

FCC EMC Test Report

Project No. : 2103C240
Equipment : Bluetooth 5.0 Nano USB Adapter
Brand Name : tp-link
Test Model : UB500
Series Model : N/A
Applicant : TP-Link Corporation Limited
Address : Room 901, 9/F. , New East Ocean Centre, 9 Science Museum Road,
Tsim Sha Tsui, Kowloon, Hong Kong
Manufacturer : TP-Link Corporation Limited
Address : Room 901, 9/F. , New East Ocean Centre, 9 Science Museum Road,
Tsim Sha Tsui, Kowloon, Hong Kong
Date of Receipt : Apr. 19, 2021
Date of Test : Apr. 22, 2021 ~ Apr. 30, 2021
Issued Date : May 24, 2021
Report Version : R00
Test Sample : Engineering Sample No.: DG20210420138
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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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).

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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 Version	Description	Issued Date
R00	Original Issue.	May 24, 2021

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 Road, Shixia, Dalang Town, Dongguan, Guangdong, China.

BTL's Test Firm 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-C02	CISPR	150kHz ~ 30MHz	2.68

B. Radiated emissions test:

Test Site	Method	Measurement Frequency Range	Ant. H / V	U,(dB)
DG-CB08 (3m)	CISPR	30MHz ~ 200MHz	V	3.72
		30MHz ~ 200MHz	H	3.02
		200MHz ~ 1,000MHz	V	4.20
		200MHz ~ 1,000MHz	H	3.66

Test Site	Method	Measurement Frequency Range	U,(dB)
DG-CB08 (3m)	CISPR	1GHz ~ 6GHz	4.36
		6GHz ~ 18GHz	5.12

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	25°C	53%	Jayce Yao
Radiated emissions 30 MHz to 1 GHz	25°C	60%	Better Yan
Radiated emissions above 1 GHz	25°C	60%	Better Yan

2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

Equipment	Bluetooth 5.0 Nano USB Adapter
Brand Name	tp-link
Test Model	UB500
Series Model	N/A
Model Difference(s)	N/A
Power Source	Supplied from USB port.
Power Rating	DC 5V
Connecting I/O Port(s)	1* USB port
Classification of EUT	Class B
Highest Internal Frequency(Fx)	2480MHz

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	Operating(BT Link)

AC Power Line Conducted Emissions test	
Final Test Mode	Description
Mode 1	Operating(BT Link)

Radiated Emissions 30 MHz to 1 GHz test	
Final Test Mode	Description
Mode 1	Operating(BT Link)

Radiated emissions above 1 GHz test	
Final Test Mode	Description
Mode 1	Operating(BT Link)

Note:

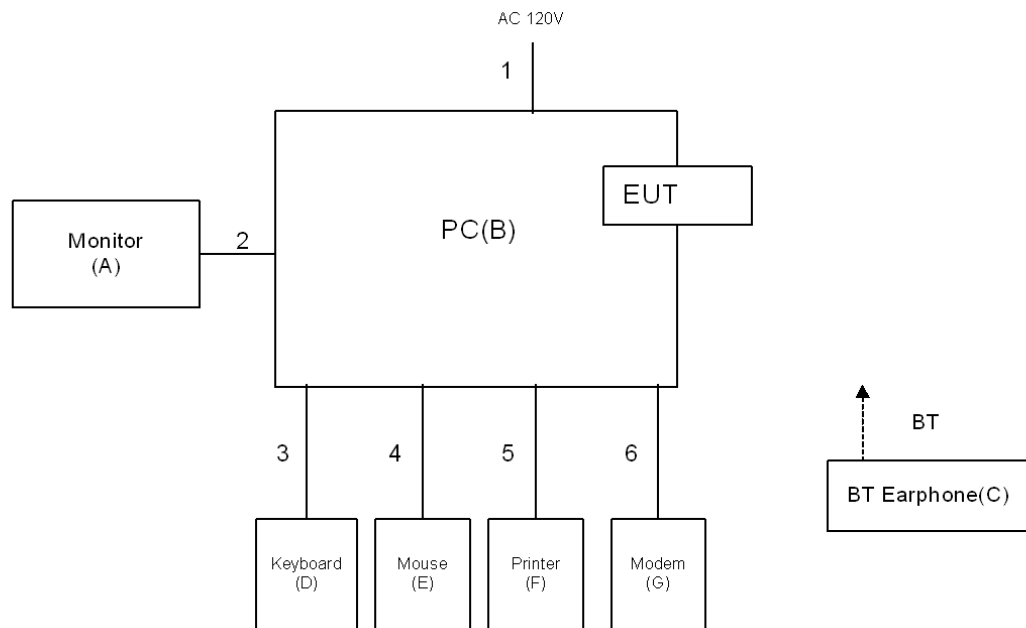
1. The product supports BT function.
The frequency exemption is 2400-2483.5MHz.
2. Radiated emission above 1GHz tested with 2.4G filter.

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. EUT is plugged into PC.
2. PC connected to Monitor via HDMI Cable.
3. PC connected to Keyboard via USB Cable.
4. PC connected to Mouse via USB Cable.
5. PC connected to Printer via Parallel Cable.
6. PC connected to Modem via RS232 Cable.
7. EUT connected to BT Earphone via BT.

2.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED



Ground Plane

Remote system

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	Monitor	PHILIPS	241P6V	UHBA1633026326
B	PC	DELL	8920-D15N9S	GZV71L2
C	BT Earphone	MICROKIA	M9	N/A
D	Keyboard	DELL	L100	CNORH6596589071T08NE
E	Mouse	DELL	MO56UOA	FQJ000BS
F	Printer	SII	DPU-414	3018507 B
G	Modem	ACEEX	DM-1414V	603002131

Item	Cable Type	Shielded Type	Ferrite Core	Length
1	AC Cable	NO	NO	1.5m
2	HDMI Cable	YES	NO	1.5m
3	USB Cable	YES	NO	1.5m
4	USB Cable	YES	NO	1.5m
5	Parallel Cable	YES	NO	1.8m
6	RS232 Cable	YES	NO	1.8m

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 - 5.0	56.00	46.00
5.0 - 30.0	60.00	50.00

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	EMI Test Receiver	R&S	ESCI	100382	Feb. 28, 2022
2	LISN	EMCO	3816/2	52765	Feb. 27, 2022
3	TWO-LINE V-NETWORK	R&S	ENV216	101447	Feb. 27, 2022
4	50Ω Terminator	SHX	TF5-3	15041305	Feb. 27, 2022
5	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A
6	Cable	N/A	RG223	12m	Mar. 09, 2022

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

All calibration period of equipment list is one year.

