



# RF Exposure Report

## For

**Applicant Name:** Guangdong Fenergy Technology Co., Ltd  
**Address:** Building 35, Zone 5, Huaide Cuigang Industrial Park, Fuyong Street, Bao'an District, Shenzhen  
**EUT Name:** 3-in-1 Wireless Charging Stand  
**Brand Name:** atomi  
**Model Number:** AT1595

## Issued By

**Company Name:** Shenzhen BANTEK Testing Co., Ltd.  
**Address:** A5&A6, Building B1&B2, No.45 Gangtuo Road, Bogan Community, Shajing Street, Bao'an District, Shenzhen, Guangdong, China 518104  
**Report Number:** BTEK231020015AE002  
**Test Standards:** 47 CFR Part 15 Subpart C  
**FCC ID:** 2BDF9-AT1595  
**Test Conclusion:** Pass  
**Test Date:** 2023-11-16 to 2023-12-05  
**Date of Issue:** 2023-12-05

**Prepared By:**

*Elma Yang*

Elma Yang / Project Engineer  
2023-12-05

**Date:**

**Approved By:**

*Damon Su*

Damon Su / EMC Manager  
2023-12-05

**Date:**

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





Revision History		
Version	Issue Date	Revisions Content
R_V0	2023-12-05	Original
Note:	<i>Once the revision has been made, then previous versions reports are invalid.</i>	





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## 1. Introduction

### 1.1 Identification of Testing Laboratory

Company Name:	Shenzhen BANTEK Testing Co., Ltd.
Address:	A5&A6,Building B1&B2,No.45 Gangtou Road,BoganCommunity, Shajing Street,Bao'an District, Shenzhen,Guangdong,China 518104
Phone Number:	+86(755) 2334 4200
Fax Number:	+86(755) 2334 4200

### 1.2 Identification of the Responsible Testing Location

Test Location:	Shenzhen BANTEK Testing Co., Ltd.
Address:	A5&A6,Building B1&B2,No.45 Gangtou Road,BoganCommunity, Shajing Street,Bao'an District, Shenzhen,Guangdong,China 518104
Description:	All measurement facilities used to collect the measurement data are located at A5&A6,Building B1&B2,No.45 Gangtou Road,BoganCommunity, Shajing Street,Bao'an District, Shenzhen,Guangdong,China 518104
FCC Registration Number:	264293
Designation Number:	CN1356

### 1.3 Laboratory Condition

Ambient Temperature:	20°C to 25°C
Ambient Relative Humidity:	45% to 55%
Ambient Pressure:	100 kPa to 102 kPa

### 1.4 Announcement

- (1) The test report is invalid if not marked with the signatures of the persons responsible for preparing, reviewing and approving the test report.
- (2) This document may not be altered or revised in any way unless done so by BANTEK and all revisions are duly noted in the revisions section.
- (3) Content of the test report, in part or in full, cannot be used for publicity and/or promotional purposes without prior written approval from the laboratory.
- (4) The laboratory is only responsible for the data released by the laboratory, except for the part provided by the applicant.







## 2. Product Information

### 2.1 Application Information

Company Name:	Guangdong Fenery Technology Co., Ltd
Address:	Building 35, Zone 5, Huaide Cuigang Industrial Park, Fuyong Street, Bao'an District, Shenzhen

### 2.2 Manufacturer Information

Company Name:	Guangdong Fenery Technology Co., Ltd
Address:	Building 35, Zone 5, Huaide Cuigang Industrial Park, Fuyong Street, Bao'an District, Shenzhen

### 2.3 Factory Information

Company Name:	Guangdong Fenery Technology Co., Ltd
Address:	Building 35, Zone 5, Huaide Cuigang Industrial Park, Fuyong Street, Bao'an District, Shenzhen

### 2.4 General Description of Equipment under Test (EUT)

EUT Name	3-in-1 Wireless Charging Stand
Under Test Model Name	AT1595
Hardware Version	20231012-V1.0
Software and Firmware Version	V1.0
Sample number	BTEK231020015AE-01

