RF EXPOSURE REPORT

FOR

Applicant	:	Incipio, LLC
Address	:	3347 Michelson Drive, Suite 100, Irvine CA 92612
Equipment under Test	:	Wireless Charging Pad
Model No.	:	GP-109-BLK
Trade Mark	:	GRIFFIN
FCC ID	:	2AAWX-GP109
Manufacturer	:	Incipio, LLC
Address	:	3347 Michelson Drive, Suite 100, Irvine CA 92612

Issued By: Dongguan Dongdian Testing Service Co., Ltd.

Add: No. 17, Zongbu Road 2, Songshan Lake Sci&Tech, Industry Park, Dongguan City, Guangdong Province, China, 523808

Tel: +86-0769-38826678, **E-mail:** ddt@dgddt.com, http://www.dgddt.com

REPORT

TABLE OF CONTENTS

TEST REPORT DECLARE

Applicant	**:**	Incipio, LLC
Address	**:**	3347 Michelson Drive, Suite 100, Irvine CA 92612
Equipment	**:**	Wireless Charging Pad
Model No.	**:**	GP-109-BLK
Trade Mark	**:**	GRIFFIN
Manufacturer	**:**	Incipio, LLC
Address	**:**	3347 Michelson Drive, Suite 100, Irvine CA 92612

Assess Standard Used: FCC CFR 47 part1, 1.1307(b), 1.1310; KDB680106 D01v03

We Declare:

The equipment described above is assessed by Dongguan Dongdian Testing Service Co., Ltd and in the configuration assessed the equipment complied with the standards specified above. The assessed results are contained in this report and Dongguan Dongdian Testing Service Co., Ltd is assumed of full responsibility for the accuracy and completeness of these assess.

After evaluation, our opinion is that the equipment In Accordance with above standard.

Report No:	DDT-R19062502-1E5		
Date of Receipt:	Jul. 24, 2019	**Date of Test:**	Jul. 24, 2019 ~ Aug. 15, 2019

Prepared By:

Sam Li

Sam Li/Engineer

Approved By:

DONGGUAN DONGDIAN TESTING SERVICE CO., LTD. DONG DIAN TESTING DDT APPROVED

Damon Hu

Damon Hu/EMC Manager

Note: This report applies to above tested sample only. This report shall not be reproduced in parts without written approval of Dongguan Dongdian Testing Service Co., Ltd.

Revision history

Rev.	Revisions	Issue Date	Revised By
---	Initial issue	Aug. 27, 2019	

1. General information

1.1. Description of Equipment

EUT* Name	:	Wireless Charging Pad
Model Number	:	GP-109-BLK
EUT function description	:	Please reference user manual of this device
Power supply	:	Input: DC 5V/2A from external AC Adapter Output: 5W Max
Wireless charging Operation frequency	:	110kHz-205kHz
Antenna Type	:	Inductive loop coil antenna
Sample Type	:	Series production

Note: EUT is the ab. of equipment under test.

1.2. Assistant equipment used for test

Description of Accessories	Manufacturer	Model number	Serial No.	Other
/	/	/	/	/

1.3. Assess laboratory

Dongguan Dongdian Testing Service Co., Ltd

Add: No. 17, Zongbu Road 2, Songshan Lake Sci&Tech, Industry Park, Dongguan City, Guangdong Province, China, 523808

Tel: +86-0769-38826678, E-mail: ddt@dgddt.com, http://www.dgddt.com

FCC Registration Number: 270092 Industry Canada site registration number: 10288A-1

