




EMC TEST REPORT

Equipment Radiation detector
 Trademark 
 Model No. R700, R750, R800, R900, R60N
 Report No. CTB210421018EX
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 Test Standard(s) EN 61326-1:2013
 EN IEC 61000-3-2:2019/A1:2021, EN 61000-3-3:2013/A1:2019
 In the configuration tested, the EUT complied with the standards specified above.

Producer : _____ , Date : Apr. 27, 2021
  Li eng/ Er er
 Signatory : _____ , Date : Apr. 27, 2021
  B or

Note: The results shown in this test report refer only to the sample(s) tested unless otherwise stated. This test report shall not be reproduced except in full, without prior written approval of CTB. This document may be altered or revised by CTB, personnel only, and shall be noted in the revision of the document.

Revision History

Rev.	Issue Date	Revisions	Effect Page	Revised By
0	Apr. 27, 2021	Initial Issue	All Page	Bin Mei

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1. TEST SUMMARY


Emission			
Requirement - Test	Test Method	Limit	Result
Conducted Emission	EN 55011	Class B	PASS
Radiated emissions at frequencies up to 1 GHz		Class B	PASS
Harmonic current emissions	EN IEC 61000-3-2	Class A	N/A
Voltage changes, voltage fluctuations and flicker	EN 61000-3-3	Clause 5	PASS
Immunity			
Requirement - Test	Test Method	Performance criteria	Result
Electrostatic discharges (ESD)	EN 61000-4-2	B	PASS
Electromagnetic field	EN IEC 61000-4-3	A	PASS
Electrical fast transients/burst (EFT/B)	EN 61000-4-4	B	PASS
Surges	EN 61000-4-5	B	PASS
Conducted RF	EN 61000-4-6	A	PASS
Power frequency magnetic field	EN 61000-4-8	A	PASS
Voltage dips and Short interruptions	EN IEC 61000-4-11	B & C	PASS

Remark: N/A is abbreviation for Not Applicable.

The test was carried out in all the test modes, only the worst data are list in report.

2. GENERAL INFORMATION

2.1. Description of EUT

Equipment	Radiation detector
Trademark	
Model Name	R700
Serial No.	Not labeled
Model Difference	All model's the function and electric circuit , appearance are the same, only with a product color and model named different. Test sample model: R700.
Rated Power Supply	DC 3.7V from battery (4400mAh) or DC 5V from adapter
Rated Power	N/A
Normal Testing Voltage	DC 5V from adapter (AC 230V/50Hz), DC 3.7V from battery (4400mAh)
Configuration	<input checked="" type="checkbox"/> Table-top <input type="checkbox"/> Floor-standing
Accessory Device	Adapter
Cable Supplied	USB cable

Note:

1. The EUT uses following adapter

Adapter	1	
Manufacturer	Shenzhen HuaYiTeng Technology Co., Ltd.	
Model	HYT-0502000	
AC Input Power	100-240V~ 50/60Hz 0.4A Max	
DC Output Power	5V---2A	
Plug Type	EU	
Power Cord	N/A	

2. Other Accessory Device List and Details

Description	Manufacturer	Model	Note
-			

External I/O Cable

Cable Description	Shielded Type	Ferrite Core	Length(m)	Note
-	<input type="checkbox"/> Shielded <input type="checkbox"/> Non-shielded	<input type="checkbox"/> Yes <input type="checkbox"/> No		

3. The above EUT information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or the User's Manual.

2.2. Operating condition of EUT

Test mode	Description
1	Working+Charging
2	
3	
4	

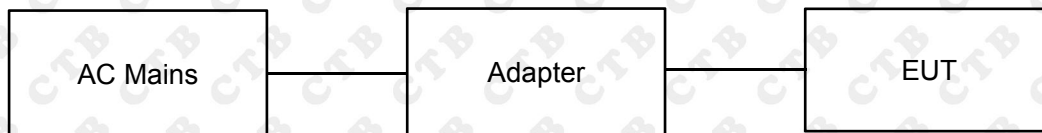
2.3. Test conditions

Temperature: 15-35°C

Relative Humidity: 30-60 %

Atmospheric pressure: 800hPa-1060hPa

2.4. Block diagram of EUT configuration



3. FACILITIES

3.1. Test Facility

CTB-LAB

Floor 1&2, Building A, No. 26 of Xinhe Road, Xinqiao Street, Baoan District, Shenzhen China

3.2. Test Instruments

Conducted Emission Measurement

(Test software: EZ-EMC Ver. EMC-con3A1.1)

Item	Equipment	Manufacturer	Model No.	Serial No.	Calibrated until
1	AMN	ROHDE&SCHWARZ	ESH3-Z5	831551852	2021.10.30
2	Pulse limiter	ROHDE&SCHWARZ	ESH3Z2	357881052	2021.10.30
3	EMI TEST RECEIVER	ROHDE&SCHWARZ	ESCS30	834115/006	2021.11.02
4	Coaxial cable	ZDECL	Z302S	18091904	2021.10.30
5	AAN	Schwarzbeck	NTFM8158	183	2021.11.07

Radiated Emission Measurement

(Test software: EZ-EMC Ver. FA-03A2 RE)

Item	Equipment	Manufacturer	Model No.	Serial No.	Calibrated until
1	Double Ridged Broadband Horn Antenna	Schwarzbeck	BBHA 9120D	1911	2021.11.02
2	TRILOG Broadband Antenna	Schwarzbeck	VULB 9168	869	2021.11.02
3	Amplifier	Agilent	8449B	3008A01838	2021.11.01
4	Amplifier	HP	8447E	2945A02747	2021.11.01
5	EMI TEST RECEIVER	ROHDE&SCHWARZ	ESPI7	100362	2021.11.01
6	Coaxial cable	ETS	RFC-SNS-10 0-NMS-80 NI	/	2021.11.01
7	Coaxial cable	ETS	RFC-SNS-10 0-NMS-20 NI	/	2021.11.01
8	Coaxial cable	ETS	RFC-SNS-10 0-SMS-20 NI	/	2021.11.01
9	Coaxial cable	ETS	RFC-NNS-10 0-NMS-300 NI	/	2021.11.01

Harmonic Current & Voltage Fluctuation and Flicker

(Test software: EZ-EMC Ver. FA-03A2 RE)

Item	Equipment	Manufacturer	Model No.	Serial No.	Calibrated until
1	Power Analyzer	Laplace Instruments	AC2000A	311363	2021.12.23
2	AC Power source	HTEC Instruments	HPF5010	633088	2021.12.23

Electrostatic Discharge Test

Item	Equipment	Manufacturer	Model No.	Serial No.	Calibrated until
1	ESD Simulator	TESTQ	NSG437	329	2021.10.30

Conducted RF Test

Item	Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Signal Generator	Agilent	N5182A	MY47420195	2021.10.30
2	Power Amplifier	AR	75A 250A	320289	2021.10.30
3	Attenuator	EM-Test	ATT6/75	320835	2021.10.30
4	CDN	EM-Test	CDN M2/M3	0208-01	2021.10.30
5	EM-Clamp	EM-Test	EM101	35762	2021.10.30

RF electromagnetic field Test

Item	Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Signal Generator	Agilent	N5182A	MY47420195	2021.10.30
2	Log-Bicon Antenna	Schwarzbeck	VULB9161	9128ES-128	2021.10.30
3	Power Amplifier	AR	150W1000M1	342526	2021.10.30
4	Microwave Horn Antenna	AR	AT4002A	322279	2021.10.30
5	Power Amplifier	AR	25S1G4A	321116	2021.10.30

Surge & Electrical Fast Transient/Burst Immunity Test

Item	Equipment	Manufacturer	Model No.	Serial No.	Calibrated until
1	Surge & Burst Generator	Lioncel	LSG-545CB	180602	2021.10.30
2	Capacitive coupling clamp	Lioncel	EFTC	18071801	2021.10.30

Voltage dips and interruptions Test

Item	Equipment	Manufacturer	Model No.	Serial No.	Calibrated until
1	Voltage dip simulator	Lioncel	VDS-1102	180902	2021.10.30

4. Measurement uncertainty

The following table is for the measurement uncertainty, which is calculated as per the document CISPR 16-4.

