

Australian/New Zealand Standard™

Luminaires

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



AS/NZS 60598.1:2017

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Electrical Regulatory Authorities Council
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Australian/New Zealand Standard™

Luminaires

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

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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 It is anticipated that the 2013 edition will then be withdrawn.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). The changes required by the Amendment 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.

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 re-tested.

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 IEC 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:

<i>Reference to International Standard</i>		<i>Australian or Australian/New Zealand Standard</i>	
IEC		AS/NZS	
60065	Audio, video and similar electronic apparatus—Safety requirements	60065	Audio, video and similar electronic apparatus—Safety requirements (IEC 60065, Ed. 7.2 (2011) MOD)
60068	Environmental testing	AS	
60068-2-75	Part 2-75: Tests—Test Eh: Hammer tests	60068.2.75	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		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 purposes	60432.2	Part 2: Tungsten-halogen lamps for domestic and similar general lighting purposes
60432-3	Part 3: Tungsten-halogen lamps (non-vehicle)	60432.3	Part 3: Tungsten halogen lamps (non-vehicle)
60529	Degrees of protection provided by enclosures (IP Code)	AS	
60529		60529	Degrees of protection provided by enclosures (IP Code)

IEC		AS/NZS	
60598	Luminaires	60598	Luminaires
60598-2	Part 2: Particular requirements (series)	60598.2	Part 2: Particular requirements (series)
60990	Methods of measurement of touch current and protective conductor current	60990	Methods of measurement of touch current and protective conductor current
61184	Bayonet lampholders	61184	Bayonet lampholders (IEC 61184, Ed. 3.1 (2011) MOD)

Only normative references that have been adopted as Australian or Australian/New Zealand Standards have been listed.

The terms 'normative' and 'informative' have been used in this Standard to define the application of the annex or appendix to which they apply. A 'normative' annex or appendix is an integral part of a Standard, whereas an 'informative' annex or appendix is only for information and guidance.

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