



TEST REPORT

Report No.: BCTC2408555444-1E

Applicant: Ugreen Group Limited

Product Name: Magnetic Wireless Power Bank

Test Model: PB763

Tested Date: 2024-08-22 to 2024-11-19

Issued Date: 2024-11-20

Shenzhen BCTC Testing Co., Ltd.



No.: BCTC/RF-EMC-005 Page 1/of 42 / / / / Edition: B.2



FCC ID:2AQI5-PB763

Product Name: Magnetic Wireless Power Bank

Trademark: UGREEN

Model/Type Reference: PB763

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: 2024-08-22

Sample Tested Date: 2024-08-22 to 2024-11-19

Issue Date: 2024-11-20

Report No.: BCTC2408555444-1E

Test Standards: FCC Part15.209 ANSI C63.10-2013

Test Results: PASS

Tested by:

kelsey Ton

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.

No.: BCTC/RF-EMC-005

Page 2 of 42

Edition: B.2



Table Of Content

Test	t Report Declaration	Page
1.	Version	∠
2.	Test Summary	5
3.	Measurement Uncertainty	6
4.	Product Information And Test Setup	7
4.1	Product Information	7
4.2	Support Equipment	7
4.3	Test Setup Configuration	8
4.4	Test Mode	
5.	Test Facility And Test Instrument Used	10
5.1	Test Facility	
5.2	Test Instrument Used	
6.	Conducted Emissions	
6.1	Block Diagram Of Test Setup	
6.2	Limit	
6.3	Test procedure	
6.4	EUT operating Conditions	
6.5	Test Result	
7.	Radiated Emissions	
7.1	Block Diagram Of Test Setup	
7.2	Limit	
7.3	Test procedure	
7.4	Test Result	
8.	Bandwidth Test	Č.
8.1	Test Procedure	
8.2	Test Setup	37
8.3	Test Result	
9.	Antenna Requirements	
9.1	Limit	
9.2	Test Result	
10.	EUT Photographs	40
11.	EUT Test Setup Photographs	41

(Note: N/A Means Not Applicable)





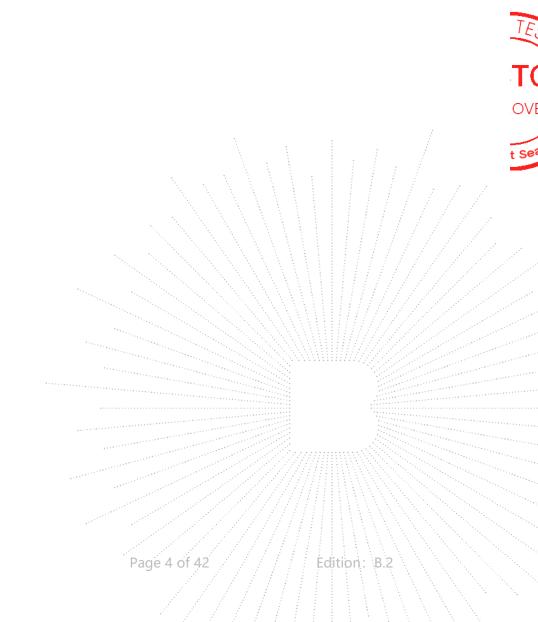


Edition: B.2



1. Version

Report No.	Issue Date	Description	Approved
BCTC2408555444-1E	2024-11-20	Original	Valid



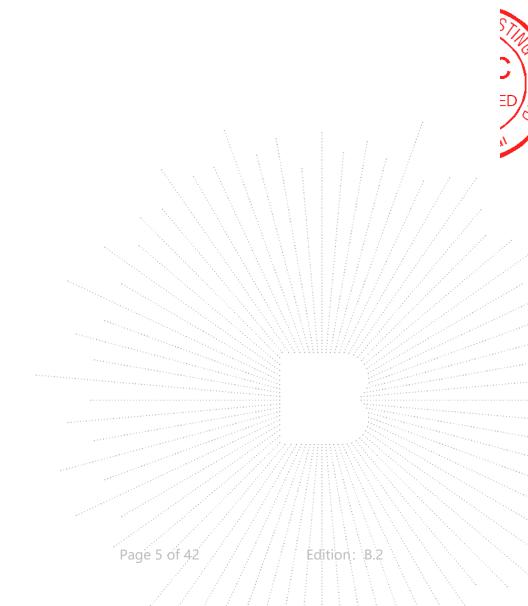
No.: BCTC/RF-EMC-005



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



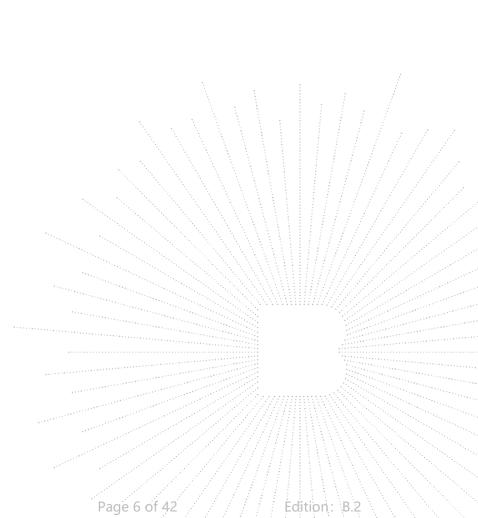
No.: BCTC/RF-EMC-005



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°C



No.: BCTC/RF-EMC-005 Pag



4. Product Information And Test Setup

4.1 Product Information

Model/Type Reference: PB763

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. 45211 is white, 55135 is gray, and the

test code is 45211.

Hardware Version: A1
Software Version: V1

Operation Frequency: 5W+7.5W: 112kHz-148.5kHz

15W: 360kHz

Modulation: FSK

Antenna installation: loop coil antenna

Ratings: USB-C (IN) Input:5V==3A/9V==-2.22A

USB-C (OUT) Output:5V---2.4A/5V---3A/9V---2.22A/12V---1.67A

Wireless Charging Output Power:15W Max Cell Capacity: 10000mAh (2X5000mAh)

Polymer Lithium-ion Battery Rated Energy: 36Wh (3.6V 10000mAh)

Rated Capacity: 6000mAh (TYP 5V 2.4A)

Remark:

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

45211	45211P	45211X	45211A	45211B	45211C	45211U	45211JP	45211ZD
55135	55135P	55135X	55135A	55135B	55135C	55135U	55135JP	55135ZD

PCB boards come from two different factories, The components' parameters, specifications and layout are the same. All were tested for radiation.

PCB 1: HUIZHOU TAISHENG ELECTRONICS CO LTD PCB 2: JU XIN ELECTRIC TECH (MEIZHOU) CO LTD

4.2 Support Equipment

No.	Device Type	Brand	Model Series No.	Note
E-1	Magnetic Wireless Power Bank	UGREEN	PB763 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.

