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# FCC TEST REPORT

Client Name : Eggtronic Engineering Srl

Address : Via Giorgio Campagna 8 41126 Modena Italy

Product Name : Power Bar

Date : Dec. 17, 2019

# **Shenzhen Anbotek Compliance Laboratory Limited**



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# **TEST REPORT**

Applicant : Eggtronic Engineering Srl

Manufacturer : Shenzhen Pilot Technology Co., Ltd

Product Name : Power Bar

Model No. : CBWH30A

Trade Mark : EGGTRONIC

Capacity: 10000mAh / 37Wh

Total Output: 30W Max

Rating(s) USB-C Input (PD3.0): 5V-20V 30W

USB-C Output (PD3.0): 5V-20V 30W

Wireless Output 1: 5W / 7.5W - Wireless Output 2: 5W / 7.5W

Wireless for Apple Watch: 5W

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

Date of Test

Nov. 08, 2019

Nov. 08~Dec. 05, 2019

Prepared By

(Engineer / Dolly Mo)

Reviewer

(Supervisor / Bibo Zhang)

Approved & Authorized Signer

\_V\_

(Manager / Tom Chen)

Code:AB-RF-05-a

Hotline 400-003-0500 www.anbotek.com



Report No.: SZAWW191108004-01

## 1. General Information

## 1.1. Client Information

Applicant	: Eggtronic Engineering Srl
Address	: Via Giorgio Campagna 8 41126 Modena Italy
Manufacturer	: Shenzhen Pilot Technology Co., Ltd
Address	. A1 Building, No.7 Shankeng Road, Shankeng Industrial Park, Shanxia Community, Pinghu Street, Longgang District, Shenzhen, China.
Factory	: Shenzhen Pilot Technology Co., Ltd
Address	: A1 Building, No.7 Shankeng Road, Shankeng Industrial Park, Shanxia Community, Pinghu Street, Longgang District, Shenzhen, China.

## 1.2. Description of Device (EUT)

Product Name	:	Power Bar	Anbotek Anbotek Anbotek Anbotek						
Model No.	:	CBWH30A	Anbotek Anbotek Anbotek Anbotek						
Trade Mark	:	6 EGGTRONIC	k Anbotek Anbotek Anbotek Anbote						
Test Power Supply	:	AC 120V, 60Hz for adapte	or Anna Anbatek Anbater Anna						
Test Sample No.	:	1-2-1(Normal Sample), 1-2-1(Engineering Sample)							
		Operation Frequency:	Conventional wireless charging: 110.1-205KHz Apple Watch wireless charging: 534KHz						
Product	:	Modulation Type:	QI Anborek Anborek Anbore						
Description		Antenna Type:	Inductive loop coil Antenna						
		Antenna Gain(Peak):	O dBi Anbore Anborer Anborer						

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	: Manufacturer: Anker Innovations Limited
	M/N: A2013
P	Input: 100-240V 50-60Hz 0.7A
	Output: 3.6-6.5V == 3A/ 6.5-9V == 2A/ 9-12V == 1.5A

**Shenzhen Anbotek Compliance Laboratory Limited** 



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## 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, Power Bank module

	For Conducted Emission	
Final Test Mode	Description	
Mode 1	Full load, Power Bank module	Anbo

For Radiated Emission								
Final Test Mode Description								
Mode 1	Full load, Power Bank module							

Note: (1) Test channel of Conventional wireless charger is 0.128MHz.

Apple Watch wireless charger: 534KHz

- (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 Two Conventional wireless charger, Apple Watch wireless charger, Type C have been tested, only worst case reported in the report.
- (4) 5W/ 7.5W All modes have been tested. This report only show the test result of the worst case (Full load 7.5W).

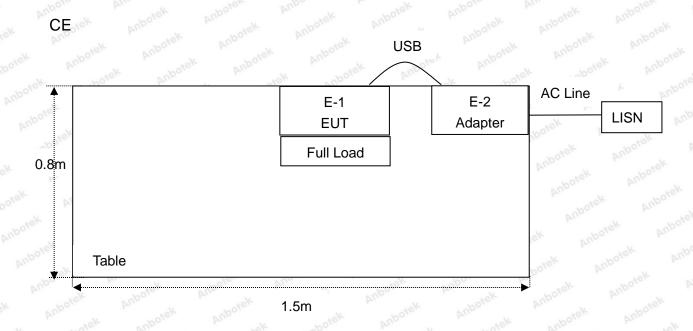


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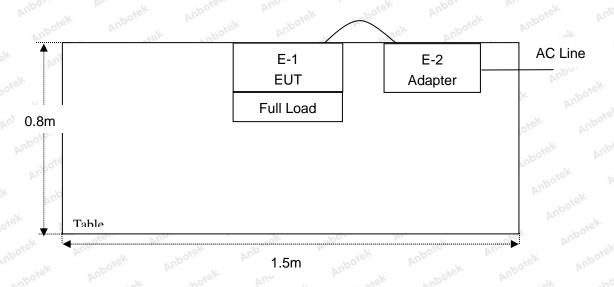
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## 1.5. Description Of Test Setup



