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TABLE OF ATTENUATION AS A FUNCTION
OF VANE ANGLE FOR ROTARY-VANE ATTENUATORS
($A = -40 \log_{10} \cos \theta$)

WILBUR LARSON



U. S. DEPARTMENT OF COMMERCE
NATIONAL BUREAU OF STANDARDS

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$$(A = -40 \log_{10} \cos \theta)$$

Wilbur Larson
Radio Standards Laboratory
National Bureau of Standards
Boulder, Colo.

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TABLE OF ATTENUATION AS A FUNCTION OF
VANE ANGLE FOR ROTARY VANE ATTENUATORS

$$(A = -40 \log_{10} \cos \theta)$$

Wilbur Larson

The table of attenuation as a function of vane angle gives the attenuation in decibels produced by an angular displacement of the vane of a rotary-vane attenuator assuming ideal behavior of the attenuator. The attenuations for vane angles corresponding to the function

$A = -40 \log_{10} \cos \theta$ are given in the table, where A is the attenuation in decibels and θ is the vane angle in degrees. The attenuations in decibels are given for increments of 0.001° for the values of θ from zero to 89.999° to the sixth decimal place and for the values of θ from 89.000° to 89.999° to the fifth decimal place.

The table was designed for determining the attenuation in decibels of a rotary-vane attenuation utilizing a scale marked in degrees. Also, the table can be used to determine correct decibel markings for a rotary vane attenuator with a direct reading scale regardless of gear ratio. The table can be used as an aid in analyzing the calibration data of a rotary-vane attenuator for characteristics which include inherent error, resettability, and gearing eccentricity.

1. INTRODUCTION

The rotary vane attenuator is considered to be the most suitable microwave attenuator for wide-band applications because the attenuation is theoretically independent of frequency and the phase shift variations in the attenuator are small. The attenuation produced in a rotary-vane attenuator is ideally a function of the angle formed by the position of the rotating vane relative to the fixed vanes. In practice, departures from this ideal behavior are usually small. The attenuation value, A , may be given in decibels as a function of this angle, θ , by the expression¹

$$A = -40 \log_{10} \cos \theta \tag{1}$$

Tables of $\log_{10} \cos \theta$ are available², but do not give the attenuation of (1) directly. Instead, additional calculation is required. For example, the value of attenuation in decibels for a given vane angle in degrees can be determined from existing tables with the following procedure.

Let θ equal 55.790°

1. $A = -40 \log \cos 55.790^\circ$

2. $A = -40 (9.749 \quad 9122 \quad 558-10) \text{ from the table}^2$

3. $A = 40 (10.000 \quad 0000 \quad 000-10)$
 $\quad \quad \quad 9.749 \quad 9122 \quad 558-10$

4. $A = 40 \times 0.250 \quad 0877 \quad 442$

5. $A = 10.003 \quad 5097 \quad 680 \text{ db}$

The purpose of the table* in this report of the function $-40 \log_{10} \cos \theta$ is to eliminate the calculations as illustrated above. For the value θ equal to 55.790° , on page 118, in column one and row thirty the attenuation in decibels is read directly as 10.003510 db.

Most commercially-available rotary-vane attenuators utilize read out scales in decibels. However, an important problem of scale resolution is present when direct decibel markings are used because the resolution decreases very rapidly at high values of attenuation. If one would like the resolution to be constant, a linear scale of the angular position of the rotor would be required. A scale in degrees of vane rotation would

*The values of the table were obtained from the log and cos subroutines in Fortran II employing the 7090 computer. The table was thoroughly checked for accuracy by taking first difference and by independent checking at intervals with the Peters table. The values in decibels were found to be accurate to one unit in the last place and even errors of one should be very rare. The differences were obtained directly from the computer to 7 decimal places for θ from zero to 88.999° and to 6 decimal places for θ from 89.000° to 89.999° . For θ from 89.500 to 89.999° some second differences were calculated also. The independent check with Peters' table was performed at intervals of 0.5° for θ from 0.499° to 89.999° and more frequently for θ from 89.500 to 89.999° .

meet this requirement. Then, for a rotary-vane attenuator with this kind of scale, a table is very useful for determining the attenuation in decibels for the scale setting in degrees. Also, the table would be useful for determining the accuracy of the scale markings in decibels of a rotary vane attenuator.

2. TABLE OF ATTENUATION IN DECIBELS VERSUS VANE ANGLE IN DEGREES

Assuming ideal behavior of the attenuator, this table can be used to determine attenuation as a function of vane angle for rotary-vane attenuators having a scale marked in degrees. In this table, the attenuation in decibels versus the vane angle, θ (theta), is given in incremental parts of one thousandth of a degree from zero to 89.999° . The range of the angle θ is shown at the top of each page. At the left of each page, the values of θ are listed in a vertical column in 0.010° increments. Across the top of each page, the values of θ are listed in a horizontal row in 0.001° increments. The attenuation in decibels is given in the table to the sixth decimal place for values of θ from zero to 88.999° and to the fifth decimal place for values of θ from 89.000° to 89.999° .

3. SCALE READOUT IN DEGREES

Let us consider a high-revolution readout for a rotary-vane attenuator in which one revolution of the control knob rotates the vane one degree. This would require ninety turns of the knob to obtain an attenuation change from zero to maximum. For an attenuator with this amount of gear reduction, scale markings of one-thousandth of a degree are attainable. A linear scale readout of this type has been designed and constructed at NBS.*

4. SCALE READOUT IN DECIBELS

The dial of the rotary-vane attenuator may have either a direct-reading scale of the attenuation in decibels or an angular scale of the vane

*Report by the author in preparation.

position in degrees. To correctly place the marks on the scale for a direct decibel readout, tables or calculations are required to determine the angular position for each incremental value of the scale. Consider, as an example, an attenuator with a scale attached to the drive mechanism which has a gear ratio of 12. The scale of this attenuator is turned three revolutions to rotate the vane from zero to 90° . The angular position of the vane corresponding to a given attenuation in decibels can be determined with the aid of the table. For example, referring to page 45 in the table, the vane angle which represents one decibel of attenuation is found to be equal to 19.255° . The corresponding rotation of the scale of an attenuator with a gear ratio of 12 is 231.060° . From the table it also can be shown that the 50 db mark will fall at an angle of 1041.312° from the zero reference.

5. RESETTABILITY

Assuming no gear backlash or other contributing causes, the resettability, or operator error in setting the dial of the rotary-vane attenuator at one position, may be determined over the entire scale with the use of the table. For example, during the calibration of a rotary-vane attenuator, with a scale marked in decibels, it is observed that the measured deviation in attenuation increases approximately 0.03 db when the dial setting is set by a width of one mark on the left side of the scale mark of 20 db and that the measured deviation in attenuation decreases approximately 0.03 db when the dial setting is set by a width of one mark on the right side of the same scale mark. Referring to page 150, the table shows that the vane angle which represents 20 db of attenuation is found to be equal to 71.565° . A deviation in attenuation of approximately ± 0.03 db at an attenuation of 20 db corresponds to a vane angle deviation of $\pm 0.033^\circ$. If the marks on the entire scale of the attenuator are of equal width, the deviations in vane angle setting corresponding to dial settings on one side

of the mark to the other side will be of the same value. However, anywhere on the scale the corresponding values of deviation in attenuation will follow the $\cos^2$ law for each dial setting in decibels. The curves in figure 1 show the limits of deviation in attenuation caused by a deviation in the vane angle of ± 0.033 over a range of zero to 40 db. The points for these curves were determined using the table. In practice, the resettability may be better or worse than the above example, depending upon the care taken and upon the skill of the operator.

The table can be used to determine the required resettability for a rotary vane attenuator. As an example, for an attenuation difference of 0.1 db referenced to the zero setting of the attenuator, the resettability must be better than $\pm 0.061^\circ$ for the error in attenuation difference to be less than ± 0.002 db; or the resettability must be better than $\pm 0.0005^\circ$ for the error to be less than $\pm 0.00002^\circ$.

6. ACKNOWLEDGEMENTS

The calculations for the table were programmed for an electronic computer by B. C. Yates.

7. REFERENCES

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2. Peters, J. (1919) Zehnstellige Logarithmen der trigonometrischen Funktionen, von 0° bis 90° für jedes Tausendstel des Grades, Copyright was obtained from Verlag der Optischen Anstalt, C. P. Goerz AKt. - Ges., Berlin-Friedenau from 1918-1938 and the D VanNostrand Company in 1942.

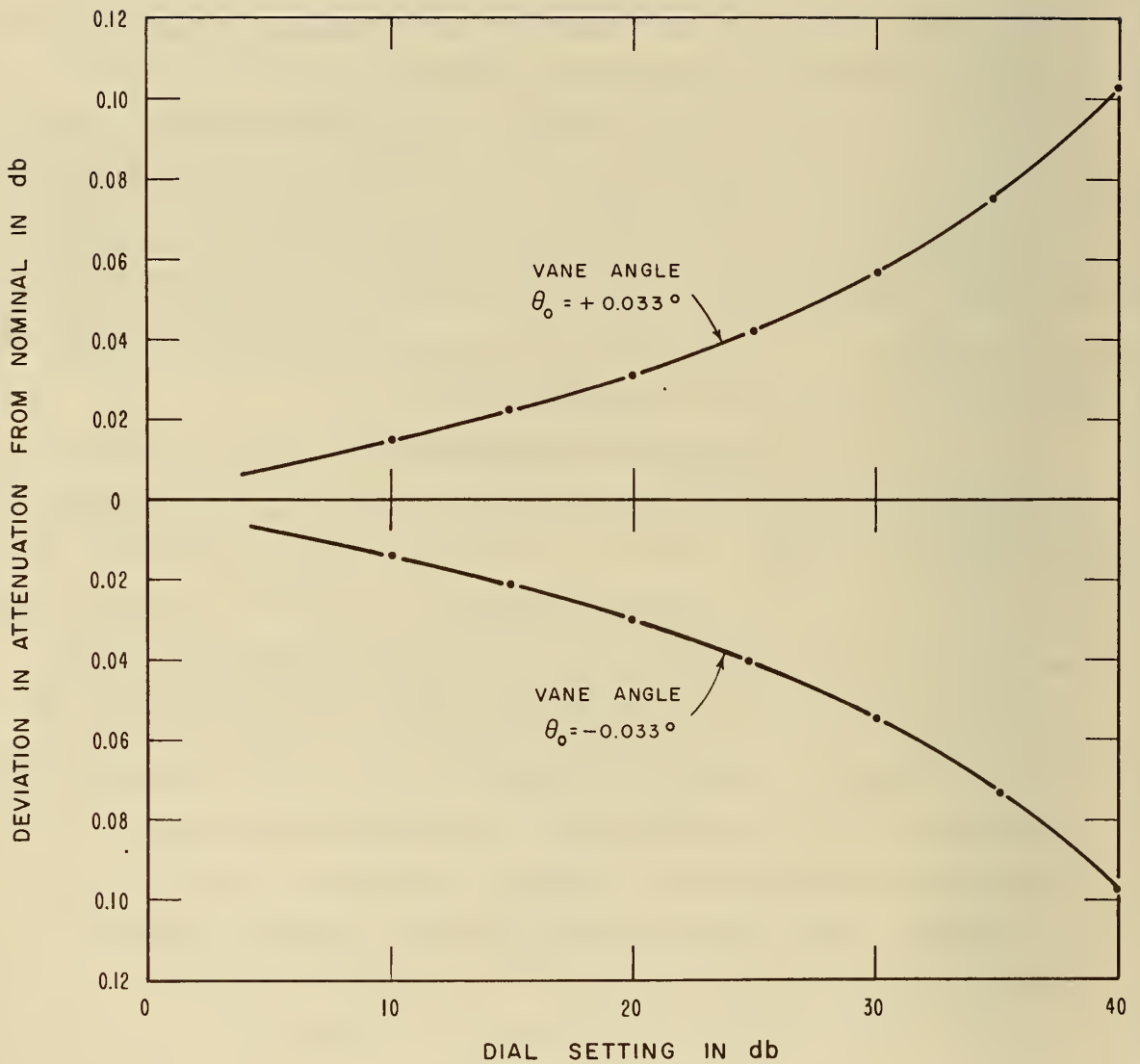


Figure 1. Graph of the deviations of attenuation from nominal versus dial settings in decibels with a resettability in vane angle setting of $\pm 0.033^\circ$.

ATTENUATION IN DECIBELS
THETA FROM 0.000 TO 0.499 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
0.010	0.000000	0.000000	0.000000	0.000000	0.000001	0.000001	0.000001	0.000001	0.000001	0.000001
0.020	0.000001	0.000001	0.000001	0.000001	0.000002	0.000002	0.000002	0.000002	0.000002	0.000002
0.030	0.000002	0.000003	0.000003	0.000003	0.000003	0.000003	0.000003	0.000004	0.000004	0.000004
0.040	0.000004	0.000004	0.000005	0.000005	0.000005	0.000005	0.000006	0.000006	0.000006	0.000006
0.050	0.000007	0.000007	0.000007	0.000008	0.000008	0.000008	0.000009	0.000009	0.000009	0.000009
0.060	0.000010	0.000010	0.000010	0.000011	0.000011	0.000011	0.000012	0.000012	0.000012	0.000013
0.070	0.000013	0.000013	0.000014	0.000014	0.000014	0.000015	0.000015	0.000016	0.000016	0.000017
0.080	0.000017	0.000017	0.000018	0.000018	0.000019	0.000019	0.000020	0.000020	0.000020	0.000021
0.090	0.000021	0.000022	0.000022	0.000023	0.000023	0.000024	0.000024	0.000025	0.000025	0.000026
0.100	0.000026	0.000027	0.000028	0.000028	0.000029	0.000029	0.000030	0.000030	0.000031	0.000031
0.110	0.000032	0.000033	0.000033	0.000034	0.000034	0.000035	0.000036	0.000036	0.000037	0.000037
0.120	0.000038	0.000039	0.000039	0.000040	0.000041	0.000041	0.000042	0.000043	0.000043	0.000044
0.130	0.000045	0.000045	0.000046	0.000047	0.000048	0.000048	0.000049	0.000050	0.000050	0.000051
0.140	0.000052	0.000053	0.000053	0.000054	0.000055	0.000056	0.000056	0.000057	0.000058	0.000059
0.150	0.000060	0.000060	0.000061	0.000062	0.000063	0.000064	0.000064	0.000065	0.000066	0.000067
0.160	0.000068	0.000069	0.000069	0.000070	0.000071	0.000072	0.000073	0.000074	0.000075	0.000076
0.170	0.000076	0.000077	0.000078	0.000079	0.000080	0.000081	0.000082	0.000083	0.000084	0.000085
0.180	0.000086	0.000087	0.000088	0.000089	0.000090	0.000091	0.000092	0.000093	0.000094	0.000095
0.190	0.000096	0.000097	0.000098	0.000099	0.000100	0.000101	0.000102	0.000103	0.000104	0.000105
0.200	0.000106	0.000107	0.000108	0.000109	0.000110	0.000111	0.000112	0.000113	0.000114	0.000116
0.210	0.000117	0.000118	0.000119	0.000120	0.000121	0.000122	0.000123	0.000125	0.000126	0.000127
0.220	0.000128	0.000129	0.000130	0.000132	0.000133	0.000134	0.000135	0.000136	0.000138	0.000139
0.230	0.000140	0.000141	0.000142	0.000144	0.000145	0.000146	0.000147	0.000149	0.000150	0.000151
0.240	0.000152	0.000154	0.000155	0.000156	0.000158	0.000159	0.000160	0.000161	0.000163	0.000164
0.250	0.000165	0.000167	0.000168	0.000169	0.000171	0.000172	0.000173	0.000175	0.000176	0.000177
0.260	0.000179	0.000180	0.000182	0.000183	0.000184	0.000186	0.000187	0.000189	0.000190	0.000191
0.270	0.000193	0.000194	0.000196	0.000197	0.000199	0.000200	0.000202	0.000203	0.000204	0.000206
0.280	0.000207	0.000209	0.000210	0.000212	0.000213	0.000215	0.000216	0.000218	0.000219	0.000221
0.290	0.000223	0.000224	0.000226	0.000227	0.000229	0.000230	0.000232	0.000233	0.000235	0.000237
0.300	0.000238	0.000240	0.000241	0.000243	0.000245	0.000246	0.000248	0.000249	0.000251	0.000253
0.310	0.000254	0.000256	0.000258	0.000259	0.000261	0.000263	0.000264	0.000266	0.000268	0.000269
0.320	0.000271	0.000273	0.000274	0.000276	0.000278	0.000279	0.000281	0.000283	0.000285	0.000286
0.330	0.000288	0.000290	0.000292	0.000293	0.000295	0.000297	0.000299	0.000300	0.000302	0.000304
0.340	0.000306	0.000308	0.000309	0.000311	0.000313	0.000315	0.000317	0.000319	0.000320	0.000322
0.350	0.000324	0.000326	0.000328	0.000330	0.000332	0.000333	0.000335	0.000337	0.000339	0.000341
0.360	0.000343	0.000345	0.000347	0.000349	0.000351	0.000352	0.000354	0.000356	0.000358	0.000360
0.370	0.000362	0.000364	0.000366	0.000368	0.000370	0.000372	0.000374	0.000376	0.000378	0.000380
0.380	0.000382	0.000384	0.000386	0.000388	0.000390	0.000392	0.000394	0.000396	0.000398	0.000400
0.390	0.000402	0.000404	0.000407	0.000409	0.000411	0.000413	0.000415	0.000417	0.000419	0.000421
0.400	0.000423	0.000425	0.000428	0.000430	0.000432	0.000434	0.000436	0.000438	0.000440	0.000443
0.410	0.000445	0.000447	0.000449	0.000451	0.000453	0.000456	0.000458	0.000460	0.000462	0.000465
0.420	0.000467	0.000469	0.000471	0.000473	0.000476	0.000478	0.000480	0.000482	0.000485	0.000487
0.430	0.000489	0.000491	0.000494	0.000496	0.000498	0.000501	0.000503	0.000505	0.000508	0.000510
0.440	0.000512	0.000515	0.000517	0.000519	0.000522	0.000524	0.000526	0.000529	0.000531	0.000533
0.450	0.000536	0.000538	0.000541	0.000543	0.000545	0.000548	0.000550	0.000553	0.000555	0.000557
0.460	0.000560	0.000562	0.000565	0.000567	0.000570	0.000572	0.000575	0.000577	0.000580	0.000582
0.470	0.000584	0.000587	0.000589	0.000592	0.000594	0.000597	0.000599	0.000602	0.000605	0.000607
0.480	0.000610	0.000612	0.000615	0.000617	0.000620	0.000622	0.000625	0.000628	0.000630	0.000633
0.490	0.000635	0.000638	0.000640	0.000643	0.000646	0.000648	0.000651	0.000654	0.000656	0.000659

ATTENUATION IN DECIBELS
THETA FROM 0.500 TO 0.999 DEGREES

THETA IN
DEGREES

0.500	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	0.000661	0.000664	0.000667	0.000669	0.000672	0.000675	0.000677	0.000680	0.000683	0.000685
0.510	0.000688	0.000691	0.000694	0.000696	0.000699	0.000702	0.000704	0.000707	0.000710	0.000713
0.520	0.000715	0.000718	0.000721	0.000724	0.000726	0.000729	0.000732	0.000735	0.000738	0.000740
0.530	0.000743	0.000746	0.000749	0.000752	0.000754	0.000757	0.000760	0.000763	0.000766	0.000769
0.540	0.000772	0.000774	0.000777	0.000780	0.000783	0.000786	0.000789	0.000792	0.000795	0.000797
0.550	0.000800	0.000803	0.000806	0.000809	0.000812	0.000815	0.000818	0.000821	0.000824	0.000827
0.560	0.000830	0.000833	0.000836	0.000839	0.000842	0.000845	0.000848	0.000851	0.000854	0.000857
0.570	0.000860	0.000863	0.000866	0.000869	0.000872	0.000875	0.000878	0.000881	0.000884	0.000887
0.580	0.000890	0.000893	0.000896	0.000899	0.000902	0.000905	0.000909	0.000912	0.000915	0.000918
0.590	0.000921	0.000924	0.000927	0.000930	0.000934	0.000937	0.000940	0.000943	0.000946	0.000949
0.600	0.000953	0.000956	0.000959	0.000962	0.000965	0.000968	0.000972	0.000975	0.000978	0.000981
0.610	0.000985	0.000988	0.000991	0.000994	0.000997	0.001001	0.001004	0.001007	0.001011	0.001014
0.620	0.001017	0.001020	0.001024	0.001027	0.001030	0.001034	0.001037	0.001040	0.001044	0.001047
0.630	0.001050	0.001054	0.001057	0.001060	0.001064	0.001067	0.001070	0.001074	0.001077	0.001080
0.640	0.001084	0.001087	0.001091	0.001094	0.001097	0.001101	0.001104	0.001108	0.001111	0.001114
0.650	0.001118	0.001121	0.001125	0.001128	0.001132	0.001135	0.001139	0.001142	0.001146	0.001149
0.660	0.001153	0.001156	0.001160	0.001163	0.001167	0.001170	0.001174	0.001177	0.001181	0.001184
0.670	0.001188	0.001191	0.001195	0.001198	0.001202	0.001206	0.001209	0.001213	0.001216	0.001220
0.680	0.001223	0.001227	0.001231	0.001234	0.001238	0.001242	0.001245	0.001249	0.001252	0.001256
0.690	0.001260	0.001263	0.001267	0.001271	0.001274	0.001278	0.001282	0.001285	0.001289	0.001293
0.700	0.001297	0.001300	0.001304	0.001308	0.001311	0.001315	0.001319	0.001323	0.001326	0.001330
0.710	0.001334	0.001338	0.001341	0.001345	0.001349	0.001353	0.001356	0.001360	0.001364	0.001368
0.720	0.001372	0.001375	0.001379	0.001383	0.001387	0.001391	0.001395	0.001398	0.001402	0.001406
0.730	0.001410	0.001414	0.001418	0.001422	0.001426	0.001429	0.001433	0.001437	0.001441	0.001445
0.740	0.001449	0.001453	0.001457	0.001461	0.001465	0.001469	0.001473	0.001476	0.001480	0.001484
0.750	0.001488	0.001492	0.001496	0.001500	0.001504	0.001508	0.001512	0.001516	0.001520	0.001524
0.760	0.001528	0.001532	0.001536	0.001540	0.001544	0.001548	0.001553	0.001557	0.001561	0.001565
0.770	0.001569	0.001573	0.001577	0.001581	0.001585	0.001589	0.001593	0.001597	0.001602	0.001606
0.780	0.001610	0.001614	0.001618	0.001622	0.001626	0.001630	0.001635	0.001639	0.001643	0.001647
0.790	0.001651	0.001656	0.001660	0.001664	0.001668	0.001672	0.001677	0.001681	0.001685	0.001689
0.800	0.001693	0.001698	0.001702	0.001706	0.001710	0.001715	0.001719	0.001723	0.001727	0.001732
0.810	0.001736	0.001740	0.001745	0.001749	0.001753	0.001758	0.001762	0.001766	0.001770	0.001775
0.820	0.001779	0.001783	0.001788	0.001792	0.001797	0.001801	0.001805	0.001810	0.001814	0.001818
0.830	0.001823	0.001827	0.001832	0.001836	0.001840	0.001845	0.001849	0.001854	0.001858	0.001863
0.840	0.001867	0.001871	0.001876	0.001880	0.001885	0.001889	0.001894	0.001898	0.001903	0.001907
0.850	0.001912	0.001916	0.001921	0.001925	0.001930	0.001934	0.001939	0.001943	0.001948	0.001952
0.860	0.001957	0.001962	0.001966	0.001971	0.001975	0.001980	0.001984	0.001989	0.001994	0.001998
0.870	0.002003	0.002007	0.002012	0.002017	0.002021	0.002026	0.002030	0.002035	0.002040	0.002044
0.880	0.002049	0.002054	0.002058	0.002063	0.002068	0.002072	0.002077	0.002082	0.002086	0.002091
0.890	0.002096	0.002101	0.002105	0.002110	0.002115	0.002119	0.002124	0.002129	0.002134	0.002138
0.900	0.002143	0.002148	0.002153	0.002158	0.002162	0.002167	0.002172	0.002177	0.002182	0.002186
0.910	0.002191	0.002196	0.002201	0.002206	0.002210	0.002215	0.002220	0.002225	0.002230	0.002235
0.920	0.002240	0.002244	0.002249	0.002254	0.002259	0.002264	0.002269	0.002274	0.002279	0.002284
0.930	0.002289	0.002293	0.002298	0.002303	0.002308	0.002313	0.002318	0.002323	0.002328	0.002333
0.940	0.002338	0.002343	0.002348	0.002353	0.002358	0.002363	0.002368	0.002373	0.002378	0.002383
0.950	0.002388	0.002393	0.002398	0.002403	0.002408	0.002413	0.002418	0.002423	0.002428	0.002433
0.960	0.002439	0.002444	0.002449	0.002454	0.002459	0.002464	0.002469	0.002474	0.002479	0.002484
0.970	0.002490	0.002495	0.002500	0.002505	0.002510	0.002515	0.002521	0.002526	0.002531	0.002536
0.980	0.002541	0.002546	0.002552	0.002557	0.002562	0.002567	0.002572	0.002578	0.002583	0.002588
0.990	0.002593	0.002599	0.002604	0.002609	0.002614	0.002620	0.002625	0.002630	0.002635	0.002641

ATTENUATION IN DECIBELS
THETA FROM 1.000 TO 1.499 DEGREES

9

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.000	0.002646	0.002651	0.002657	0.002662	0.002667	0.002673	0.002678	0.002683	0.002689	0.002694
0.010	0.002699	0.002705	0.002710	0.002715	0.002721	0.002726	0.002731	0.002737	0.002742	0.002748
0.020	0.002753	0.002758	0.002764	0.002769	0.002775	0.002780	0.002785	0.002791	0.002796	0.002802
0.030	0.002807	0.002813	0.002818	0.002824	0.002829	0.002834	0.002840	0.002845	0.002851	0.002856
0.040	0.002862	0.002867	0.002873	0.002878	0.002884	0.002890	0.002895	0.002901	0.002906	0.002912
0.050	0.002917	0.002923	0.002928	0.002934	0.002940	0.002945	0.002951	0.002956	0.002962	0.002967
0.060	0.002973	0.002979	0.002984	0.002990	0.002996	0.003001	0.003007	0.003012	0.003018	0.003024
0.070	0.003029	0.003035	0.003041	0.003046	0.003052	0.003058	0.003064	0.003069	0.003075	0.003081
0.080	0.003086	0.003092	0.003098	0.003103	0.003109	0.003115	0.003121	0.003126	0.003132	0.003138
0.090	0.003144	0.003150	0.003155	0.003161	0.003167	0.003173	0.003178	0.003184	0.003190	0.003196
0.100	0.003202	0.003208	0.003213	0.003219	0.003225	0.003231	0.003237	0.003243	0.003248	0.003254
0.110	0.003260	0.003266	0.003272	0.003278	0.003284	0.003290	0.003296	0.003301	0.003307	0.003313
0.120	0.003319	0.003325	0.003331	0.003337	0.003343	0.003349	0.003355	0.003361	0.003367	0.003373
0.130	0.003379	0.003385	0.003391	0.003397	0.003403	0.003409	0.003415	0.003421	0.003427	0.003433
0.140	0.003439	0.003445	0.003451	0.003457	0.003463	0.003469	0.003475	0.003481	0.003487	0.003493
0.150	0.003499	0.003505	0.003512	0.003518	0.003524	0.003530	0.003536	0.003542	0.003548	0.003554
0.160	0.003561	0.003567	0.003573	0.003579	0.003585	0.003591	0.003597	0.003604	0.003610	0.003616
0.170	0.003622	0.003628	0.003635	0.003641	0.003647	0.003653	0.003659	0.003666	0.003672	0.003678
0.180	0.003684	0.003691	0.003697	0.003703	0.003709	0.003716	0.003722	0.003728	0.003734	0.003741
0.190	0.003747	0.003753	0.003760	0.003766	0.003772	0.003779	0.003785	0.003791	0.003798	0.003804
0.200	0.003810	0.003817	0.003823	0.003829	0.003836	0.003842	0.003849	0.003855	0.003861	0.003868
0.210	0.003874	0.003881	0.003887	0.003893	0.003900	0.003906	0.003913	0.003919	0.003926	0.003932
0.220	0.003938	0.003945	0.003951	0.003958	0.003964	0.003971	0.003977	0.003984	0.003990	0.003997
0.230	0.004003	0.004010	0.004016	0.004023	0.004029	0.004036	0.004042	0.004049	0.004055	0.004062
0.240	0.004069	0.004075	0.004082	0.004088	0.004095	0.004101	0.004108	0.004115	0.004121	0.004128
0.250	0.004134	0.004141	0.004148	0.004154	0.004161	0.004168	0.004174	0.004181	0.004188	0.004194
0.260	0.004201	0.004208	0.004214	0.004221	0.004228	0.004234	0.004241	0.004248	0.004254	0.004261
0.270	0.004268	0.004275	0.004281	0.004288	0.004295	0.004302	0.004308	0.004315	0.004322	0.004329
0.280	0.004335	0.004342	0.004349	0.004356	0.004362	0.004369	0.004376	0.004383	0.004390	0.004397
0.290	0.004403	0.004410	0.004417	0.004424	0.004431	0.004438	0.004444	0.004451	0.004458	0.004465
0.300	0.004472	0.004479	0.004486	0.004493	0.004499	0.004506	0.004513	0.004520	0.004527	0.004534
0.310	0.004541	0.004548	0.004555	0.004562	0.004569	0.004576	0.004583	0.004590	0.004597	0.004604
0.320	0.004611	0.004618	0.004625	0.004632	0.004639	0.004646	0.004653	0.004660	0.004667	0.004674
0.330	0.004681	0.004688	0.004695	0.004702	0.004709	0.004716	0.004723	0.004730	0.004737	0.004744
0.340	0.004751	0.004758	0.004766	0.004773	0.004780	0.004787	0.004794	0.004801	0.004808	0.004815
0.350	0.004823	0.004830	0.004837	0.004844	0.004851	0.004858	0.004866	0.004873	0.004880	0.004887
0.360	0.004894	0.004901	0.004909	0.004916	0.004923	0.004930	0.004938	0.004945	0.004952	0.004959
0.370	0.004967	0.004974	0.004981	0.004988	0.004996	0.005003	0.005010	0.005017	0.005025	0.005032
0.380	0.005039	0.005047	0.005054	0.005061	0.005069	0.005076	0.005083	0.005091	0.005098	0.005105
0.390	0.005113	0.005120	0.005127	0.005135	0.005142	0.005149	0.005157	0.005164	0.005172	0.005179
0.400	0.005186	0.005194	0.005201	0.005209	0.005216	0.005224	0.005231	0.005238	0.005246	0.005253
0.410	0.005261	0.005268	0.005276	0.005283	0.005291	0.005298	0.005306	0.005313	0.005321	0.005328
0.420	0.005336	0.005343	0.005351	0.005358	0.005366	0.005373	0.005381	0.005388	0.005396	0.005404
0.430	0.005411	0.005419	0.005426	0.005434	0.005441	0.005449	0.005457	0.005464	0.005472	0.005479
0.440	0.005487	0.005495	0.005502	0.005510	0.005518	0.005525	0.005533	0.005541	0.005548	0.005556
0.450	0.005564	0.005571	0.005579	0.005587	0.005594	0.005602	0.005610	0.005617	0.005625	0.005633
0.460	0.005641	0.005648	0.005656	0.005664	0.005672	0.005679	0.005687	0.005695	0.005703	0.005710
0.470	0.005718	0.005726	0.005734	0.005741	0.005749	0.005757	0.005765	0.005773	0.005781	0.005788
0.480	0.005796	0.005804	0.005812	0.005820	0.005828	0.005835	0.005843	0.005851	0.005859	0.005867
0.490	0.005875	0.005883	0.005891	0.005898	0.005906	0.005914	0.005922	0.005930	0.005938	0.005946

ATTENUATION IN DECIRELS
THETA FROM 1.500 TO 1.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	0.005954	0.005962	0.005970	0.005978	0.005986	0.005994	0.006002	0.006010	0.006018	0.006026
0.510	0.006034	0.006042	0.006050	0.006058	0.006066	0.006074	0.006082	0.006090	0.006098	0.006106
0.520	0.006114	0.006122	0.006130	0.006138	0.006146	0.006154	0.006162	0.006170	0.006178	0.006186
0.530	0.006194	0.006203	0.006211	0.006219	0.006227	0.006235	0.006243	0.006251	0.006259	0.006268
0.540	0.006276	0.006284	0.006292	0.006300	0.006308	0.006317	0.006325	0.006333	0.006341	0.006349
0.550	0.006357	0.006366	0.006374	0.006382	0.006390	0.006399	0.006407	0.006415	0.006423	0.006432
0.560	0.006440	0.006448	0.006456	0.006464	0.006473	0.006481	0.006489	0.006498	0.006506	0.006514
0.570	0.006523	0.006531	0.006539	0.006548	0.006556	0.006564	0.006573	0.006581	0.006589	0.006598
0.580	0.006606	0.006614	0.006623	0.006631	0.006639	0.006648	0.006656	0.006665	0.006673	0.006681
0.590	0.006690	0.006698	0.006707	0.006715	0.006724	0.006732	0.006740	0.006749	0.006757	0.006766
0.600	0.006774	0.006783	0.006791	0.006800	0.006808	0.006817	0.006825	0.006834	0.006842	0.006851
0.610	0.006859	0.006868	0.006876	0.006885	0.006893	0.006902	0.006910	0.006919	0.006928	0.006936
0.620	0.006945	0.006953	0.006962	0.006971	0.006979	0.006988	0.006996	0.007005	0.007014	0.007022
0.630	0.007031	0.007039	0.007048	0.007057	0.007065	0.007074	0.007083	0.007091	0.007100	0.007109
0.640	0.007117	0.007126	0.007135	0.007143	0.007152	0.007161	0.007169	0.007178	0.007187	0.007196
0.650	0.007204	0.007213	0.007222	0.007231	0.007239	0.007248	0.007257	0.007266	0.007274	0.007283
0.660	0.007292	0.007301	0.007310	0.007318	0.007327	0.007336	0.007345	0.007354	0.007362	0.007371
0.670	0.007380	0.007389	0.007398	0.007407	0.007416	0.007424	0.007433	0.007442	0.007451	0.007460
0.680	0.007469	0.007478	0.007487	0.007495	0.007504	0.007513	0.007522	0.007531	0.007540	0.007549
0.690	0.007558	0.007567	0.007576	0.007585	0.007594	0.007603	0.007612	0.007621	0.007630	0.007639
0.700	0.007648	0.007657	0.007666	0.007675	0.007684	0.007693	0.007702	0.007711	0.007720	0.007729
0.710	0.007738	0.007747	0.007756	0.007765	0.007774	0.007783	0.007792	0.007801	0.007811	0.007820
0.720	0.007829	0.007838	0.007847	0.007856	0.007865	0.007874	0.007883	0.007893	0.007902	0.007911
0.730	0.007920	0.007929	0.007938	0.007948	0.007957	0.007966	0.007975	0.007984	0.007993	0.008003
0.740	0.008012	0.008021	0.008030	0.008040	0.008049	0.008058	0.008067	0.008076	0.008086	0.008095
0.750	0.008104	0.008114	0.008123	0.008132	0.008141	0.008151	0.008160	0.008169	0.008179	0.008188
0.760	0.008197	0.008206	0.008216	0.008225	0.008234	0.008244	0.008253	0.008262	0.008272	0.008281
0.770	0.008291	0.008300	0.008309	0.008319	0.008328	0.008337	0.008347	0.008356	0.008366	0.008375
0.780	0.008385	0.008394	0.008403	0.008413	0.008422	0.008432	0.008441	0.008451	0.008460	0.008470
0.790	0.008479	0.008488	0.008498	0.008507	0.008517	0.008526	0.008536	0.008545	0.008555	0.008565
0.800	0.008574	0.008584	0.008593	0.008603	0.008612	0.008622	0.008631	0.008641	0.008650	0.008660
0.810	0.008670	0.008679	0.008689	0.008698	0.008708	0.008718	0.008727	0.008737	0.008746	0.008756
0.820	0.008766	0.008775	0.008785	0.008795	0.008804	0.008814	0.008824	0.008833	0.008843	0.008853
0.830	0.008862	0.008872	0.008882	0.008891	0.008901	0.008911	0.008920	0.008930	0.008940	0.008950
0.840	0.008957	0.008967	0.008977	0.008987	0.008998	0.009008	0.009018	0.009028	0.009037	0.009047
0.850	0.009057	0.009067	0.009077	0.009086	0.009096	0.009106	0.009116	0.009126	0.009136	0.009145
0.860	0.009155	0.009165	0.009175	0.009185	0.009195	0.009205	0.009214	0.009224	0.009234	0.009244
0.870	0.009254	0.009264	0.009274	0.009284	0.009294	0.009304	0.009313	0.009323	0.009333	0.009343
0.880	0.009353	0.009363	0.009373	0.009383	0.009393	0.009403	0.009413	0.009423	0.009433	0.009443
0.890	0.009453	0.009463	0.009473	0.009483	0.009493	0.009503	0.009513	0.009523	0.009533	0.009543
0.900	0.009553	0.009563	0.009573	0.009584	0.009594	0.009604	0.009614	0.009624	0.009634	0.009644
0.910	0.009654	0.009664	0.009674	0.009685	0.009695	0.009705	0.009715	0.009725	0.009735	0.009745
0.920	0.009756	0.009766	0.009776	0.009786	0.009796	0.009806	0.009817	0.009827	0.009837	0.009847
0.930	0.009857	0.009868	0.009878	0.009888	0.009898	0.009909	0.009919	0.009929	0.009939	0.009950
0.940	0.009960	0.009970	0.009980	0.009991	0.010001	0.010011	0.010022	0.010032	0.010042	0.010053
0.950	0.010063	0.010073	0.010084	0.010094	0.010104	0.010115	0.010125	0.010135	0.010146	0.010156
0.960	0.010166	0.010177	0.010187	0.010198	0.010208	0.010218	0.010229	0.010239	0.010250	0.010260
0.970	0.010270	0.010281	0.010291	0.010302	0.010312	0.010323	0.010333	0.010344	0.010354	0.010364
0.980	0.010375	0.010385	0.010396	0.010406	0.010417	0.010427	0.010438	0.010448	0.010459	0.010469
0.990	0.010480	0.010491	0.010501	0.010512	0.010522	0.010533	0.010543	0.010554	0.010564	0.010575

ATTENUATION IN DECIBELS
THETA FROM 2.000 TO 2.499 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.000	0.010586	0.010596	0.010607	0.010617	0.010628	0.010639	0.010649	0.010660	0.010671	0.010681
0.010	0.010692	0.010702	0.010713	0.010724	0.010734	0.010745	0.010756	0.010766	0.010777	0.010788
0.020	0.010798	0.010809	0.010820	0.010831	0.010841	0.010852	0.010863	0.010873	0.010884	0.010895
0.030	0.010906	0.010916	0.010927	0.010938	0.010949	0.010959	0.010970	0.010981	0.010992	0.011003
0.040	0.011013	0.011024	0.011035	0.011046	0.011057	0.011067	0.011078	0.011089	0.011100	0.011111
0.050	0.011122	0.011133	0.011143	0.011154	0.011165	0.011176	0.011187	0.011198	0.011209	0.011220
0.060	0.011230	0.011241	0.011252	0.011263	0.011274	0.011285	0.011296	0.011307	0.011318	0.011329
0.070	0.011340	0.011351	0.011362	0.011373	0.011384	0.011395	0.011406	0.011417	0.011428	0.011439
0.080	0.011450	0.011461	0.011472	0.011483	0.011494	0.011505	0.011516	0.011527	0.011538	0.011549
0.090	0.011560	0.011571	0.011582	0.011593	0.011604	0.011615	0.011626	0.011638	0.011649	0.011660
0.100	0.011671	0.011682	0.011693	0.011704	0.011715	0.011727	0.011738	0.011749	0.011760	0.011771
0.110	0.011782	0.011794	0.011805	0.011816	0.011827	0.011838	0.011849	0.011861	0.011872	0.011883
0.120	0.011894	0.011906	0.011917	0.011928	0.011939	0.011951	0.011962	0.011973	0.011984	0.011996
0.130	0.012007	0.012018	0.012029	0.012041	0.012052	0.012063	0.012075	0.012086	0.012097	0.012109
0.140	0.012120	0.012131	0.012143	0.012154	0.012165	0.012177	0.012188	0.012199	0.012211	0.012222
0.150	0.012233	0.012245	0.012256	0.012268	0.012279	0.012290	0.012302	0.012313	0.012325	0.012336
0.160	0.012348	0.012359	0.012370	0.012382	0.012393	0.012405	0.012416	0.012428	0.012439	0.012451
0.170	0.012462	0.012474	0.012485	0.012497	0.012508	0.012520	0.012531	0.012543	0.012554	0.012566
0.180	0.012577	0.012589	0.012600	0.012612	0.012623	0.012635	0.012647	0.012658	0.012670	0.012681
0.190	0.012693	0.012705	0.012716	0.012728	0.012739	0.012751	0.012763	0.012774	0.012786	0.012798
0.200	0.012809	0.012821	0.012832	0.012844	0.012856	0.012867	0.012879	0.012891	0.012903	0.012914
0.210	0.012926	0.012938	0.012949	0.012961	0.012973	0.012984	0.012996	0.013008	0.013020	0.013031
0.220	0.013043	0.013055	0.013067	0.013078	0.013090	0.013102	0.013114	0.013126	0.013137	0.013149
0.230	0.013161	0.013173	0.013185	0.013196	0.013208	0.013220	0.013232	0.013244	0.013256	0.013267
0.240	0.013279	0.013291	0.013303	0.013315	0.013327	0.013339	0.013351	0.013362	0.013374	0.013386
0.250	0.013398	0.013410	0.013422	0.013434	0.013446	0.013458	0.013470	0.013482	0.013494	0.013506
0.260	0.013518	0.013530	0.013542	0.013553	0.013565	0.013577	0.013589	0.013601	0.013613	0.013625
0.270	0.013637	0.013650	0.013662	0.013674	0.013686	0.013698	0.013710	0.013722	0.013734	0.013746
0.280	0.013758	0.013770	0.013782	0.013794	0.013806	0.013818	0.013830	0.013843	0.013855	0.013867
0.290	0.013879	0.013891	0.013903	0.013915	0.013927	0.013940	0.013952	0.013964	0.013976	0.013988
0.300	0.014000	0.014013	0.014025	0.014037	0.014049	0.014061	0.014074	0.014086	0.014098	0.014110
0.310	0.014122	0.014135	0.014147	0.014159	0.014171	0.014184	0.014196	0.014208	0.014220	0.014233
0.320	0.014245	0.014257	0.014270	0.014282	0.014294	0.014307	0.014319	0.014331	0.014343	0.014356
0.330	0.014368	0.014380	0.014393	0.014405	0.014418	0.014430	0.014442	0.014455	0.014467	0.014479
0.340	0.014492	0.014504	0.014517	0.014529	0.014541	0.014554	0.014566	0.014579	0.014591	0.014603
0.350	0.014616	0.014628	0.014641	0.014653	0.014666	0.014678	0.014691	0.014703	0.014716	0.014728
0.360	0.014741	0.014753	0.014766	0.014778	0.014791	0.014803	0.014816	0.014828	0.014841	0.014853
0.370	0.014866	0.014878	0.014891	0.014904	0.014916	0.014929	0.014941	0.014954	0.014966	0.014979
0.380	0.014992	0.015004	0.015017	0.015029	0.015042	0.015055	0.015067	0.015080	0.015093	0.015105
0.390	0.015118	0.015131	0.015143	0.015156	0.015169	0.015181	0.015194	0.015207	0.015219	0.015232
0.400	0.015245	0.015257	0.015270	0.015283	0.015296	0.015308	0.015321	0.015334	0.015347	0.015359
0.410	0.015372	0.015385	0.015398	0.015410	0.015423	0.015436	0.015449	0.015461	0.015474	0.015487
0.420	0.015500	0.015513	0.015526	0.015538	0.015551	0.015564	0.015577	0.015590	0.015603	0.015615
0.430	0.015628	0.015641	0.015654	0.015667	0.015680	0.015693	0.015706	0.015718	0.015731	0.015744
0.440	0.015757	0.015770	0.015783	0.015796	0.015809	0.015822	0.015835	0.015848	0.015861	0.015874
0.450	0.015887	0.015900	0.015913	0.015926	0.015939	0.015952	0.015965	0.015978	0.015991	0.016004
0.460	0.016017	0.016030	0.016043	0.016056	0.016069	0.016082	0.016095	0.016108	0.016121	0.016134
0.470	0.016147	0.016160	0.016173	0.016186	0.016200	0.016213	0.016226	0.016239	0.016252	0.016265
0.480	0.016278	0.016291	0.016305	0.016318	0.016331	0.016344	0.016357	0.016370	0.016383	0.016397
0.490	0.016410	0.016423	0.016436	0.016449	0.016463	0.016476	0.016489	0.016502	0.016515	0.016529

ATTENUATION IN DECIBELS
THETA FROM 2.500 TO 2.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	0.016542	0.016555	0.016568	0.016582	0.016595	0.016608	0.016621	0.016635	0.016648	0.016661
0.510	0.016675	0.016688	0.016701	0.016714	0.016728	0.016741	0.016754	0.016768	0.016781	0.016794
0.520	0.016808	0.016821	0.016834	0.016847	0.016860	0.016875	0.016888	0.016901	0.016915	0.016928
0.530	0.016941	0.016955	0.016968	0.016982	0.016995	0.017009	0.017022	0.017035	0.017049	0.017062
0.540	0.017076	0.017089	0.017103	0.017116	0.017130	0.017143	0.017157	0.017170	0.017183	0.017197
0.550	0.017210	0.017224	0.017237	0.017251	0.017265	0.017278	0.017292	0.017305	0.017319	0.017332
0.560	0.017346	0.017359	0.017373	0.017386	0.017400	0.017414	0.017427	0.017441	0.017454	0.017467
0.570	0.017482	0.017495	0.017509	0.017522	0.017536	0.017550	0.017563	0.017577	0.017591	0.017604
0.580	0.017618	0.017632	0.017645	0.017659	0.017673	0.017686	0.017700	0.017714	0.017727	0.017741
0.590	0.017755	0.017769	0.017782	0.017796	0.017810	0.017823	0.017837	0.017851	0.017865	0.017878
0.600	0.017892	0.017906	0.017920	0.017934	0.017947	0.017961	0.017975	0.017989	0.018003	0.018016
0.610	0.018030	0.018044	0.018058	0.018072	0.018086	0.018099	0.018113	0.018127	0.018141	0.018155
0.620	0.018169	0.018183	0.018196	0.018210	0.018224	0.018238	0.018252	0.018266	0.018280	0.018294
0.630	0.018308	0.018322	0.018336	0.018349	0.018363	0.018377	0.018391	0.018405	0.018419	0.018433
0.640	0.018447	0.018461	0.018475	0.018489	0.018503	0.018517	0.018531	0.018545	0.018559	0.018573
0.650	0.018587	0.018601	0.018615	0.018629	0.018643	0.018657	0.018672	0.018686	0.018700	0.018714
0.660	0.018728	0.018742	0.018756	0.018770	0.018784	0.018798	0.018812	0.018827	0.018841	0.018855
0.670	0.018869	0.018883	0.018897	0.018911	0.018926	0.018940	0.018954	0.018968	0.018982	0.018996
0.680	0.019011	0.019025	0.019039	0.019053	0.019067	0.019082	0.019096	0.019110	0.019124	0.019139
0.690	0.019153	0.019167	0.019181	0.019196	0.019210	0.019224	0.019238	0.019253	0.019267	0.019281
0.700	0.019296	0.019310	0.019324	0.019338	0.019353	0.019367	0.019381	0.019396	0.019410	0.019424
0.710	0.019439	0.019453	0.019468	0.019482	0.019496	0.019511	0.019525	0.019539	0.019554	0.019568
0.720	0.019583	0.019597	0.019611	0.019626	0.019640	0.019655	0.019669	0.019684	0.019698	0.019712
0.730	0.019727	0.019741	0.019756	0.019770	0.019785	0.019799	0.019813	0.019828	0.019843	0.019857
0.740	0.019872	0.019886	0.019901	0.019915	0.019930	0.019944	0.019959	0.019973	0.019988	0.020003
0.750	0.020017	0.020032	0.020046	0.020061	0.020075	0.020090	0.020105	0.020119	0.020134	0.020148
0.760	0.020163	0.020178	0.020192	0.020207	0.020222	0.020236	0.020251	0.020265	0.020280	0.020295
0.770	0.020309	0.020324	0.020339	0.020353	0.020368	0.020383	0.020398	0.020412	0.020427	0.020442
0.780	0.020456	0.020471	0.020486	0.020501	0.020515	0.020530	0.020545	0.020560	0.020574	0.020589
0.790	0.020604	0.020619	0.020633	0.020648	0.020663	0.020678	0.020693	0.020707	0.020722	0.020737
0.800	0.020752	0.020767	0.020782	0.020796	0.020811	0.020826	0.020841	0.020856	0.020871	0.020886
0.810	0.020900	0.020915	0.020930	0.020945	0.020960	0.020975	0.020990	0.021005	0.021020	0.021035
0.820	0.021050	0.021064	0.021079	0.021094	0.021109	0.021124	0.021139	0.021154	0.021169	0.021184
0.830	0.021199	0.021214	0.021229	0.021244	0.021259	0.021274	0.021289	0.021304	0.021319	0.021334
0.840	0.021349	0.021364	0.021379	0.021394	0.021410	0.021425	0.021440	0.021455	0.021470	0.021485
0.850	0.021500	0.021515	0.021530	0.021545	0.021560	0.021576	0.021591	0.021606	0.021621	0.021636
0.860	0.021651	0.021666	0.021681	0.021697	0.021712	0.021727	0.021742	0.021757	0.021773	0.021788
0.870	0.021803	0.021818	0.021833	0.021849	0.021864	0.021879	0.021894	0.021909	0.021925	0.021940
0.880	0.021955	0.021970	0.021986	0.022001	0.022016	0.022032	0.022047	0.022062	0.022077	0.022093
0.890	0.022108	0.022123	0.022139	0.022154	0.022169	0.022185	0.022200	0.022215	0.022231	0.022246
0.900	0.022261	0.022277	0.022292	0.022307	0.022323	0.022338	0.022354	0.022369	0.022384	0.022400
0.910	0.022415	0.022431	0.022446	0.022461	0.022477	0.022492	0.022508	0.022523	0.022539	0.022554
0.920	0.022570	0.022585	0.022600	0.022616	0.022631	0.022647	0.022662	0.022678	0.022693	0.022709
0.930	0.022724	0.022740	0.022756	0.022771	0.022787	0.022802	0.022818	0.022833	0.022849	0.022864
0.940	0.022880	0.022895	0.022911	0.022927	0.022942	0.022958	0.022973	0.022989	0.023005	0.023020
0.950	0.023036	0.023052	0.023067	0.023083	0.023098	0.023114	0.023130	0.023145	0.023161	0.023177
0.960	0.023192	0.023208	0.023224	0.023239	0.023255	0.023271	0.023287	0.023302	0.023318	0.023334
0.970	0.023349	0.023365	0.023381	0.023397	0.023412	0.023428	0.023444	0.023460	0.023475	0.023491
0.980	0.023507	0.023523	0.023539	0.023554	0.023570	0.023586	0.023602	0.023618	0.023634	0.023649
0.990	0.023665	0.023681	0.023697	0.023713	0.023729	0.023744	0.023760	0.023776	0.023792	0.023808

ATTENUATION IN DEGREES
THETA FROM 3.000 TO 3.499 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.000	0.023824	0.023840	0.023856	0.023871	0.023887	0.023903	0.023919	0.023935	0.023951	0.023967
0.010	0.023983	0.023999	0.024015	0.024031	0.024047	0.024063	0.024079	0.024095	0.024111	0.024127
0.020	0.024143	0.024159	0.024175	0.024191	0.024207	0.024223	0.024239	0.024255	0.024271	0.024287
0.030	0.024303	0.024319	0.024335	0.024351	0.024367	0.024383	0.024399	0.024415	0.024431	0.024447
0.040	0.024464	0.024480	0.024496	0.024512	0.024528	0.024544	0.024560	0.024576	0.024593	0.024609
0.050	0.024625	0.024641	0.024657	0.024673	0.024690	0.024706	0.024722	0.024738	0.024754	0.024770
0.060	0.024787	0.024803	0.024819	0.024835	0.024852	0.024868	0.024884	0.024900	0.024917	0.024933
0.070	0.024949	0.024965	0.024982	0.024998	0.025014	0.025030	0.025047	0.025063	0.025079	0.025096
0.080	0.025112	0.025128	0.025145	0.025161	0.025177	0.025194	0.025210	0.025226	0.025243	0.025259
0.090	0.025275	0.025292	0.025308	0.025324	0.025341	0.025357	0.025374	0.025390	0.025406	0.025423
0.100	0.025439	0.025456	0.025472	0.025489	0.025505	0.025521	0.025538	0.025554	0.025571	0.025587
0.110	0.025604	0.025620	0.025637	0.025653	0.025670	0.025686	0.025703	0.025719	0.025736	0.025752
0.120	0.025769	0.025785	0.025802	0.025818	0.025835	0.025851	0.025868	0.025885	0.025901	0.025918
0.130	0.025934	0.025951	0.025967	0.025984	0.026001	0.026017	0.026034	0.026050	0.026067	0.026084
0.140	0.026100	0.026117	0.026134	0.026150	0.026167	0.026184	0.026200	0.026217	0.026234	0.026250
0.150	0.026267	0.026284	0.026300	0.026317	0.026334	0.026350	0.026367	0.026384	0.026401	0.026417
0.160	0.026434	0.026451	0.026468	0.026484	0.026501	0.026518	0.026535	0.026551	0.026568	0.026585
0.170	0.026602	0.026618	0.026635	0.026652	0.026669	0.026686	0.026703	0.026719	0.026736	0.026753
0.180	0.026770	0.026787	0.026804	0.026820	0.026837	0.026854	0.026871	0.026888	0.026905	0.026922
0.190	0.026939	0.026955	0.026972	0.026989	0.027006	0.027023	0.027040	0.027057	0.027074	0.027091
0.200	0.027108	0.027125	0.027142	0.027159	0.027176	0.027193	0.027210	0.027227	0.027244	0.027261
0.210	0.027278	0.027295	0.027312	0.027329	0.027346	0.027363	0.027380	0.027397	0.027414	0.027431
0.220	0.027448	0.027465	0.027482	0.027499	0.027516	0.027533	0.027550	0.027567	0.027585	0.027602
0.230	0.027619	0.027636	0.027653	0.027670	0.027687	0.027704	0.027722	0.027739	0.027756	0.027773
0.240	0.027790	0.027807	0.027824	0.027842	0.027859	0.027876	0.027893	0.027910	0.027928	0.027945
0.250	0.027962	0.027979	0.027996	0.028014	0.028031	0.028048	0.028065	0.028083	0.028100	0.028117
0.260	0.028134	0.028152	0.028169	0.028186	0.028204	0.028221	0.028238	0.028255	0.028273	0.028290
0.270	0.028307	0.028325	0.028342	0.028359	0.028377	0.028394	0.028411	0.028429	0.028446	0.028464
0.280	0.028481	0.028498	0.028516	0.028533	0.028550	0.028568	0.028585	0.028603	0.028620	0.028638
0.290	0.028655	0.028672	0.028690	0.028707	0.028725	0.028742	0.028760	0.028777	0.028795	0.028812
0.300	0.028830	0.028847	0.028864	0.028882	0.028899	0.028917	0.028934	0.028952	0.028970	0.028987
0.310	0.029005	0.029022	0.029040	0.029057	0.029075	0.029092	0.029110	0.029127	0.029145	0.029163
0.320	0.029180	0.029198	0.029215	0.029233	0.029251	0.029268	0.029286	0.029303	0.029321	0.029339
0.330	0.029356	0.029374	0.029392	0.029409	0.029427	0.029445	0.029462	0.029480	0.029498	0.029515
0.340	0.029533	0.029551	0.029568	0.029586	0.029604	0.029622	0.029639	0.029657	0.029675	0.029693
0.350	0.029710	0.029728	0.029746	0.029764	0.029781	0.029799	0.029817	0.029835	0.029852	0.029870
0.360	0.029888	0.029906	0.029924	0.029941	0.029959	0.029977	0.029995	0.030013	0.030031	0.030048
0.370	0.030066	0.030084	0.030102	0.030120	0.030138	0.030156	0.030173	0.030191	0.030209	0.030227
0.380	0.030245	0.030263	0.030281	0.030299	0.030317	0.030335	0.030353	0.030371	0.030388	0.030406
0.390	0.030424	0.030442	0.030460	0.030478	0.030496	0.030514	0.030532	0.030550	0.030568	0.030586
0.400	0.030604	0.030622	0.030640	0.030658	0.030676	0.030694	0.030712	0.030730	0.030749	0.030767
0.410	0.030785	0.030803	0.030821	0.030839	0.030857	0.030875	0.030893	0.030911	0.030929	0.030947
0.420	0.030966	0.030984	0.031002	0.031020	0.031038	0.031056	0.031074	0.031093	0.031111	0.031129
0.430	0.031147	0.031165	0.031183	0.031202	0.031220	0.031238	0.031256	0.031274	0.031293	0.031311
0.440	0.031329	0.031347	0.031365	0.031384	0.031402	0.031420	0.031438	0.031457	0.031475	0.031493
0.450	0.031512	0.031530	0.031548	0.031566	0.031585	0.031603	0.031621	0.031640	0.031658	0.031676
0.460	0.031695	0.031713	0.031731	0.031750	0.031768	0.031786	0.031805	0.031823	0.031841	0.031860
0.470	0.031878	0.031897	0.031915	0.031933	0.031952	0.031970	0.031989	0.032007	0.032025	0.032044
0.480	0.032062	0.032081	0.032099	0.032118	0.032136	0.032155	0.032173	0.032192	0.032210	0.032228
0.490	0.032247	0.032265	0.032284	0.032302	0.032321	0.032339	0.032358	0.032377	0.032395	0.032414

ATTENUATION IN DECIBELS
THETA FROM 3.500 TO 3.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	0.032432	0.032451	0.032469	0.032488	0.032506	0.032525	0.032543	0.032562	0.032581	0.032599
0.510	0.032618	0.032636	0.032655	0.032674	0.032692	0.032711	0.032730	0.032748	0.032767	0.032785
0.520	0.032804	0.032823	0.032841	0.032860	0.032879	0.032897	0.032916	0.032935	0.032953	0.032972
0.530	0.032991	0.033010	0.033028	0.033047	0.033066	0.033084	0.033103	0.033122	0.033141	0.033159
0.540	0.033178	0.033197	0.033216	0.033234	0.033253	0.033272	0.033291	0.033310	0.033328	0.033347
0.550	0.033366	0.033385	0.033404	0.033422	0.033441	0.033460	0.033479	0.033498	0.033517	0.033535
0.560	0.033554	0.033573	0.033592	0.033611	0.033630	0.033649	0.033668	0.033687	0.033705	0.033724
0.570	0.033743	0.033762	0.033781	0.033800	0.033819	0.033838	0.033857	0.033876	0.033895	0.033914
0.580	0.033933	0.033952	0.033971	0.033990	0.034009	0.034028	0.034047	0.034066	0.034085	0.034104
0.590	0.034123	0.034142	0.034161	0.034180	0.034199	0.034218	0.034237	0.034256	0.034275	0.034294
0.600	0.034313	0.034332	0.034351	0.034370	0.034389	0.034409	0.034428	0.034447	0.034466	0.034485
0.610	0.034504	0.034523	0.034542	0.034562	0.034581	0.034600	0.034619	0.034638	0.034657	0.034676
0.620	0.034696	0.034715	0.034734	0.034753	0.034772	0.034792	0.034811	0.034830	0.034849	0.034869
0.630	0.034888	0.034907	0.034926	0.034945	0.034965	0.034984	0.035003	0.035023	0.035042	0.035061
0.640	0.035080	0.035100	0.035119	0.035138	0.035158	0.035177	0.035196	0.035216	0.035235	0.035254
0.650	0.035274	0.035293	0.035312	0.035332	0.035351	0.035370	0.035390	0.035409	0.035428	0.035448
0.660	0.035467	0.035487	0.035506	0.035525	0.035545	0.035564	0.035584	0.035603	0.035623	0.035642
0.670	0.035661	0.035681	0.035700	0.035720	0.035739	0.035759	0.035778	0.035798	0.035817	0.035837
0.680	0.035856	0.035876	0.035895	0.035915	0.035934	0.035954	0.035973	0.035993	0.036012	0.036032
0.690	0.036051	0.036071	0.036091	0.036110	0.036130	0.036149	0.036169	0.036188	0.036208	0.036228
0.700	0.036247	0.036267	0.036286	0.036306	0.036326	0.036345	0.036365	0.036385	0.036404	0.036424
0.710	0.036444	0.036463	0.036483	0.036503	0.036522	0.036542	0.036562	0.036581	0.036601	0.036621
0.720	0.036640	0.036660	0.036680	0.036700	0.036719	0.036739	0.036759	0.036779	0.036798	0.036818
0.730	0.036838	0.036858	0.036877	0.036897	0.036917	0.036937	0.036956	0.036976	0.036996	0.037016
0.740	0.037036	0.037056	0.037075	0.037095	0.037115	0.037135	0.037155	0.037175	0.037194	0.037214
0.750	0.037234	0.037254	0.037274	0.037294	0.037314	0.037334	0.037354	0.037373	0.037393	0.037413
0.760	0.037433	0.037453	0.037473	0.037493	0.037513	0.037533	0.037553	0.037573	0.037593	0.037613
0.770	0.037633	0.037653	0.037673	0.037693	0.037713	0.037733	0.037753	0.037773	0.037793	0.037813
0.780	0.037833	0.037853	0.037873	0.037893	0.037913	0.037933	0.037953	0.037973	0.037993	0.038013
0.790	0.038033	0.038053	0.038074	0.038094	0.038114	0.038134	0.038154	0.038174	0.038194	0.038214
0.800	0.038234	0.038255	0.038275	0.038295	0.038315	0.038335	0.038355	0.038376	0.038396	0.038416
0.810	0.038436	0.038456	0.038476	0.038497	0.038517	0.038537	0.038557	0.038578	0.038598	0.038618
0.820	0.038638	0.038659	0.038679	0.038699	0.038719	0.038740	0.038760	0.038780	0.038800	0.038821
0.830	0.038841	0.038861	0.038882	0.038902	0.038922	0.038943	0.038963	0.038983	0.039004	0.039024
0.840	0.039044	0.039065	0.039085	0.039105	0.039126	0.039146	0.039166	0.039187	0.039207	0.039228
0.850	0.039248	0.039268	0.039289	0.039309	0.039330	0.039350	0.039371	0.039391	0.039411	0.039432
0.860	0.039452	0.039473	0.039493	0.039514	0.039534	0.039555	0.039575	0.039596	0.039616	0.039637
0.870	0.039657	0.039678	0.039698	0.039719	0.039739	0.039760	0.039780	0.039801	0.039821	0.039842
0.880	0.039863	0.039883	0.039904	0.039924	0.039945	0.039965	0.039986	0.040007	0.040027	0.040048
0.890	0.040068	0.040089	0.040110	0.040130	0.040151	0.040172	0.040192	0.040213	0.040234	0.040254
0.900	0.040275	0.040296	0.040316	0.040337	0.040358	0.040378	0.040399	0.040420	0.040440	0.040461
0.910	0.040482	0.040503	0.040523	0.040544	0.040565	0.040585	0.040606	0.040627	0.040648	0.040669
0.920	0.040689	0.040710	0.040731	0.040752	0.040772	0.040793	0.040814	0.040835	0.040856	0.040877
0.930	0.040897	0.040918	0.040939	0.040960	0.040981	0.041002	0.041022	0.041043	0.041064	0.041085
0.940	0.041106	0.041127	0.041148	0.041169	0.041189	0.041210	0.041231	0.041252	0.041273	0.041294
0.950	0.041315	0.041336	0.041357	0.041378	0.041399	0.041420	0.041441	0.041462	0.041483	0.041504
0.960	0.041525	0.041546	0.041567	0.041588	0.041609	0.041630	0.041651	0.041672	0.041693	0.041714
0.970	0.041735	0.041756	0.041777	0.041798	0.041819	0.041840	0.041861	0.041882	0.041903	0.041924
0.980	0.041945	0.041967	0.041988	0.042009	0.042030	0.042051	0.042072	0.042093	0.042114	0.042136
0.990	0.042157	0.042178	0.042199	0.042220	0.042241	0.042262	0.042284	0.042305	0.042326	0.042347

ATTENUATION IN DECIBELS
THETA FROM 4.000 TO 4.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.000	0.042368	0.042390	0.042411	0.042432	0.042453	0.042474	0.042496	0.042517	0.042538	0.042559
0.010	0.042581	0.042602	0.042623	0.042644	0.042666	0.042687	0.042708	0.042730	0.042751	0.042772
0.020	0.042793	0.042815	0.042836	0.042857	0.042879	0.042900	0.042921	0.042943	0.042964	0.042985
0.030	0.043007	0.043028	0.043050	0.043071	0.043092	0.043114	0.043135	0.043156	0.043178	0.043199
0.040	0.043221	0.043242	0.043264	0.043285	0.043306	0.043328	0.043349	0.043371	0.043392	0.043414
0.050	0.043435	0.043457	0.043478	0.043499	0.043521	0.043543	0.043564	0.043586	0.043607	0.043629
0.060	0.043650	0.043672	0.043693	0.043715	0.043736	0.043758	0.043779	0.043801	0.043822	0.043844
0.070	0.043866	0.043887	0.043909	0.043930	0.043952	0.043973	0.043995	0.044017	0.044038	0.044060
0.080	0.044082	0.044103	0.044125	0.044146	0.044168	0.044190	0.044211	0.044233	0.044255	0.044276
0.090	0.044298	0.044320	0.044341	0.044363	0.044385	0.044407	0.044428	0.044450	0.044472	0.044493
0.100	0.044515	0.044537	0.044559	0.044580	0.044602	0.044624	0.044646	0.044667	0.044689	0.044711
0.110	0.044733	0.044755	0.044776	0.044798	0.044820	0.044842	0.044864	0.044885	0.044907	0.044929
0.120	0.044951	0.044973	0.044995	0.045016	0.045038	0.045060	0.045082	0.045104	0.045126	0.045148
0.130	0.045170	0.045191	0.045213	0.045235	0.045257	0.045279	0.045301	0.045323	0.045345	0.045367
0.140	0.045389	0.045411	0.045433	0.045455	0.045477	0.045499	0.045520	0.045542	0.045564	0.045586
0.150	0.045608	0.045630	0.045652	0.045674	0.045696	0.045719	0.045741	0.045763	0.045785	0.045807
0.160	0.045829	0.045851	0.045873	0.045895	0.045917	0.045939	0.045961	0.045983	0.046005	0.046027
0.170	0.046049	0.046072	0.046094	0.046116	0.046138	0.046160	0.046182	0.046204	0.046227	0.046249
0.180	0.046271	0.046293	0.046315	0.046337	0.046359	0.046382	0.046404	0.046426	0.046448	0.046470
0.190	0.046493	0.046515	0.046537	0.046559	0.046582	0.046604	0.046626	0.046648	0.046671	0.046693
0.200	0.046715	0.046737	0.046760	0.046782	0.046804	0.046826	0.046849	0.046871	0.046893	0.046916
0.210	0.046938	0.046960	0.046983	0.047005	0.047027	0.047050	0.047072	0.047094	0.047117	0.047139
0.220	0.047161	0.047184	0.047206	0.047229	0.047251	0.047273	0.047296	0.047318	0.047341	0.047363
0.230	0.047385	0.047408	0.047430	0.047453	0.047475	0.047498	0.047520	0.047543	0.047565	0.047587
0.240	0.047610	0.047632	0.047655	0.047677	0.047700	0.047722	0.047745	0.047767	0.047790	0.047812
0.250	0.047835	0.047858	0.047880	0.047903	0.047925	0.047948	0.047970	0.047993	0.048015	0.048038
0.260	0.048061	0.048083	0.048106	0.048128	0.048151	0.048174	0.048196	0.048219	0.048241	0.048264
0.270	0.048287	0.048309	0.048332	0.048355	0.048377	0.048400	0.048423	0.048445	0.048468	0.048491
0.280	0.048513	0.048536	0.048559	0.048581	0.048604	0.048627	0.048650	0.048672	0.048695	0.048718
0.290	0.048740	0.048763	0.048786	0.048809	0.048832	0.048854	0.048877	0.048900	0.048923	0.048945
0.300	0.048968	0.048991	0.049014	0.049037	0.049059	0.049082	0.049105	0.049128	0.049151	0.049174
0.310	0.049196	0.049219	0.049242	0.049265	0.049288	0.049311	0.049334	0.049357	0.049379	0.049402
0.320	0.049425	0.049448	0.049471	0.049494	0.049517	0.049540	0.049563	0.049586	0.049609	0.049632
0.330	0.049654	0.049677	0.049700	0.049723	0.049746	0.049769	0.049792	0.049815	0.049838	0.049861
0.340	0.049884	0.049907	0.049930	0.049953	0.049976	0.049999	0.050022	0.050046	0.050069	0.050092
0.350	0.050115	0.050138	0.050161	0.050184	0.050207	0.050230	0.050253	0.050276	0.050299	0.050322
0.360	0.050346	0.050369	0.050392	0.050415	0.050438	0.050461	0.050484	0.050508	0.050531	0.050554
0.370	0.050577	0.050600	0.050623	0.050647	0.050670	0.050693	0.050716	0.050739	0.050763	0.050786
0.380	0.050809	0.050832	0.050855	0.050879	0.050902	0.050925	0.050948	0.050972	0.050995	0.051018
0.390	0.051041	0.051065	0.051088	0.051111	0.051135	0.051158	0.051181	0.051205	0.051228	0.051251
0.400	0.051275	0.051298	0.051321	0.051345	0.051368	0.051391	0.051415	0.051438	0.051461	0.051485
0.410	0.051508	0.051531	0.051555	0.051578	0.051602	0.051625	0.051648	0.051672	0.051695	0.051719
0.420	0.051742	0.051766	0.051789	0.051813	0.051836	0.051859	0.051883	0.051906	0.051930	0.051953
0.430	0.051977	0.052000	0.052024	0.052047	0.052071	0.052094	0.052118	0.052141	0.052165	0.052188
0.440	0.052212	0.052236	0.052259	0.052283	0.052306	0.052330	0.052353	0.052377	0.052400	0.052424
0.450	0.052448	0.052471	0.052495	0.052518	0.052542	0.052566	0.052589	0.052613	0.052637	0.052660
0.460	0.052684	0.052708	0.052731	0.052755	0.052779	0.052802	0.052826	0.052850	0.052873	0.052897
0.470	0.052921	0.052944	0.052968	0.052992	0.053015	0.053039	0.053063	0.053087	0.053110	0.053134
0.480	0.053158	0.053182	0.053205	0.053229	0.053253	0.053277	0.053301	0.053324	0.053348	0.053372
0.490	0.053396	0.053420	0.053443	0.053467	0.053491	0.053515	0.053539	0.053563	0.053586	0.053610

ATTENUATION IN DECIBELS
THETA FROM 4.500 TO 4.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	0.053634	0.053658	0.053682	0.053706	0.053730	0.053753	0.053777	0.053801	0.053825	0.053849
0.510	0.053873	0.053897	0.053921	0.053945	0.053969	0.053993	0.054017	0.054041	0.054064	0.054088
0.520	0.054112	0.054136	0.054160	0.054184	0.054208	0.054232	0.054256	0.054280	0.054304	0.054328
0.530	0.054352	0.054376	0.054400	0.054424	0.054448	0.054473	0.054497	0.054521	0.054545	0.054569
0.540	0.054593	0.054617	0.054641	0.054665	0.054689	0.054713	0.054737	0.054761	0.054786	0.054810
0.550	0.054834	0.054858	0.054882	0.054906	0.054930	0.054955	0.054979	0.055003	0.055027	0.055051
0.560	0.055075	0.055100	0.055124	0.055148	0.055172	0.055196	0.055221	0.055245	0.055269	0.055294
0.570	0.055317	0.055342	0.055366	0.055390	0.055414	0.055439	0.055463	0.055487	0.055512	0.055536
0.580	0.055560	0.055584	0.055609	0.055633	0.055657	0.055682	0.055706	0.055730	0.055755	0.055779
0.590	0.055803	0.055828	0.055852	0.055876	0.055901	0.055925	0.055949	0.055974	0.055998	0.056023
0.600	0.056047	0.056071	0.056096	0.056120	0.056145	0.056169	0.056193	0.056218	0.056242	0.056267
0.610	0.056291	0.056316	0.056340	0.056364	0.056389	0.056413	0.056438	0.056462	0.056487	0.056511
0.620	0.056536	0.056560	0.056585	0.056609	0.056634	0.056658	0.056683	0.056708	0.056732	0.056757
0.630	0.056781	0.056806	0.056830	0.056855	0.056879	0.056904	0.056929	0.056953	0.056978	0.057002
0.640	0.057027	0.057052	0.057076	0.057101	0.057125	0.057150	0.057175	0.057199	0.057224	0.057249
0.650	0.057273	0.057298	0.057323	0.057347	0.057372	0.057397	0.057421	0.057446	0.057471	0.057495
0.660	0.057520	0.057545	0.057570	0.057594	0.057619	0.057644	0.057669	0.057693	0.057718	0.057743
0.670	0.057768	0.057792	0.057817	0.057842	0.057867	0.057891	0.057916	0.057941	0.057966	0.057991
0.680	0.058016	0.058040	0.058065	0.058090	0.058115	0.058140	0.058165	0.058189	0.058214	0.058239
0.690	0.058264	0.058289	0.058314	0.058339	0.058364	0.058388	0.058413	0.058438	0.058463	0.058488
0.700	0.058513	0.058538	0.058563	0.058588	0.058613	0.058638	0.058663	0.058688	0.058713	0.058738
0.710	0.058763	0.058788	0.058813	0.058838	0.058863	0.058888	0.058913	0.058938	0.058963	0.058988
0.720	0.059013	0.059038	0.059063	0.059088	0.059113	0.059138	0.059163	0.059188	0.059213	0.059238
0.730	0.059263	0.059288	0.059313	0.059338	0.059364	0.059389	0.059414	0.059439	0.059464	0.059489
0.740	0.059514	0.059539	0.059565	0.059590	0.059615	0.059640	0.059665	0.059690	0.059716	0.059741
0.750	0.059766	0.059791	0.059816	0.059842	0.059867	0.059892	0.059917	0.059943	0.059968	0.059993
0.760	0.060018	0.060043	0.060069	0.060094	0.060119	0.060145	0.060170	0.060195	0.060220	0.060246
0.770	0.060271	0.060296	0.060322	0.060347	0.060372	0.060398	0.060423	0.060448	0.060474	0.060499
0.780	0.060524	0.060550	0.060575	0.060600	0.060626	0.060651	0.060676	0.060702	0.060727	0.060753
0.790	0.060778	0.060803	0.060829	0.060854	0.060880	0.060905	0.060931	0.060956	0.060981	0.061007
0.800	0.061032	0.061058	0.061083	0.061109	0.061134	0.061160	0.061185	0.061211	0.061236	0.061262
0.810	0.061287	0.061313	0.061338	0.061364	0.061389	0.061415	0.061440	0.061466	0.061492	0.061517
0.820	0.061543	0.061568	0.061594	0.061619	0.061645	0.061671	0.061696	0.061722	0.061747	0.061773
0.830	0.061799	0.061824	0.061850	0.061875	0.061901	0.061927	0.061952	0.061978	0.062004	0.062029
0.840	0.062055	0.062081	0.062106	0.062132	0.062158	0.062183	0.062209	0.062235	0.062261	0.062286
0.850	0.062312	0.062338	0.062363	0.062389	0.062415	0.062441	0.062466	0.062492	0.062518	0.062544
0.860	0.062570	0.062595	0.062621	0.062647	0.062673	0.062699	0.062724	0.062750	0.062776	0.062802
0.870	0.062828	0.062853	0.062879	0.062905	0.062931	0.062957	0.062983	0.063009	0.063034	0.063060
0.880	0.063086	0.063112	0.063138	0.063164	0.063190	0.063216	0.063242	0.063268	0.063293	0.063319
0.890	0.063345	0.063371	0.063397	0.063423	0.063449	0.063475	0.063501	0.063527	0.063553	0.063579
0.900	0.063605	0.063631	0.063657	0.063683	0.063709	0.063735	0.063761	0.063787	0.063813	0.063839
0.910	0.063865	0.063891	0.063917	0.063943	0.063969	0.063995	0.064022	0.064048	0.064074	0.064100
0.920	0.064126	0.064152	0.064178	0.064204	0.064230	0.064256	0.064283	0.064309	0.064335	0.064361
0.930	0.064387	0.064413	0.064440	0.064466	0.064492	0.064518	0.064544	0.064570	0.064597	0.064623
0.940	0.064649	0.064675	0.064701	0.064728	0.064754	0.064780	0.064806	0.064833	0.064859	0.064885
0.950	0.064911	0.064938	0.064964	0.064990	0.065016	0.065043	0.065069	0.065095	0.065122	0.065148
0.960	0.065174	0.065200	0.065227	0.065253	0.065279	0.065306	0.065332	0.065358	0.065385	0.065411
0.970	0.065438	0.065464	0.065490	0.065517	0.065543	0.065569	0.065596	0.065622	0.065649	0.065675
0.980	0.065701	0.065728	0.065754	0.065781	0.065807	0.065834	0.065860	0.065887	0.065913	0.065939
0.990	0.065966	0.065992	0.066019	0.066045	0.066072	0.066098	0.066125	0.066151	0.066178	0.066204

ATTENUATION IN DECIBELS
THETA FROM 5.000 TO 5.499 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.000	0.066231	0.066257	0.066284	0.066311	0.066337	0.066364	0.066390	0.066417	0.066443	0.066470
0.010	0.066496	0.066523	0.066550	0.066576	0.066603	0.066629	0.066656	0.066683	0.066709	0.066736
0.020	0.066763	0.066789	0.066816	0.066842	0.066869	0.066896	0.066922	0.066949	0.066976	0.067002
0.030	0.067029	0.067056	0.067083	0.067109	0.067136	0.067163	0.067189	0.067216	0.067243	0.067270
0.040	0.067296	0.067323	0.067350	0.067377	0.067403	0.067430	0.067457	0.067484	0.067510	0.067537
0.050	0.067564	0.067591	0.067618	0.067644	0.067671	0.067698	0.067725	0.067752	0.067778	0.067805
0.060	0.067832	0.067859	0.067886	0.067913	0.067940	0.067966	0.067993	0.068020	0.068047	0.068074
0.070	0.068101	0.068128	0.068155	0.068182	0.068208	0.068235	0.068262	0.068289	0.068316	0.068343
0.080	0.068370	0.068397	0.068424	0.068451	0.068478	0.068505	0.068532	0.068559	0.068586	0.068613
0.090	0.068640	0.068667	0.068694	0.068721	0.068748	0.068775	0.068802	0.068829	0.068856	0.068883
0.100	0.068910	0.068937	0.068964	0.068991	0.069019	0.069046	0.069073	0.069100	0.069127	0.069154
0.110	0.069181	0.069208	0.069235	0.069262	0.069290	0.069317	0.069344	0.069371	0.069398	0.069425
0.120	0.069452	0.069480	0.069507	0.069534	0.069561	0.069588	0.069616	0.069643	0.069670	0.069697
0.130	0.069724	0.069752	0.069779	0.069806	0.069833	0.069861	0.069888	0.069915	0.069942	0.069970
0.140	0.069997	0.070024	0.070051	0.070079	0.070106	0.070133	0.070161	0.070188	0.070215	0.070243
0.150	0.070270	0.070297	0.070325	0.070352	0.070379	0.070407	0.070434	0.070461	0.070489	0.070516
0.160	0.070543	0.070571	0.070598	0.070626	0.070653	0.070680	0.070708	0.070735	0.070763	0.070790
0.170	0.070817	0.070845	0.070872	0.070900	0.070927	0.070955	0.070982	0.071010	0.071037	0.071065
0.180	0.071092	0.071120	0.071147	0.071175	0.071202	0.071230	0.071257	0.071285	0.071312	0.071340
0.190	0.071367	0.071395	0.071422	0.071450	0.071477	0.071505	0.071533	0.071560	0.071588	0.071615
0.200	0.071643	0.071670	0.071698	0.071726	0.071753	0.071781	0.071808	0.071836	0.071864	0.071891
0.210	0.071919	0.071947	0.071974	0.072002	0.072030	0.072057	0.072085	0.072113	0.072140	0.072168
0.220	0.072196	0.072223	0.072251	0.072279	0.072307	0.072334	0.072362	0.072390	0.072418	0.072445
0.230	0.072473	0.072501	0.072529	0.072556	0.072584	0.072612	0.072640	0.072667	0.072695	0.072723
0.240	0.072751	0.072779	0.072806	0.072834	0.072862	0.072890	0.072918	0.072946	0.072973	0.073001
0.250	0.073029	0.073057	0.073085	0.073113	0.073141	0.073169	0.073196	0.073224	0.073252	0.073280
0.260	0.073308	0.073336	0.073364	0.073392	0.073420	0.073448	0.073476	0.073504	0.073531	0.073559
0.270	0.073587	0.073615	0.073643	0.073671	0.073699	0.073727	0.073755	0.073783	0.073811	0.073839
0.280	0.073867	0.073895	0.073923	0.073951	0.073979	0.074008	0.074036	0.074064	0.074092	0.074120
0.290	0.074148	0.074176	0.074204	0.074232	0.074260	0.074288	0.074316	0.074344	0.074373	0.074401
0.300	0.074429	0.074457	0.074485	0.074513	0.074541	0.074570	0.074598	0.074626	0.074654	0.074682
0.310	0.074710	0.074739	0.074767	0.074795	0.074823	0.074851	0.074880	0.074908	0.074936	0.074964
0.320	0.074992	0.075021	0.075049	0.075077	0.075105	0.075134	0.075162	0.075190	0.075218	0.075247
0.330	0.075275	0.075303	0.075332	0.075360	0.075388	0.075417	0.075445	0.075473	0.075501	0.075530
0.340	0.075558	0.075586	0.075615	0.075643	0.075672	0.075700	0.075728	0.075757	0.075785	0.075813
0.350	0.075842	0.075870	0.075899	0.075927	0.075955	0.075984	0.076012	0.076041	0.076069	0.076098
0.360	0.076126	0.076154	0.076183	0.076211	0.076240	0.076268	0.076297	0.076325	0.076354	0.076382
0.370	0.076411	0.076439	0.076468	0.076496	0.076525	0.076553	0.076582	0.076610	0.076639	0.076667
0.380	0.076696	0.076725	0.076753	0.076782	0.076810	0.076839	0.076867	0.076896	0.076925	0.076953
0.390	0.076982	0.077010	0.077039	0.077068	0.077096	0.077125	0.077154	0.077182	0.077211	0.077239
0.400	0.077268	0.077297	0.077325	0.077354	0.077383	0.077412	0.077440	0.077469	0.077498	0.077526
0.410	0.077555	0.077584	0.077612	0.077641	0.077670	0.077699	0.077727	0.077756	0.077785	0.077814
0.420	0.077842	0.077871	0.077900	0.077929	0.077958	0.077986	0.078015	0.078044	0.078073	0.078102
0.430	0.078130	0.078159	0.078188	0.078217	0.078246	0.078275	0.078303	0.078332	0.078361	0.078390
0.440	0.078419	0.078448	0.078477	0.078505	0.078534	0.078563	0.078592	0.078621	0.078650	0.078679
0.450	0.078703	0.078732	0.078761	0.078790	0.078819	0.078848	0.078877	0.078906	0.078935	0.078964
0.460	0.078997	0.079026	0.079055	0.079084	0.079113	0.079142	0.079171	0.079200	0.079229	0.079258
0.470	0.079287	0.079316	0.079346	0.079375	0.079404	0.079433	0.079462	0.079491	0.079520	0.079549
0.480	0.079578	0.079607	0.079636	0.079665	0.079694	0.079723	0.079753	0.079782	0.079811	0.079840
0.490	0.079869	0.079898	0.079928	0.079957	0.079986	0.080015	0.080044	0.080073	0.080103	0.080132

ATTENUATION IN DECIBELS
THETA FROM 5.500 TO 5.999 DEGREES

THETA IN DEGREES	0.600	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	0.080161	0.080190	0.080219	0.080248	0.080278	0.080307	0.080336	0.080365	0.080395	0.080424
0.510	0.080453	0.080482	0.080512	0.080541	0.080570	0.080599	0.080629	0.080658	0.080687	0.080717
0.520	0.080746	0.080775	0.080804	0.080834	0.080863	0.080892	0.080922	0.080951	0.080980	0.081010
0.530	0.081039	0.081068	0.081098	0.081127	0.081157	0.081186	0.081215	0.081245	0.081274	0.081304
0.540	0.081333	0.081362	0.081392	0.081421	0.081451	0.081480	0.081509	0.081539	0.081568	0.081598
0.550	0.081627	0.081657	0.081686	0.081716	0.081745	0.081775	0.081804	0.081834	0.081863	0.081893
0.560	0.081922	0.081952	0.081981	0.082011	0.082040	0.082070	0.082099	0.082129	0.082158	0.082188
0.570	0.082218	0.082247	0.082277	0.082306	0.082336	0.082365	0.082395	0.082425	0.082454	0.082484
0.580	0.082514	0.082543	0.082573	0.082602	0.082632	0.082662	0.082691	0.082721	0.082751	0.082780
0.590	0.082810	0.082840	0.082869	0.082899	0.082929	0.082958	0.082988	0.083018	0.083048	0.083077
0.600	0.083107	0.083137	0.083166	0.083196	0.083226	0.083256	0.083285	0.083315	0.083345	0.083375
0.610	0.083405	0.083434	0.083464	0.083494	0.083524	0.083554	0.083583	0.083613	0.083643	0.083673
0.620	0.083703	0.083733	0.083762	0.083792	0.083822	0.083852	0.083882	0.083912	0.083942	0.083971
0.630	0.084001	0.084031	0.084061	0.084091	0.084121	0.084151	0.084181	0.084211	0.084241	0.084270
0.640	0.084300	0.084330	0.084360	0.084390	0.084420	0.084450	0.084480	0.084510	0.084540	0.084570
0.650	0.084600	0.084630	0.084660	0.084690	0.084720	0.084750	0.084780	0.084810	0.084840	0.084870
0.660	0.084900	0.084930	0.084960	0.084991	0.085021	0.085051	0.085081	0.085111	0.085141	0.085171
0.670	0.085201	0.085231	0.085261	0.085291	0.085322	0.085352	0.085382	0.085412	0.085442	0.085472
0.680	0.085502	0.085533	0.085563	0.085593	0.085623	0.085653	0.085683	0.085714	0.085744	0.085774
0.690	0.085804	0.085834	0.085865	0.085895	0.085925	0.085955	0.085986	0.086016	0.086046	0.086076
0.700	0.086107	0.086137	0.086167	0.086197	0.086228	0.086258	0.086288	0.086319	0.086349	0.086379
0.710	0.086409	0.086440	0.086470	0.086500	0.086531	0.086561	0.086591	0.086622	0.086652	0.086683
0.720	0.086713	0.086743	0.086774	0.086804	0.086834	0.086865	0.086895	0.086926	0.086956	0.086986
0.730	0.087017	0.087047	0.087078	0.087108	0.087139	0.087169	0.087200	0.087230	0.087260	0.087291
0.740	0.087321	0.087352	0.087382	0.087413	0.087443	0.087474	0.087504	0.087535	0.087565	0.087596
0.750	0.087626	0.087657	0.087687	0.087718	0.087749	0.087779	0.087810	0.087840	0.087871	0.087901
0.760	0.087932	0.087963	0.087993	0.088024	0.088054	0.088085	0.088116	0.088146	0.088177	0.088207
0.770	0.088238	0.088269	0.088299	0.088330	0.088361	0.088391	0.088422	0.088453	0.088483	0.088514
0.780	0.088545	0.088575	0.088606	0.088637	0.088668	0.088698	0.088729	0.088760	0.088790	0.088821
0.790	0.088852	0.088883	0.088913	0.088944	0.088975	0.089006	0.089036	0.089067	0.089098	0.089129
0.800	0.089160	0.089190	0.089221	0.089252	0.089283	0.089314	0.089344	0.089375	0.089406	0.089437
0.810	0.089468	0.089499	0.089530	0.089560	0.089591	0.089622	0.089653	0.089684	0.089715	0.089746
0.820	0.089777	0.089808	0.089838	0.089869	0.089900	0.089931	0.089962	0.089993	0.090024	0.090055
0.830	0.090086	0.090117	0.090148	0.090179	0.090210	0.090241	0.090272	0.090303	0.090334	0.090365
0.840	0.090396	0.090427	0.090458	0.090489	0.090520	0.090551	0.090582	0.090613	0.090644	0.090675
0.850	0.090706	0.090737	0.090768	0.090799	0.090830	0.090862	0.090893	0.090924	0.090955	0.090986
0.860	0.091017	0.091048	0.091079	0.091110	0.091142	0.091173	0.091204	0.091235	0.091266	0.091297
0.870	0.091329	0.091360	0.091391	0.091422	0.091453	0.091484	0.091516	0.091547	0.091578	0.091609
0.880	0.091641	0.091672	0.091703	0.091734	0.091765	0.091797	0.091828	0.091859	0.091890	0.091922
0.890	0.091953	0.091984	0.092016	0.092047	0.092078	0.092109	0.092141	0.092172	0.092203	0.092235
0.900	0.092266	0.092297	0.092329	0.092360	0.092391	0.092423	0.092454	0.092486	0.092517	0.092548
0.910	0.092580	0.092611	0.092642	0.092674	0.092705	0.092737	0.092768	0.092799	0.092831	0.092862
0.920	0.092894	0.092925	0.092957	0.092988	0.093020	0.093051	0.093083	0.093114	0.093145	0.093177
0.930	0.093208	0.093240	0.093271	0.093303	0.093334	0.093366	0.093398	0.093429	0.093461	0.093492
0.940	0.093524	0.093555	0.093587	0.093618	0.093650	0.093681	0.093713	0.093745	0.093776	0.093808
0.950	0.093839	0.093871	0.093903	0.093934	0.093966	0.093997	0.094029	0.094061	0.094092	0.094124
0.960	0.094156	0.094187	0.094219	0.094251	0.094282	0.094314	0.094346	0.094377	0.094409	0.094441
0.970	0.094472	0.094504	0.094536	0.094568	0.094599	0.094631	0.094663	0.094695	0.094726	0.094758
0.980	0.094790	0.094822	0.094853	0.094885	0.094917	0.094949	0.094980	0.095012	0.095044	0.095076
0.990	0.095108	0.095139	0.095171	0.095203	0.095235	0.095267	0.095299	0.095330	0.095362	0.095394

ATTENUATION IN DECIBELS
THETA FROM 6.000 TO 6.499 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.000	0.095426	0.095458	0.095490	0.095522	0.095554	0.095585	0.095617	0.095649	0.095681	0.095713
0.010	0.095745	0.095777	0.095809	0.095841	0.095873	0.095905	0.095937	0.095969	0.096001	0.096032
0.020	0.096064	0.096096	0.096128	0.096160	0.096192	0.096224	0.096256	0.096288	0.096320	0.096352
0.030	0.096384	0.096416	0.096449	0.096481	0.096513	0.096545	0.096577	0.096609	0.096641	0.096673
0.040	0.096705	0.096737	0.096769	0.096801	0.096833	0.096865	0.096898	0.096930	0.096962	0.096994
0.050	0.097026	0.097058	0.097090	0.097123	0.097155	0.097187	0.097219	0.097251	0.097283	0.097316
0.060	0.097348	0.097380	0.097412	0.097444	0.097476	0.097509	0.097541	0.097573	0.097605	0.097638
0.070	0.097670	0.097702	0.097734	0.097767	0.097799	0.097831	0.097863	0.097896	0.097928	0.097960
0.080	0.097993	0.098025	0.098057	0.098089	0.098121	0.098154	0.098186	0.098219	0.098251	0.098283
0.090	0.098316	0.098348	0.098380	0.098413	0.098445	0.098478	0.098510	0.098542	0.098575	0.098607
0.100	0.098639	0.098672	0.098704	0.098737	0.098769	0.098802	0.098834	0.098866	0.098899	0.098931
0.110	0.098964	0.098996	0.099029	0.099061	0.099094	0.099126	0.099159	0.099191	0.099224	0.099256
0.120	0.099289	0.099321	0.099354	0.099386	0.099419	0.099451	0.099484	0.099516	0.099549	0.099581
0.130	0.099614	0.099647	0.099679	0.099712	0.099744	0.099777	0.099809	0.099842	0.099875	0.099907
0.140	0.099940	0.099972	0.100005	0.100038	0.100070	0.100103	0.100136	0.100168	0.100201	0.100234
0.150	0.100266	0.100299	0.100332	0.100364	0.100397	0.100430	0.100462	0.100495	0.100528	0.100561
0.160	0.100593	0.100626	0.100659	0.100691	0.100724	0.100757	0.100790	0.100822	0.100855	0.100888
0.170	0.100921	0.100954	0.100986	0.101019	0.101052	0.101085	0.101118	0.101150	0.101183	0.101216
0.180	0.101249	0.101282	0.101314	0.101347	0.101380	0.101413	0.101446	0.101479	0.101512	0.101544
0.190	0.101577	0.101610	0.101643	0.101676	0.101709	0.101742	0.101775	0.101808	0.101841	0.101874
0.200	0.101906	0.101939	0.101972	0.102005	0.102038	0.102071	0.102104	0.102137	0.102170	0.102203
0.210	0.102236	0.102269	0.102302	0.102335	0.102368	0.102401	0.102434	0.102467	0.102500	0.102533
0.220	0.102566	0.102599	0.102632	0.102665	0.102699	0.102732	0.102765	0.102798	0.102831	0.102864
0.230	0.102897	0.102930	0.102963	0.102996	0.103029	0.103063	0.103096	0.103129	0.103162	0.103195
0.240	0.103228	0.103261	0.103295	0.103328	0.103361	0.103394	0.103427	0.103460	0.103494	0.103527
0.250	0.103560	0.103593	0.103626	0.103660	0.103693	0.103726	0.103759	0.103793	0.103826	0.103859
0.260	0.103892	0.103926	0.103959	0.103992	0.104025	0.104059	0.104092	0.104125	0.104159	0.104192
0.270	0.104225	0.104259	0.104292	0.104325	0.104359	0.104392	0.104425	0.104459	0.104492	0.104525
0.280	0.104559	0.104592	0.104625	0.104659	0.104692	0.104726	0.104759	0.104792	0.104826	0.104859
0.290	0.104893	0.104926	0.104959	0.104993	0.105026	0.105060	0.105093	0.105127	0.105160	0.105194
0.300	0.105227	0.105260	0.105294	0.105327	0.105361	0.105394	0.105428	0.105461	0.105495	0.105528
0.310	0.105562	0.105596	0.105629	0.105663	0.105696	0.105730	0.105763	0.105797	0.105830	0.105864
0.320	0.105898	0.105931	0.105965	0.105998	0.106032	0.106065	0.106099	0.106133	0.106166	0.106200
0.330	0.106234	0.106267	0.106301	0.106335	0.106368	0.106402	0.106436	0.106469	0.106503	0.106537
0.340	0.106570	0.106604	0.106638	0.106671	0.106705	0.106739	0.106772	0.106806	0.106840	0.106874
0.350	0.106907	0.106941	0.106975	0.107009	0.107042	0.107076	0.107110	0.107144	0.107177	0.107211
0.360	0.107245	0.107279	0.107313	0.107346	0.107380	0.107414	0.107448	0.107482	0.107516	0.107549
0.370	0.107583	0.107617	0.107651	0.107685	0.107719	0.107753	0.107786	0.107820	0.107854	0.107888
0.380	0.107922	0.107956	0.107990	0.108024	0.108058	0.108092	0.108125	0.108159	0.108193	0.108227
0.390	0.108261	0.108295	0.108329	0.108363	0.108397	0.108431	0.108465	0.108499	0.108533	0.108567
0.400	0.108601	0.108635	0.108669	0.108703	0.108737	0.108771	0.108805	0.108839	0.108873	0.108907
0.410	0.108941	0.108976	0.109010	0.109044	0.109078	0.109112	0.109146	0.109180	0.109214	0.109248
0.420	0.109282	0.109316	0.109351	0.109385	0.109419	0.109453	0.109487	0.109521	0.109555	0.109590
0.430	0.109624	0.109658	0.109692	0.109726	0.109760	0.109795	0.109829	0.109863	0.109897	0.109932
0.440	0.109966	0.110000	0.110034	0.110068	0.110103	0.110137	0.110171	0.110205	0.110239	0.110274
0.450	0.110308	0.110343	0.110377	0.110411	0.110445	0.110479	0.110514	0.110548	0.110583	0.110617
0.460	0.110651	0.110686	0.110720	0.110754	0.110789	0.110823	0.110857	0.110892	0.110926	0.110960
0.470	0.110995	0.111029	0.111064	0.111098	0.111132	0.111167	0.111201	0.111236	0.111270	0.111304
0.480	0.111339	0.111373	0.111408	0.111442	0.111477	0.111511	0.111546	0.111580	0.111615	0.111649
0.490	0.111684	0.111718	0.111753	0.111787	0.111822	0.111856	0.111891	0.111925	0.111960	0.111994

ATTENUATION IN DECIBELS
THETA FROM 6.500 TO 6.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	0.112079	0.112063	0.112098	0.112132	0.112167	0.112202	0.112236	0.112271	0.112305	0.112340
0.510	0.112374	0.112409	0.112444	0.112478	0.112513	0.112548	0.112582	0.112617	0.112651	0.112686
0.520	0.112721	0.112755	0.112790	0.112825	0.112859	0.112894	0.112928	0.112963	0.112998	0.113033
0.530	0.113068	0.113102	0.113137	0.113172	0.113206	0.113241	0.113276	0.113311	0.113345	0.113380
0.540	0.113415	0.113450	0.113484	0.113519	0.113554	0.113589	0.113623	0.113658	0.113693	0.113728
0.550	0.113763	0.113798	0.113832	0.113867	0.113902	0.113937	0.113972	0.114007	0.114041	0.114076
0.560	0.114111	0.114146	0.114181	0.114216	0.114251	0.114285	0.114320	0.114355	0.114390	0.114425
0.570	0.114460	0.114495	0.114530	0.114565	0.114600	0.114635	0.114670	0.114705	0.114740	0.114775
0.580	0.114809	0.114844	0.114879	0.114914	0.114949	0.114984	0.115019	0.115054	0.115089	0.115124
0.590	0.115159	0.115195	0.115230	0.115265	0.115300	0.115335	0.115370	0.115405	0.115440	0.115475
0.600	0.115510	0.115545	0.115580	0.115615	0.115650	0.115686	0.115721	0.115756	0.115791	0.115826
0.610	0.115861	0.115896	0.115931	0.115967	0.116002	0.116037	0.116072	0.116107	0.116142	0.116178
0.620	0.116213	0.116248	0.116283	0.116318	0.116354	0.116389	0.116424	0.116459	0.116494	0.116530
0.630	0.116565	0.116600	0.116635	0.116671	0.116706	0.116741	0.116776	0.116812	0.116847	0.116882
0.640	0.116918	0.116953	0.116988	0.117023	0.117059	0.117094	0.117129	0.117165	0.117200	0.117235
0.650	0.117271	0.117306	0.117341	0.117377	0.117412	0.117448	0.117483	0.117518	0.117554	0.117589
0.660	0.117625	0.117660	0.117695	0.117731	0.117766	0.117802	0.117837	0.117872	0.117908	0.117943
0.670	0.117979	0.118014	0.118050	0.118085	0.118121	0.118156	0.118192	0.118227	0.118263	0.118298
0.680	0.118334	0.118369	0.118405	0.118440	0.118476	0.118511	0.118547	0.118582	0.118618	0.118653
0.690	0.118689	0.118725	0.118760	0.118796	0.118831	0.118867	0.118903	0.118938	0.118974	0.119009
0.700	0.119045	0.119081	0.119116	0.119152	0.119187	0.119223	0.119259	0.119294	0.119330	0.119366
0.710	0.119401	0.119437	0.119473	0.119508	0.119544	0.119580	0.119615	0.119651	0.119687	0.119723
0.720	0.119758	0.119794	0.119830	0.119866	0.119901	0.119937	0.119973	0.120009	0.120044	0.120080
0.730	0.120116	0.120152	0.120187	0.120223	0.120259	0.120295	0.120331	0.120366	0.120402	0.120438
0.740	0.120474	0.120510	0.120546	0.120581	0.120617	0.120653	0.120689	0.120725	0.120761	0.120797
0.750	0.120832	0.120868	0.120904	0.120940	0.120976	0.121012	0.121048	0.121084	0.121120	0.121156
0.760	0.121192	0.121228	0.121264	0.121299	0.121335	0.121371	0.121407	0.121443	0.121479	0.121515
0.770	0.121591	0.121587	0.121623	0.121659	0.121695	0.121731	0.121767	0.121803	0.121839	0.121875
0.780	0.121911	0.121948	0.121984	0.122020	0.122056	0.122092	0.122128	0.122164	0.122200	0.122236
0.790	0.122272	0.122308	0.122344	0.122381	0.122417	0.122453	0.122489	0.122525	0.122561	0.122597
0.800	0.122633	0.122670	0.122706	0.122742	0.122778	0.122814	0.122850	0.122887	0.122923	0.122959
0.810	0.122995	0.123031	0.123068	0.123104	0.123140	0.123176	0.123213	0.123249	0.123285	0.123321
0.820	0.123358	0.123394	0.123430	0.123466	0.123503	0.123539	0.123575	0.123612	0.123648	0.123684
0.830	0.123721	0.123757	0.123793	0.123829	0.123866	0.123902	0.123938	0.123975	0.124011	0.124048
0.840	0.124084	0.124120	0.124157	0.124193	0.124229	0.124266	0.124302	0.124339	0.124375	0.124411
0.850	0.124448	0.124484	0.124521	0.124557	0.124594	0.124630	0.124667	0.124703	0.124739	0.124776
0.860	0.124812	0.124849	0.124885	0.124922	0.124958	0.124995	0.125031	0.125068	0.125104	0.125141
0.870	0.125177	0.125214	0.125250	0.125287	0.125324	0.125360	0.125397	0.125433	0.125470	0.125506
0.880	0.125543	0.125580	0.125616	0.125653	0.125689	0.125726	0.125763	0.125799	0.125836	0.125872
0.890	0.125909	0.125946	0.125982	0.126019	0.126055	0.126092	0.126129	0.126166	0.126202	0.126239
0.900	0.126276	0.126312	0.126349	0.126386	0.126423	0.126459	0.126496	0.126533	0.126569	0.126606
0.910	0.126643	0.126680	0.126716	0.126753	0.126790	0.126827	0.126863	0.126900	0.126937	0.126974
0.920	0.127011	0.127047	0.127084	0.127121	0.127158	0.127195	0.127231	0.127268	0.127305	0.127342
0.930	0.127379	0.127416	0.127453	0.127489	0.127526	0.127563	0.127600	0.127637	0.127674	0.127711
0.940	0.127748	0.127785	0.127821	0.127858	0.127895	0.127932	0.127969	0.128006	0.128043	0.128080
0.950	0.128117	0.128154	0.128191	0.128228	0.128265	0.128302	0.128339	0.128376	0.128413	0.128450
0.960	0.128487	0.128524	0.128561	0.128598	0.128635	0.128672	0.128709	0.128746	0.128783	0.128820
0.970	0.128857	0.128894	0.128931	0.128968	0.129005	0.129043	0.129080	0.129117	0.129154	0.129191
0.980	0.129228	0.129265	0.129302	0.129339	0.129377	0.129414	0.129451	0.129488	0.129525	0.129562
0.990	0.129600	0.129637	0.129674	0.129711	0.129748	0.129786	0.129823	0.129860	0.129897	0.129934

ATTENUATION IN DECIBELS
THETA FROM 7.000 TO 7.499 DEGREES

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THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.000	0.129972	0.130009	0.130046	0.130083	0.130121	0.130158	0.130195	0.130232	0.130270	0.130307
0.010	0.130344	0.130381	0.130419	0.130456	0.130493	0.130531	0.130568	0.130605	0.130643	0.130680
0.020	0.130717	0.130755	0.130792	0.130829	0.130867	0.130904	0.130941	0.130979	0.131016	0.131053
0.030	0.131091	0.131128	0.131166	0.131203	0.131240	0.131278	0.131315	0.131353	0.131390	0.131428
0.040	0.131465	0.131502	0.131540	0.131577	0.131615	0.131652	0.131690	0.131727	0.131765	0.131802
0.050	0.131840	0.131877	0.131915	0.131952	0.131990	0.132027	0.132065	0.132102	0.132140	0.132177
0.060	0.132215	0.132252	0.132290	0.132328	0.132365	0.132403	0.132440	0.132478	0.132516	0.132553
0.070	0.132591	0.132628	0.132666	0.132704	0.132741	0.132779	0.132816	0.132854	0.132892	0.132929
0.080	0.132967	0.133005	0.133042	0.133080	0.133118	0.133155	0.133193	0.133231	0.133268	0.133306
0.090	0.133344	0.133382	0.133419	0.133457	0.133495	0.133532	0.133570	0.133608	0.133646	0.133683
0.100	0.133721	0.133759	0.133797	0.133835	0.133872	0.133910	0.133948	0.133986	0.134024	0.134061
0.110	0.134099	0.134137	0.134175	0.134213	0.134250	0.134288	0.134326	0.134364	0.134402	0.134440
0.120	0.134478	0.134515	0.134553	0.134591	0.134629	0.134667	0.134705	0.134743	0.134781	0.134819
0.130	0.134857	0.134895	0.134932	0.134970	0.135008	0.135046	0.135084	0.135122	0.135160	0.135198
0.140	0.135236	0.135274	0.135312	0.135350	0.135388	0.135426	0.135464	0.135502	0.135540	0.135578
0.150	0.135616	0.135654	0.135692	0.135730	0.135768	0.135806	0.135844	0.135882	0.135921	0.135959
0.160	0.135997	0.136035	0.136073	0.136111	0.136149	0.136187	0.136225	0.136264	0.136302	0.136340
0.170	0.136378	0.136416	0.136454	0.136492	0.136531	0.136569	0.136607	0.136645	0.136683	0.136721
0.180	0.136760	0.136798	0.136836	0.136874	0.136912	0.136951	0.136989	0.137027	0.137065	0.137104
0.190	0.137142	0.137180	0.137218	0.137257	0.137295	0.137333	0.137371	0.137410	0.137448	0.137486
0.200	0.137525	0.137563	0.137601	0.137640	0.137678	0.137716	0.137754	0.137793	0.137831	0.137870
0.210	0.137908	0.137946	0.137985	0.138023	0.138061	0.138100	0.138138	0.138177	0.138215	0.138253
0.220	0.138292	0.138330	0.138369	0.138407	0.138445	0.138484	0.138522	0.138561	0.138599	0.138638
0.230	0.138676	0.138715	0.138753	0.138792	0.138830	0.138868	0.138907	0.138945	0.138984	0.139022
0.240	0.139061	0.139100	0.139138	0.139177	0.139215	0.139254	0.139292	0.139331	0.139369	0.139408
0.250	0.139446	0.139485	0.139524	0.139562	0.139601	0.139639	0.139678	0.139717	0.139755	0.139794
0.260	0.139832	0.139871	0.139910	0.139948	0.139987	0.140026	0.140064	0.140103	0.140142	0.140180
0.270	0.140219	0.140258	0.140296	0.140335	0.140374	0.140412	0.140451	0.140490	0.140529	0.140567
0.280	0.140606	0.140645	0.140683	0.140722	0.140761	0.140800	0.140838	0.140877	0.140916	0.140955
0.290	0.140994	0.141032	0.141071	0.141110	0.141149	0.141188	0.141226	0.141265	0.141304	0.141343
0.300	0.141382	0.141421	0.141459	0.141498	0.141537	0.141576	0.141615	0.141654	0.141693	0.141731
0.310	0.141770	0.141809	0.141848	0.141887	0.141926	0.141965	0.142004	0.142043	0.142082	0.142121
0.320	0.142160	0.142199	0.142237	0.142276	0.142315	0.142354	0.142393	0.142432	0.142471	0.142510
0.330	0.142549	0.142588	0.142627	0.142666	0.142705	0.142744	0.142783	0.142822	0.142862	0.142901
0.340	0.142940	0.142979	0.143018	0.143057	0.143096	0.143135	0.143174	0.143213	0.143252	0.143291
0.350	0.143330	0.143370	0.143409	0.143448	0.143487	0.143526	0.143565	0.143604	0.143643	0.143683
0.360	0.143722	0.143761	0.143800	0.143839	0.143879	0.143918	0.143957	0.143996	0.144035	0.144074
0.370	0.144114	0.144153	0.144192	0.144231	0.144271	0.144310	0.144349	0.144388	0.144428	0.144467
0.380	0.144506	0.144545	0.144585	0.144624	0.144663	0.144703	0.144742	0.144781	0.144820	0.144860
0.390	0.144899	0.144938	0.144978	0.145017	0.145056	0.145096	0.145135	0.145175	0.145214	0.145253
0.400	0.145293	0.145332	0.145371	0.145411	0.145450	0.145490	0.145529	0.145568	0.145608	0.145647
0.410	0.145687	0.145726	0.145766	0.145805	0.145844	0.145884	0.145923	0.145963	0.146002	0.146041
0.420	0.146081	0.146121	0.146160	0.146200	0.146239	0.146279	0.146318	0.146358	0.146397	0.146437
0.430	0.146476	0.146516	0.146555	0.146595	0.146635	0.146674	0.146714	0.146753	0.146793	0.146832
0.440	0.146872	0.146912	0.146951	0.146991	0.147030	0.147070	0.147110	0.147149	0.147189	0.147229
0.450	0.147268	0.147308	0.147348	0.147387	0.147427	0.147467	0.147506	0.147546	0.147586	0.147625
0.460	0.147665	0.147705	0.147744	0.147784	0.147824	0.147864	0.147903	0.147943	0.147983	0.148023
0.470	0.148062	0.148102	0.148142	0.148182	0.148221	0.148261	0.148301	0.148341	0.148380	0.148420
0.480	0.148460	0.148500	0.148540	0.148580	0.148619	0.148659	0.148699	0.148739	0.148779	0.148819
0.490	0.148858	0.148898	0.148938	0.148978	0.149018	0.149058	0.149098	0.149138	0.149178	0.149217

ATTENUATION IN DECIBELS
THETA FROM 7.500 TO 7.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	0.149257	0.149297	0.149337	0.149377	0.149417	0.149457	0.149497	0.149537	0.149577	0.149617
0.510	0.149657	0.149697	0.149737	0.149777	0.149817	0.149857	0.149897	0.149937	0.149977	0.150017
0.520	0.150057	0.150097	0.150137	0.150177	0.150217	0.150257	0.150297	0.150337	0.150377	0.150417
0.530	0.150457	0.150497	0.150537	0.150577	0.150618	0.150658	0.150698	0.150738	0.150778	0.150818
0.540	0.150858	0.150898	0.150939	0.150979	0.151019	0.151059	0.151099	0.151139	0.151180	0.151220
0.550	0.151260	0.151300	0.151340	0.151380	0.151421	0.151461	0.151501	0.151541	0.151582	0.151622
0.560	0.151662	0.151702	0.151743	0.151783	0.151823	0.151863	0.151904	0.151944	0.151984	0.152024
0.570	0.152065	0.152105	0.152145	0.152186	0.152226	0.152266	0.152307	0.152347	0.152387	0.152428
0.580	0.152468	0.152508	0.152549	0.152589	0.152629	0.152669	0.152710	0.152750	0.152791	0.152831
0.590	0.152872	0.152912	0.152952	0.152993	0.153033	0.153074	0.153114	0.153155	0.153195	0.153235
0.600	0.153276	0.153316	0.153357	0.153397	0.153438	0.153478	0.153519	0.153559	0.153600	0.153640
0.610	0.153681	0.153721	0.153762	0.153802	0.153843	0.153883	0.153924	0.153964	0.154005	0.154046
0.620	0.154086	0.154127	0.154167	0.154208	0.154248	0.154289	0.154330	0.154370	0.154411	0.154451
0.630	0.154492	0.154533	0.154573	0.154614	0.154654	0.154695	0.154736	0.154776	0.154817	0.154858
0.640	0.154898	0.154939	0.154980	0.155020	0.155061	0.155102	0.155143	0.155183	0.155224	0.155265
0.650	0.155305	0.155346	0.155387	0.155428	0.155468	0.155509	0.155550	0.155591	0.155631	0.155672
0.660	0.155713	0.155754	0.155794	0.155835	0.155876	0.155917	0.155958	0.155998	0.156039	0.156080
0.670	0.156121	0.156162	0.156203	0.156243	0.156284	0.156325	0.156366	0.156407	0.156448	0.156489
0.680	0.156530	0.156570	0.156611	0.156652	0.156693	0.156734	0.156775	0.156816	0.156857	0.156898
0.690	0.156939	0.156980	0.157021	0.157061	0.157102	0.157143	0.157184	0.157225	0.157266	0.157307
0.700	0.157348	0.157389	0.157430	0.157471	0.157512	0.157553	0.157594	0.157635	0.157676	0.157717
0.710	0.157759	0.157800	0.157841	0.157882	0.157923	0.157964	0.158005	0.158046	0.158087	0.158128
0.720	0.158169	0.158210	0.158251	0.158293	0.158334	0.158375	0.158416	0.158457	0.158498	0.158539
0.730	0.158581	0.158622	0.158663	0.158704	0.158745	0.158786	0.158828	0.158869	0.158910	0.158951
0.740	0.158992	0.159034	0.159075	0.159116	0.159157	0.159198	0.159240	0.159281	0.159322	0.159363
0.750	0.159405	0.159446	0.159487	0.159529	0.159570	0.159611	0.159652	0.159694	0.159735	0.159776
0.760	0.159818	0.159859	0.159900	0.159942	0.159983	0.160024	0.160066	0.160107	0.160148	0.160190
0.770	0.160231	0.160272	0.160314	0.160355	0.160397	0.160438	0.160479	0.160521	0.160562	0.160604
0.780	0.160645	0.160686	0.160728	0.160769	0.160811	0.160852	0.160894	0.160935	0.160977	0.161018
0.790	0.161060	0.161101	0.161143	0.161184	0.161226	0.161267	0.161309	0.161350	0.161392	0.161433
0.800	0.161475	0.161516	0.161558	0.161599	0.161641	0.161682	0.161724	0.161765	0.161807	0.161849
0.810	0.161890	0.161932	0.161973	0.162015	0.162057	0.162098	0.162140	0.162181	0.162223	0.162265
0.820	0.162306	0.162348	0.162390	0.162431	0.162473	0.162515	0.162556	0.162598	0.162640	0.162681
0.830	0.162723	0.162765	0.162806	0.162848	0.162890	0.162932	0.162973	0.163015	0.163057	0.163098
0.840	0.163140	0.163182	0.163224	0.163266	0.163307	0.163349	0.163391	0.163433	0.163474	0.163516
0.850	0.163558	0.163600	0.163642	0.163683	0.163725	0.163767	0.163809	0.163851	0.163893	0.163934
0.860	0.163976	0.164018	0.164060	0.164102	0.164144	0.164186	0.164228	0.164269	0.164311	0.164353
0.870	0.164395	0.164437	0.164479	0.164521	0.164563	0.164605	0.164647	0.164689	0.164731	0.164773
0.880	0.164814	0.164856	0.164898	0.164940	0.164982	0.165024	0.165066	0.165108	0.165150	0.165192
0.890	0.165234	0.165276	0.165318	0.165360	0.165403	0.165445	0.165487	0.165529	0.165571	0.165613
0.900	0.165655	0.165697	0.165739	0.165781	0.165823	0.165865	0.165907	0.165949	0.165992	0.166034
0.910	0.166076	0.166118	0.166160	0.166202	0.166244	0.166287	0.166329	0.166371	0.166413	0.166455
0.920	0.166497	0.166540	0.166582	0.166624	0.166666	0.166708	0.166751	0.166793	0.166835	0.166877
0.930	0.166919	0.166962	0.167004	0.167046	0.167088	0.167131	0.167173	0.167215	0.167257	0.167300
0.940	0.167342	0.167384	0.167427	0.167469	0.167511	0.167554	0.167596	0.167638	0.167680	0.167723
0.950	0.167765	0.167808	0.167850	0.167892	0.167935	0.167977	0.168019	0.168062	0.168104	0.168146
0.960	0.168189	0.168231	0.168274	0.168316	0.168358	0.168401	0.168443	0.168486	0.168528	0.168571
0.970	0.168613	0.168656	0.168698	0.168740	0.168783	0.168825	0.168868	0.168910	0.168953	0.168995
0.980	0.169038	0.169080	0.169123	0.169165	0.169208	0.169250	0.169293	0.169335	0.169378	0.169421
0.990	0.169463	0.169506	0.169548	0.169591	0.169633	0.169676	0.169719	0.169761	0.169804	0.169846

ATTENUATION IN DECIBELS
THETA FROM 8.000 TO 8.499 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.000	0.169889	0.169932	0.169974	0.170017	0.170059	0.170102	0.170145	0.170187	0.170230	0.170273
0.010	0.170315	0.170358	0.170401	0.170443	0.170486	0.170529	0.170571	0.170614	0.170657	0.170700
0.020	0.170742	0.170785	0.170828	0.170870	0.170913	0.170956	0.170999	0.171041	0.171084	0.171127
0.030	0.171170	0.171213	0.171255	0.171298	0.171341	0.171384	0.171426	0.171469	0.171512	0.171555
0.040	0.171598	0.171641	0.171683	0.171726	0.171769	0.171812	0.171855	0.171898	0.171941	0.171983
0.050	0.172026	0.172069	0.172112	0.172155	0.172198	0.172241	0.172284	0.172327	0.172370	0.172412
0.060	0.172455	0.172498	0.172541	0.172584	0.172627	0.172670	0.172713	0.172756	0.172799	0.172842
0.070	0.172885	0.172928	0.172971	0.173014	0.173057	0.173100	0.173143	0.173186	0.173229	0.173272
0.080	0.173315	0.173358	0.173401	0.173444	0.173487	0.173530	0.173574	0.173617	0.173660	0.173703
0.090	0.173746	0.173789	0.173832	0.173875	0.173918	0.173961	0.174005	0.174048	0.174091	0.174134
0.100	0.174177	0.174220	0.174263	0.174307	0.174350	0.174393	0.174436	0.174479	0.174522	0.174566
0.110	0.174609	0.174652	0.174695	0.174738	0.174782	0.174825	0.174868	0.174911	0.174955	0.174998
0.120	0.175041	0.175084	0.175128	0.175171	0.175214	0.175258	0.175301	0.175344	0.175387	0.175431
0.130	0.175474	0.175517	0.175561	0.175604	0.175647	0.175691	0.175734	0.175777	0.175821	0.175864
0.140	0.175907	0.175951	0.175994	0.176038	0.176081	0.176124	0.176168	0.176211	0.176255	0.176298
0.150	0.176341	0.176385	0.176428	0.176472	0.176515	0.176559	0.176602	0.176645	0.176689	0.176732
0.160	0.176776	0.176819	0.176863	0.176906	0.176950	0.176993	0.177037	0.177080	0.177124	0.177167
0.170	0.177211	0.177254	0.177298	0.177341	0.177385	0.177429	0.177472	0.177516	0.177559	0.177603
0.180	0.177646	0.177690	0.177734	0.177777	0.177821	0.177864	0.177908	0.177952	0.177995	0.178039
0.190	0.178083	0.178126	0.178170	0.178213	0.178257	0.178301	0.178344	0.178388	0.178432	0.178475
0.200	0.178519	0.178563	0.178607	0.178650	0.178694	0.178738	0.178781	0.178825	0.178869	0.178913
0.210	0.178956	0.179000	0.179044	0.179088	0.179131	0.179175	0.179219	0.179263	0.179306	0.179350
0.220	0.179394	0.179438	0.179482	0.179526	0.179569	0.179613	0.179657	0.179701	0.179745	0.179789
0.230	0.179832	0.179876	0.179920	0.179964	0.180008	0.180052	0.180096	0.180139	0.180183	0.180227
0.240	0.180271	0.180315	0.180359	0.180403	0.180447	0.180491	0.180535	0.180579	0.180623	0.180667
0.250	0.180710	0.180754	0.180798	0.180842	0.180886	0.180930	0.180974	0.181018	0.181062	0.181106
0.260	0.181150	0.181194	0.181238	0.181282	0.181326	0.181371	0.181415	0.181459	0.181503	0.181547
0.270	0.181591	0.181635	0.181679	0.181723	0.181767	0.181811	0.181855	0.181899	0.181944	0.181988
0.280	0.182034	0.182078	0.182122	0.182166	0.182210	0.182254	0.182297	0.182341	0.182385	0.182429
0.290	0.182473	0.182517	0.182562	0.182606	0.182650	0.182694	0.182738	0.182783	0.182827	0.182871
0.300	0.182915	0.182960	0.183004	0.183048	0.183092	0.183137	0.183181	0.183225	0.183269	0.183314
0.310	0.183358	0.183402	0.183446	0.183491	0.183535	0.183579	0.183624	0.183668	0.183712	0.183757
0.320	0.183801	0.183845	0.183889	0.183934	0.183978	0.184023	0.184067	0.184112	0.184156	0.184200
0.330	0.184245	0.184289	0.184333	0.184378	0.184422	0.184467	0.184511	0.184556	0.184600	0.184644
0.340	0.184689	0.184733	0.184778	0.184822	0.184867	0.184911	0.184956	0.185000	0.185045	0.185089
0.350	0.185134	0.185178	0.185223	0.185267	0.185312	0.185356	0.185401	0.185445	0.185490	0.185534
0.360	0.185579	0.185623	0.185668	0.185713	0.185757	0.185802	0.185846	0.185891	0.185936	0.185980
0.370	0.186025	0.186069	0.186114	0.186159	0.186203	0.186248	0.186292	0.186337	0.186382	0.186426
0.380	0.186471	0.186516	0.186560	0.186605	0.186650	0.186694	0.186739	0.186784	0.186829	0.186873
0.390	0.186913	0.186963	0.187007	0.187052	0.187097	0.187142	0.187186	0.187231	0.187276	0.187321
0.400	0.187365	0.187410	0.187455	0.187500	0.187545	0.187589	0.187634	0.187679	0.187724	0.187769
0.410	0.187813	0.187858	0.187903	0.187948	0.187993	0.188038	0.188083	0.188127	0.188172	0.188217
0.420	0.188262	0.188307	0.188352	0.188397	0.188442	0.188486	0.188531	0.188576	0.188621	0.188666
0.430	0.188711	0.188756	0.188801	0.188846	0.188891	0.188936	0.188981	0.189026	0.189071	0.189116
0.440	0.189161	0.189206	0.189251	0.189296	0.189341	0.189386	0.189431	0.189476	0.189521	0.189566
0.450	0.189611	0.189656	0.189701	0.189746	0.189791	0.189836	0.189881	0.189926	0.189971	0.190016
0.460	0.190062	0.190107	0.190152	0.190197	0.190242	0.190287	0.190332	0.190377	0.190422	0.190468
0.470	0.190513	0.190558	0.190603	0.190648	0.190694	0.190739	0.190784	0.190829	0.190874	0.190919
0.480	0.190965	0.191010	0.191055	0.191100	0.191145	0.191191	0.191236	0.191281	0.191326	0.191372
0.490	0.191417	0.191462	0.191507	0.191553	0.191598	0.191643	0.191688	0.191734	0.191779	0.191824

ATTENUATION IN DECIBELS
THETA FROM 8.500 TO 8.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	0.191870	0.191915	0.191960	0.192006	0.192051	0.192096	0.192142	0.192187	0.192232	0.192278
0.510	0.192323	0.192368	0.192414	0.192459	0.192505	0.192550	0.192595	0.192641	0.192686	0.192732
0.520	0.192777	0.192822	0.192868	0.192913	0.192959	0.193004	0.193050	0.193095	0.193141	0.193186
0.530	0.193232	0.193277	0.193322	0.193368	0.193413	0.193459	0.193504	0.193550	0.193595	0.193641
0.540	0.193687	0.193732	0.193778	0.193823	0.193869	0.193914	0.193960	0.194005	0.194051	0.194097
0.550	0.194142	0.194188	0.194233	0.194279	0.194324	0.194370	0.194416	0.194461	0.194507	0.194553
0.560	0.194578	0.194624	0.194669	0.194715	0.194761	0.194806	0.194852	0.194898	0.194943	0.194989
0.570	0.195055	0.195101	0.195146	0.195192	0.195238	0.195283	0.195329	0.195375	0.195421	0.195466
0.580	0.195512	0.195558	0.195604	0.195649	0.195695	0.195741	0.195787	0.195832	0.195878	0.195924
0.590	0.195970	0.196016	0.196061	0.196107	0.196153	0.196199	0.196245	0.196290	0.196336	0.196382
0.600	0.196428	0.196474	0.196520	0.196566	0.196611	0.196657	0.196703	0.196749	0.196795	0.196841
0.610	0.196887	0.196933	0.196979	0.197025	0.197071	0.197116	0.197162	0.197208	0.197254	0.197300
0.620	0.197346	0.197392	0.197438	0.197484	0.197530	0.197576	0.197622	0.197668	0.197714	0.197760
0.630	0.197806	0.197852	0.197898	0.197944	0.197990	0.198035	0.198082	0.198128	0.198174	0.198220
0.640	0.198267	0.198313	0.198359	0.198405	0.198451	0.198497	0.198543	0.198589	0.198635	0.198681
0.650	0.198727	0.198774	0.198820	0.198866	0.198912	0.198958	0.199004	0.199050	0.199097	0.199143
0.660	0.199189	0.199235	0.199281	0.199328	0.199374	0.199420	0.199466	0.199512	0.199559	0.199605
0.670	0.199651	0.199697	0.199744	0.199790	0.199836	0.199882	0.199929	0.199975	0.200021	0.200067
0.680	0.200114	0.200160	0.200206	0.200253	0.200299	0.200345	0.200391	0.200438	0.200484	0.200530
0.690	0.200577	0.200623	0.200669	0.200716	0.200762	0.200809	0.200855	0.200901	0.200948	0.200994
0.700	0.201040	0.201087	0.201133	0.201180	0.201226	0.201273	0.201319	0.201365	0.201412	0.201458
0.710	0.201505	0.201551	0.201598	0.201644	0.201691	0.201737	0.201784	0.201830	0.201876	0.201923
0.720	0.201969	0.202016	0.202062	0.202109	0.202156	0.202202	0.202249	0.202295	0.202342	0.202388
0.730	0.202435	0.202481	0.202528	0.202574	0.202621	0.202668	0.202714	0.202761	0.202807	0.202854
0.740	0.202901	0.202947	0.202994	0.203040	0.203087	0.203134	0.203180	0.203227	0.203274	0.203320
0.750	0.203367	0.203414	0.203460	0.203507	0.203554	0.203600	0.203647	0.203694	0.203741	0.203787
0.760	0.203834	0.203881	0.203927	0.203974	0.204021	0.204068	0.204114	0.204161	0.204208	0.204255
0.770	0.204301	0.204348	0.204395	0.204442	0.204489	0.204535	0.204582	0.204629	0.204676	0.204723
0.780	0.204769	0.204816	0.204863	0.204910	0.204957	0.205004	0.205051	0.205097	0.205144	0.205191
0.790	0.205238	0.205285	0.205332	0.205379	0.205426	0.205472	0.205519	0.205566	0.205613	0.205660
0.800	0.205707	0.205754	0.205801	0.205848	0.205895	0.205942	0.205989	0.206036	0.206083	0.206130
0.810	0.206177	0.206224	0.206271	0.206318	0.206365	0.206412	0.206459	0.206506	0.206553	0.206600
0.820	0.206647	0.206694	0.206741	0.206788	0.206835	0.206882	0.206929	0.206976	0.207023	0.207071
0.830	0.207118	0.207165	0.207212	0.207259	0.207306	0.207353	0.207400	0.207447	0.207495	0.207542
0.840	0.207589	0.207636	0.207683	0.207730	0.207778	0.207825	0.207872	0.207919	0.207966	0.208014
0.850	0.208061	0.208108	0.208155	0.208202	0.208250	0.208297	0.208344	0.208391	0.208439	0.208486
0.860	0.208533	0.208580	0.208628	0.208675	0.208722	0.208769	0.208817	0.208864	0.208911	0.208959
0.870	0.209006	0.209053	0.209101	0.209148	0.209195	0.209243	0.209290	0.209337	0.209385	0.209432
0.880	0.209479	0.209527	0.209574	0.209622	0.209669	0.209716	0.209764	0.209811	0.209859	0.209906
0.890	0.209953	0.210001	0.210048	0.210096	0.210143	0.210191	0.210238	0.210285	0.210333	0.210380
0.900	0.210428	0.210475	0.210523	0.210570	0.210618	0.210665	0.210713	0.210760	0.210808	0.210855
0.910	0.210903	0.210950	0.210998	0.211046	0.211093	0.211141	0.211188	0.211236	0.211283	0.211331
0.920	0.211379	0.211426	0.211474	0.211521	0.211569	0.211617	0.211664	0.211712	0.211759	0.211807
0.930	0.211855	0.211902	0.211950	0.211998	0.212045	0.212093	0.212141	0.212188	0.212236	0.212284
0.940	0.212331	0.212379	0.212427	0.212475	0.212522	0.212570	0.212618	0.212665	0.212713	0.212761
0.950	0.212809	0.212856	0.212904	0.212952	0.213000	0.213047	0.213095	0.213143	0.213191	0.213239
0.960	0.213286	0.213334	0.213382	0.213430	0.213478	0.213525	0.213573	0.213621	0.213669	0.213717
0.970	0.213765	0.213813	0.213860	0.213908	0.213956	0.214004	0.214052	0.214100	0.214148	0.214196
0.980	0.214244	0.214291	0.214339	0.214387	0.214435	0.214483	0.214531	0.214579	0.214627	0.214675
0.990	0.214723	0.214771	0.214819	0.214867	0.214915	0.214963	0.215011	0.215059	0.215107	0.215155

ATTENUATION IN DECIBELS
THETA FROM 9.000 TO 9.499 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.000	0.215203	0.215251	0.215299	0.215347	0.215395	0.215443	0.215491	0.215539	0.215587	0.215635
0.010	0.215683	0.215731	0.215780	0.215828	0.215876	0.215924	0.215972	0.216020	0.216068	0.216116
0.020	0.216164	0.216213	0.216261	0.216309	0.216357	0.216405	0.216453	0.216501	0.216550	0.216598
0.030	0.216646	0.216694	0.216742	0.216791	0.216839	0.216887	0.216935	0.216983	0.217032	0.217080
0.040	0.217128	0.217176	0.217225	0.217273	0.217321	0.217369	0.217418	0.217466	0.217514	0.217562
0.050	0.217611	0.217659	0.217707	0.217756	0.217804	0.217852	0.217901	0.217949	0.217997	0.218046
0.060	0.218094	0.218142	0.218191	0.218239	0.218287	0.218336	0.218384	0.218433	0.218481	0.218529
0.070	0.218578	0.218626	0.218675	0.218723	0.218771	0.218820	0.218868	0.218917	0.218965	0.219014
0.080	0.219062	0.219110	0.219159	0.219207	0.219256	0.219304	0.219353	0.219401	0.219450	0.219498
0.090	0.219547	0.219595	0.219644	0.219692	0.219741	0.219789	0.219838	0.219887	0.219935	0.219984
0.100	0.220032	0.220081	0.220129	0.220178	0.220226	0.220275	0.220324	0.220372	0.220421	0.220469
0.110	0.220518	0.220567	0.220615	0.220664	0.220713	0.220761	0.220810	0.220859	0.220907	0.220956
0.120	0.221055	0.221103	0.221152	0.221201	0.221249	0.221298	0.221347	0.221395	0.221443	0.221492
0.130	0.221540	0.221589	0.221638	0.221686	0.221735	0.221784	0.221832	0.221881	0.221930	0.221978
0.140	0.221979	0.222028	0.222077	0.222125	0.222174	0.222223	0.222272	0.222321	0.222369	0.222418
0.150	0.222467	0.222516	0.222565	0.222614	0.222663	0.222711	0.222760	0.222809	0.222858	0.222907
0.160	0.222956	0.223005	0.223054	0.223102	0.223151	0.223200	0.223249	0.223298	0.223347	0.223396
0.170	0.223445	0.223494	0.223543	0.223592	0.223641	0.223690	0.223739	0.223788	0.223837	0.223886
0.180	0.223935	0.223984	0.224033	0.224082	0.224131	0.224180	0.224229	0.224278	0.224327	0.224376
0.190	0.224425	0.224474	0.224523	0.224572	0.224621	0.224670	0.224719	0.224768	0.224818	0.224867
0.200	0.224916	0.224965	0.225014	0.225063	0.225112	0.225161	0.225210	0.225260	0.225309	0.225358
0.210	0.225407	0.225456	0.225505	0.225553	0.225604	0.225653	0.225702	0.225751	0.225801	0.225850
0.220	0.225899	0.225948	0.225997	0.226047	0.226096	0.226145	0.226194	0.226244	0.226293	0.226342
0.230	0.226391	0.226441	0.226490	0.226539	0.226588	0.226638	0.226687	0.226736	0.226786	0.226835
0.240	0.226884	0.226934	0.226983	0.227032	0.227082	0.227131	0.227180	0.227230	0.227279	0.227328
0.250	0.227378	0.227427	0.227477	0.227526	0.227575	0.227625	0.227674	0.227724	0.227773	0.227822
0.260	0.227872	0.227921	0.227971	0.228020	0.228070	0.228119	0.228169	0.228218	0.228268	0.228317
0.270	0.228366	0.228416	0.228465	0.228515	0.228564	0.228614	0.228664	0.228713	0.228763	0.228812
0.280	0.228862	0.228911	0.228961	0.229010	0.229060	0.229109	0.229159	0.229209	0.229258	0.229308
0.290	0.229357	0.229407	0.229457	0.229506	0.229556	0.229605	0.229655	0.229705	0.229754	0.229804
0.300	0.229854	0.229903	0.229953	0.230003	0.230052	0.230102	0.230152	0.230201	0.230251	0.230301
0.310	0.230350	0.230400	0.230450	0.230499	0.230549	0.230599	0.230649	0.230698	0.230748	0.230798
0.320	0.230848	0.230897	0.230947	0.230997	0.231047	0.231096	0.231146	0.231196	0.231246	0.231296
0.330	0.231345	0.231395	0.231445	0.231495	0.231545	0.231595	0.231644	0.231694	0.231744	0.231794
0.340	0.231844	0.231894	0.231944	0.231994	0.232043	0.232093	0.232143	0.232193	0.232243	0.232293
0.350	0.232343	0.232393	0.232443	0.232493	0.232543	0.232593	0.232642	0.232692	0.232742	0.232792
0.360	0.232842	0.232892	0.232942	0.232992	0.233042	0.233092	0.233142	0.233192	0.233242	0.233292
0.370	0.233342	0.233392	0.233442	0.233492	0.233543	0.233593	0.233643	0.233693	0.233743	0.233793
0.380	0.233843	0.233893	0.233943	0.233993	0.234043	0.234093	0.234144	0.234194	0.234244	0.234294
0.390	0.234344	0.234394	0.234444	0.234495	0.234545	0.234595	0.234645	0.234695	0.234745	0.234795
0.400	0.234846	0.234896	0.234946	0.234996	0.235047	0.235097	0.235147	0.235197	0.235247	0.235298
0.410	0.235348	0.235398	0.235448	0.235499	0.235549	0.235599	0.235650	0.235700	0.235750	0.235800
0.420	0.235851	0.235901	0.235951	0.236002	0.236052	0.236102	0.236153	0.236203	0.236253	0.236304
0.430	0.236354	0.236404	0.236455	0.236505	0.236555	0.236606	0.236656	0.236707	0.236757	0.236807
0.440	0.236858	0.236908	0.236959	0.237009	0.237060	0.237110	0.237160	0.237211	0.237261	0.237312
0.450	0.237362	0.237413	0.237463	0.237514	0.237564	0.237615	0.237665	0.237716	0.237766	0.237817
0.460	0.237867	0.237918	0.237968	0.238019	0.238069	0.238120	0.238170	0.238221	0.238271	0.238322
0.470	0.238373	0.238423	0.238474	0.238524	0.238575	0.238626	0.238676	0.238727	0.238777	0.238828
0.480	0.238879	0.238929	0.238980	0.239031	0.239081	0.239132	0.239182	0.239233	0.239284	0.239334
0.490	0.239385	0.239436	0.239487	0.239537	0.239588	0.239639	0.239689	0.239740	0.239791	0.239842

ATTENUATION IN DECIBELS THETA FROM 9.500 TO 9.999 DEGREES

THETA IN DEGREES	0.001	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	0.230892	0.239943	0.239974	0.240045	0.240095	0.240146	0.240197	0.240248	0.240298	0.240347
0.510	0.240403	0.240451	0.240502	0.240552	0.240603	0.240654	0.240705	0.240756	0.240806	0.240857
0.520	0.240908	0.240959	0.241010	0.241061	0.241112	0.241162	0.241213	0.241264	0.241315	0.241366
0.530	0.241417	0.241468	0.241519	0.241570	0.241620	0.241671	0.241722	0.241773	0.241824	0.241875
0.540	0.241926	0.241977	0.242028	0.242079	0.242130	0.242181	0.242232	0.242283	0.242334	0.242385
0.550	0.242436	0.242487	0.242538	0.242589	0.242640	0.242691	0.242742	0.242793	0.242844	0.242895
0.560	0.242946	0.242997	0.243048	0.243099	0.243150	0.243201	0.243252	0.243303	0.243354	0.243405
0.570	0.243457	0.243508	0.243559	0.243611	0.243662	0.243713	0.243764	0.243815	0.243866	0.243918
0.580	0.243969	0.244020	0.244071	0.244122	0.244173	0.244225	0.244276	0.244327	0.244378	0.244429
0.590	0.244481	0.244532	0.244583	0.244634	0.244686	0.244737	0.244788	0.244839	0.244891	0.244942
0.600	0.244993	0.245045	0.245096	0.245147	0.245198	0.245250	0.245301	0.245352	0.245404	0.245455
0.610	0.245506	0.245558	0.245609	0.245660	0.245712	0.245763	0.245814	0.245866	0.245917	0.245969
0.620	0.246020	0.246071	0.246123	0.246174	0.246226	0.246277	0.246328	0.246380	0.246431	0.246483
0.630	0.246534	0.246586	0.246637	0.246688	0.246740	0.246791	0.246843	0.246894	0.246946	0.246997
0.640	0.247047	0.247100	0.247152	0.247203	0.247255	0.247306	0.247358	0.247409	0.247461	0.247513
0.650	0.247564	0.247616	0.247667	0.247719	0.247770	0.247822	0.247874	0.247925	0.247977	0.248028
0.660	0.248080	0.248132	0.248183	0.248235	0.248286	0.248338	0.248390	0.248441	0.248493	0.248545
0.670	0.248596	0.248648	0.248700	0.248751	0.248803	0.248855	0.248906	0.248958	0.249010	0.249061
0.680	0.249113	0.249165	0.249217	0.249268	0.249320	0.249372	0.249424	0.249475	0.249527	0.249579
0.690	0.249631	0.249682	0.249734	0.249786	0.249838	0.249890	0.249941	0.249993	0.250045	0.250097
0.700	0.250149	0.250200	0.250252	0.250304	0.250356	0.250408	0.250460	0.250512	0.250563	0.250615
0.710	0.250667	0.250719	0.250771	0.250823	0.250875	0.250927	0.250979	0.251030	0.251082	0.251134
0.720	0.251186	0.251238	0.251290	0.251342	0.251394	0.251446	0.251498	0.251550	0.251602	0.251654
0.730	0.251706	0.251758	0.251810	0.251862	0.251914	0.251966	0.252018	0.252070	0.252122	0.252174
0.740	0.252226	0.252278	0.252330	0.252382	0.252434	0.252486	0.252538	0.252590	0.252643	0.252695
0.750	0.252747	0.252799	0.252851	0.252903	0.252955	0.253007	0.253059	0.253112	0.253164	0.253216
0.760	0.253268	0.253320	0.253372	0.253424	0.253477	0.253529	0.253581	0.253633	0.253685	0.253738
0.770	0.253790	0.253842	0.253894	0.253946	0.253997	0.254051	0.254103	0.254155	0.254208	0.254260
0.780	0.254312	0.254364	0.254417	0.254469	0.254521	0.254573	0.254626	0.254678	0.254730	0.254783
0.790	0.254835	0.254887	0.254940	0.254992	0.255044	0.255097	0.255149	0.255201	0.255254	0.255306
0.800	0.255358	0.255411	0.255463	0.255516	0.255568	0.255620	0.255673	0.255725	0.255778	0.255830
0.810	0.255882	0.255935	0.255987	0.256040	0.256092	0.256145	0.256197	0.256250	0.256302	0.256354
0.820	0.256407	0.256459	0.256512	0.256564	0.256617	0.256669	0.256722	0.256774	0.256827	0.256879
0.830	0.256932	0.256985	0.257037	0.257090	0.257142	0.257195	0.257247	0.257300	0.257352	0.257405
0.840	0.257458	0.257510	0.257563	0.257615	0.257668	0.257721	0.257773	0.257826	0.257879	0.257931
0.850	0.257984	0.258036	0.258089	0.258142	0.258194	0.258247	0.258300	0.258352	0.258405	0.258458
0.860	0.258510	0.258563	0.258616	0.258669	0.258721	0.258774	0.258827	0.258880	0.258932	0.258985
0.870	0.259038	0.259091	0.259143	0.259196	0.259249	0.259302	0.259354	0.259407	0.259460	0.259513
0.880	0.259566	0.259618	0.259671	0.259724	0.259777	0.259830	0.259882	0.259935	0.259988	0.260041
0.890	0.260094	0.260147	0.260200	0.260252	0.260305	0.260358	0.260411	0.260464	0.260517	0.260570
0.900	0.260623	0.260676	0.260729	0.260782	0.260834	0.260887	0.260940	0.260993	0.261046	0.261099
0.910	0.261152	0.261205	0.261258	0.261311	0.261364	0.261417	0.261470	0.261523	0.261576	0.261629
0.920	0.261682	0.261735	0.261788	0.261841	0.261894	0.261947	0.262000	0.262053	0.262107	0.262160
0.930	0.262213	0.262266	0.262319	0.262372	0.262425	0.262478	0.262531	0.262584	0.262638	0.262691
0.940	0.262744	0.262797	0.262850	0.262903	0.262956	0.263009	0.263063	0.263116	0.263169	0.263222
0.950	0.263275	0.263329	0.263382	0.263435	0.263488	0.263541	0.263595	0.263648	0.263701	0.263754
0.960	0.263808	0.263861	0.263914	0.263967	0.264020	0.264074	0.264127	0.264180	0.264234	0.264287
0.970	0.264340	0.264394	0.264447	0.264500	0.264553	0.264607	0.264660	0.264713	0.264767	0.264820
0.980	0.264873	0.264927	0.264980	0.265034	0.265087	0.265140	0.265194	0.265247	0.265300	0.265354
0.990	0.265407	0.265461	0.265514	0.265568	0.265621	0.265674	0.265728	0.265781	0.265835	0.265888

ATTENUATION IN DECIBELS
THETA FROM 10.000 TO 10.499 DEGREES

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THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.000	0.265942	0.265995	0.266049	0.266102	0.266156	0.266209	0.266263	0.266316	0.266370	0.266423
0.010	0.266477	0.266530	0.266584	0.266637	0.266691	0.266744	0.266798	0.266851	0.266905	0.266958
0.020	0.267012	0.267066	0.267119	0.267173	0.267226	0.267280	0.267333	0.267387	0.267441	0.267494
0.030	0.267548	0.267602	0.267655	0.267709	0.267762	0.267816	0.267870	0.267923	0.267977	0.268031
0.040	0.268084	0.268138	0.268192	0.268246	0.268299	0.268353	0.268407	0.268460	0.268514	0.268568
0.050	0.268622	0.268675	0.268729	0.268783	0.268837	0.268890	0.268944	0.268998	0.269052	0.269105
0.060	0.269159	0.269213	0.269267	0.269321	0.269374	0.269428	0.269482	0.269536	0.269590	0.269643
0.070	0.269697	0.269751	0.269805	0.269859	0.269913	0.269967	0.270020	0.270074	0.270128	0.270182
0.080	0.270236	0.270290	0.270344	0.270398	0.270452	0.270506	0.270559	0.270613	0.270667	0.270721
0.090	0.270775	0.270829	0.270883	0.270937	0.270991	0.271045	0.271099	0.271153	0.271207	0.271261
0.100	0.271315	0.271369	0.271423	0.271477	0.271531	0.271585	0.271639	0.271693	0.271747	0.271801
0.110	0.271855	0.271909	0.271964	0.272018	0.272072	0.272126	0.272180	0.272234	0.272288	0.272342
0.120	0.272396	0.272450	0.272505	0.272559	0.272613	0.272667	0.272721	0.272775	0.272829	0.272884
0.130	0.272938	0.272992	0.273046	0.273100	0.273154	0.273209	0.273263	0.273317	0.273371	0.273425
0.140	0.273480	0.273534	0.273588	0.273642	0.273697	0.273751	0.273805	0.273859	0.273914	0.273968
0.150	0.274022	0.274077	0.274131	0.274185	0.274239	0.274294	0.274348	0.274402	0.274457	0.274511
0.160	0.274565	0.274620	0.274674	0.274728	0.274783	0.274837	0.274891	0.274946	0.275000	0.275055
0.170	0.275109	0.275163	0.275218	0.275272	0.275327	0.275381	0.275435	0.275490	0.275544	0.275599
0.180	0.275653	0.275708	0.275762	0.275816	0.275871	0.275925	0.275980	0.276034	0.276089	0.276143
0.190	0.276198	0.276252	0.276307	0.276361	0.276416	0.276470	0.276525	0.276579	0.276634	0.276689
0.200	0.276743	0.276798	0.276852	0.276907	0.276961	0.277016	0.277071	0.277125	0.277180	0.277234
0.210	0.277289	0.277344	0.277398	0.277453	0.277507	0.277562	0.277617	0.277671	0.277726	0.277781
0.220	0.277835	0.277890	0.277945	0.277999	0.278054	0.278109	0.278163	0.278218	0.278273	0.278327
0.230	0.278382	0.278437	0.278492	0.278546	0.278601	0.278656	0.278711	0.278765	0.278820	0.278875
0.240	0.278930	0.278984	0.279039	0.279094	0.279149	0.279204	0.279258	0.279313	0.279368	0.279423
0.250	0.279478	0.279532	0.279587	0.279642	0.279697	0.279752	0.279807	0.279862	0.279916	0.279971
0.260	0.280026	0.280081	0.280136	0.280191	0.280246	0.280301	0.280356	0.280410	0.280465	0.280520
0.270	0.280575	0.280630	0.280685	0.280740	0.280795	0.280850	0.280905	0.280960	0.281015	0.281070
0.280	0.281125	0.281180	0.281235	0.281290	0.281345	0.281400	0.281455	0.281510	0.281565	0.281620
0.290	0.281675	0.281730	0.281785	0.281840	0.281895	0.281950	0.282005	0.282060	0.282116	0.282171
0.300	0.282226	0.282281	0.282336	0.282391	0.282446	0.282501	0.282556	0.282612	0.282667	0.282722
0.310	0.282777	0.282832	0.282887	0.282943	0.282998	0.283053	0.283108	0.283163	0.283218	0.283274
0.320	0.283329	0.283384	0.283439	0.283494	0.283550	0.283605	0.283660	0.283715	0.283771	0.283826
0.330	0.283881	0.283936	0.283992	0.284047	0.284102	0.284158	0.284213	0.284268	0.284323	0.284379
0.340	0.284434	0.284489	0.284545	0.284600	0.284655	0.284711	0.284766	0.284821	0.284877	0.284932
0.350	0.284988	0.285043	0.285098	0.285154	0.285209	0.285265	0.285320	0.285375	0.285431	0.285486
0.360	0.285542	0.285597	0.285652	0.285708	0.285763	0.285819	0.285874	0.285930	0.285985	0.286041
0.370	0.286096	0.286152	0.286207	0.286263	0.286318	0.286374	0.286429	0.286485	0.286540	0.286596
0.380	0.286651	0.286707	0.286762	0.286818	0.286873	0.286929	0.286985	0.287040	0.287096	0.287151
0.390	0.287207	0.287262	0.287318	0.287374	0.287429	0.287485	0.287541	0.287596	0.287652	0.287707
0.400	0.287763	0.287819	0.287874	0.287930	0.287986	0.288041	0.288097	0.288153	0.288208	0.288264
0.410	0.288320	0.288376	0.288431	0.288487	0.288543	0.288598	0.288654	0.288710	0.288766	0.288821
0.420	0.288877	0.288933	0.288989	0.289044	0.289100	0.289156	0.289212	0.289268	0.289323	0.289379
0.430	0.289435	0.289491	0.289547	0.289602	0.289658	0.289714	0.289770	0.289826	0.289882	0.289937
0.440	0.289993	0.290049	0.290105	0.290161	0.290217	0.290273	0.290329	0.290385	0.290440	0.290496
0.450	0.290552	0.290608	0.290664	0.290720	0.290776	0.290832	0.290888	0.290944	0.291000	0.291056
0.460	0.291112	0.291168	0.291224	0.291280	0.291336	0.291392	0.291448	0.291504	0.291560	0.291616
0.470	0.291672	0.291728	0.291784	0.291840	0.291896	0.291952	0.292008	0.292064	0.292120	0.292176
0.480	0.292232	0.292288	0.292344	0.292401	0.292457	0.292513	0.292569	0.292625	0.292681	0.292737
0.490	0.292793	0.292850	0.292906	0.292962	0.293018	0.293074	0.293130	0.293187	0.293243	0.293299

