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# 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	Г):			
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*			

\* In the configuration tested, the EUT complied with the standards specified above.

Damon Su

Damon Su EMC Laboratory Manager





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Revision Record				
ersion	Chapter	Date	Modifier	Remark
01		2024-01-29		Original
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Authorized for issue by	3 <sup>5</sup>		» <sup>5</sup> []]
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	Carl Yang /Reviewer		





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## **General Information**

#### 3.1 Details of E.U.T.

Power supply:	<ul> <li>48A: Input/Output power: 110-240V~48A 60Hz 1-phase Charging capacity: Up to 11.52KW</li> <li>40A: Input/Output power: 240V~40A 60Hz 1-phase Charging capacity: Up to 9.6KW</li> </ul>			
For 2.4G WIFI	and the second se			
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) 802.11p(HT20 and HT40): OEDM (BPSK, OPSK, 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	8 8			
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

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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.
	- 10-	-	
The EUT has been test	ted as an independent uni	t. (()	()





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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













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# 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 <sup>2</sup> )	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 <sup>2</sup> )	6				
30–300 📎	61.4	0.163	1.0	6 📎				
300–1500	-		f/300	6				
1500–100,000	-	-	5	6				
0	(B) Limits for (	General Population/Uncontr	olled Exposure	0				
0.3–1.34	614	1.63	*(100)	30				
1.34–30	824/f	2.19/f	*(180/f <sup>2</sup> )	30				
30–300	27.5	0.073	0.2	30				
300–1500		- /	f/1500	30				
1500–100,000	- 51	- ///	1.0	30				

Note: f = frequency in MHz

#### **EVALUATION METHOD**

Transmission formula: Pd = (Pout\*G)/(4\*pi\*r<sup>2</sup>)

Where

Pd = power density in mW/cm<sup>2</sup>, Pout = output power to antenna in mW, G = gain of antenna in linear scale;

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

#### 4.1Assessment Result

#### 🛛 Passed

Not Applicable

Frequency (MHz)	Туре	Conducted Power (dBm)	Maximum Tune- up (dBm)	Power Density (mW/cm2)	Limit (mW/cm2)	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 -



