

FCC MPE TEST REPORT

FCC ID: 2APOWBW-WC02

Product: wireless charger pen holder

Trade Name: PRObway

Model Name: BW-WC02

Serial Model: BW-wc01 BW-wc02 BW-wc03 BW-wc05
BW-wc06

Report No.: UNIA2018111902FR-01

Prepared for

HONGKONG BWAY INDUSTRIAL CO., LTD

FLAT 13B, GOLD SHINE TOWER, NO.346-348 QUEEN'S RD CENTRAL,
SHEUNG WAN, Hong Kong, China

Prepared by

Shenzhen United Testing Technology Co., Ltd.

2F, Annex Bldg, Jiahuangyuan Tech Park, #365 Baotian 1 Rd, Tiegang
Community, Xixiang Str, Bao'an District, Shenzhen, China

TEST RESULT CERTIFICATION

Applicant's name.....: HONGKONG BWAY INDUSTRIAL CO., LTD
Address.....: FLAT 13B, GOLD SHINE TOWER, NO.346-348 QUEEN'S RD
 CENTRAL, SHEUNG WAN, Hong Kong, China
Manufacture's Name.....: Shenzhen Bway Tech Co., Ltd.
Address.....: Room 310, Yingchangsheng Building, 377 Shajing Section,
 Guangshen Road, Xiner Community, Shajing St., Baoan Area,
 Shenzhen, Guangdong, China (Mainland)

Product description

Product name.....: wireless charger pen holder
Trade Mark.....: PRObway
Model and/or type reference : BW-WC02, BW-wc01 BW-wc02 BW-wc03 BW-wc05 BW-wc06
Standards.....: FCC KDB 680106 D01 RF Exposure Wireless Charging
 Apps v03

This device described above has been tested by Shenzhen United Testing Technology Co., Ltd., and the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.

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Date of Test..... :
Date (s) of performance of tests.....: Nov. 20, 2018 ~ Dec. 26, 2018
Date of Issue.....: Dec. 26, 2018
Test Result.....: Pass

Prepared by: Kahn Yang
 Kahn yang/Editor
 Reviewer: Sherwin Qian
 Sherwin Qian/Supervisor
 Approved & Authorized Signer: Liuze
 Liuze/Manager

Note: For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.

Channel List			
Channel	Frequency(KHz)	Channel	Frequency(MHz)
01	125		

The EUT antenna is Coil Antenna. No antenna other than that furnished by the responsible party shall be used with the device.

1. SUMMARY OF TEST RESULTS

1.1 Test procedures according to the technical standards:

FCC KDB 680106 D01 RF Exposure Wireless Charging Apps v03

FCC CFR 47			
Standard Section	Test Item	Judgment	Remark
FCC CFR 47 part1, 1.1310 KDB680106 D01 v03(3)(3)	Electric Field Strength (E) (V/m)	PASS	
	Magnetic Field Strength (H) (A/m)	PASS	

1.2 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement $y \pm U$, where expanded uncertainty U is based on a standard uncertainty multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately **95 %**.

No.	Item	Uncertainty
1	All emissions,radiated(<30M)(9KHz-30MHz)	± 2.45 dB
2	Temperature	± 0.5 °C
3	Humidity	± 2 %

1.3 Test Instruments

Description	Brand	Model No.	Frequency Range	Calibrated Until
Broadband Field Meter	NARDA	NBM-550	—	Jan. 01, 2019
Magnetic Field Meter	NARDA	ELT-400	1–400kHz	Jan. 01, 2019
Magnetic Probe	NARDA	HF-3061	300kHz–30MHz	Jan. 01, 2019
Magnetic Probe	NARDA	HF-0191	27–1000MHz	Jan. 01, 2019
Broadband Field Meter	NARDA	NBM-550	—	Jan. 01, 2019
Electric Field Meter	COMBINOVA	EFM 200	5Hz–400kHz	Jan. 01, 2019
E-Field Probe	NARDA	EF-0391	100kHz–3GHz	Jan. 01, 2019
E-Field Probe	NARDA	EF-6091	100MHz–60GHz	Jan. 01, 2019

NOTE: The calibration interval of the above test instruments is 12 months.

2. MAXIMUM PERMISSIBLE EXPOSURE

2.1 MAXIMUM PERMISSIBLE EXPOSURE

Limit of Maximum Permissible Exposure

Limits for Occupational / Controlled Exposure				
Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/ cm ²)	Averaging Time E ² , H ² or S (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842 / f	4.89 / f	(900 / f)*	6
30-300	61.4	0.163	1.0	6
300-1500			F/300	6
1500-100,000			5	6
Limits for General Population / Uncontrolled Exposure				
Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/ cm ²)	Averaging Time E ² , H ² or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180 / f)*	30
30-300	27.5	0.073	0.2	30
300-1500			F/1500	30
1500-100,000			1	30

Note 1: f = frequency in MHz ; *Plane-wave equivalent power density.

