

Longhorn Intelligent Tech Co.,Ltd

MPE ASSESSMENT REPORT

Report Type:

FCC MPE assessment report

MODEL:

ANC-8013S-SG80, ANC-8013S-DG40,
ANC-8013S-DG80

REPORT NUMBER:

2507B2346SHA-003

ISSUE DATE:

September 16, 2025

DOCUMENT CONTROL NUMBER:

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FCC ID: 2APP2-ANC13

SUMMARY:

The equipment complies with the requirements according to the following standard(s) or Specification:

KDB447498 D01 General RF Exposure Guidance v06
FCC Part2.1091, FCC Part1.1307(b)

PREPARED BY:**REVIEWED BY:**

Project Engineer
Sky Yang

Reviewer
Eric Li

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Revision History

Report No.	Version	Description	Issued Date
2507B2346SHA-003	Rev. 01	Initial issue of report	September 16, 2025

1 GENERAL INFORMATION

1.1 Description of Equipment Under Test (EUT)

Product name:	EV Charger
Type/Model:	ANC-8013S-SG80, ANC-8013S-DG40, ANC-8013S-DG80
Description of EUT:	The EUT is electric vehicle AC charger. EUT contains certified wireless modules. The LTE module FCC ID is XMR202008EC25AFXD, the WIFI module FCC ID is 2AFOS-WT32C3-SX and XMR2023FCU760KN. ANC-8013S-SG80 only has one output, ANC-8013S-DG40 and ANC-8013S-DG80 have two outputs. All models are electrically identical except the rated output power.
Rating:	ANC-8013S-SG80: 208/240VAC, 50/60Hz, 80A max ANC-8013S-DG40: 208/240VAC, 50/60Hz, 40A max for each EV connector ANC-8013S-DG80: 208/240VAC, 50/60Hz, 80A max for single connector or dual connector
Category of EUT:	Class B
EUT type:	<input checked="" type="checkbox"/> Table top <input type="checkbox"/> Floor standing
Software Version:	-
Hardware Version:	-
Serial numbers:	A250728-44
Sample received date:	July 28, 2025
Date of test:	August 4, 2025 ~ August 19, 2025

1.2 Technical Specification

Frequency Range:	13.56 MHz ~ 13.56 MHz
Modulation:	ASK
Antenna gain:	PCB antenna

1.3 Description of Test Facility

Name:	Intertek Testing Services (Shanghai FTZ) Co., Ltd.
Address:	Building 86, No. 1198 Qinzhou Road(North), Shanghai 200233, P.R. China
Telephone:	86 21 61278200
Telefax:	86 21 54262353

The test facility is recognized, certified, or accredited by these organizations:	CNAS Accreditation Lab Registration No. CNAS L21189
	FCC Accredited Lab Designation Number: CN0175
	IC Registration Lab CAB identifier.: CN0014
	VCCI Registration Lab Member No.: 3598 (Registration No.: R-14243, G-10845, C-14723, T-12252)
	A2LA Accreditation Lab Certificate Number: 3309.02

2 MPE Assessment

Test result: Pass

2.1 MPE Assessment Limit

Mobile device exposure for standalone operations:

According to §1.1310, the limit for general population/uncontrolled exposures

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm ²)	Averaging time (minutes)
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
300-1500	/	/	f/1500	30
1500-100,000	/	/	1.0	30

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

Mobile device exposure for simultaneous transmission operations: **the sum of the MPE ratios for all simultaneously transmitting antennas incorporated in a host device is ≤ 1.0**

2.2 Assessment Results

Power density (S) is calculated according to the formula:

$$S = PG / (4\pi R^2)$$

Where S = power density in mW/cm²

P = Power in mW

G = numeric gain of transmit antenna

R = distance (cm)

Limit for 13.56MHz is 60.77 V/m

As we can see from the test report 2507B2346SHA-002:

$$61.7\text{dBuV/m}@3\text{m}, @20\text{cm}=@3\text{m}+40\log(3/0.2)=108.74\text{dBuV/m}=0.274\text{V/m}<60.77.$$

The power for WIFI/Bluetooth module refers to certificate of FCC ID: XMR2023FCU760KN

The power for WIFI/Bluetooth module refers to certificate of FCC ID: 2AFOS-WT32C3-SX

The power for LTE module refers to certificate of FCC ID: XMR202008EC25AFXD

The calculations in the table below use the highest gain of antenna for client EUT. These calculations represent worst case in terms of the exposure levels.

Module	Frequency Range	P		G		R	S	Limits
	(MHz)	(dBm)	(mW)	(dBi)	(numeric)	(cm)	(mW/cm ²)	(mW/cm ²)
XMR2023FCU760KN	Bluetooth	4.59	2.88	-0.1	0.977	20	0.0006	1
	Bluetooth LE	4.16	2.61	-0.1	0.977	20	0.0005	1
	WIFI 2.4G	19.93	98.40	-0.1	0.977	20	0.0191	1
2AFOS-WT32C3-SX	Bluetooth LE	5	3.16	2	1.585	20	0.000996	1
	WIFI 2.4G	19	79.43	2	1.585	20	0.025	1
XMR202008EC25AFXD	WCDMA Band II	25	316.23	4	2.512	20	0.158	1
	WCDMA Band IV	25	316.23	4	2.512	20	0.158	1
	WCDMA Band V	25	316.23	4	2.512	20	0.158	0.549
	LTE Band 2	25	316.23	4	2.512	20	0.158	1
	LTE Band 4	25	316.23	4	2.512	20	0.158	1
	LTE Band 5	25	316.23	4	2.512	20	0.158	0.549
	LTE Band 12	25	316.23	4	2.512	20	0.158	0.466
	LTE Band 13	25	316.23	4	2.512	20	0.158	0.518
	LTE Band 14	25	316.23	4	2.512	20	0.158	0.525
	LTE Band 66	25	316.23	4	2.512	20	0.158	1
	LTE Band 71	25	316.23	4	2.512	20	0.158	0.442

Note: 1 mW/cm² from 1.310 Table 1.

RFID and all modules can transmit simultaneously, so the maximum rate of MPE is,
 $0.274/60.77+0.0191/1+0.025/1+0.158/0.442=0.406 < 1.0$.

Appendix I

Definition below must be outlined in the User Manual:

To satisfy FCC RF exposure requirements, a separation distance of 20 cm or more should be maintained between the antenna of this device and persons during device operation.

To ensure compliance, operations at closer than this distance is not recommended.

*****END*****