
RF Exposure Evaluation

FCC ID: 2BBPL-4IN1MG

Product Name:	BS 4-IN-1BLK WIRELESS CHARGER + MUG WARMER
Trade Mark:	Brookstone
Model Number:	BS-4IN1MG-BLK
Model Difference:	N/A
Transmitting mode	Keep the EUT in continuously wireless charging mode
Power supply:	Input: DC 9V==2A Wireless charging output: 5W/7.5W/10W/15W Earphone output:3W iWatch output:2.5W Heating Output: 10W
Date of Receipt:	Sep. 17, 2026
Test Date:	Sep. 17, 2026 - Sep. 28, 2026
Date of Report:	Sep. 28, 2026

Mode1. Wireless Phone Output Mode(5W) Mode2. Wireless Phone Output Mode(7.5W)
Mode3. Wireless Phone Output Mode(10W) Mode4. Wireless Phone Output Mode(15W)
Mode5. Wireless Earphone Output Mode(3W) Mode6. Wireless iWatch Output Mode(2.5W)

Note: 1. We have evaluated 1%, 50% and 99% battery charging mode, and the worst mode (99%) is showed in this report.

2. All modes have been tested, and the report only shows the results of the worst mode4.

1 Measuring Standard

According to Part 2.1091 RF exposure is calculated. According KDB 680106 D01 WirelessPower Transfer v04.

2 Requirements

①According to the item 5 of KDB680106 D01v04:

②Inductive wireless power transfer applications that meet all of the following requirements are excluded from submitting an RF exposure evaluation.

3 Limits

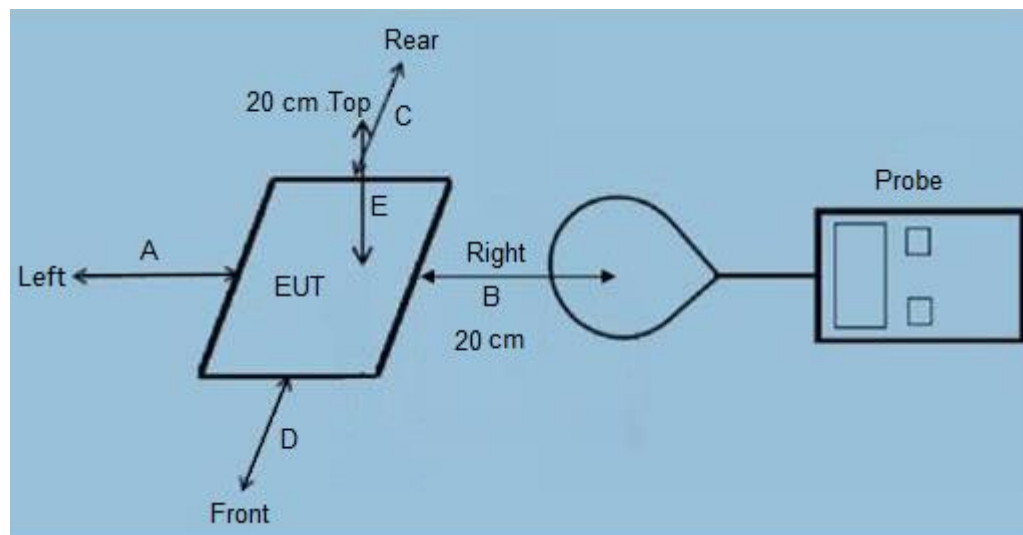
The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in 1.1307(b)

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 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 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 KDB680106 D01v04.

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

6 Description of Support Units

Adapter (Provide by test lab): Manufacturer: XIAOMI Model: MDY-14-EU	Mobile phone (Provide by test lab): Manufacturer: SAMSUNG Model: Galaxy S21 5G
Earphone (Provide by test lab): Manufacturer: Apple Model: AirPods3	iWatch (Provide by test lab): Manufacturer: Apple Model: Series 6

7 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	Oct. 25, 2025	Oct. 24, 2026
Magnetic field probe 100cm ²	Narda	ELT probe 100cm ²	M0675	Oct. 25, 2025	Oct. 24, 2026
Field Probe	ETS	HI-6105	/	Oct. 25, 2025	Oct. 24, 2026
Laser Data Interface	ETS	HI-6113	/	Oct. 25, 2025	Oct. 24, 2026

8 Test Uncertainty

E-Filed Strength(1Hz-400kHz)	:	±0.08V/m
H-Filed Strength(1Hz-400kHz)	:	±0.02A/m
uT	:	±0.01

Note: The field intensity value A/m in the report is converted from uT, and the formula is as follows:

$$\text{uT to A/m} \quad A/m = \frac{\mu T}{1.25}$$

9 Test Result

E-Filed Strength at 20 cm from the edges surrounding the EUT

Frequency Range (MHz)	Test Position A (V/m)	Test Position B (V/m)	Test Position C (V/m)	Test Position D (V/m)	Test Position E (V/m)	Limits (V/m)
0.115-0.205	0.15	0.25	0.17	0.26	0.38	614

H-Filed Strength at 20 cm from the edges surrounding the EUT (uT)

Frequency Range (MHz)	Test Position A	Test Position B	Test Position C	Test Position D	Test Position E
0.115-0.205	0.423	0.715	0.724	0.639	0.722

H-Filed Strength at 20 cm from the edges surrounding the EUT

Frequency Range (MHz)	Test Position A (A/m)	Test Position B (A/m)	Test Position C (A/m)	Test Position D (A/m)	Test Position E (A/m)	Limits (A/m)
0.115-0.205	0.335	0.574	0.581	0.529	0.563	1.63

10 Test Set-up Photo