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## 1.6. Test Equipment List

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal.	
1. <sup>Anh</sup>	L.I.S.N. Artificial Mains Network	Rohde & Schwarz	ENV216	100055	Nov. 04, 2019	1 Year	
2.	EMI Test Receiver	Rohde & Schwarz	ESPI3	101604	Nov. 04, 2019	1 Year	
3.	RF Switching Unit	Compliance Direction	RSU-M2	38303	Nov. 04, 2019	1 Year	
4 <sub>Anb</sub>	MAX Spectrum Analysis	Agilent	N9020A	MY51170037	Nov. 04, 2019	1 Year	
5. P	Preamplifier	SKET Electronic	BK1G18G30 D	KD17503	Nov. 04, 2019	1 Year	
6.	Double Ridged Horn Antenna	Instruments corporation	GTH-0118	351600	Nov. 01, 2019	1 Year	
Anbore 7.	7. Bilog Broadband Schwarzbeck		VULB9163 VULB 9163-289		Nov. 01, 2019	1 Year	
8.	Loop Antenna	Schwarzbeck	FMZB1519B 00053		Nov. 01, 2019	1 Year	
9.	Horn Antenna	Antenna A-INFO		LB-180400-K F J211060628		1 Year	
10.	Pre-amplifier	SONOMA	310N	186860	Nov. 04, 2019	1 Year	
11.	EMI Test Software SHURPLE EZ-EMC		N/A	N/A	N/A	N/A	
12.	RF Test Control System	YIHENG	YH3000	2017430	Nov. 04, 2019	1 Year	
13.	Power Sensor	DAER	RPR3006W	15I00041SN045	Nov. 04, 2019	1 Year	
14.	Power Sensor	DAER	RPR3006W	15I00041SN046	Nov. 04, 2019	1 Year	
15.	MXA Spectrum Analysis  MXG RF Vector Signal Generator  Agilent Agilent		N9020A	MY51170037	Nov. 04, 2019	1 Year	
16.			N5182A	MY48180656	Nov. 04, 2019	1 Year	
17.	Signal Generator	Agilent	E4421B	MY41000743	Nov. 04, 2019	1 Year	
18.	DC Power Supply	LW	TPR-6420D	374470	Nov. 04, 2019	1 Year	
19.	Constant Temperature Humidity Chamber	ZHONGJIAN	ZJ-KHWS80 B	N/A	Nov. 04, 2019	1 Year	



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## 1.7. Measurement Uncertainty

Radiation Uncertainty	:	Ur = 3.9 dB (Horizontal)	tek
		Ur = 3.8 dB (Vertical)	botek
6		potek Anbotek Anbotek Anbotek	Anbo
Conduction Uncertainty	:	Uc = 3.4 dB	Ar

## 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





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# 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



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## 3. Conducted Emission Test

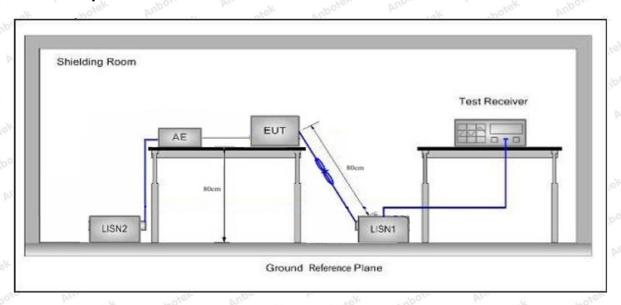
## 3.1. Test Standard and Limit

Test Standard	FCC Part15 Section 15.2	FCC Part15 Section 15.207							
Test Limit	Francisco	Maximum RF Line Voltage (dBuV)							
	Frequency	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

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All modes of Conventional wireless charger, Apple Watch wireless charger, Type C have been tested, only worst case reported in the report.

## **Conducted Emission Test Data**

Test Site: 1# Shielded Room

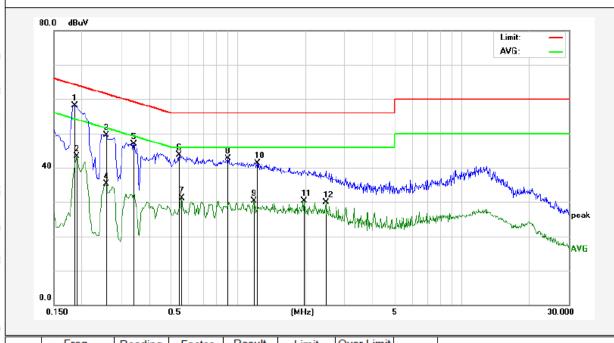
Operating Condition: Mode 1

Test Specification: AC 120V, 60Hz for adapter

Comment: Live Line

Tem.: 22.5℃ Hum.: 52%

Note: Two Conventional wireless chargers+Apple Watch wireless charger



	No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Over Limit (dB)	Detector	Remark
	1	0.1860	38.14	19.90	58.04	64.21	-6.17	QP	
	2	0.1900	23.44	19.90	43.34	54.03	-10.69	AVG	
	3	0.2580	29.53	19.89	49.42	61.49	-12.07	QP	
	4	0.2580	15.32	19.89	35.21	51.49	-16.28	AVG	
	5	0.3420	27.01	19.91	46.92	59.15	-12.23	QP	
	6	0.5460	23.65	19.99	43.64	56.00	-12.36	QP	
	7	0.5620	11.16	20.00	31.16	46.00	-14.84	AVG	
	8	0.9020	22.71	20.09	42.80	56.00	-13.20	QP	
	9	1.1820	10.18	20.12	30.30	46.00	-15.70	AVG	
Γ	10	1.2220	21.22	20.12	41.34	56.00	-14.66	QP	
	11	1.9780	10.14	20.14	30.28	46.00	-15.72	AVG	
	12	2.4620	9.67	20.15	29.82	46.00	-16.18	AVG	







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## **Conducted Emission Test Data**

