Proposal for Alternate DFS Test Procedure for LG Electronics, Model LG-VS930 FCC ID : ZNFVS930

Product Description:
The device is a cell phone that supports 802.11a/n operation in the DFS bands as a client-only device. The device does not have radar detection capabilities and, as such, only supports an infrastructure mode of operation and does not support ad-hoc networks in the DFS bands.

Android operating system is resident on the device and does not support the Windows based Media Player or the format of the streaming video file specified in FCC 06-96.

Proposed Alternate Method:
Since the operating system will not support the preferred method for data transfer from master to client device, we propose performing the DFS test while the system is performing a FTP file transfer. The file transfer from the master device to the client device under test will consist of a 4.2Gbyte compressed data folder containing multiple copies of a 418 Mbyte file.

General Test Setup Procedure:
1) Connect FCC approved Master AP to a network, via wired Ethernet, that allows connection to an FTP server.
2) Associate the EUT with the Master AP
3) Launch the FTP application on the EUT
4) Connect to the FTP server application to the FTP server hosting the file
5) Initiate an FTP download of the file from the host
6) Monitor the channel loading during transfer
7) While the system is performing an FTP transfer, perform the Channel Closing Transmission Time and Channel Move Time measurements as required by FCC 06-96 using a radiated test.

Results:
Testing showed that the maximum channel loading achievable by the system was approximately 71.9 % see Figures 1 below. Only 20 MHz bandwidth was recorded since the device under test does not support 40 MHz. DFS testing will be performed using these conditions.
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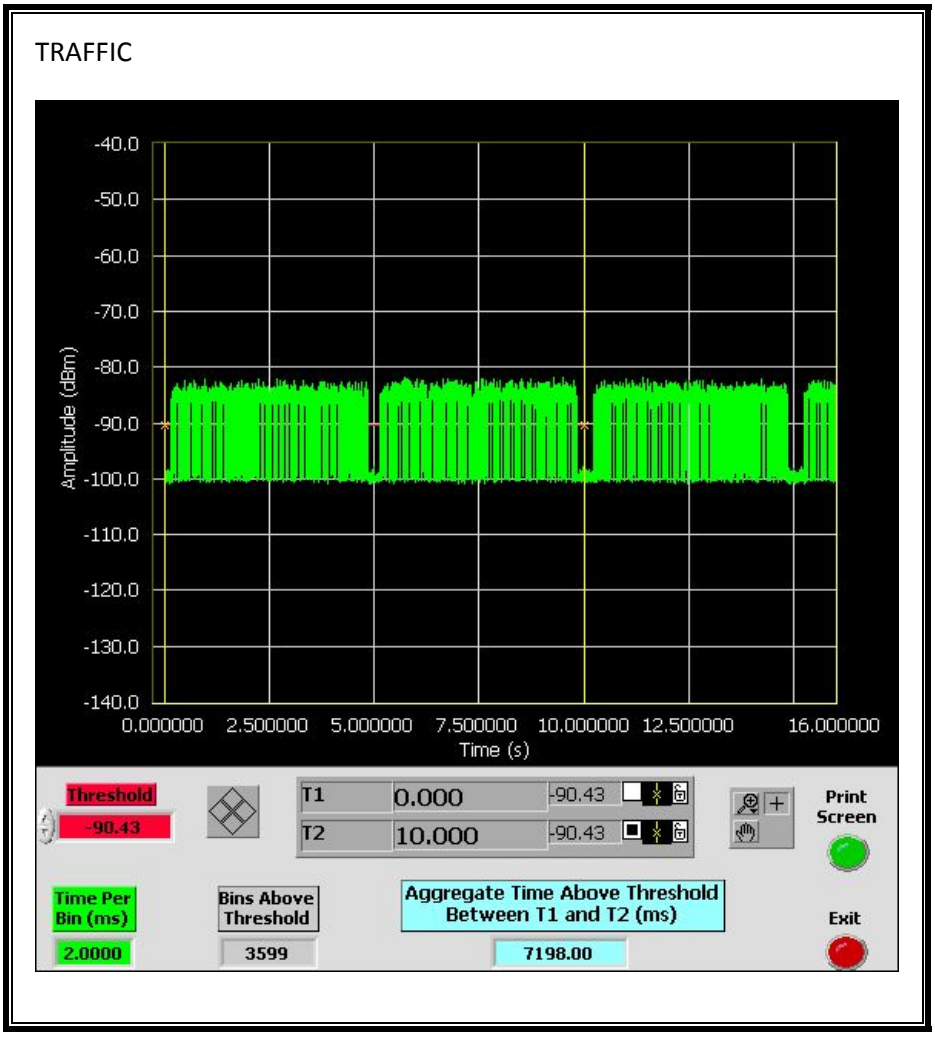

Figure 1 – 20MHz Channel Bandwidth Traffic Loading

Results from the DFS testing will be reported in the final DFS report submitted as part of the application.

Conclusion:

The proposed method loads the channel sufficiently to allow the channel closing and channel move times for the client device under test to be measured appropriately.