TEST REPORT

Applicant:	Shenzhen Dimidou Technology Co., Ltd.
Address of Applicant:	11B Haining Plaza, Dalang Street, Longhua District, SHENZHEN PRC
Manufacturer/Factory:	Shenzhen Dimidou Technology Co., Ltd.
Address of Manufacturer/Factory:	11B Haining Plaza, Dalang Street, Longhua District, SHENZHEN PRC

Equipment Under Test (EUT)

Product Name:	PET DRYING BOX
Model No.:	MH66
Add. Model No.:	MH66T,MH66a,MH66Ta,MH66e,MH66Te
Trade Mark:	DMDPET
Applicable standards:	FCC CFR Title 47 Part 15 Subpart B
Date of sample receipt:	2022-12-27
Date of Test:	2022-12-28 to 2022-12-30
Date of report issued:	2023-01-09
Test Result :	Pass *

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

Authorized Signature:

Laboratory Manager

2 Version

Version No.	Date	Description
00	*January 09, 2023*	*Original*

Prepared by: ***Date:*** *January 09, 2023*

Project Engineer

Reviewed by: ***Date:*** *January 09, 2023*

Reviewer

3 Contents

4 Test Summary

Test Item	Test Requirement	Test Method	Class / Severity	Result
Conducted Emission	FCC Part15.107	ANSI C63.4	Class B	PASS
Radiated Emissions #	FCC Part15.109	ANSI C63.4	Class B	PASS

Remark:

1. Pass: The EUT complies with the essential requirements in the standard.

2. # Refer to FCC Part 15.33 (b)(1) conditional testing procedure :

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

Measurement Uncertainty

Test Item	Frequency Range	Measurement Uncertainty	Notes
Radiated Emission	30MHz-200MHz	3.8039dB	(1)
Radiated Emission	200MHz-1GHz	3.9679dB	(1)
Radiated Emission	1GHz-18GHz	4.29dB	(1)
Radiated Emission	18GHz-40GHz	3.30dB	(1)
AC Power Line Conducted Emission	0.15MHz ~ 30MHz	3.44dB	(1)
Note (1): The measurement uncertainty is for coverage factor of k=2 and a level of confidence of 95%.			

5 General Information

5.1 General Description of EUT

Product name:	PET DRYING BOX
Trade Mark:	DMDPET
Model No:	MH66
Add. Model No.:	MH66T,MH66a,MH66Ta,MH66e,MH66Te
Power Supply:	100-130V~,50/60Hz,1200W

Note:

Models (MH66,MH66T) and models (MH66a,MH66Ta,MH66e,MH66Te) the difference is only the appearance difference, and the circuit principle, safety structure and key parts are all the same. The difference does not affect the safety and emc performance of the product.

5.2 Test mode and Test voltage

Test mode:	
Operation mode	Keep the EUT in the operation status.
Test voltage:	
AC 120V/60Hz	

5.3 Description of Support Units

Manufacturer	Description	Model	Serial Number
N/A	N/A	N/A	N/A

5.4 Deviation from Standards

None.

5.5 Abnormalities from Standard Conditions

None.

5.6 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

● **FCC —Registration No.: 381383**

Designation Number: CN5029

Global United Technology Services Co., Ltd., Shenzhen EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in files.

● **IC —Registration No.: 9079A**

CAB identifier: CN0091

The 3m Semi-anechoic chamber of Global United Technology Services Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing.

● **NVLAP (LAB CODE:600179-0)**

Global United Technology Services Co., Ltd., is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP).

5.7 Test Location

Tests were performed at:

Global United Technology Services Co., Ltd.

Address: No. 123-128, Tower A, Jinyuan Business Building, No.2, Laodong Industrial Zone, Xixiang Road, Baoan District, Shenzhen, Guangdong, China 518102

