FCC Part 15C Test Report
FCC ID:2ATOX-F700PLUSRX

Applicant:	**Shenzhen Wellturn Technology Co., Ltd**
Address:	Room 606, Building F, Lvkai Zhihui Park, Liuxian 2nd Road, 71 District, Xin'an Street, Bao'an District, Shenzhen City, China
Manufacturer:	**Shenzhen Wellturn Technology Co., Ltd**
Address:	Room 606, Building F, Lvkai Zhihui Park, Liuxian 2nd Road, 71 District, Xin'an Street, Bao'an District, Shenzhen City, China
EUT:	GPS Wireless Dog Fence
Trade Mark:	N/A
Model Number:	F700PLUS, F700, F710, F710PLUS, F720, F720PLUS, F720PRO
Date of Receipt:	Jun. 26, 2025
Test Date:	Jun. 26, 2025 to Aug. 08, 2025
Date of Report:	Aug. 08, 2025
Prepared By:	Shenzhen DL Testing Technology Co., Ltd.
Address:	101-201, Comprehensive Building, TEL Factory Area No1 Baolong 5th Rd, Baolong Community, Baolong St, Longgang District, Shenzhen City, China.
Applicable Standards:	FCC Part 15 B ANSI C63.4:2014
Test Result:	Pass
Report Number:	DLE-250726023R

Prepared by(Engineer):	Ken Tan
Reviewer(Supervisor):	Jack Bu
Approved(Manager):	Jade Yang

This test report is based on a single evaluation of one sample of above mentioned products. It is not permitted to be duplicated in extracts without written approval of Shenzhen DL Testing Technology Co., Ltd.

TABLE OF CONTENT

1.VERSION

Report No.	Version	Description	Approved
DLE-250726023R	Rev.01	Initial issue of report	Aug. 08, 2025

2.GENERAL INFORMATION

2.1 Description of Device (EUT)

EUT		GPS Wireless Dog Fence
Trademark	:	N/A
Model No.		F700PLUS
Serial Model	:	F700, F710, F710PLUS, F720, F720PLUS, F720PRO
Ratings:	:	Input: 5V⎓ 1A Battery: 3.7V⎓, 800mAh
Model Difference	:	Only the model name is different.

2.2 Tested System Details

None.

2.3 Test Facility

Shenzhen DL Testing Technology Co., Ltd.
Add. : 101-201, Comprehensive Building, TEL Factory Area No1 Baolong 5th Rd, Baolong Community, Baolong St, Longgang District, Shenzhen City, China.

FCC Test Firm Registration Number: 854456
Designation Number: CN1307
IC Registered No.: 27485
CAB ID.: CN0118

2.4 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the Product as specified in CISPR 16-4-2. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

Test item	Value (dB)
Conducted Emission (150K-30MHZ)	3.20
Radiated disturbance(30MHz-1000MHz)	4.80
3m chamber Radiated spurious emission(1GHz-6GHz)	4.9
3m chamber Radiated spurious emission(6GHz-40GHz)	5.0

2.5 Test Instrument Used

Conducted emissions Test

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Firmware Version	Last calibration	Calibrated until
1	LISN	R&S	ENV216	101471	N/A	Sep. 30, 2024	Sep. 29, 2025
2	LISN	CYBERTEK	EM5040A	E1850400149	N/A	Sep. 30, 2024	Sep. 29, 2025
3	Test Cable	N/A	C-01	N/A	N/A	Sep. 30, 2024	Sep. 29, 2025
4	Test Cable	N/A	C-02	N/A	N/A	Sep. 30, 2024	Sep. 29, 2025
5	Test Cable	N/A	C-03	N/A	N/A	Sep. 30, 2024	Sep. 29, 2025
6	EMI Test Receiver	R&S	ESCI3	101393	4.42 SP3	Sep. 29, 2024	Sep. 28, 2025
7	Triple-Loop Antenna	N/A	RF300	9194	N/A	Sep. 29, 2024	Sep. 28, 2025
8	Absorbing Clamp	DZ	ZN23201	15034	N/A	Oct. 10, 2024	Oct. 09, 2025
9	EMC Software	Frad	EZ-EMC	Ver.EMC-CON 3A1.1	N/A	\	\

