SLOVENSKI STANDARD
SIST EN 55016-1-4:2011/A2:2017

01-september-2017

Specifikacija merilnih naprav in metod za merjenje radiofrekvenčnih motenj in odpornosti - 1-4. del: Merilne naprave za merjenje radiofrekvenčnih motenj in odpornosti - Antene in preskuševališča za meritve sevanih motenj - Dopolnilo A2

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

Anforderungen an Geräte und Einrichtungen sowie Festlegung der Verfahren zur Messung der hochfrequenten Störaussendung (Funkstörungen) und Störfestigkeit – Teil 1-4: Geräte und Einrichtungen zur Messung der hochfrequenten Störaussendung (Funkstörungen) und Störfestigkeit – Antennen und Messplätze für Messungen der gestrahlten Störaussendung

Spécifications des méthodes et des appareils de mesure des perturbations radioélectriques et de l'immunité aux perturbations radioélectriques - Partie 1-4: Appareils de mesure des perturbations radioélectriques et de l'immunité aux perturbations radioélectriques - Antennes et emplacements d'essai pour les mesures des perturbations rayonnées

Ta slovenski standard je istoveten z: **EN 55016-1-4:2010/A2:2017**

ICS:

17.240	Merjenje sevanja	Radiation measurements
33.100.20	Imunost	Immunity

SIST EN 55016-1-4:2011/A2:2017 **en**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 55016-1-4:2010/A2

June 2017

ICS 33.100.10; 33.100.20

English Version

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 16-1-4:2010/A2:2017)

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This amendment A2 modifies the European Standard EN 55016-1-4:2010; it was approved by CENELEC on 2017-02-23. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this amendment the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CENELEC member.

This amendment exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

European foreword

The text of document CISPR/A/1194/FDIS, future CISPR 16-1-4:2010/A2, prepared by SC A “Radio interference measurements and statistical methods" of IEC/TC CISPR “International special committee on radio interference” was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 55016-1-4:2010/A2:2017.

The following dates are fixed:

• latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	2017-12-16
• latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2020-06-16

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC [and/or CEN] shall not be held responsible for identifying any or all such patent rights.

Endorsement notice

The text of the International Standard CISPR 16-1-4:2010/A2:2017 was approved by CENELEC as a European Standard without any modification.

Annex ZA
(normative)
Normative references to international publications with their corresponding European publications

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.

NOTE 1 When an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

Publication	Year	Title	EN/HD	Year
CISPR 16-1-6	-	Specification for radio disturbance and immunity measuring apparatus and methods -- Part 1-6: Radio disturbance and immunity measuring apparatus - EMC-antenna calibration	EN 55016-1-6	-
+ A1	-		+ FprA1	-
CISPR 16-2-3	2010	Specification for radio disturbance and immunity measuring apparatus and methods -- Part 2-3: Methods of measurement of disturbances and immunity - Radiated disturbance measurements	EN 55016-2-3	2010
-	-		+ AC	2013

CISPR 16-1-4

Edition 3.0 2017-01

INTERNATIONAL STANDARD

NORME INTERNATIONALE

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

BASIC EMC PUBLICATION
PUBLICATION FONDAMENTALE EN CEM

AMENDMENT 2
AMENDEMENT 2

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

Spécifications des méthodes et des appareils de mesure des perturbations radioélectriques et de l'immunité aux perturbations radioélectriques – Partie 1-4: Appareils de mesure des perturbations radioélectriques et de l'immunité aux perturbations radioélectriques – Antennes et emplacements d'essai pour les mesures des perturbations rayonnées

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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/1194/FDIS	CISPR/A/1203/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.

The committee has decided that the contents of this amendment and the base publication will remain unchanged until the stability date indicated on the IEC website 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.

2 Normative references

Replace, in the existing list, the reference to CISPR 16-2-3 by the following:

CISPR 16-2-3:2010, *Specification for radio disturbance and immunity measuring apparatus and methods – Part 2-3: Methods of measurement of disturbances and immunity – Radiated disturbance measurements*

Add, to the existing list, the following new normative reference:

CISPR 16-1-6:2014, *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/AMD1:2016

3.1 Terms and definitions

Add, after the existing 3.1.27 added by Amendment 1, the following the new term and definition:

3.1.28
mechanical boresight
direction of the main beam, which is defined by the geometric properties of the antenna

3.2 Abbreviations

Add to the existing list the following new abbreviations:

RX Receive

TX Transmit

4.6 Frequency range 1 GHz to 18 GHz

Add, before the existing text, the following new title:

4.6.1 General

*Delete, in the third sentence of the first paragraph of the existing subclause, the latter half of the sentence starting with "*or provisions shall be made*…"*

Add at the end of the existing 4.6 the following new subclauses:

4.6.2 Receive antenna

4.6.2.1 General

The receive antenna shall be linearly polarized and shall be the same type as used for EUT emission measurements.

Some antenna models may have different versions with possibly different patterns and users are advised to verify this.

NOTE 1 "Antenna type" means a shape or a kind of antenna, for example horn and LPDA antenna.

NOTE 2 "Antenna model" means the specified manufacturer's model number.

NOTE 3 "Version" means the specified manufacturer's revision number, if applicable, of a particular antenna model number.

4.6.2.2 Receive antenna radiation pattern

E-plane and *H*-plane radiation patterns shall be measured with reference to the boresight.

The measurand is the antenna pattern in dB and as represented on the polar chart in Figure 43.

The normalization of this chart is to 0 dB.

The 0º angle shall be equal to the mechanical boresight.

The *E*-plane and *H*-plane radiation patterns of each individual antenna shall be recorded over the frequency range of the antenna with a step size of 500 MHz or smaller according to Annex I of CISPR 16-1-6:2014/AMD1:2016.

Type test results, including statistical data, supplied by the manufacturer may be used to provide evidence that the receive antenna radiation pattern requirements are met. Service measures shall be taken to assure pattern stability during the antenna life.