

MPE ESTIMATION

FCC ID: 2BPY5-L22W

1, According to §1.1310, 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

Note: F= Frequency in MHz

2, Estimation Result

For Bluetooth and WIFI:

Mode	Max PK Output power(dBm)	Tune Up Power(dBm)	Max Tune Up power(mW)	Antenna Gain(dBi)	Antenna Gain (Numerical)	MPE (mW/cm ²)
5230	9.28	9±1(10)	10	0.73	1.18	0.00235
2402	5.88	5±1(6)	3.98	1.45	1.40	0.00111

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

Note:

Note: The estimation distance is 20cm

Note: PK Output power= conducted power in mW.

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 in cm

Conducted power see the test report HK2505082354-1E/2E,

5.2G antenna gain=0.73dBi;

BT antenna gain=1.45dBi

5.2G WIFI MPE (max)= 0.00235 (mW/cm²)

BT MPE (max)= 0.00111 (mW/cm²)

simultaneously MPE=0.00235+0.00111=0.00346 (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 0.00346 which is < 1.0, RF Exposure testing is not required.

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