

FCC RF EXPOSURE REPORT

FCC ID:TE7C20V5

Project No. : 1804C131
Equipment : AC750 Wireless Dual Band Router
Model : Archer C20
Applicant : TP-Link Technologies Co., Ltd.
Address : Building 24 (floors 1,3,4,5) and 28 (floors1-4)
Central Science and Technology
Park,Shennan Rd, Nanshan, Shenzhen,China

According: : FCC Guidelines for Human Exposure IEEE
C95.1 & FCC Part 2.1091

B T L I N C .

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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

For 2.4G:

Ant.	Brand	PN	Antenna Type	Connector	Gain (dBi)
1		3101500977	Dipole	N/A	0.95
2		3101501087	Dipole	N/A	1.09

Note:

(1) The EUT incorporates a MIMO function. Physically, the EUT provides two completed two transmitters and two receivers (2T2R).

For 5G:

Ant.	Manufacturer	PN	Antenna Type	Connector	Gain (dBi)	Note
1		3101501000	Dipole	N/A	1.58	5150-5250
1		3101501000	Dipole	N/A	1.86	5725-5850

Note:

(1) The EUT incorporates a MIMO function. Physically, the EUT provides two completed one transmitter and one receiver (1T1R).

TEST RESULTS

EUT :	AC750 Wireless Dual Band Router	Model Name :	Archer C20
Temperature :	25 °C	Relative Humidity:	55 %
Test Voltage :	AC 120V/60Hz		

2.4G WIFI

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
1.09	1.2853	24.65	291.7427	0.07464	1	Complies

5G Band UNII-1

Antenna Gain (dBi)	Antenna Gain (numeric)	AVG Output Power (dBm)	AVG Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
1.58	1.4388	21.68	147.2313	0.04518	1	Complies

5G Band UNII-3

Antenna Gain (dBi)	Antenna Gain (numeric)	AVG Output Power (dBm)	AVG Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
1.86	1.5346	21.78	150.6607	0.04623	1	Complies

For 2.4G+5G simultaneous transmission MPE:

$$0.07464/1+0.04518/1+0.04623/1=0.16605$$

Note: the calculated distance is 20 cm.