TEST REPORT

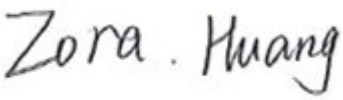
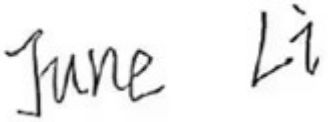
Application No.:	BTEK240507003AE
Applicant:	Shenzhen Core Image Co., Ltd.
Address of Applicant:	Building 2nd Floor, No. 1 Huafeng Hi-tech Park, Yangwu Konggang, Dongfang Community, Songgang Street, Bao'an Distric, Shenzhen,China
Manufacturer:	Shenzhen Realwe Innovation Technology Co., Ltd
Address of Manufacturer:	Room 402, Building 6, No. 8 Huamei Road, Tantou Community, Songgang Street, Bao'an District, Shenzhen, China
Equipment Under Test (EUT):	
EUT Name:	Smart Plug
Test Model.:	SPU013
Adding Model(s):	SP10,SP10B,SP10W1,SP10W2,SPU013,SPU013A,SPU013B,SPU013C, SPU013D,SPU013E
Trade Mark:	/
FCC ID:	2APQK-SPU013
Standard(s) :	47 CFR Part 2 Subpart J Section 2.1091
Date of Receipt:	2024-05-07
Date of Test:	2024-05-08 to 2024-06-20
Date of Issue:	2024-06-21
Test Result:	**Pass***

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

Lion Cai/ Approved & Authorized
EMC Laboratory Manager

ShenZhen BANTEK Testing Co.,Ltd.
Add：A5&A6, Building B1&B2, No.45 Gangtou Road, Bogang Community, Shajing Street
Bao'an District, Shenzhen, Guangdong, China 518104
Tel：+(86)755-2334 4200 E-mail：Service@btek-lab.com Web：www.btek-lab.com

Revision Record				
Version	**Chapter**	**Date**	**Modifier**	**Remark**
V0		*2024-06-21*		*Original*

Authorized for issue by				
		 **Zora Huang/Project Engineer**		
		 **June Li/Reviewer**		

Remarks:

The results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of compiler and approver.

2 Contents

General Information

3.1 Details of E.U.T.

Power supply:	INPUT:120V~ 15A OUTPUT:120V~ 15A
Support Standards:	802.11b, 802.11g, 802.11n-HT20
Frequency Range:	2412-2462MHz for 802.11b/g/n(HT20)
Type of Modulation:	802.11b: DSSS; 802.11g/n: OFDM
Quantity of Channels	11 for 802.11b/g/n(HT20)
Channel Separation:	5MHz
Antenna Type:	PCB Antenna
Antenna Gain:	-0.26dBi
Sample No.:	BTEK240507001AE-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.	

Model No.: SP10,SP10B,SP10W1,SP10W2,SPU013,SPU013A,SPU013B,SPU013C, SPU013D,SPU013E Only the model SPU013was tested. According to the declaration from the applicant, the electrical circuit design, layout, components used, internal wiring and functions of other models are identical for the above models, with only difference on Model No.

3.2 Description of Support Units

Description	Manufacturer	Model No.	Serial No.
/	/	/	/

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

According to §1.1307(b)(1) and KDB 447498 D01 General RF Exposure Guidance v06, system operating under the provisions of this section shall be operating in a manner that the public is not exposed to radio frequency energy level in excess limit for maximum permissible exposure.

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

f = frequency in MHz

Friis transmission formula: **$Pd = (Pout*G)/(4*pi*r^2)$**

Where

Pd = power density in mW/cm^2, **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

Pd id the limit of MPE, 1 mW/cm^2. If we know the maximum gain of the antenna and the total power input to the antenna, through the calculation, we will know the distance r where the MPE limit is reached.

4.1Assessment Result

☒ **Passed** ☐ **Not Applicable**

Frequency (MHz)	Type	Conducted Power (dBm)	Maximum Tune-up (dBm)	Power Density (mW/cm2)	Limit (mW/cm2)	Result
2437	2.4G-Wi-Fi	21.98	22.0	0.0561	1	Pass

Frequency (MHz)	Type	Conducted Power (dBm)	Maximum Tune-up (dBm)	Power Density (mW/cm2)	Limit (mW/cm2)	Result
2402	BT-BLE	6.75	7.0	0.0018	1	Pass

Note: 1.The exposure evaluation safety distance is 20mm.
2.Only show the worst case in the test report.

- End of the Report -