

APPLICATION FOR VERIFICATION  
On Behalf of  
GOOD EVER TRADING LIMITED

WIRELESS CHARGING PAD

Model No.: CB-E124, WCC-1378AS, 217456, 400847

FCC ID: 2AM7T-CB-E124

Prepared for : GOOD EVER TRADING LIMITED  
Address : Rm.1701, Zhuoyue Building, Fuhua Yi Rd., Futian Central  
Zone, Shenzhen, P.R.China

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Report No. : ATE20190044  
Date of Test : Jan. 19, 2019--Jan. 22, 2019  
Date of Report : Jan. 23, 2019

## TABLE OF CONTENTS

Description	Page
Test Report Declaration	
<b>1. TEST RESULTS SUMMARY .....</b>	<b>4</b>
<b>2. GENERAL INFORMATION .....</b>	<b>5</b>
2.1. Description of Device (EUT) .....	5
2.2. Model difference declaration .....	5
2.3. Special Accessory and Auxiliary Equipment .....	5
2.4. Description of Test Facility .....	6
2.5. Measurement Uncertainty .....	6
<b>3. MEASURING DEVICE AND TEST EQUIPMENT .....</b>	<b>7</b>
3.1. For Radiated Emission Measurement .....	7
3.2. The Equipment Used to Measure Conducted Disturbance (L.I.S.N) .....	8
<b>4. POWER LINE CONDUCTED MEASUREMENT .....</b>	<b>9</b>
4.1. Block Diagram of Test Setup .....	9
4.2. Power Line Conducted Emission Measurement Limits .....	9
4.3. Configuration of EUT on Measurement .....	9
4.4. Operating Condition of EUT .....	9
4.5. Test Procedure .....	10
4.6. DATA SAMPLE .....	10
4.7. Power Line Conducted Emission Measurement Results .....	11
<b>5. RADIATED EMISSION MEASUREMENT .....</b>	<b>14</b>
5.1. Block Diagram of Test .....	14
5.2. Radiated Emission Limit (Class B) .....	15
5.3. Manufacturer .....	15
5.4. Operating Condition of EUT .....	16
5.5. DATA SAMPLE .....	16
5.6. Test Procedure .....	16
5.7. Radiated Emission Noise Measurement Result .....	17
<b>6. 99% OCCUPIED BANDWIDTH .....</b>	<b>20</b>
6.1. Block Diagram of Test Setup .....	20
6.2. EUT Configuration on Measurement .....	20
6.3. Operating Condition of EUT .....	20
6.4. Test Procedure .....	20
6.5. Measurement Result .....	21
<b>7. ANTENNA REQUIREMENT .....</b>	<b>22</b>
7.1. The Requirement .....	22
7.2. Antenna Construction .....	22

## Test Report Declaration

Applicant& address : GOOD EVER TRADING LIMITED  
Rm.1701, Zhuoyue Building, Fuhua Yi Rd., Futian Central Zone, Shenzhen, P.R.China

Manufacturer& address : GOOD EVER TRADING LIMITED  
Rm.1701, Zhuoyue Building, Fuhua Yi Rd., Futian Central Zone, Shenzhen, P.R.China

Product : WIRELESS CHARGING PAD

Model No. : CB-E124, WCC-1378AS, 217456, 400847

Trade name : N/A


Measurement Procedure Used:


**FCC CFR47 Part 15 Subpart C Section 15.207 and 15.209, 2.1049**  
**ANSI C63.10: 2013**

The device described above is tested by Shenzhen Accurate Technology Co., Ltd. to determine the maximum emission levels emanating from the device. The maximum emission levels are compared to the FCC Part 15 Subpart C limits both radiated and conducted emissions. The measurement results are contained in this test report and Shenzhen Accurate Technology Co., Ltd. is assumed full responsibility for the accuracy and completeness of these measurements. Also, this report shows that the Equipment Under Test (EUT) is to be technically compliant with the FCC requirements.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of Shenzhen Accurate Technology Co., Ltd.

Date of Test : Jan. 19, 2019--Jan. 22, 2019  
Date of Report : Jan. 23, 2019

Prepared by :   
(Tin, Testing Engineer)

Approved & Authorized Signer :   
( Sean Liu, Manager)

## 1. TEST RESULTS SUMMARY

Test Items	Test Standard	Test Results
Power Line Conducted Emission	FCC Part 15.207	Pass
Radiated Emission	FCC Part 15.209	Pass
Occupied bandwidth	FCC Part 2.1049	Pass

## 2. GENERAL INFORMATION

### 2.1. Description of Device (EUT)

The submitted sample is WIRELESS CHARGING PAD, which declared Transmitter channel frequency is 110.5-205.0kHz.

The EUT is powered supply by DC 5V(Powered by charge port).

		WIRELESS CHARGING PAD
Frequency	:	110.5-205.0kHz
Modulation Type	:	ASK
Type of Antenna	:	Coil Antenna
Power Supply	:	Input: DC 5V/2A Output: DC 5V/1A
Sample Number	:	1900033

### 2.2. Model difference declaration

CB-E124, WCC-1378AS, 217456 400847 are identical in PCB motherboard, driver IC, RF module and Enclosure except the product's appearance color is different.

### 2.3. Special Accessory and Auxiliary Equipment

1. AC/DC Power Adapter: Model: MX12X6-0502000VU  
(provided by laboratory) INPUT: 100-240V~50/60Hz 0.5A  
OUTPUT:5V/2A

#### 2. Load

Note:No load, Mid load, Max load all have been pretest ,only worse case Max load is reported

## 2.4. Description of Test Facility

EMC Lab : Recognition of accreditation by Federal Communications Commission (FCC)

The Designation Number is CN1189

The Registration Number is 708358

Listed by Innovation, Science and Economic Development Canada (ISED)

The Registration Number is 5077A-2

Accredited by China National Accreditation Service for Conformity Assessment (CNAS)

The Registration Number is CNAS L3193

Accredited by American Association for Laboratory Accreditation (A2LA)

The Certificate Number is 4297.01

Name of Firm : Shenzhen Accurate Technology Co., Ltd

Site Location : 1/F., Building A, Changyuan New Material Port, Science & Industry Park, Nanshan District, Shenzhen, Guangdong, P.R. China

