FCC ID: HZB-U5358-480

Compliance with 15.407(c) frequency stability

The following table shows the specifications of the determining oscillators and the *total frequency stability of the equipment at both bands over the full operating temperature range*. The data show on the table covers the worst frequency shift situation within the full operating temperature range of –30 to +65C specified for the equipment under application. The oscillators are crystal types.

	5.775 GHz Transmitter	**5.3 GHz Transmitter**
Fundamental Oscillator (PN: 1900012-414000-000)	140MHz±10ppm or ±1.4 kHz	140MHz±10ppm or ±1.4 kHz
Secondary Oscillator (PN: 1900017-610900-000)	(109MHz±30ppm)x5 or ±16.4kHz	(109MHz±30ppm) x5 or ±16.4kHz
RF reference Oscillator (PN: 1900017-610900-000)	(106.041666MHz±10ppm)x48 or ±50.89kHz	(124.687500MHz±10ppm)x48 or 59.85kHz
Total Frequency Stability	±11.89ppm or ±68.69kHz	±14.65ppm or ±77.65kHz

Justification for the claim of compliance with 15.407(c) is as follows:

a) The lowest channel center frequency is 5300 MHz, with a 26dBc width of 86.3 MHz. The margin above and below the 26dBc points to the band edges is 6.85 MHz, both above and below the center frequency.
b) The highest channel center frequency is 5775 MHz with a 26dBc width of 80.4 MHz. The margin above and below the 26dBc points to the band edges is 9.8 MHz, both above and below the center frequency.
c) Therefore, the frequency stability of the frequency-determining element must be no worse than 0.129% (6.85 MHz/5300 MHz) over the normal operating range to maintain the emissions within the allowed band. From the above table, it can be seen that the frequency-determining components offer much superior stability to ensure the compliance to 15.407(g).