ATTENUATION IN DECIBELS
THETA FROM 10.500 TO 10.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	0.293355	0.293411	0.293467	0.293524	0.293580	0.293636	0.293692	0.293749	0.293805	0.293861
0.510	0.293917	0.293974	0.294030	0.294086	0.294142	0.294199	0.294255	0.294311	0.294367	0.294424
0.520	0.294480	0.294536	0.294593	0.294649	0.294705	0.294762	0.294818	0.294874	0.294931	0.294987
0.530	0.295043	0.295100	0.295156	0.295212	0.295269	0.295325	0.295382	0.295438	0.295494	0.295551
0.540	0.295607	0.295664	0.295720	0.295776	0.295833	0.295889	0.295946	0.296002	0.296059	0.296115
0.550	0.296172	0.296228	0.296285	0.296341	0.296398	0.296454	0.296511	0.296567	0.296624	0.296680
0.560	0.296737	0.296793	0.296850	0.296906	0.296963	0.297019	0.297076	0.297132	0.297189	0.297245
0.570	0.297302	0.297359	0.297415	0.297472	0.297528	0.297585	0.297642	0.297698	0.297755	0.297811
0.580	0.297868	0.297925	0.297981	0.298038	0.298095	0.298151	0.298208	0.298265	0.298321	0.298378
0.590	0.298435	0.298491	0.298548	0.298605	0.298661	0.298718	0.298775	0.298832	0.298888	0.298945
0.600	0.299002	0.299059	0.299115	0.299172	0.299229	0.299286	0.299342	0.299399	0.299456	0.299513
0.610	0.299570	0.299626	0.299683	0.299740	0.299797	0.299854	0.299910	0.299967	0.300024	0.300081
0.620	0.300138	0.300195	0.300251	0.300308	0.300365	0.300422	0.300479	0.300536	0.300593	0.300650
0.630	0.300707	0.300763	0.300820	0.300877	0.300934	0.300991	0.301048	0.301105	0.301162	0.301219
0.640	0.301276	0.301333	0.301390	0.301447	0.301504	0.301561	0.301618	0.301675	0.301732	0.301789
0.650	0.301846	0.301903	0.301960	0.302017	0.302074	0.302131	0.302188	0.302245	0.302302	0.302359
0.660	0.302416	0.302473	0.302530	0.302587	0.302645	0.302702	0.302759	0.302816	0.302873	0.302930
0.670	0.302987	0.303044	0.303101	0.303159	0.303216	0.303273	0.303330	0.303387	0.303444	0.303502
0.680	0.303559	0.303616	0.303673	0.303730	0.303787	0.303845	0.303902	0.303959	0.304016	0.304074
0.690	0.304131	0.304188	0.304245	0.304302	0.304360	0.304417	0.304474	0.304532	0.304589	0.304646
0.700	0.304703	0.304761	0.304818	0.304875	0.304933	0.304990	0.305047	0.305105	0.305162	0.305219
0.710	0.305277	0.305334	0.305391	0.305449	0.305506	0.305563	0.305621	0.305678	0.305735	0.305793
0.720	0.305850	0.305908	0.305965	0.306022	0.306080	0.306137	0.306195	0.306252	0.306310	0.306367
0.730	0.306425	0.306482	0.306539	0.306597	0.306654	0.306712	0.306769	0.306827	0.306884	0.306942
0.740	0.306999	0.307057	0.307114	0.307172	0.307229	0.307287	0.307344	0.307402	0.307460	0.307517
0.750	0.307575	0.307632	0.307690	0.307747	0.307805	0.307863	0.307920	0.307978	0.308035	0.308093
0.760	0.308151	0.308208	0.308266	0.308323	0.308381	0.308439	0.308496	0.308554	0.308612	0.308669
0.770	0.308727	0.308785	0.308842	0.308900	0.308958	0.309015	0.309073	0.309131	0.309189	0.309246
0.780	0.309304	0.309362	0.309420	0.309477	0.309535	0.309593	0.309651	0.309708	0.309766	0.309824
0.790	0.309862	0.309939	0.309997	0.310055	0.310113	0.310171	0.310228	0.310286	0.310344	0.310402
0.800	0.310460	0.310518	0.310575	0.310633	0.310691	0.310749	0.310807	0.310865	0.310923	0.310980
0.810	0.311038	0.311096	0.311154	0.311212	0.311270	0.311328	0.311386	0.311444	0.311502	0.311560
0.820	0.311618	0.311676	0.311733	0.311791	0.311849	0.311907	0.311965	0.312023	0.312081	0.312139
0.830	0.312197	0.312255	0.312313	0.312371	0.312429	0.312487	0.312545	0.312603	0.312661	0.312720
0.840	0.312778	0.312836	0.312894	0.312952	0.313010	0.313068	0.313126	0.313184	0.313242	0.313300
0.850	0.313358	0.313417	0.313475	0.313533	0.313591	0.313649	0.313707	0.313765	0.313824	0.313882
0.860	0.313940	0.313998	0.314056	0.314114	0.314173	0.314231	0.314289	0.314347	0.314405	0.314464
0.870	0.314522	0.314580	0.314638	0.314696	0.314755	0.314813	0.314871	0.314929	0.314988	0.315046
0.880	0.315104	0.315163	0.315221	0.315279	0.315337	0.315396	0.315454	0.315512	0.315571	0.315629
0.890	0.315687	0.315746	0.315804	0.315862	0.315921	0.315979	0.316037	0.316096	0.316154	0.316212
0.900	0.316271	0.316329	0.316388	0.316446	0.316504	0.316563	0.316621	0.316680	0.316738	0.316797
0.910	0.316855	0.316913	0.316972	0.317030	0.317089	0.317147	0.317206	0.317264	0.317323	0.317381
0.920	0.317440	0.317498	0.317557	0.317615	0.317674	0.317732	0.317791	0.317849	0.317908	0.317966
0.930	0.318025	0.318083	0.318142	0.318201	0.318259	0.318318	0.318376	0.318435	0.318494	0.318552
0.940	0.318611	0.318669	0.318728	0.318787	0.318845	0.318904	0.318962	0.319021	0.319080	0.319138
0.950	0.319197	0.319256	0.319314	0.319373	0.319432	0.319490	0.319549	0.319608	0.319667	0.319725
0.960	0.319784	0.319843	0.319901	0.319960	0.320019	0.320078	0.320136	0.320195	0.320254	0.320313
0.970	0.320371	0.320430	0.320489	0.320548	0.320606	0.320665	0.320724	0.320783	0.320842	0.320901
0.980	0.320959	0.321018	0.321077	0.321136	0.321195	0.321254	0.321312	0.321371	0.321430	0.321489
0.990	0.321548	0.321607	0.321666	0.321725	0.321783	0.321842	0.321901	0.321960	0.322019	0.322078

ATTENUATION IN DECIBELS
THEIA FROM 11.000 TO 11.499 DEGREES

THEIA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.000	0.322137	0.322196	0.322255	0.322314	0.322373	0.322432	0.322491	0.322550	0.322609	0.322668
0.010	0.322727	0.322786	0.322845	0.322904	0.322963	0.323022	0.323081	0.323140	0.323199	0.323258
0.020	0.323317	0.323376	0.323435	0.323494	0.323553	0.323612	0.323671	0.323730	0.323789	0.323848
0.030	0.323907	0.323967	0.324026	0.324085	0.324144	0.324203	0.324262	0.324321	0.324380	0.324440
0.040	0.324499	0.324558	0.324617	0.324676	0.324735	0.324795	0.324854	0.324913	0.324972	0.325031
0.050	0.325091	0.325150	0.325209	0.325268	0.325327	0.325387	0.325446	0.325505	0.325564	0.325624
0.060	0.325683	0.325742	0.325801	0.325861	0.325920	0.325979	0.326039	0.326098	0.326157	0.326217
0.070	0.326276	0.326335	0.326394	0.326454	0.326513	0.326573	0.326632	0.326691	0.326751	0.326810
0.080	0.326869	0.326929	0.326988	0.327047	0.327107	0.327166	0.327226	0.327285	0.327344	0.327404
0.090	0.327463	0.327523	0.327582	0.327642	0.327701	0.327761	0.327820	0.327879	0.327939	0.327998
0.100	0.328058	0.328117	0.328177	0.328236	0.328296	0.328355	0.328415	0.328474	0.328534	0.328593
0.110	0.328653	0.328713	0.328772	0.328832	0.328891	0.328951	0.329010	0.329070	0.329130	0.329189
0.120	0.329249	0.329308	0.329368	0.329428	0.329487	0.329547	0.329606	0.329666	0.329726	0.329785
0.130	0.329845	0.329905	0.329964	0.330024	0.330084	0.330143	0.330203	0.330263	0.330322	0.330382
0.140	0.330442	0.330501	0.330561	0.330621	0.330681	0.330740	0.330800	0.330860	0.330919	0.330979
0.150	0.331039	0.331099	0.331159	0.331218	0.331278	0.331338	0.331398	0.331457	0.331517	0.331577
0.160	0.331637	0.331697	0.331757	0.331816	0.331876	0.331936	0.331996	0.332056	0.332116	0.332175
0.170	0.332235	0.332295	0.332355	0.332415	0.332475	0.332535	0.332595	0.332655	0.332714	0.332774
0.180	0.332834	0.332894	0.332954	0.333014	0.333074	0.333134	0.333194	0.333254	0.333314	0.333374
0.190	0.333434	0.333494	0.333554	0.333614	0.333674	0.333734	0.333794	0.333854	0.333914	0.333974
0.200	0.334034	0.334094	0.334154	0.334214	0.334274	0.334334	0.334394	0.334454	0.334514	0.334574
0.210	0.334634	0.334695	0.334755	0.334815	0.334875	0.334935	0.334995	0.335055	0.335115	0.335175
0.220	0.335236	0.335296	0.335356	0.335416	0.335476	0.335536	0.335597	0.335657	0.335717	0.335777
0.230	0.335837	0.335898	0.335958	0.336018	0.336078	0.336138	0.336199	0.336259	0.336319	0.336379
0.240	0.336440	0.336500	0.336560	0.336620	0.336681	0.336741	0.336801	0.336862	0.336922	0.336982
0.250	0.337042	0.337103	0.337163	0.337223	0.337284	0.337344	0.337404	0.337465	0.337525	0.337585
0.260	0.337646	0.337706	0.337767	0.337827	0.337887	0.337948	0.338008	0.338068	0.338129	0.338189
0.270	0.338250	0.338310	0.338371	0.338431	0.338491	0.338552	0.338612	0.338673	0.338733	0.338794
0.280	0.338854	0.338915	0.338975	0.339036	0.339096	0.339157	0.339217	0.339278	0.339338	0.339399
0.290	0.339459	0.339520	0.339580	0.339641	0.339701	0.339762	0.339822	0.339883	0.339944	0.340004
0.300	0.340065	0.340125	0.340186	0.340247	0.340307	0.340368	0.340428	0.340489	0.340550	0.340610
0.310	0.340671	0.340732	0.340792	0.340853	0.340913	0.340974	0.341035	0.341095	0.341156	0.341217
0.320	0.341278	0.341338	0.341399	0.341460	0.341520	0.341581	0.341642	0.341703	0.341763	0.341824
0.330	0.341885	0.341946	0.342006	0.342067	0.342128	0.342189	0.342249	0.342310	0.342371	0.342432
0.340	0.342493	0.342553	0.342614	0.342675	0.342736	0.342797	0.342857	0.342918	0.342979	0.343040
0.350	0.343101	0.343162	0.343223	0.343283	0.343344	0.343405	0.343466	0.343527	0.343588	0.343649
0.360	0.343710	0.343771	0.343832	0.343892	0.343953	0.344014	0.344075	0.344136	0.344197	0.344258
0.370	0.344319	0.344380	0.344441	0.344502	0.344563	0.344624	0.344685	0.344746	0.344807	0.344868
0.380	0.344929	0.344990	0.345051	0.345112	0.345173	0.345234	0.345295	0.345356	0.345417	0.345479
0.390	0.345549	0.345601	0.345662	0.345723	0.345784	0.345845	0.345906	0.345967	0.346028	0.346090
0.400	0.346151	0.346212	0.346273	0.346334	0.346395	0.346456	0.346518	0.346579	0.346640	0.346701
0.410	0.346762	0.346824	0.346885	0.346946	0.347007	0.347068	0.347130	0.347191	0.347252	0.347313
0.420	0.347375	0.347436	0.347497	0.347558	0.347620	0.347681	0.347742	0.347803	0.347865	0.347926
0.430	0.347987	0.348049	0.348110	0.348171	0.348232	0.348294	0.348355	0.348416	0.348478	0.348539
0.440	0.348601	0.348662	0.348723	0.348785	0.348846	0.348907	0.348969	0.349030	0.349092	0.349153
0.450	0.349214	0.349276	0.349337	0.349399	0.349460	0.349521	0.349583	0.349644	0.349706	0.349767
0.460	0.349829	0.349890	0.349952	0.350013	0.350075	0.350136	0.350198	0.350259	0.350321	0.350382
0.470	0.350444	0.350505	0.350567	0.350628	0.350690	0.350751	0.350813	0.350874	0.350936	0.350998
0.480	0.351059	0.351121	0.351182	0.351244	0.351305	0.351367	0.351429	0.351490	0.351552	0.351614
0.490	0.351675	0.351737	0.351798	0.351860	0.351922	0.351983	0.352045	0.352107	0.352168	0.352230

ATTENUATION IN DECIBELS
FROM 11.500 TO 11.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	0.352292	0.352353	0.352415	0.352477	0.352539	0.352600	0.352662	0.352724	0.352785	0.352847
0.510	0.352909	0.352971	0.353032	0.353094	0.353156	0.353218	0.353279	0.353341	0.353403	0.353465
0.520	0.353527	0.353588	0.353650	0.353712	0.353774	0.353836	0.353897	0.353959	0.354021	0.354083
0.530	0.354145	0.354207	0.354268	0.354330	0.354392	0.354454	0.354516	0.354578	0.354640	0.354702
0.540	0.354764	0.354825	0.354887	0.354949	0.355011	0.355073	0.355135	0.355197	0.355259	0.355321
0.550	0.355383	0.355445	0.355507	0.355569	0.355631	0.355693	0.355755	0.355817	0.355879	0.355941
0.560	0.356003	0.356065	0.356127	0.356189	0.356251	0.356313	0.356375	0.356437	0.356499	0.356561
0.570	0.356623	0.356685	0.356747	0.356809	0.356872	0.356934	0.356996	0.357058	0.357120	0.357182
0.580	0.357244	0.357306	0.357368	0.357431	0.357493	0.357555	0.357617	0.357679	0.357741	0.357804
0.590	0.357866	0.357928	0.357990	0.358052	0.358115	0.358177	0.358239	0.358301	0.358363	0.358426
0.600	0.358488	0.358550	0.358612	0.358675	0.358737	0.358799	0.358861	0.358924	0.358986	0.359048
0.610	0.359111	0.359173	0.359235	0.359297	0.359360	0.359422	0.359484	0.359547	0.359609	0.359671
0.620	0.359734	0.359796	0.359858	0.359921	0.359983	0.360046	0.360108	0.360170	0.360233	0.360295
0.630	0.360357	0.360420	0.360482	0.360545	0.360607	0.360670	0.360732	0.360794	0.360857	0.360919
0.640	0.360982	0.361044	0.361107	0.361169	0.361232	0.361294	0.361357	0.361419	0.361482	0.361544
0.650	0.361607	0.361669	0.361732	0.361794	0.361857	0.361919	0.361982	0.362044	0.362107	0.362169
0.660	0.362232	0.362295	0.362357	0.362420	0.362482	0.362545	0.362608	0.362670	0.362733	0.362795
0.670	0.362858	0.362921	0.362983	0.363046	0.363108	0.363171	0.363234	0.363296	0.363359	0.363422
0.680	0.363484	0.363547	0.363610	0.363673	0.363735	0.363798	0.363861	0.363923	0.363986	0.364049
0.690	0.364112	0.364174	0.364237	0.364300	0.364363	0.364425	0.364488	0.364551	0.364614	0.364676
0.700	0.364739	0.364802	0.364865	0.364928	0.364990	0.365053	0.365116	0.365179	0.365242	0.365304
0.710	0.365367	0.365430	0.365493	0.365556	0.365619	0.365682	0.365744	0.365807	0.365870	0.365933
0.720	0.365996	0.366059	0.366122	0.366185	0.366248	0.366311	0.366374	0.366436	0.366499	0.366562
0.730	0.366625	0.366688	0.366751	0.366814	0.366877	0.366940	0.367003	0.367066	0.367129	0.367192
0.740	0.367255	0.367318	0.367381	0.367444	0.367507	0.367570	0.367633	0.367696	0.367759	0.367822
0.750	0.367885	0.367949	0.368012	0.368075	0.368138	0.368201	0.368264	0.368327	0.368390	0.368453
0.760	0.368516	0.368580	0.368643	0.368706	0.368769	0.368832	0.368895	0.368958	0.369022	0.369085
0.770	0.369148	0.369211	0.369274	0.369337	0.369401	0.369464	0.369527	0.369590	0.369653	0.369717
0.780	0.369780	0.369843	0.369906	0.369970	0.370033	0.370096	0.370159	0.370223	0.370286	0.370349
0.790	0.370412	0.370476	0.370539	0.370602	0.370666	0.370729	0.370792	0.370856	0.370919	0.370982
0.800	0.371046	0.371109	0.371172	0.371236	0.371299	0.371362	0.371426	0.371489	0.371552	0.371616
0.810	0.371679	0.371743	0.371806	0.371869	0.371933	0.371996	0.372060	0.372123	0.372187	0.372250
0.820	0.372314	0.372377	0.372440	0.372504	0.372567	0.372631	0.372694	0.372758	0.372821	0.372885
0.830	0.372948	0.373012	0.373075	0.373139	0.373202	0.373266	0.373329	0.373393	0.373457	0.373520
0.840	0.373584	0.373647	0.373711	0.373774	0.373838	0.373902	0.373965	0.374029	0.374092	0.374156
0.850	0.374220	0.374283	0.374347	0.374410	0.374474	0.374538	0.374601	0.374665	0.374729	0.374792
0.860	0.374856	0.374920	0.374983	0.375047	0.375111	0.375174	0.375238	0.375302	0.375366	0.375429
0.870	0.375493	0.375557	0.375620	0.375684	0.375748	0.375812	0.375875	0.375939	0.376003	0.376067
0.880	0.376131	0.376194	0.376258	0.376322	0.376386	0.376450	0.376513	0.376577	0.376641	0.376705
0.890	0.376769	0.376832	0.376896	0.376960	0.377024	0.377088	0.377152	0.377216	0.377280	0.377343
0.900	0.377407	0.377471	0.377535	0.377599	0.377663	0.377727	0.377791	0.377855	0.377919	0.377983
0.910	0.378046	0.378110	0.378174	0.378238	0.378302	0.378366	0.378430	0.378494	0.378558	0.378622
0.920	0.378686	0.378750	0.378814	0.378878	0.378942	0.379006	0.379070	0.379134	0.379198	0.379263
0.930	0.379327	0.379391	0.379455	0.379519	0.379583	0.379647	0.379711	0.379775	0.379839	0.379903
0.940	0.379967	0.380032	0.380096	0.380160	0.380224	0.380288	0.380352	0.380416	0.380481	0.380545
0.950	0.380609	0.380673	0.380737	0.380801	0.380866	0.380930	0.380994	0.381058	0.381122	0.381187
0.960	0.381251	0.381315	0.381379	0.381444	0.381508	0.381572	0.381636	0.381701	0.381765	0.381829
0.970	0.381893	0.381958	0.382022	0.382086	0.382151	0.382215	0.382279	0.382343	0.382408	0.382472
0.980	0.382536	0.382601	0.382665	0.382729	0.382794	0.382858	0.382923	0.382987	0.383051	0.383116
0.990	0.383180	0.383244	0.383309	0.383373	0.383438	0.383502	0.383566	0.383631	0.383695	0.383760

ATTENUATION IN DECIBELS
THETA FROM 12.000 TO 12.499 DEGREES

31

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.000	0.383824	0.383889	0.383953	0.384018	0.384082	0.384147	0.384211	0.384275	0.384340	0.384404
0.010	0.384469	0.384533	0.384598	0.384663	0.384727	0.384792	0.384856	0.384921	0.384985	0.385050
0.020	0.385114	0.385179	0.385243	0.385308	0.385373	0.385437	0.385502	0.385566	0.385631	0.385695
0.030	0.385760	0.385825	0.385889	0.385954	0.386019	0.386083	0.386148	0.386213	0.386277	0.386342
0.040	0.386407	0.386471	0.386536	0.386601	0.386665	0.386730	0.386795	0.386859	0.386924	0.386989
0.050	0.387053	0.387118	0.387183	0.387248	0.387312	0.387377	0.387442	0.387507	0.387571	0.387636
0.060	0.387701	0.387766	0.387831	0.387895	0.387960	0.388025	0.388090	0.388155	0.388219	0.388284
0.070	0.388349	0.388414	0.388479	0.388544	0.388608	0.388673	0.388738	0.388803	0.388868	0.388933
0.080	0.388998	0.389063	0.389127	0.389192	0.389257	0.389322	0.389387	0.389452	0.389517	0.389582
0.090	0.389647	0.389712	0.389777	0.389842	0.389907	0.389972	0.390037	0.390102	0.390167	0.390232
0.100	0.390297	0.390362	0.390427	0.390492	0.390557	0.390622	0.390687	0.390752	0.390817	0.390882
0.110	0.390947	0.391012	0.391077	0.391142	0.391207	0.391272	0.391337	0.391402	0.391467	0.391532
0.120	0.391598	0.391663	0.391728	0.391793	0.391858	0.391923	0.391988	0.392053	0.392119	0.392184
0.130	0.392249	0.392314	0.392379	0.392444	0.392510	0.392575	0.392640	0.392705	0.392770	0.392836
0.140	0.392901	0.392966	0.393031	0.393097	0.393162	0.393227	0.393292	0.393358	0.393423	0.393488
0.150	0.393553	0.393619	0.393684	0.393749	0.393815	0.393880	0.393945	0.394010	0.394076	0.394141
0.160	0.394206	0.394272	0.394337	0.394402	0.394468	0.394533	0.394599	0.394664	0.394729	0.394795
0.170	0.394860	0.394925	0.394991	0.395056	0.395122	0.395187	0.395252	0.395318	0.395383	0.395449
0.180	0.395514	0.395580	0.395645	0.395711	0.395776	0.395841	0.395907	0.395972	0.396038	0.396103
0.190	0.396169	0.396234	0.396300	0.396365	0.396431	0.396496	0.396562	0.396627	0.396693	0.396759
0.200	0.396824	0.396890	0.396955	0.397021	0.397086	0.397152	0.397218	0.397283	0.397349	0.397414
0.210	0.397480	0.397546	0.397611	0.397677	0.397742	0.397808	0.397874	0.397939	0.398005	0.398071
0.220	0.398136	0.398202	0.398268	0.398333	0.398399	0.398465	0.398530	0.398596	0.398662	0.398727
0.230	0.398793	0.398859	0.398925	0.398990	0.399056	0.399122	0.399188	0.399253	0.399319	0.399385
0.240	0.399451	0.399516	0.399582	0.399648	0.399714	0.399780	0.399845	0.399911	0.399977	0.400043
0.250	0.400109	0.400175	0.400240	0.400306	0.400372	0.400438	0.400504	0.400570	0.400636	0.400701
0.260	0.400767	0.400833	0.400899	0.400965	0.401031	0.401097	0.401163	0.401229	0.401295	0.401360
0.270	0.401426	0.401492	0.401558	0.401624	0.401690	0.401756	0.401822	0.401888	0.401954	0.402020
0.280	0.402086	0.402152	0.402218	0.402284	0.402350	0.402416	0.402482	0.402548	0.402614	0.402680
0.290	0.402746	0.402812	0.402878	0.402945	0.403011	0.403077	0.403143	0.403209	0.403275	0.403341
0.300	0.403407	0.403473	0.403539	0.403605	0.403672	0.403738	0.403804	0.403870	0.403936	0.404002
0.310	0.404068	0.404135	0.404201	0.404267	0.404333	0.404399	0.404466	0.404532	0.404598	0.404664
0.320	0.404730	0.404797	0.404863	0.404929	0.404995	0.405062	0.405128	0.405194	0.405260	0.405327
0.330	0.405393	0.405459	0.405525	0.405592	0.405658	0.405724	0.405791	0.405857	0.405923	0.405990
0.340	0.406056	0.406122	0.406189	0.406255	0.406321	0.406388	0.406454	0.406520	0.406587	0.406653
0.350	0.406719	0.406786	0.406852	0.406919	0.406985	0.407051	0.407118	0.407184	0.407251	0.407317
0.360	0.407384	0.407450	0.407516	0.407583	0.407649	0.407716	0.407782	0.407849	0.407915	0.407982
0.370	0.408048	0.408115	0.408181	0.408248	0.408314	0.408381	0.408447	0.408514	0.408580	0.408647
0.380	0.408713	0.408780	0.408847	0.408913	0.408980	0.409046	0.409113	0.409179	0.409246	0.409313
0.390	0.409379	0.409446	0.409512	0.409579	0.409646	0.409712	0.409779	0.409846	0.409912	0.409979
0.400	0.410046	0.410112	0.410179	0.410246	0.410312	0.410379	0.410446	0.410512	0.410579	0.410646
0.410	0.410712	0.410779	0.410846	0.410913	0.410979	0.411046	0.411113	0.411180	0.411246	0.411313
0.420	0.411380	0.411447	0.411513	0.411580	0.411647	0.411714	0.411781	0.411847	0.411914	0.411981
0.430	0.412048	0.412115	0.412182	0.412248	0.412315	0.412382	0.412449	0.412516	0.412583	0.412650
0.440	0.412716	0.412783	0.412850	0.412917	0.412984	0.413051	0.413118	0.413185	0.413252	0.413319
0.450	0.413386	0.413453	0.413519	0.413586	0.413653	0.413720	0.413787	0.413854	0.413921	0.413988
0.460	0.414055	0.414122	0.414189	0.414256	0.414323	0.414390	0.414457	0.414524	0.414591	0.414658
0.470	0.414725	0.414793	0.414860	0.414927	0.414994	0.415061	0.415128	0.415195	0.415262	0.415329
0.480	0.415396	0.415463	0.415530	0.415598	0.415665	0.415732	0.415799	0.415866	0.415933	0.416000
0.490	0.416068	0.416135	0.416202	0.416269	0.416336	0.416403	0.416471	0.416538	0.416605	0.416672

ATTENUATION IN DECIBELS
THETA FROM 12.500 TO 12.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	0.416739	0.416807	0.416874	0.416941	0.417008	0.417076	0.417143	0.417210	0.417277	0.417345
0.510	0.417412	0.417479	0.417546	0.417614	0.417681	0.417748	0.417816	0.417883	0.417950	0.418018
0.520	0.418085	0.418152	0.418220	0.418287	0.418354	0.418422	0.418489	0.418556	0.418624	0.418691
0.530	0.418758	0.418826	0.418893	0.418961	0.419028	0.419095	0.419163	0.419230	0.419298	0.419365
0.540	0.419433	0.419500	0.419567	0.419635	0.419702	0.419770	0.419837	0.419905	0.419972	0.420040
0.550	0.420107	0.420175	0.420242	0.420310	0.420377	0.420445	0.420512	0.420580	0.420647	0.420715
0.560	0.420782	0.420850	0.420918	0.420985	0.421053	0.421120	0.421188	0.421255	0.421323	0.421391
0.570	0.421458	0.421526	0.421593	0.421661	0.421729	0.421796	0.421864	0.421932	0.421999	0.422067
0.580	0.422135	0.422202	0.422270	0.422338	0.422405	0.422473	0.422541	0.422608	0.422676	0.422744
0.590	0.422811	0.422879	0.422947	0.423015	0.423082	0.423150	0.423218	0.423286	0.423353	0.423421
0.600	0.423489	0.423557	0.423624	0.423692	0.423760	0.423828	0.423896	0.423963	0.424031	0.424099
0.610	0.424167	0.424235	0.424303	0.424370	0.424438	0.424506	0.424574	0.424642	0.424710	0.424778
0.620	0.424845	0.424913	0.424981	0.425049	0.425117	0.425185	0.425253	0.425321	0.425389	0.425457
0.630	0.425525	0.425593	0.425660	0.425728	0.425796	0.425864	0.425932	0.426000	0.426068	0.426136
0.640	0.426204	0.426272	0.426340	0.426408	0.426476	0.426544	0.426612	0.426680	0.426748	0.426816
0.650	0.426884	0.426953	0.427021	0.427089	0.427157	0.427225	0.427293	0.427361	0.427429	0.427497
0.660	0.427565	0.427633	0.427701	0.427770	0.427838	0.427906	0.427974	0.428042	0.428110	0.428178
0.670	0.428247	0.428315	0.428383	0.428451	0.428519	0.428587	0.428656	0.428724	0.428792	0.428860
0.680	0.428928	0.428997	0.429065	0.429133	0.429201	0.429270	0.429338	0.429406	0.429474	0.429543
0.690	0.429611	0.429679	0.429747	0.429816	0.429884	0.429952	0.430021	0.430089	0.430157	0.430226
0.700	0.430294	0.430362	0.430431	0.430499	0.430567	0.430636	0.430704	0.430772	0.430841	0.430909
0.710	0.430977	0.431046	0.431114	0.431183	0.431251	0.431319	0.431388	0.431456	0.431525	0.431593
0.720	0.431662	0.431730	0.431798	0.431867	0.431935	0.432004	0.432072	0.432141	0.432209	0.432278
0.730	0.432346	0.432415	0.432483	0.432552	0.432620	0.432689	0.432757	0.432826	0.432894	0.432963
0.740	0.433031	0.433100	0.433169	0.433237	0.433306	0.433374	0.433443	0.433511	0.433580	0.433649
0.750	0.433717	0.433786	0.433854	0.433923	0.433992	0.434060	0.434129	0.434198	0.434266	0.434335
0.760	0.434404	0.434472	0.434541	0.434610	0.434678	0.434747	0.434816	0.434884	0.434953	0.435022
0.770	0.435090	0.435159	0.435228	0.435297	0.435365	0.435434	0.435503	0.435572	0.435640	0.435709
0.780	0.435778	0.435847	0.435915	0.435984	0.436053	0.436122	0.436191	0.436259	0.436328	0.436397
0.790	0.436466	0.436535	0.436604	0.436672	0.436741	0.436810	0.436879	0.436948	0.437017	0.437086
0.800	0.437154	0.437223	0.437292	0.437361	0.437430	0.437499	0.437568	0.437637	0.437706	0.437775
0.810	0.437844	0.437913	0.437982	0.438050	0.438119	0.438188	0.438257	0.438326	0.438395	0.438464
0.820	0.438533	0.438602	0.438671	0.438740	0.438809	0.438878	0.438947	0.439016	0.439085	0.439154
0.830	0.439224	0.439293	0.439362	0.439431	0.439500	0.439569	0.439638	0.439707	0.439776	0.439845
0.840	0.439914	0.439983	0.440053	0.440122	0.440191	0.440260	0.440329	0.440398	0.440467	0.440536
0.850	0.440606	0.440675	0.440744	0.440813	0.440882	0.440952	0.441021	0.441090	0.441159	0.441228
0.860	0.441298	0.441367	0.441436	0.441505	0.441574	0.441644	0.441713	0.441782	0.441851	0.441921
0.870	0.441990	0.442059	0.442129	0.442198	0.442267	0.442336	0.442406	0.442475	0.442544	0.442614
0.880	0.442683	0.442752	0.442822	0.442891	0.442960	0.443030	0.443099	0.443168	0.443238	0.443307
0.890	0.443377	0.443446	0.443515	0.443585	0.443654	0.443724	0.443793	0.443862	0.443932	0.444001
0.900	0.444071	0.444140	0.444210	0.444279	0.444349	0.444418	0.444487	0.444557	0.444626	0.444696
0.910	0.444765	0.444835	0.444904	0.444974	0.445043	0.445113	0.445183	0.445252	0.445322	0.445391
0.920	0.445461	0.445530	0.445600	0.445669	0.445739	0.445809	0.445878	0.445948	0.446017	0.446087
0.930	0.446156	0.446226	0.446296	0.446365	0.446435	0.446505	0.446574	0.446644	0.446714	0.446783
0.940	0.446853	0.446922	0.446992	0.447062	0.447132	0.447201	0.447271	0.447341	0.447410	0.447480
0.950	0.447550	0.447619	0.447689	0.447759	0.447829	0.447898	0.447968	0.448038	0.448108	0.448177
0.960	0.448247	0.448317	0.448387	0.448457	0.448526	0.448596	0.448666	0.448735	0.448806	0.448875
0.970	0.448945	0.449015	0.449085	0.449155	0.449225	0.449294	0.449364	0.449434	0.449504	0.449574
0.980	0.449644	0.449714	0.449784	0.449854	0.449923	0.449993	0.450063	0.450133	0.450203	0.450273
0.990	0.450343	0.450413	0.450483	0.450553	0.450623	0.450693	0.450763	0.450833	0.450903	0.450973

ATTENUATION IN DECIBELS
THETA FROM 13.000 TO 13.499 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.000	0.451043	0.451113	0.451183	0.451253	0.451323	0.451393	0.451463	0.451533	0.451603	0.451673
0.010	0.451143	0.451183	0.451233	0.451283	0.451333	0.451383	0.451433	0.451483	0.451533	0.451583
0.020	0.452444	0.452514	0.452584	0.452654	0.452724	0.452794	0.452864	0.452934	0.453004	0.453074
0.030	0.453145	0.453215	0.453285	0.453355	0.453425	0.453495	0.453565	0.453635	0.453705	0.453775
0.040	0.453847	0.453917	0.453988	0.454058	0.454128	0.454198	0.454268	0.454339	0.454409	0.454479
0.050	0.454550	0.454620	0.454690	0.454760	0.454831	0.454901	0.454971	0.455042	0.455112	0.455182
0.060	0.455233	0.455303	0.455373	0.455443	0.455513	0.455583	0.455653	0.455723	0.455793	0.455863
0.070	0.455956	0.456027	0.456097	0.456167	0.456238	0.456308	0.456379	0.456449	0.456519	0.456590
0.080	0.456660	0.456731	0.456801	0.456872	0.456942	0.457013	0.457083	0.457154	0.457224	0.457295
0.090	0.457365	0.457436	0.457506	0.457577	0.457647	0.457718	0.457788	0.457859	0.457929	0.458000
0.100	0.458070	0.458141	0.458211	0.458282	0.458353	0.458423	0.458494	0.458564	0.458635	0.458706
0.110	0.458776	0.458847	0.458917	0.458988	0.459059	0.459129	0.459200	0.459271	0.459341	0.459412
0.120	0.459483	0.459553	0.459624	0.459695	0.459765	0.459836	0.459907	0.459977	0.460048	0.460119
0.130	0.460150	0.460260	0.460331	0.460402	0.460472	0.460543	0.460614	0.460685	0.460756	0.460826
0.140	0.460897	0.460968	0.461039	0.461109	0.461180	0.461251	0.461322	0.461393	0.461463	0.461534
0.150	0.461605	0.461676	0.461747	0.461818	0.461889	0.461959	0.462030	0.462101	0.462172	0.462243
0.160	0.462314	0.462385	0.462456	0.462526	0.462597	0.462668	0.462739	0.462810	0.462881	0.462952
0.170	0.463023	0.463094	0.463165	0.463236	0.463307	0.463378	0.463449	0.463520	0.463591	0.463662
0.180	0.463733	0.463804	0.463875	0.463946	0.464017	0.464088	0.464159	0.464230	0.464301	0.464372
0.190	0.464443	0.464514	0.464585	0.464656	0.464727	0.464798	0.464869	0.464941	0.465012	0.465083
0.200	0.465154	0.465225	0.465296	0.465367	0.465438	0.465509	0.465581	0.465652	0.465723	0.465794
0.210	0.465865	0.465936	0.466007	0.466079	0.466150	0.466221	0.466292	0.466364	0.466435	0.466506
0.220	0.466577	0.466648	0.466720	0.466791	0.466862	0.466933	0.467005	0.467076	0.467147	0.467218
0.230	0.467290	0.467361	0.467432	0.467504	0.467575	0.467646	0.467718	0.467789	0.467860	0.467932
0.240	0.468003	0.468074	0.468146	0.468217	0.468288	0.468359	0.468431	0.468502	0.468574	0.468646
0.250	0.468716	0.468788	0.468859	0.468931	0.469002	0.469074	0.469145	0.469216	0.469288	0.469359
0.260	0.469431	0.469502	0.469574	0.469645	0.469717	0.469788	0.469859	0.469931	0.470002	0.470074
0.270	0.470145	0.470217	0.470288	0.470360	0.470432	0.470503	0.470575	0.470646	0.470718	0.470789
0.280	0.470861	0.470932	0.471004	0.471075	0.471147	0.471219	0.471290	0.471362	0.471433	0.471505
0.290	0.471577	0.471648	0.471720	0.471792	0.471863	0.471935	0.472006	0.472078	0.472150	0.472221
0.300	0.472293	0.472365	0.472436	0.472508	0.472580	0.472652	0.472723	0.472795	0.472867	0.472938
0.310	0.473010	0.473082	0.473154	0.473225	0.473297	0.473369	0.473441	0.473512	0.473584	0.473656
0.320	0.473728	0.473799	0.473871	0.473943	0.474015	0.474087	0.474158	0.474230	0.474302	0.474374
0.330	0.474466	0.474538	0.474610	0.474681	0.474753	0.474825	0.474897	0.474969	0.475041	0.475113
0.340	0.475164	0.475236	0.475308	0.475380	0.475452	0.475524	0.475596	0.475668	0.475740	0.475812
0.350	0.475884	0.475956	0.476028	0.476100	0.476172	0.476244	0.476316	0.476388	0.476460	0.476531
0.360	0.476604	0.476676	0.476748	0.476820	0.476892	0.476964	0.477036	0.477108	0.477180	0.477252
0.370	0.477324	0.477396	0.477468	0.477540	0.477612	0.477684	0.477756	0.477828	0.477901	0.477973
0.380	0.478045	0.478117	0.478189	0.478261	0.478333	0.478405	0.478478	0.478550	0.478622	0.478694
0.390	0.478766	0.478838	0.478911	0.478983	0.479055	0.479127	0.479199	0.479272	0.479344	0.479416
0.400	0.479488	0.479561	0.479633	0.479705	0.479777	0.479850	0.479922	0.479994	0.480066	0.480139
0.410	0.480211	0.480283	0.480355	0.480428	0.480500	0.480572	0.480645	0.480717	0.480789	0.480862
0.420	0.480934	0.481006	0.481079	0.481151	0.481223	0.481296	0.481368	0.481441	0.481513	0.481585
0.430	0.481658	0.481730	0.481803	0.481875	0.481947	0.482020	0.482092	0.482165	0.482237	0.482310
0.440	0.482382	0.482454	0.482527	0.482599	0.482672	0.482744	0.482817	0.482889	0.482962	0.483034
0.450	0.483107	0.483179	0.483252	0.483324	0.483397	0.483469	0.483542	0.483615	0.483687	0.483760
0.460	0.483832	0.483905	0.483977	0.484050	0.484123	0.484195	0.484268	0.484340	0.484413	0.484486
0.470	0.484548	0.484621	0.484694	0.484767	0.484840	0.484912	0.484985	0.485057	0.485130	0.485203
0.480	0.485285	0.485357	0.485430	0.485503	0.485575	0.485648	0.485721	0.485794	0.485866	0.485939
0.490	0.486012	0.486084	0.486157	0.486230	0.486303	0.486375	0.486448	0.486521	0.486594	0.486667

ATTENUATION IN DECIBELS
THETA FROM 13.500 TO 13.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	0.486739	0.486812	0.486885	0.486958	0.487031	0.487103	0.487176	0.487249	0.487322	0.487395
0.510	0.487463	0.487540	0.487613	0.487686	0.487759	0.487832	0.487905	0.487978	0.488051	0.488123
0.520	0.488196	0.488269	0.488342	0.488415	0.488488	0.488561	0.488634	0.488707	0.488780	0.488853
0.530	0.488926	0.488999	0.489072	0.489145	0.489217	0.489290	0.489363	0.489436	0.489509	0.489582
0.540	0.489655	0.489728	0.489802	0.489875	0.489948	0.490021	0.490094	0.490167	0.490240	0.490313
0.550	0.490386	0.490459	0.490532	0.490605	0.490678	0.490751	0.490824	0.490898	0.490971	0.491044
0.560	0.491117	0.491190	0.491263	0.491336	0.491409	0.491483	0.491556	0.491629	0.491702	0.491775
0.570	0.491848	0.491922	0.491995	0.492068	0.492141	0.492214	0.492288	0.492361	0.492434	0.492507
0.580	0.492581	0.492654	0.492727	0.492800	0.492874	0.492947	0.493020	0.493093	0.493167	0.493240
0.590	0.493313	0.493386	0.493460	0.493533	0.493606	0.493680	0.493753	0.493826	0.493900	0.493973
0.600	0.494046	0.494120	0.494193	0.494266	0.494340	0.494413	0.494487	0.494560	0.494633	0.494707
0.610	0.494780	0.494854	0.494927	0.495000	0.495074	0.495147	0.495221	0.495294	0.495368	0.495441
0.620	0.495515	0.495588	0.495661	0.495735	0.495808	0.495882	0.495955	0.496029	0.496102	0.496176
0.630	0.496249	0.496323	0.496397	0.496470	0.496544	0.496617	0.496691	0.496764	0.496838	0.496911
0.640	0.496985	0.497058	0.497132	0.497206	0.497279	0.497353	0.497426	0.497500	0.497574	0.497647
0.650	0.497721	0.497795	0.497868	0.497942	0.498016	0.498089	0.498163	0.498236	0.498310	0.498384
0.660	0.498458	0.498531	0.498605	0.498679	0.498752	0.498826	0.498900	0.498973	0.499047	0.499121
0.670	0.499195	0.499268	0.499342	0.499416	0.499490	0.499563	0.499637	0.499711	0.499785	0.499859
0.680	0.499932	0.500006	0.500080	0.500154	0.500228	0.500301	0.500375	0.500449	0.500523	0.500597
0.690	0.500671	0.500745	0.500818	0.500892	0.500966	0.501040	0.501114	0.501188	0.501262	0.501336
0.700	0.501409	0.501483	0.501557	0.501631	0.501705	0.501779	0.501853	0.501927	0.502001	0.502075
0.710	0.502149	0.502223	0.502297	0.502371	0.502445	0.502519	0.502593	0.502667	0.502741	0.502815
0.720	0.502889	0.502963	0.503037	0.503111	0.503185	0.503259	0.503333	0.503407	0.503481	0.503555
0.730	0.503629	0.503703	0.503778	0.503852	0.503926	0.504000	0.504074	0.504148	0.504222	0.504296
0.740	0.504370	0.504445	0.504519	0.504593	0.504667	0.504741	0.504815	0.504889	0.504964	0.505038
0.750	0.505112	0.505186	0.505260	0.505335	0.505409	0.505483	0.505557	0.505632	0.505706	0.505780
0.760	0.505854	0.505928	0.506003	0.506077	0.506151	0.506226	0.506300	0.506374	0.506448	0.506523
0.770	0.506597	0.506671	0.506746	0.506820	0.506894	0.506969	0.507043	0.507117	0.507192	0.507266
0.780	0.507340	0.507415	0.507489	0.507563	0.507638	0.507712	0.507787	0.507861	0.507935	0.508010
0.790	0.508084	0.508159	0.508233	0.508307	0.508382	0.508456	0.508531	0.508605	0.508680	0.508754
0.800	0.508829	0.508903	0.508978	0.509052	0.509127	0.509201	0.509276	0.509350	0.509425	0.509499
0.810	0.509574	0.509648	0.509723	0.509797	0.509872	0.509946	0.510021	0.510095	0.510170	0.510245
0.820	0.510319	0.510394	0.510468	0.510543	0.510618	0.510692	0.510767	0.510841	0.510916	0.510991
0.830	0.511065	0.511140	0.511215	0.511289	0.511364	0.511439	0.511513	0.511588	0.511663	0.511737
0.840	0.511812	0.511887	0.511961	0.512036	0.512111	0.512186	0.512260	0.512335	0.512410	0.512484
0.850	0.512559	0.512634	0.512709	0.512784	0.512858	0.512933	0.513008	0.513083	0.513157	0.513232
0.860	0.513307	0.513382	0.513457	0.513531	0.513606	0.513681	0.513756	0.513831	0.513906	0.513981
0.870	0.514055	0.514130	0.514205	0.514280	0.514355	0.514430	0.514505	0.514580	0.514654	0.514729
0.880	0.514804	0.514879	0.514954	0.515029	0.515104	0.515179	0.515254	0.515329	0.515404	0.515479
0.890	0.515554	0.515629	0.515704	0.515779	0.515854	0.515929	0.516004	0.516079	0.516154	0.516229
0.900	0.516304	0.516379	0.516454	0.516529	0.516604	0.516679	0.516754	0.516829	0.516904	0.516979
0.910	0.517054	0.517130	0.517205	0.517280	0.517355	0.517430	0.517505	0.517580	0.517655	0.517730
0.920	0.517806	0.517881	0.517956	0.518031	0.518106	0.518181	0.518257	0.518332	0.518407	0.518482
0.930	0.518557	0.518633	0.518708	0.518783	0.518858	0.518933	0.519009	0.519084	0.519159	0.519234
0.940	0.519310	0.519385	0.519460	0.519535	0.519611	0.519686	0.519761	0.519837	0.519912	0.519987
0.950	0.520063	0.520138	0.520213	0.520288	0.520364	0.520439	0.520515	0.520590	0.520665	0.520741
0.960	0.520816	0.520891	0.520967	0.521042	0.521117	0.521193	0.521268	0.521344	0.521419	0.521495
0.970	0.521570	0.521645	0.521721	0.521796	0.521872	0.521947	0.522023	0.522098	0.522174	0.522249
0.980	0.522324	0.522400	0.522475	0.522551	0.522626	0.522702	0.522777	0.522853	0.522929	0.523004
0.990	0.523080	0.523155	0.523231	0.523306	0.523382	0.523457	0.523533	0.523608	0.523684	0.523760

ATTENUATION IN DECIBELS
THETA FROM 14.000 TO 14.499 DEGREES

THETA IN
DEGREES

0.000	0.523635	0.523911	0.523986	0.524062	0.524138	0.524213	0.524289	0.524365	0.524440	0.524516
0.010	0.524591	0.524667	0.524743	0.524818	0.524894	0.524970	0.525045	0.525121	0.525197	0.525273
0.020	0.525349	0.525424	0.525500	0.525575	0.525651	0.525727	0.525803	0.525878	0.525954	0.526030
0.030	0.526106	0.526181	0.526257	0.526333	0.526409	0.526485	0.526560	0.526636	0.526712	0.526788
0.040	0.526864	0.526939	0.527015	0.527091	0.527167	0.527243	0.527319	0.527394	0.527470	0.527546
0.050	0.527622	0.527698	0.527774	0.527850	0.527926	0.528001	0.528077	0.528153	0.528229	0.528305
0.060	0.528381	0.528457	0.528533	0.528609	0.528685	0.528761	0.528837	0.528913	0.528989	0.529065
0.070	0.529141	0.529217	0.529293	0.529369	0.529445	0.529521	0.529597	0.529673	0.529749	0.529825
0.080	0.529901	0.529977	0.530053	0.530129	0.530205	0.530281	0.530357	0.530433	0.530509	0.530585
0.090	0.530662	0.530738	0.530814	0.530890	0.530966	0.531042	0.531118	0.531194	0.531271	0.531347
0.100	0.531423	0.531499	0.531575	0.531651	0.531728	0.531804	0.531880	0.531956	0.532032	0.532109
0.110	0.532185	0.532261	0.532337	0.532413	0.532490	0.532566	0.532642	0.532718	0.532795	0.532871
0.120	0.532947	0.533023	0.533100	0.533176	0.533252	0.533329	0.533405	0.533481	0.533557	0.533634
0.130	0.533710	0.533786	0.533863	0.533939	0.534015	0.534092	0.534168	0.534245	0.534321	0.534397
0.140	0.534474	0.534550	0.534626	0.534703	0.534779	0.534856	0.534932	0.535008	0.535085	0.535161
0.150	0.535238	0.535314	0.535391	0.535467	0.535544	0.535620	0.535696	0.535773	0.535849	0.535926
0.160	0.536002	0.536079	0.536155	0.536232	0.536308	0.536385	0.536461	0.536538	0.536615	0.536691
0.170	0.536768	0.536844	0.536921	0.536997	0.537074	0.537150	0.537227	0.537304	0.537380	0.537457
0.180	0.537533	0.537610	0.537687	0.537763	0.537840	0.537917	0.537993	0.538070	0.538146	0.538223
0.190	0.538300	0.538376	0.538453	0.538530	0.538607	0.538683	0.538760	0.538837	0.538914	0.538990
0.200	0.539067	0.539143	0.539220	0.539297	0.539374	0.539450	0.539527	0.539604	0.539681	0.539757
0.210	0.539834	0.539911	0.539988	0.540065	0.540141	0.540218	0.540295	0.540372	0.540449	0.540525
0.220	0.540602	0.540679	0.540756	0.540833	0.540910	0.540986	0.541063	0.541140	0.541217	0.541294
0.230	0.541371	0.541448	0.541525	0.541602	0.541678	0.541755	0.541832	0.541909	0.541986	0.542063
0.240	0.542140	0.542217	0.542294	0.542371	0.542448	0.542525	0.542602	0.542679	0.542756	0.542833
0.250	0.542910	0.542987	0.543064	0.543141	0.543218	0.543295	0.543372	0.543449	0.543526	0.543603
0.260	0.543660	0.543737	0.543814	0.543891	0.543968	0.544045	0.544123	0.544200	0.544277	0.544354
0.270	0.544451	0.544528	0.544605	0.544682	0.544759	0.544837	0.544914	0.544991	0.545068	0.545145
0.280	0.545222	0.545300	0.545377	0.545454	0.545531	0.545608	0.545685	0.545763	0.545840	0.545917
0.290	0.545994	0.546072	0.546149	0.546226	0.546303	0.546381	0.546458	0.546535	0.546612	0.546690
0.300	0.546767	0.546844	0.546921	0.546999	0.547076	0.547153	0.547231	0.547308	0.547385	0.547463
0.310	0.547540	0.547617	0.547695	0.547772	0.547849	0.547927	0.548004	0.548082	0.548159	0.548236
0.320	0.548314	0.548391	0.548468	0.548546	0.548623	0.548701	0.548778	0.548856	0.548933	0.549010
0.330	0.549088	0.549165	0.549243	0.549320	0.549398	0.549475	0.549553	0.549630	0.549708	0.549785
0.340	0.549863	0.549940	0.550018	0.550095	0.550173	0.550250	0.550328	0.550405	0.550483	0.550561
0.350	0.550638	0.550716	0.550793	0.550871	0.550948	0.551026	0.551104	0.551181	0.551259	0.551336
0.360	0.551414	0.551492	0.551569	0.551647	0.551725	0.551802	0.551880	0.551958	0.552035	0.552113
0.370	0.552191	0.552268	0.552346	0.552424	0.552501	0.552579	0.552657	0.552734	0.552812	0.552890
0.380	0.552968	0.553045	0.553123	0.553201	0.553279	0.553356	0.553434	0.553512	0.553590	0.553667
0.390	0.553745	0.553823	0.553901	0.553979	0.554056	0.554134	0.554212	0.554290	0.554368	0.554446
0.400	0.554523	0.554601	0.554679	0.554757	0.554835	0.554913	0.554991	0.555068	0.555146	0.555224
0.410	0.555302	0.555380	0.555458	0.555536	0.555614	0.555692	0.555770	0.555848	0.555926	0.556004
0.420	0.556081	0.556159	0.556237	0.556315	0.556393	0.556471	0.556549	0.556627	0.556705	0.556783
0.430	0.556861	0.556939	0.557017	0.557095	0.557173	0.557252	0.557330	0.557408	0.557486	0.557564
0.440	0.557642	0.557720	0.557798	0.557876	0.557954	0.558032	0.558110	0.558188	0.558267	0.558345
0.450	0.558423	0.558501	0.558579	0.558657	0.558735	0.558814	0.558892	0.558970	0.559048	0.559126
0.460	0.559204	0.559283	0.559361	0.559439	0.559517	0.559595	0.559674	0.559752	0.559830	0.559908
0.470	0.559987	0.560065	0.560143	0.560221	0.560300	0.560378	0.560456	0.560534	0.560613	0.560691
0.480	0.560769	0.560848	0.560926	0.561004	0.561082	0.561161	0.561239	0.561317	0.561396	0.561474
0.490	0.561553	0.561631	0.561709	0.561788	0.561866	0.561944	0.562023	0.562101	0.562180	0.562258

ATTENUATION IN DECIBELS
THETA FROM 14.500 TO 14.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	0.562336	0.562415	0.562493	0.562572	0.562650	0.562728	0.562807	0.562885	0.562964	0.563042
0.510	0.563121	0.563199	0.563278	0.563356	0.563435	0.563513	0.563592	0.563670	0.563749	0.563827
0.520	0.563906	0.563984	0.564063	0.564141	0.564220	0.564298	0.564377	0.564456	0.564534	0.564613
0.530	0.564691	0.564770	0.564848	0.564927	0.565006	0.565084	0.565163	0.565241	0.565320	0.565399
0.540	0.565477	0.565556	0.565635	0.565713	0.565792	0.565871	0.565950	0.566028	0.566107	0.566185
0.550	0.566264	0.566343	0.566421	0.566500	0.566579	0.566658	0.566736	0.566815	0.566894	0.566972
0.560	0.567051	0.567130	0.567209	0.567287	0.567366	0.567445	0.567524	0.567603	0.567681	0.567760
0.570	0.567839	0.567918	0.567997	0.568075	0.568154	0.568232	0.568311	0.568390	0.568468	0.568547
0.580	0.568627	0.568706	0.568785	0.568864	0.568943	0.569022	0.569101	0.569180	0.569258	0.569337
0.590	0.569416	0.569495	0.569574	0.569653	0.569732	0.569811	0.569890	0.569969	0.570048	0.570127
0.600	0.570206	0.570285	0.570364	0.570443	0.570522	0.570601	0.570680	0.570759	0.570838	0.570917
0.610	0.570996	0.571075	0.571154	0.571233	0.571312	0.571391	0.571470	0.571549	0.571628	0.571707
0.620	0.571786	0.571865	0.571945	0.572024	0.572103	0.572182	0.572261	0.572340	0.572419	0.572498
0.630	0.572578	0.572657	0.572736	0.572815	0.572894	0.572973	0.573053	0.573132	0.573211	0.573290
0.640	0.573369	0.573449	0.573528	0.573607	0.573686	0.573765	0.573845	0.573924	0.574003	0.574082
0.650	0.574162	0.574241	0.574320	0.574399	0.574479	0.574558	0.574637	0.574717	0.574796	0.574875
0.660	0.574954	0.575034	0.575113	0.575192	0.575272	0.575351	0.575430	0.575510	0.575589	0.575669
0.670	0.575748	0.575827	0.575907	0.575986	0.576065	0.576145	0.576224	0.576304	0.576383	0.576462
0.680	0.576542	0.576621	0.576701	0.576780	0.576860	0.576939	0.577019	0.577098	0.577178	0.577257
0.690	0.577336	0.577416	0.577495	0.577575	0.577654	0.577734	0.577814	0.577893	0.577973	0.578052
0.700	0.578132	0.578211	0.578291	0.578370	0.578450	0.578529	0.578609	0.578689	0.578768	0.578848
0.710	0.578927	0.579007	0.579087	0.579166	0.579246	0.579325	0.579405	0.579485	0.579564	0.579644
0.720	0.579724	0.579803	0.579883	0.579963	0.580042	0.580122	0.580202	0.580281	0.580361	0.580441
0.730	0.580520	0.580600	0.580680	0.580760	0.580839	0.580919	0.580999	0.581079	0.581158	0.581238
0.740	0.581318	0.581398	0.581477	0.581557	0.581637	0.581717	0.581797	0.581876	0.581956	0.582036
0.750	0.582116	0.582196	0.582275	0.582355	0.582435	0.582515	0.582595	0.582675	0.582755	0.582834
0.760	0.582914	0.582994	0.583074	0.583154	0.583234	0.583314	0.583394	0.583474	0.583554	0.583633
0.770	0.583713	0.583793	0.583873	0.583953	0.584033	0.584113	0.584193	0.584273	0.584353	0.584433
0.780	0.584513	0.584593	0.584673	0.584753	0.584833	0.584913	0.584993	0.585073	0.585153	0.585233
0.790	0.585313	0.585393	0.585473	0.585553	0.585634	0.585714	0.585794	0.585874	0.585954	0.586034
0.800	0.586114	0.586194	0.586274	0.586354	0.586435	0.586515	0.586595	0.586675	0.586755	0.586835
0.810	0.586915	0.586996	0.587076	0.587156	0.587236	0.587316	0.587397	0.587477	0.587557	0.587637
0.820	0.587717	0.587798	0.587878	0.587958	0.588038	0.588119	0.588199	0.588279	0.588359	0.588440
0.830	0.588520	0.588600	0.588680	0.588761	0.588841	0.588921	0.589002	0.589082	0.589162	0.589243
0.840	0.589323	0.589403	0.589484	0.589564	0.589644	0.589725	0.589805	0.589885	0.589966	0.590046
0.850	0.590127	0.590207	0.590287	0.590368	0.590448	0.590529	0.590609	0.590689	0.590770	0.590850
0.860	0.590931	0.591011	0.591092	0.591172	0.591253	0.591333	0.591414	0.591494	0.591574	0.591655
0.870	0.591735	0.591816	0.591896	0.591977	0.592058	0.592138	0.592219	0.592299	0.592380	0.592460
0.880	0.592541	0.592621	0.592702	0.592783	0.592863	0.592944	0.593024	0.593105	0.593185	0.593266
0.890	0.593347	0.593427	0.593508	0.593589	0.593669	0.593750	0.593830	0.593911	0.593992	0.594072
0.900	0.594153	0.594234	0.594315	0.594395	0.594476	0.594557	0.594637	0.594718	0.594799	0.594879
0.910	0.594960	0.595041	0.595122	0.595202	0.595283	0.595364	0.595445	0.595525	0.595606	0.595687
0.920	0.595768	0.595849	0.595929	0.596010	0.596091	0.596172	0.596253	0.596333	0.596414	0.596495
0.930	0.596576	0.596657	0.596738	0.596818	0.596899	0.596980	0.597061	0.597142	0.597223	0.597304
0.940	0.597385	0.597466	0.597546	0.597627	0.597708	0.597789	0.597869	0.597951	0.598032	0.598113
0.950	0.598194	0.598275	0.598356	0.598437	0.598518	0.598599	0.598680	0.598761	0.598842	0.598923
0.960	0.599004	0.599085	0.599166	0.599247	0.599328	0.599409	0.599490	0.599571	0.599652	0.599733
0.970	0.599814	0.599895	0.599976	0.600057	0.600139	0.600220	0.600301	0.600382	0.600463	0.600544
0.980	0.600625	0.600706	0.600787	0.600869	0.600950	0.601031	0.601112	0.601193	0.601274	0.601356
0.990	0.601437	0.601518	0.601599	0.601680	0.601762	0.601843	0.601924	0.602005	0.602086	0.602168

ATTENUATION IN DECIBELS
THETA FROM 15.000 TO 15.499 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.000	0.602249	0.602330	0.602411	0.602493	0.602574	0.602655	0.602736	0.602818	0.602899	0.602980
0.010	0.603062	0.603143	0.603224	0.603305	0.603387	0.603468	0.603549	0.603631	0.603712	0.603793
0.020	0.603875	0.603956	0.604038	0.604119	0.604200	0.604282	0.604363	0.604444	0.604526	0.604607
0.030	0.604689	0.604770	0.604851	0.604933	0.605014	0.605096	0.605177	0.605259	0.605340	0.605422
0.040	0.605503	0.605585	0.605666	0.605747	0.605829	0.605910	0.605992	0.606073	0.606155	0.606236
0.050	0.606318	0.606400	0.606481	0.606563	0.606644	0.606726	0.606807	0.606889	0.606970	0.607052
0.060	0.607134	0.607215	0.607297	0.607378	0.607460	0.607542	0.607623	0.607705	0.607786	0.607868
0.070	0.607950	0.608031	0.608113	0.608195	0.608276	0.608358	0.608440	0.608521	0.608603	0.608685
0.080	0.608766	0.608848	0.608930	0.609011	0.609093	0.609175	0.609257	0.609338	0.609420	0.609502
0.090	0.609584	0.609665	0.609747	0.609829	0.609911	0.609992	0.610074	0.610156	0.610238	0.610320
0.100	0.610401	0.610483	0.610565	0.610647	0.610729	0.610810	0.610892	0.610974	0.611056	0.611138
0.110	0.611220	0.611302	0.611383	0.611465	0.611547	0.611629	0.611711	0.611793	0.611875	0.611957
0.120	0.612039	0.612121	0.612202	0.612284	0.612366	0.612448	0.612530	0.612612	0.612694	0.612776
0.130	0.612858	0.612940	0.613022	0.613104	0.613186	0.613268	0.613350	0.613432	0.613514	0.613596
0.140	0.613678	0.613760	0.613842	0.613924	0.614006	0.614088	0.614171	0.614253	0.614335	0.614417
0.150	0.614499	0.614581	0.614663	0.614745	0.614827	0.614909	0.614991	0.615074	0.615156	0.615238
0.160	0.615320	0.615402	0.615484	0.615567	0.615649	0.615731	0.615813	0.615895	0.615977	0.616060
0.170	0.616142	0.616224	0.616306	0.616388	0.616471	0.616553	0.616635	0.616717	0.616800	0.616882
0.180	0.616964	0.617046	0.617129	0.617211	0.617293	0.617376	0.617458	0.617540	0.617622	0.617705
0.190	0.617787	0.617869	0.617952	0.618034	0.618116	0.618199	0.618281	0.618363	0.618446	0.618528
0.200	0.618611	0.618693	0.618775	0.618858	0.618940	0.619022	0.619105	0.619187	0.619270	0.619352
0.210	0.619435	0.619517	0.619599	0.619682	0.619764	0.619847	0.619929	0.620012	0.620094	0.620177
0.220	0.620259	0.620342	0.620424	0.620507	0.620589	0.620672	0.620754	0.620837	0.620919	0.621002
0.230	0.621084	0.621167	0.621249	0.621332	0.621415	0.621497	0.621580	0.621662	0.621745	0.621828
0.240	0.621910	0.621993	0.622075	0.622158	0.622241	0.622323	0.622406	0.622488	0.622571	0.622654
0.250	0.622736	0.622819	0.622902	0.622984	0.623067	0.623150	0.623233	0.623315	0.623398	0.623481
0.260	0.623563	0.623646	0.623729	0.623812	0.623894	0.623977	0.624060	0.624142	0.624225	0.624308
0.270	0.624391	0.624474	0.624556	0.624639	0.624722	0.624805	0.624888	0.624970	0.625053	0.625136
0.280	0.625219	0.625302	0.625384	0.625467	0.625550	0.625633	0.625716	0.625799	0.625882	0.625965
0.290	0.626047	0.626130	0.626213	0.626296	0.626379	0.626462	0.626545	0.626628	0.626711	0.626794
0.300	0.626877	0.626960	0.627042	0.627125	0.627208	0.627291	0.627374	0.627457	0.627540	0.627623
0.310	0.627706	0.627789	0.627872	0.627955	0.628038	0.628121	0.628204	0.628287	0.628371	0.628454
0.320	0.628537	0.628620	0.628703	0.628786	0.628869	0.628952	0.629035	0.629118	0.629201	0.629284
0.330	0.629367	0.629451	0.629534	0.629617	0.629700	0.629783	0.629866	0.629949	0.630033	0.630116
0.340	0.630199	0.630282	0.630365	0.630448	0.630532	0.630615	0.630698	0.630781	0.630864	0.630948
0.350	0.631031	0.631114	0.631197	0.631281	0.631364	0.631447	0.631530	0.631614	0.631697	0.631780
0.360	0.631863	0.631947	0.632030	0.632113	0.632197	0.632280	0.632363	0.632447	0.632530	0.632613
0.370	0.632677	0.632760	0.632843	0.632927	0.633010	0.633093	0.633177	0.633260	0.633344	0.633427
0.380	0.633530	0.633614	0.633697	0.633781	0.633864	0.633947	0.634031	0.634114	0.634198	0.634281
0.390	0.634365	0.634448	0.634532	0.634615	0.634699	0.634782	0.634865	0.634949	0.635032	0.635116
0.400	0.635199	0.635283	0.635367	0.635450	0.635534	0.635617	0.635701	0.635784	0.635868	0.635951
0.410	0.636035	0.636118	0.636202	0.636286	0.636369	0.636453	0.636536	0.636620	0.636704	0.636787
0.420	0.636871	0.636955	0.637038	0.637122	0.637205	0.637289	0.637373	0.637456	0.637540	0.637624
0.430	0.637707	0.637791	0.637875	0.637959	0.638042	0.638126	0.638210	0.638293	0.638377	0.638461
0.440	0.638545	0.638628	0.638712	0.638796	0.638880	0.638963	0.639047	0.639131	0.639215	0.639298
0.450	0.639382	0.639466	0.639550	0.639634	0.639718	0.639801	0.639885	0.639969	0.640053	0.640137
0.460	0.640221	0.640304	0.640388	0.640472	0.640556	0.640640	0.640724	0.640808	0.640892	0.640975
0.470	0.641059	0.641143	0.641227	0.641311	0.641395	0.641479	0.641563	0.641647	0.641731	0.641815
0.480	0.641899	0.641983	0.642067	0.642151	0.642235	0.642319	0.642403	0.642487	0.642571	0.642655
0.490	0.642739	0.642823	0.642907	0.642991	0.643075	0.643159	0.643243	0.643327	0.643411	0.643495

ATTENUATION IN DECIBELS
THETA FROM 15.500 TO 15.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	0.643579	0.643663	0.643748	0.643832	0.643916	0.644000	0.644084	0.644168	0.644252	0.644336
0.510	0.644420	0.644505	0.644599	0.644673	0.644757	0.644841	0.644925	0.645010	0.645094	0.645178
0.520	0.645262	0.645346	0.645431	0.645515	0.645599	0.645683	0.645767	0.645852	0.645936	0.646020
0.530	0.646104	0.646189	0.646273	0.646357	0.646441	0.646526	0.646610	0.646694	0.646779	0.646863
0.540	0.646947	0.647032	0.647116	0.647200	0.647285	0.647369	0.647453	0.647539	0.647622	0.647706
0.550	0.647791	0.647875	0.647959	0.648044	0.648128	0.648213	0.648297	0.648381	0.648466	0.648550
0.560	0.648635	0.648719	0.648803	0.648888	0.648972	0.649057	0.649141	0.649226	0.649310	0.649395
0.570	0.649479	0.649564	0.649648	0.649733	0.649817	0.649902	0.649986	0.650071	0.650155	0.650240
0.580	0.650324	0.650409	0.650493	0.650578	0.650662	0.650747	0.650832	0.650916	0.651001	0.651085
0.590	0.651170	0.651255	0.651339	0.651424	0.651508	0.651593	0.651678	0.651762	0.651847	0.651932
0.600	0.652016	0.652101	0.652185	0.652270	0.652355	0.652440	0.652524	0.652609	0.652694	0.652778
0.610	0.652863	0.652948	0.653032	0.653117	0.653202	0.653287	0.653371	0.653456	0.653541	0.653626
0.620	0.653710	0.653795	0.653880	0.653965	0.654050	0.654134	0.654219	0.654304	0.654389	0.654474
0.630	0.654558	0.654643	0.654728	0.654813	0.654898	0.654983	0.655067	0.655152	0.655237	0.655322
0.640	0.655407	0.655492	0.655577	0.655662	0.655745	0.655831	0.655916	0.656001	0.656086	0.656171
0.650	0.656256	0.656341	0.656426	0.656511	0.656596	0.656681	0.656766	0.656851	0.656936	0.657021
0.660	0.657106	0.657191	0.657276	0.657361	0.657446	0.657531	0.657616	0.657701	0.657786	0.657871
0.670	0.657956	0.658041	0.658126	0.658211	0.658296	0.658381	0.658466	0.658551	0.658637	0.658722
0.680	0.658807	0.658892	0.658977	0.659062	0.659147	0.659232	0.659317	0.659403	0.659488	0.659573
0.690	0.659658	0.659743	0.659828	0.659914	0.659999	0.660084	0.660169	0.660254	0.660340	0.660425
0.700	0.660510	0.660595	0.660681	0.660766	0.660851	0.660936	0.661022	0.661107	0.661192	0.661277
0.710	0.661363	0.661448	0.661533	0.661618	0.661704	0.661789	0.661874	0.661960	0.662045	0.662130
0.720	0.662216	0.662301	0.662386	0.662472	0.662557	0.662642	0.662728	0.662813	0.662899	0.662984
0.730	0.663069	0.663155	0.663240	0.663326	0.663411	0.663496	0.663582	0.663667	0.663753	0.663838
0.740	0.663924	0.664009	0.664095	0.664180	0.664265	0.664351	0.664436	0.664522	0.664607	0.664693
0.750	0.664778	0.664864	0.664949	0.665035	0.665120	0.665206	0.665292	0.665377	0.665463	0.665548
0.760	0.665634	0.665719	0.665805	0.665891	0.665976	0.666062	0.666147	0.666233	0.666319	0.666404
0.770	0.666590	0.666675	0.666761	0.666847	0.666932	0.667018	0.667104	0.667189	0.667275	0.667361
0.780	0.667346	0.667432	0.667518	0.667603	0.667689	0.667775	0.667860	0.667946	0.668032	0.668118
0.790	0.668203	0.668289	0.668375	0.668461	0.668546	0.668632	0.668718	0.668804	0.668889	0.668975
0.800	0.669061	0.669147	0.669233	0.669318	0.669404	0.669490	0.669576	0.669662	0.669748	0.669833
0.810	0.669919	0.670005	0.670091	0.670177	0.670263	0.670349	0.670434	0.670520	0.670606	0.670692
0.820	0.670778	0.670864	0.670950	0.671036	0.671122	0.671208	0.671294	0.671380	0.671466	0.671552
0.830	0.671637	0.671723	0.671809	0.671895	0.671981	0.672067	0.672153	0.672239	0.672325	0.672411
0.840	0.672497	0.672583	0.672669	0.672756	0.672842	0.672928	0.673014	0.673100	0.673186	0.673272
0.850	0.673358	0.673444	0.673530	0.673616	0.673702	0.673788	0.673875	0.673961	0.674047	0.674133
0.860	0.674219	0.674305	0.674391	0.674477	0.674564	0.674650	0.674736	0.674822	0.674908	0.674995
0.870	0.675081	0.675167	0.675253	0.675339	0.675426	0.675512	0.675598	0.675684	0.675770	0.675857
0.880	0.675943	0.676029	0.676115	0.676202	0.676289	0.676374	0.676461	0.676547	0.676633	0.676719
0.890	0.676806	0.676892	0.676978	0.677065	0.677151	0.677237	0.677324	0.677410	0.677496	0.677583
0.900	0.677669	0.677756	0.677842	0.677928	0.678015	0.678101	0.678187	0.678274	0.678360	0.678447
0.910	0.678533	0.678620	0.678706	0.678792	0.678879	0.678965	0.679052	0.679138	0.679225	0.679311
0.920	0.679398	0.679484	0.679571	0.679657	0.679744	0.679830	0.679917	0.680003	0.680090	0.680176
0.930	0.680263	0.680349	0.680436	0.680522	0.680609	0.680696	0.680782	0.680869	0.680955	0.681042
0.940	0.681128	0.681215	0.681302	0.681388	0.681475	0.681562	0.681648	0.681735	0.681821	0.681908
0.950	0.681995	0.682081	0.682168	0.682255	0.682341	0.682428	0.682515	0.682601	0.682688	0.682775
0.960	0.682862	0.682948	0.683035	0.683122	0.683208	0.683295	0.683382	0.683469	0.683555	0.683642
0.970	0.683729	0.683816	0.683902	0.683989	0.684076	0.684163	0.684250	0.684336	0.684423	0.684510
0.980	0.684597	0.684684	0.684771	0.684857	0.684944	0.685031	0.685118	0.685205	0.685292	0.685379
0.990	0.685465	0.685552	0.685639	0.685726	0.685813	0.685900	0.685987	0.686074	0.686161	0.686248

ATTENUATION IN DECIBELS
THETA FROM 16.000 TO 16.499 DEGREES

THETA IN
DEGREES

0.000	0.686335	0.686421	0.686508	0.686595	0.686682	0.686769	0.686856	0.686943	0.687030	0.687117
0.010	0.687204	0.687291	0.687378	0.687465	0.687552	0.687639	0.687726	0.687813	0.687900	0.687987
0.020	0.688074	0.688162	0.688249	0.688336	0.688423	0.688510	0.688597	0.688684	0.688771	0.688858
0.030	0.688945	0.689032	0.689120	0.689207	0.689294	0.689381	0.689468	0.689555	0.689642	0.689730
0.040	0.689817	0.689904	0.689991	0.690078	0.690165	0.690253	0.690340	0.690427	0.690514	0.690601
0.050	0.690689	0.690776	0.690863	0.690950	0.691038	0.691125	0.691212	0.691299	0.691387	0.691474
0.060	0.691561	0.691648	0.691736	0.691823	0.691910	0.691998	0.692085	0.692172	0.692260	0.692347
0.070	0.692434	0.692522	0.692609	0.692696	0.692784	0.692871	0.692958	0.693046	0.693133	0.693221
0.080	0.693308	0.693395	0.693483	0.693570	0.693658	0.693745	0.693833	0.693920	0.694007	0.694095
0.090	0.694182	0.694270	0.694357	0.694445	0.694532	0.694620	0.694707	0.694795	0.694882	0.694970
0.100	0.695057	0.695145	0.695232	0.695320	0.695407	0.695495	0.695582	0.695670	0.695757	0.695845
0.110	0.695933	0.696020	0.696108	0.696195	0.696283	0.696370	0.696458	0.696546	0.696633	0.696721
0.120	0.696809	0.696896	0.696984	0.697071	0.697159	0.697247	0.697334	0.697422	0.697510	0.697597
0.130	0.697685	0.697773	0.697860	0.697948	0.698036	0.698124	0.698211	0.698299	0.698387	0.698474
0.140	0.698562	0.698650	0.698738	0.698825	0.698913	0.699001	0.699089	0.699177	0.699264	0.699352
0.150	0.699440	0.699528	0.699616	0.699703	0.699791	0.699879	0.699967	0.700055	0.700143	0.700230
0.160	0.700318	0.700406	0.700494	0.700582	0.700670	0.700758	0.700845	0.700933	0.701021	0.701109
0.170	0.701197	0.701285	0.701373	0.701461	0.701549	0.701637	0.701725	0.701813	0.701901	0.701989
0.180	0.702076	0.702164	0.702252	0.702340	0.702428	0.702516	0.702604	0.702692	0.702780	0.702868
0.190	0.702956	0.703045	0.703133	0.703221	0.703309	0.703397	0.703485	0.703573	0.703661	0.703749
0.200	0.703837	0.703925	0.704013	0.704101	0.704189	0.704278	0.704366	0.704454	0.704542	0.704630
0.210	0.704718	0.704806	0.704895	0.704983	0.705071	0.705159	0.705247	0.705335	0.705424	0.705512
0.220	0.705600	0.705688	0.705776	0.705865	0.705953	0.706041	0.706129	0.706217	0.706306	0.706394
0.230	0.706482	0.706570	0.706659	0.706747	0.706835	0.706924	0.707012	0.707100	0.707188	0.707277
0.240	0.707365	0.707453	0.707542	0.707630	0.707718	0.707807	0.707895	0.707983	0.708072	0.708160
0.250	0.708249	0.708337	0.708425	0.708514	0.708602	0.708690	0.708779	0.708867	0.708956	0.709044
0.260	0.709133	0.709221	0.709309	0.709398	0.709486	0.709575	0.709663	0.709752	0.709840	0.709929
0.270	0.710017	0.710106	0.710194	0.710283	0.710371	0.710460	0.710548	0.710637	0.710725	0.710814
0.280	0.710902	0.710991	0.711079	0.711168	0.711257	0.711345	0.711434	0.711522	0.711611	0.711699
0.290	0.711788	0.711877	0.711965	0.712054	0.712143	0.712231	0.712320	0.712408	0.712497	0.712586
0.300	0.712674	0.712763	0.712852	0.712940	0.713029	0.713118	0.713206	0.713295	0.713384	0.713473
0.310	0.713561	0.713650	0.713739	0.713827	0.713916	0.714005	0.714094	0.714182	0.714271	0.714360
0.320	0.714449	0.714538	0.714626	0.714715	0.714804	0.714893	0.714982	0.715070	0.715159	0.715248
0.330	0.715337	0.715426	0.715514	0.715603	0.715692	0.715781	0.715870	0.715959	0.716048	0.716137
0.340	0.716225	0.716314	0.716403	0.716492	0.716581	0.716670	0.716759	0.716848	0.716937	0.717026
0.350	0.717115	0.717204	0.717292	0.717381	0.717470	0.717559	0.717648	0.717737	0.717826	0.717915
0.360	0.718004	0.718093	0.718182	0.718271	0.718360	0.718449	0.718538	0.718628	0.718717	0.718806
0.370	0.718895	0.718984	0.719073	0.719162	0.719251	0.719340	0.719429	0.719518	0.719607	0.719696
0.380	0.719786	0.719875	0.719964	0.720053	0.720142	0.720231	0.720320	0.720410	0.720499	0.720588
0.390	0.720677	0.720766	0.720855	0.720945	0.721034	0.721123	0.721212	0.721301	0.721391	0.721480
0.400	0.721569	0.721658	0.721748	0.721837	0.721926	0.722015	0.722105	0.722194	0.722283	0.722373
0.410	0.722462	0.722551	0.722640	0.722730	0.722819	0.722908	0.722998	0.723087	0.723176	0.723266
0.420	0.723355	0.723444	0.723534	0.723623	0.723712	0.723802	0.723891	0.723981	0.724070	0.724159
0.430	0.724249	0.724338	0.724428	0.724517	0.724606	0.724696	0.724785	0.724875	0.724964	0.725054
0.440	0.725143	0.725233	0.725322	0.725412	0.725501	0.725591	0.725680	0.725770	0.725859	0.725949
0.450	0.726038	0.726128	0.726217	0.726307	0.726396	0.726486	0.726575	0.726665	0.726754	0.726844
0.460	0.726934	0.727023	0.727113	0.727202	0.727292	0.727382	0.727471	0.727561	0.727650	0.727740
0.470	0.727830	0.727919	0.728009	0.728099	0.728188	0.728278	0.728368	0.728457	0.728547	0.728637
0.480	0.728726	0.728816	0.728906	0.728995	0.729085	0.729175	0.729265	0.729354	0.729444	0.729534
0.490	0.729624	0.729713	0.729803	0.729893	0.729983	0.730072	0.730162	0.730252	0.730342	0.730432

ATTENUATION IN DECIBELS
THETA FROM 16.500 TO 16.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	0.730521	0.730611	0.730701	0.730791	0.730881	0.730971	0.731060	0.731150	0.731240	0.731330
0.510	0.731420	0.731510	0.731600	0.731689	0.731779	0.731869	0.731959	0.732049	0.732139	0.732229
0.520	0.732319	0.732409	0.732499	0.732589	0.732679	0.732769	0.732858	0.732948	0.733038	0.733128
0.530	0.733218	0.733308	0.733398	0.733488	0.733578	0.733668	0.733758	0.733848	0.733938	0.734028
0.540	0.734118	0.734208	0.734299	0.734389	0.734479	0.734569	0.734659	0.734749	0.734839	0.734929
0.550	0.735019	0.735109	0.735199	0.735289	0.735380	0.735470	0.735560	0.735650	0.735740	0.735830
0.560	0.735920	0.736011	0.736101	0.736191	0.736281	0.736371	0.736461	0.736552	0.736642	0.736732
0.570	0.736822	0.736912	0.737003	0.737093	0.737183	0.737273	0.737364	0.737454	0.737544	0.737634
0.580	0.737725	0.737815	0.737905	0.737996	0.738086	0.738176	0.738266	0.738357	0.738447	0.738537
0.590	0.738628	0.738718	0.738808	0.738899	0.738989	0.739079	0.739170	0.739260	0.739350	0.739441
0.600	0.739531	0.739622	0.739712	0.739802	0.739893	0.739983	0.740074	0.740164	0.740255	0.740345
0.610	0.740435	0.740526	0.740616	0.740707	0.740797	0.740888	0.740978	0.741069	0.741159	0.741250
0.620	0.741340	0.741431	0.741521	0.741612	0.741702	0.741793	0.741883	0.741974	0.742064	0.742155
0.630	0.742245	0.742336	0.742427	0.742517	0.742608	0.742698	0.742789	0.742879	0.742970	0.743061
0.640	0.743151	0.743242	0.743333	0.743423	0.743514	0.743604	0.743695	0.743786	0.743876	0.743967
0.650	0.744058	0.744148	0.744239	0.744330	0.744421	0.744511	0.744602	0.744693	0.744783	0.744874
0.660	0.744965	0.745056	0.745146	0.745237	0.745328	0.745419	0.745509	0.745600	0.745691	0.745782
0.670	0.745872	0.745963	0.746054	0.746145	0.746236	0.746326	0.746417	0.746508	0.746599	0.746690
0.680	0.746791	0.746871	0.746962	0.747053	0.747144	0.747235	0.747326	0.747417	0.747508	0.747598
0.690	0.747689	0.747780	0.747871	0.747962	0.748053	0.748144	0.748235	0.748326	0.748417	0.748508
0.700	0.748599	0.748690	0.748781	0.748872	0.748963	0.749054	0.749145	0.749236	0.749327	0.749418
0.710	0.749509	0.749600	0.749691	0.749782	0.749873	0.749964	0.750055	0.750146	0.750237	0.750328
0.720	0.750419	0.750510	0.750601	0.750692	0.750783	0.750875	0.750966	0.751057	0.751148	0.751239
0.730	0.751330	0.751421	0.751512	0.751604	0.751695	0.751786	0.751877	0.751968	0.752059	0.752151
0.740	0.752242	0.752333	0.752424	0.752515	0.752607	0.752698	0.752789	0.752880	0.752972	0.753063
0.750	0.753154	0.753245	0.753337	0.753428	0.753519	0.753610	0.753702	0.753793	0.753884	0.753976
0.760	0.754067	0.754158	0.754249	0.754341	0.754432	0.754523	0.754615	0.754706	0.754798	0.754889
0.770	0.754980	0.755072	0.755163	0.755254	0.755346	0.755437	0.755529	0.755620	0.755711	0.755803
0.780	0.755986	0.756077	0.756168	0.756260	0.756351	0.756443	0.756534	0.756626	0.756717	0.756809
0.790	0.756900	0.756992	0.757083	0.757175	0.757266	0.757358	0.757449	0.757541	0.757632	0.757724
0.800	0.757724	0.757815	0.757907	0.757998	0.758090	0.758182	0.758273	0.758365	0.758456	0.758548
0.810	0.758640	0.758731	0.758823	0.758914	0.759006	0.759098	0.759189	0.759281	0.759372	0.759464
0.820	0.759556	0.759647	0.759739	0.759831	0.759922	0.760014	0.760106	0.760198	0.760289	0.760381
0.830	0.760473	0.760564	0.760656	0.760748	0.760840	0.760931	0.761023	0.761115	0.761207	0.761298
0.840	0.761390	0.761482	0.761574	0.761665	0.761757	0.761849	0.761941	0.762033	0.762124	0.762216
0.850	0.762308	0.762400	0.762492	0.762584	0.762675	0.762767	0.762859	0.762951	0.763043	0.763135
0.860	0.763327	0.763419	0.763510	0.763602	0.763694	0.763786	0.763878	0.763970	0.764062	0.764154
0.870	0.764346	0.764438	0.764530	0.764622	0.764714	0.764806	0.764898	0.764990	0.765082	0.765174
0.880	0.765394	0.765486	0.765578	0.765670	0.765762	0.765854	0.765946	0.766038	0.766130	0.766222
0.890	0.766598	0.766690	0.766782	0.766874	0.766966	0.767058	0.767150	0.767242	0.767334	0.767426
0.900	0.767828	0.767920	0.768013	0.768105	0.768197	0.768289	0.768381	0.768474	0.768566	0.768658
0.910	0.768950	0.769042	0.769134	0.769226	0.769318	0.769410	0.769502	0.769594	0.769686	0.769778
0.920	0.769970	0.770062	0.770154	0.770246	0.770338	0.770430	0.770522	0.770614	0.770706	0.770798
0.930	0.770990	0.771082	0.771174	0.771266	0.771358	0.771450	0.771542	0.771634	0.771726	0.771818
0.940	0.771910	0.772002	0.772094	0.772186	0.772278	0.772370	0.772462	0.772554	0.772646	0.772738
0.950	0.772830	0.772922	0.773014	0.773106	0.773198	0.773290	0.773382	0.773474	0.773566	0.773658
0.960	0.773750	0.773842	0.773934	0.774026	0.774118	0.774210	0.774302	0.774394	0.774486	0.774578
0.970	0.774670	0.774762	0.774854	0.774946	0.775038	0.775130	0.775222	0.775314	0.775406	0.775498
0.980	0.775590	0.775682	0.775774	0.775866	0.775958	0.776050	0.776142	0.776234	0.776326	0.776418
0.990	0.776510	0.776602	0.776694	0.776786	0.776878	0.776970	0.777062	0.777154	0.777246	0.777338

ATTENUATION IN DECIHEL
 THETA FROM 17.000 TO 17.499 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.000	0.776147	0.776240	0.776333	0.776425	0.776518	0.776611	0.776704	0.776796	0.776889	0.776982
0.010	0.777075	0.777167	0.777260	0.777353	0.777446	0.777538	0.777631	0.777724	0.777817	0.777910
0.020	0.778002	0.778095	0.778188	0.778281	0.778374	0.778467	0.778559	0.778652	0.778745	0.778838
0.030	0.778931	0.779024	0.779117	0.779209	0.779302	0.779395	0.779488	0.779581	0.779674	0.779767
0.040	0.779860	0.779953	0.780046	0.780139	0.780232	0.780325	0.780418	0.780510	0.780603	0.780696
0.050	0.780789	0.780882	0.780975	0.781068	0.781161	0.781254	0.781347	0.781440	0.781533	0.781627
0.060	0.781720	0.781813	0.781906	0.781999	0.782092	0.782185	0.782278	0.782371	0.782464	0.782557
0.070	0.782650	0.782743	0.782836	0.782930	0.783023	0.783116	0.783209	0.783302	0.783395	0.783488
0.080	0.783582	0.783675	0.783768	0.783861	0.783954	0.784047	0.784141	0.784234	0.784327	0.784420
0.090	0.784513	0.784607	0.784700	0.784793	0.784886	0.784980	0.785073	0.785166	0.785259	0.785353
0.100	0.785446	0.785539	0.785632	0.785726	0.785819	0.785912	0.786006	0.786099	0.786192	0.786286
0.110	0.786379	0.786472	0.786566	0.786659	0.786752	0.786846	0.786939	0.787032	0.787126	0.787219
0.120	0.787313	0.787406	0.787499	0.787593	0.787686	0.787780	0.787873	0.787966	0.788060	0.788153
0.130	0.788247	0.788340	0.788434	0.788527	0.788621	0.788714	0.788808	0.788901	0.788995	0.789088
0.140	0.789182	0.789275	0.789369	0.789462	0.789556	0.789649	0.789743	0.789836	0.789930	0.790023
0.150	0.790117	0.790210	0.790304	0.790398	0.790491	0.790585	0.790678	0.790772	0.790866	0.790959
0.160	0.791053	0.791146	0.791240	0.791334	0.791427	0.791521	0.791615	0.791708	0.791802	0.791896
0.170	0.791989	0.792083	0.792177	0.792270	0.792364	0.792458	0.792552	0.792645	0.792739	0.792833
0.180	0.792926	0.793020	0.793114	0.793208	0.793301	0.793395	0.793489	0.793583	0.793677	0.793770
0.190	0.793864	0.793958	0.794052	0.794146	0.794239	0.794333	0.794427	0.794521	0.794615	0.794709
0.200	0.794802	0.794896	0.794990	0.795084	0.795178	0.795272	0.795366	0.795459	0.795553	0.795647
0.210	0.795741	0.795835	0.795929	0.796023	0.796117	0.796211	0.796305	0.796399	0.796493	0.796587
0.220	0.796681	0.796775	0.796869	0.796963	0.797057	0.797151	0.797245	0.797339	0.797433	0.797527
0.230	0.797621	0.797715	0.797809	0.797903	0.797997	0.798091	0.798185	0.798279	0.798373	0.798467
0.240	0.798561	0.798655	0.798749	0.798843	0.798938	0.799032	0.799126	0.799220	0.799314	0.799408
0.250	0.799502	0.799596	0.799691	0.799785	0.799879	0.799973	0.800067	0.800161	0.800256	0.800350
0.260	0.800444	0.800538	0.800632	0.800727	0.800821	0.800915	0.801009	0.801104	0.801198	0.801292
0.270	0.801386	0.801481	0.801575	0.801669	0.801763	0.801858	0.801952	0.802046	0.802141	0.802235
0.280	0.802329	0.802424	0.802518	0.802612	0.802707	0.802801	0.802895	0.802990	0.803084	0.803178
0.290	0.803273	0.803367	0.803462	0.803556	0.803650	0.803745	0.803839	0.803934	0.804028	0.804122
0.300	0.804217	0.804311	0.804406	0.804500	0.804595	0.804689	0.804784	0.804878	0.804972	0.805067
0.310	0.805161	0.805256	0.805350	0.805445	0.805539	0.805634	0.805729	0.805823	0.805918	0.806012
0.320	0.806107	0.806201	0.806296	0.806390	0.806485	0.806580	0.806674	0.806769	0.806863	0.806958
0.330	0.807052	0.807147	0.807242	0.807336	0.807431	0.807525	0.807620	0.807715	0.807810	0.807904
0.340	0.807999	0.808094	0.808188	0.808283	0.808378	0.808472	0.808567	0.808662	0.808756	0.808851
0.350	0.808946	0.809041	0.809135	0.809230	0.809325	0.809420	0.809514	0.809609	0.809704	0.809799
0.360	0.809893	0.809988	0.810083	0.810178	0.810273	0.810367	0.810462	0.810557	0.810652	0.810747
0.370	0.810841	0.810936	0.811031	0.811126	0.811221	0.811316	0.811411	0.811505	0.811600	0.811695
0.380	0.811790	0.811885	0.811980	0.812075	0.812170	0.812265	0.812360	0.812455	0.812550	0.812644
0.390	0.812739	0.812834	0.812929	0.813024	0.813119	0.813214	0.813309	0.813404	0.813499	0.813594
0.400	0.813689	0.813784	0.813879	0.813974	0.814069	0.814164	0.814260	0.814355	0.814450	0.814545
0.410	0.814640	0.814735	0.814830	0.814925	0.815020	0.815115	0.815210	0.815305	0.815401	0.815496
0.420	0.815591	0.815686	0.815781	0.815876	0.815971	0.816067	0.816162	0.816257	0.816352	0.816447
0.430	0.816542	0.816638	0.816733	0.816828	0.816923	0.817018	0.817114	0.817209	0.817304	0.817399
0.440	0.817495	0.817590	0.817685	0.817780	0.817876	0.817971	0.818066	0.818161	0.818257	0.818352
0.450	0.818447	0.818543	0.818638	0.818733	0.818829	0.818924	0.819019	0.819115	0.819210	0.819305
0.460	0.819401	0.819496	0.819591	0.819687	0.819782	0.819878	0.819973	0.820068	0.820164	0.820259
0.470	0.820355	0.820450	0.820546	0.820641	0.820736	0.820832	0.820927	0.821023	0.821118	0.821214
0.480	0.821309	0.821405	0.821500	0.821596	0.821691	0.821787	0.821882	0.821978	0.822073	0.822169
0.490	0.822264	0.822360	0.822455	0.822551	0.822646	0.822742	0.822838	0.822933	0.823029	0.823124

ATTENUATION IN DECIBELS
THETA FROM 17.500 TO 17.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	0.823220	0.823316	0.823411	0.823507	0.823602	0.823698	0.823794	0.823889	0.823985	0.824081
0.510	0.824176	0.824272	0.824368	0.824463	0.824559	0.824655	0.824750	0.824846	0.824942	0.825037
0.520	0.825133	0.825229	0.825324	0.825420	0.825516	0.825612	0.825707	0.825803	0.825899	0.825995
0.530	0.826090	0.826186	0.826282	0.826378	0.826474	0.826569	0.826665	0.826761	0.826857	0.826953
0.540	0.827048	0.827144	0.827240	0.827336	0.827432	0.827528	0.827624	0.827719	0.827815	0.827911
0.550	0.828007	0.828103	0.828199	0.828295	0.828391	0.828487	0.828582	0.828678	0.828774	0.828870
0.560	0.828966	0.829062	0.829158	0.829254	0.829350	0.829446	0.829542	0.829638	0.829734	0.829830
0.570	0.829926	0.830022	0.830118	0.830214	0.830310	0.830406	0.830502	0.830598	0.830694	0.830790
0.580	0.830886	0.830982	0.831078	0.831175	0.831271	0.831367	0.831463	0.831559	0.831655	0.831751
0.590	0.831847	0.831943	0.832039	0.832136	0.832232	0.832328	0.832424	0.832520	0.832616	0.832713
0.600	0.832809	0.832905	0.833001	0.833097	0.833193	0.833290	0.833386	0.833482	0.833578	0.833675
0.610	0.833771	0.833867	0.833963	0.834060	0.834156	0.834252	0.834348	0.834445	0.834541	0.834637
0.620	0.834733	0.834830	0.834926	0.835022	0.835119	0.835215	0.835311	0.835408	0.835504	0.835600
0.630	0.835697	0.835793	0.835889	0.835986	0.836082	0.836179	0.836275	0.836371	0.836468	0.836564
0.640	0.836661	0.836757	0.836853	0.836950	0.837046	0.837143	0.837239	0.837336	0.837432	0.837528
0.650	0.837625	0.837721	0.837818	0.837914	0.838011	0.838107	0.838204	0.838300	0.838397	0.838493
0.660	0.838590	0.838686	0.838783	0.838880	0.838976	0.839073	0.839169	0.839266	0.839362	0.839459
0.670	0.839556	0.839652	0.839749	0.839845	0.839942	0.840039	0.840135	0.840232	0.840328	0.840425
0.680	0.840522	0.840618	0.840715	0.840812	0.840908	0.841005	0.841102	0.841198	0.841295	0.841392
0.690	0.841488	0.841585	0.841682	0.841779	0.841875	0.841972	0.842069	0.842165	0.842262	0.842359
0.700	0.842456	0.842553	0.842649	0.842746	0.842843	0.842940	0.843036	0.843133	0.843230	0.843327
0.710	0.843424	0.843520	0.843617	0.843714	0.843811	0.843908	0.844005	0.844102	0.844198	0.844295
0.720	0.844392	0.844489	0.844586	0.844683	0.844780	0.844877	0.844974	0.845070	0.845167	0.845264
0.730	0.845361	0.845458	0.845555	0.845652	0.845749	0.845846	0.845943	0.846040	0.846137	0.846234
0.740	0.846331	0.846428	0.846525	0.846622	0.846719	0.846816	0.846913	0.847010	0.847107	0.847204
0.750	0.847301	0.847398	0.847495	0.847592	0.847689	0.847786	0.847884	0.847981	0.848078	0.848175
0.760	0.848272	0.848369	0.848466	0.848563	0.848660	0.848758	0.848855	0.848952	0.849049	0.849146
0.770	0.849243	0.849341	0.849438	0.849535	0.849632	0.849729	0.849826	0.849924	0.850021	0.850118
0.780	0.850215	0.850313	0.850410	0.850507	0.850604	0.850702	0.850799	0.850896	0.850993	0.851091
0.790	0.851188	0.851285	0.851383	0.851480	0.851577	0.851674	0.851772	0.851869	0.851966	0.852064
0.800	0.852161	0.852258	0.852356	0.852453	0.852551	0.852648	0.852745	0.852843	0.852940	0.853037
0.810	0.853135	0.853232	0.853330	0.853427	0.853525	0.853622	0.853719	0.853817	0.853914	0.854012
0.820	0.854109	0.854207	0.854304	0.854402	0.854499	0.854597	0.854694	0.854792	0.854889	0.854987
0.830	0.855084	0.855182	0.855279	0.855377	0.855474	0.855572	0.855669	0.855767	0.855864	0.855962
0.840	0.856060	0.856157	0.856255	0.856352	0.856450	0.856548	0.856645	0.856743	0.856840	0.856938
0.850	0.857036	0.857133	0.857231	0.857329	0.857426	0.857524	0.857622	0.857719	0.857817	0.857915
0.860	0.858012	0.858110	0.858208	0.858305	0.858403	0.858501	0.858599	0.858696	0.858794	0.858892
0.870	0.859087	0.859185	0.859283	0.859381	0.859478	0.859576	0.859674	0.859772	0.859870	0.859968
0.880	0.859967	0.860065	0.860163	0.860261	0.860359	0.860457	0.860554	0.860652	0.860750	0.860848
0.890	0.860946	0.861044	0.861142	0.861239	0.861337	0.861435	0.861533	0.861631	0.861729	0.861827
0.900	0.861925	0.862023	0.862121	0.862219	0.862317	0.862415	0.862512	0.862610	0.862708	0.862806
0.910	0.862904	0.863002	0.863100	0.863198	0.863296	0.863394	0.863492	0.863590	0.863688	0.863787
0.920	0.863885	0.863983	0.864081	0.864179	0.864277	0.864375	0.864473	0.864571	0.864669	0.864767
0.930	0.864865	0.864963	0.865062	0.865160	0.865258	0.865356	0.865454	0.865552	0.865650	0.865749
0.940	0.865847	0.865945	0.866043	0.866141	0.866239	0.866338	0.866436	0.866534	0.866632	0.866730
0.950	0.866829	0.866927	0.867025	0.867123	0.867222	0.867320	0.867418	0.867516	0.867615	0.867713
0.960	0.867811	0.867909	0.868008	0.868106	0.868204	0.868303	0.868401	0.868499	0.868598	0.868696
0.970	0.868794	0.868893	0.868991	0.869089	0.869188	0.869286	0.869384	0.869483	0.869581	0.869679
0.980	0.869778	0.869876	0.869975	0.870073	0.870172	0.870270	0.870368	0.870467	0.870565	0.870664
0.990	0.870762	0.870861	0.870959	0.871058	0.871156	0.871254	0.871353	0.871451	0.871550	0.871648

ATTENUATION IN DECIBELS THETA FROM 18.000 TO 18.499 DEGREES

THETA IN
DEGREES

0.000	0.971747	0.871845	0.871944	0.872043	0.872141	0.872240	0.872338	0.872437	0.872535	0.872634
0.010	0.872732	0.872831	0.872930	0.873028	0.873127	0.873225	0.873324	0.873423	0.873521	0.873620
0.020	0.873718	0.873817	0.873916	0.874014	0.874113	0.874212	0.874310	0.874409	0.874508	0.874606
0.030	0.874705	0.874804	0.874902	0.875001	0.875100	0.875199	0.875297	0.875396	0.875495	0.875593
0.040	0.875692	0.875791	0.875890	0.875988	0.876087	0.876186	0.876285	0.876384	0.876482	0.876581
0.050	0.876680	0.876779	0.876878	0.876976	0.877075	0.877174	0.877273	0.877372	0.877471	0.877569
0.060	0.877668	0.877767	0.877866	0.877965	0.878064	0.878163	0.878262	0.878361	0.878459	0.878558
0.070	0.878657	0.878756	0.878855	0.878954	0.879053	0.879152	0.879251	0.879350	0.879449	0.879548
0.080	0.879647	0.879746	0.879845	0.879944	0.880043	0.880142	0.880241	0.880340	0.880439	0.880538
0.090	0.880637	0.880736	0.880835	0.880934	0.881033	0.881132	0.881231	0.881330	0.881429	0.881528
0.100	0.881628	0.881727	0.881826	0.881925	0.882024	0.882123	0.882222	0.882321	0.882421	0.882520
0.110	0.882619	0.882718	0.882817	0.882916	0.883016	0.883115	0.883214	0.883313	0.883412	0.883512
0.120	0.883611	0.883710	0.883809	0.883908	0.884008	0.884107	0.884206	0.884305	0.884405	0.884504
0.130	0.884603	0.884703	0.884802	0.884901	0.885000	0.885100	0.885199	0.885298	0.885398	0.885497
0.140	0.885596	0.885696	0.885795	0.885894	0.885994	0.886093	0.886192	0.886292	0.886391	0.886491
0.150	0.886590	0.886689	0.886789	0.886888	0.886988	0.887087	0.887186	0.887285	0.887385	0.887485
0.160	0.887584	0.887684	0.887783	0.887883	0.887982	0.888081	0.888181	0.888280	0.888380	0.888479
0.170	0.888579	0.888678	0.888778	0.888877	0.888977	0.889077	0.889176	0.889276	0.889375	0.889475
0.180	0.889574	0.889674	0.889773	0.889873	0.889973	0.890072	0.890172	0.890271	0.890371	0.890471
0.190	0.890570	0.890670	0.890770	0.890869	0.890969	0.891069	0.891168	0.891268	0.891368	0.891467
0.200	0.891567	0.891667	0.891766	0.891866	0.891966	0.892065	0.892165	0.892265	0.892365	0.892464
0.210	0.892564	0.892664	0.892764	0.892863	0.892963	0.893063	0.893163	0.893262	0.893362	0.893462
0.220	0.893562	0.893662	0.893761	0.893861	0.893961	0.894061	0.894161	0.894261	0.894360	0.894460
0.230	0.894560	0.894660	0.894760	0.894860	0.894960	0.895059	0.895159	0.895259	0.895359	0.895459
0.240	0.895559	0.895659	0.895759	0.895859	0.895959	0.896059	0.896159	0.896259	0.896359	0.896458
0.250	0.896558	0.896658	0.896758	0.896858	0.896958	0.897058	0.897158	0.897258	0.897358	0.897459
0.260	0.897559	0.897659	0.897759	0.897859	0.897959	0.898059	0.898159	0.898259	0.898359	0.898459
0.270	0.898559	0.898659	0.898759	0.898860	0.898960	0.899060	0.899160	0.899260	0.899360	0.899460
0.280	0.899560	0.899661	0.899761	0.899861	0.899961	0.900061	0.900161	0.900262	0.900362	0.900462
0.290	0.900562	0.900663	0.900763	0.900863	0.900963	0.901063	0.901164	0.901264	0.901364	0.901464
0.300	0.901565	0.901665	0.901765	0.901866	0.901966	0.902066	0.902166	0.902267	0.902367	0.902467
0.310	0.902568	0.902668	0.902768	0.902869	0.902969	0.903069	0.903170	0.903270	0.903371	0.903471
0.320	0.903571	0.903672	0.903772	0.903873	0.903973	0.904073	0.904174	0.904274	0.904375	0.904475
0.330	0.904576	0.904676	0.904776	0.904877	0.904977	0.905078	0.905178	0.905279	0.905379	0.905480
0.340	0.905580	0.905681	0.905781	0.905882	0.905982	0.906083	0.906183	0.906284	0.906385	0.906485
0.350	0.906586	0.906686	0.906787	0.906887	0.906988	0.907089	0.907189	0.907290	0.907390	0.907491
0.360	0.907592	0.907692	0.907793	0.907894	0.907994	0.908095	0.908195	0.908296	0.908397	0.908497
0.370	0.908598	0.908699	0.908800	0.908900	0.909001	0.909102	0.909202	0.909303	0.909404	0.909505
0.380	0.909605	0.909706	0.909807	0.909908	0.910008	0.910109	0.910210	0.910311	0.910411	0.910512
0.390	0.910613	0.910714	0.910815	0.910916	0.911017	0.911117	0.911218	0.911319	0.911420	0.911520
0.400	0.911621	0.911722	0.911823	0.911924	0.912025	0.912126	0.912227	0.912327	0.912428	0.912529
0.410	0.912630	0.912731	0.912832	0.912933	0.913034	0.913135	0.913236	0.913337	0.913438	0.913539
0.420	0.913640	0.913741	0.913842	0.913943	0.914044	0.914145	0.914246	0.914347	0.914448	0.914549
0.430	0.914650	0.914751	0.914852	0.914953	0.915054	0.915155	0.915256	0.915357	0.915458	0.915559
0.440	0.915660	0.915761	0.915863	0.915964	0.916065	0.916166	0.916267	0.916368	0.916469	0.916570
0.450	0.916672	0.916773	0.916874	0.916975	0.917076	0.917177	0.917279	0.917380	0.917481	0.917582
0.460	0.917683	0.917785	0.917886	0.917987	0.918088	0.918190	0.918291	0.918392	0.918493	0.918595
0.470	0.918696	0.918797	0.918898	0.918999	0.919101	0.919202	0.919304	0.919405	0.919506	0.919608
0.480	0.919709	0.919810	0.919912	0.920013	0.920114	0.920216	0.920317	0.920418	0.920520	0.920621
0.490	0.920722	0.920824	0.920925	0.921027	0.921128	0.921229	0.921331	0.921432	0.921534	0.921635

ATTENUATION IN DECIBELS
THETA FROM 18.500 TO 18.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	0.921737	0.921838	0.921940	0.922041	0.922142	0.922244	0.922345	0.922447	0.922548	0.922650
0.510	0.922751	0.922853	0.922954	0.923056	0.923157	0.923259	0.923361	0.923462	0.923564	0.923665
0.520	0.923767	0.923868	0.923970	0.924071	0.924173	0.924275	0.924376	0.924478	0.924579	0.924681
0.530	0.924783	0.924884	0.924986	0.925088	0.925189	0.925291	0.925393	0.925494	0.925596	0.925698
0.540	0.925799	0.925901	0.926003	0.926104	0.926206	0.926308	0.926409	0.926511	0.926613	0.926715
0.550	0.926816	0.926918	0.927020	0.927122	0.927223	0.927325	0.927427	0.927529	0.927630	0.927732
0.560	0.927834	0.927936	0.928038	0.928140	0.928241	0.928343	0.928444	0.928547	0.928649	0.928751
0.570	0.928852	0.928954	0.929056	0.929158	0.929260	0.929362	0.929464	0.929566	0.929667	0.929769
0.580	0.929871	0.929973	0.930075	0.930177	0.930279	0.930381	0.930483	0.930585	0.930687	0.930789
0.590	0.930891	0.930993	0.931095	0.931197	0.931299	0.931401	0.931503	0.931605	0.931707	0.931809
0.600	0.931911	0.932013	0.932115	0.932217	0.932319	0.932421	0.932523	0.932625	0.932727	0.932829
0.610	0.932931	0.933034	0.933136	0.933238	0.933340	0.933442	0.933544	0.933646	0.933748	0.933851
0.620	0.933953	0.934055	0.934157	0.934259	0.934361	0.934464	0.934566	0.934668	0.934770	0.934872
0.630	0.934975	0.935077	0.935179	0.935281	0.935383	0.935486	0.935588	0.935690	0.935792	0.935895
0.640	0.935997	0.936099	0.936202	0.936304	0.936406	0.936508	0.936611	0.936713	0.936815	0.936918
0.650	0.937020	0.937122	0.937225	0.937327	0.937429	0.937532	0.937634	0.937736	0.937839	0.937941
0.660	0.938044	0.938146	0.938248	0.938351	0.938453	0.938556	0.938658	0.938760	0.938863	0.938965
0.670	0.939068	0.939170	0.939273	0.939375	0.939478	0.939580	0.939683	0.939785	0.939888	0.939990
0.680	0.940093	0.940195	0.940298	0.940400	0.940503	0.940605	0.940708	0.940810	0.940913	0.941015
0.690	0.941118	0.941221	0.941323	0.941426	0.941528	0.941631	0.941733	0.941836	0.941939	0.942041
0.700	0.942144	0.942247	0.942349	0.942452	0.942554	0.942657	0.942760	0.942862	0.942965	0.943068
0.710	0.943170	0.943273	0.943376	0.943479	0.943581	0.943684	0.943787	0.943889	0.943992	0.944095
0.720	0.944198	0.944300	0.944403	0.944506	0.944609	0.944711	0.944814	0.944917	0.945020	0.945123
0.730	0.945225	0.945328	0.945431	0.945534	0.945637	0.945739	0.945842	0.945945	0.946048	0.946151
0.740	0.946254	0.946357	0.946459	0.946562	0.946665	0.946768	0.946871	0.946974	0.947077	0.947180
0.750	0.947283	0.947386	0.947488	0.947591	0.947694	0.947797	0.947900	0.948003	0.948106	0.948209
0.760	0.948312	0.948415	0.948518	0.948621	0.948724	0.948827	0.948930	0.949033	0.949136	0.949239
0.770	0.949342	0.949445	0.949548	0.949651	0.949754	0.949857	0.949961	0.950064	0.950167	0.950270
0.780	0.950373	0.950476	0.950579	0.950682	0.950785	0.950888	0.950992	0.951095	0.951198	0.951301
0.790	0.951404	0.951507	0.951610	0.951714	0.951817	0.951920	0.952023	0.952126	0.952230	0.952333
0.800	0.952436	0.952539	0.952642	0.952746	0.952849	0.952952	0.953055	0.953159	0.953262	0.953365
0.810	0.953468	0.953572	0.953675	0.953778	0.953882	0.953985	0.954088	0.954192	0.954295	0.954398
0.820	0.954502	0.954605	0.954708	0.954812	0.954915	0.955018	0.955122	0.955225	0.955328	0.955432
0.830	0.955535	0.955639	0.955742	0.955845	0.955949	0.956052	0.956156	0.956259	0.956362	0.956466
0.840	0.956569	0.956673	0.956776	0.956880	0.956983	0.957087	0.957190	0.957294	0.957397	0.957501
0.850	0.957604	0.957708	0.957811	0.957915	0.958018	0.958122	0.958225	0.958329	0.958432	0.958536
0.860	0.958640	0.958743	0.958847	0.958950	0.959054	0.959158	0.959261	0.959365	0.959468	0.959572
0.870	0.959676	0.959779	0.959883	0.959987	0.960090	0.960194	0.960297	0.960401	0.960505	0.960608
0.880	0.960712	0.960816	0.960920	0.961023	0.961127	0.961231	0.961334	0.961438	0.961542	0.961646
0.890	0.961749	0.961853	0.961957	0.962061	0.962164	0.962268	0.962372	0.962476	0.962580	0.962683
0.900	0.962787	0.962891	0.962995	0.963099	0.963202	0.963306	0.963410	0.963514	0.963618	0.963722
0.910	0.963825	0.963929	0.964033	0.964137	0.964241	0.964345	0.964449	0.964553	0.964657	0.964761
0.920	0.964864	0.964968	0.965072	0.965176	0.965280	0.965384	0.965488	0.965592	0.965696	0.965800
0.930	0.965904	0.966008	0.966112	0.966216	0.966320	0.966424	0.966528	0.966632	0.966736	0.966840
0.940	0.966944	0.967048	0.967152	0.967256	0.967360	0.967464	0.967569	0.967673	0.967777	0.967881
0.950	0.967985	0.968089	0.968193	0.968297	0.968401	0.968505	0.968610	0.968714	0.968818	0.968922
0.960	0.969026	0.969130	0.969235	0.969339	0.969443	0.969547	0.969651	0.969755	0.969860	0.969964
0.970	0.970068	0.970172	0.970277	0.970381	0.970485	0.970589	0.970694	0.970798	0.970902	0.971006
0.980	0.971111	0.971215	0.971319	0.971423	0.971528	0.971632	0.971736	0.971841	0.971945	0.972049
0.990	0.972154	0.972258	0.972362	0.972467	0.972571	0.972675	0.972780	0.972884	0.972989	0.973093

ATTENUATION IN DECIBELS
THETA FROM 19.000 TO 19.499 DEGREES

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THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.000	0.973197	0.973302	0.973406	0.973511	0.973615	0.973719	0.973824	0.973928	0.974033	0.974137
0.010	0.974242	0.974346	0.974451	0.974555	0.974660	0.974764	0.974869	0.974973	0.975078	0.975182
0.020	0.975287	0.975391	0.975496	0.975600	0.975705	0.975809	0.975914	0.976018	0.976123	0.976227
0.030	0.976332	0.976437	0.976541	0.976646	0.976750	0.976855	0.976960	0.977064	0.977169	0.977273
0.040	0.977378	0.977483	0.977587	0.977692	0.977797	0.977901	0.978006	0.978111	0.978215	0.978320
0.050	0.978425	0.978529	0.978634	0.978739	0.978844	0.978948	0.979053	0.979158	0.979262	0.979367
0.060	0.979472	0.979577	0.979681	0.979786	0.979891	0.979996	0.980101	0.980205	0.980310	0.980415
0.070	0.980520	0.980625	0.980729	0.980834	0.980938	0.981044	0.981149	0.981254	0.981358	0.981463
0.080	0.981568	0.981673	0.981778	0.981883	0.981988	0.982093	0.982198	0.982302	0.982407	0.982512
0.090	0.982617	0.982722	0.982827	0.982932	0.983037	0.983142	0.983247	0.983352	0.983457	0.983562
0.100	0.983667	0.983772	0.983877	0.983982	0.984087	0.984192	0.984297	0.984402	0.984507	0.984612
0.110	0.984717	0.984822	0.984927	0.985032	0.985137	0.985242	0.985347	0.985453	0.985558	0.985663
0.120	0.985768	0.985873	0.985978	0.986083	0.986188	0.986293	0.986399	0.986504	0.986609	0.986714
0.130	0.986819	0.986924	0.987030	0.987135	0.987240	0.987345	0.987450	0.987556	0.987661	0.987766
0.140	0.987871	0.987976	0.988082	0.988187	0.988292	0.988397	0.988503	0.988608	0.988713	0.988818
0.150	0.988924	0.989029	0.989134	0.989240	0.989345	0.989450	0.989556	0.989661	0.989766	0.989872
0.160	0.989977	0.990082	0.990188	0.990293	0.990398	0.990504	0.990609	0.990714	0.990820	0.990925
0.170	0.991031	0.991136	0.991242	0.991347	0.991452	0.991558	0.991663	0.991769	0.991874	0.991980
0.180	0.992085	0.992191	0.992296	0.992401	0.992507	0.992612	0.992718	0.992823	0.992929	0.993034
0.190	0.993140	0.993246	0.993351	0.993457	0.993562	0.993668	0.993773	0.993879	0.993984	0.994090
0.200	0.994196	0.994301	0.994407	0.994512	0.994618	0.994724	0.994829	0.994935	0.995040	0.995146
0.210	0.995252	0.995357	0.995463	0.995569	0.995674	0.995780	0.995886	0.995991	0.996097	0.996203
0.220	0.996308	0.996414	0.996520	0.996626	0.996731	0.996837	0.996943	0.997048	0.997154	0.997260
0.230	0.997366	0.997471	0.997577	0.997683	0.997789	0.997895	0.998000	0.998106	0.998212	0.998318
0.240	0.998424	0.998529	0.998635	0.998741	0.998847	0.998953	0.999059	0.999165	0.999271	0.999376
0.250	0.999482	0.999588	0.999694	0.999800	0.999906	1.000012	1.000118	1.000223	1.000329	1.000435
0.260	1.000541	1.000647	1.000753	1.000859	1.000965	1.001071	1.001177	1.001283	1.001389	1.001495
0.270	1.001601	1.001707	1.001813	1.001919	1.002025	1.002131	1.002237	1.002343	1.002449	1.002555
0.280	1.002661	1.002767	1.002873	1.002979	1.003085	1.003192	1.003298	1.003404	1.003510	1.003616
0.290	1.003722	1.003828	1.003934	1.004040	1.004147	1.004253	1.004359	1.004465	1.004571	1.004677
0.300	1.004784	1.004890	1.004996	1.005102	1.005208	1.005315	1.005421	1.005527	1.005633	1.005739
0.310	1.005846	1.005952	1.006058	1.006164	1.006271	1.006377	1.006483	1.006589	1.006696	1.006802
0.320	1.006908	1.007015	1.007121	1.007227	1.007334	1.007440	1.007546	1.007653	1.007759	1.007865
0.330	1.007972	1.008078	1.008184	1.008291	1.008397	1.008503	1.008610	1.008716	1.008823	1.008929
0.340	1.009035	1.009142	1.009248	1.009355	1.009461	1.009568	1.009674	1.009780	1.009887	1.009993
0.350	1.010100	1.010206	1.010313	1.010419	1.010526	1.010632	1.010739	1.010845	1.010952	1.011058
0.360	1.011165	1.011271	1.011378	1.011485	1.011591	1.011698	1.011804	1.011911	1.012017	1.012124
0.370	1.012231	1.012337	1.012444	1.012550	1.012657	1.012764	1.012870	1.012977	1.013083	1.013190
0.380	1.013297	1.013403	1.013510	1.013617	1.013723	1.013830	1.013937	1.014043	1.014150	1.014257
0.390	1.014364	1.014470	1.014577	1.014684	1.014790	1.014897	1.015004	1.015111	1.015217	1.015324
0.400	1.015431	1.015538	1.015645	1.015751	1.015858	1.015965	1.016072	1.016179	1.016285	1.016392
0.410	1.016499	1.016606	1.016713	1.016820	1.016926	1.017033	1.017140	1.017247	1.017354	1.017461
0.420	1.017568	1.017675	1.017781	1.017888	1.017995	1.018102	1.018209	1.018316	1.018423	1.018530
0.430	1.018637	1.018744	1.018851	1.018958	1.019065	1.019172	1.019279	1.019386	1.019493	1.019600
0.440	1.019707	1.019814	1.019921	1.020028	1.020135	1.020242	1.020349	1.020456	1.020563	1.020670
0.450	1.020777	1.020884	1.020991	1.021098	1.021205	1.021312	1.021420	1.021527	1.021634	1.021741
0.460	1.021848	1.021955	1.022062	1.022169	1.022277	1.022384	1.022491	1.022598	1.022705	1.022812
0.470	1.022920	1.023027	1.023134	1.023241	1.023348	1.023456	1.023563	1.023670	1.023777	1.023885
0.480	1.023992	1.024099	1.024206	1.024314	1.024421	1.024528	1.024635	1.024743	1.024850	1.024957
0.490	1.025065	1.025172	1.025279	1.025386	1.025494	1.025601	1.025709	1.025816	1.025923	1.026031

ATTENUATION IN DECIBELS
THETA FROM 19.500 TO 19.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	1.020138	1.026245	1.026353	1.026460	1.026567	1.026675	1.026782	1.026890	1.026997	1.027104
0.510	1.027212	1.027319	1.027427	1.027534	1.027642	1.027749	1.027857	1.027964	1.028071	1.028179
0.520	1.028286	1.028394	1.028501	1.028609	1.028716	1.028824	1.028931	1.029039	1.029147	1.029254
0.530	1.029362	1.029469	1.029577	1.029684	1.029792	1.029899	1.030007	1.030115	1.030222	1.030330
0.540	1.030437	1.030545	1.030653	1.030760	1.030868	1.030975	1.031083	1.031191	1.031298	1.031406
0.550	1.031514	1.031621	1.031729	1.031837	1.031944	1.032052	1.032160	1.032268	1.032375	1.032483
0.560	1.032591	1.032698	1.032806	1.032914	1.033022	1.033129	1.033237	1.033345	1.033453	1.033560
0.570	1.033666	1.033776	1.033884	1.033992	1.034099	1.034207	1.034315	1.034423	1.034531	1.034638
0.580	1.034746	1.034854	1.034962	1.035070	1.035178	1.035286	1.035394	1.035501	1.035609	1.035717
0.590	1.035925	1.035933	1.036041	1.036149	1.036257	1.036365	1.036473	1.036581	1.036688	1.036796
0.600	1.036904	1.037012	1.037120	1.037228	1.037336	1.037444	1.037552	1.037660	1.037768	1.037876
0.610	1.037984	1.038092	1.038200	1.038308	1.038416	1.038525	1.038633	1.038741	1.038849	1.038957
0.620	1.039065	1.039173	1.039281	1.039389	1.039497	1.039605	1.039713	1.039820	1.039930	1.040038
0.630	1.040146	1.040254	1.040362	1.040470	1.040579	1.040687	1.040795	1.040903	1.041011	1.041119
0.640	1.041228	1.041336	1.041444	1.041552	1.041661	1.041769	1.041877	1.041985	1.042093	1.042202
0.650	1.042310	1.042418	1.042527	1.042635	1.042743	1.042851	1.042960	1.043068	1.043176	1.043285
0.660	1.043393	1.043501	1.043610	1.043718	1.043826	1.043935	1.044043	1.044151	1.044260	1.044368
0.670	1.044476	1.044585	1.044693	1.044802	1.044910	1.045018	1.045127	1.045235	1.045344	1.045452
0.680	1.045561	1.045669	1.045777	1.045886	1.045994	1.046103	1.046211	1.046320	1.046428	1.046537
0.690	1.046645	1.046754	1.046862	1.046971	1.047079	1.047188	1.047296	1.047405	1.047513	1.047622
0.700	1.047731	1.047839	1.047948	1.048056	1.048165	1.048273	1.048382	1.048491	1.048599	1.048708
0.710	1.048816	1.048925	1.049034	1.049142	1.049251	1.049360	1.049468	1.049577	1.049686	1.049794
0.720	1.049903	1.050012	1.050120	1.050229	1.050338	1.050446	1.050555	1.050664	1.050773	1.050881
0.730	1.050990	1.051099	1.051207	1.051316	1.051425	1.051534	1.051643	1.051751	1.051860	1.051969
0.740	1.052078	1.052186	1.052295	1.052404	1.052513	1.052622	1.052731	1.052839	1.052948	1.053057
0.750	1.053166	1.053275	1.053384	1.053493	1.053601	1.053710	1.053819	1.053928	1.054037	1.054146
0.760	1.054255	1.054364	1.054473	1.054582	1.054691	1.054799	1.054908	1.055017	1.055126	1.055235
0.770	1.055344	1.055453	1.055562	1.055671	1.055780	1.055889	1.055998	1.056107	1.056216	1.056325
0.780	1.056434	1.056543	1.056652	1.056762	1.056871	1.056980	1.057089	1.057198	1.057307	1.057416
0.790	1.057525	1.057634	1.057743	1.057852	1.057961	1.058071	1.058180	1.058289	1.058398	1.058507
0.800	1.058616	1.058725	1.058835	1.058944	1.059053	1.059162	1.059271	1.059381	1.059490	1.059599
0.810	1.059708	1.059817	1.059927	1.060036	1.060145	1.060254	1.060364	1.060473	1.060582	1.060691
0.820	1.060801	1.060910	1.061019	1.061129	1.061238	1.061347	1.061456	1.061566	1.061675	1.061784
0.830	1.061894	1.062003	1.062112	1.062222	1.062331	1.062440	1.062550	1.062659	1.062769	1.062878
0.840	1.062987	1.063097	1.063206	1.063316	1.063425	1.063534	1.063644	1.063753	1.063863	1.063972
0.850	1.064082	1.064191	1.064301	1.064410	1.064520	1.064629	1.064738	1.064848	1.064957	1.065067
0.860	1.065176	1.065286	1.065396	1.065505	1.065615	1.065724	1.065834	1.065943	1.066053	1.066162
0.870	1.066272	1.066382	1.066491	1.066601	1.066710	1.066820	1.066930	1.067039	1.067149	1.067258
0.880	1.067368	1.067478	1.067587	1.067697	1.067807	1.067916	1.068026	1.068136	1.068245	1.068355
0.890	1.068465	1.068574	1.068684	1.068794	1.068903	1.069013	1.069123	1.069233	1.069342	1.069452
0.900	1.069562	1.069672	1.069781	1.069891	1.070001	1.070111	1.070221	1.070330	1.070440	1.070550
0.910	1.070660	1.070770	1.070879	1.070989	1.071099	1.071209	1.071319	1.071429	1.071538	1.071648
0.920	1.071758	1.071868	1.071978	1.072088	1.072198	1.072308	1.072418	1.072527	1.072637	1.072747
0.930	1.072857	1.072967	1.073077	1.073187	1.073297	1.073407	1.073517	1.073627	1.073737	1.073847
0.940	1.073957	1.074067	1.074177	1.074287	1.074397	1.074507	1.074617	1.074727	1.074837	1.074947
0.950	1.075057	1.075167	1.075277	1.075387	1.075497	1.075607	1.075718	1.075828	1.075938	1.076048
0.960	1.076158	1.076268	1.076378	1.076488	1.076598	1.076709	1.076819	1.076929	1.077039	1.077149
0.970	1.077259	1.077370	1.077480	1.077590	1.077700	1.077810	1.077921	1.078031	1.078141	1.078251
0.980	1.078361	1.078472	1.078582	1.078692	1.078802	1.078913	1.079023	1.079133	1.079244	1.079354
0.990	1.079464	1.079574	1.079685	1.079795	1.079905	1.080016	1.080126	1.080236	1.080347	1.080457

ATTENUATION IN DECIBELS
THETA FROM 20.000 TO 20.499 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.000	1.080567	1.080678	1.080788	1.080898	1.081009	1.081119	1.081230	1.081340	1.081450	1.081561
0.010	1.081671	1.081782	1.081892	1.082002	1.082113	1.082223	1.082334	1.082444	1.082555	1.082665
0.020	1.082776	1.082886	1.082997	1.083107	1.083218	1.083328	1.083439	1.083549	1.083660	1.083770
0.030	1.083881	1.083991	1.084102	1.084212	1.084323	1.084433	1.084544	1.084655	1.084765	1.084876
0.040	1.084986	1.085097	1.085207	1.085318	1.085429	1.085539	1.085650	1.085761	1.085871	1.085982
0.050	1.086093	1.086203	1.086314	1.086425	1.086535	1.086646	1.086757	1.086867	1.086978	1.087089
0.060	1.087199	1.087310	1.087421	1.087532	1.087642	1.087753	1.087864	1.087975	1.088085	1.088196
0.070	1.088307	1.088418	1.088528	1.088639	1.088750	1.088861	1.088972	1.089082	1.089193	1.089304
0.080	1.089415	1.089526	1.089637	1.089747	1.089858	1.089969	1.090080	1.090191	1.090302	1.090413
0.090	1.090523	1.090634	1.090745	1.090856	1.090967	1.091078	1.091189	1.091300	1.091411	1.091522
0.100	1.091633	1.091744	1.091855	1.091966	1.092077	1.092188	1.092299	1.092410	1.092521	1.092632
0.110	1.092743	1.092854	1.092965	1.093076	1.093187	1.093298	1.093409	1.093520	1.093631	1.093742
0.120	1.093853	1.093964	1.094075	1.094186	1.094297	1.094408	1.094520	1.094631	1.094742	1.094853
0.130	1.094964	1.095075	1.095186	1.095297	1.095409	1.095520	1.095631	1.095742	1.095853	1.095964
0.140	1.096076	1.096187	1.096298	1.096409	1.096520	1.096632	1.096743	1.096854	1.096965	1.097077
0.150	1.097188	1.097299	1.097410	1.097522	1.097633	1.097744	1.097856	1.097967	1.098078	1.098189
0.160	1.098301	1.098412	1.098523	1.098635	1.098746	1.098857	1.098969	1.099080	1.099191	1.099303
0.170	1.099414	1.099526	1.099637	1.099748	1.099860	1.099971	1.100083	1.100194	1.100305	1.100417
0.180	1.100528	1.100640	1.100751	1.100863	1.100974	1.101085	1.101197	1.101308	1.101420	1.101531
0.190	1.101643	1.101754	1.101866	1.101977	1.102089	1.102200	1.102312	1.102423	1.102535	1.102647
0.200	1.102758	1.102870	1.102981	1.103093	1.103204	1.103316	1.103427	1.103539	1.103651	1.103762
0.210	1.103874	1.103986	1.104097	1.104209	1.104320	1.104432	1.104544	1.104655	1.104767	1.104879
0.220	1.104990	1.105102	1.105214	1.105325	1.105437	1.105549	1.105660	1.105772	1.105884	1.105996
0.230	1.106107	1.106219	1.106331	1.106443	1.106554	1.106666	1.106778	1.106890	1.107001	1.107113
0.240	1.107225	1.107337	1.107449	1.107560	1.107672	1.107784	1.107896	1.108008	1.108120	1.108231
0.250	1.108343	1.108455	1.108567	1.108679	1.108791	1.108903	1.109015	1.109126	1.109238	1.109350
0.260	1.109462	1.109574	1.109686	1.109798	1.109910	1.110022	1.110134	1.110246	1.110358	1.110470
0.270	1.110582	1.110694	1.110806	1.110918	1.111030	1.111142	1.111254	1.111366	1.111478	1.111590
0.280	1.111702	1.111814	1.111926	1.112038	1.112150	1.112262	1.112374	1.112486	1.112598	1.112710
0.290	1.112822	1.112934	1.113046	1.113159	1.113271	1.113383	1.113495	1.113607	1.113719	1.113831
0.300	1.113944	1.114056	1.114168	1.114280	1.114392	1.114504	1.114617	1.114729	1.114841	1.114953
0.310	1.115065	1.115178	1.115290	1.115402	1.115514	1.115627	1.115739	1.115851	1.115963	1.116076
0.320	1.116188	1.116300	1.116412	1.116525	1.116637	1.116749	1.116862	1.116974	1.117086	1.117199
0.330	1.117311	1.117423	1.117536	1.117648	1.117760	1.117873	1.117985	1.118097	1.118210	1.118322
0.340	1.118435	1.118547	1.118659	1.118772	1.118884	1.118997	1.119109	1.119221	1.119334	1.119446
0.350	1.119559	1.119671	1.119784	1.119896	1.120009	1.120121	1.120234	1.120346	1.120459	1.120571
0.360	1.120684	1.120796	1.120909	1.121021	1.121134	1.121246	1.121359	1.121471	1.121584	1.121697
0.370	1.121809	1.121922	1.122034	1.122147	1.122259	1.122372	1.122485	1.122597	1.122710	1.122823
0.380	1.122935	1.123048	1.123160	1.123273	1.123386	1.123498	1.123611	1.123724	1.123836	1.123949
0.390	1.124062	1.124175	1.124287	1.124400	1.124513	1.124625	1.124738	1.124851	1.124964	1.125076
0.400	1.125189	1.125302	1.125415	1.125527	1.125640	1.125753	1.125866	1.125979	1.126091	1.126204
0.410	1.126317	1.126430	1.126543	1.126655	1.126768	1.126881	1.126994	1.127107	1.127220	1.127333
0.420	1.127445	1.127558	1.127671	1.127784	1.127897	1.128010	1.128123	1.128236	1.128349	1.128462
0.430	1.128575	1.128687	1.128800	1.128913	1.129026	1.129139	1.129252	1.129365	1.129478	1.129591
0.440	1.129704	1.129817	1.129930	1.130043	1.130156	1.130269	1.130382	1.130495	1.130608	1.130721
0.450	1.130835	1.130948	1.131061	1.131174	1.131287	1.131400	1.131513	1.131626	1.131739	1.131852
0.460	1.131965	1.132079	1.132192	1.132305	1.132418	1.132531	1.132644	1.132757	1.132871	1.132984
0.470	1.133097	1.133210	1.133323	1.133436	1.133550	1.133663	1.133776	1.133889	1.134003	1.134116
0.480	1.134229	1.134342	1.134455	1.134569	1.134682	1.134795	1.134909	1.135022	1.135135	1.135248
0.490	1.135362	1.135475	1.135588	1.135702	1.135815	1.135928	1.136042	1.136155	1.136268	1.136382

ATTENUATION IN DECIBELS
THETA FROM 20.500 TO 20.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	1.136435	1.136608	1.136722	1.136835	1.136948	1.137062	1.137175	1.137289	1.137402	1.137515
0.510	1.137629	1.137742	1.137856	1.137969	1.138083	1.138196	1.138309	1.138423	1.138536	1.138650
0.520	1.138763	1.138877	1.138990	1.139104	1.139217	1.139331	1.139444	1.139558	1.139671	1.139785
0.530	1.139896	1.140012	1.140126	1.140239	1.140353	1.140466	1.140580	1.140693	1.140807	1.140921
0.540	1.141034	1.141148	1.141261	1.141375	1.141489	1.141602	1.141716	1.141830	1.141943	1.142057
0.550	1.142170	1.142284	1.142398	1.142512	1.142625	1.142739	1.142853	1.142966	1.143080	1.143194
0.560	1.143307	1.143421	1.143535	1.143649	1.143762	1.143876	1.143990	1.144104	1.144217	1.144331
0.570	1.144445	1.144559	1.144673	1.144786	1.144900	1.145014	1.145128	1.145242	1.145355	1.145469
0.580	1.145583	1.145697	1.145811	1.145925	1.146038	1.146152	1.146266	1.146380	1.146494	1.146608
0.590	1.146722	1.146836	1.146950	1.147064	1.147177	1.147291	1.147405	1.147519	1.147633	1.147747
0.600	1.147861	1.147975	1.148089	1.148203	1.148317	1.148431	1.148545	1.148659	1.148773	1.148887
0.610	1.149001	1.149115	1.149229	1.149343	1.149457	1.149571	1.149685	1.149799	1.149913	1.150028
0.620	1.150142	1.150256	1.150370	1.150484	1.150598	1.150712	1.150826	1.150940	1.151054	1.151169
0.630	1.151283	1.151397	1.151511	1.151625	1.151739	1.151854	1.151968	1.152082	1.152196	1.152310
0.640	1.152424	1.152539	1.152653	1.152767	1.152881	1.152996	1.153110	1.153224	1.153338	1.153453
0.650	1.153567	1.153681	1.153795	1.153910	1.154024	1.154138	1.154253	1.154367	1.154481	1.154595
0.660	1.154710	1.154824	1.154938	1.155053	1.155167	1.155281	1.155396	1.155510	1.155625	1.155739
0.670	1.155853	1.155968	1.156082	1.156197	1.156311	1.156425	1.156540	1.156654	1.156769	1.156883
0.680	1.157112	1.157226	1.157341	1.157455	1.157569	1.157684	1.157799	1.157913	1.158028	1.158142
0.690	1.158257	1.158371	1.158486	1.158600	1.158715	1.158829	1.158944	1.159059	1.159173	1.159288
0.700	1.159402	1.159517	1.159631	1.159746	1.159861	1.159975	1.160090	1.160204	1.160319	1.160434
0.710	1.160548	1.160663	1.160778	1.160892	1.161007	1.161122	1.161236	1.161351	1.161466	1.161580
0.720	1.161695	1.161810	1.161924	1.162039	1.162154	1.162268	1.162383	1.162498	1.162613	1.162727
0.730	1.162842	1.162957	1.163072	1.163186	1.163301	1.163416	1.163531	1.163646	1.163760	1.163875
0.740	1.163990	1.164105	1.164220	1.164335	1.164449	1.164564	1.164679	1.164794	1.164909	1.165024
0.750	1.165138	1.165253	1.165368	1.165483	1.165598	1.165713	1.165828	1.165943	1.166058	1.166173
0.760	1.166288	1.166403	1.166517	1.166632	1.166747	1.166862	1.166977	1.167092	1.167207	1.167322
0.770	1.167437	1.167552	1.167667	1.167782	1.167897	1.168012	1.168127	1.168242	1.168357	1.168472
0.780	1.168588	1.168703	1.168818	1.168933	1.169048	1.169163	1.169278	1.169393	1.169508	1.169623
0.790	1.169738	1.169853	1.169969	1.170084	1.170199	1.170314	1.170429	1.170544	1.170660	1.170775
0.800	1.170890	1.171005	1.171120	1.171235	1.171351	1.171466	1.171581	1.171696	1.171811	1.171927
0.810	1.172042	1.172157	1.172272	1.172388	1.172503	1.172618	1.172734	1.172849	1.172964	1.173079
0.820	1.173195	1.173310	1.173425	1.173541	1.173656	1.173771	1.173887	1.174002	1.174117	1.174233
0.830	1.174348	1.174463	1.174579	1.174694	1.174809	1.174925	1.175040	1.175156	1.175271	1.175386
0.840	1.175502	1.175617	1.175733	1.175848	1.175964	1.176079	1.176195	1.176310	1.176425	1.176540
0.850	1.176656	1.176772	1.176887	1.177003	1.177118	1.177234	1.177349	1.177465	1.177580	1.177696
0.860	1.177812	1.177927	1.178043	1.178158	1.178274	1.178389	1.178505	1.178620	1.178736	1.178851
0.870	1.178967	1.179083	1.179198	1.179314	1.179430	1.179545	1.179661	1.179777	1.179892	1.179908
0.880	1.180024	1.180140	1.180256	1.180371	1.180487	1.180602	1.180718	1.180833	1.180949	1.181064
0.890	1.181180	1.181296	1.181412	1.181528	1.181644	1.181760	1.181876	1.181991	1.182107	1.182223
0.900	1.182339	1.182455	1.182571	1.182687	1.182803	1.182919	1.183035	1.183151	1.183267	1.183383
0.910	1.183499	1.183615	1.183731	1.183847	1.183963	1.184079	1.184195	1.184311	1.184427	1.184543
0.920	1.184659	1.184775	1.184891	1.185007	1.185123	1.185239	1.185355	1.185471	1.185587	1.185703
0.930	1.185819	1.185935	1.186051	1.186167	1.186283	1.186399	1.186515	1.186631	1.186747	1.186863
0.940	1.186979	1.187095	1.187211	1.187327	1.187443	1.187559	1.187675	1.187791	1.187907	1.188023
0.950	1.188139	1.188255	1.188371	1.188487	1.188603	1.188719	1.188835	1.188951	1.189067	1.189183
0.960	1.189299	1.189415	1.189531	1.189647	1.189763	1.189879	1.189995	1.190111	1.190227	1.190343
0.970	1.190459	1.190575	1.190691	1.190807	1.190923	1.191039	1.191155	1.191271	1.191387	1.191503
0.980	1.191619	1.191735	1.191851	1.191967	1.192083	1.192199	1.192315	1.192431	1.192547	1.192663
0.990	1.192779	1.192895	1.193011	1.193127	1.193243	1.193359	1.193475	1.193591	1.193707	1.193823

ATTENUATION IN DECIBELS THETA FROM 21.000 TO 21.499 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.000	1.193930	1.194047	1.194163	1.194280	1.194396	1.194512	1.194629	1.194745	1.194862	1.194978
0.010	1.195095	1.195211	1.195328	1.195444	1.195560	1.195677	1.195793	1.195910	1.196026	1.196143
0.020	1.196259	1.196376	1.196492	1.196609	1.196725	1.196842	1.196959	1.197075	1.197192	1.197308
0.030	1.197425	1.197541	1.197658	1.197775	1.197891	1.198008	1.198124	1.198241	1.198358	1.198474
0.040	1.198591	1.198707	1.198824	1.198941	1.199057	1.199174	1.199291	1.199407	1.199524	1.199641
0.050	1.199757	1.199874	1.199991	1.200107	1.200224	1.200341	1.200458	1.200574	1.200691	1.200808
0.060	1.200925	1.201041	1.201158	1.201275	1.201392	1.201508	1.201625	1.201742	1.201859	1.201976
0.070	1.202092	1.202209	1.202326	1.202443	1.202560	1.202676	1.202793	1.202910	1.203027	1.203144
0.080	1.203261	1.203378	1.203495	1.203611	1.203728	1.203845	1.203962	1.204079	1.204196	1.204313
0.090	1.204430	1.204547	1.204664	1.204781	1.204898	1.205015	1.205131	1.205248	1.205365	1.205482
0.100	1.205599	1.205716	1.205833	1.205950	1.206067	1.206184	1.206301	1.206419	1.206536	1.206653
0.110	1.206770	1.206887	1.207004	1.207121	1.207238	1.207355	1.207472	1.207589	1.207706	1.207823
0.120	1.207940	1.208058	1.208175	1.208292	1.208409	1.208526	1.208643	1.208760	1.208878	1.208995
0.130	1.209112	1.209229	1.209346	1.209463	1.209581	1.209698	1.209815	1.209932	1.210050	1.210167
0.140	1.210284	1.210401	1.210518	1.210636	1.210753	1.210870	1.210988	1.211105	1.211222	1.211339
0.150	1.211457	1.211574	1.211691	1.211809	1.211926	1.212043	1.212161	1.212278	1.212395	1.212513
0.160	1.212630	1.212747	1.212865	1.212982	1.213099	1.213217	1.213334	1.213452	1.213569	1.213686
0.170	1.213804	1.213921	1.214039	1.214156	1.214274	1.214391	1.214508	1.214626	1.214743	1.214861
0.180	1.214978	1.215096	1.215213	1.215331	1.215448	1.215566	1.215683	1.215801	1.215918	1.216036
0.190	1.216153	1.216271	1.216389	1.216506	1.216624	1.216741	1.216859	1.216976	1.217094	1.217212
0.200	1.217329	1.217447	1.217564	1.217682	1.217800	1.217917	1.218035	1.218152	1.218270	1.218388
0.210	1.218505	1.218623	1.218741	1.218858	1.218976	1.219094	1.219212	1.219329	1.219447	1.219565
0.220	1.219682	1.219800	1.219918	1.220036	1.220153	1.220271	1.220389	1.220507	1.220624	1.220742
0.230	1.220860	1.220978	1.221096	1.221213	1.221331	1.221449	1.221567	1.221685	1.221802	1.221920
0.240	1.222038	1.222156	1.222274	1.222392	1.222509	1.222627	1.222745	1.222863	1.222981	1.223099
0.250	1.223217	1.223335	1.223453	1.223571	1.223688	1.223806	1.223924	1.224042	1.224160	1.224278
0.260	1.224396	1.224514	1.224632	1.224750	1.224868	1.224986	1.225104	1.225222	1.225340	1.225458
0.270	1.225576	1.225694	1.225812	1.225930	1.226048	1.226166	1.226284	1.226403	1.226521	1.226639
0.280	1.226757	1.226875	1.226993	1.227111	1.227229	1.227347	1.227465	1.227584	1.227702	1.227820
0.290	1.227938	1.228056	1.228174	1.228292	1.228411	1.228529	1.228647	1.228765	1.228883	1.229002
0.300	1.229120	1.229238	1.229356	1.229474	1.229593	1.229711	1.229829	1.229947	1.230066	1.230184
0.310	1.230302	1.230420	1.230539	1.230657	1.230775	1.230894	1.231012	1.231130	1.231249	1.231367
0.320	1.231485	1.231604	1.231722	1.231840	1.231959	1.232077	1.232195	1.232314	1.232432	1.232550
0.330	1.232669	1.232787	1.232906	1.233024	1.233142	1.233261	1.233379	1.233498	1.233616	1.233735
0.340	1.233853	1.233972	1.234090	1.234208	1.234327	1.234445	1.234564	1.234682	1.234801	1.234919
0.350	1.235038	1.235156	1.235275	1.235393	1.235512	1.235631	1.235749	1.235868	1.235986	1.236105
0.360	1.236223	1.236342	1.236461	1.236579	1.236698	1.236816	1.236935	1.237054	1.237172	1.237291
0.370	1.237409	1.237528	1.237647	1.237765	1.237884	1.238003	1.238121	1.238240	1.238359	1.238477
0.380	1.238596	1.238715	1.238834	1.238952	1.239071	1.239190	1.239308	1.239427	1.239546	1.239665
0.390	1.239783	1.239902	1.240021	1.240140	1.240258	1.240377	1.240496	1.240615	1.240734	1.240852
0.400	1.240971	1.241090	1.241209	1.241328	1.241447	1.241565	1.241684	1.241803	1.241922	1.242041
0.410	1.242160	1.242279	1.242398	1.242516	1.242635	1.242754	1.242873	1.242992	1.243111	1.243230
0.420	1.243349	1.243468	1.243587	1.243706	1.243825	1.243944	1.244063	1.244182	1.244301	1.244420
0.430	1.244539	1.244658	1.244777	1.244896	1.245015	1.245134	1.245253	1.245372	1.245491	1.245610
0.440	1.245729	1.245848	1.245967	1.246086	1.246205	1.246324	1.246444	1.246563	1.246682	1.246801
0.450	1.246920	1.247039	1.247158	1.247277	1.247397	1.247516	1.247635	1.247754	1.247873	1.247992
0.460	1.248112	1.248231	1.248350	1.248469	1.248588	1.248708	1.248827	1.248946	1.249065	1.249184
0.470	1.249304	1.249423	1.249542	1.249661	1.249781	1.249900	1.250019	1.250139	1.250258	1.250377
0.480	1.250497	1.250616	1.250735	1.250854	1.250974	1.251093	1.251212	1.251332	1.251451	1.251571
0.490	1.251690	1.251809	1.251929	1.252048	1.252167	1.252287	1.252406	1.252526	1.252645	1.252764

ATTENUATION IN DECIBELS
THETA FROM 21.500 TO 21.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	1.252854	1.253003	1.253123	1.253242	1.253362	1.253481	1.253601	1.253720	1.253840	1.253959
0.510	1.254073	1.254198	1.254318	1.254437	1.254557	1.254676	1.254796	1.254915	1.255035	1.255154
0.520	1.255274	1.255393	1.255513	1.255632	1.255752	1.255871	1.255991	1.256111	1.256230	1.256350
0.530	1.256470	1.256589	1.256709	1.256828	1.256948	1.257068	1.257187	1.257307	1.257427	1.257546
0.540	1.257666	1.257786	1.257905	1.258025	1.258145	1.258265	1.258384	1.258504	1.258624	1.258743
0.550	1.258863	1.258983	1.259103	1.259222	1.259342	1.259462	1.259582	1.259701	1.259821	1.259941
0.560	1.260061	1.260181	1.260300	1.260420	1.260540	1.260660	1.260780	1.260900	1.261019	1.261139
0.570	1.261259	1.261379	1.261499	1.261619	1.261739	1.261858	1.261978	1.262098	1.262218	1.262338
0.580	1.262458	1.262578	1.262698	1.262818	1.262938	1.263058	1.263178	1.263298	1.263418	1.263538
0.590	1.263658	1.263778	1.263897	1.264017	1.264137	1.264258	1.264378	1.264498	1.264618	1.264738
0.600	1.264858	1.264978	1.265098	1.265218	1.265338	1.265458	1.265578	1.265698	1.265818	1.265938
0.610	1.266058	1.266178	1.266299	1.266419	1.266539	1.266659	1.266779	1.266899	1.267019	1.267140
0.620	1.267260	1.267380	1.267500	1.267620	1.267740	1.267861	1.267981	1.268101	1.268221	1.268341
0.630	1.268462	1.268582	1.268702	1.268822	1.268943	1.269063	1.269183	1.269303	1.269424	1.269544
0.640	1.269664	1.269785	1.269905	1.270025	1.270145	1.270266	1.270386	1.270506	1.270627	1.270747
0.650	1.270867	1.270988	1.271108	1.271229	1.271349	1.271469	1.271590	1.271710	1.271830	1.271951
0.660	1.272071	1.272192	1.272312	1.272433	1.272553	1.272673	1.272794	1.272914	1.273035	1.273155
0.670	1.273276	1.273396	1.273517	1.273637	1.273758	1.273878	1.273999	1.274119	1.274240	1.274360
0.680	1.274481	1.274601	1.274722	1.274842	1.274963	1.275083	1.275204	1.275325	1.275445	1.275566
0.690	1.275686	1.275807	1.275928	1.276048	1.276169	1.276289	1.276410	1.276531	1.276651	1.276772
0.700	1.276893	1.277013	1.277134	1.277255	1.277375	1.277496	1.277617	1.277737	1.277858	1.277979
0.710	1.278099	1.278220	1.278341	1.278462	1.278582	1.278703	1.278824	1.278945	1.279065	1.279186
0.720	1.279307	1.279428	1.279549	1.279669	1.279790	1.279911	1.280032	1.280153	1.280273	1.280394
0.730	1.280515	1.280636	1.280757	1.280878	1.280998	1.281119	1.281240	1.281361	1.281482	1.281603
0.740	1.281724	1.281845	1.281966	1.282086	1.282207	1.282328	1.282449	1.282570	1.282691	1.282812
0.750	1.282933	1.283054	1.283175	1.283296	1.283417	1.283538	1.283659	1.283780	1.283901	1.284022
0.760	1.284143	1.284264	1.284385	1.284506	1.284627	1.284748	1.284869	1.284990	1.285111	1.285232
0.770	1.285354	1.285475	1.285596	1.285717	1.285838	1.285959	1.286080	1.286201	1.286322	1.286444
0.780	1.286565	1.286686	1.286807	1.286928	1.287049	1.287170	1.287292	1.287413	1.287534	1.287655
0.790	1.287776	1.287898	1.288019	1.288140	1.288261	1.288383	1.288504	1.288625	1.288746	1.288868
0.800	1.288989	1.289110	1.289231	1.289353	1.289474	1.289595	1.289717	1.289838	1.289959	1.290081
0.810	1.290202	1.290323	1.290445	1.290566	1.290687	1.290809	1.290930	1.291051	1.291173	1.291294
0.820	1.291415	1.291537	1.291658	1.291780	1.291901	1.292022	1.292144	1.292265	1.292387	1.292508
0.830	1.292630	1.292751	1.292873	1.292994	1.293116	1.293237	1.293359	1.293480	1.293602	1.293723
0.840	1.293845	1.293966	1.294088	1.294209	1.294331	1.294452	1.294574	1.294695	1.294817	1.294938
0.850	1.295060	1.295182	1.295303	1.295425	1.295546	1.295668	1.295790	1.295911	1.296033	1.296154
0.860	1.296276	1.296398	1.296519	1.296641	1.296763	1.296884	1.297006	1.297128	1.297249	1.297371
0.870	1.297493	1.297614	1.297736	1.297858	1.297980	1.298101	1.298223	1.298345	1.298467	1.298588
0.880	1.298710	1.298832	1.298954	1.299075	1.299197	1.299319	1.299441	1.299563	1.299684	1.299806
0.890	1.299928	1.300050	1.300172	1.300293	1.300415	1.300537	1.300659	1.300781	1.300903	1.301025
0.900	1.301146	1.301268	1.301390	1.301512	1.301634	1.301756	1.301878	1.302000	1.302122	1.302244
0.910	1.302366	1.302488	1.302610	1.302731	1.302853	1.302975	1.303097	1.303219	1.303341	1.303463
0.920	1.303585	1.303707	1.303829	1.303951	1.304073	1.304195	1.304318	1.304440	1.304562	1.304684
0.930	1.304806	1.304928	1.305050	1.305172	1.305294	1.305416	1.305538	1.305660	1.305782	1.305905
0.940	1.306027	1.306149	1.306271	1.306393	1.306515	1.306637	1.306760	1.306882	1.307004	1.307126
0.950	1.307248	1.307371	1.307493	1.307615	1.307737	1.307859	1.307982	1.308104	1.308226	1.308348
0.960	1.308471	1.308593	1.308715	1.308837	1.308960	1.309082	1.309204	1.309326	1.309449	1.309571
0.970	1.309693	1.309816	1.309938	1.310060	1.310183	1.310305	1.310427	1.310550	1.310672	1.310794
0.980	1.310917	1.311039	1.311162	1.311284	1.311406	1.311529	1.311651	1.311774	1.311896	1.312018
0.990	1.312141	1.312263	1.312386	1.312508	1.312631	1.312753	1.312876	1.313000	1.313121	1.313243

