

# INTERNATIONAL STANDARD

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

**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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## CONTENTS

FOREWORD	8
1 Scope	10
2 Normative references	10
3 Terms, definitions and abbreviated terms	11
3.1 Terms and definitions	11
3.2 Abbreviated terms	15
4 Antennas for measurement of radiated radio disturbance	16
4.1 General	16
4.2 Physical parameter (measurand) for radiated disturbance measurements	16
4.3 Antennas for the frequency range 9 kHz to 150 kHz	17
4.3.1 General	17
4.3.2 Magnetic field antenna	17
4.3.3 Shielding of loop antenna	17
4.4 Antennas for the frequency range 150 kHz to 30 MHz	17
4.4.1 Electric field antenna	17
4.4.2 Magnetic field antenna	18
4.4.3 Balance and electric field discrimination of antennas	18
4.5 Antennas for the frequency range 30 MHz to 1 000 MHz	18
4.5.1 General	18
4.5.2 Low-uncertainty antenna for use if there is an alleged non-compliance to the electric disturbance field strength limit	18
4.5.3 Antenna characteristics	18
4.5.4 Balance of antenna	20
4.5.5 Cross-polar response of antenna	22
4.6 Antennas for the frequency range 1 GHz to 18 GHz	23
4.6.1 General	23
4.6.2 Receive antenna	23
4.7 Special antenna arrangements – large-loop antenna system	25
5 Test sites for measurement of radio disturbance field strength for the frequency range of 9 kHz to 30 MHz	26
6 Test sites for measurement of radio disturbance field strength for the frequency range of 30 MHz to 1 000 MHz	26
6.1 General	26
6.2 OATS	26
6.2.1 General	26
6.2.2 Weather-protection enclosure	26
6.2.3 Obstruction-free area	26
6.2.4 Radio-frequency ambient environment of a test site	28
6.2.5 Ground plane	28
6.3 Suitability of other test sites	28
6.3.1 Other ground-plane test sites	28
6.3.2 Test sites without ground plane (FAR)	29
6.4 Test site validations	29
6.4.1 General	29
6.4.2 Overview of test site validations	30
6.5 Basic parameters of the NSA method for OATS and SAC	30

6.5.1	General equation and table of theoretical NSA values.....	30
6.5.2	Antenna calibration .....	34
6.6	Reference site method for OATS and SAC .....	34
6.6.1	General.....	34
6.6.2	Antennas not permitted for RSM measurements .....	35
6.6.3	Determination of the antenna pair reference site attenuation on a REFTS .....	35
6.6.4	Determination of the antenna pair reference site attenuation using an averaging technique on a large OATS.....	36
6.7	Validation of an OATS by the NSA method .....	39
6.7.1	Discrete frequency method .....	39
6.7.2	Swept frequency method.....	40
6.8	Validation of a weather-protection-enclosed OATS or a SAC .....	41
6.9	Possible causes for exceeding site acceptability limits .....	43
6.10	Site validation for FARs .....	44
6.10.1	General.....	44
6.10.2	RSM for FAR sites .....	48
6.10.3	NSA method for FAR sites .....	50
6.10.4	Site validation criteria for FAR sites .....	52
6.11	Evaluation of set-up table and antenna tower.....	52
6.11.1	General.....	52
6.11.2	Evaluation procedure for set-up table influences .....	53
7	Test sites for measurement of radio disturbance field strength for the frequency range 1 GHz to 18 GHz .....	54
7.1	General.....	54
7.2	Reference test site.....	55
7.3	Test site validation.....	55
7.3.1	General.....	55
7.3.2	Acceptance criterion for site validation.....	56
7.4	Antenna requirements for $S_{VSWR}$ standard test procedure .....	56
7.4.1	General.....	56
7.4.2	Transmit antenna .....	57
7.4.3	Antennas and test equipment for the $S_{VSWR}$ reciprocal test procedure .....	59
7.5	Required positions for site validation testing .....	60
7.5.1	General.....	60
7.5.2	Descriptions of $S_{VSWR}$ measurement positions in a horizontal plane (Figure 23).....	60
7.5.3	Descriptions of $S_{VSWR}$ additional measurement positions (Figure 24).....	61
7.5.4	Summary of $S_{VSWR}$ measurement positions.....	62
7.6	$S_{VSWR}$ site validation – standard test procedure .....	65
7.7	$S_{VSWR}$ site validation – reciprocal test procedure using an isotropic field probe .....	66
7.8	$S_{VSWR}$ conditional measurement position requirements .....	67
7.9	$S_{VSWR}$ site validation test report.....	68
7.10	Limitations of the $S_{VSWR}$ site validation method.....	68
7.11	Alternative test sites .....	69
8	Common mode absorption devices .....	69
8.1	General.....	69
8.2	CMAD $S$ -parameter measurements .....	69
8.3	CMAD test jig.....	69