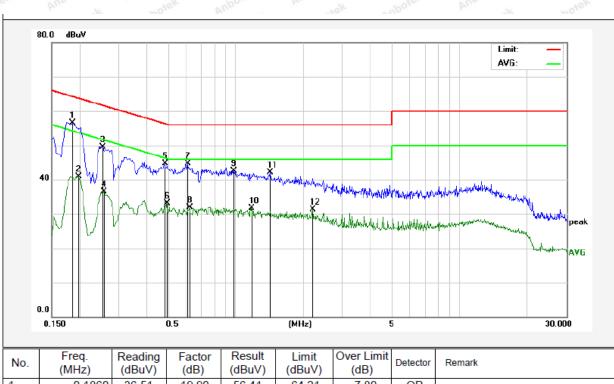
Test Site: 1# Shielded Room

Operating Condition: Mode 1

Test Specification: AC 120V, 60Hz for adapter

Comment: Neutral Line

Tem.: 22.5℃ Hum.: 52%



Freq. (MHz)	Reading (dBuV)	Factor (dB)	(dBuV)	Limit (dBuV)	Over Limit (dB)	Detector	Remark
0.1860	36.51	19.90	56.41	64.21	-7.80	QP	
0.1980	21.00	19.90	40.90	53.69	-12.79	AVG	
0.2540	29.67	19.89	49.56	61.62	-12.06	QP	
0.2580	16.52	19.89	36.41	51.49	-15.08	AVG	
0.4820	24.75	19.97	44.72	56.30	-11.58	QP	
0.4900	13.03	19.98	33.01	46.17	-13.16	AVG	
0.6100	24.71	20.01	44.72	56.00	-11.28	QP	
0.6220	11.96	20.02	31.98	46.00	-14.02	AVG	
0.9820	22.33	20.12	42.45	56.00	-13.55	QP	
1.1660	11.58	20.12	31.70	46.00	-14.30	AVG	
1.4220	22.06	20.13	42.19	56.00	-13.81	QP	
2.2020	11.17	20.14	31.31	46.00	-14.69	AVG	
	(MHz) 0.1860 0.1980 0.2540 0.2580 0.4820 0.4900 0.6100 0.6220 0.9820 1.1660 1.4220	(MHz) (dBuV) 0.1860 36.51 0.1980 21.00 0.2540 29.67 0.2580 16.52 0.4820 24.75 0.4900 13.03 0.6100 24.71 0.6220 11.96 0.9820 22.33 1.1660 11.58 1.4220 22.06	(MHz)         (dBuV)         (dB)           0.1860         36.51         19.90           0.1980         21.00         19.90           0.2540         29.67         19.89           0.2580         16.52         19.89           0.4820         24.75         19.97           0.4900         13.03         19.98           0.6100         24.71         20.01           0.6220         11.96         20.02           0.9820         22.33         20.12           1.4220         22.06         20.13	(MHz)         (dBuV)         (dB)         (dBuV)           0.1860         36.51         19.90         56.41           0.1980         21.00         19.90         40.90           0.2540         29.67         19.89         49.56           0.2580         16.52         19.89         36.41           0.4820         24.75         19.97         44.72           0.4900         13.03         19.98         33.01           0.6100         24.71         20.01         44.72           0.6220         11.96         20.02         31.98           0.9820         22.33         20.12         42.45           1.1660         11.58         20.12         31.70           1.4220         22.06         20.13         42.19	(MHz)         (dBuV)         (dB)         (dBuV)         (dBuV)           0.1860         36.51         19.90         56.41         64.21           0.1980         21.00         19.90         40.90         53.69           0.2540         29.67         19.89         49.56         61.62           0.2580         16.52         19.89         36.41         51.49           0.4820         24.75         19.97         44.72         56.30           0.4900         13.03         19.98         33.01         46.17           0.6100         24.71         20.01         44.72         56.00           0.6220         11.96         20.02         31.98         46.00           0.9820         22.33         20.12         42.45         56.00           1.1660         11.58         20.12         31.70         46.00           1.4220         22.06         20.13         42.19         56.00	(MHz)         (dBuV)         (dB)         (dBuV)         (dBuV)         (dB)           0.1860         36.51         19.90         56.41         64.21         -7.80           0.1980         21.00         19.90         40.90         53.69         -12.79           0.2540         29.67         19.89         49.56         61.62         -12.06           0.2580         16.52         19.89         36.41         51.49         -15.08           0.4820         24.75         19.97         44.72         56.30         -11.58           0.4900         13.03         19.98         33.01         46.17         -13.16           0.6100         24.71         20.01         44.72         56.00         -11.28           0.6220         11.96         20.02         31.98         46.00         -14.02           0.9820         22.33         20.12         42.45         56.00         -13.55           1.1660         11.58         20.12         31.70         46.00         -14.30           1.4220         22.06         20.13         42.19         56.00         -13.81	(MHz)         (dBuV)         (dB)         (dBuV)         (dBuV)         (dB)         Detector           0.1860         36.51         19.90         56.41         64.21         -7.80         QP           0.1980         21.00         19.90         40.90         53.69         -12.79         AVG           0.2540         29.67         19.89         49.56         61.62         -12.06         QP           0.2580         16.52         19.89         36.41         51.49         -15.08         AVG           0.4820         24.75         19.97         44.72         56.30         -11.58         QP           0.4900         13.03         19.98         33.01         46.17         -13.16         AVG           0.6100         24.71         20.01         44.72         56.00         -11.28         QP           0.6220         11.96         20.02         31.98         46.00         -14.02         AVG           0.9820         22.33         20.12         42.45         56.00         -13.55         QP           1.1660         11.58         20.12         31.70         46.00         -14.30         AVG           1.4220         22.06 <t< td=""></t<>



