




Test Report No.: RF2206WDG0262-2



# TEST REPORT


Applicant	ONANOFF LIMITED
Address	RM 424, Sino Ind. Plaza, 9 Kai Cheung Road, Kowloon Bay, Kowloon, Hong Kong

Manufacturer or Supplier	ONANOFF LIMITED
Address	RM 424, Sino Ind. Plaza, 9 Kai Cheung Road, Kowloon Bay, Kowloon, Hong Kong
Product	Onanoff Wireless Charger
Brand Name	
Model	ON-FOKUSP-WC
Additional Model & Model Difference	ON-WC, ON-SPP-WC, ON-FW-WC, See section 3.1
Date of tests	Aug. 06, 2023 ~ Aug. 21, 2023

The submitted sample of the above equipment has been tested for according to the requirements of the following standards:

**FCC Part 15, Subpart C**

**CONCLUSION: The submitted sample was found to COMPLY with the test requirement**

Tested by Eric Fang Project Engineer / EMC Department	Approved by Glyn He Assistant Manager / EMC Department
	 Date: Sep. 06, 2023

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## RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
RF2206WDG0262-2	Original release	Sep. 06, 2023



## 1 SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC Part 15, Subpart C			
STANDARD SECTION	TEST TYPE AND LIMIT	RESULT	REMARK
§15.203	Antenna Requirement	PASS	No antenna connector is used.
§15.207	AC Power Conducted Emission	PASS	Meet the requirement of limit.
§15.209	Radiated Emission	PASS	Meet the requirement of limit.
§15.215 (c)	20dB Bandwidth	PASS	Meet the requirement of limit.

## 2 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

MEASUREMENT	FREQUENCY	UNCERTAINTY
Conducted emissions	9kHz~30MHz	2.80dB
Radiated emissions	9KHz ~ 30MHz	2.80dB
	30MHz ~ 1GMHz	4.24dB

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.



### 3 GENERAL INFORMATION

#### 3.1 GENERAL DESCRIPTION OF EUT

<b>PRODUCT</b>	Onanoff Wireless Charger
<b>MODEL NO.</b>	ON-FOKUSP-WC
<b>ADDITIONAL MODELS</b>	ON-WC, ON-SPP-WC, ON-FW-WC
<b>FCC ID</b>	2AN2MONFPWC
<b>POWER SUPPLY</b>	Input:5V/1A Output:5V/0.5A
<b>MAX. OUTPUT POWER FROM THE PRIMARY COIL</b>	2.5W
<b>MODULATION TYPE</b>	FSK
<b>OPERATING FREQUENCY</b>	110KHz ~ 205KHz
<b>ANTENNA TYPE</b>	Coil Antenna
<b>CABLE SUPPLIED</b>	AUX cable: Unshielded, detachable, 1.3m, USB-C to USB-C cable: Unshielded, detachable, 1.0m,

**NOTE:**

1. For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.
2. For the test results, the EUT had been tested with all conditions. But only the worst case was shown in test report.
3. Please refer to the EUT photo document (Reference No.: 2206WDG0262-3) for detailed product photo.
4. Additional models ON-WC, ON-SPP-WC, ON-FW-WC are identical with test model except the appearance and model no. for trading purpose.



### 3.2 DESCRIPTION OF TEST MODES

The EUT was tested under the following modes the final worst mode was marked in boldface and recorded in this report.

TEST FREQUENCY	TEST MODE	TEST VOLTAGE
184.3KHz	<b>wireless charging + Transmitting</b>	DC 5V from Adapter
153.0KHz	Standby + Transmitting	

### 3.3 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is a RF Product. According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

**FCC Part 15, Subpart C**  
**ANSI C63.10-2013**

All test items have been performed and recorded as per the above standards.

### 3.4 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	Adapter	N/A	C-P36	N/A	N/A
2	Headphone	onanoff	BT-ON-FOKUSP	N/A	2AN2MONFOKUSP

NO.	DESCRIPTION OF THE ABOVE SUPPORT UNITS
1~2	USB-C Cable:1.0m, Unshielded



## 4 EMISSION TEST

### 4.1 CONDUCTED EMISSION MEASUREMENT

#### 4.1.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

FREQUENCY (MHz)	Class A (dBuV)		Class B (dBuV)	
	Quasi-peak	Average	Quasi-peak	Average
0.15 - 0.5	79	66	66 - 56	56 - 46
0.50 - 5.0	73	60	56	46
5.0 - 30.0	73	60	60	50

- NOTES:**
- (1) The lower limit shall apply at the transition frequencies.
  - (2) The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50 MHz.
  - (3) All emanations from a class A/B digital device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified above.

#### 4.1.2 TEST INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Next Cal.
EMI Test Receiver	Rohde&Schwarz	ESR7	101494	Jan. 10, 24
Artificial Mains Network	Rohde&Schwarz	ENV216	101173	Jan. 11, 24
Artificial Mains Network	Rohde&Schwarz	ESH3-Z5	100317	Jan. 10, 24
Artificial Mains Network	SCHWARZBECK	NSLK 8122	8122-05001	Jun. 14, 24
V-LISN (CISPR 25)	SCHWARZBECK	NNBM 8124-200	8124-200 05857	Apr. 05, 24
V-LISN (CISPR 25)	SCHWARZBECK	NNBM 8124-200	8124-200 05858	Apr. 05, 24
Voltage probe	SCHWARZBECK	TK 9421	TK 9421-176	Jul. 16, 24
Coaxial RF Cable	SUHNER	RG 223/U-CE	C2310066DG	Jul. 19, 24
Test software	ADT	ADT_Cond_V7.3.7	N/A	N/A

- NOTE:**
1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.
  2. The test was performed in shielding room 553.
  3. The FCC Site Registration No. is 749762.



### **4.1.3 TEST PROCEDURE**

- a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
- c. The frequency range from 150 kHz to 30 MHz was searched. Emission levels under (Limit – 20dB) were not recorded.

