

# FCC RF Exposure Report


## FCC ID: 2BH7FC840

**Report No.** : BTL-FCCP-5-2411G034  
**Equipment** : Dual-Lens Smart Baby Camera  
**Model Name** : Tapo C840  
**Brand Name** : tp-link, tapo  
**Applicant** : TP-Link Systems Inc.  
**Address** : 10 Mauchly, Irvine, CA 92618  
**Manufacturer** : 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** : 2025/1/16  
**Date of Test** : 2025/1/17 ~ 2025/2/25  
**Issued Date** : 2025/6/4

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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**REPORT ISSUED HISTORY**

Report No.	Version	Description	Issued Date	Note
BTL-FCCP-5-2411G034	R00	Original Report.	2025/6/4	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

For BLE:

Ant.	Brand Name	P/N	Type	Connector	Gain (dBi)
1	tp-link	Tapo C840+ANT1	Dipole	N/A	0.5

Note: The antenna gain is provided by the manufacturer.

For 2.4GHz:

Ant.	Brand Name	P/N	Type	Connector	Gain (dBi)
1	tp-link	Tapo C840+ANT1	Dipole	N/A	0.5
2	tp-link	Tapo C840+ANT2	Dipole	N/A	0.5

Note:

- (1) This EUT supports CDD(except the IEEE 802.11b and g mode), and all antenna gains are not equal, Directional gain =  $G_{ANT} + \text{Array Gain}$ . For power measurements, Array Gain=0dB ( $N_{ANT} \leq 4$ ), so the Directional gain=0.5.
- (2) The antenna gain is provided by the manufacturer.

For 5GHz:

Ant.	Brand Name	P/N	Type	Connector	Gain (dBi)
1	tp-link	Tapo C840+ANT1	Dipole	N/A	0.5
2	tp-link	Tapo C840+ANT2	Dipole	N/A	0.5

Note:

- (1) The EUT supports CDD (except the IEEE 802.11a mode). and all antenna gains are not equal, Directional gain =  $G_{ANT} + \text{Array Gain}$ . For power measurements, Array Gain=0dB ( $N_{ANT} \leq 4$ ), so the Directional gain=0.5.
- (2) The antenna gain is 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 <sup>2</sup> )	Limit of Power Density (S) (mW/cm <sup>2</sup> )	Test Result
0.5	1.1220	10.56	11.3763	0.00254	1	Complies

For 2.4GHz:

Antenna Gain (dBi)	Antenna 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	26.09	406.4433	0.09077	1	Complies

For 5GHz:

Antenna Gain (dBi)	Antenna 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	25.54	358.0964	0.07997	1	Complies

**For the max simultaneous transmission MPE:**

LE	Ratio		Total	Limit of Ratio	Test Result
	2.4GHz	5GHz			
0.00254	0.09077	0.07997	0.17328	1	Complies

Note:

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

**End of Test Report**