

RF EXPOSURE REPORT

Test item : Slim Wireless Charger
Model No. : CWC-TT051xyz Series
Order No. : DTNC1507-03344
Date of receipt : 2014-07-03
Test duration : 2015-08-07 ~ 2015-08-25
Date of issue : 2015-09-01
Use of report : FCC Original Grant

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Test specification : FCC Part 1.1310

Test environment : See appended test report

The test results presented in this test report are limited only to the sample supplied by applicant and the use of this test report is inhibited other than its purpose. This test report shall not be reproduced except in full, without the written approval of DT&C Co., Ltd.

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Test Report Version

Test Report No.	Date	Description
DRTFCC1508-0185	Aug. 27, 2015	Initial issue
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1. Equipment information

1.1 Equipment description

FCC Equipment Class	Part 15 Low Power Transmitter Below 1705 kHz (DCD)
Equipment type	Slim Wireless Charger
Equipment model name	CWC-TT051xyz Series
Equipment add model name	CWC-TT051YE2, CWC-TT051BK2, CWC-TT051BL2, CWC-TT051YE2, CWC-TT051WH2, CWC-TT051RE2, CWC-TT051GE2, CWC-TT051GD2, CWC-TT051SL2, CWC-TT051VI2
Equipment serial no.	Identical prototype
Frequency range	110 ~ 205kHz
Output power	Max : 5 W
Power	AC 120V 60Hz DC 5 V
Antenna type	Coil Antenna(Circular single coil)

1.2 Support equipment

Equipment	Model No.	Serial No.	Manufacturer	Note
Power Adapter	F8M670 kr	HU10750-13002A	MOBILECONN CORP.	-
Power Patch	KWP-204	N/A	KOMATECH	-
-	-	-	-	-

Note: The supporting equipments were supported by manufacturer.

2. Information about test items

2.1 Test Configuration and Mode

•Test configuration

The field strength of both E-field and H-field were measured at 10 cm using RF exposure survey meter with E-field and H-field probes for determining compliance with the MPE requirements of FCC Part 1.1310

During measurements, the wireless charging pad (EUT) was wirelessly charging a battery housed inside a portable handset and was loaded with the client device using the resistor as described below summary table for test modes and conditions.

The RF power density was measured with the battery at 2 different charge conditions: battery at almost 0 % and 50 % status, 3 resistive load conditions: 300 mA, 600 mA, 1000 mA (Max. charging current with 5 Ω resistor).

These testing were performed at test configuration as test setup diagram on clause 3 of this test report.

EUT was placed on a non-conductive turntable, and the portable handset with charging cover for charging a battery or client device with resistive load for drawing various load current.

This device uses a wireless charging circuit for power transfer operating at the frequency of 110 KHz ~ 205 KHz. Thus, the 300 KHz RF exposure limits were used as below table.

•Test mode

This device has been tested with the below test modes and charging current conditions:

Charging Current	Support Equipment
300mA	
600mA	
1000mA(Max)	Wireless Charging Cover

• Limit

	Frequency	E-Field limit	H-Field limit
FCC Part 1.1310	300 kHz ~ 3 MHz	614 V/m	1.63 A/m

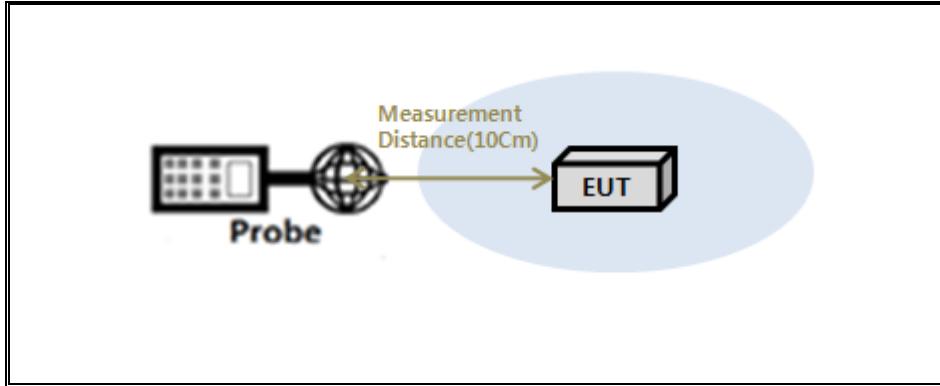
2.2 Tested environment

Temperature	:	23 ~ 25 °C
Relative humidity content	:	35 ~ 44 % R.H.
Details of power supply	:	AC 120V 60Hz DC 5V

3. E and H field strength

For RF exposure purposes, the E and H field strengths are measured separately with E and H probes and meters at different locations surrounding the test setup.

- **Test setup diagram**



- **Measurement procedure**

These testing were performed at test configuration as above diagram.

EUT was placed on a turntable, and the measurement distance of 10 Cm from the center of the probe to the edge of the device. And test was performed all sides of the EUT(except bottom side).

- **Test equipment list**

	Type	Manufacturer	Model	Cal.Date (yy/mm/dd)	Next. Cal.Date (yy/mm/dd)	S/N
<input checked="" type="checkbox"/>	EMF Meter	NARDA	ELT-400	14/09/20	15/09/20	N-0342
<input checked="" type="checkbox"/>	EMF probe	NARDA	B-Field Probe	14/09/20	15/09/20	M-0779
<input checked="" type="checkbox"/>	Broadband field meter	NARDA	NBM-550	14/09/19	15/09/19	E-1275
<input checked="" type="checkbox"/>	Broadband field probe	NARDA	EF-0391	14/09/19	15/09/19	D-0894

•Measurement data:

Tested Frequency	Result								Limit	
	E-field(V/m)				H-field(A/m)				E-field(V/m)	H-field(A/m)
	0	90	180	270	0	90	180	270		
Lowest	1.570	1.420	0.900	0.960	0.623	0.524	0.506	0.506	614	1.63
Middle	1.480	1.370	0.840	0.910	0.729	0.555	0.516	0.516		
Highest	1.510	1.430	0.920	0.940	0.764	0.410	0.428	0.428		

Note: The worst case data were reported.