



SLOVENSKI STANDARD SIST EN 60598-2-22:2015

01-april-2015

Nadomešča:

SIST EN 60598-2-22:2000

SIST EN 60598-2-22:2000/A1:2004

Svetilke - 2-22. del: Posebne zahteve - Svetilke za zasilno razsvetljavo (IEC 60598-2-22:2014)

Luminaires - Part 2-22: Particular requirements - Luminaires for emergency lighting (IEC 60598-2-22:2014)

iTeh STANDARD PREVIEW
(standards.itih.si)

Leuchten - Teil 2-22: Besondere Anforderungen - Leuchten für Notbeleuchtung (IEC 60598-2-22:2014)

[SIST EN 60598-2-22:2015](http://standards.itih.si/catalog/standards/sist/7be9b49c-3ea4-47ab-b700-c7389e35d65a/sist-en-60598-2-22-2015)

Luminaires - Partie 2-22: Exigences particulières - Luminaires pour éclairage de secours (IEC 60598-2-22:2014)

Ta slovenski standard je istoveten z: EN 60598-2-22:2014

ICS:

29.140.40	Svetila	Luminaires
91.160.10	Notranja razsvetljava	Interior lighting

SIST EN 60598-2-22:2015 en

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN 60598-2-22:2015](#)

<https://standards.iteh.ai/catalog/standards/sist/7be9b49c-3ea4-47ab-b700-c7389e35d65a/sist-en-60598-2-22-2015>

EUROPEAN STANDARD

EN 60598-2-22

NORME EUROPÉENNE

EUROPÄISCHE NORM

October 2014

ICS 29.140.40

Supersedes EN 60598-2-22:1998

English Version

**Luminaires - Part 2-22: Particular requirements - Luminaires for
emergency lighting
(IEC 60598-2-22:2014)**

Luminaires - Partie 2-22: Exigences particulières -
Luminaires pour éclairage de secours
(CEI 60598-2-22:2014)

Leuchten - Teil 2-22: Besondere Anforderungen - Leuchten
für Notbeleuchtung
(IEC 60598-2-22:2014)

This European Standard was approved by CENELEC on 2014-07-24. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.



European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

Foreword

The text of document 34D/1119/FDIS, future edition 4 of IEC 60598-2-22, prepared by SC 34D, "Luminaires", of IEC TC 34, "Lamps and related equipment", was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 60598-2-22:2014.

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) 2015-04-24
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2017-07-24

This document supersedes EN 60598-2-22:1998

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC [and/or CEN] shall not be held responsible for identifying any or all such patent rights.

This standard covers the Principle Elements of the Safety Objectives for Electrical Equipment Designed for Use within Certain Voltage Limits (LVD - 2006/95/EC).

iTeh STANDARD PREVIEW
(standard notice)

The text of the International Standard IEC 60598-2-22:2014 was approved by CENELEC as a European Standard without any modification.

<https://standards.iteh.ai/catalog/standards/sist/7be9b49c-3ea4-47ab-b700-c7389e35d65a/sist-en-60598-2-22-2015>

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE 1 When an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60073	-	Basic and safety principles for man-machine interface, marking and identification - Coding principles for indicators and actuators	EN 60073	-
IEC 60155	-	Glow-starters for fluorescent lamps	EN 60155	-
IEC 60364-5-56 (mod)	-	Low-voltage electrical installations -- Part 5-56: Selection and erection of electrical equipment - Safety services	HD 60364-5-56	-
			+A11	2013
			+A1	2011
			+AA	
IEC 60598-1	-	Luminaires -- Part 1: General requirements and tests	EN 60598-1	-
IEC 60896-21	-	Stationary lead-acid batteries -- Part 21: Valve regulated types - Methods of test	EN 60896-21	-
IEC 61056-1	-	General purpose lead-acid batteries (valve-regulated types) -- Part 1: General requirements, functional characteristics - Methods of test	EN 61056-1	-
IEC 61347-2-2	-	Lamp controlgear -- Part 2-2: Particular requirements for d.c. or a.c. supplied electronic step-down convertors for filament lamps	EN 61347-2-2	-
IEC 61347-2-3	-	Lamp controlgear -- Part 2-3: Particular requirements for a.c. and/or d.c. supplied electronic control gear for fluorescent lamps	EN 61347-2-3	-
IEC 61347-2-7	-	Lamp controlgear -- Part 2-7: Particular requirements for battery supplied electronic controlgear for emergency lighting (self-contained)	+AC EN 61347-2-7	2011
IEC 61347-2-12	-	Lamp controlgear - Part 2-12: Particular requirements for d.c. or a.c. supplied electronic ballasts for discharge lamps (excluding fluorescent lamps)	-	-
IEC 61347-2-13	-	Lamp controlgear -- Part 2-13: Particular requirements for d.c. or a.c. supplied electronic controlgear for LED modules	FprEN 61347-2-13	-
IEC 61951-1	-	Secondary cells and batteries containing alkaline or other non-acid electrolytes - Portable sealed rechargeable single cells -- Part 1: Nickel-cadmium	EN 61951-1	-

