



EMC TEST REPORT

Product Name: Metal Fan

Trade mark: /

Model No.: HI-FS-5E, HI-FS-5

S/N: /

Report No.: CTB25031704501E01

Applicant: Foshan Tuboshu Intelligent Technology Co., Ltd

No. 204-2, Bldg. B, Shunde Creative Industry Park, No.41, Fengxiang Road,

Address: Xinqiao Community, Daliang Street, Shunde District, Foshan City, Guangdong Province, China

Manufacturer: Foshan Tuboshu Intelligent Technology Co., Ltd

No. 204-2, Bldg. B, Shunde Creative Industry Park, No.41, Fengxiang Road,

Address: Xinqiao Community, Daliang Street, Shunde District, Foshan City, Guangdong Province, China

Prepared by: Shenzhen CTB Testing Technology Co., Ltd.

1&2/F., Building A, No.26, Xinhe Road, Xinqiao, Xinqiao Street, Bao'an

Address: District, Shenzhen, Guangdong, China

Sample No.: 25031704501

Date of Receipt: Mar. 17, 2025

Date of Test(s): Mar. 18, 2025 ~ Mar. 20, 2025

Date of Issue: Mar. 25, 2025

Test Standard(s): EN IEC 55014-1:2021, EN IEC 55014-2:2021

Test Result: Pass

In the configuration tested, the EUT complied with the standards specified above.

Compiled by:

Reviewed by:

Approved by:

Blake Cai

Bin Mei



Blake Cai

Bin Mei

Note: If there is any objection to the inspection results in this report, please submit a written report to the company within 15 days from the date of receiving the report. The test report is effective only with both signature and specialized stamp. This result(s) shown in this report refer only to the sample(s) tested. Without written approval of Shenzhen CTB Testing Technology Co., Ltd. this report can't be reproduced except in full. The tested sample(s) and the sample information are provided by the client. "★" indicates the testing items were fulfilled by subcontracted lab. "※" indicates the items are not in CNAS accreditation scope.

Table of Contents

1.	Description of version	3
2.	Test summary	4
3.	Measurement uncertainty	5
4.	General information	6
4.1.	Description of EUT	6
4.2.	Description of Accessory Device	6
4.3.	Test conditions	6
4.4.	Block diagram of EUT configuration	6
4.5.	Operating condition of EUT	7
5.	List of test and measurement instruments	8
6.	Emission	10
6.1.	Continuous disturbance	10
6.2.	Radiated emission	14
7.	Immunity	18
7.1.	Performance criterion	18
7.2.	Classification of apparatus	19
7.3.	Electrostatic discharges	21
7.4.	Radio frequency electromagnetic fields	23
8.	Photographs of test setup	25
9.	Photographs of EUT	27

1. Description of version

Report No.	Issue Date	Description	Approved
CTB25031704501E01	Mar. 25, 2025	Original	Valid

2. Test summary

Emission		
Test Item	Test Method	Result
Continuous disturbance	EN IEC 55014-1	PASS
Discontinuous disturbance		N/A ²
Magnetic field strength		N/A ³
Disturbance power		N/A
Radiated emissions at frequencies up to 1 GHz		PASS
Radiated emissions at frequencies above 1 GHz		N/A
Immunity(EN IEC 55014-2)		
Test Item	Test Method	Result
Electrostatic discharges	IEC 61000-4-2	PASS
Fast transients	IEC 61000-4-4	N/A ¹
Injected currents	IEC 61000-4-6	N/A ¹
Radio frequency electromagnetic field	IEC 61000-4-3	PASS
Surges	IEC 61000-4-5	N/A ¹
Voltage dips	IEC 61000-4-11	N/A ¹

Note: N/A is abbreviation for Not Applicable.

1. The Product is powered by USB power, this test items is not applicable.
2. The Product has no switching operations, automatic programme or other electrically controlled or operated functions
3. It only apply to induction cooking appliances.

3. Measurement uncertainty

The reported uncertainty of measurement $y \pm U$, where expanded uncertainty U is based on a standard uncertainty multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately 95 %

Test Item	Frequency	Expanded Uncertainty (U_{Lab})
No.1 Conducted Emission	150 kHz to 30 MHz	± 3.1 dB
No.2 Conducted Emission	150 kHz to 30 MHz	± 3.2 dB
Disturbance Power	30 MHz to 300 MHz	± 3.3 dB
Radiated Emission	30 MHz to 1000 MHz	± 4.1 dB
Radiated Emission	1000 MHz to 6000 MHz	± 4.8 dB

4. General information

4.1. Description of EUT

Product name	Metal Fan
Trade Mark	/
Model	HI-FS-5E
Serial Model No.	HI-FS-5
Model Difference	Different model names result in differences in appearance, while the internal structure remains the same. Test Sample Model: HI-FS-5E.
Rated Power	4W
Rated Voltage& current	DC 5V 2A from adapter(AC 230V/50Hz) or DC 3.7V from battery
Highest Cock Frequency	/
Category	☐ I ☐ II ☒ III ☐ IV ☐ V
The highest frequency of the internal sources of the EUT	☒ less than 108 MHz, the measurement shall only be made up to 1 GHz. ☐ between 108 MHz and 500 MHz, the measurement shall only be made up to 2 GHz. ☐ between 500 MHz and 1 GHz, the measurement shall only be made up to 5 GHz. ☐ above 1 GHz, the measurement shall be made up to 6 GHz.
Configuration	☒ Table-top ☐ Floor-standing
Adapter Information	/

Note: 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.

4.2. Description of Accessory Device

Description	Manufacturer	Model	Specification	Note
Adapter	Xu Yuan	XY-CU012005 00200U01	Input: 100-240V~ 50/60Hz 0.4A Max Output: 5V~2A	☐ Applicant ☒ CTB

External I/O Cable

Cable Description	Shielded Type	Ferrite Core	Length(m)	Note
USB Cable	☐ Shielded ☐ Non-shielded	☐ Yes ☐ No	0.5	☐ Applicant ☒ CTB

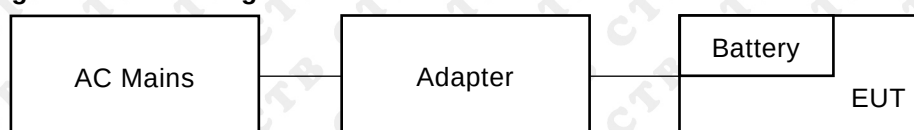
4.3. Test conditions

Temperature: 15-25℃

Relative Humidity: 30-60 %

Atmospheric pressure: 800hPa-1060hPa

4.4. Block diagram of EUT configuration



4.5. Operating condition of EUT

The test system was pre-tested based on the consideration of all possible combinations of EUT operation modes according to test plan. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively. All test mode(s) and condition(s) mentioned were considered and evaluated respectively by performing full tests, (*)the worst data were recorded and reported.

Pretest Test Mode	Description	Test Voltage
Mode 1*	Charging+Working	AC 230V/50Hz
Mode 2*	Working	DC 3.7V

Conducted emission test		
Final Test Mode	Description	Test Voltage
Mode 1*	Charging+Working	AC 230V/50Hz

Radiated emission test		
Final Test Mode	Description	Test Voltage
Mode 1*	Charging+Working	AC 230V/50Hz

Immunity test		
Final Test Mode	Description	Test Voltage
Mode 2*	Working	DC 3.7V

5. List of test and measurement instruments

No.1 Continuous disturbance						
No.	Equipment	Manufacturer	Model No.	Serial No.	Firmware version	Calibrated until
1	843 Shield Room	C/ R/ T	843	/	/	2027/6/21
2	LISN	ROHDE&SCHWARZ	ESH3-Z5	100318	/	2025/6/30
3	Pulse limiter	ROHDE&SCHWARZ	ESH3-Z2	0357.8810.54-1 02700-NB	/	2025/6/28
4	EMI TEST RECEIVER	R&S	ESCI	100428	V4.42.SP3	2025/6/30
5	Coaxial cable	Agilent	UCE500-SMNM-1. 5M	/	/	2025/6/30
6	ISN	Schwarzbeck	NTFM8158	183	/	2025/6/30
7	ISN	Schwarzbeck	CAT5 8158	473	/	2025/6/23
8	Voltage Probe	Schwarzbeck	TK 9420	01189	/	2025/10/25
9	EMI test software	Frad	EZ-EMC	Ver/ EMC-con3A1/1	/	/
10	Current Probe	FCC	F-52B	199453	/	2025/5/27

