

TEST REPORT

Application No.: BTEK240620001AE
Applicant: Guangdong Fenergy Technology CO LTD
Address of Applicant: Building 35, Zone 5, Huaide Cuigang Industrial Park, Fuyong Street, Bao 'an District, Shenzhen
Manufacturer: Guangdong Fenergy Technology CO LTD
Address of Manufacturer: Building 35, Zone 5, Huaide Cuigang Industrial Park, Fuyong Street, Bao 'an District, Shenzhen

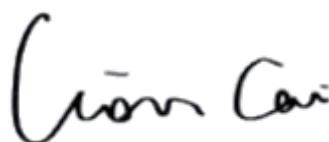
Equipment Under Test (EUT):

EUT Name: Qi Charge Tower
Test Model.: AT1893
Adding Model(s): /
Trade Mark: ATOMI
FCC ID: 2BDF9-AT1893
Standard(s) : 47 CFR PART 1, Subpart I, Section 1.1310
47 CFR PART 2, Subpart J, Section 2.1091
KDB 680106 D01

Date of Receipt: 2024-06-21
Date of Test: 2024-06-21 to 2024-07-03
Date of Issue: 2024-07-04

Test Result:	Pass*
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* In the configuration tested, the EUT complied with the standards specified above.



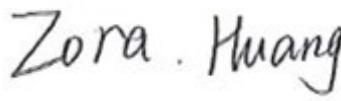
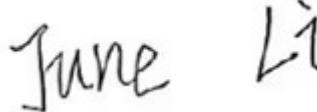
Lion Cai/ Approved & Authorized
EMC Laboratory Manager



Revision Record

Version	Chapter	Date	Modifier	Remark
V0		2024-07-04		Original

Authorized for issue by

		 Zora Huang		
		Zora Huang /Project Engineer		
		 June Li		
		June Li /Reviewer		



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3 General Information

3.1 Details of E.U.T.

Power Supply	Input:100-240V~ 50/60Hz 1.2A Output: Current tap rating: 125V~ 60Hz, 10A 1250W Max Wireless:15W USB and USB-C:5VDC 2.4A(Each Port) USB and USB-C Total current:4A Max PD: 5VDC,3A, 9VDC,2.22A, 12VDC,1.67A Total:55W max
ModulationType	FSK
Operatingfrequency	112kHz-205kHz
AntennaType	Coil antenna
HardwareVersion	M2168P-01C-IP6808-15W REV2.1
SoftwareVersion	IP6808 QFN32
Samplenumber	BTEK240620001AE-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 EUT Test Mode

Test Mode	Description	Remark
1	Wireless output:15W Load 1%	Keep the EUT Wireless output:15W
2	Wireless output:15W Load 50%	Keep the EUT Wireless output:15W
3	Wireless output:15W Load 99%	Keep the EUT Wireless output:15W

3.3 Description of Support Units

Auxiliary Equipment			
Description	Manufacturer	Model	Serial Number
WPC charging load	EESON	2S	/

3.4 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.

3.5 Deviation from Standards

None



3.6 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
1. Power transfer frequency is less than 1 MHz	112kHz-205kHz
2. Output power from each primary coil is less than or equal to 15 watts	Maximum 15W
3. The system may consist of more than one source primary coils, charging one or more clients. If more than one primary coil is present, the coil pairs may be powered on at the same time.	One radiated Coil
4. Client device is placed directly in contact with the transmitter.	Yes. The client device is placed directly in contact with the transmitter.
5. Mobile exposure conditions only (portable exposure conditions are not covered by this exclusion)	Mobile device
6. The aggregate H-field strengths anywhere at or beyond 20 cm surrounding the device, and 20cm away from the surface from all coils that by design can simultaneously transmit, and while those coils are simultaneously energized, are demonstrated to be less than 50% of the applicable MPE limit.	Yes, The H-field strengths anywhere at or beyond 20 cm surrounding the device

