

Australian/New Zealand Standard™

## Luminaires

### **Part 2.5: Particular requirements— Floodlights (IEC 60598-2-5:2015 (ED. 3.0), MOD)**

STANDARDS  
Australia



STANDARDS®  
NEW ZEALAND  
PAEREWĀ AOTEAROA



AS/NZS 60598.2.5:2018

This Joint Australian/New Zealand Standard™ was prepared by Joint Technical Committee EL-041, Lamps and Related Equipment. It was approved on behalf of the Council of Standards Australia on 15 October 2018 and by the New Zealand Standards Approval Board on 6 November 2018.

This Standard was published on 21 December 2018.

The following are represented on Committee EL-041:

- Australian Industry Group
- Consumers Federation of Australia
- Department of the Environment and Energy (Australian Government)
- Electrical Compliance Testing Association of Australia
- Electrical Regulatory Authorities Council
- IES: The Lighting Society
- Joint Accreditation System of Australia and New Zealand
- Lighting Council Australia
- Lighting Council New Zealand
- Master Electricians Australia
- Worksafe New Zealand

This Standard was issued in draft form for comment as DR AS/NZS 60598.2.5:2018.

#### **Keeping Standards up-to-date**

Ensure you have the latest versions of our publications and keep up-to-date about Amendments, Rulings, Withdrawals, and new projects by visiting:

[www.standards.org.au](http://www.standards.org.au)

[www.standards.govt.nz](http://www.standards.govt.nz)

[www.saiglobal.com](http://www.saiglobal.com) (sales and distribution)

ISBN 978 1 76072 266 1

Australian/New Zealand Standard™

**Luminaires**

**Part 2.5: Particular requirements—  
Floodlights (IEC 60598-2-5:2015 (ED.  
3.0), MOD)**

First published as AS/NZS 60598.2.5:2002.  
Second edition 2018.

**COPYRIGHT**

© IEC — All rights reserved

© Standards Australia Limited/the Crown in right of New Zealand, administered by the New Zealand Standards Executive 2018

All rights are reserved. No part of this work may be reproduced or copied in any form or by any means, electronic or mechanical, including photocopying, without the written permission of the publisher, unless otherwise permitted under the Copyright Act 1968 (Cth) or the Copyright Act 1994 (New Zealand).

Jointly published by SAI Global Pty Limited under licence from Standards Australia Limited, GPO Box 476, Sydney, NSW 2001 and by Standards New Zealand, PO Box 1473, Wellington 6140.

## Preface

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL-041, Lamps and Related Equipment to supersede AS/NZS 60598.2.5:2002, *Luminaires – Part 2.5: Particular requirements – Floodlights* (IEC 60598.2.5:1998, MOD).

The objective of this Standard is to specify requirements for floodlights for use with electrical light sources on supply voltages not exceeding 1 000 V. This edition includes significant technical changes as it introduces requirements for the glass breaking test.

This Standard is an adoption with national modifications, and has been reproduced from, IEC 60598-2-5:2015 (ED. 3.0) *Luminaires – Part 2-5: Particular requirements – Floodlights*. Appendix ZZ lists the variations for the application of this Standard in Australia and New Zealand.

As this document has been reproduced from an International Standard, the following applies:

- (a) In the source text “this part of IEC 60598” should read “this Australian Standard or Australian/New Zealand Standard”.
- (b) A full point substitutes for a comma when referring to a decimal marker.

Australian or Australian/New Zealand Standards that are identical versions of international normative references may be used interchangeably. Refer to the online catalogue for information on specific Standards.

The terms “normative” and “informative” are used in Standards to define the application of the appendices or annexes to which they apply. A “normative” appendix or annex is an integral part of a Standard, whereas an ‘informative’ appendix or annex is only for information and guidance.

NOTES

Currently in preview, click buy full version

CONTENTS

FOREWORD ..... 3

INTRODUCTION ..... 5

5.1 Scope ..... 6

5.2 Normative references ..... 6

5.3 Terms and definitions ..... 6

5.4 Classification of luminaires ..... 6

5.5 Marking ..... 7

5.6 Construction ..... 7

5.7 Creepage distances and clearances ..... 10

5.8 Provision for earthing ..... 10

5.9 Terminals ..... 10

5.10 External and internal wiring ..... 10

5.11 Protection against electric shock ..... 10

5.12 Endurance tests and thermal tests ..... 10

5.13 Resistance to dust and moisture ..... 11

5.14 Insulation resistance and electric strength ..... 11

5.15 Resistance to heat, fire and tracking ..... 11

Annex A (informative) Schedule of amended clauses containing more serious/critical requirements which require products to be retested ..... 12

Figure 1 – Counting particles at the edge of the square ..... 9

## INTERNATIONAL ELECTROTECHNICAL COMMISSION

## LUMINAIRES –

## Part 2-5: Particular requirements – Floodlights

## 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 60598-2-5 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 1998, and constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition: it introduces requirements for the glass breaking test.

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

FDIS	Report on voting
34D/1172/FDIS	34D/1180/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: *Luminaires – Part 1: General requirements and tests*.

A list of all the 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 types are used:

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

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC website under "<http://www.store.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.

## INTRODUCTION

The mechanical stress on floodlights is similar to the mechanical stress on luminaires for road and street lighting. Because of this reason this standard contains an update to align the mechanical and breakage test requirements on flat and curved glass with IEC 60598-2-3.

Currently in preview, click buy full version

## LUMINAIRES –

### Part 2-5: Particular requirements – Floodlights

#### 5.1 Scope

This part of IEC 60598 specifies requirements for floodlights for use with electrical light sources on supply voltages not exceeding 1 000 V.

#### 5.2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60068-2-75, *Environmental testing – Part 2-75: Tests – Test Eh. Temperature tests*

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

IEC 62262, *Degrees of protection provided by enclosures for electrical equipment against external mechanical impacts (IK code)*

#### 5.3 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 60598-1, as well as the following apply.

##### 5.3.1 floodlighting

lighting of a scene or an object, usually by projectors, in order to increase considerably its illuminance relative to its surroundings

Note 1 to entry: The difference in illumination between the subject and its surroundings may, alternatively, be achieved by colour.

##### 5.3.2 floodlight

luminaire for floodlighting

Note 1 to entry: A floodlight can be for either exterior or interior use or for both.

#### 5.4 Classification of luminaires

Luminaires shall be classified in accordance with the provisions of Section 2 of IEC 60598-1. The provisions of Section 0 of IEC 60598-1 apply. The tests described in each appropriate section of Part 1 shall be carried out in the order listed in this Part 2.