FCC RF EXPOSURE REPORT

FCC ID: 2BH7FEAP115BRGV3

Project No.	:	2507C009
Equipment	:	5GHz 300Mbps Long-range Indoor/Outdoor Wireless Bridge
Brand Name	:	tp-link
Test Model	:	EAP115-Bridge
Model Name	:	EAP115-Bridge
Hardware Version	:	V3
Software Version	:	V3
Applicant	:	TP-Link Systems Inc.
Address	:	10 Mauchly, Irvine, CA 92618
Manufacturer	:	TP-Link Systems Inc.
Address	:	10 Mauchly, Irvine, CA 92618
Date of Receipt	:	Jun. 30, 2025
Date of Test	:	Jul. 01, 2025 ~ Sep. 09, 2025
Issued Date	:	Sep. 28, 2025
Test Sample	:	Engineering Sample No.: DG20250630183
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. (Dongguan)

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REVISION HISTORY

Report No.	Version	Description	Issued Date	Note
BTL-FCCP-2-2507C009	R00	Original Report.	Sep. 22, 2025	Invalid
BTL-FCCP-2-2507C009	R01	This report added tune up tolerance to calculate in page 3. It is a revision of the report BTL-FCCP-2-2507C009 R00. This is a newly released report, replacing the BTL-FCCP-2-2507C009 R00 report.	Sep. 28, 2025	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

Ant.	Brand	P/N	Antenna Type	Connector	Gain (dBi)
1	TP-Link Systems Inc.	3101507411	Microstrip	IPEX	11
2	TP-Link Systems Inc.	3101507411	Microstrip	IPEX	11

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}≤4), so the Directional gain=11. So the power limit is 30-(11-6)=25dBm.
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=11+10log(2/1)dBi=14.01.
Then, the UNII-1 power spectral density limit is 17-(14.01-6)=8.99 dBm/MHz, the UNII-3 power spectral density limit is 30-(14.01-6)=21.99 dBm/500kHz.
2) Gain of any elevation angle above 30 degree: -2dBi.
3) The antenna gain is provided by the manufacturer.

3. CALCULATED RESULT

Antenna Gain (dBi)	Antenna 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
11	12.5893	25.46	351.5604	0.88095	1	Pass

Note:
1)Tune up tolerance (dBm): ±0.5.
2)Max. Output Power including tune up tolerance.
3)The calculated distance is 20 cm.

End of Test Report