

Australian/New Zealand Standard™

**Luminaires—Part 2.20: Particular
requirements—Lighting chains
(IEC 60598-2-20:1996, MOD)**

AS/NZS 60598.2.20:2002

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 11 February 2002 and on behalf of the Council of Standards New Zealand on 19 February 2002. It was published on 10 June 2002.

The following are represented on Committee EL-041:

Association of Consulting Engineers, Australia
Australian Chamber of Commerce and Industry
Australian Electrical and Electronic Manufacturers Association
Consumers Federation of Australia
Electrical Compliance Testing Association of Australia
Electrical Regulatory Authorities Council (Australia)
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Australian/New Zealand Standard™

Luminaires—Part 2.20: Particular requirements—Lighting chains (IEC 60598-2-20:1996, MOD)

Originated as AS C152-1950.
Previous editions AS/NZS 3152:1992 and AS/NZS 60598.2.20:1998.
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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 60598.2.20:1998, *Particular requirements for lighting chains* and AS/NZS 3152:1992, *Approval and test specification—Decorative lighting outfits*. In Australia, this Standard will co-exist with the current Standard AS/NZS 3152:1992 until 1 January 2005 on which date the Standard AS/NZS 3152:1992 will be withdrawn.

The objective of this Standard is to specify minimum safety requirements for lighting chains fitted with series or parallel connected incandescent lamps for use either indoors or outdoors with supply voltages not exceeding 250 V.

This joint Standard is an adoption with national modifications and has been reproduced from IEC 60598-2-20:1996, *Luminaires, Part 2-20: Particular requirements—Lighting chains*. This document has been varied as indicated to suit Australian/New Zealand conditions. IEC amendment 1 1998 and draft amendment 2 listed in 34D/588/CDV (approved as an ADIS document) are included in this document. Draft amendment 2 is identified separately by marginal bars on the right hand side of the page beside the affected clause.

Variations to IEC 60598-2-20:1996 are indicated at the appropriate places throughout this Standard. Strikethrough (*example*) identifies IEC tables, figures and passages of text which, for the purposes of this Australian/New Zealand Standard, are deleted. Where Australian/New Zealand tables, figures or passages of text are added, each is set in its proper place and identified by shading (*example*). Added figures are not themselves shaded, but are identified by a shaded border.

A reference to an International Standard identified in the Normative References Clause by strikethrough (*example*) is replaced by a reference to the Australian or Australian/New Zealand Standard(s) listed immediately thereafter and identified by shading (*example*). Where the struck-through referenced document and the referenced Australian or Australian/New Zealand Standard are identical, this is indicated in parenthesis after the title of the latter.

This Standard is a section of Part 2 of a series dealing with luminaires, which when complete will consist of the following:

AS/NZS 60598	Luminaires
Part 1:	General requirements and tests
Part 2.1:	Particular requirements—Fixed general purpose luminaires
Part 2.2:	Particular requirements—Recessed luminaires
Part 2.4:	Particular requirements—Portable general purpose luminaires
Part 2.5:	Particular requirements—Floodlights
Part 2.6:	Particular requirements—Luminaires with built-in transformers or convertors for filament lamps
Part 2.8:	Particular requirements—Handlamps
Part 2.10:	Particular requirements—Portable child-appealing luminaires
Part 2.18:	Particular requirements—Luminaires for swimming pools and similar applications
Part 2.19:	Particular requirements—Airhandling luminaires (safety requirements)
Part 2.20:	Particular requirements—Lighting chains (this Standard).
Part 2.23:	Particular requirements—Extra low voltage lighting systems for filament lamps
Part 2.25:	Particular requirements—Luminaires for use in clinical areas of hospitals and health care buildings.

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

- (a) Its number does not appear on each page of text and its identity is shown only on the cover and title page.
- (b) In the source text 'this standard' should read 'this Australian/New Zealand Standard'.
- (c) A full point should be substituted for a comma when referring to a decimal marker.

In this Standard, the following print types are used:

- requirements proper: in arial type;
- *test specifications: in italic type;*
- explanatory matter: in smaller arial type.

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Any IEC table, figure or passage of text that is struck-through is not part of this Standard. Any Australian/New Zealand table, figure or passage of text that is added (and identified by shading) is part of this Standard.

20.1 Scope

This section of ~~IEC 60598-2~~ **AS/NZS 60598.2** specifies requirements for lighting chains fitted with series or parallel or a combination of series/parallel connected incandescent lamps for use either indoors or outdoors on supply voltages not exceeding 250 V.

NOTE 1 – A Christmas tree chain is an example of a lighting chain fitted with series or series/parallel connected lamps.

A chain for illuminating ski-tracks or promenades is an example of a lighting chain fitted with parallel connected lamps.

NOTE 2 – For lighting chains fitted with lampholders of the push-in type, the appropriate requirements of this section apply.

NOTE 3 – In some countries the term 'strings' is used instead of 'chains'.

NOTE 4 – For lighting chains with non-standardised lamps (e.g. lamps of the push-in type) the lamps are regarded as part of the lighting chain and consequently included in the testing (and thereby in the test certificate, if any).

20.1.1 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this section of ~~IEC 60598-2~~ **AS/NZS 60598.2**. At the time of publication, the editions indicated were valid. All normative documents are subject to revision, and parties to agreements based on this section of ~~IEC 60598-2~~ **AS/NZS 60598.2** are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

References to International Standards that are struck through in this Clause are replaced by references to equivalent Australian or Australian/New Zealand Standards that are listed immediately thereafter and identified by shading. Any Australian or Australian/New Zealand Standard that is identical to the International Standard it replaces is appropriately identified.

IEC 60083, *Plugs and socket-outlets for domestic and similar general use. Standards*

IEC 60227 *Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V*

IEC 60238, *Edison screw lampholders*

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

IEC 60320, *Appliance couplers for household and similar general purposes*

IEC 60811-3-1, *Common test methods for insulating and sheathing materials of electric cables—Part 3: Methods specific to PVC components—Section one: Pressure test at high temperature—Tests for resistance to cracking*