

MPE ESTIMATION

FCC ID: **2A7WI-IX450-V2**

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	18.84	18±1(19)	79.43	4	2.51	0.03971
2.4G WIFI Ant2	17.95	17±1(18)	63.10	4	2.51	0.03155
MIMO	/	/	/	/	/	0.07126
5.2G WIFI Ant1	18.47	18±1(19)	79.43	4	2.51	0.03971
5.2G WIFI Ant2	18.88	18±1(19)	79.43	4	2.51	0.03971
MIMO	/	/	/	/	/	0.07943
5.8G WIFI Ant1	18.85	18±1(19)	79.43	4	2.51	0.03971
5.8G WIFI Ant2	18.04	17.5±1(18.5)	70.79	4	2.51	0.03540
MIMO	/	/	/	/	/	0.07511

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

Note:

Note: The estimation distance is 20cm

Note: PK Output power= conducted power.

Conducted power see the test report **HK2209224263-1E/-2E/3E**,

2.4G antenna gain=4dBi.

5G antenna gain=4dBi.

2.4G WIFI MPE (max)= 0.07126 (mW/cm²)

5G WIFI MPE (max)= 0.07943 (mW/cm²)

simultaneously MPE= 0.07126+0.07943=0.15069(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 0.15069mW/cm² which is < 1.0mW/cm², RF Exposure testing is not required.

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