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Part 3: CISPR technical reports

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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SPECIFICATION FOR RADIO DISTURBANCE AND IMMUNITY MEASURING APPARATUS AND METHODS –

Part 3: CISPR technical reports

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CISPR 16-3, which is a Technical Report, has been prepared by CISPR subcommittee A: Radio-interference measurements and statistical methods.

This fourth edition cancels and replaces the third edition published in 2015. This edition constitutes a technical revision.

The main technical change with respect to the previous edition consists of the addition of detailed background information on the large loop antenna system (LLAS) and its measurement method in general and on the models and equations which apply to calculate the reference validation factor and conversion factor curves.

The text of this Technical Report is based on the following documents:

Draft TR	Report on voting
CIS/A/1298/DTR	CIS/A/1310/RVDTR

Full information on the voting for the approval of this Technical Report can be found in the report on voting indicated in the above table.

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

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

The committee has decided that the contents of the base publication and its amendments 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,
- withdrawn,
- 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.

SPECIFICATION FOR RADIO DISTURBANCE AND IMMUNITY MEASURING APPARATUS AND METHODS –

Part 3: CISPR technical reports

1 Scope

This part of CISPR 16 is a collection of technical reports (Clause 4) that serve as background and supporting information for the various other standards and technical reports in CISPR 16 series. In addition, background information is provided on the history of CISPR, as well as a historical reference on the measurement of interference power from household and similar appliances in the VHF range (Clause 5).

Over the years, CISPR prepared a number of recommendations and reports that have significant technical merit but were not generally available. Reports and recommendations were for some time published in CISPR 7 and CISPR 8.

At its meeting in Campinas, Brazil, in 1988, CISPR subcommittee A agreed on the table of contents of CISPR 16-3, and to publish the reports for posterity by giving the reports a permanent place in CISPR 16-3.

With the reorganization of CISPR 16 in 2003, the significance of CISPR limits material was moved to CISPR 16-4-3, whereas recommendations on statistics of disturbance complaints and on the report on the determination of limits were moved to CISPR 16-4-4:2007. The contents of Amendment 1 (2002) of CISPR 16-3:2000 were moved to CISPR 16-4-1.

NOTE As a consolidated collection of independent technical reports, this document ~~may~~ can contain symbols that have differing meanings from one clause to the next. Attempts have been made to minimize this to the extent possible at the time of editing.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

CISPR 11:2009, *Industrial, scientific and medical equipment – Radio-frequency disturbance characteristics – Limits and methods of measurement*[1]

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*

IEC 60050-161:1990, *International Electrotechnical Vocabulary (IEV) – Part 161: Electromagnetic compatibility*

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1 5th edition (2009). This 5th edition has been replaced in 2016 by a 6th Edition CISPR 11, Industrial, scientific and medical equipment – Radio-frequency disturbance characteristics – Limits and methods of measurement.

IEC 60050-300:2001, *International Electrotechnical Vocabulary (IEV) – Electrical and electronic measurements and measuring instruments – Part 311: General terms relating to measurements – Part 312: General terms relating to electrical measurements – Part 313: Types of electrical measuring instruments – Part 314: Specific terms according to the type of instrument*

ISO/IEC Guide 99:2007, *International vocabulary of metrology – Basic and general concepts and associated terms (VIM)*

CISPR TR 16-3

Edition 4.0 2020-10

TECHNICAL REPORT

colour inside

INTERNATIONAL SPECIAL COMMITTEE ON RADIO INTERFERENCE

Specification for radio disturbance and immunity measuring apparatus and methods –
Part 3: CISPR technical reports



CISPR TR 16-3:2020-10(en)

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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SPECIFICATION FOR RADIO DISTURBANCE AND IMMUNITY MEASURING APPARATUS AND METHODS –

Part 3: CISPR technical reports

FOREWORD

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The main task of IEC technical committees is to prepare International Standards. However, a technical committee may propose the publication of a technical report when it has collected data of a different kind from that which is normally published as an International Standard, for example "state of the art."

CISPR 16-3, which is a Technical Report, has been prepared by CISPR subcommittee A: Radio-interference measurements and statistical methods.

This fourth edition cancels and replaces the third edition published in 2015. This edition constitutes a technical revision.

The main technical change with respect to the previous edition consists of the addition of detailed background information on the large loop antenna system (LLAS) and its measurement method in general and on the models and equations which apply to calculate the reference validation factor and conversion factor curves.

The text of this Technical Report is based on the following documents:

Draft TR	Report on voting
CIS/A/1298/DTR	CIS/A/1310/RVDTR

Full information on the voting for the approval of this Technical Report can be found in the report on voting indicated in the above table.

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

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

The committee has decided that the contents of the base publication and its amendments 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,
- withdrawn,
- 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.

SPECIFICATION FOR RADIO DISTURBANCE AND IMMUNITY MEASURING APPARATUS AND METHODS –

Part 3: CISPR technical reports

1 Scope

This part of CISPR 16 is a collection of technical reports (Clause 4) that serve as background and supporting information for the various other standards and technical reports in CISPR 16 series. In addition, background information is provided on the history of CISPR, as well as a historical reference on the measurement of interference power from household and similar appliances in the VHF range (Clause 5).

Over the years, CISPR prepared a number of recommendations and reports that have significant technical merit but were not generally available. Reports and recommendations were for some time published in CISPR 7 and CISPR 8.

At its meeting in Campinas, Brazil, in 1988, CISPR subcommittee A agreed on the table of contents of CISPR 16-3, and to publish the reports for posterity by giving the reports a permanent place in CISPR 16-3.

With the reorganization of CISPR 16 in 2003, the significance of CISPR limits material was moved to CISPR 16-4-3, whereas recommendations on statistics of disturbance complaints and on the report on the determination of limits were moved to CISPR 16-4-4:2007. The contents of Amendment 1 (2002) of CISPR 16-3:2000 were moved to CISPR 16-4-1.

NOTE As a consolidated collection of independent technical reports, this document can contain symbols that have differing meanings from one clause to the next. Attempts have been made to minimize this to the extent possible at the time of editing.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

CISPR 11:2009, *Industrial, scientific and medical equipment – Radio-frequency disturbance characteristics – Limits and methods of measurement*[1]

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*

IEC 60050-161:1990, *International Electrotechnical Vocabulary (IEV) – Part 161: Electromagnetic compatibility*

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1 5th edition (2009). This 5th edition has been replaced in 2016 by a 6th Edition CISPR 11, Industrial, scientific and medical equipment – Radio-frequency disturbance characteristics – Limits and methods of measurement.

IEC 60050-300:2001, *International Electrotechnical Vocabulary (IEV) – Electrical and electronic measurements and measuring instruments – Part 311: General terms relating to measurements – Part 312: General terms relating to electrical measurements – Part 313: Types of electrical measuring instruments – Part 314: Specific terms according to the type of instrument*

ISO/IEC Guide 99:2007, *International vocabulary of metrology – Basic and general concepts and associated terms (VIM)*