





# **MPE TEST REPORT**

Report No: STS1703256F02

Issued for

ZHONGSHAN KINGRONG ELECTRONICS CO.,LTD

32, CuiHuJu, YangGuangMeiJia, No.138 MinAn Rd South, XiaoLan, ZhongShan City, GuangDong, 528415 China

Product Name:	Quick wireless charger
Brand Name:	KRECO
Model Name:	KRE-Q01
Series Model:	KRE-Q02,KRE-Q03,KRE-Q04, KRE-Q05,KRE-Q06,KRE-Q07, KRE-Q08,KRE-Q09,KRE-Q10, KRE-Q11,KRE-Q12
FCC ID:	2ALPOKRE-Q01
Test Standard:	FCC CFR 47 part 1, 1.1310

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Report No.: STS1703256F02

### **TEST RESULT CERTIFICATION**

Applicant's name: ZHONGSHAN KINGRONG ELECTRONICS CO.,LTD

Address: 32, CuiHuJu, YangGuangMeiJia, No.138 MinAn Rd South,

XiaoLan, ZhongShan City, GuangDong, 528415 China

Manufacture's Name : ZHONGSHAN KINGRONG ELECTRONICS CO.,LTD

Address: 32, CuiHuJu, YangGuangMeiJia, No.138 MinAn Rd South,

XiaoLan, ZhongShan City, GuangDong, 528415 China

**Product description** 

Product name : Quick wireless charger

Brand name : KRECO

Model and/or type reference: KRE-Q01

Standards : FCC CFR 47 part 1, 1.1310

Test Procedure: KDB 680106 D01 RF Exposure Wireless Charging Apps v02

This device described above has been tested by STS, the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.

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Date of performance of tests: 01 Apr. 2017 ~15 May. 2017

Date of Issue: 18 May. 2017

Test Result : Pass

Testing Engineer :

(Leo li)

Technical Manager :

Authorized Signatory:

(Tony liu)

(Vita Li)







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## **Revision History**

Rev.	Issue Date	Report NO.	Effect Page	Contents
00	18 May. 2017	STS1703256F01	ALL	Initial Issue





#### 1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards: FCC KDB 680106 D01 RF Exposure Wireless Charging Apps v02

FCC CFR 47						
Standard Section	Test Item	Judgment	Remark			
FCC CFR 47 part1,	Electric Field Strength (E) (V/m)	PASS				
1.1310 KDB680106 D01v02 (3)(3)	Magnetic Field Strength (H) (A/m)	PASS				

### 1.1 TEST FACTORY

BZT Testing Technology Co., Ltd.

Add.: Buliding 17, Xinghua Road Xingwei industrial Park Fuyong,

Baoan District, Shenzhen, Guangdong, China

FCC Registration No.: 701733

### 1.2 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement  $\mathbf{y} \pm \mathbf{U}$  where expended uncertainty  $\mathbf{U}$  is based on a standard uncertainty multiplied by a coverage factor of  $\mathbf{k=2}$  providing a level of confidence of approximately 95 %  $^{\circ}$ 

No.	Item	Uncertainty
1	All emissions,radiated(<30M)(9KHz-30MHz)	±2.45dB
2	Temperature	±0.5°C
3	Humidity	±2%



### 1.3 GENERAL DESCRIPTION OF EUT

Equipment	Quick wireless charger
Trade Name	KRECO KRECO
Model Name	KRE-Q01
	KRE-Q02,KRE-Q03,KRE-Q04,
Series Model	KRE-Q05,KRE-Q06,KRE-Q07,
Series Model	KRE-Q08,KRE-Q09,KRE-Q10,
	KRE-Q11,KRE-Q12
Model Difference	Only different in model name
Equipemnt Category	Non-ISM frequency
Operating frequency	111-205KHz
Modulation Type	GFSK
Power Adapter	Input: DC 5V, 2A Output: DC5V, 1A
Hardware version number	N/A
Software version number	N/A

### Note:

1. For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.

2.

