



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

The Model U9W30X 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  $0.182\text{mW}/\text{cm}^2$ .

Calculation formula :

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

S : power density ( $\text{W}/\text{m}^2$ )  
P : peak output power (W)  
G : antenna gain (isotropic)  
D : measurement distance (m)

Where :

- Ant A  
P = 24.54dBm at 2412 MHz, 11n-HT20 (see 18 page)  
G = 2.1dBi
- Ant B  
P = 23.27dBm at 2412 MHz, 11n-HT20 (see 18 page)  
G = 3.3dBi  
• D = 0.2m

Therefore :

$$S(\text{W} / \text{m}^2) = \frac{(10^{\frac{24.54}{10}} \times 10^{-3} \times 10^{\frac{2.1}{10}}) + (10^{\frac{23.27}{10}} \times 10^{-3} \times 10^{\frac{3.3}{10}})}{4 \times \pi \times 0.2 \times 0.2} = 1.82$$

$$S \doteq 0.182 (\text{mW}/\text{cm}^2)$$

This would be less than  $1\text{mW}/\text{cm}^2$  when the separation distance between the user and the device's radiating element is no less than 20cm.