

RE: Aruba Networks

FCC ID: Q9DARUBA52

1) Certain documents appear to be uploaded as confidential (block diagram & schematics) however a confidentiality letter was not provide. Please explain or provide this letter.

Response: Confidentiality Letter has been uploaded.

2) The labeling information appears to also be labeled for a DoC. It is assumed this is for the PC peripheral part of the device. However the labeling is missing the appropriate FCC logo. Please update the labeling.

Response: New label has been uploaded.

3) The antenna appears to contain 2 RF cable, one for 2.4 GHz and one for 5 GHz. Is the internal construction of the antenna actually contain 2 separate antennas, or is there a shared antenna internally. Please provide close up internal photographs of the antenna construction to show whether the antennas are separate or not internally. Note that a shared antenna would suggest a concern with mixing of both the 2.4 and 5 GHz signals, therefore creating inter-modulation concerns if they operate at the same time and share the same RF antenna.

Response: Photos of antenna has been uploaded to RF exposure exhibit. The device will not transmit simultaneously.

4) The RF exposure shows separate calculations for each mode of operation (802.11b, 802.11a, 802.11a turbo, etc.). Please explain if this device (under normal use by the user) may transmit simultaneously using both 802.11b and 802.11a. If so, please update the RF exposure to show the composite RF exposure condition that can occur.

Response: The device will not transmit simultaneously under normal use.

5) Please provide test configuration photographs available for the AC power line conducted tests.

Response: Test photos of AC conducted have been uploaded.

DTS Report

6) Page 8 of 18 of the DTS report states that the antenna is a standard N-type connector and that this is professionally installed. This device does not appear to be professionally installed and additionally does not appear to contain an N-connector (see information on page 3 of 29, DTS Report). Please explain and correct the report if necessary.

Response: Statement has been corrected.

7) Page 23 of 62 of the DTS test report appears incomplete. Please explain.

Response: This has been removed since it a summary for our internal lab tests.

8) The power spectral density given on page 5 of 18, DTS report does not match the data given on page 12 of 29.

Response: The worst case PSD from 802.11b and 802.11g was reported. I have revised the report to include both PSD from each mode.

9) The Fundamental measurements made for peak and average measurements on page 7, 8, 9, 19, 20, 21 of 29 should have been measured with RBW=VBW=1 MHz for Peak and RBW=1 MHz & VBW = 10 Hz for Average. However the table on each page states a 100 kHz was used. Please correct as appropriate.

Response: All Fundamental measurements were made with RBW=VBW=1MHz (Peak), RBW=1MHz & VBW=10Hz (Avg). The report states what settings were used.

10) Please explain why the 3rd bandwidth plot does not show the standard DSS envelope typically seen in the previous 2 bandwidth plots for pages 11 & 23. Additionally, the results for the High channel on page 25 appear unusually low. Please explain.

Response: New plots of this have been uploaded. Results on page 25 for the high channel are not the same due to the spike not being present during the 100 sec sweep, but it is present on the first two plots.

11) This test report contains 2 complete sets of radiated data for 2.4 GHz (1st starts on page 5, second on page 17). However there is no explanation between these sets of data. Please explain the purpose of both sets of data.

Response: This has been corrected. 1st set of data is for 802.11g mode and 2nd set of data is for 802.11b mode. The worst-case radiated margin from both modes was reported only.

12) The resolution correction given on page 18 is only valid if correcting for a RBW from 1 MHz to 100 kHz (approximately 1%) and the VBW stays constant. Please provide information for the RBW and VBW used for both traces shown on this plot. Additionally, this correction appears to only be applied to one data point on page 19 and two data points on page 22. These data points should be adjusted as necessary in the comments column to show the appropriate correction factor for these points.

Response: This has been corrected. RBW and VBW used for the BW correction plot are included.

UNII Report

13) The users manual does not appear to contain the information to the user regarding 15.407(e).

Response: New User Manual has been uploaded with the proper statements.

14) There has been some concern regarding the use of peak power meters for certain modulations and bandwidth signals. Please provide Peak power data in accordance to one of the methods given in the FCC Public Notice DA 02-2138.

Response: New Power plots with Spectrum analyzer has been included.

15) The resolution correction given on page 5 of 48 is only valid for restricted band measurements if correcting for a RBW from 1 MHz to approximately 1% of the bandwidth of the fundamental and the VBW stays constant. It appears that 100 kHz was used and a RBW should have been approximately ≥ 200 kHz from the information given on page 13 of 48. Please provide a corrected bandwidth correction plot and be sure to include information for the RBW and VBW used for both traces shown. Additionally, when this correction is applied, the data points associated with this correction should be adjusted as necessary in the comments column to show the appropriate correction factor for these points. This issue will affect the 4 reported results for 5150 MHz and the results reported on page 4 of 48.

Response: New plot with RBW= 200kHz has been included.

16) Please provide PSD data for the high channel in the 5.150-5.250 Band.

Response: This has been included in the report as requested.

17) Does this device contain a turbo mode which incorporates a different channel set and should require testing?

Response: Turbo mode will not be use.

18) Peak excursion measurements do not appear to show Trace A with RBW = 1 MHz and VBW \geq 3 MHz according to FCC Public Notice DA 02-2138.

Response: Trace A was set to RBW=1MHz and VBW=3MHz. Similar question was made by Bill on FCC ID: PD9WM3B2100A application due to the small Delta on the Peak excursion.

19) Page 48 does not appear to take into consideration the 4.5 dBi gain for the antenna in the limit (limit = -17 dBm - 4.5 = 21.5 dBm) in the UNII band nor does the measurement appear to factor in this correction. It appears this device may fail this test.

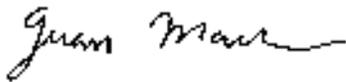
Response: New plots have been included. Average detector was not used in the previous measurement.

20) The application does not appear to provide any information regarding 15.407(c) & (g).

Response: Theory of operation has the information given explanation to 15.407 (c) & (g).

Hopefully this answers all of your questions. Please contact me via doc@elliottlabs.com if you require more information.

Regards,



Juan Martinez
Sr. EMC Engineer