BCTC

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TEST REPORT

Report No.:	BCTC2408167892-1E
Applicant:	Ugreen Group Limited
Product Name:	145W Fast Charging Power Bank
Test Model:	PB771
Tested Date:	2024-08-14 to 2024-08-22
Issued Date:	2024-08-22

Shenzhen BCTC Testing Co., Ltd.

FCC ID:2AQI5-PB771

Product Name:	145W Fast Charging Power Bank
Trademark:	UGREEN
Model/Type Reference:	PB771
Prepared For:	Ugreen Group Limited
Address:	Ugreen Building, Longcheng Industrial Park, Longguanxi Road, Longhua, ShenZhen, China
Manufacturer:	Ugreen Group Limited
Address:	Ugreen Building, Longcheng Industrial Park, Longguanxi Road, Longhua, ShenZhen, China
Prepared By:	Shenzhen BCTC Testing Co., Ltd.
Address:	1-2/F., Building B, Pengzhou Industrial Park, No.158, Fuyuan 1st Road, Zhancheng, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, China
Sample Received Date:	2024-08-14
Sample Tested Date:	2024-08-14 to 2024-08-22
Issue Date:	2024-08-22
Report No.:	BCTC2408167892-1E
Test Standards:	FCC Part15.209 ANSI C63.10-2013
Test Results:	PASS

Tested by:

Kelsey Tan/ Project Handler

Approved by:

Zero Zhou/Reviewer

The test report is effective only with both signature and specialized stamp.This result(s) shown in this report refer only to the sample(s) tested. Without written approval of Shenzhen BCTC Testing Co., Ltd, this report can't be reproduced except in full.The tested sample(s) and the sample information are provided by the client.

Table Of Content

(Note: N/A Means Not Applicable)

1. Version

Report No.	Issue Date	Description	Approved
BCTC2408167892-1E	2024-08-22	Original	Valid

2. Test Summary

The Product has been tested according to the following specifications:

No.	Test Parameter	Clause No.	Results
1	Conducted Emission	15.207	PASS
2	Radiated Emission	15.209	PASS
3	20dB Bandwidth	15.215	PASS
4	Antenna Requirement	15.203	PASS

3. 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.

No.	Item	Uncertainty
1	3m chamber Radiated spurious emission(30MHz-1GHz)	U=4.3dB
2	Conducted Emission (150kHz-30MHz)	U=3.2dB
3	humidity uncertainty	U=5.3%
4	Temperature uncertainty	U=0.59℃

4. Product Information And Test Setup

4.1 Product Information

Model/Type Reference:	PB771
P/N code Differences:	All the P/N code and test models are the same circuit and RF module, except for the appearance color and sales platform.
Hardware Version:	A1
Software Version:	A0
Operation Frequency:	5W+7.5W: 112kHz-148.5kHz 15W: 360kHz
Modulation:	FSK
Antenna installation:	loop coil antenna
Ratings:	Lithium-ion Battery Rated Energy: 72Wh (14.4V 5000mAh) USB-C1 (IN 1) Input:5V⎓3A/9V⎓3A/12V⎓3A/15V⎓3A/20V⎓3.25A 65W Max USB-C1 (OUT 1) Output: 10V⎓2.25A/5V⎓3A/9V⎓3A/12V⎓3A/15V⎓3A/20V⎓5A 100W Max USB-C2 (IN 2) Input:5V⎓3A/9V⎓3A/12V⎓3A/15V⎓3A/20V⎓2.25A 45W Max USB-C2 (OUT 2) Output: 10V⎓2.25A/5V⎓3A/9V⎓3A/12V⎓3A/15V⎓3A/20V⎓2.25A 45W Max USB-A (OUT 3) Output: 10V⎓2.25A/5V⎓3A/9V⎓2A/12V⎓1.5A Wireless Charging Output:15W Max Multi-port Output (USB-C1+USB-C2): 145W Max Total Output: 5V⎓6A/9V⎓8A/12V⎓7.5A/15V⎓6A/20V⎓7.25A Cell Capacity: 20000mAh (4*5000mAh) Rated Capacity: 11000mAh (TYP 5V 6A)

Remark:
- P/N code in the below table, for marketing purpose, will be marked on the marking plate.

35527	35527P	35527X	35527A	35527B	35527C	35527U	35527JP	35527ZD

4.2 Support Equipment

No.	Device Type	Brand	Model	Series No.	Note
E-1	145W Fast Charging Power Bank	UGREEN	PB771	N/A	EUT
E-2	Adapter	UGREEN	CD289	N/A	Auxiliary
E-3	Dummy load	N/A	DL01	N/A	Auxiliary

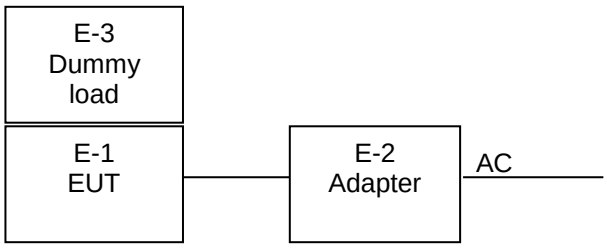
Notes:
1. All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.
2. Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.

4.3 Test Setup Configuration

See test photographs attached in *EUT TEST SETUP PHOTOGRAPHS* for the actual connections between Product and support equipment.

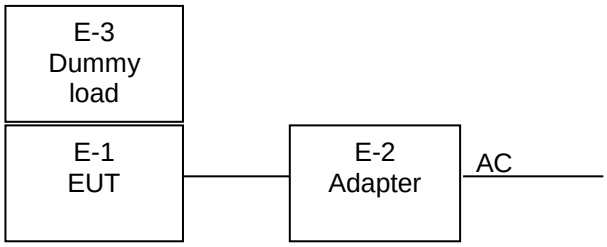
Conducted Emission:

Test Mode 1, 2, 3

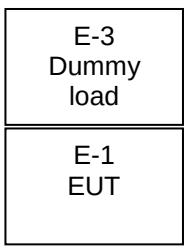


Radiated Spurious Emission:

Test Mode 1, 2, 3



Test Mode 4,5, 6



4.4 Test Mode

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

AC Mode	Mode 1	USB-C IN 1:(15V⎓3A)+ Wireless charge 5W
	Mode 2	USB-C IN 1:(15V⎓3A)+ Wireless charge 7.5W
	Mode 3	USB-C IN 1:(20V⎓3.25A)+ Wireless charge 15W
DC Mode	Mode 4	Wireless charge 15W
	Mode 5	Wireless charge 7.5W
	Mode 6	Wireless charge 5W

Note: All test mode were tested and passed, only shows the worst case mode which were recorded in this report.

5. Test Facility And Test Instrument Used

5.1 Test Facility

All measurement facilities used to collect the measurement data are located at Shenzhen BCTC Testing Co., Ltd. Address:1-2/F., Building B, Pengzhou Industrial Park, No.158, Fuyuan 1st Road, Zhancheng, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, China. The site and apparatus are constructed in conformance with the requirements of ANSI C63.4 and CISPR 16-1-1 other equivalent standards.
FCC Test Firm Registration Number: 712850
A2LA certificate registration number is: CN1212
ISED Registered No.: 23583
ISED CAB identifier: CN0017

5.2 Test Instrument Used

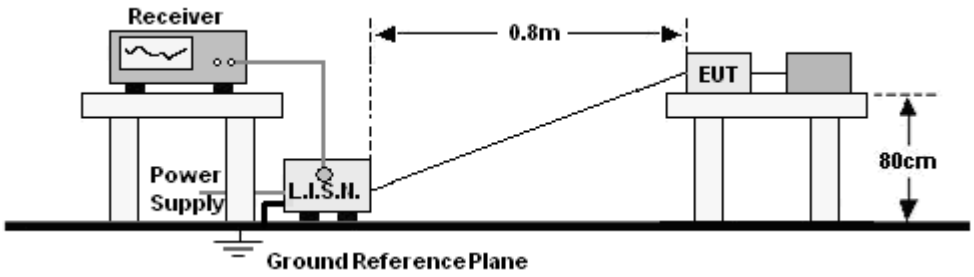
Conducted Emissions Test					
Equipment	**Manufacturer**	**Model#**	**Serial#**	**Last Cal.**	**Next Cal.**
Receiver	R&S	ESR3	102075	May 16, 2024	May 15, 2025
LISN	R&S	ENV216	101375	May 16, 2024	May 15, 2025
Software	Frad	EZ-EMC	EMC-CON 3A1	\	\
Pulse limiter	Schwarzbeck	VTSD9561-F	01323	May 16, 2024	May 15, 2025

RF Conducted Test					
Equipment	**Manufacturer**	**Model#**	**Serial#**	**Last Cal.**	**Next Cal.**
Power Meter	Keysight	E4419	\	May 16, 2024	May 15, 2025
Power Sensor (AV)	Keysight	E9300A	\	May 16, 2024	May 15, 2025
Signal Analyzer 20kHz-26.5GHz	Keysight	N9020A	MY49100060	May 16, 2024	May 15, 2025
Spectrum Analyzer 9kHz-40GHz	R&S	FSP 40	\	May 16, 2024	May 15, 2025

Radiated Emissions Test (966 Chamber01)					
Equipment	**Manufacturer**	**Model#**	**Serial#**	**Last Cal.**	**Next Cal.**
966 chamber	ChengYu	966 Room	966	May 16, 2024	May 15, 2025
Receiver	R&S	ESR3	102075	May 16, 2024	May 15, 2025
Receiver	R&S	ESRP	101154	May 16, 2024	May 15, 2025
Amplifier	Schwarzbeck	BBV9744	9744-0037	May 16, 2024	May 15, 2025
TRILOG Broadband Antenna	Schwarzbeck	VULB9163	942	May 21, 2024	May 20, 2025
Loop Antenna(9KHz -30MHz)	Schwarzbeck	FMZB1519B	00014	May 21, 2024	May 20, 2025
Amplifier	SKET	LAPA_01G18 G-45dB	SK2021040901	May 16, 2024	May 15, 2025
Horn Antenna	Schwarzbeck	BBHA9120D	1541	May 21, 2024	May 20, 2025
Amplifier(18G Hz-40GHz)	MITEQ	TTA1840-35-HG	2034381	May 16, 2024	May 15, 2025
Horn Antenna(18G Hz-40GHz)	Schwarzbeck	BBHA9170	00822	May 21, 2024	May 20, 2025
Spectrum Analyzer9kHz-40GHz	R&S	FSP40	100363	May 16, 2024	May 15, 2025
Software	Frad	EZ-EMC	FA-03A2 RE	\	\

6. Conducted Emissions

6.1 Block Diagram Of Test Setup



6.2 Limit

Frequency (MHz)	Limit (dBuV)	
	Quas-peak	Average
0.15 -0.5	66 - 56 *	56 - 46 *
0.50 -5.0	56.00	46.00
5.0 -30.0	60.00	50.00
Notes: 1. *Decreasing linearly with logarithm of frequency. 2. The lower limit shall apply at the transition frequencies.		

