

EUT Specification

FCC ID: 2A7Z4-FHT

Characteristics	Description
Product Name	10000mAh Magnetic Wireless Power Bank
Model number	FHT
Series Model	FHTB0, FHTW0
Power Supply	DC 5V / DC 9V / Battery 3.85V
Operating Frequency Range	110-205kHz
Modulation Technique	ASK
Antenna Type	Coil Antenna
Device category	<input checked="" type="checkbox"/> Portable (<20cm separation) <input type="checkbox"/> Mobile (>20cm separation) <input type="checkbox"/> Others ____
Antenna diversity	<input checked="" type="checkbox"/> Single antenna <input type="checkbox"/> Multiple antennas <input type="checkbox"/> Tx diversity <input type="checkbox"/> Rx diversity <input type="checkbox"/> Tx/Rx diversity
Evaluation applied	<input checked="" type="checkbox"/> MPE Evaluation <input type="checkbox"/> SAR Evaluation

Applicable Standard:

FCC Part 1(1.1310) ,Part 2(2.1093) and KDB 680106 D01 RF Exposure Wireless Charging Apps v03

Applicable Requirement:

Three different categories of transmitters are defined by the FCC in OET Bulletin 65.

These categories are fixed installation, mobile, and portable and are defined as follows:

Fixed Installations: fixed location means that the device, including its

antenna, is physically secured at a permanent location and is not able to be easily moved to another location. Additionally, distance to humans from the antenna is maintained to at least 2 meters.

Mobile Devices: a mobile device is defined as a transmitting device designed to be used in other than fixed locations and to be generally used in such a way that a separation distance of at least 20 centimeters is normally maintained between the transmitter's radiating structures and the body of the user or nearby persons. Transmitters designed to be used by consumers or workers that can be easily re-located, such as a wireless modem operating in a laptop computer, are considered mobile devices if they meet the 20 centimeter separation requirement. The FCC rules for evaluating mobile devices for RF compliance are found in 47 CFR §2.1091.

Portable Devices: a portable device is defined as a transmitting device designed to be used so that the radiating structure(s) of the device is/are within 20 centimeters of the body of the user. Portable device requirements are found in Section 2.1093 of the FCC's Rules (47 CFR§2.1093).

The FCC also categorizes the use of the device as based upon the user's awareness and ability to exercise control over his or her exposure. The two categories defined are Occupational/ Controlled Exposure and General Population/Uncontrolled Exposure.

These two categories are defined as follows:

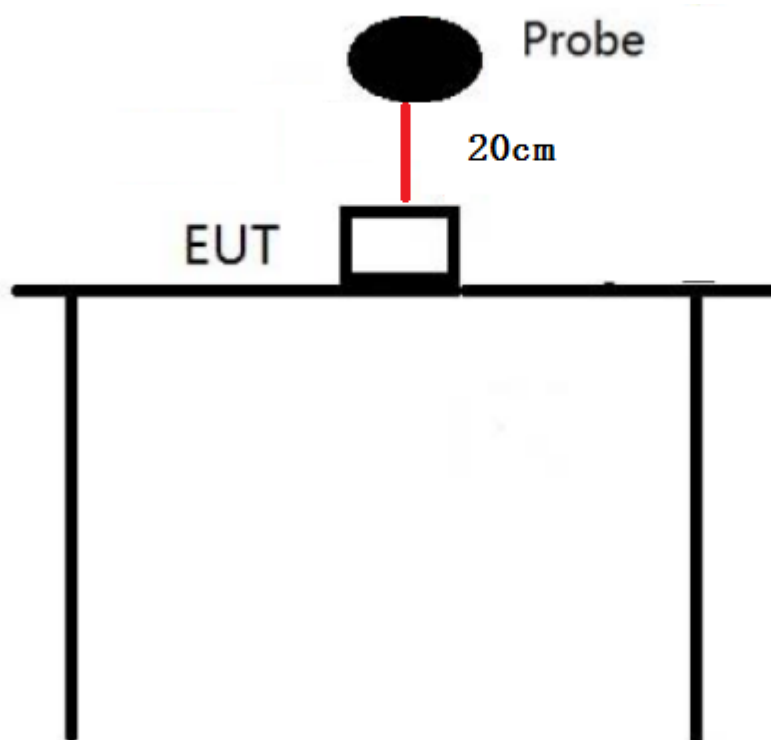
Occupational/controlled exposure limits apply in situations in which persons are exposed as a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure. Limits for occupational/controlled exposure also apply in situations when a person is transient through a location where occupational/controlled limits apply provided he or she is made aware of the potential for exposure. The phrase fully aware in the context of applying these exposure limits means that an exposed person has received written and/or verbal information fully explaining the potential for RF exposure resulting from his or her employment. With the exception of transient persons, this phrase also means that an exposed person has received appropriate training regarding work practices relating to controlling or mitigating his or her exposure. Such training is not required for transient persons, but they must receive written and/or verbal information and notification (for example, using signs) concerning their exposure potential and appropriate means available to mitigate their exposure. The phrase exercise control means that an exposed person is allowed to and knows how to reduce or avoid exposure by administrative or engineering controls and work practices, such as use of personal protective equipment or time averaging of exposure.