8.4	Measurement method using the TRL calibration.....	70
8.5	Specification of ferrite clamp-type CMAD .....	72
8.6	CMAD performance (degradation) check using spectrum analyzer and tracking generator.....	73
9	Reverberating chamber for total radiated power measurement .....	75
9.1	General.....	75
9.2	Chamber.....	75
9.2.1	Chamber size and shape .....	75
9.2.2	Door, openings in walls, and mounting brackets.....	75
9.2.3	Stirrers .....	76
9.2.4	Test for the efficiency of the stirrers.....	76
9.2.5	Coupling attenuation.....	77
10	TEM cells for immunity to radiated disturbance measurement.....	78
Annex A	(normative) Parameters of antennas .....	79
A.1	General.....	79
A.2	Preferred antennas .....	79
A.2.1	General.....	79
A.2.2	Calculable antenna .....	79
A.2.3	Low-uncertainty antennas .....	79
A.3	Simple dipole antennas.....	80
A.3.1	General.....	80
A.3.2	Tuned dipole.....	81
A.3.3	Shortened dipole.....	81
A.4	Broadband antenna parameters.....	82
A.4.1	General.....	82
A.4.2	Antenna type .....	83
A.4.3	Specification of the antenna.....	83
A.4.4	Antenna calibration.....	84
A.4.5	Antenna user information .....	84
Annex B	(XXX) (Void) .....	85
Annex C	(normative) Large-loop antenna system for magnetic field induced-current measurements in the frequency range of 9 kHz to 30 MHz.....	86
C.1	General.....	86
C.2	Construction of an LLAS .....	86
C.3	Construction of a large-loop antenna (LLA).....	86
C.4	Validation of an LLAS .....	91
C.5	Construction of the LLAS verification dipole antenna.....	94
C.6	Conversion factors .....	96
C.6.1	General.....	98
C.6.2	Current conversion factors for an LLAS with non-standard diameter .....	99
C.6.3	Conversion of LLAS measured current to magnetic field strength.....	100
C.7	Examples .....	102
Annex D	(normative) Construction details for open area test sites in the frequency range of 30 MHz to 1 000 MHz (see Clause 6).....	104
D.1	General.....	104
D.2	Ground plane construction .....	104
D.2.1	Material .....	104
D.2.2	Roughness .....	104
D.3	Services to EUT.....	105



D.4	Weather-protection enclosure construction .....	105
D.4.1	Materials and fasteners.....	105
D.4.2	Internal arrangements.....	106
D.4.3	Size .....	106
D.4.4	Uniformity with time and weather .....	106
D.5	Turntable and set-up table .....	106
D.6	Receive antenna mast installation.....	107
Annex E (xxx)	(Void).....	108
Annex F (informative)	Basis for $\pm 4$ dB site acceptability criterion (see Clause 6).....	109
F.1	General.....	109
F.2	Error analysis.....	109
Annex G (informative)	Examples of uncertainty budgets for site validation of a COMTS using RSM with a calibrated antenna pair (see 6.6) .....	111
G.1	Quantities to be considered for antenna pair reference site attenuation calibration using the averaging technique .....	111
G.2	Quantities to be considered for antenna pair reference site attenuation calibration using a REFTS .....	112
G.3	Quantities to be considered for COMTS validation using an antenna pair reference site attenuation .....	113
Annex H (informative)	Definition of uncertainty in cross-polar response measurement .....	114
H.1	General.....	114
H.2	Example uncertainty estimate .....	116
H.3	Rationale for the estimates of input quantities in Table H.1 and Table H.3 .....	117
H.4	Measurement of XPR below 100 MHz at an OATS .....	118
Bibliography	.....	120