2. Equipment used during test

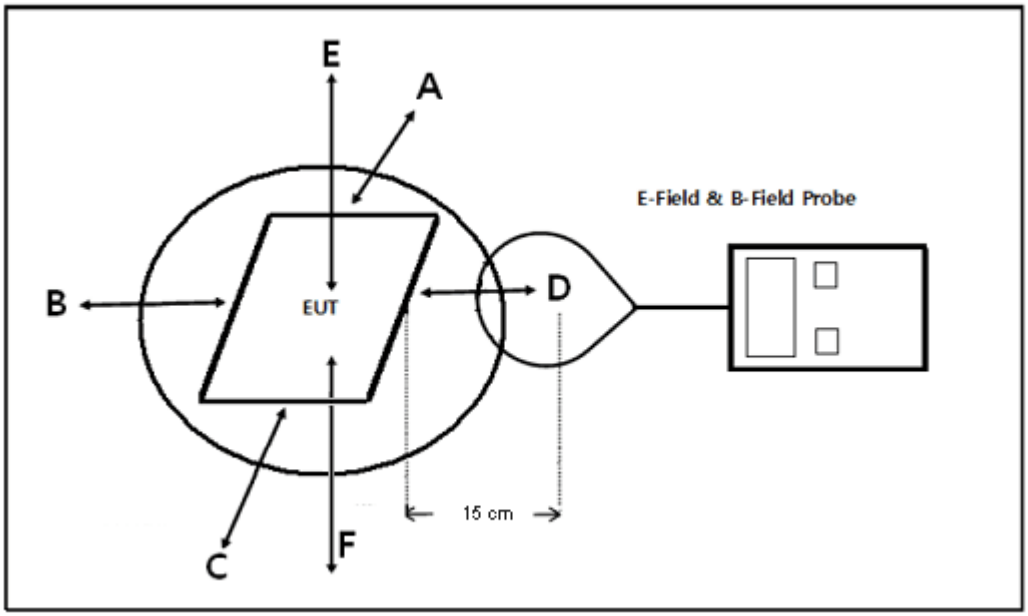
Equipment	**Manufacturer**	**Model No.**	**Serial No.**	**Last Cal.**	**Cal. Interval**
Electromagnetic Analyer	narda	ELT-400	N-0157	2018/09/17	1 Year
Magnetic field probe	narda	ELT probe 100cm^2	M0157	2018/09/17	1 Year

3. Method of measurement

3.1. Applicable Standard

According to §1.1307(b)(1), systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.
According to §1.1310 and §2.1091 RF exposure is calculated.
According KDB680106 D01v03: RF Exposure Wireless Charging Apps v03.

3.2. Block diagram of test setup



Note: Due to installation limitations no tests from the underside of the charging device (Test Position F) are required.

3.3. Test Procedure

a) The RF exposure test was performed in shielded chamber.

b) The measurement probe was placed at test distance (15cm) which is between the edge of the charger and the geometric centre of probe.

c) The measurement probe used 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) were completed.

e) The EUT were measured according to the dictates of KDB 680106D01v03.

3.4. Equipment Approval Considerations:

The EUT does comply with section 5 b) of KDB680106 D01 RF Exposure Wireless Charging App v03
(1) Power transfer frequency is less than 1MHz.
Yes; the device operates in the frequency range from 110kHz~205kHz

(2) Output power from each primary coil is less than or equal to 15 watts
Yes; the maximum output power of the primary coil is 5W.

(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.
Yes; the transfer system includes only single primary and secondary coils.

(4) Client device is placed directly in contact with the transmitter.
Yes.

(5) Mobile exposure conditions only (mobile exposure conditions are not covered by this exclusion).
Yes; the EUT is for mobile exposure conditions only.

f) The aggregate H-field strengths at 15 cm surrounding the device and 20cm above the top surface from all simultaneous transmitting coils are demonstrated to be less than 50% of the MPE limit.
Yes; the EUT H-field strengths levels are less than 50% of MPE limit.

TABLE 1—LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm^2)	Averaging time (minutes)
(A) Limits for Occupational/Controlled Exposure				
0.3-3.0	614	1.63	*100	6
3.0-30	1842/f	4.89/f	*900/f2	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				
0.3-1.34	614	1.63	*100	30
1.34-30	824/f	2.19/f	*180/f2	30
30-300	27.5	0.073	0.2	30
300-1,500			f/1500	30
1,500-100,000			1.0	30

