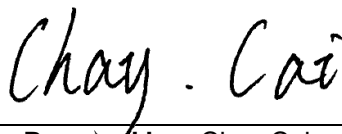


# FCC RF EXPOSURE REPORT

## FCC ID: TE7WA901NV6

**Project No.** : 2001C031  
**Equipment** : 450Mbps Wireless N Access Point  
**Brand Name** : tp-link  
**Test Model** : TL-WA901N  
**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** : Jan. 06, 2020  
**Date of Test** : Jan. 06, 2020~Feb. 14, 2020  
**Issued Date** : Feb. 18, 2020  
**Report Version** : R00  
**Test Sample** : Engineering Sample No.: DG2020011610  
**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	Feb. 18, 2020

## 1. MPE CALCULATION METHOD

Calculation Method of RF Safety Distance:

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

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

Table for Filed Antenna

Ant.	Brand	P/N	Antenna Type	Connector	Gain(dBi)
1		3101501026	Dipole	Weld	4.71
2		3101501087	Dipole	Weld	4.71
3		3101501276	Dipole	Weld	4.71

Note:

This EUT supports CDD, and all antennas have the same gain,

Directional gain =  $G_{ANT} + \text{Array Gain}$ .

For power spectral density measurements, Array Gain =  $10\log(N_{ANT}/N_{SS})$  dB,

that is Directional gain =  $4.71 + 10\log(3/1)$  dBi = 9.48. So, the power density limit is  $8 - (9.48 - 6) = 4.52$

For power measurements, Array Gain = 0 dB ( $N_{ANT} \leq 4$ ), so the Directional gain = 4.71

**2. TEST RESULTS**

Directional Gain (dBi)	Directional Gain (numeric)	Max. Output Power (dBm)	Max. Output Power (mW)	Power Density (S) (mW/cm <sup>2</sup> )	Limit of Power Density (S) (mW/cm <sup>2</sup> )	Test Result
4.71	2.9580	22.47	176.6038	0.10398	1	Complies

Note: The calculated distance is 20 cm.  
Output power including tune up tolerance.

**End of Test Report**