

# FCC RF EXPOSURE REPORT

## FCC ID: 2BCGWBP2200

**Project No.** : 2403G096  
**Equipment** : Smart Wi-Fi Outlet  
**Brand Name** : tp-link  
**Test Model** : BP2200  
**Series Model** : N/A  
**Applicant** : TP-LINK CORPORATION PTE. LTD.  
**Address** : 7 Temasek Boulevard #29-03 Suntec Tower One, Singapore 038987  
**Manufacturer** : TP-LINK CORPORATION PTE. LTD.  
**Address** : 7 Temasek Boulevard #29-03 Suntec Tower One, Singapore 038987  
**Date of Receipt** : Mar. 15, 2024  
**Date of Test** : Mar. 18, 2024 ~ Apr. 13, 2024  
**Issued Date** : May 06, 2024  
**Report Version** : R00  
**Test Sample** : Engineering Sample No.: SSL20240315121, SSL20240315122  
**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.

**Prepared by** : Nick Chen  
Nick Chen

**Approved by** : Chay Cai  
Chay Cai

Room 108, Building 2, No.1, Yile Road, Songshan Lake Zone, Dongguan City, Guangdong,  
People's Republic of China

Tel: +86-769-8318-3000    Web: [www.newbtl.com](http://www.newbtl.com)    Service mail: [btl\\_qa@newbtl.com](mailto:btl_qa@newbtl.com)

**REPORT ISSUED HISTORY**

Report No.	Version	Description	Issued Date	Note
BTL-FCCP-3-2403G096	R00	Original Report.	May 06, 2024	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	Model Name	Antenna Type	Connector	Gain (dBi)
1	tp-link	BP2200	IFA	N/A	2.19

Note: The antenna gain is provided by the manufacturer.

## 3. CALCULATED RESULT

For BT LE:

Antenna Gain (dBi)	Antenna 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
2.19	1.6558	9.45	8.8105	0.00290	1	Complies

For 2.4GHz:

Antenna Gain (dBi)	Antenna Gain (numeric)	Max. Average Output Power (dBm)	Max. Average Output Power (mW)	Power Density (S) (mW/cm <sup>2</sup> )	Limit of Power Density (S) (mW/cm <sup>2</sup> )	Test Result
2.19	1.6558	18.63	72.9458	0.02404	1	Complies

Note:

- 1) The calculated distance is 20 cm.
- 2) BT LE and WLAN 2.4GHz can not simultaneous transmission.

**End of Test Report**