

# Test Report

**Report No.** : MTi250520012-0103E2  
**Date of Issue** : 2025-05-29  
**Applicant** : Shenzhen ABP Technology Co., Ltd.  
**Product** : 2 in 1 Wireless Charging Stand  
**Model(s)** : W31  
**FCC ID** : 2BPYY-W31-20W

**Shenzhen Microtest Co., Ltd.**

# TEST REPORT

Report No.: MTi250520012-0103E2

## Table of contents

<b>1 General Description .....</b>	<b>4</b>
1.1 Description of the EUT .....	4
1.2 Description of test modes .....	5
1.3 Description of support units .....	5
<b>2 Measurement uncertainty .....</b>	<b>6</b>
<b>3 Test facilities and accreditations .....</b>	<b>6</b>
3.1 Test laboratory .....	6
<b>4 List of test equipment .....</b>	<b>7</b>
<b>5 Test result .....</b>	<b>8</b>
<b>Photographs of the Test Setup .....</b>	<b>13</b>
<b>Photographs of the EUT .....</b>	<b>14</b>

**TEST REPORT**

Report No.: MTi250520012-0103E2

<b>Test Result Certification</b>		
Applicant	Shenzhen ABP Technology Co.,Ltd.	
Applicant Address	2nd Floor,3&4 Building,Xinhaosheng Industrial Zone, Yonghe Road,Qiaotou Fuhai Street,Bao'an District, Shenzhen City,Guangdong,P.R.China	
Manufacturer	Shenzhen ABP Technology Co.,Ltd.	
Manufacturer Address	2nd Floor,3&4 Building,Xinhaosheng Industrial Zone, Yonghe Road,Qiaotou Fuhai Street,Bao'an District, Shenzhen City,Guangdong,P.R.China	
<b>Product description</b>		
Product name	2 in 1 Wireless Charging Stand	
Trademark	N/A	
Model name	W31	
Series Model(s)	N/A	
Standards	FCC CFR 47 PART 1, § 1.1310 part2.1091	
Test method	KDB 680106 D01 Wireless Power Transfer v04	
<b>Testing Information</b>		
Date of test	2025-05-27 to 2025-05-28	
Test Result	Pass	
Prepared by:	Letter Lan	Letter. Lan.
Reviewed by:	David Lee	David. Lee
Approved by:	Lewis Lian	Lewis Lian

**TEST REPORT**

Report No.: MTi250520012-0103E2

**1 General Description****1.1 Description of the EUT**

Product name:	2 in 1 Wireless Charging Stand
Model name:	W31
Series Model(s):	N/A
Model difference:	N/A
Electrical rating:	Input: DC 5V/3A, 9V/3A Wireless Output 1: 5W, 7.5W, 10W, 15W Wireless Output 2: 5W
Accessories:	Cable: USB-A to Type-C cable 1m
Hardware version:	V1.0
Software version:	A0
Test sample(s) number:	MTi250520012-01-R001

**RF specification**

Operating frequency range:	Transmitter1(Phone): 115-205KHz Transmitter2(Earphone): 115-205KHz
Modulation type:	ASK
Antenna(s) type:	Coil

# TEST REPORT

Report No.: MTI250520012-0103E2

## 1.2 Description of test modes

All the test modes were carried out with the EUT in normal operation, the final test mode of the EUT was the worst test mode for emission test, which was shown in this report and defined as:

No.	Emission test modes
Mode1	Wireless Output(Phone(5W)+Earphone(5W))
Mode2	Wireless Output(Phone(7.5W)+Earphone(5W))
Mode3	Wireless Output(Phone(10W)+Earphone(5W))
Mode4	Wireless Output(Phone(15W)+Earphone(5W))
Mode5	Wireless Output(Phone(5W))
Mode6	Wireless Output(Phone(7.5W))
Mode7	Wireless Output(Phone(10W))
Mode8	Wireless Output(Phone(15W))
Mode9	Wireless Output(Earphone(5W))
Mode10	Stand by

## 1.3 Description of support units

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Support equipment list			
Description	Model	Serial No.	Manufacturer
Lenovo USB-C adapter	C65B	1SGX21B35621Z13F1D4W	Lenovo
Air Pods	MQD83CH/A	/	Apple
wireless charging load	YBZ1.1	/	YBZ