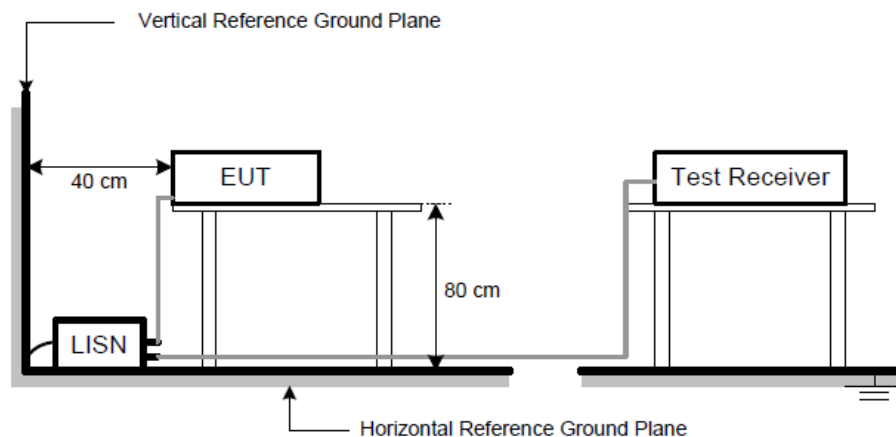
3.1.3 TEST PROCEDURE

- 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.
- 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.
- 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.
- LISN at least 80 cm from nearest part of EUT chassis.
- For the actual test configuration, please refer to the related Item –EUT Test Photos.
- Measuring frequency range from 150KHz to 30MHz.

3.1.4 DEVIATION FROM TEST STANDARD

No deviation

3.1.5 TEST SETUP

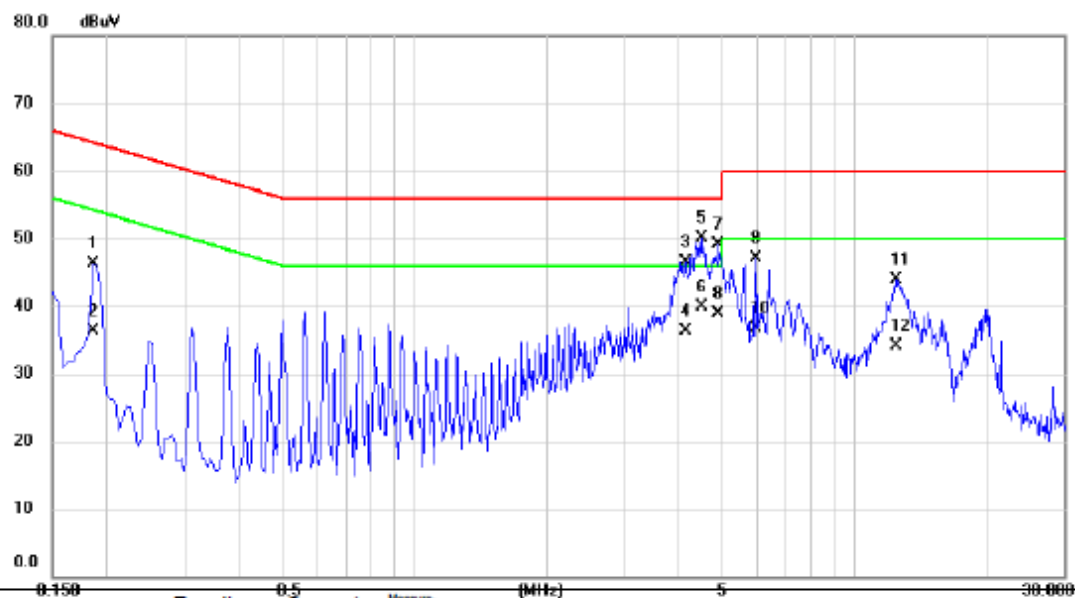


3.1.6 TEST RESULTS

Remark:

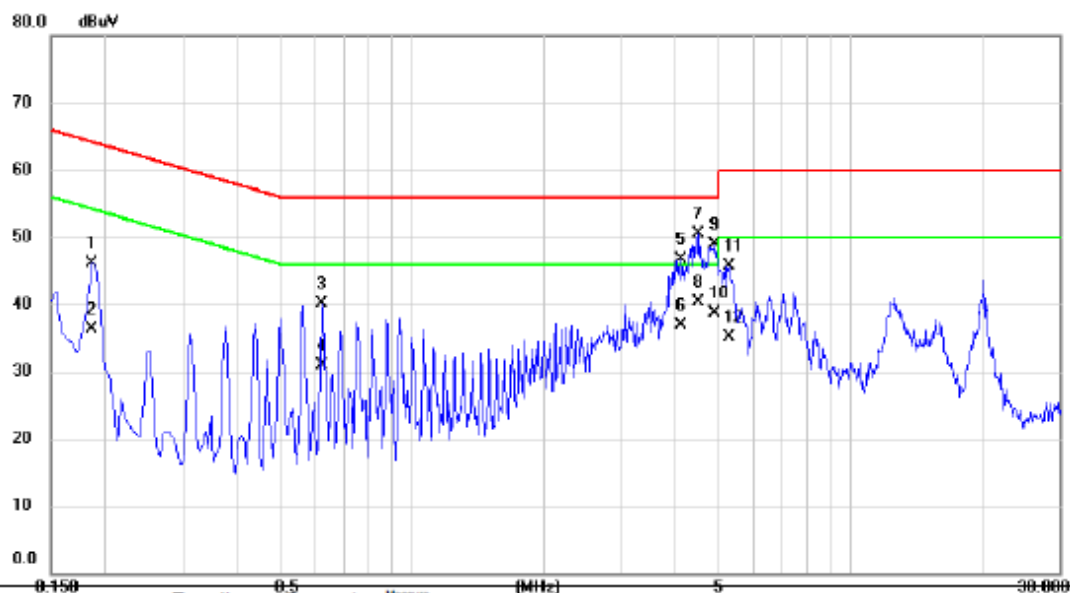
- Reading in which marked as QP means measurements by using are Quasi-Peak Mode with Detector BW=9 kHz; SPA setting in RBW=10 kHz, VBW =10 kHz, Swp. Time = 0.3 sec./MHz. Reading in which marked as AV means measurements by using are Average Mode with instrument setting in RBW=10 kHz, VBW=10 kHz, Swp. Time =0.3 sec./MHz.
- 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 1		



