

EMC TEST REPORT

Report No.: 20260702W26299X-W1

Product: Smart Watch

Model No.: U3

Trade Name: CUBOT

Applicant: Shenzhen Huafurui Technology Co., Ltd.

Test date: 2026.05.22 to 2026.06.01

Issued by: CCIC Southern Testing Co., Ltd.

Lab Location: Electronic Testing Building, No.43, Shahe Road, Xili Street, Nanshan District, Shenzhen, Guangdong, China

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Test Report

Product..... Smart Watch

Applicant..... Shenzhen Huafurui Technology Co., Ltd.

Applicant Address..... Unit 601-03, 6/F, Block A, Building 1, Ganfeng Technology Building, No. 993 Jiaxian Road, Xiangjiaotang Community, Bantian Street, Longgang District, Shenzhen, P.R. China

Manufacturer..... Shenzhen Huafurui Technology Co., Ltd.

Manufacturer Address..... Unit 601-03, 6/F, Block A, Building 1, Ganfeng Technology Building, No. 993 Jiaxian Road, Xiangjiaotang Community, Bantian Street, Longgang District, Shenzhen, P.R. China

Test Standards..... ETSI EN 301 489-1 V2.2.3 (2019-11)
ETSI EN 301 489-17 V3.3.1 (2024-09)
EN 55032:2015+A11:2020
EN 55035:2017+A11:2020

Test Result..... Pass

Tested by *Yang Zhi Cheng* 2026.07.10

Yang Zhicheng, Test Engineer

Reviewed by..... *Sun Jiaohui* 2026.07.10

Sun Jiaohui, Senior Engineer

Approved by..... *Wang Shijie* 2026.07.10

Wang Shijie, Manager



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1 General Information

1.1 Description of EUT

Product:	Smart Watch
Power supply:	Rechargeable Li-ion Polymer Battery DC3.8V/300mAh

NOTE:

Note 1: The EUT is a Smart Watch; which could support the Bluetooth mode at 2.4 GHz.

Note 2: The EUT have the following typical setups during the test:

Setup1:AC Adapter + EUT working

Setup2:Bluetooth + EUT working

Note 3: All the patterns have been tested and only the worst results are recorded in the report.

Note 4: Please refer to ANNEX I for the photographs of the EUT. For a more detailed description, please refer to Specification or User's Manual supplied by the applicant and/or manufacture.

Note 5: In the report, the power adapter is an auxiliary test equipment provided by the laboratory, and the sample is sold without a power adapter.

Note 6: All the models are electrical identical including the same software parameter and hardware design (i.e., circuit design, PCB Layout, components on PCB, etc.), same mechanical structure and design (including product enclosure, materials, etc.), the only difference is the color.

Note 7: Based on Report 20260502W19520X-W1, the model designation, Trade Name, applicant, manufacturer, and address have been revised. All other information remains unchanged, and no further EMC testing is required.



1.2 Objective

Perform Electro Magnetic Interference (EMI) and Electro Magnetic Susceptibility (EMS) tests for CE Marking.

1.3 Facilities and Accreditations

1.3.1 Facilities

☒ CCIC-SET Lab 1

Address: Electronic Testing Building, No.43, Shahe Road, Xili Street, Nanshan District, Shenzhen, Guangdong, China

ISED Registration: 11185A, CAB number: CN0064

CCIC Southern Testing Co., Ltd. EMC Laboratory has been registered by Certification and Engineering Bureau of Industry Canada for the performance of radiated measurements with Registration No. 11185A.

A2LA Code: 5721.01

CCIC-SET is a third party testing organization accredited by A2LA according to ISO/IEC 17025. The accreditation certificate number is 5721.01.

CNAS L1659

CCIC Southern Testing Co., Ltd. CCIC is a third party testing organization accredited by China National Accreditation Service for Conformity Assessment (CNAS) according to ISO/IEC 17025. The accreditation certificate number is L1659.

☐ CCIC-SET Lab 3

Address: Building 1, No.125, Hongmei Section, Wangsha Road, Hongmei Town, Dongguan City, Guangdong Province, China

CNAS L1659

CCIC Southern Testing Co., Ltd. CCIC is a third party testing organization accredited by China National Accreditation Service for Conformity Assessment (CNAS) according to ISO/IEC 17025. The accreditation certificate number is L1659.

1.4 Environmental Conditions

During the measurement the environmental conditions were within the listed ranges:

- Temperature: 15-35°C
- Relative Humidity: 25-75 %
- Atmospheric Pressure: 86-106 kPa



1.5 Measurement Uncertainty

The uncertainty is calculated using the methods suggested in the “Guide to the Expression of Uncertainty in Measurement” (GUM) published by ISO.

- Uncertainty of Conducted Emission, $U_c = 2.8 \text{ dB}$ ($k = 2$)
- Uncertainty of Radiated Emission,
 30 MHz to 1000 MHz : $U_c = 4.5 \text{ dB}$ ($k = 2$)
 1 GHz to 6 GHz: $U_c = 4.9 \text{ dB}$ ($k = 2$)

1.6 Test Standards and Results

No.	Identify	Document Title
1	ETSI EN 301 489-1 V2.2.3 (2019-11)	ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirements; Harmonised Standard for ElectroMagnetic Compatibility
2	ETSI EN 301 489-17 V3.3.1 (2024-09)	ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 17: Specific conditions for Broadband and Wideband Data Transmission Systems; Harmonised Standard for ElectroMagnetic Compatibility
3	EN 55032:2015+ A11:2020	Electromagnetic compatibility of multimedia equipment - Emission Requirements
4	EN 55035:2017+ A11:2020	Electromagnetic compatibility of multimedia equipment - Immunity requirements

The EUT has been tested according to the following specifications:

No	Test Standard	Test specifications	Result
EN 301489-1/-17			
1	EN55032	Radiated emission below 1GHz	Pass
2	EN55032	Radiated emission above 1GHz	Pass
3	EN55032	Conducted emission at DC power input/output port	N.A.1
4	EN55032	Conducted emission at AC mains input/output port	Pass
5	EN55032	Conducted emission at telecommunication port	N.A.1
6	EN61000-3-2	Harmonic current emissions at AC mains input port	N.A.1
7	EN61000-3-3	Voltage fluctuations and flicker at AC mains input port	N.A.1
EN 301489-1/-17			
8	EN61000-4-2	Electrostatic discharge	Pass
9	EN61000-4-3	RF electromagnetic field	Pass
10	EN61000-4-4	Fast transients common mode	N.A.1
11	EN61000-4-5	Surges, line to line and line to ground	N.A.1
12	EN61000-4-6	RF common mode 0.15 MHz to 80 MHz	N.A.1
13	EN61000-4-11	Voltage dips and interruptions	N.A.1

Note: 1.N.A. means the abbreviation for Not Applicable.