Radiated emission(No.2 Chamber)						
No.	Equipment	Manufacturer	Model No.	Serial No.	Firmware version	Calibrated until
1	966 Chamber	C/ R/ T	966	/	/	2026/11/14
2	Double Ridged Broadband Horn Antenna	Schwarzbeck	BBHA 9120 D	01911	/	2026/7/07
3	Broadband Antenna	Schwarzbeck	VULB 9168	1471	/	2025/10/25
4	Preamplifier	Agilent	8449B	3008A01838	/	2025/6/30
5	Preamplifier	Schwarzbeck	BBV 9743 B	00500	/	2025/5/23
6	EMI TEST RECEIVER	R&S	ESCI7	100861	/	2025/10/25
7	Spectrum Analyzer	KEYSIGHT	N9020A	MY51289897	A.14.16	2025/6/28
8	EMI test software	Farad	EZ-EMC	/	Ver. FARAD-3A1+	/
9	Coaxial cable	Rosenberg	8m	/	/	2025/10/25
10	Coaxial cable	Times	2m	/	/	2025/10/25
11	Coaxial cable	Times	2m	/	/	2025/10/25
12	Coaxial cable	Times	1m	/	/	2025/10/25
13	loop antenna	Schwarzbeck	FMZB 1519B	1519B-224	/	2025/6/29

Electrostatic discharges						
No.	Equipment	Manufacturer	Model No.	Serial No.	Firmware version	Calibrated until
1	ESD Simulator	TESTQ	NSG437	329	V01.00	2025/6/29

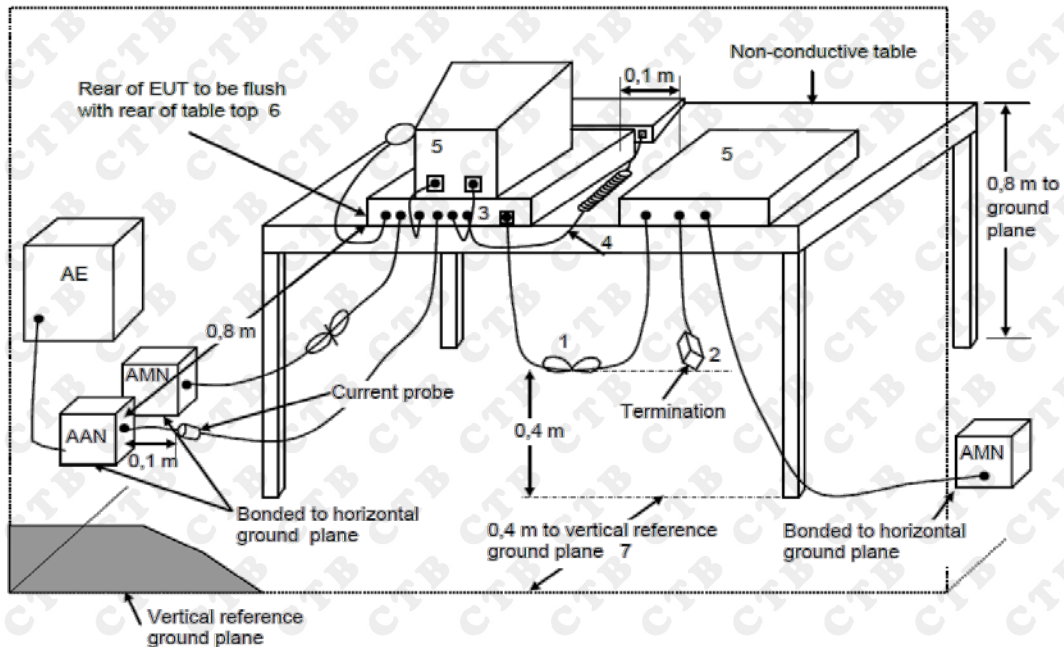
Radio frequency electromagnetic field						
No.	Equipment	Manufacturer	Type No.	Serial No.	Firmware version	Calibrated until
1	966 Chamber	C/ R/ T	966	/	/	2026/11/14
2	Signal Generator	Agilent	N5181A	MY50140365	A.01.60	2025/6/28
3	Stacked Double Log.-Per. Antenna	SKET	STLP 9129 Plus	2106070106	/	/
4	Switch Controller	SKET	RFSU-DC18G-4C	2106070105	/	/
5	RF Power Meter	Agilent	E9304A	MY41490462	/	2025/6/28
6	RF Power Meter	Agilent	E9301A	MY41495675	/	2025/6/28
7	E-Field Probe	Narda	EP-601	811ZX10305	/	2025/7/06
8	Power Amplifier	SKET	HAP-80M01G-250W	2106070103	/	2025/6/28
9	Power Amplifier	SKET	HAP-01G 06G-75W	2106070104	/	2025/6/28
10	Audio Analysis	R&S	ATS-1	ATS 1-41152	/	2025/7/01
11	Audio Output Matching Network	SKET	RCO Network	/	/	2025/7/01
12	Power Meter	Agilent	E4419B	GB42421440	/	2025/6/28
13	RS test software	SKET	EMC-S	V2.0.0.19	/	/

6. Emission

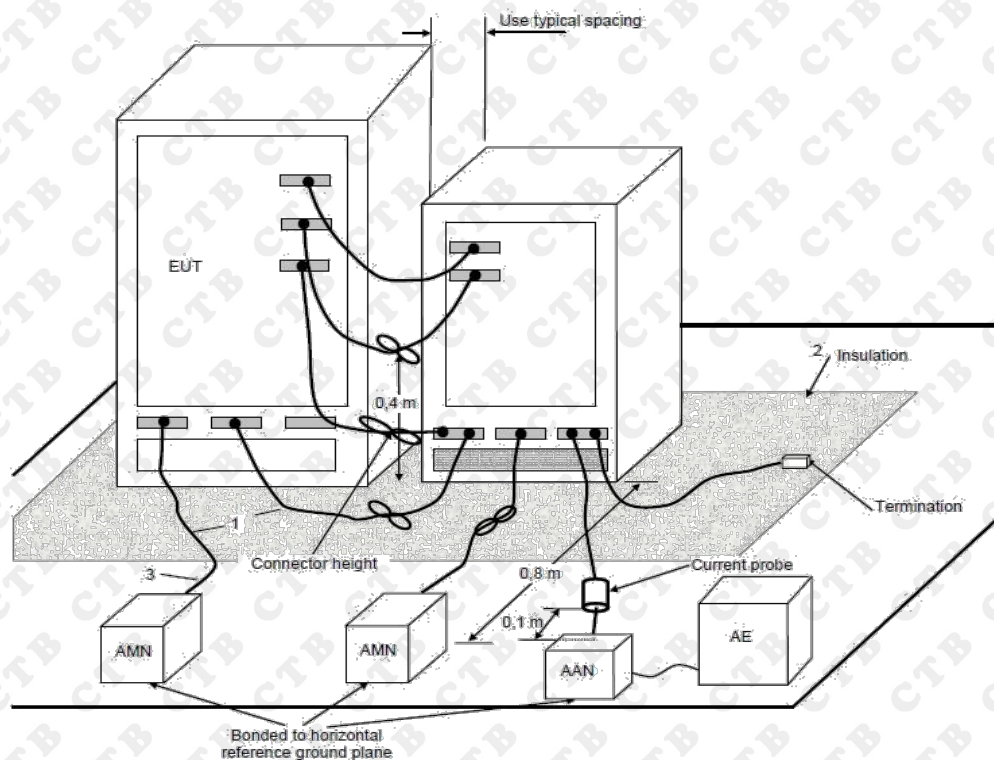
6.1. Continuous disturbance

6.1.1. Block diagram of test setup

For table-top equipment



For floor standing equipment



6.1.2. Limit

General limits						
Frequency range	Mains ports		Associated ports			
	Disturbance voltage		Disturbance voltage		Disturbance current	
MHz	Quasi-peak dBμV	Average dBμV	Quasi-peak dBμV	Average dBμV	Quasi-peak dBμA	Average dBμA
0,15 to 0,50	Decreasing linearly with the logarithm of the frequency from:		80	70	Decreasing linearly with the logarithm of the frequency from:	
	66 to 56	59 to 46			40 to 30	30 to 20
0,50 to 5	56	46	74	64	30	20
5 to 30	60	50	74	64		
The lower limit applies at the transition frequencies. The test report shall state which test method was used and which limits were applied.						

