FCC TEST REPORT

Client Name	:	Shenzhen Lingyi Innovation Tech Co., Ltd.
Address	:	12 F, Block C, Central Avenue Building, Xixiang BLVD West, Baoan District, Shenzhen, China
Product Name	:	Wireless charger
Date	:	Nov. 08, 2019

Shenzhen Anbotek Compliance Laboratory Limited

Contents

TEST REPORT

Applicant	:	Shenzhen Lingyi Innovation Tech Co., Ltd.
Manufacturer	:	Shenzhen Lingyi Innovation Tech Co., Ltd.
Product Name	:	Wireless charger
Model No.	:	AT1004C, AT1004L
Trade Mark	:	N.A.
Rating(s)	:	Input: DC 15V, 3.5A Wireless Output: 5W/7.5W/10W Apple Watch Output: 5W Type C Output: DC 5V, 3A, DC 9V, 2A, DC 12V, 1.5A

Test Standard(s)	:	**FCC Part15 Subpart C 2018, Paragraph 15.209**
Test Method(s)	:	**ANSI C63.10: 2013**

The device described above is tested by Shenzhen Anbotek Compliance Laboratory Limited to determine the maximum emission levels emanating from the device and the severe levels of the device can endure and its performance criterion. The measurement results are contained in this test report and Shenzhen Anbotek Compliance Laboratory Limited is assumed full of responsibility for the accuracy and completeness of these measurements. Also, this report shows that the EUT (Equipment Under Test) is technically compliant with the FCC Part 15 Subpart C requirements.

This report applies to above tested sample only and shall not be reproduced in part without written approval of Shenzhen Anbotek Compliance Laboratory Limited.

Date of Receipt: Sept. 02, 2019

Date of Test: Sept. 02~Oct. 31, 2019

Prepared By: Dolly Mo

(Engineer / Dolly Mo)

Reviewer: Bibo Zhang

(Supervisor / Bibo Zhang)

Approved & Authorized Signer: Sally Zhang

(Manager / Sally Zhang)

1. General Information

1.1. Client Information

Applicant	:	Shenzhen Lingyi Innovation Tech Co., Ltd.
Address	:	12 F, Block C, Central Avenue Building, Xixiang BLVD West, Baoan District, Shenzhen, China
Manufacturer	:	Shenzhen Lingyi Innovation Tech Co., Ltd.
Address	:	12 F, Block C, Central Avenue Building, Xixiang BLVD West, Baoan District, Shenzhen, China
Factory	:	Shenzhen Lingyi Innovation Tech Co., Ltd.
Address	:	12 F, Block C, Central Avenue Building, Xixiang BLVD West, Baoan District, Shenzhen, China

1.2. Description of Device (EUT)

Product Name	:	Wireless charger	
Model No.	:	AT1004C, AT1004L (Note: All samples are the same except the appearance, so we prepare "AT1004C" for test only.)	
Trade Mark	:	N.A.	
Test Power Supply	:	AC 120V, 60Hz for adapter	
Test Sample No.	:	1-2-1(Normal Sample), 1-2-1(Engineering Sample)	
Product Description	:	Operation Frequency:	Conventional wireless charging: 110.1-205KHz Apple Watch wireless charging: 550KHz
		Modulation Type:	QI
		Antenna Type:	Inductive loop coil Antenna
		Antenna Gain(Peak):	0 dBi
Remark: 1) For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.			

1.3. Auxiliary Equipment Used During Test

Adapter	:	Model: A653-1503500I Input: 100-240V ~50-60Hz 1.5A Output: 15V⎓ 3500mA

1.4. Description of Test Modes

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.

Pretest Mode	Description
Mode 1	Full load, Wireless charging

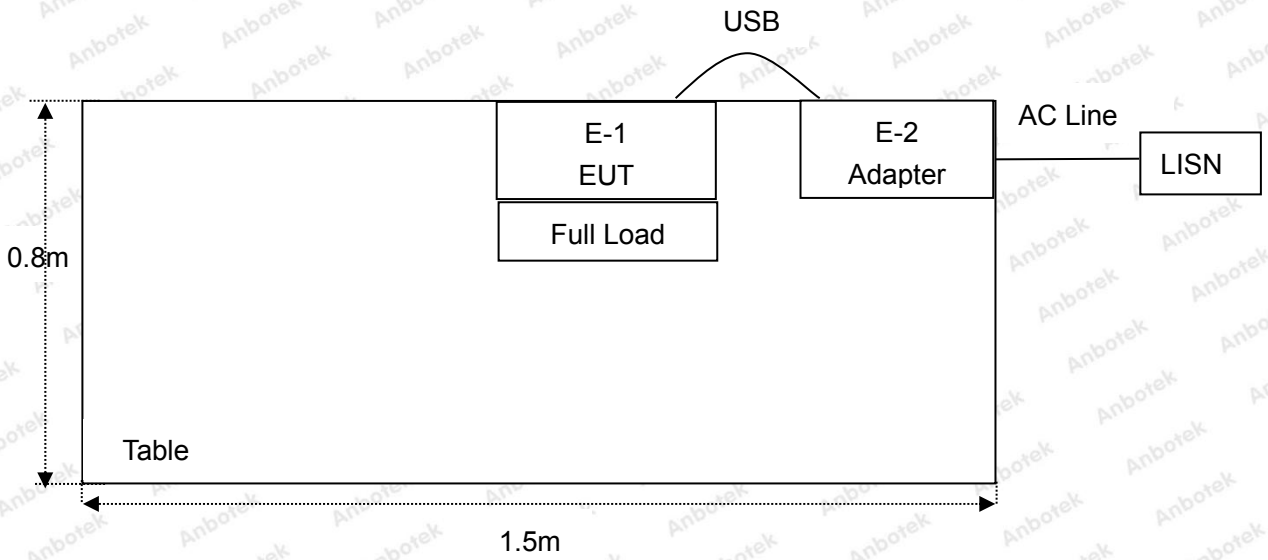
For Conducted Emission	
Final Test Mode	Description
Mode 1	Full load, Wireless charging

For Radiated Emission	
Final Test Mode	Description
Mode 1	Full load, Wireless charging

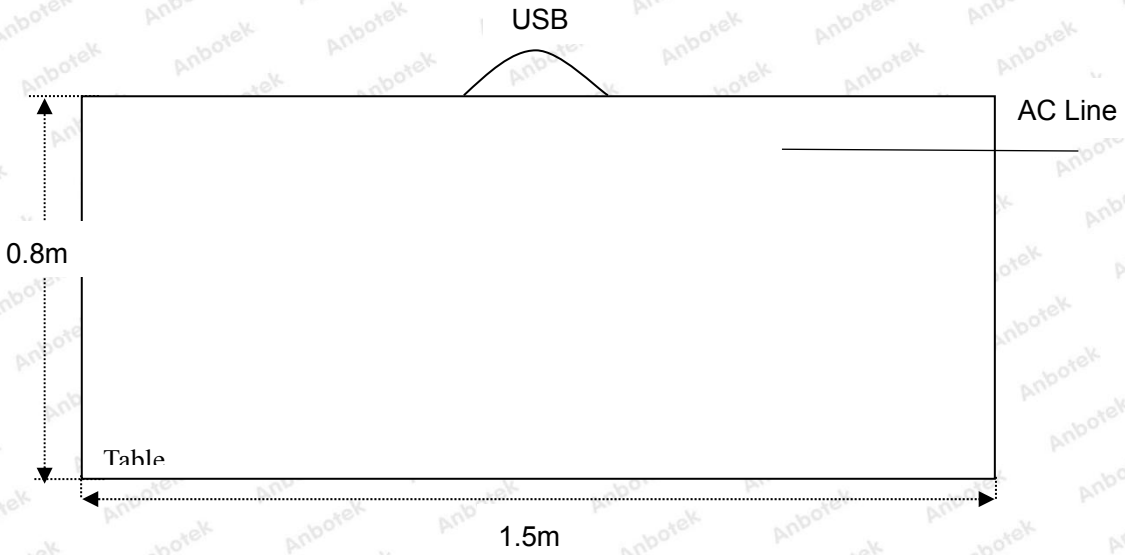
Note: (1) Test channel of Conventional wireless charger is 0.1740MHz;
Apple Watch wireless charger: 550KHz
(2) All the situation (full load, half load and empty load) has been tested, only the worst situation (full load) was recorded in the report.
(3) All modes of Conventional wireless charger, Apple Watch wireless charger, Type C have been tested, only worst case reported in the report.

1.5. Description Of Test Setup

CE



RE



1.6. Test Equipment List

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	L.I.S.N. Artificial Mains Network	Rohde & Schwarz	ENV216	100055	Nov. 26, 2018	1 Year
2.	EMI Test Receiver	Rohde & Schwarz	ESPI3	101604	Nov. 05, 2018	1 Year
3.	RF Switching Unit	Compliance Direction	RSU-M2	38303	Nov. 05, 2018	1 Year
4.	Spectrum Analysis	Agilent	E4407B	US39390582	Nov. 05, 2018	1 Year
5.	MAX Spectrum Analysis	Agilent	N9020A	MY51170037	Nov. 05, 2018	1 Year
6.	Preamplifier	SKET Electronic	BK1G18G30D	KD17503	Nov. 05, 2018	1 Year
7.	Double Ridged Horn Antenna	Instruments corporation	GTH-0118	351600	Nov. 19, 2018	1 Year
8.	Bilog Broadband Antenna	Schwarzbeck	VULB9163	VULB 9163-289	Nov. 19, 2018	1 Year
9.	Loop Antenna	Schwarzbeck	FMZB1519B	00053	Nov. 19, 2018	1 Year
10.	Horn Antenna	A-INFO	LB-180400-KF	J211060628	Nov. 20, 2018	1 Year
11.	Pre-amplifier	SONOMA	310N	186860	Nov. 05, 2018	1 Year
12.	EMI Test Software EZ-EMC	SHURPLE	N/A	N/A	N/A	N/A
13.	RF Test Control System	YIHENG	YH3000	2017430	Nov. 05, 2018	1 Year
14.	Power Sensor	DAER	RPR3006W	15I00041SN045	Nov. 05, 2018	1 Year
15.	Power Sensor	DAER	RPR3006W	15I00041SN046	Nov. 05, 2018	1 Year
16.	MXA Spectrum Analysis	Agilent	N9020A	MY51170037	Nov. 05, 2018	1 Year
17.	MXG RF Vector Signal Generator	Agilent	N5182A	MY48180656	Nov. 05, 2018	1 Year
18.	Signal Generator	Agilent	E4421B	MY41000743	Nov. 05, 2018	1 Year
19.	DC Power Supply	LW	TPR-6420D	374470	Nov. 04, 2019	1 Year
20.	Constant Temperature Humidity Chamber	ZHONGJIAN	ZJ-KHWS80B	N/A	Nov. 04, 2019	1 Year

Address: 1/F., Building D, Sogood Science and Technology Park, Sanwei Community, Hangcheng Street, Bao'an District, Shenzhen, Guangdong, China.
Tel:(86) 755-26066440 Fax: (86) 755-26014772 Email: service@anbotek.com
Hotline 400-003-0500
www.anbotek.com

1.7. Measurement Uncertainty

Radiation Uncertainty	:	Ur = 3.9 dB (Horizontal)
		Ur = 3.8 dB (Vertical)
Conduction Uncertainty	:	Uc = 3.4 dB

1.8. Description of Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

FCC-Registration No.: 184111

Shenzhen Anbotek Compliance Laboratory Limited, EMC Laboratory has been registed and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration No. 184111, September 27, 2019.