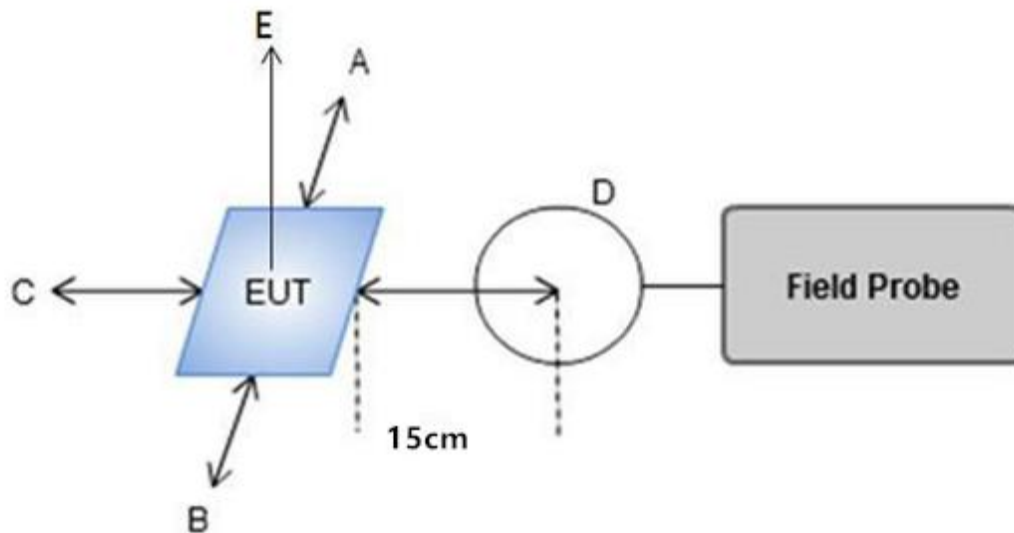
2: For the applicable limit, see FCC 1.1310, 680106 D01 RF Exposure Wireless Charging Apps v03.

3: Emissions between 100 kHz to 300 kHz should be assessed versus the limits at 300 kHz in Table 1 of Section 1.1310: 614 V/m and 1.63 A/m. A KDB inquiry is required to determine the applicable exposure limits below 100 kHz.

3. TEST PROCEDURE

a. For devices designed for typical desktop applications, such as wireless charging pads, RF exposure evaluation should be conducted assuming a user separation distance of 15 cm. E and H field strength measurements or numerical modeling may be used to demonstrate compliance. Measurements should be made from all sides and the top of the primary/client pair, with the 15 cm measured from the center of the probe(s) to the edge of the device.

4.1 TEST SETUP



4.2 TEST PHOTO



4.3 RESULT OF MAXIMUM PERMISSIBLE EXPOSURE

For Full load mode:

E-Filed Strength at 15 cm from the edges surrounding the EUT (V/m)

Frequency Range (MHz)	Test Position A	Test Position B	Test Position C	Test Position D	Test Position E	Reference Limit (V/m)	Limits Test (V/m)
0.125	1.25	1.01	1.12	1.15	1.18	307	614

H-Filed Strength at 15 cm from the edges surrounding the EUT (A/m)

Frequency Range (MHz)	Test Position A	Test Position B	Test Position C	Test Position D	Test Position E	Reference Limit (A/m)	Limits Test (A/m)
0.125	0.25	0.17	0.27	0.15	0.18	0.815	1.63

For Half Load for wrist band mode:

E-Filed Strength at 15 cm from the edges surrounding the EUT (V/m)

Frequency Range (MHz)	Test Position A	Test Position B	Test Position C	Test Position D	Test Position E	Reference Limit (V/m)	Limits Test (V/m)
0.125	1.15	1.19	1.17	1.18	1.15	307	614

H-Filed Strength at 15 cm from the edges surrounding the EUT (A/m)

Frequency Range (MHz)	Test Position A	Test Position B	Test Position C	Test Position D	Test Position E	Reference Limit (A/m)	Limits Test (A/m)
0.125	0.19	0.21	0.20	0.21	0.16	0.815	1.63

For Half Load for shoepod mode:

E-Filed Strength at 15 cm from the edges surrounding the EUT (V/m)

Frequency Range (MHz)	Test Position A	Test Position B	Test Position C	Test Position D	Test Position E	Reference Limit (V/m)	Limits Test (V/m)
0.125	1.17	1.18	1.20	1.17	1.18	307	614

H-Filed Strength at 15 cm from the edges surrounding the EUT (A/m)

Frequency Range (MHz)	Test Position A	Test Position B	Test Position C	Test Position D	Test Position E	Reference Limit (A/m)	Limits Test (A/m)
0.125	0.19	0.19	0.18	0.20	0.15	0.815	1.63

For No load mode:

E-Filed Strength at 15 cm from the edges surrounding the EUT (V/m)

Frequency Range (MHz)	Test Position A	Test Position B	Test Position C	Test Position D	Test Position E	Reference Limit (V/m)	Limits Test (V/m)
0.125	1.21	1.12	1.20	1.21	1.18	307	614

H-Filed Strength at 15 cm from the edges surrounding the EUT (A/m)

Frequency Range (MHz)	Test Position A	Test Position B	Test Position C	Test Position D	Test Position E	Reference Limit (A/m)	Limits Test (A/m)
0.125	0.17	0.18	0.18	0.19	0.19	0.815	1.63

*****THE END*****