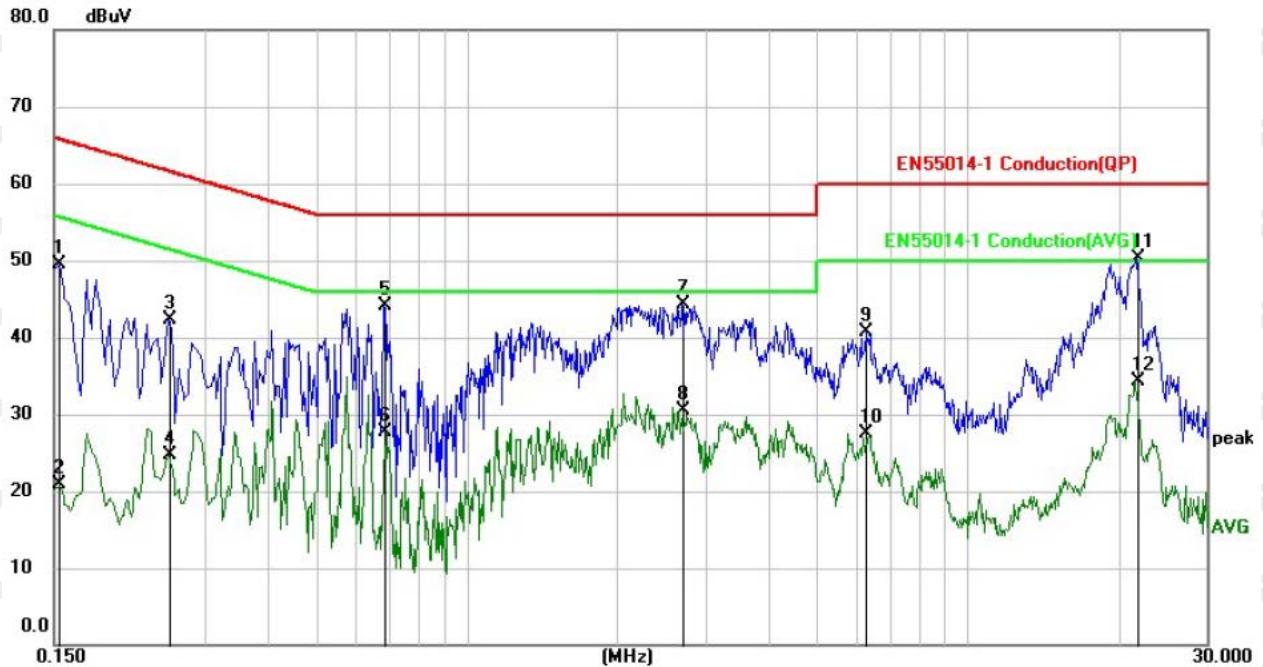
Limits for mains port of tools						
Frequency range	$P \leq 700 \text{ W}$		$700 \text{ W} < P \leq 1\,000 \text{ W}$		$P > 1\,000 \text{ W}$	
MHz	Quasi-peak dB μ V	Average dB μ V	Quasi-peak dB μ V	Average dB μ V	Quasi-peak dB μ V	Average dB μ V
	Decreasing linearly with the logarithm of the frequency from:					
0,15 to 0,35	66 to 59	59 to 49	70 to 63	63 to 53	76 to 69	69 to 59
0,35 to 5	59	49	63	53	69	59
5 to 30	64	54	68	58	74	64
The lower limit applies at the transition frequencies. P = rated power of the motor only.						

6.1.3. Test procedure

1. The AMN placed 0,8m from the boundary of the unit under test and bonded to a round reference plane. This distance was between the closest points of the AMN and the EUT. All other units of the EUT and associated equipment were at least 0,8 m from the AMN. All power was connected to the system through Artificial Mains Network (AMN). Conducted voltage measurements on mains lines were made at the output of the AMN.
2. Both sides of AC line are checked to find out the maximum conducted emission according to the EN 55014-1 regulations during conducted emission test. And the voltage probe had been used for the load terminals test according to the EN 55014-1 standard.
3. The bandwidth of the test receiver is set at 9 kHz in 150 kHz~30 MHz.
4. The frequency range from 150 kHz to 30MHz is checked.

6.1.4. Test results

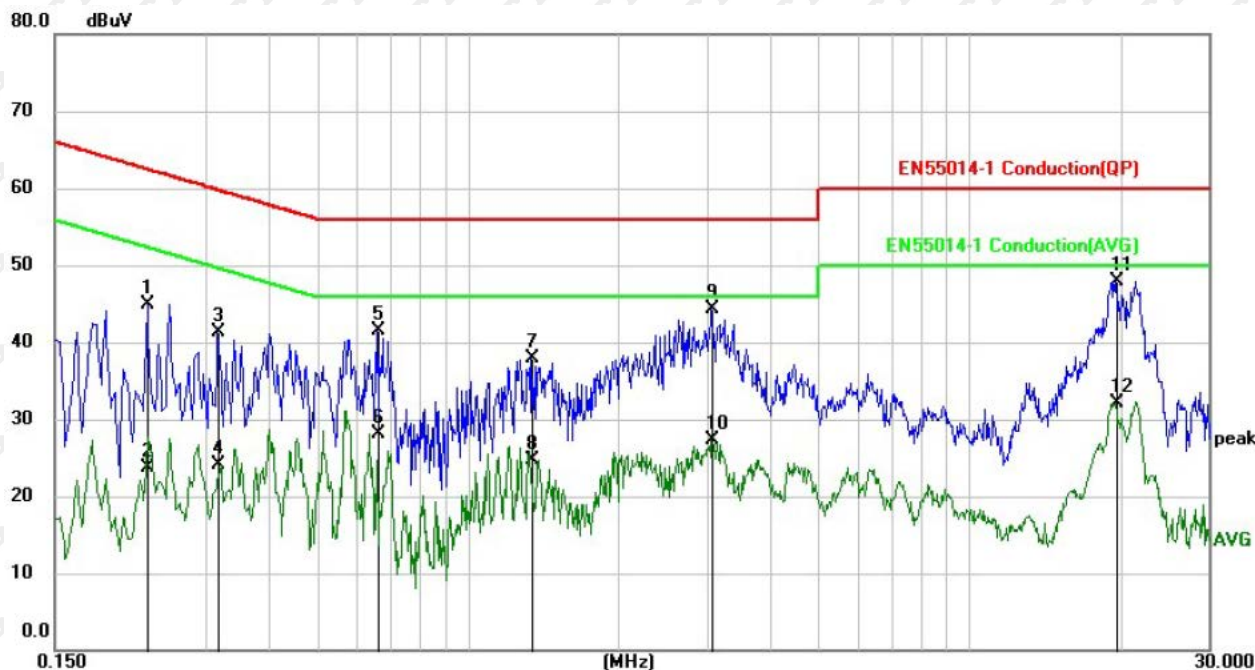
Temperature:	23°C	Relative Humidity:	54 %
Pressure:	101kPa	Phase :	Line
Test Voltage :	AC 230V/50Hz	Test Mode:	Mode 1



