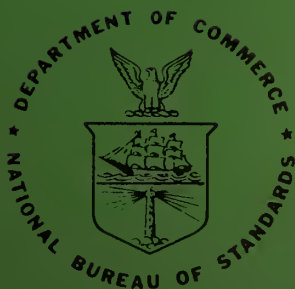


NBS

TECHNICAL NOTE

461

Tables of Solutions to Bragg's Equation For Copper, Cobalt, Iron, and Chromium K α Radiation and Small Diffraction Angles



U.S. DEPARTMENT OF COMMERCE
National Bureau of Standards

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UNITED STATES DEPARTMENT OF COMMERCE
C. R. Smith, Secretary
NATIONAL BUREAU OF STANDARDS • A. V. Astin, Director



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Tables of Solutions to Bragg's Equation for Copper, Cobalt, Iron, and Chromium K α Radiation and Small Diffraction Angles

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Tables of Solutions to Bragg's Equation for
Copper, Cobalt, Iron, and Chromium
 $K\bar{\alpha}$ Radiation and Small Diffraction Angles

James P. Colson and Edward S. Clark

Tables of solutions to Bragg's equation are presented for the $K\bar{\alpha}$ radiation of Cu(1.541838 Å*), Co(1.790260 Å*), Fe(1.937355 Å*), and Cr(2.291002 Å*). The value of 2θ is increased in increments of 0.001 degree from 0.001 to 2.999 degrees and in increments of 0.00001 radian from 0.00002 to 0.04999 radian. The solutions are rounded off to five digits.

Key words: Bragg's equation, Co, Cr, Cu, Fe, $K\bar{\alpha}$ radiation, small angle.

Small-angle x-ray scattering is a basic tool in the study of materials with very large periodicities and in the determination of both size and distribution of particles. Even though this technique is widely used in many laboratories there is an apparent lack of accessible tables of solutions to Bragg's equation for both suitably small diffraction angles and suitably small angular increments. With this in mind, tables of such solutions for $K\bar{\alpha}$ radiation of four of the most commonly used target elements, Cu, Co, Fe, and Cr, are presented for 2θ ranging from 0.001 to 2.999 degrees in increments of 0.001 degree, and from 0.00002 to 0.04999 radian in increments of 0.00001 radian. These tables were prepared with the aid of an electronic digital computer and the Bragg equation $d = \lambda / (2 \sin \theta)$. The solutions are rounded off to five digits. The values of the wavelength, λ , for $K\bar{\alpha}$ radiation were obtained by averaging the recommended values of $K\alpha_1$ and $K\alpha_2$ [1]; $K\alpha_1$ being given twice the weight of $K\alpha_2$. The wavelengths are given in a new unit Å* for which $1\text{Å}^* = 1\text{Å} \pm 5\text{ppm}$ [1]. It should be recognized that there can be small variations in the weighting factor depending upon experimental details [2].

[1] J. A. Bearden and A. F. Burr, Rev. Mod. Phys. 39, 78 & 125 (1967).

[2] J. J. Williams, Phys. Rev. 44, 146 (1933); and Andre Guinier, Theory and Technique of Radio-Crystallography (Dunod, Paris, 1956), 2nd Ed., p. 11.

Table 1
Copper $K\alpha$ Radiation
 2θ in Degrees
 $\lambda = 1.541838 \text{ \AA}^*$

2θ, DEG.	0	1	2	3	4	5	6	7	8	9
0.00		8834.1	4417.0	2944.7	2208.5	1766.8	1472.3	1262.0	1104.3	981.6
0.01	8834.1	8031.0	7361.7	6795.4	6310.1	5889.4	5521.3	5196.5	4907.8	4649.5
0.02	4417.0	4206.7	4015.5	3840.9	3680.9	3533.6	3397.7	3271.9	3155.0	3046.2
0.03	2944.7	2849.7	2760.7	2677.0	2598.3	2524.0	2453.9	2387.6	2324.8	2265.1
0.04	2208.5	2154.7	2103.4	2054.4	2007.7	1963.1	1920.5	1879.6	1840.4	1802.9
0.05	1766.8	1732.2	1698.9	1666.8	1635.9	1606.2	1577.5	1549.8	1523.1	1497.3
0.06	1472.3	1448.2	1424.9	1402.2	1380.3	1359.1	1338.5	1318.5	1299.1	1280.3
0.07	1262.0	1244.2	1227.0	1210.1	1193.8	1177.9	1162.4	1147.3	1132.6	1118.2
0.08	1104.3	1090.6	1077.3	1064.3	1051.7	1039.3	1027.2	1015.4	1003.9	992.6
0.09	981.56	970.78	960.23	949.90	939.80	929.90	920.22	910.73	901.44	892.33
0.10	883.41	874.66	866.09	857.68	849.43	841.34	833.40	825.62	817.97	810.47
0.11	803.10	795.86	788.76	781.78	774.92	768.18	761.56	755.05	748.65	742.36
0.12	736.17	730.09	724.11	718.22	712.43	706.73	701.12	695.60	690.16	684.81
0.13	679.54	674.36	669.25	664.22	659.26	654.38	649.57	644.82	640.15	635.55
0.14	631.01	626.53	622.12	617.77	613.48	609.25	605.07	600.96	596.90	592.89
0.15	588.94	585.04	581.19	577.39	573.64	569.94	566.29	562.68	559.12	555.60
0.16	552.13	548.70	545.31	541.97	538.66	535.40	532.17	528.99	525.84	522.73
0.17	519.65	516.61	513.61	510.64	507.71	504.80	501.94	499.10	496.30	493.52
0.18	490.78	488.07	485.39	482.74	480.11	477.52	474.95	472.41	469.90	467.41
0.19	464.95	462.52	460.11	457.72	455.37	453.03	450.72	448.43	446.17	443.92
0.20	441.70	439.51	437.33	435.18	433.04	430.93	428.84	426.77	424.72	422.68
0.21	420.67	418.68	416.70	414.75	412.81	410.89	408.99	407.10	405.23	403.38
0.22	401.55	399.73	397.93	396.15	394.38	392.63	390.89	389.17	387.46	385.77
0.23	384.09	382.43	380.78	379.15	377.53	375.92	374.33	372.75	371.18	369.63
0.24	368.09	366.56	365.04	363.54	362.05	360.58	359.11	357.66	356.21	354.78
0.25	353.36	351.96	350.56	349.17	347.80	346.43	345.08	343.74	342.41	341.08
0.26	339.77	338.47	337.18	335.90	334.62	333.36	332.11	330.86	329.63	328.40
0.27	327.19	325.98	324.78	323.59	322.41	321.24	320.08	318.92	317.77	316.63
0.28	315.50	314.38	313.27	312.16	311.06	309.97	308.88	307.81	306.74	305.68
0.29	304.62	303.58	302.54	301.50	300.48	299.46	298.45	297.44	296.45	295.45
0.30	294.47	293.49	292.52	291.55	290.60	289.64	288.70	287.76	286.82	285.89
0.31	284.97	284.05	283.14	282.24	281.34	280.45	279.56	278.68	277.80	276.93
0.32	276.07	275.21	274.35	273.50	272.66	271.82	270.98	270.16	269.33	268.51
0.33	267.70	266.89	266.09	265.29	264.49	263.70	262.92	262.14	261.36	260.59
0.34	259.83	259.06	258.31	257.55	256.81	256.06	255.32	254.58	253.85	253.13
0.35	252.40	251.68	250.97	250.26	249.55	248.85	248.15	247.45	246.76	246.08
0.36	245.39	244.71	244.04	243.36	242.69	242.03	241.37	240.71	240.06	239.41
0.37	238.76	238.12	237.48	236.84	236.21	235.58	234.95	234.33	233.71	233.09
0.38	232.48	231.87	231.26	230.66	230.05	229.46	228.86	228.27	227.68	227.10
0.39	226.52	225.94	225.36	224.79	224.22	223.65	223.08	222.52	221.96	221.41
0.40	220.85	220.30	219.75	219.21	218.67	218.13	217.59	217.05	216.52	215.99
0.41	215.47	214.94	214.42	213.90	213.38	212.87	212.36	211.85	211.34	210.84
0.42	210.34	209.84	209.34	208.84	208.35	207.86	207.37	206.89	206.40	205.92
0.43	205.44	204.97	204.49	204.02	203.55	203.08	202.62	202.15	201.69	201.23
0.44	200.78	200.32	199.87	199.42	198.97	198.52	198.07	197.63	197.19	196.75
0.45	196.31	195.88	195.44	195.01	194.58	194.16	193.73	193.31	192.88	192.46
0.46	192.05	191.63	191.21	190.80	190.39	189.98	189.57	189.17	188.76	188.36
0.47	187.96	187.56	187.16	186.77	186.37	185.98	185.59	185.20	184.81	184.43
0.48	184.04	183.66	183.28	182.90	182.52	182.15	181.77	181.40	181.03	180.66
0.49	180.29	179.92	179.56	179.19	178.83	178.47	178.11	177.75	177.39	177.04

2θ, DEG.	0	1	2	3	4	5	6	7	8	9
0.50	176.68	176.33	175.98	175.63	175.28	174.93	174.59	174.24	173.90	173.56
0.51	173.22	172.88	172.54	172.20	171.87	171.54	171.20	170.87	170.54	170.21
0.52	169.89	169.56	169.24	168.91	168.59	168.27	167.95	167.63	167.31	167.00
0.53	166.68	166.37	166.05	165.74	165.43	165.12	164.82	164.51	164.20	163.90
0.54	163.59	163.29	162.99	162.69	162.39	162.09	161.80	161.50	161.21	160.91
0.55	160.62	160.33	160.04	159.75	159.46	159.17	158.89	158.60	158.32	158.03
0.56	157.75	157.47	157.19	156.91	156.63	156.36	156.08	155.80	155.53	155.26
0.57	154.98	154.71	154.44	154.17	153.90	153.64	153.37	153.10	152.84	152.58
0.58	152.31	152.05	151.79	151.53	151.27	151.01	150.75	150.50	150.24	149.99
0.59	149.73	149.48	149.23	148.97	148.72	148.47	148.22	147.98	147.73	147.48
0.60	147.24	146.99	146.75	146.50	146.26	146.02	145.78	145.54	145.30	145.06
0.61	144.82	144.58	144.35	144.11	143.88	143.64	143.41	143.18	142.95	142.72
0.62	142.49	142.26	142.03	141.80	141.57	141.35	141.12	140.90	140.67	140.45
0.63	140.22	140.00	139.78	139.56	139.34	139.12	138.90	138.68	138.47	138.25
0.64	138.03	137.82	137.60	137.39	137.18	136.96	136.75	136.54	136.33	136.12
0.65	135.91	135.70	135.49	135.29	135.08	134.87	134.67	134.46	134.26	134.05
0.66	133.85	133.65	133.45	133.24	133.04	132.84	132.64	132.45	132.25	132.05
0.67	131.85	131.66	131.46	131.26	131.07	130.88	130.68	130.49	130.30	130.11
0.68	129.91	129.72	129.53	129.34	129.15	128.97	128.78	128.59	128.40	128.22
0.69	128.03	127.85	127.66	127.48	127.29	127.11	126.93	126.75	126.56	126.38
0.70	126.20	126.02	125.84	125.66	125.48	125.31	125.13	124.95	124.78	124.60
0.71	124.42	124.25	124.07	123.90	123.73	123.55	123.38	123.21	123.04	122.87
0.72	122.70	122.53	122.36	122.19	122.02	121.85	121.68	121.52	121.35	121.18
0.73	121.02	120.85	120.69	120.52	120.36	120.19	120.03	119.87	119.70	119.54
0.74	119.38	119.22	119.06	118.90	118.74	118.58	118.42	118.26	118.10	117.95
0.75	117.79	117.63	117.48	117.32	117.16	117.01	116.85	116.70	116.55	116.39
0.76	116.24	116.09	115.93	115.78	115.63	115.48	115.33	115.18	115.03	114.88
0.77	114.73	114.58	114.43	114.28	114.14	113.99	113.84	113.70	113.55	113.40
0.78	113.26	113.11	112.97	112.82	112.68	112.54	112.39	112.25	112.11	111.97
0.79	111.82	111.68	111.54	111.40	111.26	111.12	110.98	110.84	110.70	110.57
0.80	110.43	110.29	110.15	110.01	109.88	109.74	109.60	109.47	109.33	109.20
0.81	109.06	108.93	108.80	108.66	108.53	108.39	108.26	108.13	108.00	107.87
0.82	107.73	107.60	107.47	107.34	107.21	107.08	106.95	106.82	106.69	106.56
0.83	106.44	106.31	106.18	106.05	105.93	105.80	105.67	105.55	105.42	105.29
0.84	105.17	105.04	104.92	104.79	104.67	104.55	104.42	104.30	104.18	104.05
0.85	103.93	103.81	103.69	103.57	103.44	103.32	103.20	103.08	102.96	102.84
0.86	102.72	102.60	102.48	102.37	102.25	102.13	102.01	101.89	101.78	101.66
0.87	101.54	101.43	101.31	101.19	101.08	100.96	100.85	100.73	100.62	100.50
0.88	100.39	100.27	100.16	100.05	99.93	99.82	99.71	99.60	99.48	99.37
0.89	99.260	99.149	99.038	98.927	98.816	98.706	98.596	98.486	98.376	98.267
0.90	98.157	98.049	97.940	97.831	97.723	97.615	97.507	97.400	97.293	97.186
0.91	97.079	96.972	96.866	96.760	96.654	96.548	96.443	96.338	96.233	96.128
0.92	96.024	95.919	95.815	95.712	95.608	95.505	95.402	95.299	95.196	95.093
0.93	94.991	94.889	94.787	94.686	94.584	94.483	94.382	94.282	94.181	94.081
0.94	93.981	93.881	93.781	93.682	93.582	93.483	93.385	93.286	93.188	93.089
0.95	92.991	92.894	92.796	92.699	92.602	92.505	92.408	92.311	92.215	92.119
0.96	92.023	91.927	91.831	91.736	91.641	91.546	91.451	91.357	91.262	91.168
0.97	91.074	90.980	90.887	90.793	90.700	90.607	90.514	90.422	90.329	90.237
0.98	90.145	90.053	89.961	89.870	89.778	89.687	89.596	89.505	89.415	89.324
0.99	89.234	89.144	89.054	88.965	88.875	88.786	88.697	88.608	88.519	88.430

20, DEG.	0	1	2	3	4	5	6	7	8	9
1.00	88.342	88.254	88.166	88.078	87.990	87.902	87.815	87.728	87.641	87.554
1.01	87.467	87.381	87.294	87.208	87.122	87.036	86.951	86.865	86.780	86.695
1.02	86.610	86.525	86.440	86.356	86.271	86.187	86.103	86.019	85.936	85.852
1.03	85.769	85.686	85.603	85.520	85.437	85.355	85.272	85.190	85.108	85.026
1.04	84.944	84.863	84.781	84.700	84.619	84.538	84.457	84.376	84.296	84.215
1.05	84.135	84.055	83.975	83.896	83.816	83.737	83.657	83.578	83.499	83.420
1.06	83.342	83.263	83.185	83.106	83.028	82.950	82.873	82.795	82.717	82.640
1.07	82.563	82.486	82.409	82.332	82.255	82.179	82.102	82.026	81.950	81.874
1.08	81.798	81.723	81.647	81.572	81.496	81.421	81.346	81.272	81.197	81.122
1.09	81.048	80.974	80.899	80.825	80.752	80.678	80.604	80.531	80.457	80.384
1.10	80.311	80.238	80.165	80.093	80.020	79.948	79.875	79.803	79.731	79.659
1.11	79.588	79.516	79.444	79.373	79.302	79.231	79.160	79.089	79.018	78.947
1.12	78.877	78.807	78.736	78.666	78.596	78.526	78.457	78.387	78.318	78.248
1.13	78.179	78.110	78.041	77.972	77.903	77.835	77.766	77.698	77.629	77.561
1.14	77.493	77.425	77.358	77.290	77.222	77.155	77.088	77.020	76.953	76.886
1.15	76.819	76.753	76.686	76.620	76.553	76.487	76.421	76.355	76.289	76.223
1.16	76.157	76.092	76.026	75.961	75.895	75.830	75.765	75.700	75.636	75.571
1.17	75.506	75.442	75.377	75.313	75.249	75.185	75.121	75.057	74.994	74.930
1.18	74.866	74.803	74.740	74.677	74.614	74.551	74.488	74.425	74.362	74.300
1.19	74.237	74.175	74.113	74.051	73.989	73.927	73.865	73.803	73.742	73.680
1.20	73.619	73.557	73.496	73.435	73.374	73.313	73.252	73.192	73.131	73.071
1.21	73.010	72.950	72.890	72.830	72.770	72.710	72.650	72.590	72.531	72.471
1.22	72.412	72.353	72.293	72.234	72.175	72.116	72.058	71.999	71.940	71.882
1.23	71.823	71.765	71.707	71.648	71.590	71.532	71.475	71.417	71.359	71.301
1.24	71.244	71.187	71.129	71.072	71.015	70.958	70.901	70.844	70.787	70.731
1.25	70.674	70.618	70.561	70.505	70.449	70.393	70.336	70.281	70.225	70.169
1.26	70.113	70.058	70.002	69.947	69.891	69.836	69.781	69.726	69.671	69.616
1.27	69.561	69.506	69.452	69.397	69.343	69.288	69.234	69.180	69.126	69.072
1.28	69.018	68.964	68.910	68.856	68.803	68.749	68.696	68.642	68.589	68.536
1.29	68.483	68.430	68.377	68.324	68.271	68.218	68.166	68.113	68.061	68.008
1.30	67.956	67.904	67.852	67.799	67.747	67.696	67.644	67.592	67.540	67.489
1.31	67.437	67.386	67.334	67.283	67.232	67.181	67.130	67.079	67.028	66.977
1.32	66.926	66.876	66.825	66.775	66.724	66.674	66.624	66.573	66.523	66.473
1.33	66.423	66.373	66.323	66.274	66.224	66.174	66.125	66.075	66.026	65.977
1.34	65.927	65.878	65.829	65.780	65.731	65.682	65.634	65.585	65.536	65.488
1.35	65.439	65.391	65.342	65.294	65.246	65.198	65.150	65.102	65.054	65.006
1.36	64.958	64.910	64.863	64.815	64.768	64.720	64.673	64.625	64.578	64.531
1.37	64.484	64.437	64.390	64.343	64.296	64.249	64.203	64.156	64.110	64.063
1.38	64.017	63.970	63.924	63.878	63.832	63.786	63.740	63.694	63.648	63.602
1.39	63.556	63.510	63.465	63.419	63.374	63.328	63.283	63.238	63.192	63.147
1.40	63.102	63.057	63.012	62.967	62.922	62.878	62.833	62.788	62.744	62.699
1.41	62.655	62.610	62.566	62.522	62.477	62.433	62.389	62.345	62.301	62.257
1.42	62.213	62.170	62.126	62.082	62.039	61.995	61.952	61.908	61.865	61.822
1.43	61.778	61.735	61.692	61.649	61.606	61.563	61.520	61.477	61.435	61.392
1.44	61.349	61.307	61.264	61.222	61.179	61.137	61.095	61.053	61.010	60.968
1.45	60.926	60.884	60.842	60.801	60.759	60.717	60.675	60.634	60.592	60.551
1.46	60.509	60.468	60.426	60.385	60.344	60.303	60.261	60.220	60.179	60.138
1.47	60.097	60.057	60.016	59.975	59.934	59.894	59.853	59.813	59.772	59.732
1.48	59.691	59.651	59.611	59.571	59.531	59.490	59.450	59.410	59.371	59.331
1.49	59.291	59.251	59.211	59.172	59.132	59.093	59.053	59.014	58.974	58.935

20, DEG.	0	1	2	3	4	5	6	7	8	9
1.50	58.896	58.856	58.817	58.778	58.739	58.700	58.661	58.622	58.583	58.544
1.51	58.506	58.467	58.428	58.390	58.351	58.312	58.274	58.236	58.197	58.159
1.52	58.121	58.082	58.044	58.006	57.968	57.930	57.892	57.854	57.816	57.779
1.53	57.741	57.703	57.665	57.628	57.590	57.553	57.515	57.478	57.441	57.403
1.54	57.366	57.329	57.292	57.254	57.217	57.180	57.143	57.106	57.069	57.033
1.55	56.996	56.959	56.922	56.886	56.849	56.813	56.776	56.740	56.703	56.667
1.56	56.630	56.594	56.558	56.522	56.486	56.450	56.414	56.378	56.342	56.306
1.57	56.270	56.234	56.198	56.163	56.127	56.091	56.056	56.020	55.985	55.949
1.58	55.914	55.878	55.843	55.808	55.773	55.737	55.702	55.667	55.632	55.597
1.59	55.562	55.527	55.492	55.457	55.423	55.388	55.353	55.319	55.284	55.249
1.60	55.215	55.180	55.146	55.111	55.077	55.043	55.009	54.974	54.940	54.906
1.61	54.872	54.838	54.804	54.770	54.736	54.702	54.668	54.634	54.601	54.567
1.62	54.533	54.500	54.466	54.432	54.399	54.365	54.332	54.299	54.265	54.232
1.63	54.199	54.165	54.132	54.099	54.066	54.033	54.000	53.967	53.934	53.901
1.64	53.868	53.835	53.803	53.770	53.737	53.704	53.672	53.639	53.607	53.574
1.65	53.542	53.509	53.477	53.445	53.412	53.380	53.348	53.316	53.283	53.251
1.66	53.219	53.187	53.155	53.123	53.091	53.059	53.028	52.996	52.964	52.932
1.67	52.901	52.869	52.837	52.806	52.774	52.743	52.711	52.680	52.648	52.617
1.68	52.586	52.554	52.523	52.492	52.461	52.430	52.399	52.368	52.337	52.306
1.69	52.275	52.244	52.213	52.182	52.151	52.120	52.090	52.059	52.028	51.998
1.70	51.967	51.937	51.906	51.876	51.845	51.815	51.784	51.754	51.724	51.693
1.71	51.663	51.633	51.603	51.573	51.543	51.513	51.483	51.453	51.423	51.393
1.72	51.363	51.333	51.303	51.273	51.244	51.214	51.184	51.155	51.125	51.096
1.73	51.066	51.037	51.007	50.978	50.948	50.919	50.890	50.860	50.831	50.802
1.74	50.773	50.743	50.714	50.685	50.656	50.627	50.598	50.569	50.540	50.511
1.75	50.482	50.454	50.425	50.396	50.367	50.339	50.310	50.281	50.253	50.224
1.76	50.196	50.167	50.139	50.110	50.082	50.053	50.025	49.997	49.969	49.940
1.77	49.912	49.884	49.856	49.828	49.800	49.771	49.743	49.715	49.688	49.660
1.78	49.632	49.604	49.576	49.548	49.520	49.493	49.465	49.437	49.410	49.382
1.79	49.354	49.327	49.299	49.272	49.244	49.217	49.190	49.162	49.135	49.108
1.80	49.080	49.053	49.026	48.999	48.971	48.944	48.917	48.890	48.863	48.836
1.81	48.809	48.782	48.755	48.728	48.702	48.675	48.648	48.621	48.594	48.568
1.82	48.541	48.514	48.488	48.461	48.435	48.408	48.381	48.355	48.329	48.302
1.83	48.276	48.249	48.223	48.197	48.170	48.144	48.118	48.092	48.066	48.040
1.84	48.013	47.987	47.961	47.935	47.909	47.883	47.857	47.831	47.806	47.780
1.85	47.754	47.728	47.702	47.677	47.651	47.625	47.600	47.574	47.548	47.523
1.86	47.497	47.472	47.446	47.421	47.395	47.370	47.344	47.319	47.294	47.268
1.87	47.243	47.218	47.193	47.168	47.142	47.117	47.092	47.067	47.042	47.017
1.88	46.992	46.967	46.942	46.917	46.892	46.867	46.842	46.818	46.793	46.768
1.89	46.743	46.719	46.694	46.669	46.645	46.620	46.595	46.571	46.546	46.522
1.90	46.497	46.473	46.448	46.424	46.400	46.375	46.351	46.327	46.302	46.278
1.91	46.254	46.230	46.206	46.181	46.157	46.133	46.109	46.085	46.061	46.037
1.92	46.013	45.989	45.965	45.941	45.917	45.894	45.870	45.846	45.822	45.798
1.93	45.775	45.751	45.727	45.704	45.680	45.656	45.633	45.609	45.586	45.562
1.94	45.539	45.515	45.492	45.468	45.445	45.422	45.398	45.375	45.352	45.328
1.95	45.305	45.282	45.259	45.236	45.212	45.189	45.166	45.143	45.120	45.097
1.96	45.074	45.051	45.028	45.005	44.982	44.959	44.937	44.914	44.891	44.868
1.97	44.845	44.823	44.800	44.777	44.754	44.732	44.709	44.687	44.664	44.641
1.98	44.619	44.596	44.574	44.551	44.529	44.506	44.484	44.462	44.439	44.417
1.99	44.395	44.372	44.350	44.328	44.306	44.283	44.261	44.239	44.217	44.195

20, DEG.	0	1	2	3	4	5	6	7	8	9
2.00	44.173	44.151	44.129	44.107	44.085	44.063	44.041	44.019	43.997	43.975
2.01	43.953	43.931	43.909	43.887	43.866	43.844	43.822	43.800	43.779	43.757
2.02	43.735	43.714	43.692	43.671	43.649	43.627	43.606	43.584	43.563	43.541
2.03	43.520	43.499	43.477	43.456	43.434	43.413	43.392	43.370	43.349	43.328
2.04	43.307	43.285	43.264	43.243	43.222	43.201	43.180	43.159	43.137	43.116
2.05	43.095	43.074	43.053	43.032	43.011	42.991	42.970	42.949	42.928	42.907
2.06	42.886	42.865	42.845	42.824	42.803	42.782	42.762	42.741	42.720	42.700
2.07	42.679	42.658	42.638	42.617	42.597	42.576	42.556	42.535	42.515	42.494
2.08	42.474	42.453	42.433	42.413	42.392	42.372	42.352	42.331	42.311	42.291
2.09	42.271	42.250	42.230	42.210	42.190	42.170	42.150	42.130	42.110	42.089
2.10	42.069	42.049	42.029	42.009	41.989	41.970	41.950	41.930	41.910	41.890
2.11	41.870	41.850	41.830	41.811	41.791	41.771	41.751	41.732	41.712	41.692
2.12	41.673	41.653	41.633	41.614	41.594	41.575	41.555	41.535	41.516	41.496
2.13	41.477	41.458	41.438	41.419	41.399	41.380	41.360	41.341	41.322	41.302
2.14	41.283	41.264	41.245	41.225	41.206	41.187	41.168	41.149	41.129	41.110
2.15	41.091	41.072	41.053	41.034	41.015	40.996	40.977	40.958	40.939	40.920
2.16	40.901	40.882	40.863	40.844	40.825	40.807	40.788	40.769	40.750	40.731
2.17	40.713	40.694	40.675	40.656	40.638	40.619	40.600	40.582	40.563	40.544
2.18	40.526	40.507	40.489	40.470	40.452	40.433	40.415	40.396	40.378	40.359
2.19	40.341	40.322	40.304	40.286	40.267	40.249	40.231	40.212	40.194	40.176
2.20	40.157	40.139	40.121	40.103	40.085	40.066	40.048	40.030	40.012	39.994
2.21	39.976	39.958	39.940	39.922	39.904	39.885	39.867	39.850	39.832	39.814
2.22	39.796	39.778	39.760	39.742	39.724	39.706	39.688	39.671	39.653	39.635
2.23	39.617	39.599	39.582	39.564	39.546	39.529	39.511	39.493	39.476	39.458
2.24	39.440	39.423	39.405	39.388	39.370	39.353	39.335	39.318	39.300	39.283
2.25	39.265	39.248	39.230	39.213	39.195	39.178	39.161	39.143	39.126	39.109
2.26	39.091	39.074	39.057	39.040	39.022	39.005	38.988	38.971	38.954	38.936
2.27	38.919	38.902	38.885	38.868	38.851	38.834	38.817	38.800	38.783	38.766
2.28	38.749	38.732	38.715	38.698	38.681	38.664	38.647	38.630	38.613	38.596
2.29	38.579	38.563	38.546	38.529	38.512	38.495	38.479	38.462	38.445	38.428
2.30	38.412	38.395	38.378	38.362	38.345	38.328	38.312	38.295	38.279	38.262
2.31	38.245	38.229	38.212	38.196	38.179	38.163	38.146	38.130	38.113	38.097
2.32	38.081	38.064	38.048	38.031	38.015	37.999	37.982	37.966	37.950	37.933
2.33	37.917	37.901	37.885	37.868	37.852	37.836	37.820	37.804	37.787	37.771
2.34	37.755	37.739	37.723	37.707	37.691	37.675	37.659	37.643	37.627	37.610
2.35	37.594	37.579	37.563	37.547	37.531	37.515	37.499	37.483	37.467	37.451
2.36	37.435	37.419	37.404	37.388	37.372	37.356	37.340	37.325	37.309	37.293
2.37	37.277	37.262	37.246	37.230	37.214	37.199	37.183	37.168	37.152	37.136
2.38	37.121	37.105	37.090	37.074	37.058	37.043	37.027	37.012	36.996	36.981
2.39	36.965	36.950	36.934	36.919	36.904	36.888	36.873	36.857	36.842	36.827
2.40	36.811	36.796	36.781	36.765	36.750	36.735	36.720	36.704	36.689	36.674
2.41	36.659	36.643	36.628	36.613	36.598	36.583	36.568	36.553	36.537	36.522
2.42	36.507	36.492	36.477	36.462	36.447	36.432	36.417	36.402	36.387	36.372
2.43	36.357	36.342	36.327	36.312	36.297	36.282	36.267	36.253	36.238	36.223
2.44	36.208	36.193	36.178	36.164	36.149	36.134	36.119	36.104	36.090	36.075
2.45	36.060	36.046	36.031	36.016	36.001	35.987	35.972	35.958	35.943	35.928
2.46	35.914	35.899	35.885	35.870	35.855	35.841	35.826	35.812	35.797	35.783
2.47	35.768	35.754	35.739	35.725	35.710	35.696	35.682	35.667	35.653	35.638
2.48	35.624	35.610	35.595	35.581	35.567	35.552	35.538	35.524	35.510	35.495
2.49	35.481	35.467	35.453	35.438	35.424	35.410	35.396	35.382	35.367	35.353

20, DEG.	0	1	2	3	4	5	6	7	8	9
2.50	35.339	35.325	35.311	35.297	35.283	35.269	35.255	35.240	35.226	35.212
2.51	35.198	35.184	35.170	35.156	35.142	35.128	35.114	35.101	35.087	35.073
2.52	35.059	35.045	35.031	35.017	35.003	34.989	34.975	34.962	34.948	34.934
2.53	34.920	34.906	34.893	34.879	34.865	34.851	34.838	34.824	34.810	34.796
2.54	34.783	34.769	34.755	34.742	34.728	34.714	34.701	34.687	34.674	34.660
2.55	34.646	34.633	34.619	34.606	34.592	34.579	34.565	34.552	34.538	34.525
2.56	34.511	34.498	34.484	34.471	34.457	34.444	34.430	34.417	34.404	34.390
2.57	34.377	34.363	34.350	34.337	34.323	34.310	34.297	34.283	34.270	34.257
2.58	34.244	34.230	34.217	34.204	34.191	34.177	34.164	34.151	34.138	34.125
2.59	34.111	34.098	34.085	34.072	34.059	34.046	34.033	34.019	34.006	33.993
2.60	33.980	33.967	33.954	33.941	33.928	33.915	33.902	33.889	33.876	33.863
2.61	33.850	33.837	33.824	33.811	33.798	33.785	33.772	33.759	33.747	33.734
2.62	33.721	33.708	33.695	33.682	33.669	33.657	33.644	33.631	33.618	33.605
2.63	33.593	33.580	33.567	33.554	33.542	33.529	33.516	33.503	33.491	33.478
2.64	33.465	33.453	33.440	33.427	33.415	33.402	33.390	33.377	33.364	33.352
2.65	33.339	33.327	33.314	33.301	33.289	33.276	33.264	33.251	33.239	33.226
2.66	33.214	33.201	33.189	33.176	33.164	33.152	33.139	33.127	33.114	33.102
2.67	33.089	33.077	33.065	33.052	33.040	33.028	33.015	33.003	32.991	32.978
2.68	32.966	32.954	32.941	32.929	32.917	32.905	32.892	32.880	32.868	32.856
2.69	32.843	32.831	32.819	32.807	32.795	32.783	32.770	32.758	32.746	32.734
2.70	32.722	32.710	32.698	32.686	32.673	32.661	32.649	32.637	32.625	32.613
2.71	32.601	32.589	32.577	32.565	32.553	32.541	32.529	32.517	32.505	32.493
2.72	32.481	32.469	32.457	32.446	32.434	32.422	32.410	32.398	32.386	32.374
2.73	32.362	32.351	32.339	32.327	32.315	32.303	32.291	32.280	32.268	32.256
2.74	32.244	32.233	32.221	32.209	32.197	32.186	32.174	32.162	32.150	32.139
2.75	32.127	32.115	32.104	32.092	32.080	32.069	32.057	32.045	32.034	32.022
2.76	32.011	31.999	31.987	31.976	31.964	31.953	31.941	31.930	31.918	31.907
2.77	31.895	31.884	31.872	31.861	31.849	31.838	31.826	31.815	31.803	31.792
2.78	31.780	31.769	31.758	31.746	31.735	31.723	31.712	31.701	31.689	31.678
2.79	31.667	31.655	31.644	31.633	31.621	31.610	31.599	31.587	31.576	31.565
2.80	31.553	31.542	31.531	31.520	31.508	31.497	31.486	31.475	31.464	31.452
2.81	31.441	31.430	31.419	31.408	31.396	31.385	31.374	31.363	31.352	31.341
2.82	31.330	31.319	31.308	31.296	31.285	31.274	31.263	31.252	31.241	31.230
2.83	31.219	31.208	31.197	31.186	31.175	31.164	31.153	31.142	31.131	31.120
2.84	31.109	31.098	31.087	31.076	31.065	31.054	31.044	31.033	31.022	31.011
2.85	31.000	30.989	30.978	30.967	30.957	30.946	30.935	30.924	30.913	30.902
2.86	30.892	30.881	30.870	30.859	30.848	30.838	30.827	30.816	30.805	30.795
2.87	30.784	30.773	30.763	30.752	30.741	30.730	30.720	30.709	30.698	30.688
2.88	30.677	30.666	30.656	30.645	30.635	30.624	30.613	30.603	30.592	30.582
2.89	30.571	30.560	30.550	30.539	30.529	30.518	30.508	30.497	30.487	30.476
2.90	30.466	30.455	30.445	30.434	30.424	30.413	30.403	30.392	30.382	30.371
2.91	30.361	30.351	30.340	30.330	30.319	30.309	30.298	30.288	30.278	30.267
2.92	30.257	30.247	30.236	30.226	30.216	30.205	30.195	30.185	30.174	30.164
2.93	30.154	30.143	30.133	30.123	30.113	30.102	30.092	30.082	30.072	30.061
2.94	30.051	30.041	30.031	30.021	30.010	30.000	29.990	29.980	29.970	29.960
2.95	29.949	29.939	29.929	29.919	29.909	29.899	29.889	29.878	29.868	29.858
2.96	29.848	29.838	29.828	29.818	29.808	29.798	29.788	29.778	29.768	29.758
2.97	29.748	29.738	29.728	29.718	29.708	29.698	29.688	29.678	29.668	29.658
2.98	29.648	29.638	29.628	29.618	29.608	29.598	29.588	29.578	29.569	29.559
2.99	29.549	29.539	29.529	29.519	29.509	29.499	29.490	29.480	29.470	29.460

Table 2
Cobalt $K\bar{\alpha}$ Radiation
 2θ in Degrees
 $\lambda = 1.790260 \text{ \AA}^*$

20, DEG.	0	1	2	3	4	5	6	7	8	9
0.00			51267.	34191.	25644.	20515.	17096.	14653.	12822.	11397.
0.01	10257.	9325.	8548.	7890.	7327.	6838.	6411.	6034.	5699.	5399.
0.02	5128.7	4884.5	4662.5	4459.8	4273.9	4103.0	3945.2	3799.0	3663.4	3537.0
0.03	3419.1	3308.9	3205.4	3108.3	3016.9	2930.7	2849.3	2772.3	2699.3	2630.1
0.04	2564.4	2501.8	2442.2	2385.5	2331.2	2279.4	2229.9	2182.4	2137.0	2093.4
0.05	2051.5	2011.3	1972.6	1935.4	1899.5	1865.0	1831.7	1799.6	1768.5	1738.5
0.06	1709.6	1681.6	1654.4	1628.2	1602.7	1578.1	1554.2	1531.0	1508.4	1486.6
0.07	1465.3	1444.7	1424.6	1405.1	1386.1	1367.7	1349.7	1332.1	1315.1	1298.4
0.08	1282.2	1266.4	1250.9	1235.8	1221.1	1206.8	1192.7	1179.0	1165.6	1152.5
0.09	1139.7	1127.2	1114.9	1103.0	1091.2	1079.7	1068.5	1057.5	1046.7	1036.1
0.10	1025.7	1015.6	1005.6	995.9	986.3	976.9	967.7	958.6	949.8	941.0
0.11	932.49	924.09	915.84	907.74	899.78	891.95	884.26	876.70	869.27	861.97
0.12	854.79	847.72	840.77	833.94	827.21	820.59	814.08	807.67	801.36	795.15
0.13	789.03	783.01	777.08	771.24	765.48	759.81	754.22	748.72	743.29	737.95
0.14	732.67	727.48	722.35	717.30	712.32	707.41	702.56	697.78	693.07	688.42
0.15	683.83	679.30	674.83	670.42	666.07	661.77	657.53	653.34	649.20	645.12
0.16	641.09	637.11	633.18	629.29	625.45	621.66	617.92	614.22	610.56	606.95
0.17	603.38	599.85	596.36	592.92	589.51	586.14	582.81	579.52	576.26	573.04
0.18	569.86	566.71	563.60	560.52	557.47	554.46	551.48	548.53	545.61	542.72
0.19	539.87	537.04	534.24	531.47	528.73	526.02	523.34	520.68	518.05	515.45
0.20	512.87	510.32	507.79	505.29	502.82	500.36	497.93	495.53	493.15	490.79
0.21	488.45	486.13	483.84	481.57	479.32	477.09	474.88	472.69	470.52	468.38
0.22	466.25	464.14	462.05	459.97	457.92	455.89	453.87	451.87	449.89	447.92
0.23	445.98	444.05	442.13	440.23	438.35	436.49	434.64	432.80	430.98	429.18
0.24	427.39	425.62	423.86	422.12	420.39	418.67	416.97	415.28	413.61	411.95
0.25	410.30	408.66	407.04	405.43	403.84	402.25	400.68	399.12	397.58	396.04
0.26	394.52	393.01	391.51	390.02	388.54	387.07	385.62	384.17	382.74	381.32
0.27	379.91	378.50	377.11	375.73	374.36	373.00	371.65	370.30	368.97	367.65
0.28	366.34	365.03	363.74	362.45	361.18	359.91	358.65	357.40	356.16	354.93
0.29	353.71	352.49	351.28	350.08	348.89	347.71	346.54	345.37	344.21	343.06
0.30	341.91	340.78	339.65	338.53	337.42	336.31	335.21	334.12	333.03	331.96
0.31	330.89	329.82	328.76	327.71	326.67	325.63	324.60	323.58	322.56	321.55
0.32	320.55	319.55	318.55	317.57	316.59	315.61	314.65	313.68	312.73	311.78
0.33	310.83	309.89	308.96	308.03	307.11	306.19	305.28	304.38	303.47	302.58
0.34	301.69	300.80	299.93	299.05	298.18	297.32	296.46	295.60	294.75	293.91
0.35	293.07	292.24	291.40	290.58	289.76	288.94	288.13	287.32	286.52	285.72
0.36	284.93	284.14	283.36	282.57	281.80	281.03	280.26	279.49	278.74	277.98
0.37	277.23	276.48	275.74	275.00	274.26	273.53	272.80	272.08	271.36	270.65
0.38	269.93	269.22	268.52	267.82	267.12	266.43	265.74	265.05	264.37	263.69
0.39	263.01	262.34	261.67	261.00	260.34	259.68	259.03	258.37	257.73	257.08
0.40	256.44	255.80	255.16	254.53	253.90	253.27	252.65	252.03	251.41	250.79
0.41	250.18	249.57	248.97	248.36	247.76	247.17	246.57	245.98	245.39	244.81
0.42	244.23	243.65	243.07	242.49	241.92	241.35	240.79	240.22	239.66	239.10
0.43	238.55	237.99	237.44	236.89	236.35	235.80	235.26	234.72	234.19	233.66
0.44	233.12	232.60	232.07	231.55	231.02	230.50	229.99	229.47	228.96	228.45
0.45	227.94	227.44	226.93	226.43	225.94	225.44	224.94	224.45	223.96	223.47
0.46	222.99	222.50	222.02	221.54	221.07	220.59	220.12	219.65	219.18	218.71
0.47	218.24	217.78	217.32	216.86	216.40	215.95	215.49	215.04	214.59	214.14
0.48	213.70	213.25	212.81	212.37	211.93	211.49	211.06	210.63	210.19	209.76
0.49	209.34	208.91	208.49	208.06	207.64	207.22	206.80	206.39	205.97	205.56

20, DEG.	0	1	2	3	4	5	6	7	8	9
0.50	205.15	204.74	204.33	203.93	203.52	203.12	202.72	202.32	201.92	201.52
0.51	201.13	200.73	200.34	199.95	199.56	199.17	198.79	198.40	198.02	197.64
0.52	197.26	196.88	196.50	196.13	195.75	195.38	195.01	194.64	194.27	193.90
0.53	193.54	193.17	192.81	192.45	192.09	191.73	191.37	191.01	190.66	190.31
0.54	189.95	189.60	189.25	188.90	188.56	188.21	187.87	187.52	187.18	186.84
0.55	186.50	186.16	185.82	185.49	185.15	184.82	184.49	184.16	183.83	183.50
0.56	183.17	182.84	182.52	182.19	181.87	181.55	181.23	180.91	180.59	180.27
0.57	179.96	179.64	179.33	179.01	178.70	178.39	178.08	177.77	177.47	177.16
0.58	176.85	176.55	176.25	175.94	175.64	175.34	175.04	174.74	174.45	174.15
0.59	173.86	173.56	173.27	172.98	172.68	172.39	172.11	171.82	171.53	171.24
0.60	170.96	170.67	170.39	170.11	169.83	169.55	169.27	168.99	168.71	168.43
0.61	168.16	167.88	167.61	167.33	167.06	166.79	166.52	166.25	165.98	165.71
0.62	165.44	165.18	164.91	164.65	164.38	164.12	163.86	163.60	163.34	163.08
0.63	162.82	162.56	162.30	162.05	161.79	161.54	161.28	161.03	160.78	160.52
0.64	160.27	160.02	159.77	159.53	159.28	159.03	158.78	158.54	158.29	158.05
0.65	157.81	157.57	157.32	157.08	156.84	156.60	156.36	156.13	155.89	155.65
0.66	155.42	155.18	154.95	154.71	154.48	154.25	154.02	153.79	153.56	153.33
0.67	153.10	152.87	152.64	152.41	152.19	151.96	151.74	151.51	151.29	151.07
0.68	150.85	150.62	150.40	150.18	149.96	149.74	149.53	149.31	149.09	148.88
0.69	148.66	148.44	148.23	148.02	147.80	147.59	147.38	147.17	146.96	146.75
0.70	146.54	146.33	146.12	145.91	145.70	145.50	145.29	145.08	144.88	144.68
0.71	144.47	144.27	144.07	143.86	143.66	143.46	143.26	143.06	142.86	142.66
0.72	142.47	142.27	142.07	141.87	141.68	141.48	141.29	141.09	140.90	140.71
0.73	140.51	140.32	140.13	139.94	139.75	139.56	139.37	139.18	138.99	138.80
0.74	138.61	138.43	138.24	138.06	137.87	137.68	137.50	137.32	137.13	136.95
0.75	136.77	136.58	136.40	136.22	136.04	135.86	135.68	135.50	135.32	135.15
0.76	134.97	134.79	134.61	134.44	134.26	134.09	133.91	133.74	133.56	133.39
0.77	133.21	133.04	132.87	132.70	132.53	132.36	132.18	132.01	131.84	131.68
0.78	131.51	131.34	131.17	131.00	130.84	130.67	130.50	130.34	130.17	130.01
0.79	129.84	129.68	129.51	129.35	129.19	129.03	128.86	128.70	128.54	128.38
0.80	128.22	128.06	127.90	127.74	127.58	127.42	127.26	127.11	126.95	126.79
0.81	126.64	126.48	126.32	126.17	126.01	125.86	125.70	125.55	125.40	125.24
0.82	125.09	124.94	124.79	124.64	124.48	124.33	124.18	124.03	123.88	123.73
0.83	123.58	123.44	123.29	123.14	122.99	122.84	122.70	122.55	122.40	122.26
0.84	122.11	121.97	121.82	121.68	121.53	121.39	121.25	121.10	120.96	120.82
0.85	120.68	120.54	120.39	120.25	120.11	119.97	119.83	119.69	119.55	119.41
0.86	119.27	119.14	119.00	118.86	118.72	118.58	118.45	118.31	118.17	118.04
0.87	117.90	117.77	117.63	117.50	117.36	117.23	117.10	116.96	116.83	116.70
0.88	116.56	116.43	116.30	116.17	116.04	115.90	115.77	115.64	115.51	115.38
0.89	115.25	115.12	114.99	114.87	114.74	114.61	114.48	114.35	114.23	114.10
0.90	113.97	113.85	113.72	113.59	113.47	113.34	113.22	113.09	112.97	112.84
0.91	112.72	112.60	112.47	112.35	112.23	112.10	111.98	111.86	111.74	111.62
0.92	111.50	111.37	111.25	111.13	111.01	110.89	110.77	110.65	110.53	110.41
0.93	110.30	110.18	110.06	109.94	109.82	109.71	109.59	109.47	109.36	109.24
0.94	109.12	109.01	108.89	108.78	108.66	108.55	108.43	108.32	108.20	108.09
0.95	107.97	107.86	107.75	107.63	107.52	107.41	107.30	107.18	107.07	106.96
0.96	106.85	106.74	106.63	106.52	106.41	106.30	106.19	106.08	105.97	105.86
0.97	105.75	105.64	105.53	105.42	105.31	105.21	105.10	104.99	104.88	104.78
0.98	104.67	104.56	104.46	104.35	104.24	104.14	104.03	103.93	103.82	103.72
0.99	103.61	103.51	103.40	103.30	103.19	103.09	102.99	102.88	102.78	102.68

