

FCC EMC Test Report

Project No. : 2207G005
Equipment : POS Terminal
Brand Name : NEXGO
Test Model : N82
Series Model : N/A
Applicant : Shenzhen Xinguodu Technology Co., Ltd.
Address : 17B JinSong Mansion, Terra Industrial & Trade Park Chegongmiao, Futian District, Shenzhen, China
Manufacturer : Shenzhen Xinguodu Technology Co., Ltd.
Address : 17B JinSong Mansion, Terra Industrial & Trade Park Chegongmiao, Futian District, Shenzhen, China
Factory : Shenzhen Xinguodu Technology Co., Ltd. Manufacture Branch.
Address : Building C, Dagang Industrial Park, Changzhen Community, Gongming Office, Guangming New District, Shenzhen, Guangdong, China.
Date of Receipt : Jul. 05, 2022
Date of Test : Jul. 08, 2022 ~ Jul. 27, 2022
Issued Date : Aug. 03, 2022
Report Version : R00
Test Sample : Engineering Sample No.: DG202207071
Standard(s) : FCC CFR Title 47, Part 15, Subpart B

The above equipment has been tested and found compliance with the requirement of the relative standards by BTL Inc.

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TESTING CERT #5123.02

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Declaration

BTL represents to the client that testing is done in accordance with standard procedures as applicable and that test instruments used has been calibrated with standards traceable to international standard(s) and/or national standard(s).

BTL's reports apply only to the specific samples tested under conditions. It is manufacture's responsibility to ensure that additional production units of this model are manufactured with the identical electrical and mechanical components. **BTL** shall have no liability for any declarations, inferences or generalizations drawn by the client or others from **BTL** issued reports.

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BTL's laboratory quality assurance procedures are in compliance with the **ISO/IEC 17025** requirements, and accredited by the conformity assessment authorities listed in this test report.

BTL is not responsible for the sampling stage, so the results only apply to the sample as received.

The information, data and test plan are provided by manufacturer which may affect the validity of results, so it is manufacturer's responsibility to ensure that the apparatus meets the essential requirements of applied standards and in all the possible configurations as representative of its intended use.

Limitation

For the use of the authority's logo is limited unless the Test Standard(s)/Scope(s)/Item(s) mentioned in this test report is (are) included in the conformity assessment authorities acceptance respective.

Please note that the measurement uncertainty is provided for informational purpose only and are not use in determining the Pass/Fail results.

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REPORT ISSUED HISTORY

Report No.	Version	Description	Issued Date	Note
BTL-FCCE-1-2207G005	R00	Original Report.	Aug. 03, 2022	Valid

1. SUMMARY OF TEST RESULTS

Emission		
Standard(s)	Test Item	Result
FCC CFR Title 47, Part 15, Subpart B ANSI C63.4-2014	AC Power Line Conducted Emissions	PASS
	Radiated Emissions 30 MHz to 1 GHz	PASS
	Radiated Emissions Above 1 GHz	PASS

1.1 TEST FACILITY

The test facilities used to collect the test data in this report at the location of No. 3 Jinshagang 1st Rd. Shixia, Dalang Town Dongguan City, Guangdong 523792 People's Republic of China.

BTL's Registration Number for FCC: 357015

BTL's Designation Number for FCC: CN1240

1.2 MEASUREMENT UNCERTAINTY

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2))

The BTL measurement uncertainty as below table:

A. AC power line conducted emissions test:

Test Site	Method	Measurement Frequency Range	U,(dB)
DG-C01	CISPR	150kHz ~ 30MHz	2.86

B. Radiated emissions test:

Test Site	Method	Measurement Frequency Range	Ant. H / V	U,(dB)
DG-CB03 (3m)	CISPR	30MHz ~ 200MHz	V	4.36
		30MHz ~ 200MHz	H	3.32
		200MHz ~ 1,000MHz	V	4.08
		200MHz ~ 1,000MHz	H	3.96

Test Site	Method	Measurement Frequency Range	U,(dB)
DG-CB03 (3m)	CISPR	1GHz ~ 6GHz	3.80
		6GHz ~ 18GHz	4.82

Test Site	Method	Measurement Frequency Range	U,(dB)
DG-CB03 (1m)	CISPR	18 ~ 26.5 GHz	3.62
		26.5 ~ 40 GHz	4.00

Note: Unless specifically mentioned, the uncertainty of measurement has not been taken into account to declare the compliance or non-compliance to the specification.

1.3 TEST ENVIRONMENT CONDITIONS

Test Item	Temperature	Humidity	Tested By
AC Power Line Conducted Emissions	26°C	58%	Jayce Yao
Radiated emissions 30 MHz to 1 GHz	26°C	52%	Chen Mo
Radiated emissions above 1 GHz	25-26°C	50-52%	Chen Mo Meers Zhang

2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

Equipment	POS Terminal
Brand Name	NEXGO
Test Model	N82
Series Model	N/A
Model Difference(s)	N/A
Power Source	1# DC voltage supplied from AC adapter. (1) Model: RJ23B-W050200EU (2) Model: STC-A520A-Z 2# Supplied from battery. Model: GX02 3# Supplied from USB port.
Power Rating	1# (1) I/P: 100-240V~ 50/60Hz 0.3A O/P: 5.0V === 2.0A 10.0W (2) I/P: 100-240V~ 50/60Hz 400mA O/P: 5.0V === 2000mA 2# DC 3.7V, Rated Capacity: 5200mAh 19.24Wh 3# DC 5V
Connecting I/O Port(s)	1* Type-C port 2* SIM Card port 1* SD Card port 1* NFC Card port 1* IC Card port 1* Magnetic Card port
Classification of EUT	Class B
Highest Internal Frequency(Fx)	5850 MHz

Note:

1. For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.

2.2 DESCRIPTION OF TEST MODES

To investigate the maximum EMI emission characteristics generated from EUT, the test system was pre-scanning tested based on the consideration of following EUT operation mode or test configuration mode which possibly have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

Pretest Mode	Description
Mode 1	Full System:SIM1 GSM+SIM2 GSM+BT+2.4G WIFI+GPS+Magnetic Card
Mode 2	Full System:SIM1 WCDMA+SIM2 GSM+BT+5G WIFI+GPS+Contact IC Card
Mode 3	Full System:SIM1 LTE+SIM2 GSM+BT+5.8G WIFI+GPS+Contactless IC Card
Mode 4	Full System:SIM1 WCDMA+SIM2 GSM+BT+2.4G WIFI+GPS+Printing
Mode 5	Idle+SD Playing
Mode 6	Front Camera Recording
Mode 7	Rear Camera Recording

AC Power Line Conducted Emissions Test	
Final Test Mode	Description
Mode 4	Full System:SIM1 WCDMA+SIM2 GSM+BT+2.4G WIFI+GPS+Printing

Radiated Emissions 30 MHz to 1 GHz Test	
Final Test Mode	Description
Mode 4	Full System:SIM1 WCDMA+SIM2 GSM+BT+2.4G WIFI+GPS+Printing

Radiated emissions above 1 GHz Test	
Final Test Mode	Description
Mode 4	Full System:SIM1 WCDMA+SIM2 GSM+BT+2.4G WIFI+GPS+Printing

Config	Test sample	Description	Adapter
1	1#	Attach conductive cloth to the printing place	STC-A520A-Z
2	1#	Attach conductive cloth to the printing place	RJ23B-W050200EU
3	2#	EMI film is affixed to the printing place	STC-A520A-Z
4	2#	EMI film is affixed to the printing place	RJ23B-W050200EU

Note:

