

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.

Prepared by :*Poken Huang*

Poken Huang, Engineer

Approved by :*Peter Chen*

Peter Chen, Manager

**BTL Inc.**

No.18, Ln. 171, Sec. 2, Jiuzong Rd., Neihu Dist., Taipei City 114, Taiwan

Tel: +886-2-2657-3299 Fax: +886-2-2657-3331 Web: www.newbtl.com Service mail: btl_qa@newbtl.com

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

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.
- (3) Ratio=Power Density (S) (mW/cm²)/Limit of Power Density (S) (mW/cm²)

End of Test Report