



SLOVENSKI STANDARD

SIST EN 62341-6-1:2011

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Prikazovalniki z organskimi svetlečimi diodami (OLED) - 6-1. del: Merilne metode za optične in optoelektrične parametre (IEC 62341-6-1:2009)

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

Anzeigen mit organischen lichtemittierenden Dioden - Teil 6-1: Messmethoden für optische und elektro-optische Parameter (IEC 62341-6-1:2009)

Afficheurs à diodes électroluminescentes organiques (OLED) - Partie 6-1: Méthodes de mesure des paramètres optiques et électro-optiques (CEI 62341-6-1:2009)

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Ta slovenski standard je istoveten z: EN 62341-6-1:2011

ICS:

31.120	Elektronske prikazovalne naprave	Electronic display devices
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EUROPEAN STANDARD
NORME EUROPÉENNE
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EN 62341-6-1

February 2011

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English version

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

Afficheurs à diodes électroluminescentes
organiques (OLED) -
Partie 6-1: Méthodes de mesure des
paramètres optiques et électro-optiques
(CEI 62341-6-1:2009)

Anzeigen mit organischen
lichtemittierenden Dioden -
Teil 6-1: Messmethoden für optische und
elektro-optische Parameter
(IEC 62341-6-1:2009)

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This European Standard was approved by CENELEC on 2011-01-02. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

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CENELEC

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

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Foreword

The text of document 110/170/FDIS, future edition 1 of IEC 62341-6-1, prepared by IEC/TC 110, Flat panel display devices, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 62341-6-1 on 2011-01-02.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN and CENELEC shall not be held responsible for identifying any or all such patent rights.

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) 2011-10-02
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2014-01-02

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 62341-6-1:2009 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 60068-1	NOTE	Harmonized as EN 60068-1:2011
IEC 61747-6	NOTE	Harmonized as EN 61747-6
IEC 61988-2-1	NOTE	Harmonized as EN 61988-2-1.
IEC 62087	NOTE	Harmonized as EN 62087.
IEC 62341-1-1	NOTE	Harmonized as EN 62341-1-1.

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 62341-1-2	-	Organic light emitting diode displays - Part 1-2: Terminology and letter symbols	EN 62341-1-2	-
CIE 15.2	1986	Colorimetry	-	-
CIE S 014-1/E	2006	Colorimetry - Part 1: Standard Colorimetric Observers	-	-

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INTERNATIONAL STANDARD

NORME INTERNATIONALE

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

**Afficheurs à diodes électroluminescentes organiques (OLED) –
Partie 6-1: Méthodes de mesure des paramètres optiques et électro-optiques**

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

ORGANIC LIGHT EMITTING DIODE (OLED) DISPLAYS –

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

FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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International Standard IEC 62341-6-1 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
110/170/FDIS	110/179/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.

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.

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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 measurement conditions and measuring methods for determining optical and electro-optical parameters of organic light emitting diode (OLED) display modules, and where specified, OLED display panels, in the following areas:

- a) luminance and uniformity;
- b) dark room contrast ratio;
- c) chromaticity, colour uniformity, colour gamut and white field correlated colour temperature;
- d) power consumption.

2 Normative references

The following referenced documents are indispensable for the application of this document. For undated references, the latest edition of the referenced document (including any amendments) applies.

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

[SIST EN 62341-6-1:2011](https://standards.iteh.ai/catalog/standards/sist/bd88e6ed-e080-47ac-928f-e9fd5643c2/sist-en-62341-6-1-2011)

CIE 15.2:1986, *Colorimetry (second edition)*

CIE S 014-1/E:2006, *Colorimetry – Part 1: CIE Standard Colorimetric Observers*

3 Terms, definitions and units

For the purposes of this part of IEC 62341, most of the definitions and units used comply with IEC 62341-1-2.

4 Structure of measuring equipment

The system diagrams and/or operating conditions of the measuring equipment shall comply with the structure specified in each item.

5 Standard measuring conditions

5.1 Standard measuring environmental conditions

Measurements shall be carried out under the standard environmental conditions at a temperature of $25\text{ °C} \pm 3\text{ °C}$, at a relative humidity of 25 % to 85 %, and pressure of 86 kPa to 106 kPa. When different environmental conditions are used, they shall be noted in the report.

5.2 Standard measuring dark-room conditions

With the OLED display turned off, the ambient illuminance at all points on the screen shall be less than 0,3 lx. When a higher ambient illuminance on the display is present, the background