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1		0.1539	38.58	10.88	49.46	65.79	-16.33	QP
2		0.1539	10.10	10.88	20.98	55.79	-34.81	AVG
3		0.2540	31.67	10.67	42.34	61.63	-19.29	QP
4		0.2540	13.96	10.67	24.63	51.63	-27.00	AVG
5		0.6860	33.43	10.70	44.13	56.00	-11.87	QP
6		0.6860	16.98	10.70	27.68	46.00	-18.32	AVG
7		2.7020	32.49	11.73	44.22	56.00	-11.78	QP
8		2.7020	18.77	11.73	30.50	46.00	-15.50	AVG
9		6.2780	28.00	12.69	40.69	60.00	-19.31	QP
10		6.2780	14.83	12.69	27.52	50.00	-22.48	AVG
11	*	21.7300	36.48	13.74	50.22	60.00	-9.78	QP
12		21.7300	20.55	13.74	34.29	50.00	-15.71	AVG

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

Temperature:	23°C	Relative Humidity:	54 %
Pressure:	101kPa	Phase :	Neutral
Test Voltage :	AC 230V/50Hz	Test Mode:	Mode 1



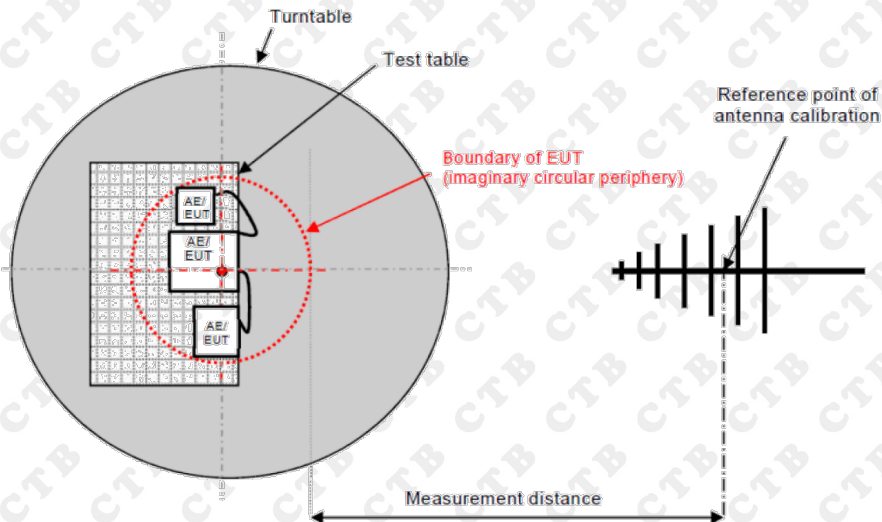
No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	
		MHz	Level	Factor	ment			Detector
			dBuV	dB	dBuV	dBuV	dB	
1		0.2300	34.17	10.69	44.86	62.45	-17.59	QP
2		0.2300	12.92	10.69	23.61	52.45	-28.84	AVG
3		0.3180	30.72	10.63	41.35	59.76	-18.41	QP
4		0.3180	13.40	10.63	24.03	49.76	-25.73	AVG
5		0.6580	30.85	10.67	41.52	56.00	-14.48	QP
6		0.6580	17.47	10.67	28.14	46.00	-17.86	AVG
7		1.3380	26.74	11.16	37.90	56.00	-18.10	QP
8		1.3380	13.60	11.16	24.76	46.00	-21.24	AVG
9	*	3.0660	32.47	11.81	44.28	56.00	-11.72	QP
10		3.0660	15.54	11.81	27.35	46.00	-18.65	AVG
11		19.5459	34.36	13.57	47.93	60.00	-12.07	QP
12		19.5459	18.45	13.57	32.02	50.00	-17.98	AVG

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

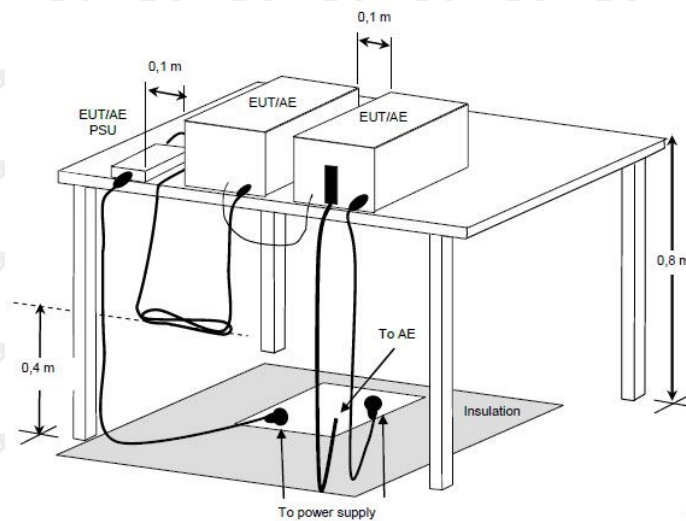
6.2. Radiated emission

6.2.1. Block diagram of test setup

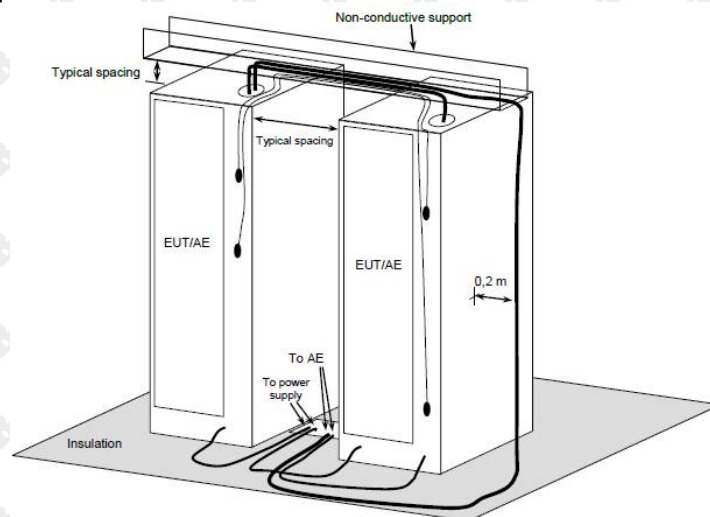
Measurement distance



For table-top equipment



For floor standing equipment



6.2.2. Limit

Up to 1GHz:

Frequency range MHz	Measurement			Limits dB(μ V/m)
	Facility	Distance m	Detector type / bandwidth	
30 to 230	SAC	3	Quasi Peak / 120 kHz	40
230 to 1 000				47

Above 1GHz:

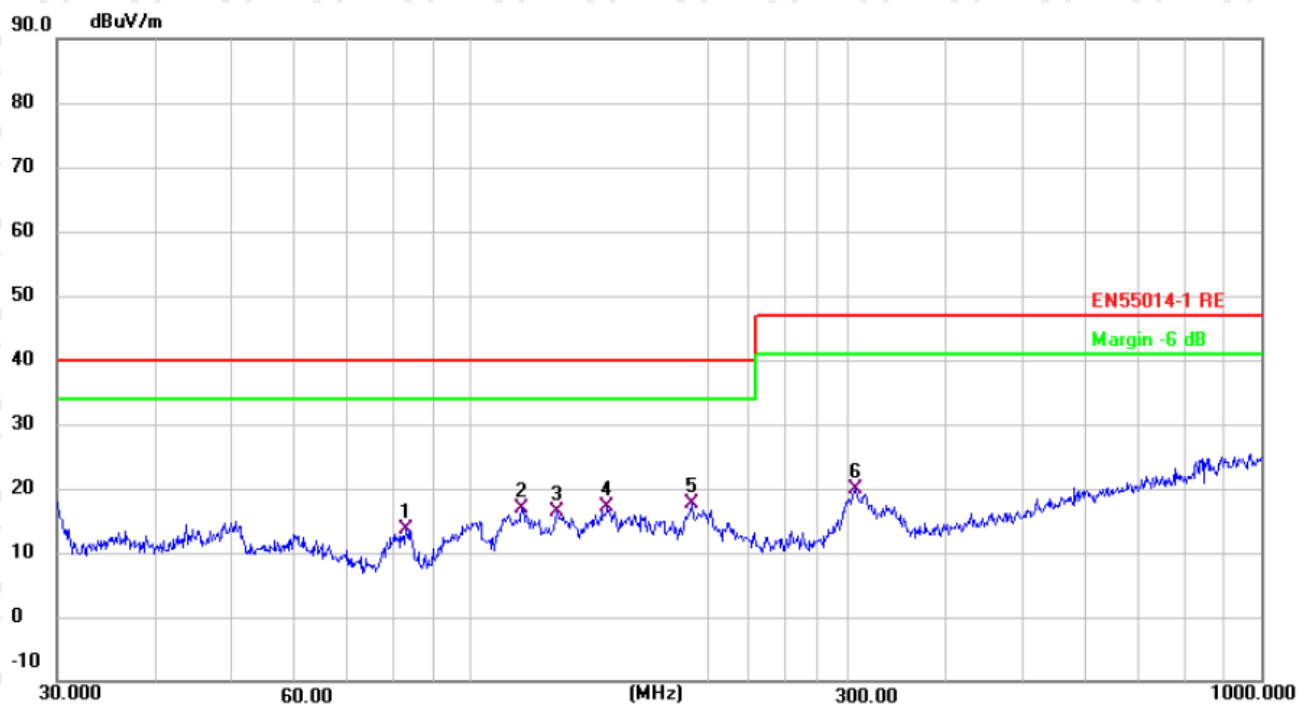
Frequency range MHz	Measurement			Class B limits dB(μ V/m)
	Facility	Distance m	Detector type / bandwidth	
1 000 to 3 000	FSOATS	3	Average / 1MHz	50
3 000 to 6 000				54
1 000 to 3 000		3	Peak / 1MHz	70
3 000 to 6 000				74

