AS/NZS CISPR 16.4.5:2013
CISPR/TR 16-4-5, Ed. 1.0 (2006)

AS/NZS CISPR 16.4.5:2013

Australian/New Zealand Standard™

Specification for radio disturbance and immunity measuring apparatus and methods

Part 4.5: Uncertainties, statistics and limit modelling—Conditions for the use of alternative test methods

STANDARDS Australia

STANDARDS NEW ZEALAND PAEREWA AOTEAROA

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.
This Standard was published on 20 June 2013.

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This Standard was issued in draft form for comment as DR AS/NZS CISPR 16.4.5.

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First published as AS/NZS CISPR 16.4.5:2013.

Jointly published by SAI Global Limited under licence from Standards Australia Limited, GPO Box 476, Sydney, NSW 2001 and by Standards New Zealand, Private Bag 2439, Wellington 6140.

ISBN 978 1 74342 505 3

PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee TE-003, Electromagnetic Interference.

The objective of this Standard is to specify a method to enable product committees to develop limits for alternative test methods, using conversions from established limits.

This Standard is identical with, and has been reproduced from CISPR/TR 16-4-5, Ed. 1.0 (2006). *Specification for radio disturbance and immunity measuring apparatus and methods*—Part 4-5. *Uncertainties, statistics and limit modelling—Conditions for the use of alternative test methods*.

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

(a) In the source text 'this part of CISPR 16-4' 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:

Reference to International Standard		*Australian/New Zealand Standard*	
CISPR		AS/NZS CISPR	
16	Specification for radio disturbance and immunity measuring apparatus and methods	16	Specification for radio disturbance and immunity measuring apparatus and methods
16-4-1 (2003)	Part 4-1: Uncertainties, statistics and limit modelling—Uncertainties in standardized EMC tests	16.4.1 (2004)	Part 4.1: Uncertainties, statistics and limit modelling—Uncertainties in standardized EMC tests
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

Only international references that have been adopted as Australian or Australian/New Zealand Standards have been listed.

The term 'informative' has been used in this Standard to define the application of the annex to which it applies. An 'informative' annex is only for information and guidance.

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Part 4.5:
Uncertainties, statistics and limit modelling—Conditions for the use of alternative test methods

1 Scope

This part of CISPR 16-4 specifies a method to enable product committees to develop limits for alternative test methods, using conversions from established limits. This method is generally applicable for all kinds of disturbance measurements, but focuses on radiated disturbance measurements (i.e. field strength), for which several alternative methods are presently specified. These limits development methods are intended for use by product committees and other groups responsible for defining emissions limits in situations where it is decided to use alternative test methods and the associated limits in product standards.

2 Normative references

IEC 60050-161, *International Electrotechnical Vocabulary (IEV) – Chapter 161: Electromagnetic compatibility*

CISPR 16-4-1:2003, *Specification for radio disturbance and immunity measuring apparatus and methods – Part 4-1: Uncertainties, statistics and limit modelling – Uncertainty in standardized EMC tests*

CISPR 16-4-2:2003, *Specification for radio disturbance and immunity measuring apparatus and methods – Part 4-2: Uncertainties, statistics and limit modelling – Uncertainty in EMC measurements*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 60050-161 and the following apply.

3.1
established test method
test method described in a basic standard with established emissions limits defined in corresponding product or generic standards. An established test method consists of a specific test procedure, a specific test set-up, a specific test facility or site, and an established emissions limit

NOTE The following test methods have been considered to be established test methods in CISPR:

– conducted disturbance measurements: test method defined in CISPR 16-2-1:2003, Clause 7;

– radiated disturbance measurements up to 1 GHz: the test method defined in CISPR 16-2-3, 7.2.1;

– radiated disturbance measurements up to 18 GHz: the test method defined in CISPR 16-2-3, 7.3.

3.2
alternative test method
test method described in a basic standard without established emissions limits. The alternative test method is designed for the same purpose as the established test method. An alternative test method consists of a specific test procedure, a specific test set-up, a specific test facility or site, and a derived emissions limit that was determined by the application of the proposed method stated in this document