



September 14, 2006

Attn: Director of Certification

Dear Sir or Madam:

The following is the SAR calculation for the Digivance® SCS 800 MHz and 1900 MHz System 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  $1.0 \text{ mW/cm}^2$  over 30 minutes.  
1500 MHz – 100,000 MHz

The following equations determine the distance from the antenna that the power density is  $\leq 1.0 \text{ mW/cm}^2$ .

+37.97 dBm Transmitter Power (Max)  
22.03 dBi Antenna Gain (Max)  
 $37.97 \text{ dBm} + 22.03 \text{ dBi} = +60 \text{ dBm EIRP}$   
 $+60 \text{ dBm EIRP} = 1000 \text{ Watts EIRP}$   
 $1000 \text{ Watts EIRP} = 1000 \times 10^3 \text{ mWatts EIRP}$   
 $1.0 \text{ mW/cm}^2 = 1000 \times 10^3 \text{ mW} / (4 \times \pi \times r^2)$   
 $r = \text{SQR}(1000 \times 10^3 / 4 \times \pi \times 1.0)$   
 $r = 282.09 \text{ cm or } 2.82 \text{ Meters}$

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,

A handwritten signature in black ink, appearing to read 'Jon Norton', is written over a horizontal line.

Jon Norton  
Director of Engineering  
Tele: 952 917-2112  
Fax: 952 403-8858  
Email: [jon.norton@adc.com](mailto:jon.norton@adc.com)