Australian/New Zealand Standard™

# Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment (CISPR 15:2000, MOD)

Standards Australia

STANDARDS NEW ZEALAND

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee TE-003, Electromagnetic Interference. It was approved on behalf of the Council of Standards Australia on 26 November 2001 and on behalf of the Council of Standards New Zealand on 19 February 2002. It was published on 13 March 2002.

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We also welcome suggestions for improvement in our Standards, and especially encourage readers to notify us immediately of any apparent inaccuracies or ambiguities. Please address your comments to the Chief Executive of either Standards Australia International or Standards New Zealand at the address shown on the back cover.

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# Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment (CISPR 15:2000, MOD)

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# PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee TE-003, Electromagnetic Interference to supersede AS/NZS 4051:1998.

The objective of this Standard is to specify limits and methods of tests for the measurement of radio disturbance characteristics of electrical lighting and similar equipment. The frequency range covered is 9 kHz to 400 GHz.

This Standard has been reproduced from CISPR 15:2000, *Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment*, and some modifications to requirements have been made to reflect local conditions.

Variations to the CISPR document 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). Modifications for Australian and New Zealand conditions are given in Table 2a, *Disturbance voltage limits at mains terminals* and Table 3, *Radiated electromagnetic disturbance limits*.

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.

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.

The term ‘normative’ has been used in this Standard to define the application of the annex to which it applies. A ‘normative’ annex is an integral part of a Standard.

# CONTENTS

*Page*

Clause

STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

# Australian/New Zealand Standard

# Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment (CISPR 15:2000, MOD)

## 1 Scope

This standard applies to the emission (radiated and conducted) of radiofrequency disturbances from:

– all lighting equipment with a primary function of generating and/or distributing light intended for illumination purposes, and intended either for connection to the low voltage electricity supply or for battery operation;

– the lighting part of multi-function equipment where one of the primary functions of this is illumination;

– independent auxiliaries exclusively for use with lighting equipment;

– UV and IR radiation equipment;

– neon advertising signs;

– street/flood lighting intended for outdoor use;

– transport lighting (installed in buses and trains).

Excluded from the scope of this standard are:

– lighting equipment operating in the ISM frequency bands (as defined in Resolution 63 (1979) of the ITU Radio Regulation);

– lighting equipment for aircraft and airports;

– apparatus for which the electromagnetic compatibility requirements in the radio-frequency range are explicitly formulated in other IEC or CISPR standards.

NOTE Examples are:

– built-in lighting devices in other equipment, for example scale illumination or neon devices;

– photocopiers;

– slide projectors;

– lighting equipment for road vehicles.

The frequency range covered is 9 kHz to 400 GHz.

Multi-function equipment which is subjected simultaneously to different clauses of this standard and/or other standards shall meet the provisions of each clause/standard with the relevant functions in operation.

The limits in this standard have been determined on a probabilistic basis to keep the suppression of disturbances within economically reasonable limits while still achieving an adequate level of radio protection and electromagnetic compatibility. In exceptional cases, additional provisions may be required.