1.7 List of supported unit used in test configuration and system

Equipment	Trade Name	Model Name	Data Cable	Serial No.
Adapter	CUKTECH	AD653C	/	/

1.8 Test Software

No.	Type	Software/Version
1	Conducted Emission	EMC32/Version 9.26.01
2	RE (30MHz – 1GHz)	EMC32/Version 10.35.10
3	RE (1GHz – 18GHz)	TS+/JS32-RE 5.0.0.2
4	RF electromagnetic field	TS+/JS32-RS 5.0.0.0

1.9 List of Equipment Used

Description	Manufacturer	Model No.	Calibration Due. Date	Serial No.
Conducted Emission				
EMI Test Receiver	ROHDE&SCHWARZ	N9038A	2027.04.14	A141202036
LISN	ROHDE&SCHWARZ	ENV216	2027.04.14	A140701847
Shield Room*	Xinju Electronics	L7300*W4500*H3100	2026.07.29	A181003226
Radiated Emissions below 1GHz				
EMI Test Receiver	ROHDE&SCHWARZ	ESR3	2027.01.08	A181103297
Broadband Ant.*	ETC	MCTD2786	2027.01.07	A240204135
3M Anechoic Chamber*	Albatross	SAC-3MAC 9*6*6m	2027.02.26	A0412375
Radiated Emissions above 1GHz				
EMI Test Receiver	ROHDE&SCHWARZ	ESW26	2027.04.15	A180502935
5M Anechoic Chamber*	Albatross	SAC-5MAC 12.8x6.8x6.4m	2030.04.20	A0304210
EMI Horn Ant.(1-18G)	ROHDE&SCHWARZ	HF906	2028.03.21	A0304225
Electrostatic discharge				
ESD Test System	TESQ	NSG-437	2026.08.12	A170902745
RF electromagnetic field				
Signal Generator	ROHDE&SCHWARZ	SMB100A	2026.07.14	A180502936
Power Meter	Agilent	E4417A	2027.04.14	A151102418
EMS Antenna*	SCHWARZBCK	STLP 9129	2026.10.15	A181203430
Power Amplifier (80M-1G)	TESEQ	CBA1G-600B	2027.03.17	A190503534
Power Amplifier (1-6G)	Rflight	NTWPA-1060200	2027.03.26	A181203431

Note1: Equipment above have been calibrated and are in the period of validation.

Note2: Devices with "*" are calibrated every three years.

2 Emission Test

2.1 EUT Setup and Operation

1. Please refer to Note 2 of section 1.1 about the typical setups of EUT.
2. All test modes have been tested, only the worst cases are recorded in this report.

2.2 Radiated emission below 1GHz

2.2.1 Limits of radiated emission below 1GHz at 3m measurement distance

Frequency range (MHz)	Quasi peak limits(dB μ V/m)
30 – 230	40
230 – 1000	47

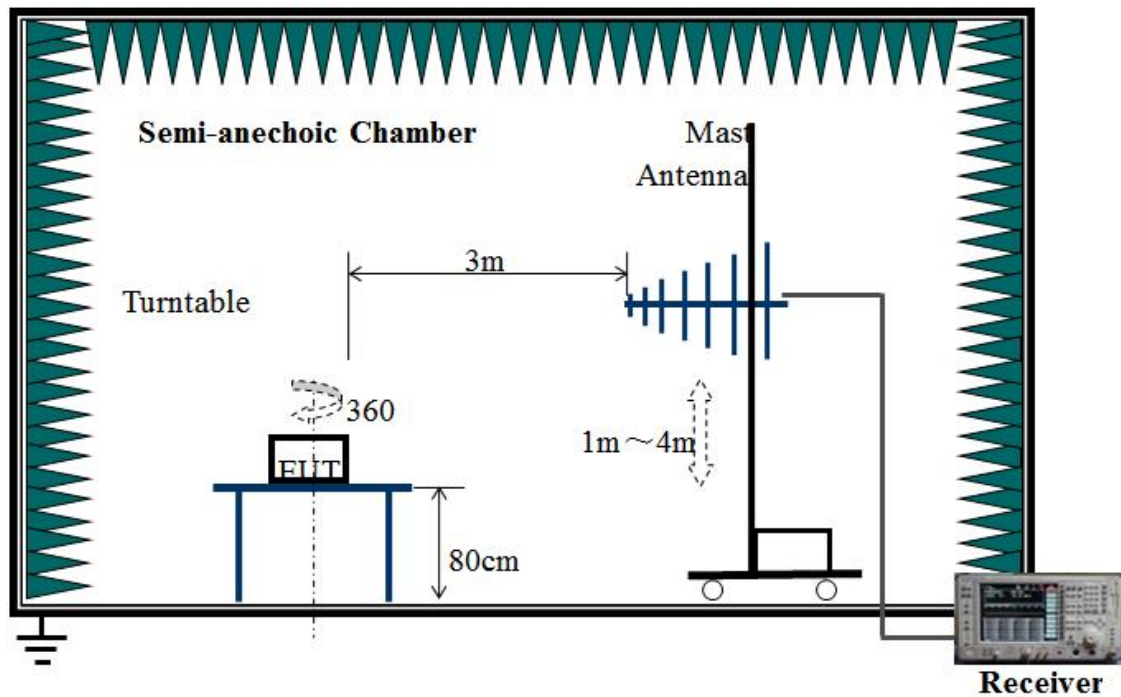
Note:

- (1) The lower limit shall apply at the transition frequency.
- (2) Additional provisions may be required for cases where interference occurs.

2.2.2 Test Procedure

- a. The EUT was placed on the top of an insulating table 0.8 meters above the ground at a semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The antenna is a broadband antenna, and its height is varied from 1 to 4 meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to the heights from 1 to 4 meters and the rotate table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Peak Detector Function and Specified Bandwidth with Maximum Hold Mode. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emission that did not have 10dB margin would be retested one by one using the quasi-peak method.

2.2.3 Test Setup

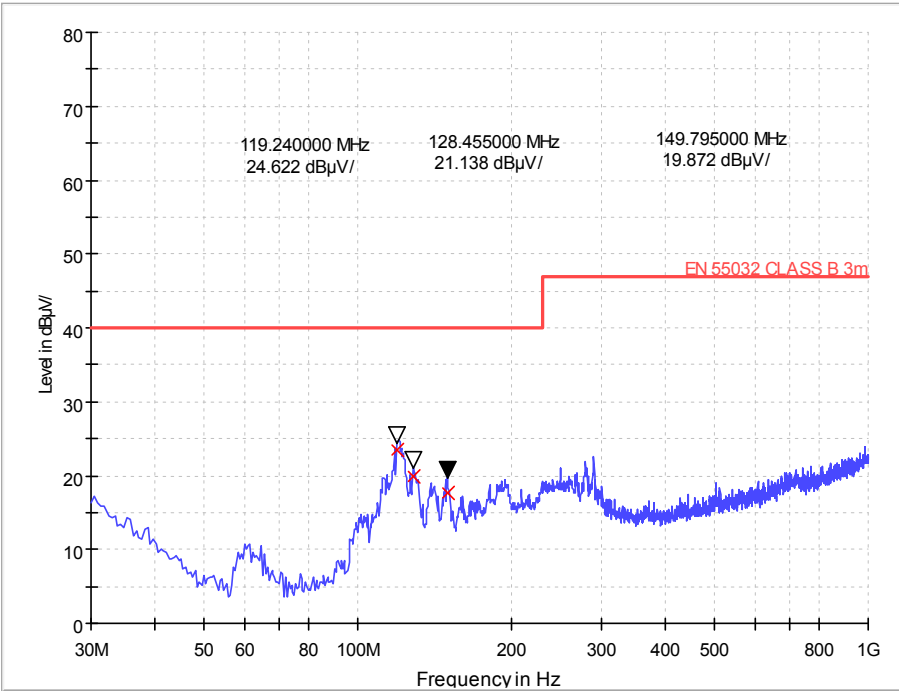


For the actual test configuration, please refer to the related item-Photographs of the Test Configuration.

