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

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CONTENTS

FOREWORD	5
1 Scope	7
2 Normative references	7
3 Terms, definitions, and abbreviated terms	7
3.1 Terms and definitions.....	7
3.2 Abbreviated terms.....	8
4 Structure of measuring equipment	8
5 Standard measuring conditions.....	8
5.1 Standard environmental conditions for measurements	8
5.2 Standard dark room conditions for measurements.....	8
5.3 Standard setup conditions.....	9
5.3.1 General	9
5.3.2 Adjustment of OLED display modules	9
5.3.3 Starting conditions of measurements	9
5.3.4 Measuring equipment requirements	9
5.4 Standard locations of measurement field.....	11
5.5 Standard test patterns.....	11
6 Measuring methods for optical parameters	16
6.1 Primary luminance, colour, and uniformity of full-colour high-resolution modules	16
6.1.1 Purpose	16
6.1.2 Measuring conditions	16
6.1.3 Measuring method for high-resolution full-colour modules.....	16
6.1.4 Maximum luminance of white and RGB primaries.....	18
6.1.5 Average colour of white and RGB primaries.....	18
6.1.6 Luminance uniformity of white and RGB primaries	19
6.1.7 Colour non-uniformity of white and RGB primaries.....	19
6.1.8 Colour additivity of white and RGB primaries	20
6.1.9 White correlated colour temperature	20
6.2 Primary luminance, colour, and uniformity of low-resolution modules	21
6.2.1 Purpose	21
6.2.2 Measuring conditions	21
6.2.3 Measuring method for low-resolution modules and segmented displays.....	21
6.3 Signal loading	21
6.3.1 Purpose	21
6.3.2 Measuring conditions	21
6.3.3 Measuring methods	21
6.4 Dark room contrast ratio	22
6.4.1 Purpose	22
6.4.2 Measuring conditions	22
6.4.3 Measuring method	23
6.5 Display colour gamut, colour gamut area, and colour gamut volume	23
6.5.1 Purpose	23
6.5.2 Measuring conditions	23
6.5.3 Measuring method	23
6.5.4 Display colour gamut	24

6.5.5	Display colour gamut area in CIE 1976 chromaticity diagram	24
6.5.6	Colour gamut volume	24
7	Measuring methods for power consumption	26
7.1	Purpose	26
7.2	Measuring conditions	26
7.3	Measuring method	26
Annex A (normative)	Response time of passive matrix display panels	28
A.1	Purpose	28
A.2	Measuring conditions	28
A.3	Measuring method	28
Annex B (normative)	Luminance current efficiency	30
B.1	Purpose	30
B.2	Measuring conditions	30
B.3	Measuring method	30
Annex C (informative)	Veiling glare frustum	32
Annex D (informative)	Methods to obtain the correlated colour temperature (CCT) from chromaticity coordinates	33
D.1	Method 1: using McCamy's approximate formula	33
D.2	Method 2: using Javier Hernandez-Andres's approximate formula	33
D.3	Method 3: graphical determination of correlated colour temperature	34
Annex E (informative)	Measuring the performance of modern colour-managed displays and panels	36
E.1	Legacy displays	36
E.2	Modern displays	36
E.3	Results	38
E.4	Conclusion	41
Annex F (informative)	Simple window luminance and colour measurements	42
F.1	Background	42
F.2	Measuring conditions	42
F.3	Maximum full-screen luminance	42
F.4	4 % window luminance	42
F.5	Sampled luminance non-uniformity	42
F.6	4 % window centre colour	43
F.7	Sampled colour non-uniformity	44
Bibliography	45
Figure 1	– Layout diagram of measurement setup	10
Figure 2	– Standard measurement positions in the active area of the display	11
Figure 3	– Test pattern scaling used to define the area size of the coloured rectangles in the active area of the display	12
Figure 4	– Low APL loading series of red, green, blue, and white test patterns used for basic luminance, colour, and uniformity measurements	13
Figure 5	– Medium (top) and high (bottom) APL loading versions of CTR pattern	14
Figure 6	– Standard low APL RGBCMY test pattern used for centre luminance and colour measurements	15
Figure 7	– Optional medium APL RGBCMY test pattern used for centre luminance and colour measurements	16

Figure 8 – Sequence for measuring luminance and colour at the nine standard display positions for all coloured tile patterns.....	17
Figure 9 – Colour of blackbody source at various temperatures as represented on the CIE 1931 chromaticity diagram	20
Figure 10 – Example representation of the same primary colours in the CIE 1931 (left) and CIE 1976 (right) chromaticity diagrams.....	24
Figure 11 –Example of the range of colours produced by a given display as represented by the CIELAB colour space	25
Figure 12 – Example of measurement setup of power consumption	27
Figure A.1 – Relationship between the driving signal and the optical response times	29
Figure B.1 – Example of a measurement configuration for measuring luminance current efficiency	31
Figure C.1 – Pattern for veiling glare frustum.....	32
Figure D.1 – CIE 1931 <i>XYZ</i> chromaticity diagram	34
Figure D.2 – Blackbody locus (Planckian locus) and isothermperature lines in CIE 1931 chromaticity diagram.....	35
Figure E.1 – Legacy model where the independent drive electronics provide a direct correlation between the input RGB signals and the display’s colour primaries.....	36
Figure E.2 – Example of modern drive models utilizing multi-dimensional LUTs for RGB (top) and multi-primary (bottom) displays.....	37
Figure E.3 – Example of APL loading behaviour for a WRGB (top) and RGB (bottom) OLED display.....	39
Figure E.4 – Low APL loading test pattern with small box size (1/9 the screen size dimensions)	40
Figure E.5 – APL loading profiles for several input colours measured at the centre of the test pattern using Figure E.4	41
Figure F.1 – Example of a simple 4 % white window pattern at the centre of the screen.....	43
Table 1 – Standard digital-equivalent input signals for rendering the white, primary and secondary colours in test patterns.....	15
Table 2 – Example of luminance measured of the same colour at the nine standard screen positions and the resulting luminance non-uniformity.....	18
Table 3 – Example of the same colour measured at the nine standard screen positions and the resulting chromaticity non-uniformity	18
Table 4 – Scaling the size of the colour boxes in the APL loading pattern relative to the screen dimensions	22
Table 5 – Example of a summary sheet for module power consumption measurements	27
Table D.1 – x_e , y_e , A_i and t_i for Formula (D.3) and Formula (D.4)	33
Table E.1 – Example of luminance data for an RGB and WRGB OLED display	38

INTERNATIONAL ELECTROTECHNICAL COMMISSION

ORGANIC LIGHT EMITTING DIODE (OLED) DISPLAYS –

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

FOREWORD

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

This second edition cancels and replaces the first edition published in 2009. This edition constitutes a technical revision.

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

- a) extends the applicability of the measuring methods to include OLED displays that have multi-primary or red, green, blue and white sub-pixels;
- b) adds a method to characterize how the luminance is affected by the amount of content on the screen;
- c) adds a method to determine the dark room colour gamut volume in the CIELAB colour space.

The text of this standard is based on the following documents:

FDIS	Report on voting
110/816/FDIS	110/830/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
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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. 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)

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*

CIE 15:2004, *Colorimetry, 3rd edition*

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