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Fully flexible organic light emitting diode (OLED) panels for general lighting - Performance requirements

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Fully flexible organic light emitting diode (OLED) panels for general lighting - Performance requirements

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IEC 63553 has been prepared by subcommittee SC 34A: Electric light sources, of IEC technical committee 34: Lighting. It is an International Standard.

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

Draft	Report on voting
34A/2484/FDIS	34A/2489/RVD

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. The main document types developed by IEC are described in greater detail at www.iec.ch/publications.

In this document, the following types are used:

– requirements: roman type,

– *compliance statements: italic type,*

– notes: smaller roman type.

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– reconfirmed,

– withdrawn, or

– revised.

1 Scope

This document specifies performance requirements of fully flexible organic light emitting diode (OLED) tiles and panels whose configurations are twisted, wavy or helical for use on supplies up to 120 V ripple free DC for indoor and similar general lighting purposes and designed for being bent during the manufacturing process of curved luminaires.

The requirements of this document relate only to type testing.

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 62504, *General lighting - Light emitting diode (LED) products and related equipment - Terms and definitions*

IEC 62868-1, *Organic light emitting diode (OLED) Light sources for general lighting - Safety - Part 1: General requirements and tests*

IEC 62868-2-3, *Organic light emitting diode (OLED) light sources for general lighting - Safety - Part 2-3: Particular requirements - Flexible OLED tiles and panels*

IEC 62922:2016, *Organic light emitting diode (OLED) panels for general lighting - Performance requirements*
IEC 62922:2016/AMD1:2021

IEC TS 62972, *General lighting - Organic light emitting diode (OLED) products and related equipment - Terms and definitions*

IEC 63286:2022, *Flexible organic light emitting diode (OLED) panels for general lighting - Performance requirements*

CIE S 025:2015, *Test Method for LED Lamps, LED Luminaires and LED Modules*

CIE S 025-SP1:2019, *Test Method for OLED Luminaires and OLED Light Sources*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 62504, IEC 62868-1, IEC TS 62972 and the following apply.

ISO and IEC maintain terminology 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

3.1
fully flexible OLED panel
flexible OLED panel with freely bending shapes of geometrical curvature