ATTENUATION IN DECIBELS
THETA FROM 22.000 TO 22.499 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.000	1.313366	1.313488	1.313611	1.313733	1.313856	1.313978	1.314101	1.314223	1.314346	1.314468
0.010	1.314591	1.314713	1.314836	1.314959	1.315081	1.315204	1.315326	1.315449	1.315572	1.315694
0.020	1.315817	1.315939	1.316062	1.316185	1.316308	1.316430	1.316553	1.316675	1.316798	1.316921
0.030	1.317043	1.317166	1.317289	1.317411	1.317534	1.317657	1.317780	1.317902	1.318025	1.318148
0.040	1.318270	1.318393	1.318516	1.318639	1.318761	1.318884	1.319007	1.319130	1.319253	1.319375
0.050	1.319498	1.319621	1.319744	1.319867	1.319989	1.320112	1.320235	1.320358	1.320481	1.320604
0.060	1.320727	1.320849	1.320972	1.321095	1.321218	1.321341	1.321464	1.321587	1.321710	1.321833
0.070	1.321956	1.322078	1.322201	1.322324	1.322447	1.322570	1.322693	1.322816	1.322939	1.323062
0.080	1.323185	1.323308	1.323431	1.323554	1.323677	1.323800	1.323923	1.324046	1.324169	1.324292
0.090	1.324415	1.324538	1.324662	1.324785	1.324908	1.325031	1.325154	1.325277	1.325400	1.325523
0.100	1.325646	1.325769	1.325892	1.326016	1.326139	1.326262	1.326385	1.326508	1.326631	1.326755
0.110	1.326878	1.327001	1.327124	1.327247	1.327370	1.327494	1.327617	1.327740	1.327863	1.327987
0.120	1.328110	1.328233	1.328356	1.328479	1.328603	1.328726	1.328849	1.328973	1.329096	1.329219
0.130	1.329342	1.329466	1.329589	1.329712	1.329836	1.329959	1.330082	1.330206	1.330329	1.330452
0.140	1.330576	1.330699	1.330822	1.330946	1.331069	1.331193	1.331316	1.331439	1.331563	1.331686
0.150	1.331810	1.331933	1.332057	1.332180	1.332303	1.332427	1.332550	1.332674	1.332797	1.332921
0.160	1.333044	1.333168	1.333291	1.333415	1.333538	1.333662	1.333785	1.333909	1.334032	1.334156
0.170	1.334279	1.334403	1.334526	1.334650	1.334774	1.334897	1.335021	1.335144	1.335268	1.335392
0.180	1.335515	1.335639	1.335762	1.335886	1.336010	1.336133	1.336257	1.336381	1.336504	1.336628
0.190	1.336752	1.336875	1.336999	1.337123	1.337246	1.337370	1.337494	1.337617	1.337741	1.337865
0.200	1.337989	1.338112	1.338236	1.338360	1.338483	1.338607	1.338731	1.338855	1.338979	1.339102
0.210	1.339226	1.339350	1.339474	1.339598	1.339721	1.339845	1.339969	1.340093	1.340217	1.340341
0.220	1.340464	1.340588	1.340712	1.340836	1.340960	1.341084	1.341208	1.341332	1.341455	1.341579
0.230	1.341703	1.341827	1.341951	1.342075	1.342199	1.342323	1.342447	1.342571	1.342695	1.342819
0.240	1.342943	1.343067	1.343191	1.343315	1.343439	1.343563	1.343687	1.343811	1.343935	1.344059
0.250	1.344183	1.344307	1.344431	1.344555	1.344679	1.344803	1.344927	1.345051	1.345175	1.345299
0.260	1.345424	1.345548	1.345672	1.345796	1.345920	1.346044	1.346168	1.346292	1.346417	1.346541
0.270	1.346665	1.346789	1.346913	1.347037	1.347162	1.347286	1.347410	1.347534	1.347658	1.347783
0.280	1.347907	1.348031	1.348155	1.348280	1.348404	1.348528	1.348652	1.348777	1.348901	1.349025
0.290	1.349149	1.349274	1.349398	1.349522	1.349647	1.349771	1.349895	1.350020	1.350144	1.350268
0.300	1.350393	1.350517	1.350641	1.350766	1.350890	1.351014	1.351139	1.351263	1.351388	1.351512
0.310	1.351636	1.351761	1.351885	1.352010	1.352134	1.352258	1.352383	1.352507	1.352632	1.352756
0.320	1.352881	1.353005	1.353130	1.353254	1.353379	1.353503	1.353628	1.353752	1.353877	1.354001
0.330	1.354126	1.354250	1.354375	1.354499	1.354624	1.354749	1.354873	1.354998	1.355122	1.355247
0.340	1.355371	1.355496	1.355621	1.355745	1.355870	1.355995	1.356119	1.356244	1.356368	1.356493
0.350	1.356618	1.356742	1.356867	1.356992	1.357116	1.357241	1.357366	1.357491	1.357615	1.357740
0.360	1.357865	1.357989	1.358114	1.358239	1.358364	1.358488	1.358613	1.358738	1.358863	1.358987
0.370	1.359112	1.359237	1.359362	1.359487	1.359611	1.359736	1.359861	1.359986	1.360111	1.360235
0.380	1.360360	1.360485	1.360610	1.360735	1.360860	1.360985	1.361109	1.361234	1.361359	1.361484
0.390	1.361609	1.361734	1.361859	1.361984	1.362109	1.362234	1.362359	1.362484	1.362608	1.362733
0.400	1.362858	1.362983	1.363108	1.363233	1.363358	1.363483	1.363608	1.363733	1.363858	1.363983
0.410	1.364108	1.364233	1.364358	1.364484	1.364609	1.364734	1.364859	1.364984	1.365109	1.365234
0.420	1.365359	1.365484	1.365609	1.365734	1.365859	1.365985	1.366110	1.366235	1.366360	1.366485
0.430	1.366610	1.366735	1.366861	1.366986	1.367111	1.367236	1.367361	1.367486	1.367612	1.367737
0.440	1.367862	1.367987	1.368113	1.368238	1.368363	1.368488	1.368613	1.368739	1.368864	1.368989
0.450	1.369115	1.369240	1.369365	1.369490	1.369616	1.369741	1.369866	1.369992	1.370117	1.370242
0.460	1.370368	1.370493	1.370618	1.370744	1.370869	1.370994	1.371120	1.371245	1.371371	1.371496
0.470	1.371621	1.371747	1.371872	1.371998	1.372123	1.372248	1.372374	1.372499	1.372625	1.372750
0.480	1.372876	1.373001	1.373127	1.373252	1.373378	1.373503	1.373629	1.373754	1.373880	1.374005
0.490	1.374131	1.374256	1.374382	1.374507	1.374633	1.374758	1.374884	1.375009	1.375135	1.375261

ATTENUATION IN DECIBELS
THETA FROM 22.500 TO 22.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	1.375386	1.375512	1.375637	1.375763	1.375889	1.376014	1.376140	1.376265	1.376391	1.376517
0.510	1.376642	1.376768	1.376894	1.377019	1.377145	1.377271	1.377396	1.377522	1.377648	1.377773
0.520	1.377899	1.378025	1.378151	1.378276	1.378402	1.378528	1.378654	1.378779	1.378905	1.379031
0.530	1.379157	1.379282	1.379408	1.379534	1.379660	1.379786	1.379911	1.380037	1.380163	1.380289
0.540	1.380415	1.380540	1.380666	1.380792	1.380918	1.381044	1.381170	1.381296	1.381421	1.381547
0.550	1.381673	1.381799	1.381925	1.382051	1.382177	1.382303	1.382429	1.382555	1.382681	1.382807
0.560	1.382933	1.383059	1.383184	1.383310	1.383436	1.383562	1.383688	1.383814	1.383940	1.384066
0.570	1.384192	1.384318	1.384445	1.384571	1.384697	1.384823	1.384949	1.385075	1.385201	1.385327
0.580	1.385453	1.385579	1.385705	1.385831	1.385957	1.386083	1.386210	1.386336	1.386462	1.386588
0.590	1.386714	1.386840	1.386966	1.387093	1.387219	1.387345	1.387471	1.387597	1.387724	1.387850
0.600	1.387976	1.388102	1.388228	1.388355	1.388481	1.388607	1.388733	1.388860	1.388986	1.389112
0.610	1.389238	1.389365	1.389491	1.389617	1.389743	1.389870	1.389996	1.390122	1.390249	1.390375
0.620	1.390501	1.390628	1.390754	1.390880	1.391007	1.391133	1.391259	1.391386	1.391512	1.391639
0.630	1.391765	1.391891	1.392018	1.392144	1.392271	1.392397	1.392523	1.392650	1.392776	1.392903
0.640	1.393029	1.393156	1.393282	1.393409	1.393535	1.393662	1.393788	1.393915	1.394041	1.394168
0.650	1.394294	1.394421	1.394547	1.394674	1.394800	1.394927	1.395053	1.395180	1.395306	1.395433
0.660	1.395560	1.395686	1.395813	1.395939	1.396066	1.396193	1.396319	1.396446	1.396572	1.396699
0.670	1.396826	1.396952	1.397079	1.397206	1.397332	1.397459	1.397586	1.397712	1.397839	1.397966
0.680	1.398092	1.398219	1.398346	1.398473	1.398599	1.398726	1.398853	1.398979	1.399106	1.399233
0.690	1.399360	1.399487	1.399613	1.399740	1.399867	1.399994	1.400120	1.400247	1.400374	1.400501
0.700	1.400628	1.400755	1.400881	1.401008	1.401135	1.401262	1.401389	1.401516	1.401643	1.401769
0.710	1.401896	1.402023	1.402150	1.402277	1.402404	1.402531	1.402658	1.402785	1.402912	1.403039
0.720	1.403166	1.403293	1.403419	1.403546	1.403673	1.403800	1.403927	1.404054	1.404181	1.404308
0.730	1.404435	1.404562	1.404689	1.404816	1.404944	1.405071	1.405198	1.405325	1.405452	1.405579
0.740	1.405706	1.405833	1.405960	1.406087	1.406214	1.406341	1.406468	1.406596	1.406723	1.406850
0.750	1.406977	1.407104	1.407231	1.407358	1.407486	1.407613	1.407740	1.407867	1.407994	1.408121
0.760	1.408249	1.408376	1.408503	1.408630	1.408758	1.408885	1.409012	1.409139	1.409267	1.409394
0.770	1.409521	1.409648	1.409776	1.409903	1.410030	1.410157	1.410285	1.410412	1.410539	1.410667
0.780	1.410794	1.410921	1.411049	1.411176	1.411303	1.411431	1.411558	1.411685	1.411813	1.411940
0.790	1.412068	1.412195	1.412322	1.412450	1.412577	1.412705	1.412832	1.412959	1.413087	1.413214
0.800	1.413342	1.413469	1.413597	1.413724	1.413852	1.413979	1.414107	1.414234	1.414362	1.414489
0.810	1.414617	1.414744	1.414872	1.414999	1.415127	1.415254	1.415382	1.415509	1.415637	1.415764
0.820	1.415992	1.416120	1.416247	1.416375	1.416502	1.416630	1.416758	1.416885	1.417013	1.417140
0.830	1.417168	1.417296	1.417423	1.417551	1.417679	1.417806	1.417934	1.418062	1.418189	1.418317
0.840	1.418445	1.418573	1.418700	1.418828	1.418956	1.419083	1.419211	1.419339	1.419467	1.419594
0.850	1.419722	1.419850	1.419978	1.420105	1.420233	1.420361	1.420489	1.420617	1.420744	1.420872
0.860	1.421000	1.421128	1.421256	1.421384	1.421511	1.421639	1.421767	1.421895	1.422023	1.422151
0.870	1.422279	1.422407	1.422534	1.422662	1.422790	1.422918	1.423046	1.423174	1.423302	1.423430
0.880	1.423558	1.423686	1.423814	1.423942	1.424070	1.424198	1.424326	1.424454	1.424582	1.424710
0.890	1.424838	1.424966	1.425094	1.425222	1.425350	1.425478	1.425606	1.425734	1.425862	1.425990
0.900	1.426118	1.426246	1.426374	1.426502	1.426630	1.426758	1.426887	1.427015	1.427143	1.427271
0.910	1.427399	1.427527	1.427655	1.427784	1.427912	1.428040	1.428168	1.428296	1.428424	1.428553
0.920	1.428681	1.428809	1.428937	1.429065	1.429194	1.429322	1.429450	1.429578	1.429707	1.429835
0.930	1.429963	1.430091	1.430220	1.430348	1.430476	1.430604	1.430733	1.430861	1.430989	1.431118
0.940	1.431246	1.431374	1.431503	1.431631	1.431759	1.431888	1.432016	1.432144	1.432273	1.432401
0.950	1.432530	1.432658	1.432786	1.432915	1.433043	1.433172	1.433300	1.433428	1.433557	1.433685
0.960	1.433814	1.433942	1.434071	1.434199	1.434328	1.434456	1.434585	1.434713	1.434842	1.434970
0.970	1.435099	1.435227	1.435356	1.435484	1.435613	1.435741	1.435870	1.435998	1.436127	1.436255
0.980	1.436384	1.436513	1.436641	1.436770	1.436898	1.437027	1.437156	1.437284	1.437413	1.437541
0.990	1.437670	1.437799	1.437927	1.438056	1.438185	1.438313	1.438442	1.438571	1.438699	1.438828

ATTENUATION IN DECIBELS
THETA FROM 23.000 TO 23.499 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.000	1.438957	1.439085	1.439214	1.439343	1.439472	1.439600	1.439729	1.439858	1.439986	1.440115
0.010	1.440244	1.440373	1.440502	1.440630	1.440759	1.440888	1.441017	1.441145	1.441274	1.441403
0.020	1.441532	1.441661	1.441790	1.441918	1.442047	1.442176	1.442305	1.442434	1.442563	1.442692
0.030	1.442820	1.442949	1.443078	1.443207	1.443336	1.443465	1.443594	1.443723	1.443852	1.443981
0.040	1.444110	1.444239	1.444368	1.444496	1.444625	1.444754	1.444883	1.445012	1.445141	1.445270
0.050	1.445399	1.445528	1.445657	1.445786	1.445915	1.446045	1.446174	1.446303	1.446432	1.446561
0.060	1.446690	1.446819	1.446948	1.447077	1.447206	1.447335	1.447464	1.447594	1.447723	1.447852
0.070	1.447981	1.448110	1.448239	1.448368	1.448497	1.448627	1.448756	1.448885	1.449014	1.449143
0.080	1.449273	1.449402	1.449531	1.449660	1.449789	1.449919	1.450048	1.450177	1.450306	1.450435
0.090	1.450565	1.450694	1.450823	1.450953	1.451082	1.451211	1.451341	1.451470	1.451599	1.451728
0.100	1.451858	1.451987	1.452116	1.452246	1.452375	1.452504	1.452634	1.452763	1.452893	1.453022
0.110	1.453151	1.453281	1.453410	1.453540	1.453669	1.453798	1.453928	1.454057	1.454187	1.454316
0.120	1.454645	1.454775	1.454904	1.455034	1.455163	1.455293	1.455422	1.455552	1.455681	1.455811
0.130	1.455740	1.455870	1.456000	1.456129	1.456259	1.456388	1.456517	1.456647	1.456776	1.456906
0.140	1.457036	1.457165	1.457295	1.457424	1.457554	1.457684	1.457813	1.457943	1.458073	1.458202
0.150	1.458332	1.458461	1.458591	1.458721	1.458850	1.458980	1.459110	1.459239	1.459369	1.459499
0.160	1.459628	1.459758	1.459888	1.460018	1.460147	1.460277	1.460407	1.460536	1.460666	1.460796
0.170	1.460926	1.461056	1.461185	1.461315	1.461445	1.461575	1.461704	1.461834	1.461964	1.462094
0.180	1.462224	1.462354	1.462483	1.462613	1.462743	1.462873	1.463003	1.463133	1.463262	1.463392
0.190	1.463522	1.463652	1.463782	1.463912	1.464042	1.464172	1.464302	1.464432	1.464562	1.464691
0.200	1.464821	1.464951	1.465081	1.465211	1.465341	1.465471	1.465601	1.465731	1.465861	1.465991
0.210	1.466121	1.466251	1.466381	1.466511	1.466641	1.466771	1.466901	1.467031	1.467162	1.467292
0.220	1.467422	1.467552	1.467682	1.467812	1.467942	1.468072	1.468202	1.468332	1.468462	1.468593
0.230	1.468723	1.468853	1.468983	1.469113	1.469243	1.469373	1.469504	1.469634	1.469764	1.469894
0.240	1.470024	1.470155	1.470285	1.470415	1.470545	1.470675	1.470806	1.470936	1.471066	1.471196
0.250	1.471327	1.471457	1.471587	1.471718	1.471848	1.471978	1.472108	1.472239	1.472369	1.472499
0.260	1.472630	1.472760	1.472890	1.473021	1.473151	1.473281	1.473412	1.473542	1.473672	1.473803
0.270	1.473933	1.474064	1.474194	1.474324	1.474455	1.474585	1.474716	1.474846	1.474977	1.475107
0.280	1.475237	1.475368	1.475498	1.475629	1.475759	1.475890	1.476020	1.476151	1.476281	1.476412
0.290	1.476542	1.476673	1.476803	1.476934	1.477064	1.477195	1.477325	1.477456	1.477587	1.477717
0.300	1.477848	1.477978	1.478109	1.478239	1.478370	1.478501	1.478631	1.478762	1.478893	1.479023
0.310	1.479154	1.479284	1.479415	1.479546	1.479676	1.479807	1.479938	1.480068	1.480199	1.480330
0.320	1.480460	1.480591	1.480722	1.480853	1.480983	1.481114	1.481245	1.481376	1.481506	1.481637
0.330	1.481768	1.481899	1.482029	1.482160	1.482291	1.482422	1.482553	1.482683	1.482814	1.482945
0.340	1.483076	1.483207	1.483337	1.483468	1.483599	1.483730	1.483861	1.483992	1.484123	1.484253
0.350	1.484364	1.484495	1.484626	1.484757	1.484888	1.485019	1.485150	1.485281	1.485412	1.485543
0.360	1.485694	1.485825	1.485955	1.486086	1.486217	1.486348	1.486479	1.486610	1.486741	1.486872
0.370	1.487003	1.487134	1.487265	1.487396	1.487528	1.487659	1.487790	1.487921	1.488052	1.488183
0.380	1.488314	1.488445	1.488576	1.488707	1.488838	1.488969	1.489100	1.489232	1.489363	1.489494
0.390	1.489625	1.489756	1.489887	1.490018	1.490150	1.490281	1.490412	1.490543	1.490674	1.490806
0.400	1.490937	1.491068	1.491199	1.491330	1.491462	1.491593	1.491724	1.491855	1.491987	1.492118
0.410	1.492249	1.492380	1.492512	1.492643	1.492774	1.492905	1.493037	1.493168	1.493299	1.493431
0.420	1.493562	1.493693	1.493825	1.493956	1.494087	1.494219	1.494350	1.494482	1.494613	1.494744
0.430	1.494876	1.495007	1.495138	1.495270	1.495401	1.495533	1.495664	1.495796	1.495927	1.496058
0.440	1.496190	1.496321	1.496453	1.496584	1.496716	1.496847	1.496979	1.497110	1.497242	1.497373
0.450	1.497505	1.497636	1.497768	1.497899	1.498031	1.498162	1.498294	1.498426	1.498557	1.498689
0.460	1.498820	1.498952	1.499083	1.499215	1.499347	1.499478	1.499610	1.499741	1.499873	1.500005
0.470	1.500136	1.500268	1.500400	1.500531	1.500663	1.500795	1.500926	1.501058	1.501190	1.501321
0.480	1.501453	1.501585	1.501717	1.501848	1.501980	1.502112	1.502244	1.502375	1.502507	1.502639
0.490	1.502771	1.502902	1.503034	1.503166	1.503298	1.503429	1.503561	1.503693	1.503825	1.503957

ATTENUATION IN DECIBELS
THETA FROM 23.500 TO 23.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	1.504089	1.504220	1.504352	1.504484	1.504616	1.504748	1.504880	1.505012	1.505143	1.505275
0.510	1.505407	1.505539	1.505671	1.505803	1.505935	1.506067	1.506199	1.506331	1.506463	1.506595
0.520	1.506726	1.506858	1.506990	1.507122	1.507254	1.507386	1.507518	1.507650	1.507782	1.507914
0.530	1.508046	1.508178	1.508310	1.508442	1.508574	1.508706	1.508838	1.508971	1.509103	1.509235
0.540	1.509367	1.509499	1.509631	1.509763	1.509895	1.510027	1.510160	1.510292	1.510424	1.510556
0.550	1.510688	1.510820	1.510952	1.511085	1.511217	1.511349	1.511481	1.511613	1.511745	1.511878
0.560	1.512010	1.512142	1.512274	1.512406	1.512539	1.512671	1.512803	1.512935	1.513068	1.513200
0.570	1.513332	1.513465	1.513597	1.513729	1.513861	1.513994	1.514126	1.514258	1.514391	1.514523
0.580	1.514655	1.514788	1.514920	1.515052	1.515185	1.515317	1.515449	1.515582	1.515714	1.515847
0.590	1.515979	1.516111	1.516244	1.516376	1.516509	1.516641	1.516774	1.516906	1.517038	1.517171
0.600	1.517303	1.517436	1.517568	1.517701	1.517833	1.517966	1.518098	1.518231	1.518363	1.518496
0.610	1.518628	1.518761	1.518893	1.519026	1.519158	1.519291	1.519424	1.519556	1.519689	1.519821
0.620	1.519954	1.520086	1.520219	1.520352	1.520484	1.520617	1.520749	1.520882	1.521015	1.521147
0.630	1.521280	1.521413	1.521545	1.521678	1.521811	1.521943	1.522076	1.522209	1.522341	1.522474
0.640	1.522607	1.522740	1.522872	1.523005	1.523138	1.523271	1.523403	1.523536	1.523669	1.523802
0.650	1.523934	1.524067	1.524200	1.524333	1.524465	1.524598	1.524731	1.524864	1.524997	1.525130
0.660	1.525262	1.525395	1.525528	1.525661	1.525794	1.525927	1.526060	1.526192	1.526325	1.526458
0.670	1.526591	1.526724	1.526857	1.526990	1.527123	1.527256	1.527389	1.527522	1.527655	1.527788
0.680	1.527920	1.528053	1.528186	1.528319	1.528452	1.528585	1.528718	1.528851	1.528984	1.529117
0.690	1.529250	1.529383	1.529517	1.529650	1.529783	1.529916	1.530049	1.530182	1.530315	1.530448
0.700	1.530581	1.530714	1.530847	1.530980	1.531114	1.531247	1.531380	1.531513	1.531646	1.531779
0.710	1.531912	1.532045	1.532179	1.532312	1.532445	1.532578	1.532711	1.532845	1.532978	1.533111
0.720	1.533244	1.533377	1.533511	1.533644	1.533777	1.533910	1.534044	1.534177	1.534310	1.534443
0.730	1.534577	1.534710	1.534843	1.534977	1.535110	1.535243	1.535377	1.535510	1.535643	1.535777
0.740	1.535910	1.536043	1.536177	1.536310	1.536443	1.536577	1.536710	1.536843	1.536977	1.537110
0.750	1.537244	1.537377	1.537510	1.537644	1.537777	1.537911	1.538044	1.538178	1.538311	1.538445
0.760	1.538578	1.538712	1.538845	1.538978	1.539112	1.539245	1.539379	1.539513	1.539646	1.539780
0.770	1.539913	1.540047	1.540180	1.540314	1.540447	1.540581	1.540714	1.540848	1.540982	1.541115
0.780	1.541249	1.541382	1.541516	1.541650	1.541783	1.541917	1.542050	1.542184	1.542318	1.542451
0.790	1.542585	1.542719	1.542852	1.542986	1.543120	1.543253	1.543387	1.543521	1.543655	1.543788
0.800	1.543922	1.544056	1.544189	1.544323	1.544457	1.544591	1.544724	1.544858	1.544992	1.545126
0.810	1.545260	1.545393	1.545527	1.545661	1.545795	1.545929	1.546062	1.546196	1.546330	1.546464
0.820	1.546598	1.546732	1.546865	1.546999	1.547133	1.547267	1.547401	1.547535	1.547669	1.547803
0.830	1.547937	1.548070	1.548204	1.548338	1.548472	1.548606	1.548740	1.548874	1.549008	1.549142
0.840	1.549276	1.549410	1.549544	1.549678	1.549812	1.549946	1.550080	1.550214	1.550348	1.550482
0.850	1.550616	1.550750	1.550884	1.551018	1.551152	1.551286	1.551420	1.551555	1.551689	1.551823
0.860	1.551957	1.552091	1.552225	1.552359	1.552493	1.552627	1.552762	1.552896	1.553030	1.553164
0.870	1.553298	1.553432	1.553567	1.553701	1.553835	1.553969	1.554103	1.554238	1.554372	1.554506
0.880	1.554640	1.554774	1.554909	1.555043	1.555177	1.555311	1.555446	1.555580	1.555714	1.555849
0.890	1.555983	1.556117	1.556251	1.556386	1.556520	1.556654	1.556789	1.556923	1.557057	1.557192
0.900	1.557326	1.557460	1.557595	1.557729	1.557864	1.557998	1.558132	1.558267	1.558401	1.558536
0.910	1.558670	1.558804	1.558939	1.559073	1.559208	1.559342	1.559477	1.559611	1.559746	1.559880
0.920	1.560014	1.560149	1.560283	1.560418	1.560552	1.560687	1.560822	1.560956	1.561091	1.561225
0.930	1.561360	1.561494	1.561629	1.561763	1.561898	1.562032	1.562167	1.562302	1.562436	1.562571
0.940	1.562705	1.562840	1.562975	1.563109	1.563244	1.563379	1.563513	1.563648	1.563783	1.563917
0.950	1.564052	1.564187	1.564321	1.564456	1.564591	1.564725	1.564860	1.564995	1.565129	1.565264
0.960	1.565399	1.565534	1.565668	1.565803	1.565938	1.566073	1.566207	1.566342	1.566477	1.566612
0.970	1.566747	1.566881	1.567016	1.567151	1.567286	1.567421	1.567556	1.567690	1.567825	1.567960
0.980	1.568095	1.568230	1.568365	1.568500	1.568634	1.568769	1.568904	1.569039	1.569174	1.569309
0.990	1.569444	1.569579	1.569714	1.569849	1.569984	1.570119	1.570254	1.570389	1.570524	1.570659

ATTENUATION IN DECIBELS
THETA FROM 24.000 TO 24.499 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.000	1.570793	1.570928	1.571063	1.571198	1.571334	1.571469	1.571604	1.571739	1.571874	1.572009
0.010	1.572144	1.572279	1.572414	1.572549	1.572684	1.572819	1.572954	1.573089	1.573224	1.573359
0.020	1.573495	1.573630	1.573765	1.573900	1.574035	1.574170	1.574305	1.574441	1.574576	1.574711
0.030	1.574846	1.574981	1.575116	1.575252	1.575387	1.575522	1.575657	1.575792	1.575928	1.576063
0.040	1.576198	1.576333	1.576469	1.576604	1.576739	1.576875	1.577010	1.577145	1.577280	1.577416
0.050	1.577551	1.577686	1.577822	1.577957	1.578092	1.578228	1.578363	1.578498	1.578634	1.578769
0.060	1.578904	1.579040	1.579175	1.579311	1.579446	1.579581	1.579717	1.579852	1.579988	1.580123
0.070	1.580258	1.580394	1.580529	1.580665	1.580800	1.580936	1.581071	1.581207	1.581342	1.581478
0.080	1.581613	1.581749	1.581884	1.582020	1.582155	1.582291	1.582426	1.582562	1.582697	1.582833
0.090	1.582968	1.583104	1.583240	1.583375	1.583511	1.583646	1.583782	1.583917	1.584053	1.584189
0.100	1.584324	1.584460	1.584596	1.584731	1.584867	1.585003	1.585138	1.585274	1.585410	1.585545
0.110	1.585681	1.585817	1.585952	1.586088	1.586224	1.586359	1.586495	1.586631	1.586767	1.586902
0.120	1.587038	1.587174	1.587310	1.587445	1.587581	1.587717	1.587853	1.587989	1.588124	1.588260
0.130	1.588396	1.588532	1.588668	1.588803	1.588939	1.589075	1.589211	1.589347	1.589483	1.589619
0.140	1.589754	1.589890	1.590026	1.590162	1.590298	1.590434	1.590570	1.590706	1.590842	1.590978
0.150	1.591114	1.591249	1.591385	1.591521	1.591657	1.591793	1.591929	1.592065	1.592201	1.592337
0.160	1.592473	1.592609	1.592745	1.592881	1.593017	1.593153	1.593289	1.593425	1.593562	1.593698
0.170	1.593834	1.593970	1.594106	1.594242	1.594378	1.594514	1.594650	1.594786	1.594922	1.595059
0.180	1.595195	1.595331	1.595467	1.595603	1.595739	1.595875	1.596012	1.596148	1.596284	1.596420
0.190	1.596556	1.596693	1.596829	1.596965	1.597101	1.597237	1.597374	1.597510	1.597646	1.597782
0.200	1.597919	1.598055	1.598191	1.598327	1.598464	1.598600	1.598736	1.598873	1.599009	1.599145
0.210	1.599282	1.599418	1.599554	1.599691	1.599827	1.599963	1.600100	1.600236	1.600372	1.600509
0.220	1.600645	1.600782	1.600918	1.601054	1.601191	1.601327	1.601464	1.601600	1.601736	1.601873
0.230	1.602009	1.602146	1.602282	1.602419	1.602555	1.602692	1.602828	1.602965	1.603101	1.603238
0.240	1.603374	1.603511	1.603647	1.603784	1.603920	1.604057	1.604193	1.604330	1.604466	1.604603
0.250	1.604740	1.604876	1.605013	1.605149	1.605286	1.605423	1.605559	1.605696	1.605832	1.605969
0.260	1.606106	1.606242	1.606379	1.606516	1.606652	1.606789	1.606926	1.607062	1.607199	1.607336
0.270	1.607473	1.607609	1.607746	1.607883	1.608019	1.608156	1.608293	1.608430	1.608566	1.608703
0.280	1.608840	1.608977	1.609113	1.609250	1.609387	1.609524	1.609661	1.609797	1.609934	1.610071
0.290	1.610208	1.610345	1.610482	1.610618	1.610755	1.610892	1.611029	1.611166	1.611303	1.611440
0.300	1.611577	1.611713	1.611850	1.611987	1.612124	1.612261	1.612398	1.612535	1.612672	1.612809
0.310	1.612946	1.613083	1.613220	1.613357	1.613494	1.613631	1.613768	1.613905	1.614042	1.614179
0.320	1.614316	1.614453	1.614590	1.614727	1.614864	1.615001	1.615138	1.615275	1.615412	1.615549
0.330	1.615686	1.615823	1.615961	1.616098	1.616235	1.616372	1.616509	1.616646	1.616783	1.616920
0.340	1.617058	1.617195	1.617332	1.617469	1.617606	1.617743	1.617881	1.618018	1.618155	1.618292
0.350	1.618429	1.618567	1.618704	1.618841	1.618978	1.619116	1.619253	1.619390	1.619527	1.619665
0.360	1.619802	1.619939	1.620076	1.620214	1.620351	1.620488	1.620626	1.620763	1.620900	1.621038
0.370	1.621175	1.621312	1.621450	1.621587	1.621724	1.621862	1.621999	1.622137	1.622274	1.622411
0.380	1.622549	1.622686	1.622824	1.622961	1.623098	1.623236	1.623373	1.623511	1.623648	1.623786
0.390	1.623923	1.624061	1.624198	1.624336	1.624473	1.624611	1.624748	1.624886	1.625023	1.625161
0.400	1.625298	1.625436	1.625573	1.625711	1.625848	1.625986	1.626124	1.626261	1.626399	1.626536
0.410	1.626674	1.626811	1.626949	1.627087	1.627224	1.627362	1.627500	1.627637	1.627775	1.627913
0.420	1.628050	1.628188	1.628326	1.628463	1.628601	1.628739	1.628876	1.629014	1.629152	1.629289
0.430	1.629427	1.629565	1.629703	1.629840	1.629978	1.630116	1.630254	1.630391	1.630529	1.630667
0.440	1.630805	1.630943	1.631080	1.631218	1.631356	1.631494	1.631632	1.631769	1.631907	1.632045
0.450	1.632183	1.632321	1.632459	1.632597	1.632734	1.632872	1.633010	1.633148	1.633286	1.633424
0.460	1.633562	1.633700	1.633838	1.633976	1.634114	1.634251	1.634389	1.634527	1.634665	1.634803
0.470	1.634941	1.635079	1.635217	1.635355	1.635493	1.635631	1.635769	1.635907	1.636045	1.636183
0.480	1.636321	1.636459	1.636598	1.636736	1.636874	1.637012	1.637150	1.637288	1.637426	1.637564
0.490	1.637702	1.637840	1.637978	1.638117	1.638255	1.638393	1.638531	1.638669	1.638807	1.638945

ATTENUATION IN DECIBELS
THETA FROM 24.500 TO 24.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	1.639084	1.639222	1.639360	1.639498	1.639636	1.639775	1.639913	1.640051	1.640189	1.640327
0.510	1.640466	1.640604	1.640742	1.640880	1.641019	1.641157	1.641295	1.641434	1.641572	1.641710
0.520	1.641848	1.641987	1.642125	1.642263	1.642402	1.642540	1.642678	1.642817	1.642955	1.643093
0.530	1.643232	1.643370	1.643508	1.643647	1.643785	1.643924	1.644062	1.644200	1.644339	1.644477
0.540	1.644616	1.644754	1.644893	1.645031	1.645169	1.645308	1.645446	1.645585	1.645723	1.645862
0.550	1.646000	1.646139	1.646277	1.646416	1.646554	1.646693	1.646831	1.646970	1.647108	1.647247
0.560	1.647386	1.647524	1.647663	1.647801	1.647940	1.648078	1.648217	1.648356	1.648494	1.648633
0.570	1.648771	1.648909	1.649049	1.649187	1.649326	1.649465	1.649603	1.649742	1.649881	1.650019
0.580	1.650158	1.650297	1.650435	1.650574	1.650713	1.650852	1.650990	1.651129	1.651268	1.651406
0.590	1.651545	1.651684	1.651823	1.651961	1.652100	1.652239	1.652378	1.652517	1.652655	1.652794
0.600	1.652933	1.653072	1.653211	1.653349	1.653488	1.653627	1.653766	1.653905	1.654044	1.654183
0.610	1.654321	1.654460	1.654599	1.654738	1.654877	1.655016	1.655155	1.655294	1.655433	1.655572
0.620	1.655711	1.655849	1.655988	1.656127	1.656266	1.656405	1.656544	1.656683	1.656822	1.656961
0.630	1.657100	1.657239	1.657378	1.657517	1.657656	1.657795	1.657934	1.658073	1.658213	1.658352
0.640	1.658491	1.658630	1.658769	1.658908	1.659047	1.659186	1.659325	1.659464	1.659603	1.659743
0.650	1.659882	1.660021	1.660160	1.660299	1.660438	1.660577	1.660717	1.660856	1.660995	1.661134
0.660	1.661273	1.661413	1.661552	1.661691	1.661830	1.661969	1.662109	1.662248	1.662387	1.662526
0.670	1.662666	1.662805	1.662944	1.663083	1.663223	1.663362	1.663501	1.663641	1.663780	1.663919
0.680	1.664059	1.664198	1.664337	1.664477	1.664616	1.664755	1.664895	1.665034	1.665173	1.665313
0.690	1.665452	1.665592	1.665731	1.665870	1.666010	1.666149	1.666289	1.666428	1.666567	1.666707
0.700	1.666846	1.666986	1.667125	1.667265	1.667404	1.667544	1.667683	1.667823	1.667962	1.668102
0.710	1.668241	1.668381	1.668520	1.668660	1.668799	1.668939	1.669078	1.669218	1.669358	1.669497
0.720	1.669637	1.669776	1.669916	1.670055	1.670195	1.670335	1.670474	1.670614	1.670754	1.670893
0.730	1.671033	1.671173	1.671312	1.671452	1.671592	1.671731	1.671871	1.672011	1.672150	1.672290
0.740	1.672430	1.672569	1.672709	1.672849	1.672989	1.673128	1.673268	1.673408	1.673548	1.673687
0.750	1.673827	1.673967	1.674107	1.674246	1.674386	1.674526	1.674666	1.674806	1.674945	1.675085
0.760	1.675225	1.675365	1.675505	1.675645	1.675785	1.675924	1.676064	1.676204	1.676344	1.676484
0.770	1.676624	1.676764	1.676904	1.677044	1.677184	1.677323	1.677463	1.677603	1.677743	1.677883
0.780	1.678023	1.678163	1.678303	1.678443	1.678583	1.678723	1.678863	1.679003	1.679143	1.679283
0.790	1.679423	1.679563	1.679703	1.679843	1.679983	1.680123	1.680264	1.680404	1.680544	1.680684
0.800	1.680824	1.680964	1.681104	1.681244	1.681384	1.681524	1.681665	1.681805	1.681945	1.682085
0.810	1.682225	1.682365	1.682505	1.682646	1.682786	1.682926	1.683066	1.683206	1.683347	1.683487
0.820	1.683627	1.683767	1.683907	1.684048	1.684188	1.684328	1.684468	1.684609	1.684749	1.684889
0.830	1.685030	1.685170	1.685310	1.685450	1.685591	1.685731	1.685871	1.686012	1.686152	1.686292
0.840	1.686433	1.686573	1.686714	1.686854	1.686994	1.687135	1.687275	1.687415	1.687556	1.687696
0.850	1.687837	1.687977	1.688117	1.688258	1.688393	1.688539	1.688679	1.688820	1.688960	1.689101
0.860	1.689241	1.689382	1.689522	1.689663	1.689803	1.689944	1.690084	1.690225	1.690365	1.690506
0.870	1.690646	1.690787	1.690927	1.691068	1.691208	1.691349	1.691490	1.691630	1.691771	1.691911
0.880	1.692052	1.692193	1.692333	1.692474	1.692615	1.692755	1.692896	1.693036	1.693177	1.693318
0.890	1.693458	1.693599	1.693740	1.693881	1.694021	1.694162	1.694303	1.694444	1.694584	1.694725
0.900	1.694866	1.695006	1.695147	1.695288	1.695429	1.695569	1.695710	1.695851	1.695992	1.696132
0.910	1.696273	1.696414	1.696555	1.696696	1.696836	1.696977	1.697118	1.697259	1.697400	1.697541
0.920	1.697682	1.697822	1.697963	1.698104	1.698245	1.698386	1.698527	1.698668	1.698809	1.698950
0.930	1.699091	1.699232	1.699372	1.699513	1.699654	1.699795	1.699936	1.700077	1.700218	1.700359
0.940	1.700500	1.700641	1.700782	1.700923	1.701064	1.701205	1.701346	1.701487	1.701628	1.701769
0.950	1.701910	1.702052	1.702193	1.702334	1.702475	1.702616	1.702757	1.702898	1.703039	1.703180
0.960	1.703321	1.703463	1.703604	1.703745	1.703886	1.704027	1.704168	1.704309	1.704451	1.704592
0.970	1.704733	1.704874	1.705015	1.705157	1.705298	1.705439	1.705580	1.705721	1.705863	1.706004
0.980	1.706145	1.706286	1.706428	1.706569	1.706710	1.706852	1.706993	1.707134	1.707275	1.707417
0.990	1.707558	1.707699	1.707841	1.707982	1.708123	1.708265	1.708406	1.708547	1.708689	1.708830

ATTENUATION IN DECIBELS
THETA FROM 25.000 TO 25.499 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.000	1.708972	1.709113	1.709254	1.709396	1.709537	1.709679	1.709820	1.709961	1.710103	1.710244
0.010	1.710386	1.710527	1.710669	1.710810	1.710952	1.711093	1.711234	1.711376	1.711517	1.711659
0.020	1.711800	1.711942	1.712084	1.712225	1.712367	1.712508	1.712650	1.712791	1.712933	1.713074
0.030	1.713216	1.713357	1.713499	1.713641	1.713782	1.713924	1.714065	1.714207	1.714349	1.714490
0.040	1.714632	1.714774	1.714915	1.715057	1.715199	1.715340	1.715482	1.715624	1.715765	1.715907
0.050	1.716049	1.716190	1.716332	1.716474	1.716616	1.716757	1.716899	1.717041	1.717183	1.717324
0.060	1.717466	1.717608	1.717750	1.717891	1.718033	1.718175	1.718317	1.718459	1.718600	1.718742
0.070	1.718884	1.719026	1.719168	1.719310	1.719451	1.719593	1.719735	1.719877	1.720019	1.720161
0.080	1.720303	1.720445	1.720587	1.720728	1.720870	1.721012	1.721154	1.721296	1.721438	1.721580
0.090	1.721722	1.721864	1.722006	1.722148	1.722290	1.722432	1.722574	1.722716	1.722858	1.723000
0.100	1.723142	1.723284	1.723426	1.723568	1.723710	1.723852	1.723994	1.724136	1.724278	1.724420
0.110	1.724563	1.724705	1.724847	1.724989	1.725131	1.725273	1.725415	1.725557	1.725699	1.725842
0.120	1.725984	1.726126	1.726268	1.726410	1.726552	1.726695	1.726837	1.726979	1.727121	1.727263
0.130	1.727406	1.727548	1.727690	1.727832	1.727975	1.728117	1.728259	1.728401	1.728544	1.728686
0.140	1.728828	1.728970	1.729113	1.729255	1.729397	1.729540	1.729682	1.729824	1.729967	1.730109
0.150	1.730251	1.730394	1.730536	1.730678	1.730821	1.730963	1.731106	1.731248	1.731390	1.731533
0.160	1.731675	1.731818	1.731960	1.732102	1.732245	1.732387	1.732530	1.732672	1.732815	1.732957
0.170	1.733100	1.733242	1.733385	1.733527	1.733670	1.733812	1.733955	1.734097	1.734240	1.734382
0.180	1.734525	1.734667	1.734810	1.734952	1.735095	1.735238	1.735380	1.735523	1.735665	1.735808
0.190	1.735951	1.736093	1.736236	1.736378	1.736521	1.736664	1.736806	1.736949	1.737092	1.737234
0.200	1.737377	1.737520	1.737662	1.737805	1.737948	1.738090	1.738233	1.738376	1.738519	1.738661
0.210	1.738804	1.738947	1.739089	1.739232	1.739375	1.739518	1.739661	1.739803	1.739946	1.740089
0.220	1.740232	1.740374	1.740517	1.740660	1.740803	1.740946	1.741089	1.741231	1.741374	1.741517
0.230	1.741660	1.741803	1.741946	1.742089	1.742232	1.742374	1.742517	1.742660	1.742803	1.742946
0.240	1.743089	1.743232	1.743375	1.743518	1.743661	1.743804	1.743947	1.744090	1.744233	1.744376
0.250	1.744519	1.744662	1.744805	1.744948	1.745091	1.745234	1.745377	1.745520	1.745663	1.745806
0.260	1.745949	1.746092	1.746235	1.746378	1.746521	1.746664	1.746807	1.746951	1.747094	1.747237
0.270	1.747380	1.747523	1.747666	1.747809	1.747952	1.748096	1.748239	1.748382	1.748525	1.748668
0.280	1.748811	1.748955	1.749098	1.749241	1.749384	1.749527	1.749671	1.749814	1.749957	1.750100
0.290	1.750244	1.750387	1.750530	1.750673	1.750817	1.750960	1.751103	1.751247	1.751390	1.751533
0.300	1.751677	1.751820	1.751963	1.752107	1.752250	1.752393	1.752537	1.752680	1.752823	1.752967
0.310	1.753110	1.753253	1.753397	1.753540	1.753684	1.753827	1.753970	1.754114	1.754257	1.754401
0.320	1.754544	1.754688	1.754831	1.754975	1.755118	1.755262	1.755405	1.755549	1.755692	1.755836
0.330	1.755979	1.756123	1.756266	1.756410	1.756553	1.756697	1.756840	1.756984	1.757127	1.757271
0.340	1.757414	1.757558	1.757702	1.757845	1.757989	1.758132	1.758276	1.758420	1.758563	1.758707
0.350	1.758851	1.758994	1.759138	1.759282	1.759425	1.759569	1.759713	1.759856	1.760000	1.760144
0.360	1.760287	1.760431	1.760575	1.760719	1.760862	1.761006	1.761150	1.761293	1.761437	1.761581
0.370	1.761725	1.761869	1.762012	1.762156	1.762300	1.762444	1.762588	1.762731	1.762875	1.763019
0.380	1.763163	1.763307	1.763451	1.763594	1.763738	1.763882	1.764026	1.764170	1.764314	1.764458
0.390	1.764602	1.764745	1.764889	1.765033	1.765177	1.765321	1.765465	1.765609	1.765753	1.765897
0.400	1.766041	1.766185	1.766329	1.766473	1.766617	1.766761	1.766905	1.767049	1.767193	1.767337
0.410	1.767481	1.767625	1.767769	1.767913	1.768057	1.768201	1.768345	1.768489	1.768633	1.768777
0.420	1.768922	1.769066	1.769210	1.769354	1.769498	1.769642	1.769786	1.769930	1.770075	1.770219
0.430	1.770363	1.770507	1.770651	1.770795	1.770939	1.771084	1.771228	1.771372	1.771516	1.771661
0.440	1.771805	1.771949	1.772093	1.772237	1.772382	1.772526	1.772670	1.772814	1.772959	1.773103
0.450	1.773247	1.773392	1.773536	1.773680	1.773825	1.773969	1.774113	1.774258	1.774402	1.774546
0.460	1.774691	1.774835	1.774979	1.775124	1.775268	1.775412	1.775557	1.775701	1.775846	1.775990
0.470	1.776134	1.776279	1.776423	1.776568	1.776712	1.776857	1.777001	1.777146	1.777290	1.777435
0.480	1.777579	1.777724	1.777868	1.778013	1.778157	1.778302	1.778446	1.778591	1.778735	1.778880
0.490	1.779024	1.779169	1.779313	1.779458	1.779602	1.779747	1.779892	1.780036	1.780181	1.780325

ATTENUATION IN DECIBELS
THETA FROM 25.500 TO 25.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	1.780470	1.780615	1.780759	1.780904	1.781049	1.781193	1.781338	1.781483	1.781627	1.781772
0.510	1.781917	1.782061	1.782206	1.782351	1.782495	1.782640	1.782785	1.782929	1.783074	1.783219
0.520	1.783364	1.783508	1.783653	1.783798	1.783943	1.784087	1.784232	1.784377	1.784522	1.784667
0.530	1.784811	1.784956	1.785101	1.785246	1.785391	1.785536	1.785680	1.785825	1.785970	1.786115
0.540	1.786260	1.786405	1.786550	1.786695	1.786839	1.786984	1.787129	1.787274	1.787419	1.787564
0.550	1.787709	1.787854	1.787999	1.788144	1.788289	1.788434	1.788579	1.788724	1.788869	1.789014
0.560	1.789159	1.789304	1.789449	1.789594	1.789739	1.789884	1.790029	1.790174	1.790319	1.790464
0.570	1.790609	1.790754	1.790899	1.791044	1.791189	1.791335	1.791480	1.791625	1.791770	1.791915
0.580	1.792060	1.792205	1.792350	1.792496	1.792641	1.792786	1.792931	1.793076	1.793221	1.793367
0.590	1.793512	1.793657	1.793802	1.793947	1.794093	1.794238	1.794383	1.794528	1.794674	1.794819
0.600	1.794964	1.795109	1.795255	1.795400	1.795545	1.795691	1.795836	1.795981	1.796127	1.796272
0.610	1.796417	1.796563	1.796708	1.796853	1.796999	1.797144	1.797289	1.797435	1.797580	1.797725
0.620	1.797871	1.798016	1.798162	1.798307	1.798452	1.798598	1.798743	1.798889	1.799034	1.799180
0.630	1.799325	1.799471	1.799616	1.799762	1.799907	1.800053	1.800198	1.800344	1.800489	1.800635
0.640	1.800780	1.800926	1.801071	1.801217	1.801362	1.801508	1.801653	1.801799	1.801944	1.802090
0.650	1.802236	1.802381	1.802527	1.802672	1.802818	1.802964	1.803109	1.803255	1.803401	1.803546
0.660	1.803692	1.803838	1.803983	1.804129	1.804275	1.804420	1.804566	1.804712	1.804857	1.805003
0.670	1.805149	1.805295	1.805440	1.805586	1.805732	1.805877	1.806023	1.806169	1.806315	1.806461
0.680	1.806606	1.806752	1.806898	1.807044	1.807190	1.807335	1.807481	1.807627	1.807773	1.807919
0.690	1.808065	1.808210	1.808356	1.808502	1.808648	1.808794	1.808940	1.809086	1.809232	1.809377
0.700	1.809523	1.809669	1.809815	1.809961	1.810107	1.810253	1.810399	1.810545	1.810691	1.810837
0.710	1.810983	1.811129	1.811275	1.811421	1.811567	1.811713	1.811859	1.812005	1.812151	1.812297
0.720	1.812443	1.812589	1.812735	1.812881	1.813027	1.813173	1.813319	1.813466	1.813612	1.813758
0.730	1.813904	1.814050	1.814196	1.814342	1.814488	1.814635	1.814781	1.814927	1.815073	1.815219
0.740	1.815365	1.815512	1.815658	1.815804	1.815950	1.816096	1.816243	1.816389	1.816535	1.816681
0.750	1.816827	1.816974	1.817120	1.817266	1.817412	1.817559	1.817705	1.817851	1.817998	1.818144
0.760	1.818270	1.818437	1.818583	1.818729	1.818875	1.819022	1.819168	1.819315	1.819461	1.819607
0.770	1.819754	1.819900	1.820046	1.820193	1.820339	1.820486	1.820632	1.820778	1.820925	1.821071
0.780	1.821218	1.821364	1.821511	1.821657	1.821803	1.821950	1.822096	1.822243	1.822389	1.822536
0.790	1.822682	1.822829	1.822975	1.823122	1.823268	1.823415	1.823562	1.823708	1.823855	1.824001
0.800	1.824148	1.824294	1.824441	1.824588	1.824734	1.824881	1.825027	1.825174	1.825321	1.825467
0.810	1.825614	1.825760	1.825907	1.826054	1.826200	1.826347	1.826494	1.826640	1.826787	1.826934
0.820	1.827080	1.827227	1.827374	1.827521	1.827667	1.827814	1.827961	1.828108	1.828254	1.828401
0.830	1.828548	1.828695	1.828841	1.828988	1.829135	1.829282	1.829429	1.829575	1.829722	1.829869
0.840	1.830016	1.830163	1.830309	1.830456	1.830603	1.830750	1.830897	1.831044	1.831191	1.831338
0.850	1.831484	1.831631	1.831778	1.831925	1.832072	1.832219	1.832366	1.832513	1.832660	1.832807
0.860	1.832954	1.833101	1.833248	1.833395	1.833542	1.833689	1.833836	1.833983	1.834130	1.834277
0.870	1.834424	1.834571	1.834718	1.834865	1.835012	1.835159	1.835306	1.835453	1.835600	1.835747
0.880	1.835894	1.836041	1.836188	1.836336	1.836483	1.836630	1.836777	1.836924	1.837071	1.837218
0.890	1.837366	1.837513	1.837660	1.837807	1.837954	1.838101	1.838249	1.838396	1.838543	1.838690
0.900	1.838837	1.838985	1.839132	1.839279	1.839426	1.839574	1.839721	1.839868	1.840015	1.840163
0.910	1.840310	1.840457	1.840605	1.840752	1.840899	1.841047	1.841194	1.841341	1.841489	1.841636
0.920	1.841783	1.841931	1.842078	1.842225	1.842373	1.842520	1.842667	1.842815	1.842962	1.843110
0.930	1.843257	1.843405	1.843552	1.843699	1.843847	1.843994	1.844142	1.844289	1.844437	1.844584
0.940	1.844732	1.844879	1.845027	1.845174	1.845322	1.845469	1.845617	1.845764	1.845912	1.846059
0.950	1.846287	1.846435	1.846582	1.846729	1.846877	1.846995	1.847092	1.847240	1.847387	1.847535
0.960	1.847683	1.847830	1.847978	1.848126	1.848273	1.848421	1.848568	1.848716	1.848864	1.849011
0.970	1.849159	1.849307	1.849454	1.849602	1.849750	1.849898	1.850045	1.850193	1.850341	1.850489
0.980	1.850636	1.850784	1.850932	1.851080	1.851227	1.851375	1.851523	1.851671	1.851818	1.851966
0.990	1.852114	1.852262	1.852410	1.852558	1.852705	1.852853	1.853001	1.853149	1.853297	1.853445

ATTENUATION IN DECIBELS
THETA FROM 26.000 TO 26.499 DEGREES

THETA IN
DEGREES

0.000	1.853593	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.010	1.855072	1.853740	1.853888	1.854036	1.854184	1.854332	1.854480	1.854628	1.854776	1.854924
0.020	1.856551	1.855220	1.855368	1.855515	1.855663	1.855811	1.855959	1.856107	1.856255	1.856403
0.030	1.858032	1.856699	1.856847	1.856995	1.857143	1.857292	1.857440	1.857588	1.857736	1.857884
0.040	1.859513	1.858180	1.858328	1.858476	1.858624	1.858772	1.858920	1.859068	1.859217	1.859365
0.050	1.860995	1.859661	1.859809	1.859957	1.860105	1.860254	1.860402	1.860550	1.860698	1.860846
0.060	1.862477	1.861143	1.861291	1.861439	1.861587	1.861736	1.861884	1.862032	1.862180	1.862329
0.070	1.863960	1.862625	1.862774	1.862922	1.863070	1.863218	1.863367	1.863515	1.863663	1.863812
0.080	1.865444	1.864108	1.864257	1.864405	1.864553	1.864702	1.864850	1.864999	1.865147	1.865295
0.090	1.866928	1.865592	1.865741	1.865889	1.866037	1.866186	1.866334	1.866483	1.866631	1.866780
0.100	1.868413	1.867077	1.867225	1.867374	1.867522	1.867670	1.867819	1.867968	1.868116	1.868265
0.110	1.869899	1.868562	1.868710	1.868859	1.869007	1.869156	1.869304	1.869453	1.869602	1.869750
0.120	1.871385	1.870047	1.870196	1.870345	1.870493	1.870642	1.870790	1.870939	1.871088	1.871236
0.130	1.872872	1.871534	1.871682	1.871831	1.871980	1.872128	1.872277	1.872426	1.872575	1.872723
0.140	1.874360	1.873021	1.873170	1.873318	1.873467	1.873616	1.873765	1.873913	1.874062	1.874211
0.150	1.875848	1.874508	1.874657	1.874806	1.874955	1.875104	1.875253	1.875401	1.875550	1.875699
0.160	1.877337	1.875997	1.876146	1.876295	1.876443	1.876592	1.876741	1.876890	1.877039	1.877188
0.170	1.878827	1.877486	1.877635	1.877784	1.877933	1.878082	1.878231	1.878380	1.878529	1.878678
0.180	1.880317	1.878976	1.879125	1.879274	1.879423	1.879572	1.879721	1.879870	1.880019	1.880168
0.190	1.881808	1.880466	1.880615	1.880764	1.880913	1.881062	1.881211	1.881360	1.881509	1.881659
0.200	1.883299	1.881957	1.882106	1.882255	1.882404	1.882553	1.882703	1.882852	1.883001	1.883150
0.210	1.884791	1.883448	1.883598	1.883747	1.883896	1.884045	1.884195	1.884344	1.884493	1.884642
0.220	1.886284	1.884941	1.885090	1.885239	1.885389	1.885538	1.885687	1.885836	1.885986	1.886135
0.230	1.887778	1.886434	1.886583	1.886732	1.886882	1.887031	1.887180	1.887330	1.887479	1.887629
0.240	1.889272	1.887927	1.888077	1.888226	1.888376	1.888525	1.888674	1.888824	1.888973	1.889123
0.250	1.890767	1.889422	1.889571	1.889721	1.889870	1.890019	1.890169	1.890318	1.890468	1.890617
0.260	1.892263	1.890917	1.891066	1.891216	1.891365	1.891515	1.891664	1.891814	1.891963	1.892113
0.270	1.893759	1.892412	1.892562	1.892711	1.892861	1.893011	1.893160	1.893310	1.893459	1.893609
0.280	1.895256	1.893903	1.894053	1.894208	1.894357	1.894507	1.894657	1.894806	1.894956	1.895106
0.290	1.896753	1.895405	1.895555	1.895705	1.895854	1.896004	1.896154	1.896304	1.896453	1.896603
0.300	1.898251	1.896903	1.897053	1.897202	1.897352	1.897502	1.897652	1.897802	1.897951	1.898101
0.310	1.899750	1.898401	1.898551	1.898701	1.898851	1.899001	1.899150	1.899300	1.899450	1.899600
0.320	1.901249	1.899900	1.900050	1.900200	1.900350	1.900500	1.900650	1.900800	1.900950	1.901099
0.330	1.902750	1.901399	1.901549	1.901699	1.901849	1.901999	1.902149	1.902299	1.902450	1.902600
0.340	1.904250	1.902900	1.903050	1.903200	1.903350	1.903500	1.903650	1.903800	1.903950	1.904100
0.350	1.905752	1.904400	1.904551	1.904701	1.904851	1.905001	1.905151	1.905301	1.905451	1.905602
0.360	1.907254	1.905902	1.906052	1.906202	1.906353	1.906503	1.906653	1.906803	1.906953	1.907104
0.370	1.908757	1.907404	1.907554	1.907705	1.907855	1.908005	1.908156	1.908306	1.908456	1.908606
0.380	1.910260	1.908907	1.909057	1.909208	1.909358	1.909508	1.909659	1.909809	1.909959	1.910110
0.390	1.911764	1.910410	1.910561	1.910711	1.910862	1.911012	1.911162	1.911313	1.911463	1.911614
0.400	1.913269	1.911915	1.912065	1.912216	1.912366	1.912516	1.912667	1.912817	1.912968	1.913118
0.410	1.914774	1.913419	1.913570	1.913720	1.913871	1.914022	1.914172	1.914323	1.914473	1.914624
0.420	1.916280	1.914925	1.915075	1.915226	1.915377	1.915527	1.915678	1.915829	1.915979	1.916130
0.430	1.917787	1.916431	1.916582	1.916732	1.916883	1.917034	1.917184	1.917335	1.917486	1.917636
0.440	1.919295	1.917938	1.918089	1.918239	1.918390	1.918541	1.918691	1.918842	1.918993	1.919144
0.450	1.920803	1.919445	1.919596	1.919747	1.919898	1.920048	1.920199	1.920350	1.920501	1.920652
0.460	1.922311	1.920953	1.921104	1.921255	1.921406	1.921557	1.921708	1.921859	1.922009	1.922160
0.470	1.923821	1.922462	1.922613	1.922764	1.922915	1.923066	1.923217	1.923368	1.923519	1.923670
0.480	1.925331	1.923972	1.924123	1.924274	1.924425	1.924576	1.924727	1.924878	1.925029	1.925180
0.490	1.926841	1.925482	1.925633	1.925784	1.925935	1.926086	1.926237	1.926388	1.926539	1.926690
		1.926992	1.927144	1.927295	1.927446	1.927597	1.927748	1.927899	1.928050	1.928201

ATTENUATION IN DECIBELS
THETA FROM 26.500 TO 26.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	1.928353	1.928504	1.928655	1.928806	1.928957	1.929103	1.929260	1.929411	1.929562	1.929713
0.510	1.929865	1.930016	1.930167	1.930318	1.930470	1.930621	1.930772	1.930923	1.931075	1.931226
0.520	1.931377	1.931529	1.931680	1.931831	1.931983	1.932134	1.932285	1.932437	1.932588	1.932739
0.530	1.932891	1.933042	1.933193	1.933345	1.933496	1.933648	1.933799	1.933950	1.934102	1.934253
0.540	1.934405	1.934556	1.934708	1.934859	1.935010	1.935162	1.935313	1.935465	1.935616	1.935768
0.550	1.935919	1.936071	1.936222	1.936374	1.936525	1.936677	1.936828	1.936980	1.937131	1.937283
0.560	1.937435	1.937586	1.937738	1.937889	1.938041	1.938193	1.938344	1.938496	1.938647	1.938799
0.570	1.938951	1.939102	1.939254	1.939405	1.939557	1.939709	1.939860	1.940012	1.940164	1.940315
0.580	1.940467	1.940619	1.940771	1.940922	1.941074	1.941226	1.941377	1.941529	1.941681	1.941833
0.590	1.941984	1.942136	1.942288	1.942440	1.942592	1.942743	1.942895	1.943047	1.943199	1.943351
0.600	1.943502	1.943654	1.943806	1.943958	1.944110	1.944262	1.944414	1.944565	1.944717	1.944869
0.610	1.945021	1.945173	1.945325	1.945477	1.945629	1.945781	1.945933	1.946084	1.946236	1.946388
0.620	1.946540	1.946692	1.946844	1.946996	1.947148	1.947300	1.947452	1.947604	1.947756	1.947908
0.630	1.948060	1.948212	1.948364	1.948516	1.948668	1.948821	1.948973	1.949125	1.949277	1.949429
0.640	1.949581	1.949733	1.949885	1.950037	1.950189	1.950341	1.950494	1.950646	1.950798	1.950950
0.650	1.951102	1.951254	1.951406	1.951559	1.951711	1.951863	1.952015	1.952167	1.952320	1.952472
0.660	1.952624	1.952776	1.952929	1.953081	1.953233	1.953385	1.953538	1.953690	1.953842	1.953994
0.670	1.954147	1.954299	1.954451	1.954604	1.954756	1.954908	1.955061	1.955213	1.955365	1.955518
0.680	1.955670	1.955822	1.955975	1.956127	1.956279	1.956432	1.956584	1.956737	1.956889	1.957041
0.690	1.957194	1.957346	1.957499	1.957651	1.957804	1.957956	1.958108	1.958261	1.958413	1.958566
0.700	1.958718	1.958871	1.959023	1.959176	1.959328	1.959481	1.959633	1.959786	1.959939	1.960091
0.710	1.960244	1.960396	1.960549	1.960701	1.960854	1.961007	1.961159	1.961312	1.961464	1.961617
0.720	1.961770	1.961922	1.962075	1.962227	1.962380	1.962533	1.962685	1.962838	1.962991	1.963143
0.730	1.963296	1.963449	1.963602	1.963754	1.963907	1.964060	1.964212	1.964365	1.964518	1.964671
0.740	1.964823	1.964976	1.965129	1.965282	1.965434	1.965587	1.965740	1.965893	1.966046	1.966198
0.750	1.966351	1.966504	1.966657	1.966810	1.966963	1.967115	1.967268	1.967421	1.967574	1.967727
0.760	1.967880	1.968033	1.968186	1.968339	1.968491	1.968644	1.968797	1.968950	1.969103	1.969256
0.770	1.969409	1.969562	1.969715	1.969868	1.970021	1.970174	1.970327	1.970480	1.970633	1.970786
0.780	1.970939	1.971092	1.971245	1.971398	1.971551	1.971704	1.971857	1.972010	1.972163	1.972316
0.790	1.972469	1.972623	1.972776	1.972929	1.973082	1.973235	1.973388	1.973541	1.973694	1.973848
0.800	1.974001	1.974154	1.974307	1.974460	1.974613	1.974767	1.974920	1.975073	1.975226	1.975379
0.810	1.975533	1.975686	1.975839	1.975992	1.976146	1.976299	1.976452	1.976605	1.976759	1.976912
0.820	1.977065	1.977218	1.977372	1.977525	1.977678	1.977831	1.977985	1.978138	1.978292	1.978445
0.830	1.978598	1.978752	1.978905	1.979058	1.979212	1.979365	1.979519	1.979672	1.979825	1.979979
0.840	1.980132	1.980286	1.980439	1.980592	1.980746	1.980899	1.981053	1.981206	1.981360	1.981513
0.850	1.981667	1.981820	1.981974	1.982127	1.982281	1.982434	1.982588	1.982741	1.982895	1.983048
0.860	1.983202	1.983355	1.983509	1.983663	1.983816	1.983970	1.984123	1.984277	1.984431	1.984584
0.870	1.984738	1.984891	1.985045	1.985199	1.985352	1.985506	1.985660	1.985813	1.985967	1.986121
0.880	1.986274	1.986428	1.986582	1.986735	1.986889	1.987043	1.987197	1.987350	1.987504	1.987658
0.890	1.987812	1.987965	1.988119	1.988273	1.988427	1.988580	1.988734	1.988888	1.989042	1.989196
0.900	1.989349	1.989503	1.989657	1.989811	1.989965	1.990119	1.990272	1.990426	1.990580	1.990734
0.910	1.990888	1.991042	1.991196	1.991350	1.991504	1.991657	1.991811	1.991965	1.992119	1.992273
0.920	1.992427	1.992581	1.992735	1.992889	1.993043	1.993197	1.993351	1.993505	1.993659	1.993813
0.930	1.993967	1.994121	1.994275	1.994429	1.994583	1.994737	1.994891	1.995045	1.995199	1.995353
0.940	1.995507	1.995662	1.995816	1.995970	1.996124	1.996278	1.996432	1.996586	1.996740	1.996895
0.950	1.997049	1.997203	1.997357	1.997511	1.997665	1.997820	1.997974	1.998128	1.998282	1.998436
0.960	1.998591	1.998745	1.998899	1.999053	1.999207	1.999362	1.999516	1.999670	1.999825	1.999979
0.970	2.000133	2.000287	2.000442	2.000596	2.000750	2.000905	2.001059	2.001213	2.001368	2.001522
0.980	2.001676	2.001831	2.001985	2.002139	2.002294	2.002448	2.002602	2.002757	2.002911	2.003066
0.990	2.003220	2.003375	2.003529	2.003683	2.003838	2.003992	2.004147	2.004301	2.004456	2.004610

ATTENUATION IN DECIBELS
THETA FROM 27.000 TO 27.499 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.000	2.004765	2.004919	2.005074	2.005228	2.005383	2.005537	2.005692	2.005846	2.006001	2.006155
0.010	2.006310	2.006464	2.006619	2.006774	2.006928	2.007083	2.007237	2.007392	2.007546	2.007701
0.020	2.007856	2.008010	2.008165	2.008320	2.008474	2.008629	2.008783	2.008938	2.009093	2.009248
0.030	2.009402	2.009557	2.009712	2.009866	2.010021	2.010176	2.010330	2.010485	2.010640	2.010795
0.040	2.010949	2.011104	2.011259	2.011414	2.011568	2.011723	2.011878	2.012033	2.012188	2.012343
0.050	2.012497	2.012652	2.012807	2.012962	2.013117	2.013271	2.013426	2.013581	2.013736	2.013891
0.060	2.014046	2.014201	2.014356	2.014510	2.014665	2.014820	2.014975	2.015130	2.015285	2.015440
0.070	2.015595	2.015750	2.015905	2.016060	2.016215	2.016370	2.016525	2.016680	2.016835	2.016990
0.080	2.017145	2.017300	2.017455	2.017610	2.017765	2.017920	2.018075	2.018230	2.018385	2.018540
0.090	2.018695	2.018850	2.019006	2.019161	2.019316	2.019471	2.019626	2.019781	2.019936	2.020091
0.100	2.020247	2.020402	2.020557	2.020712	2.020867	2.021022	2.021178	2.021333	2.021488	2.021643
0.110	2.021798	2.021954	2.022109	2.022264	2.022419	2.022575	2.022730	2.022885	2.023040	2.023196
0.120	2.023351	2.023506	2.023661	2.023817	2.023972	2.024127	2.024283	2.024438	2.024593	2.024749
0.130	2.024904	2.025059	2.025215	2.025370	2.025526	2.025681	2.025836	2.025992	2.026147	2.026303
0.140	2.026458	2.026613	2.026769	2.026924	2.027080	2.027235	2.027391	2.027546	2.027702	2.027857
0.150	2.028012	2.028168	2.028323	2.028479	2.028634	2.028790	2.028946	2.029101	2.029257	2.029412
0.160	2.029568	2.029723	2.029879	2.030034	2.030190	2.030346	2.030501	2.030657	2.030812	2.030968
0.170	2.031124	2.031279	2.031435	2.031590	2.031746	2.031902	2.032057	2.032213	2.032369	2.032524
0.180	2.032680	2.032836	2.032991	2.033147	2.033303	2.033459	2.033614	2.033770	2.033926	2.034082
0.190	2.034237	2.034393	2.034549	2.034705	2.034860	2.035016	2.035172	2.035328	2.035484	2.035639
0.200	2.035795	2.035951	2.036107	2.036263	2.036419	2.036574	2.036730	2.036886	2.037042	2.037198
0.210	2.037354	2.037510	2.037666	2.037821	2.037977	2.038133	2.038289	2.038445	2.038601	2.038757
0.220	2.038913	2.039069	2.039225	2.039381	2.039537	2.039693	2.039849	2.040005	2.040161	2.040317
0.230	2.040473	2.040629	2.040785	2.040941	2.041097	2.041253	2.041409	2.041565	2.041721	2.041877
0.240	2.042033	2.042189	2.042346	2.042502	2.042658	2.042814	2.042970	2.043126	2.043282	2.043438
0.250	2.043595	2.043751	2.043907	2.044063	2.044219	2.044375	2.044532	2.044688	2.044844	2.045000
0.260	2.045156	2.045313	2.045469	2.045625	2.045781	2.045938	2.046094	2.046250	2.046406	2.046563
0.270	2.046719	2.046875	2.047032	2.047188	2.047344	2.047501	2.047657	2.047813	2.047970	2.048126
0.280	2.048282	2.048439	2.048595	2.048751	2.048908	2.049064	2.049221	2.049377	2.049533	2.049690
0.290	2.049846	2.050003	2.050159	2.050315	2.050472	2.050628	2.050785	2.050941	2.051098	2.051254
0.300	2.051411	2.051567	2.051724	2.051880	2.052037	2.052193	2.052350	2.052506	2.052663	2.052819
0.310	2.052976	2.053133	2.053289	2.053446	2.053602	2.053759	2.053915	2.054072	2.054229	2.054385
0.320	2.054542	2.054699	2.054855	2.055012	2.055168	2.055325	2.055482	2.055638	2.055795	2.055952
0.330	2.056108	2.056265	2.056422	2.056579	2.056735	2.056892	2.057049	2.057205	2.057362	2.057519
0.340	2.057676	2.057832	2.057989	2.058146	2.058303	2.058460	2.058616	2.058773	2.058930	2.059087
0.350	2.059244	2.059400	2.059557	2.059714	2.059871	2.060028	2.060185	2.060342	2.060498	2.060655
0.360	2.060812	2.060969	2.061126	2.061283	2.061440	2.061597	2.061754	2.061911	2.062068	2.062225
0.370	2.062382	2.062538	2.062695	2.062852	2.063009	2.063166	2.063323	2.063480	2.063637	2.063794
0.380	2.063951	2.064108	2.064265	2.064423	2.064580	2.064737	2.064894	2.065051	2.065208	2.065365
0.390	2.065522	2.065679	2.065836	2.065993	2.066150	2.066308	2.066465	2.066622	2.066779	2.066936
0.400	2.067093	2.067250	2.067408	2.067565	2.067722	2.067879	2.068036	2.068194	2.068351	2.068508
0.410	2.068665	2.068823	2.068980	2.069137	2.069294	2.069451	2.069609	2.069766	2.069923	2.070081
0.420	2.070238	2.070395	2.070552	2.070709	2.070867	2.071024	2.071182	2.071339	2.071496	2.071654
0.430	2.071811	2.071969	2.072126	2.072283	2.072441	2.072598	2.072755	2.072913	2.073070	2.073228
0.440	2.073385	2.073543	2.073700	2.073857	2.074015	2.074172	2.074330	2.074487	2.074645	2.074802
0.450	2.074960	2.075117	2.075275	2.075432	2.075590	2.075747	2.075905	2.076062	2.076220	2.076378
0.460	2.076535	2.076693	2.076850	2.077008	2.077165	2.077323	2.077481	2.077638	2.077796	2.077953
0.470	2.078111	2.078269	2.078426	2.078584	2.078742	2.078899	2.079057	2.079215	2.079372	2.079530
0.480	2.079688	2.079845	2.080003	2.080161	2.080319	2.080476	2.080634	2.080792	2.080950	2.081107
0.490	2.081265	2.081423	2.081581	2.081738	2.081896	2.082054	2.082212	2.082370	2.082527	2.082685

ATTENUATION IN DECIBELS
THETA FROM 27.500 TO 27.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	2.082843	2.083001	2.083159	2.083317	2.083474	2.083632	2.083790	2.083948	2.084106	2.084264
0.510	2.084422	2.084580	2.084738	2.084895	2.085053	2.085211	2.085369	2.085527	2.085685	2.085843
0.520	2.086001	2.086159	2.086317	2.086475	2.086633	2.086791	2.086949	2.087107	2.087265	2.087423
0.530	2.087581	2.087739	2.087897	2.088055	2.088213	2.088371	2.088529	2.088687	2.088846	2.089004
0.540	2.089162	2.089320	2.089478	2.089636	2.089794	2.089952	2.090110	2.090269	2.090427	2.090585
0.550	2.090743	2.090901	2.091059	2.091218	2.091376	2.091534	2.091692	2.091850	2.092009	2.092167
0.560	2.092325	2.092483	2.092642	2.092800	2.092958	2.093116	2.093275	2.093433	2.093591	2.093750
0.570	2.093908	2.094066	2.094224	2.094383	2.094541	2.094699	2.094858	2.095016	2.095174	2.095333
0.580	2.095491	2.095650	2.095808	2.095966	2.096125	2.096283	2.096442	2.096600	2.096758	2.096917
0.590	2.097075	2.097234	2.097392	2.097551	2.097709	2.097868	2.098026	2.098184	2.098343	2.098502
0.600	2.098660	2.098819	2.098977	2.099136	2.099294	2.099453	2.099611	2.099770	2.099928	2.100087
0.610	2.100245	2.100404	2.100563	2.100721	2.100880	2.101038	2.101197	2.101356	2.101514	2.101673
0.620	2.101831	2.101990	2.102149	2.102307	2.102466	2.102625	2.102783	2.102942	2.103101	2.103260
0.630	2.103418	2.103577	2.103736	2.103894	2.104053	2.104212	2.104371	2.104529	2.104688	2.104847
0.640	2.105006	2.105164	2.105323	2.105482	2.105641	2.105800	2.105958	2.106117	2.106276	2.106435
0.650	2.106594	2.106753	2.106911	2.107070	2.107229	2.107388	2.107547	2.107706	2.107865	2.108024
0.660	2.108183	2.108341	2.108500	2.108659	2.108818	2.108977	2.109136	2.109295	2.109454	2.109613
0.670	2.109772	2.109931	2.110090	2.110249	2.110408	2.110567	2.110726	2.110885	2.111044	2.111203
0.680	2.111362	2.111521	2.111680	2.111839	2.111998	2.112157	2.112316	2.112476	2.112635	2.112794
0.690	2.112953	2.113112	2.113271	2.113430	2.113589	2.113749	2.113908	2.114067	2.114226	2.114385
0.700	2.114544	2.114704	2.114863	2.115022	2.115181	2.115340	2.115500	2.115659	2.115818	2.115977
0.710	2.116136	2.116296	2.116455	2.116614	2.116774	2.116933	2.117092	2.117251	2.117411	2.117570
0.720	2.117729	2.117889	2.118048	2.118207	2.118367	2.118526	2.118685	2.118845	2.119004	2.119163
0.730	2.119323	2.119482	2.119642	2.119801	2.119960	2.120120	2.120279	2.120439	2.120598	2.120758
0.740	2.120917	2.121076	2.121236	2.121395	2.121555	2.121714	2.121874	2.122033	2.122193	2.122352
0.750	2.122512	2.122671	2.122831	2.122990	2.123150	2.123309	2.123469	2.123629	2.123788	2.123948
0.760	2.124107	2.124267	2.124427	2.124586	2.124746	2.124905	2.125065	2.125225	2.125384	2.125544
0.770	2.125704	2.125863	2.126023	2.126183	2.126342	2.126502	2.126662	2.126821	2.126981	2.127141
0.780	2.127300	2.127460	2.127620	2.127780	2.127939	2.128099	2.128259	2.128419	2.128578	2.128738
0.790	2.128898	2.129058	2.129218	2.129377	2.129537	2.129697	2.129857	2.130017	2.130176	2.130336
0.800	2.130496	2.130656	2.130816	2.130976	2.131136	2.131296	2.131455	2.131615	2.131775	2.131935
0.810	2.132095	2.132255	2.132415	2.132575	2.132735	2.132895	2.133055	2.133215	2.133375	2.133535
0.820	2.133695	2.133855	2.134015	2.134175	2.134335	2.134495	2.134655	2.134815	2.134975	2.135135
0.830	2.135295	2.135455	2.135615	2.135775	2.135935	2.136095	2.136255	2.136416	2.136576	2.136736
0.840	2.136896	2.137056	2.137216	2.137376	2.137536	2.137697	2.137857	2.138017	2.138177	2.138337
0.850	2.138497	2.138658	2.138818	2.138978	2.139138	2.139299	2.139459	2.139619	2.139779	2.139940
0.860	2.140100	2.140260	2.140420	2.140581	2.140741	2.140901	2.141061	2.141222	2.141382	2.141542
0.870	2.141703	2.141863	2.142023	2.142184	2.142344	2.142504	2.142665	2.142825	2.142986	2.143146
0.880	2.143306	2.143467	2.143627	2.143788	2.143948	2.144108	2.144269	2.144429	2.144590	2.144750
0.890	2.144911	2.145071	2.145232	2.145392	2.145553	2.145713	2.145874	2.146034	2.146195	2.146355
0.900	2.146516	2.146676	2.146837	2.146997	2.147158	2.147318	2.147479	2.147640	2.147800	2.147961
0.910	2.148121	2.148282	2.148443	2.148603	2.148764	2.148924	2.149085	2.149246	2.149406	2.149567
0.920	2.149728	2.149888	2.150049	2.150210	2.150370	2.150531	2.150692	2.150853	2.151013	2.151174
0.930	2.151335	2.151495	2.151656	2.151817	2.151978	2.152139	2.152299	2.152460	2.152621	2.152782
0.940	2.152942	2.153103	2.153264	2.153425	2.153586	2.153747	2.153907	2.154068	2.154229	2.154390
0.950	2.154551	2.154712	2.154873	2.155033	2.155194	2.155355	2.155516	2.155677	2.155838	2.155999
0.960	2.156160	2.156321	2.156482	2.156643	2.156804	2.156965	2.157126	2.157287	2.157448	2.157609
0.970	2.157770	2.157931	2.158092	2.158253	2.158414	2.158575	2.158736	2.158897	2.159058	2.159219
0.980	2.159380	2.159541	2.159702	2.159863	2.160024	2.160185	2.160346	2.160507	2.160669	2.160830
0.990	2.160991	2.161152	2.161313	2.161475	2.161636	2.161797	2.161958	2.162119	2.162280	2.162442

ATTENUATION IN DECIBELS
THETA FROM 28.000 TO 28.499 DEGREES

THETA IN
DEGREES

0.000	2.162603	2.162764	2.162925	2.163087	2.163248	2.163409	2.163570	2.163732	2.163893	2.164054
0.010	2.164215	2.164377	2.164538	2.164699	2.164861	2.165022	2.165183	2.165344	2.165506	2.165667
0.020	2.165828	2.165990	2.166151	2.166313	2.166474	2.166635	2.166797	2.166958	2.167120	2.167281
0.030	2.167442	2.167604	2.167765	2.167927	2.168088	2.168249	2.168411	2.168572	2.168734	2.168895
0.040	2.169057	2.169218	2.169380	2.169541	2.169702	2.169864	2.170026	2.170187	2.170349	2.170510
0.050	2.170672	2.170834	2.170995	2.171157	2.171318	2.171480	2.171641	2.171803	2.171965	2.172126
0.060	2.172288	2.172449	2.172611	2.172773	2.172934	2.173096	2.173258	2.173419	2.173581	2.173743
0.070	2.173904	2.174066	2.174228	2.174389	2.174551	2.174713	2.174875	2.175036	2.175198	2.175360
0.080	2.175522	2.175683	2.175845	2.176007	2.176169	2.176330	2.176492	2.176654	2.176816	2.176978
0.090	2.177139	2.177301	2.177463	2.177625	2.177787	2.177949	2.178111	2.178272	2.178434	2.178596
0.100	2.178758	2.178920	2.179082	2.179244	2.179406	2.179568	2.179729	2.179891	2.180053	2.180215
0.110	2.180377	2.180539	2.180701	2.180863	2.181025	2.181187	2.181349	2.181511	2.181673	2.181835
0.120	2.181997	2.182159	2.182321	2.182483	2.182645	2.182807	2.182969	2.183132	2.183294	2.183456
0.130	2.183618	2.183780	2.183942	2.184104	2.184266	2.184428	2.184590	2.184753	2.184915	2.185077
0.140	2.185239	2.185401	2.185563	2.185726	2.185888	2.186050	2.186212	2.186374	2.186537	2.186699
0.150	2.186861	2.187023	2.187186	2.187348	2.187510	2.187672	2.187835	2.187997	2.188159	2.188321
0.160	2.188644	2.188806	2.188968	2.189130	2.189293	2.189455	2.189618	2.189782	2.189945	2.190108
0.170	2.190107	2.190269	2.190432	2.190594	2.190757	2.190919	2.191081	2.191244	2.191406	2.191569
0.180	2.191731	2.191894	2.192056	2.192218	2.192381	2.192543	2.192706	2.192868	2.193031	2.193193
0.190	2.193356	2.193518	2.193681	2.193843	2.194006	2.194168	2.194331	2.194493	2.194656	2.194819
0.200	2.194981	2.195144	2.195306	2.195469	2.195631	2.195794	2.195957	2.196119	2.196282	2.196445
0.210	2.196607	2.196770	2.196932	2.197095	2.197258	2.197420	2.197583	2.197746	2.197909	2.198071
0.220	2.198234	2.198397	2.198559	2.198722	2.198885	2.199048	2.199210	2.199373	2.199536	2.199699
0.230	2.199861	2.200024	2.200187	2.200350	2.200512	2.200675	2.200838	2.201001	2.201164	2.201327
0.240	2.201489	2.201652	2.201815	2.201978	2.202141	2.202304	2.202467	2.202630	2.202792	2.202955
0.250	2.203118	2.203281	2.203444	2.203607	2.203770	2.203933	2.204096	2.204259	2.204422	2.204585
0.260	2.204748	2.204911	2.205074	2.205237	2.205400	2.205563	2.205726	2.205889	2.206052	2.206215
0.270	2.206378	2.206541	2.206704	2.206867	2.207030	2.207193	2.207356	2.207519	2.207682	2.207846
0.280	2.208009	2.208172	2.208335	2.208498	2.208661	2.208824	2.208988	2.209151	2.209314	2.209477
0.290	2.209640	2.209803	2.209967	2.210130	2.210293	2.210456	2.210619	2.210783	2.210946	2.211109
0.300	2.211272	2.211436	2.211599	2.211762	2.211925	2.212089	2.212252	2.212415	2.212579	2.212742
0.310	2.212905	2.213069	2.213232	2.213395	2.213559	2.213722	2.213885	2.214049	2.214212	2.214375
0.320	2.214539	2.214702	2.214866	2.215029	2.215192	2.215356	2.215519	2.215683	2.215846	2.216010
0.330	2.216173	2.216337	2.216500	2.216663	2.216827	2.216990	2.217154	2.217317	2.217481	2.217644
0.340	2.217808	2.217972	2.218135	2.218299	2.218462	2.218626	2.218789	2.218953	2.219116	2.219280
0.350	2.219444	2.219607	2.219771	2.219934	2.220098	2.220262	2.220425	2.220589	2.220753	2.220916
0.360	2.221080	2.221244	2.221407	2.221571	2.221735	2.221898	2.222062	2.222226	2.222389	2.222553
0.370	2.222717	2.222881	2.223044	2.223208	2.223372	2.223536	2.223699	2.223863	2.224027	2.224191
0.380	2.224355	2.224518	2.224682	2.224846	2.225010	2.225174	2.225337	2.225501	2.225665	2.225829
0.390	2.225993	2.226157	2.226321	2.226485	2.226648	2.226812	2.226976	2.227140	2.227304	2.227468
0.400	2.227632	2.227796	2.227960	2.228124	2.228288	2.228452	2.228616	2.228780	2.228944	2.229108
0.410	2.229272	2.229436	2.229600	2.229764	2.229928	2.230092	2.230256	2.230420	2.230584	2.230748
0.420	2.230912	2.231076	2.231240	2.231404	2.231568	2.231732	2.231897	2.232061	2.232225	2.232389
0.430	2.232553	2.232717	2.232881	2.233046	2.233210	2.233374	2.233538	2.233702	2.233866	2.234031
0.440	2.234195	2.234359	2.234523	2.234688	2.234852	2.235016	2.235180	2.235344	2.235509	2.235673
0.450	2.235837	2.236002	2.236166	2.236330	2.236494	2.236659	2.236823	2.236987	2.237152	2.237316
0.460	2.237480	2.237645	2.237809	2.237973	2.238138	2.238302	2.238467	2.238631	2.238795	2.238960
0.470	2.239124	2.239289	2.239453	2.239617	2.239782	2.239946	2.240111	2.240275	2.240440	2.240604
0.480	2.240769	2.240933	2.241098	2.241262	2.241427	2.241591	2.241756	2.241920	2.242085	2.242249
0.490	2.242414	2.242578	2.242743	2.242908	2.243072	2.243237	2.243401	2.243566	2.243731	2.243895

ATTENUATION IN DECIBELS
THETA FROM 28.500 TO 28.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	2.244060	2.244224	2.244389	2.244554	2.244718	2.244883	2.245048	2.245212	2.245377	2.245542
0.510	2.245706	2.245871	2.246036	2.246200	2.246365	2.246530	2.246695	2.246859	2.247024	2.247189
0.520	2.247354	2.247518	2.247683	2.247848	2.248013	2.248177	2.248342	2.248507	2.248672	2.248837
0.530	2.249002	2.249166	2.249331	2.249496	2.249661	2.249826	2.249991	2.250155	2.250320	2.250485
0.540	2.250650	2.250815	2.250980	2.251145	2.251310	2.251475	2.251640	2.251805	2.251969	2.252134
0.550	2.252299	2.252464	2.252629	2.252794	2.252959	2.253124	2.253289	2.253454	2.253619	2.253784
0.560	2.253949	2.254114	2.254279	2.254445	2.254610	2.254775	2.254940	2.255105	2.255270	2.255435
0.570	2.255600	2.255765	2.255930	2.256095	2.256261	2.256426	2.256591	2.256756	2.256921	2.257086
0.580	2.257251	2.257417	2.257582	2.257747	2.257912	2.258077	2.258243	2.258408	2.258573	2.258738
0.590	2.258903	2.259069	2.259234	2.259399	2.259564	2.259730	2.259895	2.260060	2.260226	2.260391
0.600	2.260556	2.260722	2.260887	2.261052	2.261217	2.261383	2.261548	2.261714	2.261879	2.262044
0.610	2.262210	2.262375	2.262540	2.262706	2.262871	2.263037	2.263202	2.263367	2.263533	2.263698
0.620	2.263864	2.264029	2.264195	2.264360	2.264526	2.264691	2.264856	2.265022	2.265187	2.265353
0.630	2.265518	2.265684	2.265850	2.266015	2.266181	2.266346	2.266512	2.266677	2.266843	2.267008
0.640	2.267174	2.267340	2.267505	2.267671	2.267836	2.268002	2.268168	2.268333	2.268499	2.268664
0.650	2.268830	2.268996	2.269161	2.269327	2.269493	2.269658	2.269824	2.269990	2.270156	2.270321
0.660	2.270487	2.270653	2.270818	2.270984	2.271150	2.271316	2.271481	2.271647	2.271813	2.271979
0.670	2.272145	2.272310	2.272476	2.272642	2.272808	2.272974	2.273139	2.273305	2.273471	2.273637
0.680	2.273803	2.273969	2.274134	2.274300	2.274466	2.274632	2.274798	2.274964	2.275130	2.275296
0.690	2.275462	2.275628	2.275794	2.275959	2.276125	2.276291	2.276457	2.276623	2.276789	2.276955
0.700	2.277121	2.277287	2.277453	2.277619	2.277785	2.277951	2.278117	2.278283	2.278449	2.278615
0.710	2.278782	2.278948	2.279114	2.279280	2.279446	2.279612	2.279778	2.279944	2.280110	2.280276
0.720	2.280403	2.280569	2.280735	2.280901	2.281067	2.281233	2.281399	2.281566	2.281732	2.281898
0.730	2.282104	2.282270	2.282437	2.282603	2.282769	2.282935	2.283101	2.283268	2.283434	2.283600
0.740	2.283767	2.283933	2.284099	2.284265	2.284432	2.284598	2.284764	2.284931	2.285097	2.285263
0.750	2.285430	2.285596	2.285762	2.285929	2.286095	2.286261	2.286428	2.286594	2.286761	2.286927
0.760	2.287093	2.287260	2.287426	2.287593	2.287759	2.287925	2.288092	2.288258	2.288425	2.288591
0.770	2.288758	2.288924	2.289091	2.289257	2.289424	2.289590	2.289757	2.289923	2.290090	2.290256
0.780	2.290423	2.290589	2.290756	2.290922	2.291089	2.291256	2.291422	2.291589	2.291755	2.291922
0.790	2.292089	2.292255	2.292422	2.292588	2.292755	2.292922	2.293088	2.293255	2.293422	2.293588
0.800	2.293755	2.293922	2.294088	2.294255	2.294422	2.294589	2.294755	2.294922	2.295089	2.295256
0.810	2.295422	2.295589	2.295756	2.295923	2.296089	2.296256	2.296423	2.296590	2.296757	2.296923
0.820	2.297090	2.297257	2.297424	2.297591	2.297757	2.297924	2.298091	2.298258	2.298425	2.298592
0.830	2.298759	2.298926	2.299092	2.299259	2.299426	2.299593	2.299760	2.299927	2.300094	2.300261
0.840	2.300428	2.300595	2.300762	2.300929	2.301096	2.301263	2.301430	2.301597	2.301764	2.301931
0.850	2.302098	2.302265	2.302432	2.302599	2.302766	2.302933	2.303100	2.303267	2.303434	2.303601
0.860	2.303768	2.303936	2.304103	2.304270	2.304437	2.304604	2.304771	2.304938	2.305105	2.305273
0.870	2.305440	2.305607	2.305774	2.305941	2.306109	2.306276	2.306443	2.306610	2.306777	2.306945
0.880	2.307112	2.307279	2.307446	2.307614	2.307781	2.307948	2.308115	2.308283	2.308450	2.308617
0.890	2.308784	2.308952	2.309119	2.309286	2.309454	2.309621	2.309788	2.309956	2.310123	2.310290
0.900	2.310458	2.310625	2.310793	2.310960	2.311127	2.311295	2.311462	2.311630	2.311797	2.311964
0.910	2.312132	2.312299	2.312467	2.312634	2.312802	2.312969	2.313137	2.313304	2.313472	2.313639
0.920	2.313807	2.313974	2.314142	2.314309	2.314477	2.314644	2.314812	2.314979	2.315147	2.315315
0.930	2.315482	2.315650	2.315817	2.315985	2.316153	2.316320	2.316488	2.316655	2.316823	2.316991
0.940	2.317158	2.317326	2.317494	2.317661	2.317829	2.317997	2.318164	2.318332	2.318500	2.318667
0.950	2.318835	2.319003	2.319171	2.319338	2.319506	2.319674	2.319842	2.319999	2.320177	2.320345
0.960	2.320513	2.320680	2.320848	2.321016	2.321184	2.321352	2.321519	2.321687	2.321855	2.322023
0.970	2.322191	2.322359	2.322527	2.322694	2.322862	2.323030	2.323198	2.323366	2.323534	2.323702
0.980	2.323870	2.324038	2.324206	2.324374	2.324542	2.324710	2.324877	2.325045	2.325213	2.325381
0.990	2.325549	2.325717	2.325885	2.326053	2.326221	2.326389	2.326557	2.326725	2.326894	2.327062

ATTENUATION IN DECIBELS
THEIA FROM 29.000 TO 29.499 DEGREES

THEIA IN
DEGREES

0.000	2.327230	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.010	2.327398	2.327566	2.327734	2.327902	2.328070	2.328238	2.328406	2.328574	2.328742		
0.020	2.327907	2.328075	2.328243	2.328411	2.328579	2.328747	2.328915	2.329083	2.329251	2.329419	2.329587
0.030	2.328416	2.328584	2.328752	2.328920	2.329088	2.329256	2.329424	2.329592	2.329760	2.329928	2.330096
0.040	2.328925	2.329093	2.329261	2.329429	2.329597	2.329765	2.329933	2.330101	2.330269	2.330437	2.330605
0.050	2.329434	2.329602	2.329770	2.329938	2.330106	2.330274	2.330442	2.330610	2.330778	2.330946	2.331114
0.060	2.329943	2.330111	2.330279	2.330447	2.330615	2.330783	2.330951	2.331119	2.331287	2.331455	2.331623
0.070	2.330452	2.330620	2.330788	2.330956	2.331124	2.331292	2.331460	2.331628	2.331796	2.331964	2.332132
0.080	2.330961	2.331129	2.331297	2.331465	2.331633	2.331801	2.331969	2.332137	2.332305	2.332473	2.332641
0.090	2.331470	2.331638	2.331806	2.331974	2.332142	2.332310	2.332478	2.332646	2.332814	2.332982	2.333150
0.100	2.331979	2.332147	2.332315	2.332483	2.332651	2.332819	2.332987	2.333155	2.333323	2.333491	2.333659
0.110	2.332488	2.332656	2.332824	2.332992	2.333160	2.333328	2.333496	2.333664	2.333832	2.333999	2.334167
0.120	2.332997	2.333165	2.333333	2.333501	2.333669	2.333837	2.333999	2.334167	2.334335	2.334503	2.334671
0.130	2.333506	2.333674	2.333842	2.334010	2.334178	2.334346	2.334514	2.334682	2.334850	2.335018	2.335186
0.140	2.334015	2.334183	2.334351	2.334519	2.334687	2.334855	2.335023	2.335191	2.335359	2.335527	2.335695
0.150	2.334524	2.334692	2.334860	2.335028	2.335196	2.335364	2.335532	2.335700	2.335868	2.336036	2.336204
0.160	2.335033	2.335201	2.335369	2.335537	2.335705	2.335873	2.336041	2.336209	2.336377	2.336545	2.336713
0.170	2.335542	2.335710	2.335878	2.336046	2.336214	2.336382	2.336550	2.336718	2.336886	2.337054	2.337222
0.180	2.336051	2.336219	2.336387	2.336555	2.336723	2.336891	2.337059	2.337227	2.337395	2.337563	2.337731
0.190	2.336560	2.336728	2.336896	2.337064	2.337232	2.337400	2.337568	2.337736	2.337904	2.338072	2.338240
0.200	2.337069	2.337237	2.337405	2.337573	2.337741	2.337909	2.338077	2.338245	2.338413	2.338581	2.338749
0.210	2.337578	2.337746	2.337914	2.338082	2.338250	2.338418	2.338586	2.338754	2.338922	2.339090	2.339258
0.220	2.338087	2.338255	2.338423	2.338591	2.338759	2.338927	2.339095	2.339263	2.339431	2.339599	2.339767
0.230	2.338596	2.338764	2.338932	2.339100	2.339268	2.339436	2.339604	2.339772	2.339940	2.340108	2.340276
0.240	2.339105	2.339273	2.339441	2.339609	2.339777	2.339945	2.340113	2.340281	2.340449	2.340617	2.340785
0.250	2.339614	2.339782	2.339950	2.340118	2.340286	2.340454	2.340622	2.340790	2.340958	2.341126	2.341294
0.260	2.340123	2.340291	2.340459	2.340627	2.340795	2.340963	2.341131	2.341299	2.341467	2.341635	2.341803
0.270	2.340632	2.340800	2.340968	2.341136	2.341304	2.341472	2.341640	2.341808	2.341976	2.342144	2.342312
0.280	2.341141	2.341309	2.341477	2.341645	2.341813	2.341981	2.342149	2.342317	2.342485	2.342653	2.342821
0.290	2.341650	2.341818	2.341986	2.342154	2.342322	2.342490	2.342658	2.342826	2.342994	2.343162	2.343330
0.300	2.342159	2.342327	2.342495	2.342663	2.342831	2.342999	2.343167	2.343335	2.343503	2.343671	2.343839
0.310	2.342668	2.342836	2.343004	2.343172	2.343340	2.343508	2.343676	2.343844	2.344012	2.344180	2.344348
0.320	2.343177	2.343345	2.343513	2.343681	2.343849	2.344017	2.344185	2.344353	2.344521	2.344689	2.344857
0.330	2.343686	2.343854	2.344022	2.344190	2.344358	2.344526	2.344694	2.344862	2.345030	2.345198	2.345366
0.340	2.344195	2.344363	2.344531	2.344699	2.344867	2.345035	2.345203	2.345371	2.345539	2.345707	2.345875
0.350	2.344704	2.344872	2.345040	2.345208	2.345376	2.345544	2.345712	2.345880	2.346048	2.346216	2.346384
0.360	2.345213	2.345381	2.345549	2.345717	2.345885	2.346053	2.346221	2.346389	2.346557	2.346725	2.346893
0.370	2.345722	2.345890	2.346058	2.346226	2.346394	2.346562	2.346730	2.346898	2.347066	2.347234	2.347402
0.380	2.346231	2.346399	2.346567	2.346735	2.346903	2.347071	2.347239	2.347407	2.347575	2.347743	2.347911
0.390	2.346740	2.346908	2.347076	2.347244	2.347412	2.347580	2.347748	2.347916	2.348084	2.348252	2.348420
0.400	2.347249	2.347417	2.347585	2.347753	2.347921	2.348089	2.348257	2.348425	2.348593	2.348761	2.348929
0.410	2.347758	2.347926	2.348094	2.348262	2.348430	2.348598	2.348766	2.348934	2.349102	2.349270	2.349438
0.420	2.348267	2.348435	2.348603	2.348771	2.348939	2.349107	2.349275	2.349443	2.349611	2.349779	2.349947
0.430	2.348776	2.348944	2.349112	2.349280	2.349448	2.349616	2.349784	2.349952	2.350120	2.350288	2.350456
0.440	2.349285	2.349453	2.349621	2.349789	2.349957	2.350125	2.350293	2.350461	2.350629	2.350797	2.350965
0.450	2.349794	2.349962	2.350130	2.350298	2.350466	2.350634	2.350802	2.350970	2.351138	2.351306	2.351474
0.460	2.350303	2.350471	2.350639	2.350807	2.350975	2.351143	2.351311	2.351479	2.351647	2.351815	2.351983
0.470	2.350812	2.350980	2.351148	2.351316	2.351484	2.351652	2.351820	2.351988	2.352156	2.352324	2.352492
0.480	2.351321	2.351489	2.351657	2.351825	2.351993	2.352161	2.352329	2.352497	2.352665	2.352833	2.352999
0.490	2.351830	2.351998	2.352166	2.352334	2.352502	2.352670	2.352838	2.353006	2.353174	2.353342	2.353510

ATTENUATION IN DECIBELS
THETA FROM 29.500 TO 29.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	2.412129	2.412300	2.412472	2.412644	2.412815	2.412987	2.413158	2.413330	2.413502	2.413673
0.510	2.413845	2.414016	2.414188	2.414360	2.414531	2.414703	2.414874	2.415046	2.415218	2.415389
0.520	2.415561	2.415733	2.415905	2.416076	2.416248	2.416420	2.416591	2.416763	2.416935	2.417107
0.530	2.417278	2.417450	2.417622	2.417794	2.417965	2.418137	2.418309	2.418481	2.418653	2.418824
0.540	2.418996	2.419168	2.419340	2.419512	2.419683	2.419855	2.420027	2.420199	2.420371	2.420543
0.550	2.420715	2.420887	2.421058	2.421230	2.421402	2.421574	2.421746	2.421918	2.422090	2.422262
0.560	2.422434	2.422606	2.422778	2.422950	2.423122	2.423294	2.423466	2.423638	2.423810	2.423982
0.570	2.424154	2.424326	2.424498	2.424670	2.424842	2.425014	2.425186	2.425358	2.425530	2.425702
0.580	2.425874	2.426047	2.426219	2.426391	2.426563	2.426735	2.426907	2.427079	2.427251	2.427424
0.590	2.427596	2.427768	2.427940	2.428112	2.428285	2.428457	2.428629	2.428801	2.428973	2.429146
0.600	2.429318	2.429490	2.429662	2.429835	2.430007	2.430179	2.430351	2.430524	2.430696	2.430868
0.610	2.431041	2.431213	2.431385	2.431558	2.431730	2.431902	2.432075	2.432247	2.432419	2.432592
0.620	2.432764	2.432936	2.433109	2.433281	2.433454	2.433626	2.433798	2.433971	2.434143	2.434316
0.630	2.434488	2.434661	2.434833	2.435006	2.435178	2.435350	2.435523	2.435695	2.435868	2.436040
0.640	2.436213	2.436386	2.436558	2.436731	2.436903	2.437076	2.437248	2.437421	2.437593	2.437766
0.650	2.437939	2.438111	2.438284	2.438456	2.438629	2.438802	2.438974	2.439147	2.439319	2.439492
0.660	2.439665	2.439837	2.440010	2.440183	2.440355	2.440528	2.440701	2.440874	2.441046	2.441219
0.670	2.441392	2.441564	2.441737	2.441910	2.442083	2.442255	2.442428	2.442601	2.442774	2.442947
0.680	2.443119	2.443292	2.443465	2.443638	2.443811	2.443983	2.444156	2.444329	2.444502	2.444675
0.690	2.444848	2.445021	2.445193	2.445366	2.445539	2.445712	2.445885	2.446058	2.446231	2.446404
0.700	2.446577	2.446750	2.446923	2.447096	2.447269	2.447441	2.447614	2.447787	2.447960	2.448133
0.710	2.448306	2.448479	2.448652	2.448826	2.448999	2.449172	2.449345	2.449518	2.449691	2.449864
0.720	2.450037	2.450210	2.450383	2.450556	2.450729	2.450902	2.451075	2.451249	2.451422	2.451595
0.730	2.451768	2.451941	2.452114	2.452288	2.452461	2.452634	2.452807	2.452980	2.453153	2.453327
0.740	2.453500	2.453673	2.453846	2.454020	2.454193	2.454366	2.454539	2.454713	2.454886	2.455059
0.750	2.455232	2.455406	2.455579	2.455752	2.455926	2.456099	2.456272	2.456446	2.456619	2.456792
0.760	2.456966	2.457139	2.457312	2.457486	2.457659	2.457833	2.458006	2.458179	2.458353	2.458526
0.770	2.458700	2.458873	2.459047	2.459220	2.459393	2.459567	2.459740	2.459914	2.460087	2.460261
0.780	2.460434	2.460608	2.460781	2.460955	2.461128	2.461302	2.461475	2.461649	2.461823	2.461996
0.790	2.462170	2.462343	2.462517	2.462690	2.462864	2.463038	2.463211	2.463385	2.463558	2.463732
0.800	2.463906	2.464079	2.464253	2.464427	2.464600	2.464774	2.464948	2.465121	2.465295	2.465469
0.810	2.465642	2.465816	2.465990	2.466164	2.466337	2.466511	2.466685	2.466859	2.467032	2.467206
0.820	2.467380	2.467554	2.467728	2.467901	2.468075	2.468249	2.468423	2.468597	2.468770	2.468944
0.830	2.469118	2.469292	2.469466	2.469640	2.469814	2.469988	2.470161	2.470335	2.470509	2.470683
0.840	2.470857	2.471031	2.471205	2.471379	2.471553	2.471727	2.471901	2.472075	2.472249	2.472423
0.850	2.472597	2.472771	2.472945	2.473119	2.473293	2.473467	2.473641	2.473815	2.473989	2.474163
0.860	2.474337	2.474511	2.474685	2.474859	2.475033	2.475207	2.475381	2.475555	2.475730	2.475904
0.870	2.476078	2.476252	2.476426	2.476600	2.476774	2.476949	2.477123	2.477297	2.477471	2.477645
0.880	2.477820	2.477994	2.478168	2.478342	2.478516	2.478691	2.478865	2.479039	2.479213	2.479388
0.890	2.479562	2.479736	2.479910	2.480085	2.480259	2.480433	2.480608	2.480782	2.480956	2.481131
0.900	2.481305	2.481479	2.481654	2.481828	2.482002	2.482177	2.482351	2.482526	2.482700	2.482874
0.910	2.483049	2.483223	2.483398	2.483572	2.483747	2.483921	2.484095	2.484270	2.484444	2.484619
0.920	2.484793	2.484968	2.485142	2.485317	2.485491	2.485666	2.485840	2.486015	2.486189	2.486364
0.930	2.486539	2.486713	2.486888	2.487062	2.487237	2.487411	2.487586	2.487761	2.487935	2.488110
0.940	2.488284	2.488459	2.488634	2.488808	2.488983	2.489158	2.489332	2.489507	2.489682	2.489856
0.950	2.490031	2.490206	2.490380	2.490555	2.490730	2.490905	2.491079	2.491254	2.491429	2.491604
0.960	2.491778	2.491953	2.492128	2.492303	2.492478	2.492652	2.492827	2.493002	2.493177	2.493352
0.970	2.493526	2.493701	2.493876	2.494051	2.494226	2.494401	2.494576	2.494750	2.494925	2.495100
0.980	2.495275	2.495450	2.495625	2.495800	2.495975	2.496150	2.496325	2.496500	2.496675	2.496850
0.990	2.497025	2.497200	2.497375	2.497550	2.497725	2.497900	2.498075	2.498250	2.498425	2.498600

ATTENUATION IN DECIBELS
THETA FROM 30.000 TO 30.499 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.000	2.498775	2.498950	2.499125	2.499300	2.499475	2.499650	2.499825	2.500000	2.500175	2.500350
0.010	2.500526	2.500701	2.500876	2.501051	2.501226	2.501401	2.501576	2.501752	2.501927	2.502102
0.020	2.502277	2.502452	2.502628	2.502803	2.502978	2.503153	2.503328	2.503504	2.503679	2.503854
0.030	2.504029	2.504205	2.504380	2.504555	2.504730	2.504906	2.505081	2.505256	2.505432	2.505607
0.040	2.505782	2.505958	2.506133	2.506308	2.506484	2.506659	2.506834	2.507010	2.507185	2.507361
0.050	2.507536	2.507711	2.507887	2.508062	2.508238	2.508413	2.508589	2.508764	2.508939	2.509115
0.060	2.509290	2.509466	2.509641	2.509817	2.509992	2.510168	2.510343	2.510519	2.510694	2.510870
0.070	2.511045	2.511221	2.511397	2.511572	2.511748	2.511923	2.512099	2.512274	2.512450	2.512626
0.080	2.512801	2.512977	2.513153	2.513328	2.513504	2.513679	2.513855	2.514031	2.514206	2.514382
0.090	2.514558	2.514733	2.514909	2.515085	2.515261	2.515436	2.515612	2.515788	2.515963	2.516139
0.100	2.516315	2.516491	2.516667	2.516842	2.517018	2.517194	2.517370	2.517545	2.517721	2.517897
0.110	2.518073	2.518249	2.518425	2.518600	2.518776	2.518952	2.519128	2.519304	2.519480	2.519656
0.120	2.519832	2.520007	2.520183	2.520359	2.520535	2.520711	2.520887	2.521063	2.521239	2.521415
0.130	2.521591	2.521767	2.521943	2.522119	2.522295	2.522471	2.522647	2.522823	2.522999	2.523175
0.140	2.523351	2.523527	2.523703	2.523879	2.524055	2.524231	2.524407	2.524583	2.524759	2.524936
0.150	2.525112	2.525288	2.525464	2.525640	2.525816	2.525992	2.526168	2.526345	2.526521	2.526697
0.160	2.526873	2.527049	2.527225	2.527402	2.527578	2.527754	2.527930	2.528106	2.528283	2.528459
0.170	2.528635	2.528811	2.528988	2.529164	2.529340	2.529517	2.529693	2.529869	2.530045	2.530222
0.180	2.530398	2.530574	2.530751	2.530927	2.531103	2.531280	2.531456	2.531633	2.531809	2.531985
0.190	2.532162	2.532338	2.532514	2.532691	2.532867	2.533044	2.533220	2.533397	2.533573	2.533749
0.200	2.533926	2.534102	2.534279	2.534455	2.534632	2.534808	2.534985	2.535161	2.535338	2.535514
0.210	2.535691	2.535867	2.536044	2.536221	2.536397	2.536574	2.536750	2.536927	2.537103	2.537280
0.220	2.537457	2.537633	2.537810	2.537986	2.538163	2.538340	2.538516	2.538693	2.538870	2.539046
0.230	2.539223	2.539400	2.539576	2.539753	2.539930	2.540107	2.540283	2.540460	2.540637	2.540813
0.240	2.540990	2.541167	2.541344	2.541520	2.541697	2.541874	2.542051	2.542228	2.542404	2.542581
0.250	2.542758	2.542935	2.543112	2.543288	2.543465	2.543642	2.543819	2.543996	2.544173	2.544350
0.260	2.544527	2.544703	2.544880	2.545057	2.545234	2.545411	2.545588	2.545765	2.545942	2.546119
0.270	2.546296	2.546473	2.546650	2.546827	2.547004	2.547181	2.547358	2.547535	2.547712	2.547889
0.280	2.548066	2.548243	2.548420	2.548597	2.548774	2.548951	2.549128	2.549305	2.549482	2.549659
0.290	2.549836	2.550013	2.550191	2.550368	2.550545	2.550722	2.550899	2.551076	2.551253	2.551431
0.300	2.551608	2.551785	2.551962	2.552139	2.552316	2.552494	2.552671	2.552848	2.553025	2.553203
0.310	2.553380	2.553557	2.553734	2.553912	2.554089	2.554266	2.554443	2.554621	2.554798	2.554975
0.320	2.555153	2.555330	2.555507	2.555685	2.555862	2.556039	2.556217	2.556394	2.556571	2.556749
0.330	2.556926	2.557104	2.557281	2.557458	2.557636	2.557813	2.557991	2.558168	2.558345	2.558523
0.340	2.558700	2.558878	2.559055	2.559233	2.559410	2.559588	2.559765	2.559943	2.560120	2.560298
0.350	2.560475	2.560653	2.560830	2.561008	2.561185	2.561363	2.561541	2.561718	2.561896	2.562073
0.360	2.562251	2.562428	2.562606	2.562784	2.562961	2.563139	2.563317	2.563494	2.563672	2.563850
0.370	2.564027	2.564205	2.564383	2.564560	2.564738	2.564916	2.565093	2.565271	2.565449	2.565627
0.380	2.565804	2.565982	2.566160	2.566338	2.566515	2.566693	2.566871	2.567049	2.567226	2.567404
0.390	2.567582	2.567760	2.567938	2.568116	2.568293	2.568471	2.568649	2.568827	2.569005	2.569183
0.400	2.569538	2.569716	2.569894	2.570072	2.570250	2.570428	2.570606	2.570784	2.570962	2.571140
0.410	2.571318	2.571496	2.571674	2.571852	2.572030	2.572208	2.572386	2.572564	2.572742	2.572920
0.420	2.573098	2.573276	2.573454	2.573632	2.573810	2.573988	2.574166	2.574344	2.574522	2.574700
0.430	2.574878	2.575056	2.575235	2.575413	2.575591	2.575769	2.575947	2.576125	2.576303	2.576481
0.440	2.576660	2.576838	2.577016	2.577194	2.577372	2.577551	2.577729	2.577907	2.578085	2.578263
0.450	2.578442	2.578620	2.578798	2.578977	2.579155	2.579333	2.579511	2.579690	2.579868	2.580046
0.460	2.580225	2.580403	2.580581	2.580760	2.580938	2.581116	2.581295	2.581473	2.581651	2.581830
0.470	2.581830	2.582008	2.582187	2.582365	2.582543	2.582722	2.582900	2.583079	2.583257	2.583436
0.480	2.583614	2.583792	2.583971	2.584149	2.584328	2.584506	2.584685	2.584863	2.585042	2.585220
0.490	2.585399	2.585577	2.585756	2.585934	2.586113	2.586292	2.586470	2.586649	2.586827	2.587006

ATTENUATION IN DECIBELS
THETA FROM 30.500 TO 30.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	2.587184	2.587363	2.587542	2.587720	2.587899	2.588078	2.588256	2.588435	2.588613	2.588792
0.510	2.588971	2.589149	2.589328	2.589507	2.589686	2.589864	2.590043	2.590222	2.590400	2.590579
0.520	2.590937	2.591115	2.591294	2.591473	2.591652	2.591830	2.592009	2.592188	2.592367	2.592545
0.530	2.592546	2.592724	2.592903	2.593082	2.593261	2.593440	2.593618	2.593797	2.593976	2.594155
0.540	2.594334	2.594513	2.594692	2.594871	2.595050	2.595228	2.595407	2.595586	2.595765	2.595944
0.550	2.596123	2.596302	2.596481	2.596660	2.596839	2.597018	2.597197	2.597376	2.597555	2.597734
0.560	2.597913	2.598092	2.598271	2.598450	2.598629	2.598808	2.598987	2.599166	2.599345	2.599524
0.570	2.599704	2.599883	2.600062	2.600241	2.600420	2.600599	2.600778	2.600957	2.601137	2.601316
0.580	2.601674	2.601853	2.602032	2.602212	2.602391	2.602570	2.602749	2.602928	2.603108	2.603287
0.590	2.603327	2.603466	2.603645	2.603825	2.604004	2.604183	2.604362	2.604542	2.604721	2.604900
0.600	2.605080	2.605259	2.605438	2.605618	2.605797	2.605976	2.606156	2.606335	2.606514	2.606694
0.610	2.606873	2.607052	2.607232	2.607411	2.607591	2.607770	2.607949	2.608129	2.608308	2.608488
0.620	2.608667	2.608847	2.609026	2.609206	2.609385	2.609565	2.609744	2.609924	2.610103	2.610283
0.630	2.610467	2.610647	2.610821	2.611001	2.611180	2.611360	2.611539	2.611719	2.611899	2.612078
0.640	2.612258	2.612437	2.612617	2.612797	2.612976	2.613156	2.613335	2.613515	2.613695	2.613874
0.650	2.614054	2.614234	2.614413	2.614593	2.614773	2.614952	2.615132	2.615312	2.615492	2.615671
0.660	2.615851	2.616031	2.616211	2.616390	2.616570	2.616750	2.616930	2.617109	2.617289	2.617469
0.670	2.617649	2.617829	2.618008	2.618188	2.618368	2.618548	2.618728	2.618908	2.619087	2.619267
0.680	2.619447	2.619627	2.619807	2.619987	2.620167	2.620347	2.620527	2.620707	2.620887	2.621066
0.690	2.621246	2.621426	2.621606	2.621786	2.621966	2.622146	2.622326	2.622506	2.622686	2.622866
0.700	2.623046	2.623226	2.623406	2.623586	2.623766	2.623946	2.624127	2.624307	2.624487	2.624667
0.710	2.624847	2.625027	2.625207	2.625387	2.625567	2.625747	2.625928	2.626108	2.626288	2.626468
0.720	2.626648	2.626828	2.627009	2.627189	2.627369	2.627549	2.627729	2.627910	2.628090	2.628270
0.730	2.628450	2.628630	2.628811	2.628991	2.629171	2.629351	2.629532	2.629712	2.629892	2.630073
0.740	2.630253	2.630433	2.630614	2.630794	2.630974	2.631155	2.631335	2.631515	2.631696	2.631876
0.750	2.632056	2.632237	2.632417	2.632598	2.632778	2.632958	2.633139	2.633319	2.633500	2.633680
0.760	2.633861	2.634041	2.634222	2.634402	2.634582	2.634763	2.634943	2.635124	2.635304	2.635485
0.770	2.635865	2.635846	2.636027	2.636207	2.636388	2.636568	2.636749	2.636929	2.637110	2.637291
0.780	2.637471	2.637652	2.637832	2.638013	2.638194	2.638374	2.638555	2.638735	2.638916	2.639097
0.790	2.639277	2.639458	2.639639	2.639819	2.640000	2.640181	2.640362	2.640542	2.640723	2.640904
0.800	2.641084	2.641265	2.641446	2.641627	2.641807	2.641988	2.642169	2.642350	2.642531	2.642711
0.810	2.642892	2.643073	2.643254	2.643435	2.643616	2.643796	2.643977	2.644158	2.644339	2.644520
0.820	2.644701	2.644882	2.645062	2.645243	2.645424	2.645605	2.645786	2.645967	2.646148	2.646329
0.830	2.646510	2.646691	2.646872	2.647053	2.647234	2.647415	2.647596	2.647777	2.647958	2.648139
0.840	2.648320	2.648501	2.648682	2.648863	2.649044	2.649225	2.649406	2.649587	2.649768	2.649949
0.850	2.650130	2.650312	2.650493	2.650674	2.650855	2.651036	2.651217	2.651398	2.651579	2.651761
0.860	2.651942	2.652123	2.652304	2.652485	2.652667	2.652848	2.653029	2.653210	2.653391	2.653573
0.870	2.653754	2.653935	2.654116	2.654298	2.654479	2.654660	2.654841	2.655023	2.655204	2.655385
0.880	2.655567	2.655748	2.655929	2.656111	2.656292	2.656473	2.656655	2.656836	2.657017	2.657199
0.890	2.657380	2.657562	2.657743	2.657924	2.658106	2.658287	2.658469	2.658650	2.658831	2.659013
0.900	2.659194	2.659376	2.659557	2.659739	2.659920	2.660102	2.660283	2.660465	2.660646	2.660828
0.910	2.661009	2.661191	2.661372	2.661554	2.661736	2.661917	2.662099	2.662280	2.662462	2.662643
0.920	2.662825	2.663007	2.663188	2.663370	2.663551	2.663733	2.663915	2.664096	2.664278	2.664460
0.930	2.664641	2.664823	2.665005	2.665186	2.665368	2.665550	2.665732	2.665913	2.666095	2.666277
0.940	2.666458	2.666640	2.666822	2.667004	2.667186	2.667367	2.667549	2.667731	2.667913	2.668094
0.950	2.668276	2.668458	2.668640	2.668822	2.669004	2.669185	2.669367	2.669549	2.669731	2.669913
0.960	2.670095	2.670277	2.670459	2.670641	2.670822	2.671004	2.671186	2.671368	2.671550	2.671732
0.970	2.671914	2.672096	2.672278	2.672460	2.672642	2.672824	2.673006	2.673188	2.673370	2.673552
0.980	2.673734	2.673916	2.674098	2.674280	2.674462	2.674644	2.674826	2.675008	2.675191	2.675373
0.990	2.675555	2.675737	2.675919	2.676101	2.676283	2.676465	2.676648	2.676830	2.677012	2.677194

ATTENUATION IN DECIBELS
THETA FROM 31.000 TO 31.499 DEGREES

THETA IN
DEGREES

0.000	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.000	2.677376	2.677558	2.677741	2.677923	2.678105	2.678287	2.678469	2.678652	2.678834	2.679016
0.010	2.679198	2.679381	2.679563	2.679745	2.679927	2.680110	2.680292	2.680474	2.680657	2.680839
0.020	2.681021	2.681204	2.681386	2.681568	2.681751	2.681933	2.682115	2.682298	2.682480	2.682662
0.030	2.682845	2.683027	2.683210	2.683392	2.683574	2.683757	2.683939	2.684122	2.684304	2.684487
0.040	2.684669	2.684852	2.685034	2.685216	2.685399	2.685581	2.685764	2.685946	2.686129	2.686312
0.050	2.686494	2.686677	2.686859	2.687042	2.687224	2.687407	2.687589	2.687772	2.687955	2.688137
0.060	2.688320	2.688502	2.688685	2.688868	2.689050	2.689233	2.689416	2.689598	2.689781	2.689964
0.070	2.690146	2.690329	2.690512	2.690694	2.690877	2.691060	2.691242	2.691425	2.691608	2.691791
0.080	2.691973	2.692156	2.692339	2.692522	2.692705	2.692887	2.693070	2.693253	2.693436	2.693619
0.090	2.693801	2.693984	2.694167	2.694350	2.694533	2.694716	2.694898	2.695081	2.695264	2.695447
0.100	2.695630	2.695813	2.695996	2.696179	2.696362	2.696545	2.696728	2.696910	2.697093	2.697276
0.110	2.697459	2.697642	2.697825	2.698008	2.698191	2.698374	2.698557	2.698740	2.698923	2.699106
0.120	2.699289	2.699472	2.699656	2.699839	2.700022	2.700205	2.700388	2.700571	2.700754	2.700937
0.130	2.701120	2.701303	2.701486	2.701670	2.701853	2.702036	2.702219	2.702402	2.702585	2.702769
0.140	2.702952	2.703135	2.703318	2.703501	2.703685	2.703868	2.704051	2.704234	2.704417	2.704601
0.150	2.704784	2.704967	2.705150	2.705334	2.705517	2.705700	2.705884	2.706067	2.706250	2.706434
0.160	2.706617	2.706800	2.706984	2.707167	2.707350	2.707534	2.707717	2.707900	2.708084	2.708267
0.170	2.708451	2.708634	2.708817	2.709001	2.709184	2.709368	2.709551	2.709735	2.709918	2.710102
0.180	2.710285	2.710468	2.710652	2.710835	2.711019	2.711202	2.711386	2.711570	2.711753	2.711937
0.190	2.712120	2.712304	2.712487	2.712671	2.712854	2.713038	2.713222	2.713405	2.713589	2.713772
0.200	2.713956	2.714140	2.714323	2.714507	2.714691	2.714874	2.715058	2.715242	2.715425	2.715609
0.210	2.715793	2.715976	2.716160	2.716344	2.716527	2.716711	2.716895	2.717079	2.717262	2.717446
0.220	2.717630	2.717814	2.717997	2.718181	2.718365	2.718549	2.718733	2.718916	2.719100	2.719284
0.230	2.719468	2.719652	2.719836	2.720019	2.720203	2.720387	2.720571	2.720755	2.720939	2.721123
0.240	2.721307	2.721491	2.721674	2.721858	2.722042	2.722226	2.722410	2.722594	2.722778	2.722962
0.250	2.723146	2.723330	2.723514	2.723698	2.723882	2.724066	2.724250	2.724434	2.724618	2.724802
0.260	2.724986	2.725170	2.725354	2.725538	2.725723	2.725907	2.726091	2.726275	2.726459	2.726643
0.270	2.726827	2.727011	2.727195	2.727380	2.727564	2.727748	2.727932	2.728116	2.728300	2.728485
0.280	2.728669	2.728853	2.729037	2.729221	2.729406	2.729590	2.729774	2.729958	2.730143	2.730327
0.290	2.730511	2.730695	2.730880	2.731064	2.731248	2.731433	2.731617	2.731801	2.731986	2.732170
0.300	2.732354	2.732539	2.732723	2.732907	2.733092	2.733276	2.733460	2.733645	2.733829	2.734014
0.310	2.734198	2.734383	2.734567	2.734751	2.734936	2.735120	2.735305	2.735489	2.735674	2.735858
0.320	2.736043	2.736227	2.736412	2.736596	2.736781	2.736965	2.737150	2.737334	2.737519	2.737703
0.330	2.737888	2.738072	2.738257	2.738442	2.738626	2.738811	2.738995	2.739180	2.739365	2.739549
0.340	2.739734	2.739919	2.740103	2.740288	2.740472	2.740657	2.740842	2.741027	2.741211	2.741396
0.350	2.741581	2.741765	2.741950	2.742135	2.742320	2.742504	2.742689	2.742874	2.743059	2.743243
0.360	2.743428	2.743613	2.743798	2.743982	2.744167	2.744352	2.744537	2.744722	2.744907	2.745091
0.370	2.745276	2.745461	2.745646	2.745831	2.746016	2.746201	2.746385	2.746570	2.746755	2.746940
0.380	2.747125	2.747310	2.747495	2.747680	2.747865	2.748050	2.748235	2.748420	2.748605	2.748790
0.390	2.748975	2.749160	2.749345	2.749530	2.749715	2.749900	2.750085	2.750270	2.750455	2.750640
0.400	2.750825	2.751010	2.751195	2.751380	2.751565	2.751751	2.751936	2.752121	2.752306	2.752491
0.410	2.752676	2.752861	2.753046	2.753232	2.753417	2.753602	2.753787	2.753972	2.754158	2.754343
0.420	2.754528	2.754713	2.754898	2.755084	2.755269	2.755454	2.755639	2.755825	2.756010	2.756195
0.430	2.756380	2.756566	2.756751	2.756936	2.757122	2.757307	2.757492	2.757678	2.757863	2.758048
0.440	2.758234	2.758419	2.758604	2.758790	2.758975	2.759161	2.759346	2.759531	2.759717	2.759902
0.450	2.760088	2.760273	2.760459	2.760644	2.760830	2.761015	2.761200	2.761386	2.761571	2.761757
0.460	2.761942	2.762128	2.762313	2.762499	2.762684	2.762870	2.763056	2.763241	2.763427	2.763612
0.470	2.763998	2.764183	2.764369	2.764555	2.764740	2.764926	2.765111	2.765297	2.765483	2.765668
0.480	2.765954	2.766139	2.766325	2.766510	2.766696	2.766882	2.767068	2.767254	2.767440	2.767625
0.490	2.767511	2.767697	2.767882	2.768068	2.768254	2.768440	2.768625	2.768811	2.768997	2.769183

ATTENUATION IN DECIBELS
THETA FROM 31.500 TO 31.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	2.769369	2.769554	2.769740	2.769926	2.770112	2.770298	2.770483	2.770669	2.770855	2.771041
0.510	2.771227	2.771413	2.771599	2.771785	2.771970	2.772156	2.772342	2.772528	2.772714	2.772900
0.520	2.773086	2.773272	2.773458	2.773644	2.773830	2.774016	2.774202	2.774388	2.774574	2.774760
0.530	2.774946	2.775132	2.775318	2.775504	2.775690	2.775876	2.776062	2.776248	2.776434	2.776620
0.540	2.776806	2.776992	2.777178	2.777365	2.777551	2.777737	2.777923	2.778109	2.778295	2.778481
0.550	2.778668	2.778854	2.779040	2.779226	2.779412	2.779598	2.779785	2.779971	2.780157	2.780343
0.560	2.780529	2.780716	2.780902	2.781088	2.781274	2.781461	2.781647	2.781833	2.782020	2.782206
0.570	2.782392	2.782579	2.782765	2.782951	2.783138	2.783324	2.783510	2.783697	2.783883	2.784069
0.580	2.784256	2.784442	2.784628	2.784815	2.785001	2.785188	2.785374	2.785561	2.785747	2.785933
0.590	2.786120	2.786306	2.786493	2.786679	2.786866	2.787052	2.787239	2.787425	2.787612	2.787798
0.600	2.787985	2.788171	2.788358	2.788544	2.788731	2.788917	2.789104	2.789291	2.789477	2.789664
0.610	2.789850	2.790037	2.790224	2.790410	2.790597	2.790783	2.790970	2.791157	2.791343	2.791530
0.620	2.791717	2.791903	2.792090	2.792277	2.792463	2.792650	2.792837	2.793024	2.793210	2.793397
0.630	2.793584	2.793771	2.793957	2.794144	2.794331	2.794518	2.794704	2.794891	2.795078	2.795265
0.640	2.795452	2.795638	2.795825	2.796012	2.796199	2.796386	2.796573	2.796760	2.796946	2.797133
0.650	2.797320	2.797507	2.797694	2.797881	2.798068	2.798255	2.798442	2.798629	2.798816	2.799002
0.660	2.799189	2.799376	2.799563	2.799750	2.799937	2.800124	2.800311	2.800498	2.800685	2.800872
0.670	2.801059	2.801247	2.801434	2.801621	2.801808	2.801995	2.802182	2.802369	2.802556	2.802743
0.680	2.802930	2.803117	2.803304	2.803492	2.803679	2.803866	2.804053	2.804240	2.804427	2.804615
0.690	2.804802	2.804989	2.805176	2.805363	2.805550	2.805738	2.805925	2.806112	2.806299	2.806487
0.700	2.806674	2.806861	2.807048	2.807236	2.807423	2.807610	2.807798	2.807985	2.808172	2.808360
0.710	2.808547	2.808734	2.808922	2.809109	2.809296	2.809484	2.809671	2.809858	2.810046	2.810233
0.720	2.810421	2.810608	2.810795	2.810983	2.811170	2.811358	2.811545	2.811733	2.811920	2.812107
0.730	2.812295	2.812482	2.812670	2.812857	2.813045	2.813232	2.813420	2.813607	2.813795	2.813982
0.740	2.814170	2.814358	2.814545	2.814733	2.814920	2.815108	2.815295	2.815483	2.815671	2.815858
0.750	2.816046	2.816234	2.816421	2.816609	2.816796	2.816984	2.817172	2.817359	2.817547	2.817735
0.760	2.817922	2.818110	2.818298	2.818486	2.818673	2.818861	2.819049	2.819237	2.819424	2.819612
0.770	2.819800	2.819988	2.820175	2.820363	2.820551	2.820739	2.820927	2.821114	2.821302	2.821490
0.780	2.821678	2.821866	2.822054	2.822241	2.822429	2.822617	2.822805	2.822993	2.823181	2.823369
0.790	2.823557	2.823745	2.823932	2.824120	2.824308	2.824496	2.824684	2.824872	2.825060	2.825248
0.800	2.825436	2.825624	2.825812	2.826000	2.826188	2.826376	2.826564	2.826752	2.826940	2.827128
0.810	2.827316	2.827504	2.827693	2.827881	2.828069	2.828257	2.828445	2.828633	2.828821	2.829009
0.820	2.829197	2.829386	2.829574	2.829762	2.829950	2.830138	2.830326	2.830515	2.830703	2.830891
0.830	2.831079	2.831267	2.831456	2.831644	2.831832	2.832020	2.832209	2.832397	2.832585	2.832773
0.840	2.832962	2.833150	2.833338	2.833526	2.833715	2.833903	2.834091	2.834280	2.834468	2.834656
0.850	2.834845	2.835033	2.835221	2.835410	2.835598	2.835787	2.835975	2.836163	2.836352	2.836540
0.860	2.836729	2.836917	2.837106	2.837294	2.837482	2.837671	2.837859	2.838048	2.838236	2.838425
0.870	2.838613	2.838802	2.838990	2.839179	2.839367	2.839556	2.839744	2.839933	2.840122	2.840310
0.880	2.840499	2.840687	2.840876	2.841064	2.841253	2.841442	2.841630	2.841819	2.842008	2.842196
0.890	2.842385	2.842573	2.842762	2.842951	2.843139	2.843328	2.843517	2.843706	2.843894	2.844083
0.900	2.844272	2.844460	2.844649	2.844838	2.845027	2.845215	2.845404	2.845593	2.845782	2.845970
0.910	2.846159	2.846348	2.846537	2.846726	2.846915	2.847103	2.847292	2.847481	2.847670	2.847859
0.920	2.848048	2.848236	2.848425	2.848614	2.848803	2.848992	2.849181	2.849370	2.849559	2.849748
0.930	2.849937	2.850126	2.850315	2.850504	2.850692	2.850881	2.851070	2.851259	2.851448	2.851637
0.940	2.851826	2.852015	2.852205	2.852394	2.852583	2.852772	2.852961	2.853150	2.853339	2.853528
0.950	2.853717	2.853906	2.854095	2.854284	2.854473	2.854663	2.854852	2.855041	2.855230	2.855419
0.960	2.855608	2.855797	2.855987	2.856176	2.856365	2.856554	2.856743	2.856933	2.857122	2.857311
0.970	2.857500	2.857689	2.857879	2.858068	2.858257	2.858447	2.858636	2.858825	2.859014	2.859204
0.980	2.859393	2.859582	2.859772	2.859961	2.860150	2.860340	2.860529	2.860718	2.860908	2.861097
0.990	2.861286	2.861476	2.861665	2.861855	2.862044	2.862233	2.862423	2.862612	2.862802	2.862991

ATTENUATION IN DECIBELS
THETA FROM 32.000 TO 32.499 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.000	2.863181	2.863370	2.863560	2.863749	2.863939	2.864128	2.864318	2.864507	2.864697	2.864886
0.010	2.865076	2.865265	2.865455	2.865644	2.865834	2.866023	2.866213	2.866402	2.866592	2.866782
0.020	2.866971	2.867161	2.867350	2.867540	2.867730	2.867919	2.868109	2.868299	2.868488	2.868678
0.030	2.868868	2.869057	2.869247	2.869437	2.869626	2.869816	2.870006	2.870196	2.870385	2.870575
0.040	2.870765	2.870955	2.871144	2.871334	2.871524	2.871714	2.871903	2.872093	2.872282	2.872473
0.050	2.872663	2.872853	2.873042	2.873232	2.873422	2.873612	2.873802	2.873992	2.874182	2.874371
0.060	2.874561	2.874751	2.874941	2.875131	2.875321	2.875511	2.875701	2.875891	2.876081	2.876271
0.070	2.876461	2.876651	2.876841	2.877031	2.877221	2.877411	2.877601	2.877791	2.877981	2.878171
0.080	2.878361	2.878551	2.878741	2.878931	2.879121	2.879311	2.879501	2.879691	2.879881	2.880071
0.090	2.880262	2.880452	2.880642	2.880832	2.881022	2.881212	2.881402	2.881593	2.881783	2.881973
0.100	2.882163	2.882353	2.882544	2.882734	2.882924	2.883114	2.883304	2.883495	2.883685	2.883875
0.110	2.884065	2.884256	2.884446	2.884636	2.884827	2.885017	2.885207	2.885398	2.885588	2.885778
0.120	2.885969	2.886159	2.886349	2.886540	2.886730	2.886920	2.887111	2.887301	2.887491	2.887682
0.130	2.887872	2.888063	2.888253	2.888444	2.888634	2.888824	2.889015	2.889205	2.889396	2.889586
0.140	2.889777	2.889967	2.890158	2.890348	2.890539	2.890729	2.890920	2.891110	2.891301	2.891492
0.150	2.891682	2.891873	2.892063	2.892254	2.892444	2.892635	2.892826	2.893016	2.893207	2.893397
0.160	2.893588	2.893779	2.893969	2.894160	2.894351	2.894541	2.894732	2.894923	2.895113	2.895304
0.170	2.895495	2.895686	2.895876	2.896067	2.896258	2.896448	2.896639	2.896830	2.897021	2.897211
0.180	2.897402	2.897593	2.897784	2.897975	2.898165	2.898356	2.898547	2.898738	2.898929	2.899120
0.190	2.899310	2.899501	2.899692	2.899883	2.900074	2.900265	2.900456	2.900647	2.900838	2.901029
0.200	2.901219	2.901410	2.901601	2.901792	2.901983	2.902174	2.902365	2.902556	2.902747	2.902938
0.210	2.903129	2.903320	2.903511	2.903702	2.903893	2.904084	2.904275	2.904466	2.904657	2.904848
0.220	2.905040	2.905231	2.905422	2.905613	2.905804	2.905995	2.906186	2.906377	2.906568	2.906760
0.230	2.906951	2.907142	2.907333	2.907524	2.907715	2.907907	2.908098	2.908289	2.908480	2.908671
0.240	2.908863	2.909054	2.909245	2.909436	2.909628	2.909819	2.910010	2.910201	2.910393	2.910584
0.250	2.910775	2.910967	2.911158	2.911349	2.911541	2.911732	2.911923	2.912115	2.912306	2.912497
0.260	2.912689	2.912880	2.913071	2.913263	2.913454	2.913646	2.913837	2.914028	2.914220	2.914411
0.270	2.914603	2.914794	2.914986	2.915177	2.915369	2.915560	2.915752	2.915943	2.916135	2.916326
0.280	2.916518	2.916709	2.916901	2.917092	2.917284	2.917475	2.917667	2.917859	2.918050	2.918242
0.290	2.918433	2.918625	2.918816	2.919008	2.919200	2.919391	2.919583	2.919775	2.919966	2.920158
0.300	2.920350	2.920541	2.920733	2.920925	2.921116	2.921308	2.921500	2.921692	2.921883	2.922075
0.310	2.922267	2.922458	2.922650	2.922842	2.923034	2.923226	2.923417	2.923609	2.923801	2.923993
0.320	2.924185	2.924376	2.924568	2.924760	2.924952	2.925144	2.925336	2.925527	2.925719	2.925911
0.330	2.926103	2.926295	2.926487	2.926679	2.926871	2.927063	2.927255	2.927447	2.927639	2.927830
0.340	2.928022	2.928214	2.928406	2.928598	2.928790	2.928982	2.929174	2.929366	2.929558	2.929750
0.350	2.929942	2.930135	2.930327	2.930519	2.930711	2.930903	2.931095	2.931287	2.931479	2.931671
0.360	2.931863	2.932055	2.932247	2.932440	2.932632	2.932824	2.933016	2.933208	2.933400	2.933593
0.370	2.933785	2.933977	2.934169	2.934361	2.934554	2.934746	2.934938	2.935130	2.935323	2.935515
0.380	2.935707	2.935899	2.936092	2.936284	2.936476	2.936668	2.936861	2.937053	2.937245	2.937438
0.390	2.937630	2.937822	2.938015	2.938207	2.938399	2.938592	2.938784	2.938977	2.939169	2.939361
0.400	2.939554	2.939746	2.939939	2.940131	2.940324	2.940516	2.940708	2.940901	2.941093	2.941286
0.410	2.941478	2.941671	2.941863	2.942056	2.942248	2.942441	2.942633	2.942826	2.943018	2.943211
0.420	2.943404	2.943596	2.943789	2.943981	2.944174	2.944366	2.944559	2.944752	2.944944	2.945137
0.430	2.945330	2.945522	2.945715	2.945908	2.946100	2.946293	2.946486	2.946678	2.946871	2.947064
0.440	2.947256	2.947449	2.947642	2.947834	2.948027	2.948220	2.948413	2.948605	2.948798	2.948991
0.450	2.949184	2.949377	2.949569	2.949762	2.949955	2.950148	2.950341	2.950533	2.950726	2.950919
0.460	2.951112	2.951305	2.951498	2.951691	2.951883	2.952076	2.952269	2.952462	2.952655	2.952848
0.470	2.953041	2.953234	2.953427	2.953620	2.953813	2.954006	2.954199	2.954392	2.954585	2.954778
0.480	2.954971	2.955164	2.955357	2.955550	2.955743	2.955936	2.956129	2.956322	2.956515	2.956708
0.490	2.956901	2.957094	2.957287	2.957480	2.957674	2.957867	2.958060	2.958253	2.958446	2.958639

ATTENUATION IN DECIBELS
THETA FROM 32.500 TO 32.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	2.958832	2.959025	2.959219	2.959412	2.959605	2.959798	2.959991	2.960185	2.960378	2.960571
0.510	2.960764	2.960957	2.961151	2.961344	2.961537	2.961730	2.961924	2.962117	2.962310	2.962504
0.520	2.962697	2.962890	2.963084	2.963277	2.963470	2.963664	2.963857	2.964050	2.964244	2.964437
0.530	2.964630	2.964824	2.965017	2.965211	2.965404	2.965597	2.965791	2.965984	2.966178	2.966371
0.540	2.966565	2.966758	2.966951	2.967145	2.967338	2.967532	2.967725	2.967919	2.968112	2.968306
0.550	2.968499	2.968693	2.968886	2.969080	2.969274	2.969467	2.969661	2.969854	2.970048	2.970241
0.560	2.970435	2.970629	2.970822	2.971016	2.971210	2.971403	2.971597	2.971790	2.971984	2.972178
0.570	2.972371	2.972565	2.972759	2.972953	2.973146	2.973340	2.973534	2.973727	2.973921	2.974115
0.580	2.974309	2.974502	2.974696	2.974890	2.975084	2.975277	2.975471	2.975665	2.975859	2.976053
0.590	2.976247	2.976440	2.976634	2.976828	2.977022	2.977216	2.977410	2.977603	2.977797	2.977991
0.600	2.978185	2.978379	2.978573	2.978767	2.978961	2.979155	2.979349	2.979543	2.979737	2.979931
0.610	2.980125	2.980319	2.980513	2.980707	2.980901	2.981095	2.981289	2.981483	2.981677	2.981871
0.620	2.982065	2.982259	2.982453	2.982647	2.982841	2.983035	2.983229	2.983423	2.983617	2.983811
0.630	2.984006	2.984200	2.984394	2.984588	2.984782	2.984976	2.985170	2.985365	2.985559	2.985753
0.640	2.985947	2.986141	2.986336	2.986530	2.986724	2.986918	2.987113	2.987307	2.987501	2.987695
0.650	2.987890	2.988084	2.988278	2.988472	2.988667	2.988861	2.989055	2.989250	2.989444	2.989638
0.660	2.989833	2.990027	2.990221	2.990416	2.990610	2.990804	2.990999	2.991193	2.991388	2.991582
0.670	2.991777	2.991971	2.992165	2.992360	2.992554	2.992749	2.992943	2.993138	2.993332	2.993527
0.680	2.993721	2.993916	2.994110	2.994305	2.994499	2.994694	2.994888	2.995083	2.995277	2.995472
0.690	2.995667	2.995861	2.996056	2.996250	2.996445	2.996639	2.996834	2.997029	2.997223	2.997418
0.700	2.997613	2.997807	2.998002	2.998197	2.998391	2.998586	2.998781	2.998975	2.999170	2.999365
0.710	2.999559	2.999754	2.999949	3.000144	3.000338	3.000533	3.000728	3.000923	3.001117	3.001312
0.720	3.001507	3.001702	3.001897	3.002091	3.002286	3.002481	3.002676	3.002871	3.003066	3.003261
0.730	3.003455	3.003650	3.003845	3.004040	3.004235	3.004430	3.004625	3.004820	3.005015	3.005210
0.740	3.005404	3.005599	3.005794	3.005989	3.006184	3.006379	3.006574	3.006769	3.006964	3.007159
0.750	3.007354	3.007549	3.007744	3.007939	3.008134	3.008330	3.008525	3.008720	3.008915	3.009110
0.760	3.009305	3.009500	3.009695	3.009890	3.010085	3.010280	3.010476	3.010671	3.010866	3.011061
0.770	3.011256	3.011451	3.011647	3.011842	3.012037	3.012232	3.012427	3.012623	3.012818	3.013013
0.780	3.013208	3.013404	3.013599	3.013794	3.013989	3.014185	3.014380	3.014575	3.014771	3.014966
0.790	3.015161	3.015356	3.015552	3.015747	3.015943	3.016138	3.016333	3.016529	3.016724	3.016919
0.800	3.017115	3.017310	3.017506	3.017701	3.017896	3.018092	3.018287	3.018483	3.018678	3.018874
0.810	3.019069	3.019265	3.019460	3.019656	3.019851	3.020047	3.020242	3.020438	3.020633	3.020829
0.820	3.021024	3.021220	3.021415	3.021611	3.021806	3.022002	3.022198	3.022393	3.022589	3.022784
0.830	3.022980	3.023176	3.023371	3.023567	3.023763	3.023958	3.024154	3.024350	3.024545	3.024741
0.840	3.024937	3.025132	3.025328	3.025524	3.025719	3.025915	3.026111	3.026307	3.026502	3.026698
0.850	3.026894	3.027090	3.027285	3.027481	3.027677	3.027873	3.028069	3.028264	3.028460	3.028656
0.860	3.028852	3.029048	3.029244	3.029440	3.029635	3.029831	3.030027	3.030223	3.030419	3.030615
0.870	3.030811	3.031007	3.031203	3.031399	3.031595	3.031790	3.031986	3.032182	3.032378	3.032574
0.880	3.032770	3.032966	3.033162	3.033358	3.033554	3.033750	3.033946	3.034143	3.034339	3.034535
0.890	3.034731	3.034927	3.035123	3.035319	3.035515	3.035711	3.035907	3.036103	3.036299	3.036496
0.900	3.036692	3.036888	3.037084	3.037280	3.037476	3.037673	3.037869	3.038065	3.038261	3.038457
0.910	3.038654	3.038850	3.039046	3.039242	3.039439	3.039635	3.039831	3.040027	3.040224	3.040420
0.920	3.040616	3.040812	3.041009	3.041205	3.041401	3.041598	3.041794	3.041990	3.042187	3.042383
0.930	3.042580	3.042776	3.042972	3.043169	3.043365	3.043561	3.043758	3.043954	3.044151	3.044347
0.940	3.044544	3.044740	3.044937	3.045133	3.045329	3.045526	3.045722	3.045919	3.046115	3.046312
0.950	3.046508	3.046705	3.046901	3.047098	3.047295	3.047491	3.047688	3.047884	3.048081	3.048277
0.960	3.048474	3.048671	3.048867	3.049064	3.049260	3.049457	3.049654	3.049850	3.050047	3.050244
0.970	3.050440	3.050637	3.050834	3.051030	3.051227	3.051424	3.051621	3.051817	3.052014	3.052211
0.980	3.052407	3.052604	3.052801	3.052998	3.053194	3.053391	3.053588	3.053785	3.053982	3.054178
0.990	3.054375	3.054572	3.054769	3.054966	3.055163	3.055360	3.055556	3.055753	3.055950	3.056147

