



# MPE ESTIMATION

FCC ID: 2BEDI-D16X

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> )
EDR	2441	1.96	1±1(2)	1.5849	3.57	2.2751	0.000717
2.4g WiFi	2412	14.34	14±1(15)	31.6228	3.57	2.2751	0.014313
5.2g WiFi	5230	9.16	9±1(10)	10.0000	6.2	4.1687	0.008293
5.8g WiFi	5775	12.87	12±1(13)	19.9526	6.2	4.1687	0.016547

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

Note:

Note: The estimation distance is 20cm

Note:

PK Output power= conducted power.

Conducted power see the test report **HK2312116019-1E/2E/3E/4E**, antenna gain=3.57dBi(EDR/2.4g WiFi), 6.2dBi(5.2g WiFi, 5.8g WiFi)

2.4G WIFI MPE (max)= 0.014313 (mW/cm<sup>2</sup>)

5G WIFI MPE (max)= 0.016547 (mW/cm<sup>2</sup>)

simultaneously MPE=0.014313+0.016547=0.030860(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 0.030860 mW/cm<sup>2</sup> which is < 1.0mW/cm<sup>2</sup>, RF Exposure testing is not required.

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