



# MPE ESTIMATION

FCC ID: 2AK43RD-881

## 1, Limit for General Population/ Uncontrolled Exposures

Frequency	Power density (mW/ cm <sup>2</sup> )	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/cm <sup>2</sup> )
WiFi	2437	13.39	13±1(14)	25.12	2.73	1.8750	0.00937
BT	2480	3.43	3±1(4)	2.51	-0.68	0.8551	0.00043

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

Note:

Note: The estimation distance is 20cm

The device could not transmit simultaneously in 2.4G and BT

Note:

PK Output power= conducted power.

Conducted power see the test report **HK2111294626-1E/2E**, 2.4G WIFI antenna gain=2.73dBi, BT antenna gain=-0.68dBi

2.4G WIFI MPE(MAX)= 0.00937(mW/cm<sup>2</sup>)

BT MPE(MAX)= 0.00043(mW/cm<sup>2</sup>)

Simultaneously MPE=0.00937+0.00043=0.0098(mW/cm<sup>2</sup>)

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 0.0098 mW/cm<sup>2</sup> which is < 1.0mW/cm<sup>2</sup>, RF Exposure testing is not required.

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