





# **MPE TEST REPORT**

Report No:STS1808090W03

Issued for

SHENZHEN BAIJUNDA ELECTRONIC CO.,LTD

2nd and 5F Bldg C, KeShangMei Ind Park ChongQing Rd, FuYong Town,Five,Bao An dist ShenZhen China

Product Name:	Car Mounat Wireless Charger
Brand Name:	N/A
Model Name:	WD-282-010Q
Series Model:	WD-282-050Q
FCC ID:	2AO8CWD-282-010Q
Test Standard:	FCC CFR 47 part 1, 1.1310

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APPROVAL

Shenzhen STS Test Services Co., Ltd.

1/F., Building B, Zhuoke Science Park, No.190, Chongqing Road,
Fuyong Street, Bao'an District, Shenzhen, Guangdong, China
TEL: +86-755 3688 6288 FAX: +86-755 3688 6277 E-mail:sts@stsapp.com



### **TEST RESULT CERTIFICATION**

•	LOT KLOOLI CLIKTII IOATION		
Applicant's name:	SHENZHEN BAIJUNDA ELECTRONIC CO.,LTD		
Address:	2nd and 5F Bldg C, KeShangMei Ind Park ChongQing Rd, FuYong Town,Five,Bao An dist ShenZhen China		
Manufacture's Name:	SHENZHEN BAIJUNDA ELECTRONIC CO.,LTD		
Address:	2nd and 5F Bldg C, KeShangMei Ind Park ChongQing Rd, FuYong Town,Five,Bao An dist ShenZhen China		
Product description			
Product NameBrand Name	Car Mounat Wireless Charger N/A		
Model Name:	WD-282-010Q		
Series Model:	WD-282-050Q		
under test (EUT) is in compliance v sample identified in the report. This report shall not be reproduced	FCC CFR 47 part 1, 1.1310 680106 D01 RF Exposure Wireless Charging Apps v03 een tested by STS, the test results show that the equipment with the FCC requirements. And it is applicable only to the tested I except in full, without the written approval of STS, this document personal only, and shall be noted in the revision of the document. 17 Aug. 2018 ~ 24 Aug. 2018		
Date of Issue:	24 Aug. 2018		
Test Result :	Pass		
Testing Engineer	: Chins cher		
Technical Manage	(Chris chen)  Sean She  (Sean she)		
Authorized Signat	a Puli		

(Vita Li)



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### **Revision History**

Rev.	Issue Date	Report NO.	Effect Page	Contents
00	24 Aug. 2018	STS1808090W03	ALL	Initial Issue





### 1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards: FCC KDB 680106 D01 RF Exposure Wireless Charging Apps v03

FCC CFR 47				
Standard Section	Test Item	Judgment	Remark	
FCC CFR 47 part1,	Electric Field Strength (E) (V/m)	PASS		
1.1310 KDB680106 D01v03	Magnetic Field Strength (H) (A/m)	PASS		

### 1.1 TEST FACTORY

Shenzhen STS Test Services Co., Ltd.

Add.: 1/F., Building B, Zhuoke Science Park, No.190, Chongqing Road,

Fuyong Street, Bao'an District, Shenzhen, Guangdong, China CNAS Registration No.: L7649; FCC Registration No.: 625569 IC Registration No.: 12108A; A2LA Certificate No.: 4338.01;

#### 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

Product Name	Car Mounat Wireless Charger
Trade Name	N/A
Model Name	WD-282-010Q
Series Model	WD-282-050Q
Model Difference	Only different in model name
Equipemnt Category	Non-ISM frequency
Operating frequency	DC 5V: 179.3KHz DC 9V: 169.7 KHz
Modulation Type	ASK
Power Adapter	Input: 5V2A, 9V1.67A Output: 5V/1A, 9V/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. Table for Filed Antenna

Ant	Brand	Model Name	Antenna Type	Connector	NOTE
1	N/A	WD-282-010Q	Coil	NA	Antenna

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
EMF Meter	NARDA	ELT-400	N-0342	2017.10.23	2018.10.22
EMF probe	NARDA	B-Field Probe	M-0779	2017.10.23	2018.10.22
Broadband field meter NARDA NBM	550	Broadband field meter NARDA NBM	E-1275	2017.10.23	2018.10.22
Broadband field probe NARDA EF	0391	Broadband field probe NARDA EF	D-0894	2017.10.23	2018.10.22





### 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 v03 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.

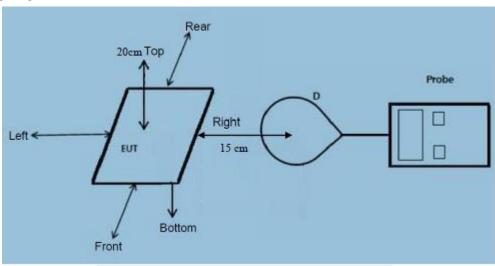
Note 4: The aggregate H-field strengths at 15 cm surrounding the device and 20 cm above the top surface from all simultaneous transmitting coils are demonstrated to be less than 50% of the MPE limit.