ISED-Registration No.: 8058A

Shenzhen Anbotek Compliance Laboratory Limited, EMC Laboratory has been registered and fully described in a report filed with the (ISED) Innovation, Science and Economic Development Canada. The acceptance letter from the ISED is maintained in our files. Registration 8058A, March 07, 2019.

Test Location

Shenzhen Anbotek Compliance Laboratory Limited.
1/F, Building D, Sogood Science and Technology Park, Sanwei community, Hangcheng Street, Bao'an District, Shenzhen, Guangdong, China.518102

2. Summary of Test Results

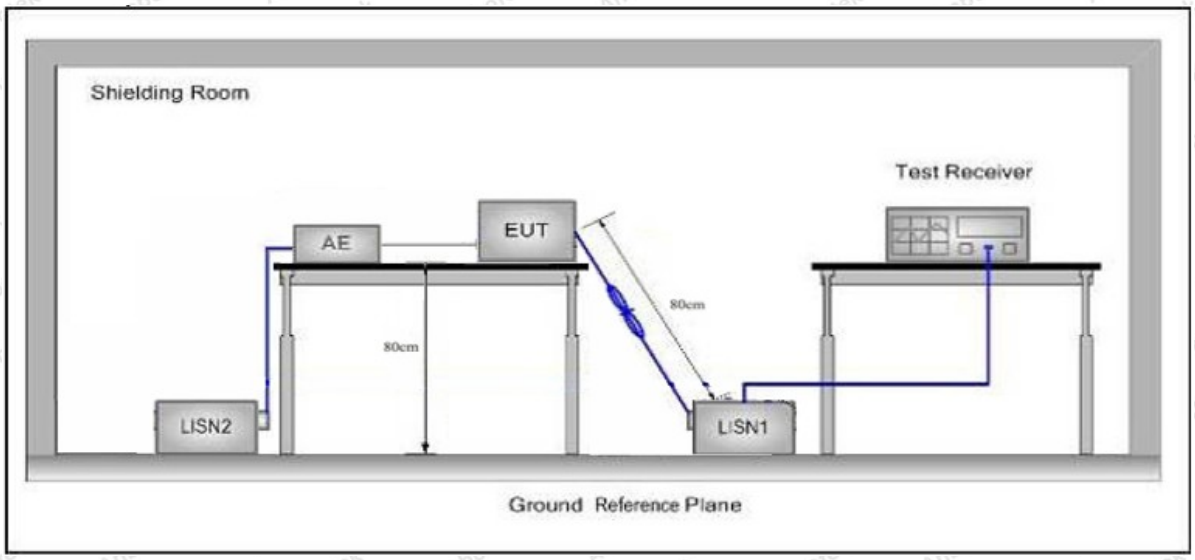
Standard Section	Test Item	Result
FCC Part 15, Paragraph 15.207	Conducted Emission Test	PASS
FCC Part 15, Paragraph 15.209(a)(f)	Spurious Emission	PASS
Part 15.203	Antenna Requirement	PASS

3. Conducted Emission Test

3.1. Test Standard and Limit

Test Standard	FCC Part15 Section 15.207		
Test Limit	Frequency	Maximum RF Line Voltage (dBuV)	
		Quasi-peak Level	Average Level
	150kHz~500kHz	66 ~ 56 *	56 ~ 46 *
	500kHz~5MHz	56	46
	5MHz~30MHz	60	50
Remark: (1) *Decreasing linearly with logarithm of the frequency. (2) The lower limit shall apply at the transition frequency.			

3.2. Test Setup



3.3. Test Procedure

The EUT system 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 line 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 FCC ANSI C63.10-2013 on Conducted Emission Measurement.

The bandwidth of test receiver (ESCI) set at 9kHz.

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

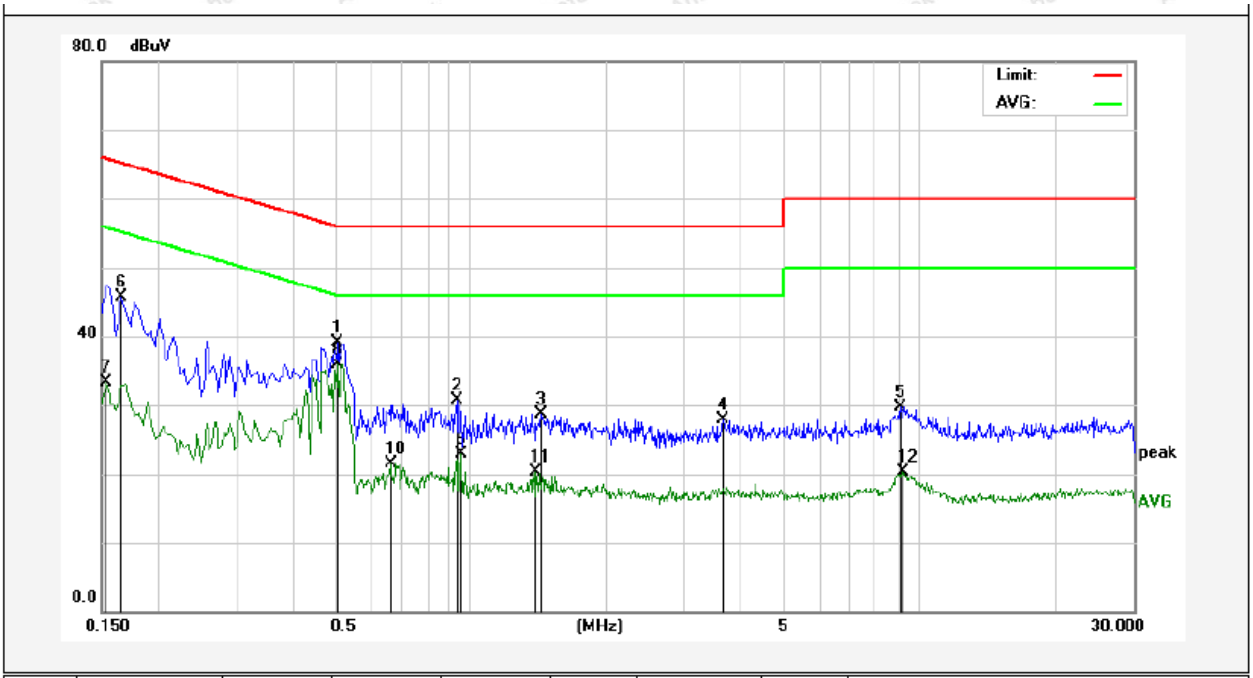
3.4. Test Data

Please to see the following pages.

The three coils of conventional wireless charger can only work with one coil at a time, and only the worst mode (middle coil) is recorded in the report. It is found that 10W is the worst case, and the data in the report only reflects the worst case.

Conducted Emission Test Data

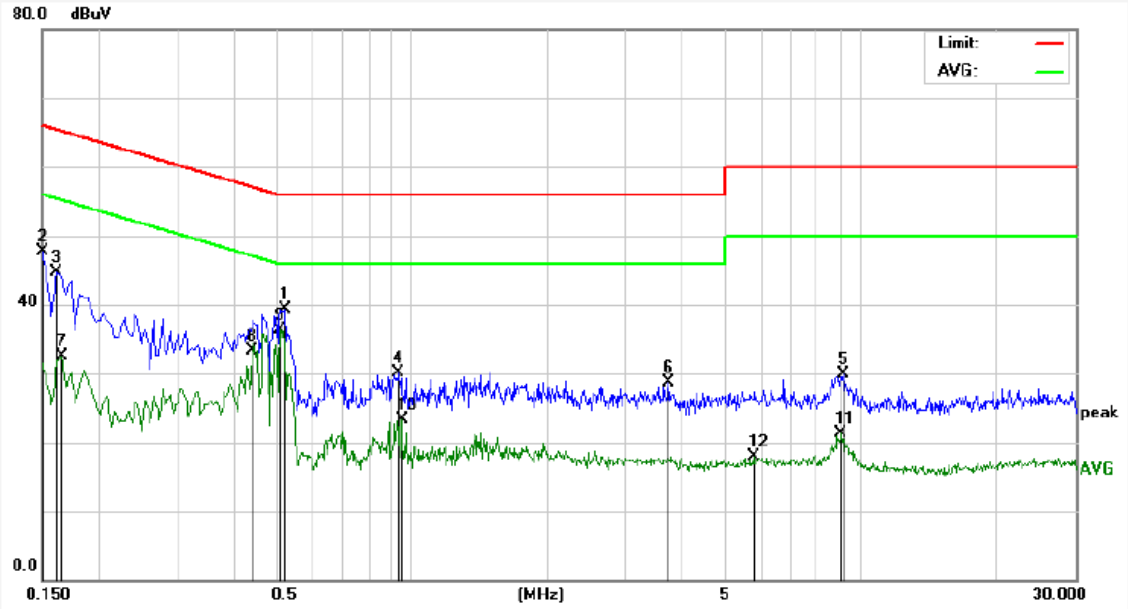
Test Site:	1# Shielded Room
Operating Condition:	Mode 1
Test Specification:	AC 120V, 60Hz for adapter
Comment:	Live Line
	Tem.: 22.8℃ Hum.: 53%
Note:	Conventional wireless charging



