

Edition 3.0 2017-04

INTERNATIONAL STANDARD

Luminaires -

Part 2-4: Particular requirements – Portable general purpose luminaires

INTERNATIONAL ELECTROTECHNICAL COMMISSION

ICS 29.140.40 ISBN 978-2-8322-4172-1

Warning! Make sure that you obtained this publication from an authorized distributor.

CONTENTS

FOR	EWORD	3
4.1	Scope	5
4.2	Normative references	5
4.3	Terms and definitions	5
4.4	General test requirements	5
4.5	Classification of luminaires	5
4.6	Marking	6
4.7	Construction	6
4.8	Creepage distances and clearances	8
4.9	Provision for earthing	8
4.10	Terminals	8
4.11	External and internal wiring	8
4.12	Protection against electric shock	8
4.13	Endurance tests and thermal tests	9
4.14	Resistance to dust and moisture	9
4.15	Insulation resistance and electric strength	9
4.16	Resistance to heat, fire and tracking	9
Biblio	ography	10
Fiaur	e 1 – Luminaires "For indoor use only"	6

INTERNATIONAL ELECTROTECHNICAL COMMISSION

LUMINAIRES -

Part 2-4: Particular requirements – Portable general purpose luminaires

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.
- 2) The formal decisions or agreements of IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested IEC National Committees.
- 3) IEC Publications have the form of recommendations for international use and are accepted by IEC National Committees in that sense. While all reasonable efforts are made to ensure that the technical content of IEC Publications is accurate, IEC cannot be held responsible for the way in which they are used or for any misinterpretation by any end user.
- 4) In order to promote international uniformity, IEC National Committees undertake to apply IEC Publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any IEC Publication and the corresponding national or regional publication shall be clearly indicated in the latter.
- 5) IEC itself does not provide any attestation of conformity. Independent certification bodies provide conformity assessment services and, in some areas, access to IEC marks of conformity. IEC is not responsible for any services carried out by independent certification bodies.
- 6) All users should ensure that they have the latest edition of this publication.
- 7) No liability shall attach to IEC or its directors, employees, servants or agents including individual experts and members of its technical committees and IEC National Committees for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication, use of, or reliance upon, this IEC Publication or any other IEC Publications.
- 8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
- 9) Attention is drawn to the possibility that some of the elements of this IEC Publication may be the subject of patent rights. IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 60598-2-4 has been prepared by subcommittee 34D: Luminaires, of IEC technical committee 34: Lamps and related equipment.

This third edition cancels and replaces the second edition published in 1997. This edition constitutes a technical revision.

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

- a) alignment with IEC 60598-1;
- b) modification of the scope, classification and requirements to cover portable luminaires for both indoor and outdoor applications, by introducing the requirements already listed in IEC 60598-2-7;

NOTE In this edition of IEC 60598-2-4 all requirements listed in IEC 60598-2-7 have been incorporated. As a consequence, IEC 60598-2-7 will be withdrawn after publication of this standard.

- c) modification of the scope to cover all electrical light sources (it was previously limited to tungsten filament, tubular fluorescent and other discharge lamps);
- d) introduction of the symbol for luminaires which are other than ordinary, but suitable for indoor applications only (e.g. luminaire using PVC cable);
- e) modification in the detail of test to clarify that the stability test on an inclined plane (see 4.7.3) shall be carried out with the light source(s) in place;
- f) modification of the minimum degree of protection against dust and moisture for portable luminaires for outdoor use from IPX3 to IPX4 (see 4.5.2); as a consequence, the requirements for cable entry position, as given in IEC 60598-2-7:1982, 7.6.3 were deleted as they are covered by IPX4;
- g) modification of the requirements for the acceptance criteria of plug and socket outlet;
- h) modification of the IP test requiring the most unfavourable of the overturned positions to cover all classes (and not only class II luminaires as in 7.13.1 of IEC 60598-2-7:1982).

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

FDIS	Report on voting
34D/1257/FDIS	34D/1271/RVD

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

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

This publication is to be read in conjunction with IEC 60598-1: Luminaires – Part 1: General requirements and tests. It was established on the basis of the eight edition (2014) of that standard.

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

NOTE In this standard, the following print type is used:

compliance statements: in italic type

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under "http://webstore.iec.ch" in the data related to the specific document. At this date, the document will be

- · reconfirmed,
- withdrawn,
- · replaced by a revised edition, or
- amended.

A bilingual version of this publication may be issued at a later date.

LUMINAIRES -

Part 2-4: Particular requirements – Portable general purpose luminaires

4.1 Scope

This part of IEC 60598-2 specifies requirements for portable general purpose luminaires for indoor and/or outdoor use (e.g. garden use), other than handlamps, designed to be used with or incorporating electrical light sources on supply voltages not exceeding 250 V.

4.2 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 61032:1997, Protection of persons and equipment by enclosures – Probes for verification

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