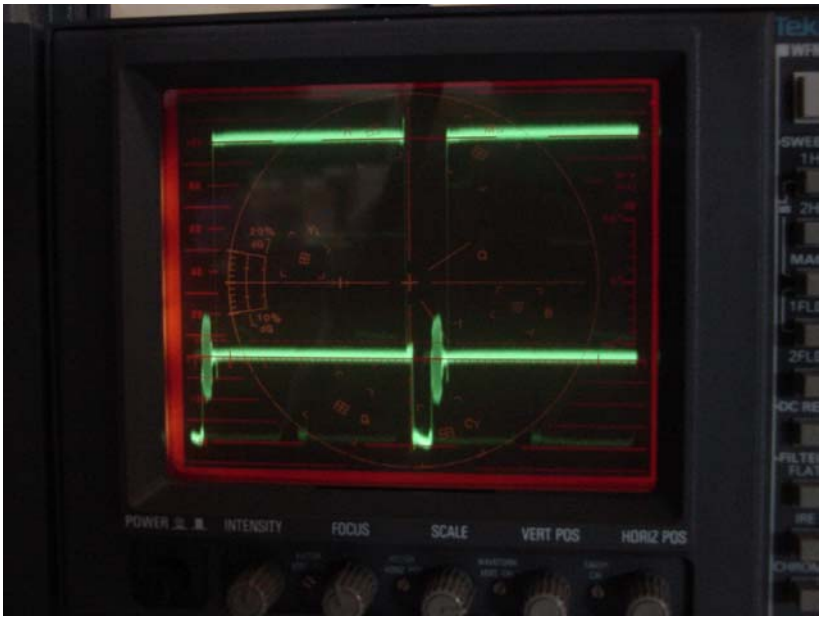
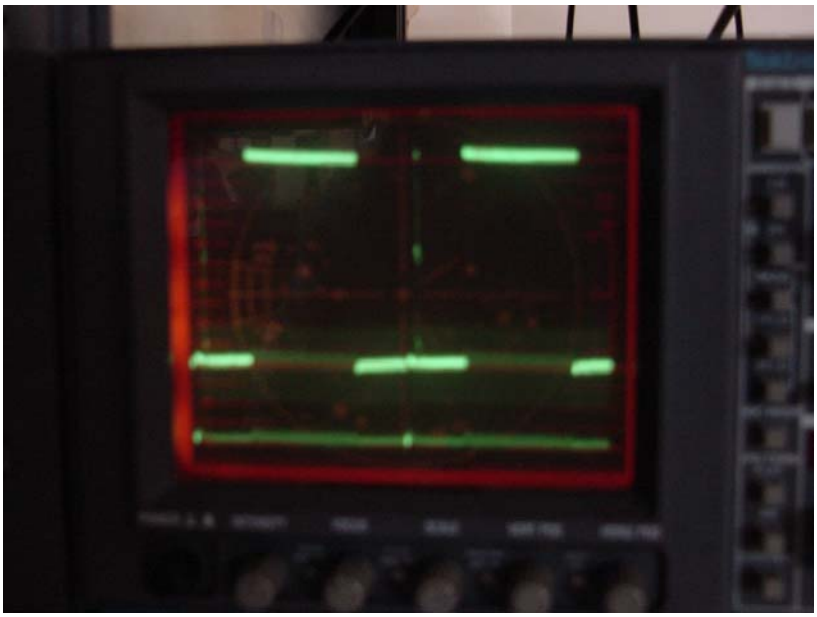
**TWO HORIZONTAL LINES AND TWO FIELDS SHOWING CORRECT MODULATION DEPTH FOR REFERENCE WHITE AND SYNC LEVELS AT 1.0 KW**

Power Output = 1.0 kwatts



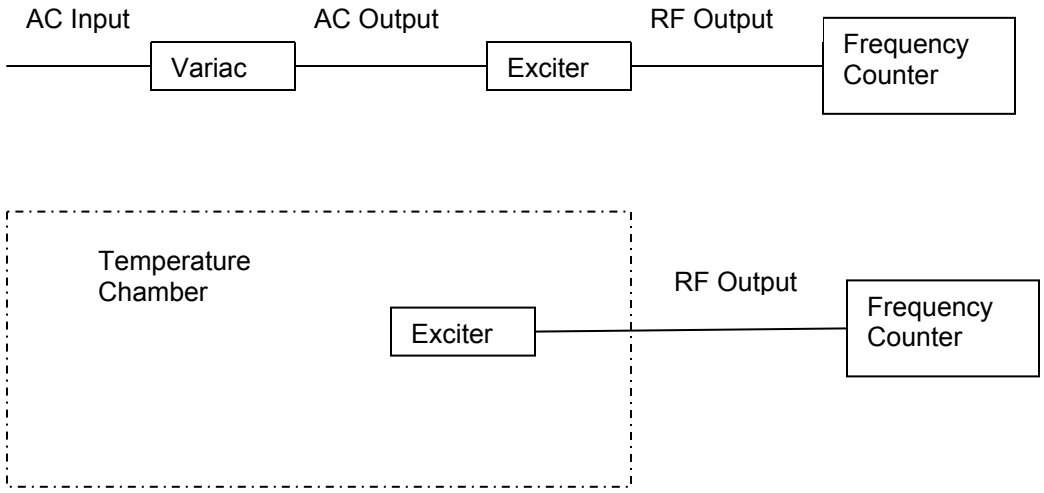

Power Output = 1.0 kwatts



As can be seen from the above photographs there is negligible distortion of the waveforms.

# 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.




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) |
|---|---|---|
| 100 (85%) | 549.250045 | 553.750041 |
| 121 (nominal) | 549.250046 | 553.750040 |
| 140 (115%) | 549.250046 | 553.750040 |

For the temperature stability measurements the exciter was placed inside a Tenney temperature chamber equipped with a MicroTenn II temperature controller. The exciter frequency was measured on the frequency counter. The temperature in the chamber was changed to each of the points identified in the table below. The chamber followed a prescribed rate of 10 minutes to change the frequency and then the temperature was allowed to stabilize at the temperature for 10-15 minutes. When the temperature had stabilized, the exciter visual and aural frequencies were recorded, and then the temperature was advanced to the next measurement point. The temperature was cycled cold first and then returned to room temperature and then cycled hot.

| Temperature °C | Time | Visual Frequency (MHz) | Aural Frequency (MHz) |
|---|---|---|---|
| 25 | 9:20 am | 531.250050 | 535.750056 |
| 20 | 9:35 am | 531.250041 | 535.750046 |
| 10 | 10:25 am | 531.250041 | 535.750050 |
| 0 | 10:45 am | 531.250037 | 535.750046 |
| -10 | 11:10 am | 531.250032 | 535.750042 |
| -20 | 11:55 am | 531.250031 | 535.750039 |
| -30 | 12:15 pm | 531.250030 | 535.750038 |
| 25 | 12:40 pm | 531.250038 | 535.750045 |
| 30 | 1:00 pm | 531.250043 | 535.750050 |
| 40 | 1:25 pm | 531.250049 | 535.750056 |
| 50 | 1:50 pm | 531.250055 | 535.750062 |

The recorded data indicates that the frequency stability requirements of FCC Rule 2.1055 were met.