

# Proposal for Alternate DFS Test Procedure for Honda Engineering Co., Ltd.

## Model E3000-02-01, FCC ID: N43E30000201

### **Product Description:**

The device is a IEEE.802.11abgn that support 802.11a and 802.11n operation in the DFS bands as client-only devices. They do not have radar detection capabilities and, as such, only support an infrastructure mode of operation and do not support ad-hoc networks in the DFS bands.

The operating system of host device of EUT does not support the Windows based Media Player or the format of the streaming video file specified in FCC 06-96.

This application is limited module approval. The host device is limited. (Handy terminal)

### **Proposed Alternate Method:**

Since the operating system of handy terminal does not support the streaming of video files from master device to the client device, we propose that we execute the DFS test while the tool is executing the file transfer.

Transmit Data is sent from the personal computer to radio module (EUT) via a radio access point (AP) by Wireless Communication. And Handy terminal connected to radio module (EUT) receives it.

At this time, "WlanCalib.exe"(Software) is used.

### **General Test Setup Procedure:**

1) Radio module (EUT) is attached and then connected to Handy terminal.

Master AP is connected to PC via LAN cable. Master AP communicates with radio module (EUT) via radio waves.

2) "WlanCalib.exe" is started in the PC connected with master AP, selects the IP address (with the EUT module), and does connected operation and transfer data to AP by FTP tool.

As a result, the handy terminal keeps transmitting the data file ("Testfile.mpeg") to the EUT with the radio signal.

3) Record the data rate which sets the master AP on and the channel loading.

4) While the system is performing a file transfer using the settings from item 2), 3), above, perform the Channel Closing Transmission Time and Channel Move Time measurements as required by FCC 06-96 using a conducted test.

### **Results:**

Testing showed that the minimum target of maximum channel loading was achieved by setting the Master AP to the lowest allowed data rate for 802.11a, 6Mb/s for a channel bandwidth of 20MHz (see figure 1 below). At these settings approximate traffic loading levels were about 85% for a channel bandwidth of 20MHz. DFS testing will be performed using these conditions.

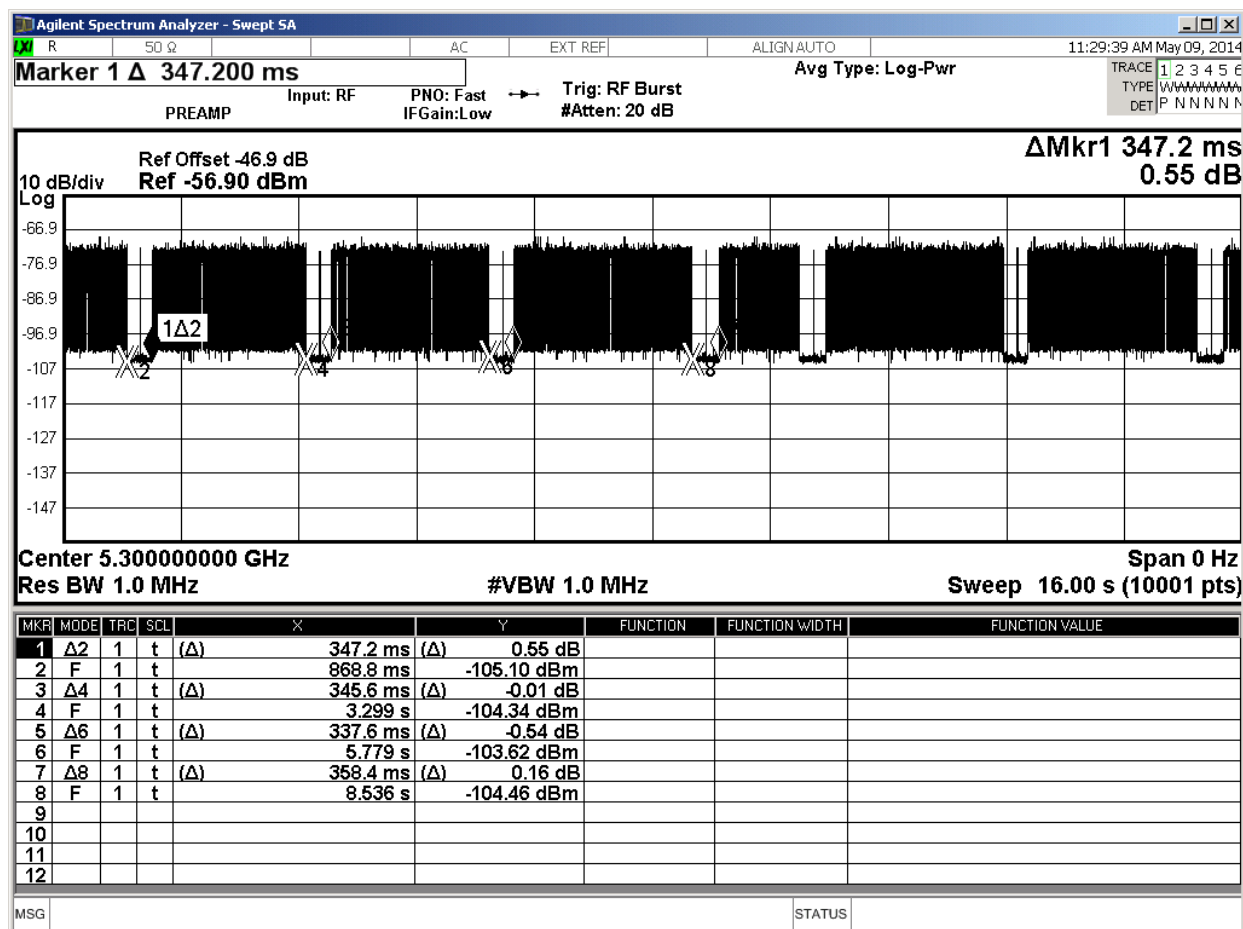


Figure 1 – 20MHz Channel Bandwidth Traffic Loading at 6 Mb/s

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

## Conclusion:

We conclude that this way is available to place burden on radio module (EUT) in measurement of channel closing time and channel shift time.