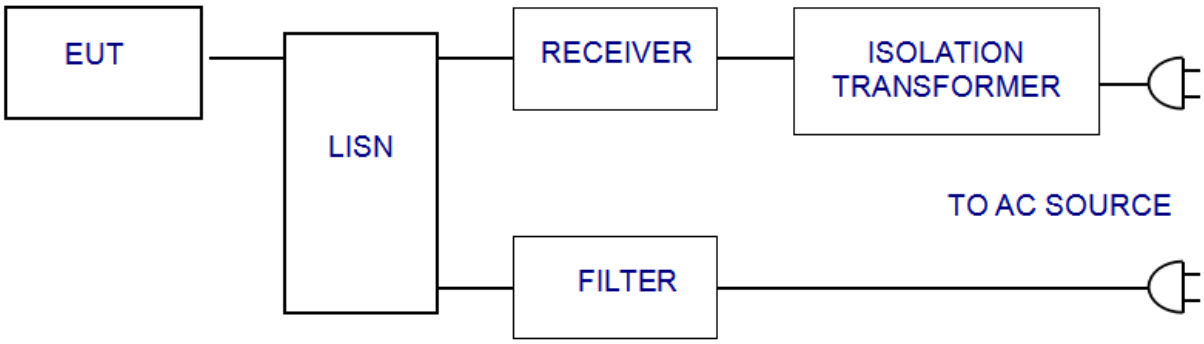
Radiated emissions Test (966 chamber)

Item	Equipment	Manufacturer	Type No.	Serial No.	Firmware Version	Last calibration	Calibrated until
1	Spectrum Analyzer (9kHz-26.5GHz)	KEYSIGHT	N9020A	MY55370835	A.17.05	Sep. 29, 2024	Sep. 28, 2025
2	Spectrum Analyzer (10kHz-39.9GHz)	R&S	FSV40-N	100363	1.71 SP2	Sep. 30, 2024	Sep. 29, 2025
3	EMI Test Receiver (9kHz-7GHz)	R&S	ESCI7	100969	4.32	Sep. 29, 2024	Sep. 28, 2025
4	Bilog Antenna (30MHz-1500MHz)	Schwarzbeck	VULB9168	00877	N/A	Sep. 30, 2024	Sep. 29, 2025
5	Horn Antenna (1GHz-18GHz)	Agilent	AH-118	071145	N/A	Sep. 30, 2024	Sep. 29, 2025
6	Horn Antenna (15GHz-40GHz)	A.H.System	SAS-574	588	N/A	Sep. 30, 2024	Sep. 29, 2025
7	Loop Antenna	TESEQ	HLA6121	58357	N/A	Oct. 11, 2024	Oct. 10, 2025
8	Amplifier (30-1000MHz)	EM Electronics	EM330 Amplifier	60747	N/A	Sep. 29, 2024	Sep. 28, 2025
9	Amplifier (1GHz-26.5GHz)	HuiPu	8449B	3008A00315	N/A	Sep. 29, 2024	Sep. 28, 2025
10	Amplifier (500MHz-40GHz)	QuanJuDa	DLE-161	097	N/A	Sep. 30, 2024	Sep. 29, 2025
11	Test Cable	N/A	R-01	N/A	N/A	Sep. 30, 2024	Sep. 29, 2025
12	Test Cable	N/A	R-02	N/A	N/A	Sep. 30, 2024	Sep. 29, 2025
13	Test Cable	N/A	R-03	N/A	N/A	Sep. 30, 2024	Sep. 29, 2025

14	D.C. Power Supply	LongWei	TPR-6405D	N/A	N/A	Sep. 30, 2024	Sep. 29, 2025
15	EMC Software	Frad	EZ-EMC	Ver.EMC-CON 3A1.1	N/A	\	\
16	Turntable	MF	MF-7802BS	N/A	N/A	\	\
17	Antenna tower	MF	MF-7802BS	N/A	N/A	\	\

3.CONDUCTED EMISSION AT THE MAINS TERMINALS TEST

3.1 Block Diagram Of Test Setup



3.2 Test Standard

FCC PART 15 B

3.3 Power Line Conducted Emission Limit

Frequency MHz	Limits dB(μV)	
	Quasi-peak Level	Average Level
0.15 ~ 0.50	66 ~ 56*	56 ~ 46*
0.50 ~ 5.00	56	46
5.00 ~ 30.00	60	50

Notes: 1. *Decreasing linearly with logarithm of frequency.
2. The lower limit shall apply at the transition frequencies.

3.4 EUT Configuration on Test

The following equipments are installed on conducted emission test to meet FCC PART 15 B requirement and operating in a manner which tends to maximize its emission characteristics in a normal application.

