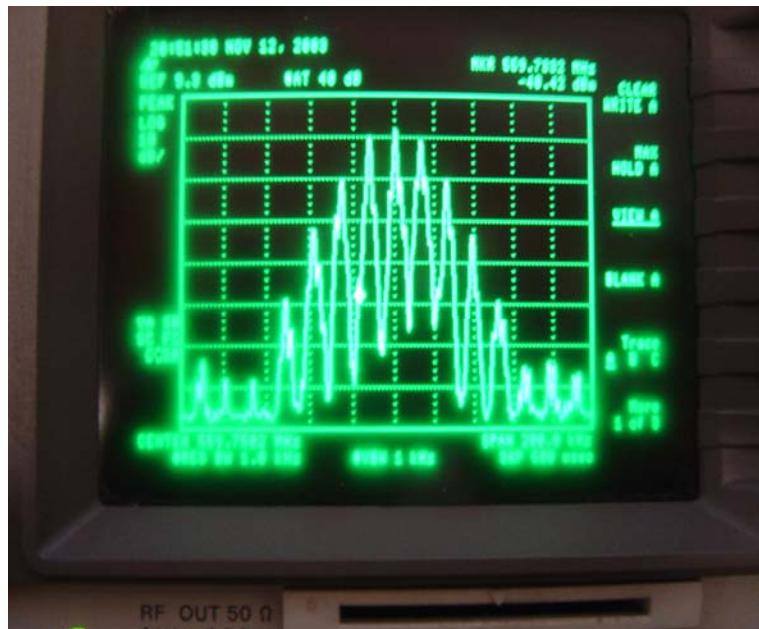


## OCCUPIED BANDWIDTH MEASUREMENTS

The test equipment was configured as in Figure 1. The aural carrier was energized and increased in power until the desired Visual to Aural power ratio of 10 dB was met. The visual input waveform used was a "0" IRE video input level from the TSG-90 and the aural input signal was a 15 kHz sine wave taken from the HP 200CD audio generator. The aural deviation was increased until the desired level (85% of 25 kHz = 21.25 kHz) was indicated on the HP8903B modulation analyzer. The output spectrum was observed on the HP 8593 spectrum analyzer noting the requirements as identified in FCC Rule Part 2.1079. As can be observed, the output spectrum meets these requirements.

OCCUPIED BANDWIDTH—POWER OUTPUT = 4.70 kWatts  
(Scan width = 200 kHz)



OCCUPIED BANDWIDTH—POWER OUTPUT = 1.34 kWatts  
(Scan width = 200 kHz)



## AURAL FREQUENCY RESPONSE

The equipment configuration of Figure 1 was used. The visual and aural carriers were energized and the aural carrier was modulated by the HP200CD audio frequency generator. A reference was set at 400 Hz and the audio generator level was adjusted to achieve 25 kHz deviation at each frequency using the calibrated audio output (in mvolt/kHz) from the TV demodulator. The following table of audio response was obtained by dividing the output audio level by the reference level at 400 Hz. This table is displayed on the graph shown on the next page. The input termination to the UTX5KW was fixed at 600 ohms. The oscilloscope was used to compare the input voltage with the output demodulated voltage from the TV Demod (and also compared to the 8903B) to determine the response level. The results are tabulated below and plotted on the next page meeting the prescribed limits as shown on the graph.

FREQUENCY RESPONCE	
FREQUENCY (Hz)	AMPLITUDE (dB)
50	-0.8
100	-0.5
200	-0.3
400	Reference
800	0.25
1500	1.58
2000	2.40
4000	5.6
8000	10.0
10000	11.1
12000	12.5
15000	13.7

## AURAL FREQUENCY RESPONSE GRAPH WITH LIMITS

