



Shenzhen BANTEK Testing Co., Ltd.

Report No.: BTEK240401007AE002

Page: 1 of 9

FCC ID: 2BDF9-AT2473

TEST REPORT

Application No.: BTEK240401007AE
Version Number: V0
Applicant: Guangdong Fenenergy Technology Co., Ltd
Address of Applicant: Building 35, Zone 5, Huaide Cuigang Industrial Park, Fuyong Street, Bao'an District, Shenzhen
Manufacturer: Guangdong Fenenergy Technology Co., Ltd
Address of Manufacturer: Building 35, Zone 5, Huaide Cuigang Industrial Park, Fuyong Street, Bao'an District, Shenzhen
Factory: Guangdong Fenenergy Technology Co., Ltd
Address of Factory: Building 35, Zone 5, Huaide Cuigang Industrial Park, Fuyong Street, Bao'an District, Shenzhen

Equipment Under Test (EUT):
EUT Name: 3-in-1 Magnetic Charger
Model No.: AT2473
Trade Mark: atomi
Standard(s) : 47 CFR PART 1, Subpart I, Section 1.1310
47 CFR PART 2, Subpart J, Section 2.1091
Date of Receipt: 2024-04-09
Date of Test: 2024-04-09 to 2024-04-28
Date of Issue: 2024-04-29

Test Result:	Pass*
---------------------	--------------


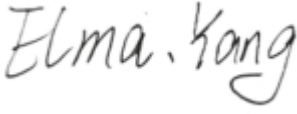
* In the configuration tested, the EUT complied with the standards specified above.

Lion Cai
EMC Laboratory Manager





Revision Record				
Version	Chapter	Date	Modifier	Remark
V0		2024-04-29		Original

Authorized for issue by			
			
		<hr/>	
		Daivd.Zhuang/Project Engineer	
			
		<hr/>	
		Elam.Yang/Reviewer	



2 Contents

	Page
1 Cover Page	1
2 Contents	3
3 General Information	4
3.1 Details of E.U.T.....	4
3.2 Description of Support Units.....	4
3.3 Test Location.....	5
3.4 Deviation from Standards.....	5
3.5 Abnormalities from Standard Conditions	5
4 Test Requirement	6
4.1 Assessment Result.....	7
4.2 Test Set-up Photo	9



3 General Information

3.1 Details of E.U.T.

Power Supply	USB-C Input: 12V=1.67A UBS Output: 5V=1A, 5W max. Wireless Charge Stand Output: 15W Earbud Output: 3W
Modulation Type	FSK
Operating frequency	112kHz-205kHz
Antenna Type	Coil antenna
Hardware Version	V1.0
Software Version	V1.0
Sample number	BTEK240401007AE-01
Remark: The information in this section is provided by the applicant or manufacturer, BANTEK is not liable to the accuracy, suitability, reliability or/and integrity of the information.	

3.2 Description of Support Units

Description	Manufacturer	Model No.	Serial No.
WPC charging load	EESON	2S	/
Earbud	Apple	AirPods	/



3.3 Test Location

All tests were performed at:

Shenzhen BANTEK Testing Co., Ltd.,

A5&A6, Building B1&B2, No.45 Gangtou Road, Bogang Community, Shajing Street, Bao'an District, Shenzhen, Guangdong, China 518104

Tel:0755-2334 4200

Fax: 0755-2334 4200

FCC Registration Number: 264293

Designation Number: CN1356

No tests were sub-contracted.

3.4 Deviation from Standards

None

3.5 Abnormalities from Standard Conditions

None



4 Test Requirement

KDB 680106 D01 Wireless Power Transfer v04

According to KDB 680106 D01:

Requirements of KDB 680106 D01	Description
WPT operating frequency (or frequencies).	112kHz-205kHz
Number of radiating structure(Coil)	Two radiated Coil
Conducted power for each radiating structure.	Maximum 15W
§ 2.1091-Mobile or § 2.1093-Portable demonstrated scenarios of operation, including RF exposure compliance information	Mobile Device
Maximum distance from the WPT transmitter at which, by design, a load can be charged (including slow-charging operations)	Charing with the load directly contact

