

RF Exposure Evaluation Report

Report Reference No...... : **MTEB22120201-H**

FCC ID..... : **2A2RN-ACEVCC880A**

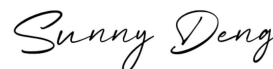
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Date of issue..... : **December 30, 2022**

Representative Laboratory Name. : **Shenzhen Most Technology Service Co., Ltd.**

Address..... : No.5, 2nd Langshan Road, North District, Hi-tech Industrial Park,
Nanshan, Shenzhen, Guangdong, China.

Applicant's name..... : **Xiamen Joint Tech. Co., Ltd**

Address..... : Building #1, No.268 HouXiang Rd, Xinyang, Industrial Park, Haicang
District, XIAMEN, Fujian, China.

Test specification/ Standard..... : **47 CFR Part 1.1307**

47 CFR Part 1.1310

KDB447498D01 General RF Exposure Guidance v06

TRF Originator..... : Shenzhen Most Technology Service Co., Ltd.

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Test item description..... : Electric Vehicle AC Charging Station

Trade Mark..... : Joint

Manufacturer..... : **Xiamen Joint Tech. Co., Ltd**

Model/Type reference..... : JNT-EVC10/80AC/01C/SR/RF/WF

Listed Models : JNT-EVCXX/80AC/01C/YY/ZZ
XX denotes shell, can be 10=10 shell, 11=11 shell, 12=12 shell, 17=17 shell, 22=22 shell
YY denotes color, YY=Any two letters represent colors
ZZ denotes function, can be
RF=RFID, WF=WIFI, RF/WF=RFID+WIFI.

Modulation Type..... : ASK

Operation Frequency..... : 13.56MHz

Hardware Version..... : JNT-C8-PR-80A-V2.0

Software Version..... : V49.12

Rating..... : AC 120V/60Hz

Result..... : **PASS**

TEST REPORT

Equipment under Test : Electric Vehicle AC Charging Station

Model /Type : JNT-EVC10/80AC/01C/SR/RF/WF

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XX denotes shell, can be 10=10 shell,11=11 shell,12=12shell,17=17shell,22=22shell
YY denotes color,YY=Any two letters represent colors
ZZ denotes function,can be
RF=RFID,WF=WIFI,RF/WF=RFID+WIFI.

Remark : EUT is an electric vehicle AC charger with RFID function, supporting WIFI function, RF ID function or both, with wireless modular FCC ID:2AC7Z-ESPWROOM32D. Therefore, JNT-EVC10/80AC/01C/SR/RF/WF was chosen as the representative for testing

Applicant : **Xiamen Joint Tech. Co., Ltd**

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Manufacturer : **Xiamen Joint Tech. Co., Ltd**

Address : Building #1,No.268 HouXiang Rd,Xinyang, Industrial Park,Haicang District,XIAMEN,Fujian,China.

Test Result:	PASS
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The test report merely corresponds to the test sample.
It is not permitted to copy extracts of these test result without the written permission of the test laboratory.

1. Revision History

Revision	Issue Date	Revisions	Revised By
00	2022-12.30	Initial Issue	Alisa Luo

2. SAR Evaluation

2.1 RF Exposure Compliance Requirement

2.1.1 Standard Requirement

According to KDB447498D01 General RF Exposure Guidance v06

4.3.1. Standalone SAR test exclusion considerations

Unless specifically required by the published RF exposure KDB procedures, standalone 1-g head or body and 10-g extremity SAR evaluation for general population exposure conditions, by measurement or numerical simulation, is not required when the corresponding SAR Exclusion Threshold condition, listed below, is satisfied.

2.1.2 Limits

For frequencies below 100 MHz, the following may be considered for SAR test exclusion (also illustrated in Appendix C): 33

- 1) For test separation distances > 50 mm and < 200 mm, the power threshold at the corresponding test separation distance at 100 MHz in step b) is multiplied by $[1 + \log(100/f(\text{MHz}))]$
- 2) For test separation distances ≤ 50 mm, the power threshold determined by the equation in c) 1) for 50 mm and 100 MHz is multiplied by $\frac{1}{2}$
- 3) SAR measurement procedures are not established below 100 MHz.

When SAR test exclusion cannot be applied, a KDB inquiry is required to determine SAR evaluation requirements for any SAR test results below 100 MHz to be acceptable.³⁴

2.1.3 EUT RF Exposure

The worst case (refer to report **MTEB22120201-R**) is below:

Antenna polarization: Horizontal		
Frequency (MHz)	Level (dBuV/m)	Polarization
13.56	77.5	Peak

$$E = \text{EIRP} - 20 \log d + 104.8$$

E: is the electric field strength in dBuV/m

EIRP: is the equivalent isotropically radiated power in dBm

d: is the specified measurement distance in m

d=3m

$$\text{EIRP} = 77.5 + 20 \log 3 - 104.8 = -17.3 \text{ dBm}$$

13.56 MHz < 30 MHz, Add a 6 dB maximum ground factor.

$$\text{EIRP} = -17.3 \text{ dBm} + 6 = -11.3 \text{ dBm}$$

The EIRP of the product is small enough, RF Exposure meets the requirements.

Contains FCCID: 2AC7Z-ESPWROOM32D

Equation from KDB 447498 D01 General RF Exposure Guidance v07 is:

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

Where: S = power density (in appropriate units, e.g. mW/cm²)

P = Time-average maximum power (in appropriate units, e.g., mW)

G = the numeric gain of the antenna

R = distance to the center of radiation of the antenna (20 cm = limit for MPE)

Band	PG (mW)	Test Result (mW/cm ²)	Limit Value (mW/cm ²)	The MPE ratio
WiFi 2.4G	148.252	0.0295	1.000	0.0295

For transmitters, minimum separation distance is 20cm, even if calculations indicate MPE

.....**THE END OF REPORT**.....