**NOTE:**

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value

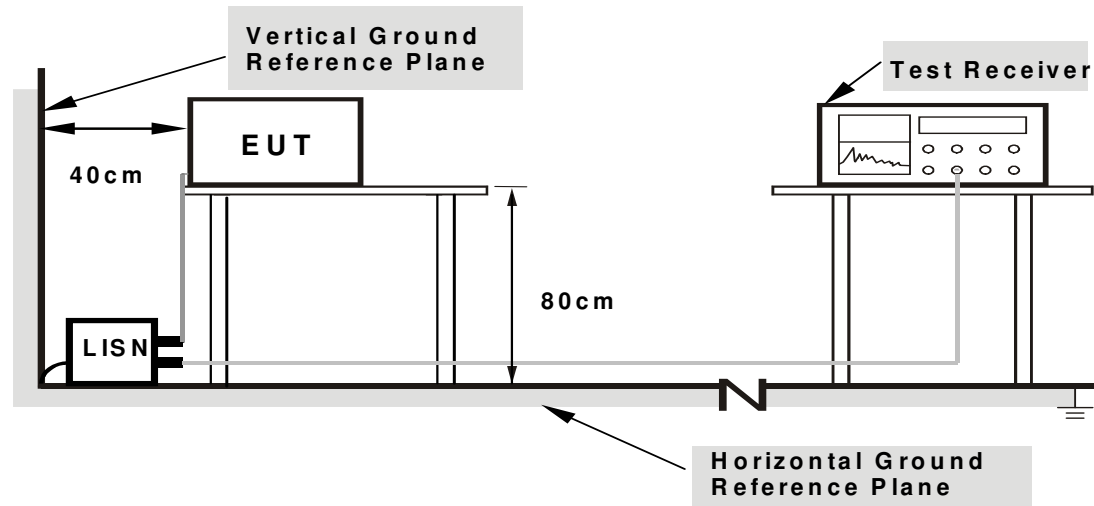
### **4.1.4 DEVIATION FROM TEST STANDARD**

No deviation.





#### 4.1.5 TEST SETUP



- Note:**
- 1.Support units were connected to second LISN.
  - 2.Both of LISNs (AMN) are 80cm from EUT and at least 80cm from other units and other metal planes support units.

#### 4.1.6 EUT OPERATING CONDITIONS

- a. Turned on the power of all equipment.
- b. EUT was operated according to the type description in manufacturer's specifications or the User's Manual.

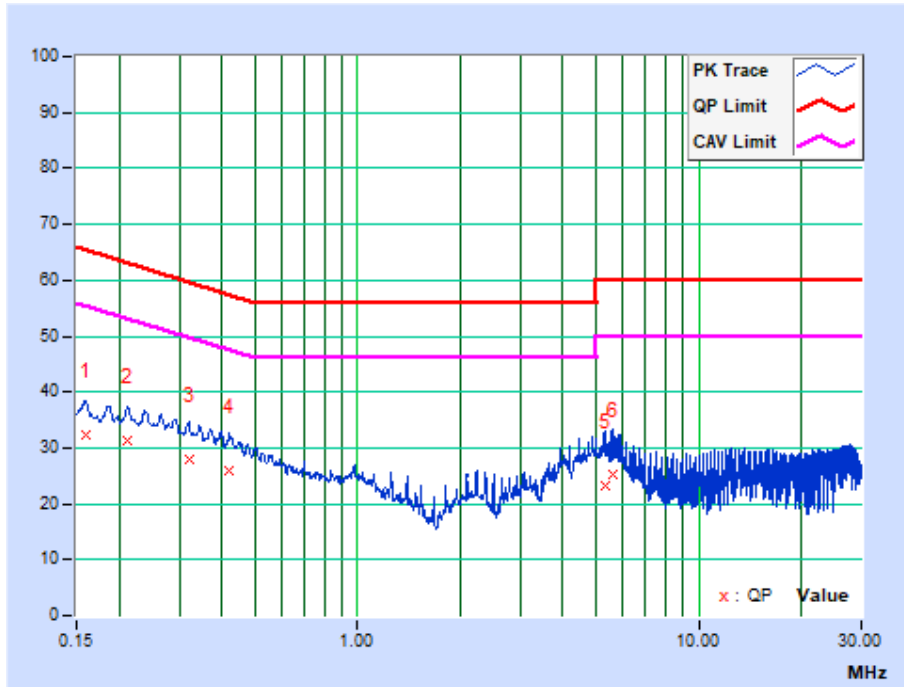


4.1.7 TEST RESULTS

<b>TEST MODE</b>	wireless charging +Transmitting	<b>6DB BANDWIDTH</b>	9 kHz
<b>TEST VOLTAGE</b>	DC 5V from Adapter	<b>PHASE</b>	Line (L)
<b>ENVIRONMENTAL CONDITIONS</b>	25deg. C, 45% RH	<b>TESTED BY</b>	Dragon

No.	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15924	9.96	22.52	8.59	32.48	18.55	65.50	55.50	-33.02	-36.95
2	0.21067	10.02	21.17	8.85	31.19	18.87	63.18	53.18	-31.99	-34.31
3	0.32057	10.09	17.71	5.03	27.80	15.12	59.69	49.69	-31.89	-34.57
4	0.42076	10.13	15.89	6.79	26.02	16.92	57.43	47.43	-31.42	-30.52
5	5.30250	10.50	12.63	4.64	23.13	15.14	60.00	50.00	-36.87	-34.86
6	5.58150	10.52	14.80	7.90	25.32	18.42	60.00	50.00	-34.68	-31.58

