IEC 62868-2-4

Edition 1.0 2025-02

INTERNATIONAL STANDARD

NORME INTERNATIONALE

Organic light emitting diode (OLED) light sources for general lighting – Safety – Part 2-4: Particular requirements – Rigid OLED tiles and panels

Sources lumineuses à diodes électroluminescentes organiques (OLED) destinées à l'éclairage général – Sécurité – Partie 2-4: Exigences particulières – Dalles et panneaux OLED rigides

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IEC 62868-2-4 has been prepared by subcommittee 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/2425/FDIS	34A/2435/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.

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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.

A list of all parts in the IEC 62868 series, published under the general title *Organic light emitting diode (OLED) light sources for general lighting – Safety*, 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 in the data related to the specific document. At this date, the document will be

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ORGANIC LIGHT EMITTING DIODE (OLED) LIGHT SOURCES FOR GENERAL LIGHTING – SAFETY –

Part 2-4: Particular requirements – Rigid OLED tiles and panels

1 Scope

This part of IEC 62868 specifies the safety requirements for rigid organic light emitting diode (OLED) tiles and panels for use on supplies up to 120 V ripple free DC for indoor and similar general lighting purposes.

NOTE The construction of OLED tiles and panels is illustrated in Annex A.

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 62868-1:2020, *Organic light emitting diode (OLED) light sources for general lighting – Safety –Part 1: General requirements and tests*
IEC 62868-1:2020/AMD1:2024

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

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.

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- IEC Electropedia: available at https://www.electropedia.org/
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3.1
OLED tile
smallest functional OLED light source which cannot be separated into smaller OLED lighting elements containing at least one contact ledge with at least one positive and one negative pole for connection to the electrical power supply

3.2
OLED panel
independently operable unit OLED light source containing an OLED tile and means of connection to electrical supply such as a connector, PCB (printed circuit board), passive electronic components and optionally a frame

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