



# MPE ESTIMATION

FCC ID: 2AYVA-IX450

## 1, Limit for General Population/ Uncontrolled Exposures

| Frequency        | Power density (mW/ cm <sup>2</sup> ) | 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 <sup>2</sup> ) |
|----------------|-----------------|--------------------------|--------------------|-----------------------|-------------------|-----------------------|---------------------------|
| 2.4GWIFI ANT.1 | 2412            | 15.25                    | 15±1(16)           | 39.81                 | 3                 | 1.9953                | 0.01580                   |
| 2.4GWIFI ANT.2 | 2412            | 14.57                    | 14±1(15)           | 31.62                 | 3                 | 1.9953                | 0.01255                   |
| MIMO           | /               | /                        | /                  | /                     | /                 | /                     | 0.02835                   |
| 5.2GWIFI ANT.1 | 5190            | 12.94                    | 12±1(13)           | 19.95                 | 3                 | 1.9953                | 0.00792                   |
| 5.2GWIFI ANT.2 | 5230            | 13.65                    | 13±1(14)           | 25.12                 | 3                 | 1.9953                | 0.00997                   |
| MIMO           | /               | /                        | /                  | /                     | /                 | /                     | 0.01789                   |
| 5.8GWIFI ANT.1 | 5755            | 12.92                    | 12±1(13)           | 19.95                 | 3                 | 1.9953                | 0.00792                   |
| 5.8GWIFI ANT.2 | 5795            | 14.09                    | 14±1(15)           | 31.62                 | 3                 | 1.9953                | 0.01255                   |
| MIMO           | /               | /                        | /                  | /                     | /                 | /                     | 0.02047                   |

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

Note:

Note: The estimation distance is 20cm

Note:

PK Output power= conducted power.

Conducted power see the test report HK2106181951-1E/2E/3E, antenna gain=3dBi

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 0.02835 mW/cm<sup>2</sup> which is < 1.0mW/cm<sup>2</sup>, RF Exposure testing is not required.

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

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