

Expedited DFS Review Request

We are submitting applications for a series of four devices (FCC IDs 2AAEH-103, 2AAEH-104, 2AAEH-105, and 2AAEH-106) with very similar characteristics. 2AAEH-103 and 2AAEH-104 operate as a pair (they cannot be used standalone from each other). 2AAEH-105 and 2AAEH-106 operate as a pair also and are only different from 103/104 by the use of higher gain signaling antennas (the DFS antenna is separate).

All four (103, 104, 105 and 106) implement the new DFS rules for the UNII bands and share a common implementation for DFS. The implementation is similar to the one submitted for FCC IDs : 2AAEH-101 and 2AAEH-102; however these new devices (103, 104, 105 and 106) follow the new DFS rules and are evaluated for detection of the new type 1 radar waveform.

The table below compares the two applications as requested in the TCB training from October 2008. We hope that the information below can be used by the OET to expedite the review of these new applications by limiting the number of samples we need to provide and/or the number of tests per sample the FCC needs to perform.

| | Previous Applications | | These Applications | | | |
|--|--|-----------|---|-------------------|----------------------|-------------------|
| FCC ID: | 2AAEH-101 | 2AAEH-102 | 2AAEH-103 | 2AAEH-104 | 2AAEH-105 | 2AAEH-106 |
| Technology: (i.e.; 802.11x, frame based, MIMO, smart antenna, etc.) | FDD, frame-based, 2-stream MIMO system | | Same technology as previous certification – FDD, frame-based, 2-stream MIMO system | | | |
| Transmit Operating Band(s) | DTS (5.8) | UNII 2A | UNII 2C DTS (5.8) | UNII 1 UNII 2A | UNII 2C DTS (5.8) | UNII 1 UNII 2A |
| Bandwidth information and differences | 10MHz, 20MHz, 40MHz | | 10MHz, 20MHz, 40MHz | | | |
| DFS Antenna information and differences for the minimum gain antennas | 0 dBi | 0 dBi | 0 dBi | 0 dBi | 0 dBi | 0 dBi |
| DFS rule version (old/new) | Old | | New | | | |
| Differences in DFS functioning, circuitry, software, etc. | | | Firmware of DFS detector has been updated to include new radar detection requirements | | | |
| Differences between the products such as TX power, modulation, receivers, processing circuitry, etc. | | | Added UNII 1 and UNII 2C operation. Increased power by 2 dB in the DTS bands. Increased EIRP in non-DFS band by way of antenna gain for 2AAEH-105 and 2AAEH-106. Modulation, receivers, etc are the same as original product. | | | |
| Name of the test lab that performed the DFS testing | UL Fremont | | UL Fremont | | | |

Based on the similarities between the device that has been approved, after DFS testing was performed by the FCC OET Lab, and this device, we request that the testing for these products be combined into a single day at OET. The testing should be represented by the testing of 2AAEH-103 and 2AAEH-104 because the DFS implementation is identical and the power of operation is identical to 2AAEH-105 and 2AAEH-106 in the DFS bands.