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit dBuV	Over Limit (dB)	Detector	Remark
1	0.5060	19.05	19.98	39.03	56.00	-16.97	QP	
2	0.9300	10.63	20.10	30.73	56.00	-25.27	QP	
3	1.4375	8.54	20.13	28.67	56.00	-27.33	QP	
4	3.6579	7.72	20.17	27.89	56.00	-28.11	QP	
5	9.1059	9.47	20.32	29.79	60.00	-30.21	QP	
6	0.1660	25.89	19.90	45.79	65.15	-19.36	QP	
7	0.1539	13.32	19.90	33.22	55.78	-22.56	AVG	
8	0.5060	16.02	19.98	36.00	46.00	-10.00	AVG	
9	0.9495	2.86	20.11	22.97	46.00	-23.03	AVG	
10	0.6620	1.48	20.03	21.51	46.00	-24.49	AVG	
11	1.4014	0.24	20.13	20.37	46.00	-25.63	AVG	
12	9.2096	0.00	20.32	20.32	50.00	-29.68	AVG	

Conducted Emission Test Data

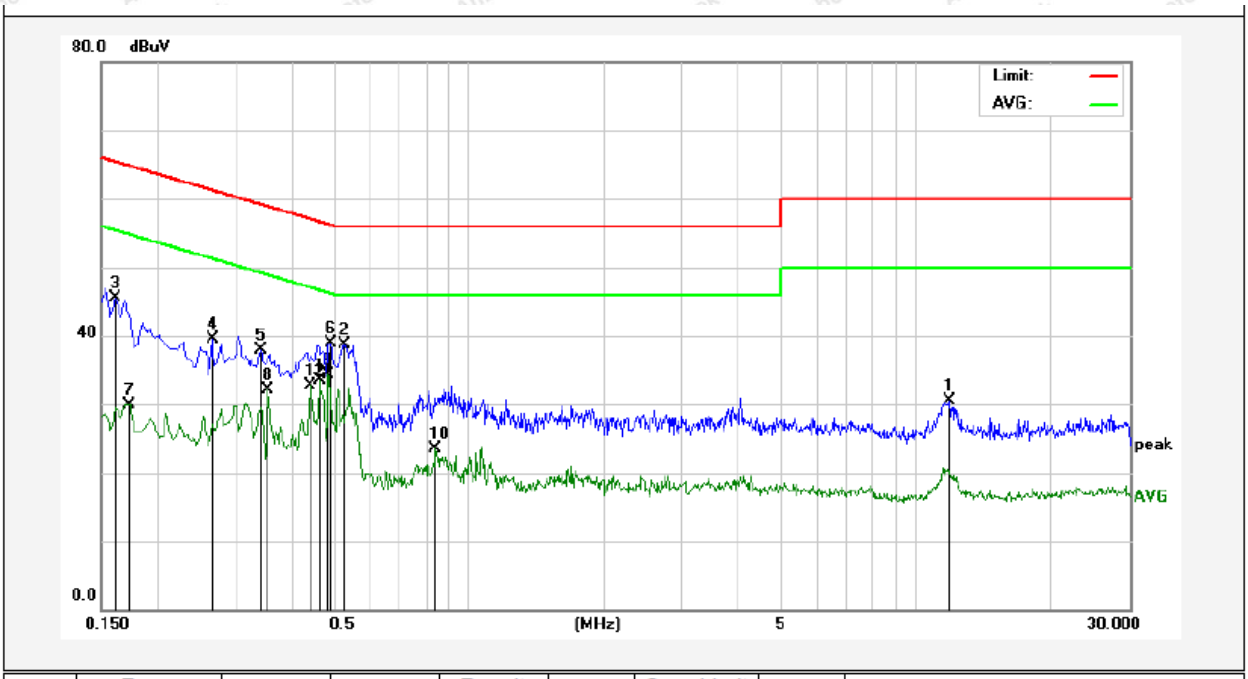
Test Site: 1# Shielded Room
Operating Condition: Mode 1
Test Specification: AC 120V, 60Hz for adapter
Comment: Neutral Line
Tem.: 22.8℃ Hum.: 53%
Note: Conventional wireless charging



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit dBuV	Over Limit (dB)	Detector	Remark
1	0.5220	19.27	19.99	39.26	56.00	-16.74	QP	
2	0.1499	27.83	19.90	47.73	66.00	-18.27	QP	
3	0.1620	24.80	19.90	44.70	65.36	-20.66	QP	
4	0.9340	10.07	20.10	30.17	56.00	-25.83	QP	
5	9.1097	9.50	20.32	29.82	60.00	-30.18	QP	
6	3.7339	8.48	20.17	28.65	56.00	-27.35	QP	
7	0.1660	12.67	19.90	32.57	55.15	-22.58	AVG	
8	0.4420	13.26	19.95	33.21	47.02	-13.81	AVG	
9	0.5100	16.39	19.98	36.37	46.00	-9.63	AVG	
10	0.9497	3.14	20.11	23.25	46.00	-22.75	AVG	
11	9.0496	0.90	20.31	21.21	50.00	-28.79	AVG	
12	5.7738	-2.30	20.23	17.93	50.00	-32.07	AVG	

Conducted Emission Test Data

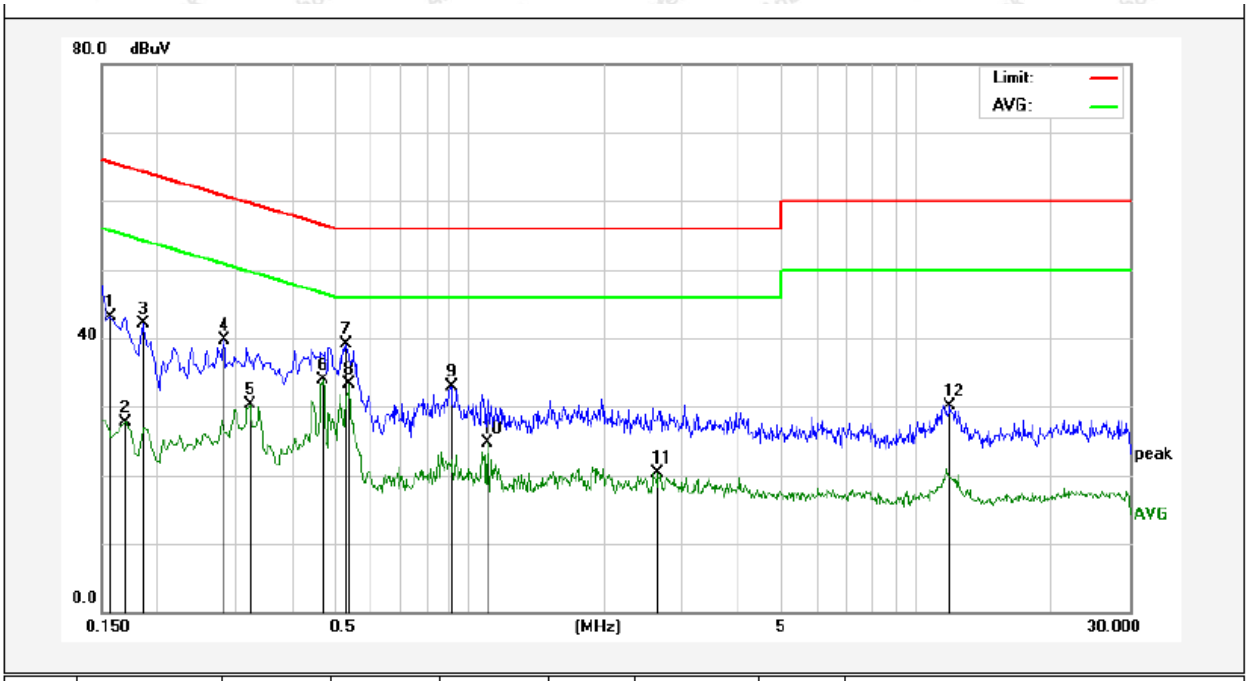
Test Site: 1# Shielded Room
Operating Condition: Mode 1
Test Specification: AC 120V, 60Hz for adapter
Comment: Live Line
Tem.: 22.8℃ Hum.: 53%
Note: Apple Watch wireless charging



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit dBuV	Over Limit (dB)	Detector	Remark
1	11.8739	10.24	20.31	30.55	60.00	-29.45	QP	
2	0.5260	18.70	19.99	38.69	56.00	-17.31	QP	
3	0.1620	25.68	19.90	45.58	65.36	-19.78	QP	
4	0.2660	19.54	19.89	39.43	61.24	-21.81	QP	
5	0.3420	18.01	19.91	37.92	59.15	-21.23	QP	
6	0.4899	18.89	19.98	38.87	56.17	-17.30	QP	
7	0.1737	10.05	19.90	29.95	54.78	-24.83	AVG	
8	0.3537	12.15	19.91	32.06	48.87	-16.81	AVG	
9	0.4858	14.39	19.97	34.36	46.24	-11.88	AVG	
10	0.8417	3.42	20.08	23.50	46.00	-22.50	AVG	
11	0.4620	13.58	19.96	33.54	46.66	-13.12	AVG	
12	0.4420	12.85	19.95	32.80	47.02	-14.22	AVG	

Conducted Emission Test Data

Test Site: 1# Shielded Room
Operating Condition: Mode 1
Test Specification: AC 120V, 60Hz for adapter
Comment: Neutral Line
Tem.: 22.8℃ Hum.: 53%
Note: Apple Watch wireless charging



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit dBuV	Over Limit (dB)	Detector	Remark
1	0.1580	23.15	19.90	43.05	65.56	-22.51	QP	
2	0.1700	7.82	19.90	27.72	54.96	-27.24	AVG	
3	0.1859	22.15	19.90	42.05	64.21	-22.16	QP	
4	0.2816	19.80	19.89	39.69	60.77	-21.08	QP	
5	0.3220	10.36	19.90	30.26	49.65	-19.39	AVG	
6	0.4697	13.85	19.97	33.82	46.52	-12.70	AVG	
7	0.5299	19.14	19.99	39.13	56.00	-16.87	QP	
8	0.5380	13.24	19.99	33.23	46.00	-12.77	AVG	
9	0.9100	12.90	20.10	33.00	56.00	-23.00	QP	
10	1.0980	4.65	20.12	24.77	46.00	-21.23	AVG	
11	2.6419	0.23	20.15	20.38	46.00	-25.62	AVG	
12	11.9176	9.79	20.31	30.10	60.00	-29.90	QP	

4. Radiation Spurious Emission and Band Edge

4.1. Test Standard and Limit

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

Remark:
(1)The lower limit shall apply at the transition frequency.
(2) 15.35(b), Unless otherwise specified, the limit on peak radio frequency emissions is 20dB above the maximum permitted average emission limit applicable to the equipment under test. This peak limit applies to the total peak emission level radiated by the device.

