



SLOVENSKI STANDARD
SIST EN IEC 63356-2:2023

01-januar-2023

Značilnosti LED-svetlobnega vira - 2. del: Parametri za načrtovanje in vrednosti (IEC 63356-2:2022)

LED light source characteristics - Part 2: Design parameters and values (IEC 63356-2:2022)

Eigenschaften von LED-Lichtquellen - Teil 2: Konstruktionsparameter und werte (IEC 63356-2:2022)

Caractéristiques de source lumineuse à LED - Partie 2: Paramètres et valeurs de conception (IEC 63356-2:2022)

Ta slovenski standard je istoveten z: EN IEC 63356-2:2022

ICS:

29.140.01 Žarnice na splošno Lamps in general

SIST EN IEC 63356-2:2023 **en**

EUROPEAN STANDARD

EN IEC 63356-2

NORME EUROPÉENNE

EUROPÄISCHE NORM

November 2022

ICS 29.140.99

English Version

**LED light source characteristics - Part 2: Design parameters and values
(IEC 63356-2:2022)**

Caractéristiques de source lumineuse à LED - Partie 2:
Paramètres et valeurs de conception
(IEC 63356-2:2022)

Eigenschaften von LED-Lichtquellen - Teil 2:
Konstruktionsparameter und werte
(IEC 63356-2:2022)

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CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

EN IEC 63356-2:2022 (E)**European foreword**

The text of document 34A/2298/FDIS, future edition 1 of IEC 63356-2, prepared by SC 34A "Electric light sources" of IEC/TC 34 "Lighting" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 63356-2:2022.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2023-08-22
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2025-11-22

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In the official version, for Bibliography, the following notes have to be added for the standard indicated:

IEC 60061 (series) NOTE Harmonized as EN 60061 (series)

IEC 63356-1 NOTE Harmonized as EN IEC 63356-1



IEC 63356-2

Edition 1.0 2022-10

INTERNATIONAL STANDARD

NORME INTERNATIONALE



**LED light source characteristics –
Part 2: Design parameters and values**

**Caractéristiques de source lumineuse à LED –
Partie 2: Paramètres et valeurs de conception**

<https://standards.iteh.ai/catalog/standards/sist/1a19ba86-66e1-4b45-8aa4-0a6735f6a66c/sist-en-iec-63356-2-2023>

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

COMMISSION
ELECTROTECHNIQUE
INTERNATIONALE

ICS 29.140.99

ISBN 978-2-8322-5888-0

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

LED LIGHT SOURCE CHARACTERISTICS –

Part 2: Design parameters and values

FOREWORD

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IEC 63356-2 has been prepared by subcommittee 34A: Electric light sources, of IEC technical committee 34: Lighting. It is an International Standard.

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

Draft	Report on voting
34A/2298/FDIS	34A/2313/RVD

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/publications.

A list of all parts in the IEC 63356 series, published under the general title *LED light source characteristics*, can be found on the IEC website.

The committee has decided that the contents of this document 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,
- replaced by a revised edition, or
- amended.

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INTRODUCTION

The IEC 63356 series – (LED light source characteristics) is split into two parts:

- Part 1: Data sheets

The scope of Part 1 covers data sheets that are comprehensive specifications for unique LED light sources (LED lamp or LED module). These are full specifications for products including, where necessary, information on interchangeability aspects, for example mechanical, electrical, optical.

Each data sheet in Part 1 relates to an individual type of LED lamp or LED module.

- Part 2: Design parameters and values

The scope of Part 2 covers design parameters and values that are used in the design of an LED light source (LED lamp or LED module) or a related component. Part 2 does not provide full product specifications but includes important interface aspects (e.g. mechanical, electrical, optical) that should be taken account of in the design of LED light sources and related components.

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LED LIGHT SOURCE CHARACTERISTICS –

Part 2: Design parameters and values

1 Scope

This part of IEC 63356 specifies design parameters and design values of an LED light source or related interface characteristics.