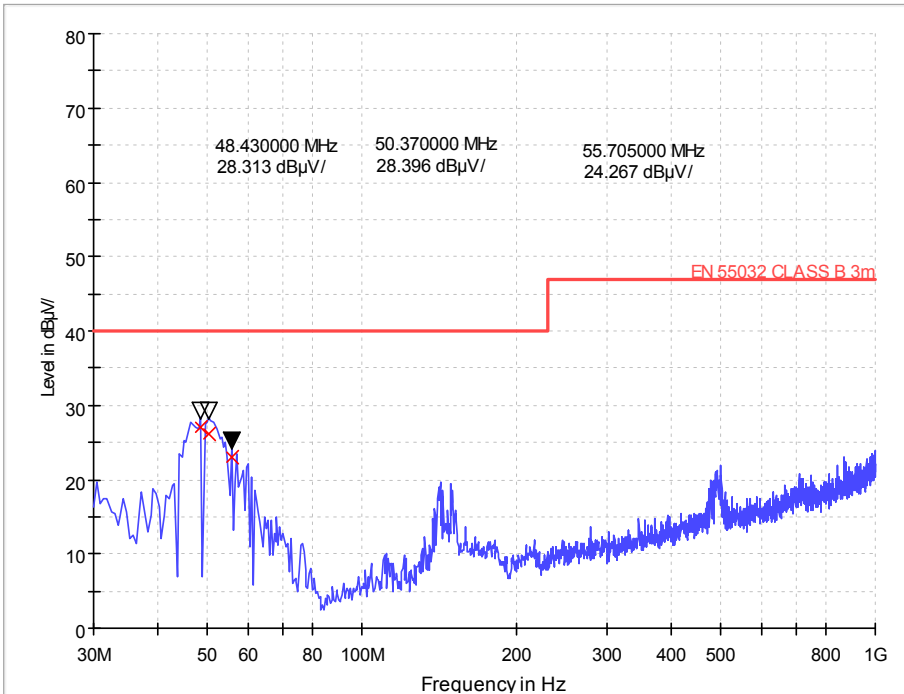
2.2.4 Test Result

No.	Frequency (MHz)	Antenna Polarization	Antenna Height (m)	Table Angle (Degree)	QP Limits (dB ($\mu\text{V}/\text{m}$))	Emission Level (dB ($\mu\text{V}/\text{m}$))
1	119.24	H	1.00	154	40.00	23.41
2	128.44	H	1.00	18	40.00	19.98
3	149.80	H	1.00	61	40.00	17.66
4	48.44	V	1.00	80	40.00	26.94
5	50.36	V	1.00	160	40.00	26.12
6	55.72	V	1.00	270	40.00	22.95

a. Radiation disturbances, antenna polarization: Setup 1, Horizontal



b. Radiation disturbances, antenna polarization: Setup 1, Vertical



2.3 Radiated emission above 1GHz

2.3.1 Limits of radiated emission above 1GHz at 3m measurement distance

Frequency range (GHz)	Average limit dB(μ V/m)	Peak limit dB(μ V/m)
1 – 3	50	70
3 – 6	54	74

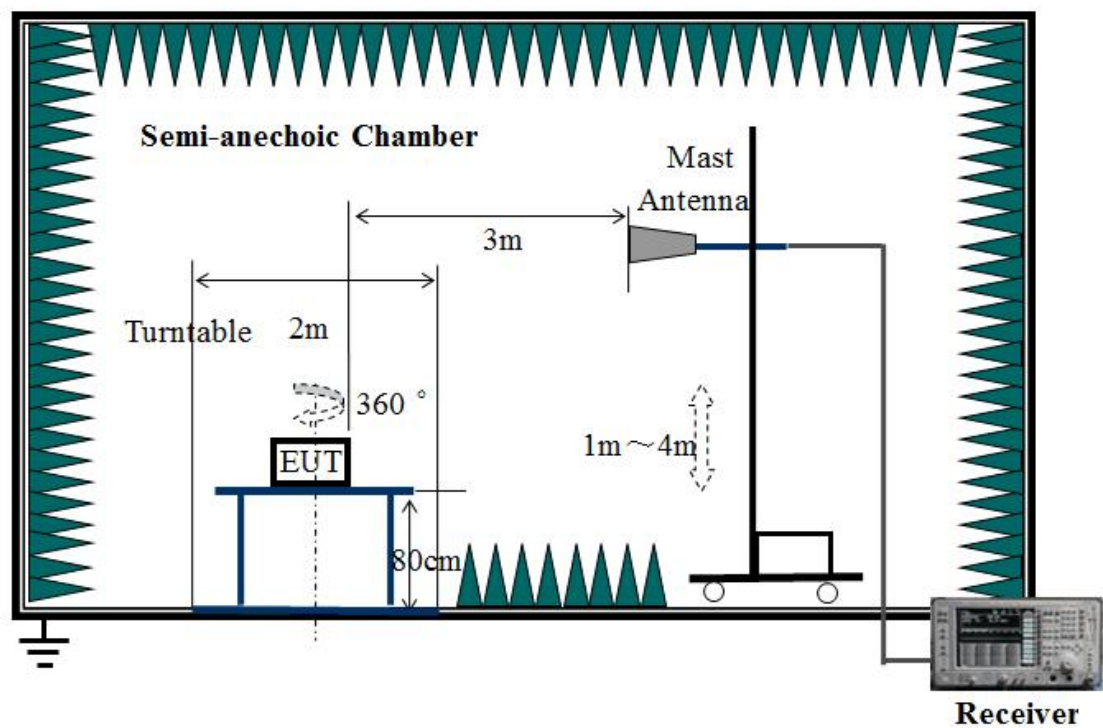
Note:

- (1) The lower limit shall apply at the transition frequency.
- (2) Additional provisions may be required for cases where interference occurs.

2.3.2 Test Procedure

- a. The EUT was placed on the top of an insulating table (made of polystyrene) 0.8 meters above the ground at a semi-anechoic chamber, and some absorbers (Model: VHP-12-NRL) were used to achieve free-space conditions. The diameter and height of the test volume were both 2.0 meters. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The antenna is a broadband antenna, and its height is varied from 1 to 4 meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to the heights from 1 to 4 meters and the rotatable table was turned from 0 degree to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Peak & AV Detector Function and Specified Bandwidth with Maximum Hold Mode.
- f. Since the highest frequency of the internal sources of the ancillary equipment (Notebook PC) was more than 1GHz, the measurement was made up to 6GHz.