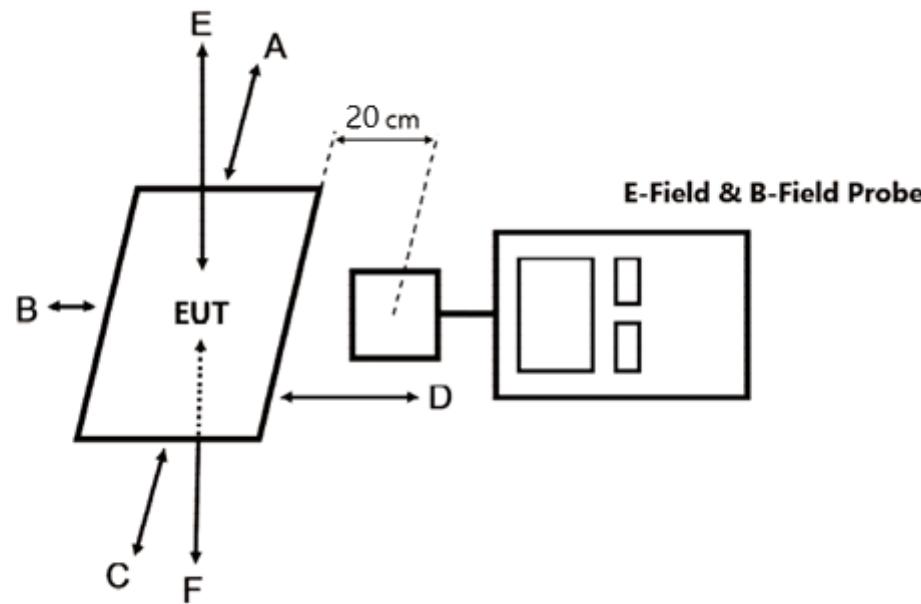
TABLE 1—LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

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 20cm 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 (20cm) 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 Equipment List

Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
Exposure Level Tester	Narda	ELT-400	N-0219	2024-06-10	2025-06-09
B-Field Probe	Narda	100cm ²	M-0753	2024-06-10	2025-06-09

4.2 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 20 cm from the edges surrounding the EUT and 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 A	Test Position B	Test Position C	Test Position D	Test Position E		
1%	uT	0.1615	0.1535	0.1574	0.1533	0.1579	--	--
1%	A/m	0.1292	0.1228	0.1259	0.1226	0.1263	0.815	1.63
50%	uT	0.1343	0.1315	0.1298	0.1335	0.1369	--	--
50%	A/m	0.1074	0.1052	0.1038	0.1068	0.1095	0.815	1.63
99%	uT	0.1155	0.1183	0.1140	0.1218	0.1240	--	--



99%	A/m	0.0924	0.0946	0.0912	0.0974	0.0992	0.815	1.63
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uT=1.25* A/m

E-Field Strength at 20cm from the edges surrounding the EUT and 20cm from the top surface of the EUT
Frequency Range(MHz): 112-205KHz

Chargin g 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	48.7084	46.2956	47.4643	46.2202	47.6151	307	614
50%	V/m	40.4898	39.6604	39.1326	40.2636	41.2815	307	614
99%	V/m	34.8348	35.6642	34.3824	36.7198	37.3984	307	614

Note: V/m= A/m *377

I-Field Strength at 20cm from the top surface of the EUT

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	0.1284		--	--
1%	A/m	0.1027		0.815	1.63
50%	uT	0.1293		--	--
50%	A/m	0.1034		0.815	1.63
99%	uT	0.1286		--	--
99%	A/m	0.1029		0.815	1.63

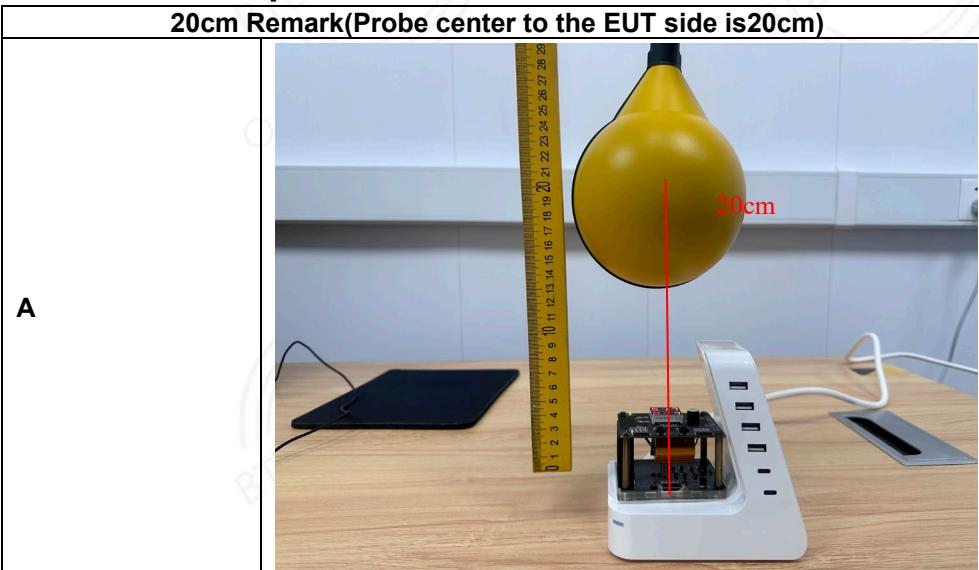
Note: A/m=uT/1.25

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



4.3 Test Set-up Photo

20cm Remark(Probe center to the EUT side is20cm)



- End of the Report -