20, DEG.	0	1	2	3	4	5	6	7	8	9
1.00	102.58	102.47	102.37	102.27	102.17	102.07	101.96	101.86	101.76	101.66
1.01	101.56	101.46	101.36	101.26	101.16	101.06	100.96	100.86	100.76	100.66
1.02	100.56	100.47	100.37	100.27	100.17	100.07	99.98	99.88	99.78	99.68
1.03	99.588	99.491	99.395	99.299	99.203	99.107	99.011	98.916	98.821	98.725
1.04	98.631	98.536	98.441	98.347	98.253	98.159	98.065	97.971	97.878	97.784
1.05	97.691	97.598	97.506	97.413	97.320	97.228	97.136	97.044	96.953	96.861
1.06	96.770	96.678	96.587	96.497	96.406	96.315	96.225	96.135	96.045	95.955
1.07	95.865	95.776	95.686	95.597	95.508	95.419	95.331	95.242	95.154	95.066
1.08	94.978	94.890	94.802	94.715	94.627	94.540	94.453	94.366	94.279	94.193
1.09	94.106	94.020	93.934	93.848	93.762	93.677	93.591	93.506	93.421	93.336
1.10	93.251	93.166	93.082	92.997	92.913	92.829	92.745	92.661	92.578	92.494
1.11	92.411	92.328	92.245	92.162	92.079	91.996	91.914	91.832	91.750	91.668
1.12	91.586	91.504	91.422	91.341	91.260	91.179	91.098	91.017	90.936	90.856
1.13	90.775	90.695	90.615	90.535	90.455	90.375	90.296	90.216	90.137	90.058
1.14	89.979	89.900	89.821	89.743	89.664	89.586	89.508	89.430	89.352	89.274
1.15	89.197	89.119	89.042	88.965	88.887	88.810	88.734	88.657	88.580	88.504
1.16	88.428	88.352	88.275	88.200	88.124	88.048	87.973	87.897	87.822	87.747
1.17	87.672	87.597	87.522	87.448	87.373	87.299	87.225	87.151	87.077	87.003
1.18	86.929	86.855	86.782	86.709	86.635	86.562	86.489	86.416	86.344	86.271
1.19	86.198	86.126	86.054	85.982	85.910	85.838	85.766	85.694	85.623	85.551
1.20	85.480	85.409	85.338	85.267	85.196	85.126	85.055	84.984	84.914	84.844
1.21	84.774	84.704	84.634	84.564	84.494	84.425	84.356	84.286	84.217	84.148
1.22	84.079	84.010	83.941	83.873	83.804	83.736	83.667	83.599	83.531	83.463
1.23	83.395	83.328	83.260	83.192	83.125	83.058	82.991	82.923	82.857	82.790
1.24	82.723	82.656	82.590	82.523	82.457	82.391	82.325	82.259	82.193	82.127
1.25	82.061	81.996	81.930	81.865	81.799	81.734	81.669	81.604	81.539	81.475
1.26	81.410	81.345	81.281	81.217	81.152	81.088	81.024	80.960	80.896	80.833
1.27	80.769	80.705	80.642	80.579	80.515	80.452	80.389	80.326	80.263	80.201
1.28	80.138	80.075	80.013	79.951	79.888	79.826	79.764	79.702	79.640	79.578
1.29	79.517	79.455	79.394	79.332	79.271	79.210	79.149	79.088	79.027	78.966
1.30	78.905	78.844	78.784	78.723	78.663	78.603	78.543	78.482	78.422	78.363
1.31	78.303	78.243	78.183	78.124	78.064	78.005	77.946	77.887	77.827	77.768
1.32	77.710	77.651	77.592	77.533	77.475	77.416	77.358	77.300	77.241	77.183
1.33	77.125	77.067	77.010	76.952	76.894	76.836	76.779	76.722	76.664	76.607
1.34	76.550	76.493	76.436	76.379	76.322	76.265	76.209	76.152	76.096	76.039
1.35	75.983	75.927	75.870	75.814	75.758	75.702	75.647	75.591	75.535	75.480
1.36	75.424	75.369	75.313	75.258	75.203	75.148	75.093	75.038	74.983	74.928
1.37	74.874	74.819	74.764	74.710	74.656	74.601	74.547	74.493	74.439	74.385
1.38	74.331	74.277	74.223	74.170	74.116	74.063	74.009	73.956	73.903	73.849
1.39	73.796	73.743	73.690	73.637	73.585	73.532	73.479	73.427	73.374	73.322
1.40	73.269	73.217	73.165	73.113	73.060	73.009	72.957	72.905	72.853	72.801
1.41	72.750	72.698	72.647	72.595	72.544	72.493	72.441	72.390	72.339	72.288
1.42	72.237	72.186	72.136	72.085	72.034	71.984	71.933	71.883	71.833	71.782
1.43	71.732	71.682	71.632	71.582	71.532	71.482	71.432	71.383	71.333	71.284
1.44	71.234	71.185	71.135	71.086	71.037	70.988	70.939	70.889	70.841	70.792
1.45	70.743	70.694	70.645	70.597	70.548	70.500	70.451	70.403	70.355	70.306
1.46	70.258	70.210	70.162	70.114	70.066	70.019	69.971	69.923	69.875	69.828
1.47	69.780	69.733	69.686	69.638	69.591	69.544	69.497	69.450	69.403	69.356
1.48	69.309	69.262	69.215	69.169	69.122	69.076	69.029	68.983	68.936	68.890
1.49	68.844	68.798	68.752	68.705	68.659	68.614	68.568	68.522	68.476	68.430

COBALT

WAVELENGTH = 1.790280A°

20, DEG.	0	1	2	3	4	5	6	7	8	9
1.50	68.385	68.339	68.294	68.248	68.203	68.158	68.112	68.067	68.022	67.977
1.51	67.932	67.887	67.842	67.797	67.753	67.708	67.663	67.619	67.574	67.530
1.52	67.485	67.441	67.396	67.352	67.308	67.264	67.220	67.176	67.132	67.088
1.53	67.044	67.000	66.957	66.913	66.869	66.826	66.782	66.739	66.695	66.652
1.54	66.609	66.566	66.522	66.479	66.436	66.393	66.350	66.307	66.265	66.222
1.55	66.179	66.136	66.094	66.051	66.009	65.966	65.924	65.882	65.839	65.797
1.56	65.755	65.713	65.671	65.629	65.587	65.545	65.503	65.461	65.419	65.378
1.57	65.336	65.294	65.253	65.211	65.170	65.129	65.087	65.046	65.005	64.964
1.58	64.923	64.881	64.840	64.800	64.759	64.718	64.677	64.636	64.596	64.555
1.59	64.514	64.474	64.433	64.393	64.352	64.312	64.272	64.231	64.191	64.151
1.60	64.111	64.071	64.031	63.991	63.951	63.911	63.872	63.832	63.792	63.752
1.61	63.713	63.673	63.634	63.594	63.555	63.516	63.476	63.437	63.398	63.359
1.62	63.320	63.281	63.242	63.203	63.164	63.125	63.086	63.047	63.008	62.970
1.63	62.931	62.893	62.854	62.816	62.777	62.739	62.700	62.662	62.624	62.586
1.64	62.547	62.509	62.471	62.433	62.395	62.357	62.320	62.282	62.244	62.206
1.65	62.168	62.131	62.093	62.056	62.018	61.981	61.943	61.906	61.868	61.831
1.66	61.794	61.757	61.720	61.682	61.645	61.608	61.571	61.534	61.498	61.461
1.67	61.424	61.387	61.350	61.314	61.277	61.241	61.204	61.168	61.131	61.095
1.68	61.058	61.022	60.986	60.950	60.913	60.877	60.841	60.805	60.769	60.733
1.69	60.697	60.661	60.625	60.590	60.554	60.518	60.482	60.447	60.411	60.376
1.70	60.340	60.305	60.269	60.234	60.198	60.163	60.128	60.093	60.057	60.022
1.71	59.987	59.952	59.917	59.882	59.847	59.812	59.778	59.743	59.708	59.673
1.72	59.639	59.604	59.569	59.535	59.500	59.466	59.431	59.397	59.362	59.328
1.73	59.294	59.260	59.225	59.191	59.157	59.123	59.089	59.055	59.021	58.987
1.74	58.953	58.919	58.885	58.852	58.818	58.784	58.750	58.717	58.683	58.650
1.75	58.616	58.583	58.549	58.516	58.483	58.449	58.416	58.383	58.349	58.316
1.76	58.283	58.250	58.217	58.184	58.151	58.118	58.085	58.052	58.019	57.987
1.77	57.954	57.921	57.889	57.856	57.823	57.791	57.758	57.726	57.693	57.661
1.78	57.628	57.596	57.564	57.531	57.499	57.467	57.435	57.403	57.371	57.338
1.79	57.306	57.274	57.243	57.211	57.179	57.147	57.115	57.083	57.052	57.020
1.80	56.988	56.956	56.925	56.893	56.862	56.830	56.799	56.767	56.736	56.705
1.81	56.673	56.642	56.611	56.580	56.548	56.517	56.486	56.455	56.424	56.393
1.82	56.362	56.331	56.300	56.269	56.238	56.208	56.177	56.146	56.115	56.085
1.83	56.054	56.023	55.993	55.962	55.932	55.901	55.871	55.840	55.810	55.780
1.84	55.749	55.719	55.689	55.659	55.628	55.598	55.568	55.538	55.508	55.478
1.85	55.448	55.418	55.388	55.358	55.328	55.299	55.269	55.239	55.209	55.180
1.86	55.150	55.120	55.091	55.061	55.032	55.002	54.973	54.943	54.914	54.884
1.87	54.855	54.826	54.796	54.767	54.738	54.709	54.680	54.650	54.621	54.592
1.88	54.563	54.534	54.505	54.476	54.447	54.419	54.390	54.361	54.332	54.303
1.89	54.275	54.246	54.217	54.189	54.160	54.131	54.103	54.074	54.046	54.017
1.90	53.989	53.961	53.932	53.904	53.876	53.847	53.819	53.791	53.763	53.734
1.91	53.706	53.678	53.650	53.622	53.594	53.566	53.538	53.510	53.482	53.455
1.92	53.427	53.399	53.371	53.343	53.316	53.288	53.260	53.233	53.205	53.177
1.93	53.150	53.122	53.095	53.067	53.040	53.013	52.985	52.958	52.930	52.903
1.94	52.876	52.849	52.821	52.794	52.767	52.740	52.713	52.686	52.659	52.632
1.95	52.605	52.578	52.551	52.524	52.497	52.470	52.443	52.417	52.390	52.363
1.96	52.336	52.310	52.283	52.256	52.230	52.203	52.177	52.150	52.124	52.097
1.97	52.071	52.044	52.018	51.992	51.966	51.939	51.913	51.886	51.860	51.834
1.98	51.808	51.782	51.756	51.729	51.703	51.677	51.651	51.625	51.599	51.573
1.99	51.548	51.522	51.496	51.470	51.444	51.418	51.393	51.367	51.341	51.315

20, DEG.	0	1	2	3	4	5	6	7	8	9
2.00	51.290	51.264	51.239	51.213	51.187	51.162	51.136	51.111	51.085	51.060
2.01	51.035	51.009	50.984	50.959	50.933	50.908	50.883	50.858	50.832	50.807
2.02	50.782	50.757	50.732	50.707	50.682	50.657	50.632	50.607	50.582	50.557
2.03	50.532	50.507	50.482	50.457	50.433	50.408	50.383	50.358	50.334	50.309
2.04	50.284	50.260	50.235	50.210	50.186	50.161	50.137	50.112	50.088	50.063
2.05	50.039	50.015	49.990	49.966	49.942	49.917	49.893	49.869	49.844	49.820
2.06	49.796	49.772	49.748	49.724	49.700	49.676	49.651	49.627	49.603	49.579
2.07	49.556	49.532	49.508	49.484	49.460	49.436	49.412	49.389	49.365	49.341
2.08	49.317	49.294	49.270	49.246	49.223	49.199	49.175	49.152	49.128	49.105
2.09	49.081	49.058	49.034	49.011	48.988	48.964	48.941	48.918	48.894	48.871
2.10	48.848	48.824	48.801	48.778	48.755	48.732	48.709	48.685	48.662	48.639
2.11	48.616	48.593	48.570	48.547	48.524	48.501	48.478	48.455	48.433	48.410
2.12	48.387	48.364	48.341	48.319	48.296	48.273	48.250	48.228	48.205	48.182
2.13	48.160	48.137	48.115	48.092	48.070	48.047	48.025	48.002	47.980	47.957
2.14	47.935	47.912	47.890	47.868	47.845	47.823	47.801	47.778	47.756	47.734
2.15	47.712	47.690	47.667	47.645	47.623	47.601	47.579	47.557	47.535	47.513
2.16	47.491	47.469	47.447	47.425	47.403	47.381	47.359	47.338	47.316	47.294
2.17	47.272	47.250	47.229	47.207	47.185	47.163	47.142	47.120	47.099	47.077
2.18	47.055	47.034	47.012	46.991	46.969	46.948	46.926	46.905	46.883	46.862
2.19	46.840	46.819	46.798	46.776	46.755	46.734	46.713	46.691	46.670	46.649
2.20	46.628	46.606	46.585	46.564	46.543	46.522	46.501	46.480	46.459	46.438
2.21	46.417	46.396	46.375	46.354	46.333	46.312	46.291	46.270	46.249	46.228
2.22	46.208	46.187	46.166	46.145	46.124	46.104	46.083	46.062	46.042	46.021
2.23	46.000	45.980	45.959	45.939	45.918	45.897	45.877	45.856	45.836	45.816
2.24	45.795	45.775	45.754	45.734	45.713	45.693	45.673	45.652	45.632	45.612
2.25	45.592	45.571	45.551	45.531	45.511	45.490	45.470	45.450	45.430	45.410
2.26	45.390	45.370	45.350	45.330	45.310	45.290	45.270	45.250	45.230	45.210
2.27	45.190	45.170	45.150	45.130	45.110	45.091	45.071	45.051	45.031	45.011
2.28	44.992	44.972	44.952	44.933	44.913	44.893	44.874	44.854	44.834	44.815
2.29	44.795	44.776	44.756	44.737	44.717	44.698	44.678	44.659	44.639	44.620
2.30	44.601	44.581	44.562	44.542	44.523	44.504	44.485	44.465	44.446	44.427
2.31	44.408	44.388	44.369	44.350	44.331	44.312	44.292	44.273	44.254	44.235
2.32	44.216	44.197	44.178	44.159	44.140	44.121	44.102	44.083	44.064	44.045
2.33	44.026	44.007	43.989	43.970	43.951	43.932	43.913	43.895	43.876	43.857
2.34	43.838	43.820	43.801	43.782	43.763	43.745	43.726	43.708	43.689	43.670
2.35	43.652	43.633	43.615	43.596	43.578	43.559	43.541	43.522	43.504	43.485
2.36	43.467	43.448	43.430	43.412	43.393	43.375	43.357	43.338	43.320	43.302
2.37	43.283	43.265	43.247	43.229	43.211	43.192	43.174	43.156	43.138	43.120
2.38	43.102	43.083	43.065	43.047	43.029	43.011	42.993	42.975	42.957	42.939
2.39	42.921	42.903	42.885	42.867	42.850	42.832	42.814	42.796	42.778	42.760
2.40	42.742	42.725	42.707	42.689	42.671	42.654	42.636	42.618	42.600	42.583
2.41	42.565	42.547	42.530	42.512	42.495	42.477	42.459	42.442	42.424	42.407
2.42	42.389	42.372	42.354	42.337	42.319	42.302	42.284	42.267	42.250	42.232
2.43	42.215	42.197	42.180	42.163	42.145	42.128	42.111	42.094	42.076	42.059
2.44	42.042	42.025	42.007	41.990	41.973	41.956	41.939	41.922	41.904	41.887
2.45	41.870	41.853	41.836	41.819	41.802	41.785	41.768	41.751	41.734	41.717
2.46	41.700	41.683	41.666	41.649	41.632	41.616	41.599	41.582	41.565	41.548
2.47	41.531	41.515	41.498	41.481	41.464	41.447	41.431	41.414	41.397	41.381
2.48	41.364	41.347	41.331	41.314	41.297	41.281	41.264	41.247	41.231	41.214
2.49	41.198	41.181	41.165	41.148	41.132	41.115	41.099	41.082	41.066	41.049

COBALT

14

WAVELENGTH = 1.790860A°

20, DEG,	0	1	2	3	4	5	6	7	8	9
2.50	41.033	41.017	41.000	40.984	40.967	40.951	40.935	40.918	40.902	40.886
2.51	40.870	40.853	40.837	40.821	40.805	40.788	40.772	40.756	40.740	40.724
2.52	40.707	40.691	40.675	40.659	40.643	40.627	40.611	40.595	40.579	40.563
2.53	40.547	40.531	40.515	40.499	40.483	40.467	40.451	40.435	40.419	40.403
2.54	40.387	40.371	40.355	40.339	40.323	40.308	40.292	40.276	40.260	40.244
2.55	40.229	40.213	40.197	40.181	40.166	40.150	40.134	40.118	40.103	40.087
2.56	40.071	40.056	40.040	40.025	40.009	39.993	39.978	39.962	39.947	39.931
2.57	39.914	39.900	39.885	39.869	39.854	39.838	39.823	39.807	39.792	39.776
2.58	39.761	39.745	39.730	39.715	39.699	39.684	39.669	39.653	39.638	39.623
2.59	39.607	39.592	39.577	39.562	39.546	39.531	39.516	39.501	39.485	39.470
2.60	39.455	39.440	39.425	39.410	39.394	39.379	39.364	39.349	39.334	39.319
2.61	39.304	39.289	39.274	39.259	39.244	39.229	39.214	39.199	39.184	39.169
2.62	39.154	39.139	39.124	39.109	39.094	39.079	39.065	39.050	39.035	39.020
2.63	39.005	38.990	38.975	38.961	38.946	38.931	38.916	38.902	38.887	38.872
2.64	38.857	38.843	38.828	38.813	38.799	38.784	38.769	38.755	38.740	38.725
2.65	38.711	38.696	38.682	38.667	38.652	38.638	38.623	38.609	38.594	38.580
2.66	38.565	38.551	38.536	38.522	38.507	38.493	38.478	38.464	38.450	38.435
2.67	38.421	38.406	38.392	38.378	38.363	38.349	38.335	38.320	38.306	38.292
2.68	38.278	38.263	38.249	38.235	38.220	38.206	38.192	38.178	38.164	38.149
2.69	38.135	38.121	38.107	38.093	38.079	38.065	38.050	38.036	38.022	38.008
2.70	37.994	37.980	37.966	37.952	37.938	37.924	37.910	37.896	37.882	37.868
2.71	37.854	37.840	37.826	37.812	37.798	37.784	37.770	37.756	37.742	37.729
2.72	37.715	37.701	37.687	37.673	37.659	37.646	37.632	37.618	37.604	37.590
2.73	37.577	37.563	37.549	37.535	37.522	37.508	37.494	37.481	37.467	37.453
2.74	37.439	37.426	37.412	37.399	37.385	37.371	37.358	37.344	37.331	37.317
2.75	37.303	37.290	37.276	37.263	37.249	37.236	37.222	37.209	37.195	37.182
2.76	37.168	37.155	37.141	37.128	37.114	37.101	37.088	37.074	37.061	37.047
2.77	37.034	37.021	37.007	36.994	36.981	36.967	36.954	36.941	36.927	36.914
2.78	36.901	36.888	36.874	36.861	36.848	36.835	36.821	36.808	36.795	36.782
2.79	36.769	36.755	36.742	36.729	36.716	36.703	36.690	36.677	36.664	36.650
2.80	36.637	36.624	36.611	36.598	36.585	36.572	36.559	36.546	36.533	36.520
2.81	36.507	36.494	36.481	36.468	36.455	36.442	36.429	36.416	36.403	36.390
2.82	36.378	36.365	36.352	36.339	36.326	36.313	36.300	36.288	36.275	36.262
2.83	36.249	36.236	36.223	36.211	36.198	36.185	36.172	36.160	36.147	36.134
2.84	36.121	36.109	36.096	36.083	36.071	36.058	36.045	36.033	36.020	36.007
2.85	35.995	35.982	35.969	35.957	35.944	35.932	35.919	35.907	35.894	35.881
2.86	35.869	35.856	35.844	35.831	35.819	35.806	35.794	35.781	35.769	35.756
2.87	35.744	35.732	35.719	35.707	35.694	35.682	35.669	35.657	35.645	35.632
2.88	35.620	35.608	35.595	35.583	35.570	35.558	35.546	35.534	35.521	35.509
2.89	35.497	35.484	35.472	35.460	35.448	35.435	35.423	35.411	35.399	35.386
2.90	35.374	35.362	35.350	35.338	35.326	35.313	35.301	35.289	35.277	35.265
2.91	35.253	35.241	35.229	35.216	35.204	35.192	35.180	35.168	35.156	35.144
2.92	35.132	35.120	35.108	35.096	35.084	35.072	35.060	35.048	35.036	35.024
2.93	35.012	35.000	34.988	34.976	34.964	34.953	34.941	34.929	34.917	34.905
2.94	34.893	34.881	34.869	34.858	34.846	34.834	34.822	34.810	34.798	34.787
2.95	34.775	34.763	34.751	34.740	34.728	34.716	34.704	34.693	34.681	34.669
2.96	34.657	34.646	34.634	34.622	34.611	34.599	34.587	34.576	34.564	34.552
2.97	34.541	34.529	34.517	34.506	34.494	34.483	34.471	34.460	34.448	34.436
2.98	34.425	34.413	34.402	34.390	34.379	34.367	34.356	34.344	34.333	34.321
2.99	34.310	34.298	34.287	34.275	34.264	34.252	34.241	34.230	34.218	34.207

Table 3
Iron $K\alpha$ Radiation
 2θ in Degrees
 $\lambda = 1.937355 \text{ \AA}^*$

20.DEG.	0	1	2	3	4	5	6	7	8	9
0.00			55501.	37001.	27751.	22200.	18500.	15857.	13875.	12334.
0.01	11100.	10091.	9250.	8539.	7929.	7400.	6938.	6530.	6167.	5842.
0.02	5650.1	5285.8	5048.6	4826.2	4625.1	4440.1	4269.3	4111.2	3964.4	3827.7
0.03	3700.1	3580.7	3468.8	3363.7	3264.8	3171.5	3083.4	3000.1	2921.1	2846.2
0.04	2775.1	2707.4	2642.9	2581.4	2522.8	2466.7	2413.1	2361.8	2312.5	2265.4
0.05	2220.0	2176.5	2134.7	2094.4	2055.6	2018.2	1982.2	1947.4	1913.8	1881.4
0.06	1850.0	1819.7	1790.4	1761.9	1734.4	1707.7	1681.9	1656.8	1632.4	1608.7
0.07	1585.7	1563.4	1541.7	1520.6	1500.0	1480.0	1460.6	1441.6	1423.1	1405.1
0.08	1387.5	1370.4	1353.7	1337.4	1321.5	1305.9	1290.7	1275.9	1261.4	1247.2
0.09	1233.4	1219.8	1206.5	1193.6	1180.9	1168.4	1156.3	1144.4	1132.7	1121.2
0.10	1110.0	1099.0	1088.3	1077.7	1067.3	1057.2	1047.2	1037.4	1027.8	1018.4
0.11	1009.1	1000.0	991.1	982.3	973.7	965.2	956.9	948.7	940.7	932.8
0.12	925.02	917.37	909.85	902.46	895.18	888.02	880.97	874.03	867.21	860.48
0.13	853.86	847.35	840.93	834.60	828.38	822.24	816.19	810.24	804.36	798.58
0.14	792.87	787.25	781.71	776.24	770.85	765.53	760.29	755.12	750.02	744.98
0.15	740.02	735.11	730.28	725.51	720.79	716.14	711.55	707.02	702.55	698.13
0.16	693.76	689.46	685.20	681.00	676.84	672.74	668.69	664.68	660.73	656.82
0.17	652.95	649.14	645.36	641.63	637.94	634.30	630.70	627.13	623.61	620.12
0.18	616.68	613.27	609.90	606.57	603.27	600.01	596.79	593.60	590.44	587.31
0.19	584.22	581.16	578.14	575.14	572.18	569.24	566.34	563.46	560.62	557.80
0.20	555.01	552.25	549.52	546.81	544.13	541.47	538.85	536.24	533.67	531.11
0.21	528.58	526.08	523.60	521.14	518.70	516.29	513.90	511.53	509.19	506.86
0.22	504.56	502.27	500.01	497.77	495.55	493.34	491.16	489.00	486.85	484.73
0.23	482.62	480.53	478.46	476.40	474.37	472.35	470.35	468.36	466.40	464.45
0.24	462.51	460.59	458.69	456.80	454.93	453.07	451.23	449.40	447.59	445.79
0.25	444.01	442.24	440.49	438.74	437.02	435.30	433.60	431.92	430.24	428.58
0.26	426.93	425.30	423.67	422.06	420.46	418.88	417.30	415.74	414.19	412.65
0.27	411.12	409.60	408.10	406.60	405.12	403.65	402.18	400.73	399.29	397.86
0.28	396.44	395.03	393.63	392.23	390.85	389.48	388.12	386.77	385.42	384.09
0.29	382.77	381.45	380.15	378.85	377.56	376.28	375.01	373.75	372.49	371.25
0.30	370.01	368.78	367.56	366.34	365.14	363.94	362.75	361.57	360.40	359.23
0.31	358.07	356.92	355.78	354.64	353.51	352.39	351.27	350.17	349.06	347.97
0.32	346.88	345.80	344.73	343.66	342.60	341.55	340.50	339.46	338.42	337.39
0.33	336.37	335.35	334.34	333.34	332.34	331.35	330.36	329.38	328.41	327.44
0.34	326.48	325.52	324.57	323.62	322.68	321.75	320.82	319.89	318.97	318.06
0.35	317.15	316.25	315.35	314.45	313.57	312.68	311.80	310.93	310.06	309.20
0.36	308.34	307.49	306.64	305.79	304.95	304.12	303.29	302.46	301.64	300.82
0.37	300.01	299.20	298.39	297.59	296.80	296.01	295.22	294.44	293.66	292.88
0.38	292.11	291.35	290.58	289.82	289.07	288.32	287.57	286.83	286.09	285.35
0.39	284.62	283.89	283.17	282.45	281.73	281.02	280.31	279.60	278.90	278.20
0.40	277.51	276.81	276.13	275.44	274.76	274.08	273.41	272.73	272.06	271.40
0.41	270.74	270.08	269.42	268.77	268.12	267.48	266.83	266.19	265.56	264.92
0.42	264.29	263.66	263.04	262.42	261.80	261.18	260.57	259.96	259.35	258.75
0.43	258.15	257.58	256.98	256.36	255.77	255.18	254.59	254.01	253.43	252.85
0.44	252.28	251.71	251.14	250.57	250.01	249.44	248.88	248.33	247.77	247.22
0.45	246.67	246.13	245.58	245.04	244.50	243.96	243.43	242.89	242.36	241.84
0.46	241.31	240.79	240.27	239.75	239.23	238.72	238.20	237.69	237.19	236.68
0.47	236.18	235.67	235.17	234.68	234.18	233.69	233.20	232.71	232.22	231.74
0.48	231.26	230.77	230.30	229.82	229.34	228.87	228.40	227.93	227.46	227.00
0.49	226.54	226.07	225.62	225.16	224.70	224.25	223.80	223.35	222.90	222.45

20, DEG.	0	1	2	3	4	5	6	7	8	9
0.50	222.01	221.56	221.12	220.68	220.24	219.81	219.37	218.94	218.51	218.08
0.51	217.65	217.23	216.80	216.38	215.96	215.54	215.12	214.71	214.29	213.88
0.52	213.47	213.06	212.65	212.24	211.84	211.43	211.03	210.63	210.23	209.83
0.53	209.44	209.04	208.65	208.26	207.87	207.48	207.09	206.71	206.32	205.94
0.54	205.56	205.18	204.80	204.42	204.05	203.67	203.30	202.93	202.56	202.19
0.55	201.82	201.46	201.09	200.73	200.37	200.00	199.65	199.29	198.93	198.57
0.56	198.22	197.87	197.51	197.16	196.81	196.47	196.12	195.77	195.43	195.08
0.57	194.74	194.40	194.06	193.72	193.38	193.05	192.71	192.38	192.05	191.71
0.58	191.38	191.05	190.73	190.40	190.07	189.75	189.42	189.10	188.78	188.46
0.59	188.14	187.82	187.50	187.19	186.87	186.56	186.25	185.93	185.62	185.31
0.60	185.00	184.70	184.39	184.08	183.78	183.48	183.17	182.87	182.57	182.27
0.61	181.97	181.67	181.38	181.08	180.79	180.49	180.20	179.91	179.62	179.33
0.62	179.04	178.75	178.46	178.17	177.89	177.60	177.32	177.04	176.76	176.48
0.63	176.19	175.92	175.64	175.36	175.08	174.81	174.53	174.26	173.99	173.71
0.64	173.44	173.17	172.90	172.63	172.36	172.10	171.83	171.57	171.30	171.04
0.65	170.77	170.51	170.25	169.99	169.73	169.47	169.21	168.95	168.70	168.44
0.66	168.19	167.93	167.68	167.43	167.17	166.92	166.67	166.42	166.17	165.92
0.67	165.68	165.43	165.18	164.94	164.69	164.45	164.21	163.96	163.72	163.48
0.68	163.24	163.00	162.76	162.52	162.29	162.05	161.81	161.58	161.34	161.11
0.69	160.87	160.64	160.41	160.18	159.95	159.72	159.49	159.26	159.03	158.80
0.70	158.58	158.35	158.12	157.90	157.67	157.45	157.23	157.01	156.78	156.56
0.71	156.34	156.12	155.90	155.68	155.47	155.25	155.03	154.82	154.60	154.39
0.72	154.17	153.96	153.74	153.53	153.32	153.11	152.90	152.69	152.48	152.27
0.73	152.06	151.85	151.64	151.44	151.23	151.02	150.82	150.61	150.41	150.21
0.74	150.00	149.80	149.60	149.40	149.20	149.00	148.80	148.60	148.40	148.20
0.75	148.00	147.81	147.61	147.41	147.22	147.02	146.83	146.64	146.44	146.25
0.76	146.06	145.86	145.67	145.48	145.29	145.10	144.91	144.72	144.54	144.35
0.77	144.16	143.97	143.79	143.60	143.41	143.23	143.05	142.86	142.68	142.49
0.78	142.31	142.13	141.95	141.77	141.59	141.41	141.23	141.05	140.87	140.69
0.79	140.51	140.33	140.16	139.98	139.80	139.63	139.45	139.28	139.10	138.93
0.80	138.75	138.58	138.41	138.24	138.06	137.89	137.72	137.55	137.38	137.21
0.81	137.04	136.87	136.70	136.54	136.37	136.20	136.03	135.87	135.70	135.54
0.82	135.37	135.20	135.04	134.88	134.71	134.55	134.39	134.22	134.06	133.90
0.83	133.74	133.58	133.42	133.26	133.10	132.94	132.78	132.62	132.46	132.30
0.84	132.15	131.99	131.83	131.68	131.52	131.36	131.21	131.05	130.90	130.75
0.85	130.59	130.44	130.29	130.13	129.98	129.83	129.68	129.53	129.37	129.22
0.86	129.07	128.92	128.77	128.62	128.48	128.33	128.18	128.03	127.88	127.74
0.87	127.59	127.44	127.30	127.15	127.01	126.86	126.72	126.57	126.43	126.28
0.88	126.14	126.00	125.85	125.71	125.57	125.43	125.29	125.14	125.00	124.86
0.89	124.72	124.58	124.44	124.30	124.16	124.03	123.89	123.75	123.61	123.47
0.90	123.34	123.20	123.06	122.93	122.79	122.66	122.52	122.39	122.25	122.12
0.91	121.98	121.85	121.71	121.58	121.45	121.32	121.18	121.05	120.92	120.79
0.92	120.66	120.52	120.39	120.26	120.13	120.00	119.87	119.74	119.62	119.49
0.93	119.36	119.23	119.10	118.97	118.85	118.72	118.59	118.47	118.34	118.21
0.94	118.09	117.96	117.84	117.71	117.59	117.46	117.34	117.22	117.09	116.97
0.95	116.85	116.72	116.60	116.48	116.36	116.23	116.11	115.99	115.87	115.75
0.96	115.63	115.51	115.39	115.27	115.15	115.03	114.91	114.79	114.67	114.55
0.97	114.44	114.32	114.20	114.08	113.97	113.85	113.73	113.62	113.50	113.38
0.98	113.27	113.15	113.04	112.92	112.81	112.69	112.58	112.47	112.35	112.24
0.99	112.12	112.01	111.90	111.79	111.67	111.56	111.45	111.34	111.23	111.11

20, DEG.	0	1	2	3	4	5	6	7	8	9
1.00	111.00	110.89	110.78	110.67	110.56	110.45	110.34	110.23	110.12	110.01
1.01	109.90	109.80	109.69	109.58	109.47	109.36	109.26	109.15	109.04	108.93
1.02	108.83	108.72	108.61	108.51	108.40	108.30	108.19	108.09	107.98	107.88
1.03	107.77	107.67	107.56	107.46	107.35	107.25	107.15	107.04	106.94	106.84
1.04	106.73	106.63	106.53	106.43	106.33	106.22	106.12	106.02	105.92	105.82
1.05	105.72	105.62	105.52	105.42	105.32	105.22	105.12	105.02	104.92	104.82
1.06	104.72	104.62	104.52	104.43	104.33	104.23	104.13	104.03	103.94	103.84
1.07	103.74	103.65	103.55	103.45	103.36	103.26	103.16	103.07	102.97	102.88
1.08	102.78	102.69	102.59	102.50	102.40	102.31	102.21	102.12	102.03	101.93
1.09	101.84	101.75	101.65	101.56	101.47	101.37	101.28	101.19	101.10	101.00
1.10	100.91	100.82	100.73	100.64	100.55	100.46	100.37	100.27	100.18	100.09
1.11	100.00	99.91	99.82	99.73	99.64	99.56	99.47	99.38	99.29	99.20
1.12	99.111	99.022	98.934	98.846	98.758	98.670	98.583	98.495	98.408	98.321
1.13	98.234	98.147	98.060	97.974	97.887	97.801	97.715	97.629	97.543	97.458
1.14	97.372	97.287	97.202	97.116	97.032	96.947	96.862	96.778	96.694	96.609
1.15	96.525	96.441	96.358	96.274	96.191	96.108	96.024	95.941	95.859	95.776
1.16	95.693	95.611	95.529	95.446	95.364	95.283	95.201	95.119	95.038	94.957
1.17	94.875	94.794	94.713	94.633	94.552	94.472	94.391	94.311	94.231	94.151
1.18	94.071	93.992	93.912	93.833	93.754	93.674	93.596	93.517	93.438	93.359
1.19	93.281	93.203	93.124	93.046	92.968	92.891	92.813	92.735	92.658	92.581
1.20	92.504	92.427	92.350	92.273	92.196	92.120	92.043	91.967	91.891	91.815
1.21	91.739	91.663	91.588	91.512	91.437	91.362	91.286	91.211	91.137	91.062
1.22	90.987	90.913	90.838	90.764	90.690	90.616	90.542	90.468	90.394	90.321
1.23	90.247	90.174	90.101	90.028	89.955	89.882	89.809	89.737	89.664	89.592
1.24	89.520	89.448	89.376	89.304	89.232	89.160	89.089	89.017	88.946	88.875
1.25	88.804	88.733	88.662	88.591	88.520	88.450	88.379	88.309	88.239	88.169
1.26	88.099	88.029	87.959	87.890	87.820	87.751	87.681	87.612	87.543	87.474
1.27	87.405	87.336	87.268	87.199	87.131	87.062	86.994	86.926	86.858	86.790
1.28	86.722	86.655	86.587	86.520	86.452	86.385	86.318	86.251	86.184	86.117
1.29	86.050	85.983	85.917	85.850	85.784	85.718	85.652	85.586	85.520	85.454
1.30	85.388	85.323	85.257	85.192	85.126	85.061	84.996	84.931	84.866	84.801
1.31	84.736	84.672	84.607	84.543	84.478	84.414	84.350	84.286	84.222	84.158
1.32	84.095	84.031	83.967	83.904	83.840	83.777	83.714	83.651	83.588	83.525
1.33	83.462	83.400	83.337	83.274	83.212	83.150	83.087	83.025	82.963	82.901
1.34	82.839	82.778	82.716	82.654	82.593	82.531	82.470	82.409	82.348	82.287
1.35	82.226	82.165	82.104	82.044	81.983	81.922	81.862	81.802	81.741	81.681
1.36	81.621	81.561	81.501	81.442	81.382	81.322	81.263	81.203	81.144	81.085
1.37	81.026	80.966	80.907	80.848	80.790	80.731	80.672	80.614	80.555	80.497
1.38	80.438	80.380	80.322	80.264	80.206	80.148	80.090	80.032	79.975	79.917
1.39	79.860	79.802	79.745	79.688	79.631	79.574	79.517	79.460	79.403	79.346
1.40	79.289	79.233	79.176	79.120	79.063	79.007	78.951	78.895	78.839	78.783
1.41	78.727	78.671	78.616	78.560	78.504	78.449	78.393	78.338	78.283	78.228
1.42	78.173	78.118	78.063	78.008	77.953	77.898	77.844	77.789	77.735	77.680
1.43	77.626	77.572	77.518	77.463	77.409	77.356	77.302	77.248	77.194	77.141
1.44	77.087	77.033	76.980	76.927	76.873	76.820	76.767	76.714	76.661	76.608
1.45	76.555	76.503	76.450	76.397	76.345	76.292	76.240	76.188	76.135	76.083
1.46	76.031	75.979	75.927	75.875	75.823	75.772	75.720	75.668	75.617	75.565
1.47	75.514	75.463	75.411	75.360	75.309	75.258	75.207	75.156	75.105	75.054
1.48	75.004	74.953	74.902	74.852	74.801	74.751	74.701	74.651	74.600	74.550
1.49	74.500	74.450	74.400	74.351	74.301	74.251	74.202	74.152	74.102	74.053

20, DEG.	0	1	2	3	4	5	6	7	8	9
1.50	74.004	73.954	73.905	73.856	73.807	73.758	73.709	73.660	73.611	73.562
1.51	73.514	73.465	73.416	73.368	73.319	73.271	73.223	73.174	73.126	73.078
1.52	73.030	72.982	72.934	72.886	72.838	72.791	72.743	72.695	72.648	72.600
1.53	72.553	72.505	72.458	72.411	72.364	72.316	72.269	72.222	72.175	72.128
1.54	72.082	72.035	71.988	71.941	71.895	71.848	71.802	71.755	71.709	71.663
1.55	71.617	71.570	71.524	71.478	71.432	71.386	71.340	71.295	71.249	71.203
1.56	71.158	71.112	71.066	71.021	70.976	70.930	70.885	70.840	70.794	70.749
1.57	70.704	70.659	70.614	70.569	70.525	70.480	70.435	70.390	70.346	70.301
1.58	70.257	70.212	70.168	70.124	70.079	70.035	69.991	69.947	69.903	69.859
1.59	69.815	69.771	69.727	69.684	69.640	69.596	69.553	69.509	69.466	69.422
1.60	69.379	69.335	69.292	69.249	69.206	69.163	69.120	69.077	69.034	68.991
1.61	68.948	68.905	68.862	68.820	68.777	68.734	68.692	68.649	68.607	68.565
1.62	68.522	68.480	68.438	68.396	68.353	68.311	68.269	68.227	68.186	68.144
1.63	68.102	68.060	68.018	67.977	67.935	67.894	67.852	67.811	67.769	67.728
1.64	67.687	67.645	67.604	67.563	67.522	67.481	67.440	67.399	67.358	67.317
1.65	67.276	67.236	67.195	67.154	67.114	67.073	67.033	66.992	66.952	66.912
1.66	66.871	66.831	66.791	66.751	66.710	66.670	66.630	66.590	66.551	66.511
1.67	66.471	66.431	66.391	66.352	66.312	66.272	66.233	66.193	66.154	66.115
1.68	66.075	66.036	65.997	65.957	65.918	65.879	65.840	65.801	65.762	65.723
1.69	65.684	65.645	65.607	65.568	65.529	65.490	65.452	65.413	65.375	65.336
1.70	65.298	65.259	65.221	65.183	65.145	65.106	65.068	65.030	64.992	64.954
1.71	64.916	64.878	64.840	64.802	64.765	64.727	64.689	64.651	64.614	64.576
1.72	64.539	64.501	64.464	64.426	64.389	64.352	64.314	64.277	64.240	64.203
1.73	64.166	64.129	64.092	64.055	64.018	63.981	63.944	63.907	63.870	63.834
1.74	63.797	63.760	63.724	63.687	63.651	63.614	63.578	63.541	63.505	63.469
1.75	63.432	63.396	63.360	63.324	63.288	63.252	63.216	63.180	63.144	63.108
1.76	63.072	63.036	63.000	62.965	62.929	62.893	62.858	62.822	62.787	62.751
1.77	62.716	62.680	62.645	62.610	62.574	62.539	62.504	62.469	62.434	62.398
1.78	62.363	62.328	62.293	62.258	62.224	62.189	62.154	62.119	62.084	62.050
1.79	62.015	61.980	61.946	61.911	61.877	61.842	61.808	61.773	61.739	61.705
1.80	61.670	61.636	61.602	61.568	61.534	61.500	61.466	61.432	61.398	61.364
1.81	61.330	61.296	61.262	61.228	61.195	61.161	61.127	61.094	61.060	61.026
1.82	60.993	60.959	60.926	60.892	60.859	60.826	60.792	60.759	60.726	60.693
1.83	60.660	60.626	60.593	60.560	60.527	60.494	60.461	60.428	60.396	60.363
1.84	60.330	60.297	60.264	60.232	60.199	60.166	60.134	60.101	60.069	60.036
1.85	60.004	59.971	59.939	59.907	59.874	59.842	59.810	59.778	59.746	59.713
1.86	59.681	59.649	59.617	59.585	59.553	59.521	59.489	59.458	59.426	59.394
1.87	59.362	59.330	59.299	59.267	59.235	59.204	59.172	59.141	59.109	59.078
1.88	59.046	59.015	58.984	58.952	58.921	58.890	58.859	58.827	58.796	58.765
1.89	58.734	58.703	58.672	58.641	58.610	58.579	58.548	58.517	58.487	58.456
1.90	58.425	58.394	58.364	58.333	58.302	58.272	58.241	58.211	58.180	58.150
1.91	58.119	58.089	58.058	58.028	57.998	57.967	57.937	57.907	57.877	57.847
1.92	57.816	57.786	57.756	57.726	57.696	57.666	57.636	57.606	57.577	57.547
1.93	57.517	57.487	57.457	57.428	57.398	57.368	57.339	57.309	57.279	57.250
1.94	57.220	57.191	57.161	57.132	57.103	57.073	57.044	57.015	56.985	56.956
1.95	56.927	56.898	56.869	56.840	56.810	56.781	56.752	56.723	56.694	56.666
1.96	56.637	56.608	56.579	56.550	56.521	56.492	56.464	56.435	56.406	56.378
1.97	56.349	56.321	56.292	56.263	56.235	56.206	56.178	56.150	56.121	56.093
1.98	56.065	56.036	56.008	55.980	55.952	55.923	55.895	55.867	55.839	55.811
1.99	55.783	55.755	55.727	55.699	55.671	55.643	55.615	55.587	55.560	55.532