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## **Conducted Emission Test Data**

Test Site: 1# Shielded Room

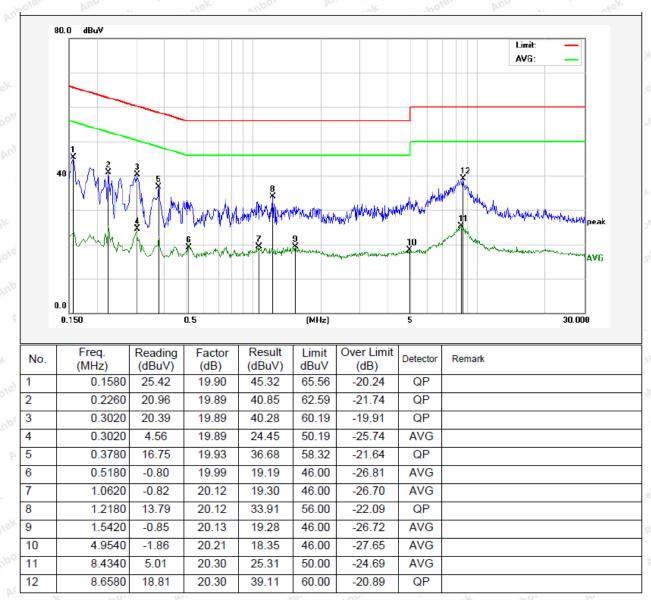
Operating Condition: Mode 1

Test Specification: AC 120V, 60Hz for adapter

Comment: Live Line

Tem.: 22.5℃ Hum.: 52%

Note: Apple Watch wireless charging



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#### **Conducted Emission Test Data**

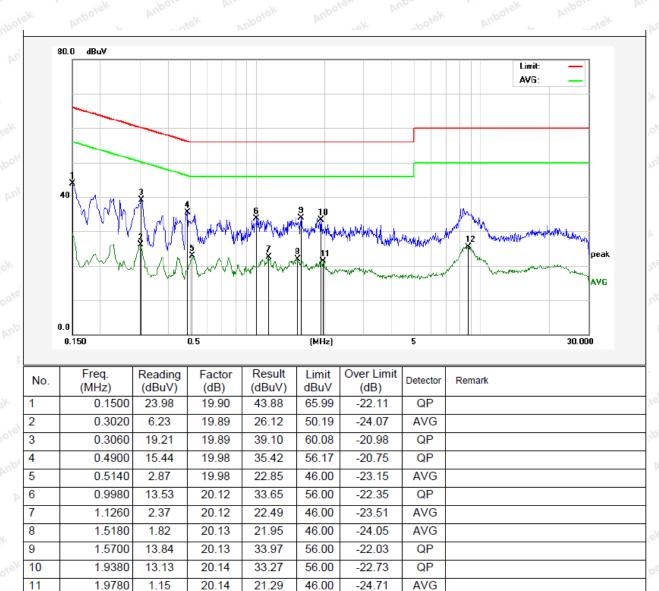
Test Site: 1# Shielded Room

**Operating Condition:** Mode 1

Test Specification: AC 120V, 60Hz for adapter

Comment: **Neutral Line** 

Tem.: 22.5°C Hum.: 52%



5.23

8.7380

12

Code: AB-RF-05-a

20.31

25.54

50.00

-24.46

AVG



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## 4. Radiation Spurious Emission and Band Edge

## 4.1. Test Standard and Limit

Test Standard	FCC Part15 C Section 15	5.209 and 15.205				
	Frequency (MHz)	Field strength (microvolt/meter)	Limit (dBuV/m)	Remark	Measurement distance (m)	
	0.009MHz~0.490MHz	2400/F(kHz)	And	anbotek	300	
	0.490MHz-1.705MHz	24000/F(kHz)	r Augusta	Anbotek	30	
	1.705MHz-30MHz	30	Pur Pole	k Anborek	30	
Test Limit	30MHz~88MHz	100	40.0	Quasi-peak	3	
	88MHz~216MHz	150	43.5	Quasi-peak	3 Ame	
	216MHz~960MHz	200	46.0	Quasi-peak	Ambor 3	
	960MHz~1000MHz	500 100	54.0	Quasi-peak	Ambo 3	
	Ab 2112 4000MH	500	54.0	Average	M 3	
	Above 1000MHz	Antorek Ant	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

