## 6a.5 Land Mobile Frequency Stability -- Pursuant 47 CFR 2.1055a(1) & 2.1055(d)2

Frequency stability measurements were made as described in paragraph 7.4. Because of the transmitter's dependence on the stability of the base station oscillator, it is not possible to provide stability data for this transmitter as is commonly supplied for certification per 47 CFR 2.1055 for a radio with a locally stabilized oscillator. The following data was collected in a setup comprising of a base station simulator and it represents the absolute frequency error of the transceiver under test versus the base station frequency reference.

| Frequency Stability in PPM at 813.5125MHz, Voltage = 4V | | |
|---|---|---|
| **TEMP** | **Frequency Error (Hz)** | **PPM** |
| -30 | 19.86 | 0.024 |
| -20 | 33.44 | 0.041 |
| -10 | 25.89 | 0.032 |
| 0 | 18.38 | 0.022 |
| 10 | 28.48 | 0.035 |
| 20 | 17.98 | 0.022 |
| 30 | 28.58 | 0.035 |
| 40 | 40.33 | 0.049 |
| 50 | 25.18 | 0.031 |
| 60 | 28.01 | 0.034 |

**Table 6a-5.1. Transmitter Frequency Stability vs. Temperature in 800 MHz Band**

| Frequency Stability in PPM at 900.98125MHz, Voltage = 4V | | |
|---|---|---|
| **TEMP** | **Frequency Error (Hz)** | **PPM** |
| -30 | 28.16 | 0.031 |
| -20 | 46.93 | 0.052 |
| -10 | 84.39 | 0.093 |
| 0 | 52.79 | 0.058 |
| 10 | 14.98 | 0.016 |
| 20 | 36.97 | 0.041 |
| 30 | 41.91 | 0.046 |
| 40 | 44.61 | 0.049 |
| 50 | 12.28 | 0.013 |
| 60 | 39.51 | 0.043 |

**Table 6a-5.2. Transmitter Frequency Stability vs. Temperature in 900 MHz Band**

| Frequency Stability in PPM at 813.5125MHz, Temperature = 25°C | | |
|---|---|---|
| **Power Supply Output Voltage** | **Frequency Error in Hz** | **PPM** |
| 3.55 | 27.81 | 0.034 |
| 3.6 | 39.79 | 0.049 |
| 3.7 | 34.14 | 0.042 |
| 3.8 | 33.40 | 0.041 |
| 3.9 | 29.25 | 0.036 |
| 4.0 | 20.05 | 0.024 |
| 4.1 | 47.08 | 0.057 |
| 4.2 | 27.82 | 0.034 |

**Table 6a-5.3. Transmitter Frequency Stability vs. Voltage in 800 MHz Band**

| Frequency Stability in PPM at 900.98125MHz, Temperature = 25°C | | |
|---|---|---|
| **Power Supply Output Voltage** | **Frequency Error in Hz** | **PPM** |
| 3.55 | 11.59 | 0.013 |
| 3.6 | 12.35 | 0.014 |
| 3.7 | 21.84 | 0.024 |
| 3.8 | 11.64 | 0.013 |
| 3.9 | 23.21 | 0.025 |
| 4.0 | 21.08 | 0.023 |
| 4.1 | 21.38 | 0.024 |
| 4.2 | 21.31 | 0.023 |

**Table 6a-5.4. Transmitter Frequency Stability vs. Voltage in 900 MHz Band**