	Technical Specification of Verification and Inspection for Sound Level Meters	S/N	CNMV 58-1
		Rev.	2

1. This Technical Specification is enacted pursuant to Paragraph 2, Articles 14 and 16 of the Weights and Measures Act.
2. The revision, date of promulgations, document No, date of enforcement and content of the amendment are listed as follows:

Rev.	Date of Promulgation	Document No. (Ching-Piao-Szu-Tsu)	Date of Enforcement	Content of Amendment
1	2003-07-04	No.09240006030	2003-08-01	
2	2015-10-22	No.10440014460	2017-01-01	Harmonized with OIML R 58 and IEC 61672 standards and amended the content with considering the verification and inspections in practice

1. Scope

1.1 This specification applies to the verification and inspection of time-weighting, and time-averaging sound level meters, conform to class 1 or class 2 specifications.

1.2 Sound level meters with octave band filter should be verified by this technical specification first.

2. Terminology

2.1 Sound pressure: difference between an instantaneous total pressure and the corresponding static pressure.

Note: Sound pressure is expressed in pascal (Pa).

2.2 Sound pressure level: ten times the logarithm to the base 10 of the ratio of the time-mean-square of a sound pressure signal to the square of the reference value.

Note: sound pressure level is expressed in decibel (dB); the reference value is 20 μPa.

2.3 Frequency weighting: difference, as a specified function of frequency, between the level of the frequency-weighted signal indicated on the display device and the corresponding level of a constant-amplitude sinusoidal input signal, ex: A-frequency-weighting, C-frequency-weighting and Z.

2.4 Time-weighted sound level: ten times the logarithm to the base 10 of the ratio of the running time average of the time weighted square of a frequency-weighted sound-pressure signal to the square of the reference value.

2.5 Time-averaged sound level: ten times the logarithm to the base 10 of the ratio of the time average of the square of a frequency-weighted sound-pressure signal during a specified time interval to the square of the reference value.

2.6 Level range: range of nominal sound levels measured for a particular setting of the controls of a sound level meter.

Note: Level range is expressed in decibel (dB), for example, the 50 dB to 110 dB range.

2.7 Reference sound pressure level: sound pressure level specified for testing the electroacoustic performance of a sound level meter.

2.8 Reference level range: level range specified for testing the electroacoustic characteristics of a sound level meter and containing the reference sound pressure level.

2.9 Calibration check frequency: nominal frequency of the sinusoidal sound pressure produced by a sound calibrator.

2.10 Level linearity deviation: the value of an indicated signal level minus the anticipated signal level at a specific frequency.

2.11 Linear operating range: on any level range and at a specified frequency, the range of sound levels over which level linearity deviations do not exceed the applicable acceptance limits specified in this standard.

2.12 Toneburst: A sinusoidal electrical signal with one or more complete cycles, which starts and stops at a zero intersection of the waveform.

2.13 Toneburst response: The value of the maximum time-weighted sound level measured in response to a toneburst minus the corresponding measured sound level of the steady input signal from which the toneburst was extracted.

3. Verification and inspection equipment

3.1 Verification and inspection equipment shall meet the following specification:

（1） Sound calibrator: compliance with IEC 60942 class 1 sound calibrator, the maximum expanded uncertainty shall be less than 0.2 dB.

（2） Standard microphone: compliance with IEC61094-1 laboratory standard microphone or IEC 61094-4 working standard microphone, frequency range shall be at least 31.5 Hz to 16 kHz, the maximum expanded uncertainty shall be less than 0.2 dB.

（3） Attenuator: attenuation range shall be at least 60 dB, resolution (minimum scale) is better than 0.1 dB, the maximum expanded uncertainty shall be less than 0.2 dB.

Note: If the output voltage range of sinusoidal signal generator is greater than 60 dB, it may not be necessary to use the attenuator to test.

（4） Voltage meter: frequency range shall be at least 20 Hz to 20 kHz, the error of voltage measurement shall be less than 1 %.

（5） Sinusoidal signal generator: frequency range shall be at least 20 Hz to 20 kHz, the error of output frequency shall be less than 0.25 %.

（6） Anechoic apparatus: background noise shall be less than 20 dB (A). The deviation of free-field characteristics within the range of 0.5 m to 1.1 m from the center of sound source is shown in Table 1.