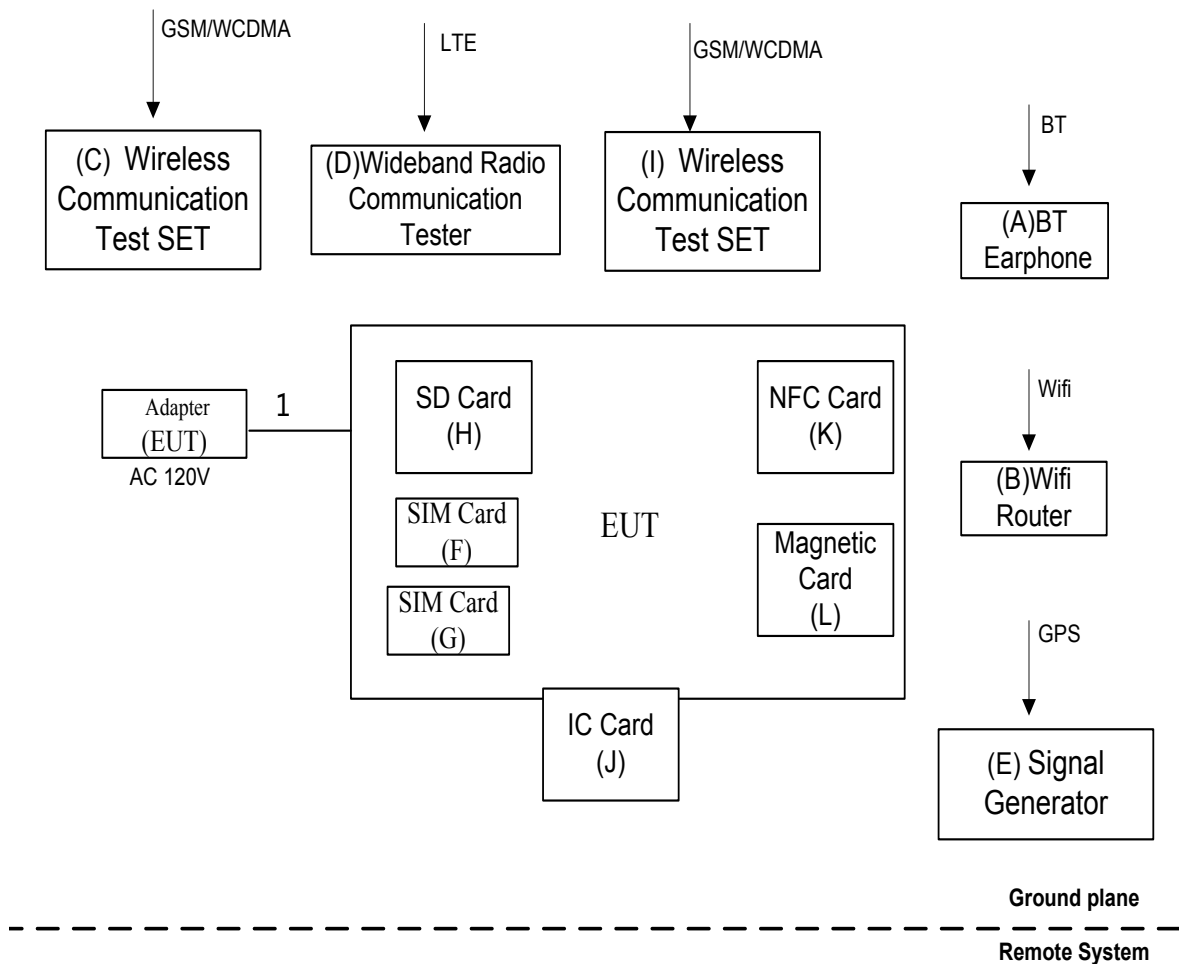
1. The config1 tested all the mode, and then used the config2-4 tested the worst case. The worst case is mode 4(config1) and recorded in the report.
2. The product supports BT&2.4G&5G WIFI function.
The frequency exemptions are 2400-2483.5MHz, 5150-5250MHz, 5250-5350MHz, 5470-5725MHz, 5725-5850MHz.
3. Radiated emission above 1GHz tested with 2.4G&5G filter.

2.3 EUT OPERATING CONDITIONS

The EUT exercise program used during radiated and/or conducted emission measurement was designed to exercise the various system components in a manner similar to a typical use. The standard test signals and output signal as following:

1. The SD Card, SIM Card, IC Card, Magnetic Card and NFC Card are plugged into the EUT.
2. EUT connected to Adapter DC cable.
3. EUT connected to Wireless Communication Test SET via GSM/WCDMA function.
4. EUT connected to Wideband Radio Communication Tester via LTE function.
5. EUT connected to BT Earphone via BT function.
6. EUT connected to Wifi Router via Wifi function.
7. EUT connected to Signal Generator via GPS function.

2.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED



2.5 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Item	Equipment	Mfr/Brand	Model/Type No.	Series No.
A	BT Earphone	MICROKIA	M9	N/A
B	Wifi Router	ASUS	RT-AC66U	E8ICGG000138
C	Wireless Communication Test SET	Agilent	(8960 Series) E5515C	MY48364183
D	Wideband Radio Communication Tester	RS	CMW500	122125
E	Signal Generator	Agilent	E4438C	MY49071316
F	SIM Card	R&S	N/A	N/A
G	SIM Card	R&S	N/A	N/A
H	SD Card	Kingston	8GB	N/A
I	Wireless Communication Test SET	Agilent	(8960 Series) E5515C	MY48364183
J	IC Card	N/A	N/A	N/A
K	NFC Card	N/A	N/A	N/A
L	Magnetic Card	N/A	N/A	N/A

Item	Cable Type	Shielded Type	Ferrite Core	Length
1	DC Cable	NO	NO	1.2m

3. EMC EMISSION TEST

3.1 AC POWER LINE CONDUCTED EMISSIONS TEST

3.1.1 LIMIT

Frequency of Emission (MHz)	Class B (dBuV)	
	Quasi-peak	Average
0.15 - 0.5	66 - 56 *	56 - 46 *
0.5 - 5	56	46
5 - 30	60	50

Note:

- (1) The tighter limit applies at the band edges.
- (2) The limit of " * " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.
- (3) The test result calculated as following:
 Measurement Value = Reading Level + Correct Factor
 Correct Factor = Insertion Loss + Cable Loss + Attenuator Factor(if use)
 Margin Level = Measurement Value - Limit Value

3.1.2 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	TWO-LINE V-NETWORK	R&S	ENV216	100526	Jul. 03, 2023
2	EMI Test Receiver	R&S	ESR3	101862	Jan. 22, 2023
3*	Artificial-Mains Network	SCHWARZBECK	NSLK 8127	8127685	Feb. 28, 2024
4	Cable	N/A	RG400	N/A(12m)	Mar. 08, 2023
5	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A

Remark: "N/A" denotes no model name, serial no. or calibration specified.

"*" calibration period of equipment list is three year.

Except * item, all calibration period of equipment list is one year.

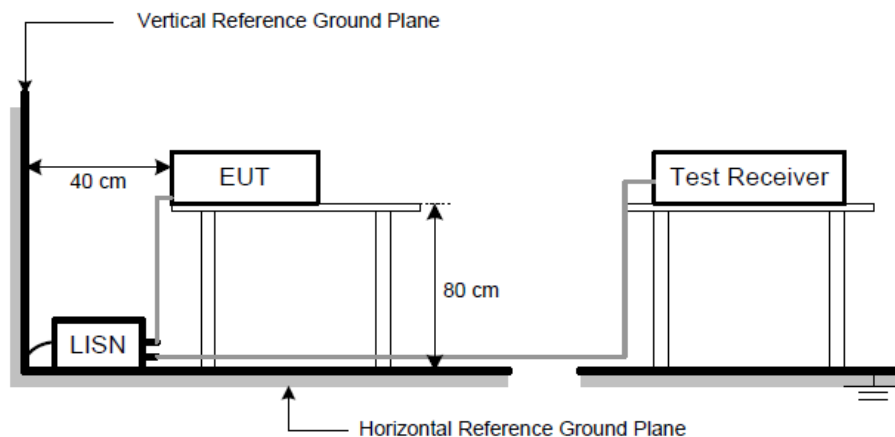
3.1.3 TEST PROCEDURE

- a. The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipment powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- b. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
- c. I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
- d. LISN at least 80 cm from nearest part of EUT chassis.
- e. For the actual test configuration, please refer to the related Item –EUT Test Photos.
- f. Measuring frequency range from 150KHz to 30MHz.

3.1.4 DEVIATION FROM TEST STANDARD

No deviation

3.1.5 TEST SETUP

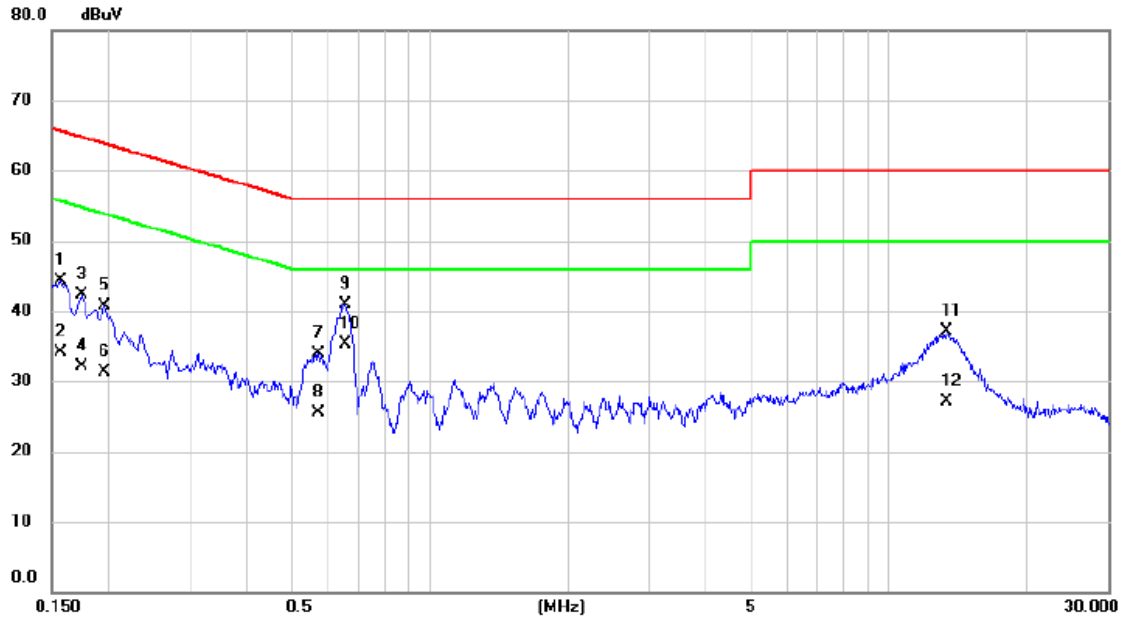


3.1.6 TEST RESULTS

Remark:

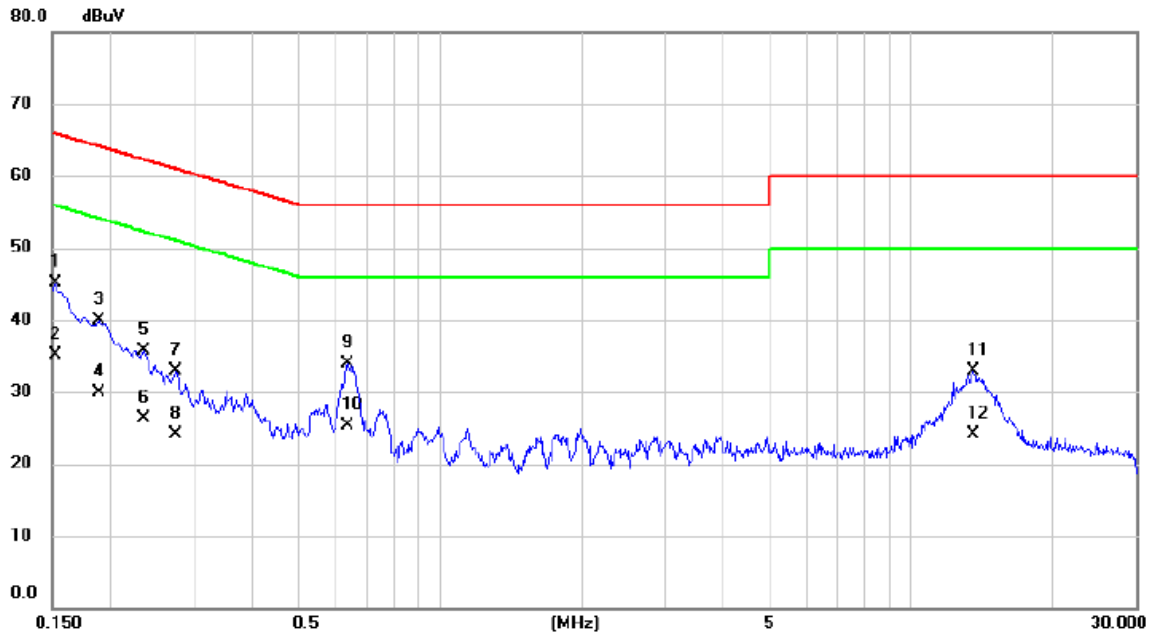
- (1) Reading in which marked as QP means measurements by using are Quasi-Peak Mode with Detector BW=9 kHz; SPA setting in RBW=10 kHz, VBW =10 kHz, Swp. Time = 0.3 sec./MHz. Reading in which marked as AV means measurements by using are Average Mode with instrument setting in RBW=10 kHz, VBW=10 kHz, Swp. Time =0.3 sec./MHz.
- (2) All readings are QP Mode value unless otherwise stated AVG in column of 『Note』 . If the QP Mode Measured value compliance with the QP Limits and lower than AVG Limits, the EUT shall be deemed to meet both QP & AVG Limits and then only QP Mode was measured, but AVG Mode didn't perform. In this case, a “ * ” marked in AVG Mode column of Interference Voltage Measured.

Test Voltage	AC 120V/60Hz	Phase	Line
Test Mode	Mode 4		



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1		0.1567	34.63	9.66	44.29	65.64	-21.35	QP	
2		0.1567	24.40	9.66	34.06	55.64	-21.58	AVG	
3		0.1747	32.57	9.67	42.24	64.73	-22.49	QP	
4		0.1747	22.50	9.67	32.17	54.73	-22.56	AVG	
5		0.1950	31.03	9.68	40.71	63.82	-23.11	QP	
6		0.1950	21.60	9.68	31.28	53.82	-22.54	AVG	
7		0.5730	24.22	9.74	33.96	56.00	-22.04	QP	
8		0.5730	15.70	9.74	25.44	46.00	-20.56	AVG	
9		0.6561	31.13	9.75	40.88	56.00	-15.12	QP	
10	*	0.6561	25.53	9.75	35.28	46.00	-10.72	AVG	
11		13.3755	26.80	10.40	37.20	60.00	-22.80	QP	
12		13.3755	16.70	10.40	27.10	50.00	-22.90	AVG	

Test Voltage	AC 120V/60Hz	Phase	Neutral
Test Mode	Mode 4		



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1		0.1522	35.38	9.63	45.01	65.88	-20.87	QP	
2		0.1522	25.40	9.63	35.03	55.88	-20.85	AVG	
3		0.1883	30.34	9.63	39.97	64.11	-24.14	QP	
4		0.1883	20.30	9.63	29.93	54.11	-24.18	AVG	
5		0.2355	26.01	9.64	35.65	62.25	-26.60	QP	
6		0.2355	16.70	9.64	26.34	52.25	-25.91	AVG	
7		0.2737	23.27	9.66	32.93	61.00	-28.07	QP	
8		0.2737	14.50	9.66	24.16	51.00	-26.84	AVG	
9		0.6382	24.14	9.71	33.85	56.00	-22.15	QP	
10	*	0.6382	15.50	9.71	25.21	46.00	-20.79	AVG	
11		13.5285	22.40	10.53	32.93	60.00	-27.07	QP	
12		13.5285	13.60	10.53	24.13	50.00	-25.87	AVG	

3.2 RADIATED EMISSIONS 30 MHZ TO 1 GHZ

3.2.1 LIMIT

Frequency (MHz)	Class B (at 3m)	
	(uV/m) Quasi-peak	(dBuV/m) Quasi-peak
30 - 88	100	40
88 - 216	150	43.5
216 - 960	200	46
960 - 1000	500	54

NOTE:

- (1) The tighter limit applies at the band edges.
- (2) Emission level (dBuV/m) = 20log Emission level (uV/m).
3m Emission level = 10m Emission level + 20log(10m/3m).
- (3) The test result calculated as following:
 Measurement Value = Reading Level + Correct Factor
 Correct Factor = Antenna Factor + Cable Loss - Amplifier Gain(if use)
 Margin Level = Measurement Value - Limit Value

3.2.2 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Antenna	Schwarzbeck	VULB9160	9160-3232	Mar. 03, 2023
2	Amplifier	HP	8447D	2944A08742	Jan. 22, 2023
3	Cable	emci	LMR-400	N/A	Nov. 30, 2022
4	Controller	CT	SC100	N/A	N/A
5	Controller	MF	MF-7802	MF780208416	N/A
6	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A
7	Receiver	Agilent	N9038A	MY52130039	Jan. 22, 2023

Remark: "N/A" denotes no model name, no serial no. or no calibration specified.

All calibration period of equipment list is one year.

