

S

T

S

L

A

B



MPE TEST REPORT

Report No:STS1805113W03

Issued for

Shenzhen AiNaU Technology Co.,Ltd.

Zone B, Floor 7, Yongde Industry Center, Zone 5, Huaide
Cuigang Industrial Park, Fuyong Sub-district, Bao' an District,
Shenzhen City, China

Product Name:	Wireless Car Charger
Brand Name:	N/A
Model Name:	ANU-C1801-2
Series Model:	ANU-C1801-1,ANU-C1801-3
FCC ID:	2APUIANU-C1801
Test Standard:	FCC CFR 47 part 1, 1.1310

Any reproduction of this document must be done in full. No single part of this document may be reproduced without permission from STS, All Test Data Presented in this report is only applicable to presented Test sample.

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

Applicant's name: Shenzhen AiNaU Technology Co.,Ltd.
 Address: Zone B, Floor 7, Yongde Industry Center, Zone 5, Huaide
 Cuigang Industrial Park, Fuyong Sub-district, Bao' an District,
 Shenzhen City, China

Manufacture's Name: Shenzhen AiNaU Technology Co.,Ltd.
 Address: Zone B, Floor 7, Yongde Industry Center, Zone 5, Huaide
 Cuigang Industrial Park, Fuyong Sub-district, Bao' an District,
 Shenzhen City, China

Product description

Product Name: Wireless Car Charger
 Brand Name: N/A
 Model Name: ANU-C1801-2
 Series Model: ANU-C1801-1, ANU-C1801-3

Standards : FCC CFR 47 part 1, 1.1310
 Test Procedure : 680106 D01 RF Exposure Wireless Charging Apps v03

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.

This report shall not be reproduced except in full, without the written approval of STS, this document may be altered or revised by STS, personal only, and shall be noted in the revision of the document.

Date of performance of tests: 16 May 2018 ~ 05 June 2018

Date of Issue : 06 June 2018

Test Result : **Pass**

Testing Engineer : *Chris chen*

 (Chris chen)

Technical Manager : *Sean she*

 (Sean she)

Authorized Signatory : *Vita Li*

 (Vita Li)





Table of Contents	Page
1. SUMMARY OF TEST RESULTS	5
1.1 TEST FACTORY	5
1.2 MEASUREMENT UNCERTAINTY	5
1.3 GENERAL DESCRIPTION OF EUT	6
1.4 EQUIPMENTS LIST FOR ALL TEST ITEMS	7
2. MAXIMUM PERMISSIBLE EXPOSURE	8
2.1 MAXIMUM PERMISSIBLE EXPOSURE	8
2.2 TEST PROCEDURE	9
2.3 TEST SETUP	9
2.5 MAXIMUM PERMISSIBLE EXPOSURE	10





Revision History

Rev.	Issue Date	Report NO.	Effect Page	Contents
00	06 June 2018	STS1805113W03	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, 1.1310 KDB680106 D01v03	Electric Field Strength (E) (V/m)	PASS	
	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 $y \pm U$, where expended uncertainty U is based on a standard uncertainty multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately **95 %**.

No.	Item	Uncertainty
1	All emissions,radiated(<30M)(9KHz-30MHz)	$\pm 2.45\text{dB}$
2	Temperature	$\pm 0.5^\circ\text{C}$
3	Humidity	$\pm 2\%$



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
Mobile phone	IPHONE	IPHONE 8	N/A	N/A	N/A
Mobile phone	SAMSUNG	SM-N9500	R28JA1170ZR	N/A	N/A



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/ cm ²)	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/ cm ²)	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