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.

Licensees and applicants are responsible for compliance with both the occupational/controlled exposure limits and the general population/uncontrolled exposure limits as they apply to transmitters under their jurisdiction. Licensees and applicants should be aware that the occupational/controlled exposure limits apply especially in situations where workers may have access to areas in very close proximity to antennas and access to the general public may be restricted.

In lieu of evaluation with the general population/uncontrolled exposure limits, amateur licensees authorized under part 97 of this chapter and members of his or her immediate household may be evaluated with respect to the occupational/controlled exposure limits in this section, provided appropriate training and information has been provided to the amateur licensee and members of his/her household. Other nearby persons who are not members of the amateur licensee's household must be evaluated with respect to the general population/uncontrolled exposure limits.

Test Setup Block



Test Procedure

1. Connect the EUT and equipment as above diagram of test configuration.
2. EUT was placed on a table, and the measure probe was placed at a measurement distance of 20cm from the EUT to the center of the probe.
3. Power on the measuring probe, the EUT was set at the maximum field strength emission state.
4. The EUT was put in different directions (Left, Right, Front, Rear, Top and Bottom) toward to the measure probe. The distance from the top of the EUT to the probe is 20CM, and the distance from other directions is 20cm. Measure the value of field strength.
5. Record the worst data of the different directions.

Measuring Device And Test Equipment

Used	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
<input checked="" type="checkbox"/>	E&H-Field Probe(9kHz-30M Hz)	Narda	EHP-200A	180ZX11012	Oct. 28, 2023	1 Year

Description of Support Device

- phone : Manufacturer: Apple Inc.
M/N: A2404
S/N: N/A
- phone : Manufacturer: Xiaomi
M/N: Xiaomi 9
S/N: N/A
- phone : Manufacturer: SAMSUNG
M/N: Samsung Galaxy S9
S/N: N/A
- Adapter : Model number:580245A087
Input: AC 100-240V, 50/60Hz

Limits for Maximum Permissible Exposure(MPE)

Frequency Range(MHz)	Electric Field Strength(V/m)	Magnetic Field Strength(A/m)	Power Density(mW/cm ²)	Average Time
(A) Limits for Occupational/Control Exposures				
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842/f	4.89/f	(900/f)*	6
30-300	61.4	0.163	1.0	6
300-1500	--	--	F/300	6
1500-100000	--	--	5	6
(B) Limits for General Population/Uncontrol Exposures				
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f)*	30
30-300	27.5	0.073	0.2	30
300-1500	--	--	F/1500	30
1500-100000	--	--	1	30

Note: f denotes for frequency in MHz.

* denotes for plane-wave equivalent power density.

Measurement Result

We tested three modes (15W load, 7.5W load, 5W load) for EUT, the worst test data see the following.

Magnetic Field (H-Field) strength at 0cm from the boundaries of EUT.

Test Mode: Wireless Charging 15W					
		Measuring Distance(cm)	H- Field(A/m)	Limit(A/m)	50% Limit(A/m)
Measurement Point 1	Front	0	1.4953	1.63	0.815
Measurement Point 2	Back	0	1.3874		
Measurement Point 3	Left	0	0.5886		
Measurement Point 4	Right	0	0.4832		
Measurement Point 5	Bottom	0	0.9604		
Measurement Point 6	Top	0	1.2653		

Note: The results of the data in the above table are calculated and evaluated.

Test Mode: Wireless Charging 15W					
		Measuring Distance(cm)	E- Field(V/m)	Limit(V/m)	50% Limit(V/m)
Measurement Point 1	Front	0	10.553	614	307
Measurement Point 2	Back	0	10.872		
Measurement Point 3	Left	0	9.9852		
Measurement Point 4	Right	0	9.0324		
Measurement Point 5	Bottom	0	11.668		
Measurement Point 6	Top	0	12.302		

Note: The results of the data in the above table are calculated and evaluated.