20.DEG.	0	1	2	3	4	5	6	7	8	9
2.00	55.504	55.476	55.449	55.421	55.393	55.366	55.338	55.310	55.283	55.255
2.01	55.228	55.200	55.173	55.146	55.118	55.091	55.064	55.036	55.009	54.982
2.02	54.954	54.927	54.900	54.873	54.846	54.819	54.792	54.765	54.738	54.711
2.03	54.684	54.657	54.630	54.603	54.576	54.549	54.523	54.496	54.469	54.442
2.04	54.416	54.389	54.362	54.336	54.309	54.283	54.256	54.230	54.203	54.177
2.05	54.150	54.124	54.098	54.071	54.045	54.019	53.992	53.966	53.940	53.914
2.06	53.888	53.861	53.835	53.809	53.783	53.757	53.731	53.705	53.679	53.653
2.07	53.627	53.601	53.575	53.550	53.524	53.498	53.472	53.447	53.421	53.395
2.08	53.369	53.344	53.318	53.293	53.267	53.241	53.216	53.190	53.165	53.140
2.09	53.114	53.089	53.063	53.038	53.013	52.987	52.962	52.937	52.912	52.886
2.10	52.861	52.836	52.811	52.786	52.761	52.736	52.711	52.686	52.661	52.636
2.11	52.611	52.586	52.561	52.536	52.511	52.486	52.462	52.437	52.412	52.387
2.12	52.363	52.338	52.313	52.289	52.264	52.239	52.215	52.190	52.166	52.141
2.13	52.117	52.092	52.068	52.043	52.019	51.995	51.970	51.946	51.922	51.898
2.14	51.873	51.849	51.825	51.801	51.776	51.752	51.728	51.704	51.680	51.656
2.15	51.632	51.608	51.584	51.560	51.536	51.512	51.488	51.464	51.441	51.417
2.16	51.393	51.369	51.345	51.322	51.298	51.274	51.251	51.227	51.203	51.180
2.17	51.156	51.133	51.109	51.086	51.062	51.039	51.015	50.992	50.968	50.945
2.18	50.922	50.898	50.875	50.852	50.828	50.805	50.782	50.759	50.735	50.712
2.19	50.689	50.666	50.643	50.620	50.597	50.574	50.551	50.528	50.505	50.482
2.20	50.459	50.436	50.413	50.390	50.367	50.344	50.321	50.299	50.276	50.253
2.21	50.230	50.208	50.185	50.162	50.140	50.117	50.094	50.072	50.049	50.027
2.22	50.004	49.982	49.959	49.937	49.914	49.892	49.869	49.847	49.825	49.802
2.23	49.780	49.758	49.735	49.713	49.691	49.669	49.646	49.624	49.602	49.580
2.24	49.558	49.536	49.514	49.491	49.469	49.447	49.425	49.403	49.381	49.359
2.25	49.338	49.316	49.294	49.272	49.250	49.228	49.206	49.185	49.163	49.141
2.26	49.119	49.098	49.076	49.054	49.032	49.011	48.989	48.968	48.946	48.924
2.27	48.903	48.881	48.860	48.838	48.817	48.795	48.774	48.753	48.731	48.710
2.28	48.688	48.667	48.646	48.624	48.603	48.582	48.561	48.539	48.518	48.497
2.29	48.476	48.455	48.434	48.412	48.391	48.370	48.349	48.328	48.307	48.286
2.30	48.265	48.244	48.223	48.202	48.181	48.160	48.140	48.119	48.098	48.077
2.31	48.056	48.035	48.015	47.994	47.973	47.952	47.932	47.911	47.890	47.870
2.32	47.849	47.828	47.808	47.787	47.767	47.746	47.726	47.705	47.685	47.664
2.33	47.644	47.623	47.603	47.583	47.562	47.542	47.521	47.501	47.481	47.460
2.34	47.440	47.420	47.400	47.379	47.359	47.339	47.319	47.299	47.279	47.258
2.35	47.238	47.218	47.198	47.178	47.158	47.138	47.118	47.098	47.078	47.058
2.36	47.038	47.018	46.998	46.979	46.959	46.939	46.919	46.899	46.879	46.860
2.37	46.840	46.820	46.800	46.781	46.761	46.741	46.722	46.702	46.682	46.663
2.38	46.643	46.623	46.604	46.584	46.565	46.545	46.526	46.506	46.487	46.467
2.39	46.448	46.428	46.409	46.390	46.370	46.351	46.332	46.312	46.293	46.274
2.40	46.254	46.235	46.216	46.197	46.177	46.158	46.139	46.120	46.101	46.082
2.41	46.062	46.043	46.024	46.005	45.986	45.967	45.948	45.929	45.910	45.891
2.42	45.872	45.853	45.834	45.815	45.796	45.778	45.759	45.740	45.721	45.702
2.43	45.683	45.665	45.646	45.627	45.608	45.590	45.571	45.552	45.534	45.515
2.44	45.496	45.478	45.459	45.440	45.422	45.403	45.385	45.366	45.348	45.329
2.45	45.311	45.292	45.274	45.255	45.237	45.218	45.200	45.181	45.163	45.145
2.46	45.126	45.108	45.090	45.071	45.053	45.035	45.017	44.998	44.980	44.962
2.47	44.944	44.926	44.907	44.889	44.871	44.853	44.835	44.817	44.799	44.781
2.48	44.762	44.744	44.726	44.708	44.690	44.672	44.654	44.637	44.619	44.601
2.49	44.583	44.565	44.547	44.529	44.511	44.493	44.476	44.458	44.440	44.422

20, DEG.	0	1	2	3	4	5	6	7	8	9
2.50	44.404	44.387	44.369	44.351	44.334	44.316	44.298	44.280	44.263	44.245
2.51	44.228	44.210	44.192	44.175	44.157	44.140	44.122	44.105	44.087	44.070
2.52	44.052	44.035	44.017	44.000	43.982	43.965	43.947	43.930	43.913	43.895
2.53	43.878	43.861	43.843	43.826	43.809	43.791	43.774	43.757	43.740	43.722
2.54	43.705	43.688	43.671	43.654	43.637	43.619	43.602	43.585	43.568	43.551
2.55	43.534	43.517	43.500	43.483	43.466	43.449	43.432	43.415	43.398	43.381
2.56	43.364	43.347	43.330	43.313	43.296	43.279	43.263	43.246	43.229	43.212
2.57	43.195	43.178	43.162	43.145	43.128	43.111	43.095	43.078	43.061	43.044
2.58	43.028	43.011	42.994	42.978	42.961	42.945	42.928	42.911	42.895	42.878
2.59	42.862	42.845	42.829	42.812	42.796	42.779	42.763	42.746	42.730	42.713
2.60	42.697	42.680	42.664	42.648	42.631	42.615	42.599	42.582	42.566	42.550
2.61	42.533	42.517	42.501	42.484	42.468	42.452	42.436	42.420	42.403	42.387
2.62	42.371	42.355	42.339	42.323	42.306	42.290	42.274	42.258	42.242	42.226
2.63	42.210	42.194	42.178	42.162	42.146	42.130	42.114	42.098	42.082	42.066
2.64	42.050	42.034	42.018	42.002	41.986	41.971	41.955	41.939	41.923	41.907
2.65	41.891	41.876	41.860	41.844	41.828	41.813	41.797	41.781	41.765	41.750
2.66	41.734	41.718	41.703	41.687	41.671	41.656	41.640	41.624	41.609	41.593
2.67	41.578	41.562	41.547	41.531	41.515	41.500	41.484	41.469	41.453	41.438
2.68	41.423	41.407	41.392	41.376	41.361	41.345	41.330	41.315	41.299	41.284
2.69	41.269	41.253	41.238	41.223	41.207	41.192	41.177	41.162	41.146	41.131
2.70	41.116	41.101	41.085	41.070	41.055	41.040	41.025	41.009	40.994	40.979
2.71	40.964	40.949	40.934	40.919	40.904	40.889	40.874	40.859	40.844	40.829
2.72	40.814	40.799	40.784	40.769	40.754	40.739	40.724	40.709	40.694	40.679
2.73	40.664	40.649	40.634	40.619	40.605	40.590	40.575	40.560	40.545	40.530
2.74	40.516	40.501	40.486	40.471	40.457	40.442	40.427	40.412	40.398	40.383
2.75	40.368	40.354	40.339	40.324	40.310	40.295	40.280	40.266	40.251	40.237
2.76	40.222	40.208	40.193	40.178	40.164	40.149	40.135	40.120	40.106	40.091
2.77	40.077	40.062	40.048	40.034	40.019	40.005	39.990	39.976	39.962	39.947
2.78	39.933	39.918	39.904	39.890	39.875	39.861	39.847	39.833	39.818	39.804
2.79	39.790	39.775	39.761	39.747	39.733	39.719	39.704	39.690	39.676	39.662
2.80	39.648	39.633	39.619	39.605	39.591	39.577	39.563	39.549	39.535	39.521
2.81	39.507	39.493	39.478	39.464	39.450	39.436	39.422	39.408	39.394	39.380
2.82	39.367	39.353	39.339	39.325	39.311	39.297	39.283	39.269	39.255	39.241
2.83	39.227	39.214	39.200	39.186	39.172	39.158	39.144	39.131	39.117	39.103
2.84	39.089	39.076	39.062	39.048	39.034	39.021	39.007	38.993	38.980	38.966
2.85	38.952	38.939	38.925	38.911	38.898	38.884	38.870	38.857	38.843	38.830
2.86	38.816	38.802	38.789	38.775	38.762	38.748	38.735	38.721	38.708	38.694
2.87	38.681	38.667	38.654	38.640	38.627	38.614	38.600	38.587	38.573	38.560
2.88	38.547	38.533	38.520	38.506	38.493	38.480	38.466	38.453	38.440	38.426
2.89	38.413	38.400	38.387	38.373	38.360	38.347	38.334	38.320	38.307	38.294
2.90	38.281	38.268	38.254	38.241	38.228	38.215	38.202	38.189	38.175	38.162
2.91	38.149	38.136	38.123	38.110	38.097	38.084	38.071	38.058	38.045	38.032
2.92	38.019	38.006	37.993	37.980	37.967	37.954	37.941	37.928	37.915	37.902
2.93	37.889	37.876	37.863	37.850	37.837	37.824	37.811	37.799	37.786	37.773
2.94	37.760	37.747	37.734	37.722	37.709	37.696	37.683	37.670	37.658	37.645
2.95	37.632	37.619	37.607	37.594	37.581	37.568	37.556	37.543	37.530	37.518
2.96	37.505	37.492	37.480	37.467	37.454	37.442	37.429	37.416	37.404	37.391
2.97	37.379	37.366	37.354	37.341	37.328	37.316	37.303	37.291	37.278	37.266
2.98	37.253	37.241	37.228	37.216	37.203	37.191	37.178	37.166	37.154	37.141
2.99	37.129	37.116	37.104	37.092	37.079	37.067	37.054	37.042	37.030	37.017

Table 4
Chromium $K\alpha$ Radiation

2θ in Degrees

$$\lambda = 2.291002 \text{ \AA}^*$$

26, DEG. 0	1	2	3	4	5	6	7	8	9
0.00		65632.	43755.	32816.	26253.	21877.	18752.	16408.	14585.
0.01	13126.	11933.	10939.	10097.	9376.	8751.	8204.	7721.	7292.
0.02	6563.2	6250.7	5968.6	5707.2	5469.4	5250.6	5048.6	4861.7	4688.0
0.03	4375.5	4234.3	4102.0	3977.7	3860.7	3750.4	3646.2	3547.7	3454.3
0.04	3281.6	3201.6	3125.4	3052.7	2983.3	2917.0	2853.6	2792.9	2734.7
0.05	2625.3	2573.8	2524.3	2476.7	2430.8	2386.6	2344.0	2302.9	2263.2
0.06	2187.7	2151.9	2117.2	2083.6	2051.0	2019.5	1988.9	1959.2	1930.4
0.07	1875.2	1848.8	1823.1	1798.1	1773.8	1750.2	1727.2	1704.7	1682.9
0.08	1640.8	1620.6	1600.8	1581.5	1562.7	1544.3	1526.3	1508.8	1491.6
0.09	1458.5	1442.5	1426.8	1411.4	1396.4	1381.7	1367.3	1353.2	1339.4
0.10	1312.6	1299.7	1286.9	1274.4	1262.2	1250.1	1238.3	1226.8	1215.4
0.11	1193.3	1182.6	1172.0	1161.6	1151.4	1141.4	1131.6	1121.9	1112.4
0.12	1093.9	1084.8	1075.9	1067.2	1058.6	1050.1	1041.8	1033.6	1025.5
0.13	1009.7	1002.0	994.4	987.0	979.6	972.3	965.2	958.1	951.2
0.14	937.61	930.96	924.40	917.94	911.56	905.27	899.07	892.96	886.92
0.15	875.10	869.30	863.58	857.94	852.37	846.87	841.44	836.08	830.79
0.16	820.40	815.31	810.28	805.31	800.40	795.54	790.75	786.02	781.34
0.17	772.15	767.63	763.17	758.76	754.40	750.08	745.82	741.61	737.44
0.18	729.25	725.22	721.24	717.29	713.40	709.54	705.72	701.95	698.22
0.19	690.87	687.25	683.67	680.13	676.62	673.15	669.72	666.32	662.95
0.20	656.32	653.06	649.83	646.62	643.46	640.32	637.21	634.13	631.08
0.21	625.07	622.11	619.17	616.27	613.39	610.53	607.71	604.91	602.13
0.22	596.66	593.96	591.28	588.63	586.00	583.40	580.82	578.26	575.72
0.23	570.72	568.28	565.80	563.37	560.96	558.57	556.21	553.86	551.53
0.24	546.94	544.67	542.42	540.18	537.97	535.77	533.60	531.44	529.29
0.25	525.06	522.97	520.89	518.83	516.79	514.76	512.75	510.76	508.78
0.26	504.86	502.93	501.01	499.11	497.22	495.34	493.48	491.63	489.79
0.27	486.17	484.37	482.59	480.82	479.07	477.33	475.60	473.88	472.18
0.28	468.80	467.13	465.48	463.83	462.20	460.58	458.97	457.37	455.78
0.29	452.64	451.08	449.54	448.00	446.48	444.97	443.46	441.97	440.49
0.30	437.55	436.10	434.65	433.22	431.79	430.38	428.97	427.57	426.18
0.31	423.44	422.07	420.72	419.38	418.04	416.71	415.40	414.08	412.78
0.32	410.20	408.93	407.66	406.39	405.14	403.89	402.65	401.42	400.20
0.33	397.77	396.57	395.38	394.19	393.01	391.84	390.67	389.51	388.36
0.34	386.07	384.94	383.82	382.70	381.58	380.48	379.38	378.29	377.20
0.35	375.04	373.97	372.91	371.86	370.80	369.76	368.72	367.69	366.66
0.36	364.62	363.61	362.61	361.61	360.62	359.63	358.65	357.67	356.70
0.37	354.77	353.81	352.86	351.92	350.98	350.04	349.11	348.18	347.26
0.38	345.43	344.53	343.63	342.73	341.84	340.95	340.06	339.17	338.31
0.39	336.58	335.72	334.86	334.01	333.16	332.32	331.48	330.64	329.81
0.40	328.16	327.34	326.53	325.72	324.91	324.11	323.31	322.52	321.73
0.41	320.16	319.38	318.60	317.83	317.07	316.30	315.54	314.78	314.03
0.42	312.54	311.79	311.05	310.32	309.59	308.86	308.13	307.41	306.69
0.43	305.27	304.56	303.85	303.15	302.45	301.76	301.07	300.38	299.69
0.44	298.33	297.65	296.98	296.31	295.64	294.98	294.32	293.66	293.00
0.45	291.70	291.05	290.41	289.77	289.13	288.49	287.86	287.23	286.61
0.46	285.36	284.74	284.12	283.51	282.90	282.29	281.68	281.08	280.48
0.47	279.29	278.69	278.10	277.52	276.93	276.35	275.77	275.19	274.61
0.48	273.47	272.90	272.33	271.77	271.21	270.65	270.09	269.54	268.99
0.49	267.89	267.34	266.80	266.26	265.72	265.18	264.65	264.12	263.58

20, DEG.	0	1	2	3	4	5	6	7	8	9
0.50	262.53	262.01	261.48	260.96	260.43	259.93	259.42	258.91	258.40	257.89
0.51	257.38	256.88	256.38	255.88	255.38	254.88	254.39	253.90	253.41	252.92
0.52	252.43	251.95	251.47	250.99	250.51	250.03	249.55	249.08	248.61	248.14
0.53	247.67	247.20	246.74	246.28	245.82	245.36	244.90	244.44	243.99	243.53
0.54	243.08	242.63	242.19	241.74	241.30	240.85	240.41	239.97	239.54	239.10
0.55	238.66	238.23	237.80	237.37	236.94	236.51	236.09	235.66	235.24	234.82
0.56	234.40	233.98	233.57	233.15	232.74	232.33	231.92	231.51	231.10	230.69
0.57	230.29	229.89	229.48	229.08	228.69	228.29	227.89	227.50	227.10	226.71
0.58	226.32	225.93	225.54	225.15	224.77	224.39	224.00	223.62	223.24	222.86
0.59	222.48	222.11	221.73	221.36	220.99	220.61	220.24	219.87	219.51	219.14
0.60	218.78	218.41	218.05	217.69	217.33	216.97	216.61	216.25	215.90	215.54
0.61	215.19	214.84	214.49	214.14	213.79	213.44	213.09	212.75	212.40	212.06
0.62	211.72	211.38	211.04	210.70	210.36	210.02	209.69	209.35	209.02	208.69
0.63	208.36	208.03	207.70	207.37	207.04	206.72	206.39	206.07	205.75	205.42
0.64	205.10	204.78	204.46	204.15	203.83	203.51	203.20	202.88	202.57	202.26
0.65	201.95	201.64	201.33	201.02	200.71	200.41	200.10	199.80	199.49	199.19
0.66	198.89	198.59	198.29	197.99	197.69	197.39	197.10	196.80	196.51	196.21
0.67	195.92	195.63	195.34	195.05	194.76	194.47	194.18	193.89	193.61	193.32
0.68	193.04	192.75	192.47	192.19	191.91	191.63	191.35	191.07	190.79	190.52
0.69	190.24	189.96	189.69	189.42	189.14	188.87	188.60	188.33	188.06	187.79
0.70	187.52	187.25	186.99	186.72	186.46	186.19	185.93	185.67	185.40	185.14
0.71	184.88	184.62	184.36	184.10	183.85	183.59	183.33	183.08	182.82	182.57
0.72	182.31	182.06	181.81	181.56	181.31	181.06	180.81	180.56	180.31	180.06
0.73	179.82	179.57	179.32	179.08	178.84	178.59	178.35	178.11	177.87	177.63
0.74	177.39	177.15	176.91	176.67	176.43	176.20	175.96	175.72	175.49	175.25
0.75	175.02	174.79	174.56	174.32	174.09	173.86	173.63	173.40	173.17	172.95
0.76	172.72	172.49	172.26	172.04	171.81	171.59	171.37	171.14	170.92	170.70
0.77	170.48	170.25	170.03	169.81	169.59	169.38	169.16	168.94	168.72	168.51
0.78	168.29	168.07	167.86	167.64	167.43	167.22	167.00	166.79	166.58	166.37
0.79	166.16	165.95	165.74	165.53	165.32	165.11	164.91	164.70	164.49	164.29
0.80	164.08	163.88	163.67	163.47	163.27	163.06	162.86	162.66	162.46	162.26
0.81	162.06	161.86	161.66	161.46	161.26	161.06	160.87	160.67	160.47	160.28
0.82	160.08	159.89	159.69	159.50	159.30	159.11	158.92	158.73	158.53	158.34
0.83	158.15	157.96	157.77	157.58	157.39	157.20	157.02	156.83	156.64	156.46
0.84	156.27	156.08	155.90	155.71	155.53	155.34	155.16	154.98	154.79	154.61
0.85	154.43	154.25	154.07	153.89	153.71	153.53	153.35	153.17	152.99	152.81
0.86	152.63	152.46	152.28	152.10	151.93	151.75	151.58	151.40	151.23	151.05
0.87	150.88	150.71	150.53	150.36	150.19	150.02	149.85	149.68	149.51	149.34
0.88	149.17	149.00	148.83	148.66	148.49	148.32	148.16	147.99	147.82	147.66
0.89	147.49	147.32	147.16	146.99	146.83	146.67	146.50	146.34	146.18	146.01
0.90	145.85	145.69	145.53	145.37	145.21	145.05	144.89	144.73	144.57	144.41
0.91	144.25	144.09	143.93	143.77	143.62	143.46	143.30	143.15	142.99	142.84
0.92	142.68	142.53	142.37	142.22	142.06	141.91	141.76	141.60	141.45	141.30
0.93	141.15	140.99	140.84	140.69	140.54	140.39	140.24	140.09	139.94	139.79
0.94	139.64	139.50	139.35	139.20	139.05	138.91	138.76	138.61	138.47	138.32
0.95	138.18	138.03	137.88	137.74	137.60	137.45	137.31	137.16	137.02	136.88
0.96	136.74	136.59	136.45	136.31	136.17	136.03	135.89	135.75	135.61	135.47
0.97	135.33	135.19	135.05	134.91	134.77	134.63	134.49	134.36	134.22	134.08
0.98	133.95	133.81	133.67	133.54	133.40	133.27	133.13	133.00	132.86	132.73
0.99	132.59	132.46	132.33	132.19	132.06	131.93	131.79	131.66	131.53	131.40

20.0EG.	0	1	2	3	4	5	6	7	8	9
1.00	131.27	131.14	131.00	130.87	130.74	130.61	130.48	130.35	130.22	130.10
1.01	129.97	129.84	129.71	129.58	129.45	129.33	129.20	129.07	128.95	128.82
1.02	128.69	128.57	128.44	128.32	128.19	128.06	127.94	127.82	127.69	127.57
1.03	127.44	127.32	127.20	127.07	126.95	126.83	126.71	126.58	126.46	126.34
1.04	126.22	126.10	125.98	125.85	125.73	125.61	125.49	125.37	125.25	125.13
1.05	125.02	124.90	124.78	124.66	124.54	124.42	124.31	124.19	124.07	123.95
1.06	123.84	123.72	123.60	123.49	123.37	123.26	123.14	123.02	122.91	122.79
1.07	122.68	122.56	122.45	122.34	122.22	122.11	122.00	121.88	121.77	121.66
1.08	121.54	121.43	121.32	121.21	121.09	120.98	120.87	120.76	120.65	120.54
1.09	120.43	120.32	120.21	120.10	119.99	119.88	119.77	119.66	119.55	119.44
1.10	119.33	119.23	119.12	119.01	118.90	118.79	118.69	118.58	118.47	118.37
1.11	118.26	118.15	118.05	117.94	117.83	117.73	117.62	117.52	117.41	117.31
1.12	117.20	117.10	116.99	116.89	116.79	116.68	116.58	116.47	116.37	116.27
1.13	116.17	116.06	115.96	115.86	115.76	115.65	115.55	115.45	115.35	115.25
1.14	115.15	115.05	114.94	114.84	114.74	114.64	114.54	114.44	114.34	114.24
1.15	114.15	114.05	113.95	113.85	113.75	113.65	113.55	113.45	113.36	113.26
1.16	113.16	113.06	112.97	112.87	112.77	112.68	112.58	112.48	112.39	112.29
1.17	112.19	112.10	112.00	111.91	111.81	111.72	111.62	111.53	111.43	111.34
1.18	111.24	111.15	111.06	110.96	110.87	110.77	110.68	110.59	110.49	110.40
1.19	110.31	110.22	110.12	110.03	109.94	109.85	109.76	109.66	109.57	109.48
1.20	109.39	109.30	109.21	109.12	109.03	108.94	108.85	108.75	108.66	108.58
1.21	108.49	108.40	108.31	108.22	108.13	108.04	107.95	107.86	107.77	107.68
1.22	107.60	107.51	107.42	107.33	107.24	107.16	107.07	106.98	106.90	106.81
1.23	106.72	106.63	106.55	106.46	106.38	106.29	106.20	106.12	106.03	105.95
1.24	105.86	105.78	105.69	105.61	105.52	105.44	105.35	105.27	105.18	105.10
1.25	105.01	104.93	104.85	104.76	104.68	104.60	104.51	104.43	104.35	104.26
1.26	104.18	104.10	104.02	103.93	103.85	103.77	103.69	103.60	103.52	103.44
1.27	103.36	103.28	103.20	103.12	103.04	102.95	102.87	102.79	102.71	102.63
1.28	102.55	102.47	102.39	102.31	102.23	102.15	102.07	101.99	101.92	101.84
1.29	101.76	101.68	101.60	101.52	101.44	101.36	101.29	101.21	101.13	101.05
1.30	100.98	100.90	100.82	100.74	100.67	100.59	100.51	100.43	100.36	100.28
1.31	100.20	100.13	100.05	99.98	99.90	99.82	99.75	99.67	99.60	99.52
1.32	99.445	99.370	99.295	99.220	99.145	99.070	98.995	98.921	98.846	98.772
1.33	98.698	98.623	98.549	98.475	98.402	98.328	98.254	98.181	98.107	98.034
1.34	97.961	97.888	97.815	97.742	97.669	97.597	97.524	97.452	97.380	97.308
1.35	97.235	97.163	97.092	97.020	96.948	96.877	96.805	96.734	96.663	96.592
1.36	96.520	96.450	96.379	96.308	96.237	96.167	96.097	96.026	95.956	95.886
1.37	95.816	95.746	95.676	95.607	95.537	95.468	95.398	95.329	95.260	95.191
1.38	95.122	95.053	94.984	94.915	94.847	94.778	94.710	94.642	94.573	94.505
1.39	94.437	94.370	94.302	94.234	94.166	94.099	94.032	93.964	93.897	93.830
1.40	93.763	93.696	93.629	93.562	93.496	93.429	93.363	93.296	93.230	93.164
1.41	93.098	93.032	92.966	92.900	92.835	92.769	92.703	92.638	92.573	92.508
1.42	92.442	92.377	92.312	92.247	92.183	92.118	92.053	91.989	91.925	91.860
1.43	91.796	91.732	91.668	91.604	91.540	91.476	91.412	91.349	91.285	91.222
1.44	91.158	91.095	91.032	90.969	90.906	90.843	90.780	90.718	90.655	90.592
1.45	90.530	90.467	90.405	90.343	90.281	90.219	90.157	90.095	90.033	89.971
1.46	89.910	89.848	89.787	89.725	89.664	89.603	89.542	89.481	89.420	89.359
1.47	89.298	89.238	89.177	89.116	89.056	88.996	88.935	88.875	88.815	88.755
1.48	88.695	88.635	88.575	88.515	88.456	88.396	88.337	88.277	88.218	88.159
1.49	88.100	88.041	87.982	87.923	87.864	87.805	87.746	87.688	87.629	87.571

20, DEG.	0	1	2	3	4	5	6	7	8	9
1.50	87.512	87.454	87.396	87.338	87.280	87.222	87.164	87.106	87.048	86.990
1.51	86.933	86.875	86.818	86.760	86.703	86.646	86.589	86.532	86.475	86.418
1.52	86.361	86.304	86.247	86.191	86.134	86.078	86.021	85.965	85.909	85.853
1.53	85.797	85.740	85.685	85.629	85.573	85.517	85.461	85.406	85.350	85.295
1.54	85.239	85.184	85.129	85.074	85.019	84.964	84.909	84.854	84.799	84.744
1.55	84.690	84.635	84.580	84.526	84.472	84.417	84.363	84.309	84.255	84.201
1.56	84.147	84.093	84.039	83.985	83.932	83.878	83.824	83.771	83.717	83.664
1.57	83.611	83.558	83.504	83.451	83.398	83.345	83.292	83.240	83.187	83.134
1.58	83.082	83.029	82.977	82.924	82.872	82.820	82.767	82.715	82.663	82.611
1.59	82.559	82.507	82.455	82.404	82.352	82.300	82.249	82.197	82.146	82.094
1.60	82.043	81.992	81.941	81.890	81.839	81.788	81.737	81.686	81.635	81.584
1.61	81.534	81.483	81.432	81.382	81.332	81.281	81.231	81.181	81.131	81.080
1.62	81.030	80.980	80.930	80.881	80.831	80.781	80.731	80.682	80.632	80.583
1.63	80.533	80.484	80.435	80.385	80.336	80.287	80.238	80.189	80.140	80.091
1.64	80.042	79.993	79.945	79.896	79.848	79.799	79.750	79.702	79.654	79.605
1.65	79.557	79.509	79.461	79.413	79.365	79.317	79.269	79.221	79.173	79.126
1.66	79.078	79.030	78.983	78.935	78.888	78.840	78.793	78.746	78.699	78.652
1.67	78.604	78.557	78.510	78.464	78.417	78.370	78.323	78.276	78.230	78.183
1.68	78.137	78.090	78.044	77.997	77.951	77.905	77.859	77.812	77.766	77.720
1.69	77.674	77.628	77.582	77.537	77.491	77.445	77.400	77.354	77.308	77.263
1.70	77.217	77.172	77.127	77.081	77.036	76.991	76.946	76.901	76.856	76.811
1.71	76.766	76.721	76.676	76.631	76.587	76.542	76.497	76.453	76.408	76.364
1.72	76.320	76.275	76.231	76.187	76.143	76.098	76.054	76.010	75.966	75.922
1.73	75.878	75.835	75.791	75.747	75.703	75.660	75.616	75.573	75.529	75.486
1.74	75.442	75.399	75.356	75.313	75.269	75.226	75.183	75.140	75.097	75.054
1.75	75.011	74.969	74.926	74.883	74.840	74.798	74.755	74.713	74.670	74.628
1.76	74.585	74.543	74.501	74.458	74.416	74.374	74.332	74.290	74.248	74.206
1.77	74.164	74.122	74.080	74.038	73.997	73.955	73.913	73.872	73.830	73.789
1.78	73.747	73.706	73.664	73.623	73.582	73.541	73.500	73.458	73.417	73.376
1.79	73.335	73.294	73.253	73.213	73.172	73.131	73.090	73.050	73.009	72.968
1.80	72.928	72.887	72.847	72.807	72.766	72.726	72.686	72.645	72.605	72.565
1.81	72.525	72.485	72.445	72.405	72.365	72.325	72.285	72.246	72.206	72.166
1.82	72.127	72.087	72.047	72.008	71.968	71.929	71.890	71.850	71.811	71.772
1.83	71.732	71.693	71.654	71.615	71.576	71.537	71.498	71.459	71.420	71.381
1.84	71.343	71.304	71.265	71.227	71.188	71.149	71.111	71.072	71.034	70.995
1.85	70.957	70.919	70.880	70.842	70.804	70.766	70.728	70.690	70.652	70.614
1.86	70.576	70.538	70.500	70.462	70.424	70.386	70.349	70.311	70.273	70.236
1.87	70.198	70.161	70.123	70.086	70.048	70.011	69.974	69.936	69.899	69.862
1.88	69.825	69.788	69.751	69.714	69.677	69.640	69.603	69.566	69.529	69.492
1.89	69.455	69.419	69.382	69.345	69.309	69.272	69.236	69.199	69.163	69.126
1.90	69.090	69.054	69.017	68.981	68.945	68.909	68.872	68.836	68.800	68.764
1.91	68.728	68.692	68.656	68.620	68.585	68.549	68.513	68.477	68.442	68.406
1.92	68.370	68.335	68.299	68.264	68.228	68.193	68.157	68.122	68.087	68.051
1.93	68.016	67.981	67.946	67.911	67.875	67.840	67.805	67.770	67.735	67.700
1.94	67.666	67.631	67.596	67.561	67.526	67.492	67.457	67.422	67.388	67.353
1.95	67.319	67.284	67.250	67.215	67.181	67.146	67.112	67.078	67.044	67.009
1.96	66.975	66.941	66.907	66.873	66.839	66.805	66.771	66.737	66.703	66.669
1.97	66.635	66.601	66.568	66.534	66.500	66.466	66.433	66.399	66.366	66.332
1.98	66.299	66.265	66.232	66.198	66.165	66.132	66.098	66.065	66.032	65.999
1.99	65.966	65.932	65.899	65.866	65.833	65.800	65.767	65.734	65.701	65.669

2θ, DEG.	0	1	2	3	4	5	6	7	8	9
2.00	65.636	65.603	65.570	65.537	65.505	65.472	65.439	65.407	65.374	65.342
2.01	65.309	65.277	65.244	65.212	65.180	65.147	65.115	65.083	65.050	65.018
2.02	64.986	64.954	64.922	64.890	64.858	64.826	64.794	64.762	64.730	64.698
2.03	64.666	64.634	64.602	64.570	64.539	64.507	64.475	64.444	64.412	64.380
2.04	64.349	64.317	64.286	64.254	64.223	64.192	64.160	64.129	64.098	64.066
2.05	64.035	64.004	63.973	63.941	63.910	63.879	63.848	63.817	63.786	63.755
2.06	63.724	63.693	63.662	63.632	63.601	63.570	63.539	63.508	63.478	63.447
2.07	63.416	63.386	63.355	63.325	63.294	63.264	63.233	63.203	63.172	63.142
2.08	63.112	63.081	63.051	63.021	62.990	62.960	62.930	62.900	62.870	62.840
2.09	62.810	62.780	62.750	62.720	62.690	62.660	62.630	62.600	62.570	62.540
2.10	62.511	62.481	62.451	62.421	62.392	62.362	62.332	62.303	62.273	62.244
2.11	62.214	62.185	62.155	62.126	62.097	62.067	62.038	62.009	61.979	61.950
2.12	61.921	61.892	61.863	61.833	61.804	61.775	61.746	61.717	61.688	61.659
2.13	61.630	61.601	61.572	61.544	61.515	61.486	61.457	61.428	61.400	61.371
2.14	61.342	61.314	61.285	61.256	61.228	61.199	61.171	61.142	61.114	61.085
2.15	61.057	61.029	61.000	60.972	60.944	60.915	60.887	60.859	60.831	60.802
2.16	60.774	60.746	60.718	60.690	60.662	60.634	60.606	60.578	60.550	60.522
2.17	60.494	60.466	60.439	60.411	60.383	60.355	60.328	60.300	60.272	60.244
2.18	60.217	60.189	60.162	60.134	60.107	60.079	60.052	60.024	59.997	59.969
2.19	59.942	59.915	59.887	59.860	59.833	59.805	59.778	59.751	59.724	59.697
2.20	59.669	59.642	59.615	59.588	59.561	59.534	59.507	59.480	59.453	59.426
2.21	59.400	59.373	59.346	59.319	59.292	59.265	59.239	59.212	59.185	59.159
2.22	59.132	59.105	59.079	59.052	59.026	58.999	58.973	58.946	58.920	58.893
2.23	58.867	58.840	58.814	58.788	58.761	58.735	58.709	58.683	58.656	58.630
2.24	58.604	58.578	58.552	58.526	58.500	58.474	58.448	58.422	58.396	58.370
2.25	58.344	58.318	58.292	58.266	58.240	58.214	58.189	58.163	58.137	58.111
2.26	58.086	58.060	58.034	58.009	57.983	57.957	57.932	57.906	57.881	57.855
2.27	57.830	57.804	57.779	57.753	57.728	57.703	57.677	57.652	57.627	57.601
2.28	57.576	57.551	57.526	57.500	57.475	57.450	57.425	57.400	57.375	57.350
2.29	57.325	57.300	57.275	57.250	57.225	57.200	57.175	57.150	57.125	57.100
2.30	57.075	57.051	57.026	57.001	56.976	56.952	56.927	56.902	56.878	56.853
2.31	56.828	56.804	56.779	56.755	56.730	56.706	56.681	56.657	56.632	56.608
2.32	56.584	56.559	56.535	56.510	56.486	56.462	56.438	56.413	56.389	56.365
2.33	56.341	56.317	56.292	56.268	56.244	56.220	56.196	56.172	56.148	56.124
2.34	56.100	56.076	56.052	56.028	56.004	55.980	55.957	55.933	55.909	55.885
2.35	55.861	55.838	55.814	55.790	55.766	55.743	55.719	55.695	55.672	55.648
2.36	55.625	55.601	55.578	55.554	55.531	55.507	55.484	55.460	55.437	55.413
2.37	55.390	55.367	55.343	55.320	55.297	55.273	55.250	55.227	55.204	55.180
2.38	55.157	55.134	55.111	55.088	55.065	55.042	55.019	54.996	54.972	54.949
2.39	54.927	54.904	54.881	54.858	54.835	54.812	54.789	54.766	54.743	54.720
2.40	54.698	54.675	54.652	54.629	54.607	54.584	54.561	54.539	54.516	54.493
2.41	54.471	54.448	54.426	54.403	54.381	54.358	54.335	54.313	54.291	54.268
2.42	54.246	54.223	54.201	54.179	54.156	54.134	54.112	54.089	54.067	54.045
2.43	54.022	54.000	53.978	53.956	53.934	53.912	53.889	53.867	53.845	53.823
2.44	53.801	53.779	53.757	53.735	53.713	53.691	53.669	53.647	53.625	53.603
2.45	53.582	53.560	53.538	53.516	53.494	53.472	53.451	53.429	53.407	53.385
2.46	53.364	53.342	53.320	53.299	53.277	53.256	53.234	53.212	53.191	53.169
2.47	53.148	53.126	53.105	53.083	53.062	53.040	53.019	52.998	52.976	52.955
2.48	52.933	52.912	52.891	52.870	52.848	52.827	52.806	52.785	52.763	52.742
2.49	52.721	52.700	52.679	52.658	52.636	52.615	52.594	52.573	52.552	52.531

20, DEG.	0	1	2	3	4	5	6	7	8	9
2.50	52.510	52.489	52.468	52.447	52.426	52.405	52.384	52.364	52.343	52.322
2.51	52.301	52.280	52.259	52.238	52.218	52.197	52.176	52.155	52.135	52.114
2.52	52.093	52.073	52.052	52.031	52.011	51.990	51.970	51.949	51.929	51.908
2.53	51.888	51.867	51.847	51.826	51.806	51.785	51.765	51.744	51.724	51.704
2.54	51.683	51.663	51.643	51.622	51.602	51.582	51.562	51.541	51.521	51.501
2.55	51.481	51.460	51.440	51.420	51.400	51.380	51.360	51.340	51.320	51.300
2.56	51.280	51.260	51.240	51.220	51.200	51.180	51.160	51.140	51.120	51.100
2.57	51.080	51.060	51.040	51.021	51.001	50.981	50.961	50.941	50.922	50.902
2.58	50.882	50.862	50.843	50.823	50.803	50.784	50.764	50.744	50.725	50.705
2.59	50.686	50.666	50.647	50.627	50.608	50.588	50.569	50.549	50.530	50.510
2.60	50.491	50.471	50.452	50.433	50.413	50.394	50.375	50.355	50.336	50.317
2.61	50.297	50.278	50.259	50.240	50.220	50.201	50.182	50.163	50.144	50.125
2.62	50.105	50.086	50.067	50.048	50.029	50.010	49.991	49.972	49.953	49.934
2.63	49.915	49.896	49.877	49.858	49.839	49.820	49.801	49.782	49.764	49.745
2.64	49.726	49.707	49.688	49.669	49.651	49.632	49.613	49.594	49.576	49.557
2.65	49.538	49.520	49.501	49.482	49.464	49.445	49.426	49.408	49.389	49.371
2.66	49.352	49.334	49.315	49.297	49.278	49.260	49.241	49.223	49.204	49.186
2.67	49.167	49.149	49.131	49.112	49.094	49.075	49.057	49.039	49.020	49.002
2.68	48.984	48.966	48.947	48.929	48.911	48.893	48.874	48.856	48.838	48.820
2.69	48.802	48.784	48.766	48.747	48.729	48.711	48.693	48.675	48.657	48.639
2.70	48.621	48.603	48.585	48.567	48.549	48.531	48.513	48.495	48.477	48.460
2.71	48.442	48.424	48.406	48.388	48.370	48.353	48.335	48.317	48.299	48.281
2.72	48.264	48.246	48.228	48.210	48.193	48.175	48.157	48.140	48.122	48.105
2.73	48.087	48.069	48.052	48.034	48.017	47.999	47.981	47.964	47.946	47.929
2.74	47.911	47.894	47.876	47.859	47.842	47.824	47.807	47.789	47.772	47.755
2.75	47.737	47.720	47.703	47.685	47.668	47.651	47.633	47.616	47.599	47.582
2.76	47.564	47.547	47.530	47.513	47.495	47.478	47.461	47.444	47.427	47.410
2.77	47.393	47.376	47.358	47.341	47.324	47.307	47.290	47.273	47.256	47.239
2.78	47.222	47.205	47.188	47.171	47.154	47.137	47.121	47.104	47.087	47.070
2.79	47.053	47.036	47.019	47.002	46.986	46.969	46.952	46.935	46.918	46.902
2.80	46.885	46.868	46.852	46.835	46.818	46.801	46.785	46.768	46.751	46.735
2.81	46.718	46.702	46.685	46.668	46.652	46.635	46.619	46.602	46.586	46.569
2.82	46.553	46.536	46.520	46.503	46.487	46.470	46.454	46.437	46.421	46.404
2.83	46.388	46.372	46.355	46.339	46.323	46.306	46.290	46.274	46.257	46.241
2.84	46.225	46.208	46.192	46.176	46.160	46.144	46.127	46.111	46.095	46.079
2.85	46.063	46.046	46.030	46.014	45.998	45.982	45.966	45.950	45.934	45.918
2.86	45.902	45.886	45.869	45.853	45.837	45.821	45.805	45.790	45.774	45.758
2.87	45.742	45.726	45.710	45.694	45.678	45.662	45.646	45.630	45.615	45.599
2.88	45.583	45.567	45.551	45.535	45.520	45.504	45.488	45.472	45.457	45.441
2.89	45.425	45.409	45.394	45.378	45.362	45.347	45.331	45.315	45.300	45.284
2.90	45.269	45.253	45.237	45.222	45.206	45.191	45.175	45.160	45.144	45.129
2.91	45.113	45.098	45.082	45.067	45.051	45.036	45.020	45.005	44.989	44.974
2.92	44.959	44.943	44.928	44.912	44.897	44.882	44.866	44.851	44.836	44.820
2.93	44.805	44.790	44.775	44.759	44.744	44.729	44.714	44.698	44.683	44.668
2.94	44.653	44.638	44.622	44.607	44.592	44.577	44.562	44.547	44.532	44.517
2.95	44.501	44.486	44.471	44.456	44.441	44.426	44.411	44.396	44.381	44.366
2.96	44.351	44.336	44.321	44.306	44.291	44.276	44.261	44.247	44.232	44.217
2.97	44.202	44.187	44.172	44.157	44.142	44.128	44.113	44.098	44.083	44.068
2.98	44.054	44.039	44.024	44.009	43.995	43.980	43.965	43.950	43.936	43.921
2.99	43.906	43.892	43.877	43.862	43.848	43.833	43.818	43.804	43.789	43.775

