

BS EN 62722-1:2016

Incorporating corrigendum March 2016



BSI Standards Publication

Luminaire performance —

Part 1: General Requirements

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National foreword

This British Standard is the UK implementation of EN 62722-1:2016. It is derived from IEC 62722-1:2014. It supersedes DD IEC/PAS 62722-1:2011 which will be withdrawn on 8 October 2017.

The CENELEC common modifications have been implemented at the appropriate places in the text. The start and finish of each common modification is indicated in the text by tags **[C]** **[C]**.

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 subcommittee can be obtained on request to its secretary.

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English Version

Luminaire performance - Part 1: General requirements (IEC 62722-1:2014 , modified)

Performance des luminaires -
Partie 1: Exigences générales
(IEC 62722-1:2014 , modifiée)

Arbeitsweise von Leuchten -
Teil 1: Allgemeine Anforderungen
(IEC 62722-1:2014 , modifiziert)

This European Standard was approved by CENELEC on 2015-11-09. 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.

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Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

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European foreword

The text of document 34D/1132/FDIS, future edition 1 of IEC 62722-1, 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 62722-1:2016.

A draft amendment, which covers common modifications to IEC 62722-1:2014 (34D/1132/FDIS), was prepared by CLC/TC 34Z "Luminaires and associated equipment" and approved by CENELEC.

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) 2016-11-09
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2018-11-09

Clauses, subclauses, notes, tables, figures and annexes which are additional to those in IEC 62722-1:2014 are prefixed "Z".

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This document has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For the relationship with EU Regulation (EC) No. 245/2009, see informative Annex ZZ, which is an integral part of this document.

Endorsement notice

The text of the International Standard IEC 62722-1:2014 was approved by CENELEC as a European Standard with agreed common modifications.

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>
-	-	Light and lighting - Measurement and presentation of photometric data of lamps and luminaires - Part 2: Presentation of data for indoor and outdoor work places	EN 13032-2	2004
IEC 60598-1	-	Luminaires - Part 1: General requirements and tests	EN 60598-1	-
IEC 60598-2	series	Luminaires - Part 2: Particular requirements	EN 60598-2	series
IEC 60598-2-22	-	Luminaires - Part 2-22: Particular requirements - Luminaires for emergency lighting	EN 60598-2-22	-
IEC 62722-2	series	Luminaire performance - Part 2: Particular requirements	EN 62722-2	series
CIE 34	1977	Road lighting lantern and installation data: photometrics, classification and performance	-	-
CIE 43	1979	Photometry of floodlights	-	-
CIE 121	1996	The photometry and goniophotometry of luminaires	-	-
CIE 121 SPI	2009	The photometry and goniophotometry of luminaires - supplement 1: luminaires for emergency lighting	-	-

Annex ZZ

(informative)

Relationship between this European Standard and the ecodesign requirements of Commission Regulation (EC) No 245/2009 aimed to be covered

This European standard has been prepared under a Commission's standardisation request M/495_Am3 to provide one voluntary means of conforming to the ecodesign requirements of Commission Regulation (EC) No 245/2009 of 18 March 2009 implementing Directive 2005/32/EC of the European Parliament and of the Council with regard to ecodesign requirements for fluorescent lamps without integrated ballast, for high intensity discharge lamps, and for ballasts and luminaires able to operate such lamps, and repealing Directive 2000/55/EC of the European Parliament and of the Council [OJ L 76, 24.3.2009, p. 17–44].

Once this standard is cited in the Official Journal of the European Union under that Regulation, compliance with the normative clauses of this standard given in Table ZZ.1 confers, within the limits of the scope of this standard, a presumption of conformity with the corresponding ecodesign requirements of that Regulation and associated EFTA Regulations.