2.3.3 Test Setup

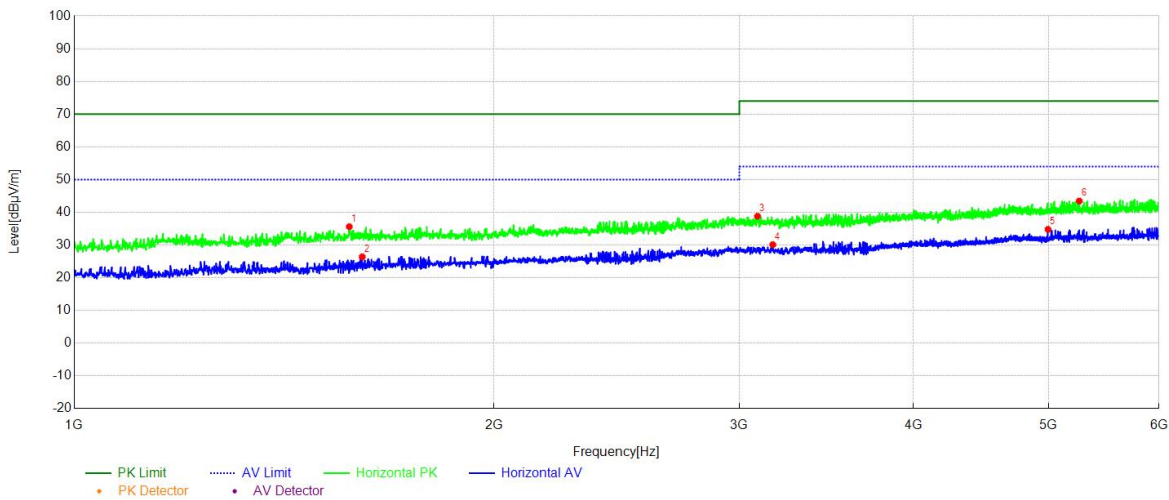


For the actual test configuration, please refer to the related item-Photographs of the Test Configuration.

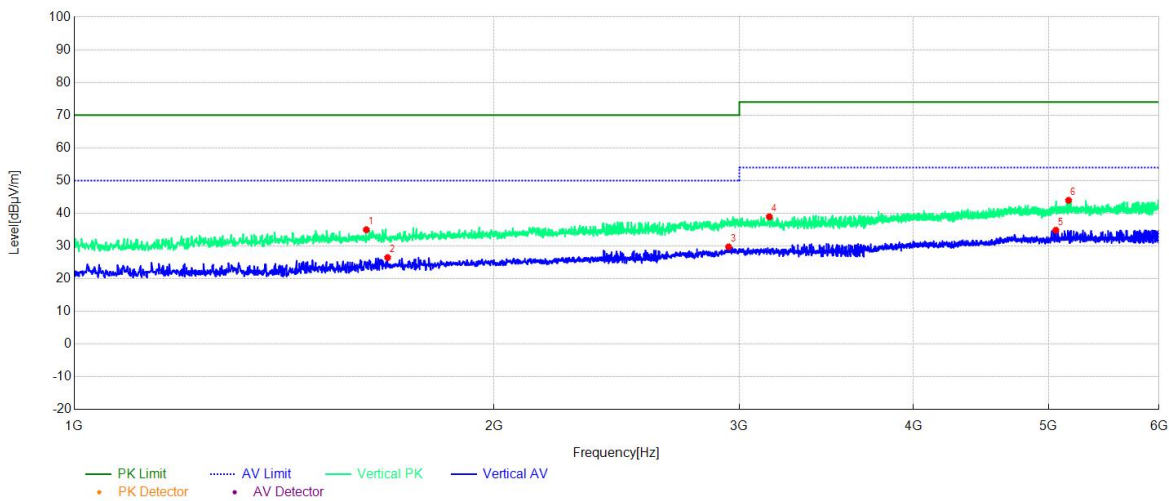
2.3.4 Test Result

Antenna Polarization	Antenna Height (cm)	Table Angle (Degree)	Average			Peak		
			Freq. (MHz)	Limits (dBμV/m)	Level (dBμV/m)	Freq. (MHz)	Limits (dBμV/m)	Level (dBμV/m)
Horizontal/ Vertical	100~ 400	0~360	1000~ 3000	50	<40	1000~ 3000	70	<50
Horizontal/ Vertical	100~ 400	0~360	3000~ 6000	54	<40	3000~ 6000	74	<50

a. Radiation disturbances, antenna polarization: Setup 1, Horizontal



b. Radiation disturbances, antenna polarization: Setup 1, Vertical



2.4 Conducted emission at AC main input/output port

2.4.1 Limits of conducted emission at AC main input/output port

Frequency range (MHz)	Limits (dB μ V), Class B ITE	
	Quasi-peak	Average
0.15 – 0.50	66 to 56	56 to 46
0.50 – 5	56	46
5 – 30	60	50

Note:

(1) The lower limit shall apply at the transition frequency.

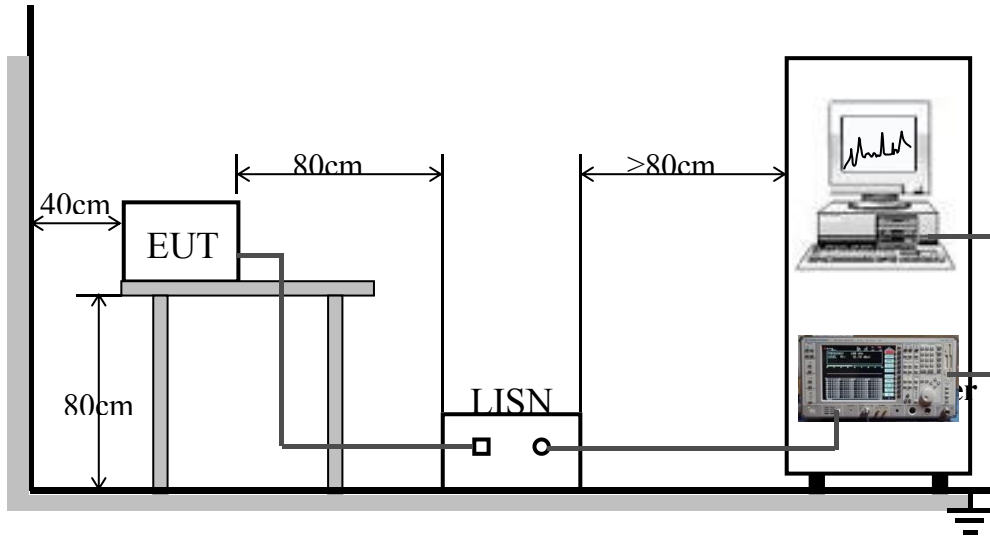
(2) The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.50MHz.

2.4.2 Test Procedure

- The EUT was placed 0.8 meters from the conducting wall of shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). The LISN provide 50 Ω /50 μ H of coupling impedance for the measuring instrument.
- Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
- The frequency range from 150 kHz to 30 MHz was searched. Emission levels over 10dB under the prescribed limits are not reported.