3.5 Operating Condition of EUT

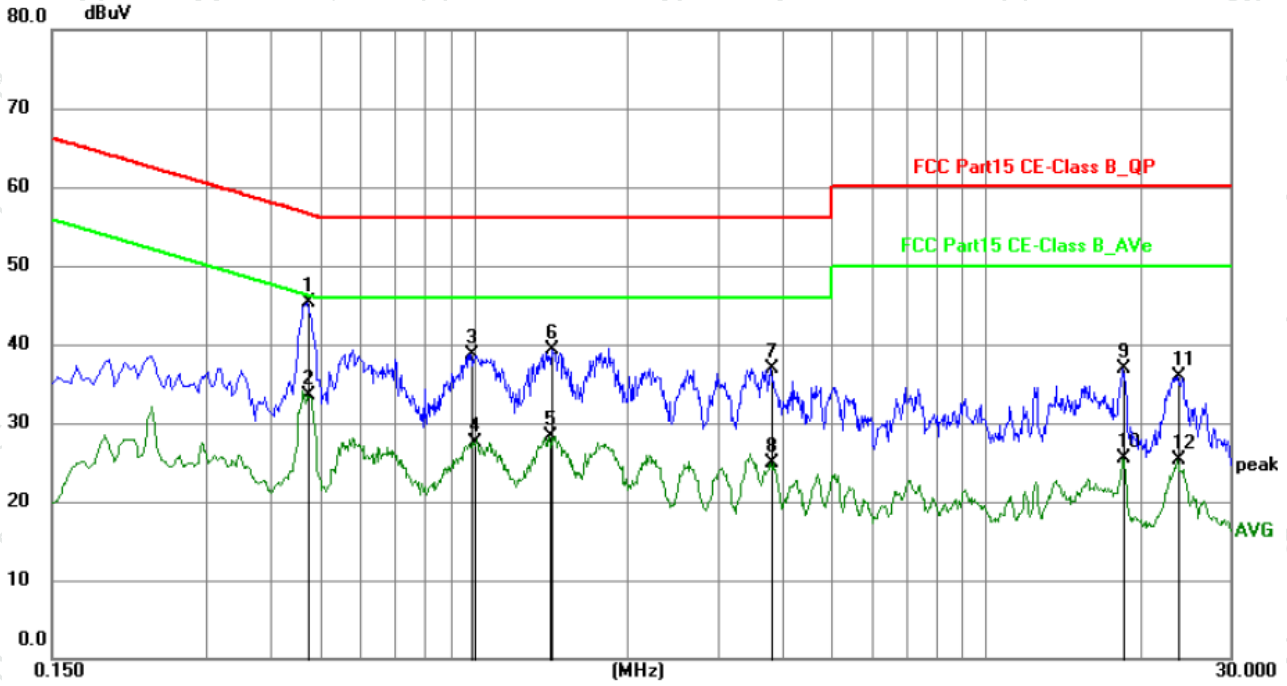
3.5.1 Setup the EUT and simulators as shown in Section 3.1.
3.5.2 Turn on the power of all equipments.
3.5.3 Let the EUT work in test modes and test it.

3.6 Test Procedure

The EUT is put on the ground and connected to the AC mains through a Artificial Mains Network (AMN). This provided a 50ohm coupling impedance for the tested equipments. Both sides of AC line are checked to find out the maximum conducted emission levels according to the **FCC PART 15 B** regulations during conducted emission test.
The bandwidth of the test receiver (R&S Test Receiver ESCI) is set at 10KHz.
The frequency range from 150 KHz to 30 MHz is investigated.

