



SLOVENSKI STANDARD
oSIST prEN IEC 63356-2:2022
01-marec-2022

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

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

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

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

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ICS:

29.140.01 Žarnice na splošno 2022 Lamps in general

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SECRETARIAT: United Kingdom	SECRETARY: Mr Petar Luzajic
OF INTEREST TO THE FOLLOWING COMMITTEES: TC 34, SC 34B, SC 34C, SC 34D	PROPOSED HORIZONTAL STANDARD: <input type="checkbox"/> Other TC/SCs are requested to indicate their interest, if any, in this CDV to the secretary.
FUNCTIONS CONCERNED: <input type="checkbox"/> EMC <input type="checkbox"/> ENVIRONMENT <input type="checkbox"/> QUALITY ASSURANCE <input type="checkbox"/> SAFETY	
<input checked="" type="checkbox"/> SUBMITTED FOR CENELEC PARALLEL VOTING	<input type="checkbox"/> NOT SUBMITTED FOR CENELEC PARALLEL VOTING
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TITLE:

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

PROPOSED STABILITY DATE: 2025

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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LED LIGHT SOURCE CHARACTERISTICS

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Part 2: Design parameters and values

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FOREWORD

- 85 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising
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87 co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and
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114 indispensable for the correct application of this publication.
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- 117 IEC 63356-2 has been prepared by subcommittee 34A: Electric light sources, of IEC technical
118 committee 34: Lighting. It is an International Standard.

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

Draft	Report on voting
XX/XX/FDIS	XX/XX/RVD

120

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

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

124 This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in
125 accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available

126 at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are
127 described in greater detail at www.iec.ch/standardsdev/publications.

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

- 131 • reconfirmed,
132 • withdrawn,
133 • replaced by a revised edition, or
134 • amended.

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136

INTRODUCTION

137 IEC 63356 – LED LIGHT SOURCE CHARACTERISTICS is split into 2 parts:

138 Part 1: Datasheets

139 The scope of Part 1 covers datasheets that are comprehensive specifications for unique LED
140 light sources (LED lamp or LED module). These are full specifications for products including,
141 where necessary, information on interchangeability aspects, e.g. mechanical, electrical, optical.

142 Each datasheet in this part relates to an individual type of LED lamp or LED module.

143 Part 2: Design parameters and values

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

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LED LIGHT SOURCE CHARACTERISTICS

Part 2: Design parameters and values

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1 Scope

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

161 Note 1: Interface characteristics can cover interfaces between LED light source and luminaire/controlgear or LED
162 light source and additional attachments.

163 Note 2: Interfaces can be related to for example electrical, mechanical, or optical aspects.

164 This part does not cover interchangeability between products from different LED light source
165 manufacturers.

166 Note 3: Interchangeability is covered by Part 1.

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

169 Compliance criteria relating to parameters in this document are covered by IEC 63220 for
170 safety, or IEC 63221 for performance.

2 Normative references

172 There are no normative references in this document.

3 Terms and definitions

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

175 ISO and IEC maintain terminological databases for use in standardization at the following
176 addresses:

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

3.1

Thermal Interface Material

TIM

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

4 Overview and common information

4.1 General

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

187 All lengths that omit an explicit unit indication are in millimeters.

4.2 Numbering system

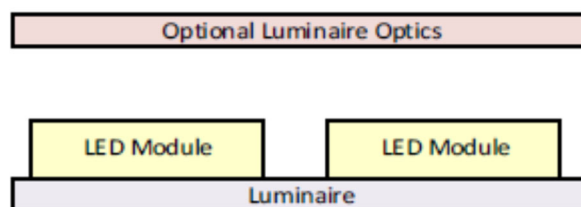
189 Products that have comparable interfaces are grouped in following clauses.

5 Rectangular LED modules with undefined Light Emitting Surface

191 Note: The following subclauses are derived from Zhaga Book 7 Edition 1.7

192 5.1 General

193 Rectangular LED modules with undefined Light Emitting Surface (LES) are intended to be
 194 mounted in a luminaire. Figure 1 illustrates an example of an LED module-luminaire
 195 combination. In this example the luminaire holds two LED modules. In practice, a luminaire can
 196 hold any number of LED modules.



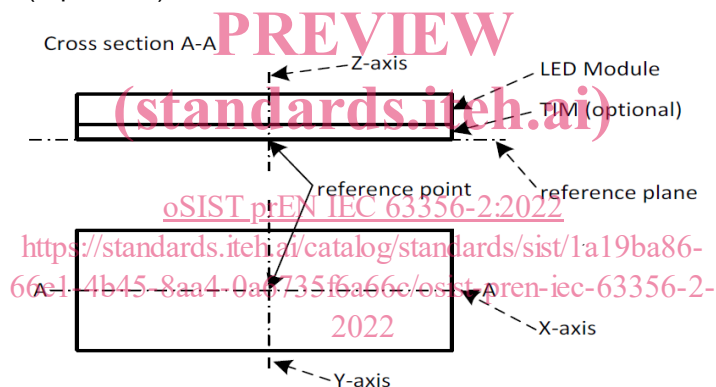
197

198 **Figure 1 – Example of a luminaire with two LED modules**

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

201 5.2 Mechanical references

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



206

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

208 5.3 LED module categories

209 5.3.1 General

210 This clause specifies a number of LED module categories that are identified by a designation.
 211 In the clauses 5.3.2 to 5.3.19, the LED module demarcations of these LED module categories
 212 are specified.

