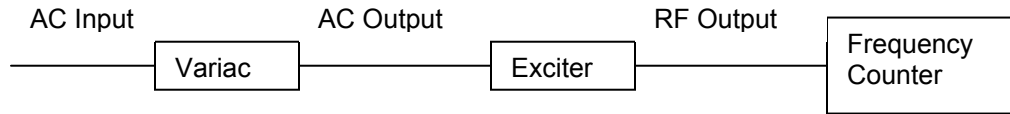


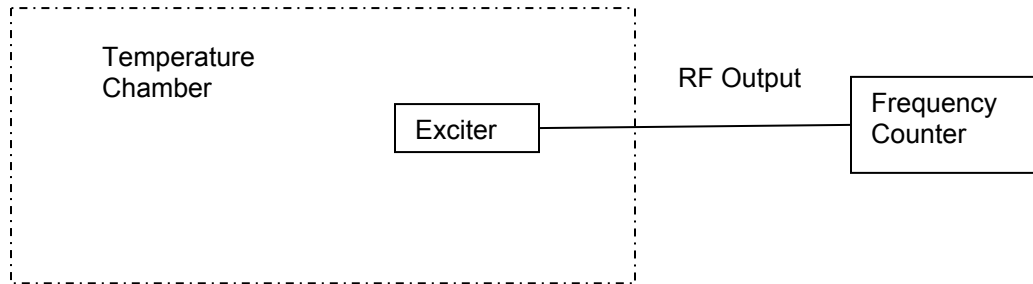
FREQUENCY STABILITY MEASUREMENTS

Frequency stability versus temperature and line voltage was measured in a controlled environment. For these tests the exciter RF output was fed to a frequency counter that has better than a 1ppm accuracy. The test equipment configuration is shown below.

Frequency Stability versus line voltage variation



Frequency Stability versus temperature



The Variac was adjusted for nominal voltage and the frequency was recorded. Then the variac was adjusted to 85% and 115% of the nominal voltage and the frequency was recorded at each voltage level. The results are tabulated below.

LINE VOLTAGE (Volts)	Visual Frequency (MHz)	Aural Frequency (MHz)
93.5 (85%)	753.249980	757.749980
110 (nominal)	753.250018	757.750018
126.5 (115%)	753.249960	757.749960

For the temperature stability measurements the exciter was placed inside a temperature chamber equipped with temperature controller. The exciter frequency was measured on the frequency counter. Measurements were first recorded at room temperature. The temperature in the chamber was changed to each of the points identified in the table below. The chamber followed a prescribed rate of change to reach each temperature and was then allowed to stabilize at the desired temperature at which time frequency measurements were made.

Temperature °C	Visual Frequency (MHz)	Aural Frequency (MHz)
50	753.250098	757.750098
45	753.250075	757.750075
35	753.250048	757.750048
25	753.250028	757.750028
15	753.250020	757.750020
+5	753.250010	757.750010
-5	753.250012	757.750012
-15	753.250030	757.750030
-25	753.250045	757.750045
-30	753.250087	757.750087

The recorded data indicates that the total shift in frequency was 88 Hz and thus frequency stability requirements of FCC Rule 2.1055 were met.