BS EN 60598-2-5:2015



BSI Standards Publication

Luminaires

Part 2- 5: Particular requirements — Floodlights



BS EN 60598-2-5:2015

National foreword

This British Standard is the UK implementation of EN 60598-2-5:2015. It is identical to IEC 60598-2-5:2015. It supersedes BS EN 60598-2-5:1998, which will be withdrawn on 10 September 2018.

The UK participation in its preparation was entrusted by Technical Committee CPL/34, Lamps and Related Equipment, to Subcommittee CPL/34/4, Luminaires.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

© The British Standards Institution 2015. Published by BSI Standards Limited 2015

ISBN 978 0 580 82907 9 ICS 29.140.40

Compliance with a British Standard cannot confer immunity from legal obligations.

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 31 December 2015.

Amendments/corrigenda issued since publication

Date Text affected

EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN 60598-2-5

November 2015

ICS 29.140.40

Supersedes EN 60598-2-5:1998

English Version

Luminaires - Part 2-5: Particular requirements - Floodlights (IEC 60598-2-5:2015)

Luminaires - Partie 2-5: Exigences particulières -Projecteurs (IEC 60598-2-5:2015) Leuchten - Teil 2: Besondere Anforderungen -Hauptabschnitt 5: Scheinwerfer (IEC 60598-2-5:2015)

This European Standard was approved by CENELEC on 2015-09-10. 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

European foreword

The text of document 34D/1172/FDIS, future edition 3 of IEC 60598-2-5, prepared by IEC/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 60598-2-5:2015.

The following dates are fixed:

•	latest date by which the document has	(dop)	2016-06-10
	to be implemented at national level by		
	publication of an identical national		
	standard or by endorsement		
•	latest date by which the national	(dow)	2018-09-10
	standards conflicting with the		
	document have to be withdrawn		

This document supersedes EN 60598-2-5:1999 + corr. Dec. 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).

Endorsement notice

The text of the International Standard IEC 60598-2-5:2015 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 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>	EN/HD	Year
IEC 60068-2-75	-	Environmental testing - Part 2-75: Tests - Test Eh: Hammer tests	EN 60068-2-75	-
IEC 60598-1	-	Luminaires Part 1: General requirement and tests	sEN 60598-1	-
EC 62262 - Degrees of protection provided by enclosures for electrical equipment against external mechanical impacts (IK code)		EN 62262 st	-	

CONTENTS

FORE\	WORD	3
INTRO	DUCTION	5
5.1	Scope	6
5.2	Normative references	6
5.3	Terms and definitions	6
5.4	Classification of luminaires	6
5.5	Marking	7
5.6	Construction	7
5.7	Creepage distances and clearances	10
5.8	Provision for earthing	10
5.9	Terminals	10
5.10	External and internal wiring	10
5.11	Protection against electric shock	10
5.12	Endurance tests and thermal tests	10
5.13	Resistance to dust and moisture	11
5.14	Insulation resistance and electric strength	11
5.15	Resistance to heat, fire and tracking	11
	A (informative) Schedule of amended clauses containing more serious/critical ements which require products to be retested	12
Figure	1 – Counting particles at the edge of the square	9

INTERNATIONAL ELECTROTECHNICAL COMMISSION

LUMINAIRES -

Part 2-5: Particular requirements – Floodlights

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 60598-2-5 has been prepared by subcommittee 34D: Luminaires, of IEC technical committee 34: Lamps and related equipment.

This third edition cancels and replaces the second edition published in 1998, and constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition: it introduces requirements for the glass breaking test.

IEC 60598-2-5:2015 © IEC 2015

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

FDIS	Report on voting
34D/1172/FDIS	34D/1180/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 the parts in the IEC 60598 series, published under the general title *Luminaires* can be found on the IEC website.

NOTE 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 website 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.

INTRODUCTION

The mechanical stress on floodlights is similar to the mechanical stress on luminaires for road and street lighting. Because of this reason this standard contains an update to align the mechanical and breakage test requirements on flat and curved glass with IEC 60598-2-3.

LUMINAIRES -

Part 2-5: Particular requirements – Floodlights

5.1 Scope

This part of IEC 60598 specifies requirements for floodlights for use with electrical light sources on supply voltages not exceeding 1 000 V.

5.2 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 60068-2-75, Environmental testing - Part 2-75: Tests - Test Eh: Hammer tests

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

IEC 62262, Degrees of protection provided by enclosures for electrical equipment against external mechanical impacts (IK code)

5.3 Terms and definitions

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

5.3.1

floodlighting

lighting of a scene or an object, usually by projectors, in order to increase considerably its illuminance relative to its surroundings

Note 1 to entry: The difference in illumination between the subject and its surroundings may, alternatively, be achieved by colour.

5.3.2

floodlight

luminaire for floodlighting

Note 1 to entry: A floodlight can be for either exterior or interior use or for both.

5.4 Classification of luminaires

Luminaires shall be classified in accordance with the provisions of Section 2 of IEC 60598-1. The provisions of Section 0 of IEC 60598-1 apply. The tests described in each appropriate section of Part 1 shall be carried out in the order listed in this Part 2.