**REMARKS:** The emission levels of other frequencies were very low against the limit.





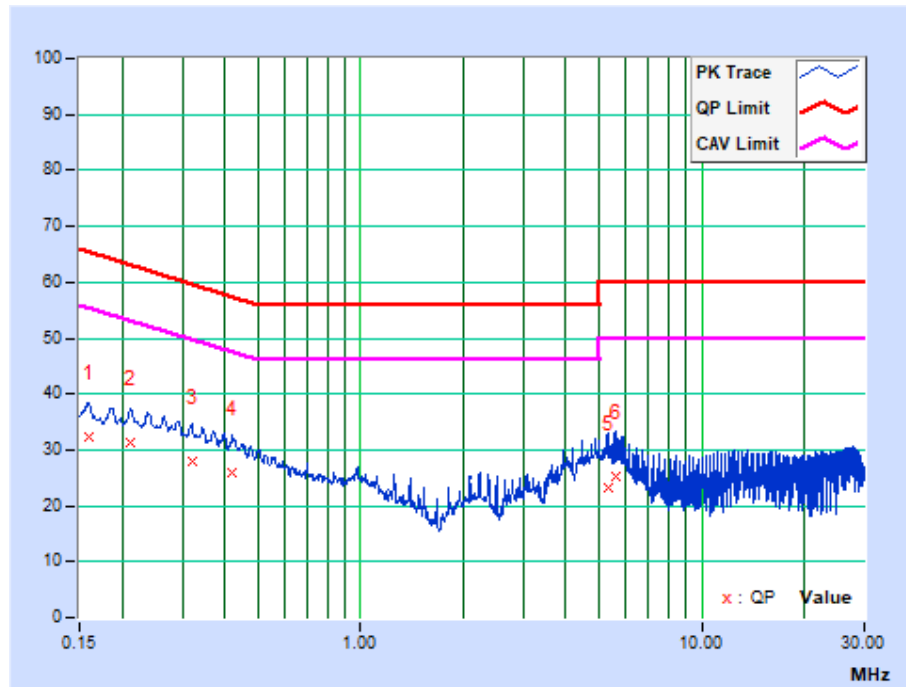
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<b>TEST MODE</b>	wireless charging +Transmitting	<b>6DB BANDWIDTH</b>	9 kHz
<b>TEST VOLTAGE</b>	DC 5V from Adapter	<b>PHASE</b>	Neutral (N)
<b>ENVIRONMENTAL CONDITIONS</b>	25deg. C, 45% RH	<b>TESTED BY</b>	Dragon

No.	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15882	9.88	22.95	8.34	32.83	18.22	65.53	55.53	-32.69	-37.30
2	0.18510	9.91	22.06	8.67	31.97	18.58	64.25	54.25	-32.28	-35.67
<b>3</b>	<b>0.28725</b>	<b>9.97</b>	<b>22.30</b>	<b>14.30</b>	<b>32.27</b>	<b>24.27</b>	<b>60.60</b>	<b>50.60</b>	<b>-28.33</b>	<b>-26.33</b>
4	0.42000	10.00	16.35	9.09	26.35	19.09	57.45	47.45	-31.10	-28.36
5	0.55812	10.03	13.68	3.42	23.71	13.45	56.00	46.00	-32.29	-32.55
6	5.29575	10.29	10.63	-0.11	20.92	10.18	60.00	50.00	-39.08	-39.82

**REMARKS:** The emission levels of other frequencies were very low against the limit.



## 4.2 RADIATED EMISSION MEASUREMENT

### 4.2.1 LIMITS OF RADIATED EMISSION MEASUREMENT

TEST STANDARD: FCC Part 15, Subpart C, Section 15.209

Emissions radiated outside of the specified bands, shall be according to the general radiated limits as following:

FREQUENCIES (MHz)	FIELD STRENGTH (microvolts/meter)	MEASUREMENT DISTANCE (meters)
0.009 – 0.490	2400/F(kHz)	300
0.490 – 1.705	24000/F(kHz)	30
1.705 – 30.0	30	30
30 – 88	100	3
88 – 216	150	3
216 - 960	200	3
Above 960	500	3

**NOTE:**

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
3. As shown in 15.35(b), for frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.
4. The measured field strength was extrapolated to distance 30 meters, using the formula that the limit of field strength varies as the inverse distance square (40dB per decade of distance)



### 4.2.2 TEST INSTRUMENTS

#### FREQUENCY 9KHz-30MHz

Equipment	Manufacturer	Model No.	Serial No.	Next Cal.
EMI Test Receiver	Rohde&Schwarz	ESR7	101564	Jan. 10, 24
Active Loop Antenna	SCHWARZBECK	FMZB 1519B	1519B-045	May. 09, 24
Amplifier	Burgeon	BPA-530	100210	Mar. 06, 24
Coaxial RF Cable	/	/	/	Jul. 06, 24
Test Software	ADT	ADT_Radiated_V8 .7.07	N/A	N/A

- NOTES:**
1. The test was performed in 10m Chamber.
  2. The calibration interval of the above test instruments is 12 months. And the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.
  3. The FCC Site Registration No. is 749762.

#### FREQUENCY 30MHz-1GHz

Equipment	Manufacturer	Model No.	Serial No.	Next Cal.
EMI Test Receiver	Rohde&Schwarz	ESU40	100449	Jan. 10, 24
Trilog-Broadband Antenna	SCHWARZBECK	VULB 9168	01282	Jan. 08, 24
Pre-Amplifier	Burgeon	BPA-530	100220	Mar. 06, 24
3m Semi-anechoic Chamber	Burgeon	9m*6m*6m	NSEMC003	May. 20, 24
Coaxial RF Cable(3m Below 1G)	/	/	/	Jul. 03, 24
Test software	ADT	ADT_Radiated_V 7.6.15.9.2	N/A	N/A

- NOTES:**
1. The test was performed in 966 Chamber
  2. The calibration interval of the above test instruments is 12 months. And the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.
  3. The FCC Site Registration No. is 749762.



### 4.2.3 TEST PROCEDURE

< Below 30MHz >

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 10 meters Semi-anechoic chamber room. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the loop antenna, which was mounted on the top of a loop antenna tower.
- c. The height of antenna is 1.3m above the ground. Both coaxial and coplanar polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case 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 quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.

<30MHz~1GHz >

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meters 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 is a broadband antenna, and its 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 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.

**NOTE:**

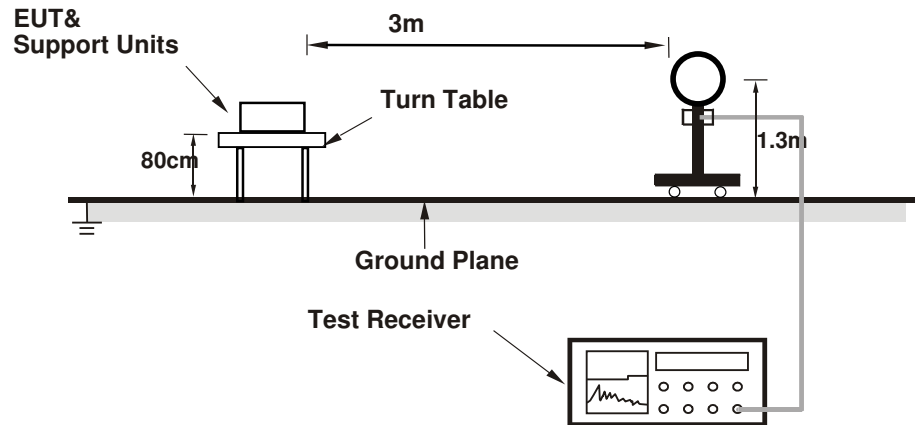
1. The resolution bandwidth of test receiver/spectrum analyzer is 200Hz for Quasi-peak detection (QP) at fundamental frequency 9K-150KHz;
2. The resolution bandwidth of test receiver/spectrum analyzer is 9KHz for Quasi-peak detection (QP) at fundamental frequency 150K-30MHz;
3. The resolution bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at radiated spurious emission frequency 30MHz-1GHz.

