

# INTERNATIONAL STANDARD

**IEC**  
**60598-2-3**

Third edition  
2002-12

---

---

## Luminaires –

### Part 2-3: Particular requirements – Luminaires for road and street lighting

*This **English-language** version is derived from the original **bilingual** publication by leaving out all French-language pages. Missing page numbers correspond to the French-language pages.*



Reference number  
IEC 60598-2-3:2002(E)

# INTERNATIONAL STANDARD

**IEC**  
**60598-2-3**

Third edition  
2002-12

---

---

---

## **Luminaires –**

### **Part 2-3: Particular requirements – Luminaires for road and street lighting**

© IEC 2002 Copyright - all rights reserved

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

International Electrotechnical Commission, 3, rue de Varembé, PO Box 131, CH-1211 Geneva 20, Switzerland  
Telephone: +41 22 919 02 11 Telefax: +41 22 919 03 00 E-mail: [inmail@iec.ch](mailto:inmail@iec.ch) Web: [www.iec.ch](http://www.iec.ch)



Commission Electrotechnique Internationale  
International Electrotechnical Commission  
Международная Электротехническая Комиссия

## CONTENTS

FOREWORD .....	5
3.1 Scope .....	9
3.2 General test requirements .....	9
3.3 Definitions .....	9
3.4 Classification of luminaires .....	13
3.5 Marking .....	13
3.6 Construction .....	13
3.7 Creepage distances and clearances .....	21
3.8 Provision for earthing.....	21
3.9 Terminals .....	21
3.10 External and internal wiring .....	21
3.11 Protection against electric shock .....	23
3.12 Endurance tests and thermal tests.....	23
3.13 Resistance to dust and moisture .....	23
3.14 Insulation resistance and electric strength .....	23
3.15 Resistance to heat, fire and tracking.....	23
Annex A (informative) Drag coefficient measurement .....	29
Annex B (normative) Schedule of amended clauses containing more serious/critical requirements which require products to be retested .....	31
Figure 1 – Different procedures for the static wind-force test.....	25
Figure 2 – Counting particles at the edge of the square.....	27

## INTERNATIONAL ELECTROTECHNICAL COMMISSION

## LUMINAIRES –

**Part 2-3: Particular requirements –  
Luminaires for road and street lighting**

## FOREWORD

- 1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the 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, the IEC publishes International Standards. 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. The 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 the 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 National Committees.
- 3) The documents produced have the form of recommendations for international use and are published in the form of standards, technical specifications, technical reports or guides and they are accepted by the National Committees in that sense.
- 4) In order to promote international unification, IEC National Committees undertake to apply IEC International Standards transparently to the maximum extent possible in their national and regional standards. Any divergence between the IEC Standard and the corresponding national or regional standard shall be clearly indicated in the latter.
- 5) The IEC provides no marking procedure to indicate its approval and cannot be rendered responsible for any equipment declared to be in conformity with one of its standards.
- 6) Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. The IEC shall not be held responsible for identifying any or all such patent rights.

This International Standard IEC 60598-2-3 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 1993, and its amendments 1 (1997) and 2 (2000) as well as interpretation sheets IS 01 and IS 02 (2001). It constitutes a technical revision.

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

FDIS	Report on voting
34D/762/FDIS	34D/772/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.

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

This standard is to be read in conjunction with IEC 60598-1.

The changes to the text introduced by this new edition introduce requirements for column-integrated luminaires.

The text introduced by interpretation sheets IS 01 and IS 02 is contained in subclause 3.6.5 Note 1 and subclause 3.12.1, second paragraph, respectively.

The committee has decided that the contents of this publication will remain unchanged until July 2006. At this date, the publication will be

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

## LUMINAIRES –

### Part 2-3: Particular requirements – Luminaires for road and street lighting

#### 3.1 Scope

This part of IEC 60598 specifies requirements for

- luminaires for road, street lighting and other public outdoor lighting applications;
- tunnel lighting;
- column-integrated luminaires with a minimum total height above normal ground level of 2,5 m;

and for use with electrical lighting sources on supply voltages not exceeding 1 000 V.

NOTE Column integrated luminaires with a total height below 2,5 m are under consideration.

##### 3.1.1 Normative references

The normative references listed in Section 0 of IEC 60598-1 apply to this part as well as the following reference:

IEC 60364-7-714, 1996, *Electrical installations of buildings – Part 7: Requirements for special installations or locations – Section 714: External lighting installations*

IEC 60068-3-76:1997, *Environmental testing – Part 2-75: Tests – Test Eh: Hammer tests*