Table 5
Copper $K\alpha$ Radiation
 2θ in Radian
 $\lambda = 1.541838 \text{ \AA}^*$

2θ,RAD.	0	1	2	3	4	5	6	7	8	9
0.0000			77092.	51395.	38546.	30837.	25697.	22026.	19273.	17132.
0.0001	15418.	14017.	12849.	11860.	11013.	10279.	9636.	9070.	8566.	8115.
0.0002	7709.2	7342.1	7008.4	6703.6	6424.3	6167.4	5930.1	5710.5	5506.6	5316.7
0.0003	5139.5	4973.7	4818.2	4672.2	4534.8	4405.3	4282.9	4167.1	4057.5	3953.4
0.0004	3854.6	3760.6	3671.0	3585.7	3504.2	3426.3	3351.8	3280.5	3212.2	3146.6
0.0005	3083.7	3023.2	2965.1	2909.1	2855.3	2803.3	2753.3	2705.0	2658.3	2613.3
0.0006	2569.7	2527.6	2486.8	2447.4	2409.1	2372.1	2336.1	2301.3	2267.4	2234.5
0.0007	2202.6	2171.6	2141.4	2112.1	2083.6	2055.8	2028.7	2002.4	1976.7	1951.7
0.0008	1927.3	1903.5	1880.3	1857.6	1835.5	1813.9	1792.8	1772.2	1752.1	1732.4
0.0009	1713.2	1694.3	1675.9	1657.9	1640.3	1623.0	1606.1	1589.5	1573.3	1557.4
0.0010	1541.8	1526.6	1511.6	1496.9	1482.5	1468.4	1454.6	1441.0	1427.6	1414.5
0.0011	1401.7	1389.0	1376.6	1364.5	1352.5	1340.7	1329.2	1317.8	1306.6	1295.7
0.0012	1284.9	1274.2	1263.8	1253.5	1243.4	1233.5	1223.7	1214.0	1204.6	1195.2
0.0013	1186.0	1177.0	1168.1	1159.3	1150.6	1142.1	1133.7	1125.4	1117.3	1109.2
0.0014	1101.3	1093.5	1085.8	1078.2	1070.7	1063.3	1056.1	1048.9	1041.8	1034.8
0.0015	1027.9	1021.1	1014.4	1007.7	1001.2	994.7	988.4	982.1	975.8	969.7
0.0016	963.65	957.66	951.75	945.91	940.15	934.45	928.82	923.26	917.76	912.33
0.0017	906.96	901.66	896.42	891.24	886.11	881.05	876.04	871.10	866.20	861.36
0.0018	856.58	851.84	847.16	842.53	837.96	833.43	828.95	824.51	820.13	815.79
0.0019	811.49	807.25	803.04	798.88	794.76	790.69	786.65	782.66	778.71	774.79
0.0020	770.92	767.08	763.29	759.53	755.80	752.12	748.47	744.85	741.27	737.72
0.0021	734.21	730.73	727.28	723.87	720.49	717.13	713.81	710.52	707.27	704.04
0.0022	700.84	697.66	694.52	691.41	688.32	685.26	682.23	679.22	676.24	673.29
0.0023	670.36	667.46	664.59	661.73	658.91	656.10	653.32	650.56	647.83	645.12
0.0024	642.43	639.77	637.12	634.50	631.90	629.32	626.76	624.23	621.71	619.21
0.0025	616.74	614.28	611.84	609.42	607.02	604.64	602.28	599.94	597.61	595.30
0.0026	593.01	590.74	588.49	586.25	584.03	581.83	579.64	577.47	575.31	573.17
0.0027	571.05	568.94	566.85	564.78	562.71	560.67	558.64	556.62	554.62	552.63
0.0028	550.66	548.70	546.75	544.82	542.90	541.00	539.10	537.23	535.36	533.51
0.0029	531.67	529.84	528.03	526.22	524.43	522.66	520.89	519.14	517.40	515.67
0.0030	513.95	512.24	510.54	508.86	507.18	505.52	503.87	502.23	500.60	498.98
0.0031	497.37	495.77	494.18	492.60	491.03	489.47	487.92	486.38	484.86	483.34
0.0032	481.82	480.32	478.83	477.35	475.88	474.41	472.96	471.51	470.07	468.64
0.0033	467.22	465.81	464.41	463.01	461.63	460.25	458.88	457.52	456.17	454.82
0.0034	453.48	452.15	450.83	449.52	448.21	446.91	445.62	444.33	443.06	441.79
0.0035	440.53	439.27	438.02	436.78	435.55	434.32	433.10	431.89	430.68	429.48
0.0036	428.29	427.10	425.92	424.75	423.58	422.42	421.27	420.12	418.98	417.84
0.0037	416.71	415.59	414.47	413.36	412.26	411.16	410.06	408.98	407.89	406.82
0.0038	405.75	404.68	403.62	402.57	401.52	400.48	399.44	398.41	397.38	396.36
0.0039	395.34	394.33	393.33	392.33	391.33	390.34	389.35	388.37	387.40	386.43
0.0040	385.46	384.50	383.54	382.59	381.64	380.70	379.76	378.83	377.90	376.98
0.0041	376.06	375.14	374.23	373.33	372.42	371.53	370.63	369.75	368.86	367.98
0.0042	367.10	366.23	365.36	364.50	363.64	362.79	361.93	361.09	360.24	359.40
0.0043	358.57	357.74	356.91	356.08	355.26	354.45	353.63	352.82	352.02	351.22
0.0044	350.42	349.62	348.83	348.05	347.26	346.48	345.70	344.93	344.16	343.39
0.0045	342.63	341.87	341.11	340.36	339.61	338.87	338.12	337.38	336.65	335.91
0.0046	335.18	334.46	333.73	333.01	332.29	331.58	330.87	330.16	329.45	328.75
0.0047	328.05	327.35	326.66	325.97	325.28	324.60	323.92	323.24	322.56	321.89
0.0048	321.22	320.55	319.88	319.22	318.56	317.91	317.25	316.60	315.95	315.30
0.0049	314.66	314.02	313.38	312.75	312.11	311.48	310.85	310.23	309.61	308.99

2θ, RAD.	0	1	2	3	4	5	6	7	8	9
0.0050	308.37	307.75	307.14	306.53	305.92	305.31	304.71	304.11	303.51	302.92
0.0051	302.32	301.73	301.14	300.55	299.97	299.39	298.81	298.23	297.65	297.08
0.0052	296.51	295.94	295.37	294.81	294.24	293.68	293.13	292.57	292.02	291.46
0.0053	290.91	290.37	289.82	289.28	288.73	288.19	287.66	287.12	286.59	286.06
0.0054	285.53	285.00	284.47	283.95	283.43	282.91	282.39	281.87	281.36	280.85
0.0055	280.33	279.83	279.32	278.81	278.31	277.81	277.31	276.81	276.32	275.82
0.0056	275.33	274.84	274.35	273.86	273.38	272.89	272.41	271.93	271.45	270.97
0.0057	270.50	270.02	269.55	269.08	268.61	268.15	267.68	267.22	266.75	266.29
0.0058	265.83	265.38	264.92	264.47	264.01	263.56	263.11	262.66	262.22	261.77
0.0059	261.33	260.89	260.45	260.01	259.57	259.13	258.70	258.26	257.83	257.40
0.0060	256.97	256.55	256.12	255.70	255.27	254.85	254.43	254.01	253.59	253.18
0.0061	252.76	252.35	251.93	251.52	251.11	250.71	250.30	249.89	249.49	249.09
0.0062	248.68	248.28	247.88	247.49	247.09	246.69	246.30	245.91	245.52	245.13
0.0063	244.74	244.35	243.96	243.58	243.19	242.81	242.43	242.05	241.67	241.29
0.0064	240.91	240.54	240.16	239.79	239.42	239.05	238.68	238.31	237.94	237.57
0.0065	237.21	236.84	236.48	236.12	235.76	235.40	235.04	234.68	234.32	233.97
0.0066	233.61	233.26	232.91	232.56	232.21	231.86	231.51	231.16	230.81	230.47
0.0067	230.13	229.78	229.44	229.10	228.76	228.42	228.08	227.75	227.41	227.08
0.0068	226.74	226.41	226.08	225.75	225.42	225.09	224.76	224.43	224.10	223.78
0.0069	223.46	223.13	222.81	222.49	222.17	221.85	221.53	221.21	220.89	220.58
0.0070	220.26	219.95	219.64	219.32	219.01	218.70	218.39	218.08	217.77	217.47
0.0071	217.16	216.86	216.55	216.25	215.94	215.64	215.34	215.04	214.74	214.44
0.0072	214.14	213.85	213.55	213.26	212.96	212.67	212.37	212.08	211.79	211.50
0.0073	211.21	210.92	210.63	210.35	210.06	209.77	209.49	209.21	208.92	208.64
0.0074	208.36	208.08	207.80	207.52	207.24	206.96	206.68	206.40	206.13	205.85
0.0075	205.58	205.31	205.03	204.76	204.49	204.22	203.95	203.68	203.41	203.14
0.0076	202.87	202.61	202.34	202.08	201.81	201.55	201.28	201.02	200.76	200.50
0.0077	200.24	199.98	199.72	199.46	199.20	198.95	198.69	198.44	198.18	197.93
0.0078	197.67	197.42	197.17	196.91	196.66	196.41	196.16	195.91	195.67	195.42
0.0079	195.17	194.92	194.68	194.43	194.19	193.94	193.70	193.46	193.21	192.97
0.0080	192.73	192.49	192.25	192.01	191.77	191.53	191.30	191.06	190.82	190.59
0.0081	190.35	190.12	189.88	189.65	189.42	189.18	188.95	188.72	188.49	188.26
0.0082	188.03	187.80	187.57	187.34	187.12	186.89	186.66	186.44	186.21	185.99
0.0083	185.76	185.54	185.32	185.10	184.87	184.65	184.43	184.21	183.99	183.77
0.0084	183.55	183.33	183.12	182.90	182.68	182.47	182.25	182.04	181.82	181.61
0.0085	181.39	181.18	180.97	180.76	180.54	180.33	180.12	179.91	179.70	179.49
0.0086	179.28	179.08	178.87	178.66	178.45	178.25	178.04	177.84	177.63	177.43
0.0087	177.22	177.02	176.82	176.61	176.41	176.21	176.01	175.81	175.61	175.41
0.0088	175.21	175.01	174.81	174.61	174.42	174.22	174.02	173.83	173.63	173.44
0.0089	173.24	173.05	172.85	172.66	172.47	172.27	172.08	171.89	171.70	171.51
0.0090	171.32	171.13	170.94	170.75	170.56	170.37	170.18	169.99	169.81	169.62
0.0091	169.43	169.25	169.06	168.88	168.69	168.51	168.32	168.14	167.96	167.77
0.0092	167.59	167.41	167.23	167.05	166.87	166.69	166.51	166.33	166.15	165.97
0.0093	165.79	165.61	165.43	165.26	165.08	164.90	164.73	164.55	164.38	164.20
0.0094	164.03	163.85	163.68	163.50	163.33	163.16	162.99	162.81	162.64	162.47
0.0095	162.30	162.13	161.96	161.79	161.62	161.45	161.28	161.11	160.94	160.78
0.0096	160.61	160.44	160.27	160.11	159.94	159.78	159.61	159.45	159.28	159.12
0.0097	158.95	158.79	158.63	158.46	158.30	158.14	157.98	157.81	157.65	157.49
0.0098	157.33	157.17	157.01	156.85	156.69	156.53	156.37	156.22	156.06	155.90
0.0099	155.74	155.58	155.43	155.27	155.12	154.96	154.80	154.65	154.49	154.34

2θ, RAD.	0	1	2	3	4	5	6	7	8	9
0.0100	154.18	154.03	153.88	153.72	153.57	153.42	153.26	153.11	152.96	152.81
0.0101	152.66	152.51	152.36	152.21	152.06	151.91	151.76	151.61	151.46	151.31
0.0102	151.16	151.01	150.87	150.72	150.57	150.42	150.28	150.13	149.98	149.84
0.0103	149.69	149.55	149.40	149.26	149.11	148.97	148.83	148.68	148.54	148.40
0.0104	148.26	148.11	147.97	147.83	147.69	147.55	147.40	147.26	147.12	146.98
0.0105	146.84	146.70	146.56	146.42	146.29	146.15	146.01	145.87	145.73	145.59
0.0106	145.46	145.32	145.18	145.05	144.91	144.77	144.64	144.50	144.37	144.23
0.0107	144.10	143.96	143.83	143.69	143.56	143.43	143.29	143.16	143.03	142.90
0.0108	142.76	142.63	142.50	142.37	142.24	142.11	141.97	141.84	141.71	141.58
0.0109	141.45	141.32	141.19	141.07	140.94	140.81	140.68	140.55	140.42	140.30
0.0110	140.17	140.04	139.91	139.79	139.66	139.53	139.41	139.28	139.16	139.03
0.0111	138.91	138.78	138.66	138.53	138.41	138.28	138.16	138.03	137.91	137.79
0.0112	137.66	137.54	137.42	137.30	137.17	137.05	136.93	136.81	136.69	136.57
0.0113	136.45	136.33	136.21	136.09	135.97	135.85	135.73	135.61	135.49	135.37
0.0114	135.26	135.13	135.01	134.89	134.78	134.66	134.54	134.42	134.31	134.19
0.0115	134.07	133.96	133.84	133.72	133.61	133.49	133.38	133.26	133.15	133.03
0.0116	132.92	132.80	132.69	132.58	132.46	132.35	132.23	132.12	132.01	131.89
0.0117	131.78	131.67	131.56	131.44	131.33	131.22	131.11	131.00	130.89	130.78
0.0118	130.67	130.55	130.44	130.33	130.22	130.11	130.00	129.89	129.79	129.68
0.0119	129.57	129.46	129.35	129.24	129.13	129.02	128.92	128.81	128.70	128.59
0.0120	128.49	128.38	128.27	128.17	128.06	127.95	127.85	127.74	127.64	127.53
0.0121	127.43	127.32	127.22	127.11	127.01	126.90	126.80	126.69	126.59	126.48
0.0122	126.38	126.28	126.17	126.07	125.97	125.87	125.76	125.66	125.56	125.46
0.0123	125.35	125.25	125.15	125.05	124.95	124.85	124.75	124.64	124.54	124.44
0.0124	124.34	124.24	124.14	124.04	123.94	123.84	123.74	123.64	123.55	123.45
0.0125	123.35	123.25	123.15	123.05	122.95	122.86	122.76	122.66	122.56	122.47
0.0126	122.37	122.27	122.18	122.08	121.98	121.89	121.79	121.69	121.60	121.50
0.0127	121.41	121.31	121.21	121.12	121.02	120.93	120.83	120.74	120.65	120.55
0.0128	120.46	120.36	120.27	120.18	120.08	119.99	119.89	119.80	119.71	119.62
0.0129	119.52	119.43	119.34	119.25	119.15	119.06	118.97	118.88	118.79	118.70
0.0130	118.60	118.51	118.42	118.33	118.24	118.15	118.06	117.97	117.88	117.79
0.0131	117.70	117.61	117.52	117.43	117.34	117.25	117.16	117.07	116.98	116.90
0.0132	116.81	116.72	116.63	116.54	116.45	116.37	116.28	116.19	116.10	116.02
0.0133	115.93	115.84	115.75	115.67	115.58	115.49	115.41	115.32	115.24	115.15
0.0134	115.06	114.98	114.89	114.81	114.72	114.64	114.55	114.47	114.38	114.30
0.0135	114.21	114.13	114.04	113.96	113.87	113.79	113.71	113.62	113.54	113.45
0.0136	113.37	113.29	113.20	113.12	113.04	112.96	112.87	112.79	112.71	112.63
0.0137	112.54	112.46	112.38	112.30	112.22	112.13	112.05	111.97	111.89	111.81
0.0138	111.73	111.65	111.57	111.49	111.41	111.32	111.24	111.16	111.08	111.00
0.0139	110.92	110.84	110.77	110.69	110.61	110.53	110.45	110.37	110.29	110.21
0.0140	110.13	110.05	109.98	109.90	109.82	109.74	109.66	109.58	109.51	109.43
0.0141	109.35	109.27	109.20	109.12	109.04	108.96	108.89	108.81	108.73	108.66
0.0142	108.58	108.50	108.43	108.35	108.28	108.20	108.12	108.05	107.97	107.90
0.0143	107.82	107.75	107.67	107.60	107.52	107.45	107.37	107.30	107.22	107.15
0.0144	107.07	107.00	106.92	106.85	106.78	106.70	106.63	106.56	106.48	106.41
0.0145	106.33	106.26	106.19	106.12	106.04	105.97	105.90	105.82	105.75	105.68
0.0146	105.61	105.53	105.46	105.39	105.32	105.25	105.17	105.10	105.03	104.96
0.0147	104.89	104.82	104.75	104.67	104.60	104.53	104.46	104.39	104.32	104.25
0.0148	104.18	104.11	104.04	103.97	103.90	103.83	103.76	103.69	103.62	103.55
0.0149	103.48	103.41	103.34	103.27	103.20	103.13	103.07	103.00	102.93	102.86

COPPER

33

WAVELENGTH = 1.541838 Å

2θ, RAD.	0	1	2	3	4	5	6	7	8	9
0.0150	102.79	102.72	102.65	102.59	102.52	102.45	102.38	102.31	102.24	102.18
0.0151	102.11	102.04	101.97	101.91	101.84	101.77	101.71	101.64	101.57	101.50
0.0152	101.44	101.37	101.30	101.24	101.17	101.11	101.04	100.97	100.91	100.84
0.0153	100.77	100.71	100.64	100.58	100.51	100.45	100.38	100.32	100.25	100.19
0.0154	100.12	100.06	99.99	99.93	99.86	99.80	99.73	99.67	99.60	99.54
0.0155	99.474	99.410	99.346	99.282	99.218	99.155	99.091	99.027	98.964	98.900
0.0156	98.837	98.774	98.710	98.647	98.584	98.521	98.458	98.395	98.333	98.270
0.0157	98.207	98.145	98.082	98.020	97.958	97.896	97.833	97.771	97.709	97.648
0.0158	97.586	97.524	97.462	97.401	97.339	97.278	97.217	97.155	97.094	97.033
0.0159	96.972	96.911	96.850	96.789	96.729	96.668	96.607	96.547	96.487	96.426
0.0160	96.366	96.306	96.246	96.186	96.126	96.066	96.006	95.946	95.887	95.827
0.0161	95.767	95.708	95.649	95.589	95.530	95.471	95.412	95.353	95.294	95.235
0.0162	95.176	95.118	95.059	95.000	94.942	94.883	94.825	94.767	94.709	94.650
0.0163	94.592	94.534	94.476	94.419	94.361	94.303	94.245	94.188	94.130	94.073
0.0164	94.016	93.958	93.901	93.844	93.787	93.730	93.673	93.616	93.559	93.503
0.0165	93.446	93.389	93.333	93.276	93.220	93.164	93.107	93.051	92.995	92.939
0.0166	92.883	92.827	92.771	92.715	92.660	92.604	92.548	92.493	92.437	92.382
0.0167	92.327	92.272	92.216	92.161	92.106	92.051	91.996	91.941	91.887	91.832
0.0168	91.777	91.723	91.668	91.614	91.559	91.505	91.451	91.396	91.342	91.288
0.0169	91.234	91.180	91.126	91.072	91.019	90.965	90.911	90.858	90.804	90.751
0.0170	90.697	90.644	90.591	90.538	90.485	90.432	90.379	90.326	90.273	90.220
0.0171	90.167	90.114	90.062	90.009	89.957	89.904	89.852	89.800	89.747	89.695
0.0172	89.643	89.591	89.539	89.487	89.435	89.383	89.331	89.280	89.228	89.176
0.0173	89.125	89.073	89.022	88.970	88.919	88.868	88.817	88.766	88.715	88.664
0.0174	88.613	88.562	88.511	88.460	88.409	88.359	88.308	88.258	88.207	88.157
0.0175	88.106	88.056	88.006	87.955	87.905	87.855	87.805	87.755	87.705	87.655
0.0176	87.606	87.556	87.506	87.457	87.407	87.357	87.308	87.259	87.209	87.160
0.0177	87.111	87.061	87.012	86.963	86.914	86.865	86.816	86.768	86.719	86.670
0.0178	86.621	86.573	86.524	86.476	86.427	86.379	86.330	86.282	86.234	86.186
0.0179	86.137	86.089	86.041	85.993	85.945	85.897	85.850	85.802	85.754	85.706
0.0180	85.659	85.611	85.564	85.516	85.469	85.422	85.374	85.327	85.280	85.233
0.0181	85.186	85.139	85.092	85.045	84.998	84.951	84.904	84.857	84.811	84.764
0.0182	84.718	84.671	84.625	84.578	84.532	84.486	84.439	84.393	84.347	84.301
0.0183	84.255	84.209	84.163	84.117	84.071	84.025	83.979	83.934	83.888	83.842
0.0184	83.797	83.751	83.706	83.660	83.615	83.570	83.524	83.479	83.434	83.389
0.0185	83.344	83.299	83.254	83.209	83.164	83.119	83.074	83.030	82.985	82.940
0.0186	82.896	82.851	82.807	82.762	82.718	82.674	82.629	82.585	82.541	82.497
0.0187	82.452	82.408	82.364	82.320	82.277	82.233	82.189	82.145	82.101	82.058
0.0188	82.014	81.970	81.927	81.883	81.840	81.796	81.753	81.710	81.666	81.623
0.0189	81.580	81.537	81.494	81.451	81.408	81.365	81.322	81.279	81.236	81.193
0.0190	81.151	81.108	81.065	81.023	80.980	80.938	80.895	80.853	80.810	80.768
0.0191	80.726	80.684	80.641	80.599	80.557	80.515	80.473	80.431	80.389	80.347
0.0192	80.305	80.264	80.222	80.180	80.138	80.097	80.055	80.014	79.972	79.931
0.0193	79.889	79.848	79.807	79.765	79.724	79.683	79.642	79.601	79.560	79.518
0.0194	79.477	79.437	79.396	79.355	79.314	79.273	79.232	79.192	79.151	79.110
0.0195	79.070	79.029	78.989	78.948	78.908	78.868	78.827	78.787	78.747	78.707
0.0196	78.667	78.626	78.586	78.546	78.506	78.466	78.426	78.387	78.347	78.307
0.0197	78.267	78.228	78.188	78.148	78.109	78.069	78.030	77.990	77.951	77.911
0.0198	77.872	77.833	77.793	77.754	77.715	77.676	77.637	77.598	77.559	77.520
0.0199	77.481	77.442	77.403	77.364	77.325	77.286	77.248	77.209	77.170	77.132

2θ, RAD.	0	1	2	3	4	5	6	7	8	9
0.0200	77.093	77.055	77.016	76.978	76.939	76.901	76.863	76.824	76.786	76.748
0.0201	76.710	76.672	76.633	76.595	76.557	76.519	76.481	76.443	76.406	76.368
0.0202	76.330	76.292	76.254	76.217	76.179	76.142	76.104	76.066	76.029	75.991
0.0203	75.954	75.917	75.879	75.842	75.805	75.767	75.730	75.693	75.656	75.619
0.0204	75.582	75.545	75.508	75.471	75.434	75.397	75.360	75.323	75.286	75.250
0.0205	75.213	75.176	75.140	75.103	75.067	75.030	74.994	74.957	74.921	74.884
0.0206	74.848	74.812	74.775	74.739	74.703	74.667	74.631	74.594	74.558	74.522
0.0207	74.486	74.450	74.414	74.379	74.343	74.307	74.271	74.235	74.200	74.164
0.0208	74.128	74.093	74.057	74.021	73.986	73.950	73.915	73.880	73.844	73.809
0.0209	73.774	73.738	73.703	73.668	73.633	73.597	73.562	73.527	73.492	73.457
0.0210	73.422	73.387	73.352	73.318	73.283	73.248	73.213	73.178	73.144	73.109
0.0211	73.074	73.040	73.005	72.971	72.936	72.902	72.867	72.833	72.798	72.764
0.0212	72.730	72.695	72.661	72.627	72.593	72.559	72.524	72.490	72.456	72.422
0.0213	72.388	72.354	72.320	72.286	72.253	72.219	72.185	72.151	72.117	72.084
0.0214	72.050	72.016	71.983	71.949	71.916	71.882	71.849	71.815	71.782	71.748
0.0215	71.715	71.681	71.648	71.615	71.582	71.548	71.515	71.482	71.449	71.416
0.0216	71.383	71.350	71.317	71.284	71.251	71.218	71.185	71.152	71.119	71.087
0.0217	71.054	71.021	70.988	70.956	70.923	70.891	70.858	70.825	70.793	70.760
0.0218	70.728	70.696	70.663	70.631	70.598	70.566	70.534	70.502	70.469	70.437
0.0219	70.405	70.373	70.341	70.309	70.277	70.245	70.213	70.181	70.149	70.117
0.0220	70.085	70.053	70.021	69.990	69.958	69.926	69.894	69.863	69.831	69.799
0.0221	69.768	69.736	69.705	69.673	69.642	69.610	69.579	69.548	69.516	69.485
0.0222	69.454	69.422	69.391	69.360	69.329	69.298	69.266	69.235	69.204	69.173
0.0223	69.142	69.111	69.080	69.049	69.018	68.988	68.957	68.926	68.895	68.864
0.0224	68.834	68.803	68.772	68.741	68.711	68.680	68.650	68.619	68.589	68.558
0.0225	68.528	68.497	68.467	68.436	68.406	68.376	68.345	68.315	68.285	68.255
0.0226	68.224	68.194	68.164	68.134	68.104	68.074	68.044	68.014	67.984	67.954
0.0227	67.924	67.894	67.864	67.834	67.804	67.775	67.745	67.715	67.685	67.656
0.0228	67.626	67.596	67.567	67.537	67.508	67.478	67.449	67.419	67.390	67.360
0.0229	67.331	67.301	67.272	67.243	67.213	67.184	67.155	67.126	67.096	67.067
0.0230	67.038	67.009	66.980	66.951	66.922	66.893	66.864	66.835	66.806	66.777
0.0231	66.748	66.719	66.690	66.661	66.632	66.604	66.575	66.546	66.517	66.489
0.0232	66.460	66.431	66.403	66.374	66.346	66.317	66.289	66.260	66.232	66.203
0.0233	66.175	66.146	66.118	66.090	66.061	66.033	66.005	65.977	65.948	65.920
0.0234	65.892	65.864	65.836	65.808	65.780	65.752	65.724	65.696	65.668	65.640
0.0235	65.612	65.584	65.556	65.528	65.500	65.472	65.445	65.417	65.389	65.361
0.0236	65.334	65.306	65.278	65.251	65.223	65.196	65.168	65.140	65.113	65.085
0.0237	65.058	65.031	65.003	64.976	64.948	64.921	64.894	64.866	64.839	64.812
0.0238	64.785	64.757	64.730	64.703	64.676	64.649	64.622	64.595	64.568	64.541
0.0239	64.514	64.487	64.460	64.433	64.406	64.379	64.352	64.325	64.298	64.272
0.0240	64.245	64.218	64.191	64.165	64.138	64.111	64.085	64.058	64.031	64.005
0.0241	63.978	63.952	63.925	63.899	63.872	63.846	63.819	63.793	63.767	63.740
0.0242	63.714	63.688	63.661	63.635	63.609	63.583	63.556	63.530	63.504	63.478
0.0243	63.452	63.426	63.400	63.374	63.347	63.321	63.295	63.269	63.244	63.218
0.0244	63.192	63.166	63.140	63.114	63.088	63.062	63.037	63.011	62.985	62.959
0.0245	62.934	62.908	62.882	62.857	62.831	62.806	62.780	62.755	62.729	62.703
0.0246	62.678	62.653	62.627	62.602	62.576	62.551	62.525	62.500	62.475	62.450
0.0247	62.424	62.399	62.374	62.349	62.323	62.298	62.273	62.248	62.223	62.198
0.0248	62.173	62.147	62.122	62.097	62.072	62.047	62.022	61.998	61.973	61.948
0.0249	61.923	61.898	61.873	61.848	61.824	61.799	61.774	61.749	61.725	61.700

2θ, RAD.	0	1	2	3	4	5	6	7	8	9
0.0250	61.675	61.651	61.626	61.601	61.577	61.552	61.528	61.503	61.478	61.454
0.0251	61.429	61.405	61.381	61.356	61.332	61.307	61.283	61.259	61.234	61.210
0.0252	61.186	61.161	61.137	61.113	61.089	61.065	61.040	61.016	60.992	60.968
0.0253	60.944	60.920	60.896	60.872	60.848	60.824	60.800	60.776	60.752	60.728
0.0254	60.704	60.680	60.656	60.632	60.609	60.585	60.561	60.537	60.513	60.490
0.0255	60.466	60.442	60.419	60.395	60.371	60.348	60.324	60.300	60.277	60.253
0.0256	60.230	60.206	60.183	60.159	60.136	60.112	60.089	60.066	60.042	60.019
0.0257	59.995	59.972	59.949	59.925	59.902	59.879	59.856	59.832	59.809	59.786
0.0258	59.763	59.740	59.717	59.693	59.670	59.647	59.624	59.601	59.578	59.555
0.0259	59.532	59.509	59.486	59.463	59.440	59.417	59.395	59.372	59.349	59.326
0.0260	59.303	59.280	59.258	59.235	59.212	59.189	59.167	59.144	59.121	59.099
0.0261	59.076	59.053	59.031	59.008	58.986	58.963	58.941	58.918	58.895	58.873
0.0262	58.851	58.828	58.806	58.783	58.761	58.738	58.716	58.694	58.671	58.649
0.0263	58.627	58.604	58.582	58.560	58.538	58.516	58.493	58.471	58.449	58.427
0.0264	58.405	58.383	58.360	58.338	58.316	58.294	58.272	58.250	58.228	58.206
0.0265	58.184	58.162	58.140	58.119	58.097	58.075	58.053	58.031	58.009	57.987
0.0266	57.966	57.944	57.922	57.900	57.879	57.857	57.835	57.813	57.792	57.770
0.0267	57.749	57.727	57.705	57.684	57.662	57.641	57.619	57.598	57.576	57.555
0.0268	57.533	57.512	57.490	57.469	57.447	57.426	57.405	57.383	57.362	57.340
0.0269	57.319	57.298	57.277	57.255	57.234	57.213	57.192	57.170	57.149	57.128
0.0270	57.107	57.086	57.065	57.044	57.022	57.001	56.980	56.959	56.938	56.917
0.0271	56.896	56.875	56.854	56.833	56.812	56.791	56.771	56.750	56.729	56.708
0.0272	56.687	56.666	56.645	56.625	56.604	56.583	56.562	56.542	56.521	56.500
0.0273	56.479	56.459	56.438	56.417	56.397	56.376	56.356	56.335	56.314	56.294
0.0274	56.273	56.253	56.232	56.212	56.191	56.171	56.150	56.130	56.109	56.089
0.0275	56.069	56.048	56.028	56.008	55.987	55.967	55.947	55.926	55.906	55.886
0.0276	55.866	55.845	55.825	55.805	55.785	55.765	55.744	55.724	55.704	55.684
0.0277	55.664	55.644	55.624	55.604	55.584	55.564	55.544	55.524	55.504	55.484
0.0278	55.464	55.444	55.424	55.404	55.384	55.364	55.344	55.324	55.305	55.285
0.0279	55.265	55.245	55.225	55.206	55.186	55.166	55.146	55.127	55.107	55.087
0.0280	55.067	55.048	55.028	55.009	54.989	54.969	54.950	54.930	54.911	54.891
0.0281	54.872	54.852	54.833	54.813	54.794	54.774	54.755	54.735	54.716	54.696
0.0282	54.677	54.658	54.638	54.619	54.600	54.580	54.561	54.542	54.522	54.503
0.0283	54.484	54.465	54.445	54.426	54.407	54.388	54.369	54.349	54.330	54.311
0.0284	54.292	54.273	54.254	54.235	54.216	54.197	54.177	54.158	54.139	54.120
0.0285	54.101	54.082	54.064	54.045	54.026	54.007	53.988	53.969	53.950	53.931
0.0286	53.912	53.893	53.875	53.856	53.837	53.818	53.799	53.781	53.762	53.743
0.0287	53.724	53.706	53.687	53.668	53.650	53.631	53.612	53.594	53.575	53.557
0.0288	53.538	53.519	53.501	53.482	53.464	53.445	53.427	53.408	53.390	53.371
0.0289	53.353	53.334	53.316	53.297	53.279	53.261	53.242	53.224	53.205	53.187
0.0290	53.169	53.150	53.132	53.114	53.096	53.077	53.059	53.041	53.022	53.004
0.0291	52.986	52.968	52.950	52.931	52.913	52.895	52.877	52.859	52.841	52.823
0.0292	52.805	52.787	52.768	52.750	52.732	52.714	52.696	52.678	52.660	52.642
0.0293	52.624	52.606	52.589	52.571	52.553	52.535	52.517	52.499	52.481	52.463
0.0294	52.445	52.428	52.410	52.392	52.374	52.356	52.339	52.321	52.303	52.285
0.0295	52.268	52.250	52.232	52.215	52.197	52.179	52.162	52.144	52.126	52.109
0.0296	52.091	52.073	52.056	52.038	52.021	52.003	51.986	51.968	51.951	51.933
0.0297	51.916	51.898	51.881	51.863	51.846	51.828	51.811	51.794	51.776	51.759
0.0298	51.741	51.724	51.707	51.689	51.672	51.655	51.638	51.620	51.603	51.586
0.0299	51.568	51.551	51.534	51.517	51.500	51.482	51.465	51.448	51.431	51.414

2θ, RAD.	0	1	2	3	4	5	6	7	8	9
0.0300	51.397	51.379	51.362	51.345	51.328	51.311	51.294	51.277	51.260	51.243
0.0301	51.226	51.209	51.192	51.175	51.158	51.141	51.124	51.107	51.090	51.073
0.0302	51.056	51.039	51.022	51.006	50.989	50.972	50.955	50.938	50.921	50.905
0.0303	50.888	50.871	50.854	50.837	50.821	50.804	50.787	50.770	50.754	50.737
0.0304	50.720	50.704	50.687	50.670	50.654	50.637	50.620	50.604	50.587	50.571
0.0305	50.554	50.538	50.521	50.504	50.488	50.471	50.455	50.438	50.422	50.405
0.0306	50.389	50.372	50.356	50.340	50.323	50.307	50.290	50.274	50.258	50.241
0.0307	50.225	50.208	50.192	50.176	50.159	50.143	50.127	50.111	50.094	50.078
0.0308	50.062	50.045	50.029	50.013	49.997	49.981	49.964	49.948	49.932	49.916
0.0309	49.900	49.884	49.867	49.851	49.835	49.819	49.803	49.787	49.771	49.755
0.0310	49.739	49.723	49.707	49.691	49.675	49.659	49.643	49.627	49.611	49.595
0.0311	49.579	49.563	49.547	49.531	49.515	49.499	49.483	49.468	49.452	49.436
0.0312	49.420	49.404	49.388	49.372	49.357	49.341	49.325	49.309	49.294	49.278
0.0313	49.262	49.246	49.231	49.215	49.199	49.184	49.168	49.152	49.136	49.121
0.0314	49.105	49.090	49.074	49.058	49.043	49.027	49.012	48.996	48.980	48.965
0.0315	48.949	48.934	48.918	48.903	48.887	48.872	48.856	48.841	48.825	48.810
0.0316	48.794	48.779	48.764	48.748	48.733	48.717	48.702	48.687	48.671	48.656
0.0317	48.641	48.625	48.610	48.595	48.579	48.564	48.549	48.533	48.518	48.503
0.0318	48.488	48.472	48.457	48.442	48.427	48.411	48.396	48.381	48.366	48.351
0.0319	48.336	48.320	48.305	48.290	48.275	48.260	48.245	48.230	48.215	48.200
0.0320	48.185	48.169	48.154	48.139	48.124	48.109	48.094	48.079	48.064	48.049
0.0321	48.034	48.019	48.005	47.990	47.975	47.960	47.945	47.930	47.915	47.900
0.0322	47.885	47.870	47.856	47.841	47.826	47.811	47.796	47.781	47.767	47.752
0.0323	47.737	47.722	47.708	47.693	47.678	47.663	47.649	47.634	47.619	47.604
0.0324	47.590	47.575	47.560	47.546	47.531	47.516	47.502	47.487	47.473	47.458
0.0325	47.443	47.429	47.414	47.400	47.385	47.370	47.356	47.341	47.327	47.312
0.0326	47.298	47.283	47.269	47.254	47.240	47.225	47.211	47.196	47.182	47.168
0.0327	47.153	47.139	47.124	47.110	47.096	47.081	47.067	47.052	47.038	47.024
0.0328	47.009	46.995	46.981	46.966	46.952	46.938	46.924	46.909	46.895	46.881
0.0329	46.867	46.852	46.838	46.824	46.810	46.795	46.781	46.767	46.753	46.739
0.0330	46.725	46.710	46.696	46.682	46.668	46.654	46.640	46.626	46.612	46.597
0.0331	46.583	46.569	46.555	46.541	46.527	46.513	46.499	46.485	46.471	46.457
0.0332	46.443	46.429	46.415	46.401	46.387	46.373	46.359	46.345	46.331	46.318
0.0333	46.304	46.290	46.276	46.262	46.248	46.234	46.220	46.207	46.193	46.179
0.0334	46.165	46.151	46.137	46.124	46.110	46.096	46.082	46.068	46.055	46.041
0.0335	46.027	46.013	46.000	45.986	45.972	45.959	45.945	45.931	45.918	45.904
0.0336	45.890	45.877	45.863	45.849	45.836	45.822	45.808	45.795	45.781	45.768
0.0337	45.754	45.741	45.727	45.713	45.700	45.686	45.673	45.659	45.646	45.632
0.0338	45.619	45.605	45.592	45.578	45.565	45.551	45.538	45.524	45.511	45.498
0.0339	45.484	45.471	45.457	45.444	45.431	45.417	45.404	45.390	45.377	45.364
0.0340	45.350	45.337	45.324	45.310	45.297	45.284	45.271	45.257	45.244	45.231
0.0341	45.217	45.204	45.191	45.178	45.164	45.151	45.138	45.125	45.112	45.098
0.0342	45.085	45.072	45.059	45.046	45.033	45.019	45.006	44.993	44.980	44.967
0.0343	44.954	44.941	44.928	44.915	44.901	44.888	44.875	44.862	44.849	44.836
0.0344	44.823	44.810	44.797	44.784	44.771	44.758	44.745	44.732	44.719	44.706
0.0345	44.693	44.680	44.667	44.654	44.641	44.629	44.616	44.603	44.590	44.577
0.0346	44.564	44.551	44.538	44.525	44.513	44.500	44.487	44.474	44.461	44.448
0.0347	44.436	44.423	44.410	44.397	44.384	44.372	44.359	44.346	44.333	44.321
0.0348	44.308	44.295	44.283	44.270	44.257	44.244	44.232	44.219	44.206	44.194
0.0349	44.181	44.168	44.156	44.143	44.130	44.118	44.105	44.093	44.080	44.067

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0.0350	44.055	44.042	44.030	44.017	44.005	43.992	43.979	43.967	43.954	43.942
0.0351	43.929	43.917	43.904	43.892	43.879	43.867	43.854	43.842	43.829	43.817
0.0352	43.805	43.792	43.780	43.767	43.755	43.742	43.730	43.718	43.705	43.693
0.0353	43.680	43.668	43.656	43.643	43.631	43.619	43.606	43.594	43.582	43.569
0.0354	43.557	43.545	43.532	43.520	43.508	43.496	43.483	43.471	43.459	43.447
0.0355	43.434	43.422	43.410	43.398	43.386	43.373	43.361	43.349	43.337	43.325
0.0356	43.312	43.300	43.288	43.276	43.264	43.252	43.240	43.227	43.215	43.203
0.0357	43.191	43.179	43.167	43.155	43.143	43.131	43.119	43.107	43.095	43.082
0.0358	43.070	43.058	43.046	43.034	43.022	43.010	42.998	42.986	42.974	42.962
0.0359	42.950	42.939	42.927	42.915	42.903	42.891	42.879	42.867	42.855	42.843
0.0360	42.831	42.819	42.807	42.796	42.784	42.772	42.760	42.748	42.736	42.724
0.0361	42.713	42.701	42.689	42.677	42.665	42.653	42.642	42.630	42.618	42.606
0.0362	42.595	42.583	42.571	42.559	42.548	42.536	42.524	42.512	42.501	42.489
0.0363	42.477	42.466	42.454	42.442	42.431	42.419	42.407	42.396	42.384	42.372
0.0364	42.361	42.349	42.337	42.326	42.314	42.302	42.291	42.279	42.268	42.256
0.0365	42.245	42.233	42.221	42.210	42.198	42.187	42.175	42.164	42.152	42.141
0.0366	42.129	42.118	42.106	42.095	42.083	42.072	42.060	42.049	42.037	42.026
0.0367	42.014	42.003	41.991	41.980	41.969	41.957	41.946	41.934	41.923	41.912
0.0368	41.900	41.889	41.877	41.866	41.855	41.843	41.832	41.821	41.809	41.798
0.0369	41.787	41.775	41.764	41.753	41.741	41.730	41.719	41.708	41.696	41.685
0.0370	41.674	41.662	41.651	41.640	41.629	41.617	41.606	41.595	41.584	41.573
0.0371	41.561	41.550	41.539	41.528	41.517	41.505	41.494	41.483	41.472	41.461
0.0372	41.450	41.439	41.427	41.416	41.405	41.394	41.383	41.372	41.361	41.350
0.0373	41.339	41.328	41.316	41.305	41.294	41.283	41.272	41.261	41.250	41.239
0.0374	41.228	41.217	41.206	41.195	41.184	41.173	41.162	41.151	41.140	41.129
0.0375	41.118	41.107	41.096	41.085	41.074	41.063	41.052	41.042	41.031	41.020
0.0376	41.009	40.998	40.987	40.976	40.965	40.954	40.943	40.933	40.922	40.911
0.0377	40.900	40.889	40.878	40.868	40.857	40.846	40.835	40.824	40.813	40.803
0.0378	40.792	40.781	40.770	40.759	40.749	40.738	40.727	40.716	40.706	40.695
0.0379	40.684	40.673	40.663	40.652	40.641	40.631	40.620	40.609	40.599	40.588
0.0380	40.577	40.567	40.556	40.545	40.535	40.524	40.513	40.503	40.492	40.481
0.0381	40.471	40.460	40.449	40.439	40.428	40.418	40.407	40.396	40.386	40.375
0.0382	40.365	40.354	40.344	40.333	40.323	40.312	40.301	40.291	40.280	40.270
0.0383	40.259	40.249	40.238	40.228	40.217	40.207	40.196	40.186	40.175	40.165
0.0384	40.155	40.144	40.134	40.123	40.113	40.102	40.092	40.081	40.071	40.061
0.0385	40.050	40.040	40.029	40.019	40.009	39.998	39.988	39.978	39.967	39.957
0.0386	39.947	39.936	39.926	39.915	39.905	39.895	39.885	39.874	39.864	39.854
0.0387	39.843	39.833	39.823	39.812	39.802	39.792	39.782	39.771	39.761	39.751
0.0388	39.741	39.730	39.720	39.710	39.700	39.689	39.679	39.669	39.659	39.649
0.0389	39.638	39.628	39.618	39.608	39.598	39.588	39.577	39.567	39.557	39.547
0.0390	39.537	39.527	39.517	39.506	39.496	39.486	39.476	39.466	39.456	39.446
0.0391	39.436	39.426	39.416	39.406	39.395	39.385	39.375	39.365	39.355	39.345
0.0392	39.335	39.325	39.315	39.305	39.295	39.285	39.275	39.265	39.255	39.245
0.0393	39.235	39.225	39.215	39.205	39.195	39.185	39.175	39.165	39.155	39.145
0.0394	39.136	39.126	39.116	39.106	39.096	39.086	39.076	39.066	39.056	39.046
0.0395	39.036	39.027	39.017	39.007	38.997	38.987	38.977	38.967	38.958	38.948
0.0396	38.938	38.928	38.918	38.908	38.899	38.889	38.879	38.869	38.859	38.850
0.0397	38.840	38.830	38.820	38.811	38.801	38.791	38.781	38.771	38.762	38.752
0.0398	38.742	38.733	38.723	38.713	38.703	38.694	38.684	38.674	38.665	38.655
0.0399	38.645	38.635	38.626	38.616	38.606	38.597	38.587	38.577	38.568	38.558

