RF EXPOSURE REPORT

Product: Wyze Switch

Model Name: WLPS1

FCC ID: 2AUIUWLPS1

Applicant: Wyze Labs, Inc.

Address: 5808 Lake Washington Blvd NE Ste 300 Kirkland WA 98033

Manufacturer: LEEDARSON LIGHTING CO.,LTD.

Address: Xingtai Industrial Park, Economic Development Zone of Changtai County, Zhangzhou City Fujian, China

Prepared by: BV 7Layers Communications Technology (Shenzhen) Co. Ltd

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Report No.: W7L-P21060015SA01

Received Date: Jun. 17, 2021

Test Date: Jun. 17, 2021 ~ Jul. 26, 2021

Issued Date: Jul. 27, 2021

This report should not be used by the client to claim product certification, approval, or endorsement by A2LA or any government agencies.

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
W7L-P21060015SA01	Original release	Jul. 27, 2021

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1 CERTIFICATION

PRODUCT:	Wyze Switch
BRAND NAME:	WYZE
MODEL NAME:	WLPS1
APPLICANT:	Wyze Labs, Inc.
TESTED:	Jun. 17, 2021 ~ Jul. 26, 2021
TEST SAMPLE:	Identical Prototype
STANDARDS:	**FCC Part 2 (Section 2.1091)** **FCC OET Bulletin 65, Supplement C (01-01)** **KDB 447498 D01 General RF Exposure Guidance v06** IEEE C95.1

The above equipment has been tested by **BV 7Layers Communications Technology (Shenzhen) Co. Ltd** and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

PREPARED BY : Simon , **DATE:** Jul. 27, 2021

(Simon Wang / Engineer)

APPROVED BY : Luke Lu , **DATE:** Jul. 27, 2021

(Luke Lu / Manager)

2 GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

PRODUCT	Wyze Switch	
MODEL NAME	WLPS1	
NOMINAL VOLTAGE	120Vac	
OPERATING TEMPERATURE RANGE	0-40°C (32~104℉) ℃	
MODULATION TYPE	**BT_LE**	GFSK
	WLAN	DSSS, OFDM
OPERATING FREQUENCY	**BT_LE**	2402MHz ~ 2480MHz
	WLAN	2412 ~ 2462MHz for 11b/g/n(HT20)
HW VERSION	V1	
SW VERSION	V1.2.5	
I/O PORTS	Refer to user's manual	
CABLE SUPPLIED	N/A	

NOTE:

1. For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.

2. For the test results, the EUT had been tested with all conditions. But only the worst case was shown in test report.

3 RF EXPOSURE

3.1 LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

FREQUENCY RANGE (MHz)	ELECTRIC FIELD STRENGTH (V/m)	MAGNETIC FIELD STRENGTH (A/m)	POWER DENSITY (mW/cm^2)	AVERAGE TIME (minutes)
LIMITS FOR GENERAL POPULATION / UNCONTROLLED EXPOSURE				
300-1500	…	…	F/1500	30
1500-100,000	…	…	1.0	30

F = Frequency in MHz

3.2 MPE CALCULATION FORMULA

Pd = (Pout*G) / (4*pi*r2)

where

Pd = power density in mW/cm2

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

3.3 CLASSIFICATION

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

3.4 CONDUCTED POWER

WIFI 2.4G

802.11b 11b

CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER (dBm)	PASS/FAIL
1	2412	14.90	N/A
6	2437	15.14	N/A
11	2462	15.17	N/A

802.11g

CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER (dBm)	PASS/FAIL
1	2412	13.40	N/A
6	2437	13.37	N/A
11	2462	13.41	N/A

802.11n (20MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER (dBm)	PASS/FAIL
1	2412	13.44	N/A
6	2437	13.38	N/A
11	2462	13.25	N/A

BLE

CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER (dBm)	PASS/FAIL
0	2402	5.83	N/A
19	2440	6.66	N/A
39	2480	7.62	N/A

3.5 CALCULATION RESULT OF MAXIMUM CONDUCTED POWER

WIFI&BLE

Band	Frequency (MHz)	Operating Mode	Antenna Gain (dBi)	Tune-up Power (dBm)	Tune-up Power (mW)	Power Density (mW/cm^2)	limit (mW/cm^2)	PASS / FAIL
BLE	2402-2480	1M	1.23	11.50	14.13	0.004	1.00	PASS
WIFI 2.4G	2412-2462	11b	1.23	23.00	199.53	0.053	1.00	PASS

3.6 CONCLUSION OF SIMULTANEOUS TRANSMITTER

Both of the WLAN and plug-in device can transmit simultaneously, the formula of calculated the MPE is:

CPD1/LPD1+CPD2/LPD2+……etc. < 1

CPD = Calculation power density

LPD = Limit of power density

Therefore the worst-case situation is 0.004/1.00+0.053/1.00=0.057, which is less than “1”, This confirmed that the device comply with FCC 1.1310 MPE limit.

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