Table 1 Allowable deviation of the free-field characteristics of anechoic apparatus

Environmental requirements for acoustical signal tests	One-third-octave band frequency (Hz)	Allowable deviations (dB)
Anechoic room	≦630	±1.5
	800 to 5000	±1.0
	≧6300	±1.5

Note: The allowable deviations in Table 1 determine the available frequency range of the anechoic apparatus.

（7） Test sound source for free-field: frequency range shall be 250 Hz to 20 kHz at least, the output sound pressure level shall be at least 30 dB greater than the background noise.

Note: Tests at frequency less than the lower limiting frequency of the free-field test facility shall be performed by a comparison coupler instead of the free-field test facility.

（8） Test sound source of comparison coupler: frequency range shall be 31.5 Hz to 250 Hz at least, sound pressure level shall be greater than 70 dB.

Note: If anechoic apparatus can meet all test frequency range, it may not be necessary to use the comparison coupler to test.

（9） Toneburst signal generator: toneburst signal frequency is 4 kHz, the duration shall be at least 0.25 ms to 1000 ms.

Note: If sinusoidal signal generator can produce toneburst signals, it may not be necessary to use a toneburst signal generator.

（10）Preamplifier: frequency range shall be 20 Hz to 20 kHz at least.

（11）Measuring amplifier: frequency range shall be 20 Hz to 20 kHz at least.

Note: If the microphone output voltage can measured by a voltmeter, it may not be necessary to use the measuring amplifier.

Items of equipment (1) to (5) listed above should be provided certificates of traceability and uncertainty.

3.2 Environmental conditions of verification and inspection

（1） Temperature: 20 ℃ to 26 ℃;

（2） Relative humidity: 25 % to 70 %;

（3） Static pressure: 80 kPa to 105 kPa;

（4） Temperature, relative humidity and static pressure should be measured and recorded at the beginning and the end of the test.

4. Construction

4.1 The measurement unit of sound level meter is”decibel” and the symbol is ”dB”.

4.2 The followings shall be labeled on an obvious position of sound level meter:

（1） Type of the sound level meter (for example: class 1 or class 2).

（2） The name of manufacturer or trademark.

（3） Model type and instrument number (include type and instrument number of the microphone).

4.3 Sound level meters shall have the A-frequency-weighted characteristic.

4.4 Sound level meters shall have the time-weighted characteristic, such as fast (F or FAST), slow (S or SLOW). Integrating sound level meter must have the time-averaged characteristic.

4.5 Sound level meters shall have a function of keeping the maximum value of the measured sound pressure level.

4.6 Sound level meters shall be equipped with a device to indicate overload input.

4.7 The minimum scale interval for sound level meters with digital output indicators shall be less than 0.1 dB.

4.8 The range of indicators for sound level meters shall be at least 60 decibel.

Note: If sound level meter with difference level range, on adjacent level ranges shall overlap by at least 30 dB for sound level meters that measure time-weighted sound levels. The overlap range shall be at least 40 dB for sound level meters that measure time-averaged sound levels.

4.9 If sound level meters use batteries, a warning device should be provided to indicate low battery voltage.

4.10 The microphone shall be removable to allow the insertion of electrical test signals to the input of the preamplifier.

5. Verification procedures

5.1 According to the following items to verify the construction and specifications of the sound level meter

（1） Construction

（2） Indication at the calibration check frequency

（3） Self-generated noise

（4） Acoustical signal tests of a frequency weighting

（5） Electrical signal tests of frequency weightings

（6） Level linearity

（7） Level range control

（8） Toneburst response

（9） Overload indication

（10）Frequency and time weightings at 1 kHz

（11）Long-term stability

（12）High-level stability

Note: If the sound level meter is a multi-channel device, verify all items according to the number of channels by requirement of customers.

5.2 Construction: shall comply with the requirements of section 4

5.3 Indication at the calibration check frequency

（1） The sound level meter shall be set at specified frequency and time-weighted characteristics given in the instruction manual (if it not be specified, it can be set at the A-frequency-weighting, F-time-weighting) and reference level range.

（2） The indication of the sound level meter shall be checked the sound pressure level by calibrated sound calibrator shown as figure 1 to adjust indicated value and recorded.

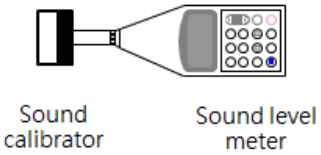

Figure 1 Calibration for checking frequency of sound level meter

5.4 The procedures of testing self-generated noise are specified as follows:

（1） Self-generated noise levels can be measured by a microphone on the sound level meter or the specified electrical input device.