Test	Parameters	Expanded Uncertainty (U_{Lab})	Expanded Uncertainty (U_{Cispr})
Conducted Emission	Level Accuracy: 150kHz to 30MHz	± 1.22 dB	± 3.6 dB
Radiated Emission	Level Accuracy: 30MHz to 1000 MHz	± 3.67 dB	± 5.2 dB
Radiated Emission	Level Accuracy: Above 1000MHz	± 4.79 dB	N/A

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of $k=2$.

5. Emission

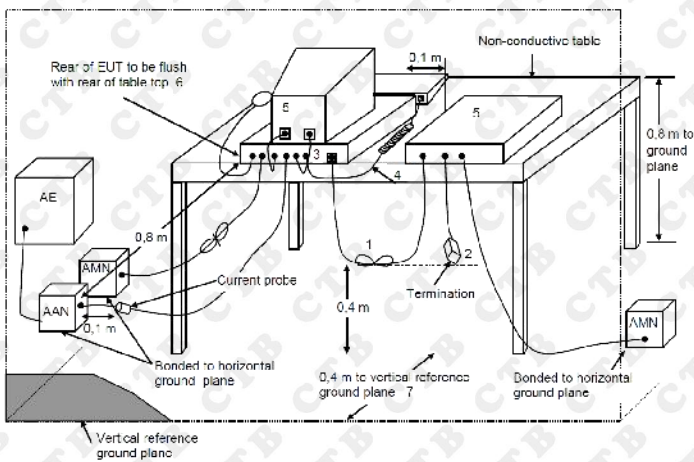
5.1. Mains terminal disturbance voltage

5.1.1. Limit

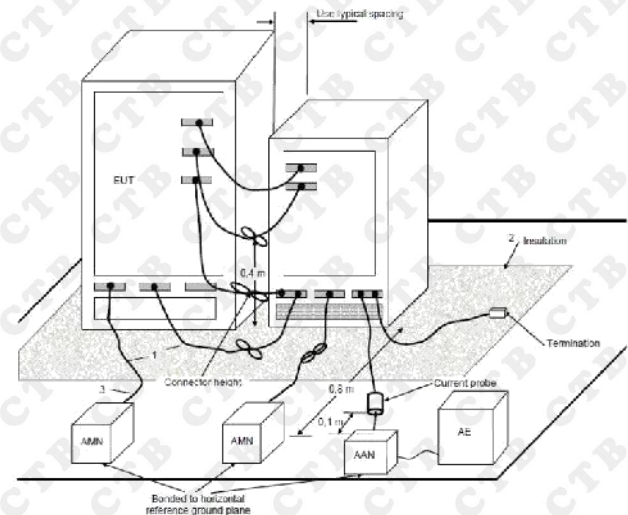
Frequency range MHz	Detector type / bandwidth	Class B limits dB(µV)
0,15 to 0,5	Quasi Peak / 9 kHz	66 to 56
0,5 to 5		56
5 to 30		60
0,15 to 0,5	Average / 9 kHz	56 to 46
0,5 to 5		46
5 to 30		50

5.1.2. Test setup

For table-top equipment



For floor standing equipment



5.1.3. Test procedure

Measurement was performed in shielded room, and instruments used were followed CISPR 16-2-1 clause 7.

Detailed test procedure was following clause 7 of CISPR 16-2-1.

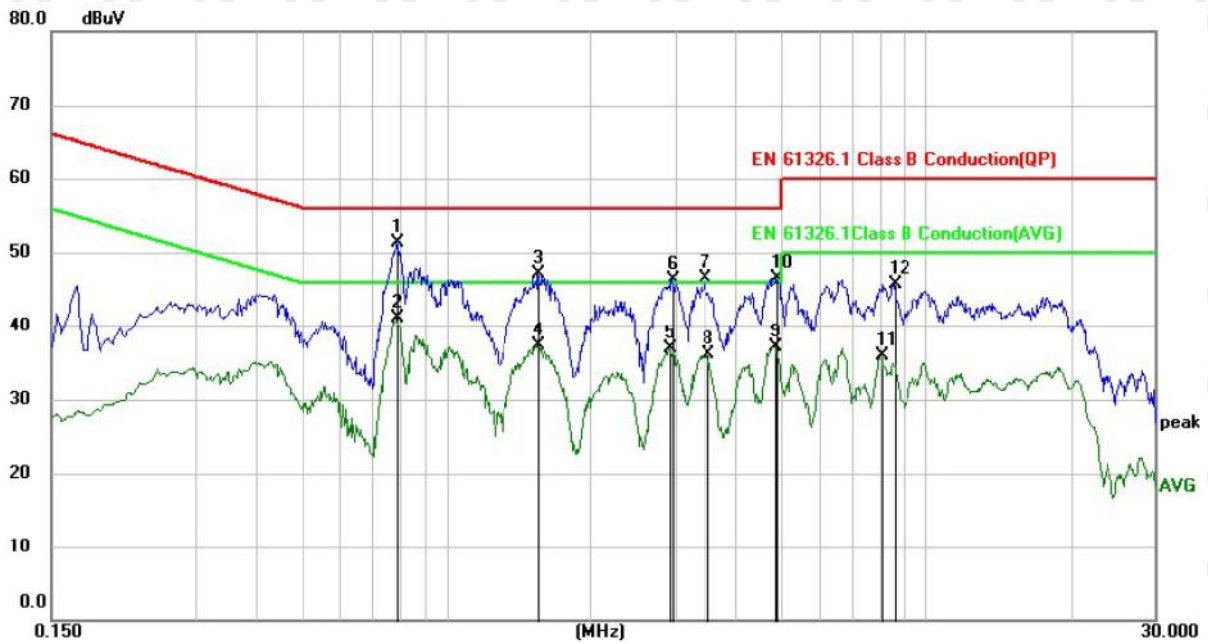
Frequency range 150kHz – 30MHz was checked and EMI receiver measurement bandwidth was set to 9 kHz.

5.1.4. Test results

PASS

Please refer to the following page.