ATTENUATION IN DECIBELS
THETA FROM 33.000 TO 33.499 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.000	3.056344	3.056541	3.056738	3.056935	3.057132	3.057328	3.057525	3.057722	3.057919	3.058116
0.010	3.058313	3.058510	3.058707	3.058904	3.059101	3.059298	3.059495	3.059692	3.059889	3.060086
0.020	3.060283	3.060480	3.060677	3.060875	3.061072	3.061269	3.061466	3.061663	3.061860	3.062057
0.030	3.062254	3.062451	3.062648	3.062846	3.063043	3.063240	3.063437	3.063634	3.063831	3.064029
0.040	3.064226	3.064423	3.064620	3.064817	3.065015	3.065212	3.065409	3.065606	3.065804	3.066001
0.050	3.066198	3.066395	3.066593	3.066790	3.066987	3.067185	3.067382	3.067579	3.067777	3.067974
0.060	3.068171	3.068369	3.068566	3.068763	3.068961	3.069158	3.069355	3.069553	3.069750	3.069948
0.070	3.070145	3.070343	3.070540	3.070737	3.070935	3.071132	3.071330	3.071527	3.071725	3.071922
0.080	3.072120	3.072317	3.072515	3.072712	3.072910	3.073107	3.073305	3.073502	3.073700	3.073898
0.090	3.074095	3.074293	3.074490	3.074688	3.074885	3.075083	3.075281	3.075478	3.075676	3.075874
0.100	3.076071	3.076269	3.076467	3.076664	3.076862	3.077060	3.077257	3.077455	3.077653	3.077850
0.110	3.078048	3.078246	3.078444	3.078641	3.078839	3.079037	3.079235	3.079432	3.079630	3.079828
0.120	3.080026	3.080224	3.080421	3.080619	3.080817	3.081015	3.081213	3.081411	3.081608	3.081806
0.130	3.082004	3.082202	3.082400	3.082598	3.082796	3.082994	3.083192	3.083389	3.083587	3.083785
0.140	3.083983	3.084181	3.084379	3.084577	3.084775	3.084973	3.085171	3.085369	3.085567	3.085765
0.150	3.085963	3.086161	3.086359	3.086557	3.086755	3.086953	3.087151	3.087350	3.087548	3.087746
0.160	3.087944	3.088142	3.088340	3.088538	3.088736	3.088934	3.089133	3.089331	3.089529	3.089727
0.170	3.089925	3.090123	3.090322	3.090520	3.090718	3.090916	3.091114	3.091313	3.091511	3.091709
0.180	3.091907	3.092106	3.092304	3.092502	3.092700	3.092899	3.093097	3.093295	3.093494	3.093692
0.190	3.093890	3.094089	3.094287	3.094485	3.094684	3.094882	3.095080	3.095279	3.095477	3.095676
0.200	3.095874	3.096072	3.096271	3.096469	3.096668	3.096866	3.097065	3.097263	3.097461	3.097660
0.210	3.097858	3.098057	3.098255	3.098454	3.098652	3.098851	3.099049	3.099248	3.099447	3.099645
0.220	3.099844	3.100042	3.100241	3.100439	3.100638	3.100836	3.101035	3.101234	3.101432	3.101631
0.230	3.101830	3.102028	3.102227	3.102425	3.102624	3.102823	3.103021	3.103220	3.103419	3.103618
0.240	3.103816	3.104015	3.104214	3.104412	3.104611	3.104810	3.105009	3.105207	3.105406	3.105605
0.250	3.105804	3.106002	3.106201	3.106400	3.106599	3.106798	3.106997	3.107195	3.107394	3.107593
0.260	3.107792	3.107991	3.108190	3.108389	3.108587	3.108786	3.108985	3.109184	3.109383	3.109582
0.270	3.109781	3.109980	3.110179	3.110378	3.110577	3.110776	3.110975	3.111174	3.111373	3.111572
0.280	3.111771	3.111970	3.112169	3.112368	3.112567	3.112766	3.112965	3.113164	3.113363	3.113562
0.290	3.113761	3.113960	3.114159	3.114358	3.114557	3.114757	3.114956	3.115155	3.115354	3.115553
0.300	3.115752	3.115951	3.116151	3.116350	3.116549	3.116748	3.116947	3.117147	3.117346	3.117545
0.310	3.117744	3.117944	3.118143	3.118342	3.118541	3.118741	3.118940	3.119139	3.119338	3.119538
0.320	3.119737	3.119936	3.120136	3.120335	3.120534	3.120734	3.120933	3.121132	3.121332	3.121531
0.330	3.121731	3.121930	3.122129	3.122329	3.122528	3.122728	3.122927	3.123126	3.123326	3.123525
0.340	3.123725	3.123924	3.124124	3.124323	3.124523	3.124722	3.124922	3.125121	3.125321	3.125520
0.350	3.125720	3.125919	3.126119	3.126319	3.126518	3.126718	3.126917	3.127117	3.127316	3.127516
0.360	3.127716	3.127915	3.128115	3.128315	3.128514	3.128714	3.128913	3.129113	3.129313	3.129513
0.370	3.129712	3.129912	3.130112	3.130311	3.130511	3.130711	3.130911	3.131110	3.131310	3.131510
0.380	3.131710	3.131909	3.132109	3.132309	3.132509	3.132708	3.132908	3.133108	3.133308	3.133508
0.390	3.133708	3.133907	3.134107	3.134307	3.134507	3.134707	3.134907	3.135107	3.135307	3.135506
0.400	3.135706	3.135906	3.136106	3.136306	3.136506	3.136706	3.136906	3.137106	3.137306	3.137506
0.410	3.137706	3.137906	3.138106	3.138306	3.138506	3.138706	3.138906	3.139106	3.139306	3.139506
0.420	3.139706	3.139906	3.140106	3.140307	3.140507	3.140707	3.140907	3.141107	3.141307	3.141507
0.430	3.141707	3.141908	3.142108	3.142308	3.142508	3.142708	3.142908	3.143109	3.143309	3.143509
0.440	3.143709	3.143909	3.144110	3.144310	3.144510	3.144710	3.144911	3.145111	3.145311	3.145512
0.450	3.145712	3.145912	3.146113	3.146313	3.146513	3.146713	3.146914	3.147114	3.147315	3.147515
0.460	3.147715	3.147916	3.148116	3.148316	3.148517	3.148717	3.148918	3.149118	3.149319	3.149519
0.470	3.149719	3.149920	3.150120	3.150321	3.150521	3.150722	3.150922	3.151123	3.151323	3.151524
0.480	3.151724	3.151925	3.152125	3.152326	3.152526	3.152727	3.152928	3.153128	3.153329	3.153529
0.490	3.153730	3.153931	3.154131	3.154332	3.154532	3.154733	3.154934	3.155134	3.155335	3.155536

ATTENUATION IN DECIBELS
THETA FROM 33.500 TO 33.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	3.155736	3.155937	3.156138	3.156338	3.156539	3.156740	3.156941	3.157141	3.157342	3.157543
0.510	3.157744	3.157944	3.158145	3.158346	3.158547	3.158747	3.158948	3.159149	3.159350	3.159551
0.520	3.159752	3.159952	3.160153	3.160354	3.160555	3.160756	3.160957	3.161158	3.161358	3.161559
0.530	3.161760	3.161961	3.162162	3.162363	3.162564	3.162765	3.162966	3.163167	3.163368	3.163569
0.540	3.163770	3.163971	3.164172	3.164373	3.164574	3.164775	3.164976	3.165177	3.165378	3.165579
0.550	3.165780	3.165981	3.166182	3.166383	3.166584	3.166785	3.166986	3.167188	3.167389	3.167590
0.560	3.167791	3.167992	3.168193	3.168394	3.168596	3.168797	3.168998	3.169199	3.169400	3.169601
0.570	3.169803	3.170004	3.170205	3.170406	3.170608	3.170809	3.171010	3.171211	3.171413	3.171614
0.580	3.171815	3.172016	3.172218	3.172419	3.172620	3.172822	3.173023	3.173224	3.173426	3.173627
0.590	3.173828	3.174030	3.174231	3.174433	3.174634	3.174835	3.175037	3.175238	3.175440	3.175641
0.600	3.175842	3.176044	3.176245	3.176447	3.176648	3.176850	3.177051	3.177253	3.177454	3.177656
0.610	3.177857	3.178059	3.178260	3.178462	3.178663	3.178865	3.179067	3.179268	3.179470	3.179671
0.620	3.179873	3.180074	3.180276	3.180478	3.180679	3.180881	3.181083	3.181284	3.181486	3.181688
0.630	3.181889	3.182091	3.182293	3.182494	3.182696	3.182898	3.183099	3.183301	3.183503	3.183705
0.640	3.183906	3.184108	3.184310	3.184512	3.184713	3.184915	3.185117	3.185319	3.185520	3.185722
0.650	3.185924	3.186126	3.186328	3.186530	3.186731	3.186933	3.187135	3.187337	3.187539	3.187741
0.660	3.187943	3.188145	3.188347	3.188548	3.188750	3.188952	3.189154	3.189356	3.189558	3.189760
0.670	3.189962	3.190164	3.190366	3.190568	3.190770	3.190972	3.191174	3.191376	3.191578	3.191780
0.680	3.191982	3.192184	3.192386	3.192588	3.192791	3.192993	3.193195	3.193397	3.193599	3.193801
0.690	3.194003	3.194205	3.194407	3.194610	3.194812	3.195014	3.195216	3.195418	3.195620	3.195823
0.700	3.196025	3.196227	3.196429	3.196632	3.196834	3.197036	3.197238	3.197441	3.197643	3.197845
0.710	3.198047	3.198250	3.198452	3.198654	3.198857	3.199059	3.199261	3.199463	3.199666	3.199868
0.720	3.200071	3.200273	3.200475	3.200678	3.200880	3.201082	3.201285	3.201487	3.201690	3.201892
0.730	3.202094	3.202297	3.202499	3.202702	3.202904	3.203107	3.203309	3.203512	3.203714	3.203917
0.740	3.204119	3.204322	3.204524	3.204727	3.204929	3.205132	3.205334	3.205537	3.205740	3.205942
0.750	3.206145	3.206347	3.206550	3.206753	3.206955	3.207158	3.207360	3.207563	3.207766	3.207968
0.760	3.208171	3.208374	3.208576	3.208779	3.208982	3.209184	3.209387	3.209590	3.209793	3.209995
0.770	3.210198	3.210401	3.210604	3.210806	3.211009	3.211212	3.211415	3.211617	3.211820	3.212023
0.780	3.212226	3.212429	3.212631	3.212834	3.213037	3.213240	3.213443	3.213646	3.213849	3.214051
0.790	3.214254	3.214457	3.214660	3.214863	3.215066	3.215269	3.215472	3.215675	3.215878	3.216081
0.800	3.216284	3.216487	3.216690	3.216893	3.217096	3.217299	3.217502	3.217705	3.217908	3.218111
0.810	3.218314	3.218517	3.218720	3.218923	3.219126	3.219329	3.219532	3.219735	3.219938	3.220142
0.820	3.220345	3.220548	3.220751	3.220954	3.221157	3.221360	3.221564	3.221767	3.221970	3.222173
0.830	3.222376	3.222579	3.222783	3.222986	3.223189	3.223392	3.223596	3.223799	3.224002	3.224205
0.840	3.224409	3.224612	3.224815	3.225019	3.225222	3.225425	3.225628	3.225832	3.226035	3.226238
0.850	3.226442	3.226645	3.226849	3.227052	3.227255	3.227459	3.227662	3.227866	3.228069	3.228272
0.860	3.228476	3.228679	3.228883	3.229086	3.229290	3.229493	3.229697	3.229900	3.230103	3.230307
0.870	3.230510	3.230714	3.230918	3.231121	3.231325	3.231528	3.231732	3.231935	3.232139	3.232342
0.880	3.232546	3.232750	3.232953	3.233157	3.233360	3.233564	3.233768	3.233971	3.234175	3.234379
0.890	3.234582	3.234786	3.234989	3.235193	3.235397	3.235601	3.235804	3.236008	3.236212	3.236415
0.900	3.236619	3.236823	3.237027	3.237230	3.237434	3.237638	3.237842	3.238046	3.238249	3.238453
0.910	3.238657	3.238861	3.239065	3.239268	3.239472	3.239676	3.239880	3.240084	3.240288	3.240492
0.920	3.240695	3.240899	3.241103	3.241307	3.241511	3.241715	3.241919	3.242123	3.242327	3.242531
0.930	3.242735	3.242939	3.243143	3.243347	3.243551	3.243755	3.243959	3.244163	3.244367	3.244571
0.940	3.244775	3.244979	3.245183	3.245387	3.245591	3.245795	3.245999	3.246203	3.246407	3.246612
0.950	3.246816	3.247020	3.247224	3.247428	3.247632	3.247836	3.248041	3.248245	3.248449	3.248653
0.960	3.248857	3.249061	3.249266	3.249470	3.249674	3.249878	3.250083	3.250287	3.250491	3.250695
0.970	3.250900	3.251104	3.251308	3.251513	3.251717	3.251921	3.252125	3.252330	3.252534	3.252738
0.980	3.252943	3.253147	3.253352	3.253556	3.253760	3.253965	3.254169	3.254373	3.254578	3.254782
0.990	3.254987	3.255191	3.255396	3.255600	3.255805	3.256009	3.256213	3.256418	3.256622	3.256827

ATTENUATION IN DECIBELS
THETA FROM 34.000 TO 34.499 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.000	3.257031	3.257236	3.257440	3.257645	3.257850	3.258054	3.258259	3.258463	3.258668	3.258872
0.010	3.259077	3.259281	3.259486	3.259691	3.259895	3.260100	3.260305	3.260509	3.260714	3.260918
0.020	3.261123	3.261328	3.261532	3.261737	3.261942	3.262147	3.262351	3.262556	3.262761	3.262965
0.030	3.263170	3.263375	3.263580	3.263784	3.263989	3.264194	3.264399	3.264603	3.264808	3.265013
0.040	3.265218	3.265423	3.265628	3.265832	3.266037	3.266242	3.266447	3.266652	3.266857	3.267062
0.050	3.267266	3.267471	3.267676	3.267881	3.268086	3.268291	3.268496	3.268701	3.268906	3.269111
0.060	3.269316	3.269521	3.269726	3.269931	3.270136	3.270341	3.270546	3.270751	3.270956	3.271161
0.070	3.271366	3.271571	3.271776	3.271981	3.272186	3.272391	3.272596	3.272801	3.273006	3.273212
0.080	3.273417	3.273622	3.273827	3.274032	3.274237	3.274442	3.274647	3.274852	3.275057	3.275263
0.090	3.275468	3.275674	3.275879	3.276084	3.276289	3.276494	3.276700	3.276905	3.277110	3.277315
0.100	3.277521	3.277726	3.277931	3.278137	3.278342	3.278547	3.278753	3.278958	3.279163	3.279369
0.110	3.279574	3.279779	3.279985	3.280190	3.280395	3.280601	3.280806	3.281012	3.281217	3.281422
0.120	3.281628	3.281833	3.282039	3.282244	3.282450	3.282655	3.282861	3.283066	3.283272	3.283477
0.130	3.283683	3.283888	3.284094	3.284299	3.284505	3.284710	3.284916	3.285121	3.285327	3.285532
0.140	3.285738	3.285944	3.286149	3.286355	3.286560	3.286766	3.286972	3.287177	3.287383	3.287589
0.150	3.287794	3.288000	3.288206	3.288411	3.288617	3.288823	3.289028	3.289234	3.289440	3.289646
0.160	3.289851	3.290057	3.290263	3.290469	3.290674	3.290880	3.291086	3.291292	3.291497	3.291703
0.170	3.291909	3.292115	3.292321	3.292527	3.292732	3.292938	3.293144	3.293350	3.293556	3.293762
0.180	3.293968	3.294174	3.294380	3.294585	3.294791	3.294997	3.295203	3.295409	3.295615	3.295821
0.190	3.296027	3.296233	3.296439	3.296645	3.296851	3.297057	3.297263	3.297469	3.297675	3.297881
0.200	3.298087	3.298293	3.298499	3.298705	3.298911	3.299118	3.299324	3.299530	3.299736	3.299942
0.210	3.300148	3.300354	3.300560	3.300766	3.300973	3.301179	3.301385	3.301591	3.301797	3.302004
0.220	3.302210	3.302416	3.302622	3.302828	3.303035	3.303241	3.303447	3.303653	3.303860	3.304066
0.230	3.304272	3.304478	3.304685	3.304891	3.305097	3.305304	3.305510	3.305716	3.305923	3.306129
0.240	3.306335	3.306542	3.306748	3.306955	3.307161	3.307367	3.307574	3.307780	3.307987	3.308193
0.250	3.308399	3.308606	3.308812	3.309019	3.309225	3.309432	3.309638	3.309845	3.310051	3.310258
0.260	3.310464	3.310671	3.310877	3.311084	3.311290	3.311497	3.311703	3.311910	3.312117	3.312323
0.270	3.312530	3.312736	3.312943	3.313150	3.313356	3.313563	3.313769	3.313976	3.314183	3.314389
0.280	3.314596	3.314803	3.315009	3.315216	3.315423	3.315629	3.315836	3.316043	3.316250	3.316456
0.290	3.316663	3.316870	3.317077	3.317283	3.317490	3.317697	3.317904	3.318111	3.318317	3.318524
0.300	3.318731	3.318938	3.319145	3.319351	3.319558	3.319765	3.319972	3.320179	3.320386	3.320593
0.310	3.320800	3.321007	3.321213	3.321420	3.321627	3.321834	3.322041	3.322248	3.322455	3.322662
0.320	3.322869	3.323076	3.323283	3.323490	3.323697	3.323904	3.324111	3.324318	3.324525	3.324732
0.330	3.324939	3.325146	3.325353	3.325560	3.325768	3.325975	3.326182	3.326389	3.326596	3.326803
0.340	3.327010	3.327217	3.327424	3.327632	3.327839	3.328046	3.328253	3.328460	3.328668	3.328875
0.350	3.329082	3.329289	3.329496	3.329704	3.329911	3.330118	3.330325	3.330533	3.330740	3.330947
0.360	3.331154	3.331362	3.331569	3.331776	3.331984	3.332191	3.332398	3.332606	3.332813	3.333020
0.370	3.333228	3.333435	3.333643	3.333850	3.334057	3.334265	3.334472	3.334680	3.334887	3.335094
0.380	3.335302	3.335509	3.335717	3.335924	3.336132	3.336339	3.336547	3.336754	3.336962	3.337169
0.390	3.337377	3.337584	3.337792	3.337999	3.338207	3.338414	3.338622	3.338830	3.339037	3.339245
0.400	3.339452	3.339660	3.339868	3.340075	3.340283	3.340490	3.340698	3.340906	3.341113	3.341321
0.410	3.341529	3.341736	3.341944	3.342152	3.342359	3.342567	3.342775	3.342983	3.343190	3.343398
0.420	3.343606	3.343814	3.344021	3.344229	3.344437	3.344645	3.344853	3.345060	3.345268	3.345476
0.430	3.345684	3.345892	3.346100	3.346307	3.346515	3.346723	3.346931	3.347139	3.347347	3.347555
0.440	3.347763	3.347971	3.348178	3.348386	3.348594	3.348802	3.349010	3.349218	3.349426	3.349634
0.450	3.349842	3.350050	3.350258	3.350466	3.350674	3.350882	3.351090	3.351298	3.351506	3.351714
0.460	3.351922	3.352130	3.352339	3.352547	3.352755	3.352963	3.353171	3.353379	3.353587	3.353795
0.470	3.354003	3.354212	3.354420	3.354628	3.354836	3.355044	3.355253	3.355461	3.355669	3.355877
0.480	3.356085	3.356294	3.356502	3.356710	3.356918	3.357127	3.357335	3.357543	3.357751	3.357960
0.490	3.358168	3.358376	3.358585	3.358793	3.359001	3.359210	3.359418	3.359626	3.359835	3.360043

ATTENUATION IN DECIBELS
THETA FROM 34.500 TO 34.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	3.360251	3.360460	3.360668	3.360877	3.361085	3.361293	3.361502	3.361710	3.361919	3.362127
0.510	3.362336	3.362544	3.362752	3.362961	3.363169	3.363378	3.363586	3.363795	3.364003	3.364212
0.520	3.364421	3.364629	3.364838	3.365046	3.365255	3.365463	3.365672	3.365880	3.366089	3.366298
0.530	3.366506	3.366715	3.366924	3.367132	3.367341	3.367549	3.367758	3.367967	3.368175	3.368384
0.540	3.368593	3.368802	3.369010	3.369219	3.369428	3.369636	3.369845	3.370054	3.370263	3.370471
0.550	3.370680	3.370889	3.371098	3.371306	3.371515	3.371724	3.371933	3.372142	3.372351	3.372559
0.560	3.372768	3.372977	3.373186	3.373395	3.373604	3.373813	3.374021	3.374230	3.374439	3.374648
0.570	3.374857	3.375066	3.375275	3.375484	3.375693	3.375902	3.376111	3.376320	3.376529	3.376738
0.580	3.376947	3.377156	3.377365	3.377574	3.377783	3.377992	3.378201	3.378410	3.378619	3.378828
0.590	3.379037	3.379246	3.379455	3.379664	3.379874	3.380083	3.380292	3.380501	3.380710	3.380919
0.600	3.381128	3.381338	3.381547	3.381756	3.381965	3.382174	3.382383	3.382593	3.382802	3.383011
0.610	3.383220	3.383430	3.383639	3.383848	3.384057	3.384267	3.384476	3.384685	3.384895	3.385104
0.620	3.385313	3.385522	3.385732	3.385941	3.386150	3.386360	3.386569	3.386779	3.386988	3.387197
0.630	3.387407	3.387616	3.387825	3.388035	3.388244	3.388454	3.388663	3.388873	3.389082	3.389292
0.640	3.389501	3.389710	3.389920	3.390129	3.390339	3.390548	3.390758	3.390968	3.391177	3.391387
0.650	3.391596	3.391806	3.392015	3.392225	3.392434	3.392644	3.392854	3.393063	3.393273	3.393482
0.660	3.393692	3.393902	3.394111	3.394321	3.394531	3.394740	3.394950	3.395160	3.395369	3.395579
0.670	3.395789	3.395998	3.396208	3.396418	3.396628	3.396837	3.397047	3.397257	3.397467	3.397676
0.680	3.397886	3.398096	3.398306	3.398516	3.398725	3.398935	3.399145	3.399355	3.399565	3.399775
0.690	3.399984	3.400194	3.400404	3.400614	3.400824	3.401034	3.401244	3.401454	3.401664	3.401873
0.700	3.402083	3.402293	3.402503	3.402713	3.402923	3.403133	3.403343	3.403553	3.403763	3.403973
0.710	3.404183	3.404393	3.404603	3.404813	3.405023	3.405233	3.405444	3.405654	3.405864	3.406074
0.720	3.406284	3.406494	3.406704	3.406914	3.407124	3.407334	3.407545	3.407755	3.407965	3.408175
0.730	3.408385	3.408595	3.408805	3.409016	3.409226	3.409436	3.409646	3.409857	3.410067	3.410277
0.740	3.410487	3.410698	3.410908	3.411118	3.411328	3.411539	3.411749	3.411959	3.412170	3.412380
0.750	3.412590	3.412801	3.413011	3.413221	3.413432	3.413642	3.413852	3.414063	3.414273	3.414484
0.760	3.414694	3.414904	3.415115	3.415325	3.415535	3.415746	3.415957	3.416167	3.416378	3.416588
0.770	3.416799	3.417009	3.417220	3.417430	3.417641	3.417851	3.418062	3.418272	3.418483	3.418693
0.780	3.418904	3.419114	3.419325	3.419536	3.419746	3.419957	3.420167	3.420378	3.420589	3.420799
0.790	3.421010	3.421221	3.421431	3.421642	3.421853	3.422063	3.422274	3.422485	3.422696	3.422906
0.800	3.423117	3.423328	3.423538	3.423749	3.423960	3.424171	3.424381	3.424592	3.424803	3.425014
0.810	3.425224	3.425435	3.425646	3.425857	3.426068	3.426279	3.426489	3.426700	3.426911	3.427122
0.820	3.427333	3.427544	3.427755	3.427966	3.428177	3.428387	3.428598	3.428809	3.429020	3.429231
0.830	3.429442	3.429653	3.429864	3.430075	3.430286	3.430497	3.430708	3.430919	3.431130	3.431341
0.840	3.431552	3.431763	3.431974	3.432185	3.432396	3.432607	3.432818	3.433030	3.433241	3.433452
0.850	3.433663	3.433874	3.434085	3.434296	3.434507	3.434719	3.434930	3.435141	3.435352	3.435563
0.860	3.435775	3.435986	3.436197	3.436408	3.436619	3.436831	3.437042	3.437253	3.437464	3.437676
0.870	3.437887	3.438098	3.438309	3.438521	3.438732	3.438943	3.439154	3.439366	3.439577	3.439789
0.880	3.440000	3.440211	3.440423	3.440634	3.440845	3.441057	3.441268	3.441480	3.441691	3.441903
0.890	3.442114	3.442325	3.442537	3.442748	3.442960	3.443171	3.443383	3.443594	3.443806	3.444017
0.900	3.444229	3.444440	3.444652	3.444863	3.445075	3.445286	3.445498	3.445709	3.445921	3.446133
0.910	3.446344	3.446556	3.446767	3.446979	3.447191	3.447402	3.447614	3.447826	3.448037	3.448249
0.920	3.448460	3.448672	3.448884	3.449096	3.449307	3.449519	3.449731	3.449942	3.450154	3.450366
0.930	3.450578	3.450789	3.451001	3.451213	3.451425	3.451636	3.451848	3.452060	3.452272	3.452484
0.940	3.452695	3.452907	3.453119	3.453331	3.453543	3.453755	3.453967	3.454178	3.454390	3.454602
0.950	3.454814	3.455026	3.455238	3.455450	3.455662	3.455874	3.456086	3.456298	3.456510	3.456722
0.960	3.456934	3.457146	3.457358	3.457570	3.457782	3.457994	3.458206	3.458418	3.458630	3.458842
0.970	3.459054	3.459266	3.459478	3.459690	3.459902	3.460114	3.460326	3.460538	3.460751	3.460963
0.980	3.461175	3.461387	3.461599	3.461811	3.462023	3.462236	3.462448	3.462660	3.462872	3.463084
0.990	3.463297	3.463509	3.463721	3.463933	3.464146	3.464358	3.464570	3.464782	3.464995	3.465207

ATTENUATION IN DECIBELS
THETA FROM 35.000 TO 35.499 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.000	3.465419	3.465632	3.465844	3.466056	3.466268	3.466481	3.466693	3.466906	3.467118	3.467330
0.010	3.467543	3.467755	3.467967	3.468180	3.468392	3.468605	3.468817	3.469029	3.469242	3.469454
0.020	3.469667	3.469879	3.470092	3.470304	3.470517	3.470729	3.470942	3.471154	3.471367	3.471579
0.030	3.471792	3.472004	3.472217	3.472429	3.472642	3.472855	3.473067	3.473280	3.473492	3.473705
0.040	3.473917	3.474130	3.474343	3.474556	3.474768	3.474981	3.475193	3.475406	3.475619	3.475831
0.050	3.476044	3.476257	3.476469	3.476682	3.476895	3.477108	3.477320	3.477533	3.477746	3.477959
0.060	3.478171	3.478384	3.478597	3.478810	3.479023	3.479235	3.479448	3.479661	3.479874	3.480087
0.070	3.480299	3.480512	3.480725	3.480938	3.481151	3.481364	3.481577	3.481790	3.482003	3.482215
0.080	3.482428	3.482641	3.482854	3.483067	3.483280	3.483493	3.483706	3.483919	3.484132	3.484345
0.090	3.484558	3.484771	3.484984	3.485197	3.485410	3.485623	3.485836	3.486049	3.486262	3.486475
0.100	3.486689	3.486902	3.487115	3.487328	3.487541	3.487754	3.487967	3.488180	3.488394	3.488607
0.110	3.488820	3.489033	3.489246	3.489459	3.489673	3.489886	3.490099	3.490312	3.490525	3.490739
0.120	3.490952	3.491165	3.491378	3.491592	3.491805	3.492018	3.492232	3.492445	3.492658	3.492871
0.130	3.493085	3.493298	3.493511	3.493725	3.493938	3.494152	3.494365	3.494578	3.494792	3.495005
0.140	3.495218	3.495432	3.495645	3.495859	3.496072	3.496286	3.496499	3.496713	3.496926	3.497139
0.150	3.497353	3.497566	3.497780	3.497993	3.498207	3.498420	3.498634	3.498848	3.499061	3.499275
0.160	3.499488	3.499702	3.499915	3.500129	3.500342	3.500556	3.500770	3.500983	3.501197	3.501411
0.170	3.501624	3.501838	3.502052	3.502265	3.502479	3.502693	3.502906	3.503120	3.503334	3.503547
0.180	3.503761	3.503975	3.504188	3.504402	3.504616	3.504830	3.505043	3.505257	3.505471	3.505685
0.190	3.505899	3.506112	3.506326	3.506540	3.506754	3.506968	3.507182	3.507395	3.507609	3.507823
0.200	3.508037	3.508251	3.508465	3.508679	3.508893	3.509107	3.509320	3.509534	3.509748	3.509962
0.210	3.510176	3.510390	3.510604	3.510818	3.511032	3.511246	3.511460	3.511674	3.511888	3.512102
0.220	3.512316	3.512530	3.512744	3.512958	3.513172	3.513387	3.513601	3.513815	3.514029	3.514243
0.230	3.514457	3.514671	3.514885	3.515099	3.515313	3.515528	3.515742	3.515956	3.516170	3.516384
0.240	3.516599	3.516813	3.517027	3.517241	3.517455	3.517670	3.517884	3.518098	3.518312	3.518527
0.250	3.518741	3.518955	3.519170	3.519384	3.519598	3.519812	3.520027	3.520241	3.520455	3.520670
0.260	3.520884	3.521098	3.521313	3.521527	3.521742	3.521956	3.522170	3.522385	3.522599	3.522814
0.270	3.523028	3.523243	3.523457	3.523671	3.523886	3.524100	3.524315	3.524529	3.524744	3.524958
0.280	3.525173	3.525387	3.525602	3.525816	3.526031	3.526246	3.526460	3.526675	3.526889	3.527104
0.290	3.527318	3.527533	3.527748	3.527962	3.528177	3.528391	3.528606	3.528821	3.529035	3.529250
0.300	3.529465	3.529679	3.529894	3.530109	3.530324	3.530538	3.530753	3.530968	3.531182	3.531397
0.310	3.531612	3.531827	3.532041	3.532256	3.532471	3.532686	3.532901	3.533115	3.533330	3.533545
0.320	3.533760	3.533975	3.534189	3.534404	3.534619	3.534834	3.535049	3.535264	3.535479	3.535694
0.330	3.535909	3.536123	3.536338	3.536553	3.536768	3.536983	3.537198	3.537413	3.537628	3.537843
0.340	3.538053	3.538267	3.538482	3.538697	3.538912	3.539127	3.539342	3.539557	3.539772	3.539987
0.350	3.540208	3.540423	3.540638	3.540853	3.541068	3.541283	3.541498	3.541713	3.541928	3.542143
0.360	3.542359	3.542574	3.542789	3.543004	3.543219	3.543434	3.543649	3.543864	3.544079	3.544294
0.370	3.544511	3.544727	3.544942	3.545157	3.545372	3.545588	3.545803	3.546018	3.546233	3.546449
0.380	3.546664	3.546879	3.547095	3.547310	3.547525	3.547741	3.547956	3.548171	3.548387	3.548602
0.390	3.548818	3.549033	3.549248	3.549464	3.549679	3.549895	3.550110	3.550326	3.550541	3.550756
0.400	3.550972	3.551187	3.551403	3.551618	3.551834	3.552049	3.552265	3.552480	3.552696	3.552911
0.410	3.553127	3.553343	3.553558	3.553774	3.553989	3.554205	3.554420	3.554636	3.554852	3.555067
0.420	3.555283	3.555498	3.555714	3.555930	3.556145	3.556361	3.556577	3.556792	3.557008	3.557224
0.430	3.557440	3.557655	3.557871	3.558087	3.558302	3.558518	3.558734	3.558950	3.559165	3.559381
0.440	3.559597	3.559813	3.560029	3.560244	3.560460	3.560676	3.560891	3.561108	3.561324	3.561539
0.450	3.561755	3.561971	3.562187	3.562403	3.562619	3.562835	3.563051	3.563267	3.563482	3.563698
0.460	3.563914	3.564130	3.564346	3.564562	3.564778	3.564994	3.565210	3.565426	3.565642	3.565858
0.470	3.566074	3.566290	3.566506	3.566722	3.566938	3.567154	3.567370	3.567587	3.567803	3.568019
0.480	3.568235	3.568451	3.568667	3.568883	3.569099	3.569315	3.569531	3.569747	3.569964	3.570180
0.490	3.570396	3.570613	3.570829	3.571045	3.571261	3.571477	3.571694	3.571910	3.572126	3.572342

ATTENUATION IN DECIBELS
THETA FROM 35.500 TO 35.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	3.572559	3.572775	3.572991	3.573207	3.573424	3.573640	3.573856	3.574073	3.574289	3.574505
0.510	3.574722	3.574938	3.575154	3.575371	3.575587	3.575804	3.576020	3.576236	3.576453	3.576669
0.520	3.576886	3.577102	3.577318	3.577535	3.577751	3.577968	3.578184	3.578401	3.578617	3.578834
0.530	3.579050	3.579267	3.579483	3.579700	3.579916	3.580133	3.580349	3.580566	3.580783	3.580999
0.540	3.581216	3.581432	3.581649	3.581866	3.582082	3.582299	3.582515	3.582732	3.582949	3.583165
0.550	3.583382	3.583599	3.583815	3.584032	3.584249	3.584465	3.584682	3.584899	3.585116	3.585332
0.560	3.585549	3.585766	3.585983	3.586199	3.586416	3.586633	3.586850	3.587066	3.587283	3.587500
0.570	3.587717	3.587934	3.588151	3.588367	3.588584	3.588801	3.589018	3.589235	3.589452	3.589669
0.580	3.589886	3.590102	3.590319	3.590536	3.590753	3.590970	3.591187	3.591404	3.591621	3.591838
0.590	3.592055	3.592272	3.592489	3.592706	3.592923	3.593140	3.593357	3.593574	3.593791	3.594008
0.600	3.594225	3.594442	3.594659	3.594877	3.595094	3.595311	3.595528	3.595745	3.595962	3.596179
0.610	3.596396	3.596613	3.596831	3.597048	3.597265	3.597482	3.597699	3.597917	3.598134	3.598351
0.620	3.598568	3.598785	3.599002	3.599220	3.599437	3.599654	3.599872	3.600089	3.600306	3.600524
0.630	3.600741	3.600958	3.601175	3.601393	3.601610	3.601828	3.602045	3.602262	3.602480	3.602697
0.640	3.602914	3.603132	3.603349	3.603567	3.603784	3.604001	3.604219	3.604436	3.604654	3.604871
0.650	3.605089	3.605306	3.605524	3.605741	3.605959	3.606176	3.606394	3.606611	3.606829	3.607046
0.660	3.607264	3.607481	3.607699	3.607916	3.608134	3.608351	3.608569	3.608787	3.609004	3.609222
0.670	3.609440	3.609657	3.609875	3.610092	3.610310	3.610528	3.610745	3.610963	3.611181	3.611398
0.680	3.611616	3.611834	3.612052	3.612269	3.612487	3.612705	3.612923	3.613140	3.613358	3.613576
0.690	3.613794	3.614011	3.614229	3.614447	3.614665	3.614883	3.615101	3.615318	3.615536	3.615754
0.700	3.615972	3.616190	3.616408	3.616626	3.616843	3.617061	3.617279	3.617497	3.617715	3.617933
0.710	3.618151	3.618369	3.618587	3.618805	3.619023	3.619241	3.619459	3.619677	3.619895	3.620113
0.720	3.620331	3.620549	3.620767	3.620985	3.621203	3.621421	3.621639	3.621857	3.622075	3.622293
0.730	3.622512	3.622730	3.622948	3.623166	3.623384	3.623602	3.623820	3.624038	3.624257	3.624475
0.740	3.624693	3.624911	3.625129	3.625348	3.625566	3.625784	3.626002	3.626221	3.626439	3.626657
0.750	3.626875	3.627094	3.627312	3.627530	3.627748	3.627967	3.628185	3.628403	3.628622	3.628840
0.760	3.629058	3.629277	3.629495	3.629714	3.629932	3.630150	3.630369	3.630587	3.630805	3.631024
0.770	3.631242	3.631461	3.631679	3.631898	3.632116	3.632335	3.632553	3.632772	3.632990	3.633209
0.780	3.633427	3.633646	3.633864	3.634083	3.634301	3.634520	3.634738	3.634957	3.635175	3.635394
0.790	3.635613	3.635831	3.636050	3.636268	3.636487	3.636706	3.636924	3.637143	3.637362	3.637580
0.800	3.637799	3.638018	3.638236	3.638455	3.638674	3.638892	3.639111	3.639330	3.639548	3.639767
0.810	3.639986	3.640205	3.640423	3.640642	3.640861	3.641080	3.641299	3.641517	3.641736	3.641955
0.820	3.642174	3.642393	3.642612	3.642830	3.643049	3.643268	3.643487	3.643706	3.643925	3.644144
0.830	3.644363	3.644582	3.644801	3.645019	3.645238	3.645457	3.645676	3.645895	3.646114	3.646333
0.840	3.646552	3.646771	3.646990	3.647209	3.647428	3.647647	3.647866	3.648085	3.648304	3.648523
0.850	3.648742	3.648962	3.649181	3.649400	3.649619	3.649838	3.650057	3.650276	3.650495	3.650714
0.860	3.650934	3.651153	3.651372	3.651591	3.651810	3.652029	3.652248	3.652468	3.652687	3.652906
0.870	3.653126	3.653345	3.653564	3.653783	3.654003	3.654222	3.654441	3.654660	3.654880	3.655099
0.880	3.655318	3.655538	3.655757	3.655976	3.656196	3.656415	3.656634	3.656854	3.657073	3.657292
0.890	3.657512	3.657731	3.657951	3.658170	3.658389	3.658609	3.658828	3.659048	3.659267	3.659487
0.900	3.659706	3.659926	3.660145	3.660365	3.660584	3.660804	3.661023	3.661243	3.661462	3.661682
0.910	3.661901	3.662121	3.662340	3.662560	3.662780	3.663000	3.663219	3.663438	3.663658	3.663878
0.920	3.664097	3.664317	3.664537	3.664756	3.664976	3.665196	3.665415	3.665635	3.665855	3.666074
0.930	3.666294	3.666514	3.666734	3.666953	3.667173	3.667393	3.667613	3.667832	3.668052	3.668272
0.940	3.668492	3.668712	3.668931	3.669151	3.669371	3.669591	3.669811	3.670031	3.670250	3.670470
0.950	3.670690	3.670910	3.671130	3.671350	3.671570	3.671790	3.672010	3.672229	3.672449	3.672669
0.960	3.672889	3.673109	3.673329	3.673549	3.673769	3.673989	3.674209	3.674429	3.674649	3.674869
0.970	3.675089	3.675309	3.675529	3.675749	3.675970	3.676190	3.676410	3.676630	3.676850	3.677070
0.980	3.677290	3.677510	3.677730	3.677951	3.678171	3.678391	3.678611	3.678831	3.679051	3.679272
0.990	3.679492	3.679712	3.679932	3.680152	3.680373	3.680593	3.680813	3.681033	3.681254	3.681474

ATTENUATION IN DECIBELS
THETA FROM 36.000 TO 36.499 DEGREES

THETA IN
DEGREES

0.000	3.681624	3.681914	3.682135	3.682355	3.682575	3.682796	3.683016	3.683236	3.683457	3.683677
0.001	3.682897	3.683188	3.683479	3.683770	3.684061	3.684352	3.684643	3.684934	3.685225	3.685516
0.010	3.686101	3.686392	3.686683	3.686974	3.687265	3.687556	3.687847	3.688138	3.688429	3.688720
0.020	3.688306	3.688597	3.688888	3.689179	3.689470	3.689761	3.690052	3.690343	3.690634	3.690925
0.030	3.691012	3.691303	3.691594	3.691885	3.692176	3.692467	3.692758	3.693049	3.693340	3.693631
0.040	3.693922	3.694213	3.694504	3.694795	3.695086	3.695377	3.695668	3.695959	3.696250	3.696541
0.050	3.696832	3.697123	3.697414	3.697705	3.697996	3.698287	3.698578	3.698869	3.699160	3.699451
0.060	3.699742	3.700033	3.700324	3.700615	3.700906	3.701197	3.701488	3.701779	3.702070	3.702361
0.070	3.702642	3.702933	3.703224	3.703515	3.703806	3.704097	3.704388	3.704679	3.704970	3.705261
0.080	3.705542	3.705833	3.706124	3.706415	3.706706	3.706997	3.707288	3.707579	3.707870	3.708161
0.090	3.708452	3.708743	3.709034	3.709325	3.709616	3.709907	3.710198	3.710489	3.710780	3.711071
0.100	3.711362	3.711653	3.711944	3.712235	3.712526	3.712817	3.713108	3.713399	3.713690	3.713981
0.110	3.714262	3.714553	3.714844	3.715135	3.715426	3.715717	3.716008	3.716299	3.716590	3.716881
0.120	3.717162	3.717453	3.717744	3.718035	3.718326	3.718617	3.718908	3.719199	3.719490	3.719781
0.130	3.720062	3.720353	3.720644	3.720935	3.721226	3.721517	3.721808	3.722099	3.722390	3.722681
0.140	3.722972	3.723263	3.723554	3.723845	3.724136	3.724427	3.724718	3.725009	3.725300	3.725591
0.150	3.725872	3.726163	3.726454	3.726745	3.727036	3.727327	3.727618	3.727909	3.728200	3.728491
0.160	3.728772	3.729063	3.729354	3.729645	3.729936	3.730227	3.730518	3.730809	3.731100	3.731391
0.170	3.731672	3.731963	3.732254	3.732545	3.732836	3.733127	3.733418	3.733709	3.733999	3.734290
0.180	3.734570	3.734861	3.735152	3.735443	3.735734	3.736025	3.736316	3.736607	3.736898	3.737189
0.190	3.737469	3.737760	3.738051	3.738342	3.738633	3.738924	3.739215	3.739506	3.739797	3.740088
0.200	3.740379	3.740670	3.740961	3.741252	3.741543	3.741834	3.742125	3.742416	3.742707	3.742998
0.210	3.743289	3.743580	3.743871	3.744162	3.744453	3.744744	3.745035	3.745326	3.745617	3.745908
0.220	3.746199	3.746490	3.746781	3.747072	3.747363	3.747654	3.747945	3.748236	3.748527	3.748818
0.230	3.749109	3.749400	3.749691	3.749982	3.750273	3.750564	3.750855	3.751146	3.751437	3.751728
0.240	3.752019	3.752310	3.752601	3.752892	3.753183	3.753474	3.753765	3.754056	3.754347	3.754638
0.250	3.754929	3.755220	3.755511	3.755802	3.756093	3.756384	3.756675	3.756966	3.757257	3.757548
0.260	3.757839	3.758130	3.758421	3.758712	3.759003	3.759294	3.759585	3.759876	3.760167	3.760458
0.270	3.760749	3.761040	3.761331	3.761622	3.761913	3.762204	3.762495	3.762786	3.763077	3.763368
0.280	3.763659	3.763950	3.764241	3.764532	3.764823	3.765114	3.765405	3.765696	3.765987	3.766278
0.290	3.766569	3.766860	3.767151	3.767442	3.767733	3.768024	3.768315	3.768606	3.768897	3.769188
0.300	3.769479	3.769770	3.770061	3.770352	3.770643	3.770934	3.771225	3.771516	3.771807	3.772098
0.310	3.772389	3.772680	3.772971	3.773262	3.773553	3.773844	3.774135	3.774426	3.774717	3.775008
0.320	3.775299	3.775590	3.775881	3.776172	3.776463	3.776754	3.777045	3.777336	3.777627	3.777918
0.330	3.778209	3.778500	3.778791	3.779082	3.779373	3.779664	3.779955	3.780246	3.780537	3.780828
0.340	3.781119	3.781410	3.781701	3.781992	3.782283	3.782574	3.782865	3.783156	3.783447	3.783738
0.350	3.784029	3.784320	3.784611	3.784902	3.785193	3.785484	3.785775	3.786066	3.786357	3.786648
0.360	3.786939	3.787230	3.787521	3.787812	3.788103	3.788394	3.788685	3.788976	3.789267	3.789558
0.370	3.789849	3.790140	3.790431	3.790722	3.791013	3.791304	3.791595	3.791886	3.792177	3.792468
0.380	3.792759	3.793050	3.793341	3.793632	3.793923	3.794214	3.794505	3.794796	3.795087	3.795378
0.390	3.795669	3.795960	3.796251	3.796542	3.796833	3.797124	3.797415	3.797706	3.797997	3.798288
0.400	3.798579	3.798870	3.799161	3.799452	3.799743	3.800034	3.800325	3.800616	3.800907	3.801198
0.410	3.801489	3.801780	3.802071	3.802362	3.802653	3.802944	3.803235	3.803526	3.803817	3.804108
0.420	3.804399	3.804690	3.804981	3.805272	3.805563	3.805854	3.806145	3.806436	3.806727	3.807018
0.430	3.807309	3.807600	3.807891	3.808182	3.808473	3.808764	3.809055	3.809346	3.809637	3.809928
0.440	3.810219	3.810510	3.810801	3.811092	3.811383	3.811674	3.811965	3.812256	3.812547	3.812838
0.450	3.813129	3.813420	3.813711	3.814002	3.814293	3.814584	3.814875	3.815166	3.815457	3.815748
0.460	3.816039	3.816330	3.816621	3.816912	3.817203	3.817494	3.817785	3.818076	3.818367	3.818658
0.470	3.818949	3.819240	3.819531	3.819822	3.820113	3.820404	3.820695	3.820986	3.821277	3.821568
0.480	3.821859	3.822150	3.822441	3.822732	3.823023	3.823314	3.823605	3.823896	3.824187	3.824478
0.490	3.824769	3.825060	3.825351	3.825642	3.825933	3.826224	3.826515	3.826806	3.827097	3.827388

ATTENUATION IN DECIBELS
THETA FROM 36.500 TO 36.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	3.792851	3.793075	3.793300	3.793524	3.793749	3.793973	3.794197	3.794422	3.794646	3.794871
0.510	3.795095	3.795319	3.795544	3.795768	3.795993	3.796217	3.796442	3.796666	3.796891	3.797115
0.520	3.797340	3.797564	3.797789	3.798013	3.798238	3.798462	3.798687	3.798912	3.799136	3.799361
0.530	3.799585	3.799810	3.800035	3.800259	3.800484	3.800708	3.800933	3.801158	3.801382	3.801607
0.540	3.801832	3.802056	3.802281	3.802506	3.802731	3.802955	3.803180	3.803405	3.803629	3.803854
0.550	3.804079	3.804304	3.804528	3.804753	3.804978	3.805203	3.805428	3.805652	3.805877	3.806102
0.560	3.806327	3.806552	3.806777	3.807002	3.807226	3.807451	3.807676	3.807901	3.808126	3.808351
0.570	3.808576	3.808801	3.809026	3.809251	3.809476	3.809701	3.809926	3.810151	3.810375	3.810600
0.580	3.810825	3.811051	3.811276	3.811501	3.811726	3.811951	3.812176	3.812401	3.812626	3.812851
0.590	3.813076	3.813301	3.813526	3.813751	3.813976	3.814202	3.814427	3.814652	3.814877	3.815102
0.600	3.815327	3.815552	3.815778	3.816003	3.816228	3.816453	3.816678	3.816904	3.817129	3.817354
0.610	3.817579	3.817805	3.818030	3.818255	3.818481	3.818706	3.818931	3.819156	3.819382	3.819607
0.620	3.819832	3.820058	3.820283	3.820508	3.820734	3.820959	3.821185	3.821410	3.821635	3.821861
0.630	3.822086	3.822312	3.822537	3.822762	3.822988	3.823213	3.823439	3.823664	3.823890	3.824115
0.640	3.824341	3.824566	3.824792	3.825017	3.825243	3.825468	3.825694	3.825919	3.826145	3.826371
0.650	3.826596	3.826822	3.827047	3.827273	3.827499	3.827724	3.827950	3.828175	3.828401	3.828627
0.660	3.828852	3.829078	3.829304	3.829529	3.829755	3.829981	3.830207	3.830432	3.830658	3.830884
0.670	3.831109	3.831335	3.831561	3.831787	3.832013	3.832238	3.832464	3.832690	3.832916	3.833142
0.680	3.833367	3.833593	3.833819	3.834045	3.834271	3.834497	3.834722	3.834948	3.835174	3.835400
0.690	3.835626	3.835852	3.836078	3.836304	3.836530	3.836756	3.836982	3.837208	3.837434	3.837660
0.700	3.837866	3.838112	3.838338	3.838564	3.838790	3.839016	3.839242	3.839468	3.839694	3.839920
0.710	3.840146	3.840372	3.840598	3.840824	3.841050	3.841276	3.841503	3.841729	3.841955	3.842181
0.720	3.842407	3.842633	3.842859	3.843086	3.843312	3.843538	3.843764	3.843990	3.844217	3.844443
0.730	3.844669	3.844895	3.845122	3.845348	3.845574	3.845800	3.846027	3.846253	3.846479	3.846706
0.740	3.846932	3.847158	3.847385	3.847611	3.847837	3.848064	3.848290	3.848516	3.848743	3.848969
0.750	3.849196	3.849422	3.849648	3.849875	3.850101	3.850328	3.850554	3.850781	3.851007	3.851234
0.760	3.851460	3.851687	3.851913	3.852140	3.852366	3.852593	3.852819	3.853046	3.853272	3.853499
0.770	3.853725	3.853952	3.854179	3.854405	3.854632	3.854858	3.855085	3.855312	3.855538	3.855765
0.780	3.855992	3.856218	3.856445	3.856672	3.856898	3.857125	3.857352	3.857578	3.857805	3.858032
0.790	3.858258	3.858485	3.858712	3.858939	3.859165	3.859392	3.859619	3.859846	3.860073	3.860299
0.800	3.860526	3.860753	3.860980	3.861207	3.861434	3.861660	3.861887	3.862114	3.862341	3.862568
0.810	3.862795	3.863022	3.863249	3.863476	3.863703	3.863929	3.864156	3.864383	3.864610	3.864837
0.820	3.865064	3.865291	3.865518	3.865745	3.865972	3.866199	3.866426	3.866653	3.866880	3.867107
0.830	3.867335	3.867562	3.867789	3.868016	3.868243	3.868470	3.868697	3.868924	3.869151	3.869378
0.840	3.869606	3.869833	3.870060	3.870287	3.870514	3.870741	3.870969	3.871196	3.871423	3.871650
0.850	3.871877	3.872105	3.872332	3.872559	3.872786	3.873014	3.873241	3.873468	3.873696	3.873923
0.860	3.874150	3.874378	3.874605	3.874832	3.875060	3.875287	3.875514	3.875742	3.875969	3.876196
0.870	3.876424	3.876651	3.876879	3.877106	3.877333	3.877561	3.877788	3.878016	3.878243	3.878471
0.880	3.878698	3.878926	3.879153	3.879381	3.879608	3.879836	3.880063	3.880291	3.880518	3.880746
0.890	3.880973	3.881201	3.881429	3.881656	3.881884	3.882111	3.882339	3.882567	3.882794	3.883022
0.900	3.883249	3.883477	3.883705	3.883932	3.884160	3.884388	3.884615	3.884843	3.885071	3.885299
0.910	3.885526	3.885754	3.885982	3.886209	3.886437	3.886665	3.886893	3.887121	3.887348	3.887576
0.920	3.887804	3.888032	3.888260	3.888487	3.888715	3.888943	3.889171	3.889399	3.889627	3.889855
0.930	3.890082	3.890310	3.890538	3.890766	3.890994	3.891222	3.891450	3.891678	3.891906	3.892134
0.940	3.892362	3.892590	3.892818	3.893046	3.893274	3.893502	3.893730	3.893958	3.894186	3.894414
0.950	3.894642	3.894870	3.895098	3.895326	3.895554	3.895782	3.896011	3.896239	3.896467	3.896695
0.960	3.896923	3.897151	3.897379	3.897607	3.897835	3.898064	3.898292	3.898520	3.898748	3.898977
0.970	3.899205	3.899433	3.899661	3.899890	3.900118	3.900346	3.900574	3.900803	3.901031	3.901259
0.980	3.901487	3.901716	3.901944	3.902172	3.902401	3.902629	3.902858	3.903086	3.903314	3.903543
0.990	3.903771	3.903999	3.904228	3.904456	3.904685	3.904913	3.905142	3.905370	3.905598	3.905827

ATTENUATION IN DECIBELS
THETA FROM 37.000 TO 37.499 DEGREES

81

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.000	3.906055	3.906284	3.906512	3.906741	3.906969	3.907198	3.907426	3.907655	3.907883	3.908112
0.010	3.908340	3.908569	3.908798	3.909026	3.909255	3.909483	3.909712	3.909941	3.910169	3.910398
0.020	3.910626	3.910855	3.911084	3.911312	3.911541	3.911770	3.911998	3.912227	3.912456	3.912685
0.030	3.912913	3.913142	3.913371	3.913599	3.913828	3.914057	3.914286	3.914515	3.914743	3.914972
0.040	3.915201	3.915430	3.915659	3.915887	3.916116	3.916345	3.916574	3.916803	3.917032	3.917260
0.050	3.917489	3.917718	3.917947	3.918176	3.918405	3.918634	3.918863	3.919092	3.919321	3.919550
0.060	3.919779	3.920008	3.920237	3.920466	3.920695	3.920924	3.921153	3.921382	3.921611	3.921840
0.070	3.922069	3.922298	3.922527	3.922756	3.922985	3.923214	3.923443	3.923672	3.923902	3.924131
0.080	3.924360	3.924589	3.924818	3.925047	3.925276	3.925506	3.925735	3.925964	3.926193	3.926422
0.090	3.926652	3.926881	3.927110	3.927339	3.927569	3.927798	3.928027	3.928256	3.928486	3.928715
0.100	3.928944	3.929174	3.929403	3.929632	3.929861	3.930091	3.930320	3.930550	3.930779	3.931008
0.110	3.931238	3.931467	3.931696	3.931926	3.932155	3.932385	3.932614	3.932844	3.933073	3.933302
0.120	3.933532	3.933761	3.933991	3.934220	3.934450	3.934679	3.934909	3.935138	3.935368	3.935598
0.130	3.935827	3.936057	3.936286	3.936516	3.936745	3.936975	3.937205	3.937434	3.937664	3.937893
0.140	3.938123	3.938353	3.938582	3.938812	3.939042	3.939271	3.939501	3.939731	3.939960	3.940190
0.150	3.940420	3.940650	3.940879	3.941109	3.941339	3.941569	3.941798	3.942028	3.942258	3.942488
0.160	3.942717	3.942947	3.943177	3.943407	3.943637	3.943867	3.944096	3.944326	3.944556	3.944786
0.170	3.945016	3.945246	3.945476	3.945706	3.945936	3.946165	3.946395	3.946625	3.946855	3.947085
0.180	3.947315	3.947545	3.947775	3.948005	3.948235	3.948465	3.948695	3.948925	3.949155	3.949385
0.190	3.949615	3.949845	3.950075	3.950306	3.950536	3.950766	3.950996	3.951226	3.951456	3.951686
0.200	3.951916	3.952146	3.952377	3.952607	3.952837	3.953067	3.953297	3.953527	3.953758	3.953988
0.210	3.954218	3.954448	3.954679	3.954909	3.955139	3.955369	3.955600	3.955830	3.956060	3.956290
0.220	3.956521	3.956751	3.956981	3.957212	3.957442	3.957672	3.957903	3.958133	3.958363	3.958594
0.230	3.958824	3.959055	3.959285	3.959515	3.959746	3.959976	3.960207	3.960437	3.960668	3.960898
0.240	3.961128	3.961359	3.961589	3.961820	3.962050	3.962281	3.962511	3.962742	3.962972	3.963203
0.250	3.963434	3.963664	3.963895	3.964125	3.964356	3.964586	3.964817	3.965048	3.965278	3.965509
0.260	3.965740	3.965970	3.966201	3.966431	3.966662	3.966893	3.967124	3.967354	3.967585	3.967816
0.270	3.968046	3.968277	3.968508	3.968739	3.968969	3.969200	3.969431	3.969662	3.969892	3.970123
0.280	3.970354	3.970585	3.970816	3.971046	3.971277	3.971508	3.971739	3.971970	3.972201	3.972432
0.290	3.972662	3.972893	3.973124	3.973355	3.973586	3.973817	3.974048	3.974279	3.974510	3.974741
0.300	3.974972	3.975203	3.975434	3.975665	3.975896	3.976127	3.976358	3.976589	3.976820	3.977051
0.310	3.977282	3.977513	3.977744	3.977975	3.978206	3.978437	3.978668	3.978899	3.979131	3.979362
0.320	3.979593	3.979824	3.980055	3.980286	3.980518	3.980749	3.980980	3.981211	3.981442	3.981673
0.330	3.981905	3.982136	3.982367	3.982598	3.982830	3.983061	3.983292	3.983523	3.983755	3.983986
0.340	3.984217	3.984449	3.984680	3.984911	3.985143	3.985374	3.985605	3.985837	3.986068	3.986299
0.350	3.986531	3.986762	3.986994	3.987225	3.987456	3.987688	3.987919	3.988151	3.988382	3.988614
0.360	3.988845	3.989077	3.989308	3.989540	3.989771	3.990003	3.990234	3.990466	3.990697	3.990929
0.370	3.991160	3.991392	3.991623	3.991855	3.992087	3.992318	3.992550	3.992781	3.993013	3.993245
0.380	3.993476	3.993708	3.993940	3.994171	3.994403	3.994635	3.994866	3.995098	3.995330	3.995561
0.390	3.995793	3.996025	3.996257	3.996488	3.996720	3.996952	3.997184	3.997415	3.997647	3.997879
0.400	3.998111	3.998343	3.998574	3.998806	3.999038	3.999270	3.999502	3.999734	3.999966	4.000197
0.410	4.000429	4.000661	4.000893	4.001125	4.001357	4.001589	4.001821	4.002053	4.002285	4.002517
0.420	4.002749	4.002981	4.003213	4.003445	4.003677	4.003909	4.004141	4.004373	4.004605	4.004837
0.430	4.005069	4.005301	4.005533	4.005765	4.005997	4.006229	4.006461	4.006694	4.006926	4.007158
0.440	4.007390	4.007622	4.007854	4.008086	4.008319	4.008551	4.008783	4.009015	4.009247	4.009480
0.450	4.009712	4.009944	4.010176	4.010409	4.010641	4.010873	4.011105	4.011338	4.011570	4.011802
0.460	4.012035	4.012267	4.012499	4.012731	4.012964	4.013196	4.013429	4.013661	4.013893	4.014126
0.470	4.014358	4.014591	4.014823	4.015055	4.015288	4.015520	4.015753	4.015985	4.016218	4.016450
0.480	4.016683	4.016915	4.017147	4.017380	4.017612	4.017845	4.018077	4.018310	4.018543	4.018775
0.490	4.019008	4.019240	4.019473	4.019705	4.019938	4.020171	4.020403	4.020636	4.020868	4.021101

ATTENUATION IN DECIBELS
THEIA FROM 37.500 TO 37.999 DEGREES

THEIA IN
DEGREES

0.500	4.021334	4.021566	4.021799	4.022032	4.022264	4.022497	4.022730	4.022963	4.023195	4.023428
0.510	4.023661	4.023893	4.024126	4.024359	4.024592	4.024825	4.025057	4.025290	4.025523	4.025756
0.520	4.025988	4.026221	4.026454	4.026687	4.026920	4.027153	4.027386	4.027618	4.027851	4.028084
0.530	4.028317	4.028550	4.028783	4.029016	4.029249	4.029482	4.029715	4.029948	4.030181	4.030414
0.540	4.030647	4.030879	4.031112	4.031345	4.031578	4.031812	4.032045	4.032278	4.032511	4.032744
0.550	4.032977	4.033210	4.033443	4.033676	4.033909	4.034142	4.034375	4.034608	4.034842	4.035075
0.560	4.035308	4.035541	4.035774	4.036007	4.036241	4.036474	4.036707	4.036940	4.037173	4.037407
0.570	4.037640	4.037873	4.038106	4.038340	4.038573	4.038806	4.039039	4.039273	4.039506	4.039739
0.580	4.039973	4.040206	4.040439	4.040673	4.040906	4.041139	4.041373	4.041606	4.041840	4.042073
0.590	4.042306	4.042540	4.042773	4.043007	4.043240	4.043473	4.043707	4.043940	4.044174	4.044407
0.600	4.044641	4.044874	4.045108	4.045341	4.045575	4.045808	4.046042	4.046275	4.046509	4.046743
0.610	4.046976	4.047210	4.047443	4.047677	4.047911	4.048144	4.048378	4.048611	4.048845	4.049079
0.620	4.049312	4.049546	4.049780	4.050013	4.050247	4.050481	4.050714	4.050948	4.051182	4.051416
0.630	4.051649	4.051883	4.052117	4.052351	4.052584	4.052818	4.053052	4.053286	4.053520	4.053753
0.640	4.053987	4.054221	4.054455	4.054689	4.054923	4.055156	4.055390	4.055624	4.055858	4.056092
0.650	4.056326	4.056560	4.056794	4.057028	4.057262	4.057496	4.057730	4.057964	4.058197	4.058432
0.660	4.058665	4.058899	4.059133	4.059368	4.059602	4.059836	4.060070	4.060304	4.060538	4.060772
0.670	4.061006	4.061240	4.061474	4.061708	4.061942	4.062176	4.062411	4.062645	4.062879	4.063113
0.680	4.063347	4.063581	4.063815	4.064050	4.064284	4.064518	4.064752	4.064986	4.065221	4.065455
0.690	4.065689	4.065923	4.066158	4.066392	4.066626	4.066861	4.067095	4.067329	4.067563	4.067798
0.700	4.068032	4.068266	4.068501	4.068735	4.068970	4.069204	4.069438	4.069673	4.069907	4.070141
0.710	4.070376	4.070610	4.070845	4.071079	4.071314	4.071548	4.071783	4.072017	4.072252	4.072486
0.720	4.072721	4.072955	4.073190	4.073424	4.073659	4.073893	4.074128	4.074362	4.074597	4.074831
0.730	4.075066	4.075301	4.075535	4.075770	4.076004	4.076239	4.076474	4.076708	4.076943	4.077178
0.740	4.077412	4.077647	4.077882	4.078116	4.078351	4.078586	4.078821	4.079055	4.079290	4.079525
0.750	4.079759	4.079994	4.080229	4.080464	4.080699	4.080933	4.081168	4.081403	4.081638	4.081873
0.760	4.082107	4.082342	4.082577	4.082812	4.083047	4.083282	4.083517	4.083752	4.083987	4.084221
0.770	4.084456	4.084691	4.084926	4.085161	4.085396	4.085631	4.085866	4.086101	4.086336	4.086571
0.780	4.086806	4.087041	4.087276	4.087511	4.087746	4.087981	4.088216	4.088451	4.088686	4.088921
0.790	4.089157	4.089392	4.089627	4.089862	4.090097	4.090332	4.090567	4.090802	4.091033	4.091273
0.800	4.091508	4.091743	4.091978	4.092214	4.092449	4.092684	4.092919	4.093154	4.093390	4.093625
0.810	4.093860	4.094096	4.094331	4.094566	4.094801	4.095037	4.095272	4.095507	4.095743	4.095978
0.820	4.096213	4.096449	4.096684	4.096919	4.097155	4.097390	4.097626	4.097861	4.098096	4.098332
0.830	4.098567	4.098803	4.099038	4.099274	4.099509	4.099745	4.099980	4.100216	4.100451	4.100687
0.840	4.100992	4.101228	4.101463	4.101699	4.101934	4.102169	4.102405	4.102641	4.102877	4.103113
0.850	4.103278	4.103513	4.103749	4.103985	4.104220	4.104456	4.104692	4.104927	4.105163	4.105399
0.860	4.105674	4.105910	4.106146	4.106381	4.106617	4.106853	4.107089	4.107325	4.107561	4.107797
0.870	4.107992	4.108227	4.108463	4.108699	4.108935	4.109170	4.109406	4.109642	4.109878	4.110114
0.880	4.110350	4.110586	4.110821	4.111057	4.111293	4.111529	4.111765	4.112001	4.112237	4.112473
0.890	4.112709	4.112945	4.113181	4.113417	4.113653	4.113889	4.114125	4.114361	4.114597	4.114833
0.900	4.115069	4.115305	4.115541	4.115777	4.116013	4.116249	4.116485	4.116721	4.116957	4.117193
0.910	4.117429	4.117665	4.117902	4.118138	4.118374	4.118610	4.118846	4.119082	4.119319	4.119555
0.920	4.119791	4.120027	4.120263	4.120500	4.120736	4.120972	4.121208	4.121445	4.121681	4.121917
0.930	4.122153	4.122390	4.122626	4.122862	4.123099	4.123335	4.123571	4.123808	4.124044	4.124280
0.940	4.124517	4.124753	4.124989	4.125226	4.125462	4.125699	4.125935	4.126171	4.126408	4.126644
0.950	4.126881	4.127117	4.127354	4.127590	4.127827	4.128063	4.128300	4.128536	4.128773	4.129009
0.960	4.129246	4.129482	4.129719	4.129955	4.130192	4.130429	4.130665	4.130902	4.131138	4.131375
0.970	4.131612	4.131848	4.132085	4.132321	4.132558	4.132795	4.133031	4.133268	4.133505	4.133742
0.980	4.133978	4.134215	4.134452	4.134688	4.134925	4.135162	4.135399	4.135635	4.135872	4.136109
0.990	4.136346	4.136583	4.136819	4.137056	4.137293	4.137530	4.137767	4.138004	4.138240	4.138477

ATTENUATION IN DECIBELS
THETA FROM 38.000 TO 38.499 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.000	4.138714	4.138951	4.139188	4.139425	4.139662	4.139899	4.140136	4.140373	4.140610	4.140846
0.010	4.141083	4.141320	4.141557	4.141794	4.142031	4.142268	4.142505	4.142742	4.142979	4.143216
0.020	4.143454	4.143691	4.143928	4.144165	4.144402	4.144639	4.144876	4.145113	4.145350	4.145587
0.030	4.145824	4.146062	4.146299	4.146536	4.146773	4.147010	4.147247	4.147485	4.147722	4.147959
0.040	4.148196	4.148434	4.148671	4.148908	4.149145	4.149383	4.149620	4.149857	4.150094	4.150332
0.050	4.150569	4.150806	4.151044	4.151281	4.151518	4.151756	4.151993	4.152230	4.152468	4.152705
0.060	4.152942	4.153180	4.153417	4.153655	4.153892	4.154130	4.154367	4.154604	4.154842	4.155079
0.070	4.155317	4.155554	4.155792	4.156029	4.156267	4.156504	4.156742	4.156979	4.157217	4.157454
0.080	4.157692	4.157930	4.158167	4.158405	4.158642	4.158880	4.159118	4.159355	4.159593	4.159830
0.090	4.160068	4.160306	4.160543	4.160781	4.161019	4.161256	4.161494	4.161732	4.161970	4.162207
0.100	4.162445	4.162683	4.162921	4.163158	4.163396	4.163634	4.163872	4.164109	4.164347	4.164585
0.110	4.164823	4.165061	4.165298	4.165536	4.165774	4.166012	4.166250	4.166488	4.166726	4.166964
0.120	4.167201	4.167439	4.167677	4.167915	4.168153	4.168391	4.168629	4.168867	4.169105	4.169343
0.130	4.169561	4.169819	4.170057	4.170295	4.170533	4.170771	4.171009	4.171247	4.171485	4.171723
0.140	4.171961	4.172199	4.172437	4.172676	4.172914	4.173152	4.173390	4.173628	4.173866	4.174104
0.150	4.174342	4.174581	4.174819	4.175057	4.175295	4.175533	4.175772	4.176010	4.176248	4.176486
0.160	4.176724	4.176963	4.177201	4.177439	4.177678	4.177916	4.178154	4.178392	4.178631	4.178869
0.170	4.179167	4.179346	4.179584	4.179822	4.180061	4.180299	4.180538	4.180776	4.181014	4.181253
0.180	4.181491	4.181730	4.181968	4.182207	4.182445	4.182683	4.182922	4.183160	4.183399	4.183637
0.190	4.183876	4.184114	4.184353	4.184591	4.184830	4.185068	4.185307	4.185546	4.185784	4.186023
0.200	4.186261	4.186500	4.186738	4.186977	4.187216	4.187454	4.187693	4.187932	4.188170	4.188409
0.210	4.188648	4.188886	4.189125	4.189364	4.189602	4.189841	4.190080	4.190319	4.190557	4.190796
0.220	4.191035	4.191274	4.191512	4.191751	4.191990	4.192229	4.192468	4.192706	4.192945	4.193184
0.230	4.193423	4.193662	4.193901	4.194139	4.194378	4.194617	4.194856	4.195095	4.195334	4.195573
0.240	4.195812	4.196051	4.196290	4.196529	4.196768	4.197007	4.197246	4.197485	4.197724	4.197963
0.250	4.198202	4.198441	4.198680	4.198919	4.199158	4.199397	4.199636	4.199875	4.200114	4.200353
0.260	4.200592	4.200831	4.201070	4.201310	4.201549	4.201788	4.202027	4.202266	4.202505	4.202744
0.270	4.202984	4.203223	4.203462	4.203701	4.203941	4.204180	4.204419	4.204658	4.204897	4.205137
0.280	4.205376	4.205615	4.205855	4.206094	4.206333	4.206572	4.206812	4.207051	4.207290	4.207530
0.290	4.207769	4.208009	4.208248	4.208487	4.208727	4.208966	4.209206	4.209445	4.209684	4.209924
0.300	4.210163	4.210403	4.210642	4.210882	4.211121	4.211361	4.211600	4.211840	4.212079	4.212319
0.310	4.212558	4.212798	4.213037	4.213277	4.213516	4.213756	4.213996	4.214235	4.214475	4.214714
0.320	4.214954	4.215194	4.215433	4.215673	4.215913	4.216152	4.216392	4.216631	4.216871	4.217111
0.330	4.217351	4.217590	4.217830	4.218070	4.218309	4.218549	4.218789	4.219029	4.219269	4.219508
0.340	4.219748	4.219988	4.220228	4.220468	4.220707	4.220947	4.221187	4.221427	4.221667	4.221907
0.350	4.222146	4.222386	4.222626	4.222866	4.223106	4.223346	4.223586	4.223826	4.224066	4.224306
0.360	4.224546	4.224786	4.225026	4.225266	4.225506	4.225746	4.225986	4.226226	4.226466	4.226706
0.370	4.226946	4.227186	4.227426	4.227666	4.227906	4.228146	4.228386	4.228626	4.228866	4.229107
0.380	4.229347	4.229587	4.229827	4.230067	4.230307	4.230547	4.230788	4.231028	4.231268	4.231508
0.390	4.231748	4.231989	4.232229	4.232469	4.232709	4.232950	4.233190	4.233430	4.233671	4.233911
0.400	4.234151	4.234391	4.234632	4.234872	4.235112	4.235353	4.235593	4.235834	4.236074	4.236314
0.410	4.236555	4.236795	4.237035	4.237276	4.237516	4.237757	4.237997	4.238238	4.238478	4.238719
0.420	4.238959	4.239200	4.239440	4.239681	4.239921	4.240162	4.240402	4.240643	4.240883	4.241124
0.430	4.241364	4.241605	4.241845	4.242086	4.242327	4.242567	4.242808	4.243048	4.243289	4.243530
0.440	4.243770	4.244011	4.244252	4.244492	4.244733	4.244974	4.245214	4.245455	4.245696	4.245937
0.450	4.246177	4.246418	4.246659	4.246900	4.247140	4.247381	4.247622	4.247863	4.248104	4.248344
0.460	4.248585	4.248826	4.249067	4.249308	4.249549	4.249789	4.250030	4.250271	4.250512	4.250753
0.470	4.250994	4.251235	4.251476	4.251717	4.251958	4.252199	4.252439	4.252680	4.252921	4.253162
0.480	4.253403	4.253644	4.253885	4.254126	4.254367	4.254608	4.254849	4.255090	4.255332	4.255573
0.490	4.255814	4.256055	4.256296	4.256537	4.256778	4.257019	4.257261	4.257502	4.257743	4.257984

ATTENUATION IN DECIBELS
THETA FROM 38.500 TO 38.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	4.258225	4.258466	4.258708	4.258949	4.259190	4.259431	4.259672	4.259914	4.260155	4.260396
0.510	4.260637	4.260879	4.261120	4.261361	4.261602	4.261844	4.262085	4.262326	4.262568	4.262809
0.520	4.263050	4.263292	4.263533	4.263774	4.264016	4.264257	4.264499	4.264740	4.264981	4.265223
0.530	4.265464	4.265706	4.265947	4.266189	4.266430	4.266671	4.266913	4.267154	4.267396	4.267637
0.540	4.267879	4.268120	4.268362	4.268604	4.268845	4.269087	4.269328	4.269570	4.269811	4.270053
0.550	4.270295	4.270536	4.270778	4.271019	4.271261	4.271503	4.271744	4.271986	4.272228	4.272469
0.560	4.272711	4.272953	4.273194	4.273436	4.273678	4.273920	4.274161	4.274403	4.274645	4.274887
0.570	4.275128	4.275370	4.275612	4.275854	4.276096	4.276337	4.276579	4.276821	4.277063	4.277305
0.580	4.277547	4.277788	4.278030	4.278272	4.278514	4.278756	4.278998	4.279240	4.279482	4.279724
0.590	4.279966	4.280208	4.280450	4.280692	4.280934	4.281176	4.281418	4.281660	4.281902	4.282144
0.600	4.282386	4.282628	4.282870	4.283112	4.283354	4.283596	4.283838	4.284080	4.284322	4.284564
0.610	4.284806	4.285049	4.285291	4.285533	4.285775	4.286017	4.286259	4.286501	4.286744	4.286986
0.620	4.287228	4.287470	4.287713	4.287955	4.288197	4.288439	4.288682	4.288924	4.289166	4.289408
0.630	4.289651	4.289893	4.290135	4.290378	4.290620	4.290862	4.291105	4.291347	4.291589	4.291832
0.640	4.292074	4.292316	4.292559	4.292801	4.293044	4.293286	4.293528	4.293771	4.294013	4.294256
0.650	4.294498	4.294741	4.294983	4.295226	4.295468	4.295711	4.295953	4.296196	4.296438	4.296681
0.660	4.296923	4.297166	4.297409	4.297651	4.297894	4.298136	4.298379	4.298622	4.298864	4.299107
0.670	4.299349	4.299592	4.299835	4.300077	4.300320	4.300563	4.300805	4.301048	4.301291	4.301534
0.680	4.301776	4.302019	4.302262	4.302505	4.302747	4.302990	4.303233	4.303476	4.303718	4.303961
0.690	4.304204	4.304447	4.304690	4.304933	4.305175	4.305418	4.305661	4.305904	4.306147	4.306390
0.700	4.306633	4.306876	4.307119	4.307361	4.307604	4.307847	4.308090	4.308333	4.308576	4.308819
0.710	4.309062	4.309305	4.309548	4.309791	4.310034	4.310277	4.310520	4.310763	4.311006	4.311249
0.720	4.311493	4.311736	4.311979	4.312222	4.312465	4.312708	4.312951	4.313194	4.313437	4.313681
0.730	4.313924	4.314167	4.314410	4.314653	4.314896	4.315139	4.315382	4.315625	4.315869	4.316113
0.740	4.316356	4.316599	4.316842	4.317086	4.317329	4.317572	4.317815	4.318059	4.318302	4.318545
0.750	4.318789	4.319032	4.319275	4.319519	4.319762	4.320006	4.320249	4.320492	4.320736	4.320979
0.760	4.321253	4.321496	4.321740	4.321983	4.322226	4.322469	4.322712	4.322955	4.323198	4.323441
0.770	4.323667	4.323910	4.324154	4.324398	4.324641	4.324885	4.325128	4.325372	4.325615	4.325858
0.780	4.326093	4.326337	4.326580	4.326824	4.327067	4.327311	4.327555	4.327798	4.328042	4.328286
0.790	4.328529	4.328773	4.329017	4.329260	4.329504	4.329748	4.329992	4.330235	4.330479	4.330723
0.800	4.330967	4.331210	4.331454	4.331698	4.331942	4.332186	4.332429	4.332673	4.332917	4.333161
0.810	4.333405	4.333649	4.333893	4.334136	4.334380	4.334624	4.334868	4.335112	4.335356	4.335600
0.820	4.335844	4.336088	4.336332	4.336576	4.336820	4.337064	4.337308	4.337552	4.337796	4.338040
0.830	4.338284	4.338528	4.338772	4.339016	4.339260	4.339504	4.339748	4.339992	4.340236	4.340481
0.840	4.340725	4.340969	4.341213	4.341457	4.341701	4.341945	4.342189	4.342433	4.342677	4.342922
0.850	4.343166	4.343410	4.343655	4.343899	4.344143	4.344387	4.344632	4.344876	4.345120	4.345365
0.860	4.345609	4.345853	4.346097	4.346342	4.346586	4.346830	4.347075	4.347319	4.347564	4.347808
0.870	4.348052	4.348297	4.348541	4.348785	4.349030	4.349274	4.349519	4.349763	4.350008	4.350252
0.880	4.350497	4.350741	4.350985	4.351230	4.351474	4.351719	4.351964	4.352208	4.352453	4.352697
0.890	4.352942	4.353186	4.353431	4.353675	4.353920	4.354165	4.354409	4.354654	4.354898	4.355143
0.900	4.355388	4.355632	4.355877	4.356122	4.356366	4.356611	4.356856	4.357100	4.357345	4.357590
0.910	4.357835	4.358079	4.358324	4.358569	4.358814	4.359058	4.359303	4.359548	4.359793	4.360038
0.920	4.360282	4.360527	4.360772	4.361017	4.361262	4.361507	4.361751	4.361996	4.362241	4.362486
0.930	4.362731	4.362976	4.363221	4.363466	4.363711	4.363956	4.364201	4.364446	4.364691	4.364936
0.940	4.365181	4.365426	4.365671	4.365916	4.366161	4.366406	4.366651	4.366896	4.367141	4.367386
0.950	4.367631	4.367876	4.368121	4.368366	4.368611	4.368857	4.369102	4.369347	4.369592	4.369837
0.960	4.370082	4.370327	4.370572	4.370818	4.371063	4.371308	4.371553	4.371799	4.372044	4.372289
0.970	4.372534	4.372780	4.373025	4.373270	4.373516	4.373761	4.374006	4.374251	4.374497	4.374742
0.980	4.374987	4.375233	4.375478	4.375724	4.375969	4.376214	4.376460	4.376705	4.376951	4.377196
0.990	4.377441	4.377687	4.377932	4.378178	4.378423	4.378669	4.378914	4.379160	4.379405	4.379651

ATTENUATION IN DECIBELS
THETA FROM 39.000 TO 39.499 DEGREES

THETA IN
DEGREES

0.000	4.379896	4.380142	4.380387	4.380633	4.380878	4.381124	4.381369	4.381615	4.381861	4.382106
0.010	4.382352	4.382597	4.382843	4.383089	4.383334	4.383580	4.383826	4.384071	4.384317	4.384563
0.020	4.384808	4.385054	4.385300	4.385545	4.385791	4.386037	4.386283	4.386528	4.386774	4.387020
0.030	4.387266	4.387512	4.387757	4.388003	4.388249	4.388495	4.388741	4.388987	4.389232	4.389478
0.040	4.389724	4.389970	4.390216	4.390462	4.390708	4.390954	4.391199	4.391445	4.391691	4.391937
0.050	4.392183	4.392429	4.392675	4.392921	4.393167	4.393413	4.393659	4.393905	4.394151	4.394397
0.060	4.394643	4.394889	4.395135	4.395382	4.395628	4.395874	4.396120	4.396366	4.396612	4.396858
0.070	4.397104	4.397350	4.397597	4.397843	4.398089	4.398335	4.398581	4.398827	4.399074	4.399320
0.080	4.399566	4.399812	4.400059	4.400305	4.400551	4.400797	4.401044	4.401290	4.401536	4.401782
0.090	4.402029	4.402275	4.402521	4.402768	4.403014	4.403260	4.403507	4.403753	4.404000	4.404246
0.100	4.404492	4.404739	4.404985	4.405232	4.405478	4.405724	4.405971	4.406217	4.406464	4.406710
0.110	4.406957	4.407203	4.407450	4.407696	4.407943	4.408189	4.408436	4.408682	4.408929	4.409175
0.120	4.409422	4.409669	4.409915	4.410162	4.410408	4.410655	4.410902	4.411148	4.411395	4.411642
0.130	4.411888	4.412135	4.412382	4.412628	4.412875	4.413122	4.413368	4.413615	4.413862	4.414109
0.140	4.414355	4.414602	4.414849	4.415096	4.415342	4.415589	4.415836	4.416083	4.416330	4.416576
0.150	4.416823	4.417070	4.417317	4.417564	4.417811	4.418058	4.418304	4.418551	4.418798	4.419045
0.160	4.419292	4.419539	4.419786	4.420033	4.420280	4.420527	4.420774	4.421021	4.421268	4.421515
0.170	4.421762	4.422009	4.422256	4.422503	4.422750	4.422997	4.423244	4.423491	4.423738	4.423985
0.180	4.424232	4.424479	4.424727	4.424974	4.425221	4.425468	4.425715	4.425962	4.426210	4.426457
0.190	4.426704	4.426951	4.427198	4.427445	4.427693	4.427940	4.428187	4.428434	4.428682	4.428929
0.200	4.429176	4.429424	4.429671	4.429918	4.430165	4.430413	4.430660	4.430907	4.431155	4.431402
0.210	4.431649	4.431897	4.432144	4.432392	4.432639	4.432886	4.433134	4.433381	4.433629	4.433876
0.220	4.434124	4.434371	4.434618	4.434866	4.435113	4.435361	4.435608	4.435856	4.436104	4.436351
0.230	4.436599	4.436846	4.437094	4.437341	4.437589	4.437836	4.438084	4.438332	4.438579	4.438827
0.240	4.439074	4.439322	4.439570	4.439817	4.440065	4.440313	4.440560	4.440808	4.441056	4.441303
0.250	4.441551	4.441799	4.442047	4.442294	4.442542	4.442790	4.443038	4.443285	4.443533	4.443781
0.260	4.444029	4.444277	4.444524	4.444772	4.445020	4.445268	4.445516	4.445764	4.446012	4.446259
0.270	4.446507	4.446755	4.447003	4.447251	4.447499	4.447747	4.447995	4.448243	4.448491	4.448739
0.280	4.448987	4.449235	4.449483	4.449731	4.449979	4.450227	4.450475	4.450723	4.450971	4.451219
0.290	4.451467	4.451715	4.451963	4.452211	4.452459	4.452708	4.452956	4.453204	4.453452	4.453700
0.300	4.453948	4.454196	4.454445	4.454693	4.454941	4.455189	4.455437	4.455686	4.455934	4.456182
0.310	4.456430	4.456679	4.456927	4.457175	4.457423	4.457672	4.457920	4.458168	4.458417	4.458665
0.320	4.458913	4.459162	4.459410	4.459658	4.459907	4.460155	4.460403	4.460652	4.460900	4.461149
0.330	4.461397	4.461646	4.461894	4.462142	4.462391	4.462639	4.462888	4.463136	4.463385	4.463633
0.340	4.463882	4.464130	4.464379	4.464627	4.464876	4.465124	4.465373	4.465622	4.465870	4.466119
0.350	4.466367	4.466616	4.466865	4.467113	4.467362	4.467611	4.467859	4.468108	4.468357	4.468605
0.360	4.468854	4.469103	4.469351	4.469600	4.469849	4.470097	4.470346	4.470595	4.470844	4.471093
0.370	4.471341	4.471590	4.471839	4.472088	4.472336	4.472585	4.472834	4.473083	4.473332	4.473581
0.380	4.473830	4.474078	4.474327	4.474576	4.474825	4.475074	4.475323	4.475572	4.475821	4.476070
0.390	4.476319	4.476568	4.476817	4.477066	4.477315	4.477564	4.477813	4.478062	4.478311	4.478560
0.400	4.478809	4.479058	4.479307	4.479556	4.479805	4.480054	4.480303	4.480552	4.480801	4.481050
0.410	4.481300	4.481549	4.481798	4.482047	4.482296	4.482545	4.482795	4.483044	4.483293	4.483542
0.420	4.483791	4.484041	4.484290	4.484539	4.484788	4.485038	4.485287	4.485536	4.485785	4.486035
0.430	4.486284	4.486533	4.486783	4.487032	4.487281	4.487531	4.487780	4.488029	4.488279	4.488528
0.440	4.488778	4.489027	4.489276	4.489526	4.489775	4.490025	4.490274	4.490524	4.490773	4.491023
0.450	4.491272	4.491522	4.491771	4.492021	4.492270	4.492520	4.492769	4.493019	4.493268	4.493518
0.460	4.493767	4.494017	4.494267	4.494516	4.494766	4.495016	4.495265	4.495515	4.495764	4.496014
0.470	4.496264	4.496513	4.496763	4.497013	4.497262	4.497512	4.497762	4.498012	4.498261	4.498511
0.480	4.498761	4.499011	4.499260	4.499510	4.499760	4.500010	4.500260	4.500509	4.500759	4.501009
0.490	4.501259	4.501509	4.501759	4.502008	4.502258	4.502508	4.502758	4.503008	4.503258	4.503508

ATTENUATION IN DECIBELS
THETA FROM 39.500 TO 39.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	4.503758	4.504008	4.504258	4.504508	4.504758	4.505008	4.505258	4.505508	4.505758	4.506007
0.510	4.506258	4.506508	4.506758	4.507008	4.507258	4.507508	4.507758	4.508008	4.508258	4.508508
0.520	4.508758	4.509008	4.509258	4.509509	4.509759	4.510009	4.510259	4.510509	4.510759	4.511010
0.530	4.511260	4.511510	4.511760	4.512010	4.512261	4.512511	4.512761	4.513011	4.513262	4.513512
0.540	4.513762	4.514013	4.514263	4.514513	4.514763	4.515014	4.515264	4.515514	4.515765	4.516015
0.550	4.516266	4.516516	4.516766	4.517017	4.517267	4.517518	4.517768	4.518018	4.518269	4.518519
0.560	4.518770	4.519020	4.519271	4.519521	4.519772	4.520022	4.520273	4.520523	4.520774	4.521024
0.570	4.521275	4.521526	4.521776	4.522027	4.522277	4.522528	4.522778	4.523029	4.523280	4.523530
0.580	4.523781	4.524032	4.524282	4.524533	4.524784	4.525034	4.525285	4.525536	4.525786	4.526037
0.590	4.526288	4.526539	4.526789	4.527040	4.527291	4.527542	4.527792	4.528043	4.528294	4.528545
0.600	4.528796	4.529047	4.529297	4.529548	4.529799	4.530050	4.530301	4.530552	4.530803	4.531053
0.610	4.531304	4.531555	4.531806	4.532057	4.532308	4.532559	4.532810	4.533061	4.533312	4.533563
0.620	4.533814	4.534065	4.534316	4.534567	4.534818	4.535069	4.535320	4.535571	4.535822	4.536073
0.630	4.536324	4.536575	4.536827	4.537078	4.537329	4.537580	4.537831	4.538082	4.538333	4.538585
0.640	4.538836	4.539087	4.539338	4.539589	4.539841	4.540092	4.540343	4.540594	4.540846	4.541097
0.650	4.541348	4.541599	4.541851	4.542102	4.542353	4.542605	4.542856	4.543107	4.543359	4.543610
0.660	4.543861	4.544113	4.544364	4.544615	4.544867	4.545118	4.545370	4.545621	4.545872	4.546124
0.670	4.546375	4.546627	4.546878	4.547130	4.547381	4.547633	4.547884	4.548136	4.548387	4.548639
0.680	4.548890	4.549142	4.549393	4.549645	4.549896	4.550148	4.550400	4.550651	4.550903	4.551154
0.690	4.551406	4.551658	4.551909	4.552161	4.552413	4.552664	4.552916	4.553168	4.553419	4.553671
0.700	4.553923	4.554174	4.554426	4.554678	4.554930	4.555181	4.555433	4.555685	4.555937	4.556189
0.710	4.556440	4.556692	4.556944	4.557196	4.557448	4.557700	4.557951	4.558203	4.558455	4.558707
0.720	4.558959	4.559211	4.559463	4.559715	4.559967	4.560219	4.560471	4.560722	4.560974	4.561226
0.730	4.561478	4.561730	4.561982	4.562234	4.562486	4.562738	4.562990	4.563242	4.563494	4.563747
0.740	4.563999	4.564251	4.564503	4.564755	4.565007	4.565259	4.565511	4.565763	4.566015	4.566268
0.750	4.566520	4.566772	4.567024	4.567276	4.567528	4.567780	4.568032	4.568285	4.568537	4.568790
0.760	4.569042	4.569294	4.569546	4.569799	4.570051	4.570303	4.570556	4.570808	4.571060	4.571312
0.770	4.571565	4.571817	4.572070	4.572322	4.572574	4.572827	4.573079	4.573331	4.573584	4.573836
0.780	4.574089	4.574341	4.574594	4.574846	4.575099	4.575351	4.575603	4.575856	4.576109	4.576361
0.790	4.576613	4.576866	4.577119	4.577371	4.577624	4.577876	4.578129	4.578381	4.578634	4.578887
0.800	4.579139	4.579392	4.579644	4.579897	4.580150	4.580402	4.580655	4.580908	4.581160	4.581413
0.810	4.581666	4.581918	4.582171	4.582424	4.582677	4.582929	4.583182	4.583435	4.583688	4.583940
0.820	4.584193	4.584446	4.584699	4.584952	4.585204	4.585457	4.585710	4.585963	4.586216	4.586469
0.830	4.586722	4.586975	4.587227	4.587480	4.587733	4.587986	4.588239	4.588492	4.588745	4.588998
0.840	4.589251	4.589504	4.589757	4.590010	4.590263	4.590516	4.590769	4.591022	4.591275	4.591528
0.850	4.591781	4.592034	4.592287	4.592540	4.592793	4.593046	4.593300	4.593553	4.593806	4.594059
0.860	4.594312	4.594565	4.594818	4.595072	4.595325	4.595578	4.595831	4.596084	4.596338	4.596591
0.870	4.596844	4.597097	4.597351	4.597604	4.597857	4.598110	4.598364	4.598617	4.598870	4.599124
0.880	4.599377	4.599630	4.599884	4.600137	4.600390	4.600644	4.600897	4.601150	4.601404	4.601657
0.890	4.601911	4.602164	4.602417	4.602671	4.602924	4.603178	4.603431	4.603685	4.603938	4.604192
0.900	4.604445	4.604699	4.604952	4.605206	4.605459	4.605713	4.605967	4.606220	4.606474	4.606727
0.910	4.606981	4.607234	4.607488	4.607742	4.607995	4.608249	4.608503	4.608756	4.609010	4.609264
0.920	4.609517	4.609771	4.610025	4.610278	4.610532	4.610786	4.611040	4.611293	4.611547	4.611801
0.930	4.612055	4.612308	4.612562	4.612816	4.613070	4.613324	4.613577	4.613831	4.614085	4.614339
0.940	4.614593	4.614847	4.615101	4.615355	4.615608	4.615862	4.616116	4.616370	4.616624	4.616878
0.950	4.616732	4.616986	4.617240	4.617494	4.617748	4.618002	4.618256	4.618510	4.618764	4.619018
0.960	4.619672	4.619926	4.620180	4.620434	4.620688	4.620942	4.621197	4.621451	4.621705	4.621959
0.970	4.622213	4.622467	4.622721	4.622976	4.623230	4.623484	4.623738	4.623992	4.624246	4.624501
0.980	4.624755	4.625009	4.625263	4.625518	4.625772	4.626026	4.626280	4.626535	4.626789	4.627043
0.990	4.627298	4.627552	4.627806	4.628061	4.628315	4.628569	4.628824	4.629078	4.629332	4.629587

ATTENUATION IN DECIBELS
THETA FROM 40.000 TO 40.499 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.000	4.629841	4.630096	4.630350	4.630605	4.630859	4.631113	4.631368	4.631622	4.631877	4.632131
0.010	4.632386	4.632640	4.632895	4.633149	4.633404	4.633658	4.633913	4.634168	4.634422	4.634677
0.020	4.634931	4.635186	4.635441	4.635695	4.635950	4.636204	4.636459	4.636714	4.636968	4.637223
0.030	4.637478	4.637732	4.637987	4.638242	4.638496	4.638751	4.639006	4.639261	4.639515	4.639770
0.040	4.640025	4.640280	4.640535	4.640789	4.641044	4.641299	4.641554	4.641809	4.642063	4.642318
0.050	4.642573	4.642828	4.643083	4.643338	4.643593	4.643848	4.644102	4.644357	4.644612	4.644867
0.060	4.645122	4.645377	4.645632	4.645887	4.646142	4.646397	4.646652	4.646907	4.647162	4.647417
0.070	4.647672	4.647927	4.648182	4.648437	4.648692	4.648947	4.649202	4.649458	4.649713	4.649968
0.080	4.650223	4.650478	4.650733	4.650988	4.651244	4.651499	4.651754	4.652009	4.652264	4.652520
0.090	4.652775	4.653030	4.653285	4.653541	4.653796	4.654051	4.654306	4.654562	4.654817	4.655072
0.100	4.655327	4.655583	4.655838	4.656093	4.656349	4.656604	4.656860	4.657115	4.657370	4.657626
0.110	4.657881	4.658136	4.658392	4.658647	4.658903	4.659158	4.659414	4.659669	4.659925	4.660180
0.120	4.660436	4.660691	4.660947	4.661202	4.661458	4.661713	4.661969	4.662224	4.662480	4.662735
0.130	4.662991	4.663247	4.663502	4.663758	4.664013	4.664269	4.664525	4.664780	4.665036	4.665292
0.140	4.665547	4.665803	4.666059	4.666314	4.666570	4.666826	4.667081	4.667337	4.667593	4.667849
0.150	4.668104	4.668360	4.668616	4.668872	4.669128	4.669383	4.669639	4.669895	4.670151	4.670407
0.160	4.670663	4.670918	4.671174	4.671430	4.671686	4.671942	4.672198	4.672454	4.672710	4.672966
0.170	4.673222	4.673478	4.673734	4.673990	4.674245	4.674501	4.674757	4.675013	4.675269	4.675526
0.180	4.675782	4.676038	4.676294	4.676550	4.676806	4.677062	4.677318	4.677574	4.677830	4.678086
0.190	4.678342	4.678599	4.678855	4.679111	4.679367	4.679623	4.679879	4.680135	4.680392	4.680648
0.200	4.680904	4.681160	4.681417	4.681673	4.681929	4.682185	4.682442	4.682698	4.682954	4.683210
0.210	4.683467	4.683723	4.683979	4.684236	4.684492	4.684748	4.685005	4.685261	4.685518	4.685774
0.220	4.686030	4.686287	4.686543	4.686800	4.687056	4.687312	4.687569	4.687825	4.688082	4.688338
0.230	4.688595	4.688851	4.689108	4.689364	4.689621	4.689877	4.690134	4.690390	4.690647	4.690904
0.240	4.691160	4.691417	4.691673	4.691930	4.692187	4.692443	4.692700	4.692956	4.693213	4.693470
0.250	4.693726	4.693983	4.694240	4.694497	4.694753	4.695010	4.695267	4.695523	4.695780	4.696037
0.260	4.696294	4.696550	4.696807	4.697064	4.697321	4.697578	4.697834	4.698091	4.698348	4.698605
0.270	4.698862	4.699119	4.699375	4.699632	4.699889	4.700146	4.700403	4.700660	4.700917	4.701174
0.280	4.701431	4.701688	4.701945	4.702202	4.702459	4.702716	4.702973	4.703230	4.703487	4.703744
0.290	4.704001	4.704258	4.704515	4.704772	4.705029	4.705286	4.705543	4.705800	4.706057	4.706314
0.300	4.706571	4.706829	4.707086	4.707343	4.707600	4.707857	4.708114	4.708372	4.708629	4.708886
0.310	4.709143	4.709400	4.709658	4.709915	4.710172	4.710429	4.710687	4.710944	4.711201	4.711459
0.320	4.711716	4.711973	4.712231	4.712488	4.712745	4.713003	4.713260	4.713517	4.713775	4.714032
0.330	4.714299	4.714547	4.714804	4.715062	4.715319	4.715577	4.715834	4.716091	4.716349	4.716606
0.340	4.716864	4.717121	4.717379	4.717636	4.717894	4.718151	4.718409	4.718667	4.718924	4.719182
0.350	4.719439	4.719697	4.719954	4.720212	4.720470	4.720727	4.720985	4.721243	4.721500	4.721758
0.360	4.722016	4.722273	4.722531	4.722789	4.723046	4.723304	4.723562	4.723819	4.724077	4.724335
0.370	4.724593	4.724850	4.725108	4.725366	4.725624	4.725882	4.726139	4.726397	4.726655	4.726913
0.380	4.727171	4.727429	4.727687	4.727944	4.728202	4.728460	4.728718	4.728976	4.729234	4.729492
0.390	4.729750	4.730008	4.730266	4.730524	4.730782	4.731040	4.731298	4.731556	4.731814	4.732072
0.400	4.732330	4.732588	4.732846	4.733104	4.733362	4.733620	4.733878	4.734136	4.734394	4.734653
0.410	4.734911	4.735169	4.735427	4.735685	4.735943	4.736201	4.736460	4.736718	4.736976	4.737234
0.420	4.737492	4.737751	4.738009	4.738267	4.738525	4.738784	4.739042	4.739300	4.739558	4.739817
0.430	4.740075	4.740333	4.740592	4.740850	4.741108	4.741367	4.741625	4.741883	4.742142	4.742400
0.440	4.742659	4.742917	4.743176	4.743434	4.743692	4.743951	4.744209	4.744468	4.744726	4.744985
0.450	4.745243	4.745502	4.745760	4.746019	4.746277	4.746536	4.746794	4.747053	4.747311	4.747570
0.460	4.747829	4.748087	4.748346	4.748604	4.748863	4.749122	4.749380	4.749639	4.749898	4.750156
0.470	4.750415	4.750674	4.750932	4.751191	4.751450	4.751708	4.751967	4.752226	4.752485	4.752744
0.480	4.753002	4.753261	4.753520	4.753778	4.754037	4.754296	4.754555	4.754814	4.755073	4.755331
0.490	4.755590	4.755849	4.756108	4.756367	4.756626	4.756885	4.757144	4.757403	4.757661	4.757920

ATTENUATION IN DECIBELS
THETA FROM 40.500 TO 40.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	4.758179	4.758438	4.758697	4.758956	4.759215	4.759474	4.759733	4.759992	4.760251	4.760510
0.510	4.760769	4.761028	4.761287	4.761546	4.761806	4.762065	4.762324	4.762583	4.762842	4.763101
0.520	4.763360	4.763619	4.763879	4.764138	4.764397	4.764656	4.764915	4.765174	4.765434	4.765693
0.530	4.765952	4.766211	4.766471	4.766730	4.766989	4.767248	4.767508	4.767767	4.768026	4.768285
0.540	4.768545	4.768804	4.769063	4.769323	4.769582	4.769841	4.770101	4.770360	4.770620	4.770879
0.550	4.771133	4.771398	4.771657	4.771917	4.772176	4.772436	4.772695	4.772955	4.773214	4.773474
0.560	4.773733	4.773993	4.774252	4.774512	4.774771	4.775031	4.775290	4.775550	4.775809	4.776069
0.570	4.776329	4.776588	4.776848	4.777107	4.777367	4.777627	4.777886	4.778146	4.778406	4.778665
0.580	4.778925	4.779185	4.779444	4.779704	4.779964	4.780223	4.780483	4.780743	4.781003	4.781262
0.590	4.781522	4.781782	4.782042	4.782302	4.782561	4.782821	4.783081	4.783341	4.783601	4.783861
0.600	4.784120	4.784380	4.784640	4.784900	4.785160	4.785420	4.785680	4.785940	4.786200	4.786460
0.610	4.786720	4.786980	4.787240	4.787500	4.787759	4.788020	4.788280	4.788540	4.788800	4.789060
0.620	4.789320	4.789580	4.789840	4.790100	4.790360	4.790620	4.790880	4.791140	4.791400	4.791660
0.630	4.791921	4.792181	4.792441	4.792701	4.792961	4.793221	4.793482	4.793742	4.794002	4.794262
0.640	4.794523	4.794783	4.795043	4.795303	4.795564	4.795824	4.796084	4.796344	4.796605	4.796865
0.650	4.797125	4.797386	4.797646	4.797906	4.798167	4.798427	4.798688	4.798948	4.799208	4.799469
0.660	4.799729	4.799990	4.800250	4.800510	4.800771	4.801031	4.801292	4.801552	4.801813	4.802073
0.670	4.802334	4.802594	4.802855	4.803115	4.803376	4.803636	4.803897	4.804158	4.804418	4.804679
0.680	4.804939	4.805200	4.805461	4.805721	4.805982	4.806243	4.806503	4.806764	4.807025	4.807285
0.690	4.807546	4.807807	4.808067	4.808328	4.808589	4.808850	4.809110	4.809371	4.809632	4.809893
0.700	4.810153	4.810414	4.810675	4.810936	4.811197	4.811457	4.811718	4.811979	4.812240	4.812501
0.710	4.812762	4.813023	4.813283	4.813544	4.813805	4.814066	4.814327	4.814588	4.814849	4.815110
0.720	4.815371	4.815632	4.815893	4.816154	4.816415	4.816676	4.816937	4.817198	4.817459	4.817720
0.730	4.817981	4.818242	4.818503	4.818764	4.819025	4.819287	4.819548	4.819809	4.820070	4.820331
0.740	4.820592	4.820853	4.821115	4.821376	4.821637	4.821898	4.822159	4.822421	4.822682	4.822943
0.750	4.823204	4.823466	4.823727	4.823988	4.824249	4.824511	4.824772	4.825033	4.825295	4.825556
0.760	4.825817	4.826079	4.826340	4.826601	4.826863	4.827124	4.827385	4.827647	4.827908	4.828170
0.770	4.828431	4.828693	4.828954	4.829215	4.829477	4.829738	4.830000	4.830261	4.830523	4.830784
0.780	4.831046	4.831307	4.831569	4.831831	4.832092	4.832354	4.832615	4.832877	4.833138	4.833400
0.790	4.833652	4.833923	4.834185	4.834446	4.834708	4.834970	4.835231	4.835493	4.835755	4.836017
0.800	4.836278	4.836540	4.836802	4.837063	4.837325	4.837587	4.837849	4.838110	4.838372	4.838634
0.810	4.838896	4.839158	4.839419	4.839681	4.839943	4.840205	4.840467	4.840729	4.840991	4.841252
0.820	4.841514	4.841776	4.842038	4.842300	4.842562	4.842824	4.843086	4.843348	4.843610	4.843872
0.830	4.844134	4.844396	4.844658	4.844920	4.845182	4.845444	4.845706	4.845968	4.846230	4.846492
0.840	4.846754	4.847016	4.847278	4.847540	4.847802	4.848065	4.848327	4.848589	4.848851	4.849113
0.850	4.849375	4.849638	4.849900	4.850162	4.850424	4.850686	4.850949	4.851211	4.851473	4.851735
0.860	4.851998	4.852260	4.852522	4.852784	4.853047	4.853309	4.853571	4.853834	4.854096	4.854358
0.870	4.854621	4.854883	4.855145	4.855408	4.855670	4.855933	4.856195	4.856457	4.856720	4.856982
0.880	4.857245	4.857507	4.857770	4.858032	4.858295	4.858557	4.858820	4.859082	4.859345	4.859607
0.890	4.859870	4.860132	4.860395	4.860657	4.860920	4.861182	4.861445	4.861708	4.861970	4.862233
0.900	4.862406	4.862758	4.863021	4.863284	4.863546	4.863809	4.864072	4.864334	4.864597	4.864860
0.910	4.865122	4.865385	4.865648	4.865911	4.866173	4.866436	4.866699	4.866962	4.867224	4.867487
0.920	4.867750	4.868013	4.868276	4.868539	4.868801	4.869064	4.869327	4.869590	4.869853	4.870116
0.930	4.870379	4.870642	4.870905	4.871168	4.871431	4.871693	4.871956	4.872219	4.872482	4.872745
0.940	4.873008	4.873271	4.873534	4.873797	4.874060	4.874324	4.874587	4.874850	4.875113	4.875376
0.950	4.875639	4.875902	4.876165	4.876428	4.876691	4.876954	4.877218	4.877481	4.877744	4.878007
0.960	4.878270	4.878534	4.878797	4.879060	4.879323	4.879586	4.879850	4.880113	4.880376	4.880639
0.970	4.880903	4.881166	4.881429	4.881693	4.881956	4.882219	4.882483	4.882746	4.883009	4.883273
0.980	4.883536	4.883799	4.884063	4.884326	4.884590	4.884853	4.885116	4.885380	4.885643	4.885907
0.990	4.886170	4.886434	4.886697	4.886961	4.887224	4.887488	4.887751	4.888015	4.888278	4.888542

ATTENUATION IN DECIBELS
THETA FROM 41.000 TO 41.499 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.000	4.888805	4.889069	4.889333	4.889596	4.889860	4.890123	4.890387	4.890651	4.890914	4.891178
0.010	4.891442	4.891705	4.891969	4.892233	4.892496	4.892760	4.893024	4.893287	4.893551	4.893815
0.020	4.894079	4.894342	4.894606	4.894870	4.895134	4.895397	4.895661	4.895925	4.896189	4.896453
0.030	4.896717	4.896980	4.897244	4.897508	4.897772	4.898036	4.898300	4.898564	4.898828	4.899091
0.040	4.899355	4.899619	4.899883	4.900147	4.900411	4.900675	4.900939	4.901203	4.901467	4.901731
0.050	4.901995	4.902259	4.902523	4.902787	4.903051	4.903315	4.903580	4.903844	4.904108	4.904372
0.060	4.904636	4.904900	4.905164	4.905428	4.905693	4.905957	4.906221	4.906485	4.906749	4.907013
0.070	4.907278	4.907542	4.907806	4.908070	4.908335	4.908599	4.908863	4.909127	4.909392	4.909656
0.080	4.909920	4.910185	4.910449	4.910713	4.910978	4.911242	4.911506	4.911771	4.912035	4.912299
0.090	4.912564	4.912828	4.913093	4.913357	4.913621	4.913886	4.914150	4.914415	4.914679	4.914944
0.100	4.915208	4.915473	4.915737	4.916002	4.916266	4.916531	4.916795	4.917060	4.917325	4.917589
0.110	4.917854	4.918118	4.918383	4.918647	4.918912	4.919177	4.919441	4.919706	4.919971	4.920235
0.120	4.920500	4.920765	4.921029	4.921294	4.921559	4.921824	4.922088	4.922353	4.922618	4.922882
0.130	4.923147	4.923412	4.923677	4.923942	4.924206	4.924471	4.924736	4.925001	4.925266	4.925531
0.140	4.925795	4.926060	4.926325	4.926590	4.926855	4.927120	4.927385	4.927650	4.927915	4.928180
0.150	4.928445	4.928710	4.928975	4.929240	4.929505	4.929770	4.930035	4.930300	4.930565	4.930830
0.160	4.931095	4.931360	4.931625	4.931890	4.932155	4.932420	4.932685	4.932950	4.933215	4.933481
0.170	4.933746	4.934011	4.934276	4.934541	4.934806	4.935072	4.935337	4.935602	4.935867	4.936132
0.180	4.936398	4.936663	4.936928	4.937193	4.937458	4.937724	4.937989	4.938255	4.938520	4.938785
0.190	4.939050	4.939316	4.939581	4.939847	4.940112	4.940377	4.940643	4.940908	4.941173	4.941439
0.200	4.941704	4.941970	4.942235	4.942501	4.942766	4.943032	4.943297	4.943563	4.943828	4.944094
0.210	4.944359	4.944625	4.944890	4.945156	4.945421	4.945687	4.945952	4.946218	4.946483	4.946749
0.220	4.947015	4.947280	4.947546	4.947812	4.948077	4.948343	4.948609	4.948874	4.949140	4.949406
0.230	4.949671	4.949937	4.950203	4.950468	4.950734	4.951000	4.951266	4.951531	4.951797	4.952063
0.240	4.952329	4.952595	4.952860	4.953126	4.953392	4.953658	4.953924	4.954190	4.954456	4.954721
0.250	4.954987	4.955253	4.955519	4.955785	4.956051	4.956317	4.956583	4.956849	4.957115	4.957381
0.260	4.957647	4.957913	4.958179	4.958445	4.958711	4.958977	4.959243	4.959509	4.959775	4.960041
0.270	4.960307	4.960573	4.960839	4.961105	4.961371	4.961638	4.961904	4.962170	4.962436	4.962702
0.280	4.962968	4.963235	4.963501	4.963767	4.964033	4.964299	4.964566	4.964832	4.965098	4.965364
0.290	4.965631	4.965897	4.966163	4.966429	4.966696	4.966962	4.967228	4.967495	4.967761	4.968027
0.300	4.968294	4.968560	4.968826	4.969093	4.969359	4.969626	4.969892	4.970159	4.970425	4.970691
0.310	4.970958	4.971224	4.971491	4.971757	4.972024	4.972290	4.972557	4.972823	4.973090	4.973356
0.320	4.973623	4.973889	4.974156	4.974423	4.974689	4.974956	4.975222	4.975489	4.975756	4.976022
0.330	4.976289	4.976556	4.976822	4.977089	4.977356	4.977622	4.977889	4.978156	4.978422	4.978689
0.340	4.978956	4.979223	4.979489	4.979756	4.980023	4.980290	4.980556	4.980823	4.981090	4.981357
0.350	4.981624	4.981890	4.982157	4.982424	4.982691	4.982958	4.983225	4.983492	4.983759	4.984025
0.360	4.984292	4.984559	4.984826	4.985093	4.985360	4.985627	4.985894	4.986161	4.986428	4.986695
0.370	4.986962	4.987229	4.987496	4.987763	4.988030	4.988297	4.988564	4.988832	4.989099	4.989366
0.380	4.989633	4.989900	4.990167	4.990434	4.990701	4.990969	4.991236	4.991503	4.991770	4.992037
0.390	4.992304	4.992572	4.992839	4.993106	4.993373	4.993641	4.993908	4.994175	4.994442	4.994710
0.400	4.994977	4.995244	4.995512	4.995779	4.996046	4.996314	4.996581	4.996848	4.997116	4.997383
0.410	4.997651	4.997918	4.998185	4.998453	4.998720	4.998988	4.999255	4.999523	4.999790	5.000057
0.420	5.000325	5.000592	5.000860	5.001127	5.001395	5.001662	5.001930	5.002198	5.002465	5.002733
0.430	5.003000	5.003268	5.003535	5.003803	5.004071	5.004338	5.004606	5.004874	5.005141	5.005409
0.440	5.005677	5.005944	5.006212	5.006480	5.006747	5.007015	5.007283	5.007551	5.007818	5.008086
0.450	5.008354	5.008622	5.008889	5.009157	5.009425	5.009693	5.009961	5.010229	5.010496	5.010764
0.460	5.011032	5.011300	5.011568	5.011836	5.012104	5.012371	5.012639	5.012907	5.013175	5.013443
0.470	5.013711	5.013979	5.014247	5.014515	5.014783	5.015051	5.015319	5.015587	5.015855	5.016123
0.480	5.016391	5.016659	5.016927	5.017195	5.017464	5.017732	5.018000	5.018268	5.018536	5.018804
0.490	5.019072	5.019340	5.019609	5.019877	5.020145	5.020413	5.020681	5.020950	5.021218	5.021486

ATTENUATION IN DECIBELS
THETA FROM 41.500 TO 41.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	5.021754	5.022023	5.022291	5.022559	5.022827	5.023096	5.023364	5.023632	5.023901	5.024169
0.510	5.024437	5.024706	5.024974	5.025242	5.025511	5.025779	5.026047	5.026316	5.026584	5.026853
0.520	5.027121	5.027389	5.027658	5.027926	5.028195	5.028463	5.028732	5.029000	5.029269	5.029537
0.530	5.029806	5.030074	5.030343	5.030611	5.030880	5.031149	5.031417	5.031686	5.031954	5.032223
0.540	5.032492	5.032760	5.033029	5.033297	5.033566	5.033835	5.034104	5.034372	5.034641	5.034910
0.550	5.035178	5.035447	5.035716	5.035984	5.036253	5.036522	5.036791	5.037060	5.037328	5.037597
0.560	5.037666	5.038135	5.038404	5.038672	5.038941	5.039210	5.039479	5.039748	5.040017	5.040286
0.570	5.040554	5.040823	5.041092	5.041361	5.041630	5.041899	5.042168	5.042437	5.042706	5.042975
0.580	5.043244	5.043513	5.043782	5.044051	5.044320	5.044589	5.044858	5.045127	5.045396	5.045665
0.590	5.045934	5.046204	5.046473	5.046742	5.047011	5.047280	5.047549	5.047818	5.048088	5.048357
0.600	5.048626	5.048895	5.049164	5.049434	5.049703	5.049972	5.050241	5.050510	5.050780	5.051049
0.610	5.051318	5.051588	5.051857	5.052126	5.052395	5.052665	5.052934	5.053203	5.053473	5.053742
0.620	5.054012	5.054281	5.054550	5.054820	5.055089	5.055359	5.055628	5.055897	5.056167	5.056436
0.630	5.056706	5.056975	5.057245	5.057514	5.057784	5.058053	5.058323	5.058592	5.058862	5.059131
0.640	5.059401	5.059671	5.059940	5.060210	5.060479	5.060749	5.061019	5.061288	5.061558	5.061828
0.650	5.062097	5.062367	5.062636	5.062906	5.063176	5.063446	5.063715	5.063985	5.064255	5.064525
0.660	5.064794	5.065064	5.065334	5.065604	5.065873	5.066143	5.066413	5.066683	5.066953	5.067222
0.670	5.067492	5.067762	5.068032	5.068302	5.068572	5.068842	5.069112	5.069382	5.069651	5.069921
0.680	5.070191	5.070461	5.070731	5.071001	5.071271	5.071541	5.071811	5.072081	5.072351	5.072621
0.690	5.072891	5.073161	5.073431	5.073701	5.073972	5.074242	5.074512	5.074782	5.075052	5.075322
0.700	5.075592	5.075862	5.076132	5.076403	5.076673	5.076943	5.077213	5.077483	5.077754	5.078024
0.710	5.078294	5.078564	5.078834	5.079105	5.079375	5.079645	5.079916	5.080186	5.080456	5.080726
0.720	5.080977	5.081247	5.081517	5.081788	5.082058	5.082329	5.082599	5.082869	5.083139	5.083409
0.730	5.083701	5.083971	5.084241	5.084512	5.084782	5.085053	5.085323	5.085594	5.085864	5.086135
0.740	5.086405	5.086676	5.086946	5.087217	5.087487	5.087758	5.088028	5.088299	5.088570	5.088840
0.750	5.089111	5.089381	5.089652	5.089923	5.090193	5.090464	5.090735	5.091005	5.091276	5.091547
0.760	5.091817	5.092088	5.092359	5.092630	5.092900	5.093171	5.093442	5.093713	5.093983	5.094254
0.770	5.094525	5.094796	5.095067	5.095337	5.095608	5.095879	5.096150	5.096421	5.096692	5.096963
0.780	5.097233	5.097504	5.097775	5.098046	5.098317	5.098588	5.098859	5.099130	5.099401	5.099672
0.790	5.099943	5.100214	5.100485	5.100756	5.101027	5.101298	5.101569	5.101840	5.102111	5.102382
0.800	5.102653	5.102924	5.103196	5.103467	5.103738	5.104009	5.104280	5.104551	5.104822	5.105093
0.810	5.105365	5.105636	5.105907	5.106178	5.106449	5.106721	5.106992	5.107263	5.107534	5.107806
0.820	5.108077	5.108348	5.108620	5.108891	5.109162	5.109433	5.109705	5.109976	5.110247	5.110519
0.830	5.110790	5.111062	5.111333	5.111604	5.111876	5.112147	5.112419	5.112690	5.112962	5.113233
0.840	5.113504	5.113776	5.114047	5.114319	5.114590	5.114862	5.115133	5.115405	5.115677	5.115948
0.850	5.116220	5.116491	5.116763	5.117034	5.117306	5.117578	5.117849	5.118121	5.118392	5.118664
0.860	5.118936	5.119207	5.119479	5.119751	5.120022	5.120294	5.120566	5.120838	5.121109	5.121381
0.870	5.121653	5.121925	5.122196	5.122468	5.122740	5.123012	5.123284	5.123555	5.123827	5.124099
0.880	5.124371	5.124643	5.124915	5.125186	5.125458	5.125730	5.126002	5.126274	5.126546	5.126818
0.890	5.127090	5.127362	5.127634	5.127906	5.128178	5.128450	5.128722	5.128994	5.129266	5.129538
0.900	5.129810	5.130082	5.130354	5.130626	5.130898	5.131170	5.131442	5.131714	5.131986	5.132258
0.910	5.132531	5.132803	5.133075	5.133347	5.133619	5.133891	5.134164	5.134436	5.134708	5.134980
0.920	5.135252	5.135525	5.135797	5.136069	5.136341	5.136614	5.136886	5.137158	5.137431	5.137703
0.930	5.137975	5.138248	5.138520	5.138792	5.139065	5.139337	5.139609	5.139882	5.140154	5.140427
0.940	5.140699	5.140971	5.141244	5.141516	5.141789	5.142061	5.142334	5.142606	5.142879	5.143151
0.950	5.143424	5.143696	5.143969	5.144241	5.144514	5.144786	5.145059	5.145332	5.145604	5.145877
0.960	5.146149	5.146422	5.146695	5.146967	5.147240	5.147513	5.147785	5.148058	5.148331	5.148603
0.970	5.148876	5.149149	5.149421	5.149694	5.149967	5.150240	5.150512	5.150785	5.151058	5.151331
0.980	5.151624	5.151897	5.152169	5.152442	5.152715	5.152988	5.153261	5.153534	5.153807	5.154080
0.990	5.154332	5.154605	5.154878	5.155151	5.155424	5.155697	5.155970	5.156243	5.156516	5.156789

ATTENUATION IN DECIBELS
THETA FROM 42.000 TO 42.499 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.000	5.157062	5.157335	5.157608	5.157881	5.158154	5.158427	5.158700	5.158973	5.159246	5.159519
0.010	5.159792	5.160065	5.160338	5.160611	5.160885	5.161158	5.161431	5.161704	5.161977	5.162250
0.020	5.162524	5.162797	5.163070	5.163343	5.163616	5.163890	5.164163	5.164436	5.164709	5.164983
0.030	5.165256	5.165529	5.165802	5.166076	5.166349	5.166622	5.166896	5.167169	5.167443	5.167716
0.040	5.167989	5.168263	5.168536	5.168809	5.169083	5.169356	5.169630	5.169903	5.170177	5.170450
0.050	5.170723	5.170997	5.171270	5.171544	5.171817	5.172091	5.172365	5.172638	5.172912	5.173185
0.060	5.173459	5.173732	5.174006	5.174280	5.174553	5.174827	5.175100	5.175374	5.175648	5.175921
0.070	5.176195	5.176469	5.176742	5.177016	5.177290	5.177563	5.177837	5.178111	5.178385	5.178658
0.080	5.178932	5.179206	5.179480	5.179753	5.180027	5.180301	5.180575	5.180849	5.181123	5.181396
0.090	5.181670	5.181944	5.182218	5.182492	5.182766	5.183040	5.183314	5.183588	5.183861	5.184135
0.100	5.184409	5.184683	5.184957	5.185231	5.185505	5.185779	5.186053	5.186327	5.186601	5.186875
0.110	5.187149	5.187423	5.187698	5.187972	5.188246	5.188520	5.188794	5.189068	5.189342	5.189616
0.120	5.189890	5.190165	5.190439	5.190713	5.190987	5.191261	5.191536	5.191810	5.192084	5.192358
0.130	5.192632	5.192907	5.193181	5.193455	5.193730	5.194004	5.194278	5.194552	5.194827	5.195101
0.140	5.195375	5.195650	5.195924	5.196198	5.196473	5.196747	5.197022	5.197296	5.197570	5.197845
0.150	5.198119	5.198394	5.198668	5.198943	5.199217	5.199492	5.199766	5.200041	5.200315	5.200590
0.160	5.200864	5.201139	5.201413	5.201688	5.201962	5.202237	5.202512	5.202786	5.203061	5.203335
0.170	5.203610	5.203885	5.204159	5.204434	5.204709	5.204983	5.205258	5.205533	5.205807	5.206082
0.180	5.206357	5.206631	5.206906	5.207181	5.207456	5.207731	5.208005	5.208280	5.208555	5.208830
0.190	5.209105	5.209379	5.209654	5.209929	5.210204	5.210479	5.210754	5.211029	5.211303	5.211578
0.200	5.211853	5.212128	5.212403	5.212678	5.212953	5.213228	5.213503	5.213778	5.214053	5.214328
0.210	5.214603	5.214878	5.215153	5.215428	5.215703	5.215978	5.216253	5.216528	5.216803	5.217078
0.220	5.217354	5.217629	5.217904	5.218179	5.218454	5.218729	5.219004	5.219280	5.219555	5.219830
0.230	5.220105	5.220380	5.220656	5.220931	5.221206	5.221481	5.221757	5.222032	5.222307	5.222582
0.240	5.222858	5.223133	5.223408	5.223684	5.223959	5.224234	5.224510	5.224785	5.225061	5.225336
0.250	5.225611	5.225887	5.226162	5.226438	5.226713	5.226988	5.227264	5.227539	5.227815	5.228090
0.260	5.228366	5.228641	5.228917	5.229192	5.229468	5.229743	5.230019	5.230295	5.230570	5.230846
0.270	5.231121	5.231397	5.231673	5.231948	5.232224	5.232499	5.232775	5.233051	5.233326	5.233602
0.280	5.233878	5.234153	5.234429	5.234705	5.234981	5.235256	5.235532	5.235808	5.236084	5.236359
0.290	5.236635	5.236911	5.237187	5.237463	5.237738	5.238014	5.238290	5.238566	5.238842	5.239118
0.300	5.239394	5.239669	5.239945	5.240221	5.240497	5.240773	5.241049	5.241325	5.241601	5.241877
0.310	5.242153	5.242429	5.242705	5.242981	5.243257	5.243533	5.243809	5.244085	5.244361	5.244637
0.320	5.244913	5.245189	5.245465	5.245741	5.246018	5.246294	5.246570	5.246846	5.247122	5.247398
0.330	5.247674	5.247951	5.248227	5.248503	5.248779	5.249055	5.249332	5.249608	5.249884	5.250160
0.340	5.250437	5.250713	5.250989	5.251266	5.251542	5.251818	5.252095	5.252371	5.252647	5.252924
0.350	5.253200	5.253476	5.253753	5.254029	5.254305	5.254582	5.254858	5.255135	5.255411	5.255688
0.360	5.255964	5.256240	5.256517	5.256794	5.257070	5.257347	5.257623	5.257900	5.258176	5.258453
0.370	5.258729	5.259006	5.259282	5.259559	5.259836	5.260112	5.260389	5.260665	5.260942	5.261219
0.380	5.261495	5.261772	5.262049	5.262325	5.262602	5.262879	5.263156	5.263432	5.263709	5.263986
0.390	5.264262	5.264539	5.264816	5.265093	5.265370	5.265646	5.265923	5.266200	5.266477	5.266754
0.400	5.267031	5.267307	5.267584	5.267861	5.268138	5.268415	5.268692	5.268969	5.269246	5.269523
0.410	5.269800	5.270077	5.270353	5.270630	5.270907	5.271184	5.271461	5.271738	5.272016	5.272293
0.420	5.272570	5.272847	5.273124	5.273401	5.273678	5.273955	5.274232	5.274509	5.274786	5.275063
0.430	5.275341	5.275618	5.275895	5.276172	5.276449	5.276726	5.277004	5.277281	5.277558	5.277835
0.440	5.278113	5.278390	5.278667	5.278944	5.279222	5.279499	5.279776	5.280053	5.280331	5.280608
0.450	5.280885	5.281163	5.281440	5.281717	5.281995	5.282272	5.282550	5.282827	5.283104	5.283382
0.460	5.283659	5.283937	5.284214	5.284492	5.284769	5.285047	5.285324	5.285602	5.285879	5.286157
0.470	5.286434	5.286712	5.286989	5.287267	5.287544	5.287822	5.288100	5.288377	5.288655	5.288932
0.480	5.289210	5.289488	5.289765	5.290043	5.290321	5.290598	5.290876	5.291154	5.291431	5.291709
0.490	5.291987	5.292265	5.292542	5.292820	5.293098	5.293376	5.293653	5.293931	5.294209	5.294487

ATTENUATION IN DECIBELS
THETA FROM 42.500 TO 42.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	5.294765	5.295042	5.295320	5.295598	5.295876	5.296154	5.296432	5.296710	5.296988	5.297265
0.510	5.297543	5.297821	5.298099	5.298377	5.298655	5.298933	5.299211	5.299489	5.299767	5.300045
0.520	5.300323	5.300601	5.300879	5.301157	5.301435	5.301713	5.301991	5.302269	5.302548	5.302826
0.530	5.303104	5.303382	5.303660	5.303938	5.304216	5.304495	5.304773	5.305051	5.305329	5.305607
0.540	5.305885	5.306164	5.306442	5.306720	5.306998	5.307277	5.307555	5.307833	5.308111	5.308390
0.550	5.308668	5.308946	5.309225	5.309503	5.309781	5.310060	5.310338	5.310617	5.310895	5.311173
0.560	5.311452	5.311730	5.312009	5.312287	5.312565	5.312844	5.313122	5.313401	5.313679	5.313958
0.570	5.314236	5.314515	5.314793	5.315072	5.315350	5.315629	5.315908	5.316186	5.316465	5.316743
0.580	5.317022	5.317301	5.317579	5.317858	5.318136	5.318415	5.318694	5.318972	5.319251	5.319530
0.590	5.319808	5.320087	5.320366	5.320645	5.320923	5.321202	5.321481	5.321760	5.322038	5.322317
0.600	5.322596	5.322875	5.323154	5.323432	5.323711	5.323990	5.324269	5.324548	5.324827	5.325106
0.610	5.325384	5.325663	5.325942	5.326221	5.326500	5.326779	5.327058	5.327337	5.327616	5.327895
0.620	5.328174	5.328453	5.328732	5.329011	5.329290	5.329569	5.329848	5.330127	5.330406	5.330685
0.630	5.330964	5.331244	5.331523	5.331802	5.332081	5.332360	5.332639	5.332918	5.333198	5.333477
0.640	5.333756	5.334035	5.334314	5.334594	5.334873	5.335152	5.335431	5.335710	5.335990	5.336269
0.650	5.336548	5.336828	5.337107	5.337386	5.337666	5.337945	5.338224	5.338504	5.338783	5.339062
0.660	5.339342	5.339621	5.339900	5.340180	5.340459	5.340739	5.341018	5.341298	5.341577	5.341857
0.670	5.342136	5.342416	5.342695	5.342975	5.343254	5.343534	5.343813	5.344093	5.344372	5.344652
0.680	5.344931	5.345211	5.345491	5.345770	5.346050	5.346329	5.346609	5.346889	5.347168	5.347448
0.690	5.347723	5.348007	5.348287	5.348567	5.348847	5.349126	5.349406	5.349686	5.349966	5.350245
0.700	5.350525	5.350805	5.351085	5.351364	5.351644	5.351924	5.352204	5.352484	5.352764	5.353043
0.710	5.353323	5.353603	5.353883	5.354163	5.354443	5.354723	5.355003	5.355283	5.355563	5.355843
0.720	5.356123	5.356403	5.356683	5.356963	5.357243	5.357523	5.357803	5.358083	5.358363	5.358643
0.730	5.358923	5.359203	5.359483	5.359763	5.360043	5.360323	5.360604	5.360884	5.361164	5.361444
0.740	5.361724	5.362004	5.362284	5.362565	5.362845	5.363125	5.363405	5.363686	5.363966	5.364246
0.750	5.364526	5.364807	5.365087	5.365367	5.365647	5.365928	5.366208	5.366488	5.366769	5.367049
0.760	5.367330	5.367610	5.367890	5.368171	5.368451	5.368731	5.369012	5.369292	5.369573	5.369853
0.770	5.370134	5.370414	5.370695	5.370975	5.371256	5.371536	5.371817	5.372097	5.372378	5.372658
0.780	5.372933	5.373219	5.373500	5.373781	5.374061	5.374342	5.374622	5.374903	5.375184	5.375464
0.790	5.375745	5.376026	5.376306	5.376587	5.376868	5.377148	5.377429	5.377710	5.377991	5.378271
0.800	5.378552	5.378833	5.379114	5.379394	5.379675	5.379956	5.380237	5.380518	5.380799	5.381079
0.810	5.381360	5.381641	5.381922	5.382203	5.382484	5.382765	5.383046	5.383326	5.383607	5.383888
0.820	5.384169	5.384450	5.384731	5.385012	5.385293	5.385574	5.385855	5.386136	5.386417	5.386698
0.830	5.386979	5.387260	5.387542	5.387823	5.388104	5.388385	5.388666	5.388947	5.389228	5.389509
0.840	5.389790	5.390072	5.390353	5.390634	5.390915	5.391196	5.391478	5.391759	5.392040	5.392321
0.850	5.392603	5.392884	5.393165	5.393446	5.393728	5.394009	5.394290	5.394571	5.394853	5.395134
0.860	5.395415	5.395697	5.395978	5.396260	5.396541	5.396822	5.397104	5.397385	5.397667	5.397948
0.870	5.398230	5.398511	5.398792	5.399074	5.399355	5.399637	5.399918	5.400200	5.400481	5.400763
0.880	5.401044	5.401326	5.401608	5.401889	5.402171	5.402452	5.402734	5.403016	5.403297	5.403579
0.890	5.403861	5.404142	5.404424	5.404705	5.404987	5.405269	5.405551	5.405832	5.406114	5.406396
0.900	5.406677	5.406959	5.407241	5.407523	5.407805	5.408086	5.408368	5.408650	5.408932	5.409214
0.910	5.409495	5.409777	5.410059	5.410341	5.410623	5.410905	5.411187	5.411469	5.411750	5.412032
0.920	5.412314	5.412596	5.412878	5.413160	5.413442	5.413724	5.414006	5.414288	5.414570	5.414852
0.930	5.415134	5.415416	5.415698	5.415980	5.416262	5.416545	5.416827	5.417109	5.417391	5.417673
0.940	5.417955	5.418237	5.418519	5.418802	5.419084	5.419366	5.419648	5.419930	5.420213	5.420495
0.950	5.420777	5.421059	5.421342	5.421624	5.421906	5.422188	5.422471	5.422753	5.423035	5.423318
0.960	5.423600	5.423882	5.424165	5.424447	5.424729	5.425012	5.425294	5.425577	5.425859	5.426141
0.970	5.426424	5.426706	5.426989	5.427271	5.427554	5.427836	5.428119	5.428401	5.428684	5.428966
0.980	5.429249	5.429531	5.429814	5.430096	5.430379	5.430661	5.430944	5.431227	5.431509	5.431792
0.990	5.432075	5.432357	5.432640	5.432923	5.433205	5.433488	5.433771	5.434053	5.434336	5.434619

ATTENUATION IN DECIBELS
THETA FROM 43.000 TO 43.499 DEGREES

THETA IN
DEGREES

0.000	5.434901	5.435184	5.435467	5.435750	5.436032	5.436315	5.436598	5.436881	5.437164	5.437446
0.010	5.437729	5.438012	5.438295	5.438578	5.438861	5.439144	5.439426	5.439709	5.439992	5.440275
0.020	5.440558	5.440841	5.441124	5.441407	5.441690	5.441973	5.442256	5.442539	5.442822	5.443105
0.030	5.443388	5.443671	5.443954	5.444237	5.444520	5.444803	5.445086	5.445369	5.445652	5.445936
0.040	5.446219	5.446502	5.446785	5.447068	5.447351	5.447634	5.447918	5.448201	5.448484	5.448767
0.050	5.449050	5.449334	5.449617	5.449900	5.450183	5.450467	5.450750	5.451033	5.451317	5.451600
0.060	5.445183	5.452167	5.452450	5.452733	5.453017	5.453300	5.453583	5.453867	5.454150	5.454434
0.070	5.454717	5.455000	5.455284	5.455567	5.455851	5.456134	5.456418	5.456701	5.456985	5.457268
0.080	5.457552	5.457835	5.458119	5.458402	5.458686	5.458970	5.459253	5.459537	5.459820	5.460104
0.090	5.460388	5.460671	5.460955	5.461239	5.461522	5.461806	5.462089	5.462373	5.462657	5.462941
0.100	5.463224	5.463508	5.463792	5.464076	5.464359	5.464643	5.464927	5.465211	5.465494	5.465778
0.110	5.466062	5.466346	5.466630	5.466914	5.467197	5.467481	5.467765	5.468049	5.468333	5.468617
0.120	5.468901	5.469185	5.469469	5.469753	5.470037	5.470321	5.470604	5.470888	5.471173	5.471456
0.130	5.471740	5.472025	5.472309	5.472593	5.472877	5.473161	5.473445	5.473729	5.474013	5.474297
0.140	5.474581	5.474865	5.475150	5.475434	5.475718	5.476002	5.476286	5.476570	5.476855	5.477139
0.150	5.477423	5.477707	5.477991	5.478276	5.478560	5.478844	5.479128	5.479413	5.479697	5.479981
0.160	5.480266	5.480550	5.480834	5.481119	5.481403	5.481687	5.481972	5.482256	5.482541	5.482825
0.170	5.483109	5.483394	5.483678	5.483963	5.484247	5.484532	5.484816	5.485101	5.485385	5.485670
0.180	5.485954	5.486239	5.486523	5.486808	5.487092	5.487377	5.487661	5.487946	5.488231	5.488515
0.190	5.488800	5.489084	5.489369	5.489654	5.489938	5.490223	5.490508	5.490792	5.491077	5.491362
0.200	5.491646	5.491931	5.492216	5.492501	5.492785	5.493070	5.493355	5.493640	5.493924	5.494209
0.210	5.494494	5.494779	5.495064	5.495349	5.495633	5.495918	5.496203	5.496488	5.496773	5.497058
0.220	5.497343	5.497628	5.497913	5.498198	5.498483	5.498768	5.499053	5.499337	5.499622	5.499907
0.230	5.500193	5.500477	5.500763	5.501048	5.501333	5.501618	5.501903	5.502188	5.502473	5.502758
0.240	5.503043	5.503328	5.503613	5.503899	5.504184	5.504469	5.504754	5.505039	5.505324	5.505610
0.250	5.505895	5.506180	5.506465	5.506751	5.507036	5.507321	5.507606	5.507892	5.508177	5.508462
0.260	5.508748	5.509033	5.509318	5.509604	5.509889	5.510174	5.510460	5.510745	5.511030	5.511316
0.270	5.511601	5.511887	5.512172	5.512457	5.512743	5.513028	5.513314	5.513599	5.513885	5.514170
0.280	5.514456	5.514741	5.515027	5.515312	5.515598	5.515884	5.516169	5.516455	5.516740	5.517026
0.290	5.517312	5.517597	5.517883	5.518168	5.518454	5.518740	5.519025	5.519311	5.519597	5.519882
0.300	5.520168	5.520454	5.520740	5.521025	5.521311	5.521597	5.521883	5.522168	5.522454	5.522740
0.310	5.523026	5.523312	5.523597	5.523883	5.524169	5.524455	5.524741	5.525027	5.525313	5.525599
0.320	5.525895	5.526170	5.526456	5.526742	5.527028	5.527314	5.527600	5.527886	5.528172	5.528458
0.330	5.528744	5.529030	5.529316	5.529602	5.529888	5.530174	5.530460	5.530747	5.531033	5.531319
0.340	5.531605	5.531891	5.532177	5.532463	5.532749	5.533036	5.533322	5.533608	5.533894	5.534180
0.350	5.534467	5.534753	5.535039	5.535325	5.535611	5.535898	5.536184	5.536470	5.536757	5.537043
0.360	5.537329	5.537615	5.537902	5.538188	5.538475	5.538761	5.539047	5.539334	5.539620	5.539906
0.370	5.540193	5.540479	5.540766	5.541052	5.541339	5.541625	5.541911	5.542198	5.542484	5.542771
0.380	5.543058	5.543344	5.543631	5.543917	5.544204	5.544490	5.544777	5.545063	5.545350	5.545637
0.390	5.545923	5.546210	5.546496	5.546783	5.547070	5.547356	5.547643	5.547930	5.548216	5.548503
0.400	5.548790	5.549077	5.549363	5.549650	5.549937	5.550224	5.550510	5.550797	5.551084	5.551371
0.410	5.551657	5.551944	5.552231	5.552518	5.552805	5.553092	5.553379	5.553665	5.553952	5.554239
0.420	5.554526	5.554813	5.555100	5.555387	5.555674	5.555961	5.556248	5.556535	5.556822	5.557109
0.430	5.557396	5.557683	5.557970	5.558257	5.558544	5.558831	5.559118	5.559405	5.559692	5.559979
0.440	5.560266	5.560554	5.560841	5.561128	5.561415	5.561702	5.561989	5.562277	5.562564	5.562851
0.450	5.563138	5.563425	5.563713	5.564000	5.564287	5.564574	5.564862	5.565149	5.565436	5.565724
0.460	5.566011	5.566298	5.566586	5.566873	5.567160	5.567448	5.567735	5.568022	5.568310	5.568597
0.470	5.568895	5.569172	5.569459	5.569747	5.570034	5.570322	5.570609	5.570897	5.571184	5.571472
0.480	5.571759	5.572047	5.572334	5.572622	5.572909	5.573197	5.573485	5.573772	5.574060	5.574347
0.490	5.574635	5.574923	5.575210	5.575498	5.575786	5.576073	5.576361	5.576649	5.576936	5.577224

ATTENUATION IN DECIBELS
THETA FROM 43.500 TO 43.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	5.577512	5.577799	5.578087	5.578375	5.578663	5.578950	5.579238	5.579526	5.579814	5.580102
0.510	5.580389	5.580677	5.580965	5.581253	5.581541	5.581829	5.582117	5.582404	5.582692	5.582980
0.520	5.583268	5.583556	5.583844	5.584132	5.584420	5.584708	5.584996	5.585284	5.585572	5.585860
0.530	5.586148	5.586436	5.586724	5.587012	5.587300	5.587588	5.587876	5.588164	5.588452	5.588740
0.540	5.589029	5.589317	5.589605	5.589893	5.590181	5.590469	5.590757	5.591046	5.591334	5.591622
0.550	5.591910	5.592199	5.592487	5.592775	5.593063	5.593352	5.593640	5.593928	5.594216	5.594505
0.560	5.594793	5.595081	5.595370	5.595658	5.595946	5.596235	5.596523	5.596812	5.597100	5.597388
0.570	5.597677	5.597965	5.598254	5.598542	5.598831	5.599119	5.599408	5.599696	5.599985	5.600273
0.580	5.600562	5.600850	5.601139	5.601427	5.601716	5.602004	5.602293	5.602582	5.602870	5.603159
0.590	5.603447	5.603736	5.604025	5.604313	5.604602	5.604891	5.605179	5.605468	5.605757	5.606045
0.600	5.606334	5.606623	5.606912	5.607200	5.607489	5.607778	5.608067	5.608355	5.608644	5.608933
0.610	5.609222	5.609511	5.609800	5.610088	5.610377	5.610666	5.610955	5.611244	5.611533	5.611822
0.620	5.612111	5.612400	5.612689	5.612978	5.613267	5.613555	5.613845	5.614133	5.614423	5.614712
0.630	5.615001	5.615290	5.615579	5.615868	5.616157	5.616446	5.616735	5.617024	5.617313	5.617602
0.640	5.617891	5.618181	5.618470	5.618759	5.619048	5.619337	5.619626	5.619916	5.620205	5.620494
0.650	5.620783	5.621072	5.621362	5.621651	5.621940	5.622229	5.622519	5.622808	5.623097	5.623387
0.660	5.623676	5.623965	5.624255	5.624544	5.624833	5.625123	5.625412	5.625702	5.625991	5.626280
0.670	5.626570	5.626859	5.627149	5.627438	5.627728	5.628017	5.628307	5.628596	5.628886	5.629175
0.680	5.629465	5.629754	5.630044	5.630333	5.630623	5.630913	5.631202	5.631492	5.631781	5.632071
0.690	5.632361	5.632650	5.632940	5.633230	5.633519	5.633809	5.634099	5.634388	5.634678	5.634968
0.700	5.635257	5.635547	5.635837	5.636127	5.636417	5.636706	5.636996	5.637286	5.637576	5.637866
0.710	5.638155	5.638445	5.638735	5.639025	5.639315	5.639605	5.639895	5.640185	5.640474	5.640764
0.720	5.641054	5.641344	5.641634	5.641924	5.642214	5.642504	5.642794	5.643084	5.643374	5.643664
0.730	5.643954	5.644244	5.644534	5.644824	5.645114	5.645405	5.645695	5.645985	5.646275	5.646565
0.740	5.646855	5.647145	5.647435	5.647726	5.648016	5.648306	5.648596	5.648886	5.649177	5.649467
0.750	5.649757	5.650047	5.650338	5.650628	5.650918	5.651208	5.651499	5.651789	5.652079	5.652370
0.760	5.652660	5.652950	5.653241	5.653531	5.653822	5.654112	5.654402	5.654693	5.654983	5.655274
0.770	5.655564	5.655855	5.656145	5.656435	5.656726	5.657016	5.657307	5.657597	5.657888	5.658179
0.780	5.658469	5.658760	5.659050	5.659341	5.659631	5.659922	5.660213	5.660503	5.660794	5.661084
0.790	5.661375	5.661666	5.661956	5.662247	5.662538	5.662828	5.663119	5.663410	5.663701	5.663991
0.800	5.664282	5.664573	5.664864	5.665154	5.665445	5.665736	5.666027	5.666318	5.666608	5.666899
0.810	5.667190	5.667481	5.667772	5.668063	5.668354	5.668645	5.668935	5.669226	5.669517	5.669808
0.820	5.670099	5.670390	5.670681	5.670972	5.671263	5.671554	5.671845	5.672136	5.672427	5.672718
0.830	5.673009	5.673300	5.673591	5.673882	5.674174	5.674465	5.674756	5.675047	5.675338	5.675629
0.840	5.675920	5.676212	5.676503	5.676794	5.677085	5.677376	5.677667	5.677959	5.678250	5.678541
0.850	5.678832	5.679124	5.679415	5.679706	5.679998	5.680289	5.680580	5.680872	5.681163	5.681454
0.860	5.681746	5.682037	5.682328	5.682620	5.682911	5.683203	5.683494	5.683785	5.684077	5.684368
0.870	5.684660	5.684951	5.685243	5.685534	5.685826	5.686117	5.686409	5.686700	5.686992	5.687283
0.880	5.687575	5.687866	5.688158	5.688450	5.688741	5.689033	5.689324	5.689616	5.689908	5.690199
0.890	5.690491	5.690783	5.691074	5.691366	5.691658	5.691950	5.692241	5.692533	5.692825	5.693116
0.900	5.693408	5.693700	5.693992	5.694284	5.694575	5.694867	5.695159	5.695451	5.695743	5.696035
0.910	5.696326	5.696618	5.696910	5.697202	5.697494	5.697786	5.698078	5.698370	5.698662	5.698954
0.920	5.699246	5.699538	5.699830	5.700122	5.700414	5.700706	5.700998	5.701290	5.701582	5.701874
0.930	5.702166	5.702458	5.702750	5.703042	5.703334	5.703627	5.703919	5.704211	5.704503	5.704795
0.940	5.705087	5.705379	5.705672	5.705964	5.706256	5.706548	5.706841	5.707133	5.707425	5.707717
0.950	5.708010	5.708302	5.708594	5.708886	5.709179	5.709471	5.709763	5.710056	5.710348	5.710640
0.960	5.710933	5.711225	5.711518	5.711810	5.712102	5.712395	5.712687	5.712980	5.713272	5.713565
0.970	5.713857	5.714150	5.714442	5.714735	5.715027	5.715320	5.715612	5.715905	5.716197	5.716490
0.980	5.716783	5.717075	5.717368	5.717660	5.717953	5.718246	5.718538	5.718831	5.719124	5.719416
0.990	5.719709	5.720002	5.720294	5.720587	5.720880	5.721173	5.721465	5.721758	5.722051	5.722344

ATTENUATION IN DECIBELS
THETA FROM 44.000 TO 44.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.000	5.722636	5.722929	5.723222	5.723515	5.723808	5.724100	5.724393	5.724686	5.724979	5.725272
0.010	5.725565	5.725858	5.726151	5.726444	5.726736	5.727029	5.727322	5.727615	5.727908	5.728201
0.020	5.728494	5.728787	5.729080	5.729373	5.729666	5.729959	5.730252	5.730545	5.730839	5.731132
0.030	5.731425	5.731718	5.732011	5.732304	5.732597	5.732890	5.733184	5.733477	5.733770	5.734063
0.040	5.734356	5.734649	5.734943	5.735236	5.735529	5.735822	5.736116	5.736409	5.736702	5.736995
0.050	5.737289	5.737582	5.737875	5.738169	5.738462	5.738755	5.739048	5.739342	5.739636	5.739929
0.060	5.740222	5.740516	5.740809	5.741103	5.741396	5.741689	5.741983	5.742276	5.742570	5.742863
0.070	5.743157	5.743450	5.743744	5.744037	5.744331	5.744625	5.744918	5.745212	5.745505	5.745799
0.080	5.746092	5.746386	5.746680	5.746973	5.747267	5.747561	5.747854	5.748148	5.748442	5.748735
0.090	5.749029	5.749323	5.749617	5.749910	5.750204	5.750498	5.750792	5.751085	5.751379	5.751673
0.100	5.751967	5.752261	5.752554	5.752848	5.753142	5.753436	5.753730	5.754024	5.754318	5.754611
0.110	5.754905	5.755199	5.755493	5.755787	5.756081	5.756375	5.756669	5.756963	5.757257	5.757551
0.120	5.757845	5.758139	5.758433	5.758727	5.759021	5.759315	5.759609	5.759903	5.760198	5.760492
0.130	5.760786	5.761080	5.761374	5.761668	5.761962	5.762257	5.762551	5.762845	5.763139	5.763433
0.140	5.763728	5.764022	5.764316	5.764610	5.764905	5.765199	5.765493	5.765787	5.766082	5.766376
0.150	5.766670	5.766965	5.767259	5.767553	5.767848	5.768142	5.768437	5.768731	5.769025	5.769320
0.160	5.769614	5.769909	5.770203	5.770498	5.770792	5.771086	5.771381	5.771675	5.771970	5.772264
0.170	5.772559	5.772854	5.773148	5.773443	5.773737	5.774032	5.774326	5.774621	5.774916	5.775210
0.180	5.775505	5.775800	5.776094	5.776389	5.776684	5.776978	5.777273	5.777568	5.777862	5.778157
0.190	5.778452	5.778747	5.779041	5.779336	5.779631	5.779926	5.780220	5.780515	5.780810	5.781105
0.200	5.781400	5.781695	5.781989	5.782284	5.782579	5.782874	5.783169	5.783464	5.783759	5.784054
0.210	5.784349	5.784644	5.784939	5.785234	5.785529	5.785824	5.786119	5.786414	5.786709	5.787004
0.220	5.787299	5.787594	5.787889	5.788184	5.788479	5.788774	5.789069	5.789364	5.789659	5.789955
0.230	5.790250	5.790545	5.790840	5.791135	5.791430	5.791726	5.792021	5.792316	5.792611	5.792906
0.240	5.793202	5.793497	5.793792	5.794088	5.794383	5.794678	5.794973	5.795269	5.795564	5.795859
0.250	5.796155	5.796450	5.796746	5.797041	5.797336	5.797632	5.797927	5.798223	5.798518	5.798813
0.260	5.799109	5.799404	5.799700	5.799995	5.800291	5.800586	5.800882	5.801177	5.801473	5.801768
0.270	5.802064	5.802360	5.802655	5.802951	5.803246	5.803542	5.803838	5.804133	5.804429	5.804725
0.280	5.805020	5.805316	5.805612	5.805907	5.806203	5.806499	5.806794	5.807090	5.807386	5.807682
0.290	5.807977	5.808273	5.808569	5.808865	5.809161	5.809456	5.809752	5.810048	5.810344	5.810640
0.300	5.810936	5.811232	5.811527	5.811823	5.812119	5.812415	5.812711	5.813007	5.813303	5.813599
0.310	5.813895	5.814191	5.814487	5.814783	5.815079	5.815375	5.815671	5.815967	5.816263	5.816559
0.320	5.816855	5.817151	5.817447	5.817744	5.818040	5.818336	5.818632	5.818928	5.819224	5.819520
0.330	5.819817	5.820113	5.820409	5.820705	5.821001	5.821298	5.821594	5.821890	5.822186	5.822483
0.340	5.822779	5.823075	5.823372	5.823668	5.823964	5.824261	5.824557	5.824853	5.825150	5.825446
0.350	5.825742	5.826039	5.826335	5.826632	5.826928	5.827224	5.827521	5.827817	5.828114	5.828410
0.360	5.828707	5.829003	5.829300	5.829596	5.829893	5.830189	5.830486	5.830783	5.831079	5.831376
0.370	5.831672	5.831969	5.832265	5.832562	5.832859	5.833155	5.833452	5.833749	5.834045	5.834342
0.380	5.834639	5.834935	5.835232	5.835529	5.835826	5.836122	5.836419	5.836716	5.837013	5.837310
0.390	5.837606	5.837903	5.838200	5.838497	5.838794	5.839090	5.839387	5.839684	5.839981	5.840278
0.400	5.840575	5.840872	5.841169	5.841466	5.841763	5.842060	5.842357	5.842654	5.842951	5.843248
0.410	5.843545	5.843842	5.844139	5.844436	5.844733	5.845030	5.845327	5.845624	5.845921	5.846218
0.420	5.846515	5.846812	5.847109	5.847407	5.847704	5.848001	5.848298	5.848595	5.848892	5.849190
0.430	5.849487	5.849784	5.850081	5.850379	5.850676	5.850973	5.851270	5.851568	5.851865	5.852162
0.440	5.852460	5.852757	5.853054	5.853352	5.853649	5.853946	5.854244	5.854541	5.854839	5.855136
0.450	5.855433	5.855731	5.856028	5.856326	5.856623	5.856921	5.857218	5.857516	5.857813	5.858111
0.460	5.858408	5.858706	5.859003	5.859301	5.859598	5.859896	5.860194	5.860491	5.860789	5.861086
0.470	5.861384	5.861682	5.861979	5.862277	5.862575	5.862872	5.863170	5.863468	5.863765	5.864063
0.480	5.864361	5.864659	5.864956	5.865254	5.865552	5.865850	5.866148	5.866445	5.866743	5.867041
0.490	5.867339	5.867637	5.867935	5.868232	5.868530	5.868828	5.869126	5.869424	5.869722	5.870020

