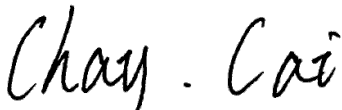


FCC RF EXPOSURE REPORT

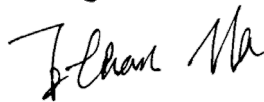
FCC ID: TE7RE105V5

Project No. : 2002C070
Equipment : 300Mbps Wi-Fi Range Extender
Brand Name : tp-link
Test Model : RE105
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. 26, 2020
Date of Test : Feb. 27, 2020 ~ Mar. 24, 2020
Issued Date : Mar. 30, 2020
Report Version : R00
Test Sample : Engineering Sample No.: DG2020022618
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.



Prepared by : Chay Cai



Approved by : Ethan Ma



Certificate #5123.02

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REPORT ISSUED HISTORY

Report Version	Description	Issued Date
R00	Original Issue	Mar. 30, 2020

1. MPE CALCULATION METHOD

Calculation Method of RF Safety Distance:

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

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		3101503088	Dipole	IPEX	2.25
2		3101502809	Dipole	IPEX	2.25

Note:

This EUT supports CDD, and all antennas have the same gain, so Directional gain= G_{ANT} +Array Gain, For power spectral density measurements, Array Gain= $10\log(N_{ANT}/N_{SS})$ dB, that is Directional gain= $2.25+10\log(2/1)=5.26$.

For Power measurements, Array Gain = 0 dB ($N_{ANT} \leq 4$), so the Directional gain= 2.25 .

2. TEST RESULTS

Directional Gain (dBi)	Directional Gain (numeric)	Max. Average Output Power (dBm)	Max. Average Output Power (mW)	Power Density (S) (mW/cm^2)	Limit of Power Density (S) (mW/cm^2)	Test Result
2.25	1.6788	25.01	316.9567	0.10591	1	Complies

Note: The calculated distance is 20 cm.

Output power including tune up tolerance.

End of Test Report