### 2.5 Technical Information

Power Supply	Input: 100-240V~50/60Hz 0.5A from adapter Type-C Input: 5V DC 3A, 9V DC 2.22A, 12V DC 1.67A, 20W max Wireless Charging for Mobile: 15W max Wireless Charging for Earphone Case: 3W max Wireless Charging for Watch: 3W max Total Output: 18W max
Modulation Type	FSK
Frequency Range	The frequency block is 110.0 KHz to 205.0KHz.
Antenna Type	Coil antenna



### 3. 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).	The device operate in the frequency range 110KHz~205KHz
Number of radiating structure(Coil)	Three 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 <sup>2</sup> )	Averaging time (minutes)
<b>(A) 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
300-1,500			f/300	6
1,500-100,000			5	6
<b>(B) 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
300-1,500			f/1500	30
1,500-100,000			1.0	30

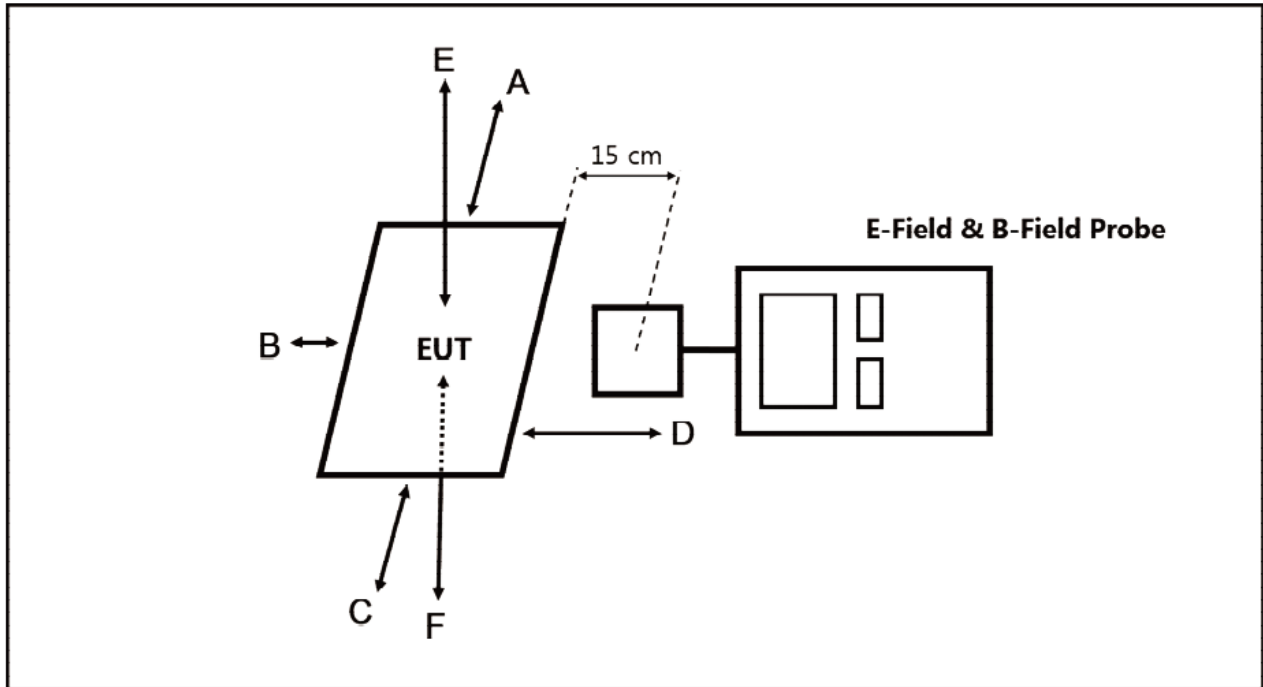
f = frequency in MHz \* = Plane-wave equivalent power density



**Test Equipment List**

Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal. (mm-dd-yy)	Next Cal. (mm-dd-yy)
Magnetic Field Analyzer	Narda	ETL-400	N-0231	2023.06.12	2024.06.12

**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 (15 cm from all sides and 20 cm from the top) 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) were completed.
- 4) The EUT was measured according to the dictates of KDB 680106 D01 v04.



