Appendix A

Non-Conformities for US Radio Equipment Authorization

Non-Conformities FCC ID: PWO271247ASB (CKC CS Ref # E09-000012-FCC-01)

The items listed below represent requests for information following review of this application for certification under United States (FCC) regulations. Further question may arise pending review of responses to these items.

OK	ID	#	Non-Conformity or Comment	Submitted Response	Respondent / Date of Response
x	TL	1	The File size of Test report FC08-107 and FC08-108 exceeds the allowable file size of 6MB. Please reduce the file size or split the file into sections.	Reports split into sections not exceeding 3 MB each.	Jessina Hunter 2/13/09
x	C	2	Tune up procedure is missing from the exhibit; please provide a tune up procedure, with emphasis on limiting the input signal level at the bandedge.	There is no "tune-up procedure" for the user. The amplifier gain and power is self-adjusting and automatic as explained in the submitted "Operational Description" and "Linearity" documents.	Riki Kline 2/12/09
x	TL	3	The test report fc08 108, FC08-107 listed RF conducted power in mW, Please provide a revised test report presenting RF output power in Watt	Randy has indicated that mW listings are OK	Mike Wilkinson 2/6/09
x	C	4	The RF output power is listed as 0.37W, 2.09W, 0.012W and 2.51W operating in the 869 - 894MHz band, 824-849MHz band, 1850-1920MHz band and 1930-1990MHz band respectively, however the test report shows that in order to comply with the bandedge requirement, the power level at the band edges needs to be reduced drastically compared to the power measured in the middle of the band. Please confirm whether the tune up procedure or input signal limiting circuits has been put in place to ensure the RF output power does not exceed the measured RF output power at bandedge.	There is no "tune-up procedure" for the user. The amplifier gain and power is self-adjusting and automatic as explained in the submitted "Operational Description" and "Linearity" documents.	Riki Kline 2/12/09
x	C	5	Per FCC2.1033(c) (8) The dc voltages applied to and dc currents into	The dc voltage and dc current	Riki Kline

			the several elements of the final radio frequency amplifying device for normal operation over the power range shall be furnished. Please provide the needed information.	supplied to the uplink final amplifier is 5V, 2A, maximum. The dc voltage and dc current supplied to each of the downlink final amplifiers (there are two – one for each band) is 3.7V, 40mA	2/12/09
x	C	6	The test report showed a huge difference in power level within the Frequency range. Please provide a tune up procedure to address the lowered RF output power at the bandedges.	The product has demonstrated compliance at the band edges as required by the regulatory agency. The test reports show a test mode configuration. In the final product, the production firmware provides OBW / ACP monitoring to provide adjacent channel protection according to individual carrier requirements. See page 2 of the operational description for more details. \	Riki Kline 2/13/09
x	TL	7	Page 35 of test report FC08-108. the reported RBW used is 1 MHz from 30 - 2000MHz. Please clarify whether this is a typo in the frequency range	Typo the RBW 30-1000 MHz is 120 kHz and 1-2 GHz is 1 MHz	Mike Wilkinson 2/6/09
x	C	8	The test condition indicated that the RF output power at the band edges were measured with input signal adjusted to a point where the spurious emission complies with the requirement at the lower and higher channel with a narrow margin while, the middle channel can operate at a substantially higher output power with higher input signal level. Please provide a technical justification to clarify how the input level at the bandedges is controlled to prevent the device from operate at power level that exceeds the reported power level at bandedges.	The dc voltage and dc current supplied to the uplink final amplifier is 5V, 2A, maximum. The dc voltage and dc current supplied to each of the downlink final amplifiers (there are two – one for each band) is 3.7V, 40mA	Riki Kline 2/12/09
x	TL	9	Input vs Output plot: Page 46,48,50,52 and 54 of test report FC08-108, Page 47,49,51,53,and 55 of test report FC08-107. The output plot does not look similar to the Input plots. Please verify whether the device was operating properly at the reported power level.	The product has demonstrated compliance at the band edges as required by the regulatory agency. The test reports show a test mode configuration. In the final product, the production firmware provides OBW /	Riki Kline 2/13/09

				ACP monitoring to provide adjacent channel protection according to individual carrier requirements. See page 2 of the operational description for more details.	

The items indicated above must be submitted before processing can continue on the referenced application. Failure to provide the requested information within 60 days may result in application dismissal pursuant to Section 2.917(c) and forfeiture of the filing fee pursuant to Section 1.1106.

How to read the table:

OK column indicates closure by CKC CS.

ID column is for use with Agents to assist in identifying the probable source for closure.

- A – Application issue
- TL – Test lab issue
- C – Client issue
- R – Retesting may be necessary

column indicates unique or separate non-conformity items (note some items may be related).

Non-Conformity or Comment column indicates the evaluators specific question or comment.

Submitted response column indicates the response or a summary of the response provided.

Respondent / Date of Response column indicates the responding party or agent and the date of the response was either received or logged.