# SLOVENSKI STANDARD
# SIST EN 61988-2-1:2012

**01-maj-2012**

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**Prikazovalniki s plazmo - 2-1. del: Merilne metode - Optične in optoelektrične**

Plasma Display Panels - Part 2-1: Measuring methods - Optical and optoelectrical

Plasmabildschirme - Teil 2-1: Messverfahren - Optisch und Opto-Elektrisch

Panneaux d'affichage à plasma - Partie 2-1: Méthodes de mesure - Optiques, Méthodes opto-électriques

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**Ta slovenski standard je istoveten z:** **EN 61988-2-1:2012**

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**ICS:**

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|---|---|---|
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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

# EN 61988-2-1

March 2012

ICS 31.260

Supersedes EN 61988-2-1:2002, EN 61988-2-2:2003

English version

# Plasma display panels - Part 2-1: Measuring methods - Optical and optoelectrical
(IEC 61988-2-1:2012)

Panneaux d'affichage à plasma - Partie 2-1: Méthodes de mesure - Mesures optiques et opto-électriques (CEI 61988-2-1:2012)

Plasmabildschirme - Teil 2-1: Messverfahren – Optisch und opto-elektrisch (IEC 61988-2-1:2012)

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## Foreword

The text of document 110/337/FDIS, future edition 2 of IEC 61988-2-1, prepared by IEC TC 110, "Flat panel display devices" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 61988-2-1:2012.

The following dates are fixed:

| | | |
|---|---|---|
| • latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement | (dop) | 2012-11-28 |
| • latest date by which the national standards conflicting with the document have to be withdrawn | (dow) | 2015-02-28 |

This document supersedes EN 61988-2-1:2002 and EN 61988-2-2:2003.

EN 61988-2-1:2012 includes the following significant technical changes with respect to EN 61988-2-1:2002:

– EN 61988-2-1:2002 and EN 61988-2-2:2003 were combined and reconstructed in this document.

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## Endorsement notice

The text of the International Standard IEC 61988-2-1:2012 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. |
| IEC 61988-2-2 | NOTE | Harmonized as EN 61988-2-2. |

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## Annex ZA
(normative)

## Normative references to international publications with their corresponding European publications

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. 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 | Year | Title | EN/HD | Year |
|---|---|---|---|---|
| IEC 60068-1 | - | Environmental testing - Part 1: General and guidance | EN 60068-1 | - |
| IEC 60107-1 | - | Methods of measurement on receivers for television broadcast transmissions - Part 1: General considerations - Measurements at radio and video frequencies | EN 60107-1 | - |
| IEC 61988-1 | - | Plasma display panels - Part 1: Terminology and letter symbols | EN 61988-1 | - |
| IEC 62087 | - | Methods of Measurement for the power consumption of audio, video and related equipment | EN 62087 | - |
| CIE 15 | - | Colorimetry | - | - |

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# INTERNATIONAL STANDARD

# NORME INTERNATIONALE

## Plasma display panels – Part 2-1: Measuring methods – Optical and optoelectrical

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## Panneaux d'affichage à plasma – Partie 2-1: Méthodes de mesure – Mesures optiques et opto-électriques

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# PLASMA DISPLAY PANELS –

# Part 2-1: Measuring methods – Optical and optoelectrical

## FOREWORD

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International Standard IEC 61988-2-1 has been prepared by IEC technical committee 110: Electronic display devices.

This second edition cancels and replaces the first edition published in 2002. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

– The first edition of IEC 61988-2-1 and IEC 61988-2-2 were combined and reconstructed in this document.

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

| FDIS | Report on voting |
|---|---|
| 110/337/FDIS | 110/352/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 stability 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

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# PLASMA DISPLAY PANELS –

# Part 2-1: Measuring methods – Optical and optoelectrical

## 1 Scope

This part of IEC 61988 determines the following measuring methods for characterizing the performance of plasma display modules (PDP modules):

a) four per cent (4 %) window luminance;
b) luminance uniformity;
c) dark-room contrast ratio;
d) bright-room contrast ratio 100/70;
e) white chromaticity and chromatic uniformity;
f) colour gamut in the centre box;
g) module power and current consumption;
h) module power consumption using video signal;
i) module luminous efficacy, and
j) panel luminous efficacy.

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## 2 Normative references

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IEC 60068-1, *Environmental Testing – Part 1: General and guidance*

IEC 60107-1, *Methods of measurement on receivers for television broadcast transmissions – Part 1: General considerations – Measurements at radio and video frequencies*

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

IEC 62087, *Methods of measurement for the power consumption of audio, video and related equipment*

CIE 15:2004, *Colorimetry*

## 3 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 61988-1, IEC 60068-1, and IEC 60107-1, as well as the following, apply.