

# FCC RF EXPOSURE REPORT

## FCC ID: 2BH7FC206

**Report No.** : BTL-FCCP-2-2411G036  
**Equipment** : Indoor/Outdoor Pan/Tilt Security Wi-Fi Camera  
**Model Name** : Tapo C216, Tapo C206, TC30, TC31, Tapo C207, Tapo C217, TCW30  
**Test Model** : Tapo C216  
**Brand Name** : tp-link  
**Applicant** : TP-Link Systems Inc.  
**Address** : 10 Mauchly, Irvine, CA 92618  
**Manufacturer** : TP-Link Systems Inc.  
**Address** : 10 Mauchly, Irvine, CA 92618

**Radio Function** : WLAN 2.4GHz

**FCC Rule Part(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** : 2025/2/5

**Date of Test** : 2025/2/11 ~ 2025/2/19

**Issued Date** : 2025/3/27

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

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**BTL Inc.**

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REVISION HISTORY

| Report No.          | Version | Description      | Issued Date | Note  |
|---------------------|---------|------------------|-------------|-------|
| BTL-FCCP-2-2411G036 | R00     | Original Report. | 2025/3/27   | 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                | P/N           | Antenna Type | Connector | Gain (dBi) |
|------|----------------------|---------------|--------------|-----------|------------|
| 1    | TP-Link Systems Inc. | Tapo C216+ANT | IFA          | N/A       | 0.5        |
| 2    | TP-Link Systems Inc. | 6035500234    | PIFA         | N/A       | 0.5        |

Note:

- 1) This EUT supports CDD, and all antennas have the same gain, Directional gain =  $G_{ANT} + \text{Array Gain}$ .

For power measurements, Array Gain=0dB ( $N_{ANT} \leq 4$ ), so the Directional gain=0.5.

For power spectral density measurements,  $N_{ANT}=2$ ,  $N_{SS} = 1$ .

So the Directional gain= $G_{ANT} + \text{Array Gain} = G_{ANT} + 10\log(N_{ANT}/N_{SS})\text{dBi} = 0.5 + 10\log(2/1)\text{dBi} = 3.51$ .

- 2) The antenna gain is provided by the manufacturer.

## 3. CALCULATED RESULT

| Directional Gain (dBi) | Directional Gain (numeric) | Max. Output Power (dBm) | Max. Output Power (mW) | Power Density (S) (mW/cm <sup>2</sup> ) | Limit of Power Density (S) (mW/cm <sup>2</sup> ) | Test Result |
|------------------------|----------------------------|-------------------------|------------------------|-----------------------------------------|--------------------------------------------------|-------------|
| 0.5                    | 1.1220                     | 22.62                   | 182.8100               | 0.04083                                 | 1                                                | Complies    |

Note: The calculated distance is 20 cm.

**End of Test Report**