2.4.3 Test Setup

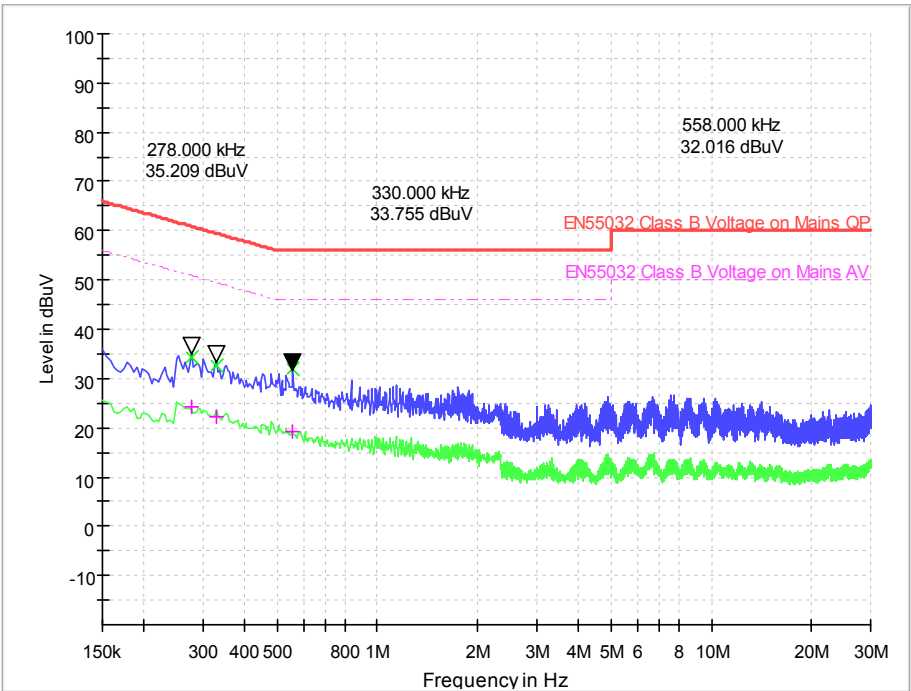


For the actual test configuration, please refer to the related item-Photographs of the Test Configuration.

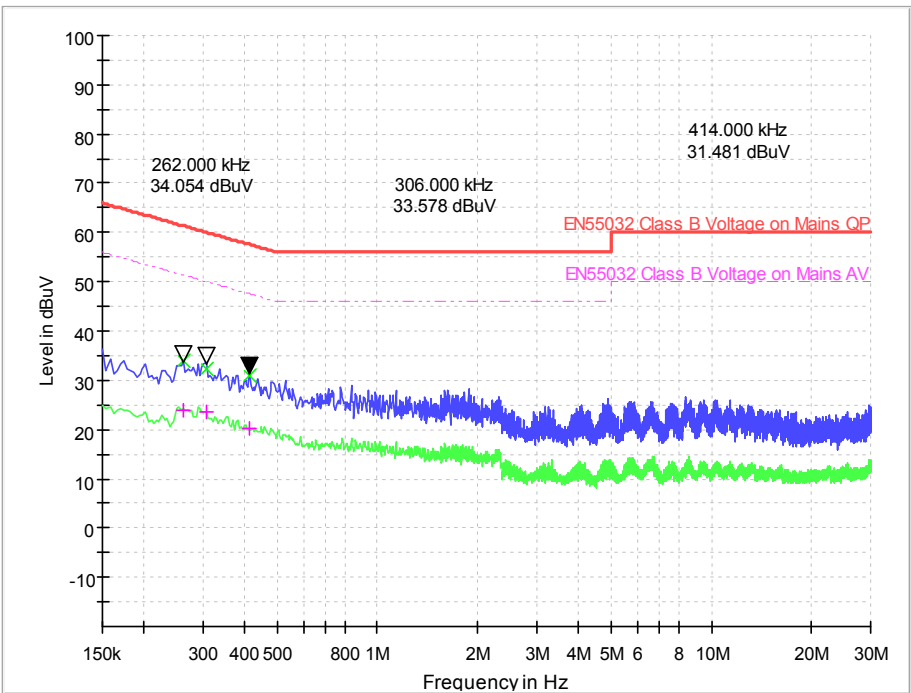
2.4.4 Test Result

No.	Freq. (MHz)	Limit Value (dB μ V)		Emission Level (dB μ V)		Phase
		QP	AV	QP	AV	
1	0.2780	60.88	50.88	34.42	24.25	L
2	0.3300	59.45	49.45	32.67	22.28	L
3	0.5580	56.00	46.00	31.92	19.29	L
4	0.2620	61.37	51.37	33.88	23.89	N
5	0.3060	60.08	50.08	32.32	23.45	N
6	0.4140	57.57	47.57	30.99	20.20	N

a. Mains terminal disturbance voltage, Setup 1, L phase



b. Mains terminal disturbance voltage, Setup 1, N phase



3 Immunity Test

3.1 EUT Setup and Operating Conditions

1. Please refer to Note 2 of section 1.1 about the typical setups of EUT.
2. All test modes have been tested, only the worst cases are recorded in this report.

3.2 Performance Criteria

Criteria	Performance criteria
CT/CR	During and after the test, the apparatus shall continue to operate as intended. No degradation of performance or loss of function is allowed below a permissible performance level specified by the manufacturer when the apparatus is used as intended.
TT/TR	After the test, the apparatus shall continue to operate as intended. No degradation of performance or loss of function is allowed below a permissible performance level specified by the manufacturer, when the apparatus is used as intended.

3.3 Electrostatic discharge

3.3.1 Test Specification

Basic Standard:	EN 61000-4-2
Discharge Impedance	330 Ω / 150 pF
Discharge Voltage:	Air Discharge :8 kV Contact Discharge :4 kV
Polarity:	Positive / Negative
Number of Discharge:	Minimum 20 times at each test point
Discharge Mode:	Single discharge
Discharge Period:	1-second minimum
Performance Criterion	TT, TR

3.3.2 Test Procedure

The discharges shall be applied in two ways:

- a. Contact discharges to the conductive surfaces and coupling planes:

The EUT shall be exposed to at least 200 discharges, 100 each at negative and positive polarity, at a minimum of four test points. One of the test points shall be subjected to at least 50 indirect discharges to the center of the front edge of the horizontal coupling plane. The remaining three contact test points shall each receive at least 50 direct contact discharges. If no direct contact test points are available, at least 200 indirect discharges shall be applied in the indirect mode.

Test shall be performed at a maximum repetition rate of one discharge per second.

b. Air discharges at slots and apertures and insulating surfaces:

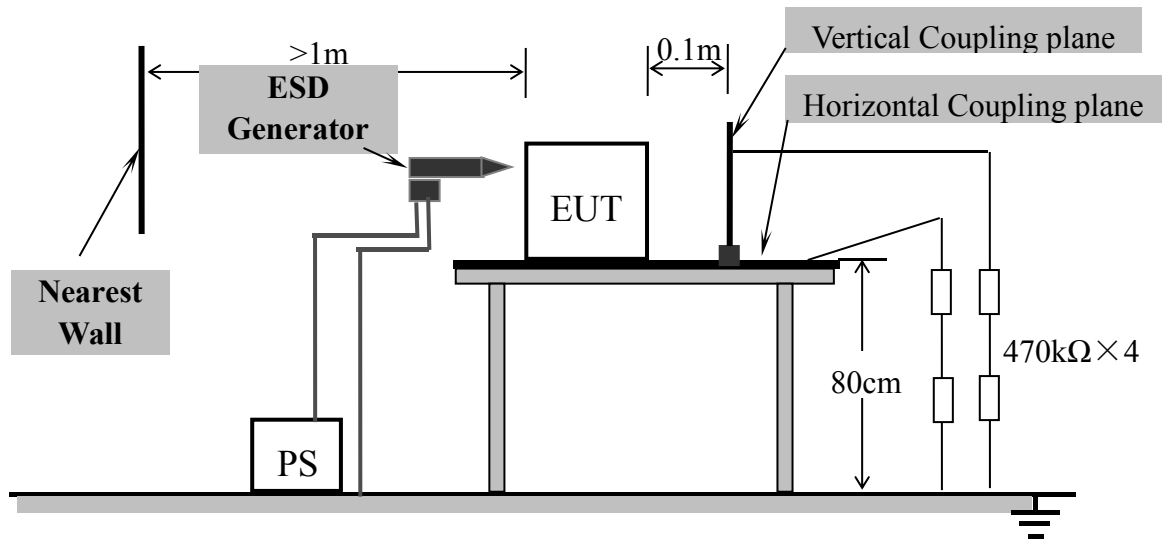
On those parts of the EUT where it is not possible to perform contact discharge testing, the equipment should be investigated to identify user accessible points where breakdown may occur. Such points are tested using the air discharge method. This investigation should be restricted to those area normally handled selected test point for each such area.