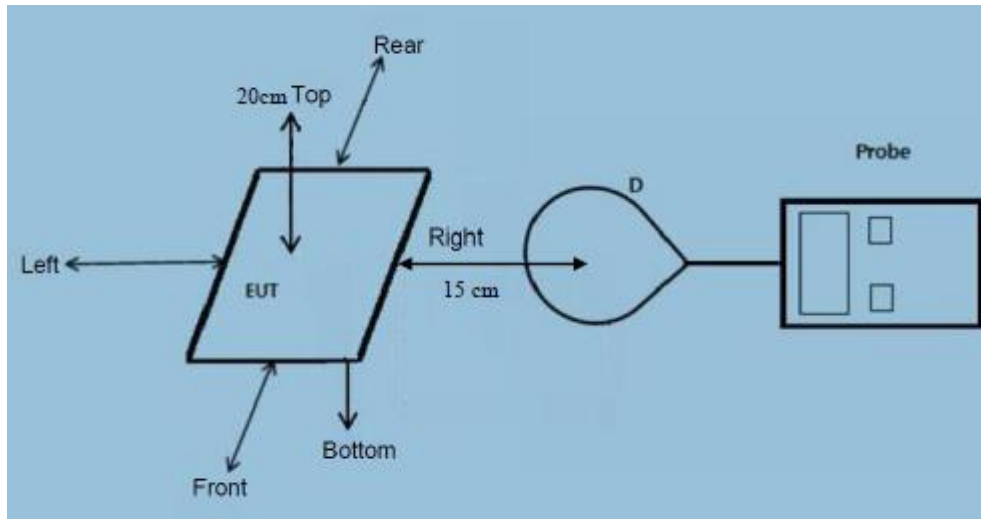
Note 3: Emissions between 100 kHz to 300 kHz should be assessed versus the limits at 300 kHz in Table 1 of Section 1.1310: 614 V/m and 1.63 A/m. A KDB inquiry is required to determine the applicable exposure limits below 100 kHz.

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 as wireless charging pads, RF exposure evaluation should be conducted assuming a user separation distance of 20 cm (Top) and 15 cm (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 15 cm (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.

- (1) 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

IPHONE:

Maximum Permissible Exposure				
Charging	Separation	Probe from EUT Side	E-field (V/m)	H-field (A/m)
< 1% Battery	15cm	Front	0.450	0.115
< 1% Battery	15cm	Rear	0.430	0.117
< 1% Battery	15cm	Left	0.437	0.108
< 1% Battery	15cm	Right	0.442	0.123
< 1% Battery	20cm	Top	0.456	0.125
Limit			614	1.63
Margin Limit (%)			0.074%	7.7%

Maximum Permissible Exposure				
Charging	Separation	Probe from EUT Side	E-field (V/m)	H-field (A/m)
50% Battery	15cm	Front	0.447	0.111
50% Battery	15cm	Rear	0.428	0.109
50% Battery	15cm	Left	0.424	0.121
50% Battery	15cm	Right	0.438	0.115
50% Battery	20cm	Top	0.453	0.123
Limit			614	1.63
Margin Limit (%)			0.074%	7.5%

Maximum Permissible Exposure				
Charging	Separation	Probe from EUT Side	E-field (V/m)	H-field (A/m)
>99% Battery	15cm	Front	0.450	0.113
>99% Battery	15cm	Rear	0.434	0.115
>99% Battery	15cm	Left	0.425	0.106
>99% Battery	15cm	Right	0.437	0.115
>99% Battery	20cm	Top	0.457	0.121
Limit			614	1.63
Margin Limit (%)			0.074%	7.4%



SAMSUNG:

Maximum Permissible Exposure				
Charging	Separation	Probe from EUT Side	E-field (V/m)	H-field (A/m)
< 1% Battery	15cm	Front	0.433	0.110
< 1% Battery	15cm	Rear	0.425	0.108
< 1% Battery	15cm	Left	0.416	0.105
< 1% Battery	15cm	Right	0.435	0.111
< 1% Battery	20cm	Top	0.439	0.118
Limit			614	1.63
Margin Limit (%)			0.071%	7.2%

