FCC RF EXPOSURE REPORT

FCC ID: TE7T6EV2

Project No.	:	2003C118
Equipment	:	AC1300 Wireless Dual Band PCI Express Adapter
Brand Name	:	tp-link
Test Model	:	Archer T6E
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	:	Mar. 20, 2020
Date of Test	:	Mar. 23, 2020 ~ Apr. 25, 2020
Issued Date	:	May 12, 2020
Report Version	:	R00
Test Sample	:	Engineering Sample No.: DG20200316141
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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Certificate #5123.02

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REPORT ISSUED HISTORY

Report Version	Description	Issued Date
R00	Original Issue.	May 12, 2020

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

Table for Filed Antenna

Ant.	Brand	P/N	Antenna Type	Connector	Gain (dBi)
1	Cortec®	AN2450-5506RS	Dipole	SMA Male Reverse	2.61
2	Cortec®	AN2450-5506RS	Dipole	SMA Male Reverse	2.61

Note:
This EUT supports CDD, and all antennas have the same gain, so Directional gain = G_{ANT}+Array Gain, where Array Gain is as follows:
1) For power spectral density measurements, N_{ANT} = 2, N_{SS} = 1. So Directional gain = G_{ANT} + Array Gain =10 log (N_{ANT}/ N_{SS}) dB =2.61+10log(2/1)dBi=5.62.
2) For power measurements, Array Gain = 0 dB (N_{ANT} ≤ 4), so the Directional gain=2.61.

Ant.	Brand	P/N	Antenna Type	Connector	Gain (dBi)
1	Cortec®	AN2450-5506RS	Dipole	SMA Male Reverse	2.68
2	Cortec®	AN2450-5506RS	Dipole	SMA Male Reverse	2.68

Note:
This EUT supports CDD, and all antennas have the same gain, so Directional gain = G_{ANT}+Array Gain, where Array Gain is as follows:
1) For power spectral density measurements, N_{ANT} = 2, N_{SS} = 1. So Directional gain = G_{ANT} + Array Gain =10 log (N_{ANT}/ N_{SS}) dB =2.68+10log(2/1)dBi=5.69.
2) For power measurements, Array Gain = 0 dB (N_{ANT} ≤ 4), so the Directional gain=2.68.

2. TEST RESULTS

For 2.4GHz:

Directional Gain (dBi)	Directional Gain (numeric)	Max. Output Power (dBm)	Max. Output Power (mW)	Power Density (S) (mW/cm^2)	Limit of Power Density (S) (mW/cm^2)	Test Result
2.61	1.8239	23.20	208.9296	0.07585	1	Complies

For 5GHz UNII-1:

Directional Gain (dBi)	Directional Gain (numeric)	Max. Output Power (dBm)	Max. Output Power (mW)	Power Density (S) (mW/cm^2)	Limit of Power Density (S) (mW/cm^2)	Test Result
2.68	1.8535	19.19	82.9851	0.03062	1	Complies

For 5GHz UNII-2A:

Directional Gain (dBi)	Directional Gain (numeric)	Max. Output Power (dBm)	Max. Output Power (mW)	Power Density (S) (mW/cm^2)	Limit of Power Density (S) (mW/cm^2)	Test Result
2.68	1.8535	23.59	228.5599	0.08432	1	Complies

For 5GHz UNII-2C:

Directional Gain (dBi)	Directional Gain (numeric)	Max. Output Power (dBm)	Max. Output Power (mW)	Power Density (S) (mW/cm^2)	Limit of Power Density (S) (mW/cm^2)	Test Result
2.68	1.8535	23.79	239.3316	0.08830	1	Complies

For 5GHz UNII-3:

Directional Gain (dBi)	Directional Gain (numeric)	Max. Output Power (dBm)	Max. Output Power (mW)	Power Density (S) (mW/cm^2)	Limit of Power Density (S) (mW/cm^2)	Test Result
2.68	1.8535	23.77	238.2319	0.08789	1	Complies

Note: The calculated distance is 20 cm.

End of Test Report