

Non-Conformities FCC ID: AOIWLWIFIM010 (CKC CS Ref # E08-000002-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	#	Non-Conformity or Comment	Submitted Response	Respondent / Date of Response
X	1	The block diagram shows a 802.11 modem is employed in the product, however the schematic diagram of the modem is not included for evaluation purposes . Please provide a schematic diagram of the 802.11 modem	The schematic of the 802.11 modem has been uploaded.	CKC Labs 2/6/07
X	2	The internal photographs do not provide enough detail of the PCB and construction. Please provide legible internal photographs of the top and bottom of the PCB, including the removal of shielding, in addition to showing identity of major frequency determining components in accordance with 2.1033	Additional photos have been uploaded.	CKC Labs 2/6/07
X	3	The back side of the product is not clearly identified from the provided set of external photographs. Please provide photo showing the back side of the product	Additional photos have been uploaded.	CKC Labs 2/6/07
X	4	<p>Page 10 and 13 of the test report, the test condition indicated "without active data transfer". Please provide revised test condition describing the operation of the EUT and loading of I/O port IAW ANSI 63.4.</p> <p>1/28/08: The test condition of Page 10 and 13 of the test report stated, "WLU connected to access point without active data transfer. Frequency range tested: 30-1000 MHz." Which seems to indicate the device was idle during</p>	Revised test report provided.	CKC Labs 2/6/07

		the test. Please rephrase test condition to indicated the test was performed IAW AN63.4 guideline.		
X	5	Please provide antenna installation instructions with appropriate antenna distance to meet the RF exposure compliance	Please see updated SDIM. Section 11.1 which has been uploaded.	CKC Labs 2/6/07
X	6	Please provide an updated users manual incorporating the statement required by 15.2	Please see page 6 of the manual for the required statement.	CKC Labs 2/6/07
X	7	15.107 conducted emission data is not provided in the test report. Please confirm whether the product is exepted from AC powerline conducted emission under the provision of 15.107d or 15.103(a)	This is not required.	CKC Labs 2/6/07
X	8	802.11 devices incorporating a receiving capability must be tested to the 5th harmonic of the receiving frequency, however the frequency range of the 15.109 data sheet ends at 1GHz. Please provide 15.109 data with the appropriate frequency range of measurement. Alternatively, IF the receiver portion of the product was active during the 15.247(d)/15.109 measurements, please revise test condition to indicate as such	The EUT was transmitting with the receive mode active during 15.247(d) testing.	CKC Labs 2/6/07
X	9	Page 15 of the user manual indicated Antenna port J2 is a TNC connector, which does not meet the definition of unique connector per 15.203 requirements. Please clarify ways to ensure only certified antennas can be attached to the product.	Everything on an aircraft is professionally installed and therefore the unique connector requirement does not apply.	CKC Labs 2/6/07
X	10	Reported PSD on page 26 of the test report does not seems to correlate with the test method IAW KDB558074 nor measure result from page 27-44. Please provide PSD measured IAW KDB558074 or a statement and calculation	According to KDB 558074: "If the spectrum line spacing cannot be resolved on the available spectrum analyzer,	CKC Labs 2/6/07

		to clarify the relationship between the reported PSD in dBm/3kHz and measurement made in dBm/Hz	the noise density function on most modern conventional spectrum analyzers will directly measure the noise power density normalized to a 1 Hz noise power bandwidth. Add 35 dB for correction to 3 kHz." The noise density function in a 1 Hz bandwidth is shown in the test plots on pages 27-44. The tabular readings (on page 26) show the PSD readings when corrected to 3 kHz IAW the instructions in the sentence above.	
x	11	1/28/08: The revised set of PCB photos does not include detail photo of the 802.11 modem card. Please provide legible internal photographs of the top and bottom of the modem card, including the removal of shielding, in addition to showing identity of major frequency determining components in accordance with 2.1033	Updated photos provided.	CKC Labs 2/6/07

Non-Conformities FCC ID: AOIWLWIFIM010 (CKC CS Ref # E08-000002-FCC-02)

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x	1	<p>Since the antennas for this product are not supplied with the equipment (reference section 15.27), this equipment is required to be certified under professional installation. In which, please provide the following information in the form of a declaration.</p> <p>1) Method of Marketing 2) How installation of the equipment is controlled. 3) Application Intended end environment (CKC CS understand this is already declared, however please provide this declaration in addition to the supplied documentation.)</p>	A declaration of professional installation has been uploaded.	CKC Labs 2/11/08
x	2	<p>The confidentiality letter lists internal photos and installation instructions to be held confidential. These items cannot be held confidential without further justification and subsequent FCC approval. Please provide further justification for these items or revise the letter as appropriate.</p> <p>Please note, schematic diagrams and block diagrams do not appear to have been held confidential, these items qualify for confidentiality. You may include these items without further justification should you wish to do so.</p>	An updated confidentiality letter has been uploaded.	CKC Labs 2/11/08