

# FCC RF EXPOSURE REPORT

FCC ID: 2AXJ4T2E

**Project No.** : 2012C099

**Equipment**: AC600 Wireless Dual Band PCI Express Adapter

Brand Name : tp-link
Test Model : Archer T2E

Series Model : N/A

**Applicant**: TP-Link Corporation Limited

Address : Room 901, 9/F., New East Ocean Centre, 9 Science Museum Road,

Tsim Sha Tsui, Kowloon, Hong Kong

Manufacturer : TP-Link Corporation Limited

Address : Room 901, 9/F., New East Ocean Centre, 9 Science Museum Road,

Tsim Sha Tsui, Kowloon, Hong Kong

Date of Receipt : Dec. 26, 2020

**Date of Test** : Dec. 28, 2020 ~ Feb. 08, 2021

**Issued Date** : Feb. 25, 2021

Report Version : R00

**Test Sample**: Engineering Sample No.: DG2028121658

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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ACCREDITED

Certificate #5123.02

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# **REPORT ISSUED HISTORY**

| Report Version | Description    | Issued Date   |
|----------------|----------------|---------------|
| R00            | Original Issue | Feb. 25, 2021 |



#### 1. TEST FACILITY

The test facilities used to collect the test data in this report is at the location of No.3, Jinshagang 1st Road, Shixia, Dalang Town, Dongguan, Guangdong, China.

BTL's Test Firm Registration Number for FCC: 357015

BTL's Designation Number for FCC: CN1240

# 2. 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

#### Table for Filed Antenna:

#### For 2.4GHz:

| Ant. | Brand   | P/N        | Antenna Type | Connector | Gain (dBi) |
|------|---------|------------|--------------|-----------|------------|
| 1    | tp-link | 3101503058 | Dipole       | N/A       | 2.35       |

#### Note:

The antenna gain and beamforming gain is provided by the manufacturer.

#### For 5GHz:

| Ant. | Brand   | P/N        | Antenna Type | Connector | Gain (dBi) | Note   |
|------|---------|------------|--------------|-----------|------------|--------|
| 1    | tp-link | 3101503058 | Dipole       | RP-SMA-F  | 4.52       | Band 1 |
| 1    | tp-link | 3101503058 | Dipole       | RP-SMA-F  | 4.72       | Band 2 |
| 1    | tp-link | 3101503058 | Dipole       | RP-SMA-F  | 4.83       | Band 3 |
| 1    | tp-link | 3101503058 | Dipole       | RP-SMA-F  | 3.96       | Band 4 |

Note:

The antenna gain and beamforming gain is provided by the manufacturer.





# 3. TEST RESULTS

# For 2.4GHz:

| Antenna Gain<br>(dBi) | Antenna<br>Gain<br>(numeric) | Max. Output<br>Power<br>(dBm) | Max. Output<br>Power<br>(mW) | Power Density<br>(S) (mW/cm²) | Limit of Power<br>Density (S)<br>(mW/cm²) | Test Result |
|-----------------------|------------------------------|-------------------------------|------------------------------|-------------------------------|---|-------------|
| 2.35                  | 1.7179                       | 18.39                         | 69.0240                      | 0.02360                       | 1   | Complies    |

#### For 5GHz UNII-1:

| Antenna Gain<br>(dBi) | Antenna<br>Gain<br>(numeric) | Max. Output<br>Power<br>(dBm) | Max. Output<br>Power<br>(mW) | Power Density<br>(S) (mW/cm²) | Limit of Power<br>Density (S)<br>(mW/cm²) | Test Result |
|-----------------------|------------------------------|-------------------------------|------------------------------|-------------------------------|---|-------------|
| 4.52                  | 2.8314                       | 19.79                         | 95.2796                      | 0.05370                       | 1   | Complies    |

#### For 5GHz UNII-2A:

| Δ | ntenna Gain<br>(dBi) | Antenna<br>Gain<br>(numeric) | Max. Output<br>Power<br>(dBm) | Max. Output<br>Power<br>(mW) | Power Density<br>(S) (mW/cm²) | Limit of Power<br>Density (S)<br>(mW/cm²) | Test Result |
|---|----------------------|------------------------------|-------------------------------|------------------------------|-------------------------------|---|-------------|
|   | 4.72                 | 2.9648                       | 18.82                         | 76.2079                      | 0.04497                       | 1   | Complies    |

# For 5GHz UNII-2C:

| Antenna Gain<br>(dBi) | Antenna<br>Gain<br>(numeric) | Max. Output<br>Power<br>(dBm) | Max. Output<br>Power<br>(mW) | Power Density<br>(S) (mW/cm²) | Limit of Power<br>Density (S)<br>(mW/cm²) | Test Result |
|-----------------------|------------------------------|-------------------------------|------------------------------|-------------------------------|---|-------------|
| 4.83                  | 3.0409                       | 18.60                         | 72.4436                      | 0.04385                       | 1   | Complies    |

# For 5GHz UNII-3:

| Antenna Gain<br>(dBi) | Antenna<br>Gain<br>(numeric) | Max. Output<br>Power<br>(dBm) | Max. Output<br>Power<br>(mW) | Power Density<br>(S) (mW/cm²) | Limit of Power<br>Density (S)<br>(mW/cm²) | Test Result |
|-----------------------|------------------------------|-------------------------------|------------------------------|-------------------------------|---|-------------|
| 3.96                  | 2.4889                       | 18.39                         | 69.0240                      | 0.03419                       | 1   | Complies    |

**End of Test Report**