

Australian Standard[®]

Hearing aids

Part 7: Measurement of the performance characteristics of hearing aids for production, supply and delivery quality assurance purposes



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. This Standard was published on 20 February 2007.

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 - 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
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 - Department of Consumer & Employment Protection, WorkSafe Division, WA
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 - 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
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STANDARDS AUSTRALIA

RECONFIRMATION

OF

AS 60118.7—2007

Hearing aids

**Part 7: Measurement of the performance characteristics of hearing aids for
production, supply and delivery quality assurance purposes**

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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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New South Wales Nurses Association
New Zealand Audiological Society
Worksafe Division, Department of Commerce, Western Australia
WorkSafe Victoria

NOTES

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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 1088.7—1987, *Hearing aids—Measurement of the performance characteristics of hearing aids for quality inspection for delivery purposes*.

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 give recommendations for the measurement of the performance characteristics of air-conduction hearing aids of a particular model for the purposes of comparing measured properties with those specified by the manufacturer.

This Standard is identical with, and has been reproduced from IEC 60118-7, Ed. 2.0 (2005), *Electroacoustics—Hearing aids—Part 7: Measurement of the performance characteristics of hearing aids for production, supply and delivery quality assurance purposes*.

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.

CONTENTS

	<i>Page</i>
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 General conditions	4
4.1 Acoustic test method	4
4.2 Reporting of data	4
5 Nominal characteristics and tolerances	4
6 Test box and test equipment	5
6.1 General	5
6.2 Unwanted stimuli in the test box	5
6.3 Sound source	5
6.4 Acoustic coupler	5
6.5 Measurement system for the measurement of sound pressure level and harmonic distortion in the acoustic coupler	5
7 Test conditions	6
7.1 General	6
7.2 Control of the sound field	6
7.3 Normal operating conditions for a hearing aid	8
8 Measurements, specifications and tolerances	10
8.1 Frequency response curves	10
8.2 Output sound pressure level frequency response curve for an input sound pressure level of 90 dB (OSPL90 frequency response curve)	10
8.3 Full-on acoustic gain response curve	11
8.4 Basic frequency response curve at reference test gain setting	11
8.5 Battery current	13
8.6 Total harmonic distortion	13
8.7 Equivalent input noise	13
8.8 Additional measurements for hearing aids having induction pick-up coil	14
8.9 Additional measurements applying to AGC hearing aids	14
9 Maximum permitted expanded uncertainty of measurements	15
Bibliography	17

STANDARDS AUSTRALIA

Australian Standard**Hearing aids—Part 7: Measurement of the performance characteristics of hearing aids for production, supply and delivery quality assurance purposes**

1 Scope

This part of IEC 60118 gives recommendations for the measurement of the performance characteristics of air-conduction hearing aids of a particular model for production, supply and delivery quality assurance purposes. The manufacturer will normally assign nominal values.

This standard does not relate to mechanical or environmental tests. It should not be used as the basis for the exchange of information about hearing aid characteristics in general, nor is it intended to be used as a predictor for real-ear performance.

NOTE Terms such as "manufacturer" and "purchaser" are used in this standard. These terms may be understood, however, to refer to the supplier and recipient respectively in any arrangement for the supply of hearing aids in which the use of this standard is called for.

Though the number of measurements covered by this standard is limited, it is not intended that all measurements described herein shall be made in every case.

This second edition now specifies performance requirements. Conformance to the specifications in this 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 standard extended by the values for U_{\max} given in Table 4.

In case of custom-made in-the-ear instruments, the data supplied by the manufacturer applies only to the particular hearing aid being tested.

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.

IEC 60318-5, *Electroacoustics – Simulators of human head and ear – Part 5: 2 cm³ coupler for the measurement of hearing aids and earphones coupled to the ear by means of ear inserts*¹⁾

3 Terms and definitions

For the purpose of this document, the following terms and definitions apply:

¹⁾ To be published. IEC 60318-5 is a revision of IEC 60126:1973, *IEC reference coupler for the measurement of hearing aids using earphones coupled to the ear by means of ear inserts*.