ATTENUATION IN DECIBELS
THETA FROM 44.500 TO 44.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	5.870318	5.870616	5.870914	5.871212	5.871510	5.871808	5.872106	5.872404	5.872702	5.873000
0.510	5.873298	5.873596	5.873894	5.874192	5.874490	5.874788	5.875086	5.875384	5.875683	5.875981
0.520	5.876279	5.876577	5.876875	5.877173	5.877472	5.877770	5.878068	5.878366	5.878664	5.878963
0.530	5.879261	5.879559	5.879857	5.880156	5.880454	5.880752	5.881051	5.881349	5.881647	5.881946
0.540	5.882244	5.882542	5.882841	5.883139	5.883438	5.883736	5.884034	5.884333	5.884631	5.884930
0.550	5.885228	5.885527	5.885825	5.886124	5.886422	5.886721	5.887019	5.887318	5.887616	5.887915
0.560	5.888213	5.888512	5.888811	5.889109	5.889408	5.889706	5.890005	5.890304	5.890602	5.890901
0.570	5.891200	5.891498	5.891797	5.892096	5.892395	5.892693	5.892992	5.893291	5.893589	5.893888
0.580	5.894187	5.894486	5.894785	5.895083	5.895382	5.895681	5.895980	5.896279	5.896578	5.896877
0.590	5.897175	5.897474	5.897773	5.898072	5.898371	5.898670	5.898969	5.899268	5.899567	5.899866
0.600	5.900165	5.900464	5.900763	5.901062	5.901361	5.901660	5.901959	5.902258	5.902557	5.902856
0.610	5.903155	5.903454	5.903753	5.904052	5.904352	5.904651	5.904950	5.905249	5.905548	5.905847
0.620	5.906147	5.906446	5.906745	5.907044	5.907344	5.907643	5.907942	5.908241	5.908541	5.908840
0.630	5.909139	5.909438	5.909738	5.910037	5.910336	5.910636	5.910935	5.911235	5.911534	5.911833
0.640	5.912133	5.912432	5.912732	5.913031	5.913330	5.913630	5.913929	5.914229	5.914528	5.914828
0.650	5.915127	5.915427	5.915726	5.916026	5.916325	5.916625	5.916925	5.917224	5.917524	5.917823
0.660	5.918123	5.918423	5.918722	5.919022	5.919322	5.919621	5.919921	5.920221	5.920520	5.920820
0.670	5.921120	5.921419	5.921719	5.922019	5.922319	5.922618	5.922918	5.923218	5.923518	5.923818
0.680	5.924117	5.924417	5.924717	5.925017	5.925317	5.925617	5.925917	5.926216	5.926516	5.926816
0.690	5.927116	5.927416	5.927716	5.928016	5.928316	5.928616	5.928916	5.929216	5.929516	5.929816
0.700	5.930116	5.930416	5.930716	5.931016	5.931316	5.931616	5.931916	5.932217	5.932517	5.932817
0.710	5.933117	5.933417	5.933717	5.934017	5.934318	5.934618	5.934918	5.935218	5.935518	5.935819
0.720	5.936119	5.936419	5.936719	5.937020	5.937320	5.937620	5.937921	5.938221	5.938521	5.938821
0.730	5.939122	5.939422	5.939723	5.940023	5.940323	5.940624	5.940924	5.941225	5.941525	5.941825
0.740	5.942126	5.942426	5.942727	5.943027	5.943328	5.943628	5.943929	5.944229	5.944530	5.944830
0.750	5.945131	5.945432	5.945732	5.946033	5.946333	5.946634	5.946935	5.947235	5.947536	5.947836
0.760	5.948137	5.948438	5.948738	5.949039	5.949340	5.949641	5.949941	5.950242	5.950543	5.950844
0.770	5.951144	5.951445	5.951746	5.952047	5.952347	5.952648	5.952949	5.953250	5.953551	5.953852
0.780	5.954153	5.954453	5.954754	5.955055	5.955356	5.955657	5.955958	5.956259	5.956560	5.956861
0.790	5.957162	5.957463	5.957764	5.958065	5.958366	5.958667	5.958968	5.959269	5.959570	5.959871
0.800	5.960172	5.960473	5.960774	5.961075	5.961377	5.961678	5.961979	5.962280	5.962581	5.962882
0.810	5.963184	5.963485	5.963786	5.964087	5.964388	5.964690	5.964991	5.965292	5.965593	5.965895
0.820	5.966196	5.966497	5.966799	5.967100	5.967401	5.967703	5.968004	5.968305	5.968607	5.968908
0.830	5.969209	5.969511	5.969812	5.970114	5.970415	5.970717	5.971018	5.971319	5.971621	5.971922
0.840	5.972224	5.972525	5.972827	5.973128	5.973430	5.973732	5.974033	5.974335	5.974636	5.974938
0.850	5.975240	5.975541	5.975843	5.976144	5.976446	5.976748	5.977049	5.977351	5.977653	5.977954
0.860	5.978256	5.978558	5.978860	5.979161	5.979463	5.979765	5.980067	5.980368	5.980670	5.980972
0.870	5.981274	5.981576	5.981878	5.982179	5.982481	5.982783	5.983085	5.983387	5.983689	5.983991
0.880	5.984293	5.984595	5.984896	5.985198	5.985500	5.985802	5.986104	5.986406	5.986708	5.987010
0.890	5.987312	5.987614	5.987916	5.988219	5.988521	5.988823	5.989125	5.989427	5.989729	5.990031
0.900	5.990333	5.990635	5.990938	5.991240	5.991542	5.991844	5.992146	5.992449	5.992751	5.993053
0.910	5.993355	5.993657	5.993960	5.994262	5.994564	5.994867	5.995169	5.995471	5.995773	5.996076
0.920	5.996378	5.996680	5.996983	5.997285	5.997588	5.997890	5.998192	5.998495	5.998797	5.999100
0.930	5.999402	5.999705	6.000007	6.000310	6.000612	6.000915	6.001217	6.001520	6.001822	6.002125
0.940	6.002427	6.002730	6.003032	6.003335	6.003638	6.003940	6.004243	6.004545	6.004848	6.005151
0.950	6.005453	6.005756	6.006059	6.006361	6.006664	6.006967	6.007270	6.007572	6.007875	6.008178
0.960	6.008491	6.008793	6.009096	6.009399	6.009692	6.009995	6.010297	6.010600	6.010903	6.011206
0.970	6.011509	6.011812	6.012115	6.012417	6.012720	6.013023	6.013326	6.013629	6.013932	6.014235
0.980	6.014538	6.014841	6.015144	6.015447	6.015750	6.016053	6.016356	6.016659	6.016962	6.017265
0.990	6.017568	6.017872	6.018175	6.018478	6.018781	6.019084	6.019387	6.019690	6.019994	6.020297

ATTENUATION IN DECIBELS
THETA FROM 45.000 TO 45.499 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.000	6.020600	6.020903	6.021206	6.021510	6.021813	6.022116	6.022419	6.022722	6.023026	6.023329
0.010	6.023632	6.023936	6.024239	6.024542	6.024846	6.025149	6.025452	6.025756	6.026059	6.026362
0.020	6.026666	6.026969	6.027273	6.027576	6.027880	6.028183	6.028487	6.028790	6.029094	6.029397
0.030	6.029701	6.030004	6.030308	6.030611	6.030915	6.031218	6.031522	6.031825	6.032129	6.032433
0.040	6.032736	6.033040	6.033343	6.033647	6.033951	6.034254	6.034558	6.034862	6.035165	6.035469
0.050	6.035773	6.036077	6.036380	6.036684	6.036988	6.037292	6.037595	6.037899	6.038203	6.038507
0.060	6.038811	6.039114	6.039418	6.039722	6.040026	6.040330	6.040634	6.040938	6.041242	6.041546
0.070	6.041849	6.042153	6.042457	6.042761	6.043065	6.043369	6.043673	6.043977	6.044281	6.044585
0.080	6.044889	6.045193	6.045497	6.045802	6.046106	6.046410	6.046714	6.047018	6.047322	6.047626
0.090	6.047930	6.048234	6.048539	6.048843	6.049147	6.049451	6.049755	6.050060	6.050364	6.050668
0.100	6.050972	6.051277	6.051581	6.051885	6.052189	6.052494	6.052798	6.053102	6.053407	6.053711
0.110	6.054015	6.054320	6.054624	6.054929	6.055233	6.055537	6.055842	6.056146	6.056451	6.056755
0.120	6.057060	6.057364	6.057669	6.057973	6.058277	6.058582	6.058887	6.059191	6.059496	6.059800
0.130	6.060105	6.060409	6.060714	6.061019	6.061323	6.061628	6.061932	6.062237	6.062542	6.062846
0.140	6.063151	6.063456	6.063760	6.064065	6.064370	6.064675	6.064979	6.065284	6.065589	6.065894
0.150	6.066198	6.066503	6.066808	6.067113	6.067418	6.067722	6.068027	6.068332	6.068637	6.068942
0.160	6.069247	6.069552	6.069857	6.070161	6.070466	6.070771	6.071076	6.071381	6.071686	6.071991
0.170	6.072296	6.072601	6.072906	6.073211	6.073516	6.073821	6.074126	6.074431	6.074737	6.075042
0.180	6.075347	6.075652	6.075957	6.076262	6.076567	6.076872	6.077178	6.077483	6.077788	6.078093
0.190	6.078398	6.078704	6.079009	6.079314	6.079619	6.079925	6.080230	6.080535	6.080840	6.081146
0.200	6.081451	6.081756	6.082062	6.082367	6.082672	6.082978	6.083283	6.083588	6.083894	6.084199
0.210	6.084505	6.084810	6.085116	6.085421	6.085726	6.086032	6.086337	6.086643	6.086948	6.087254
0.220	6.087560	6.087865	6.088171	6.088476	6.088782	6.089087	6.089393	6.089698	6.090004	6.090310
0.230	6.090615	6.090921	6.091227	6.091532	6.091838	6.092144	6.092449	6.092755	6.093061	6.093367
0.240	6.093672	6.093978	6.094284	6.094590	6.094895	6.095201	6.095507	6.095813	6.096119	6.096424
0.250	6.096730	6.097036	6.097342	6.097648	6.097954	6.098260	6.098566	6.098871	6.099177	6.099483
0.260	6.099789	6.100095	6.100401	6.100707	6.101013	6.101319	6.101625	6.101931	6.102237	6.102543
0.270	6.102849	6.103155	6.103462	6.103768	6.104074	6.104380	6.104686	6.104992	6.105298	6.105604
0.280	6.105911	6.106217	6.106523	6.106829	6.107135	6.107442	6.107748	6.108054	6.108360	6.108667
0.290	6.108973	6.109279	6.109585	6.109892	6.110198	6.110504	6.110811	6.111117	6.111423	6.111730
0.300	6.112036	6.112343	6.112649	6.112955	6.113262	6.113568	6.113875	6.114181	6.114488	6.114794
0.310	6.115101	6.115407	6.115714	6.116020	6.116327	6.116633	6.116940	6.117246	6.117553	6.117859
0.320	6.118166	6.118473	6.118779	6.119086	6.119393	6.119699	6.120006	6.120313	6.120619	6.120926
0.330	6.121233	6.121539	6.121846	6.122153	6.122460	6.122766	6.123073	6.123380	6.123687	6.123993
0.340	6.124300	6.124607	6.124914	6.125221	6.125528	6.125834	6.126141	6.126448	6.126755	6.127062
0.350	6.127369	6.127676	6.127983	6.128290	6.128597	6.128904	6.129211	6.129518	6.129825	6.130132
0.360	6.130439	6.130746	6.131053	6.131360	6.131667	6.131974	6.132281	6.132588	6.132895	6.133202
0.370	6.133510	6.133817	6.134124	6.134431	6.134738	6.135045	6.135353	6.135660	6.135967	6.136274
0.380	6.136581	6.136889	6.137196	6.137503	6.137810	6.138118	6.138425	6.138732	6.139040	6.139347
0.390	6.139654	6.139962	6.140269	6.140576	6.140884	6.141191	6.141499	6.141806	6.142114	6.142421
0.400	6.142728	6.143036	6.143343	6.143651	6.143958	6.144266	6.144573	6.144881	6.145188	6.145496
0.410	6.145804	6.146111	6.146419	6.146726	6.147034	6.147341	6.147649	6.147957	6.148264	6.148572
0.420	6.148880	6.149187	6.149495	6.149803	6.150110	6.150418	6.150726	6.151034	6.151341	6.151649
0.430	6.151957	6.152265	6.152573	6.152880	6.153188	6.153496	6.153804	6.154112	6.154420	6.154727
0.440	6.155035	6.155343	6.155651	6.155959	6.156267	6.156575	6.156883	6.157191	6.157499	6.157807
0.450	6.158115	6.158423	6.158731	6.159039	6.159347	6.159655	6.159963	6.160271	6.160579	6.160887
0.460	6.161195	6.161503	6.161811	6.162120	6.162428	6.162736	6.163044	6.163352	6.163660	6.163969
0.470	6.164277	6.164585	6.164893	6.165201	6.165510	6.165818	6.166126	6.166435	6.166743	6.167051
0.480	6.167359	6.167668	6.167976	6.168284	6.168593	6.168901	6.169210	6.169518	6.169826	6.170135
0.490	6.170443	6.170752	6.171060	6.171368	6.171677	6.171985	6.172294	6.172602	6.172911	6.173219

ATTENUATION IN DECIBELS
THETA FROM 45.500 TO 45.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	6.173528	6.173836	6.174145	6.174454	6.174762	6.175071	6.175379	6.175688	6.175997	6.176305
0.510	6.176614	6.176923	6.177231	6.177540	6.177848	6.178157	6.178466	6.178775	6.179083	6.179392
0.520	6.179701	6.180010	6.180318	6.180627	6.180936	6.181245	6.181553	6.181862	6.182171	6.182480
0.530	6.182789	6.183098	6.183407	6.183715	6.184024	6.184333	6.184642	6.184951	6.185260	6.185569
0.540	6.185878	6.186187	6.186496	6.186805	6.187114	6.187423	6.187732	6.188041	6.188350	6.188659
0.550	6.188968	6.189277	6.189586	6.189895	6.190204	6.190514	6.190823	6.191132	6.191441	6.191750
0.560	6.192059	6.192369	6.192678	6.192987	6.193296	6.193605	6.193915	6.194224	6.194533	6.194842
0.570	6.195152	6.195461	6.195770	6.196080	6.196389	6.196698	6.197008	6.197317	6.197626	6.197936
0.580	6.198245	6.198555	6.198864	6.199173	6.199483	6.199792	6.200102	6.200411	6.200721	6.201030
0.590	6.201340	6.201649	6.201959	6.202268	6.202578	6.202887	6.203197	6.203506	6.203816	6.204126
0.600	6.204435	6.204745	6.205054	6.205364	6.205674	6.205983	6.206293	6.206603	6.206912	6.207222
0.610	6.207532	6.207842	6.208151	6.208461	6.208771	6.209081	6.209390	6.209700	6.210010	6.210320
0.620	6.210630	6.210939	6.211249	6.211559	6.211869	6.212179	6.212489	6.212799	6.213109	6.213418
0.630	6.213728	6.214038	6.214348	6.214658	6.214968	6.215278	6.215588	6.215898	6.216208	6.216518
0.640	6.216828	6.217138	6.217448	6.217759	6.218069	6.218379	6.218689	6.218999	6.219309	6.219619
0.650	6.219929	6.220240	6.220550	6.220860	6.221170	6.221480	6.221790	6.222101	6.222411	6.222721
0.660	6.223031	6.223342	6.223652	6.223962	6.224273	6.224583	6.224893	6.225204	6.225514	6.225824
0.670	6.226135	6.226445	6.226755	6.227066	6.227376	6.227687	6.227997	6.228307	6.228618	6.228928
0.680	6.229239	6.229549	6.229860	6.230170	6.230481	6.230791	6.231102	6.231412	6.231723	6.232034
0.690	6.232344	6.232655	6.232965	6.233276	6.233587	6.233897	6.234208	6.234519	6.234829	6.235140
0.700	6.235451	6.235761	6.236072	6.236383	6.236693	6.237004	6.237315	6.237626	6.237936	6.238247
0.710	6.238558	6.238869	6.239180	6.239491	6.239801	6.240112	6.240423	6.240734	6.241045	6.241356
0.720	6.241667	6.241978	6.242288	6.242599	6.242910	6.243221	6.243532	6.243843	6.244154	6.244465
0.730	6.244776	6.245087	6.245398	6.245709	6.246020	6.246332	6.246643	6.246954	6.247265	6.247576
0.740	6.247887	6.248198	6.248509	6.248820	6.249132	6.249443	6.249754	6.250065	6.250376	6.250688
0.750	6.250999	6.251310	6.251621	6.251933	6.252244	6.252555	6.252867	6.253178	6.253489	6.253800
0.760	6.254112	6.254423	6.254735	6.255046	6.255357	6.255669	6.255980	6.256292	6.256603	6.256914
0.770	6.257226	6.257537	6.257849	6.258160	6.258472	6.258783	6.259095	6.259406	6.259718	6.260029
0.780	6.260341	6.260652	6.260964	6.261276	6.261587	6.261899	6.262210	6.262522	6.262834	6.263145
0.790	6.263457	6.263769	6.264080	6.264392	6.264704	6.265016	6.265327	6.265639	6.265951	6.266263
0.800	6.266574	6.266886	6.267198	6.267510	6.267822	6.268133	6.268445	6.268757	6.269069	6.269381
0.810	6.269693	6.270005	6.270317	6.270628	6.270940	6.271252	6.271564	6.271876	6.272188	6.272500
0.820	6.272812	6.273124	6.273436	6.273748	6.274060	6.274372	6.274684	6.274996	6.275309	6.275621
0.830	6.275933	6.276245	6.276557	6.276869	6.277181	6.277493	6.277806	6.278118	6.278430	6.278742
0.840	6.279054	6.279367	6.279679	6.279991	6.280303	6.280616	6.280928	6.281240	6.281552	6.281865
0.850	6.282177	6.282489	6.282802	6.283114	6.283426	6.283739	6.284051	6.284364	6.284676	6.284988
0.860	6.285301	6.285613	6.285926	6.286238	6.286551	6.286863	6.287176	6.287488	6.287801	6.288113
0.870	6.288426	6.288738	6.289051	6.289364	6.289676	6.289989	6.290301	6.290614	6.290927	6.291239
0.880	6.291552	6.291864	6.292177	6.292490	6.292803	6.293115	6.293428	6.293741	6.294053	6.294366
0.890	6.294679	6.294992	6.295304	6.295617	6.295930	6.296243	6.296556	6.296869	6.297181	6.297494
0.900	6.297807	6.298120	6.298433	6.298746	6.299059	6.299372	6.299685	6.299997	6.300310	6.300623
0.910	6.300936	6.301249	6.301562	6.301875	6.302188	6.302501	6.302814	6.303127	6.303441	6.303754
0.920	6.304067	6.304380	6.304693	6.305006	6.305319	6.305632	6.305945	6.306259	6.306572	6.306885
0.930	6.307198	6.307511	6.307825	6.308138	6.308451	6.308764	6.309078	6.309391	6.309704	6.310017
0.940	6.310331	6.310644	6.310957	6.311271	6.311584	6.311897	6.312211	6.312524	6.312838	6.313151
0.950	6.313464	6.313778	6.314091	6.314405	6.314718	6.315032	6.315345	6.315659	6.315972	6.316286
0.960	6.316599	6.316913	6.317226	6.317540	6.317853	6.318167	6.318480	6.318794	6.319108	6.319421
0.970	6.319735	6.320049	6.320362	6.320676	6.320990	6.321303	6.321617	6.321931	6.322244	6.322558
0.980	6.322872	6.323186	6.323499	6.323813	6.324127	6.324441	6.324755	6.325069	6.325382	6.325696
0.990	6.326010	6.326324	6.326638	6.326952	6.327265	6.327579	6.327893	6.328207	6.328521	6.328835

ATTENUATION IN DECIBELS
THETA FROM 46.000 TO 46.499 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.000	6.329149	6.329463	6.329777	6.330091	6.330405	6.330719	6.331033	6.331347	6.331661	6.331975
0.010	6.332289	6.332603	6.332917	6.333232	6.333546	6.333860	6.334174	6.334488	6.334802	6.335116
0.020	6.335431	6.335745	6.336059	6.336373	6.336687	6.337002	6.337316	6.337630	6.337944	6.338259
0.030	6.338573	6.338887	6.339202	6.339516	6.339830	6.340145	6.340459	6.340773	6.341088	6.341402
0.040	6.341717	6.342031	6.342345	6.342660	6.342974	6.343289	6.343603	6.343918	6.344232	6.344547
0.050	6.344861	6.345176	6.345490	6.345805	6.346119	6.346434	6.346748	6.347063	6.347378	6.347692
0.060	6.348007	6.348321	6.348636	6.348951	6.349265	6.349580	6.349895	6.350209	6.350524	6.350839
0.070	6.351154	6.351468	6.351783	6.352098	6.352413	6.352727	6.353042	6.353357	6.353672	6.353987
0.080	6.354302	6.354616	6.354931	6.355246	6.355561	6.355876	6.356191	6.356506	6.356821	6.357136
0.090	6.357451	6.357766	6.358081	6.358395	6.358710	6.359025	6.359340	6.359655	6.359971	6.360286
0.100	6.360601	6.360916	6.361231	6.361546	6.361861	6.362176	6.362491	6.362806	6.363122	6.363437
0.110	6.363752	6.364067	6.364382	6.364697	6.365013	6.365328	6.365643	6.365958	6.366274	6.366589
0.120	6.366904	6.367220	6.367535	6.367850	6.368165	6.368481	6.368796	6.369111	6.369427	6.369742
0.130	6.370058	6.370373	6.370688	6.371004	6.371319	6.371635	6.371950	6.372266	6.372581	6.372897
0.140	6.373212	6.373528	6.373843	6.374159	6.374474	6.374790	6.375105	6.375421	6.375737	6.376052
0.150	6.376368	6.376683	6.376999	6.377315	6.377630	6.377946	6.378262	6.378577	6.378893	6.379209
0.160	6.379524	6.379840	6.380156	6.380472	6.380787	6.381103	6.381419	6.381735	6.382051	6.382366
0.170	6.382682	6.382998	6.383314	6.383630	6.383946	6.384262	6.384578	6.384893	6.385209	6.385525
0.180	6.385841	6.386157	6.386473	6.386789	6.387105	6.387421	6.387737	6.388053	6.388369	6.388685
0.190	6.389001	6.389317	6.389633	6.389949	6.390266	6.390582	6.390898	6.391214	6.391530	6.391846
0.200	6.392162	6.392479	6.392795	6.393111	6.393427	6.393743	6.394060	6.394376	6.394692	6.395008
0.210	6.395325	6.395641	6.395957	6.396273	6.396590	6.396906	6.397222	6.397539	6.397855	6.398172
0.220	6.398488	6.398804	6.399121	6.399437	6.399754	6.400070	6.400387	6.400703	6.401019	6.401336
0.230	6.401652	6.401969	6.402285	6.402602	6.402918	6.403235	6.403552	6.403868	6.404185	6.404501
0.240	6.404818	6.405135	6.405451	6.405768	6.406084	6.406401	6.406718	6.407035	6.407351	6.407668
0.250	6.407985	6.408301	6.408618	6.408935	6.409252	6.409568	6.409885	6.410202	6.410519	6.410836
0.260	6.411152	6.411469	6.411786	6.412103	6.412420	6.412737	6.413054	6.413370	6.413687	6.414004
0.270	6.414321	6.414638	6.414955	6.415272	6.415589	6.415906	6.416223	6.416540	6.416857	6.417174
0.280	6.417491	6.417808	6.418125	6.418442	6.418760	6.419077	6.419394	6.419711	6.420028	6.420345
0.290	6.420662	6.420979	6.421297	6.421614	6.421931	6.422248	6.422566	6.422883	6.423200	6.423517
0.300	6.423835	6.424152	6.424469	6.424786	6.425104	6.425421	6.425738	6.426056	6.426373	6.426690
0.310	6.427008	6.427325	6.427643	6.427960	6.428277	6.428595	6.428912	6.429230	6.429547	6.429865
0.320	6.430182	6.430500	6.430817	6.431135	6.431452	6.431770	6.432087	6.432405	6.432723	6.433040
0.330	6.433358	6.433675	6.433993	6.434311	6.434628	6.434946	6.435264	6.435581	6.435899	6.436217
0.340	6.436534	6.436852	6.437170	6.437488	6.437805	6.438123	6.438441	6.438759	6.439076	6.439394
0.350	6.439712	6.440030	6.440348	6.440666	6.440984	6.441301	6.441619	6.441937	6.442255	6.442573
0.360	6.442891	6.443209	6.443527	6.443845	6.444163	6.444481	6.444799	6.445117	6.445435	6.445753
0.370	6.446071	6.446389	6.446707	6.447025	6.447343	6.447661	6.447979	6.448298	6.448616	6.448934
0.380	6.449252	6.449570	6.449888	6.450207	6.450525	6.450843	6.451161	6.451479	6.451798	6.452116
0.390	6.452434	6.452753	6.453071	6.453389	6.453707	6.454026	6.454344	6.454662	6.454981	6.455299
0.400	6.455618	6.455936	6.456254	6.456573	6.456891	6.457210	6.457528	6.457847	6.458165	6.458483
0.410	6.458802	6.459120	6.459439	6.459758	6.460076	6.460395	6.460713	6.461032	6.461350	6.461669
0.420	6.461987	6.462306	6.462625	6.462943	6.463262	6.463581	6.463899	6.464218	6.464537	6.464855
0.430	6.465174	6.465493	6.465812	6.466130	6.466449	6.466768	6.467087	6.467405	6.467724	6.468043
0.440	6.468362	6.468681	6.469000	6.469318	6.469637	6.469956	6.470275	6.470594	6.470913	6.471232
0.450	6.471551	6.471870	6.472189	6.472508	6.472827	6.473146	6.473465	6.473784	6.474103	6.474422
0.460	6.474741	6.475060	6.475379	6.475698	6.476017	6.476336	6.476655	6.476974	6.477294	6.477613
0.470	6.477932	6.478251	6.478570	6.478889	6.479209	6.479528	6.479847	6.480166	6.480485	6.480805
0.480	6.481124	6.481443	6.481763	6.482082	6.482401	6.482721	6.483040	6.483359	6.483679	6.483998
0.490	6.484317	6.484637	6.484956	6.485276	6.485595	6.485914	6.486234	6.486553	6.486873	6.487192

ATTENUATION IN DECIBELS
THETA FROM 46.500 TO 46.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	6.487512	6.487831	6.488151	6.488470	6.488790	6.489109	6.489429	6.489749	6.490068	6.490388
0.510	6.490707	6.491027	6.491347	6.491666	6.491986	6.492306	6.492625	6.492945	6.493265	6.493584
0.520	6.493904	6.494224	6.494544	6.494863	6.495183	6.495503	6.495823	6.496142	6.496462	6.496782
0.530	6.497102	6.497422	6.497742	6.498061	6.498381	6.498701	6.499021	6.499341	6.499661	6.499981
0.540	6.500301	6.500621	6.500941	6.501261	6.501581	6.501901	6.502221	6.502541	6.502861	6.503181
0.550	6.503501	6.503821	6.504141	6.504461	6.504781	6.505101	6.505421	6.505742	6.506062	6.506382
0.560	6.506702	6.507022	6.507342	6.507663	6.507983	6.508303	6.508623	6.508943	6.509264	6.509584
0.570	6.509904	6.510225	6.510545	6.510865	6.511185	6.511506	6.511826	6.512147	6.512467	6.512787
0.580	6.513108	6.513428	6.513748	6.514069	6.514389	6.514710	6.515030	6.515351	6.515671	6.515992
0.590	6.516312	6.516633	6.516953	6.517274	6.517594	6.517915	6.518235	6.518556	6.518877	6.519197
0.600	6.519518	6.519838	6.520159	6.520480	6.520800	6.521121	6.521442	6.521762	6.522083	6.522404
0.610	6.522725	6.523045	6.523366	6.523687	6.524008	6.524328	6.524649	6.524970	6.525291	6.525612
0.620	6.525932	6.526253	6.526574	6.526895	6.527216	6.527537	6.527858	6.528179	6.528500	6.528820
0.630	6.529141	6.529462	6.529783	6.530104	6.530425	6.530746	6.531067	6.531388	6.531709	6.532030
0.640	6.532352	6.532673	6.532994	6.533315	6.533636	6.533957	6.534278	6.534599	6.534920	6.535242
0.650	6.535563	6.535884	6.536205	6.536526	6.536848	6.537169	6.537490	6.537811	6.538133	6.538454
0.660	6.538775	6.539096	6.539418	6.539739	6.540060	6.540382	6.540703	6.541024	6.541346	6.541667
0.670	6.541989	6.542310	6.542631	6.542953	6.543274	6.543596	6.543917	6.544239	6.544560	6.544882
0.680	6.545203	6.545525	6.545846	6.546168	6.546489	6.546811	6.547133	6.547454	6.547776	6.548097
0.690	6.548419	6.548741	6.549062	6.549384	6.549706	6.550027	6.550349	6.550671	6.550992	6.551314
0.700	6.551636	6.551958	6.552279	6.552601	6.552923	6.553245	6.553567	6.553888	6.554210	6.554532
0.710	6.554854	6.555176	6.555498	6.555819	6.556141	6.556463	6.556785	6.557107	6.557429	6.557751
0.720	6.558073	6.558395	6.558717	6.559039	6.559361	6.559683	6.560005	6.560327	6.560649	6.560971
0.730	6.561293	6.561615	6.561937	6.562259	6.562582	6.562904	6.563226	6.563548	6.563870	6.564192
0.740	6.564515	6.564837	6.565159	6.565481	6.565804	6.566126	6.566448	6.566770	6.567092	6.567415
0.750	6.567737	6.568059	6.568382	6.568704	6.569026	6.569349	6.569671	6.569993	6.570316	6.570638
0.760	6.570961	6.571283	6.571606	6.571928	6.572250	6.572573	6.572895	6.573218	6.573540	6.573863
0.770	6.574185	6.574508	6.574830	6.575153	6.575476	6.575798	6.576121	6.576443	6.576766	6.577089
0.780	6.577411	6.577734	6.578057	6.578379	6.578702	6.579025	6.579347	6.579670	6.579993	6.580316
0.790	6.580638	6.580961	6.581284	6.581607	6.581929	6.582252	6.582575	6.582898	6.583221	6.583544
0.800	6.583866	6.584189	6.584512	6.584835	6.585158	6.585481	6.585804	6.586127	6.586450	6.586773
0.810	6.587096	6.587419	6.587742	6.588065	6.588388	6.588711	6.589034	6.589357	6.589680	6.590003
0.820	6.590326	6.590649	6.590972	6.591295	6.591619	6.591942	6.592265	6.592588	6.592911	6.593234
0.830	6.593558	6.593881	6.594204	6.594527	6.594851	6.595174	6.595497	6.595820	6.596144	6.596467
0.840	6.596790	6.597114	6.597437	6.597760	6.598084	6.598407	6.598730	6.599054	6.599377	6.599701
0.850	6.600024	6.600347	6.600671	6.600994	6.601318	6.601641	6.601965	6.602288	6.602612	6.602935
0.860	6.603259	6.603583	6.603906	6.604230	6.604554	6.604877	6.605200	6.605524	6.605848	6.606171
0.870	6.606495	6.606819	6.607142	6.607466	6.607790	6.608113	6.608437	6.608761	6.609085	6.609408
0.880	6.609732	6.610056	6.610380	6.610704	6.611027	6.611351	6.611675	6.611999	6.612323	6.612647
0.890	6.612970	6.613294	6.613618	6.613942	6.614266	6.614590	6.614915	6.615239	6.615562	6.615886
0.900	6.616210	6.616534	6.616858	6.617182	6.617506	6.617830	6.618154	6.618479	6.618802	6.619126
0.910	6.619451	6.619775	6.620099	6.620423	6.620747	6.621071	6.621395	6.621720	6.622044	6.622368
0.920	6.622692	6.623016	6.623341	6.623665	6.623989	6.624313	6.624638	6.624962	6.625286	6.625611
0.930	6.625935	6.626259	6.626584	6.626908	6.627232	6.627557	6.627881	6.628206	6.628530	6.628855
0.940	6.629179	6.629503	6.629828	6.630152	6.630477	6.630801	6.631126	6.631450	6.631775	6.632100
0.950	6.632424	6.632749	6.633073	6.633398	6.633722	6.634047	6.634372	6.634696	6.635021	6.635346
0.960	6.635670	6.635995	6.636320	6.636644	6.636969	6.637294	6.637619	6.637943	6.638268	6.638593
0.970	6.638918	6.639243	6.639567	6.639892	6.640217	6.640542	6.640867	6.641192	6.641517	6.641841
0.980	6.642166	6.642491	6.642816	6.643141	6.643466	6.643791	6.644116	6.644441	6.644766	6.645091
0.990	6.645416	6.645741	6.646066	6.646391	6.646716	6.647041	6.647366	6.647691	6.648017	6.648342

ATTENUATION IN DECIBELS
THETA FROM 47.000 TO 47.499 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.000	6.648667	6.648992	6.649317	6.649642	6.649967	6.650293	6.650618	6.650943	6.651268	6.651593
0.010	6.651919	6.652244	6.652569	6.652894	6.653220	6.653545	6.653870	6.654196	6.654521	6.654846
0.020	6.655172	6.655497	6.655823	6.656148	6.656473	6.656799	6.657124	6.657450	6.657775	6.658100
0.030	6.658426	6.658751	6.659077	6.659402	6.659728	6.660053	6.660379	6.660705	6.661030	6.661356
0.040	6.661681	6.662007	6.662333	6.662658	6.662984	6.663309	6.663635	6.663961	6.664286	6.664612
0.050	6.664938	6.665264	6.665589	6.665915	6.666241	6.666566	6.666892	6.667218	6.667544	6.667870
0.060	6.668195	6.668521	6.668847	6.669173	6.669499	6.669825	6.670151	6.670476	6.670802	6.671128
0.070	6.671454	6.671780	6.672106	6.672432	6.672758	6.673084	6.673410	6.673736	6.674062	6.674388
0.080	6.674714	6.675040	6.675366	6.675692	6.676018	6.676345	6.676671	6.676997	6.677323	6.677649
0.090	6.677975	6.678301	6.678628	6.678954	6.679280	6.679606	6.679932	6.680259	6.680585	6.680911
0.100	6.681237	6.681564	6.681890	6.682216	6.682543	6.682869	6.683195	6.683522	6.683848	6.684174
0.110	6.684501	6.684827	6.685153	6.685480	6.685806	6.686133	6.686459	6.686786	6.687112	6.687439
0.120	6.687765	6.688092	6.688418	6.688745	6.689071	6.689398	6.689724	6.690051	6.690378	6.690704
0.130	6.691031	6.691357	6.691684	6.692011	6.692337	6.692664	6.692991	6.693317	6.693644	6.693971
0.140	6.694298	6.694624	6.694951	6.695278	6.695605	6.695932	6.696258	6.696585	6.696912	6.697239
0.150	6.697565	6.697892	6.698219	6.698546	6.698873	6.699200	6.699527	6.699854	6.700181	6.700508
0.160	6.700835	6.701162	6.701488	6.701815	6.702142	6.702469	6.702797	6.703124	6.703451	6.703778
0.170	6.704105	6.704432	6.704759	6.705086	6.705413	6.705740	6.706067	6.706395	6.706722	6.707049
0.180	6.707376	6.707703	6.708030	6.708358	6.708685	6.709012	6.709339	6.709667	6.709994	6.710321
0.190	6.710649	6.710976	6.711303	6.711631	6.711958	6.712285	6.712613	6.712940	6.713267	6.713595
0.200	6.713922	6.714250	6.714577	6.714904	6.715232	6.715559	6.715887	6.716214	6.716542	6.716869
0.210	6.717197	6.717525	6.717852	6.718180	6.718507	6.718835	6.719162	6.719490	6.719818	6.720145
0.220	6.720473	6.720801	6.721128	6.721456	6.721784	6.722111	6.722439	6.722767	6.723094	6.723422
0.230	6.723750	6.724078	6.724406	6.724733	6.725061	6.725389	6.725717	6.726045	6.726372	6.726700
0.240	6.727028	6.727356	6.727684	6.728012	6.728340	6.728668	6.728996	6.729324	6.729652	6.729980
0.250	6.730308	6.730636	6.730964	6.731292	6.731620	6.731948	6.732276	6.732604	6.732932	6.733260
0.260	6.733588	6.733916	6.734244	6.734572	6.734901	6.735229	6.735557	6.735885	6.736213	6.736542
0.270	6.736870	6.737198	6.737526	6.737854	6.738183	6.738511	6.738839	6.739168	6.739496	6.739824
0.280	6.740153	6.740481	6.740809	6.741138	6.741466	6.741794	6.742123	6.742451	6.742780	6.743108
0.290	6.743437	6.743765	6.744093	6.744422	6.744750	6.745079	6.745407	6.745736	6.746064	6.746393
0.300	6.746722	6.747050	6.747379	6.747707	6.748036	6.748365	6.748693	6.749022	6.749351	6.749679
0.310	6.750008	6.750337	6.750665	6.750994	6.751323	6.751651	6.751980	6.752309	6.752638	6.752967
0.320	6.753295	6.753624	6.753953	6.754282	6.754611	6.754939	6.755268	6.755597	6.755926	6.756255
0.330	6.756584	6.756913	6.757242	6.757571	6.757900	6.758229	6.758558	6.758887	6.759216	6.759545
0.340	6.759874	6.760203	6.760532	6.760861	6.761190	6.761519	6.761848	6.762177	6.762506	6.762835
0.350	6.763164	6.763494	6.763823	6.764152	6.764481	6.764810	6.765140	6.765469	6.765798	6.766127
0.360	6.766456	6.766786	6.767115	6.767444	6.767774	6.768103	6.768432	6.768762	6.769091	6.769420
0.370	6.769750	6.770079	6.770408	6.770738	6.771067	6.771397	6.771726	6.772056	6.772385	6.772714
0.380	6.773044	6.773373	6.773703	6.774033	6.774362	6.774692	6.775021	6.775351	6.775680	6.776010
0.390	6.776339	6.776669	6.776999	6.777328	6.777658	6.777988	6.778317	6.778647	6.778977	6.779306
0.400	6.779636	6.779966	6.780296	6.780625	6.780955	6.781285	6.781615	6.781944	6.782274	6.782604
0.410	6.782934	6.783264	6.783594	6.783924	6.784253	6.784583	6.784913	6.785243	6.785573	6.785903
0.420	6.786233	6.786563	6.786893	6.787223	6.787553	6.787883	6.788213	6.788543	6.788873	6.789203
0.430	6.789533	6.789863	6.790193	6.790523	6.790853	6.791183	6.791514	6.791844	6.792174	6.792504
0.440	6.792834	6.793164	6.793495	6.793825	6.794155	6.794485	6.794816	6.795146	6.795476	6.795806
0.450	6.796137	6.796467	6.796797	6.797128	6.797458	6.797788	6.798119	6.798449	6.798779	6.799110
0.460	6.799440	6.799771	6.800101	6.800432	6.800762	6.801092	6.801423	6.801753	6.802084	6.802414
0.470	6.802745	6.803075	6.803406	6.803737	6.804067	6.804398	6.804728	6.805059	6.805390	6.805720
0.480	6.806051	6.806382	6.806712	6.807043	6.807374	6.807704	6.808035	6.808366	6.808696	6.809027
0.490	6.809358	6.809689	6.810019	6.810350	6.810681	6.811012	6.811343	6.811674	6.812004	6.812335

ATTENUATION IN DECIBELS
THETA FROM 47.500 TO 47.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	6.812666	6.812997	6.813328	6.813659	6.813990	6.814321	6.814652	6.814983	6.815314	6.815645
0.510	6.815975	6.816306	6.816638	6.816969	6.817300	6.817631	6.817962	6.818293	6.818624	6.818955
0.520	6.819286	6.819617	6.819948	6.820279	6.820611	6.820942	6.821273	6.821604	6.821935	6.822267
0.530	6.822598	6.822929	6.823260	6.823591	6.823923	6.824254	6.824585	6.824917	6.825248	6.825579
0.540	6.825911	6.826242	6.826573	6.826905	6.827236	6.827567	6.827899	6.828230	6.828562	6.828893
0.550	6.829225	6.829556	6.829888	6.830219	6.830550	6.830882	6.831214	6.831545	6.831877	6.832208
0.560	6.832540	6.832871	6.833203	6.833535	6.833866	6.834198	6.834529	6.834861	6.835193	6.835524
0.570	6.835856	6.836188	6.836519	6.836851	6.837183	6.837515	6.837846	6.838178	6.838510	6.838842
0.580	6.839174	6.839505	6.839837	6.840169	6.840501	6.840833	6.841165	6.841497	6.841828	6.842160
0.590	6.842492	6.842824	6.843156	6.843488	6.843820	6.844152	6.844484	6.844816	6.845148	6.845480
0.600	6.845812	6.846144	6.846476	6.846808	6.847140	6.847472	6.847805	6.848137	6.848469	6.848801
0.610	6.849133	6.849465	6.849797	6.850130	6.850462	6.850794	6.851126	6.851458	6.851791	6.852123
0.620	6.852455	6.852787	6.853120	6.853452	6.853784	6.854117	6.854449	6.854781	6.855114	6.855446
0.630	6.855779	6.856111	6.856443	6.856776	6.857108	6.857441	6.857773	6.858106	6.858438	6.858770
0.640	6.859103	6.859435	6.859768	6.860101	6.860433	6.860766	6.861098	6.861431	6.861763	6.862096
0.650	6.862429	6.862761	6.863094	6.863427	6.863759	6.864092	6.864425	6.864757	6.865090	6.865423
0.660	6.865755	6.866088	6.866421	6.866754	6.867087	6.867419	6.867752	6.868085	6.868418	6.868751
0.670	6.869083	6.869416	6.869749	6.870082	6.870415	6.870748	6.871081	6.871414	6.871747	6.872080
0.680	6.872413	6.872746	6.873079	6.873412	6.873745	6.874078	6.874411	6.874744	6.875077	6.875410
0.690	6.875743	6.876076	6.876409	6.876742	6.877075	6.877408	6.877742	6.878075	6.878408	6.878741
0.700	6.879074	6.879408	6.879741	6.880074	6.880407	6.880741	6.881074	6.881407	6.881740	6.882074
0.710	6.882407	6.882740	6.883074	6.883407	6.883740	6.884074	6.884407	6.884741	6.885074	6.885407
0.720	6.885741	6.886074	6.886408	6.886741	6.887075	6.887408	6.887742	6.888075	6.888409	6.888742
0.730	6.889076	6.889409	6.889743	6.890077	6.890410	6.890744	6.891077	6.891411	6.891745	6.892078
0.740	6.892412	6.892746	6.893079	6.893413	6.893747	6.894081	6.894414	6.894748	6.895082	6.895416
0.750	6.895749	6.896083	6.896417	6.896751	6.897085	6.897418	6.897752	6.898086	6.898420	6.898754
0.760	6.899083	6.899422	6.899756	6.900090	6.900424	6.900758	6.901092	6.901425	6.901760	6.902093
0.770	6.902427	6.902762	6.903096	6.903430	6.903764	6.904098	6.904432	6.904766	6.905100	6.905434
0.780	6.905768	6.906102	6.906437	6.906771	6.907105	6.907439	6.907773	6.908108	6.908442	6.908776
0.790	6.909110	6.909445	6.909779	6.910113	6.910447	6.910782	6.911116	6.911451	6.911785	6.912119
0.800	6.912454	6.912788	6.913122	6.913457	6.913791	6.914126	6.914460	6.914795	6.915129	6.915463
0.810	6.915798	6.916132	6.916467	6.916801	6.917136	6.917471	6.917805	6.918140	6.918474	6.918809
0.820	6.919143	6.919478	6.919813	6.920147	6.920482	6.920817	6.921151	6.921486	6.921821	6.922155
0.830	6.922498	6.922832	6.923166	6.923500	6.923834	6.924169	6.924503	6.924838	6.925172	6.925507
0.840	6.925838	6.926173	6.926508	6.926843	6.927177	6.927512	6.927847	6.928182	6.928517	6.928852
0.850	6.929187	6.929522	6.929857	6.930192	6.930527	6.930862	6.931197	6.931532	6.931867	6.932202
0.860	6.932537	6.932872	6.933208	6.933543	6.933878	6.934213	6.934548	6.934883	6.935218	6.935554
0.870	6.935889	6.936224	6.936559	6.936894	6.937230	6.937565	6.937900	6.938235	6.938571	6.938906
0.880	6.939241	6.939577	6.939912	6.940247	6.940583	6.940918	6.941253	6.941589	6.941924	6.942260
0.890	6.942595	6.942931	6.943266	6.943601	6.943937	6.944272	6.944608	6.944943	6.945279	6.945614
0.900	6.945950	6.946286	6.946621	6.946957	6.947292	6.947628	6.947964	6.948299	6.948635	6.948970
0.910	6.949306	6.949642	6.949977	6.950313	6.950649	6.950985	6.951320	6.951656	6.951992	6.952328
0.920	6.952663	6.952999	6.953335	6.953671	6.954007	6.954342	6.954678	6.955014	6.955350	6.955686
0.930	6.956027	6.956363	6.956699	6.957035	6.957371	6.957707	6.958043	6.958379	6.958715	6.959051
0.940	6.959387	6.959723	6.960059	6.960395	6.960731	6.961067	6.961403	6.961739	6.962075	6.962411
0.950	6.962744	6.963080	6.963415	6.963751	6.964087	6.964423	6.964759	6.965096	6.965432	6.965768
0.960	6.966102	6.966441	6.966777	6.967113	6.967449	6.967786	6.968122	6.968458	6.968795	6.969131
0.970	6.969468	6.969804	6.970140	6.970477	6.970813	6.971150	6.971486	6.971822	6.972159	6.972495
0.980	6.972832	6.973168	6.973505	6.973841	6.974178	6.974515	6.974851	6.975188	6.975524	6.975861
0.990	6.976197	6.976534	6.976871	6.977207	6.977544	6.977881	6.978217	6.978554	6.978891	6.979227

ATTENUATION IN DECIBELS
THETA FROM 48.000 TO 48.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.000	6.979564	6.979901	6.980238	6.980574	6.980911	6.981248	6.981585	6.981922	6.982258	6.982595
0.010	6.982932	6.983269	6.983606	6.983943	6.984280	6.984616	6.984953	6.985290	6.985627	6.985964
0.020	6.986301	6.986638	6.986975	6.987312	6.987649	6.987986	6.988323	6.988660	6.988997	6.989334
0.030	6.989671	6.990009	6.990346	6.990683	6.991020	6.991357	6.991694	6.992031	6.992369	6.992706
0.040	6.993043	6.993380	6.993717	6.994055	6.994392	6.994729	6.995066	6.995404	6.995741	6.996078
0.050	6.996416	6.996753	6.997090	6.997428	6.997765	6.998102	6.998440	6.998777	6.999115	6.999452
0.060	6.999789	7.000127	7.000464	7.000802	7.001139	7.001477	7.001814	7.002152	7.002489	7.002827
0.070	7.003164	7.003502	7.003839	7.004177	7.004515	7.004852	7.005190	7.005523	7.005865	7.006203
0.080	7.006541	7.006878	7.007216	7.007554	7.007891	7.008229	7.008567	7.008905	7.009242	7.009580
0.090	7.009918	7.010256	7.010594	7.010931	7.011269	7.011607	7.011945	7.012283	7.012621	7.012959
0.100	7.013297	7.013634	7.013972	7.014310	7.014648	7.014986	7.015324	7.015662	7.016000	7.016338
0.110	7.016676	7.017014	7.017352	7.017690	7.018028	7.018367	7.018705	7.019043	7.019381	7.019719
0.120	7.020057	7.020395	7.020734	7.021072	7.021410	7.021748	7.022086	7.022425	7.022763	7.023101
0.130	7.023439	7.023778	7.024116	7.024454	7.024793	7.025131	7.025469	7.025808	7.026146	7.026484
0.140	7.026823	7.027161	7.027499	7.027838	7.028176	7.028515	7.028853	7.029192	7.029530	7.029869
0.150	7.030207	7.030546	7.030884	7.031223	7.031561	7.031900	7.032238	7.032577	7.032916	7.033254
0.160	7.033593	7.033931	7.034270	7.034609	7.034947	7.035286	7.035625	7.035964	7.036302	7.036641
0.170	7.036980	7.037318	7.037657	7.037996	7.038335	7.038674	7.039012	7.039351	7.039690	7.040029
0.180	7.040368	7.040707	7.041046	7.041384	7.041723	7.042062	7.042401	7.042740	7.043079	7.043418
0.190	7.043757	7.044096	7.044435	7.044774	7.045113	7.045452	7.045791	7.046130	7.046469	7.046808
0.200	7.047148	7.047487	7.047826	7.048165	7.048504	7.048843	7.049182	7.049522	7.049861	7.050200
0.210	7.050539	7.050878	7.051218	7.051557	7.051896	7.052235	7.052575	7.052914	7.053253	7.053593
0.220	7.053932	7.054271	7.054611	7.054950	7.055290	7.055629	7.055968	7.056308	7.056647	7.056987
0.230	7.057326	7.057666	7.058005	7.058344	7.058684	7.059023	7.059363	7.059703	7.060042	7.060382
0.240	7.060721	7.061061	7.061400	7.061740	7.062080	7.062419	7.062759	7.063099	7.063438	7.063778
0.250	7.064118	7.064457	7.064797	7.065137	7.065477	7.065816	7.066156	7.066496	7.066836	7.067175
0.260	7.067515	7.067855	7.068195	7.068535	7.068875	7.069215	7.069554	7.069894	7.070234	7.070574
0.270	7.070914	7.071254	7.071594	7.071934	7.072274	7.072614	7.072954	7.073294	7.073634	7.073974
0.280	7.074314	7.074654	7.074994	7.075334	7.075674	7.076015	7.076355	7.076695	7.077035	7.077375
0.290	7.077715	7.078055	7.078396	7.078736	7.079076	7.079416	7.079757	7.080097	7.080437	7.080777
0.300	7.081118	7.081458	7.081798	7.082139	7.082479	7.082819	7.083160	7.083500	7.083840	7.084181
0.310	7.084521	7.084862	7.085202	7.085543	7.085883	7.086223	7.086564	7.086904	7.087245	7.087585
0.320	7.087926	7.088267	7.088607	7.088948	7.089288	7.089629	7.089969	7.090310	7.090651	7.090991
0.330	7.091332	7.091673	7.092013	7.092354	7.092695	7.093035	7.093376	7.093717	7.094058	7.094396
0.340	7.094739	7.095080	7.095421	7.095762	7.096102	7.096443	7.096784	7.097125	7.097466	7.097807
0.350	7.098148	7.098488	7.098829	7.099170	7.099511	7.099852	7.100193	7.100534	7.100875	7.101216
0.360	7.101557	7.101898	7.102239	7.102580	7.102921	7.103262	7.103603	7.103944	7.104286	7.104627
0.370	7.104968	7.105309	7.105650	7.105991	7.106332	7.106674	7.107015	7.107356	7.107697	7.108039
0.380	7.108380	7.108721	7.109062	7.109404	7.109745	7.110086	7.110428	7.110769	7.111110	7.111452
0.390	7.111793	7.112134	7.112476	7.112817	7.113159	7.113500	7.113841	7.114183	7.114524	7.114866
0.400	7.115207	7.115549	7.115890	7.116232	7.116573	7.116915	7.117257	7.117598	7.117940	7.118281
0.410	7.118623	7.118965	7.119306	7.119648	7.119989	7.120331	7.120673	7.121015	7.121356	7.121698
0.420	7.122040	7.122381	7.122723	7.123065	7.123407	7.123749	7.124091	7.124432	7.124774	7.125116
0.430	7.125458	7.125800	7.126141	7.126483	7.126825	7.127167	7.127509	7.127851	7.128193	7.128535
0.440	7.128877	7.129219	7.129561	7.129903	7.130245	7.130587	7.130929	7.131271	7.131613	7.131955
0.450	7.132297	7.132639	7.132981	7.133324	7.133666	7.134008	7.134350	7.134692	7.135034	7.135377
0.460	7.135719	7.136061	7.136403	7.136745	7.137088	7.137430	7.137772	7.138115	7.138457	7.138799
0.470	7.139142	7.139484	7.139826	7.140169	7.140511	7.140853	7.141196	7.141538	7.141881	7.142223
0.480	7.142566	7.142908	7.143250	7.143593	7.143935	7.144278	7.144620	7.144963	7.145306	7.145648
0.490	7.145991	7.146333	7.146676	7.147018	7.147361	7.147704	7.148046	7.148389	7.148732	7.149074

ATTENUATION IN DECIBELS
THETA FROM 48.500 TO 48.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	7.149417	7.149760	7.150102	7.150445	7.150788	7.151131	7.151474	7.151816	7.152159	7.152502
0.510	7.152845	7.153188	7.153530	7.153873	7.154216	7.154559	7.154902	7.155245	7.155588	7.155931
0.520	7.156273	7.156616	7.156959	7.157302	7.157645	7.157988	7.158331	7.158674	7.159017	7.159360
0.530	7.159703	7.160047	7.160390	7.160733	7.161076	7.161419	7.161762	7.162105	7.162448	7.162792
0.540	7.163135	7.163478	7.163820	7.164164	7.164508	7.164851	7.165194	7.165537	7.165881	7.166224
0.550	7.166567	7.166910	7.167254	7.167597	7.167940	7.168284	7.168627	7.168971	7.169314	7.169657
0.560	7.170001	7.170344	7.170688	7.171031	7.171375	7.171718	7.172062	7.172405	7.172749	7.173092
0.570	7.173436	7.173779	7.174123	7.174466	7.174810	7.175153	7.175497	7.175841	7.176184	7.176528
0.580	7.176872	7.177215	7.177559	7.177903	7.178246	7.178590	7.178934	7.179278	7.179621	7.179965
0.590	7.180309	7.180653	7.180996	7.181340	7.181684	7.182028	7.182372	7.182716	7.183060	7.183403
0.600	7.183747	7.184091	7.184435	7.184779	7.185123	7.185467	7.185811	7.186155	7.186499	7.186843
0.610	7.187187	7.187531	7.187875	7.188219	7.188563	7.188907	7.189251	7.189595	7.189940	7.190284
0.620	7.190628	7.190972	7.191316	7.191660	7.192005	7.192349	7.192693	7.193037	7.193381	7.193726
0.630	7.194070	7.194414	7.194759	7.195103	7.195447	7.195792	7.196136	7.196480	7.196825	7.197169
0.640	7.197513	7.197858	7.198202	7.198547	7.198891	7.199235	7.199580	7.199924	7.200269	7.200613
0.650	7.200958	7.201302	7.201647	7.201991	7.202336	7.202681	7.203025	7.203370	7.203714	7.204059
0.660	7.204404	7.204748	7.205093	7.205438	7.205782	7.206127	7.206472	7.206816	7.207161	7.207506
0.670	7.207851	7.208195	7.208540	7.208885	7.209230	7.209574	7.209919	7.210264	7.210609	7.210954
0.680	7.211299	7.211644	7.211988	7.212333	7.212678	7.213023	7.213368	7.213713	7.214058	7.214403
0.690	7.214748	7.215093	7.215438	7.215783	7.216128	7.216473	7.216818	7.217163	7.217508	7.217854
0.700	7.218199	7.218544	7.218889	7.219234	7.219579	7.219924	7.220270	7.220615	7.220960	7.221305
0.710	7.221650	7.221996	7.222341	7.222686	7.223032	7.223377	7.223722	7.224067	7.224413	7.224758
0.720	7.225103	7.225449	7.225794	7.226140	7.226485	7.226830	7.227176	7.227521	7.227867	7.228212
0.730	7.228558	7.228903	7.229249	7.229594	7.229940	7.230285	7.230631	7.230976	7.231322	7.231668
0.740	7.232013	7.232359	7.232704	7.233050	7.233396	7.233741	7.234087	7.234433	7.234778	7.235124
0.750	7.235470	7.235816	7.236161	7.236507	7.236853	7.237199	7.237544	7.237890	7.238236	7.238582
0.760	7.238928	7.239274	7.239619	7.239965	7.240311	7.240657	7.241003	7.241349	7.241695	7.242041
0.770	7.242387	7.242733	7.243079	7.243425	7.243771	7.244117	7.244463	7.244809	7.245155	7.245501
0.780	7.245847	7.246193	7.246539	7.246885	7.247232	7.247578	7.247924	7.248270	7.248616	7.248962
0.790	7.249309	7.249655	7.250001	7.250347	7.250694	7.251040	7.251386	7.251732	7.252079	7.252425
0.800	7.252771	7.253118	7.253464	7.253810	7.254157	7.254503	7.254850	7.255196	7.255542	7.255889
0.810	7.256235	7.256582	7.256928	7.257275	7.257621	7.257968	7.258314	7.258661	7.259007	7.259354
0.820	7.259701	7.260047	7.260394	7.260740	7.261087	7.261434	7.261780	7.262127	7.262474	7.262820
0.830	7.263167	7.263514	7.263860	7.264207	7.264554	7.264901	7.265247	7.265594	7.265941	7.266288
0.840	7.266635	7.266981	7.267328	7.267675	7.268022	7.268369	7.268716	7.269063	7.269410	7.269757
0.850	7.270104	7.270450	7.270797	7.271144	7.271491	7.271838	7.272185	7.272532	7.272879	7.273226
0.860	7.273574	7.273921	7.274268	7.274615	7.274962	7.275309	7.275656	7.276003	7.276350	7.276698
0.870	7.277045	7.277392	7.277739	7.278086	7.278434	7.278781	7.279128	7.279476	7.279823	7.280170
0.880	7.280517	7.280865	7.281212	7.281559	7.281907	7.282254	7.282601	7.282949	7.283296	7.283644
0.890	7.283991	7.284339	7.284686	7.285034	7.285381	7.285728	7.286076	7.286424	7.286771	7.287119
0.900	7.287466	7.287814	7.288161	7.288509	7.288856	7.289204	7.289552	7.289899	7.290247	7.290595
0.910	7.290942	7.291290	7.291638	7.291985	7.292333	7.292681	7.293029	7.293376	7.293724	7.294072
0.920	7.294420	7.294768	7.295115	7.295463	7.295811	7.296159	7.296507	7.296855	7.297203	7.297550
0.930	7.297898	7.298246	7.298594	7.298942	7.299290	7.299638	7.299986	7.300334	7.300682	7.301030
0.940	7.301378	7.301726	7.302074	7.302422	7.302771	7.303119	7.303467	7.303815	7.304163	7.304511
0.950	7.304859	7.305208	7.305556	7.305904	7.306252	7.306600	7.306949	7.307297	7.307645	7.307993
0.960	7.308342	7.308690	7.309038	7.309387	7.309735	7.310083	7.310432	7.310780	7.311128	7.311477
0.970	7.311825	7.312174	7.312522	7.312871	7.313219	7.313568	7.313916	7.314264	7.314613	7.314961
0.980	7.315310	7.315659	7.316007	7.316356	7.316704	7.317053	7.317402	7.317750	7.318099	7.318447
0.990	7.318796	7.319145	7.319493	7.319842	7.320191	7.320540	7.320888	7.321237	7.321586	7.321935

ATTENUATION IN DECIBELS
THETA FROM 49.000 TO 49.499 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.000	7.322283	7.322632	7.322981	7.323330	7.323679	7.324027	7.324376	7.324725	7.325074	7.325423
0.010	7.322772	7.323121	7.323470	7.323819	7.324168	7.324516	7.324865	7.325214	7.325563	7.325912
0.020	7.329261	7.329611	7.329960	7.330309	7.330658	7.331007	7.331356	7.331705	7.332054	7.332403
0.030	7.332752	7.333102	7.333451	7.333800	7.334149	7.334498	7.334848	7.335197	7.335546	7.335895
0.040	7.336245	7.336594	7.336943	7.337292	7.337642	7.337991	7.338340	7.338690	7.339039	7.339389
0.050	7.339738	7.340087	7.340437	7.340786	7.341136	7.341485	7.341835	7.342184	7.342534	7.342883
0.060	7.343233	7.343582	7.343932	7.344281	7.344631	7.344980	7.345330	7.345680	7.346029	7.346379
0.070	7.346728	7.347078	7.347428	7.347777	7.348127	7.348477	7.348827	7.349176	7.349526	7.349876
0.080	7.350226	7.350575	7.350925	7.351275	7.351625	7.351975	7.352324	7.352674	7.353024	7.353374
0.090	7.353724	7.354074	7.354424	7.354774	7.355124	7.355473	7.355823	7.356173	7.356523	7.356873
0.100	7.357223	7.357573	7.357923	7.358274	7.358624	7.358974	7.359324	7.359674	7.360024	7.360374
0.110	7.360724	7.361074	7.361425	7.361775	7.362125	7.362475	7.362825	7.363176	7.363526	7.363876
0.120	7.364226	7.364577	7.364927	7.365277	7.365627	7.365978	7.366328	7.366678	7.367029	7.367379
0.130	7.367729	7.368080	7.368430	7.368781	7.369131	7.369482	7.369832	7.370183	7.370533	7.370884
0.140	7.371234	7.371585	7.371935	7.372286	7.372636	7.372987	7.373337	7.373688	7.374039	7.374389
0.150	7.374740	7.375090	7.375441	7.375792	7.376142	7.376493	7.376844	7.377194	7.377545	7.377896
0.160	7.378247	7.378597	7.378948	7.379299	7.379650	7.380001	7.380351	7.380702	7.381053	7.381404
0.170	7.381755	7.382106	7.382457	7.382808	7.383159	7.383510	7.383860	7.384211	7.384562	7.384913
0.180	7.385264	7.385615	7.385966	7.386317	7.386669	7.387020	7.387371	7.387722	7.388073	7.388424
0.190	7.388775	7.389126	7.389477	7.389829	7.390180	7.390531	7.390882	7.391233	7.391585	7.391936
0.200	7.392287	7.392638	7.392990	7.393341	7.393692	7.394043	7.394395	7.394746	7.395097	7.395449
0.210	7.395800	7.396152	7.396503	7.396854	7.397206	7.397557	7.397909	7.398260	7.398612	7.398963
0.220	7.399315	7.399666	7.400018	7.400369	7.400721	7.401072	7.401424	7.401775	7.402127	7.402479
0.230	7.402830	7.403182	7.403533	7.403885	7.404237	7.404588	7.404940	7.405292	7.405644	7.405995
0.240	7.406347	7.406699	7.407051	7.407402	7.407754	7.408106	7.408458	7.408810	7.409162	7.409513
0.250	7.409865	7.410217	7.410569	7.410921	7.411273	7.411625	7.411977	7.412329	7.412681	7.413033
0.260	7.413385	7.413737	7.414089	7.414441	7.414793	7.415145	7.415497	7.415849	7.416201	7.416553
0.270	7.416905	7.417257	7.417609	7.417962	7.418314	7.418666	7.419018	7.419370	7.419723	7.420075
0.280	7.420427	7.420779	7.421132	7.421484	7.421836	7.422188	7.422541	7.422893	7.423245	7.423598
0.290	7.423950	7.424303	7.424655	7.425007	7.425360	7.425712	7.426065	7.426417	7.426769	7.427122
0.300	7.427474	7.427827	7.428180	7.428532	7.428885	7.429237	7.429590	7.429942	7.430295	7.430647
0.310	7.431000	7.431353	7.431705	7.432058	7.432411	7.432763	7.433116	7.433469	7.433821	7.434174
0.320	7.434527	7.434880	7.435232	7.435585	7.435938	7.436291	7.436644	7.436996	7.437349	7.437702
0.330	7.438055	7.438408	7.438761	7.439114	7.439467	7.439819	7.440172	7.440525	7.440878	7.441231
0.340	7.441594	7.441937	7.442290	7.442643	7.442996	7.443349	7.443702	7.444056	7.444409	7.444762
0.350	7.445115	7.445468	7.445821	7.446174	7.446527	7.446881	7.447234	7.447587	7.447940	7.448293
0.360	7.448647	7.449000	7.449353	7.449706	7.450060	7.450413	7.450766	7.451120	7.451473	7.451826
0.370	7.452180	7.452533	7.452887	7.453240	7.453593	7.453947	7.454300	7.454654	7.455007	7.455361
0.380	7.455714	7.456068	7.456421	7.456775	7.457128	7.457482	7.457835	7.458189	7.458542	7.458896
0.390	7.459250	7.459603	7.459957	7.460311	7.460664	7.461018	7.461372	7.461725	7.462079	7.462433
0.400	7.462786	7.463140	7.463494	7.463848	7.464202	7.464555	7.464909	7.465263	7.465617	7.465971
0.410	7.466325	7.466678	7.467032	7.467386	7.467740	7.468094	7.468448	7.468802	7.469156	7.469510
0.420	7.469864	7.470218	7.470572	7.470926	7.471280	7.471634	7.471988	7.472342	7.472696	7.473050
0.430	7.473404	7.473758	7.474113	7.474467	7.474821	7.475175	7.475529	7.475883	7.476238	7.476592
0.440	7.476946	7.477300	7.477655	7.478009	7.478363	7.478718	7.479072	7.479426	7.479780	7.480135
0.450	7.480489	7.480844	7.481198	7.481552	7.481907	7.482261	7.482616	7.482970	7.483325	7.483679
0.460	7.484034	7.484388	7.484743	7.485097	7.485452	7.485806	7.486161	7.486515	7.486870	7.487225
0.470	7.487579	7.487934	7.488288	7.488643	7.488998	7.489352	7.489707	7.490062	7.490416	7.490771
0.480	7.491126	7.491481	7.491835	7.492190	7.492545	7.492900	7.493255	7.493610	7.493964	7.494319
0.490	7.494674	7.495029	7.495384	7.495739	7.496094	7.496449	7.496803	7.497158	7.497513	7.497868

ATTENUATION IN DECIBELS
THETA FROM 49.500 TO 49.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	7.498223	7.498578	7.498933	7.499288	7.499643	7.499998	7.500354	7.500709	7.501064	7.501419
0.510	7.501774	7.502129	7.502484	7.502839	7.503195	7.503550	7.503905	7.504260	7.504615	7.504970
0.520	7.505326	7.505681	7.506036	7.506392	7.506747	7.507102	7.507457	7.507813	7.508168	7.508523
0.530	7.508879	7.509234	7.509590	7.509945	7.510300	7.510656	7.511011	7.511367	7.511722	7.512078
0.540	7.512433	7.512789	7.513144	7.513500	7.513855	7.514211	7.514566	7.514922	7.515278	7.515633
0.550	7.515989	7.516344	7.516700	7.517056	7.517411	7.517767	7.518123	7.518478	7.518834	7.519190
0.560	7.519546	7.519901	7.520257	7.520613	7.520969	7.521325	7.521680	7.522036	7.522392	7.522748
0.570	7.523104	7.523460	7.523816	7.524171	7.524527	7.524883	7.525239	7.525595	7.525951	7.526307
0.580	7.526663	7.527019	7.527375	7.527731	7.528087	7.528443	7.528799	7.529155	7.529512	7.529868
0.590	7.530224	7.530580	7.530936	7.531292	7.531648	7.532005	7.532361	7.532717	7.533073	7.533429
0.600	7.533786	7.534142	7.534498	7.534855	7.535211	7.535567	7.535923	7.536280	7.536636	7.536992
0.610	7.537349	7.537705	7.538062	7.538418	7.538774	7.539131	7.539487	7.539844	7.540200	7.540557
0.620	7.540913	7.541270	7.541626	7.541983	7.542339	7.542696	7.543052	7.543409	7.543766	7.544122
0.630	7.544479	7.544836	7.545192	7.545549	7.545906	7.546262	7.546619	7.546976	7.547332	7.547689
0.640	7.548046	7.548403	7.548759	7.549116	7.549473	7.549830	7.550187	7.550543	7.550900	7.551257
0.650	7.551614	7.551971	7.552328	7.552685	7.553042	7.553399	7.553756	7.554113	7.554470	7.554827
0.660	7.555184	7.555541	7.555898	7.556255	7.556612	7.556969	7.557326	7.557683	7.558040	7.558397
0.670	7.558754	7.559111	7.559469	7.559826	7.560183	7.560540	7.560897	7.561255	7.561612	7.561969
0.680	7.562326	7.562684	7.563041	7.563398	7.563755	7.564113	7.564470	7.564827	7.565185	7.565542
0.690	7.565899	7.566257	7.566614	7.566972	7.567329	7.567687	7.568044	7.568402	7.568759	7.569117
0.700	7.569474	7.569832	7.570189	7.570547	7.570904	7.571262	7.571619	7.571977	7.572335	7.572692
0.710	7.573050	7.573407	7.573765	7.574123	7.574480	7.574838	7.575196	7.575554	7.575911	7.576269
0.720	7.576627	7.576985	7.577342	7.577700	7.578058	7.578416	7.578774	7.579132	7.579490	7.579847
0.730	7.580205	7.580563	7.580921	7.581279	7.581637	7.581995	7.582353	7.582711	7.583069	7.583427
0.740	7.583785	7.584143	7.584501	7.584859	7.585217	7.585575	7.585933	7.586291	7.586649	7.587007
0.750	7.587366	7.587724	7.588082	7.588440	7.588798	7.589157	7.589515	7.589873	7.590231	7.590589
0.760	7.590948	7.591306	7.591664	7.592023	7.592381	7.592739	7.593098	7.593456	7.593814	7.594173
0.770	7.594531	7.594890	7.595248	7.595606	7.595965	7.596323	7.596682	7.597040	7.597399	7.597757
0.780	7.598116	7.598474	7.598833	7.599191	7.599550	7.599909	7.600267	7.600626	7.600984	7.601343
0.790	7.601702	7.602060	7.602419	7.602778	7.603136	7.603495	7.603854	7.604213	7.604571	7.604930
0.800	7.605289	7.605648	7.606006	7.606365	7.606724	7.607083	7.607442	7.607801	7.608160	7.608518
0.810	7.608877	7.609236	7.609595	7.609954	7.610313	7.610672	7.611031	7.611390	7.611749	7.612108
0.820	7.612467	7.612826	7.613185	7.613544	7.613903	7.614262	7.614622	7.614981	7.615340	7.615699
0.830	7.616058	7.616417	7.616776	7.617136	7.617495	7.617854	7.618213	7.618573	7.618932	7.619291
0.840	7.619650	7.620010	7.620369	7.620728	7.621088	7.621447	7.621806	7.622166	7.622525	7.622884
0.850	7.623244	7.623603	7.623963	7.624322	7.624682	7.625041	7.625401	7.625760	7.626120	7.626479
0.860	7.626839	7.627198	7.627558	7.627917	7.628277	7.628637	7.628996	7.629356	7.629715	7.630075
0.870	7.630435	7.630794	7.631154	7.631514	7.631874	7.632233	7.632593	7.632953	7.633313	7.633672
0.880	7.634032	7.634392	7.634752	7.635112	7.635471	7.635831	7.636191	7.636551	7.636911	7.637271
0.890	7.637631	7.637991	7.638351	7.638711	7.639071	7.639431	7.639791	7.640151	7.640511	7.640871
0.900	7.641231	7.641591	7.641951	7.642311	7.642671	7.643031	7.643391	7.643751	7.644112	7.644472
0.910	7.644832	7.645192	7.645552	7.645913	7.646273	7.646633	7.646993	7.647353	7.647714	7.648074
0.920	7.648434	7.648795	7.649155	7.649515	7.649876	7.650236	7.650596	7.650957	7.651317	7.651678
0.930	7.652038	7.652399	7.652759	7.653120	7.653480	7.653840	7.654201	7.654561	7.654922	7.655283
0.940	7.655643	7.656004	7.656364	7.656725	7.657085	7.657446	7.657807	7.658167	7.658528	7.658889
0.950	7.659249	7.659610	7.659971	7.660332	7.660692	7.661053	7.661414	7.661775	7.662135	7.662496
0.960	7.662857	7.663218	7.663579	7.663940	7.664300	7.664661	7.665022	7.665383	7.665744	7.666105
0.970	7.666466	7.666827	7.667188	7.667549	7.667910	7.668271	7.668632	7.668993	7.669354	7.669715
0.980	7.670076	7.670437	7.670798	7.671159	7.671520	7.671882	7.672243	7.672604	7.672965	7.673326
0.990	7.673687	7.674049	7.674410	7.674771	7.675132	7.675494	7.675855	7.676216	7.676577	7.676939

ATTENUATION IN DECIBELS
THETA FROM 50.000 TO 50.499 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.000	7.671300	7.677661	7.684023	7.690384	7.696746	7.703107	7.709468	7.715830	7.722191	7.728553
0.010	7.680914	7.687276	7.693637	7.700000	7.706362	7.712725	7.719087	7.725450	7.731812	7.738174
0.020	7.684529	7.690891	7.697253	7.703615	7.709977	7.716339	7.722701	7.729063	7.735425	7.741787
0.030	7.688146	7.694508	7.700870	7.707232	7.713594	7.719956	7.726318	7.732680	7.739042	7.745404
0.040	7.691764	7.698126	7.704488	7.710850	7.717212	7.723574	7.729936	7.736298	7.742660	7.749022
0.050	7.695383	7.701745	7.708107	7.714469	7.720831	7.727193	7.733555	7.739917	7.746279	7.752641
0.060	7.699003	7.705365	7.711727	7.718089	7.724451	7.730813	7.737175	7.743537	7.749899	7.756261
0.070	7.702625	7.708987	7.715349	7.721711	7.728073	7.734435	7.740797	7.747159	7.753521	7.759883
0.080	7.706248	7.712610	7.718972	7.725334	7.731696	7.738058	7.744420	7.750782	7.757144	7.763506
0.090	7.709872	7.716234	7.722596	7.728958	7.735320	7.741682	7.748044	7.754406	7.760768	7.767130
0.100	7.713495	7.719857	7.726219	7.732581	7.738943	7.745305	7.751667	7.758029	7.764391	7.770753
0.110	7.717124	7.723486	7.729848	7.736210	7.742572	7.748934	7.755296	7.761658	7.768020	7.774382
0.120	7.720752	7.727114	7.733476	7.739838	7.746200	7.752562	7.758924	7.765286	7.771648	7.778010
0.130	7.724380	7.730742	7.737104	7.743466	7.749828	7.756190	7.762552	7.768914	7.775276	7.781638
0.140	7.728013	7.734375	7.740737	7.747099	7.753461	7.759823	7.766185	7.772547	7.778909	7.785271
0.150	7.731645	7.738007	7.744369	7.750731	7.757093	7.763455	7.769817	7.776179	7.782541	7.788903
0.160	7.735278	7.741640	7.748002	7.754364	7.760726	7.767088	7.773450	7.779812	7.786174	7.792536
0.170	7.738912	7.745274	7.751636	7.757998	7.764360	7.770722	7.777084	7.783446	7.789808	7.796170
0.180	7.742548	7.748910	7.755272	7.761634	7.767996	7.774358	7.780720	7.787082	7.793444	7.799806
0.190	7.746185	7.752547	7.758909	7.765271	7.771633	7.777995	7.784357	7.790719	7.797081	7.803443
0.200	7.749824	7.756186	7.762548	7.768910	7.775272	7.781634	7.787996	7.794358	7.800720	7.807082
0.210	7.753463	7.759825	7.766187	7.772549	7.778911	7.785273	7.791635	7.797997	7.804359	7.810721
0.220	7.757104	7.763466	7.769828	7.776190	7.782552	7.788914	7.795276	7.801638	7.807999	7.814361
0.230	7.760747	7.767109	7.773471	7.779833	7.786195	7.792557	7.798919	7.805281	7.811643	7.817999
0.240	7.764390	7.770752	7.777114	7.783476	7.789838	7.796200	7.802562	7.808924	7.815286	7.821648
0.250	7.768035	7.774397	7.780759	7.787121	7.793483	7.799845	7.806207	7.812569	7.818931	7.825293
0.260	7.771681	7.778043	7.784405	7.790767	7.797129	7.803491	7.809853	7.816215	7.822577	7.828939
0.270	7.775329	7.781691	7.788053	7.794415	7.800777	7.807139	7.813501	7.819863	7.826225	7.832587
0.280	7.778977	7.785339	7.791701	7.798063	7.804425	7.810787	7.817149	7.823511	7.829873	7.836235
0.290	7.782628	7.788990	7.795352	7.801714	7.808076	7.814438	7.820800	7.827162	7.833524	7.839886
0.300	7.786279	7.792641	7.799003	7.805365	7.811727	7.818089	7.824451	7.830813	7.837175	7.843537
0.310	7.789932	7.796294	7.802656	7.809018	7.815380	7.821742	7.828104	7.834466	7.840828	7.847190
0.320	7.793585	7.799947	7.806309	7.812671	7.819033	7.825395	7.831757	7.838119	7.844481	7.850843
0.330	7.797241	7.803603	7.809965	7.816327	7.822689	7.829051	7.835413	7.841775	7.848137	7.854499
0.340	7.800897	7.807259	7.813621	7.819983	7.826345	7.832707	7.839069	7.845431	7.851793	7.858155
0.350	7.804555	7.810917	7.817279	7.823641	7.829999	7.836361	7.842723	7.849085	7.855447	7.861809
0.360	7.808214	7.814576	7.820938	7.827300	7.833662	7.839999	7.846361	7.852723	7.859085	7.865447
0.370	7.811875	7.818237	7.824599	7.830961	7.837323	7.843685	7.849999	7.856361	7.862723	7.869085
0.380	7.815535	7.821897	7.828259	7.834621	7.840983	7.847345	7.853707	7.859999	7.866361	7.872723
0.390	7.819199	7.825561	7.831923	7.838285	7.844647	7.851009	7.857371	7.863733	7.870095	7.876457
0.400	7.822864	7.829226	7.835588	7.841950	7.848312	7.854674	7.861036	7.867398	7.873760	7.880122
0.410	7.826529	7.832891	7.839253	7.845615	7.851977	7.858339	7.864701	7.871063	7.877425	7.883787
0.420	7.830196	7.836558	7.842920	7.849282	7.855644	7.862006	7.868368	7.874730	7.881092	7.887454
0.430	7.833865	7.840227	7.846589	7.852951	7.859313	7.865675	7.872037	7.878399	7.884761	7.891123
0.440	7.837534	7.843896	7.850258	7.856620	7.862982	7.869344	7.875706	7.882068	7.888430	7.894792
0.450	7.841205	7.847567	7.853929	7.860291	7.866653	7.873015	7.879377	7.885739	7.892101	7.898463
0.460	7.844877	7.851239	7.857601	7.863963	7.870325	7.876687	7.883049	7.889411	7.895773	7.902135
0.470	7.848551	7.854913	7.861275	7.867637	7.873999	7.880361	7.886723	7.893085	7.899447	7.905809
0.480	7.852225	7.858587	7.864949	7.871311	7.877673	7.884035	7.890397	7.896759	7.903121	7.909483
0.490	7.855902	7.862264	7.868626	7.874988	7.881350	7.887712	7.894074	7.900436	7.906798	7.913160

ATTENUATION IN DECIBELS
THETA FROM 50.500 TO 50.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	7.859579	7.859947	7.860315	7.860682	7.861050	7.861418	7.861786	7.862154	7.862522	7.862890
0.510	7.863258	7.863626	7.863994	7.864362	7.864730	7.865098	7.865466	7.865834	7.866202	7.866570
0.520	7.866938	7.867306	7.867674	7.868042	7.868410	7.868778	7.869146	7.869514	7.869882	7.870250
0.530	7.870619	7.870987	7.871355	7.871724	7.872092	7.872460	7.872828	7.873197	7.873565	7.873933
0.540	7.874302	7.874670	7.875038	7.875407	7.875775	7.876143	7.876512	7.876880	7.877249	7.877617
0.550	7.877986	7.878354	7.878722	7.879091	7.879460	7.879828	7.880197	7.880565	7.880934	7.881302
0.560	7.881671	7.882039	7.882408	7.882777	7.883145	7.883514	7.883883	7.884251	7.884620	7.884989
0.570	7.885357	7.885726	7.886095	7.886464	7.886832	7.887201	7.887570	7.887939	7.888308	7.888676
0.580	7.889045	7.889414	7.889783	7.890152	7.890521	7.890890	7.891259	7.891627	7.891996	7.892365
0.590	7.892734	7.893103	7.893472	7.893841	7.894210	7.894579	7.894949	7.895318	7.895687	7.896056
0.600	7.896425	7.896794	7.897163	7.897532	7.897901	7.898271	7.898640	7.899009	7.899378	7.899747
0.610	7.900117	7.900486	7.900855	7.901224	7.901594	7.901963	7.902332	7.902702	7.903071	7.903440
0.620	7.903810	7.904179	7.904549	7.904918	7.905287	7.905657	7.906026	7.906396	7.906765	7.907135
0.630	7.907504	7.907874	7.908243	7.908613	7.908982	7.909352	7.909722	7.910091	7.910461	7.910830
0.640	7.911200	7.911570	7.911939	7.912309	7.912679	7.913048	7.913418	7.913788	7.914158	7.914527
0.650	7.914897	7.915267	7.915637	7.916007	7.916376	7.916746	7.917116	7.917486	7.917856	7.918226
0.660	7.918505	7.918865	7.919235	7.919605	7.920005	7.920445	7.920885	7.921325	7.921765	7.922205
0.670	7.922295	7.922665	7.923035	7.923405	7.923775	7.924146	7.924516	7.924886	7.925256	7.925626
0.680	7.925996	7.926366	7.926737	7.927107	7.927477	7.927847	7.928217	7.928588	7.928958	7.929328
0.690	7.929699	7.930069	7.930439	7.930809	7.931180	7.931550	7.931921	7.932291	7.932661	7.933032
0.700	7.933402	7.933773	7.934143	7.934514	7.934884	7.935255	7.935625	7.935996	7.936366	7.936737
0.710	7.937107	7.937478	7.937848	7.938219	7.938590	7.938960	7.939331	7.939701	7.940072	7.940443
0.720	7.940813	7.941184	7.941555	7.941926	7.942296	7.942667	7.943038	7.943409	7.943779	7.944150
0.730	7.944521	7.944892	7.945263	7.945634	7.946005	7.946375	7.946746	7.947117	7.947488	7.947859
0.740	7.948230	7.948601	7.948972	7.949343	7.949714	7.950085	7.950456	7.950827	7.951198	7.951569
0.750	7.951940	7.952311	7.952682	7.953054	7.953425	7.953796	7.954167	7.954538	7.954909	7.955281
0.760	7.955652	7.956023	7.956394	7.956766	7.957137	7.957508	7.957879	7.958251	7.958622	7.958993
0.770	7.959365	7.959736	7.960108	7.960479	7.960850	7.961222	7.961593	7.961965	7.962336	7.962708
0.780	7.963079	7.963450	7.963822	7.964194	7.964565	7.964937	7.965308	7.965680	7.966051	7.966423
0.790	7.966735	7.967166	7.967538	7.967909	7.968281	7.968653	7.969024	7.969396	7.969768	7.970140
0.800	7.970511	7.970883	7.971255	7.971627	7.971999	7.972370	7.972742	7.973114	7.973486	7.973858
0.810	7.974230	7.974602	7.974973	7.975345	7.975717	7.976089	7.976461	7.976833	7.977205	7.977577
0.820	7.977949	7.978321	7.978693	7.979065	7.979437	7.979809	7.980181	7.980554	7.980926	7.981298
0.830	7.981670	7.982042	7.982414	7.982786	7.983159	7.983531	7.983903	7.984275	7.984648	7.985020
0.840	7.985392	7.985764	7.986137	7.986509	7.986881	7.987254	7.987626	7.987998	7.988371	7.988743
0.850	7.989116	7.989488	7.989861	7.990233	7.990605	7.990978	7.991350	7.991723	7.992095	7.992468
0.860	7.992840	7.993213	7.993586	7.993958	7.994331	7.994703	7.995076	7.995449	7.995821	7.996194
0.870	7.996567	7.996939	7.997312	7.997685	7.998058	7.998430	7.998803	7.999176	7.999549	7.999921
0.880	8.000294	8.000667	8.001040	8.001413	8.001786	8.002158	8.002531	8.002904	8.003277	8.003650
0.890	8.004023	8.004396	8.004769	8.005142	8.005515	8.005888	8.006261	8.006634	8.007007	8.007380
0.900	8.007753	8.008126	8.008499	8.008872	8.009246	8.009619	8.009992	8.010365	8.010738	8.011111
0.910	8.011485	8.011858	8.012231	8.012604	8.012977	8.013351	8.013724	8.014097	8.014471	8.014844
0.920	8.015217	8.015591	8.015964	8.016337	8.016711	8.017084	8.017458	8.017831	8.018205	8.018578
0.930	8.018952	8.019325	8.019699	8.020072	8.020445	8.020819	8.021193	8.021566	8.021940	8.022313
0.940	8.022687	8.023061	8.023434	8.023808	8.024181	8.024555	8.024929	8.025303	8.025676	8.026050
0.950	8.026424	8.026798	8.027171	8.027545	8.027919	8.028293	8.028666	8.029040	8.029414	8.029788
0.960	8.030162	8.030536	8.030910	8.031284	8.031658	8.032031	8.032405	8.032779	8.033153	8.033527
0.970	8.033901	8.034275	8.034649	8.035023	8.035398	8.035772	8.036146	8.036520	8.036894	8.037268
0.980	8.037642	8.038016	8.038391	8.038765	8.039139	8.039513	8.039887	8.040262	8.040636	8.041010
0.990	8.041384	8.041759	8.042133	8.042507	8.042881	8.043256	8.043630	8.044005	8.044379	8.044753

ATTENUATION IN DECIBELS
THETA FROM 51.000 TO 51.499 DEGREES

THETA IN
DEGREES

0.000	8.045128	8.045502	8.045877	8.046251	8.046625	8.047000	8.047374	8.047749	8.048123	8.048498
0.010	8.048873	8.049247	8.049622	8.049996	8.050371	8.050745	8.051120	8.051495	8.051869	8.052244
0.020	8.052619	8.052993	8.053368	8.053743	8.054118	8.054492	8.054867	8.055242	8.055617	8.055991
0.030	8.056366	8.056741	8.057116	8.057491	8.057866	8.058241	8.058615	8.058990	8.059365	8.059740
0.040	8.060115	8.060490	8.060865	8.061240	8.061615	8.061990	8.062365	8.062740	8.063115	8.063490
0.050	8.063865	8.064240	8.064615	8.064991	8.065366	8.065741	8.066116	8.066491	8.066866	8.067242
0.060	8.067617	8.067992	8.068367	8.068742	8.069118	8.069493	8.069868	8.070244	8.070619	8.070994
0.070	8.071370	8.071745	8.072120	8.072496	8.072871	8.073246	8.073622	8.073997	8.074373	8.074748
0.080	8.075124	8.075499	8.075875	8.076250	8.076626	8.077001	8.077377	8.077752	8.078128	8.078504
0.090	8.078879	8.079255	8.079630	8.080006	8.080382	8.080757	8.081133	8.081509	8.081885	8.082260
0.100	8.082636	8.083012	8.083388	8.083763	8.084139	8.084515	8.084891	8.085267	8.085643	8.086018
0.110	8.086394	8.086770	8.087146	8.087522	8.087898	8.088274	8.088650	8.089026	8.089402	8.089778
0.120	8.090154	8.090530	8.090906	8.091282	8.091658	8.092034	8.092410	8.092786	8.093163	8.093539
0.130	8.093915	8.094291	8.094667	8.095043	8.095420	8.095796	8.096172	8.096548	8.096924	8.097301
0.140	8.097677	8.098053	8.098430	8.098806	8.099182	8.099559	8.099935	8.100311	8.100688	8.101064
0.150	8.101441	8.101817	8.102193	8.102570	8.102946	8.103323	8.103699	8.104076	8.104452	8.104829
0.160	8.105206	8.105582	8.105958	8.106335	8.106712	8.107088	8.107465	8.107842	8.108218	8.108595
0.170	8.108972	8.109348	8.109725	8.110102	8.110479	8.110855	8.111232	8.111609	8.111986	8.112363
0.180	8.112739	8.113116	8.113493	8.113870	8.114247	8.114624	8.115001	8.115378	8.115754	8.116131
0.190	8.116508	8.116885	8.117262	8.117639	8.118016	8.118393	8.118770	8.119147	8.119524	8.119902
0.200	8.120279	8.120656	8.121033	8.121410	8.121787	8.122164	8.122541	8.122919	8.123296	8.123673
0.210	8.124050	8.124428	8.124805	8.125182	8.125559	8.125937	8.126314	8.126691	8.127069	8.127446
0.220	8.127823	8.128201	8.128578	8.128955	8.129333	8.129710	8.130088	8.130465	8.130843	8.131220
0.230	8.131598	8.131975	8.132353	8.132730	8.133108	8.133485	8.133863	8.134241	8.134618	8.134996
0.240	8.135373	8.135751	8.136129	8.136506	8.136884	8.137262	8.137640	8.138017	8.138395	8.138773
0.250	8.139150	8.139528	8.139906	8.140284	8.140662	8.141039	8.141417	8.141795	8.142173	8.142551
0.260	8.142929	8.143307	8.143685	8.144063	8.144441	8.144819	8.145197	8.145575	8.145952	8.146331
0.270	8.146709	8.147087	8.147465	8.147843	8.148221	8.148599	8.148977	8.149355	8.149733	8.150112
0.280	8.150490	8.150868	8.151246	8.151624	8.152002	8.152381	8.152759	8.153137	8.153516	8.153894
0.290	8.154272	8.154650	8.155029	8.155407	8.155786	8.156164	8.156542	8.156921	8.157299	8.157678
0.300	8.158056	8.158434	8.158813	8.159191	8.159570	8.159948	8.160327	8.160705	8.161084	8.161463
0.310	8.161841	8.162220	8.162598	8.162977	8.163356	8.163734	8.164113	8.164492	8.164870	8.165249
0.320	8.165628	8.166006	8.166385	8.166764	8.167143	8.167521	8.167900	8.168279	8.168658	8.169037
0.330	8.169415	8.169794	8.170173	8.170552	8.170931	8.171310	8.171689	8.172068	8.172447	8.172826
0.340	8.173205	8.173584	8.173963	8.174342	8.174721	8.175100	8.175479	8.175858	8.176237	8.176616
0.350	8.176995	8.177374	8.177754	8.178133	8.178512	8.178891	8.179270	8.179650	8.180029	8.180408
0.360	8.180787	8.181167	8.181546	8.181925	8.182304	8.182684	8.183063	8.183442	8.183822	8.184201
0.370	8.184581	8.184960	8.185339	8.185719	8.186098	8.186478	8.186857	8.187237	8.187616	8.187996
0.380	8.188375	8.188755	8.189134	8.189514	8.189893	8.190273	8.190653	8.191032	8.191412	8.191792
0.390	8.192171	8.192551	8.192931	8.193310	8.193690	8.194070	8.194450	8.194829	8.195209	8.195589
0.400	8.195969	8.196348	8.196728	8.197108	8.197488	8.197868	8.198248	8.198628	8.199008	8.199387
0.410	8.199767	8.200147	8.200527	8.200907	8.201287	8.201667	8.202047	8.202427	8.202807	8.203187
0.420	8.203568	8.203948	8.204328	8.204708	8.205088	8.205468	8.205848	8.206228	8.206609	8.206989
0.430	8.207369	8.207749	8.208129	8.208510	8.208890	8.209270	8.209650	8.210031	8.210411	8.210791
0.440	8.211172	8.211552	8.211932	8.212313	8.212693	8.213074	8.213454	8.213835	8.214215	8.214595
0.450	8.214976	8.215356	8.215737	8.216117	8.216498	8.216879	8.217259	8.217640	8.218020	8.218401
0.460	8.218781	8.219162	8.219543	8.219923	8.220304	8.220685	8.221065	8.221446	8.221827	8.222208
0.470	8.222588	8.222969	8.223350	8.223731	8.224112	8.224492	8.224873	8.225254	8.225635	8.226016
0.480	8.226397	8.226778	8.227158	8.227539	8.227920	8.228301	8.228682	8.229063	8.229444	8.229825
0.490	8.230206	8.230587	8.230968	8.231349	8.231730	8.232112	8.232493	8.232874	8.233255	8.233636

ATTENUATION IN DECIBELS
THETA FROM 51.500 TO 51.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	8.234017	8.234398	8.234780	8.235161	8.235542	8.235923	8.236305	8.236686	8.237067	8.237448
0.510	8.237830	8.238211	8.238592	8.238974	8.239355	8.239736	8.240118	8.240499	8.240880	8.241262
0.520	8.241643	8.242025	8.242406	8.242788	8.243169	8.243551	8.243932	8.244314	8.244695	8.245077
0.530	8.245458	8.245840	8.246222	8.246603	8.246985	8.247367	8.247748	8.248130	8.248512	8.248893
0.540	8.249275	8.249657	8.250038	8.250420	8.250802	8.251184	8.251565	8.251947	8.252329	8.252711
0.550	8.253053	8.253435	8.253816	8.254198	8.254580	8.254962	8.255344	8.255726	8.256108	8.256490
0.560	8.256912	8.257294	8.257676	8.258058	8.258440	8.258822	8.259204	8.259586	8.259968	8.260350
0.570	8.260733	8.261115	8.261497	8.261879	8.262261	8.262643	8.263026	8.263408	8.263790	8.264172
0.580	8.264555	8.264937	8.265319	8.265701	8.266084	8.266466	8.266848	8.267231	8.267613	8.267995
0.590	8.268378	8.268760	8.269143	8.269525	8.269907	8.270290	8.270672	8.271055	8.271437	8.271820
0.600	8.272202	8.272585	8.272968	8.273350	8.273733	8.274115	8.274498	8.274881	8.275263	8.275646
0.610	8.276029	8.276411	8.276794	8.277177	8.277559	8.277942	8.278325	8.278703	8.279090	8.279473
0.620	8.279826	8.280209	8.280592	8.280974	8.281357	8.281740	8.282123	8.282506	8.282891	8.283273
0.630	8.283665	8.284048	8.284431	8.284814	8.285197	8.285580	8.285963	8.286346	8.286729	8.287112
0.640	8.287515	8.287898	8.288281	8.288664	8.289047	8.289430	8.289814	8.290197	8.290580	8.290963
0.650	8.291346	8.291730	8.292113	8.292496	8.292879	8.293263	8.293646	8.294029	8.294413	8.294796
0.660	8.295179	8.295563	8.295946	8.296329	8.296713	8.297096	8.297480	8.297863	8.298247	8.298630
0.670	8.299014	8.299397	8.299781	8.300164	8.300548	8.300931	8.301315	8.301698	8.302082	8.302466
0.680	8.302849	8.303233	8.303617	8.304000	8.304384	8.304768	8.305151	8.305535	8.305919	8.306303
0.690	8.306686	8.307070	8.307454	8.307838	8.308222	8.308605	8.308989	8.309373	8.309757	8.310141
0.700	8.310525	8.310909	8.311293	8.311677	8.312060	8.312444	8.312829	8.313213	8.313596	8.313981
0.710	8.314365	8.314749	8.315133	8.315517	8.315901	8.316285	8.316669	8.317053	8.317437	8.317822
0.720	8.318206	8.318590	8.318974	8.319358	8.319743	8.320127	8.320511	8.320895	8.321280	8.321664
0.730	8.322043	8.322427	8.322811	8.323195	8.323580	8.323964	8.324348	8.324733	8.325117	8.325502
0.740	8.325892	8.326277	8.326661	8.327046	8.327430	8.327815	8.328199	8.328584	8.328968	8.329353
0.750	8.329738	8.330122	8.330507	8.330891	8.331276	8.331661	8.332045	8.332430	8.332815	8.333200
0.760	8.333584	8.333969	8.334354	8.334738	8.335123	8.335508	8.335893	8.336278	8.336663	8.337047
0.770	8.337432	8.337817	8.338202	8.338587	8.338972	8.339357	8.339742	8.340127	8.340512	8.340897
0.780	8.341282	8.341667	8.342052	8.342437	8.342822	8.343207	8.343592	8.343977	8.344362	8.344748
0.790	8.345133	8.345518	8.345903	8.346288	8.346673	8.347059	8.347444	8.347829	8.348214	8.348600
0.800	8.348985	8.349370	8.349756	8.350141	8.350526	8.350911	8.351297	8.351682	8.352068	8.352453
0.810	8.352839	8.353224	8.353609	8.353995	8.354380	8.354766	8.355151	8.355537	8.355922	8.356308
0.820	8.356694	8.357079	8.357465	8.357850	8.358236	8.358621	8.359007	8.359393	8.359779	8.360164
0.830	8.360550	8.360936	8.361321	8.361707	8.362093	8.362479	8.362864	8.363250	8.363636	8.364022
0.840	8.364408	8.364793	8.365179	8.365565	8.365951	8.366337	8.366723	8.367109	8.367495	8.367881
0.850	8.368267	8.368653	8.369039	8.369425	8.369811	8.370197	8.370583	8.370969	8.371355	8.371741
0.860	8.372127	8.372513	8.372900	8.373286	8.373672	8.374058	8.374444	8.374830	8.375217	8.375603
0.870	8.375989	8.376376	8.376762	8.377148	8.377534	8.377920	8.378307	8.378693	8.379080	8.379466
0.880	8.379853	8.380239	8.380625	8.381012	8.381398	8.381785	8.382171	8.382558	8.382944	8.383331
0.890	8.383717	8.384104	8.384490	8.384877	8.385264	8.385650	8.386037	8.386423	8.386810	8.387197
0.900	8.387593	8.387970	8.388357	8.388743	8.389130	8.389517	8.389904	8.390290	8.390677	8.391064
0.910	8.391451	8.391838	8.392224	8.392611	8.392998	8.393385	8.393772	8.394159	8.394546	8.394933
0.920	8.395320	8.395707	8.396094	8.396481	8.396868	8.397255	8.397642	8.398029	8.398416	8.398803
0.930	8.399190	8.399577	8.399964	8.400351	8.400738	8.401126	8.401513	8.401900	8.402287	8.402674
0.940	8.403062	8.403449	8.403836	8.404223	8.404611	8.404998	8.405385	8.405773	8.406160	8.406547
0.950	8.406935	8.407322	8.407709	8.408097	8.408484	8.408872	8.409259	8.409647	8.410034	8.410422
0.960	8.410809	8.411197	8.411584	8.411972	8.412359	8.412747	8.413134	8.413522	8.413910	8.414297
0.970	8.414675	8.415073	8.415460	8.415848	8.416236	8.416623	8.417011	8.417399	8.417787	8.418174
0.980	8.418562	8.418950	8.419338	8.419726	8.420113	8.420501	8.420889	8.421277	8.421665	8.422053
0.990	8.422441	8.422829	8.423217	8.423605	8.423993	8.424381	8.424769	8.425157	8.425545	8.425933

ATTENUATION IN DECIBELS
THETA FROM 52.000 TO 52.499 DEGREES

THETA IN
DEGREES

0.000	8.426321	8.426709	8.427097	8.427485	8.427873	8.428261	8.428649	8.429038	8.429426	8.429814
0.010	8.430202	8.430590	8.430979	8.431367	8.431755	8.432143	8.432532	8.432920	8.433308	8.433697
0.020	8.434085	8.434473	8.434862	8.435250	8.435639	8.436027	8.436415	8.436804	8.437192	8.437581
0.030	8.437969	8.438358	8.438746	8.439135	8.439523	8.439912	8.440300	8.440689	8.441078	8.441466
0.040	8.441855	8.442243	8.442632	8.443021	8.443409	8.443798	8.444187	8.444576	8.444964	8.445353
0.050	8.445742	8.446131	8.446519	8.446908	8.447297	8.447686	8.448075	8.448464	8.448852	8.449241
0.060	8.449630	8.450019	8.450408	8.450797	8.451186	8.451575	8.451964	8.452353	8.452742	8.453131
0.070	8.453520	8.453909	8.454298	8.454687	8.455076	8.455465	8.455855	8.456244	8.456633	8.457022
0.080	8.457411	8.457800	8.458190	8.458579	8.458968	8.459357	8.459747	8.460136	8.460525	8.460914
0.090	8.461304	8.461693	8.462083	8.462472	8.462861	8.463251	8.463640	8.464030	8.464419	8.464808
0.100	8.465198	8.465587	8.465977	8.466366	8.466756	8.467145	8.467535	8.467924	8.468314	8.468704
0.110	8.469093	8.469483	8.469872	8.470262	8.470652	8.471041	8.471431	8.471821	8.472211	8.472600
0.120	8.472990	8.473380	8.473770	8.474159	8.474549	8.474939	8.475329	8.475719	8.476109	8.476498
0.130	8.476888	8.477278	8.477668	8.478058	8.478448	8.478838	8.479228	8.479618	8.480008	8.480398
0.140	8.480768	8.481158	8.481548	8.481938	8.482328	8.482718	8.483108	8.483498	8.483889	8.484279
0.150	8.484689	8.485079	8.485469	8.485860	8.486250	8.486640	8.487030	8.487420	8.487811	8.488201
0.160	8.488591	8.488982	8.489372	8.489762	8.490153	8.490543	8.490934	8.491324	8.491714	8.492105
0.170	8.489245	8.492886	8.493276	8.493667	8.494057	8.494448	8.494838	8.495229	8.495619	8.496010
0.180	8.496400	8.496791	8.497182	8.497572	8.497963	8.498354	8.498744	8.499135	8.499526	8.499916
0.190	8.500307	8.500698	8.501089	8.501479	8.501869	8.502260	8.502652	8.503043	8.503433	8.503824
0.200	8.504215	8.504606	8.504997	8.505388	8.505779	8.506170	8.506561	8.506952	8.507343	8.507734
0.210	8.508125	8.508516	8.508907	8.509298	8.509689	8.510080	8.510471	8.510862	8.511253	8.511644
0.220	8.512035	8.512427	8.512818	8.513209	8.513600	8.513991	8.514383	8.514774	8.515165	8.515556
0.230	8.515948	8.516339	8.516730	8.517122	8.517513	8.517905	8.518296	8.518687	8.519079	8.519470
0.240	8.519861	8.520253	8.520644	8.521036	8.521427	8.521819	8.522210	8.522602	8.522993	8.523385
0.250	8.523777	8.524168	8.524560	8.524951	8.525343	8.525735	8.526126	8.526518	8.526910	8.527301
0.260	8.527693	8.528085	8.528477	8.528868	8.529260	8.529652	8.530044	8.530436	8.530827	8.531219
0.270	8.531611	8.532003	8.532395	8.532787	8.533179	8.533571	8.533962	8.534354	8.534746	8.535138
0.280	8.535530	8.535922	8.536314	8.536706	8.537099	8.537491	8.537883	8.538275	8.538667	8.539059
0.290	8.539451	8.539843	8.540236	8.540628	8.541020	8.541412	8.541804	8.542197	8.542589	8.542981
0.300	8.543766	8.544158	8.544550	8.544943	8.545335	8.545727	8.546120	8.546512	8.546904	8.547296
0.310	8.547689	8.548082	8.548474	8.548867	8.549259	8.549652	8.550044	8.550437	8.550829	8.551221
0.320	8.551615	8.552007	8.552400	8.552792	8.553185	8.553578	8.553970	8.554363	8.554756	8.555148
0.330	8.555541	8.555934	8.556327	8.556719	8.557112	8.557505	8.557898	8.558290	8.558683	8.559076
0.340	8.559469	8.559862	8.560255	8.560648	8.561041	8.561434	8.561826	8.562220	8.562613	8.563005
0.350	8.563398	8.563792	8.564185	8.564578	8.564971	8.565364	8.565757	8.566150	8.566543	8.566936
0.360	8.567329	8.567722	8.568116	8.568509	8.568902	8.569295	8.569688	8.570082	8.570475	8.570868
0.370	8.571262	8.571655	8.572048	8.572441	8.572835	8.573228	8.573622	8.574015	8.574408	8.574801
0.380	8.574802	8.575195	8.575589	8.575982	8.576375	8.576769	8.577163	8.577556	8.577950	8.578343
0.390	8.578737	8.579130	8.579524	8.579917	8.580311	8.580705	8.581098	8.581492	8.581886	8.582279
0.400	8.583067	8.583460	8.583854	8.584248	8.584642	8.585035	8.585429	8.585823	8.586217	8.586611
0.410	8.586611	8.587005	8.587399	8.587792	8.588186	8.588580	8.588974	8.589368	8.589762	8.590156
0.420	8.590550	8.590944	8.591338	8.591732	8.592126	8.592520	8.592914	8.593308	8.593702	8.594096
0.430	8.594491	8.594885	8.595279	8.595673	8.596067	8.596461	8.596856	8.597250	8.597644	8.598038
0.440	8.598433	8.598827	8.599221	8.599616	8.600010	8.600404	8.600799	8.601193	8.601587	8.601982
0.450	8.602376	8.602771	8.603165	8.603559	8.603954	8.604348	8.604743	8.605137	8.605532	8.605926
0.460	8.606321	8.606716	8.607110	8.607505	8.607899	8.608294	8.608689	8.609083	8.609478	8.609873
0.470	8.610267	8.610662	8.611057	8.611452	8.611846	8.612241	8.612636	8.613031	8.613425	8.613820
0.480	8.614215	8.614610	8.615005	8.615400	8.615795	8.616189	8.616584	8.616979	8.617374	8.617769
0.490	8.618164	8.618559	8.618954	8.619349	8.619744	8.620139	8.620534	8.620929	8.621325	8.621720

ATTENUATION IN DECIBELS
THETA FROM 52.500 TO 52.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	8.622115	8.622510	8.622905	8.623300	8.623695	8.624091	8.624486	8.624881	8.625276	8.625672
0.510	8.626067	8.626462	8.626857	8.627253	8.627648	8.628043	8.628439	8.628834	8.629230	8.629625
0.520	8.630020	8.630416	8.630811	8.631207	8.631602	8.631998	8.632393	8.632789	8.633184	8.633580
0.530	8.633975	8.634371	8.634766	8.635162	8.635558	8.635953	8.636349	8.636744	8.637140	8.637536
0.540	8.637931	8.638327	8.638723	8.639119	8.639514	8.639910	8.640306	8.640702	8.641098	8.641494
0.550	8.641869	8.642265	8.642661	8.643057	8.643453	8.643849	8.644245	8.644640	8.645036	8.645432
0.560	8.645848	8.646244	8.646640	8.647036	8.647432	8.647829	8.648225	8.648621	8.649017	8.649413
0.570	8.649809	8.650205	8.650601	8.650998	8.651394	8.651790	8.652186	8.652582	8.652979	8.653375
0.580	8.653771	8.654167	8.654564	8.654960	8.655356	8.655753	8.656149	8.656545	8.656942	8.657338
0.590	8.657735	8.658131	8.658527	8.658924	8.659320	8.659717	8.660113	8.660510	8.660906	8.661303
0.600	8.661699	8.662096	8.662493	8.662889	8.663286	8.663682	8.664079	8.664476	8.664872	8.665269
0.610	8.665666	8.666062	8.666459	8.666856	8.667253	8.667650	8.668046	8.668443	8.668840	8.669237
0.620	8.669634	8.670030	8.670427	8.670824	8.671221	8.671618	8.672015	8.672412	8.672809	8.673206
0.630	8.673603	8.674000	8.674397	8.674794	8.675191	8.675588	8.675985	8.676382	8.676779	8.677176
0.640	8.677573	8.677971	8.678368	8.678765	8.679162	8.679559	8.679956	8.680354	8.680751	8.681148
0.650	8.681545	8.681943	8.682340	8.682737	8.683135	8.683532	8.683929	8.684327	8.684724	8.685122
0.660	8.685519	8.685916	8.686314	8.686711	8.687109	8.687506	8.687904	8.688301	8.688699	8.689096
0.670	8.689494	8.689892	8.690289	8.690687	8.691084	8.691482	8.691880	8.692277	8.692675	8.693073
0.680	8.693470	8.693868	8.694266	8.694664	8.695061	8.695459	8.695857	8.696255	8.696653	8.697050
0.690	8.697448	8.697846	8.698244	8.698642	8.699040	8.699438	8.699836	8.700234	8.700631	8.701030
0.700	8.701427	8.701825	8.702224	8.702622	8.703020	8.703418	8.703816	8.704214	8.704612	8.705010
0.710	8.705408	8.705806	8.706205	8.706603	8.707001	8.707399	8.707797	8.708196	8.708594	8.708992
0.720	8.709390	8.709789	8.710187	8.710585	8.710984	8.711382	8.711780	8.712179	8.712577	8.712976
0.730	8.713374	8.713772	8.714171	8.714569	8.714968	8.715366	8.715765	8.716163	8.716562	8.716960
0.740	8.717359	8.717758	8.718156	8.718555	8.718953	8.719352	8.719751	8.720149	8.720548	8.720947
0.750	8.721346	8.721744	8.722143	8.722542	8.722941	8.723339	8.723738	8.724137	8.724536	8.724935
0.760	8.725333	8.725732	8.726131	8.726530	8.726929	8.727328	8.727727	8.728126	8.728525	8.728924
0.770	8.729323	8.729722	8.730121	8.730520	8.730919	8.731318	8.731717	8.732116	8.732515	8.732915
0.780	8.733314	8.733713	8.734112	8.734511	8.734910	8.735309	8.735709	8.736108	8.736507	8.736907
0.790	8.737306	8.737705	8.738105	8.738504	8.738903	8.739303	8.739702	8.740101	8.740501	8.740900
0.800	8.741300	8.741699	8.742099	8.742498	8.742898	8.743297	8.743697	8.744096	8.744496	8.744895
0.810	8.745295	8.745694	8.746094	8.746494	8.746893	8.747293	8.747693	8.748092	8.748492	8.748892
0.820	8.749291	8.749691	8.750091	8.750491	8.750890	8.751290	8.751690	8.752090	8.752490	8.752890
0.830	8.753289	8.753689	8.754089	8.754489	8.754889	8.755289	8.755689	8.756089	8.756489	8.756889
0.840	8.757289	8.757689	8.758089	8.758489	8.758889	8.759289	8.759689	8.760090	8.760490	8.760890
0.850	8.761290	8.761690	8.762090	8.762491	8.762891	8.763291	8.763691	8.764091	8.764492	8.764892
0.860	8.765292	8.765693	8.766093	8.766493	8.766894	8.767294	8.767695	8.768095	8.768495	8.768896
0.870	8.769296	8.769697	8.770097	8.770498	8.770898	8.771299	8.771699	8.772100	8.772500	8.772901
0.880	8.773402	8.773802	8.774203	8.774603	8.775004	8.775405	8.775805	8.776206	8.776607	8.777008
0.890	8.777308	8.777709	8.778110	8.778511	8.778911	8.779312	8.779713	8.780114	8.780515	8.780916
0.900	8.781317	8.781718	8.782118	8.782519	8.782920	8.783321	8.783722	8.784123	8.784524	8.784925
0.910	8.785326	8.785727	8.786128	8.786529	8.786931	8.787332	8.787733	8.788134	8.788535	8.788936
0.920	8.789337	8.789739	8.790140	8.790541	8.790942	8.791343	8.791744	8.792146	8.792547	8.792949
0.930	8.793350	8.793751	8.794153	8.794554	8.794955	8.795357	8.795758	8.796160	8.796561	8.796963
0.940	8.797364	8.797765	8.798167	8.798568	8.798970	8.799372	8.799773	8.800175	8.800576	8.800978
0.950	8.801380	8.801781	8.802183	8.802585	8.802986	8.803388	8.803789	8.804191	8.804593	8.804995
0.960	8.805397	8.805798	8.806200	8.806602	8.807004	8.807406	8.807807	8.808209	8.808611	8.809013
0.970	8.809415	8.809817	8.810219	8.810621	8.811023	8.811425	8.811827	8.812229	8.812631	8.813033
0.980	8.813435	8.813837	8.814239	8.814641	8.815043	8.815445	8.815847	8.816250	8.816652	8.817054
0.990	8.817456	8.817858	8.818261	8.818663	8.819065	8.819467	8.819870	8.820272	8.820674	8.821077

ATTENUATION IN DECIBELS
THETA FROM 53.000 TO 53.499 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.000	8.821479	8.821881	8.822284	8.822686	8.823089	8.823491	8.823893	8.824296	8.824698	8.825101
0.010	8.825503	8.825906	8.826308	8.826711	8.827113	8.827516	8.827918	8.828321	8.828724	8.829126
0.020	8.829529	8.829932	8.830334	8.830737	8.831140	8.831542	8.831945	8.832348	8.832751	8.833153
0.030	8.833556	8.833959	8.834362	8.834765	8.835167	8.835570	8.835973	8.836376	8.836779	8.837182
0.040	8.837585	8.837988	8.838391	8.838794	8.839197	8.839600	8.840003	8.840406	8.840809	8.841212
0.050	8.841615	8.842018	8.842421	8.842824	8.843227	8.843630	8.844033	8.844436	8.844840	8.845243
0.060	8.845647	8.846050	8.846453	8.846856	8.847260	8.847663	8.848066	8.848469	8.848873	8.849276
0.070	8.849679	8.850083	8.850486	8.850890	8.851293	8.851697	8.852100	8.852504	8.852907	8.853310
0.080	8.853714	8.854118	8.854521	8.854925	8.855328	8.855732	8.856135	8.856539	8.856943	8.857346
0.090	8.857750	8.858154	8.858557	8.858961	8.859365	8.859769	8.860172	8.860576	8.860980	8.861384
0.100	8.861787	8.862191	8.862595	8.862999	8.863403	8.863807	8.864211	8.864614	8.865018	8.865422
0.110	8.865826	8.866230	8.866634	8.867038	8.867442	8.867846	8.868250	8.868654	8.869058	8.869463
0.120	8.869867	8.870271	8.870675	8.871079	8.871483	8.871887	8.872292	8.872696	8.873100	8.873504
0.130	8.873909	8.874313	8.874717	8.875121	8.875526	8.875930	8.876334	8.876739	8.877143	8.877547
0.140	8.877952	8.878356	8.878761	8.879165	8.879570	8.879974	8.880379	8.880783	8.881188	8.881592
0.150	8.881977	8.882401	8.882866	8.883210	8.883615	8.884020	8.884424	8.884829	8.885234	8.885638
0.160	8.886043	8.886448	8.886852	8.887257	8.887662	8.888067	8.888471	8.888876	8.889281	8.889686
0.170	8.890091	8.890496	8.890900	8.891305	8.891710	8.892115	8.892520	8.892925	8.893330	8.893735
0.180	8.894140	8.894545	8.894950	8.895355	8.895760	8.896165	8.896570	8.896975	8.897380	8.897785
0.190	8.898190	8.898596	8.899001	8.899406	8.899811	8.900216	8.900622	8.901027	8.901432	8.901837
0.200	8.902243	8.902648	8.903053	8.903459	8.903864	8.904269	8.904675	8.905080	8.905486	8.905891
0.210	8.906296	8.906702	8.907107	8.907513	8.907918	8.908324	8.908729	8.909135	8.909540	8.909946
0.220	8.910351	8.910757	8.911163	8.911568	8.911974	8.912380	8.912785	8.913191	8.913597	8.914002
0.230	8.914408	8.914814	8.915219	8.915625	8.916031	8.916437	8.916843	8.917248	8.917654	8.918060
0.240	8.918465	8.918872	8.919278	8.919684	8.920090	8.920496	8.920902	8.921308	8.921714	8.922119
0.250	8.922526	8.922932	8.923338	8.923744	8.924150	8.924556	8.924962	8.925368	8.925774	8.926180
0.260	8.926587	8.926993	8.927399	8.927805	8.928211	8.928618	8.929024	8.929430	8.929836	8.930243
0.270	8.930649	8.931055	8.931462	8.931868	8.932274	8.932681	8.933087	8.933494	8.933900	8.934307
0.280	8.934713	8.935120	8.935526	8.935933	8.936339	8.936746	8.937152	8.937559	8.937965	8.938372
0.290	8.938779	8.939185	8.939592	8.939998	8.940405	8.940812	8.941218	8.941625	8.942032	8.942439
0.300	8.942845	8.943252	8.943659	8.944066	8.944473	8.944879	8.945286	8.945693	8.946100	8.946507
0.310	8.946914	8.947321	8.947728	8.948135	8.948542	8.948949	8.949356	8.949763	8.950170	8.950577
0.320	8.950984	8.951391	8.951798	8.952205	8.952612	8.953019	8.953426	8.953833	8.954241	8.954648
0.330	8.955055	8.955462	8.955870	8.956277	8.956684	8.957091	8.957499	8.957906	8.958313	8.958721
0.340	8.959128	8.959535	8.959943	8.960350	8.960757	8.961165	8.961572	8.961980	8.962387	8.962795
0.350	8.963202	8.963610	8.964017	8.964425	8.964832	8.965240	8.965648	8.966055	8.966463	8.966870
0.360	8.967278	8.967686	8.968094	8.968501	8.968909	8.969317	8.969724	8.970132	8.970540	8.970948
0.370	8.971355	8.971763	8.972171	8.972579	8.972987	8.973395	8.973803	8.974210	8.974618	8.975026
0.380	8.975434	8.975842	8.976250	8.976658	8.977066	8.977474	8.977882	8.978290	8.978698	8.979106
0.390	8.979514	8.979923	8.980331	8.980739	8.981147	8.981555	8.981963	8.982372	8.982780	8.983188
0.400	8.983596	8.984004	8.984413	8.984821	8.985229	8.985638	8.986046	8.986454	8.986863	8.987271
0.410	8.987680	8.988088	8.988496	8.988905	8.989313	8.989722	8.990130	8.990539	8.990947	8.991356
0.420	8.991764	8.992173	8.992581	8.992990	8.993399	8.993807	8.994216	8.994624	8.995033	8.995442
0.430	8.995851	8.996259	8.996668	8.997077	8.997486	8.997894	8.998303	8.998712	8.999121	8.999529
0.440	8.999938	9.000347	9.000756	9.001165	9.001574	9.001983	9.002392	9.002801	9.003210	9.003619
0.450	9.004027	9.004436	9.004845	9.005255	9.005664	9.006073	9.006482	9.006891	9.007300	9.007709
0.460	9.008118	9.008527	9.008937	9.009346	9.009755	9.010164	9.010573	9.010983	9.011392	9.011801
0.470	9.012210	9.012620	9.013029	9.013438	9.013848	9.014257	9.014666	9.015076	9.015485	9.015895
0.480	9.016304	9.016714	9.017123	9.017533	9.017942	9.018352	9.018761	9.019171	9.019580	9.019990
0.490	9.020399	9.020809	9.021219	9.021628	9.022038	9.022447	9.022857	9.023267	9.023677	9.024086

ATTENUATION IN DECIBELS
THETA FROM 53.500 TO 53.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	9.024496	9.024906	9.025316	9.025725	9.026135	9.026545	9.026955	9.027365	9.027774	9.028184
0.510	9.028594	9.029004	9.029414	9.029824	9.030234	9.030644	9.031054	9.031464	9.031874	9.032284
0.520	9.032694	9.033104	9.033514	9.033924	9.034334	9.034744	9.035154	9.035565	9.035975	9.036385
0.530	9.036795	9.037205	9.037616	9.038026	9.038436	9.038846	9.039257	9.039667	9.040077	9.040487
0.540	9.040898	9.041308	9.041718	9.042129	9.042539	9.042950	9.043360	9.043771	9.044181	9.044591
0.550	9.045002	9.045412	9.045823	9.046233	9.046644	9.047055	9.047465	9.047876	9.048286	9.048697
0.560	9.049108	9.049518	9.049929	9.050340	9.050750	9.051161	9.051572	9.051983	9.052393	9.052804
0.570	9.053215	9.053626	9.054036	9.054447	9.054858	9.055269	9.055680	9.056091	9.056502	9.056913
0.580	9.057323	9.057734	9.058145	9.058556	9.058967	9.059378	9.059789	9.060200	9.060611	9.061023
0.590	9.061434	9.061845	9.062256	9.062667	9.063078	9.063489	9.063900	9.064312	9.064723	9.065134
0.600	9.065545	9.065957	9.066368	9.066779	9.067190	9.067602	9.068013	9.068424	9.068836	9.069247
0.610	9.069659	9.070070	9.070481	9.070893	9.071304	9.071716	9.072127	9.072539	9.072950	9.073362
0.620	9.073773	9.074185	9.074596	9.075008	9.075420	9.075831	9.076243	9.076654	9.077066	9.077478
0.630	9.077889	9.078301	9.078713	9.079125	9.079536	9.079948	9.080360	9.080772	9.081183	9.081595
0.640	9.082007	9.082419	9.082831	9.083243	9.083655	9.084067	9.084478	9.084890	9.085302	9.085714
0.650	9.086126	9.086538	9.086950	9.087362	9.087774	9.088187	9.088599	9.089011	9.089423	9.089835
0.660	9.090247	9.090659	9.091071	9.091484	9.091896	9.092308	9.092720	9.093132	9.093545	9.093957
0.670	9.094369	9.094782	9.095194	9.095606	9.096019	9.096431	9.096843	9.097256	9.097668	9.098081
0.680	9.098493	9.098905	9.099318	9.099730	9.100143	9.100555	9.100968	9.101380	9.101793	9.102206
0.690	9.102618	9.103031	9.103443	9.103856	9.104269	9.104681	9.105094	9.105507	9.105919	9.106332
0.700	9.106745	9.107158	9.107571	9.107983	9.108396	9.108809	9.109222	9.109635	9.110047	9.110460
0.710	9.110873	9.111286	9.111699	9.112112	9.112525	9.112938	9.113351	9.113764	9.114177	9.114590
0.720	9.115003	9.115416	9.115829	9.116242	9.116655	9.117068	9.117482	9.117895	9.118308	9.118721
0.730	9.119134	9.119547	9.119961	9.120374	9.120787	9.121200	9.121614	9.122027	9.122440	9.122854
0.740	9.123267	9.123680	9.124094	9.124507	9.124921	9.125334	9.125747	9.126161	9.126574	9.126988
0.750	9.127401	9.127815	9.128228	9.128642	9.129056	9.129469	9.129883	9.130296	9.130710	9.131124
0.760	9.131537	9.131951	9.132365	9.132778	9.133192	9.133606	9.134019	9.134433	9.134847	9.135261
0.770	9.135674	9.136088	9.136502	9.136916	9.137330	9.137744	9.138158	9.138572	9.138985	9.139399
0.780	9.139813	9.140227	9.140641	9.141055	9.141469	9.141883	9.142297	9.142711	9.143125	9.143540
0.790	9.143954	9.144368	9.144782	9.145196	9.145610	9.146024	9.146439	9.146853	9.147267	9.147681
0.800	9.148095	9.148510	9.148924	9.149338	9.149753	9.150167	9.150581	9.150996	9.151410	9.151824
0.810	9.152239	9.152653	9.153068	9.153482	9.153897	9.154311	9.154726	9.155140	9.155555	9.155969
0.820	9.156384	9.156798	9.157213	9.157628	9.158042	9.158457	9.158872	9.159286	9.159701	9.160116
0.830	9.160530	9.160945	9.161360	9.161775	9.162189	9.162604	9.163019	9.163434	9.163849	9.164263
0.840	9.164678	9.165093	9.165508	9.165923	9.166338	9.166753	9.167168	9.167583	9.167998	9.168413
0.850	9.168828	9.169243	9.169658	9.170073	9.170488	9.170903	9.171318	9.171733	9.172148	9.172563
0.860	9.172979	9.173394	9.173809	9.174224	9.174639	9.175055	9.175470	9.175885	9.176301	9.176716
0.870	9.177131	9.177547	9.177962	9.178377	9.178793	9.179208	9.179623	9.180039	9.180454	9.180870
0.880	9.181285	9.181701	9.182116	9.182532	9.182947	9.183363	9.183778	9.184194	9.184610	9.185025
0.890	9.185441	9.185856	9.186272	9.186688	9.187103	9.187519	9.187935	9.188351	9.188766	9.189182
0.900	9.189598	9.190014	9.190429	9.190845	9.191261	9.191677	9.192093	9.192509	9.192925	9.193341
0.910	9.193756	9.194172	9.194588	9.195004	9.195420	9.195836	9.196252	9.196668	9.197084	9.197500
0.920	9.197917	9.198333	9.198749	9.199165	9.199581	9.199997	9.200413	9.200830	9.201246	9.201662
0.930	9.202078	9.202494	9.202911	9.203327	9.203743	9.204160	9.204576	9.204992	9.205409	9.205825
0.940	9.206241	9.206658	9.207074	9.207491	9.207907	9.208323	9.208740	9.209157	9.209573	9.209990
0.950	9.210406	9.210823	9.211239	9.211656	9.212072	9.212489	9.212906	9.213322	9.213739	9.214156
0.960	9.214572	9.214989	9.215406	9.215822	9.216239	9.216656	9.217073	9.217490	9.217906	9.218323
0.970	9.218740	9.219157	9.219574	9.219991	9.220408	9.220824	9.221241	9.221658	9.222075	9.222492
0.980	9.222909	9.223326	9.223743	9.224160	9.224578	9.224995	9.225412	9.225829	9.226246	9.226663
0.990	9.227080	9.227497	9.227915	9.228332	9.228749	9.229166	9.229583	9.230001	9.230418	9.230835

ATTENUATION IN DECIBELS
THETA FROM 54.000 TO 54.499 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.000	9.231253	9.231670	9.232087	9.232504	9.232922	9.233339	9.233757	9.234174	9.234591	9.235009
0.010	9.235426	9.235844	9.236261	9.236679	9.237096	9.237514	9.237931	9.238349	9.238767	9.239184
0.020	9.239602	9.240019	9.240437	9.240855	9.241272	9.241690	9.242108	9.242526	9.242943	9.243361
0.030	9.243779	9.244197	9.244614	9.245032	9.245450	9.245868	9.246286	9.246704	9.247121	9.247539
0.040	9.247957	9.248375	9.248793	9.249211	9.249629	9.250047	9.250465	9.250883	9.251301	9.251719
0.050	9.252137	9.252555	9.252973	9.253392	9.253810	9.254228	9.254646	9.255064	9.255482	9.255901
0.060	9.256319	9.256737	9.257155	9.257574	9.257992	9.258410	9.258829	9.259247	9.259665	9.260084
0.070	9.260502	9.260920	9.261339	9.261757	9.262176	9.262594	9.263013	9.263431	9.263849	9.264268
0.080	9.264687	9.265105	9.265524	9.265942	9.266361	9.266779	9.267198	9.267617	9.268035	9.268454
0.090	9.268873	9.269291	9.269710	9.270129	9.270548	9.270966	9.271385	9.271804	9.272223	9.272642
0.100	9.273060	9.273479	9.273898	9.274317	9.274736	9.275155	9.275574	9.275993	9.276412	9.276831
0.110	9.277250	9.277669	9.278088	9.278507	9.278926	9.279345	9.279764	9.280183	9.280602	9.281021
0.120	9.281440	9.281860	9.282279	9.282698	9.283117	9.283536	9.283956	9.284375	9.284794	9.285213
0.130	9.285633	9.286052	9.286471	9.286891	9.287310	9.287730	9.288149	9.288568	9.288988	9.289407
0.140	9.289827	9.290246	9.290666	9.291085	9.291505	9.291924	9.292344	9.292763	9.293183	9.293602
0.150	9.294022	9.294442	9.294861	9.295281	9.295701	9.296120	9.296540	9.296960	9.297379	9.297799
0.160	9.298219	9.298639	9.299059	9.299478	9.299898	9.300318	9.300738	9.301158	9.301578	9.301998
0.170	9.302418	9.302837	9.303257	9.303677	9.304097	9.304517	9.304937	9.305357	9.305777	9.306197
0.180	9.306617	9.307038	9.307458	9.307878	9.308298	9.308718	9.309138	9.309558	9.309979	9.310399
0.190	9.310819	9.311239	9.311660	9.312080	9.312500	9.312920	9.313341	9.313761	9.314181	9.314602
0.200	9.315022	9.315443	9.315863	9.316283	9.316704	9.317124	9.317545	9.317965	9.318386	9.318806
0.210	9.319227	9.319647	9.320068	9.320489	9.320909	9.321330	9.321750	9.322171	9.322592	9.323012
0.220	9.323433	9.323854	9.324275	9.324695	9.325116	9.325537	9.325958	9.326378	9.326799	9.327220
0.230	9.327641	9.328062	9.328483	9.328903	9.329324	9.329745	9.330166	9.330587	9.331008	9.331429
0.240	9.331850	9.332271	9.332692	9.333113	9.333534	9.333955	9.334376	9.334798	9.335219	9.335640
0.250	9.336061	9.336482	9.336903	9.337325	9.337746	9.338167	9.338588	9.339010	9.339431	9.339852
0.260	9.340273	9.340695	9.341116	9.341537	9.341959	9.342380	9.342802	9.343223	9.343644	9.344066
0.270	9.344487	9.344909	9.345330	9.345752	9.346173	9.346595	9.347017	9.347438	9.347860	9.348281
0.280	9.348703	9.349125	9.349546	9.349968	9.350390	9.350811	9.351233	9.351655	9.352077	9.352498
0.290	9.352920	9.353342	9.353764	9.354185	9.354607	9.355029	9.355451	9.355873	9.356295	9.356717
0.300	9.357139	9.357561	9.357983	9.358405	9.358827	9.359249	9.359671	9.360093	9.360515	9.360937
0.310	9.361359	9.361781	9.362203	9.362625	9.363047	9.363469	9.363892	9.364314	9.364736	9.365158
0.320	9.365581	9.366003	9.366425	9.366847	9.367270	9.367692	9.368114	9.368537	9.368959	9.369381
0.330	9.369804	9.370226	9.370649	9.371071	9.371494	9.371916	9.372339	9.372761	9.373184	9.373606
0.340	9.374029	9.374451	9.374874	9.375296	9.375719	9.376142	9.376564	9.376987	9.377410	9.377832
0.350	9.378255	9.378678	9.379101	9.379523	9.379946	9.380369	9.380792	9.381214	9.381637	9.382060
0.360	9.382483	9.382906	9.383329	9.383752	9.384175	9.384598	9.385021	9.385444	9.385867	9.386290
0.370	9.387136	9.387559	9.387982	9.388405	9.388828	9.389251	9.389674	9.390097	9.390520	9.390943
0.380	9.390944	9.391367	9.391790	9.392213	9.392637	9.393060	9.393483	9.393906	9.394330	9.394753
0.390	9.395176	9.395600	9.396023	9.396446	9.396870	9.397293	9.397717	9.398140	9.398564	9.398987
0.400	9.399834	9.400257	9.400681	9.401105	9.401528	9.401952	9.402375	9.402799	9.403223	9.403646
0.410	9.403666	9.404090	9.404514	9.404938	9.405361	9.405785	9.406209	9.406632	9.407056	9.407480
0.420	9.407884	9.408307	9.408731	9.409155	9.409579	9.410003	9.410427	9.410851	9.411275	9.411698
0.430	9.412122	9.412546	9.412970	9.413394	9.413818	9.414243	9.414667	9.415091	9.415515	9.415939
0.440	9.416363	9.416787	9.417211	9.417635	9.418059	9.418484	9.418908	9.419332	9.419756	9.420181
0.450	9.420605	9.421029	9.421453	9.421878	9.422302	9.422727	9.423151	9.423575	9.424000	9.424424
0.460	9.424848	9.425273	9.425697	9.426122	9.426546	9.426971	9.427395	9.427820	9.428244	9.428669
0.470	9.429094	9.429518	9.429943	9.430367	9.430792	9.431217	9.431641	9.432066	9.432491	9.432916
0.480	9.433340	9.433765	9.434190	9.434615	9.435040	9.435464	9.435889	9.436314	9.436739	9.437164
0.490	9.437589	9.438014	9.438438	9.438863	9.439288	9.439713	9.440138	9.440563	9.440988	9.441413

ATTENUATION IN DECIBELS
THETA FROM 54.500 TO 54.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	9.441839	9.442264	9.442689	9.443114	9.443539	9.443964	9.444389	9.444814	9.445240	9.445665
0.510	9.446090	9.446515	9.446940	9.447366	9.447791	9.448216	9.448642	9.449067	9.449492	9.449918
0.520	9.450343	9.450768	9.451194	9.451619	9.452044	9.452470	9.452895	9.453321	9.453746	9.454172
0.530	9.454597	9.455023	9.455449	9.455874	9.456300	9.456725	9.457151	9.457577	9.458002	9.458428
0.540	9.458854	9.459279	9.459705	9.460131	9.460557	9.460982	9.461408	9.461834	9.462260	9.462685
0.550	9.463111	9.463537	9.463963	9.464389	9.464815	9.465241	9.465667	9.466093	9.466519	9.466945
0.560	9.467371	9.467797	9.468223	9.468649	9.469075	9.469501	9.469927	9.470353	9.470779	9.471205
0.570	9.471631	9.472058	9.472484	9.472910	9.473336	9.473762	9.474189	9.474615	9.475041	9.475468
0.580	9.475894	9.476320	9.476747	9.477173	9.477599	9.478026	9.478452	9.478878	9.479305	9.479731
0.590	9.480158	9.480584	9.481011	9.481437	9.481864	9.482290	9.482717	9.483144	9.483570	9.483997
0.600	9.484423	9.484850	9.485277	9.485703	9.486130	9.486557	9.486984	9.487410	9.487837	9.488264
0.610	9.488691	9.489117	9.489544	9.489971	9.490398	9.490825	9.491252	9.491678	9.492105	9.492532
0.620	9.492959	9.493386	9.493813	9.494240	9.494667	9.495094	9.495521	9.495948	9.496375	9.496802
0.630	9.497230	9.497657	9.498084	9.498511	9.498938	9.499365	9.499792	9.500220	9.500647	9.501074
0.640	9.501501	9.501929	9.502356	9.502783	9.503211	9.503638	9.504065	9.504493	9.504920	9.505347
0.650	9.505775	9.506202	9.506630	9.507057	9.507485	9.507912	9.508340	9.508767	9.509195	9.509622
0.660	9.510050	9.510478	9.510905	9.511333	9.511760	9.512188	9.512616	9.513044	9.513471	9.513899
0.670	9.514327	9.514754	9.515182	9.515610	9.516038	9.516466	9.516893	9.517321	9.517749	9.518177
0.680	9.518605	9.519033	9.519461	9.519889	9.520317	9.520745	9.521173	9.521600	9.522029	9.522457
0.690	9.522885	9.523313	9.523741	9.524169	9.524597	9.525025	9.525453	9.525881	9.526310	9.526738
0.700	9.527166	9.527594	9.528023	9.528451	9.528879	9.529307	9.529736	9.530164	9.530592	9.531021
0.710	9.531449	9.531877	9.532306	9.532734	9.533163	9.533591	9.534020	9.534448	9.534876	9.535305
0.720	9.535734	9.536162	9.536591	9.537019	9.537448	9.537876	9.538305	9.538734	9.539162	9.539591
0.730	9.540020	9.540448	9.540877	9.541306	9.541735	9.542163	9.542592	9.543021	9.543450	9.543879
0.740	9.544307	9.544736	9.545165	9.545594	9.546023	9.546452	9.546881	9.547310	9.547739	9.548168
0.750	9.548597	9.549026	9.549455	9.549884	9.550313	9.550742	9.551171	9.551600	9.552029	9.552458
0.760	9.552888	9.553317	9.553746	9.554175	9.554604	9.555034	9.555463	9.555892	9.556322	9.556751
0.770	9.557180	9.557609	9.558039	9.558468	9.558897	9.559327	9.559756	9.560186	9.560615	9.561045
0.780	9.561474	9.561904	9.562333	9.562763	9.563192	9.563622	9.564051	9.564481	9.564911	9.565341
0.790	9.565770	9.566200	9.566629	9.567059	9.567489	9.567918	9.568348	9.568778	9.569208	9.569637
0.800	9.570067	9.570497	9.570927	9.571357	9.571787	9.572216	9.572646	9.573076	9.573506	9.573936
0.810	9.574366	9.574796	9.575226	9.575656	9.576086	9.576516	9.576946	9.577376	9.577806	9.578236
0.820	9.578666	9.579097	9.579527	9.579957	9.580387	9.580817	9.581247	9.581678	9.582108	9.582538
0.830	9.582968	9.583399	9.583829	9.584259	9.584690	9.585120	9.585550	9.585981	9.586411	9.586842
0.840	9.587272	9.587703	9.588133	9.588564	9.588994	9.589424	9.589855	9.590286	9.590716	9.591147
0.850	9.591577	9.592008	9.592439	9.592869	9.593300	9.593731	9.594161	9.594592	9.595023	9.595453
0.860	9.595884	9.596315	9.596746	9.597177	9.597607	9.598038	9.598469	9.598900	9.599331	9.599762
0.870	9.600193	9.600623	9.601054	9.601485	9.601916	9.602347	9.602778	9.603209	9.603641	9.604071
0.880	9.604503	9.604934	9.605365	9.605796	9.606227	9.606658	9.607089	9.607521	9.607952	9.608383
0.890	9.608814	9.609246	9.609677	9.610108	9.610539	9.610971	9.611402	9.611833	9.612265	9.612696
0.900	9.613127	9.613559	9.613990	9.614422	9.614853	9.615285	9.615716	9.616148	9.616579	9.617011
0.910	9.617442	9.617874	9.618305	9.618737	9.619169	9.619600	9.620032	9.620464	9.620895	9.621327
0.920	9.621759	9.622190	9.622622	9.623054	9.623486	9.623918	9.624349	9.624781	9.625213	9.625645
0.930	9.626077	9.626509	9.626941	9.627373	9.627804	9.628236	9.628668	9.629100	9.629532	9.629964
0.940	9.630396	9.630828	9.631261	9.631693	9.632125	9.632557	9.632989	9.633421	9.633853	9.634285
0.950	9.634718	9.635150	9.635582	9.636014	9.636447	9.636879	9.637311	9.637743	9.638176	9.638608
0.960	9.639040	9.639473	9.639905	9.640338	9.640770	9.641202	9.641635	9.642067	9.642500	9.642932
0.970	9.643365	9.643797	9.644230	9.644662	9.645095	9.645528	9.645960	9.646393	9.646826	9.647258
0.980	9.647691	9.648124	9.648556	9.648989	9.649422	9.649855	9.650287	9.650720	9.651153	9.651586
0.990	9.652019	9.652452	9.652884	9.653317	9.653750	9.654183	9.654616	9.655049	9.655482	9.655915

ATTENUATION IN DECIBELS
THETA FROM 55.000 TO 55.499 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.000	9.656348	9.656781	9.657214	9.657647	9.658080	9.658513	9.658946	9.659379	9.659812	9.660246
0.010	9.660679	9.661112	9.661545	9.661978	9.662412	9.662845	9.663278	9.663711	9.664145	9.664578
0.020	9.665011	9.665445	9.665878	9.666311	9.666745	9.667178	9.667611	9.668045	9.668478	9.668912
0.030	9.669345	9.669779	9.670212	9.670646	9.671079	9.671513	9.671947	9.672380	9.672814	9.673247
0.040	9.673681	9.674115	9.674548	9.674982	9.675416	9.675850	9.676283	9.676717	9.677151	9.677585
0.050	9.678018	9.678452	9.678886	9.679320	9.679754	9.680188	9.680622	9.681055	9.681489	9.681923
0.060	9.682357	9.682791	9.683225	9.683659	9.684093	9.684527	9.684961	9.685395	9.685830	9.686264
0.070	9.686698	9.687132	9.687566	9.688000	9.688434	9.688869	9.689303	9.689737	9.690171	9.690606
0.080	9.691040	9.691474	9.691909	9.692343	9.692777	9.693212	9.693646	9.694080	9.694515	9.694949
0.090	9.695384	9.695818	9.696253	9.696687	9.697122	9.697556	9.697991	9.698425	9.698860	9.699295
0.100	9.699729	9.700164	9.700598	9.701033	9.701468	9.701902	9.702337	9.702772	9.703207	9.703641
0.110	9.704076	9.704511	9.704946	9.705381	9.705815	9.706250	9.706685	9.707120	9.707555	9.707990
0.120	9.708425	9.708860	9.709295	9.709730	9.710165	9.710600	9.711035	9.711470	9.711905	9.712340
0.130	9.712775	9.713210	9.713645	9.714080	9.714516	9.714951	9.715386	9.715821	9.716256	9.716692
0.140	9.717127	9.717562	9.717997	9.718433	9.718868	9.719303	9.719739	9.720174	9.720610	9.721045
0.150	9.721480	9.721916	9.722351	9.722787	9.723222	9.723658	9.724093	9.724529	9.724964	9.725400
0.160	9.725835	9.726271	9.726707	9.727142	9.727578	9.728014	9.728449	9.728885	9.729321	9.729756
0.170	9.730192	9.730628	9.731064	9.731499	9.731935	9.732371	9.732807	9.733243	9.733679	9.734115
0.180	9.734550	9.734986	9.735422	9.735858	9.736294	9.736730	9.737166	9.737602	9.738038	9.738474
0.190	9.738910	9.739347	9.739783	9.740219	9.740655	9.741091	9.741527	9.741963	9.742400	9.742836
0.200	9.743272	9.743708	9.744145	9.744581	9.745017	9.745453	9.745890	9.746326	9.746763	9.747199
0.210	9.747635	9.748072	9.748508	9.748945	9.749381	9.749817	9.750254	9.750690	9.751127	9.751564
0.220	9.752000	9.752437	9.752873	9.753310	9.753747	9.754183	9.754620	9.755057	9.755493	9.755930
0.230	9.756367	9.756803	9.757240	9.757677	9.758114	9.758550	9.758987	9.759424	9.759861	9.760298
0.240	9.760735	9.761172	9.761608	9.762045	9.762482	9.762919	9.763356	9.763793	9.764230	9.764667
0.250	9.765104	9.765541	9.765979	9.766416	9.766853	9.767290	9.767727	9.768164	9.768601	9.769039
0.260	9.769476	9.769913	9.770350	9.770787	9.771225	9.771662	9.772099	9.772537	9.772974	9.773411
0.270	9.773849	9.774286	9.774724	9.775161	9.775598	9.776036	9.776473	9.776911	9.777348	9.777786
0.280	9.778223	9.778661	9.779098	9.779536	9.779974	9.780411	9.780849	9.781286	9.781724	9.782162
0.290	9.782600	9.783037	9.783475	9.783913	9.784351	9.784788	9.785226	9.785664	9.786102	9.786540
0.300	9.786977	9.787415	9.787853	9.788291	9.788729	9.789167	9.789605	9.790043	9.790481	9.790919
0.310	9.791357	9.791795	9.792233	9.792671	9.793109	9.793547	9.793985	9.794424	9.794862	9.795300
0.320	9.795738	9.796176	9.796615	9.797053	9.797491	9.797929	9.798368	9.798806	9.799244	9.799682
0.330	9.800121	9.800559	9.800998	9.801436	9.801874	9.802313	9.802751	9.803190	9.803628	9.804067
0.340	9.804505	9.804944	9.805382	9.805821	9.806260	9.806698	9.807137	9.807575	9.808014	9.808453
0.350	9.808891	9.809330	9.809769	9.810207	9.810646	9.811085	9.811524	9.811962	9.812401	9.812840
0.360	9.813279	9.813718	9.814157	9.814596	9.815035	9.815473	9.815912	9.816351	9.816790	9.817229
0.370	9.817668	9.818107	9.818546	9.818985	9.819425	9.819864	9.820303	9.820742	9.821181	9.821620
0.380	9.822059	9.822498	9.822938	9.823377	9.823816	9.824255	9.824695	9.825134	9.825573	9.826012
0.390	9.826452	9.826891	9.827331	9.827770	9.828209	9.828649	9.829088	9.829528	9.829967	9.830407
0.400	9.830846	9.831286	9.831725	9.832165	9.832604	9.833044	9.833483	9.833923	9.834363	9.834802
0.410	9.835242	9.835682	9.836121	9.836561	9.837001	9.837440	9.837880	9.838320	9.838760	9.839200
0.420	9.839640	9.840079	9.840519	9.840959	9.841399	9.841839	9.842279	9.842719	9.843159	9.843599
0.430	9.844039	9.844479	9.844919	9.845359	9.845799	9.846239	9.846679	9.847119	9.847559	9.847999
0.440	9.848439	9.848880	9.849320	9.849760	9.850200	9.850641	9.851081	9.851521	9.851961	9.852402
0.450	9.852842	9.853282	9.853723	9.854163	9.854603	9.855044	9.855484	9.855925	9.856365	9.856806
0.460	9.857246	9.857687	9.858127	9.858568	9.859008	9.859449	9.859889	9.860330	9.860770	9.861211
0.470	9.861652	9.862092	9.862533	9.862974	9.863415	9.863855	9.864296	9.864737	9.865178	9.865618
0.480	9.866059	9.866500	9.866941	9.867382	9.867823	9.868263	9.868704	9.869145	9.869586	9.870027
0.490	9.870468	9.870909	9.871350	9.871791	9.872232	9.872673	9.873114	9.873556	9.873997	9.874438

ATTENUATION IN DECIBELS
THETA FROM 55.500 TO 55.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	9.874879	9.875320	9.875761	9.876202	9.876644	9.877085	9.877526	9.877967	9.878409	9.878850
0.510	9.879231	9.879732	9.880174	9.880615	9.881057	9.881498	9.881939	9.882381	9.882822	9.883264
0.520	9.883705	9.884147	9.884583	9.885020	9.885471	9.885913	9.886354	9.886796	9.887238	9.887679
0.530	9.888121	9.888562	9.889004	9.889446	9.889888	9.890329	9.890771	9.891213	9.891654	9.892096
0.540	9.892538	9.892980	9.893422	9.893864	9.894305	9.894747	9.895189	9.895631	9.896073	9.896515
0.550	9.896957	9.897399	9.897841	9.898283	9.898725	9.899167	9.899609	9.900051	9.900493	9.900936
0.560	9.901378	9.901820	9.902262	9.902704	9.903146	9.903589	9.904031	9.904473	9.904915	9.905358
0.570	9.905800	9.906242	9.906685	9.907127	9.907569	9.908012	9.908454	9.908896	9.909339	9.909781
0.580	9.910224	9.910666	9.911109	9.911551	9.911994	9.912436	9.912879	9.913321	9.913764	9.914207
0.590	9.914649	9.915092	9.915535	9.915977	9.916420	9.916863	9.917305	9.917748	9.918191	9.918634
0.600	9.919077	9.919519	9.919962	9.920405	9.920848	9.921291	9.921734	9.922177	9.922620	9.923062
0.610	9.923505	9.923948	9.924391	9.924834	9.925277	9.925721	9.926164	9.926607	9.927050	9.927493
0.620	9.927936	9.928379	9.928822	9.929265	9.929709	9.930152	9.930595	9.931038	9.931482	9.931925
0.630	9.932368	9.932811	9.933255	9.933698	9.934142	9.934585	9.935028	9.935472	9.935915	9.936359
0.640	9.936802	9.937245	9.937689	9.938133	9.938576	9.939020	9.939463	9.939907	9.940350	9.940794
0.650	9.941238	9.941681	9.942125	9.942569	9.943012	9.943456	9.943900	9.944343	9.944787	9.945231
0.660	9.945675	9.946119	9.946562	9.947006	9.947450	9.947894	9.948338	9.948782	9.949226	9.949670
0.670	9.950114	9.950558	9.951002	9.951446	9.951890	9.952334	9.952778	9.953222	9.953666	9.954110
0.680	9.954554	9.954998	9.955442	9.955887	9.956331	9.956775	9.957219	9.957663	9.958108	9.958552
0.690	9.958996	9.959441	9.959885	9.960329	9.960774	9.961218	9.961662	9.962107	9.962551	9.962996
0.700	9.963440	9.963885	9.964329	9.964774	9.965218	9.965663	9.966107	9.966552	9.966996	9.967441
0.710	9.967856	9.968300	9.968745	9.969190	9.969634	9.970079	9.970524	9.970969	9.971413	9.971858
0.720	9.972333	9.972778	9.973222	9.973667	9.974112	9.974557	9.975002	9.975447	9.975892	9.976337
0.730	9.976782	9.977227	9.977672	9.978117	9.978562	9.979007	9.979452	9.979897	9.980342	9.980787
0.740	9.981232	9.981677	9.982122	9.982568	9.983013	9.983458	9.983903	9.984348	9.984794	9.985239
0.750	9.985634	9.986079	9.986525	9.986970	9.987416	9.987861	9.988306	9.988752	9.989197	9.989643
0.760	9.990138	9.990584	9.991029	9.991475	9.991920	9.992366	9.992811	9.993257	9.993702	9.994148
0.770	9.994594	9.995039	9.995485	9.995931	9.996376	9.996822	9.997268	9.997714	9.998159	9.998605
0.780	9.999051	9.999497	9.999943	10.000388	10.000834	10.001280	10.001726	10.002172	10.002618	10.003064
0.790	10.003510	10.003956	10.004402	10.004848	10.005294	10.005740	10.006186	10.006632	10.007078	10.007524
0.800	10.007970	10.008416	10.008862	10.009309	10.009755	10.010201	10.010647	10.011094	10.011540	10.011986
0.810	10.012432	10.012879	10.013325	10.013771	10.014218	10.014664	10.015111	10.015557	10.016003	10.016450
0.820	10.016896	10.017343	10.017789	10.018236	10.018682	10.019129	10.019575	10.020022	10.020469	10.020915
0.830	10.021362	10.021809	10.022255	10.022702	10.023149	10.023595	10.024042	10.024489	10.024936	10.025382
0.840	10.025819	10.026276	10.026723	10.027170	10.027617	10.028063	10.028510	10.028957	10.029404	10.029851
0.850	10.030298	10.030745	10.031192	10.031639	10.032086	10.032533	10.032980	10.033427	10.033874	10.034322
0.860	10.034769	10.035216	10.035663	10.036110	10.036557	10.037005	10.037452	10.037899	10.038346	10.038794
0.870	10.039241	10.039688	10.040136	10.040583	10.041030	10.041478	10.041925	10.042373	10.042820	10.043267
0.880	10.043715	10.044162	10.044610	10.045057	10.045505	10.045953	10.046400	10.046848	10.047295	10.047743
0.890	10.048191	10.048638	10.049086	10.049534	10.049981	10.050429	10.050877	10.051324	10.051772	10.052220
0.900	10.052668	10.053116	10.053564	10.054011	10.054459	10.054907	10.055355	10.055803	10.056251	10.056699
0.910	10.057147	10.057595	10.058043	10.058491	10.058939	10.059387	10.059835	10.060283	10.060731	10.061179
0.920	10.061628	10.062076	10.062524	10.062972	10.063420	10.063869	10.064317	10.064765	10.065213	10.065662
0.930	10.066110	10.066558	10.067007	10.067455	10.067903	10.068352	10.068800	10.069249	10.069697	10.070146
0.940	10.070594	10.071043	10.071491	10.071940	10.072388	10.072837	10.073285	10.073734	10.074183	10.074631
0.950	10.075080	10.075529	10.075977	10.076426	10.076875	10.077323	10.077772	10.078221	10.078670	10.079118
0.960	10.079567	10.080016	10.080465	10.080914	10.081363	10.081812	10.082260	10.082709	10.083158	10.083607
0.970	10.084056	10.084505	10.084954	10.085403	10.085853	10.086302	10.086751	10.087200	10.087649	10.088098
0.980	10.088547	10.088996	10.089446	10.089895	10.090344	10.090793	10.091242	10.091692	10.092141	10.092590
0.990	10.093040	10.093489	10.093938	10.094388	10.094837	10.095287	10.095736	10.096185	10.096635	10.097084