NOTE 1 Interface characteristics can cover interfaces between the LED light source and the luminaire or the controlgear, or the LED light source and additional attachments.

NOTE 2 Interfaces can be related to for example electrical, mechanical, or optical aspects.

This document does not cover interchangeability between products from different LED light source manufacturers.

NOTE 3 Interchangeability is covered by IEC 63356-1.

Lamp caps and lampholders specified in the IEC 60061 series are not within the scope of this document.

Compliance criteria relating to parameters in this document are covered by IEC 63220¹ for safety, or IEC 63221² for performance.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

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

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

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

3.1

thermal interface material

TIM

material with specified thermal conductivity assembled between an LED module and a luminaire to enable improved heat dissipation

¹ Under consideration.

² Under consideration.

4 Overview and common information

4.1 General

Unless otherwise specified, mechanical dimensions refer to a temperature of $(25 \pm 5) ^\circ\text{C}$.

All values of dimensions that omit an explicit unit indication are in millimetres.

4.2 Numbering system

Products that have comparable interfaces are grouped in separate clauses.

5 Rectangular LED modules with undefined light emitting surface

NOTE Clause 5 is derived from Zhaga Book 7 Edition 1.7.

5.1 General

Rectangular LED modules with undefined light emitting surface (LES) are intended to be mounted in a luminaire. Figure 1 illustrates an example of an LED module-luminaire combination. In this example the luminaire holds two LED modules. In practice, a luminaire can hold any number of LED modules.

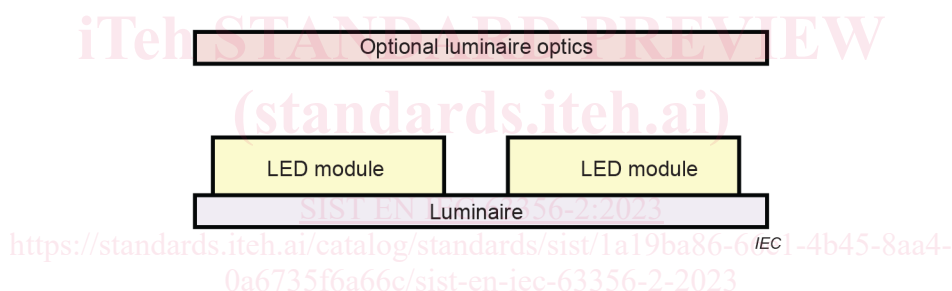


Figure 1 – Example of a luminaire with two LED modules

The luminaire typically features luminaire-optics which shape the light output of the LED module(s).

5.2 Mechanical references

The reference plane and the reference point of an LED module, including (optional) TIM are defined in Figure 2. Dimensions are specified relative to either the reference point or the reference plane unless indicated otherwise. Moreover, dimensions are specified to include the thickness of the TIM (if present).

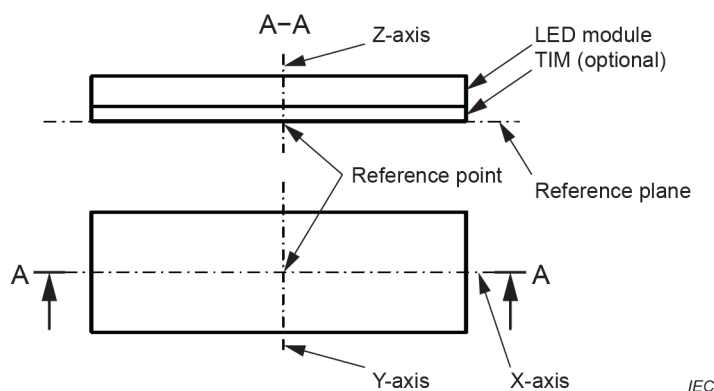


Figure 2 – Positions of the reference point and the reference plane of the LED module