



IEC 60598-2-4

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# INTERNATIONAL STANDARD



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

INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

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## CONTENTS

FOREWORD .....	3
<b>4.1 General</b> .....	<b>6</b>
4.1 Scope .....	6
4.2 Normative references .....	6
<b>4.3 Terms and definitions</b> .....	<b>6</b>
4.4 General test requirements .....	6
4.5 Classification of luminaires .....	7
4.6 Marking .....	7
4.7 Construction .....	7
4.8 Creepage distances and clearances .....	9
4.9 Provision for earthing .....	9
4.10 Terminals .....	9
4.11 External and internal wiring .....	9
4.12 Protection against electric shock .....	10
4.13 Endurance tests and thermal tests .....	10
4.14 Resistance to dust and moisture .....	10
4.15 Insulation resistance and electric strength .....	10
4.16 Resistance to heat, fire and tracking .....	10
<b>Bibliography</b> .....	<b>11</b>
<b>Figure 1 – Luminaires “For indoor use only”</b> .....	<b>7</b>

## 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.
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**This redline version of the official IEC Standard allows the user to identify the changes made to the previous edition. A vertical bar appears in the margin wherever a change has been made. Additions are in green text, deletions are in strikethrough red text.**

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 eighth 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.

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## LUMINAIRES –

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

#### ~~4.1~~ **General**

#### **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, ~~for use with tungsten filament, tubular fluorescent and other discharge lamps~~ designed to be used with or incorporating electrical light sources on supply voltages not exceeding 250 V. ~~It is to be read in conjunction with those sections of part 1 to which reference is made.~~

#### **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 60529:1989, *Degrees of protection provided by enclosures (IP codes)*~~

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

# INTERNATIONAL STANDARD

# NORME INTERNATIONALE

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

**Luminaires –  
Partie 2-4: Exigences particulières – Luminaires portatifs à usage général**

## CONTENTS

FOREWORD.....	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
Bibliography.....	10
Figure 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.
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International Standard IEC 60598-2-4 has been prepared by subcommittee 34D: Luminaires, of IEC technical committee 34: Lamps and related equipment.

This bilingual version (2018-07) corresponds to the English version, published in 2017-04.

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.

The French version of this standard has not been voted upon.

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 eighth edition (2014) of that standard.

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

## 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*

## SOMMAIRE

AVANT-PROPOS .....	13
4.1 Domaine d'application .....	15
4.2 Références normatives .....	15
4.3 Termes et définitions .....	15
4.4 Exigences générales d'essai .....	15
4.5 Classification des luminaires .....	15
4.6 Marquage .....	16
4.7 Construction .....	16
4.8 Lignes de fuite et distances dans l'air .....	18
4.9 Dispositions en vue de la mise à la terre .....	18
4.10 Bornes.....	18
4.11 Câblage externe et interne .....	18
4.12 Protection contre les chocs électriques.....	19
4.13 Essais d'endurance et essais thermiques .....	19
4.14 Résistance aux poussières et à l'humidité .....	19
4.15 Résistance d'isolement et rigidité diélectrique .....	20
4.16 Résistance à la chaleur, au feu et aux courants de cheminement .....	20
Bibliographie.....	21
 Figure 1 – Luminaires “Pour utilisation à l'intérieur uniquement” .....	 16

# COMMISSION ÉLECTROTECHNIQUE INTERNATIONALE

## LUMINAIRES –

### **Partie 2-4: Exigences particulières – Luminaires portatifs à usage général**

#### AVANT-PROPOS

- 1) La Commission Électrotechnique Internationale (IEC) est une organisation mondiale de normalisation composée de l'ensemble des comités électrotechniques nationaux (Comités nationaux de l'IEC). L'IEC a pour objet de favoriser la coopération internationale pour toutes les questions de normalisation dans les domaines de l'électricité et de l'électronique. À cet effet, l'IEC – entre autres activités – publie des Normes internationales, des Spécifications techniques, des Rapports techniques, des Spécifications accessibles au public (PAS) et des Guides (ci-après dénommés "Publication(s) de l'IEC"). Leur élaboration est confiée à des comités d'études, aux travaux desquels tout Comité national intéressé par le sujet traité peut participer. Les organisations internationales, gouvernementales et non gouvernementales, en liaison avec l'IEC, participent également aux travaux. L'IEC collabore étroitement avec l'Organisation Internationale de Normalisation (ISO), selon des conditions fixées par accord entre les deux organisations.
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La Norme internationale IEC 60598-2-4 a été établie par le sous-comité 34D: Luminaires, du comité d'études 34 de l'IEC: Lampes et équipements associés.