No.: BCTC/RF-EMC-005 Page 7 of 42 / / / Edition: B.2

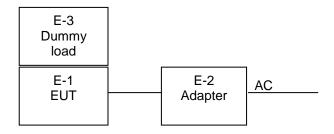


4.3 Test Setup Configuration

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

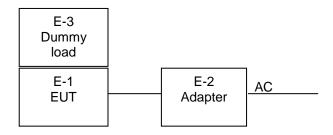
Conducted Emission:

Test Mode 1, 2

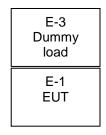


Radiated Spurious Emission:

Test Mode 1, 2



Test Mode 3,4,5



No.: BCTC/RF-EMC-005

Page 8 of 42

Edition: B.2

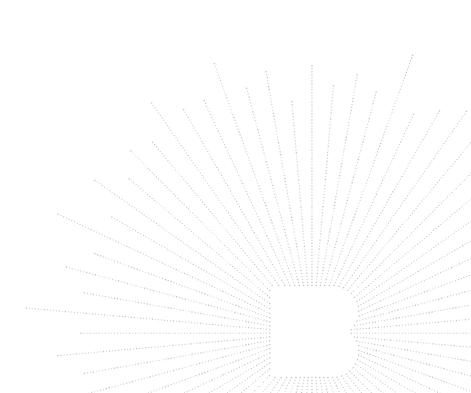


4.4 Test Mode

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.

	Mode 1	USB-C IN :(5V===3A)+5W
AC Mode	Mode 2	USB-C IN :(9V===2.22A)+7.5W
DC Mode	Mode 3	Wireless charge 5W
	Mode 4	Wireless charge 7.5W
	Mode 5	Wireless charge 15W

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



No.: BCTC/RF-EMC-005 Page 9 of 42 / / / Edition:

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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 Cond	lucted Test		. / /
Equipment	Manufacturer	Model#	Serial#	Last Cal.	Next Cal.
Power Meter	Keysight	E4419	The state of the s	May 16, 2024	May 15, 2025
Power Sensor (AV)	Keysight	E9300A	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	May 16, 2024	May 15, 2025
Signal Analyzer 20kHz-26.5G Hz	Keysight	N9020A	MY49100060	May 16, 2024	May 15, 2025
Spectrum Analyzer 9kHz-40GHz	R&S	FSP 40		May 16, 2024	May 15, 2025

No.: BCTC/RF-EMC-005 Page 10 of 42 / / / / Edition: B.2



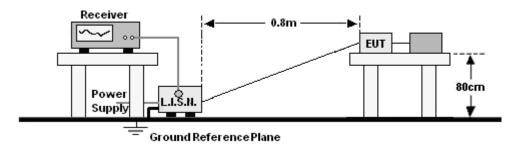
	Radiated Emissions Test (966 Chamber01)					
Equipment	Manufacturer	Model#	Serial#	Last Cal.	Next Cal.	
966 chamber	ChengYu	966 Room	966	May 16, 2024	May 15, 2025	
Receiver	R&S	ESR3	102075	May 16, 2024	May 15, 2025	
Receiver	R&S	ESRP	101154	May 16, 2024	May 15, 2025	
Amplifier	Schwarzbeck	BBV9744	9744-0037	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

Fraguency (MUz)	Limit (dBuV)
Frequency (MHz)	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.

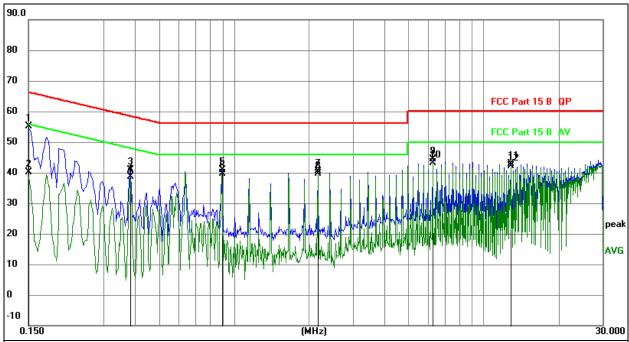
No.: BCTC/RF-EMC-005 Page 12 of 42 / / / Edition: B.2



6.5 Test Result

PCB 1

Temperature:	26 ℃	Relative Humidity:	54%RH
Pressure:	101KPa	Phase :	L
Test Mode:	Mode 2(Worst)	Test Voltage:	AC 120V/60Hz



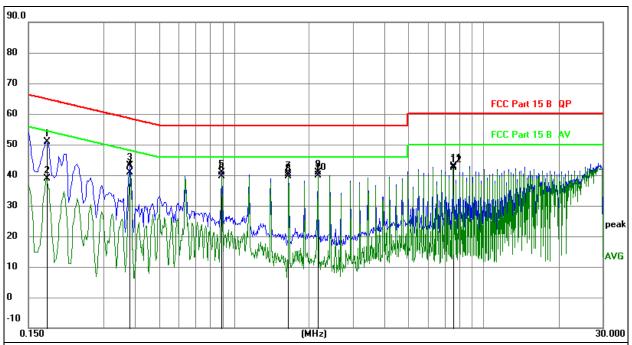
- All readings are Quasi-Peak and Average values.
 Factor = Insertion Loss + Cable Loss.
 Measurement = Reading Level + Correct Factor

- 4. Over = Measurement Limit

No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
	MHz		dB	dBu∨	dBu∀	dB	Detector
1	0.1500	35.12	20.07	55.19	66.00	-10.81	QP
2	0.1500	19.96	20.07	40.03	56.00	-15.97	AVG
3	0.3840	20.69	20.08	40.77	58.19	-17.42	QP
4	0.3840	18.48	20.08	38.56	48.19	-9.63	AVG
5	0.8969	20.77	20.09	40.86	56.00	-15.14	QP
6 *	0.8969	19.49	20.09	39.58	46.00	-6.42	AVG
7	2.1749	20.28	20.10	40.38	56.00	-15.62	QP
8	2.1749	19.42	20.10	39.52	46.00	-6.48	AVG
9	6.2655	24.24	20.16	44.40	60.00	-15.60	QP
10	6.2655	23.09	20.16	43.25	50.00	-6.75	AVG
11	12.9120	22.58	20.25	42.83	60.00	-17.17	QP
12	12.9120	21.94	20.25	42.19	50.00	-7.81	AVG



Temperature:	26 ℃	Relative Humidity:	54%RH
Pressure:	101KPa	Phase :	N
Test Mode:	Mode 2(Worst)	Test Voltage:	AC 120V/60Hz