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0.0400	38.549	38.539	38.529	38.520	38.510	38.500	38.491	38.481	38.472	38.462
0.0401	38.452	38.443	38.433	38.424	38.414	38.405	38.395	38.385	38.376	38.366
0.0402	38.357	38.347	38.338	38.328	38.319	38.309	38.300	38.290	38.281	38.271
0.0403	38.262	38.252	38.243	38.233	38.224	38.214	38.205	38.195	38.186	38.176
0.0404	38.167	38.158	38.148	38.139	38.129	38.120	38.110	38.101	38.092	38.082
0.0405	38.073	38.063	38.054	38.045	38.035	38.026	38.016	38.007	37.998	37.988
0.0406	37.979	37.970	37.960	37.951	37.942	37.932	37.923	37.914	37.904	37.895
0.0407	37.886	37.876	37.867	37.858	37.848	37.839	37.830	37.821	37.811	37.802
0.0408	37.793	37.784	37.774	37.765	37.756	37.747	37.737	37.728	37.719	37.710
0.0409	37.700	37.691	37.682	37.673	37.664	37.654	37.645	37.636	37.627	37.618
0.0410	37.608	37.599	37.590	37.581	37.572	37.563	37.554	37.544	37.535	37.526
0.0411	37.517	37.508	37.499	37.490	37.481	37.471	37.462	37.453	37.444	37.435
0.0412	37.426	37.417	37.408	37.399	37.390	37.381	37.372	37.362	37.353	37.344
0.0413	37.335	37.326	37.317	37.308	37.299	37.290	37.281	37.272	37.263	37.254
0.0414	37.245	37.236	37.227	37.218	37.209	37.200	37.191	37.182	37.173	37.164
0.0415	37.155	37.146	37.138	37.129	37.120	37.111	37.102	37.093	37.084	37.075
0.0416	37.066	37.057	37.048	37.039	37.031	37.022	37.013	37.004	36.995	36.986
0.0417	36.977	36.968	36.960	36.951	36.942	36.933	36.924	36.915	36.906	36.898
0.0418	36.889	36.880	36.871	36.862	36.854	36.845	36.836	36.827	36.818	36.810
0.0419	36.801	36.792	36.783	36.774	36.766	36.757	36.748	36.739	36.731	36.722
0.0420	36.713	36.704	36.696	36.687	36.678	36.670	36.661	36.652	36.643	36.635
0.0421	36.626	36.617	36.609	36.600	36.591	36.583	36.574	36.565	36.557	36.548
0.0422	36.539	36.531	36.522	36.513	36.505	36.496	36.487	36.479	36.470	36.461
0.0423	36.453	36.444	36.436	36.427	36.418	36.410	36.401	36.393	36.384	36.375
0.0424	36.367	36.358	36.350	36.341	36.333	36.324	36.315	36.307	36.298	36.290
0.0425	36.281	36.273	36.264	36.256	36.247	36.239	36.230	36.222	36.213	36.205
0.0426	36.196	36.188	36.179	36.171	36.162	36.154	36.145	36.137	36.128	36.120
0.0427	36.111	36.103	36.095	36.086	36.078	36.069	36.061	36.052	36.044	36.035
0.0428	36.027	36.019	36.010	36.002	35.993	35.985	35.977	35.968	35.960	35.951
0.0429	35.943	35.935	35.926	35.918	35.910	35.901	35.893	35.885	35.876	35.868
0.0430	35.860	35.851	35.843	35.835	35.826	35.818	35.810	35.801	35.793	35.785
0.0431	35.776	35.768	35.760	35.751	35.743	35.735	35.727	35.718	35.710	35.702
0.0432	35.694	35.685	35.677	35.669	35.661	35.652	35.644	35.636	35.628	35.619
0.0433	35.611	35.603	35.595	35.586	35.578	35.570	35.562	35.554	35.545	35.537
0.0434	35.529	35.521	35.513	35.505	35.496	35.488	35.480	35.472	35.464	35.456
0.0435	35.447	35.439	35.431	35.423	35.415	35.407	35.399	35.390	35.382	35.374
0.0436	35.366	35.358	35.350	35.342	35.334	35.326	35.318	35.309	35.301	35.293
0.0437	35.285	35.277	35.269	35.261	35.253	35.245	35.237	35.229	35.221	35.213
0.0438	35.205	35.197	35.189	35.181	35.173	35.165	35.156	35.148	35.140	35.132
0.0439	35.124	35.116	35.108	35.100	35.092	35.085	35.077	35.069	35.061	35.053
0.0440	35.045	35.037	35.029	35.021	35.013	35.005	34.997	34.989	34.981	34.973
0.0441	34.965	34.957	34.949	34.941	34.934	34.926	34.918	34.910	34.902	34.894
0.0442	34.886	34.878	34.870	34.862	34.855	34.847	34.839	34.831	34.823	34.815
0.0443	34.807	34.800	34.792	34.784	34.776	34.768	34.760	34.752	34.745	34.737
0.0444	34.729	34.721	34.713	34.706	34.698	34.690	34.682	34.674	34.667	34.659
0.0445	34.651	34.643	34.635	34.628	34.620	34.612	34.604	34.597	34.589	34.581
0.0446	34.573	34.566	34.558	34.550	34.542	34.535	34.527	34.519	34.511	34.504
0.0447	34.496	34.488	34.481	34.473	34.465	34.457	34.450	34.442	34.434	34.427
0.0448	34.419	34.411	34.404	34.396	34.388	34.381	34.373	34.365	34.358	34.350
0.0449	34.342	34.335	34.327	34.319	34.312	34.304	34.296	34.289	34.281	34.274

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0.0450	34.266	34.258	34.251	34.243	34.236	34.228	34.220	34.213	34.205	34.198
0.0451	34.190	34.182	34.175	34.167	34.160	34.152	34.145	34.137	34.130	34.122
0.0452	34.114	34.107	34.099	34.092	34.084	34.077	34.069	34.062	34.054	34.047
0.0453	34.039	34.032	34.024	34.017	34.009	34.002	33.994	33.987	33.979	33.972
0.0454	33.964	33.957	33.949	33.942	33.934	33.927	33.919	33.912	33.904	33.897
0.0455	33.890	33.882	33.875	33.867	33.860	33.852	33.845	33.837	33.830	33.823
0.0456	33.815	33.808	33.800	33.793	33.786	33.778	33.771	33.763	33.756	33.749
0.0457	33.741	33.734	33.726	33.719	33.712	33.704	33.697	33.690	33.682	33.675
0.0458	33.668	33.660	33.653	33.646	33.638	33.631	33.624	33.616	33.609	33.602
0.0459	33.594	33.587	33.580	33.572	33.565	33.558	33.550	33.543	33.536	33.529
0.0460	33.521	33.514	33.507	33.499	33.492	33.485	33.478	33.470	33.463	33.456
0.0461	33.449	33.441	33.434	33.427	33.420	33.412	33.405	33.398	33.391	33.383
0.0462	33.376	33.369	33.362	33.354	33.347	33.340	33.333	33.326	33.318	33.311
0.0463	33.304	33.297	33.290	33.282	33.275	33.268	33.261	33.254	33.247	33.239
0.0464	33.232	33.225	33.218	33.211	33.204	33.197	33.189	33.182	33.175	33.168
0.0465	33.161	33.154	33.147	33.139	33.132	33.125	33.118	33.111	33.104	33.097
0.0466	33.090	33.083	33.075	33.068	33.061	33.054	33.047	33.040	33.033	33.026
0.0467	33.019	33.012	33.005	32.998	32.991	32.984	32.976	32.969	32.962	32.955
0.0468	32.948	32.941	32.934	32.927	32.920	32.913	32.906	32.899	32.892	32.885
0.0469	32.878	32.871	32.864	32.857	32.850	32.843	32.836	32.829	32.822	32.815
0.0470	32.808	32.801	32.794	32.787	32.780	32.773	32.766	32.759	32.752	32.745
0.0471	32.738	32.732	32.725	32.718	32.711	32.704	32.697	32.690	32.683	32.676
0.0472	32.669	32.662	32.655	32.648	32.641	32.635	32.628	32.621	32.614	32.607
0.0473	32.600	32.593	32.586	32.579	32.573	32.566	32.559	32.552	32.545	32.538
0.0474	32.531	32.524	32.518	32.511	32.504	32.497	32.490	32.483	32.477	32.470
0.0475	32.463	32.456	32.449	32.442	32.436	32.429	32.422	32.415	32.408	32.401
0.0476	32.395	32.388	32.381	32.374	32.367	32.361	32.354	32.347	32.340	32.334
0.0477	32.327	32.320	32.313	32.306	32.300	32.293	32.286	32.279	32.273	32.266
0.0478	32.259	32.252	32.246	32.239	32.232	32.225	32.219	32.212	32.205	32.199
0.0479	32.192	32.185	32.178	32.172	32.165	32.158	32.152	32.145	32.138	32.131
0.0480	32.125	32.118	32.111	32.105	32.098	32.091	32.085	32.078	32.071	32.065
0.0481	32.058	32.051	32.045	32.038	32.031	32.025	32.018	32.011	32.005	31.998
0.0482	31.991	31.985	31.978	31.972	31.965	31.958	31.952	31.945	31.938	31.932
0.0483	31.925	31.919	31.912	31.905	31.899	31.892	31.886	31.879	31.872	31.866
0.0484	31.859	31.853	31.846	31.840	31.833	31.826	31.820	31.813	31.807	31.800
0.0485	31.794	31.787	31.781	31.774	31.767	31.761	31.754	31.748	31.741	31.735
0.0486	31.728	31.722	31.715	31.709	31.702	31.696	31.689	31.683	31.676	31.670
0.0487	31.663	31.657	31.650	31.644	31.637	31.631	31.624	31.618	31.611	31.605
0.0488	31.598	31.592	31.585	31.579	31.572	31.566	31.559	31.553	31.547	31.540
0.0489	31.534	31.527	31.521	31.514	31.508	31.501	31.495	31.489	31.482	31.476
0.0490	31.469	31.463	31.456	31.450	31.444	31.437	31.431	31.424	31.418	31.412
0.0491	31.405	31.399	31.392	31.386	31.380	31.373	31.367	31.360	31.354	31.348
0.0492	31.341	31.335	31.329	31.322	31.316	31.310	31.303	31.297	31.291	31.284
0.0493	31.278	31.271	31.265	31.259	31.252	31.246	31.240	31.233	31.227	31.221
0.0494	31.215	31.208	31.202	31.196	31.189	31.183	31.177	31.170	31.164	31.158
0.0495	31.151	31.145	31.139	31.133	31.126	31.120	31.114	31.107	31.101	31.095
0.0496	31.089	31.082	31.076	31.070	31.064	31.057	31.051	31.045	31.039	31.032
0.0497	31.026	31.020	31.014	31.007	31.001	30.995	30.989	30.983	30.976	30.970
0.0498	30.964	30.958	30.951	30.945	30.939	30.933	30.927	30.920	30.914	30.908
0.0499	30.902	30.896	30.889	30.883	30.877	30.871	30.865	30.859	30.852	30.846

Table 6
Cobalt $K\alpha$ Radiation
 2θ in Radian
 $\lambda = 1.790260 \text{ \AA}^*$

2θ, RAD.	0	1	2	3	4	5	6	7	8	9
0.0000			895.13	596.75	4475.6	3580.5	2983.8	2557.5	2237.8	1989.2
0.0001	1790.3	1627.5	1491.9	1377.1	1278.8	1193.5	1118.9	1053.1	994.6	942.2
0.0002	895.13	8525.0	8137.5	7783.7	7459.4	7161.0	6885.6	6630.6	6393.8	6173.3
0.0003	5967.5	5775.0	5594.6	5425.0	5265.5	5115.0	4972.9	4838.5	4711.2	4590.4
0.0004	4475.7	4366.5	4262.5	4163.4	4068.8	3978.4	3891.9	3809.1	3729.7	3653.6
0.0005	3580.5	3510.3	3442.8	3377.8	3315.3	3255.0	3196.9	3140.8	3086.7	3034.3
0.0006	2983.8	2934.9	2887.5	2841.7	2797.3	2754.2	2712.5	2672.0	2632.7	2594.6
0.0007	2557.5	2521.5	2486.5	2452.4	2419.3	2387.0	2355.6	2325.0	2295.2	2266.2
0.0008	2237.8	2210.2	2183.2	2156.9	2131.3	2106.2	2081.7	2057.8	2034.4	2011.5
0.0009	1989.2	1967.3	1945.9	1925.0	1904.5	1884.5	1864.9	1845.6	1826.8	1808.3
0.0010	1790.3	1772.5	1755.2	1738.1	1721.4	1705.0	1688.9	1673.1	1657.6	1642.4
0.0011	1627.5	1612.8	1598.4	1584.3	1570.4	1556.7	1543.3	1530.1	1517.2	1504.4
0.0012	1491.9	1479.6	1467.4	1455.5	1443.8	1432.2	1420.8	1409.7	1398.6	1387.8
0.0013	1377.1	1366.6	1356.3	1346.1	1336.0	1326.1	1316.4	1306.8	1297.3	1288.0
0.0014	1278.8	1269.7	1260.7	1251.9	1243.2	1234.7	1226.2	1217.9	1209.6	1201.5
0.0015	1193.5	1185.6	1177.8	1170.1	1162.5	1155.0	1147.6	1140.3	1133.1	1125.9
0.0016	1118.9	1112.0	1105.1	1098.3	1091.6	1085.0	1078.5	1072.0	1065.6	1059.3
0.0017	1053.1	1046.9	1040.8	1034.8	1028.9	1023.0	1017.2	1011.4	1005.8	1000.1
0.0018	994.59	989.09	983.66	978.28	972.97	967.71	962.51	957.36	952.27	947.23
0.0019	942.24	937.31	932.43	927.60	922.81	918.08	913.40	908.76	904.17	899.63
0.0020	895.13	890.68	886.27	881.90	877.58	873.30	869.06	864.86	860.70	856.58
0.0021	852.51	848.46	844.46	840.50	836.57	832.68	828.82	825.00	821.22	817.47
0.0022	813.75	810.07	806.42	802.81	799.22	795.67	792.15	788.66	785.20	781.77
0.0023	778.37	775.00	771.66	768.35	765.07	761.81	758.59	755.38	752.21	749.06
0.0024	745.94	742.85	739.78	736.73	733.71	730.72	727.75	724.80	721.88	718.98
0.0025	716.10	713.25	710.42	707.61	704.83	702.06	699.32	696.60	693.90	691.22
0.0026	688.56	685.92	683.31	680.71	678.13	675.57	673.03	670.51	668.01	665.52
0.0027	663.06	660.61	658.18	655.77	653.38	651.00	648.65	646.30	643.98	641.67
0.0028	639.38	637.10	634.84	632.60	630.37	628.16	625.97	623.78	621.62	619.47
0.0029	617.33	615.21	613.10	611.01	608.93	606.87	604.82	602.78	600.76	598.75
0.0030	596.75	594.77	592.80	590.85	588.90	586.97	585.05	583.15	581.25	579.37
0.0031	577.50	575.65	573.80	571.97	570.15	568.34	566.54	564.75	562.98	561.21
0.0032	559.46	557.71	555.98	554.26	552.55	550.85	549.16	547.48	545.81	544.15
0.0033	542.50	540.86	539.24	537.62	536.01	534.41	532.82	531.23	529.66	528.10
0.0034	526.55	525.00	523.47	521.94	520.42	518.92	517.42	515.93	514.44	512.97
0.0035	511.50	510.05	508.60	507.16	505.72	504.30	502.88	501.47	500.07	498.68
0.0036	497.29	495.92	494.55	493.18	491.83	490.48	489.14	487.81	486.48	485.17
0.0037	483.85	482.55	481.25	479.96	478.68	477.40	476.13	474.87	473.61	472.36
0.0038	471.12	469.88	468.65	467.43	466.21	465.00	463.80	462.60	461.41	460.22
0.0039	459.04	457.87	456.70	455.54	454.38	453.23	452.09	450.95	449.81	448.69
0.0040	447.57	446.45	445.34	444.23	443.13	442.04	440.95	439.87	438.79	437.72
0.0041	436.65	435.59	434.53	433.48	432.43	431.39	430.35	429.32	428.29	427.27
0.0042	426.25	425.24	424.23	423.23	422.23	421.24	420.25	419.27	418.29	417.31
0.0043	416.34	415.37	414.41	413.46	412.50	411.55	410.61	409.67	408.74	407.80
0.0044	406.88	405.96	405.04	404.12	403.21	402.31	401.40	400.51	399.61	398.72
0.0045	397.84	396.95	396.08	395.20	394.33	393.46	392.60	391.74	390.89	390.04
0.0046	389.19	388.34	387.50	386.67	385.83	385.00	384.18	383.35	382.53	381.72
0.0047	380.91	380.10	379.29	378.49	377.69	376.90	376.11	375.32	374.53	373.75
0.0048	372.97	372.20	371.42	370.65	369.89	369.13	368.37	367.61	366.86	366.11
0.0049	365.36	364.62	363.87	363.14	362.40	361.67	360.94	360.21	359.49	358.77

20,RAD.	0	1	2	3	4	5	6	7	8	9
0.0050	358.05	357.34	356.63	355.92	355.21	354.51	353.81	353.11	352.41	351.72
0.0051	351.03	350.34	349.66	348.98	348.30	347.62	346.95	346.28	345.61	344.94
0.0052	344.28	343.62	342.96	342.31	341.65	341.00	340.35	339.71	339.06	338.42
0.0053	337.79	337.15	336.52	335.88	335.26	334.63	334.00	333.38	332.76	332.15
0.0054	331.53	330.92	330.31	329.70	329.09	328.49	327.89	327.29	326.69	326.10
0.0055	325.50	324.91	324.32	323.74	323.15	322.57	321.99	321.41	320.84	320.26
0.0056	319.69	319.12	318.55	317.99	317.42	316.86	316.30	315.74	315.19	314.63
0.0057	314.08	313.53	312.98	312.44	311.89	311.35	310.81	310.27	309.73	309.20
0.0058	308.67	308.13	307.61	307.08	306.55	306.03	305.51	304.99	304.47	303.95
0.0059	303.43	302.92	302.41	301.90	301.39	300.88	300.38	299.88	299.38	298.88
0.0060	298.38	297.88	297.39	296.89	296.40	295.91	295.42	294.94	294.45	293.97
0.0061	293.49	293.01	292.53	292.05	291.57	291.10	290.63	290.16	289.69	289.22
0.0062	288.75	288.29	287.82	287.36	286.90	286.44	285.98	285.53	285.07	284.62
0.0063	284.17	283.72	283.27	282.82	282.38	281.93	281.49	281.05	280.61	280.17
0.0064	279.73	279.29	278.86	278.42	277.99	277.56	277.13	276.70	276.28	275.85
0.0065	275.43	275.00	274.58	274.16	273.74	273.32	272.91	272.49	272.08	271.66
0.0066	271.25	270.84	270.43	270.02	269.62	269.21	268.81	268.41	268.00	267.60
0.0067	267.20	266.81	266.41	266.01	265.62	265.22	264.83	264.44	264.05	263.66
0.0068	263.27	262.89	262.50	262.12	261.73	261.35	260.97	260.59	260.21	259.84
0.0069	259.46	259.08	258.71	258.34	257.96	257.59	257.22	256.85	256.48	256.12
0.0070	255.75	255.39	255.02	254.66	254.30	253.94	253.58	253.22	252.86	252.51
0.0071	252.15	251.80	251.44	251.09	250.74	250.39	250.04	249.69	249.34	248.99
0.0072	248.65	248.30	247.96	247.62	247.27	246.93	246.59	246.25	245.92	245.58
0.0073	245.24	244.91	244.57	244.24	243.91	243.57	243.24	242.91	242.58	242.26
0.0074	241.93	241.60	241.28	240.95	240.63	240.30	239.98	239.66	239.34	239.02
0.0075	238.70	238.38	238.07	237.75	237.44	237.12	236.81	236.49	236.18	235.87
0.0076	235.56	235.25	234.94	234.63	234.33	234.02	233.72	233.41	233.11	232.80
0.0077	232.50	232.20	231.90	231.60	231.30	231.00	230.70	230.41	230.11	229.82
0.0078	229.52	229.23	228.93	228.64	228.35	228.06	227.77	227.48	227.19	226.90
0.0079	226.62	226.33	226.04	225.76	225.47	225.19	224.91	224.63	224.34	224.06
0.0080	223.78	223.50	223.23	222.95	222.67	222.39	222.12	221.84	221.57	221.29
0.0081	221.02	220.75	220.48	220.20	219.93	219.66	219.40	219.13	218.86	218.59
0.0082	218.33	218.06	217.79	217.53	217.27	217.00	216.74	216.48	216.22	215.95
0.0083	215.69	215.44	215.18	214.92	214.66	214.40	214.15	213.89	213.64	213.38
0.0084	213.13	212.87	212.62	212.37	212.12	211.87	211.62	211.37	211.12	210.87
0.0085	210.62	210.37	210.13	209.88	209.63	209.39	209.14	208.90	208.66	208.41
0.0086	208.17	207.93	207.69	207.45	207.21	206.97	206.73	206.49	206.25	206.01
0.0087	205.78	205.54	205.31	205.07	204.84	204.60	204.37	204.14	203.90	203.67
0.0088	203.44	203.21	202.98	202.75	202.52	202.29	202.06	201.83	201.61	201.38
0.0089	201.15	200.93	200.70	200.48	200.25	200.03	199.81	199.58	199.36	199.14
0.0090	198.92	198.70	198.48	198.26	198.04	197.82	197.60	197.38	197.17	196.95
0.0091	196.73	196.52	196.30	196.09	195.87	195.66	195.44	195.23	195.02	194.81
0.0092	194.59	194.38	194.17	193.96	193.75	193.54	193.33	193.12	192.92	192.71
0.0093	192.50	192.30	192.09	191.88	191.68	191.47	191.27	191.06	190.86	190.66
0.0094	190.45	190.25	190.05	189.85	189.65	189.45	189.25	189.05	188.85	188.65
0.0095	188.45	188.25	188.05	187.86	187.66	187.46	187.27	187.07	186.88	186.68
0.0096	186.49	186.29	186.10	185.91	185.71	185.52	185.33	185.14	184.95	184.75
0.0097	184.56	184.37	184.18	183.99	183.81	183.62	183.43	183.24	183.05	182.87
0.0098	182.68	182.49	182.31	182.12	181.94	181.75	181.57	181.38	181.20	181.02
0.0099	180.84	180.65	180.47	180.29	180.11	179.93	179.75	179.57	179.39	179.21

2θ, RAD.	0	1	2	3	4	5	6	7	8	9
0.0100	179.03	178.85	178.67	178.49	178.31	178.14	177.96	177.78	177.61	177.43
0.0101	177.25	177.08	176.90	176.73	176.56	176.38	176.21	176.03	175.86	175.69
0.0102	175.52	175.34	175.17	175.00	174.83	174.66	174.49	174.32	174.15	173.98
0.0103	173.81	173.64	173.48	173.31	173.14	172.97	172.81	172.64	172.47	172.31
0.0104	172.14	171.98	171.81	171.65	171.48	171.32	171.15	170.99	170.83	170.66
0.0105	170.50	170.34	170.18	170.02	169.85	169.69	169.53	169.37	169.21	169.05
0.0106	168.89	168.73	168.58	168.42	168.26	168.10	167.94	167.79	167.63	167.47
0.0107	167.31	167.16	167.00	166.85	166.69	166.54	166.38	166.23	166.07	165.92
0.0108	165.77	165.61	165.46	165.31	165.15	165.00	164.85	164.70	164.55	164.40
0.0109	164.24	164.09	163.94	163.79	163.64	163.49	163.35	163.20	163.05	162.90
0.0110	162.75	162.60	162.46	162.31	162.16	162.02	161.87	161.72	161.58	161.43
0.0111	161.29	161.14	161.00	160.85	160.71	160.56	160.42	160.27	160.13	159.99
0.0112	159.85	159.70	159.56	159.42	159.28	159.14	158.99	158.85	158.71	158.57
0.0113	158.43	158.29	158.15	158.01	157.87	157.73	157.59	157.46	157.32	157.18
0.0114	157.04	156.90	156.77	156.63	156.49	156.36	156.22	156.08	155.95	155.81
0.0115	155.68	155.54	155.41	155.27	155.14	155.00	154.87	154.73	154.60	154.47
0.0116	154.33	154.20	154.07	153.94	153.80	153.67	153.54	153.41	153.28	153.15
0.0117	153.01	152.88	152.75	152.62	152.49	152.36	152.23	152.10	151.98	151.85
0.0118	151.72	151.59	151.46	151.33	151.21	151.08	150.95	150.82	150.70	150.57
0.0119	150.44	150.32	150.19	150.06	149.94	149.81	149.69	149.56	149.44	149.31
0.0120	149.19	149.07	148.94	148.82	148.69	148.57	148.45	148.32	148.20	148.08
0.0121	147.96	147.83	147.71	147.59	147.47	147.35	147.23	147.11	146.98	146.86
0.0122	146.74	146.62	146.50	146.38	146.26	146.14	146.03	145.91	145.79	145.67
0.0123	145.55	145.43	145.31	145.20	145.08	144.96	144.84	144.73	144.61	144.49
0.0124	144.38	144.26	144.14	144.03	143.91	143.80	143.68	143.57	143.45	143.34
0.0125	143.22	143.11	142.99	142.88	142.76	142.65	142.54	142.42	142.31	142.20
0.0126	142.09	141.97	141.86	141.75	141.64	141.52	141.41	141.30	141.19	141.08
0.0127	140.97	140.86	140.74	140.63	140.52	140.41	140.30	140.19	140.08	139.97
0.0128	139.87	139.76	139.65	139.54	139.43	139.32	139.21	139.10	139.00	138.89
0.0129	138.78	138.67	138.57	138.46	138.35	138.25	138.14	138.03	137.93	137.82
0.0130	137.71	137.61	137.50	137.40	137.29	137.19	137.08	136.98	136.87	136.77
0.0131	136.66	136.56	136.45	136.35	136.25	136.14	136.04	135.94	135.83	135.73
0.0132	135.63	135.52	135.42	135.32	135.22	135.12	135.01	134.91	134.81	134.71
0.0133	134.61	134.51	134.40	134.30	134.20	134.10	134.00	133.90	133.80	133.70
0.0134	133.60	133.50	133.40	133.30	133.20	133.11	133.01	132.91	132.81	132.71
0.0135	132.61	132.51	132.42	132.32	132.22	132.12	132.03	131.93	131.83	131.73
0.0136	131.64	131.54	131.44	131.35	131.25	131.16	131.06	130.96	130.87	130.77
0.0137	130.68	130.58	130.49	130.39	130.30	130.20	130.11	130.01	129.92	129.82
0.0138	129.73	129.64	129.54	129.45	129.36	129.26	129.17	129.08	128.98	128.89
0.0139	128.80	128.70	128.61	128.52	128.43	128.34	128.24	128.15	128.06	127.97
0.0140	127.88	127.79	127.69	127.60	127.51	127.42	127.33	127.24	127.15	127.06
0.0141	126.97	126.88	126.79	126.70	126.61	126.52	126.43	126.34	126.25	126.16
0.0142	126.08	125.99	125.90	125.81	125.72	125.63	125.55	125.46	125.37	125.28
0.0143	125.19	125.11	125.02	124.93	124.84	124.76	124.67	124.58	124.50	124.41
0.0144	124.32	124.24	124.15	124.07	123.98	123.89	123.81	123.72	123.64	123.55
0.0145	123.47	123.38	123.30	123.21	123.13	123.04	122.96	122.87	122.79	122.71
0.0146	122.62	122.54	122.45	122.37	122.29	122.20	122.12	122.04	121.95	121.87
0.0147	121.79	121.70	121.62	121.54	121.46	121.37	121.29	121.21	121.13	121.05
0.0148	120.96	120.88	120.80	120.72	120.64	120.56	120.48	120.40	120.31	120.23
0.0149	120.15	120.07	119.99	119.91	119.83	119.75	119.67	119.59	119.51	119.43

2θ, RAD.	0	1	2	3	4	5	6	7	8	9
0.0150	119.35	119.27	119.19	119.11	119.03	118.96	118.88	118.80	118.72	118.64
0.0151	118.56	118.48	118.40	118.33	118.25	118.17	118.09	118.01	117.94	117.86
0.0152	117.78	117.70	117.63	117.55	117.47	117.40	117.32	117.24	117.16	117.09
0.0153	117.01	116.94	116.86	116.78	116.71	116.63	116.55	116.48	116.40	116.33
0.0154	116.25	116.18	116.10	116.03	115.95	115.88	115.80	115.73	115.65	115.58
0.0155	115.50	115.43	115.35	115.28	115.20	115.13	115.06	114.98	114.91	114.84
0.0156	114.76	114.69	114.61	114.54	114.47	114.39	114.32	114.25	114.18	114.10
0.0157	114.03	113.96	113.89	113.81	113.74	113.67	113.60	113.52	113.45	113.38
0.0158	113.31	113.24	113.17	113.09	113.02	112.95	112.88	112.81	112.74	112.67
0.0159	112.60	112.53	112.45	112.38	112.31	112.24	112.17	112.10	112.03	111.96
0.0160	111.89	111.82	111.75	111.68	111.61	111.54	111.47	111.41	111.34	111.27
0.0161	111.20	111.13	111.06	110.99	110.92	110.85	110.78	110.72	110.65	110.58
0.0162	110.51	110.44	110.37	110.31	110.24	110.17	110.10	110.04	109.97	109.90
0.0163	109.83	109.77	109.70	109.63	109.56	109.50	109.43	109.36	109.30	109.23
0.0164	109.16	109.10	109.03	108.96	108.90	108.83	108.77	108.70	108.63	108.57
0.0165	108.50	108.44	108.37	108.30	108.24	108.17	108.11	108.04	107.98	107.91
0.0166	107.85	107.78	107.72	107.65	107.59	107.52	107.46	107.40	107.33	107.27
0.0167	107.20	107.14	107.07	107.01	106.95	106.88	106.82	106.76	106.69	106.63
0.0168	106.56	106.50	106.44	106.37	106.31	106.25	106.19	106.12	106.06	106.00
0.0169	105.93	105.87	105.81	105.75	105.68	105.62	105.56	105.50	105.43	105.37
0.0170	105.31	105.25	105.19	105.13	105.06	105.00	104.94	104.88	104.82	104.76
0.0171	104.69	104.63	104.57	104.51	104.45	104.39	104.33	104.27	104.21	104.15
0.0172	104.09	104.03	103.97	103.91	103.84	103.78	103.72	103.66	103.60	103.54
0.0173	103.48	103.42	103.37	103.31	103.25	103.19	103.13	103.07	103.01	102.95
0.0174	102.89	102.83	102.77	102.71	102.65	102.60	102.54	102.48	102.42	102.36
0.0175	102.30	102.24	102.19	102.13	102.07	102.01	101.95	101.89	101.84	101.78
0.0176	101.72	101.66	101.61	101.55	101.49	101.43	101.38	101.32	101.26	101.20
0.0177	101.15	101.09	101.03	100.97	100.92	100.86	100.80	100.75	100.69	100.63
0.0178	100.58	100.52	100.46	100.41	100.35	100.30	100.24	100.18	100.13	100.07
0.0179	100.02	99.96	99.90	99.85	99.79	99.74	99.68	99.63	99.57	99.52
0.0180	99.460	99.405	99.350	99.295	99.240	99.185	99.130	99.075	99.020	98.965
0.0181	98.911	98.856	98.802	98.747	98.693	98.638	98.584	98.530	98.476	98.421
0.0182	98.367	98.313	98.259	98.205	98.152	98.098	98.044	97.990	97.937	97.883
0.0183	97.830	97.776	97.723	97.670	97.616	97.563	97.510	97.457	97.404	97.351
0.0184	97.298	97.245	97.193	97.140	97.087	97.035	96.982	96.929	96.877	96.825
0.0185	96.772	96.720	96.668	96.616	96.563	96.511	96.459	96.407	96.356	96.304
0.0186	96.252	96.200	96.149	96.097	96.045	95.994	95.943	95.891	95.840	95.789
0.0187	95.737	95.686	95.635	95.584	95.533	95.482	95.431	95.380	95.329	95.279
0.0188	95.228	95.177	95.127	95.076	95.026	94.975	94.925	94.875	94.825	94.774
0.0189	94.724	94.674	94.624	94.574	94.524	94.474	94.424	94.375	94.325	94.275
0.0190	94.226	94.176	94.127	94.077	94.028	93.978	93.929	93.880	93.831	93.781
0.0191	93.732	93.683	93.634	93.585	93.536	93.488	93.439	93.390	93.341	93.293
0.0192	93.244	93.196	93.147	93.099	93.050	93.002	92.954	92.906	92.857	92.809
0.0193	92.761	92.713	92.665	92.617	92.569	92.521	92.474	92.426	92.378	92.331
0.0194	92.283	92.235	92.188	92.140	92.093	92.046	91.998	91.951	91.904	91.857
0.0195	91.810	91.763	91.716	91.669	91.622	91.575	91.528	91.481	91.435	91.388
0.0196	91.341	91.295	91.248	91.202	91.155	91.109	91.063	91.016	90.970	90.924
0.0197	90.878	90.832	90.786	90.739	90.694	90.648	90.602	90.556	90.510	90.464
0.0198	90.419	90.373	90.327	90.282	90.236	90.191	90.146	90.100	90.055	90.010
0.0199	89.964	89.919	89.874	89.829	89.784	89.739	89.694	89.649	89.604	89.559

2θ, RAD.	0	1	2	3	4	5	6	7	8	9
0.0200	89.515	89.470	89.425	89.380	89.336	89.291	89.247	89.202	89.158	89.114
0.0201	89.069	89.025	88.981	88.936	88.892	88.848	88.804	88.760	88.716	88.672
0.0202	88.628	88.584	88.541	88.497	88.453	88.409	88.366	88.322	88.279	88.235
0.0203	88.192	88.148	88.105	88.062	88.018	87.975	87.932	87.889	87.846	87.802
0.0204	87.759	87.716	87.673	87.631	87.588	87.545	87.502	87.459	87.417	87.374
0.0205	87.331	87.289	87.246	87.204	87.161	87.119	87.077	87.034	86.992	86.950
0.0206	86.907	86.865	86.823	86.781	86.739	86.697	86.655	86.613	86.571	86.529
0.0207	86.488	86.446	86.404	86.362	86.321	86.279	86.238	86.196	86.155	86.113
0.0208	86.072	86.030	85.989	85.948	85.907	85.865	85.824	85.783	85.742	85.701
0.0209	85.660	85.619	85.578	85.537	85.496	85.456	85.415	85.374	85.333	85.293
0.0210	85.252	85.212	85.171	85.130	85.090	85.050	85.009	84.969	84.929	84.888
0.0211	84.848	84.808	84.768	84.728	84.688	84.648	84.608	84.568	84.528	84.488
0.0212	84.448	84.408	84.368	84.329	84.289	84.249	84.210	84.170	84.130	84.091
0.0213	84.051	84.012	83.973	83.933	83.894	83.855	83.815	83.776	83.737	83.698
0.0214	83.659	83.620	83.581	83.542	83.503	83.464	83.425	83.386	83.347	83.308
0.0215	83.270	83.231	83.192	83.154	83.115	83.076	83.038	82.999	82.961	82.922
0.0216	82.884	82.846	82.807	82.769	82.731	82.693	82.655	82.616	82.578	82.540
0.0217	82.502	82.464	82.426	82.388	82.350	82.312	82.275	82.237	82.199	82.161
0.0218	82.124	82.086	82.048	82.011	81.973	81.936	81.898	81.861	81.823	81.786
0.0219	81.749	81.711	81.674	81.637	81.600	81.563	81.525	81.488	81.451	81.414
0.0220	81.377	81.340	81.303	81.266	81.229	81.193	81.156	81.119	81.082	81.046
0.0221	81.009	80.972	80.936	80.899	80.863	80.826	80.790	80.753	80.717	80.680
0.0222	80.644	80.608	80.571	80.535	80.499	80.463	80.427	80.391	80.355	80.318
0.0223	80.282	80.246	80.211	80.175	80.139	80.103	80.067	80.031	79.995	79.960
0.0224	79.924	79.888	79.853	79.817	79.782	79.746	79.711	79.675	79.640	79.604
0.0225	79.569	79.534	79.498	79.463	79.428	79.392	79.357	79.322	79.287	79.252
0.0226	79.217	79.182	79.147	79.112	79.077	79.042	79.007	78.972	78.937	78.903
0.0227	78.868	78.833	78.798	78.764	78.729	78.695	78.660	78.625	78.591	78.556
0.0228	78.522	78.488	78.453	78.419	78.384	78.350	78.316	78.282	78.247	78.213
0.0229	78.179	78.145	78.111	78.077	78.043	78.009	77.975	77.941	77.907	77.873
0.0230	77.839	77.805	77.772	77.738	77.704	77.670	77.637	77.603	77.569	77.536
0.0231	77.502	77.469	77.435	77.402	77.368	77.335	77.301	77.268	77.235	77.201
0.0232	77.168	77.135	77.102	77.069	77.035	77.002	76.969	76.936	76.903	76.870
0.0233	76.837	76.804	76.771	76.738	76.705	76.672	76.640	76.607	76.574	76.541
0.0234	76.509	76.476	76.443	76.411	76.378	76.346	76.313	76.280	76.248	76.216
0.0235	76.183	76.151	76.118	76.086	76.054	76.021	75.989	75.957	75.925	75.892
0.0236	75.860	75.828	75.796	75.764	75.732	75.700	75.668	75.636	75.604	75.572
0.0237	75.540	75.508	75.477	75.445	75.413	75.381	75.349	75.318	75.286	75.254
0.0238	75.223	75.191	75.160	75.128	75.097	75.065	75.034	75.002	74.971	74.939
0.0239	74.908	74.877	74.845	74.814	74.783	74.752	74.721	74.689	74.658	74.627
0.0240	74.596	74.565	74.534	74.503	74.472	74.441	74.410	74.379	74.348	74.317
0.0241	74.287	74.256	74.225	74.194	74.163	74.133	74.102	74.071	74.041	74.010
0.0242	73.980	73.949	73.918	73.888	73.857	73.827	73.797	73.766	73.736	73.705
0.0243	73.675	73.645	73.615	73.584	73.554	73.524	73.494	73.464	73.433	73.403
0.0244	73.373	73.343	73.313	73.283	73.253	73.223	73.193	73.163	73.133	73.104
0.0245	73.074	73.044	73.014	72.984	72.955	72.925	72.895	72.866	72.836	72.806
0.0246	72.777	72.747	72.718	72.688	72.659	72.629	72.600	72.570	72.541	72.511
0.0247	72.482	72.453	72.423	72.394	72.365	72.336	72.306	72.277	72.248	72.219
0.0248	72.190	72.161	72.132	72.103	72.074	72.045	72.016	71.987	71.958	71.929
0.0249	71.900	71.871	71.842	71.813	71.785	71.756	71.727	71.698	71.670	71.641

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0.0250	71.612	71.584	71.555	71.527	71.498	71.469	71.441	71.412	71.384	71.355
0.0251	71.327	71.299	71.270	71.242	71.214	71.185	71.157	71.129	71.100	71.072
0.0252	71.044	71.016	70.988	70.960	70.931	70.903	70.875	70.847	70.819	70.791
0.0253	70.763	70.735	70.707	70.679	70.652	70.624	70.596	70.568	70.540	70.512
0.0254	70.485	70.457	70.429	70.401	70.374	70.346	70.319	70.291	70.263	70.236
0.0255	70.208	70.181	70.153	70.126	70.098	70.071	70.043	70.016	69.989	69.961
0.0256	69.934	69.907	69.879	69.852	69.825	69.798	69.770	69.743	69.716	69.689
0.0257	69.662	69.635	69.608	69.581	69.554	69.527	69.500	69.473	69.446	69.419
0.0258	69.392	69.365	69.338	69.311	69.285	69.258	69.231	69.204	69.177	69.151
0.0259	69.124	69.097	69.071	69.044	69.017	68.991	68.964	68.938	68.911	68.885
0.0260	68.858	68.832	68.805	68.779	68.752	68.726	68.700	68.673	68.647	68.621
0.0261	68.594	68.568	68.542	68.516	68.489	68.463	68.437	68.411	68.385	68.359
0.0262	68.333	68.306	68.280	68.254	68.228	68.202	68.176	68.150	68.125	68.099
0.0263	68.073	68.047	68.021	67.995	67.969	67.944	67.918	67.892	67.866	67.841
0.0264	67.815	67.789	67.764	67.738	67.712	67.687	67.661	67.636	67.610	67.585
0.0265	67.559	67.534	67.508	67.483	67.457	67.432	67.406	67.381	67.356	67.330
0.0266	67.305	67.280	67.254	67.229	67.204	67.179	67.154	67.128	67.103	67.078
0.0267	67.053	67.028	67.003	66.978	66.953	66.928	66.903	66.878	66.853	66.828
0.0268	66.803	66.778	66.753	66.728	66.703	66.678	66.654	66.629	66.604	66.579
0.0269	66.554	66.530	66.505	66.480	66.456	66.431	66.406	66.382	66.357	66.333
0.0270	66.308	66.283	66.259	66.234	66.210	66.185	66.161	66.137	66.112	66.088
0.0271	66.063	66.039	66.015	65.990	65.966	65.942	65.917	65.893	65.869	65.845
0.0272	65.820	65.796	65.772	65.748	65.724	65.700	65.676	65.652	65.627	65.603
0.0273	65.579	65.555	65.531	65.507	65.483	65.460	65.436	65.412	65.388	65.364
0.0274	65.340	65.316	65.292	65.269	65.245	65.221	65.197	65.174	65.150	65.126
0.0275	65.102	65.079	65.055	65.032	65.008	64.984	64.961	64.937	64.914	64.890
0.0276	64.867	64.843	64.820	64.796	64.773	64.749	64.726	64.703	64.679	64.656
0.0277	64.632	64.609	64.586	64.563	64.539	64.516	64.493	64.470	64.446	64.423
0.0278	64.400	64.377	64.354	64.331	64.307	64.284	64.261	64.238	64.215	64.192
0.0279	64.169	64.146	64.123	64.100	64.077	64.054	64.031	64.009	63.986	63.963
0.0280	63.940	63.917	63.894	63.872	63.849	63.826	63.803	63.781	63.758	63.735
0.0281	63.712	63.690	63.667	63.645	63.622	63.599	63.577	63.554	63.532	63.509
0.0282	63.487	63.464	63.442	63.419	63.397	63.374	63.352	63.329	63.307	63.285
0.0283	63.262	63.240	63.218	63.195	63.173	63.151	63.128	63.106	63.084	63.062
0.0284	63.040	63.017	62.995	62.973	62.951	62.929	62.907	62.885	62.862	62.840
0.0285	62.818	62.796	62.774	62.752	62.730	62.708	62.686	62.664	62.643	62.621
0.0286	62.599	62.577	62.555	62.533	62.511	62.489	62.468	62.446	62.424	62.402
0.0287	62.381	62.359	62.337	62.315	62.294	62.272	62.250	62.229	62.207	62.186
0.0288	62.164	62.142	62.121	62.099	62.078	62.056	62.035	62.013	61.992	61.970
0.0289	61.949	61.928	61.906	61.885	61.863	61.842	61.821	61.799	61.778	61.757
0.0290	61.735	61.714	61.693	61.672	61.650	61.629	61.608	61.587	61.566	61.544
0.0291	61.523	61.502	61.481	61.460	61.439	61.418	61.397	61.376	61.355	61.334
0.0292	61.313	61.292	61.271	61.250	61.229	61.208	61.187	61.166	61.145	61.124
0.0293	61.103	61.082	61.062	61.041	61.020	60.999	60.978	60.958	60.937	60.916
0.0294	60.895	60.875	60.854	60.833	60.813	60.792	60.771	60.751	60.730	60.710
0.0295	60.689	60.668	60.648	60.627	60.607	60.586	60.566	60.545	60.525	60.504
0.0296	60.484	60.464	60.443	60.423	60.402	60.382	60.362	60.341	60.321	60.301
0.0297	60.280	60.260	60.240	60.220	60.199	60.179	60.159	60.139	60.118	60.098
0.0298	60.078	60.058	60.038	60.018	59.998	59.977	59.957	59.937	59.917	59.897
0.0299	59.877	59.857	59.837	59.817	59.797	59.777	59.757	59.737	59.717	59.698

