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# INTERNATIONAL STANDARD

# NORME INTERNATIONALE



Fluorescent ultraviolet lamps used for tanning – Measurement and specification method

Lampes fluorescentes à ultraviolet utilisées pour le bronzage – Méthode de mesure et de spécification





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INTERNATIONAL ELECTROTECHNICAL COMMISSION

COMMISSION ELECTROTECHNIQUE INTERNATIONALE

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#### INTERNATIONAL ELECTROTECHNICAL COMMISSION

### FLUORESCENT ULTRAVIOLET LAMPS USED FOR TANNING – MEASUREMENT AND SPECIFICATION METHOD

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International Standard IEC 61228 has been prepared by subcommittee 34A: Electric light sources, of IEC technical committee 34: Lighting.

This third edition cancels and replaces the second edition published in 2008. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- a) maintenance code: description of the depreciation of the UV irradiance lamp during operation;
- b) operating position: information added for single capped lamps;
- c) spectroradiometric measuring system: new information about distance between sensor and lamp axis;
- d) measurement and evaluation procedure: separated detailed information for double capped fluorescent UV lamps and single capped fluorescent UV lamps;
- e) Annex C (normative), Method of test for irradiance maintenance: new information added;
- f) Annex D (normative), Reflector gauge: new information added;

g) Annex E (normative), Lamp datasheets for measurement: complementary information added.

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

FDIS	Report on voting
34A/2213/FDIS	34A/2220/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.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under "http://webstore.iec.ch" in the data related to the specific document. At this date, the document will be

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- withdrawn,
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### FLUORESCENT ULTRAVIOLET LAMPS USED FOR TANNING – MEASUREMENT AND SPECIFICATION METHOD

#### 1 Scope

This document describes the method of measuring, evaluating and specifying the UV irradiation characteristics of fluorescent ultraviolet lamps that are used in appliances for tanning purposes. It includes specific requirements regarding the marking of such lamps.

These requirements relate only to type testing.

Lamps complying with the requirements of this document comply with the electrical and mechanical safety requirements of IEC 61195 and IEC 61199 with the exception of the requirements for maximum limits of UV radiation.

#### 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 60061-1, Lamp caps and holders together with gauges for the control of interchangeability and safety – Part 1: Lamp caps

IEC 60081, Double-capped fluorescent lamps - Performance specifications

IEC 60155, Glow-starters for fluorescent lamps

IEC 60335-2-27, Household and similar electrical appliances – Safety – Part 2-27: Particular requirements for appliances for skin exposure to optical radiation

IEC 60921, Ballasts for tubular fluorescent lamps - Performance requirements

IEC 60929, AC and/or DC-supplied electronic control gear for tubular fluorescent lamps – Performance requirements

IEC 61049, Capacitors for use in tubular fluorescent and other discharge lamp circuits. Performance requirements

ISO/CIE 28077:2016, Photocarcinogenesis action spectrum (non-melanoma skin cancers)

CIE 63:1984, The spectroradiometric measurement of light sources

#### 3 Terms and definitions

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