Channel List							
Channel	Frequency (KHz)	Channel	Frequency (KHz)	Channel	Frequency (KHz)		
01	111	48	158	95	205		

3. Table for Filed Antenna

Ant	Brand	Model Name	Antenna Type	Connector	NOTE
1	KRECO	KRE-Q01	Coil	NA	

The EUT antenna is Coil Antenna. No antenna other than that furnished by the responsible party shall be used with the device.





### 1.4 EQUIPMENTS LIST FOR ALL TEST ITEMS

Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until
E-Field Probe	CHROMA	MFM 2000	CR25G41Y	2016.10.23	2017.10.22
H-Field Probe	CHROMA	MFM 2000	CR25G41Y	2016.10.23	2017.10.22





### 2. MAXIMUM PERMISSIBLE EXPOSURE

### 2.1 MAXIMUM PERMISSIBLE EXPOSURE

Limit of Maximum Permissible Exposure

	Limits for Occupational / Controlled Exposure						
Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/ cm²)	Averaging Time  E ², H ² or S (minutes)			
0.3-3.0	614	1.63	(100)*	6			
3.0-30	1842 / f	4.89 / f	(900 / f)*	6			
30-300	61.4	0.163	1.0	6			
300-1500			F/300	6			
1500-100,000			5	6			

	Limits for General Population / Uncontrolled Exposure						
Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/ cm²)	Averaging Time  E ², H ² or S (minutes)			
0.3-1.34	614	1.63	(100)*	30			
1.34-30	824/f	2.19/f	(180 / f)*	30			
30-300	27.5	0.073	0.2	30			
300-1500			F/1500	30			
1500-100,000			1	30			

Note 1: f = frequency in MHz; \*Plane-wave equivalent power density

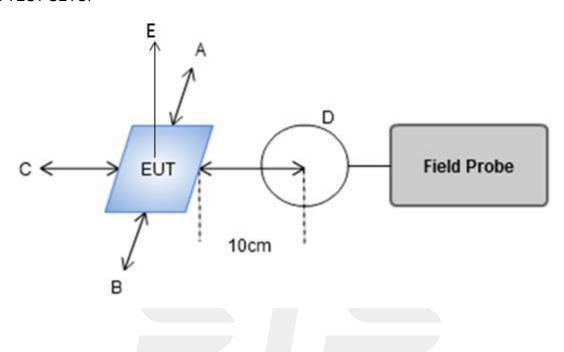
Note 2: For the applicable limit, see FCC 1.1310, 680106 D01 RF Exposure Wireless Charging Apps v02 Note 3: Emissions between 100 kHz to 300 kHz should be assessed versus the limits at 300 kHz in Table 1 of Section 1.1310: 614 V/m and 1.63 A/m. A KDB inquiry is required to determine the applicable exposure limits below 100 kHz.



#### 2.2 TEST PROCEDURE

a. For devices designed for typical desktop applications, such a wireless charging pads, RF exposure evaluation should be conducted assuming a user separation distance of 10 cm. E and H field strength measurements or numerical modeling may be used to demonstrate compliance. Measurements should be made from all sides and the top of the primary/client pair, with the 10 cm measured from the center of the probe(s) to the edge of the device.

#### 2.3 TEST SETUP





### 2.4 RESULT OF MAXIMUM PERMISSIBLE EXPOSURE

Maximum Permissible Exposure						
Charging	Separation	Probe from EUT Side	E-field (V/m)	H-field (A/m)		
Full load	10cm	А	1.53	0.363		
Full load	10cm	В	1.59	0.378		
Full load	10cm	С	1.72	0.350		
Full load	10cm	D	1.76	0.349		
Full load	10cm	E	7.52	0.374		
Limit			614	1.63		
	Margin	Limit (%)	1.22%	23.19%		

Maximum Permissible Exposure				
Charging	Separation	Probe from EUT Side	E-field (V/m)	H-field (A/m)
no load	10cm	A	1.03	0.321
no load	10cm	В	1.01	0.330
no load	10cm	С	1.15	0.317
no load	10cm	D	1.39	0.320
no load	10cm	E	5.78	0.321
Limit			614	1.63
Margin Limit (%)			0.94%	20.25%



# **MPE SETUP PHOTO**



\* \* \* \* \* END OF THE REPORT \* \* \* \* \*