Tel: 0755-27798480 Fax: 0755-27798960

6 Test Instruments list

Radiated Emission:						
Item	**Test Equipment**	**Manufacturer**	**Model No.**	**Inventory No.**	**Cal.Date (mm-dd-yy)**	**Cal.Due date (mm-dd-yy)**
1	3m Semi- Anechoic Chamber	ZhongYu Electron	9.2(L)*6.2(W)* 6.4(H)	GTS250	July 02, 2020	July 01, 2025
2	Control Room	ZhongYu Electron	6.2(L)*2.5(W)* 2.4(H)	GTS251	N/A	N/A
3	EMI Test Receiver	Rohde & Schwarz	ESU26	GTS203	April 22, 2022	April 21, 2023
4	BiConiLog Antenna	SCHWARZBECK MESS-ELEKTRONIK	VULB9168	GTS640	March 21, 2022	March 20, 2023
5	Double -ridged waveguide horn	SCHWARZBECK MESS-ELEKTRONIK	BBHA 9120 D	GTS208	June 12, 2022	June 11, 2023
6	Horn Antenna	ETS-LINDGREN	3160	GTS217	June 23, 2022	June 22, 2023
7	EMI Test Software	AUDIX	E3	N/A	N/A	N/A
8	Coaxial Cable	GTS	N/A	GTS213	April 22, 2022	April 21, 2023
9	Coaxial Cable	GTS	N/A	GTS211	April 22, 2022	April 21, 2023
10	Coaxial cable	GTS	N/A	GTS210	April 22, 2022	April 21, 2023
11	Coaxial Cable	GTS	N/A	GTS212	April 22, 2022	April 21, 2023
12	Amplifier(100kHz-3GHz)	HP	8347A	GTS204	April 22, 2022	April 21, 2023
13	Amplifier (18-26GHz)	Rohde & Schwarz	AFS33-18002 650-30-8P-44	GTS218	June 23, 2022	June 22, 2023
14	Band filter	Amindeon	82346	GTS219	June 23, 2022	June 22, 2023
15	Power Meter	Anritsu	ML2495A	GTS540	June 23, 2022	June 22, 2023
16	Power Sensor	Anritsu	MA2411B	GTS541	June 23, 2022	June 22, 2023
17	Wideband Radio Communication Tester	Rohde & Schwarz	CMW500	GTS575	April 22, 2022	April 21, 2023
18	Splitter	Agilent	11636B	GTS237	June 23, 2022	June 22, 2023
19	Loop Antenna	ZHINAN	ZN30900A	GTS534	Nov. 29, 2022	Nov. 28, 2023
20	Broadband Preamplifier	SCHWARZBECK	BBV9718	GTS535	April 22, 2022	April 21, 2023
21	Breitband hornantenna	SCHWARZBECK	BBHA 9170	GTS579	Oct. 16, 2022	Oct. 15, 2023
22	Amplifier	TDK	PA-02-02	GTS574	Oct. 16, 2022	Oct. 15, 2023
23	Amplifier	TDK	PA-02-03	GTS576	Oct. 16, 2022	Oct. 15, 2023
24	PSA Series Spectrum Analyzer	Rohde & Schwarz	FSP	GTS578	June 23, 2022	June 22, 2023
25	Amplifier(1GHz-26.5GHz)	HP	8449B	GTS601	April 22, 2022	April 21, 2023

Conducted Emission						
Item	**Test Equipment**	**Manufacturer**	**Model No.**	**Inventory No.**	**Cal.Date (mm-dd-yy)**	**Cal.Due date (mm-dd-yy)**
1	Shielding Room	ZhongYu Electron	7.3(L)x3.1(W)x2.9(H)	GTS252	May 14, 2022	May 13, 2025
2	EMI Test Receiver	R&S	ESCI 7	GTS552	April 24, 2022	April 23, 2023
3	Coaxial Switch	ANRITSU CORP	MP59B	GTS225	June 23, 2022	June 22, 2023
4	ENV216 2-L-V-NETZNACHB.DE	ROHDE&SCHWARZ	ENV216	GTS226	April 22, 2022	April 21, 2023
5	Coaxial Cable	GTS	N/A	GTS227	N/A	N/A
6	EMI Test Software	AUDIX	E3	N/A	N/A	N/A
7	Thermo meter	JINCHUANG	GSP-8A	GTS639	April 28, 2022	April 27, 2023
8	Absorbing clamp	Elektronik-Feinmechanik	MDS21	GTS229	April 15, 2022	April 14, 2023
9	ISN	SCHWARZBECK	NTFM 8158	GTS565	April 22, 2022	April 21, 2023
10	High voltage probe	SCHWARZBECK	TK9420	GTS537	April 22, 2022	April 21, 2023

General used equipment:						
Item	**Test Equipment**	**Manufacturer**	**Model No.**	**Inventory No.**	**Cal.Date (mm-dd-yy)**	**Cal.Due date (mm-dd-yy)**
1	Humidity/ Temperature Indicator	KTJ	TA328	GTS243	April 25, 2022	April 24, 2023
2	Barometer	KUMAO	SF132	GTS647	July 26, 2022	July 25, 2023

7 Test Results and Measurement Data

7.1 Radiated Emission

Test Requirement:	FCC Part15 B Section 15.109
Test Method:	ANSI C63.4:2014
Test Frequency Range:	30MHz to 18GHz
Test site:	Measurement Distance: 3m (Semi-Anechoic Chamber)
Receiver setup:	