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

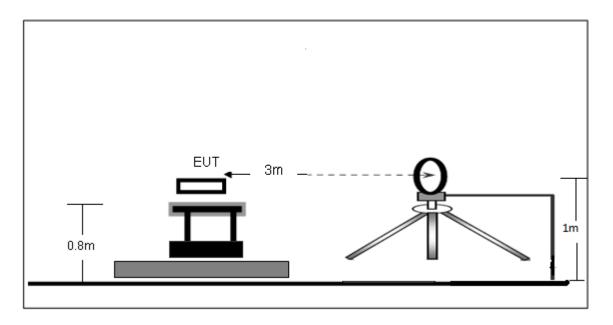
No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
	MHz		dB	dBu∨	dBu∨	dB	Detector
1	0.1768	30.69	20.07	50.76	64.63	-13.87	QP
2	0.1768	18.80	20.07	38.87	54.63	-15.76	AVG
3	0.3831	22.96	20.08	43.04	58.21	-15.17	QP
4	0.3831	20.87	20.08	40.95	48.21	-7.26	AVG
5	0.8944	20.71	20.09	40.80	56.00	-15.20	QP
6	0.8944	19.64	20.09	39.73	46.00	-6.27	AVG
7	1.6537	20.16	20.10	40.26	56.00	-15.74	QP
8	1.6537	19.58	20.10	39.68	46.00	-6.32	AVG
9	2.1667	20.69	20.10	40.79	56.00	-15.21	QP
10 *	2.1667	19.71	20.10	39.81	46.00	-6.19	AVG
11	7.5258	22.69	20.16	42.85	60.00	-17.15	QP
12	7.5258	22.13	20.16	42.29	50.00	-7.71	AVG



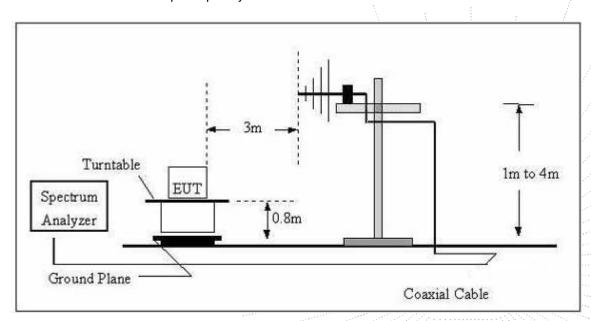
7. Radiated Emissions

7.1 Block Diagram Of Test Setup

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



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



No.: BCTC/RF-EMC-005 Page 15 of 42 / / / | Edition | B.2

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7.2 Limit

FCC §15.209; §15.205.

Test Standard	FCC Part15 C Section 15.209 and 15.205								
	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				
Test Limit	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				
	A1 1000MII-	500	54.0	Average	3				
	Above 1000MHz		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.

No.: BCTC/RF-EMC-005 Page 16 of 42 / / / Edition: B.2

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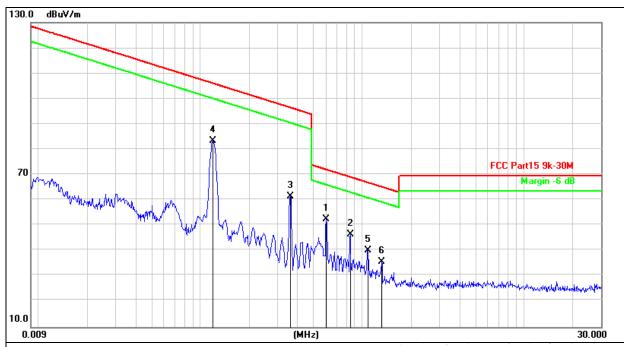




7.4 Test Result

9kHz-30MHz PCB 1

Temperature:	26 ℃	Relative Humidity:	54%RH
Pressure:	101 kPa	Test Voltage:	AC120V/60Hz
Test Mode:	Mode 1 (112kHz-148.5kHz)	Polarization:	Coaxial(Worst)



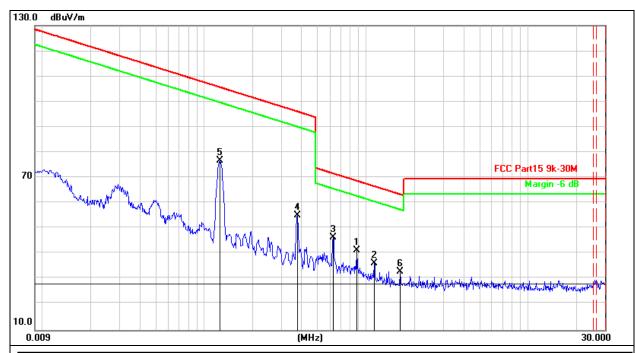
No. Mk	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
	MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector
1 *	0.6013	59.84	-7.46	52.38	72.03	-19.65	peak
2	0.8454	53.84	-7.36	46.48	69.08	-22.60	peak
3	0.3607	69.16	-7.67	61.49	96.46	-34.97	peak
4	0.1197	90.81	-7.53	83.28	106.0	-22.76	peak
5	1.0871	47.59	-7.36	40.23	66.90	-26.67	peak
6	1.3207	43.01	-7.35	35.66	65.21	-29.55	peak

No.: BCTC/RF-EMC-005 Page 17 of 42 / / / Edition B.2





Temperature:	26℃	Relative Humidity:	54%RH
Pressure:	101 kPa	Test Voltage:	AC120V/60Hz
Test Mode:	Mode 1 (112kHz-148.5kHz)	Polarization:	Coplanar(Worst)

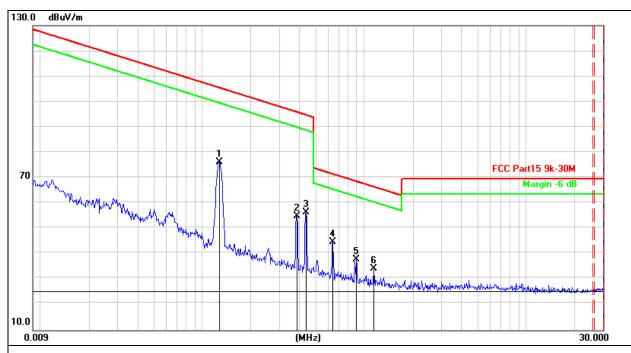


No. I	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	,
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector
1		0.8804	48.60	-7.36	41.24	68.72	-27.48	peak
2		1.1229	43.64	-7.36	36.28	66.62	-30.34	peak
3	*	0.6262	53.92	-7.44	46.48	71.68	-25.20	peak
4		0.3756	62.75	-7.66	55.09	96.11	-41.02	peak
5		0.1257	84.17	-7.54	76.63	105.6	-28.99	peak
6		1.6308	40.23	-7.33	32.90	63.39	-30.49	peak