### 4.2.4 DEVIATION FROM TEST STANDARD

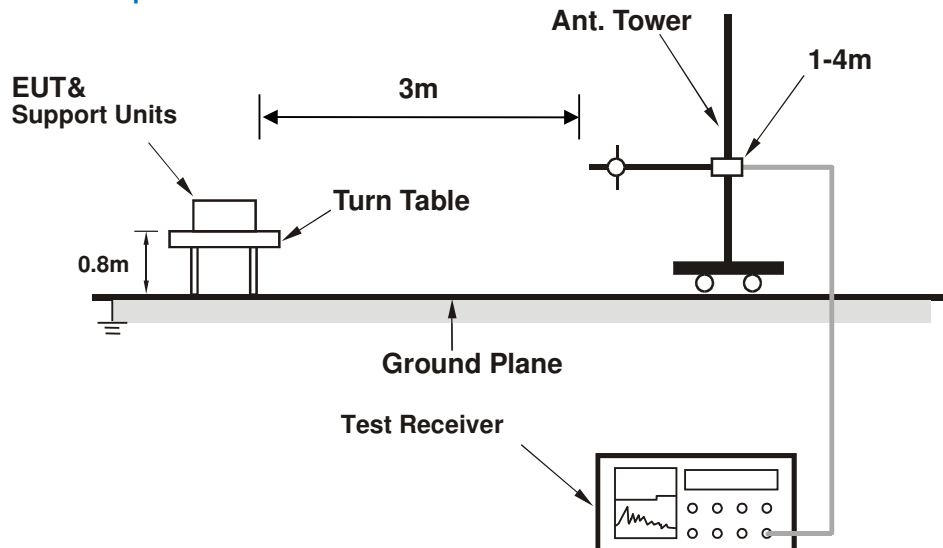
No deviation.

## 4.2.5 TEST SETUP

### Below 30MHz test setup



### Below 1GHz test setup



**Note:** For the actual test configuration, please refer to the attached file (Test Setup Photo).

## 4.2.6 EUT OPERATING CONDITIONS

- a. Turn on the power supply of the EUT.
- b. EUT was operated according to the type description in manufacturer's specifications or the User's Manual.

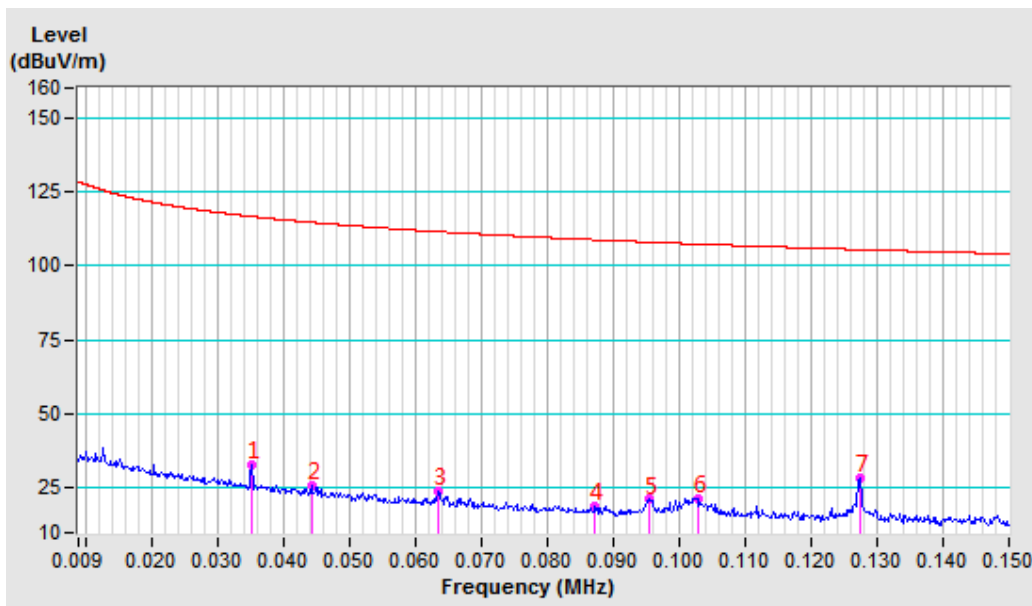


### 4.2.7 TEST RESULTS

<b>TEST MODE</b>	wireless charging + Transmitting	<b>FREQUENCY RANGE</b>	9 -150KHz
<b>TEST VOLTAGE</b>	DC 5V from adapter Input AC 120V 60Hz	<b>DETECTOR FUNCTION &amp; RESOLUTION BANDWIDTH</b>	Quasi-Peak, 200Hz
<b>ENVIRONMENTAL CONDITIONS</b>	21deg. C, 54% RH	<b>TESTED BY:</b> Vincent	

ANTENNA POLARITY & TEST DISTANCE: COAXIAL AT 3M								
No	Freq. (MHz)	Correction Factor (dB/m)	Raw Value (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)
1	0.03520	-11.62	44.77	33.15	116.67	-83.52	130	104
2	0.04430	-11.73	37.53	25.80	114.68	-88.88	130	223
3	0.06360	-11.82	35.61	23.79	111.53	-87.74	130	37
4	0.08730	-11.73	30.82	19.09	108.78	-89.69	130	61
5	0.09540	-11.67	32.84	21.17	108.01	-86.84	130	265
6	0.10280	-11.65	33.30	21.65	107.36	-85.71	130	220
7	0.12750	-11.68	40.06	28.38	105.49	-77.11	130	74

- REMARKS:**
1. Peak detector quick scan is showed on the graph and final quasi-peak detector data is measured corresponding to relevant limit and recorded in the data table.
  2. Negative sign (-) in the margin column signify levels below the limit.
  3. Frequency range scanned: 0.009-0.15MHz.
  4. Only emissions significantly above equipment noise floor are reported.

