

# FCC RF EXPOSURE REPORT

## FCC ID: 2AXJ4KS220M

**Project No.** : 2103C171  
**Equipment** : Kasa Smart Wi-Fi Dimmer Switch, Motion-Activated  
**Brand Name** : tp-link  
**Test Model** : KS220M  
**Series Model** : ES20M  
**Applicant** : TP-Link Corporation Limited  
**Address** : Room 901, 9/F. , New East Ocean Centre, 9 Science Museum Road,  
Tsim Sha Tsui, Kowloon, Hong Kong  
**Manufacturer** : TP-Link Corporation Limited  
**Address** : Room 901, 9/F. , New East Ocean Centre, 9 Science Museum Road,  
Tsim Sha Tsui, Kowloon, Hong Kong  
**Date of Receipt** : Mar. 22, 2021  
**Date of Test** : Mar. 24, 2021 ~ Mar. 31, 2021  
**Issued Date** : May 08, 2021  
**Report Version** : R01  
**Test Sample** : Engineering Sample No.: DG2021031987  
**Standard(s)** : FCC Guidelines for Human Exposure IEEE C95.1 & FCC Part 2.1091  
FCC Title 47 Part 2.1091, OET Bulletin 65 Supplement C

The above equipment has been tested and found compliance with the requirement of the relative standards by BTL Inc.



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Certificate #5123.02

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**REPORT ISSUED HISTORY**

Report Version	Description	Issued Date
R00	Original Issue	Apr. 20, 2021
R01	Added the series model.	May 08, 2021

## 1. TEST FACILITY

The test facilities used to collect the test data in this report is at the location of No.3,Jinshagang 1st Road, Shixia, Dalang Town, Dongguan, Guangdong, China.

BTL's Test Firm Registration Number for FCC: 357015

BTL's Designation Number for FCC: CN1240

## 2. MPE CALCULATION METHOD

Calculation Method of RF Safety Distance:

$$S = \frac{PG}{4\pi r^2} = \frac{EIRP}{4\pi r^2}$$

where:

S = power density

P = power input to the 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

Table for Filed Antenna:

Ant.	Brand	P/N	Antenna Type	Connector	Gain (dBi)
1	tp-link	6035500079	Internal	N/A	2.98

Note: The antenna gain is provided by the manufacturer.

## 3. TEST RESULTS

Antenna Gain (dBi)	Antenna Gain (numeric)	Max. Average Output Power (dBm)	Max. Average Output Power (mW)	Power Density (S) (mW/cm <sup>2</sup> )	Limit of Power Density (S) (mW/cm <sup>2</sup> )	Test Result
2.98	1.9861	20.44	110.6624	0.04375	1	Complies

Note: The calculated distance is 20 cm.

Output power including tune up tolerance.

End of Test Report