

RF Exposure Test Report

Product: POWER BANK

Trade Mark: N/A

Model Number: MWP05A

FCC ID: 2BBAF-MWP05A

Prepared for

Blue-Two Electronics Limited

7th to 9th floors of Building 3, Songhai New Materials Industry Innovation Center, No.10 and No.12 Yingshan North Road, Lilin Town, Zhongkai High tech Zone, Huizhou, China

Prepared by

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TEST RESULT CERTIFICATION

Applicant's Name..... : Blue-Two Electronics Limited
Address : 7th to 9th floors of Building 3, Songhai New Materials Industry Innovation Center, No.10 and No.12 Yingshan North Road, Lilin Town, Zhongkai High tech Zone, Huizhou
Manufacturer's Name : The same as applicant
Address : The same as applicant
Product description
Product name : POWER BANK
Model Number..... : MWP05A, 2MTPP1998, 2IHPP2026, 2IHPP2037, 2IHPP1055-WHT-R2, 2MTPP1998W4G7, 2IHPP2026B4G7, 2IHPP2026W4G7, 2IHPP2037B4G7, 2IHPP2037W4G7, UN028BLK, UN028WHI
Standards : FCC CFR 47 PART 1, 1.1310
Test procedure..... : KDB 680106 D01 Wireless Power Transfer v04
This device described above has been tested by SHENZHEN TIMEWAY TESTING LABORATORIE S. and the test results show that the equipment under test (EUT) is in compliance with the EMC requirements. And it is applicable only to the tested sample identified in the report.
Date of Test..... :
Date (s) of performance of tests..... : Mar 09, 2026~ Mar 18, 2026
Test Result..... : **Pass**

Testing Engineer:

(Andy Xing)

Authorized Signatory:

(Terry Tang)



Revision History

[illegible]



1 General Description

1.1 Description of EUT

Product name:	POWER BANK
Model name:	MWP05A
Series Model:	2MTPP1998, 2IHPP2026, 2IHPP2037, 2IHPP1055-WHT-R2, 2MTPP1998W4G7, 2IHPP2026B4G7, 2IHPP2026W4G7, 2IHPP2037B4G7, 2IHPP2037W4G7, UN028BLK, UN028WHI
Different of series model:	Only the model names are the different for the marketing requirement
Operation frequency:	111.5–205 kHz
Operational mode:	Wireless charging
Modulation type:	ASK
Antenna type:	Coil Antenna
Input:	Type-C Input, DC5V/2.1A
Battery:	DC3.7V, 5000mAh Li-ion battery
Output:	Wireless Output: 5W USB-A Output: 5V/2.4A; USB-C Output: 5V/2.4A; Total: 12W Max
Adapter information:	N/A

1.2 Test Mode

Pretest Test Mode	Description of Mode
1	Charging + Wireless Output(5W)
2	Wireless Output (Phone: 5W)

1.3 Test Setup

See photographs of the test setup in the report for the actual setup and connections between EUT and support equipment.

1.4 Ancillary Equipment

Support equipment list			
Description	Model	Serial No.	Manufacturer
HUAWEI QUICK CHARGE (65W)	HW-200325CP1	FL8606P8500764	HUAWEI
Mobile phone	MATE 30	--	HUAWEI



Support cable list			
Description	Length (m)	From	To
/	/	/	/



2 Test Facilities and Accreditations

2.1 Test Laboratory

Test Site	SHENZHEN TIMEWAY TESTING LABORATORIES.
Test Site Location	Zone C, 1st Floor, Block B, Jun Xiang Da Building, Zhongshan Park Road West, Tong Le Village, Nanshan District, Shenzhen, China
Telephone:	(86-755) 8344 8688
Fax:	(86-755) 8344 2996
FCC Registration No.:	CN1251
A2LA Certificate No.:	5013.01

2.2 Environmental Conditions

During the measurement the environmental conditions were within the listed ranges:

Temperature:	15°C~35°C
Relative Humidity:	20%~75%
Air Pressure:	98kPa~101kPa

2.3 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 %.

The data and results quoted in this document are true and accurate values, and uncertainties are not involved in the calculations.

In addition, components and mass production processes that are similar to testing equipment may introduce additional deviations, and the manufacturer is solely responsible for the continued compliance of the equipment.

