

§ 325.71

Subpart F—Correction Factors

§ 325.71 Scope of the rules in this subpart.

(a) The rules in this subpart specify correction factors which are added to, or subtracted from, the reading of the sound level generated by a motor vehicle, as displayed on a sound level measurement system, during the measurement of the motor vehicle's sound level emissions at a test site which is not a standard site.

(b) The purpose of adding or subtracting a correction factor is to equate the sound level reading actually generated by the motor vehicle to the sound level reading it would have generated if the measurement had been made at a standard test site.

§ 325.73 Microphone distance correction factors.¹

If the distance between the microphone location point and the microphone target point is other than 50 feet (15.2 m), the maximum observed sound level reading generated by the motor vehicle in accordance with § 325.39 of this part or the numerical average of the recorded maximum observed sound level readings generated by the motor vehicle in accordance with § 325.59 of this part shall be corrected as specified in the following table:

TABLE 2—DISTANCE CORRECTION FACTORS

If the distance between the microphone location point and the microphone target point is	The value dB(A) to be applied to the observed sound level reading is—
31 feet (9.5 m) or more but less than 35 feet (10.7 m)	-4
35 feet (10.7 m) or more but less than 39 feet (11.9 m)	-3
39 feet (11.9 m) or more but less than 43 feet (13.1 m)	-2
43 feet (13.1 m) or more but less than 48 feet (14.6 m)	-1
48 feet (14.6 m) or more but less than 58 feet (17.7 m)	0

¹Table 1, in § 325.7 is a tabulation of the maximum allowable sound level readings taking into account both the distance correction factors contained in § 325.73 and the ground surface correction factors contained in § 325.75.

TABLE 2—DISTANCE CORRECTION FACTORS—Continued

If the distance between the microphone location point and the microphone target point is	The value dB(A) to be applied to the observed sound level reading is—
58 feet (17.7 m) or more but less than 70 feet (21.3 m)	+1
70 feet (21.3 m) or more but less than 83 feet (25.3 m)	+2

[40 FR 42437, Sept. 12, 1975, as amended at 54 FR 50385, Dec. 6, 1989]

§ 325.75 Ground surface correction factors.¹

(a) *Highway operations.* When measurements are made in accordance with the rules in subpart D of this part upon a test site which is “hard,” a correction factor of 2 dB(A) shall be subtracted from the maximum observed sound level reading generated by the motor vehicle to determine whether the motor vehicle conforms to the Standards for Highway Operations, 40 CFR 202.20.

(b) *Stationary Test.* When measurements are made in accordance with the rules in subpart E of this part upon a test site which is “soft,” a correction factor of 2 dB(A) shall be added to the numerical average of the recorded maximum observed sound level readings generated by the motor vehicle to determine whether the motor vehicle conforms to the Standard for Operation Under Stationary Test, 40 CFR 202.21.

§ 325.77 Computation of open site requirements—nonstandard sites.

(a) If the distance between the microphone location point and the microphone target point is other than 50 feet (15.2 m), the test site must be an open site within a radius from both points which is equal to the distance between the microphone location point and the microphone target point.

¹Table 1, in § 325.7 is a tabulation of the maximum allowable sound level readings taking into account both the distance correction factors contained in § 325.73 and the ground surface correction factors contained in § 325.75.

(b) Plan view diagrams of non-standard test sites are shown in Figures 3 and 4. Figure 3 illustrates a test site which is larger than a standard test site and is based upon a 60-foot (18.3 m) distance between the microphone location point and the microphone target point. (See §325.79(b)(1) for an example of the application of the correction factor to a sound level reading obtained at such a site.) Figure 4 illustrates a test site which is smaller than a standard test site and is based upon a 35-foot (10.7 m) distance between the microphone location point and the microphone target point. (See §325.79(b)(2) for an example of the application of the correction factor to a sound level reading obtained at such a site.)

§ 325.79 Application of correction factors.

(a) If two correction factors apply to a measurement they are applied cumulatively.

(b) The following examples illustrate the application of correction factors to sound level measurement readings:

(1) *Example 1—Highway operations.* Assume that a motor vehicle generates a maximum observed sound level reading of 86 dB(A) during a measurement in accordance with the rules in subpart D of this part. Assume also that the distance between the microphone location point and the microphone target point is 60 feet (18.3 m) and that the measurement area of the test site is acoustically "hard." The corrected sound level generated by the motor vehicle would be 85 dB(A), calculated as follows:

86 dB(A)	Uncorrected reading
+1 dB(A)	Distance correction factor
-2 dB(A)	Ground surface correction factor
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85 dB(A)	Corrected reading

(2) *Example 2—Stationary test.* Assume that a motor vehicle generates maximum sound level readings which average 88 dB(A) during a measurement in accordance with the rules in subpart E of this part. Assume also that the distance between the microphone location point and the microphone target point is 35 feet (10.7 m), and that the measurement area of the test site is acoustically "soft." The corrected sound level generated by the motor vehicle would be 87 dB(A), calculated as follows:

88 dB(A)	Uncorrected average of readings
-3 dB(A)	Distance correction factor
+2 dB(A)	Ground surface correction factor
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87 dB(A)	Corrected reading

Subpart G—Exhaust Systems and Tires

§ 325.91 Exhaust systems.

A motor vehicle does not conform to the visual exhaust system inspection requirements, 40 CFR 202.22, of the Interstate Motor Carrier Noise Emission Standards, if inspection of the exhaust system of the motor vehicle discloses that the system—

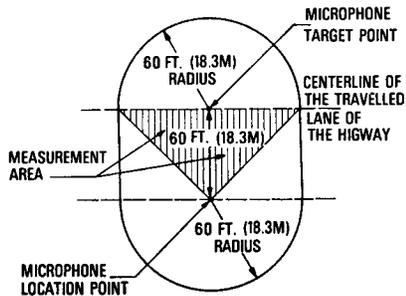


Figure 3
NON-STANDARD TEST SITE;
(60 FT (18.3M) DISTANCE BETWEEN
MICROPHONE LOCATION AND TARGET POINTS)

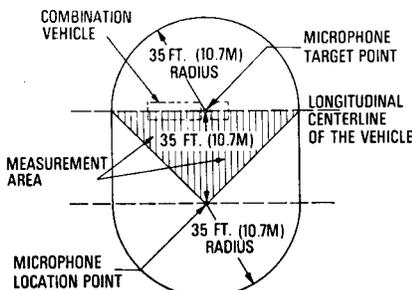


Figure 4
NON-STANDARD TEST SITE;
(35 FT.(10.7M) DISTANCE BETWEEN
MICROPHONE LOCATION AND TARGET POINTS)