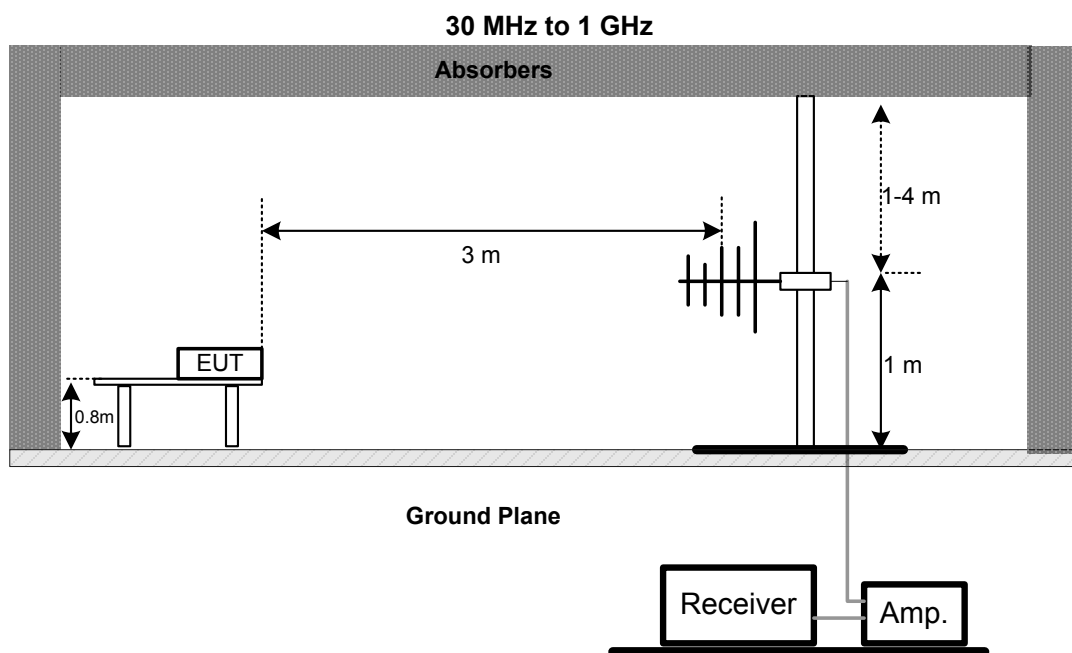
3.2.3 TEST PROCEDURE

- The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- The height of the equipment or of the substitution antenna shall be 0.8 m, the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights find the maximum reading (used Bore sight function).
- The initial step in collecting radiated emission data is a receiver peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- All readings are Peak unless otherwise stated QP in column of Note. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform.
- For the actual test configuration, please refer to the related Item - EUT Test Photos.

3.2.4 DEVIATION FROM TEST STANDARD

No deviation

3.2.5 TEST SETUP

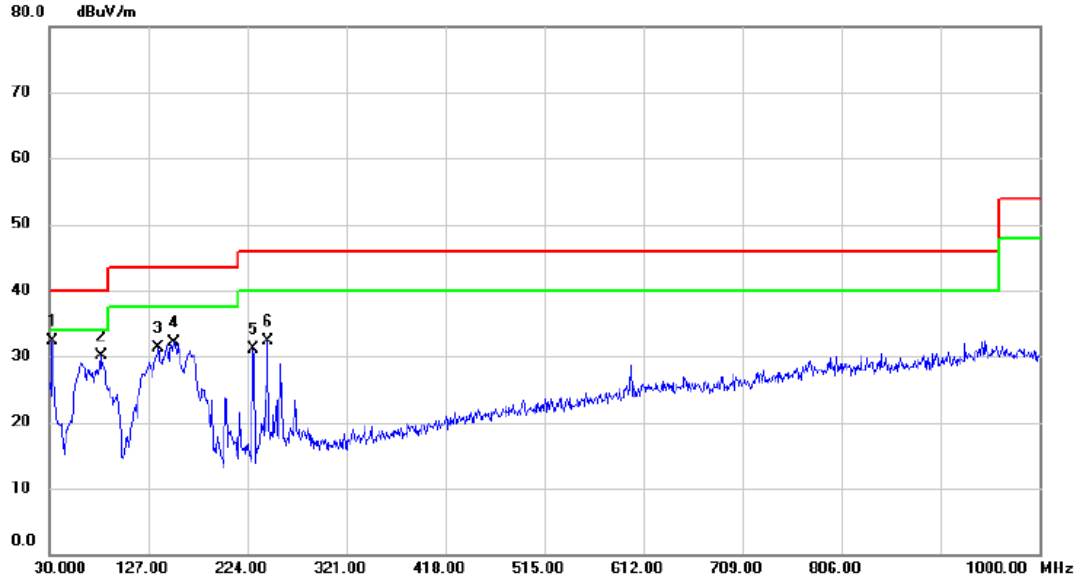


3.2.6 TEST RESULTS

Remark:

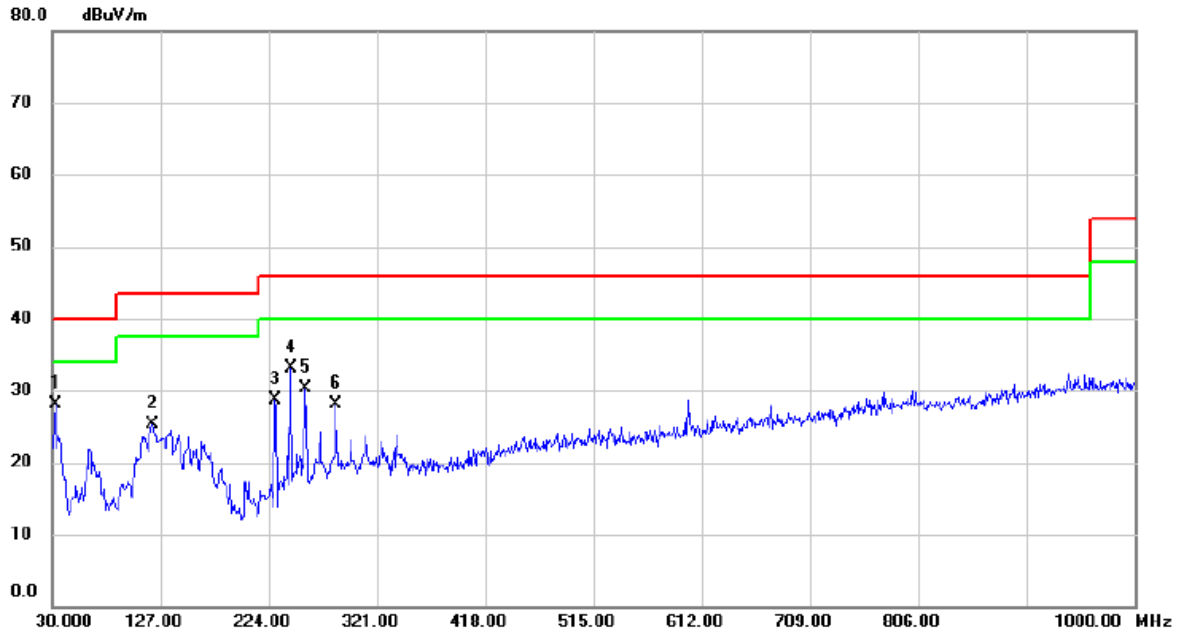
- Measuring frequency range from 30 MHz to 1000 MHz
- If the peak scan value lower limit more than 20 dB, then this signal data does not show in table.

Test Voltage	AC 120V/60Hz	Polarization	Vertical
Test Mode	Mode 4		



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	32.9100	47.55	-15.16	32.39	40.00	-7.61	QP	
2		80.4400	48.38	-18.26	30.12	40.00	-9.88	QP	
3		136.7000	44.22	-12.90	31.32	43.50	-12.18	QP	
4		151.7350	44.47	-12.40	32.07	43.50	-11.43	QP	
5		230.3050	44.84	-13.70	31.14	46.00	-14.86	QP	
6		243.8850	45.28	-12.99	32.29	46.00	-13.71	QP	

Test Voltage	AC 120V/60Hz	Polarization	Horizontal
Test Mode	Mode 4		



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	32.9100	43.36	-15.16	28.20	40.00	-11.80	QP	
2		120.2100	39.36	-14.01	25.35	43.50	-18.15	QP	
3		230.3050	42.36	-13.70	28.66	46.00	-17.34	QP	
4		243.8850	46.02	-12.99	33.03	46.00	-12.97	QP	
5		257.4650	42.75	-12.44	30.31	46.00	-15.69	QP	
6		284.6250	39.30	-11.21	28.09	46.00	-17.91	QP	

3.3 RADIATED EMISSIONS ABOVE 1 GHZ

3.3.1 LIMIT

Frequency (MHz)	Class B	
	(dBuV/m) (at 3m)	
	Peak	Average
Above 1000	74	54

Frequency (MHz)	Class B	
	(dBuV/m) (at 1m)	
	Peak	Average
Above 18000	83.5	63.5

FREQUENCY RANGE OF RADIATED MEASUREMENT (FOR UNINTENTIONAL RADIATORS)

Highest internal frequency (F _x)	Highest measurement frequency (F _M)
$F_x \leq 108 \text{ Mhz}$	1 GHz
$108 \text{ MHz} < F_x \leq 500 \text{ MHz}$	2 GHz
$500 \text{ MHz} < F_x \leq 1 \text{ GHz}$	5 GHz
$F_x > 1 \text{ GHz}$	5 x F _x up to a maximum of 40 GHz

Note: F_x is the highest fundamental frequency generated and/or used in the ITE or digital apparatus under test.