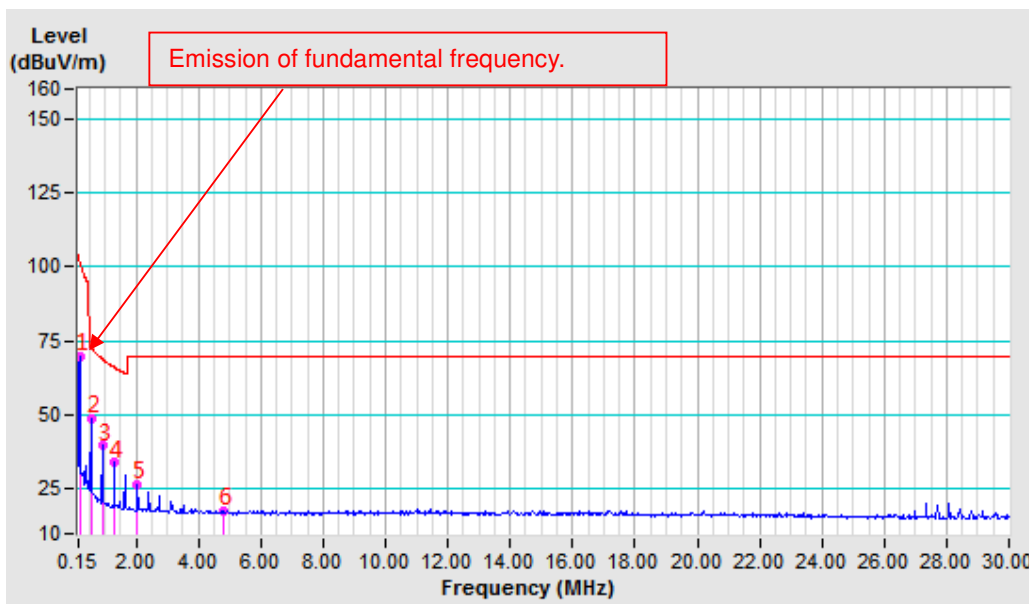




<b>TEST MODE</b>	wireless charging + Transmitting	<b>FREQUENCY RANGE</b>	150KHz-30MHz
<b>TEST VOLTAGE</b>	DC 5V from adapter Input AC 120V 60Hz	<b>DETECTOR FUNCTION &amp; RESOLUTION BANDWIDTH</b>	Quasi-Peak, 200Hz
<b>ENVIRONMENTAL CONDITIONS</b>	21deg. C, 54% RH	<b>TESTED BY:</b> Vincent	

<b>ANTENNA POLARITY &amp; TEST DISTANCE: COAXIAL AT 3M</b>								
No.	Freq. (MHz)	Correction Factor (dB/m)	Raw Value (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)
1	0.18430	-11.70	81.74	70.04	102.29	-32.25	130	196
2	0.55300	-11.73	60.55	48.82	72.85	-24.03	130	196
3	0.92320	-11.72	51.33	39.61	68.81	-29.20	130	196
4	1.29180	-11.67	45.55	33.88	66.16	-32.28	130	197
5	2.03060	-11.59	38.05	26.46	69.54	-43.08	130	2
6	4.80240	-11.72	29.51	17.79	69.54	-51.75	130	145

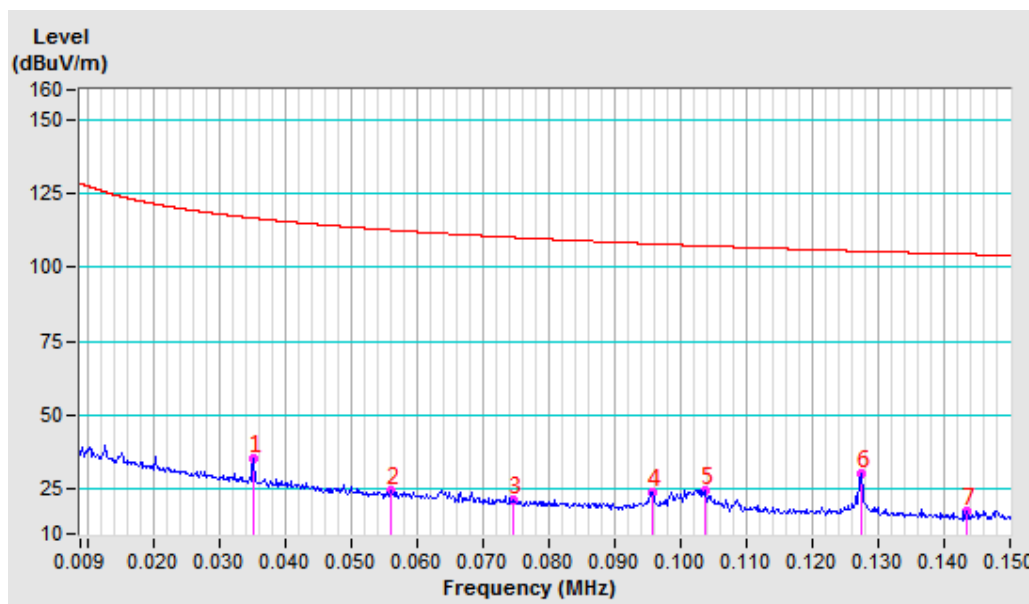
- REMARKS:**
1. Peak detector quick scan is showed on the graph and final quasi-peak detector data is measured corresponding to relevant limit and recorded in the data table.
  2. Negative sign (-) in the margin column signify levels below the limit.
  3. Frequency range scanned: 0.15-30MHz.
  4. Only emissions significantly above equipment noise floor are reported.