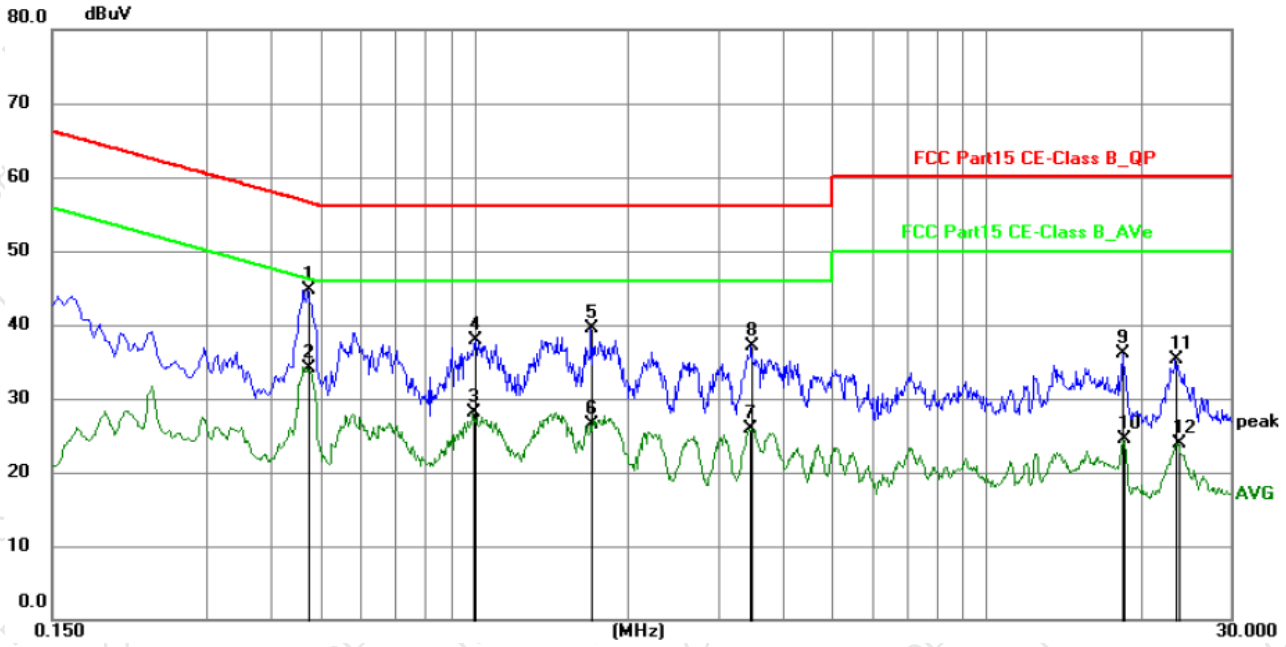
3.7 Test Result

Temperature:	26 ℃	Relative Humidity:	54%
Pressure:	1010hPa	Phase :	L
Test Voltage :	AC 120V/60Hz	Test Mode:	Charging



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.4739	24.99	20.31	45.30	56.45	-11.15	QP	P
2	0.4739	13.18	20.31	33.49	46.45	-12.96	AVG	P
3	0.9868	18.48	20.30	38.78	56.00	-17.22	QP	P
4	1.0003	7.13	20.30	27.43	46.00	-18.57	AVG	P
5	1.4100	7.92	20.31	28.23	46.00	-17.77	AVG	P
6	1.4189	18.99	20.31	39.30	56.00	-16.70	QP	P
7	3.8039	16.61	20.34	36.95	56.00	-19.05	QP	P
8	3.8039	4.58	20.34	24.92	46.00	-21.08	AVG	P
9	18.5775	16.45	20.50	36.95	60.00	-23.05	QP	P
10	18.5775	4.98	20.50	25.48	50.00	-24.52	AVG	P
11	23.6445	15.38	20.60	35.98	60.00	-24.02	QP	P
12	23.6445	4.76	20.60	25.36	50.00	-24.64	AVG	P

Temperature：	26 ℃	Relative Humidity：	54%
Pressure：	1010hPa	Phase :	N
Test Voltage ：	AC 120V/60Hz	Test Mode：	Charging

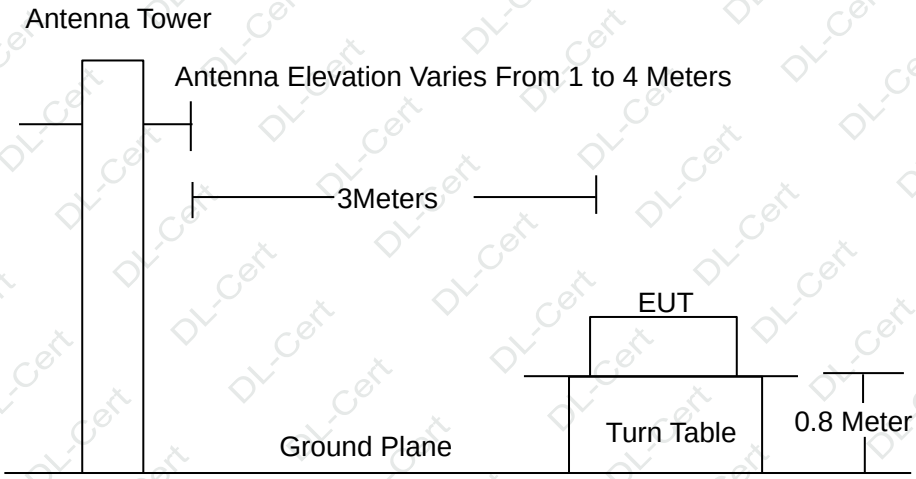


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.4739	24.46	20.31	44.77	56.45	-11.68	QP	P
2	0.4739	13.79	20.31	34.10	46.45	-12.35	AVG	P
3	0.9959	7.83	20.30	28.13	46.00	-17.87	AVG	P
4	1.0048	17.64	20.30	37.94	56.00	-18.06	QP	P
5	1.6978	19.21	20.30	39.51	56.00	-16.49	QP	P
6	1.6978	6.27	20.30	26.57	46.00	-19.43	AVG	P
7	3.4529	5.62	20.33	25.95	46.00	-20.05	AVG	P
8	3.4889	16.70	20.33	37.03	56.00	-18.97	QP	P
9	18.5234	15.65	20.52	36.17	60.00	-23.83	QP	P
10	18.5414	4.02	20.52	24.54	50.00	-25.46	AVG	P
11	23.4510	14.75	20.62	35.37	60.00	-24.63	QP	P
12	23.7029	3.35	20.63	23.98	50.00	-26.02	AVG	P