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0.0300	59.678	59.658	59.638	59.618	59.598	59.578	59.559	59.539	59.519	59.499
0.0301	59.479	59.460	59.440	59.420	59.400	59.381	59.361	59.341	59.322	59.302
0.0302	59.282	59.263	59.243	59.224	59.204	59.184	59.165	59.145	59.126	59.106
0.0303	59.087	59.067	59.048	59.028	59.009	58.989	58.970	58.951	58.931	58.912
0.0304	58.892	58.873	58.854	58.834	58.815	58.796	58.776	58.757	58.738	58.719
0.0305	58.699	58.680	58.661	58.642	58.623	58.603	58.584	58.565	58.546	58.527
0.0306	58.508	58.488	58.469	58.450	58.431	58.412	58.393	58.374	58.355	58.336
0.0307	58.317	58.298	58.279	58.260	58.241	58.222	58.203	58.184	58.165	58.147
0.0308	58.128	58.109	58.090	58.071	58.052	58.033	58.015	57.996	57.977	57.958
0.0309	57.940	57.921	57.902	57.883	57.865	57.846	57.827	57.809	57.790	57.771
0.0310	57.753	57.734	57.715	57.697	57.678	57.660	57.641	57.623	57.604	57.586
0.0311	57.567	57.549	57.530	57.512	57.493	57.475	57.456	57.438	57.419	57.401
0.0312	57.383	57.364	57.346	57.327	57.309	57.291	57.272	57.254	57.236	57.217
0.0313	57.199	57.181	57.163	57.144	57.126	57.108	57.090	57.072	57.053	57.035
0.0314	57.017	56.999	56.981	56.963	56.945	56.926	56.908	56.890	56.872	56.854
0.0315	56.836	56.818	56.800	56.782	56.764	56.746	56.728	56.710	56.692	56.674
0.0316	56.656	56.638	56.620	56.602	56.585	56.567	56.549	56.531	56.513	56.495
0.0317	56.478	56.460	56.442	56.424	56.406	56.389	56.371	56.353	56.335	56.318
0.0318	56.300	56.282	56.265	56.247	56.229	56.212	56.194	56.176	56.159	56.141
0.0319	56.123	56.106	56.088	56.071	56.053	56.036	56.018	56.001	55.983	55.966
0.0320	55.948	55.931	55.913	55.896	55.878	55.861	55.843	55.826	55.809	55.791
0.0321	55.774	55.756	55.739	55.722	55.704	55.687	55.670	55.652	55.635	55.618
0.0322	55.601	55.583	55.566	55.549	55.532	55.514	55.497	55.480	55.463	55.446
0.0323	55.428	55.411	55.394	55.377	55.360	55.343	55.326	55.309	55.292	55.274
0.0324	55.257	55.240	55.223	55.206	55.189	55.172	55.155	55.138	55.121	55.104
0.0325	55.087	55.070	55.054	55.037	55.020	55.003	54.986	54.969	54.952	54.935
0.0326	54.918	54.902	54.885	54.868	54.851	54.834	54.818	54.801	54.784	54.767
0.0327	54.751	54.734	54.717	54.700	54.684	54.667	54.650	54.634	54.617	54.600
0.0328	54.584	54.567	54.550	54.534	54.517	54.501	54.484	54.467	54.451	54.434
0.0329	54.418	54.401	54.385	54.368	54.352	54.335	54.319	54.302	54.286	54.269
0.0330	54.253	54.236	54.220	54.204	54.187	54.171	54.154	54.138	54.122	54.105
0.0331	54.089	54.073	54.056	54.040	54.024	54.007	53.991	53.975	53.959	53.942
0.0332	53.926	53.910	53.894	53.877	53.861	53.845	53.829	53.813	53.796	53.780
0.0333	53.764	53.748	53.732	53.716	53.700	53.684	53.667	53.651	53.635	53.619
0.0334	53.603	53.587	53.571	53.555	53.539	53.523	53.507	53.491	53.475	53.459
0.0335	53.443	53.427	53.411	53.395	53.379	53.364	53.348	53.332	53.316	53.300
0.0336	53.284	53.268	53.252	53.237	53.221	53.205	53.189	53.173	53.158	53.142
0.0337	53.126	53.110	53.095	53.079	53.063	53.047	53.032	53.016	53.000	52.985
0.0338	52.969	52.953	52.938	52.922	52.906	52.891	52.875	52.859	52.844	52.828
0.0339	52.813	52.797	52.781	52.766	52.750	52.735	52.719	52.704	52.688	52.673
0.0340	52.657	52.642	52.626	52.611	52.595	52.580	52.565	52.549	52.534	52.518
0.0341	52.503	52.488	52.472	52.457	52.441	52.426	52.411	52.395	52.380	52.365
0.0342	52.349	52.334	52.319	52.304	52.288	52.273	52.258	52.242	52.227	52.212
0.0343	52.197	52.182	52.166	52.151	52.136	52.121	52.106	52.090	52.075	52.060
0.0344	52.045	52.030	52.015	52.000	51.985	51.970	51.954	51.939	51.924	51.909
0.0345	51.894	51.879	51.864	51.849	51.834	51.819	51.804	51.789	51.774	51.759
0.0346	51.744	51.729	51.714	51.699	51.685	51.670	51.655	51.640	51.625	51.610
0.0347	51.595	51.580	51.565	51.551	51.536	51.521	51.506	51.491	51.476	51.462
0.0348	51.447	51.432	51.417	51.403	51.388	51.373	51.358	51.344	51.329	51.314
0.0349	51.300	51.285	51.270	51.255	51.241	51.226	51.211	51.197	51.182	51.168

2θ, RAD.	0	1	2	3	4	5	6	7	8	9
0.0350	51.153	51.138	51.124	51.109	51.095	51.080	51.065	51.051	51.036	51.022
0.0351	51.007	50.993	50.978	50.964	50.949	50.935	50.920	50.906	50.891	50.877
0.0352	50.862	50.848	50.833	50.819	50.805	50.790	50.776	50.761	50.747	50.733
0.0353	50.718	50.704	50.690	50.675	50.661	50.647	50.632	50.618	50.604	50.589
0.0354	50.575	50.561	50.546	50.532	50.518	50.504	50.489	50.475	50.461	50.447
0.0355	50.433	50.418	50.404	50.390	50.376	50.362	50.347	50.333	50.319	50.305
0.0356	50.291	50.277	50.263	50.249	50.234	50.220	50.206	50.192	50.178	50.164
0.0357	50.150	50.136	50.122	50.108	50.094	50.080	50.066	50.052	50.038	50.024
0.0358	50.010	49.996	49.982	49.968	49.954	49.940	49.926	49.912	49.899	49.885
0.0359	49.871	49.857	49.843	49.829	49.815	49.801	49.788	49.774	49.760	49.746
0.0360	49.732	49.718	49.705	49.691	49.677	49.663	49.649	49.636	49.622	49.608
0.0361	49.594	49.581	49.567	49.553	49.540	49.526	49.512	49.498	49.485	49.471
0.0362	49.457	49.444	49.430	49.417	49.403	49.389	49.376	49.362	49.348	49.335
0.0363	49.321	49.308	49.294	49.281	49.267	49.253	49.240	49.226	49.213	49.199
0.0364	49.186	49.172	49.159	49.145	49.132	49.118	49.105	49.091	49.078	49.064
0.0365	49.051	49.038	49.024	49.011	48.997	48.984	48.971	48.957	48.944	48.930
0.0366	48.917	48.904	48.890	48.877	48.864	48.850	48.837	48.824	48.810	48.797
0.0367	48.784	48.770	48.757	48.744	48.731	48.717	48.704	48.691	48.678	48.664
0.0368	48.651	48.638	48.625	48.612	48.598	48.585	48.572	48.559	48.546	48.532
0.0369	48.519	48.506	48.493	48.480	48.467	48.454	48.441	48.427	48.414	48.401
0.0370	48.388	48.375	48.362	48.349	48.336	48.323	48.310	48.297	48.284	48.271
0.0371	48.258	48.245	48.232	48.219	48.206	48.193	48.180	48.167	48.154	48.141
0.0372	48.128	48.115	48.102	48.089	48.076	48.064	48.051	48.038	48.025	48.012
0.0373	47.999	47.986	47.973	47.961	47.948	47.935	47.922	47.909	47.896	47.884
0.0374	47.871	47.858	47.845	47.832	47.820	47.807	47.794	47.781	47.769	47.756
0.0375	47.743	47.730	47.718	47.705	47.692	47.680	47.667	47.654	47.642	47.629
0.0376	47.616	47.604	47.591	47.578	47.566	47.553	47.540	47.528	47.515	47.502
0.0377	47.490	47.477	47.465	47.452	47.440	47.427	47.414	47.402	47.389	47.377
0.0378	47.364	47.352	47.339	47.327	47.314	47.302	47.289	47.277	47.264	47.252
0.0379	47.239	47.227	47.214	47.202	47.189	47.177	47.165	47.152	47.140	47.127
0.0380	47.115	47.103	47.090	47.078	47.065	47.053	47.041	47.028	47.016	47.004
0.0381	46.991	46.979	46.967	46.954	46.942	46.930	46.917	46.905	46.893	46.881
0.0382	46.868	46.856	46.844	46.832	46.819	46.807	46.795	46.783	46.770	46.758
0.0383	46.746	46.734	46.722	46.709	46.697	46.685	46.673	46.661	46.649	46.636
0.0384	46.624	46.612	46.600	46.588	46.576	46.564	46.552	46.539	46.527	46.515
0.0385	46.503	46.491	46.479	46.467	46.455	46.443	46.431	46.419	46.407	46.395
0.0386	46.383	46.371	46.359	46.347	46.335	46.323	46.311	46.299	46.287	46.275
0.0387	46.263	46.251	46.239	46.227	46.215	46.203	46.191	46.179	46.167	46.156
0.0388	46.144	46.132	46.120	46.108	46.096	46.084	46.072	46.061	46.049	46.037
0.0389	46.025	46.013	46.001	45.990	45.978	45.966	45.954	45.942	45.931	45.919
0.0390	45.907	45.895	45.884	45.872	45.860	45.848	45.837	45.825	45.813	45.801
0.0391	45.790	45.778	45.766	45.755	45.743	45.731	45.720	45.708	45.696	45.685
0.0392	45.673	45.661	45.650	45.638	45.626	45.615	45.603	45.591	45.580	45.568
0.0393	45.557	45.545	45.534	45.522	45.510	45.499	45.487	45.476	45.464	45.453
0.0394	45.441	45.430	45.418	45.406	45.395	45.383	45.372	45.360	45.349	45.338
0.0395	45.326	45.315	45.303	45.292	45.280	45.269	45.257	45.246	45.234	45.223
0.0396	45.212	45.200	45.189	45.177	45.166	45.155	45.143	45.132	45.120	45.109
0.0397	45.098	45.086	45.075	45.064	45.052	45.041	45.030	45.018	45.007	44.996
0.0398	44.984	44.973	44.962	44.951	44.939	44.928	44.917	44.905	44.894	44.883
0.0399	44.872	44.860	44.849	44.838	44.827	44.816	44.804	44.793	44.782	44.771

2θ, RAD.	0	1	2	3	4	5	6	7	8	9
0.0400	44.760	44.748	44.737	44.726	44.715	44.704	44.693	44.681	44.670	44.659
0.0401	44.648	44.637	44.626	44.615	44.603	44.592	44.581	44.570	44.559	44.548
0.0402	44.537	44.526	44.515	44.504	44.493	44.482	44.471	44.459	44.448	44.437
0.0403	44.426	44.415	44.404	44.393	44.382	44.371	44.360	44.349	44.338	44.327
0.0404	44.316	44.305	44.295	44.284	44.273	44.262	44.251	44.240	44.229	44.218
0.0405	44.207	44.196	44.185	44.174	44.163	44.153	44.142	44.131	44.120	44.109
0.0406	44.098	44.087	44.076	44.066	44.055	44.044	44.033	44.022	44.011	44.001
0.0407	43.990	43.979	43.968	43.957	43.947	43.936	43.925	43.914	43.904	43.893
0.0408	43.882	43.871	43.861	43.850	43.839	43.828	43.818	43.807	43.796	43.785
0.0409	43.775	43.764	43.753	43.743	43.732	43.721	43.711	43.700	43.689	43.679
0.0410	43.668	43.657	43.647	43.636	43.625	43.615	43.604	43.594	43.583	43.572
0.0411	43.562	43.551	43.541	43.530	43.519	43.509	43.498	43.488	43.477	43.467
0.0412	43.456	43.445	43.435	43.424	43.414	43.403	43.393	43.382	43.372	43.361
0.0413	43.351	43.340	43.330	43.319	43.309	43.298	43.288	43.277	43.267	43.257
0.0414	43.246	43.236	43.225	43.215	43.204	43.194	43.184	43.173	43.163	43.152
0.0415	43.142	43.132	43.121	43.111	43.100	43.090	43.080	43.069	43.059	43.049
0.0416	43.038	43.028	43.018	43.007	42.997	42.987	42.976	42.966	42.956	42.945
0.0417	42.935	42.925	42.914	42.904	42.894	42.884	42.873	42.863	42.853	42.843
0.0418	42.832	42.822	42.812	42.802	42.791	42.781	42.771	42.761	42.751	42.740
0.0419	42.730	42.720	42.710	42.700	42.689	42.679	42.669	42.659	42.649	42.639
0.0420	42.628	42.618	42.608	42.598	42.588	42.578	42.568	42.558	42.547	42.537
0.0421	42.527	42.517	42.507	42.497	42.487	42.477	42.467	42.457	42.447	42.436
0.0422	42.426	42.416	42.406	42.396	42.386	42.376	42.366	42.356	42.346	42.336
0.0423	42.326	42.316	42.306	42.296	42.286	42.276	42.266	42.256	42.246	42.236
0.0424	42.226	42.216	42.206	42.196	42.187	42.177	42.167	42.157	42.147	42.137
0.0425	42.127	42.117	42.107	42.097	42.087	42.077	42.068	42.058	42.048	42.038
0.0426	42.028	42.018	42.008	41.999	41.989	41.979	41.969	41.959	41.949	41.940
0.0427	41.930	41.920	41.910	41.900	41.890	41.881	41.871	41.861	41.851	41.842
0.0428	41.832	41.822	41.812	41.802	41.793	41.783	41.773	41.763	41.754	41.744
0.0429	41.734	41.725	41.715	41.705	41.695	41.686	41.676	41.666	41.657	41.647
0.0430	41.637	41.628	41.618	41.608	41.599	41.589	41.579	41.570	41.560	41.550
0.0431	41.541	41.531	41.521	41.512	41.502	41.492	41.483	41.473	41.464	41.454
0.0432	41.444	41.435	41.425	41.416	41.406	41.397	41.387	41.377	41.368	41.358
0.0433	41.349	41.339	41.330	41.320	41.311	41.301	41.292	41.282	41.273	41.263
0.0434	41.254	41.244	41.235	41.225	41.216	41.206	41.197	41.187	41.178	41.168
0.0435	41.159	41.149	41.140	41.130	41.121	41.111	41.102	41.093	41.083	41.074
0.0436	41.064	41.055	41.045	41.036	41.027	41.017	41.008	40.999	40.989	40.980
0.0437	40.970	40.961	40.952	40.942	40.933	40.924	40.914	40.905	40.896	40.886
0.0438	40.877	40.868	40.858	40.849	40.840	40.830	40.821	40.812	40.802	40.793
0.0439	40.784	40.774	40.765	40.756	40.747	40.737	40.728	40.719	40.710	40.700
0.0440	40.691	40.682	40.673	40.663	40.654	40.645	40.636	40.626	40.617	40.608
0.0441	40.599	40.590	40.580	40.571	40.562	40.553	40.544	40.534	40.525	40.516
0.0442	40.507	40.498	40.489	40.479	40.470	40.461	40.452	40.443	40.434	40.425
0.0443	40.416	40.406	40.397	40.388	40.379	40.370	40.361	40.352	40.343	40.334
0.0444	40.325	40.315	40.306	40.297	40.288	40.279	40.270	40.261	40.252	40.243
0.0445	40.234	40.225	40.216	40.207	40.198	40.189	40.180	40.171	40.162	40.153
0.0446	40.144	40.135	40.126	40.117	40.108	40.099	40.090	40.081	40.072	40.063
0.0447	40.054	40.045	40.036	40.027	40.018	40.009	40.000	39.991	39.982	39.973
0.0448	39.965	39.956	39.947	39.938	39.929	39.920	39.911	39.902	39.893	39.884
0.0449	39.876	39.867	39.858	39.849	39.840	39.831	39.822	39.814	39.805	39.796

COBALT

50

WAVELENGTH = 1.798260Å

2θ, RAD.	0	1	2	3	4	5	6	7	8	9
0.0450	39.787	39.778	39.769	39.760	39.752	39.743	39.734	39.725	39.716	39.708
0.0451	39.699	39.690	39.681	39.672	39.664	39.655	39.646	39.637	39.628	39.620
0.0452	39.611	39.602	39.593	39.585	39.576	39.567	39.558	39.550	39.541	39.532
0.0453	39.524	39.515	39.506	39.497	39.489	39.480	39.471	39.463	39.454	39.445
0.0454	39.436	39.428	39.419	39.410	39.402	39.393	39.384	39.376	39.367	39.358
0.0455	39.350	39.341	39.333	39.324	39.315	39.307	39.298	39.289	39.281	39.272
0.0456	39.264	39.255	39.246	39.238	39.229	39.221	39.212	39.203	39.195	39.186
0.0457	39.178	39.169	39.161	39.152	39.143	39.135	39.126	39.118	39.109	39.101
0.0458	39.092	39.084	39.075	39.067	39.058	39.049	39.041	39.032	39.024	39.015
0.0459	39.007	38.998	38.990	38.981	38.973	38.965	38.956	38.948	38.939	38.931
0.0460	38.922	38.914	38.905	38.897	38.888	38.880	38.871	38.863	38.855	38.846
0.0461	38.838	38.829	38.821	38.813	38.804	38.796	38.787	38.779	38.770	38.762
0.0462	38.754	38.745	38.737	38.729	38.720	38.712	38.703	38.695	38.687	38.678
0.0463	38.670	38.662	38.653	38.645	38.637	38.628	38.620	38.612	38.603	38.595
0.0464	38.587	38.578	38.570	38.562	38.553	38.545	38.537	38.529	38.520	38.512
0.0465	38.504	38.495	38.487	38.479	38.471	38.462	38.454	38.446	38.438	38.429
0.0466	38.421	38.413	38.405	38.396	38.388	38.380	38.372	38.364	38.355	38.347
0.0467	38.339	38.331	38.322	38.314	38.306	38.298	38.290	38.281	38.273	38.265
0.0468	38.257	38.249	38.241	38.232	38.224	38.216	38.208	38.200	38.192	38.184
0.0469	38.175	38.167	38.159	38.151	38.143	38.135	38.127	38.119	38.110	38.102
0.0470	38.094	38.086	38.078	38.070	38.062	38.054	38.046	38.038	38.029	38.021
0.0471	38.013	38.005	37.997	37.989	37.981	37.973	37.965	37.957	37.949	37.941
0.0472	37.933	37.925	37.917	37.909	37.901	37.893	37.885	37.877	37.869	37.861
0.0473	37.853	37.845	37.837	37.829	37.821	37.813	37.805	37.797	37.789	37.781
0.0474	37.773	37.765	37.757	37.749	37.741	37.733	37.725	37.717	37.709	37.701
0.0475	37.693	37.685	37.677	37.669	37.662	37.654	37.646	37.638	37.630	37.622
0.0476	37.614	37.606	37.598	37.590	37.583	37.575	37.567	37.559	37.551	37.543
0.0477	37.535	37.527	37.520	37.512	37.504	37.496	37.488	37.480	37.472	37.465
0.0478	37.457	37.449	37.441	37.433	37.425	37.418	37.410	37.402	37.394	37.386
0.0479	37.379	37.371	37.363	37.355	37.347	37.340	37.332	37.324	37.316	37.308
0.0480	37.301	37.293	37.285	37.277	37.270	37.262	37.254	37.246	37.239	37.231
0.0481	37.223	37.215	37.208	37.200	37.192	37.185	37.177	37.169	37.161	37.154
0.0482	37.146	37.138	37.131	37.123	37.115	37.107	37.100	37.092	37.084	37.077
0.0483	37.069	37.061	37.054	37.046	37.038	37.031	37.023	37.015	37.008	37.000
0.0484	36.993	36.985	36.977	36.970	36.962	36.954	36.947	36.939	36.931	36.924
0.0485	36.916	36.909	36.901	36.893	36.886	36.878	36.871	36.863	36.855	36.848
0.0486	36.840	36.833	36.825	36.818	36.810	36.802	36.795	36.787	36.780	36.772
0.0487	36.765	36.757	36.750	36.742	36.735	36.727	36.719	36.712	36.704	36.697
0.0488	36.689	36.682	36.674	36.667	36.659	36.652	36.644	36.637	36.629	36.622
0.0489	36.614	36.607	36.599	36.592	36.584	36.577	36.569	36.562	36.555	36.547
0.0490	36.540	36.532	36.525	36.517	36.510	36.502	36.495	36.488	36.480	36.473
0.0491	36.465	36.458	36.450	36.443	36.436	36.428	36.421	36.413	36.406	36.399
0.0492	36.391	36.384	36.376	36.369	36.362	36.354	36.347	36.339	36.332	36.325
0.0493	36.317	36.310	36.303	36.295	36.288	36.281	36.273	36.266	36.258	36.251
0.0494	36.244	36.236	36.229	36.222	36.214	36.207	36.200	36.193	36.185	36.178
0.0495	36.171	36.163	36.156	36.149	36.141	36.134	36.127	36.120	36.112	36.105
0.0496	36.098	36.090	36.083	36.076	36.069	36.061	36.054	36.047	36.040	36.032
0.0497	36.025	36.018	36.011	36.003	35.996	35.989	35.982	35.974	35.967	35.960
0.0498	35.953	35.946	35.938	35.931	35.924	35.917	35.910	35.902	35.895	35.888
0.0499	35.881	35.874	35.866	35.859	35.852	35.845	35.838	35.830	35.823	35.816

Table 7
Iron $K\alpha$ Radiation
 2θ in Radian
 $\lambda = 1.937355 \text{ \AA}^*$

2θ, RAD.	0	1	2	3	4	5	6	7	8	9
0.0000			96868.	64579.	48434.	38747.	32289.	27677.	24217.	21526.
0.0001	19374.	17612.	16145.	14903.	13838.	12916.	12108.	11396.	10763.	10197.
0.0002	9686.8	9225.5	8806.2	8423.3	8072.3	7749.4	7451.4	7175.4	6919.1	6680.5
0.0003	6457.9	6249.5	6054.2	5870.8	5698.1	5535.3	5381.5	5236.1	5098.3	4967.6
0.0004	4843.4	4725.3	4612.8	4505.5	4403.1	4305.2	4211.6	4122.0	4036.2	3953.8
0.0005	3874.7	3798.7	3725.7	3655.4	3587.7	3522.5	3459.6	3398.9	3340.3	3283.7
0.0006	3228.9	3176.0	3124.8	3075.2	3027.1	2980.5	2935.4	2891.6	2849.1	2807.8
0.0007	2767.7	2728.7	2690.8	2653.9	2618.0	2583.1	2549.2	2516.0	2483.8	2452.3
0.0008	2421.7	2391.8	2362.6	2334.2	2306.4	2279.2	2252.7	2226.8	2201.5	2176.8
0.0009	2152.6	2129.0	2105.8	2083.2	2061.0	2039.3	2018.1	1997.3	1976.9	1956.9
0.0010	1937.4	1918.2	1899.4	1880.9	1862.8	1845.1	1827.7	1810.6	1793.8	1777.4
0.0011	1761.2	1745.4	1729.8	1714.5	1699.4	1684.7	1670.1	1655.9	1641.8	1628.0
0.0012	1614.5	1601.1	1588.0	1575.1	1562.4	1549.9	1537.6	1525.5	1513.6	1501.8
0.0013	1490.3	1478.9	1467.7	1456.7	1445.8	1435.1	1424.5	1414.1	1403.9	1393.8
0.0014	1383.8	1374.0	1364.3	1354.8	1345.4	1336.1	1327.0	1317.9	1309.0	1300.2
0.0015	1291.6	1283.0	1274.6	1266.2	1258.0	1249.9	1241.9	1234.0	1226.2	1218.5
0.0016	1210.8	1203.3	1195.9	1188.6	1181.3	1174.2	1167.1	1160.1	1153.2	1146.4
0.0017	1139.6	1133.0	1126.4	1119.9	1113.4	1107.1	1100.8	1094.6	1088.4	1082.3
0.0018	1076.3	1070.4	1064.5	1058.7	1052.9	1047.2	1041.6	1036.0	1030.5	1025.1
0.0019	1019.7	1014.3	1009.0	1003.8	998.6	993.5	988.4	983.4	978.5	973.5
0.0020	968.68	963.86	959.09	954.36	949.68	945.05	940.46	935.92	931.42	926.96
0.0021	922.55	918.18	913.85	909.56	905.31	901.10	896.92	892.79	888.70	884.64
0.0022	880.62	876.63	872.68	868.77	864.89	861.05	857.24	853.46	849.72	846.01
0.0023	842.33	838.68	835.07	831.48	827.93	824.41	820.91	817.45	814.02	810.61
0.0024	807.23	803.88	800.56	797.27	794.00	790.76	787.54	784.35	781.19	778.05
0.0025	774.94	771.85	768.79	765.75	762.74	759.75	756.78	753.83	750.91	748.01
0.0026	745.14	742.28	739.45	736.64	733.85	731.08	728.33	725.60	722.89	720.21
0.0027	717.54	714.89	712.26	709.65	707.06	704.49	701.94	699.41	696.89	694.39
0.0028	691.91	689.45	687.01	684.58	682.17	679.77	677.40	675.04	672.69	670.37
0.0029	668.05	665.76	663.48	661.21	658.96	656.73	654.51	652.31	650.12	647.95
0.0030	645.79	643.64	641.51	639.39	637.29	635.20	633.12	631.06	629.01	626.98
0.0031	624.95	622.94	620.95	618.96	616.99	615.03	613.09	611.15	609.23	607.32
0.0032	605.42	603.54	601.66	599.80	597.95	596.11	594.28	592.46	590.66	588.86
0.0033	587.08	585.30	583.54	581.79	580.05	578.32	576.59	574.88	573.18	571.49
0.0034	569.81	568.14	566.48	564.83	563.18	561.55	559.93	558.32	556.71	555.12
0.0035	553.53	551.95	550.39	548.83	547.28	545.73	544.20	542.68	541.16	539.65
0.0036	538.15	536.66	535.18	533.71	532.24	530.78	529.33	527.89	526.46	525.03
0.0037	523.61	522.20	520.79	519.40	518.01	516.63	515.25	513.89	512.53	511.18
0.0038	509.83	508.49	507.16	505.84	504.52	503.21	501.91	500.61	499.32	498.04
0.0039	496.76	495.49	494.22	492.97	491.71	490.47	489.23	488.00	486.77	485.55
0.0040	484.34	483.13	481.93	480.73	479.54	478.36	477.18	476.01	474.84	473.68
0.0041	472.53	471.38	470.23	469.09	467.96	466.83	465.71	464.59	463.48	462.38
0.0042	461.28	460.18	459.09	458.00	456.92	455.85	454.78	453.71	452.65	451.60
0.0043	450.55	449.50	448.46	447.43	446.40	445.37	444.35	443.33	442.32	441.31
0.0044	440.31	439.31	438.32	437.33	436.34	435.36	434.39	433.41	432.45	431.48
0.0045	430.52	429.57	428.62	427.67	426.73	425.79	424.86	423.93	423.00	422.08
0.0046	421.16	420.25	419.34	418.44	417.53	416.64	415.74	414.85	413.97	413.08
0.0047	412.20	411.33	410.46	409.59	408.73	407.86	407.01	406.15	405.30	404.46
0.0048	403.62	402.78	401.94	401.11	400.28	399.46	398.63	397.81	397.00	396.19
0.0049	395.38	394.57	393.77	392.97	392.18	391.39	390.60	389.81	389.03	388.25

2θ, RAD.	0	1	2	3	4	5	6	7	8	9
0.0050	387.47	386.70	385.93	385.16	384.40	383.64	382.88	382.12	381.37	380.62
0.0051	379.87	379.13	378.39	377.65	376.92	376.19	375.46	374.73	374.01	373.29
0.0052	372.57	371.85	371.14	370.43	369.72	369.02	368.32	367.62	366.92	366.23
0.0053	365.54	364.85	364.17	363.48	362.80	362.12	361.45	360.77	360.10	359.44
0.0054	358.77	358.11	357.45	356.79	356.13	355.48	354.83	354.18	353.53	352.89
0.0055	352.25	351.61	350.97	350.34	349.70	349.07	348.45	347.82	347.20	346.58
0.0056	345.96	345.34	344.73	344.11	343.50	342.90	342.29	341.69	341.08	340.48
0.0057	339.89	339.29	338.70	338.11	337.52	336.93	336.35	335.76	335.18	334.60
0.0058	334.03	333.45	332.88	332.31	331.74	331.17	330.61	330.04	329.48	328.92
0.0059	328.37	327.81	327.26	326.70	326.15	325.61	325.06	324.52	323.97	323.43
0.0060	322.89	322.36	321.82	321.29	320.75	320.22	319.70	319.17	318.64	318.12
0.0061	317.60	317.08	316.56	316.05	315.53	315.02	314.51	314.00	313.49	312.98
0.0062	312.48	311.97	311.47	310.97	310.47	309.98	309.48	308.99	308.50	308.01
0.0063	307.52	307.03	306.54	306.06	305.58	305.10	304.62	304.14	303.66	303.19
0.0064	302.71	302.24	301.77	301.30	300.83	300.37	299.90	299.44	298.98	298.51
0.0065	298.06	297.60	297.14	296.69	296.23	295.78	295.33	294.88	294.43	293.98
0.0066	293.54	293.10	292.65	292.21	291.77	291.33	290.89	290.46	290.02	289.59
0.0067	289.16	288.73	288.30	287.87	287.44	287.02	286.59	286.17	285.75	285.33
0.0068	284.91	284.49	284.07	283.65	283.24	282.83	282.41	282.00	281.59	281.18
0.0069	280.78	280.37	279.97	279.56	279.16	278.76	278.36	277.96	277.56	277.16
0.0070	276.77	276.37	275.98	275.58	275.19	274.80	274.41	274.03	273.64	273.25
0.0071	272.87	272.48	272.10	271.72	271.34	270.96	270.58	270.20	269.83	269.45
0.0072	269.08	268.70	268.33	267.96	267.59	267.22	266.85	266.49	266.12	265.76
0.0073	265.39	265.03	264.67	264.31	263.95	263.59	263.23	262.87	262.51	262.16
0.0074	261.81	261.45	261.10	260.75	260.40	260.05	259.70	259.35	259.01	258.66
0.0075	258.31	257.97	257.63	257.29	256.94	256.60	256.26	255.93	255.59	255.25
0.0076	254.92	254.58	254.25	253.91	253.58	253.25	252.92	252.59	252.26	251.93
0.0077	251.61	251.28	250.95	250.63	250.30	249.98	249.66	249.34	249.02	248.70
0.0078	248.38	248.06	247.74	247.43	247.11	246.80	246.48	246.17	245.86	245.55
0.0079	245.24	244.93	244.62	244.31	244.00	243.69	243.39	243.08	242.78	242.47
0.0080	242.17	241.87	241.57	241.27	240.97	240.67	240.37	240.07	239.77	239.48
0.0081	239.18	238.89	238.59	238.30	238.01	237.71	237.42	237.13	236.84	236.55
0.0082	236.26	235.98	235.69	235.40	235.12	234.83	234.55	234.26	233.98	233.70
0.0083	233.42	233.14	232.86	232.58	232.30	232.02	231.74	231.46	231.19	230.91
0.0084	230.64	230.36	230.09	229.82	229.55	229.27	229.00	228.73	228.46	228.19
0.0085	227.92	227.66	227.39	227.12	226.86	226.59	226.33	226.06	225.80	225.54
0.0086	225.27	225.01	224.75	224.49	224.23	223.97	223.71	223.46	223.20	222.94
0.0087	222.69	222.43	222.17	221.92	221.67	221.41	221.16	220.91	220.66	220.41
0.0088	220.15	219.90	219.66	219.41	219.16	218.91	218.66	218.42	218.17	217.93
0.0089	217.68	217.44	217.19	216.95	216.71	216.47	216.22	215.98	215.74	215.50
0.0090	215.26	215.02	214.79	214.55	214.31	214.07	213.84	213.60	213.37	213.13
0.0091	212.90	212.66	212.43	212.20	211.97	211.73	211.50	211.27	211.04	210.81
0.0092	210.58	210.35	210.13	209.90	209.67	209.44	209.22	208.99	208.77	208.54
0.0093	208.32	208.09	207.87	207.65	207.43	207.20	206.98	206.76	206.54	206.32
0.0094	206.10	205.88	205.66	205.45	205.23	205.01	204.80	204.58	204.36	204.15
0.0095	203.93	203.72	203.50	203.29	203.08	202.87	202.65	202.44	202.23	202.02
0.0096	201.81	201.60	201.39	201.18	200.97	200.76	200.56	200.35	200.14	199.93
0.0097	199.73	199.52	199.32	199.11	198.91	198.70	198.50	198.30	198.09	197.89
0.0098	197.69	197.49	197.29	197.09	196.89	196.69	196.49	196.29	196.09	195.89
0.0099	195.69	195.50	195.30	195.10	194.91	194.71	194.51	194.32	194.12	193.93

IRON

WAVELENGTH = 1.937355Å

2θ, RAD.	0	1	2	3	4	5	6	7	8	9
0.0100	193.74	193.54	193.35	193.16	192.96	192.77	192.58	192.39	192.20	192.01
0.0101	191.82	191.63	191.44	191.25	191.06	190.87	190.69	190.50	190.31	190.12
0.0102	189.94	189.75	189.57	189.38	189.20	189.01	188.83	188.64	188.46	188.28
0.0103	188.09	187.91	187.73	187.55	187.37	187.18	187.00	186.82	186.64	186.46
0.0104	186.29	186.11	185.93	185.75	185.57	185.39	185.22	185.04	184.86	184.69
0.0105	184.51	184.34	184.16	183.99	183.81	183.64	183.46	183.29	183.12	182.94
0.0106	182.77	182.60	182.43	182.25	182.08	181.91	181.74	181.57	181.40	181.23
0.0107	181.06	180.89	180.72	180.56	180.39	180.22	180.05	179.89	179.72	179.55
0.0108	179.39	179.22	179.05	178.89	178.72	178.56	178.39	178.23	178.07	177.90
0.0109	177.74	177.58	177.41	177.25	177.09	176.93	176.77	176.61	176.44	176.28
0.0110	176.12	175.96	175.80	175.65	175.49	175.33	175.17	175.01	174.85	174.69
0.0111	174.54	174.38	174.22	174.07	173.91	173.75	173.60	173.44	173.29	173.13
0.0112	172.98	172.82	172.67	172.52	172.36	172.21	172.06	171.90	171.75	171.60
0.0113	171.45	171.30	171.15	170.99	170.84	170.69	170.54	170.39	170.24	170.09
0.0114	169.94	169.80	169.65	169.50	169.35	169.20	169.05	168.91	168.76	168.61
0.0115	168.47	168.32	168.17	168.03	167.88	167.74	167.59	167.45	167.30	167.16
0.0116	167.01	166.87	166.73	166.58	166.44	166.30	166.15	166.01	165.87	165.73
0.0117	165.59	165.45	165.30	165.16	165.02	164.88	164.74	164.60	164.46	164.32
0.0118	164.18	164.04	163.91	163.77	163.63	163.49	163.35	163.22	163.08	162.94
0.0119	162.80	162.67	162.53	162.39	162.26	162.12	161.99	161.85	161.72	161.58
0.0120	161.45	161.31	161.18	161.04	160.91	160.78	160.64	160.51	160.38	160.25
0.0121	160.11	159.98	159.85	159.72	159.59	159.45	159.32	159.19	159.06	158.93
0.0122	158.80	158.67	158.54	158.41	158.28	158.15	158.02	157.89	157.77	157.64
0.0123	157.51	157.38	157.25	157.13	157.00	156.87	156.75	156.62	156.49	156.37
0.0124	156.24	156.11	155.99	155.86	155.74	155.61	155.49	155.36	155.24	155.11
0.0125	154.99	154.87	154.74	154.62	154.50	154.37	154.25	154.13	154.00	153.88
0.0126	153.76	153.64	153.52	153.39	153.27	153.15	153.03	152.91	152.79	152.67
0.0127	152.55	152.43	152.31	152.19	152.07	151.95	151.83	151.71	151.59	151.48
0.0128	151.36	151.24	151.12	151.00	150.89	150.77	150.65	150.53	150.42	150.30
0.0129	150.18	150.07	149.95	149.84	149.72	149.60	149.49	149.37	149.26	149.14
0.0130	149.03	148.91	148.80	148.69	148.57	148.46	148.34	148.23	148.12	148.00
0.0131	147.89	147.78	147.67	147.55	147.44	147.33	147.22	147.10	146.99	146.88
0.0132	146.77	146.66	146.55	146.44	146.33	146.22	146.11	146.00	145.89	145.78
0.0133	145.67	145.56	145.45	145.34	145.23	145.12	145.01	144.90	144.80	144.69
0.0134	144.58	144.47	144.36	144.26	144.15	144.04	143.94	143.83	143.72	143.62
0.0135	143.51	143.40	143.30	143.19	143.08	142.98	142.87	142.77	142.66	142.56
0.0136	142.45	142.35	142.24	142.14	142.04	141.93	141.83	141.72	141.62	141.52
0.0137	141.41	141.31	141.21	141.10	141.00	140.90	140.80	140.70	140.59	140.49
0.0138	140.39	140.29	140.19	140.08	139.98	139.88	139.78	139.68	139.58	139.48
0.0139	139.38	139.28	139.18	139.08	138.98	138.88	138.78	138.68	138.58	138.48
0.0140	138.38	138.28	138.19	138.09	137.99	137.89	137.79	137.70	137.60	137.50
0.0141	137.40	137.30	137.21	137.11	137.01	136.92	136.82	136.72	136.63	136.53
0.0142	136.43	136.34	136.24	136.15	136.05	135.96	135.86	135.77	135.67	135.58
0.0143	135.48	135.39	135.29	135.20	135.10	135.01	134.91	134.82	134.73	134.63
0.0144	134.54	134.45	134.35	134.26	134.17	134.07	133.98	133.89	133.80	133.70
0.0145	133.61	133.52	133.43	133.34	133.24	133.15	133.06	132.97	132.88	132.79
0.0146	132.70	132.61	132.52	132.42	132.33	132.24	132.15	132.06	131.97	131.88
0.0147	131.79	131.70	131.62	131.53	131.44	131.35	131.26	131.17	131.08	130.99
0.0148	130.90	130.82	130.73	130.64	130.55	130.46	130.38	130.29	130.20	130.11
0.0149	130.03	129.94	129.85	129.76	129.68	129.59	129.50	129.42	129.33	129.24

2 θ , RAD.	0	1	2	3	4	5	6	7	8	9
0.0150	129.16	129.07	128.99	128.90	128.81	128.73	128.64	128.56	128.47	128.39
0.0151	128.30	128.22	128.13	128.05	127.96	127.88	127.80	127.71	127.63	127.54
0.0152	127.46	127.38	127.29	127.21	127.12	127.04	126.96	126.87	126.79	126.71
0.0153	126.63	126.54	126.46	126.38	126.30	126.21	126.13	126.05	125.97	125.89
0.0154	125.80	125.72	125.64	125.56	125.48	125.40	125.32	125.23	125.15	125.07
0.0155	124.99	124.91	124.83	124.75	124.67	124.59	124.51	124.43	124.35	124.27
0.0156	124.19	124.11	124.03	123.95	123.87	123.79	123.71	123.64	123.56	123.48
0.0157	123.40	123.32	123.24	123.16	123.09	123.01	122.93	122.85	122.77	122.70
0.0158	122.62	122.54	122.46	122.39	122.31	122.23	122.15	122.08	122.00	121.92
0.0159	121.85	121.77	121.69	121.62	121.54	121.47	121.39	121.31	121.24	121.16
0.0160	121.09	121.01	120.93	120.86	120.78	120.71	120.63	120.56	120.48	120.41
0.0161	120.33	120.26	120.18	120.11	120.04	119.96	119.89	119.81	119.74	119.67
0.0162	119.59	119.52	119.44	119.37	119.30	119.22	119.15	119.08	119.00	118.93
0.0163	118.86	118.78	118.71	118.64	118.57	118.49	118.42	118.35	118.28	118.20
0.0164	118.13	118.06	117.99	117.92	117.85	117.77	117.70	117.63	117.56	117.49
0.0165	117.42	117.35	117.27	117.20	117.13	117.06	116.99	116.92	116.85	116.78
0.0166	116.71	116.64	116.57	116.50	116.43	116.36	116.29	116.22	116.15	116.08
0.0167	116.01	115.94	115.87	115.80	115.73	115.66	115.60	115.53	115.46	115.39
0.0168	115.32	115.25	115.18	115.11	115.05	114.98	114.91	114.84	114.77	114.71
0.0169	114.64	114.57	114.50	114.43	114.37	114.30	114.23	114.16	114.10	114.03
0.0170	113.96	113.90	113.83	113.76	113.70	113.63	113.56	113.50	113.43	113.36
0.0171	113.30	113.23	113.16	113.10	113.03	112.97	112.90	112.84	112.77	112.70
0.0172	112.64	112.57	112.51	112.44	112.38	112.31	112.25	112.18	112.12	112.05
0.0173	111.99	111.92	111.86	111.79	111.73	111.66	111.60	111.54	111.47	111.41
0.0174	111.34	111.28	111.22	111.15	111.09	111.02	110.96	110.90	110.83	110.77
0.0175	110.71	110.64	110.58	110.52	110.46	110.39	110.33	110.27	110.20	110.14
0.0176	110.08	110.02	109.95	109.89	109.83	109.77	109.70	109.64	109.58	109.52
0.0177	109.46	109.39	109.33	109.27	109.21	109.15	109.09	109.03	108.96	108.90
0.0178	108.84	108.78	108.72	108.66	108.60	108.54	108.48	108.42	108.35	108.29
0.0179	108.23	108.17	108.11	108.05	107.99	107.93	107.87	107.81	107.75	107.69
0.0180	107.63	107.57	107.51	107.45	107.39	107.33	107.27	107.22	107.16	107.10
0.0181	107.04	106.98	106.92	106.86	106.80	106.74	106.68	106.63	106.57	106.51
0.0182	106.45	106.39	106.33	106.27	106.22	106.16	106.10	106.04	105.98	105.93
0.0183	105.87	105.81	105.75	105.69	105.64	105.58	105.52	105.46	105.41	105.35
0.0184	105.29	105.24	105.18	105.12	105.06	105.01	104.95	104.89	104.84	104.78
0.0185	104.72	104.67	104.61	104.55	104.50	104.44	104.38	104.33	104.27	104.22
0.0186	104.16	104.10	104.05	103.99	103.94	103.88	103.83	103.77	103.71	103.66
0.0187	103.60	103.55	103.49	103.44	103.38	103.33	103.27	103.22	103.16	103.11
0.0188	103.05	103.00	102.94	102.89	102.83	102.78	102.72	102.67	102.62	102.56
0.0189	102.51	102.45	102.40	102.34	102.29	102.24	102.18	102.13	102.08	102.02
0.0190	101.97	101.91	101.86	101.81	101.75	101.70	101.65	101.59	101.54	101.49
0.0191	101.43	101.38	101.33	101.27	101.22	101.17	101.12	101.06	101.01	100.96
0.0192	100.91	100.85	100.80	100.75	100.70	100.64	100.59	100.54	100.49	100.43
0.0193	100.38	100.33	100.28	100.23	100.18	100.12	100.07	100.02	99.97	99.92
0.0194	99.865	99.814	99.762	99.711	99.660	99.609	99.557	99.506	99.455	99.404
0.0195	99.353	99.302	99.251	99.201	99.150	99.099	99.048	98.998	98.947	98.897
0.0196	98.846	98.796	98.746	98.695	98.645	98.595	98.545	98.495	98.444	98.395
0.0197	98.345	98.295	98.245	98.195	98.145	98.096	98.046	97.996	97.947	97.897
0.0198	97.848	97.798	97.749	97.700	97.651	97.601	97.552	97.503	97.454	97.405
0.0199	97.356	97.307	97.258	97.210	97.161	97.112	97.064	97.015	96.966	96.918

