



FCC TEST REPORT FCC ID:2A9YKCWSWMODTWSCENE

Product	:	Pure Smart Switch Module 9-40V			
Model Name	:	WIZ71, CW-SWMOD-TW-SCENE			
Brand	:	N/A			
Report No.	:	PTC24032513601E-FC02			
Prepared for					
Pure Edge Lighting LLC.					
1718 W. Fullerton Chicago IL. 60614					
Prepared by					
Precise Testing & Certification Co., Ltd.					
Building 1, No. 6, Tongxin Road, Dongcheng Street, Dongguan, Guangdong, China.					



TEST RESULT CERTIFICATION

Applicant's name : Pure Edge Lighting LLC.

Address : 1718 W. Fullerton Chicago IL. 60614

Manufacture's name : NIE-TECH Co., Ltd

Jinlian commercial center 9001, Jinxiu road No.2, Changan Address

Town, Dongguan City, Guang Dong Prov., CHINA

Product name : Pure Smart Switch Module 9-40V Model name : WIZ71, CW-SWMOD-TW-SCENE

Test procedure : FCC CFR47 Part 1.1307(b)(1)

Test Date : Apr. 02, 2024 to Apr. 17, 2024

Date of Issue : Apr. 24, 2024

Test Result : PASS

This device described above has been tested by PTC, and the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.

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Test Engineer:

Jack zhou / Engineer

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2 Test Summary

Test Items	Test Requirement	Result	
Maximum Permissible Exposure (Exposure of Humans to RF Fields)	15.247 (i)	PASS	
Remark:			
N/A: Not Applicable			



3 General Information

3.1 General Description of E.U.T.

Product Name	:	Pure Smart Switch Module 9-40V		
Model Name	:	WIZ71		
Additional model	:	CW-SWMOD-TW-SCENE		
Model difference	:	Different model names		
Specification	:	802.11b/g/n HT20		
Operation Frequency	:	2412-2462MHz for 802.11b/g/ n(HT20)		
Number of Channel	:	11 channels for 802.11b/g/ n(HT20)		
Type of Modulation	:	DSSS with DBPSK/DQPSK/CCK for 802.11b; OFDM with BPSK/QPSK/16QAM/64QAM for 802.11g/n;		
Antenna installation	-	PCB antenna		
Antenna Gain	:	2.72 dBi		
Power supply	:	DC 9V-40V		
Hardware Version	:	N/A		
Software Version	:	N/A		



4 RF Exposure

Test Requirement : FCC Part 1.1307(b)(1)

Evaluation Method : KDB 447498 D01 General RF Exposure Guidance v06

4.1 Requirements

Systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy levels in excess limit for maximum permissible exposure. In accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091 this device has been defined as a mobile device whereby a distance of 0.2 m normally can be maintained between the user and the device.

4.2 The procedures / limit

(A) Limits for Occupational / Controlled Exposure

Frequency Range	Electric Field	Magnetic Field	Power Density (S)	Averaging Time
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842 / f	4.89 / f	(900 / f)*	6
30-300	61.4	0.163	1.0	6
300-1500		300	F/300	6
1500-100,000			5	6

(B) Limits for General Population / Uncontrolled Exposure

Frequency Range	Electric Field	Magnetic Field	Power Density (S)	Averaging Time
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f)*	30
30-300	27.5	0.073	0.2	30
	27.0	0.070	-	
300-1500			F/1500	30
1500-100,000			1.0	30

Note: f = frequency in MHz; *Plane-wave equivalent power density



4.3 MPE Calculation Method

$$E \text{ (V/m)} = \frac{\sqrt{30 \times P \times G}}{d}$$
Power Density: Pd (W/m²) = $\frac{E^2}{377}$

E = Electric field (V/m)

P = Peak RF output power (W)

G = EUT Antenna numeric gain (numeric)

d = Separation distance between radiator and human body (m)

The formula can be changed to

$$Pd = \frac{30 \times P \times G}{377 \times d^2} \theta \varphi$$

From the peak EUT RF output power, the minimum mobile separation distance, d=0.2m, as well as the gain of the used antenna, the RF power density can be obtained

4.4 Test Result

Mode	Antenna Gain (numeric)	Max. Peak Output Power (dBm)		Max Tune Up Power (mW)	Power Density (mW/cm2)	Limit of Power Density (mW/cm2)	Result
2412	1.87	20.71	20.71±1	148.251809	0.052933	1	Pass

******THE END REPORT*****