

8.8. FREQUENCY STABILITY

RESULTS

No non-compliance noted:

Referring to the theory of operation, the crystal used to set the frequency has a temperature coefficient of ± 20 ppm. For a transmitter fundamental frequency of 5.35 GHz, this corresponds to ± 107 kHz.

During band edge testing, it is determined that the smallest margin (along the frequency axis) to the band edge occurred at the upper band edge in the Turbo mode, using average detection, with the antenna vertically polarized. In this configuration, with the transmitter set to the highest channel, the envelope of the modulation sideband intercepted the 54 dBuV/m limit at 5,347.3 MHz. Adding the maximum peak-to-peak deviation due to the crystal (0.214 MHz) yields 5,347.514 MHz, which remains within the authorized band of 5,150 to 5,350 MHz.

At the lower band edge, the smallest margin (along the frequency axis) occurred in the Base mode, using average detection, with the antenna vertically polarized. In this configuration, with the transmitter set to the lowest channel, the envelope of the modulation sideband intercepted the 54 dBuV/m limit at 5,154 MHz. Subtracting the maximum peak-to-peak deviation due to the crystal (0.214 MHz) yields 5,153.786 MHz, which remains within the authorized band of 5,150 to 5,350 MHz.