

# **Plasma display panels**

Part 4-2: Environmental testing  
methods — Panel strength

### **National foreword**

This British Standard is the UK implementation of IEC 61988-4-2:2012.

The UK participation in its preparation was entrusted to Technical Committee EPL/47, Semiconductors.

A list of organizations represented on this committee can be obtained on request to its secretary.

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# INTERNATIONAL STANDARD

# NORME INTERNATIONALE

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**Plasma display panels –  
Part 4-2: Environmental testing methods – Panel strength**

**Panneaux d'affichage à plasma –  
Partie 4-2: Méthodes d'essais d'environnement – Résistance des panneaux**

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### PLASMA DISPLAY PANELS –

#### Part 4-2: Environmental testing methods – Panel strength

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International Standard IEC 61988-4-2 has been prepared by IEC technical committee 110: Electronic display devices.

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

FDIS	Report on voting
110/354/FDIS	110/369/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 publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

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

Future Part 4-x standards in this series will include the new title component: *Environmental testing methods*, as cited above. Titles of existing Part 4-x standards in this series will be updated accordingly at the time of the next edition.

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

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- withdrawn,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

## PLASMA DISPLAY PANELS –

### Part 4-2: Environmental testing methods – Panel strength

#### 1 Scope

This part of IEC 61988 defines testing methods for evaluating mechanical characteristics of plasma display modules (PDP modules) in the following areas:

- a) Ball drop breaking strength of panels;
- b) Partial heating strength of panels.

#### 2 Normative references

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.

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

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

IEC 61988-2-1, *Plasma display panels – Part 2-1: Measuring methods – Optical and optoelectrical*

IEC 61988-4, *Plasma display panels – Part 4: Climatic and mechanical testing methods*

#### 3 Terms and definitions

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

##### 3.1

##### **ball drop breaking strength**

breaking strength against a ball drop impact measured as a breaking drop height using a ball whose weight and material are previously determined

##### 3.2

##### **rubber heater**

soft and flexible sheet (generally made from thermally conductive rubber) in which electric heating element is molded

Note 1 to entry: Temperature uniformity of rubber heater is obtained by the layout of heating wire in the sheet and its material.

##### 3.3

##### **partial heating strength**

mechanical strength under a thermal stress caused by heating a limited area of panel