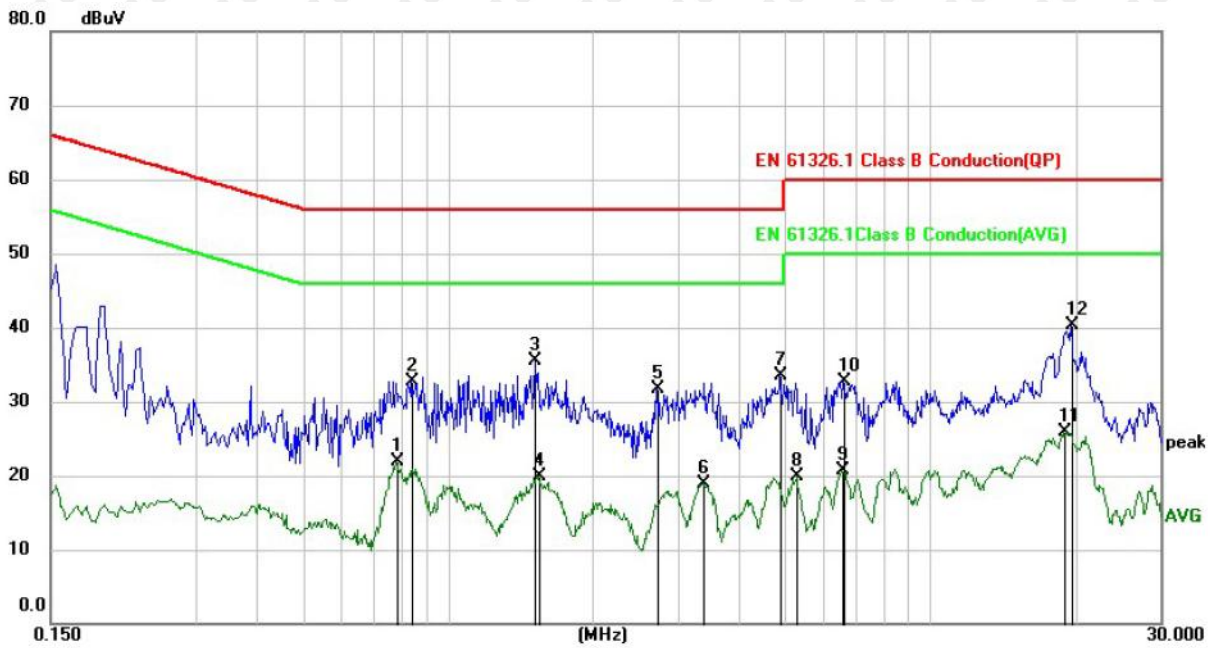
Phase: L



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Margin dB	Detector
1	*	0.7900	41.00	10.21	51.21	56.00	-4.79	QP
2		0.7900	30.80	10.21	41.01	46.00	-4.99	AVG
3		1.5580	36.93	10.13	47.06	56.00	-8.94	QP
4		1.5580	27.27	10.13	37.40	46.00	-8.60	AVG
5		2.9140	26.65	10.25	36.90	46.00	-9.10	AVG
6		2.9539	36.06	10.26	46.32	56.00	-9.68	QP
7		3.4580	36.21	10.31	46.52	56.00	-9.48	QP
8		3.5020	25.77	10.33	36.10	46.00	-9.90	AVG
9		4.8578	26.68	10.50	37.18	46.00	-8.82	AVG
10		4.8778	35.96	10.50	46.46	56.00	-9.54	QP
11		8.0539	25.28	10.58	35.86	50.00	-14.14	AVG
12		8.5500	35.11	10.59	45.70	60.00	-14.30	QP

Note: Result=Reading + Factor
Over Limit=Result - Limit

Phase: N



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Margin dB	Detector
1		0.7820	11.75	10.13	21.88	46.00	-24.12	AVG
2		0.8420	22.65	10.15	32.80	56.00	-23.20	QP
3		1.5180	25.22	10.23	35.45	56.00	-20.55	QP
4		1.5380	9.76	10.23	19.99	46.00	-26.01	AVG
5		2.7180	21.40	10.26	31.66	56.00	-24.34	QP
6		3.3980	8.63	10.30	18.93	46.00	-27.07	AVG
7		4.8740	23.04	10.39	33.43	56.00	-22.57	QP
8		5.2819	9.42	10.40	19.82	50.00	-30.18	AVG
9		6.5780	10.28	10.44	20.72	50.00	-29.28	AVG
10		6.6180	22.23	10.44	32.67	60.00	-27.33	QP
11		18.9780	15.16	10.77	25.93	50.00	-24.07	AVG
12	*	19.5780	29.43	10.79	40.22	60.00	-19.78	QP

Note: Result=Reading + Factor
Over Limit=Result - Limit

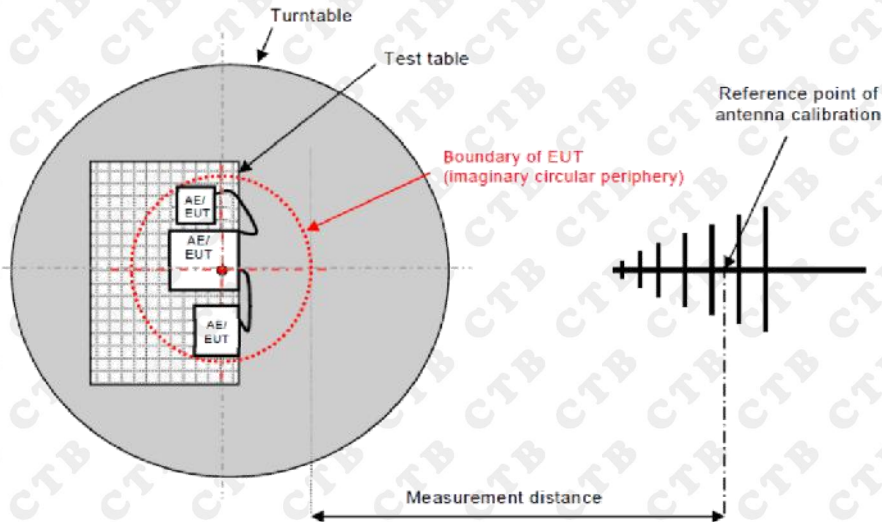
5.2. Radiated emissions

5.2.1. Limit

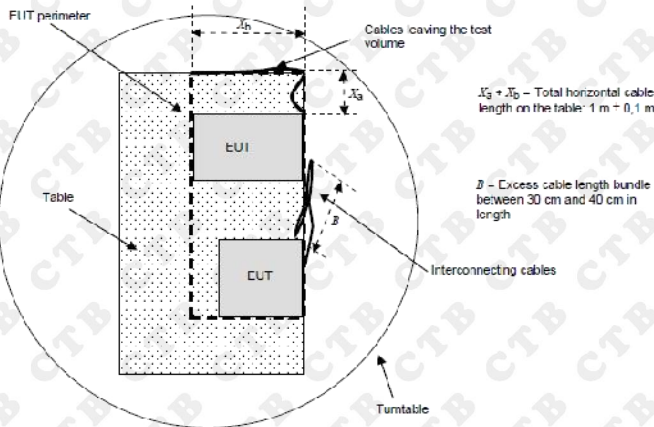
Frequency range MHz	Measurement			Class B limits dB(µV/m)
	Facility	Distance m	Detector type / bandwidth	
30 to 230	SAC	3	Quasi Peak / 120 kHz	40
230 to 1 000				47

5.2.2. Block diagram of test setup

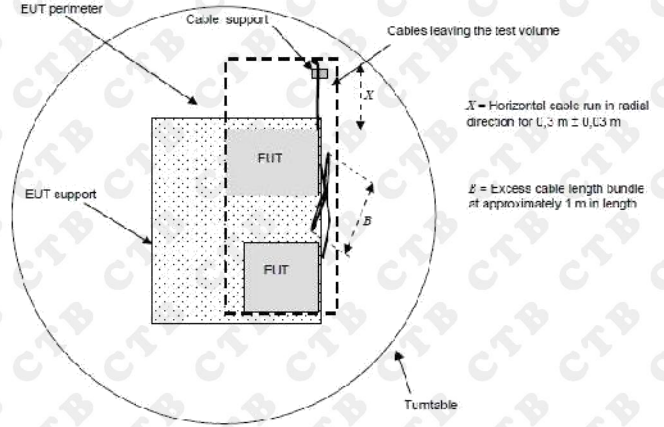
Measurement distance



For table-top equipment



For floor standing equipment



5.2.3. Test procedure

The measurement was performed in a semi-anechoic chamber. The distance from EUT to receiving antenna is 3 meters. Measurement was performed according to clause 7.3 of CISPR 16-2-3.

5.2.4. Test results

PASS

Please refer to the following page.

