

INTERNATIONAL STANDARD

IEC 60268-5

Third edition
2003-05

Sound system equipment –

Part 5: Loudspeakers

Equipements pour systèmes électroacoustiques –

*Partie 5:
Haut-parleurs*

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CONTENTS

FOREWORD	5
1 Scope	6
2 Normative references.....	6
3 Conditions for measurement	7
3.1 General conditions.....	7
3.2 Measuring conditions.....	7
4 Test signals	8
4.1 General	8
4.2 Sinusoidal signal	8
4.3 Broadband noise signal	8
4.4 Narrow-band noise signal	8
4.5 Impulsive signal.....	8
5 Acoustical environment.....	8
5.1 General	8
5.2 Free-field conditions	8
5.3 Half-space free-field conditions.....	9
5.4 Diffuse sound field conditions	9
5.5 Simulated free-field conditions.....	9
5.6 Half-space simulated free-field conditions.....	9
6 Unwanted acoustical and electrical noise.....	9
7 Positioning of loudspeaker and measuring microphone.....	10
7.1 Measuring distance under free-field and half-space free-field conditions.....	10
7.2 Positioning of loudspeaker in diffuse field conditions	10
7.3 Positioning of loudspeaker and microphone in simulated free-field conditions.....	10
8 Measuring equipment.....	11
9 Accuracy of the acoustical measurement	11
10 Mounting of loudspeakers	11
10.1 Mounting and acoustic loading of drive units.....	11
10.2 Mounting and acoustic loading of a loudspeaker system.....	11
11 Standard baffle and measuring enclosures	11
11.1 Standard baffle	11
11.2 Standard measuring enclosures.....	12
12 Preconditioning.....	13
13 Type description	13
13.1 General	13
13.2 Loudspeaker drive units.....	13
13.3 Loudspeaker system.....	13
14 Marking of terminals and controls	13
15 Reference plane, reference point and reference axis	13
15.1 Reference plane – characteristic to be specified	13
15.2 Reference point – characteristic to be specified	14
15.3 Reference axis – characteristic to be specified	14
16 Impedance and derivative characteristics.....	14
16.1 Rated impedance – characteristic to be specified	14

16.2	Impedance curve	14
16.3	Total Q-factor (Q_t)	14
16.4	Equivalent air volume of a loudspeaker drive unit compliance (V_{as})	16
17	Input voltage	17
17.1	Rated noise voltage	17
17.2	Short-term maximum input voltage	18
17.3	Long-term maximum input voltage	18
17.4	Rated sinusoidal voltage	19
18	Input electrical power	19
18.1	Rated noise power – characteristic to be specified	19
18.2	Short-term maximum power – characteristic to be specified	19
18.3	Long-term maximum power – characteristic to be specified	19
18.4	Rated sinusoidal power – characteristic to be specified	19
19	Frequency characteristics	20
19.1	Rated frequency range – characteristic to be specified	20
19.2	Resonance frequency	20
19.3	Tuning frequency of a bass reflex or passive radiator loudspeaker system – characteristic to be specified	20
20	Sound pressure under free-field and half-space free-field conditions	20
20.1	Sound pressure in a stated frequency band	20
20.2	Sound pressure level in a stated frequency band – characteristic to be specified	21
20.3	Characteristic sensitivity in a stated frequency band	21
20.4	Characteristic sensitivity level in a stated frequency band – characteristic to be specified	21
20.5	Mean sound pressure in a stated frequency band	21
20.6	Mean sound pressure level in a stated frequency band – characteristic to be specified	22
21	Response under free-field and half-space free-field conditions	22
21.1	Frequency response	22
21.2	Effective frequency range	23
21.3	Transfer function	23
22	Output power (acoustic power)	24
22.1	Acoustic power in a frequency band	24
22.2	Mean acoustic power in a frequency band	25
22.3	Efficiency in a frequency band	26
22.4	Mean efficiency in a frequency band	26
23	Directional characteristics	26
23.1	Directional response pattern	26
23.2	Radiation angle	27
23.3	Directivity index	27
23.4	Coverage angle or angles	28
24	Amplitude non-linearity	29
24.1	Total harmonic distortion	29
24.2	Harmonic distortion of the n^{th} order (where $n = 2$ or $n = 3$)	31
24.3	Characteristic harmonic distortion	32
24.4	Modulation distortion of the n^{th} order (where $n = 2$ or $n = 3$)	32
24.5	Characteristic modulation distortion of the n^{th} order (where $n = 2$ or $n = 3$)	33
24.6	Difference frequency distortion (of the second order only)	33

