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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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FOREWORD

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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- withdrawn;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.

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*

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 ºC ± 3 ºC, 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