



SLOVENSKI STANDARD
oSIST prEN IEC 60598-2-2:2022
01-januar-2022

Svetilke - 2-2. del: Posebne zahteve - Vgradne svetilke

Luminaires - Part 2-2: Particular requirements - Recessed luminaires

Leuchten - Teil 2-2: Besondere Anforderungen - Einbauleuchten

Luminaires - Partie 2-2: Règles particulières - Luminaires encastrés

Ta slovenski standard je istoveten z: prEN IEC 60598-2-2:2021

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29.140.40 Svetila Luminaires

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34D/1633/CDV

COMMITTEE DRAFT FOR VOTE (CDV)

PROJECT NUMBER: IEC 60598-2-2 ED4	
DATE OF CIRCULATION: 2021-10-29	CLOSING DATE FOR VOTING: 2022-01-21
SUPERSEDES DOCUMENTS: 34D/1600/CD, 34D/1616A/CC	

IEC SC 34D : LUMINAIRES	
SECRETARIAT: United Kingdom	SECRETARY: Ms Shanti Conn
OF INTEREST TO THE FOLLOWING COMMITTEES:	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 checked="" type="checkbox"/> SAFETY	
<input checked="" type="checkbox"/> SUBMITTED FOR CENELEC PARALLEL VOTING <input type="checkbox"/> NOT SUBMITTED FOR CENELEC PARALLEL VOTING	
<p>Attention IEC-CENELEC parallel voting</p> <p>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.</p> <p>The CENELEC members are invited to vote through the CENELEC online voting system.</p>	

This document is still under study and subject to change. It should not be used for reference purposes.

Recipients of this document are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

TITLE:

Luminaires - Part 2-2: Particular requirements - Recessed luminaires

PROPOSED STABILITY DATE: 2025

NOTE FROM TC/SC OFFICERS:

Subject: Revision of recessed luminaire standard and merging of air-handling luminaire requirements

Project Leader: David Crossley

Note: The CDV is based on 34D/1600/CD updated in line with the responses to the national committee comments given in 34D/1616/CC.

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INTRODUCTION (not part of the proposal)

As agreed during:

- the 34D WG1 meeting in Wellington (see 34D/WG1(SEC)022, sections 4.16 and 6.2);
- 34D WG1 meeting (19-20 October and 4 & 14 December (see 34D_WG1(SEC)032A Minutes Section 4.1); and
- 34D WG1 meeting 16-17 June 2021 (see 34D_WG1(SEC)043A Minutes Section 6.2.1)

LUMEX agreed for recessed luminaire requirements to be moved from IEC 60598-1 to IEC 60598.2.2 and to merge the content of IEC 60598-2-19 *Air-handling luminaires* into IEC 60598-2-2.

LUMEX agreed for this proposal to be circulated as a CDV.

Commentators are asked to note the intent of this revision is not to change any requirements but simply move all specific recessed luminaire requirements from Part 1 into Part 2-2 and merge the requirements for air handling luminaires (i.e. Part 2-19) with Part 2-2.

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

LUMINAIRES –

**Part 2-2: Particular requirements –
Recessed luminaires and recessed air-handling luminaires**

FOREWORD

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- 9) Attention is drawn to the possibility that some of the elements of this IEC Publication may be the subject of patent rights. IEC shall not be held responsible for identifying any or all such patent rights.

IEC 60598-2-2 has been prepared by subcommittee 34D: Luminaires, of IEC technical committee 34:Lighting. It is an International Standard.

This fourth edition cancels and replaces the third edition published in 2011. This edition constitutes a technical revision.

This edition includes the following technical changes with respect to the previous edition (there are no major technical changes, see Annex D):

- a) The requirements specific to recessed luminaires given in IEC 60598-1 are now incorporated in this Part 2-2.
- b) The requirements for air-handling luminaires given in IEC 60598-2-19 are now incorporated in this Part 2-2.
- c) The references to Part 1 have been updated

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

Draft	Report on voting
34D/XX/FDIS	34D/XX/RVD

97
98 Full information on the voting for its approval can be found in the report on voting indicated in
99 the above table.

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

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

105 A list of all parts in the IEC 60598 series, published under the general title *Luminaires* can be
106 found on the IEC website.

107 This Part 2-2 is to be used in conjunction with the latest edition of IEC 60598-1 and its
108 amendment(s). It was established on the basis of the ninth edition (2020).

109 NOTE 1 When "Part 1" is mentioned in this document, it refers to IEC 60598-1.

110 NOTE 2 In this document, the following print type is used:

111 – compliance statements: *in italic type*.

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

- 115 • reconfirmed,
- 116 • withdrawn,
- 117 • replaced by a revised edition, or
- 118 • amended.

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LUMINAIRES –

Part 2-2: Particular requirements – Recessed luminaires and recessed air-handling luminaires

128 2.1 Scope

129 This part of IEC 60598 specifies requirements for recessed luminaires incorporating electric
130 light sources for operation from supply voltages up to 1 000 V. It also specifies requirements
131 for recessed air-handling luminaires for use with a ventilation duct or ventilated space (plenum).

132 NOTE The expressions “ventilation” and “ventilated” in this section refer to forced ventilation.

133 2.2 Normative references

134 The following referenced documents are indispensable for the application of this document.
135 For dated references, only the edition cited applies. For undated references, the latest edition
136 of the referenced document (including any amendments) applies.