NOTE:

- (1) The tighter limit applies at the band edges.
- (2) Emission level (dBuV/m) = 20log Emission level (uV/m).
1m Emission level = 3m Emission level + 20log(3m/1m).
- (3) The test result calculated as following:
Measurement Value = Reading Level + Correct Factor
Correct Factor = Antenna Factor + Cable Loss - Amplifier Gain(if use)
Margin Level = Measurement Value - Limit Value

3.3.2 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Double Ridged Horn Antenna	ARA	DRG-118A	16554	Apr. 18, 2023
2	Broad-Band Horn Antenna	Schwarzbeck	BBHA 9170(3m)	9170-319	May 27, 2023
3	Amplifier	Agilent	8449B	3008A02584	Jul. 03, 2023
4	Controller	CT	SC100	N/A	N/A
5	Controller	MF	MF-7802	MF780208416	N/A
6	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A
7	Receiver	Agilent	N9038A	MY52130039	Jan. 22, 2023
8	EXA Spectrum Analyzer	Keysight	N9010A	MY56480488	Jan. 22, 2023
9	Low Noise Amplifier	CONNPHY	CLN-18G40G-4330-K	619413	Jul. 05, 2025
10	Cable	Talent microwave	A81-SMAMSMAM-12.5M	N/A	Oct. 15, 2022
11	Cable	Talent microwave	A40-2.92M2.92M-2.5M	N/A	Nov. 30, 2022
12	Broad-Band Horn Antenna	Schwarzbeck	BBHA 9170(1m)	9170-319	Jun. 11, 2023
13*	Band Reject Filter	Wairwright Instruments Gmbh	WRCG 2400/2483-2375/2505-50/ 10SS	16	Feb. 28, 2024
14*	Band Reject Filter	Micro-Tronics	BRC50704-01	8	Feb. 27, 2024
15*	Band Reject Filter	Micro-Tronics	BRC50703-01	7	Feb. 27, 2024
16*	Band Reject Filter	Micro-Tronics	BRC50705-01	10	Feb. 27, 2024

Remark: "N/A" denotes no model name, no serial no. or no calibration specified.

"*" calibration period of equipment list is three year.

Except * item, all calibration period of equipment list is one year.

3.3.3 TEST PROCEDURE

- a. The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.

Note:

For measurement of frequency 1GHz -18GHz, the EUT was set 3 meters away from the receiver antenna. For 18G - 40GHz, the EUT was set 1 meter.

Emission level (dBuV/m)=20log Emission level (uV/m).

The limits above 18GHz shall be extrapolated to the specified distance using an extrapolation factor of 20dB/decade from 3m to 1m

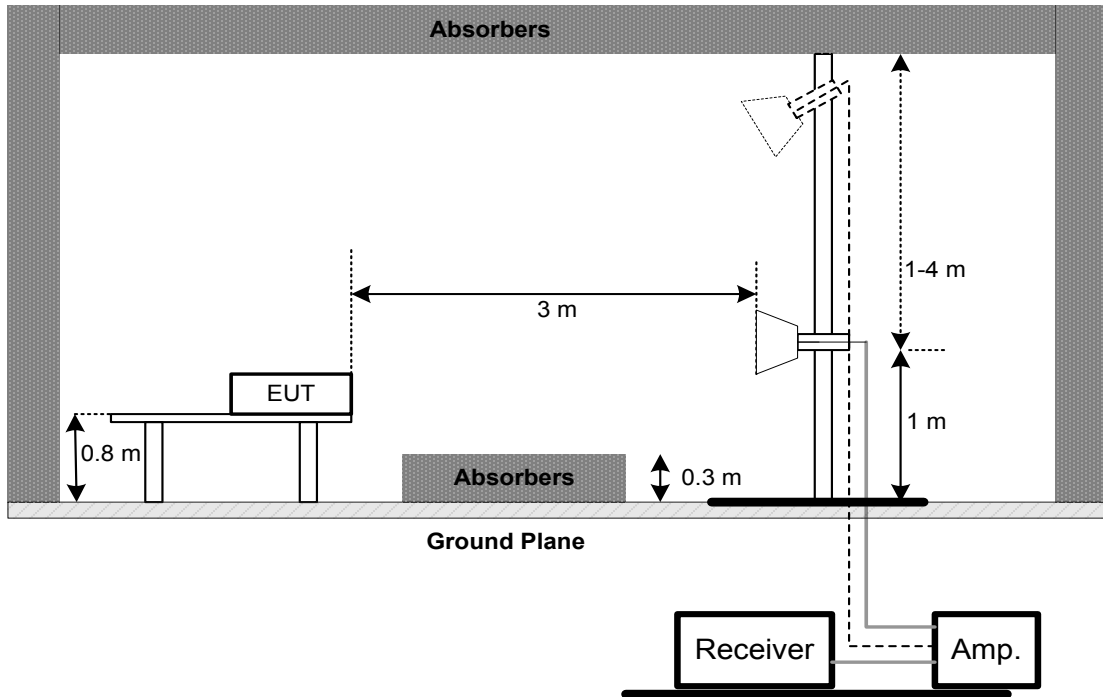
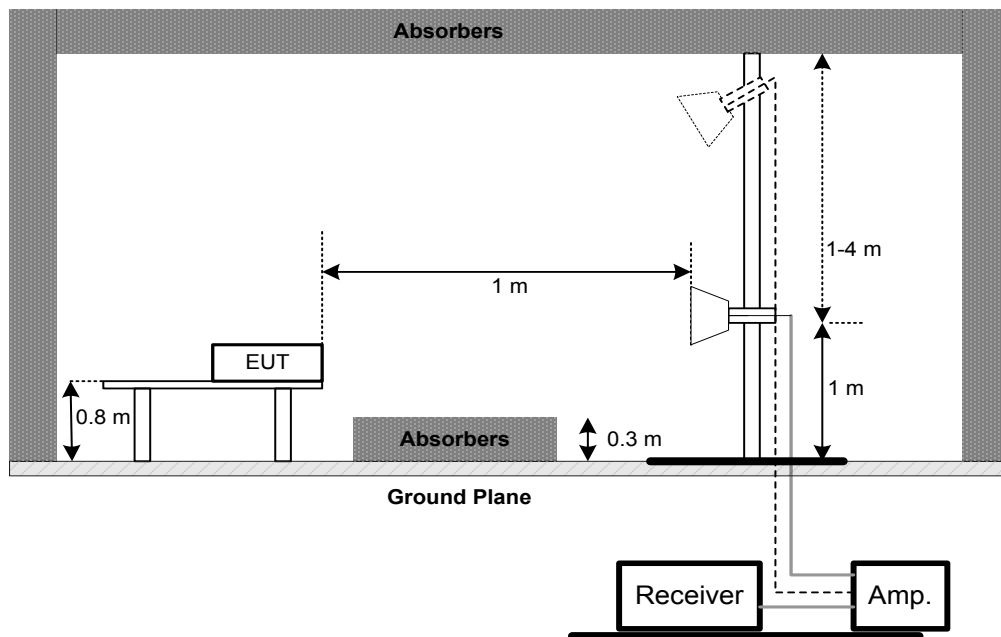
Distance extrapolation factor = $20 \log (3\text{m}/1\text{m})$ dB ;

Limit line = specific limits (dBuV) + 9.5 dB.

- b. The height of the equipment or of the substitution antenna shall be 0.8 m, the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- c. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights find the maximum reading (used Bore sight function).
- d. The initial step in collecting radiated emission data is a receiver peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then AVG detector mode re-measured.
- e. The receiver system was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz.
- f. All readings are Peak Mode value unless otherwise stated AVG in column of Note. If the Peak Mode Measured value compliance with the Peak Limits and lower than AVG Limits, the EUT shall be deemed to meet both Peak & AVG Limits and then only Peak Mode was measured, but AVG Mode didn't perform.
- g. For the actual test configuration, please refer to the related Item - EUT Test Photos.