Notes:
1.An initial pre-scan was performed on the line and neutral lines with peak detector.
2.Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission.
3.Mesurement Level = Reading level + Correct Factor
4.Only the worst test voltages were recorded is 120VAC.

4.RADIATION EMISSION TEST

4.1 Block Diagram of Test Setup



4.2 Test Standard

FCC PART 15 B

4.3 Radiation Limit

FREQUENCY (MHz)	DISTANCE (Meters)	FIELD STRENGTHS LIMITS (dBμV/m)
30 ~ 88	3	40.0
88 ~ 216	3	43.5
216 ~ 960	3	46.0
960 ~ 1000	3	54.0

FREQUENCY (MHz)	Limit (dBuV/m) (at 3M)	
	PEAK	AVERAGE
Above 1000	74	54

4.4 EUT Configuration on Test

The FCC PART 15 B regulations test method must be used to find the maximum emission during radiated emission test. The configuration of EUT is the same as used in conducted emission test.Please refer to Section 2.2.

4.5 Operating Condition of EUT

Same as conducted emission test, which is listed in Section 2.2 except the test set up replaced as Section 4.1.

4.6 Test Procedure

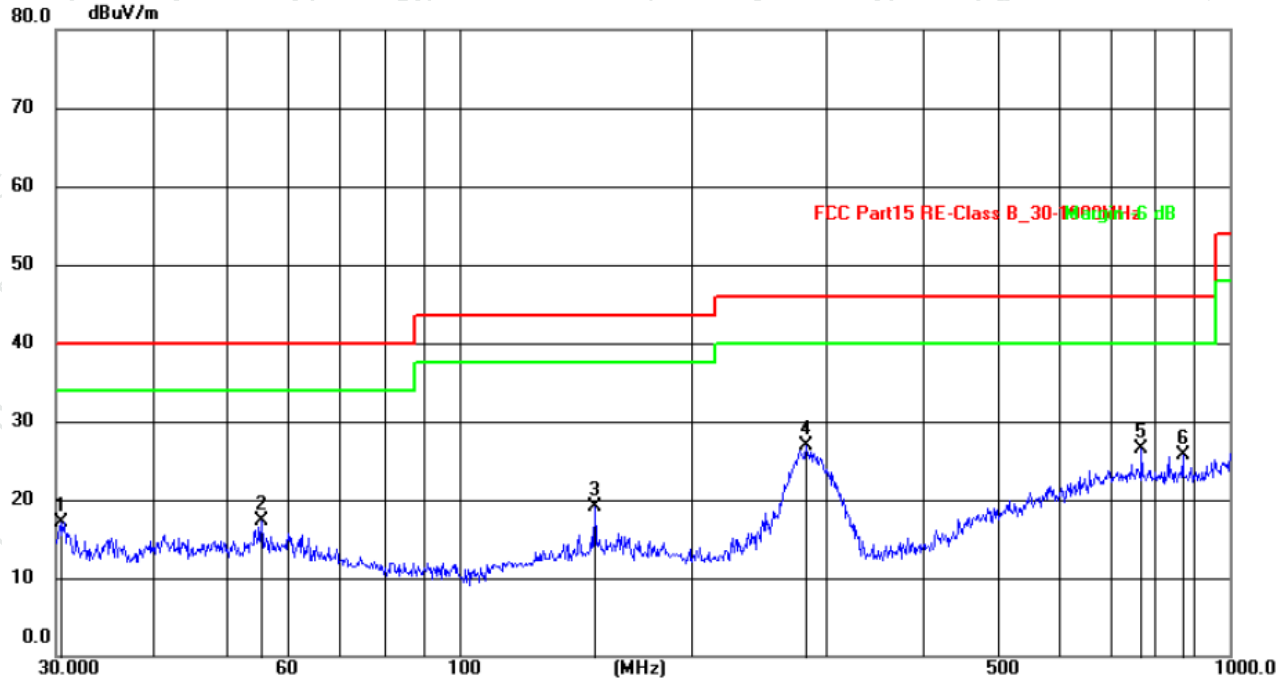
The EUT and its simulators are placed on a turned table that is 0.8 meter above the ground. The turned table can rotate 360 degrees to determine the position of the maximum emission level. The EUT is set 3 meters away from the receiving antenna that is mounted on the antenna tower. The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level. Broadband antenna (calibrated biconical and log periodical antenna) is used as receiving antenna. Both horizontal and vertical polarization of the antenna is set on test. In order to find the maximum emission levels, the interface cable must be