137 IEC 60227 (all parts), *Polyvinyl chloride insulated cables of rated voltages up to and including*
138 *450/750 V*

139 IEC 60245 (all parts), *Rubber insulated cables – Rated voltages up to and including*
140 *450/750 V*

141 IEC 60598-1, *Luminaires – Part 1: General requirements and tests*

142 2.3 Terms and definitions

143 For the purposes of this document, the terms and definitions given in Part 1 and the following
144 apply.

145 ISO and IEC maintain terminological databases for use in standardization at the following
146 addresses:

- 147 • IEC Electropedia: available at <http://www.electropedia.org/>
- 148 • ISO Online browsing platform: available at <http://www.iso.org/obp>

149 2.3.1

150 **air-handling luminaire**

151 luminaire specially designed for use in association with an air conditioning system.

152 Note 1 to entry: The air may pass either through the lamp chamber or through separate passages.

153 Note 2 to entry: For an explanation of the significance of t_a as applied to air-handling luminaires (see Annex C).

154 2.3.2

155 **static operation**

156 operation of a luminaire when not handling either forced supply or extract air but permitting
157 convection.

158 2.4 General test requirements

159 The provisions of section 0 of Part 1 apply. The tests described in each appropriate section of
160 Part 1 shall be carried out in the order listed in this section of Part 2.

161 A procedure measuring ambient temperature in an installation is given in Annex A.

162 NOTE Annex A provides additional information on how ambient temperature is considered within the recessed
163 cavity area relative to the t_a marking of the luminaire.

164 2.5 Classification of luminaires

165 Luminaires shall be classified in accordance with the provisions of Section 2 of Part 1.

166 2.6 Marking

167 The provisions of Section 3 of Part 1 apply, as well as the following.

168 The following information shall be distinctly and durably marked on the luminaire and be
169 visible during installation or behind a cover or part which is removed during installation.

170 **2.6.1** For recessed luminaires with two IP ratings, both ratings shall be visible during
171 installation and it shall be obvious to which parts of the luminaire the ratings refer. The
172 relevant information shall be provided even if the rating is IP20 or the lower rating is specified
173 as ordinary.

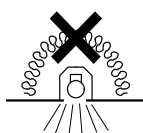
174 **2.6.2** Where applicable, the relevant symbol for recessed luminaires not suitable for direct
175 mounting on normally flammable surfaces. The symbol shall be explained on the luminaire or
176 in the manufacturer's instructions provided with the luminaire. The minimum size of the
177 symbol shall be 25mm for each side.



178

179 **Figure 1 – Symbol for luminaires not suitable for direct mounting on normally**
180 **flammable surfaces (suitable only for mounting on non-combustible surfaces)**

181 **2.6.3** The relevant symbol for luminaires not suitable for covering with thermally insulated
182 material. The symbol shall be explained on the luminaire or in the manufacturer's instructions
183 provided with the luminaire. The minimum size of the symbol shall be 25mm for each side.



184

185 **Figure 2 – Symbol for luminaires not suitable for covering with thermally insulating**
186 **material**

187 2.7 Construction

188 The provisions of Section 4 of Part 1 apply.

189 **2.8 Creepage distances and clearances**

190 The provisions of Section 11 of Part 1 apply.

191 **2.9 Provision for earthing**

192 The provisions of Section 7 of Part 1 apply.

193 **2.10 Terminals**

194 The provisions of Sections 14 and 15 of Part 1 apply.

195 **2.11 External and internal wiring**

196 The provisions of Section 5 of Part 1 apply.

197 Flexible cables or cords used as a means of connection to the supply, when supplied by the
198 luminaire manufacturer, shall be at least equal in their mechanical and electrical properties to
199 those specified in IEC 60227 or IEC 60245 and shall be capable of withstanding without
200 deterioration the highest temperature to which they may be exposed under normal conditions
201 of use. Materials other than PVC and rubber are suitable if the above requirements are met.

202 *Compliance shall be checked by the tests specified in 2.13.*

203 NOTE The use of flexible cables and cords with recessed luminaires is appropriate for the following reasons:

- 204 1) The flexible cable or cord cannot be easily touched as it is normally out of reach within the recess.
- 205 2) To facilitate installation of the luminaire into the recess.
- 206 3) To permit the adjustment of settable and adjustable recessed luminaires.

207 **2.12 Protection against electric shock**

208 The provisions of Section 8 of Part 1 apply.

209 The parts of the luminaire and components within the ceiling space or cavity shall provide the
210 same degree of protection against electric shock as the luminaire parts below the ceiling
211 space.

212 NOTE The ceiling space or cavity is regarded as accessible for installation and maintenance, and the barriers do
213 not provide adequate protection against electric shock.

214 *Compliance is checked by inspection.*

215 **2.13 Endurance tests and thermal tests**

216 The provisions of Section 12 of Part 1 apply together with the following requirements.

217 **2.13.1** The luminaire shall be mounted and tested according to Annex B.

218 Luminaires with an IP classification greater than IP20 shall be subjected to the relevant tests
219 of Clauses 12.4, 12.5, 12.6 and 12.7 of Section 12 of Part 1 after the test(s) of
220 Clause 9.2 but before the test(s) of Clause 9.3 of Section 9 of Part 1 specified in Clause 2.14
221 of this document.