No.: BCTC/RF-EMC-005 Page 18 of 42 / / / Edition B.2



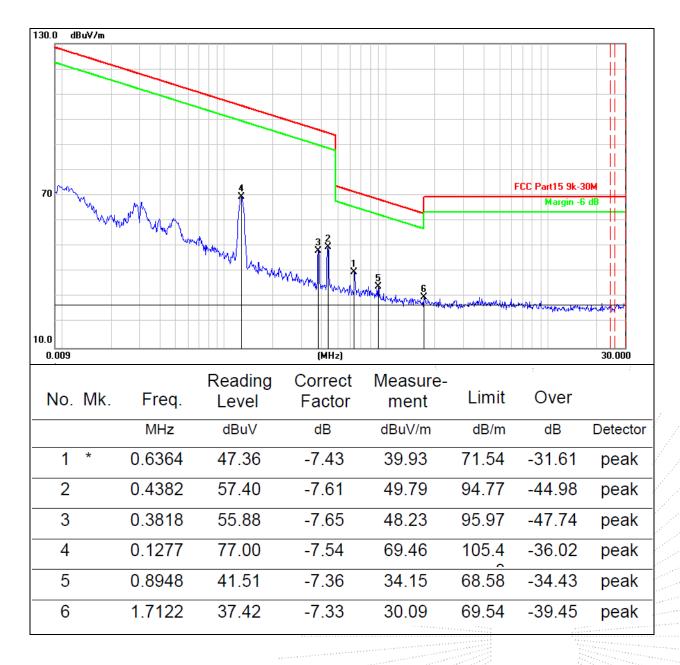
Temperature:	26 ℃	Relative Humidity:	54%RH
Pressure:	101 kPa	Test Voltage:	DC 3.6V
Test Mode:	Mode 3 (112kHz-148.5kHz)	Polarization:	Coaxial(Worst)



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	Å
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector
1		0.1277	83.78	-7.54	76.24	105.4	-29.24	peak
2		0.3849	62.56	-7.65	54.91	95.90	-40.99	peak
3		0.4382	64.06	-7.61	56.45	94.77	-38.32	peak
4	*	0.6416	52.12	-7.42	44.70	71.47	-26.77	peak
5		0.8948	45.25	-7.36	37.89	68.58	-30.69	peak
6		1.1506	41.40	-7.35	34.05	66.41	-32.36	peak



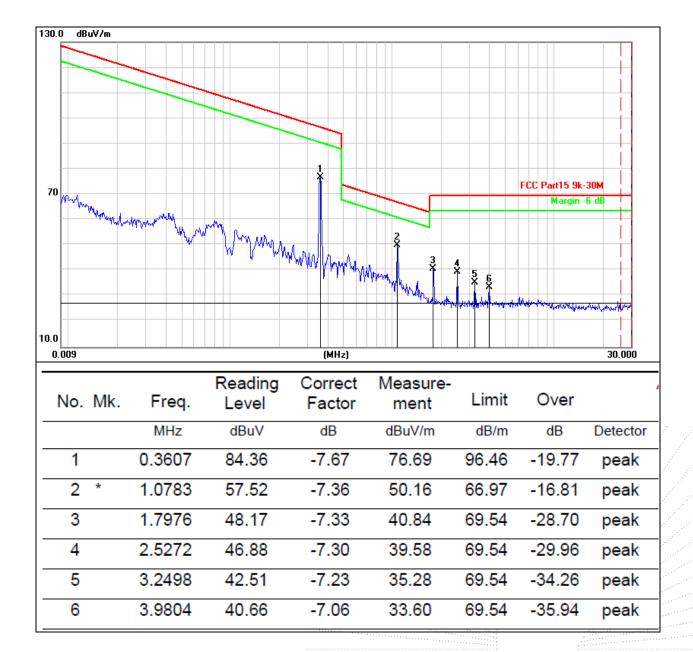
Temperature:	26℃	Relative Humidity:	54%RH
Pressure:	101 kPa	Test Voltage:	DC 3.6V
Test Mode:	Mode 3 (112kHz-148.5kHz)	Polarization:	Coplanar(Worst)





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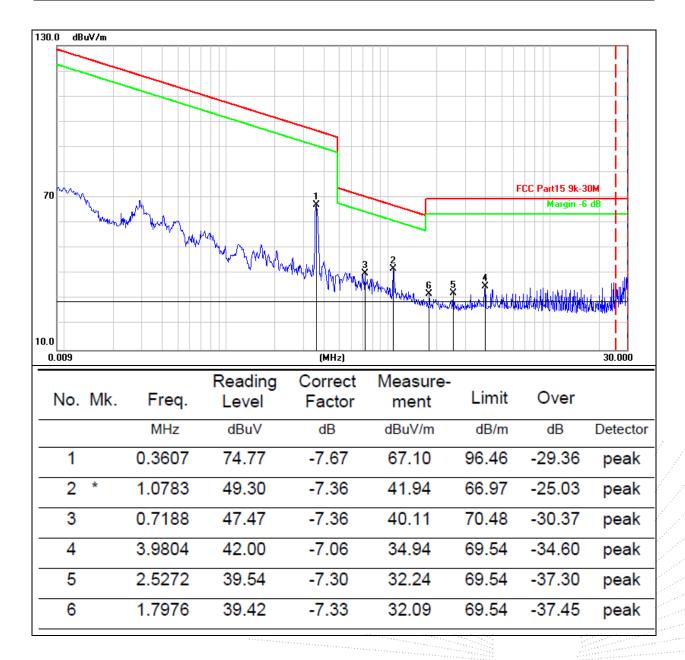
Temperature:	26℃	Relative Humidity:	54%RH
Pressure:	101 kPa	Test Voltage:	DC 3.6V
Test Mode:	Mode 5(360kHz)	Polarization:	Coaxial(Worst)



No.: BCTC/RF-EMC-005 Page 21 of 42 / / Edition B.2



Temperature:	26℃	Relative Humidity:	54%RH
Pressure:	101 kPa	Test Voltage:	DC 3.6V
Test Mode:	Mode 5(360kHz)	Polarization:	Coplanar(Worst)

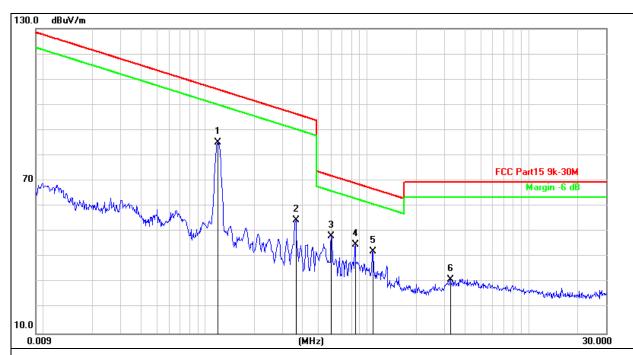


No.: BCTC/RF-EMC-005 Page 22 of 42 / / / Edition B.2



PCB 2

Temperature:	26℃	Relative Humidity:	54%RH
Pressure:	101 kPa	Test Voltage:	AC120V/60Hz
LLest Mode.	Mode 1 (112kHz-148.5kHz)	Polarization:	Coaxial(Worst)



