AS 60118.8—2007
IEC 60118-8, Ed. 2.0:2005
Reconfirmed 2019

Australian Standard®

Hearing aids

Part 8: Methods of measurement of performance characteristics of hearing aids under simulated in situ working conditions

This Australian Standard® was prepared by Committee AV-003, Acoustics—Human Effects.
It was approved on behalf of the Council of Standards Australia on 3 November 2006.
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The following are represented on Committee AV-003:

- Association of Accredited Certification Bodies
- Association of Australian Acoustical Consultants
- Association of Consulting Engineers Australia
- Audiological Society of Australia
- Australasian Faculty of Occupational Medicine
- Australian Acoustical Society
- Australian Chamber of Commerce and Industry
- Australian Council of Trade Unions
- Australian Industry Group
- Department of Consumer & Employment Protection, WorkSafe Division, WA
- Department of Labour, NZ
- National Acoustic Laboratories
- New South Wales Nurses, Association
- New Zealand Audiological Society
- Royal Institute of Naval Architects
- Safety Institute of Australia
- The Australian Society of Otolaryngological Head and Neck Surgery
- Victorian WorkCover Authority
- WorkCover New South Wales

This Standard was issued in draft form for comment as DR 06473.

Standards Australia wishes to acknowledge the participation of the expert individuals that contributed to the development of this Standard through their representation on the Committee and through public comment period.

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STANDARDS AUSTRALIA

RECONFIRMATION

OF
AS 60118.8—2007
Hearing aids
Part 8: Methods of measurement of performance characteristics of hearing aids under simulated in situ working conditions

RECONFIRMATION NOTICE

Technical Committee AV-003 has reviewed the content of this publication and in accordance with Standards Australia procedures for reconfirmation, it has been determined that the publication is still valid and does not require change.

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The following are represented on Technical Committee AV-003:
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Australian Acoustical Society
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New South Wales Nurses Association
New Zealand Audiological Society
Worksafe Division, Department of Commerce, Western Australia
WorkSafe Victoria

NOTES

Australian Standard®

Hearing aids

Part 8: Methods of measurement of performance characteristics of hearing aids under simulated in situ working conditions

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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 1088.8—1987.

After consultation with stakeholders in both countries, Standards Australia and Standards New Zealand decided to develop this Standard as an Australian Standard rather than an Australian/New Zealand Standard.

The objective of this Standard is to describe methods for a test which simulates the acoustical effects of a median adult wearer on the performance of a hearing aid.

This Standard is identical with, and has been reproduced from IEC 60118-8, Ed. 2.0 (2005), *Electroacoustics—Hearing aids - Part 8: Methods of measurement of performance characteristics of hearing aids under simulated in situ working conditions*.

As this Standard is reproduced from an International Standard, the following applies:

(a) Its number does not appear on each page of text and its identity is shown only on the cover and title page.

(b) In the source text 'this part of IEC 60118' should read 'this Australian Standard.

(c) A full point should be substituted for a comma when referring to a decimal marker.

The terms 'normative' and 'informative' are used to define the application of the annex to which they apply. A normative annex is an integral part of a standard, whereas an informative annex is only for information and guidance.

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Measurement methods that take into account the acoustical influence of the wearer on the performance of hearing aids are important, particularly when the results are to be used to assist in fitting of hearing aids. The information obtained using this standard is likely to be more relevant to the fitting of hearing aids than that provided by publications concerned with type approval and quality control such as IEC 60118-0 and IEC 60118-7.

The methods specified in this standard require a device such as a manikin to simulate the presence of the wearer. It has been found necessary to establish certain guidelines for simulated in situ measurements of hearing aids. The recommended methods are described in this standard.

STANDARDS AUSTRALIA

Australian Standard

Hearing aids—Part 8: Methods of measurement of performance characteristics of hearing aids under simulated in situ working conditions

1 Scope

The purpose of this part of IEC 60118 is to describe methods for a test which simulates the acoustical effects of a median adult wearer on the performance of a hearing aid.

It establishes certain guidelines for simulated *in situ* measurements of hearing aids; it describes a simplified method for simulated *in situ* measurements of hearing aids and a description for determination of the directivity index (DI) of directional microphones in hearing aids in the horizontal plane.

In addition this second edition now specifies tolerances. Conformance to the specifications in this International Standard is demonstrated only when the result of a measurement, extended by the actual expanded uncertainty of measurement of the testing laboratory, lies fully within the tolerances specified in this International Standard extended by the values for U_{max}

2 Normative references

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

References to international standards that are struck through in this clause are replaced by references to Australian or Australian New Zealand Standards that are listed immediately thereafter and identified by shading. Only Australian or Australian/New Zealand Standard that is identical to the International Standard it replaces is identified as such.

~~IEC 60118-0:1983, *Hearing aids – Part 0: Measurement of electroacoustical characteristics*~~

AS 60118.0*, Hearing aids*, Part 0: *Measurement of electroacoustical characteristics* (identical to IEC 60118-0)

IEC 60263, *Scales and sizes for plotting frequency characteristics and polar diagrams*

~~IEC 60711, *Occluded-ear simulator for the measurement of earphones coupled to the ear by ear inserts*~~

AS 2928, *Occluded-ear simulator for the measurement of earphones coupled to the ear by ear inserts* (identical to IEC 60711)

IEC 60959, *Provisional head and torso simulator for acoustic measurements of air conduction hearing aids*