

8 FREQUENCY STABILITY

8.1 Test description

Parameter:	FCC §2.1055
Requirement:	FCC § 24.235
Frequency Tolerance:	Sufficient to ensure that the fundamental emission stays within the authorized frequency block

8.2 Test Procedure

The ppm frequency error of the transmitter was calculated by:

$$ppm\ error = \left(\frac{MCF}{ACF} - 1 \right) \cdot 10^6$$

Where MCF is the Measured Carrier Frequency in MHz

ACF is the Assigned Carrier Frequency in MHz

8.2.1 Frequency Stability vs. Temperature

The equipment under test was connected to an external DC power supply and the RF output was connected to a frequency counter via feedthrough attenuators. The EUT was placed inside the temperature chamber.

After the temperature stabilized for approximately 20 minutes, the frequency of the output signal was recorded from the counter.

8.2.2 Frequency Stability vs. Voltage

At room temperature (25 ± 5 °C), an external variable DC power supply was connected to the EUT. The frequency of the transmitter was measured for 115%, 100% and 85% of the nominal operating input voltage.

8.4 Test Results

Test was not requested.

8.5 Modifications made during testing

None

8.6 Test instrumentation

☒ Data provided by applicant

- ☐ Temperature Chamber, -50C to +100C
- ☐ Hewlett Packard 5383A Frequency Counter
- ☐ Tektronix 2784 Spectrum Analyzer
- ☐ Goldstar DC Power Supply, GR303

9 AC LINE CONDUCTED EMISSIONS**9.1 Test description**

Parameter:	ANSI C63.4
Requirement:	FCC § 15.107

9.2 Test Procedure

The EUT was connected to the DC power supply, that was connected to the AC line through the LISNs.

Both HOT and NEUTRAL leads were tested.

9.3 Test Results

[X] Passed, see separate DoC report.

9.4 Modifications made during testing

None

9.5 Test instrumentation

[] HP 8566B Spectrum Analyzer

[] LISN