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# INTERNATIONAL STANDARD



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## Organic light emitting diode (OLED) displays – Part 6-1: Measuring methods of optical and electro-optical parameters

INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

### ORGANIC LIGHT EMITTING DIODE (OLED) DISPLAYS –

#### Part 6-1: Measuring methods of optical and electro-optical parameters

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IEC 62341-6-1 has been prepared by IEC technical committee 110: Electronic display devices. It is an International Standard.

This third edition cancels and replaces the second edition published in 2017. This edition constitutes a technical revision.

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

- a) measuring methods for power consumption of displays that have an embedded video connection terminal are added;
- b) the contents description including video signal for power consumption is modified.

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

Draft	Report on voting
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Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at [www.iec.ch/members\\_experts/refdocs](http://www.iec.ch/members_experts/refdocs). The main document types developed by IEC are described in greater detail at [www.iec.ch/standardsdev/publications](http://www.iec.ch/standardsdev/publications).

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 [webstore.iec.ch](http://webstore.iec.ch) in the data related to the specific document. At this date, the document will be

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- withdrawn,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

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## ORGANIC LIGHT EMITTING DIODE (OLED) DISPLAYS –

### Part 6-1: Measuring methods of optical and electro-optical parameters

#### 1 Scope

This part of IEC 62341 specifies the standard measuring conditions and measuring methods for determining the optical and electro-optical parameters of organic light emitting diode (OLED) display modules, and where specified, OLED display panels. These methods are limited to flat displays measured in a dark room.

#### 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 60050-845, *International Electrotechnical Vocabulary – Part 850: Lighting* (available at [www.electropedia.org](http://www.electropedia.org))

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

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

IEC 62341-6-2:2015, *Organic light emitting diode (OLED) displays – Part 6-2: Measuring methods of visual quality and ambient performance*

IEC 62087-3, *Audio, video, and related equipment – Determination of power consumption – Part 3: Television sets*

CIE 15:2004, *Colorimetry*, 3<sup>rd</sup> edition

CIE S 014-1, *Colorimetry – Part 1: CIE Standard Colorimetric Observers*

#### 3 Terms, definitions, and abbreviated terms

##### 3.1 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 60050-845, 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 <https://www.electropedia.org>
- ISO Online browsing platform: available at <https://www.iso.org/obp>