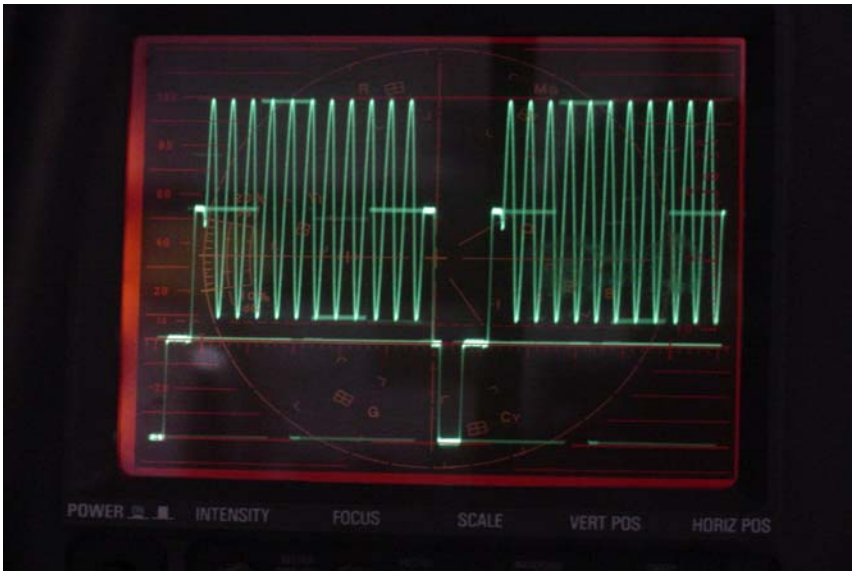
VISUAL TRANSMITTER FREQUENCY RESPONSE MEASUREMENTS

The test equipment configuration of Figure 1 was used with the 1410 video generator supplying the video input waveform. For this test, the aural carrier was left energized. A variable frequency sine wave of 90 IRE Peak-to-Peak amplitude from 200 kHz to 4.5 MHz with pedestal set at 52.5 IRE input video waveform was used. The modulation output was increased until the maximum excursion reached reference white and 10 IRE as shown in the photo below. The frequency of the variable sine wave was varied between 200 kHz to 4.5 MHz in 500 kHz steps. The RF sideband output level was measured for the sidebands below and above the visual carrier. The frequency response was plotted. The plots were scanned and are shown beginning on the next page. Spectrum plots for both 2.0 kW and 500 Watt power output conditions are displayed to confirm that the radiated envelope meets the requirements as outline in Part 74 Rule 750.