## 2.5. Measurement Uncertainty

Conducted emission expanded uncertainty : U=2.23dB, k=2

Power disturbance expanded uncertainty : U=2.92dB, k=2

Radiated emission expanded uncertainty : U=3.08dB, k=2  
(9kHz-30MHz)

Radiated emission expanded uncertainty : U=4.42dB, k=2  
(30MHz-1000MHz)

Radiated emission expanded uncertainty : U=4.06dB, k=2  
(Above 1GHz)

### 3. MEASURING DEVICE AND TEST EQUIPMENT

#### 3.1. For Radiated Emission Measurement

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum Analyzer	Agilent	E7405A	MY45115511	Jan.05, 2019	1 Year
2.	Spectrum Analyzer	Rohde&Schwarz	FSV40	101495	Jan.05, 2019	1 Year
3.	Test Receiver	Rohde&Schwarz	ESCS30	100307	Jan.05, 2019	1 Year
4.	Test Receiver	Rohde& Schwarz	ESPI	100396/003	Jan.05, 2019	1 Year
5.	Test Receiver	Rohde& Schwarz	ESPI	101526/003	Jan.05, 2019	1 Year
6.	Test Receiver	Rohde& Schwarz	ESR	101817	Jan.05, 2019	1 Year
7.	Bilog Antenna	Schwarzbeck	VULB9163	9163-194	Jan.05, 2019	1 Year
8.	Bilog Antenna	Schwarzbeck	VULB9163	9163-323	Jan.05, 2019	1 Year
9.	Log.-Per.Antenna	Schwarzbeck	VUSLP 9111B	9111B-074	Jan.05, 2019	1 Year
10.	Biconical Broad Band Antenna	Schwarzbeck	VHBB 9124+BBA 9106	9124-617	Jan.05, 2019	1 Year
11.	Loop Antenna	Schwarzbeck	FMZB1516	1516131	Jan.05, 2019	1 Year
12.	Horn Antenna	Schwarzbeck	BBHA9120D	9120D-655	Jan.05, 2019	1 Year
13.	Horn Antenna	Schwarzbeck	BBHA9120D	9120D-1067	Jan.05, 2019	1 Year
14.	Vertical Active Monopole Antenna	Schwarzbeck	VAMP 9243	9243-370	Jan.05, 2019	1 Year
15.	RF Switching Unit+PreAMP	Compliance Direction	RSU-M2	38322	Jan.05, 2019	1 Year
16.	Pre-Amplifier	Agilent	8447D	294A10619	Jan.05, 2019	1 Year
17.	Pre-Amplifier	Rohde&Schwarz	CBLU11835 40-01	3791	Jan.05, 2019	1 Year
18.	50 Coaxial Switch	Anritsu Corp	MP59B	6200237248	Jan.05, 2019	1 Year
19.	50 Coaxial Switch	Anritsu Corp	MP59B	6200506474	Jan.05, 2019	1 Year
20.	RF Coaxial Cable	Schwarzbeck	N-5m	No.1	Jan.05, 2019	1 Year
21.	RF Coaxial Cable	Schwarzbeck	N-1m	No.6	Jan.05, 2019	1 Year
22.	RF Coaxial Cable	Schwarzbeck	N-1m	No.7	Jan.05, 2019	1 Year
23.	RF Coaxial Cable	SUHNER	N-3m	No.8	Jan.05, 2019	1 Year
24.	RF Coaxial Cable	RESENBERGER	N-3.5m	No.9	Jan.05, 2019	1 Year
25.	RF Coaxial Cable	SUHNER	N-6m	No.10	Jan.05, 2019	1 Year
26.	RF Coaxial Cable	RESENBERGER	N-12m	No.11	Jan.05, 2019	1 Year
27.	RF Coaxial Cable	RESENBERGER	N-0.5m	No.12	Jan.05, 2019	1 Year
28.	RF Coaxial Cable	SUHNER	N-2m	No.13	Jan.05, 2019	1 Year
29.	RF Coaxial Cable	SUHNER	N-0.5m	No.15	Jan.05, 2019	1 Year
30.	RF Coaxial Cable	SUHNER	N-2m	No.16	Jan.05, 2019	1 Year
31.	RF Coaxial Cable	RESENBERGER	N-6m	No.17	Jan.05, 2019	1 Year
Radiated Emission Measurement Software: EZ EMC V1.1.4.2						

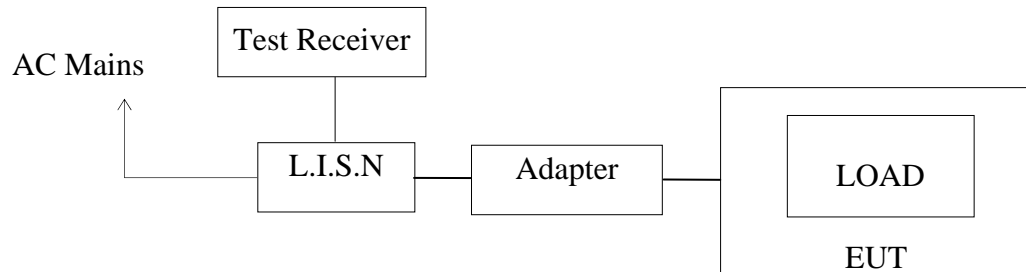
### 3.2.The Equipment Used to Measure Conducted Disturbance (L.I.S.N)

