

MPE ESTIMATION

FCC ID: 2AU8K-NZC110EXT

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

Note: F= Frequency in MHz

2 Estimation Result

2.4G WIFI ANT. 1:

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)
11b	18.40	18±1(19)	79.43	8	6.309	0.09977
11g	17.59	17±1(18)	63.10	8	6.309	0.07925
11n/HT20	16.60	16±1(17)	50.12	8	6.309	0.06295
11n/HT40	15.89	15±1(16)	39.81	8	6.309	0.05000

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

Note:

Note: The estimation distance is 20cm

Note:

PK Output power= conducted power.

Conducted power see the test report HK1911212985-E, The MIMO mode power is max, so only calculate max power mode and antenna port 1 gain=8dBi, antenna port 2 gain=8dBi.

2.4G WIFI ANT. 2:

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)
11b	18.43	18±1(19)	79.43	8	6.309	0.09977
11g	17.61	17±1(18)	63.10	8	6.309	0.07925
11n/HT20	16.43	16±1(17)	50.12	8	6.309	0.06295
11n/HT40	15.91	15±1(16)	39.81	8	6.309	0.05000

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

Note:

Note: The estimation distance is 20cm

Note:

PK Output power= conducted power.

Conducted power see the test report HK1911212985-E, The MIMO mode power is max, so only calculate max power mode and antenna port 1 gain=8dBi, antenna port 2 gain=8dBi.

For MIMO:

Mode	MPE (mW/cm ²)
11n/HT20	0.1259
11n/HT40	0.1000

Note: The estimation distance is 20cm

Note:

PK Output power= conducted power.

Conducted power see the test report HK1911212985-E, The MIMO mode power is max, so only calculate max power mode and antenna port 1 gain=8dBi, antenna port 2 gain=8dBi.

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 0.1259mW/cm² which is < 1.0mW/cm², RF Exposure testing is not required.