

# FCC RF EXPOSURE REPORT

## FCC ID: 2AXJ4HX510V2

**Project No.** : 2405G108  
**Equipment** : AX3000 Whole Home Mesh Wi-Fi AP  
**Brand Name** : tp-link  
**Test Model** : HX510  
**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  
**Issued Date** : May 29, 2024  
**Report Version** : R00  
**Standard(s)** : FCC Guidelines for Human Exposure IEEE C95.1 & FCC Part 2.1091  
FCC Title 47 Part 2.1091 & KDB 447498 D01 v06

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 No.	Version	Description	Issued Date	Note
BTL-FCCP-3-2405G108	R00	Original Report.	May 29, 2024	Valid

## 1. MPE CALCULATION METHOD

Calculation Method of RF Safety Distance:

$$S = \frac{PG}{4\pi^2} = \frac{EIRP}{4\pi^2}$$

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. CALCULATED RESULT

### Radio Frequency Radiation Exposure Evaluation

(Worst case)				
Operating Mode	Max. Tune up Power	Max. Directional Antenna Gain	Power density	Limit
	(dBm)	(dBi)	(mW/ cm <sup>2</sup> )	
WIFI 2.4G	27.69	2	0.18524	1

(Worst case)				
Operating Mode	Max. Tune up Power	Max. Directional Antenna Gain	Power density	Limit
	(dBm)	(dBi)	(mW/ cm <sup>2</sup> )	
WIFI 5G	27.41	1	0.13795	1

Note:

1. The calculated distance is 20 cm.
2. The power comes from operation description.
3. The manufacturer declared that the EUT can support WIFI 2.4G&WIFI 5Gsimultaneous emission.  
2.4 GHz WiFi + 5 GHz WiFi = 0.18524+ 0.13795= 0.32319 (mW/cm<sup>2</sup>)  
Therefor the maximum calculations of above situations are less than the "1" limit.

Note: The test results reference to report which is provided by the manufacturer.  
(Report No.: 4791019221-1-RF-4)

**End of Test Report**