

SLOVENSKI STANDARD SIST EN 61988-4:2008 01-februar-2008

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Plasma Display Panels - Part 4: Climatic and mechanical testing methods (IEC 61988-4:2007)

Plasmabildschirme - Teil 4: Umwelt-, Lebensdauer- und mechanische Prüfverfahren (IEC 61988-4:2007)

iTeh STANDARD PREVIEW

Panneaux d'affichage a plasma Partie 4: Méthodes d'essais climatiques et mécaniques (IEC 61988-4:2007)

SIST EN 61988-4:2008

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EUROPEAN STANDARD

EN 61988-4

NORME EUROPÉENNE

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Plasma display panels Part 4: Climatic and mechanical testing methods (IEC 61988-4:2007)

Panneaux d'affichage à plasma -Partie 4: Méthodes d'essais climatiques et mécaniques (CEI 61988-4:2007) Plasmabildschirme -Teil 4: Umwelt-, Lebensdauerund mechanische Prüfverfahren (IEC 61988-4:2007)

This European Standard was approved by CENELEC on 2007-05-01. 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, Bulgaria, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the 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 document 110/107/FDIS, future edition 1 of IEC 61988-4, prepared by IEC TC 110, Flat panel display devices, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61988-4 on 2007-05-01.

The following dates were 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) 2008-02-01

 latest date by which the national standards conflicting with the EN have to be withdrawn

(dow) 2010-05-01

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 61988-4:2007 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 61988-2-1 NOTE

Harmonized as EN 61988-2-1:2002 (not modified).

IEC 61988-2-2 NOTE

(standards.iteh.ai)
Harmonized as EN 61988-2-2:2003 (not modified).

SIST EN 61988-4:2008

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Annex ZA

(normative)

Normative references to international publications with their corresponding European publications

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.

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

Publication IEC 60068-1	<u>Year</u> 1988	<u>Title</u> Environmental testing - Part 1: General and guidance	EN/HD EN 60068-1 1)	<u>Year</u> 1994
IEC 60068-2-1	1990	Environmental testing - Part 2-1: Tests - Tests A: Cold	EN 60068-2-1 ²⁾	1993
IEC 60068-2-2	1974	Environmental testing - Part 2-2: Tests - Tests B: Dry heat	EN 60068-2-2 3)	1993
IEC 60068-2-6	- ⁴) T	eEnvironmental testing RD PREVIE Part 2-6: Tests - Test Fc: Vibration (sinusoidal) ndards.iteh.ai)	L Ň 60068-2-6	1995 ⁵⁾
IEC 60068-2-13	_ 4) https://sta	Environmental testing 788-4:2008 Part 2-13: Tests - Test M: Low air pressure	EN 60068-2-13 7-95ac-	1999 ⁵⁾
IEC 60068-2-27	1987	c3a5b5f482ec/sist-en-61988-4-2008 Basic environmental testing procedures - Part 2-27: Tests - Test Ea and guidance: Shock	EN 60068-2-27	1993
IEC 60068-2-30	- 4)	Environmental testing - Part 2-30: Tests - Test Db: Damp heat, cyclic (12 h + 12 h cycle)	EN 60068-2-30	2005 5)
IEC 60068-2-78	2001	Environmental testing - Part 2-78: Tests - Test Cab: Damp heat, steady state	EN 60068-2-78	2001 5)
IEC 61747-5	1998	Liquid crystal and solid-state display devices - Part 5: Environmental, endurance and mechanical test methods	EN 61747-5	1998

¹⁾ EN 60068-1 includes corrigendum October 1988 + A1:1992 to IEC 60068-1.

²⁾ EN 60068-2-1 is superseded by EN 60068-2-1:2007, which is based on IEC 60068-2-1:2007.

³⁾ EN 60068-2-2 includes supplement A:1976 to IEC 60068-2-2.

⁴⁾ Undated reference.

⁵⁾ Valid edition at date of issue.

Publication IEC 61988-1	<u>Year</u> - ⁴⁾	<u>Title</u> Plasma display panels - Part 1: Terminology and letter symbols	<u>EN/HD</u> EN 61988-1	<u>Year</u> 2003 ⁵⁾
ISO 2248	- 4)	Packaging - Complete, filled transport packages - Vertical impact test by dropping	EN 22248	1992 ⁵⁾
ISO 4180-1	_ 4)	Complete, filled transport packages - General rules for the compilation of performance test schedules - Part 1: General principles	EN 24180-1	1992 ⁵⁾
ISO 4180-2	_ 4)	Complete, filled transport packages - General rules for the compilation of performance test schedules - Part 2: Quantitative data	EN 24180-2	1992 ⁵⁾

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INTERNATIONAL **STANDARD NORME** INTERNATIONALE

IEC CEI 61988-4

> First edition Première édition 2007-04

Plasma display panels -

Part 4: Climatic and mechanical testing methods

Panneaux d'affichage à plasma – (standards.iteh.ai)
Partie 4:

Méthodes d'essais climatiques et mécaniques

https://standards.iteh.ai/catalog/standards/sist/0d1b40fc-5c6d-4187-95acc3a5b5f482ec/sist-en-61988-4-2008

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

PLASMA DISPLAY PANELS -

Part 4: Climatic and mechanical testing methods

FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of 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, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). 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. 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 61988-4 has been prepared by IEC technical committee 110: Flat panel display devices.

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

FDIS	Report on voting	
110/107/FDIS	110/110/RVD	

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

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

A list of all the parts in the IEC 61988 series, under the general title *Plasma display panels*, can be found on the IEC website.

The committee has decided that the contents of this publication will remain unchanged until the maintenance result date indicated on the IEC web site under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

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

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PLASMA DISPLAY PANELS -

Part 4: Climatic and mechanical testing methods

1 Scope

This part of IEC 61988 defines test methods for evaluating environmental and mechanical endurance characteristics of plasma display modules (PDP modules).

2 Normative references

The following referenced standards are indispensable for the application of this standard. For standards with explicit dates, only the edition cited applies. For undated standards, the latest edition of the referenced standard (including any amendments) applies.

IEC 60068-1:1988, Environmental testing – Part 1: General and guidance

IEC 60068-2-1:1990, Environmental testing - Part 2: Tests - Tests A: Cold

IEC 60068-2-2:1974, Environmental testing - Part 2: Tests - Tests B: Dry heat

IEC 60068-2-6, Environmental testing – Part 2: Tests – Test Fc: Vibration (sinusoidal)

IEC 60068-2-13, Environmental testing - Part 2: Tests - Test M: Low air pressure

IEC 60068-2-27:1987, Environmental testing – Part 2: Tests – Test Ea and guidance: Shock

IEC 60068-2-30, Environmental testing – Part 2-30: Tests – Test Db: Damp heat, cyclic (12 h + 12 h cycle)

IEC 60068-2-78:2001, Environmental testing – Part 2-78: Tests – Test Cab: Damp heat, steady state

IEC 61747-5:1998, Liquid crystal and solid-state display devices – Part 5: Environmental, endurance and mechanical test methods

IEC 61988-1, Plasma display panels – Part 1: Terminology and letter symbols

ISO 2248, Packaging - Complete, filled transport packages - Vertical impact test by dropping

ISO 4180-1, Complete, filled transport packages – General rules for the compilation of performance test schedules – Part 1: General principles

ISO 4180-2, Complete, filled transport packages – General rules for the compilation of performance test schedules – Part 2: Quantitative data