No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1	0.1860	36.53	9.86	46.39	64.21	-17.82	QP	
2	0.1860	26.40	9.86	36.26	54.21	-17.95	AVG	
3	4.1325	36.37	10.22	46.59	56.00	-9.41	QP	
4	4.1325	26.00	10.22	36.22	46.00	-9.78	AVG	
5 *	4.4925	39.77	10.24	50.01	56.00	-5.99	QP	
6	4.4925	29.60	10.24	39.84	46.00	-6.16	AVG	
7	4.9064	38.74	10.28	49.02	56.00	-6.98	QP	
8	4.9064	28.70	10.28	38.98	46.00	-7.02	AVG	
9	5.9910	36.73	10.35	47.08	60.00	-12.92	QP	
10	5.9910	26.40	10.35	36.75	50.00	-13.25	AVG	
11	12.4260	33.24	10.76	44.00	60.00	-16.00	QP	
12	12.4260	23.30	10.76	34.06	50.00	-15.94	AVG	

Test Voltage	AC 120V/60Hz	Phase	Neutral
Test Mode	Mode 1		



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1		0.1860	36.23	9.95	46.18	64.21	-18.03	QP	
2		0.1860	26.40	9.95	36.35	54.21	-17.86	AVG	
3		0.6225	30.00	10.15	40.15	56.00	-15.85	QP	
4		0.6225	20.70	10.15	30.85	46.00	-15.15	AVG	
5		4.1010	36.15	10.54	46.69	56.00	-9.31	QP	
6		4.1010	26.30	10.54	36.84	46.00	-9.16	AVG	
7	*	4.5104	39.94	10.58	50.52	56.00	-5.48	QP	
8		4.5104	29.70	10.58	40.28	46.00	-5.72	AVG	
9		4.9110	38.30	10.62	48.92	56.00	-7.08	QP	
10		4.9110	28.00	10.62	38.62	46.00	-7.38	AVG	
11		5.2980	34.97	10.64	45.61	60.00	-14.39	QP	
12		5.2980	24.40	10.64	35.04	50.00	-14.96	AVG	

3.2 RADIATED EMISSIONS 30 MHZ TO 1 GHZ

3.2.1 LIMIT

Frequency (MHz)	Class B (at 3m)	
	(uV/m) Field strength	(dBuV/m) Field strength
30 - 88	100	40
88 - 216	150	43.5
216 - 960	200	46
Above 960	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	Receiver	Keysight	N9038A	MY54450004	Jul. 25, 2021
2	Pre-Amplifier	EMC INSTRUMENT	EMC 9135	980284	Dec. 13, 2021
3	Trilog-Broadband Antenna	Schwarzbeck	VULB9168	946	Oct. 16, 2021
4	Cable	emci	LMR-400(5m+8m+8m)	N/A	Jan. 06, 2022
5	Measurement Software	Farad	EZ-EMC Ver.BTL-2ANT-1	N/A	N/A
6	Multi-Device Controller	ETS-Lindgren	2090	N/A	N/A
7	Attenuator	EMCI	EMCI-N-6-06	N0670	Nov. 09, 2021

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

All calibration period of equipment list is one year.

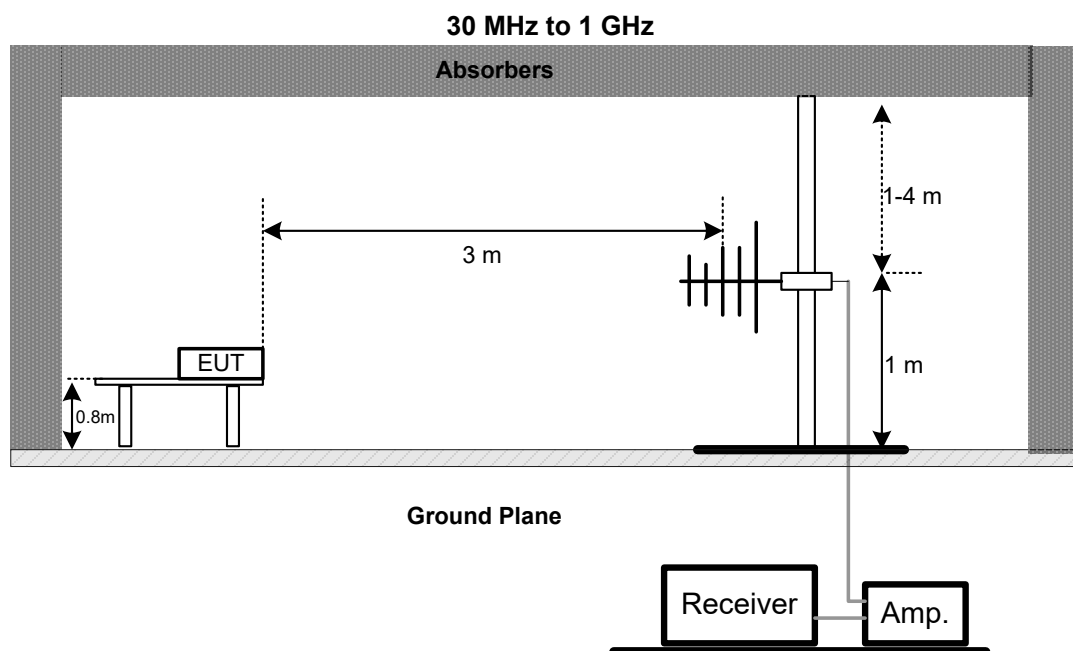
3.2.3 TEST PROCEDURE

- 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 10 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