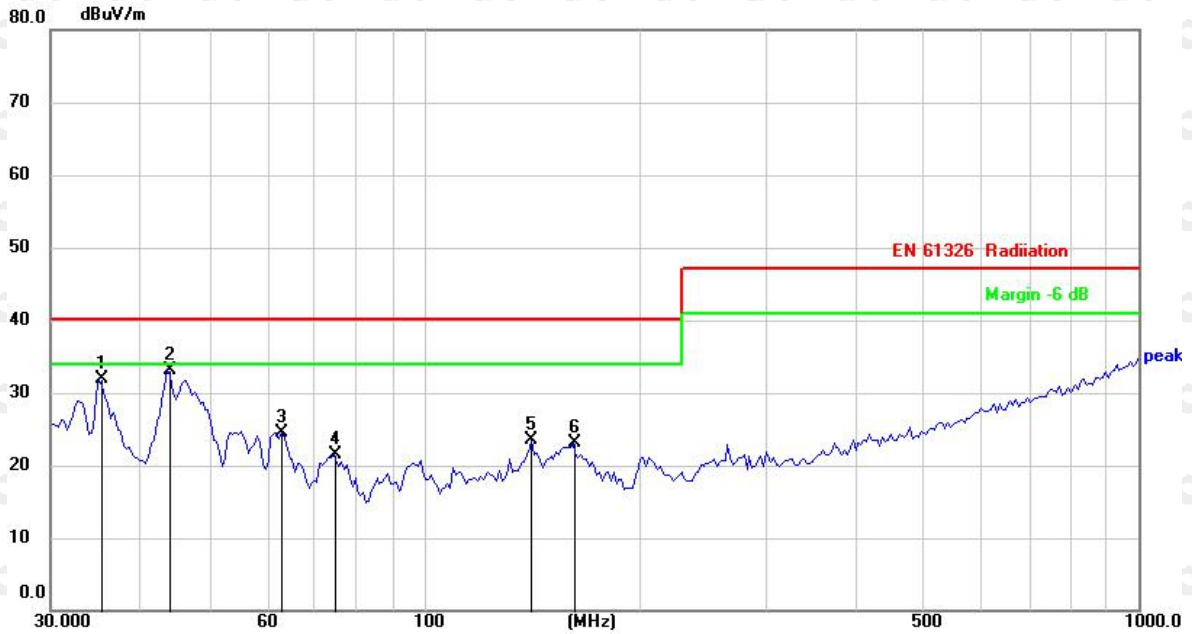
Polarization: H



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dB/m	Over dB	Detector
1		34.8212	30.88	-7.33	23.55	40.00	-16.45	QP
2		45.2960	29.92	-6.99	22.93	40.00	-17.07	QP
3		154.5493	29.41	-6.87	22.54	40.00	-17.46	QP
4		259.2338	35.53	-8.28	27.25	47.00	-19.75	QP
5		314.3765	31.95	-6.50	25.45	47.00	-21.55	QP
6	*	796.1830	27.97	3.64	31.61	47.00	-15.39	QP

Note: Result=Reading+Factor
Over Limit=Result-Limit

Polarization: V

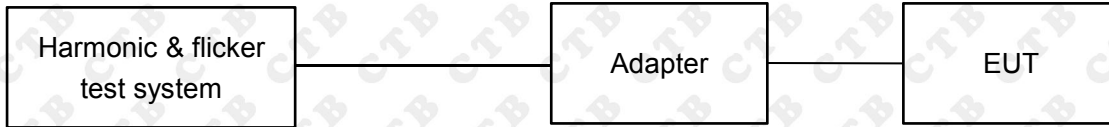


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dB/m	Over dB	Detector
1		35.1278	39.12	-7.28	31.84	40.00	-8.16	QP
2	*	43.7352	40.03	-6.93	33.10	40.00	-6.90	QP
3		63.2023	33.14	-8.55	24.59	40.00	-15.41	QP
4		74.6569	32.07	-10.61	21.46	40.00	-18.54	QP
5		141.5777	30.65	-7.23	23.42	40.00	-16.58	QP
6		161.4742	29.91	-6.86	23.05	40.00	-16.95	QP

Note: Result=Reading+Factor
Over Limit=Result-Limit

5.3. Harmonic current emissions

5.3.1. Test Setup



5.3.2. Test Procedure

Basic Standard(s)	: EN IEC 61000-3-2:2019/A1:2021
Measurement Equipment requirement	: IEC 61000-4-7
Measured Harmonics	: 1 - 40
Equipment Class	: <input checked="" type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D
Limits	: <input checked="" type="checkbox"/> Clause 7.1 Table 1 <input type="checkbox"/> Clause 7.2 <input type="checkbox"/> Clause 7.3 Table 2 <input type="checkbox"/> Clause 7.4 Table 3

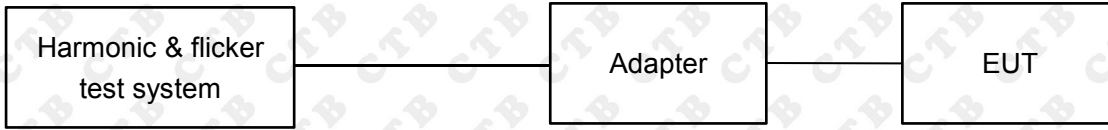
- This product is not defined as lighting equipment, and has rated power less than 75W, therefore, no limit applies according to EN 61000-3-2
- The EUT is kitchen machines as listed in the scope of IEC 60335-2-14, therefore, is deemed to conform to the harmonic current limits of this standard without further testing.

5.3.3. Test Result

N/A

5.4. Voltage changes, voltage fluctuations and flicker

5.4.1. Test Setup



5.4.2. Test Procedure

Basic Standard(s)	:	EN 61000-3-3:2013/A1:2019
Measurement Equipment requirement	:	IEC 61000-4-15
Limits	:	Clause 5

5.4.2.1 Definition

Flicker: impression of unsteadiness of visual sensation induced by a lighting stimulus whose luminance or spectral distribution fluctuates with time.

P_{st} : Short-term flicker indicator the flicker severity evaluated over a short period (in minutes); $P_{st}=1$ is the conventional threshold of irritability

P_{lt} : long-term flicker indicator; the flicker severity evaluated over a long period (a few hours) using successive P_{st} values.

dc: the relative steady-state voltage change

d_{max} : the maximum relative voltage change

$d(t)$: the value during a voltage change

5.4.2.2 Test Procedure

The following limits apply

- " P_{lt} " shall not exceed 0.65.
- " P_{st} " shall not exceed 1.0.
- "dc" shall not exceed 3.3%.
- " $d(t)$ " shall not exceed 3.3% for more than 500ms.
- " d_{max} " shall not exceed:
 - 4% without additional conditions,
 - 6% switched manually or automatically more than twice per day,
 - 7% attended whilst in use or switched automatically for no more than twice per day or attended while in use.
 - For manual switch, d_{max} is measured in accordance with Annex B of standard, average d_{max} is calculated from 24 times measurement.
 - The EUT is unlikely to produce significant voltage fluctuations or flicker by technical analysis and evaluation. So it is deemed to fulfil the requirements without testing.

5.4.3. Test Result

PASS

The EUT is unlikely to produce significant voltage fluctuations or flicker.

6. Immunity

Performance criteria

Performance criterion A

The equipment shall continue to operate as intended without operator intervention. No degradation of performance or loss function is allowed below a performance level specified by the manufacturer, when the equipment is used as intended. The performance level may be replaced by a permissible loss of performance. If the minimum performance level or the permissible performance loss is not specified by the manufacturer, then either of these may be derived from the product description and documentation, and by what the user may reasonably expect from the equipment if used as intended.

Performance criterion B

The equipment shall continue to operate as intended after the test. No degradation of performance or loss function is allowed below a performance level specified by the manufacturer, when the equipment is used as intended. During the test, degradation of performance is however allowed. No change of actual operating state or stored data is allowed. If the minimum performance level or the permissible performance loss is specified by the manufacturer, either of these may be derived from the product description and documentation and what the user may reasonably expect from equipment if used as intended.

Performance criterion C

Temporary loss of function is allowed, provided the function is self-recoverable or can be restored by operation of the controls.

