

The original modular approval covered a maximum gain PIFA antenna of 3.0dBi/3.6dBi in the 2.4GHz band and 4.8dBi in the 5GHz bands. This application is to add a PCB antenna with a maximum gain of 4.7dBi in the 2.4GHz band and 2.2dBi in the 5GHz bands and a dipole antenna with a gain of 3.6dBi in the 2.4GHz band and 2.8dBi in the 5GHz bands.

The limits used for the output power and power spectral density in the modular reports for 5GHz operations (DTS and NII) show compliance these antennas as they are of equal or lower gain. For 2.4GHz operations the composite gain for 2x2 beamforming modes is 7.7dBi for the highest gain antenna (PCB antenna). The output power limit for a 7.7dBi antenna is 28.3dBm. The maximum rated output power listed on the grant is 27.19dBm which complies with this limit of 28.3dBm.

Radiated spurious emissions were tested for the two new different antenna types.