FCC RF Exposure Evaluation

Per Section 5 of FCC KDB Publication 680106 D03 Inductive wireless power transfer applications that meet all of the following requirements are not required to submit a PAG for equipment approved using certification to address RF exposure compliance:

1) Power transfer frequency is less that 1 MHz

Device operates nominally at 127.9 kHz (123.7 – 131.7 kHz range).

2) Output power from each primary coil is less than 15 watts

The EUT is a WPC Power Class 0 device following the Wireless Power Consortium design specifications for a device operating at 15 watts.

3) The transfer system includes only single primary and secondary coils. This includes charging systems that may have multiple primary coils and clients that are able to detect and allow coupling only between individual pairs of coils

This device is designed to comply with this requirement.

4) Client device is inserted in or placed directly in contact with the transmitter

This device is designed for direct contact charging only.

5) Mobile exposure conditions only (portable exposure conditions are not covered by this exclusion).

The EUT is Mobile (not portable).

f) Aggregate leakage fields at 15 cm surrounding the device and 20 cm from all simultaneous transmitting coils are demonstrated to be less than 50% of the MPE limit.

Aggregate leakage fields at 15 cm distance surrounding the EUT and at 20cm above the EUT pad antenna were measured with each integral coil loaded by a Samsung Galaxy 6 Edge cellular phone and, over three charging levels (1%, 50%, 99%). Results noted in the following pages demonstrate that these fields remains well below 50% of the MPE limit.

USA REF: 1.1310, 2.1091/1093, 447498 D01 General RF Exposure Guidance v0(

Application: Mobile

Test Date: 8-Jan-21

Test Engineer: Joseph D. Brunett

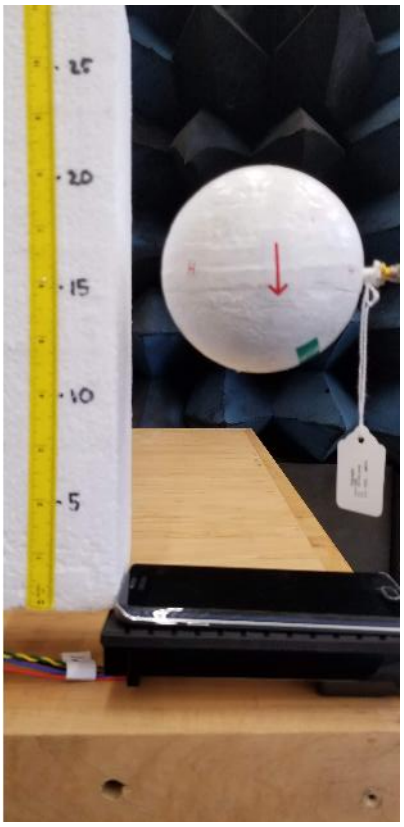
EUT: LG WCFDM00Y2A

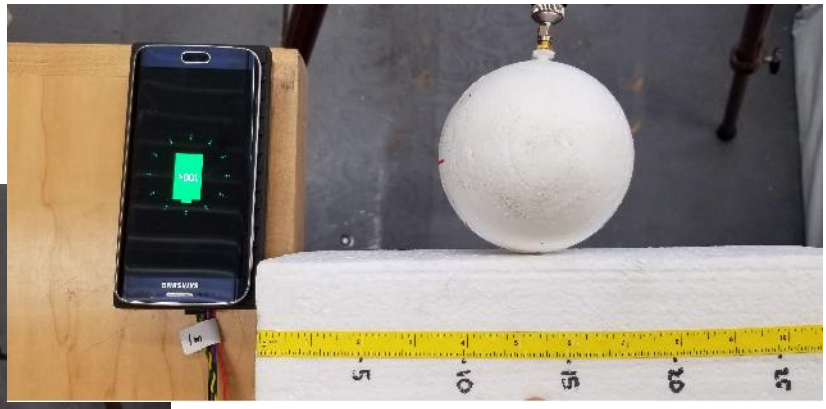
EUT Mode: Worst Case / 6min

Meas. Distance: 20 cm

#	Mode	Freq. MHz	Meas. Distance cm	Max Measured Field* E(Pk) dBuV/m	Max Measured Field* H(Pk) dBuA/m	USA FCC 1.1310 MPE E Field Limit*** dBuV/m	USA FCC 1.1310 MPE Hfield Limit*** dBuA/m	USA FCC 1.1310 MPE Worst Case MPE Ratio
1	Sens/Pol	0.1051	20.0	118.4	105.9	175.8	124.2	.12083
2	15W, Charging	0.1279	20.0	126.7	114.7	175.8	124.2	.33328
							Max MPE Ratio	**.33328**
							Complies?	**Yes**

