

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

The Model U9W31 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 0.058mW/cm².

Calculation formula :

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

S : power density (W/m²)
P : peak output power (W)
G: antenna gain (isotropic)
D: measurement distance (m)

Where :

- Ant A
P = 21.24dBm at 2452 MHz, 11n-HT40 (see 20 page)
G= 0.67dBi
- Ant B
P = 20.61dBm at 2452 MHz, 11n-HT40 (see 20 page)
G= 0.88dBi
- D = 0.2m

Therefore :

$$S(W/m^2) = \frac{(10^{\frac{21.24}{10}} \times 10^{-3} \times 10^{\frac{0.67}{10}}) + (10^{\frac{20.61}{10}} \times 10^{-3} \times 10^{\frac{0.88}{10}})}{4 \times \pi \times 0.2 \times 0.2} = 0.58$$

$$S \approx 0.058 \text{ (mW/cm}^2\text{)}$$

This would be less than 1mW/cm² when the separation distance between the user and the device's radiating element is no less than 20cm.