f = frequency in MHz * = Plane-wave equivalent power density

3.5. E and H Field Strength

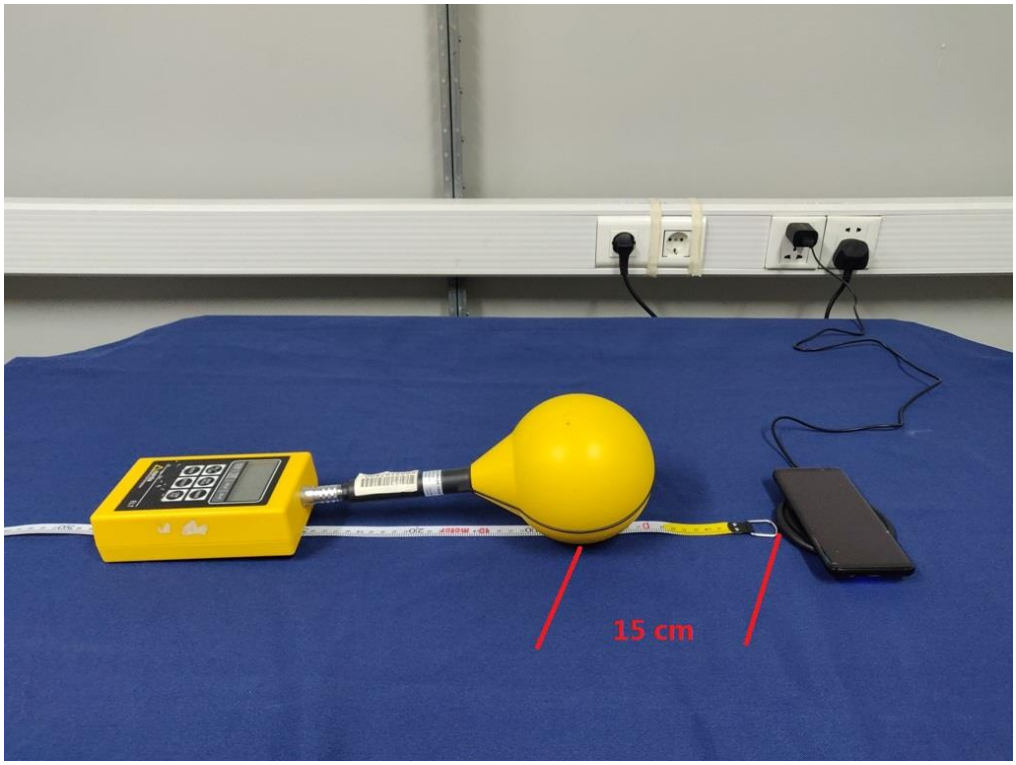
Test mode for wireless charger:
Dummy load: Full Load, Zero charge and intermediate charge mode
E-Filed Strength at 15 cm from the edges surrounding the EUT (V/m)

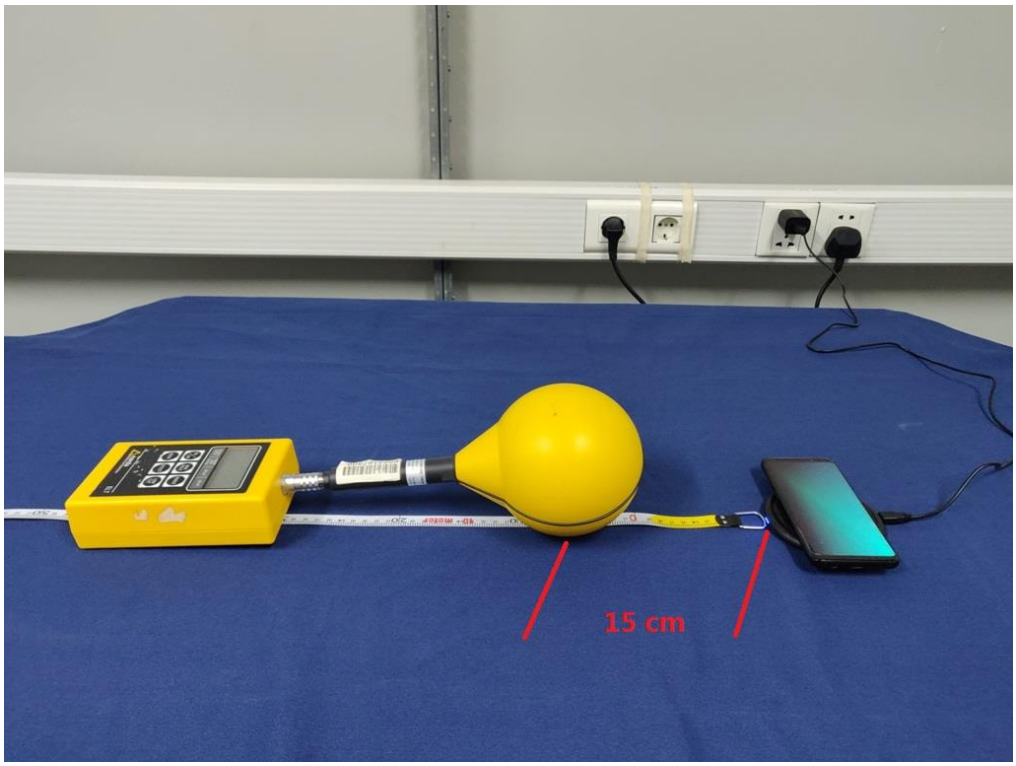
Test Position	Probe Measure Result(V/m)			Limits Test (V/m)
	Full Load	Zero charge	intermediate charge	
A	0.75	1.82	1.23	614
B	0.80	1.90	1.30	614
C	0.72	1.80	1.21	614
D	0.70	1.78	1.21	614
E	1.25	2.12	1.79	614