*As Measured Peak value used to demonstrate compliance.
*** For FCC MPE, use of 300 kHz limit at 125 kHz as previously allowed by FCC.
**** EIRP (mW) = S (mW/cm^2) x 4 x PI x 20cm^2





Frequency Band	E-Field Sensor	Application:	Test Date:	01/08/21
0.009-30 MHz	EFPGALX101	Mobile (desktop)	Test Engineer:	Joseph D Brunett
Detector	H-Field Sensor	Load:	EUT Mode:	Charging, Coil 1,2,3,4
Integrated RMS	HFPGALX101	Samsung Edge S6	EUT Tested:	LG

					Electric Field			Magnetic Field			
	Load Charge	EUT	Sensor	Meas. Distance	Measured		Limit	Measured		Limit	Worst Case MPE Level (%)
#	%	Side	Vector	cm	dBuV/m	*V/m	V/m	dBuA/m	*A/m	A/m	
1	1%	Left	x	15.0	110.9	1.00	614.00	54.7	0.11	1.63	
2			y	15.0	108.0			42.8			
3			z	15.0	112.1			100.7			6.7
4		Front	x	15.0	105.2	1.29	614.00	59.4	0.11	1.63	
5			y	15.0	120.5			69.5			
6			z	15.0	93.7			100.7			6.9
7		Back	x	15.0	109.9	1.40	614.00	53.9	0.11	1.63	
8			y	15.0	120.2			62.4			
9			z	15.0	96.4			100.7			6.8
10		Top	x	20.0	110.2	2.79	614.00	99.1	0.31	1.63	
11			y	20.0	121.3			96.5			
12			z	20.0	122.3			103.9			**19.2**
13		Right	x	15.0	116.6	0.88	614.00	84.6	0.14	1.63	
14			y	15.0	101.0			82.2			
15			z	15.0	99.0			100.7			8.5
16	50%	Left	x	15.0	110.6	0.93	614.00	53.5	0.09	1.63	
17			y	15.0	106.0			41.9			
18			z	15.0	111.8			99.1			5.6
19		Front	x	15.0	103.3	1.06	614.00	57.7	0.09	1.63	
20			y	15.0	118.8			67.8			
21			z	15.0	92.8			99.1			5.7
22		Back	x	15.0	109.0	1.28	614.00	53.5	0.10	1.63	
23			y	15.0	119.5			62.0			
24			z	15.0	93.6			100.2			6.4
25		Top	x	20.0	108.1	2.49	614.00	98.7	0.26	1.63	
26			y	20.0	121.0			94.2			
27			z	20.0	120.9			101.9			16.0
28		Right	x	15.0	115.0	0.73	614.00	84.0	0.10	1.63	
29			y	15.0	99.8			80.5			
30			z	15.0	96.4			97.8			6.4
31	99%	Left	x	15.0	89.3	0.08	614.00	28.5	0.01	1.63	
32			y	15.0	85.8			15.8			
33			z	15.0	90.4			74.6			0.3
34		Front	x	15.0	82.8	0.10	614.00	32.7	0.01	1.63	
35			y	15.0	98.0			43.2			
36			z	15.0	71.9			73.7			0.3
37		Back	x	15.0	88.1	0.12	614.00	27.8	0.01	1.63	
38			y	15.0	98.5			35.2			
39			z	15.0	74.7			74.5			0.3
40		Top	x	20.0	87.9	0.23	614.00	73.0	0.02	1.63	
41			y	20.0	99.4			69.7			
42			z	20.0	100.7			77.6			0.9
43		Right	x	15.0	94.9	0.07	614.00	57.9	0.01	1.63	
44			y	15.0	79.2			55.5			
45			z	15.0	77.4			74.3			0.4

*Total Field Strength = 10^(x-field_dB/20)+10^(y-field_dB/20)+10^(z-field_dB/20))