### 3.1 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

Charging Battery Level	Unit	Frequency Range (MHz)	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	0.145	0.1577	0.1546	0.1584	0.1535	0.1580	--	--
1%	A/m	0.145	0.1240	0.1229	0.1238	0.1221	0.1273	0.815	1.63
50%	uT	0.145	0.1378	0.1325	0.1327	0.1367	0.1357	--	--
50%	A/m	0.145	0.1027	0.1019	0.1043	0.1061	0.1072	0.815	1.63
99%	uT	0.145	0.1206	0.1214	0.1286	0.1212	0.1297	--	--
99%	A/m	0.145	0.0905	0.0917	0.0911	0.0979	0.0966	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

Charging Battery Level	Unit	Frequency Range (MHz)	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	0.145	45.2061	45.2028	45.2028	45.2034	45.2004	307	614
50%	V/m	0.145	39.5069	39.5077	39.5063	39.5091	39.5092	307	614
99%	V/m	0.145	37.8054	37.8088	37.8079	37.8095	37.8062	307	614

Note: V/m= A/m \*377

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

Charging Battery Level	Unit	Frequency Range (MHz)	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	0.145	0.1092	--	--
1%	A/m	0.145	0.1059	0.815	1.63
50%	uT	0.145	0.1080	--	--
50%	A/m	0.145	0.1044	0.815	1.63
99%	uT	0.145	0.1025	--	--
99%	A/m	0.145	0.1037	0.815	1.63

Note:A/m=uT/1.25

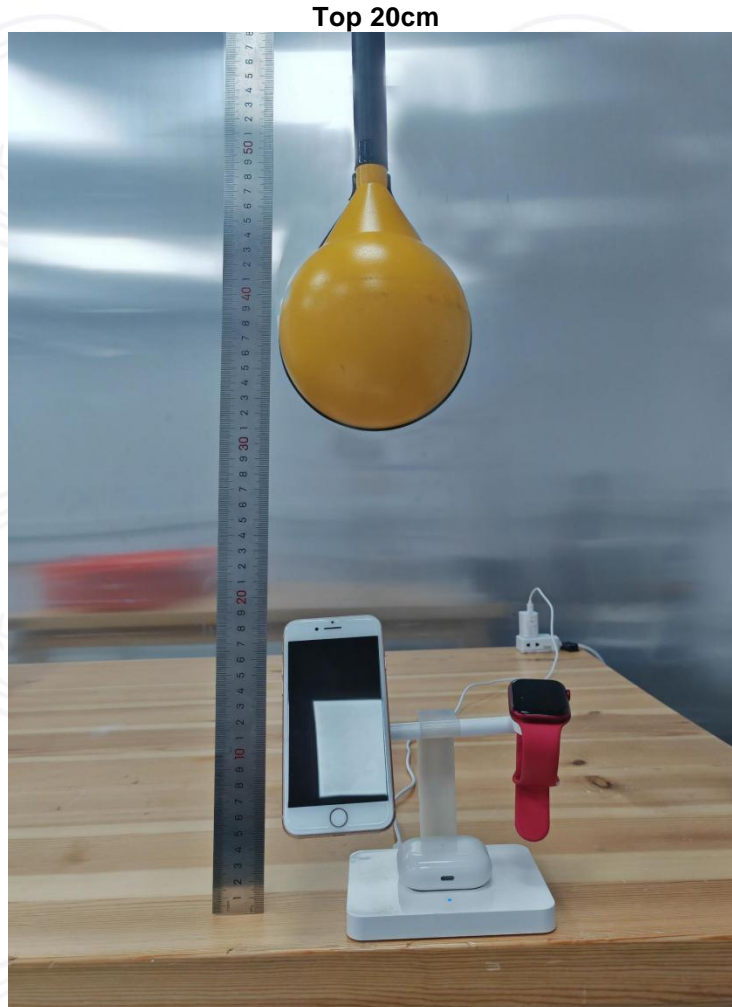
According to October 2018 TCB workshop. Only H-field required.

