

## MPE Calculation (for Mobile Device)

FCC ID: P3R-YY01

EUT Description: Mini PC for Android

Company: YUANYI ELECTRONICS TECHNOLOGY CO., LTD.

Model: YY-01

Typical use distance:  $d \geq 20 \text{ cm}$

Power density limit for mobile devices at 2.4GHz:  $S \leq 1 \text{ mW/cm}^2$

Remark: Average  $\leq$  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

Maximum measured conducted power (Peak):  $P_{\text{conducted}} = 16.79 \text{ dBm}$

Antenna Gain:  $G = 0 \text{ dBi}$

Calculation:  $P_{\text{radiated}} = P_{\text{conducted}} + G_{\text{linear}} = 16.79 \text{ dBm} + 0 \text{ dBi} = 16.79 \text{ dBm} = 57 \text{ mW}$

Power density  $S = (P_{\text{radiated}}) / (4\pi \times d^2) = 0.0012 \text{ mW/cm}^2$ , which is below the limit, so pass.