（2） During the self-generated noise levels measurement by microphone, the sound level meter shall be set at the maximum-sensitive level range and A-frequency-weighting. The self-generated noise levels measurement shall be made in anechoic apparatus shown as figure 2.

（3） Using electrical input-signal device instead of a microphone to test, the device terminated in

the manner specified in the instruction manual for self-generated noise levels measurement shown as figure 3. The sound level meter shall be set at the maximum-sensitive level range and A-frequency-weighting.

（4） The A-frequency-weighed sound level of self-generated noise is preferably measured as a time-averaged sound level with an averaging time of at least 30 s.

（5） If the measurement cannot be determined by time-averaged sound level, the S-time-weighted (or F-time-weighted) sound level shall be determined from the average of ten observations taken at random over a 60 s interval.

Note: The self-generated noise level is only for reference and not for assessing conformance as a requirement. The level of self-generated noise is reported without an associated uncertainty.

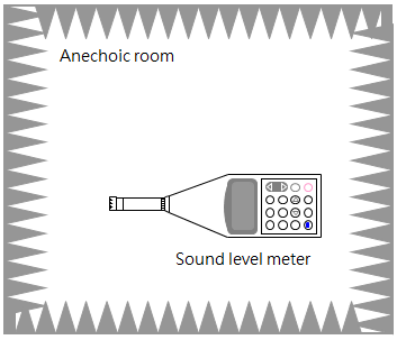

Figure 2　The acoustical signal test for self-generated noise of sound level meter

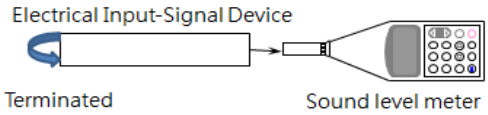

Figure 3　The electrical signal test for self-generated noise of sound level meter

5.5　The acoustical signal test of a frequency weighting is specified as follows:

5.5.1 The test in an anechoic apparatus

（1）The sound level meter shall be set at A-frequency-weighted sound level and the reference level range (or measurement level range of user application).

（2）Frequency weighting shall be test in an anechoic apparatus using a calibrated standard microphone as reference.

（3）Each instrument shall be connected as shown in figure 4, and warm up according to the time specified by the manufacturer

（4）By adjusting the output voltage of the sinusoidal signal generator, the standard microphone shall receive sound pressure level more than 70 dB at 1 m away from the sound source.

（5）The acoustical signal tests of a frequency weighting shall be test at frequencies of 31.5 Hz, 63 Hz, 125 Hz, 250 Hz, 500 Hz, 1 kHz, 2 kHz, 4 kHz, 8 kHz and 16 kHz.

（6）Replace the standard microphone with the sound level meter in the same position and then measure the frequency-weighted sound levels of the sound level meter at each frequency. Calculate the difference between the frequency-weighted sound levels and those corresponding sound pressure levels measured by the standard microphone.

（7）The test shall be repeated at 1.00 m, 1.05 m and 1.10 m difference distances in an anechoic apparatus, and then calculate the arithmetic mean of all measured sound levels.

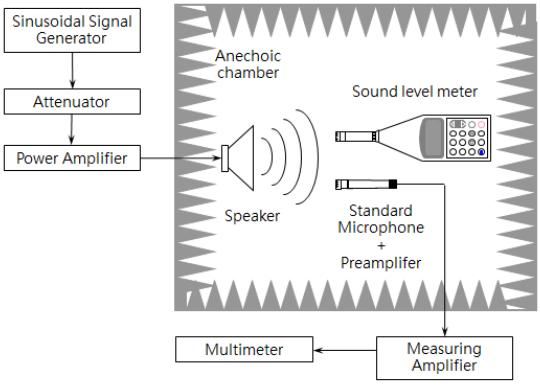

Figure 4　Test system for acoustical signal frequency weighting of sound level meter (in an anechoic apparatus)

5.5.2 The test in a comparison coupler

（Tests at frequencies equal or less than 250 Hz and the lower limiting frequency of an anechoic apparatus cannot fit the requirement can be performed by a comparison coupler.）

（1）The sound level meter shall be set at A-frequency-weighting and the reference level range (or measurement level range of user application).

