## Mike Kuo

From:	Danielle Zhan
Sent:	Tuesday, June 14, 2005 11:32 AM
То:	Mike Kuo
Cc:	Thu Chan; Michael Heckrotte; Barbara Judge
Subject:	RE: AT ROAD, Inc., FCC ID: PDC-IWM314XSW, Assessment NO.: AN05T4842, Notice#1
Attachments:	05U3362-1B FCC DTS Report_Revised.pdf; ILM3140_Series_InstallerGuide.revised.pdf; iWM3140_Ant_Gain_Calculation.pdf

Hi Mike,

Please find responses to your questions /comments contained below in blue.

Thanks for your further review,

**Danielle Zhan** 

Compliance Certification Services 561 F Monterey Road Morgan Hill, CA 95037 Tel: (408) 463 0885 Fax: (408) 463 0888

-----Original Message-----From: Mike Kuo Sent: Friday, June 10, 2005 2:39 PM To: Danielle Zhan Cc: Thu Chan; Michael Heckrotte; Barbara Judge Subject: FW: AT ROAD, Inc., FCC ID: PDC-IWM314XSW, Assessment NO.: AN05T4842, Notice#1

**Best Regards** 

Mike Kuo Compliance Certification Services 561F Monterey Road Morgan Hill CA 95037 Tel: (408)463-0885 x: 105 Fax: (408)463-0888 http://www.ccsemc.com

-----Original Message-----From: Compliance Certification Services [mailto:MKuo@ccsemc.com] Sent: Friday, June 10, 2005 3:32 PM To: Mike Kuo Subject: AT ROAD, Inc., FCC ID: PDC-IWM314XSW, Assessment NO.: AN05T4842, Notice#1

Question #1: Based upon the information submitted, this Mobile Internet Location unit is equipped with two radios. One is Licensed Part 22/24 module under FCC ID:N7N-EM5625D and unlicensed WLAN module under FCC ID:M4Y-000325. The proposed FCC ID is on the Mobile Internet Location unit under the grantee code of applicant.

With above understanding in mind, this application must be filed as composite device. One unlicensed 15.247 DTS application ( submitted, under assessment no:AN05T4842 ) and the other licensed PCS base station ( which has not been submitted ). Please submit another TCB application for licensed portion. [Danielle] Another TCB application for the licesed portion has been filed under assessment No.: AN05T4857 on 6/10/05 for your review.

Question #2: In the FCC 15.247 DTS report submitted in this application, page 26 indicates that there is co-located radiated spurious emission was performed. However, such co-located test data can not be found. Please explain. [Danielle] The co-located spurious emissions section has been removed from the report. Please see revised FCC report as attached and also be noted that the antenna gain has been revised in the test report based on the additional antenna info provided by client.



05U3362-1B FCC DTS Report\_Revi...

Question #3: User manual does not contain information required under section 15.21 and 15.19 (3) of FCC rules. Please submit revised user manual to address these two requirements.

[Danielle] FCC rules 15.21 and 15.19 (3) have been added into the user manual, please see revised as attached.



ILM3140\_Series\_In stallerGuide....

Question #4: MPE estimate, when there are multiple radios installed in a single enclosure, MPE estimate shall take into account when multiple transmitters are transmitting at the same time. The power density of combined far field radiation must be considered. Please provide revised MPE estimate.

[Danielle] A co-located Maximum Permissible Exposure section has been added to the report, same as attached above.

Question #5: The antenna gain indicated in the test report is 2.5dBi which does not agree with antenna specification for 2.4GHz band. Please explain.

[Danielle] An additional antenna info has been provided as attached. The gain (5 dBi for 2.4 GHz band) indicated in the antenna spec is without cable loss(3.3 dBi), so the actual gain for 2.4 GHz band is 1.7 dBl. Please see attached for antenna gain with and without cable loss.



iWM3140\_Ant\_Gain \_Calculation.p...

Part 22/24 portion:

Question #6: Based upon the original grant under FCC ID:N7N-EM5625D, the max. allowed antenna gain for cellular band is 5.1dBi and for PCS band is 3.9dBi. In accordance with antenna specification submit, the gain for PCS band is 5 dBi. There is no document submitted to justify the higher antenna gain for PCS band used by the applicant. Please explain.

[Danielle] Please see the additional antenna info, same as attached above. The gain (2 dBi for Cellular band) indicated in the antenna spec is without cable loss(2.25 dBi), so the actual gain for the cellular band is -0.25 dBI; while the gain (5 dBi for PCS band) indicated in the antenna spec is without cable loss(3.3 dBi), so the actual gain for the PCS band is 1.7 dBI. The test report has also been updated too accordingly.

**Best Regards** 

The items indicated above must be submitted before processing can continue on the above referenced application. Failure to provide the requested information within 30 days of the original e-mail date may result in application dismissal and forfeiture of the filing fee. Also, please note that partial responses increase processing time and should not be submitted. Any questions about the content of this correspondence should be directed to the e-mail address listed below the name of the sender.