# RF EXPOSURE REPORT

for

Borqs BeiJing Ltd.

Bennu wireless charging

Model Number: XD6

FCC ID: 2ABDK-XD6

Prepared for : Borqs BeiJing Ltd.

Address : Tower A, Building B23, Universal Business Park, No. 10

Jiuxianqiao Road, Chaoyang District Beijing, 100015 China

Prepared by : Keyway Testing Technology Co., Ltd.

Address : Baishun Industrial Zone, Zhangmutou Town,

Dongguan, Guangdong, China

Tel: 86-769-8718 2258 Fax: 86-769-8718 1058

Report No. : 15KWE042434F Date of Test : Apr. 2~3, 2015 Date of Report : Apr. 7, 2015

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## Keyway Testing Technology Co., Ltd.

**Applicant:** Borgs BeiJing Ltd.

**Address:** Tower A, Building B23, Universal Business Park, No. 10 Jiuxiangiao

Road, Chaoyang District Beijing, 100015 China

Manufacturer: ShenZhen VLG Wireless Technology CO., LTD

Address: 3rd floor, 1st Building, 1st Park of Taohuayuan Hi-tech and Innovation

Park, Tiegang, Xixiang, Bao'an, Shenzhen, China 518102

**E.U.T:** Bennu wireless charging

Model Number: XD6

Trade Name: ----- Serial No.: -----

Date of Receipt: Apr. 2, 2015 Date of Test: Apr. 2~3, 2015

Test Specification: FCC CFR 47 part1, 1.1307(b), 1.1310

**Test Result:** The equipment under test was found to be compliance with the

requirements of the standards applied.

Issue Date: Apr. 7, 2015

Tested by: Reviewed by: Approved by:

Jack Bu / Engineer

Andy Gao / Supervisor

And Jaw

Jade Yang / Supervisor

Other Aspects:

None.

Abbreviations: OK/P=passed fail/F=failed n.a/N=not applicable E.U.T=equipment under tested

This test report is based on a single evaluation of one sample of above mentioned products. It is not permitted to be duplicated in extracts without written approval of Keyway Testing Technology Co., Ltd.

## 1. GENERAL PRODUCT INFORMATION

#### 1.1. Product Function

Refer to Technical Construction Form and User Manual.

#### 1.2. Description of Device (EUT)

Description : Bennu wireless charging

Model No. : XD6

Power Input : DC 5.05V/ 900mA(Max)

Operation frequency : 110~200KHz

Antenna Type: : Inductive loop coil antenna

## 1.3. Independent Operation Mode

The basic operation mode is:

1.3.1. Charging

#### 1.4. Difference between Model Numbers

None.

## 1.5. Test Supporting System

Adapter

Description : Switching Adapter Model No. : ASUC41a-050120

Power Input : AC 100-240V~50/60Hz 0.2A

Output : DC 5.05V/ 900mA9

USB Line : Unshielded, Detachable 3m

Mobile phone

Applicant : Borqs BeiJing Ltd.

Description : 6" Tablet Remote

Model No. : XR6

## 2. TEST SITES

#### 2.1. Test Facilities

Lab Qualifications: 944 Shielded Room built by ETS-Lindgren, USA

Date of completion: March 28, 2011

966 Chamber built by ETS-Lindgren, USA

Date of completion: March 28, 2011

Certificated by TUV Rheinland, Germany.

Registration No.: UA 50207153 Date of registration: July 13, 2011

Certificated by UL, USA Registration No.: 100567237

Date of registration: September 5, 2012

Certificated by Intertek

Registration No.: 2011-RTL-L1-31 Date of registration: October 11, 2011

Certificated by Industry Canada

Registration No.: 9868A

Date of registration: December 8, 2011

Certificated by FCC, USA Registration No.: 370994

Date of registration: February 21, 2012

Certificated by CNAS China Registration No.: CNAS L5783 Date of registration: August 8, 2012

Name of Firm : Keyway Testing Technology Co., Ltd.

Site Location : Baishun Industrial Zone, Zhangmutou Town,

Dongguan, Guangdong, China

## 2.2. List of Test and Measurement Instruments

## 2.2.1. For conducted emission at the mains terminals test

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
Exposure Level Tester	Narda	ELT-400	N-0231	Apr. 27,14	Apr. 27,15
Magnetic field probe 100cm <sup>2</sup>	Narda	ELT probe 100cm <sup>2</sup>	M0675	Apr. 27,14	Apr. 27,15
944 Chamber	ETS	944	94401	Apr. 27,14	Apr. 27,15

#### 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.

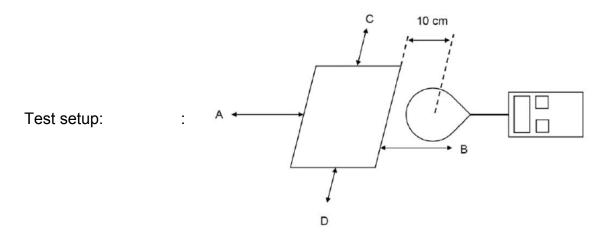
According to §1.1310 and §2.1093 RF exposure is calculated.

According KDB680106 D01v02: RF Exposure Wireless Charging Apps v02.

#### 4. TEST RESULT

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

#### **Test Setup**



- 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.

Test Procedure:

- 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.

