

VALGUSTITE TOIMIVUSNÄITAJAD. OSA 2-1: ERINÕUDED
LEEDVALGUSTITELE

Luminaire performance - Part 2-1: Particular
requirements for LED luminaires

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 62722-2-1:2016 sisaldab Euroopa standardi EN 62722-2-1:2016 ingliskeelset teksti.	This Estonian standard EVS-EN 62722-2-1:2016 consists of the English text of the European standard EN 62722-2-1:2016.
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 29.04.2016.	Date of Availability of the European standard is 29.04.2016.
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; koduleht 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; homepage www.evs.ee; phone +372 605 5050; e-mail info@evs.ee

ICS 29.140.40

English Version

Luminaire performance - Part 2-1: Particular requirements for
LED luminaires
(IEC 62722-2-1:2014 , modified)

Performance des luminaires - Partie 2-1: Exigences
particulières relatives aux luminaires à LED
(IEC 62722-2-1:2014 , modifiée)

Arbeitsweise von Leuchten - Teil 2-1: Besondere
Anforderungen an LED-Leuchten
(IEC 62722-2-1:2014 , 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.

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/1147/FDIS, future edition 1 of IEC 62722-2-1, 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 62722-2-1:2016.

A draft amendment, which covers common modifications to IEC 62722-2-1:2014 (34D/1147/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) 2016-10-29
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2019-04-29

Clauses, subclauses, notes, tables, figures and annexes which are additional to those in IEC 62722-2-1:2014 are prefixed "Z".

Endorsement notice

The text of the International Standard IEC 62722-2-1:2014 was approved by CENELEC as a European Standard with agreed common modifications.

COMMON MODIFICATIONS

Modification to 6.1 General test conditions

Add the following after the last paragraph:

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

Modifications to annexes

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>	<u>EN/HD</u>	<u>Year</u>
IEC 60598-1	-	Luminaires - Part 1: General requirements and tests	EN 60598-1	-
IEC 60598-2-3	-	Luminaires - Part 2-3: Particular requirements - Luminaires for road and street lighting	EN 60598-2-3	-
IEC 60598-2-5	-	Luminaires - Part 2-5: Particular requirements - Floodlights	EN 60598-2-5	-
IEC 62031	-	LED modules for general lighting - Safety specifications	EN 62031	-
IEC 62504	-	General lighting - Light emitting diode (LED) products and related equipment - Terms and definitions	EN 62504	-
IEC 62717	-	LED modules for general lighting - Performance requirements	EN 62717 ¹⁾	-
IEC 62722-1	-	Luminaire performance - Part 1: General requirements	EN 62722-1	-

1) At draft stage.

Modifications to Bibliography

Add the following notes for the standards indicated:

IEC 61547	NOTE	Harmonized as EN 61547.
IEC 62442-3:2014	NOTE	Harmonized as EN 62442-3:2014 (not modified).
IEC 62560	NOTE	Harmonized as EN 62560.
CISPR 15:2005	NOTE	Harmonized as EN 55015:2006 (not modified).

This document is a preview generated by EVS

CONTENTS

FOREWORD.....	4
INTRODUCTION.....	6
1 Scope.....	7
2 Normative references	8
3 Terms and definitions	8
4 Product information	9
5 Not used.....	10
6 Test conditions	10
6.1 General test conditions	10
6.2 Luminaires using LED modules where compliance with IEC 62717 has been proven (Type A)	10
6.3 Luminaires using LED modules where compliance with IEC 62717 has not been proven (Type B)	10
6.3.1 General	10
6.3.2 Creation of module families to reduce test effort	11
6.4 Performance requirements.....	11
7 Input power	12
8 Photometric performance.....	12
8.1 Luminous flux	12
8.2 Luminous intensity distribution, peak intensity and beam angle.....	12
8.2.1 General	12
8.2.2 Measurement.....	12
8.2.3 Luminous intensity distribution.....	12
8.2.4 Peak intensity.....	12
8.2.5 Beam angle	12
8.3 Luminaire luminous efficacy.....	12
9 Chromaticity co-ordinates, correlated colour temperature and colour rendering	12
9.1 Chromaticity co-ordinates	12
9.2 Correlated colour temperature (CCT)	13
9.3 Colour rendering index (CRI)	13
10 LED luminaire life	13
10.1 General.....	13
10.2 Lumen maintenance.....	13
10.3 Endurance tests	13
11 Verification	14
Annex A (normative) Method of measuring LED luminaire characteristics	16
A.1 General.....	16
A.2 Electrical characteristics	16
A.3 Photometric characteristics	16
Annex B (informative) Explanation of recommended life time metrics	17
B.1 General.....	17
B.2 Life time specification	17
Bibliography.....	18
Figure 1 – Terminals to be used for input power measurement	15

Table 1 – Product information	9
Table 2 – Performance criteria for which testing is required	11
Table 3 – Sample sizes	14

This document is a preview generated by EVS

INTRODUCTION

This standard is the conversion of IEC PAS 62722-2-1 into a full IEC performance standard for LED luminaires for general lighting applications. It acknowledges the need for relevant tests for luminaires using this new source of electrical light. The publication is seen in close context with simultaneously developed and edited publication of performance standards for luminaires in general and for LED modules. This standard does not consider luminaires designed for LED lamps, which are covered in IEC 62722-1. Changes in the LED luminaires standard will have impact on the LED module standards and vice versa, due to the behaviour of LED. Therefore, in the development of the present standard, mutual consultancy of experts of both products has taken place.

The provisions in the standard represent the technical knowledge of experts from the fields of the semiconductor (LED chip) industry and of those of the traditional electrical light sources and luminaires.

This document is a preview generated by EVS