# 10. MPE ESTIMATION

## 10.1. Limit for General Population/ Uncontrolled Exposures

| Frequency | Power density (mW/ cm$^2$) | Averaging time(minutes) |
|---|---|---|
| 300MHz----1.5GHz | F/1500 | 30 |
| 1.5GHz---100GHz | 1.0 | 30 |

| Frequency(MHz) | Power density (mW/ cm$^2$) | Averaging time(minutes) |
|---|---|---|
| 2412 | 1 | 30 |
| 2437 | 1 | 30 |
| 2462 | 1 | 30 |

Note: F= Frequency in MHz

## 10.2. Estimation Result

| EUT: Altai A8in (ac) Super WiFi Base Station | | |
|---|---|---|
| M/N: WA8011NAC-H | | |
| Test date: 2016-02-25 | Pressure: 101.4±1.0kPa | Humidity: 50.3±3.0% |
| Tested by: Donjon_Huang | Test site: RF site | Temperature:20.2±0.6 ℃ |

| Test Mode | CH | Frequency（MHz） | Peak Output Power (dBm) | Output Power (mW) | Antenna Gain (dBi) | Antenna Gain (Linear) | MPE |
|---|---|---|---|---|---|---|---|
| 11b | CH1 | 2412 | 21.27 | 133.97 | 14 | 25.12 | 0.6698 |
| | CH6 | 2437 | 21.08 | 128.23 | 14 | 25.12 | 0.6411 |
| | CH11 | 2462 | 21.08 | 128.23 | 14 | 25.12 | 0.6411 |
| 11g | CH1 | 2412 | 21.28 | 134.28 | 14 | 25.12 | 0.6714 |
| | CH6 | 2437 | 21.28 | 134.28 | 14 | 25.12 | 0.6714 |
| | CH11 | 2462 | 21.32 | 135.52 | 14 | 25.12 | 0.6776 |
| 11n HT20 | CH1 | 2412 | 21.42 | 138.68 | 14 | 25.12 | 0.6933 |
| | CH6 | 2437 | 21.34 | 136.14 | 14 | 25.12 | 0.6807 |
| | CH11 | 2462 | 21.48 | 140.60 | 14 | 25.12 | 0.7030 |
| 11n HT40 | CH3 | 2422 | 21.21 | 132.13 | 14 | 25.12 | 0.6606 |
| | CH6 | 2437 | 21.33 | 135.83 | 14 | 25.12 | 0.6791 |
| | CH9 | 2452 | 21.42 | 138.68 | 14 | 25.12 | 0.6933 |

$$MPE = \frac{PG}{4\pi R^2} \quad (R=20cm)$$