#### 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 20 cm(Top) and 15cm(Edge). 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 20 cm(Top) and 15cm(Edge) measured from the center of the probe(s) to the edge of the device.

#### 2.3 TEST SETUP



### 2.4 Test results

The EUT does comply with item 5 KDB680106 D01 v03.

- Power transfer frequency is less than 1 MHz. (Conform)
- (2) Output power from each primary coil is less than or equal to 15 watts. (Conform)
- (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. (Conform)
- (4) Client device is placed directly in contact with the transmitter. (Conform)
- (5) Mobile exposure conditions only (portable exposure conditions are not covered by this exclusion).(Conform)
- (6) The aggregate H-field strengths at 15 cm surrounding the device and 20 cm above the top surface from all simultaneous transmitting coils are demonstrated to be less than 50% of the MPE limit. (Conform)



### 2.5 MAXIMUM PERMISSIBLE EXPOSURE

Test voltage: DC 5V

Maximum Permissible Exposure					
Charging	Separation	Probe from EUT Side	E-field (V/m)	H-field (A/m)	
< 1% Battery	15cm	Front	0.421	0.110	
< 1% Battery	15cm	Rear	0.418	0.112	
< 1% Battery	15cm	Left	0.423	0.105	
< 1% Battery	15cm	Right	0.430	0.113	
< 1% Battery	20cm	Тор	0.438	0.117	
Limit			614	1.63	
Margin Limit (%)			0.071%	7.2%	

Maximum Permissible Exposure				
Charging	Separation	Probe from EUT Side	E-field (V/m)	H-field (A/m)
50% Battery	15cm	Front	0.432	0.105
50% Battery	15cm	Rear	0.420	0.113
50% Battery	15cm	Left	0.424	0.114
50% Battery	15cm	Right	0.435	0.109
50% Battery	20cm	Тор	0.440	0.115
Limit			614	1.63
Margin Limit (%)			0.072%	7.1%

Maximum Permissible Exposure				
Charging	Separation	Probe from EUT Side	E-field (V/m)	H-field (A/m)
>99% Battery	15cm	Front	0.442	0.111
>99% Battery	15cm	Rear	0.438	0.125
>99% Battery	15cm	Left	0.435	0.113
>99% Battery	15cm	Right	0.44	0.124
>99% Battery	20cm	Тор	0.445	0.127
Limit			614	1.63
Margin Limit (%)			0.072%	7.4%



Test voltage: DC 9V

Maximum Permissible Exposure				
Charging	Separation	Probe from EUT Side	E-field (V/m)	H-field (A/m)
< 1% Battery	15cm	Front	0.433	0.101
< 1% Battery	15cm	Rear	0.422	0.116
< 1% Battery	15cm	Left	0.420	0.108
< 1% Battery	15cm	Right	0.425	0.115
< 1% Battery	20cm	Тор	0.443	0.120
Limit			614	1.63
Margin Limit (%)			0.072%	7.4%

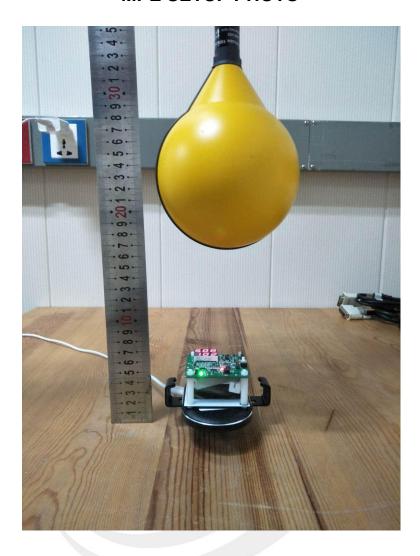
Maximum Permissible Exposure				
Charging	Separation	Probe from EUT Side	E-field (V/m)	H-field (A/m)
50% Battery	15cm	Front	0.435	0.105
50% Battery	15cm	Rear	0.423	0.120
50% Battery	15cm	Left	0.425	0.110
50% Battery	15cm	Right	0.437	0.117
50% Battery	20cm	Тор	0.446	0.123
Limit			614	1.63
Margin Limit (%)			0.073%	7.6%

Maximum Permissible Exposure				
Charging	Separation	Probe from EUT Side	E-field (V/m)	H-field (A/m)
>99% Battery	15cm	Front	0.442	0.111
>99% Battery	15cm	Rear	0.438	0.125
>99% Battery	15cm	Left	0.435	0.113
>99% Battery	15cm	Right	0.44	0.124
>99% Battery	20cm	Тор	0.445	0.127
Limit			614	1.63
Margin Limit (%)			0.072%	7.8%

Note: The input of 5V/1A, 9V/1.67A all have tested, the worst case is 9V/1.67A, only show the worst case.



## **MPE SETUP PHOTO**



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