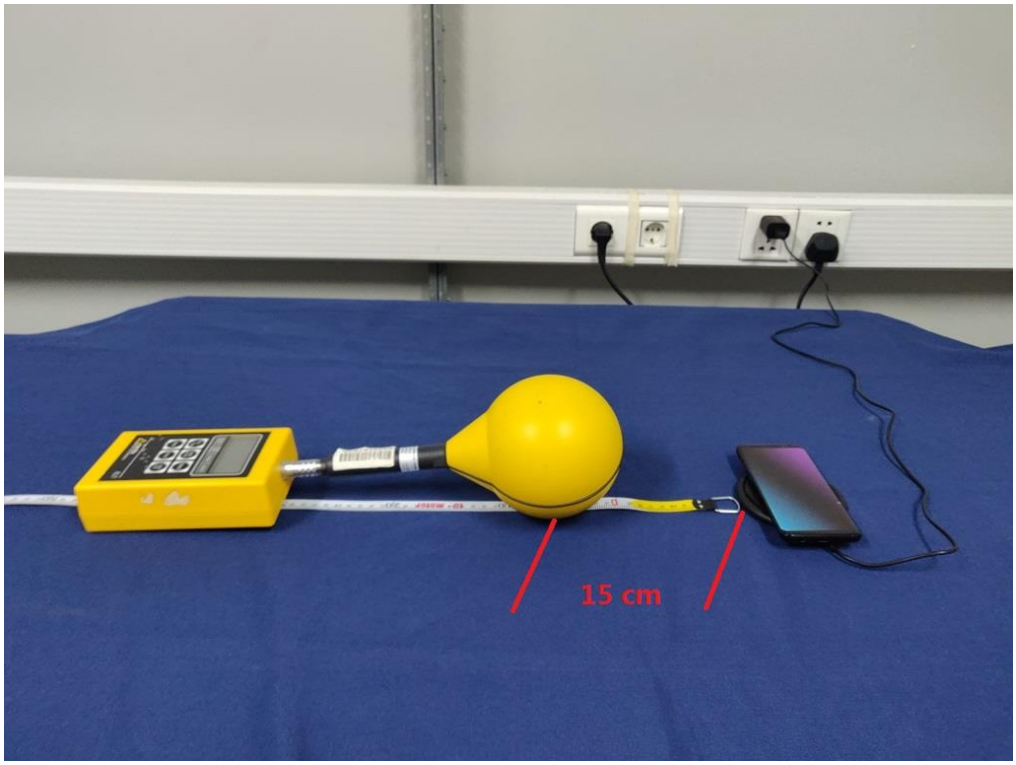
H-Filed Strength at 15 cm from the edges surrounding the EUT and 20 cm above the top surface of the EUT (A/m)