3.3.4 DEVIATION FROM TEST STANDARD

No deviation

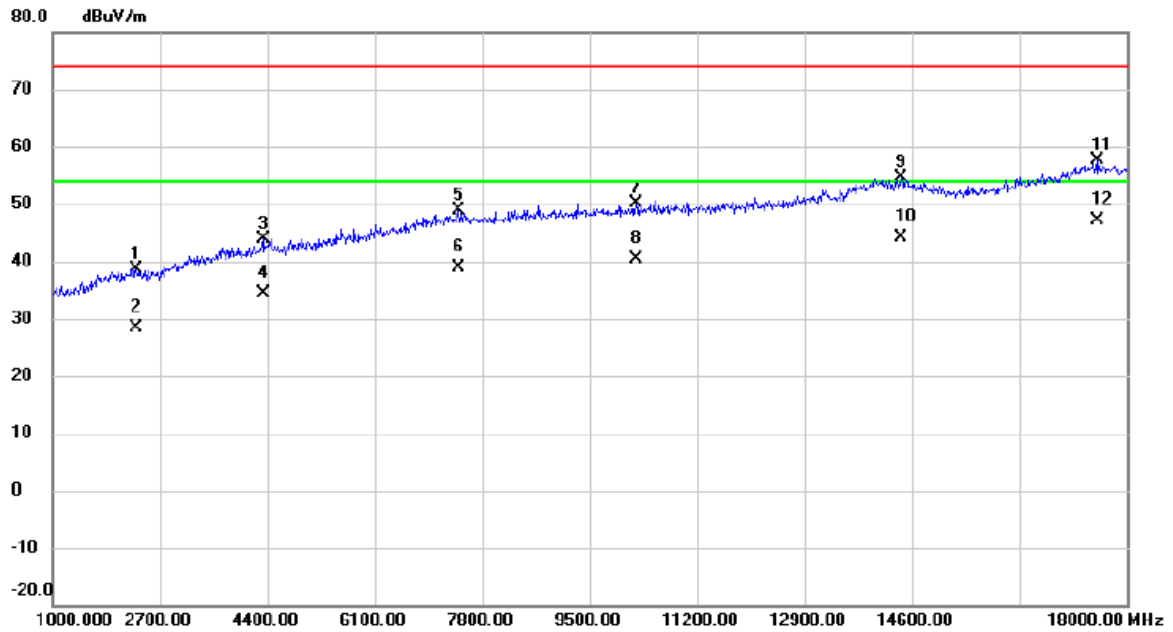
3.3.5 TEST SETUP**1 GHz-18 GHz****18 GHz-40 GHz**

3.3.6 TEST RESULTS

Remark:

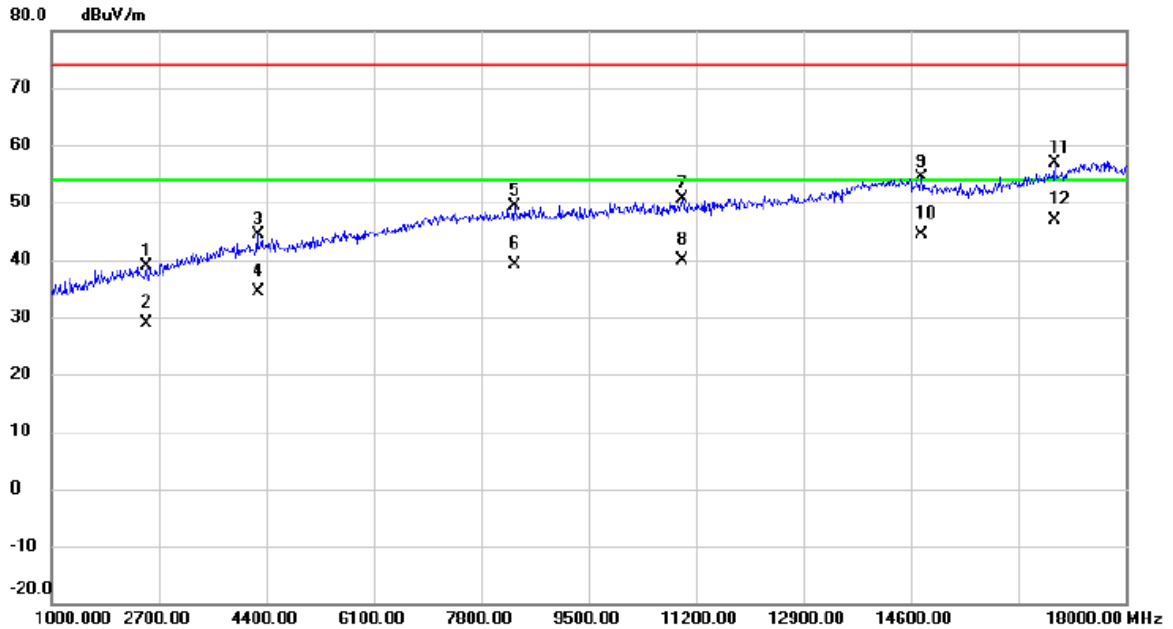
- (1) Radiated emissions measured in frequency range above 1000 MHz were made with an instrument using Peak detector mode and AV detector mode of the emission.
- (2) Data of measurement within this frequency range shown “*” in the table above means the reading of emissions are attenuated more than 20 dB below the permissible limits or the field strength is too small to be measured.
- (3) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

Test Voltage	AC 120V/60Hz	Polarization	Vertical
Test Mode	Mode 4		



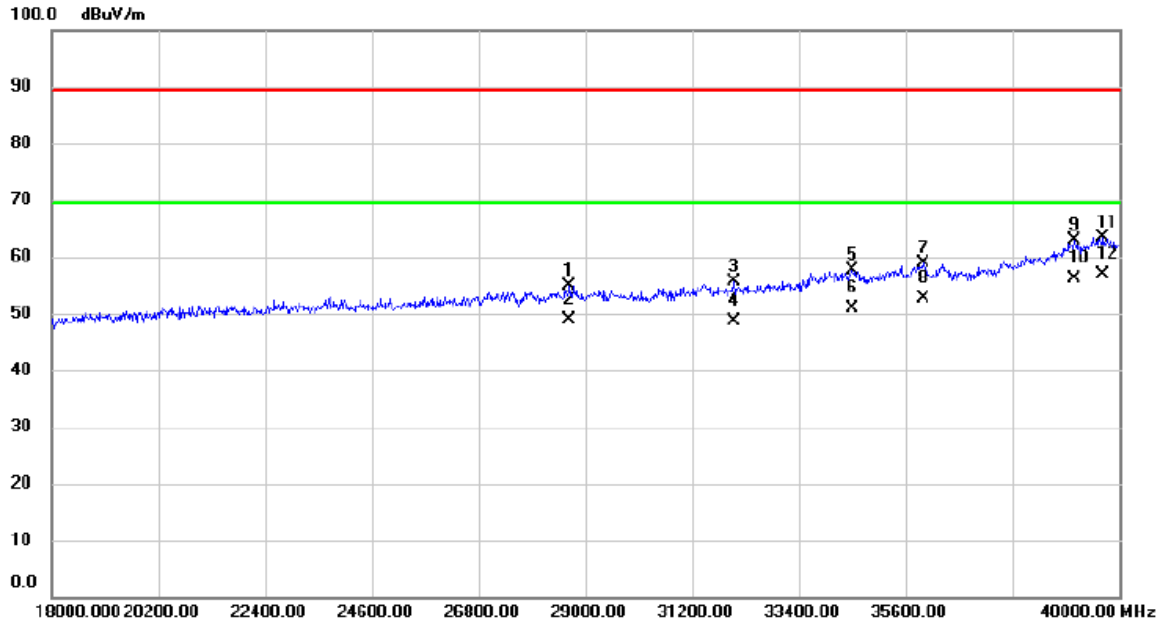
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		2326.000	41.49	-2.76	38.73	74.00	-35.27	peak	
2		2326.000	31.26	-2.76	28.50	54.00	-25.50	AVG	
3		4332.000	40.32	3.52	43.84	74.00	-30.16	peak	
4		4332.000	30.96	3.52	34.48	54.00	-19.52	AVG	
5		7426.000	38.73	10.26	48.99	74.00	-25.01	peak	
6		7426.000	28.63	10.26	38.89	54.00	-15.11	AVG	
7		10231.00	38.25	11.99	50.24	74.00	-23.76	peak	
8		10231.00	28.36	11.99	40.35	54.00	-13.65	AVG	
9		14430.00	36.70	18.05	54.75	74.00	-19.25	peak	
10		14430.00	26.01	18.05	44.06	54.00	-9.94	AVG	
11		17541.00	36.51	21.02	57.53	74.00	-16.47	peak	
12	*	17541.00	26.03	21.02	47.05	54.00	-6.95	AVG	

