

RF Exposure Evaluation FCC ID:2AEOP-M1517MI04A

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)

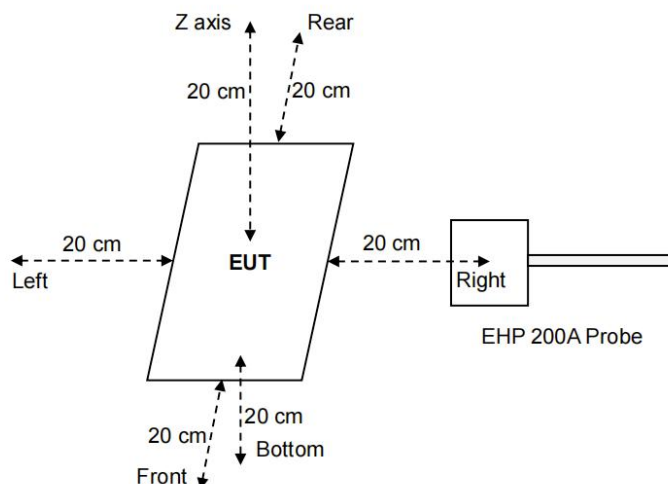
Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm ²)	Averaging time (minutes)
(A) Limits for Occupational/Controlled Exposures				
0.3-3.0	614	1.63	*(100)	6
3.0-30	1842/f	4.89/f	*(900/f ²)	6
30-300	61.4	0.163	1.0	6
300-1500	/	/	f/300	6
1500-100,000	/	/	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
 *=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).

4 MEASUREMENT UNCERTAINTY

Parameter	Expanded Uncertainty
Magnetic field measurements(9KHz~30MHz)	$\pm 1.2\%$
Electric field measurements(9KHz~30MHz)	$\pm 1.2\%$

5 Test Setup



6 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.

7 Equipment list

Test Equipment	Manufacturer	Model No.	SN.	Last calibration	Calibrated until
Electric and Magnetic field probe-Analyzer	Narda	EHP-200A	N03565	2023/08/29	2024/08/28

8 Photo



9 Test mode

Mode 1 Phone(10W)

10 Necessary accessories

Item	Equipment	Mfr/Brand	Model/Type No.	Serial No.	Note
1	Phone	HW	Mate 20	N/A	This phone is for testing only in report.

11 Test Result

Mode 10(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 Position C	Test Position D	Limits (V/m)	50%MP E limit (V/m)	Result
1%	0.115-0.205	1.41	1.12	0.57	0.51	614	307	PASS
50%	0.115-0.205	1.64	1.21	0.44	0.61	614	307	PASS
95%	0.115-0.205	1.22	1.17	0.51	0.57	614	307	PASS
Stand-by	0.115-0.205	1.35	1.24	0.56	0.51	614	307	PASS
Test date		2024/02/10						

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

Battery power	Frequency Range(MHz)	Test Position E	Limits (V/m)	50%MPE limit(V/m)	Result
1%	0.115-0.205	1.21	614	307	PASS
50%	0.115-0.205	1.32	614	307	PASS
95%	0.115-0.205	1.48	614	307	PASS
Stand-by	0.115-0.205	1.53	614	307	PASS
Test date		2024/02/10			

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

Battery power	Frequency Range(MHz)	Test Position A	Test Position B	Test Position C	Test Position D	Limits (A/m)	50%M PE limit (A/m)	Result
1%	0.115-0.205	0.63	0.61	0.71	0.62	1.63	0.815	PASS
50%	0.115-0.205	0.63	0.63	0.67	0.55	1.63	0.815	PASS
95%	0.115-0.205	0.61	0.62	0.54	0.53	1.63	0.815	PASS
Stand-by	0.115-0.205	0.57	0.61	0.65	0.51	1.63	0.815	PASS
Test date		2024/02/10						

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

Battery power	Frequency Range(MHz)	Test Position E	Limits (A/m)	50%MPE limit (A/m)	Result
1%	0.115-0.205	0.43	1.63	0.815	PASS
50%	0.115-0.205	0.34	1.63	0.815	PASS
95%	0.115-0.205	0.45	1.63	0.815	PASS
Stand-by	0.115-0.205	0.51	1.63	0.815	PASS
Test date	2024/02/10				

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