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### SINGAPORE STANDARD Luminaire performance

- Part 1 : General requirements



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SINGAPORE STANDARD

### Luminaire performance

- Part 1: General requirements

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This standard is a revision of SS IEC 62722-1:2015. It is an identical adoption of IEC 62722-1:2022, "Luminaire performance Part 1: General requirements", published by the International Electrotechnical Commission.

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# INTERNATIONAL STANDARD

## NORME INTERNATIONALE

**Luminaire performance – Part 1: General requirements** 

Performance des luminaires – Partie 1: Exigences générales





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## INTERNATIONAL STANDARD

## NORME INTERNATIONALE

Luminaire performance – Part 1: General requirements

Performance des luminaires – Partie 1: Exigences générales

INTERNATIONAL ELECTROTECHNICAL COMMISSION

COMMISSION ELECTROTECHNIQUE INTERNATIONALE

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### CONTENTS

FOREWORD	3
INTRODUCTION	5
1 Scope	6
2 Normative references	6
3 Terms and definitions	7
4 General requirements	8
5 Light sources and components of luminaires	9
6 Photometric data	
7 Electrical data	9
8 Luminaire efficacy data	
9 Environmental data	
9.1 Materials information	
9.2 Maintenance instructions	
9.3 End of life dismantling instructions	
Annex A (informative) Use of regional standards	
Annex B (normative) Measurement method of total power of luminaires and associated	
powers	12
B.1 General	12
B.2 Test measurement of luminaire power during normal operation	12
B.3 Standard test conditions	
B.4 Electrical measuring instruments	
B.5 Test luminaires	
B.6 Test voltage	
B.7 Luminaire power	
B.8 Luminaire standby power	
B.9 Luminaire networked standby power	
Annex C (informative) Pictograms to assist the communication of instructions for	13
maintenance through life and end of life recycling	14
Annex D (normative) Photometric distribution data for luminaires	15
D.1 General	15
D.2 Measurement resolution of photometric distribution data	
D.3 Method of comparison and acceptable limits of variation	
D.3.1 General	15
D.3.2 Scenarios for each main half plane: C <sub>0</sub> ; C <sub>90</sub> ; C <sub>180</sub> ; C <sub>270</sub>	16
D.3.3 Scenarios for half plane: C I <sub>max</sub>	17
D.3.4 Compliance	17
Bibliography	
Figure C.1. Instructions for luminaire associates	4.4
Figure C.1 – Instructions for luminaire servicing.	
Figure C.2 – Instructions for luminaire cleaning	
Figure C.3 – Instructions for end of life dismantling	14
Table D.1 – Examples of nearest values to be selected for comparison	16

#### INTERNATIONAL ELECTROTECHNICAL COMMISSION

**LUMINAIRE PERFORMANCE -**

### Part 1: General requirements

#### **FOREWORD**

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IEC 62722-1 has been prepared by subcommittee 34D: Luminaires, of IEC technical committee 34: Lighting. It is an International Standard.

This second edition cancels and replaces the first edition published in 2014. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- a) The reference to and use of the measurement methods for non-active power consumption in accordance with IEC 63103 have been added.
- b) The pictograms of Annex C have been updated to represent modern light sources.

The text of this International Standard is based on the following documents:

Draft	Report on voting
34D/1658/FDIS	34D/1660/RVD

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at <a href="https://www.iec.ch/members\_experts/refdocs">www.iec.ch/members\_experts/refdocs</a>. The main document types developed by IEC are described in greater detail at <a href="https://www.iec.ch/standardsdev/publications">www.iec.ch/standardsdev/publications</a>.

A list of all 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 document will remain unchanged until the stability date indicated on the IEC website under webstore.iec.ch in the data related to the specific document. At this date, the document will be

- reconfirmed,
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- replaced by a revised edition, or
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- 5 -

#### INTRODUCTION

This part of IEC 62722 is a performance standard for luminaires (general requirements) and 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 can be reasonably expected. Information to support responsible environmental use is also included. Future Parts 2 of the IEC 62722 series can be introduced where additional performance requirements for specific types of light sources are required. The structure of these performance standards also allows for the possibility of Part 3 of the IEC 62722 series to be introduced in the future should standardization of performance criteria linked to specific luminaire applications be determined as necessary (e.g. floodlighting, street lighting).

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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 document are for the luminaires in a condition representative of new manufacture, with any specified initial aging procedures completed.

This document covers requirements for luminaires to support energy efficient use and responsible environmental management to the end of life. The object of this document 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 can also cover a wider scope of performance aspects appropriate to the particular light source technology.

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

For some types of luminaires (e.g. decorative or household) the provision of performance data under the scope of this document is not appropriate.

#### 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60050-845, International Electrotechnical Vocabulary (IEV) – Part 845: Lighting (available at http://www.electropedia.org)

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

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

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

IEC 63103:2020, Lighting equipment – Non-active mode power measurement

IEC TS 63105, Lighting systems and related equipment – Vocabulary

CIE 034:1977, Road lighting lantern and installation data: Photometrics, classification and performance

CIE 043:1979, Photometry of floodlights

CIE 121:1996, The photometry and goniophotometry of luminaires