



FCC ID: 2BE8H-W723A

Product Name:	Magnetic 5 in 1 wireless charger
Trade Mark:	AC ISLAND
Model No.:	W7-23A W7-23B, W7-23C, W7-23D, W7-23E
Model Difference:	All samples are the same except the model number and appearance color, so we prepare " W7-23A" for test only.
Transmitting mode	Keep the EUT in continuously wireless charging mode
Power supply:	Input: 12V $\overline{=}$ 2.91A Output: Magnetic Wireless Charger: 5W/ 7.5W/ 10W/ 15W Apple Watch Charger: 3W AirPods Charger: 5W USB-A: 5V $\overline{=}$ 2.4A USB-C: 5V $\overline{=}$ 2.4A
Date of Receipt:	Jan. 25, 2024
Test Date:	Jan. 25, 2024 - Feb. 29, 2024
Date of Report:	Feb. 29, 2024

Test Modes:	
Mode1.	Wireless charger Output Mode(Watch+ Cell Phone+ Earphone)(Full Load)
Mode2.	Wireless charger Output Mode(Watch+ Cell Phone+ Earphone) (Half Load)
Mode3.	Wireless charger Output Mode(Watch+ Cell Phone+ Earphone) (No Load)
Mode4.	Type-C Output+Wireless charger Output Mode(Watch+ Cell Phone+ Earphone) (Full Load)
Mode5.	Type-C Output+Wireless charger Output Mode(Watch+ Cell Phone+ Earphone) (Half Load)
Mode6.	Type-C Output+Wireless charger Output Mode(Watch+ Cell Phone+ Earphone) (No Load)
Mode7.	USB-A Output+Wireless charger Output Mode(Watch+ Cell Phone+ Earphone) (Full Load)
Mode8.	USB-A Output+Wireless charger Output Mode(Watch+ Cell Phone+ Earphone) (Half Load)
Mode9.	USB-A Output+Wireless charger Output Mode(Watch+ Cell Phone+ Earphone) (No Load)
Note: 1. We have evaluated 1%, 50% and 99% battery charging mode, and the worst mode (99%) is showed in this report.	



RF Exposure Evaluation

1 Measuring Standard

KDB 680106 D01 RF Exposure Wireless Power Transfer v04

2 Requirements

According to the item 5 of KDB 680106 D01:

Inductive wireless power transfer applications that meet all of the following requirements are excluded from submitting an RF exposure evaluation.

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.

Remark: Meet all the above requirements.



Limits

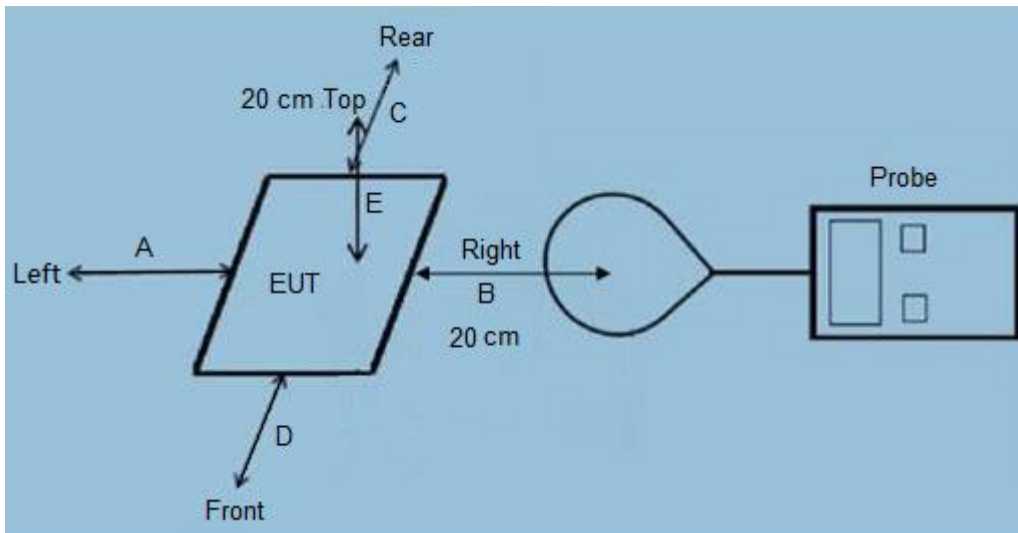
The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in 1.1307(b)

