

# MPE ESTIMATION

FCC ID: 2BGRF-X1

**1,Per FCC Part 2.1091 Radiofrequency radiation exposure evaluation: mobile devices, the 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> )
2.4g WIFI	2437	15.40	15±1(16)	39.81	4.97	3.14	0.02488
$Pd = \frac{P_{out} * G}{4\pi r^2} ;$							
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 HK2508224044-E, antenna gain=4.97dBi							

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 0.02488 mW/cm<sup>2</sup> which is < 1.0mW/cm<sup>2</sup>, RF Exposure testing is not required.

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