

INTERNATIONAL STANDARD

**Organic light emitting diode (OLED) light sources for general lighting – Safety –
Part 2-1: Particular requirements – Semi-integrated OLED modules**



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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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

Part 2-1: Particular requirements – Semi-integrated OLED modules

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This consolidated version of the official IEC Standard and its amendment has been prepared for user convenience.

IEC 62868-2-1 edition 1.1 contains the first edition (2020-08) [documents 34A/2192/FDIS and 34A/2199/RVD] and its amendment 1 (2025-05) [documents 34A/2422/FDIS and 34A/2449/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.

International Standard IEC 62868-2-1 has been prepared by subcommittee 34A: Electric light sources, of IEC technical committee 34: Lighting.

IEC 62868-2-1 has been prepared in parallel with IEC 62868-2-2.

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

| FDIS | Report on voting |
|---------------|------------------|
| 34A/2192/FDIS | 34A/2199/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 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.

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

- reconfirmed,
- withdrawn, or
- revised.

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

Part 2-1: Particular requirements – Semi-integrated OLED modules

1 Scope

This part of IEC 62868 specifies safety requirements for semi-integrated organic light emitting (OLED) diode modules operating with an external controlgear connected to the mains voltage, and which, in addition, have a control means inside ("semi-integrated") for operation under constant voltage, constant current or constant power and have a rated voltage up to 20 V ripple free DC or 50 V AC RMS at 50 Hz or 60 Hz.

NOTE 1 The classification of OLED modules is given in Annex A.

NOTE 2 The classification of OLED modules according to the power supply method is illustrated IEC 62868-1:2020/AMD1:2024.

NOTE 3 The flexible OLED tiles or panels, or the OLED tiles or panels complying with this document are deemed to comply with the requirements of IEC 62868-2-3 or IEC 62868-2-4, unless otherwise specified in this document.

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 60598-1:2014, Luminaires – Part 1: General requirements and tests –
IEC 60598-1:2014/AMD1:2017~~

~~IEC 60838-2-2, Miscellaneous lamp holders – Part 2-2: Particular requirements – Connectors for LED modules~~

IEC 61347-1:2015, Lamp control gear – Part 1: General and safety requirements
IEC 61347-1:2015/AMD1:2017

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 and IEC TS 62972 and the following apply.

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