4.2. Test Setup

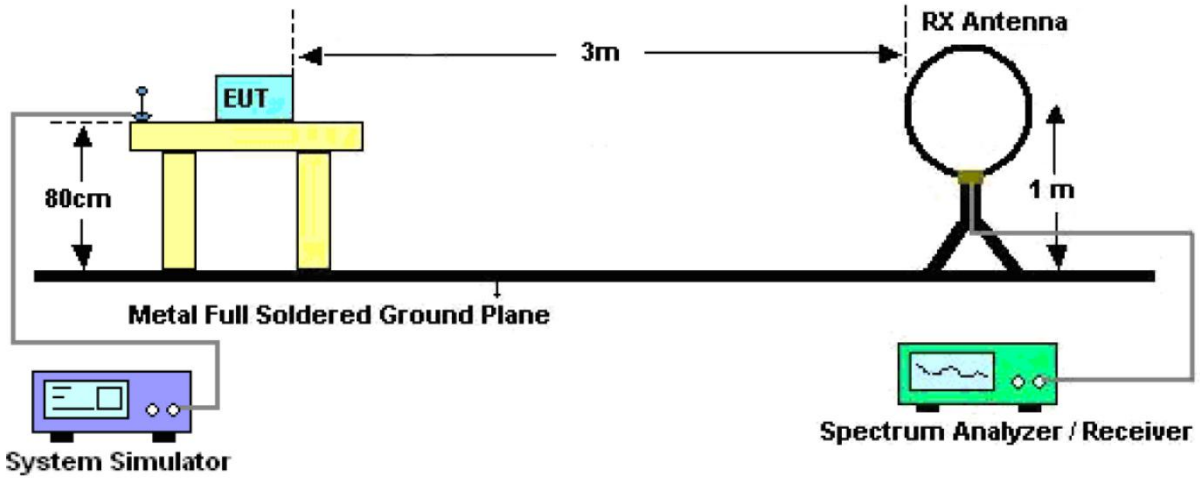


Figure 1. Below 30MHz

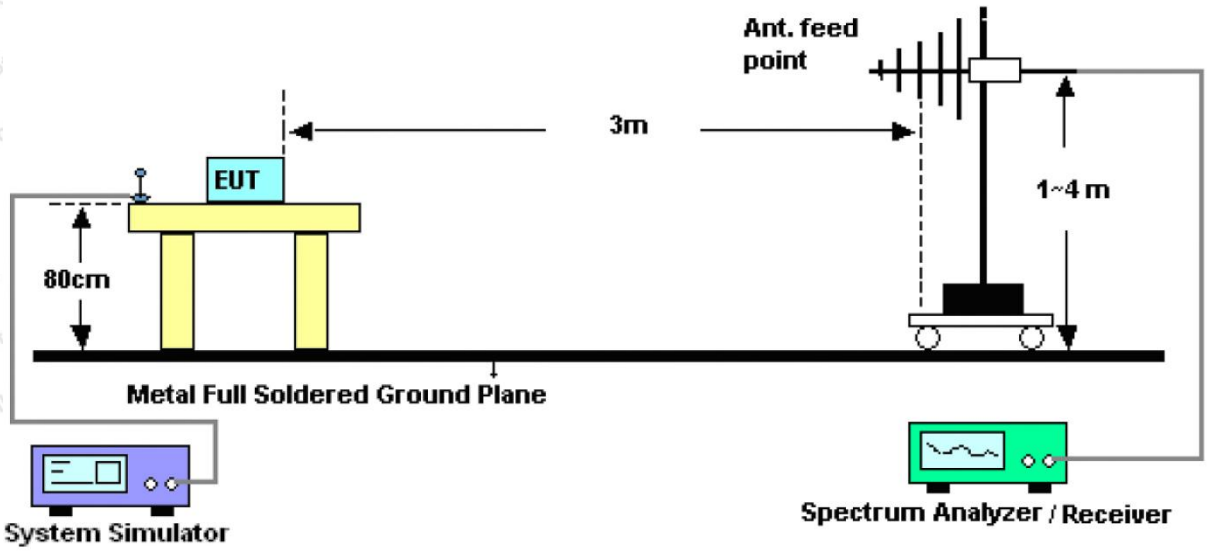


Figure 2. 30MHz to 1GHz

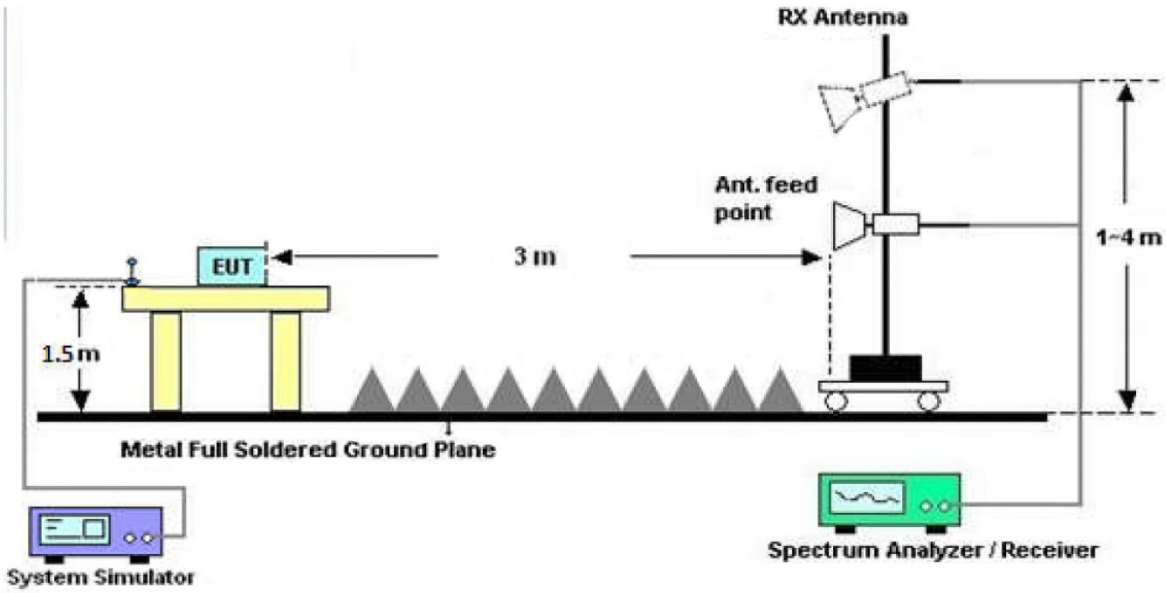


Figure 3. Above 1 GHz

4.3. Test Procedure

For below 1GHz: The EUT is placed on a turntable, which is 0.8m above the ground plane.
For above 1GHz: The EUT is placed on a turntable, which is 1.5m above the ground plane.
The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT is set 3 meters away from the receiving antenna which is mounted on a antenna tower. The antenna can be moved up and down from 1 to 4 meters to find out the maximum emission level. Rotated the EUT through three orthogonal axes to determine the maximum emissions, both horizontal and vertical polarization of the antenna are set on test. The EUT is tested in 9*6*6 Chamber. The device is evaluated in xyz orientation.

For 9kHz to 150kHz, Set the spectrum analyzer as:
RBW = 200Hz, VBW =1kHz, Detector= Quasi-Peak, Trace mode= Max hold, Sweep- auto couple.

For 150kHz to 30MHz, Set the spectrum analyzer as:
RBW = 9KHz, VBW =30kHz, Detector= Quasi-Peak, Trace mode= Max hold, Sweep- auto couple.

For 30MHz to 1000MHz, Set the spectrum analyzer as:
RBW = 100kHz, VBW =300kHz, Detector= Quasi-Peak, Trace mode= Max hold, Sweep- auto couple.

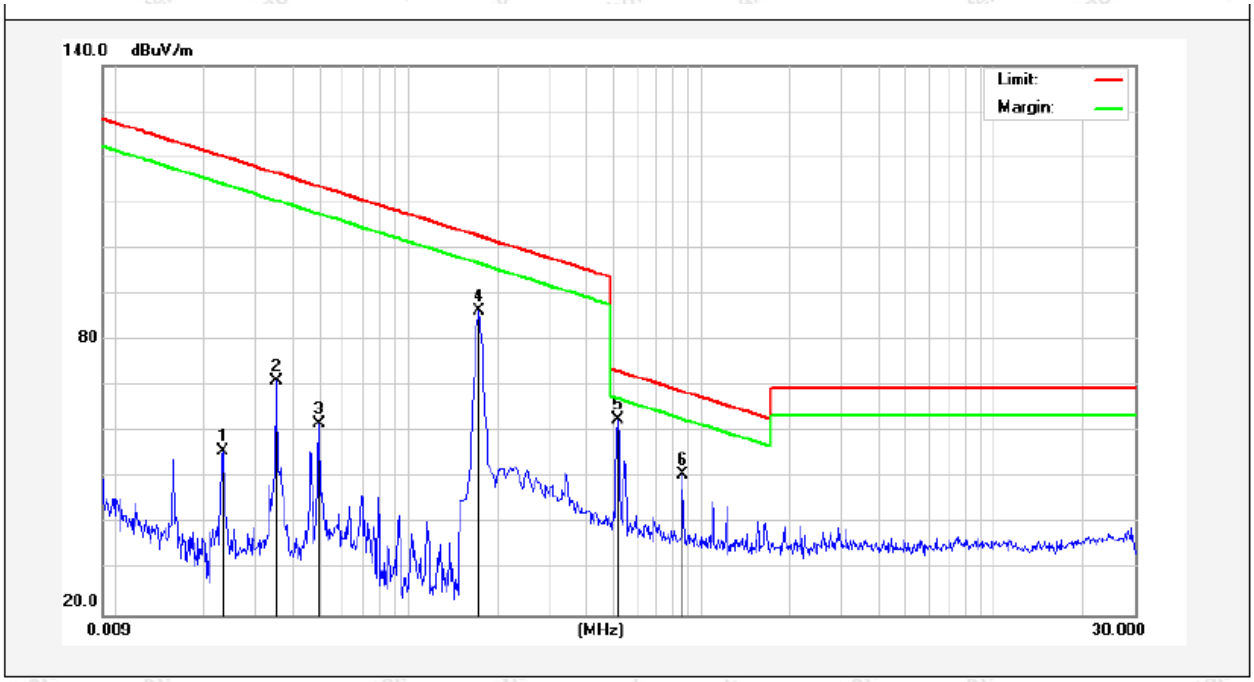
4.4. Test Data

PASS

Note:
The three coils of conventional wireless charger can only work with one coil at a time, and only the worst mode (middle coil) is recorded in the report. It is found that 10W is the worst case, and the data in the report only reflects the worst case.