6.2.3. Test procedure

1. The EUT is placed on a turn table which is 0,8m meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The Boundary of EUT (imaginary circular periphery) is set 3 meters away from the receiving antenna (Reference point of antenna calibration) which is mounted on an antenna tower. The antenna can move up and down between 1 to 4 meters to find out the maximum emission level. Broadband antennas (calibrated by dipole antenna) are used as a receiving antenna.
2. Both horizontal and vertical polarizations of the antenna are set on test.
3. The bandwidth setting on the test receiver reference 5.3.2.
4. The EUT is tested in Semi-Anechoic Chamber.
5. The Test results are listed in Section 5.3.4.

6.2.4. Test results

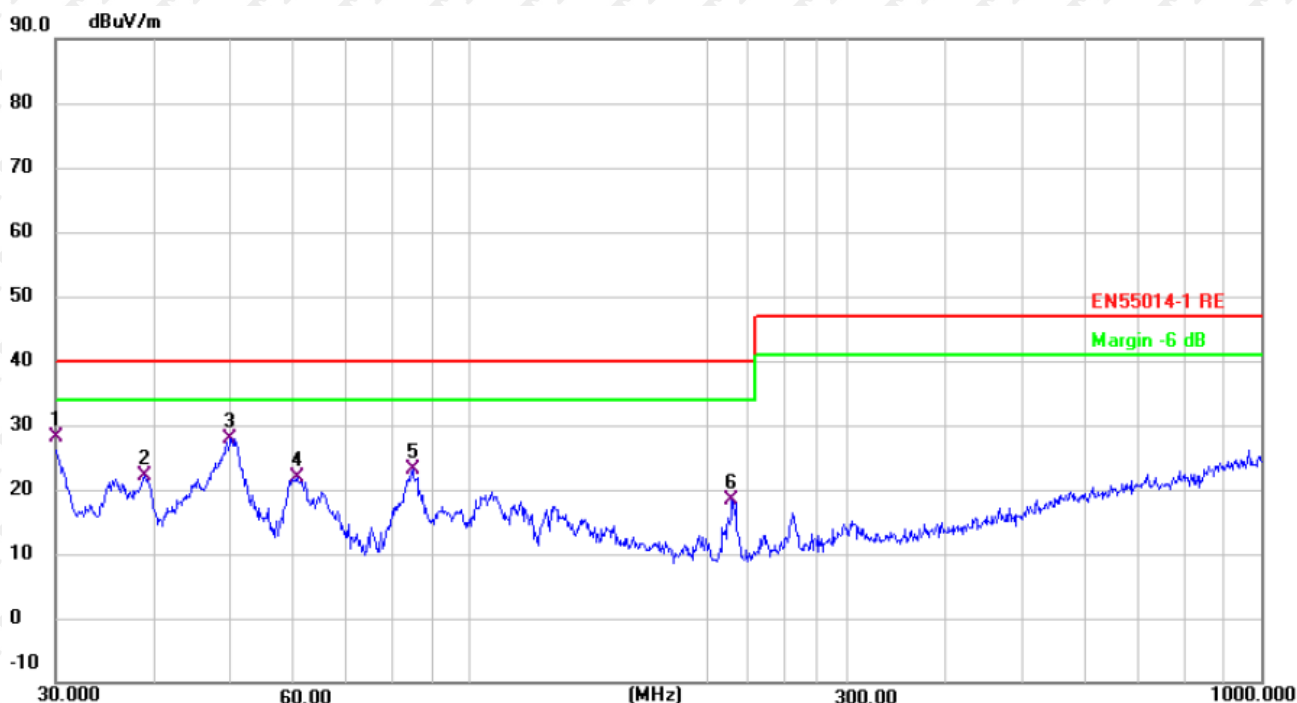
Temperature:	23°C	Relative Humidity:	54 %
Pressure:	101kPa	Polarization :	Horizontal
Test Voltage :	AC 230V/50Hz	Test Mode:	Mode 1



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	82.9384	31.78	-18.07	13.71	40.00	-26.29	QP
2	116.1321	32.59	-15.83	16.76	40.00	-23.24	QP
3	128.5630	31.15	-14.72	16.43	40.00	-23.57	QP
4	148.9624	29.91	-12.90	17.01	40.00	-22.99	QP
5 *	190.4050	33.41	-15.75	17.66	40.00	-22.34	QP
6	306.7537	33.25	-13.31	19.94	47.00	-27.06	QP

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

Temperature:	23°C	Relative Humidity:	54 %
Pressure:	101kPa	Polarization :	Vertical
Test Voltage :	AC 230V/50Hz	Test Mode:	Mode 1



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	30.0000	41.89	-13.75	28.14	40.00	-11.86	QP
2	38.8878	35.57	-13.47	22.10	40.00	-17.90	QP
3	49.8814	41.40	-13.57	27.83	40.00	-12.17	QP
4	60.4918	36.83	-14.92	21.91	40.00	-18.09	QP
5	84.7020	41.17	-18.11	23.06	40.00	-16.94	QP
6	214.5142	34.89	-16.44	18.45	40.00	-21.55	QP

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

7. Immunity

7.1. Performance criterion

Performance criterion A: The apparatus shall continue to operate as intended during the test. No degradation of performance or loss of function is allowed below a performance level (or permissible loss of performance) specified by the manufacturer, when the apparatus is used as intended. 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 from what the user may reasonably expect from the apparatus if used as intended.

Performance criterion B: The apparatus shall continue to operate as intended after the test. No degradation of performance or loss of function is allowed below a performance level (or permissible loss of performance) specified by the manufacturer, when the apparatus is used as intended. During the test, degradation of performance is allowed, however no change of actual operating state or stored data is allowed to persist after the test. 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 from what the user may reasonably expect from the apparatus if used as intended.

Performance criterion C: Temporary loss of function is allowed, provided the function is self-recoverable or can be restored by the operation of the controls, or by any operation specified in the instructions for use.

7.2. Classification of apparatus

Category I: equipment containing no electronic control circuitry.

All appliances having no electronic control circuitry are considered to be category I.

Electric circuits consisting of passive components (such as radio interference suppression capacitors or inductors, mains transformers, mains frequency rectifiers and heating elements) are not considered to be electronic control circuitry.

Category II: mains operated equipment containing electronic control circuitry with no clock frequency higher than 15 MHz.

Test items:

Electrostatic discharges with performance criterion B;

Electric fast transients with performance criterion B;

Injected currents 150 kHz to 230 MHz with performance criterion A;

Surges with performance criterion B;

Voltage dips with performance criterion C.

