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**INDUSTRY STANDARD OF THE
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JJF 1842-2020

**Calibration Specification for Fixed Audiometric Equipment in
Sound Field
(English Translation)**

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Appendix A Reference threshold sound pressure levels for free field and diffuse field audiometry (6)

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Appendix C Examples of Uncertainty Evaluation (11)

Introduction

JJF 1071-2010 "Rules for the Compilation of National Metrology and Calibration Specifications", JJF 1001-2011 "General Metrology Terms and Definitions "Evaluation and Representation of Measurement Uncertainty" and JJF 1059.1-2012 "Measurement Uncertainty Evaluation and Expression" together constitute the basis for supporting the formulation of this specification.

Basic series of specifications. This specification refers to the national standard GB/T 4854.7-2008 "Acoustic Calibration Audiometry Reference Level Zero for Preparation Part 7: Reference Threshold for Free Field and Diffusion Field Audiometry, GB/T 16296.2-2016 "Sound Learn Audiometry Method Part 2: Sound Field Audiometry with Pure Tone and Narrowband Test Signals and National Metrological Verification Regulations JJG388-2012 "Pure tone audiometer for audiometry equipment".

This specification is released for the first time.

Calibration specification for fixed sound field audiometry equipment

1 Scope

This specification applies to the calibration of fixed sound field audiometry equipment (hereinafter referred to as audiometry equipment).

2 Reference documents this specification refers to the following documents.

JJG176 Sound Calibrator JJF 1001 General measurement terms and definitions JJF 1034 Acoustic Metrology Terms and Definitions JJF 1059.1-2012 Measurement Uncertainty Evaluation and Expression GB/T 3102.7 Acoustic quantities and units GB/T 3947-1996 Acoustic terms GB/T 4854.7-2008 Acoustic calibration of the reference zero level of audiometry equipment-Part 7: Reference threshold of free field and diffuse field audiometry GB/T 7341.1-2010 Electroacoustic Audiometry Equipment Part 1: Pure Tone Audiometer GB/T 16296.2-2016 Acoustic audiometry method Part 2: Sound field audiometry with pure tone and narrowband test signals for dated reference documents, only the dated version applies to this specification; for undated reference documents, the latest version (including all amendments) is applicable to this specification.

3 Terms and units of measurement this specification adopts the quantities and units specified in GB/T 3102.7.

JJG176, JJF 1001, JJF 1034, JJF 1059.1, GB/T 3947-1996, GB/T 4854.7-the following terms and definitions defined in 2008, GB/T 7341.1-2010 and GB/T 16296.2-2016 apply to this code.

3.1 Howl

A pure tone whose frequency is sinusoidally modulated.

Note: Rewrite GB/T 3947-1996, definition 12.10.

3.2 Reference points the center position of the subject's head (the midpoint of the connection between the center of the external auditory meatus of the two ears) during sound field audiometry is located on the reference axis of the sounding speaker of the audiometry equipment.

Note: Rewrite GB/T 16296.2-2016, definition 3.3.

3.3 Fixed sound field audiometry equipment Hearing equipment for sound field listening of subjects in the listening room, consisting of one or more speakers fixedly placed in the listening room and the signal source, power amplifier, signal level controller and other components placed outside the listening room.