

**Valgustid. Osa 2-24: Erinõuded. Piiratud
pinnatemperatuuriga valgustid**

**Luminaires - Part 2-24: Particular requirements -
Luminaires with limited surface temperatures (IEC
60598-2-24:2013)**

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 60598-2-24:2013 sisaldab Euroopa standardi EN 60598-2-24:2013 ingliskeelset teksti.	This Estonian standard EVS-EN 60598-2-24:2013 consists of the English text of the European standard EN 60598-2-24:2013.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 02.08.2013.	Date of Availability of the European standard is 02.08.2013.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

ICS 29.140.40

Standardite reprodutseerimise ja levitamise õigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonsesse süsteemi või edastamine ükskõik millises vormis või millisel teel ilma Eesti Standardikeskuse kirjaliku loata on keelatud.

Kui Teil on küsimusi standardite autorikaitse kohta, võtke palun ühendust Eesti Standardikeskusega:
Aru 10, 10317 Tallinn, Eesti; www.evs.ee; telefon 605 5050; e-post info@evs.ee

The right to reproduce and distribute standards belongs to the Estonian Centre for Standardisation

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, without a written permission from the Estonian Centre for Standardisation.

If you have any questions about copyright, please contact Estonian Centre for Standardisation:
Aru 10, 10317 Tallinn, Estonia; www.evs.ee; phone 605 5050; e-mail info@evs.ee

English version

**Luminaire -
Part 2-24: Particular requirements -
Luminaire with limited surface temperatures
(IEC 60598-2-24:2013)**

Luminaire -
Partie 2-24: Exigences particulières -
Luminaire avec surfaces à températures
limitées
(CEI 60598-2-24:2013)

Leuchten – Teil 2-24: Besondere
Anforderungen – Leuchten mit begrenzter
Oberflächentemperatur
(IEC 60598-2-24:2013)

This European Standard was approved by CENELEC on 2013-07-24. 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.

CENELEC

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

Management Centre: Avenue Marnix 17, B - 1000 Brussels

Foreword

The text of document 34D/1094/FDIS, future edition 2 of IEC 60598-2-24, 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 60598-2-24:2013.

The following dates are fixed:

- latest date by which the document has to be (dop) 2014-04-24
implemented at national level by
publication of an identical national
standard or by endorsement
- latest date by which the national (dow) 2016-07-24
standards conflicting with the
document have to be withdrawn

This document supersedes EN 60598-2-24:1998.

EN 60598-2-24:2013 includes the following significant technical changes with respect to EN 60598-2-24:1998:

- a) change of required degree of protection from IP6X to IP4X to harmonize with the international wiring rules;
- b) temperature limits introduced for glass surface of any light source exposed to risk of dust.

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

NOTE In this standard, the following print types are used:

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

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).

Endorsement notice

The text of the International Standard IEC 60598-2-24:2013 was approved by CENELEC as a European Standard without any modification.

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 When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60364-4-42	-	Low voltage electrical installations - Part 4-42: Protection for safety - Protection against thermal effects	HD 60364-4-42	-
IEC 60598-1	-	Luminaires - Part 1: General requirements and tests	EN 60598-1	-
ISO 4225	1994	Air quality - General aspects - Vocabulary	-	-

CONTENTS

FOREWORD.....	3
24.1 Scope.....	5
24.2 Normative references	5
24.3 General test requirements.....	5
24.4 Terms and definitions	5
24.5 Classification of luminaires	6
24.6 Marking	6
24.7 Construction	6
24.8 Creepage distances and clearances.....	7
24.9 Provision for earthing.....	7
24.10 Terminals and electrical connections.....	7
24.11 External and internal wiring.....	7
24.12 Protection against electric shock.....	7
24.13 Endurance test and thermal test.....	7
24.13.1 Temperature limits – normal operation.....	7
24.13.2 Temperature limits – abnormal operation	8
24.13.3 Temperature limits – fault conditions	8
24.14 Resistance to dust, solid objects and moisture	8
24.15 Insulation resistance and electric strength.....	8
24.16 Resistance to heat, fire and tracking.....	8
Figure 1 – Symbol for luminaires with limited surface temperatures	6

LUMINAIRES –

Part 2-24: Particular requirements – Luminaires with limited surface temperatures

24.1 Scope

This part of the IEC 60598 series specifies requirements for luminaires intended for use where the necessity of limited temperature on the outer surface exists, due to the risk of thermal effects, combustion or degradation of materials but where the risk of explosion in the atmosphere does not exist. The luminaires are for use with electric light sources on supply voltages not exceeding 1 000 V.

This standard specifically excludes requirements for luminaires for use in explosive gas atmospheres and explosive dust atmospheres.

24.2 Normative references

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.

IEC 60364-4-42, *Low-voltage electrical installations – Part 4-42: Protection for safety – Protection against thermal effects*

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

ISO 4225:1994, *Air quality – General aspects – Vocabulary*

24.3 General test requirements

The provisions of Section 0 in IEC 60598-1 apply. The tests described in each appropriate section of IEC 60598-1 shall be carried out in the order listed in this standard.

24.4 Terms and definitions

For the purposes of this document, the terms and definitions given in Section 1 of IEC 60598-1 apply, as well as the following apply.

24.4.1

dust

small solid particles in the atmosphere which settle out under their own weight, but which may remain suspended in air for some time (includes dust and grit as defined in ISO 4225)

24.4.2

explosive gas atmosphere

mixture with air, under atmospheric conditions, of flammable substances in the form of gas or vapour which, after ignition, permits self sustaining flame propagation