Figure 1	– Schematic of radiation from EUT reaching an LPDA antenna directly and via ground reflection at a 3 m site, showing the beamwidth half-angle, $\phi$ , at the reflected ray.....	19
Figure 2	– RX antenna E-plane radiation pattern example, with limit area shaded for 3 m distance and 2 m EUT width.....	24
Figure 3	– Determination of maximum useable EUT width using half-power beamwidth .....	24
Figure 4	– Determination of maximum useable EUT height using half-power beamwidth .....	25
Figure 5	– Obstruction-free area of a test site with a turntable .....	27
Figure 6	– Obstruction-free area with stationary EUT .....	27
Figure 7	– Test point locations for 3 m and 10 m test distances .....	36
Figure 8	– Paired test point locations for all test distances.....	38
Figure 9	– Example of paired test point selection for a test distance of 10 m.....	38
Figure 10	– Illustration of an investigation of influence of antenna mast on $A_{APR}$ .....	39
Figure 11	– Typical antenna positions for a weather-protected OATS or a SAC – vertical polarization validation measurements .....	42
Figure 12	– Typical antenna positions for a weather-protected OATS or a SAC – horizontal polarization validation measurements .....	42
Figure 13	– Typical antenna positions for a weather-protected OATS or a SAC – vertical polarization validation measurements for a smaller EUT .....	43
Figure 14	– Typical antenna positions for a weather-protected OATS or a SAC – horizontal polarization validation measurements for a smaller EUT .....	43
Figure 15	– Measurement positions for FAR site validation .....	46

Figure 16 – Example of one measurement position and antenna tilt for FAR site validation .....	48
Figure 17 – Typical quasi free-space test site reference SA measurement set-up .....	50
Figure 18 – Theoretical free-space NSA as a function of frequency for different measurement distances [see Equation (16)].....	52
Figure 19 – Position of the antenna relative to the edge above a rectangle set-up table (top view).....	54
Figure 20 – Antenna position above the set-up table (side view).....	54
Figure 21 – Transmit antenna E-plane radiation pattern example (this example is for informative purposes only).....	58
Figure 22 – Transmit antenna H-plane radiation pattern (this example is for informative purposes only).....	59
Figure 23 – $S_{VSWR}$ measurement positions in a horizontal plane (see 7.5.2 for description).....	60
Figure 24 – $S_{VSWR}$ positions (height requirements) .....	62
Figure 25 – $S_{VSWR}$ conditional measurement position requirements .....	68
Figure 26 – Definition of the reference planes inside the test jig .....	70
Figure 27 – The four configurations for the TRL calibration .....	72
Figure 28 – Limits for the magnitude of $S_{11}$ , measured according to the provisions of 8.1 to 8.3 .....	73
Figure 29 – Example of a 50 $\Omega$ adaptor construction in the vertical flange of the jig .....	74
Figure 30 – Example of a matching adaptor with balun or transformer .....	74
Figure 31 – Example of a matching adaptor with resistive matching network.....	75
Figure 32 – Example of a typical paddle stirrer .....	76
Figure 33 – Range of coupling attenuation as a function of frequency for a chamber using the stirrer shown in Figure 32 .....	77
Figure A.1 – Short dipole antenna factors for $R_L = 50 \Omega$ .....	82
Figure C.1 – The LLAS, consisting of three mutually perpendicular large-loop antennas .....	88
Figure C.2 – An LLA containing two opposite slits, positioned symmetrically with respect to the current probe C .....	89
Figure C.3 – Construction of an LLA slit.....	89
Figure C.4 – Example of an LLA slit construction using a strap of printed circuit board to obtain a rigid construction .....	90
Figure C.5 – Construction of the metal box containing the current probe.....	90
Figure C.6 – Example showing the routing of several cables from an EUT to minimize capacitive coupling from the leads to the LLAS .....	91
Figure C.7 – The eight positions of the LLAS verification dipole during validation of an LLA .....	92
Figure C.8 – <del>Validation factor for an LLA of 2 m diameter</del> Reference validation factors for loops of 2 m, 3 m, and 4 m diameters .....	93
Figure C.9 – Construction of the LLAS verification dipole antenna .....	96
<del>Figure C.10 – Conversion factors <math>C_{dA}</math> [for conversion into dB(<math>\mu A/m</math>)] and <math>C_{dV}</math> [for conversion into dB(<math>\mu V/m</math>)] for two standard measuring distances <math>d</math>.....</del>	<del>.....</del>
<del>Figure C.11 – Sensitivity <math>S_D</math> of a large-loop antenna with diameter <math>D</math> relative to a large-loop antenna having a diameter of 2 m .....</del>	<del>.....</del>
Figure C.10 – Sensitivity $S_D$ of an LLA with diameter $D$ relative to an LLA with 2 m diameter .....	99