Category III: battery operated equipment not included in Category I.

NOTE: The assignment to Category III is independent of the clock frequency

This category also includes equipment provided with rechargeable batteries, which can be charged, directly or indirectly, from the mains. Accordingly, this equipment shall also be subjected to the test requirements for mains operated equipment but only when testing the charging function.

If the equipment can operate its intended functions when connected, directly or indirectly to the mains, then it is not battery operated. Accordingly, it shall be classified as Category II, Category IV or Category V, as applicable, and subjected to the corresponding test requirements when in mains operation.

Test items:

Electrostatic discharges with performance criterion B/C^a;

Electric fast transients with performance criterion B;

Injected currents 150 kHz to 80 MHz with performance criterion A;

Radio frequency electromagnetic fields ^{b, c} 80 MHz to (F) MHz with performance criterion A;

Surges with performance criterion B;

NOTE:

a. Performance criterion C may be applied to toys not using score or data entered by the user (e.g. musical soft toys and sounding toys).

b. The frequency (F), up to which this test needs to be performed, is determined from either categories IV test requirements or categories IV test requirements, according to the principle for distinguishing between categories IV and V.

c. For Category III toys, the radio frequency electromagnetic fields test shall be applicable only for ride on toys.

Category IV: mains operated equipment containing electronic control circuitry with a highest clock frequency greater than 15 MHz but lower than or equal to 200 MHz.

Test items:

Electrostatic discharges with performance criterion B;

Electric fast transients with performance criterion B;

Injected currents 150 kHz to 80 MHz with performance criterion A;

Radio frequency electromagnetic fields 80 MHz to 1000 MHz with performance criterion A;

Surges with performance criterion B;

Voltage dips with performance criterion C.

Category V: mains operated equipment containing electronic control circuitry with a highest clock frequency greater than 200 MHz.

Test items:

Electrostatic discharges with performance criterion B;

Electric fast transients with performance criterion B;

Injected currents 150 kHz to 80 MHz with performance criterion A;

Radio frequency electromagnetic fields 80 MHz to 6000 MHz with performance criterion A;

Surges with performance criterion B;

Voltage dips with performance criterion C.

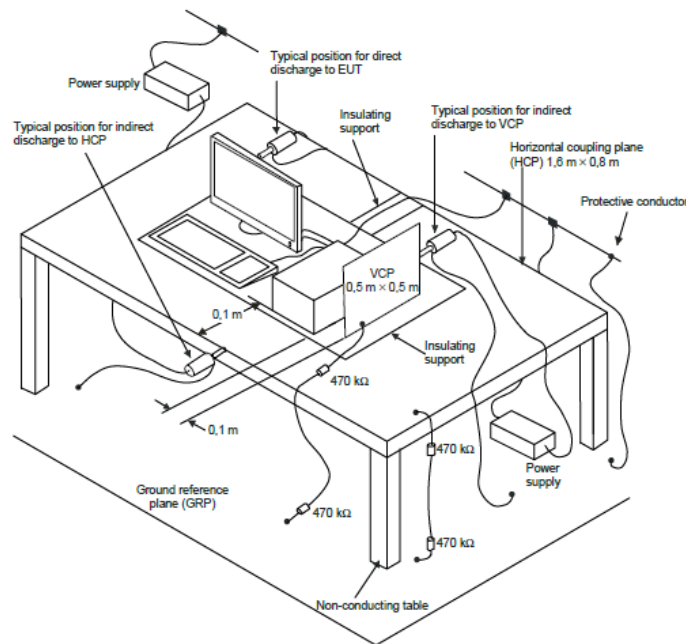
7.3. Electrostatic discharges

7.3.1. Test standard and Levels

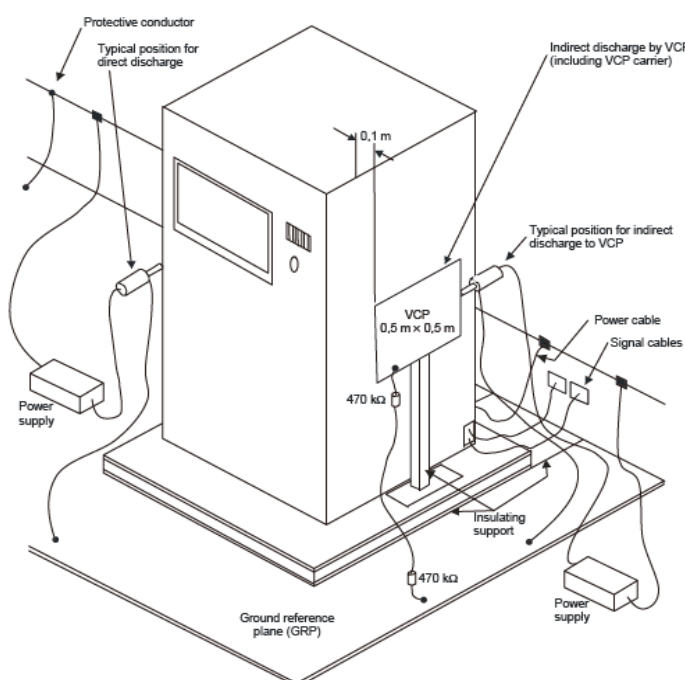
Environmental phenomenon	Test specifications	Basic Standard
Electrostatic discharge	± 8 kV air discharge	IEC 61000-4-2
	± 4 kV contact discharge	

7.3.2. Block diagram of test setup

For table-top equipment



For floor standing equipment



7.3.3. Test procedure

1. Air discharge:

This test is done on a non-conductive surface. The round discharge tip of the discharge electrode shall be approached as fast as possible to touch the EUT. After each discharge, the discharge electrode shall be removed from the EUT. The generator is then re-triggered for a new single discharge and repeated 10 times for each pre-selected test point. This procedure shall be repeated until all the air discharge completed.

2. Contact discharge:

All the procedure shall be same as Section 1. except that the tip of the discharge electrode shall touch the EUT before the discharge switch is operated.

3. Indirect discharge for horizontal coupling plane

At least 20 single discharges shall be applied to the horizontal coupling plane, at points on each side of the EUT. The discharge electrode positions vertically at a distance of 0.1m from the EUT and with the discharge electrode touching the coupling plane.

4. Indirect discharge for vertical coupling plane

At least 20 single discharge shall be applied to the center of one vertical edge of the coupling plane. The coupling plane, of dimensions 0.5m X 0.5m, is placed parallel to, and positioned at a distance of 0.1m from the EUT. Discharges shall be applied to the coupling plane, with this plane in sufficient different positions that the four faces of the EUT are completely illuminated.

7.3.4. Test results

Temperature:	23°C	Relative Humidity:	54 %
Pressure:	101kPa	Test Mode:	Mode 2
Test Voltage :	DC 3.7V		

Discharge Method	Discharge Position	Voltage (±kV)	Min. No. of Discharge per polarity (Each Point)	Performance Criterion	Required Criterion
Contact Discharge	Conductive Surfaces	4	10	B	A
	Indirect Discharge HCP	4	10	B	A
	Indirect Discharge VCP	4	10	B	A
Air Discharge	Slots, Apertures, and Insulating Surfaces	8	10	B	A
Note: N/A					

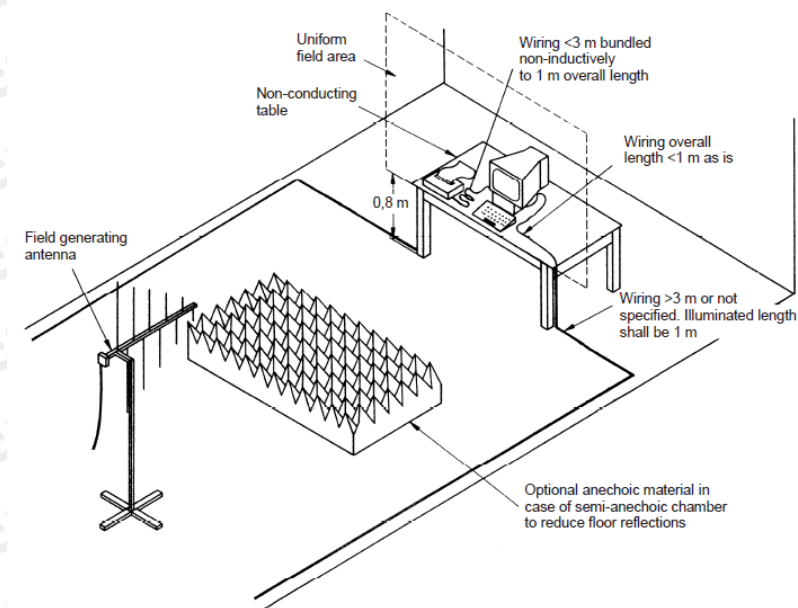
7.4. Radio frequency electromagnetic fields

