SECTION 9

RF EXPOSURE INFORMATION

5.1 RF Safety Requirements to 2.1091 for Mobile Transmitters

Wireless Detection LLC calculated the MPE emission values for the EUT with the 3 dBi gain antenna. They used the formula shown in OET Bulletin 65 and calculated the minimum distance between antenna and unsuspecting user as 20 cm.

The EUT's maximum expected output power as shown in Section 2.7 was:

Frequency of Fundamental (MHz)	Measurement (dBm)*	Measurement (mW)*	FCC Limit (Watt)
902.277	23.41	219.28	1.0
915.021	23.43	220.3	1.0
927.250	23.06	202.3	1.0

Power = Antilog (dBm/10) = Antilog (23.41/10) = Antilog 2.341 = 219.28
*** Measurement includes 0.1 dB for cable loss**

Test Date: March 31, 2005

Tester Signature: _____ **Name: David Blethen**

The maximum EIRP expected for mobile installations is with a +3 dBi gain antenna. This would yield a maximum EIRP of 26.43 dBm.

RF Safety Requirements to 2.1091 for Mobile Transmitters

The maximum EIRP for mobile installations may be expected to be

Antilog (26.43 dBm/10) = 439.5 mW

MPE Calculations

The limits for this unit (uncontrolled exposure) are 1.0 mW/cm^2. Taking the RF Density Field Equation:

Mobile Installations

$S = 439.5/4*\pi* 20^2$

$S = 439.5/5026.55$

$S = 0.09$ mW / cm^2

This is well below the maximum level of 1.0 mW / cm^2

All manual instructions will specify 20 cm for mobile installations