Measurement Frequency Range	U, (dB)	Note
RF frequency	2×10^{-5}	
E-field	± 1.06 dB	
H-field	± 0.7 dB	
Temperature	± 1 degree	
Humidity	± 5 %	



3 List of Test Equipment

Equipment	Manufacturer	Model	Serial No.	Cal. date	Cal. Due
Near-field Electric and Magnetic Field Sensor System	SPEAG	MAGPy-8H 3 D+ED3	3101	2024/3/12	2027/3/11

Equipment	Manufacturer	Model	Software version:	Cal. date	Cal. Due
MPE test software	SPEAG	MAGPY 2.6	2.6	/	/

Note: the calibration interval of the above test instruments is 3 years and the calibrations are traceable to international system unit (SI).



4 RF Exposure

4.1 Maximum Permissible Exposure

4.1.1. Limit

Frequency range(MHz)	Electric field strength(V/m)	Magnetic field strength(A/m)	Power density(mW/cm ²)	Averaging time(minutes)
(A) Limits for Occupational/Controlled Exposure				
0.3-3.0	614	1.63	*100	6
3.0-30	1842/f	4.89/f	*900/f ²	6
30-300	61.4	0.163	1.0 6	6
300-1500			f/300	6
1500-100000			5	6
(B) Limits for General Population/Uncontrolled Exposure				
0.3-1.34	614	1.63	*100	30
1.34-30	824/f	2.19/f	*180/f ²	30
30-300	27.5	0.073	0.2	30
300-1500			f/1500	30
1500-100000			1	30

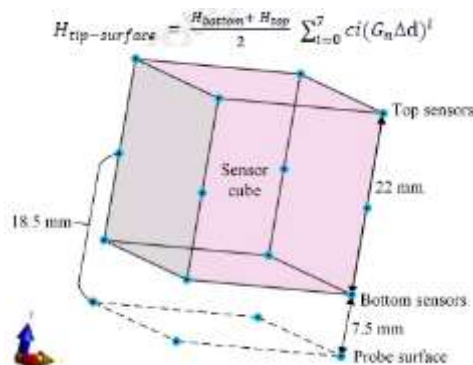
f = frequency in MHz * = Plane-wave equivalent power density

4.1.2. Test Procedures

H-field measurements should be taken 0 cm ~ 20 cm with 2 cm increments from the center of the probe.

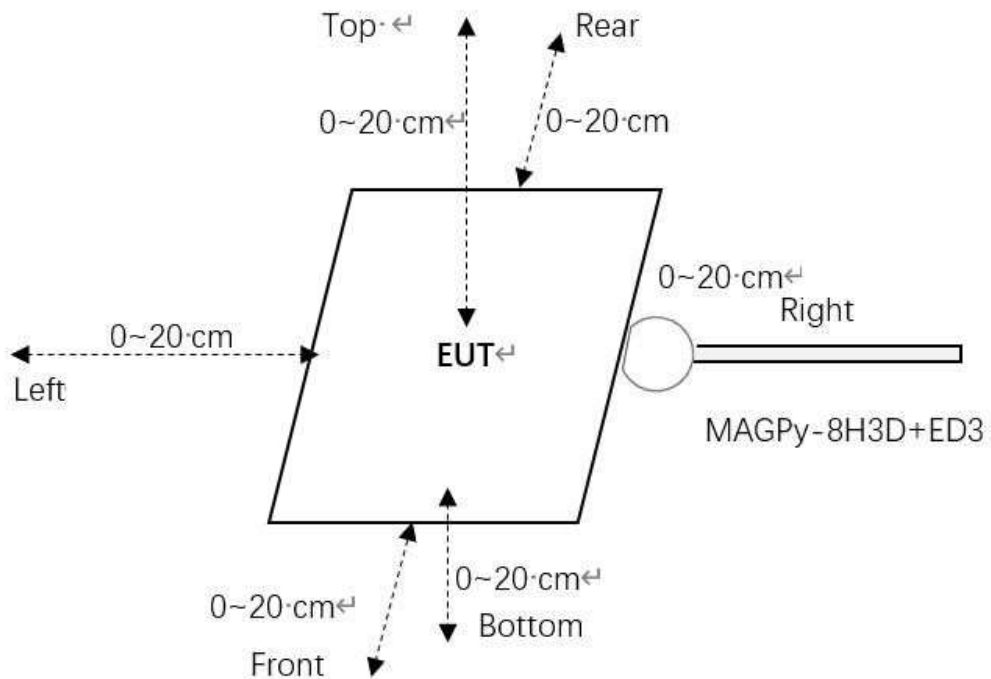
The center of the probe to the tip surface of the probe is 18.5 mm, so the directly testing can be performed at the probe center from 2 cm to 20 cm.

