## **MPE Calculation (for Mobile Device)**

FCC ID: 1881PC2605N

Typical use distance:  $d \ge 20$  cm Power density limit for mobile devices at 2.4 and 5 GHz:  $S \le 1$  mW/cm<sup>2</sup> Remark: Average  $\le$  Peak, which means that calculating the power density applying Peak power is worst case. The worst case operation mode generating the highest power in each frequency range is taken for calculation.

Frequency range: 2412-2462MHz; 2422-2452MHz; Maximum measured conducted power (Average):  $P_{conducted} = 10.68 \text{ dBm}$ Antenna Gain: G = 3 dBi Calculation:  $P_{radiated} = P_{conducted} + G_{linear} = 10.68 \text{ dBm} + 3 \text{ dBi} = 13.68 \text{ dBm} = 23.33 \text{ mW}$ Power density S =  $(P_{radiated}) / (4\pi \times d^2) = 23.33 / 5026 = 0.0047 \text{ mW/cm}^2$  which is far below the limit, so pass.