



Sisaldab värvilisi lehekülgi  
Colour inside

**Specification for radio disturbance and immunity  
measuring apparatus and methods -  
Part 1-6: Radio disturbance and immunity measuring  
apparatus - EMC antenna calibration  
(CISPR 16-1-6:2014 + CISPR 16-1-6:2014/A1:2017 +  
CISPR 16-1-6:2014/AMD2:2022)**

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

See Eesti standard EVS-EN 55016-1-6:2015+A1+A2:2022 sisaldab Euroopa standardi EN 55016-1-6:2015 ja selle muudatuste A1:2017 ja A2:2022 ingliskeelset teksti.	This Estonian standard EVS-EN 55016-1-6:2015+A1+A2:2022 consists of the English text of the European standard EN 55016-1-6:2015 and its amendments A1:2017 and A2:2022.
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English Version

Specification for radio disturbance and immunity measuring  
apparatus and methods -  
Part 1-6: Radio disturbance and immunity measuring apparatus -  
EMC antenna calibration  
(CISPR 16-1-6:2014 + CISPR 16-1-6:2014/A1:2017 + CISPR  
16-1-6:2014/AMD2:2022)

Spécifications des méthodes et des appareils de mesure  
des perturbations radioélectriques et de l'immunité aux  
perturbations radioélectriques -

Partie 1-6: Appareils de mesure des perturbations  
radioélectriques et de l'immunité aux perturbations  
radioélectriques - Étalonnage des antennes CEM  
(CISPR 16-1-6:2014 + CISPR 16-1-6:2014/A1:2017 +  
CISPR 16-1-6:2014/AMD2:2022)

Anforderungen an Geräte und Einrichtungen sowie  
Festlegung der Verfahren zur Messung der hochfrequenten  
Störaussendung (Funkstörungen) und Störfestigkeit -

Teil 1-6: Geräte und Einrichtungen zur Messung der  
hochfrequenten Störaussendung (Funkstörungen) und  
Störfestigkeit - Kalibrierung von Antennen für EMV-  
Messungen  
(CISPR 16-1-6:2014 + CISPR 16-1-6:2014/A1:2017 +  
CISPR 16-1-6:2014/AMD2:2022)

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European Committee for Electrotechnical Standardization  
Comité Européen de Normalisation Electrotechnique  
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**CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels**

## Foreword

The text of document CISPR/A/1087/FDIS, future edition 1 of CISPR 16-1-6, prepared by CISPR SC A "Radiointerference measurements and statistical methods" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 55016-1-6:2015.

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CISPR 16-1-1:2010	NOTE	Harmonized as EN 55016-1-1:2010 (not modified).
CISPR 16-2-3:2010	NOTE	Harmonized as EN 55016-2-3:2010 (not modified).
CISPR 16-4-2:2011	NOTE	Harmonized as EN 55016-4-2:2011 (not modified).
CISPR 25:2008	NOTE	Harmonized as EN 55025:2008 (not modified).
IEC 61000-4-22:2010	NOTE	Harmonized as EN 61000-4-22:2010 (not modified).
IEC 61169-16:2006	NOTE	Harmonized as EN 61169-16:2007 (not modified).
ISO/IEC 17043:2010	NOTE	Harmonized as EN ISO/IEC 17043:2010 (not modified).

**A1 Amendment A1 European foreword**

The text of document CISPR/A/1195/FDIS, future CISPR 16-1-6:2014/A1, prepared by CISPR SC A "Radio-interference measurements and statistical methods" of CISPR "International special committee on radio interference" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 55016-1-6:2015/A1:2017.

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# INTERNATIONAL STANDARD

## NORME INTERNATIONALE



INTERNATIONAL SPECIAL COMMITTEE ON RADIO INTERFERENCE  
COMITÉ INTERNATIONAL SPÉCIAL DES PERTURBATIONS RADIOÉLECTRIQUES

BASIC EMC PUBLICATION  
PUBLICATION FONDAMENTALE EN CEM

**Specification for radio disturbance and immunity measuring apparatus and methods –**

**Part 1-6: Radio disturbance and immunity measuring apparatus – EMC antenna calibration**

**Spécification des méthodes et des appareils de mesure des perturbations radioélectriques et de l'immunité aux perturbations radioélectriques –**

**Partie 1-6: Appareils de mesure des perturbations radioélectriques et de l'immunité aux perturbations radioélectriques – Étalonnage des antennes CEM**



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INTERNATIONAL ELECTROTECHNICAL COMMISSION  
INTERNATIONAL SPECIAL COMMITTEE ON RADIO INTERFERENCE

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

**Part 1-6: Radio disturbance and immunity measuring apparatus –  
EMC antenna calibration**

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International Standard CISPR 16-1-6 has been prepared by CISPR subcommittee A: Radio-interference measurements and statistical methods.

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

The text of this standard is based on the following documents:

FDIS	Report on voting
CISPR/A/1087/FDIS	CISPR/A/1098/RVD

Full information on the voting for the approval of this standard 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 CISPR 16 series, 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 this publication 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

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## AMENDMENT A1 FOREWORD

This amendment has been prepared by CISPR subcommittee A: Radio-interference measurements and statistical methods, of IEC technical committee CISPR: International special committee on radio interference.

The text of this amendment is based on the following documents:

FDIS	Report on voting
CISPR/A/1195/FDIS	CISPR/A/1204/RVD

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

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**A<sub>2</sub>** AMENDMENT A2 FOREWORD

Amendment 2 to CISPR 16-1-6:2014 has been prepared by subcommittee CISPR A: Radio-interference measurements and statistical methods, of IEC technical committee CISPR: International special committee on radio interference.

The text of this Amendment is based on the following documents:

Draft	Report on voting
CIS/A/1362/FDIS	CIS/A/1365/RVD

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this Amendment is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at [www.iec.ch/members\\_experts/refdocs](http://www.iec.ch/members_experts/refdocs). The main document types developed by IEC are described in greater detail at [www.iec.ch/standardsdev/publications/](http://www.iec.ch/standardsdev/publications/).

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

### Part 1-6: Radio disturbance and immunity measuring apparatus – EMC antenna calibration

#### 1 Scope

This part of CISPR 16 provides procedures and supporting information for the calibration of antennas for determining antenna factors (AF) that are applicable to antennas intended for use in radiated disturbance measurements.

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

The AF of an antenna is influenced by nearby surroundings and by its position in space relative to the radiating source. This standard focuses on antenna calibrations that provide the AF in a free-space environment in the direction of the boresight of the antenna. The frequency range addressed is 9 kHz to 18 GHz. The relevant antenna types covered in this standard are monopole, loop, dipole, biconical, log-periodic dipole-array (LPDA), hybrid and horn antennas.

Guidance is also provided on measurement uncertainties associated with each calibration method and configuration, and the test instrumentation used.

#### 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 16-1-2, *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 16-1-4:2019, *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 16-1-5:2014, *Specification for radio disturbance and immunity measuring apparatus and methods – Part 1-5: Radio disturbance and immunity measuring apparatus – Antenna calibration sites and reference test sites for 5 MHz to 18 GHz*

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

ISO/IEC Guide 98-3:2008, *Uncertainty of measurement – Part 3: Guide to the expression of uncertainty in measurement (GUM:1995)*