6.3 Test procedure

Receiver Parameters	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 kHz

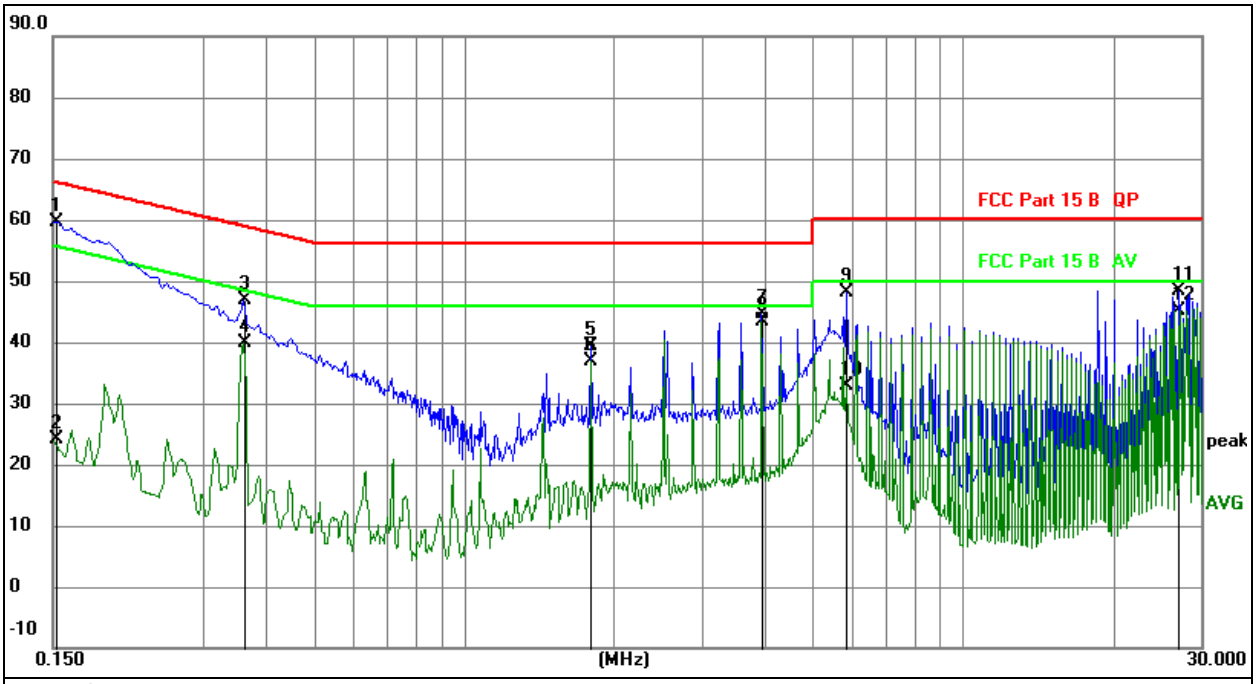
a. The Product was placed on a nonconductive table 0.8 m above the horizontal ground reference plane, and 0.4 m from the vertical ground reference plane, and connected to the main through Line Impedance Stability Network (L.I.S.N).
b. The RBW of the receiver was set at 9 kHz in 150 kHz ~ 30MHz with Peak and AVG detector in Max Hold mode. Run the receiver's pre-scan to record the maximum disturbance generated from Product in all power lines in the full band.
c. For each frequency whose maximum record was higher or close to limit, measure its QP and AVG values and record.

6.4 EUT operating Conditions

The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.

6.5 Test Result

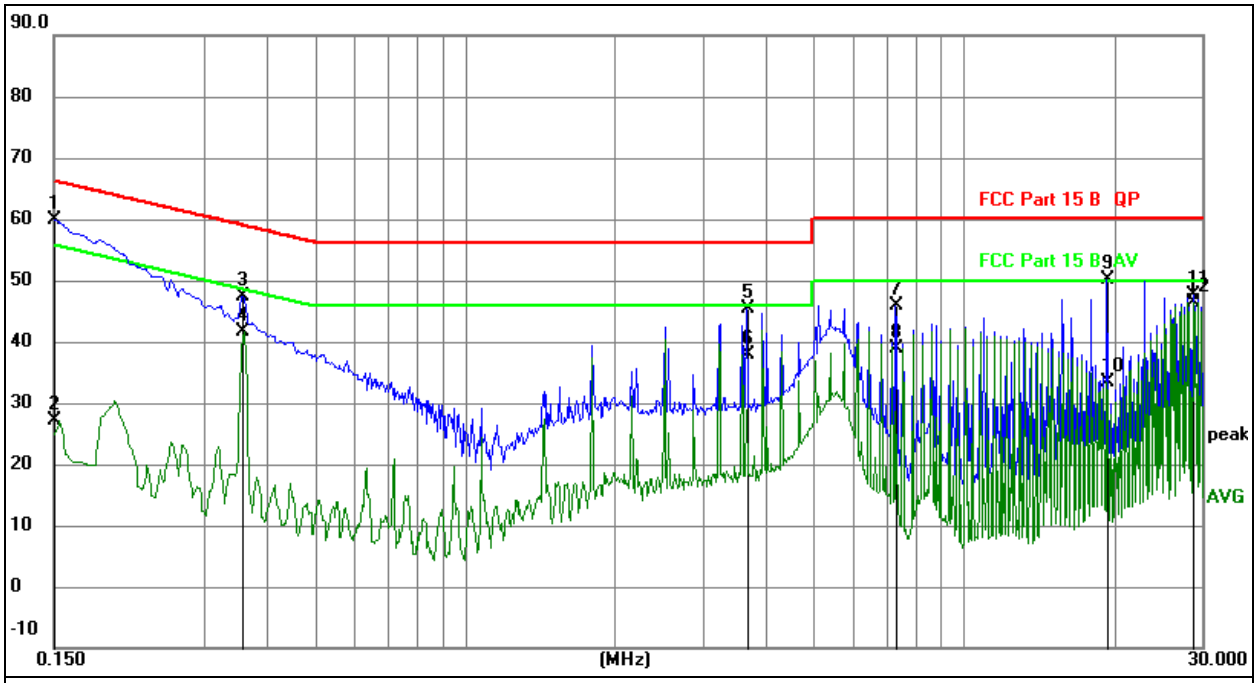
Temperature:	26 ℃	Relative Humidity:	54%RH
Pressure:	101KPa	Phase :	L
Test Mode:	Mode 3(Worst)	Test Voltage:	AC 120V/60Hz



Remark:
1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.
3. Measurement = Reading Level + Correct Factor
4. Over = Measurement - Limit

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz		dB	dBuV	dBuV	dB	Detector
1		0.1516	39.50	20.07	59.57	65.91	-6.34	QP
2		0.1516	4.08	20.07	24.15	55.91	-31.76	AVG
3		0.3615	26.70	20.08	46.78	58.69	-11.91	QP
4		0.3615	19.86	20.08	39.94	48.69	-8.75	AVG
5		1.8000	19.34	20.10	39.44	56.00	-16.56	QP
6		1.8000	16.71	20.10	36.81	46.00	-9.19	AVG
7		3.9430	24.46	20.14	44.60	56.00	-11.40	QP
8	*	3.9430	23.36	20.14	43.50	46.00	-2.50	AVG
9		5.8358	28.00	20.15	48.15	60.00	-11.85	QP
10		5.8358	12.76	20.15	32.91	50.00	-17.09	AVG
11		26.9836	28.06	20.29	48.35	60.00	-11.65	QP
12		26.9836	24.95	20.29	45.24	50.00	-4.76	AVG

Temperature:	26 ℃	Relative Humidity:	54%RH
Pressure:	101KPa	Phase :	N
Test Mode:	Mode 3(Worst)	Test Voltage:	AC 120V/60Hz



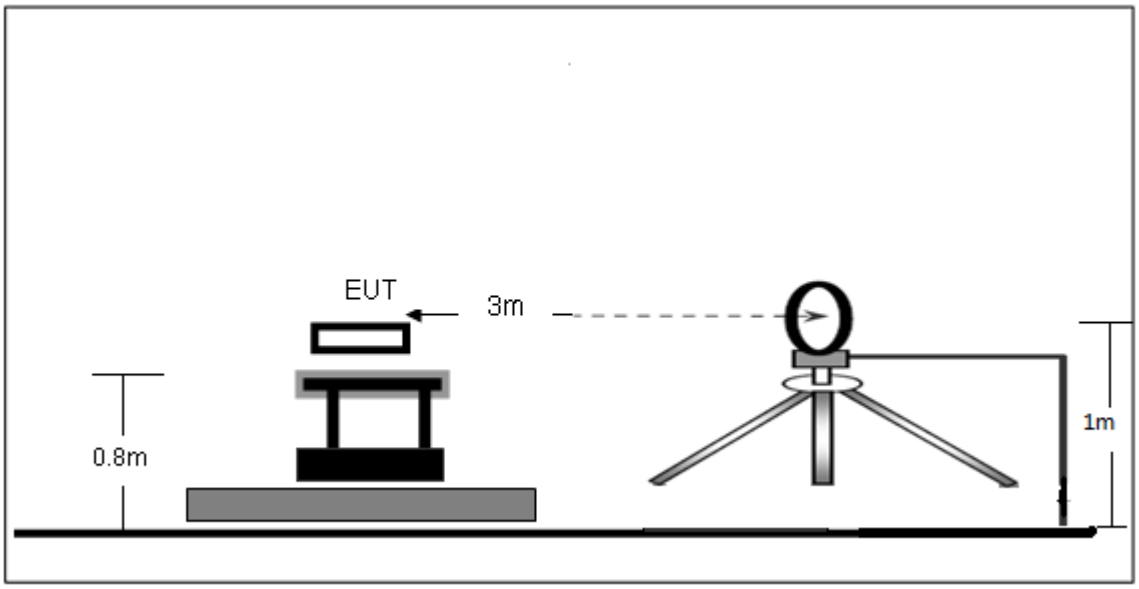
Remark:
1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.
3. Measurement = Reading Level + Correct Factor
4. Over = Measurement - Limit

