ELECTROMAGNETIC EMISSION COMPLIANCE REPORT FOR LOW-POWER, NON-LICENSED TRANSMITTER

Test Report No.	**: W15DR-D015**
AGR No	**: A15NA-011**
Applicant	**: IGC Co., Ltd.**
Address	**: Halla SigmaValley 6F-Room. 606, 1 gongdan-ro 212, Gumi-si, Gyeongsangbuk-do, 39376, Korea**
Manufacturer	**: IGC Co., Ltd.**
Address	**: Halla SigmaValley 6F-Room. 606, 1 gongdan-ro 212, Gumi-si, Gyeongsangbuk-do, 39376, Korea**
Type of Equipment	**: Wireless Charger Wi-Pl**
FCC ID.	**: 2AGOU-WIPL15B-A**
Model Name	**: WIPL15B-A**
Multiple Model Name	**: WIPL15B-C, WIPL15W-A**
Serial number	**: N/A**
Total page of Report	**: 9 pages (including this page)**
Date of Incoming	**: November 18, 2015**
Date of issue	**: December 18, 2015**

SUMMARY

The equipment complies with the regulation; **FCC CFR 47 PART 1.1310**

This test report only contains the result of a single test of the sample supplied for the examination.

It is not a generally valid assessment of the features of the respective products of the mass-production.

Reviewed by: Ki-Hong, Nam / Asst, Chief Engineer
ONETECH Corp.

Approved by: Sung-Ik, Han/ Managing Director
ONETECH Corp.

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EMC Testing Div. : 307-51 Daessangnyeong-ri, Chowol-eup, Gwangju-si, Gyeonggi-do 464-862 Korea (TEL: 82-31-765-8289, FAX: 82-31-766-2904)

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Revision History

Issue Report No.	Issued Date	Revisions	Effect Section
W15DR-D015	December 18, 2015	Initial Release	All

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1. VERIFICATION OF COMPLIANCE

APPLICANT : IGC Co., Ltd.

ADDRESS : Halla SigmaValley 6F-Room. 606, 1 gongdan-ro 212, Gumi-si, Gyeongsangbuk-do, 39376, Korea

CONTACT PERSON : InKyu, Kim / Chief Executive Officer

TELEPHONE NO : +82-70-8248-9198

FCC ID : 2AGOU-WIPL15B-A

MODEL NAME : WIPL15B-A

BRAND NAME : N/A

SERIAL NUMBER : N/A

DATE : December 18, 2015

EQUIPMENT CLASS	**DCD – Part 15 Low Power Transmitter Below 1 705 kHz**
KIND OF EQUIPMENT	Wireless Charger Wi-Pl
THIS REPORT CONCERNS	Original Grant
MEASUREMENT PROCEDURES	ANSI C63.10: 2013
TYPE OF EQUIPMENT TESTED	Pre-Production
KIND OF EQUIPMENT AUTHORIZATION REQUESTED	Certification
EQUIPMENT WILL BE OPERATED UNDER FCC RULES PART(S)	FCC CFR 47 PART 1.1310
MODIFICATIONS ON THE EQUIPMENT TO ACHIEVE COMPLIANCE	No
FINAL TEST WAS CONDUCTED ON	3 m, Semi Anechoic Chamber

-. The above equipment was tested by ONETECH Corp. for compliance with the requirement set forth in the FCC Rules and Regulations. This said equipment in the configuration described in this report, shows the maximum emission levels emanating from equipment are within the compliance requirements.

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2. GENERAL INFORMATION

2.1 Product Description

The IGC Co., Ltd., Model: WIPL15B-A (referred to as the EUT in this report) is an Wireless Charger Wi-Pl. Product specification information described herein was obtained from product data sheet or user's manual.

DEVICE TYPE	Wireless Charger
OPERATING FREQUENCY	110 kHz ~ 205 kHz
RATED RF OUTPUT POWER	75.90 dBμV/m
ANTENNA TYPE	Coil Antenna
MODULATION	ASK
LIST OF EACH OSC. OR CRY. FREQ.(FREQ. >= 1 MHz)	110 kHz ~ 205 kHz
RATED SUPPLY VOLTAGE	DC 5.0 V

2.2 Model Differences

The following lists consist of the added model and their differences.

Model Name	Differences	Tested
WIPL15B-A	Basic Model (Black / Stand Type)	☑
WIPL15B-C	This model is identical to basic model except for stationary type and enclosure's color. (Black / CD Slot Type)	☐
WIPL15W-A	This model is identical to basic model except for stationary type and enclosure's color. (White / Stand Type)	☐

Note: 1. Applicant consigns only basic model to test, therefore this test report just guarantees the units which have been tested.

2. The Applicant/manufacturer is responsible for the compliance of all variants.

3. EUT MODIFICATIONS

-. None

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4. RADIO FREQUENCY EXPOSURE

4.1 Environmental evaluation and exposure limit

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), except in the case of portable devices which shall be evaluated according to the provisions of FCC part 2.1093 of this chapter

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
3.0 – 30	1 842/f	4.89/f	*(900/f$^{2)}$	6
30 – 300	61.4	0.163	1.0	6
300 – 1 500			f/300	6
1 500 – 100 000			5	6
(B) Limits for General Population/Uncontrolled Exposure				
0.3 – 3.0	614	1.63	*(100)	30
3.0 – 30	824/f	2.19/f	*(180/f$^{2)}$	30
30 – 300	27.5	0.073	0.2	30
300 – 1 500			f/1 500	30
1 500 – 100 000			1.0	30

f = frequency in MHz

* = Plane wave equivalent power density

Note 1 to Table 1: Occupational/controlled limits apply in situations in which persons are exposed as a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure. Limits for occupational/controlled exposure also apply in situations when an individual is transient through a location where occupational/controlled limits apply provided he or she is made aware of the potential for exposure.