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



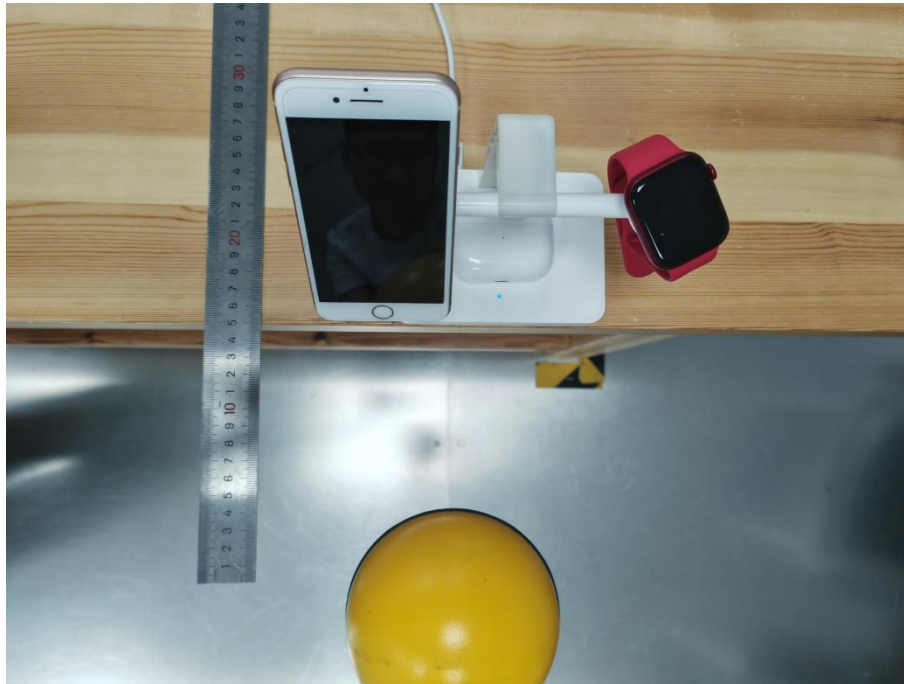


### 3.2 Test Set-up Photo

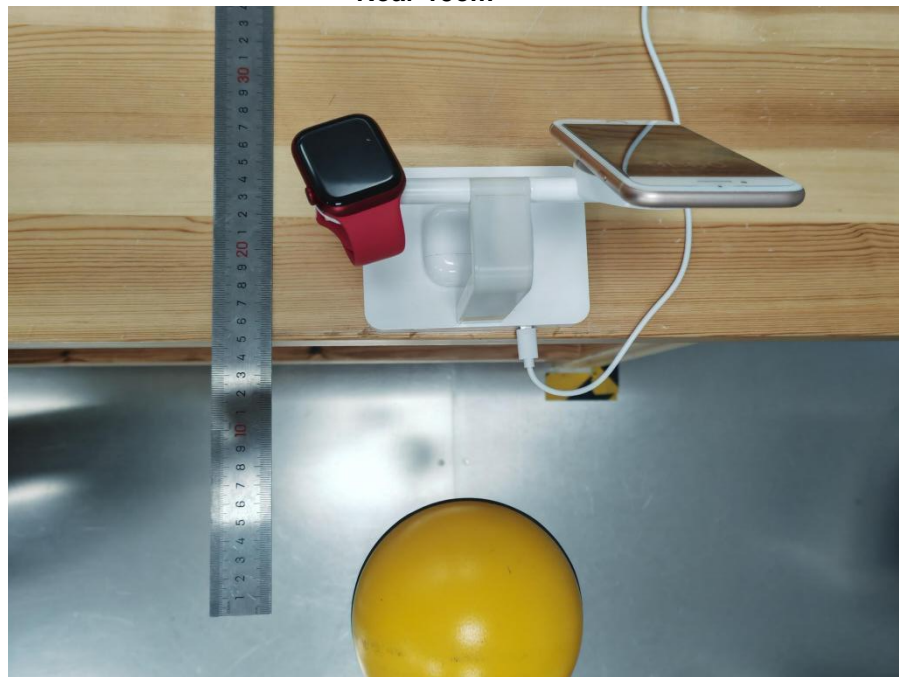