La présente version bilingue (2018-07) correspond à la version anglaise monolingue publiée en 2017-04.

Cette troisième édition annule et remplace la deuxième édition parue en 1997. Cette édition constitue une révision technique.

Cette édition inclut les modifications techniques majeures suivantes par rapport à l'édition précédente:

- a) alignement sur l'IEC 60598-1;

- b) modification du domaine d'application, de la classification et des exigences, afin de couvrir les luminaires portatifs destinés aux applications à l'intérieur et à l'extérieur, en introduisant les exigences déjà énumérées dans l'IEC 60598-2-7;

NOTE Toutes les exigences énumérées dans l'IEC 60598-2-7 ont été intégrées dans la présente édition de l'IEC 60598-2-4. L'IEC 60598-2-7 sera donc retirée après la publication de la présente norme.

- c) modification du domaine d'application afin de couvrir toutes les sources lumineuses électriques (auparavant le domaine d'application était limité aux lampes à filament de tungstène, aux lampes tubulaires fluorescentes et autres lampes à décharge);
- d) introduction du symbole pour les luminaires autres que les luminaires ordinaires, mais adaptés uniquement aux applications à l'intérieur (par exemple, les luminaires équipés d'un câble en PVC);
- e) modification des détails de l'essai afin de clarifier que l'essai de stabilité sur un plan incliné (voir 4.7.3) doit être effectué avec la ou les sources lumineuses en place;
- f) modification du degré minimal de protection contre la poussière et l'humidité, pour les luminaires portatifs pour utilisation en extérieur, de IPX3 à IPX4 (voir 4.5.2); les exigences relatives à la position d'entrée de câble, telles que données au 7.6.3 de l'IEC 60598-2-7:1982, sont donc supprimées, car elles sont couvertes par IPX4;
- g) modification des exigences pour les critères d'acceptation des fiches et des socles de prise de courant;
- h) modification de l'essai IP exigeant la plus défavorable des positions renversées pour couvrir toutes les classes (et pas seulement les luminaires de classe II comme en 7.13.1 de l'IEC 60598-2-7:1982).

Le texte anglais de cette norme est issu des documents 34D/1257/FDIS et 34D/1271/RVD.

Le rapport de vote 34D/1271/RVD donne toute information sur le vote ayant abouti à l'approbation de cette norme.

La version française de cette norme n'a pas été soumise au vote.

Ce document a été rédigé selon les Directives ISO/IEC, Partie 2.

Cette publication doit être utilisée conjointement avec l'IEC 60598-1: *Luminaires – Partie 1: Exigences générales et essais*. Elle a été établie sur la base de la huitième édition (2014) de cette norme.

Une liste de toutes les parties de la série IEC 60598, publiées sous le titre général *Luminaires*, peut être consultée sur le site web de l'IEC.

NOTE Dans la présente norme, les caractères d'imprimerie suivants sont utilisés:

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## LUMINAIRES –

### **Partie 2-4: Exigences particulières – Luminaires portatifs à usage général**

#### **4.1 Domaine d'application**

La présente partie de l'IEC 60598-2 spécifie les exigences applicables aux luminaires portatifs à usage général pour une utilisation à l'intérieur et/ou à l'extérieur (par exemple emploi dans les jardins), autres que les baladeuses, conçus pour être utilisés avec des sources électriques lumineuses ou intégrant des sources électriques lumineuses pour tensions d'alimentation ne dépassant pas 250 V.

#### **4.2 Références normatives**

Les documents suivants cités dans le texte constituent, pour tout ou partie de leur contenu, des exigences du présent document. Pour les références datées, seule l'édition citée s'applique. Pour les références non datées, la dernière édition du document de référence s'applique (y compris les éventuels amendements).

IEC 61032:1997, *Protection des personnes et des matériels par les enveloppes – Calibres d'essai pour la vérification*

IEC 60598-1, *Luminaires – Partie 1: Exigences générales et essais*