manipulated according to FCC PART 15 B on radiated emission test.
The bandwidth setting on the field strength meter (R&S Test Receiver ESCI) is set at 120KHz below 1GHz, set at 1MHz above 1GHz.The frequency range from 30MHz to 1000MHz is checked.The highest frequency of the internal sources of the EUT was below 108MHz, so the measurement was only made up to 1GHz.

4.7 Test Result

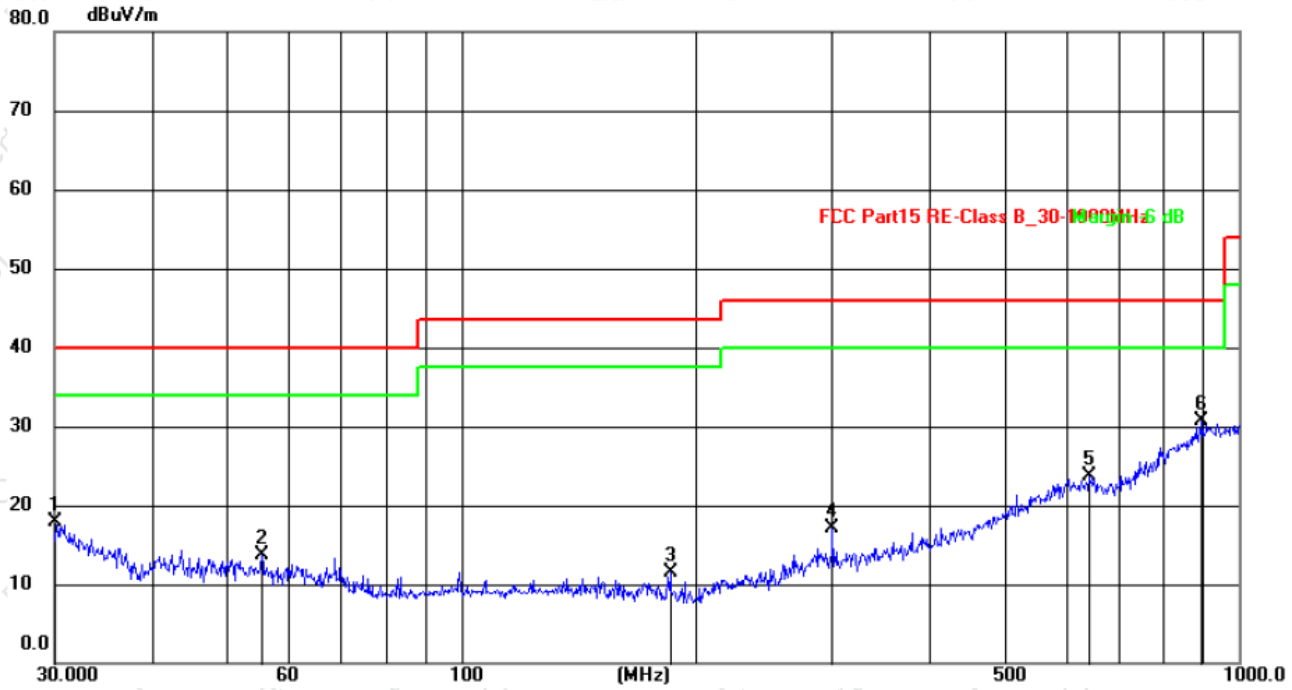
Between 30MHz – 1GHz:

Radiation Emission Test Data			
Temperature:	26℃	Relative Humidity:	60%
Pressure:	1009hPa	Phase :	Horizontal
Test Voltage :	DC 3.7V	Test Mode:	Working



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	30.5304	31.26	-14.19	17.07	40.00	-22.93	QP
2	55.4147	31.26	-14.04	17.22	40.00	-22.78	QP
3	150.0107	35.42	-16.35	19.07	43.50	-24.43	QP
4	281.9945	41.12	-14.20	26.92	46.00	-19.08	QP
5	768.7481	33.08	-6.59	26.49	46.00	-19.51	QP
6	869.1300	32.38	-6.69	25.69	46.00	-20.31	QP

