

# FCC RF EXPOSURE REPORT

## FCC ID: 2BH7FKL110

**Project No.** : 2505G016  
**Equipment** : Smart Wi-Fi Light Bulb, Dimmable  
**Brand Name** : tp-link  
**Test Model** : KL110  
**Series Model** : N/A  
**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** : May 22, 2025  
**Date of Test** : May 23, 2025 ~ Jun. 27, 2025  
**Issued Date** : Aug. 18, 2025  
**Test Sample** : Engineering Sample No.: DG20250522159  
**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-2-2505G016	R00	Original Report.	Aug. 18, 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.	Manufacturer	Model Name	Antenna Type	Connector	Gain (dBi)
1	TP-Link Systems Inc.	KL110(US)4.6	monopole	N/A	-0.79

Note: The antenna gain is provided by the manufacturer.

## 3. CALCULATED RESULT

For 2.4GHz:

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
-0.79	0.8337	18.52	71.1214	0.01180	1	Complies

Note:

- (1) The calculated distance is 20 cm.

**End of Test Report**