

Exhibit 7 MPE Data

Exhibit 7 contains the CELL-TRAC™ II maximum permissible exposure (MPE) data, calculations and warning label.

The radiated emission of the unit with its antenna was measured. The maximum Corrected Reading was 133.9 dB(uV/m) at low channel. This value corresponds to a ERP of 36.5 dBm see Exhibit 9 Intertek Testing services NA Inc. Test Report page 5 and 5a.

1. Convert ERP from dBm to milliwatts (mW):

$$\text{dBm} = 10 \text{ LOG}(\text{Watts} * 1000)$$

$$\text{ERP(mW)} = \text{INV-LOG}(36.5\text{dBm}/10) = 4467 \text{ mW}$$

2. The maximum permissible exposure (MPE) limit per OET Bulletin 65, Appendix A, Table 1B the Power Density (S) for General Population/Uncontrolled Exposure is:

$$S_{\text{limit}} = f/1500, \quad f = \text{frequency in MHz}, \quad f_{\text{max}} = 849 \text{ MHz}$$

$$S_{\text{limit}} = 849/1500 = 0.566 \text{ mW/cm}^2$$

3. Using Equation 5 from OET Bulletin 65 (and adding 3dB (ERP * 2) for reflection from a ground plane) calculate minimum distance to the center of radiation of the antenna:

$$S = \frac{\text{EIRP}}{4\pi R^2} = \frac{1.64 \text{ ERP}}{4\pi R^2} = \frac{0.41 \text{ ERP}}{\pi R^2} \quad (5)$$

$$R^2 = (0.41 * (\text{ERP} * 2)) / (S_{\text{limit}} * 3.1416) = 2060 \text{ cm}^2$$

$$R = 45.4 \text{ cm minimum}$$

4. The CELL-TRAC™ II is a box which is used with an antenna connected via a cable to its connector. It is not used as a handheld device to be held against one's ear. The antenna is to be mounted at least 50 centimeters (20 inches) away from the body of the user or nearby persons. The following warning label will be mounted on all CELL-TRAC™ II units.

Warning

While this device is in operation, a separation distance of at least 50 centimeters (20 inches) should be maintained between the radiating antenna and the body of the user or nearby persons in order to meet the FCC RF exposure guidelines.