

FINAL VERSION

VERSION FINALE



**Luminaires –
Part 1: General requirements and tests**

**Luminaires –
Partie 1: Exigences générales et essais**

INTERNATIONAL ELECTROTECHNICAL COMMISSION

IEC 60598-1
Edition 8.0 2014-05

LUMINAIRES –

Part 1: General requirements and tests

INTERPRETATION SHEET 1

This interpretation sheet has been prepared by subcommittee 34D: Luminaires, of IEC technical committee 34: Lamps and related equipment.

The text of this interpretation sheet is based on the following documents:

ISH	Report on voting
34D/1197/ISH	34D/1207/RVD

Full information on the voting for the approval of this interpretation sheet can be found in the report on voting indicated in the above table.

INTRODUCTION (not part of the proposal)

Changes introduced in IEC 60598-1 Ed.8.0 were made urgently to address completely new designs of LED luminaire that are entering the market. Some further alignment with the already existing previous requirements of the standard are still needed and this will be addressed for Amendment 1 to Edition 8 that is now in preparation.

PROPOSAL

To publish Interpretation Sheet on Clause 4.31; Clause 10; Clause 11; Annex M and Annex X of IEC 60598-1:2014 (Ed. 8.0), *Luminaires – Part 1: General requirements and tests*, as follows:

INTERPRETATION SHEET

Clause 4.31; Clause 10; Clause 11; Annex M and Annex X of
IEC 60598-1:2014 (Ed. 8.0), *Luminaires – Part 1: General requirements and tests*

For insulation requirements between active (current carrying/live) parts and accessible parts, Table X.1 of Annex X is to be taken as the definitive reference of the required insulation that is to be provided. Furthermore, the details prescribed by Table X.1 are to be used as the basis for establishing the 'working voltage' that is to be considered for application of the electric strength tests of Clause 10 and Creepage and Clearance requirements of Clause 11.

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

LUMINAIRES –

Part 1: General requirements and tests

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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DISCLAIMER

This Consolidated version is not an official IEC Standard and has been prepared for user convenience. Only the current versions of the standard and its amendment(s) are to be considered the official documents.

This Consolidated version of IEC 60598-1 bears the edition number 8.1. It consists of the eighth edition (2014-05) [documents 34D/1110/FDIS and 34D/1121/RVD], its corrigenda 1 (2015-10), 2 (2015-12) and 3 (2017-05) and the interpretation sheet 1 (2016-05), and its amendment 1 (2017-09) [documents 34D/1292/FDIS and 34D/1298/RVD]. The technical content is identical to the base edition and its amendment.

This Final version does not show where the technical content is modified by amendment 1. A separate Redline version with all changes highlighted is available in this publication.

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

This eighth edition constitutes a technical revision and includes the following significant technical changes with respect to the previous edition:

- a) requirements to support the construction methods for new LED luminaires entering the market;
- b) photobiological requirements extended;
- c) more precise requirements for insulation between different types of electrical circuit;
- d) other general updates and improvements.

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.

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 the base publication and its amendment 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.

LUMINAIRES –

Part 1: General requirements and tests

SECTION 0: GENERAL INTRODUCTION

0.1 Scope

This Part 1 of 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, electrical construction and photobiological safety.

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.

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.

Where the requirements of any of the sections of Part 1 are referred to in the parts of IEC 60598-2 by the phrase "The requirements of section... of IEC 60598-1 apply", this phrase is to be interpreted as meaning that all the requirements of that section of Part 1 apply except those which are clearly inapplicable to the particular type of luminaire covered by that part of IEC 60598-2.