2θ, RAD.	0	1	2	3	4	5	6	7	8	9
0.0200	96.869	96.821	96.773	96.724	96.676	96.628	96.580	96.532	96.484	96.435
0.0201	96.388	96.340	96.292	96.244	96.196	96.148	96.101	96.053	96.005	95.958
0.0202	95.910	95.863	95.816	95.768	95.721	95.674	95.626	95.579	95.532	95.485
0.0203	95.438	95.391	95.344	95.297	95.250	95.203	95.157	95.110	95.063	95.017
0.0204	94.970	94.924	94.877	94.831	94.784	94.738	94.692	94.645	94.599	94.553
0.0205	94.507	94.461	94.415	94.369	94.323	94.277	94.231	94.185	94.139	94.094
0.0206	94.048	94.002	93.957	93.911	93.866	93.820	93.775	93.730	93.684	93.639
0.0207	93.594	93.549	93.503	93.458	93.413	93.368	93.323	93.278	93.233	93.189
0.0208	93.144	93.099	93.054	93.010	92.965	92.920	92.876	92.831	92.787	92.743
0.0209	92.698	92.654	92.610	92.565	92.521	92.477	92.433	92.389	92.345	92.301
0.0210	92.257	92.213	92.169	92.125	92.081	92.038	91.994	91.950	91.907	91.863
0.0211	91.820	91.776	91.733	91.689	91.646	91.602	91.559	91.516	91.473	91.430
0.0212	91.386	91.343	91.300	91.257	91.214	91.171	91.129	91.086	91.043	91.000
0.0213	90.957	90.915	90.872	90.830	90.787	90.744	90.702	90.659	90.617	90.575
0.0214	90.532	90.490	90.448	90.406	90.364	90.321	90.279	90.237	90.195	90.153
0.0215	90.111	90.069	90.028	89.986	89.944	89.902	89.861	89.819	89.777	89.736
0.0216	89.694	89.653	89.611	89.570	89.528	89.487	89.446	89.404	89.363	89.322
0.0217	89.281	89.240	89.199	89.158	89.117	89.076	89.035	88.994	88.953	88.912
0.0218	88.871	88.831	88.790	88.749	88.709	88.668	88.627	88.587	88.546	88.506
0.0219	88.466	88.425	88.385	88.345	88.304	88.264	88.224	88.184	88.144	88.103
0.0220	88.063	88.023	87.983	87.944	87.904	87.864	87.824	87.784	87.744	87.705
0.0221	87.665	87.625	87.586	87.546	87.507	87.467	87.428	87.388	87.349	87.309
0.0222	87.270	87.231	87.192	87.152	87.113	87.074	87.035	86.996	86.957	86.918
0.0223	86.879	86.840	86.801	86.762	86.723	86.684	86.646	86.607	86.568	86.530
0.0224	86.491	86.452	86.414	86.375	86.337	86.298	86.260	86.222	86.183	86.145
0.0225	86.107	86.068	86.030	85.992	85.954	85.916	85.878	85.840	85.802	85.764
0.0226	85.726	85.688	85.650	85.612	85.574	85.536	85.499	85.461	85.423	85.386
0.0227	85.348	85.310	85.273	85.235	85.198	85.160	85.123	85.086	85.048	85.011
0.0228	84.974	84.936	84.899	84.862	84.825	84.788	84.751	84.714	84.677	84.640
0.0229	84.603	84.566	84.529	84.492	84.455	84.418	84.382	84.345	84.308	84.271
0.0230	84.235	84.198	84.162	84.125	84.089	84.052	84.016	83.979	83.943	83.906
0.0231	83.870	83.834	83.798	83.761	83.725	83.689	83.653	83.617	83.581	83.545
0.0232	83.509	83.473	83.437	83.401	83.365	83.329	83.293	83.257	83.222	83.186
0.0233	83.150	83.115	83.079	83.043	83.008	82.972	82.937	82.901	82.866	82.830
0.0234	82.795	82.760	82.724	82.689	82.654	82.618	82.583	82.548	82.513	82.478
0.0235	82.443	82.408	82.373	82.338	82.303	82.268	82.233	82.198	82.163	82.128
0.0236	82.093	82.059	82.024	81.989	81.954	81.920	81.885	81.851	81.816	81.781
0.0237	81.747	81.712	81.678	81.644	81.609	81.575	81.541	81.506	81.472	81.438
0.0238	81.403	81.369	81.335	81.301	81.267	81.233	81.199	81.165	81.131	81.097
0.0239	81.063	81.029	80.995	80.961	80.927	80.894	80.860	80.826	80.792	80.759
0.0240	80.725	80.692	80.658	80.624	80.591	80.557	80.524	80.490	80.457	80.424
0.0241	80.390	80.357	80.324	80.290	80.257	80.224	80.191	80.157	80.124	80.091
0.0242	80.058	80.025	79.992	79.959	79.926	79.893	79.860	79.827	79.794	79.761
0.0243	79.729	79.696	79.663	79.630	79.598	79.565	79.532	79.500	79.467	79.434
0.0244	79.402	79.369	79.337	79.304	79.272	79.239	79.207	79.175	79.142	79.110
0.0245	79.078	79.046	79.013	78.981	78.949	78.917	78.885	78.852	78.820	78.788
0.0246	78.756	78.724	78.692	78.660	78.628	78.597	78.565	78.533	78.501	78.469
0.0247	78.437	78.406	78.374	78.342	78.311	78.279	78.247	78.216	78.184	78.153
0.0248	78.121	78.090	78.058	78.027	77.995	77.964	77.933	77.901	77.870	77.839
0.0249	77.808	77.776	77.745	77.714	77.683	77.652	77.620	77.589	77.558	77.527

2θ, RAD.	0	1	2	3	4	5	6	7	8	9
0.0250	77.496	77.465	77.434	77.403	77.373	77.342	77.311	77.280	77.249	77.218
0.0251	77.188	77.157	77.126	77.095	77.065	77.034	77.003	76.973	76.942	76.912
0.0252	76.881	76.851	76.820	76.790	76.759	76.729	76.699	76.668	76.638	76.608
0.0253	76.577	76.547	76.517	76.487	76.457	76.426	76.396	76.366	76.336	76.306
0.0254	76.276	76.246	76.216	76.186	76.156	76.126	76.096	76.066	76.036	76.007
0.0255	75.977	75.947	75.917	75.888	75.858	75.828	75.798	75.769	75.739	75.710
0.0256	75.680	75.651	75.621	75.591	75.562	75.533	75.503	75.474	75.444	75.415
0.0257	75.386	75.356	75.327	75.298	75.268	75.239	75.210	75.181	75.152	75.123
0.0258	75.093	75.064	75.035	75.006	74.977	74.948	74.919	74.890	74.861	74.832
0.0259	74.804	74.775	74.746	74.717	74.688	74.659	74.631	74.602	74.573	74.544
0.0260	74.516	74.487	74.459	74.430	74.401	74.373	74.344	74.316	74.287	74.259
0.0261	74.230	74.202	74.174	74.145	74.117	74.088	74.060	74.032	74.004	73.975
0.0262	73.947	73.919	73.891	73.862	73.834	73.806	73.778	73.750	73.722	73.694
0.0263	73.666	73.638	73.610	73.582	73.554	73.526	73.498	73.470	73.442	73.415
0.0264	73.387	73.359	73.331	73.304	73.276	73.248	73.220	73.193	73.165	73.138
0.0265	73.110	73.082	73.055	73.027	73.000	72.972	72.945	72.917	72.890	72.863
0.0266	72.835	72.808	72.780	72.753	72.726	72.698	72.671	72.644	72.617	72.590
0.0267	72.562	72.535	72.508	72.481	72.454	72.427	72.400	72.373	72.346	72.319
0.0268	72.292	72.265	72.238	72.211	72.184	72.157	72.130	72.103	72.076	72.050
0.0269	72.023	71.996	71.969	71.943	71.916	71.889	71.863	71.836	71.809	71.783
0.0270	71.756	71.730	71.703	71.677	71.650	71.624	71.597	71.571	71.544	71.518
0.0271	71.491	71.465	71.439	71.412	71.386	71.360	71.333	71.307	71.281	71.255
0.0272	71.229	71.202	71.176	71.150	71.124	71.098	71.072	71.046	71.020	70.994
0.0273	70.968	70.942	70.916	70.890	70.864	70.838	70.812	70.786	70.760	70.734
0.0274	70.709	70.683	70.657	70.631	70.606	70.580	70.554	70.529	70.503	70.477
0.0275	70.452	70.426	70.400	70.375	70.349	70.324	70.298	70.273	70.247	70.222
0.0276	70.196	70.171	70.145	70.120	70.095	70.069	70.044	70.019	69.993	69.968
0.0277	69.943	69.918	69.892	69.867	69.842	69.817	69.792	69.767	69.742	69.716
0.0278	69.691	69.666	69.641	69.616	69.591	69.566	69.541	69.516	69.491	69.466
0.0279	69.442	69.417	69.392	69.367	69.342	69.317	69.293	69.268	69.243	69.218
0.0280	69.194	69.169	69.144	69.120	69.095	69.070	69.046	69.021	68.996	68.972
0.0281	68.947	68.923	68.898	68.874	68.849	68.825	68.800	68.776	68.752	68.727
0.0282	68.703	68.679	68.654	68.630	68.606	68.581	68.557	68.533	68.509	68.484
0.0283	68.460	68.436	68.412	68.388	68.364	68.339	68.315	68.291	68.267	68.243
0.0284	68.219	68.195	68.171	68.147	68.123	68.099	68.075	68.051	68.027	68.004
0.0285	67.980	67.956	67.932	67.908	67.884	67.861	67.837	67.813	67.789	67.766
0.0286	67.742	67.718	67.695	67.671	67.647	67.624	67.600	67.577	67.553	67.530
0.0287	67.506	67.483	67.459	67.436	67.412	67.389	67.365	67.342	67.318	67.295
0.0288	67.272	67.248	67.225	67.202	67.178	67.155	67.132	67.109	67.085	67.062
0.0289	67.039	67.016	66.993	66.969	66.946	66.923	66.900	66.877	66.854	66.831
0.0290	66.808	66.785	66.762	66.739	66.716	66.693	66.670	66.647	66.624	66.601
0.0291	66.578	66.555	66.532	66.510	66.487	66.464	66.441	66.418	66.396	66.373
0.0292	66.350	66.327	66.305	66.282	66.259	66.237	66.214	66.192	66.169	66.146
0.0293	66.124	66.101	66.079	66.056	66.034	66.011	65.989	65.966	65.944	65.921
0.0294	65.899	65.876	65.854	65.832	65.809	65.787	65.765	65.742	65.720	65.698
0.0295	65.676	65.653	65.631	65.609	65.587	65.564	65.542	65.520	65.498	65.476
0.0296	65.454	65.432	65.409	65.387	65.365	65.343	65.321	65.299	65.277	65.255
0.0297	65.233	65.211	65.189	65.167	65.146	65.124	65.102	65.080	65.058	65.036
0.0298	65.014	64.993	64.971	64.949	64.927	64.905	64.884	64.862	64.840	64.819
0.0299	64.797	64.775	64.754	64.732	64.710	64.689	64.667	64.646	64.624	64.603

2θ, RAD.	0	1	2	3	4	5	6	7	8	9
0.0300	64.581	64.559	64.538	64.516	64.495	64.474	64.452	64.431	64.409	64.388
0.0301	64.366	64.345	64.324	64.302	64.281	64.260	64.238	64.217	64.196	64.175
0.0302	64.153	64.132	64.111	64.090	64.068	64.047	64.026	64.005	63.984	63.963
0.0303	63.942	63.921	63.899	63.878	63.857	63.836	63.815	63.794	63.773	63.752
0.0304	63.731	63.710	63.689	63.668	63.648	63.627	63.606	63.585	63.564	63.543
0.0305	63.522	63.502	63.481	63.460	63.439	63.418	63.398	63.377	63.356	63.335
0.0306	63.315	63.294	63.273	63.253	63.232	63.212	63.191	63.170	63.150	63.129
0.0307	63.109	63.088	63.067	63.047	63.026	63.006	62.985	62.965	62.945	62.924
0.0308	62.904	62.883	62.863	62.842	62.822	62.802	62.781	62.761	62.741	62.720
0.0309	62.700	62.680	62.660	62.639	62.619	62.599	62.579	62.558	62.538	62.518
0.0310	62.498	62.478	62.458	62.437	62.417	62.397	62.377	62.357	62.337	62.317
0.0311	62.297	62.277	62.257	62.237	62.217	62.197	62.177	62.157	62.137	62.117
0.0312	62.097	62.077	62.058	62.038	62.018	61.998	61.978	61.958	61.938	61.919
0.0313	61.899	61.879	61.859	61.840	61.820	61.800	61.781	61.761	61.741	61.721
0.0314	61.702	61.682	61.663	61.643	61.623	61.604	61.584	61.565	61.545	61.525
0.0315	61.506	61.486	61.467	61.447	61.428	61.408	61.389	61.370	61.350	61.331
0.0316	61.311	61.292	61.273	61.253	61.234	61.214	61.195	61.176	61.157	61.137
0.0317	61.118	61.099	61.079	61.060	61.041	61.022	61.002	60.983	60.964	60.945
0.0318	60.926	60.907	60.887	60.868	60.849	60.830	60.811	60.792	60.773	60.754
0.0319	60.735	60.716	60.697	60.678	60.659	60.640	60.621	60.602	60.583	60.564
0.0320	60.545	60.526	60.507	60.488	60.469	60.451	60.432	60.413	60.394	60.375
0.0321	60.356	60.338	60.319	60.300	60.281	60.263	60.244	60.225	60.206	60.188
0.0322	60.169	60.150	60.132	60.113	60.094	60.076	60.057	60.038	60.020	60.001
0.0323	59.983	59.964	59.946	59.927	59.909	59.890	59.872	59.853	59.835	59.816
0.0324	59.798	59.779	59.761	59.742	59.724	59.705	59.687	59.669	59.650	59.632
0.0325	59.614	59.595	59.577	59.559	59.540	59.522	59.504	59.486	59.467	59.449
0.0326	59.431	59.413	59.394	59.376	59.358	59.340	59.322	59.303	59.285	59.267
0.0327	59.249	59.231	59.213	59.195	59.177	59.159	59.141	59.122	59.104	59.086
0.0328	59.068	59.050	59.032	59.014	58.996	58.979	58.961	58.943	58.925	58.907
0.0329	58.889	58.871	58.853	58.835	58.817	58.800	58.782	58.764	58.746	58.728
0.0330	58.710	58.693	58.675	58.657	58.639	58.622	58.604	58.586	58.568	58.551
0.0331	58.533	58.515	58.498	58.480	58.462	58.445	58.427	58.410	58.392	58.374
0.0332	58.357	58.339	58.322	58.304	58.287	58.269	58.252	58.234	58.217	58.199
0.0333	58.182	58.164	58.147	58.129	58.112	58.094	58.077	58.060	58.042	58.025
0.0334	58.007	57.990	57.973	57.955	57.938	57.921	57.903	57.886	57.869	57.852
0.0335	57.834	57.817	57.800	57.783	57.765	57.748	57.731	57.714	57.696	57.679
0.0336	57.662	57.645	57.628	57.611	57.594	57.576	57.559	57.542	57.525	57.508
0.0337	57.491	57.474	57.457	57.440	57.423	57.406	57.389	57.372	57.355	57.338
0.0338	57.321	57.304	57.287	57.270	57.253	57.236	57.219	57.203	57.186	57.169
0.0339	57.152	57.135	57.118	57.101	57.085	57.068	57.051	57.034	57.017	57.001
0.0340	56.984	56.967	56.950	56.934	56.917	56.900	56.883	56.867	56.850	56.833
0.0341	56.817	56.800	56.783	56.767	56.750	56.734	56.717	56.700	56.684	56.667
0.0342	56.651	56.634	56.618	56.601	56.584	56.568	56.551	56.535	56.518	56.502
0.0343	56.485	56.469	56.453	56.436	56.420	56.403	56.387	56.370	56.354	56.338
0.0344	56.321	56.305	56.289	56.272	56.256	56.240	56.223	56.207	56.191	56.174
0.0345	56.158	56.142	56.126	56.109	56.093	56.077	56.061	56.044	56.028	56.012
0.0346	55.996	55.980	55.963	55.947	55.931	55.915	55.899	55.883	55.867	55.851
0.0347	55.834	55.818	55.802	55.786	55.770	55.754	55.738	55.722	55.706	55.690
0.0348	55.674	55.658	55.642	55.626	55.610	55.594	55.578	55.562	55.546	55.530
0.0349	55.514	55.499	55.483	55.467	55.451	55.435	55.419	55.403	55.388	55.372

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0.0350	55.356	55.340	55.324	55.308	55.293	55.277	55.261	55.245	55.230	55.214
0.0351	55.198	55.182	55.167	55.151	55.135	55.120	55.104	55.088	55.073	55.057
0.0352	55.041	55.026	55.010	54.995	54.979	54.963	54.948	54.932	54.917	54.901
0.0353	54.885	54.870	54.854	54.839	54.823	54.808	54.792	54.777	54.761	54.746
0.0354	54.730	54.715	54.700	54.684	54.669	54.653	54.638	54.622	54.607	54.592
0.0355	54.576	54.561	54.546	54.530	54.515	54.500	54.484	54.469	54.454	54.438
0.0356	54.423	54.408	54.392	54.377	54.362	54.347	54.331	54.316	54.301	54.286
0.0357	54.271	54.255	54.240	54.225	54.210	54.195	54.180	54.164	54.149	54.134
0.0358	54.119	54.104	54.089	54.074	54.059	54.044	54.028	54.013	53.998	53.983
0.0359	53.968	53.953	53.938	53.923	53.908	53.893	53.878	53.863	53.848	53.833
0.0360	53.818	53.803	53.789	53.774	53.759	53.744	53.729	53.714	53.699	53.684
0.0361	53.669	53.654	53.640	53.625	53.610	53.595	53.580	53.565	53.551	53.536
0.0362	53.521	53.506	53.492	53.477	53.462	53.447	53.433	53.418	53.403	53.388
0.0363	53.374	53.359	53.344	53.330	53.315	53.300	53.286	53.271	53.256	53.242
0.0364	53.227	53.212	53.198	53.183	53.169	53.154	53.139	53.125	53.110	53.096
0.0365	53.081	53.067	53.052	53.038	53.023	53.009	52.994	52.980	52.965	52.951
0.0366	52.936	52.922	52.907	52.893	52.878	52.864	52.850	52.835	52.821	52.806
0.0367	52.792	52.778	52.763	52.749	52.735	52.720	52.706	52.692	52.677	52.663
0.0368	52.649	52.634	52.620	52.606	52.591	52.577	52.563	52.549	52.534	52.520
0.0369	52.506	52.492	52.477	52.463	52.449	52.435	52.421	52.406	52.392	52.378
0.0370	52.364	52.350	52.336	52.322	52.307	52.293	52.279	52.265	52.251	52.237
0.0371	52.223	52.209	52.195	52.181	52.167	52.153	52.139	52.125	52.111	52.097
0.0372	52.082	52.069	52.055	52.041	52.027	52.013	51.999	51.985	51.971	51.957
0.0373	51.943	51.929	51.915	51.901	51.887	51.873	51.859	51.846	51.832	51.818
0.0374	51.804	51.790	51.776	51.763	51.749	51.735	51.721	51.707	51.693	51.680
0.0375	51.666	51.652	51.638	51.625	51.611	51.597	51.583	51.570	51.556	51.542
0.0376	51.528	51.515	51.501	51.487	51.474	51.460	51.446	51.433	51.419	51.405
0.0377	51.392	51.378	51.365	51.351	51.337	51.324	51.310	51.297	51.283	51.269
0.0378	51.256	51.242	51.229	51.215	51.202	51.188	51.175	51.161	51.148	51.134
0.0379	51.121	51.107	51.094	51.080	51.067	51.053	51.040	51.026	51.013	51.000
0.0380	50.986	50.973	50.959	50.946	50.933	50.919	50.906	50.892	50.879	50.866
0.0381	50.852	50.839	50.826	50.812	50.799	50.786	50.772	50.759	50.746	50.733
0.0382	50.719	50.706	50.693	50.679	50.666	50.653	50.640	50.626	50.613	50.600
0.0383	50.587	50.574	50.560	50.547	50.534	50.521	50.508	50.495	50.481	50.468
0.0384	50.455	50.442	50.429	50.416	50.403	50.390	50.376	50.363	50.350	50.337
0.0385	50.324	50.311	50.298	50.285	50.272	50.259	50.246	50.233	50.220	50.207
0.0386	50.194	50.181	50.168	50.155	50.142	50.129	50.116	50.103	50.090	50.077
0.0387	50.064	50.051	50.038	50.025	50.012	49.999	49.987	49.974	49.961	49.948
0.0388	49.935	49.922	49.909	49.896	49.884	49.871	49.858	49.845	49.832	49.819
0.0389	49.807	49.794	49.781	49.768	49.756	49.743	49.730	49.717	49.704	49.692
0.0390	49.679	49.666	49.654	49.641	49.628	49.615	49.603	49.590	49.577	49.565
0.0391	49.552	49.539	49.527	49.514	49.501	49.489	49.476	49.463	49.451	49.438
0.0392	49.426	49.413	49.400	49.388	49.375	49.363	49.350	49.337	49.325	49.312
0.0393	49.300	49.287	49.275	49.262	49.250	49.237	49.225	49.212	49.200	49.187
0.0394	49.175	49.162	49.150	49.137	49.125	49.112	49.100	49.087	49.075	49.063
0.0395	49.050	49.038	49.025	49.013	49.001	48.988	48.976	48.963	48.951	48.939
0.0396	48.926	48.914	48.902	48.889	48.877	48.865	48.852	48.840	48.828	48.815
0.0397	48.803	48.791	48.779	48.766	48.754	48.742	48.730	48.717	48.705	48.693
0.0398	48.681	48.668	48.656	48.644	48.632	48.619	48.607	48.595	48.583	48.571
0.0399	48.559	48.546	48.534	48.522	48.510	48.498	48.486	48.474	48.461	48.449

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0.0400	48.437	48.425	48.413	48.401	48.389	48.377	48.365	48.353	48.340	48.328
0.0401	48.316	48.304	48.292	48.280	48.268	48.256	48.244	48.232	48.220	48.208
0.0402	48.196	48.184	48.172	48.160	48.148	48.136	48.124	48.112	48.101	48.089
0.0403	48.077	48.065	48.053	48.041	48.029	48.017	48.005	47.993	47.981	47.970
0.0404	47.958	47.946	47.934	47.922	47.910	47.898	47.887	47.875	47.863	47.851
0.0405	47.839	47.827	47.816	47.804	47.792	47.780	47.768	47.757	47.745	47.733
0.0406	47.721	47.710	47.698	47.686	47.674	47.663	47.651	47.639	47.628	47.616
0.0407	47.604	47.593	47.581	47.569	47.557	47.546	47.534	47.522	47.511	47.499
0.0408	47.488	47.476	47.464	47.453	47.441	47.429	47.418	47.406	47.395	47.383
0.0409	47.371	47.360	47.348	47.337	47.325	47.314	47.302	47.291	47.279	47.267
0.0410	47.256	47.244	47.233	47.221	47.210	47.198	47.187	47.175	47.164	47.152
0.0411	47.141	47.130	47.118	47.107	47.095	47.084	47.072	47.061	47.049	47.038
0.0412	47.027	47.015	47.004	46.992	46.981	46.970	46.958	46.947	46.935	46.924
0.0413	46.913	46.901	46.890	46.879	46.867	46.856	46.845	46.833	46.822	46.811
0.0414	46.799	46.788	46.777	46.766	46.754	46.743	46.732	46.720	46.709	46.698
0.0415	46.687	46.675	46.664	46.653	46.642	46.630	46.619	46.608	46.597	46.586
0.0416	46.574	46.563	46.552	46.541	46.530	46.519	46.507	46.496	46.485	46.474
0.0417	46.463	46.452	46.441	46.429	46.418	46.407	46.396	46.385	46.374	46.363
0.0418	46.352	46.341	46.329	46.318	46.307	46.296	46.285	46.274	46.263	46.252
0.0419	46.241	46.230	46.219	46.208	46.197	46.186	46.175	46.164	46.153	46.142
0.0420	46.131	46.120	46.109	46.098	46.087	46.076	46.065	46.054	46.043	46.032
0.0421	46.021	46.010	46.000	45.989	45.978	45.967	45.956	45.945	45.934	45.923
0.0422	45.912	45.901	45.891	45.880	45.869	45.858	45.847	45.836	45.825	45.815
0.0423	45.804	45.793	45.782	45.771	45.761	45.750	45.739	45.728	45.717	45.707
0.0424	45.696	45.685	45.674	45.664	45.653	45.642	45.631	45.621	45.610	45.599
0.0425	45.588	45.578	45.567	45.556	45.545	45.535	45.524	45.513	45.503	45.492
0.0426	45.481	45.471	45.460	45.449	45.439	45.428	45.417	45.407	45.396	45.385
0.0427	45.375	45.364	45.354	45.343	45.332	45.322	45.311	45.301	45.290	45.279
0.0428	45.269	45.258	45.248	45.237	45.227	45.216	45.205	45.195	45.184	45.174
0.0429	45.163	45.153	45.142	45.132	45.121	45.111	45.100	45.090	45.079	45.069
0.0430	45.058	45.048	45.037	45.027	45.016	45.006	44.996	44.985	44.975	44.964
0.0431	44.954	44.943	44.933	44.923	44.912	44.902	44.891	44.881	44.870	44.860
0.0432	44.850	44.839	44.829	44.819	44.808	44.798	44.788	44.777	44.767	44.756
0.0433	44.746	44.736	44.726	44.715	44.705	44.695	44.684	44.674	44.664	44.653
0.0434	44.643	44.633	44.623	44.612	44.602	44.592	44.581	44.571	44.561	44.551
0.0435	44.540	44.530	44.520	44.510	44.500	44.489	44.479	44.469	44.459	44.449
0.0436	44.438	44.428	44.418	44.408	44.398	44.387	44.377	44.367	44.357	44.347
0.0437	44.337	44.327	44.316	44.306	44.296	44.286	44.276	44.266	44.256	44.246
0.0438	44.235	44.225	44.215	44.205	44.195	44.185	44.175	44.165	44.155	44.145
0.0439	44.135	44.125	44.115	44.105	44.095	44.084	44.074	44.064	44.054	44.044
0.0440	44.034	44.024	44.014	44.004	43.994	43.984	43.974	43.964	43.955	43.945
0.0441	43.935	43.925	43.915	43.905	43.895	43.885	43.875	43.865	43.855	43.845
0.0442	43.835	43.825	43.815	43.805	43.796	43.786	43.776	43.766	43.756	43.746
0.0443	43.736	43.726	43.717	43.707	43.697	43.687	43.677	43.667	43.657	43.648
0.0444	43.638	43.628	43.618	43.608	43.598	43.589	43.579	43.569	43.559	43.550
0.0445	43.540	43.530	43.520	43.510	43.501	43.491	43.481	43.471	43.462	43.452
0.0446	43.442	43.432	43.423	43.413	43.403	43.393	43.384	43.374	43.364	43.355
0.0447	43.345	43.335	43.326	43.316	43.306	43.297	43.287	43.277	43.268	43.258
0.0448	43.248	43.239	43.229	43.219	43.210	43.200	43.190	43.181	43.171	43.162
0.0449	43.152	43.142	43.133	43.123	43.113	43.104	43.094	43.085	43.075	43.066

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0.0450	43.056	43.046	43.037	43.027	43.018	43.008	42.999	42.989	42.980	42.970
0.0451	42.961	42.951	42.942	42.932	42.923	42.913	42.904	42.894	42.885	42.875
0.0452	42.866	42.856	42.847	42.837	42.828	42.818	42.809	42.799	42.790	42.780
0.0453	42.771	42.761	42.752	42.743	42.733	42.724	42.714	42.705	42.696	42.686
0.0454	42.677	42.667	42.658	42.649	42.639	42.630	42.620	42.611	42.602	42.592
0.0455	42.583	42.574	42.564	42.555	42.546	42.536	42.527	42.518	42.508	42.499
0.0456	42.490	42.480	42.471	42.462	42.452	42.443	42.434	42.424	42.415	42.406
0.0457	42.397	42.387	42.378	42.369	42.360	42.350	42.341	42.332	42.323	42.313
0.0458	42.304	42.295	42.286	42.276	42.267	42.258	42.249	42.240	42.230	42.221
0.0459	42.212	42.203	42.194	42.184	42.175	42.166	42.157	42.148	42.139	42.129
0.0460	42.120	42.111	42.102	42.093	42.084	42.074	42.065	42.056	42.047	42.038
0.0461	42.029	42.020	42.011	42.002	41.992	41.983	41.974	41.965	41.956	41.947
0.0462	41.938	41.929	41.920	41.911	41.902	41.893	41.883	41.874	41.865	41.856
0.0463	41.847	41.838	41.829	41.820	41.811	41.802	41.793	41.784	41.775	41.766
0.0464	41.757	41.748	41.739	41.730	41.721	41.712	41.703	41.694	41.685	41.676
0.0465	41.667	41.658	41.649	41.640	41.632	41.623	41.614	41.605	41.596	41.587
0.0466	41.578	41.569	41.560	41.551	41.542	41.533	41.525	41.516	41.507	41.498
0.0467	41.489	41.480	41.471	41.462	41.453	41.445	41.436	41.427	41.418	41.409
0.0468	41.400	41.391	41.383	41.374	41.365	41.356	41.347	41.338	41.330	41.321
0.0469	41.312	41.303	41.294	41.286	41.277	41.268	41.259	41.250	41.242	41.233
0.0470	41.224	41.215	41.207	41.198	41.189	41.180	41.172	41.163	41.154	41.145
0.0471	41.137	41.128	41.119	41.110	41.102	41.093	41.084	41.076	41.067	41.058
0.0472	41.050	41.041	41.032	41.023	41.015	41.006	40.997	40.989	40.980	40.971
0.0473	40.963	40.954	40.945	40.937	40.928	40.920	40.911	40.902	40.894	40.885
0.0474	40.876	40.868	40.859	40.850	40.842	40.833	40.825	40.816	40.807	40.799
0.0475	40.790	40.782	40.773	40.765	40.756	40.747	40.739	40.730	40.722	40.713
0.0476	40.705	40.696	40.688	40.679	40.670	40.662	40.653	40.645	40.636	40.628
0.0477	40.619	40.611	40.602	40.594	40.585	40.577	40.568	40.560	40.551	40.543
0.0478	40.534	40.526	40.517	40.509	40.500	40.492	40.484	40.475	40.467	40.458
0.0479	40.450	40.441	40.433	40.424	40.416	40.408	40.399	40.391	40.382	40.374
0.0480	40.365	40.357	40.349	40.340	40.332	40.323	40.315	40.307	40.298	40.290
0.0481	40.282	40.273	40.265	40.256	40.248	40.240	40.231	40.223	40.215	40.206
0.0482	40.198	40.190	40.181	40.173	40.165	40.156	40.148	40.140	40.131	40.123
0.0483	40.115	40.107	40.098	40.090	40.082	40.073	40.065	40.057	40.049	40.040
0.0484	40.032	40.024	40.015	40.007	39.999	39.991	39.982	39.974	39.966	39.958
0.0485	39.949	39.941	39.933	39.925	39.917	39.908	39.900	39.892	39.884	39.875
0.0486	39.867	39.859	39.851	39.843	39.834	39.826	39.818	39.810	39.802	39.794
0.0487	39.785	39.777	39.769	39.761	39.753	39.745	39.736	39.728	39.720	39.712
0.0488	39.704	39.696	39.688	39.680	39.671	39.663	39.655	39.647	39.639	39.631
0.0489	39.623	39.615	39.607	39.598	39.590	39.582	39.574	39.566	39.558	39.550
0.0490	39.542	39.534	39.526	39.518	39.510	39.502	39.494	39.485	39.477	39.469
0.0491	39.461	39.453	39.445	39.437	39.429	39.421	39.413	39.405	39.397	39.389
0.0492	39.381	39.373	39.365	39.357	39.349	39.341	39.333	39.325	39.317	39.309
0.0493	39.301	39.293	39.285	39.277	39.269	39.261	39.254	39.246	39.238	39.230
0.0494	39.222	39.214	39.206	39.198	39.190	39.182	39.174	39.166	39.158	39.150
0.0495	39.143	39.135	39.127	39.119	39.111	39.103	39.095	39.087	39.079	39.072
0.0496	39.064	39.056	39.048	39.040	39.032	39.024	39.016	39.009	39.001	38.993
0.0497	38.985	38.977	38.969	38.962	38.954	38.946	38.938	38.930	38.922	38.915
0.0498	38.907	38.899	38.891	38.883	38.876	38.868	38.860	38.852	38.844	38.837
0.0499	38.829	38.821	38.813	38.806	38.798	38.790	38.782	38.774	38.767	38.759

Table 8
Chromium $K\alpha$ Radiation
 2θ in Radian
 $\lambda = 2.291002 \text{ \AA}^*$

2θ, RAD.	0	1	2	3	4	5	6	7	8	9
0.0000				76367.	57275.	45820.	38183.	32729.	28638.	25456.
0.0001	22910.	20827.	19092.	17623.	16364.	15273.	14319.	13476.	12728.	12058.
0.0002	11455.	10910.	10414.	9961.	9546.	9164.	8812.	8485.	8182.	7900.
0.0003	7636.7	7390.3	7159.4	6942.4	6738.2	6545.7	6363.9	6191.9	6029.0	5874.4
0.0004	5727.5	5587.8	5454.8	5327.9	5206.8	5091.1	4980.4	4874.5	4772.9	4675.5
0.0005	4582.0	4492.2	4405.8	4322.6	4242.6	4165.5	4091.1	4019.3	3950.0	3883.1
0.0006	3818.3	3755.7	3695.2	3636.5	3579.7	3524.6	3471.2	3419.4	3369.1	3320.3
0.0007	3272.9	3226.8	3181.9	3138.4	3095.9	3054.7	3014.5	2975.3	2937.2	2900.0
0.0008	2863.8	2828.4	2793.9	2760.2	2727.4	2695.3	2664.0	2633.3	2603.4	2574.2
0.0009	2545.6	2517.6	2490.2	2463.4	2437.2	2411.6	2386.5	2361.9	2337.8	2314.1
0.0010	2291.0	2268.3	2246.1	2224.3	2202.9	2181.9	2161.3	2141.1	2121.3	2101.8
0.0011	2082.7	2064.0	2045.5	2027.4	2009.7	1992.2	1975.0	1958.1	1941.5	1925.2
0.0012	1909.2	1893.4	1877.9	1862.6	1847.6	1832.8	1818.3	1803.9	1789.8	1776.0
0.0013	1762.3	1748.9	1735.6	1722.6	1709.7	1697.0	1684.6	1672.3	1660.1	1648.2
0.0014	1636.4	1624.8	1613.4	1602.1	1591.0	1580.0	1569.2	1558.5	1548.0	1537.6
0.0015	1527.3	1517.2	1507.2	1497.4	1487.7	1478.1	1468.6	1459.2	1450.0	1440.9
0.0016	1431.9	1423.0	1414.2	1405.5	1397.0	1388.5	1380.1	1371.9	1363.7	1355.6
0.0017	1347.6	1339.8	1332.0	1324.3	1316.7	1309.1	1301.7	1294.4	1287.1	1279.9
0.0018	1272.8	1265.7	1258.8	1251.9	1245.1	1238.4	1231.7	1225.1	1218.6	1212.2
0.0019	1205.8	1199.5	1193.2	1187.0	1180.9	1174.9	1168.9	1162.9	1157.1	1151.3
0.0020	1145.5	1139.8	1134.2	1128.6	1123.0	1117.6	1112.1	1106.8	1101.4	1096.2
0.0021	1091.0	1085.8	1080.7	1075.6	1070.6	1065.6	1060.6	1055.8	1050.9	1046.1
0.0022	1041.4	1036.7	1032.0	1027.4	1022.8	1018.2	1013.7	1009.3	1004.8	1000.4
0.0023	996.09	991.78	987.50	983.26	979.06	974.89	970.76	966.67	962.61	958.58
0.0024	954.58	950.62	946.70	942.80	938.94	935.10	931.30	927.53	923.79	920.08
0.0025	916.40	912.75	909.13	905.53	901.97	898.43	894.92	891.44	887.99	884.56
0.0026	881.15	877.78	874.43	871.10	867.80	864.53	861.28	858.05	854.85	851.67
0.0027	848.52	845.39	842.28	839.20	836.13	833.09	830.07	827.08	824.10	821.15
0.0028	818.22	815.30	812.41	809.54	806.69	803.86	801.05	798.26	795.49	792.73
0.0029	790.00	787.29	784.59	781.91	779.25	776.61	773.99	771.38	768.79	766.22
0.0030	763.67	761.13	758.61	756.11	753.62	751.15	748.69	746.26	743.83	741.43
0.0031	739.03	736.66	734.30	731.95	729.62	727.30	725.00	722.71	720.44	718.18
0.0032	715.94	713.71	711.49	709.29	707.10	704.92	702.76	700.61	698.48	696.35
0.0033	694.24	692.15	690.06	687.99	685.93	683.88	681.85	679.82	677.81	675.81
0.0034	673.82	671.85	669.88	667.93	665.99	664.06	662.14	660.23	658.33	656.45
0.0035	654.57	652.71	650.85	649.01	647.18	645.35	643.54	641.74	639.95	638.16
0.0036	636.39	634.63	632.87	631.13	629.40	627.67	625.96	624.25	622.56	620.87
0.0037	619.19	617.52	615.86	614.21	612.57	610.93	609.31	607.69	606.09	604.49
0.0038	602.90	601.31	599.74	598.17	596.62	595.07	593.52	591.99	590.46	588.95
0.0039	587.44	585.93	584.44	582.95	581.47	580.00	578.54	577.08	575.63	574.19
0.0040	572.75	571.32	569.90	568.49	567.08	565.68	564.29	562.90	561.52	560.15
0.0041	558.78	557.42	556.07	554.72	553.38	552.05	550.72	549.40	548.09	546.78
0.0042	545.48	544.18	542.89	541.61	540.33	539.06	537.79	536.53	535.28	534.03
0.0043	532.79	531.56	530.33	529.10	527.88	526.67	525.46	524.26	523.06	521.87
0.0044	520.68	519.50	518.33	517.16	515.99	514.83	513.68	512.53	511.38	510.25
0.0045	509.11	507.98	506.86	505.74	504.63	503.52	502.41	501.31	500.22	499.13
0.0046	498.04	496.96	495.89	494.82	493.75	492.69	491.63	490.58	489.53	488.49
0.0047	487.45	486.41	485.38	484.36	483.33	482.32	481.30	480.29	479.29	478.29
0.0048	477.29	476.30	475.31	474.33	473.35	472.37	471.40	470.43	469.47	468.51
0.0049	467.55	466.60	465.65	464.71	463.77	462.83	461.90	460.97	460.04	459.12

2θ, RAD.	0	1	2	3	4	5	6	7	8	9
0.0050	458.20	457.29	456.38	455.47	454.56	453.66	452.77	451.87	450.99	450.10
0.0051	449.22	448.34	447.46	446.59	445.72	444.86	443.99	443.13	442.28	441.43
0.0052	440.58	439.73	438.89	438.05	437.21	436.38	435.55	434.73	433.90	433.08
0.0053	432.27	431.45	430.64	429.83	429.03	428.23	427.43	426.63	425.84	425.05
0.0054	424.26	423.48	422.69	421.92	421.14	420.37	419.60	418.83	418.07	417.31
0.0055	416.55	415.79	415.04	414.29	413.54	412.79	412.05	411.31	410.57	409.84
0.0056	409.11	408.38	407.65	406.93	406.21	405.49	404.77	404.06	403.35	402.64
0.0057	401.93	401.23	400.53	399.83	399.13	398.44	397.74	397.05	396.37	395.68
0.0058	395.00	394.32	393.64	392.97	392.30	391.62	390.96	390.29	389.63	388.97
0.0059	388.31	387.65	386.99	386.34	385.69	385.04	384.40	383.75	383.11	382.47
0.0060	381.83	381.20	380.57	379.93	379.31	378.68	378.05	377.43	376.81	376.19
0.0061	375.57	374.96	374.35	373.74	373.13	372.52	371.92	371.31	370.71	370.11
0.0062	369.52	368.92	368.33	367.74	367.15	366.56	365.98	365.39	364.81	364.23
0.0063	363.65	363.08	362.50	361.93	361.36	360.79	360.22	359.66	359.09	358.53
0.0064	357.97	357.41	356.85	356.30	355.75	355.19	354.65	354.10	353.55	353.01
0.0065	352.46	351.92	351.38	350.84	350.31	349.77	349.24	348.71	348.18	347.65
0.0066	347.12	346.60	346.07	345.55	345.03	344.51	344.00	343.48	342.97	342.45
0.0067	341.94	341.43	340.92	340.42	339.91	339.41	338.91	338.41	337.91	337.41
0.0068	336.91	336.42	335.92	335.43	334.94	334.45	333.97	333.48	333.00	332.51
0.0069	332.03	331.55	331.07	330.59	330.12	329.64	329.17	328.70	328.22	327.76
0.0070	327.29	326.82	326.35	325.89	325.43	324.97	324.51	324.05	323.59	323.13
0.0071	322.68	322.22	321.77	321.32	320.87	320.42	319.97	319.53	319.08	318.64
0.0072	318.20	317.75	317.31	316.88	316.44	316.00	315.57	315.13	314.70	314.27
0.0073	313.84	313.41	312.98	312.55	312.13	311.70	311.28	310.86	310.43	310.01
0.0074	309.60	309.18	308.76	308.35	307.93	307.52	307.11	306.69	306.28	305.88
0.0075	305.47	305.06	304.66	304.25	303.85	303.44	303.04	302.64	302.24	301.85
0.0076	301.45	301.05	300.66	300.26	299.87	299.48	299.09	298.70	298.31	297.92
0.0077	297.53	297.15	296.76	296.38	296.00	295.61	295.23	294.85	294.47	294.10
0.0078	293.72	293.34	292.97	292.59	292.22	291.85	291.48	291.11	290.74	290.37
0.0079	290.00	289.63	289.27	288.90	288.54	288.18	287.82	287.45	287.09	286.73
0.0080	286.38	286.02	285.66	285.31	284.95	284.60	284.24	283.89	283.54	283.19
0.0081	282.84	282.49	282.14	281.80	281.45	281.11	280.76	280.42	280.07	279.73
0.0082	279.39	279.05	278.71	278.37	278.04	277.70	277.36	277.03	276.69	276.36
0.0083	276.03	275.69	275.36	275.03	274.70	274.37	274.04	273.72	273.39	273.06
0.0084	272.74	272.41	272.09	271.77	271.45	271.13	270.80	270.49	270.17	269.85
0.0085	269.53	269.21	268.90	268.58	268.27	267.95	267.64	267.33	267.02	266.71
0.0086	266.40	266.09	265.78	265.47	265.16	264.86	264.55	264.25	263.94	263.64
0.0087	263.33	263.03	262.73	262.43	262.13	261.83	261.53	261.23	260.94	260.64
0.0088	260.34	260.05	259.75	259.46	259.16	258.87	258.58	258.29	258.00	257.71
0.0089	257.42	257.13	256.84	256.55	256.27	255.98	255.69	255.41	255.12	254.84
0.0090	254.56	254.27	253.99	253.71	253.43	253.15	252.87	252.59	252.31	252.04
0.0091	251.76	251.48	251.21	250.93	250.66	250.38	250.11	249.84	249.57	249.29
0.0092	249.02	248.75	248.48	248.21	247.94	247.68	247.41	247.14	246.88	246.61
0.0093	246.35	246.08	245.82	245.55	245.29	245.03	244.77	244.50	244.24	243.98
0.0094	243.72	243.47	243.21	242.95	242.69	242.44	242.18	241.92	241.67	241.41
0.0095	241.16	240.91	240.65	240.40	240.15	239.90	239.65	239.40	239.15	238.90
0.0096	238.65	238.40	238.15	237.90	237.66	237.41	237.16	236.92	236.67	236.43
0.0097	236.19	235.94	235.70	235.46	235.22	234.98	234.73	234.49	234.25	234.02
0.0098	233.78	233.54	233.30	233.06	232.83	232.59	232.35	232.12	231.88	231.65
0.0099	231.42	231.18	230.95	230.72	230.48	230.25	230.02	229.79	229.56	229.33

