Skip to main content Skip to primary navigation	
Menu	
 Home Home About this portal Latest updates 	
Print Save Email	
Resource detail	

AS/NZS CISPR 15:2002 Limits and methods of radio disturbance characteristics of electrical lighting and similar equipment

		_		
Tabl	e c	of C	ont	ents

View on Information Provider website {{ linkText }}

Abbreviation

AS/NZS CISPR 15:2002

Valid from

Citations

12/03/2002

Information provider

Standards New Zealand

Author

Standards New Zealand, Standards Australia

Information type

New Zealand Standard

Format

Hard copy, PDF

Cited By

This resource is cited by 1 document (show Citations)

Description

This Standard provides limits for the level of electromagnetic disturbance characteristics produced by lighting equipment and methods of its measurement. This Standard is technically equivalent to and has been reproduced from CISPR 15:2000. It contains some changes to limits to protect local radio services.

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 radiofrequency range are explicitly formulated in other IEC or CISPR standards.

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.

For assistance with locating previous versions, please contact the information provider.

Table of Contents | View on Information Provider website | { { linkText } }

For assistance with locating previous versions, please contact the information provider.

This resource is cited by:

AS/NZS CISPR 15:2002 Limits and methods of radio disturbance characteristics of electrical lighting and similar equipment

This document is CITED BY:

• AS/NZS 1680.1:2006

AS/NZS CISPR 15:2002 is cited by AS/NZS 1680.1:2006 Interior and workplace lighting - Part 1: General principles and recommendations

Back

AS/NZS CISPR 15:2002 Limits and methods of radio disturbance characteristics of electrical lighting and similar equipment

Show what documents this resource is CITED BY

Show what documents this resource CITES

Description

This Standard provides limits for the level of electromagnetic disturbance characteristics produced by lighting equipment and methods of its measurement. This Standard is technically equivalent to and has been reproduced from CISPR 15:2000. It contains some changes to limits to protect local radio services.

View on Information Provider website

AS/NZS CISPR 15:2002 Limits and methods of radio disturbance characteristics of electrical lighting and similar equipment

Description

This Standard provides limits for the level of electromagnetic disturbance characteristics produced by lighting equipment and methods of its measurement. This Standard is technically equivalent to and has been reproduced from CISPR 15:2000. It contains some changes to limits to protect local radio services.

View on Information Provider website

This resource does not cite any other resources.

AS/NZS CISPR 15:2002 Limits and methods of radio disturbance characteristics of electrical lighting and similar equipment

This resource does not CITE any other resources.



Table of Contents

- 1 Scope
- 2 Normative References
- 3 Definitions
- 4 Limits
- 4.1 Frequency Ranges
- 4.2 Insertion Loss
- 4.3 Disturbance Voltages
- 4.4 Radiated Electromagnetic Disturbances
- **5 Application Of The Limits**
- 5.1 General
- 5.2 Indoor Luminaires
- 5.3 Independent Auxiliaries Exclusively For Use With Lighting Equipment
- 5.4 Self-Ballasted Lamps
- 5.5 Outdoor Lighting Appliances
- 5.6 UV And IR Radiation Appliances
- **5.7 Transport Lighting**
- 5.8 Neon And Other Advertising Signs
- **5.9 Self-Contained Emergency Lighting Luminaires**
- 5.10 Replaceable Starters For Fluorescent Lamps
- **6 Operating Conditions For Lighting Equipment**

6.1 General 6.2 Lighting Equipment 6.3 Supply Voltage And Frequency **6.4 Ambient Conditions** 6.5 Lamps 6.6 Replaceable Starters 7 Method Of Insertion Loss Measurement 7.1 Circuits For The Measurement Of Insertion Loss 7.2 Measuring Arrangement And Procedure 7.3 Luminaire 7.4 Measurement Procedure 8 Method Of Measurement Of Disturbance Voltages 8.1 Measuring Arrangement And Procedure 8.2 Indoor And Outdoor Luminaires 8.3 Independent Light Regulating Devices 8.4 Independent Transformers And Convertors For Incandescent Lamps 8.5 Independent Ballasts For Fluorescent And Other Discharge Lamps 8.6 Self-Ballasted Lamps And Semi-Luminaires 8.7 UV And IR Radiation Appliances 8.8 Self-Contained Emergency Lighting Luminaires 8.9 Independent Starters And Igniters For Fluorescent And Other Discharge Lamps 9 Method Of Measurement Of Radiated Electromagnetic Disturbances 9.1 Measuring Arrangement And Procedure 9.2 Indoor And Outdoor Luminaires

9.3 Independent Convertors For Incandescent Lamps

- 9.4 Independent Ballasts For Fluorescent And Other Discharge Lamps
- 9.5 Self-Ballasted Lamps And Semi-Luminaires
- 9.6 UV And IR Radiation Appliances
- 9.7 Self-Contained Emergency Lighting Luminaires
- 10 Interpretation Of CISPR Radio Disturbance Limits
- 10.1 Significance Of A CISPR Limit
- 10.2 Tests
- 10.3 Statistical Method Of Evaluation
- 10.4 Banning Of Sales

Annex A (Normative) Electrical And Constructional Requirements For The Low-Capacitance Balance-To-Unbalance Transformer

Figures

Figure 1 Insertion Loss Measurement On Linear And U-Type Fluorescent Lamp Luminaires

Figure 2 Insertion Loss Measurement On Circular Fluorescent Lamp Luminaires

Figure 3 Insertion Loss Measurement On Luminaires For Single-Capped Fluorescent Lamps With Integrated Starter

Figure 4a Configuration Of Linear And U-Type Dummy Lamps

Figure 4b Configuration Of Circular Dummy Lamps

Figure 4c Dummy Lamp For 15 Mm Fluorescent Lamps

Figure 4d Dummy Lamp For 15 Mm Single-Capped Fluorescent Lamps

Figure 4e Dummy Lamp For Single-Capped Fluorescent Lamps, Linear-Shaped, Twin Tube, Tube Diameter 12 Mm

Figure 4f Dummy Lamp For Single-Capped Fluorescent Lamps, Linear-Shaped, Quad Tube, Diameter 12 Mm

Figure 5 Measuring Arrangements For An Independent Light Regulating Device, Transformer Or Convertor

Fi	αı	ırΔ	62	Lum	ina	irae
	yι	11 C	va	Luiii	IIIIa	1163

Figure 6b Independent Ballasts For Fluorescent And Other Discharge Lamps

Figure 6c Self-Ballasted Lamps

Figure 6 Measuring Arrangements

Figure 7 Conical Metal Housing For Self-Ballasted Fluorescent Lamps

Figure A.1 Isolation Test Configuration

Figure A.2a Balance-To-Unbalance Transformer Circuit

Figure A.2b Details Of Transformer Core Construction 36

Figure A.2c Details Of Transformer Core Construction

Figure A.2d Construction Of Transformer

Tables

Table 1 – Minimum Values Of Insertion Loss

Table 2a – Disturbance Voltage Limits At Mains Terminals

Table 2b – Disturbance Voltage Limits At Load And Control Terminals

Table 3 – Radiated Electromagnetic Disturbance Limits

Table 4 – Sample Size And Corresponding K Factor In A Non-Central T-Distribution

Print	<u>Save</u>	Email			
Feedba	ack				
• <u>P</u>	ontact rivacy prisclaim opyrigh	oolicy er			
Feedba	<u>ack</u>				