

Australian/New Zealand Standard™

Luminaires

**Part 2.2: Particular requirements—
Recessed luminaires
(IEC 60598-2-2: Ed. 3.0 (2011) MOD)**



AS/NZS 60598.2.2:2016

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 13 November 2015 and on behalf of the Council of Standards New Zealand on 12 February 2016. This Standard was published on 26 February 2016.

The following are represented on Committee EL-041:

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Consumers Federation of Australia
Department of Industry
Electrical Compliance Testing Association
Electrical Contractors Association of New Zealand
Electrical Regulatory Authorities Council
Energy Efficiency and Conservation Authority of New Zealand
Fair Trading NSW
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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 60598.2.2:2001, *Luminaires, Part 2.2: Particular requirements—Recessed luminaires (IEC 60598-2-2:1996, MOD)*, 24 months from the date of publication. During this period, both standards will operate in parallel, after which it is anticipated that the 2001 edition will be withdrawn.

The objective of this Standard is to provide manufacturers, users and regulators with electrical safety requirements for recessed luminaires.

This Standard is an adoption with national modifications; it has been reproduced from IEC 60598-2-2, Ed. 3.0 (2011), *Luminaires, Part 2-2: Particular requirements—Recessed luminaires*, and has been varied as indicated to take account of Australian/New Zealand conditions.

Variations made to IEC 60598-2-2, Ed. 3.0 (2011) form the Australian/New Zealand variations for the purposes of the IECEE CB Scheme for recognition of testing to standards for safety of electrical equipment (the CB Scheme). They are listed in Appendix ZZ.

Appendix ZA has been added to set out the thermal test procedures for Australia/New Zealand.

Appendices ZB, ZC and ZD have been added to provide examples of methods satisfying the requirements for the supply of information specified in Appendix ZZ; examples of recessed luminaires; and guidance on classifications.

This Standard is structured as follows:

- (a) Preface.
- (b) IEC 60598-2-2, Ed. 3.0 (2011), unedited from the contents page to the final clause of the source document.
- (c) Appendix ZZ—Australian/New Zealand variations to the source document.
- (d) Appendices ZA, ZB, ZC and ZD.

The variations listed in Appendix ZZ include the following:

- (i) Classifications and definitions of different types of recessed luminaire in relation to use near, or being covered with, building elements or thermal insulation, or both.
- (ii) Tests, including ingress protection tests and thermal tests for normal and abnormal operating conditions, and marking and instructional requirements for the different classifications of recessed luminaire with standardized test box and temperature limits, and requirements for any thermal protection.

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

- (A) In the source text ‘this part of IEC 60598’ should read ‘this Australian/New Zealand Standard’.
- (B) 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/New Zealand Standard</i>	
IEC		AS/NZS	
60227	Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V	60227	Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V
60227-5	Part 5: Flexible cables (cords)	60227.5	Part 5: Flexible cables (cords)

IEC		AS/NZS	
60245	Rubber insulated cables—Rated voltages up to and including 450/750 V	60245	Rubber insulated cables—Rated voltages up to and including 450/750 V
60245-4	Part 4: Cords and flexible cables	60245.4	Part 4: Cords and flexible cables
60598	Luminaires	60598	Luminaires
60598-1	Part 1: General requirements and tests	60598.1	Part 1: General requirements and tests

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.

In this Standard, the terms ‘clause’ and ‘section’ give effect to the same meaning and may be used interchangeably.

It has been assumed in the drafting of this Standard that the execution of its provisions is entrusted to appropriately qualified and experienced persons.

The essential safety requirements in AS/NZS 3820, *Essential safety requirements for electrical equipment*, that could be applicable to lighting products within the scope of this Standard, are covered by this Standard, taken in conjunction with any other relevant requirements affecting safety.

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AUSTRALIAN/NEW ZEALAND STANDARD

Luminaires

Part 2.2:

**Particular requirements—Recessed luminaires
(IEC 60598-2-2, Ed. 3.0 (2011) MOD)****2.1 Scope**

This part of IEC 60598 specifies requirements for recessed luminaires incorporating electric light sources for operation from supply voltages up to 1 000 V. This section does not apply to air-handling or liquid-cooled luminaires.

2.2 Normative references

The following referenced documents are indispensable for the application 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 60227 (all parts), *Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V*

IEC 60245 (all parts), *Rubber insulated cables – Rated voltages up to and including 450/750 V*

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

2.3 General test requirements

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 section of part 2.

A procedure measuring ambient temperature in an installation is given in Annex A.

2.4 Definitions

For the purposes of this document, the definitions of Section 1 of IEC 60598-1 apply.

2.5 Classification of luminaires

Luminaires shall be classified in accordance with the provisions of Section 2 of IEC 60598-1.

2.6 Marking

The provisions of Section 3 of IEC 60598-1 apply.

2.7 Construction

The provisions of Section 4 of IEC 60598-1 apply.

2.8 Creepage distances and clearances

The provisions of Section 11 of IEC 60598-1 apply.