



1601 FM 1460, Suite B
Round Rock, TX 78664
e-mail: info@ptitest.com
512-244-3371 Fax: 512-244-1846

5 October 2006

FCC: UI3S1613-01
IC: 140L-S161301
ATCB: Comments 100406

In response to your comments dated 4 Oct 2006 regarding the application for certification of the devices referenced above please find our responses below:

1:	Please update the users manual to include appropriate RF exposure information to the user regarding 5 GHz SAR testing.
	<i>[NEC is instructed] to revise their manual to reflect the highest measured SAR to be 1.33mW/g at 0.0cm separation distance. {Shawn McMillen METLabs}</i>
2:	The SAR results appear to also test 5260 – 5320 MHz. Please note that this band requires DFS capability and is subject to specific DFS testing which may only be evaluated by the FCC. If this particular band is being removed, please explain how this is being done to ensure compliance with 15.15 of the rules.
	<i>The EUT will initially ship with the 2nd UNII band (as reported in the comments) disabled in software. The ART diagnostic software provided for SAR testing has full control over the radio, so it was decided to SAR test UNII-2 band now rather than later.</i> <i>A DFS evaluation of the EUT, including the UNII-2 band, is scheduled to take place next week at MiCom Labs. (Contact Gordon Hurst, 925-462-0304.)</i> <i>Once the DFS report is obtained, a filing of the DFS report and amended emission report is to be made for the EUT to add this band. This band was already tested for emissions at PTI, though data was withheld from the emission report as provided to ATCB. {Eric Lifsey PTI}</i>
3:	Maximum RF power for the 5745 – 5825 band is shown in the EMC report as 7.4 dBm which is higher than reported in the SAR report. Please note that the FCC expects the SAR power to be $\geq$ to the EMC power. Please review/correct/comments as necessary.
	<i>The measurement difference is under 3% (7.2 to 7.4 dBm) or in linear terms a difference of 0.25 microvolts in 5.25 microvolts or less than 5% difference. This is generally within expectations for measurement error. {Eric Lifsey PTI}</i>
4:	7x7x7 grid used does not appear to meet minimum 7x7x9 requirements. Please review/verify/justify as necessary.
	<i>The highest reported RF exposure occurred in the 5800MHz band for this device. Subsequently, the RF exposure was re-measured using an area scan of 10 x 10mm and a zoom scan with the following criteria:</i> <i>Zoom scan (x,y,z) resolution= 4.0 x 4.0 x 2.5mm</i> <i>Volumetric extents (x,y,z) = 24 x 24 x 20mm</i> <i>Zoom scan grid points = 7 x 7 x 9</i> <i>The reported SAR using the 7 x 7 x 9 grid was 1.03 mW/g as compared to the 1.33mW/g reported using a 7 x 7 x 7 grid point in the filing. It can be assumed that the use of a higher resolution zoom scan would give lower SAR results across all bands tested but more apparent in the 5800MHz band due to the higher SAR gradients. Please see attached SAR measurement using higher resolution volumetric scan for the 5800MHz band. {Shawn McMillen METLabs}</i>
5:	FYI.....Report mentions 5% for Permittivity and 10% for conductivity. Please note that the FCC requires 5% for conductivity and 10% for permittivity.
	<i>No response.</i>
