



August 16, 2001

TCB
BABT Product Service
4855 Patrick Henry Drive, Building 6
Santa Clara, CA 95054

Dear Sir or Madam:

The following is the SAR calculation for the Digivance LRCS SMR System's Remote Unit using the system's maximum RF emission. The calculation is based on FCC 47CFR Part 2 and OET 65.

Per OET 65:
Maximum Permissible Exposure is $\text{Freq. (MHz)}/1500 = \text{MPE mW/cm}^2$
 $851 \text{ MHz}/1500 = .5673 \text{ mW/cm}^2$

The following equations determine the distance from the antenna that the power density is $\leq .5673 \text{ mW/cm}^2$.

+44.77dBm Transmitter Power (Max)
15.23dBi Antenna Gain (Max)
 $44.77\text{dBm} + 15.23\text{dBi} = +60\text{dBm EIRP}$
 $+60\text{dBm EIRP} = 1000 \text{ Watts EIRP}$
 $1000 \text{ Watts EIRP} = 1000 * 10^3 \text{ mWatts EIRP}$
 $.5673 \text{ mW/cm}^2 = 1000 * 10^3 \text{ mW} / (4 * \pi * r^2)$
 $r = \text{SQR}(1000 * 10^3 / 4 * \pi * .5673)$
 $r = 374.53 \text{ cm or } 3.75 \text{ Meters}$

In addition, the following statement will be added to our installation/operation manual:

To comply with Maximum Permissible Exposure (MPE) requirements, the maximum composite output from the antenna cannot exceed 1000 Watts EIRP and the antenna must be permanently installed in a fixed location that provides at least 6 meters (20 feet) of separation from all persons.

Sincerely,

Gary Spedaliere
Director of Product Mngt.
Tele: 952 233-6412
Fax: 952 233-6384