



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

The Model U9W31 with 5150-5850MHz 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 0.01mW/cm².

Calculation formula :

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

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

Where :

• Ant A

P = 10.87dBm at 5190 MHz, 11n-HT40 (see 29 page)

G = 1.62dBi

• Ant B

P = 11.72dBm at 5190 MHz, 11n-HT40 (see 29 page)

G = 3.34dBi

Therefore :

$$S(W/m^2) = \frac{(10^{\frac{10.87}{10}} \times 10^{-3} \times 10^{\frac{1.62}{10}}) + (10^{\frac{11.72}{10}} \times 10^{-3} \times 10^{\frac{3.34}{10}})}{4 \times \pi \times 0.2 \times 0.2} = 0.1$$

$$S \doteq 0.01 \text{ (mW/cm}^2\text{)}$$

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.