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FCC RF Exposure Report

FCC ID: 2BH7FC530WS

Report No.	: BTL-FCCP-6-2407G080B
Equipment	: Outdoor Pan/Tilt Security Wi-Fi Camera
Model Name	: Tapo C530WS
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 ~ 2024/10/24
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.

Poken blum Prepared by Poken Huang, Engineer Approved by Peter Chen, Manager

BTL Inc.

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REPORT ISSUED HISTORY

Report No.	Version	Description	Issued Date	Note
BTL-FCCP-6-2407G080B	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

ŀ	Ant.	Brand Name	Model Name	Туре	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:

Ra	Total	Limit of Ratio	Test Result	
LE	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.
(3) Ratio=Power Density (S) (mW/cm²)/Limit of Power Density (S) (mW/cm²)

End of Test Report