6.1. Electrostatic discharges (ESD)

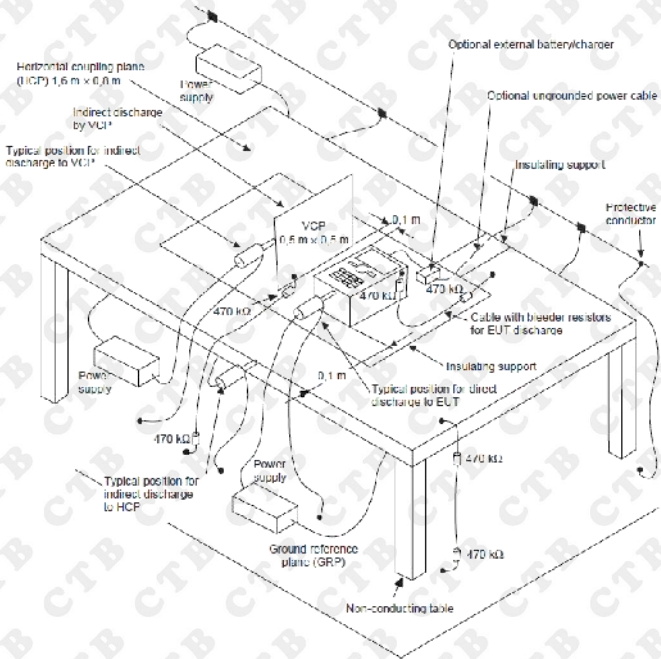
6.1.1. Test Levels and Performance Criterion

Characteristics	Test levels
Air discharge	±8 kV
Contact discharge	±4 kV

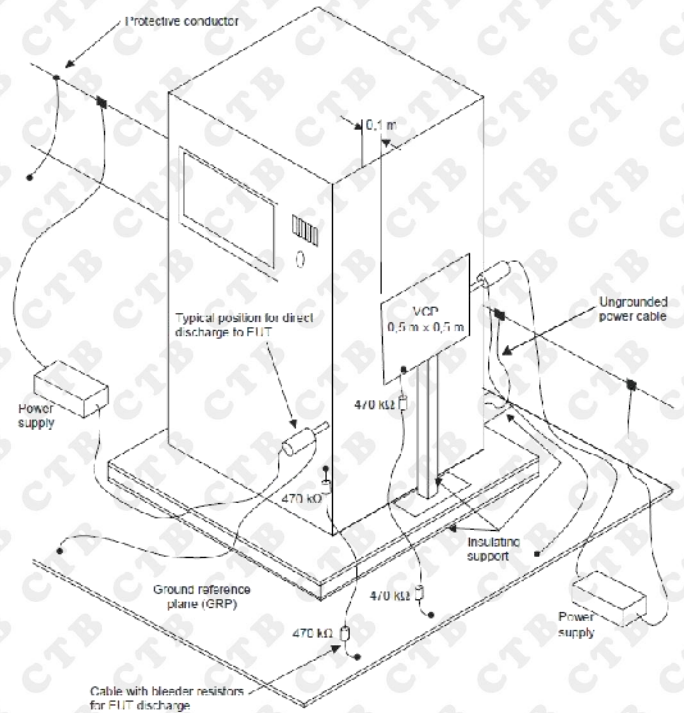
Performance criterion: **B**

6.1.2. Test setup

For table-top equipment



For floor standing equipment



6.1.3. Test Procedure

Measurement was performed in shielded room.

Measurement procedure was applied according to EN 61000-4-2 clause 8.

The test method and equipment were specified by EN 61000-4-2.

6.1.4. Test Result

PASS

Please refer to the following page.

No.	Location of discharge	Polarity	Discharge	Number of discharges	Test level kV	Result
1	HCP	P&N	C	10	4	PASS
2	VCP	P&N	C	10	4	PASS
3	Points on conductive surface	P&N	C	10	4	PASS
4	Points on non-conductive surface	P&N	A	10	8	PASS

HCP = Horizontal coupling plate VCP = Vertical coupling plate N = Negative P = Positive
 A = Air discharge C = Contact discharge

6.2. Electromagnetic field

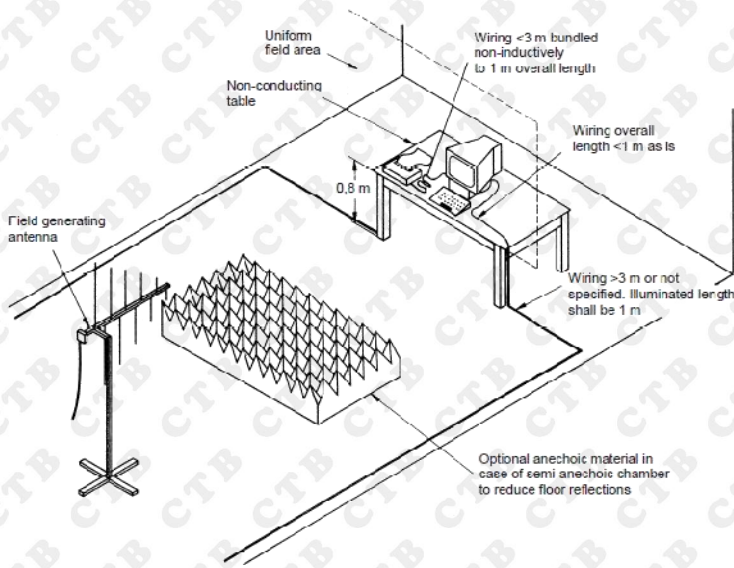
6.2.1. Test Levels and Performance Criterion

Characteristics	Test levels	Test levels
Frequency range	80 MHz to 1 000 MHz, 1.4GHz to 2 GHz	2GHz to 2.7GHz
Test level	3 V/m (unmodulated)	1 V/m (unmodulated)
Modulation	1 kHz, 80 % AM, sine wave	1 kHz, 80 % AM, sine wave

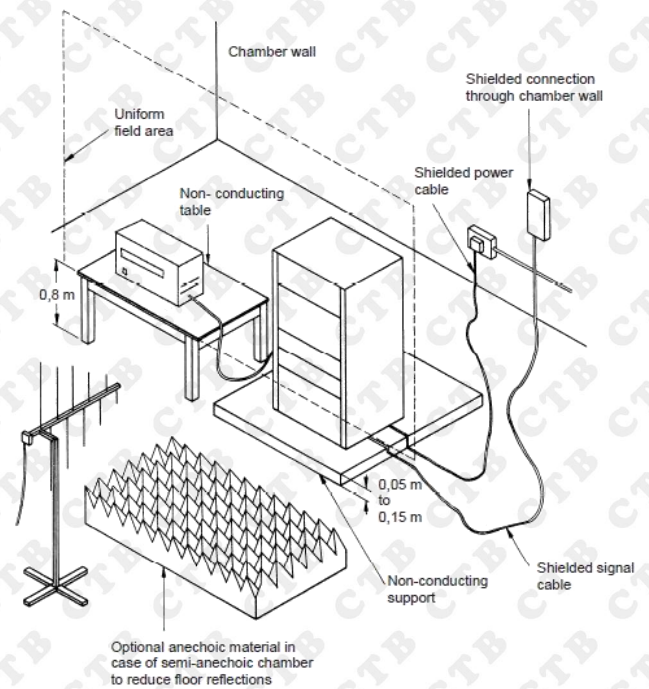
Performance criterion: **A**

6.2.2. Test setup

For table-top equipment



For floor standing equipment



6.2.3. Test Procedure

Measurement was performed in full-anechoic chamber.
 Measurement procedure was applied according to EN 61000-4-3 clause 8.
 The test method and equipment was specified by EN 61000-4-3.

