

Type Acceptance Test Report

**Multimode PCS Repeater
FCC Rule Parts: 2, 15 & 24**

ACS Report Number: 03-0089-24TA

Manufacturer: EMS Wireless
Model: Link2Cell

FCC ID: DNY0B2L2C1900

Appendix H

RF Exposure Information

General Information:

Applicant: EMS Wireless
 ACS Project: 03-0089
 FCC ID: NUW0B2L2C1900
 Device Category: Fixed Mount
 Environment: General Population/Uncontrolled Exposure

Technical Information:

Antenna Type: Integrated folded dipole and External Patch
 Antenna Gain: 13 dBi
 Transmitter Conducted Power: 13dBm or 20mW
 Maximum System EIRP: 26dBm or 398mW
 Operating Configuration: Wall Mounted
 Exposure Conditions: Greater than 20cm from the population

MPE Calculation

The minimum separation distance is calculated as follows:

$$E(V/m) = \frac{\sqrt{30 \times P \times G}}{d} \qquad \text{Power Density: } P_d = (mW/cm^2) = \frac{E^2}{3770}$$

MPE Distance

MPE Limits for General Population/Uncontrolled Exposure				
Radio Power (dBm)	Antenna Gain (dBi)	Sytem EIRP (mW)	MPE Limit (mW/cm2)	MPE Distance (cm)
13	13	398.11	1.00	5.63

Installation Guidelines

The installation manual will contain the following text advising how to install the equipment to maintain compliance with the FCC RF exposure requirements:

“In accordance with FCC regulations regarding human exposure to radiofrequency energy, this device shall be installed such that a minimum separation distance of 20cm is maintained between it and the general population”

Conclusion

This device complies with the MPE requirements by providing adequate separation between the device and any radiating structure and the general population.