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 Exposures				
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
300-1500	/	/	f/300	6
1500-100,000	/	/	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
300-1500	/	/	f/1500	30
1500-100,000	/	/	1.0	30

F=frequency in MHz
f=Plane-wave equivalent power density
RF exposure compliance will need to be determined with respect to 1.1307(c) and (d) of the FCC rules. The emissions should be within the limits at 300kHz in Table 1 of 1.1310 (use the 300kHz limits for 150kHz: 614V/m, 1.63A/m).

3 Test Setup



4 Test Procedure

- 1) The RF exposure test was performed in anechoic chamber.
- 2) The measurement probe was placed at test distance (20 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 v04.

Remark: The EUT's test position A, B, C, D and E is valid for the E and H field measurements.



5 Description of Support Units

Adapter (Provide by test lab):

Manufacturer: XIAOMI

Model: AD652G

I/P: AC 100-240V 50/60Hz 1.7A

O/P: (USB-A)DC 5V/2.4A, DC 9V/2A, DC 12V/1.5A 18W MAX

(Type-C)DC 5V/3A, DC 9V/3A, DC 11V/5A, DC 12V/3A, DC 15V/3A, DC 20V/3.25A 65W MAX

Total: (USB-A)DC 5V/2.4A, DC 9V/2A, DC 12V/1.5A 18W MAX

(Type-C)DC 5V/3A, DC 9V/3A, DC 11V/5A, DC 12V/3A, DC 15V/3A, DC 20V/3.25A 45W MAX

Earphone (Provide by test lab):

Manufacturer: Apple

Model: AirPods3

Cell Phone(Provide by test lab):

Manufacturer: Apple

Model: iPhone 11 Pro

Watch(Provide by test lab):

Manufacturer: Apple

Model: Watch Series 6

6 Test Instruments list

Test Equipment	Manufacturer	Model No.	SN.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)
Exposure Level Tester	Narda	ELT-400	N-0231	June. 25 2023	June. 26 2024
Magnetic field probe 100cm ²	Narda	ELT probe 100cm ²	M0675	June. 25 2023	June. 26 2024
Field Probe	ETS	HI-6105	/	June. 25 2023	June. 26 2024
Laser Data Interface	ETS	HI-6113	/	June. 25 2023	June. 26 2024

7 Test Uncertainty

E-Filed Strength : $\pm 0.08\text{V/m}$

H-Filed Strength : $\pm 0.02\text{A/m}$



8 Test Result

E-Filed Strength at 20 cm from the edges surrounding the EUT (V/m)

Frequency Range (KHz)	Test Position A	Test Position B	Test Position C	Test Position D	Limits (V/m)
115-205	0.19	0.18	0.20	0.15	614
326.6	0.15	0.21	0.17	0.22	614

E-Filed Strength at 20 cm from the top of the EUT (V/m)

Frequency Range (KHz)	Test Position E	Limits (V/m)
115-205	0.17	614
326.6	0.19	614

H-Filed Strength at 20 cm from the edges surrounding the EUT (A/m)

Frequency Range (KHz)	Test Position A	Test Position B	Test Position C	Test Position D	Limits (A/m)
115-205	0.09	0.11	0.10	0.14	1.63
326.6	0.10	0.13	0.08	0.13	1.63

H-Filed Strength at 20 cm from the top of the EUT (A/m)

Frequency Range (KHz)	Test Position E	Limits (A/m)
115-205	0.18	1.63
326.6	0.20	1.63

9 Test Set-up Photo

