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(JSA)

**Electroacoustics—
Random incidence and diffuse
field calibration of sound level
meters**

ICS 17.140.50

Descriptors : noise (environmental), acoustic measurement, measuring instruments,
absorption (waves), diffusion (waves), calibration

Reference number : JIS C 1508 : 2000 (E)

Foreword

This translation has been made based on the original Japanese Industrial Standard established by the Minister of International Trade and Industry through deliberations at the Japanese Industrial Standards Committee according to the proposal of establishing a Japanese Industrial Standard from the Japanese Standards Association (JSA), with a draft of Industrial Standard based on the provision of Clause 1, Article 12 of the Industrial Standardization Law.

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In the event of any doubts arising as to the contents,
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Contents

	Page
Introduction	1
1 Scope	1
2 Normative references	1
2.1 Japanese Industrial Standards	1
2.2 International Standards	2
3 Definitions	2
3.1	2
3.2 reference direction	2
3.3 random incidence sound field	2
3.4 diffuse sound field	2
3.5 random-incidence sensitivity level	2
3.6 diffuse-field sensitivity level	2
3.7 free-field sensitivity level	3
3.8 pressure sensitivity level	3
4 Calibration method based on free-field measurements	3
5 Calibration method based on diffuse-field measurements	6
Annex A (informative) Practical calibration method based on free-field measurements	8
A.1 Principle of the test procedure	8
A.2 Measurement set-up	11
A.3 Measurement of the free-field sensitivity level G_F	12
A.4 Measurement and calculation of directivity factors	12
A.5	13
A.6	14

Annex B (informative)	Practical calibration method based on diffuse-field measurements	15
B.1	Measurement set-up.....	15
B.2	Measurement of diffuse-field sensitivity level G_D by comparison with sound pressure levels measured by a reference sound level meter calibrated in accordance with clause 4 and the procedure of Annex A	15
B.3	Measurement of diffuse-field sensitivity level G_D by comparison with sound pressure levels measured by a free-field calibrated reference sound level meter with known free-field sensitivity levels $G_{F, \text{ref}}$ and known directivity factors γ_{ref}	16
B.4	Measurement of diffuse-field sensitivity level G_D by comparison with sound pressure levels measured by a pressure calibrated reference sound level meter with known pressure sensitivity level $G_{P, \text{ref}}$ and known difference Δ_{DP} between diffuse-field sensitivity level and pressure sensitivity level.....	16
B.5	Measuring method used for determination of values given in Table B.1	17

Electroacoustics— Random incidence and diffuse field calibration of sound level meters

Introduction This Japanese Industrial Standard has been prepared based on the first edition of **IEC 61183** *Electroacoustics—Random-incidence and diffuse-field calibration of sound level meters* published in 1994 without modifying the technical contents.

“Information” underlined with dots is the matter not stated in the original International Standard.

1 Scope

1.1 This Standard describes a free-field calibration method for determining random-incidence sensitivity levels of sound level meters. Additionally, this Standard describes a diffuse-field calibration method for determining diffuse-field sensitivity levels.

1.2 For the purpose of this Standard, diffuse-field sensitivity level may be used interchangeably with random-incidence sensitivity level. Selection of calibration method depends on the facility available.

1.3 Results of calibrations conducted in accordance with this Standard depend upon which components of a sound level meter are exposed to the sound field.

1.4 For the purpose of this Standard, a sound level meter is considered to be a conventional sound level meter, an integrating-averaging sound level meter, or any other sound measuring system.

2 Normative references The following standards contain provisions which, through reference in this Standard, constitute provisions of this Standard. The most recent editions of the standards (including amendments) indicated below shall be applied.

2.1 Japanese Industrial Standards

JIS C 1502 *Sound level meters*

JIS C 1505 *Precision sound level meters*

NOTE : The items cited from **IEC 60651** *Sound level meters* and **IEC 60804** *Integrating-averaging sound level meters* are equivalent to the corresponding matters of **JIS C 1502** and **JIS C 1505**.

JIS C 1514 *Octave-band and fractional-octave-band filters* (to be published)

NOTE : **IEC 61260** *Electroacoustics—Octave-band and fractional-octave-band filters* is identical with the said standard.

JIS Z 8106 *International electrotechnical vocabulary Chapter 801: Acoustical and electroacoustics*

NOTE : **IEC 60050 (801)** *International Electrotechnical Vocabulary—Chapter 801 : Acoustics and electroacoustics* is identical with the said standard.