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz		dB	dBuV	dBuV	dB	Detector
1		0.1500	39.89	20.07	59.96	66.00	-6.04	QP
2		0.1500	6.96	20.07	27.03	56.00	-28.97	AVG
3		0.3570	27.38	20.08	47.46	58.80	-11.34	QP
4		0.3570	21.53	20.08	41.61	48.80	-7.19	AVG
5		3.6645	25.24	20.13	45.37	56.00	-10.63	QP
6		3.6645	17.76	20.13	37.89	46.00	-8.11	AVG
7		7.3275	25.72	20.16	45.88	60.00	-14.12	QP
8		7.3275	18.79	20.16	38.95	50.00	-11.05	AVG
9		19.4189	29.74	20.33	50.07	60.00	-9.93	QP
10		19.4189	13.10	20.33	33.43	50.00	-16.57	AVG
11		28.8015	27.24	20.28	47.52	60.00	-12.48	QP
12	*	28.8015	26.19	20.28	46.47	50.00	-3.53	AVG

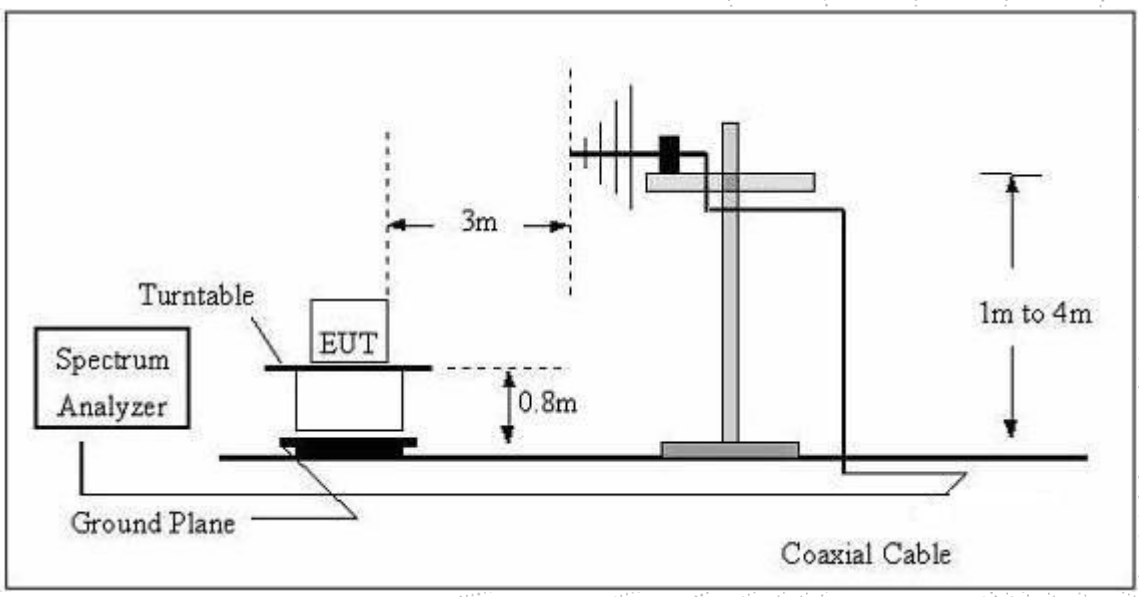
7. Radiated Emissions

7.1 Block Diagram Of Test Setup

（A）Radiated Emission Test-Up Frequency Below 30MHz



（B）Radiated Emission Test-Up Frequency 30MHz~1GHz



7.2 Limit

FCC §15.209; §15.205.

Test Standard	FCC Part15 C Section 15.209 and 15.205				
Test Limit	Frequency (MHz)	Field strength (microvolt/meter)	Limit (dBuV/m)	Remark	Measurement distance (m)
	0.009MHz~0.490MHz	2400/F(kHz)	-	-	300
	0.490MHz-1.705MHz	24000/F(kHz)	-	-	30
	1.705MHz-30MHz	30	-	-	30
	30MHz~88MHz	100	40.0	Quasi-peak	3
	88MHz~216MHz	150	43.5	Quasi-peak	3
	216MHz~960MHz	200	46.0	Quasi-peak	3
	960MHz~1000MHz	500	54.0	Quasi-peak	3
	Above 1000MHz	500	54.0	Average	3
		-	74.0	Peak	3

7.3 Test procedure

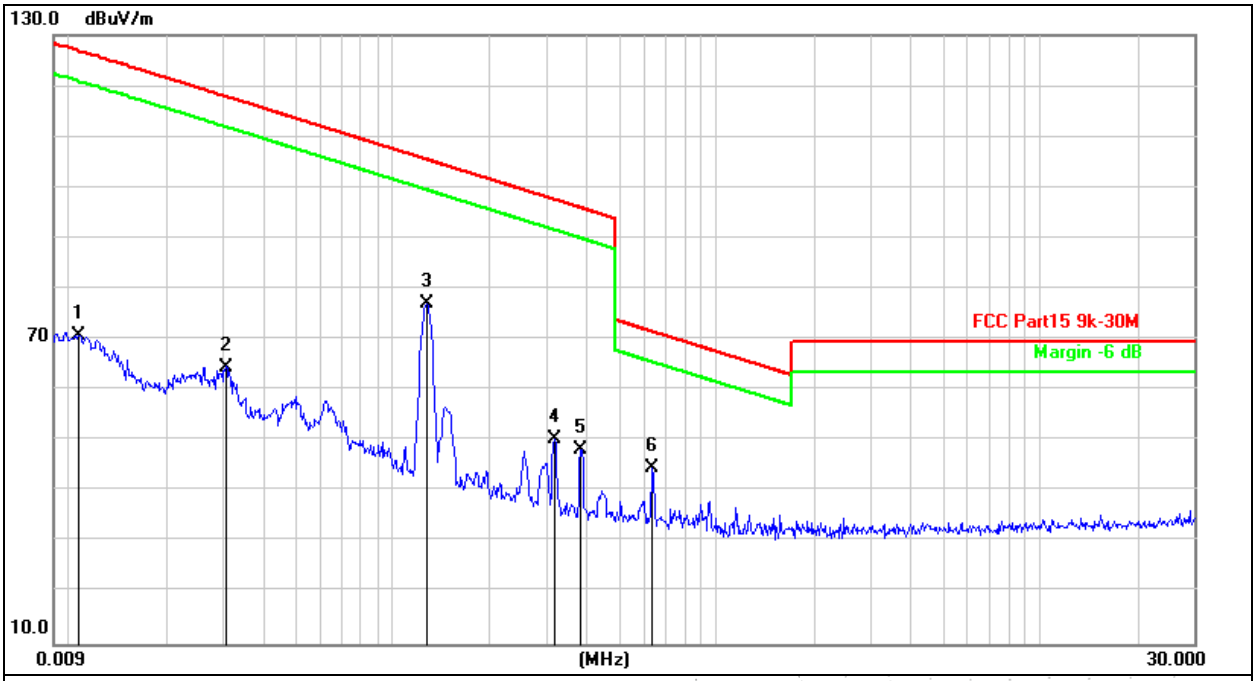
Receiver Parameter	Setting
Attenuation	Auto
9kHz~150kHz	RBW 200Hz for QP
150kHz~30MHz	RBW 9kHz for QP
30MHz~1000MHz	RBW 120kHz for QP

Below 1GHz test procedure as below:
a.The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic camber. 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 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.
d.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 (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
e.The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
f.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.
Above 1GHz test procedure as below:
g.Different between above is the test site, change from Semi- Anechoic Chamber to fully Anechoic Chamber and change form table 0.8 metre to 1.5 metre(Above 18GHz the distance is 1 meter and table is 1.5 metre).
h.Test the EUT in the lowest channel ,the middle channel ,the Highest channel.
Note: Both horizontal and vertical antenna polarities were tested and performed pretest to three orthogonal axis. The worst case emissions were reported.

7.4 Test Result

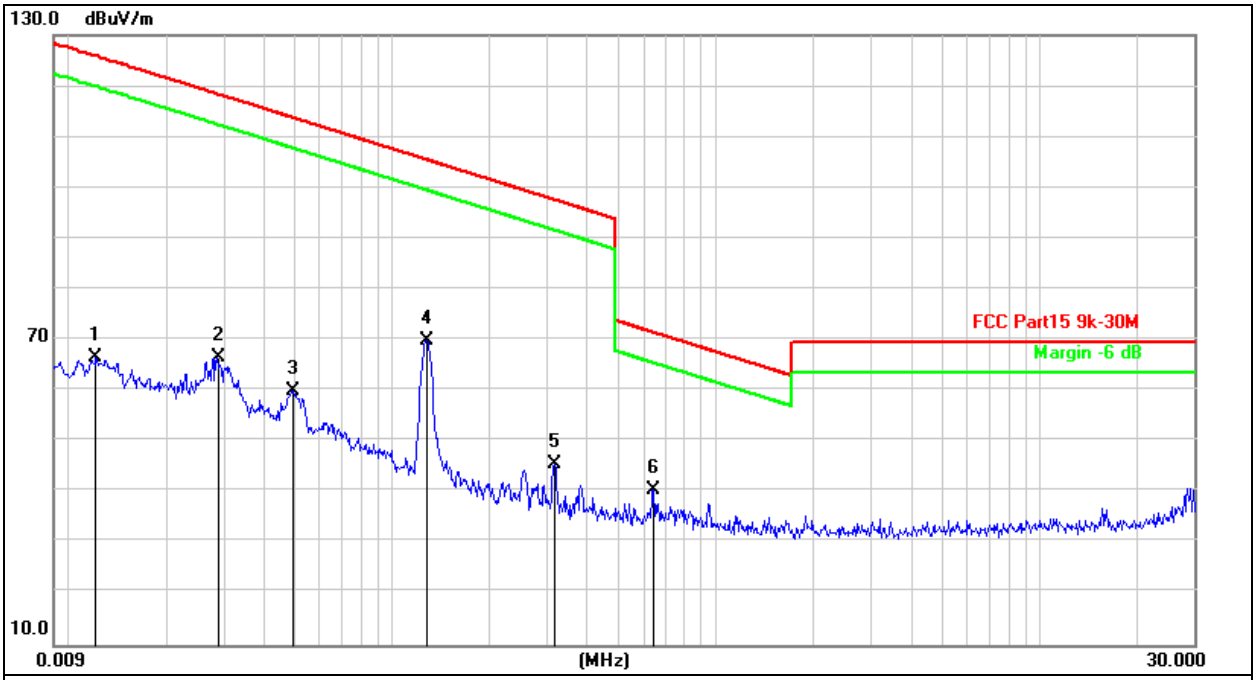
9kHz-30MHz

Temperature:	26℃	Relative Humidity:	54%RH
Pressure:	101 kPa	Test Voltage:	AC120V/60Hz
Test Mode:	Mode 2 (112kHz-148.5kHz)	Polarization:	Coaxial(Worst)



