



TEST REPORT

Application No.: BTEK231122011AE
Applicant: Guangdong Fenergy Technology Co., Ltd
Address of Applicant: Building 35, Zone 5, Huaide Cuigang Industrial Park, Fuyong Street, Bao 'an District, Shenzhen, China
Manufacturer: Guangdong Fenergy Technology Co., Ltd
Address of Manufacturer: Building 35, Zone 5, Huaide Cuigang Industrial Park, Fuyong Street, Bao 'an District, Shenzhen, China
Factory: Guangdong Fenergy Technology Co., Ltd
Address of Factory: Building 35, Zone 5, Huaide Cuigang Industrial Park, Fuyong Street, Bao 'an District, Shenzhen, China

Equipment Under Test (EUT):

EUT Name: Smart EV Charger

Model No.: FE-W-US-B115D, XXX-W-US-XXXXX

(The first three 'X' represent the company name, which can be represented by letters A-Z; 'W' stands for wall-mounted, 'US' stands for the United States, and the fourth 'X' represents the housing type, which can be represented by the letters BCD; The fifth, sixth and seventh 'X' indicates the output power, which can be represented by the numbers 96 and 115; The last 'X' indicates the output plug type, which can be represented by the letter ABD.)

Please refer to section 3 of this report which indicates which model was actually tested and which were electrically identical.

Trade Mark: NA

Standard(s) : 47 CFR Part 2 Subpart J Section 2.1091

Date of Receipt: 2023-11-28

Date of Test: 2023-11-28 to 2023-12-22

Date of Issue: 2024-01-29

Test Result:	Pass*
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* In the configuration tested, the EUT complied with the standards specified above.

Damon Su
EMC Laboratory Manager





Revision Record				
Version	Chapter	Date	Modifier	Remark
01		2024-01-29		Original

Authorized for issue by				
		Elma. Yang Elma Yan/ Project Engineer		
		Carl. Yang Carl Yang /Reviewer		



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General Information

3.1 Details of E.U.T.

Power supply:	48A: Input/Output power: 110-240V~48A 60Hz 1-phase Charging capacity: Up to 11.52KW 40A: Input/Output power: 240V~40A 60Hz 1-phase Charging capacity: Up to 9.6KW
For 2.4G WIFI	
Cable(s):	N/A
Operation Frequency:	802.11b/g/n(HT20): 2412MHz to 2462MHz 802.11n(HT40): 2422MHz to 2452MHz
Modulation Type:	802.11b: DSSS (CCK, DQPSK, DBPSK) 802.11g: OFDM (64QAM, 16QAM, QPSK, BPSK) 802.11n(HT20 and HT40): OFDM (BPSK, QPSK, 16QAM, 64QAM)
Channel Numbers:	802.11b/g, 802.11n HT20: 11 Channels 802.11n HT40: 7 Channels
Channel Spacing:	5MHz
Antenna Type:	PCB ANT
Antenna Gain:	2.21 dBi
Hardware Version:	NA
Software and Firmware Version:	NA
For BLE	
Operation Frequency:	2402MHz to 2480MHz
Bluetooth Version:	Bluetooth 5.3
Modulation Type:	GFSK
Numble of Channels:	40
Antenna Type:	PCB ANT
Antenna Gain:	2.21 dBi
Hardware Version:	NA
Software and Firmware Version:	NA
Sample No.:	BTEK231122011AE-01
Remark: The information in this section is provided by the applicant or manufacturer, BANTEK is not liable to the accuracy, suitability, reliability or/and integrity of the information.	

Note:

E.U.T./EUT means Equipment Under Test.

Pass means the test result passed the test standard requirement, please find the detailed decision rule in the report relative section.

Model No.: FE-W-US-B115D, XXX-W-US-XXXXX

(The first three 'X' represent the company name, which can be represented by letters A-Z; 'W' stands for wall-mounted, 'US' stands for the United States, and the fourth 'X' represents the housing type, which can be represented by the letters BCD; The fifth, sixth and seventh 'X' indicates the output power, which can be represented by the numbers 96 and 115; The last 'X' indicates the output plug type, which can be represented by the letter ABD.)



Only the model FE-W-US-B115D was tested. According to the declaration from the applicant, all of these models only the model name and appearance style are different, and everything else is the same. And parameter 48A and parameter 40A, the voltage is different because the input plug is inconsistent, 48A is the terminal, 40A is the plug.

3.2 Description of Support Units

Description	Manufacturer	Model No.	Serial No.
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The EUT has been tested as an independent unit.			



3.3 Test Location

All tests were performed at:

Shenzhen BANTEK Testing Co., Ltd.,

A5&A6, Building B1&B2, No.45 Gangtou Road, Bogang Community, Shajing Street, Bao'an District, Shenzhen, Guangdong, China 518103

Tel:0755-2334 4200

Fax: 0755-2334 4200

FCC Registration Number: 264293

Designation Number: CN1356

No tests were sub-contracted.

3.4 Deviation from Standards

None

3.5 Abnormalities from Standard Conditions

None



4 Test Requirement

The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in 1.1307(b), 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 Exposures				
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
300–1500	-	-	f/300	6
1500–100,000	-	-	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
300–1500	-	-	f/1500	30
1500–100,000	-	-	1.0	30

Note: f = frequency in MHz

EVALUATION METHOD

Transmission formula: $P_d = (P_{out} * G) / (4 * \pi * r^2)$

Where

P_d = power density in mW/cm², P_{out} = output power to antenna in mW, G = gain of antenna in linear scale;

P_i = 3.1416, R = distance between observation point and center of the radiator in cm

4.1 Assessment Result

☒ Passed ☐ Not Applicable

Frequency (MHz)	Type	Conducted Power (dBm)	Maximum Tune-up (dBm)	Power Density (mW/cm ²)	Limit (mW/cm ²)	Result
2402	BLE	2.94	3	0.0007	1.0000	Pass
2462	2.4Gwifi	20.24	21	0.0417	1.0000	Pass

Note: The exposure evaluation safety distance is 20cm.

End of the Report -