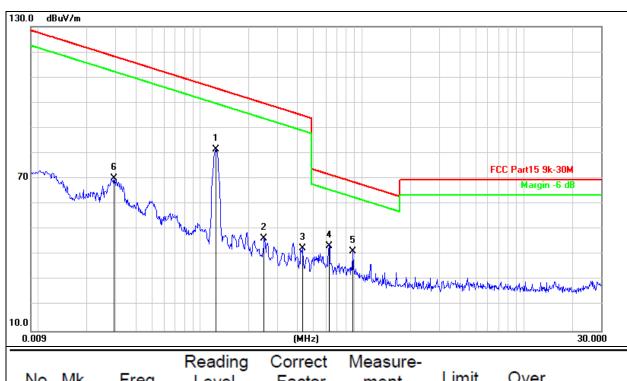
No. I	Μk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector
1 '	k	0.1197	92.81	-7.53	85.28	106.0	-20.76	peak
2		0.3636	62.32	-7.67	54.65	96.39	-41.74	peak
3		0.6013	55.84	-7.46	48.38	72.03	-23.65	peak
4		0.8454	52.34	-7.36	44.98	69.08	-24.10	peak
5		1.0871	49.59	-7.36	42.23	66.90	-24.67	peak
6		3.2762	38.50	-7.22	31.28	69.54	-38.26	peak

No.: BCTC/RF-EMC-005 Page 23 of 42 / / Edition B.2





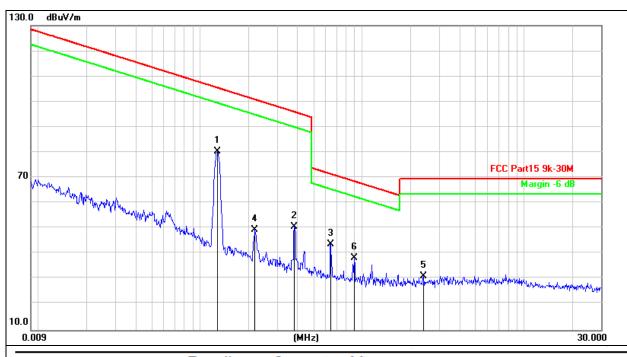
Temperature:	26℃	Relative Humidity:	54%RH
Pressure:	101 kPa	Test Voltage:	AC120V/60Hz
Test Mode:	Mode 1 (112kHz-148.5kHz)	Polarization:	Coplanar(Worst)



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector
1	*	0.1257	89.17	-7.54	81.63	105.6	-23.99	peak
2		0.2484	54.12	-7.75	46.37	99.70	-53.33	peak
3		0.4277	50.04	-7.62	42.42	94.98	-52.56	peak
4		0.6262	50.92	-7.44	43.48	71.68	-28.20	peak
5		0.8804	48.60	-7.36	41.24	68.72	-27.48	peak
6		0.0294	77.51	-7.43	70.08	118.2	-48.16	peak



Temperature:	26℃	Relative Humidity:	54%RH
Pressure:	101 kPa	Test Voltage:	DC 3.6V
Test Mode:	Mode 4 (112kHz-148.5kHz)	Polarization:	Coaxial(Worst)

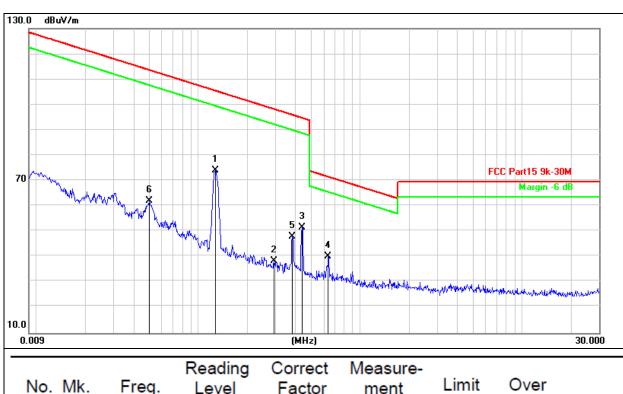


No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	,
	MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector
1 *	0.1277	87.77	-7.54	80.23	105.4	-25.25	peak
2	0.3818	58.44	-7.65	50.79	95.97	-45.18	peak
3	0.6416	51.21	-7.42	43.79	71.47	-27.68	peak
4	0.2181	57.21	-7.77	49.44	100.8	-51.39	peak
5	2.4072	38.46	-7.30	31.16	69.54	-38.38	peak
6	0.8948	45.65	-7.36	38.29	68.58	-30.29	peak

No.: BCTC/RF-EMC-005 Page 25 of 42 / / / Edition B.2



Temperature:	26 ℃	Relative Humidity:	54%RH
Pressure:	101 kPa	Test Voltage:	DC 3.6V
Test Mode:	Mode 4 (112kHz-148.5kHz)	Polarization:	Coplanar(Worst)

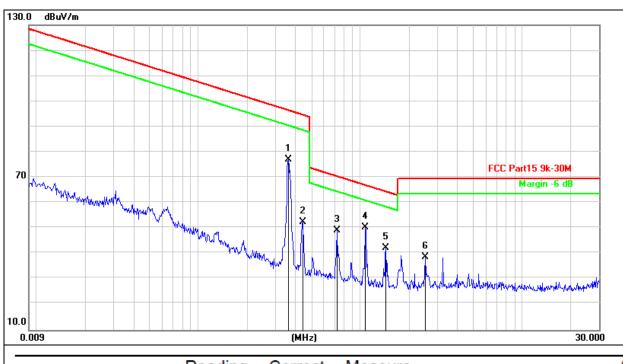


No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
	MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector
1	0.1277	81.65	-7.54	74.11	105.4	-31.37	peak
2	0.2945	46.11	-7.71	38.40	98.22	-59.82	peak
3	0.4382	59.08	-7.61	51.47	94.77	-43.30	peak
4 *	0.6364	47.63	-7.43	40.20	71.54	-31.34	peak
5	0.3818	55.56	-7.65	47.91	95.97	-48.06	peak
6	0.0498	69.46	-7.29	62.17	113.6	-51.49	peak

No.: BCTC/RF-EMC-005 Page 26 of 42 / / / Edition B.2



Temperature:	26℃	Relative Humidity:	54%RH
Pressure:	101 kPa	Test Voltage:	DC 3.6V
Test Mode:	Mode 5(360kHz)	Polarization:	Coaxial(Worst)



No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	A I
	MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector
1	0.3607	84.64	-7.67	76.97	96.46	-19.49	peak
2	0.4418	59.97	-7.61	52.36	94.70	-42.34	peak
3	0.7188	56.43	-7.36	49.07	70.48	-21.41	peak
4 *	1.0783	57.81	-7.36	50.45	66.97	-16.52	peak
5	1.4440	49.47	-7.34	42.13	64.44	-22.31	peak
6	2.5272	45.97	-7.30	38.67	69.54	-30.87	peak