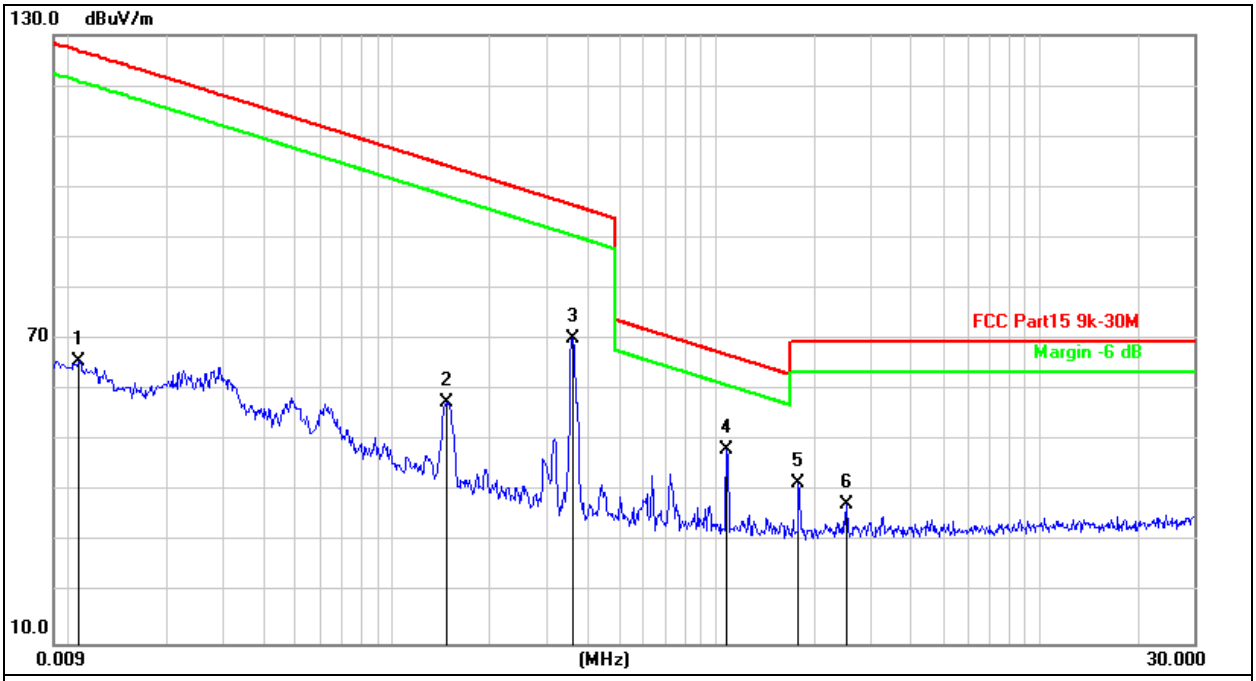
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector
1		0.0108	78.23	-7.45	70.78	126.9	-56.16	peak
2		0.0306	72.02	-7.42	64.60	117.8	-53.29	peak
3		0.1276	84.48	-7.54	76.94	105.4	-28.55	peak
4		0.3168	58.08	-7.70	50.38	97.59	-47.21	peak
5		0.3818	55.99	-7.65	48.34	95.97	-47.63	peak
6	*	0.6363	52.20	-7.43	44.77	71.54	-26.77	peak

Temperature:	26℃	Relative Humidity:	54%RH
Pressure:	101 kPa	Test Voltage:	AC120V/60Hz
Test Mode:	Mode 2 (112kHz-148.5kHz)	Polarization:	Coplanar(Worst)



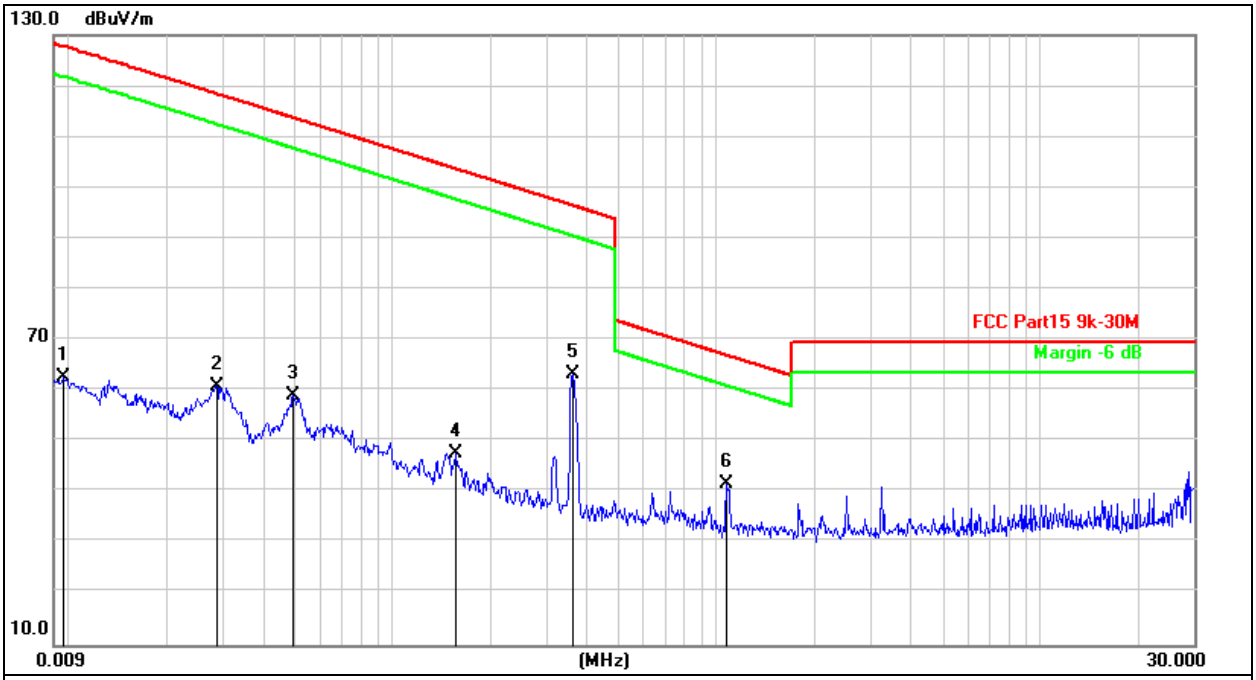
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector
1		0.0122	73.86	-7.46	66.40	125.8	-59.48	peak
2		0.0287	73.88	-7.43	66.45	118.4	-52.00	peak
3		0.0494	67.37	-7.29	60.08	113.7	-53.65	peak
4		0.1276	77.35	-7.54	69.81	105.4	-35.68	peak
5		0.3168	53.12	-7.70	45.42	97.59	-52.17	peak
6	*	0.6416	47.98	-7.42	40.56	71.47	-30.91	peak

Temperature:	26℃	Relative Humidity:	54%RH
Pressure:	101 kPa	Test Voltage:	AC120V/60Hz
Test Mode:	Mode 3 (360kHz)	Polarization:	Coaxial(Worst)



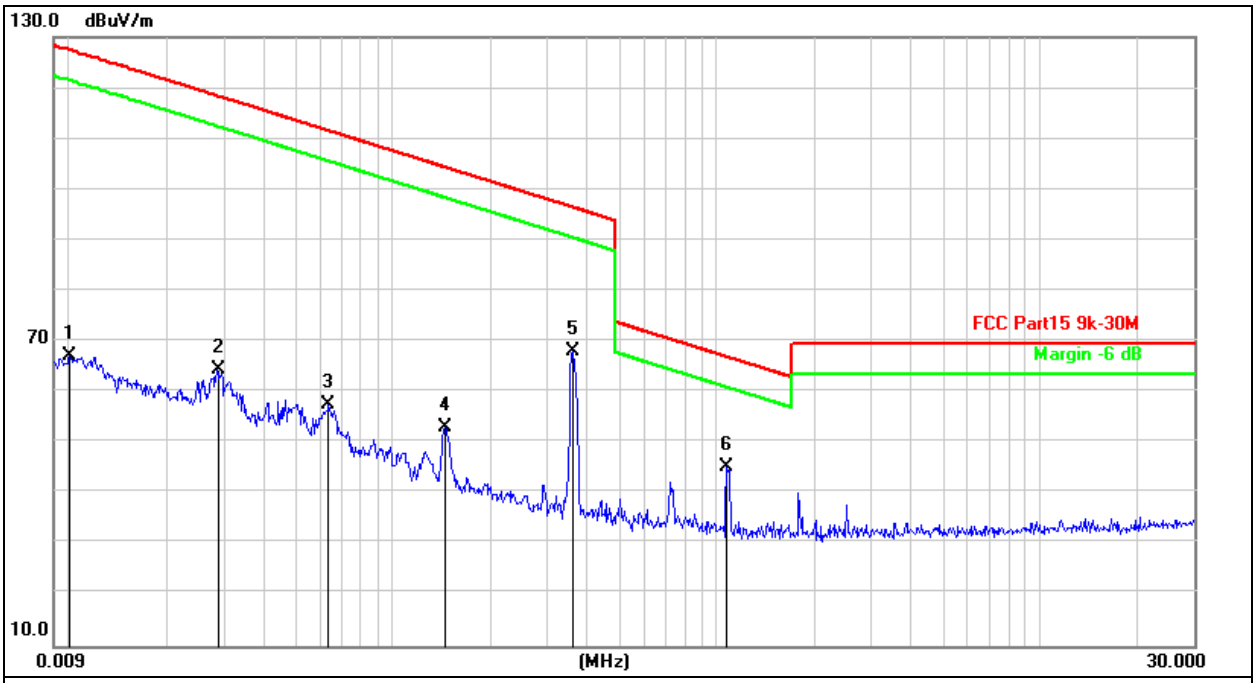
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector
1		0.0108	73.16	-7.45	65.71	126.9	-61.23	peak
2		0.1466	65.04	-7.57	57.47	104.2	-46.81	peak
3		0.3607	77.84	-7.67	70.17	96.46	-26.29	peak
4	*	1.0783	55.58	-7.36	48.22	66.97	-18.75	peak
5		1.7976	48.86	-7.33	41.53	69.54	-28.01	peak
6		2.5272	44.87	-7.30	37.57	69.54	-31.97	peak