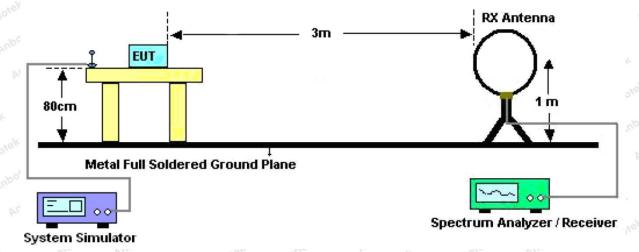


Figure 1. Below 30MHz



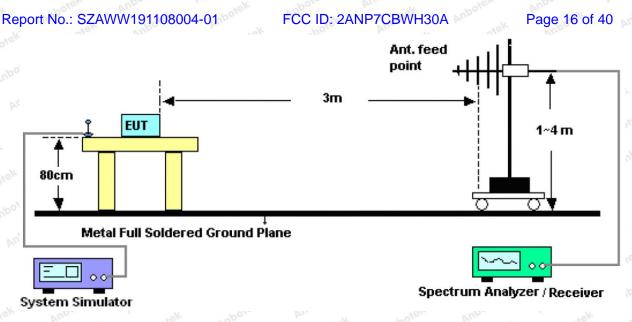


Figure 2. 30MHz to 1GHz

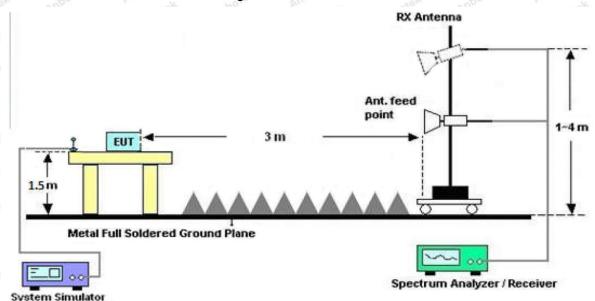


Figure 3. Above 1 GHz

## 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.



Code:AB-RF-05-a

Hotline 400-003-0500 www.anbotek.com



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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 data is in TX mode, and this is the worst mode.

All modes of Conventional wireless charger, Apple Watch wireless charger, Type C have been tested, only worst case reported in the report.



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Test Results (9K~30MHz)

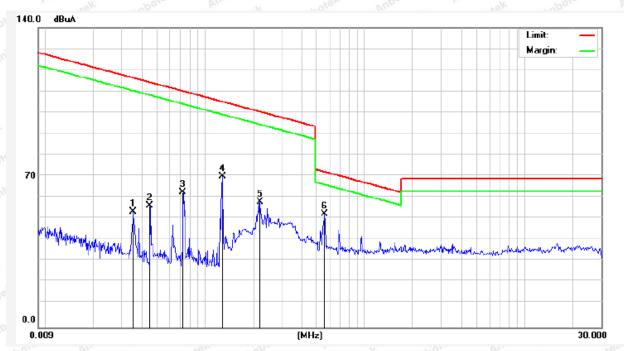
Test Mode: Mode 1

Power Source: AC 120V, 60Hz for adapter

Temp.(°C)/Hum.(%RH): 22.2°C/51%RH

Distance: 3m

Note: Two Conventional wireless chargers+Apple Watch wireless charger



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	Frequency (MHz)	Read Level (dBuV)	Antenna Factor	Cable Loss (dB)	Preamp Factor	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	degree
L	()	(===-)	(dB/m)	()	(dB)	(	(4247742)	()		(dge)
	0.0354	43.52	19.28	2.53	0	65.33	136.50	-71.17	Peak	129
	0.0354	32.22	19.28	2.53	0	54.03	116.50	-62.47	AV	129
	0.0451	45.91	19.28	2.53	0	67.72	134.40	-66.68	Peak	325
	0.0451	35.18	19.28	2.53	0	56.99	114.40	-57.41	AV	325
	0.0728	50.24	19.53	2.59	0	72.36	130.27	-57.91	Peak	227
	0.0728	41.00	19.53	2.59	0	63.12	110.27	-47.15	AV	227
	0.1282	59.17	19.53	2.59	0	81.29	125.38	-44.09	Peak	178
	0.1282	48.36	19.53	2.59	0	70.48	105.38	-34.90	AV	178
	0.2199	45.10	19.53	2.59	0	67.22	120.72	-53.50	Peak	267
	0.2199	36.34	19.53	2.59	0	58.46	100.72	-42.26	AV	267
	0.5620	29.83	20.66	2.63	0	53.12	72.61	-19.49	QP	28
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**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.



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Test Results (9K~30MHz)

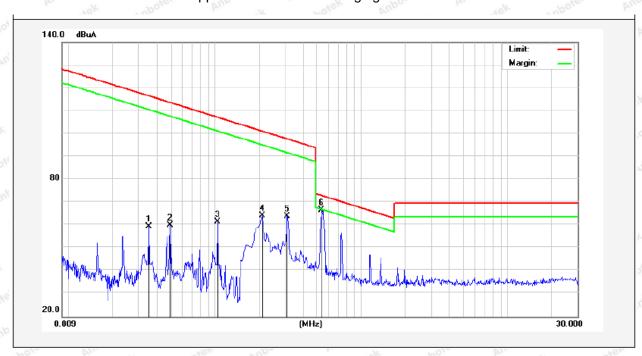
Test Mode: Mode 1

Power Source: AC 120V, 60Hz for adapter

Temp.(°C)/Hum.(%RH): 22.2°C/51%RH

Distance: 3m

Note: Apple Watch wireless charging



	Frequency	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level (dBuV/m)	Limit (dBuV/m)	Over Limit	Detector	degree
	(MHz)	(dBuV)	(dB/m)	(dB)	(dB)	(dbuv/III)	(dbuv/III)	(dB)		(dge)
ì	0.0354	39.06	19.28	2.53	0	60.87	136.50	-75.63	Peak	114
	0.0354	37.63	19.28	2.53	0	59.44	116.50	-57.06	AV	114
)	0.0495	39.88	19.38	2.55	0	61.81	133.60	-71.79	Peak	254
	0.0495	38.10	19.38	2.55	0	60.03	113.60	-53.57	AV	254
1	0.1044	40.50	19.39	2.55	0	62.44	127.15	-64.71	Peak	152
	0.1044	39.75	19.39	2.55	0	61.69	107.15	-45.46	AV	152
	0.2099	43.58	19.41	2.56	0	65.55	121.12	-55.57	Peak	90
	0.2099	42.38	19.41	2.56	0	64.35	101.12	-36.77	AV	90
	0.3140	42.42	19.55	2.58	0	64.55	117.64	-53.09	Peak	120
	0.3140	41.84	19.55	2.58	0	63.97	97.64	-33.67	AV	120
	0.5340	43.57	20.34	2.60	0	66.51	73.05	-6.54	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.



