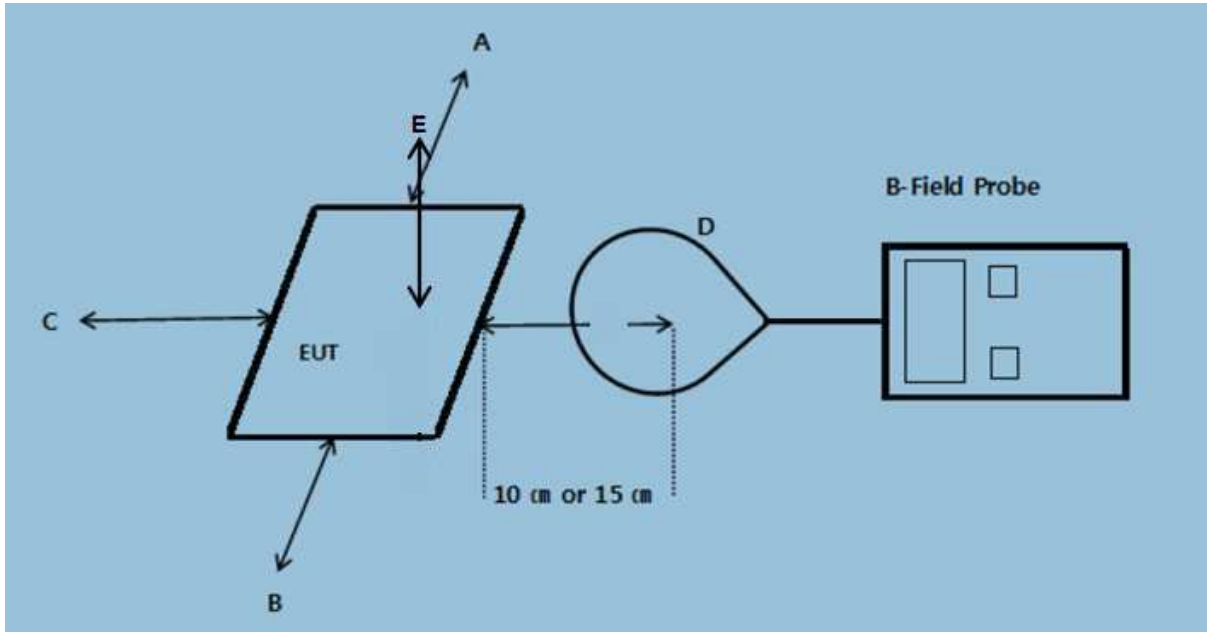


TEST REPORT

Test Setup Configuration



Note

- The RF exposure test is performed in the shield room.
- The test distance is between the edge of the charger and the geometric centre of probe.

Test Equipment List

Name of instrument	Model	Manufacturer	Cal. Date	Due Date
MAGNETIC FIELD HiTESTER	3470	Hioki	21-Jun-15	21-Jun-16

Reference Limit:

Environmental evaluation and exposure limit according to FCC CFR 47 part 1, 1.1307(c) and (d), 1.1310

According to FCC 1.1310: The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation

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 (minutes)
(A) Limits for Occupational/Controlled Exposure				
0.3 – 3.0	614	1.63	(100)*	6
(B) Limits for General Population/Uncontrolled Exposure				
0.3 – 1.34	614	1.63	(100)*	30

Note: * = Plane wave equivalent power density

Test Mode: Wireless charger and Bluetooth function transmitting simultaneously.

Test Result:

H-Field Strength at 10 cm from the edges surrounding the EUT

Frequency Range (MHz)	Probe Position A (A/m)	Probe Position B (A/m)	Probe Position C (A/m)	Probe Position D (A/m)	Probe Position E (A/m)	Limits (A/m)
0.110~0.150	0.036	0.016	0.018	0.002	0.026	1.63

E-Field Strength (calculated) at 10 cm from the edges surrounding the EUT

Frequency Range (MHz)	Probe Position A (V/m)	Probe Position B (V/m)	Probe Position C (V/m)	Probe Position D (V/m)	Probe Position E (V/m)	Limits (V/m)
0.110~0.150	13.57	6.03	6.79	0.75	9.80	614

Note:

1. $E = 377 * H$,

E = electric field strength (V/m), H = magnetic field strength (A/m)

2. The maximum E-field Strength at 3m is 78.7dBuV/m, According to FCC KDB 412172D01:

The EIRP = $(FS * D)^2 / 30 = -16.5 \text{ dBm}$

Configuration photo of the test:

1. Measuring distance 10 cm



For BLE 4.0 Portion:

Modulation Type: GFSK.

Antenna Type: Integral antenna.

The nominal conducted output power specified: -3dBm ±3dB.

According to the KDB 447498:

The maximum conducted output power specified is 0dBm = 1.0mW

The source- based time-averaging conducted output power = 1.0* Duty Cycle mW= 1.0mW

The SAR Exclusion Threshold Level: = 3.0 * (min. test separation distance, mm) / sqrt(freq. in GHz)
= 3.0 * 5 / sqrt (2.480) mW = 9.5 mW

Since the source-based time-averaging conducted output power is well below the SAR low threshold level, so the EUT is considered to comply with SAR requirement without testing.

According to section 4.3.2 of KDB 447498 D01, standalone SAR was estimated according to the following to determine simultaneous transmission SAR test exclusion

$$\text{W/kg} = 1.0 * [\text{sqrt} (2.480) / 7.5] / 5 \text{ W/kg} = 0.042 \text{ W/kg}$$

From above value, the estimated standalone Bluetooth SAR value does not exceed 1/2 of SAR limit and the measured E and H field strengths of standalone Wireless Charging operation does not exceed 1/2 of E and H field strength limits, so the quantitative simultaneous transmission analysis will not be necessary.