



REPORT No. : SZ18010036S01

TEST REPORT

APPLICANT : Bostar Technology INC
PRODUCT NAME : Wireless Charger
MODEL NAME : BSD-WF-R201
BRAND NAME : CUCELL
FCC ID : 2AEKMBSD-WF-R201
STANDARD(S) : 47CFR 2.1093

TEST DATE : 2018-05-13
ISSUE DATE : 2018-05-15

Tested by:

Gan Yueming
Gan Yueming(Test engineer)

Approved by:

Peng Huarui
Peng Huarui (Supervisor)

NOTE: This document is issued by MORLAB, the test report shall not be reproduced except in full without prior written permission of the company. The test results apply only to the particular sample(s) tested and to the specific tests carried out which is available on request for validation and information confirmed at our website.

MORLAB

SHENZHEN MORLAB COMMUNICATIONS TECHNOLOGY Co., Ltd.
FL1-3, Building A, FeiYang Science Park, No.8 LongChang Road,
Block67, BaoAn District, ShenZhen , GuangDong Province, P. R. China

Tel: 86-755-36698555

Fax: 86-755-36698525

Http://www.morlab.cn

E-mail: service@morlab.cn



DIRECTORY

1. Technical Information.....	3
1.1. Applicant and Manufacturer Information.....	3
1.2. Equipment Under Test (EUT) Description	3
1.3. Photographs of the EUT.....	3
1.4. Applied Reference Documents	3
2. FCC MPE Requirement	4
2.1. General Information.....	4
2.2. MPE Limit	4
2.3. Measurement Uncertainty (95% confidence levels, k=2)	5
2.4. Test Information	5
2.5. Test Setup	5
3. Assess Results	6
Annex A General Information	
Annex B Test Setup Photos	

Change History		
Issue	Date	Reason for change
1.0	2018-05-15	First edition



1. Technical Information

Note: Provide by manufacturer.

1.1. Applicant and Manufacturer Information

Applicant:	Bostar Technology INC
Applicant Address:	NO.39 DaDong Road,DazhouCun 1st Industrial Zone,QiaoTou Town,DongGuan,GuangDong,China
Manufacturer:	Bostar Technology INC
Manufacturer Address:	NO.39 DaDong Road,DazhouCun 1st Industrial Zone,QiaoTou Town,DongGuan,GuangDong,China

1.2. Equipment Under Test (EUT) Description

EUT Type:	Wireless Charger		
Hardware Version:	N/A		
Software Version:	N/A		
Frequency Bands:	110KHz~148KHz		
Antenna type:	N/A		
MPE:	H-field	0.016 A/m	50%Limit: 0.815(A/m)

Note: For a more detailed description, please refer to specification or user's manual supplied by the applicant and/or manufacturer.

1.3. Photographs of the EUT

Please refer to the External Photos for the Photos of the EUT

1.4. Applied Reference Documents

Leading reference documents for testing:

No.	Identity	Document Title
1	47 CFR§2.1093	Radiofrequency Radiation Exposure Evaluation: Portable Devices
2	680106 D01v03	RF Exposure Considerations for Low Power Consumer Wireless Power Transfer Applications

2. FCC MPE Requirement

2.1. General Information

For devices designed for typical desktop applications, such a wireless charging pads, RF exposure evaluation should be conducted assuming a user separation distance of 15 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 15 cm measured from the center of the probe(s) to the edge of the device. 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. MPE Limit

Basic Restrictions Reference levels

Basic Restriction for electric, magnetic and electromagnetic fields (0Hz to 300GHz)

TABLE 1—LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm ²)	Averaging time (minutes)
(A) Limits for Occupational/Controlled Exposure				
0.3-3.0	614	1.63	*100	6
3.0-30	1842/f	4.89/f	*900/f ²	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 General Population/Uncontrolled Exposure				
0.3-1.34	614	1.63	*100	30
1.34-30	824/f	2.19/f	*180/f ²	30
30-300	27.5	0.073	0.2	30
300-1,500			f/1500	30
1,500-100,000			1.0	30

f = frequency in MHz * = Plane-wave equivalent power density

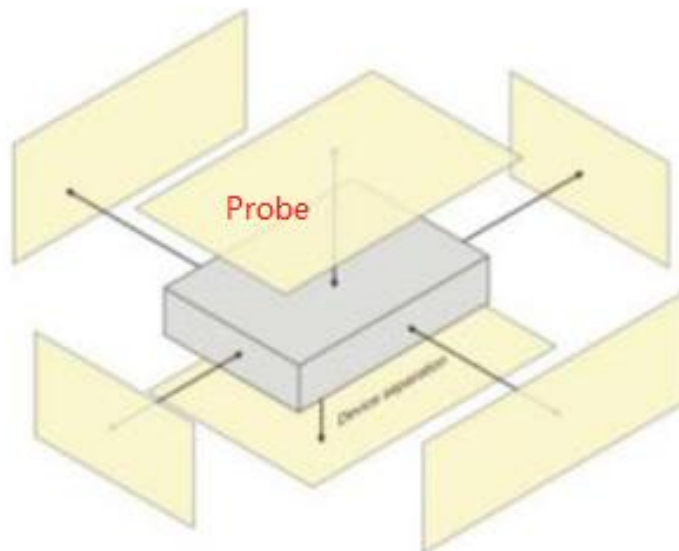
2.3.Measurement Uncertainty (95% confidence levels, k=2)

Test Item	Uncertainty
Uncertainty for Radiated Frequency	7×10^8
Uncertainty for test site temperature and humidity	0.6 °C
	3%

2.4.Test Information

The EUT working at normal charging mode, use the E-Probe measure the H-field Strength, E-field Strength separately. The measure distance is 15cm.