### 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 110 KHz to 200 KHz

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

Yes; the maximum output power of the primary coil is 4.545W<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:

Yes; The EUT coupling surface area was 82.3 cm<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.

## 4.3. E and H field Strength

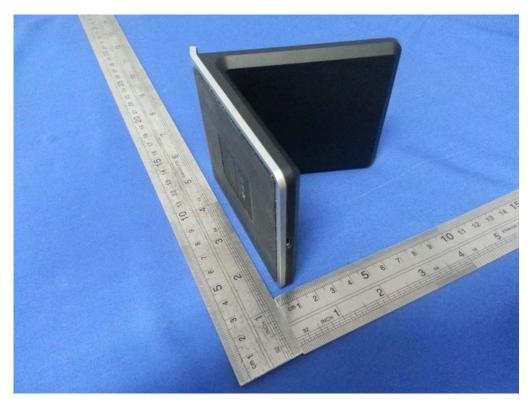
Fraguency	E-Filed Strength at 10 cm from the edges surrounding the EUT (V/m)						
Frequency Range (MHz)	Test Position A	Test Position B	Test Position C	Test Position D	Test Position E	Test Position F	Limits Test (V/m)
0.110-0.200	1.03	1.95	0.61	0.78	1.24	1.38	614

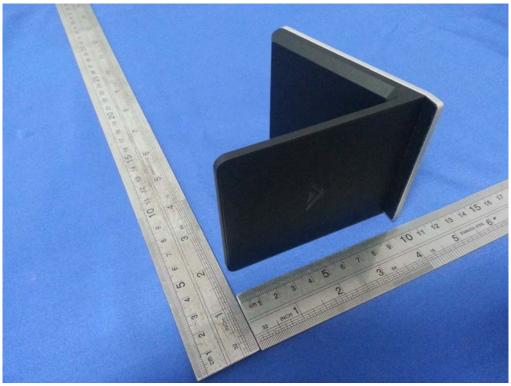
Eroguonov	E-Filed Strength at 10 cm from the edges surrounding the EUT (A/m)						Limito
Frequency Range (MHz)	Test Position A	Test Position B	Test Position C	Test Position D	Test Position E	Test Position F	Limits Test (V/m)
0.110-0.200	0.37	0.29	0.19	0.27	0.34	0.31	1.63

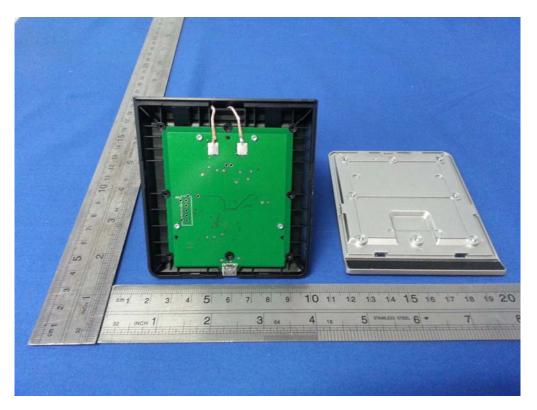
## 5. PHOTOGRAPHS OF TEST SET-UP

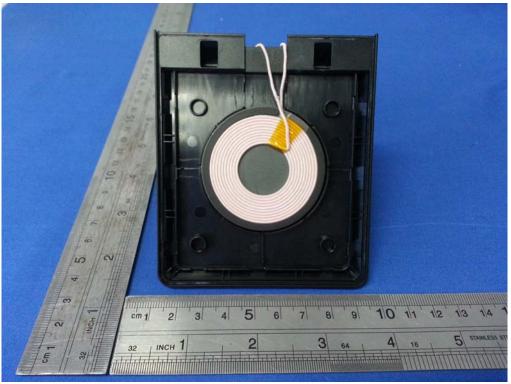


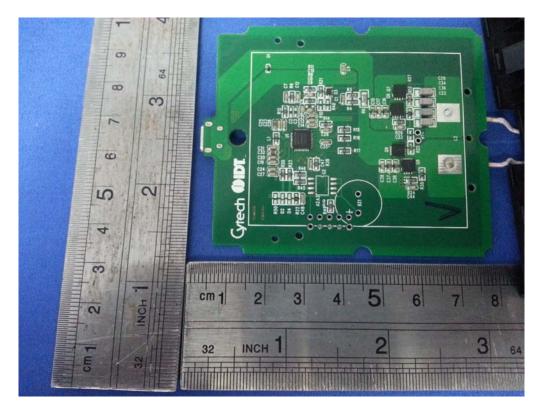
## 6. PHOTOGRAPHS OF THE EUT

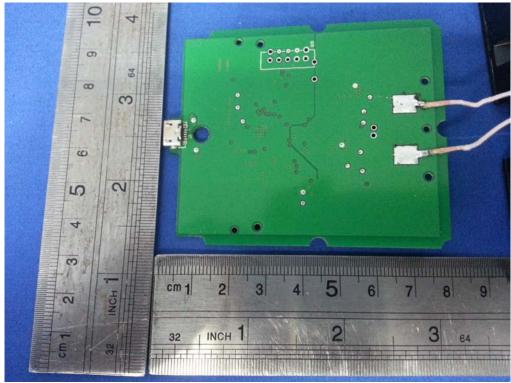












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