

INTERNATIONAL STANDARD

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**Organic light emitting diode (OLED) displays –
Part 5-3: Measuring methods of image sticking and lifetime**

**Afficheurs à diodes électroluminescentes organiques (OLED) –
Partie 5-3: Méthodes de mesure de la durée de vie et de la rémanence d'images**



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INTERNATIONAL ELECTROTECHNICAL COMMISSION

ORGANIC LIGHT EMITTING DIODE (OLED) DISPLAYS –

Part 5-3: Measuring methods of image sticking and lifetime

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International Standard IEC 62341-5-3 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
110/474/FDIS	110/501/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 62341 series, under the general title *Organic light emitting diode (OLED) displays*, can be found on the IEC website.

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ORGANIC LIGHT EMITTING DIODE (OLED) DISPLAYS –

Part 5-3: Measuring methods of image sticking and lifetime

1 Scope

This part of IEC 62341 specifies the standard measurement conditions and measurement methods for determining the image sticking and lifetime of organic light emitting diode (OLED) display panels and modules. It mainly applies to modules.

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 60050 (all parts), *International Electrotechnical Vocabulary* (available at <<http://www.electropedia.org>>)

IEC 62087:2011, *Methods of measurement for the power consumption of audio, video and related equipment*

IEC 62341-1-2:2007, *Organic light emitting diode (OLED) displays – Part 1-2: Terminology and letter symbols*

IEC 62341-6-1:2009, *Organic light emitting diode (OLED) displays – Part 6-1: Measuring methods of optical and electro-optical parameters*

IEC 61966-2-1:1999, *Multimedia systems and equipment – Colour measurement and management – Part 2-1: Colour management – Default RGB colour space – sRGB*

CIE 15-2004, *Colorimetry*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 62341-1-2:2007 and IEC 60050-845:1987, as well as the following apply.

3.1

equivalent current density

average current density of a certain pixel calculated from a varying luminance per frame image in a moving picture so that luminance degradation becomes similar at the same time

Note 1 to entry: See Annex A.

3.2

equivalent signal level

digital code value from 0 to 255 (in the case of 8 bits) transformed from the normalized luminance of a certain pixel by a gamma function

Note 1 to entry: See Annex A.