FCC RF Exposure Report

FCC ID: 2BH7FC520WSV2

Report No.	:	BTL-FCCP-3-2407G080B
Equipment	:	Outdoor Pan/Tilt Security Wi-Fi Camera
Model Name	:	Tapo C520WS
Series Model	:	N/A
Brand Name	:	tp-link
Applicant	:	TP-Link Systems Inc.
Address	:	10 Mauchly, Irvine, CA 92618
Standard(s)	:	FCC Guidelines for Human Exposure IEEE C95.1 & FCC Part 2.1091 FCC Title 47 Part 2.1091 & KDB 447498 D01 v06
Date of Receipt	:	2024/9/23
Date of Test	:	2024/10/01 ~ 2024/10/19
Issued Date	:	2024/12/2

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

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REPORT ISSUED HISTORY

Report No.	Version	Description	Issued Date	Note
BTL-FCCP-3-2407G080B	R00	Original Report.	2024/12/2	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.	Brand Name	Model Name	Type	Connector	Gain (dBi)
1	TP-Link Systems Inc.	Tapo C520WS	dipole	N/A	0.5
2	TP-Link Systems Inc.	Tapo C520WS	dipole	N/A	0.5

Note:
(1) Smart antenna system with two transmit/receive chains, but operating in a mode where only one transmit/receive chain is used.
(2) The antenna gain and beamforming gain are 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
0.5	1.1220	6.37	4.3351	0.00097	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
0.5	1.1220	19.86	96.8278	0.02162	1	Complies

For the max simultaneous transmission MPE:

Ratio		Total	Limit of Ratio	Test Result
LE	2.4GHz			
0.00097	0.02162	0.02259	1	Complies

Note:
(1) The calculated distance is 20 cm.
(2) Output power including tune up tolerance.

End of Test Report