

# **TEST REPORT**

Report No.: BCTC2305124200-1E

Applicant: Guangdong Xizhongxi Technology Co., Ltd.

Product Name: 3-in-1 Power Bank

Model/Type Ref.: ME08

Tested Date: 2023-05-16 to 2023-05-30

Issued Date: 2023-05-30

Shenzhen BCTC Testing Co., Ltd.



No.: BCTC/RF-EMC-005 Page 1 of 43 / / / Edition: B.0



## FCC ID: 2A5LA-ME08

Product Name: 3-in-1 Power Bank

Trademark: N/A

Model/Type Ref.: ME08

Prepared For: Guangdong Xizhongxi Technology Co., Ltd.

Address: Building 7, No. 1, Jizhou Middle Road, Daojiao Town, Dongguan City,

Guangdong Province, China

Manufacturer: Guangdong Xizhongxi Technology Co., Ltd.

Address: Building 7, No. 1, Jizhou Middle Road, Daojiao Town, Dongguan City,

Guangdong Province, 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: 2023-05-15

Sample tested Date: 2023-05-16 to 2023-05-30

Issue Date: 2023-05-30

Report No.: BCTC2305124200-1E

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

Test Results: PASS

Tested by:

Lei Chen

Lei Chen/Project Handler

Approved by:

Zero Zhou/Reviewer

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No.: BCTC/RF-EMC-005 Page 2 of 43 / / / Edition: B.0



#### **Table Of Content**

Test	Report Declaration	Page
1.	Version	4
2.	Test Summary	
3.	Measurement Uncertainty	6
4.	Product Information And Test Setup	7
4.1	Product Information	
4.2	Support Equipment	
4.3	Test Setup Configuration	
4.4	Test Mode	
5.	Test Facility And Test Instrument Used	11
5.1	Test Facility	
5.2	Test Instrument Used	11
6.	Conducted Emissions	13
6.1	Block Diagram Of Test Setup	13
6.2	Limit	13
6.3	Test Procedure	13
6.4	EUT Operating Conditions	13
6.5	Test Result	14
7.	Radiated Emissions	18
7.1	Block Diagram Of Test Setup	18
7.2	Limit	19
7.3	Test Procedure	19
7.4	Test Result	
8.	Bandwidth Test	
9.	Antenna Requirements	36
10.	EUT Photographs	37
11.	EUT Test Setup Photographs	38

(Note: N/A Means Not Applicable)





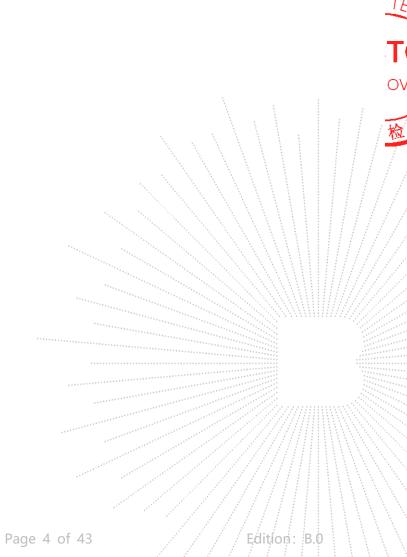






#### Version 1.

Report No.	Issue Date	Description	Approved
BCTC2305124200-1E	2023-05-30	Original	Valid



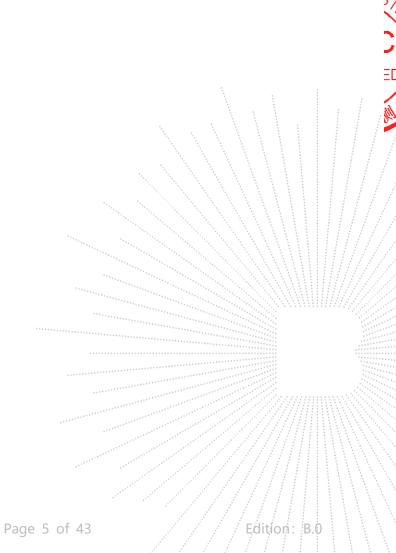
No.: BCTC/RF-EMC-005



#### **Test Summary** 2.

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(9kHz-30MHz)	U=3.7dB
2	3m chamber Radiated spurious emission(30MHz-1GHz)	U=4.3dB
3	3m chamber Radiated spurious emission(1GHz-18GHz)	U=4.5dB
4	3m chamber Radiated spurious emission(18GHz-40GHz)	U=3.34dB
5	Conducted Emission(150kHz-30MHz)	U=3.20dB
6	Conducted Adjacent channel power	U=1.38dB
7	Conducted output power uncertainty Above 1G	U=1.576dB
8	Conducted output power uncertainty below 1G	U=1.28dB
9	humidity uncertainty	U=5.3%
10	Temperature uncertainty	U=0.59°C

No.: BCTC/RF-EMC-005 Page 6 of 43 // / Edition: B.0



#### 4. Product Information And Test Setup

#### 4.1 Product Information

Model/Type Ref.: ME08 Model differences: N/A

Product Description: 3-in-1 Power Bank

Operation Frequency: Wireless charging Output (Phone/Earphone): 115kHz-205kHz,

Wireless charging Output (Watch): 300-350kHz

Antenna installation: loop coil antenna

Type C Input: DC 5V/2A

Ratings: Type C Output: DC 5V/2A

Wireless charging Output: 2.5W (Watch), 5W (Phone/Earphone)

Hardware Version: N/A
Software Version: N/A

Remark: EUT wireless charging phone, earphone, and watch share the same coil antenna,

and do not support simultaneous transmission.

#### 4.2 Support Equipment

No.	Device Type	Brand	Model	Series No.	Note
E-1	3-in-1 Power Bank	N/A	ME08	N/A	EUT
E-2	Adapter	N/A	CD122	N/A	Auxiliary
E-3	Dummy load	N/A	DL02	N/A	Auxiliary
E-4	Dummy load	N/A	DL01	N/A	Auxiliary

#### Notes:

<sup>1.</sup> All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.

<sup>2.</sup> Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.

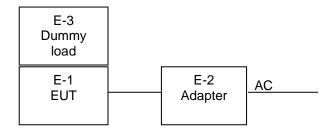


### 4.3 Test Setup Configuration

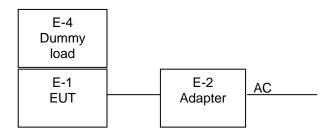
See test photographs attached in *EUT TEST SETUP PHOTOGRAPHS* for the actual connections between Product and support equipment.