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

# TEST REPORT

Report No.: MTi250520012-0103E2

## 2 Measurement uncertainty

Parameter	Expanded Uncertainty
Magnetic field measurements(3kHz~10MHz)	±14.8%
Electric field measurements(3kHz~10MHz)	±17.5%

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

## 3 Test facilities and accreditations

### 3.1 Test laboratory

Test laboratory:	Shenzhen Microtest Co., Ltd.
Test site location:	101, No. 7, Zone 2, Xinxing Industrial Park, Fuhai Avenue, Xinhe Community, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China
Telephone:	(86-755)88850135
Fax:	(86-755)88850136
CNAS Registration No.:	CNAS L5868
FCC Registration No.:	448573

# TEST REPORT

Report No.: MTi250520012-0103E2

## 4 List of test equipment

No.	Equipment	Manufacturer	Model	Serial No.	Cal. date	Cal. Due
MTI-E143	Near-field Electric and Magnetic Field Sensor System	SPEAG	MAGPy-8H3 D+ED3	3101	2024/3/12	2027/3/11

No.	Equipment	Manufacturer	Model	Software version:	Cal. date	Cal. Due
MTI-E016S	MPE test software	SPEAG	MAGPY 2.6	2.6	/	/

# TEST REPORT

Report No.: MTI250520012-0103E2

## 5 Test result

### 5.1.1 Requirement

§1.1310: The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in §1.1307(b), except in the case of portable devices which shall be evaluated according to the provisions of FCC part 2.1093 of this chapter.

**Table 1 to §1.1310(e)(1) - Limits for Maximum Permissible Exposure (MPE)**

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

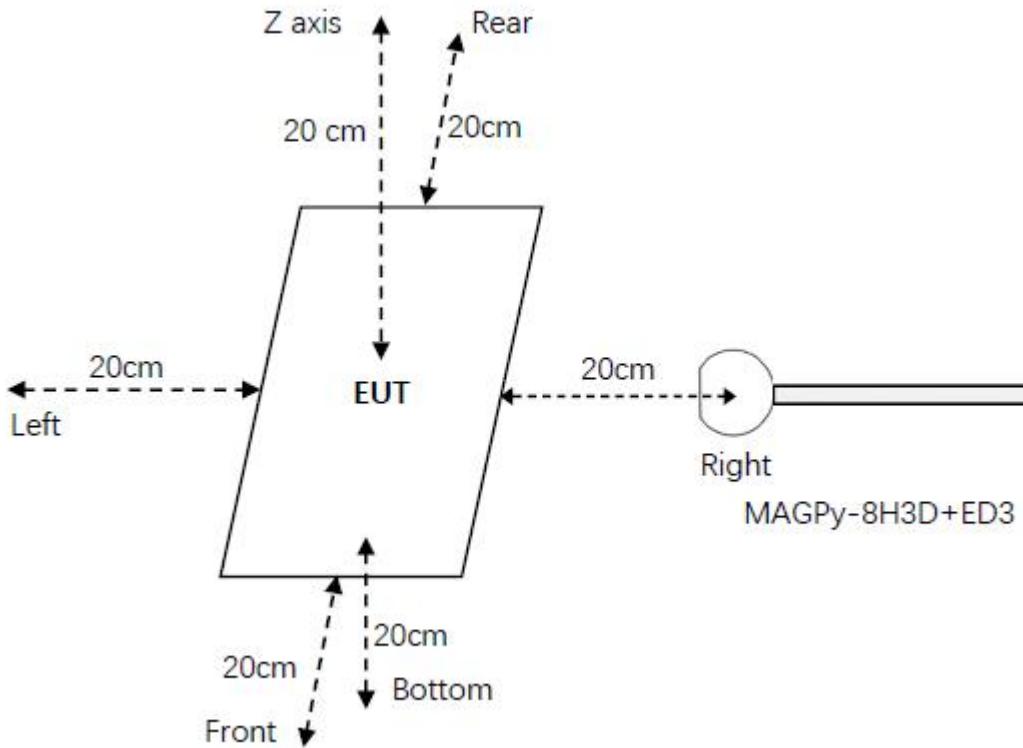
f = frequency in MHz

\* = Plane-wave equivalent power density

**Note 1:** Occupational/controlled exposure limits apply in situations in which persons are exposed as a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure.