6.2.4. Test Result

PASS

Enclosure	Horizontal	Vertical
Front	PASS	PASS
Right Side	PASS	PASS
Left Side	PASS	PASS
Rear	PASS	PASS

6.3. Electrical fast transients/burst (EFT/B)

6.3.1. Test Levels and Performance Criterion

- Severity Level 2 for signal and control ports
- Severity Level 2 for input and output DC power ports
- Severity Level 2 for input and output AC power ports

Open circuit output test voltage and repetition frequency of the impulses				
Level	Power ports, earth port (PE)		Signal, and control ports	
	Voltage peak	Repetition frequency	Voltage peak	Repetition frequency
	kV	kHz	kV	kHz
1	0,5	5 or 100	0,25	5 or 100
2	1	5 or 100	0,5	5 or 100
3	2	5 or 100	1	5 or 100
4	4	5 or 100	2	5 or 100
X ^a	Special	Special	Special	Special

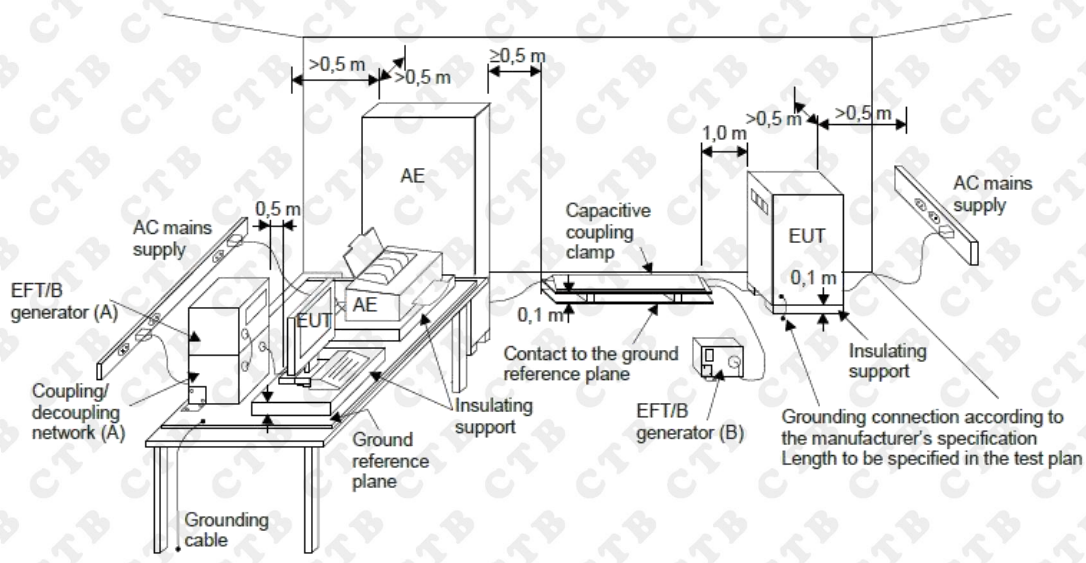
The use of 5 kHz repetition frequency is traditional, however, 100 kHz is closer to reality. Product committees should determine which frequencies are relevant for specific products or product types.

With some products, there may be no clear distinction between power ports and signal ports, in which case it is up to product committees to make this determination for test purposes.

^a "X" can be any level, above, below or in between the others. The level shall be specified in the dedicated equipment specification.

Performance criterion: **B**

6.3.2. Test setup



6.3.3. Test Procedure

Measurement was performed in shielded room.

Measurement procedure was applied according to EN 61000-4-4 clause 8.

The test method and equipment was specified by EN 61000-4-4.

6.3.4. Test Result

PASS

Location	Level (kV)	Polarity (P/N)	Result
AC power (including protective earth)	1	P/N	Pass
DC power (including protective earth)	1	P/N	N/A
I/O signal/control (including functional earth)	0,5	P/N	N/A
I/O signal/control connected directly to mains supply	1	P/N	N/A

6.4. Surges

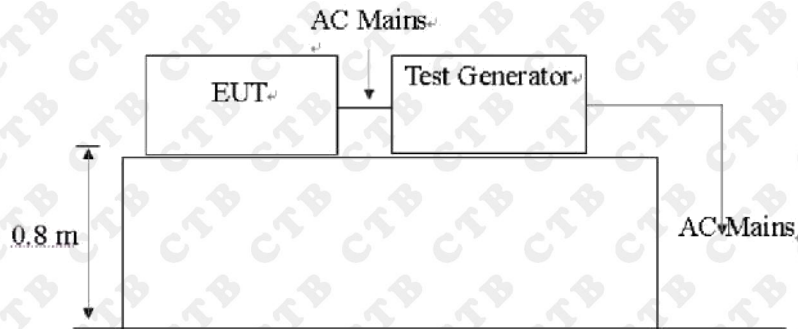
6.4.1. Test Levels and Performance Criterion

Severity Level 2 for line to line 1.0KV, Severity Level 2 for line to ground at 2.0KV

Level	Open-circuit test voltage $\pm 10\%$ (kV)
1	0,5
2	1
3	2
4	4
X ^a	Special
^a "X" can be any level, above, below or in between the others. The level shall be specified in the dedicated equipment specification.	

Performance criterion: **B**

6.4.2. Test setup



6.4.3. Test Procedure

Measurement was performed in shielded room.

Measurement procedure was applied according to EN 61000-4-5 clause 8.

The test method and equipment was specified by EN 61000-4-5.

6.4.4. Test Result

PASS

Location	Level(kV)	Polarity(P/N)	Result
AC power (including protective earth) (line to line)	1.0	P/N	Pass
AC power (including protective earth) (line to ground)	2.0	P/N	N/A
DC power (including protective earth) (line to line)	0,5	P/N	N/A
DC power (including protective earth) (line to ground)	1.0	P/N	N/A
I/O signal/control (including functional earth) (line to ground)	1.0	P/N	N/A
I/O signal/control connected directly to mains supply (line to line)	0,5	P/N	N/A
I/O signal/control connected directly to mains supply (line to ground)	1.0	P/N	N/A

6.5. Conducted RF

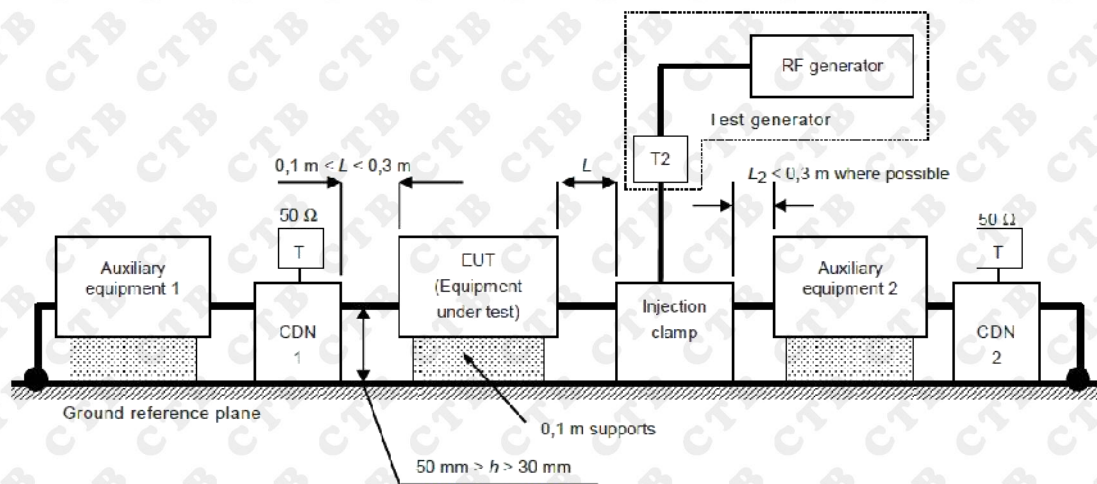
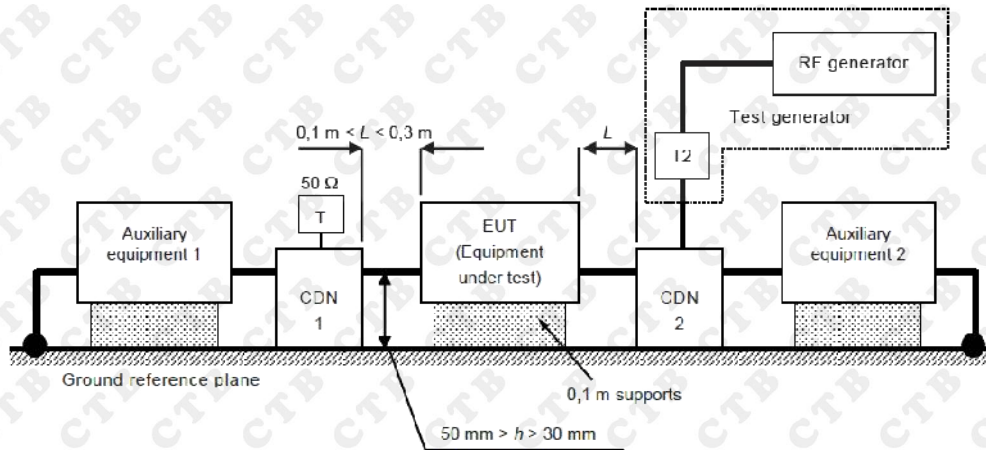
6.5.1. Test Levels and Performance Criterion