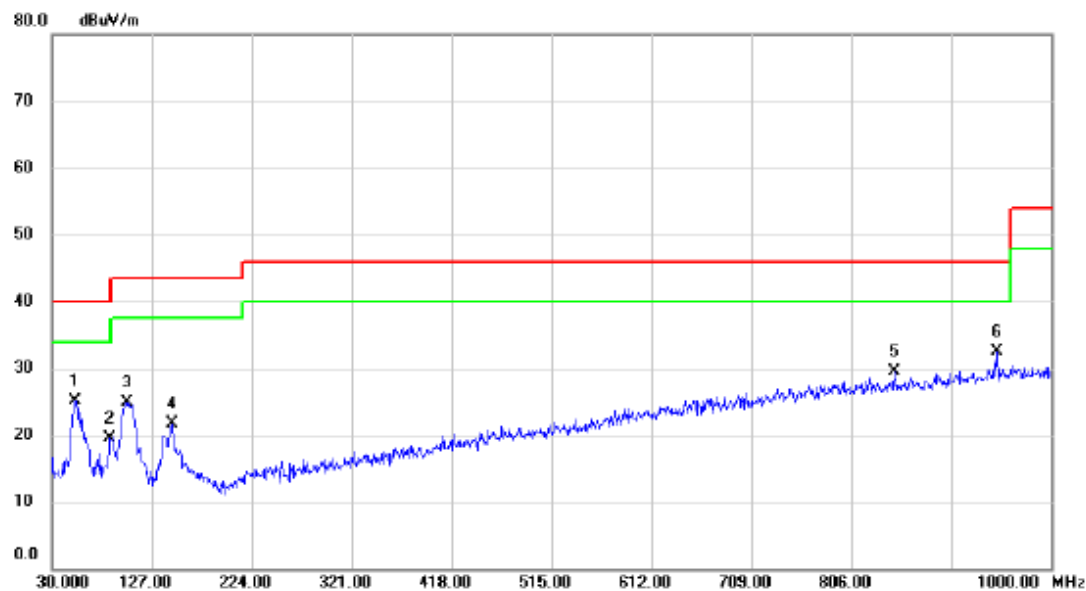


3.2.6 TEST RESULTS

Remark:

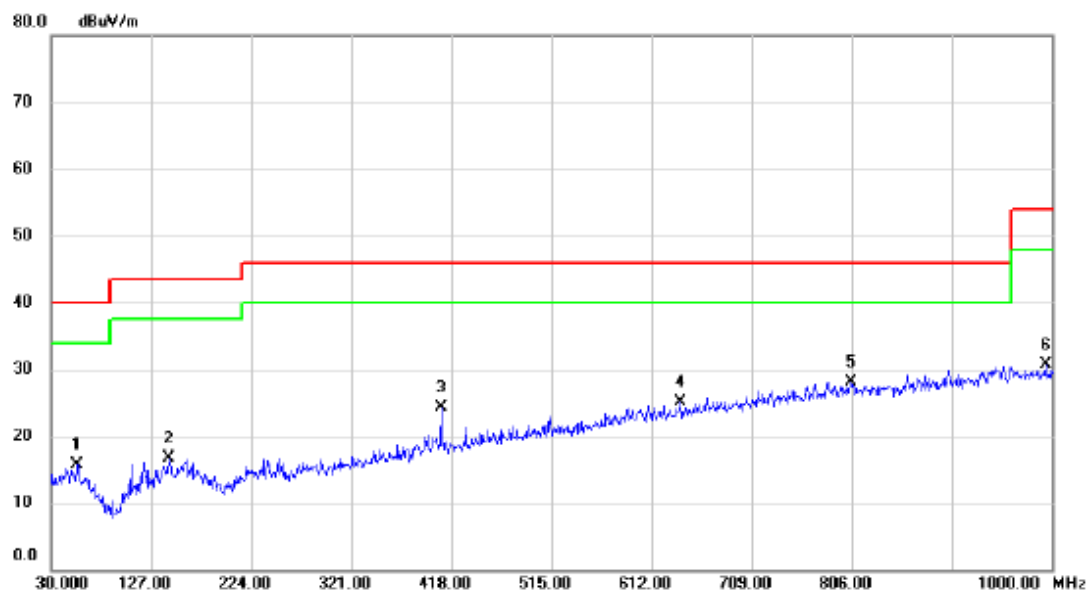
- (1) Measuring frequency range from 30 MHz to 1000 MHz
- (2) If the peak scan value lower limit more than 20 dB, then this signal data does not show in table.

Test Voltage	AC 120V/60Hz	Polarization	Vertical
Test Mode	Mode 1		



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		52.7950	42.62	-17.54	25.08	40.00	-14.92	QP	
2		86.7450	42.00	-22.53	19.47	40.00	-20.53	QP	
3		103.2350	45.83	-20.86	24.97	43.50	-18.53	QP	
4		146.4000	37.88	-16.23	21.65	43.50	-21.85	QP	
5		848.1950	33.70	-4.20	29.50	46.00	-16.50	QP	
6	*	948.1050	34.85	-2.28	32.57	46.00	-13.43	QP	

Test Voltage	AC 120V/60Hz	Polarization	Horizontal
Test Mode	Mode 1		



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		55.7050	33.35	-17.63	15.72	40.00	-24.28	QP	
2		144.9450	33.00	-16.33	16.67	43.50	-26.83	QP	
3		407.8150	35.54	-11.17	24.37	46.00	-21.63	QP	
4		639.6450	31.37	-6.34	25.03	46.00	-20.97	QP	
5	*	805.5150	32.37	-4.22	28.15	46.00	-17.85	QP	
6		993.6950	32.77	-2.01	30.76	54.00	-23.24	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 RANGE OF RADIATED MEASUREMENT (FOR UNINTENTIONAL RADIATORS)

