

AS/NZS CISPR 16.2.3:2020



Australian/New Zealand Standard™

Specification for radio disturbance and immunity measuring apparatus and methods

Part 2.3: Methods of measurement of disturbances and immunity —
Radiated disturbance measurements (CISPR 16-2-3:2016+AMD1:2019
CSV (ED 4.1) MOD)



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AS/NZS CISPR 16.2.3:2020

This Joint Australian/New Zealand Standard™ was prepared by Joint Technical Committee TE-003, Electromagnetic Compatibility. It was approved on behalf of the Council of Standards Australia on 30 July 2020 and by the New Zealand Standards Approval Board on 5 August 2020.

This Standard was published on 21 August 2020.

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ISBN 978 1 76072 950 9

Australian/New Zealand Standard™

Specification for radio disturbance and immunity measuring apparatus and methods

**Part 2.3: Methods of measurement of
disturbances and immunity — Radiated
disturbance measurements (CISPR 16-2-
3:2016+AM1:2019 CSV (ED 4.1) MOD)**

Originated as part of AS/NZS 1052.2:1999.
Previous edition AS/NZS CISPR 16.2.3:2012.
Third edition 2020.



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Preface

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee TE-003, Electromagnetic Compatibility, to supersede AS/NZS CISPR 16.2.3:2012, *Specification for radio disturbance and immunity measuring apparatus and methods, Part 2.3: Methods of measurement of disturbances and immunity — Radiated disturbance measurements* and its Amendment 1 (2015).

The objective of this document is to specify the methods of measurement of radiated disturbance phenomena in the frequency range of 9 kHz to 18 GHz. The aspects of measurement uncertainty are specified in AS/NZS CISPR 16.4.1 and AS/NZS CISPR 16.4.2.

This document is an adoption with national modifications, and has been reproduced from CISPR 16-2-3:2016+AMD1:2019 CSV (ED 4.1) *Specification for radio disturbance and immunity measuring apparatus and methods, Part 2-3: Methods of measurement of disturbances and immunity — Radiated disturbance measurements*. The modifications are additional requirements and are set out in Appendix ZZ, which has been added at the end of the source text.

Appendix ZZ lists the variations to the normative references list for the application of this document in Australia and New Zealand.

This document is structured as follows:

- (a) Preface.
- (b) CISPR 16-2-3:2016+AMD1: 2019 (unedited from the contents page to the final clause of the source document).
- (c) Appendix ZZ—Australian/New Zealand variations to the source document.

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The terms “normative” and “informative” are used in Standards to define the application of the appendices or annexes to which they apply. A “normative” appendix or annex is an integral part of a Standard, whereas an “informative” appendix or annex is only for information and guidance.

NOTES

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INTERNATIONAL ELECTROTECHNICAL COMMISSION
INTERNATIONAL SPECIAL COMMITTEE ON RADIO INTERFERENCE

**SPECIFICATION FOR RADIO DISTURBANCE AND IMMUNITY
MEASURING APPARATUS AND METHODS –**

**Part 2-3: Methods of measurement of disturbances and immunity –
Radiated disturbance measurements**

FOREWORD

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This Consolidated version of CISPR 16-2-3 bears the edition number 4.1. It consists of the fourth edition (2016-09) [documents CISPR/A/1176A/FDIS and CISPR/A/1182/RVD] and its amendment 1 (2019-06) [documents CISPR/A/1278/FDIS and CISPR/A/1283/RVD]. The technical content is identical to the base edition and its amendment.

This Final version does not show where the technical content is modified by amendment 1. A separate Redline version with all changes highlighted is available in this publication.

International Standard CISPR 16-2-3 has been prepared by CISPR subcommittee A: Radio-interference measurements and statistical methods.

This fourth edition constitutes a technical revision.

This edition includes the following significant technical change with respect to the previous edition: addition of content on correction of the electric field strength to account for phase centre of log-periodic dipole array antennas.

It has the status of a basic EMC publication in accordance with IEC Guide 107, *Electromagnetic compatibility – Guide to the drafting of electromagnetic compatibility publications*.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts of the CISPR 16 series, published under the general title *Specification for radio disturbance and immunity measuring apparatus and methods*, can be found on the IEC website.

The committee has decided that the contents of the base publication and its amendment will remain unchanged until the stability date indicated on the IEC web site under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
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- replaced by a revised edition, or
- amended.

IMPORTANT – The 'colour inside' logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this document using a colour printer.

INTRODUCTION

Amendment of CISPR 16-2-3 regarding EUT volume specifications for radiated disturbance measurements depending on test method and on measurement distance

SPECIFICATION FOR RADIO DISTURBANCE AND IMMUNITY MEASURING APPARATUS AND METHODS –

Part 2-3: Methods of measurement of disturbances and immunity – Radiated disturbance measurements

1 Scope

This part of CISPR 16 specifies the methods of measurement of radiated disturbance phenomena in the frequency range of 9 kHz to 18 GHz. The aspects of measurement uncertainty are specified in CISPR 16-4-1 and CISPR 16-4-2.

NOTE In accordance with IEC Guide 107 [13]¹, CISPR 16-2-3 is a basic EMC publication for use by product committees of the IEC. As stated in Guide 107, product committees are responsible for determining the applicability of the EMC standard. CISPR and its subcommittees are prepared to co-operate with product committees in the evaluation of the value of particular EMC tests for specific products.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

CISPR 14-1:2016, *Electromagnetic compatibility – Requirements for household appliances, electric tools and similar apparatus – Part 1: Emission*

CISPR 16-1-1, *Specification for radio disturbance and immunity measuring apparatus and methods – Part 1-1: Radio disturbance and immunity measuring apparatus – Measuring apparatus*

CISPR 16-1-2:2014, *Specification for radio disturbance and immunity measuring apparatus and methods – Part 1-2: Radio disturbance and immunity measuring apparatus – Coupling devices for conducted disturbance measurements*

CISPR 16-1-4:2018, *Specification for radio disturbance and immunity measuring apparatus and methods – Part 1-4: Radio disturbance and immunity measuring apparatus – Antennas and test sites for radiated disturbance measurements*

CISPR 16-2-1:2014, *Specification for radio disturbance and immunity measuring apparatus and methods – Part 2-1: Methods of measurement of disturbances and immunity – Conducted disturbance measurements*

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

¹ Numbers in square brackets refer to the Bibliography.