SLOVENSKI STANDARD
SIST EN 60268-5:1999

01-april-1999

Sound system equipment -- Part 5: Loudspeakers (IEC 60268-5:1989 + A1:1993)

Sound system equipment -- Part 5: Loudspeakers

Elektroakustische Geräte -- Teil 5: Lautsprecher

Equipements pour systèmes électroacoustiques -- Partie 5: Haut-parleurs

Ta slovenski standard je istoveten z: **EN 60268-5:1996**

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EUROPEAN STANDARD

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EUROPÄISCHE NORM

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Descriptors: Sound system equipment, loudspeaker, characteristic, specification, measuring method

English version

Sound system equipment
Part 5: Loudspeakers
(IEC 268-5:1989 + A1:1993)

Equipements pour systèmes électroacoustiques
Partie 5: Haut-parleurs
(CEI 268-5:1989 + A1:1993)

Elektroakustische Geräte
Teil 5: Lautsprecher
(IEC 268-5:1989 + A1:1993)

This European Standard was approved by CENELEC on 1996-07-02. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CENELEC
European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Foreword

The text of the International Standard IEC 268-5:1989 and its amendment 1:1993, prepared by TC 84 (transformed into SC 100C, Equipment and systems in the field of audio, video and audiovisual engineering, of IEC TC 100, Audio, video and multimedia systems and equipment), was approved by CENELEC as HD 483.5 S2 on 1994-07-05

This Harmonization Document was submitted to the formal vote for conversion into a European Standard and was approved by CENELEC as EN 60268-5 on 1996-07-02.

The following date was fixed:

- latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 1997-04-01

Annexes designated "normative" are part of the body of the standard.
In this standard, annex ZA is normative.
Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 268-5:1989 and its amendment 1:1993 was approved by CENELEC as a European Standard without any modification.

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

NOTE: When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

Publication	Year	Title	EN/HD	Year
IEC 50(151)	1978	International Electrotechnical Vocabulary (IEV) Chapter 151: Electrical and magnetic devices	-	-
IEC 65 (mod)	1985	Safety requirements for mains operated electronic and related apparatus for household and similar general use	EN 60065[1]	1993 + corr. November 1993
IEC 225[2]	1966	Octave, half-octave and third-octave band filters intended for the analysis of sounds and vibrations	-	-
IEC 263	1982	Scales and sizes for plotting frequency characteristics and polar diagrams	-	-
IEC 268-1	1985	Sound system equipment Part 1: General	HD 483.1 S2[3]	1989
IEC 268-2	1987	Part 2: Explanation of general terms and calculation methods	HD 483.2 S2[4]	1993
IEC 268-11	1987	Part 11: Application of connectors for the interconnection of sound system components	HD 483.11 S3[5]	1993
IEC 268-12	1987	Part 12: Application of connectors for broadcast and similar use	EN 60268-12[6]	1995

1) EN 60065 includes A1:1987 + A2:1989 + A3:1992 to IEC 65.

2) IEC 225 is superseded by IEC 1260:1995, which is harmonized as EN 61260:1995.

3) HD 483.1 S2 includes A1:1988 to IEC 268-1.

4) HD 483.2 S2 includes A1:1991 to IEC 268-2.

5) HD 483.11 S3 includes A1:1989 + A2:1991 to IEC 268-11.

6) EN 60268-12 includes A1:1991 to IEC 268-12.