Magnetic Field (H-Field) strength at 2cm from the boundaries of EUT.

Test Mode: Wireless Charging 15W					
		Measuring Distance(cm)	H- Field(A/m)	Limit(A/m)	50% Limit(A/m)
Measurement Point 1	Front	2	1.4763	1.63	0.815
Measurement Point 2	Back	2	1.3642		
Measurement Point 3	Left	2	0.5673		
Measurement Point 4	Right	2	0.4648		
Measurement Point 5	Bottom	2	0.9105		
Measurement Point 6	Top	2	1.2446		

Note: The results of the data in the above table are calculated and evaluated.

Test Mode: Wireless Charging 15W					
		Measuring Distance(cm)	E- Field(V/m)	Limit(V/m)	50% Limit(V/m)
Measurement Point 1	Front	2	10.264	614	307
Measurement Point 2	Back	2	10.543		
Measurement Point 3	Left	2	9.6428		
Measurement Point 4	Right	2	8.7853		
Measurement Point 5	Bottom	2	11.204		
Measurement Point 6	Top	2	11.894		

Note: The results of the data in the above table are calculated and evaluated.

Magnetic Field (H-Field) strength at 4cm from the boundaries of EUT.

Test Mode: Wireless Charging 15W					
		Measuring Distance(cm)	H- Field(A/m)	Limit(A/m)	50% Limit(A/m)
Measurement Point 1	Front	4	1.4431	1.63	0.815
Measurement Point 2	Back	4	1.3504		
Measurement Point 3	Left	4	0.5473		
Measurement Point 4	Right	4	0.4047		
Measurement Point 5	Bottom	4	0.8944		
Measurement Point 6	Top	4	1.2041		

Test Mode: Wireless Charging 15W					
		Measuring Distance(cm)	E- Field(V/m)	Limit(V/m)	50% Limit(V/m)
Measurement Point 1	Front	4	10.055	614	307
Measurement Point 2	Back	4	10.183		
Measurement Point 3	Left	4	9.1738		
Measurement Point 4	Right	4	8.3636		
Measurement Point 5	Bottom	4	11.086		
Measurement Point 6	Top	4	11.565		

Magnetic Field (H-Field) strength at 6cm from the boundaries of EUT.

Test Mode: Wireless Charging 15W					
		Measuring Distance(cm)	H- Field(A/m)	Limit(A/m)	50% Limit(A/m)
Measurement Point 1	Front	6	1.5868	1.63	0.815
Measurement Point 2	Back	6	0.9256		
Measurement Point 3	Left	6	1.164		
Measurement Point 4	Right	6	0.5443		
Measurement Point 5	Bottom	6	0.7685		
Measurement Point 6	Top	6	1.2376		

Test Mode: Wireless Charging 15W					
		Measuring Distance(cm)	E- Field(V/m)	Limit(V/m)	50% Limit(V/m)
Measurement Point 1	Front	6	4.3641	614	307
Measurement Point 2	Back	6	4.8421		
Measurement Point 3	Left	6	4.9056		
Measurement Point 4	Right	6	3.6302		
Measurement Point 5	Bottom	6	4.7155		
Measurement Point 6	Top	6	5.5794		

Magnetic Field (H-Field) strength at 8cm from the boundaries of EUT.

Test Mode: Wireless Charging 15W					
		Measuring Distance(cm)	H- Field(A/m)	Limit(A/m)	50% Limit(A/m)
Measurement Point 1	Front	8	0.6617	1.63	0.815
Measurement Point 2	Back	8	0.8666		
Measurement Point 3	Left	8	1.1367		
Measurement Point 4	Right	8	0.3245		
Measurement Point 5	Bottom	8	0.448		
Measurement Point 6	Top	8	1.2194		

Test Mode: Wireless Charging 15W					
		Measuring Distance(cm)	E- Field(V/m)	Limit(V/m)	50% Limit(V/m)
Measurement Point 1	Front	8	2.8025	614	307
Measurement Point 2	Back	8	4.7953		
Measurement Point 3	Left	8	4.7531		
Measurement Point 4	Right	8	2.0168		
Measurement Point 5	Bottom	8	3.7274		
Measurement Point 6	Top	8	5.421		

Magnetic Field (H-Field) strength at 10cm from the boundaries of EUT.

