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Irish Standard  
I.S. EN 61988-2-3:2009

# Plasma display panels -- Part 2-3: Measuring methods - Image quality: defects and degradation (IEC 61988-2 -3:2009 (EQV))

## I.S. EN 61988-2-3:2009

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**NORME EUROPÉENNE**  
**EUROPÄISCHE NORM**

**EN 61988-2-3**

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ICS 31.260

English version

**Plasma display panels -  
Part 2-3: Measuring methods -  
Image quality: defects and degradation  
(IEC 61988-2-3:2009)**

Panneaux d'affichage à plasma -  
Partie 2-3: Méthodes de mesure -  
Qualité d'image: défauts  
et dégradation  
(CEI 61988-2-3:2009)

Plasmabildschirme -  
Teil 2-3: Messverfahren -  
Bildqualität: Defekte  
und Bildverschlechterung  
(IEC 61988-2-3:2009)

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

**Central Secretariat: Avenue Marnix 17, B - 1000 Brussels**

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**Foreword**

The text of document 110/180/FDIS, future edition 1 of IEC 61988-2-3, prepared by IEC TC 110, Flat panel display devices, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61988-2-3 on 2009-09-01.

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) 2010-06-01
- latest date by which the national standards conflicting  
with the EN have to be withdrawn (dow) 2012-09-01

Annex ZA has been added by CENELEC.

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**Endorsement notice**

The text of the International Standard IEC 61988-2-3:2009 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 61966-5   | NOTE Harmonized as EN 61966-5:2009 (not modified).   |
| IEC 61988-2-2 | NOTE Harmonized as EN 61988-2-2:2003 (not modified). |
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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.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60068-1	1988	Environmental testing - Part 1: General and guidance	EN 60068-1 <sup>1)</sup>	1994
IEC 60107-1	1997	Methods of measurement on receivers for television broadcast transmissions - Part 1: General considerations - Measurements at radio and video frequencies	EN 60107-1	1997
IEC 61988-1	- <sup>2)</sup>	Plasma display panels - Part 1: Terminology and letter symbols	EN 61988-1	2003 <sup>3)</sup>
IEC 61988-2-1	2002	Plasma display panels - Part 2-1: Measuring methods - Optical	EN 61988-2-1	2002
CIE 15	2004	Colorimetry	-	-

<sup>1)</sup> EN 60068-1 includes A1:1992 to IEC 60068-1 + corr. October 1988.

<sup>2)</sup> Undated reference.

<sup>3)</sup> Valid edition at date of issue.

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**PLASMA DISPLAY PANELS –****Part 2-3: Measuring methods –  
Image quality: defects and degradation**

## FOREWORD

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International Standard IEC 61988-2-3 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
110/180/FDIS	110/188/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.

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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.

## PLASMA DISPLAY PANELS –

### Part 2-3: Measuring methods – Image quality: defects and degradation

#### 1 Scope

This part of IEC 61988 determines the measuring methods for defects and degradation of colour plasma display (PDP) module in the following areas:

- a) cell defects;
- b) image sticking;
- c) luminance lifetime.

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

IEC 60107-1:1997, *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 61988-2-1:2002, *Plasma display panels – Part 2-1: Measuring methods – Optical*

CIE 15:2004, *Colorimetry, 3rd Edition (ISBN 978 3 901906 33 6)*

#### 3 Terms and definitions

For the purposes of this document, most of the terms and definitions used, comply with IEC 61988-1, IEC 60068-1 and IEC 60107-1, and the followings apply.

##### 3.1

##### **cell defect**

cell showing a dark defect or a bright defect, or an unstable cell

##### 3.2

##### **defect luminance ratio**

percentage of luminance difference from the full screen white-level luminance of each colour

##### 3.3

##### **unstable cell**

cell that changes luminance in an uncontrollable way

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