（2）Frequency weighting shall be test in a comparison coupler by using a calibrated standard microphone as reference.

（3）Each instrument shall be connected as shown in figure 5, and warm up according to the time specified by the manufacturer

（4）The sound pressure level which the standard microphone receives shall be in the range from 70 dB to 125 dB at all frequencies by adjusting sinusoidal signal generator output voltage.

（5）Replace the standard microphone with the sound level meter and then measure the frequency-weighted sound levels of the sound level meter at each frequency. Calculate the difference between the frequency-weighted sound levels and those corresponding sound pressure levels measured by the standard microphone.

（6）The measurements in a comparison coupler shall be performed at least three tests and calculate the arithmetic mean of all measured sound levels. The microphones shall be removed from the coupler and then re-installed before each test.

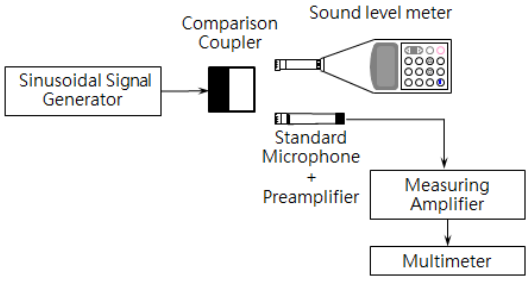

Figure 5　Test system for acoustical signal frequency weighting of sound level meter (in a comparison coupler)

5.6　The electrical signal of a frequency weighting is specified as follows

（1）Remove the microphone from sound level meter and then replace the microphone with the electrical input device to allow insertion of electrical test signals to the input of the preamplifier.

（2）Each instrument shall be connected as shown in figure 6, and warm up according to the time specified by the manufacturer.

（3）The sound level meter shall be set at the reference level range (or measurement level range of user application) and frequency weighting A, C or Z.

（4）The sinusoidal signal generator applies 1 kHz sinusoidal signal to sound level meter, then have the sound level meter display at the indication of 5 dB lower than the upper limit of primary indicator range by adjusting sinusoidal signal generator input signal, and use this indication as a reference level.

（5）Change the signal frequencies following the frequencies listed in table 1, calculate the difference value corresponding reference level and draw the response curve to get Z, A, C frequency weighted characteristics.

（6）The measured value should be the arithmetic mean of at least three test results.

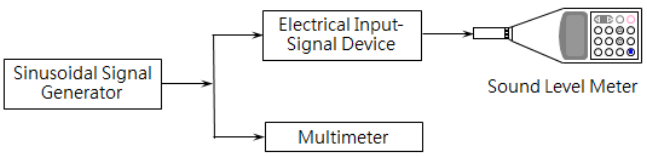

Figure 6　Test system for electrical signal frequency weighting of sound level meter

5.7　The test of a level linearity is specified as follows:

（1）Remove the microphone from sound level meter and then replace the microphone with the electrical input device to allow insertion of electrical test signals to the input of the

preamplifier.

（2） Each instrument shall be connected as shown in figure 7, and warm up according to the time specified by the manufacturer.

（3） The sound level meter shall be set at the reference level range (or measurement level range of user application) and frequency weighting A, The indicated sound level may be an F-time-weighted sound level or time-averaged sound level.

（4） The sinusoidal signal generator applies 8 kHz sinusoidal signal to sound level meter, then have the sound level meter display on reference level by adjusting input signal, and the deviation of level linearity in this reference level is zero.

（5） When adjusting the level of attenuator (or sinusoidal signal generator), this test shall be performed in 5 dB steps of increasing or decreasing input signal level. When the working range of linearity is less than 5dB between upper limit or lower limit, it shall be performed by changing input signal levels of 1 dB steps of increasing or decreasing input signal level.

（6） Calculate the deviations of level linearity between the signal generator input levels and those corresponding output levels measured by the sound level meter.

（7） The measured value should be the arithmetic mean of at least three test results.

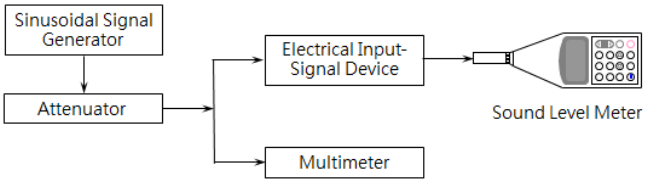

Figure 7　Test system for level linearity of sound level meter

5.8 The test of a level range control is specified as follows (applicable to multiple level ranges):

（1） Remove the microphone from sound level meter and then replace the microphone with the electrical input device to allow insertion of electrical test signals to the input of the preamplifier.