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Test Receiver	Rohde & Schwarz	ESCS30	100307	Jan.05, 2019	1 Year
2.	Test Receiver	Rohde & Schwarz	ESPI3	100396/003	Jan.05, 2019	1 Year
3.	Test Receiver	Rohde & Schwarz	ESPI3	101526/003	Jan.05, 2019	1 Year
4.	L.I.S.N.	Schwarzbeck	NLSK8126	8126431	Jan.05, 2019	1 Year
5.	L.I.S.N.	Rohde & Schwarz	ESH3-Z5	100305	Jan.05, 2019	1 Year
6.	L.I.S.N.	Rohde & Schwarz	ESH3-Z5	100310	Jan.05, 2019	1 Year
7.	L.I.S.N.	Rohde & Schwarz	ESH3-Z6	100132	Jan.05, 2019	1 Year
8.	Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100305	Jan.05, 2019	1 Year
9.	Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100312	Jan.05, 2019	1 Year
10.	Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100815	Jan.05, 2019	1 Year
11.	50Ω Coaxial Switch	Anritsu Corp	MP59B	6200283936	Jan.05, 2019	1 Year
12.	50Ω Coaxial Switch	Anritsu Corp	MP59B	6200283933	Jan.05, 2019	1 Year
13.	50Ω Coaxial Switch	Anritsu Corp	MP59B	6200506474	Jan.05, 2019	1 Year
14.	VOLTAGE PROBE	Schwarzbeck	TK9416	N/A	Jan.05, 2019	1 Year
15.	RF CURRENT PROBE	Rohde & Schwarz	EZ-17	100048	Jan.05, 2019	1 Year
16.	8-Wire Impedance Stabilisation Network	Schwarzbeck	CAT5 8158	8158-0035	Jan.05, 2019	1 Year
17.	RF Coaxial Cable	SUHNER	N-2m	No.2	Jan.05, 2019	1 Year
18.	RF Coaxial Cable	SUHNER	N-2m	No.3	Jan.05, 2019	1 Year
19.	RF Coaxial Cable	SUHNER	N-2m	No.14	Jan.05, 2019	1 Year
Conducted Emission Measurement Software: ES-K1 V1.71						



## 4. POWER LINE CONDUCTED MEASUREMENT

### 4.1. Block Diagram of Test Setup



(EUT: WIRELESS CHARGING PAD)

### 4.2. Power Line Conducted Emission Measurement Limits

Frequency (MHz)	Limit dB(μV)	
	Quasi-peak Level	Average Level
0.15 - 0.50	66.0 – 56.0 *	56.0 – 46.0 *
0.50 - 5.00	56.0	46.0
5.00 - 30.00	60.0	50.0

NOTE1: The lower limit shall apply at the transition frequencies.  
NOTE2: The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.50MHz.

### 4.3. Configuration of EUT on Measurement

The following equipments are installed on Power Line Conducted Emission Measurement to meet the commission requirement and operating regulations in a manner, which tends to maximize its emission characteristics in a normal application.

### 4.4. Operating Condition of EUT

4.4.1. Setup the EUT and simulator as shown as Section 4.1.

4.4.2. Turn on the power of all equipment.

4.4.3. Let the EUT work in test mode and measure it.

#### 4.5. Test Procedure

The EUT is put on the plane 0.8 m high above the ground by insulating support and is connected to the power mains through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm coupling impedance for the EUT system. Please refer the block diagram of the test setup and photographs. Both sides of AC lines are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to ANSI C63.10: 2013 on Conducted Emission Measurement.

The bandwidth of test receiver (R & S ESCS30) is set at 9kHz.

The frequency range from 150kHz to 30MHz is checked.

#### 4.6. DATA SAMPLE

Frequency (MHz)	Quasi Peak Level (dB $\mu$ V)	Average Level (dB $\mu$ V)	Transducer value (dB)	QuasiPeak Result (dB $\mu$ V)	Average Result (dB $\mu$ V)	Quasi Peak Limit (dB $\mu$ V)	Average Limit (dB $\mu$ V)	QuasiPeak Margin (dB)	Average Margin (dB)	Remark (Pass/Fail)
X.XX	29.4	18.3	11.1	40.5	29.4	56.0	56.0	15.5	16.6	Pass

Transducer value = Insertion loss of LISN + Cable Loss

Result = Quasi-peak Level/Average Level + Transducer value

Limit = Limit stated in standard

Calculation Formula:

Margin = Limit – Reading level value – Transducer value

## 4.7.Power Line Conducted Emission Measurement Results

**PASS.**

The frequency range from 150kHz to 30MHz is checked.

Test mode : Max Load(worse case)								
Test Voltage: 120V/60Hz								
<b>MEASUREMENT RESULT: "F-0044-2_fin"</b>								
2019-1-22 9:37								
Frequency MHz	Level dBuV	Transd dB	Limit dBuV	Margin dB	Detector	Line	PE	
0.150000	50.80	10.8	66	15.2	QP	L1	GND	
0.843000	33.50	11.1	56	22.5	QP	L1	GND	
0.978000	35.90	11.1	56	20.1	QP	L1	GND	
2.166000	30.30	11.3	56	25.7	QP	L1	GND	
7.836000	34.80	11.5	60	25.2	QP	L1	GND	
17.394000	36.80	11.7	60	23.2	QP	L1	GND	
<b>MEASUREMENT RESULT: "F-0044-2_fin2"</b>								
2019-1-22 9:37								
Frequency MHz	Level dBuV	Transd dB	Limit dBuV	Margin dB	Detector	Line	PE	
0.150000	45.90	10.8	56	10.1	AV	L1	GND	
0.631500	26.20	11.0	46	19.8	AV	L1	GND	
0.910500	22.70	11.1	46	23.3	AV	L1	GND	
2.445000	22.90	11.3	46	23.1	AV	L1	GND	
7.593000	27.00	11.5	50	23.0	AV	L1	GND	
16.903500	22.60	11.7	50	27.4	AV	L1	GND	
<b>MEASUREMENT RESULT: "F-0044-1_fin"</b>								
2019-1-22 9:33								
Frequency MHz	Level dBuV	Transd dB	Limit dBuV	Margin dB	Detector	Line	PE	
0.150000	50.90	10.8	66	15.1	QP	N	GND	
0.631500	43.30	11.0	56	12.7	QP	N	GND	
0.982500	43.10	11.1	56	12.9	QP	N	GND	
2.166000	33.40	11.3	56	22.6	QP	N	GND	
11.616000	28.50	11.6	60	31.5	QP	N	GND	
16.633500	33.40	11.7	60	26.6	QP	N	GND	
<b>MEASUREMENT RESULT: "F-0044-1_fin2"</b>								
2019-1-22 9:33								
Frequency MHz	Level dBuV	Transd dB	Limit dBuV	Margin dB	Detector	Line	PE	
0.150000	45.90	10.8	56	10.1	AV	N	GND	
0.631500	37.30	11.0	46	8.7	AV	N	GND	
0.982500	33.60	11.1	46	12.4	AV	N	GND	
2.445000	27.10	11.3	46	18.9	AV	N	GND	
7.579500	22.80	11.5	50	27.2	AV	N	GND	
16.386000	18.00	11.7	50	32.0	AV	N	GND	

Emissions attenuated more than 20 dB below the permissible value are not reported.