Temperature:	26℃	Relative Humidity:	54%RH
Pressure:	101 kPa	Test Voltage:	AC120V/60Hz
Test Mode:	Mode 3 (360kHz)	Polarization:	Coplanar(Worst)



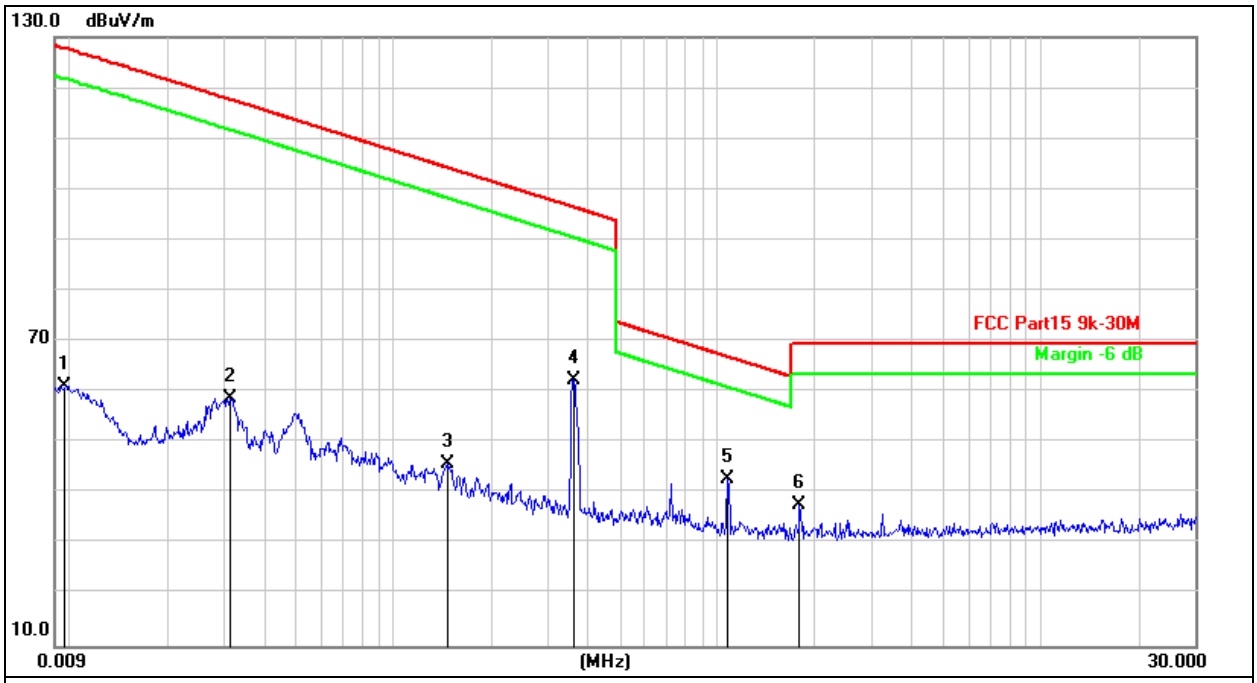
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector
1		0.0097	70.16	-7.61	62.55	127.8	-65.32	peak
2		0.0286	68.18	-7.43	60.75	118.4	-57.73	peak
3		0.0493	66.23	-7.29	58.94	113.7	-54.81	peak
4		0.1577	55.22	-7.61	47.61	103.6	-56.04	peak
5		0.3607	70.84	-7.67	63.17	96.46	-33.29	peak
6	*	1.0783	48.88	-7.36	41.52	66.97	-25.45	peak

Temperature:	26℃	Relative Humidity:	54%RH
Pressure:	101 kPa	Test Voltage:	DC 14.4V
Test Mode:	Mode 4(360kHz)	Polarization:	Coaxial(Worst)



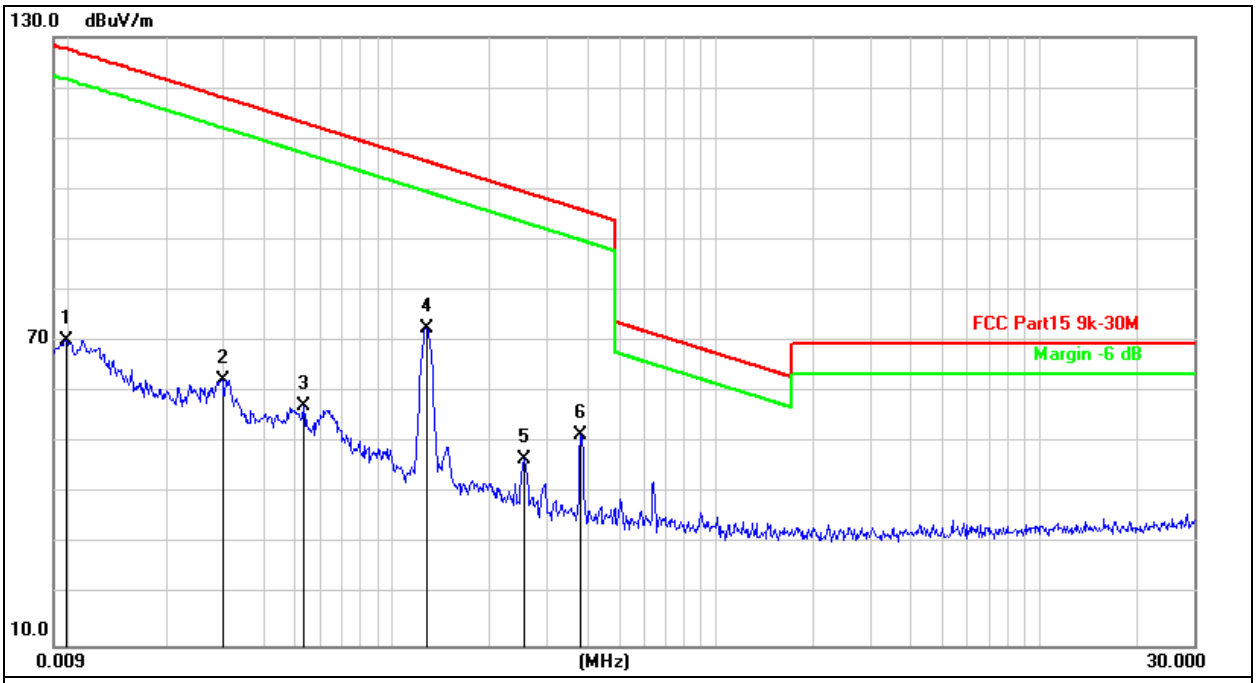
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector
1		0.0101	74.61	-7.45	67.16	127.5	-60.36	peak
2		0.0287	71.77	-7.43	64.34	118.4	-54.11	peak
3		0.0636	65.10	-7.56	57.54	111.5	-54.00	peak
4		0.1454	60.54	-7.57	52.97	104.3	-51.38	peak
5		0.3607	75.59	-7.67	67.92	96.46	-28.54	peak
6	*	1.0783	52.46	-7.36	45.10	66.97	-21.87	peak

Temperature:	26℃	Relative Humidity:	54%RH
Pressure:	101 kPa	Test Voltage:	DC 14.4V
Test Mode:	Mode 4(360kHz)	Polarization:	Coplanar(Worst)



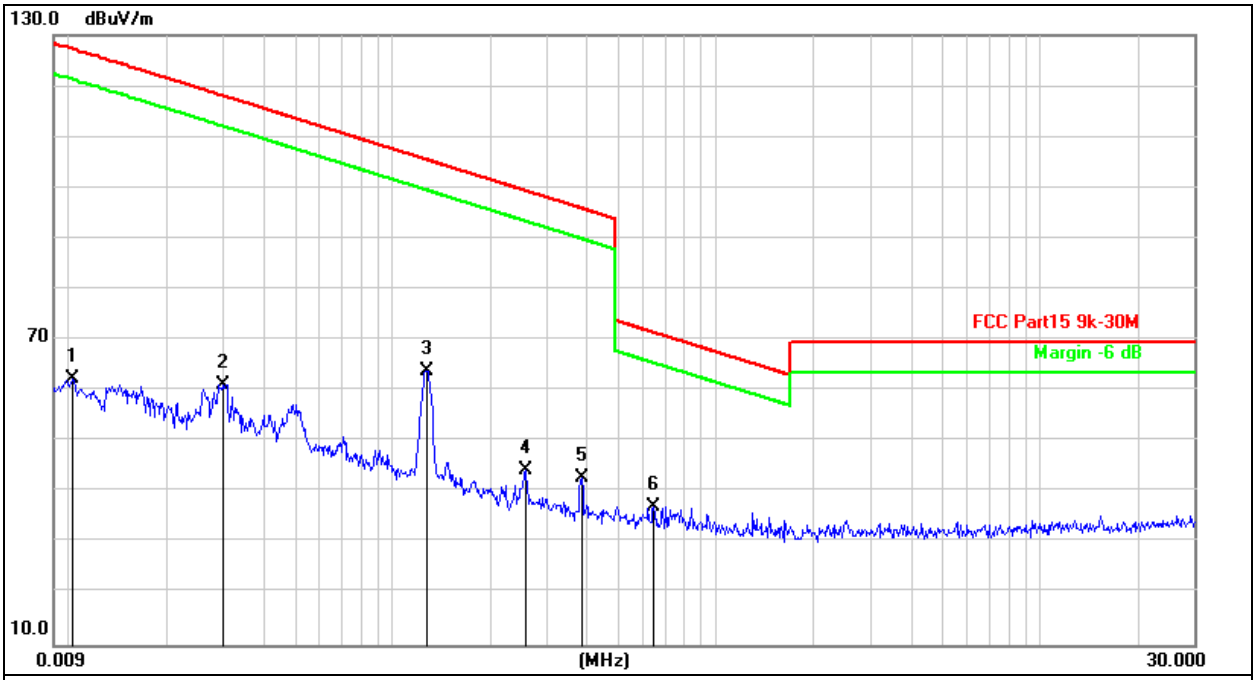
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector
1		0.0097	68.75	-7.61	61.14	127.8	-66.73	peak
2		0.0313	66.10	-7.41	58.69	117.6	-59.00	peak
3		0.1466	53.37	-7.57	45.80	104.2	-58.48	peak
4		0.3607	70.15	-7.67	62.48	96.46	-33.98	peak
5	*	1.0783	50.16	-7.36	42.80	66.97	-24.17	peak
6		1.7976	45.17	-7.33	37.84	69.54	-31.70	peak