IEC 61951-2	-	Secondary cells and batteries containing alkaline or other non-acid electrolytes - Portable sealed rechargeable single cells -- Part 2: Nickel-metal hydride	EN 61951-2	-
IEC 62034	-	Automatic test systems for battery powered emergency escape lighting	EN 62034	-
ISO 3864-1	2011	Graphical symbols_ - Safety colours and safety signs_ - Part_1: Design principles for safety signs and safety markings	-	-
ISO 3864-4	-	Graphical symbols_ - Safety colours and safety signs_ - Part_4: Colorimetric and photometric properties of safety sign materials	-	-
ISO 30061	-	Emergency lighting	-	-
CIE 121 SPI	-	The Photometry and Goniophotometry of Luminaires - Supplement 1: Luminaires for Emergency Lighting	-	-

iTeh STANDARD PREVIEW (standards.iteh.ai)

[SIST EN 60598-2-22:2015](https://standards.iteh.ai/catalog/standards/sist/7be9b49c-3ea4-47ab-b700-c7389e35d65a/sist-en-60598-2-22-2015)

<https://standards.iteh.ai/catalog/standards/sist/7be9b49c-3ea4-47ab-b700-c7389e35d65a/sist-en-60598-2-22-2015>

Annex ZB (informative)

A-deviations

A-deviation: National deviation due to regulations, the alteration of which is for the time being outside the competence of the CEN-CENELEC national member.

This European Standard falls under Directive 2006/95/EC.

NOTE (from CEN-CENELEC IR Part 2:2011, 2.17) Where standards fall under EU Directives, it is the view of the Commission of the European Communities (OJ No C 59; 1982-03-09) that the effect of the decision of the Court of Justice in case 815/79 Cremonini/Vrankovich (European Court Reports 1980, p. 3583) is that compliance with A- deviations is no longer mandatory and that the free movement of products complying with such a standard should not be restricted except under the safeguard procedure provided for in the relevant Directive.

A-deviations in an EFTA-country are valid instead of the relevant provisions of the European Standard in that country until they have been removed.

<u>Clause</u>	<u>Deviation</u>
22.6.18	<p>France Ministry of the Interior, Overseas and Local Authorities - Order of 11 December 2009 approving various provisions supplementing and amending Regulation for fire hazard safety for buildings open to the public - Clause EL 10 paragraph 1.</p> <p>In premises open to the public, electrical installations shall have only permanent fittings.</p>
22.11.1	<p>France Ministry of the Interior, Overseas and Local Authorities - Order of 11 December 2009 approving various provisions supplementing and amending Regulation for fire hazard safety for buildings open to the public - Clause EL 10 paragraph 1.</p> <p>In premises open to the public, electrical installations shall have only permanent fittings.</p>
22.6.15	<p>France Ministry of the Interior - Order of 19 November 2001 approving various provisions supplementing and amending regulation for fire hazard safety for buildings open to the public - Clauses EC 9 and EC 10.</p> <p>The required photometric characteristics of products are only based on the "rated lumen output" as defined in 22.3.14, which shall be measured. Therefore the photometric data distribution of the luminaire may not to be provided or checked.</p>
22.17.1	<p>France Ministry of the Interior - Order of 19 November 2001 approving various provisions supplementing and amending regulation for fire hazard safety for buildings open to the public - Clauses EC 9 and EC 10.</p> <p>The required photometric characteristics of products are only based on the "rated lumen output" as defined in 22.3.14, which shall be measured. Therefore the photometric data distribution of the luminaire may not to be provided or checked.</p>

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN 60598-2-22:2015](https://standards.iteh.ai/catalog/standards/sist/7be9b49c-3ea4-47ab-b700-c7389e35d65a/sist-en-60598-2-22-2015)

<https://standards.iteh.ai/catalog/standards/sist/7be9b49c-3ea4-47ab-b700-c7389e35d65a/sist-en-60598-2-22-2015>



IEC 60598-2-22

Edition 4.0 2014-06

INTERNATIONAL STANDARD

NORME INTERNATIONALE

Luminaire – iTeh STANDARD PREVIEW
Part 2-22: Particular requirements – Luminaire for emergency lighting
(standards.iteh.ai)

Luminaire –
Partie 2-22: Règles particulières – Luminaire pour éclairage de secours
SIST EN 60598-2-22:2015
http://standards.iteh.ai/catalog/standards/sist-en-60598-2-22-2015/c7389e35d65a/sist-en-60598-2-22-2015

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

COMMISSION
ELECTROTECHNIQUE
INTERNATIONALE

PRICE CODE
CODE PRIX



ICS 29.140.40

ISBN 978-2-8322-1659-0

Warning! Make sure that you obtained this publication from an authorized distributor.
Attention! Veuillez vous assurer que vous avez obtenu cette publication via un distributeur agréé.