Test Mode: Wireless Charging 15W					
		Measuring Distance(cm)	H- Field(A/m)	Limit(A/m)	50% Limit(A/m)
Measurement Point 1	Front	10	0.3432	1.63	0.815
Measurement Point 2	Back	10	0.8137		
Measurement Point 3	Left	10	0.7568		
Measurement Point 4	Right	10	0.1175		
Measurement Point 5	Bottom	10	0.3032		
Measurement Point 6	Top	10	1.0765		

Test Mode: Wireless Charging 15W					
		Measuring Distance(cm)	E- Field(V/m)	Limit(V/m)	50% Limit(V/m)
Measurement Point 1	Front	10	1.9238	614	307
Measurement Point 2	Back	10	3.7174		
Measurement Point 3	Left	10	3.6403		
Measurement Point 4	Right	10	1.9688		
Measurement Point 5	Bottom	10	2.5131		
Measurement Point 6	Top	10	5.3049		

Magnetic Field (H-Field) strength at 12cm from the boundaries of EUT.

Test Mode: Wireless Charging 15W					
		Measuring Distance(cm)	H- Field(A/m)	Limit(A/m)	50% Limit(A/m)
Measurement Point 1	Front	12	0.2412	1.63	0.815
Measurement Point 2	Back	12	0.3985		
Measurement Point 3	Left	12	0.3076		
Measurement Point 4	Right	12	0.1062		
Measurement Point 5	Bottom	12	0.2614		
Measurement Point 6	Top	12	0.6898		

Test Mode: Wireless Charging 15W					
		Measuring Distance(cm)	E- Field(V/m)	Limit(V/m)	50% Limit(V/m)
Measurement Point 1	Front	12	1.4243	614	307
Measurement Point 2	Back	12	1.7364		
Measurement Point 3	Left	12	1.5627		
Measurement Point 4	Right	12	1.7466		
Measurement Point 5	Bottom	12	2.0495		
Measurement Point 6	Top	12	3.5203		

Magnetic Field (H-Field) strength at 14cm from the boundaries of EUT.

Test Mode: Wireless Charging 15W					
		Measuring Distance(cm)	H- Field(A/m)	Limit(A/m)	50% Limit(A/m)
Measurement Point 1	Front	14	0.1351	1.63	0.815
Measurement Point 2	Back	14	0.1749		
Measurement Point 3	Left	14	0.1705		
Measurement Point 4	Right	14	0.0423		
Measurement Point 5	Bottom	14	0.177		
Measurement Point 6	Top	14	0.5249		

Test Mode: Wireless Charging 15W					
		Measuring Distance(cm)	E- Field(V/m)	Limit(V/m)	50% Limit(V/m)
Measurement Point 1	Front	14	1.0238	614	307
Measurement Point 2	Back	14	1.359		
Measurement Point 3	Left	14	1.131		
Measurement Point 4	Right	14	1.3705		
Measurement Point 5	Bottom	14	1.4906		
Measurement Point 6	Top	14	2.4018		

Magnetic Field (H-Field) strength at 16cm from the boundaries of EUT.

Test Mode: Wireless Charging 15W					
		Measuring Distance(cm)	H- Field(A/m)	Limit(A /m)	50% Limit(A/m)
Measurement Point 1	Front	16	0.1037	1.63	0.815
Measurement Point 2	Back	16	0.096		
Measurement Point 3	Left	16	0.0763		
Measurement Point 4	Right	16	0.0342		
Measurement Point 5	Bottom	16	0.1177		
Measurement Point 6	Top	16	0.4806		

Test Mode: Wireless Charging 15W					
		Measuring Distance(cm)	E- Field(V/m)	Limit(V/ m)	50% Limit(V/m)
Measurement Point 1	Front	16	0.7783	614	307
Measurement Point 2	Back	16	1.1477		
Measurement Point 3	Left	16	0.9534		
Measurement Point 4	Right	16	1.1372		
Measurement Point 5	Bottom	16	1.1863		
Measurement Point 6	Top	16	2.2098		

Magnetic Field (H-Field) strength at 18cm from the boundaries of EUT.

