§ 325.55 Ambient conditions; stationary test.

(a)(1) Sound. The ambient A-weighted sound level at the microphone location point shall be measured, in the absence of motor vehicle noise emanating from within the clear zone, with fast meter response using a sound level measurement system that conforms to the rules of §325.23.

(2) Measurements may be made at a test site having smaller or greater dimensions in accordance with the rules in subpart F of this part.

(b) The test site must be an open site, essentially free of large sound-reflecting objects. However, the following objects may be within the test site, including the triangular measurement area:

(1) Small cylindrical objects such as fire hydrants or telephone or utility poles.

(2) Rural mailboxes.

(3) Traffic railings of any type of construction except solid concrete barriers (see §325.5(c)(4)).

(4) One or more curbs having a height of 1 foot (.3 m) or less.

(c) The following objects may be within the test site if they are outside of the triangular measurement area of the site:

(1) Any vertical surface, regardless of size (such as a billboard), having a lower edge more than 15 feet (4.6 m) above the ground.

(2) Any uniformly smooth surface slanting away from the vehicle with a slope that is less than 45 degrees above the horizontal.

(3) Any surface slanting away from the vehicle that is 45 degrees or more and not more than 90 degrees above the horizontal, if all points on the surface are more than 15 feet (4.6 m) above the surface of the ground in the test site.

(d) The surface of the ground within the measurement area must be relatively flat. (See §325.5(c)(5)). The site shall be a “hard” site. However, if the site is determined to be “soft,” the correction factor specified in §325.75(b) of this part shall be applied to the measurement.


§ 325.57 Location and operation of sound level measurement systems; stationary test.

(a) The microphone of a sound level measurement system that conforms to the rules in §325.23 shall be located at a height of not less than 2 feet (.6 m) nor more than 6 feet (1.8 m) above the plane of the roadway surface and not less than 3½ feet (1.1 m) above the surface on which the microphone stands. The preferred microphone height on flat terrain is 4 feet (1.2 m).

(b) Wind. The wind velocity at the test site shall be measured at the beginning of each series of noise measurements and at intervals of 5–15 minutes thereafter until it has been established that the wind velocity is essentially constant. Once this fact has been established, wind velocity measurements may be made at intervals of once every hour. Noise measurements may only be made if the measured wind velocity is 12 mph (19.3 kph) or less. Gust wind measurements of up to 20 mph (32.2 kph) are allowed.

(c) Precipitation. Measurements are prohibited under any conditions of precipitation, however, measurements may be made with snow on the ground. The ground within the measurement area must be free of standing water.

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