May 23, 2002

Dennis:

Please find our responses below each issue listed.

RE: FCC ID: E2XSWL-2200P
May 10, 2002 Correspondence

1. Please note that a technical brochure does not adequately provide an operational description of the device. The preliminary technical brochure that you have listed in the operational description portion of the application seems to be the generic product information that will be in the users manual. Because this information will be in the manual, it cannot be classified as confidential. Please remove the product description from the confidentiality letter and resubmit a new confidentiality letter listing only those portions capable of being held confidential (e.g. schematics and block diagram). Please provide an adequate operational description or theory of operation.

a) New Operational Description uploaded, along with revised Technical Brochure.
b) Revised Confidentiality Letter, without Product Description line item, uploaded.

2. Please note that the technical brochure listed above and the same description of the device in the manual must agree. The product description must agree throughout the application. Please correct the product description in the brochure and manual to agree.

Technical brochure (product specifications document) and page 8 in User Manual now contain the same data; uploaded revised specification document and revised manual.

3. TIA603-1 is for use on a licensed device not an unlicensed device. Please note that the test methods for Part 15 intentional radiators are those in ANSI C63.4. Also, please note that the FCC has issued recommended test procedures for Spread Spectrum devices. These are DA000705 for FHSS and fcc97114 for DSSS. These recommended test procedures should be referenced when testing SS devices not TIA603-1 as listed on page 1 of the report. Please provide proper reference to test methods used.

Revised Page 1 of Test Report, reflecting appropriate test procedures, and uploaded report again.

4. Your report states that you tested the device in three orthogonal planes (page 7 par 2.1). Yet, it then states that the device was testing in a personal computer. Please explain how three orthogonal planes were tested in a PC. Was the antenna placed in three orthogonal planes, or was the PCI card?

The PCI card was installed in a personal computer (tower computer configuration). The PCI WLAN output connector was connected to the antenna via a coaxial cable. The antenna was placed in three orthogonal positions during testing.

5. Your report states that you used the FCC's Band Edge procedures. However, your plots only show step one of that procedure. It does not show the relative delta between peaks in the restricted band compared to the peak of the fundamental. Please note that in step 2 of the procedure, the video bandwidth used is to be greater than the resolution bandwidth. This is because you are not actually averaging the measurements in the restricted band at this point, but only obtaining a relative delta between peak measurements. This relative delta is then

used in step 3 to determine what the averaged reading actually is in the restricted band. The final measurement is a comparison of the peak and averaged readings of the fundamental with a reduced RSBW at the band edges to compensate for problems at the band edge in SS devices. Remember that you are not actually making an averaged field strength measurement in this procedure. Instead, you are using the delta between the peak measurements, subtracting this delta from the averaged reading of the fundamental and applying this result to the restricted band edge. The device appears to be compliant even in this unfinished measurement. However, please remember that both steps must be done to complete the procedure in accordance with the FCC. Please explain why you did not perform the correct measurements in accordance with the FCC recommended procedure, or please perform the measurements in accordance with the FCC recommended procedures to include all three steps.

Though the FCC's preferred method for performing compliance with the Bandedge requires DA000705 and fcc97114 for FHSS and DSSS respectively, ATCB has allowed the use of absolute measurement plots by applying 1 MHz / 100 Hz RBW / VBW on the LBE and UBE's for low power DSSS devices without amplification and lower gain antennas. RTL will reference the method used for Bandedge Compliance in the future.

6. Please note that table 9-2 uses the incorrect power. In table 8-3 you state the power on channel 6 is 16.1dBm yet in table 9-2 you state channel 6 is 15.4dBm. Please correct the report to show actual values measured. Also, please note that you did not provide antenna conducted measurements for channel 11 as stated in the report. Please correct these tables and provide the data for channel 11.

a) Table 9-2 has been corrected, and is included in the uploaded revised report.
b) Antenna conducted measurements for channel 11 have been added to the report in Table 9-3, and report was uploaded.

7. Please provide the required internal and external pictures for this device.

Internal and External photographs have been uploaded.

8. Please note that the label is sufficiently large enough to include the two-condition statement as required by 15.19 and 2.925. Please note that 2.925 requires the FCC ID and "Any other statements or labeling requirements imposed by the rules governing the operation of the specific class of equipment" to be on the equipment. Please provide a label and statement in compliance with these parts of CFR47.

Label has been modified to include statements required by 15.19 and 2.925, and uploaded for review.

9. Please note that the statement (or similar) as required in 15.105(b) does not appear to be in the manual. Please note that the statement is intended to warn of possible interference to and from any device, not just medical devices. Please update the manual to include this 15.105 or similar statement.

Manual page 5 was modified to include the statement as required by 15.05, refer to revised manual that was uploaded.