

TEST REPORT

of

FCC Part 1 §1.1310

FCC ID : ZH3TBW20Q

Equipment Under Test	:	LS Wireless Charger LSWC-TBW20-Q
Model Name	:	(Alt: LSWC-T, LSWC-TBB20-M, LSWC-TWW20-M, LSWC-TPW20-M, LSWC-TGW10-M, LSWC-TKW10-M, LSWC-TSW10-M)
Serial No.	:	N/A
Applicant	:	LS Cable & System Ltd.
Manufacturer	:	LS Cable & System Ltd.
Date of Test(s)	:	2011. 09. 15 ~ 2011. 09. 15
Date of Issue	:	2011. 09. 26

In the configuration tested, the EUT complied with the standards specified above.

Tested By:



Date

2011. 09. 26

Grant Lee

Approved By:



Date

2011. 09. 26

Feer Jeong

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SGS Korea Co., Ltd. (Gunpo Laboratory)

18-34, Sanbon-dong, Gunpo-si, Gyeonggi-do, Korea, 435-040

Tel. +82 31 428 5700 / Fax. +82 31 427 2371

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1. General information

1.1. Testing laboratory

SGS Korea Co., Ltd. (Gunpo Laboratory)

Wireless Div. 2FL, 18-34, Sanbon-dong, Gunpo-si, Gyeonggi-do, Korea 435-040

www.ee.sgs.com/korea

Phone No. : +82 31 428 5700

Fax No. : +82 31 427 2371

1.2. Details of applicant

Applicant : LS Cable & System Ltd.

Address : 555, Hogye-dong, Dongan-gu, Anyang-si, Gyeonggi-do, Korea

Contact Person : Danny Seo

Phone No. : +82 31 428 4156

1.3. Description of EUT

Kind of Product	LS Wireless Charger
Model Name	LSWC-TBW20-Q (Alt: LSWC-T, LSWC-TBB20-M, LSWC-TWW20-M, LSWC-TPW20-M, LSWC-TGW10-M, LSWC-TKW10-M, LSWC-TSW10-M)
Serial Number	N/A
Power Supply	AC 100 V ~ 240V, 50 Hz/ 60 Hz(Used adapter : DC 19 V / 1 A)
Frequency Range	Tx : 111 kHz ~ 205 kHz
Operating Conditions	-10 °C ~ 50 °C
Operating Voltage	AC 100 ~ 240 V
Antenna Type	Coil Antenna

1.4. Declarations by the manufacturer

- Operation temperature: -10 °C ~ 50 °C

- Variant models have only a different color than basic model.

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1.5. Test Equipment List

Equipment	Manufacture	Model	S/N	Cal due.
E-Field Probe	Schaffner	2244/90.20	AE-0023	Mar. 08, 2012
EM Radiation Meter	Schaffner	EMC-20	AR-0040	Mar. 08, 2012
B-Field Probe	Narda	BN 2300/90.10	J-0025	Jan. 25, 2012
Exposure Level Meter	Narda	ELT-400	J-0015	Jan. 25, 2012

1.6. Test report revision

Revision	Report number	Description
0	F690501/RF-RTL004919	Initial
1	F690501/RF-RTL004919-1	The test result, photos of EUT & test setup photos were changed.
2	F690501/RF-RTL004919-2	Declared identity the specific device & test setup photos were changed.