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Test Results (30~1000MHz)

Test Mode: Mode 1

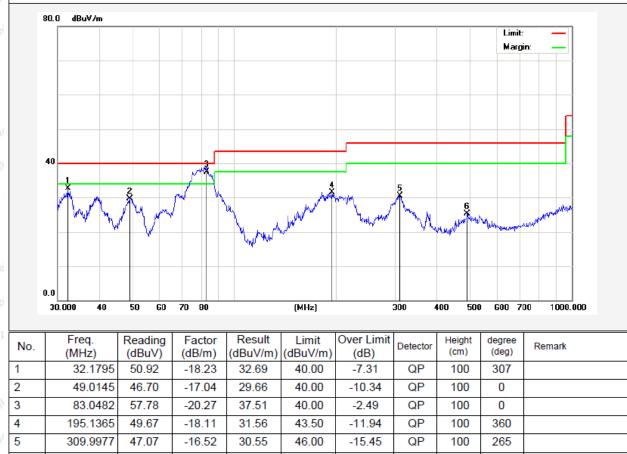
AC 120V, 60Hz for adapter Power Source:

Polarization: Vertical

Temp.(°C)/Hum.(%RH): 22.2°C/51%RH

Distance: 3m

Note: Two Conventional wireless chargers+Apple Watch wireless charger



No.	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector	(cm)	(deg)	Remark
1	32.1795	50.92	-18.23	32.69	40.00	-7.31	QP	100	307	
2	49.0145	46.70	-17.04	29.66	40.00	-10.34	QP	100	0	
3	83.0482	57.78	-20.27	37.51	40.00	-2.49	QP	100	0	
4	195.1365	49.67	-18.11	31.56	43.50	-11.94	QP	100	360	
5	309.9977	47.07	-16.52	30.55	46.00	-15.45	QP	100	265	
6	490.7447	38.66	-13.38	25.28	46.00	-20.72	QP	100	0	



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Test Results (30~1000MHz)

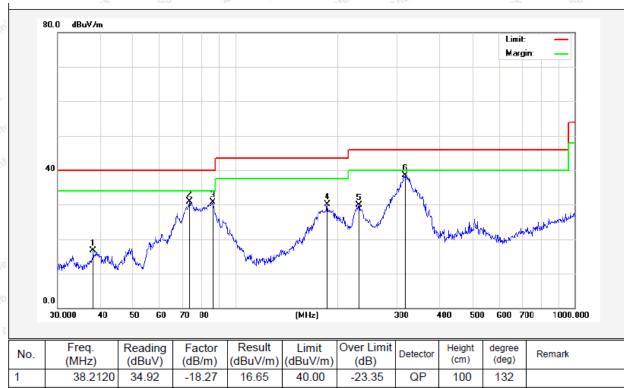
Test Mode: Mode 1

Power Source: AC 120V, 60Hz for adapter

Polarization: Horizontal

Temp.(°C)/Hum.(%RH): 22.2°C/51%RH

Distance: 3m



No.	Freq. (MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector	(cm)	(deg)	Remark
1	38.2120	34.92	-18.27	16.65	40.00	-23.35	QP	100	132	
2	73.3593	53.89	-22.96	30.93	40.00	-9.07	QP	100	0	
3	85.8984	53.64	-22.95	30.69	40.00	-9.31	QP	100	96	
4	187.0958	53.26	-23.18	30.08	43.50	-13.42	QP	300	0	
5	231.7179	51.00	-21.04	29.96	46.00	-16.04	QP	300	360	
6	316.5890	56.26	-17.75	38.51	46.00	-7.49	QP	300	0	



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Test Results (30~1000MHz)

Test Mode: Mode 1

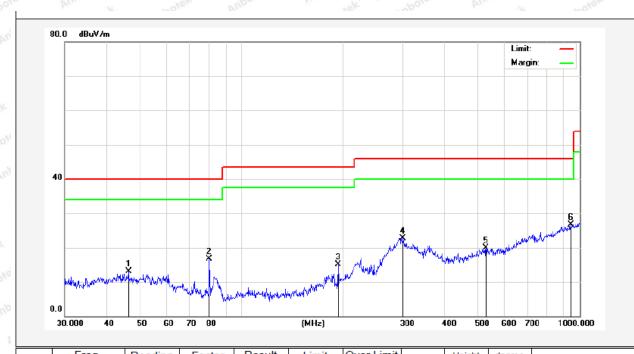
Power Source: AC 120V, 60Hz for adapter

Polarization: Vertical

Temp.(°C)/Hum.(%RH): 22.2°C/51%RH

Distance: 3m

Note: Apple Watch wireless charging



	No.	Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	(dBuV/m)	Limit (dBuV/m)	(dB)	Detector	Height (cm)	degree (deg)	Remark
1		46.3402	29.64	-16.59	13.05	40.00	-26.95	QP	100	0	
2	2	80.3619	38.28	-21.50	16.78	40.00	-23.22	QP	100	360	
3	3	193.0945	31.91	-16.79	15.12	43.50	-28.38	QP	100	0	
4	ļ	300.3672	38.34	-15.55	22.79	46.00	-23.21	QP	100	360	
5	5	528.2458	31.54	-11.73	19.81	46.00	-26.19	QP	100	0	
6	6	942.1305	31.13	-4.36	26.77	46.00	-19.23	QP	100	360	