The spectral diagrams are attached as below.

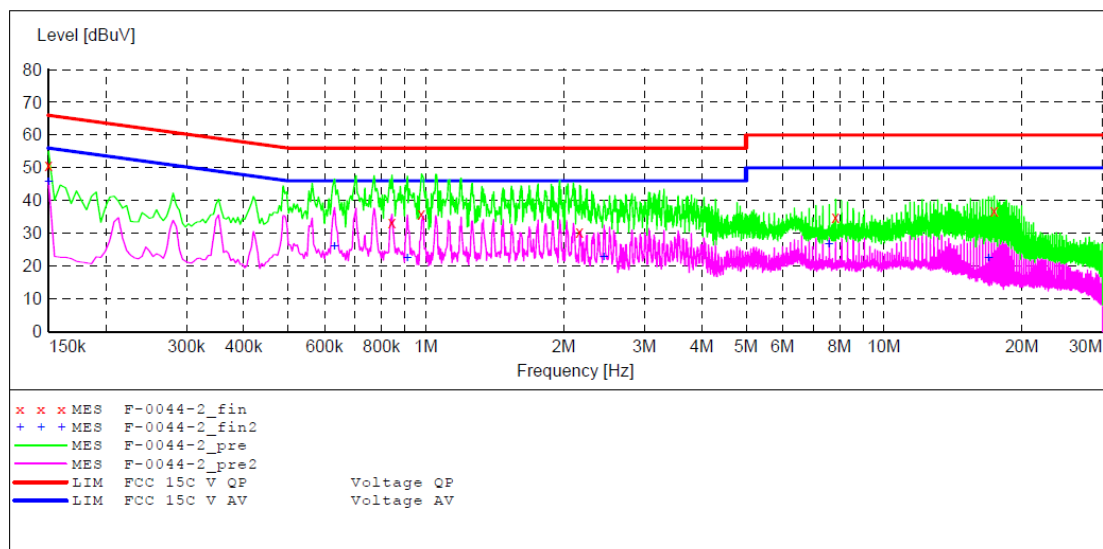
## ACCURATE TECHNOLOGY CO., LTD

### CONDUCTED EMISSION STANDARD FCC PART 15C

EUT: WIRELESS CHARGING PAD M/N:CB-E124  
 Manufacturer: GOOD EVER TRADING LIMITED  
 Operating Condition: Max load  
 Test Site: 1#Shielding Room  
 Operator: Frank  
 Test Specification: L 120V/60Hz  
 Comment: Report NO.:ATE20190044  
 Start of Test: 2019-1-22 / 9:33:57

### SCAN TABLE: "V 150K-30MHz fin"

Short Description: SUB STD VTERM2 1.70  
 Start Stop Step Detector Meas. IF Transducer  
 Frequency Frequency Width Time Bandw.  
 150.0 kHz 30.0 MHz 4.5 kHz QuasiPeak 1.0 s 9 kHz NSLK8126 2008  
 Average



### MEASUREMENT RESULT: "F-0044-2\_fin"

2019-1-22 9:37

Frequency MHz	Level dBuV	Transd dB	Limit dBuV	Margin dB	Detector	Line	PE
0.150000	50.80	10.8	66	15.2	QP	L1	GND
0.843000	33.50	11.1	56	22.5	QP	L1	GND
0.978000	35.90	11.1	56	20.1	QP	L1	GND
2.166000	30.30	11.3	56	25.7	QP	L1	GND
7.836000	34.80	11.5	60	25.2	QP	L1	GND
17.394000	36.80	11.7	60	23.2	QP	L1	GND

### MEASUREMENT RESULT: "F-0044-2\_fin2"

2019-1-22 9:37

Frequency MHz	Level dBuV	Transd dB	Limit dBuV	Margin dB	Detector	Line	PE
0.150000	45.90	10.8	56	10.1	AV	L1	GND
0.631500	26.20	11.0	46	19.8	AV	L1	GND
0.910500	22.70	11.1	46	23.3	AV	L1	GND
2.445000	22.90	11.3	46	23.1	AV	L1	GND
7.593000	27.00	11.5	50	23.0	AV	L1	GND
16.903500	22.60	11.7	50	27.4	AV	L1	GND

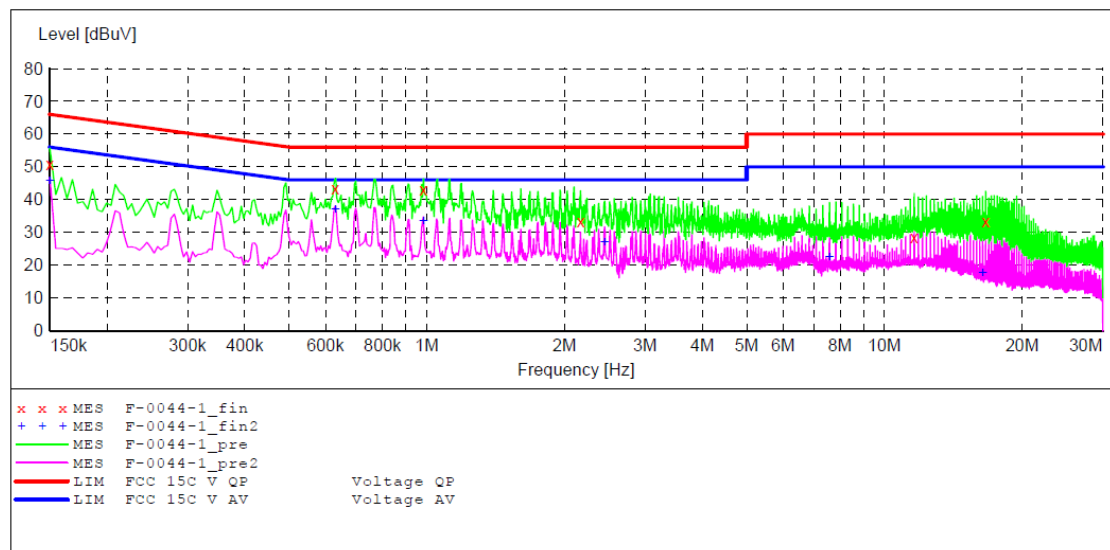
## ACCURATE TECHNOLOGY CO., LTD

### CONDUCTED EMISSION STANDARD FCC PART 15C

EUT: WIRELESS CHARGING PAD M/N:CB-E124  
 Manufacturer: GOOD EVER TRADING LIMITED  
 Operating Condition: Max load  
 Test Site: 1#Shielding Room  
 Operator: Frank  
 Test Specification: N 120V/60Hz  
 Comment: Report NO.:ATE20190044  
 Start of Test: 2019-1-22 / 9:30:22