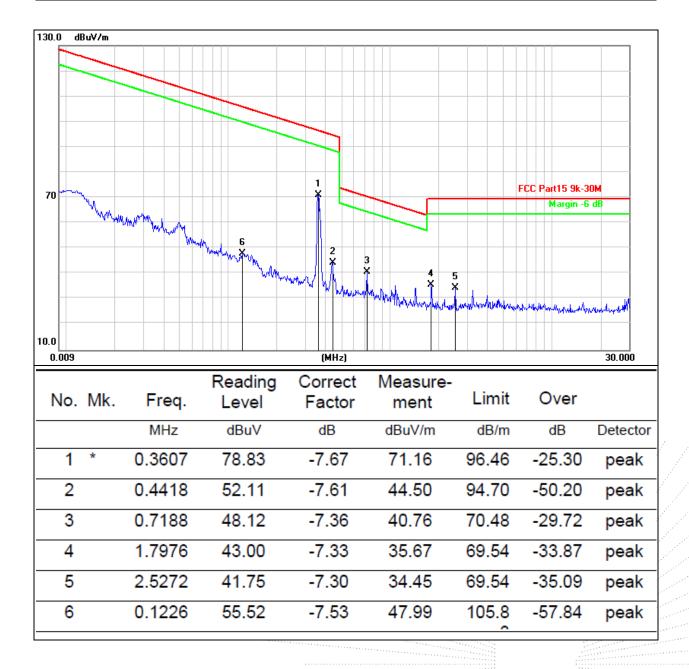
No.: BCTC/RF-EMC-005 Page 27 of 42 / / / Edition B.2

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Temperature:	26℃	Relative Humidity:	54%RH
Pressure:	101 kPa	Test Voltage:	DC 3.6V
Test Mode:	Mode 5(360kHz)	Polarization:	Coplanar(Worst)



No.: BCTC/RF-EMC-005 Page 28 of 42 / / / Edition B.2



Between 30MHz - 1GHz PCB 1

Temperature:	26 ℃	Relative Humidity:	54%RH
Pressure:	101KPa	Phase :	Horizontal
Test Mode:	Mode 2(Worst)	Test Voltage:	AC 120V/60Hz

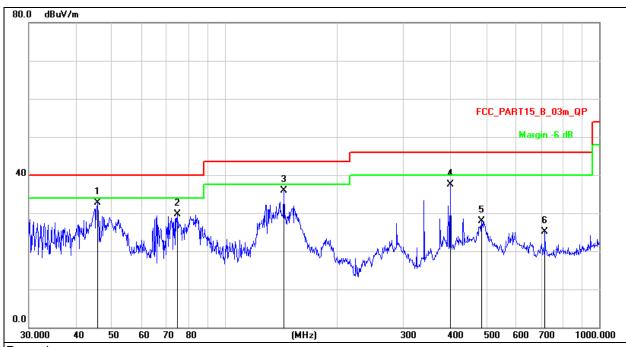


- 1. Factor = Antenna Factor + Cable Loss Pre-amplifier.
- Measurement = Reading Level + Correct Factor
 Over = Measurement Limit

J. OVE	- IVIC	asurement - L	111111				1 1 1	
		_	Reading	Correct	Measure-	1.1.11	•	
No.	Mk.	Freq.	Level	Factor	ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector
1	*	47.1599	45.21	-14.13	31.08	40.00	-8.92	QP
2		79.8003	47.98	-19.72	28.26	40.00	-11.74	QP
3	•	143.8295	52.30	-19.00	33.30	43.50	-10.20	QP
4	2	287.9904	45.50	-13.49	32.01	46.00	-13.99	QP
5	ļ	588.9051	32.83	-7.77	25.06	46.00	-20.94	QP
6	Ç	903.3094	27.30	-3.11	24.19	46.00	-21.81	QP



Temperature:	26 ℃	Relative Humidity:	54%RH
Pressure:	101KPa	Phase :	Vertical
Test Mode:	Mode 2(Worst)	Test Voltage:	AC 120V/60Hz



Remark:

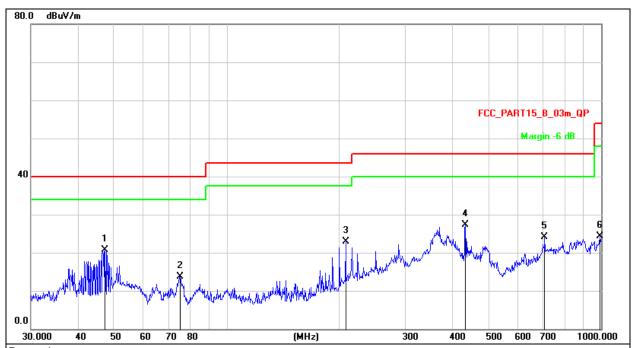
- Factor = Antenna Factor + Cable Loss Pre-amplifier.
 Measurement = Reading Level + Correct Factor
- 3. Over = Measurement Limit

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No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector
1	*	45.6948	46.96	-14.25	32.71	40.00	-7.29	QP
2		74.9191	48.47	-18.86	29.61	40.00	-10.39	QP
3		143.8295	54.98	-19.00	35.98	43.50	-7.52	QP
4		400.4319	48.34	-10.83	37.51	46.00	-8.49	QP
5		485.6093	36.82	-8.97	27.85	46.00	-18.15	QP
6		716.6820	30.66	-5.47	25.19	46.00	-20.81	QP

No.: BCTC/RF-EMC-005 Edition: B.2



Temperature:	26 ℃	Relative Humidity:	54%RH
Pressure:	101KPa	Phase :	Horizontal
Test Mode:	Mode 5(Worst)	Test Voltage:	DC 3.6V

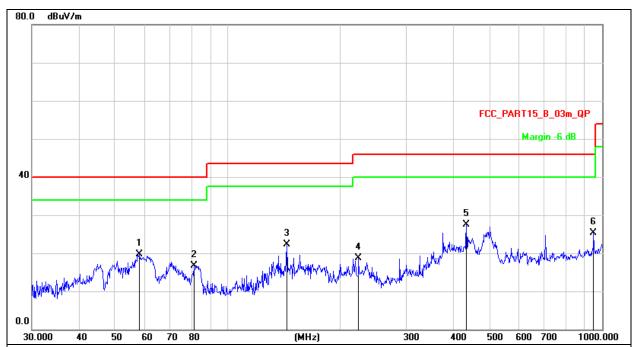


- 1. Factor = Antenna Factor + Cable Loss Pre-amplifier.
- Measurement = Reading Level + Correct Factor
 Over = Measurement Limit