Highest frequency generated or Upper frequency of measurement used in the device or on which the device operates or tunes (MHz)	Range (MHz)
Below 1.705	30
1.705 - 108	1000
108 - 500	2000
500 - 1000	5000
Above 1000	5 th harmonic of the highest frequency or 40 GHz, whichever is lower

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	Horn Antenna	EMCO	3115	9605-4803	May 12, 2021
2	Amplifier	Agilent	8449B	3008A02333	Feb. 28, 2022
3	MXE EMI Receiver	Agilent	N9038A	MY53220133	Feb. 28, 2022
4	Measurement Software	Farad	EZ-EMC Ver.BTL-2ANT-1	N/A	N/A
5	Multi-Device Controller	ETS-Lindgren	2090	N/A	N/A
6	Controller	MF	MF-7802	MF780208159	N/A
7	MXE EMI Receiver	Agilent	N9038A	MY53220133	Feb. 28, 2022
8	Cable	Micable	RWLP50-4.0A-SMSM-12 M-KJ	20191107 002	Mar. 31, 2022
9	Band Reject Filter	Wairwright Instruments Gmbh	WRCG 2400/2483-2375/2505-50/10SS	16	Feb. 28, 2022

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

All calibration period of equipment list is one year.

3.3.3 TEST PROCEDURE

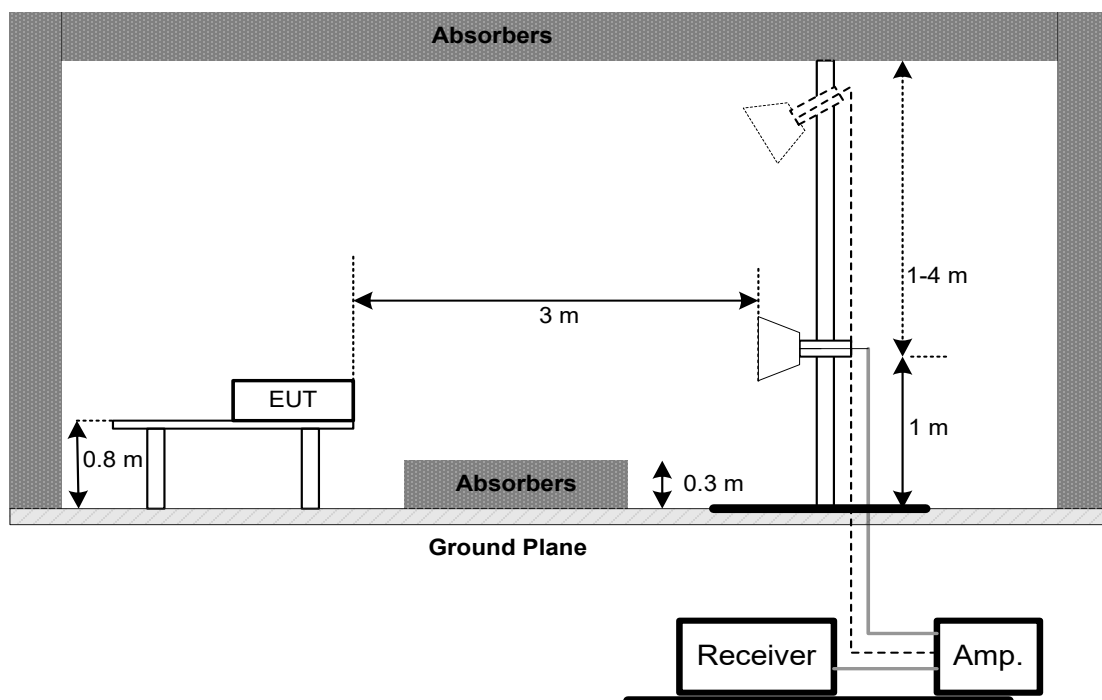
- The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 10 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- The height of the equipment or of the 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 AVG detector mode re-measured.
- 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.
- 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.
- 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

Above 1 GHz

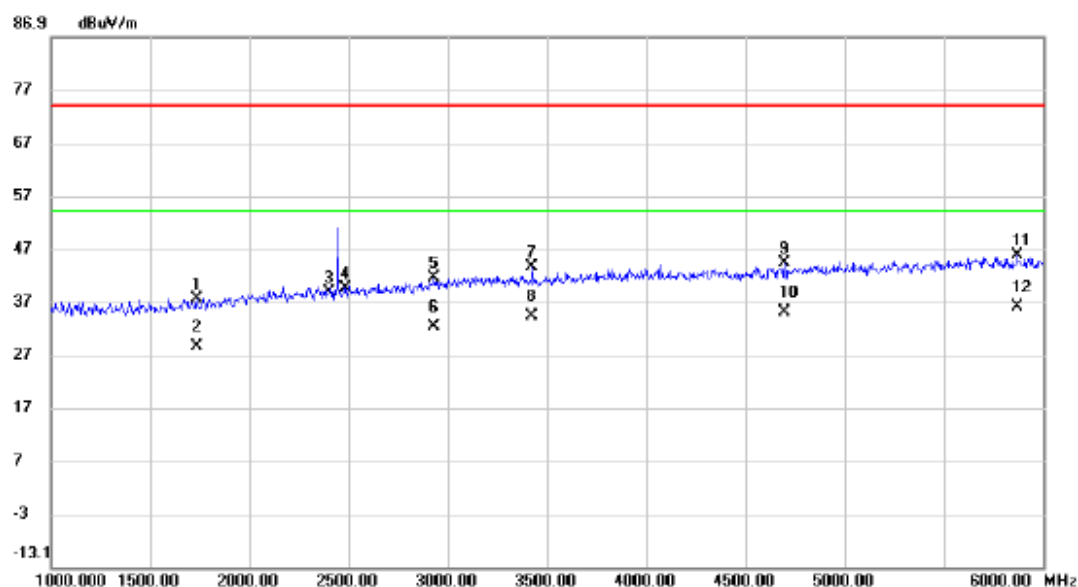


3.3.6 TEST RESULTS

Remark:

