

April 5, 2004

Applicant: Inovonics Wireless Corp.
FCC ID: HCQ3B6ETUMXM
Correspondence Reference Number: 26334
731 Confirmation Number: EA718484

Re: Action Items regarding Grant approval

- 1) Please update the user manual to include installation/RF safety instructions consistent with the 20 cm distance given in the MPE analysis.

Rather than change the user manual, the device is shown to meet the requirements of 47CFR2.1093, at maximum duty cycle.

The maximum duty cycle of the device is 0.36%, which consists of an alarm message, a restore message, and a supervisory message in a 3-minute window. 33 packets are used to transmit these messages.

The time-averaged RF transmit power is then,

$$50mW \times \frac{33 \text{ packets}}{3 \text{ min}} \times \frac{20ms}{\text{packet}} \times \frac{1 \text{ min}}{60 \times 10^3 ms} = 0.183mW$$

Worst case, if all of the transmitted power were absorbed in a 1-gram sample of tissue, the power density is 0.133 mW/gram and is well below the 1.6 mW/gram limit found in 47CFR2.1093.

- 2) Please clarify maximum power. The MPE analysis suggests maximum power is 250 mW while Form 731 states 50 mW. Please explain and correct as appropriate.

The maximum RF power level of the device is 50 mW.

The value of 250 mW was used in the MPE analysis to demonstrate that even at the worst-case power limit allowed by 47CFR15.247, the device is compliant with 47CFR2.1091.

- 3) Please confirm that the MPE analysis was performed at the maximum duty cycle of the device. Maximum duty cycle will go on the grant.

The maximum duty cycle of the device is

$$\frac{33 \text{ packets}}{3 \text{ min}} \times \frac{20ms}{\text{packet}} \times \frac{1 \text{ min}}{60 \times 10^3 ms} = 0.0036 = 0.36\%$$