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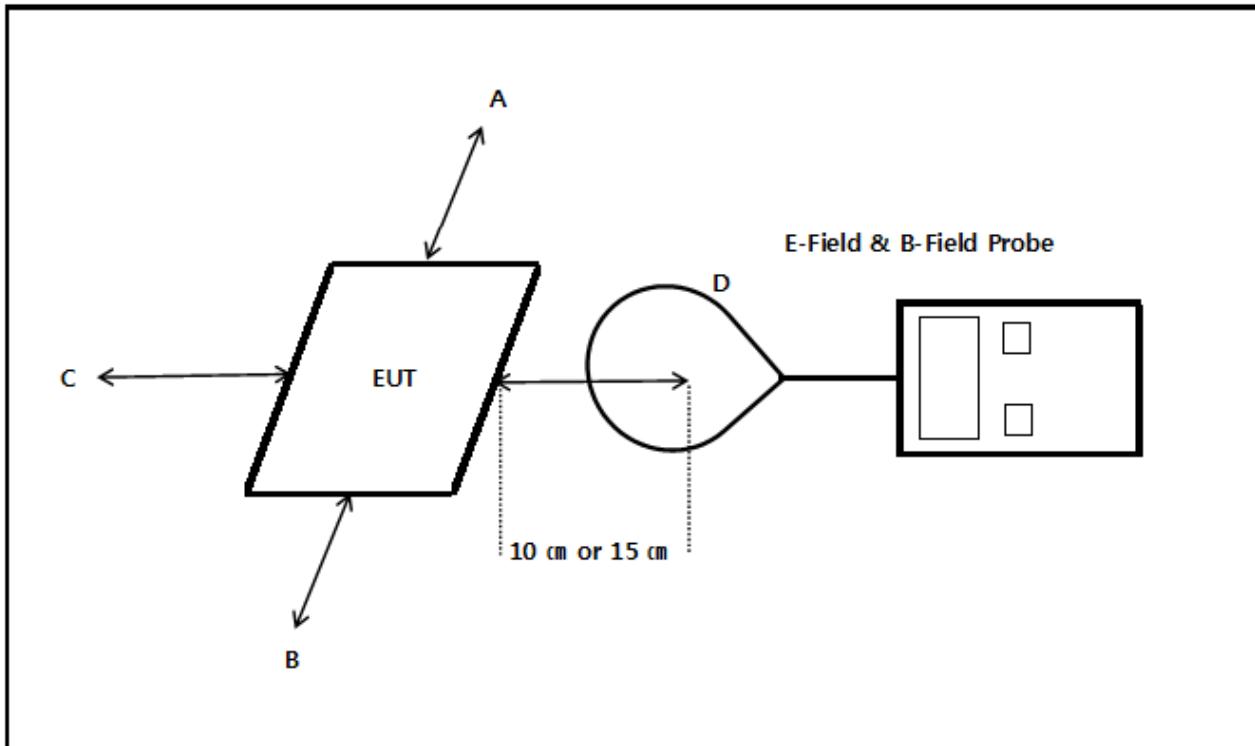
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2. Test Result

2.1. Test Setup



Note

- The RF exposure test is performed in the shield room.
- The test distance is between the edge of the charger and the geometric center of probe.
- The iPhone 4 with specific receiver being charged by the transmitter during the field measurements.
- The receiver is only for iPhone 4.

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2.2. Environmental evaluation and exposure limit according to FCC CFR 47 part 1, 1.1307(b), 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 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)	Average Time (minutes)
(A) Limits for Occupational /Control Exposures				
0.3 – 3.0	614	1.63	*(100)	6
(B) Limits for General Population/Uncontrol Exposures				
<u>0.3 – 1.34</u>	<u>614</u>	<u>1.63</u>	*(100)	30

* = Plane wave equivalent power density

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2.3. E and H field strength

Test Mode : Normal Operation(Charging mode)

2.3.1. E-Field Strength 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)
0.111 ~ 0.205	4.13	3.81	4.63	4.06	614.00

2.3.2. E-Field Strength at 15 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)
0.111 ~ 0.205	3.37	3.16	3.26	3.33	614.00

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2.3.3. 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)	Limits (A/m)
0.111 ~ 0.205	0.114	0.118	0.138	0.154	1.630

2.3.4. H-Field Strength at 15 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)
0.111 ~ 0.205	0.108	0.117	0.115	0.112	1.630

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Appendix A. Photos of the EUT**Front View of EUT****Rear View of EUT**

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Side View of EUT

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Top View of EUT**Bottom View of EUT**

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Test Setup Photos of E-Field

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Test Setup Photos of H-Field

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