

MPE ESTIMATION  
FCC ID: 2AIGI-RA18

## 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                      |

## 2, Estimation Result

**For 2.4G WIFI:**

| Mode                                                                  | 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> ) |
|-----------------------------------------------------------------------|--------------------------|--------------------|-----------------------|-------------------|-----------------------|---------------------------|
| 11b                                                                   | 9.49                     | 9±1(10)            | 10.00                 | 1                 | 1.2589                | 0.00251                   |
| 11g                                                                   | 8.63                     | 8±1(9)             | 7.94                  | 1                 | 1.2589                | 0.00199                   |
| 11n/HT20                                                              | 7.75                     | 7±1(8)             | 6.31                  | 1                 | 1.2589                | 0.00158                   |
| 11n/HT40                                                              | 6.44                     | 6±1(7)             | 5.01                  | 1                 | 1.2589                | 0.00126                   |
| $Pd = \frac{P_{out} * G}{4\pi r^2} :$                                 |                          |                    |                       |                   |                       |                           |
| Note:                                                                 |                          |                    |                       |                   |                       |                           |
| Note: The estimation distance is 20cm                                 |                          |                    |                       |                   |                       |                           |
| Note: PK Output power= conducted power.                               |                          |                    |                       |                   |                       |                           |
| Conducted power see the test report HK1809061071E, antenna gain=1dBi. |                          |                    |                       |                   |                       |                           |

| Mode                                                                                                             | CH   | PK Output<br>power(dBm) | Output<br>power(mW) | Antenna<br>Gain(dBi) | Antenna Gain<br>(linear) | MPE<br>(mW/cm <sup>2</sup> ) |
|------------------------------------------------------------------------------------------------------------------|------|-------------------------|---------------------|----------------------|--------------------------|------------------------------|
| 11b                                                                                                              | CH1  | 9.01                    | 7.96                | 1                    | 1.2589                   | 0.00199                      |
|                                                                                                                  | CH6  | 9.33                    | 8.57                | 1                    | 1.2589                   | 0.00215                      |
|                                                                                                                  | CH11 | 9.49                    | 8.89                | 1                    | 1.2589                   | 0.00223                      |
| 11g                                                                                                              | CH1  | 8.63                    | 7.29                | 1                    | 1.2589                   | 0.00183                      |
|                                                                                                                  | CH6  | 8.17                    | 6.56                | 1                    | 1.2589                   | 0.00164                      |
|                                                                                                                  | CH11 | 8.30                    | 6.76                | 1                    | 1.2589                   | 0.00169                      |
| 11n/HT20                                                                                                         | CH1  | 7.75                    | 5.96                | 1                    | 1.2589                   | 0.00149                      |
|                                                                                                                  | CH6  | 7.31                    | 5.38                | 1                    | 1.2589                   | 0.00135                      |
|                                                                                                                  | CH11 | 7.33                    | 5.41                | 1                    | 1.2589                   | 0.00136                      |
| 11n/HT40                                                                                                         | CH1  | 6.18                    | 4.15                | 1                    | 1.2589                   | 0.00104                      |
|                                                                                                                  | CH4  | 6.40                    | 4.37                | 1                    | 1.2589                   | 0.00109                      |
|                                                                                                                  | CH7  | 6.44                    | 4.41                | 1                    | 1.2589                   | 0.00110                      |
| $Pd = \frac{P_{out} * G}{4\pi r^2};$                                                                             |      |                         |                     |                      |                          |                              |
| Note:                                                                                                            |      |                         |                     |                      |                          |                              |
| Note: The estimation distance is 20cm                                                                            |      |                         |                     |                      |                          |                              |
| Note: PK Output power= conducted power.<br>Conducted power see the test report HK1809061071E, antenna gain=1dBi. |      |                         |                     |                      |                          |                              |

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