CONTENTS

FOREWORD.....	3
22.1 Scope.....	5
22.2 Normative references	5
22.3 Terms and definitions	6
22.4 General test requirements	9
22.5 Classification of luminaires	9
22.6 Marking	9
22.7 Construction	11
22.8 Creepage distances and clearances	14
22.9 Provision of earthing.....	14
22.10 Terminals.....	14
22.11 External and internal wiring.....	14
22.12 Protection against electric shock.....	14
22.13 Endurance test and thermal test.....	14
22.14 Resistance to dust and moisture	16
22.15 Insulation resistance and electric strength	16
22.16 Resistance to heat, fire and tracking	16
22.17 Photometric data.....	17
22.18 Changeover operation.....	18
22.19 High temperature operation.....	18
22.20 Battery chargers for self-contained emergency luminaires	19
22.21 Test devices for emergency operation.....	19
Annex A (normative) Batteries for self-contained emergency luminaires	20
Annex B (normative) Luminaire classification	22
Annex C (normative) Luminance measurements	24
Annex D (informative) Rest mode and inhibition mode facilities.....	25
Annex E (normative) Requirements for self-contained portable emergency luminaires	26
E.1 General.....	26
E.2 Scope of requirements provided in Annex E.....	26
E.3 Terms and definitions.....	26
E.4 General test requirements.....	27
E.5 Classification of luminaires	27
E.6 Marking.....	28
E.7 Construction	28
E.8 Changeover operation.....	30
E.9 High temperature operation.....	30
E.10 Thermal test.....	30
Table 1 – Voltage limits for discharge durations up to the end of declared battery life	16

INTERNATIONAL ELECTROTECHNICAL COMMISSION

LUMINAIRES –

**Part 2-22: Particular requirements –
Luminaires for emergency lighting**

FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
- 2) The formal decisions or agreements of IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested IEC National Committees.
- 3) IEC Publications have the form of recommendations for international use and are accepted by IEC National Committees in that sense. While all reasonable efforts are made to ensure that the technical content of IEC Publications is accurate, IEC cannot be held responsible for the way in which they are used or for any misinterpretation by any end user.
- 4) In order to promote international uniformity, IEC National Committees undertake to apply IEC Publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any IEC Publication and the corresponding national or regional publication shall be clearly indicated in the latter.
- 5) IEC itself does not provide any attestation of conformity. Independent certification bodies provide conformity assessment services and, in some areas, access to IEC marks of conformity. IEC is not responsible for any services carried out by independent certification bodies.
- 6) All users should ensure that they have the latest edition of this publication.
- 7) No liability shall attach to IEC or its directors, employees, servants or agents including individual experts and members of its technical committees and IEC National Committees for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication, use of, or reliance upon, this IEC Publication or any other IEC Publications.
- 8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
- 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.

International Standard IEC 60598-2-22 has been prepared by subcommittee 34D: Luminaires of IEC technical committee 34: Lamp and related equipment.

This fourth edition cancels and replaces the third edition published in 1997, AMD1:2002 and AMD2:2008. This edition constitutes a technical revision.

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

- a) Clause 22.3, addition of definitions for PELF and Self-contained portable emergency luminaire;
- b) Clause 22.5, updated with the introduction of requirements for non-replaceable lamp and batteries;

- c) Clause 22.6, improved requirements to confirm that the charge indication is correctly connected to the circuit together with other clarifications regarding the controlgear and the remote box with its connecting cable to the emergency luminaire;
- d) Clause 22.12, improved requirements to ensure that the luminaire shall not become unsafe;
- e) Clause 22.16, full revision of the photometric testing to align with ISO and CIE;
- f) Clause 22.17, now only references the requirements which are now covered in IEC 61347-2-7;
- g) Clause 22.19, now only references the requirements which are now covered in IEC 61347-2-7;
- h) Annex A, now includes nickel metal hydride batteries and reference to cell types in IEC 61951-1;
- i) Annex B, minor changes to the classifications;
- j) Annex C, Figure C.1 deleted in favour of a revised text;
- k) Annex E, the additional requirements covering self-contained portable emergency luminaires

The text of this standard is based on the following documents:

FDIS	Report on voting
34D/1119/FDIS	34D/1131/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.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

This standard is to be read in conjunction with IEC 60598-1 *Luminaires – Part 1: General requirements and tests*.

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

In this standard, the following print types are used:

- requirements: in roman type
- *test specifications: in italic type*
- notes: in small roman type.

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.