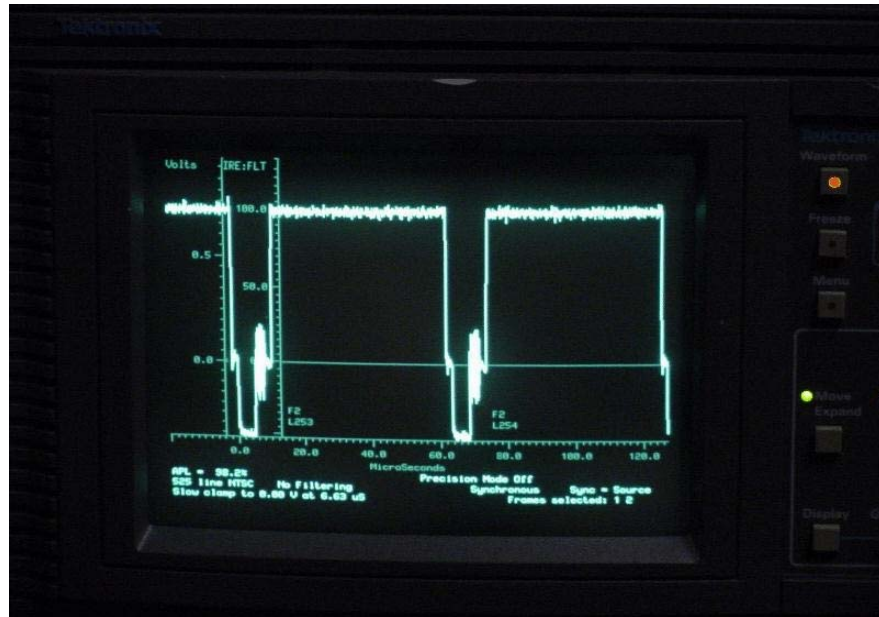
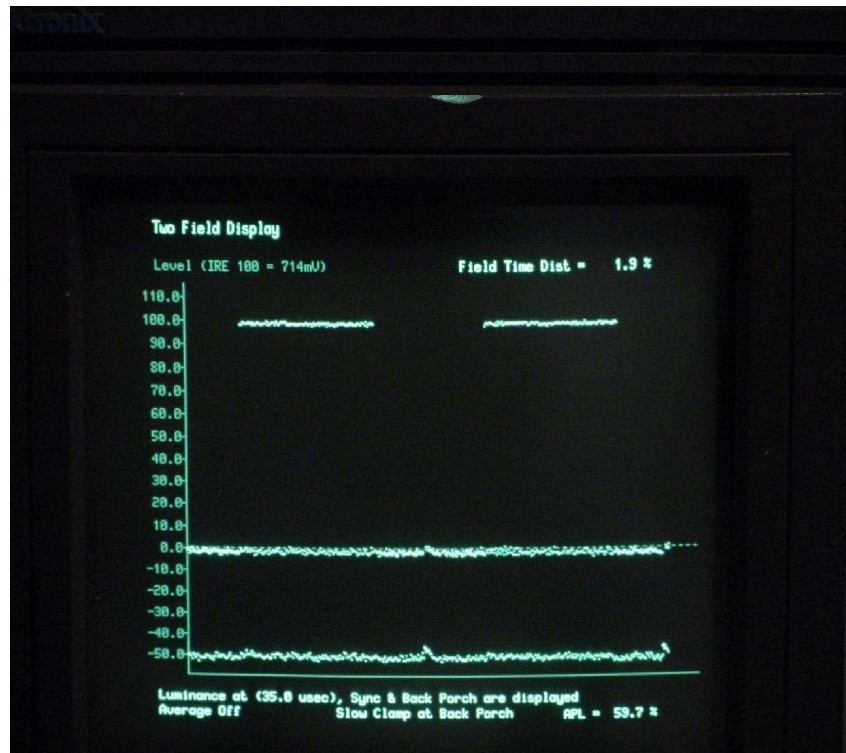


**TWO HORIZONTAL LINES AND TWO FIELDS SHOWING
CORRECT MODULATION DEPTH FOR REFERENCE WHITE
AND SYNC LEVELS AT 500 WATTS**



Power Output = 500 watts



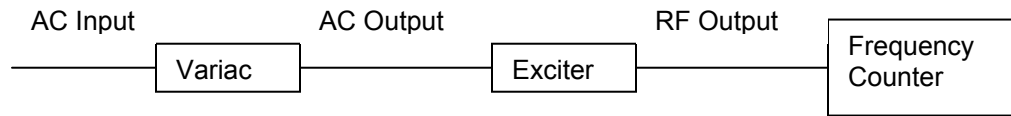
Power Output = 500 watts

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

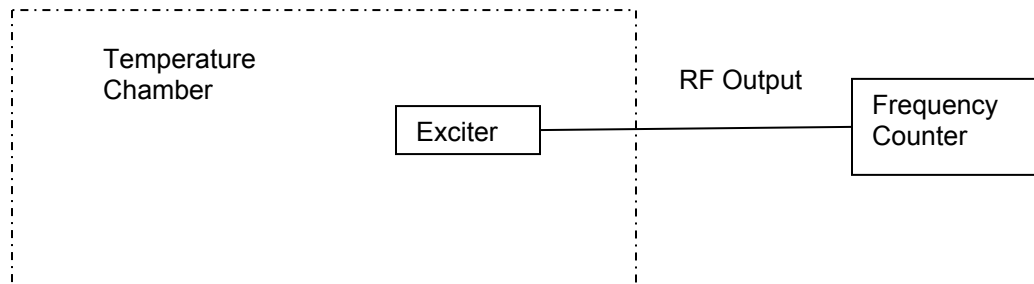
FREQUENCY STABILITY MEASUREMENTS

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.

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)
100 (85%)	175.250290	179.750393
121 (nominal)	175.250281	179.750380
140 (115%)	175.250277	179.750376

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. 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 for 10-15 minutes at which time frequency measurements were made. The temperature was cycled hot to 50°C and then gradually decreased until the entire range was covered.

Temperature °C	Time	Visual Frequency (MHz)	Aural Frequency (MHz)
25	1:30	175.250226	179.750232
50	2:50	175.250224	179.750230
40	3:10	175.250226	179.750231
30	3:20	175.250226	179.750232
20	3:30	175.250225	179.750233
10	3:45	175.250224	179.750230
0	4:00	175.250224	179.750229
-10	4:10	175.250224	179.750229
-20	4:20	175.250225	179.750231
-30	4:30	175.250227	179.750233

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