

# MPE ESTIMATION

FCC ID: 2BCLC-B4

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

|          | Frequency (MHz) | 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> ) |
|----------|-----------------|--------------------------|--------------------|-----------------------|-------------------|--------------------------|---------------------------|
| 2.4GWiFi | 2412            | 11.51                    | 11+1(12)           | 15.849                | 3.85              | 2.43                     | 0.00766                   |

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

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 **HK2503261489-E**, antenna gain=3.85dBi

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 0.00766mW/cm<sup>2</sup> which is < 1.0mW/cm<sup>2</sup>, RF Exposure testing is not required.

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