FCC RF EXPOSURE REPORT

CERTIFICATION TEST REPORT

For

Kasa Smart Wi-Fi Light Bulb, Multicolor
Tapo Smart Wi-Fi Light Bulb, Multicolor

MODEL NUMBER: KL125, Tapo L530E

FCC ID: 2AXJ4KL125V4

REPORT NUMBER: 4790769271-1-RF-2

ISSUE DATE: March 29, 2023

Prepared for

TP-Link Corporation Limited

Room 901, 9/F. , New East Ocean Centre, 9 Science Museum Road, Tsim Sha Tsui, Kowloon, Hong Kong

Prepared by

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Revision History

Rev.	Issue Date	Revisions	Revised By
V0	March 29, 2023	Initial Issue	

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1. ATTESTATION OF TEST RESULTS

Applicant Information

Company Name:	TP-Link Corporation Limited
Address:	Room 901, 9/F. , New East Ocean Centre, 9 Science Museum Road, Tsim Sha Tsui, Kowloon, Hong Kong

Manufacturer Information

Company Name:	TP-Link Corporation Limited
Address:	Room 901, 9/F. , New East Ocean Centre, 9 Science Museum Road, Tsim Sha Tsui, Kowloon, Hong Kong

EUT Information

EUT Name:	Kasa Smart Wi-Fi Light Bulb, Multicolor Tapo Smart Wi-Fi Light Bulb, Multicolor
Model:	KL125, Tapo L530E
Brand:	tp-link
Sample Received Date:	March 14, 2023
Sample Status:	Normal
Sample ID:	5882865
Date of Tested:	March 14, 2023 to March 29, 2023

APPLICABLE STANDARDS	
STANDARD	**TEST RESULTS**
FCC 47CFR§2.1091	PASS
KDB 447498 D01V06	

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2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091 and KDB 447498 D01 General RF Exposure Guidance v06.

3. FACILITIES AND ACCREDITATION

Accreditation Certificate	**A2LA (Certificate No.: 4102.01)** UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been assessed and proved to be in compliance with A2LA. **FCC (FCC Designation No.: CN1187)** UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. Has been recognized to perform compliance testing on equipment subject to the Commission's Delcaration of Conformity (DoC) and Certification rules **ISED (Company No.: 21320)** UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been registered and fully described in a report filed with ISED. The Company Number is 21320 and the test lab Conformity Assessment Body Identifier (CABID) is CN0046. **VCCI (Registration No.: G-20019, R-20004, C-20012 and T-20011)** UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been assessed and proved to be in compliance with VCCI, the Membership No. is 3793. Facility Name: Chamber D, the VCCI registration No. is G-20019 and R-20004 Shielding Room B , the VCCI registration No. is C-20012 and T-20011

Note: All tests measurement facilities use to collect the measurement data are located at Building 10, Innovation Technology Park, Song Shan Lake Hi tech Development Zone, Dongguan, 523808, China.

4. DESCRIPTION OF EUT

EUT Name	Kasa Smart Wi-Fi Light Bulb, Multicolor Tapo Smart Wi-Fi Light Bulb, Multicolor
Model	KL125, Tapo L530E
Model Difference	They are all the same. Expect the product name and model number. We choose Model KL125(Kasa Smart Wi-Fi Light Bulb, Multicolor) to test.

Frequency Range:	2412 MHz to 2462 MHz
Radio Technology:	IEEE802.11b/g/n HT20
Type of Modulation:	IEEE 802.11b: DSSS(CCK, DQPSK, DBPSK) IEEE 802.11g/n: OFDM(64-QAM, 16-QAM, QPSK, BPSK)
Normal Test Voltage:	AC 120 V, 60 Hz

5. REQUIREMENT

LIMIT AND CALCULATION METHOD

Systems operating under the provisions of FCC 47 CFR section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

In accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091 this device has been defined as mobile device whereby a distance of 0.2m normally can be maintained between the user and the device, and below RF Permissible Exposure limit shall comply with.

Limits for General Population/Uncontrolled Exposure

RF EXPOSURE LIMIT

Frequency Range (MHz)	E-field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm^2)	Averaging Time $\|E\|^2$, $\|H\|^2$ or S (Minutes)
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

CALCULATION METHOD

$S=PG/4\pi R^2$

Where:

S=power density

P=power input to antenna

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

R=distance to the center of radiation of the antenna

CALCULATED RESULTS

Worst Case					
Mode	Max Tune up Power	Antenna Gain	Power Density	Power Density Limit	Test Result
	dBm	dBi	mW/cm2	mW/cm2	--
WIFI 2.4G	19.5	-3.3	0.00829	1.0	Complies

Note:

1. The Power comes from operation description.
2. The minimum separation distance of the device is greater than 20 cm.
3. Calculate by WORST-CASE mode.

Therefor the maximum calculations of above situations are less than the “1” limit.

END OF REPORT