

MPE ESTIMATION

FCC ID: 2AY55-VRC PAA70MW

1, 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

2, Estimation Result

For 2.4G WIFI:

Mode	Max PK Output power(dBm)	Tune Up Power(dBm)	Max Tune Up power(mW)	Antenna Gain(dBi)	Antenna Gain (linear)	MPE (mW/cm ²)
BT	-7.147	-8±1(-7)	0.2	1	1.26	0.00005
5.8GWIFI	13.90	13±1(14)	25.12	1	1.26	0.0063

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

Note:

Note: The estimation distance is 20cm

Note: PK Output power= conducted power.

Conducted power see the test report HK2103020481-1E/HK2103020481-2E.

Gantenna gain=1dBi

simultaneously MPE

BT MPE (max)= 0.00005 (mW/cm²)

5.8G WIFI MPE (max)= 0.0063 (mW/cm²)

simultaneously MPE=0.00005+0.0063=0.00635(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

0.00634mW/cm² which is< 1.0mW/cm², RF Exposure testing is not required.

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