Temperature:	26℃	Relative Humidity:	54%RH
Pressure:	101 kPa	Test Voltage:	DC 14.4V
Test Mode:	Mode 6 (112kHz-148.5kHz)	Polarization:	Coaxial(Worst)



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector
1		0.0098	77.78	-7.56	70.22	127.7	-57.56	peak
2		0.0299	69.80	-7.42	62.38	118.0	-55.71	peak
3		0.0532	64.52	-7.35	57.17	113.0	-55.92	peak
4	*	0.1276	80.10	-7.54	72.56	105.4	-32.93	peak
5		0.2545	54.62	-7.74	46.88	99.49	-52.61	peak
6		0.3818	59.12	-7.65	51.47	95.97	-44.50	peak

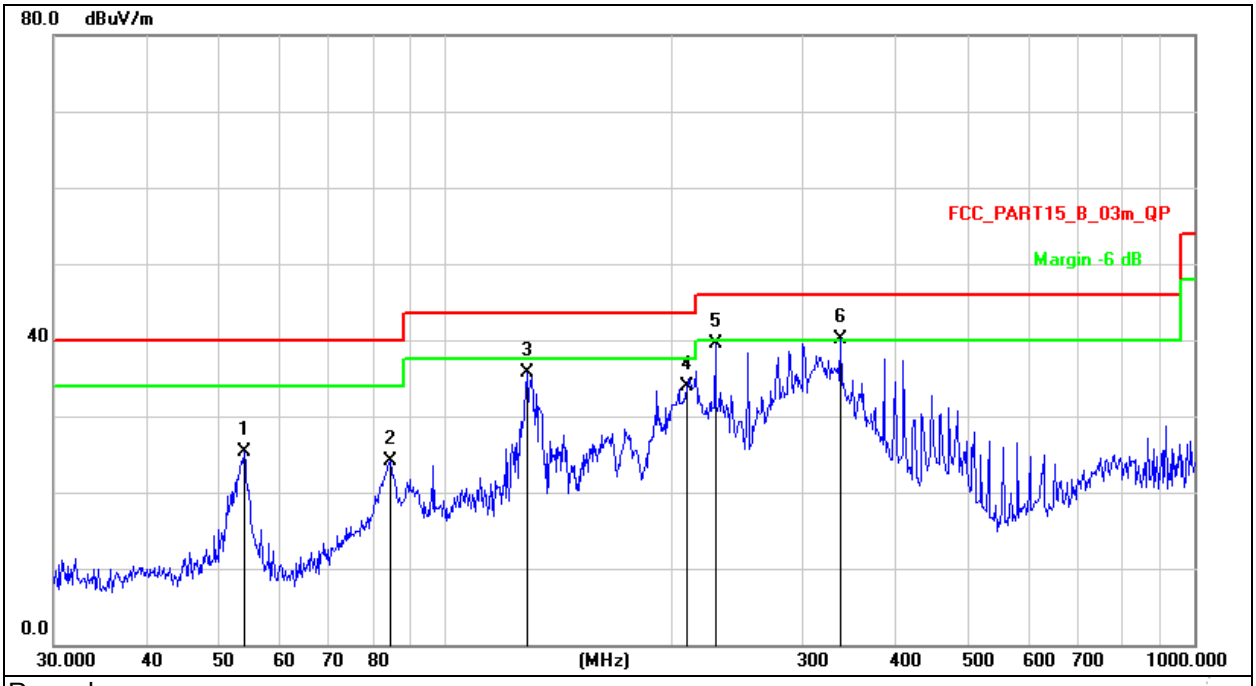
Temperature:	26℃	Relative Humidity:	54%RH
Pressure:	101 kPa	Test Voltage:	DC 14.4V
Test Mode:	Mode 6 (112kHz-148.5kHz)	Polarization:	Coplanar(Worst)



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector
1		0.0103	69.76	-7.45	62.31	127.3	-65.04	peak
2		0.0299	68.55	-7.42	61.13	118.0	-56.96	peak
3		0.1276	71.44	-7.54	63.90	105.4	-41.59	peak
4		0.2587	52.14	-7.74	44.40	99.35	-54.95	peak
5		0.3849	50.38	-7.65	42.73	95.90	-53.17	peak
6	*	0.6416	44.69	-7.42	37.27	71.47	-34.20	peak

Between 30MHz – 1GHz

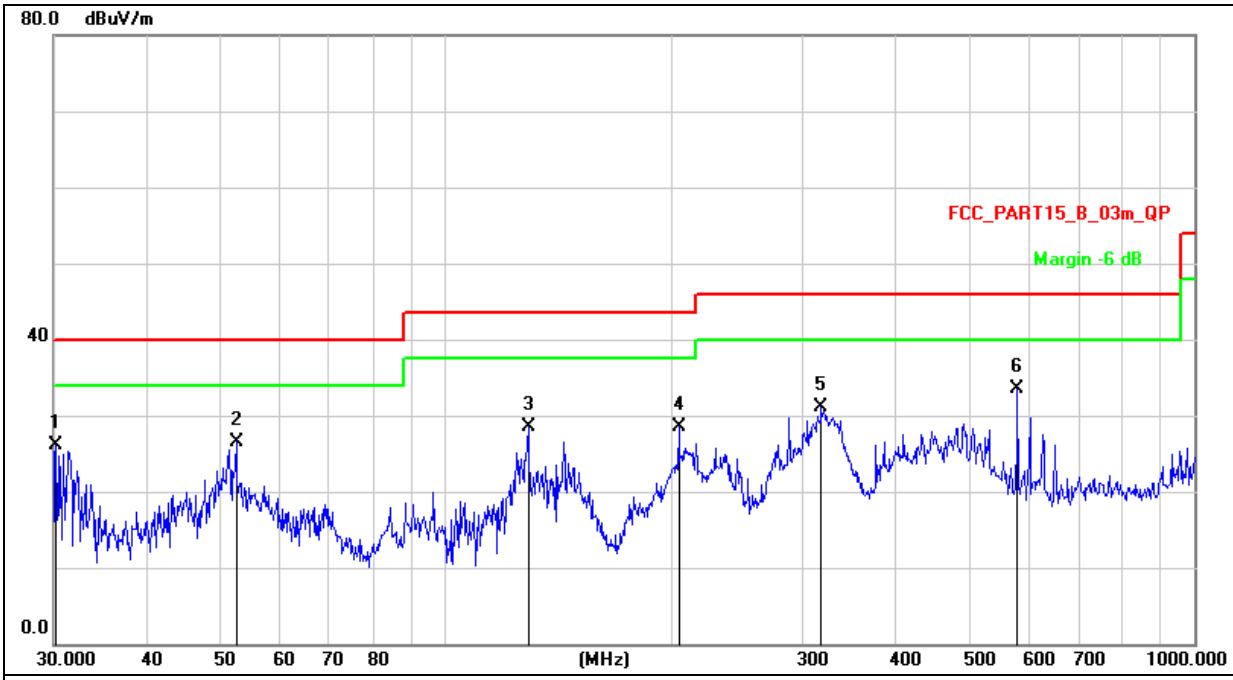
Temperature:	26 ℃	Relative Humidity:	54%RH
Pressure:	101KPa	Phase :	Horizontal
Test Mode:	Mode 4(360kHz)	Test Voltage:	DC 14.4V



Remark:
1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.
2. Measurement = Reading Level + Correct Factor
3. Over = Measurement - Limit

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detecto
1		53.8818	39.71	-14.42	25.29	40.00	-14.71	QP
2		84.4054	42.87	-18.71	24.16	40.00	-15.84	QP
3		128.5630	53.69	-17.93	35.76	43.50	-7.74	QP
4		210.0482	49.38	-15.43	33.95	43.50	-9.55	QP
5		229.2931	54.43	-14.88	39.55	46.00	-6.45	QP
6	*	337.2155	51.98	-11.93	40.05	46.00	-5.95	QP

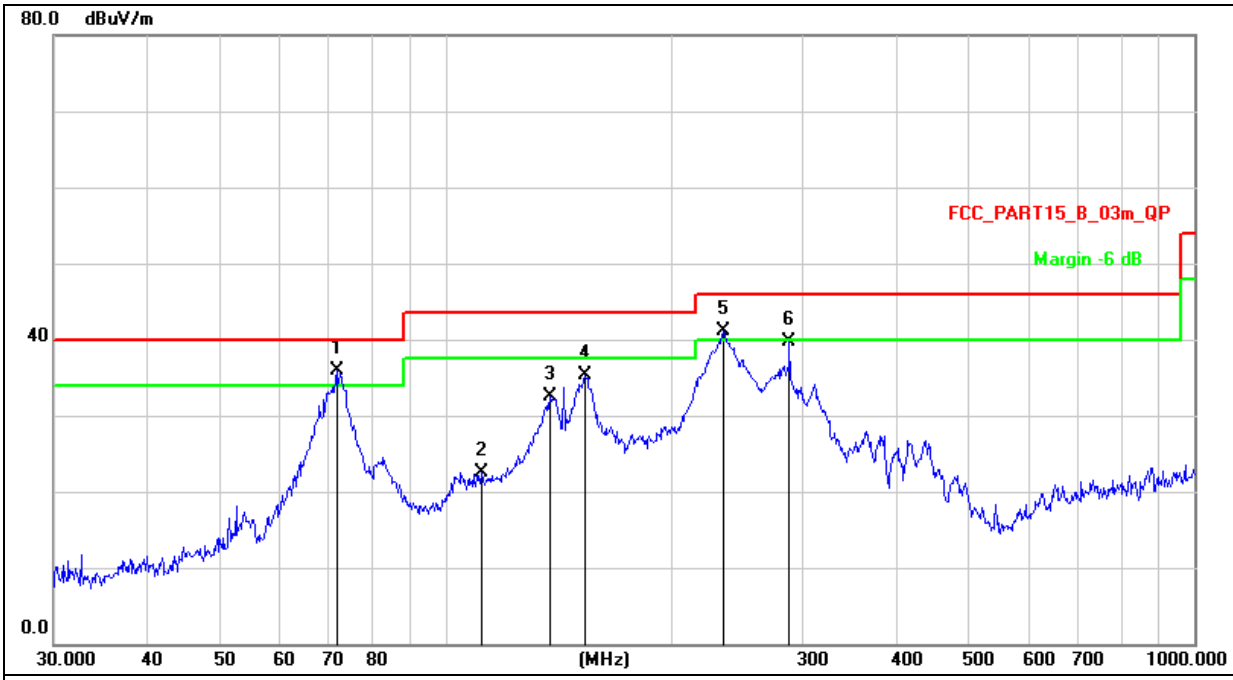
Temperature:	26 ℃	Relative Humidity:	54%RH
Pressure:	101KPa	Phase :	Vertical
Test Mode:	Mode 4(360kHz)	Test Voltage:	DC 14.4V



