FCC §1.1307&1.1310 – RF EXPOSURE

Applicable Standard

FCC §1.1307 & 1.1310
KDB 680106 D01 RF Exposure Wireless Charging Apps v02

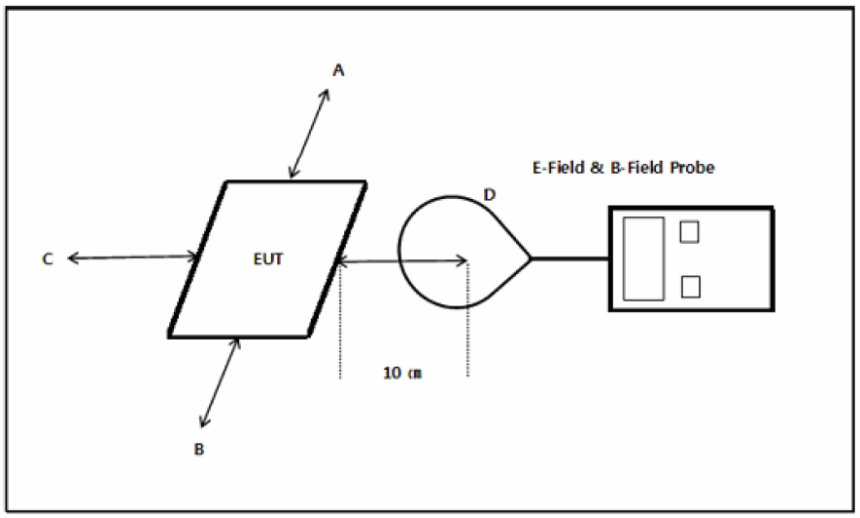
According to FCC 1.1310: The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in 1.1307

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

Note: f = frequency in MHz
* = plane-wave equipment power density

EUT Setup



Test Equipment List and Details

Manufacturer	Description	Model	Calibration Date	Calibration Due Date
Hioki	Magnetic Field Test	3470	2013-03-10	2014-03-09

Test Result

Test Mode: Charging mode

1) E-Filed 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)	Limits (A/m)
0.11-0.210	0.056	0.032	0.061	0.028	1.63

2) E-Filed 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)	Limits (V/m)
0.11-0.210	21.112	12.064	22.997	10.556	614

Note:
E= 377* H,
E = electric field strength (V/m)
H = magnetic field strength (A/m)

According with KDB 680106 D01 RF Exposure Wireless Charging Apps v02, Emissions between 100 kHz to 300 kHz should be assessed versus the limits at 300 kHz in Table 1 of Section 1.1310: 614 V/m and 1.63 A/m