#### Conducted Emission:

#### Test Mode 1

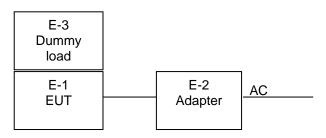


#### Test Mode 2

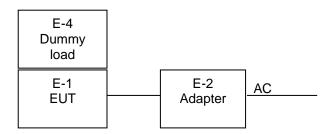


#### Radiated Spurious Emission

#### Test Mode 1



#### Test Mode 2





#### Test Mode 3

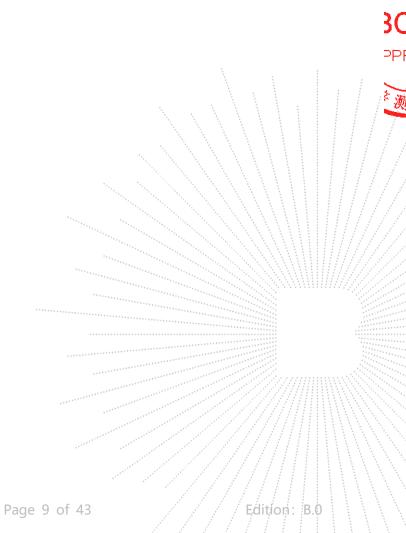
E-3 Dummy load

> E-1 **EUT**

#### Test Mode 4

E-4 Dummy load

> E-1 **EUT**



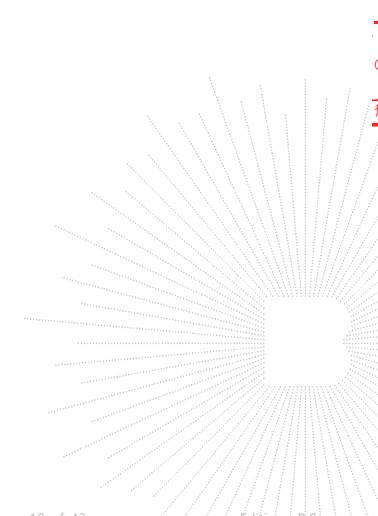
No.: BCTC/RF-EMC-005



#### 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.

Test Mode 1	Charging+ Wireless charging output 2.5W
Test Mode 2	Charging+ Wireless charging output 5W
Test Mode 3	Wireless charging output 2.5W
Test Mode 4	Wireless charging output 5W



No.: BCTC/RF-EMC-005 Page 10 of 43 / / / Édition: B.0



#### 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 15, 2023	May 14, 2024	
LISN	R&S	ENV216	101375	May 15, 2023	May 14, 2024	
Software	Frad	EZ-EMC	EMC-CON 3A1	\	\	
Attenuator	\	10dB DC-6GHz	1650	May 15, 2023	May 14, 2024	

RF Conducted Test					
Equipment	Manufacturer	Model#	Serial#	Last Cal.	Next Cal.
Power Metter	Keysight	E4419	\	May 15, 2023	May 14, 2024
Power Sensor (AV)	Keysight	E9300A		May 15, 2023	May 14, 2024
Signal Analyzer20kH z-26.5GHz	Keysight	N9020A	MY49100060	May 15, 2023	May 14, 2024
Spectrum Analyzer9kHz- 40GHz	R&S	FSP40	100363	May 15, 2023	May 14, 2024

No.: BCTC/RF-EMC-005 Page 11 of 43 / / / Edition: B.0





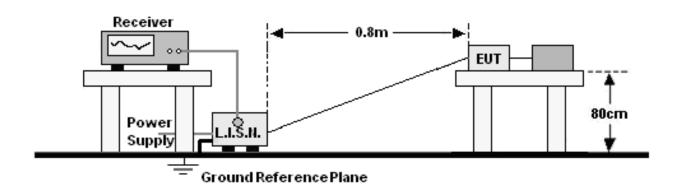
Radiated Emissions Test (966 Chamber01)					
Equipment	Manufacturer	Model#	Serial#	Last Cal.	Next Cal.
966 chamber	ChengYu	966 Room	966	Jun. 06. 2020	Jun. 05, 2023
Receiver	R&S	ESR3	102075	May 15, 2023	May 14, 2024
Receiver	R&S	ESRP	101154	May 15, 2023	May 14, 2024
Amplifier	Schwarzbeck	BBV9744	9744-0037	May 15, 2023	May 14, 2024
TRILOG Broadband Antenna	Schwarzbeck	VULB9163	942	May 15, 2023	May 14, 2024
Loop Antenna(9KHz -30MHz)	Schwarzbeck	FMZB1519B	00014	May 15, 2023	May 14, 2024
Amplifier	SKET	LAPA_01G18 G-45dB	\	May 15, 2023	May 14, 2024
Horn Antenna	Schwarzbeck	BBHA9120D	1541	May 15, 2023	May 14, 2024
Amplifier(18G Hz-40GHz)	MITEQ	TTA1840-35- HG	2034381	May 15, 2023	May 14, 2024
Horn Antenna(18G Hz-40GHz)	Schwarzbeck	BBHA9170	00822	May 15, 2023	May 14, 2024
Spectrum Analyzer9kHz- 40GHz	R&S	FSP40	100363	May 15, 2023	May 14, 2024
Software	Frad	EZ-EMC	FA-03A2 RE	\	\ :

No.: BCTC/RF-EMC-005 Page 12 of 43 / Edition: B.0



#### 6. Conducted Emissions

#### 6.1 Block Diagram Of Test Setup



#### 6.2 Limit

FREQUENCY (MHz)	Limit (	Limit (dBuV)		
FREQUENCY (WINZ)	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

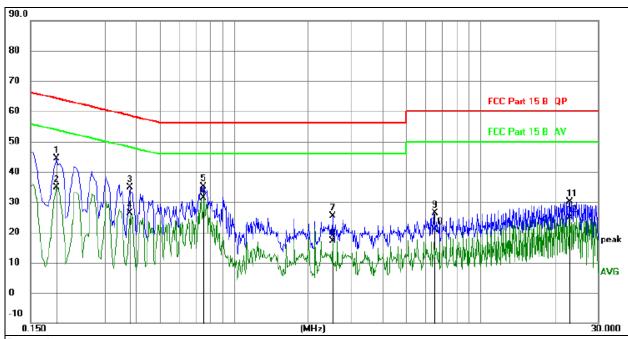
The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.

No.: BCTC/RF-EMC-005 Page 13 of 43 / / / Édition: BCC



#### 6.5 Test Result

Temperature:	26 ℃	Relative Humidity:	54%
Pressure:	101kPa	Phase :	L
Test Voltage:	AC 120V/60Hz	Test Mode:	Mode 1



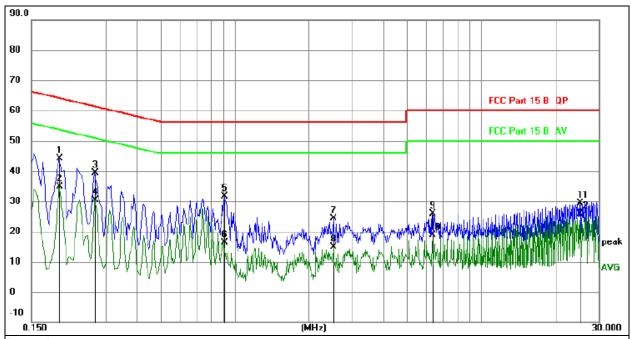
- All readings are Quasi-Peak and Average values.
   Factor = Insertion Loss + Cable Loss.
   Measurement=Reading Level+ Correct Factor