### SCAN TABLE: "V 150K-30MHz fin"

Short Description: SUB STD VTERM2 1.70  
 Start Stop Step Detector Meas. IF Transducer  
 Frequency Frequency Width Time Bandw.  
 150.0 kHz 30.0 MHz 4.5 kHz QuasiPeak 1.0 s 9 kHz NSLK8126 2008  
 Average



### MEASUREMENT RESULT: "F-0044-1\_fin"

2019-1-22 9:33

Frequency MHz	Level dBuV	Transd dB	Limit dBuV	Margin dB	Detector	Line	PE
0.150000	50.90	10.8	66	15.1	QP	N	GND
0.631500	43.30	11.0	56	12.7	QP	N	GND
0.982500	43.10	11.1	56	12.9	QP	N	GND
2.166000	33.40	11.3	56	22.6	QP	N	GND
11.616000	28.50	11.6	60	31.5	QP	N	GND
16.633500	33.40	11.7	60	26.6	QP	N	GND

### MEASUREMENT RESULT: "F-0044-1\_fin2"

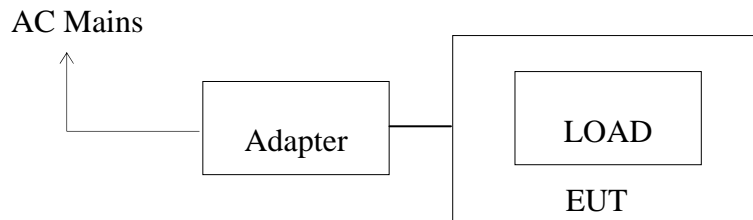
2019-1-22 9:33

Frequency MHz	Level dBuV	Transd dB	Limit dBuV	Margin dB	Detector	Line	PE
0.150000	45.90	10.8	56	10.1	AV	N	GND
0.631500	37.30	11.0	46	8.7	AV	N	GND
0.982500	33.60	11.1	46	12.4	AV	N	GND
2.445000	27.10	11.3	46	18.9	AV	N	GND
7.579500	22.80	11.5	50	27.2	AV	N	GND
16.386000	18.00	11.7	50	32.0	AV	N	GND

## 5. RADIATED EMISSION MEASUREMENT

### 5.1. Block Diagram of Test

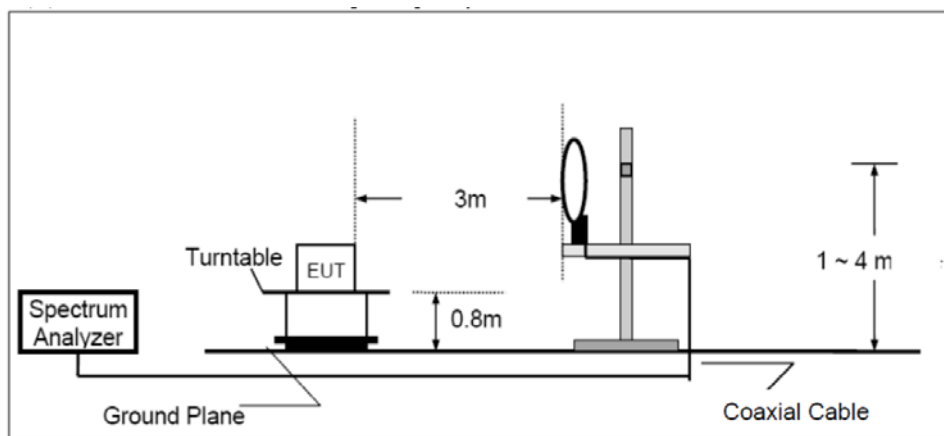
#### 5.1.1. Block diagram of connection between the EUT and simulators



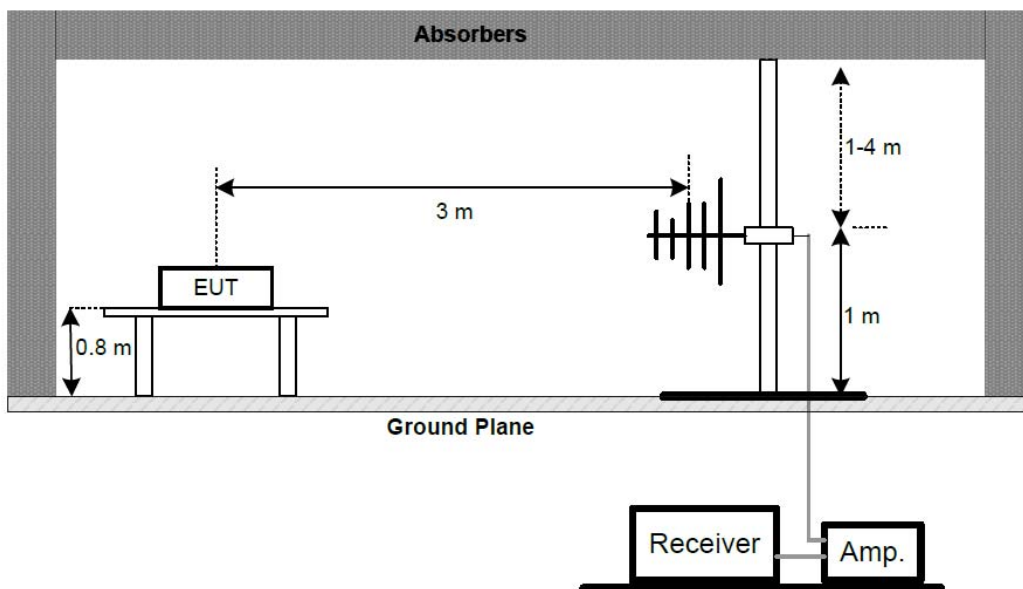
(EUT: WIRELESS CHARGING PAD)

