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IEC 61672-2:2013+AMD1:2017 CSV (ED 2.1)

AS/NZS IEC 61672.2:2019

Australian/New Zealand Standard™

Electroacoustics—Sound level meters

Part 2: Pattern evaluation tests

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AS/NZS IEC 61672.2:2019

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Accident Compensation Corporation (New Zealand)
Association of Australasian Acoustical Consultants
Australian Acoustical Society
Australian Chamber of Commerce and Industry
Australian Council of Trade Unions
Australian Hearing
Engineers Australia
New Zealand Audiological Society
Worksafe Division, Department of Commerce, Western Australia

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Australian/New Zealand Standard™

Electroacoustics—Sound level meters

Part 2: Pattern evaluation tests

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Preface

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee AV-003, Acoustics Human Effects, to supersede AS IEC 61672.2—2004, *Electroacoustics—Sound level meters, Part 2: Pattern evaluation tests.*

The objective of this Standard is to provide details of the tests necessary to verify conformance to all mandatory specifications given in AS IEC 61672.1 for time-weighting sound level meters, integrating-averaging sound level meters, and integrating sound level meters. Pattern evaluation tests apply for each channel of a multi-channel sound level meter, as necessary. Tests and test methods are applicable to class 1 and class 2 sound level meters. The aim is to ensure that all laboratories use consistent methods to perform pattern evaluation tests.

This Standard is identical with, and has been reproduced from, IEC 61672-2:2013+AMD 1:2017 (CD 2.1), *Electroacoustics — Sound level meters — Part 2: Pattern evaluation tests.*

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(a) In the source text "this part of IEC 61672" should read "this Australian/New Zealand Standard".

(b) A full point substitutes for a comma when referring to a decimal marker.

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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ELECTROACOUSTICS – SOUND LEVEL METERS –

Part 2: Pattern evaluation tests

FOREWORD

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This Consolidated version is not an official IEC Standard and has been prepared for user convenience. Only the current versions of the standard and its amendment(s) are to be considered the official documents.

This Consolidated version of IEC 61672-2 bears the edition number 2.1. It consists of the second edition (2013-09) [documents 29/813/FDIS and 29/824/RVD] and its amendment 1 (2017-04) [documents 29/914/CDV and 29/938/RVC]. The technical content is identical to the base edition and its amendment.

This Final version does not show where the technical content is modified by amendment 1. A separate Redline version with all changes highlighted is available in this publication.

International Standard IEC 61672-2 has been prepared by IEC technical committee 29, Electroacoustics, in cooperation with the International Organization of Legal Metrology (OIML).

This second edition constitutes a technical revision.

The main technical changes with regard to the previous edition are as follows:

In this second edition, conformance to specifications is demonstrated when:

a) measured deviations from design goals do not exceed the applicable acceptance limits, and

b) the uncertainty of measurement does not exceed the corresponding maximum permitted uncertainty, with both uncertainties determined for a coverage probability of 95 %.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts of the IEC 61672 series, published under the general title *Electroacoustics – Sound level meters*, can be found on the IEC website.

The committee has decided that the contents of the base publication and its amendment will remain unchanged until the stability date indicated on the IEC web site under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

ELECTROACOUSTICS – SOUND LEVEL METERS –

Part 2: Pattern-evaluation tests

1 Scope

This part of IEC 61672 provides details of the tests necessary to verify conformance to all mandatory specifications given in IEC 61672-1 for time-weighting sound level meters, integrating-averaging sound level meters, and integrating sound level meters. Pattern-evaluation tests apply for each channel of a multi-channel sound level meter, as necessary. Tests and test methods are applicable to class 1 and class 2 sound level meters. The aim is to ensure that all laboratories use consistent methods to perform pattern-evaluation tests.

NOTE 1 In this document, references to IEC 61672-1, IEC 61672-2, and IEC 61672-3 refer to the second editions unless stated otherwise.

NOTE 2 Procedures for the pattern-evaluation testing of sound level meters designed to conform to the specifications of IEC 61672-1:2002 were given in IEC 61672-2:2003.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60942, *Electroacoustics – Sound calibrators*

IEC 61000-4-2:2008, *Electromagnetic compatibility (EMC) – Part 4-2: Testing and measurement techniques – Electrostatic discharge immunity test*

IEC 61000-4-3:2010, *Electromagnetic compatibility (EMC) – Part 4-3: Testing and measurement techniques – Radiated, radio-frequency, electromagnetic-field immunity test*

IEC 61000-4-6:2008, *Electromagnetic compatibility (EMC) – Part 4-6: Testing and measurement techniques – Immunity to conducted disturbances, induced by radio-frequency fields*

IEC 61000-4-20:2010, *Electromagnetic compatibility (EMC) – Part 4-20: Testing and measurement techniques – Emission and immunity testing in transverse electromagnetic (TEM) waveguides*

IEC 61000-6-2:2005, *Electromagnetic compatibility (EMC) – Part 6-2: Generic standards – Immunity for industrial environments*

IEC 61094-1, *Measurement microphones – Part 1: Specifications for laboratory standard microphones*

IEC 61094-5, *Measurement microphones – Part 5: Methods for pressure calibration of working standard microphones by comparison*

IEC 61183, *Electroacoustics – Random-incidence and diffuse-field calibration of sound level meters*