

# **RF Exposure Evaluation**

FCC ID: 2AXTH-T9

# 1 Measuring Standard

KDB 680106 Wireless Power Transfer D01 V04

## 2 Requirements

All requirements refer to Section 3 of KDB 680106 D01V04:

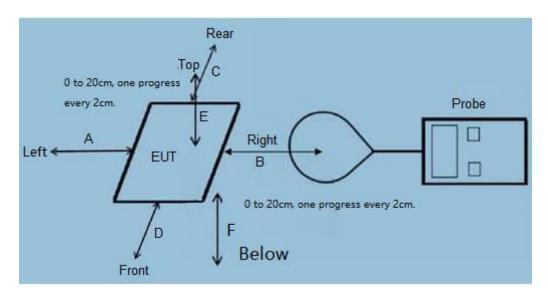
- 1.The devices may be considered to meet the § 2.1091-Mobile conditions ("generally be used in such a way that a separation distance of at least 20 centimeters is normally maintained between the RF source's radiating structure(s) and [the nearest person]")
- 2. Devices Operating at Frequencies Below 4 MHz.
- 3.For § 2.1091-Mobile devices, the MPE limits between 100 kHz to 300 kHz are to be considered the same as those at 300 kHz in Table 1 of § 1.1310, that is, 614 V/m and 1.63 A/m, for the electric field and magnetic field, respectively.

#### 3 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)

## 4 Test Setup





#### 5 Test Procedure

- 1) The RF exposure test was performed in anechoic chamber.
- 2) The measurement probe was placed at test distance (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 Wireless Power Transfer v04.
- **6.** Measurement Uncertainty (95% confidence levels, k=2)

Item	Uncertainty
Uncertainty for H-Field	2.36dB
Uncertainty for E-Field	2.42dB
Uncertainty for conducted RF Power	0.62dB
Uncertainty for temperature	0.2°C
Uncertainty for humidity	1.1%
Uncertainty for DC and low frequency voltages	0.06%

# 7. Equipment list

Test Equipment	Manufacturer	Model No.	SN.	Last	Calibrated
				calibration	until
Electric and	Narda	EHP-200A	N03565	Aug 29,2023	Aug 28,2024
Magnetic					
field					
probe-Analyzer					

## 7 Placement Mode 1 Photo





## 8 Test mode

Mode 1 Watch(2.5W)

Mode 2 Watch(5W)

Mode 3 Wireless Earbuds(5W)

Mode 4 Phone(5W)

Mode 5 Phone(7.5W)

Mode 6 Phone(10W)

Mode 7 Phone(15W)

Mode 8 Watch(2.5W)+Wireless Earbuds(5W)+Phone(5W)

Mode 9 Watch(5W)+Wireless Earbuds(5W)+Phone(5W)

Mode 10 Watch(2.5W)+Wireless Earbuds(5W)+Phone(7.5W)



Mode 11	Watch(5W)+Wireless Earbuds(5W)+Phone(7.5W)
Mode 12	Watch(2.5W)+Wireless Earbuds(5W)+Phone(10W)
Mode 13	Watch(5W)+Wireless Earbuds(5W)+Phone(10W)
Mode 14	Watch(2.5W)+Phone(5W)
Mode 15	Watch(5W)+Phone(5W)
Mode 16	Watch(2.5W)+Phone(7.5W)
Mode 17	Watch(5W)+Phone(7.5W)
Mode 18	Watch(2.5W)+Phone(10W)
Mode 19	Watch(5W)+Phone(10W)
Mode 20	Watch(2.5W)+Phone(15W)
Mode 21	Watch(5W)+Phone(15W)
Mode 22	Wireless Earbuds(5W)+Phone(5W)
Mode 23	Wireless Earbuds(5W)+Phone(7.5W)
Mode 24	Wireless Earbuds(5W)+Phone(10W)
Mode 25	Wireless Earbuds(5W)+Phone(15W)

# 9 Necessary accessories

	Equipment	Mfr/Brand	Model/Type No.	Serial No.	Note
1	Phone	Apple	iPhone 12	N/A	This is for testing only in report.
2	Earbuds	Apple AirPods	AirPods 2	N/A	This is for testing only in report.



3	Watch	Apple Watch	S7	N/A	This is for testing only in report.
4	Adapter	Xiaomi	MDY-11-EB	N/A	This is for testing only in report.

## 10 Test Result

Placement Mode 9(Worst)

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

Battery power	Frequency Range(MHz)	Test Position A	Test Position B	Test Positio n C	Test Positio n D	Limit s (V/m)	50%M PE limit (V/m)	Result
1%	0.115-0.205	1.42	1.50	0.62	0.48	614	307	PASS
50%	0.115-0.205	1.53	1.40	0.50	0.65	614	307	PASS
95%	0.115-0.205	1.30	1.57	0.45	0.63	614	307	PASS
Stand-by	0.115-0.205	1.45	1.39	0.62	0.66	614	307	PASS

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

Battery	Frequency	Test	Limits	50%MPE	Decult
power	Range(MHz)	Position E	(V/m)	limit(V/m)	Result
1%	0.115-0.205	1.25	614	307	PASS
50%	0.115-0.205	1.29	614	307	PASS
95%	0.115-0.205	1.33	614	307	PASS
Stand-by	0.115-0.205	1.48	614	307	PASS

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



		Test	Test	Test	Test		50%MP	
Battery	Frequency	Position	Position	Position	Position	Limits	E limit	Result
power	Range(MHz)	Α	В	С	D	(A/m)	(A/m)	
1%	0.115-0.205	0.63	0.65	0.64	0.65	1.63	0.815	PASS
50%	0.115-0.205	0.62	0.60	0.63	0.66	1.63	0.815	PASS
95%	0.115-0.205	0.67	0.61	0.59	0.63	1.63	0.815	PASS
Stand-by	0.115-0.205	0.64	0.58	0.63	0.65	1.63	0.815	PASS

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

Battery	Frequency	Test	Limits	50%MPE limit	Dogult
power	Range(MHz)	Position E	(A/m)	(A/m)	Result
1%	0.115-0.205	0.55	1.67	0.815	PASS
50%	0.115-0.205	0.48	1.66	0.815	PASS
95%	0.115-0.205	0.50	1.65	0.815	PASS
Stand-by	0.115-0.205	0.65	1.64	0.815	PASS

Tested by: \_\_\_\_\_ Reviewed by:

\*\*\*\*\*END OF THE REPORT\*\*\*