

## MPE ESTIMATION

FCC ID: 2ABO5-C48S

### 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  | 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   | 13.95                    | 13±1(14)           | 25.12                 | 3                 | 1.2589                | 0.018885                  |
| 11g   | 13.65                    | 13±1(14)           | 25.12                 | 3                 | 1.2589                | 0.018885                  |
| 11n/HT20  | 12.96                    | 12±1(13)           | 19.95                 | 3                 | 1.2589                | 0.014997                  |
| 11n/HT40  | 12.42                    | 12±1(13)           | 19.95                 | 3                 | 1.2589                | 0.014997                  |
| $Pd = \frac{P_{out} * G}{4\pi r^2}$                                       |                          |                    |                       |                   |                       |                           |
| Note:   |                          |                    |                       |                   |                       |                           |
| Note: The estimation distance is 20cm.                                    |                          |                    |                       |                   |                       |                           |
| Note: PK Output power= conducted power.                                   |                          |                    |                       |                   |                       |                           |
| Conducted power see the test report UNIA19030103FR-01, antenna gain=3dBi. |                          |                    |                       |                   |                       |                           |

| Mode  | CH | PK Output power(dBm) | Output power(mW) | Antenna Gain(dBi) | Antenna Gain (linear) | MPE (mW/cm <sup>2</sup> ) |
|---|----|----------------------|------------------|-------------------|-----------------------|---------------------------|
| 11b   | 1  | 13.89                | 23.49            | 3                 | 1.2589                | 0.018408                  |
|   | 6  | 13.62                | 23.01            | 3                 | 1.2589                | 0.017301                  |
|   | 11 | 13.95                | 24.83            | 3                 | 1.2589                | 0.018666                  |
| 11g   | 1  | 13.51                | 22.44            | 3                 | 1.2589                | 0.016869                  |
|   | 6  | 13.65                | 23.17            | 3                 | 1.2589                | 0.017421                  |
|   | 11 | 13.36                | 21.68            | 3                 | 1.2589                | 0.016296                  |
| 11n/HT20  | 1  | 12.96                | 19.77            | 3                 | 1.2589                | 0.014862                  |
|   | 6  | 12.67                | 18.49            | 3                 | 1.2589                | 0.013902                  |
|   | 11 | 12.75                | 18.84            | 3                 | 1.2589                | 0.014160                  |
| 11n/HT40  | 3  | 12.31                | 17.02            | 3                 | 1.2589                | 0.012795                  |
|   | 6  | 12.36                | 17.22            | 3                 | 1.2589                | 0.012945                  |
|   | 9  | 12.42                | 17.46            | 3                 | 1.2589                | 0.013125                  |
| $Pd = \frac{P_{out} * G}{4\pi r^2}$                                       |    |                      |                  |                   |                       |                           |
| Note:   |    |                      |                  |                   |                       |                           |
| Note: The estimation distance is 20cm.                                    |    |                      |                  |                   |                       |                           |
| Note: PK Output power= conducted power.                                   |    |                      |                  |                   |                       |                           |
| Conducted power see the test report UNIA19030103FR-01, antenna gain=3dBi. |    |                      |                  |                   |                       |                           |

Conclusion: No SAR evaluation required since transmitter power is below FCC threshold  
-----The End-----