

## RF Exposure / MPE Calculation

**No. : 27DE0139-HO**

**Applicant** : OMRON Corporation Okayama factory  
**Type of Equipment** : FA Wireless LAN Unit (IEEE802.11a 5150-5350MHz (FCC15.407))  
**Model No.** : WE70-CL  
**FCC ID** : RXEWE70CL

---

OMRON Corporation Okayama factory declares that Model : WE70-CL complies with FCC radiation exposure requirement specified in the FCC Rules 2.1093(for portable)/2.1091 (for mobile).

### **RF Exposure Calculations:**

The following information provides the minimum separation distance for the highest gain antenna provided with the "WE70-CL" as calculated from FCC OET Bulletin 65 Appendix A, Table (B) Limits for General Population / Uncontrolled Exposure. This calculation is based on the highest EIRP possible from the system, considering maximum power and antenna gain, and considering a 1.0mW/cm<sup>2</sup> uncontrolled exposure limit. The Friis formula used was:

$$S = (P * G) / (4 * \pi * r^2)$$

Where

**P = 19.36 mW (Maximum peak output power)**  
**G = 2.19 Numerical Antenna gain; equal 3.40 dBi \***  
**r = 20.0 cm**

**For: WE70-CL**

$$S = 0.00843 \text{ mW/cm}^2$$

**\* Antenna Gain 3.40 dBi**

**= [ Magnetic pedestal Antenna Gain 7dBi max(for 5GHz band) ] - [ Antenna cable loss 3.6dB min(for 5GHz band) ]**