（2） Each instrument shall be connected as shown in figure 7, and warm up according to the time specified by the manufacturer.

（3） The sound level meter shall be set at the reference level range (or measurement level range of user application) and frequency weighting A, The indicated sound level may be an F-time-weighted sound level or time-averaged sound level.

（4） The sinusoidal signal generator applies 1 kHz sinusoidal signal to sound level meter, then have the sound level meter display the indication 5 dB less than the upper limit of primary indicator range by adjusting sinusoidal signal generator input signal.

（5） Adjust attenuator but do not change the indication of sound level meters in different level range by changing level range control.

（6） Calculate the difference between change value of level range control and change value of

attenuator.

（7） The measured value should be the arithmetic mean of at least three test results.

5.9 The test of a toneburst response is specified as follows:

（1） Remove the microphone from sound level meter and then replace the microphone with the electrical input device to allow insertion of electrical test signals to the input of the preamplifier.

（2） Each instrument shall be connected as shown in figure 8, and warm up according to the time specified by the manufacturer

（3） The sound level meter shall be set at the reference level range (or measurement level range of user application) and frequency weighting A, The indicated sound level may be an F-time-weighted sound level, an S-time-weighted sound level or a time averaged sound level.

（4） The sinusoidal signal generator applies 4 kHz sinusoidal signal to sound level meter, then have the sound level meter display the indication 3 dB less than the upper limit of primary indicator range by adjusting sinusoidal signal generator input signal, and use this indication as a reference level.

（5） Keep the above same input signal level, and then input a single 4k Hz toneburst with durations of 200 ms, 2 ms and 0.25 ms, respectively (for F-time-weighting and time-averaging) and with durations of 200 ms and 2 ms, respectively (for S-time-weighting) to sound level meters. Calculate the maximum sound levels indicated for the toneburst signals and the corresponding sound levels indicated for the steady signals.

（6）Measured value should be the arithmetic mean of three tests result at least.

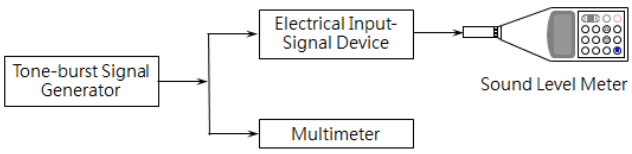

Figure 8 Test system for toneburst response of sound level meter

5.10 The test of an overload indication is specified as follows (applicable to sound level meters capable of displaying time-averaged sound level):

（1） Remove the microphone from sound level meter and then replace the microphone with the electrical input device to allow insertion of electrical test signals to the input of the preamplifier.

（2） Each instrument shall be connected as shown in figure 9, and warm up according to the time specified by the manufacturer

（3） Overload indication shall be tested on the least-sensitive level range with the sound level meter set to display A-weighted, time-averaged sound level.

（4） The sinusoidal signal generator applies 4 kHz sinusoidal signal to sound level meter, then have the sound level meter display the indication 1 dB less than the upper limit of primary indicator range by adjusting sinusoidal signal generator input signal.

（5）Apply the positive one-half-cycle signals which extracted from the 4 kHz steady signal to the sound level meter. The input signals shall be increased in steps of 0.1 dB until the first indication of overload, and then record this level. The process shall be repeated for negative one-half-cycle signals. Calculate differences between the two measurement values.

（6）The measured value should be the arithmetic mean of at least three test results.

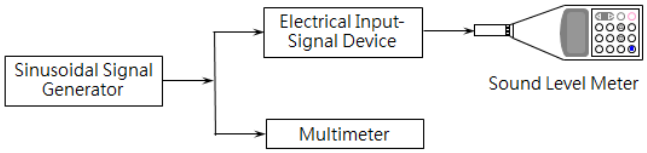

Figure 9　Test system for overload indication of sound level meter

5.11 The test of a frequency and time weightings at 1 kHz is specified as follows:

（1） Remove the microphone from sound level meter and then replace the microphone with the electrical input device to allow insertion of electrical test signals to the input of the preamplifier.

（2） Each instrument shall be connected as shown in figure 10, and warm up according to the time specified by the manufacturer.

（3） The sound level meter shall be set at the reference level range, frequency weighting A, and F-time-weighted sound level.