<b>TEST MODE</b>	wireless charging + Transmitting	<b>FREQUENCY RANGE</b>	9 -150KHz
<b>TEST VOLTAGE</b>	DC 5V from adapter Input AC 120V 60Hz	<b>DETECTOR FUNCTION &amp; RESOLUTION BANDWIDTH</b>	Quasi-Peak, 200Hz
<b>ENVIRONMENTAL CONDITIONS</b>	21deg. C, 54% RH	<b>TESTED BY:</b> Ming Bai	

<b>ANTENNA POLARITY &amp; TEST DISTANCE: COPLANAR AT 3M</b>								
No	Freq. (MHz)	Correction Factor (dB/m)	Raw Value (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)
1	0.03520	-11.62	46.85	35.23	116.67	-81.44	130	0
2	0.05610	-11.82	36.40	24.58	112.62	-88.04	130	26
3	0.07470	-11.79	33.14	21.35	110.14	-88.79	130	114
4	0.09570	-11.67	35.60	23.93	107.98	-84.05	130	223
5	0.10370	-11.65	36.53	24.88	107.29	-82.41	130	97
6	0.12740	-11.68	41.95	30.27	105.50	-75.23	130	253
7	0.14340	-11.70	29.64	17.94	104.47	-86.53	130	74

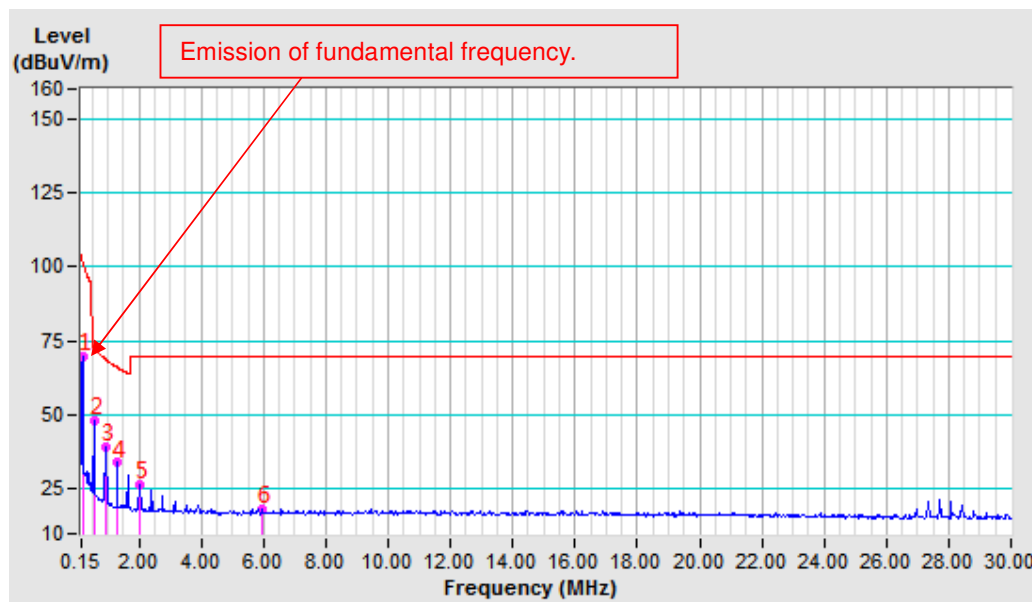
- REMARKS:**
1. Peak detector quick scan is showed on the graph and final quasi-peak detector data is measured corresponding to relevant limit and recorded in the data table.
  2. Negative sign (-) in the margin column signify levels below the limit.
  3. Frequency range scanned: 0.009-0.15MHz.
  4. Only emissions significantly above equipment noise floor are reported.



<b>TEST MODE</b>	wireless charging + Transmitting	<b>FREQUENCY RANGE</b>	150KHz-30MHz
<b>TEST VOLTAGE</b>	DC 5V from adapter Input AC 120V 60Hz	<b>DETECTOR FUNCTION &amp; RESOLUTION BANDWIDTH</b>	Quasi-Peak, 200Hz
<b>ENVIRONMENTAL CONDITIONS</b>	21deg. C, 54% RH	<b>TESTED BY:</b> Vincent	

<b>ANTENNA POLARITY &amp; TEST DISTANCE: COPLANAR AT 3M</b>								
No.	Freq. (MHz)	Correction Factor (dB/m)	Raw Value (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)
1	0.18430	-11.70	81.48	69.78	102.29	-32.51	130	184
2	0.55300	-11.73	60.15	48.42	72.85	-24.43	130	184
3	0.92320	-11.72	50.85	39.13	68.81	-29.68	130	173
4	1.29180	-11.67	45.56	33.89	66.16	-32.27	130	184
5	2.03060	-11.59	38.19	26.60	69.54	-42.94	130	184
6	5.93820	-11.72	30.03	18.31	69.54	-51.23	130	44

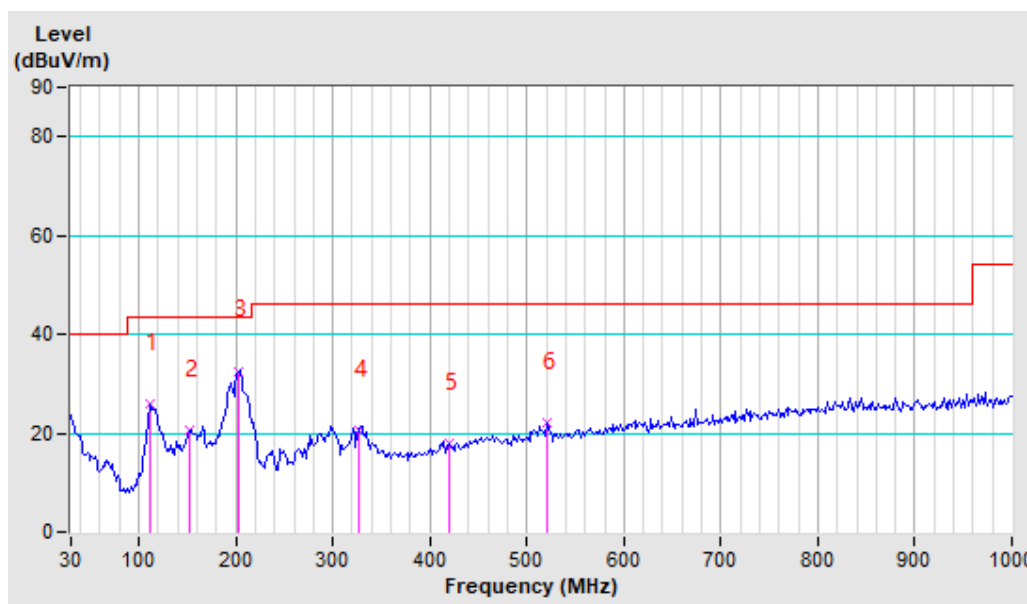
- REMARKS:**
1. Peak detector quick scan is showed on the graph and final quasi-peak detector data is measured corresponding to relevant limit and recorded in the data table.
  2. Negative sign (-) in the margin column signify levels below the limit.
  3. Frequency range scanned: 0.15-30MHz
  4. Only emissions significantly above equipment noise floor are reported.



