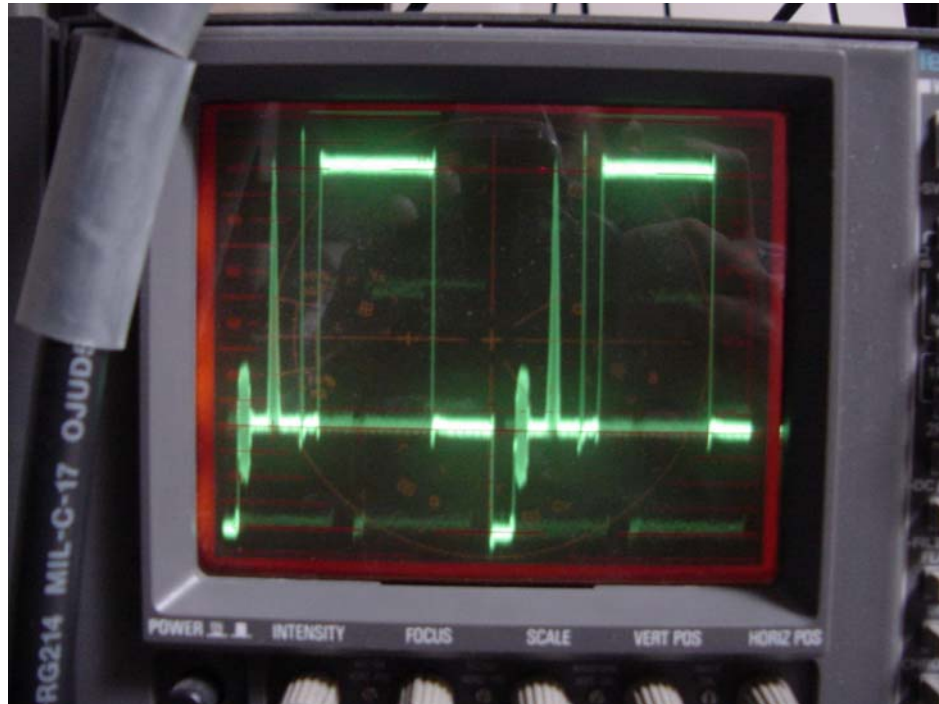
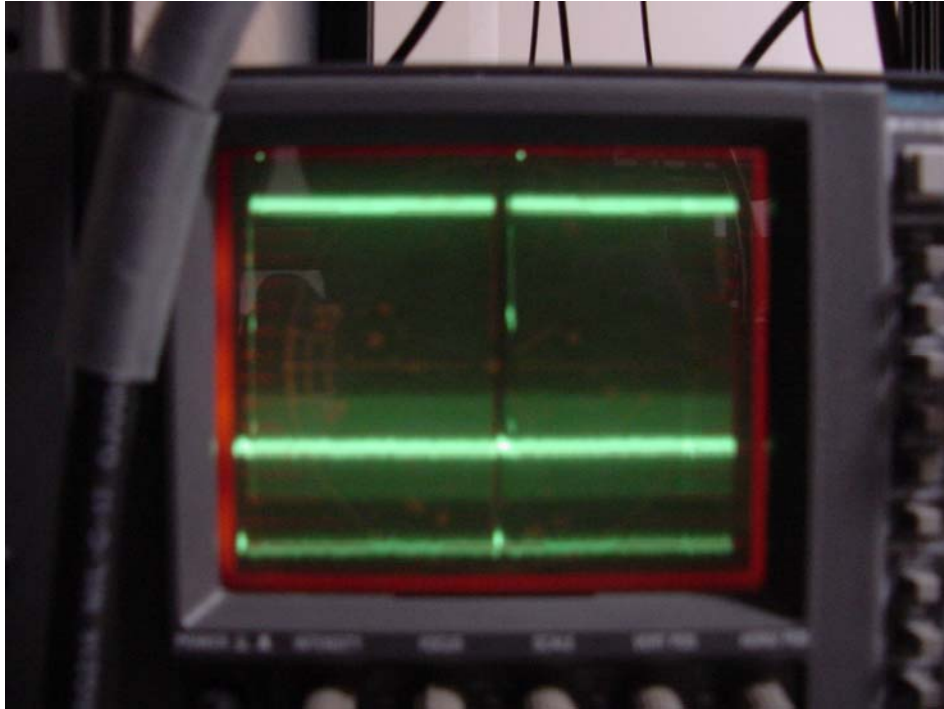


**TWO HORIZONTAL LINES AND TWO FIELDS SHOWING  
CORRECT MODULATION DEPTH FOR REFERENCE WHITE  
AND SYNC LEVELS AT 100 W**

Power Output = 100 watts

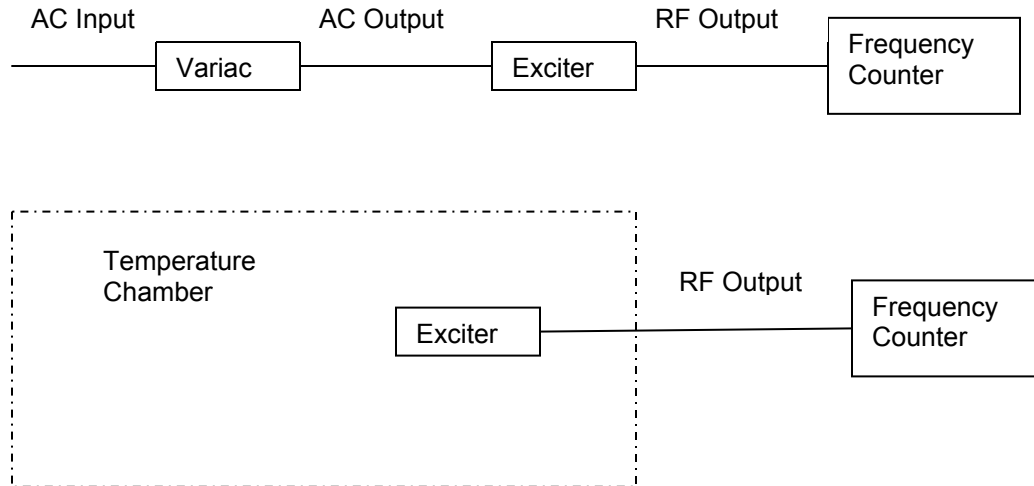


Power Output = 100 watts



## 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 temperature 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.