CISPR 13

Edition 5.0 2015-01

INTERNATIONAL STANDARD

NORME INTERNATIONALE

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

AMENDMENT 1
AMENDEMENT 1

Sound and television broadcast receivers and associated equipment – Radio disturbance characteristics – Limits and methods of measurement

Récepteurs de radiodiffusion et de télévision et équipements associés – Caractéristiques des perturbations radioélectriques – Limites et méthodes de mesure

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

COMMISSION ELECTROTECHNIQUE INTERNATIONALE

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FOREWORD

This amendment has been prepared by CISPR subcommittee I: Electromagnetic compatibility of information technology equipment, multimedia equipment and receivers.

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

FDIS	Report on voting
CIS/I/491/FDIS	CIS/I/499/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 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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- replaced by a revised edition, or
- amended.

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2 Normative references

Add the following new reference to the existing list:

CISPR 16-4-2:2011, *Specification for radio disturbance and immunity measuring apparatus and methods – Part 4-2: Uncertainties, statistics and limit modelling – Measurement instrumentation uncertainty*

3.1 Terms and definitions

Add, after the existing definition 3.1.6, the new term and new definition as follows:

3.1.7
audio/video player integrated within a television receiver
subsystem intended for playback of audio and/or visual information from external, inserted or attached media, which has been combined with a television receiver to form an integrated appliance

4.1 General

Add, at the end of the existing text, the following new paragraph:

An integrated audio/video player of a television receiver is deemed to comply with the emission requirements when it meets the provisions of the relevant clauses for television receivers with the audio/video player function in operation.

Table 2 – Limits of disturbance voltage at the antenna terminals

Replace the existing text in the second line, first column by the following new text:

Television receivers, video recorders, DAB receivers[d] and PC tuner cards working in channels between 30 MHz and 1 GHz

Add, after the existing footnote to table [c]*, the following new table footnote:*

[d] For DAB receivers operating in the L-Band (1 452 MHz à 1 492 MHz) the limit for the fundamental frequency of the local oscillator is equal to the 54 dB(μV) limit given for harmonics of the local oscillator.

For car DAB receiver the same limits apply.

4.6 Radiated disturbances

Replace the existing table of this subclause by the following new table and add, at the end of the subclause, the new note as follows:

Table 5 – Limits of radiated disturbances at 3 m distance

Equipment type	Source	Frequency MHz	Limit dB(μV/m) Quasi-peak [a, c, d]		Limit dB(μV/m) RMS-average [a, b, c, d]	
Television receivers, video recorders, DAB receivers (band III) [e] and PC tuner cards	Local oscillator	≤1 000	Fundamental	57 [a]	Fundamental	57[a]
		30 to 300	Harmonics	52	Harmonics	52
		300 to 1 000	Harmonics	56	Harmonics	56
	Other	30 to 230		40		40
		230 to 1 000		47		47
Television and sound receivers for broadcast satellite transmissions (except outdoor units) and DAB receiver (L-Band) , Infrared remote control units and Infrared headphone systems	Other	30 to 230		40		40
		230 to 1 000		47		47
Frequency modulation sound receivers and PC tuner cards	Local oscillator	≤1 000	Fundamental	60	Fundamental	60
		30 to 300	Harmonics	52	Harmonics	52
		300 to 1 000	Harmonics	56	Harmonics	56
	Other	30 to 230		40		40
		230 to 1 000		47		47

[a] In Japan: 57 dB(μV/m) is relaxed to 66 dB(μV/m) for operating channels <300 MHz and to 70 dB(μV/m) for operating channels >300 MHz.

[b] The RMS-average limits can be applied as an alternative to quasi-peak limits.

[c] It is allowed to measure at 10 m distance using 3 m limits minus 10 dB.

[d] The maximum size of the EUT shall be within the test volume defined during NSA test site validation.

[e] The limit for other disturbances applies also for fundamental and harmonics disturbances from DAB receiver operating in band III.

NOTE For car radio receivers and for LW, MW and SW AM broadcast receivers, no radiation limits apply.

NOTE No limits for radiated disturbances are defined in the frequency range 150 kHz to 30 MHz. Guidance to measure the magnetic field component can be found in IEC PAS 62825.

5.1 General

Add, after the existing second paragraph, the following new paragraphs:

The output terminals of audio amplifiers shall be terminated with a resistive load equal to the rated load impedance. In case the rated load impedance has a certain range, a value of the rated load for which the equipment under test attains maximum power shall be used.

The level of the audio output signal shall be adjusted by the volume control to be 1/8 of the rated output power for each output. The setting of the other controls shall be in middle or neutral position.

An infrared remote control is considered as a part of the main unit and tested together. Remote controls marketed separately are only tested on radiated disturbances (Table 5).

5.2 Test signals

Delete the last existing paragraph of this subclause.

5.3.3 Sound receivers

Delete the third and fourth existing paragraphs of this subclause.

5.3.5 Audio amplifiers

Delete the last four existing paragraphs of this subclause.

5.7.3 Disposition of the equipment under test

Replace the first existing paragraph of this subclause by the following new paragraph:

The equipment under test shall be placed on a support of non-metallic material, the height of which shall be 0,8 m above the reference ground plane. Where practical, the rear of the equipment under test should be flush with the rear of the table. The equipment under test shall be rotatable in a horizontal plane.

