

RF Exposure / MPE Calculation

No. : 27DE0139-HO

Applicant : OMRON Corporation Okayama factory
Type of Equipment : FA Wireless LAN Unit (IEEE802.11b/g (FCC15.247))
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/cm² uncontrolled exposure limit. The Friis formula used was:

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

Where

P = 133.97 mW (Maximum peak output power)
G = 1.70 Numerical Antenna gain; equal 2.30 dBi *
r = 20.0 cm

For: WE70-CL

$$S = 0.04526 \text{ mW/cm}^2$$

*** Antenna Gain 2.30 dBi**

= [Magnetic pedestal Antenna Gain 4.5dBi max(for 2.4GHz band)] - [Antenna cable loss 2.2dB min(for 2.4GHz band)]