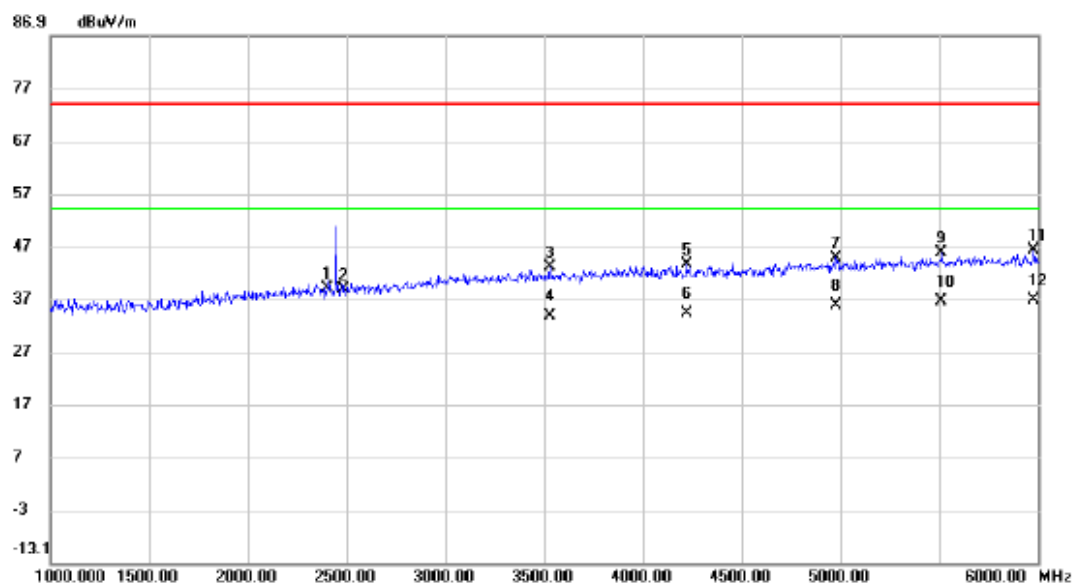
- (1) Radiated emissions measured in frequency range above 1000 MHz were made with an instrument using Peak detector mode and AV detector mode of the emission.
- (2) Data of measurement within this frequency range shown “ * ” in the table above means the reading of emissions are attenuated more than 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 1		



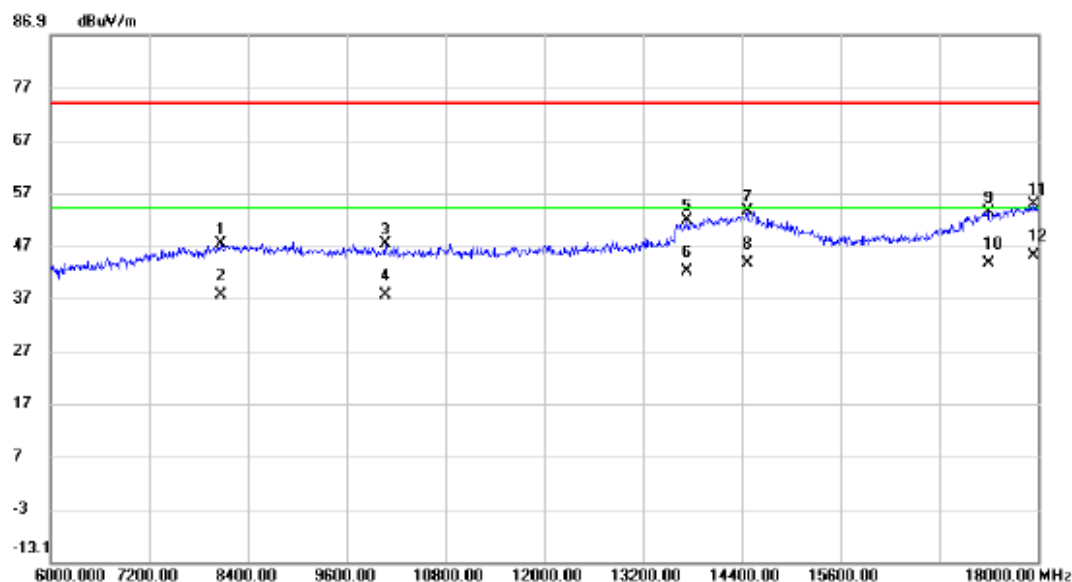
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		1737.500	39.15	-1.51	37.64	74.00	-36.36	peak	
2		1737.500	30.02	-1.51	28.51	54.00	-25.49	AVG	
3		2400.000	37.23	1.65	38.88	74.00	-35.12	peak	
4		2483.500	37.67	1.96	39.63	74.00	-34.37	peak	
5		2930.000	37.63	3.94	41.57	74.00	-32.43	peak	
6		2930.000	28.36	3.94	32.30	54.00	-21.70	AVG	
7		3425.000	37.82	5.63	43.45	74.00	-30.55	peak	
8		3425.000	28.59	5.63	34.22	54.00	-19.78	AVG	
9		4695.000	34.94	9.24	44.18	74.00	-29.82	peak	
10		4695.000	25.67	9.24	34.91	54.00	-19.09	AVG	
11		5867.500	33.83	12.00	45.83	74.00	-28.17	peak	
12	*	5867.500	24.12	12.00	36.12	54.00	-17.88	AVG	