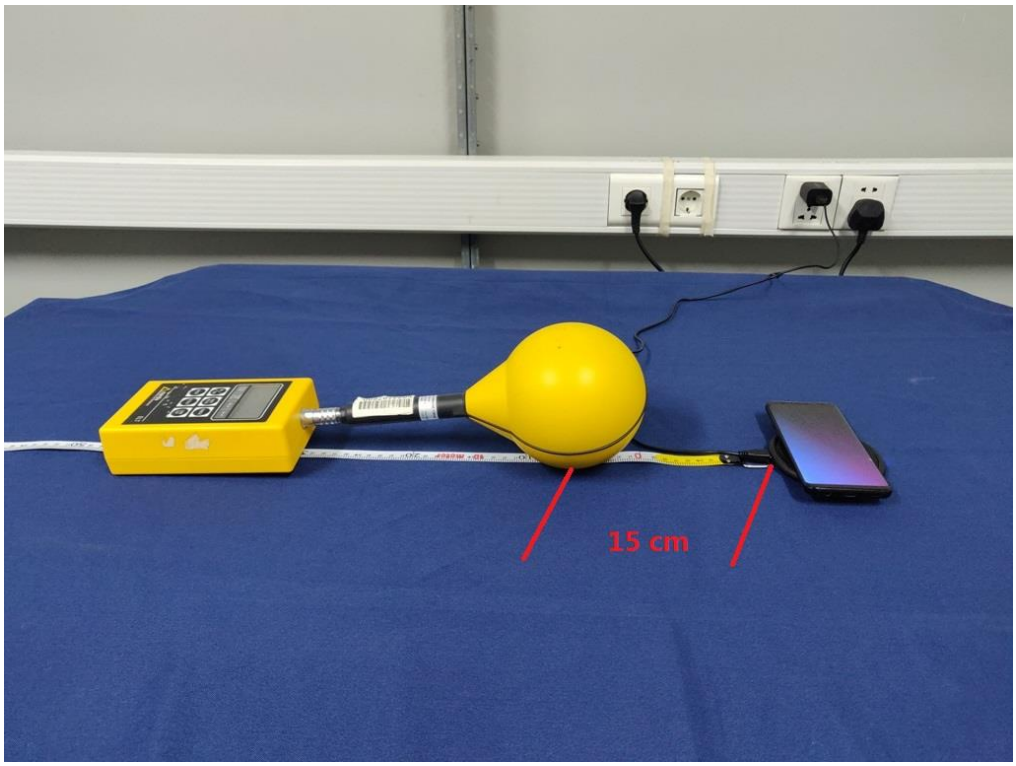
Test Position	Probe Measure Result(A/m)			Limits Test (A/m)
	Full Load	Zero charge	intermediate charge	
A	0.162	0.205	0.185	1.63
B	0.164	0.208	0.186	1.63
C	0.163	0.206	0.185	1.63
D	0.166	0.212	0.189	1.63
E	0.171	0.219	0.195	1.63

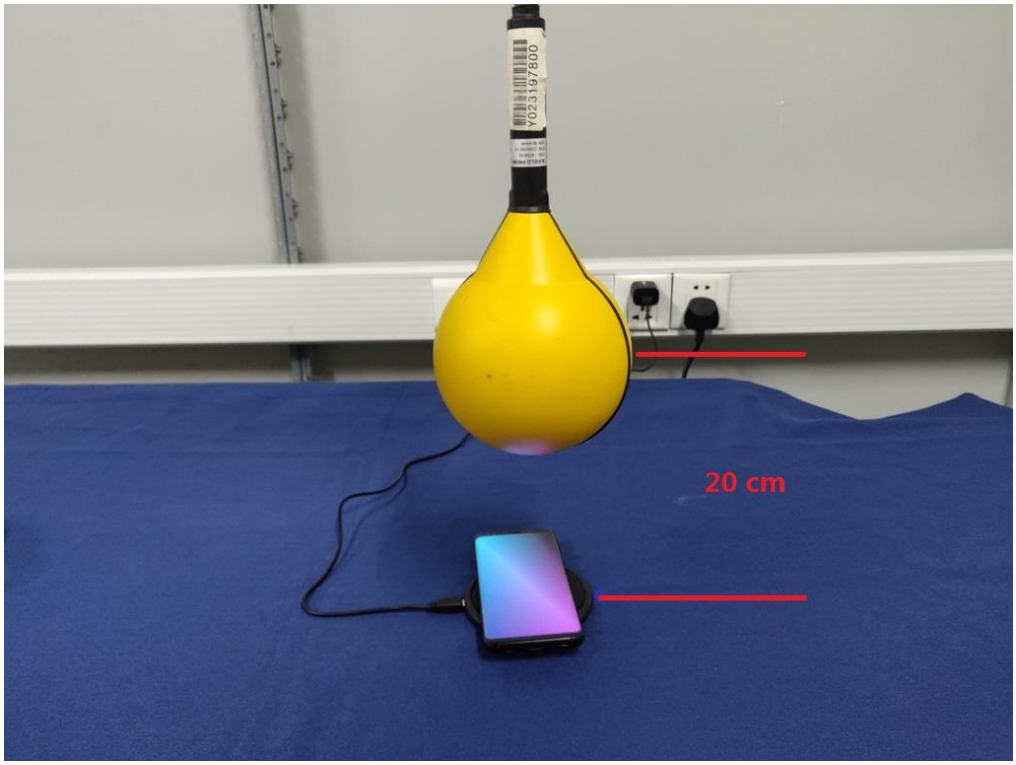
4. Test Setup Photo






15 cm


15 cm



END OF REPORT