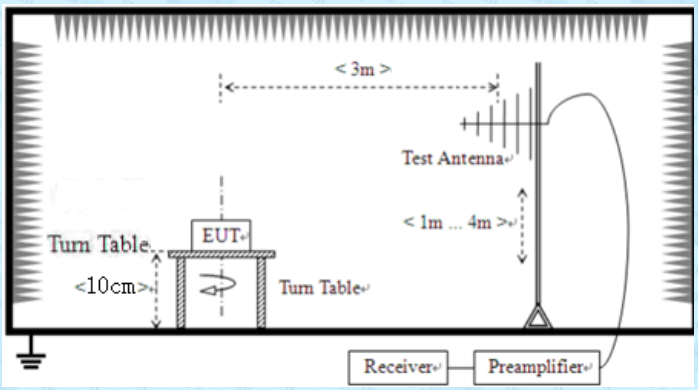
Frequency	Detector	RBW	VBW	Value
30MHz-1GHz	Quasi-peak	120kHz	300kHz	Quasi-peak
Above 1GHz	Peak	1MHz	3MHz	Peak
	Peak	1MHz	10Hz	Average

Limit:

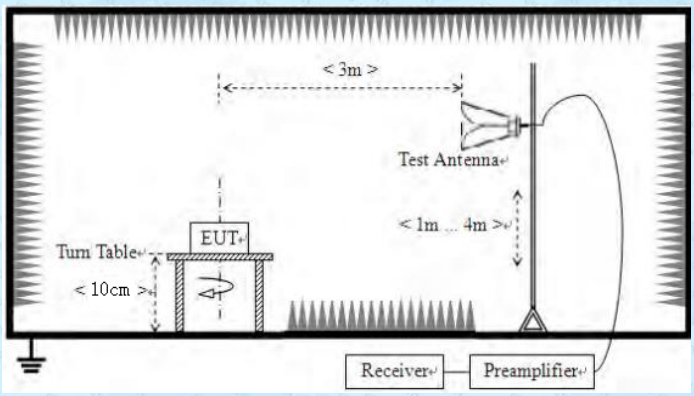
Frequency	Limit (dBμV/m @3m)	Value
30MHz-88MHz	40.00	Quasi-peak
88MHz-216MHz	43.50	Quasi-peak
216MHz-960MHz	46.00	Quasi-peak
960MHz-1GHz	54.00	Quasi-peak
1GHz-18GHz	54.00	Average
1GHz-18GHz	74.00	Peak

Test setup:

For radiated emissions from 30MHz to1GHz



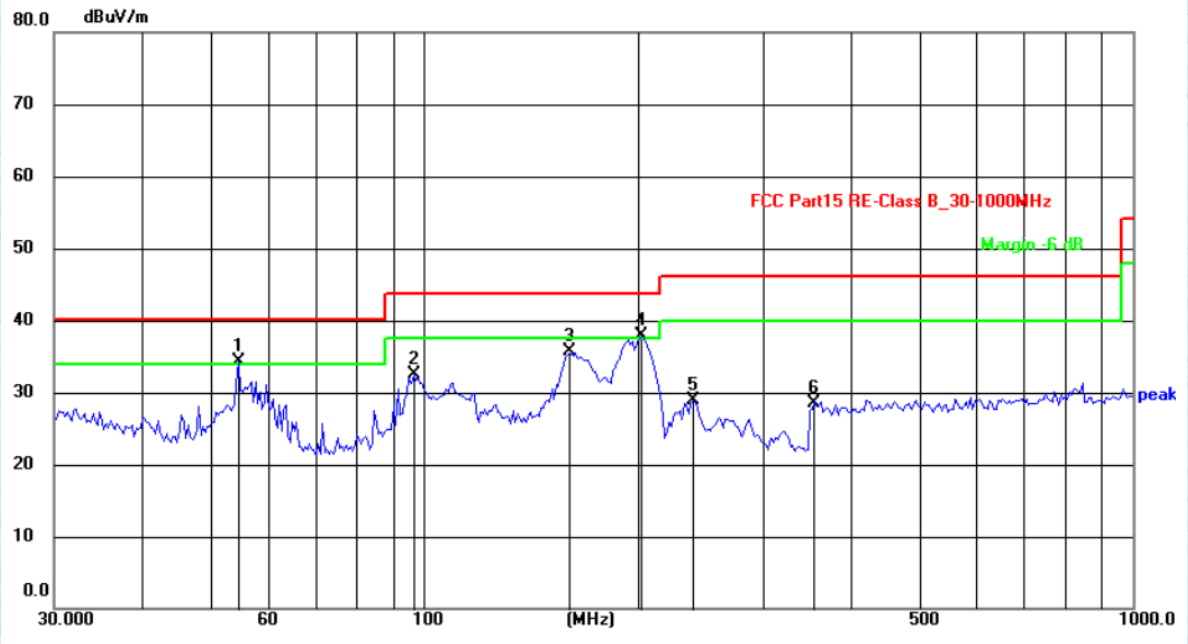
For radiated emissions above 1GHz



Test Procedure:	1. The EUT was placed on the top of a rotating table (0.8m for below 1G and 1.5m for above 1G) above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation. 2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. 3. The antenna height is varied from one meter to four 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. 4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rota table was turned from 0 degrees to 360 degrees to find the maximum reading. 5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. 6. 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 emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.					
Test environment:	Temp.:	25 °C	Humid.:	52%	Press.:	1 012mbar
Test Instruments:	Refer to section 6 for details					
Test mode:	Refer to section 5.2 for details and only show the worst case.					
Test results:	Pass					

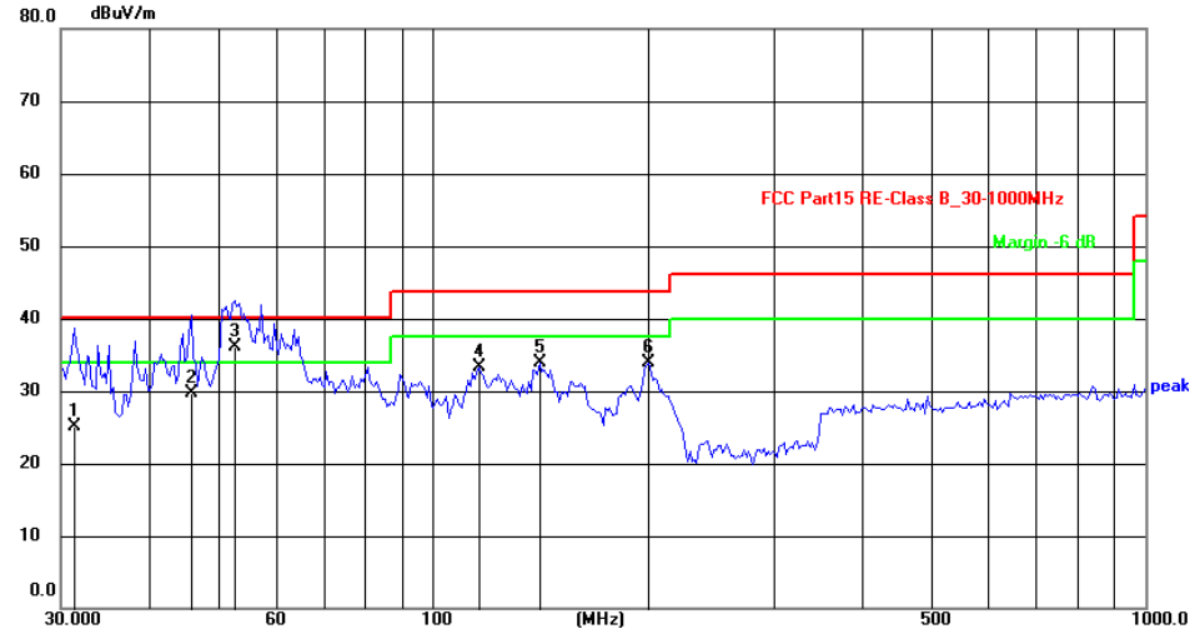
Measurement Data
Below 1GHz

Test mode:	Operation mode	Antenna Polarity:	Horizontal



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	54.5167	42.53	-8.16	34.37	40.00	-5.63	QP
2	96.3230	42.47	-10.01	32.46	43.50	-11.04	QP
3	159.7586	44.17	-8.56	35.61	43.50	-7.89	QP
4	201.4539	45.42	-7.47	37.95	43.50	-5.55	QP
5	238.4626	35.91	-6.99	28.92	46.00	-17.08	QP
6	353.4471	33.18	-4.61	28.57	46.00	-17.43	QP