7.4.1. Test standard and Levels and Performance Criterion

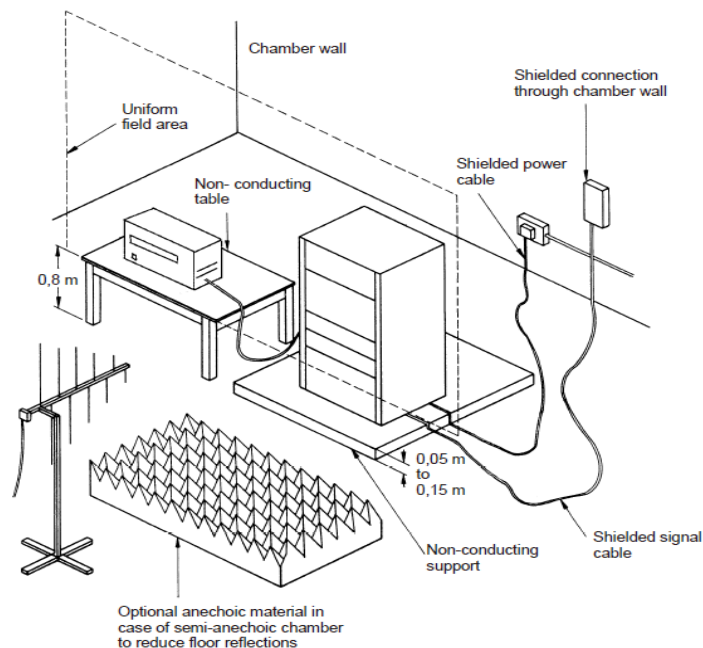
Enclosure port		
Environmental phenomenon	Test specifications	Basic Standard
Radio-frequency electromagnetic field, 1 kHz, 80% AM	80 MHz to 1 000 MHz	IEC 61000-4-3
	3 V/m (unmodulated)	

7.4.2. Block diagram of test setup

For table-top equipment



For floor standing equipment



7.4.3. Test procedure

1. The EUT and its simulators are placed on a turn table which is 0.8 meter above the ground. The EUT is set 3 meters away from the transmitting antenna which is mounted on an antenna tower.
Both horizontal and vertical polarizations of the antenna are set on test.
2. Each of the four sides of EUT must be faced this transmitting antenna and measured individually.
3. In order to determine the performance of EUT, a CCD camera is used to monitor the EUT.

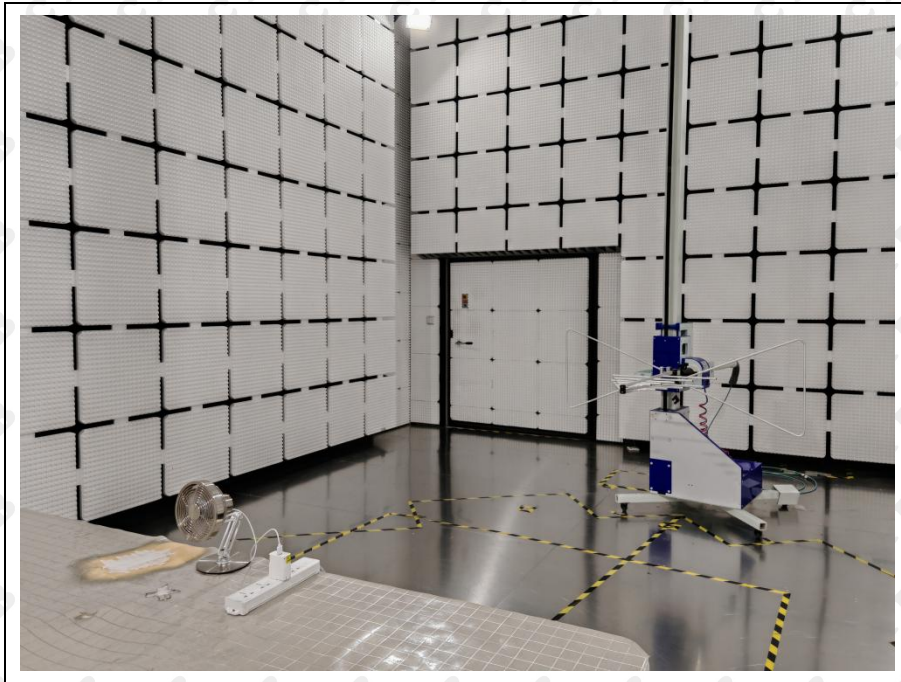
7.4.4. Test results

Temperature:	23°C	Relative Humidity:	54 %
Pressure:	101kPa	Test Mode:	Mode 2
Test Voltage :	DC 3.7V		

Frequency range [MHz]	Test Level [V/m]	Polarization	EUT Face	Performance Criterion	Required Criterion
80 to 1000	3	Horizontal & Vertical	Front/ Rear	A	A
			Right/ Left	A	A
			Top/ Underside	A	A