Test Voltage	AC 120V/60Hz	Polarization	Horizontal
Test Mode	Mode 1		



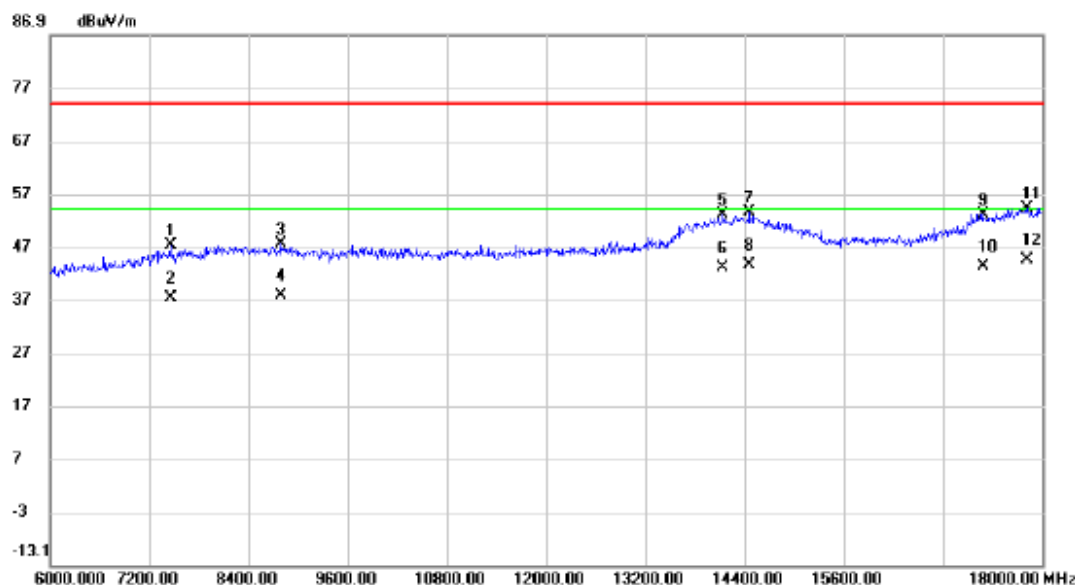
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		2400.000	37.30	1.65	38.95	74.00	-35.05	peak	
2		2483.500	36.85	1.96	38.81	74.00	-35.19	peak	
3		3532.500	37.13	6.01	43.14	74.00	-30.86	peak	
4		3532.500	27.81	6.01	33.82	54.00	-20.18	AVG	
5		4222.500	35.10	8.34	43.44	74.00	-30.56	peak	
6		4222.500	26.02	8.34	34.36	54.00	-19.64	AVG	
7		4975.000	34.88	10.02	44.90	74.00	-29.10	peak	
8		4975.000	25.70	10.02	35.72	54.00	-18.28	AVG	
9		5512.500	34.22	11.45	45.67	74.00	-28.33	peak	
10		5512.500	25.06	11.45	36.51	54.00	-17.49	AVG	
11		5977.500	34.05	12.16	46.21	74.00	-27.79	peak	
12	*	5977.500	24.50	12.16	36.66	54.00	-17.34	AVG	

Test Voltage	AC 120V/60Hz	Polarization	Vertical
Test Mode	Mode 1		



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		8076.000	33.61	13.78	47.39	74.00	-26.61	peak	
2		8076.000	23.73	13.78	37.51	54.00	-16.49	AVG	
3		10074.00	32.33	15.00	47.33	74.00	-26.67	peak	
4		10074.00	22.50	15.00	37.50	54.00	-16.50	AVG	
5		13728.00	30.34	21.37	51.71	74.00	-22.29	peak	
6		13728.00	20.61	21.37	41.98	54.00	-12.02	AVG	
7		14466.00	30.48	22.93	53.41	74.00	-20.59	peak	
8		14466.00	20.54	22.93	43.47	54.00	-10.53	AVG	
9		17394.00	29.82	23.44	53.26	74.00	-20.74	peak	
10		17394.00	20.03	23.44	43.47	54.00	-10.53	AVG	
11		17940.00	29.58	25.29	54.87	74.00	-19.13	peak	
12	*	17940.00	19.65	25.29	44.94	54.00	-9.06	AVG	

Test Voltage	AC 120V/60Hz	Polarization	Horizontal
Test Mode	Mode 1		



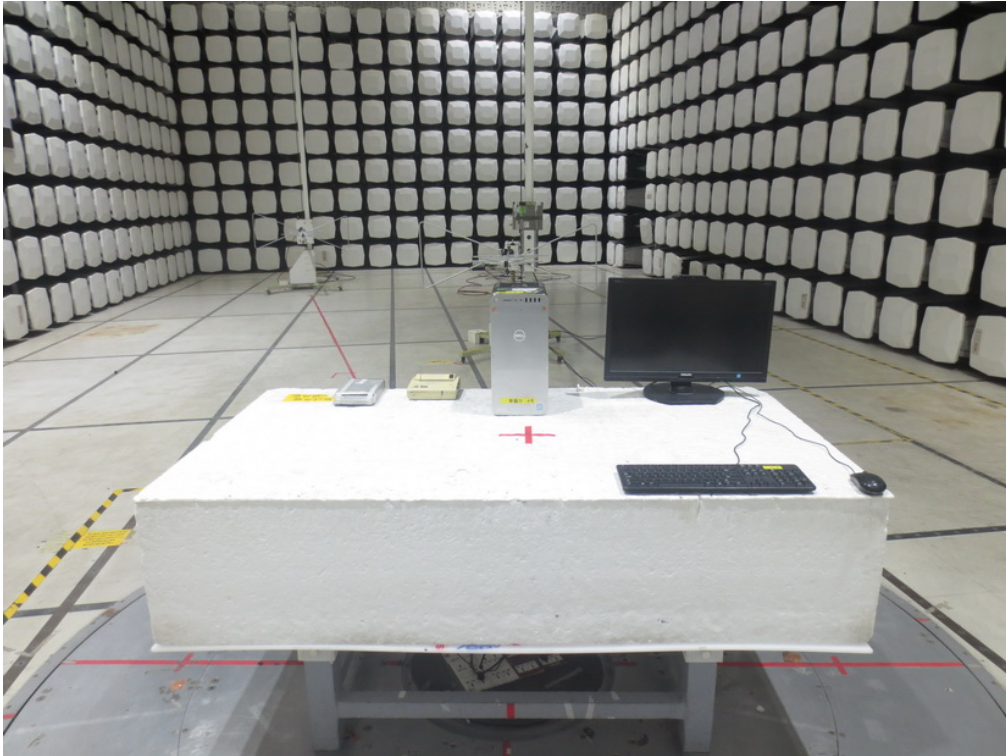
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		7458.000	34.73	12.60	47.33	74.00	-26.67	peak	
2		7458.000	24.68	12.60	37.28	54.00	-16.72	AVG	
3		8796.000	33.39	14.14	47.53	74.00	-26.47	peak	
4		8796.000	23.52	14.14	37.66	54.00	-16.34	AVG	
5		14136.00	30.24	22.67	52.91	74.00	-21.09	peak	
6		14136.00	20.36	22.67	43.03	54.00	-10.97	AVG	
7		14460.00	30.53	22.92	53.45	74.00	-20.55	peak	
8		14460.00	20.62	22.92	43.54	54.00	-10.46	AVG	
9		17280.00	29.78	23.20	52.98	74.00	-21.02	peak	
10		17280.00	20.01	23.20	43.21	54.00	-10.79	AVG	
11		17814.00	29.55	24.82	54.37	74.00	-19.63	peak	
12	*	17814.00	19.67	24.82	44.49	54.00	-9.51	AVG	