#### 5.1.2. Block diagram of test setup (In chamber)

##### (A) Radiated Emission Test Set-Up, Frequency below 30MHz



(B) Radiated Emission Test Set-Up, Frequency below 1GHz



5.2. Radiated Emission Limit (Class B)

Frequency (MHz)	Field Strength Limitation		Field Strength Limitation at 3m Measurement Dist	
	(uV/m)	Dist	(uV/m)	(dBuV/m)
0.009 – 0.490	2400 / F(KHz)	300m	$10000 * 2400/F(KHz)$	$20\log 2400/F(KHz) + 80$
0.490 – 1.705	24000 / F(KHz)	30m	$100 * 24000/F(KHz)$	$20\log 24000/F(KHz) + 40$
1.705 – 30.00	30	30m	$100 * 30$	$20\log 30 + 40$
30.0 – 88.0	100	3m	100	$20\log 100$
88.0 – 216.0	150	3m	150	$20\log 150$
216.0 – 960.0	200	3m	200	$20\log 200$
Above 960.0	500	3m	500	$20\log 500$

Limit:  $2400/175=13.7\mu V/m@300m$

Distance Correction Factor= $40\log(\text{test distance}/\text{specific distance})$

5.3. Manufacturer

The following equipments are installed on Radiated Emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

5.3.1. WIRELESS CHARGING PAD (EUT)

Model Number: CB-E124

Manufacturer: GOOD EVER TRADING LIMITED

## 5.4. Operating Condition of EUT

5.4.1. Setup the EUT and simulator as shown as Section 5.1.

5.4.2. Turn on the power of all equipment.

5.4.3. Let the EUT work in test mode and measure it.

## 5.5. DATA SAMPLE

Frequency (MHz)	Reading (dB $\mu$ V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Remark
X.XX	49.83	-22.03	27.80	43.50	-15.70	QP

Frequency(MHz) = Emission frequency in MHz

Reading(dB $\mu$ V) = Uncorrected Analyzer/Receiver reading

Factor (dB/m)= Antenna factor + Cable Loss – Amplifier gain

Result(dB $\mu$ V/m) = Reading + Factor

Limit (dB $\mu$ V/m)= Limit stated in standard

Margin (dB) = Result(dB $\mu$ V/m) - Limit (dB $\mu$ V/m)

Calculation Formula:

Margin(dB) = Result (dB $\mu$ V/m)–Limit(dB $\mu$ V/m)

Result(dB $\mu$ V/m)= Reading(dB $\mu$ V)+ Factor(dB/m)

The “Margin” column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of -7dB means the emission is 7dB below the limit.

## 5.6. Test Procedure

The EUT and its simulators are placed on a turntable, which is 0.8 meter high above ground. The turntable can rotate 360 degrees to determine the position of the maximum emission level. EUT is set 3.0 meters away from the receiving antenna, which is mounted on an antenna tower. The antenna can be moved up and down between 1.0 meter and 4 meters to find out the maximum emission level. Broadband antenna (calibrated bilog antenna) is used as receiving antenna. Both horizontal and vertical polarizations of the antenna are set on measurement. In order to find the maximum emission levels, all of the interface cables must be manipulated according to ANSI C63.10: 2013 on radiated emission measurement.

From 9kHz to 30MHz at distance 3m The EUT was rotated a full revolution in order to obtain the maximum value of the electric field intensity.

From 30MHz to 1000MHz at distance 3m The measuring antenna height varied between 1 and 4m and EUT was rotated a full revolution in order to obtain the maximum value of the electric field intensity. The measurements were performed for both vertical and horizontal antenna polarization.



The final measurement will be performed with an EMI Receiver set to Quasi Peak detector for the frequency bands 9kHz to 90kHz and 110 to 490 kHz where an average detector will be used according to Section 15.209(d)(2).

The final level, expressed in dBuV/m, is arrived at by taking the reading from the EMI receiver(Level dBuV) and adding the antenna correction factor and cable loss factor(Factor dB) to it. This result then has to be compared with the relevant FCC limit.The resolution bandwidth during the measurement is as follows:

9kHz – 150kHz: ResBW:200Hz

150kHz – 30MHz: ResBW:9kHz

The bandwidth of the EMI test receiver (R&S ESCS30) is set at 120kHz from 30MHz to 1000MHz.

## 5.7.Radiated Emission Noise Measurement Result

**PASS.**

From 9kHz to 30MHz(175kHz TX)

Frequency (MHz)	Quasi Peak (dB $\mu$ V/m)	Detector	Azimuth	Height (cm)	Limit @3m (dB $\mu$ V/m)	Margin (dB)
0.175	94.76	Peak	78	124	122.7	-27.94
0.175	85.48	AV	78	124	102.7	-17.22
2.21	36.20	QP	356	150	69.5	-33.30
2.59	35.42	QP	229	202	69.5	-34.08
0.175	89.14	Peak	145	145	122.7	-33.56
0.175	79.87	AV	145	145	102.7	-22.83
2.66	31.31	QP	37	154	69.5	-38.19
3.56	34.38	QP	40	148	69.5	-35.12

Part 15 Section 15.31(f)(2) (9kHz-30MHz)

Limit at 3m=Limit at 300m-40\*log(3(m)/300(m))

Limit at 3m=Limit at 30m-40\*log(3(m)/30(m))

From 30MHz to 1000MHz(Worse case)



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Job No.: FRANK2019 #145

Standard: FCC part15C 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT: WIRELESS CHARGING PAD

