

ICS 17.140.50

CCS A 59



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

GB/T 25498.5-2017

**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**

电声学 人头模拟器和耳模拟器 第5部分：测量助听器和以插入方式与人耳耦合的
耳机用2cm³声耦合器

(English Translation)

Issued on: September 7, 2017

Implemented on: April 1, 2018

**Issued by: General Administration of Quality Supervision, Inspection and
Quarantine of the People's Republic of China, Standardization
Administration of the People's Republic of China**

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Foreword

GB/T 25498 "electro-acoustic head simulator and ear simulator" is divided into the following sections.

- Part 1. Calibrations earmuffs ear simulator;
- Part 2. Calibration audiometry earphones with extended high-frequency range temporary acoustic coupler;
- Part 3. Calibration of earbuds audiocouplers for audiometry;
- Part 4. Measurement of plug-in earphones plugging ear simulator;
- Part 5. Measurement of hearing aids and to insert the way with the human ear coupling 2cm³ acoustic coupler;

--- Part 6. Bone shaker measuring force coupler;

--- Part 7. Measurement of human head and torsion simulator for hearing aids.

This section GB/T 25498 Part 5.

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

This section uses the translation method is equivalent to using IEC 60318-5:2006 "electroacoustic human head simulator and ear simulator Part 5. Test Volume hearing aid and a 2cm³ acoustic coupler for earphones that are coupled to the human ear by way of insertion. " the documents of our country that are consistent with the corresponding international documents that are normative references in this section are as follows.

--- GB/T 16402-1996 Acoustic plug-in headphones pure tone reference equivalent sound pressure level (eqvISO 389-2:1994)

--- GB/T 20441.4-2006 Measuring microphones Part 4. Working standard microphone specifications (IEC 61094-4:1995, IDT) Please note that some of this document may be patentable. The issuing agencies of this document do not bear the responsibility of identifying these patents.

This part is proposed by the Ministry of Industry and Information Technology of the People's Republic of China.

This part of the National Electroacoustic Standardization Technical Committee (SAC/TC23) centralized.

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1 Scope

This section GB/T 25498 specifies an acoustic coupler for the determination of 125Hz ~ 8000Hz frequency range, with a specific sound Impedance of hearing aids or headphones physical characteristics.

This section applies to inserted into the human ear and air-conduction hearing aids, such as ear molds or similar devices.

Under normal circumstances, the headphone pressure generated in the coupler and the sound pressure generated in the human ear is not the same, but it can be as easy the method of rowing is used for the exchange of technical specifications and physical data of hearing aids, as well as for the calibration of prescribed plug-in headphones.

Note: This section of the plug-in headset is inserted into the human ear coupled with the ear.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version applies to this article Pieces. For undated references, the latest edition (including all amendments) applies to this document.

ISO 389-2 Acoustic calibration of audiometric equipment - Level 0 - Part 2. Plug-in headphones pure tone reference equivalent threshold sound pressure level (Acoustics-Reference zero for the calibration of audiometric equipment-Part 2: Reference equivalent threshold sound pressure levels for pure tones and insert earphones) IEC 61094-4 Measurement microphones Part 4. Working standard microphone specifications (Measurement microphones-Part 4.

Specifications for working standard microphones) BIPM/IEC/ISO/IUPAC/IUPAP/OIML.1995 Guidance on Measurement Uncertainty [Guide to the expression of uncertainty in measurement (GUM)]

3 Terms and definitions

The following terms and definitions apply to this document.

Acoustics coupler

Predetermined shape and volume cavities, combined with calibrated microphones for measuring the sound pressure level in the cavity, are used to calibrate headset.

Effective volume at 250 Hz, the equivalent air volume of the coupler made up of the cavity and the microphone.

4.1 Overview

Coupler mainly by the effective volume nominal value of 2000 mm³ cylindrical cavity composition. Place the microphone diaphragm or adapter ring