<b>TEST MODE</b>	Wireless Charging	<b>FREQUENCY RANGE</b>	30-1000MHz
<b>TEST VOLTAGE</b>	DC 5V from Adapter Input AC 120V 60Hz	<b>DETECTOR FUNCTION &amp; RESOLUTION BANDWIDTH</b>	Quasi-Peak, 120kHz
<b>ENVIRONMENTAL CONDITIONS</b>	23deg. C, 55% RH	<b>TESTED BY:</b> Ming Bai	

<b>ANTENNA POLARITY &amp; TEST DISTANCE: HORIZONTAL AT 3M</b>								
No.	Freq. (MHz)	Correction Factor (dB/m)	Raw Value (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)
1	112.390	-19.06	44.91	25.85	43.50	-17.65	200	210
2	152.800	-15.59	36.26	20.67	43.50	-22.83	200	227
3	202.550	-18.27	50.87	32.60	43.50	-10.90	200	193
4	326.910	-13.77	34.21	20.44	46.00	-25.56	200	245
5	420.180	-11.11	29.18	18.07	46.00	-27.93	200	259
6	521.220	-8.87	30.86	21.99	46.00	-24.01	200	274

- REMARKS:**
1. Peak detector quick scan is showed on the graph and final quasi-peak detector data is measured corresponding to relevant limit and recorded in the data table.
  2. Negative sign (-) in the margin column signify levels below the limit.
  3. Frequency range scanned: 30MHz to 1000MHz.
  4. Only emissions significantly above equipment noise floor are reported.

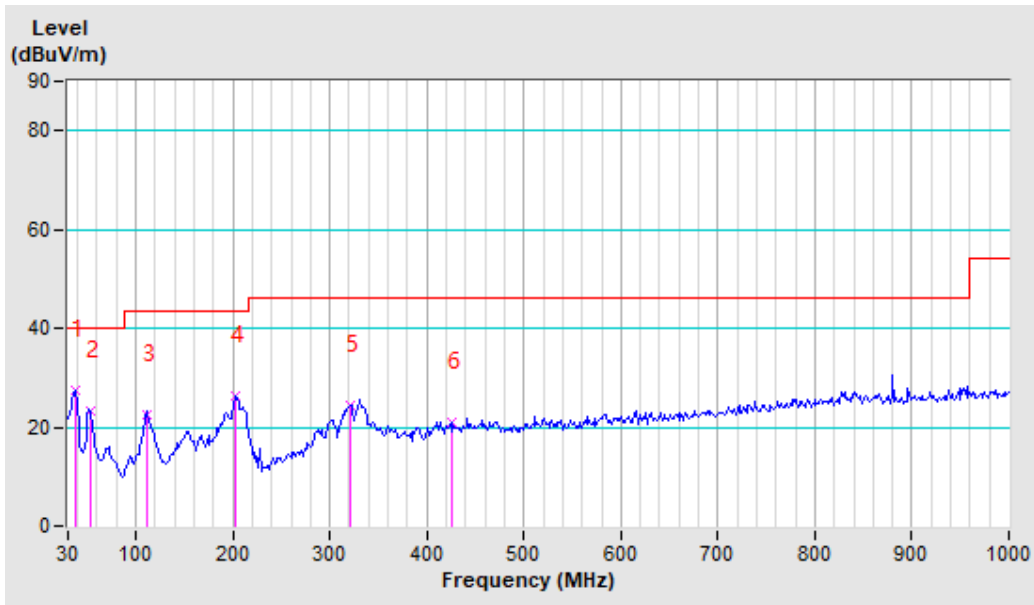




<b>TEST MODE</b>	Wireless Charging	<b>FREQUENCY RANGE</b>	30-1000MHz
<b>TEST VOLTAGE</b>	DC 5V from Adapter Input AC 120V 60Hz	<b>DETECTOR FUNCTION &amp; RESOLUTION BANDWIDTH</b>	Quasi-Peak, 120kHz
<b>ENVIRONMENTAL CONDITIONS</b>	21deg. C, 67% RH	<b>TESTED BY:</b> Ming Bai	

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3M								
No.	Freq. (MHz)	Correction Factor (dB/m)	Raw Value (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)
1	37.770	-17.63	45.09	27.46	40.00	-12.54	100	33
2	53.320	-16.52	39.70	23.18	40.00	-16.82	100	16
3	112.390	-19.06	41.58	22.52	43.50	-20.98	100	52
4	202.550	-18.27	44.48	26.21	43.50	-17.29	100	70
5	320.690	-13.93	38.48	24.55	46.00	-21.45	100	0
6	424.840	-10.94	31.76	20.82	46.00	-25.18	100	0

- REMARKS:**
1. Peak detector quick scan is showed on the graph and final quasi-peak detector data is measured corresponding to relevant limit and recorded in the data table.
  2. Negative sign (-) in the margin column signify levels below the limit.
  3. Frequency range scanned: 30MHz to 1000MHz.
  4. Only emissions significantly above equipment noise floor are reported.





### 4.3 20DB BANDWIDTH MEASUREMENT

#### 4.3.1 LIMITS OF 20dB BANDWIDTH MEASUREMENT

The field strength of any emissions appearing between the band edges and out of band shall be attenuated at least 20 dB below the level of the unmodulated carrier or to the general limits in Section 15.209.

#### 4.3.2 TEST INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Next Cal.
Signal and Spectrum Analyzer	Rohde&Schwarz	FSV40	101094	Jan. 11, 24
Current Probe	FCC	F-52	160055	Apr. 03, 24
Signal Generator	Agilent	N5183A	MY50140980	Jul. 23, 24
Loop Antenna	PHX	HLA50-2M	LA210301	N/A
Coaxial RF Cable	VIMA	MIL-C-17	RG58	Oct. 07, 23

**NOTE:**

1. The test was performed in RF Oven room.
2. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.
3. The FCC Site Registration No. is 749762.

