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Lighting equipment with radio communication - safety
requirements

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 50705:2023 sisaldab Euroopa standardi EN 50705:2023 ingliskeelset teksti.	This Estonian standard EVS-EN 50705:2023 consists of the English text of the European standard EN 50705:2023.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation.
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English Version

Lighting equipment with radio communication - safety requirements

Équipements radioélectriques intégrés dans des appareils
d'éclairage - Exigences de sécurité

Beleuchtungseinrichtung mit Funkkommunikation -
Sicherheitsanforderungen

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European foreword

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The following dates are fixed:

- latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2023-10-28
- latest date by which the national standards conflicting with this document have to be withdrawn (dow) 2026-04-28

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Any feedback and questions on this document should be directed to the users' national committee. A complete listing of these bodies can be found on the CENELEC website.

1 Scope

This document specifies safety requirements for radio-integrated lighting equipment.

NOTE 1 Examples for lighting equipment are light sources, lamps, luminaires and controlgear for light sources.

NOTE 2 With the radio equipment integrated into the lighting equipment, the lighting equipment itself becomes radio equipment which is subject to the provisions of the RED.

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.

EN 60570, *Electrical supply track systems for luminaires* (IEC 60570)

EN IEC 60598-2-1, *Luminaires - Part 2: Particular requirements - Section 1: Fixed general purpose luminaires* (IEC 60598-2-1)

EN 60598-2-2, *Luminaires - Part 2-2: Particular requirements - Recessed luminaires* (IEC 60598-2-2)

EN 60598-2-3, *Luminaires - Part 2-3: Particular requirements - Luminaires for road and street lighting* (IEC 60598-2-3)

EN 60598-2-4, *Luminaires - Part 2-4: Particular requirements - Portable general purpose luminaires* (IEC 60598-2-4:2017)

EN 60598-2-5, *Luminaires - Part 2-5: Particular requirements – Floodlights* (IEC 60598-2-5:2015)

EN 60598-2-8, *Luminaires - Part 2-8: Particular requirements – Handlamps* (IEC 60598-2-8:2013)

EN 60598-2-10, *Luminaires - Part 2-10: Particular requirements - Portable luminaires for children* (IEC 60598-2-10)

EN 60598-2-11, *Luminaires - Part 2-11: Particular requirements - Aquarium luminaires* (IEC 60598-2-11)

EN 60598-2-12, *Luminaires - Part 2-12: Particular requirements - Mains socket-outlet mounted nightlights* (IEC 60598-2-12)

EN 60598-2-13, *Luminaires - Part 2-13: Particular requirements - Ground recessed luminaires* (IEC 60598-2-13)

EN IEC 60598-2-17, *Luminaires - Part 2-17: Particular requirements - Luminaires for stage lighting, television and film studios (outdoor and indoor)* (IEC 60598-2-17)

EN 60598-2-18, *Luminaires - Part 2: Particular requirements - Section 18: Luminaires for swimming pools and similar applications* (IEC 60598-2-18)

EN 60598-2-19, *Luminaires - Part 2: Particular requirements - Section 19: Air-handling luminaires (safety requirements)* (IEC 60598-2-19)

EN 60598-2-20, *Luminaires - Part 2-20: Particular requirements - Lighting chains* (IEC 60598-2-20:2014)

EN 60598-2-21, *Luminaires - Part 2-21: Particular requirements - Rope lights* (IEC 60598-2-21)

EN 60598-2-22, *Luminaires - Part 2-22: Particular requirements - Luminaires for emergency lighting* (IEC 60598-2-22)

EN IEC 60598-2-23, *Luminaires - Part 2-23: Particular requirements - Extra-low-voltage lighting systems for ELV light sources*

EN 60598-2-24, *Luminaires - Part 2-24: Particular requirements - Luminaires with limited surface temperatures (IEC 60598-2-24)*

EN 60598-2-25, *Luminaires - Part 2-25: Particular requirements - Luminaires for use in clinical areas of hospitals and health care buildings (IEC 60598-2-25)*

EN 61347-2-7, *Lamp controlgear - Part 2-7: Particular requirements for battery supplied electronic controlgear for emergency lighting (self-contained) (IEC 61347-2-7)*

EN 61347-2-11, *Lamp controlgear - Part 2-11: Particular requirements for miscellaneous electronic circuits used with luminaires (IEC 61347-2-11)*

EN 61347-2-13, *Lamp controlgear - Part 2-13: Particular requirements for d.c. or a.c. supplied electronic controlgear for LED modules (IEC 61347-2-13)*

EN IEC 62031, *LED modules for general lighting - Safety specifications*

EN 62493:2015, *Assessment of lighting equipment related to human exposure to electromagnetic fields*

EN 62560, *Self-ballasted LED-lamps for general lighting services by voltage > 50 V - Safety specifications (IEC 62560)*

EN 62776, *Double-capped LED lamps designed to retrofit linear fluorescent lamps - Safety specifications*

EN 62838, *LEDs lamps for general lighting services with supply voltages not exceeding 50 V a.c. r.m.s. or 120 V ripple free d.c. - Safety specifications (IEC 62838)*

EN 62868, *Organic light emitting diode (OLED) panels for general lighting - Safety requirements*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

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

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

3.1

radio integrated lighting equipment

active or non-active radio integrated lighting equipment

3.2

active radio integrated lighting equipment

lighting equipment with an intentional radiator incorporated in a fixed and permanent way

3.3

non-active radio integrated lighting equipment

lighting equipment with radio receivers and/or radio transducers only incorporated in a fixed and permanent way

Note 1 to entry: Radio transducers, such as NFC transducers, receive the power (for the purpose of NFC communication) from another source, such as an NFC reader, and, thus, do not emit any net power (for the purpose of NFC communication) and thus are classified as non-active.