FCC RF EXPOSURE REPORT

FCC ID: TE7WA801NV6

Project No.	:	2002C019
Equipment	:	300Mbps Wireless N Access Point
Brand Name	:	tp-link
Test Model	:	TL-WA801N
Series Model	:	N/A
Applicant	:	TP-Link Technologies Co., Ltd.
Address	:	Building 24(floors1,3,4,5) and 28(floors1-4) Central Science and Technology Park, Shennan Rd, Nanshan, Shenzhen, China
Manufacturer	:	TP-Link Technologies Co., Ltd.
Address	:	Building 24(floors1,3,4,5) and 28(floors1-4) Central Science and Technology Park, Shennan Rd, Nanshan, Shenzhen, China
Date of Receipt	:	Feb. 17, 2020
Date of Test	:	Feb. 19, 2020 ~ Mar. 02, 2020
Issued Date	:	Mar. 06, 2020
Report Version	:	R00
Test Sample	:	Engineering Sample No.: DG202002171
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	Mar. 06, 2020

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

Antenna Specification:

Ant.	Brand	P/N	Antenna Type	Connector	Gain (dBi)
1	TP-LINK	3101500977	Dipole	Weld	4.71
2	TP-LINK	3101501026	Dipole	Weld	4.71

Note:
This EUT supports CDD, and all antennas have the same gain,
Directional gain = G_{ANT} + Array Gain.
For power spectral density measurements, N_{ANT} = 2, N_{SS} = 1.
Directional gain = G_{ANT} + Array Gain = G_{ANT} + 10 log (N_{ANT}/ N_{SS}) dB =4.71+10log(2/1)dBi=7.72.
Then, the power density limit is 8-(7.72-6) = 6.28.
For power measurements, Array Gain = 0 dB (N_{ANT} ≤ 4), so the Directional gain=4.71.

2. TEST RESULTS

Directional Gain (dBi)	Directional Gain (numeric)	Max. AVG Output Power (dBm)	Max. AVG Output Power (mW)	Power Density (S) (mW/cm^2)	Limit of Power Density (S) (mW/cm^2)	Test Result
4.71	3.1623	23.62	7.7446	0.00487	1	Complies

Note: The calculated distance is 20 cm.
Output power including tune up tolerance (tune up tolerance: 0.5 dBm).

End of Test Report