

FCC RF EXPOSURE REPORT

FCC ID: 2BH7FX60V4

Report No. : BTL-FCCP-4-2509C326
Equipment : AX5400 Whole Home Mesh Wi-Fi 6 System
Model Name : Deco X60
Brand Name : tp-link
Hardware Version : V4.2
Software Version : V4.2
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, WLAN 5GHz

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 : 2025/9/22
Date of Test : 2025/10/13 ~ 2025/11/10
Issued Date : 2025/11/28

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

Prepared by

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Approved by

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REVISION HISTORY

Report No.	Version	Description	Issued Date	Note
BTL-FCCP-4-2509C326	R00	Original Report.	2025/11/28	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. ANTENNA SPECIFICATION

For 2.4G WLAN:

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	tp-link	N/A	Dipole	IPEX	3.52
2	tp-link	N/A	Dipole	IPEX	3.20

Note:

(1) This EUT supports CDD, and all antenna gains are not equal, Directional gain = G_{ANT}+Array Gain.
For power measurements, Array Gain=0dB (N_{ANT}≤4), so the Directional gain=5.52.

(2) The above Antenna information are derived from the antenna data sheet provided by manufacturer and for more detailed features description, please refer to the manufacturer's specifications, the laboratory shall not be held responsible.

For 5G WLAN:

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)	Note
1	tp-link	N/A	Dipole	IPEX	2.90	UNII-1
					3.26	UNII-2A
					3.11	UNII-2C
					3.01	UNII-3
2	tp-link	N/A	Dipole	IPEX	4.07	UNII-1
					4.34	UNII-2A
					4.12	UNII-2C
					4.07	UNII-3
3	tp-link	N/A	Dipole	IPEX	5.32	UNII-1
					5.13	UNII-2A
					5.65	UNII-2C
					4.79	UNII-3
4	tp-link	N/A	Dipole	IPEX	4.40	UNII-1
					4.40	UNII-2A
					3.60	UNII-2C
					3.36	UNII-3

Note:

(1) This EUT supports CDD, and all antenna gains are not equal, Directional gain = G_{ANT}+Array Gain.
For power measurements, Array Gain=0dB (N_{ANT}≤4), so the UNII-1 Directional gain=3.26, the UNII-2A Directional gain=4.34, the UNII-2C Directional gain=5.65, the UNII-3 Directional gain=4.40.

(2) The above Antenna information are derived from the antenna data sheet provided by manufacturer and for more detailed features description, please refer to the manufacturer's specifications, the laboratory shall not be held responsible.

3. CALCULATED RESULT

For 2.4GHz:

Directional Gain (dBi)	Directional Gain (numeric)	Max. Output Power (dBm)	Max. Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
5.52	3.5645	25.62	364.7539	0.2588	1	Complies

For 5GHz:

Directional Gain (dBi)	Directional Gain (numeric)	Max. Output Power (dBm)	Max. Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
3.26	2.1184	28.53	712.8530	0.3006	1	Complies

For the max simultaneous transmission MPE:

Ratio		Total	Limit of Ratio	Test Result
2.4GHz	5GHz			
0.2588	0.3006	0.5594	1	Complies

Note:

- (1) The calculated distance is 20 cm.
- (2) Ratio=Power Density (S) (mW/cm²)/Limit of Power Density (S) (mW/cm²)

End of Test Report