2θ, RAD.	0	1	2	3	4	5	6	7	8	9
0.0100	229.10	228.87	228.64	228.42	228.19	227.96	227.73	227.51	227.28	227.06
0.0101	226.83	226.61	226.38	226.16	225.94	225.72	225.49	225.27	225.05	224.83
0.0102	224.61	224.39	224.17	223.95	223.73	223.51	223.30	223.08	222.86	222.64
0.0103	222.43	222.21	222.00	221.78	221.57	221.35	221.14	220.93	220.71	220.50
0.0104	220.29	220.08	219.87	219.66	219.45	219.24	219.03	218.82	218.61	218.40
0.0105	218.19	217.98	217.78	217.57	217.36	217.16	216.95	216.75	216.54	216.34
0.0106	216.13	215.93	215.73	215.52	215.32	215.12	214.92	214.72	214.51	214.31
0.0107	214.11	213.91	213.71	213.51	213.32	213.12	212.92	212.72	212.52	212.33
0.0108	212.13	211.93	211.74	211.54	211.35	211.15	210.96	210.76	210.57	210.38
0.0109	210.18	209.99	209.80	209.61	209.42	209.23	209.03	208.84	208.65	208.46
0.0110	208.27	208.08	207.90	207.71	207.52	207.33	207.14	206.96	206.77	206.58
0.0111	206.40	206.21	206.03	205.84	205.66	205.47	205.29	205.10	204.92	204.74
0.0112	204.55	204.37	204.19	204.01	203.83	203.65	203.46	203.28	203.10	202.92
0.0113	202.74	202.57	202.39	202.21	202.03	201.85	201.67	201.50	201.32	201.14
0.0114	200.97	200.79	200.61	200.44	200.26	200.09	199.91	199.74	199.57	199.39
0.0115	199.22	199.05	198.87	198.70	198.53	198.36	198.18	198.01	197.84	197.67
0.0116	197.50	197.33	197.16	196.99	196.82	196.65	196.49	196.32	196.15	195.98
0.0117	195.81	195.65	195.48	195.31	195.15	194.98	194.81	194.65	194.48	194.32
0.0118	194.15	193.99	193.83	193.66	193.50	193.33	193.17	193.01	192.85	192.68
0.0119	192.52	192.36	192.20	192.04	191.88	191.72	191.56	191.40	191.24	191.08
0.0120	190.92	190.76	190.60	190.44	190.28	190.13	189.97	189.81	189.65	189.50
0.0121	189.34	189.18	189.03	188.87	188.72	188.56	188.41	188.25	188.10	187.94
0.0122	187.79	187.63	187.48	187.33	187.17	187.02	186.87	186.72	186.56	186.41
0.0123	186.26	186.11	185.96	185.81	185.66	185.51	185.36	185.21	185.06	184.91
0.0124	184.76	184.61	184.46	184.31	184.17	184.02	183.87	183.72	183.58	183.43
0.0125	183.28	183.13	182.99	182.84	182.70	182.55	182.41	182.26	182.12	181.97
0.0126	181.83	181.68	181.54	181.39	181.25	181.11	180.97	180.82	180.68	180.54
0.0127	180.40	180.25	180.11	179.97	179.83	179.69	179.55	179.41	179.27	179.13
0.0128	178.99	178.85	178.71	178.57	178.43	178.29	178.15	178.01	177.87	177.74
0.0129	177.60	177.46	177.32	177.19	177.05	176.91	176.78	176.64	176.50	176.37
0.0130	176.23	176.10	175.96	175.83	175.69	175.56	175.42	175.29	175.15	175.02
0.0131	174.89	174.75	174.62	174.49	174.35	174.22	174.09	173.96	173.83	173.69
0.0132	173.56	173.43	173.30	173.17	173.04	172.91	172.78	172.65	172.52	172.39
0.0133	172.26	172.13	172.00	171.87	171.74	171.61	171.48	171.36	171.23	171.10
0.0134	170.97	170.84	170.72	170.59	170.46	170.34	170.21	170.08	169.96	169.83
0.0135	169.71	169.58	169.45	169.33	169.20	169.08	168.95	168.83	168.71	168.58
0.0136	168.46	168.33	168.21	168.09	167.96	167.84	167.72	167.59	167.47	167.35
0.0137	167.23	167.11	166.98	166.86	166.74	166.62	166.50	166.38	166.26	166.14
0.0138	166.02	165.90	165.78	165.66	165.54	165.42	165.30	165.18	165.06	164.94
0.0139	164.82	164.70	164.58	164.47	164.35	164.23	164.11	164.00	163.88	163.76
0.0140	163.64	163.53	163.41	163.29	163.18	163.06	162.95	162.83	162.71	162.60
0.0141	162.48	162.37	162.25	162.14	162.02	161.91	161.80	161.68	161.57	161.45
0.0142	161.34	161.23	161.11	161.00	160.89	160.77	160.66	160.55	160.44	160.32
0.0143	160.21	160.10	159.99	159.88	159.76	159.65	159.54	159.43	159.32	159.21
0.0144	159.10	158.99	158.88	158.77	158.66	158.55	158.44	158.33	158.22	158.11
0.0145	158.00	157.89	157.78	157.68	157.57	157.46	157.35	157.24	157.13	157.03
0.0146	156.92	156.81	156.70	156.60	156.49	156.38	156.28	156.17	156.06	155.96
0.0147	155.85	155.75	155.64	155.53	155.43	155.32	155.22	155.11	155.01	154.90
0.0148	154.80	154.69	154.59	154.49	154.38	154.28	154.17	154.07	153.97	153.86
0.0149	153.76	153.66	153.55	153.45	153.35	153.25	153.14	153.04	152.94	152.84

2θ, RAD,	0	1	2	3	4	5	6	7	8	9
0.0150	152.73	152.63	152.53	152.43	152.33	152.23	152.13	152.03	151.92	151.82
0.0151	151.72	151.62	151.52	151.42	151.32	151.22	151.12	151.02	150.92	150.82
0.0152	150.73	150.63	150.53	150.43	150.33	150.23	150.13	150.03	149.94	149.84
0.0153	149.74	149.64	149.54	149.45	149.35	149.25	149.16	149.06	148.96	148.86
0.0154	148.77	148.67	148.57	148.48	148.38	148.29	148.19	148.09	148.00	147.90
0.0155	147.81	147.71	147.62	147.52	147.43	147.33	147.24	147.14	147.05	146.95
0.0156	146.84	146.77	146.67	146.58	146.49	146.39	146.30	146.20	146.11	146.02
0.0157	145.93	145.83	145.74	145.65	145.55	145.46	145.37	145.28	145.19	145.09
0.0158	145.00	144.91	144.82	144.73	144.64	144.54	144.45	144.36	144.27	144.18
0.0159	144.09	144.00	143.91	143.82	143.73	143.64	143.55	143.46	143.37	143.28
0.0160	143.19	143.10	143.01	142.92	142.83	142.74	142.65	142.57	142.48	142.39
0.0161	142.30	142.21	142.12	142.04	141.95	141.86	141.77	141.68	141.60	141.51
0.0162	141.42	141.33	141.25	141.16	141.07	140.99	140.90	140.81	140.73	140.64
0.0163	140.55	140.47	140.38	140.30	140.21	140.12	140.04	139.95	139.87	139.78
0.0164	139.70	139.61	139.53	139.44	139.36	139.27	139.19	139.10	139.02	138.93
0.0165	138.85	138.77	138.68	138.60	138.51	138.43	138.35	138.26	138.18	138.10
0.0166	138.01	137.93	137.85	137.76	137.68	137.60	137.52	137.43	137.35	137.27
0.0167	137.19	137.11	137.02	136.94	136.86	136.78	136.70	136.61	136.53	136.45
0.0168	136.37	136.29	136.21	136.13	136.05	135.97	135.89	135.81	135.72	135.64
0.0169	135.56	135.48	135.40	135.32	135.24	135.16	135.08	135.00	134.93	134.85
0.0170	134.77	134.69	134.61	134.53	134.45	134.37	134.29	134.21	134.14	134.06
0.0171	133.98	133.90	133.82	133.74	133.67	133.59	133.51	133.43	133.35	133.28
0.0172	133.20	133.12	133.04	132.97	132.89	132.81	132.74	132.66	132.58	132.51
0.0173	132.43	132.35	132.28	132.20	132.12	132.05	131.97	131.90	131.82	131.74
0.0174	131.67	131.59	131.52	131.44	131.37	131.29	131.22	131.14	131.07	130.99
0.0175	130.92	130.84	130.77	130.69	130.62	130.54	130.47	130.39	130.32	130.25
0.0176	130.17	130.10	130.02	129.95	129.88	129.80	129.73	129.66	129.58	129.51
0.0177	129.44	129.36	129.29	129.22	129.15	129.07	129.00	128.93	128.85	128.78
0.0178	128.71	128.64	128.57	128.49	128.42	128.35	128.28	128.21	128.13	128.06
0.0179	127.99	127.92	127.85	127.78	127.71	127.63	127.56	127.49	127.42	127.35
0.0180	127.28	127.21	127.14	127.07	127.00	126.93	126.86	126.79	126.72	126.65
0.0181	126.58	126.51	126.44	126.37	126.30	126.23	126.16	126.09	126.02	125.95
0.0182	125.88	125.81	125.74	125.67	125.61	125.54	125.47	125.40	125.33	125.26
0.0183	125.19	125.12	125.06	124.99	124.92	124.85	124.78	124.72	124.65	124.58
0.0184	124.51	124.45	124.38	124.31	124.24	124.18	124.11	124.04	123.97	123.91
0.0185	123.84	123.77	123.71	123.64	123.57	123.51	123.44	123.37	123.31	123.24
0.0186	123.17	123.11	123.04	122.98	122.91	122.84	122.78	122.71	122.65	122.58
0.0187	122.52	122.45	122.38	122.32	122.25	122.19	122.12	122.06	121.99	121.93
0.0188	121.86	121.80	121.73	121.67	121.60	121.54	121.48	121.41	121.35	121.28
0.0189	121.22	121.15	121.09	121.03	120.96	120.90	120.84	120.77	120.71	120.64
0.0190	120.58	120.52	120.45	120.39	120.33	120.26	120.20	120.14	120.08	120.01
0.0191	119.95	119.89	119.82	119.76	119.70	119.64	119.57	119.51	119.45	119.39
0.0192	119.32	119.26	119.20	119.14	119.08	119.02	118.95	118.89	118.83	118.77
0.0193	118.71	118.65	118.58	118.52	118.46	118.40	118.34	118.28	118.22	118.16
0.0194	118.09	118.03	117.97	117.91	117.85	117.79	117.73	117.67	117.61	117.55
0.0195	117.49	117.43	117.37	117.31	117.25	117.19	117.13	117.07	117.01	116.95
0.0196	116.89	116.83	116.77	116.71	116.65	116.59	116.53	116.47	116.41	116.36
0.0197	116.30	116.24	116.18	116.12	116.06	116.00	115.94	115.88	115.83	115.77
0.0198	115.71	115.65	115.59	115.53	115.48	115.42	115.36	115.30	115.24	115.19
0.0199	115.13	115.07	115.01	114.95	114.90	114.84	114.78	114.72	114.67	114.61

2θ, RAD.	0	1	2	3	4	5	6	7	8	9
0.0200	114.55	114.49	114.44	114.38	114.32	114.27	114.21	114.15	114.10	114.04
0.0201	113.98	113.93	113.87	113.81	113.76	113.70	113.64	113.59	113.53	113.47
0.0202	113.42	113.36	113.31	113.25	113.19	113.14	113.08	113.03	112.97	112.91
0.0203	112.86	112.80	112.75	112.69	112.64	112.58	112.53	112.47	112.42	112.36
0.0204	112.31	112.25	112.20	112.14	112.09	112.03	111.98	111.92	111.87	111.81
0.0205	111.76	111.70	111.65	111.59	111.54	111.49	111.43	111.38	111.32	111.27
0.0206	111.22	111.16	111.11	111.05	111.00	110.95	110.89	110.84	110.79	110.73
0.0207	110.68	110.63	110.57	110.52	110.47	110.41	110.36	110.31	110.25	110.20
0.0208	110.15	110.09	110.04	109.99	109.93	109.88	109.83	109.78	109.72	109.67
0.0209	109.62	109.57	109.51	109.46	109.41	109.36	109.31	109.25	109.20	109.15
0.0210	109.10	109.05	108.99	108.94	108.89	108.84	108.79	108.73	108.68	108.63
0.0211	108.58	108.53	108.48	108.43	108.37	108.32	108.27	108.22	108.17	108.12
0.0212	108.07	108.02	107.97	107.92	107.86	107.81	107.76	107.71	107.66	107.61
0.0213	107.56	107.51	107.46	107.41	107.36	107.31	107.26	107.21	107.16	107.11
0.0214	107.06	107.01	106.96	106.91	106.86	106.81	106.76	106.71	106.66	106.61
0.0215	106.56	106.51	106.46	106.41	106.36	106.31	106.26	106.21	106.17	106.12
0.0216	106.07	106.02	105.97	105.92	105.87	105.82	105.77	105.72	105.68	105.63
0.0217	105.58	105.53	105.48	105.43	105.38	105.34	105.29	105.24	105.19	105.14
0.0218	105.09	105.05	105.00	104.95	104.90	104.85	104.81	104.76	104.71	104.66
0.0219	104.61	104.57	104.52	104.47	104.42	104.38	104.33	104.28	104.23	104.19
0.0220	104.14	104.09	104.04	104.00	103.95	103.90	103.86	103.81	103.76	103.71
0.0221	103.67	103.62	103.57	103.53	103.48	103.43	103.39	103.34	103.29	103.25
0.0222	103.20	103.15	103.11	103.06	103.01	102.97	102.92	102.88	102.83	102.78
0.0223	102.74	102.69	102.65	102.60	102.55	102.51	102.46	102.42	102.37	102.32
0.0224	102.28	102.23	102.19	102.14	102.10	102.05	102.01	101.96	101.92	101.87
0.0225	101.82	101.78	101.73	101.69	101.64	101.60	101.55	101.51	101.46	101.42
0.0226	101.37	101.33	101.28	101.24	101.19	101.15	101.11	101.06	101.02	100.97
0.0227	100.93	100.88	100.84	100.79	100.75	100.71	100.66	100.62	100.57	100.53
0.0228	100.48	100.44	100.40	100.35	100.31	100.26	100.22	100.18	100.13	100.09
0.0229	100.05	100.00	99.96	99.92	99.87	99.83	99.78	99.74	99.70	99.65
0.0230	99.611	99.568	99.525	99.481	99.438	99.395	99.352	99.309	99.266	99.223
0.0231	99.180	99.137	99.094	99.051	99.008	98.966	98.923	98.880	98.838	98.795
0.0232	98.752	98.710	98.667	98.625	98.582	98.540	98.498	98.455	98.413	98.371
0.0233	98.329	98.286	98.244	98.202	98.160	98.118	98.076	98.034	97.992	97.950
0.0234	97.908	97.867	97.825	97.783	97.741	97.700	97.658	97.616	97.575	97.533
0.0235	97.492	97.450	97.409	97.367	97.326	97.285	97.244	97.202	97.161	97.120
0.0236	97.079	97.038	96.996	96.955	96.914	96.873	96.833	96.792	96.751	96.710
0.0237	96.669	96.628	96.588	96.547	96.506	96.466	96.425	96.384	96.344	96.303
0.0238	96.263	96.223	96.182	96.142	96.101	96.061	96.021	95.981	95.940	95.900
0.0239	95.860	95.820	95.780	95.740	95.700	95.660	95.620	95.580	95.540	95.501
0.0240	95.461	95.421	95.381	95.342	95.302	95.262	95.223	95.183	95.144	95.104
0.0241	95.065	95.025	94.986	94.947	94.907	94.868	94.829	94.789	94.750	94.711
0.0242	94.672	94.633	94.594	94.555	94.516	94.477	94.438	94.399	94.360	94.321
0.0243	94.282	94.244	94.205	94.166	94.127	94.089	94.050	94.012	93.973	93.934
0.0244	93.896	93.857	93.819	93.781	93.742	93.704	93.666	93.627	93.589	93.551
0.0245	93.513	93.475	93.436	93.398	93.360	93.322	93.284	93.246	93.208	93.170
0.0246	93.133	93.095	93.057	93.019	92.981	92.944	92.906	92.868	92.831	92.793
0.0247	92.756	92.718	92.681	92.643	92.606	92.568	92.531	92.493	92.456	92.419
0.0248	92.382	92.344	92.307	92.270	92.233	92.196	92.159	92.122	92.085	92.048
0.0249	92.011	91.974	91.937	91.900	91.863	91.826	91.789	91.753	91.716	91.679

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0.0250	91.643	91.606	91.569	91.533	91.496	91.460	91.423	91.387	91.350	91.314
0.0251	91.277	91.241	91.205	91.169	91.132	91.096	91.060	91.024	90.987	90.951
0.0252	90.915	90.879	90.843	90.807	90.771	90.735	90.699	90.663	90.627	90.592
0.0253	90.556	90.520	90.484	90.449	90.413	90.377	90.342	90.306	90.271	90.235
0.0254	90.199	90.164	90.128	90.093	90.058	90.022	89.987	89.952	89.916	89.881
0.0255	89.846	89.811	89.775	89.740	89.705	89.670	89.635	89.600	89.565	89.530
0.0256	89.495	89.460	89.425	89.390	89.355	89.320	89.286	89.251	89.216	89.181
0.0257	89.147	89.112	89.077	89.043	89.008	88.973	88.939	88.904	88.870	88.836
0.0258	88.801	88.767	88.732	88.698	88.664	88.629	88.595	88.561	88.527	88.492
0.0259	88.458	88.424	88.390	88.356	88.322	88.288	88.254	88.220	88.186	88.152
0.0260	88.118	88.084	88.050	88.016	87.983	87.949	87.915	87.881	87.848	87.814
0.0261	87.780	87.747	87.713	87.680	87.646	87.613	87.579	87.546	87.512	87.479
0.0262	87.445	87.412	87.379	87.345	87.312	87.279	87.246	87.212	87.179	87.146
0.0263	87.113	87.080	87.047	87.014	86.981	86.948	86.915	86.882	86.849	86.816
0.0264	86.783	86.750	86.717	86.684	86.652	86.619	86.586	86.553	86.521	86.488
0.0265	86.456	86.423	86.390	86.358	86.325	86.293	86.260	86.228	86.195	86.163
0.0266	86.131	86.098	86.066	86.033	86.001	85.969	85.937	85.904	85.872	85.840
0.0267	85.808	85.776	85.744	85.712	85.680	85.648	85.616	85.584	85.552	85.520
0.0268	85.488	85.456	85.424	85.392	85.360	85.329	85.297	85.265	85.233	85.202
0.0269	85.170	85.138	85.107	85.075	85.044	85.012	84.980	84.949	84.917	84.886
0.0270	84.855	84.823	84.792	84.760	84.729	84.698	84.666	84.635	84.604	84.573
0.0271	84.541	84.510	84.479	84.448	84.417	84.386	84.355	84.324	84.293	84.262
0.0272	84.231	84.200	84.169	84.138	84.107	84.076	84.045	84.014	83.984	83.953
0.0273	83.922	83.891	83.861	83.830	83.799	83.769	83.738	83.708	83.677	83.646
0.0274	83.616	83.585	83.555	83.524	83.494	83.464	83.433	83.403	83.373	83.342
0.0275	83.312	83.282	83.251	83.221	83.191	83.161	83.131	83.100	83.070	83.040
0.0276	83.010	82.980	82.950	82.920	82.890	82.860	82.830	82.800	82.770	82.740
0.0277	82.710	82.681	82.651	82.621	82.591	82.561	82.532	82.502	82.472	82.443
0.0278	82.413	82.383	82.354	82.324	82.294	82.265	82.235	82.206	82.176	82.147
0.0279	82.118	82.088	82.059	82.029	82.000	81.971	81.941	81.912	81.883	81.853
0.0280	81.824	81.795	81.766	81.737	81.708	81.678	81.649	81.620	81.591	81.562
0.0281	81.533	81.504	81.475	81.446	81.417	81.388	81.359	81.330	81.302	81.273
0.0282	81.244	81.215	81.186	81.158	81.129	81.100	81.071	81.043	81.014	80.986
0.0283	80.957	80.928	80.900	80.871	80.843	80.814	80.786	80.757	80.729	80.700
0.0284	80.672	80.643	80.615	80.587	80.558	80.530	80.502	80.474	80.445	80.417
0.0285	80.389	80.361	80.332	80.304	80.276	80.248	80.220	80.192	80.164	80.136
0.0286	80.108	80.080	80.052	80.024	79.996	79.968	79.940	79.912	79.884	79.856
0.0287	79.829	79.801	79.773	79.745	79.718	79.690	79.662	79.634	79.607	79.579
0.0288	79.552	79.524	79.496	79.469	79.441	79.414	79.386	79.359	79.331	79.304
0.0289	79.276	79.249	79.221	79.194	79.167	79.139	79.112	79.085	79.057	79.030
0.0290	79.003	78.976	78.948	78.921	78.894	78.867	78.840	78.813	78.786	78.759
0.0291	78.731	78.704	78.677	78.650	78.623	78.596	78.569	78.543	78.516	78.489
0.0292	78.462	78.435	78.408	78.381	78.355	78.328	78.301	78.274	78.247	78.221
0.0293	78.194	78.167	78.141	78.114	78.087	78.061	78.034	78.008	77.981	77.955
0.0294	77.928	77.902	77.875	77.849	77.822	77.796	77.769	77.743	77.717	77.690
0.0295	77.664	77.638	77.611	77.585	77.559	77.533	77.506	77.480	77.454	77.428
0.0296	77.402	77.375	77.349	77.323	77.297	77.271	77.245	77.219	77.193	77.167
0.0297	77.141	77.115	77.089	77.063	77.037	77.011	76.986	76.960	76.934	76.908
0.0298	76.882	76.856	76.831	76.805	76.779	76.753	76.728	76.702	76.676	76.651
0.0299	76.625	76.599	76.574	76.548	76.523	76.497	76.472	76.446	76.421	76.395

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0.0300	76.370	76.344	76.319	76.293	76.268	76.243	76.217	76.192	76.167	76.141
0.0301	76.116	76.091	76.065	76.040	76.015	75.990	75.965	75.939	75.914	75.889
0.0302	75.864	75.839	75.814	75.789	75.764	75.739	75.714	75.689	75.664	75.639
0.0303	75.614	75.589	75.564	75.539	75.514	75.489	75.464	75.439	75.415	75.390
0.0304	75.365	75.340	75.315	75.291	75.266	75.241	75.216	75.192	75.167	75.142
0.0305	75.118	75.093	75.069	75.044	75.019	74.995	74.970	74.946	74.921	74.897
0.0306	74.872	74.848	74.823	74.799	74.775	74.750	74.726	74.701	74.677	74.653
0.0307	74.628	74.604	74.580	74.556	74.531	74.507	74.483	74.459	74.435	74.410
0.0308	74.386	74.362	74.338	74.314	74.290	74.266	74.242	74.218	74.194	74.169
0.0309	74.145	74.122	74.098	74.074	74.050	74.026	74.002	73.978	73.954	73.930
0.0310	73.906	73.882	73.859	73.835	73.811	73.787	73.764	73.740	73.716	73.692
0.0311	73.669	73.645	73.621	73.598	73.574	73.550	73.527	73.503	73.480	73.456
0.0312	73.433	73.409	73.386	73.362	73.339	73.315	73.292	73.268	73.245	73.221
0.0313	73.198	73.175	73.151	73.128	73.105	73.081	73.058	73.035	73.011	72.988
0.0314	72.965	72.942	72.918	72.895	72.872	72.849	72.826	72.803	72.780	72.756
0.0315	72.733	72.710	72.687	72.664	72.641	72.618	72.595	72.572	72.549	72.526
0.0316	72.503	72.480	72.457	72.434	72.412	72.389	72.366	72.343	72.320	72.297
0.0317	72.274	72.252	72.229	72.206	72.183	72.161	72.138	72.115	72.093	72.070
0.0318	72.047	72.025	72.002	71.979	71.957	71.934	71.912	71.889	71.866	71.844
0.0319	71.821	71.799	71.776	71.754	71.731	71.709	71.687	71.664	71.642	71.619
0.0320	71.597	71.575	71.552	71.530	71.508	71.485	71.463	71.441	71.418	71.396
0.0321	71.374	71.352	71.329	71.307	71.285	71.263	71.241	71.219	71.197	71.174
0.0322	71.152	71.130	71.108	71.086	71.064	71.042	71.020	70.998	70.976	70.954
0.0323	70.932	70.910	70.888	70.866	70.844	70.822	70.801	70.779	70.757	70.735
0.0324	70.713	70.691	70.669	70.648	70.626	70.604	70.582	70.561	70.539	70.517
0.0325	70.496	70.474	70.452	70.431	70.409	70.387	70.366	70.344	70.322	70.301
0.0326	70.279	70.258	70.236	70.215	70.193	70.172	70.150	70.129	70.107	70.086
0.0327	70.064	70.043	70.022	70.000	69.979	69.957	69.936	69.915	69.893	69.872
0.0328	69.851	69.830	69.808	69.787	69.766	69.745	69.723	69.702	69.681	69.660
0.0329	69.639	69.617	69.596	69.575	69.554	69.533	69.512	69.491	69.470	69.449
0.0330	69.428	69.407	69.385	69.364	69.343	69.323	69.302	69.281	69.260	69.239
0.0331	69.218	69.197	69.176	69.155	69.134	69.113	69.093	69.072	69.051	69.030
0.0332	69.009	68.989	68.968	68.947	68.926	68.906	68.885	68.864	68.843	68.823
0.0333	68.802	68.781	68.761	68.740	68.720	68.699	68.678	68.658	68.637	68.617
0.0334	68.596	68.576	68.555	68.535	68.514	68.494	68.473	68.453	68.432	68.412
0.0335	68.391	68.371	68.351	68.330	68.310	68.289	68.269	68.249	68.228	68.208
0.0336	68.188	68.168	68.147	68.127	68.107	68.087	68.066	68.046	68.026	68.006
0.0337	67.986	67.965	67.945	67.925	67.905	67.885	67.865	67.845	67.825	67.804
0.0338	67.784	67.764	67.744	67.724	67.704	67.684	67.664	67.644	67.624	67.604
0.0339	67.584	67.565	67.545	67.525	67.505	67.485	67.465	67.445	67.425	67.406
0.0340	67.386	67.366	67.346	67.326	67.307	67.287	67.267	67.247	67.228	67.208
0.0341	67.188	67.168	67.149	67.129	67.109	67.090	67.070	67.051	67.031	67.011
0.0342	66.992	66.972	66.953	66.933	66.913	66.894	66.874	66.855	66.835	66.816
0.0343	66.796	66.777	66.757	66.738	66.719	66.699	66.680	66.660	66.641	66.622
0.0344	66.602	66.583	66.564	66.544	66.525	66.506	66.486	66.467	66.448	66.428
0.0345	66.409	66.390	66.371	66.352	66.332	66.313	66.294	66.275	66.256	66.236
0.0346	66.217	66.198	66.179	66.160	66.141	66.122	66.103	66.084	66.065	66.046
0.0347	66.026	66.007	65.988	65.969	65.950	65.932	65.913	65.894	65.875	65.856
0.0348	65.837	65.818	65.799	65.780	65.761	65.742	65.723	65.705	65.686	65.667
0.0349	65.648	65.629	65.611	65.592	65.573	65.554	65.536	65.517	65.498	65.479

2θ, RAD.	0	1	2	3	4	5	6	7	8	9
0.0350	65.461	65.442	65.423	65.405	65.386	65.367	65.349	65.330	65.311	65.293
0.0351	65.274	65.256	65.237	65.218	65.200	65.181	65.163	65.144	65.126	65.107
0.0352	65.089	65.070	65.052	65.033	65.015	64.996	64.978	64.960	64.941	64.923
0.0353	64.904	64.886	64.868	64.849	64.831	64.813	64.794	64.776	64.758	64.739
0.0354	64.721	64.703	64.684	64.666	64.648	64.630	64.612	64.593	64.575	64.557
0.0355	64.539	64.521	64.502	64.484	64.466	64.448	64.430	64.412	64.394	64.376
0.0356	64.357	64.339	64.321	64.303	64.285	64.267	64.249	64.231	64.213	64.195
0.0357	64.177	64.159	64.141	64.123	64.105	64.087	64.070	64.052	64.034	64.016
0.0358	63.998	63.980	63.962	63.944	63.927	63.909	63.891	63.873	63.855	63.837
0.0359	63.820	63.802	63.784	63.766	63.749	63.731	63.713	63.696	63.678	63.660
0.0360	63.642	63.625	63.607	63.589	63.572	63.554	63.537	63.519	63.501	63.484
0.0361	63.466	63.449	63.431	63.413	63.396	63.378	63.361	63.343	63.326	63.308
0.0362	63.291	63.273	63.256	63.238	63.221	63.204	63.186	63.169	63.151	63.134
0.0363	63.117	63.099	63.082	63.064	63.047	63.030	63.012	62.995	62.978	62.960
0.0364	62.943	62.926	62.909	62.891	62.874	62.857	62.840	62.822	62.805	62.788
0.0365	62.771	62.754	62.736	62.719	62.702	62.685	62.668	62.651	62.633	62.616
0.0366	62.599	62.582	62.565	62.548	62.531	62.514	62.497	62.480	62.463	62.446
0.0367	62.429	62.412	62.395	62.378	62.361	62.344	62.327	62.310	62.293	62.276
0.0368	62.259	62.242	62.225	62.208	62.191	62.175	62.158	62.141	62.124	62.107
0.0369	62.090	62.074	62.057	62.040	62.023	62.006	61.990	61.973	61.956	61.939
0.0370	61.923	61.906	61.889	61.872	61.856	61.839	61.822	61.806	61.789	61.772
0.0371	61.756	61.739	61.722	61.706	61.689	61.673	61.656	61.639	61.623	61.606
0.0372	61.590	61.573	61.557	61.540	61.524	61.507	61.491	61.474	61.458	61.441
0.0373	61.425	61.408	61.392	61.375	61.359	61.342	61.326	61.310	61.293	61.277
0.0374	61.260	61.244	61.228	61.211	61.195	61.179	61.162	61.146	61.130	61.113
0.0375	61.097	61.081	61.064	61.048	61.032	61.016	60.999	60.983	60.967	60.951
0.0376	60.935	60.918	60.902	60.886	60.870	60.854	60.837	60.821	60.805	60.789
0.0377	60.773	60.757	60.741	60.725	60.709	60.692	60.676	60.660	60.644	60.628
0.0378	60.612	60.596	60.580	60.564	60.548	60.532	60.516	60.500	60.484	60.468
0.0379	60.452	60.436	60.420	60.404	60.389	60.373	60.357	60.341	60.325	60.309
0.0380	60.293	60.277	60.262	60.246	60.230	60.214	60.198	60.182	60.167	60.151
0.0381	60.135	60.119	60.103	60.088	60.072	60.056	60.040	60.025	60.009	59.993
0.0382	59.978	59.962	59.946	59.931	59.915	59.899	59.884	59.868	59.852	59.837
0.0383	59.821	59.805	59.790	59.774	59.759	59.743	59.727	59.712	59.696	59.681
0.0384	59.665	59.650	59.634	59.619	59.603	59.588	59.572	59.557	59.541	59.526
0.0385	59.510	59.495	59.479	59.464	59.449	59.433	59.418	59.402	59.387	59.372
0.0386	59.356	59.341	59.325	59.310	59.295	59.279	59.264	59.249	59.233	59.218
0.0387	59.203	59.187	59.172	59.157	59.142	59.126	59.111	59.096	59.081	59.065
0.0388	59.050	59.035	59.020	59.005	58.989	58.974	58.959	58.944	58.929	58.914
0.0389	58.898	58.883	58.868	58.853	58.838	58.823	58.808	58.793	58.778	58.763
0.0390	58.747	58.732	58.717	58.702	58.687	58.672	58.657	58.642	58.627	58.612
0.0391	58.597	58.582	58.567	58.552	58.537	58.522	58.507	58.493	58.478	58.463
0.0392	58.448	58.433	58.418	58.403	58.388	58.373	58.358	58.344	58.329	58.314
0.0393	58.299	58.284	58.269	58.255	58.240	58.225	58.210	58.195	58.181	58.166
0.0394	58.151	58.136	58.122	58.107	58.092	58.077	58.063	58.048	58.033	58.019
0.0395	58.004	57.989	57.975	57.960	57.945	57.931	57.916	57.901	57.887	57.872
0.0396	57.857	57.843	57.828	57.814	57.799	57.784	57.770	57.755	57.741	57.726
0.0397	57.712	57.697	57.683	57.668	57.654	57.639	57.625	57.610	57.596	57.581
0.0398	57.567	57.552	57.538	57.523	57.509	57.495	57.480	57.466	57.451	57.437
0.0399	57.422	57.408	57.394	57.379	57.365	57.351	57.336	57.322	57.308	57.293

2θ, RAD.	0	1	2	3	4	5	6	7	8	9
0.0400	57.279	57.265	57.250	57.236	57.222	57.207	57.193	57.179	57.165	57.150
0.0401	57.136	57.122	57.108	57.093	57.079	57.065	57.051	57.037	57.022	57.008
0.0402	56.994	56.980	56.966	56.952	56.937	56.923	56.909	56.895	56.881	56.867
0.0403	56.853	56.838	56.824	56.810	56.796	56.782	56.768	56.754	56.740	56.726
0.0404	56.712	56.698	56.684	56.670	56.656	56.642	56.628	56.614	56.600	56.586
0.0405	56.572	56.558	56.544	56.530	56.516	56.502	56.488	56.474	56.460	56.446
0.0406	56.433	56.419	56.405	56.391	56.377	56.363	56.349	56.335	56.322	56.308
0.0407	56.294	56.280	56.266	56.252	56.239	56.225	56.211	56.197	56.184	56.170
0.0408	56.156	56.142	56.128	56.115	56.101	56.087	56.074	56.060	56.046	56.032
0.0409	56.019	56.005	55.991	55.978	55.964	55.950	55.937	55.923	55.909	55.896
0.0410	55.882	55.868	55.855	55.841	55.828	55.814	55.800	55.787	55.773	55.760
0.0411	55.746	55.733	55.719	55.705	55.692	55.678	55.665	55.651	55.638	55.624
0.0412	55.611	55.597	55.584	55.570	55.557	55.543	55.530	55.517	55.503	55.490
0.0413	55.476	55.463	55.449	55.436	55.423	55.409	55.396	55.382	55.369	55.356
0.0414	55.342	55.329	55.316	55.302	55.289	55.275	55.262	55.249	55.236	55.222
0.0415	55.209	55.196	55.182	55.169	55.156	55.142	55.129	55.116	55.103	55.089
0.0416	55.076	55.063	55.050	55.037	55.023	55.010	54.997	54.984	54.971	54.957
0.0417	54.944	54.931	54.918	54.905	54.892	54.878	54.865	54.852	54.839	54.826
0.0418	54.813	54.800	54.787	54.773	54.760	54.747	54.734	54.721	54.708	54.695
0.0419	54.682	54.669	54.656	54.643	54.630	54.617	54.604	54.591	54.578	54.565
0.0420	54.552	54.539	54.526	54.513	54.500	54.487	54.474	54.461	54.448	54.435
0.0421	54.422	54.409	54.396	54.383	54.371	54.358	54.345	54.332	54.319	54.306
0.0422	54.293	54.280	54.268	54.255	54.242	54.229	54.216	54.203	54.191	54.178
0.0423	54.165	54.152	54.139	54.127	54.114	54.101	54.088	54.075	54.063	54.050
0.0424	54.037	54.024	54.012	53.999	53.986	53.974	53.961	53.948	53.935	53.923
0.0425	53.910	53.897	53.885	53.872	53.859	53.847	53.834	53.821	53.809	53.796
0.0426	53.784	53.771	53.758	53.746	53.733	53.720	53.708	53.695	53.683	53.670
0.0427	53.658	53.645	53.632	53.620	53.607	53.595	53.582	53.570	53.557	53.545
0.0428	53.532	53.520	53.507	53.495	53.482	53.470	53.457	53.445	53.432	53.420
0.0429	53.407	53.395	53.383	53.370	53.358	53.345	53.333	53.320	53.308	53.296
0.0430	53.283	53.271	53.259	53.246	53.234	53.221	53.209	53.197	53.184	53.172
0.0431	53.160	53.147	53.135	53.123	53.110	53.098	53.086	53.073	53.061	53.049
0.0432	53.037	53.024	53.012	53.000	52.988	52.975	52.963	52.951	52.939	52.926
0.0433	52.914	52.902	52.890	52.878	52.865	52.853	52.841	52.829	52.817	52.804
0.0434	52.792	52.780	52.768	52.756	52.744	52.732	52.719	52.707	52.695	52.683
0.0435	52.671	52.659	52.647	52.635	52.623	52.610	52.598	52.586	52.574	52.562
0.0436	52.550	52.538	52.526	52.514	52.502	52.490	52.478	52.466	52.454	52.442
0.0437	52.430	52.418	52.406	52.394	52.382	52.370	52.358	52.346	52.334	52.322
0.0438	52.310	52.298	52.286	52.274	52.263	52.251	52.239	52.227	52.215	52.203
0.0439	52.191	52.179	52.167	52.155	52.144	52.132	52.120	52.108	52.096	52.084
0.0440	52.072	52.061	52.049	52.037	52.025	52.013	52.002	51.990	51.978	51.966
0.0441	51.954	51.943	51.931	51.919	51.907	51.896	51.884	51.872	51.860	51.849
0.0442	51.837	51.825	51.813	51.802	51.790	51.778	51.767	51.755	51.743	51.732
0.0443	51.720	51.708	51.697	51.685	51.673	51.662	51.650	51.638	51.627	51.615
0.0444	51.603	51.592	51.580	51.569	51.557	51.545	51.534	51.522	51.511	51.499
0.0445	51.488	51.476	51.464	51.453	51.441	51.430	51.418	51.407	51.395	51.384
0.0446	51.372	51.361	51.349	51.338	51.326	51.315	51.303	51.292	51.280	51.269
0.0447	51.257	51.246	51.234	51.223	51.211	51.200	51.188	51.177	51.166	51.154
0.0448	51.143	51.131	51.120	51.109	51.097	51.086	51.074	51.063	51.052	51.040
0.0449	51.029	51.018	51.006	50.995	50.983	50.972	50.961	50.949	50.938	50.927

CHROMIUM

72

WAVELENGTH = 2.291002Å

2θ, RAD.	0	1	2	3	4	5	6	7	8	9
0.0450	50.916	50.904	50.893	50.882	50.870	50.859	50.848	50.836	50.825	50.814
0.0451	50.803	50.791	50.780	50.769	50.758	50.746	50.735	50.724	50.713	50.701
0.0452	50.690	50.679	50.668	50.657	50.645	50.634	50.623	50.612	50.601	50.590
0.0453	50.578	50.567	50.556	50.545	50.534	50.523	50.511	50.500	50.489	50.478
0.0454	50.467	50.456	50.445	50.434	50.423	50.411	50.400	50.389	50.378	50.367
0.0455	50.356	50.345	50.334	50.323	50.312	50.301	50.290	50.279	50.268	50.257
0.0456	50.246	50.235	50.224	50.213	50.202	50.191	50.180	50.169	50.158	50.147
0.0457	50.136	50.125	50.114	50.103	50.092	50.081	50.070	50.059	50.048	50.037
0.0458	50.026	50.015	50.004	49.994	49.983	49.972	49.961	49.950	49.939	49.928
0.0459	49.917	49.906	49.896	49.885	49.874	49.863	49.852	49.841	49.831	49.820
0.0460	49.809	49.798	49.787	49.776	49.766	49.755	49.744	49.733	49.722	49.712
0.0461	49.701	49.690	49.679	49.669	49.658	49.647	49.636	49.625	49.615	49.604
0.0462	49.593	49.583	49.572	49.561	49.550	49.540	49.529	49.518	49.508	49.497
0.0463	49.486	49.475	49.465	49.454	49.443	49.433	49.422	49.411	49.401	49.390
0.0464	49.380	49.369	49.358	49.348	49.337	49.326	49.316	49.305	49.295	49.284
0.0465	49.273	49.263	49.252	49.242	49.231	49.220	49.210	49.199	49.189	49.178
0.0466	49.168	49.157	49.147	49.136	49.125	49.115	49.104	49.094	49.083	49.073
0.0467	49.062	49.052	49.041	49.031	49.020	49.010	48.999	48.989	48.978	48.968
0.0468	48.958	48.947	48.937	48.926	48.916	48.905	48.895	48.884	48.874	48.864
0.0469	48.853	48.843	48.832	48.822	48.812	48.801	48.791	48.780	48.770	48.760
0.0470	48.749	48.739	48.729	48.718	48.708	48.697	48.687	48.677	48.666	48.656
0.0471	48.646	48.635	48.625	48.615	48.605	48.594	48.584	48.574	48.563	48.553
0.0472	48.543	48.532	48.522	48.512	48.502	48.491	48.481	48.471	48.461	48.450
0.0473	48.440	48.430	48.420	48.409	48.399	48.389	48.379	48.369	48.358	48.348
0.0474	48.338	48.328	48.318	48.307	48.297	48.287	48.277	48.267	48.257	48.246
0.0475	48.236	48.226	48.216	48.206	48.196	48.186	48.175	48.165	48.155	48.145
0.0476	48.135	48.125	48.115	48.105	48.094	48.084	48.074	48.064	48.054	48.044
0.0477	48.034	48.024	48.014	48.004	47.994	47.984	47.974	47.964	47.954	47.944
0.0478	47.934	47.924	47.913	47.903	47.893	47.883	47.873	47.863	47.853	47.843
0.0479	47.833	47.824	47.814	47.804	47.794	47.784	47.774	47.764	47.754	47.744
0.0480	47.734	47.724	47.714	47.704	47.694	47.684	47.674	47.664	47.654	47.645
0.0481	47.635	47.625	47.615	47.605	47.595	47.585	47.575	47.565	47.556	47.546
0.0482	47.536	47.526	47.516	47.506	47.496	47.487	47.477	47.467	47.457	47.447
0.0483	47.437	47.428	47.418	47.408	47.398	47.388	47.379	47.369	47.359	47.349
0.0484	47.339	47.330	47.320	47.310	47.300	47.291	47.281	47.271	47.261	47.252
0.0485	47.242	47.232	47.222	47.213	47.203	47.193	47.183	47.174	47.164	47.154
0.0486	47.145	47.135	47.125	47.116	47.106	47.096	47.087	47.077	47.067	47.058
0.0487	47.048	47.038	47.029	47.019	47.009	47.000	46.990	46.980	46.971	46.961
0.0488	46.951	46.942	46.932	46.923	46.913	46.903	46.894	46.884	46.875	46.865
0.0489	46.855	46.846	46.836	46.827	46.817	46.808	46.798	46.789	46.779	46.769
0.0490	46.760	46.750	46.741	46.731	46.722	46.712	46.703	46.693	46.684	46.674
0.0491	46.665	46.655	46.646	46.636	46.627	46.617	46.608	46.598	46.589	46.579
0.0492	46.570	46.560	46.551	46.541	46.532	46.523	46.513	46.504	46.494	46.485
0.0493	46.475	46.466	46.457	46.447	46.438	46.428	46.419	46.410	46.400	46.391
0.0494	46.381	46.372	46.363	46.353	46.344	46.334	46.325	46.316	46.306	46.297
0.0495	46.288	46.278	46.269	46.260	46.250	46.241	46.232	46.222	46.213	46.204
0.0496	46.194	46.185	46.176	46.166	46.157	46.148	46.139	46.129	46.120	46.111
0.0497	46.101	46.092	46.083	46.074	46.064	46.055	46.046	46.037	46.027	46.018
0.0498	46.009	46.000	45.990	45.981	45.972	45.963	45.954	45.944	45.935	45.926
0.0499	45.917	45.907	45.898	45.889	45.880	45.871	45.862	45.852	45.843	45.834



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