FCC RF EXPOSURE REPORT

FCC ID: 2BCGWC420

Project No.	:	2307G106D
Equipment	:	Smart Wire-Free Security Camera
Brand Name	:	tp-link, tapo
Test Model	:	Tapo C420
Series Model	:	N/A
Applicant	:	TP-LINK CORPORATION PTE.LTD.
Address	:	7 Temasek Boulevard #29-03 Suntec Tower One, Singapore 038987
Manufacturer	:	TP-LINK CORPORATION PTE.LTD.
Address	:	7 Temasek Boulevard #29-03 Suntec Tower One, Singapore 038987
Issued Date	:	Jun. 10, 2025
Report Version	:	R00
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-2-2307G106D	R00	Original Report.	Jun. 10, 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

For Sub 1GHz:

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	TP-LINK®	Tapo C420(US)1.0	Monopole	N/A	-5.04

Note: The antenna gain is provided by the manufacturer.

For 2.4GHz:

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
2	TP-LINK®	Tapo C420(US)1.0	IFA	N/A	-0.21

Note: The antenna gain is provided by the manufacturer.

3. CALCULATED RESULT

For Sub 1GHz:

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
-5.04	0.3133	16.48	44.4631	0.00277	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
-0.21	0.9528	18.59	72.2770	0.01371	1	Complies

Note:
(1) The calculated distance is 20 cm.
(2) Ratio=Power Density (S) (mW/cm^2)/Limit of Power Density (S) (mW/cm^2)
(3) WLAN 2.4GHz and Sub 1GHz can not simultaneous transmission.
(4) The WLAN 2.4 GHz values are adopted from test report: BTL-FCCP-1-2204C109A.
    The Sub 1G values are adopted from test report: BTL-FCCP-2-2204C109A.

End of Test Report