- 4. Over=Measurement-Limit

. Ovci-	-ivicasui	CITICITE LITTIE					<u> </u>	
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz		dB	dBuV	dBu∨	dB	Detector
1		0.1904	24.49	19.78	44.27	64.02	-19.75	QP
2		0.1904	15.12	19.78	34.90	54.02	-19.12	AVG
3		0.3791	15.18	19.75	34.93	58.30	-23.37	QP
4		0.3791	6.62	19.75	26.37	48.30	-21.93	AVG
5		0.7549	15.45	19.74	35.19	56.00	-20.81	QP
6	*	0.7549	11.67	19.74	31.41	46.00	-14.59	AVG
7		2.5133	5.36	19.94	25.30	56.00	-30.70	QP
8		2.5133	-2.72	19.94	17.22	46.00	-28.78	AVG
9		6.4882	6.17	20.17	26.34	60.00	-33.66	QP
10		6.4882	0.78	20.17	20.95	50.00	-29.05	AVG
11		22.8965	9.55	20.52	30.07	60.00	-29.93	QP
12		22.8965	4.43	20.52	24.95	50.00	-25.05	AVG



Temperature:	26 ℃	Relative Humidity:	54%
Pressure:	101kPa	Phase :	N
Test Voltage :	AC 120V/60Hz	Test Mode:	Mode 1

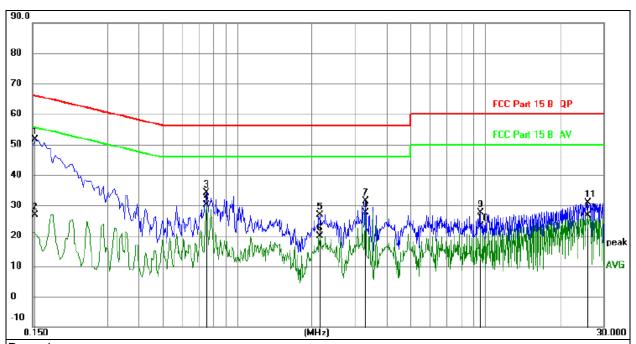


- 1. All readings are Quasi-Peak and Average values.
- 2. Factor = Insertion Loss + Cable Loss.
- 3. Measurement=Reading Level+ Correct Factor
- 4. Over=Measurement-Limit

4. OVCI-	-ivicasuic	HIGHT-LIHHT						1 1 1
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz		dB	dBuV	dBuV	dB	Detector
1		0.1949	24.40	19.79	44.19	63.83	-19.64	QP
2	*	0.1949	15.02	19.79	34.81	53.83	-19.02	AVG
3		0.2714	19.63	19.78	39.41	61.07	-21.66	QP
4		0.2714	10.50	19.78	30.28	51.07	-20.79	AVG
5		0.9104	11.81	19.75	31.56	56.00	-24.44	QP
6		0.9104	-3.45	19.75	16.30	46.00	-29.70	AVG
7		2.5170	4.36	19.94	24.30	56.00	-31.70	QP
8		2.5170	-5.15	19.94	14.79	46.00	-31.21	AVG
9		6.3465	5.66	20.16	25.82	60.00	-34.18	QP
10		6.3465	-1.32	20.16	18.84	50.00	-31.16	AVG
11		25.0755	8.76	20.52	29.28	60.00	-30.72	QP
12		25.0755	5.24	20.52	25.76	50.00	-24.24	AVG



Temperature:	26 ℃	Relative Humidity:	54%
Pressure:	101kPa	Phase :	L
Test Voltage:	AC 120V/60Hz	Test Mode:	Mode 2

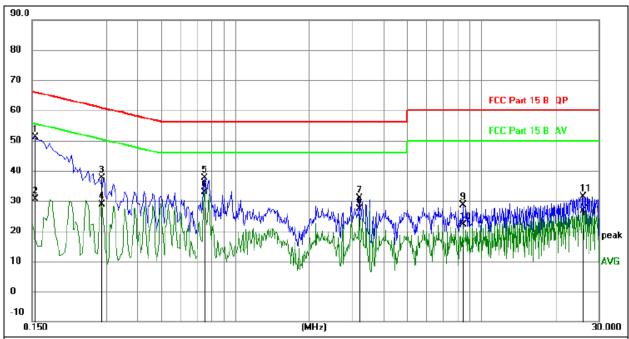


- 1. All readings are Quasi-Peak and Average values.
- 2. Factor = Insertion Loss + Cable Loss.
- 3. Measurement=Reading Level+ Correct Factor
- 4. Over=Measurement-Limit

1 *     0.1539     31.86     19.68     51.54     65.79     -14.25     0       2 0.1539     7.31     19.68     26.99     55.79     -28.80     A       3 0.7508     14.48     19.74     34.22     56.00     -21.78     0       4 0.7508     10.45     19.74     30.19     46.00     -15.81     A       5 2.1552     6.98     19.90     26.88     56.00     -29.12     0	1. Ovol-Woodoromone Limit							
1 *     0.1539     31.86     19.68     51.54     65.79     -14.25     0       2 0.1539     7.31     19.68     26.99     55.79     -28.80     A       3 0.7508     14.48     19.74     34.22     56.00     -21.78     0       4 0.7508     10.45     19.74     30.19     46.00     -15.81     A       5 2.1552     6.98     19.90     26.88     56.00     -29.12     0								
2     0.1539     7.31     19.68     26.99     55.79     -28.80     A       3     0.7508     14.48     19.74     34.22     56.00     -21.78     C       4     0.7508     10.45     19.74     30.19     46.00     -15.81     A       5     2.1552     6.98     19.90     26.88     56.00     -29.12     C	ector							
3 0.7508 14.48 19.74 34.22 56.00 -21.78 0 4 0.7508 10.45 19.74 30.19 46.00 -15.81 A 5 2.1552 6.98 19.90 26.88 56.00 -29.12 0	QР							
4 0.7508 10.45 19.74 30.19 46.00 -15.81 A 5 2.1552 6.98 19.90 26.88 56.00 -29.12 0	VG							
5 2.1552 6.98 19.90 26.88 56.00 -29.12	QΡ							
	VG							
6 2.1552 -0.11 19.90 19.79 46.00 -26.21 A	QР							
	VG							
7 3.2930 11.42 20.02 31.44 56.00 -24.56 0	QР							
8 3.2930 7.65 20.02 27.67 46.00 -18.33 A	VG							
9 9.5520 7.31 20.27 27.58 60.00 -32.42 0	QР							
10 9.5520 2.92 20.27 23.19 50.00 -26.81 A	VG							
11 25.8638 10.47 20.52 30.99 60.00 -29.01	QР							
12 25.8638 6.17 20.52 26.69 50.00 -23.31 A	VG							



Temperature:	26 ℃	Relative Humidity:	54%
Pressure:	101kPa	Phase :	Ν
Test Voltage:	AC 120V/60Hz	Test Mode:	Mode 2



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

- 4. Over=Measurement-Limit

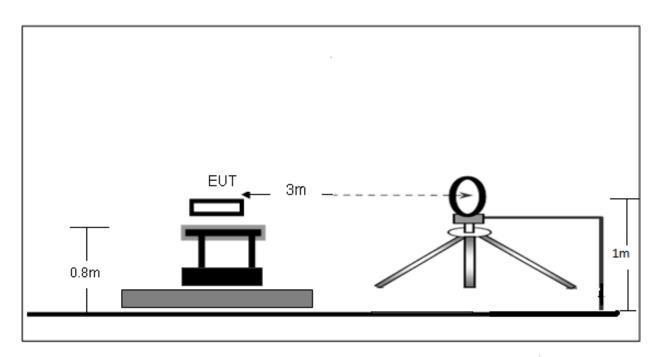
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz		dB	dBuV	dBu∨	dB	Detector
1		0.1545	31.33	19.68	51.01	65.75	-14.74	QP
2		0.1545	10.84	19.68	30.52	55.75	-25.23	AVG
3		0.2863	17.77	19.78	37.55	60.63	-23.08	QP
4		0.2863	9.07	19.78	28.85	50.63	-21.78	AVG
5		0.7530	17.83	19.74	37.57	56.00	-18.43	QP
6	*	0.7530	13.08	19.74	32.82	46.00	-13.18	AVG
7		3.1920	10.85	20.01	30.86	56.00	-25.14	QP
8		3.1920	7.40	20.01	27.41	46.00	-18.59	AVG
9		8.4300	8.43	20.23	28.66	60.00	-31.34	QP
10		8.4300	1.98	20.23	22.21	50.00	-27.79	AVG
11		25.7595	10.81	20.52	31.33	60.00	-28.67	QP
12		25.7595	6.13	20.52	26.65	50.00	-23.35	AVG



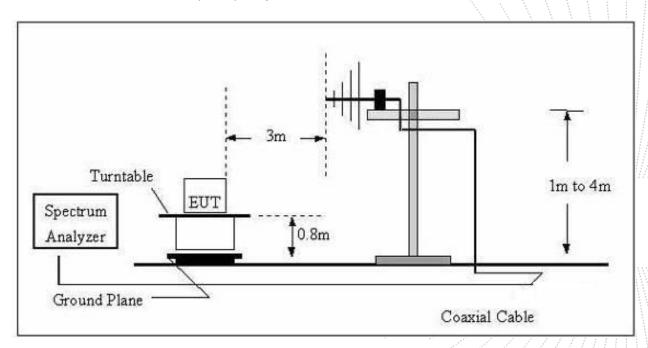
#### 7. Radiated Emissions

## 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 18 of 43 // Edition: B.0



#### 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 chamber. 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.

No.: BCTC/RF-EMC-005 Page 19 of 43 / / / Édition: B.0



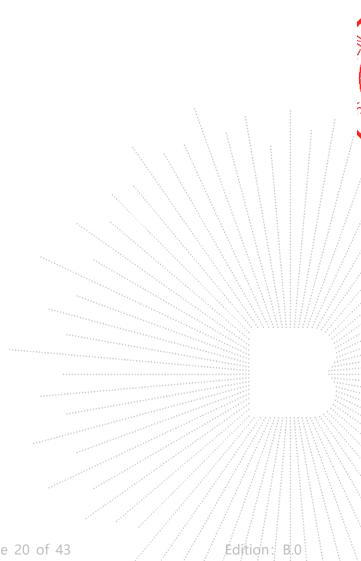
f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified 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

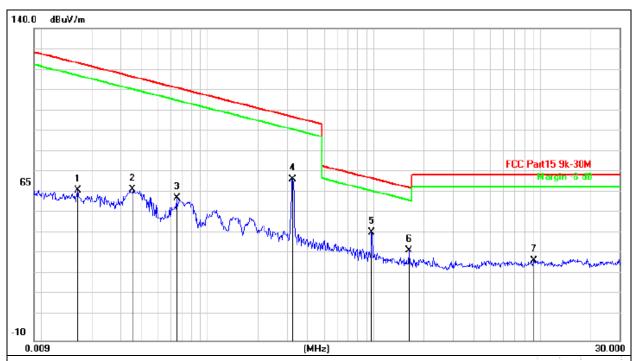


No.: BCTC/RF-EMC-005 Page 20 of 43 / / Édition: B.0



#### 9kHz-30MHz

Temperature:	26℃	Relative Humidity:	54%
Pressure:	101 kPa	Test Voltage:	AC 120V/60Hz
Test Mode:	Mode 1	Polarization :	

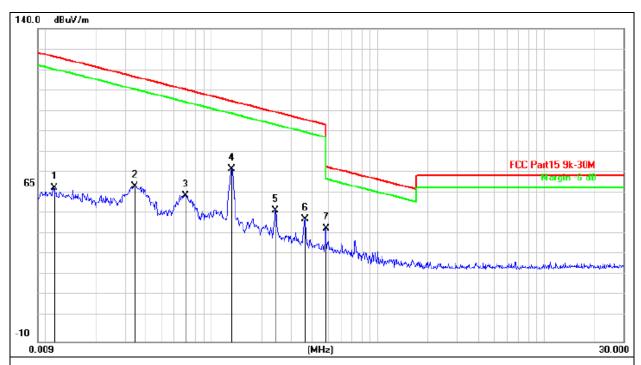


			D 1'-	0				
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector
1		0.0165	72.67	-10.61	62.06	123.2	-61.20	peak
2		0.0354	73.08	-10.70	62.38	116.6	-54.24	peak
3		0.0651	68.97	-10.58	58.39	111.3	-52.94	peak
4		0.3245	77.77	-10.28	67.49	97.38	-29.89	peak
5	*	0.9704	52.22	-10.23	41.99	67.88	-25.89	peak
6		1.6176	43.61	-10.19	33.42	63.46	-30.04	peak
7		9.1786	38.07	-9.74	28.33	69.54	-41.21	peak

No.: BCTC/RF-EMC-005 Page 21 of 43 / / Edition: B.0



Temperature:	26℃	Relative Humidity:	54%
Pressure:	101 kPa	Test Voltage:	AC 120V/60Hz
Test Mode:	Mode 2	Polarization :	

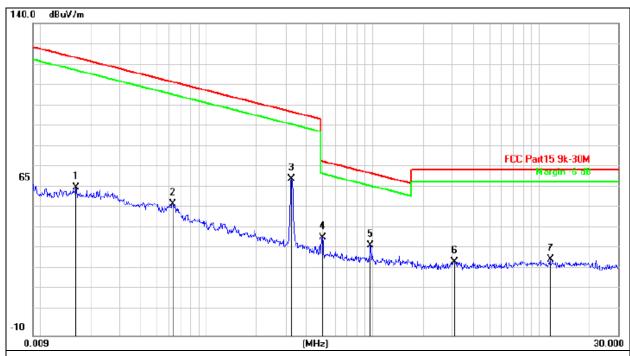


No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
	MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector
1	0.0112	73.92	-10.40	63.52	126.6	-63.10	peak
2	0.0346	75.12	-10.70	64.42	116.8	-52.40	peak
3	0.0694	70.57	-10.56	60.01	110.7	-50.77	peak
4 *	0.1318	82.72	-10.09	72.63	105.2	-32.58	peak
5	0.2424	63.16	-10.26	52.90	99.91	-47.01	peak
6	0.3636	58.95	-10.27	48.68	96.39	-47.71	peak
7	0.4869	54.44	-10.27	44.17	93.86	-49.69	peak
							94.1941

No.: BCTC/RF-EMC-005 Page 22 of 43 / / Edition: B.0



Temperature:	26℃	Relative Humidity:	54%
Pressure:	101 kPa	Test Voltage:	DC 3.85V
Test Mode:	Mode 3	Polarization :	



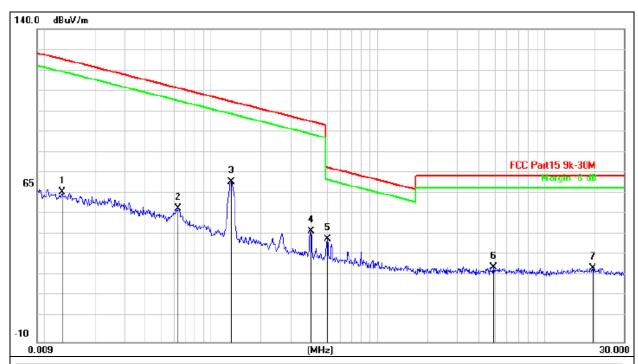
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector
1		0.0164	71.66	-10.61	61.05	123.3	-62.26	peak
2		0.0625	63.90	-10.59	53.31	111.6	-58.38	peak
3	*	0.3245	75.54	-10.28	65.26	97.38	-32.12	peak
4		0.4989	47.40	-10.27	37.13	73.64	-36.51	peak
5		0.9704	43.65	-10.23	33.42	67.88	-34.46	peak
6		3.0954	35.42	-9.99	25.43	69.54	-44.11	peak
7		11.7075	36.19	-9.56	26.63	69.54	-42.91	peak

No.: BCTC/RF-EMC-005 Page 23 of 43 / / Edition: B.0





Temperature:	<b>26</b> ℃	Relative Humidity:	54%
Pressure:	101 kPa	Test Voltage:	DC 3.85V
Test Mode:	Mode 4	Polarization :	



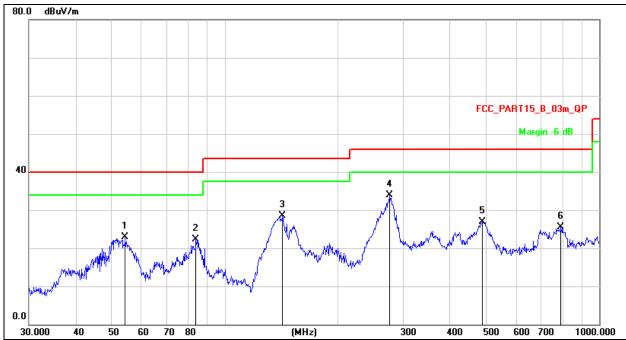
No. M	k. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
	MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector
1	0.0128	72.35	-10.46	61.89	125.4	-63.57	peak
2	0.0631	64.50	-10.59	53.91	111.6	-57.69	peak
3	0.1319	76.64	-10.09	66.55	105.2	-38.65	peak
4	0.3976	53.26	-10.27	42.99	95.62	-52.63	peak
5 *	0.4990	49.50	-10.26	39.24	73.64	-34.40	peak
6	4.9550	35.11	-9.41	25.70	69.54	-43.84	peak
7	19.5168	34.59	-9.23	25.36	69.54	-44.18	peak

No.: BCTC/RF-EMC-005 Page 24 of 43 / / Edition: B.0



#### Between 30MHz - 1GHz

Temperature:	26℃	Relative Humidity:	54%
Pressure:	101 kPa	Test Voltage:	AC 120V/60Hz
Test Mode:	Mode 1	Polarization :	Horizontal

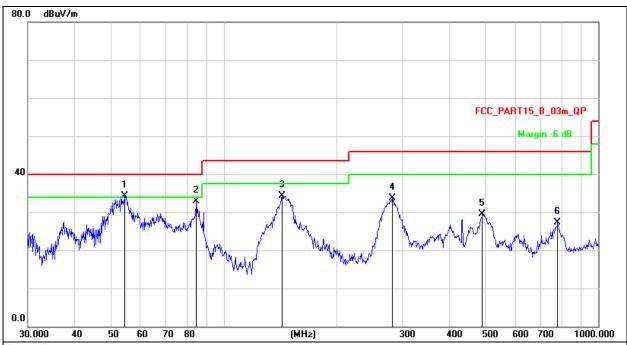


- 1.Factor = Antenna Factor + Cable Loss Pre-amplifier.
  2. Measurement=Reading Level+ Correct Factor
  3. Over=Measurement-Limit

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector
1		54.2610	39.17	-16.23	22.94	40.00	-17.06	QP
2		83.8156	42.93	-20.67	22.26	40.00	-17.74	QP
3	,	142.8243	49.13	-20.58	28.55	43.50	-14.95	QP
4	* 2	275.1570	49.05	-15.20	33.85	46.00	-12.15	QP
5	4	187.3151	37.45	-10.56	26.89	46.00	-19.11	QP
6	7	790.6188	31.27	-5.72	25.55	46.00	-20.45	QP



Temperature:	26℃	Relative Humidity:	54%
Pressure:	101 kpa	Test Voltage:	AC 120V/60Hz
Test Mode:	Mode 1	Polarization :	Vertical

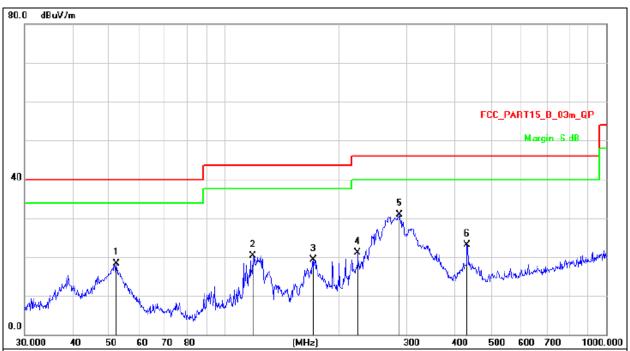


- 1.Factor = Antenna Factor + Cable Loss Pre-amplifier.
- 2. Measurement=Reading Level+ Correct Factor
- 3. Over=Measurement-Limit

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector
1	*	54.4516	50.63	-16.26	34.37	40.00	-5.63	QP
2		84.4054	53.36	-20.53	32.83	40.00	-7.17	QP
3	,	143.3261	54.90	-20.61	34.29	43.50	-9.21	QP
4	2	281.9946	48.67	-15.03	33.64	46.00	-12.36	QP
5	4	190.7447	39.98	-10.48	29.50	46.00	-16.50	QP
6	7	779.6068	33.16	-5.90	27.26	46.00	-18.74	QP



Temperature:	26℃	Relative Humidity:	54%
Pressure:	101 kPa	Test Voltage:	AC 120V/60Hz
Test Mode:	Mode 2	Polarization :	Horizontal

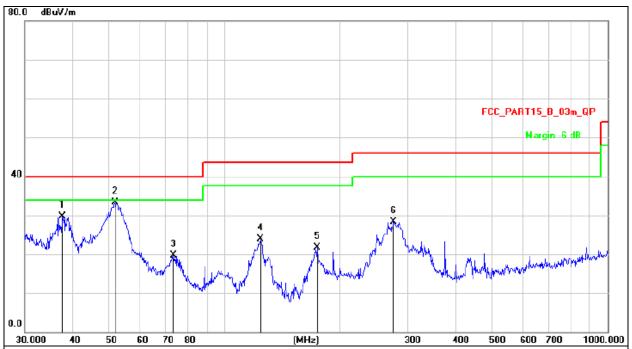


- 1.Factor = Antenna Factor + Cable Loss Pre-amplifier.
- Measurement=Reading Level+ Correct Factor
   Over=Measurement-Limit

S. Over-	=iviea	Surement-Linit				7	<u> </u>	
No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector
1		52.2079	34.15	-15.92	18.23	40.00	-21.77	QP
2		118.6014	39.32	-18.98	20.34	43.50	-23.16	QP
3		171.3926	38.79	-19.48	19.31	43.50	-24.19	QP
4		223.7334	37.67	-16.64	21.03	46.00	-24.97	QP
5	*	286.9823	45.75	-14.91	30.84	46.00	-15.16	QP
6		432.5457	34.88	-11.74	23.14	46.00	-22.86	QP



Temperature:	26℃	Relative Humidity:	54%
Pressure:	101 kpa	Test Voltage:	AC 120V/60Hz
Test Mode:	Mode 2	Polarization :	Vertical

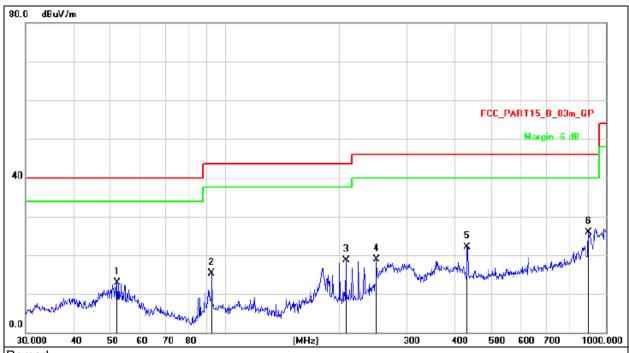


- 1.Factor = Antenna Factor + Cable Loss Pre-amplifier.
- 2. Measurement=Reading Level+ Correct Factor
- 3. Over=Measurement-Limit

								<del></del>
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector
1		37.6798	46.82	-17.11	29.71	40.00	-10.29	QP
2	*	51.6616	49.12	-15.84	33.28	40.00	-6.72	QP
3		73.3593	40.23	-20.49	19.74	40.00	-20.26	QP
4		123.6985	43.18	-19.32	23.86	43.50	-19.64	QP
5		174.4241	40.86	-19.25	21.61	43.50	-21.89	QP
6		276.1235	43.56	-15.18	28.38	46.00	-17.62	QP



Temperature:	26℃	Relative Humidity:	54%
Pressure:	101 kPa	Test Voltage:	DC 3.85V
Test Mode:	Mode 3	Polarization :	Horizontal



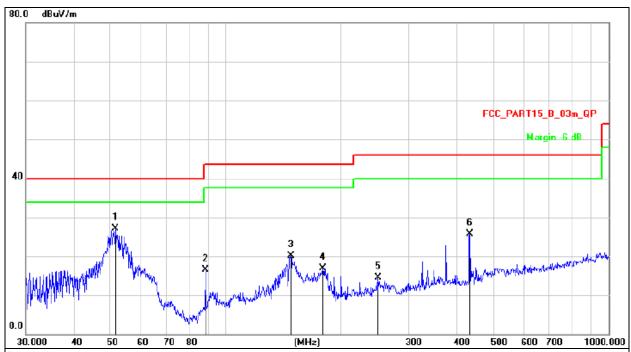
- 1.Factor = Antenna Factor + Cable Loss Pre-amplifier.2. Measurement=Reading Level+ Correct Factor
- 3. Over=Measurement-Limit

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector
1		52.2079	28.92	-15.92	13.00	40.00	-27.00	QP
2		92.4624	34.15	-18.87	15.28	43.50	-28.22	QP
3		207.8501	35.92	-17.13	18.79	43.50	-24.71	QP
4		250.3012	34.75	-15.82	18.93	46.00	-27.07	QP
5		432.5457	33.81	-11.74	22.07	46.00	-23.93	QP
6	*	900.1474	30.41	-4.59	25.82	46.00	-20.18	QP





Temperature:	26℃	Relative Humidity:	54%
Pressure:	101 kpa	Test Voltage:	DC 3.85V
Test Mode:	Mode 3	Polarization :	Vertical

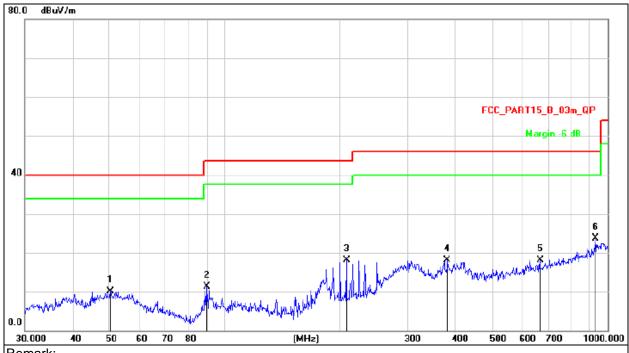


- 1.Factor = Antenna Factor + Cable Loss Pre-amplifier.2. Measurement=Reading Level+ Correct Factor
- 3. Over=Measurement-Limit

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector
1	*	51.4807	42.86	-15.81	27.05	40.00	-12.95	QP
2		88.3421	36.03	-19.62	16.41	43.50	-27.09	QP
3		147.9214	40.99	-20.91	20.08	43.50	-23.42	QP
4		179.3863	35.73	-18.89	16.84	43.50	-26.66	QP
5		250.3012	30.33	-15.82	14.51	46.00	-31.49	QP
6		434.0651	37.51	-11.72	25.79	46.00	-20.21	QP
						4.5.7	441 441 44	



Temperature:	<b>26</b> ℃	Relative Humidity:	54%
Pressure:	101 kPa	Test Voltage:	DC 3.85V
Test Mode:	Mode 4	Polarization :	Horizontal

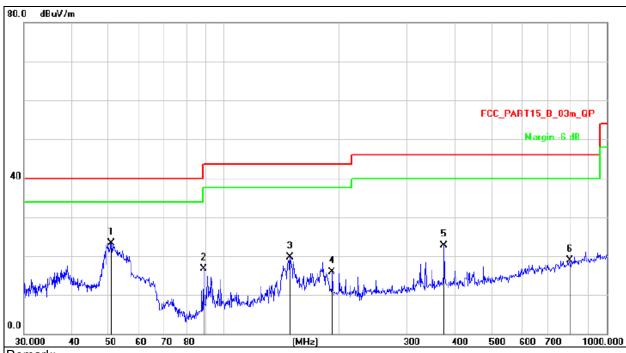


- 1.Factor = Antenna Factor + Cable Loss Pre-amplifier.
- 2. Measurement=Reading Level+ Correct Factor
- 3. Over=Measurement-Limit

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector
1		50.2324	25.67	-15.62	10.05	40.00	-29.95	QP
2		89.5899	30.64	-19.33	11.31	43.50	-32.19	QP
3		207.8501	35.29	-17.13	18.16	43.50	-25.34	QP
4		381.2487	30.50	-12.43	18.07	46.00	-27.93	QP
5		665.8035	25.71	-7.54	18.17	46.00	-27.83	QP
6	*	929.0082	27.90	-4.28	23.62	46.00	-22.38	QP



Temperature:	26℃	Relative Humidity:	54%
Pressure:	101 kpa	Test Voltage:	DC 3.85V
Test Mode:	Mode 4	Polarization :	Vertical



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

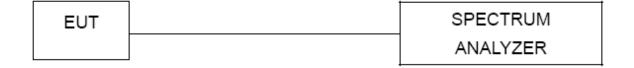
			•					
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector
1	*	50.7637	39.05	-15.70	23.35	40.00	-16.65	QP
2		88.3421	36.23	-19.62	16.61	43.50	-26.89	QP
3		148.9625	40.74	-20.98	19.76	43.50	-23.74	QP
4		191.7450	33.89	-17.98	15.91	43.50	-27.59	QP
5	,	375.9385	35.10	-12.49	22.61	46.00	-23.39	QP
6		801.7863	24.52	-5.55	18.97	46.00	-27.03	QP



#### 8. Bandwidth Test

- 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.

**TEST SETUP** 



No.: BCTC/RF-EMC-005 Page 33 of 43 // Edition: B.0



#### Watch

Temperature :	26 ℃	Relative Humidity:	54%
Pressure :	101kPa		

Frequency (KHz)	20dB bandwidth (Hz)	Result
324.4	319	Pass



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OV

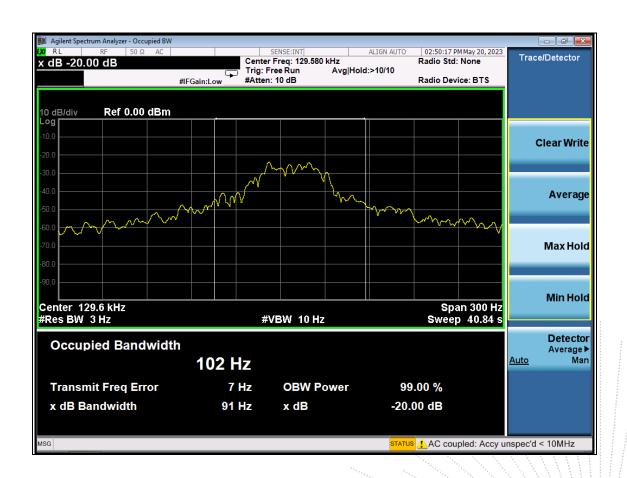




#### Phone

Temperature :	26 ℃	Relative Humidity:	54%
Pressure :	101kPa		

Frequency (KHz)	20dB bandwidth (Hz)	Result
129.6	91	Pass



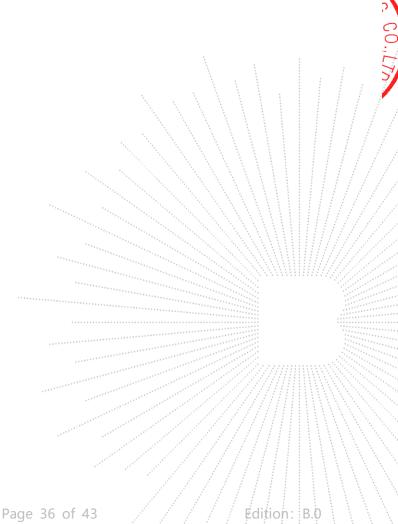
No.: BCTC/RF-EMC-005 Page 35 of 43 // Édition: B.0



### 9. Antenna Requirements

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.

The antenna used for this product is Inductive loop coil antenna.

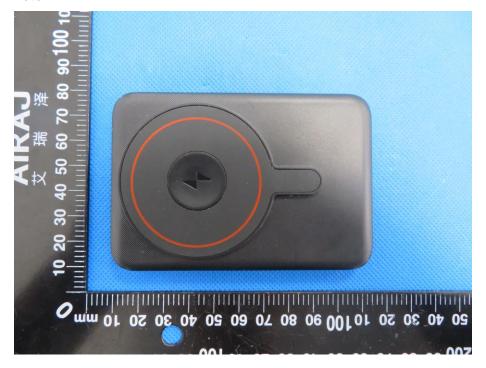


No.: BCTC/RF-EMC-005 Page 36 of 43

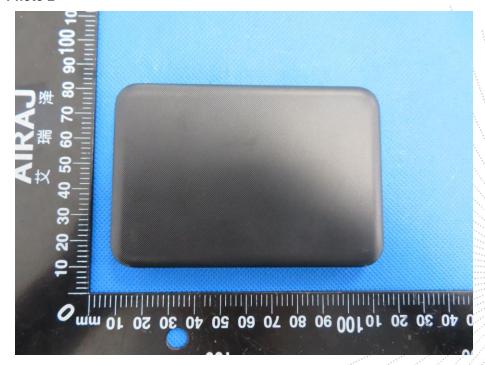


#### 10. EUT Photographs

#### **EUT Photo 1**



#### **EUT Photo 2**



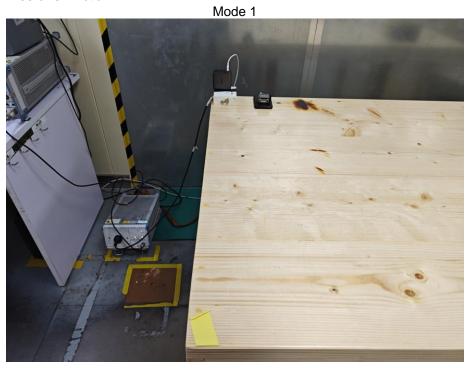
**NOTE: Appendix-Photographs Of EUT Constructional Details** 