The basic test procedure was in accordance with EN 61000-4-2:

- a. Electrostatic discharges were applied only to those points and surfaces of the EUT that are accessible to users during normal operation.
- b. The test was performed with at least ten single discharges on the pre-selected points in the most sensitive polarity.
- c. The time interval between two successive single discharges was at least 1 second.
- d. The ESD generator was held perpendicularly to the surface to which the discharge was applied and the return cable was at least 0.2 meters from the EUT.
- e. Contact discharges were applied to the non-insulating coating, with the pointed tip of the generator penetrating the coating and contacting the conducting substrate.
- f. Air discharges were applied with the round discharge tip of the discharge electrode approaching the EUT as fast as possible (without causing mechanical damage) to touch the EUT. After each discharge, the ESD generator was removed from the EUT and re-triggered for a new single discharge. The test was repeated until all discharges were completed.
- g. At least ten single discharges (in the most sensitive polarity) were applied to the Horizontal Coupling Plane at points on each side of the EUT. The ESD generator was positioned vertically at a distance of 0.1 meters from the EUT with the discharge electrode touching the HCP.
- h. At least ten single discharges (in the most sensitive polarity) were applied to the center of one vertical edge of the Vertical Coupling Plane in sufficiently different positions that the four faces of the EUT were completely illuminated. The VCP (dimensions 0.5m×0.5m) was placed vertically to and 0.1 meters from the EUT.



3.3.3 Test Setup



For the actual test configuration, please refer to the related item-Photographs of the Test Configuration.

3.3.4 Test Result

Test Points	Discharge Level (kV)	Discharge Mode	Observation	Conformance
Setup 1				
Insulated housing gap	$\pm 2, \pm 4, \pm 8$	Air	Note(1)	Pass
Screen	$\pm 2, \pm 4, \pm 8$	Air	Note(1)	Pass
Button	$\pm 2, \pm 4, \pm 8$	Air	Note(1)	Pass
Metal part of the enclosure	$\pm 2, \pm 4$	Contact	Note(1)	Pass
Charging port	$\pm 2, \pm 4$	Contact	Note(1)	Pass
HCP	$\pm 2, \pm 4$	Contact	Note(1)	Pass
VCP	$\pm 2, \pm 4$	Contact	Note(1)	Pass

Note:

(1). The EUT continued to operate as intended. No degradation of performance was observed.

3.4 RF Electromagnetic Field

3.4.1 Test Specification

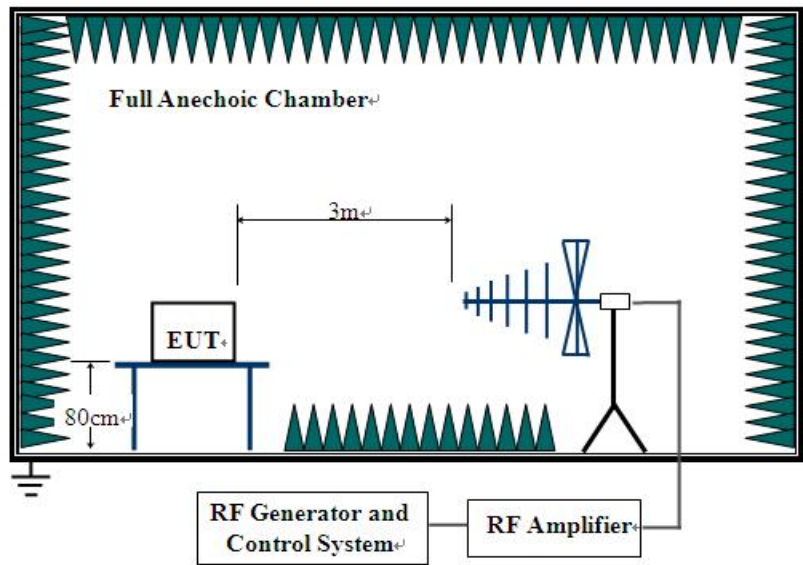
Basic Standard:	EN 61000-4-3
Frequency Range:	80 MHz – 6000MHz
Field Strength:	3 V/m
Modulation:	1kHz sine wave, 80%, AM modulation
Frequency Step:	1% of fundamental
Polarity of Antenna	Horizontal and Vertical
Test Distance:	3m
Antenna Height:	1.5m
Dwell Time:	3 seconds
Performance Criterion	CT, CR

3.4.2 Test Procedure

The test procedure was in accordance with EN 61000-4-3.

- The testing was performed in a fully anechoic chamber. The transmit antenna was located at a distance of 3 meters from the EUT.
- The frequency range is swept from 80 MHz to 1000MHz and 1000 MHz to 6000MHz with the signal 80% amplitude modulated with a 1 kHz sine wave. The rate of sweep did not exceed 1.5×10^{-3} decade/s. Where the frequency range is swept incrementally, the step size was 1% of fundamental.
- The dwell time at each frequency shall be not less than the time necessary for the EUT to be able to respond.
- The field strength level was 3V/m.
- The test was performed with the EUT exposed to both vertically and horizontally polarized fields on each of the four sides.

