

MPE ESTIMATION

FCC ID: 2BAIV-FIREFLY

1,Per FCC Part 2.1091 Radiofrequency radiation exposure evaluation: mobile devices, the 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/cm ²)
EDR	2441	8.81	8±1(9)	7.94	0	1.00	0.00158
BLE	2440	1.5	1±1(2)	1.58	0	1.00	0.00031
5.8G TX	5806	14.02	14±1(15)	31.62	2	1.58	0.00994

$$Pd = \frac{P_{out} * G}{4\pi r^2} :$$

Note:

Note: The estimation distance is 20cm

Note:

PK Output power= conducted power.

Conducted power see the test report **HK2410226209-1E/2E/3E**, antenna gain=2dBi(5.8G TX), 0dBi(BT)

5.8G TX (max)= 0.00994 (mW/cm²)

BT (max)= 0.00158 (mW/cm²)

simultaneously MPE=0.00994+0.00158=0.01152(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 0.01152 mW/cm² which is < 1.0mW/cm², RF Exposure testing is not required.

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