Mode: Wireless Charging

Model: CB-E124

Manufacturer: GOOD EVER TRADING LIMITED

Polarization: Horizontal

Power Source: AC 120V/60Hz

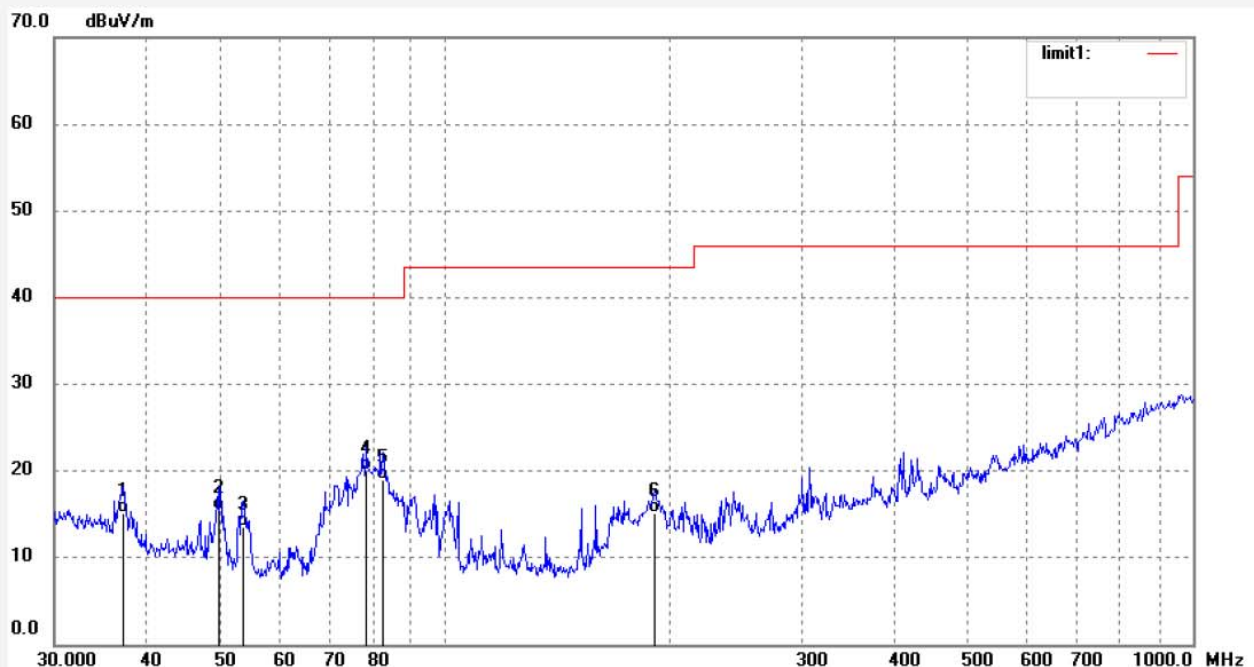
Date: 19/01/22/

Time: 9/52/23

Engineer Signature:

Distance: 3m

Note: Report NO.:ATE20190044



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	37.1709	37.45	-22.37	15.08	40.00	-24.92	QP	200	321	
2	49.7571	41.64	-26.12	15.52	40.00	-24.48	QP	200	331	
3	53.7558	40.45	-26.81	13.64	40.00	-26.36	QP	200	201	
4	78.5644	47.45	-27.49	19.96	40.00	-20.04	QP	200	119	
5	82.5257	46.45	-27.43	19.02	40.00	-20.98	QP	200	61	
6	190.4411	40.23	-25.08	15.15	43.50	-28.35	QP	200	201	

Job No.: FRANK2019 #144

Standard: FCC part15C 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT: WIRELESS CHARGING PAD

Mode: Wireless Charging

Model: CB-E124

Manufacturer: GOOD EVER TRADING LIMITED

Polarization: Vertical

Power Source: AC 120V/60Hz

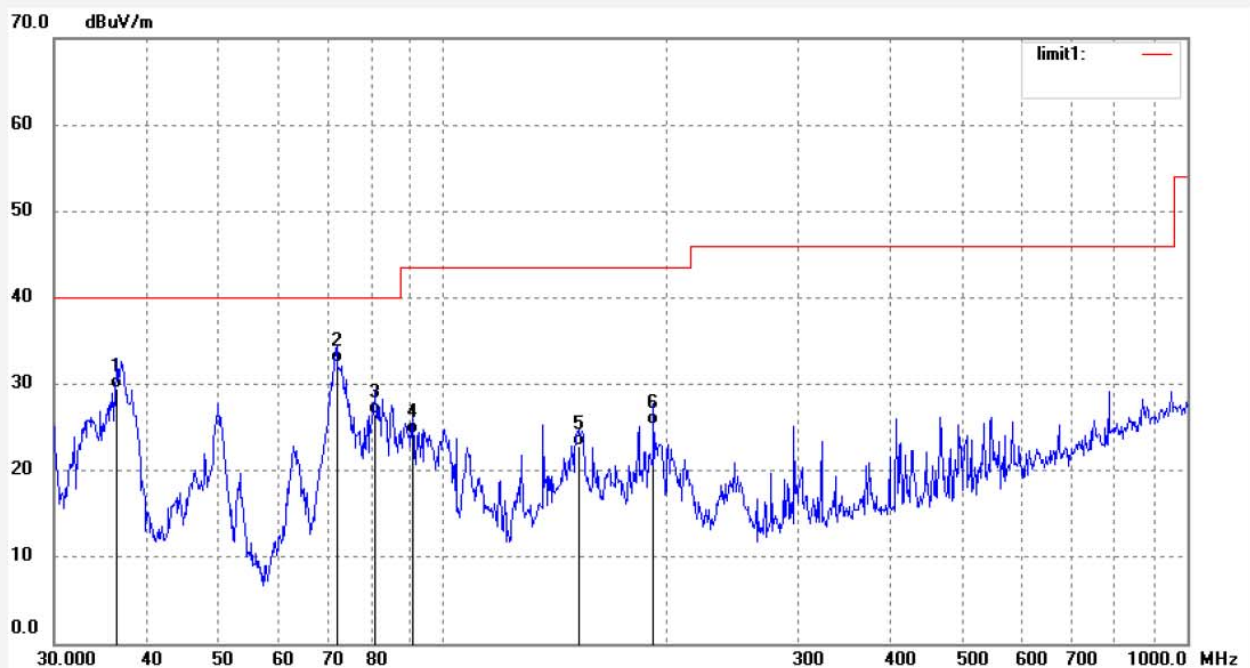
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Distance: 3m

