

MPE ESTIMATION

FCC ID: **2ADUG-HWAP-AX880**

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/5G 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 Ant1	17.79	17±1(18)	63.10	6.54	4.51	0.05662
2.4G WIFI Ant2	17.99	17±1(18)	63.10	6.54	4.51	0.05662
2.4G WIFI Ant3	17.46	17±1(18)	63.10	6.54	4.51	0.05662
2.4G WIFI Ant4	17.32	17±1(18)	63.10	6.54	4.51	0.05662
MIMO	/	/	/	/	/	0.22648
5.2G WIFI Ant1	4.70	4±1(5)	3.16	8.16	6.55	0.00412
5.2G WIFI Ant2	4.74	4±1(5)	3.16	8.16	6.55	0.00412
5.2G WIFI Ant3	5.36	5±1(6)	3.98	8.16	6.55	0.00519
5.2G WIFI Ant4	4.63	4±1(5)	3.16	8.16	6.55	0.00412
MIMO	/	/	/	/	/	0.01755
5.8G WIFI Ant1	5.19	5±1(6)	3.98	7.71	5.90	0.00468
5.8G WIFI Ant2	5.17	5±1(6)	3.98	7.71	5.90	0.00468
5.8G WIFI Ant3	5.79	5±1(6)	3.98	7.71	5.90	0.00468
5.8G WIFI Ant4	5.17	5±1(6)	3.98	7.71	5.90	0.00468
MIMO	/	/	/	/	/	0.01872

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

Note:

Note: The estimation distance is 20cm

Note: PK Output power= conducted power.

Conducted power see the test report **HK2306052297-1E/-2E/3E**,

2.4G antenna gain=6.54dBi.

5.2G antenna gain=8.16dBi.

5.8G antenna gain=7.71dBi.

2.4G WIFI MPE (max)= 0.22648 (mW/cm²)

5G WIFI MPE (max)= 0.01872 (mW/cm²)

simultaneously MPE= 0.22648+0.01872=0.2452

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 0.2452 which is < 1.0, RF Exposure testing is not required.

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