#### 4.3.3 TEST PROCEDURE

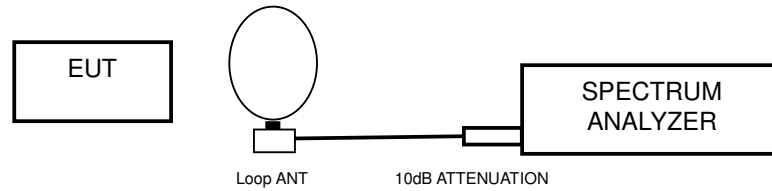
- a. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
- b. Turn on the EUT, then set it to any one convenient frequency within its operating range. Set a reference level on the measuring instrument equal to the highest peak value.
- c. Measure the frequency difference of two frequencies that were attenuated 20dB from the reference level. Record the frequency difference as the emission bandwidth.
- d. Repeat above procedures until all frequencies measured were complete.

#### 4.3.4 DEVIATION FROM TEST STANDARD

No deviation.



#### 4.3.5 TEST SETUP



#### 4.3.6 EUT OPERATING CONDITION

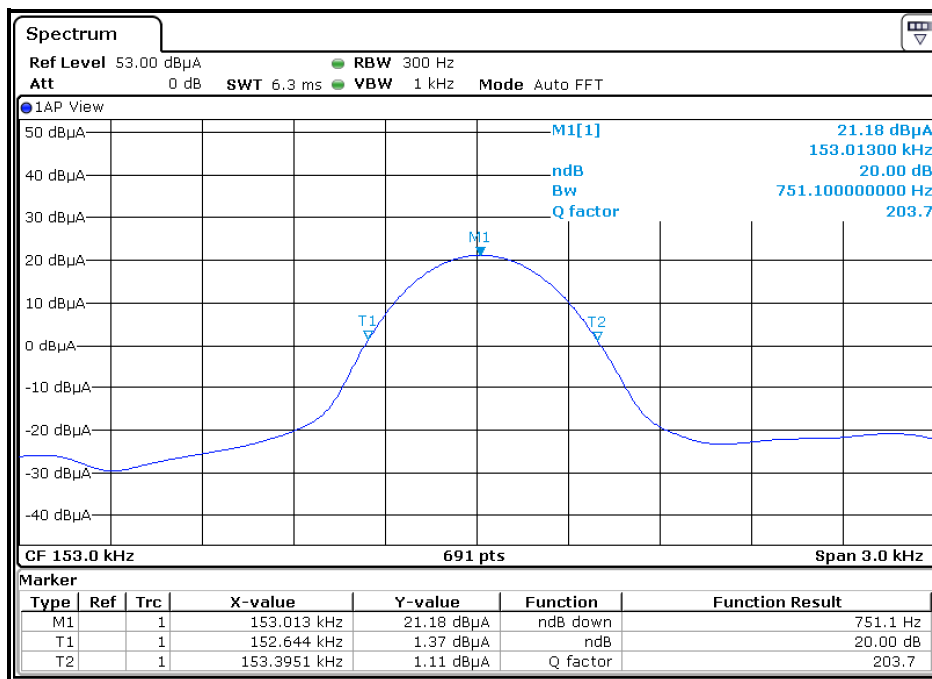
- a. Turn on the EUT.
- b. The EUT tested in charging mode and standby mode respectively.

### 4.3.7 TEST RESULTS

TEST MODE	CHANNEL FREQUENCY (KHz)	20dB BANDWIDTH (Hz)
Standby	153.00	751.1

Lower & Upper Test Frequency Point (MHz)	Test Frequency (KHz)	P/F
Lower	152.644	PASS
Upper	153.3951	PASS

**Test Data:**



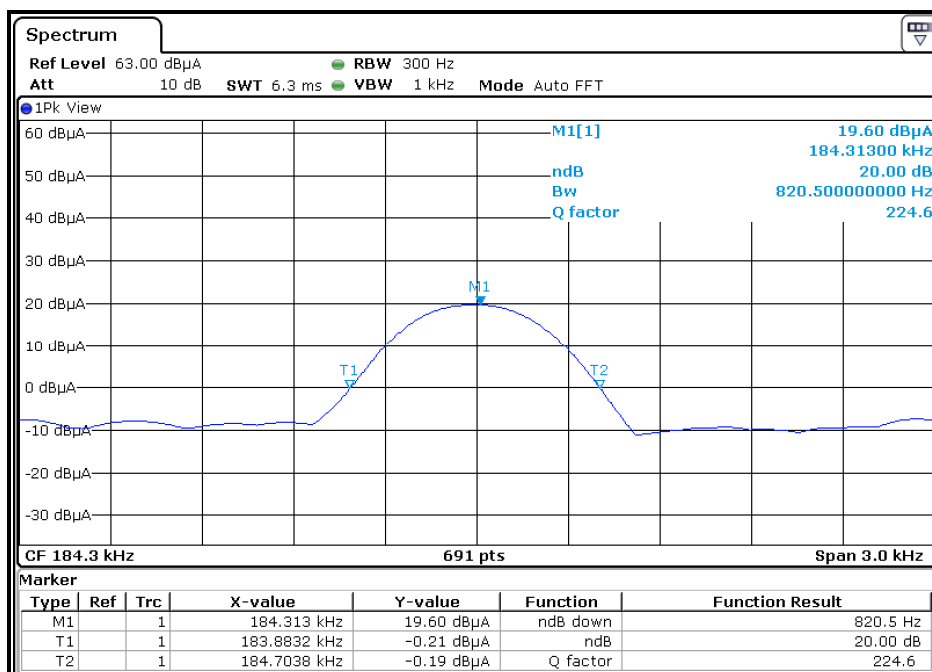
Notes: It not practical to adjust RBW in range of 1% to 5% of the OBW.



TEST MODE	CHANNEL FREQUENCY (KHz)	20dB BANDWIDTH (Hz)
Charging	184.3	820.5

Lower & Upper Test Frequency Point (MHz)	Test Frequency (KHz)	P/F
Lower	183.8832	PASS
Upper	184.7038	PASS

Test Data:



Notes: It not practical to adjust RBW in range of 1% to 5% of the OBW.



**BUREAU**  
**VERITAS**

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## 5 PHOTOGRAPHS OF THE TEST CONFIGURATION

Please refer to the attached file (Test Setup Photo).



**BUREAU**  
**VERITAS**

Test Report No.: RF2206WDG0262-2

## **6 APPENDIX A – MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB**

No any modifications were made to the EUT by the lab during the test.

**---END---**