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**Calibration Specification for Electro-acoustical Measurement
Instruments
(English Translation)**

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Introduction

This specification is based on JJF 1071-2010 "National Calibration Specifications writing rules," the preparation of requirements and coding format written. General Terms and JJF 1001 measurement used in this specification "common measurement terms and definitions of" consensus, the main spot the technical term industry adopted GB/T 3947-1996 "Acoustics terminology" and ITU-TP.51.1996 "simulation Definition of mouth ". This specification audio tester artificial ear and the relevant part of the calibration project. the artificial ear pressure sensitivity adjustment Section (including the measuring system) and the artificial ear microphone frequency response is consistent with JJG389-2003 "artificial ear." this specification audio tester artificial mouth and the relevant parts (including source) calibration projects, ITU-T P.51.1996 "artificial mouth" to determine the main acoustic characteristics. Normalized free-field response selected measuring point 2, and electrical Sound tester calibration position closest to the sound. The maximum sound pressure level and can be sent; response requirements and tolerances from Table 3a/P.51 Total distortion calibration method is consistent with the proposal, the total distortion limits depending on the circumstances of domestic production plant slightly enlarged, and an increase in the most common requirements of 1kHz.

Acoustic Test metrological characteristics of the present specification given in addition to the above basis, but also a combination of domestic and international electro-acoustic tester main Manufacturer's instructions to the main parameters of the technical requirements. In Appendix B, according JJF 1059-1999 "measurement is not Determine the evaluation and expression "gives examples of assessment SPL measurement uncertainty.

Acoustic Calibration Test Specification

1 Scope

This standard applies to the measurement headsets, microphones, speakers, receivers, microphones and other audio devices electro-acoustic properties Electro-acoustic test instrument calibration.

2. References

This specification references the following documents.

JJG176-2005 sound calibrators JJG188-2002 Sound Level Meter JJG389-2003 artificial ear JJG607-2003 audio signal generator JJF 1001 common measurement terms and definitions JJF 1034-2005 acoustic measurement terminology and definitions JJF 1059-1999 Evaluation and Expression of Uncertainty in Measurement JJF 1157-2006 measuring amplifier calibration specification GB 3102.7 Quantities and units of acoustics GB/T 3947-1996 Acoustics Terminology ITU-TP.51.1996 artificial mouth (ITU-TRecommendationP.51ArtificialMouth) for dated references, only the dated edition applies to this specification; undated reference documents Member, the latest edition

(including any amendments) applies to this specification.

3 terminology and units of measurement JJF 1001, GB/T 3947-1996, ITU-TP.51.1996 and JJF 1034-2005 as defined and the following terms and definitions apply to this specification.

This specification uses quantities and units specified in GB 3102.7.

3.1 artificial ear Acoustic impedance headphones to provide equivalent means average adult ear headphones acoustic impedance calibration.

NOTE: rewrite GB/T 3947-1996,6.57.

3.2 artificial mouth Closed cavity equipped with a speaker, the sound directivity and radiation pattern of the average person's speech is similar to the mouth.

[ITU-TP.51.1996,4.1] 3.3 mouth reference point (MRP) mouthreferencepoint in the reference axis, from the lips of the plane in front of the point of 25mm.

[ITU-TP.51.1996,4.7] 3.4 normalized free-field response Artificial mouth in free field over a given point produces 1/3 octave spectrum level of the signal while producing a letter in the mouth reference point