



# MPE ESTIMATION

FCC ID: 2AD37JVAWPRO53TX

1, According to §1.1310, 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

|               | Max PK Output power(dBm) | Tune Up Power (dBm) | Max Tune Up power (mW) | Antenna Gain (dBi) | Antenna Gain (numerical) | MPE (mW/cm <sup>2</sup> ) | Limit (mW/cm <sup>2</sup> ) |
|---------------|--------------------------|---------------------|------------------------|--------------------|--------------------------|---------------------------|-----------------------------|
| 5.2GWiFi ANT1 | 1.93                     | 1±1(2)              | 1.585                  | 5.49               | 3.540                    | 0.00112                   | 1.0                         |
| 5.2GWiFi ANT2 | 1.32                     | 1±1(2)              | 1.585                  | 5.48               | 3.532                    | 0.00111                   | 1.0                         |
| MIMO          | 4.33                     | 4±1(5)              | 3.162                  | 8.50               | 7.079                    | 0.00446                   | 1.0                         |
| 5.8GWiFi ANT1 | 15.73                    | 15±1(16)            | 39.811                 | 5.36               | 3.436                    | 0.02722                   | 1.0                         |
| 5.8GWiFi ANT2 | 15.12                    | 15±1(16)            | 39.811                 | 5.50               | 3.548                    | 0.02812                   | 1.0                         |
| MIMO          | 15.77                    | 15±1(16)            | 39.811                 | 8.44               | 6.982                    | 0.05533                   | 1.0                         |

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

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 **HK2603030377-1E/2E**.

5.2G antenna 1 gain=5.49dBi, 5.2G antenna 2 gain=5.48dBi;

5.8G antenna 1 gain=5.36dBi, 5.8G antenna 2 gain=5.50dBi.

5.2GWiFi and 5.8GWiFi cannot be transmitted at the same time

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 0.05533 which is < 1.0, RF Exposure testing is not required.

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