

Irish Standard I.S. EN 62722-1:2016

Luminaire performance - Part 1: General requirements

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I.S. EN 62722-1:2016

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EUROPEAN STANDARD

EN 62722-1

NORME EUROPÉENNE

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January 2016

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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)

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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/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 (dop) 2016-11-09 national level by publication of an identical national standard or by endorsement
- latest date by which the national standards conflicting with (dow) 2018-11-09 the document have to be withdrawn

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.

COMMON MODIFICATIONS

Modification to Clause 1 Scope

Replace the last paragraph by the following:

"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)."

Modification to Clause 2 Normative references

Add the following new reference:

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

Modification to Clause 4 General requirements

Add the following after 4.6:

"4.Z1 Where a Commission Regulation specifies limits for parameters, these limits shall be used instead of the limits specified in this standard."

Modification to Clause 6 Photometric data

Replace the 2^{nd} paragraph after Note 2 (before "The distribution of luminous intensity ...") by the following:

"When a CEN flux code is provided, it shall be calculated in accordance with EN 13032-2."

Modifications to annexes

Add the following at the end of Clause B.8:

"The power consumption when the operated lamps do not emit any light in normal operating conditions is measured excluding the power consumed by sensors, network connections and other auxiliary loads."

Add the following new annexes.

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	<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 <u>or</u> 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	

See Annex V "Indicative benchmarks for fluorescent and high intensity discharge products (for information)", item 4 "Luminaire product information".

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.

Modifications to Bibliography

Add the following note for the standard indicated:

IEC 61231 NOTE Harmonized as EN 61231.

Add the following new references

EN 13032-1:2004+A1:2012, Light and lighting – Measurement and presentation of photometric data of lamps and luminaires – Part 1: Measurement and file format

EN 13032-3:2007, Light and lighting – Measurement and presentation of photometric data of lamps and luminaires – Part 3: Presentation of data for emergency lighting of work places

EN 13201-3:2003, Road lighting – Part 3: Calculation of performance

EN 61341:2011, Method of measurement of centre beam intensity and beam angle(s) of reflector lamps (IEC/TR 61341:2010)

EN 62504:2014, General lighting – Light emitting diode (LED) products and related equipment – Terms and definitions (IEC 62504:2014)



IEC 62722-1

Edition 1.0 2014-09

INTERNATIONAL STANDARD

NORME INTERNATIONALE



Luminaire performance – Part 1: General requirements

Performance des luminaires – Partie 1: Exigences générales





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IEC 62722-1

Edition 1.0 2014-09

INTERNATIONAL STANDARD

NORME INTERNATIONALE



Luminaire performance – Part 1: General requirements

Performance des luminaires – Partie 1: Exigences générales

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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LUMINAIRE PERFORMANCE -

Part 1: General requirements

FOREWORD

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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

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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

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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.

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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 luminaire (e.g. decorative/household) the provision of performance data under the scope of this standard may not be appropriate.

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 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

CIE 43:1979, Photometry of floodlights



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