

MPE ESTIMATION

FCC ID: 2ADFS-ULTRA-U2

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 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)
2.4G WIFI ANT.1	16.47	16±1(17)	50.12	0.56	1.14	0.01135
2.4G WIFI ANT.2	15.65	15±1(16)	39.81	0.56	1.14	0.00901
MIMO	/	/	/	/	/	0.02036
5.2G WIFI ANT.1	8.86	8±1(9)	7.94	1.27	1.34	0.00212
5.2G WIFI ANT.2	8.75	8±1(9)	7.94	1.27	1.34	0.00212
MIMO	/	/	/	/	/	0.00424
5.8G WIFI ANT.1	7.26	7±1(8)	6.31	0.51	1.12	0.00141
5.8G WIFI ANT.2	8.42	8±1(9)	7.94	0.51	1.12	0.00178
MIMO	/	/	/	/	/	0.00319

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

Note:

Note: The estimation distance is 20cm

Note: PK Output power= conducted power.

Conducted power see the test report HK2409235493-1E/2E(2.4G+5.2G) and HK2503111093-E(5.8G)

2.4G antenna gain=0.56dBi.

5.2G antenna gain=1.27dBi.

5.8G antenna gain=0.51dBi.

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 0.02036 which is < 1.0, RF Exposure testing is not required.

Note: the device could not transmit simultaneously in 2.4G and 5G.

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