

MPE ESTIMATION

FCC ID: 2BKNM-ONE

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 WIFI+SRD:

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)
2.4GWIFI	14.42	14±1(15)	31.62	2.66	1.85	0.01161
2.4GTX	-1.62	-2±1(-1)	0.79	2.66	1.85	0.00029
5.8GTX	-8.53	-8±1(-7)	0.20	1.76	1.50	0.00006

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

Note:

Note: The estimation distance is 20cm

Note: PK Output power= conducted power.

Conducted power see the test report HK2407093751-1E/2E/3E,

2.4GWIFI antenna gain=2.66dBi

2.4GTX antenna gain=2.66dBi.

5.8GTX antenna gain=1.76dBi.

2.4G WIFI MPE (max)= 0.01161 (mW/cm²)

2.4GTX MPE (max)= 0.00029 (mW/cm²)

5.8GTX MPE (max)= 0.00006 (mW/cm²)

simultaneously MPE=0.01161+0.00029+0.00006=0.01196(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 0.01196 which is < 1.0, RF Exposure testing is not required.

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