Test Results (9K~30MHz)

Test Mode:	Mode 1
Power Source:	AC 120V, 60Hz for adapter
Temp.(℃)/Hum.(%RH):	22.6℃/57%RH
Distance:	3m
Note:	Conventional wireless charging

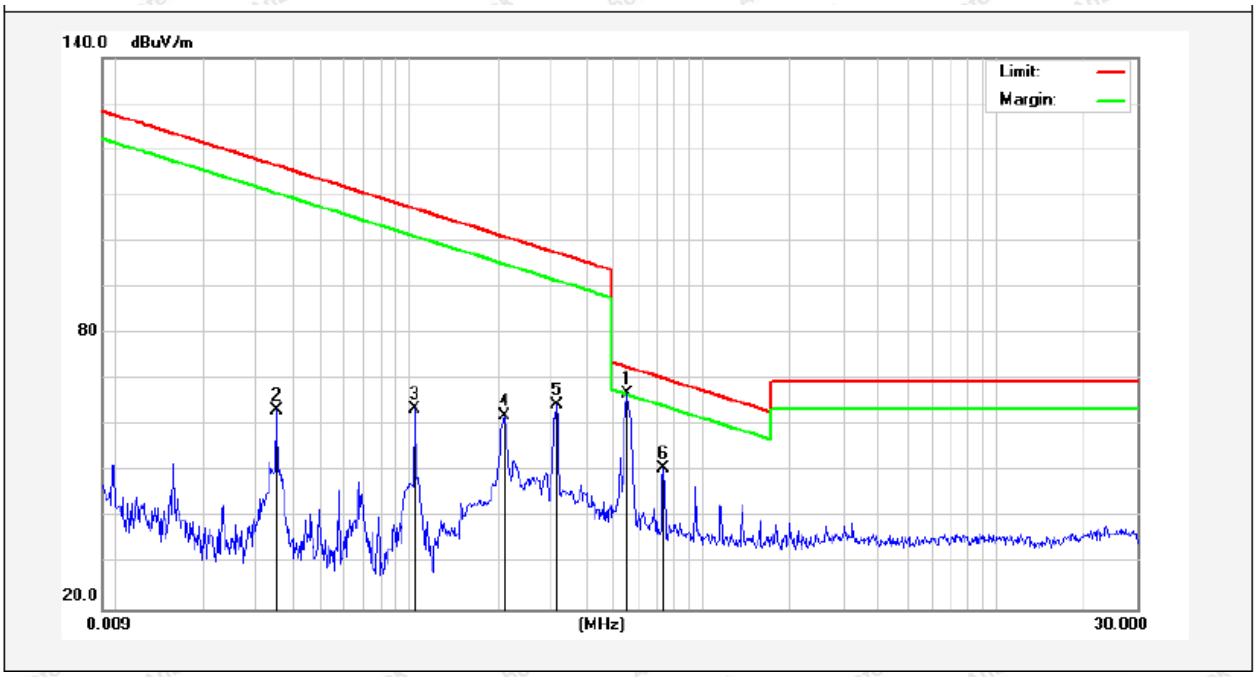


Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	degree (dge)
0.0232	34.12	19.28	2.53	0	55.93	140.15	-84.22	Peak	84
0.0232	30.67	19.28	2.53	0	52.48	120.15	-67.67	AV	84
0.0354	49.29	19.28	2.53	0	71.10	136.50	-65.40	Peak	120
0.0354	47.75	19.28	2.53	0	69.56	116.50	-46.94	AV	120
0.0495	40.08	19.30	2.54	0	61.92	133.60	-71.68	Peak	180
0.0495	37.80	19.30	2.54	0	59.64	113.60	-53.96	AV	180
0.1740	64.39	19.38	2.55	0	86.32	122.74	-36.42	Peak	320
0.1740	62.52	19.38	2.55	0	84.45	102.74	-18.29	AV	320
0.5180	40.77	19.53	2.59	0	62.89	73.32	-10.43	QP	90
0.8620	27.81	20.34	2.60	0	50.75	68.89	-18.14	QP	76

Remark: According to FCC PART 15.209 (d), the emission limits for the frequency bands 9–90 kHz, 110–490 kHz and above 1000 MHz, Radiated emission limits in these three bands are based on measurements employing an average detector.

Test Results (9K~30MHz)

Test Mode:	Mode 1
Power Source:	AC 120V, 60Hz for adapter
Temp.(℃)/Hum.(%RH):	22.6℃/57%RH
Distance:	3m
Note:	Apple Watch wireless charging

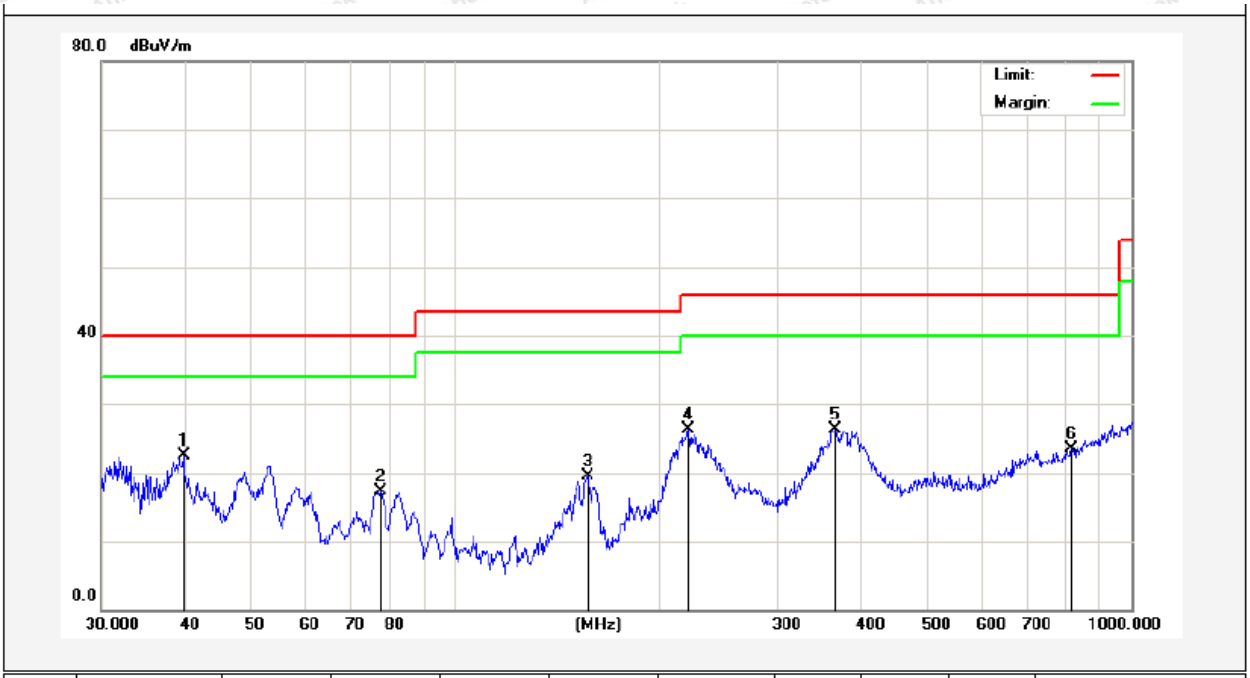


Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	degree (dge)
0.5500	45.02	19.28	2.53	0	66.83	72.79	-5.96	QP	67
0.0353	43.86	19.28	2.53	0	65.67	136.52	-70.85	Peak	114
0.0353	41.49	19.28	2.53	0	63.30	116.52	-53.22	AV	114
0.1046	43.28	19.38	2.55	0	65.21	127.14	-61.93	Peak	254
0.1046	41.82	19.38	2.55	0	63.75	107.14	-43.39	AV	254
0.2100	42.17	19.39	2.55	0	64.11	121.12	-57.01	Peak	152
0.2100	40.07	19.39	2.55	0	62.01	101.12	-39.11	AV	152
0.3180	43.20	19.41	2.56	0	65.17	117.53	-52.36	Peak	90
0.3180	42.70	19.41	2.56	0	64.67	97.53	-32.86	AV	90
0.7340	27.88	20.34	2.60	0	50.82	70.29	-19.47	QP	76

Remark： According to FCC PART 15.209 (d), the emission limits for the frequency bands 9–90 kHz, 110–490 kHz and above 1000 MHz, Radiated emission limits in these three bands are based on measurements employing an average detector.

Test Results (30~1000MHz)

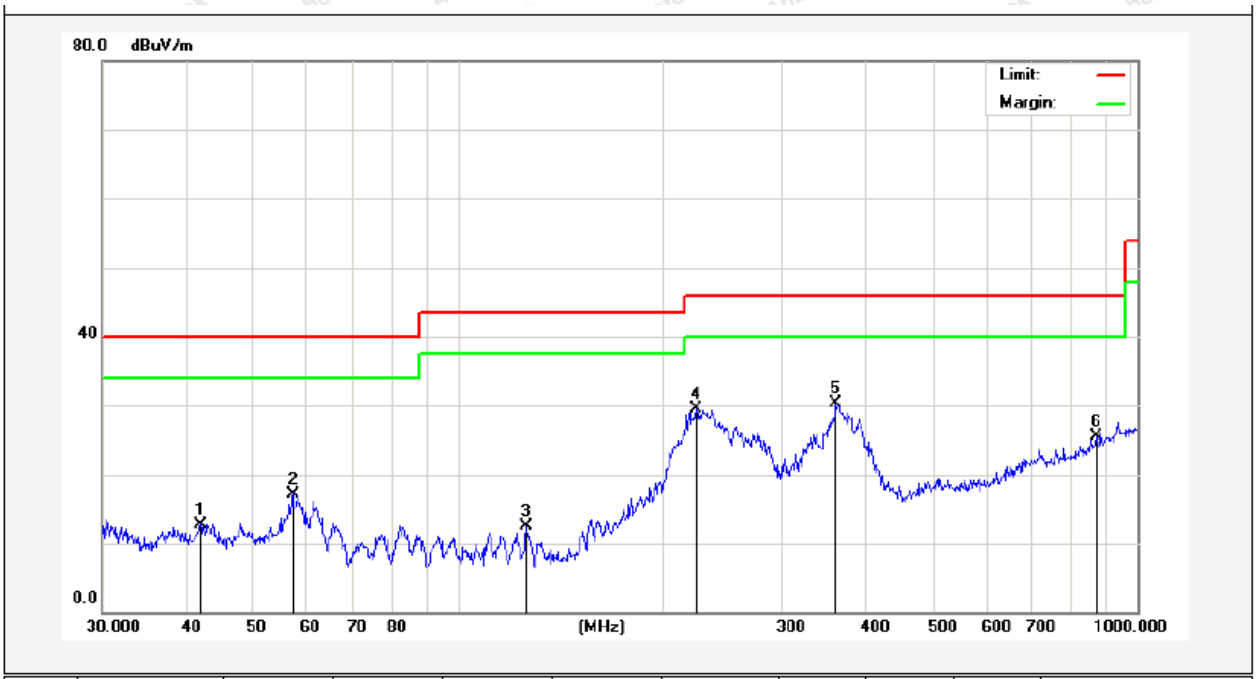
Test Mode:	Mode 1
Power Source:	AC 120V, 60Hz for adapter
Polarization:	Vertical
Temp.(℃)/Hum.(%RH):	22.6℃/57%RH
Distance:	3m
Note:	Conventional wireless charging