Radiation Emission Test Data			
Temperature:	26℃	Relative Humidity:	60%
Pressure:	1009hPa	Phase :	Vertical
Test Voltage :	DC 3.7V	Test Mode:	Working

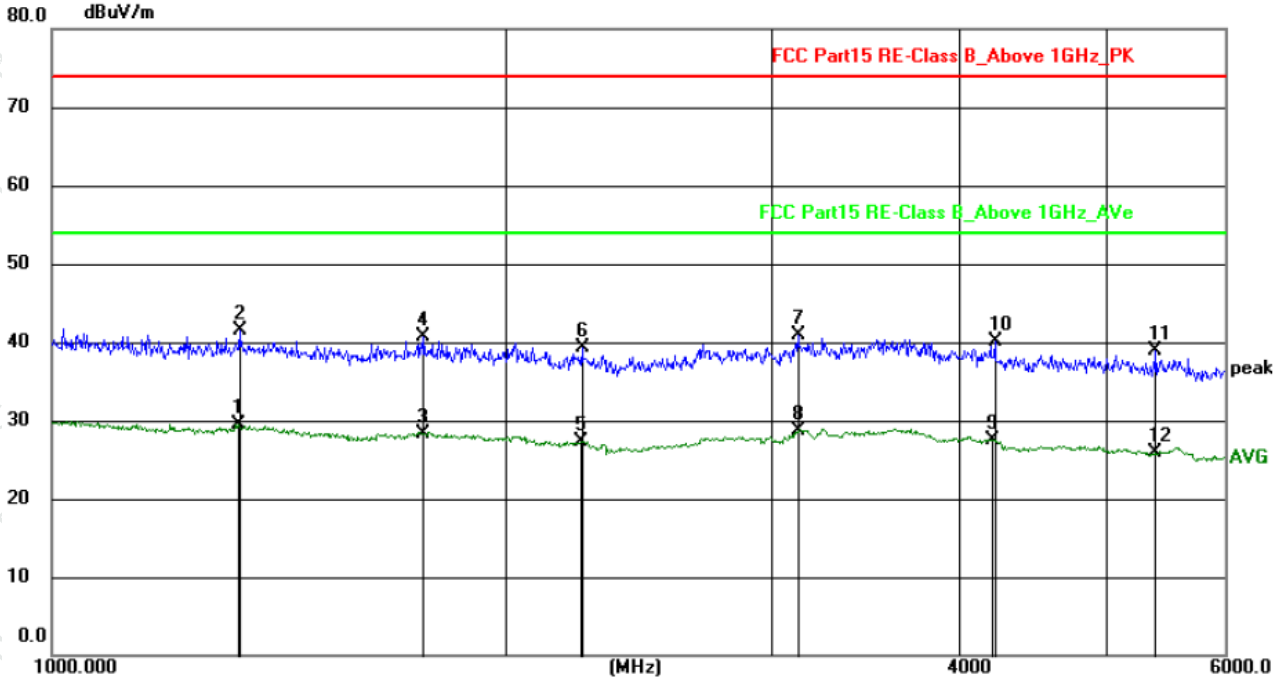


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	30.0000	36.18	-18.34	17.84	40.00	-22.16	QP
2	55.4147	31.51	-17.74	13.77	40.00	-26.23	QP
3	185.7880	31.36	-19.82	11.54	43.50	-31.96	QP
4	300.3672	35.09	-17.89	17.20	46.00	-28.80	QP
5	642.8612	31.11	-7.34	23.77	46.00	-22.23	QP
6	896.9963	31.19	-0.52	30.67	46.00	-15.33	QP

Remarks:
1.Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
2.The emission levels of other frequencies are very lower than the limit and not show in test report.
3.Only the worst test voltages were recorded is 120VAC.

