AS/NZS 60598.1:2017
(Incorporating Amendments up to and including No. 2)





Australian/New Zealand Standard™

## Luminaires

Part 1: General requirements and tests (IEC 60598-1, Ed.8.0 (2014) MOD)



## AS/NZS 60598.1:2017

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 5 February 2017 and by the New Zealand Standards Approval Board on 7 March 2017.

This Standard was published on 24 April 2017.

The following are represented on Committee EL-041:

Australian Industry Group
Consumers Federation of Australia
Department of the Environment and Energy
Electrical Compliance Testing Association
Electrical Contractors Association of New Zealand
Electrical Regulatory Authorities Council
Energy Efficiency and Conservation Authority of New Zealand
IES: The Lighting Society
Institution of Professional Engineers New Zealand
Joint Accreditation System of Australia and New Zealand
Lighting Council Australia
Lighting Council New Zealand
Master Electricians Australia
NSW Fair Trading
WorkSafe New Zealand

#### Additional Interests

Australasian Fire and Emergency Service Authorities Council

This Standard was issued in draft form for comment as DR AS/NZS 60598.1:2017.

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## Australian/New Zealand Standard™

## **Luminaires**

# Part 1: General requirements and tests (IEC 60598-1, Ed.8.0 (2014) MOD)

Originated as AS/NZS 60598.1:1998.
Previous edition 2013.
Fifth edition 2017.
Reissued incorporating Amendment No 1 (November 2017).
Reissued incorporating Amendment No 2 (November 2020).



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## **PREFACE**

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL-041, Lamps and Related Equipment, to supersede AS/NZS 60598.1:2013, *Luminaires*, Part 1: *General requirements and tests (IEC 60598-1, Ed. 7.0 (2008) MOD)* two years after publication. Until that time, both editions of the Standard will operate in parallel. It is anticipated that the 2013 edition will then be withdrawn.

This Standard incorporates Amendment No. 1 (November 2017) and Amendment No. 2 (November 2020). The changes required by the Amendments are indicated in the text by a marginal bar and amendment number against the clause, note, table, figure or part thereof affected.

The objective of this Standard is to specify 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 and electrical construction.

The objective of Amendment 2 is to—

A2

- (aa) add a requirement for a cord tag for luminaires intended to be fixed to the wall and supplied with a plug and cord;
- (bb) amend requirements for small batteries in Clause 4.101;
- (cc) modify references to metal oxide varistors; and
- (dd) correct needle-flame test requirements in Clause 13.3.3.

This Standard is an adoption with national modifications and has been reproduced from IEC 60598-1, Ed. 8.0 (2014), *Luminaires*, Part 1: *General requirements and tests*. The source document has been varied as indicated to take account of Australian/New Zealand conditions. The modifications are specified in Appendix ZZ.

This Standard 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 new text has been included which contains more serious/critical requirements requiring products to be retested.

This Standard is structured as follows:

- (i) Preface (including Australian and New Zealand references).
- (ii) IEC 60598-1 (unedited from the contents page to the final clause of the IEC Standard).
- (iii) Appendix ZZ—Australian/New Zealand variations to the IEC Standard.

The variations in Appendix ZZ include the following:

- (A) Clarifying that the Standard includes LED light sources within its scope.
- (B) Testing requirements for 240 V supply.
- (C) Requirements for capacitors.
- (D) Details of means of connection to supply.
- (E) Assessment for access to live parts.

## (F) Resistance to fire tests.

The essential safety requirements in AS/NZS 3820, Essential safety requirements for electrical equipment, which could be applicable to lighting products within the scope of this Standard, are covered by this Standard.

The variations described in Appendix ZZ form the Australian and New Zealand variations for the purposes of the IECEE CB Scheme for the recognition of testing to standards for safety of electrical equipment.

In this Standard, the following print types are used:

- Requirements: in roman type.
- Test specifications: in italic type.
- Notes: in small roman type.

As this Standard is reproduced from an International Standard, the following applies:

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

References to International Standards should be replaced by references to Australian or Australian/New Zealand Standards, as follows:

Reference to International Standard		Australian or Australian/New Zealand Standard		
IEC 60065	Audio, video and similar electronic apparatus—Safety requirements	AS/NZS 60065	Audio, video and similar electronic apparatus—Safety requirements (IEC 60065, Ed. 7.2 (2011) MOD)	
60068 60068-2-7	Environmental testing 5 Part 2-75: Tests—Test Eh: Hammer tests	AS 60068 60068.2.75	Environmental testing Part 2.75: Tests—Test Eh: Hammer tests	
60112	Method for the determination of the proof and the comparative tracking indices of solid insulating materials	AS/NZS 60112	Method for the determination of the proof and the comparative tracking indices of solid insulating materials	
60155	Glow-starters for fluorescent lamps	60155	Glow-starters for fluorescent lamps	
60238	Edison screw lampholders	60238	Edison screw lampholders (IEC 60238, Ed. 8.2 (2011) MOD)	
60245	Rubber-insulated cables—Rated voltages up to and including 450/750 V (series)	60245	Rubber-insulated cables—Rated voltage up to and including 450/750 V (series)	
60320	Appliance couplers for household and similar general purposes (series)	60320	Appliance couplers for household and similar general purposes (series)	
60432	Incandescent lamps—Safety specifications	60432	Incandescent lamps—Safety specifications	
60432-1	Part 1: Tungsten filament lamps for domestic and similar general lighting purposes	60432.1	Part 1: Tungsten filament lamps for domestic and similar general lighting purposes	
60432-2	Part 2: Tungsten halogen lamps for domestic and similar general lighting	60432.2	Part 2: Tungsten-halogen lamps for domestic and similar general lighting	
60432-3	purposes Part 3: Tungsten-halogen lamps (non-vehicle)	60432.3	purposes Part 3: Tungsten halogen lamps (non-vehicle)	



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