Publication	Year	Title	EN/HD	Year
IEC 268-14	1980	Part 14: Circular and elliptical loudspeakers; outer frame diameters and mounting dimensions	-	-
IEC 651	1979	Sound level meters	EN 60651	1994
ISO 3741	1988	Acoustics - Determination of sound power levels of noise sources - Precision methods for board-band sources in reverberation rooms	-	-
ISO 3743	1976	Acoustics - Determination of sound power levels of noise sources - Engineering methods for special reverberation test rooms	-	-
ISO 3744	1981	Acoustics - Determination of sound power levels of noise sources - Engineering methods for free-field conditions over a reflecting plane	-	-
ISO 3745	1977	Acoustics - Determination of sound power levels of noise sources - Precision methods for anechoic and semi-anechoic rooms	-	-

NORME INTERNATIONALE

INTERNATIONAL STANDARD

CEI
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Deuxième édition
Second edition
1989-07

Equipements pour systèmes électroacoustiques

Cinquième partie:
Haut-parleurs

Sound system equipment

Part 5:
Loudspeakers

Numéro de référence
Reference number
CEI/IEC 268-5: 1989

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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FOREWORD

1) The formal decisions or agreements of the IEC on technical matters, prepared by Technical Committees on which all the National Committees having a special interest therein are represented, express, as nearly as possible, an international consensus of opinion on the subjects dealt with.

2) They have the form of recommendations for international use and they are accepted by the National Committees in that sense.

3) In order to promote international unification, the IEC expresses the wish that all National Committees should adopt the text of the IEC recommendation for their national rules in so far as national conditions will permit. Any divergence between the IEC recommendation and the corresponding national rules should, as far as possible, be clearly indicated in the latter.

4) The IEC has not laid down any procedure concerning marking as an indication of approval and has no responsibility when an item of equipment is declared to comply with one of its recommendations.

PREFACE

This standard has been prepared by IEC Technical Committee No. 84: Equipment and systems in the field of audio, video and audiovisual engineering.

This second edition replaces the first edition of IEC Publication 268-5 and its first supplement (Publication 268-5A (1980)).

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

Six Months' Rule	Report on Voting
84(CO)35	84(CO)46

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

The following IEC publications are quoted in this standard:

Publications Nos. 50 (151) (1978): International Electronical Vocabulary (IEV), Chapter 151: Electrical and magnetic devices.
65 (1985): Safety requirements for mains operated electronic and related apparatus for household and similar general use.
225 (1982): Octave, half-octave and third-octave band filters intended for the analysis of sounds and vibrations.
263 (1982): Scales and sizes for plotting frequency characteristics and polar diagrams.
268-1 (1985): Sound system equipment, Part 1: General.
268-2 (1987): Part 2: Explanation of general terms and calculation methods.
268-11 (1987): Part 11: Application of connectors for the interconnection of sound system components.
268-12 (1987): Part 12: Application of connectors for broadcast and similar use.

268-14 (1980): Part 14: Circular and elliptical loudspeakers; outer frame diameters and mounting dimensions.

651 (1979): Sound level meters.

ISO Standards quoted:

3741 (1988): Acoustics – Determination of sound power levels of noise sources – Precision methods for broad-band sources in reverberation rooms.

3743 (1976): Acoustics – Determination of sound power levels of noise sources – Engineering methods for special reverberation test rooms.

3744 (1981): Acoustics – Determination of sound power levels of noise sources – Engineering methods for free-field conditions over a reflecting plane.

3745 (1977): Acoustics – Determination of sound power levels of noise sources – Precision methods for anechoic and semi-anechoic rooms.

SOUND SYSTEM EQUIPMENT

Part 5: Loudspeakers

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1. Scope

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

Note. – 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 cross-over filters, transformers and any other passive element.

2. Object

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 signals.

The methods of measurement given in this standard are those which are seen to be most directly related to the characteristics.

Notes 1. – If equivalent results can be obtained using other methods of measurement, details of the methods used should be presented with the results.

2. – 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.

SECTION ONE – GENERAL

3. Conditions

3.1 *General conditions*

This standard is to be used in conjunction with the following standards:

- IEC 268-1 (1985): Sound system equipment, Part 1: General.
- IEC 268-2 (1987): Part 2: Explanation of general terms and calculation methods.
- ISO 3741 (1988): Acoustics – Determination of sound power levels of noise sources – Precision methods for broad-band sources in reverberation rooms.