

MPE ESTIMATION

FCC ID: 2A8NQ-HW622H-SE-01

1, According to §1.1310, 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

	Max PK Output power(dBm)	Tune Up Power(dBm)	Max Tune Up power(mW)	Antenna Gain(dBi)	Antenna Gain (numerical)	MPE (mW/cm ²)
2.4GWiFi ANT1	15.06	15±1(16)	39.811	8.05	6.38	0.05058
2.4GWiFi ANT2	14.98	14±1(15)	31.623	8.05	6.38	0.04017
MIMO	/	/	/	/	/	0.09075
5.8GWiFi ANT1	8.04	8±1(9)	7.943	7.56	5.70	0.00901
5.8GWiFi ANT2	8.73	8±1(9)	7.943	7.56	5.70	0.00901
MIMO	/	/	/	/	/	0.01802

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

Note:

Note: The estimation distance is 20cm

Note:

PK Output power= conducted power in mW.

G=power gain of the antenna in the direction of interest relative to an isotropic radiator

R=distance to the center of radiation of the antenna in cm

Conducted power see the test report **HK2508214730-1E/2E**.

2.4G antenna 1 gain=8.05dBi, 5.2G antenna 2 gain=8.05dBi;

5.8G antenna 1 gain=7.56dBi, 5.8G antenna 2 gain=7.56dBi.

2.4GWIFI + 5.8GWIFI MPE (max)= 0.10877 (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 0.10877mW/cm² which is< 1.0mW/cm², RF Exposure testing is not required.

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