25	Rated ambient conditions.....	34
25.1	Temperature ranges	34
25.2	Humidity ranges.....	34
26	Stray magnetic fields	35
26.1	Static components	35
26.2	Dynamic components.....	36
27	Physical characteristics	36
27.1	Dimensions.....	36
27.2	Mass.....	36
27.3	Cable assemblies	37
28	Design data	37
29	Indication of the characteristics to be specified.....	37
Annex A (informative)	Standard measuring enclosure type A	43
Annex B (informative)	Standard measuring enclosure type B	45
Annex C (informative)	Definitions of terms used in Clause 13.....	48
Bibliography.....		50
Figure 1 – Impedance curve of loudspeaker		15
Figure 2 – Standard baffle, dimensions		39
Figure 3 – Standard baffle with chamfer		40
Figure 4 – Standard baffle with sub-baffle		40
Figure 5 – Standard measuring enclosure type A		41
Figure 6 – Standard measuring enclosure type B		41
Figure 7 – Block diagram of test set-up		42
Figure 8 – Measuring apparatus for stray magnetic field.....		42
Figure A.1 – An example of standard measuring enclosure type A		43
Figure A.2 – The correction curve for the diffraction effect of the standard measuring enclosure from free-field to half-space free-field		44
Figure A.3 – The correction curve for the diffraction effect of a standard measuring enclosure from free-field to half-space free-field.....		44
Figure B.1 – An example of standard measuring enclosure type B		45
Figure B.2 – Construction of scalable measuring enclosure type B.....		46
Figure B.3 – The correction curve for the diffraction effect of the standard measuring enclosure from free-field to half-space free-field.....		47
Figure B.4 – The correction curve for the diffraction effect of the standard measuring enclosure from free-field to half-space free-field.....		47
Table 1 – Indication of the characteristics to be specified.....		38
Table B.1 – Dimensions and ratios of scalable measuring enclosure type B		46

INTERNATIONAL ELECTROTECHNICAL COMMISSION

SOUND SYSTEM EQUIPMENT –

Part 5: Loudspeakers

FOREWORD

- 1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, the IEC publishes International Standards. Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. The IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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International Standard IEC 60268-5 has been prepared by IEC technical committee 100: Audio, video and multimedia systems and equipment.

This third edition of IEC 60268-5 cancels and replaces the second edition published in 1989, amendment 1 (1993) and amendment 2 (1996). This third edition constitutes a technical revision.

The text of this standard is based on the following documents:

FDIS	Report on voting
100/648/FDIS	100/674/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

This standard is to be read in conjunction with IEC 60268-1, IEC 60268-2 and ISO 3741.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

The committee has decided that the contents of this publication will remain unchanged until 2005. At this date, the publication will be

- reconfirmed;
- withdrawn;
- replaced by a revised edition, or
- amended.

A bilingual edition of this standard may be issued at a later date.

SOUND SYSTEM EQUIPMENT –

Part 5: Loudspeakers

1 Scope

This standard applies to sound system loudspeakers, treated entirely as passive elements. Loudspeakers with built-in amplifiers are excluded.

NOTE 1 The term “loudspeaker” used in this standard relates to loudspeaker drive units themselves and also to loudspeaker systems, which comprise one or more loudspeaker drive units provided with a baffle, enclosure or horn and such relevant devices as built-in crossover filters, transformers and any other passive element.

The purpose of this standard is to give the characteristics to be specified and the relevant methods of measurement for loudspeakers using sinusoidal or specified noise or impulsive signals.

NOTE 2 The methods of measurement given in this standard have been chosen for their appropriateness to the characteristics.

NOTE 3 If equivalent results can be obtained using other methods of measurement, details of the methods used should be presented with the results.

NOTE 4 The following items are under consideration:

- loudspeakers with built-in amplifiers;
- measurements under conditions other than free-field, half-space free-field and diffuse field;
- measurements with signals other than sinusoidal or noise or impulsive signals.

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 60050(151), *International Electrotechnical Vocabulary (IEV) – Part 151: Electrical and magnetic devices*

IEC 60263, *Scales and sizes for plotting frequency characteristics and polar diagrams*

IEC 60268-1, *Sound system equipment – Part 1: General*

IEC 60268-2, *Sound system equipment – Part 2: Explanation of general terms and calculation methods*

IEC 60268-3, *Sound system equipment – Part 3: Amplifiers*

IEC 60268-11, *Sound system equipment – Part 11: Application of connectors for the interconnection of sound system components*

IEC 60268-12, *Sound system equipment – Part 12: Application of connectors for broadcast and similar use*

IEC 60268-14, *Part 14: Circular and elliptical loudspeakers; outer frame diameters and mounting dimensions*

IEC 60651, *Sound level meters*

IEC 61260, *Electroacoustics – Octave-band and fractional-octave-band filters*

ISO 3741, *Acoustics – Determination of sound power levels of noise sources using sound pressure – Precision methods for reverberation rooms*

ISO 3744, *Acoustics – Determination of sound power levels of noise sources using sound pressure – Engineering method in an essentially free field over a reflecting plane*

ISO 3745, *Acoustics – Determination of sound power levels of noise sources – Precision methods for anechoic and semi-anechoic rooms*