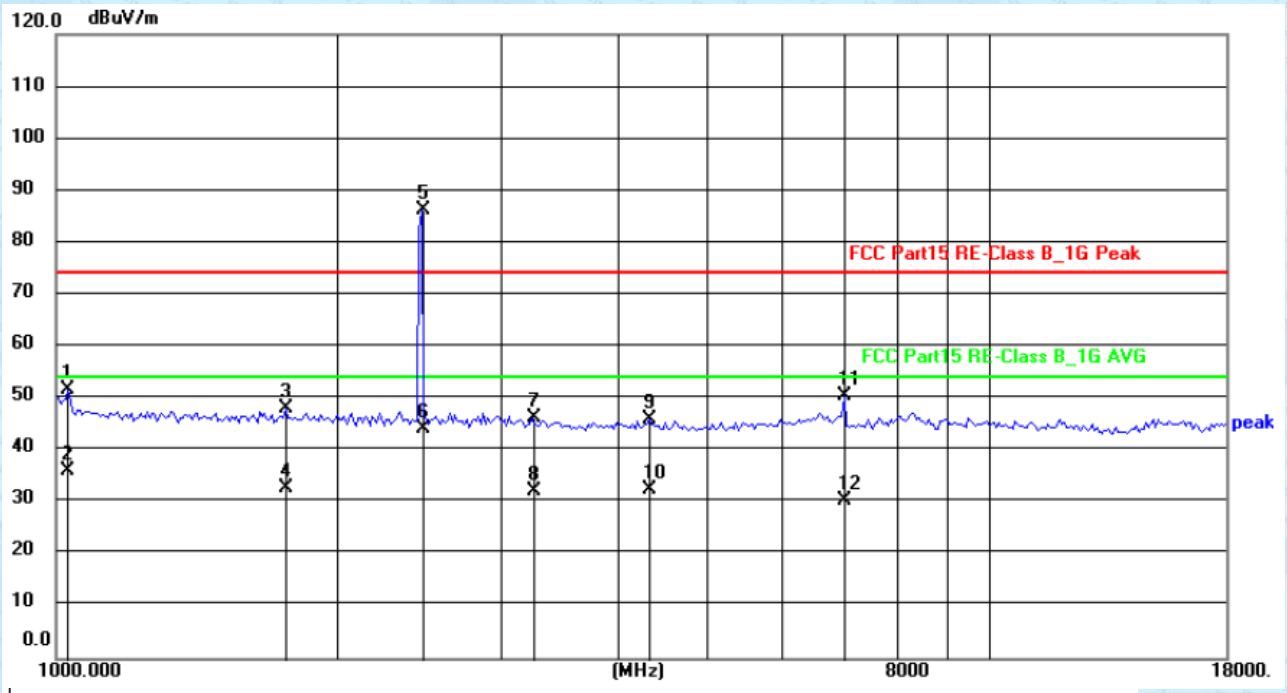
Test mode:	Operation mode	Antenna Polarity:	Vertical



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	31.2919	25.30	-0.20	25.10	40.00	-14.90	QP
2	45.7333	34.63	-4.93	29.70	40.00	-10.30	QP
3	52.6344	43.75	-7.65	36.10	40.00	-3.90	QP
4	115.6321	40.41	-7.08	33.33	43.50	-10.17	QP
5	140.7766	41.19	-7.20	33.99	43.50	-9.51	QP
6	200.0431	41.43	-7.54	33.89	43.50	-9.61	QP

