

# FCC RF EXPOSURE REPORT

## FCC ID: 2AXJ4EAP110ODV4

**Project No.** : 2109C147  
**Equipment** : 300Mbps Wireless N Outdoor Access Point  
**Brand Name** : tp-link  
**Test Model** : EAP110-Outdoor  
**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. 22, 2021  
**Date of Test** : Sep. 27, 2021 ~ Dec. 01, 2021  
**Issued Date** : Dec. 14, 2021  
**Report Version** : R00  
**Test Sample** : Engineering Sample No.: DG2021092486  
**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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TESTING CERT #5123.02

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**REPORT ISSUED HISTORY**

Report Version	Description	Issued Date
R00	Original Issue	Dec. 14, 2021

## 1. TEST FACILITY

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

BTL's 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

Antenna Specification:

Ant.	Brand	P/N	Antenna Type	Connector	Gain (dBi)
1	tp-link	3101501571	Dipole	RP-SMA-F	1
2	tp-link	3101501571	Dipole	RP-SMA-F	1

Note:

- 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=1. For power spectral density measurements,  $N_{ANT}=2$ ,  $N_{SS} = 1$ . So the Directional gain= $G_{ANT} + \text{Array Gain} = G_{ANT} + 10\log(N_{ANT}/N_{SS})\text{dBi} = 1 + 10\log(2/1)\text{dBi} = 4.01$ .
- 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)
IEEE 802.11n(HT40)		V(Ant. 1 + Ant. 2)

## 3. TEST RESULTS

Antenna Gain (dBi)	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/cm <sup>2</sup> )	Test Result
1	1.2589	23.99	250.6109	0.06280	1	Complies

Note: The calculated distance is 20 cm.

Output power including tune up tolerance.

**End of Test Report**