

RE: FCC ID: PKRNVWMIFI4510

Applicant: Novatel Wireless Inc.

Correspondence Reference Number: PKR101368  
Confirmation Number: 1Y1011231368-9  
Date of Original Email: December 20, 2010

Subject: Request for additional information

In regards to your recent TCB application referenced above, we kindly request that you provide the following additional information.

1. Pages 234-239 of the SAR report are missing- please revise to include these pages.

NVTL provides, as separate exhibits, the SAR report with no photos and the SAR test photos. This is done so the SAR test photos can be separately put into confidentiality with the FCC. The photos are simply extracted from the original Full report. The file reviewed was the report file without the photos, therefore it would appear that the document was missing these pages.

Please review the file titled "MiFi4510\_Full US SAR Report Rev" to have all the pages. This file must NOT be published or uploaded to the FCC website, it is provided as information to support the request.

The updated separate exhibits "MiFi4510\_US SAR Report Rev" and "MiFi4510\_US SAR Photos Rev" maybe provided to the FCC.

2. The SAR report cover page includes the following statement: "... certifies that no party to this application has been denied the FCC benefits pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. 863(a)." The reference is not accurate, and may not correctly reflect the 47 CFR part 1 subpart P requirement (along with Form-731), which uses the following terminology: "... subject to a denial of Federal benefits that includes FCC benefits...." Please revise.

The first page has been revised to the exact wording as above.

3. Please submit copies of the FCC's responses to the KDB Inquiries (831948 and 869935) referenced in the SAR report.

These have been provided as separate documents with this response, as "ReplyToResponse 869935.pdf" and "ReplyToResponse 831948.pdf"

4. In Table 5.1 of the SAR report (p. 9), the various tissue ingredient percentages do not add up to 100%- it is as low as 97% in the PCS band. Please revise so that the percentages sum to 100% in each band.

All ingredients now total to 100% in the revised report.

5. Please specify the detector function used to measure the 802.11 output power levels listed on p. 20 of the SAR report (peak or average).

The report has been revised on the table to show Average Power.

6. The 1900 MHz SAR System Validation test performed on 11/23/10 uses a dielectric constant that is not equal to the value listed in Table 10.1. Please address.

The incorrect value was entered. The revised report has the corrected value for the tissue.

7. The SAR Plot for LTE QPSK 10 MHz Top Face RB 25 Offset 13 (p. 99) lists a separation distance of 13mm, instead of 12 mm. Please explain.

This was a typographical error. The SAR system only indicates a spacing of 0mm when the data sheet is printed out. The 12 mm gap must be revised at the completion of the data formatting. The 13 mm was incorrectly entered.

8. The SAR plot on p. 97 for 802.11b Side A shows a measured 1-g SAR level of 0.214 W/kg, but the level listed in the data Table on p. 23 lists 0.181 W/kg- please revise. Please note that this affects the simultaneous SAR calculations on p. 26, so that the sum exceeds 1.6 W/kg.

The incorrect data sheet was merged into the file. This data sheet was data with the device set at 10 mm gap instead of 12 mm gap. The 10 mm gap was for the NVTL internal reference only, possible future use. The correct data sheet was included with the revised report.

9. Pursuant to the previous question, please provide peak SAR locations, and determine the SAR to peak location separation ratios, per KDB 648474, to determine if simultaneous transmission SAR testing is required.

The value listed in the data tables on page 23 and 26 are correct. Therefore, this comment is not applicable.

10. The 802.11b output power levels (presumed to be average levels- see question #5) listed in the SAR report for Channels 6 and 11 at 1 Mbps are nearly equal to one another (16.05 dBm and 16.02 dBm, respectively), however, the corresponding average output levels listed in the DTS EMC report are nearly 0.5 dB and more than 1.0 dB higher, respectively. If the measured WiFi SAR levels are scaled up to simulate the levels from a device operating with output power levels as measured in the DTS EMC report, the simultaneous transmission SAR calculations on p. 26 of the SAR report would be affected. Please address this issue.

A revised procedure was provided for setting the WLAN power levels in the device and subsequently new measurements were taken. Please see the revised DTS EMC report.

11. The SAR Plot "Product Data" on p. 146, as well as the data Table on p. 25, indicate that the measured 0.138 W/kg SAR reading is associated with Side D, but the "Other Data" on p. 147 states "Bottom Face". Please reconcile.

The SAR report has been corrected. The change in the nomenclature for the configurations was not updated for this data file originally.

12. Please provide the SAR plot for LTE 16QAM Side A RB 25 Offset 13 (the plot on pp. 148-149 is a repeat of the plot on pp. 142-143).

The correct file has been included in the revised report.

-End-