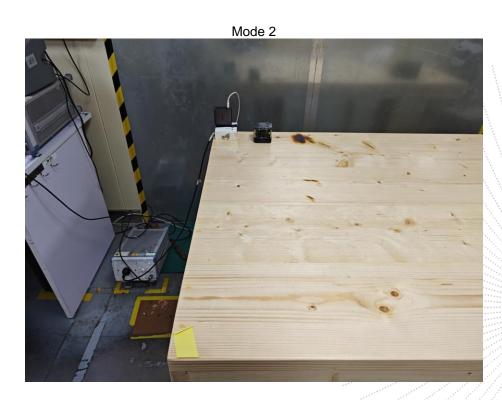
No.: BCTC/RF-EMC-005 Page 37 of 43 / / / Édition: B.0



## 11. EUT Test Setup Photographs

#### **Conducted Emissions Photo**

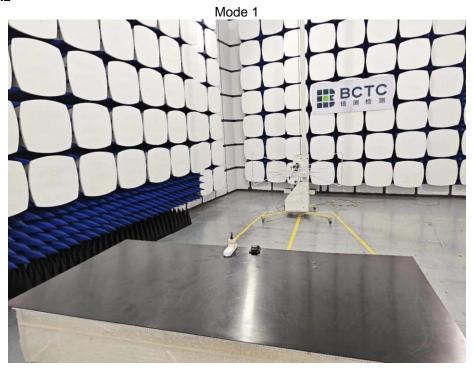


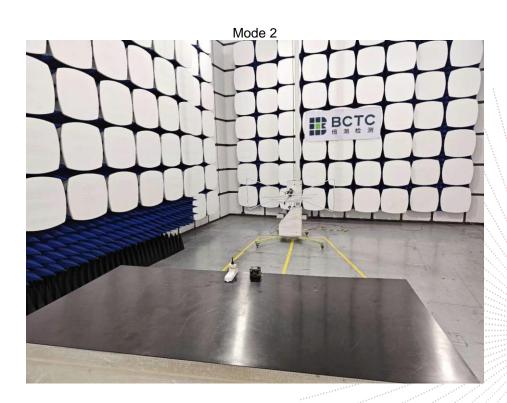


No.: BCTC/RF-EMC-005 Page 38 of 43 // Edition: B.0



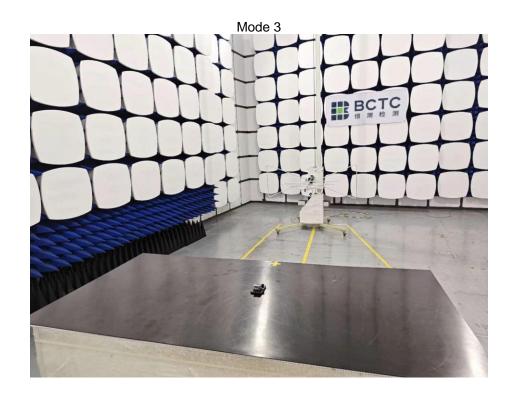
# Radiated Measurement Photos 30MHz-1GHz

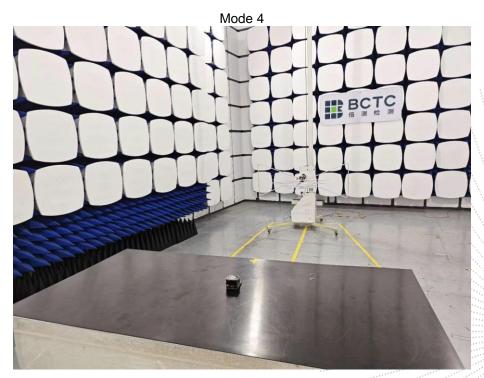




No.: BCTC/RF-EMC-005 Page 39 of 43 // Edition: B.0



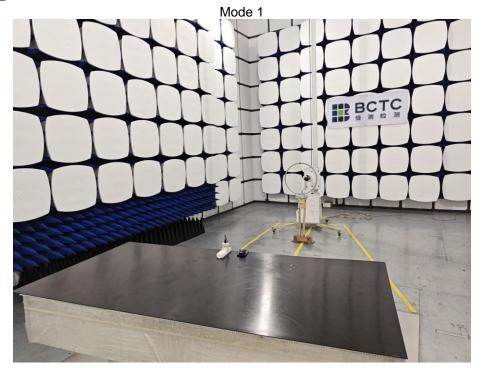


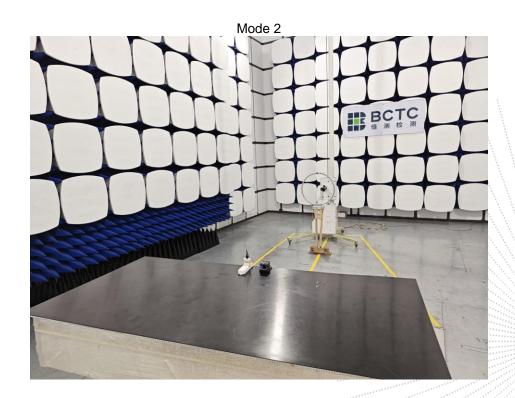


No.: BCTC/RF-EMC-005 Page 40 of 43 // Edition: B.0



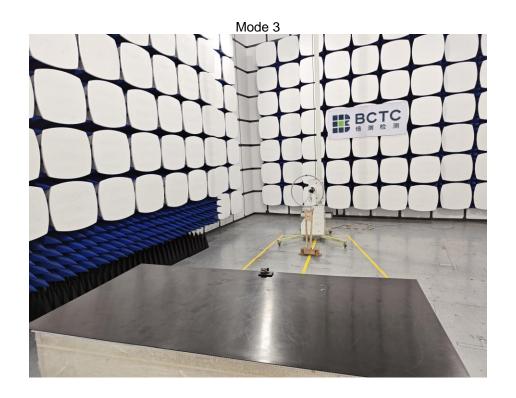
#### 9kHz-30MHz

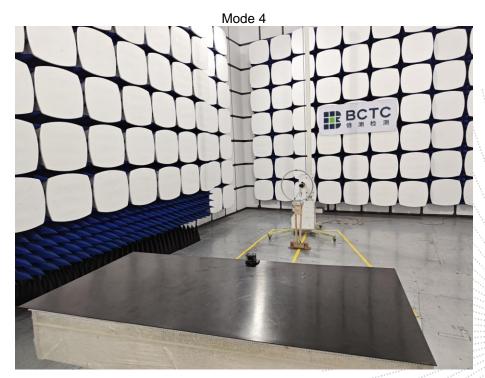




No.: BCTC/RF-EMC-005 Page 41 of 43 // Edition: B.0







No.: BCTC/RF-EMC-005 Page 42 of 43 // Edition: B.0



#### **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

E-Mail: bctc@bctc-lab.com.cn

\*\*\*\* END \*\*\*\*

No.: BCTC/RF-EMC-005 Page 43 of 43 // Edition: B.O.