FCC RF EXPOSURE REPORT

FCC ID: 2AXJ4C420

Project No.	:	2204C109A
Equipment	:	Smart Wire-Free Security Camera
Brand Name	:	tp-link, tapo
Test Model	:	Tapo C420
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 Receipt	:	Jun. 06, 2022
Date of Test	:	Jun. 08, 2022 ~ Jul. 13, 2022
Issued Date	:	Sep. 30, 2022
Report Version	:	R02
Test Sample	:	Engineering Sample No.: DG2022053170 for WIFI, DG2022053168 for Sub 1G.
Standard(s)	:	FCC Guidelines for Human Exposure IEEE C95.1 & FCC Part 2.1091 FCC Title 47 Part 2.1091

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

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Approved by : Chay Cai

TESTING CERT #5123.02

BTL Inc.

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REPORT ISSUED HISTORY

Report No.	Version	Description	Issued Date	Note
BTL-FCCP-3-2204C109A	R00	Original Report	Sep. 09, 2022	Invalid
BTL-FCCP-3-2204C109A	R01	Changed the product name.	Sep. 13, 2022	Invalid
BTL-FCCP-3-2204C109A	R02	Updated the writing of antenna type.	Sep. 30, 2022	Valid

1. TEST FACILITY

The test facilities used to collect the test data in this report is at the location of No. 3 Jinshagang 1st Rd. Shixia, Dalang Town Dongguan City, Guangdong 523792 People's Republic of China.
BTL's 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

Antenna Specification:
For 2.4GHz:

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	tp-link	Tapo C420(US)1.0	IFA	N/A	-0.21

Note: The antenna gain is provided by the manufacturer.

For Sub 1G:

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.

3. TEST RESULTS

For 2.4GHz:

Antenna Gain (dBi)	Antenna Gain (numeric)	Max. Average Output Power (dBm)	Max. Average Output Power (mW)	Power Density (S) (mW/cm^2)	Limit of Power Density (S) (mW/cm^2)	Test Result
-0.21	0.9528	19.09	81.0961	0.01538	1	Complies

For Sub 1G:

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	16.98	49.8884	0.00311	1	Complies

For the max simultaneous transmission MPE:

Ratio		Total	Limit of Ratio	Test Result
2.4GHz	Sub 1G			
0.01538	0.00311	0.01849	1	Complies

Note: The calculated distance is 20 cm.
Output power including tune up tolerance.

End of Test Report