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Test Results (30~1000MHz)

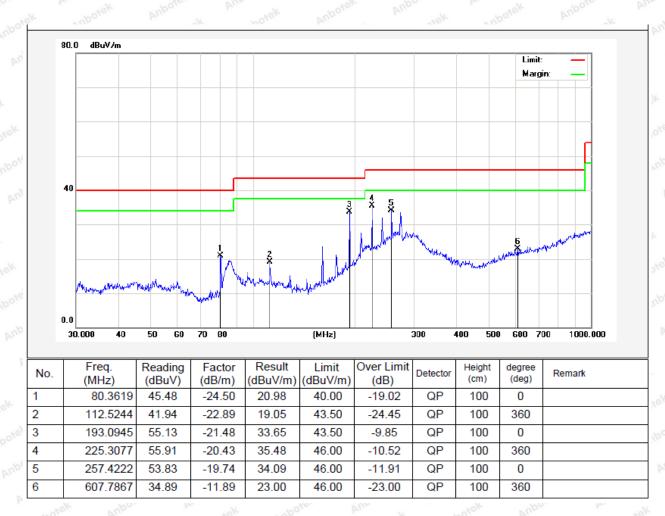
Test Mode: Mode 1

Power Source: AC 120V, 60Hz for adapter

Polarization: Horizontal

22.2°C/51%RH Temp.(°C)/Hum.(%RH):

Distance: 3m





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## 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 an 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** 



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## **APPENDIX I -- TEST SETUP PHOTOGRAPH**

Photo of Conducted Emission Measurement
(Two Conventional wireless chargers+Apple Watch wireless charger)



Apple Watch wireless charging



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# Photo of Radiation Emission Test (Two Conventional wireless chargers+Apple Watch wireless charger)



Apple Watch wireless charging

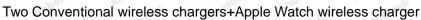




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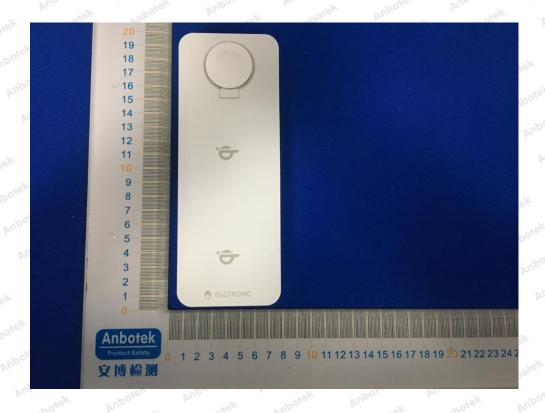
Apple Watch wireless charging





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## **APPENDIX II -- EXTERNAL PHOTOGRAPH**





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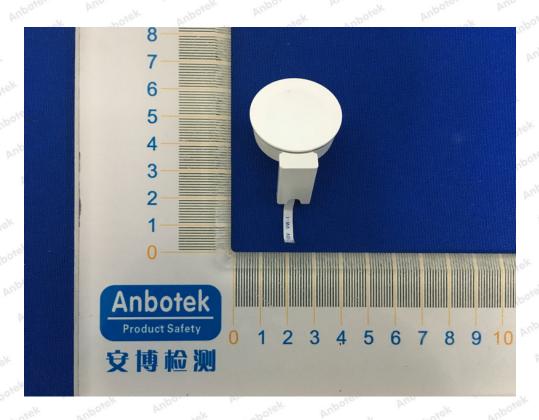


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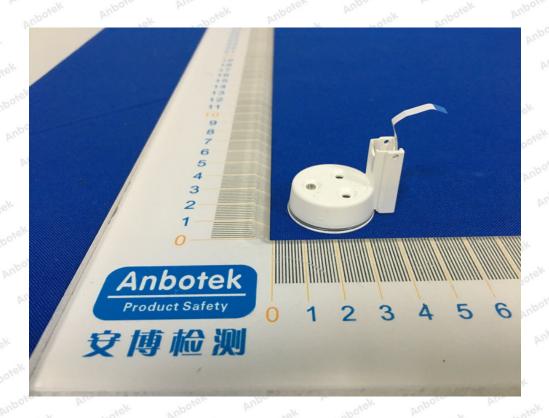
## **Shenzhen Anbotek Compliance Laboratory Limited**

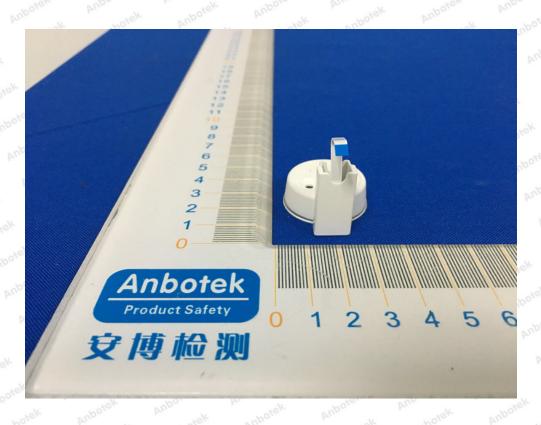


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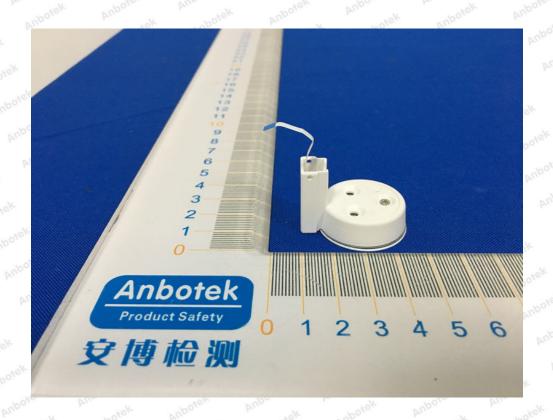
## **Shenzhen Anbotek Compliance Laboratory Limited**