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	39.7146	39.41	-16.85	22.56	40.00	-17.44	QP	100	360	
2	77.5928	39.01	-21.80	17.21	40.00	-22.79	QP	100	0	
3	157.0074	40.11	-20.53	19.58	43.50	-23.92	QP	100	360	
4	221.3921	43.42	-17.19	26.23	46.00	-19.77	QP	100	0	
5	365.5391	41.07	-14.84	26.23	46.00	-19.77	QP	100	360	
6	815.9678	30.70	-7.19	23.51	46.00	-22.49	QP	100	0	

Test Results (30~1000MHz)

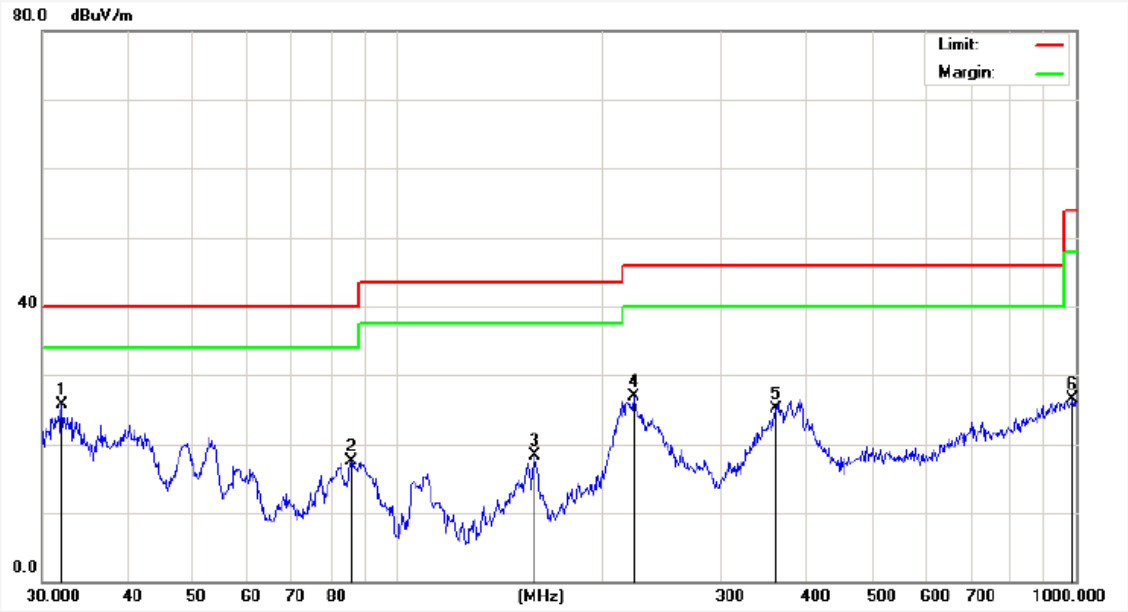
Test Mode:	Mode 1
Power Source:	AC 120V, 60Hz for adapter
Polarization:	Horizontal
Temp.(℃)/Hum.(%RH):	22.6℃/57%RH
Distance:	3m
Note:	Conventional wireless charging



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	41.8596	30.58	-17.78	12.80	40.00	-27.20	QP	100	0	
2	57.1914	35.51	-18.31	17.20	40.00	-22.80	QP	100	360	
3	126.3286	37.73	-25.21	12.52	43.50	-30.98	QP	100	0	
4	224.5193	51.21	-21.78	29.43	46.00	-16.57	QP	100	360	
5	360.4476	46.21	-15.91	30.30	46.00	-15.70	QP	100	0	
6	869.1302	32.52	-7.05	25.47	46.00	-20.53	QP	100	360	

Test Results (30~1000MHz)

Test Mode:	Mode 1
Power Source:	AC 120V, 60Hz for adapter
Polarization:	Vertical
Temp.(℃)/Hum.(%RH):	22.6℃/57%RH
Distance:	3m
Note:	Apple Watch wireless charging



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	32.0667	43.93	-18.23	25.70	40.00	-14.30	QP	100	0	
2	85.5977	36.95	-19.46	17.49	40.00	-22.51	QP	100	360	
3	159.7844	38.77	-20.40	18.37	43.50	-25.13	QP	100	0	
4	222.9502	43.92	-17.10	26.82	46.00	-19.18	QP	100	360	
5	361.7139	40.02	-14.90	25.12	46.00	-20.88	QP	100	0	
6	989.5355	30.28	-3.81	26.47	54.00	-27.53	QP	100	360	

Test Results (30~1000MHz)

Test Mode:	Mode 1
Power Source:	AC 120V, 60Hz for adapter
Polarization:	Horizontal
Temp.(℃)/Hum.(%RH):	22.6℃/57%RH
Distance:	3m
Note:	Apple Watch wireless charging

No.	Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	31.7313	33.49	-19.24	14.25	40.00	-25.75	QP	100	360	
2	58.4074	34.74	-18.36	16.38	40.00	-23.62	QP	100	0	
3	110.1816	43.59	-23.36	20.23	43.50	-23.27	QP	100	360	
4	228.4904	54.36	-21.38	32.98	46.00	-13.02	QP	100	0	
5	368.1116	45.34	-15.79	29.55	46.00	-16.45	QP	100	360	
6	945.4399	33.23	-5.59	27.64	46.00	-18.36	QP	100	0	

5. Antenna Requirement

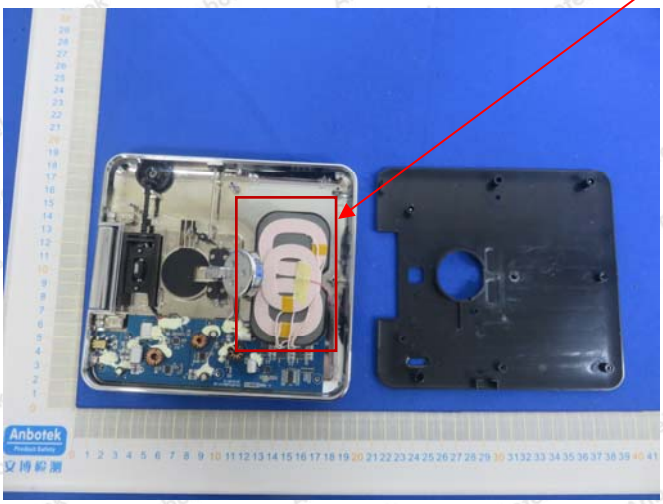
5.1. Test Standard and Requirement

Test Standard	FCC Part15 Section 15.203
Requirement	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, the manufacturer may design the unit so that a broken antenna can

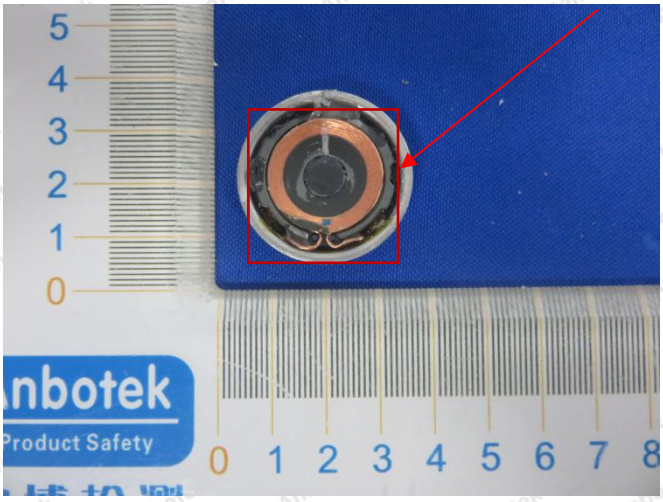
5.2. Antenna Connected Construction

The antenna is a Inductive loop coil Antenna which permanently attached, and the best case gain of the antenna is 0 dBi. It complies with the standard requirement.

