







# **MPE TEST REPORT**

Report No: STS1803188W01

Issued for

Shenzhen Benarlee Technology Co., Ltd

Third floor, Building B1, Nanshan Zhiyuan, Taoyuan Street, Nanshan District, ShenZhen, China

Product Name:	Wireless charger
Brand Name:	BenarLee, te-rich, AUOPLUS
Model Name:	V8E
Series Model:	V8E-G, V8E-R, V8E-L, V8E-1, V8E-2, V8E-3, V8E-4, V8E-5, V8E-6
FCC ID:	2AOQUV8E
Test Standard:	FCC CFR 47 part 1, 1.1310

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APPROVAL

Shenzhen STS Test Services Co., Ltd.

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## **TEST RESULT CERTIFICATION**

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Applicant's name:	Shenzhen Benarlee Technology Co., Ltd		
Address:	Third floor, Building B1, Nanshan Zhiyuan, Taoyuan Street, Nanshan District, ShenZhen, China		
Manufacture's Name:	Skytek Smart Commuication Limited		
Address:	5th Floor, Building H,Bantian snow east industrial Park, Buji town,Longgang District, Shenzhen, China		
Product description			
Product Name:	Wireless charger		
Brand Name:	BenarLee, te-rich, AUOPLUS		
Model Name:	V8E		
Series Model:	V8E-G, V8E-R, V8E-L, V8E-1, V8E-2, V8E-3, V8E-4, V8E-5, V8E-6		
Standards :	FCC CFR 47 part 1, 1.1310		
Test Procedure :	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		
sample identified in the report.	except in full, without the written approval of STS, this document		
•	personal only, and shall be noted in the revision of the document.		
Date of performance of tests:	16 Mar. 2018~20 Mar. 2018		
Date of Issue :	21 Mar. 2018		
Test Result :	Pass		
Testing Engineer			
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	(STING OF COLUMN )		
Technical Manage	ACOUNT RIVE		
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# **Revision History**

Rev.	Issue Date	Report NO.	Effect Page	Contents
00	21 Mar. 2018	STS1803188W01	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	Wireless charger
Trade Name	BenarLee, te-rich, AUOPLUS
Model Name	V8E
Series Model	V8E-G, V8E-R, V8E-L, V8E-1, V8E-2, V8E-3, V8E-4, V8E-5, V8E-6
Model Difference	Only different in model name, colour and brand name
Equipemnt Category	Non-ISM frequency
Operating frequency	110 KHz ~205KHz
Modulation Type	GFSK
Power Adapter	Input: AC100-240V, 0.35A, 50-60Hz Output: DC 5V, 2A
Hardware version number	JXW V8 1.1
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	BenarLee, te-rich, AUOPLUS	V8E	Coil	N/A	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.

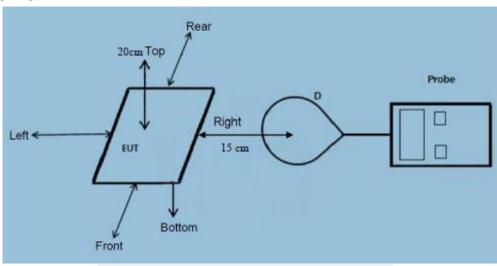
Note 4: The aggregate H-field strengths at 15 cm surrounding the device and 20 cm above the top surface from all simultaneous transmitting coils are demonstrated to be less than 50% of the MPE limit.



#### 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 RESULT OF MAXIMUM PERMISSIBLE EXPOSURE

Maximum Permissible Exposure				
Charging	Separation	Probe from EUT Side	E-field (V/m)	H-field (A/m)
< 1% Battery	15cm	Front	0.438	0.102
< 1% Battery	15cm	Rear	0.421	0.117
< 1% Battery	15cm	Left	0.424	0.106
< 1% Battery	15cm	Right	0.437	0.115
< 1% Battery	20cm	Тор	0.445	0.119
Limit			614	1.63
Margin Limit (%)			0.072%	7.3%



Maximum Permissible Exposure						
Charging	Separation	Probe from EUT Side	E-field (V/m)	H-field (A/m)		
50% Battery	15cm	Front	0.427	0.105		
50% Battery	15cm	Rear	0.426	0.113		
50% Battery	15cm	Left	0.429	0.107		
50% Battery	15cm	Right	0.433	0.116		
50% Battery	20cm	Тор	0.448	0.120		
Limit			614	1.63		
Margin Limit (%)			0.073%	7.4%		

Maximum Permissible Exposure						
Charging	Separatio n	Probe from EUT Side	E-field (V/m)	H-field (A/m)		
>99% Battery	15cm	Front	0.435	0.107		
>99% Battery	15cm	Rear	0.422	0.111		
>99% Battery	15cm	Left	0.427	0.105		
>99% Battery	15cm	Right	0.430	0.112		
>99% Battery	20cm	Тор	0.444	0.124		
Limit			614	1.63		
	Margin	0.072%	7.6%			



# **MPE SETUP PHOTO**



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