3.4.3 Test Setup



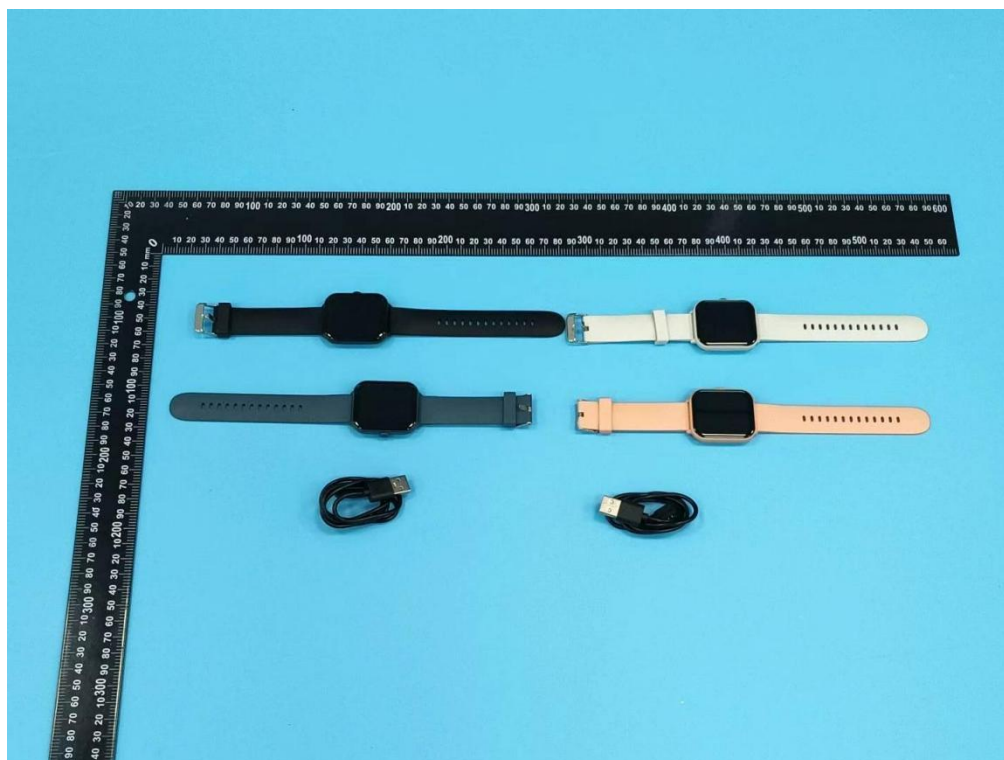
3.4.4 Test Result

Test Mode	Polarity	Azimuth	Required Performance Criterion	Observation	Conformance
Setup 1	V&H	0	CR/CT	Note(1)	Pass
	V&H	90	CR/CT	Note(1)	Pass
	V&H	180	CR/CT	Note(1)	Pass
	V&H	270	CR/CT	Note(1)	Pass

- Note:**
- (1). The EUT continued to operate as intended. No degradation of performance was observed.
 - (2). All test modes are performed, only the worst cases are recorded in this report.

