

REPORT

# **RF EXPOSURE REPORT**

# FOR

Applicant	:	Kintec Digital Co., Ltd
Address	:	8F, Jinye Building , NO.306 , ChangQing South Road, GuangDong, China
Equipment	:	Wireless Charger
Model No ONG	<b>]: </b>	KQI-S12, KQI-S12S, KQI-SXX, BKQI-S12-HORN, HT-WG12, EA52
Trade Mark	:	KINTEC
FCC ID	:	PXY-KQI-S12
Manufacturer	:	Kintec Digital Co., Ltd
Address	:	8F, Jinye Building , NO.306 , ChangQing South Road, GuangDong, China

# 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

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# **TEST REPORT DECLARE**

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

#### 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-R17120604-1E1					
Date of Test:	Dec. 06, 2017~Dec. 25, 2017	Date of Report:	Dec. 25, 2017			

**Prepared By:** 

Som Li

Sam Li/Engineer



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.

# 1. General information

## 1.1. Description of Equipment

	1	
EUT* Name	:	Wireless Charger
Model Number	:	KQI-S12, KQI-S12S, KQI-SXX, BKQI-S12-HORN, HT-WG12, EA52
Difference of model number	•	All models are identical, except the model number, all tests are performed on model KQI-S12.
EUT function description	:	Please reference user manual of this device
Power supply	:	DC 5V or DC 9V
Wireless charging Operation frequency	•	120kHz-205kHz
Antenna Type	:	Inductive loop coil antenna
Sample Type	:	Series production
Note: EUT is the about of any	•	

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

### 1.2. Assistant equipment used for test

Assistant equipment	Manufacturer	Model number	Serial No.	Other
Simulation load	/	/	/	/
USB cable	/	/	/	0.5m
AC adapter	HUAWEI	HW-050200C3W	/	Input: AC 100-240V 50/60Hz 0.5A MAX Output: DC 5.0V 2A

## 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: +86-0769-89201699, 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	2017/09/17	1 Year
Electric Magnetic field probe	narda	ELT probe 100cm <sup>2</sup>	M0157	2017/09/17	1 Year

# 3. Method of measurement

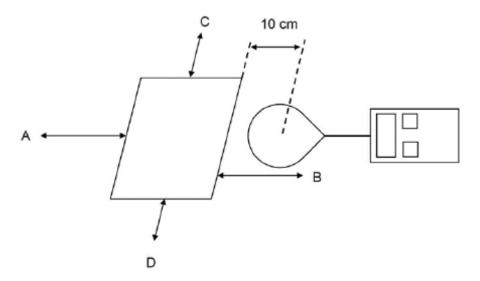
### **3.1.** Applicable Standard

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 §2.1093 RF exposure is calculated.

According KDB680106 D01v02: RF Exposure Wireless Charging Apps v02.

#### 3.2. Block diagram of test setup



#### **3.3.** 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.

### **3.4. 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 120kHz~205kHz

b) Output power from each primary coil is less than 5 watts Yes; the maximum output power of the primary coil is 5W.

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 only between 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: No; The EUT coupling surface area <60cm<sup>2</sup>

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

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

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm <sup>2</sup> )	Averaging time (minutes)						
	(A) Limits for Occupational/Controlled Exposure									
0.3-3.0	614	1.63	*100	6						
3.0-30	1842/	4.89/1	*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 Gene	ral Population/Uncontrolled	Exposure	•						
0.3-1.34	614	1.63	*100	30						
1.34-30	824/	2.19/1	*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						

TABLE 1-LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

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 mode

Phone load: Zero charge, intermediate charge and full charge mode

All modes have been tested, Full Load mode is worse case

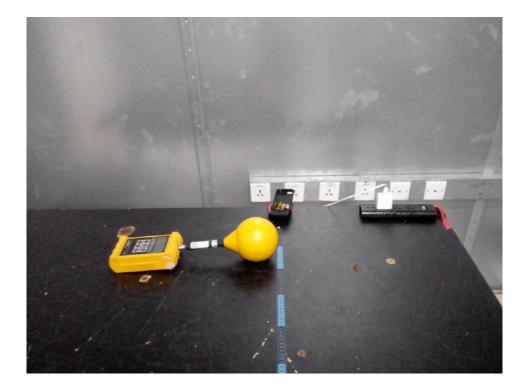
E-Filed Strength at 10 cm from the edges surrounding the EUT (V/m)

		Limits			
Test Position	Full Load	Zero charge	intermediate charge	full charge	Test (V/m)
А	1.16	1.04	1.08	1.13	614
В	1.12	1.02	1.07	1.12	614
С	1.02	0.95	0.98	1.00	614
D	0.98	0.92	0.96	0.99	614
Тор	1.30	1.14	1.18	1.28	614
Bottom	1.18	1.07	1.10	1.14	614

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

		Limits			
Test Position	Full Load	Zero charge	intermediate charge	full charge	Test (A/m)
А	0.200	0.096	0.144	0.184	1.63
В	0.200	0.104	0.152	0.176	1.63
С	0.184	0.088	0.136	0.168	1.63
D	0.184	0.096	0.144	0.176	1.63
Тор	0.208	0.104	0.160	0.208	1.63
Bottom	0.192	0.096	0.144	0.184	1.63

# 4. Test Setup Photo



**END OF REPORT**