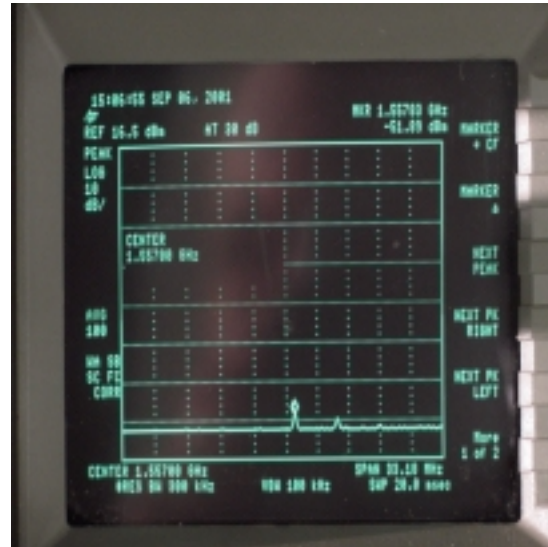


2nd Harmonic area spectrum
Output @ 1100 watts peak



3rd harmonic spectrum area
Output @1100 watts peak

The figures shown above are harmonic and spurious measured at the translator output for power levels of 250 and 1100 watts peak. The only spectral components other than the spurs just outside the channel are harmonics of the visual and aural carriers . All other harmonic and spurious levels are >80 dB below rated output power. The harmonic levels are recorded in the table below.

Output Power = 1100 watts peak sync

Spectral Frequency	Displayed Value	Corrected value*
510.25 MHz (Fv - 9)	-70 dB	-70 dB
514.75 MHz (Fv - 4.5)	-68 dB	-68 dB
1.038 GHz (Fv x 2)	-63 dB	-67 dB
1.046 GHz (Fa x 2)	-66 dB	-70 dB
1.557 GHz (Fv x 3)	-68 dB	-72 dB
1.571 GHz (Fa x 3)	-70 dB	-74 dB

*Corrected for cable loss and coupling factor from the RF coupler and cable used in the test setup and notch filters at visual and aural carriers.

Cabinet Radiation

The translator and test equipment was configured as shown on the following page including the angles of measurement with respect to the translator cabinet. The photo on the subsequent page also shows the physical set-up of the test equipment and equipment under test. The translator was operated at 110% power with a 10 dB visual/aural ratio with the video input signal being a sync signal and 0 IRE "set-up" level. The

free space path loss, cable loss, and antenna gain characteristics were obtained at the fundamental frequency and at each of the harmonics of the visual carrier frequency in order to accurately assess the level of the signal radiated from the cabinet. The cabinet was measured in 4 different physical rotation angles: 0, 90, 180, and 270 degrees (0 degrees being the front of the cabinet). All spectral components above -80 dB referenced to peak sync power radiated from the cabinet were recorded. Their values are tabulated in the table below the photos.

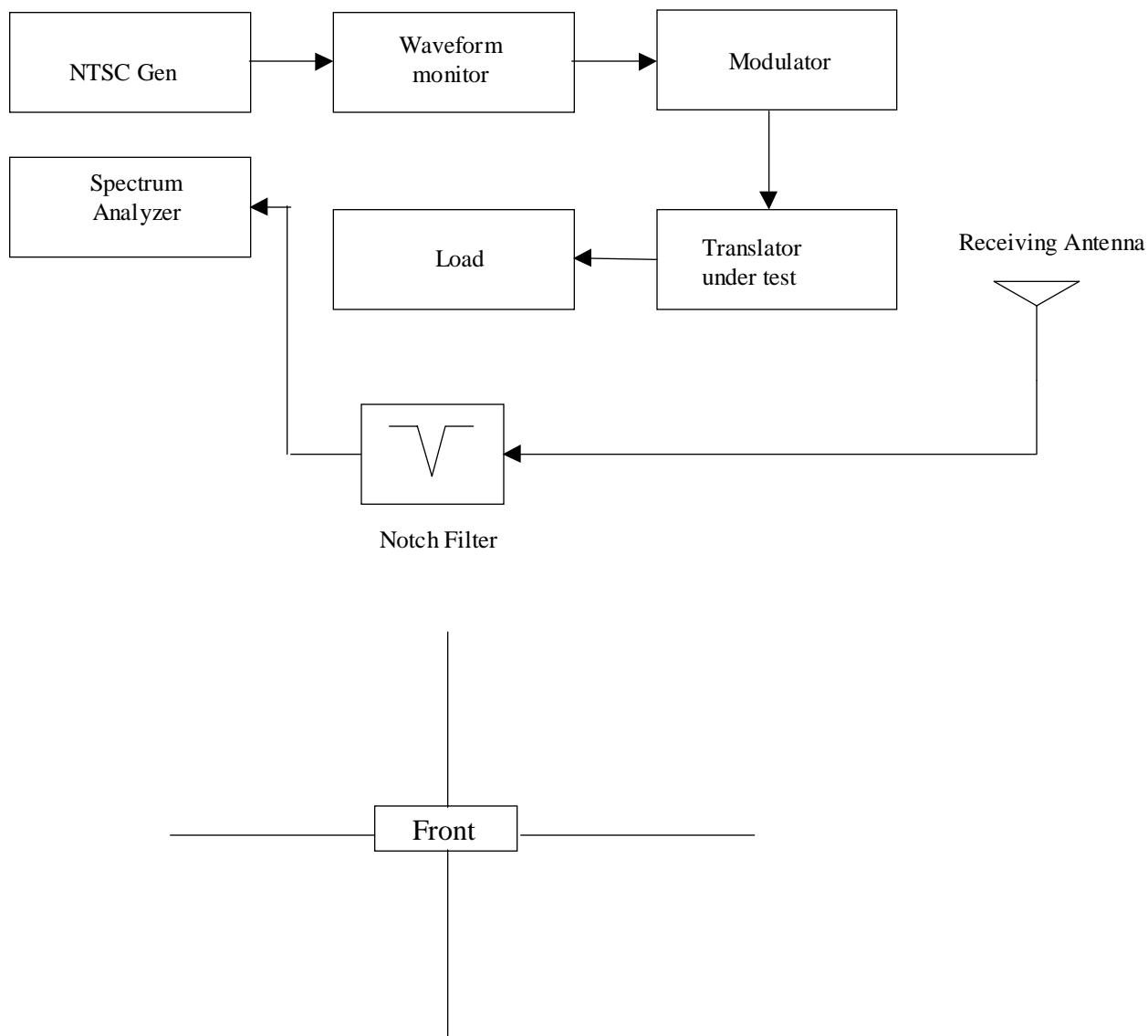




Figure showing Test setup for cabinet radiation. Cabinet was rotated to measure radiation from four angles. Foreground shows receiving antenna, notch filters, and spectrum analyzer.