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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 31275-2026

Replacing GB/T 31275-2020

**Assessment of lighting equipment related to human exposure
to electromagnetic fields**

照明设备对人体电磁辐射的评价

(English Translation)

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part 1: Structure and Drafting Rules of Standardization Documents".

Drafting.

This document supersedes GB/T 31275-2020 "Evaluation of Electromagnetic Radiation from Lighting Equipment to the Human Body" and is consistent with GB/T 31275-2020.

Compared to previous versions, aside from structural adjustments and editorial changes, the main technical changes are as follows.

---The term and definition of "intentional radiator" have been added (see 3.12);

---The general rules for limits have been changed (see 5.1, 4.1 in the 2020 edition).

This document adopts IEC 62493:2022 "Evaluation of electromagnetic radiation from lighting fixtures to the human body".

Compared with IEC 62493:2022, this document has undergone the following structural adjustments.

3.1, Chapter 4 corresponds to 3.2 and 3.3 in IEC 62493:2022.

Please note that some content in this document may involve patents. The issuing organization of this document assumes no responsibility for identifying patents.

This document was proposed by the China National Light Industry Council.

This document is under the jurisdiction of the National Technical Committee on Standardization of Lighting Appliances (SAC/TC224).

1 Scope

This document applies to human exposure to induced internal electric fields with frequencies between 20kHz and 10MHz and to the frequencies around lighting equipment.

Evaluation of electromagnetic radiation from lighting equipment in the range of 100 kHz to 300 MHz by specific absorptivity (SAR).

This document applies to.

---Lighting, primarily for generating and/or distributing light, powered by low voltage or batteries, for indoor and/or outdoor use.

All lighting fixtures;

---One of its main functions is lighting; devices are multifunctional devices used for illumination.

---A separate auxiliary device specifically designed for use with lighting equipment;

This document does not apply to.

---Lighting equipment for aircraft and airports;

---Lighting equipment for road vehicles (excluding lighting equipment used for passenger compartment lighting in public transport);

---Agricultural lighting equipment;

---Lighting equipment for ships/vehicles;

--- Photocopier, slide projector;

---Electromagnetic field requirements are clearly defined in other standards for equipment.

The methods described in this document are not applicable to comparing the

electromagnetic fields of different lighting devices.

This document does not apply to internal components of luminaires, such as electronic control devices for lamps.

2 Normative references

The contents of the following documents, through normative references within the text, constitute essential provisions of this document. Dated citations are not included.

For references to documents, only the version corresponding to that date applies to this document; for undated references, the latest version (including all amendments) applies.

This document.

IEC 62209-2:2010 Human models, instruments and specifications for human exposure to radio frequency fields generated by handheld and wearable wireless communication devices Procedure 2.Measurement Procedure for the Absorption Rate (SAR) of Wireless Communication Devices Used Closely to the Human Body (Frequency Range 30MHz~6GHz) IEC 62232:2011 Method for determining the intensity of radio frequency fields and SAR near radio communication base stations for the evaluation of human exposure.

IEC 62311:2007 Electrical and electronic equipment - Assessment of human exposure to electromagnetic radiation (0 Hz to 300 GHz) (0Hz~300GHz)] IEC 62479:2010 Assessing whether low-power electronic and electrical equipment complies with fundamental limits relating to human exposure to electromagnetic fields.