Appendix I: Photographs of the EUT

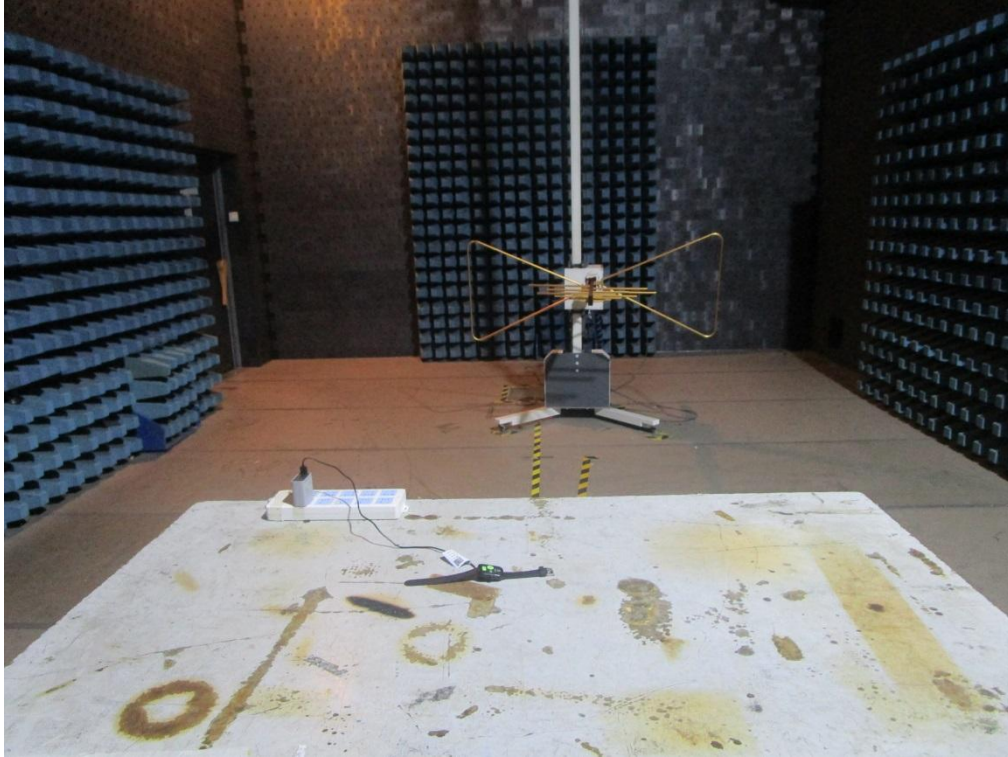




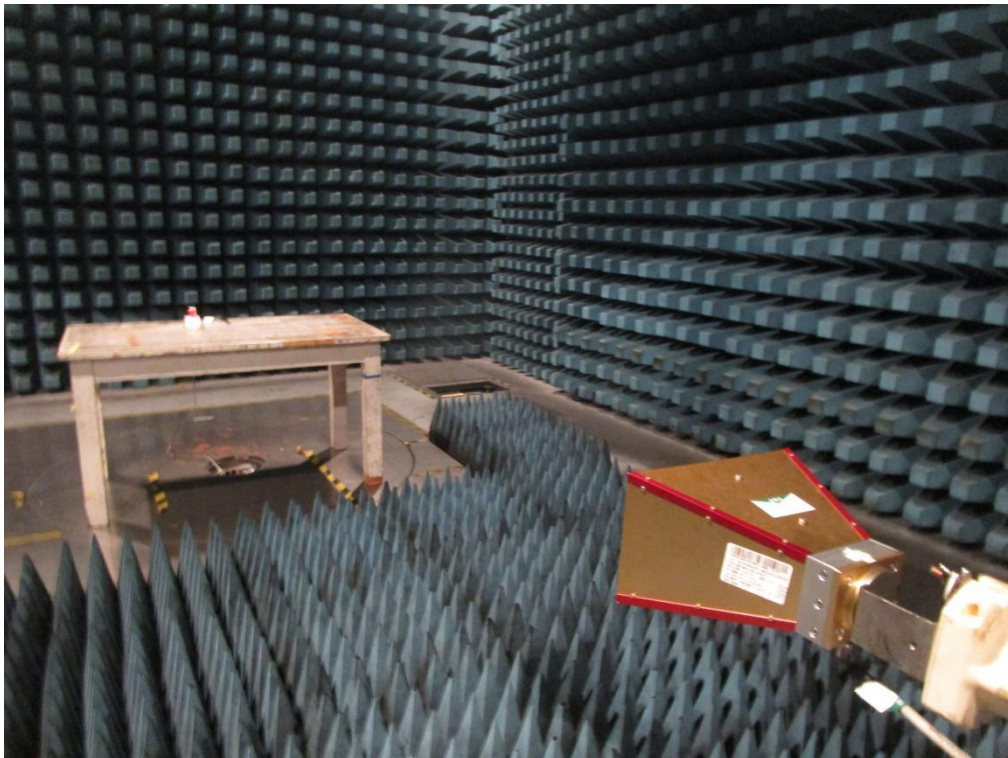


Appendix II: Photographs of EMC Test Configuration

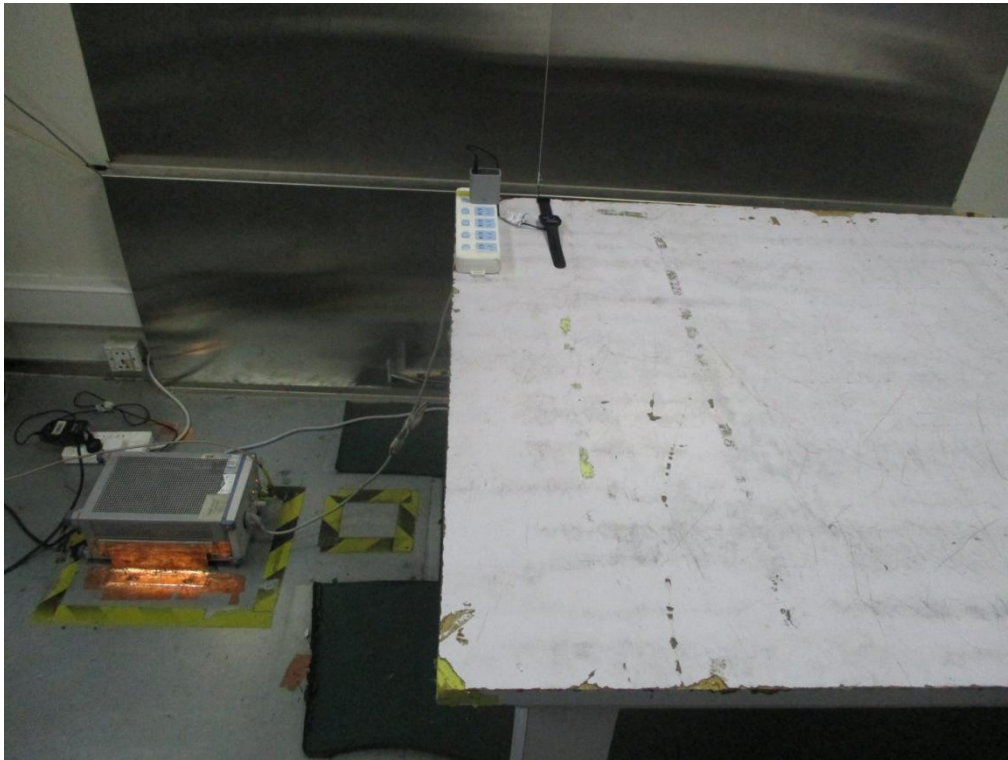
1. Radiated Emission Measurement below 1GHz



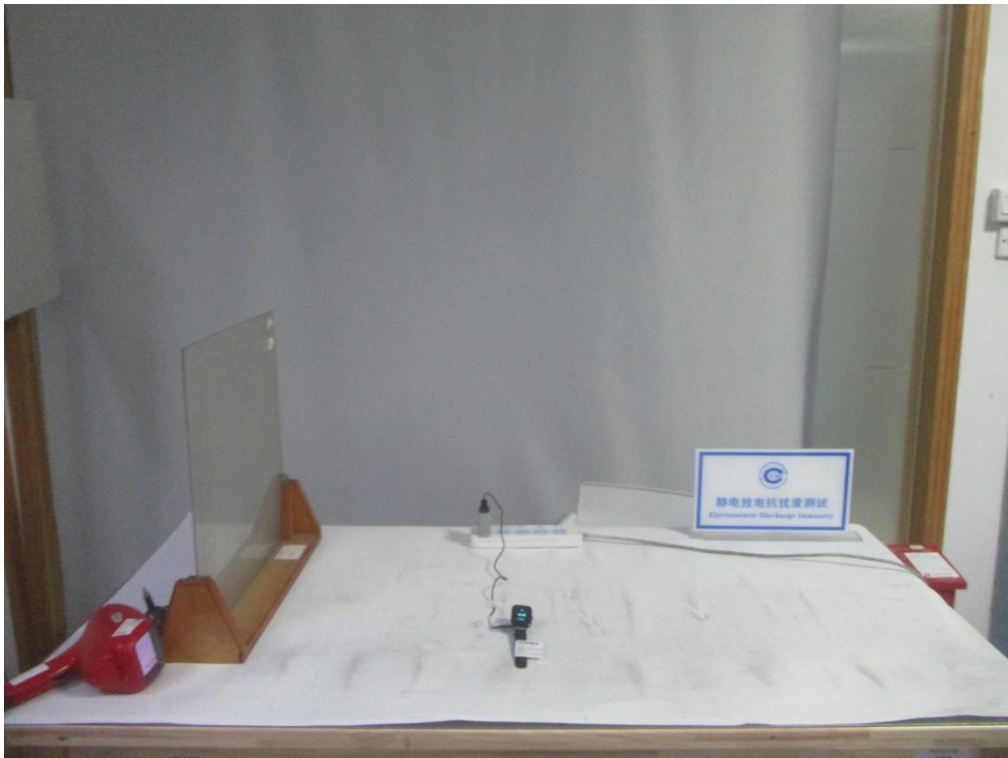
2. Radiated Emission Measurement above 1GHz



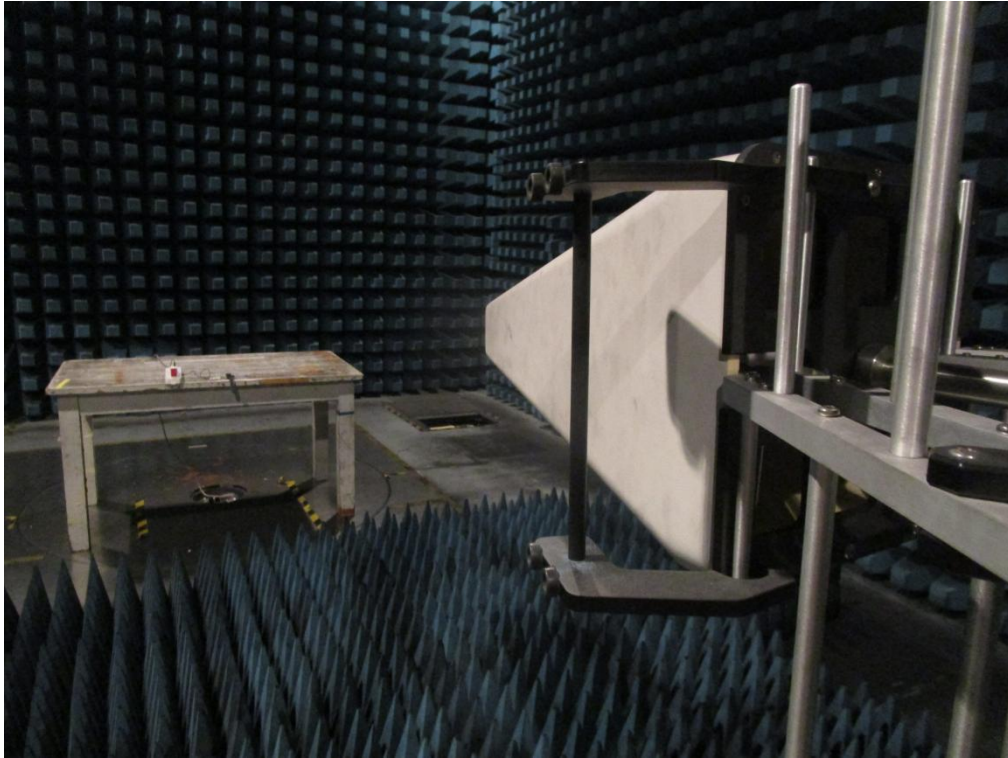
3. Conducted emission at AC mains input/output port Measurement



4. Electrostatic Discharge Immunity Test



5. RF electromagnetic field Immunity Test



----- End of this Report-----