Remark:
1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.
2. Measurement = Reading Level + Correct Factor
3. Over = Measurement - Limit

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector
1		30.2111	42.76	-16.61	26.15	40.00	-13.85	QP
2		52.5753	40.80	-14.25	26.55	40.00	-13.45	QP
3		129.0146	46.52	-17.96	28.56	43.50	-14.94	QP
4		204.9551	44.15	-15.58	28.57	43.50	-14.93	QP
5		317.7011	43.66	-12.62	31.04	46.00	-14.96	QP
6	*	580.7026	41.80	-8.32	33.48	46.00	-12.52	QP

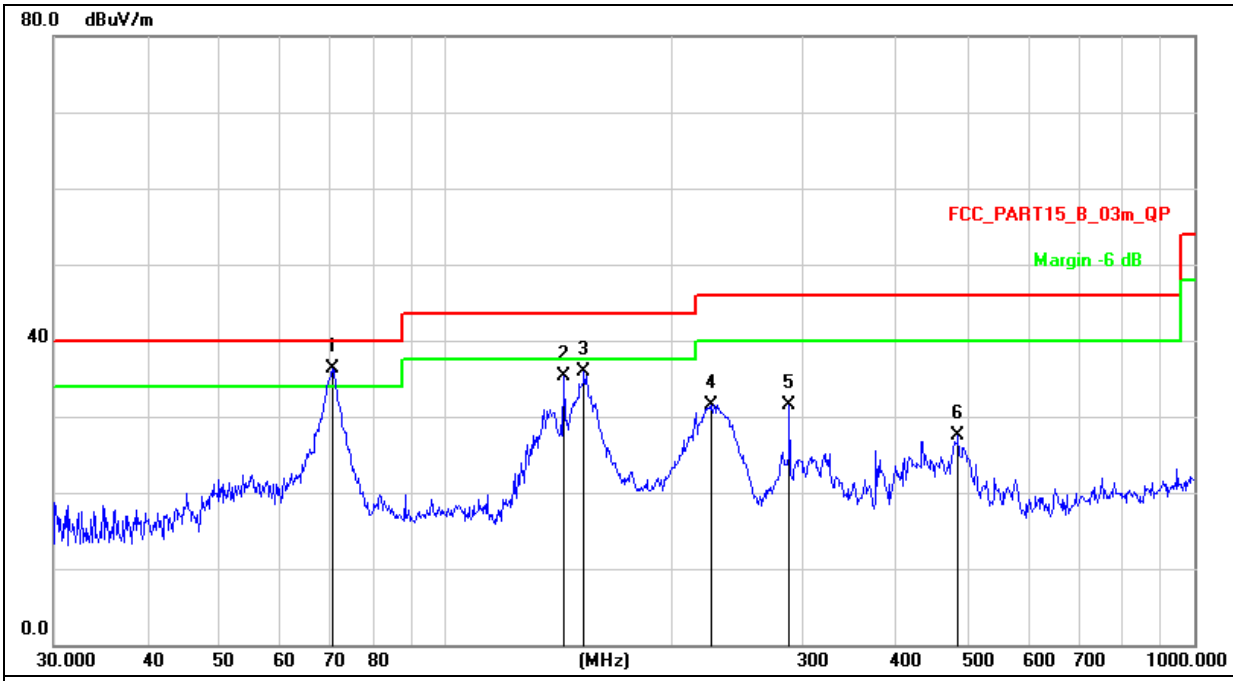
Temperature:	26 ℃	Relative Humidity:	54%RH
Pressure:	101KPa	Phase :	Horizontal
Test Mode:	Mode 6 (112kHz-148.5kHz)	Test Voltage:	DC 14.4V



Remark:
1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.
2. Measurement = Reading Level + Correct Factor
3. Over = Measurement - Limit

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector
1	*	71.5806	54.26	-18.28	35.98	40.00	-4.02	QP
2		111.7380	39.30	-16.75	22.55	43.50	-20.95	QP
3		137.9028	51.15	-18.58	32.57	43.50	-10.93	QP
4		153.7385	54.50	-19.15	35.35	43.50	-8.15	QP
5	!	234.9909	55.73	-14.72	41.01	46.00	-4.99	QP
6		287.9904	53.12	-13.49	39.63	46.00	-6.37	QP

Temperature:	26 ℃	Relative Humidity:	54%RH
Pressure:	101KPa	Phase :	Vertical
Test Mode:	Mode 6 (112kHz-148.5kHz)	Test Voltage:	DC 14.4V



Remark:
1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.
2. Measurement = Reading Level + Correct Factor
3. Over = Measurement - Limit

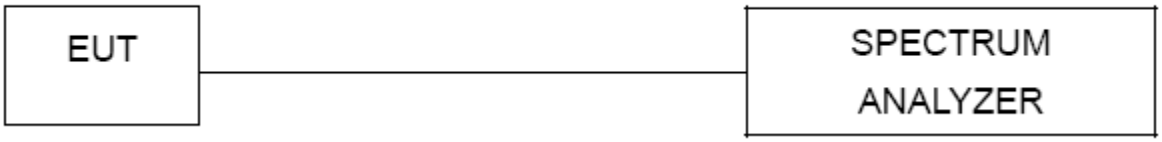
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector
1	*	70.5836	54.36	-18.10	36.26	40.00	-3.74	QP
2		143.8295	54.27	-19.00	35.27	43.50	-8.23	QP
3		153.2004	55.01	-19.19	35.82	43.50	-7.68	QP
4		226.8936	46.53	-14.95	31.58	46.00	-14.42	QP
5		287.9904	45.02	-13.49	31.53	46.00	-14.47	QP
6		483.9094	36.45	-9.01	27.44	46.00	-18.56	QP

8. Bandwidth Test

8.1 Test Procedure

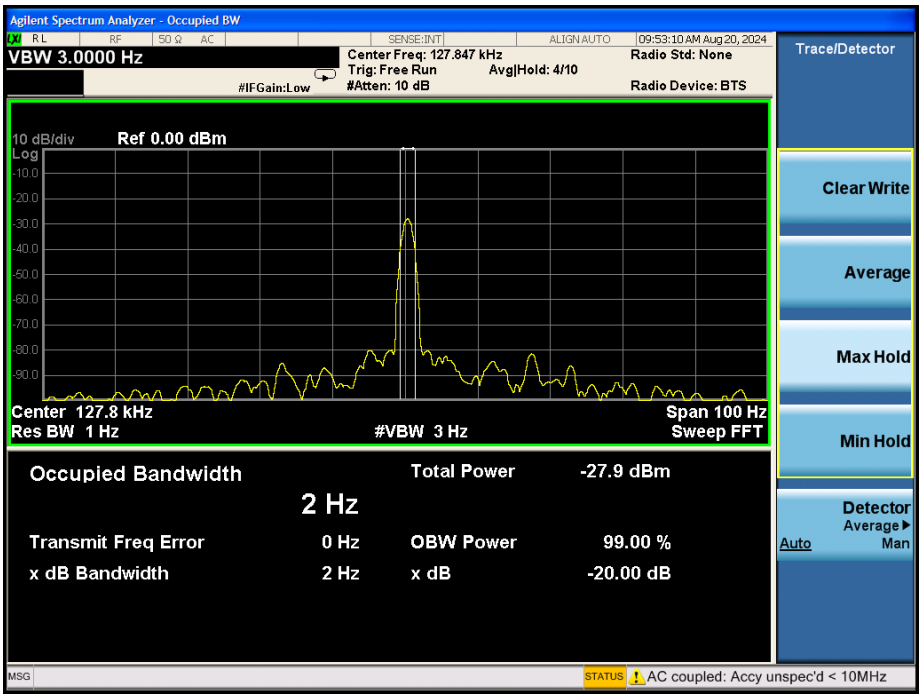
1. Set RBW = 1%~5% OBW.
2. Set the video bandwidth (VBW) ≥ 3 x RBW.
3. Detector = Peak.
4. Trace mode = max hold.
5. Sweep = auto couple.
6. Allow the trace to stabilize.
7. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 20 dB relative to the maximum level measured in the fundamental emission.

8.2 Test Setup

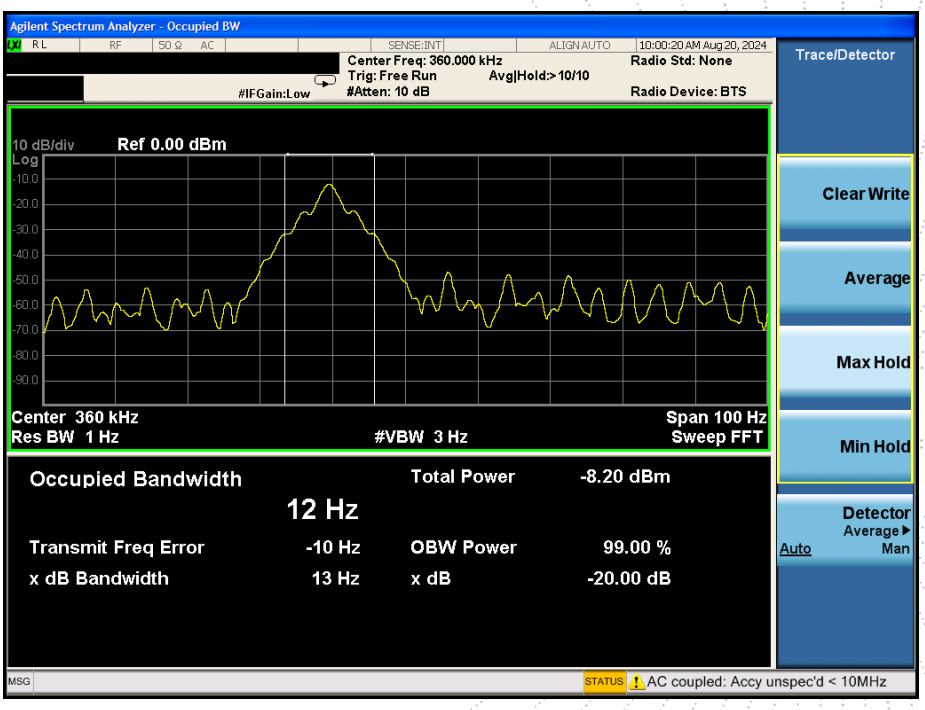


8.3 Test Result

Frequency (kHz)	20dB bandwidth (kHz)	Result
127.8	0.002	Pass



Frequency (kHz)	20dB bandwidth (kHz)	Result
360	0.013	Pass



9. Antenna Requirements

9.1 Limit

For intentional device, according to FCC 47 CFR Section 15.203, An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

9.2 Test Result

The antenna used for this product is loop coil antenna.