Add, after the first paragraph, the following new paragraph:

The EUT shall be arranged in the most compact practical arrangement within the test volume. The central point of the arrangement shall be positioned at the centre of the turntable. The measurement distance is the shortest horizontal distance between an imaginary circular periphery just encompassing this arrangement, and the calibration point of the antenna. See Figure 14.

Replace the third existing paragraph of this subclause by the following new paragraph:

The mains cable shall be vertically routed to the mains supply socket, with the excess length folded back and forth parallel to the lead so as to form a horizontal bundle with a length between 0,3 m and 0,4 m at the mains-plug end.

Add, after the third paragraph, the following new paragraph:

If the length of the mains port input cable is less than 0,8 m (e.g. power supplies integrated in the mains plug), an extension cable shall be used such that the mains plug and external power supply unit if applicable, is placed on the measurement table. The extension cable shall have similar characteristics to the mains cable (including the number of conductors and the presence of ground connection). The extension cable shall be treated as part of the mains cable.

Add, before the existing Figure 1, the following new clause:

7 Measurement uncertainty

The measurement instrumentation uncertainty shall be calculated in accordance with CISPR 16-4-2 and reported. The measurement instrumentation uncertainty shall not be taken

into account in the determination of compliance. Refer to CISPR TR 16-4-3 for guidance on the applicability of the limits to series produced equipment.

Figure 14 – Open-field measurement at 3 m distance (see 5.7.3)

Replace the existing figure by the following new figure:

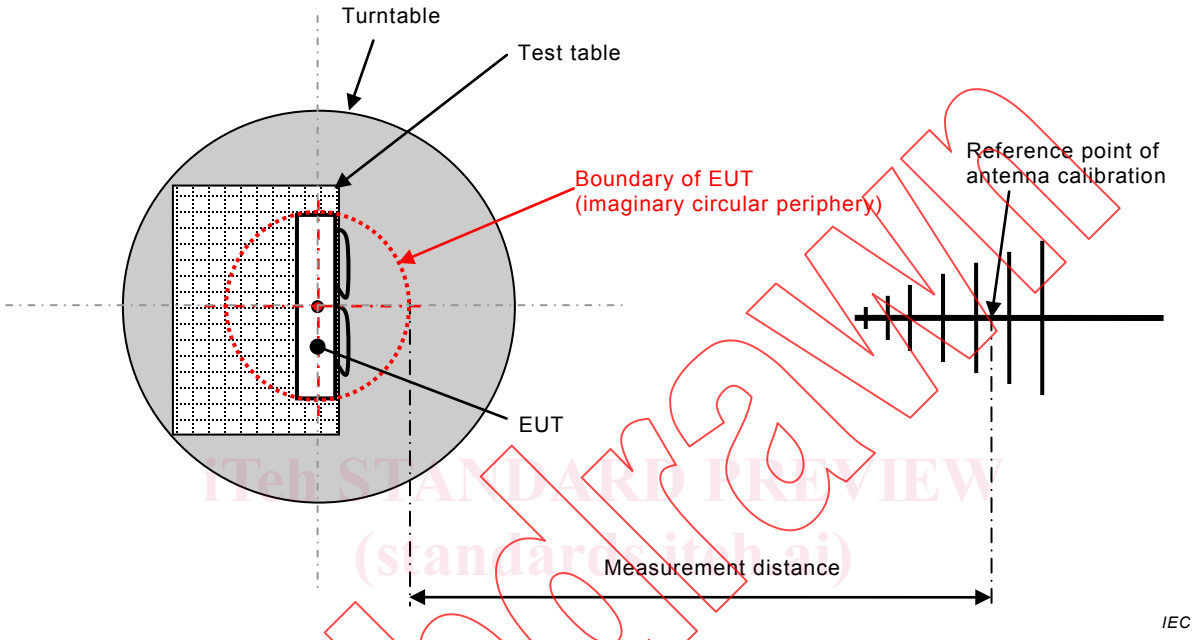

Figure 14 – Open-field measurement at 3 m distance (see 5.7.3)

Bibliography

Add the following new reference to the existing list:

IEC PAS 62825:2013, *Methods of measurement and limits for radiated disturbances from plasma display panel TVs in the frequency range 150 kHz to 30 MHz*

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AVANT-PROPOS

Le présent amendement a été établi par le sous-comité I du CISPR: Compatibilité électromagnétique des matériels de traitement de l'information, multimédia et récepteurs.

Le texte de cet amendement est issu des documents suivants:

FDIS	Rapport de vote
CIS/I/491/FDIS	CIS/I/499/RVD

Le rapport de vote indiqué dans le tableau ci-dessus donne toute information sur le vote ayant abouti à l'approbation de cet amendement.

Le comité a décidé que le contenu de cet amendement et de la publication de base ne sera pas modifié avant la date de stabilité indiquée sur le site web de l'IEC sous "http://webstore.iec.ch" dans les données relatives à la publication recherchée. A cette date, la publication sera

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2 Références normatives

Ajouter la nouvelle référence suivante à la liste existante:

CISPR 16-4-2:2011, *Spécifications des méthodes et des appareils de mesure des perturbations radioélectriques et de l'immunité aux perturbations radioélectriques – Partie 4-2: Incertitudes, statistiques et modélisation des limites – Incertitudes de mesure de l'instrumentation*

3.1 Termes et définitions

Ajouter, après la définition 3.1.6 existante, le nouveau terme et la nouvelle définition comme suit: