

MPE ESTIMATION

FCC ID: **2A7WI-RIX450**

1, Limit for General Population/ Uncontrolled Exposures

Frequency	Power density (mW/ cm ²)	Averaging time(minutes)
300MHz----1.5GHz	F/1500	30
1.5GHz---100GHz	1.0	30

2, Estimation Result

For 2.4G/5G WIFI:

Mode	Max PK Output power(dBm)	Tune Up Power(dBm)	Max Tune Up power(mW)	Antenna Gain(dBi)	Antenna Gain (linear)	MPE (mW/cm ²)
2.4G WIFI Ant1	21.62	21±1(22)	158.49	5	3.1623	0.09976
2.4G WIFI Ant2	21.63	21±1(22)	158.49	5	3.1623	0.09976
MIMO	/	/	/	/	/	0.19952
5.2G WIFI Ant1	13.28	12.5±1(13.5)	22.39	5	3.1623	0.01409
5.2G WIFI Ant2	13.23	12.5±1(13.5)	22.39	5	3.1623	0.01409
MIMO	/	/	/	/	/	0.02818
5.8G WIFI Ant1	10.64	10±1(11)	12.59	5	3.1623	0.00792
5.8G WIFI Ant2	10.28	10±1(11)	12.59	5	3.1623	0.00792
MIMO	/	/	/	/	/	0.01584

$$Pd = \frac{P_{out} * G}{4\pi r^2} ;$$

Note:

Note: The estimation distance is 20cm

Note: PK Output power= conducted power.

Conducted power see the test report **HK2207213174-1E/-2E/3E**,

2.4G antenna gain=5dBi.

5G antenna gain=5dBi.

2.4G WIFI MPE (max)= 0.19952 (mW/cm²)

5G WIFI MPE (max)= 0.02818 (mW/cm²)

simultaneously MPE= 0.19952+0.02818=0.22770(mW/cm²)

when the minimum test separation distance is >20 cm, a distance of 20 cm is applied to determine RF Exposure test exclusion. The test exclusion threshold is 0.22770mW/cm² which is < 1.0mW/cm², RF Exposure testing is not required.

-----The End-----