

# **RF EXPOSURE REPORT** For FCC ID: 2AO5E-GTX1

Product Name:	Wireless Charger
Trademark:	N/A
Model Number:	G-TX1 G-TX2
Prepared For :	Grandshine Technology Co., Ltd
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Test Date:	Jan. 25 - Feb. 01, 2018
Date of Report :	Feb. 01, 2018
Report No.:	BCTC-FY180100338-1E



## **TEST RESULT CERTIFICATION**

	Grandshine Technology Co., Ltd Floor 5, Block 6, Concept Industrial Park, Jinlong Zhonghuan Road, Shenzhen, China
Manufacture's Name:	Grandshine Technology Co., Ltd
Address:	Floor 5, Block 6, Concept Industrial Park, Jinlong Zhonghuan Road, Shenzhen, China
Product description	
Product name	Wireless Charger
Trademark:	N/A
Model and/or type reference :	G-TX1
Serial Model :	G-TX2
Power Supply	Input: DC5V2A /9V1.67A Out Output: 10W-Max
Model Difference :	All the model are the same circuit and RF module, except
	model names.

Standards..... FCC CFR 47 part1, 1.1307(b), 1.1310

This device described above has been tested by BCTC, and the test results show that the equipment under And it is applicable only to the tested sample identified in the report. This report shall not be reproduced except in full, without the written approval of BCTC, this document may be altered or revised by BCTC, personal only, and shall be noted in the revision of the document.

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# 1. GENERAL INFORMATION

1.1. Independent Operation Mode

The basic operation mode is:

1.1.1. Charging

1.2. Test Supporting System

Adapter Description : Adapter Model No. : BCTC-001 Power Input : AC 100-240V~50/60Hz 0.2A Output : 5V ---- 3A, 9V ---- 2A USB Line : Unshielded, Detachable 1.0m

Mobile phone Model No. : OPPO R9 Battery model: BLP609



# **2.LIST OF TEST AND MEASUREMENT INSTRUMENTS**

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
Exposure Level Tester	Narda	ELT-400	N-0231	Aug. 08,17	Aug. 07,19
Magnetic field probe 100cm2	Narda	B-Field Probe 100cm2	M0675	Aug. 08,17	Aug. 07,19
843 Chamber	ETS	843	84301	Aug. 27,17	Aug. 26,19

2.1. For conducted emission at the mains terminals test



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# 3. METHOD OF MEASUREMENT

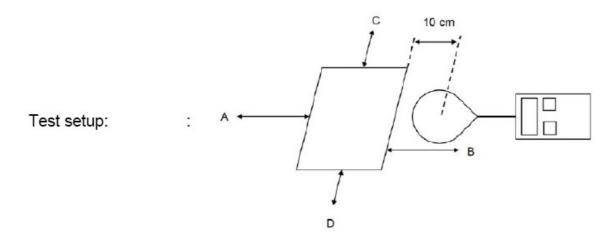
3. 1.Applicable Standard

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 §2.1093 RF exposure is calculated. According KDB680106 D01v02: RF Exposure Wireless Charging Apps v02.

# 4. TEST RESULT

### 4.1. Conducted Emission at the Mains Terminals Test

### Test Setup



#### **Test 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 (10cm) which is between the edge of the charger and the geometric centre of probe.

c) The turn table was rotated 360d 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) were completed.

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



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# 4.2. Equipment Approval Considerations:

The EUT does comply with item 5.2 of KDB 680106 D01v02

a) Power transfer frequency is less than 1MHz

Yes; the device operate in the frequency range from 112 KHz to 205 KHz

b)Output power from each primary coil is less than 5 watts

No; the maximum output power of the primary coil is 10W

c) The transfer system includes only single primary and secondary coils. This includes charging systems that may have multiple primary coils and clients that able to detect and allow coupling onlybetween individual pair of coils.

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

d) Client device is inserted in or placed directly in contact with the transmitter.

Yes; Client device is placed directly in contact with the transmitter.

e) The maximum coupling surface area of the transmit (charging) device:

Yes; The EUT coupling surface area was 49cm2(Dimensions: 7.0cm x7.0cm)L x W

f) Aggregate leakage fields at 10cm surrounding the device from all simultaneous transmitting coilsare demonstrated to be less than 30% of the MPE limit.

Yes; The EUT field strength levels are 30% x MPE limit.

#### 4.3. E and H field Strength

1% battery level

Frequency	Test	Test	Test	Test	Test	Test	Limits
Range	Position	Position	Position	Position	Position	Position	Test
(MHz)	А	В	С	D	E	F	(V/m)
0.112-0.205	0.96	1.15	1.32	0.98	1.32	0.96	614

#### H-Filed Strength at 10 cm from the edges surrounding the EUT (A/m)

Frequency	Test	Test	Test	Test	Test	Test	Limits
Range	Position	Position	Position	Position	Position	Position	Test
(MHz)	А	В	С	D	E	F	(A/m)
0.112-0.205	0.13	0.11	0.16	0.12	0.15	0.18	1.63



#### 50% battery level

#### E-Filed Strength at 10 cm from the edges surrounding the EUT (V/m)

Frequency	Test	Test	Test	Test	Test	Test	Limits
Range	Position	Position	Position	Position	Position	Position	Test
(MHz)	А	В	С	D	E	F	(V/m)
0.112-0.205	0.93	1.35	1.48	0.79	1.24	0.78	614

#### H-Filed Strength at 10 cm from the edges surrounding the EUT (A/m)

Frequency	Test	Test	Test	Test	Test	Test	Limits
Range	Position	Position	Position	Position	Position	Position	Test
(MHz)	А	В	С	D	Е	F	(A/m)
0.112-0.205	0.15	0.17	0.20	0.18	0.19	0.13	1.63

99% battery level

#### E-Filed Strength at 10 cm from the edges surrounding the EUT (V/m)

Frequency	Test	Test	Test	Test	Test	Test	Limits
Range	Position	Position	Position	Position	Position	Position	Test
(MHz)	А	В	С	D	Е	F	(V/m)
0.112-0.205	0.98	1.31	1.39	0.82	1.45	0.84	614

#### H-Filed Strength at 10 cm from the edges surrounding the EUT (A/m)

Frequency	Test	Test	Test	Test	Test	Test	Limits
Range	Position	Position	Position	Position	Position	Position	Test
(MHz)	А	В	С	D	Е	F	(A/m)
0.112-0.205	0.12	0.14	0.11	0.13	0.17	0.15	1.63



5. Photographs of test set-up













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