

FCC RF EXPOSURE REPORT

FCC ID: 2BH7FP430M

Project No. : 2504G006
Equipment : Smart Outdoor Plug-In Dimmer
Brand Name : tp-link
Test Model : Tapo P430M
Series Model : N/A
Applicant : TP-Link Systems Inc.
Address : 10 Mauchly, Irvine, CA 92618
Manufacturer : TP-Link Systems Inc.
Address : 10 Mauchly, Irvine, CA 92618
Date of Receipt : Apr. 11, 2025
Date of Test : Apr. 11, 2025 ~ May 19, 2025
Issued Date : Jun. 09, 2025
Report Version : R01
Test Sample : Engineering Sample No.: DG2025041116
Standard(s) : FCC Guidelines for Human Exposure IEEE C95.1 & FCC Part 2.1091
FCC Title 47 Part 2.1091 & KDB 447498 D01 v06

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

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REPORT ISSUED HISTORY

Report No.	Version	Description	Issued Date	Note
BTL-FCCP-3-2504G006	R00	Original Report.	May 29, 2025	Invalid
BTL-FCCP-3-2504G006	R01	Modified the comments.	Jun. 09, 2025	Valid

1. 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

2. ANTENNA SPECIFICATION

Ant.	Manufacturer	Model Name	Antenna Type	Connector	Gain (dBi)
1	TP-Link Systems Inc.	Tapo P430M	IFA	N/A	1.80

Note: The antenna gain is provided by the manufacturer.

3. CALCULATED RESULT

For LE:

Antenna Gain (dBi)	Antenna Gain (numeric)	Max. Output Power (dBm)	Max. Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
1.80	1.5136	7.17	5.2119	0.00157	1	Complies

For 2.4GHz:

Antenna Gain (dBi)	Antenna Gain (numeric)	Max. Output Power (dBm)	Max. Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
1.80	1.5136	23.98	250.0345	0.07533	1	Complies

Note:

(1) The calculated distance is 20 cm.

(2) Ratio=Power Density (S) (mW/cm²)/Limit of Power Density (S) (mW/cm²)

(3) WLAN 2.4GHz and LE can not simultaneous transmission.

End of Test Report