

FCC RF EXPOSURE REPORT

FCC ID:YJYK3

Project No. : 1710C304
Equipment : AC3150 Dual-band Gigabit Wireless Router
Model : K3
Applicant : Phicomm (Shanghai) Co., Ltd.
Address : No.3666, Sixian Rd., Songjiang District,
Shanghai, 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

Ant.	Manufacturer	Model Name	Antenna Type	Connector	Gain (dBi)
1	N/A	N/A	PCB	N/A	2
2	N/A	N/A	PCB	N/A	2
3	N/A	N/A	PCB	N/A	2
4	N/A	N/A	PCB	N/A	2

Power Table

Band	Technology	Mode	Target Power (dBm)	Tolerance (dBm)
2.4G	802.11b	-	28	+/- 2dB
	802.11g	-	28	+/- 2dB
	802.11n	HT20	28	+/- 2dB
		HT40	28	+/- 2dB
	802.11ac	VHT20	28	+/- 2dB
		VHT40	28	+/- 2dB
5G Band UNII-1	802.11a	-	25.5	+/- 2dB
	802.11n	HT20	26.5	+/- 2dB
		HT40	22.5	+/- 2dB
	802.11ac	VHT20	25	+/- 2dB
		VHT40	22	+/- 2dB
		VHT80	21	+/- 2dB
5G Band UNII-3	802.11a	-	21.5	+/- 2dB
	802.11n	HT20	22	+/- 2dB
		HT40	21	+/- 2dB
	802.11ac	VHT20	22	+/- 2dB
		VHT40	20	+/- 2dB
		VHT80	22.5	+/- 2dB

TEST RESULTS

EUT :	AC3150 Smart Wireless Router	Model Name :	K3
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
2	1.5849	30	893.3055	0.31546	1	Complies

5G Band UNII-1

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
2	1.5849	28.5	639.7348	0.22333	1	Complies

5G Band UNII-3

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
2	1.5849	24.5	267.3006	0.08891	1	Complies

For 2.4G+5G simultaneous transmission MPE:

$$0.31546/1+0.22333/1=0.53879$$

Note: the calculated distance is 20 cm.