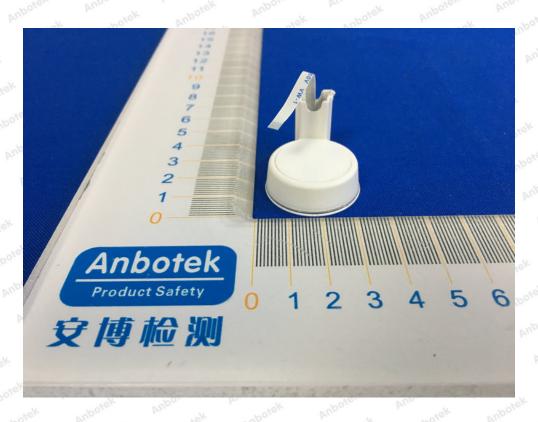


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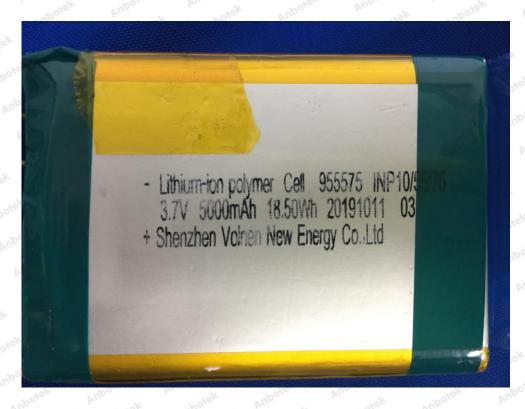
## **Shenzhen Anbotek Compliance Laboratory Limited**



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## **APPENDIX III -- INTERNAL PHOTOGRAPH**





## **Shenzhen Anbotek Compliance Laboratory Limited**

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Tel:(86) 755–26066440 Fax: (86) 755–26014772 Email: service@anbotek.com





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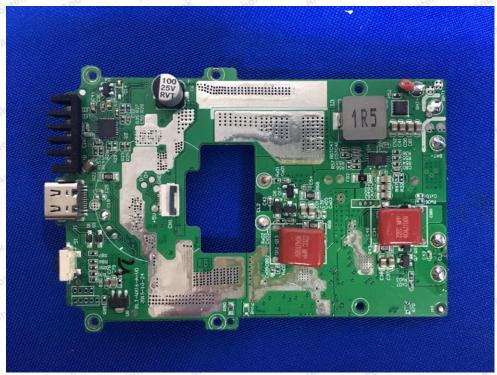




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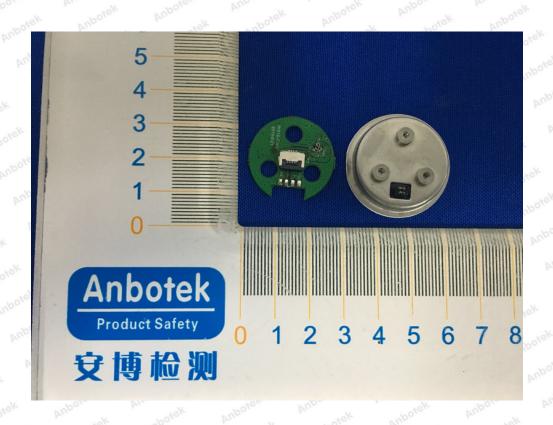


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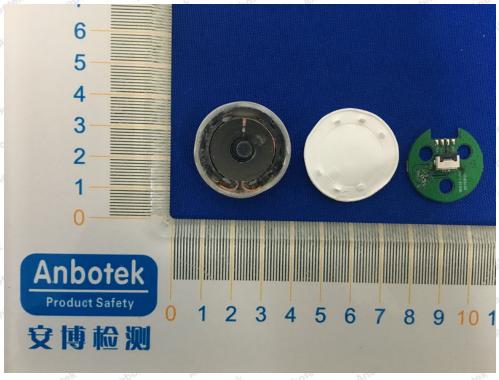






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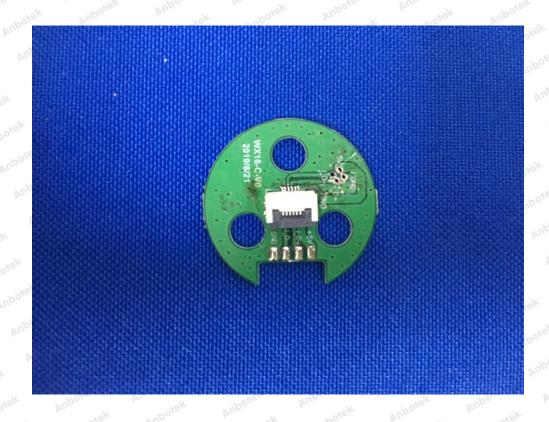






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