



MPE ESTIMATION

FCC ID: ZNPWD-ME5

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

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/cm ²)
2.4G WiFi Ant. 1	2462	14.77	14±1(15)	25.12	2.5	1.7783	0.00889
2.4G WiFi Ant. 2	2452	14.73	15±1(16)	31.62	2.5	1.7783	0.01119
MIMO	/	/	/	/	/	/	0.02008
5.2G WiFi Ant. 1	5180	13.88	12±1(13)	19.95	3.5	2.2387	0.00889
5.2G WiFi Ant. 2	5200	13.82	13±1(14)	25.12	3.5	2.2387	0.01119
MIMO	/	/	/	/	/	/	0.02008
5.8G WiFi Ant. 1	5775	14.19	14±1(15)	25.12	3.5	2.2387	0.01119
5.8G WiFi Ant. 2	5775	14.21	15±1(16)	31.62	3.5	2.2387	0.01408
MIMO	/	/	/	/	/	/	0.02527

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

Note:

Note: The estimation distance is 20cm

Note: PK Output power= conducted power.

Conducted power see the test report **HK2104131089-1E/2E/3E**, antenna gain=2.5dBi(2.4G WIFI),3.5dBi(5.2GWIFI/5.8GWIFI)

2.4G WIFI MPE (max)= 0.02008 (mW/cm²)

5G WIFI MPE (max)= 0.02527 (mW/cm²)

simultaneously MPE=0.02008+0.02527=0.04535(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 0.04535 mW/cm² which is < 1.0mW/cm², RF Exposure testing is not required.

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