TEST REPORT

Dt&C

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1. Report No : DRTFCC1612-0165
2. Customer
   - Name : DRTECH Corporation
   - Address : Suite No.2, 3 Floor, 29, Dunchon-daero 541beon-gil Seongnam-si, Gyeonggi-do, Republic of Korea
3. Use of Report : FCC Original Grant
4. Product Name / Model Name : Wireless Charging System / EVS WPCS
   FCC ID : RNH-EVSWPCS
5. Test Method Used : FCC Part 1.1310
6. Date of Test : 2016-09-03
7. Testing Environment : See appended test report
8. Test Result : Refer to the attached Test Result

Affirmation	Tested by Name : KwiCheol, Yeom (Signature)	Technical Manager Name : Geunki Son (Signature)

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If this report is required to confirmation of authenticity, please contact to report@dtnc.net

Test Report Version

Test Report No.	Date	Description
DRTFCC1612-0165	Dec. 22, 2016	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	Wireless Charging System
Equipment model name	EVS WPCS
Equipment add model name	NA
Equipment serial no.	Identical prototype
Frequency	110 ~ 205 kHz
Output power	Max : 15 W
Power	AC 120V 60Hz
Antenna type	Coil Antenna(single coil)

1.2 Support equipment

Equipment	Model No.	Serial No.	Manufacturer	Note
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-

Note: The above equipment was 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 loaded with the client device using the resistor as described below summary table for test modes and conditions.
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 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:

Test Mode (Charging Current)	**Load condition**	**Support Equipment**
Low mA	50.0 Ω	Client device(WPC RX Board)
Mid mA	16.0 Ω	
High mA	5.3 Ω	

▪ Limit

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

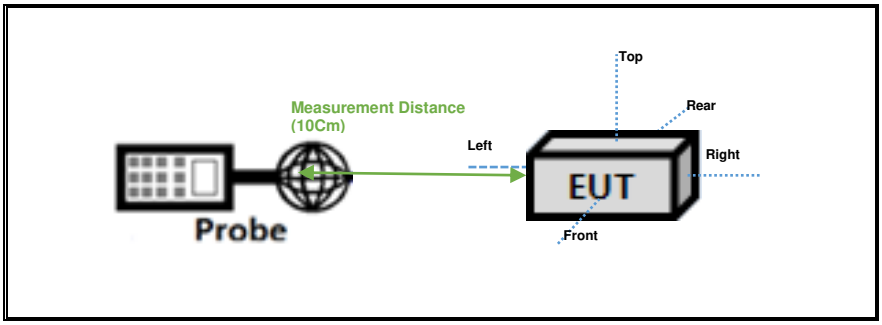
2.2 Tested environment

Temperature	:	22 ~ 23 °C
Relative humidity content	:	42 ~ 45 % R.H.
Details of power supply	:	AC 120 V 60 Hz

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: KDB 680106**

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).

▪**Measurement data:**

Test Mode	E-field(V/m)					Limit(V/m)
	Front	Rear	Left	Right	Top	
Low mA	2.280	2.520	13.890	12.860	-	614
Mid mA	2.810	2.930	18.590	16.660	-	
High mA	2.670	2.970	**19.310**	16.740	--	

Test Mode	H-field(A/m)					Limit(A/m)
	Front	Rear	Left	Right	Top	
Low mA	0.581	0.644	0.598	**0.941**	-	1.64
Mid mA	0.540	0.457	0.522	0.790	--	
High mA	0.649	0.473	0.691	0.830	-	

▪**Test equipment list**

Type	Manufacturer	Model	Cal.Date (yy/mm/dd)	Next. Cal.Date (yy/mm/dd)	S/N
EMF Meter	NARDA	ELT-400	16/07/13	18/07/13	N-0342
EMF probe	NARDA	B-Field Probe	16/07/13	18/07/13	M-0779
Broadband field meter	NARDA	NBM-550	16/08/02	18/08/02	E-1275
Broadband field probe	NARDA	EF-0391	16/08/02	18/08/02	D-0894