Test Voltage	AC 120V/60Hz	Polarization	Horizontal
Test Mode	Mode 4		



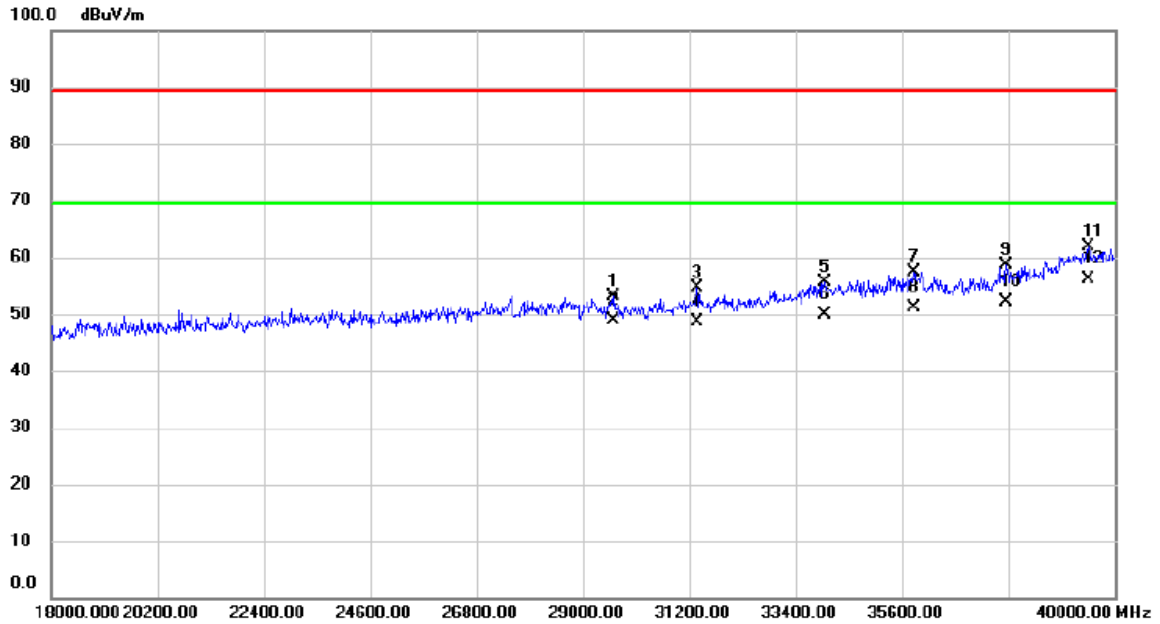
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		2496.000	41.46	-2.66	38.80	74.00	-35.20	peak	
2		2496.000	31.62	-2.66	28.96	54.00	-25.04	AVG	
3		4264.000	40.93	3.42	44.35	74.00	-29.65	peak	
4		4264.000	30.94	3.42	34.36	54.00	-19.64	AVG	
5		8327.000	38.60	10.67	49.27	74.00	-24.73	peak	
6		8327.000	28.34	10.67	39.01	54.00	-14.99	AVG	
7		10979.00	37.78	12.77	50.55	74.00	-23.45	peak	
8		10979.00	27.13	12.77	39.90	54.00	-14.10	AVG	
9		14770.00	37.17	17.28	54.45	74.00	-19.55	peak	
10		14770.00	27.06	17.28	44.34	54.00	-9.66	AVG	
11		16878.00	38.01	18.83	56.84	74.00	-17.16	peak	
12	*	16878.00	28.03	18.83	46.86	54.00	-7.14	AVG	

Test Voltage	AC 120V/60Hz	Polarization	Vertical
Test Mode	Mode 4		



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		28670.00	44.35	10.62	54.97	89.50	-34.53	peak	
2		28670.00	38.36	10.62	48.98	69.50	-20.52	AVG	
3		32058.00	45.98	9.63	55.61	89.50	-33.89	peak	
4		32058.00	38.97	9.63	48.60	69.50	-20.90	AVG	
5		34500.00	46.61	10.90	57.51	89.50	-31.99	peak	
6		34500.00	40.06	10.90	50.96	69.50	-18.54	AVG	
7		35952.00	46.30	12.47	58.77	89.50	-30.73	peak	
8		35952.00	40.17	12.47	52.64	69.50	-16.86	AVG	
9		39076.00	45.87	17.13	63.00	89.50	-26.50	peak	
10		39076.00	39.12	17.13	56.25	69.50	-13.25	AVG	
11		39670.00	45.35	17.93	63.28	89.50	-26.22	peak	
12	*	39670.00	38.96	17.93	56.89	69.50	-12.61	AVG	

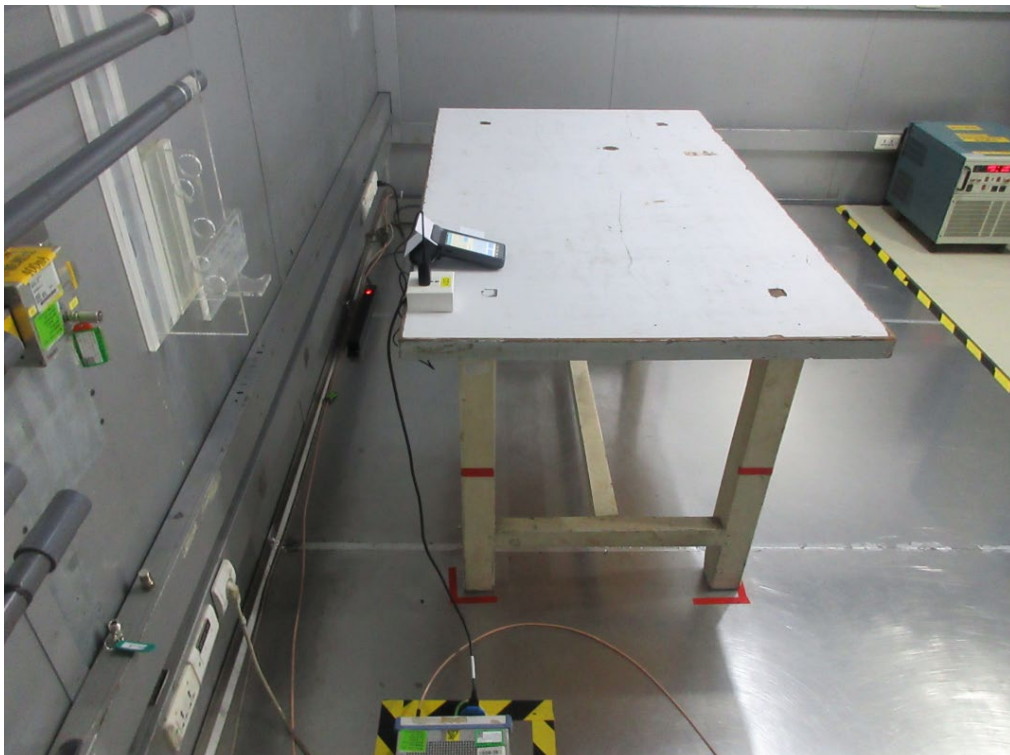
Test Voltage	AC 120V/60Hz	Polarization	Horizontal
Test Mode	Mode 4		