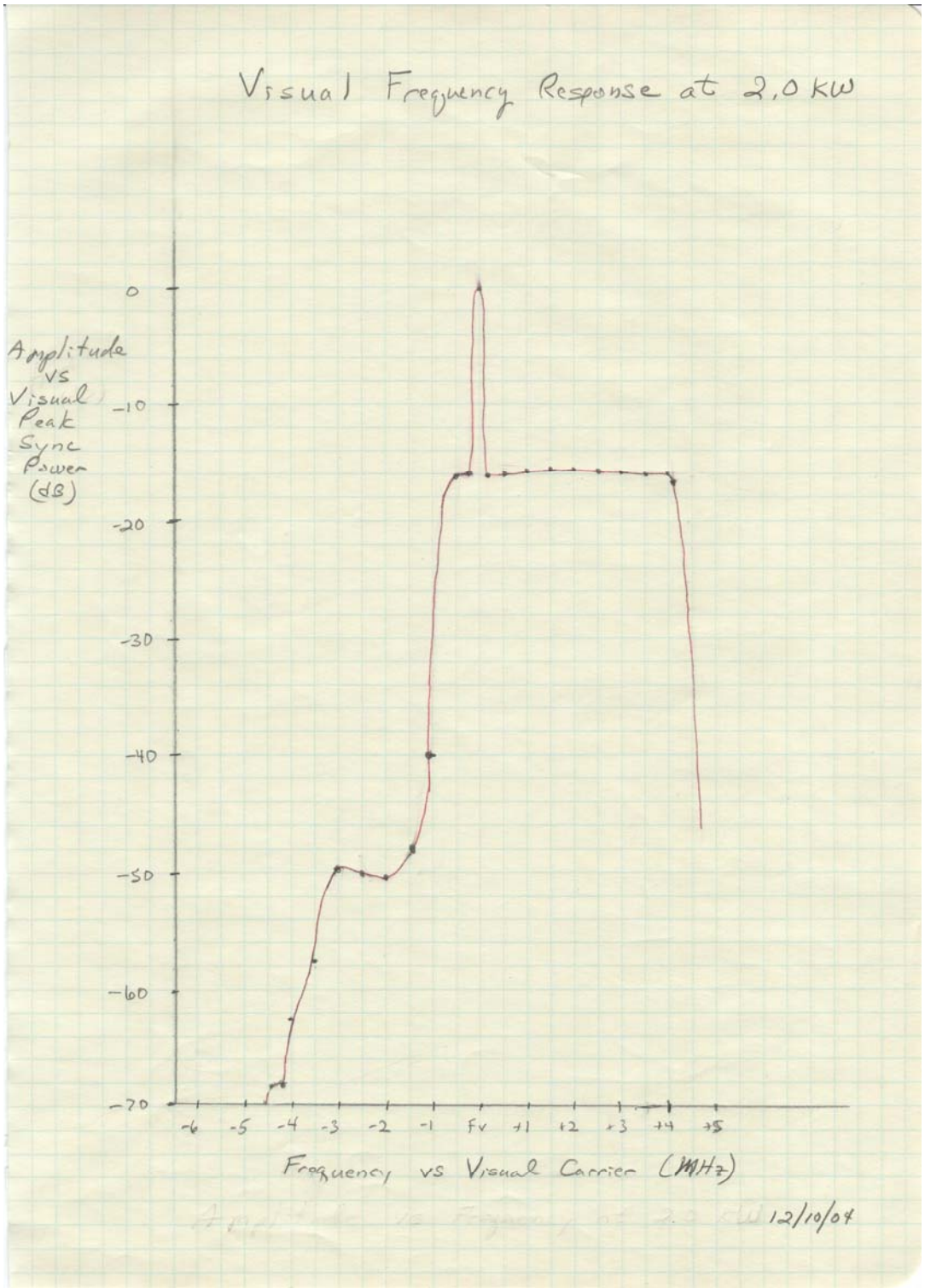
FREQUENCY RESPONSE INPUT WAVEFORM



The sweep amplitude of 90 IRE establishes a spectrum component at -14 dB reference to peak of sync output power. The frequency response measurements are tabulated below for upper and lower sideband values at power levels of 2 kW and 500 Watts and plotted on the next page to demonstrate compliance with the frequency response Rule 74.750. The tabulated values are compared to the -14 dB reference in the tables but plotted on an absolute level.

Power Level	Pout = 2 kW		Pout =500 W	
Frequency	LSB	USB	LSB	USB
200 kHz	-15 dB	-15 dB	-15 dB	-15 dB
500 kHz	-16 dB	-16 dB	-15 dB	-15 dB
1.0 MHz	-40 dB	-15.5 dB	-18 dB	-14.5 dB
1.5 MHz	-48 dB	-15 dB	-45 dB	-14.5 dB
2.0 MHz	-51 dB	-15 dB	-45 dB	-14.5 dB
2.5 MHz	-48 dB	-15 dB	-46 dB	-14.5 dB
3.0 MHz	-49 dB	-15.5 dB	-46 dB	-14.3 dB
3.5 MHz	-57 dB	-16 dB	-56 dB	-14.5 dB
4.0 MHz	-63 dB	-16 dB	-64 dB	-14.3 dB
4.2 MHz	-68 dB	-16 dB	-69 dB	-14.5 dB
4.4 MHz	-68 dB	-25 dB	-70 dB	-22 dB

PLOT OF SPECTRUM AT POWER OUTPUT =2.0 kwatts



PLOT OF SPECTRUM AT POWER OUTPUT =500 watts