Conventional wireless Antenna



Apple Watch wireless Antenna



APPENDIX I -- TEST SETUP PHOTOGRAPH

Photo of Conducted Emission Measurement
(Conventional wireless charging)

Apple Watch wireless charging

Photo of Radiation Emission Test

(Conventional wireless charging)

Apple Watch wireless charging

Conventional wireless charging

Apple Watch wireless charging

APPENDIX II -- EXTERNAL PHOTOGRAPH


Anbotek
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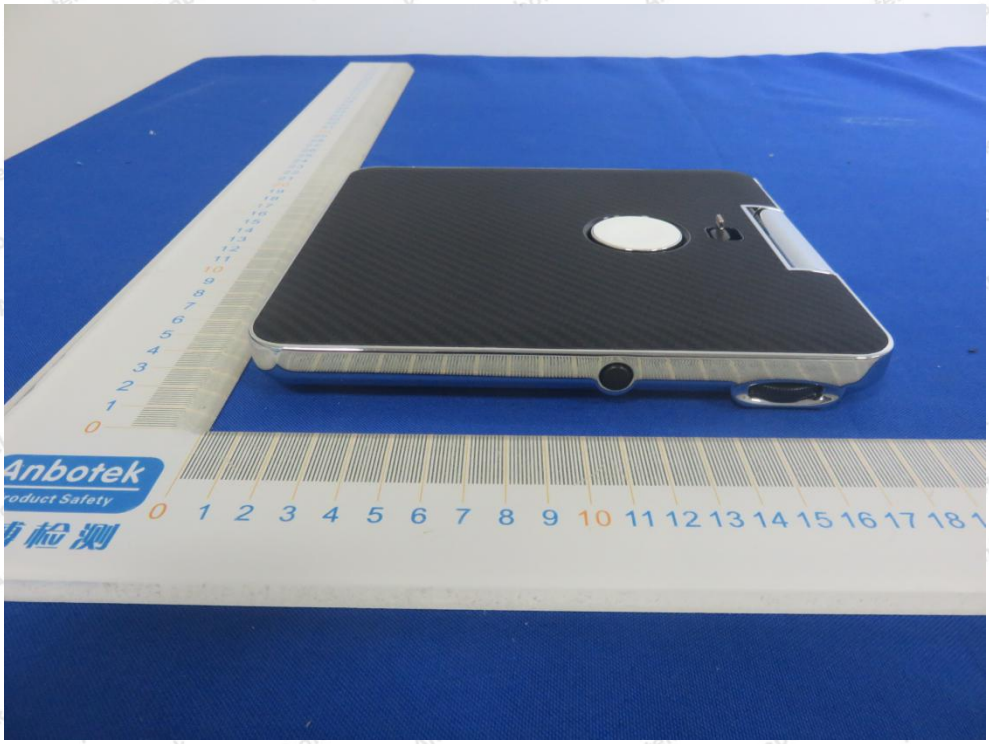
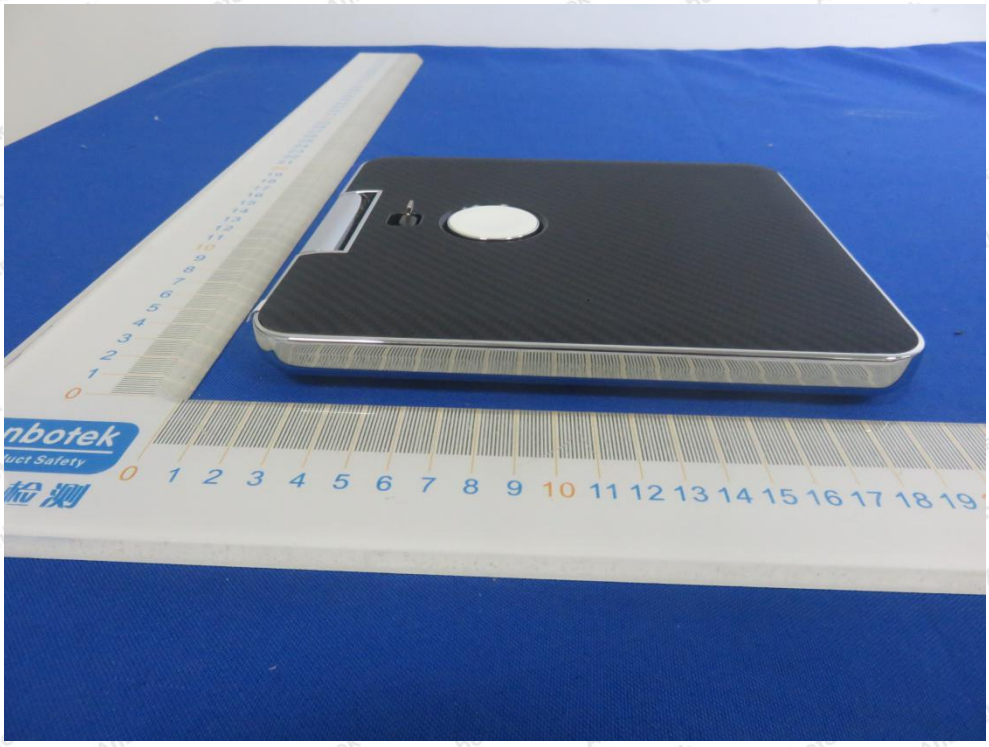
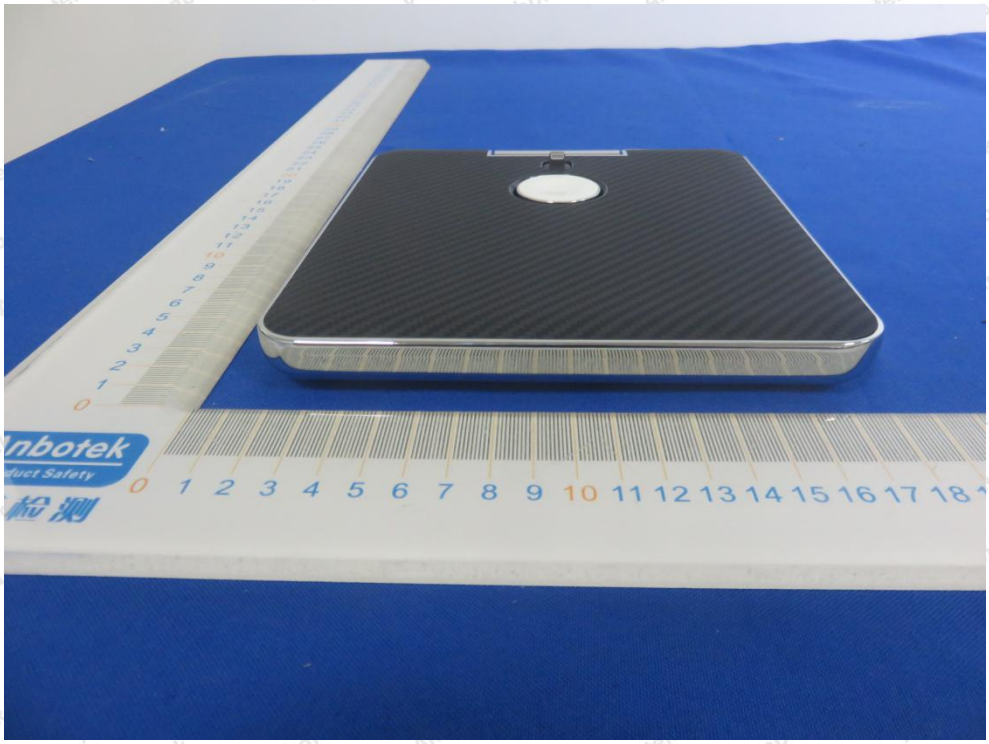
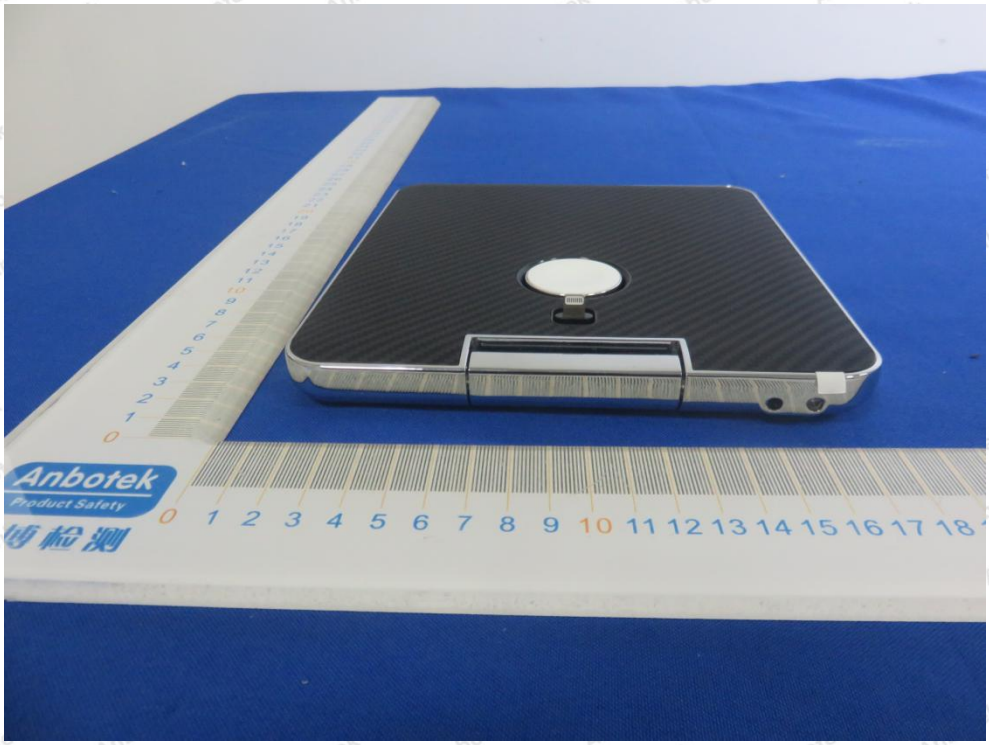
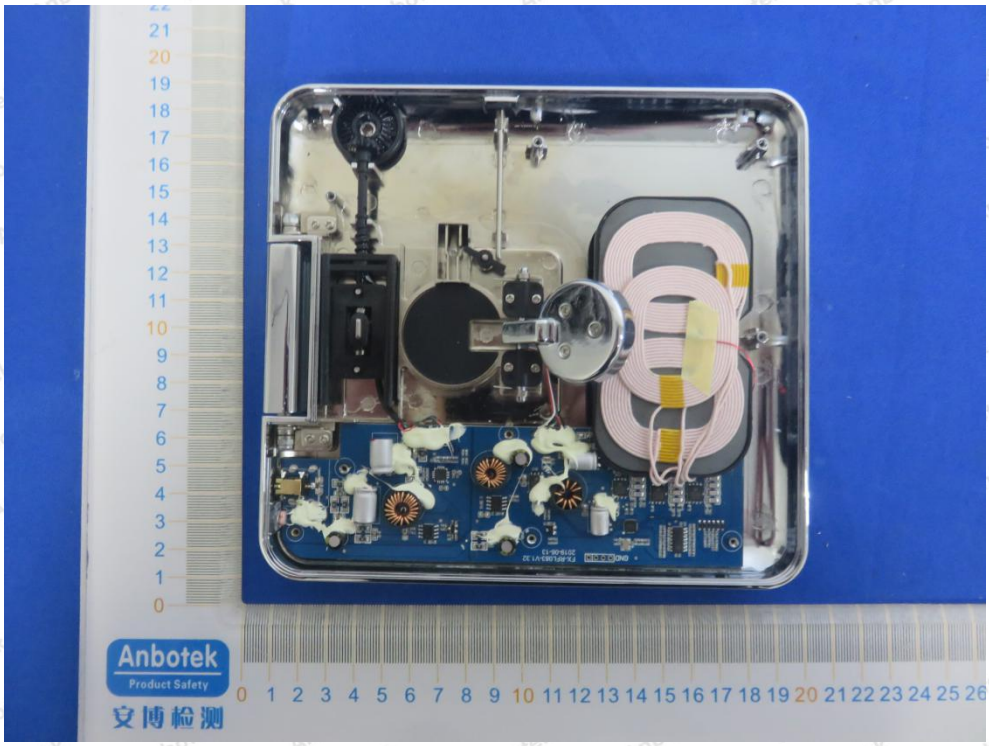

