

6b.4 Frequency Stability in the 900 MHz ISM Band -- Pursuant 47 CFR 2.1055a(1) & 2.1055(d)2

The transmitter output frequency stability in the ISM band depends upon the inherent frequency stability of the Temperature Compensated Crystal Oscillator (TCXO) used as the frequency reference in the frequency generation scheme described in Exhibit 4. The total variation of the reference TCXO frequency, including changes caused by ambient temperature, supply voltage variation, and aging of the crystal is specified to be less than 2.25 PPM. This TCXO performance results in a total variation of frequency in the 900 MHz ISM band of less than 2100 Hz from nominal frequency.

Measurements were made at 915 MHz.

Temp °C	Freq error, ppm
-30	0.798
-18	0.678
-3	0.612
2	0.590
8	0.546
18	0.382
36	0.109
46	0.012
53	0.119

Table 6b-5. Frequency stability at Maximum battery voltage, 4.0 V

Temp °C	Freq error, ppm
-29	0.798
-19	0.678
-8	0.634
-5	0.601
4	0.590
23	0.382
28	0.262
35	0.131
50	0

Table 6b-6 . Frequency Stability at minimum battery voltage, 3.55 V

Temp °C	Freq error, ppm
-30	0.798
-20	0.678
-10	0.612
0	0.590
10	0.546
20	0.382
30	0.109
40	0.012
50	0.119

Figure 6b-7: Frequency Stability versus temperature at maximum voltage