**Note 2:** General population/uncontrolled exposure limits apply in situations in which the general public may be exposed, or in which persons who are exposed as a consequence of their employment may not be fully aware of the potential for exposure or cannot exercise control over their exposure.

### 5.1 Test setup



### 5.2 Test Procedures

- a. The RF exposure test was performed in anechoic chamber.
- b. E and H-field measurements should be made with these devices considered to meet the § 2.1091-Mobile conditions ("generally be used in such a way that a separation distance of at least 20 centimeters is normally maintained between the RF source's radiating structure(s) and [the nearest person]").
- c. The highest emission level was recorded and compared with limit.
- d. The EUT was measured according to the dictates of KDB 680106 D01 Wireless Power Transfer v04.

# TEST REPORT

Report No.: MTI250520012-0103E2

## 5.3 Information of test equipment

**Test equipment: MAGPy-8H3D+ED3**

<b>Diameter</b>	<b>60mm</b>
<b>8 isotropic H-field sensors</b>	<b>Concentric loops of 1cm<sup>2</sup> arranged at the corner of a cube of 22mm side length</b>
<b>1 isotropic E-field sensor</b>	<b>Orthogonal dipole/monopole (arm length: 50mm)</b>
<b>Measurement center</b>	<b>18.5mm from the probe tip</b>
<b>Dimensions</b>	<b>110*635*35mm (MAGPy-8H3D+E3D V2 &amp; MAGPy-DAS V2)</b>

**Test probe, without the casing**

# TEST REPORT

Report No.: MTi250520012-0103E2

## 5.4 Test results

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

Probe Position	E-field (V/m)			H-field (A/m)		
	Measurement	Limit	Percentage (%)	Measurement	Limit	Percentage (%)
Z axis	2.64	614	0.43%	0.13	1.63	7.98%
Left	1.87			0.08		
Right	1.91			0.06		
Front	2.02			0.07		
Rear	1.67			0.05		
Bottom	1.73			0.09		

Test condition 2: Mode 4 operating mode with client device (50 % battery status of client device)

Probe Position	E-field (V/m)			H-field (A/m)		
	Measurement	Limit	Max. Percentage (%)	Measurement	Limit	Max. Percentage (%)
Z axis	2.61	614	0.43%	0.11	1.63	6.75%
Left	1.83			0.08		
Right	1.85			0.05		
Front	2.01			0.07		
Rear	1.66			0.04		
Bottom	1.70			0.09		

Test condition 3: Mode 4 operating mode with client device (99 % battery status of client device)

Probe Position	E-field (V/m)			H-field (A/m)		
	Measurement	Limit	Percentage (%)	Measurement	Limit	Percentage (%)
Z axis	2.51	614	0.41%	0.11	1.63	6.75%
Left	1.83			0.08		
Right	1.84			0.05		
Front	1.98			0.07		
Rear	1.66			0.04		



## TEST REPORT

Report No.: MTi250520012-0103E2

Bottom	1.70			0.09		
--------	------	--	--	------	--	--



# TEST REPORT

Report No.: MTI250520012-0103E2

## Photographs of the Test Setup

See the Appendix - Test Setup.



# TEST REPORT

Report No.: MTi250520012-0103E2

## Photographs of the EUT

See the Appendix - EUT Photos.

## Statement

1. This report is invalid without the seal and signature of the laboratory.
2. The test results of this report are only responsible for the samples submitted. Client shall be responsible for representativeness of the sample and authenticity of the material.
3. The report shall not be partially reproduced without the written consent of the Laboratory.
4. This report is invalid if transferred, altered or tampered with in any form without authorization.
5. The observations or tests with special mark fall outside the scope of accreditation, and are only used for purpose of commission, research, training, internal quality control etc.
6. Any objection to this report shall be submitted to the laboratory within 15 days from the date of receipt of the report.

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