Anbotek

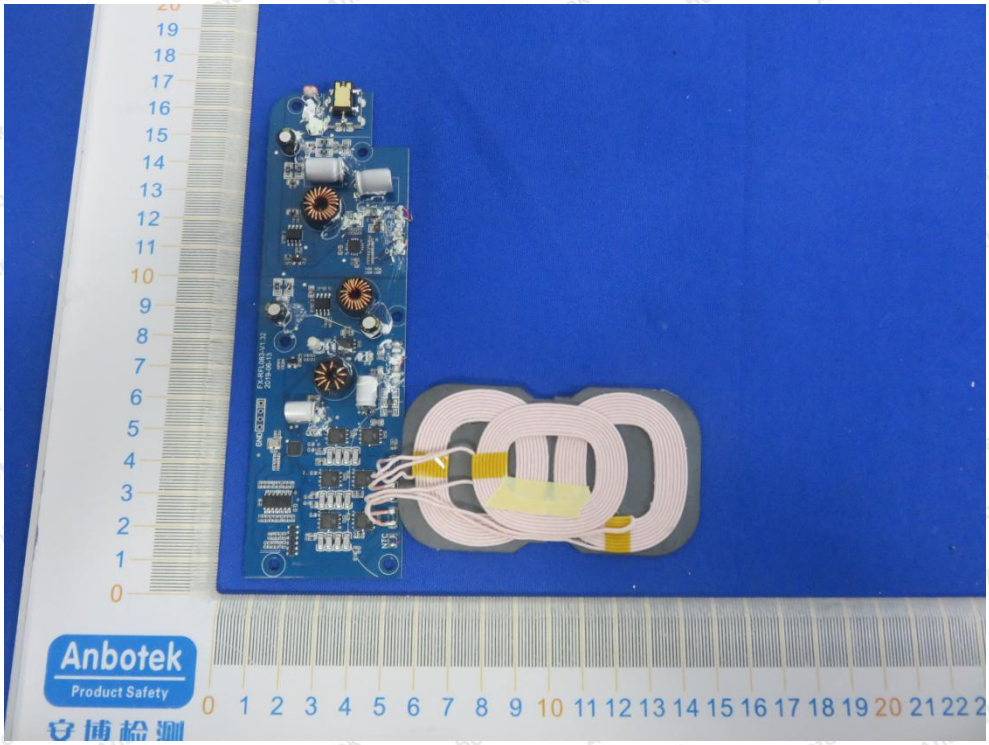


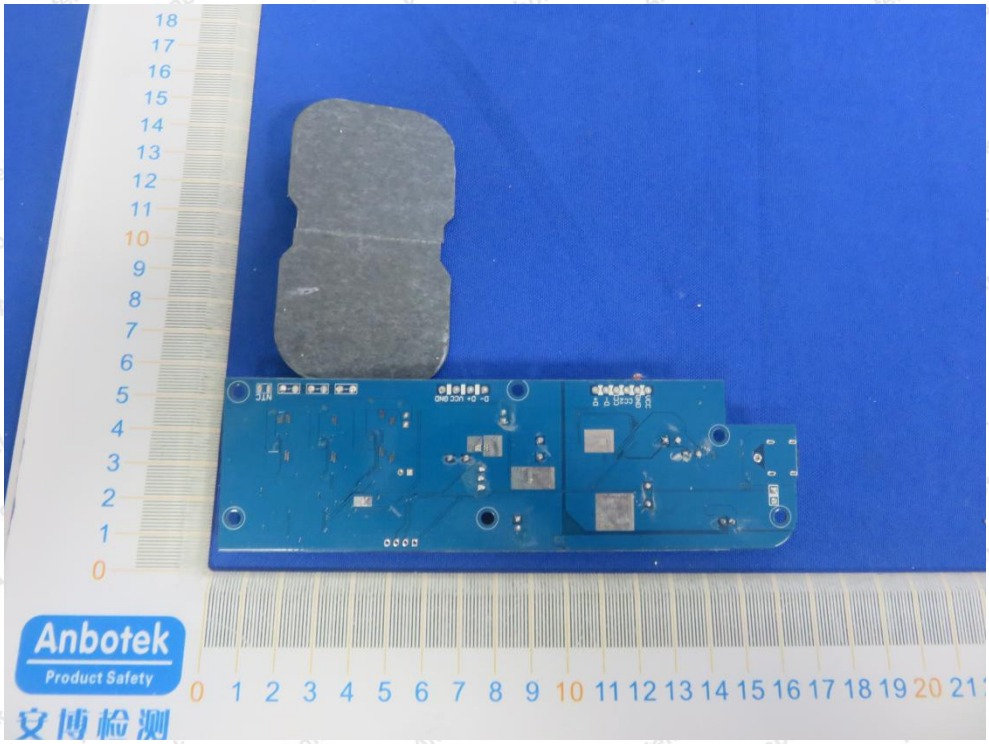


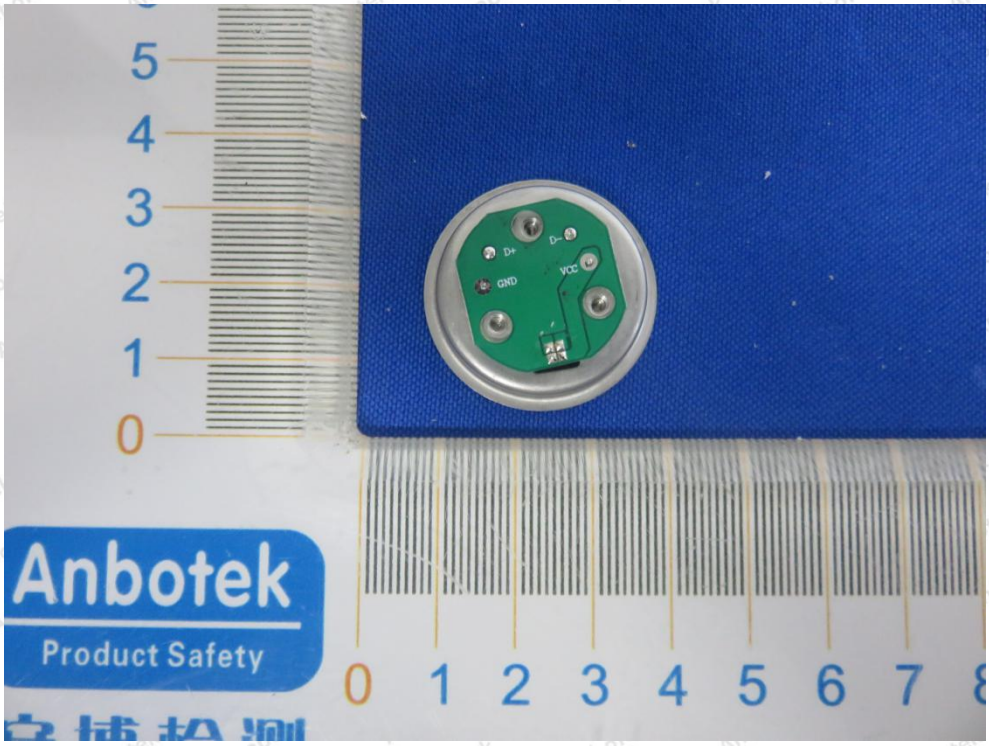

Anbotek
Product Safety

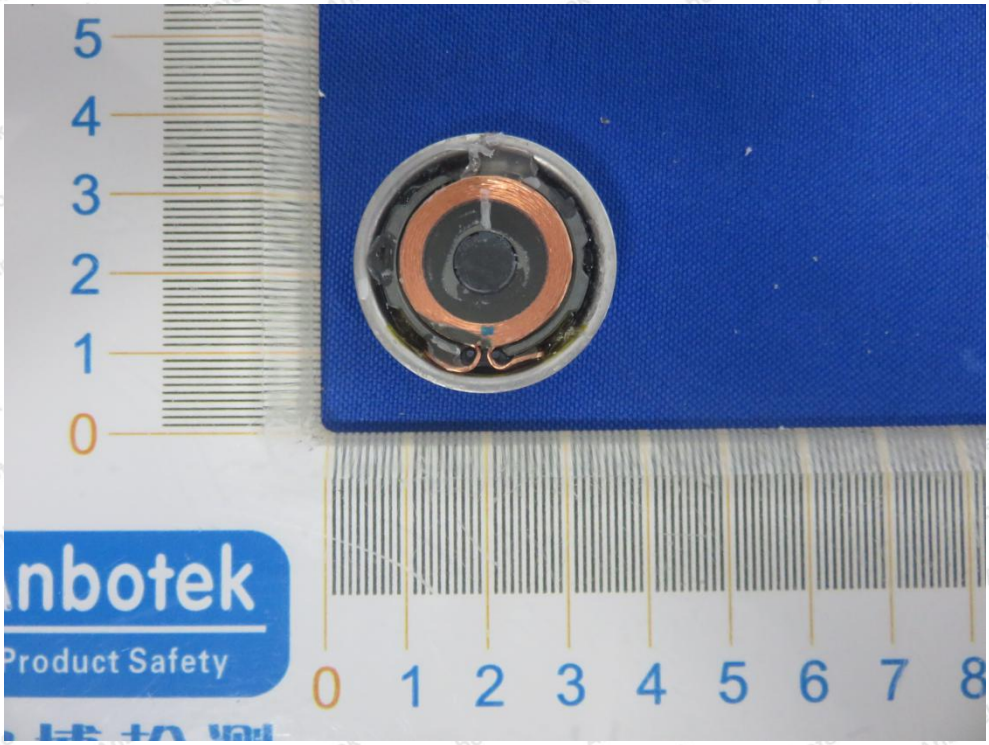
APPENDIX III -- INTERNAL PHOTOGRAPH




Anbotek
Product Safety
安博检测


Anbotek
Product Safety
安博检测


D+
D-
GND
VCC



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