ATTENUATION IN DECIBELS THETA FROM 56.000 TO 56.499 DEGREES

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THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.000	10.097534	10.097983	10.098433	10.098882	10.099332	10.099782	10.100231	10.100681	10.101130	10.101580
0.010	10.102030	10.102479	10.102929	10.103379	10.103829	10.104278	10.104728	10.105178	10.105628	10.106078
0.020	10.106527	10.106977	10.107427	10.107877	10.108327	10.108777	10.109227	10.109677	10.110127	10.110577
0.030	10.111027	10.111477	10.111927	10.112377	10.112827	10.113277	10.113727	10.114177	10.114627	10.115077
0.040	10.115528	10.115978	10.116428	10.116878	10.117329	10.117779	10.118229	10.118679	10.119130	10.119580
0.050	10.120030	10.120481	10.120931	10.121381	10.121832	10.122282	10.122733	10.123183	10.123634	10.124084
0.060	10.124535	10.124985	10.125436	10.125886	10.126337	10.126788	10.127238	10.127689	10.128139	10.128590
0.070	10.129041	10.129491	10.129942	10.130393	10.130844	10.131294	10.131745	10.132196	10.132647	10.133098
0.080	10.133548	10.133999	10.134450	10.134901	10.135352	10.135803	10.136254	10.136705	10.137156	10.137607
0.090	10.138058	10.138509	10.138960	10.139411	10.139862	10.140313	10.140764	10.141216	10.141667	10.142118
0.100	10.142569	10.143020	10.143472	10.143923	10.144374	10.144825	10.145277	10.145728	10.146179	10.146631
0.110	10.147082	10.147533	10.147985	10.148436	10.148888	10.149339	10.149791	10.150242	10.150694	10.151145
0.120	10.151597	10.152048	10.152500	10.152951	10.153403	10.153854	10.154306	10.154758	10.155209	10.155661
0.130	10.156113	10.156565	10.157016	10.157468	10.157920	10.158372	10.158823	10.159275	10.159727	10.160179
0.140	10.160631	10.161083	10.161535	10.161986	10.162439	10.162890	10.163342	10.163794	10.164246	10.164698
0.150	10.165151	10.165603	10.166055	10.166507	10.166959	10.167411	10.167863	10.168315	10.168767	10.169220
0.160	10.169672	10.170124	10.170576	10.171029	10.171481	10.171933	10.172385	10.172838	10.173290	10.173743
0.170	10.174195	10.174647	10.175100	10.175552	10.176005	10.176457	10.176910	10.177362	10.177815	10.178267
0.180	10.178720	10.179172	10.179625	10.180078	10.180530	10.180983	10.181435	10.181888	10.182341	10.182793
0.190	10.183246	10.183699	10.184152	10.184605	10.185057	10.185510	10.185963	10.186416	10.186869	10.187322
0.200	10.187774	10.188227	10.188680	10.189133	10.189586	10.190039	10.190492	10.190945	10.191398	10.191851
0.210	10.192304	10.192757	10.193211	10.193664	10.194117	10.194570	10.195023	10.195476	10.195930	10.196383
0.220	10.196836	10.197289	10.197743	10.198196	10.198649	10.199103	10.199556	10.200009	10.200463	10.200916
0.230	10.201369	10.201823	10.202276	10.202730	10.203183	10.203637	10.204090	10.204544	10.204997	10.205451
0.240	10.205904	10.206358	10.206812	10.207265	10.207719	10.208173	10.208626	10.209080	10.209534	10.209987
0.250	10.210441	10.210895	10.211349	10.211803	10.212256	10.212710	10.213164	10.213618	10.214072	10.214526
0.260	10.214980	10.215434	10.215888	10.216342	10.216796	10.217250	10.217704	10.218158	10.218612	10.219066
0.270	10.219520	10.219974	10.220428	10.220882	10.221336	10.221791	10.222245	10.222699	10.223153	10.223608
0.280	10.224062	10.224516	10.224970	10.225425	10.225879	10.226333	10.226788	10.227242	10.227697	10.228151
0.290	10.228605	10.229060	10.229514	10.229969	10.230423	10.230878	10.231332	10.231787	10.232242	10.232696
0.300	10.233151	10.233605	10.234060	10.234515	10.234969	10.235424	10.235879	10.236334	10.236788	10.237243
0.310	10.237698	10.238153	10.238608	10.239062	10.239517	10.239972	10.240427	10.240882	10.241337	10.241792
0.320	10.242247	10.242702	10.243157	10.243612	10.244067	10.244522	10.244977	10.245432	10.245887	10.246342
0.330	10.246797	10.247252	10.247707	10.248163	10.248618	10.249073	10.249528	10.249984	10.250439	10.250894
0.340	10.251349	10.251805	10.252260	10.252715	10.253171	10.253626	10.254082	10.254537	10.254992	10.255448
0.350	10.255903	10.256359	10.256814	10.257270	10.257725	10.258181	10.258637	10.259092	10.259548	10.260003
0.360	10.260459	10.260915	10.261370	10.261826	10.262282	10.262738	10.263193	10.263649	10.264105	10.264561
0.370	10.265016	10.265472	10.265928	10.266384	10.266840	10.267296	10.267752	10.268208	10.268664	10.269120
0.380	10.269576	10.270032	10.270488	10.270944	10.271400	10.271856	10.272312	10.272768	10.273224	10.273680
0.390	10.274136	10.274593	10.275049	10.275505	10.275961	10.276417	10.276874	10.277330	10.277786	10.278243
0.400	10.278699	10.279155	10.279612	10.280068	10.280524	10.280981	10.281437	10.281894	10.282350	10.282807
0.410	10.283263	10.283720	10.284176	10.284633	10.285089	10.285546	10.286003	10.286459	10.286916	10.287373
0.420	10.287829	10.288286	10.288743	10.289199	10.289656	10.290113	10.290570	10.291027	10.291483	10.291940
0.430	10.292397	10.292854	10.293311	10.293768	10.294225	10.294682	10.295139	10.295596	10.296053	10.296510
0.440	10.296967	10.297424	10.297881	10.298338	10.298795	10.299252	10.299709	10.300166	10.300624	10.301081
0.450	10.301538	10.301995	10.302452	10.302910	10.303367	10.303824	10.304281	10.304739	10.305196	10.305653
0.460	10.306111	10.306568	10.307026	10.307483	10.307940	10.308398	10.308855	10.309313	10.309770	10.310228
0.470	10.310686	10.311143	10.311601	10.312058	10.312516	10.312973	10.313431	10.313889	10.314347	10.314804
0.480	10.315262	10.315720	10.316177	10.316635	10.317093	10.317551	10.318009	10.318467	10.318924	10.319382
0.490	10.319840	10.320298	10.320756	10.321214	10.321672	10.322130	10.322588	10.323046	10.323504	10.323962

ATTENUATION IN DECIBELS
THETA FROM 56.500 TO 56.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	10.324420	10.324878	10.325336	10.325794	10.326252	10.326711	10.327169	10.327627	10.328085	10.328543
0.510	10.329002	10.329460	10.329918	10.330377	10.330835	10.331293	10.331751	10.332210	10.332668	10.333127
0.520	10.333585	10.334044	10.334502	10.334960	10.335419	10.335877	10.336336	10.336794	10.337253	10.337712
0.530	10.338170	10.338629	10.339087	10.339546	10.340005	10.340463	10.340922	10.341381	10.341840	10.342298
0.540	10.342757	10.343216	10.343675	10.344133	10.344592	10.345051	10.345510	10.345969	10.346428	10.346887
0.550	10.347346	10.347805	10.348264	10.348723	10.349182	10.349641	10.350100	10.350559	10.351018	10.351477
0.560	10.351936	10.352395	10.352854	10.353313	10.353773	10.354232	10.354691	10.355150	10.355610	10.356069
0.570	10.356528	10.356987	10.357447	10.357906	10.358365	10.358825	10.359284	10.359744	10.360203	10.360662
0.580	10.361122	10.361581	10.362041	10.362500	10.362960	10.363419	10.363879	10.364339	10.364798	10.365258
0.590	10.365718	10.366177	10.366637	10.367097	10.367556	10.368016	10.368476	10.368935	10.369395	10.369855
0.600	10.370315	10.370775	10.371234	10.371694	10.372154	10.372614	10.373074	10.373534	10.373994	10.374454
0.610	10.374914	10.375374	10.375834	10.376294	10.376754	10.377214	10.377674	10.378134	10.378594	10.379055
0.620	10.379515	10.379975	10.380435	10.380895	10.381356	10.381816	10.382276	10.382736	10.383197	10.383657
0.630	10.384117	10.384578	10.385038	10.385498	10.385959	10.386419	10.386880	10.387340	10.387801	10.388261
0.640	10.388722	10.389182	10.389643	10.390103	10.390564	10.391024	10.391485	10.391946	10.392406	10.392867
0.650	10.393328	10.393788	10.394249	10.394710	10.395170	10.395631	10.396092	10.396553	10.397014	10.397475
0.660	10.397935	10.398396	10.398857	10.399318	10.399779	10.400240	10.400701	10.401162	10.401623	10.402084
0.670	10.402545	10.403006	10.403467	10.403928	10.404389	10.404850	10.405312	10.405773	10.406234	10.406695
0.680	10.407156	10.407617	10.408079	10.408540	10.409001	10.409463	10.409924	10.410385	10.410847	10.411308
0.690	10.411769	10.412231	10.412692	10.413154	10.413615	10.414077	10.414538	10.414999	10.415461	10.415923
0.700	10.416384	10.416846	10.417307	10.417769	10.418231	10.418692	10.419154	10.419616	10.420077	10.420539
0.710	10.421001	10.421463	10.421924	10.422386	10.422848	10.423310	10.423772	10.424233	10.424695	10.425157
0.720	10.425619	10.426081	10.426543	10.427005	10.427467	10.427929	10.428391	10.428853	10.429315	10.429777
0.730	10.430239	10.430701	10.431163	10.431625	10.432088	10.432550	10.433012	10.433474	10.433936	10.434399
0.740	10.434861	10.435323	10.435786	10.436248	10.436710	10.437173	10.437635	10.438097	10.438560	10.439022
0.750	10.439485	10.439947	10.440410	10.440872	10.441335	10.441797	10.442260	10.442722	10.443185	10.443647
0.760	10.444110	10.444573	10.445035	10.445498	10.445961	10.446423	10.446886	10.447349	10.447812	10.448274
0.770	10.448737	10.449200	10.449663	10.450126	10.450588	10.451051	10.451514	10.451977	10.452440	10.452903
0.780	10.453366	10.453829	10.454292	10.454755	10.455218	10.455681	10.456144	10.456607	10.457070	10.457533
0.790	10.457997	10.458460	10.458923	10.459386	10.459849	10.460313	10.460776	10.461239	10.461702	10.462166
0.800	10.462629	10.463092	10.463555	10.464018	10.464483	10.464946	10.465409	10.465873	10.466336	10.466800
0.810	10.467263	10.467727	10.468190	10.468654	10.469117	10.469581	10.470045	10.470508	10.470972	10.471436
0.820	10.471899	10.472363	10.472827	10.473290	10.473754	10.474218	10.474682	10.475145	10.475609	10.476073
0.830	10.476537	10.477001	10.477465	10.477929	10.478392	10.478856	10.479320	10.479784	10.480248	10.480712
0.840	10.481176	10.481640	10.482105	10.482569	10.483033	10.483497	10.483961	10.484425	10.484889	10.485353
0.850	10.485818	10.486282	10.486746	10.487210	10.487675	10.488139	10.488603	10.489068	10.489532	10.489996
0.860	10.490461	10.490925	10.491390	10.491854	10.492318	10.492783	10.493247	10.493712	10.494176	10.494641
0.870	10.495106	10.495570	10.496035	10.496499	10.496964	10.497429	10.497893	10.498358	10.498823	10.499287
0.880	10.499752	10.500217	10.500682	10.501146	10.501611	10.502076	10.502541	10.503006	10.503471	10.503935
0.890	10.504400	10.504865	10.505330	10.505795	10.506260	10.506725	10.507190	10.507655	10.508120	10.508585
0.900	10.509050	10.509516	10.509981	10.510446	10.510911	10.511376	10.511841	10.512307	10.512772	10.513237
0.910	10.513702	10.514168	10.514633	10.515098	10.515564	10.516029	10.516494	10.516960	10.517425	10.517891
0.920	10.518356	10.518821	10.519287	10.519753	10.520218	10.520684	10.521149	10.521615	10.522080	10.522546
0.930	10.523011	10.523477	10.523943	10.524408	10.524874	10.525340	10.525806	10.526271	10.526737	10.527203
0.940	10.527669	10.528134	10.528600	10.529066	10.529532	10.529998	10.530464	10.530930	10.531396	10.531862
0.950	10.532328	10.532794	10.533260	10.533726	10.534192	10.534658	10.535124	10.535590	10.536056	10.536522
0.960	10.536988	10.537455	10.537921	10.538387	10.538853	10.539320	10.539786	10.540252	10.540718	10.541185
0.970	10.541651	10.542117	10.542584	10.543050	10.543517	10.543983	10.544449	10.544916	10.545382	10.545849
0.980	10.546315	10.546782	10.547248	10.547715	10.548182	10.548648	10.549115	10.549581	10.550048	10.550515
0.990	10.550981	10.551448	10.551915	10.552382	10.552848	10.553315	10.553782	10.554249	10.554716	10.555182

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.000	10.555649	10.556116	10.556583	10.557050	10.557517	10.557984	10.558451	10.558918	10.559385	10.559852
0.010	10.560319	10.560786	10.561253	10.561720	10.562187	10.562654	10.563122	10.563589	10.564056	10.564523
0.020	10.564991	10.565458	10.565925	10.566392	10.566860	10.567327	10.567794	10.568262	10.568729	10.569196
0.030	10.569664	10.570131	10.570599	10.571066	10.571534	10.572001	10.572469	10.572936	10.573404	10.573871
0.040	10.574339	10.574806	10.575274	10.575742	10.576209	10.576677	10.577145	10.577612	10.578080	10.578548
0.050	10.579016	10.579483	10.579951	10.580419	10.580887	10.581355	10.581823	10.582290	10.582758	10.583226
0.060	10.583694	10.584162	10.584630	10.585098	10.585566	10.586034	10.586502	10.586970	10.587438	10.587906
0.070	10.588375	10.588843	10.589311	10.589779	10.590247	10.590716	10.591184	10.591652	10.592120	10.592589
0.080	10.593057	10.593525	10.593994	10.594462	10.594930	10.595399	10.595867	10.596335	10.596804	10.597272
0.090	10.597741	10.598209	10.598678	10.599146	10.599615	10.600083	10.600552	10.601021	10.601489	10.601958
0.100	10.602427	10.602895	10.603364	10.603833	10.604301	10.604770	10.605239	10.605708	10.606176	10.606645
0.110	10.607114	10.607583	10.608052	10.608521	10.608990	10.609459	10.609928	10.610397	10.610866	10.611335
0.120	10.611804	10.612273	10.612742	10.613211	10.613680	10.614149	10.614618	10.615087	10.615556	10.616026
0.130	10.616495	10.616964	10.617433	10.617902	10.618372	10.618841	10.619310	10.619780	10.620249	10.620718
0.140	10.621188	10.621657	10.622126	10.622596	10.623065	10.623535	10.624004	10.624474	10.624943	10.625413
0.150	10.625382	10.625852	10.626322	10.626791	10.627261	10.627730	10.628200	10.628670	10.629140	10.629610
0.160	10.630579	10.631049	10.631518	10.631988	10.632458	10.632928	10.633398	10.633868	10.634338	10.634807
0.170	10.635277	10.635747	10.636217	10.636687	10.637157	10.637627	10.638097	10.638567	10.639037	10.639507
0.180	10.639977	10.640448	10.640918	10.641388	10.641858	10.642328	10.642798	10.643269	10.643739	10.644209
0.190	10.644679	10.645150	10.645620	10.646090	10.646561	10.647031	10.647501	10.647972	10.648442	10.648913
0.200	10.649383	10.649854	10.650324	10.650795	10.651265	10.651736	10.652206	10.652677	10.653148	10.653618
0.210	10.654089	10.654559	10.655030	10.655501	10.655972	10.656442	10.656913	10.657384	10.657855	10.658325
0.220	10.658796	10.659267	10.659738	10.660209	10.660680	10.661150	10.661621	10.662092	10.662563	10.663034
0.230	10.663505	10.663976	10.664447	10.664918	10.665390	10.665861	10.666332	10.666803	10.667274	10.667745
0.240	10.668216	10.668687	10.669159	10.669630	10.670101	10.670573	10.671044	10.671515	10.671986	10.672458
0.250	10.672929	10.673401	10.673872	10.674343	10.674815	10.675286	10.675758	10.676229	10.676701	10.677172
0.260	10.677644	10.678115	10.678587	10.679058	10.679530	10.680002	10.680473	10.680945	10.681417	10.681888
0.270	10.682360	10.682832	10.683304	10.683775	10.684247	10.684719	10.685191	10.685663	10.686134	10.686606
0.280	10.687073	10.687550	10.688022	10.688494	10.688966	10.689438	10.689910	10.690382	10.690854	10.691326
0.290	10.691798	10.692270	10.692743	10.693215	10.693687	10.694159	10.694631	10.695103	10.695576	10.696048
0.300	10.696520	10.696992	10.697465	10.697937	10.698409	10.698882	10.699354	10.699826	10.700299	10.700771
0.310	10.701244	10.701716	10.702189	10.702661	10.703134	10.703606	10.704079	10.704551	10.705024	10.705497
0.320	10.705969	10.706442	10.706915	10.707387	10.707860	10.708333	10.708805	10.709278	10.709751	10.710224
0.330	10.710697	10.711169	10.711642	10.712115	10.712588	10.713061	10.713534	10.714007	10.714480	10.714953
0.340	10.715426	10.715899	10.716372	10.716845	10.717318	10.717791	10.718264	10.718737	10.719210	10.719683
0.350	10.720157	10.720630	10.721103	10.721576	10.722049	10.722523	10.722996	10.723469	10.723943	10.724416
0.360	10.724889	10.725363	10.725836	10.726309	10.726783	10.727256	10.727730	10.728203	10.728677	10.729150
0.370	10.729624	10.730097	10.730571	10.731045	10.731518	10.731992	10.732466	10.732939	10.733413	10.733886
0.380	10.734360	10.734834	10.735308	10.735781	10.736255	10.736729	10.737203	10.737677	10.738151	10.738624
0.390	10.739098	10.739572	10.740046	10.740520	10.740994	10.741468	10.741942	10.742416	10.742890	10.743364
0.400	10.743838	10.744313	10.744787	10.745261	10.745735	10.746209	10.746683	10.747158	10.747632	10.748106
0.410	10.748580	10.749055	10.749529	10.750003	10.750478	10.750952	10.751426	10.751901	10.752375	10.752849
0.420	10.753324	10.753798	10.754273	10.754747	10.755222	10.755696	10.756171	10.756646	10.757120	10.757595
0.430	10.758069	10.758544	10.759019	10.759493	10.759968	10.760443	10.760918	10.761392	10.761867	10.762342
0.440	10.762817	10.763292	10.763766	10.764241	10.764716	10.765191	10.765666	10.766141	10.766616	10.767091
0.450	10.767566	10.768041	10.768516	10.768991	10.769466	10.769941	10.770416	10.770891	10.771366	10.771842
0.460	10.772317	10.772792	10.773267	10.773742	10.774218	10.774693	10.775168	10.775644	10.776119	10.776594
0.470	10.777070	10.777545	10.778020	10.778496	10.778971	10.779447	10.779922	10.780398	10.780873	10.781349
0.480	10.781824	10.782300	10.782775	10.783251	10.783727	10.784202	10.784678	10.785154	10.785629	10.786105
0.490	10.786581	10.787056	10.787532	10.788008	10.788484	10.788960	10.789435	10.789911	10.790387	10.790863

ATTENUATION IN DECIBELS
THETA FROM 57.500 TO 57.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	10.791339	10.791815	10.792291	10.792767	10.793243	10.793719	10.794195	10.794671	10.795147	10.795623
0.510	10.796099	10.796575	10.797051	10.797528	10.798004	10.798480	10.798956	10.799432	10.799909	10.800385
0.520	10.800861	10.801337	10.801814	10.802290	10.802766	10.803243	10.803719	10.804196	10.804672	10.805148
0.530	10.805625	10.806101	10.806578	10.807054	10.807531	10.808007	10.808484	10.808961	10.809437	10.809914
0.540	10.810390	10.810867	10.811344	10.811821	10.812297	10.812774	10.813251	10.813727	10.814204	10.814681
0.550	10.815159	10.815635	10.816112	10.816589	10.817065	10.817542	10.818019	10.818496	10.818973	10.819450
0.560	10.819927	10.820404	10.820881	10.821358	10.821836	10.822313	10.822790	10.823267	10.823744	10.824221
0.570	10.824698	10.825176	10.825653	10.826130	10.826607	10.827085	10.827562	10.828039	10.828517	10.828994
0.580	10.829471	10.829949	10.830426	10.830904	10.831381	10.831859	10.832336	10.832814	10.833291	10.833769
0.590	10.834246	10.834724	10.835201	10.835679	10.836157	10.836634	10.837112	10.837590	10.838067	10.838545
0.600	10.839023	10.839501	10.839978	10.840456	10.840934	10.841412	10.841890	10.842368	10.842845	10.843323
0.610	10.843801	10.844279	10.844757	10.845235	10.845713	10.846191	10.846669	10.847147	10.847625	10.848104
0.620	10.848582	10.849060	10.849538	10.850016	10.850494	10.850973	10.851451	10.851929	10.852407	10.852886
0.630	10.853364	10.853842	10.854321	10.854799	10.855277	10.855756	10.856234	10.856713	10.857191	10.857669
0.640	10.858148	10.858626	10.859105	10.859583	10.860062	10.860541	10.861019	10.861498	10.861977	10.862455
0.650	10.862934	10.863412	10.863891	10.864370	10.864849	10.865327	10.865806	10.866285	10.866764	10.867243
0.660	10.867722	10.868200	10.868679	10.869158	10.869637	10.870116	10.870595	10.871074	10.871553	10.872032
0.670	10.872511	10.872990	10.873469	10.873948	10.874428	10.874907	10.875386	10.875865	10.876344	10.876823
0.680	10.877303	10.877782	10.878261	10.878740	10.879220	10.879699	10.880178	10.880658	10.881137	10.881616
0.690	10.882066	10.882545	10.883025	10.883504	10.883984	10.884463	10.884943	10.885422	10.885902	10.886381
0.700	10.886891	10.887371	10.887850	10.888330	10.888810	10.889289	10.889769	10.890249	10.890728	10.891208
0.710	10.891688	10.892168	10.892648	10.893127	10.893607	10.894087	10.894567	10.895047	10.895527	10.896007
0.720	10.896487	10.896967	10.897447	10.897927	10.898407	10.898887	10.899367	10.899847	10.900327	10.900807
0.730	10.901288	10.901768	10.902248	10.902728	10.903208	10.903689	10.904169	10.904649	10.905129	10.905610
0.740	10.906090	10.906570	10.907051	10.907531	10.908012	10.908492	10.908973	10.909453	10.909933	10.910414
0.750	10.910895	10.911375	10.911856	10.912336	10.912817	10.913297	10.913778	10.914259	10.914739	10.915220
0.760	10.915701	10.916182	10.916662	10.917143	10.917624	10.918105	10.918585	10.919066	10.919547	10.920028
0.770	10.920509	10.920990	10.921471	10.921952	10.922433	10.922914	10.923395	10.923876	10.924357	10.924838
0.780	10.925319	10.925800	10.926281	10.926762	10.927243	10.927725	10.928206	10.928687	10.929168	10.929649
0.790	10.930131	10.930612	10.931093	10.931575	10.932056	10.932537	10.933019	10.933500	10.933982	10.934463
0.800	10.934945	10.935426	10.935907	10.936389	10.936871	10.937352	10.937834	10.938315	10.938797	10.939278
0.810	10.939760	10.940242	10.940723	10.941205	10.941687	10.942169	10.942650	10.943132	10.943614	10.944096
0.820	10.944578	10.945059	10.945541	10.946023	10.946505	10.946987	10.947469	10.947951	10.948433	10.948915
0.830	10.949397	10.949879	10.950361	10.950843	10.951325	10.951807	10.952289	10.952772	10.953254	10.953736
0.840	10.954218	10.954700	10.955183	10.955665	10.956147	10.956629	10.957112	10.957594	10.958076	10.958559
0.850	10.959041	10.959523	10.960006	10.960488	10.960971	10.961453	10.961936	10.962418	10.962901	10.963383
0.860	10.963866	10.964349	10.964831	10.965314	10.965796	10.966279	10.966762	10.967245	10.967727	10.968210
0.870	10.968693	10.969176	10.969658	10.970141	10.970624	10.971107	10.971590	10.972073	10.972556	10.973038
0.880	10.973521	10.974004	10.974487	10.974970	10.975453	10.975937	10.976420	10.976903	10.977386	10.977869
0.890	10.978352	10.978835	10.979318	10.979802	10.980285	10.980768	10.981251	10.981735	10.982218	10.982701
0.900	10.983184	10.983668	10.984151	10.984635	10.985118	10.985601	10.986085	10.986568	10.987052	10.987535
0.910	10.988010	10.988502	10.988986	10.989469	10.989953	10.990436	10.990920	10.991404	10.991887	10.992371
0.920	10.992855	10.993338	10.993822	10.994306	10.994790	10.995274	10.995757	10.996241	10.996725	10.997209
0.930	10.997673	10.998177	10.998661	10.999145	10.999629	11.000113	11.000597	11.001081	11.001565	11.002049
0.940	11.002533	11.003017	11.003501	11.003985	11.004469	11.004953	11.005438	11.005922	11.006406	11.006890
0.950	11.007375	11.007859	11.008343	11.008827	11.009312	11.009796	11.010280	11.010765	11.011249	11.011734
0.960	11.012213	11.012703	11.013187	11.013672	11.014156	11.014641	11.015125	11.015610	11.016094	11.016579
0.970	11.017064	11.017548	11.018033	11.018518	11.019002	11.019487	11.019972	11.020457	11.020941	11.021426
0.980	11.021911	11.022396	11.022881	11.023366	11.023851	11.024336	11.024820	11.025305	11.025790	11.026275
0.990	11.026760	11.027246	11.027731	11.028216	11.028701	11.029186	11.029671	11.030156	11.030641	11.031126

11-03016 11-03061 11-03112

ATTENUATION IN DECIBELS
THETA FROM 58.000 TO 58.499 DEGREES

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THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.000	11.031612	11.032697	11.032582	11.033067	11.033553	11.034038	11.034523	11.035009	11.035494	11.035979
0.010	11.036405	11.036950	11.037436	11.037921	11.038406	11.038892	11.039377	11.039863	11.040349	11.040834
0.020	11.041370	11.041805	11.042291	11.042776	11.043262	11.043748	11.044234	11.044719	11.045205	11.045691
0.030	11.046177	11.046662	11.047148	11.047634	11.048120	11.048606	11.049091	11.049577	11.050063	11.050549
0.040	11.051035	11.051521	11.052007	11.052493	11.052979	11.053465	11.053951	11.054438	11.054924	11.055410
0.050	11.055896	11.056382	11.056868	11.057354	11.057841	11.058327	11.058813	11.059299	11.059786	11.060272
0.060	11.060758	11.061245	11.061731	11.062217	11.062704	11.063190	11.063677	11.064163	11.064650	11.065136
0.070	11.065623	11.066109	11.066596	11.067082	11.067569	11.068056	11.068542	11.069029	11.069516	11.070002
0.080	11.070489	11.070976	11.071463	11.071949	11.072436	11.072923	11.073410	11.073897	11.074383	11.074870
0.090	11.075357	11.075844	11.076331	11.076818	11.077305	11.077792	11.078279	11.078766	11.079253	11.079740
0.100	11.080227	11.080714	11.081202	11.081689	11.082176	11.082663	11.083150	11.083637	11.084125	11.084612
0.110	11.085099	11.085587	11.086074	11.086561	11.087049	11.087536	11.088023	11.088511	11.088998	11.089486
0.120	11.089973	11.090461	11.090948	11.091436	11.091923	11.092411	11.092898	11.093386	11.093874	11.094361
0.130	11.094849	11.095337	11.095824	11.096312	11.096800	11.097288	11.097775	11.098263	11.098751	11.099239
0.140	11.099727	11.100214	11.100702	11.101190	11.101678	11.102166	11.102654	11.103142	11.103630	11.104118
0.150	11.104606	11.105094	11.105582	11.106070	11.106559	11.107047	11.107535	11.108023	11.108511	11.108999
0.160	11.109488	11.109976	11.110464	11.110952	11.111441	11.111929	11.112417	11.112906	11.113394	11.113883
0.170	11.114371	11.114859	11.115348	11.115836	11.116325	11.116813	11.117302	11.117790	11.118279	11.118768
0.180	11.119276	11.119765	11.120254	11.120742	11.121231	11.121720	11.122208	11.122697	11.123186	11.123675
0.190	11.124143	11.124632	11.125121	11.125610	11.126099	11.126588	11.127077	11.127566	11.128055	11.128543
0.200	11.129032	11.129521	11.130011	11.130500	11.130989	11.131478	11.131967	11.132456	11.132945	11.133434
0.210	11.133924	11.134413	11.134902	11.135391	11.135880	11.136370	11.136859	11.137348	11.137838	11.138327
0.220	11.138816	11.139306	11.139795	11.140285	11.140774	11.141264	11.141753	11.142243	11.142732	11.143222
0.230	11.143711	11.144201	11.144690	11.145180	11.145670	11.146159	11.146649	11.147139	11.147628	11.148118
0.240	11.148608	11.149098	11.149588	11.150077	11.150567	11.151057	11.151547	11.152037	11.152527	11.153017
0.250	11.153507	11.153996	11.154487	11.154976	11.155467	11.155957	11.156447	11.156937	11.157427	11.157917
0.260	11.158407	11.158897	11.159387	11.159878	11.160369	11.160859	11.161348	11.161839	11.162329	11.162819
0.270	11.163309	11.163800	11.164290	11.164781	11.165271	11.165761	11.166252	11.166742	11.167233	11.167723
0.280	11.168214	11.168704	11.169195	11.169685	11.170176	11.170667	11.171157	11.171648	11.172139	11.172629
0.290	11.173120	11.173611	11.174102	11.174592	11.175083	11.175574	11.176065	11.176556	11.177047	11.177537
0.300	11.178028	11.178519	11.179010	11.179501	11.179992	11.180483	11.180974	11.181465	11.181956	11.182447
0.310	11.182938	11.183429	11.183921	11.184412	11.184903	11.185394	11.185885	11.186377	11.186868	11.187359
0.320	11.187850	11.188342	11.188834	11.189324	11.189816	11.190307	11.190799	11.191290	11.191781	11.192273
0.330	11.192764	11.193256	11.193747	11.194239	11.194731	11.195222	11.195714	11.196205	11.196697	11.197188
0.340	11.197650	11.198172	11.198664	11.199155	11.199647	11.200139	11.200631	11.201122	11.201614	11.202106
0.350	11.202598	11.203090	11.203582	11.204074	11.204566	11.205058	11.205550	11.206042	11.206534	11.207026
0.360	11.207518	11.208010	11.208502	11.208994	11.209486	11.209978	11.210470	11.210963	11.211455	11.211947
0.370	11.212439	11.212932	11.213424	11.213916	11.214409	11.214901	11.215393	11.215886	11.216378	11.216870
0.380	11.217363	11.217855	11.218348	11.218840	11.219333	11.219825	11.220318	11.220811	11.221303	11.221796
0.390	11.222288	11.222781	11.223274	11.223766	11.224259	11.224752	11.225245	11.225737	11.226230	11.226723
0.400	11.227216	11.227709	11.228201	11.228694	11.229187	11.229680	11.230173	11.230666	11.231159	11.231652
0.410	11.232145	11.232638	11.233131	11.233624	11.234117	11.234610	11.235104	11.235597	11.236090	11.236583
0.420	11.237076	11.237570	11.238063	11.238556	11.239049	11.239542	11.240036	11.240529	11.241023	11.241516
0.430	11.242010	11.242503	11.242996	11.243490	11.243983	11.244477	11.244970	11.245464	11.245957	11.246451
0.440	11.246945	11.247438	11.247932	11.248425	11.248919	11.249413	11.249907	11.250400	11.250894	11.251388
0.450	11.251882	11.252375	11.252869	11.253363	11.253857	11.254351	11.254845	11.255339	11.255833	11.256327
0.460	11.256821	11.257315	11.257809	11.258303	11.258797	11.259291	11.259785	11.260279	11.260773	11.261267
0.470	11.261762	11.262256	11.262750	11.263244	11.263738	11.264232	11.264727	11.265221	11.265716	11.266210
0.480	11.266764	11.267199	11.267693	11.268188	11.268682	11.269176	11.269671	11.270166	11.270660	11.271155
0.490	11.271649	11.272144	11.272638	11.273133	11.273628	11.274122	11.274617	11.275112	11.275606	11.276101

ATTENUATION IN DECIBELS
THETA FOR 58.500 TO 58.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	11.276596	11.277091	11.277585	11.278080	11.278575	11.279070	11.279565	11.280060	11.280555	11.281050
0.510	11.281545	11.282040	11.282534	11.283030	11.283525	11.284020	11.284515	11.285010	11.285505	11.286000
0.520	11.286495	11.286990	11.287485	11.287981	11.288476	11.288971	11.289466	11.289961	11.290457	11.290952
0.530	11.291446	11.291943	11.292438	11.292934	11.293429	11.293925	11.294420	11.294916	11.295411	11.295907
0.540	11.296402	11.296898	11.297393	11.297889	11.298384	11.298880	11.299376	11.299871	11.300367	11.300863
0.550	11.301359	11.301854	11.302350	11.302846	11.303342	11.303838	11.304333	11.304829	11.305325	11.305821
0.560	11.306813	11.307309	11.307805	11.308301	11.308797	11.309293	11.309789	11.310285	11.310781	
0.570	11.311277	11.311773	11.312270	11.312766	11.313262	11.313758	11.314254	11.314751	11.315247	11.315743
0.580	11.316239	11.316736	11.317232	11.317729	11.318225	11.318721	11.319218	11.319714	11.320211	11.320707
0.590	11.321204	11.321700	11.322197	11.322693	11.323190	11.323686	11.324183	11.324680	11.325176	11.325673
0.600	11.326170	11.326667	11.327163	11.327660	11.328157	11.328654	11.329150	11.329647	11.330144	11.330641
0.610	11.331138	11.331635	11.332132	11.332629	11.333126	11.333623	11.334120	11.334617	11.335114	11.335611
0.620	11.336108	11.336605	11.337102	11.337599	11.338097	11.338594	11.339091	11.339588	11.340086	11.340583
0.630	11.341080	11.341577	11.342075	11.342572	11.343069	11.343567	11.344064	11.344562	11.345059	11.345556
0.640	11.346054	11.346551	11.347049	11.347547	11.348044	11.348542	11.349039	11.349537	11.350035	11.350532
0.650	11.351030	11.351528	11.352025	11.352523	11.353021	11.353519	11.354016	11.354514	11.355012	11.355510
0.660	11.356008	11.356506	11.357004	11.357502	11.357999	11.358497	11.358995	11.359493	11.359991	11.360489
0.670	11.360986	11.361486	11.361984	11.362482	11.362980	11.363478	11.363976	11.364475	11.364973	11.365471
0.680	11.365969	11.366468	11.366966	11.367464	11.367963	11.368461	11.368959	11.369458	11.369956	11.370455
0.690	11.370953	11.371452	11.371950	11.372449	11.372947	11.373446	11.373944	11.374443	11.374941	11.375440
0.700	11.375939	11.376437	11.376936	11.377435	11.377934	11.378432	11.378931	11.379430	11.379929	11.380428
0.710	11.380926	11.381425	11.381924	11.382423	11.382922	11.383421	11.383920	11.384419	11.384918	11.385417
0.720	11.385916	11.386415	11.386914	11.387413	11.387912	11.388412	11.388911	11.389410	11.389909	11.390408
0.730	11.390908	11.391407	11.391906	11.392406	11.392905	11.393404	11.393903	11.394403	11.394902	11.395402
0.740	11.395901	11.396401	11.396900	11.397400	11.397899	11.398399	11.398898	11.399397	11.399897	11.400397
0.750	11.400897	11.401396	11.401896	11.402396	11.402895	11.403395	11.403895	11.404395	11.404894	11.405394
0.760	11.405894	11.406394	11.406894	11.407394	11.407894	11.408394	11.408894	11.409394	11.409894	11.410394
0.770	11.410894	11.411394	11.411894	11.412394	11.412894	11.413394	11.413894	11.414394	11.414895	11.415395
0.780	11.415895	11.416395	11.416896	11.417396	11.417896	11.418396	11.418897	11.419397	11.419898	11.420398
0.790	11.420896	11.421399	11.421899	11.422400	11.422900	11.423401	11.423901	11.424402	11.424903	11.425403
0.800	11.425904	11.426404	11.426905	11.427406	11.427907	11.428407	11.428908	11.429409	11.429909	11.430410
0.810	11.430911	11.431412	11.431913	11.432414	11.432915	11.433416	11.433916	11.434417	11.434918	11.435419
0.820	11.435920	11.436421	11.436923	11.437424	11.437925	11.438426	11.438927	11.439428	11.439929	11.440431
0.830	11.440932	11.441433	11.441934	11.442436	11.442937	11.443438	11.443939	11.444441	11.444942	11.445444
0.840	11.445945	11.446446	11.446948	11.447449	11.447951	11.448452	11.448954	11.449455	11.449957	11.450459
0.850	11.450960	11.451462	11.451963	11.452465	11.452967	11.453469	11.453970	11.454472	11.454974	11.455476
0.860	11.455977	11.456479	11.456981	11.457483	11.457985	11.458487	11.458989	11.459491	11.459993	11.460495
0.870	11.460997	11.461499	11.462001	11.462503	11.463005	11.463507	11.464009	11.464511	11.465013	11.465515
0.880	11.466018	11.466520	11.467022	11.467524	11.468027	11.468529	11.469031	11.469534	11.470036	11.470538
0.890	11.471041	11.471543	11.472046	11.472548	11.473051	11.473553	11.474056	11.474558	11.475061	11.475563
0.900	11.476066	11.476569	11.477071	11.477574	11.478077	11.478579	11.479082	11.479585	11.480088	11.480590
0.910	11.481093	11.481596	11.482099	11.482602	11.483104	11.483607	11.484110	11.484613	11.485116	11.485619
0.920	11.486122	11.486625	11.487128	11.487631	11.488134	11.488637	11.489141	11.489644	11.490147	11.490650
0.930	11.491153	11.491656	11.492160	11.492663	11.493166	11.493670	11.494173	11.494676	11.495180	11.495683
0.940	11.496166	11.496690	11.497193	11.497697	11.498200	11.498704	11.499207	11.499711	11.500214	11.500718
0.950	11.501221	11.501725	11.502229	11.502732	11.503236	11.503740	11.504243	11.504747	11.505251	11.505755
0.960	11.506258	11.506762	11.507266	11.507770	11.508274	11.508778	11.509282	11.509786	11.510289	11.510793
0.970	11.511297	11.511801	11.512305	11.512810	11.513314	11.513818	11.514322	11.514826	11.515330	11.515834
0.980	11.516338	11.516843	11.517347	11.517851	11.518355	11.518860	11.519364	11.519868	11.520373	11.520877
0.990	11.521381	11.521886	11.522390	11.522895	11.523399	11.523904	11.524408	11.524913	11.525417	11.525922

ATTENUATION IN DECIBELS
THETA FROM 59.000 TO 59.499 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.000	11.526427	11.526931	11.527436	11.527940	11.528445	11.528950	11.529454	11.529959	11.530464	11.530969
0.010	11.531474	11.531978	11.532483	11.532988	11.533493	11.533998	11.534503	11.535008	11.535513	11.536018
0.020	11.536523	11.537027	11.537533	11.538038	11.538543	11.539048	11.539553	11.540058	11.540563	11.541068
0.030	11.541574	11.542079	11.542584	11.543089	11.543594	11.544100	11.544605	11.545110	11.545616	11.546121
0.040	11.546626	11.547132	11.547637	11.548143	11.548648	11.549154	11.549659	11.550165	11.550670	11.551176
0.050	11.551682	11.552187	11.552693	11.553198	11.553704	11.554210	11.554716	11.555221	11.555727	11.556233
0.060	11.556738	11.557244	11.557750	11.558256	11.558762	11.559268	11.559774	11.560280	11.560786	11.561291
0.070	11.561797	11.562304	11.562810	11.563316	11.563822	11.564328	11.564834	11.565340	11.565846	11.566352
0.080	11.566859	11.567365	11.567871	11.568377	11.568883	11.569390	11.569896	11.570402	11.570909	11.571415
0.090	11.571921	11.572428	11.572934	11.573441	11.573947	11.574454	11.574960	11.575467	11.575973	11.576480
0.100	11.576987	11.577493	11.578000	11.578506	11.579013	11.579520	11.580027	11.580533	11.581040	11.581547
0.110	11.582054	11.582560	11.583067	11.583574	11.584081	11.584588	11.585095	11.585602	11.586109	11.586616
0.120	11.587123	11.587630	11.588137	11.588644	11.589151	11.589658	11.590165	11.590672	11.591179	11.591686
0.130	11.592194	11.592701	11.593208	11.593715	11.594223	11.594730	11.595237	11.595744	11.596252	11.596759
0.140	11.597267	11.597774	11.598282	11.598789	11.599296	11.599804	11.600311	11.600819	11.601327	11.601834
0.150	11.602342	11.602849	11.603357	11.603865	11.604372	11.604880	11.605388	11.605895	11.606403	11.606911
0.160	11.607419	11.607927	11.608434	11.608942	11.609450	11.609958	11.610466	11.610974	11.611482	11.611990
0.170	11.612498	11.613006	11.613514	11.614022	11.614530	11.615038	11.615546	11.616054	11.616563	11.617071
0.180	11.617579	11.618087	11.618595	11.619104	11.619612	11.620120	11.620629	11.621137	11.621645	11.622154
0.190	11.622662	11.623170	11.623679	11.624187	11.624696	11.625204	11.625713	11.626221	11.626730	11.627239
0.200	11.627747	11.628256	11.628765	11.629273	11.629782	11.630291	11.630799	11.631308	11.631817	11.632326
0.210	11.632834	11.633343	11.633852	11.634361	11.634870	11.635379	11.635888	11.636397	11.636906	11.637414
0.220	11.637923	11.638433	11.638942	11.639451	11.639960	11.640469	11.640978	11.641487	11.641996	11.642506
0.230	11.643015	11.643524	11.644033	11.644542	11.645052	11.645561	11.646070	11.646580	11.647089	11.647599
0.240	11.648104	11.648617	11.649127	11.649636	11.650146	11.650655	11.651165	11.651674	11.652184	11.652694
0.250	11.653203	11.653713	11.654222	11.654732	11.655242	11.655751	11.656261	11.656771	11.657281	11.657791
0.260	11.658300	11.658810	11.659320	11.659830	11.660340	11.660850	11.661360	11.661870	11.662380	11.662890
0.270	11.663400	11.663910	11.664420	11.664930	11.665440	11.665950	11.666460	11.666970	11.667481	11.667991
0.280	11.668501	11.669011	11.669521	11.670032	11.670542	11.671052	11.671563	11.672073	11.672583	11.673094
0.290	11.673604	11.674115	11.674625	11.675136	11.675646	11.676157	11.676667	11.677178	11.677688	11.678199
0.300	11.678710	11.679220	11.679731	11.680242	11.680752	11.681263	11.681774	11.682285	11.682795	11.683306
0.310	11.683817	11.684328	11.684839	11.685350	11.685861	11.686372	11.686883	11.687393	11.687904	11.688416
0.320	11.688927	11.689438	11.689949	11.690460	11.690971	11.691482	11.691993	11.692504	11.693016	11.693527
0.330	11.694038	11.694549	11.695060	11.695572	11.696083	11.696594	11.697106	11.697617	11.698129	11.698640
0.340	11.699152	11.699663	11.700174	11.700686	11.701197	11.701709	11.702221	11.702732	11.703244	11.703755
0.350	11.704267	11.704779	11.705290	11.705802	11.706314	11.706825	11.707337	11.707849	11.708361	11.708873
0.360	11.709385	11.709896	11.710408	11.710920	11.711432	11.711945	11.712456	11.712968	11.713480	11.713992
0.370	11.714504	11.715016	11.715528	11.716040	11.716553	11.717065	11.717577	11.718089	11.718601	11.719114
0.380	11.719626	11.720138	11.720650	11.721163	11.721675	11.722187	11.722700	11.723212	11.723725	11.724237
0.390	11.724749	11.725262	11.725775	11.726287	11.726799	11.727312	11.727825	11.728337	11.728850	11.729363
0.400	11.729875	11.730388	11.730901	11.731413	11.731926	11.732439	11.732952	11.733464	11.733977	11.734490
0.410	11.735003	11.735515	11.736029	11.736542	11.737055	11.737568	11.738081	11.738594	11.739107	11.739620
0.420	11.740133	11.740646	11.741159	11.741672	11.742185	11.742698	11.743212	11.743725	11.744238	11.744751
0.430	11.745265	11.745778	11.746291	11.746805	11.747318	11.747831	11.748345	11.748858	11.749372	11.749885
0.440	11.750399	11.750912	11.751426	11.751939	11.752453	11.752966	11.753480	11.753994	11.754507	11.755021
0.450	11.755535	11.756048	11.756562	11.757076	11.757589	11.758103	11.758617	11.759131	11.759645	11.760159
0.460	11.760672	11.761186	11.761700	11.762214	11.762728	11.763242	11.763756	11.764270	11.764784	11.765298
0.470	11.765815	11.766327	11.766841	11.767355	11.767869	11.768383	11.768898	11.769412	11.769926	11.770440
0.480	11.770955	11.771469	11.771983	11.772498	11.773012	11.773526	11.774041	11.774555	11.775070	11.775584
0.490	11.776099	11.776613	11.777128	11.777642	11.778157	11.778672	11.779186	11.779701	11.780216	11.780730

ATTENUATION IN DECIBELS
THETA FROM 59.500 TO 59.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	11.781245	11.781760	11.782274	11.782789	11.783304	11.783819	11.784334	11.784849	11.785363	11.785878
0.510	11.786393	11.786908	11.787423	11.787938	11.788453	11.788968	11.789483	11.789998	11.790513	11.791028
0.520	11.791543	11.792059	11.792574	11.793089	11.793604	11.794119	11.794635	11.795150	11.795665	11.796181
0.530	11.796696	11.797211	11.797727	11.798242	11.798757	11.799273	11.799788	11.800304	11.800819	11.801335
0.540	11.801850	11.802366	11.802881	11.803397	11.803913	11.804428	11.804944	11.805460	11.805975	11.806491
0.550	11.807007	11.807523	11.808038	11.808554	11.809070	11.809586	11.810102	11.810618	11.811134	11.811649
0.560	11.812165	11.812681	11.813197	11.813713	11.814229	11.814745	11.815261	11.815778	11.816294	11.816810
0.570	11.817326	11.817842	11.818358	11.818874	11.819391	11.819907	11.820423	11.820940	11.821456	11.821972
0.580	11.822489	11.823005	11.823521	11.824038	11.824554	11.825071	11.825587	11.826104	11.826620	11.827137
0.590	11.827653	11.828170	11.828686	11.829203	11.829720	11.830236	11.830753	11.831270	11.831787	11.832303
0.600	11.832820	11.833337	11.833854	11.834371	11.834887	11.835404	11.835921	11.836438	11.836955	11.837472
0.610	11.837989	11.838506	11.839023	11.839540	11.840057	11.840574	11.841091	11.841608	11.842126	11.842643
0.620	11.843160	11.843677	11.844194	11.844712	11.845229	11.845746	11.846264	11.846781	11.847298	11.847816
0.630	11.848333	11.848850	11.849368	11.849885	11.850403	11.850920	11.851438	11.851955	11.852473	11.852990
0.640	11.853508	11.854026	11.854543	11.855061	11.855579	11.856096	11.856614	11.857132	11.857650	11.858167
0.650	11.858685	11.859203	11.859721	11.860239	11.860757	11.861274	11.861792	11.862310	11.862828	11.863346
0.660	11.863864	11.864382	11.864900	11.865419	11.865937	11.866455	11.866973	11.867491	11.868009	11.868527
0.670	11.869046	11.869564	11.870082	11.870600	11.871119	11.871637	11.872155	11.872674	11.873192	11.873711
0.680	11.874229	11.874747	11.875266	11.875784	11.876303	11.876821	11.877340	11.877859	11.878377	11.878896
0.690	11.879414	11.879933	11.880452	11.880970	11.881489	11.882008	11.882527	11.883045	11.883564	11.884083
0.700	11.884602	11.885121	11.885640	11.886159	11.886678	11.887197	11.887715	11.888234	11.888753	11.889272
0.710	11.889792	11.890311	11.890830	11.891349	11.891868	11.892387	11.892906	11.893425	11.893944	11.894464
0.720	11.894983	11.895503	11.896022	11.896541	11.897061	11.897580	11.898099	11.898619	11.899138	11.899657
0.730	11.900177	11.900697	11.901216	11.901736	11.902255	11.902775	11.903294	11.903814	11.904333	11.904853
0.740	11.905373	11.905892	11.906412	11.906932	11.907452	11.907972	11.908491	11.909011	11.909531	11.910051
0.750	11.910571	11.911091	11.911611	11.912130	11.912650	11.913170	11.913690	11.914211	11.914731	11.915251
0.760	11.915771	11.916291	11.916811	11.917331	11.917851	11.918372	11.918892	11.919412	11.919932	11.920453
0.770	11.920973	11.921493	11.922014	11.922534	11.923054	11.923575	11.924095	11.924616	11.925136	11.925657
0.780	11.926177	11.926698	11.927218	11.927739	11.928259	11.928780	11.929301	11.929821	11.930342	11.930863
0.790	11.931383	11.931904	11.932425	11.932946	11.933466	11.933987	11.934508	11.935029	11.935550	11.936071
0.800	11.936592	11.937113	11.937634	11.938155	11.938676	11.939197	11.939718	11.940239	11.940760	11.941281
0.810	11.941802	11.942323	11.942845	11.943366	11.943887	11.944408	11.944929	11.945451	11.945972	11.946493
0.820	11.947015	11.947536	11.948057	11.948579	11.949100	11.949622	11.950143	11.950665	11.951186	11.951708
0.830	11.952229	11.952751	11.953272	11.953794	11.954316	11.954837	11.955359	11.955881	11.956403	11.956924
0.840	11.957446	11.957968	11.958490	11.959011	11.959533	11.960055	11.960577	11.961099	11.961621	11.962143
0.850	11.962665	11.963187	11.963709	11.964231	11.964753	11.965275	11.965797	11.966319	11.966841	11.967364
0.860	11.967886	11.968408	11.968930	11.969453	11.969975	11.970497	11.971019	11.971542	11.972064	11.972586
0.870	11.973109	11.973631	11.974154	11.974676	11.975199	11.975721	11.976244	11.976766	11.977289	11.977811
0.880	11.978334	11.978857	11.979379	11.979902	11.980425	11.980947	11.981470	11.981993	11.982516	11.983038
0.890	11.983561	11.984084	11.984607	11.985130	11.985653	11.986176	11.986699	11.987221	11.987744	11.988268
0.900	11.988791	11.989314	11.989837	11.990360	11.990883	11.991406	11.991929	11.992452	11.992975	11.993497
0.910	11.994022	11.994545	11.995069	11.995592	11.996115	11.996638	11.997162	11.997685	11.998209	11.998732
0.920	11.999256	11.999779	12.000302	12.000826	12.001349	12.001873	12.002397	12.002920	12.003444	12.003968
0.930	12.004491	12.005015	12.005539	12.006062	12.006586	12.007110	12.007634	12.008157	12.008681	12.009205
0.940	12.009729	12.010253	12.010777	12.011301	12.011825	12.012349	12.012873	12.013397	12.013921	12.014445
0.950	12.014969	12.015493	12.016017	12.016541	12.017065	12.017589	12.018114	12.018638	12.019162	12.019686
0.960	12.020211	12.020735	12.021259	12.021784	12.022308	12.022833	12.023357	12.023881	12.024406	12.024930
0.970	12.025455	12.025979	12.026504	12.027028	12.027553	12.028078	12.028602	12.029127	12.029652	12.030176
0.980	12.030701	12.031226	12.031751	12.032275	12.032800	12.033325	12.033850	12.034375	12.034899	12.035424
0.990	12.035949	12.036474	12.036999	12.037524	12.038049	12.038574	12.039099	12.039624	12.040150	12.040675

ATTENUATION IN DECIBELS
THETA FROM 60.000 TO 60.499 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.000	12.041200	12.041725	12.042250	12.042775	12.043301	12.043826	12.044351	12.044876	12.045402	12.045927
0.010	12.046452	12.046978	12.047503	12.048028	12.048554	12.049079	12.049605	12.050130	12.050656	12.051181
0.020	12.051707	12.052233	12.052758	12.053284	12.053809	12.054335	12.054861	12.055387	12.055912	12.056438
0.030	12.056964	12.057490	12.058015	12.058541	12.059067	12.059593	12.060119	12.060645	12.061171	12.061697
0.040	12.062223	12.062749	12.063275	12.063801	12.064327	12.064853	12.065379	12.065905	12.066431	12.066957
0.050	12.067484	12.068010	12.068536	12.069062	12.069589	12.070115	12.070641	12.071168	12.071694	12.072220
0.060	12.072747	12.073273	12.073800	12.074326	12.074853	12.075379	12.075906	12.076432	12.076959	12.077485
0.070	12.078012	12.078539	12.079065	12.079592	12.080119	12.080646	12.081172	12.081699	12.082226	12.082753
0.080	12.083279	12.083806	12.084333	12.084860	12.085387	12.085914	12.086441	12.086968	12.087495	12.088022
0.090	12.088549	12.089076	12.089603	12.090130	12.090657	12.091185	12.091712	12.092239	12.092766	12.093293
0.100	12.093821	12.094348	12.094875	12.095403	12.095930	12.096457	12.096985	12.097512	12.098040	12.098567
0.110	12.099095	12.099622	12.100150	12.100677	12.101205	12.101732	12.102260	12.102787	12.103315	12.103843
0.120	12.104370	12.104898	12.105426	12.105954	12.106481	12.107009	12.107537	12.108065	12.108593	12.109120
0.130	12.109648	12.110176	12.110704	12.111232	12.111760	12.112288	12.112816	12.113344	12.113872	12.114401
0.140	12.114929	12.115457	12.115985	12.116513	12.117041	12.117569	12.118098	12.118626	12.119154	12.119683
0.150	12.120211	12.120739	12.121268	12.121796	12.122324	12.122853	12.123381	12.123910	12.124438	12.124967
0.160	12.125495	12.126024	12.126552	12.127081	12.127610	12.128138	12.128667	12.129196	12.129725	12.130253
0.170	12.130782	12.131311	12.131840	12.132368	12.132897	12.133426	12.133955	12.134484	12.135013	12.135542
0.180	12.136071	12.136600	12.137129	12.137658	12.138187	12.138716	12.139245	12.139774	12.140303	12.140832
0.190	12.141362	12.141891	12.142420	12.142949	12.143479	12.144008	12.144537	12.145066	12.145596	12.146125
0.200	12.146655	12.147184	12.147713	12.148243	12.148772	12.149302	12.149831	12.150361	12.150890	12.151420
0.210	12.151950	12.152479	12.153009	12.153539	12.154068	12.154598	12.155128	12.155658	12.156187	12.156717
0.220	12.157247	12.157777	12.158307	12.158837	12.159366	12.159896	12.160426	12.160956	12.161486	12.162016
0.230	12.162546	12.163077	12.163607	12.164137	12.164667	12.165197	12.165727	12.166257	12.166788	12.167318
0.240	12.167849	12.168378	12.168909	12.169439	12.169969	12.170500	12.171030	12.171560	12.172091	12.172621
0.250	12.173152	12.173682	12.174213	12.174743	12.175274	12.175804	12.176335	12.176866	12.177396	12.177927
0.260	12.178458	12.178988	12.179519	12.180050	12.180581	12.181111	12.181642	12.182173	12.182704	12.183235
0.270	12.183766	12.184297	12.184828	12.185359	12.185889	12.186421	12.186952	12.187483	12.188014	12.188545
0.280	12.189076	12.189607	12.190138	12.190669	12.191200	12.191732	12.192263	12.192794	12.193326	12.193857
0.290	12.194388	12.194920	12.195451	12.195982	12.196514	12.197045	12.197577	12.198108	12.198640	12.199171
0.300	12.199703	12.200234	12.200766	12.201298	12.201829	12.202361	12.202892	12.203424	12.203956	12.204488
0.310	12.205019	12.205551	12.206083	12.206615	12.207147	12.207678	12.208210	12.208742	12.209274	12.209806
0.320	12.210338	12.210870	12.211402	12.211934	12.212466	12.212998	12.213530	12.214063	12.214595	12.215127
0.330	12.215659	12.216191	12.216724	12.217256	12.217788	12.218320	12.218853	12.219385	12.219917	12.220450
0.340	12.220982	12.221515	12.222047	12.222580	12.223112	12.223645	12.224177	12.224710	12.225242	12.225775
0.350	12.226308	12.226840	12.227373	12.227906	12.228438	12.228971	12.229504	12.230036	12.230569	12.231102
0.360	12.231635	12.232168	12.232701	12.233234	12.233767	12.234300	12.234833	12.235366	12.235898	12.236431
0.370	12.236965	12.237498	12.238031	12.238564	12.239097	12.239630	12.240163	12.240697	12.241230	12.241763
0.380	12.242296	12.242830	12.243363	12.243896	12.244430	12.244963	12.245497	12.246030	12.246563	12.247097
0.390	12.247630	12.248164	12.248697	12.249231	12.249764	12.250298	12.250832	12.251365	12.251899	12.252433
0.400	12.252966	12.253500	12.254034	12.254568	12.255101	12.255635	12.256169	12.256703	12.257237	12.257771
0.410	12.258305	12.258839	12.259373	12.259907	12.260441	12.260975	12.261509	12.262043	12.262577	12.263111
0.420	12.263645	12.264179	12.264714	12.265248	12.265782	12.266316	12.266850	12.267385	12.267919	12.268453
0.430	12.268988	12.269522	12.270056	12.270591	12.271125	12.271660	12.272194	12.272729	12.273263	12.273798
0.440	12.274333	12.274867	12.275402	12.275936	12.276471	12.277006	12.277540	12.278075	12.278610	12.279145
0.450	12.279680	12.280214	12.280749	12.281284	12.281819	12.282354	12.282889	12.283424	12.283959	12.284494
0.460	12.285029	12.285564	12.286099	12.286634	12.287169	12.287704	12.288239	12.288774	12.289310	12.289845
0.470	12.290380	12.290915	12.291451	12.291986	12.292521	12.293056	12.293592	12.294127	12.294663	12.295198
0.480	12.295733	12.296269	12.296804	12.297340	12.297876	12.298411	12.298947	12.299482	12.300018	12.300553
0.490	12.301089	12.301625	12.302161	12.302696	12.303232	12.303768	12.304304	12.304839	12.305375	12.305911

ATTENUATION IN DECIBELS
THETA FROM 60.500 TO 60.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	12.306447	12.306983	12.307519	12.308055	12.308591	12.309127	12.309663	12.310199	12.310735	12.311271
0.510	12.311807	12.312343	12.312879	12.313416	12.313952	12.314488	12.315024	12.315560	12.316097	12.316633
0.520	12.317169	12.317706	12.318242	12.318778	12.319315	12.319851	12.320388	12.320924	12.321461	12.321997
0.530	12.322534	12.323070	12.323607	12.324143	12.324680	12.325217	12.325753	12.326290	12.326827	12.327363
0.540	12.327900	12.328437	12.328974	12.329511	12.330047	12.330584	12.331121	12.331658	12.332195	12.332732
0.550	12.333269	12.333806	12.334343	12.334880	12.335417	12.335954	12.336491	12.337029	12.337566	12.338103
0.560	12.338640	12.339177	12.339715	12.340252	12.340789	12.341326	12.341864	12.342401	12.342938	12.343476
0.570	12.344013	12.344551	12.345088	12.345626	12.346163	12.346701	12.347238	12.347776	12.348313	12.348851
0.580	12.349388	12.349926	12.350464	12.351002	12.351539	12.352077	12.352615	12.353153	12.353690	12.354228
0.590	12.354766	12.355304	12.355842	12.356380	12.356918	12.357456	12.357994	12.358532	12.359070	12.359608
0.600	12.360146	12.360684	12.361222	12.361760	12.362298	12.362836	12.363375	12.363913	12.364451	12.364990
0.610	12.365528	12.366066	12.366604	12.367143	12.367681	12.368220	12.368758	12.369296	12.369835	12.370373
0.620	12.370912	12.371450	12.371989	12.372528	12.373066	12.373605	12.374143	12.374682	12.375221	12.375759
0.630	12.376298	12.376837	12.377376	12.377915	12.378453	12.378992	12.379531	12.380070	12.380609	12.381148
0.640	12.381687	12.382226	12.382765	12.383304	12.383843	12.384382	12.384921	12.385460	12.385999	12.386538
0.650	12.387077	12.387617	12.388156	12.388695	12.389234	12.389774	12.390313	12.390852	12.391392	12.391931
0.660	12.392470	12.393010	12.393549	12.394089	12.394628	12.395168	12.395707	12.396247	12.396786	12.397326
0.670	12.397866	12.398405	12.398945	12.399485	12.400024	12.400564	12.401104	12.401644	12.402183	12.402723
0.680	12.403263	12.403803	12.404343	12.404883	12.405422	12.405962	12.406502	12.407042	12.407582	12.408122
0.690	12.408662	12.409203	12.409743	12.410283	12.410823	12.411363	12.411903	12.412444	12.412984	12.413524
0.700	12.414064	12.414605	12.415145	12.415685	12.416226	12.416766	12.417306	12.417847	12.418387	12.418928
0.710	12.419468	12.420009	12.420549	12.421090	12.421630	12.422171	12.422712	12.423252	12.423793	12.424334
0.720	12.424874	12.425415	12.425956	12.426497	12.427037	12.427578	12.428119	12.428660	12.429201	12.429742
0.730	12.430283	12.430824	12.431365	12.431906	12.432447	12.432988	12.433529	12.434070	12.434611	12.435152
0.740	12.435693	12.436234	12.436776	12.437317	12.437858	12.438400	12.438941	12.439482	12.440024	12.440565
0.750	12.441106	12.441648	12.442189	12.442731	12.443272	12.443813	12.444355	12.444897	12.445438	12.445980
0.760	12.446521	12.447063	12.447605	12.448146	12.448688	12.449230	12.449771	12.450313	12.450855	12.451397
0.770	12.451939	12.452480	12.453022	12.453564	12.454106	12.454648	12.455190	12.455732	12.456274	12.456816
0.780	12.457358	12.457900	12.458442	12.458984	12.459526	12.460068	12.460611	12.461153	12.461695	12.462237
0.790	12.462780	12.463322	12.463864	12.464407	12.464949	12.465491	12.466034	12.466576	12.467119	12.467661
0.800	12.468204	12.468746	12.469289	12.469831	12.470374	12.470916	12.471459	12.472002	12.472544	12.473087
0.810	12.473630	12.474172	12.474715	12.475258	12.475801	12.476344	12.476887	12.477429	12.477972	12.478515
0.820	12.479058	12.479601	12.480144	12.480687	12.481230	12.481773	12.482316	12.482859	12.483402	12.483946
0.830	12.484469	12.485012	12.485555	12.486118	12.486662	12.487205	12.487748	12.488292	12.488835	12.489378
0.840	12.489922	12.490465	12.491008	12.491552	12.492095	12.492639	12.493182	12.493726	12.494269	12.494813
0.850	12.495357	12.495900	12.496444	12.496988	12.497531	12.498075	12.498619	12.499162	12.499706	12.500250
0.860	12.500794	12.501338	12.501882	12.502426	12.502969	12.503513	12.504057	12.504601	12.505145	12.505689
0.870	12.506233	12.506777	12.507322	12.507866	12.508410	12.508954	12.509498	12.510042	12.510587	12.511131
0.880	12.511675	12.512219	12.512764	12.513308	12.513852	12.514397	12.514941	12.515486	12.516030	12.516575
0.890	12.517119	12.517664	12.518208	12.518753	12.519297	12.519842	12.520387	12.520931	12.521476	12.522021
0.900	12.522565	12.523110	12.523655	12.524200	12.524744	12.525289	12.525834	12.526379	12.526924	12.527469
0.910	12.528014	12.528559	12.529104	12.529649	12.530194	12.530739	12.531284	12.531829	12.532374	12.532919
0.920	12.533464	12.534010	12.534555	12.535100	12.535645	12.536191	12.536736	12.537281	12.537827	12.538372
0.930	12.538917	12.539463	12.540008	12.540554	12.541099	12.541645	12.542190	12.542736	12.543281	12.543827
0.940	12.544373	12.544918	12.545464	12.546010	12.546555	12.547101	12.547647	12.548193	12.548738	12.549284
0.950	12.549830	12.550376	12.550922	12.551468	12.552014	12.552559	12.553105	12.553652	12.554198	12.554744
0.960	12.555290	12.555836	12.556382	12.556928	12.557474	12.558020	12.558567	12.559113	12.559659	12.560205
0.970	12.560752	12.561298	12.561844	12.562391	12.562937	12.563483	12.564030	12.564576	12.565123	12.565669
0.980	12.566216	12.566762	12.567309	12.567855	12.568402	12.568949	12.569495	12.570042	12.570589	12.571135
0.990	12.571682	12.572229	12.572776	12.573323	12.573869	12.574416	12.574963	12.575510	12.576057	12.576604

ATTENUATION IN DECIBELS
THETA FROM 61.000 TO 61.499 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.000	12.577151	12.577698	12.578245	12.578792	12.579339	12.579886	12.580433	12.580980	12.581527	12.582075
0.010	12.582622	12.583169	12.583716	12.584263	12.584811	12.585358	12.585905	12.586453	12.587000	12.587547
0.020	12.588095	12.588642	12.589190	12.589737	12.590285	12.590832	12.591380	12.591927	12.592475	12.593023
0.030	12.593570	12.594118	12.594666	12.595213	12.595761	12.596309	12.596857	12.597404	12.597952	12.598500
0.040	12.599048	12.599596	12.600144	12.600692	12.601240	12.601788	12.602336	12.602884	12.603432	12.603980
0.050	12.604528	12.605076	12.605624	12.606172	12.606720	12.607269	12.607817	12.608365	12.608913	12.609462
0.060	12.610010	12.610558	12.611107	12.611655	12.612203	12.612752	12.613300	12.613849	12.614397	12.614946
0.070	12.615494	12.616043	12.616592	12.617140	12.617689	12.618237	12.618786	12.619335	12.619884	12.620432
0.080	12.620981	12.621530	12.622079	12.622628	12.623176	12.623725	12.624274	12.624823	12.625372	12.625921
0.090	12.626470	12.627019	12.627568	12.628117	12.628666	12.629215	12.629765	12.630314	12.630863	12.631412
0.100	12.631961	12.632511	12.633060	12.633609	12.634158	12.634708	12.635257	12.635807	12.636356	12.636905
0.110	12.637455	12.638004	12.638554	12.639103	12.639653	12.640202	12.640752	12.641302	12.641851	12.642401
0.120	12.642951	12.643500	12.644050	12.644600	12.645150	12.645699	12.646249	12.646799	12.647349	12.647899
0.130	12.648449	12.648999	12.649549	12.650099	12.650648	12.651199	12.651749	12.652299	12.652849	12.653399
0.140	12.653949	12.654499	12.655049	12.655599	12.656150	12.656700	12.657250	12.657801	12.658351	12.658901
0.150	12.659451	12.660002	12.660552	12.661103	12.661653	12.662204	12.662754	12.663305	12.663855	12.664406
0.160	12.664956	12.665507	12.666058	12.666608	12.667159	12.667710	12.668260	12.668811	12.669362	12.669913
0.170	12.670463	12.671014	12.671565	12.672116	12.672667	12.673218	12.673769	12.674320	12.674871	12.675422
0.180	12.675973	12.676524	12.677075	12.677626	12.678177	12.678728	12.679280	12.679831	12.680382	12.680933
0.190	12.681485	12.682036	12.682587	12.683138	12.683690	12.684241	12.684793	12.685344	12.685896	12.686447
0.200	12.686998	12.687550	12.688102	12.688653	12.689205	12.689756	12.690308	12.690860	12.691411	12.691963
0.210	12.692515	12.693066	12.693618	12.694170	12.694722	12.695274	12.695826	12.696378	12.696929	12.697481
0.220	12.698033	12.698585	12.699137	12.699689	12.700241	12.700793	12.701345	12.701898	12.702450	12.703002
0.230	12.703554	12.704106	12.704659	12.705211	12.705763	12.706315	12.706868	12.707420	12.707972	12.708525
0.240	12.709077	12.709630	12.710182	12.710734	12.711287	12.711840	12.712392	12.712945	12.713497	12.714050
0.250	12.714602	12.715155	12.715708	12.716261	12.716813	12.717366	12.717919	12.718472	12.719024	12.719577
0.260	12.720130	12.720683	12.721236	12.721789	12.722342	12.722895	12.723448	12.724001	12.724554	12.725107
0.270	12.725660	12.726213	12.726766	12.727319	12.727873	12.728426	12.728979	12.729532	12.730086	12.730639
0.280	12.731192	12.731746	12.732299	12.732852	12.733406	12.733959	12.734513	12.735066	12.735620	12.736173
0.290	12.736727	12.737280	12.737834	12.738388	12.738941	12.739495	12.740049	12.740602	12.741156	12.741710
0.300	12.742264	12.742818	12.743371	12.743925	12.744479	12.745033	12.745587	12.746141	12.746695	12.747249
0.310	12.747803	12.748357	12.748911	12.749465	12.750019	12.750573	12.751127	12.751682	12.752236	12.752790
0.320	12.753344	12.753899	12.754453	12.755007	12.755561	12.756116	12.756670	12.757225	12.757779	12.758333
0.330	12.758888	12.759442	12.759997	12.760551	12.761106	12.761661	12.762215	12.762770	12.763324	12.763879
0.340	12.764434	12.764989	12.765543	12.766098	12.766653	12.767208	12.767763	12.768317	12.768872	12.769427
0.350	12.769982	12.770537	12.771092	12.771647	12.772202	12.772757	12.773312	12.773867	12.774422	12.774978
0.360	12.775533	12.776088	12.776643	12.777198	12.777754	12.778309	12.778864	12.779420	12.779975	12.780530
0.370	12.781086	12.781641	12.782197	12.782752	12.783308	12.783863	12.784419	12.784974	12.785530	12.786085
0.380	12.786641	12.787197	12.787752	12.788308	12.788864	12.789419	12.789975	12.790531	12.791087	12.791643
0.390	12.792199	12.792754	12.793310	12.793866	12.794422	12.794978	12.795534	12.796090	12.796646	12.797202
0.400	12.797758	12.798314	12.798871	12.799427	12.799983	12.800539	12.801095	12.801652	12.802208	12.802764
0.410	12.803320	12.803877	12.804433	12.804990	12.805546	12.806102	12.806659	12.807215	12.807772	12.808328
0.420	12.808885	12.809441	12.809998	12.810555	12.811111	12.811668	12.812225	12.812781	12.813338	12.813895
0.430	12.814452	12.815009	12.815565	12.816122	12.816679	12.817236	12.817793	12.818350	12.818907	12.819464
0.440	12.820021	12.820578	12.821135	12.821692	12.822249	12.822806	12.823363	12.823920	12.824478	12.825035
0.450	12.825592	12.826149	12.826707	12.827264	12.827821	12.828379	12.828936	12.829494	12.830051	12.830608
0.460	12.831166	12.831723	12.832281	12.832838	12.833396	12.833953	12.834511	12.835069	12.835626	12.836184
0.470	12.836742	12.837300	12.837857	12.838415	12.838973	12.839531	12.840089	12.840647	12.841204	12.841762
0.480	12.842320	12.842878	12.843436	12.843994	12.844552	12.845110	12.845668	12.846226	12.846785	12.847343
0.490	12.847901	12.848459	12.849017	12.849576	12.850134	12.850692	12.851250	12.851809	12.852367	12.852925

ATTENUATION IN DECIBELS
THETA FROM 61.500 TO 61.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	12.853484	12.854042	12.854601	12.855159	12.855718	12.856276	12.856835	12.857393	12.857952	12.858511
0.510	12.859069	12.859628	12.860187	12.860745	12.861304	12.861863	12.862422	12.862980	12.863539	12.864098
0.520	12.864657	12.865216	12.865775	12.866334	12.866893	12.867452	12.868011	12.868570	12.869129	12.869688
0.530	12.870247	12.870806	12.871365	12.871924	12.872483	12.873043	12.873602	12.874161	12.874720	12.875280
0.540	12.875839	12.876398	12.876958	12.877517	12.878077	12.878636	12.879196	12.879755	12.880315	12.880874
0.550	12.881434	12.881993	12.882553	12.883113	12.883672	12.884232	12.884792	12.885351	12.885911	12.886471
0.560	12.887031	12.887591	12.888150	12.888710	12.889270	12.889830	12.890390	12.890950	12.891510	12.892070
0.570	12.892630	12.893190	12.893750	12.894310	12.894870	12.895430	12.895990	12.896551	12.897111	12.897671
0.580	12.898232	12.898792	12.899352	12.899913	12.900473	12.901033	12.901594	12.902154	12.902715	12.903275
0.590	12.903836	12.904396	12.904957	12.905517	12.906078	12.906638	12.907199	12.907760	12.908320	12.908881
0.600	12.909442	12.910003	12.910563	12.911124	12.911685	12.912246	12.912807	12.913368	12.913929	12.914490
0.610	12.915051	12.915612	12.916173	12.916734	12.917295	12.917856	12.918417	12.918978	12.919539	12.920100
0.620	12.920661	12.921223	12.921784	12.922345	12.922907	12.923468	12.924029	12.924591	12.925152	12.925713
0.630	12.926275	12.926836	12.927398	12.927959	12.928521	12.929082	12.929644	12.930206	12.930767	12.931329
0.640	12.931890	12.932452	12.933014	12.933576	12.934137	12.934699	12.935261	12.935823	12.936385	12.936947
0.650	12.937508	12.938070	12.938632	12.939194	12.939756	12.940318	12.940880	12.941442	12.942005	12.942567
0.660	12.943129	12.943691	12.944253	12.944815	12.945378	12.945940	12.946502	12.947065	12.947627	12.948189
0.670	12.948752	12.949314	12.949876	12.950439	12.951001	12.951564	12.952126	12.952689	12.953251	12.953814
0.680	12.954377	12.954939	12.955502	12.956065	12.956627	12.957190	12.957753	12.958315	12.958878	12.959441
0.690	12.960004	12.960567	12.961130	12.961693	12.962256	12.962819	12.963382	12.963945	12.964508	12.965071
0.700	12.965634	12.966197	12.966760	12.967323	12.967886	12.968450	12.969013	12.969576	12.970139	12.970703
0.710	12.971266	12.971829	12.972393	12.972956	12.973519	12.974083	12.974646	12.975210	12.975773	12.976337
0.720	12.976900	12.977464	12.978028	12.978591	12.979155	12.979718	12.980282	12.980846	12.981410	12.981973
0.730	12.982537	12.983101	12.983665	12.984229	12.984793	12.985356	12.985920	12.986484	12.987048	12.987612
0.740	12.988176	12.988740	12.989305	12.989869	12.990433	12.990997	12.991561	12.992125	12.992689	12.993254
0.750	12.993818	12.994382	12.994946	12.995511	12.996075	12.996640	12.997204	12.997768	12.998333	12.998897
0.760	12.999462	13.000026	13.000591	13.001155	13.001720	13.002285	13.002849	13.003414	13.003979	13.004543
0.770	13.005108	13.005673	13.006238	13.006802	13.007367	13.007932	13.008497	13.009062	13.009627	13.010192
0.780	13.010757	13.011322	13.011887	13.012452	13.013017	13.013582	13.014147	13.014712	13.015277	13.015843
0.790	13.016408	13.016973	13.017538	13.018103	13.018669	13.019234	13.019799	13.020365	13.020930	13.021496
0.800	13.022061	13.022627	13.023192	13.023758	13.024323	13.024889	13.025454	13.026020	13.026586	13.027151
0.810	13.027717	13.028283	13.028848	13.029414	13.029980	13.030546	13.031111	13.031677	13.032243	13.032809
0.820	13.033375	13.033941	13.034507	13.035073	13.035639	13.036205	13.036771	13.037337	13.037903	13.038469
0.830	13.039035	13.039601	13.040168	13.040734	13.041300	13.041867	13.042433	13.042999	13.043566	13.044132
0.840	13.044698	13.045265	13.045831	13.046398	13.046964	13.047531	13.048097	13.048664	13.049230	13.049797
0.850	13.050364	13.050930	13.051497	13.052064	13.052630	13.053197	13.053764	13.054331	13.054897	13.055464
0.860	13.056031	13.056598	13.057165	13.057732	13.058299	13.058866	13.059433	13.060000	13.060567	13.061134
0.870	13.061701	13.062268	13.062835	13.063403	13.063970	13.064538	13.065104	13.065672	13.066239	13.066806
0.880	13.067374	13.067941	13.068508	13.069076	13.069643	13.070211	13.070778	13.071346	13.071913	13.072481
0.890	13.073048	13.073616	13.074184	13.074751	13.075319	13.075887	13.076454	13.077022	13.077590	13.078158
0.900	13.078725	13.079293	13.079861	13.080429	13.080997	13.081565	13.082133	13.082701	13.083269	13.083837
0.910	13.084405	13.084973	13.085541	13.086109	13.086677	13.087246	13.087814	13.088382	13.088950	13.089519
0.920	13.090007	13.090575	13.091143	13.091712	13.092280	13.092849	13.093417	13.093986	13.094554	13.095123
0.930	13.095771	13.096340	13.096908	13.097477	13.098046	13.098614	13.099183	13.099752	13.100320	13.100889
0.940	13.101458	13.102027	13.102595	13.103164	13.103733	13.104302	13.104871	13.105440	13.106009	13.106578
0.950	13.107147	13.107716	13.108285	13.108854	13.109423	13.109992	13.110562	13.111131	13.111700	13.112269
0.960	13.112838	13.113408	13.113977	13.114546	13.115116	13.115685	13.116254	13.116824	13.117393	13.117963
0.970	13.118532	13.119102	13.119671	13.120241	13.120811	13.121380	13.121950	13.122519	13.123089	13.123659
0.980	13.124209	13.124798	13.125368	13.125938	13.126508	13.127078	13.127648	13.128217	13.128787	13.129357
0.990	13.129927	13.130497	13.131067	13.131637	13.132207	13.132777	13.133348	13.133918	13.134488	13.135058

ATTENUATION IN DECIBELS
THETA FROM 62.000 TO 62.499 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.000	13.135628	13.136199	13.136769	13.137339	13.137909	13.138480	13.139050	13.139620	13.140191	13.140761
0.010	13.141332	13.141902	13.142473	13.143043	13.143614	13.144184	13.144755	13.145326	13.145896	13.146467
0.020	13.147038	13.147608	13.148179	13.148750	13.149321	13.149891	13.150462	13.151033	13.151604	13.152175
0.030	13.152746	13.153317	13.153888	13.154459	13.155030	13.155601	13.156172	13.156743	13.157314	13.157885
0.040	13.158457	13.159028	13.159599	13.160170	13.160741	13.161312	13.161884	13.162455	13.163027	13.163598
0.050	13.164170	13.164741	13.165313	13.165884	13.166456	13.167027	13.167599	13.168170	13.168742	13.169314
0.060	13.169885	13.170457	13.171028	13.171600	13.172172	13.172744	13.173316	13.173887	13.174459	13.175031
0.070	13.175603	13.176175	13.176747	13.177319	13.177891	13.178463	13.179035	13.179607	13.180179	13.180751
0.080	13.181323	13.181895	13.182468	13.183040	13.183612	13.184184	13.184757	13.185329	13.185901	13.186474
0.090	13.187046	13.187618	13.188191	13.188763	13.189336	13.189908	13.190481	13.191054	13.191626	13.192199
0.100	13.192771	13.193344	13.193917	13.194489	13.195062	13.195635	13.196208	13.196780	13.197353	13.197926
0.110	13.198499	13.199072	13.199645	13.200218	13.200791	13.201363	13.201936	13.202508	13.203083	13.203656
0.120	13.204829	13.205402	13.205975	13.206548	13.207121	13.207694	13.208267	13.208840	13.209413	13.209986
0.130	13.209961	13.210535	13.211108	13.211681	13.212255	13.212828	13.213402	13.213975	13.214549	13.215122
0.140	13.215696	13.216270	13.216843	13.217417	13.217991	13.218564	13.219138	13.219712	13.220286	13.220859
0.150	13.221433	13.222007	13.222581	13.223155	13.223729	13.224303	13.224877	13.225451	13.226025	13.226599
0.160	13.227173	13.227747	13.228321	13.228895	13.229469	13.230044	13.230618	13.231192	13.231766	13.232341
0.170	13.232915	13.233489	13.234064	13.234638	13.235213	13.235787	13.236361	13.236936	13.237510	13.238085
0.180	13.238660	13.239234	13.239809	13.240383	13.240958	13.241533	13.242107	13.242682	13.243257	13.243832
0.190	13.244406	13.244981	13.245556	13.246131	13.246706	13.247281	13.247856	13.248431	13.249006	13.249581
0.200	13.250156	13.250731	13.251306	13.251881	13.252456	13.253031	13.253607	13.254182	13.254757	13.255332
0.210	13.255908	13.256483	13.257058	13.257634	13.258209	13.258785	13.259360	13.259935	13.260511	13.261086
0.220	13.261662	13.262238	13.262813	13.263389	13.263964	13.264540	13.265116	13.265691	13.266267	13.266843
0.230	13.267419	13.267994	13.268570	13.269146	13.269722	13.270298	13.270874	13.271450	13.272026	13.272602
0.240	13.273178	13.273754	13.274330	13.274906	13.275482	13.276058	13.276634	13.277210	13.277787	13.278363
0.250	13.278939	13.279516	13.280092	13.280668	13.281245	13.281821	13.282397	13.282974	13.283550	13.284127
0.260	13.284703	13.285280	13.285856	13.286433	13.287010	13.287586	13.288163	13.288740	13.289316	13.289893
0.270	13.290470	13.291047	13.291623	13.292200	13.292777	13.293354	13.293931	13.294508	13.295085	13.295662
0.280	13.296239	13.296816	13.297393	13.297970	13.298547	13.299124	13.299701	13.300278	13.300856	13.301433
0.290	13.302010	13.302587	13.303165	13.303742	13.304319	13.304897	13.305474	13.306051	13.306629	13.307206
0.300	13.307784	13.308361	13.308939	13.309516	13.310094	13.310672	13.311249	13.311827	13.312405	13.312982
0.310	13.313560	13.314138	13.314716	13.315293	13.315871	13.316449	13.317027	13.317605	13.318183	13.318761
0.320	13.319339	13.319917	13.320495	13.321073	13.321651	13.322229	13.322807	13.323385	13.323963	13.324542
0.330	13.325120	13.325698	13.326276	13.326855	13.327433	13.328011	13.328590	13.329168	13.329746	13.330325
0.340	13.330903	13.331482	13.332060	13.332639	13.333218	13.333796	13.334375	13.334953	13.335532	13.336111
0.350	13.336689	13.337268	13.337847	13.338426	13.339005	13.339583	13.340162	13.340741	13.341320	13.341899
0.360	13.342478	13.343057	13.343636	13.344215	13.344794	13.345373	13.345952	13.346531	13.347111	13.347690
0.370	13.348269	13.348848	13.349427	13.350007	13.350586	13.351165	13.351745	13.352324	13.352903	13.353482
0.380	13.354062	13.354642	13.355221	13.355801	13.356380	13.356960	13.357540	13.358119	13.358699	13.359279
0.390	13.359858	13.360438	13.361018	13.361598	13.362177	13.362757	13.363337	13.363917	13.364497	13.365077
0.400	13.365657	13.366237	13.366817	13.367397	13.367977	13.368557	13.369137	13.369717	13.370297	13.370877
0.410	13.371457	13.372038	13.372618	13.373198	13.373778	13.374359	13.374939	13.375519	13.376100	13.376680
0.420	13.377261	13.377841	13.378422	13.379002	13.379583	13.380164	13.380744	13.381324	13.381905	13.382486
0.430	13.383066	13.383647	13.384228	13.384809	13.385389	13.385970	13.386551	13.387132	13.387713	13.388294
0.440	13.388875	13.389456	13.390037	13.390618	13.391199	13.391780	13.392361	13.392942	13.393523	13.394104
0.450	13.394685	13.395267	13.395848	13.396429	13.397010	13.397592	13.398173	13.398754	13.399336	13.399917
0.460	13.400499	13.401080	13.401661	13.402243	13.402825	13.403406	13.403988	13.404569	13.405151	13.405733
0.470	13.406314	13.406896	13.407478	13.408059	13.408641	13.409223	13.409805	13.410387	13.410968	13.411550
0.480	13.412132	13.412714	13.413296	13.413878	13.414460	13.415042	13.415624	13.416206	13.416789	13.417371
0.490	13.417953	13.418535	13.419117	13.419700	13.420282	13.420864	13.421446	13.422029	13.422611	13.423194

ATTENUATION IN DECIBELS
THETA FROM 62.500 TO 62.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	13.423776	13.424358	13.424941	13.425523	13.426106	13.426688	13.427271	13.427854	13.428436	13.429019
0.510	13.429602	13.430184	13.430767	13.431350	13.431932	13.432515	13.433098	13.433681	13.434264	13.434847
0.520	13.435430	13.436013	13.436595	13.437178	13.437761	13.438344	13.438927	13.439511	13.440094	13.440677
0.530	13.441260	13.441843	13.442426	13.443010	13.443593	13.444176	13.444760	13.445343	13.445926	13.446510
0.540	13.447093	13.447677	13.448260	13.448843	13.449427	13.450011	13.450594	13.451178	13.451761	13.452345
0.550	13.452929	13.453512	13.454096	13.454680	13.455263	13.455847	13.456431	13.457015	13.457599	13.458183
0.560	13.458767	13.459350	13.459934	13.460518	13.461102	13.461686	13.462271	13.462855	13.463439	13.464023
0.570	13.464607	13.465191	13.465775	13.466360	13.466944	13.467528	13.468113	13.468697	13.469281	13.469866
0.580	13.470450	13.471035	13.471619	13.472203	13.472788	13.473372	13.473957	13.474542	13.475126	13.475711
0.590	13.476295	13.476880	13.477465	13.478050	13.478634	13.479219	13.479804	13.480389	13.480974	13.481559
0.600	13.482144	13.482728	13.483313	13.483898	13.484483	13.485068	13.485654	13.486239	13.486824	13.487409
0.610	13.487994	13.488579	13.489164	13.489750	13.490335	13.490920	13.491505	13.492091	13.492676	13.493262
0.620	13.493847	13.494432	13.495018	13.495603	13.496189	13.496774	13.497360	13.497946	13.498531	13.499117
0.630	13.499702	13.500288	13.500874	13.501459	13.502045	13.502631	13.503217	13.503803	13.504389	13.504974
0.640	13.505560	13.506146	13.506732	13.507318	13.507904	13.508490	13.509076	13.509663	13.510249	13.510835
0.650	13.511421	13.512007	13.512593	13.513180	13.513766	13.514352	13.514938	13.515525	13.516111	13.516697
0.660	13.517284	13.517870	13.518457	13.519043	13.519630	13.520216	13.520803	13.521389	13.521976	13.522563
0.670	13.523149	13.523736	13.524323	13.524909	13.525496	13.526083	13.526670	13.527257	13.527844	13.528430
0.680	13.529017	13.529604	13.530191	13.530778	13.531365	13.531952	13.532539	13.533126	13.533714	13.534301
0.690	13.534888	13.535475	13.536062	13.536649	13.537237	13.537824	13.538411	13.538999	13.539586	13.540174
0.700	13.540761	13.541348	13.541936	13.542523	13.543111	13.543698	13.544286	13.544873	13.545461	13.546049
0.710	13.546636	13.547224	13.547812	13.548400	13.548987	13.549575	13.550163	13.550751	13.551339	13.551927
0.720	13.552515	13.553102	13.553690	13.554278	13.554866	13.555454	13.556043	13.556631	13.557219	13.557807
0.730	13.558395	13.558983	13.559572	13.560160	13.560748	13.561336	13.561925	13.562513	13.563101	13.563690
0.740	13.564278	13.564867	13.565455	13.566044	13.566632	13.567221	13.567809	13.568398	13.568987	13.569575
0.750	13.570164	13.570753	13.571341	13.571930	13.572519	13.573108	13.573696	13.574285	13.574874	13.575463
0.760	13.576052	13.576641	13.577230	13.577819	13.578408	13.578997	13.579586	13.580175	13.580764	13.581353
0.770	13.581943	13.582532	13.583121	13.583710	13.584300	13.584889	13.585478	13.586068	13.586657	13.587246
0.780	13.587836	13.588425	13.589015	13.589604	13.590194	13.590783	13.591373	13.591963	13.592552	13.593142
0.790	13.593732	13.594321	13.594911	13.595501	13.596091	13.596680	13.597270	13.597860	13.598450	13.599040
0.800	13.599630	13.600220	13.600810	13.601400	13.601990	13.602580	13.603170	13.603760	13.604350	13.604941
0.810	13.605531	13.606121	13.606711	13.607301	13.607892	13.608482	13.609072	13.609663	13.610253	13.610844
0.820	13.611434	13.612024	13.612615	13.613206	13.613796	13.614387	13.614977	13.615568	13.616158	13.616749
0.830	13.617340	13.617931	13.618521	13.619112	13.619703	13.620294	13.620885	13.621475	13.622066	13.622657
0.840	13.623248	13.623839	13.624430	13.625021	13.625612	13.626203	13.626795	13.627386	13.627977	13.628568
0.850	13.629159	13.629750	13.630342	13.630933	13.631524	13.632116	13.632707	13.633298	13.633890	13.634481
0.860	13.635073	13.635664	13.636256	13.636847	13.637439	13.638030	13.638622	13.639214	13.639805	13.640397
0.870	13.640989	13.641580	13.642172	13.642764	13.643356	13.643948	13.644540	13.645131	13.645723	13.646315
0.880	13.646907	13.647499	13.648091	13.648683	13.649275	13.649868	13.650460	13.651052	13.651644	13.652236
0.890	13.652828	13.653421	13.654013	13.654605	13.655198	13.655790	13.656382	13.656975	13.657567	13.658160
0.900	13.658752	13.659345	13.659937	13.660530	13.661122	13.661715	13.662308	13.662900	13.663493	13.664086
0.910	13.664678	13.665271	13.665864	13.666457	13.667050	13.667642	13.668235	13.668828	13.669421	13.670014
0.920	13.670607	13.671200	13.671793	13.672386	13.672979	13.673572	13.674166	13.674759	13.675352	13.675945
0.930	13.676538	13.677132	13.677725	13.678318	13.678912	13.679505	13.680098	13.680692	13.681285	13.681879
0.940	13.682472	13.683066	13.683659	13.684253	13.684847	13.685440	13.686034	13.686628	13.687221	13.687815
0.950	13.688409	13.689003	13.689596	13.690190	13.690784	13.691378	13.691972	13.692566	13.693160	13.693754
0.960	13.694348	13.694942	13.695536	13.696130	13.696724	13.697318	13.697912	13.698507	13.699101	13.699695
0.970	13.700269	13.700864	13.701458	13.702052	13.702647	13.703241	13.703836	13.704430	13.705024	13.705619
0.980	13.706233	13.706828	13.707422	13.708017	13.708612	13.709206	13.709801	13.710396	13.710991	13.711585
0.990	13.712180	13.712775	13.713370	13.713965	13.714560	13.715155	13.715749	13.716344	13.716939	13.717534

ATTENUATION IN DECIBELS
THETA FROM 63.000 TO 63.499 DEGREES

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THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.000	13.718129	13.718724	13.719319	13.719915	13.720510	13.721105	13.721700	13.722295	13.722891	13.723486
0.010	13.724081	13.724676	13.725272	13.725867	13.726463	13.727058	13.727654	13.728249	13.728845	13.729440
0.020	13.730036	13.730631	13.731227	13.731822	13.732418	13.733014	13.733609	13.734205	13.734801	13.735397
0.030	13.735993	13.736588	13.737184	13.737780	13.738376	13.738972	13.739568	13.740164	13.740760	13.741356
0.040	13.741952	13.742548	13.743144	13.743740	13.744337	13.744933	13.745529	13.746125	13.746722	13.747318
0.050	13.747914	13.748510	13.749107	13.749703	13.750300	13.750896	13.751493	13.752089	13.752686	13.753282
0.060	13.753879	13.754475	13.755072	13.755669	13.756265	13.756862	13.757459	13.758056	13.758652	13.759249
0.070	13.759846	13.760443	13.761040	13.761637	13.762234	13.762830	13.763428	13.764025	13.764622	13.765219
0.080	13.765816	13.766413	13.767010	13.767607	13.768205	13.768802	13.769399	13.769996	13.770594	13.771191
0.090	13.771788	13.772385	13.772983	13.773581	13.774178	13.774776	13.775373	13.775971	13.776568	13.777166
0.100	13.777763	13.778361	13.778959	13.779556	13.780154	13.780752	13.781350	13.781947	13.782545	13.783143
0.110	13.783741	13.784339	13.784937	13.785535	13.786133	13.786731	13.787329	13.787927	13.788525	13.789123
0.120	13.789721	13.790319	13.790917	13.791516	13.792114	13.792712	13.793310	13.793909	13.794507	13.795105
0.130	13.795704	13.796302	13.796901	13.797499	13.798098	13.798696	13.799295	13.799893	13.800492	13.801091
0.140	13.801679	13.802278	13.802877	13.803475	13.804074	13.804673	13.805272	13.805871	13.806470	13.807068
0.150	13.807677	13.808276	13.808875	13.809474	13.810073	13.810672	13.811271	13.811870	13.812469	13.813069
0.160	13.813668	13.814267	13.814866	13.815465	13.816065	13.816664	13.817263	13.817863	13.818462	13.819061
0.170	13.819661	13.820260	13.820860	13.821459	13.822059	13.822658	13.823258	13.823858	13.824457	13.825057
0.180	13.825657	13.826256	13.826856	13.827456	13.828056	13.828655	13.829255	13.829855	13.830455	13.831055
0.190	13.831655	13.832255	13.832855	13.833455	13.834055	13.834655	13.835255	13.835855	13.836455	13.837056
0.200	13.837656	13.838256	13.838856	13.839457	13.840057	13.840657	13.841258	13.841858	13.842458	13.843059
0.210	13.843659	13.844260	13.844860	13.845461	13.846061	13.846662	13.847263	13.847863	13.848464	13.849065
0.220	13.849666	13.850266	13.850867	13.851468	13.852069	13.852670	13.853270	13.853871	13.854472	13.855073
0.230	13.855674	13.856275	13.856876	13.857477	13.858078	13.858680	13.859281	13.859882	13.860483	13.861084
0.240	13.861686	13.862287	13.862888	13.863490	13.864091	13.864692	13.865294	13.865895	13.866497	13.867098
0.250	13.867700	13.868301	13.868903	13.869504	13.870106	13.870708	13.871309	13.871911	13.872513	13.873114
0.260	13.873716	13.874318	13.874920	13.875522	13.876124	13.876725	13.877327	13.877929	13.878531	13.879133
0.270	13.879735	13.880337	13.880939	13.881542	13.882144	13.882746	13.883348	13.883950	13.884553	13.885155
0.280	13.885757	13.886359	13.886962	13.887564	13.888167	13.888769	13.889372	13.889974	13.890576	13.891179
0.290	13.891782	13.892384	13.892987	13.893589	13.894192	13.894795	13.895398	13.896000	13.896603	13.897206
0.300	13.897809	13.898412	13.899014	13.899617	13.900220	13.900823	13.901426	13.902029	13.902632	13.903235
0.310	13.903838	13.904441	13.905045	13.905648	13.906251	13.906854	13.907457	13.908061	13.908664	13.909267
0.320	13.909871	13.910474	13.911077	13.911681	13.912284	13.912888	13.913491	13.914095	13.914698	13.915302
0.330	13.915905	13.916509	13.917113	13.917717	13.918320	13.918924	13.919528	13.920132	13.920735	13.921339
0.340	13.921943	13.922547	13.923151	13.923755	13.924359	13.924963	13.925567	13.926171	13.926775	13.927379
0.350	13.927983	13.928587	13.929192	13.929796	13.930400	13.931004	13.931609	13.932213	13.932817	13.933422
0.360	13.934026	13.934631	13.935235	13.935839	13.936444	13.937048	13.937653	13.938258	13.938862	13.939467
0.370	13.940071	13.940676	13.941281	13.941886	13.942490	13.943095	13.943700	13.944305	13.944910	13.945515
0.380	13.946120	13.946725	13.947329	13.947935	13.948539	13.949145	13.949750	13.950355	13.950960	13.951565
0.390	13.952170	13.952775	13.953381	13.953986	13.954591	13.955197	13.955802	13.956407	13.957013	13.957618
0.400	13.958224	13.958829	13.959435	13.960040	13.960646	13.961251	13.961857	13.962462	13.963068	13.963674
0.410	13.964280	13.964885	13.965491	13.966097	13.966703	13.967309	13.967914	13.968520	13.969126	13.969732
0.420	13.970338	13.970944	13.971550	13.972156	13.972762	13.973369	13.973975	13.974581	13.975187	13.975793
0.430	13.976399	13.977006	13.977612	13.978218	13.978825	13.979431	13.980037	13.980644	13.981250	13.981857
0.440	13.982463	13.983070	13.983676	13.984283	13.984890	13.985496	13.986103	13.986710	13.987316	13.987923
0.450	13.988530	13.989137	13.989743	13.990350	13.990957	13.991564	13.992171	13.992778	13.993385	13.993992
0.460	13.994599	13.995206	13.995813	13.996420	13.997028	13.997635	13.998242	13.998849	13.999456	14.000064
0.470	14.000671	14.001278	14.001886	14.002493	14.003100	14.003708	14.004315	14.004923	14.005530	14.006138
0.480	14.006745	14.007353	14.007961	14.008568	14.009176	14.009784	14.010391	14.010999	14.011607	14.012215
0.490	14.012823	14.013430	14.014038	14.014646	14.015254	14.015862	14.016470	14.017078	14.017686	14.018294

ATTENUATION IN DECIBELS
THETA FROM 63.500 TO 63.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	14.018902	14.019511	14.020119	14.020727	14.021335	14.021943	14.022552	14.023160	14.023768	14.024377
0.510	14.024985	14.025593	14.026202	14.026810	14.027419	14.028027	14.028636	14.029244	14.029853	14.030461
0.520	14.031070	14.031679	14.032287	14.032896	14.033505	14.034114	14.034722	14.035331	14.035940	14.036549
0.530	14.037158	14.037767	14.038376	14.038985	14.039594	14.040203	14.040812	14.041421	14.042030	14.042639
0.540	14.043248	14.043857	14.044467	14.045076	14.045685	14.046295	14.046904	14.047513	14.048123	14.048732
0.550	14.049341	14.049951	14.050560	14.051170	14.051779	14.052388	14.052999	14.053608	14.054218	14.054828
0.560	14.055437	14.056047	14.056657	14.057266	14.057876	14.058486	14.059096	14.059706	14.060316	14.060926
0.570	14.061536	14.062146	14.062756	14.063366	14.063976	14.064586	14.065196	14.065806	14.066416	14.067027
0.580	14.067637	14.068247	14.068857	14.069468	14.070078	14.070688	14.071299	14.071909	14.072520	14.073130
0.590	14.073741	14.074351	14.074962	14.075572	14.076183	14.076794	14.077404	14.078015	14.078626	14.079236
0.600	14.079847	14.080458	14.081069	14.081680	14.082290	14.082901	14.083512	14.084123	14.084734	14.085345
0.610	14.085956	14.086567	14.087178	14.087790	14.088401	14.089012	14.089623	14.090234	14.090845	14.091457
0.620	14.092068	14.092679	14.093291	14.093902	14.094514	14.095125	14.095737	14.096348	14.096959	14.097571
0.630	14.098183	14.098794	14.099406	14.100018	14.100629	14.101241	14.101853	14.102464	14.103076	14.103688
0.640	14.104300	14.104912	14.105524	14.106135	14.106747	14.107359	14.107971	14.108583	14.109195	14.109808
0.650	14.110420	14.111032	14.111644	14.112256	14.112868	14.113481	14.114093	14.114705	14.115318	14.115930
0.660	14.116542	14.117155	14.117767	14.118380	14.118992	14.119605	14.120217	14.120830	14.121442	14.122055
0.670	14.122668	14.123280	14.123893	14.124506	14.125118	14.125731	14.126344	14.126957	14.127570	14.128183
0.680	14.128796	14.129408	14.130021	14.130634	14.131247	14.131860	14.132474	14.133087	14.133700	14.134313
0.690	14.134926	14.135539	14.136153	14.136766	14.137379	14.137992	14.138606	14.139219	14.139833	14.140446
0.700	14.141059	14.141673	14.142286	14.142900	14.143514	14.144127	14.144741	14.145354	14.145968	14.146582
0.710	14.147195	14.147809	14.148423	14.149037	14.149651	14.150265	14.150878	14.151492	14.152106	14.152720
0.720	14.153334	14.153948	14.154562	14.155176	14.155790	14.156405	14.157019	14.157633	14.158247	14.158861
0.730	14.159476	14.160090	14.160704	14.161319	14.161933	14.162547	14.163162	14.163776	14.164391	14.165005
0.740	14.165620	14.166234	14.166849	14.167464	14.168078	14.168693	14.169307	14.169922	14.170537	14.171152
0.750	14.171767	14.172381	14.172996	14.173611	14.174226	14.174841	14.175456	14.176071	14.176686	14.177301
0.760	14.177916	14.178531	14.179146	14.179762	14.180377	14.180992	14.181607	14.182222	14.182838	14.183453
0.770	14.184068	14.184684	14.185299	14.185915	14.186530	14.187145	14.187761	14.188377	14.188992	14.189608
0.780	14.190223	14.190839	14.191455	14.192070	14.192686	14.193302	14.193918	14.194533	14.195149	14.195765
0.790	14.196381	14.196997	14.197613	14.198229	14.198845	14.199461	14.200077	14.200693	14.201309	14.201925
0.800	14.202541	14.203158	14.203774	14.204390	14.205006	14.205623	14.206239	14.206855	14.207472	14.208088
0.810	14.208704	14.209321	14.209937	14.210554	14.211171	14.211787	14.212404	14.213020	14.213637	14.214254
0.820	14.214870	14.215487	14.216104	14.216720	14.217337	14.217954	14.218571	14.219188	14.219805	14.220422
0.830	14.221039	14.221656	14.222273	14.222890	14.223507	14.224124	14.224741	14.225358	14.225976	14.226593
0.840	14.227210	14.227827	14.228445	14.229062	14.229679	14.230297	14.230914	14.231532	14.232149	14.232766
0.850	14.233384	14.234002	14.234619	14.235237	14.235854	14.236472	14.237090	14.237707	14.238325	14.238943
0.860	14.239561	14.240178	14.240796	14.241414	14.242032	14.242650	14.243268	14.243886	14.244504	14.245122
0.870	14.245740	14.246358	14.246976	14.247594	14.248213	14.248831	14.249449	14.250067	14.250686	14.251304
0.880	14.251922	14.252541	14.253159	14.253777	14.254396	14.255014	14.255633	14.256251	14.256870	14.257488
0.890	14.258107	14.258726	14.259344	14.259963	14.260582	14.261201	14.261819	14.262438	14.263057	14.263676
0.900	14.264295	14.264914	14.265532	14.266152	14.266770	14.267390	14.268009	14.268628	14.269247	14.269866
0.910	14.270485	14.271104	14.271723	14.272343	14.272962	14.273581	14.274201	14.274820	14.275439	14.276059
0.920	14.276678	14.277298	14.277917	14.278537	14.279156	14.279776	14.280395	14.281015	14.281635	14.282254
0.930	14.282874	14.283494	14.284113	14.284733	14.285353	14.285973	14.286593	14.287213	14.287833	14.288453
0.940	14.289073	14.289693	14.290313	14.290933	14.291553	14.292173	14.292793	14.293413	14.294033	14.294654
0.950	14.295274	14.295894	14.296514	14.297135	14.297755	14.298375	14.298996	14.299616	14.300237	14.300857
0.960	14.301478	14.302098	14.302719	14.303340	14.303960	14.304581	14.305202	14.305822	14.306443	14.307064
0.970	14.307685	14.308306	14.308926	14.309547	14.310168	14.310789	14.311410	14.312031	14.312652	14.313273
0.980	14.313894	14.314515	14.315136	14.315758	14.316379	14.317000	14.317621	14.318242	14.318864	14.319485
0.990	14.320106	14.320728	14.321349	14.321971	14.322592	14.323214	14.323835	14.324457	14.325078	14.325700

ATTENUATION IN DECIBELS
THETA FROM 64.000 TO 64.499 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
14.326321	14.326943	14.327565	14.328187	14.328808	14.329430	14.330052	14.330674	14.331295	14.331917	
14.332539	14.333161	14.333783	14.334405	14.335027	14.335649	14.336271	14.336893	14.337515	14.338138	
14.338760	14.339382	14.340004	14.340626	14.341249	14.341871	14.342493	14.343116	14.343738	14.344361	
14.344983	14.345606	14.346228	14.346851	14.347473	14.348096	14.348718	14.349341	14.349964	14.350586	
14.351209	14.351832	14.352455	14.353078	14.353700	14.354323	14.354946	14.355569	14.356192	14.356815	
14.357438	14.358061	14.358684	14.359307	14.359929	14.360552	14.361175	14.361800	14.362423	14.363046	
14.363670	14.364293	14.364916	14.365540	14.366163	14.366786	14.367410	14.368033	14.368657	14.369280	
14.369904	14.370528	14.371151	14.371775	14.372398	14.373022	14.373646	14.374270	14.374893	14.375517	
14.376141	14.376765	14.377389	14.378013	14.378637	14.379261	14.379885	14.380509	14.381133	14.381757	
14.382381	14.383005	14.383629	14.384254	14.384878	14.385502	14.386126	14.386751	14.387375	14.387999	
14.388624	14.389248	14.389873	14.390497	14.391122	14.391746	14.392371	14.392995	14.393620	14.394244	
14.394869	14.395494	14.396119	14.396743	14.397368	14.397993	14.398618	14.399243	14.399867	14.400492	
14.401117	14.401742	14.402367	14.402992	14.403617	14.404242	14.404868	14.405493	14.406118	14.406743	
14.407368	14.407994	14.408619	14.409244	14.409869	14.410495	14.411120	14.411746	14.412371	14.412997	
14.413622	14.414248	14.414873	14.415499	14.416124	14.416750	14.417376	14.418001	14.418627	14.419253	
14.419879	14.420504	14.421130	14.421756	14.422382	14.423008	14.423634	14.424260	14.424886	14.425512	
14.426138	14.426764	14.427390	14.428016	14.428642	14.429269	14.429895	14.430521	14.431147	14.431774	
14.432400	14.433026	14.433653	14.434279	14.434906	14.435532	14.436159	14.436785	14.437412	14.438038	
14.438665	14.439292	14.439918	14.440545	14.441172	14.441798	14.442425	14.443052	14.443679	14.444306	
14.444933	14.445560	14.446187	14.446813	14.447441	14.448068	14.448695	14.449322	14.449949	14.450576	
14.451203	14.451830	14.452458	14.453085	14.453712	14.454339	14.454967	14.455594	14.456222	14.456849	
14.457476	14.458104	14.458731	14.459359	14.459986	14.460614	14.461242	14.461869	14.462497	14.463125	
14.463753	14.464380	14.465008	14.465636	14.466264	14.466892	14.467520	14.468147	14.468775	14.469403	
14.470031	14.470659	14.471287	14.471916	14.472544	14.473172	14.473800	14.474428	14.475057	14.475685	
14.476313	14.476941	14.477570	14.478198	14.478827	14.479455	14.480083	14.480712	14.481340	14.481969	
14.482597	14.483226	14.483855	14.484483	14.485112	14.485741	14.486369	14.486998	14.487627	14.488256	
14.488885	14.489514	14.490143	14.490772	14.491400	14.492029	14.492658	14.493288	14.493917	14.494546	
14.495175	14.495804	14.496433	14.497062	14.497692	14.498321	14.498950	14.499580	14.500209	14.500838	
14.501468	14.502097	14.502727	14.503356	14.503986	14.504615	14.505245	14.505875	14.506504	14.507134	
14.507764	14.508393	14.509023	14.509653	14.510283	14.510912	14.511542	14.512172	14.512802	14.513432	
14.514062	14.514692	14.515322	14.515952	14.516582	14.517212	14.517842	14.518473	14.519103	14.519733	
14.520363	14.520994	14.521624	14.522254	14.522885	14.523515	14.524145	14.524776	14.525406	14.526037	
14.526667	14.527298	14.527929	14.528559	14.529190	14.529821	14.530451	14.531082	14.531713	14.532344	
14.532974	14.533605	14.534236	14.534867	14.535498	14.536129	14.536760	14.537391	14.538022	14.538653	
14.539284	14.539915	14.540547	14.541178	14.541809	14.542440	14.543071	14.543703	14.544334	14.544965	
14.545597	14.546228	14.546860	14.547491	14.548123	14.548754	14.549386	14.550017	14.550649	14.551281	
14.551912	14.552544	14.553176	14.553807	14.554439	14.555071	14.555703	14.556335	14.556967	14.557599	
14.558231	14.558862	14.559494	14.560127	14.560759	14.561391	14.562023	14.562655	14.563287	14.563919	
14.564552	14.565184	14.565816	14.566448	14.567081	14.567713	14.568346	14.568978	14.569610	14.570243	
14.570876	14.571508	14.572141	14.572773	14.573406	14.574039	14.574671	14.575304	14.575937	14.576569	
14.577202	14.577835	14.578468	14.579101	14.579734	14.580367	14.581000	14.581633	14.582266	14.582899	
14.583532	14.584165	14.584798	14.585431	14.586064	14.586698	14.587331	14.587964	14.588598	14.589231	
14.589864	14.590498	14.591131	14.591765	14.592398	14.593032	14.593665	14.594299	14.594932	14.595566	
14.596200	14.596833	14.597467	14.598101	14.598734	14.599368	14.600002	14.600636	14.601270	14.601904	
14.602538	14.603172	14.603806	14.604440	14.605074	14.605708	14.606342	14.606976	14.607610	14.608244	
14.608878	14.609513	14.610147	14.610781	14.611416	14.612050	14.612684	14.613319	14.613953	14.614588	
14.615222	14.615857	14.616491	14.617126	14.617761	14.618395	14.619030	14.619665	14.620299	14.620934	
14.621569	14.622204	14.622839	14.623474	14.624108	14.624743	14.625378	14.626013	14.626648	14.627283	
14.627918	14.628554	14.629189	14.629824	14.630459	14.631094	14.631729	14.632365	14.633000	14.633635	
14.634271	14.634906	14.635542	14.636177	14.636812	14.637448	14.638083	14.638719	14.639355	14.639990	

ATTENUATION IN DECIBELS
THETA FROM 64.500 TO 64.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	14.640626	14.641262	14.641897	14.642533	14.643169	14.643805	14.644440	14.645076	14.645712	14.646348
0.510	14.646984	14.647620	14.648256	14.648892	14.649528	14.650164	14.650800	14.651436	14.652072	14.652709
0.520	14.653345	14.653981	14.654617	14.655254	14.655890	14.656526	14.657163	14.657799	14.658436	14.659072
0.530	14.659709	14.660345	14.660982	14.661618	14.662255	14.662892	14.663528	14.664165	14.664802	14.665438
0.540	14.666075	14.666712	14.667349	14.667986	14.668623	14.669260	14.669897	14.670534	14.671171	14.671808
0.550	14.672445	14.673082	14.673719	14.674356	14.674993	14.675631	14.676268	14.676905	14.677542	14.678180
0.560	14.678817	14.679454	14.680092	14.680729	14.681367	14.682004	14.682642	14.683279	14.683917	14.684555
0.570	14.685192	14.685830	14.686468	14.687105	14.687743	14.688381	14.689019	14.689657	14.690295	14.690933
0.580	14.691570	14.692208	14.692846	14.693484	14.694122	14.694760	14.695399	14.696037	14.696675	14.697313
0.590	14.697951	14.698590	14.699228	14.699866	14.700505	14.701143	14.701781	14.702420	14.703058	14.703697
0.600	14.704335	14.704974	14.705612	14.706251	14.706890	14.707528	14.708167	14.708806	14.709444	14.710083
0.610	14.710722	14.711361	14.712000	14.712638	14.713277	14.713916	14.714555	14.715194	14.715833	14.716472
0.620	14.717111	14.717751	14.718390	14.719029	14.719668	14.720307	14.720947	14.721586	14.722225	14.722865
0.630	14.723504	14.724143	14.724783	14.725422	14.726062	14.726701	14.727341	14.727980	14.728620	14.729260
0.640	14.729899	14.730539	14.731179	14.731818	14.732458	14.733098	14.733738	14.734378	14.735018	14.735658
0.650	14.736297	14.736937	14.737577	14.738217	14.738858	14.739498	14.740138	14.740778	14.741418	14.742058
0.660	14.742699	14.743339	14.743979	14.744619	14.745260	14.745900	14.746541	14.747181	14.747822	14.748462
0.670	14.749103	14.749743	14.750384	14.751024	14.751665	14.752306	14.752946	14.753587	14.754228	14.754869
0.680	14.755509	14.756150	14.756791	14.757432	14.758073	14.758714	14.759355	14.759996	14.760637	14.761278
0.690	14.761919	14.762560	14.763202	14.763843	14.764484	14.765125	14.765767	14.766408	14.767049	14.767691
0.700	14.768332	14.768973	14.769615	14.770256	14.770898	14.771539	14.772181	14.772823	14.773464	14.774106
0.710	14.774747	14.775389	14.776031	14.776673	14.777315	14.777956	14.778598	14.779240	14.779882	14.780524
0.720	14.781166	14.781808	14.782450	14.783092	14.783734	14.784376	14.785019	14.785661	14.786303	14.786945
0.730	14.787587	14.788230	14.788872	14.789514	14.790157	14.790799	14.791442	14.792084	14.792727	14.793369
0.740	14.794012	14.794654	14.795297	14.795940	14.796582	14.797225	14.797868	14.798510	14.799153	14.799796
0.750	14.800439	14.801082	14.801725	14.802368	14.803011	14.803654	14.804297	14.804940	14.805583	14.806226
0.760	14.808869	14.809512	14.810155	14.810799	14.811442	14.812085	14.812728	14.813372	14.814015	14.814659
0.770	14.813302	14.813946	14.814589	14.815233	14.815876	14.816520	14.817163	14.817807	14.818451	14.819094
0.780	14.819738	14.820382	14.821025	14.821669	14.822313	14.822957	14.823601	14.824245	14.824889	14.825533
0.790	14.826177	14.826821	14.827465	14.828109	14.828753	14.829397	14.830042	14.830686	14.831330	14.831974
0.800	14.832619	14.833263	14.833907	14.834552	14.835196	14.835840	14.836485	14.837129	14.837774	14.838419
0.810	14.839063	14.839708	14.840353	14.840997	14.841642	14.842287	14.842931	14.843576	14.844221	14.844866
0.820	14.845511	14.846156	14.846801	14.847446	14.848091	14.848736	14.849381	14.850026	14.850671	14.851316
0.830	14.851961	14.852607	14.853252	14.853897	14.854542	14.855188	14.855833	14.856478	14.857124	14.857769
0.840	14.858415	14.859060	14.859706	14.860351	14.860997	14.861643	14.862288	14.862934	14.863580	14.864225
0.850	14.864871	14.865517	14.866163	14.866809	14.867455	14.868100	14.868746	14.869392	14.870038	14.870684
0.860	14.871330	14.871976	14.872623	14.873269	14.873915	14.874561	14.875207	14.875854	14.876500	14.877146
0.870	14.877793	14.878439	14.879086	14.879732	14.880378	14.881025	14.881671	14.882318	14.882965	14.883611
0.880	14.884258	14.884905	14.885551	14.886198	14.886845	14.887492	14.888138	14.888785	14.889432	14.890079
0.890	14.890726	14.891373	14.892020	14.892667	14.893314	14.893961	14.894608	14.895255	14.895903	14.896550
0.900	14.897197	14.897844	14.898492	14.899139	14.899786	14.900434	14.901081	14.901729	14.902376	14.903023
0.910	14.903671	14.904319	14.904966	14.905614	14.906261	14.906909	14.907557	14.908205	14.908852	14.909500
0.920	14.910148	14.910796	14.911444	14.912092	14.912740	14.913388	14.914035	14.914684	14.915332	14.915980
0.930	14.916628	14.917276	14.917924	14.918572	14.919221	14.919869	14.920517	14.921165	14.921814	14.922462
0.940	14.923111	14.923759	14.924407	14.925056	14.925705	14.926353	14.927002	14.927650	14.928299	14.928948
0.950	14.929596	14.930245	14.930894	14.931543	14.932191	14.932840	14.933489	14.934138	14.934787	14.935436
0.960	14.936085	14.936734	14.937383	14.938032	14.938681	14.939331	14.939980	14.940629	14.941278	14.941927
0.970	14.942577	14.943226	14.943875	14.944525	14.945174	14.945824	14.946473	14.947123	14.947772	14.948422
0.980	14.949071	14.949721	14.950371	14.951020	14.951670	14.952320	14.952970	14.953619	14.954269	14.954919
0.990	14.955569	14.956219	14.956869	14.957519	14.958169	14.958819	14.959469	14.960119	14.960769	14.961419

ATTENUATION IN DECIBELS
THETA FROM 65.000 TO 65.499 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.000	14.962070	14.962720	14.963370	14.964020	14.964671	14.965321	14.965971	14.966622	14.967272	14.967923
0.010	14.968573	14.969224	14.969874	14.970525	14.971175	14.971826	14.972477	14.973127	14.973778	14.974429
0.020	14.975080	14.975730	14.976381	14.977032	14.977683	14.978334	14.978985	14.979636	14.980287	14.980938
0.030	14.981589	14.982240	14.982891	14.983542	14.984194	14.984845	14.985496	14.986147	14.986799	14.987450
0.040	14.988101	14.988753	14.989404	14.990056	14.990707	14.991359	14.992010	14.992662	14.993314	14.993965
0.050	14.994617	14.995268	14.995920	14.996572	14.997224	14.997876	14.998527	14.999179	14.999831	15.000483
0.060	15.001135	15.001787	15.002439	15.003091	15.003743	15.004395	15.005048	15.005700	15.006352	15.007004
0.070	15.007656	15.008309	15.008961	15.009614	15.010266	15.010918	15.011571	15.012223	15.012876	15.013528
0.080	15.014181	15.014833	15.015486	15.016139	15.016791	15.017444	15.018097	15.018750	15.019402	15.020055
0.090	15.020708	15.021361	15.022014	15.022667	15.023320	15.023973	15.024626	15.025279	15.025932	15.026585
0.100	15.027238	15.027892	15.028545	15.029198	15.029851	15.030505	15.031158	15.031811	15.032465	15.033118
0.110	15.033772	15.034425	15.035079	15.035732	15.036386	15.037039	15.037693	15.038347	15.039000	15.039654
0.120	15.040308	15.040962	15.041615	15.042269	15.042923	15.043577	15.044231	15.044885	15.045539	15.046193
0.130	15.046847	15.047501	15.048155	15.048810	15.049464	15.050118	15.050772	15.051426	15.052081	15.052735
0.140	15.053389	15.054044	15.054698	15.055353	15.056007	15.056662	15.057316	15.057971	15.058625	15.059280
0.150	15.059935	15.060589	15.061244	15.061899	15.062554	15.063208	15.063863	15.064518	15.065173	15.065828
0.160	15.066483	15.067138	15.067793	15.068448	15.069103	15.069758	15.070413	15.071068	15.071724	15.072379
0.170	15.073034	15.073689	15.074345	15.075000	15.075655	15.076311	15.076966	15.077622	15.078277	15.078933
0.180	15.079588	15.080244	15.080899	15.081555	15.082211	15.082867	15.083522	15.084178	15.084834	15.085490
0.190	15.086146	15.086801	15.087457	15.088113	15.088769	15.089425	15.090081	15.090737	15.091393	15.092050
0.200	15.092706	15.093362	15.094018	15.094674	15.095331	15.095987	15.096644	15.097300	15.097956	15.098613
0.210	15.099269	15.099926	15.100582	15.101238	15.101895	15.102552	15.103208	15.103865	15.104522	15.105178
0.220	15.105835	15.106492	15.107149	15.107806	15.108463	15.109120	15.109776	15.110433	15.111090	15.111747
0.230	15.112404	15.113062	15.113719	15.114376	15.115033	15.115690	15.116348	15.117005	15.117662	15.118319
0.240	15.118977	15.119634	15.120292	15.120949	15.121606	15.122264	15.122922	15.123579	15.124237	15.124894
0.250	15.125552	15.126210	15.126868	15.127525	15.128183	15.128841	15.129499	15.130157	15.130814	15.131472
0.260	15.132130	15.132788	15.133446	15.134104	15.134763	15.135421	15.136079	15.136737	15.137395	15.138053
0.270	15.138712	15.139370	15.140028	15.140687	15.141345	15.142004	15.142662	15.143320	15.143979	15.144637
0.280	15.145296	15.145955	15.146613	15.147272	15.147931	15.148589	15.149248	15.149907	15.150566	15.151225
0.290	15.151883	15.152542	15.153201	15.153860	15.154519	15.155178	15.155837	15.156496	15.157156	15.157815
0.300	15.158474	15.159133	15.159792	15.160452	15.161111	15.161770	15.162430	15.163089	15.163748	15.164408
0.310	15.165067	15.165727	15.166386	15.167046	15.167706	15.168365	15.169025	15.169685	15.170344	15.171004
0.320	15.171664	15.172324	15.172983	15.173643	15.174303	15.174963	15.175623	15.176283	15.176943	15.177603
0.330	15.178263	15.178923	15.179584	15.180244	15.180904	15.181564	15.182225	15.182885	15.183545	15.184205
0.340	15.184866	15.185526	15.186187	15.186847	15.187508	15.188168	15.188829	15.189489	15.190150	15.190811
0.350	15.191471	15.192132	15.192793	15.193454	15.194115	15.194775	15.195436	15.196097	15.196758	15.197419
0.360	15.198080	15.198741	15.199402	15.200063	15.200724	15.201385	15.202047	15.202708	15.203369	15.204030
0.370	15.204692	15.205353	15.206014	15.206676	15.207337	15.207999	15.208660	15.209322	15.209983	15.210645
0.380	15.211306	15.211968	15.212630	15.213291	15.213953	15.214615	15.215277	15.215939	15.216600	15.217262
0.390	15.217924	15.218586	15.219248	15.219910	15.220572	15.221234	15.221896	15.222558	15.223221	15.223883
0.400	15.224545	15.225207	15.225870	15.226532	15.227194	15.227857	15.228519	15.229181	15.229844	15.230506
0.410	15.231169	15.231831	15.232494	15.233157	15.233819	15.234482	15.235145	15.235807	15.236470	15.237133
0.420	15.237796	15.238459	15.239122	15.239784	15.240447	15.241110	15.241773	15.242437	15.243100	15.243763
0.430	15.244426	15.245089	15.245752	15.246415	15.247079	15.247742	15.248405	15.249069	15.249732	15.250395
0.440	15.251059	15.251722	15.252386	15.253049	15.253713	15.254377	15.255040	15.255704	15.256368	15.257031
0.450	15.257695	15.258359	15.259023	15.259686	15.260350	15.261014	15.261678	15.262342	15.263006	15.263670
0.460	15.264334	15.264998	15.265662	15.266327	15.266991	15.267655	15.268319	15.268983	15.269648	15.270312
0.470	15.270976	15.271641	15.272305	15.272970	15.273634	15.274299	15.274963	15.275628	15.276292	15.276957
0.480	15.277622	15.278286	15.278951	15.279616	15.280281	15.280946	15.281610	15.282275	15.282940	15.283605
0.490	15.284270	15.284935	15.285600	15.286265	15.286930	15.287596	15.288261	15.288926	15.289591	15.290256

ATTENUATION IN DECIBELS
THETA FROM 65.500 TO 65.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	15.290922	15.291587	15.292252	15.292918	15.293583	15.294243	15.294914	15.295579	15.296245	15.296911
0.510	15.297576	15.298242	15.298907	15.299573	15.300239	15.300905	15.301570	15.302236	15.302902	15.303568
0.520	15.304234	15.304900	15.305566	15.306232	15.306898	15.307564	15.308230	15.308896	15.309562	15.310228
0.530	15.310894	15.311561	15.312227	15.312893	15.313560	15.314226	15.314892	15.315559	15.316225	15.316892
0.540	15.317558	15.318225	15.318891	15.319558	15.320225	15.320891	15.321558	15.322225	15.322891	15.323558
0.550	15.324225	15.324892	15.325559	15.326226	15.326893	15.327559	15.328226	15.328894	15.329561	15.330228
0.560	15.330895	15.331562	15.332229	15.332897	15.333564	15.334231	15.334899	15.335566	15.336233	15.336901
0.570	15.337568	15.338236	15.338903	15.339571	15.340238	15.340906	15.341573	15.342241	15.342909	15.343577
0.580	15.344244	15.344912	15.345580	15.346248	15.346916	15.347584	15.348251	15.348919	15.349587	15.350255
0.590	15.350924	15.351592	15.352260	15.352928	15.353596	15.354264	15.354933	15.355601	15.356269	15.356938
0.600	15.357606	15.358274	15.358943	15.359611	15.360280	15.360948	15.361617	15.362285	15.362954	15.363623
0.610	15.364291	15.364960	15.365629	15.366297	15.366966	15.367635	15.368304	15.368973	15.369642	15.370311
0.620	15.370980	15.371649	15.372318	15.372987	15.373656	15.374325	15.374995	15.375664	15.376333	15.377002
0.630	15.377671	15.378341	15.379010	15.379680	15.380349	15.381019	15.381688	15.382357	15.383027	15.383697
0.640	15.384366	15.385036	15.385706	15.386375	15.387045	15.387715	15.388385	15.389054	15.389724	15.390394
0.650	15.391084	15.391754	15.392424	15.393094	15.393764	15.394434	15.395104	15.395774	15.396445	15.397115
0.660	15.397765	15.398435	15.399106	15.399776	15.400446	15.401117	15.401787	15.402458	15.403128	15.403799
0.670	15.404469	15.405140	15.405810	15.406481	15.407152	15.407822	15.408493	15.409164	15.409835	15.410506
0.680	15.411176	15.411847	15.412518	15.413189	15.413860	15.414531	15.415202	15.415873	15.416544	15.417216
0.690	15.417887	15.418558	15.419229	15.419900	15.420572	15.421243	15.421914	15.422586	15.423257	15.423929
0.700	15.424600	15.425272	15.425943	15.426615	15.427287	15.427958	15.428630	15.429302	15.429973	15.430645
0.710	15.431317	15.431989	15.432660	15.433332	15.434004	15.434676	15.435348	15.436020	15.436692	15.437364
0.720	15.438036	15.438709	15.439381	15.440053	15.440725	15.441398	15.442070	15.442742	15.443415	15.444087
0.730	15.444759	15.445432	15.446104	15.446777	15.447449	15.448122	15.448795	15.449467	15.450140	15.450813
0.740	15.451485	15.452158	15.452831	15.453504	15.454177	15.454849	15.455522	15.456195	15.456868	15.457541
0.750	15.458214	15.458887	15.459561	15.460234	15.460907	15.461580	15.462253	15.462926	15.463600	15.464273
0.760	15.464947	15.465620	15.466293	15.466967	15.467640	15.468314	15.468987	15.469661	15.470335	15.471008
0.770	15.471682	15.472356	15.473029	15.473703	15.474377	15.475051	15.475725	15.476399	15.477073	15.477747
0.780	15.478421	15.479095	15.479769	15.480443	15.481117	15.481791	15.482465	15.483139	15.483814	15.484488
0.790	15.485162	15.485837	15.486511	15.487185	15.487860	15.488534	15.489209	15.489883	15.490558	15.491232
0.800	15.491907	15.492582	15.493256	15.493931	15.494606	15.495281	15.495955	15.496630	15.497305	15.497980
0.810	15.498655	15.499330	15.500005	15.500680	15.501355	15.502030	15.502705	15.503380	15.504056	15.504731
0.820	15.505406	15.506081	15.506757	15.507432	15.508107	15.508783	15.509458	15.510134	15.510809	15.511485
0.830	15.512160	15.512836	15.513512	15.514187	15.514863	15.515539	15.516214	15.516890	15.517566	15.518242
0.840	15.518918	15.519594	15.520270	15.520946	15.521622	15.522298	15.522974	15.523650	15.524326	15.525002
0.850	15.525678	15.526355	15.527031	15.527707	15.528383	15.529060	15.529736	15.530413	15.531089	15.531766
0.860	15.532442	15.533119	15.533795	15.534472	15.535149	15.535825	15.536502	15.537179	15.537855	15.538532
0.870	15.539209	15.539886	15.540563	15.541240	15.541917	15.542594	15.543271	15.543948	15.544625	15.545302
0.880	15.545979	15.546656	15.547334	15.548011	15.548688	15.549365	15.550043	15.550720	15.551397	15.552075
0.890	15.552752	15.553430	15.554107	15.554785	15.555463	15.556140	15.556818	15.557496	15.558173	15.558851
0.900	15.559529	15.560207	15.560884	15.561562	15.562240	15.562918	15.563596	15.564274	15.564952	15.565630
0.910	15.566308	15.566987	15.567665	15.568343	15.569021	15.569699	15.570378	15.571056	15.571734	15.572413
0.920	15.573091	15.573770	15.574448	15.575127	15.575805	15.576484	15.577162	15.577841	15.578520	15.579198
0.930	15.579877	15.580556	15.581235	15.581913	15.582592	15.583271	15.583950	15.584629	15.585308	15.585987
0.940	15.586666	15.587345	15.588024	15.588704	15.589383	15.590062	15.590741	15.591421	15.592100	15.592779
0.950	15.593459	15.594138	15.594817	15.595497	15.596176	15.596856	15.597535	15.598215	15.598895	15.599574
0.960	15.600254	15.600934	15.601614	15.602293	15.602973	15.603653	15.604333	15.605013	15.605693	15.606373
0.970	15.607053	15.607733	15.608413	15.609093	15.609773	15.610453	15.611133	15.611814	15.612494	15.613174
0.980	15.613855	15.614535	15.615215	15.615896	15.616576	15.617257	15.617937	15.618618	15.619298	15.619979
0.990	15.620660	15.621340	15.622021	15.622702	15.623383	15.624063	15.624744	15.625425	15.626106	15.626787

ATTENUATION IN DECIBELS
THETA FROM 66.000 TO 66.499 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.000	15.627468	15.628149	15.628830	15.629511	15.630192	15.630873	15.631554	15.632236	15.632917	15.633598
0.010	15.634279	15.634961	15.635642	15.636323	15.637005	15.637686	15.638368	15.639049	15.639731	15.640412
0.020	15.641074	15.641776	15.642457	15.643139	15.643821	15.644502	15.645184	15.645866	15.646548	15.647230
0.030	15.647912	15.648594	15.649276	15.649958	15.650640	15.651322	15.652004	15.652686	15.653369	15.654051
0.040	15.654733	15.655415	15.656098	15.656780	15.657462	15.658145	15.658827	15.659510	15.660192	15.660875
0.050	15.661557	15.662240	15.662923	15.663605	15.664288	15.664971	15.665653	15.666336	15.667019	15.667702
0.060	15.668385	15.669068	15.669751	15.670434	15.671117	15.671800	15.672483	15.673166	15.673849	15.674532
0.070	15.675215	15.675899	15.676582	15.677265	15.677949	15.678632	15.679315	15.679999	15.680682	15.681366
0.080	15.682049	15.682733	15.683417	15.684100	15.684784	15.685468	15.686151	15.686835	15.687519	15.688203
0.090	15.688887	15.689570	15.690254	15.690938	15.691622	15.692306	15.692990	15.693674	15.694359	15.695043
0.100	15.695727	15.696411	15.697095	15.697780	15.698464	15.699148	15.699833	15.700517	15.701202	15.701886
0.110	15.702571	15.703255	15.703940	15.704624	15.705309	15.705994	15.706678	15.707363	15.708048	15.708732
0.120	15.709417	15.710102	15.710787	15.711472	15.712157	15.712842	15.713527	15.714212	15.714897	15.715582
0.130	15.716267	15.716953	15.717638	15.718323	15.719008	15.719694	15.720379	15.721064	15.721750	15.722435
0.140	15.723121	15.723806	15.724492	15.725177	15.725863	15.726548	15.727234	15.727920	15.728606	15.729291
0.150	15.729977	15.730663	15.731349	15.732035	15.732721	15.733407	15.734093	15.734779	15.735465	15.736151
0.160	15.736837	15.737523	15.738209	15.738896	15.739582	15.740268	15.740954	15.741641	15.742327	15.743014
0.170	15.743700	15.744386	15.745073	15.745759	15.746446	15.747133	15.747819	15.748506	15.749193	15.749879
0.180	15.750566	15.751253	15.751940	15.752627	15.753314	15.754001	15.754687	15.755374	15.756061	15.756749
0.190	15.757436	15.758123	15.758810	15.759497	15.760184	15.760872	15.761559	15.762246	15.762933	15.763621
0.200	15.764308	15.764996	15.765683	15.766371	15.767058	15.767746	15.768434	15.769121	15.769809	15.770497
0.210	15.771184	15.771872	15.772560	15.773248	15.773936	15.774624	15.775311	15.775999	15.776688	15.777375
0.220	15.778064	15.778752	15.779440	15.780128	15.780816	15.781504	15.782193	15.782881	15.783569	15.784258
0.230	15.784946	15.785634	15.786323	15.787011	15.787700	15.788388	15.789077	15.789766	15.790454	15.791143
0.240	15.791832	15.792521	15.793209	15.793898	15.794587	15.795276	15.795965	15.796654	15.797343	15.798032
0.250	15.798721	15.799410	15.800099	15.800788	15.801477	15.802166	15.802856	15.803545	15.804234	15.804924
0.260	15.805613	15.806302	15.806992	15.807681	15.808371	15.809060	15.809750	15.810440	15.811129	15.811819
0.270	15.812509	15.813198	15.813888	15.814578	15.815268	15.815958	15.816647	15.817337	15.818027	15.818717
0.280	15.819407	15.820097	15.820787	15.821478	15.822168	15.822858	15.823548	15.824238	15.824929	15.825619
0.290	15.826309	15.827000	15.827690	15.828381	15.829071	15.829762	15.830452	15.831143	15.831833	15.832524
0.300	15.833215	15.833905	15.834596	15.835287	15.835978	15.836669	15.837359	15.838050	15.838741	15.839432
0.310	15.840123	15.840814	15.841505	15.842197	15.842888	15.843579	15.844270	15.844961	15.845653	15.846344
0.320	15.847035	15.847727	15.848418	15.849109	15.849801	15.850492	15.851184	15.851875	15.852567	15.853259
0.330	15.853950	15.854642	15.855334	15.856026	15.856717	15.857409	15.858101	15.858793	15.859485	15.860177
0.340	15.860869	15.861561	15.862253	15.862945	15.863637	15.864329	15.865021	15.865714	15.866406	15.867098
0.350	15.867791	15.868483	15.869175	15.869868	15.870560	15.871253	15.871945	15.872638	15.873330	15.874023
0.360	15.874716	15.875408	15.876101	15.876794	15.877486	15.878179	15.878872	15.879565	15.880258	15.880951
0.370	15.881644	15.882337	15.883030	15.883723	15.884416	15.885109	15.885803	15.886496	15.887189	15.887882
0.380	15.888576	15.889269	15.889962	15.890656	15.891349	15.892043	15.892736	15.893430	15.894123	15.894817
0.390	15.895510	15.896204	15.896898	15.897591	15.898285	15.898979	15.899673	15.900367	15.901061	15.901755
0.400	15.902449	15.903143	15.903837	15.904531	15.905225	15.905919	15.906613	15.907307	15.908002	15.908696
0.410	15.909390	15.910084	15.910779	15.911473	15.912168	15.912862	15.913557	15.914251	15.914946	15.915640
0.420	15.916335	15.917030	15.917724	15.918419	15.919114	15.919809	15.920503	15.921198	15.921893	15.922588
0.430	15.923283	15.923978	15.924673	15.925368	15.926063	15.926758	15.927454	15.928149	15.928844	15.929539
0.440	15.930234	15.930930	15.931625	15.932320	15.933016	15.933711	15.934407	15.935102	15.935798	15.936494
0.450	15.937189	15.937885	15.938581	15.939276	15.939972	15.940668	15.941364	15.942060	15.942755	15.943451
0.460	15.944147	15.944843	15.945539	15.946235	15.946931	15.947628	15.948324	15.949020	15.949716	15.950412
0.470	15.951107	15.951805	15.952501	15.953198	15.953894	15.954591	15.955287	15.955984	15.956680	15.957377
0.480	15.958073	15.958770	15.959467	15.960163	15.960860	15.961557	15.962254	15.962951	15.963647	15.964344
0.490	15.965041	15.965738	15.966435	15.967132	15.967829	15.968527	15.969224	15.969921	15.970618	15.971315

ATTENUATION IN DECIBELS
THETA FROM 66.500 TO 66.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	15.972013	15.972710	15.973407	15.974105	15.974802	15.975500	15.976197	15.976895	15.977592	15.978290
0.510	15.978987	15.979685	15.980383	15.981080	15.981778	15.982476	15.983174	15.983872	15.984569	15.985267
0.520	15.985965	15.986663	15.987361	15.988059	15.988757	15.989456	15.990154	15.990852	15.991550	15.992248
0.530	15.992947	15.993645	15.994343	15.995042	15.995740	15.996439	15.997137	15.997836	15.998534	15.999233
0.540	15.999931	16.000630	16.001329	16.002027	16.002726	16.003425	16.004124	16.004822	16.005521	16.006220
0.550	16.006919	16.007618	16.008317	16.009016	16.009715	16.010415	16.011114	16.011813	16.012512	16.013211
0.560	16.013911	16.014610	16.015309	16.016009	16.016708	16.017408	16.018107	16.018806	16.019506	16.020206
0.570	16.020905	16.021605	16.022305	16.023004	16.023704	16.024404	16.025104	16.025804	16.026504	16.027203
0.580	16.027903	16.028603	16.029303	16.030003	16.030704	16.031404	16.032104	16.032804	16.033504	16.034204
0.590	16.034905	16.035605	16.036305	16.037006	16.037706	16.038407	16.039107	16.039808	16.040508	16.041209
0.600	16.041909	16.042610	16.043311	16.044012	16.044712	16.045413	16.046114	16.046815	16.047516	16.048217
0.610	16.048918	16.049618	16.050320	16.051021	16.051722	16.052423	16.053124	16.053825	16.054527	16.055228
0.620	16.055929	16.056630	16.057332	16.058033	16.058735	16.059436	16.060138	16.060839	16.061541	16.062242
0.630	16.062944	16.063646	16.064347	16.065049	16.065751	16.066453	16.067154	16.067856	16.068558	16.069260
0.640	16.069962	16.070664	16.071366	16.072068	16.072770	16.073472	16.074175	16.074877	16.075579	16.076281
0.650	16.076983	16.077686	16.078388	16.079091	16.079793	16.080496	16.081198	16.081901	16.082603	16.083306
0.660	16.084008	16.084711	16.085414	16.086117	16.086819	16.087522	16.088225	16.088928	16.089631	16.090334
0.670	16.091037	16.091740	16.092443	16.093146	16.093849	16.094552	16.095255	16.095958	16.096662	16.097365
0.680	16.098068	16.098772	16.099475	16.100178	16.100882	16.101585	16.102289	16.102993	16.103696	16.104400
0.690	16.105103	16.105807	16.106511	16.107215	16.107919	16.108622	16.109326	16.110030	16.110734	16.111438
0.700	16.112142	16.112846	16.113550	16.114254	16.114958	16.115662	16.116367	16.117071	16.117775	16.118479
0.710	16.119184	16.119888	16.120592	16.121297	16.122001	16.122706	16.123410	16.124115	16.124820	16.125524
0.720	16.126229	16.126934	16.127638	16.128343	16.129048	16.129753	16.130458	16.131162	16.131867	16.132572
0.730	16.133277	16.133982	16.134687	16.135393	16.136098	16.136803	16.137508	16.138213	16.138919	16.139624
0.740	16.140329	16.141035	16.141740	16.142446	16.143151	16.143857	16.144562	16.145268	16.145973	16.146679
0.750	16.147385	16.148090	16.148796	16.149502	16.150208	16.150914	16.151619	16.152325	16.153031	16.153737
0.760	16.154444	16.155149	16.155856	16.156562	16.157268	16.157974	16.158680	16.159387	16.160093	16.160799
0.770	16.161506	16.162212	16.162918	16.163625	16.164331	16.165038	16.165745	16.166451	16.167158	16.167864
0.780	16.168571	16.169278	16.169985	16.170691	16.171398	16.172105	16.172812	16.173519	16.174226	16.174933
0.790	16.175640	16.176347	16.177054	16.177762	16.178469	16.179176	16.179883	16.180590	16.181298	16.182005
0.800	16.182713	16.183420	16.184127	16.184835	16.185542	16.186250	16.186958	16.187665	16.188373	16.189080
0.810	16.189788	16.190496	16.191204	16.191912	16.192620	16.193327	16.194035	16.194743	16.195451	16.196159
0.820	16.196867	16.197576	16.198284	16.198992	16.199700	16.200408	16.201117	16.201825	16.202533	16.203242
0.830	16.203950	16.204659	16.205367	16.206075	16.206784	16.207493	16.208201	16.208910	16.209619	16.210327
0.840	16.211036	16.211745	16.212454	16.213162	16.213871	16.214580	16.215289	16.215998	16.216707	16.217416
0.850	16.218125	16.218835	16.219544	16.220253	16.220962	16.221671	16.222381	16.223090	16.223799	16.224509
0.860	16.225218	16.225928	16.226637	16.227347	16.228056	16.228766	16.229476	16.230185	16.230895	16.231605
0.870	16.232315	16.233024	16.233734	16.234444	16.235154	16.235864	16.236574	16.237284	16.237994	16.238704
0.880	16.239414	16.240124	16.240835	16.241545	16.242255	16.242965	16.243676	16.244386	16.245096	16.245807
0.890	16.246517	16.247228	16.247938	16.248649	16.249360	16.250070	16.250781	16.251492	16.252203	16.252913
0.900	16.253624	16.254335	16.255046	16.255757	16.256468	16.257179	16.257890	16.258601	16.259312	16.260023
0.910	16.260734	16.261445	16.262156	16.262868	16.263579	16.264290	16.265002	16.265713	16.266425	16.267136
0.920	16.267848	16.268559	16.269271	16.269982	16.270694	16.271405	16.272117	16.272829	16.273541	16.274253
0.930	16.274964	16.275676	16.276388	16.277100	16.277812	16.278524	16.279236	16.279948	16.280660	16.281373
0.940	16.282085	16.282797	16.283509	16.284222	16.284934	16.285646	16.286359	16.287071	16.287784	16.288496
0.950	16.289209	16.289921	16.290634	16.291346	16.292059	16.292772	16.293484	16.294197	16.294910	16.295623
0.960	16.296336	16.297049	16.297762	16.298475	16.299188	16.299901	16.300614	16.301327	16.302040	16.302753
0.970	16.303467	16.304180	16.304893	16.305606	16.306320	16.307033	16.307747	16.308460	16.309174	16.309887
0.980	16.310601	16.311314	16.312028	16.312742	16.313455	16.314169	16.314883	16.315597	16.316310	16.317024
0.990	16.317738	16.318452	16.319166	16.319880	16.320594	16.321308	16.322023	16.322737	16.323451	16.324165

ATTENUATION IN DECIBELS
THETA FROM 67.000 TO 67.499 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.000	16.324879	16.325594	16.326308	16.327022	16.327737	16.328451	16.329166	16.329880	16.330595	16.331309
0.010	16.332024	16.332739	16.333453	16.334168	16.334883	16.335598	16.336312	16.337027	16.337742	16.338457
0.020	16.339172	16.339887	16.340602	16.341317	16.342032	16.342747	16.343462	16.344178	16.344893	16.345608
0.030	16.346323	16.347038	16.347754	16.348469	16.349185	16.349900	16.350616	16.351332	16.352047	16.352763
0.040	16.353478	16.354194	16.354910	16.355626	16.356341	16.357057	16.357773	16.358489	16.359205	16.359921
0.050	16.360637	16.361353	16.362069	16.362785	16.363501	16.364218	16.364934	16.365650	16.366366	16.367083
0.060	16.367799	16.368515	16.369232	16.369948	16.370665	16.371381	16.372098	16.372814	16.373531	16.374248
0.070	16.374964	16.375681	16.376398	16.377115	16.377831	16.378548	16.379265	16.379982	16.380699	16.381416
0.080	16.382133	16.382850	16.383567	16.384284	16.385002	16.385719	16.386436	16.387153	16.387871	16.388588
0.090	16.389306	16.390023	16.390740	16.391458	16.392175	16.392893	16.393611	16.394328	16.395046	16.395764
0.100	16.396482	16.397199	16.397917	16.398635	16.399353	16.400071	16.400789	16.401507	16.402225	16.402943
0.110	16.403661	16.404379	16.405097	16.405815	16.406533	16.407252	16.407970	16.408688	16.409407	16.410125
0.120	16.410844	16.411562	16.412281	16.412999	16.413718	16.414436	16.415155	16.415874	16.416592	16.417311
0.130	16.418030	16.418749	16.419468	16.420187	16.420905	16.421624	16.422343	16.423063	16.423782	16.424501
0.140	16.425220	16.425939	16.426658	16.427377	16.428097	16.428816	16.429535	16.430255	16.430974	16.431694
0.150	16.432413	16.433133	16.433852	16.434572	16.435292	16.436011	16.436731	16.437451	16.438170	16.438890
0.160	16.439610	16.440330	16.441050	16.441770	16.442490	16.443210	16.443930	16.444650	16.445370	16.446090
0.170	16.446810	16.447531	16.448251	16.448971	16.449692	16.450412	16.451133	16.451853	16.452573	16.453294
0.180	16.454015	16.454735	16.455456	16.456176	16.456897	16.457618	16.458338	16.459059	16.459780	16.460501
0.190	16.461222	16.461943	16.462664	16.463385	16.464106	16.464827	16.465548	16.466269	16.466990	16.467712
0.200	16.468433	16.469154	16.469876	16.470597	16.471318	16.472039	16.472761	16.473483	16.474204	16.474926
0.210	16.475647	16.476369	16.477091	16.477812	16.478534	16.479256	16.479978	16.480700	16.481421	16.482143
0.220	16.482365	16.483087	16.483809	16.484531	16.485254	16.485976	16.486698	16.487420	16.488142	16.488864
0.230	16.490087	16.490809	16.491532	16.492254	16.492976	16.493699	16.494421	16.495144	16.495867	16.496589
0.240	16.497312	16.498035	16.498757	16.499480	16.500203	16.500926	16.501649	16.502372	16.503095	16.503818
0.250	16.504541	16.505264	16.505987	16.506710	16.507433	16.508156	16.508879	16.509603	16.510326	16.511049
0.260	16.511773	16.512496	16.513220	16.513943	16.514667	16.515390	16.516114	16.516837	16.517561	16.518285
0.270	16.519008	16.519732	16.520456	16.521180	16.521904	16.522628	16.523351	16.524076	16.524800	16.525524
0.280	16.526248	16.526972	16.527696	16.528420	16.529144	16.529869	16.530593	16.531317	16.532042	16.532766
0.290	16.533490	16.534215	16.534939	16.535664	16.536388	16.537113	16.537838	16.538563	16.539287	16.540012
0.300	16.540737	16.541461	16.542186	16.542911	16.543636	16.544361	16.545086	16.545811	16.546536	16.547261
0.310	16.547987	16.548712	16.549437	16.550162	16.550888	16.551613	16.552338	16.553064	16.553789	16.554515
0.320	16.555240	16.555966	16.556691	16.557417	16.558142	16.558868	16.559594	16.560320	16.561045	16.561771
0.330	16.562497	16.563223	16.563949	16.564675	16.565401	16.566127	16.566853	16.567579	16.568305	16.569031
0.340	16.569758	16.570484	16.571210	16.571936	16.572663	16.573389	16.574116	16.574842	16.575569	16.576295
0.350	16.577022	16.577748	16.578475	16.579202	16.579928	16.580655	16.581382	16.582109	16.582836	16.583563
0.360	16.584289	16.585016	16.585743	16.586470	16.587198	16.587925	16.588652	16.589379	16.590106	16.590833
0.370	16.591561	16.592288	16.593015	16.593743	16.594470	16.595198	16.595925	16.596653	16.597380	16.598106
0.380	16.598835	16.599563	16.600291	16.601019	16.601747	16.602474	16.603202	16.603930	16.604658	16.605386
0.390	16.606114	16.606842	16.607570	16.608298	16.609026	16.609755	16.610483	16.611211	16.611939	16.612668
0.400	16.613396	16.614124	16.614853	16.615581	16.616310	16.617038	16.617767	16.618495	16.619224	16.619953
0.410	16.620682	16.621410	16.622139	16.622868	16.623597	16.624326	16.625055	16.625783	16.626513	16.627242
0.420	16.627971	16.628700	16.629429	16.630158	16.630887	16.631617	16.632346	16.633075	16.633805	16.634534
0.430	16.635263	16.635993	16.636722	16.637452	16.638181	16.638911	16.639641	16.640371	16.641100	16.641830
0.440	16.642560	16.643290	16.644019	16.644749	16.645479	16.646209	16.646939	16.647669	16.648399	16.649130
0.450	16.649860	16.650590	16.651320	16.652050	16.652781	16.653511	16.654241	16.654972	16.655702	16.656433
0.460	16.657163	16.657894	16.658624	16.659355	16.660086	16.660816	16.661547	16.662278	16.663009	16.663739
0.470	16.664470	16.665201	16.665932	16.666663	16.667394	16.668125	16.668856	16.669588	16.670319	16.671050
0.480	16.671781	16.672513	16.673244	16.673975	16.674706	16.675438	16.676169	16.676901	16.677632	16.678364
0.490	16.679096	16.679827	16.680559	16.681290	16.682022	16.682754	16.683486	16.684218	16.684950	16.685682

