

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



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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
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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	1TX
TX Mode	
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 ²)	Limit of Power Density (S) (mW/cm ²)	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