



## APPENDIX A (DECLARATION OF COMPLIANCE TO MAXIMUM PERMISSIBLE EXPOSURE LIMITS FOR HUMANS)

The Model U9W33 with 2400-2483.5MHz transmitter complies with Maximum permissible exposure limits for humans as called out in §1.1310. It is exempt from Maximum Permissible Exposure based on its operating frequency, and power density 0.059mW/cm<sup>2</sup>.

Calculation formula :

$$S = PG / 4\pi D^2$$

S : power density (W/m<sup>2</sup>)  
P : peak output power (W)  
G : antenna gain (isotropic)  
D : measurement distance (m)

Where :

- Ant A  
P = 19.75dBm at 2462 MHz, 11n-HT20 (see 19 page)  
G = 1.08dBi
- Ant B  
P = 20.41dBm at 2462 MHz, 11n-HT20 (see 19 page)  
G = 2.08dBi
- D = 0.2m

Therefore :

$$S(W / m^2) = \frac{(10^{\frac{19.75}{10}} \times 10^{-3} \times 10^{\frac{1.08}{10}}) + (10^{\frac{20.41}{10}} \times 10^{-3} \times 10^{\frac{2.08}{10}})}{4 \times \pi \times 0.2 \times 0.2} = 0.59$$

$$S \doteq 0.059 \text{ (mW/cm}^2\text{)}$$

This would be less than 1mW/cm<sup>2</sup> when the separation distance between the user and the device's radiating element is no less than 20cm.