ATTENUATION IN DECIBELS
THETA FROM 67.500 TO 67.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	16.686414	16.687145	16.687877	16.688610	16.689342	16.690074	16.690806	16.691538	16.692271	16.693003
0.510	16.693735	16.694467	16.695200	16.695932	16.696665	16.697397	16.698130	16.698862	16.699595	16.700328
0.520	16.701060	16.701793	16.702526	16.703259	16.703991	16.704724	16.705457	16.706190	16.706923	16.707656
0.530	16.708389	16.709122	16.709855	16.710588	16.711322	16.712055	16.712788	16.713521	16.714255	16.714988
0.540	16.715721	16.716455	16.717188	16.717922	16.718655	16.719389	16.720123	16.720856	16.721590	16.722324
0.550	16.723058	16.723791	16.724525	16.725259	16.725993	16.726727	16.727461	16.728195	16.728929	16.729663
0.560	16.730397	16.731131	16.731866	16.732600	16.733334	16.734068	16.734803	16.735537	16.736272	16.737006
0.570	16.737741	16.738475	16.739210	16.739944	16.740679	16.741414	16.742148	16.742883	16.743618	16.744353
0.580	16.745087	16.745822	16.746557	16.747292	16.748027	16.748762	16.749497	16.750232	16.750968	16.751703
0.590	16.752438	16.753173	16.753909	16.754644	16.755379	16.756115	16.756850	16.757586	16.758321	16.759057
0.600	16.759792	16.760528	16.761264	16.761999	16.762735	16.763471	16.764207	16.764942	16.765678	16.766414
0.610	16.767150	16.767886	16.768622	16.769358	16.770094	16.770830	16.771567	16.772303	16.773039	16.773775
0.620	16.774512	16.775248	16.775985	16.776721	16.777457	16.778194	16.778930	16.779667	16.780404	16.781140
0.630	16.781877	16.782614	16.783350	16.784087	16.784824	16.785561	16.786298	16.787035	16.787772	16.788509
0.640	16.789246	16.789983	16.790720	16.791457	16.792194	16.792932	16.793669	16.794406	16.795143	16.795881
0.650	16.796618	16.797356	16.798093	16.798831	16.799568	16.800306	16.801044	16.801781	16.802519	16.803257
0.660	16.803994	16.804732	16.805470	16.806208	16.806946	16.807684	16.808422	16.809160	16.809898	16.810636
0.670	16.811374	16.812112	16.812850	16.813589	16.814327	16.815065	16.815804	16.816542	16.817281	16.818019
0.680	16.818758	16.819496	16.820235	16.820973	16.821712	16.822451	16.823189	16.823928	16.824667	16.825406
0.690	16.826145	16.826884	16.827623	16.828362	16.829101	16.829840	16.830579	16.831318	16.832057	16.832796
0.700	16.833536	16.834275	16.835014	16.835754	16.836493	16.837232	16.837972	16.838711	16.839451	16.840190
0.710	16.840930	16.841670	16.842409	16.843149	16.843889	16.844629	16.845369	16.846108	16.846848	16.847588
0.720	16.848378	16.849068	16.849808	16.850549	16.851289	16.852029	16.852769	16.853509	16.854249	16.854990
0.730	16.855730	16.856471	16.857211	16.857951	16.858692	16.859432	16.860173	16.860914	16.861654	16.862395
0.740	16.863136	16.863876	16.864617	16.865358	16.866099	16.866840	16.867581	16.868322	16.869063	16.869804
0.750	16.870545	16.871286	16.872027	16.872768	16.873510	16.874251	16.874992	16.875734	16.876475	16.877216
0.760	16.877958	16.878699	16.879441	16.880182	16.880924	16.881666	16.882407	16.883149	16.883891	16.884633
0.770	16.885374	16.886116	16.886858	16.887600	16.888342	16.889084	16.889826	16.890568	16.891310	16.892052
0.780	16.892795	16.893537	16.894279	16.895021	16.895764	16.896506	16.897249	16.897991	16.898734	16.899476
0.790	16.900219	16.900961	16.901704	16.902447	16.903189	16.903932	16.904675	16.905418	16.906161	16.906904
0.800	16.907646	16.908389	16.909132	16.909875	16.910619	16.911362	16.912105	16.912848	16.913591	16.914335
0.810	16.915078	16.915821	16.916564	16.917308	16.918051	16.918795	16.919538	16.920282	16.921026	16.921769
0.820	16.922513	16.923257	16.924001	16.924744	16.925488	16.926232	16.926976	16.927720	16.928464	16.929208
0.830	16.929952	16.930696	16.931440	16.932184	16.932928	16.933673	16.934417	16.935161	16.935905	16.936650
0.840	16.937394	16.938139	16.938883	16.939628	16.940372	16.941117	16.941862	16.942606	16.943351	16.944096
0.850	16.944841	16.945585	16.946330	16.947075	16.947820	16.948565	16.949310	16.950055	16.950800	16.951545
0.860	16.952291	16.953036	16.953781	16.954526	16.955272	16.956017	16.956762	16.957508	16.958253	16.958999
0.870	16.959744	16.960490	16.961236	16.961981	16.962727	16.963473	16.964218	16.964964	16.965710	16.966456
0.880	16.967207	16.967948	16.968694	16.969440	16.970186	16.970932	16.971678	16.972424	16.973171	16.973917
0.890	16.974663	16.975409	16.976156	16.976902	16.977648	16.978395	16.979141	16.979888	16.980635	16.981381
0.900	16.982128	16.982875	16.983621	16.984368	16.985115	16.985862	16.986609	16.987355	16.988102	16.988849
0.910	16.989597	16.990344	16.991091	16.991838	16.992585	16.993332	16.994080	16.994827	16.995574	16.996321
0.920	16.997069	16.997816	16.998564	16.999311	17.000059	17.000807	17.001554	17.002302	17.003050	17.003797
0.930	17.004545	17.005293	17.006041	17.006789	17.007537	17.008285	17.009032	17.009781	17.010529	17.011277
0.940	17.012025	17.012773	17.013521	17.014270	17.015018	17.015766	17.016515	17.017263	17.018012	17.018760
0.950	17.019509	17.020257	17.021006	17.021755	17.022503	17.023252	17.024001	17.024749	17.025498	17.026247
0.960	17.026996	17.027745	17.028494	17.029243	17.029992	17.030741	17.031490	17.032239	17.032989	17.033738
0.970	17.034487	17.035236	17.035986	17.036735	17.037485	17.038234	17.038984	17.039733	17.040483	17.041232
0.980	17.041982	17.042732	17.043482	17.044231	17.044981	17.045731	17.046481	17.047231	17.047981	17.048731
0.990	17.049481	17.050231	17.050981	17.051731	17.052481	17.053231	17.053982	17.054732	17.055482	17.056233

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.000	17.056983	17.057734	17.058484	17.059235	17.059985	17.060736	17.061486	17.062237	17.062988	17.063739
0.010	17.064489	17.065240	17.065991	17.066742	17.067493	17.068244	17.068995	17.069746	17.070497	17.071248
0.020	17.071993	17.072751	17.073502	17.074253	17.075005	17.075756	17.076507	17.077259	17.078010	17.078762
0.030	17.079513	17.080265	17.081016	17.081768	17.082520	17.083272	17.084023	17.084775	17.085527	17.086279
0.040	17.087031	17.087783	17.088535	17.089287	17.090039	17.090791	17.091543	17.092295	17.093047	17.093800
0.050	17.094552	17.095304	17.096057	17.096809	17.097562	17.098314	17.099067	17.099819	17.100572	17.101325
0.060	17.102077	17.102830	17.103583	17.104336	17.105088	17.105841	17.106594	17.107347	17.108100	17.108853
0.070	17.109606	17.110359	17.111112	17.111866	17.112619	17.113372	17.114125	17.114879	17.115632	17.116385
0.080	17.117139	17.117892	17.118646	17.119399	17.120153	17.120907	17.121660	17.122414	17.123168	17.123921
0.090	17.124675	17.125429	17.126183	17.126937	17.127691	17.128445	17.129199	17.129953	17.130707	17.131461
0.100	17.132216	17.132970	17.133724	17.134479	17.135233	17.135987	17.136742	17.137496	17.138251	17.139005
0.110	17.139760	17.140514	17.141269	17.142024	17.142778	17.143533	17.144288	17.145043	17.145798	17.146553
0.120	17.147308	17.148061	17.148818	17.149573	17.150328	17.151083	17.151838	17.152593	17.153349	17.154104
0.130	17.154859	17.155615	17.156370	17.157126	17.157881	17.158637	17.159392	17.160148	17.160903	17.161659
0.140	17.162415	17.163171	17.163926	17.164682	17.165438	17.166194	17.166950	17.167706	17.168462	17.169218
0.150	17.169974	17.170730	17.171487	17.172243	17.172999	17.173755	17.174512	17.175268	17.176024	17.176781
0.160	17.177537	17.178294	17.179050	17.179807	17.180564	17.181320	17.182077	17.182834	17.183591	17.184348
0.170	17.185104	17.185861	17.186618	17.187375	17.188132	17.188889	17.189646	17.190404	17.191161	17.191918
0.180	17.192675	17.193433	17.194190	17.194947	17.195705	17.196462	17.197220	17.197977	17.198735	17.199492
0.190	17.200250	17.201008	17.201765	17.202523	17.203281	17.204039	17.204797	17.205554	17.206312	17.207070
0.200	17.207829	17.208586	17.209345	17.210103	17.210861	17.211619	17.212377	17.213136	17.213894	17.214652
0.210	17.215411	17.216169	17.216928	17.217686	17.218445	17.219203	17.219962	17.220721	17.221479	17.222238
0.220	17.222997	17.223756	17.224515	17.225274	17.226032	17.226791	17.227551	17.228310	17.229069	17.229828
0.230	17.230587	17.231346	17.232105	17.232865	17.233624	17.234383	17.235143	17.235902	17.236662	17.237421
0.240	17.238181	17.238940	17.239700	17.240460	17.241220	17.241979	17.242739	17.243499	17.244259	17.245018
0.250	17.245779	17.246538	17.247298	17.248059	17.248819	17.249579	17.250339	17.251099	17.251859	17.252620
0.260	17.253380	17.254140	17.254901	17.255661	17.256422	17.257182	17.257943	17.258703	17.259464	17.260225
0.270	17.260985	17.261746	17.262507	17.263268	17.264029	17.264790	17.265551	17.266312	17.267073	17.267834
0.280	17.268595	17.269356	17.270117	17.270878	17.271640	17.272401	17.273162	17.273924	17.274685	17.275446
0.290	17.276208	17.276969	17.277731	17.278493	17.279254	17.280016	17.280778	17.281539	17.282301	17.283063
0.300	17.283825	17.284587	17.285349	17.286111	17.286873	17.287635	17.288397	17.289159	17.289921	17.290684
0.310	17.291446	17.292208	17.292970	17.293733	17.294495	17.295258	17.296020	17.296783	17.297545	17.298308
0.320	17.299071	17.299833	17.300596	17.301359	17.302122	17.302884	17.303647	17.304410	17.305173	17.305936
0.330	17.306699	17.307462	17.308225	17.308989	17.309752	17.310515	17.311278	17.312042	17.312805	17.313568
0.340	17.314332	17.315095	17.315859	17.316622	17.317386	17.318149	17.318913	17.319677	17.320441	17.321204
0.350	17.321968	17.322732	17.323496	17.324260	17.325024	17.325788	17.326552	17.327316	17.328080	17.328844
0.360	17.329608	17.330373	17.331137	17.331901	17.332666	17.333430	17.334194	17.334959	17.335723	17.336488
0.370	17.337253	17.338017	17.338782	17.339547	17.340311	17.341076	17.341841	17.342606	17.343371	17.344136
0.380	17.344901	17.345666	17.346431	17.347196	17.347961	17.348726	17.349491	17.350257	17.351022	17.351787
0.390	17.352553	17.353318	17.354084	17.354849	17.355614	17.356380	17.357146	17.357911	17.358677	17.359443
0.400	17.360209	17.360974	17.361740	17.362506	17.363272	17.364038	17.364804	17.365570	17.366336	17.367102
0.410	17.367868	17.368634	17.369401	17.370167	17.370933	17.371700	17.372466	17.373232	17.373999	17.374765
0.420	17.375532	17.376299	17.377065	17.377832	17.378598	17.379365	17.380132	17.380899	17.381666	17.382433
0.430	17.383199	17.383966	17.384733	17.385501	17.386268	17.387035	17.387802	17.388569	17.389336	17.390104
0.440	17.390871	17.391639	17.392406	17.393173	17.393941	17.394708	17.395476	17.396244	17.397011	17.397779
0.450	17.398546	17.399314	17.400082	17.400850	17.401618	17.402386	17.403154	17.403922	17.404690	17.405458
0.460	17.406226	17.406994	17.407762	17.408530	17.409299	17.410067	17.410835	17.411604	17.412372	17.413141
0.470	17.413909	17.414678	17.415446	17.416215	17.416984	17.417752	17.418521	17.419290	17.420058	17.420827
0.480	17.421596	17.422365	17.423134	17.423903	17.424672	17.425442	17.426211	17.426980	17.427749	17.428518
0.490	17.429287	17.430057	17.430826	17.431596	17.432365	17.433135	17.433904	17.434674	17.435443	17.436213

ATTENUATION IN DECIBELS
THETA FROM 68.500 TO 68.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.507	17.436983	17.437752	17.438522	17.439292	17.440062	17.440832	17.441602	17.442371	17.443141	17.443912
0.510	17.444682	17.445452	17.446222	17.446992	17.447762	17.448533	17.449303	17.450073	17.450844	17.451614
0.520	17.452384	17.453155	17.453926	17.454696	17.455467	17.456238	17.457008	17.457779	17.458550	17.459321
0.530	17.460091	17.460862	17.461633	17.462404	17.463175	17.463946	17.464717	17.465489	17.466260	17.467031
0.540	17.467802	17.468574	17.469345	17.470116	17.470888	17.471659	17.472431	17.473202	17.473974	17.474746
0.550	17.475517	17.476289	17.477061	17.477832	17.478604	17.479376	17.480148	17.480920	17.481692	17.482464
0.560	17.483236	17.484008	17.484780	17.485552	17.486325	17.487097	17.487869	17.488642	17.489414	17.490186
0.570	17.490959	17.491731	17.492504	17.493276	17.494049	17.494822	17.495594	17.496367	17.497140	17.497912
0.580	17.498685	17.499458	17.500231	17.501004	17.501777	17.502550	17.503323	17.504096	17.504869	17.505643
0.590	17.506416	17.507189	17.507963	17.508736	17.509509	17.510283	17.511056	17.511830	17.512603	17.513377
0.600	17.514151	17.514924	17.515698	17.516472	17.517246	17.518019	17.518793	17.519567	17.520341	17.521115
0.610	17.521889	17.522663	17.523438	17.524212	17.524986	17.525760	17.526534	17.527309	17.528083	17.528857
0.620	17.529632	17.530406	17.531181	17.531955	17.532730	17.533504	17.534279	17.535054	17.535829	17.536603
0.630	17.537378	17.538153	17.538928	17.539703	17.540478	17.541253	17.542028	17.542803	17.543578	17.544354
0.640	17.545129	17.545904	17.546679	17.547455	17.548230	17.549006	17.549781	17.550557	17.551332	17.552108
0.650	17.552883	17.553659	17.554435	17.555211	17.555986	17.556762	17.557538	17.558314	17.559090	17.559866
0.660	17.560642	17.561418	17.562194	17.562970	17.563746	17.564523	17.565299	17.566075	17.566852	17.567628
0.670	17.568404	17.569181	17.569957	17.570734	17.571511	17.572287	17.573064	17.573841	17.574617	17.575394
0.680	17.576171	17.576948	17.577725	17.578502	17.579279	17.580056	17.580833	17.581610	17.582387	17.583164
0.690	17.583941	17.584719	17.585496	17.586273	17.587051	17.587828	17.588606	17.589383	17.590161	17.590939
0.700	17.591716	17.592494	17.593271	17.594049	17.594827	17.595605	17.596383	17.597161	17.597939	17.598717
0.710	17.599495	17.600273	17.601051	17.601829	17.602607	17.603385	17.604164	17.604942	17.605720	17.606499
0.720	17.607277	17.608056	17.608834	17.609613	17.610391	17.611170	17.611949	17.612727	17.613506	17.614285
0.730	17.615064	17.615843	17.616621	17.617401	17.618180	17.618959	17.619738	17.620517	17.621296	17.622075
0.740	17.622854	17.623634	17.624413	17.625192	17.625972	17.626751	17.627531	17.628310	17.629090	17.629869
0.750	17.630649	17.631429	17.632208	17.632988	17.633768	17.634548	17.635328	17.636108	17.636888	17.637668
0.760	17.638448	17.639228	17.640008	17.640788	17.641568	17.642349	17.643129	17.643909	17.644690	17.645470
0.770	17.646250	17.647031	17.647811	17.648592	17.649373	17.650153	17.650934	17.651715	17.652495	17.653276
0.780	17.654057	17.654838	17.655619	17.656400	17.657181	17.657962	17.658743	17.659524	17.660306	17.661087
0.790	17.661863	17.662649	17.663430	17.664212	17.664993	17.665775	17.666556	17.667338	17.668119	17.668901
0.800	17.669683	17.670464	17.671246	17.672028	17.672810	17.673592	17.674373	17.675155	17.675937	17.676719
0.810	17.677501	17.678284	17.679066	17.679848	17.680630	17.681412	17.682195	17.682977	17.683759	17.684542
0.820	17.685324	17.686107	17.686889	17.687672	17.688455	17.689237	17.690020	17.690803	17.691586	17.692369
0.830	17.693151	17.693934	17.694717	17.695500	17.696283	17.697066	17.697850	17.698633	17.699416	17.700199
0.840	17.700982	17.701766	17.702549	17.703332	17.704116	17.704899	17.705683	17.706466	17.707250	17.708034
0.850	17.708817	17.709601	17.710385	17.711169	17.711953	17.712737	17.713521	17.714304	17.715088	17.715873
0.860	17.716657	17.717441	17.718225	17.719009	17.719793	17.720578	17.721362	17.722147	17.722931	17.723715
0.870	17.724500	17.725284	17.726069	17.726854	17.727638	17.728423	17.729208	17.729992	17.730777	17.731562
0.880	17.732347	17.733132	17.733917	17.734702	17.735487	17.736272	17.737057	17.737843	17.738628	17.739413
0.890	17.740198	17.740984	17.741769	17.742555	17.743340	17.744126	17.744911	17.745697	17.746482	17.747268
0.900	17.748054	17.748840	17.749625	17.750411	17.751197	17.751983	17.752769	17.753555	17.754341	17.755127
0.910	17.755913	17.756700	17.757486	17.758272	17.759058	17.759845	17.760631	17.761417	17.762204	17.762990
0.920	17.763777	17.764564	17.765350	17.766137	17.766924	17.767710	17.768497	17.769284	17.770071	17.770858
0.930	17.771645	17.772432	17.773219	17.774006	17.774793	17.775580	17.776367	17.777154	17.777942	17.778729
0.940	17.779516	17.780304	17.781091	17.781879	17.782666	17.783454	17.784241	17.785029	17.785817	17.786605
0.950	17.787392	17.788180	17.788968	17.789756	17.790544	17.791332	17.792120	17.792908	17.793696	17.794484
0.960	17.795272	17.796061	17.796849	17.797637	17.798425	17.799214	17.800002	17.800791	17.801579	17.802368
0.970	17.803156	17.803945	17.804734	17.805522	17.806311	17.807100	17.807889	17.808678	17.809467	17.810256
0.980	17.811045	17.811834	17.812623	17.813412	17.814201	17.814990	17.815779	17.816569	17.817358	17.818148
0.990	17.818937	17.819726	17.820516	17.821306	17.822095	17.822885	17.823674	17.824464	17.825254	17.826044

ATTENUATION IN DECIbELS
THETA FROM 69.000 TO 69.499 DEGREES

THETA IN DEGREES	0.003	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.000	17.826833	17.827623	17.828413	17.829203	17.829993	17.830783	17.831573	17.832363	17.833153	17.833944
0.010	17.834734	17.835524	17.836315	17.837105	17.837895	17.838686	17.839476	17.840267	17.841057	17.841848
0.020	17.842639	17.843429	17.844220	17.845011	17.845802	17.846592	17.847383	17.848174	17.848965	17.849756
0.030	17.850348	17.851139	17.851930	17.852721	17.853512	17.854303	17.855094	17.855886	17.856677	17.857469
0.040	17.858460	17.859252	17.860044	17.860835	17.861627	17.862418	17.863210	17.864002	17.864794	17.865586
0.050	17.866377	17.867169	17.867961	17.868753	17.869545	17.870337	17.871130	17.871922	17.872714	17.873506
0.060	17.874299	17.875091	17.875883	17.876676	17.877468	17.878261	17.879053	17.879846	17.880639	17.881431
0.070	17.882224	17.883017	17.883810	17.884603	17.885395	17.886188	17.886981	17.887774	17.888567	17.889360
0.080	17.890153	17.890947	17.891740	17.892533	17.893327	17.894120	17.894913	17.895707	17.896500	17.897294
0.090	17.898087	17.898881	17.899674	17.900468	17.901262	17.902056	17.902849	17.903643	17.904437	17.905231
0.100	17.906025	17.906819	17.907613	17.908407	17.909201	17.909996	17.910790	17.911584	17.912378	17.913172
0.110	17.913967	17.914761	17.915556	17.916350	17.917145	17.917939	17.918734	17.919529	17.920324	17.921118
0.120	17.922913	17.923708	17.924503	17.925298	17.926093	17.926888	17.927683	17.928478	17.929273	17.930068
0.130	17.929863	17.930659	17.931454	17.932249	17.933045	17.933840	17.934636	17.935431	17.936227	17.937022
0.140	17.937818	17.938613	17.939409	17.940205	17.941001	17.941797	17.942593	17.943388	17.944184	17.944980
0.150	17.945776	17.946573	17.947369	17.948165	17.948961	17.949757	17.950554	17.951350	17.952146	17.952943
0.160	17.953739	17.954536	17.955332	17.956129	17.956926	17.957722	17.958519	17.959316	17.960113	17.960909
0.170	17.961706	17.962503	17.963300	17.964097	17.964894	17.965691	17.966489	17.967286	17.968083	17.968880
0.180	17.969677	17.970475	17.971272	17.972070	17.972867	17.973665	17.974462	17.975260	17.976058	17.976855
0.190	17.977653	17.978451	17.979248	17.980046	17.980844	17.981642	17.982440	17.983238	17.984036	17.984834
0.200	17.985632	17.986431	17.987229	17.988027	17.988825	17.989624	17.990422	17.991220	17.992019	17.992818
0.210	17.993616	17.994415	17.995214	17.996012	17.996811	17.997610	17.998408	17.999207	18.000006	18.000805
0.220	18.001604	18.002403	18.003202	18.004001	18.004801	18.005600	18.006399	18.007198	18.007998	18.008797
0.230	18.009596	18.010396	18.011195	18.011995	18.012794	18.013594	18.014394	18.015193	18.015993	18.016793
0.240	18.017593	18.018393	18.019192	18.019992	18.020792	18.021592	18.022393	18.023193	18.023993	18.024793
0.250	18.025593	18.026393	18.027194	18.027994	18.028795	18.029595	18.030396	18.031196	18.031997	18.032797
0.260	18.033598	18.034399	18.035199	18.036000	18.036801	18.037602	18.038403	18.039204	18.040005	18.040806
0.270	18.041607	18.042408	18.043209	18.044011	18.044812	18.045613	18.046414	18.047216	18.048017	18.048819
0.280	18.049620	18.050422	18.051224	18.052025	18.052827	18.053628	18.054430	18.055232	18.056034	18.056836
0.290	18.057638	18.058440	18.059242	18.060044	18.060846	18.061648	18.062450	18.063252	18.064055	18.064857
0.300	18.065660	18.066462	18.067264	18.068067	18.068869	18.069672	18.070474	18.071277	18.072080	18.072883
0.310	18.073685	18.074488	18.075291	18.076094	18.076897	18.077700	18.078503	18.079306	18.080109	18.080912
0.320	18.081716	18.082519	18.083322	18.084126	18.084929	18.085732	18.086536	18.087339	18.088143	18.088946
0.330	18.089750	18.090554	18.091357	18.092161	18.092965	18.093769	18.094573	18.095376	18.096180	18.096985
0.340	18.097789	18.098593	18.099397	18.100201	18.101005	18.101810	18.102614	18.103418	18.104223	18.105027
0.350	18.105832	18.106636	18.107441	18.108245	18.109050	18.109855	18.110659	18.111464	18.112269	18.113074
0.360	18.113879	18.114684	18.115489	18.116294	18.117099	18.117904	18.118709	18.119514	18.120320	18.121125
0.370	18.121930	18.122736	18.123541	18.124346	18.125152	18.125957	18.126763	18.127569	18.128374	18.129180
0.380	18.129986	18.130792	18.131598	18.132403	18.133209	18.134015	18.134821	18.135627	18.136433	18.137240
0.390	18.138046	18.138852	18.139658	18.140465	18.141271	18.142077	18.142884	18.143690	18.144497	18.145303
0.400	18.146110	18.146917	18.147723	18.148530	18.149337	18.150144	18.150951	18.151757	18.152565	18.153372
0.410	18.154179	18.154986	18.155793	18.156600	18.157407	18.158214	18.159022	18.159829	18.160636	18.161444
0.420	18.162251	18.163059	18.163866	18.164674	18.165482	18.166289	18.167097	18.167905	18.168713	18.169520
0.430	18.170328	18.171136	18.171944	18.172752	18.173560	18.174368	18.175177	18.175985	18.176793	18.177601
0.440	18.178410	18.179218	18.180027	18.180835	18.181643	18.182452	18.183261	18.184069	18.184878	18.185687
0.450	18.186495	18.187304	18.188113	18.188922	18.189731	18.190540	18.191349	18.192158	18.192967	18.193776
0.460	18.194585	18.195395	18.196204	18.197013	18.197823	18.198632	18.199441	18.200251	18.201060	18.201870
0.470	18.202680	18.203489	18.204299	18.205109	18.205918	18.206728	18.207538	18.208348	18.209158	18.209968
0.480	18.210778	18.211588	18.212398	18.213208	18.214019	18.214829	18.215639	18.216449	18.217260	18.218071
0.490	18.218881	18.219692	18.220502	18.221313	18.222123	18.222934	18.223745	18.224555	18.225366	18.226177

ATTENUATION IN DECIBELS
THETA FROM 69.500 TO 69.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	18.226988	18.227799	18.228610	18.229421	18.230232	18.231043	18.231854	18.232666	18.233477	18.234288
0.510	18.235100	18.235911	18.236722	18.237534	18.238345	18.239157	18.239969	18.240780	18.241592	18.242404
0.520	18.243215	18.244027	18.244839	18.245651	18.246463	18.247275	18.248087	18.248899	18.249711	18.250523
0.530	18.251335	18.252147	18.252960	18.253772	18.254585	18.255397	18.256209	18.257022	18.257835	18.258647
0.540	18.259460	18.260273	18.261085	18.261898	18.262711	18.263524	18.264337	18.265150	18.265963	18.266776
0.550	18.267589	18.268402	18.269215	18.270028	18.270841	18.271655	18.272468	18.273281	18.274095	18.274908
0.560	18.275722	18.276535	18.277349	18.278162	18.278976	18.279790	18.280604	18.281418	18.282231	18.283045
0.570	18.283859	18.284673	18.285487	18.286301	18.287115	18.287930	18.288744	18.289558	18.290372	18.291187
0.580	18.292001	18.292815	18.293630	18.294444	18.295259	18.296073	18.296888	18.297703	18.298517	18.299332
0.590	18.300147	18.300962	18.301777	18.302592	18.303407	18.304222	18.305037	18.305852	18.306667	18.307482
0.600	18.308298	18.309113	18.309928	18.310744	18.311559	18.312374	18.313190	18.314006	18.314821	18.315637
0.610	18.316453	18.317268	18.318084	18.318900	18.319715	18.320531	18.321347	18.322163	18.322979	18.323796
0.620	18.324612	18.325428	18.326244	18.327060	18.327877	18.328693	18.329509	18.330326	18.331142	18.331959
0.630	18.332775	18.333592	18.334409	18.335225	18.336042	18.336859	18.337675	18.338492	18.339309	18.340126
0.640	18.340943	18.341760	18.342577	18.343394	18.344212	18.345029	18.345846	18.346663	18.347481	18.348298
0.650	18.349115	18.349933	18.350750	18.351568	18.352386	18.353203	18.354021	18.354839	18.355656	18.356474
0.660	18.357292	18.358110	18.358928	18.359746	18.360564	18.361382	18.362200	18.363018	18.363837	18.364655
0.670	18.365473	18.366292	18.367110	18.367928	18.368747	18.369565	18.370384	18.371202	18.372021	18.372840
0.680	18.373659	18.374477	18.375296	18.376115	18.376934	18.377753	18.378572	18.379391	18.380210	18.381029
0.690	18.381848	18.382663	18.383487	18.384306	18.385126	18.385945	18.386765	18.387584	18.388403	18.389223
0.700	18.390043	18.390862	18.391682	18.392502	18.393322	18.394141	18.394961	18.395781	18.396601	18.397421
0.710	18.398241	18.399061	18.399882	18.400702	18.401522	18.402342	18.403162	18.403983	18.404803	18.405624
0.720	18.406444	18.407265	18.408085	18.408906	18.409727	18.410547	18.411368	18.412189	18.413010	18.413831
0.730	18.414652	18.415473	18.416294	18.417115	18.417936	18.418757	18.419578	18.420399	18.421221	18.422042
0.740	18.422863	18.423685	18.424506	18.425328	18.426150	18.426971	18.427793	18.428614	18.429436	18.430258
0.750	18.431080	18.431902	18.432724	18.433546	18.434367	18.435189	18.436012	18.436834	18.437656	18.438478
0.760	18.439301	18.440123	18.440945	18.441767	18.442590	18.443413	18.444235	18.445058	18.445880	18.446703
0.770	18.447526	18.448348	18.449171	18.449994	18.450817	18.451640	18.452463	18.453286	18.454109	18.454932
0.780	18.455755	18.456578	18.457402	18.458225	18.459048	18.459872	18.460695	18.461518	18.462342	18.463165
0.790	18.463989	18.464813	18.465636	18.466460	18.467284	18.468108	18.468931	18.469755	18.470579	18.471403
0.800	18.472227	18.473052	18.473876	18.474700	18.475524	18.476348	18.477173	18.477997	18.478821	18.479646
0.810	18.480470	18.481295	18.482119	18.482944	18.483768	18.484593	18.485418	18.486243	18.487068	18.487892
0.820	18.488717	18.489542	18.490367	18.491193	18.492018	18.492843	18.493668	18.494493	18.495318	18.496144
0.830	18.496969	18.497795	18.498620	18.499445	18.500271	18.501097	18.501922	18.502748	18.503574	18.504400
0.840	18.505225	18.506051	18.506877	18.507703	18.508529	18.509355	18.510181	18.511007	18.511833	18.512660
0.850	18.513486	18.514312	18.515139	18.515965	18.516791	18.517618	18.518444	18.519271	18.520097	18.520924
0.860	18.521751	18.522578	18.523405	18.524232	18.525058	18.525885	18.526712	18.527539	18.528366	18.529193
0.870	18.530020	18.530848	18.531675	18.532502	18.533329	18.534157	18.534984	18.535812	18.536639	18.537467
0.880	18.538295	18.539122	18.539950	18.540777	18.541605	18.542433	18.543261	18.544089	18.544917	18.545745
0.890	18.546573	18.547401	18.548229	18.549057	18.549886	18.550714	18.551542	18.552371	18.553199	18.554027
0.900	18.554856	18.555684	18.556513	18.557342	18.558170	18.558999	18.559828	18.560657	18.561486	18.562314
0.910	18.563143	18.563972	18.564801	18.565630	18.566460	18.567289	18.568118	18.568947	18.569777	18.570606
0.920	18.571435	18.572265	18.573094	18.573924	18.574753	18.575583	18.576412	18.577242	18.578072	18.578902
0.930	18.579732	18.580561	18.581391	18.582222	18.583051	18.583882	18.584712	18.585542	18.586372	18.587202
0.940	18.588032	18.588863	18.589693	18.590524	18.591354	18.592185	18.593016	18.593846	18.594676	18.595507
0.950	18.596338	18.597169	18.598000	18.598830	18.599661	18.600492	18.601323	18.602154	18.602985	18.603817
0.960	18.604648	18.605479	18.606310	18.607142	18.607973	18.608804	18.609636	18.610467	18.611299	18.612131
0.970	18.612962	18.613794	18.614626	18.615457	18.616289	18.617121	18.617953	18.618785	18.619617	18.620449
0.980	18.621281	18.622113	18.622946	18.623778	18.624610	18.625442	18.626275	18.627107	18.627939	18.628772
0.990	18.629605	18.630437	18.631270	18.632102	18.632935	18.633768	18.634601	18.635434	18.636266	18.637100

ATTENUATION IN DECIBELS THETA FROM 70.000 TO 70.499 DEGREES

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THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.000	18.637933	18.638766	18.639599	18.640432	18.641265	18.642098	18.642931	18.643765	18.644598	18.645432
0.010	18.646265	18.647099	18.647932	18.648766	18.649599	18.650432	18.651267	18.652100	18.652934	18.653768
0.020	18.654602	18.655436	18.656270	18.657104	18.657938	18.658772	18.659606	18.660440	18.661275	18.662109
0.030	18.662944	18.663778	18.664612	18.665447	18.666281	18.667116	18.667951	18.668785	18.669620	18.670455
0.040	18.671289	18.672124	18.672959	18.673794	18.674629	18.675464	18.676299	18.677135	18.677970	18.678805
0.050	18.679640	18.680475	18.681311	18.682146	18.682982	18.683817	18.684653	18.685488	18.686324	18.687160
0.060	18.687995	18.688831	18.689667	18.690503	18.691339	18.692175	18.693011	18.693847	18.694683	18.695519
0.070	18.696355	18.697191	18.698028	18.698864	18.699700	18.700536	18.701373	18.702209	18.703046	18.703883
0.080	18.704719	18.705556	18.706393	18.707229	18.708066	18.708903	18.709740	18.710577	18.711414	18.712251
0.090	18.713088	18.713925	18.714762	18.715600	18.716437	18.717274	18.718112	18.718949	18.719786	18.720624
0.100	18.721462	18.722299	18.723137	18.723974	18.724812	18.725650	18.726488	18.727326	18.728163	18.729002
0.110	18.729839	18.730677	18.731516	18.732354	18.733192	18.734030	18.734868	18.735707	18.736545	18.737384
0.120	18.738222	18.739060	18.739899	18.740738	18.741576	18.742415	18.743254	18.744093	18.744931	18.745770
0.130	18.746609	18.747448	18.748287	18.749126	18.749965	18.750804	18.751643	18.752483	18.753322	18.754161
0.140	18.755001	18.755840	18.756680	18.757519	18.758359	18.759198	18.760038	18.760878	18.761717	18.762557
0.150	18.763397	18.764237	18.765077	18.765917	18.766757	18.767597	18.768437	18.769277	18.770117	18.770957
0.160	18.771798	18.772638	18.773479	18.774319	18.775159	18.776000	18.776840	18.777681	18.778522	18.779362
0.170	18.780203	18.781044	18.781885	18.782726	18.783567	18.784408	18.785249	18.786090	18.786931	18.787772
0.180	18.788613	18.789454	18.790296	18.791137	18.791979	18.792820	18.793662	18.794503	18.795345	18.796186
0.190	18.797028	18.797870	18.798712	18.799553	18.800395	18.801237	18.802079	18.802921	18.803763	18.804605
0.200	18.805447	18.806289	18.807132	18.807974	18.808816	18.809659	18.810501	18.811343	18.812186	18.813029
0.210	18.813871	18.814714	18.815556	18.816399	18.817242	18.818085	18.818928	18.819771	18.820613	18.821456
0.220	18.822299	18.823143	18.823986	18.824829	18.825672	18.826515	18.827359	18.828202	18.829046	18.829889
0.230	18.830733	18.831576	18.832420	18.833263	18.834107	18.834951	18.835795	18.836639	18.837482	18.838326
0.240	18.839170	18.840014	18.840858	18.841703	18.842547	18.843391	18.844235	18.845080	18.845924	18.846768
0.250	18.847613	18.848457	18.849302	18.850146	18.850991	18.851836	18.852680	18.853525	18.854370	18.855215
0.260	18.856060	18.856905	18.857750	18.858595	18.859440	18.860285	18.861130	18.861975	18.862821	18.863666
0.270	18.864511	18.865357	18.866202	18.867048	18.867893	18.868739	18.869585	18.870430	18.871276	18.872122
0.280	18.872968	18.873814	18.874660	18.875505	18.876351	18.877198	18.878044	18.878890	18.879736	18.880582
0.290	18.881428	18.882275	18.883121	18.883968	18.884814	18.885661	18.886507	18.887354	18.888201	18.889047
0.300	18.889894	18.890741	18.891588	18.892435	18.893282	18.894129	18.894976	18.895823	18.896670	18.897517
0.310	18.898364	18.899212	18.900059	18.900906	18.901754	18.902601	18.903449	18.904296	18.905144	18.905992
0.320	18.906839	18.907687	18.908535	18.909383	18.910230	18.911078	18.911927	18.912775	18.913623	18.914471
0.330	18.915319	18.916167	18.917015	18.917864	18.918712	18.919560	18.920409	18.921257	18.922106	18.922954
0.340	18.923803	18.924652	18.925500	18.926349	18.927198	18.928047	18.928896	18.929745	18.930594	18.931443
0.350	18.932292	18.933141	18.933990	18.934839	18.935689	18.936538	18.937387	18.938237	18.939086	18.939936
0.360	18.940785	18.941635	18.942485	18.943335	18.944184	18.945034	18.945884	18.946734	18.947584	18.948434
0.370	18.949284	18.950134	18.950984	18.951834	18.952684	18.953535	18.954385	18.955235	18.956086	18.956936
0.380	18.957787	18.958637	18.959488	18.960339	18.961189	18.962040	18.962891	18.963742	18.964592	18.965443
0.390	18.966294	18.967145	18.967997	18.968848	18.969699	18.970550	18.971401	18.972253	18.973104	18.973955
0.400	18.974807	18.975658	18.976510	18.977361	18.978213	18.979065	18.979916	18.980768	18.981620	18.982472
0.410	18.983324	18.984176	18.985028	18.985880	18.986732	18.987584	18.988436	18.989289	18.990141	18.990993
0.420	18.991846	18.992698	18.993551	18.994403	18.995255	18.996108	18.996961	18.997813	18.998666	18.999519
0.430	19.000372	19.001225	19.002078	19.002931	19.003784	19.004637	19.005490	19.006343	19.007197	19.008050
0.440	19.008903	19.009757	19.010610	19.011463	19.012317	19.013170	19.014024	19.014878	19.015732	19.016585
0.450	19.017439	19.018293	19.019147	19.020001	19.020855	19.021709	19.022563	19.023417	19.024271	19.025126
0.460	19.025980	19.026834	19.027689	19.028543	19.029397	19.030252	19.031106	19.031961	19.032816	19.033670
0.470	19.034525	19.035380	19.036235	19.037090	19.037945	19.038800	19.039654	19.040509	19.041365	19.042220
0.480	19.043075	19.043931	19.044786	19.045641	19.046497	19.047352	19.048208	19.049063	19.049919	19.050774
0.490	19.051630	19.052486	19.053342	19.054197	19.055053	19.055909	19.056765	19.057621	19.058477	19.059334

ATTENUATION IN DECIBELS
THETA FROM 70.500 TO 70.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	19.060190	19.061046	19.061902	19.062758	19.063615	19.064471	19.065328	19.066184	19.067041	19.067897
0.510	19.068754	19.069611	19.070467	19.071324	19.072181	19.073038	19.073895	19.074752	19.075609	19.076466
0.520	19.077323	19.078180	19.079037	19.079895	19.080752	19.081609	19.082467	19.083324	19.084182	19.085039
0.530	19.085897	19.086755	19.087612	19.088470	19.089328	19.090186	19.091043	19.091901	19.092759	19.093617
0.540	19.094476	19.095334	19.096192	19.097050	19.097908	19.098767	19.099625	19.100483	19.101342	19.102200
0.550	19.103059	19.103917	19.104776	19.105635	19.106493	19.107352	19.108211	19.109070	19.109929	19.110788
0.560	19.111647	19.112506	19.113365	19.114224	19.115084	19.115943	19.116802	19.117661	19.118521	19.119380
0.570	19.120240	19.121099	19.121959	19.122819	19.123678	19.124538	19.125398	19.126258	19.127118	19.127978
0.580	19.128838	19.129698	19.130558	19.131418	19.132278	19.133138	19.133999	19.134859	19.135719	19.136580
0.590	19.137440	19.138301	19.139161	19.140022	19.140882	19.141743	19.142604	19.143465	19.144325	19.145186
0.600	19.146047	19.146909	19.147769	19.148631	19.149492	19.150353	19.151214	19.152075	19.152937	19.153798
0.610	19.154660	19.155521	19.156383	19.157244	19.158106	19.158967	19.159829	19.160691	19.161553	19.162415
0.620	19.163276	19.164138	19.165000	19.165862	19.166724	19.167587	19.168449	19.169311	19.170173	19.171036
0.630	19.171898	19.172760	19.173623	19.174485	19.175348	19.176211	19.177073	19.177936	19.178799	19.179662
0.640	19.180525	19.181387	19.182250	19.183113	19.183976	19.184840	19.185703	19.186566	19.187429	19.188293
0.650	19.189156	19.190019	19.190883	19.191746	19.192610	19.193473	19.194337	19.195201	19.196064	19.196928
0.660	19.197792	19.198656	19.199520	19.200384	19.201248	19.202112	19.202976	19.203840	19.204704	19.205569
0.670	19.206433	19.207297	19.208162	19.209026	19.209891	19.210755	19.211620	19.212485	19.213349	19.214214
0.680	19.215079	19.215944	19.216809	19.217674	19.218539	19.219405	19.220268	19.221134	19.221999	19.222864
0.690	19.223729	19.224595	19.225460	19.226326	19.227191	19.228056	19.228922	19.229788	19.230653	19.231519
0.700	19.232385	19.233251	19.234117	19.234982	19.235848	19.236714	19.237581	19.238446	19.239313	19.240179
0.710	19.241045	19.241911	19.242778	19.243644	19.244511	19.245377	19.246244	19.247110	19.247977	19.248844
0.720	19.249710	19.250577	19.251444	19.252311	19.253178	19.254045	19.254912	19.255779	19.256646	19.257513
0.730	19.258380	19.259248	19.260115	19.260982	19.261850	19.262717	19.263585	19.264452	19.265320	19.266187
0.740	19.267055	19.267923	19.268791	19.269659	19.270526	19.271394	19.272262	19.273130	19.273998	19.274867
0.750	19.275735	19.276603	19.277472	19.278340	19.279208	19.280077	19.280945	19.281814	19.282682	19.283551
0.760	19.284420	19.285288	19.286157	19.287026	19.287895	19.288764	19.289633	19.290502	19.291371	19.292240
0.770	19.293109	19.293978	19.294847	19.295717	19.296586	19.297456	19.298325	19.299195	19.300064	19.300934
0.780	19.301803	19.302673	19.303543	19.304413	19.305282	19.306152	19.307022	19.307892	19.308762	19.309632
0.790	19.310503	19.311373	19.312243	19.313113	19.313984	19.314854	19.315724	19.316595	19.317466	19.318336
0.800	19.319207	19.320077	19.320948	19.321819	19.322690	19.323560	19.324431	19.325302	19.326174	19.327044
0.810	19.327916	19.328787	19.329658	19.330529	19.331401	19.332272	19.333143	19.334015	19.334886	19.335758
0.820	19.336630	19.337501	19.338373	19.339245	19.340117	19.340988	19.341860	19.342732	19.343604	19.344476
0.830	19.345348	19.346220	19.347093	19.347965	19.348837	19.349710	19.350582	19.351454	19.352327	19.353199
0.840	19.354072	19.354945	19.355818	19.356690	19.357563	19.358436	19.359309	19.360182	19.361055	19.361928
0.850	19.362801	19.363674	19.364547	19.365420	19.366294	19.367167	19.368040	19.368914	19.369787	19.370661
0.860	19.371534	19.372408	19.373282	19.374155	19.375029	19.375903	19.376777	19.377651	19.378525	19.379399
0.870	19.380273	19.381147	19.382021	19.382895	19.383770	19.384644	19.385518	19.386393	19.387267	19.388142
0.880	19.389016	19.389891	19.390765	19.391640	19.392515	19.393390	19.394265	19.395139	19.396014	19.396889
0.890	19.397764	19.398640	19.399515	19.400390	19.401265	19.402141	19.403016	19.403891	19.404767	19.405642
0.900	19.406518	19.407393	19.408269	19.409145	19.410021	19.410896	19.411772	19.412648	19.413524	19.414400
0.910	19.415276	19.416152	19.417028	19.417904	19.418781	19.419657	19.420533	19.421410	19.422286	19.423163
0.920	19.424039	19.424916	19.425792	19.426669	19.427546	19.428423	19.429299	19.430176	19.431053	19.431930
0.930	19.432807	19.433684	19.434561	19.435439	19.436316	19.437193	19.438071	19.438948	19.439825	19.440703
0.940	19.441580	19.442458	19.443336	19.444213	19.445091	19.445969	19.446846	19.447725	19.448602	19.449480
0.950	19.450358	19.451236	19.452115	19.452993	19.453871	19.454749	19.455628	19.456506	19.457384	19.458263
0.960	19.459141	19.460020	19.460899	19.461777	19.462656	19.463535	19.464414	19.465292	19.466171	19.467050
0.970	19.467929	19.468808	19.469687	19.470567	19.471446	19.472325	19.473205	19.474084	19.474963	19.475843
0.980	19.476722	19.477602	19.478482	19.479361	19.480241	19.481121	19.482001	19.482880	19.483760	19.484640
0.990	19.485520	19.486400	19.487280	19.488161	19.489041	19.489921	19.490801	19.491682	19.492562	19.493443

ATTENUATION IN DECIBELS
THETA FROM 71.000 TO 71.499 DEGREES

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THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.000	19.494323	19.495204	19.496084	19.496965	19.497846	19.498727	19.499607	19.500488	19.501369	19.502250
0.010	19.503131	19.504012	19.504893	19.505774	19.506656	19.507537	19.508418	19.509300	19.510181	19.511062
0.020	19.511944	19.512825	19.513707	19.514589	19.515471	19.516352	19.517234	19.518116	19.518998	19.519880
0.030	19.520762	19.521644	19.522526	19.523408	19.524291	19.525173	19.526055	19.526937	19.527820	19.528702
0.040	19.529585	19.530468	19.531350	19.532233	19.533115	19.533998	19.534881	19.535764	19.536647	19.537530
0.050	19.538413	19.539296	19.540179	19.541062	19.541945	19.542829	19.543712	19.544595	19.545479	19.546362
0.060	19.547246	19.548129	19.549013	19.549896	19.550780	19.551664	19.552548	19.553432	19.554316	19.555200
0.070	19.556084	19.556968	19.557852	19.558736	19.559620	19.560504	19.561389	19.562273	19.563158	19.564042
0.080	19.564927	19.565811	19.566696	19.567580	19.568465	19.569350	19.570235	19.571120	19.572005	19.572890
0.090	19.573775	19.574660	19.575545	19.576430	19.577315	19.578201	19.579086	19.579971	19.580857	19.581742
0.100	19.582628	19.583513	19.584399	19.585285	19.586170	19.587056	19.587942	19.588828	19.589714	19.590600
0.110	19.591486	19.592372	19.593258	19.594144	19.595031	19.595917	19.596803	19.597690	19.598576	19.599463
0.120	19.600249	19.601136	19.602022	19.602909	19.603896	19.604783	19.605669	19.606556	19.607443	19.608330
0.130	19.609217	19.610104	19.610991	19.611879	19.612766	19.613653	19.614541	19.615428	19.616316	19.617203
0.140	19.618091	19.618978	19.619866	19.620754	19.621641	19.622529	19.623417	19.624305	19.625193	19.626081
0.150	19.626969	19.627857	19.628745	19.629633	19.630522	19.631410	19.632298	19.633187	19.634075	19.634964
0.160	19.635852	19.636741	19.637630	19.638518	19.639407	19.640296	19.641185	19.642074	19.642963	19.643852
0.170	19.644741	19.645630	19.646519	19.647408	19.648298	19.649187	19.650076	19.650966	19.651855	19.652745
0.180	19.653634	19.654524	19.655414	19.656303	19.657193	19.658083	19.658973	19.659863	19.660753	19.661643
0.190	19.662533	19.663423	19.664313	19.665204	19.666094	19.666984	19.667875	19.668765	19.669656	19.670546
0.200	19.671437	19.672328	19.673218	19.674109	19.675000	19.675890	19.676781	19.677672	19.678563	19.679455
0.210	19.680346	19.681237	19.682128	19.683019	19.683911	19.684802	19.685693	19.686585	19.687476	19.688368
0.220	19.689260	19.690151	19.691043	19.691935	19.692827	19.693718	19.694610	19.695502	19.696394	19.697286
0.230	19.698179	19.699071	19.699963	19.700855	19.701748	19.702640	19.703532	19.704425	19.705317	19.706210
0.240	19.707103	19.707995	19.708888	19.709781	19.710674	19.711567	19.712460	19.713353	19.714246	19.715139
0.250	19.716032	19.716925	19.717818	19.718712	19.719605	19.720495	19.721392	19.722286	19.723179	19.724073
0.260	19.724966	19.725860	19.726754	19.727648	19.728542	19.729435	19.730330	19.731224	19.732118	19.733012
0.270	19.733906	19.734800	19.735694	19.736589	19.737483	19.738378	19.739272	19.740167	19.741061	19.741956
0.280	19.742851	19.743745	19.744640	19.745535	19.746430	19.747325	19.748220	19.749115	19.750010	19.750905
0.290	19.751800	19.752696	19.753591	19.754486	19.755382	19.756277	19.757173	19.758068	19.758964	19.759860
0.300	19.760755	19.761651	19.762547	19.763443	19.764339	19.765235	19.766131	19.767027	19.767923	19.768819
0.310	19.769715	19.770612	19.771508	19.772404	19.773301	19.774197	19.775094	19.775990	19.776887	19.777784
0.320	19.778681	19.779577	19.780474	19.781371	19.782268	19.783165	19.784062	19.784959	19.785856	19.786754
0.330	19.787651	19.788548	19.789446	19.790343	19.791241	19.792138	19.793036	19.793933	19.794831	19.795729
0.340	19.796627	19.797524	19.798422	19.799320	19.800218	19.801116	19.802014	19.802912	19.803811	19.804709
0.350	19.805607	19.806506	19.807404	19.808302	19.809201	19.810100	19.810998	19.811897	19.812796	19.813694
0.360	19.814593	19.815492	19.816391	19.817290	19.818189	19.819088	19.819987	19.820886	19.821786	19.822685
0.370	19.823584	19.824484	19.825383	19.826283	19.827182	19.828082	19.828981	19.829881	19.830781	19.831681
0.380	19.832581	19.833480	19.834380	19.835280	19.836180	19.837080	19.837981	19.838881	19.839781	19.840682
0.390	19.841582	19.842482	19.843383	19.844283	19.845184	19.846085	19.846985	19.847886	19.848787	19.849688
0.400	19.850589	19.851490	19.852391	19.853292	19.854193	19.855094	19.855995	19.856896	19.857798	19.858699
0.410	19.859601	19.860502	19.861403	19.862305	19.863206	19.864108	19.865010	19.865912	19.866814	19.867716
0.420	19.868618	19.869519	19.870422	19.871324	19.872226	19.873128	19.874030	19.874933	19.875835	19.876737
0.430	19.877640	19.878542	19.879445	19.880347	19.881250	19.882153	19.883056	19.883959	19.884861	19.885764
0.440	19.886667	19.887570	19.888473	19.889377	19.890280	19.891183	19.892086	19.892990	19.893893	19.894796
0.450	19.895700	19.896604	19.897507	19.898411	19.899314	19.900218	19.901122	19.902026	19.902930	19.903834
0.460	19.904738	19.905642	19.906546	19.907450	19.908355	19.909259	19.910163	19.911067	19.911972	19.912877
0.470	19.913781	19.914686	19.915590	19.916495	19.917400	19.918305	19.919209	19.920115	19.921019	19.921924
0.480	19.922829	19.923735	19.924640	19.925545	19.926450	19.927356	19.928261	19.929167	19.930072	19.930978
0.490	19.931883	19.932789	19.933695	19.934600	19.935506	19.936412	19.937318	19.938224	19.939130	19.940036

ATTENUATION IN DECIBELS
THETA FROM 71.500 TO 71.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	19.940942	19.941848	19.942755	19.943661	19.944567	19.945473	19.946380	19.947286	19.948193	19.949100
0.510	19.950006	19.950913	19.951820	19.952727	19.953633	19.954540	19.955447	19.956354	19.957261	19.958169
0.520	19.959076	19.960083	19.961090	19.962097	19.963105	19.964112	19.965120	19.966127	19.967135	19.968143
0.530	19.969150	19.970158	19.971166	19.972174	19.973182	19.974190	19.975198	19.976206	19.977214	19.978222
0.540	19.979230	19.980239	19.981247	19.982255	19.983264	19.984272	19.985281	19.986289	19.987298	19.988306
0.550	19.989315	19.990324	19.991333	19.992342	19.993351	19.994360	19.995369	19.996378	19.997387	19.998396
0.560	19.999406	20.000415	20.001424	20.002433	20.003442	20.004451	20.005460	20.006469	20.007478	20.008487
0.570	20.009500	20.010509	20.011518	20.012527	20.013536	20.014545	20.015554	20.016563	20.017572	20.018581
0.580	20.019603	20.020612	20.021621	20.022630	20.023639	20.024648	20.025657	20.026666	20.027675	20.028684
0.590	20.029709	20.030718	20.031727	20.032736	20.033745	20.034754	20.035763	20.036772	20.037781	20.038790
0.600	20.039821	20.040830	20.041839	20.042848	20.043857	20.044866	20.045875	20.046884	20.047893	20.048902
0.610	20.049918	20.050927	20.051936	20.052945	20.053954	20.054963	20.055972	20.056981	20.057990	20.058999
0.620	20.060011	20.061020	20.062029	20.063038	20.064047	20.065056	20.066065	20.067074	20.068083	20.069092
0.630	20.070104	20.071113	20.072122	20.073131	20.074140	20.075149	20.076158	20.077167	20.078176	20.079185
0.640	20.080208	20.081217	20.082226	20.083235	20.084244	20.085253	20.086262	20.087271	20.088280	20.089289
0.650	20.090302	20.091311	20.092320	20.093329	20.094338	20.095347	20.096356	20.097365	20.098374	20.099383
0.660	20.100407	20.101416	20.102425	20.103434	20.104443	20.105452	20.106461	20.107470	20.108479	20.109488
0.670	20.110502	20.111511	20.112520	20.113529	20.114538	20.115547	20.116556	20.117565	20.118574	20.119583
0.680	20.120607	20.121616	20.122625	20.123634	20.124643	20.125652	20.126661	20.127670	20.128679	20.129688
0.690	20.130702	20.131711	20.132720	20.133729	20.134738	20.135747	20.136756	20.137765	20.138774	20.139783
0.700	20.140807	20.141816	20.142825	20.143834	20.144843	20.145852	20.146861	20.147870	20.148879	20.149888
0.710	20.150902	20.151911	20.152920	20.153929	20.154938	20.155947	20.156956	20.157965	20.158974	20.159983
0.720	20.161007	20.162016	20.163025	20.164034	20.165043	20.166052	20.167061	20.168070	20.169079	20.170088
0.730	20.171102	20.172111	20.173120	20.174129	20.175138	20.176147	20.177156	20.178165	20.179174	20.180183
0.740	20.181207	20.182216	20.183225	20.184234	20.185243	20.186252	20.187261	20.188270	20.189279	20.190288
0.750	20.191302	20.192311	20.193320	20.194329	20.195338	20.196347	20.197356	20.198365	20.199374	20.200383
0.760	20.201407	20.202416	20.203425	20.204434	20.205443	20.206452	20.207461	20.208470	20.209479	20.210488
0.770	20.211502	20.212511	20.213520	20.214529	20.215538	20.216547	20.217556	20.218565	20.219574	20.220583
0.780	20.221607	20.222616	20.223625	20.224634	20.225643	20.226652	20.227661	20.228670	20.229679	20.230688
0.790	20.230702	20.231711	20.232720	20.233729	20.234738	20.235747	20.236756	20.237765	20.238774	20.239783
0.800	20.240807	20.241816	20.242825	20.243834	20.244843	20.245852	20.246861	20.247870	20.248879	20.249888
0.810	20.250902	20.251911	20.252920	20.253929	20.254938	20.255947	20.256956	20.257965	20.258974	20.259983
0.820	20.261007	20.262016	20.263025	20.264034	20.265043	20.266052	20.267061	20.268070	20.269079	20.270088
0.830	20.271102	20.272111	20.273120	20.274129	20.275138	20.276147	20.277156	20.278165	20.279174	20.280183
0.840	20.281207	20.282216	20.283225	20.284234	20.285243	20.286252	20.287261	20.288270	20.289279	20.290288
0.850	20.291302	20.292311	20.293320	20.294329	20.295338	20.296347	20.297356	20.298365	20.299374	20.300383
0.860	20.301407	20.302416	20.303425	20.304434	20.305443	20.306452	20.307461	20.308470	20.309479	20.310488
0.870	20.311502	20.312511	20.313520	20.314529	20.315538	20.316547	20.317556	20.318565	20.319574	20.320583
0.880	20.321607	20.322616	20.323625	20.324634	20.325643	20.326652	20.327661	20.328670	20.329679	20.330688
0.890	20.330702	20.331711	20.332720	20.333729	20.334738	20.335747	20.336756	20.337765	20.338774	20.339783
0.900	20.340807	20.341816	20.342825	20.343834	20.344843	20.345852	20.346861	20.347870	20.348879	20.349888
0.910	20.350902	20.351911	20.352920	20.353929	20.354938	20.355947	20.356956	20.357965	20.358974	20.359983
0.920	20.361007	20.362016	20.363025	20.364034	20.365043	20.366052	20.367061	20.368070	20.369079	20.370088
0.930	20.371102	20.372111	20.373120	20.374129	20.375138	20.376147	20.377156	20.378165	20.379174	20.380183
0.940	20.381207	20.382216	20.383225	20.384234	20.385243	20.386252	20.387261	20.388270	20.389279	20.390288
0.950	20.391302	20.392311	20.393320	20.394329	20.395338	20.396347	20.397356	20.398365	20.399374	20.400383
0.960	20.401407	20.402416	20.403425	20.404434	20.405443	20.406452	20.407461	20.408470	20.409479	20.410488
0.970	20.411502	20.412511	20.413520	20.414529	20.415538	20.416547	20.417556	20.418565	20.419574	20.420583
0.980	20.421607	20.422616	20.423625	20.424634	20.425643	20.426652	20.427661	20.428670	20.429679	20.430688
0.990	20.430702	20.431711	20.432720	20.433729	20.434738	20.435747	20.436756	20.437765	20.438774	20.439783

ATTENUATION IN DECIBELS
THETA FROM 72.000 TO 72.499 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.000	20.400705	20.401639	20.402572	20.403505	20.404438	20.405372	20.406305	20.407239	20.408172	20.409106
0.010	20.410039	20.410973	20.411907	20.412841	20.413775	20.414709	20.415642	20.416577	20.417511	20.418445
0.020	20.419379	20.420313	20.421248	20.422182	20.423117	20.424051	20.424986	20.425920	20.426855	20.427790
0.030	20.428724	20.429659	20.430594	20.431529	20.432464	20.433399	20.434334	20.435269	20.436205	20.437140
0.040	20.438075	20.439011	20.439946	20.440881	20.441817	20.442753	20.443688	20.444624	20.445560	20.446496
0.050	20.447432	20.448368	20.449304	20.450240	20.451176	20.452112	20.453048	20.453984	20.454921	20.455857
0.060	20.456794	20.457730	20.458667	20.459603	20.460540	20.461477	20.462413	20.463350	20.464287	20.465224
0.070	20.466161	20.467098	20.468035	20.468972	20.469910	20.470847	20.471784	20.472722	20.473659	20.474597
0.080	20.475534	20.476472	20.477409	20.478347	20.479285	20.480223	20.481161	20.482099	20.483037	20.483975
0.090	20.484913	20.485851	20.486789	20.487728	20.488666	20.489604	20.490543	20.491481	20.492420	20.493358
0.100	20.494297	20.495236	20.496175	20.497113	20.498052	20.498991	20.499930	20.500870	20.501809	20.502748
0.110	20.503687	20.504626	20.505566	20.506505	20.507445	20.508384	20.509324	20.510263	20.511203	20.512143
0.120	20.513083	20.514022	20.514962	20.515902	20.516842	20.517782	20.518723	20.519663	20.520603	20.521543
0.130	20.522484	20.523424	20.524364	20.525305	20.526246	20.527186	20.528127	20.529068	20.530009	20.530949
0.140	20.531890	20.532831	20.533772	20.534714	20.535655	20.536596	20.537537	20.538478	20.539420	20.540361
0.150	20.541303	20.542244	20.543186	20.544127	20.545069	20.546011	20.546953	20.547895	20.548837	20.549779
0.160	20.550721	20.551663	20.552605	20.553547	20.554490	20.555432	20.556374	20.557317	20.558259	20.559202
0.170	20.560144	20.561087	20.562030	20.562973	20.563915	20.564858	20.565801	20.566744	20.567687	20.568630
0.180	20.569574	20.570517	20.571460	20.572403	20.573347	20.574290	20.575234	20.576178	20.577121	20.578065
0.190	20.579009	20.579952	20.580896	20.581840	20.582784	20.583728	20.584672	20.585616	20.586560	20.587505
0.200	20.588449	20.589394	20.590338	20.591282	20.592227	20.593172	20.594116	20.595061	20.596006	20.596951
0.210	20.597895	20.598840	20.599785	20.600730	20.601676	20.602621	20.603566	20.604511	20.605456	20.606402
0.220	20.607347	20.608293	20.609238	20.610184	20.611130	20.612075	20.613021	20.613967	20.614913	20.615859
0.230	20.616805	20.617751	20.618697	20.619643	20.620589	20.621536	20.622482	20.623429	20.624375	20.625322
0.240	20.626268	20.627215	20.628161	20.629108	20.630055	20.631002	20.631949	20.632896	20.633843	20.634790
0.250	20.635737	20.636684	20.637632	20.638579	20.639526	20.640474	20.641421	20.642369	20.643316	20.644264
0.260	20.645212	20.646159	20.647107	20.648055	20.649003	20.649951	20.650899	20.651847	20.652796	20.653744
0.270	20.654692	20.655640	20.656589	20.657537	20.658486	20.659434	20.660383	20.661332	20.662281	20.663229
0.280	20.664178	20.665127	20.666076	20.667025	20.667974	20.668923	20.669873	20.670822	20.671771	20.672720
0.290	20.673670	20.674619	20.675569	20.676519	20.677468	20.678418	20.679368	20.680318	20.681267	20.682217
0.300	20.683167	20.684118	20.685068	20.686018	20.686968	20.687924	20.688869	20.689819	20.690769	20.691720
0.310	20.692671	20.693621	20.694572	20.695523	20.696474	20.697424	20.698375	20.699326	20.700277	20.701228
0.320	20.702180	20.703131	20.704082	20.705033	20.705985	20.706936	20.707888	20.708839	20.709791	20.710742
0.330	20.711694	20.712646	20.713598	20.714550	20.715502	20.716454	20.717406	20.718358	20.719310	20.720262
0.340	20.721215	20.722167	20.723119	20.724072	20.725024	20.725977	20.726930	20.727882	20.728835	20.729788
0.350	20.730741	20.731694	20.732647	20.733600	20.734553	20.735506	20.736459	20.737413	20.738366	20.739319
0.360	20.740273	20.741226	20.742180	20.743134	20.744087	20.745041	20.745995	20.746948	20.747902	20.748856
0.370	20.749810	20.750765	20.751719	20.752673	20.753627	20.754581	20.755536	20.756490	20.757445	20.758399
0.380	20.759354	20.760309	20.761263	20.762218	20.763173	20.764128	20.765083	20.766038	20.766993	20.767948
0.390	20.768903	20.769858	20.770814	20.771769	20.772724	20.773680	20.774636	20.775591	20.776547	20.777502
0.400	20.778458	20.779414	20.780370	20.781326	20.782282	20.783238	20.784194	20.785150	20.786106	20.787063
0.410	20.788019	20.788975	20.789932	20.790888	20.791845	20.792802	20.793758	20.794715	20.795672	20.796629
0.420	20.797585	20.798542	20.799500	20.800457	20.801414	20.802371	20.803328	20.804286	20.805243	20.806201
0.430	20.807158	20.808115	20.809073	20.810031	20.810989	20.811946	20.812904	20.813862	20.814820	20.815778
0.440	20.816736	20.817694	20.818652	20.819611	20.820569	20.821527	20.822486	20.823444	20.824403	20.825361
0.450	20.826320	20.827279	20.828238	20.829196	20.830155	20.831114	20.832073	20.833032	20.833992	20.834951
0.460	20.835910	20.836869	20.837829	20.838788	20.839748	20.840707	20.841667	20.842626	20.843586	20.844546
0.470	20.845506	20.846466	20.847425	20.848386	20.849346	20.850306	20.851266	20.852226	20.853186	20.854147
0.480	20.855107	20.856068	20.857028	20.857989	20.858949	20.859910	20.860871	20.861832	20.862792	20.863754
0.490	20.864715	20.865676	20.866637	20.867598	20.868559	20.869520	20.870482	20.871443	20.872405	20.873366

ATTENUATION IN DECIBELS
THETA FROM 72.500 TO 72.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	20.874328	20.875289	20.876251	20.877213	20.878175	20.879137	20.880098	20.881060	20.882022	20.882985
0.510	20.883947	20.884909	20.885871	20.886834	20.887796	20.888758	20.889721	20.890684	20.891646	20.892609
0.520	20.893572	20.894534	20.895497	20.896460	20.897423	20.898386	20.899349	20.900313	20.901276	20.902239
0.530	20.903202	20.904166	20.905129	20.906093	20.907056	20.908020	20.908984	20.909947	20.910911	20.911875
0.540	20.912839	20.913803	20.914767	20.915731	20.916695	20.917660	20.918624	20.919588	20.920552	20.921517
0.550	20.922482	20.923446	20.924411	20.925375	20.926340	20.927305	20.928270	20.929235	20.930200	20.931165
0.560	20.932130	20.933095	20.934060	20.935026	20.935991	20.936956	20.937922	20.938887	20.939853	20.940819
0.570	20.941784	20.942750	20.943716	20.944682	20.945647	20.946614	20.947580	20.948546	20.949512	20.950478
0.580	20.951444	20.952411	20.953377	20.954344	20.955310	20.956277	20.957243	20.958210	20.959177	20.960144
0.590	20.961111	20.962077	20.963044	20.964011	20.964979	20.965946	20.966913	20.967880	20.968848	20.969815
0.600	20.970783	20.971750	20.972718	20.973685	20.974653	20.975621	20.976588	20.977556	20.978524	20.979492
0.610	20.980460	20.981429	20.982397	20.983365	20.984333	20.985301	20.986270	20.987238	20.988207	20.989176
0.620	20.990144	20.991113	20.992082	20.993051	20.994020	20.994988	20.995957	20.996927	20.997895	20.998865
0.630	20.999834	21.000803	21.001773	21.002742	21.003712	21.004681	21.005651	21.006620	21.007590	21.008560
0.640	21.009530	21.010500	21.011470	21.012439	21.013410	21.014380	21.015350	21.016320	21.017291	21.018261
0.650	21.019231	21.020202	21.021173	21.022143	21.023114	21.024084	21.025055	21.026026	21.026997	21.027968
0.660	21.028939	21.029910	21.030881	21.031852	21.032824	21.033795	21.034766	21.035738	21.036709	21.037681
0.670	21.038653	21.039624	21.040596	21.041568	21.042540	21.043512	21.044484	21.045456	21.046428	21.047400
0.680	21.048372	21.049344	21.050317	21.051289	21.052262	21.053234	21.054207	21.055179	21.056152	21.057125
0.690	21.058098	21.059070	21.060043	21.061016	21.061990	21.062963	21.063936	21.064909	21.065882	21.066856
0.700	21.067829	21.068803	21.069776	21.070750	21.071723	21.072697	21.073671	21.074645	21.075619	21.076592
0.710	21.077566	21.078541	21.079515	21.080489	21.081463	21.082438	21.083412	21.084386	21.085361	21.086335
0.720	21.087310	21.088284	21.089259	21.090234	21.091209	21.092184	21.093159	21.094134	21.095109	21.096084
0.730	21.097059	21.098035	21.099010	21.099985	21.100961	21.101936	21.102912	21.103888	21.104863	21.105839
0.740	21.106815	21.107791	21.108767	21.109743	21.110719	21.111695	21.112671	21.113647	21.114624	21.115600
0.750	21.116576	21.117553	21.118529	21.119506	21.120482	21.121459	21.122436	21.123413	21.124390	21.125367
0.760	21.126344	21.127321	21.128298	21.129275	21.130252	21.131230	21.132207	21.133185	21.134162	21.135140
0.770	21.136117	21.137095	21.138073	21.139050	21.140028	21.141006	21.141984	21.142962	21.143940	21.144919
0.780	21.145897	21.146875	21.147853	21.148832	21.149810	21.150789	21.151767	21.152746	21.153725	21.154704
0.790	21.155682	21.156661	21.157640	21.158619	21.159598	21.160578	21.161557	21.162536	21.163515	21.164495
0.800	21.165474	21.166453	21.167433	21.168413	21.169392	21.170372	21.171352	21.172332	21.173312	21.174292
0.810	21.175272	21.176252	21.177232	21.178212	21.179192	21.180173	21.181153	21.182134	21.183114	21.184095
0.820	21.185075	21.186056	21.187037	21.188018	21.188998	21.189980	21.190960	21.191941	21.192923	21.193904
0.830	21.194885	21.195867	21.196848	21.197829	21.198811	21.199792	21.200774	21.201756	21.202737	21.203719
0.840	21.204701	21.205683	21.206665	21.207647	21.208629	21.209611	21.210593	21.211576	21.212558	21.213541
0.850	21.214523	21.215506	21.216488	21.217471	21.218453	21.219436	21.220419	21.221402	21.222385	21.223368
0.860	21.224351	21.225334	21.226317	21.227301	21.228284	21.229267	21.230251	21.231234	21.232218	21.233202
0.870	21.234185	21.235169	21.236153	21.237137	21.238121	21.239105	21.240088	21.241073	21.242057	21.243041
0.880	21.244025	21.245010	21.245994	21.246979	21.247963	21.248948	21.249932	21.250917	21.251902	21.252887
0.890	21.253872	21.254857	21.255842	21.256827	21.257812	21.258797	21.259782	21.260768	21.261753	21.262738
0.900	21.263724	21.264710	21.265695	21.266681	21.267667	21.268653	21.269639	21.270624	21.271610	21.272597
0.910	21.273503	21.274489	21.275475	21.276461	21.277447	21.278434	21.279421	21.280407	21.281394	21.282381
0.920	21.283347	21.284334	21.285321	21.286308	21.287295	21.288282	21.289269	21.290256	21.291243	21.292231
0.930	21.293318	21.294306	21.295293	21.296281	21.297268	21.298256	21.299244	21.300231	21.301219	21.302207
0.940	21.303195	21.304183	21.305171	21.306159	21.307148	21.308136	21.309124	21.310113	21.311101	21.312090
0.950	21.313078	21.314067	21.315056	21.316044	21.317033	21.318022	21.319011	21.320000	21.320989	21.321978
0.960	21.322968	21.323957	21.324946	21.325936	21.326925	21.327914	21.328904	21.329894	21.330883	21.331873
0.970	21.332863	21.333853	21.334843	21.335833	21.336823	21.337813	21.338803	21.339793	21.340784	21.341774
0.980	21.342765	21.343755	21.344746	21.345736	21.346727	21.347718	21.348708	21.349699	21.350690	21.351681
0.990	21.352672	21.353663	21.354655	21.355646	21.356637	21.357629	21.358620	21.359612	21.360603	21.361595

ATTENUATION IN DECIBELS
THETA FROM 73.000 TO 73.499 DEGREES

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THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.000	21.362586	21.363578	21.364570	21.365562	21.366554	21.367546	21.368538	21.369530	21.370522	21.371514
0.010	21.372506	21.373499	21.374491	21.375484	21.376476	21.377469	21.378462	21.379454	21.380447	21.381440
0.020	21.382433	21.383426	21.384419	21.385412	21.386405	21.387398	21.388391	21.389385	21.390378	21.391372
0.030	21.392365	21.393359	21.394353	21.395346	21.396340	21.397334	21.398328	21.399322	21.400316	21.401310
0.040	21.402304	21.403298	21.404293	21.405287	21.406281	21.407276	21.408270	21.409265	21.410259	21.411254
0.050	21.412249	21.413244	21.414239	21.415234	21.416229	21.417224	21.418219	21.419214	21.420210	21.421205
0.060	21.422200	21.423196	21.424191	21.425187	21.426183	21.427178	21.428174	21.429170	21.430166	21.431162
0.070	21.432158	21.433154	21.434150	21.435146	21.436142	21.437139	21.438135	21.439132	21.440128	21.441125
0.080	21.442122	21.443118	21.444115	21.445112	21.446109	21.447106	21.448103	21.449100	21.450097	21.451094
0.090	21.452091	21.453089	21.454086	21.455084	21.456081	21.457079	21.458076	21.459074	21.460072	21.461070
0.100	21.462068	21.463065	21.464063	21.465062	21.466060	21.467058	21.468056	21.469054	21.470053	21.471051
0.110	21.472050	21.473048	21.474047	21.475046	21.476045	21.477044	21.478042	21.479041	21.480041	21.481040
0.120	21.482039	21.483038	21.484037	21.485037	21.486036	21.487036	21.488035	21.489034	21.490034	21.491034
0.130	21.492034	21.493033	21.494033	21.495034	21.496033	21.497034	21.498034	21.499034	21.500034	21.501034
0.140	21.502035	21.503036	21.504036	21.505037	21.506037	21.507038	21.508039	21.509040	21.510041	21.511041
0.150	21.512043	21.513044	21.514045	21.515046	21.516047	21.517049	21.518050	21.519052	21.520053	21.521055
0.160	21.522056	21.523058	21.524060	21.525062	21.526064	21.527066	21.528068	21.529070	21.530072	21.531074
0.170	21.532077	21.533079	21.534081	21.535084	21.536086	21.537089	21.538092	21.539094	21.540097	21.541100
0.180	21.542103	21.543106	21.544109	21.545112	21.546115	21.547119	21.548122	21.549125	21.550129	21.551132
0.190	21.552136	21.553139	21.554143	21.555147	21.556151	21.557155	21.558159	21.559163	21.560167	21.561171
0.200	21.562175	21.563179	21.564183	21.565188	21.566192	21.567197	21.568202	21.569206	21.570211	21.571216
0.210	21.572220	21.573225	21.574230	21.575235	21.576240	21.577245	21.578251	21.579256	21.580261	21.581267
0.220	21.582272	21.583278	21.584283	21.585289	21.586295	21.587301	21.588306	21.589312	21.590318	21.591324
0.230	21.592330	21.593337	21.594343	21.595349	21.596355	21.597362	21.598368	21.599375	21.600381	21.601388
0.240	21.602395	21.603402	21.604409	21.605416	21.606422	21.607430	21.608437	21.609444	21.610451	21.611458
0.250	21.612466	21.613473	21.614481	21.615488	21.616496	21.617504	21.618511	21.619519	21.620527	21.621535
0.260	21.622543	21.623551	21.624559	21.625567	21.626576	21.627584	21.628592	21.629601	21.630610	21.631618
0.270	21.632627	21.633635	21.634644	21.635653	21.636662	21.637671	21.638680	21.639689	21.640698	21.641707
0.280	21.642717	21.643726	21.644735	21.645745	21.646755	21.647764	21.648774	21.649783	21.650793	21.651803
0.290	21.652813	21.653823	21.654833	21.655843	21.656853	21.657864	21.658874	21.659884	21.660895	21.661905
0.300	21.662916	21.663927	21.664937	21.665948	21.666959	21.667970	21.668981	21.669992	21.671003	21.672014
0.310	21.673025	21.674036	21.675048	21.676059	21.677071	21.678082	21.679094	21.680105	21.681117	21.682129
0.320	21.683141	21.684153	21.685165	21.686177	21.687189	21.688202	21.689213	21.690225	21.691238	21.692250
0.330	21.693263	21.694275	21.695288	21.696301	21.697313	21.698326	21.699339	21.700352	21.701365	21.702378
0.340	21.703391	21.704404	21.705418	21.706431	21.707444	21.708458	21.709471	21.710485	21.711499	21.712512
0.350	21.713526	21.714540	21.715554	21.716568	21.717582	21.718596	21.719610	21.720624	21.721639	21.722653
0.360	21.723668	21.724682	21.725697	21.726711	21.727726	21.728741	21.729755	21.730770	21.731785	21.732800
0.370	21.733815	21.734830	21.735846	21.736861	21.737876	21.738892	21.739907	21.740923	21.741938	21.742954
0.380	21.743970	21.744985	21.746001	21.747017	21.748033	21.749049	21.750065	21.751081	21.752098	21.753114
0.390	21.754130	21.755147	21.756163	21.757180	21.758197	21.759213	21.760230	21.761247	21.762264	21.763281
0.400	21.764297	21.765315	21.766332	21.767349	21.768366	21.769384	21.770401	21.771419	21.772436	21.773454
0.410	21.774471	21.775489	21.776507	21.777525	21.778543	21.779561	21.780579	21.781597	21.782615	21.783633
0.420	21.784652	21.785670	21.786688	21.787707	21.788725	21.789744	21.790763	21.791781	21.792800	21.793819
0.430	21.794838	21.795857	21.796876	21.797895	21.798915	21.799934	21.800953	21.801973	21.802992	21.804012
0.440	21.805031	21.806051	21.807071	21.808091	21.809110	21.810130	21.811151	21.812171	21.813191	21.814211
0.450	21.815231	21.816252	21.817272	21.818292	21.819313	21.820333	21.821354	21.822375	21.823395	21.824416
0.460	21.825437	21.826458	21.827479	21.828501	21.829522	21.830543	21.831564	21.832586	21.833607	21.834629
0.470	21.835650	21.836672	21.837693	21.838715	21.839737	21.840758	21.841781	21.842803	21.843825	21.844847
0.480	21.845870	21.846892	21.847914	21.848937	21.849959	21.850981	21.852004	21.853027	21.854050	21.855072
0.490	21.856095	21.857118	21.858141	21.859164	21.860188	21.861211	21.862234	21.863257	21.864281	21.865304

ATTENUATION IN DECIBELS
THETA FROM 73.500 TO 73.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	21.866328	21.867351	21.868375	21.869399	21.870423	21.871446	21.872470	21.873494	21.874518	21.875542
0.510	21.876567	21.877591	21.878615	21.879640	21.880664	21.881689	21.882713	21.883738	21.884763	21.885787
0.520	21.886812	21.887837	21.888862	21.889887	21.890912	21.891937	21.892963	21.893988	21.895013	21.896039
0.530	21.897064	21.898090	21.899116	21.900141	21.901167	21.902193	21.903219	21.904245	21.905271	21.906297
0.540	21.907323	21.908349	21.909375	21.910402	21.911428	21.912455	21.913481	21.914508	21.915535	21.916561
0.550	21.917588	21.918615	21.919642	21.920669	21.921696	21.922723	21.923751	21.924778	21.925805	21.926833
0.560	21.927860	21.928888	21.929915	21.930943	21.931971	21.932999	21.934026	21.935054	21.936082	21.937110
0.570	21.938139	21.939167	21.940195	21.941223	21.942252	21.943280	21.944309	21.945338	21.946366	21.947395
0.580	21.948424	21.949453	21.950482	21.951511	21.952540	21.953569	21.954598	21.955627	21.956657	21.957686
0.590	21.958715	21.959745	21.960775	21.961804	21.962834	21.963864	21.964894	21.965924	21.966954	21.967984
0.600	21.969014	21.970044	21.971074	21.972105	21.973135	21.974165	21.975196	21.976227	21.977257	21.978288
0.610	21.979319	21.980350	21.981381	21.982412	21.983443	21.984474	21.985505	21.986536	21.987568	21.988599
0.620	21.989630	21.990662	21.991693	21.992725	21.993757	21.994789	21.995821	21.996853	21.997885	21.998917
0.630	21.999949	22.000981	22.002013	22.003046	22.004078	22.005111	22.006143	22.007175	22.008208	22.009241
0.640	22.010274	22.011307	22.012340	22.013372	22.014405	22.015439	22.016472	22.017505	22.018538	22.019572
0.650	22.020605	22.021639	22.022672	22.023706	22.024740	22.025774	22.026808	22.027842	22.028875	22.029910
0.660	22.030944	22.031978	22.033012	22.034046	22.035081	22.036115	22.037150	22.038184	22.039219	22.040254
0.670	22.041289	22.042324	22.043358	22.044394	22.045429	22.046464	22.047499	22.048534	22.049569	22.050605
0.680	22.051640	22.052676	22.053711	22.054747	22.055783	22.056819	22.057855	22.058891	22.059927	22.060963
0.690	22.061999	22.063035	22.064071	22.065108	22.066144	22.067180	22.068217	22.069253	22.070290	22.071327
0.700	22.072364	22.073401	22.074438	22.075475	22.076512	22.077549	22.078586	22.079623	22.080661	22.081698
0.710	22.082736	22.083773	22.084811	22.085849	22.086886	22.087924	22.088962	22.090000	22.091038	22.092076
0.720	22.093114	22.094152	22.095191	22.096229	22.097267	22.098306	22.099344	22.100383	22.101422	22.102461
0.730	22.103499	22.104537	22.105577	22.106616	22.107656	22.108695	22.109734	22.110773	22.111813	22.112852
0.740	22.113891	22.114931	22.115971	22.117010	22.118050	22.119090	22.120130	22.121170	22.122210	22.123250
0.750	22.124290	22.125330	22.126371	22.127411	22.128452	22.129492	22.130533	22.131573	22.132614	22.133655
0.760	22.134696	22.135737	22.136778	22.137819	22.138860	22.139901	22.140942	22.141984	22.143025	22.144065
0.770	22.145108	22.146150	22.147191	22.148233	22.149275	22.150317	22.151359	22.152401	22.153443	22.154485
0.780	22.155527	22.156569	22.157612	22.158654	22.159697	22.160739	22.161782	22.162824	22.163867	22.164910
0.790	22.165953	22.166996	22.168039	22.169082	22.170125	22.171168	22.172212	22.173255	22.174299	22.175342
0.800	22.176386	22.177429	22.178473	22.179517	22.180561	22.181604	22.182648	22.183692	22.184736	22.185781
0.810	22.186825	22.187869	22.188914	22.189958	22.191003	22.192047	22.193092	22.194137	22.195181	22.196226
0.820	22.197271	22.198316	22.199361	22.200406	22.201452	22.202497	22.203542	22.204588	22.205633	22.206679
0.830	22.207724	22.208770	22.209816	22.210861	22.211907	22.212953	22.213999	22.215045	22.216092	22.217138
0.840	22.218184	22.219230	22.220277	22.221323	22.222370	22.223417	22.224463	22.225510	22.226557	22.227604
0.850	22.228651	22.229698	22.230745	22.231792	22.232839	22.233887	22.234934	22.235982	22.237029	22.238077
0.860	22.239124	22.240172	22.241220	22.242268	22.243316	22.244364	22.245412	22.246460	22.247508	22.248556
0.870	22.249605	22.250653	22.251702	22.252750	22.253799	22.254848	22.255896	22.256945	22.257994	22.259043
0.880	22.260092	22.261141	22.262190	22.263240	22.264289	22.265338	22.266388	22.267437	22.268487	22.269536
0.890	22.270586	22.271636	22.272686	22.273736	22.274786	22.275836	22.276886	22.277936	22.278986	22.280037
0.900	22.281087	22.282138	22.283188	22.284239	22.285290	22.286340	22.287391	22.288442	22.289493	22.290544
0.910	22.291595	22.292646	22.293697	22.294749	22.295800	22.296852	22.297903	22.298955	22.300006	22.301058
0.920	22.302110	22.303162	22.304214	22.305266	22.306318	22.307370	22.308422	22.309474	22.310527	22.311579
0.930	22.312631	22.313684	22.314737	22.315789	22.316842	22.317895	22.318948	22.320001	22.321054	22.322107
0.940	22.323160	22.324213	22.325267	22.326320	22.327373	22.328427	22.329480	22.330534	22.331588	22.332642
0.950	22.333695	22.334749	22.335804	22.336858	22.337912	22.338966	22.340020	22.341074	22.342129	22.343183
0.960	22.344238	22.345293	22.346347	22.347402	22.348457	22.349512	22.350567	22.351622	22.352677	22.353732
0.970	22.354787	22.355842	22.356898	22.357953	22.359009	22.360065	22.361120	22.362176	22.363232	22.364288
0.980	22.365344	22.366400	22.367455	22.368512	22.369568	22.370624	22.371680	22.372737	22.373794	22.374850
0.990	22.375907	22.376963	22.378020	22.379077	22.380134	22.381191	22.382248	22.383305	22.384362	22.385420

ATTENUATION IN DECIBELS
THETA FROM 74.000 TO 74.499 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.000	22.386477	22.387534	22.388592	22.389649	22.390707	22.391765	22.392822	22.393880	22.394938	22.395996
0.010	22.397054	22.398112	22.399170	22.400229	22.401287	22.402345	22.403404	22.404462	22.405521	22.406579
0.020	22.407638	22.408697	22.409756	22.410815	22.411874	22.412933	22.413992	22.415051	22.416111	22.417170
0.030	22.418229	22.419289	22.420348	22.421408	22.422468	22.423527	22.424587	22.425647	22.426707	22.427767
0.040	22.428827	22.429888	22.430948	22.432008	22.433069	22.434129	22.435189	22.436250	22.437311	22.438372
0.050	22.439432	22.440493	22.441554	22.442615	22.443676	22.444738	22.445799	22.446860	22.447922	22.448983
0.060	22.450044	22.451106	22.452168	22.453229	22.454291	22.455353	22.456415	22.457477	22.458539	22.459601
0.070	22.460664	22.461726	22.462788	22.463851	22.464913	22.465976	22.467038	22.468101	22.469164	22.470227
0.080	22.471290	22.472353	22.473416	22.474479	22.475542	22.476605	22.477669	22.478732	22.479796	22.480859
0.090	22.481923	22.482987	22.484050	22.485114	22.486178	22.487242	22.488306	22.489370	22.490434	22.491499
0.100	22.492563	22.493628	22.494692	22.495757	22.496821	22.497886	22.498951	22.500015	22.501080	22.502145
0.110	22.503210	22.504276	22.505341	22.506406	22.507471	22.508537	22.509602	22.510668	22.511733	22.512799
0.120	22.513865	22.514930	22.515996	22.517062	22.518128	22.519195	22.520261	22.521327	22.522393	22.523460
0.130	22.524526	22.525593	22.526659	22.527726	22.528793	22.529860	22.530926	22.531993	22.533060	22.534127
0.140	22.535195	22.536262	22.537329	22.538396	22.539464	22.540531	22.541599	22.542667	22.543734	22.544802
0.150	22.545870	22.546938	22.548006	22.549074	22.550142	22.551211	22.552279	22.553347	22.554416	22.555484
0.160	22.556553	22.557621	22.558690	22.559759	22.560828	22.561897	22.562966	22.564035	22.565104	22.566173
0.170	22.567242	22.568312	22.569381	22.570451	22.571520	22.572590	22.573660	22.574729	22.575799	22.576869
0.180	22.577939	22.579010	22.580080	22.581150	22.582220	22.583290	22.584361	22.585431	22.586502	22.587573
0.190	22.588643	22.589714	22.590785	22.591856	22.592927	22.593998	22.595069	22.596140	22.597212	22.598283
0.200	22.599355	22.600426	22.601497	22.602569	22.603641	22.604713	22.605784	22.606856	22.607929	22.609000
0.210	22.610073	22.611145	22.612217	22.613290	22.614362	22.615434	22.616507	22.617580	22.618652	22.619725
0.220	22.620798	22.621871	22.622944	22.624017	22.625090	22.626163	22.627237	22.628310	22.629384	22.630457
0.230	22.631531	22.632604	22.633678	22.634752	22.635826	22.636899	22.637974	22.639048	22.640122	22.641196
0.240	22.642270	22.643345	22.644419	22.645494	22.646568	22.647643	22.648718	22.649792	22.650867	22.651942
0.250	22.653017	22.654092	22.655168	22.656243	22.657318	22.658393	22.659469	22.660544	22.661620	22.662696
0.260	22.663771	22.664847	22.665923	22.666999	22.668075	22.669151	22.670227	22.671304	22.672380	22.673456
0.270	22.674533	22.675609	22.676686	22.677762	22.678839	22.679916	22.680993	22.682070	22.683147	22.684224
0.280	22.685301	22.686378	22.687456	22.688533	22.689610	22.690688	22.691766	22.692843	22.693921	22.694999
0.290	22.696077	22.697155	22.698233	22.699311	22.700389	22.701467	22.702546	22.703624	22.704702	22.705781
0.300	22.706860	22.707938	22.709017	22.710096	22.711175	22.712254	22.713333	22.714412	22.715491	22.716570
0.310	22.717650	22.718729	22.719809	22.720888	22.721968	22.723047	22.724127	22.725207	22.726287	22.727367
0.320	22.728447	22.729527	22.730607	22.731688	22.732768	22.733848	22.734929	22.736009	22.737090	22.738171
0.330	22.739252	22.740332	22.741413	22.742494	22.743576	22.744657	22.745738	22.746819	22.747900	22.748982
0.340	22.750063	22.751145	22.752227	22.753309	22.754390	22.755472	22.756554	22.757636	22.758718	22.759800
0.350	22.760883	22.761965	22.763047	22.764130	22.765212	22.766295	22.767378	22.768460	22.769543	22.770626
0.360	22.771709	22.772792	22.773875	22.774958	22.776042	22.777125	22.778208	22.779292	22.780375	22.781459
0.370	22.782543	22.783626	22.784710	22.785794	22.786878	22.787962	22.789046	22.790131	22.791215	22.792299
0.380	22.793384	22.794468	22.795553	22.796637	22.797722	22.798807	22.799892	22.800977	22.802062	22.803147
0.390	22.804232	22.805317	22.806402	22.807488	22.808573	22.809659	22.810744	22.811830	22.812916	22.814002
0.400	22.815087	22.816173	22.817259	22.818346	22.819432	22.820518	22.821604	22.822691	22.823777	22.824864
0.410	22.825950	22.827037	22.828124	22.829211	22.830297	22.831384	22.832471	22.833559	22.834646	22.835733
0.420	22.836820	22.837908	22.838995	22.840083	22.841171	22.842258	22.843346	22.844434	22.845522	22.846610
0.430	22.847698	22.848786	22.849874	22.850963	22.852051	22.853139	22.854228	22.855317	22.856405	22.857494
0.440	22.858583	22.859672	22.860761	22.861850	22.862939	22.864028	22.865117	22.866207	22.867296	22.868386
0.450	22.869475	22.870565	22.871655	22.872744	22.873834	22.874924	22.876014	22.877104	22.878194	22.879284
0.460	22.880375	22.881465	22.882555	22.883646	22.884737	22.885827	22.886918	22.888009	22.889100	22.890191
0.470	22.891282	22.892373	22.893464	22.894555	22.895646	22.896738	22.897829	22.898921	22.900012	22.901104
0.480	22.902196	22.903288	22.904380	22.905472	22.906564	22.907656	22.908748	22.909841	22.910933	22.912025
0.490	22.913118	22.914210	22.915303	22.916396	22.917489	22.918581	22.919674	22.920767	22.921860	22.922954

ATTENUATION IN DECIBELS
THETA FROM 74.500 TO 74.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	22.924047	22.925140	22.926234	22.927327	22.928421	22.929514	22.930608	22.931702	22.932796	22.933889
0.510	22.934983	22.936078	22.937172	22.938266	22.939360	22.940454	22.941549	22.942643	22.943738	22.944833
0.520	22.945927	22.947022	22.948117	22.949212	22.950307	22.951402	22.952497	22.953593	22.954688	22.955783
0.530	22.956879	22.957974	22.959070	22.960166	22.961262	22.962357	22.963453	22.964549	22.965645	22.966742
0.540	22.967838	22.968934	22.970030	22.971127	22.972223	22.973320	22.974416	22.975513	22.976610	22.977707
0.550	22.978804	22.979901	22.980998	22.982095	22.983193	22.984290	22.985387	22.986485	22.987582	22.988680
0.560	22.989778	22.990875	22.991973	22.993071	22.994169	22.995267	22.996366	22.997464	22.998562	22.999660
0.570	23.000758	23.001858	23.002956	23.004055	23.005153	23.006252	23.007351	23.008450	23.009549	23.010648
0.580	23.011748	23.012847	23.013946	23.015046	23.016145	23.017245	23.018344	23.019444	23.020544	23.021644
0.590	23.022744	23.023844	23.024944	23.026044	23.027144	23.028245	23.029345	23.030446	23.031546	23.032647
0.600	23.033747	23.034848	23.035949	23.037050	23.038151	23.039252	23.040353	23.041455	23.042556	23.043657
0.610	23.044759	23.045860	23.046962	23.048064	23.049165	23.050267	23.051369	23.052471	23.053573	23.054675
0.620	23.055777	23.056880	23.057982	23.059084	23.060187	23.061290	23.062392	23.063495	23.064598	23.065701
0.630	23.066803	23.067907	23.069010	23.070113	23.071216	23.072320	23.073423	23.074526	23.075630	23.076734
0.640	23.077837	23.078941	23.080045	23.081149	23.082253	23.083357	23.084461	23.085565	23.086670	23.087774
0.650	23.088879	23.089983	23.091088	23.092192	23.093297	23.094402	23.095507	23.096612	23.097717	23.098822
0.660	23.099927	23.101033	23.102138	23.103244	23.104349	23.105455	23.106560	23.107666	23.108772	23.109878
0.670	23.110984	23.112090	23.113196	23.114302	23.115408	23.116515	23.117621	23.118728	23.119834	23.120941
0.680	23.122048	23.123155	23.124261	23.125368	23.126475	23.127583	23.128690	23.129797	23.130904	23.132012
0.690	23.133119	23.134227	23.135334	23.136442	23.137550	23.138658	23.139766	23.140874	23.141982	23.143090
0.700	23.144198	23.145307	23.146415	23.147524	23.148632	23.149741	23.150850	23.151958	23.153067	23.154176
0.710	23.155285	23.156394	23.157503	23.158613	23.159722	23.160831	23.161941	23.163050	23.164160	23.165270
0.720	23.166379	23.167489	23.168599	23.169709	23.170819	23.171930	23.173040	23.174150	23.175261	23.176371
0.730	23.177481	23.178592	23.179703	23.180814	23.181924	23.183035	23.184146	23.185257	23.186368	23.187480
0.740	23.188591	23.189703	23.190814	23.191926	23.193037	23.194149	23.195261	23.196372	23.197484	23.198596
0.750	23.199708	23.200820	23.201933	23.203045	23.204157	23.205270	23.206382	23.207495	23.208608	23.209720
0.760	23.210833	23.211946	23.213059	23.214172	23.215285	23.216398	23.217512	23.218625	23.219738	23.220852
0.770	23.221966	23.223079	23.224193	23.225307	23.226421	23.227535	23.228649	23.229763	23.230877	23.231992
0.780	23.233106	23.234220	23.235335	23.236449	23.237564	23.238679	23.239794	23.240909	23.242024	23.243139
0.790	23.244254	23.245369	23.246484	23.247600	23.248715	23.249831	23.250946	23.252062	23.253178	23.254293
0.800	23.255409	23.256525	23.257641	23.258758	23.259874	23.260990	23.262106	23.263223	23.264339	23.265456
0.810	23.266573	23.267689	23.268806	23.269923	23.271040	23.272157	23.273274	23.274391	23.275509	23.276626
0.820	23.277744	23.278861	23.279979	23.281096	23.282214	23.283332	23.284450	23.285568	23.286686	23.287804
0.830	23.288922	23.290040	23.291159	23.292277	23.293396	23.294515	23.295633	23.296752	23.297871	23.298990
0.840	23.300109	23.301228	23.302347	23.303466	23.304585	23.305705	23.306824	23.307944	23.309063	23.310183
0.850	23.311303	23.312423	23.313543	23.314663	23.315783	23.316903	23.318023	23.319143	23.320264	23.321384
0.860	23.322505	23.323625	23.324746	23.325867	23.326988	23.328109	23.329230	23.330351	23.331472	23.332593
0.870	23.333714	23.334836	23.335957	23.337079	23.338201	23.339322	23.340444	23.341566	23.342688	23.343810
0.880	23.344932	23.346054	23.347176	23.348299	23.349421	23.350543	23.351666	23.352789	23.353911	23.355034
0.890	23.356157	23.357280	23.358403	23.359526	23.360649	23.361773	23.362896	23.364019	23.365143	23.366266
0.900	23.367390	23.368514	23.369638	23.370762	23.371886	23.373010	23.374134	23.375258	23.376382	23.377506
0.910	23.378631	23.379755	23.380880	23.382005	23.383129	23.384254	23.385379	23.386504	23.387629	23.388754
0.920	23.389879	23.391005	23.392130	23.393256	23.394381	23.395507	23.396632	23.397758	23.398884	23.400010
0.930	23.401136	23.402262	23.403388	23.404514	23.405640	23.406767	23.407894	23.409020	23.410147	23.411273
0.940	23.412400	23.413527	23.414654	23.415781	23.416908	23.418035	23.419163	23.420290	23.421417	23.422545
0.950	23.423672	23.424800	23.425928	23.427055	23.428183	23.429311	23.430439	23.431567	23.432696	23.433824
0.960	23.434952	23.436081	23.437209	23.438338	23.439466	23.440595	23.441724	23.442853	23.443982	23.445111
0.970	23.446240	23.447369	23.448498	23.449628	23.450757	23.451887	23.453017	23.454146	23.455276	23.456406
0.980	23.457536	23.458666	23.459796	23.460926	23.462056	23.463187	23.464317	23.465447	23.466578	23.467709
0.990	23.468839	23.469970	23.471101	23.472232	23.473363	23.474494	23.475625	23.476756	23.477888	23.479019

ATTENUATION IN DECIBELS
THETA FROM 75.000 TO 75.499 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.000	23.480151	23.481282	23.482414	23.483546	23.484678	23.485809	23.486941	23.488073	23.489206	23.490338
0.010	23.491470	23.492602	23.493735	23.494867	23.496000	23.497133	23.498266	23.499398	23.500531	23.501664
0.020	23.502797	23.503930	23.505064	23.506197	23.507330	23.508464	23.509597	23.510731	23.511865	23.512999
0.030	23.514132	23.515266	23.516400	23.517534	23.518669	23.519803	23.520937	23.522072	23.523206	23.524341
0.040	23.525476	23.526610	23.527745	23.528880	23.530015	23.531150	23.532285	23.533420	23.534556	23.535691
0.050	23.536827	23.537962	23.539098	23.540233	23.541369	23.542505	23.543641	23.544777	23.545913	23.547049
0.060	23.548186	23.549322	23.550458	23.551595	23.552731	23.553868	23.555005	23.556142	23.557278	23.558415
0.070	23.559552	23.560690	23.561827	23.562964	23.564101	23.565239	23.566376	23.567514	23.568652	23.569790
0.080	23.570927	23.572065	23.573203	23.574341	23.575480	23.576618	23.577756	23.578895	23.580033	23.581172
0.090	23.582310	23.583449	23.584588	23.585727	23.586866	23.588005	23.589144	23.590283	23.591422	23.592562
0.100	23.593701	23.594841	23.595980	23.597120	23.598260	23.599400	23.600539	23.601680	23.602820	23.603960
0.110	23.605100	23.606241	23.607381	23.608521	23.609662	23.610803	23.611943	23.613084	23.614225	23.615366
0.120	23.616507	23.617648	23.618789	23.619931	23.621072	23.622213	23.623355	23.624497	23.625638	23.626780
0.130	23.627922	23.629064	23.630206	23.631348	23.632490	23.633632	23.634775	23.635917	23.637060	23.638202
0.140	23.639345	23.640488	23.641630	23.642773	23.643916	23.645059	23.646203	23.647346	23.648489	23.649632
0.150	23.650776	23.651919	23.653063	23.654207	23.655351	23.656494	23.657638	23.658782	23.659927	23.661071
0.160	23.662215	23.663359	23.664504	23.665648	23.666793	23.667938	23.669082	23.670227	23.671372	23.672517
0.170	23.673662	23.674807	23.675952	23.677098	23.678243	23.679389	23.680534	23.681680	23.682826	23.683971
0.180	23.685117	23.686263	23.687409	23.688555	23.689702	23.690848	23.691994	23.693141	23.694287	23.695434
0.190	23.696581	23.697727	23.698874	23.700021	23.701168	23.702315	23.703463	23.704610	23.705757	23.706905
0.200	23.708052	23.709200	23.710347	23.711495	23.712643	23.713791	23.714939	23.716087	23.717235	23.718383
0.210	23.719532	23.720680	23.721828	23.722977	23.724126	23.725274	23.726423	23.727572	23.728721	23.729870
0.220	23.731019	23.732168	23.733318	23.734467	23.735617	23.736766	23.737916	23.739065	23.740215	23.741365
0.230	23.742515	23.743665	23.744815	23.745965	23.747116	23.748266	23.749416	23.750567	23.751718	23.752868
0.240	23.754019	23.755170	23.756321	23.757472	23.758623	23.759774	23.760925	23.762077	23.763228	23.764380
0.250	23.765531	23.766683	23.767834	23.768986	23.770138	23.771290	23.772442	23.773594	23.774746	23.775899
0.260	23.777051	23.778204	23.779356	23.780509	23.781662	23.782815	23.783967	23.785120	23.786273	23.787426
0.270	23.788580	23.789733	23.790886	23.792040	23.793193	23.794347	23.795501	23.796654	23.797808	23.798962
0.280	23.800116	23.801270	23.802424	23.803579	23.804733	23.805887	23.807042	23.808197	23.809351	23.810506
0.290	23.811661	23.812816	23.813971	23.815126	23.816281	23.817436	23.818592	23.819747	23.820903	23.822058
0.300	23.823214	23.824370	23.825526	23.826681	23.827837	23.828994	23.830150	23.831306	23.832462	23.833619
0.310	23.834775	23.835932	23.837088	23.838245	23.839402	23.840559	23.841716	23.842873	23.844030	23.845187
0.320	23.846345	23.847502	23.848660	23.849817	23.850975	23.852132	23.853290	23.854448	23.855606	23.856764
0.330	23.857922	23.859081	23.860239	23.861397	23.862556	23.863714	23.864873	23.866032	23.867190	23.868349
0.340	23.869508	23.870667	23.871826	23.872986	23.874145	23.875304	23.876464	23.877623	23.878783	23.879943
0.350	23.881102	23.882262	23.883422	23.884582	23.885742	23.886903	23.888063	23.889223	23.890384	23.891544
0.360	23.892705	23.893866	23.895026	23.896187	23.897348	23.898509	23.899670	23.900831	23.901993	23.903154
0.370	23.904316	23.905477	23.906639	23.907800	23.908962	23.910124	23.911286	23.912448	23.913610	23.914772
0.380	23.915935	23.917097	23.918259	23.919422	23.920585	23.921747	23.922910	23.924073	23.925236	23.926399
0.390	23.927562	23.928725	23.929888	23.931052	23.932215	23.933379	23.934542	23.935706	23.936870	23.938034
0.400	23.939198	23.940362	23.941526	23.942690	23.943854	23.945019	23.946183	23.947348	23.948512	23.949677
0.410	23.950842	23.952007	23.953171	23.954336	23.955502	23.956667	23.957832	23.958997	23.960163	23.961328
0.420	23.962494	23.963660	23.964825	23.965991	23.967157	23.968323	23.969489	23.970656	23.971822	23.972988
0.430	23.974155	23.975321	23.976488	23.977654	23.978821	23.979988	23.981155	23.982322	23.983489	23.984656
0.440	23.985824	23.986991	23.988158	23.989326	23.990494	23.991661	23.992829	23.993997	23.995165	23.996333
0.450	23.997501	23.998669	23.999838	24.001006	24.002174	24.003343	24.004512	24.005680	24.006849	24.008018
0.460	24.009187	24.010356	24.011525	24.012694	24.013864	24.015033	24.016202	24.017372	24.018542	24.019711
0.470	24.020881	24.022051	24.023221	24.024391	24.025561	24.026731	24.027902	24.029072	24.030242	24.031413
0.480	24.032584	24.033754	24.034925	24.036096	24.037267	24.038438	24.039609	24.040781	24.041952	24.043123
0.490	24.044295	24.045466	24.046638	24.047810	24.048981	24.050153	24.051325	24.052497	24.053670	24.054842

ATTENUATION IN DECIBELS
THETA FROM 75.500 TO 75.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	24.056014	24.057187	24.058359	24.059532	24.060704	24.061877	24.063050	24.064223	24.065396	24.066569
0.510	24.067742	24.068915	24.070088	24.071262	24.072436	24.073609	24.074783	24.075957	24.077131	24.078305
0.520	24.079479	24.080652	24.081827	24.083001	24.084175	24.085350	24.086524	24.087699	24.088874	24.090048
0.530	24.091223	24.092398	24.093573	24.094748	24.095923	24.097099	24.098274	24.099450	24.100625	24.101801
0.540	24.102977	24.104152	24.105328	24.106504	24.107680	24.108856	24.110033	24.111209	24.112385	24.113562
0.550	24.114738	24.115915	24.117092	24.118268	24.119445	24.120622	24.121799	24.122977	24.124154	24.125331
0.560	24.126508	24.127686	24.128864	24.130041	24.131219	24.132397	24.133575	24.134753	24.135931	24.137109
0.570	24.138287	24.139466	24.140644	24.141823	24.143001	24.144180	24.145359	24.146538	24.147717	24.148896
0.580	24.150075	24.151254	24.152433	24.153613	24.154792	24.155971	24.157151	24.158331	24.159511	24.160691
0.590	24.161870	24.163051	24.164231	24.165411	24.166591	24.167772	24.168952	24.170133	24.171313	24.172494
0.600	24.173675	24.174856	24.176037	24.177218	24.178399	24.179580	24.180762	24.181943	24.183125	24.184306
0.610	24.185488	24.186670	24.187851	24.189033	24.190215	24.191397	24.192580	24.193762	24.194944	24.196127
0.620	24.197309	24.198492	24.199675	24.200857	24.202040	24.203223	24.204406	24.205590	24.206773	24.207956
0.630	24.209139	24.210323	24.211506	24.212690	24.213874	24.215058	24.216242	24.217426	24.218610	24.219794
0.640	24.220976	24.222162	24.223347	24.224531	24.225716	24.226901	24.228086	24.229270	24.230455	24.231640
0.650	24.232825	24.234010	24.235196	24.236381	24.237567	24.238752	24.239938	24.241124	24.242309	24.243495
0.660	24.244681	24.245867	24.247053	24.248240	24.249426	24.250612	24.251799	24.252985	24.254172	24.255359
0.670	24.256546	24.257733	24.258920	24.260107	24.261294	24.262481	24.263669	24.264856	24.266044	24.267231
0.680	24.268419	24.269607	24.270795	24.271982	24.273171	24.274359	24.275547	24.276735	24.277924	24.279112
0.690	24.280301	24.281489	24.282678	24.283867	24.285056	24.286245	24.287434	24.288623	24.289812	24.291002
0.700	24.292191	24.293381	24.294570	24.295760	24.296950	24.298140	24.299330	24.300520	24.301710	24.302900
0.710	24.304090	24.305281	24.306471	24.307662	24.308852	24.310043	24.311234	24.312425	24.313616	24.314807
0.720	24.315998	24.317189	24.318381	24.319572	24.320764	24.321955	24.323147	24.324339	24.325531	24.326723
0.730	24.327915	24.329107	24.330299	24.331491	24.332684	24.333876	24.335069	24.336262	24.337454	24.338646
0.740	24.339840	24.341033	24.342226	24.343419	24.344612	24.345806	24.346999	24.348193	24.349386	24.350580
0.750	24.351774	24.352968	24.354162	24.355356	24.356550	24.357744	24.358938	24.360133	24.361327	24.362522
0.760	24.363717	24.364911	24.366106	24.367301	24.368496	24.369691	24.370886	24.372082	24.373277	24.374472
0.770	24.375668	24.376864	24.378059	24.379255	24.380451	24.381647	24.382843	24.384039	24.385236	24.386432
0.780	24.387628	24.388825	24.390021	24.391218	24.392415	24.393612	24.394809	24.396006	24.397203	24.398400
0.790	24.399597	24.400795	24.401992	24.403190	24.404387	24.405585	24.406783	24.407981	24.409179	24.410377
0.800	24.411575	24.412773	24.413971	24.415170	24.416368	24.417567	24.418766	24.419965	24.421163	24.422362
0.810	24.423561	24.424761	24.425960	24.427159	24.428359	24.429558	24.430758	24.431957	24.433157	24.434357
0.820	24.435557	24.436757	24.437957	24.439157	24.440357	24.441558	24.442758	24.443959	24.445159	24.446360
0.830	24.447561	24.448762	24.449963	24.451164	24.452365	24.453566	24.454768	24.455969	24.457171	24.458372
0.840	24.459574	24.460776	24.461978	24.463180	24.464382	24.465584	24.466786	24.467988	24.469191	24.470393
0.850	24.471596	24.472798	24.474001	24.475204	24.476407	24.477610	24.478813	24.480016	24.481220	24.482423
0.860	24.483626	24.484830	24.486034	24.487237	24.488441	24.489645	24.490849	24.492053	24.493258	24.494462
0.870	24.495666	24.496871	24.498075	24.499280	24.500484	24.501689	24.502894	24.504099	24.505304	24.506509
0.880	24.507715	24.508920	24.510125	24.511331	24.512536	24.513742	24.514948	24.516154	24.517359	24.518566
0.890	24.519772	24.520978	24.522184	24.523391	24.524597	24.525804	24.527010	24.528217	24.529424	24.530631
0.900	24.531838	24.533045	24.534252	24.535460	24.536667	24.537874	24.539082	24.540290	24.541497	24.542705
0.910	24.543913	24.545121	24.546329	24.547538	24.548746	24.549954	24.551162	24.552371	24.553580	24.554788
0.920	24.555997	24.557206	24.558415	24.559624	24.560833	24.562043	24.563252	24.564461	24.565671	24.566880
0.930	24.568090	24.569300	24.570510	24.571720	24.572930	24.574140	24.575350	24.576561	24.577771	24.578982
0.940	24.580192	24.581403	24.582614	24.583825	24.585036	24.586246	24.587458	24.588669	24.589880	24.591092
0.950	24.592303	24.593515	24.594727	24.595938	24.597150	24.598362	24.599574	24.600786	24.601998	24.603211
0.960	24.604423	24.605636	24.606848	24.608061	24.609274	24.610487	24.611699	24.612912	24.614125	24.615339
0.970	24.616552	24.617765	24.618979	24.620193	24.621406	24.622620	24.623834	24.625048	24.626262	24.627476
0.980	24.628690	24.629904	24.631119	24.632333	24.633548	24.634762	24.635977	24.637192	24.638407	24.639622
0.990	24.640837	24.642052	24.643267	24.644483	24.645698	24.646914	24.648129	24.649345	24.650561	24.651777

ATTENUATION IN DECIBELS
THETA FROM 76.000 TO 76.499 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.000	24.652993	24.654209	24.655425	24.656641	24.657858	24.659074	24.660291	24.661507	24.662724	24.663941
0.010	24.665158	24.666375	24.667592	24.668809	24.670026	24.671244	24.672461	24.673679	24.674896	24.676114
0.020	24.677332	24.678550	24.679768	24.680986	24.682204	24.683422	24.684641	24.685859	24.687078	24.688296
0.030	24.689515	24.690734	24.691953	24.693172	24.694391	24.695610	24.696829	24.698049	24.699268	24.700488
0.040	24.701707	24.702927	24.704147	24.705367	24.706587	24.707807	24.709027	24.710247	24.711468	24.712688
0.050	24.713908	24.715129	24.716350	24.717571	24.718791	24.720012	24.721234	24.722455	24.723676	24.724897
0.060	24.726119	24.727340	24.728562	24.729784	24.731006	24.732228	24.733449	24.734672	24.735894	24.737116
0.070	24.738338	24.739561	24.740783	24.742006	24.743229	24.744452	24.745674	24.746897	24.748121	24.749344
0.080	24.750567	24.751791	24.753014	24.754237	24.755461	24.756685	24.757909	24.759133	24.760357	24.761581
0.090	24.762805	24.764029	24.765254	24.766478	24.767703	24.768927	24.770152	24.771377	24.772602	24.773827
0.100	24.775052	24.776277	24.777502	24.778728	24.779953	24.781179	24.782404	24.783630	24.784856	24.786082
0.110	24.787308	24.788534	24.789760	24.790987	24.792213	24.793439	24.794666	24.795893	24.797119	24.798346
0.120	24.799573	24.800800	24.802027	24.803255	24.804482	24.805709	24.806937	24.808164	24.809392	24.810620
0.130	24.811848	24.813076	24.814304	24.815532	24.816760	24.817988	24.819217	24.820445	24.821674	24.822903
0.140	24.824131	24.825360	24.826589	24.827818	24.829047	24.830277	24.831506	24.832736	24.833965	24.835195
0.150	24.836424	24.837654	24.838884	24.840114	24.841344	24.842574	24.843805	24.845035	24.846265	24.847496
0.160	24.848727	24.849957	24.851188	24.852419	24.853650	24.854881	24.856112	24.857343	24.858575	24.859806
0.170	24.861038	24.862270	24.863501	24.864733	24.865965	24.867197	24.868429	24.869661	24.870894	24.872126
0.180	24.873358	24.874591	24.875824	24.877057	24.878289	24.879522	24.880755	24.881989	24.883222	24.884455
0.190	24.885689	24.886922	24.888156	24.889389	24.890623	24.891857	24.893091	24.894325	24.895559	24.896793
0.200	24.898028	24.899262	24.900497	24.901731	24.902966	24.904201	24.905436	24.906671	24.907906	24.909141
0.210	24.910376	24.911612	24.912847	24.914083	24.915318	24.916554	24.917790	24.919026	24.920262	24.921498
0.220	24.922734	24.923970	24.925207	24.926443	24.927680	24.928916	24.930153	24.931390	24.932627	24.933864
0.230	24.935101	24.936338	24.937576	24.938813	24.940051	24.941288	24.942526	24.943764	24.945002	24.946240
0.240	24.947478	24.948716	24.949954	24.951193	24.952431	24.953670	24.954908	24.956147	24.957386	24.958625
0.250	24.959864	24.961103	24.962342	24.963581	24.964821	24.966060	24.967300	24.968539	24.969779	24.971019
0.260	24.972259	24.973499	24.974739	24.975979	24.977220	24.978460	24.979701	24.980941	24.982182	24.983423
0.270	24.984663	24.985904	24.987146	24.988387	24.989628	24.990869	24.992111	24.993352	24.994594	24.995836
0.280	24.997077	24.998319	24.999562	25.000803	25.002046	25.003288	25.004530	25.005773	25.007015	25.008259
0.290	25.009501	25.010744	25.011987	25.013230	25.014473	25.015716	25.016959	25.018203	25.019446	25.020690
0.300	25.021934	25.023178	25.024421	25.025666	25.026910	25.028154	25.029398	25.030642	25.031887	25.033131
0.310	25.034376	25.035621	25.036866	25.038110	25.039356	25.040601	25.041846	25.043091	25.044337	25.045582
0.320	25.046828	25.048074	25.049319	25.050565	25.051811	25.053057	25.054303	25.055550	25.056796	25.058042
0.330	25.059289	25.060536	25.061782	25.063029	25.064276	25.065523	25.066770	25.068017	25.069265	25.070512
0.340	25.071759	25.073007	25.074255	25.075503	25.076751	25.077998	25.079247	25.080495	25.081743	25.082991
0.350	25.084240	25.085488	25.086737	25.087986	25.089234	25.090483	25.091732	25.092982	25.094231	25.095480
0.360	25.096729	25.097979	25.099228	25.100478	25.101728	25.102978	25.104228	25.105478	25.106728	25.107978
0.370	25.109229	25.110479	25.111729	25.112980	25.114231	25.115482	25.116733	25.117984	25.119235	25.120486
0.380	25.121737	25.122989	25.124240	25.125492	25.126743	25.127995	25.129247	25.130499	25.131751	25.133003
0.390	25.134255	25.135508	25.136760	25.138013	25.139265	25.140518	25.141771	25.143024	25.144277	25.145530
0.400	25.146783	25.148036	25.149290	25.150543	25.151797	25.153051	25.154305	25.155558	25.156812	25.158067
0.410	25.159321	25.160575	25.161829	25.163084	25.164338	25.165593	25.166847	25.168103	25.169357	25.170612
0.420	25.171868	25.173123	25.174378	25.175633	25.176889	25.178145	25.179400	25.180656	25.181912	25.183168
0.430	25.184424	25.185680	25.186937	25.188193	25.189449	25.190706	25.191962	25.193219	25.194476	25.195733
0.440	25.196990	25.198247	25.199505	25.200762	25.202019	25.203277	25.204535	25.205792	25.207050	25.208308
0.450	25.209566	25.210824	25.212082	25.213341	25.214599	25.215858	25.217116	25.218375	25.219634	25.220892
0.460	25.222151	25.223410	25.224670	25.225929	25.227188	25.228448	25.229707	25.230967	25.232227	25.233486
0.470	25.234746	25.236006	25.237267	25.238527	25.239787	25.241048	25.242308	25.243569	25.244829	25.246090
0.480	25.247351	25.248612	25.249873	25.251135	25.252396	25.253657	25.254919	25.256180	25.257442	25.258704
0.490	25.259966	25.261228	25.262490	25.263752	25.265014	25.266276	25.267539	25.268801	25.270064	25.271327

ATTENUATION IN DECIBELS
THETA FROM 76.500 TO 76.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	25.272590	25.273853	25.275116	25.276379	25.277642	25.278905	25.280169	25.281432	25.282696	25.283960
0.510	25.285223	25.286488	25.287751	25.289016	25.290280	25.291544	25.292809	25.294073	25.295338	25.296602
0.520	25.297867	25.299132	25.300397	25.301662	25.302927	25.304193	25.305458	25.306723	25.307989	25.309255
0.530	25.310520	25.311786	25.313052	25.314318	25.315584	25.316851	25.318117	25.319384	25.320650	25.321917
0.540	25.323184	25.324450	25.325717	25.326984	25.328251	25.329519	25.330786	25.332053	25.333321	25.334589
0.550	25.335856	25.337124	25.338392	25.339660	25.340928	25.342196	25.343465	25.344733	25.346002	25.347270
0.560	25.348539	25.349808	25.351077	25.352345	25.353615	25.354884	25.356153	25.357423	25.358692	25.359962
0.570	25.361231	25.362501	25.363771	25.365041	25.366311	25.367581	25.368851	25.370122	25.371392	25.372663
0.580	25.373934	25.375204	25.376475	25.377746	25.379017	25.380288	25.381559	25.382831	25.384102	25.385374
0.590	25.386646	25.387917	25.389189	25.390461	25.391733	25.393005	25.394277	25.395550	25.396822	25.398095
0.600	25.399367	25.400640	25.401913	25.403186	25.404459	25.405732	25.407005	25.408278	25.409552	25.410825
0.610	25.412099	25.413373	25.414647	25.415920	25.417194	25.418468	25.419743	25.421017	25.422292	25.423566
0.620	25.424841	25.426115	25.427390	25.428665	25.429940	25.431215	25.432490	25.433766	25.435041	25.436316
0.630	25.437592	25.438868	25.440144	25.441419	25.442695	25.443972	25.445248	25.446524	25.447800	25.449077
0.640	25.450353	25.451630	25.452907	25.454184	25.455461	25.456738	25.458015	25.459292	25.460570	25.461847
0.650	25.463125	25.464402	25.465680	25.466958	25.468236	25.469514	25.470792	25.472070	25.473349	25.474627
0.660	25.475906	25.477185	25.478463	25.479742	25.481021	25.482300	25.483579	25.484859	25.486138	25.487417
0.670	25.488697	25.489977	25.491256	25.492536	25.493816	25.495096	25.496377	25.497657	25.498937	25.500218
0.680	25.501498	25.502779	25.504060	25.505340	25.506621	25.507902	25.509184	25.510465	25.511746	25.513028
0.690	25.514309	25.515591	25.516873	25.518154	25.519436	25.520718	25.522001	25.523283	25.524565	25.525848
0.700	25.527130	25.528413	25.529696	25.530978	25.532261	25.533545	25.534828	25.536111	25.537394	25.538678
0.710	25.539961	25.541245	25.542529	25.543813	25.545096	25.546381	25.547665	25.548949	25.550233	25.551518
0.720	25.552802	25.554087	25.555372	25.556657	25.557941	25.559227	25.560512	25.561797	25.563082	25.564368
0.730	25.565653	25.566939	25.568225	25.569511	25.570797	25.572083	25.573369	25.574655	25.575942	25.577228
0.740	25.578515	25.579801	25.581088	25.582375	25.583662	25.584949	25.586236	25.587523	25.588811	25.590098
0.750	25.591386	25.592673	25.593961	25.595249	25.596537	25.597825	25.599113	25.600402	25.601690	25.602978
0.760	25.604267	25.605556	25.606844	25.608133	25.609422	25.610711	25.612000	25.613290	25.614579	25.615869
0.770	25.617158	25.618448	25.619738	25.621028	25.622318	25.623608	25.624898	25.626188	25.627479	25.628769
0.780	25.630060	25.631351	25.632641	25.633932	25.635223	25.636514	25.637805	25.639097	25.640388	25.641680
0.790	25.642971	25.644263	25.645555	25.646847	25.648139	25.649431	25.650723	25.652015	25.653309	25.654600
0.800	25.655893	25.657186	25.658478	25.659771	25.661065	25.662358	25.663651	25.664944	25.666238	25.667531
0.810	25.668825	25.670119	25.671412	25.672706	25.674001	25.675295	25.676589	25.677883	25.679178	25.680472
0.820	25.681767	25.683062	25.684356	25.685652	25.686947	25.688242	25.689537	25.690832	25.692128	25.693424
0.830	25.694719	25.696015	25.697311	25.698607	25.699903	25.701199	25.702495	25.703792	25.705088	25.706385
0.840	25.707681	25.708978	25.710275	25.711572	25.712869	25.714166	25.715464	25.716761	25.718059	25.719356
0.850	25.720654	25.721952	25.723250	25.724548	25.725846	25.727144	25.728443	25.729741	25.731040	25.732338
0.860	25.733637	25.734936	25.736235	25.737534	25.738833	25.740132	25.741431	25.742731	25.744030	25.745330
0.870	25.746630	25.747930	25.749230	25.750530	25.751830	25.753130	25.754431	25.755731	25.757032	25.758332
0.880	25.759633	25.760934	25.762235	25.763536	25.764838	25.766139	25.767440	25.768742	25.770043	25.771345
0.890	25.772647	25.773949	25.775251	25.776553	25.777855	25.779157	25.780460	25.781763	25.783065	25.784368
0.900	25.785671	25.786974	25.788277	25.789580	25.790883	25.792186	25.793490	25.794794	25.796097	25.797401
0.910	25.798705	25.800009	25.801313	25.802617	25.803921	25.805226	25.806530	25.807835	25.809140	25.810445
0.920	25.811749	25.813054	25.814359	25.815665	25.816970	25.818275	25.819581	25.820887	25.822192	25.823498
0.930	25.824804	25.826110	25.827416	25.828723	25.830029	25.831336	25.832642	25.833949	25.835256	25.836562
0.940	25.837869	25.839176	25.840484	25.841791	25.843098	25.844406	25.845713	25.847021	25.848329	25.849637
0.950	25.850945	25.852253	25.853561	25.854870	25.856178	25.857486	25.858795	25.860104	25.861413	25.862722
0.960	25.864031	25.865340	25.866649	25.867959	25.869268	25.870578	25.871887	25.873197	25.874507	25.875817
0.970	25.877127	25.878437	25.879748	25.881058	25.882369	25.883679	25.884990	25.886301	25.887612	25.888923
0.980	25.890234	25.891545	25.892856	25.894168	25.895479	25.896791	25.898103	25.899415	25.900727	25.902039
0.990	25.903351	25.904663	25.905976	25.907288	25.908601	25.909914	25.911226	25.912539	25.913852	25.915165

ATTENUATION IN DECIBELS THETA FROM 77.000 TO 77.499 DEGREES

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THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.000	25.916479	25.917792	25.919105	25.920419	25.921732	25.923046	25.924360	25.925674	25.926988	25.928302
0.010	25.929617	25.930931	25.932245	25.933560	25.934875	25.936190	25.937505	25.938819	25.940135	25.941450
0.020	25.942765	25.944081	25.945396	25.946712	25.948037	25.949353	25.950669	25.951975	25.953291	25.954608
0.030	25.955924	25.957241	25.958557	25.959874	25.961191	25.962507	25.963825	25.965142	25.966459	25.967776
0.040	25.969024	25.970341	25.971657	25.972974	25.974291	25.975608	25.976925	25.978241	25.979559	25.980876
0.050	25.982274	25.983592	25.984911	25.986230	25.987549	25.988868	25.990187	25.991506	25.992825	25.994145
0.060	25.995464	25.996784	25.998104	25.999424	26.000743	26.002064	26.003384	26.004704	26.006024	26.007345
0.070	26.008665	26.009986	26.011307	26.012628	26.013949	26.015270	26.016591	26.017912	26.019233	26.020555
0.080	26.021877	26.023199	26.024521	26.025843	26.027165	26.028487	26.029809	26.031132	26.032454	26.033777
0.090	26.035099	26.036422	26.037745	26.039068	26.040391	26.041714	26.043038	26.044361	26.045685	26.047008
0.100	26.048332	26.049656	26.050980	26.052304	26.053628	26.054953	26.056277	26.057601	26.058926	26.060251
0.110	26.061576	26.062901	26.064226	26.065551	26.066876	26.068201	26.069527	26.070853	26.072178	26.073504
0.120	26.074830	26.076156	26.077482	26.078808	26.080134	26.081461	26.082787	26.084114	26.085441	26.086768
0.130	26.088094	26.089422	26.090749	26.092076	26.093403	26.094731	26.096059	26.097386	26.098714	26.100042
0.140	26.101370	26.102698	26.104026	26.105355	26.106683	26.108012	26.109340	26.110669	26.111998	26.113327
0.150	26.114656	26.115985	26.117315	26.118644	26.119973	26.121303	26.122633	26.123963	26.125293	26.126623
0.160	26.127953	26.129283	26.130614	26.131944	26.133275	26.134605	26.135936	26.137267	26.138598	26.139929
0.170	26.141260	26.142592	26.143923	26.145255	26.146586	26.147918	26.149250	26.150582	26.151914	26.153246
0.180	26.154579	26.155911	26.157244	26.158576	26.159909	26.161242	26.162575	26.163908	26.165241	26.166574
0.190	26.167908	26.169241	26.170575	26.171909	26.173242	26.174576	26.175910	26.177244	26.178579	26.179913
0.200	26.181247	26.182582	26.183917	26.185251	26.186586	26.187922	26.189257	26.190592	26.191927	26.193263
0.210	26.194598	26.195934	26.197269	26.198605	26.199941	26.201277	26.202614	26.203950	26.205286	26.206623
0.220	26.207959	26.209296	26.210633	26.211970	26.213307	26.214644	26.215981	26.217319	26.218656	26.219994
0.230	26.221332	26.222669	26.224007	26.225345	26.226684	26.228022	26.229360	26.230697	26.232037	26.233376
0.240	26.234715	26.236053	26.237392	26.238732	26.240071	26.241410	26.242750	26.244089	26.245429	26.246768
0.250	26.248108	26.249449	26.250788	26.252129	26.253469	26.254809	26.256150	26.257491	26.258831	26.260172
0.260	26.261513	26.262854	26.264195	26.265537	26.266878	26.268220	26.269561	26.270903	26.272245	26.273587
0.270	26.274929	26.276271	26.277613	26.278955	26.280298	26.281641	26.282983	26.284326	26.285669	26.287012
0.280	26.288355	26.289699	26.291042	26.292385	26.293729	26.295073	26.296416	26.297760	26.299104	26.300448
0.290	26.301793	26.303137	26.304482	26.305826	26.307171	26.308516	26.309860	26.311205	26.312551	26.313896
0.300	26.315241	26.316586	26.317932	26.319278	26.320623	26.321969	26.323315	26.324661	26.326008	26.327354
0.310	26.328700	26.330047	26.331393	26.332740	26.334087	26.335434	26.336781	26.338128	26.339476	26.340823
0.320	26.342170	26.343518	26.344866	26.346214	26.347562	26.348910	26.350258	26.351606	26.352955	26.354303
0.330	26.355652	26.357001	26.358349	26.359698	26.361047	26.362396	26.363746	26.365095	26.366445	26.367794
0.340	26.369144	26.370494	26.371844	26.373194	26.374544	26.375894	26.377245	26.378595	26.379946	26.381296
0.350	26.382647	26.383998	26.385349	26.386700	26.388052	26.389403	26.390754	26.392106	26.393458	26.394810
0.360	26.396162	26.397514	26.398866	26.400218	26.401570	26.402923	26.404275	26.405628	26.406981	26.408334
0.370	26.409687	26.411040	26.412393	26.413747	26.415100	26.416454	26.417807	26.419161	26.420515	26.421869
0.380	26.423223	26.424577	26.425932	26.427286	26.428641	26.429996	26.431350	26.432705	26.434060	26.435416
0.390	26.436771	26.438126	26.439482	26.440837	26.442193	26.443549	26.444905	26.446261	26.447617	26.448973
0.400	26.450329	26.451686	26.453043	26.454399	26.455756	26.457113	26.458470	26.459827	26.461184	26.462542
0.410	26.463899	26.465257	26.466614	26.467972	26.469330	26.470688	26.472046	26.473405	26.474763	26.476121
0.420	26.477480	26.478839	26.480197	26.481556	26.482915	26.484275	26.485634	26.486993	26.488353	26.489712
0.430	26.491072	26.492432	26.493792	26.495152	26.496512	26.497872	26.499233	26.500593	26.501954	26.503314
0.440	26.504675	26.506036	26.507397	26.508758	26.510120	26.511481	26.512842	26.514204	26.515566	26.516927
0.450	26.518290	26.519652	26.521014	26.522376	26.523738	26.525101	26.526464	26.527826	26.529189	26.530557
0.460	26.531915	26.533278	26.534642	26.536005	26.537369	26.538732	26.540096	26.541460	26.542824	26.544188
0.470	26.545552	26.546916	26.548281	26.549645	26.551010	26.552375	26.553739	26.555104	26.556469	26.557835
0.480	26.559200	26.560565	26.561931	26.563297	26.564662	26.566028	26.567394	26.568760	26.570127	26.571493
0.490	26.572859	26.574226	26.575593	26.576959	26.578326	26.579693	26.581060	26.582428	26.583795	26.585162

ATTENUATION IN DECIBELS
THETA FROM 77.500 TO 77.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	26.586530	26.587898	26.589265	26.590633	26.592001	26.593369	26.594738	26.596106	26.597475	26.598843
0.510	26.600212	26.601581	26.602949	26.604319	26.605688	26.607057	26.608426	26.609796	26.611165	26.612535
0.520	26.613905	26.615275	26.616645	26.618015	26.619385	26.620756	26.622126	26.623496	26.624868	26.626239
0.530	26.627609	26.628981	26.630352	26.631723	26.633095	26.634466	26.635838	26.637209	26.638581	26.639953
0.540	26.641325	26.642698	26.644070	26.645442	26.646815	26.648188	26.649560	26.650933	26.652306	26.653679
0.550	26.655053	26.656426	26.657799	26.659173	26.660547	26.661921	26.663294	26.664668	26.666043	26.667417
0.560	26.668791	26.670166	26.671540	26.672915	26.674290	26.675665	26.677040	26.678415	26.679790	26.681166
0.570	26.682541	26.683917	26.685293	26.686668	26.688045	26.689420	26.690797	26.692173	26.693549	26.694926
0.580	26.696303	26.697680	26.699056	26.700433	26.701811	26.703188	26.704565	26.705943	26.707320	26.708698
0.590	26.710076	26.711453	26.712831	26.714210	26.715588	26.716966	26.718345	26.719723	26.721102	26.722481
0.600	26.723860	26.725239	26.726618	26.727998	26.729377	26.730757	26.732136	26.733516	26.734896	26.736276
0.610	26.737656	26.739036	26.740416	26.741797	26.743177	26.744558	26.745939	26.747320	26.748701	26.750082
0.620	26.751463	26.752845	26.754226	26.755608	26.756989	26.758371	26.759753	26.761135	26.762517	26.763900
0.630	26.765282	26.766665	26.768047	26.769430	26.770813	26.772196	26.773579	26.774962	26.776345	26.777729
0.640	26.779112	26.780496	26.781880	26.783264	26.784648	26.786032	26.787416	26.788800	26.790185	26.791569
0.650	26.792954	26.794339	26.795724	26.797109	26.798494	26.799880	26.801265	26.802650	26.804036	26.805422
0.660	26.806808	26.808194	26.809580	26.810966	26.812352	26.813739	26.815125	26.816512	26.817899	26.819286
0.670	26.820673	26.822060	26.823447	26.824835	26.826222	26.827610	26.828997	26.830385	26.831773	26.833161
0.680	26.834549	26.835938	26.837326	26.838715	26.840103	26.841492	26.842881	26.844270	26.845659	26.847048
0.690	26.848438	26.849827	26.851217	26.852607	26.853996	26.855386	26.856776	26.858166	26.859557	26.860947
0.700	26.862338	26.863728	26.865119	26.866510	26.867901	26.869292	26.870683	26.872075	26.873466	26.874858
0.710	26.876249	26.877641	26.879033	26.880425	26.881817	26.883209	26.884602	26.885994	26.887387	26.888780
0.720	26.890172	26.891566	26.892959	26.894352	26.895745	26.897139	26.898532	26.899926	26.901320	26.902714
0.730	26.904108	26.905502	26.906896	26.908290	26.909685	26.911079	26.912474	26.913869	26.915264	26.916659
0.740	26.918054	26.919450	26.920845	26.922240	26.923636	26.925032	26.926428	26.927824	26.929220	26.930616
0.750	26.932013	26.933409	26.934806	26.936203	26.937599	26.938996	26.940393	26.941791	26.943188	26.944585
0.760	26.945983	26.947381	26.948778	26.950176	26.951574	26.952972	26.954370	26.955769	26.957167	26.958566
0.770	26.959965	26.961364	26.962763	26.964162	26.965561	26.966960	26.968360	26.969759	26.971159	26.972559
0.780	26.973958	26.975358	26.976759	26.978159	26.979559	26.980960	26.982360	26.983761	26.985162	26.986563
0.790	26.987964	26.989365	26.990767	26.992168	26.993570	26.994971	26.996373	26.997775	26.999177	27.000579
0.800	27.001981	27.003384	27.004786	27.006189	27.007592	27.008995	27.010398	27.011801	27.013204	27.014607
0.810	27.016011	27.017414	27.018818	27.020222	27.021626	27.023030	27.024434	27.025838	27.027243	27.028647
0.820	27.030052	27.031457	27.032861	27.034266	27.035672	27.037077	27.038482	27.039888	27.041293	27.042699
0.830	27.044105	27.045511	27.046917	27.048323	27.049729	27.051136	27.052542	27.053949	27.055356	27.056763
0.840	27.058170	27.059577	27.060984	27.062392	27.063799	27.065207	27.066614	27.068022	27.069430	27.070838
0.850	27.072247	27.073655	27.075063	27.076472	27.077881	27.079289	27.080698	27.082108	27.083517	27.084926
0.860	27.086335	27.087745	27.089154	27.090564	27.091974	27.093384	27.094794	27.096205	27.097615	27.099025
0.870	27.100436	27.101847	27.103258	27.104669	27.106080	27.107491	27.108902	27.110314	27.111725	27.113137
0.880	27.114549	27.115961	27.117373	27.118785	27.120197	27.121610	27.123022	27.124435	27.125848	27.127260
0.890	27.128674	27.130087	27.131500	27.132913	27.134327	27.135741	27.137154	27.138568	27.139982	27.141396
0.900	27.142810	27.144225	27.145639	27.147054	27.148468	27.149883	27.151298	27.152713	27.154128	27.155544
0.910	27.156959	27.158375	27.159790	27.161206	27.162622	27.164038	27.165454	27.166870	27.168287	27.169703
0.920	27.171120	27.172537	27.173954	27.175371	27.176788	27.178205	27.179622	27.181040	27.182457	27.183875
0.930	27.185293	27.186711	27.188129	27.189547	27.190965	27.192384	27.193803	27.195221	27.196640	27.198059
0.940	27.199478	27.200897	27.202317	27.203736	27.205155	27.206575	27.207995	27.209415	27.210835	27.212255
0.950	27.213675	27.215096	27.216516	27.217937	27.219357	27.220778	27.222199	27.223620	27.225042	27.226463
0.960	27.227885	27.229306	27.230728	27.232150	27.233572	27.234994	27.236416	27.237838	27.239261	27.240683
0.970	27.242106	27.243529	27.244952	27.246375	27.247798	27.249221	27.250645	27.252068	27.253492	27.254916
0.980	27.256340	27.257764	27.259188	27.260612	27.262036	27.263461	27.264886	27.266310	27.267735	27.269160
0.990	27.270585	27.272011	27.273436	27.274862	27.276287	27.277713	27.279139	27.280565	27.281991	27.283417

ATTENUATION IN DECIBELS
THETA FROM 78.000 TO 78.499 DEGREES

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THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.000	27.284843	27.286270	27.287697	27.289123	27.290550	27.291977	27.293404	27.294832	27.296259	27.297686
0.010	27.299114	27.300541	27.301969	27.303397	27.304825	27.306253	27.307682	27.309110	27.310539	27.311968
0.020	27.313396	27.314825	27.316254	27.317683	27.319113	27.320542	27.321972	27.323401	27.324831	27.326261
0.030	27.327691	27.329121	27.330552	27.331982	27.333413	27.334843	27.336274	27.337705	27.339136	27.340567
0.040	27.341998	27.343430	27.344861	27.346293	27.347725	27.349157	27.350589	27.352021	27.353453	27.354885
0.050	27.356318	27.357750	27.359183	27.360616	27.362049	27.363482	27.364915	27.366349	27.367782	27.369216
0.060	27.370650	27.372084	27.373518	27.374952	27.376386	27.377820	27.379255	27.380689	27.382124	27.383559
0.070	27.384994	27.386429	27.387864	27.389300	27.390735	27.392171	27.393606	27.395042	27.396478	27.397914
0.080	27.399350	27.400787	27.402223	27.403660	27.405097	27.406533	27.407970	27.409407	27.410845	27.412282
0.090	27.413719	27.415157	27.416595	27.418033	27.419471	27.420909	27.422347	27.423785	27.425224	27.426662
0.100	27.428101	27.429540	27.430979	27.432418	27.433857	27.435296	27.436736	27.438175	27.439615	27.441055
0.110	27.442495	27.443935	27.445375	27.446815	27.448256	27.449696	27.451137	27.452578	27.454019	27.455460
0.120	27.456901	27.458342	27.459784	27.461225	27.462667	27.464109	27.465551	27.466993	27.468435	27.469877
0.130	27.471320	27.472762	27.474205	27.475648	27.477091	27.478534	27.479977	27.481421	27.482864	27.484308
0.140	27.485751	27.487195	27.488639	27.490083	27.491527	27.492971	27.494416	27.495861	27.497305	27.498750
0.150	27.500195	27.501640	27.503085	27.504530	27.505976	27.507421	27.508867	27.510313	27.511759	27.513205
0.160	27.514651	27.516098	27.517544	27.518991	27.520437	27.521884	27.523331	27.524778	27.526226	27.527673
0.170	27.529120	27.530568	27.532016	27.533463	27.534911	27.536360	27.537808	27.539256	27.540704	27.542153
0.180	27.543602	27.545051	27.546500	27.547949	27.549398	27.550847	27.552297	27.553746	27.555196	27.556646
0.190	27.558096	27.559546	27.560996	27.562447	27.563897	27.565348	27.566798	27.568249	27.569700	27.571151
0.200	27.572603	27.574054	27.575506	27.576957	27.578409	27.579861	27.581313	27.582765	27.584217	27.585670
0.210	27.587122	27.588575	27.590028	27.591480	27.592934	27.594387	27.595840	27.597293	27.598747	27.600201
0.220	27.601654	27.603108	27.604562	27.606016	27.607471	27.608925	27.610380	27.611834	27.613289	27.614744
0.230	27.616199	27.617654	27.619110	27.620565	27.622021	27.623476	27.624932	27.626388	27.627844	27.629300
0.240	27.630757	27.632213	27.633670	27.635126	27.636583	27.638040	27.639497	27.640954	27.642412	27.643869
0.250	27.645327	27.646785	27.648242	27.649701	27.651159	27.652617	27.654075	27.655534	27.656992	27.658451
0.260	27.659910	27.661369	27.662828	27.664287	27.665747	27.667206	27.668666	27.670125	27.671586	27.673046
0.270	27.674506	27.675966	27.677427	27.678887	27.680348	27.681808	27.683270	27.684731	27.686192	27.687653
0.280	27.689114	27.690576	27.692038	27.693500	27.694962	27.696424	27.697886	27.699348	27.700811	27.702273
0.290	27.703736	27.705199	27.706662	27.708125	27.709588	27.711051	27.712515	27.713979	27.715442	27.716906
0.300	27.718370	27.719834	27.721298	27.722763	27.724227	27.725692	27.727157	27.728622	27.730087	27.731552
0.310	27.733017	27.734483	27.735948	27.737414	27.738880	27.740346	27.741812	27.743278	27.744744	27.746211
0.320	27.747677	27.749144	27.750611	27.752078	27.753545	27.755012	27.756480	27.757947	27.759415	27.760882
0.330	27.762350	27.763818	27.765286	27.766755	27.768223	27.769692	27.771160	27.772629	27.774098	27.775567
0.340	27.777036	27.778506	27.779975	27.781445	27.782914	27.784384	27.785854	27.787324	27.788794	27.790265
0.350	27.791735	27.793206	27.794676	27.796147	27.797618	27.799089	27.800561	27.802032	27.803504	27.804975
0.360	27.806447	27.807919	27.809391	27.810863	27.812335	27.813808	27.815280	27.816753	27.818226	27.819699
0.370	27.821172	27.822645	27.824118	27.825592	27.827065	27.828539	27.830013	27.831487	27.832961	27.834435
0.380	27.835910	27.837384	27.838859	27.840333	27.841808	27.843283	27.844759	27.846234	27.847709	27.849185
0.390	27.850661	27.852136	27.853612	27.855088	27.856565	27.858041	27.859517	27.860994	27.862471	27.863947
0.400	27.865424	27.866902	27.868379	27.869856	27.871334	27.872811	27.874289	27.875767	27.877245	27.878723
0.410	27.880202	27.881680	27.883158	27.884637	27.886116	27.887595	27.889074	27.890553	27.892033	27.893512
0.420	27.894992	27.896471	27.897951	27.899431	27.900911	27.902392	27.903872	27.905353	27.906833	27.908314
0.430	27.909795	27.911276	27.912757	27.914238	27.915720	27.917202	27.918683	27.920165	27.921647	27.923129
0.440	27.924611	27.926092	27.927576	27.929059	27.930542	27.932024	27.933507	27.934991	27.936474	27.937958
0.450	27.939441	27.940925	27.942409	27.943892	27.945376	27.946861	27.948345	27.949830	27.951314	27.952799
0.460	27.954284	27.955769	27.957254	27.958739	27.960225	27.961710	27.963196	27.964682	27.966167	27.967654
0.470	27.969140	27.970626	27.972113	27.973599	27.975086	27.976573	27.978060	27.979547	27.981034	27.982522
0.480	27.984009	27.985497	27.986984	27.988472	27.989960	27.991449	27.992937	27.994426	27.995914	27.997403
0.490	27.998892	28.000381	28.001870	28.003359	28.004848	28.006338	28.007828	28.009317	28.010807	28.012297

