

To: tjohnson@AmericanTCB.com
Subject: Aruba Networks, FCC ID: Q9DARUBA52
Cc: Documentation Group <doc@elliottlabs.com>,
Christine Vu <cvu@elliottlabs.com>

Tim,

Here are my response:

1) The new labeling provided appears to now be missing all the DoC information. From previous review of this device it appears that the DoC labeling should be present, but was incomplete.

Response: The device was tested as a network peripheral and not a computer peripheral so we are submitting as a verification device and not a DoC, that is why the Label was re-submitted to only show verification FCC statement.

2) The new UNII power measurements do not appear to follow method 3 specified in accordance to the methods given in the FCC Public Notice DA 02-2138. For example, the plot does not appear to be max held for 60 seconds. Additionally, please justify the use of 300 kHz for this measurement (is $VBW \geq 1/T$ where T is the transmission pulse duration?). If necessary, please update the report, 731 form, and MPE calculations.

Response: Per the FCC Public notice we used sampling mode (if sample detector mode if bin width (i.e., span/number of points in spectrum) < 0.5 RBW, which we know is less than 0.5 RBW). The problem with our analyzer 8564E, which is the only one with Channel Power integration option, is that when we set to sampling mode and try to max hold the trace, the analyzer returns the state back to peak mode, so what we done is set the analyzer to single sweep and continuous sweep. We switch between these two modes for several sweeps to determine the worst case amplitude within at least 30 sec period. If this is not acceptable please let me know and we will try something else and re-submit new data.

Page 13 of 48 of the test data states the reasoning for using a VBW of 300kHz. Below is the statement we placed in the page I just mentioned:

The minimum VBW required for power measurements using a spectrum analyzer is $1/T$, where T is the pulse transmission rate.

Pulse Transmission Rate: 4.0 uS (Symbol Rate for 802.11a)

Minimum VBW: 250 kHz

VBW Used: 300 kHz (Used Method# 3 from the UNII FCC Public Notice)

The minimum VBW required for power measurements using a spectrum analyzer is $1/T$, where T is the pulse transmission rate.

3) Please justify the use of an averaging detector for page 48 of the UNII report measurements. The limit is a peak limit and should therefore utilize same settings as peak power measurements (using method #3 for power measurements $RBW = 1 \text{ MHz}$, $VBW \geq 1/T$, max hold for 60 sec, etc.). This does not

appear to
have been done.

Response: We will like to know what the FCC interpretation is on this, since there is not mention of what settings to use for the 5.725 to 5.825 MHz Bandedge range in the FCC Public Notice for the UNII. We have so far used the interpretation were if a signal is continuously transmitting and that is not the normal function of the transmitter, Average is allowed in this scenario, while using an RBW and VBW of 1MHz. If the case is that FCC is not allowing this, we will like to know what is their new thinking on this, especially for the UNII devices.

Anything else please let me know. Thanks

Regards,

Juan Martinez
EMC Engineer
Elliott Laboratories