MPE ESTIMATION

FCC ID: 2A5TQ-P80

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)		
300MHz1.5GHz	F/1500	30		
1.5GHz100GHz	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/cm²)
5.8G WIFI	5745	4.23	4±1(5)	3.16	1.74	1.49	0.0009
EDR	2402	9.58	9±1(10)	10.00	-0.4	0.91	0.0019

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

Note:

Note: The estimation distance is 20cm

Note:

PK Output power= conducted power.

Conducted power see the test report HK2406143112-1E/2E, antenna gain=1.74dBi(5.8G WIFI),

-0.4dBi(EDR)

5.8G WIFI MPE (max)= 0.0009 (mW/cm²)

BLE $(max) = 0.0019 (mW/cm^2)$

simultaneously MPE=0.0009+0.0019=0.0028(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 0.0028 mW/cm² which is< 1.0mW/cm², RF Exposure testing is not required.

----The End-----