213 No part of a LED module crosses the outline boundaries of its LED module category
 214 demarcation.

215 Unless stated otherwise, all holes are available and for each hole at least 25% of the
 216 circumference of the hole is present in the LED module. The demarcation model specifies the
 217 minimum diameter of the mounting holes at specified position.

218 Note: In typical designs the diameter of these holes can be larger allowing for a tolerance on the position of the
 219 holes.

220 The intention of the demarcation model is to visualize restricted areas or volumes that no part
 221 of a luminaire crosses.

222 In case the LED module is applied in combination with a TIM, this material is defined to be part
 223 of the LED module. Thus, the total height of the module + TIM does not exceed the maximum
 224 height H (see clause 5.3.2 to 5.3.19).

225 The hashed area indicates the keep-in zone for the LED module and the keep-out zone for the
226 luminaire

227 **5.3.2 L6W6**

228 The designation for this category is 'L6W6'.

229 The LED module demarcation of the L6W6 category is defined in Table 1 and Figure 3.

230 **Table 1 – LED module demarcation of the L6W6 category**

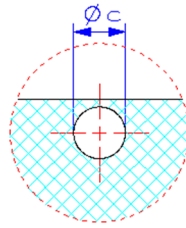
Dimension	Value
L	60
W	60
H	20
a	48
b	48
M	20
P	35
Øc	4,3

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232

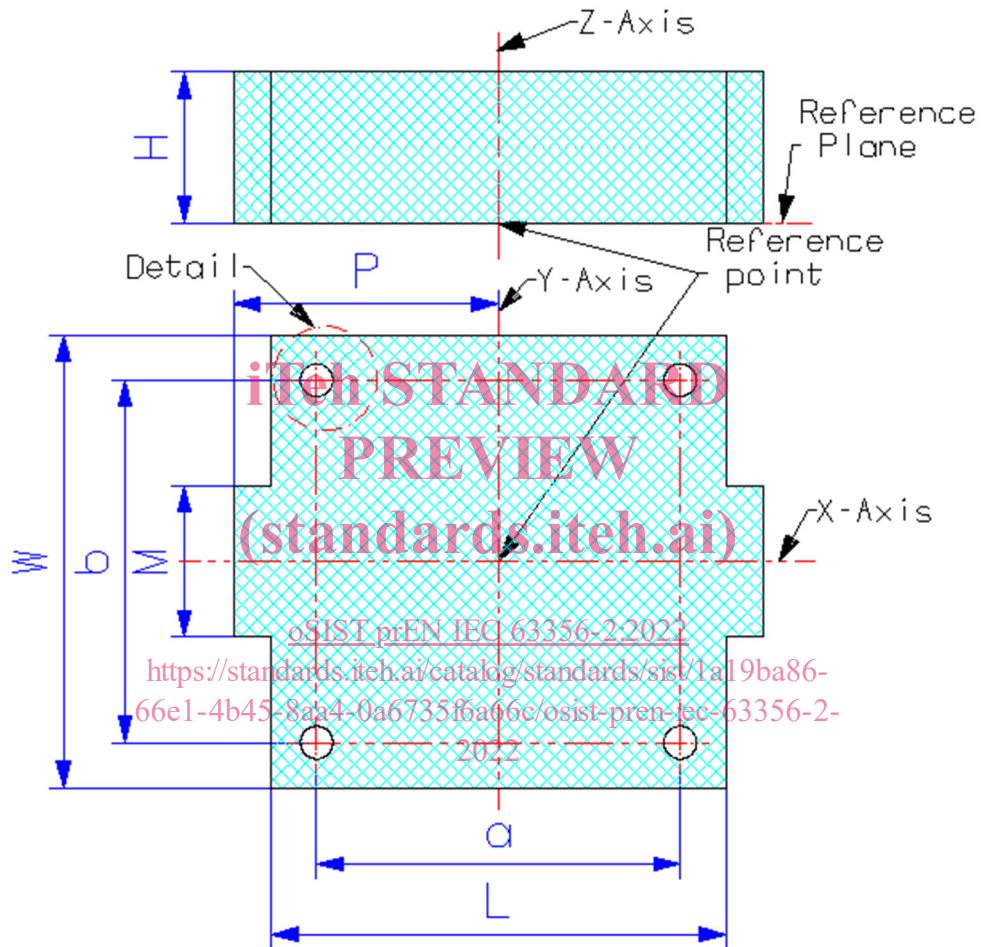
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236 Note: The top figure shows the detail

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Figure 3 – LED module demarcation of the L6W6 category

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X-axis and Y-axis are symmetry axis for the outline and the mounting holes.

239