（4） The sinusoidal signal generator applies 1 kHz sinusoidal signal to sound level meter.

（5） Record the difference of the indicated level of a C-weighting and Z with the level of the corresponding A-weighting.

（6） Record the difference between the indicated level of a S-time-weighting and time-averaging and the level of the corresponding A-weighting.

（7）The measured value should be the arithmetic mean of at least three test results.

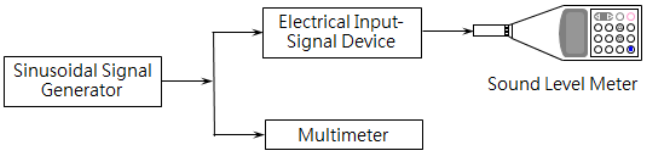

Figure 10　Test system for frequency and time weightings of sound level meter

5.12　Test of a long-term stability is specified as follows:

（1） Remove the microphone from sound level meter and then replace the microphone with the electrical input device to allow insertion of electrical test signals to the input of the preamplifier.

（2） Each instrument shall be connected as shown in figure 11, and warm up according to the time specified by the manufacturer

（3） The sound level meter shall be set at the reference level range (or measurement level range of user application) and frequency weighting A, The indicated sound level may be an F-time-weighted sound level or 10 s averaged sound level.

（4） The sinusoidal signal generator applies 1 kHz sinusoidal signal to sound level meter, then have the sound level meter display the indication 60 dB of primary indicator range by adjusting sinusoidal signal generator input signal, and continued for 30 minutes.

（5） Record the difference between the initial and final indications of sound level meter.

（6） The measured value should be the arithmetic mean of at least three test results

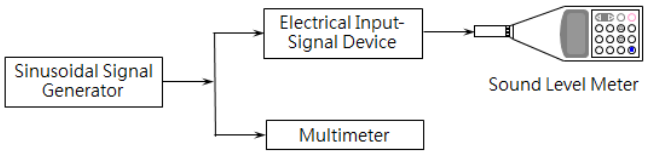

Figure 11　Test system for long-term stability of sound level meter

5.13 The test of a high-level stability is specified as follows:

（1） Remove the microphone from sound level meter and then replace the microphone with the electrical input device to allow insertion of electrical test signals to the input of the preamplifier.

（2） Each instrument shall be connected as shown in figure 12, and warm up according to the time specified by the manufacturer.

（3） The sound level meter shall be set at the reference level range (or measurement level range of user application) and frequency weighting A, The indicated sound level may be an F-time-weighted sound level or a 10-s-averaged sound level.

（4） The sinusoidal signal generator applies 1 kHz sinusoidal signal to sound level meter, then have the sound level meter display the indication 1 dB less than the upper limit of primary indicator range by adjusting sinusoidal signal generator input signal, and continued for 5 minutes.

（5） Record the difference between the initial and final indications of sound level meter.

（6） The measured value should be the arithmetic mean of at least three test results.

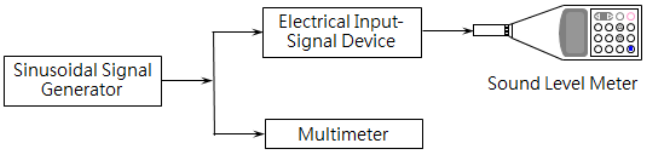

Figure 12　Test system for high-level stability of sound level meter

5.14 The validity period of the verification of a sound level meters is two years from the first day of the next month that the sound level meter bears the verification compliance mark.

6. Inspection procedures can adopt all or part of verification items in this technical specification.

7. The maximum permissible errors of verification and inspection

7.1　The verification maximum permissible errors of the sound level meter are as follows

（1）Frequency weighting:

Table 2 Frequency weightings and maximum permissible errors

Nominal frequency (Hz)	Frequency weighting (dB)			Maximum permissible errors (dB)	
	A	C	Z	Class 1	Class 2
20	-50.5	-6.2	0.0	±2.0	±3.0
25	-44.7	-4.4	0.0	+2.0;-1.5	±3.0
31.5	-39.4	-3.0	0.0	±1.5	±3.0
40	-34.6	-2.0	0.0	±1.0	±2.0
50	-30.2	-1.3	0.0	±1.0	±2.0
63	-26.2	-0.8	0.0	±1.0	±2.0
80	-22.5	-0.5	0.0	±1.0	±2.0
100	-19.1	-0.3	0.0	±1.0	±1.5
125	-16.1	-0.2	0.0	±1.0	±1.5
160	-13.4	-0.1	0.0	±1.0	±1.5
200	-10.9	0.0	0.0	±1.0	±1.5
250	-8.6	0.0	0.0	±1.0	±1.5
315	-6.6	0.0	0.0	±1.0	±1.5
400	-4.8	0.0	0.0	±1.0	±1.5
500	-3.2	0.0	0.0	±1.0	±1.5
630	-1.9	0.0	0.0	±1.0	±1.5
800	-0.8	0.0	0.0	±1.0	±1.5
1000	0	0	0	±0.7	±1.0
1250	+0.6	0.0	0.0	±1.0	±1.5
1600	+1.0	-0.1	0.0	±1.0	±2.0
2000	+1.2	-0.2	0.0	±1.0	±2.0
2500	+1.3	-0.3	0.0	±1.0	±2.5
3150	+1.2	-0.5	0.0	±1.0	±2.5
4000	+1.0	-0.8	0.0	±1.0	±3.0
5000	+0.5	-1.3	0.0	±1.5	±3.5
6300	-0.1	-2.0	0.0	+1.5;-2.0	±4.5
8000	-1.1	-3.0	0.0	+1.5;-2.5	±5.0
10000	-2.5	-4.4	0.0	+2.0;-3.0	+5.0; -∞
12500	-4.3	-6.2	0.0	+2.0;-5.0	+5.0; -∞
16000	-6.6	-8.5	0.0	+2.5;-16.0	+5.0; -∞
20000	-9.3	-11.2	0.0	+3.0;-∞	+5.0; -∞

（2） Level linearity:

The level linearity deviations shall not exceed ±0.8 dB for class 1 sound level meter.

The level linearity deviations shall not exceed ±1.1 dB for class 2 sound level meter.

（3）Toneburst response:

Table 3 Toneburst responses and maximum permissible errors

Toneburst duration (ms)	Toneburst duration (dB)		Maximum permissible errors (dB)	
	F-time-weighting	Time average	Class 1	Class 2
200	-1.0	-7.0	±0.5	±1.0
2	-18.0	-27.0	+1.0;-1.5	+1.0;-2.5
0.25	-27.0	-36.0	+1.0;-3.0	+1.5;-5.0
	S-time-weighting			
200	-7.4		±0.5	±1.0
2	-27.0		+1.0;-3.0	+1.0;-5.0

（4） The deviations of overload indication shall not exceed ±1.5 dB.

（5） Frequency and time weightings at 1 kHz:

The deviations of frequency weighting switched shall not exceed ±0.2 dB.

The deviations of time weighting switched shall not exceed ±0.1 dB.

（6） Long-term stability:

The deviations of long-term stability for class 1 sound level meter shall not exceed ±0.1 dB.

The deviations of long-term stability for class 2 sound level meter shall not exceed ±0.3 dB.

（7）High-level stability:

The deviations of high-level stability for class 1 sound level meter shall not exceed ±0.1 dB.

The deviations of high-level stability for class 2 sound level meter shall not exceed ±0.3 dB.

7.2 The maximum-permitted expended uncertainties of each verification item at a confidence level of approximately 95 % for the sound level meter are shown in table 4.

Table 4 Maximum-permitted expanded uncertainty of the verification items

Verification items	Maximum-permitted expanded uncertainty
Frequency weightings A、C、Z	0.60 dB (10 Hz to 4 kHz) 0.70 dB (> 4 kHz to 10 kHz) 1.00 dB (>10 kHz to 20 kHz)
Level linearity deviation	0.30 dB
Toneburst response	0.30 dB
Overload indication	0.25 dB
Frequency weighting vs. Time weighting at 1 kHz	0.20 dB
Long-term stability	0.10 dB
High-level stability	0.10 dB

7.3 The inspection maximum permissible errors of sound level meters are the same as the verification maximum permissible errors.

8. The verification compliance marks and certificates

8.1 The verification compliance tag of a sound level meter shall be stuck on an obvious place of the upper cover of the main device.

8.2 A verification certificate shall be issued after the sound level meter passes the verification.

8.3 The verification certificate of a sound level meter shall be recorded with the following items: the applicant, address, specification, brand, model, serial number, type, the number of certificate, verification date, expiration date, and other necessary items.