SLOVENSKI STANDARD
oSIST prEN IEC 63356-2:2024

01-februar-2024

Značilnosti LED-svetlobnega vira - 2. del: Parametri za načrtovanje in vrednosti

LED light source characteristics - Part 2: Design parameters and values

Eigenschaften von LED-Lichtquellen - Teil 2: Konstruktionsparameter und werte

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

Ta slovenski standard je istoveten z: **prEN IEC 63356-2:2023**

ICS:

29.140.99	Drugi standardi v zvezi z žarnicami	Other standards related to lamps

oSIST prEN IEC 63356-2:2024 **en**

a

34A/2377/CDV

COMMITTEE DRAFT FOR VOTE (CDV)

PROJECT NUMBER:	
IEC 63356-2 ED2	
DATE OF CIRCULATION:	CLOSING DATE FOR VOTING:
2023-12-01	**2024-02-23**
SUPERSEDES DOCUMENTS:	
34A/2361/CD, 34A/2375/CC	

IEC SC 34A : ELECTRIC LIGHT SOURCES	
SECRETARIAT: United Kingdom	SECRETARY: Mr Petar Luzajic
OF INTEREST TO THE FOLLOWING COMMITTEES: TC 34,SC 34B,SC 34C,SC 34D	PROPOSED HORIZONTAL STANDARD: ☐ Other TC/SCs are requested to indicate their interest, if any, in this CDV to the secretary.
FUNCTIONS CONCERNED: ☐ EMC ☐ ENVIRONMENT ☐ QUALITY ASSURANCE ☐ SAFETY	
☒ SUBMITTED FOR CENELEC PARALLEL VOTING **Attention IEC-CENELEC parallel voting** The attention of IEC National Committees, members of CENELEC, is drawn to the fact that this Committee Draft for Vote (CDV) is submitted for parallel voting. The CENELEC members are invited to vote through the CENELEC online voting system.	☐ NOT SUBMITTED FOR CENELEC PARALLEL VOTING

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TITLE:

LED light source characteristics - Part 2: Design parameters and values

PROPOSED STABILITY DATE: 2026

NOTE FROM TC/SC OFFICERS:

Edition 2 is proposed for the transfer of information from IEC PAS 63324 Zhaga interface specification Book 1 and Book 10 and IEC PAS 63328 Zhaga interface specification Book 1 and Book 12 to IEC 63356-2. An explanatory introduction is provided which is not part of the proposal or the document manuscript.

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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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.

This second edition cancels and replaces the first edition published in 2022. This edition constitutes a technical revision.

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

a) Added clause 6 for Circular LED modules with a circular Light Emitting Surface for spot lighting;
b) Added clause 7 for LEDni modules with a rectangular shape and a circular light emitting surface

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

FDIS	Report on voting
34A/XXX/FDIS	34A/XXX/RVD

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

The language used for the development of this Amendment 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 publication will remain unchanged until the stability date indicated on the IEC web site under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

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

The National Committees are requested to note that for this publication the stability data is 20XX.

THIS TEXT IS INCLUDED FOR THE INFORMATION OF THE NATIONAL COMMITTEES AND WILL BE DELETED AT THE PUBLICATION STAGE.

INTRODUCTION

(not part of the proposal or document manuscript)

Zhaga Book 10 *Circular LED modules for spot lighting* has been published as a Publicly Available Specification, IEC PAS 63324. Likewise, Zhaga Book 12 *Rectangular LED arrays with circular LES and corresponding holders* has been published as IEC PAS 63328. The process for converting IEC PAS 63324 and IEC PAS 63328 to IEC deliverables has been discussed in the TC 34/AG 13 advisory group on 2020-03-28.

Briefly, the LED modules of Zhaga Book 10 have a mechanical interface directly to the luminaire. As such there is no cap or holder for transfer to an SC 34B document. Inclusion of these mechanical interfaces in IEC 63356-2 datasheets was supported. The LED arrays of Zhaga Book 12 use a holder specified in Zhaga Book 10 that enables mounting to a luminaire. Transfer of the mechanical interface for LED arrays to IEC 63356-2 datasheets was supported. Note that the term LED array used in the Zhaga Book 12 has the term LEDni module (non-integrated LED module) in IEC TC/SC 34 publications. The change in terminology has been made in this draft manuscript.

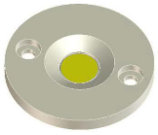
Although the LED modules and LED arrays have a specification for a Lambertian photometric interface to the luminaire, this was considered unnecessary for transfer to the IEC 63356-2 datasheets since it is useful but rarely tested.

The electrical interface of LED modules to the electronic control gear (ECG) specifies compliance with Zhaga Books 22 and 23, which are not being transferred to the IEC at this time. Nevertheless, the specific referential requirements of IEC PAS 63324 for LED modules may be considered for transfer to the IEC 63356-2 datasheets later.

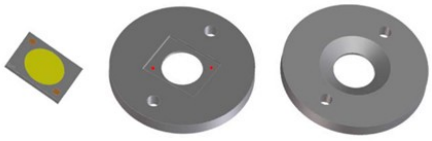
The thermal interface of LED modules to the luminaire was specified with requirements that were not very well suited to a datasheet format. The TC 34/AG 13 experts advised that this material could be transferred to new clauses or annexes for LED modules in IEC 63221 *LED Light sources – Performance requirements*. A reference photometric and electrical test fixture (PETF) for evaluating thermal performance of LED modules could be part of the specification in IEC 63221 that informs luminaire design.

Zhaga Book 10 includes specifications for an LED Array Holder. This is an LED module mount that mechanically affixes an LED array (e.g. Chip-on-Board) to the luminaire. The TC 34/AG 13 experts generally supported inclusion of this specification in a new IEC 63xxx-2-1: *Part 2-1: Particular requirements – LED module holders, LED module connectors and LED module mounts* that has been proposed in SC 34B/WG 1. Their advice was to include the specification of electrical contacts in the requirements. The transfer of specifications for LED Array Holders will await the development of the new SC 34B document.

The following image of a Zhaga Book 10 LED module is for illustrative purposes:



The following image of a Zhaga Book 12 LED array (A) and holder (B:bottom and C:top) is for illustrative purposes:



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

1 Scope

No changes

2 Normative references

No changes

3 Terms and definitions

No changes or additions

3.1

Thermal Interface Material

TIM

No changes

4 Overview and common information

4.1 General

Change the first sentence to read as follows:

Unless otherwise specified, dimensions are specified at a temperature of (25 ± 5) °C.

4.2 Numbering system

No changes

5 Rectangular LED modules with undefined Light Emitting Surface

Modify the following note as follows

Note: Clause 5, including LED module demarcations specified in clauses 5.3.2 through 5.3.19, are derived from Zhaga Book 7 Edition 1.7.

5.1 General

No changes

5.2 Mechanical references

No changes

5.3 LED module categories

5.3.1 General

No changes

5.3.2 L6W6

No changes

5.3.3 L14W2

No changes

5.3.4 L28W2

No changes