FCC TEST REPORT

FCC ID: 2BFQB-SW0203

Product	:	Smart Wall switch
Model Name	:	SW0203,SW0203**,GE-SM39**,SW0202**, GE-SM38**,SW0201**,GE-SM37**
Brand	:	Youngzuth
Report No.	:	PTC24010817401E-FC03

Prepared for

Shenzhen Youngzuth Technology Co., Ltd

D1, 4/F, Datang Times Commercial Complex, No. 2203 Meilong Avenue, Qinghua Community, Longhua Street, Longhua District, Shenzhen, China

Prepared by

Precise Testing & Certification Co., Ltd.

Building 1, No. 6, Tongxin Road, Dongcheng Street, Dongguan, Guangdong, China.

TEST RESULT CERTIFICATION

Applicant's name	:	Shenzhen Youngzuth Technology Co., Ltd
Address	:	D1, 4/F, Datang Times Commercial Complex, No. 2203 Meilong Avenue, Qinghua Community, Longhua Street, Longhua District, Shenzhen, China
Manufacture's name	:	Shenzhen Youngzuth Technology Co., Ltd
Address	:	D1, 4/F, Datang Times Commercial Complex, No. 2203 Meilong Avenue, Qinghua Community, Longhua Street, Longhua District, Shenzhen, China
Product name	:	Smart Wall switch
Model name	:	SW0203,SW0203**,GE-SM39**,SW0202**, GE-SM38**,SW0201**,GE-SM37**
Test procedure	:	FCC CFR47 Part 1.1307(b)(1)
Test Date	:	May 28, 2024 to May 13, 2024
Date of Issue	:	June 29, 2024
Test Result	:	PASS

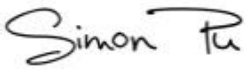
This device described above has been tested by PTC, and the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.

This report shall not be reproduced except in full, without the written approval of PTC, this document may be altered or revised by PTC, personal only, and shall be noted in the revision of the document.

Test Engineer:

Jack zhou / Engineer

Technical Manager:



Simon Pu / Manager

Contents

Page

2 TEST SUMMARY **4**

3 GENERAL INFORMATION **5**

3.1 GENERAL DESCRIPTION OF E.U.T. 5

4 RF EXPOSURE **6**

4.1 REQUIREMENTS 6

4.2 THE PROCEDURES / LIMIT 6

4.3 MPE CALCULATION METHOD 7

4.4 TEST RESULT 7

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	:	Smart Wall switch
Model Name	:	SW0203
Additional model	:	SW0203**,GE-SM39**,SW0202**,GE-SM38**,SW0201**,GE-SM37**
Model difference	:	(* is "0-9" or "A-Z" or "a-z" or space, * is used only to distinguish between different appearance colors, customers and sales regions), the product has different number of buttons and different output ports, otherwise the same.
Specification	:	802.11b/g/n HT20/HT40
Operation Frequency	:	2412-2462MHz for 802.11b/g/ n(HT20/HT40) 2402-2480MHz
Number of Channel	:	11 channels for 802.11b/g/ n(HT20/HT40) 40 channels For DTS
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	:	1.37 dBi
Power supply	:	Input：AC 100-277V 10A Output: AC 100-277V
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			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
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 (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 = $\frac{30 \times P \times G}{377 \times d^2}$ θφ

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

Frequency(MHz)	Antenna Gain (numeric)	Max. Peak Output Power (dBm)	Tune up tolerance (dBm)	Max Tune Up Power (mW)	Power Density (mW/cm2)	Limit of Power Density (mW/cm2)	Result	Test Mode
2402	1.37	5.43	5.43±1	4.395416	0.001199	1	Pass	BLE_1M
2412	1.37	19.92	19.92±1	123.594743	0.033708	1	Pass	802.11 g

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