

TECHNICAL SPECIFICATION

SPÉCIFICATION TECHNIQUE

General lighting – LEDs and LED modules – Terms and definitions

Eclairage général – LED et modules de LED – Termes et définitions



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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**GENERAL LIGHTING –
LEDs AND LED MODULES –
TERMS AND DEFINITIONS**

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IEC 62504, which is a technical specification, has been prepared by subcommittee 34A: Lamps, of IEC technical committee 34: Lamps and related equipment.

The text of this technical specification is based on the following documents:

Enquiry draft	Report on voting
34A/1355/DTS	34A/1418/RVC

Full information on the voting for the approval of this technical specification can be found in the report on voting indicated in the above table.

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- withdrawn,
- replaced by a revised edition, or
- amended.

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GENERAL LIGHTING – LEDs AND LED MODULES – TERMS AND DEFINITIONS

1 Scope

This Technical Specification presents terms and definitions relevant for lighting with LED light sources. It provides both descriptive terms (such as “built-in LED module”) and measurable terms (such as “luminance”).

NOTE Annex A gives an overview of systems composed of LED modules and control gear.

2 Normative references

The following referenced documents are indispensable for the application 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 60050-845:1987, *International Electrotechnical Vocabulary – Chapter 845: Lighting*

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

3 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 60050-845 and the following apply.

3.1

ambient temperature

t_{amb}

average temperature of air or another medium in the vicinity of the LED or LED module

NOTE 1 During the measurement of the ambient temperature, the measuring instrument/probe should be shielded from draughts and radiant heating.

[IEC 60050-826:2004, definition 826-10-03, modified]

[see also CIE 127, Subclause 2.2.5]

NOTE 2 Ambient temperature is expressed in Celsius degrees.

3.2

angular subtense

α

angle subtended by an apparent source as viewed from a point in space

The angle extension is determined by the observation distance, but at no distance smaller than the minimum distance of accommodation.

NOTE 1 The location and angular subtense of the apparent source depends on the viewing position in the beam.

NOTE 2 The angular subtense of an apparent source is only applicable in the wavelength range from 380 nm to 1 400 nm, where eye hazard exists.