Top

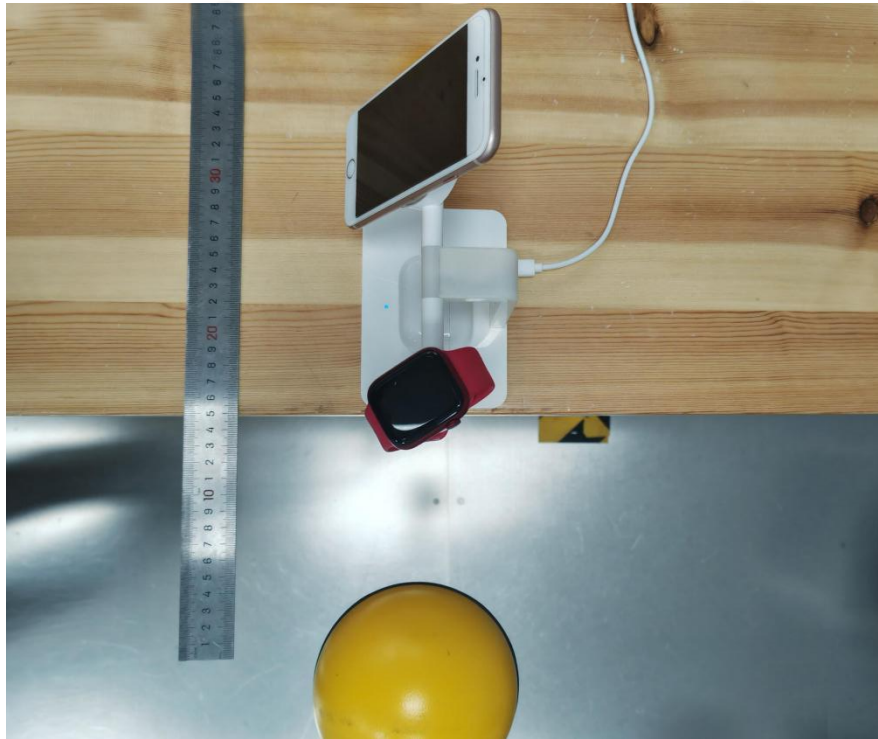
Front 15cm



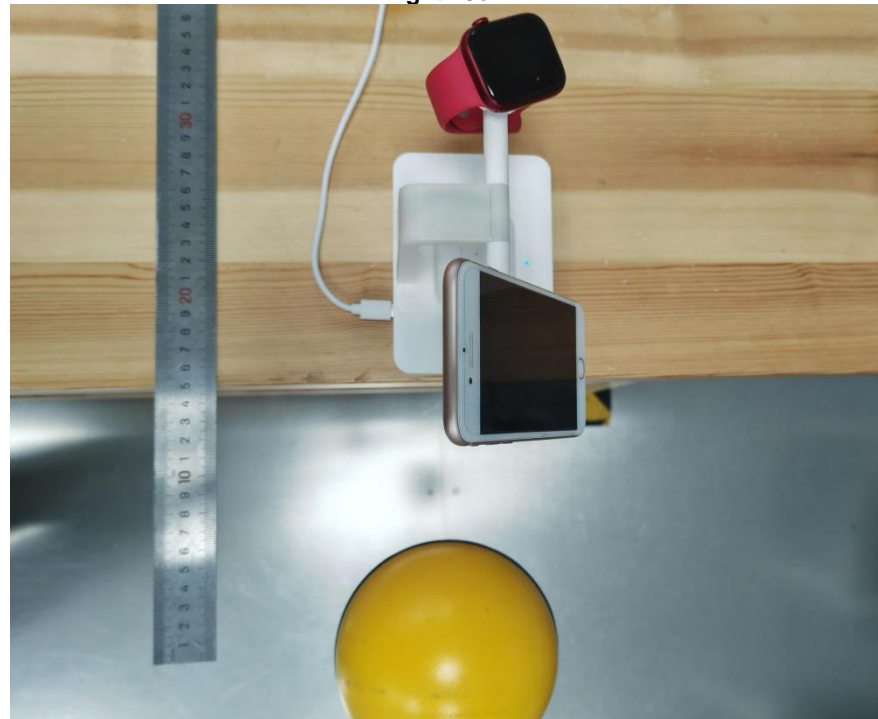
Rear 15cm



Left 15cm



Right 15cm



--END OF REPORT--

