


RF Exposure Evaluation Report

Product : Smart Socket Adapter
Trade mark : 
Model/Type reference : SA010KU
Serial Number : N/A
Report Number : EED32J00021802
FCC ID : 2AK7ELIH03
Date of Issue : May 09, 2017
47 CFR Part 1.1307
Test Standards : 47 CFR Part 1.1310
KDB447498D01v06
Test result : PASS

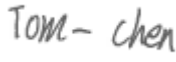
Prepared for:

VuPoint Solutions Inc
710 Nogales Street, City of Industry, CA91748

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May 09, 2017

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2 Version

Version No.	Date	Description
00	May 09, 2017	Original

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4 General Information

4.1 Client Information

Applicant:	VuPoint Solutions Inc.
Address of Applicant:	710 Nogales Street, City of Industry, CA91748
Manufacturer:	VuPoint Solutions Inc.
Address of Manufacturer:	710 Nogales Street, City of Industry, CA91748
Factory:	Sky Light Electronic (ShenZhen) Limited
Address of Factory:	No. 1, 5 and 6 Building, JinBi Industrial Area, HuangTian, BaoAn, Shenzhen, China.

4.2 General Description of EUT

Product Name:	Smart Socket Adapter
Model No.(EUT):	SA010KU
Trade mark:	
EUT Supports Radios application:	BT 4.0

4.3 Product Specification subjective to this standard

Operation Frequency:	2402MHz~2480MHz
Modulation Type:	GFSK
Hardware Version:	V01 (manufacturer declare)
Software Version:	V09 (manufacturer declare)
Test Power Grade:	N/A
Test Software of EUT:	N/A
Antenna Type:	Monopole Antenna
Antenna Gain:	1.5dBi
Test Voltage:	AC 120V/60Hz
Sample Received Date:	Feb. 17, 2017
Sample tested Date:	Feb. 17, 2017 to May 08, 2017
The tested sample and the sample information are provided by the client.	

4.4 Test Location

All tests were performed at:

Centre Testing International Group Co., Ltd.

Hongwei Industrial Zone, Bao'an 70 District, Shenzhen, Guangdong, China 518101

Telephone: +86 (0) 755 3368 3668 Fax:+86 (0) 755 3368 3385

No tests were sub-contracted.

FCC Designation No.: CN1164

4.5 Deviation from Standards

None.

4.6 Abnormalities from Standard Conditions

None.

4.7 Other Information Requested by the Customer

None.

5 RF Exposure Evaluation

5.1 RF Exposure Compliance Requirement

5.1.1 Limits

According to FCC Part1.1310: 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 part1.1307(b)

TABLE 1—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

A rough estimation of the expected exposure in power flux density on a given point can be made with the following equation:

$$S = \frac{P \times G}{4 \times \pi \times R^2}$$

Where:

S = power density

P = power input to the antenna

G = numeric gain of the antenna in the direction of interest relative to an isotropic radiator

R= distance to the centre of radiation of the antenna

EIRP = P*G

The antenna of the product, under normal use condition is at least 20 cm away from the body of the user.

Warning statement to the user for keeping at least 20cm separation distance and the prohibition of operating to a person has been printed on the user's manual. Therefore, the S of the device is calculated with R=20cm, and if it is below the limit S, then we can conclude the device complies with the rules.

5.1.2 Test Procedure

Software provided by client enabled the EUT to transmit data at lowest, middle and highest channel individually.

5.1.3 EUT RF Exposure Evaluation

Antenna Gain: 1.5 dBi

Output Power Into Antenna & RF Exposure Evaluation Distance:

Channel	Frequency (MHz)	Max Conducted Peak Output Power(dBm)	Gain (dBi)	EIRP* (dBm)	EIRP (mW)	R (cm)	S (mW/cm ²)	Limit (mW/cm ²)	Result
Lowest	2402	1.612	1.5	3.112	2.05	20	0.00041	1.0	Pass

Note: Refer to report of EED32J00021801.

PHOTOGRAPHS OF EUT Constructional Details

Refer to Report No. EED32J00021801 for EUT external and internal photos.

*** End of Report ***

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