

MPE ESTIMATION

FCC ID: 2BLWP-PH770T

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)
2.4g WIFI	2437	12.68	12±1(13)	19.95	3.88	2.44	0.00968
BLE	2402	0.26	0±1(1)	1.26	2.49	1.77	0.00062

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

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 HK2504232087-1E/2E, antenna gain=3.88dBi(2.4g WIFI), 2.49dBi(BLE)

2.4G WIFI MPE (max)= 0.00968 (mW/cm²)

BLE MPE (max)= 0.00062 (mW/cm²)

Simultaneously MPE

2.4G WiFi + Bluetooth = 0.00968 + 0.00062 = 0.01030

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 0.01030 which is<1.0; RF Exposure testing is not required.

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