4. EUT TEST PHOTO

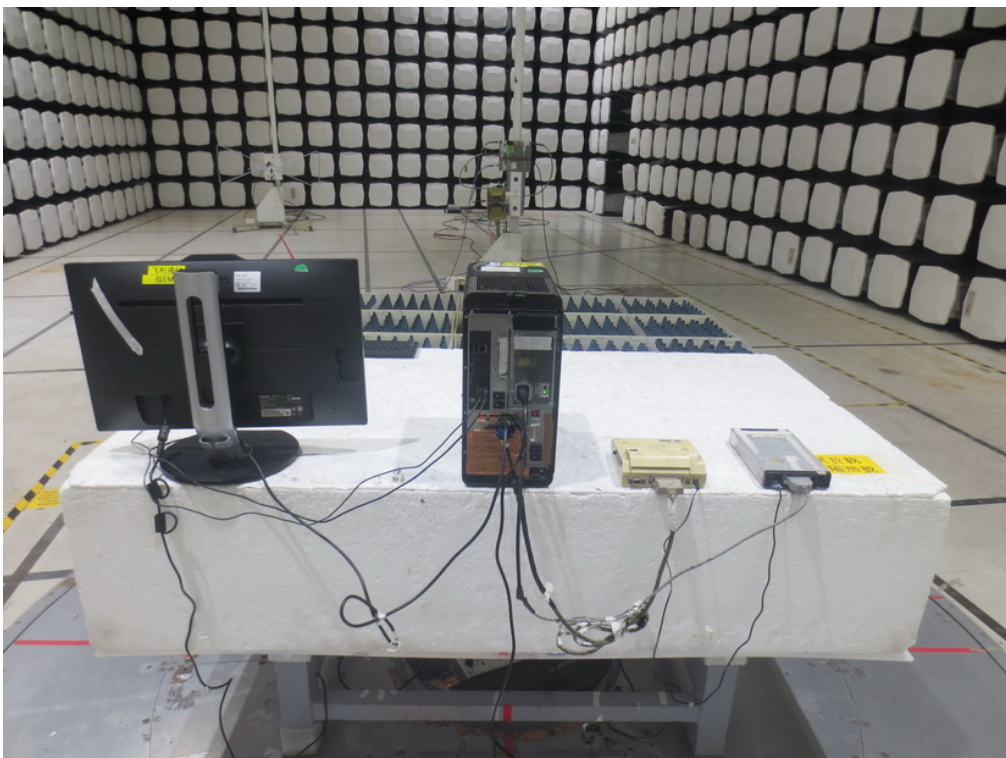
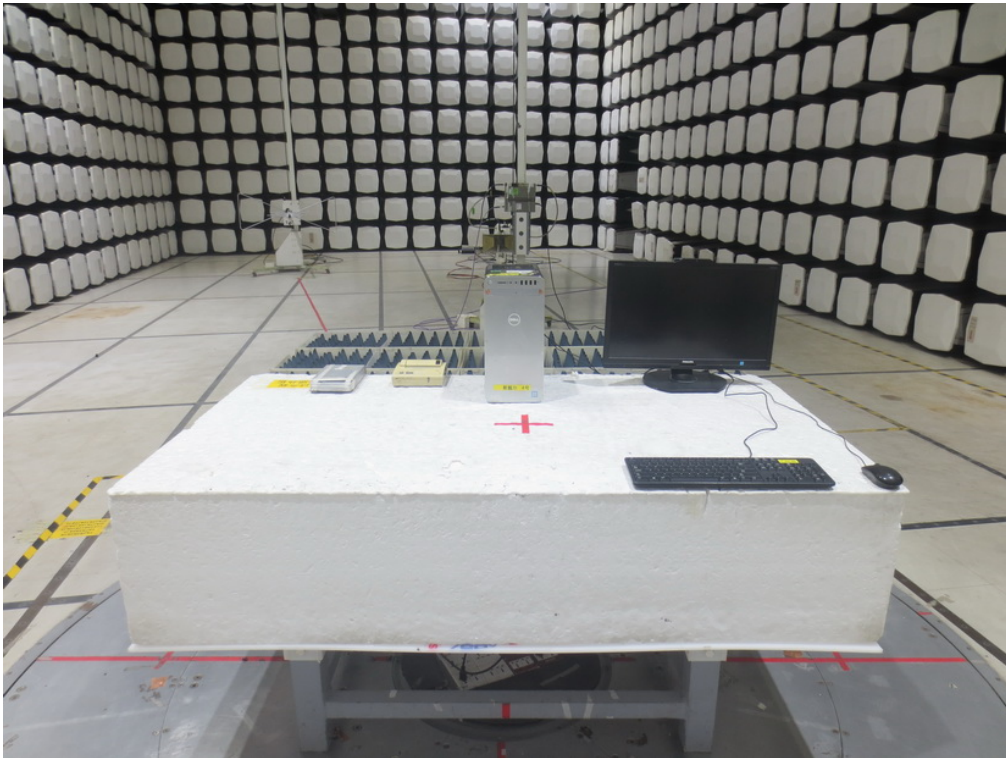
AC Power Line Conducted Emissions



Radiated Emissions 30 MHz to 1 GHz



Radiated Emissions Above 1 GHz

**End of Test Report**