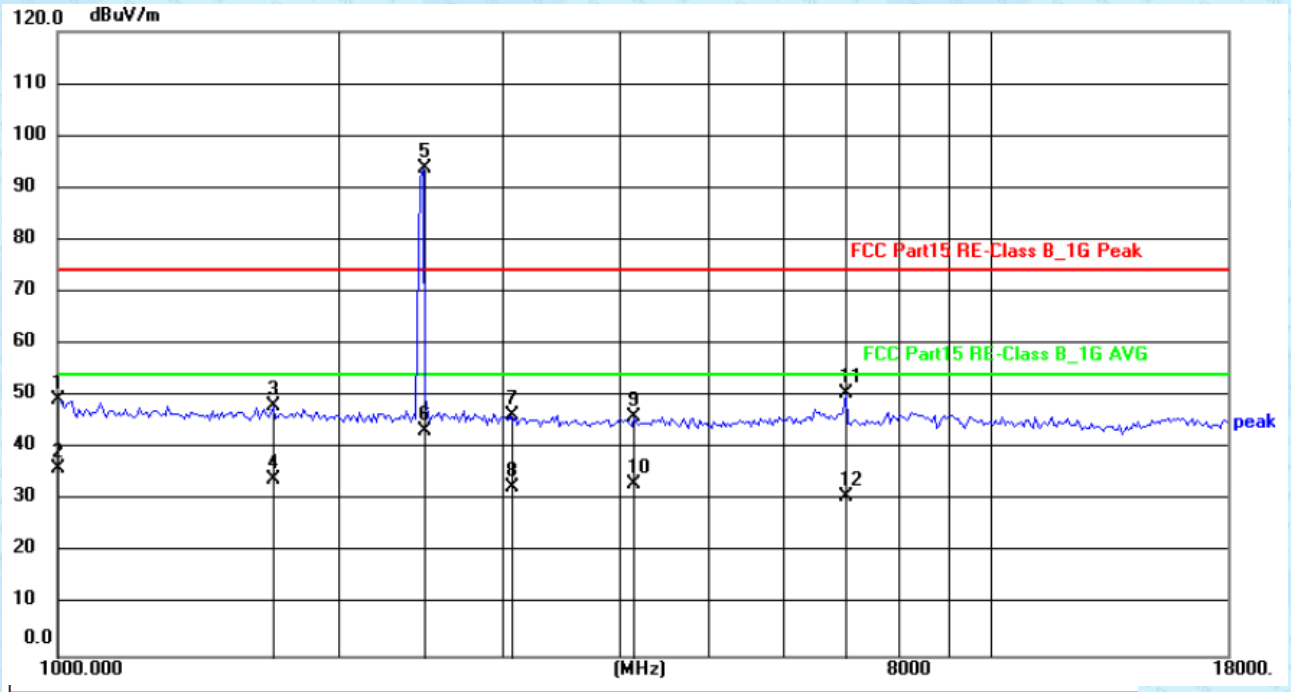
Above 1GHz

Test mode:	Operation mode	Antenna Polarity:	Horizontal



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	1029.385	49.82	1.86	51.68	74.00	-22.32	peak
2	1029.385	34.40	1.86	36.26	54.00	-17.74	AVG
3	1764.113	23.04	24.99	48.03	74.00	-25.97	peak
4	1764.113	7.75	24.99	32.74	54.00	-21.26	AVG
5	2468.482	59.67	26.45	86.12	74.00	12.12	peak
6	2468.482	17.71	26.45	44.16	54.00	-9.84	AVG
7	3240.873	18.49	27.83	46.32	74.00	-27.68	peak
8	3240.873	4.34	27.83	32.17	54.00	-21.83	AVG
9	4329.530	16.70	29.23	45.93	74.00	-28.07	peak
10	4329.530	3.27	29.23	32.50	54.00	-21.50	AVG
11	7002.185	14.72	35.80	50.52	74.00	-23.48	peak
12	7002.185	-5.34	35.80	30.46	54.00	-23.54	AVG

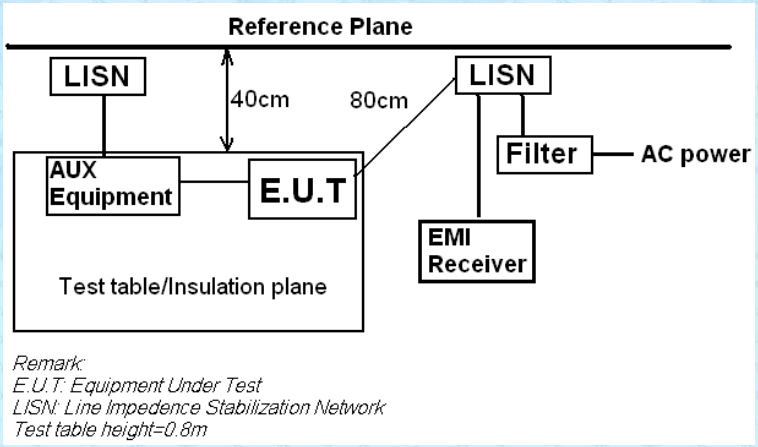
Test mode:	Operation mode	Antenna Polarity:	Vertical



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	1005.809	47.82	1.49	49.31	74.00	-24.69	peak
2	1005.809	34.58	1.49	36.07	54.00	-17.93	AVG
3	1703.856	23.34	24.81	48.15	74.00	-25.85	peak
4	1703.856	9.24	24.81	34.05	54.00	-19.95	AVG
5	2468.482	67.42	26.45	93.87	74.00	19.87	peak
6	2468.482	16.97	26.45	43.42	54.00	-10.58	AVG
7	3058.484	18.80	27.51	46.31	74.00	-27.69	peak
8	3058.484	5.02	27.51	32.53	54.00	-21.47	AVG
9	4157.495	17.12	29.06	46.18	74.00	-27.82	peak
10	4157.495	4.11	29.06	33.17	54.00	-20.83	AVG
11	7002.185	14.82	35.80	50.62	74.00	-23.38	peak
12	7002.185	-5.18	35.80	30.62	54.00	-23.38	AVG

