MPE ESTIMATION

FCC ID: 2A3PR-KCA01

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

Note: F= Frequency in MHz

2, Estimation Result

Mode	Frequency (MHz)	Max PK Output power(dBm)	Tune Up Power(dBm)	Max Tune Up power(mW)	Antenna Gain(dBi)	Antenna Gain (linear)	MPE (mW/cm²)
WiFi	2462	16.18	16±1(17)	50.12	2.5	1.7783	0.01773
BLE	2480	7.13	7±1(8)	6.31	2.5	1.7783	0.00223

Note:

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

Note: The estimation distance is 20cm

Note:

PK Output power= conducted power.

Conducted power see the test report **HK2112224931-1E/2E**, 2.4G WIFI antenna gain=2.5dBi, BT antenna gain=2.5dBi

2.4G WIFI MPE(MAX)= 0.01773(mW/cm²)

BLE MPE(MAX)= 0.00223(mW/cm²)

Simultaneously MPE=0.01773+0.00223=0.01996(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 0.01996 mW/cm² which is< 1.0mW/cm², RF Exposure testing is not required.
-------The End-------