

INTERNATIONAL STANDARD

**Organic light emitting diode (OLED) light sources for general lighting – Safety –
Part 2-3: Particular requirements – Flexible OLED films and panels**



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

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**ORGANIC LIGHT EMITTING DIODE (OLED) LIGHT
SOURCES FOR GENERAL LIGHTING – SAFETY –****Part 2-3: Particular requirements – Flexible OLED tiles and panels**

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IEC 62868-2-3 edition 1.1 contains the first edition (2021-10) [documents 34A/2254/FDIS and 34A/2261/RVD] and its amendment 1 (2025-02) [documents 34A/2424/FDIS and 34A/2434/RVD].

In this Redline version, a vertical line in the margin shows where the technical content is modified by amendment 1. Additions are in green text, deletions are in strikethrough red text. A separate Final version with all changes accepted is available in this publication.

IEC 62868-2-3 has been prepared by subcommittee 34A: Electric light sources, of IEC technical committee 34: Lighting. It is an International Standard.

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/standardsdev/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.

This International Standard is to be used in conjunction with IEC 62868-1:2020.

In this document, the following print type is used:

– *compliance statements: in italic type.*

The committee has decided that the contents of this document and its amendment 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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- revised.

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

Part 2-3: Particular requirements – Flexible OLED tiles and panels

1 Scope

This part of IEC 62868 specifies the safety requirements for flexible 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 and designed for being bent during the manufacturing process of curved luminaires.

NOTE The construction of flexible OLED tiles and panels is given 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 61747-40-1:2019, *Liquid crystal display devices – Part 40-1: Mechanical testing of display cover glass for mobile devices – Guidelines*

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

IEC 62715-6-3:2020, *Flexible display devices – Part 6-3: Mechanical test methods – Impact and hardness tests*

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 62972:2016, *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 and IEC TS 62972 and the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

3.1

flexible OLED

OLED that is mechanically bendable in one or more of the steps of substrate handling, manufacturing, storage, use, operation, shipping, and relocation