ATTENUATION IN DECIBELS
THETA FROM 78.500 TO 78.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	28.013788	28.015278	28.016768	28.018259	28.019750	28.021240	28.022731	28.024223	28.025714	28.027205
0.510	28.028697	28.030188	28.031680	28.033172	28.034664	28.036156	28.037649	28.039141	28.040634	28.042126
0.520	28.043617	28.045112	28.046605	28.048099	28.049592	28.051085	28.052579	28.054073	28.055567	28.057061
0.530	28.058555	28.060049	28.061544	28.063038	28.064533	28.066028	28.067523	28.069018	28.070513	28.072009
0.540	28.073504	28.075000	28.076496	28.077992	28.079488	28.080984	28.082480	28.083977	28.085473	28.086970
0.550	28.088467	28.089964	28.091461	28.092958	28.094456	28.095953	28.097451	28.098949	28.100447	28.101945
0.560	28.103443	28.104941	28.106440	28.107938	28.109437	28.110936	28.112435	28.113934	28.115433	28.116933
0.570	28.118433	28.119932	28.121432	28.122932	28.124432	28.125932	28.127433	28.128933	28.130434	28.131935
0.580	28.133435	28.134937	28.136438	28.137939	28.139441	28.140942	28.142444	28.143946	28.145447	28.146950
0.590	28.148452	28.149954	28.151457	28.152960	28.154462	28.155965	28.157468	28.158972	28.160475	28.161978
0.600	28.163482	28.164986	28.166490	28.167994	28.169498	28.171002	28.172507	28.174011	28.175516	28.177021
0.610	28.178525	28.180031	28.181536	28.183041	28.184547	28.186052	28.187558	28.189064	28.190570	28.192076
0.620	28.193583	28.195089	28.196596	28.198102	28.199609	28.201116	28.202623	28.204131	28.205638	28.207146
0.630	28.203653	28.210161	28.211669	28.213177	28.214685	28.216194	28.217702	28.219211	28.220720	28.222229
0.640	28.223738	28.225247	28.226756	28.228266	28.229775	28.231285	28.232795	28.234305	28.235815	28.237325
0.650	28.238836	28.240346	28.241857	28.243368	28.244879	28.246390	28.247901	28.249413	28.250924	28.252436
0.660	28.253947	28.255459	28.256971	28.258483	28.259996	28.261508	28.263021	28.264534	28.266047	28.267560
0.670	28.269073	28.270586	28.272099	28.273613	28.275127	28.276640	28.278154	28.279669	28.281183	28.282697
0.680	28.284212	28.285726	28.287241	28.288756	28.290271	28.291786	28.293302	28.294817	28.296333	28.297848
0.690	28.299365	28.300880	28.302397	28.303913	28.305429	28.306946	28.308463	28.309980	28.311496	28.313014
0.700	28.314531	28.316048	28.317566	28.319084	28.320601	28.322119	28.323637	28.325156	28.326674	28.328193
0.710	28.329711	28.331230	28.332749	28.334268	28.335787	28.337307	28.338826	28.340346	28.341866	28.343385
0.720	28.344905	28.346426	28.347946	28.349466	28.350987	28.352508	28.354028	28.355550	28.357071	28.358592
0.730	28.360113	28.361635	28.363157	28.364678	28.366200	28.367723	28.369245	28.370767	28.372290	28.373812
0.740	28.375335	28.376858	28.378381	28.379905	28.381428	28.382951	28.384475	28.385999	28.387523	28.389047
0.750	28.390571	28.392095	28.393620	28.395144	28.396669	28.398194	28.399719	28.401244	28.402769	28.404295
0.760	28.405820	28.407346	28.408872	28.410398	28.411924	28.413450	28.414977	28.416503	28.418030	28.419557
0.770	28.421084	28.422611	28.424138	28.425666	28.427193	28.428721	28.430249	28.431777	28.433305	28.434833
0.780	28.436361	28.437890	28.439419	28.440947	28.442476	28.444005	28.445534	28.447064	28.448593	28.450123
0.790	28.451653	28.453183	28.454713	28.456243	28.457773	28.459304	28.460835	28.462365	28.463896	28.465427
0.800	28.466958	28.468490	28.470021	28.471553	28.473084	28.474616	28.476148	28.477680	28.479213	28.480745
0.810	28.482278	28.483810	28.485343	28.486876	28.488410	28.489943	28.491476	28.493010	28.494544	28.496077
0.820	28.497611	28.499146	28.500680	28.502214	28.503749	28.505283	28.506818	28.508353	28.509888	28.511424
0.830	28.512959	28.514494	28.516030	28.517566	28.519102	28.520638	28.522174	28.523710	28.525247	28.526784
0.840	28.528321	28.529858	28.531395	28.532932	28.534469	28.536007	28.537544	28.539082	28.540620	28.542158
0.850	28.543696	28.545235	28.546773	28.548312	28.549851	28.551390	28.552929	28.554468	28.556007	28.557547
0.860	28.559086	28.560626	28.562166	28.563706	28.565246	28.566787	28.568327	28.569868	28.571409	28.572949
0.870	28.574491	28.576032	28.577573	28.579115	28.580656	28.582198	28.583740	28.585282	28.586824	28.588367
0.880	28.589909	28.591451	28.592994	28.594537	28.596080	28.597623	28.599167	28.600710	28.602254	28.603798
0.890	28.605341	28.606885	28.608430	28.609974	28.611519	28.613063	28.614608	28.616153	28.617698	28.619243
0.900	28.620788	28.622334	28.623879	28.625425	28.626971	28.628517	28.630063	28.631610	28.633156	28.634703
0.910	28.636250	28.637796	28.639343	28.640891	28.642438	28.643985	28.645533	28.647081	28.648629	28.650177
0.920	28.651725	28.653273	28.654822	28.656370	28.657919	28.659468	28.661017	28.662566	28.664115	28.665665
0.930	28.667215	28.668764	28.670314	28.671864	28.673414	28.674965	28.676515	28.678066	28.679617	28.681168
0.940	28.682719	28.684270	28.685821	28.687373	28.688924	28.690476	28.692028	28.693580	28.695132	28.696685
0.950	28.698237	28.699790	28.701343	28.702895	28.704448	28.706002	28.707555	28.709109	28.710662	28.712216
0.960	28.713770	28.715324	28.716878	28.718433	28.719987	28.721542	28.723097	28.724652	28.726207	28.727762
0.970	28.729317	28.730873	28.732429	28.733984	28.735540	28.737096	28.738653	28.740209	28.741765	28.743322
0.980	28.744879	28.746436	28.747993	28.749550	28.751108	28.752665	28.754223	28.755781	28.757339	28.758897
0.990	28.760455	28.762014	28.763572	28.765131	28.766690	28.768249	28.769808	28.771367	28.772927	28.774486

ATTENUATION IN DECIBELS
THETA FROM 79.000 TO 79.499 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.000	28.776046	28.777606	28.779166	28.780726	28.782286	28.783847	28.785408	28.786968	28.788529	28.790090
0.010	28.791651	28.793213	28.794774	28.796336	28.797898	28.799459	28.801022	28.802584	28.804146	28.805709
0.020	28.807271	28.808834	28.810397	28.811960	28.813523	28.815087	28.816650	28.818214	28.819777	28.821342
0.030	28.822906	28.824470	28.826034	28.827599	28.829164	28.830728	28.832293	28.833858	28.835424	28.836989
0.040	28.838555	28.840120	28.841686	28.843252	28.844818	28.846385	28.847951	28.849518	28.851084	28.852651
0.050	28.854218	28.855786	28.857353	28.858920	28.860488	28.862056	28.863624	28.865192	28.866760	28.868328
0.060	28.869897	28.871465	28.873034	28.874603	28.876172	28.877741	28.879311	28.880880	28.882450	28.884020
0.070	28.885590	28.887160	28.888730	28.890301	28.891871	28.893442	28.895013	28.896584	28.898155	28.899726
0.080	28.901298	28.902869	28.904441	28.906013	28.907585	28.909157	28.910729	28.912302	28.913874	28.915447
0.090	28.917020	28.918593	28.920166	28.921740	28.923313	28.924887	28.926461	28.928035	28.929609	28.931183
0.100	28.932757	28.934332	28.935907	28.937481	28.939056	28.940632	28.942207	28.943782	28.945358	28.946934
0.110	28.948509	28.950085	28.951662	28.953238	28.954814	28.956391	28.957968	28.959545	28.961122	28.962699
0.120	28.964276	28.965854	28.967432	28.969009	28.970587	28.972165	28.973744	28.975322	28.976901	28.978479
0.130	28.980058	28.981637	28.983216	28.984796	28.986375	28.987955	28.989534	28.991114	28.992694	28.994274
0.140	28.995855	28.997435	28.999016	29.000597	29.002177	29.003759	29.005340	29.006921	29.008503	29.010084
0.150	29.011666	29.013248	29.014830	29.016413	29.017995	29.019578	29.021160	29.022743	29.024326	29.025909
0.160	29.027493	29.029076	29.030660	29.032244	29.033828	29.035412	29.036996	29.038580	29.040165	29.041749
0.170	29.043334	29.044919	29.046504	29.048090	29.049675	29.051260	29.052846	29.054432	29.056018	29.057604
0.180	29.059191	29.060777	29.062364	29.063951	29.065537	29.067125	29.068712	29.070299	29.071887	29.073474
0.190	29.075062	29.076650	29.078238	29.079827	29.081415	29.083004	29.084592	29.086181	29.087770	29.089359
0.200	29.090949	29.092538	29.094128	29.095717	29.097307	29.098897	29.100488	29.102078	29.103669	29.105259
0.210	29.106850	29.108441	29.110032	29.111624	29.113215	29.114807	29.116398	29.117990	29.119582	29.121175
0.220	29.122767	29.124359	29.125952	29.127545	29.129138	29.130731	29.132324	29.133918	29.135511	29.137105
0.230	29.138699	29.140293	29.141887	29.143481	29.145076	29.146670	29.148265	29.149860	29.151455	29.153050
0.240	29.154646	29.156241	29.157837	29.159433	29.161029	29.162625	29.164221	29.165817	29.167414	29.169011
0.250	29.170608	29.172205	29.173802	29.175399	29.176997	29.178595	29.180192	29.181790	29.183388	29.184987
0.260	29.186585	29.188184	29.189782	29.191381	29.192980	29.194579	29.196179	29.197778	29.199378	29.200978
0.270	29.202578	29.204178	29.205778	29.207378	29.208979	29.210580	29.212181	29.213782	29.215383	29.216984
0.280	29.218585	29.220187	29.221789	29.223391	29.224993	29.226595	29.228198	29.229800	29.231403	29.233006
0.290	29.234609	29.236212	29.237815	29.239419	29.241022	29.242626	29.244230	29.245834	29.247438	29.249043
0.300	29.250647	29.252252	29.253857	29.255462	29.257067	29.258672	29.260278	29.261883	29.263489	29.265095
0.310	29.266701	29.268307	29.269913	29.271520	29.273127	29.274734	29.276340	29.277948	29.279555	29.281163
0.320	29.282770	29.284378	29.285986	29.287594	29.289202	29.290810	29.292419	29.294028	29.295636	29.297246
0.330	29.298855	29.300464	29.302073	29.303683	29.305293	29.306903	29.308513	29.310123	29.311733	29.313344
0.340	29.314955	29.316566	29.318177	29.319788	29.321399	29.323010	29.324622	29.326234	29.327846	29.329458
0.350	29.331070	29.332683	29.334295	29.335908	29.337521	29.339134	29.340747	29.342360	29.343974	29.345587
0.360	29.347201	29.348815	29.350429	29.352043	29.353658	29.355273	29.356887	29.358502	29.360117	29.361732
0.370	29.363348	29.364963	29.366579	29.368195	29.369811	29.371427	29.373043	29.374660	29.376276	29.377893
0.380	29.379510	29.381127	29.382744	29.384362	29.385979	29.387597	29.389215	29.390832	29.392451	29.394069
0.390	29.395687	29.397306	29.398925	29.400544	29.402163	29.403782	29.405401	29.407021	29.408641	29.410261
0.400	29.411881	29.413501	29.415121	29.416742	29.418362	29.419983	29.421604	29.423225	29.424846	29.426468
0.410	29.428090	29.429711	29.431333	29.432955	29.434577	29.436200	29.437822	29.439445	29.441068	29.442691
0.420	29.444314	29.445937	29.447561	29.449184	29.450808	29.452432	29.454056	29.455681	29.457305	29.458930
0.430	29.460594	29.462179	29.463804	29.465430	29.467055	29.468680	29.470306	29.471932	29.473558	29.475184
0.440	29.476810	29.478437	29.480063	29.481690	29.483317	29.484944	29.486572	29.488199	29.489826	29.491454
0.450	29.493082	29.494710	29.496338	29.497967	29.499595	29.501224	29.502853	29.504482	29.506111	29.507740
0.460	29.509370	29.510999	29.512629	29.514259	29.515889	29.517519	29.519150	29.520780	29.522411	29.524042
0.470	29.525673	29.527304	29.528935	29.530567	29.532199	29.533831	29.535463	29.537095	29.538727	29.540359
0.480	29.541992	29.543625	29.545258	29.546891	29.548524	29.550158	29.551791	29.553425	29.555059	29.556693
0.490	29.558327	29.559962	29.561596	29.563231	29.564866	29.566501	29.568136	29.569771	29.571407	29.573042

ATTENUATION IN DECIBELS
THETA FROM 79.500 TO 79.999 DFGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	29.574678	29.576314	29.577950	29.579587	29.581223	29.582860	29.584496	29.586133	29.587770	29.589408
0.510	29.591045	29.592683	29.594320	29.595958	29.597596	29.599235	29.600873	29.602511	29.604150	29.605789
0.520	29.607478	29.609116	29.610754	29.612392	29.614030	29.615668	29.617306	29.618944	29.620582	29.622220
0.530	29.623827	29.625465	29.627103	29.628741	29.630379	29.632017	29.633655	29.635293	29.636931	29.638569
0.540	29.640242	29.641880	29.643517	29.645155	29.646793	29.648431	29.650069	29.651707	29.653345	29.654983
0.550	29.656672	29.658310	29.659948	29.661586	29.663224	29.664862	29.666500	29.668138	29.669776	29.671414
0.560	29.673120	29.674758	29.676396	29.678034	29.679672	29.681310	29.682948	29.684586	29.686224	29.687862
0.570	29.689583	29.691221	29.692859	29.694497	29.696135	29.697773	29.699411	29.701049	29.702687	29.704325
0.580	29.706062	29.707700	29.709338	29.710976	29.712614	29.714252	29.715890	29.717528	29.719166	29.720804
0.590	29.722558	29.724196	29.725834	29.727472	29.729110	29.730748	29.732386	29.734024	29.735662	29.737300
0.600	29.739069	29.740707	29.742345	29.743983	29.745621	29.747259	29.748897	29.750535	29.752173	29.753811
0.610	29.755597	29.757235	29.758873	29.760511	29.762149	29.763787	29.765425	29.767063	29.768701	29.770339
0.620	29.772141	29.773779	29.775417	29.777055	29.778693	29.780331	29.781969	29.783607	29.785245	29.786883
0.630	29.788702	29.790340	29.791978	29.793616	29.795254	29.796892	29.798530	29.800168	29.801806	29.803444
0.640	29.805279	29.806917	29.808555	29.810193	29.811831	29.813469	29.815107	29.816745	29.818383	29.820021
0.650	29.821872	29.823510	29.825148	29.826786	29.828424	29.830062	29.831700	29.833338	29.834976	29.836614
0.660	29.838461	29.840099	29.841737	29.843375	29.845013	29.846651	29.848289	29.849927	29.851565	29.853203
0.670	29.85107	29.852708	29.854346	29.855984	29.857622	29.859260	29.860898	29.862536	29.864174	29.865812
0.680	29.871750	29.873388	29.875026	29.876664	29.878302	29.879940	29.881578	29.883216	29.884854	29.886492
0.690	29.888409	29.890047	29.891685	29.893323	29.894961	29.896599	29.898237	29.899875	29.901513	29.903151
0.700	29.905084	29.906722	29.908360	29.909998	29.911636	29.913274	29.914912	29.916550	29.918188	29.919826
0.710	29.921776	29.923414	29.925052	29.926690	29.928328	29.929966	29.931604	29.933242	29.934880	29.936518
0.720	29.938465	29.940103	29.941741	29.943379	29.945017	29.946655	29.948293	29.949931	29.951569	29.953207
0.730	29.955210	29.956848	29.958486	29.960124	29.961762	29.963400	29.965038	29.966676	29.968314	29.969952
0.740	29.971952	29.973590	29.975228	29.976866	29.978504	29.980142	29.981780	29.983418	29.985056	29.986694
0.750	29.988710	29.990348	29.991986	29.993624	29.995262	29.996900	29.998538	29.999176	29.999814	29.999452
0.760	30.005486	30.007124	30.008762	30.010400	30.012038	30.013676	30.015314	30.016952	30.018590	30.020228
0.770	30.022278	30.023916	30.025554	30.027192	30.028830	30.030468	30.032106	30.033744	30.035382	30.037020
0.780	30.039086	30.040724	30.042362	30.044000	30.045638	30.047276	30.048914	30.050552	30.052190	30.053828
0.790	30.055912	30.057550	30.059188	30.060826	30.062464	30.064102	30.065740	30.067378	30.069016	30.070654
0.800	30.072754	30.074392	30.076030	30.077668	30.079306	30.080944	30.082582	30.084220	30.085858	30.087496
0.810	30.089614	30.091252	30.092890	30.094528	30.096166	30.097804	30.099442	30.101080	30.102718	30.104356
0.820	30.106490	30.108128	30.109766	30.111404	30.113042	30.114680	30.116318	30.117956	30.119594	30.121232
0.830	30.123383	30.125021	30.126659	30.128297	30.129935	30.131573	30.133211	30.134849	30.136487	30.138125
0.840	30.140293	30.141931	30.143569	30.145207	30.146845	30.148483	30.150121	30.151759	30.153397	30.155035
0.850	30.157220	30.158858	30.160496	30.162134	30.163772	30.165410	30.167048	30.168686	30.170324	30.171962
0.860	30.174164	30.175802	30.177440	30.179078	30.180716	30.182354	30.183992	30.185630	30.187268	30.188906
0.870	30.191126	30.192764	30.194402	30.196040	30.197678	30.199316	30.200954	30.202592	30.204230	30.205868
0.880	30.206104	30.207742	30.209380	30.211018	30.212656	30.214294	30.215932	30.217570	30.219208	30.220846
0.890	30.225100	30.226738	30.228376	30.229914	30.231552	30.233190	30.234828	30.236466	30.238104	30.239742
0.900	30.242112	30.243750	30.245388	30.247026	30.248664	30.250302	30.251940	30.253578	30.255216	30.256854
0.910	30.259142	30.260780	30.262418	30.264056	30.265694	30.267332	30.268970	30.270608	30.272246	30.273884
0.920	30.276189	30.277827	30.279465	30.281103	30.282741	30.284379	30.286017	30.287655	30.289293	30.290931
0.930	30.293253	30.294891	30.296529	30.298167	30.299805	30.301443	30.303081	30.304719	30.306357	30.307995
0.940	30.310335	30.311973	30.313611	30.315249	30.316887	30.318525	30.320163	30.321801	30.323439	30.325077
0.950	30.327434	30.329072	30.330710	30.332348	30.333986	30.335624	30.337262	30.338900	30.340538	30.342176
0.960	30.344551	30.346189	30.347827	30.349465	30.351103	30.352741	30.354379	30.356017	30.357655	30.359293
0.970	30.361684	30.363322	30.364960	30.366598	30.368236	30.369874	30.371512	30.373150	30.374788	30.376426
0.980	30.378836	30.380474	30.382112	30.383750	30.385388	30.387026	30.388664	30.390302	30.391940	30.393578
0.990	30.396004	30.397642	30.399280	30.400918	30.402556	30.404194	30.405832	30.407470	30.409108	30.410746

ATTENUATION IN DECIBELS
THETA FROM 80.000 TO 80.499 DEGREES

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THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.000	30.413191	30.414910	30.416630	30.418350	30.420070	30.421790	30.423511	30.425231	30.426952	30.428673
0.010	30.430394	30.432116	30.433837	30.435559	30.437281	30.439003	30.440725	30.442448	30.444170	30.445893
0.020	30.447616	30.449339	30.451062	30.452786	30.454509	30.456233	30.457957	30.459681	30.461406	30.463130
0.030	30.464855	30.466580	30.468305	30.470030	30.471756	30.473481	30.475207	30.476933	30.478659	30.480385
0.040	30.482111	30.483838	30.485565	30.487292	30.489019	30.490746	30.492474	30.494202	30.495930	30.497658
0.050	30.499386	30.501114	30.502843	30.504572	30.506301	30.508030	30.509759	30.511488	30.513218	30.514948
0.060	30.516678	30.518408	30.520139	30.521869	30.523600	30.525331	30.527062	30.528793	30.530524	30.532256
0.070	30.533988	30.535720	30.537452	30.539184	30.540917	30.542650	30.544382	30.546115	30.547848	30.549582
0.080	30.551316	30.553049	30.554783	30.556517	30.558252	30.559986	30.561721	30.563455	30.565190	30.566926
0.090	30.568661	30.570396	30.572132	30.573868	30.575604	30.577340	30.579077	30.580813	30.582550	30.584287
0.100	30.586024	30.587762	30.589499	30.591237	30.592975	30.594713	30.596451	30.598189	30.599928	30.601666
0.110	30.603405	30.605145	30.606884	30.608623	30.610363	30.612103	30.613843	30.615583	30.617323	30.619064
0.120	30.620805	30.622545	30.624287	30.626028	30.627769	30.629511	30.631253	30.632995	30.634737	30.636479
0.130	30.638222	30.639965	30.641707	30.643450	30.645194	30.646937	30.648681	30.650424	30.652169	30.653913
0.140	30.655657	30.657402	30.659146	30.660891	30.662636	30.664381	30.666127	30.667872	30.669618	30.671364
0.150	30.673110	30.674856	30.676603	30.678350	30.680096	30.681844	30.683591	30.685338	30.687086	30.688833
0.160	30.690582	30.692330	30.694078	30.695826	30.697575	30.699324	30.701073	30.702822	30.704571	30.706321
0.170	30.708071	30.709821	30.711571	30.713321	30.715072	30.716822	30.718573	30.720324	30.722075	30.723827
0.180	30.725578	30.727330	30.729082	30.730834	30.732587	30.734339	30.736092	30.737844	30.739598	30.741351
0.190	30.743104	30.744858	30.746612	30.748365	30.750119	30.751874	30.753628	30.755383	30.757138	30.758893
0.200	30.760648	30.762403	30.764159	30.765915	30.767671	30.769427	30.771183	30.772940	30.774696	30.776453
0.210	30.778210	30.779968	30.781725	30.783483	30.785240	30.786998	30.788757	30.790515	30.792273	30.794032
0.220	30.795791	30.797550	30.799309	30.801069	30.802828	30.804588	30.806348	30.808108	30.809869	30.811629
0.230	30.813390	30.815151	30.816912	30.818673	30.820435	30.822196	30.823958	30.825720	30.827482	30.829245
0.240	30.831007	30.832770	30.834533	30.836296	30.838059	30.839823	30.841586	30.843350	30.845114	30.846878
0.250	30.848643	30.850407	30.852172	30.853937	30.855702	30.857467	30.859233	30.860999	30.862765	30.864531
0.260	30.866297	30.868063	30.869830	30.871597	30.873364	30.875131	30.876898	30.878666	30.880434	30.882201
0.270	30.883970	30.885738	30.887506	30.889275	30.891044	30.892813	30.894582	30.896351	30.898121	30.899891
0.280	30.901661	30.903431	30.905201	30.906972	30.908744	30.910513	30.912284	30.914055	30.915827	30.917598
0.290	30.919370	30.921142	30.922915	30.924687	30.926459	30.928232	30.930005	30.931778	30.933552	30.935325
0.300	30.937099	30.938873	30.940647	30.942421	30.944195	30.945970	30.947745	30.949520	30.951295	30.953070
0.310	30.954846	30.956621	30.958397	30.960173	30.961950	30.963726	30.965503	30.967280	30.969057	30.970834
0.320	30.972611	30.974389	30.976166	30.977945	30.979723	30.981501	30.983279	30.985058	30.986837	30.988616
0.330	30.990396	30.992175	30.993955	30.995734	30.997514	30.999295	31.001075	31.002856	31.004637	31.006418
0.340	31.008199	31.009980	31.011761	31.013543	31.015325	31.017107	31.018889	31.020672	31.022455	31.024238
0.350	31.026021	31.027804	31.029587	31.031371	31.033154	31.034939	31.036723	31.038507	31.040292	31.042076
0.360	31.043861	31.045646	31.047432	31.049217	31.051003	31.052789	31.054575	31.056361	31.058147	31.059934
0.370	31.061721	31.063508	31.065295	31.067082	31.068870	31.070658	31.072446	31.074234	31.076022	31.077811
0.380	31.079599	31.081388	31.083177	31.084967	31.086756	31.088546	31.090336	31.092126	31.093916	31.095706
0.390	31.097497	31.099288	31.101079	31.102871	31.104661	31.106455	31.108244	31.110036	31.111829	31.113621
0.400	31.115413	31.117206	31.118999	31.120792	31.122585	31.124379	31.126172	31.127966	31.129760	31.131554
0.410	31.133349	31.135143	31.136938	31.138733	31.140528	31.142324	31.144119	31.145915	31.147711	31.149507
0.420	31.151303	31.153100	31.154896	31.156693	31.158490	31.160288	31.162085	31.163883	31.165681	31.167479
0.430	31.169277	31.171075	31.172874	31.174673	31.176472	31.178271	31.180070	31.181870	31.183670	31.185470
0.440	31.187270	31.189070	31.190871	31.192671	31.194472	31.196273	31.198075	31.199876	31.201678	31.203480
0.450	31.205282	31.207084	31.208886	31.210689	31.212492	31.214295	31.216098	31.217901	31.219705	31.221509
0.460	31.223313	31.225117	31.226921	31.228726	31.230531	31.232336	31.234141	31.235946	31.237752	31.239558
0.470	31.241363	31.243170	31.244976	31.246782	31.248589	31.250396	31.252203	31.254010	31.255818	31.257625
0.480	31.259433	31.261241	31.263049	31.264858	31.266666	31.268475	31.270284	31.272094	31.273903	31.275712
0.490	31.277522	31.279332	31.281142	31.282953	31.284763	31.286574	31.288385	31.290196	31.292007	31.293819

ATTENUATION IN DECIBELS
THETA FROM 80.500 TO 80.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	31.295631	31.297443	31.299255	31.301067	31.302880	31.304692	31.306505	31.308318	31.310132	31.311945
0.510	31.313759	31.315573	31.317387	31.319201	31.321015	31.322830	31.324645	31.326460	31.328275	31.330091
0.520	31.331906	31.333722	31.335538	31.337354	31.339170	31.340987	31.342804	31.344621	31.346438	31.348255
0.530	31.350073	31.351891	31.353709	31.355527	31.357345	31.359164	31.360982	31.362801	31.364620	31.366440
0.540	31.368259	31.370079	31.371899	31.373719	31.375540	31.377360	31.379181	31.381001	31.382823	31.384644
0.550	31.386465	31.388287	31.390109	31.391931	31.393753	31.395576	31.397398	31.399221	31.401044	31.402868
0.560	31.404691	31.406515	31.408339	31.410163	31.411987	31.413811	31.415636	31.417461	31.419286	31.421111
0.570	31.422936	31.424762	31.426588	31.428414	31.430240	31.432066	31.433893	31.435720	31.437547	31.439374
0.580	31.441201	31.443029	31.444857	31.446685	31.448513	31.450341	31.452170	31.453999	31.455828	31.457657
0.590	31.459486	31.461316	31.463145	31.464976	31.466806	31.468636	31.470467	31.472297	31.474128	31.475960
0.600	31.477791	31.479622	31.481454	31.483286	31.485118	31.486951	31.488783	31.490616	31.492449	31.494282
0.610	31.496115	31.497949	31.499783	31.501616	31.503451	31.505285	31.507119	31.508954	31.510789	31.512624
0.620	31.514460	31.516295	31.518131	31.519967	31.521803	31.523639	31.525476	31.527313	31.529149	31.530987
0.630	31.532824	31.534661	31.536499	31.538337	31.540175	31.542013	31.543852	31.545691	31.547530	31.549369
0.640	31.551208	31.553048	31.554887	31.556727	31.558567	31.560408	31.562248	31.564089	31.565930	31.567771
0.650	31.569612	31.571454	31.573296	31.575137	31.576980	31.578822	31.580664	31.582507	31.584350	31.586193
0.660	31.588037	31.589880	31.591724	31.593568	31.595412	31.597256	31.599100	31.600945	31.602790	31.604635
0.670	31.606481	31.608326	31.610172	31.612018	31.613864	31.615710	31.617557	31.619404	31.621251	31.623098
0.680	31.624945	31.626793	31.628641	31.630489	31.632337	31.634185	31.636034	31.637882	31.639731	31.641581
0.690	31.643430	31.645280	31.647129	31.648979	31.650830	31.652680	31.654531	31.656381	31.658232	31.660084
0.700	31.661935	31.663786	31.665638	31.667490	31.669343	31.671195	31.673048	31.674900	31.676753	31.678607
0.710	31.680460	31.682314	31.684167	31.686022	31.687876	31.689730	31.691585	31.693440	31.695295	31.697150
0.720	31.699005	31.700861	31.702717	31.704573	31.706429	31.708286	31.710142	31.711999	31.713856	31.715714
0.730	31.717571	31.719429	31.721287	31.723145	31.725003	31.726862	31.728720	31.730579	31.732439	31.734298
0.740	31.736157	31.738017	31.739877	31.741737	31.743598	31.745458	31.747319	31.749180	31.751041	31.752903
0.750	31.754764	31.756626	31.758488	31.760350	31.762213	31.764075	31.765938	31.767801	31.769664	31.771528
0.760	31.773391	31.775255	31.777119	31.778983	31.780848	31.782712	31.784577	31.786442	31.788308	31.790173
0.770	31.792039	31.793905	31.795771	31.797637	31.799504	31.801370	31.803237	31.805104	31.806972	31.808839
0.780	31.810707	31.812575	31.814443	31.816311	31.818180	31.820049	31.821918	31.823787	31.825656	31.827526
0.790	31.829396	31.831266	31.833136	31.835006	31.836877	31.838748	31.840619	31.842490	31.844362	31.846233
0.800	31.848105	31.849977	31.851850	31.853722	31.855595	31.857468	31.859341	31.861214	31.863088	31.864961
0.810	31.866835	31.868710	31.870584	31.872458	31.874333	31.876208	31.878083	31.879959	31.881835	31.883710
0.820	31.885586	31.887463	31.889339	31.891216	31.893093	31.894969	31.896847	31.898724	31.900602	31.902480
0.830	31.904358	31.906236	31.908115	31.909994	31.911873	31.913752	31.915631	31.917511	31.919390	31.921270
0.840	31.923151	31.925031	31.926912	31.928792	31.930673	31.932555	31.934436	31.936318	31.938200	31.940082
0.850	31.941964	31.943846	31.945729	31.947612	31.949495	31.951379	31.953262	31.955146	31.957030	31.958914
0.860	31.960798	31.962683	31.964568	31.966453	31.968338	31.970223	31.972109	31.973995	31.975881	31.977767
0.870	31.979654	31.981540	31.983427	31.985314	31.987202	31.989089	31.990977	31.992865	31.994753	31.996641
0.880	31.998530	32.000419	32.002308	32.004197	32.006086	32.007976	32.009866	32.011756	32.013646	32.015537
0.890	32.017427	32.019318	32.021209	32.023101	32.024992	32.026884	32.028776	32.030668	32.032560	32.034453
0.900	32.036346	32.038239	32.040132	32.042026	32.043919	32.045813	32.047707	32.049602	32.051496	32.053391
0.910	32.055285	32.057180	32.059076	32.060971	32.062867	32.064763	32.066659	32.068556	32.070453	32.072349
0.920	32.074246	32.076144	32.078041	32.079939	32.081837	32.083735	32.085633	32.087532	32.089430	32.091329
0.930	32.093228	32.095128	32.097027	32.098927	32.100827	32.102727	32.104628	32.106529	32.108429	32.110331
0.940	32.112232	32.114133	32.116035	32.117937	32.119839	32.121742	32.123644	32.125547	32.127450	32.129353
0.950	32.131257	32.133160	32.135064	32.136968	32.138873	32.140777	32.142682	32.144587	32.146492	32.148397
0.960	32.150303	32.152208	32.154115	32.156021	32.157927	32.159834	32.161741	32.163648	32.165555	32.167463
0.970	32.169370	32.171278	32.173186	32.175095	32.177003	32.178912	32.180821	32.182730	32.184640	32.186550
0.980	32.188459	32.190370	32.192280	32.194191	32.196101	32.198012	32.199923	32.201835	32.203746	32.205658
0.990	32.207570	32.209482	32.211395	32.213307	32.215220	32.217134	32.219047	32.220960	32.222874	32.224788

ATTENUATION IN DECIBELS
THETA FROM 81.000 TO 81.499 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.000	32.226702	32.228617	32.230531	32.232446	32.234361	32.236276	32.238192	32.240108	32.242023	32.243939
0.010	32.245856	32.247773	32.249689	32.251606	32.253523	32.255441	32.257359	32.259276	32.261195	32.263113
0.020	32.265031	32.266950	32.268869	32.270788	32.272707	32.274627	32.276547	32.278467	32.280387	32.282308
0.030	32.284228	32.286150	32.288071	32.289992	32.291914	32.293835	32.295757	32.297679	32.299602	32.301525
0.040	32.303447	32.305370	32.307294	32.309217	32.311141	32.313065	32.314989	32.316914	32.318838	32.320763
0.050	32.322688	32.324614	32.326539	32.328465	32.330390	32.332317	32.334243	32.336170	32.338097	32.340024
0.060	32.341951	32.343878	32.345806	32.347734	32.349662	32.351590	32.353519	32.355448	32.357377	32.359306
0.070	32.361235	32.363165	32.365095	32.367025	32.368955	32.370886	32.372817	32.374748	32.376679	32.378610
0.080	32.380542	32.382474	32.384406	32.386338	32.388271	32.390203	32.392136	32.394070	32.396003	32.397936
0.090	32.399870	32.401804	32.403738	32.405673	32.407608	32.409543	32.411478	32.413414	32.415349	32.417285
0.100	32.419221	32.421157	32.423094	32.425030	32.426967	32.428905	32.430842	32.432779	32.434717	32.436656
0.110	32.438593	32.440532	32.442471	32.444410	32.446349	32.448288	32.450228	32.452168	32.454108	32.456048
0.120	32.457988	32.459929	32.461870	32.463811	32.465753	32.467694	32.469636	32.471578	32.473520	32.475463
0.130	32.477406	32.479348	32.481292	32.483235	32.485178	32.487123	32.489067	32.491011	32.492955	32.494900
0.140	32.496845	32.498790	32.500735	32.502681	32.504627	32.506573	32.508519	32.510466	32.512412	32.514359
0.150	32.516306	32.518254	32.520201	32.522149	32.524097	32.526046	32.527994	32.529943	32.531892	32.533841
0.160	32.535790	32.537740	32.539690	32.541640	32.543590	32.545541	32.547492	32.549442	32.551394	32.553345
0.170	32.555297	32.557249	32.559201	32.561153	32.563106	32.565058	32.567011	32.568964	32.570918	32.572872
0.180	32.574826	32.576780	32.578734	32.580688	32.582644	32.584599	32.586554	32.588509	32.590465	32.592421
0.190	32.594377	32.596333	32.598290	32.600247	32.602204	32.604161	32.606119	32.608076	32.610034	32.611992
0.200	32.613951	32.615910	32.617868	32.619827	32.621787	32.623746	32.625706	32.627666	32.629626	32.631587
0.210	32.633547	32.635508	32.637469	32.639431	32.641392	32.643354	32.645316	32.647278	32.649241	32.651204
0.220	32.653166	32.655129	32.657093	32.659057	32.661020	32.662984	32.664949	32.666914	32.668878	32.670843
0.230	32.672808	32.674774	32.676739	32.678705	32.680671	32.682638	32.684604	32.686571	32.688538	32.690506
0.240	32.692473	32.694441	32.696409	32.698377	32.700345	32.702314	32.704282	32.706252	32.708221	32.710191
0.250	32.712161	32.714130	32.716101	32.718071	32.720042	32.722013	32.723984	32.725955	32.727927	32.729898
0.260	32.731871	32.733843	32.735816	32.737788	32.739761	32.741735	32.743708	32.745682	32.747655	32.749629
0.270	32.751604	32.753579	32.755553	32.757528	32.759504	32.761479	32.763455	32.765431	32.767407	32.769383
0.280	32.771360	32.773337	32.775314	32.777291	32.779269	32.781247	32.783225	32.785203	32.787182	32.789160
0.290	32.791140	32.793118	32.795098	32.797078	32.799057	32.801038	32.803018	32.804998	32.806979	32.808960
0.300	32.810942	32.812923	32.814905	32.816887	32.818869	32.820851	32.822834	32.824817	32.826800	32.828784
0.310	32.830767	32.832751	32.834735	32.836720	32.838704	32.840689	32.842674	32.844659	32.846644	32.848630
0.320	32.850616	32.852602	32.854589	32.856575	32.858562	32.860549	32.862536	32.864523	32.866511	32.868499
0.330	32.870488	32.872476	32.874465	32.876454	32.878443	32.880432	32.882422	32.884412	32.886402	32.888392
0.340	32.890383	32.892374	32.894365	32.896356	32.898347	32.900339	32.902331	32.904323	32.906316	32.908309
0.350	32.910301	32.912294	32.914288	32.916281	32.918275	32.920269	32.922264	32.924258	32.926253	32.928248
0.360	32.930243	32.932239	32.934234	32.936230	32.938226	32.940223	32.942220	32.944216	32.946214	32.948211
0.370	32.950209	32.952206	32.954205	32.956203	32.958201	32.960200	32.962199	32.964198	32.966197	32.968197
0.380	32.970197	32.972198	32.974198	32.976199	32.978199	32.980200	32.982202	32.984203	32.986205	32.988207
0.390	32.990210	32.992212	32.994215	32.996218	32.998221	33.000225	33.002228	33.004232	33.006237	33.008241
0.400	33.010246	33.012250	33.014256	33.016261	33.018267	33.020273	33.022279	33.024285	33.026291	33.028298
0.410	33.030305	33.032312	33.034320	33.036328	33.038336	33.040344	33.042353	33.044361	33.046370	33.048379
0.420	33.050389	33.052398	33.054408	33.056418	33.058429	33.060439	33.062450	33.064461	33.066473	33.068484
0.430	33.070496	33.072508	33.074520	33.076533	33.078546	33.080558	33.082572	33.084585	33.086599	33.088613
0.440	33.090627	33.092641	33.094656	33.096671	33.098686	33.100701	33.102717	33.104733	33.106749	33.108765
0.450	33.110782	33.112799	33.114816	33.116833	33.118850	33.120868	33.122886	33.124904	33.126923	33.128942
0.460	33.130960	33.132980	33.134999	33.137019	33.139039	33.141059	33.143079	33.145100	33.147121	33.149142
0.470	33.151163	33.153185	33.155207	33.157229	33.159251	33.161274	33.163297	33.165319	33.167343	33.169366
0.480	33.171390	33.173414	33.175438	33.177463	33.179488	33.181513	33.183538	33.185564	33.187589	33.189615
0.490	33.191641	33.193667	33.195694	33.197721	33.199749	33.201776	33.203804	33.205831	33.207860	33.209888

ATTENUATION IN DECIBELS
THETA FROM 81.500 TO 91.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	33.211916	33.213945	33.215974	33.218004	33.220033	33.222063	33.224093	33.226123	33.228154	33.230185
0.510	33.232216	33.234247	33.236279	33.238310	33.240342	33.242374	33.244407	33.246439	33.248473	33.250506
0.520	33.252539	33.254573	33.256607	33.258641	33.260675	33.262710	33.264745	33.266780	33.268816	33.270851
0.530	33.272887	33.274923	33.276960	33.278996	33.281033	33.283071	33.285108	33.287145	33.289183	33.291221
0.540	33.293260	33.295298	33.297337	33.299376	33.301415	33.303455	33.305495	33.307535	33.309575	33.311615
0.550	33.313656	33.315698	33.317739	33.319780	33.321822	33.323864	33.325906	33.327949	33.329991	33.332035
0.560	33.334078	33.336121	33.338165	33.340209	33.342253	33.344297	33.346342	33.348387	33.350432	33.352478
0.570	33.354524	33.356570	33.358616	33.360662	33.362709	33.364756	33.366803	33.368850	33.370898	33.372946
0.580	33.374994	33.377042	33.379091	33.381140	33.383189	33.385239	33.387288	33.389338	33.391388	33.393439
0.590	33.395489	33.397540	33.399591	33.401643	33.403694	33.405746	33.407798	33.409851	33.411903	33.413956
0.600	33.416009	33.418063	33.420116	33.422170	33.424224	33.426279	33.428333	33.430388	33.432443	33.434498
0.610	33.436554	33.438610	33.440666	33.442722	33.444779	33.446836	33.448893	33.450950	33.453008	33.455065
0.620	33.457123	33.459182	33.461240	33.463299	33.465358	33.467418	33.469477	33.471537	33.473597	33.475657
0.630	33.477718	33.479779	33.481840	33.483901	33.485963	33.488025	33.490087	33.492149	33.494212	33.496274
0.640	33.493337	33.500401	33.502464	33.504528	33.506592	33.508657	33.510721	33.512786	33.514851	33.516916
0.650	33.518982	33.521048	33.523114	33.525180	33.527247	33.529314	33.531381	33.533448	33.535516	33.537583
0.660	33.539651	33.541720	33.543788	33.545857	33.547926	33.549996	33.552065	33.554135	33.556205	33.558276
0.670	33.560346	33.562417	33.564488	33.566560	33.568631	33.570703	33.572775	33.574848	33.576920	33.578993
0.680	33.581066	33.583139	33.585213	33.587287	33.589361	33.591435	33.593510	33.595585	33.597661	33.599736
0.690	33.601811	33.603888	33.605964	33.608040	33.610116	33.612194	33.614271	33.616348	33.618426	33.620504
0.700	33.622582	33.624660	33.626739	33.628818	33.630898	33.632977	33.635056	33.637136	33.639217	33.641297
0.710	33.643378	33.645459	33.647540	33.649621	33.651703	33.653785	33.655868	33.657950	33.660033	33.662116
0.720	33.664199	33.666283	33.668367	33.670451	33.672535	33.674620	33.676704	33.678790	33.680875	33.682961
0.730	33.685046	33.687132	33.689219	33.691305	33.693392	33.695479	33.697567	33.699654	33.701742	33.703830
0.740	33.705919	33.708007	33.710096	33.712185	33.714275	33.716365	33.718454	33.720545	33.722635	33.724726
0.750	33.726817	33.728908	33.730999	33.733091	33.735183	33.737276	33.739368	33.741461	33.743554	33.745647
0.760	33.747741	33.749835	33.751929	33.754023	33.756117	33.758212	33.760307	33.762403	33.764498	33.766594
0.770	33.768690	33.770787	33.772883	33.774980	33.777077	33.779175	33.781272	33.783370	33.785469	33.787567
0.780	33.789666	33.791765	33.793864	33.795963	33.798063	33.800163	33.802263	33.804364	33.806465	33.808566
0.790	33.810667	33.812768	33.814870	33.816973	33.819075	33.821177	33.823280	33.825384	33.827487	33.829590
0.800	33.831674	33.833798	33.835903	33.838007	33.840113	33.842218	33.844323	33.846429	33.848535	33.850641
0.810	33.852747	33.854855	33.856961	33.859069	33.861176	33.863284	33.865392	33.867500	33.869609	33.871718
0.820	33.873827	33.875937	33.878046	33.880156	33.882266	33.884377	33.886487	33.888598	33.890709	33.892821
0.830	33.894932	33.897045	33.899157	33.901269	33.903382	33.905495	33.907609	33.909722	33.911836	33.913950
0.840	33.916064	33.918179	33.920294	33.922409	33.924524	33.926640	33.928756	33.930872	33.932989	33.935105
0.850	33.937222	33.939339	33.941457	33.943574	33.945693	33.947811	33.949930	33.952048	33.954167	33.956287
0.860	33.958406	33.960526	33.962646	33.964767	33.966887	33.969008	33.971129	33.973251	33.975373	33.977495
0.870	33.979617	33.981740	33.983862	33.985985	33.988109	33.990232	33.992356	33.994480	33.996604	33.998729
0.880	34.000854	34.002979	34.005105	34.007231	34.009356	34.011483	34.013609	34.015736	34.017863	34.019990
0.890	34.022118	34.024246	34.026374	34.028502	34.030631	34.032760	34.034889	34.037018	34.039148	34.041278
0.900	34.043408	34.045538	34.047669	34.049800	34.051932	34.054063	34.056195	34.058327	34.060460	34.062592
0.910	34.064725	34.066858	34.068992	34.071126	34.073259	34.075394	34.077528	34.079663	34.081798	34.083933
0.920	34.086069	34.088204	34.090341	34.092477	34.094614	34.096751	34.098888	34.101025	34.103163	34.105301
0.930	34.107439	34.109578	34.111716	34.113855	34.115995	34.118134	34.120274	34.122415	34.124555	34.126696
0.940	34.128836	34.130978	34.133119	34.135261	34.137403	34.139545	34.141688	34.143831	34.145974	34.148117
0.950	34.150260	34.152404	34.154549	34.156693	34.158838	34.160983	34.163128	34.165274	34.167419	34.169565
0.960	34.171712	34.173858	34.176005	34.178153	34.180300	34.182447	34.184596	34.186744	34.188892	34.191041
0.970	34.193190	34.195339	34.197489	34.199639	34.201789	34.203939	34.206090	34.208241	34.210392	34.212543
0.980	34.214695	34.216847	34.219000	34.221152	34.223305	34.225458	34.227612	34.229765	34.231919	34.234073
0.990	34.236228	34.238382	34.240538	34.242693	34.244848	34.247005	34.249160	34.251317	34.253473	34.255630

ATTENUATION IN DECIBELS
 THETA FROM 82.000 TO 82.499 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.000	34.257788	34.259945	34.262103	34.264261	34.266419	34.268578	34.270737	34.272896	34.275055	34.277215
0.010	34.279375	34.281535	34.283695	34.285856	34.288017	34.290178	34.292340	34.294502	34.296664	34.298827
0.020	34.300989	34.303152	34.305315	34.307479	34.309643	34.311807	34.313971	34.316136	34.318301	34.320466
0.030	34.322631	34.324797	34.326963	34.329129	34.331295	34.333462	34.335629	34.337797	34.339964	34.342133
0.040	34.344301	34.346469	34.348638	34.350807	34.352976	34.355145	34.357316	34.359486	34.361656	34.363827
0.050	34.365998	34.368169	34.370340	34.372512	34.374684	34.376856	34.379029	34.381202	34.383375	34.385549
0.060	34.387722	34.389896	34.392071	34.394245	34.396420	34.398595	34.400769	34.402946	34.405122	34.407299
0.070	34.409475	34.411652	34.413829	34.416006	34.418184	34.420362	34.422540	34.424718	34.426897	34.429076
0.080	34.431255	34.433434	34.435615	34.437795	34.439975	34.442156	34.444336	34.446518	34.448699	34.450881
0.090	34.453063	34.455245	34.457428	34.459611	34.461794	34.463978	34.466162	34.468346	34.470530	34.472714
0.100	34.474899	34.477085	34.479270	34.481456	34.483642	34.485828	34.488014	34.490201	34.492388	34.494576
0.110	34.496763	34.498951	34.501140	34.503328	34.505517	34.507706	34.509895	34.512085	34.514275	34.516465
0.120	34.518656	34.520846	34.523037	34.525229	34.527421	34.529612	34.531805	34.533997	34.536190	34.538383
0.130	34.540576	34.542769	34.544963	34.547157	34.549352	34.551547	34.553741	34.555937	34.558133	34.560328
0.140	34.562524	34.564721	34.566917	34.569115	34.571312	34.573509	34.575707	34.577905	34.580104	34.582302
0.150	34.584501	34.586700	34.588900	34.591100	34.593300	34.595500	34.597701	34.599902	34.602103	34.604305
0.160	34.606506	34.608708	34.610911	34.613113	34.615316	34.617520	34.619723	34.621927	34.624131	34.626336
0.170	34.628540	34.630745	34.632950	34.635156	34.637362	34.639568	34.641774	34.643981	34.646188	34.648395
0.180	34.650602	34.652810	34.655018	34.657227	34.659435	34.661644	34.663853	34.666063	34.668272	34.670483
0.190	34.672693	34.674904	34.677114	34.679326	34.681537	34.683749	34.685961	34.688174	34.690386	34.692599
0.200	34.694812	34.697026	34.699240	34.701454	34.703668	34.705883	34.708098	34.710313	34.712529	34.714745
0.210	34.716960	34.719177	34.721394	34.723611	34.725828	34.728045	34.730263	34.732481	34.734700	34.736918
0.220	34.739138	34.741357	34.743577	34.745796	34.748016	34.750237	34.752458	34.754679	34.756900	34.759121
0.230	34.761343	34.763566	34.765788	34.768011	34.770234	34.772457	34.774681	34.776905	34.779129	34.781353
0.240	34.783578	34.785803	34.788029	34.790254	34.792480	34.794706	34.796933	34.799160	34.801387	34.803614
0.250	34.805842	34.808070	34.810298	34.812527	34.814755	34.816985	34.819214	34.821444	34.823674	34.825904
0.260	34.828135	34.830366	34.832597	34.834828	34.837060	34.839292	34.841525	34.843757	34.845990	34.848223
0.270	34.850457	34.852691	34.854925	34.857159	34.859394	34.861629	34.863864	34.866100	34.868336	34.870572
0.280	34.872808	34.875045	34.877282	34.879519	34.881757	34.883995	34.886233	34.888472	34.890710	34.892950
0.290	34.895189	34.897429	34.899669	34.901909	34.904149	34.906390	34.908631	34.910873	34.913115	34.915357
0.300	34.917599	34.919841	34.922084	34.924327	34.926571	34.928815	34.931059	34.933303	34.935548	34.937793
0.310	34.940038	34.942284	34.944530	34.946776	34.949022	34.951269	34.953516	34.955764	34.958011	34.960259
0.320	34.962507	34.964756	34.967005	34.969254	34.971503	34.973753	34.976003	34.978253	34.980504	34.982755
0.330	34.985006	34.987257	34.989510	34.991762	34.994014	34.996267	34.998519	35.000773	35.003026	35.005280
0.340	35.007535	35.009789	35.012044	35.014299	35.016554	35.018810	35.021066	35.023322	35.025578	35.027835
0.350	35.030093	35.032350	35.034608	35.036866	35.039124	35.041383	35.043642	35.045901	35.048161	35.050421
0.360	35.052681	35.054941	35.057202	35.059463	35.061724	35.063986	35.066248	35.068510	35.070773	35.073036
0.370	35.075299	35.077562	35.079826	35.082090	35.084354	35.086618	35.088884	35.091149	35.093415	35.095681
0.380	35.097947	35.100213	35.102480	35.104747	35.107014	35.109282	35.111550	35.113818	35.116087	35.118356
0.390	35.120625	35.122894	35.125164	35.127434	35.129704	35.131975	35.134246	35.136518	35.138789	35.141061
0.400	35.143333	35.145606	35.147879	35.150152	35.152425	35.154699	35.156972	35.159247	35.161521	35.163796
0.410	35.166072	35.168347	35.170623	35.172899	35.175176	35.177452	35.179729	35.182007	35.184284	35.186562
0.420	35.188840	35.191119	35.193398	35.195677	35.197957	35.200236	35.202517	35.204797	35.207078	35.209359
0.430	35.211640	35.213922	35.216203	35.218485	35.220768	35.223053	35.225334	35.227617	35.229901	35.232185
0.440	35.234469	35.236754	35.239039	35.241324	35.243610	35.245896	35.248182	35.250469	35.252756	35.255043
0.450	35.257330	35.259618	35.261906	35.264194	35.266483	35.268772	35.271061	35.273350	35.275640	35.277930
0.460	35.280221	35.282512	35.284803	35.287094	35.289386	35.291678	35.293970	35.296263	35.298556	35.300849
0.470	35.303143	35.305437	35.307731	35.310025	35.312320	35.314615	35.316910	35.319206	35.321502	35.323799
0.480	35.326095	35.328392	35.330689	35.332987	35.335285	35.337583	35.339881	35.342180	35.344480	35.346779
0.490	35.349079	35.351378	35.353679	35.355979	35.358281	35.360582	35.362884	35.365185	35.367487	35.369790

ATTENUATION IN DECIBELS
THETA FROM 82.500 TO 82.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	35.372093	35.374396	35.376699	35.379004	35.381308	35.383612	35.385917	35.388222	35.390527	35.392833
0.510	35.395138	35.397445	35.399751	35.402058	35.404366	35.406673	35.408981	35.411289	35.413597	35.415906
0.520	35.418215	35.420525	35.422834	35.425144	35.427454	35.429765	35.432076	35.434387	35.436699	35.439011
0.530	35.441323	35.443635	35.445948	35.448261	35.450575	35.452888	35.455203	35.457517	35.459832	35.462147
0.540	35.464462	35.466778	35.469094	35.471410	35.473727	35.476043	35.478361	35.480678	35.482996	35.485314
0.550	35.487633	35.489952	35.492270	35.494590	35.496913	35.499230	35.501550	35.503871	35.506192	35.508513
0.560	35.510835	35.513156	35.515479	35.517801	35.520124	35.522447	35.524771	35.527095	35.529419	35.531744
0.570	35.534068	35.536393	35.538719	35.541044	35.543371	35.545697	35.548024	35.550351	35.552678	35.555006
0.580	35.557333	35.559662	35.561990	35.564319	35.566648	35.568978	35.571308	35.573638	35.575968	35.578299
0.590	35.580630	35.582962	35.585294	35.587626	35.589958	35.592291	35.594624	35.596957	35.599291	35.601625
0.600	35.603959	35.606294	35.608629	35.610964	35.613299	35.615635	35.617972	35.620308	35.622645	35.624982
0.610	35.627320	35.629658	35.631996	35.634334	35.636673	35.639012	35.641352	35.643692	35.646031	35.648372
0.620	35.650712	35.653053	35.655395	35.657736	35.660079	35.662421	35.664763	35.667107	35.669450	35.671793
0.630	35.674137	35.676481	35.678826	35.681171	35.683516	35.685862	35.688208	35.690554	35.692900	35.695247
0.640	35.697594	35.699942	35.702289	35.704638	35.706986	35.709335	35.711684	35.714033	35.716383	35.718733
0.650	35.721083	35.723434	35.725785	35.728136	35.730488	35.732840	35.735192	35.737545	35.739898	35.742251
0.660	35.744605	35.746959	35.749313	35.751667	35.754022	35.756378	35.758733	35.761089	35.763445	35.765802
0.670	35.768158	35.770516	35.772873	35.775231	35.777589	35.779948	35.782307	35.784666	35.787025	35.789385
0.680	35.791745	35.794106	35.796466	35.798827	35.801188	35.803550	35.805912	35.808275	35.810637	35.813001
0.690	35.815364	35.817728	35.820092	35.822456	35.824821	35.827186	35.829551	35.831917	35.834283	35.836649
0.700	35.839015	35.841383	35.843750	35.846117	35.848485	35.850854	35.853222	35.855591	35.857961	35.860330
0.710	35.862700	35.865070	35.867441	35.869812	35.872183	35.874555	35.876926	35.879299	35.881671	35.884044
0.720	35.886417	35.888791	35.891165	35.893539	35.895914	35.898288	35.900664	35.903039	35.905415	35.907791
0.730	35.910168	35.912545	35.914922	35.917299	35.919677	35.922055	35.924434	35.926813	35.929192	35.931571
0.740	35.933951	35.936331	35.938712	35.941092	35.943474	35.945855	35.948237	35.950619	35.953001	35.955384
0.750	35.957767	35.960151	35.962535	35.964919	35.967303	35.969688	35.972073	35.974459	35.976845	35.979231
0.760	35.981617	35.984004	35.986391	35.988779	35.991166	35.993555	35.995943	35.998332	36.000721	36.003110
0.770	36.005500	36.007890	36.010281	36.012671	36.015063	36.017454	36.019846	36.022238	36.024631	36.027023
0.780	36.029417	36.031810	36.034204	36.036598	36.038992	36.041388	36.043783	36.046178	36.048574	36.050970
0.790	36.053367	36.055763	36.058160	36.060558	36.062956	36.065354	36.067752	36.070151	36.072551	36.074950
0.800	36.077350	36.079750	36.082151	36.084552	36.086953	36.089355	36.091756	36.094159	36.096561	36.098964
0.810	36.103671	36.106174	36.108679	36.111183	36.113688	36.116194	36.118700	36.121207	36.123714	36.126221
0.820	36.125418	36.127825	36.130232	36.132640	36.135048	36.137456	36.139865	36.142274	36.144683	36.147093
0.830	36.149503	36.151913	36.154324	36.156735	36.159146	36.161558	36.163970	36.166383	36.168795	36.171208
0.840	36.173672	36.176035	36.178450	36.180864	36.183279	36.185694	36.188109	36.190525	36.192941	36.195358
0.850	36.197775	36.200192	36.202610	36.205027	36.207446	36.209864	36.212283	36.214702	36.217122	36.219547
0.860	36.221962	36.224382	36.226803	36.229225	36.231646	36.234068	36.236490	36.238913	36.241336	36.243759
0.870	36.246183	36.248607	36.251031	36.253456	36.255881	36.258307	36.260732	36.263158	36.265585	36.268012
0.880	36.270439	36.272866	36.275294	36.277722	36.280150	36.282579	36.285008	36.287438	36.289868	36.292292
0.890	36.294729	36.297160	36.299591	36.302022	36.304454	36.306887	36.309319	36.311752	36.314186	36.316619
0.900	36.319053	36.321488	36.323923	36.326357	36.328793	36.331229	36.333665	36.336101	36.338538	36.340975
0.910	36.343413	36.345850	36.348289	36.350727	36.353166	36.355605	36.358045	36.360485	36.362925	36.365366
0.920	36.367836	36.370248	36.372690	36.375132	36.377574	36.380017	36.382460	36.384903	36.387347	36.389791
0.930	36.392235	36.394681	36.397125	36.399571	36.402017	36.404463	36.406909	36.409357	36.411804	36.414251
0.940	36.416699	36.419147	36.421596	36.424045	36.426495	36.428944	36.431394	36.433845	36.436296	36.438747
0.950	36.441198	36.443650	36.446102	36.448555	36.451007	36.453461	36.455914	36.458368	36.460823	36.463276
0.960	36.465732	36.468187	36.470643	36.473099	36.475555	36.478012	36.480469	36.482927	36.485384	36.487843
0.970	36.490301	36.492760	36.495219	36.497679	36.500139	36.502599	36.505060	36.507521	36.509982	36.512444
0.980	36.514905	36.517368	36.519831	36.522294	36.524757	36.527221	36.529685	36.532150	36.534615	36.537080
0.990	36.539546	36.542011	36.544478	36.546944	36.549411	36.551879	36.554347	36.556815	36.559283	36.561752

ATTENUATION IN DECIBELS
THETA FROM 83.000 TO 83.499 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.000	36.564221	36.566690	36.569160	36.571630	36.574101	36.576572	36.579043	36.581515	36.583987	36.586459
0.010	36.588932	36.591405	36.593878	36.596352	36.598826	36.601301	36.603776	36.606251	36.608727	36.611202
0.020	36.613679	36.616156	36.618632	36.621110	36.623588	36.626066	36.628544	36.631023	36.633502	36.635982
0.030	36.638462	36.640942	36.643422	36.645903	36.648385	36.650866	36.653348	36.655830	36.658313	36.660797
0.040	36.663280	36.665764	36.668248	36.670732	36.673217	36.675703	36.678188	36.680675	36.683161	36.685647
0.050	36.688135	36.690622	36.693110	36.695598	36.698087	36.700575	36.703064	36.705554	36.708044	36.710535
0.060	36.713025	36.715517	36.718008	36.720500	36.722992	36.725484	36.727977	36.730470	36.732964	36.735458
0.070	36.737952	36.740447	36.742942	36.745438	36.747933	36.750430	36.752926	36.755423	36.757920	36.760417
0.080	36.762916	36.765414	36.767913	36.770411	36.772911	36.775411	36.777911	36.780412	36.782913	36.785414
0.090	36.787915	36.790417	36.792920	36.795423	36.797925	36.800429	36.802933	36.805437	36.807941	36.810446
0.100	36.812952	36.815457	36.817964	36.820470	36.822977	36.825484	36.827991	36.830499	36.833007	36.835516
0.110	36.838025	36.840534	36.843044	36.845554	36.848064	36.850573	36.853086	36.855598	36.858109	36.860622
0.120	36.863134	36.865648	36.868161	36.870675	36.873189	36.875703	36.878218	36.880733	36.883249	36.885765
0.130	36.888281	36.890798	36.893315	36.895833	36.898350	36.900868	36.903387	36.905906	36.908425	36.910945
0.140	36.913465	36.915985	36.918506	36.921027	36.923549	36.926071	36.928593	36.931116	36.933639	36.936162
0.150	36.938685	36.941210	36.943734	36.946259	36.948784	36.951310	36.953836	36.956362	36.958889	36.961416
0.160	36.963943	36.966471	36.968999	36.971528	36.974057	36.976586	36.979116	36.981646	36.984177	36.986708
0.170	36.989239	36.991770	36.994302	36.996835	36.999367	37.001900	37.004434	37.006968	37.009502	37.012036
0.180	37.014572	37.017107	37.019642	37.022179	37.024715	37.027252	37.029789	37.032327	37.034864	37.037403
0.190	37.039942	37.042481	37.045020	37.047560	37.050100	37.052641	37.055182	37.057723	37.060265	37.062807
0.200	37.065350	37.067892	37.070436	37.072979	37.075523	37.078067	37.080612	37.083158	37.085703	37.088249
0.210	37.090795	37.093342	37.095889	37.098436	37.100984	37.103532	37.106081	37.108629	37.111179	37.113729
0.220	37.116276	37.118829	37.121380	37.123931	37.126482	37.129035	37.131587	37.134140	37.136693	37.139246
0.230	37.141800	37.144354	37.146909	37.149464	37.152019	37.154573	37.157131	37.159688	37.162244	37.164802
0.240	37.167359	37.169917	37.172476	37.175035	37.177594	37.180153	37.182714	37.185274	37.187834	37.190395
0.250	37.192957	37.195519	37.198081	37.200644	37.203208	37.205772	37.208334	37.210898	37.213463	37.216028
0.260	37.218593	37.221159	37.223725	37.226291	37.228858	37.231425	37.233993	37.236561	37.239130	37.241698
0.270	37.244267	37.246837	37.249407	37.251977	37.254548	37.257119	37.259690	37.262262	37.264834	37.267407
0.280	37.269980	37.272553	37.275127	37.277702	37.280276	37.282851	37.285427	37.288002	37.290578	37.293155
0.290	37.295732	37.298309	37.300887	37.303465	37.306043	37.308622	37.311201	37.313781	37.316361	37.318941
0.300	37.321522	37.324103	37.326685	37.329267	37.331849	37.334432	37.337015	37.339599	37.342182	37.344767
0.310	37.347351	37.349936	37.352522	37.355108	37.357694	37.360281	37.362867	37.365455	37.368043	37.370631
0.320	37.373219	37.375808	37.378398	37.380988	37.383578	37.386168	37.388759	37.391350	37.393942	37.396534
0.330	37.399127	37.401720	37.404313	37.406907	37.409501	37.412095	37.414690	37.417285	37.419881	37.422477
0.340	37.425073	37.427670	37.430267	37.432865	37.435463	37.438061	37.440660	37.443259	37.445859	37.448459
0.350	37.451059	37.453650	37.456261	37.458863	37.461464	37.464067	37.466670	37.469273	37.471876	37.474480
0.360	37.477085	37.479689	37.482294	37.484900	37.487506	37.490112	37.492719	37.495326	37.497933	37.500541
0.370	37.503150	37.505758	37.508367	37.510977	37.513587	37.516197	37.518807	37.521419	37.524030	37.526642
0.380	37.529254	37.531867	37.534480	37.537093	37.539707	37.542321	37.544936	37.547551	37.550166	37.552782
0.390	37.555398	37.558015	37.560632	37.563250	37.565867	37.568486	37.571104	37.573723	37.576343	37.578962
0.400	37.581583	37.584203	37.586824	37.589446	37.592068	37.594690	37.597312	37.599936	37.602559	37.605183
0.410	37.607807	37.610432	37.613057	37.615682	37.618308	37.620934	37.623561	37.626188	37.628816	37.631444
0.420	37.634072	37.636700	37.639329	37.641959	37.644589	37.647219	37.649850	37.652481	37.655112	37.657744
0.430	37.660377	37.663009	37.665642	37.668276	37.670910	37.673544	37.676179	37.678814	37.681449	37.684085
0.440	37.686722	37.689359	37.691996	37.694633	37.697271	37.699910	37.702549	37.705188	37.707827	37.710467
0.450	37.713108	37.715749	37.718390	37.721032	37.723673	37.726316	37.728959	37.731602	37.734246	37.736890
0.460	37.739534	37.742179	37.744824	37.747470	37.750116	37.752763	37.755410	37.758057	37.760705	37.763353
0.470	37.766002	37.768651	37.771300	37.773950	37.776600	37.779251	37.781901	37.784553	37.787205	37.789857
0.480	37.792510	37.795163	37.797816	37.800470	37.803124	37.805779	37.808434	37.811090	37.813746	37.816402
0.490	37.819059	37.821716	37.824374	37.827032	37.829690	37.832349	37.835009	37.837668	37.840328	37.842988

ATTENUATION IN DECIBELS
THETA FROM 93.500 TO 93.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	37.845650	37.848311	37.850973	37.853635	37.856297	37.858960	37.861624	37.864287	37.866951	37.869616
0.510	37.872281	37.874947	37.877613	37.880279	37.882946	37.885612	37.888280	37.890948	37.893616	37.896285
0.520	37.898954	37.901624	37.904294	37.906964	37.909635	37.912306	37.914978	37.917650	37.920323	37.922996
0.530	37.925669	37.928343	37.931017	37.933692	37.936367	37.939042	37.941718	37.944394	37.947071	37.949746
0.540	37.952425	37.955103	37.957782	37.960461	37.963140	37.965819	37.968499	37.971180	37.973861	37.976542
0.550	37.979224	37.981906	37.984588	37.987271	37.989954	37.992639	37.995323	37.998007	38.000692	38.003378
0.560	38.006064	38.008750	38.011437	38.014124	38.016811	38.019500	38.022188	38.024877	38.027566	38.030256
0.570	38.032946	38.035636	38.038327	38.041019	38.043711	38.046403	38.049096	38.051788	38.054482	38.057176
0.580	38.059870	38.062565	38.065260	38.067956	38.070652	38.073349	38.076045	38.078743	38.081440	38.084134
0.590	38.086837	38.089536	38.092236	38.094935	38.097636	38.100336	38.103037	38.105739	38.108441	38.111143
0.600	38.113846	38.116549	38.119253	38.121957	38.124662	38.127367	38.130072	38.132778	38.135484	38.138191
0.610	38.140898	38.143605	38.146313	38.149022	38.151731	38.154440	38.157149	38.159860	38.162570	38.165281
0.620	38.167992	38.170704	38.173416	38.176129	38.178842	38.181556	38.184269	38.186984	38.189699	38.192414
0.630	38.195130	38.197846	38.200562	38.203279	38.205997	38.208714	38.211432	38.214151	38.216870	38.219590
0.640	38.222310	38.225030	38.227751	38.230473	38.233194	38.235916	38.238639	38.241362	38.244085	38.246809
0.650	38.249533	38.252258	38.254983	38.257709	38.260435	38.263161	38.265888	38.268616	38.271343	38.274071
0.660	38.276800	38.279529	38.282259	38.284988	38.287719	38.290450	38.293181	38.295913	38.298645	38.301377
0.670	38.304110	38.306844	38.309577	38.312312	38.315046	38.317781	38.320517	38.323253	38.325990	38.328726
0.680	38.331464	38.334201	38.336940	38.339678	38.342417	38.345157	38.347897	38.350637	38.353378	38.356119
0.690	38.358861	38.361603	38.364346	38.367089	38.369832	38.372576	38.375320	38.378065	38.380810	38.383556
0.700	38.386302	38.389049	38.391796	38.394543	38.397291	38.400039	38.402788	38.405537	38.408287	38.411036
0.710	38.413787	38.416538	38.419290	38.422041	38.424794	38.427546	38.430299	38.433053	38.435807	38.438561
0.720	38.441316	38.444072	38.446827	38.449584	38.452340	38.455097	38.457855	38.460613	38.463371	38.466130
0.730	38.468890	38.471649	38.474410	38.477170	38.479931	38.482693	38.485455	38.488217	38.490980	38.493743
0.740	38.496507	38.499271	38.502036	38.504801	38.507567	38.510333	38.513099	38.515866	38.518633	38.521401
0.750	38.524169	38.526938	38.529707	38.532477	38.535247	38.538017	38.540788	38.543560	38.546331	38.549104
0.760	38.551877	38.554649	38.557423	38.560197	38.562972	38.565747	38.568522	38.571298	38.574074	38.576851
0.770	38.579628	38.582406	38.585184	38.587962	38.590741	38.593521	38.596301	38.599081	38.601861	38.604643
0.780	38.607425	38.610207	38.612989	38.615772	38.618556	38.621340	38.624124	38.626909	38.629694	38.632480
0.790	38.635266	38.638053	38.640840	38.643628	38.646416	38.649204	38.651993	38.654782	38.657572	38.660367
0.800	38.663153	38.665945	38.668736	38.671528	38.674321	38.677114	38.679907	38.682701	38.685495	38.688290
0.810	38.691085	38.693881	38.696677	38.699474	38.702271	38.705069	38.707867	38.710665	38.713464	38.716263
0.820	38.719053	38.721863	38.724664	38.727466	38.730267	38.733069	38.735872	38.738675	38.741478	38.744283
0.830	38.747087	38.749891	38.752697	38.755503	38.758309	38.761116	38.763923	38.766730	38.769538	38.772347
0.840	38.775156	38.777966	38.780775	38.783586	38.786397	38.789208	38.792019	38.794832	38.797644	38.800457
0.850	38.803271	38.806085	38.808890	38.811715	38.814530	38.817346	38.820162	38.822979	38.825797	38.828614
0.860	38.831432	38.834251	38.837070	38.839890	38.842710	38.845531	38.848351	38.851173	38.853995	38.856817
0.870	38.859640	38.862463	38.865287	38.868111	38.870936	38.873761	38.876587	38.879413	38.882239	38.885067
0.880	38.887894	38.890722	38.893550	38.896379	38.899209	38.902039	38.904869	38.907700	38.910531	38.913363
0.890	38.916194	38.919027	38.921860	38.924694	38.927528	38.930362	38.933197	38.936033	38.938869	38.941705
0.900	38.944542	38.947379	38.950217	38.953055	38.955894	38.958733	38.961573	38.964413	38.967253	38.970094
0.910	38.972936	38.975778	38.978620	38.981463	38.984307	38.987151	38.989995	38.992840	38.995685	38.998531
0.920	39.001377	39.004224	39.007071	39.009919	39.012766	39.015615	39.018464	39.021314	39.024164	39.027014
0.930	39.029865	39.032717	39.035569	39.038421	39.041274	39.044127	39.046981	39.049835	39.052690	39.055545
0.940	39.058401	39.061257	39.064114	39.066971	39.069829	39.072687	39.075545	39.078404	39.081264	39.084124
0.950	39.086984	39.089845	39.092706	39.095568	39.098431	39.101294	39.104156	39.107020	39.109885	39.112750
0.960	39.115615	39.118480	39.121346	39.124213	39.127080	39.129948	39.132816	39.135684	39.138554	39.141423
0.970	39.144293	39.147164	39.150034	39.152906	39.155778	39.158650	39.161523	39.164397	39.167271	39.170145
0.980	39.173020	39.175895	39.178771	39.181647	39.184524	39.187401	39.190279	39.193157	39.196035	39.198915
0.990	39.201794	39.204674	39.207555	39.210436	39.213317	39.216200	39.219082	39.221965	39.224848	39.227733

ATTENUATION IN DECIBELS
THETA FROM 84.000 TO 84.499 DEGREES

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THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.000	39.230617	39.233502	39.236388	39.239274	39.242160	39.245047	39.247934	39.250822	39.253710	39.256599
0.010	39.259489	39.262378	39.265268	39.268159	39.271050	39.273942	39.276834	39.279727	39.282620	39.285514
0.020	39.288408	39.291303	39.294198	39.297094	39.299990	39.302886	39.305784	39.308681	39.311579	39.314478
0.030	39.317377	39.320277	39.323176	39.326077	39.328978	39.331880	39.334782	39.337684	39.340587	39.343491
0.040	39.346395	39.349299	39.352204	39.355109	39.358015	39.360922	39.363829	39.366736	39.369644	39.372552
0.050	39.375461	39.378371	39.381280	39.384191	39.387102	39.390013	39.392925	39.395837	39.398750	39.401663
0.060	39.404577	39.407491	39.410406	39.413321	39.416237	39.419154	39.422071	39.424988	39.427906	39.430824
0.070	39.433743	39.436662	39.439581	39.442502	39.445422	39.448344	39.451265	39.454187	39.457110	39.460033
0.080	39.462957	39.465881	39.468806	39.471731	39.474657	39.477583	39.480510	39.483437	39.486365	39.489293
0.090	39.492222	39.495151	39.498081	39.501011	39.503942	39.506873	39.509805	39.512737	39.515669	39.518603
0.100	39.521536	39.524471	39.527405	39.530341	39.533276	39.536212	39.539149	39.542087	39.545024	39.547962
0.110	39.550901	39.553840	39.556780	39.559720	39.562661	39.565602	39.568544	39.571486	39.574429	39.577372
0.120	39.580316	39.583260	39.586205	39.589150	39.592096	39.595042	39.597989	39.600936	39.603884	39.606833
0.130	39.609781	39.612731	39.615680	39.618630	39.621582	39.624533	39.627485	39.630437	39.633390	39.636343
0.140	39.639297	39.642251	39.645206	39.648162	39.651118	39.654074	39.657031	39.659988	39.662946	39.665905
0.150	39.668864	39.671823	39.674783	39.677743	39.680705	39.683666	39.686628	39.689590	39.692554	39.695517
0.160	39.698481	39.701446	39.704411	39.707376	39.710342	39.713309	39.716276	39.719244	39.722212	39.725181
0.170	39.728150	39.731120	39.734090	39.737061	39.740032	39.743003	39.745976	39.748949	39.751922	39.754896
0.180	39.757870	39.760845	39.763820	39.766796	39.769773	39.772749	39.775727	39.778705	39.781683	39.784662
0.190	39.787642	39.790621	39.793602	39.796583	39.799564	39.802547	39.805529	39.808512	39.811496	39.814480
0.200	39.817464	39.820450	39.823435	39.826422	39.829408	39.832396	39.835383	39.838371	39.841360	39.844349
0.210	39.847340	39.850330	39.853321	39.856312	39.859304	39.862297	39.865289	39.868283	39.871277	39.874271
0.220	39.877266	39.880262	39.883258	39.886255	39.889252	39.892249	39.895246	39.898246	39.901246	39.904245
0.230	39.907245	39.910246	39.913248	39.916249	39.919251	39.922255	39.925258	39.928262	39.931266	39.934271
0.240	39.937277	39.940283	39.943289	39.946297	39.949304	39.952312	39.955321	39.958330	39.961340	39.964350
0.250	39.967361	39.970372	39.973384	39.976396	39.979409	39.982422	39.985436	39.988451	39.991466	39.994482
0.260	39.997498	40.000514	40.003531	40.006549	40.009567	40.012586	40.015605	40.018625	40.021645	40.024666
0.270	40.027687	40.030709	40.033731	40.036754	40.039778	40.042802	40.045826	40.048851	40.051877	40.054903
0.280	40.057930	40.060957	40.063985	40.067013	40.070042	40.073071	40.076101	40.079131	40.082162	40.085194
0.290	40.088226	40.091258	40.094291	40.097325	40.100359	40.103394	40.106429	40.109465	40.112501	40.115538
0.300	40.118575	40.121613	40.124651	40.127690	40.130730	40.133770	40.136810	40.139852	40.142893	40.145936
0.310	40.148978	40.152021	40.155065	40.158110	40.161154	40.164200	40.167246	40.170292	40.173339	40.176387
0.320	40.179435	40.182484	40.185533	40.188582	40.191633	40.194684	40.197735	40.200787	40.203839	40.206892
0.330	40.209946	40.213000	40.216054	40.219110	40.222166	40.225222	40.228279	40.231336	40.234394	40.237452
0.340	40.240511	40.243570	40.246631	40.249691	40.252752	40.255814	40.258876	40.261939	40.265002	40.268066
0.350	40.271131	40.274196	40.277261	40.280327	40.283394	40.286461	40.289528	40.292597	40.295665	40.298735
0.360	40.301805	40.304875	40.307946	40.311018	40.314090	40.317163	40.320235	40.323309	40.326384	40.329458
0.370	40.332533	40.335609	40.338686	40.341763	40.344841	40.347919	40.350997	40.354076	40.357156	40.360237
0.380	40.362317	40.366399	40.369481	40.372563	40.375647	40.378730	40.381814	40.384899	40.387984	40.391070
0.390	40.394156	40.397243	40.400331	40.403419	40.406507	40.409597	40.412686	40.415777	40.418868	40.421959
0.400	40.425051	40.428144	40.431237	40.434330	40.437424	40.440519	40.443614	40.446710	40.449807	40.452903
0.410	40.456001	40.459099	40.462198	40.465297	40.468397	40.471497	40.474598	40.477699	40.480801	40.483904
0.420	40.487007	40.490110	40.493215	40.496319	40.499425	40.502531	40.505637	40.508744	40.511852	40.514960
0.430	40.518068	40.521178	40.524288	40.527398	40.530509	40.533620	40.536733	40.539845	40.542958	40.546072
0.440	40.549186	40.552301	40.555417	40.558533	40.561649	40.564766	40.567884	40.571002	40.574121	40.577241
0.450	40.580361	40.583481	40.586602	40.589724	40.592846	40.595969	40.599092	40.602216	40.605341	40.608466
0.460	40.611592	40.614718	40.617845	40.620972	40.624100	40.627228	40.630357	40.633487	40.636617	40.639748
0.470	40.642879	40.646011	40.649144	40.652277	40.655410	40.658545	40.661679	40.664814	40.667950	40.671087
0.480	40.674224	40.677361	40.680500	40.683639	40.686778	40.689918	40.693058	40.696199	40.699341	40.702483
0.490	40.705626	40.708769	40.711913	40.715057	40.718203	40.721348	40.724494	40.727641	40.730788	40.733936

ATTENUATION IN DECIBELS
THEIA FROM 84.500 TO 84.999 DEGREES

THETA IN DEGREES	0.00°	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	40.737085	40.740234	40.743384	40.746534	40.749685	40.752836	40.755988	40.759140	40.762294	40.765448
0.510	40.768662	40.771757	40.774912	40.778068	40.781225	40.784382	40.787539	40.790698	40.793857	40.797016
0.520	40.800176	40.803337	40.806498	40.809660	40.812822	40.815985	40.819149	40.822313	40.825478	40.828643
0.530	40.831800	40.834975	40.838142	40.841310	40.844478	40.847647	40.850817	40.853986	40.857157	40.860328
0.540	40.863500	40.866672	40.869845	40.873019	40.876193	40.879367	40.882543	40.885718	40.888895	40.892071
0.550	40.895249	40.898427	40.901606	40.904786	40.907979	40.911146	40.914327	40.917509	40.920691	40.923874
0.560	40.927057	40.930241	40.933426	40.936611	40.939797	40.942983	40.946170	40.949358	40.952546	40.955735
0.570	40.958924	40.962114	40.965304	40.968496	40.971687	40.974880	40.978073	40.981266	40.984460	40.987655
0.580	40.990850	40.994046	40.997242	41.000440	41.003637	41.006835	41.010034	41.013234	41.016434	41.019634
0.590	41.022835	41.026037	41.029240	41.032443	41.035645	41.038850	41.042055	41.045260	41.048466	41.051673
0.600	41.054880	41.058088	41.061296	41.064505	41.067715	41.070925	41.074136	41.077347	41.080559	41.083772
0.610	41.086985	41.090199	41.093413	41.096628	41.099844	41.103059	41.106276	41.109494	41.112711	41.115930
0.620	41.119149	41.122369	41.125589	41.128810	41.132032	41.135254	41.138477	41.141700	41.144924	41.148149
0.630	41.151374	41.154600	41.157826	41.161053	41.164281	41.167509	41.170738	41.173967	41.177197	41.180428
0.640	41.183650	41.186891	41.190124	41.193357	41.196590	41.199824	41.203059	41.206295	41.209531	41.212768
0.650	41.216005	41.219243	41.222481	41.225720	41.228961	41.232201	41.235442	41.238683	41.241925	41.245168
0.660	41.248412	41.251656	41.254900	41.258145	41.261391	41.264638	41.267885	41.271132	41.274381	41.277630
0.670	41.280873	41.284130	41.287380	41.290632	41.293884	41.297136	41.300389	41.303643	41.306898	41.310153
0.680	41.313468	41.316665	41.319921	41.323179	41.326437	41.329696	41.332955	41.336215	41.339476	41.342737
0.690	41.345939	41.349262	41.352525	41.355788	41.359053	41.362318	41.365583	41.368849	41.372116	41.375382
0.700	41.378652	41.381920	41.385190	41.388459	41.391730	41.395001	41.398273	41.401545	41.404818	41.408092
0.710	41.411366	41.414641	41.417916	41.421193	41.424469	41.427747	41.431025	41.434303	41.437582	41.440862
0.720	41.444143	41.447424	41.450706	41.453988	41.457271	41.460555	41.463839	41.467124	41.470409	41.473695
0.730	41.476982	41.480269	41.483557	41.486846	41.490135	41.493425	41.496716	41.500007	41.503298	41.506591
0.740	41.509884	41.513177	41.516472	41.519767	41.523062	41.526358	41.529655	41.532953	41.536251	41.539549
0.750	41.542849	41.546149	41.549449	41.552751	41.556052	41.559355	41.562658	41.565962	41.569266	41.572571
0.760	41.575877	41.579183	41.582490	41.585798	41.589106	41.592414	41.595724	41.599034	41.602345	41.605656
0.770	41.608968	41.612281	41.615594	41.618908	41.622223	41.625538	41.628854	41.632170	41.635488	41.638805
0.780	41.642124	41.645442	41.648762	41.652082	41.655404	41.658725	41.662047	41.665370	41.668694	41.672018
0.790	41.675343	41.678668	41.681994	41.685321	41.688648	41.691976	41.695305	41.698634	41.701964	41.705295
0.800	41.708626	41.711958	41.715291	41.718624	41.721957	41.725292	41.728627	41.731963	41.735299	41.738636
0.810	41.741974	41.745312	41.748651	41.751991	41.755331	41.758672	41.762013	41.765356	41.768699	41.772042
0.820	41.775386	41.778731	41.782076	41.785422	41.788769	41.792117	41.795465	41.798813	41.802163	41.805513
0.830	41.808864	41.812215	41.815567	41.818919	41.822276	41.825626	41.828981	41.832336	41.835692	41.839047
0.840	41.842406	41.845766	41.849123	41.852481	41.855841	41.859202	41.862563	41.865925	41.869287	41.872650
0.850	41.876014	41.879378	41.882743	41.886109	41.889475	41.892842	41.896210	41.899579	41.902947	41.906317
0.860	41.909688	41.913058	41.916430	41.919803	41.923175	41.926549	41.929924	41.933298	41.936674	41.940050
0.870	41.943427	41.946805	41.950183	41.953562	41.956942	41.960321	41.963703	41.967084	41.970466	41.973847
0.880	41.977233	41.980617	41.984002	41.987388	41.990774	41.994161	41.997548	42.000937	42.004325	42.007715
0.890	42.011105	42.014496	42.017888	42.021280	42.024673	42.028066	42.031460	42.034855	42.038250	42.041647
0.900	42.045044	42.048441	42.051840	42.055239	42.058638	42.062038	42.065439	42.068841	42.072243	42.075646
0.910	42.079050	42.082454	42.085859	42.089264	42.092671	42.096078	42.099485	42.102894	42.106303	42.109712
0.920	42.113122	42.116534	42.119946	42.123358	42.126771	42.130185	42.133599	42.137014	42.140429	42.143846
0.930	42.147263	42.150681	42.154099	42.157518	42.160938	42.164359	42.167780	42.171202	42.174624	42.178048
0.940	42.181471	42.184896	42.188322	42.191747	42.195174	42.198601	42.202029	42.205458	42.208887	42.212317
0.950	42.215748	42.219179	42.222611	42.226044	42.229477	42.232912	42.236346	42.239782	42.243218	42.246655
0.960	42.250093	42.253531	42.256969	42.260409	42.263850	42.267291	42.270735	42.274175	42.277617	42.281061
0.970	42.284506	42.287951	42.291397	42.294843	42.298290	42.301738	42.305187	42.308636	42.312086	42.315536
0.980	42.318988	42.322440	42.325892	42.329346	42.332800	42.336255	42.339710	42.343166	42.346623	42.350080
0.990	42.353533	42.356998	42.360457	42.363918	42.367379	42.370841	42.374303	42.377766	42.381230	42.384694

ATTENUATION IN DECIBELS
 THETA FROM 85.000 TO 85.499 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.000	42.388159	42.391625	42.395092	42.398559	42.402027	42.405496	42.408965	42.412435	42.415906	42.419377
0.010	42.422850	42.426322	42.429796	42.433270	42.436745	42.440221	42.443697	42.447175	42.450652	42.454131
0.020	42.457610	42.461090	42.464570	42.468051	42.471533	42.475016	42.478499	42.481984	42.485468	42.488954
0.030	42.492440	42.495927	42.499414	42.502903	42.506392	42.509881	42.513372	42.516863	42.520355	42.523848
0.040	42.527341	42.530835	42.534330	42.537825	42.541321	42.544818	42.548316	42.551814	42.555313	42.558812
0.050	42.562313	42.565814	42.569315	42.572818	42.576321	42.579825	42.583330	42.586835	42.590341	42.593848
0.060	42.597355	42.600863	42.604373	42.607882	42.611392	42.614903	42.618415	42.621928	42.625441	42.628955
0.070	42.632470	42.635985	42.639501	42.643018	42.646535	42.650054	42.653572	42.657092	42.660612	42.664134
0.080	42.667655	42.671178	42.674701	42.678225	42.681750	42.685275	42.688801	42.692328	42.695856	42.699384
0.090	42.702913	42.706443	42.709973	42.713504	42.717036	42.720569	42.724102	42.727636	42.731171	42.734706
0.100	42.738243	42.741780	42.745317	42.748856	42.752395	42.755935	42.759476	42.763017	42.766559	42.770102
0.110	42.773645	42.777190	42.780735	42.784280	42.787827	42.791374	42.794922	42.798470	42.802020	42.805570
0.120	42.809121	42.812672	42.816225	42.819777	42.823331	42.826886	42.830441	42.833997	42.837554	42.841111
0.130	42.844669	42.848228	42.851788	42.855348	42.858909	42.862471	42.866033	42.869596	42.873160	42.876725
0.140	42.880291	42.883857	42.887424	42.890992	42.894560	42.898129	42.901699	42.905270	42.908841	42.912414
0.150	42.915987	42.919560	42.923134	42.926709	42.930285	42.933862	42.937439	42.941017	42.944596	42.948175
0.160	42.951756	42.955337	42.958919	42.962501	42.966084	42.969668	42.973253	42.976839	42.980425	42.984012
0.170	42.987600	42.991189	42.994778	42.998367	43.001958	43.005550	43.009142	43.012735	43.016329	43.019923
0.180	43.023519	43.027114	43.030711	43.034308	43.037907	43.041506	43.045105	43.048706	43.052307	43.055909
0.190	43.059512	43.063115	43.066720	43.070324	43.073930	43.077537	43.081144	43.084752	43.088361	43.091970
0.200	43.095581	43.099192	43.102803	43.106416	43.110029	43.113643	43.117258	43.120874	43.124490	43.128107
0.210	43.131725	43.135344	43.138963	43.142583	43.146204	43.149826	43.153448	43.157071	43.160695	43.164320
0.220	43.167945	43.171571	43.175199	43.178826	43.182455	43.186084	43.189714	43.193345	43.196976	43.200609
0.230	43.204242	43.207875	43.211510	43.215146	43.218781	43.222418	43.226056	43.229695	43.233334	43.236974
0.240	43.240614	43.244256	43.247899	43.251542	43.255185	43.258830	43.262477	43.266121	43.269768	43.273416
0.250	43.277064	43.280714	43.284364	43.288014	43.291666	43.295313	43.298971	43.302625	43.306280	43.309935
0.260	43.313591	43.317248	43.320906	43.324564	43.328224	43.331884	43.335545	43.339206	43.342869	43.346532
0.270	43.350196	43.353860	43.357526	43.361192	43.364860	43.368527	43.372196	43.375865	43.379536	43.383206
0.280	43.386878	43.390551	43.394224	43.397898	43.401573	43.405249	43.408925	43.412602	43.416280	43.419959
0.290	43.423639	43.427319	43.431000	43.434682	43.438365	43.442048	43.445733	43.449418	43.453104	43.456790
0.300	43.460477	43.464166	43.467855	43.471545	43.475235	43.478927	43.482619	43.486312	43.490005	43.493700
0.310	43.497396	43.501091	43.504788	43.508486	43.512185	43.515884	43.519584	43.523285	43.526987	43.530689
0.320	43.534392	43.538096	43.541801	43.545507	43.549213	43.552920	43.556629	43.560338	43.564047	43.567758
0.330	43.571469	43.575181	43.578894	43.582607	43.586321	43.590037	43.593753	43.597470	43.601187	43.604906
0.340	43.608625	43.612345	43.616066	43.619787	43.623510	43.627233	43.630957	43.634682	43.638408	43.642134
0.350	43.645861	43.649590	43.653318	43.657048	43.660779	43.664510	43.668242	43.671975	43.675708	43.679443
0.360	43.683178	43.686914	43.690651	43.694389	43.698128	43.701867	43.705607	43.709348	43.713090	43.716833
0.370	43.720576	43.724320	43.728065	43.731811	43.735558	43.739305	43.743053	43.746803	43.750553	43.754303
0.380	43.758055	43.761807	43.765561	43.769315	43.773069	43.776825	43.780581	43.784339	43.788097	43.791856
0.390	43.795616	43.799376	43.803137	43.806900	43.810663	43.814426	43.818191	43.821957	43.825723	43.829490
0.400	43.833258	43.837027	43.840796	43.844567	43.848338	43.852110	43.855883	43.859657	43.863431	43.867207
0.410	43.870983	43.874760	43.878538	43.882316	43.886096	43.889876	43.893657	43.897439	43.901222	43.905006
0.420	43.908790	43.912575	43.916362	43.920148	43.923936	43.927725	43.931514	43.935305	43.939096	43.942888
0.430	43.946681	43.950474	43.954268	43.958064	43.961860	43.965657	43.969455	43.973253	43.977053	43.980853
0.440	43.984654	43.988456	43.992259	43.996063	43.999867	44.003673	44.007479	44.011286	44.015093	44.018902
0.450	44.022712	44.026522	44.030334	44.034145	44.037958	44.041772	44.045587	44.049402	44.053218	44.057035
0.460	44.060853	44.064672	44.068492	44.072312	44.076134	44.079959	44.083779	44.087603	44.091427	44.095253
0.470	44.099079	44.102907	44.106735	44.110564	44.114393	44.118224	44.122056	44.125888	44.129721	44.133555
0.480	44.137390	44.141226	44.145062	44.148900	44.152738	44.156578	44.160418	44.164258	44.168100	44.171943
0.490	44.175786	44.179630	44.183475	44.187322	44.191169	44.195016	44.198865	44.202714	44.206564	44.210416

ATTENUATION IN DECIBELS
THETA FROM 85.500 TO 85.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	44.214268	44.218121	44.221974	44.225829	44.229684	44.233541	44.237398	44.241256	44.245115	44.248975
0.510	44.252835	44.256697	44.260559	44.264422	44.268287	44.272151	44.276017	44.279884	44.283751	44.287620
0.520	44.291489	44.295360	44.299231	44.303102	44.306975	44.310849	44.314723	44.318599	44.322475	44.326352
0.530	44.330230	44.334109	44.337988	44.341869	44.345751	44.349633	44.353516	44.357400	44.361285	44.365171
0.540	44.369058	44.372945	44.376834	44.380723	44.384614	44.388505	44.392396	44.396289	44.400183	44.404078
0.550	44.407973	44.411870	44.415767	44.419665	44.423564	44.427464	44.431365	44.435266	44.439168	44.443072
0.560	44.446976	44.450881	44.454788	44.458694	44.462602	44.466511	44.470420	44.474331	44.478242	44.482155
0.570	44.486068	44.489982	44.493897	44.497813	44.501729	44.505647	44.509565	44.513484	44.517405	44.521326
0.580	44.525248	44.529171	44.533095	44.537019	44.540945	44.544871	44.548799	44.552727	44.556656	44.560586
0.590	44.564517	44.568449	44.572382	44.576315	44.580250	44.584186	44.588122	44.592059	44.595997	44.599936
0.600	44.603876	44.607817	44.611759	44.615701	44.619645	44.623589	44.627534	44.631481	44.635428	44.639376
0.610	44.643325	44.647274	44.651225	44.655177	44.659130	44.663083	44.667037	44.670992	44.674949	44.678906
0.620	44.682864	44.686822	44.690783	44.694743	44.698705	44.702667	44.706631	44.710595	44.714561	44.718526
0.630	44.722494	44.726461	44.730431	44.734400	44.738371	44.742342	44.746315	44.750288	44.754263	44.758238
0.640	44.762214	44.766191	44.770170	44.774148	44.778128	44.782109	44.786091	44.790073	44.794057	44.798041
0.650	44.802027	44.806013	44.810000	44.813989	44.817977	44.821968	44.825958	44.829950	44.833943	44.837937
0.660	44.841931	44.845927	44.849923	44.853920	44.857919	44.861918	44.865918	44.869919	44.873921	44.877924
0.670	44.881928	44.885933	44.889938	44.893945	44.897953	44.901961	44.905971	44.909981	44.913992	44.918005
0.680	44.922013	44.926032	44.930047	44.934063	44.938080	44.942098	44.946116	44.950136	44.954156	44.958176
0.690	44.962201	44.966224	44.970249	44.974274	44.978300	44.982327	44.986355	44.990385	44.994414	44.998446
0.700	45.002477	45.006510	45.010544	45.014579	45.018614	45.022651	45.026689	45.030727	45.034766	45.038807
0.710	45.042848	45.046890	45.050933	45.054978	45.059023	45.063069	45.067116	45.071164	45.075212	45.079263
0.720	45.083313	45.087365	45.091418	45.095471	45.099526	45.103581	45.107638	45.111696	45.115754	45.119813
0.730	45.123874	45.127935	45.131997	45.136060	45.140124	45.144190	45.148256	45.152323	45.156391	45.160460
0.740	45.164529	45.168600	45.172672	45.176745	45.180819	45.184893	45.188969	45.193046	45.197123	45.201201
0.750	45.205281	45.209362	45.213443	45.217525	45.221609	45.225690	45.229778	45.233865	45.237952	45.242040
0.760	45.246129	45.250219	45.254311	45.258402	45.262496	45.266590	45.270684	45.274780	45.278877	45.282975
0.770	45.287074	45.291174	45.295275	45.299376	45.303479	45.307583	45.311687	45.315793	45.319900	45.324008
0.780	45.328116	45.332226	45.336336	45.340448	45.344560	45.348674	45.352788	45.356904	45.361020	45.365138
0.790	45.369256	45.373375	45.377496	45.381617	45.385739	45.389863	45.393987	45.398112	45.402238	45.406366
0.800	45.410494	45.414623	45.418754	45.422884	45.427017	45.431150	45.435284	45.439419	45.443555	45.447692
0.810	45.451831	45.455970	45.460110	45.464251	45.468393	45.472536	45.476680	45.480825	45.484972	45.489119
0.820	45.493267	45.497416	45.501565	45.505717	45.509869	45.514022	45.518176	45.522331	45.526487	45.530644
0.830	45.534802	45.538961	45.543121	45.547282	45.551444	45.555607	45.559771	45.563936	45.568102	45.572265
0.840	45.576437	45.580606	45.584776	45.588948	45.593120	45.597293	45.601467	45.605642	45.609818	45.613995
0.850	45.618174	45.622353	45.626533	45.630714	45.634896	45.639079	45.643263	45.647449	45.651635	45.655822
0.860	45.660010	45.664200	45.668390	45.672591	45.676774	45.680967	45.685162	45.689357	45.693553	45.697751
0.870	45.701949	45.706149	45.710349	45.714550	45.718753	45.722957	45.727161	45.731367	45.735573	45.739781
0.880	45.743989	45.748199	45.752410	45.756622	45.760835	45.765049	45.769263	45.773477	45.777696	45.781914
0.890	45.786133	45.790353	45.794574	45.798796	45.803019	45.807243	45.811468	45.815694	45.819921	45.824150
0.900	45.828379	45.832609	45.836841	45.841073	45.845306	45.849541	45.853776	45.858013	45.862250	45.866489
0.910	45.870728	45.874969	45.879211	45.883454	45.887698	45.891943	45.896188	45.900435	45.904683	45.908932
0.920	45.913182	45.917434	45.921686	45.925939	45.930193	45.934448	45.938705	45.942962	45.947221	45.951480
0.930	45.955741	45.960002	45.964265	45.968529	45.972794	45.977059	45.981326	45.985594	45.989863	45.994133
0.940	45.998404	46.002676	46.006949	46.011223	46.015499	46.019775	46.024055	46.028331	46.032610	46.036891
0.950	46.041173	46.045455	46.049739	46.054024	46.058310	46.062597	46.066885	46.071174	46.075464	46.079755
0.960	46.084048	46.088341	46.092636	46.096931	46.101228	46.105525	46.109824	46.114124	46.118424	46.122726
0.970	46.127029	46.131333	46.135639	46.139945	46.144252	46.148561	46.152870	46.157180	46.161492	46.165804
0.980	46.170118	46.174433	46.178749	46.183065	46.187384	46.191703	46.196023	46.200344	46.204667	46.208990
0.990	46.213315	46.217640	46.221967	46.226295	46.230623	46.234953	46.239284	46.243616	46.247950	46.252284

ATTENUATION IN DECIBELS
THETA FROM 86.000 TO 86.499 DEGREES

THETA IN
DEGREES

0.000	46.256619	46.260955	46.265293	46.269631	46.273971	46.278312	46.282654	46.286997	46.291341	46.295686
0.010	46.300032	46.304379	46.308728	46.313077	46.317428	46.321780	46.326133	46.330487	46.334842	46.339198
0.020	46.343555	46.347913	46.352273	46.356633	46.360995	46.365357	46.369721	46.374086	46.378452	46.382819
0.030	46.387187	46.391557	46.395927	46.400299	46.404671	46.409045	46.413420	46.417796	46.422173	46.426551
0.040	46.430930	46.435311	46.439692	46.444075	46.448459	46.452843	46.457229	46.461617	46.466004	46.470394
0.050	46.474784	46.479176	46.483568	46.487962	46.492357	46.496753	46.501150	46.505548	46.509947	46.514348
0.060	46.518750	46.523152	46.527556	46.531961	46.536367	46.540774	46.545183	46.549592	46.554002	46.558414
0.070	46.562827	46.567241	46.571656	46.576072	46.580490	46.584908	46.589327	46.593743	46.598170	46.602593
0.080	46.607017	46.611442	46.615869	46.620296	46.624725	46.629153	46.633585	46.638017	46.642450	46.646885
0.090	46.651320	46.655757	46.660194	46.664633	46.669074	46.673515	46.677957	46.682400	46.686845	46.691290
0.100	46.695737	46.700185	46.704635	46.709085	46.713536	46.717989	46.722443	46.726897	46.731353	46.735811
0.110	46.740269	46.744729	46.749189	46.753651	46.758114	46.762578	46.767043	46.771509	46.775977	46.780446
0.120	46.784915	46.789386	46.793859	46.798332	46.802806	46.807282	46.811759	46.816236	46.820716	46.825196
0.130	46.829678	46.834160	46.838644	46.843129	46.847615	46.852103	46.856590	46.861080	46.865571	46.870063
0.140	46.874556	46.879050	46.883545	46.888042	46.892540	46.897038	46.901539	46.906040	46.910542	46.915046
0.150	46.919551	46.924057	46.928564	46.933072	46.937582	46.942092	46.946604	46.951117	46.955631	46.960146
0.160	46.964663	46.969181	46.973700	46.978220	46.982741	46.987263	46.991787	46.996312	47.000838	47.005365
0.170	47.009893	47.014423	47.018954	47.023486	47.028018	47.032553	47.037088	47.041625	47.046163	47.050702
0.180	47.055243	47.059784	47.064326	47.068870	47.073415	47.077961	47.082509	47.087058	47.091607	47.096159
0.190	47.100710	47.105264	47.109818	47.114374	47.118931	47.123489	47.128049	47.132609	47.137171	47.141734
0.200	47.146298	47.150864	47.155431	47.159998	47.164567	47.169137	47.173709	47.178282	47.182856	47.187431
0.210	47.192007	47.196585	47.201163	47.205743	47.210324	47.214907	47.219490	47.224075	47.228661	47.233248
0.220	47.237837	47.242426	47.247017	47.251609	47.256203	47.260797	47.265393	47.269990	47.274588	47.279187
0.230	47.283788	47.288390	47.292993	47.297597	47.302203	47.306809	47.311418	47.316027	47.320637	47.325249
0.240	47.329862	47.334476	47.339091	47.343708	47.348326	47.352945	47.357565	47.362186	47.366809	47.371433
0.250	47.376059	47.380685	47.385313	47.389942	47.394572	47.399202	47.403836	47.408470	47.413105	47.417742
0.260	47.422379	47.427018	47.431658	47.436300	47.440942	47.445586	47.450231	47.454877	47.459525	47.464174
0.270	47.468824	47.473475	47.478128	47.482782	47.487437	47.492094	47.496751	47.501410	47.506070	47.510731
0.280	47.515394	47.520058	47.524723	47.529389	47.534057	47.538726	47.543396	47.548068	47.552741	47.557415
0.290	47.562090	47.566766	47.571444	47.576123	47.580803	47.585485	47.590168	47.594852	47.599537	47.604224
0.300	47.608912	47.613601	47.618291	47.622983	47.627676	47.632370	47.637066	47.641763	47.646461	47.651160
0.310	47.655861	47.660563	47.665266	47.669971	47.674676	47.679383	47.684092	47.688801	47.693512	47.698225
0.320	47.702938	47.707653	47.712368	47.717086	47.721805	47.726524	47.731246	47.735968	47.740692	47.745417
0.330	47.750143	47.754871	47.759600	47.764330	47.769062	47.773794	47.778528	47.783264	47.788000	47.792738
0.340	47.797478	47.802218	47.806960	47.811703	47.816448	47.821194	47.825941	47.830689	47.835439	47.840189
0.350	47.844942	47.849696	47.854451	47.859207	47.863964	47.868723	47.873483	47.878245	47.883008	47.887772
0.360	47.892537	47.897304	47.902071	47.906841	47.911612	47.916384	47.921157	47.925931	47.930707	47.935484
0.370	47.940263	47.945043	47.949824	47.954607	47.959391	47.964176	47.968962	47.973750	47.978539	47.983329
0.380	47.988122	47.992914	47.997709	48.002505	48.007302	48.012100	48.016900	48.021701	48.026504	48.031307
0.390	48.036112	48.040919	48.045726	48.050536	48.055346	48.060158	48.064971	48.069785	48.074601	48.079418
0.400	48.084237	48.089056	48.093878	48.098700	48.103524	48.108349	48.113176	48.118004	48.122833	48.127664
0.410	48.132495	48.137329	48.142163	48.146999	48.151836	48.156675	48.161515	48.166357	48.171199	48.176044
0.420	48.180889	48.185736	48.190584	48.195434	48.200284	48.205137	48.209990	48.214845	48.219702	48.224559
0.430	48.229418	48.234279	48.239141	48.244004	48.248868	48.253734	48.258601	48.263470	48.268340	48.273211
0.440	48.278084	48.282959	48.287834	48.292711	48.297589	48.302468	48.307350	48.312232	48.317116	48.322001
0.450	48.326887	48.331775	48.336664	48.341555	48.346447	48.351340	48.356232	48.361132	48.366029	48.370928
0.460	48.375828	48.380730	48.385633	48.390538	48.395443	48.400351	48.405260	48.410170	48.415081	48.419994
0.470	48.424908	48.429824	48.434741	48.439660	48.444579	48.449501	48.454423	48.459347	48.464272	48.469200
0.480	48.474128	48.479057	48.483988	48.488921	48.493855	48.498790	48.503727	48.508665	48.513604	48.518545
0.490	48.523488	48.528431	48.533377	48.538323	48.543271	48.548220	48.553171	48.558124	48.563077	48.568032

ATTENUATION IN DECIBELS
THETA FROM 86.500 TO 86.999 DEGREES

THETA IN DEGREES	C.000	C.001	C.002	C.003	C.004	C.005	C.006	C.007	C.008	C.009
0.500	48.572983	48.577947	48.582906	48.587867	48.592829	48.597792	48.602757	48.607724	48.612691	48.617661
0.510	48.622632	48.627604	48.632577	48.637552	48.642529	48.647507	48.652486	48.657467	48.662449	48.667432
0.520	48.672418	48.677404	48.682390	48.687381	48.692372	48.697364	48.702358	48.707353	48.712349	48.717348
0.530	48.722347	48.727348	48.732350	48.737354	48.742359	48.747366	48.752374	48.757383	48.762394	48.767407
0.540	48.772421	48.777436	48.782453	48.787471	48.792491	48.797512	48.802535	48.807559	48.812584	48.817612
0.550	48.822640	48.827670	48.832701	48.837734	48.842769	48.847805	48.852845	48.857881	48.862921	48.867962
0.560	48.873005	48.878050	48.883096	48.888144	48.893193	48.898243	48.903295	48.908349	48.913404	48.918460
0.570	48.923515	48.928577	48.933638	48.938700	48.943764	48.948829	48.953896	48.958964	48.964034	48.969105
0.580	48.974178	48.979252	48.984328	48.989405	48.994483	48.999564	49.004645	49.009728	49.014813	49.019899
0.590	49.024987	49.030076	49.035166	49.040258	49.045352	49.050444	49.055543	49.060642	49.065742	49.070842
0.600	49.075945	49.081049	49.086155	49.091262	49.096370	49.101480	49.106592	49.111705	49.116820	49.121936
0.610	49.127054	49.132173	49.137294	49.142416	49.147540	49.152665	49.157792	49.162920	49.168050	49.173181
0.620	49.178314	49.183448	49.188584	49.193722	49.198861	49.204001	49.209143	49.214287	49.219432	49.224578
0.630	49.229726	49.234876	49.240027	49.245180	49.250334	49.255490	49.260647	49.265806	49.270967	49.276129
0.640	49.281292	49.286457	49.291624	49.296792	49.301961	49.307133	49.312305	49.317480	49.322655	49.327833
0.650	49.333012	49.338192	49.343374	49.348558	49.353743	49.358930	49.364118	49.369308	49.374499	49.379692
0.660	49.384886	49.390082	49.395280	49.400479	49.405680	49.410882	49.416086	49.421291	49.426498	49.431707
0.670	49.436917	49.442129	49.447341	49.452557	49.457773	49.462991	49.468210	49.473432	49.478654	49.483878
0.680	49.489104	49.494331	49.499560	49.504791	49.510023	49.515257	49.520492	49.525729	49.530968	49.536208
0.690	49.541449	49.546692	49.551937	49.557184	49.562432	49.567681	49.572932	49.578185	49.583439	49.588696
0.700	49.593953	49.599212	49.604473	49.609735	49.614999	49.620265	49.625532	49.630801	49.636071	49.641343
0.710	49.646616	49.651892	49.657168	49.662447	49.667727	49.673008	49.678292	49.683577	49.688863	49.694151
0.720	49.699441	49.704732	49.710025	49.715320	49.720616	49.725914	49.731213	49.736514	49.741817	49.747121
0.730	49.752427	49.757734	49.763043	49.768354	49.773666	49.778981	49.784296	49.789613	49.794932	49.800253
0.740	49.805575	49.810899	49.816225	49.821552	49.826880	49.832211	49.837543	49.842876	49.848212	49.853549
0.750	49.858887	49.864228	49.869569	49.874913	49.880258	49.885605	49.890954	49.896304	49.901656	49.907009
0.760	49.912364	49.917721	49.923079	49.928439	49.933801	49.939165	49.944530	49.949896	49.955265	49.960635
0.770	49.966007	49.971380	49.976755	49.982131	49.987510	49.992890	49.998272	50.003655	50.009040	50.014427
0.780	50.019815	50.025206	50.030598	50.035991	50.041386	50.046783	50.052182	50.057582	50.062984	50.068387
0.790	50.073792	50.079199	50.084608	50.090018	50.095430	50.100844	50.106259	50.111677	50.117095	50.122516
0.800	50.127938	50.133362	50.138788	50.144215	50.149644	50.155075	50.160507	50.165941	50.171377	50.176815
0.810	50.182253	50.187695	50.193137	50.198582	50.204028	50.209476	50.214925	50.220376	50.225829	50.231284
0.820	50.236740	50.242198	50.247658	50.253119	50.258583	50.264046	50.269514	50.274982	50.280453	50.285924
0.830	50.291398	50.296874	50.302351	50.307829	50.313310	50.318792	50.324276	50.329762	50.335249	50.340739
0.840	50.346230	50.351722	50.357217	50.362713	50.368211	50.373711	50.379212	50.384715	50.390220	50.395727
0.850	50.401235	50.406745	50.412257	50.417771	50.423286	50.428803	50.434322	50.439843	50.445365	50.450890
0.860	50.456416	50.461944	50.467473	50.473004	50.478538	50.484072	50.489609	50.495147	50.500687	50.506229
0.870	50.511773	50.517318	50.522866	50.528415	50.533966	50.539518	50.545072	50.550628	50.556186	50.561746
0.880	50.567307	50.572871	50.578436	50.584002	50.589571	50.595142	50.600714	50.606288	50.611864	50.617441
0.890	50.623021	50.628602	50.634185	50.639770	50.645356	50.650945	50.656535	50.662127	50.667721	50.673316
0.900	50.678914	50.684513	50.690114	50.695717	50.701322	50.706928	50.712536	50.718146	50.723758	50.729372
0.910	50.734988	50.740605	50.746224	50.751845	50.757468	50.763093	50.768720	50.774348	50.779978	50.785610
0.920	50.791244	50.796879	50.802517	50.808156	50.813797	50.819440	50.825085	50.830732	50.836380	50.842031
0.930	50.847683	50.853337	50.858993	50.864651	50.870311	50.875972	50.881635	50.887300	50.892968	50.898636
0.940	50.904307	50.909980	50.915654	50.921330	50.927009	50.932689	50.938371	50.944054	50.949740	50.955427
0.950	50.961117	50.966808	50.972501	50.978196	50.983893	50.989592	50.995292	51.000995	51.006699	51.012405
0.960	51.018113	51.023823	51.029535	51.035249	51.040965	51.046682	51.052402	51.058123	51.063846	51.069571
0.970	51.075298	51.081027	51.086758	51.092490	51.098225	51.103961	51.109699	51.115440	51.121182	51.126926
0.980	51.132672	51.138420	51.144169	51.149921	51.155675	51.161430	51.167188	51.172947	51.178709	51.184472
0.990	51.190237	51.196003	51.201773	51.207543	51.213316	51.219091	51.224867	51.230646	51.236426	51.242209

ATTENUATION IN DECIBELS
THETA FROM 87.000 TO 87.499 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.000	51.247993	51.253779	51.259568	51.265358	51.271150	51.276944	51.282740	51.288538	51.294338	51.300139
0.010	51.305943	51.311749	51.317556	51.323366	51.329177	51.334991	51.340806	51.346623	51.352443	51.358264
0.020	51.364087	51.369913	51.375740	51.381569	51.387400	51.393233	51.399068	51.404905	51.410744	51.416584
0.030	51.422428	51.428272	51.434119	51.439968	51.445818	51.451671	51.457526	51.463383	51.469242	51.475102
0.040	51.480965	51.486829	51.492696	51.498564	51.504435	51.510308	51.516182	51.522058	51.527937	51.533818
0.050	51.539701	51.545585	51.551471	51.557360	51.563251	51.569143	51.575037	51.580934	51.586833	51.592733
0.060	51.598636	51.604540	51.610447	51.616355	51.622266	51.628179	51.634094	51.640010	51.645929	51.651850
0.070	51.657773	51.663697	51.669624	51.675553	51.681484	51.687417	51.693352	51.699288	51.705227	51.711168
0.080	51.717112	51.723057	51.729004	51.734953	51.740904	51.746858	51.752813	51.758770	51.764729	51.770691
0.090	51.776655	51.782620	51.788588	51.794558	51.800529	51.806503	51.812479	51.818457	51.824437	51.830419
0.100	51.836403	51.842389	51.848378	51.854368	51.860360	51.866354	51.872351	51.878350	51.884351	51.890353
0.110	51.896358	51.902365	51.908374	51.914385	51.920398	51.926414	51.932431	51.938450	51.944472	51.950496
0.120	51.956522	51.962549	51.968579	51.974611	51.980645	51.986681	51.992721	51.998760	52.004803	52.010848
0.130	52.016894	52.022943	52.028994	52.035048	52.041102	52.047160	52.053219	52.059281	52.065345	52.071411
0.140	52.077478	52.083549	52.089621	52.095695	52.101771	52.107850	52.113931	52.120014	52.126099	52.132185
0.150	52.138275	52.144366	52.150460	52.156556	52.162656	52.168756	52.174856	52.180960	52.187066	52.193175
0.160	52.199286	52.205399	52.211514	52.217631	52.223750	52.229872	52.235995	52.242121	52.248249	52.254379
0.170	52.260512	52.266646	52.272783	52.278922	52.285063	52.291206	52.297351	52.303499	52.309649	52.315801
0.180	52.321955	52.328111	52.334270	52.340431	52.346593	52.352758	52.358926	52.365095	52.371267	52.377441
0.190	52.383617	52.389795	52.395976	52.402158	52.408343	52.414530	52.420720	52.426911	52.433105	52.439301
0.200	52.445499	52.451699	52.457902	52.464107	52.470314	52.476523	52.482735	52.488948	52.495164	52.501382
0.210	52.507603	52.513825	52.520050	52.526278	52.532506	52.538738	52.544972	52.551208	52.557446	52.563687
0.220	52.569930	52.576175	52.582422	52.588672	52.594923	52.601178	52.607434	52.613693	52.619954	52.626216
0.230	52.632482	52.638750	52.645020	52.651292	52.657566	52.663843	52.670122	52.676403	52.682687	52.688972
0.240	52.695261	52.701551	52.707844	52.714139	52.720436	52.726736	52.733037	52.739341	52.745648	52.751956
0.250	52.758267	52.764581	52.770896	52.777215	52.783535	52.789857	52.796182	52.802509	52.808838	52.815170
0.260	52.821505	52.827841	52.834179	52.840520	52.846864	52.853209	52.859558	52.865908	52.872261	52.878615
0.270	52.884973	52.891333	52.897695	52.904059	52.910425	52.916794	52.923166	52.929539	52.935915	52.942294
0.280	52.948675	52.955058	52.961443	52.967831	52.974221	52.980613	52.987008	52.993405	52.999805	53.006207
0.290	53.012611	53.019018	53.025427	53.031838	53.038252	53.044668	53.051086	53.057508	53.063931	53.070356
0.300	53.076785	53.083215	53.089648	53.096083	53.102520	53.108961	53.115403	53.121848	53.128295	53.134744
0.310	53.141196	53.147651	53.154108	53.160567	53.167028	53.173492	53.179958	53.186428	53.192899	53.199372
0.320	53.205848	53.212327	53.218808	53.225291	53.231777	53.238265	53.244766	53.251249	53.257744	53.264242
0.330	53.270742	53.277245	53.283751	53.290258	53.296768	53.303281	53.309796	53.316313	53.322833	53.329356
0.340	53.335880	53.342408	53.348938	53.355470	53.362004	53.368541	53.375081	53.381623	53.388167	53.394715
0.350	53.401264	53.407816	53.414371	53.420928	53.427487	53.434049	53.440613	53.447180	53.453749	53.460321
0.360	53.466895	53.473472	53.480052	53.486633	53.493217	53.499804	53.506393	53.512985	53.519580	53.526176
0.370	53.532776	53.539378	53.545982	53.552589	53.559198	53.565810	53.572425	53.579042	53.585661	53.592283
0.380	53.598908	53.605535	53.612164	53.618797	53.625432	53.632069	53.638709	53.645351	53.651996	53.658643
0.390	53.665293	53.671946	53.678601	53.685258	53.691912	53.698581	53.705246	53.711915	53.718585	53.725258
0.400	53.731934	53.738612	53.745293	53.751976	53.758662	53.765350	53.772041	53.778735	53.785431	53.792130
0.410	53.798831	53.805535	53.812242	53.818951	53.825663	53.832377	53.839094	53.845814	53.852536	53.859261
0.420	53.865988	53.872718	53.879450	53.886186	53.892923	53.899664	53.906407	53.913153	53.919901	53.926652
0.430	53.933406	53.940162	53.946921	53.953682	53.960446	53.967213	53.973983	53.980755	53.987529	53.994307
0.440	54.001087	54.007870	54.014655	54.021443	54.028234	54.035027	54.041822	54.048621	54.055423	54.062226
0.450	54.069033	54.075842	54.082654	54.089469	54.096286	54.103106	54.109929	54.116755	54.123582	54.130414
0.460	54.137247	54.144083	54.150922	54.157763	54.164608	54.171454	54.178304	54.185156	54.192012	54.198869
0.470	54.205730	54.212593	54.219459	54.226328	54.233199	54.240073	54.246950	54.253829	54.260712	54.267597
0.480	54.274485	54.281375	54.288268	54.295164	54.302063	54.308964	54.315869	54.322775	54.329685	54.336598
0.490	54.343513	54.350431	54.357352	54.364275	54.371202	54.378130	54.385062	54.391997	54.398934	54.405874

ATTENUATION IN DECIBELS
THETA FROM 87.500 TO 87.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	54.412817	54.419763	54.426712	54.433663	54.440617	54.447574	54.454533	54.461496	54.468461	54.475429
0.510	54.482400	54.489373	54.496350	54.503329	54.510311	54.517296	54.524283	54.531274	54.538268	54.545264
0.520	54.552263	54.559264	54.566269	54.573277	54.580287	54.587300	54.594316	54.601335	54.608356	54.615381
0.530	54.622408	54.629438	54.636471	54.643507	54.650546	54.657588	54.664632	54.671679	54.678730	54.685782
0.540	54.692838	54.699897	54.706959	54.714024	54.721091	54.728161	54.735234	54.742311	54.749389	54.756471
0.550	54.763556	54.770644	54.777734	54.784828	54.791924	54.799023	54.806125	54.813231	54.820338	54.827440
0.560	54.834563	54.841680	54.848800	54.855922	54.863048	54.870176	54.877307	54.884442	54.891579	54.898719
0.570	54.905862	54.913008	54.920154	54.927310	54.934464	54.941622	54.948783	54.955947	54.963113	54.970283
0.580	54.977456	54.984632	54.991810	54.998991	55.006176	55.013364	55.020554	55.027748	55.034944	55.042144
0.590	55.049346	55.056551	55.063760	55.070971	55.078186	55.085403	55.092624	55.099847	55.107074	55.114303
0.600	55.121536	55.128771	55.136010	55.143251	55.150496	55.157743	55.164994	55.172248	55.179504	55.186764
0.610	55.194027	55.201293	55.208562	55.215834	55.223109	55.230387	55.237668	55.244952	55.252239	55.259530
0.620	55.266823	55.274119	55.281419	55.288721	55.296027	55.303336	55.310647	55.317962	55.325280	55.332601
0.630	55.339925	55.347252	55.354583	55.361917	55.369253	55.376593	55.383935	55.391281	55.398630	55.405982
0.640	55.413337	55.420696	55.428057	55.435422	55.442790	55.450160	55.457534	55.464911	55.472291	55.479675
0.650	55.487062	55.494451	55.501844	55.509240	55.516639	55.524041	55.531447	55.538856	55.546267	55.553682
0.660	55.561100	55.568521	55.575946	55.583374	55.590805	55.598238	55.605676	55.613116	55.620560	55.628006
0.670	55.635457	55.642910	55.650366	55.657826	55.665288	55.672755	55.680224	55.687696	55.695172	55.702651
0.680	55.710133	55.717618	55.725107	55.732599	55.740094	55.747592	55.755094	55.762599	55.770106	55.777618
0.690	55.785132	55.792650	55.800171	55.807695	55.815223	55.822754	55.830288	55.837825	55.845366	55.852910
0.700	55.860457	55.868008	55.875562	55.883119	55.890677	55.898243	55.905810	55.913380	55.920954	55.928531
0.710	55.936111	55.943695	55.951282	55.958872	55.966465	55.974067	55.981662	55.989266	55.996872	56.004483
0.720	56.012096	56.019713	56.027333	56.034957	56.042583	56.050214	56.057847	56.065485	56.073125	56.080769
0.730	56.088416	56.096066	56.103720	56.111377	56.119038	56.126702	56.134369	56.142040	56.149714	56.157392
0.740	56.165072	56.172757	56.180454	56.188136	56.195830	56.203528	56.211230	56.218935	56.226643	56.234354
0.750	56.242069	56.249788	56.257510	56.265235	56.272964	56.280696	56.288432	56.296172	56.303914	56.311660
0.760	56.319410	56.327163	56.334919	56.342680	56.350443	56.358211	56.365984	56.373754	56.381531	56.389312
0.770	56.397097	56.404884	56.412676	56.420471	56.428269	56.436071	56.443876	56.451685	56.459497	56.467313
0.780	56.475133	56.482956	56.490782	56.498612	56.506446	56.514283	56.522124	56.529968	56.537816	56.545667
0.790	56.553522	56.561380	56.569242	56.577108	56.584977	56.592850	56.600726	56.608606	56.616489	56.624376
0.800	56.632267	56.640161	56.648059	56.655980	56.663885	56.671773	56.679686	56.687602	56.695521	56.703444
0.810	56.711370	56.719301	56.727235	56.735172	56.743114	56.751058	56.759007	56.766959	56.774915	56.782874
0.820	56.790837	56.798804	56.806774	56.814748	56.822726	56.830707	56.838692	56.846681	56.854673	56.862669
0.830	56.870669	56.878673	56.886680	56.894691	56.902705	56.910723	56.918745	56.926771	56.934800	56.942833
0.840	56.950870	56.958910	56.966955	56.975003	56.983055	56.991110	56.999169	57.007232	57.015299	57.023369
0.850	57.031444	57.039522	57.047604	57.055689	57.063773	57.071871	57.079968	57.088069	57.096173	57.104281
0.860	57.112393	57.120509	57.128629	57.136752	57.144879	57.153010	57.161145	57.169284	57.177426	57.185572
0.870	57.193722	57.201876	57.210034	57.218196	57.226361	57.234530	57.242703	57.250881	57.259061	57.267246
0.880	57.275434	57.283627	57.291823	57.300024	57.308228	57.316435	57.324647	57.332863	57.341083	57.349306
0.890	57.357533	57.365765	57.374000	57.382239	57.390482	57.398729	57.406980	57.415235	57.423493	57.431756
0.900	57.440023	57.448293	57.456568	57.464846	57.473129	57.481415	57.489706	57.498000	57.506298	57.514600
0.910	57.522906	57.531217	57.539531	57.547849	57.556171	57.564497	57.572827	57.581161	57.589499	57.597841
0.920	57.606187	57.614538	57.622892	57.631250	57.639612	57.647979	57.656349	57.664723	57.673101	57.681484
0.930	57.689870	57.698261	57.706656	57.715055	57.723457	57.731864	57.740275	57.748690	57.757109	57.765532
0.940	57.773959	57.782391	57.790826	57.799265	57.807709	57.816157	57.824608	57.833065	57.841525	57.849989
0.950	57.858457	57.866930	57.875406	57.883887	57.892372	57.900861	57.909354	57.917852	57.926353	57.934859
0.960	57.943369	57.951883	57.960401	57.968924	57.977450	57.985981	57.994516	58.003055	58.011599	58.020146
0.970	58.028698	58.037254	58.045815	58.054379	58.062948	58.071521	58.080098	58.088677	58.097265	58.105855
0.980	58.114449	58.123048	58.131650	58.140257	58.148869	58.157484	58.166104	58.174728	58.183356	58.191989
0.990	58.200626	58.209268	58.217913	58.226563	58.235217	58.243876	58.252539	58.261206	58.269877	58.278553

ATTENUATION IN DECIBELS
THETA FROM 88.000 TO 88.499 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.003	58.287233	58.295918	58.304606	58.313300	58.321998	58.330699	58.339406	58.348116	58.356832	58.365551
0.010	58.374275	58.383003	58.391736	58.400473	58.409214	58.417960	58.426710	58.435465	58.444224	58.452987
0.020	58.461755	58.470528	58.479304	58.488096	58.496871	58.505661	58.514456	58.523255	58.532059	58.540866
0.030	58.549679	58.558496	58.567317	58.576143	58.584973	58.593809	58.602648	58.611492	58.620340	58.629193
0.040	58.638051	58.646913	58.655779	58.664650	58.673525	58.682405	58.691290	58.700180	58.709073	58.717971
0.050	58.726874	58.735782	58.744694	58.753611	58.762532	58.771457	58.780388	58.789323	58.798262	58.807207
0.060	58.816155	58.825109	58.834067	58.843029	58.851997	58.860969	58.869945	58.878926	58.887912	58.896903
0.070	58.905898	58.914898	58.923903	58.932911	58.941926	58.950944	58.959967	58.968995	58.978028	58.987065
0.080	58.996107	59.005154	59.014205	59.023262	59.032333	59.041389	59.050459	59.059534	59.068614	59.077699
0.090	59.086768	59.095882	59.104981	59.114085	59.123193	59.132307	59.141425	59.150548	59.159675	59.168808
0.100	59.177945	59.187087	59.196234	59.205386	59.214542	59.223704	59.232870	59.242041	59.251217	59.260398
0.110	59.269583	59.278774	59.287970	59.297170	59.306375	59.315585	59.324800	59.334020	59.343244	59.352474
0.120	59.361708	59.370948	59.380192	59.389441	59.398696	59.407955	59.417219	59.426488	59.435762	59.445041
0.130	59.454325	59.463614	59.472908	59.482207	59.491510	59.500819	59.510133	59.519452	59.528776	59.538105
0.140	59.547439	59.556777	59.566122	59.575470	59.584825	59.594183	59.603548	59.612916	59.622291	59.631670
0.150	59.641055	59.650444	59.659839	59.669238	59.678643	59.688053	59.697467	59.706887	59.716312	59.725743
0.160	59.735178	59.744619	59.754065	59.763515	59.772971	59.782432	59.791898	59.801370	59.810846	59.820328
0.170	59.829815	59.839307	59.848804	59.858307	59.867815	59.877328	59.886846	59.896369	59.905898	59.915432
0.180	59.924971	59.934515	59.944065	59.953620	59.963180	59.972745	59.982316	59.991892	60.001473	60.011060
0.190	60.020651	60.030249	60.039851	60.049459	60.059072	60.068690	60.078314	60.087943	60.097578	60.107217
0.200	60.116862	60.126513	60.136169	60.145830	60.155497	60.165169	60.174846	60.184529	60.194217	60.203911
0.210	60.213610	60.223314	60.233024	60.242740	60.252460	60.262187	60.271918	60.281655	60.291398	60.301146
0.220	60.310899	60.320659	60.330423	60.340193	60.349968	60.359750	60.369536	60.379328	60.389126	60.398929
0.230	60.408738	60.418552	60.428371	60.438197	60.448028	60.457864	60.467705	60.477554	60.487407	60.497266
0.240	60.507131	60.517000	60.526876	60.536760	60.546644	60.556537	60.566433	60.576339	60.586248	60.596163
0.250	60.606084	60.616011	60.625943	60.635880	60.645824	60.655774	60.665729	60.675689	60.685656	60.695628
0.260	60.705606	60.715589	60.725578	60.735573	60.745574	60.755581	60.765593	60.775611	60.785635	60.795665
0.270	60.805761	60.815742	60.825739	60.835842	60.845901	60.855966	60.866036	60.876112	60.886195	60.896283
0.280	60.906376	60.916476	60.926582	60.936693	60.946811	60.956934	60.967063	60.977199	60.987339	60.997487
0.290	61.007640	61.017798	61.027963	61.038134	61.048311	61.058494	61.068682	61.078877	61.089078	61.099285
0.300	61.109497	61.119716	61.129941	61.140172	61.150408	61.160651	61.170900	61.181155	61.191416	61.201583
0.310	61.211956	61.222235	61.232521	61.242812	61.253109	61.263413	61.273723	61.284039	61.294361	61.304689
0.320	61.315023	61.325364	61.335710	61.346063	61.356422	61.366787	61.377159	61.387536	61.397920	61.408310
0.330	61.418706	61.429109	61.439517	61.449932	61.460353	61.470780	61.481215	61.491654	61.502100	61.512553
0.340	61.523012	61.533477	61.543949	61.554426	61.564910	61.575401	61.585898	61.596401	61.606910	61.617426
0.350	61.627948	61.638477	61.649012	61.659554	61.670101	61.680655	61.691216	61.701783	61.712357	61.722937
0.360	61.733573	61.744116	61.754715	61.765321	61.775934	61.786552	61.797178	61.807810	61.818448	61.829093
0.370	61.839744	61.850402	61.861067	61.871737	61.882415	61.893099	61.903790	61.914487	61.925191	61.935902
0.380	61.946619	61.957343	61.968073	61.978810	61.989554	62.000304	62.011061	62.021825	62.032596	62.043373
0.390	62.054156	62.064947	62.075744	62.086548	62.097358	62.108176	62.118999	62.129830	62.140668	62.151513
0.400	62.162364	62.173222	62.184086	62.194958	62.205836	62.216722	62.227613	62.238512	62.249418	62.260330
0.410	62.271250	62.282176	62.293109	62.304049	62.314996	62.325950	62.336911	62.347878	62.358853	62.369835
0.420	62.380823	62.391819	62.402822	62.413831	62.424847	62.435871	62.446901	62.457939	62.468983	62.480034
0.430	62.491093	62.502159	62.513231	62.524311	62.535398	62.546492	62.557592	62.568701	62.579816	62.590938
0.440	62.602067	62.613204	62.624348	62.635499	62.646657	62.657822	62.668994	62.680174	62.691361	62.702555
0.450	62.713756	62.724965	62.736180	62.747403	62.758634	62.769871	62.781116	62.792368	62.803627	62.814894
0.460	62.826168	62.837449	62.848738	62.860034	62.871337	62.882648	62.893966	62.905292	62.916625	62.927965
0.470	62.939312	62.950667	62.962030	62.973412	62.984877	62.996362	63.007855	63.018955	63.030362	63.041777
0.480	63.053199	63.064629	63.076066	63.087512	63.098964	63.110424	63.121891	63.133367	63.144850	63.156340
0.490	63.167838	63.179344	63.190857	63.202378	63.213907	63.225443	63.236987	63.248538	63.260098	63.271665

ATTENUATION IN DECIBELS
THETA FROM 88.500 TO 88.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	63.283239	63.294822	63.306412	63.318009	63.329615	63.341228	63.352850	63.364479	63.376115	63.387760
0.510	63.399413	63.411073	63.422740	63.434416	63.446100	63.457792	63.469491	63.481199	63.492914	63.504637
0.520	63.516368	63.528107	63.539855	63.551610	63.563372	63.575143	63.586927	63.598719	63.610504	63.622307
0.530	63.634118	63.645936	63.657763	63.669599	63.681442	63.693293	63.705153	63.717020	63.728895	63.740779
0.540	63.752671	63.764571	63.776479	63.788395	63.800320	63.812253	63.824193	63.836143	63.848100	63.860065
0.550	63.872039	63.884012	63.896012	63.908010	63.920018	63.932033	63.944057	63.956089	63.968129	63.980177
0.560	63.992234	64.004299	64.016374	64.028456	64.040546	64.052645	64.064753	64.076868	64.088993	64.101126
0.570	64.113267	64.125417	64.137575	64.149742	64.161918	64.174101	64.186292	64.198495	64.210705	64.222922
0.580	64.235149	64.247385	64.259629	64.271882	64.284143	64.296413	64.308692	64.320979	64.333276	64.345580
0.590	64.357894	64.370216	64.382547	64.394887	64.407235	64.419593	64.431959	64.444334	64.456717	64.469110
0.600	64.481512	64.493922	64.506342	64.518770	64.531207	64.543653	64.556108	64.568572	64.581044	64.593526
0.610	64.606017	64.618517	64.631025	64.643543	64.656070	64.668606	64.681150	64.693705	64.706267	64.718840
0.620	64.731421	64.744011	64.756611	64.769219	64.781837	64.794464	64.807100	64.819746	64.832400	64.845064
0.630	64.857738	64.870420	64.883111	64.895812	64.908523	64.921242	64.933970	64.946709	64.959456	64.972214
0.640	64.984980	64.997755	65.010541	65.023335	65.036139	65.048952	65.061775	65.074608	65.087449	65.100301
0.650	65.113161	65.126032	65.138912	65.151801	65.164701	65.177608	65.190527	65.203455	65.216393	65.229340
0.660	65.242296	65.255263	65.268239	65.281225	65.294221	65.307226	65.320241	65.333266	65.346301	65.359345
0.670	65.372399	65.385464	65.398538	65.411621	65.424715	65.437819	65.450932	65.464055	65.477188	65.490332
0.680	65.503485	65.516647	65.529820	65.543004	65.556197	65.569400	65.582613	65.595837	65.609070	65.622313
0.690	65.635567	65.648830	65.662104	65.675388	65.688682	65.701986	65.715301	65.728625	65.741961	65.755306
0.700	65.768661	65.782027	65.795403	65.808789	65.822186	65.835593	65.849010	65.862438	65.875876	65.889325
0.710	65.902784	65.916253	65.929733	65.943224	65.956726	65.970236	65.983758	65.997291	66.010834	66.024387
0.720	66.037951	66.051526	66.065111	66.078707	66.092314	66.105931	66.119559	66.133198	66.146848	66.160507
0.730	66.174718	66.187860	66.201552	66.215256	66.228971	66.242695	66.256431	66.270178	66.283936	66.297704
0.740	66.311483	66.325274	66.339070	66.352887	66.366711	66.380545	66.394390	66.408247	66.422114	66.435993
0.750	66.449883	66.463783	66.477695	66.491618	66.505552	66.519498	66.533455	66.547422	66.561401	66.575392
0.760	66.589394	66.603407	66.617431	66.631467	66.645512	66.659572	66.673641	66.687722	66.701816	66.715919
0.770	66.730035	66.744162	66.758300	66.772450	66.786612	66.800785	66.814969	66.829165	66.843373	66.857594
0.780	66.871824	66.886067	66.900322	66.914588	66.928866	66.943155	66.957458	66.971770	66.986095	67.000433
0.790	67.014781	67.029142	67.043514	67.057899	67.072295	67.086703	67.101124	67.115556	67.130000	67.144457
0.800	67.158925	67.173406	67.187898	67.202402	67.216919	67.231448	67.245989	67.260542	67.275107	67.289685
0.810	67.304276	67.318877	67.333492	67.348119	67.362758	67.377408	67.392073	67.406750	67.421438	67.436139
0.820	67.450852	67.465579	67.480317	67.495069	67.509831	67.524608	67.539396	67.554198	67.569012	67.583838
0.830	67.598678	67.613529	67.628394	67.643271	67.658162	67.673065	67.687981	67.702907	67.717851	67.732805
0.840	67.747772	67.762753	67.777745	67.792757	67.807770	67.822802	67.837847	67.852905	67.867976	67.883060
0.850	67.898158	67.913268	67.928391	67.943528	67.958678	67.973842	67.989018	68.004208	68.019411	68.034627
0.860	68.049857	68.065100	68.080357	68.095627	68.110909	68.126206	68.141517	68.156840	68.172178	68.187529
0.870	68.202893	68.218271	68.233663	68.249068	68.264487	68.279921	68.295366	68.310827	68.326301	68.341788
0.880	68.357290	68.372806	68.388335	68.403878	68.419436	68.435006	68.450592	68.466190	68.481804	68.497431
0.890	68.513072	68.528728	68.544397	68.560081	68.575779	68.591491	68.607217	68.622957	68.638712	68.654481
0.900	68.670264	68.686063	68.701875	68.717701	68.733542	68.749397	68.765267	68.781152	68.797051	68.812964
0.910	68.828893	68.844835	68.860793	68.876765	68.892752	68.908753	68.924770	68.940801	68.956847	68.972908
0.920	68.988983	69.005074	69.021179	69.037300	69.053435	69.069586	69.085751	69.101932	69.118127	69.134337
0.930	69.150563	69.166804	69.183061	69.199332	69.215619	69.231921	69.248239	69.264571	69.280919	69.297282
0.940	69.313662	69.330055	69.346465	69.362890	69.379332	69.395788	69.412260	69.428748	69.445251	69.461770
0.950	69.478305	69.494845	69.511422	69.528005	69.544602	69.561216	69.577847	69.594492	69.611154	69.627831
0.960	69.644526	69.661235	69.677961	69.694703	69.711461	69.728235	69.745027	69.761833	69.778656	69.795496
0.970	69.812351	69.829224	69.846112	69.863017	69.879939	69.896877	69.913832	69.930802	69.947790	69.964794
0.980	69.981815	69.998854	70.015907	70.032979	70.050067	70.067172	70.084293	70.101432	70.118587	70.135760
0.990	70.152949	70.170156	70.187380	70.204620	70.221878	70.239153	70.256445	70.273755	70.291081	70.308426

ATTENUATION IN DECIBELS
THETA FROM 89.000 TO 89.499 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.000	70.32579	70.34317	70.36056	70.37798	70.39541	70.41286	70.43032	70.44780	70.46531	70.48283
0.010	70.50036	70.51792	70.53549	70.55308	70.57069	70.58831	70.60596	70.62362	70.64130	70.65899
0.020	70.67671	70.69444	70.71219	70.72996	70.74775	70.76556	70.78338	70.80123	70.81909	70.83697
0.030	70.85487	70.87278	70.89072	70.90867	70.92664	70.94463	70.96264	70.98067	70.99872	71.01678
0.040	71.03487	71.05297	71.07109	71.08924	71.10740	71.12557	71.14377	71.16199	71.18023	71.19848
0.050	71.21676	71.23505	71.25336	71.27170	71.29005	71.30842	71.32681	71.34522	71.36365	71.38210
0.060	71.40057	71.41906	71.43757	71.45610	71.47464	71.49321	71.51180	71.53041	71.54903	71.56768
0.070	71.58635	71.60504	71.62374	71.64247	71.66122	71.67999	71.69878	71.71759	71.73642	71.75527
0.080	71.77414	71.79303	71.81194	71.83087	71.84983	71.86880	71.88779	71.90681	71.92585	71.94490
0.090	71.96398	71.98308	72.00220	72.02134	72.04050	72.05968	72.07889	72.09811	72.11736	72.13663
0.100	72.15592	72.17523	72.19456	72.21392	72.23329	72.25269	72.27211	72.29155	72.31101	72.33050
0.110	72.35000	72.36953	72.38908	72.40865	72.42825	72.44786	72.46750	72.48716	72.50685	72.52655
0.120	72.54628	72.56603	72.58580	72.60560	72.62542	72.64526	72.66512	72.68501	72.70492	72.72485
0.130	72.74430	72.76478	72.78478	72.80480	72.82485	72.84492	72.86501	72.88513	72.90527	72.92543
0.140	72.94562	72.96583	72.98606	73.00632	73.02660	73.04690	73.06723	73.08759	73.10796	73.12836
0.150	73.14878	73.16923	73.18970	73.21020	73.23072	73.25127	73.27184	73.29243	73.31305	73.33369
0.160	73.35436	73.37505	73.39576	73.41650	73.43727	73.45806	73.47888	73.49972	73.52058	73.54147
0.170	73.56239	73.58333	73.60430	73.62529	73.64631	73.66735	73.68842	73.70951	73.73063	73.75177
0.180	73.77294	73.79414	73.81536	73.83661	73.85789	73.87919	73.90051	73.92187	73.94324	73.96465
0.190	73.98608	74.00754	74.02903	74.05054	74.07208	74.09364	74.11523	74.13685	74.15850	74.18017
0.200	74.20137	74.22360	74.24535	74.26713	74.28894	74.31078	74.33264	74.35453	74.37645	74.39840
0.210	74.42037	74.44237	74.46440	74.48646	74.50855	74.53066	74.55280	74.57498	74.59717	74.61940
0.220	74.64166	74.66394	74.68625	74.70860	74.73097	74.75337	74.77579	74.79825	74.82074	74.84325
0.230	74.86580	74.88831	74.91098	74.93361	74.95627	74.97896	75.00169	75.02444	75.04722	75.07003
0.240	75.09287	75.11574	75.13864	75.16158	75.18454	75.20753	75.23055	75.25361	75.27669	75.29980
0.250	75.32295	75.34613	75.36933	75.39257	75.41584	75.43914	75.46248	75.48584	75.50923	75.53266
0.260	75.55612	75.57961	75.60313	75.62668	75.65027	75.67389	75.69754	75.72122	75.74493	75.76868
0.270	75.79246	75.81627	75.84012	75.86399	75.88791	75.91188	75.93582	75.95988	75.98388	76.00795
0.280	76.03206	76.05620	76.08038	76.10459	76.12884	76.15311	76.17743	76.20177	76.22615	76.25057
0.290	76.27502	76.29950	76.32402	76.34857	76.37316	76.39778	76.42244	76.44713	76.47186	76.49662
0.300	76.52142	76.54625	76.57112	76.59602	76.62096	76.64594	76.67095	76.69600	76.72108	76.74620
0.310	76.77136	76.79655	76.82178	76.84705	76.87236	76.89770	76.92307	76.94849	76.97394	76.99943
0.320	77.02496	77.05052	77.07612	77.10176	77.12744	77.15316	77.17891	77.20470	77.23053	77.25640
0.330	77.28231	77.30826	77.33424	77.36026	77.38633	77.41243	77.43857	77.46475	77.49097	77.51723
0.340	77.54353	77.56987	77.59625	77.62267	77.64913	77.67563	77.70217	77.72875	77.75538	77.78204
0.350	77.80874	77.83549	77.86228	77.88910	77.91597	77.94288	77.96984	77.99683	78.02387	78.05095
0.360	78.07807	78.10523	78.13244	78.15969	78.18698	78.21431	78.24169	78.26911	78.29657	78.32408
0.370	78.35163	78.37923	78.40687	78.43455	78.46228	78.49005	78.51786	78.54572	78.57363	78.60158
0.380	78.62958	78.65762	78.68570	78.71383	78.74201	78.77023	78.79850	78.82682	78.85518	78.88359
0.390	78.91204	78.94054	78.96909	78.99768	79.02632	79.05501	79.08375	79.11253	79.14137	79.17024
0.400	79.19917	79.22815	79.25717	79.28625	79.31537	79.34454	79.37376	79.40303	79.43235	79.46171
0.410	79.49113	79.52060	79.55012	79.57968	79.60930	79.63897	79.66869	79.69846	79.72828	79.75816
0.420	79.78808	79.81806	79.84817	79.87817	79.90830	79.93858	79.96892	79.99901	80.02935	80.05975
0.430	80.09020	80.12070	80.15126	80.18187	80.21253	80.24325	80.27402	80.30485	80.33573	80.36667
0.440	80.39766	80.42871	80.45981	80.49097	80.52219	80.55346	80.58478	80.61617	80.64761	80.67911
0.450	80.71066	80.74228	80.77395	80.80568	80.83746	80.86931	80.90121	80.93317	80.96519	80.99727
0.460	81.02941	81.06161	81.09387	81.12619	81.15857	81.19101	81.22351	81.25607	81.28869	81.32137
0.470	81.35412	81.38692	81.41979	81.45273	81.48572	81.51878	81.55190	81.58508	81.61833	81.65164
0.480	81.68501	81.71845	81.75195	81.78552	81.81915	81.85285	81.88661	81.92044	81.95434	81.98830
0.490	82.02233	82.05642	82.09058	82.12481	82.15911	82.19347	82.22791	82.26241	82.29698	82.33162

ATTENUATION IN DECIBELS
THETA FROM 89.500 TO 89.999 DEGREES

THETA IN DEGREES	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	82.36633	82.40110	82.43595	82.47087	82.50585	82.54091	82.57604	82.61124	82.64651	82.68186
0.510	82.71727	82.75276	82.78832	82.82396	82.85966	82.89544	82.93130	82.96723	83.00323	83.03931
0.520	83.07546	83.11169	83.14799	83.18437	83.22083	83.25736	83.29397	83.33066	83.36742	83.40426
0.530	83.44118	83.47818	83.51526	83.55242	83.58966	83.62698	83.66438	83.70185	83.73941	83.77705
0.540	83.81478	83.85258	83.89047	83.92844	83.96649	84.00463	84.04285	84.08116	84.11955	84.15802
0.550	84.19658	84.23523	84.27396	84.31278	84.35169	84.39068	84.42976	84.46893	84.50819	84.54753
0.560	84.58697	84.62649	84.66611	84.70582	84.74561	84.78550	84.82548	84.86555	84.90572	84.94598
0.570	84.98633	85.02678	85.06732	85.10795	85.14868	85.18951	85.23043	85.27145	85.31256	85.35378
0.580	85.39509	85.43650	85.47801	85.51962	85.56132	85.60313	85.64504	85.68705	85.72917	85.77138
0.590	85.81370	85.85612	85.89865	85.94127	85.98401	86.02685	86.06979	86.11285	86.15600	86.19927
0.600	86.24265	86.28613	86.32972	86.37342	86.41724	86.46116	86.50519	86.54934	86.59360	86.63797
0.610	86.68246	86.72705	86.77177	86.81660	86.86154	86.90661	86.95179	86.99708	87.04250	87.08803
0.620	87.13369	87.17946	87.22536	87.27138	87.31752	87.36378	87.41016	87.45667	87.50331	87.55007
0.630	87.59696	87.64397	87.69111	87.73838	87.78578	87.83331	87.88097	87.92876	87.97668	88.02473
0.640	88.07292	88.12124	88.16970	88.21829	88.26702	88.31588	88.36489	88.41403	88.46331	88.51273
0.650	88.56229	88.61199	88.66184	88.71183	88.76197	88.81225	88.86267	88.91324	88.96396	89.01483
0.660	89.06585	89.11702	89.16834	89.21981	89.27143	89.32321	89.37514	89.42723	89.47948	89.53188
0.670	89.58444	89.63716	89.69005	89.74309	89.79629	89.84966	89.90320	89.95690	90.01076	90.06479
0.680	90.11900	90.17337	90.22791	90.28262	90.33751	90.39257	90.44781	90.50322	90.55881	90.61457
0.690	90.67052	90.72665	90.78296	90.83954	90.89613	90.95299	91.01004	91.06728	91.12471	91.18233
0.700	91.24013	91.29814	91.35633	91.41472	91.47331	91.53210	91.59109	91.65028	91.70967	91.76926
0.710	91.82906	91.88906	91.94928	92.00970	92.07034	92.13113	92.19224	92.25352	92.31501	92.37672
0.720	92.43865	92.50080	92.56318	92.62578	92.68861	92.75166	92.81495	92.87846	92.94221	93.00620
0.730	93.07042	93.13488	93.19958	93.26452	93.32970	93.39513	93.46081	93.52674	93.59291	93.65934
0.740	93.72603	93.79297	93.86018	93.92764	93.99536	94.06336	94.13161	94.20014	94.26894	94.33801
0.750	94.40736	94.47699	94.54689	94.61708	94.68755	94.75831	94.82936	94.90071	94.97234	95.04427
0.760	95.11651	95.18904	95.26188	95.33502	95.40847	95.48224	95.55632	95.63072	95.70543	95.78047
0.770	95.85584	95.93153	96.00756	96.08392	96.16061	96.23765	96.31503	96.39275	96.47083	96.54926
0.780	96.62804	96.70718	96.78669	96.86656	96.94680	97.02741	97.10839	97.18976	97.27151	97.35365
0.790	97.43617	97.51909	97.60241	97.68613	97.77025	97.85479	97.93973	98.02510	98.11089	98.19710
0.800	98.28374	98.37082	98.45833	98.54629	98.63470	98.72355	98.81287	98.90265	98.99289	99.08360
0.810	99.17479	99.26646	99.35862	99.45127	99.54442	99.63807	99.73222	99.82689	99.92208	100.01779
0.820	100.11403	100.21081	100.30813	100.40600	100.50443	100.60341	100.70296	100.80309	100.90379	101.00509
0.830	101.10697	101.20946	101.31256	101.41627	101.52061	101.62557	101.73117	101.83742	101.94433	102.05189
0.840	102.16013	102.26904	102.37864	102.48894	102.59994	102.71166	102.82410	102.93727	103.05118	103.16585
0.850	103.28127	103.39747	103.51446	103.63223	103.75081	103.86920	103.98904	104.11148	104.23339	104.35616
0.860	104.47980	104.60433	104.72976	104.85610	104.98337	105.11157	105.24073	105.37085	105.50196	105.63407
0.870	105.76719	105.90133	106.03652	106.17277	106.31010	106.44852	106.58805	106.72871	106.87052	107.01350
0.880	107.15767	107.30304	107.44964	107.59748	107.74660	107.89700	108.04872	108.20178	108.35620	108.51200
0.890	108.66921	108.82786	108.98796	109.14956	109.31268	109.47734	109.64358	109.81143	109.98091	110.15206
0.900	110.32491	110.49951	110.67587	110.85404	111.03406	111.21597	111.39980	111.58559	111.77340	111.96326
0.910	112.15521	112.34931	112.54560	112.74414	112.94497	113.14815	113.35374	113.56179	113.77236	113.98551
0.920	114.20131	114.41983	114.64113	114.86528	115.09237	115.32246	115.55564	115.79200	116.03161	116.27458
0.930	116.52099	116.77095	117.02455	117.28192	117.54315	117.80837	118.07771	118.35129	118.62924	118.91171
0.940	119.19886	119.49083	119.78779	120.08991	120.39739	120.71040	121.02916	121.35387	121.68477	122.02210
0.950	122.36611	122.71706	123.07526	123.44099	123.81459	124.19641	124.58680	124.98617	125.39493	125.81355
0.960	126.24251	126.68232	127.13356	127.59684	128.07281	128.56218	129.06575	129.58435	130.11891	130.67044
0.970	131.24006	131.82899	132.43858	133.07035	133.72597	134.40730	135.11646	135.85579	136.62800	137.43613
0.980	138.28370	139.17476	140.11400	141.10695	142.16010	143.28125	144.47978	145.76717	147.15766	148.66920
0.990	150.32491	152.15520	154.20131	156.52098	159.19885	162.36611	166.24251	171.24006	178.28371	190.32491



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