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBu∨	dB	dBu∀/m	dB/m	dB	Detector
1		47.3253	34.78	-14.12	20.66	40.00	-19.34	QP
2		75.1822	32.66	-18.91	13.75	40.00	-26.25	QP
3	2	207.8500	38.50	-15.50	23.00	43.50	-20.50	QP
4	* 4	34.0650	37.41	-10.17	27.24	46.00	-18.76	QP
5	7	06.6998	29.68	-5.61	24.07	46.00	-21.93	QP
6	9	93.0113	26.66	-2.44	24.22	54.00	-29.78	QP



Temperature:	26 ℃	Relative Humidity:	54%RH
Pressure:	101KPa	Phase :	Vertical
Test Mode:	Mode 5(Worst)	Test Voltage:	DC 3.6V



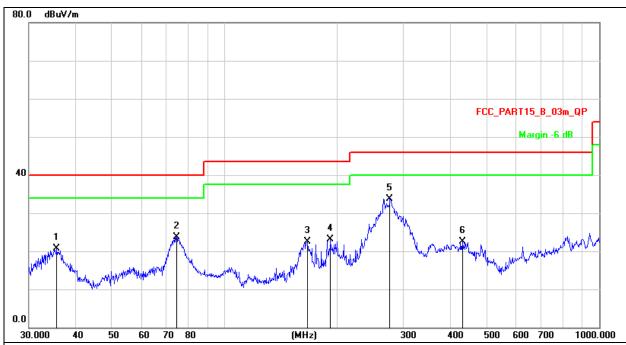
- 1. Factor = Antenna Factor + Cable Loss Pre-amplifier.
- Measurement = Reading Level + Correct Factor
 Over = Measurement Limit

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBu∨	dB	dBu∀/m	dB/m	dB	Detecto
1		58.2030	34.73	-15.01	19.72	40.00	-20.28	QP
2		81.2117	36.16	-19.47	16.69	40.00	-23.31	QP
3		143.8295	41.33	-19.00	22.33	43.50	-21.17	QP
4	2	223.7334	33.81	-15.04	18.77	46.00	-27.23	QP
5	* 4	434.0651	37.68	-10.17	27.51	46.00	-18.49	QP
6	(948.7610	28.20	-2.94	25.26	46.00	-20.74	QP



PCB 2

Temperature:	26 ℃	Relative Humidity:	54%RH
Pressure:	101KPa	Phase :	Horizontal
Test Mode:	Mode 2(Worst)	Test Voltage:	AC 120V/60Hz

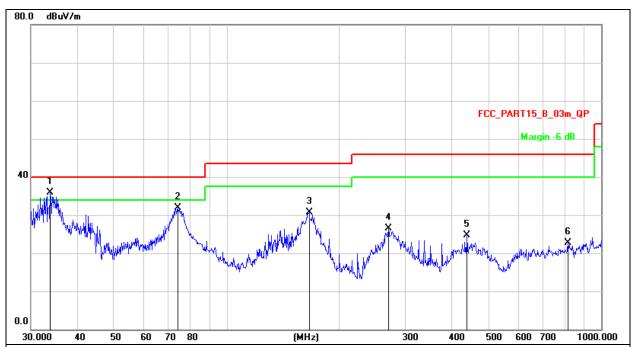


- Factor = Antenna Factor + Cable Loss Pre-amplifier.
 Measurement = Reading Level + Correct Factor
- 3. Over = Measurement Limit

0. 0.0.							1 1	
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBu∀	dB	dBu∀/m	dB/m	dB	Detecto
1		35.6240	36.18	-15.56	20.62	40.00	-19.38	QP
2		74.3955	42.45	-18.77	23.68	40.00	-16.32	QP
3		166.6514	40.66	-18.19	22.47	43.50	-21.03	QP
4		191.7450	39.38	-16.33	23.05	43.50	-20.45	QP
5	*	276.1235	47.50	-13.74	33.76	46.00	-12.24	QP
6	ı	432.5457	32.74	-10.20	22.54	46.00	-23.46	QP



Temperature:	26 ℃	Relative Humidity:	54%RH
Pressure:	101KPa	Phase :	Vertical
Test Mode:	Mode 2(Worst)	Test Voltage:	AC 120V/60Hz

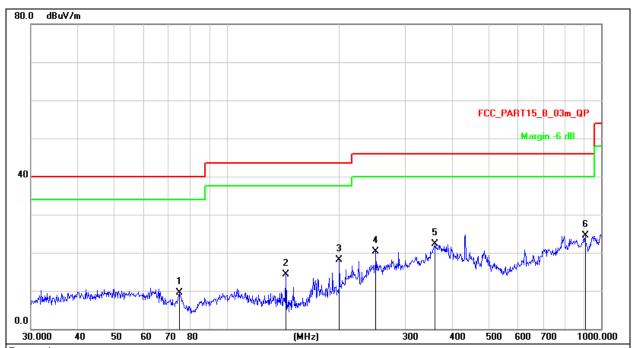


- 1. Factor = Antenna Factor + Cable Loss Pre-amplifier.
- Measurement = Reading Level + Correct Factor
 Over = Measurement Limit

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBu∨	dB	dBu∀/m	dB/m	dB	Detecto
1	*	33.7986	51.77	-15.92	35.85	40.00	-4.15	QP
2		74.1351	50.64	-18.72	31.92	40.00	-8.08	QP
3	,	166.0680	48.87	-18.24	30.63	43.50	-12.87	QP
4	2	270.3748	40.37	-13.86	26.51	46.00	-19.49	QP
5	4	138.6554	34.72	-10.08	24.64	46.00	-21.36	QP
6	8	315.9678	26.90	-4.27	22.63	46.00	-23.37	QP



Temperature:	26 ℃	Relative Humidity:	54%RH
Pressure:	101KPa	Phase :	Horizontal
Test Mode:	Mode 5(Worst)	Test Voltage:	DC 3.6V

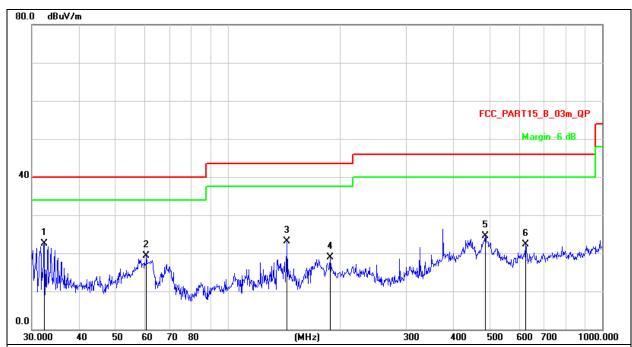


- 1. Factor = Antenna Factor + Cable Loss Pre-amplifier.
- Measurement = Reading Level + Correct Factor
 Over = Measurement Limit

