

Sound level measurement standards

Calibration

1. By an acoustic calibrator authorized by the manufacture within 12 months prior; and
2. By user 1 hour prior to measurements.

Weather

No measurements are to be taken during rain or during weather conditions in which wind sound is distinguishable from and louder to the ear than the sound being tested.

Windscreen

Always use windscreen.

Scale

Measurement to be expressed in units of the sound level (dBA) using the A- weighted scale with fast response, following the manufacturer's instructions. Impulse sounds are to be measured as the maximum reading and not the equivalent sound level.

Place of sound measurement

Sound measurement to be taken no closer to the sound source than the property line of the receiving zone properties or the property line along street front. If the property line is not readily determinable, sound measurement should be taken from any point inside the nearest receiving zone property.

Orientation of microphone

To the extent practical, the microphone should be positioned 4 to 5 feet above the ground unless this conflicts with the manufacturer' s recommendation.

Duration of measurement

Measurement to be taken over five continuous minutes unless it is an impulse sound, each of which should be taken during the impulse or omission of that sound.

Ambient sound measurement

Ambient sound level must be averaged over a period of time comparable to that for the measurement of the amplified music – i.e., five minutes for non-impulse sounds.

Determining source sound level

Except for new equipment for which the owner provides manufacturer's specifications related to sound levels accepted by the zoning administrator, the sound level from a sound source shall be determined by correcting the total sound level for ambient sound in accordance with the following procedure:

1. Subtract the maximum measured ambient sound level from the minimum measured total sound level.
2. In Row A below, find the sound level difference determined under paragraph (1) and its corresponding correction factor in Row B. To determine your music sound level, subtract the maximum measured ambient sound level from the minimum measured total sound level.

Row A Sound Level Difference (Decibels)	0.5	1	2	3	4	5	6	7	8	9	10
Row B Correction Factor (Decibels)	9.6	7	4	3	1.8	1.6	1.2	1.0	0.75	0.6	0.5

3. Subtract the value obtained from Row B under paragraph (2) from the minimum measured total sound level to determine the source sound level.
4. If the difference between the total sound level and the ambient sound level is greater than 10 dBA, no correction is necessary to determine the source sound level.