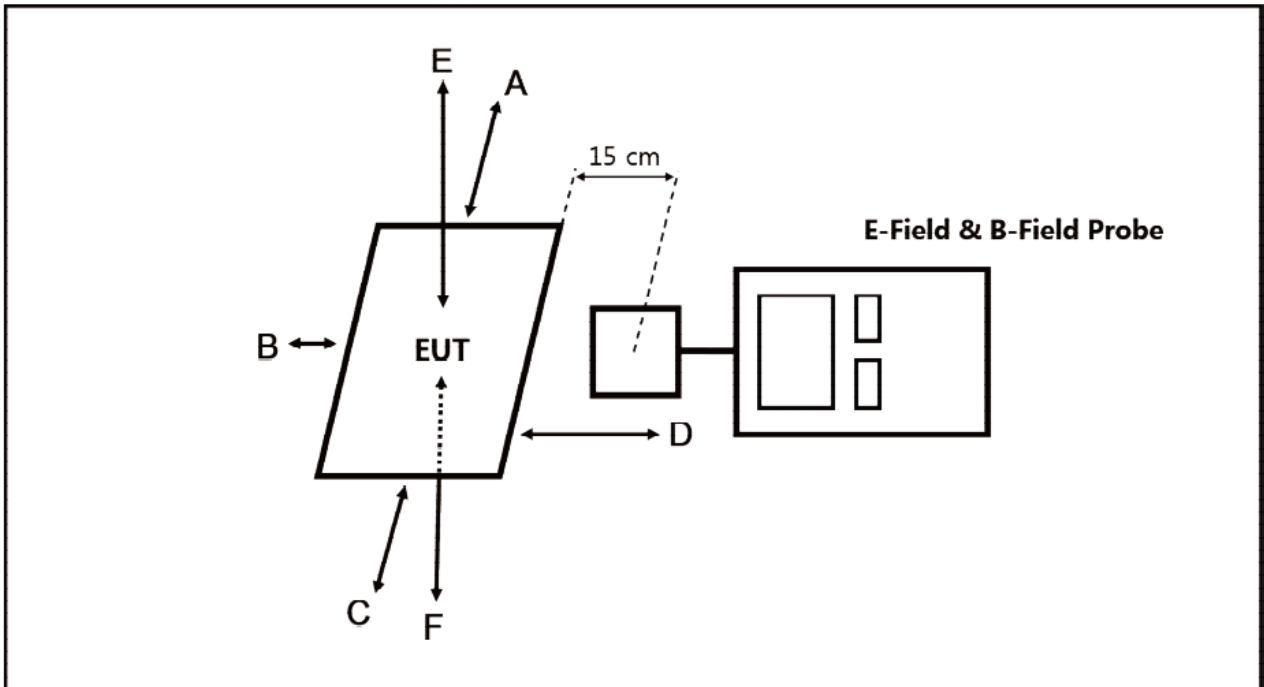
TABLE 1—LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

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
300-1,500			f/300	6
1,500-100,000			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
300-1,500			f/1500	30
1,500-100,000			1.0	30

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



Test Setup



Note: Measurements should be made from all sides and the top of the primary/client pair, with the 15cm measured from the center of the probe(s) to the edge of the device.

- 1) The RF exposure test was performed in anechoic chamber.
- 2) The measurement probe was placed at test distance (15cm) which is between the edge of the charger and the geometric center of probe.
- 3) The highest emission level was recorded and compared with limit as soon as measurement of each points (A, B, C, D, E, F) were completed.
- 4) The EUT was measured according to the dictates of KDB 680106 D01 v04.

4.1 Assessment Result

Passed **Not Applicable**

Note: All test modes were pre-tested, but we only recorded the worst case in this report.