10. EUT Photographs

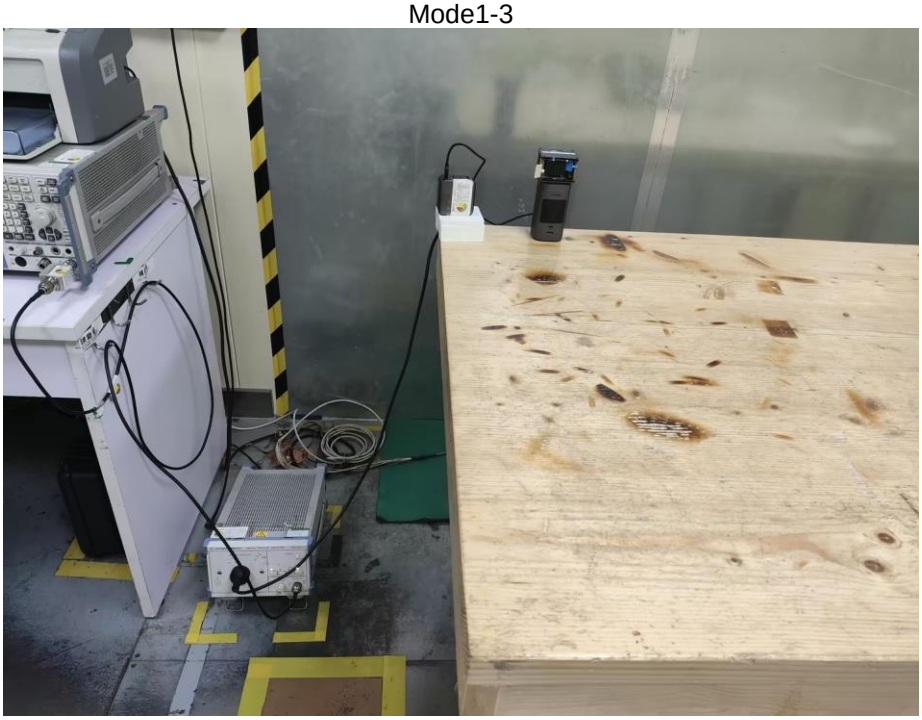
EUT Photo

NOTE: Appendix-Photographs Of EUT Constructional Details

11. EUT Test Setup Photographs

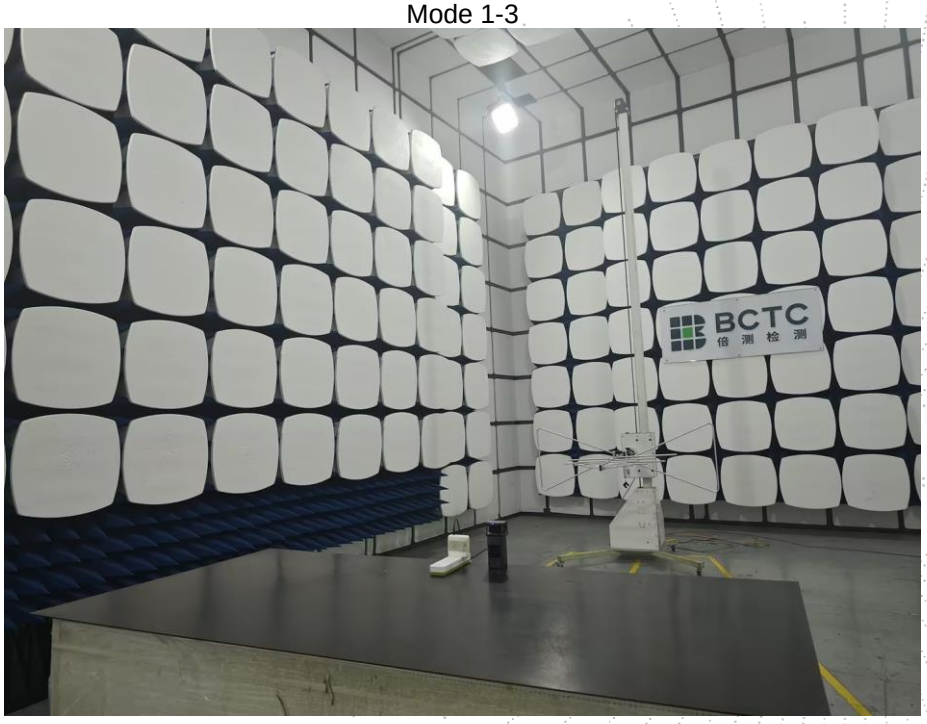
Conducted Emissions Photo

Mode1-3



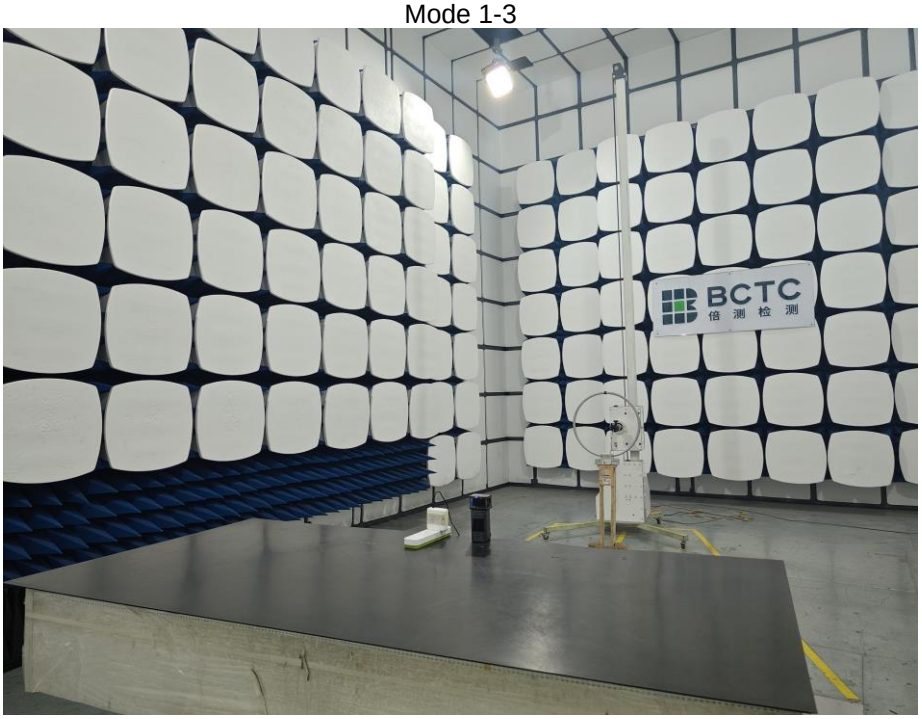
Radiated Measurement Photos
30MHz-1GHz

Mode 1-3

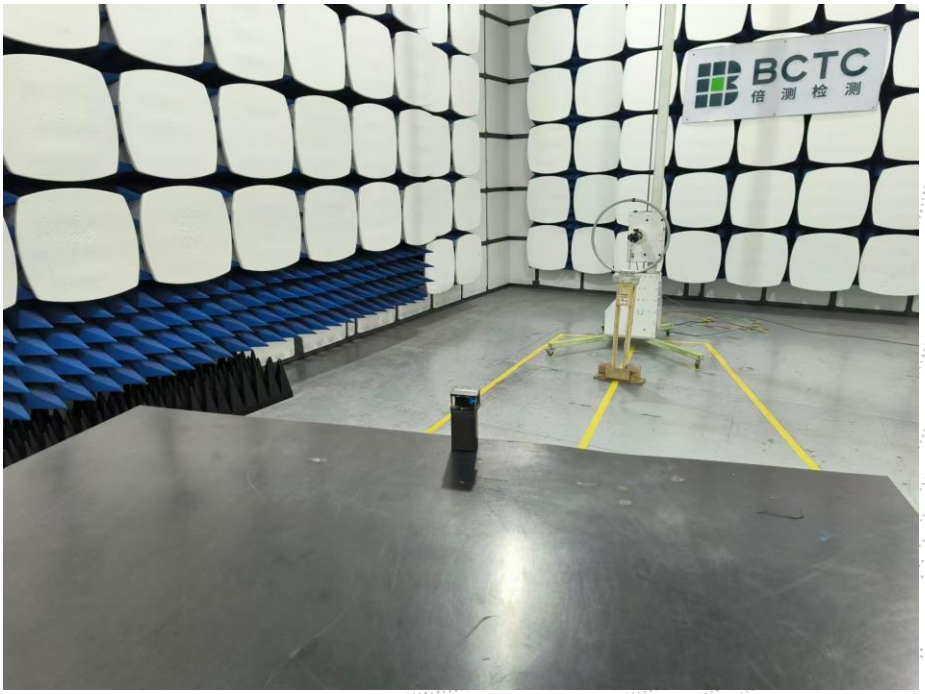


9kHz-30MHz

Mode 1-3



Mode 4-6



STATEMENT

1. The equipment lists are traceable to the national reference standards.

2. The test report can not be partially copied unless prior written approval is issued from our lab.

3. The test report is invalid without the "special seal for inspection and testing".

4. The test report is invalid without the signature of the approver.

5. The test process and test result is only related to the Unit Under Test.

6. Sample information is provided by the client and the laboratory is not responsible for its authenticity.

7. The quality system of our laboratory is in accordance with ISO/IEC17025.

8. If there is any objection to this test report, the client should inform issuing laboratory within 15 days from the date of receiving test report.

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Complaint/Advice E-mail: advice@bctc-lab.com.cn

※※※※※ END ※※※※※