Figure C.11 – Conversion factor  $C_{dA}$  [for conversion into dB( $\mu$ A/m)] for three standard measurement distances  $d$  ..... 101  
 Figure D.1 – The Rayleigh criterion for roughness in the ground plane ..... 105

Table 1 – Site validation methods applicable for OATS, OATS-based, SAC, and FAR site types ..... 30  
 Table 2 – Theoretical normalized site attenuation,  $A_N$  – recommended geometries for broadband antennas<sup>a</sup> (1 of 2) ..... 32  
 Table 3 – Example template for  $A_{APR}$  data sets ..... 35  
 Table 4 – RSM frequency steps ..... 35  
 Table 5 – Maximum dimensions of test volume versus test distance ..... 44  
 Table 6 – Frequency ranges and step sizes for FAR site validation ..... 48  
 Table 7 –  $S_{VSWR}$  measurement position designations (1 of 3) ..... 63  
 Table 8 –  $S_{VSWR}$  reporting requirements ..... 68  
 Table C.1 – Reference validation factors of Figure C.8 for loops of 2 m, 3 m, and 4 m diameters ..... 94  
 Table C.2 – Sensitivity  $S_D$  of an LLA with diameter  $D$  relative to an LLA with 2 m diameter (Figure C.10) ..... 100  
 Table C.3 – Magnetic field strength conversion factor  $C_{dA}$  for three measurement distances (Figure C.11) ..... 102  
 Table D.1 – Maximum roughness for 3 m, 10 m and 30 m measurement distances ..... 105  
 Table F.1 – Error budget ..... 109  
 Table G.1 – Antenna pair reference site attenuation calibration using the large-OATS averaging technique ..... 111  
 Table G.2 – Antenna pair reference site attenuation calibration using REFTS ..... 112  
 Table G.3 – COMTS validation using an antenna pair reference site attenuation ..... 113  
 Table H.1 – Example uncertainty estimate for XPR measurement in a FAR and assumed  $a_{xpT} = 22$  dB,  $a_{xpR} = 34$  dB ..... 117  
 Table H.2 – Uncertainties depending on other values of  $A_{xpT}$  (other assumptions as in Table H.1) ..... 118  
 Table H.3 – Example uncertainty estimate for XPR measurement at an OATS and assumed  $a_{xpT} = 22$  dB,  $a_{xpR} = 34$  dB ..... 119

INTERNATIONAL ELECTROTECHNICAL COMMISSION  
INTERNATIONAL SPECIAL COMMITTEE ON RADIO INTERFERENCE

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

**Part 1-4: Radio disturbance and immunity measuring apparatus –  
Antennas and test sites for radiated disturbance measurements**

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This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- provisions are added to address test site validation in the frequency range from 30 MHz to 1000 MHz using the reference site method, to take into account the receive antenna radiation pattern in the frequency range from 1 GHz to 18 GHz, and further details on test site validation using the NSA method with broadband antennas in the frequency range from 30 MHz to 1 000 MHz.

International Standard CISPR 16-1-4 has been prepared by CISPR subcommittee A: Radio-interference measurements and statistical methods.

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## 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

#### 1 Scope

This part of CISPR 16 specifies the characteristics and performance of equipment for the measurement of radiated disturbances in the frequency range 9 kHz to 18 GHz. Specifications for antennas and test sites are included.

NOTE In accordance with IEC Guide 107, CISPR 16-1-4 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 sub-committees are prepared to cooperate with product committees in the evaluation of the value of particular EMC tests for specific products.

The requirements of this publication apply at all frequencies and for all levels of radiated disturbances within the CISPR indicating range of the measuring equipment.

Methods of measurement are covered in Part 2-3, further information on radio disturbance is given in Part 3, and uncertainties, statistics and limit modelling are covered in Part 4 of CISPR 16.

#### 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 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 16-1-5:2014, *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*  
CISPR 16-1-5:2014/AMD1:2016

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/AMD1:2017

CISPR 16-2-3:2016, *Specification for radio disturbance and immunity measuring apparatus and methods – Part 2-3: Methods of measurement of disturbances and immunity – Radiated disturbance measurements*

CISPR TR 16-3, *Specification for radio disturbance and immunity measuring apparatus and methods – Part 3: CISPR technical reports*