



MET Laboratories, Inc. *Safety Certification - EMI - Telecom Environmental Simulation*
33439 WESTERN AVENUE ! UNION CITY, CALIFORNIA 94587 ! PHONE (510) 489-6300 ! FAX (510) 489-6372

August 9, 2007

Richard Tseng
Federal Communications Commission
Office of Engineering and Technology
445 12TH ST SW
Washington DC 20554

RE: Firetide, FCC ID: REP-6100-1, Correspondence Reference Number 33511

Dear Richard Tseng,

Please see our response to your concerns below:

1. The application lists the entire U-NII bands as operating frequencies. For unlicensed devices you must list the carrier frequency of the lowest and highest channel. Please provide this information.

The frequencies on the Form 731 were corrected to 5260 – 5320MHz & 5500 – 5700MHz.

2. The device looked like it was tested with another device of the same type. Did the EUT operate as a master or a client? If neither due to network topology, how was radar detection determined on the EUT?

The EUT was tested as a master device while connected to a client of the same type.

3. If the device operates in UNII band as a 802.11a device, why was it not tested with a typical client such as 802.11a wireless card in order to simulate normal operation?

The EUT was tested as a master device while connected to a client device which contains an 802.11a wireless card.

4. Does the EUT communicate with other nodes in the same mesh network on the same spectrum as the network traffic? Or the EUT communicates with other nodes in other frequency bands the device operates in?

In a typical deployment, the EUT is part of a mesh network with one or more other nodes. Each node in the network is capable of detecting the radar signal.

The EUT's mesh network may be configured to have both radios operate in the same spectrum/band. Or, it may be configured to have one of the two radios operate in a separate band. In either case, if one or two radios are operating in the DFS band, each radio monitors for radar traffic.

In the DFS test setup, the second radio of each mesh node was terminated with an antenna to simulate a normal operating scenario. Both of the second radios were manually set to different frequencies so they would not communicate with each other. This guaranteed that the network traffic (i.e. the test video file) was sent over the DFS channel between the EUT master and the second mesh node acting as the client.



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5. Verify that this device has only one BW mode in frequency bands that require DFS.

The EUT only uses on bandwidth mode, OFDM.

6. Please upload the list of antenna to be used with this device. User's manual mentioned there was a list yet it was not seen in any of the exhibits.

The list of antennas are provided in the DFS report on page 6 of 41. The Indoor Unit (Model 6100) uses only 1 antenna type.

7. The radar detection BW is incorrect. The minimum radar detection BW should be 80% of the occupied BW. You report the occupied BW of approximately 25 MHz. The minimum radar detection BW is about 20 MHz. Your radar detection BW data reports 16 MHz. This appears to be non-compliant. Also the detection BW datasheet did not include data for FH and FL at 90% detection or less. It is impossible to determine compliance based on the datasheet.

The reported occupied bandwidth at 5300MHz from the 99% power bandwidth EMC test report is approximately 16.4MHz, not 25MHz. The 25MHz occupied bandwidth being referred to above is the 26dB bandwidth, not the 99% bandwidth. On page 22 of 41 in the DFS report, the test data for the detection bandwidth demonstrates compliance at both FH and FL for 80% of the 99% bandwidth reported.

If you need any additional information, please let me know.

Thank you

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