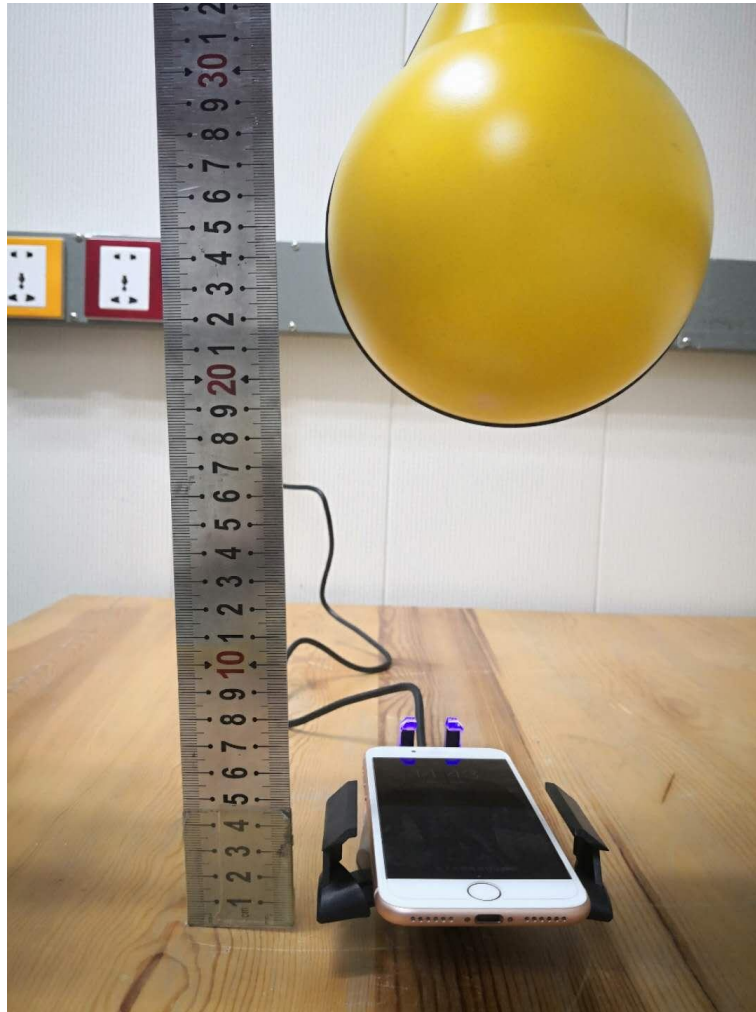
Maximum Permissible Exposure				
Charging	Separation	Probe from EUT Side	E-field (V/m)	H-field (A/m)
50% Battery	15cm	Front	0.435	0.106
50% Battery	15cm	Rear	0.422	0.105
50% Battery	15cm	Left	0.419	0.113
50% Battery	15cm	Right	0.430	0.110
50% Battery	20cm	Top	0.437	0.115
Limit			614	1.63
Margin Limit (%)			0.071%	7.1%

Maximum Permissible Exposure				
Charging	Separation	Probe from EUT Side	E-field (V/m)	H-field (A/m)
> 99% Battery	15cm	Front	0.430	0.105
> 99% Battery	15cm	Rear	0.422	0.112
> 99% Battery	15cm	Left	0.420	0.107
> 99% Battery	15cm	Right	0.433	0.109
> 99% Battery	20cm	Top	0.440	0.116
Limit			614	1.63
Margin Limit (%)			0.072%	7.1%

Note: 1. We used IPHONE, SAMSUNG two kinds of mobile phones to tested, the worst case is IPHONE, the test photo only show the worst case.

2. The input of ANU-C1801-2 (5V/2A, 9V/2A), ANU-C1801-1 (5V/2A), ANU-C1801-3 (5V/2A, 9V/2A) all have tested, the worst case is ANU-C1801-2(9V/2A), only show the worst case.

MPE SETUP PHOTO



Note: EUT top is at 4cm high ,
probe center is at 24cm high

※※※※※END OF THE REPORT※※※※※