June 11, 1998

Federal Communications Commission
Equipment Authorization Division
7435 Oakland Mills Road
Columbia, MD 21046

Subject: Maximum Permissible Exsposure calculations for **FCC ID: IMK-ILC1PC**

To whom it may concern,

Proxim is submitting a low power transmitter for the Symphony / PC PCMCIA Card. The unit has a low power frequency hopping spread spectrum radio operateing in the 2480 - 2483.5 MHz range with a radiated output power of 107 mW.

Assuming a worst case of no duty cycle.

For an Isotropic radiator the surface area of a sphere can be used to determine the area over which the transmitter energy is radiated.

Surface area of a sphere = $4*\Pi*\text{radius}^2$

In the case where there is antenna gain,the worst case energy density is increased by the antenna gain. The exposure level can be calculated as follows for the 1.0 dBi antenna gain:

MPE distance = (output power*duty cycle*10(antenna gain/10)/(4*Π*Exposure Limit (mW/cm^2)$^{1/2}$

For the 1.0 dBi Clip-on Antenna

IMK-ILC1PC MPE distance = $(135\ mW*1*1.26/4*3.14*1)^{1/2}$
= 3.49 cm
= 1.37 in

For the 0.0 dBi Stub Antenna

IMK-ILC/PC MPE distance = $(135\ mW*1*1.0/4*3.14*1)^{1/2}$
= 3.27 cm
= 1.29 in

If you have any questions please do not hesitate to call me.

Sincerely,

Chris Byleckie
Technical Director
Electronic Compliance Laboratories