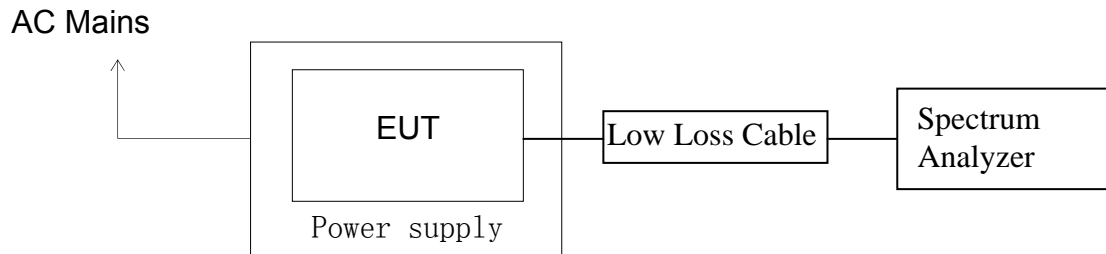
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No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	36.3954	51.48	-22.06	29.42	40.00	-10.58	QP	100	32	
2	71.9578	60.10	-27.57	32.53	40.00	-7.47	QP	100	119	
3	81.0885	53.97	-27.42	26.55	40.00	-13.45	QP	100	51	
4	91.0574	51.64	-27.41	24.23	43.50	-19.27	QP	100	201	
5	152.6254	50.68	-27.83	22.85	43.50	-20.65	QP	100	330	
6	191.7838	50.32	-24.95	25.37	43.50	-18.13	QP	100	210	

## 6. 99% OCCUPIED BANDWIDTH

### 6.1. Block Diagram of Test Setup



(EUT: WIRELESS CHARGING PAD)

### 6.2. EUT Configuration on Measurement

The following equipment is installed on the emission measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

### 6.3. Operating Condition of EUT

6.3.1. Setup the EUT and simulator as shown as Section 6.1.

6.3.2. Turn on the power of all equipment.

6.3.3. Let the EUT work in TX modes and test it. The transmit frequency range is 110.5-205.0kHz. We chose the frequency point of 175kHz to test.

### 6.4. Test Procedure

6.4.1. The transmitter output was connected to the spectrum analyzer through a low loss cable.

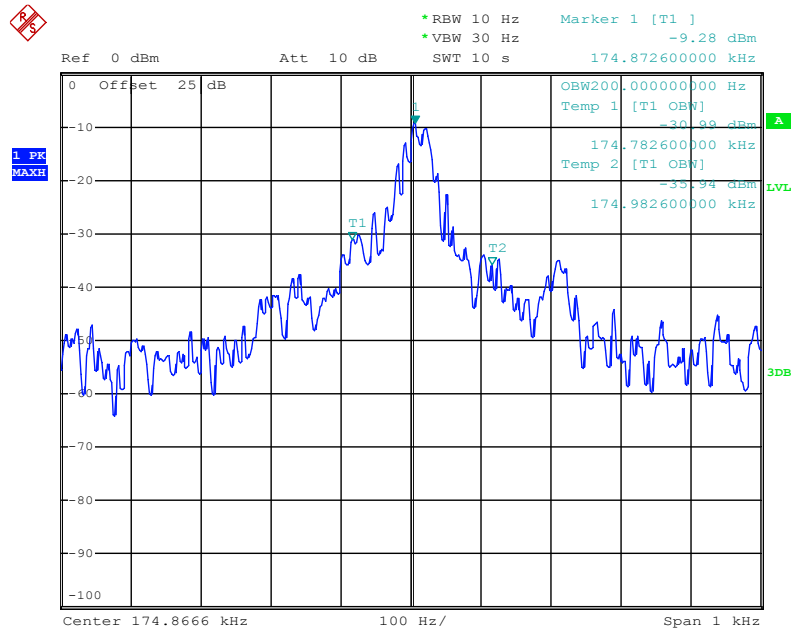
6.4.2. Set RBW of spectrum analyzer to 10 Hz and VBW to 30 Hz.

6.4.3. Set SPA "Meas" function, Select "Occupied Bandwidth" function, Select "99% Power Bandwidth". The frequency of the upper and lower markers indicating the edges of the transmitters "99% Power" emission bandwidth shall be recorded to automate by SPA.

## 6.5.Measurement Result

Frequency (kHz)	99% Occupied Bandwidth (Hz)
175	200

The spectrum analyzer plots are attached as below.



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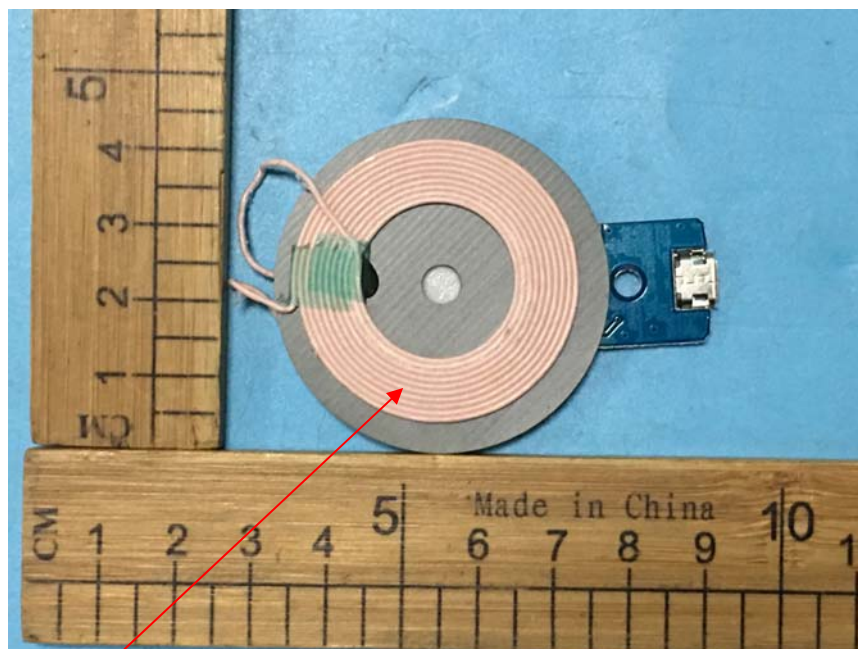
## 7. ANTENNA REQUIREMENT

### 7.1.The Requirement

According to 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.

### 7.2.Antenna Construction

Device is equipped with permanent attached antenna, which isn't displaced by other antenna. The max Antenna gain of EUT is 0dBi. Therefore, the equipment complies with the antenna requirement of Section 15.203.



Antenna