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBu∀	dB	dBu∀/m	dB/m	dB	Detector
1		74.6569	28.22	-18.81	9.41	40.00	-30.59	QP
2		143.8295	33.40	-19.00	14.40	43.50	-29.10	QP
3		199.9856	33.74	-15.72	18.02	43.50	-25.48	QP
4		250.3012	34.50	-14.28	20.22	46.00	-25.78	QP
5		360.4476	33.71	-11.35	22.36	46.00	-23.64	QP
6	*	906.4824	27.52	-3.10	24.42	46.00	-21.58	QP



Temperature:	26 ℃	Relative Humidity:	54%RH
Pressure:	101KPa	Phase :	Vertical
Test Mode:	Mode 5(Worst)	Test Voltage:	DC 3.6V



Remark:

- 1. Factor = Antenna Factor + Cable Loss Pre-amplifier.
- Measurement = Reading Level + Correct Factor
 Over = Measurement Limit

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBu∀	dB	dBu∀/m	dB/m	dB	Detecto
1	*	32.4059	38.67	-16.19	22.48	40.00	-17.52	QP
2		60.7044	34.84	-15.44	19.40	40.00	-20.60	QP
3		143.8295	42.01	-19.00	23.01	43.50	-20.49	QP
4		187.7530	35.44	-16.63	18.81	43.50	-24.69	QP
5		487.3151	33.36	-8.93	24.43	46.00	-21.57	QP
6		625.0780	28.97	-6.59	22.38	46.00	-23.62	QP

No.: BCTC/RF-EMC-005 Page 36 of 42



8. Bandwidth Test

8.1 Test Procedure

- 1. Set RBW = 1%~5% OBW.
- 2. Set the video bandwidth (VBW) \geq 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.

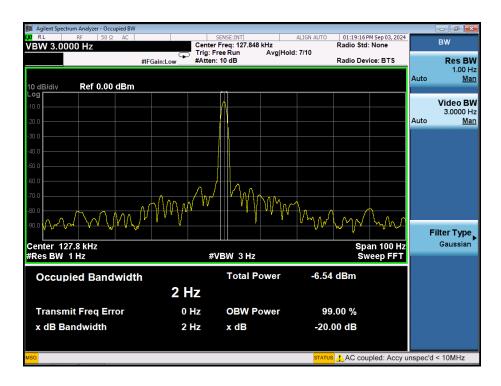
8.2 Test Setup



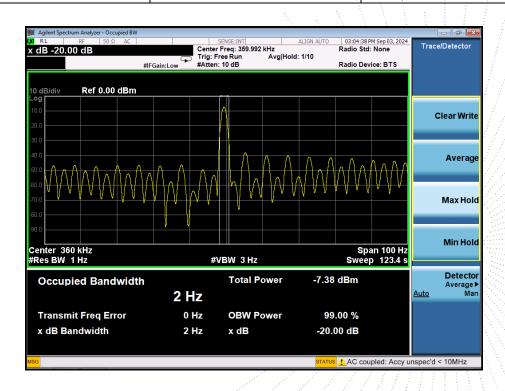
No.: BCTC/RF-EMC-005 Page 37 of 42 / / Edition B.2

8.3 Test Result

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



Frequency (kHz)	20dB bandwidth (kHz)	1	Result	/
360	0.002		Pass	





9. Antenna Requirements

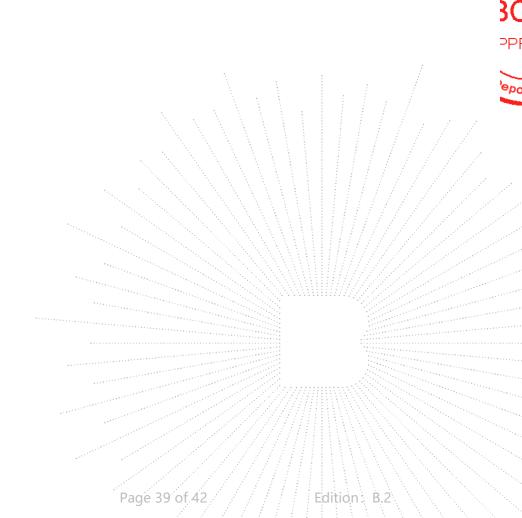
9.1 Limit

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

No.: BCTC/RF-EMC-005

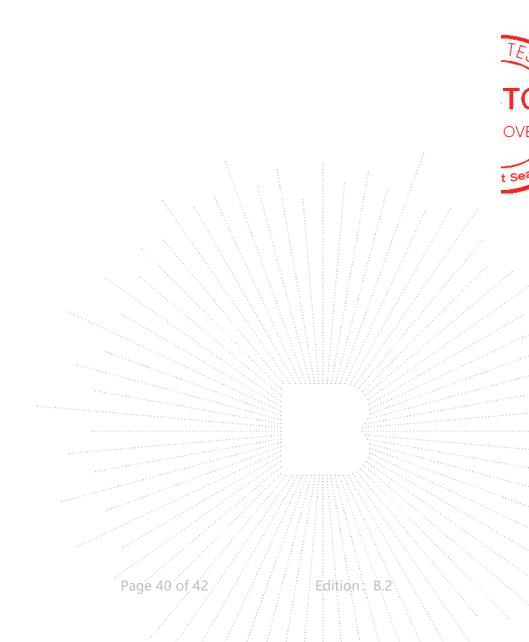
The antenna used for this product is loop coil antenna.





10. EUT Photographs

NOTE: Appendix-Photographs Of EUT Constructional Details

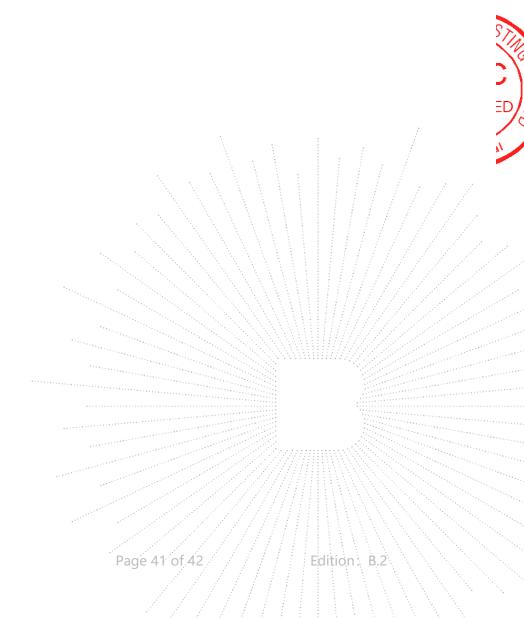


No.: BCTC/RF-EMC-005



11. EUT Test Setup Photographs

NOTE: Appendix-Test Photos



No.: BCTC/RF-EMC-005



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.

Address:

1-2/F., Building B, Pengzhou Industrial Park, No.158, Fuyuan 1st Road, Zhancheng, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, China

TEL: 400-788-9558

P.C.: 518103

FAX: 0755-33229357

Website: http://www.chnbctc.com

Consultation E-mail: bctc@bctc-lab.com.cn

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

**** END ****

6 GO.,LTA