2.5.Test Setup





3. Assess Results

EUT: Wireless charger	M/N:
Test Date:	2018.05.13
Temperature: 22.5 ± 0.6 °C Humidity: $53.4 \pm 3.0\%$	

H- field strength result (Test frequency range from 110KHz to 148KHz)					
Frequency Band	Exposure Position	Distance (cm)	H-field Strength (Max. A/m)	Limit 50%(A/m)	Result
110KHz to 148KHz	Front Side	15	0.015	0.815	PASS
	Back Side	15	0.016	0.815	PASS
	Left Side	15	0.015	0.815	PASS
	Right Side	15	0.014	0.815	PASS
	Top Side	15	0.015	0.815	PASS
	Bottom Side	15	0.015	0.815	PASS

Note:

1. According to KDB 680106 D01V03 section 5 b), 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. The more tighter limit apply to each band.
3. In this report, 15cm distance gap was used for testing on top surface.



REPORT No. : SZ18010036S01

Annex A General Information

1. Identification of the Responsible Testing Laboratory

Company Name:	Shenzhen Morlab Communications Technology Co., Ltd.
Department:	Morlab Laboratory
Address:	FL.3, Building A, FeiYang Science Park, No.8 LongChang Road, Block 67, BaoAn District, ShenZhen, GuangDong Province, P. R. China
Responsible Test Lab Manager:	Mr. Su Feng
Telephone:	+86 755 36698555
Facsimile:	+86 755 36698525

2. Identification of the Responsible Testing Location

Name:	Shenzhen Morlab Communications Technology Co., Ltd. Morlab Laboratory
Address:	FL.3, Building A, FeiYang Science Park, No.8 LongChang Road, Block 67, BaoAn District, ShenZhen, GuangDong Province, P. R. China
TAF No.:	L2030

NOTE: This document is issued by MORLAB, the test report shall not be reproduced except in full without prior written permission of the company. The test results apply only to the particular sample(s) tested and to the specific tests carried out which is available on request for validation and information confirmed at our website.

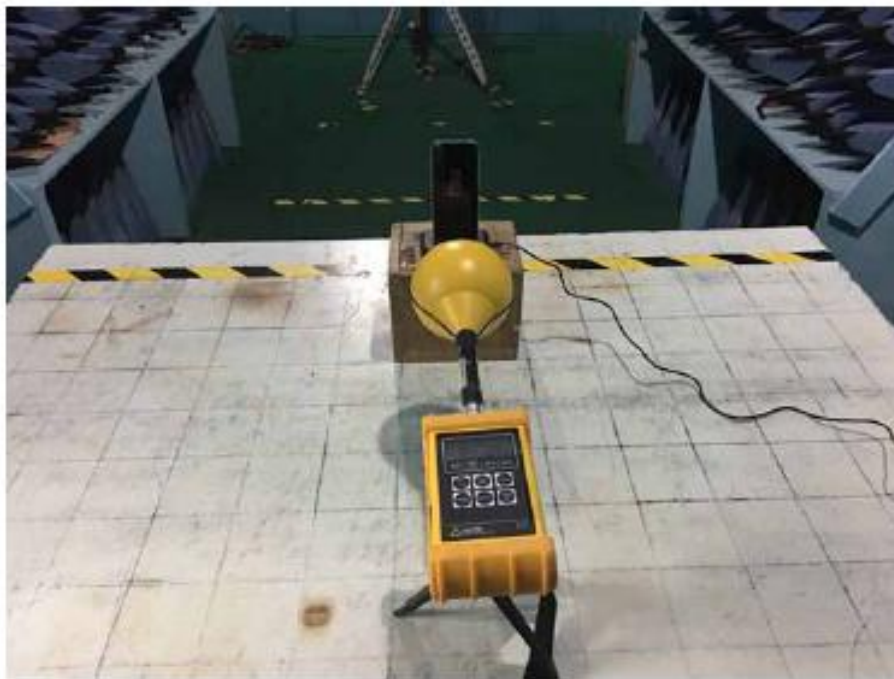


REPORT No. : SZ18010036S01

3. Test Equipment List

Manufacturer	Name of Equipment	Type/Model	Serial Number	Calibration	
				Last Cal.	Due Date
Nadar	Broadband Field meter	NBM-550	E-0716	2017.10.15	2018.10.14
Nadar	PROBE	EF-0391	D-0608	2017.10.15	2018.10.14
Nadar	Probe	HF-3061	D-0227	2017.10.15	2018.10.14
Nadar	Probe	HF-0191	D-0162	2017.10.15	2018.10.14
Nadar	Field meter	ELT-400	N-0163	2017.10.15	2018.10.14
Nadar	ELT PROBE	ELT PROBE	M-0609	2017.10.15	2018.10.14

Annex B Test Setup Photos



NOTE: This document is issued by MORLAB, the test report shall not be reproduced except in full without prior written permission of the company. The test results apply only to the particular sample(s) tested and to the specific tests carried out which is available on request for validation and information confirmed at our website.