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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 3785.3-2018

Electroacoustics -- Sound level meters -- Part 3: Periodic tests

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Foreword

GB/T 3785 "Acoustic Sound Level Meter" is divided into 3 parts.

--- Part 1. Specifications;

--- Part 2. Type evaluation test;

--- Part 3. Periodic tests.

This part is part 3 of GB/T 3785.

This section was drafted in accordance with the rules given in GB/T 1.1-2009.

This section uses the translation method equivalent to the use of IEC 61672-3:2013 "Electrical Acoustic Sound Level Meter Part 3. Cycle Test".

The Chinese documents that are consistent with the normatively quoted international documents in this section are as follows.

---GB/T 3785.1-2010 Electroacoustic sound level meter Part 1. Specification (IEC 61672-1:2002, IDT)

---GB/T 3785.2-2010 Electroacoustic sound level meter Part 2. Type evaluation test (IEC 61672-2:2003, IDT)

---GB/T 15173-2010 Electro acoustics calibrator (IEC 60942:2003, IDT)

--- GB/T 17312-1998 Random incidence and diffuse field calibration of sound level meters (equiv IEC 61183:1994)

1 Scope

This part of GB/T 3785 specifies a time-weighted sound level meter designed to meet the requirements of Class 1 and Class 2 as required by IEC 61672-1.

Integral average sound level meter and integral sound level meter cycle test procedure. Its purpose is to ensure that all laboratories use a consistent method for the cycle test.

Note 1. Unless otherwise specified, the IEC 61672-1 and IEC 61672-2 and IEC 61672-3 mentioned in this section are the second edition.

NOTE 2 The periodic test procedure for the design of sound level meters in accordance with the specifications of GB/T 3785.1-2010 is given by IEC 61672-3:2006.

The purpose of the periodic test is to demonstrate to the user that for a defined set of critical tests and under the environmental conditions under which the test is conducted, the sound level meter

The performance meets the applicable specifications of IEC 61672-1.

The scope of the tests in this section is a deliberately limited minimum range necessary for periodic testing.

This section applies to sound level meters that the manufacturer claims to comply with IEC 61672-1 version 2 specifications. The periodic test in this section also applies to it

Models have been or have not been subjected to a type approval test by an independent testing agency in accordance with IEC 61672-2 2nd Edition test procedure.

Due to the limited scope of the periodic test, if the evidence of the type evaluation cannot be publicly obtained, even if the results of the periodic test comply with IEC 61672-3

All applicable requirements of the version cannot also make general conclusions in accordance with the IEC 61672-1 specification.

2 Normative references

The following documents are indispensable for the application of this document. For dated references, only dated versions apply to this article

Pieces. For undated references, the latest version (including all amendments) applies to this document.

IEC 60942 Electroacoustics-Sound calibrators

IEC 61094-4 Test Microphone Part 4. Working Standard Microphone Specification (Measurement Microphones-Part 4.

Specificationsforworkingstandardmicrophones)

IEC 61094-6 Test microphones - Part 6. Electrostatic exciter method for measuring frequency response (Measurementmicro-

phones-Part 6.Electrostaticactuatorsfordeterminationoffrequencyresponse)

Random Incident and Diffuse Field Calibration of IEC 61183 Electroacoustic Sound Level Meter (Electroacoustics-Random-incidenceand

Diffuse-field calibration of sound level meters)

IEC 61672-1 Electroacoustic Sound Level Meter Part 1. Specification
(Electroacoustics-Sound level meters-Part 1.

Specifications)

IEC 61672-2 Electro-Acoustic Sound Level Meter Part 2. Type Evaluation Test
(Electroacoustics-Sound level

meters-Part 2. Pattern evaluation tests)

IEC 62585 Electroacoustics for the determination of the free field response of sound level
meters (Electroacoustics-Method to deter-

Mine correction to obtain the free-field response of a sound level meter)

ISO /IEC Guide 98-3 Uncertainty in measurement Part 3. Guidance for the presentation of
measurement uncertainty (GUM..1995)

[Uncertainty of measurement-Part 3.

Guide to the expression of uncertainty in measurement (GUM.

1995)]

ISO /IEC Guide 99 International Metrology Glossary Fundamentals Common Concepts and
Related Terms [International vocabulary of

metrology-Basic and general concepts and associated terms (VIM)]