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Organic light emitting diode (OLED) displays – Part 6-3: Measuring methods of image quality

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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ORGANIC LIGHT EMITTING DIODE (OLED) DISPLAYS –

Part 6-3: Measuring methods of image quality

FOREWORD

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International Standard IEC 62341-6-3 has been prepared by IEC technical committee 110: Electronic display devices.

This second edition cancels and replaces the first edition published in 2012. This edition constitutes a technical revision.

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

a) the measuring method for viewing angle has been modified. Measurement of the half luminance angle, gamma distortion, and directional colour variation is added;
b) measurement method for colour characteristics is added;
c) additional explanation is added in static image resolution clause;
d) moving image resolution clause has been moved to Annex B.

The text of this International Standard is based on the following documents:

FDIS	Report on voting
110/901/FDIS	110/923/RVD

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

This document 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.

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

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- withdrawn,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

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ORGANIC LIGHT EMITTING DIODE (OLED) DISPLAYS –

Part 6-3: Measuring methods of image quality

1 Scope

This part of IEC 62341 specifies the standard measurement conditions and measuring methods for determining the image quality of organic light emitting diode (OLED) display panels and modules.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 62341-1-2:2014, *Organic light emitting diode (OLED) displays – Part 1-2: Terminology and letter symbols*

3 Terms, definitions, and abbreviated terms

3.1 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 62341-1-2 and the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at http://www.electropedia.org/
- ISO Online browsing platform: available at http://www.iso.org/obp

3.1.1
average picture level
APL
average loading percentage of display sub-pixels based on input signal levels

3.1.2
static image resolution
maximum number of lines that can be adequately distinguished horizontally and vertically across the screen for static image signal inputs

Note 1 to entry: The unit of resolution is line, but pixel is also available as the unit of resolution.

3.1.3
colour fidelity
ability to reproduce the intended colour

3.1.4
colour desaturation
difference in chromaticity coordinates between solid colour and grilled pattern caused by image sharpening algorithm