AS/NZS CISPR 14.1:2013
CISPR 14-1, Ed.5.2 (2011)

AS/NZS CISPR 14.1:2013

Australian/New Zealand Standard™

Electromagnetic compatibility—Requirements for household appliances, electric tools and similar apparatus

Part 1: Emission

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 31 May 2013 and on behalf of the Council of Standards New Zealand on 23 April 2013.
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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 or Standards New Zealand at the address shown on the back cover.

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Australian/New Zealand Standard™

Electromagnetic compatibility—Requirements for household appliances, electric tools and similar apparatus

Part 1: Emission

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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 CISPR 14.1:2010, *Electromagnetic Compatibility—Requirements for household appliances, electrical tools and similar apparatus*, Part 1: *Emission*.

The objective of this Standard is to establish requirements for the radio disturbance level of appliances whose main functions are performed by motors, switching or regulating devices, or by r.f. generators used in induction cooking appliances.

This Standard is identical with, and has been reproduced from CISPR 14-1, Ed.5.2 (2011), *Electromagnetic compatibility—Requirements for household appliances, electric tools and similar apparatus*, Part 1: *Emission*. Edition 5.2 of CISPR 14-1 incorporates Amendment 1 (2008) and Amendment 2 (2011). The amendments are indicated by marginal bars.

As this Standard is reproduced from an International Standard 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:

Reference to International Standard		*Australian/New Zealand Standard*	
CISPR		AS/NZS CISPR	
15 (2000)	Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment	15 (2002)	Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment (CISPR 15:2000, MOD)
16	Specification for radio disturbance and immunity measuring apparatus and methods	16	Specification for radio disturbance and immunity measuring apparatus and methods
16-1-1 (2003)	Part 1-1: Radio disturbance and immunity measuring apparatus—Measuring apparatus	16.1.1 (2004)	Part 1.1: Radio disturbance and immunity measuring apparatus—Measuring apparatus
16-1-2 (2003)	Part 1-2: Radio disturbance and immunity measuring apparatus—Ancillary equipment—Conducted disturbances	16.1.2 (2004)	Part 1.2: Radio disturbance and immunity measuring apparatus—Ancillary equipment—Conducted disturbances
16-1-3 (2004)	Part1-3: Radio disturbance and immunity measuring apparatus—Ancillary equipment—Disturbance power	16.1.3 (2004)	Part 1.3: Radio disturbance and immunity measuring apparatus—Ancillary equipment—Disturbance power
16-1-4 (2007)	Part 1-4: Radio disturbance and immunity measuring apparatus—Ancillary equipment—Radiated disturbances	16.1.4 (2009)	Part 1.4: Radio disturbance and immunity measuring apparatus—Ancillary equipment—Radiated disturbances
16-2-1 (2003)	Part: 2-1: Methods of measurement of disturbances and immunity—Conducted disturbance measurements	16.2.1 (2004)	Part 2.1: Methods of measurement of disturbances and immunity—Conducted disturbance measurements
16-2-2 (2003)	Part 2-2: Methods of measurement of disturbances and immunity—Measurement of disturbance power	16.2.2 (2004)	Part: 2.2: Methods of measurement of disturbances and immunity—Measurement of disturbance power

CISPR		AS/NZS CISPR	
16-4-2 (2003)	Part 4-2: Uncertainties, statistics and limit modelling—Uncertainty in EMC measurements	16.4.2 (2004)	Part 4.2: Uncertainties, statistics and limit modelling— Uncertainty in EMC measurements
IEC		AS/NZS	
60335	Household and similar electrical appliances—Safety	60335	Household and similar electrical appliances—Safety
60335-2-76	Part 2-76: Particular requirements for electric fence energizers	60335.2.76	Particular requirements for electric fence energizers (IEC 60335-2-76 Ed 2.1, MOD)
60598	Luminaires	60598	Luminaires
60598-2-4	Part 2-4: Particular requirements—Section 4: Portable general purpose luminaires	60598.2.4	Part 2.4: Particular requirements—Portable general purpose luminaires (IEC 60598-2-4, Ed. 2.0 (1997) MOD)

Only international 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 to which they apply. A ‘normative’ annex is an integral part of a Standard, whereas an ‘informative’ annex is only for information and guidance.

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INTRODUCTION

The intention of this standard is to establish uniform requirements for the radio disturbance level of the equipment contained in the scope, to fix limits of disturbance, to describe methods of measurement and to standardize operating conditions and interpretation of results.

AUSTRALIAN/NEW ZEALAND STANDARD

Electromagnetic compatibility—Requirements for household appliances, electric tools and similar apparatus

Part 1: Emission

1 Scope

1.1 This standard applies to the conduction and radiation of radio-frequency disturbances from appliances whose main functions are performed by motors, switching or regulating devices, or by r.f. generators used in induction cooking appliances.

It includes such equipment as: household electrical appliances, electric tools, regulating controls using semiconductor devices, motor-driven electro-medical apparatus, electric/ electronic toys, automatic dispensing machines as well as cine or slide projectors. Both mains powered appliances and battery powered appliances are included.

Also included in the scope of this standard are:

– separate parts of the above mentioned equipment such as motors, switching devices e.g. (power or protective) relays, however no emission requirements apply unless formulated in this standard.

Excluded from the scope of this standard are:

– apparatus for which all emission requirements in the radio frequency range are explicitly formulated in other IEC or CISPR standards;

NOTE 1 Examples are:

- luminaires, including portable luminaires for children, discharge lamps and other lighting devices: CISPR 15;
- audio and video equipment and electronic music instruments, other than toys: CISPR 13 and CISPR 20 (see also 7.3.5.4.2);
- mains communication devices, as well as baby surveillance systems: IEC 61000-3-8;
- equipment for generation and use of radio frequency energy for heating (other than induction cooking) and therapeutic purposes: CISPR 11;
- microwave ovens: CISPR 11 (but be aware of 1.3 on multifunction equipment);
- information technology equipment, e.g. home computers, personal computers, electronic copying machines: CISPR 22;
- electronic equipment to be used on motor vehicles: CISPR 12;
- radio controls, walkie-talkies and other types of radio-transmitters, also when used with toys;
- arc welding equipment: CISPR 11.

– regulating controls and equipment with regulating controls incorporating semiconductor devices with a rated input current of more than 25 A per phase;

– stand-alone power supplies.

NOTE 2 Toys powered by the supply system of a motor-powered vehicle, ship or aircraft are not covered by this standard.

NOTE 3 Until induction cooking appliances are removed from the scope of CISPR 11, either CISPR 11 or CISPR 14-1 may be chosen for compliance.

1.2 The frequency range covered is 9 kHz to 400 GHz.