To measure the 0 cm H-field, the probe tip mode is used. The total H-field at the tip-surface $H_{\text{tip-surface}}$ can be extrapolated using the total H-field measured at the top and bottom sensors, H_{top} and H_{bottom} , as well as the normalized H-field gradient G_n . The field extrapolation formula is a polynomial function of G_n ($\Delta d = 18.5$ mm)





4.1.3. Test Setup





4.1.4. Test Result

All client power has been assessed (1%,50%, 99%), and the 1% battery status of client device was the worst.

Test condition 1: Mode 2 operating mode with client device (1 % battery status of client device)

- Estimated value: 0cm

Estimated value for H-Filed Strength at 0 cm from the edges surrounding the EUT (A/m)

Probe Position	H-field (A/m)		
	Measurement	Limit	Percentage (%)
Top	1.03	1.63	93.25%
Bottom	1.25		
Left	1.33		
Right	1.52		
Front	1.08		
Rear	1.18		

Test condition 2: Mode 2 operating mode with client device (1 % battery status of client device)

- Test distance: 2cm

Probe Position	H-field (A/m)		
	Measurement	Limit	Percentage (%)
Top	0.85	1.63	86.50%
Bottom	1.08		
Left	1.12		
Right	1.41		
Front	0.87		
Rear	0.58		



Test condition 3: Mode 2 operating mode with client device (1 % battery status of client device)

- Test distance: 4cm

Probe Position	H-field (A/m)		
	Measurement	Limit	Percentage (%)
Top	0.39	1.63	82.82%
Bottom	0.64		
Left	0.49		
Right	1.35		
Front	0.43		
Rear	0.23		

Test condition 4: Mode 2 operating mode with client device (1 % battery status of client device)

- Test distance: 6cm

Probe Position	H-field (A/m)		
	Measurement	Limit	Percentage (%)
Top	0.20	1.63	39.26%
Bottom	0.41		
Left	0.28		
Right	0.64		
Front	0.22		
Rear	0.11		



Test condition 5: Mode 2 operating mode with client device (1 % battery status of client device)

- Test distance: 8cm

Probe Position	H-field (A/m)		
	Measurement	Limit	Percentage (%)
Top	0.12	1.63	21.47%
Bottom	0.20		
Left	0.17		
Right	0.35		
Front	0.12		
Rear	0.02		

Test condition 6: Mode 5 operating mode with client device (1 % battery status of client device)

- Test distance: 10cm

Probe Position	H-field (A/m)		
	Measurement	Limit	Percentage (%)
Top	0.02	1.63	12.88%
Bottom	0.10		
Left	0.13		
Right	0.21		
Front	0.02		
Rear	0.02		



Test condition 7: Mode 2 operating mode with client device (1 % battery status of client device)

- Test distance: 12cm

Probe Position	H-field (A/m)		
	Measurement	Limit	Percentage (%)
Top	0.01	1.63	12.27%
Bottom	0.08		
Left	0.10		
Right	0.20		
Front	0.01		
Rear	0.02		

Test condition 8: Mode 5 operating mode with client device (1 % battery status of client device)

- Test distance: 14cm

Probe Position	H-field (A/m)		
	Measurement	Limit	Percentage (%)
Top	0.08	1.63	7.98%
Bottom	0.04		
Left	0.08		
Right	0.13		
Front	0.007		
Rear	0.015		



Test condition 9: Mode 2 operating mode with client device (1 % battery status of client device)

- Test distance: 16cm

Probe Position	H-field (A/m)		
	Measurement	Limit	Percentage (%)
Top	0.07	1.63	7.36%
Bottom	0.05		
Left	0.07		
Right	0.12		
Front	0.006		
Rear	0.011		

Test condition 10: Mode 2 operating mode with client device (1 % battery status of client device)

- Test distance: 18cm

Probe Position	H-field (A/m)		
	Measurement	Limit	Percentage (%)
Top	0.06	1.63	6.13%
Bottom	0.04		
Left	0.06		
Right	0.10		
Front	0.005		
Rear	0.01		



Test condition 11: Mode 2 operating mode with client device (1 % battery status of client device)

- Test distance: 20cm

Probe Position	H-field (A/m)		
	Measurement	Limit	Percentage (%)
Top	0.05	1.63	4.91%
Bottom	0.03		
Left	0.04		
Right	0.08		
Front	0.004		
Rear	0.008		



5 Photographs of the Test Setup



******* END OF REPORT *******