8. Photographs of test setup

RE



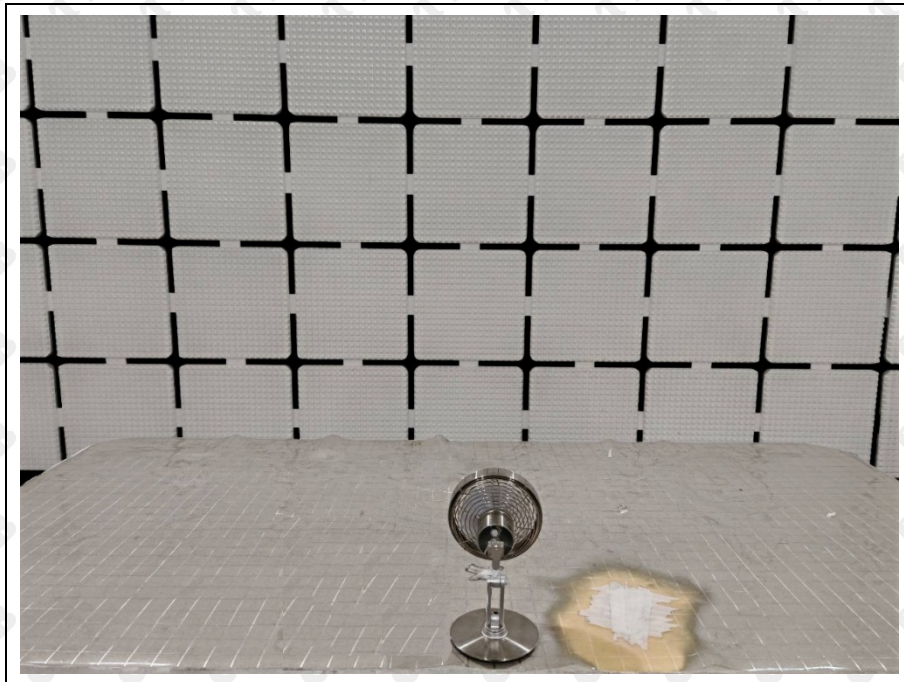
CE



ESD



RS



9. Photographs of EUT

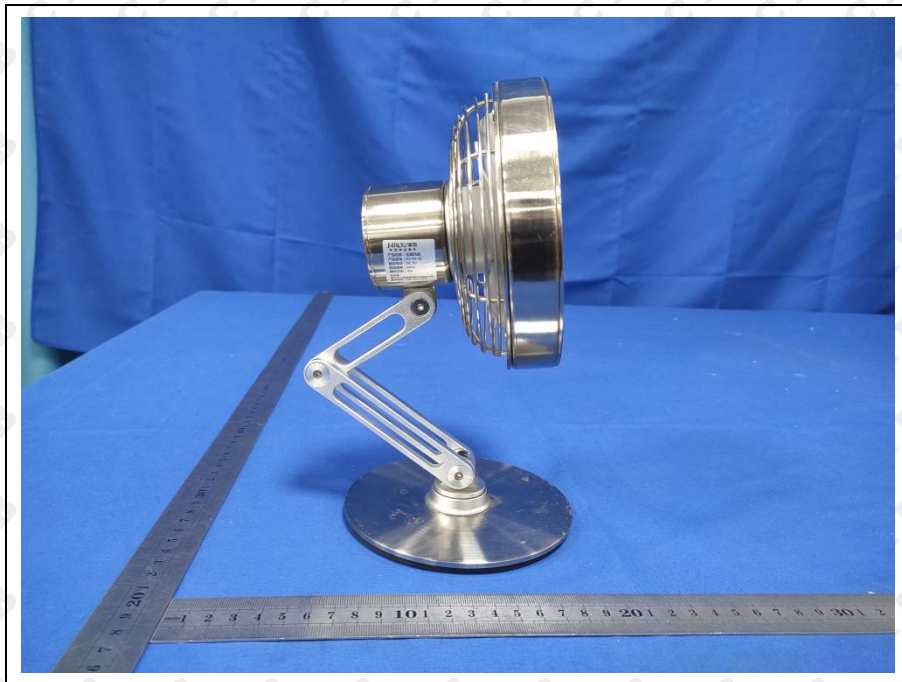
EUT photo 1



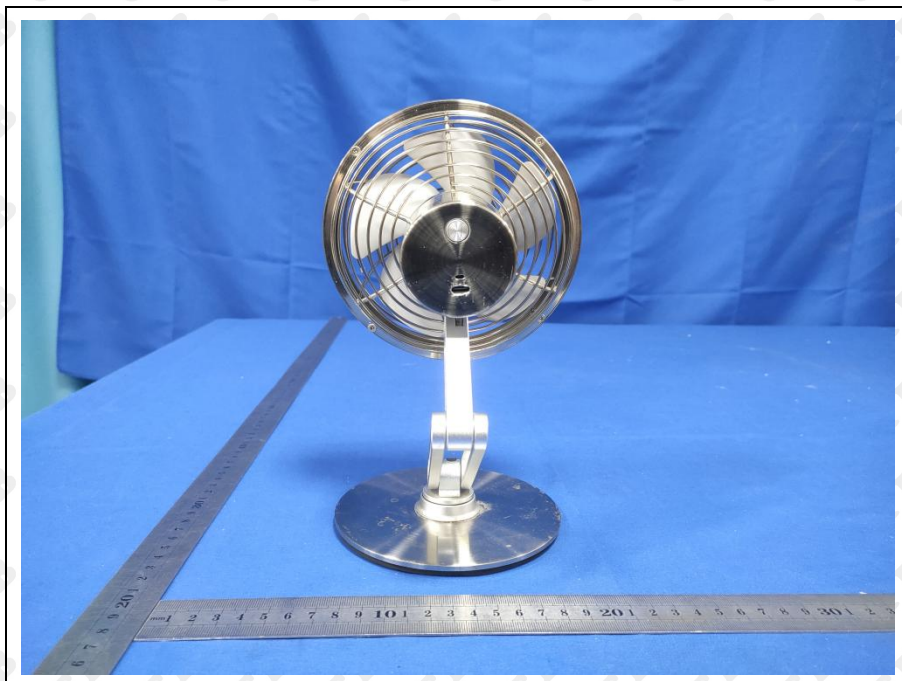
EUT photo 2



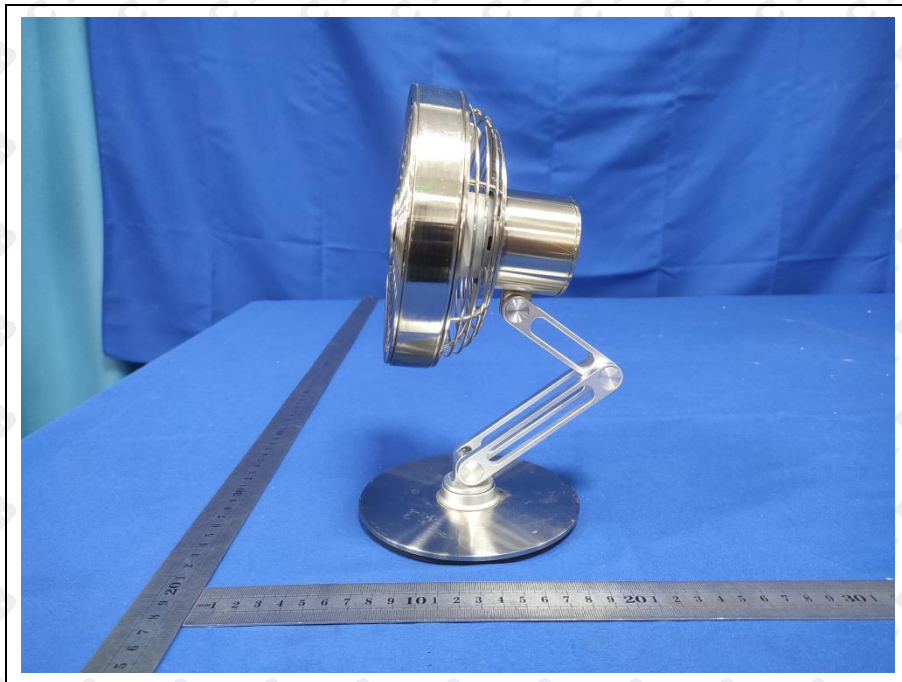
EUT photo 3



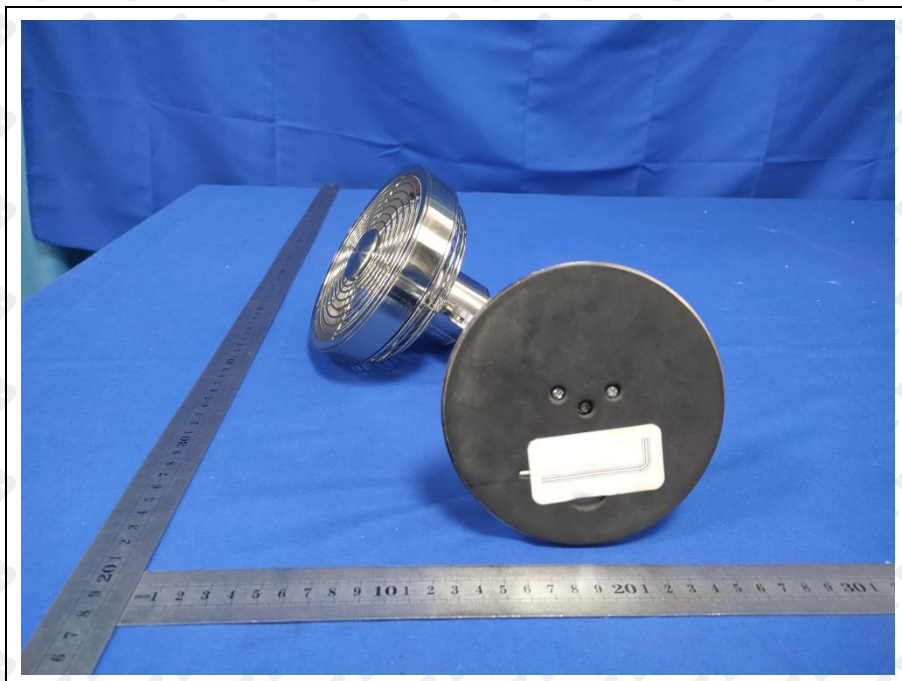
EUT photo 4



EUT photo 5



EUT photo 6



EUT photo 7



End of report