Test Mode: Wireless Charging 15W					
		Measuring Distance(cm)	H- Field(A/m)	Limit(A/m)	50% Limit(A/m)
Measurement Point 1	Front	18	0.0742	1.63	0.815
Measurement Point 2	Back	18	0.0757		
Measurement Point 3	Left	18	0.0651		
Measurement Point 4	Right	18	0.036		
Measurement Point 5	Bottom	18	0.0881		
Measurement Point 6	Top	18	0.3768		

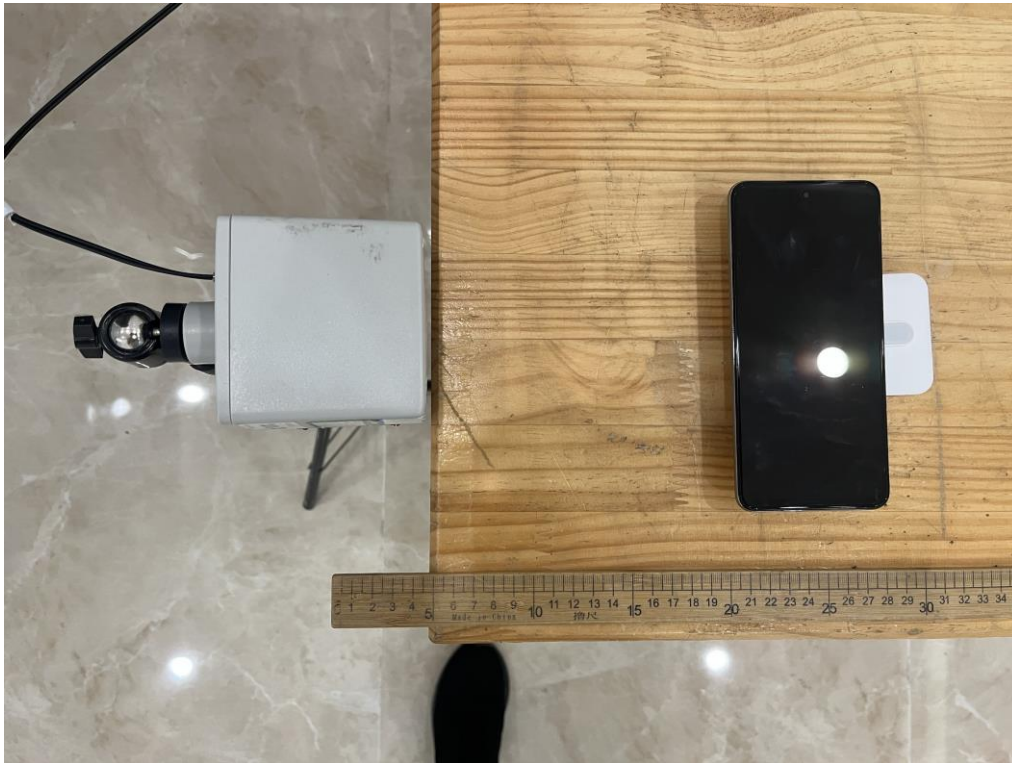
Test Mode: Wireless Charging 15W					
		Measuring Distance(cm)	E- Field(V/m)	Limit(V/m)	50% Limit(V/m)
Measurement Point 1	Front	18	0.6385	614	307
Measurement Point 2	Back	18	1.0993		
Measurement Point 3	Left	18	0.9588		
Measurement Point 4	Right	18	1.0938		
Measurement Point 5	Bottom	18	1.0231		
Measurement Point 6	Top	18	2.0875		

Magnetic Field (H-Field) strength at 20cm from the boundaries of EUT.

Test Mode: Wireless Charging 15W					
		Measuring Distance(cm)	H- Field(A/m)	Limit(A/m)	50% Limit(A/m)
Measurement Point 1	Front	20	0.0525	1.63	0.815
Measurement Point 2	Back	20	0.0542		
Measurement Point 3	Left	20	0.0469		
Measurement Point 4	Right	20	0.0336		
Measurement Point 5	Bottom	20	0.0671		
Measurement Point 6	Top	20	0.3127		

Test Mode: Wireless Charging 15W					
		Measuring Distance(cm)	E- Field(V/m)	Limit(V/m)	50% Limit(V/m)
Measurement Point 1	Front	20	0.4732	614	307
Measurement Point 2	Back	20	1.1252		
Measurement Point 3	Left	20	1.9434		
Measurement Point 4	Right	20	0.8029		
Measurement Point 5	Bottom	20	0.9743		
Measurement Point 6	Top	20	1.8933		

PHOTOGRAPHS OF TEST SETUP



Signature

Shawn Wen

Shawn Wen
General Manager
Date: 2024-04-30