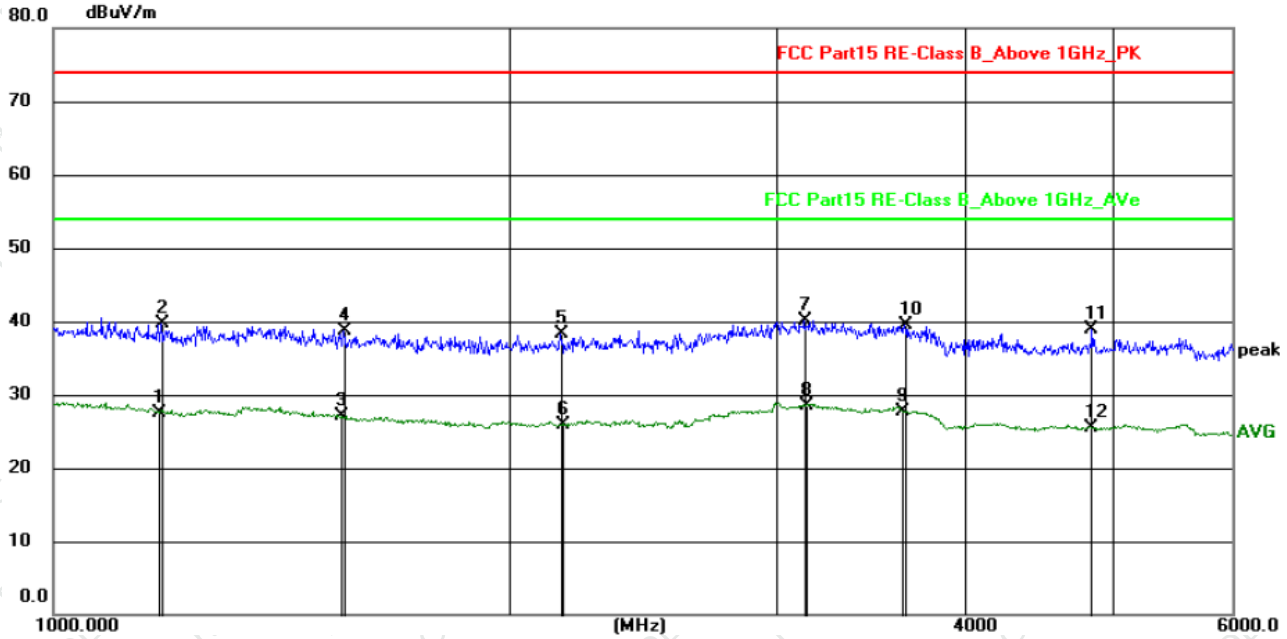
Above 1GHz:

Radiation Emission Test Data			
Temperature:	26℃	Relative Humidity:	60%
Pressure:	1009hPa	Phase :	Horizontal
Test Voltage :	DC 3.7V	Test Mode:	Working



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	1329.615	31.93	-2.51	29.42	54.00	-24.58	AVG
2	1332.000	43.93	-2.52	41.41	74.00	-32.59	peak
3	1761.553	32.69	-4.37	28.32	54.00	-25.68	AVG
4	1764.712	45.04	-4.39	40.65	74.00	-33.35	peak
5	2243.604	32.38	-5.07	27.31	54.00	-26.69	AVG
6	2247.628	44.35	-5.07	39.28	74.00	-34.72	peak
7	3125.390	44.92	-3.98	40.94	74.00	-33.06	peak
8	3125.390	32.75	-3.98	28.77	54.00	-25.23	AVG
9	4208.015	31.13	-3.59	27.54	54.00	-26.46	AVG
10	4223.122	43.67	-3.58	40.09	74.00	-33.91	peak
11	5398.092	41.98	-3.14	38.84	74.00	-35.16	peak
12	5398.092	29.00	-3.14	25.86	54.00	-28.14	AVG

Radiation Emission Test Data			
Temperature:	26℃	Relative Humidity:	60%
Pressure:	1009hPa	Phase :	Vertical
Test Voltage :	DC 3.7V	Test Mode:	Working



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	1174.988	29.39	-1.85	27.54	54.00	-26.46	AVG
2	1177.096	41.60	-1.86	39.74	74.00	-34.26	peak
3	1548.349	30.53	-3.46	27.07	54.00	-26.93	AVG
4	1553.908	42.21	-3.47	38.74	74.00	-35.26	peak
5	2160.753	43.45	-5.18	38.27	74.00	-35.73	peak
6	2164.628	31.14	-5.18	25.96	54.00	-28.04	AVG
7	3130.995	44.12	-3.99	40.13	74.00	-33.87	peak
8	3136.610	32.50	-3.98	28.52	54.00	-25.48	AVG
9	3633.029	31.54	-3.84	27.70	54.00	-26.30	AVG
10	3646.072	43.32	-3.84	39.48	74.00	-34.52	peak
11	4847.873	42.04	-3.15	38.89	74.00	-35.11	peak
12	4847.873	28.72	-3.15	25.57	54.00	-28.43	AVG

Remarks:
1.Final Level =Receiver Read level + Antenna Factor + Cable Loss － Preamplifier Factor
2.The emission levels of other frequencies are very lower than the limit and not show in test report.
3.Only the worst test voltages were recorded is 120VAC.
4. If peak below the average limit, the average emission was no test.
5. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

5.EUT TEST PHOTOGRAPHS

Reference to the appendix I for details.

6.EUT PHOTOGRAPHS

Reference to the appendix II for details.

※※※※※ END OF REPORT ※※※※※