October 10, 2002

RESPONSES TO THE QUESTIONS ON THE SAR COMPLIANCE TESTING OF PROXIM CORPORATION MODEL 8460 (FCC ID# HZB-8460) CARDBUS CARD INSERTED INTO A LAPTOP COMPUTER

An amended report that addresses all of the questions on the original SAR Compliance Test Report of August 12, 2002 is submitted herewith. Brief responses to the various questions are given in the following:

1. As given in Section VI (p. 7), the power output of the cardbus card was measured using the circuit given in Fig. 13. After the first 15 minutes of warm-up time, the power was stable at 20 ± 0.2 dBm for up to 60 minutes of observation time. We have also validated the stability of output power by repeated coarse as well as finer 1-g SAR measurements. Given in Tables 2a,b,c are the SAR distributions for the peak 1-g SAR region of volume 10 x 10 x 10 mm for three repeated runs each lasting a period of 20 minutes, for which the coarse SAR scans are given in Figs. 11a,b,c.

2. Details of the SAR measurement system are given in Section II (also see Fig. 3). A photograph of the plastic holder used to support the laptop computer including the Model 8460 Cardbus Card is shown in Fig. 4. This holder can be moved up or down so that the base of the laptop is pressed against the base of the flat phantom for "above-lap" placement (see Fig. 5) or used to support the laptop computer at 90° angle so that the card edge is at a distance of 2.5 cm from the base of the flat phantom. Laptop Model is a Dell Latitude C600.

5. The desired dielectric parameters, the procedure used and the measured dielectric values of the body-simulant fluid are given in Section V.

6. The procedure for system validation is given in Section IV. System validation information for each of the three days of measurements are given in the new Appendix B.

7. A typical coarse scan data for three successive SAR measurement runs is given in Fig. 11 (parts a, b, c).

8. The procedure for identifying the hot spot from the coarse scan data is given in Section VI. Typical data for three repeated runs for peak 1-g SARs are given in Tables 2a, b, c.

9. Some typical contour plots are given in Figs. 11a,b,c. Position of the hot spot relative to the cardbus card is illustrated in Fig. 12.

10. The procedure for calibration of the E-field probe is detailed in Section III. Due to a fairly limited bandwidth of 0.6 GHz as compared to a recommended bandwidth of 2.2 GHz for the TE_{10} mode for the WR159 waveguide, the calibration factor of the

E-field probe is 2.98 (mW/kg)/μV with a variability of ± 2% over the measurement band.

12. Additional pictures attached in the amended report are Figs. 3 and 4.

13. The slot picked for Model 8460 Cardbus Card placement in the laptop computer was the bottom slot. This was selected because of more proximal placement of the card relative to the tissue-simulant phantom. For this situation, the vertical spacing between the bottom of the card to the base of the laptop computer is 1 cm. As explained in Sections I and VI of the amended report, the base of the laptop computer was pressed against the bottom of the flat phantom for SAR measurements.