Table ZZ.1 – Correspondence between this European Standard and Commission Regulation (EC) No 245/2009 of 18 March 2009 implementing Directive 2005/32/EC of the European Parliament and of the Council with regard to ecodesign requirements for fluorescent lamps without integrated ballast, for high intensity discharge lamps, and for ballasts and luminaires able to operate such lamps, and repealing Directive 2000/55/EC of the European Parliament and of the Council [OJ L 76, 24.3.2009, p. 17–44] and Commission's standardisation request M/495_Am3

Ecodesign requirements of Regulation No 245/2009 [OJ L 76, 24.3.2009, p. 17–44]	Clause(s) / sub-clause(s) of this EN	Remarks / Notes
Power consumption when the operated lamps do not emit any light in normal operating conditions	Clause 7 (rated standby power) and Clause B.8	
CEN flux code or photometric file ^a (for Information on Best Available Technology on the market)	Clause 6	
Maintenance instructions to ensure that the luminaire maintains, as far as possible, its original quality throughout its lifetime	9.2	
Disassembly instructions.	9.3	
<p>^a See Annex V "Indicative benchmarks for fluorescent and high intensity discharge products (for information)", item 4 "Luminaire product information".</p>		

WARNING 1: Presumption of conformity stays valid only as long as a reference to this European Standard is maintained in the list published in the Official Journal of the European Union. Users of this standard should consult frequently the latest list published in the Official Journal of the European Union.

WARNING 2: Other Union legislation may be applicable to the products falling within the scope of this standard.

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

LUMINAIRE PERFORMANCE –**Part 1: General requirements**

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.
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International Standard IEC 62722-1 has been prepared by subcommittee 34D: Luminaires, of IEC technical committee 34: Lamps and related equipment.

This first edition cancels and replaces IEC PAS 62722-1 published in 2011 and constitutes a technical revision.

This edition includes the following significant technical changes with respect to IEC PAS 62722-1.

- a) The inclusion of more precise requirements for the comparison of the photometric distribution shape, with the comparison method given in Annex D.
- b) Further regional standards added to the schedule given in Annex A

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

FDIS	Report on voting
34D/1132/FDIS	34D/1141/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.

A list of all the parts in the IEC 62722 series, published under the general title *Luminaire performance* can be found on the IEC website.

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.

IMPORTANT – The 'colour inside' logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this document using a colour printer.

INTRODUCTION

The first edition of a performance standard for luminaires (general requirements) acknowledges the need for defining performance data to be provided, the presentation of this data, the basis of its measurement, and the associated tolerances that may be reasonably expected. Information to support responsible environmental use is also included. Part 2 of the IEC 62722-2 series will be introduced where additional performance requirements for specific types of light source are required.

The provisions in this standard represent the technical knowledge of experts from the fields of the luminaire industry and associated components such as lamps and controlgear.

LUMINAIRE PERFORMANCE –

Part 1: General requirements

1 Scope

This part of IEC 62722 covers specific performance and environmental requirements for luminaires, incorporating electric light sources for operation from supply voltages up to 1 000 V. Unless otherwise detailed, performance data covered under the scope of this standard are for the luminaires in a condition representative of new manufacture, with any specified initial aging procedures completed.

IEC 62722-1 covers requirements for luminaires to support energy efficient use and responsible environmental management to the end of life. The object of this Part 1 is to provide a set of requirements which are considered to be generally applicable to most types of luminaires. Where additional performance requirements for specific types of light source are relevant, these are specified in the IEC 62722-2 series. The IEC 62722-2 series may also cover a wider scope of performance aspects appropriate to the particular light source technology.

NOTE The structure of these performance standards also allows for the possibility of Part 3 standards to be introduced in the future should standardisation of performance criteria linked to specific luminaire applications be determined as necessary (e.g. floodlighting, street lighting, etc.).

It is the intention that the requirements of this Part 1 are to be met by the provision of information and data provided by the luminaire manufacturer (or responsible vendor). Conformity is considered to be met by the provision of the requested information. Any verification of data is to be conducted by the measurement requirements of this standard.

Semi-luminaires are not covered under the scope of this standard.

- ☐ For some types of general purpose luminaires (e.g. decorative), the provision of all performance data under the scope of this standard may not be appropriate.

For special purpose luminaires (e.g. emergency escape lighting), the provision of selected basic performance data under the scope of this standard only could be appropriate (e.g. input power). ☐

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.

- ☐ EN 13032-2:2004, *Light and lighting – Measurement and presentation of photometric data of lamps and luminaires – Part 2: Presentation of data for indoor and outdoor work places* ☐

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

IEC 60598-2 (all parts), *Luminaires – Part 2: Particular requirements*

IEC 60598-2-22, *Luminaires – Part 2-22: Particular requirements – Luminaires for emergency lighting*

IEC 62722-2 (all parts), *Luminaire performance – Part 2: Particular requirements*

CIE 34:1977, *Road lighting lantern and installation data: Photometrics, classification and performance*