

Product Name: Smart Wi-Fi Light Switch, Dimmer	Report No: FCC022022-05625RF14
Product Model: Tapo S500D	Security Classification: Open
Version: V1.0	Total Page:5

## TIRT Testing Report



Prepared By:	Checked By:	Approved By:	A circular blue stamp with the text "TIRT Shenzhen" in the center and "Beijing TIRT Technology Service Co., Ltd" around the perimeter.
Stone Tang	Randy Lv	Daniel Chen	
Stone Tang	Randy Lv	Daniel chen	

# FCC RF EXPOSURE REPORT

## FCC ID: 2AXJ4S500D

**Equipment** : Smart Wi-Fi Light Switch, Dimmer  
**Brand Name** : TP-Link  
**Test Model** : Tapo S500D  
**Series Model** : N/A  
**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 Test** : 2022.10.25~2022.10.28  
**Issued Date** : 2022.10.28  
**Report Version** : V1.0  
**Test Sample** : Engineering Sample No.: 20221026018942  
**Standard(s)** : FCC Guidelines for Human Exposure IEEE C95.1 & FCC Part 2.1091  
FCC Title 47 Part 2.1091

- The test result referred exclusively to the presented test model /sample.
- Without written approval of TIRT Inc. the test report shall not reproduced except in full.

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**REPORT ISSUED HISTORY**

Report No.	Version	Description	Issued Date	Note
FCC022022-05625RF14	V1.0	Original Report.	2022.10.28	Valid

## 1. TEST FACILITY

Company:	Beijing TIRT Technology Service Co.,Ltd Shenzhen
Address:	101, 3 # Factory Building, Gongjin Electronics, Shatin Community, Kengzi Street, Pingshan District, Shenzhen City, China
CNAS Registration Number:	CNAS L14158
A2LA Registration Number	6049.01
Telephone:	+86-0755-27087573

## 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	N/A	6035500079	PIFA	N/A	2.98

Note: The antenna gain is provided by the manufacturer.

Table for Antenna Configuration:

Operating Mode	
TX Mode	1TX
IEEE 802.11b	Ant. 1
IEEE 802.11g	Ant. 1
IEEE 802.11n(HT20)	Ant. 1

### 3. TEST RESULTS

For worst case:

Directional Gain (dBi)	Directional Gain (numeric)	Max. Turn-up Output Power (dBm)	Max. 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	1.99	22.18	165.20	0.0653	1	Complies

Note: The calculated distance is 20 cm.

**End of Test Report**