Severity Level 2

Frequency range 150 kHz ± 80 MHz		
Level	Voltage level (e.m.f.)	
	U0 dB(μV)	U0 V
1	120	1
2	130	3
3	140	10
X a	Special	
a X is an open level.		

Performance criterion: **A**

6.5.2. Test setup



6.5.3. Test Procedure

Measurement procedure was applied according to EN 61000-4-6 clause 8.
The test method and equipment was specified by EN 61000-4-6.

6.5.4. Test Result

PASS

Injected point	Frequency (MHz)	Level (e.m.f)	Modulation	Result
AC power (including protective earth)	0.15 to 80	3V	80%, 1 kHz, AM	PASS
DC power (including protective earth)	0.15 to 80	3V	80%, 1 kHz, AM	N/A
I/O signal/control (including functional earth)	0.15 to 80	3V	80%, 1 kHz, AM	N/A
I/O signal/control connected directly to mains supply	0.15 to 80	3V	80%, 1 kHz, AM	N/A

6.6. Power frequency magnetic field

6.6.1. Test Levels and Performance Criterion

Severity Level 2

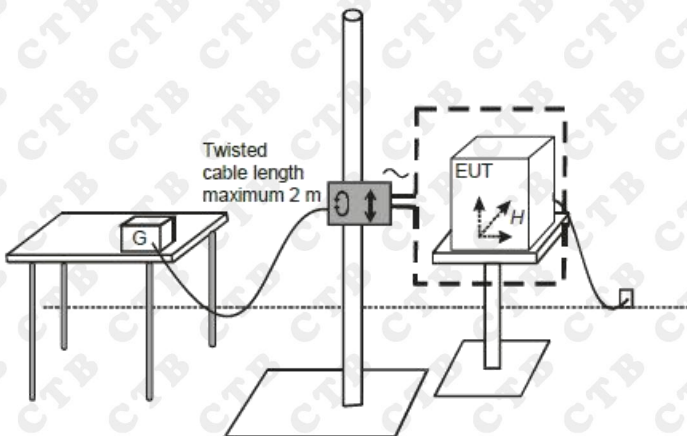
Level	Magnetic field strength (A/m)
1	1
2	3
3	10
4	30
5	100
X ^a	Special

^a "X" can be any level, above, below or in between the others. The level shall be specified in the dedicated equipment specification.

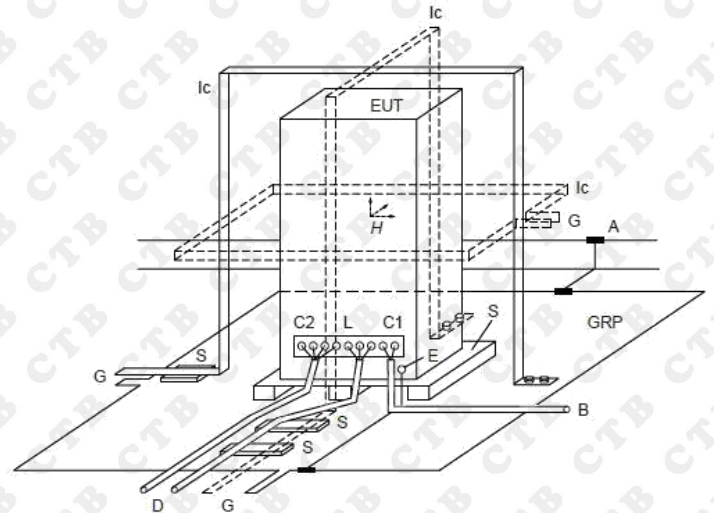
Performance criterion: **A**

6.6.2. Test setup

For table-top equipment



For floor standing equipment



6.6.3. Test Procedure

Measurement was performed in shielded room.

Measurement procedure was applied according to EN 61000-4-8 clause 8.

The test method and equipment was specified by EN 61000-4-8.

6.6.4. Test Result

PASS

Test frequency	Test Level (A/m)	Test time [s]	Axis	Result
<input checked="" type="checkbox"/> 50Hz <input type="checkbox"/> 60Hz	1	300	X	Pass
<input checked="" type="checkbox"/> 50Hz <input type="checkbox"/> 60Hz	1	300	Y	Pass
<input checked="" type="checkbox"/> 50Hz <input type="checkbox"/> 60Hz	1	300	Z	Pass

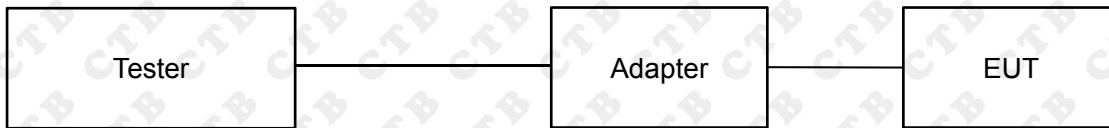
6.7. Voltage dips and Short interruptions

6.7.1. Test Levels and Performance Criterion

Residual voltage	Voltage Reduction	Period (Cycles)	Performance criterion
0%	100%	0,5	B
0%	100%	1	B
70	30	25/30 ^a	C
0	100	250/300 ^b	C

^a, ^b For example "25/30 cycles" means "25 cycles for 50 Hz test" or "30 cycles for 60 Hz test".

6.7.2. Test setup



6.7.3. Test Procedure

Measurement was performed in shielded room.

Measurement procedure was applied according to EN 61000-4-11 clause 8.

The test method and equipment was specified by EN 61000-4-11.