Note 2 to Table 1: General population/uncontrolled exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or can not exercise control over their exposure.

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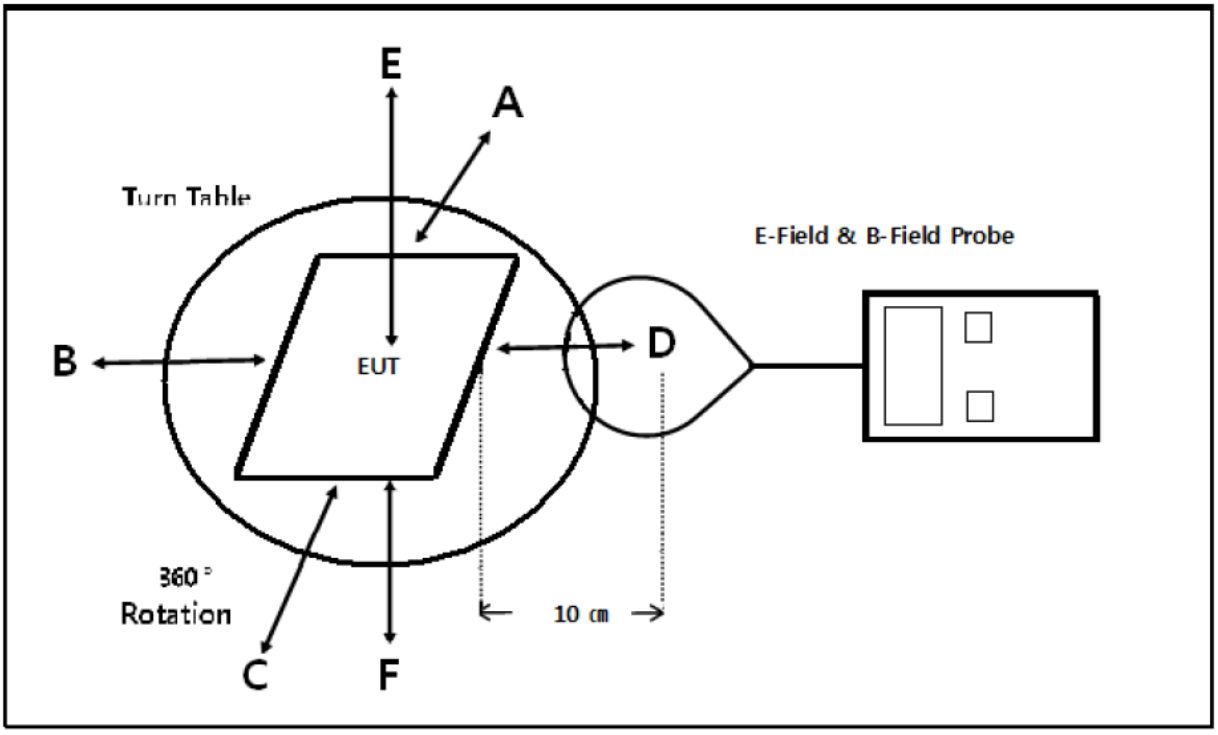
4.2 H / E field strength

4.2.1 EUT Operating condition

Mode	Charging current	Description
Charging Mode With load	1 000 mA	Using Max load
	500 mA	Using Mid load
	100 mA	Using Min load

4.2.2 EUT Operating condition



4.2.3 Measurement procedure

a) The RF exposure test was performed on 360 degree turn table in anechoic chamber.

b) The measurement probe was placed at test distance (10 cm) which is between the edge of the charger and the geometric center of probe.

c) The turn table was rotated 360 degree to search of highest strength

d) The highest emission level was recorded and compared with limit as soon as measurement of each points (A, B, C, D, E, F) were completed.

e) The EUT were measured according to the dictates of KDB 680106 D01v02.

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4.2.4 E - field strength at 10 cm from each edges the EUT

Mode	Position A [V/m]	Position B [V/m]	Position C [V/m]	Position D [V/m]	Position E [V/m]	Position F [V/m]	Limits [V/m]
Charging Mode With Max. load	0.92	0.88	1.05	1.11	1.84	1.52	614.00
Charging Mode With Mid. load	0.88	0.91	0.99	1.06	1.75	1.45	614.00
Charging Mode With Min. load	0.86	0.84	1.02	1.02	1.60	1.32	614.00

4.2.5 H - field strength at 10 cm from each edges the EUT

Mode	Position A [A/m]	Position B [A/m]	Position C [A/m]	Position D [A/m]	Position E [A/m]	Position F [A/m]	Limits [A/m]
Charging Mode With Max. load	0.31	0.33	0.35	0.34	0.42	0.33	1.63
Charging Mode With Mid. load	0.33	0.34	0.35	0.36	0.45	0.31	1.63
Charging Mode With Min. load	0.31	0.32	0.32	0.37	0.45	0.32	1.63

Tested by: Tae-Ho, Kim / Senior Engineer

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4.3 LIST OF TEST EQUIPMENT

No.	EQUIPMENTS	MFR.	MODEL	SER. NO.	LAST CAL	DUE CAL	USE
1.	Isotropic Electric Field Probe	Amplifer research	FP7003	311520	2015 .03. 11	One Year	■
3	Exposure Level Meter	Narde	ELP-400	H-0013	2015. 05. 06	One Year	■

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