

# FCC RF EXPOSURE REPORT

FCC ID: 2AXJ4C320WS

The test data were reissue from the FCC ID: 2AXJ4C310V2, model name: Tapo C310. Model difference: Compared with Tapo C310, Tapo C320WS's pixel is upgraded from 3 million to 4 million, and the white light is added to support full color night vision. The two models share WIFI board, and the structure only increases the lamp cup opening on the front face.

**Project No.** : 2005C005E

**Equipment**: Outdoor Security Wi-Fi Camera

Brand Name : tp-link

Test Model : Tapo C320WS

Series Model : N/A

**Applicant**: TP-Link Corporation Limited

Address : Room 901, 9/F., New East Ocean Centre, 9 Science Museum Road,

Tsim Sha Tsui, Kowloon, Hong Kong

Manufacturer : TP-Link Corporation Limited

Address : Room 901, 9/F., New East Ocean Centre, 9 Science Museum Road,

Tsim Sha Tsui, Kowloon, Hong Kong

Date of Receipt : Sep. 02, 2020

Jul. 29, 2021

**Date of Test** : Sep. 03, 2020 ~ Oct. 29, 2020

**Issued Date** : Oct. 12, 2021

Report Version : R00

**Test Sample :** Engineering Sample No.: DG2020090292

Standard(s) : FCC Guidelines for Human Exposure IEEE C95.1 & FCC Part 2.1091

FCC Title 47 Part 2.1091, OET Bulletin 65 Supplement C

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

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# **REPORT ISSUED HISTORY**

Report Version	Description	Issued Date	
R00	Original Issue	Oct. 12, 2021	



## 1. TEST FACILITY

The test facilities used to collect the test data in this report is at the location of N No. 3 Jinshagang 1st Rd. Shixia, Dalang Town, Dongguan City, Guangdong, People's Republic of China.

BTL's Test Firm Registration Number for FCC: 357015

BTL's Designation Number for FCC: CN1240

# 2. 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

#### Table for Filed Antenna:

Ant.	Brand	P/N	Antenna Type Connector		Gain (dBi)
1	tp-link	3101502576	2576 Dipole Weld		2.04
2	tp-link	3101502576	Dipole	Weld	2.04

#### Note:

1) This EUT supports CDD, and all antennas have the same gain, Directional gain =  $G_{ANT}$ +Array Gain. For power measurements, Array Gain=0dB ( $N_{ANT}$  $\leq$ 4), so the Directional gain=2.04.

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

So the Directional gain= $G_{ANT}$ +Array Gain= $G_{ANT}$ +10log( $N_{ANT}$ /  $N_{SS}$ )dBi=2.04+10log(2/1)dBi=5.05.

2) The antenna gain is provided by the manufacturer.

Table for Antenna Configuration:

Operating Mode TX Mode	2TX
IEEE 802.11b	V(Ant. 1 + Ant. 2)
IEEE 802.11g	V(Ant. 1 + Ant. 2)
IEEE 802.11n(HT20)	V(Ant. 1 + Ant. 2)

# 3. TEST RESULTS

Antenna (dBi)	ain Antenna Gain (numeric)	Max. Average Output Power (dBm)	Max. Average Output Power (mW)	Power Density (S) (mW/cm <sup>2</sup> )	Limit of Power Density (S) (mW/cm²)	Test Result
2.04	1.5996	21.43	138.9953	0.04425	1	Complies

Note: The calculated distance is 20 cm.

Output power including tune up tolerance.

## **End of Test Report**