

SINGAPORE STANDARD

# **Specification for luminaires**

– Part 1 : General requirements and tests



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SINGAPORE STANDARD

**Specification for luminaires**

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## **National Foreword**

This Singapore Standard was prepared by the Technical Committee on Lamps and Related Equipment under the purview of the Electrical and Electronic Standards Committee. This standard is identical to Edition 7.0 of IEC 60598-1 : 2008-04 published by the International Electrotechnical Commission.

Annex R shows where a new text has been included which contains more serious/critical requirements requiring products to be re-tested.

Editorial amendments are as follows:

### Subclauses

- 1.2.49      *Delete* NOTE 1 "Some countries do not permit joints in through wiring".
- 5.2.1      *Delete* NOTE 1 "In Australia, Austria and Japan, PVC insulated cables are acceptable for outdoor use."

Attention is drawn to the following:

1. Where the words 'part 1 of International Standard IEC 60598' appear, they should be read as 'part 1 of Singapore Standard 263'.
2. Where the reference 'each section of IEC 60598-2' or 'IEC 60598-2' or 'appropriate section of part 2' or 'sections of part 2' or 'part 2' appear, they should be interpreted as 'each appropriate part of SS 263' or 'parts of SS 263'.
3. Where the reference 'IEC 60598' appears, it should be interpreted as 'SS 263'.
4. The comma has been used throughout as a decimal marker in IEC 60598-1, whereas in Singapore Standards it is a practice to use a full-point on the baseline as the decimal marker.
5. The IEC standards referred to shall be replaced by Singapore Standards as follows:

International Standard	Corresponding Singapore Standard
IEC 60227	SS 358 Polyvinyl chloride insulated cables of rated voltages up to an including 450/750 V (appropriate parts)
IEC 60529	SS IEC 60529 : 1989 Degrees of protection provided by enclosures (IP Code)

Attention is also drawn to the possibility that some of the elements of this Singapore Standard may be the subject of patent rights. SPRING Singapore shall not be held responsible for identifying any or all of such patent rights.

### **NOTE**

1. *Singapore Standards are subject to periodic review to keep abreast of technological changes and new technical developments. The changes in Singapore Standards are documented through the issue of either amendments or revisions.*
2. *Compliance with a Singapore Standard does not exempt users from legal obligations.*

## INTERNATIONAL ELECTROTECHNICAL COMMISSION

## LUMINAIRES –

## Part 1: General requirements and tests

## FOREWORD

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International Standard IEC 60598-1 has been prepared by subcommittee 34D: Luminaires, of IEC technical committee 34: Lamps and related equipment.

This seventh edition cancels and replaces the sixth edition published in 2003. It constitutes a technical revision. The major changes which may affect certification are given in Annex R.

Annex R shows where a new text has been included which contains more serious/critical requirements requiring products to be re-tested.

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

FDIS	Report on voting
34D/889/FDIS	34D/895/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.

NOTE In this standard, the following print types are used:

- requirements: in roman type;
- *test specifications: in italic type;*
- notes: in small roman type.

A list of all parts of the IEC 60598 series, under the general title: *Luminaires*, can be found on the IEC website.

The committee has decided that the contents of this publication will remain unchanged until the maintenance result 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.

## **LUMINAIRES –**

### **Part 1: General requirements and tests**

#### **SECTION 0: GENERAL INTRODUCTION**

##### **0.1 Scope and object**

This Part 1 of International Standard IEC 60598 specifies general requirements for luminaires, incorporating electric light sources for operation from supply voltages up to 1 000 V. The requirements and related tests of this standard cover: classification, marking, mechanical construction and electrical construction.

Each section of this Part 1 is read in conjunction with this Section 0 and with other relevant sections to which reference is made.

Each part of IEC 60598-2 details requirements for a particular type of luminaire or group of luminaires on supply voltages not exceeding 1 000 V. These parts are published separately for ease of revision and additional sections will be added as and when a need for them is recognized.

Attention is drawn to the fact that this Part 1 covers all aspects of safety (electrical, thermal and mechanical).

The presentation of photometric data for luminaires is under consideration by the International Commission on Illumination (CIE) and is not, therefore, included in this Part 1.

Requirements are included in this Part 1 for luminaires incorporating ignitors with nominal peak values of the voltage pulse not exceeding those of Table 11.2. The requirements apply to luminaires with ignitors built into ballasts and to luminaires with ignitors separate from ballasts. For luminaires with ignitors built into lamps, the requirements are under consideration.

Requirements for semi-luminaires are included in this Part 1.

In general, this Part 1 covers safety requirements for luminaires. The object of this Part 1 is to provide a set of requirements and tests which are considered to be generally applicable to most types of luminaires and which can be called up as required by the detail specifications of IEC 60598-2. This Part 1 is thus not regarded as a specification in itself for any type of luminaire, and its provisions apply only to particular types of luminaires to the extent determined by the appropriate part of IEC 60598-2.

The parts of IEC 60598-2, in making reference to any of the sections of Part 1, specify the extent to which that section is applicable and the order in which the tests are to be performed; they also include additional requirements as necessary.

The order in which the sections of Part 1 are numbered has no particular significance as the order in which their provisions apply is determined for each type of luminaire or group of luminaires by the appropriate part of IEC 60598-2. All parts of IEC 60598-2 are self-contained and therefore do not contain references to other parts of IEC 60598-2.