SECTION 9

RF EXPOSURE INFORMATION

5.1 RF Safety Requirements to 2.1091 for Mobile Transmitters

The unit under evaluation has one external antenna. Nivis LLC calculated the MPE emission values for the EUT with the antenna. They used the formula shown in OET Bulletin 65 and calculated the minimum distance between antenna and unsuspecting user as 20 cm.

Nivis LLC will sell the NRD Module Model IC-NRD2-0101 with the following antenna.

MANUFACTURER	TYPE OF ANTENNA	MODEL	GAIN dBi	TYPE OR CONNECTOR
Mobile Antennas				
Comtelco	Dual Band PCS	A11382B	2	Reverse SMA

Power Output

The EUT's maximum expected output power as shown in Section 2.6 was

Frequency of Fundamental (MHz)	Measurement (dBm)*	Measurement (mW)*	FCC Limit (Watt)
910.450	27.08	510.5	1.0
918.148	27.52	664.9	1.0
927.420	26.58	455.0	1.0

* Measurement includes 0.1 dB for cable loss

The maximum EIRP expected for mobile installations is with the 2dBi gain antenna. This would yield a maximum EIRP of 29.52 dBm.

5.1 RF Safety Requirements to 2.1091 for Mobile Transmitters

The maximum EIRP for mobile installations may be expected to be

Antilog (29.52 dBm/10) = 895.4 mW

MPE Calculations

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

Mobile Installations

$S = 895.4/4*\pi* 20^2$

$S = 895.4/5026.55$

$S = 0.18\ mW / cm^2$

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

All manual instructions will specify 20 cm for mobile installations