

FCC RF EXPOSURE REPORT

For

Kasa Smart Wi-Fi Light Switch, Single Pole

MODEL NUMBER: HS220

FCC ID: 2AXJ4HS220V3

REPORT NUMBER: 4789585813-2

ISSUE DATE: January 12, 2021

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

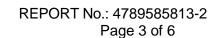
UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch Building 10, Innovation Technology Park, No. 1, Li Bin Road, Song Shan Lake Hi-Tech Development Zone, Dongguan, People's Republic of China

> Tel: +86 769-22038881 Fax: +86 769 33244054 Website: www.ul.com



TABLE OF CONTENTS

1.	ATTESTATION OF TEST RESULTS	. 3
2.	TEST METHODOLOGY	. 4
3.	FACILITIES AND ACCREDITATION	. 4
4.	REQUIREMENT	. 5
S =	PG/(4πR ²)	. 5





1. ATTESTATION OF TEST RESULTS

Applicant Information	١
-----------------------	---

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 Switch, Single Pole

Model: HS220 HVIN: HS220V3 Brand Name: tp-link

Sample Received Date: December 29, 2020

Sample Status: Normal Sample ID: 3556055

Date of Tested: December 29, 2020~ January 11, 2021

APPLICABLE STANDARDS

STANDARD TEST RESULTS

FCC 47CFR§2.1091 KDB-447498 D01 V06 **PASS**

Prepared By:

kelo. Thans.

Checked By:

5 hemy les

Kebo Zhang

Project Engineer

Shawn Wen

Laboratory Leader

Approved By:

Stephen Guo

Laboratory Manager



REPORT No.: 4789585813-2

Page 4 of 6

2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with KDB 447498 D01 General RF Exposure Guidance v06.

3. FACILITIES AND ACCREDITATION

3. I AGIEITIEG AND AGGINEDITATION							
	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)						
Accreditation	UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch.						
Certificate	has been registered and fully described in a report filed with ISED.						
Certificate	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 1: 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

Note 2: The test anechoic chamber in UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch had been calibrated and compared to the open field sites and the test anechoic chamber is shown to be equivalent to or worst case from the open field site.

Note 3: For below 30 MHz, lab had performed measurements at test anechoic chamber and comparing to measurements obtained on an open field site. And these measurements below 30 MHz had been correlated to measurements performed on an OFS.



4. REQUIREMENT

LIMIT

Limits for General Population/Uncontrolled Exposure

Limits for General Population/Uncontrolled Exposure									
Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm²)	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/f2)*	30					
30-300	27.5	0.073	0.2	30					
300-1500			f/150	30					
1500-100,000			1.0	30					

Note 1: f = frequency in MHz, * means Plane-wave equivalent power density

Note 2: General population/uncontrolled exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or cannot exercise control over their exposure.

Note 3: The limit value 1.0mW/cm² is available for this EUT.

MPE CALCULATION METHOD

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

where: S = power density (in appropriate units, e.g. mW/ cm2)

P = power input to the antenna (in appropriate units, e.g., mW)

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 (appropriate units, e.g., cm)



CALCULATED RESULTS

Radio Frequency Radiation Exposure Evaluation

WIFI 2.4G (Worst case)								
Operating Mode	Max. Tune up Power	Directional Gain		Power density	Limit			
iviode	(dBm)	(dBi)	(num)	(mW/ cm ²)				
802.11b	23	4.41	2.76	0.10958	1			

Note: 1. The calculated distance is 20cm.

END OF REPORT