6.7.4. Test Result

PASS

U_T in V	Frequency in Hz	Test Level % of U_T	Phase angles [°]	Duration in cycles	Results
<input checked="" type="checkbox"/> 230 <input type="checkbox"/> 120	<input checked="" type="checkbox"/> 50 <input type="checkbox"/> 60	0	0, 45, 90, 135, 180, 225, 270, 315	<input checked="" type="checkbox"/> 0,5 (50 Hz) <input type="checkbox"/> 0,5 (60 Hz)	PASS
<input checked="" type="checkbox"/> 230 <input type="checkbox"/> 120	<input checked="" type="checkbox"/> 50 <input type="checkbox"/> 60	0	0, 45, 90, 135, 180, 225, 270, 315	<input checked="" type="checkbox"/> 1 (50 Hz) <input type="checkbox"/> 1 (60 Hz)	PASS
<input checked="" type="checkbox"/> 230 <input type="checkbox"/> 120	<input checked="" type="checkbox"/> 50 <input type="checkbox"/> 60	70	0, 45, 90, 135, 180, 225, 270, 315	<input checked="" type="checkbox"/> 25 (50 Hz) <input type="checkbox"/> 30 (60 Hz)	PASS
<input checked="" type="checkbox"/> 230 <input type="checkbox"/> 120	<input checked="" type="checkbox"/> 50 <input type="checkbox"/> 60	0	0, 45, 90, 135, 180, 225, 270, 315	<input checked="" type="checkbox"/> 250 (50 Hz) <input type="checkbox"/> 300 (60 Hz)	PASS

7. Photographs of test setup

Photograph of test setup for Mains terminal disturbance voltage



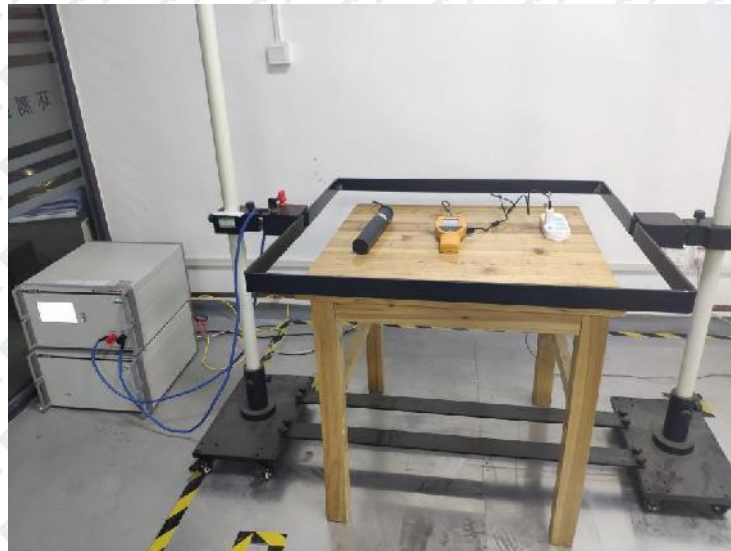
Photograph of test setup for Radiated emissions at frequencies



Photograph of test setup for ESD



Photograph of test setup for PFMF



8. Photographs of EUT



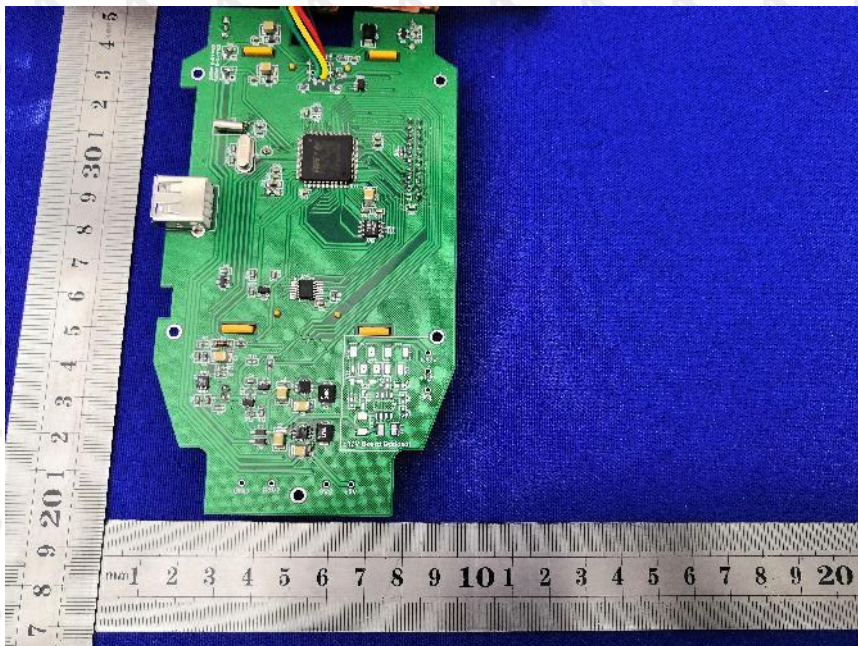
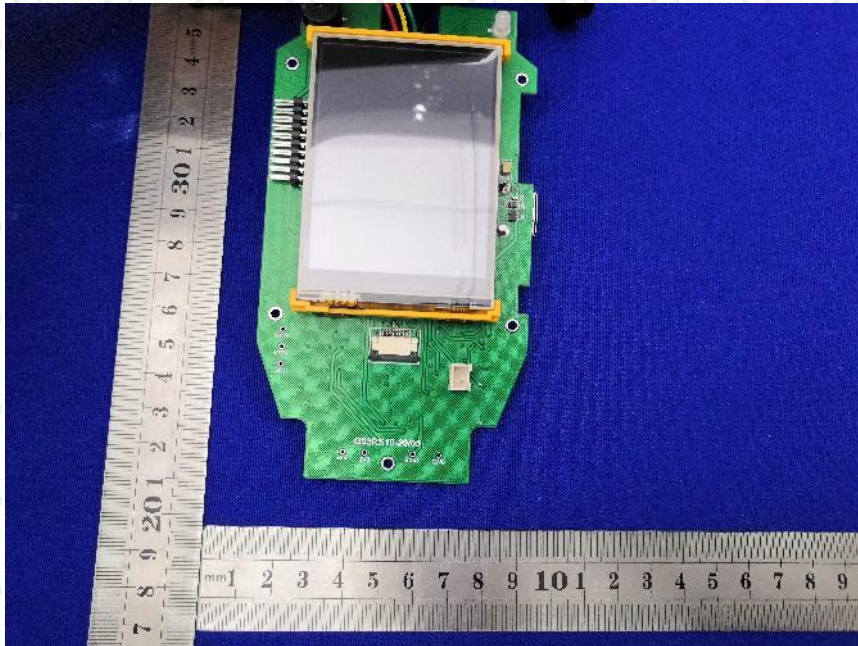
Photographs of EUT



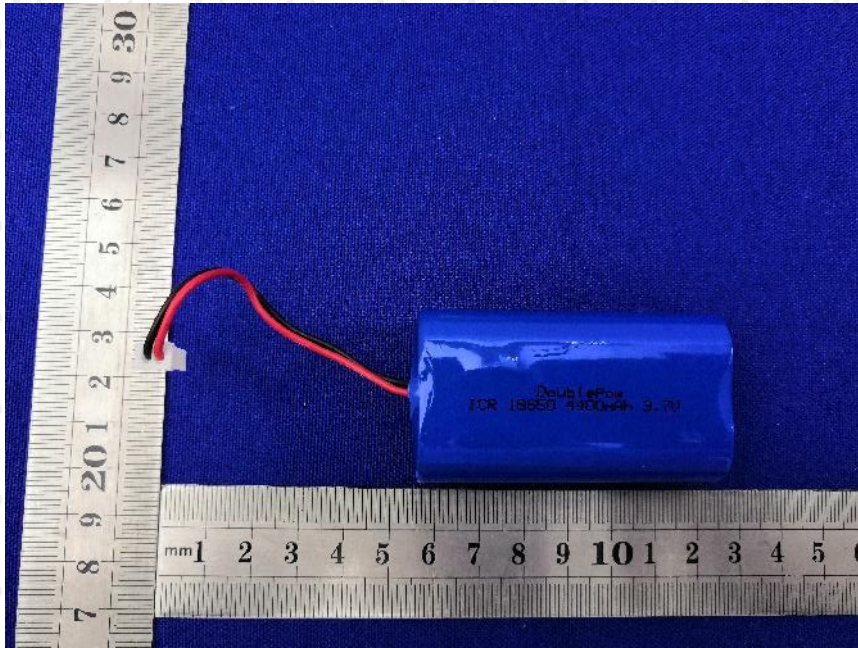
Photographs of EUT



Photographs of EUT



Photographs of EUT



End of report