H-Field Strength at 15 cm from the edges surrounding the EUT and 15cm from the top surface of the EUT

Frequency Range(MHz): 112-205kHz

Charging Battery Level	Unit	Measured E-Field Strength Values (A/m)					FCC H-Field Strength 50% Limits (A/m)	FCC H-Field Strength Limits (A/m)
		Test Position A	Test Position B	Test Position C	Test Position D	Test Position E		
1%	uT	0.1570	0.1522	0.1578	0.1577	0.1589	--	--
1%	A/m	0.1248	0.1239	0.1230	0.1247	0.1249	0.815	1.63
50%	uT	0.1399	0.1332	0.1385	0.1347	0.1376	--	--
50%	A/m	0.1005	0.1062	0.1023	0.1034	0.1038	0.815	1.63
99%	uT	0.1273	0.1286	0.1239	0.1274	0.1260	--	--
99%	A/m	0.0943	0.0942	0.0944	0.0930	0.0957	0.815	1.63

uT=1.25* A/m



E-Field Strength at 15 cm from the edges surrounding the EUT and 15cm from the top surface of the EUT
 Frequency Range(MHz): 112-205kHz

Charging Battery Level	Unit	Measured E-Field Strength Values (V/m)					FCC E-Field Strength 50% Limits (V/m)	FCC E-Field Strength Limits (V/m)
		Test Position A	Test Position B	Test Position C	Test Position D	Test Position E		
1%	V/m	45.2023	45.2043	45.2061	45.2009	45.2093	307	614
50%	V/m	39.5063	39.5010	39.5040	39.5089	39.5071	307	614
99%	V/m	37.8068	37.8029	37.8082	37.8085	37.8007	307	614

Note: V/m= A/m *377

I-Field Strength at 20cm from the top surface of the EUT
 Frequency Range(MHz): 112-205kHz

Charging Battery Level	Unit	Measured E-Field Strength Values (A/m)	FCC H-Field Strength 50% Limits (A/m)	FCC H-Field Strength Limits (A/m)
		Test Position E		
1%	uT	0.1029	--	--
1%	A/m	0.1034	0.815	1.63
50%	uT	0.1091	--	--
50%	A/m	0.1014	0.815	1.63
99%	uT	0.1065	--	--
99%	A/m	0.1059	0.815	1.63

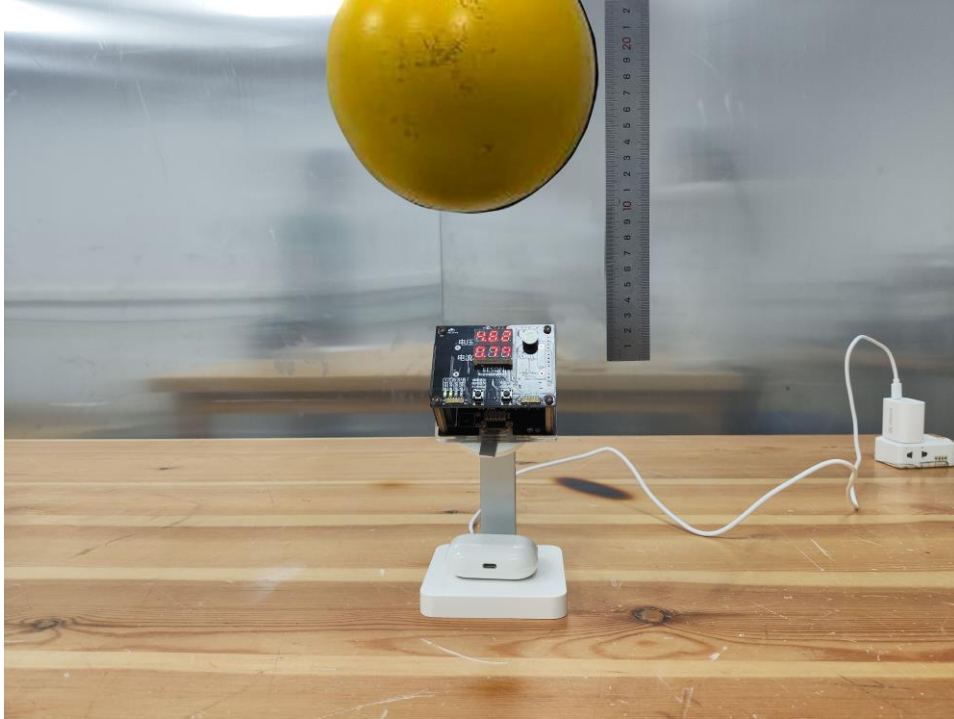
Note:A/m=uT/1.25

Note: All test modes were pre-tested, but we only recorded the worst case in this report.



4.2 Test Set-up Photo

Top 20cm



- End of the Report -

