FCC TEST REPORT

FCC ID:2A254KZQ02

Product	:	Smart led strip lights
Model Name	:	KZQ02
Brand	:	N/A
Report No.	:	PTC21072800401E-FC04

Prepared for

Wandefu (Hangzhou) Zhinengjiaju Youxiangongsi

ROOM 702B,BUILDING 1,VICTORIA CENTER ,HANGZHOU CITY ,ZHEJIANG PROVINCE, CHINA

Prepared by

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TEST RESULT CERTIFICATION

Applicant's name	:	Wandefu (Hangzhou) Zhinengjiaju Youxiangongsi
Address	:	ROOM 702B,BUILDING 1,VICTORIA CENTER ,HANGZHOU CITY ,ZHEJIANG PROVINCE, CHINA
Manufacture's name	:	WONDERFUL (HANGZHOU) SMART HOME Co., ltd
Address	:	ROOM 702B,BUILDING 1,VICTORIA CENTER ,HANGZHOU CITY ,ZHEJIANG PROVINCE, CHINA
Product name	:	Smart led strip lights
Model name	:	KZQ02
Test procedure		KDB 447498 D01 v06
Test Date	:	Aug. 13, 2021 to Aug. 20, 2021
Date of Issue	:	Aug. 20, 2021
Test Result	:	PASS

This device described above has been tested by PTS, 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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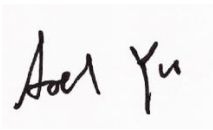
Test Engineer:



Abel Yu / Engineer

Technical Manager:

Henry Wang /Manager

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2 Test Summary

Test Items	Test Requirement	Result
Maximum Permissible Exposure (Exposure of Humans to RF Fields)	1.1307(b)(1)	PASS
Remark:		
N/A: Not Applicable		

3 General Information

3.1 General Description of E.U.T.

Product Name	:	Smart led strip lights
Model Number	:	KZQ02
Additional model	:	KZQ01,KZQ03,KZQ04,ST01,ST02,ST03,ST04,ST05,ST06,ST05,ST06,ST07, ST08,ST09,ST10,ST11,ST12,ST13,ST14,ST15,ST16,ST17,ST18,ST19,ST20
Specification	:	BT 5.0 BDR+EDR；BLE 802.11b/g/n HT20
Operating frequency	:	2402-2480MHz for BT 2412-2462MHz for 802.11b; 2412-2462MHz for 802.11g; 2412-2462MHz for 802.11n(HT20)
Modulation	:	GFSK, Π/4-DQPSK,8DPSK For DSS; GFSK For BLE; DSSS with DBPSK/DQPSK/CCK for 802.11b; OFDM with BPSK/QPSK/16QAM/64QAM for 802.11g/n;
Number of Channel	:	79 channels For BR+EDR; 40 channels For BLE 11 channels For Wifi;
Antenna installation	:	PCB Antenna
Antenna Gain	:	0 dBi
Power supply	:	Adaptor Input: AC 100V-240V 50/60Hz 0.8A; Output: DC 12V 2.5A
Hardware Version	:	V1.1
Software Version	:	V1.0.3

4 RF Exposure

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

Evaluation Method : FCC Part 2.1091

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

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

Item	Antenna Gain (numeric)	Max. Peak Output Power (dBm)	Peak Output Power (W)	Power Density (mW/cm2)	Limit of Power Density (mW/cm2)	Result
WIFI	1	18.097	0.06452	0.1284	1	Pass
BLE	1	-3.191	0.0004796	0.00095	1	Pass
BR+EDR	1	1.122	0.001295	0.002576	1	Pass

Note: With and BT function can't simultaneously transmit

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