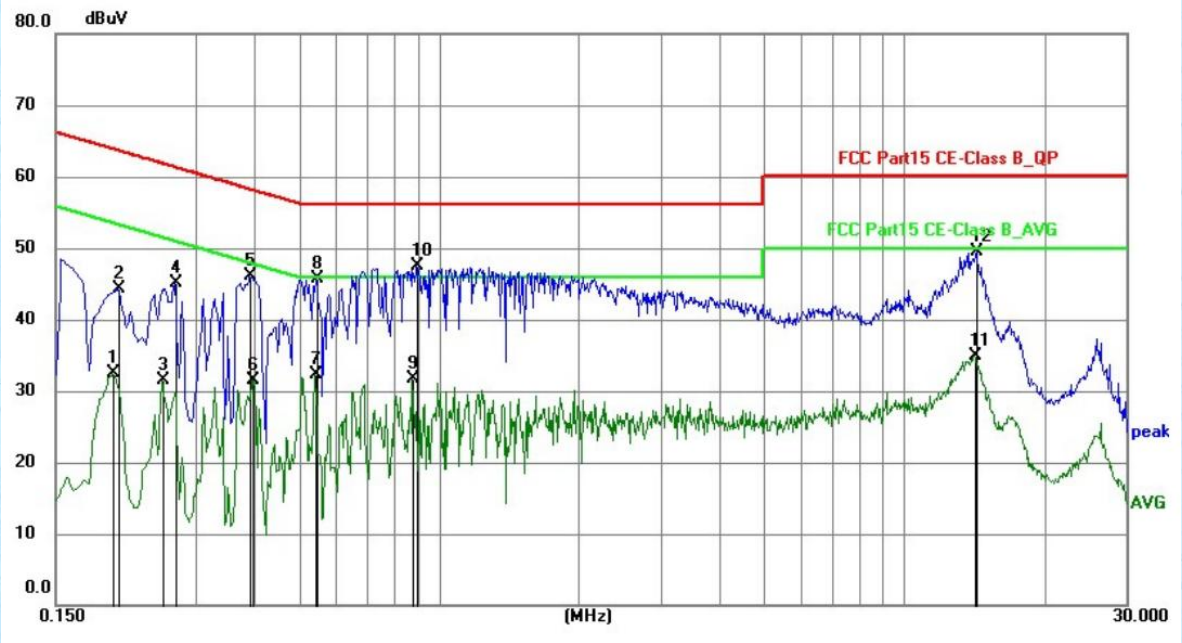
Note:
The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:
Final Test Level =Receiver Reading + Antenna Factor + Cable Factor – Preamplifier Factor
For Radiated Emission above 18GHz, there was not any unwanted emission detected, so no need to report.

7.2 Conducted Emissions

Test Requirement:	FCC Part15 B Section 15.107
Test Method:	ANSI C63.4:2014
Test Frequency Range:	150kHz to 30MHz
Class / Severity:	Class B
Receiver setup:	RBW=9kHz, VBW=30kHz
Limit:	Frequency range (MHz) / Limit (dBµV): Quasi-peak / Average 0.15-0.5: 66 to 56* / 56 to 46* 0.5-5: 56 / 46 5-30: 60 / 50 * Decreases with the logarithm of the frequency.
Test setup:	 *Remark:* *E.U.T: Equipment Under Test* *LISN: Line Impedence Stabilization Network* *Test table height=0.8m*
Test procedure	1. The E.U.T and simulators are connected to the main power through a line impedance stabilization network(L.I.S.N.). The provide a 50ohm/50uH coupling impedance for the measuring equipment. 2. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refers to the block diagram of the test setup and photographs). 3. Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.4: 2014 on conducted measurement.
Test environment:	Temp.: 25 °C / Humid.: 52% / Press.: 1 012mbar
Test Instruments:	Refer to section 6 for details
Test mode:	Refer to section 5.2 for details and only show the worst case.
Test results:	Pass

