

MPE ESTIMATION

FCC ID: **2ABFZ-RESIROUTERWF6**

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	16.51	16±1(17)	50.12	3	1.9953	0.01990
2.4G WIFI Ant2	16.71	16±1(17)	50.12	3	1.9953	0.01990
MIMO	/	/	/	/	/	0.03980
5.2G WIFI Ant1	13.02	12.5±1(13.5)	22.39	3	1.9953	0.00889
5.2G WIFI Ant2	13.15	12.5±1(13.5)	22.39	3	1.9953	0.00889
MIMO	/	/	/	/	/	0.01778
5.8G WIFI Ant1	13.42	12.5±1(13.5)	22.39	3	1.9953	0.00889
5.8G WIFI Ant2	14.23	13.5±1(14.5)	28.18	3	1.9953	0.01119
MIMO	/	/	/	/	/	0.02008

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

Note:

Note: The estimation distance is 20cm

Note: PK Output power= conducted power.

Conducted power see the test report HK2112024710-1E/2E/3E,

2.4G antenna gain=3dBi.

5G antenna gain=3dBi.

2.4G WIFI MPE (max)= 0.03980 (mW/cm²)

5G WIFI MPE (max)= 0.02008 (mW/cm²)

simultaneously MPE=0.02008+0.03980=0.05988(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 0.05988mW/cm² which is < 1.0mW/cm², RF Exposure testing is not required.

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