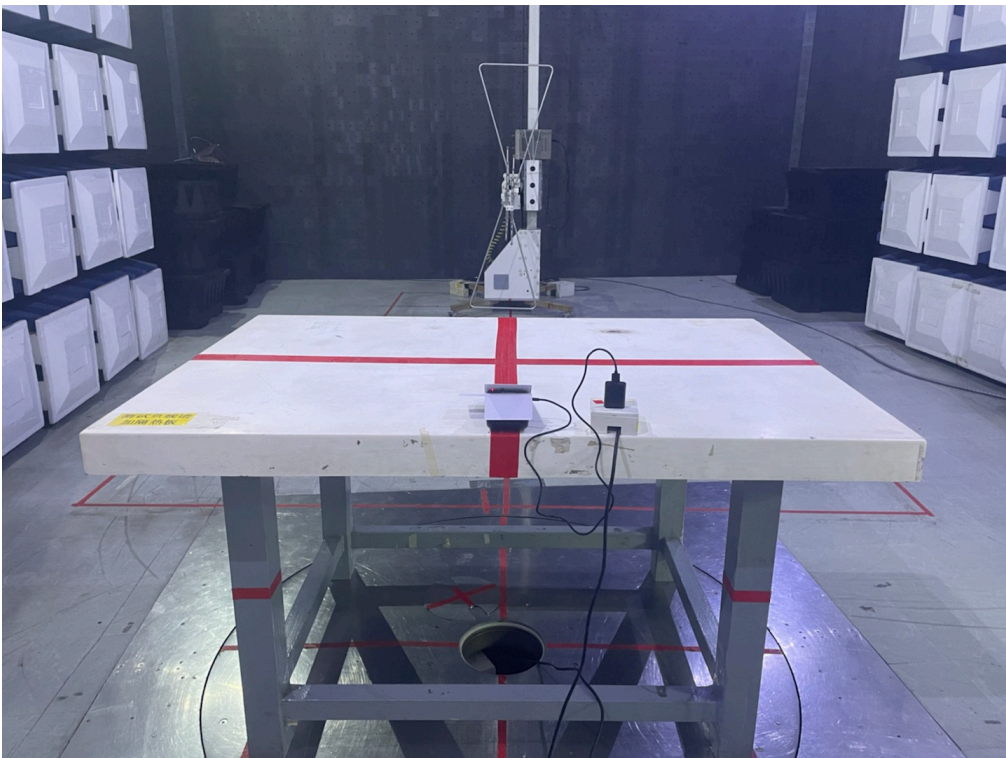
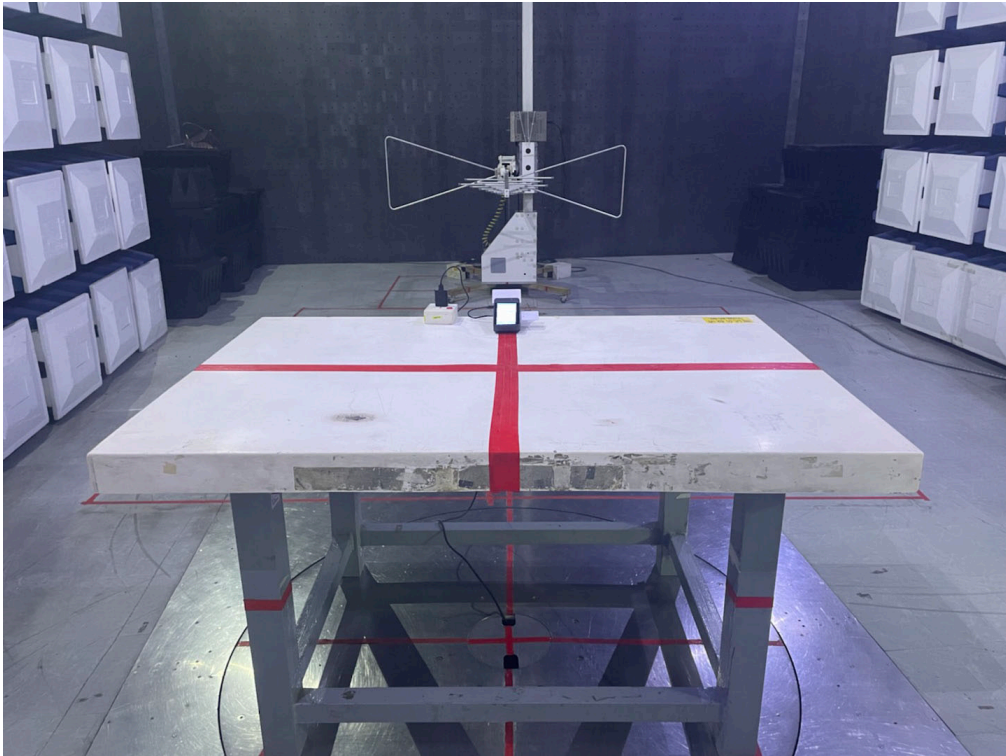
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		29638.00	43.17	10.08	53.25	89.50	-36.25	peak	
2		29638.00	38.85	10.08	48.93	69.50	-20.57	AVG	
3		31354.00	44.14	10.40	54.54	89.50	-34.96	peak	
4		31354.00	38.17	10.40	48.57	69.50	-20.93	AVG	
5		33994.00	43.68	11.99	55.67	89.50	-33.83	peak	
6		33994.00	37.92	11.99	49.91	69.50	-19.59	AVG	
7		35842.00	45.12	12.36	57.48	89.50	-32.02	peak	
8		35842.00	38.77	12.36	51.13	69.50	-18.37	AVG	
9		37756.00	45.57	13.10	58.67	89.50	-30.83	peak	
10		37756.00	39.02	13.10	52.12	69.50	-17.38	AVG	
11		39450.00	44.06	17.82	61.88	89.50	-27.62	peak	
12	*	39450.00	38.33	17.82	56.15	69.50	-13.35	AVG	

4. EUT TEST PHOTO

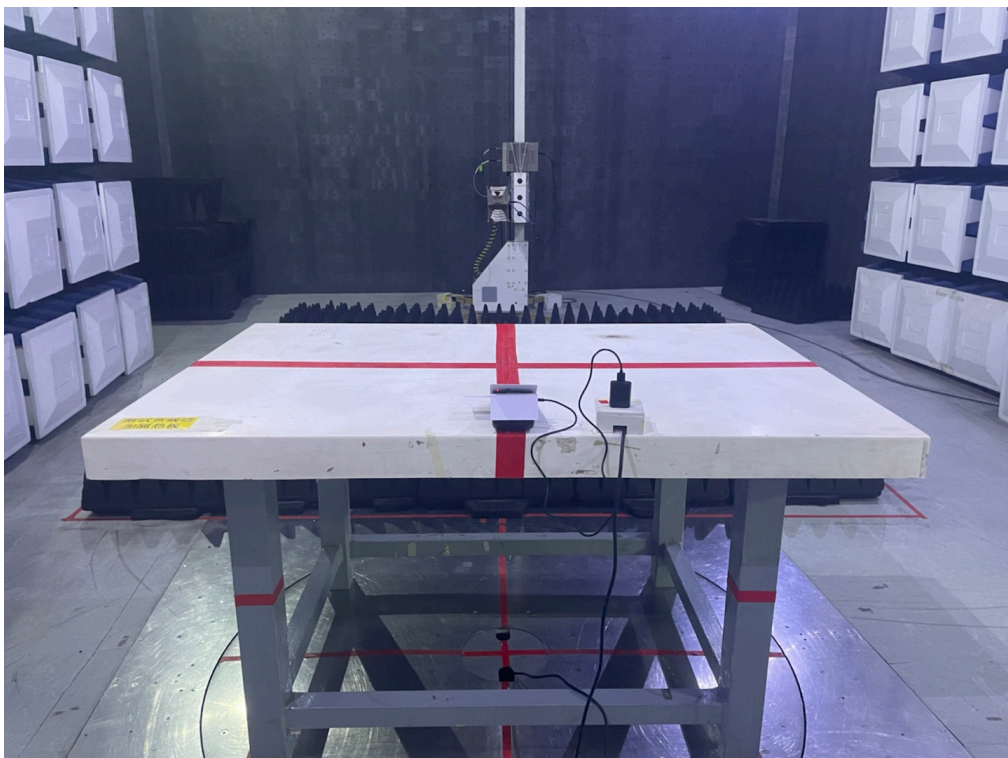
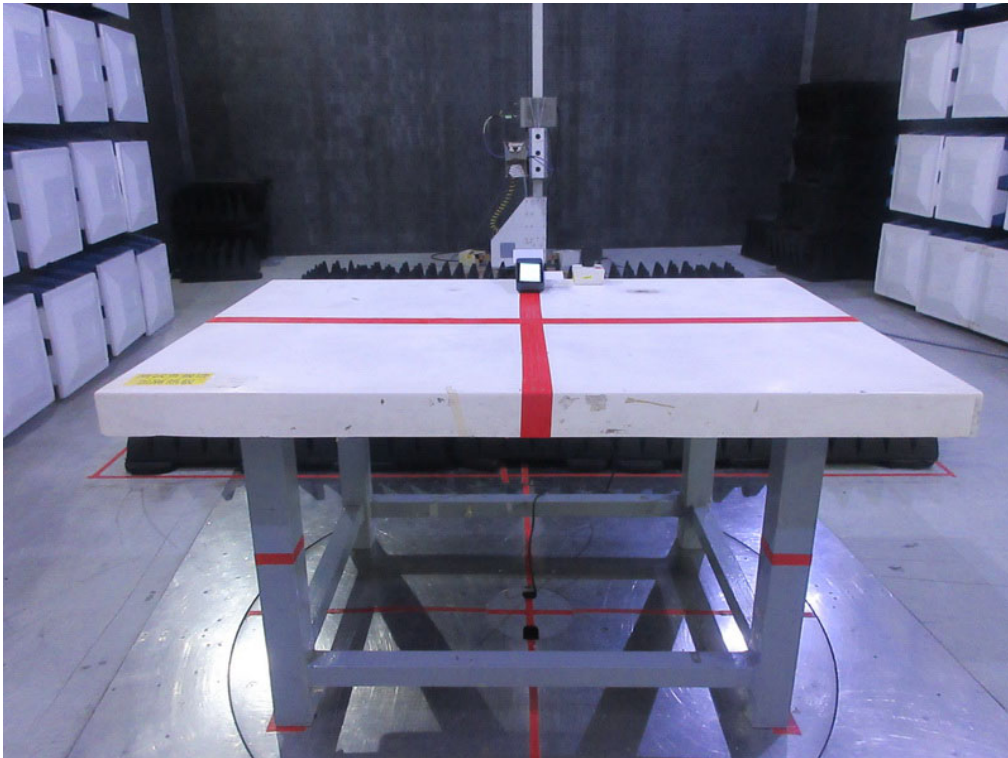
AC Power Line Conducted Emissions



Radiated Emissions 30 MHz to 1 GHz



Radiated Emissions Above 1 GHz

**End of Test Report**