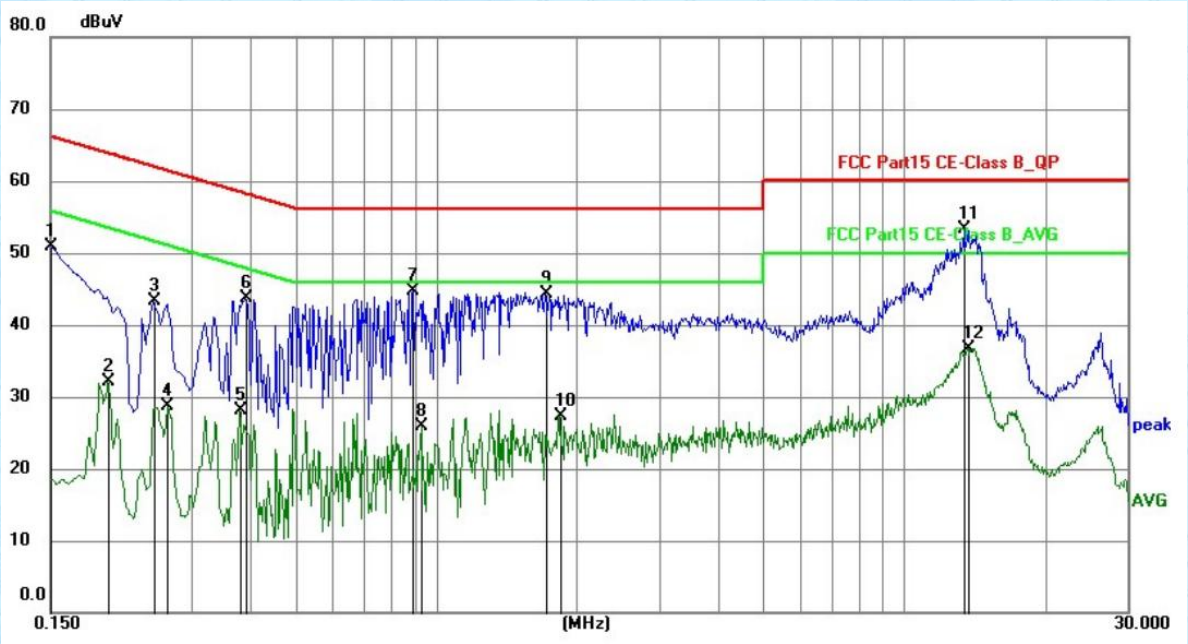
Measurement Data

Test mode:	Operation mode	Phase Polarity:	Line



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.1995	22.67	9.75	32.42	53.63	-21.21	AVG	P
2	0.2040	34.63	9.75	44.38	63.45	-19.07	QP	P
3	0.2535	21.85	9.74	31.59	51.64	-20.05	AVG	P
4	0.2714	35.41	9.74	45.15	61.07	-15.92	QP	P
5	0.3930	36.40	9.72	46.12	58.00	-11.88	QP	P
6	0.3975	21.82	9.72	31.54	47.91	-16.37	AVG	P
7	0.5415	22.65	9.71	32.36	46.00	-13.64	AVG	P
8	0.5460	35.98	9.71	45.69	56.00	-10.31	QP	P
9	0.8790	22.06	9.66	31.72	46.00	-14.28	AVG	P
10	0.8970	37.88	9.66	47.54	56.00	-8.46	QP	P
11	14.1585	24.97	9.88	34.85	50.00	-15.15	AVG	P
12	14.2980	39.53	9.89	49.42	60.00	-10.58	QP	P

Test mode:	Operation mode	Phase Polarity:	Neutral



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.1500	41.02	9.81	50.83	66.00	-15.17	QP	P
2	0.1995	22.30	9.75	32.05	53.63	-21.58	AVG	P
3	0.2490	33.53	9.74	43.27	61.79	-18.52	QP	P
4	0.2670	19.05	9.74	28.79	51.21	-22.42	AVG	P
5	0.3795	18.35	9.73	28.08	48.29	-20.21	AVG	P
6	0.3930	33.97	9.72	43.69	58.00	-14.31	QP	P
7	0.8925	34.95	9.66	44.61	56.00	-11.39	QP	P
8	0.9285	16.24	9.65	25.89	46.00	-20.11	AVG	P
9	1.7115	34.68	9.69	44.37	56.00	-11.63	QP	P
10	1.8465	17.60	9.71	27.31	46.00	-18.69	AVG	P
11	13.4790	43.49	9.87	53.36	60.00	-6.64	QP	P
12	13.7400	26.91	9.88	36.79	50.00	-13.21	AVG	P

Notes:
1. The following Quasi-Peak and Average measurements were performed on the EUT:
2. Final Test Level =Receiver Reading + LISN Factor + Cable Loss.

8 Test Setup Photo

Reference to the **appendix I** for details.

9 EUT Constructional Details

Reference to the appendix II & III for details

------End------