

The Signal generator supplies a low RF level that is amplified, by the driver, to a suitable input RF level to the PA.

The PA output is set to 180W.

The RF signal is external modulated with output signal from the function generator

1.0 TEST SETUP

The PA's frequency was set to 881.5MHz and FM modulated with a 3 kHz 50% duty cycle square wave at a 5kHz deviation. The output power was set to 180W.

2.0 RESULTS

In accordance with paragraph 22.917 (d) the peak power of any emission shall be attenuated below the unmodulated carrier power (P) in accordance with the following:

- (1) On any frequency removed from the carrier frequency by more than 20kHz but not more than 45kHz: At least 26dB.
- (2) On any frequency removed from the carrier frequency by more than 45kHz but not more than 90kHz: At least 45dB.
- (3) On any frequency removed from the carrier frequency by more than 45kHz, up to the first multiple of the carrier frequency: at least 60dB or $43 + 10\log(P)\text{dB}$, whichever is the lesser attenuation.

The occupied bandwidth measurement results were plotted in figure 1 and 2. The limits are referenced to the power measured from the unmodulated carrier. As can be seen from the data, the sideband emissions measured at the output were similar to the sideband emissions measured from the input.

Figure 1. Input Spectrum

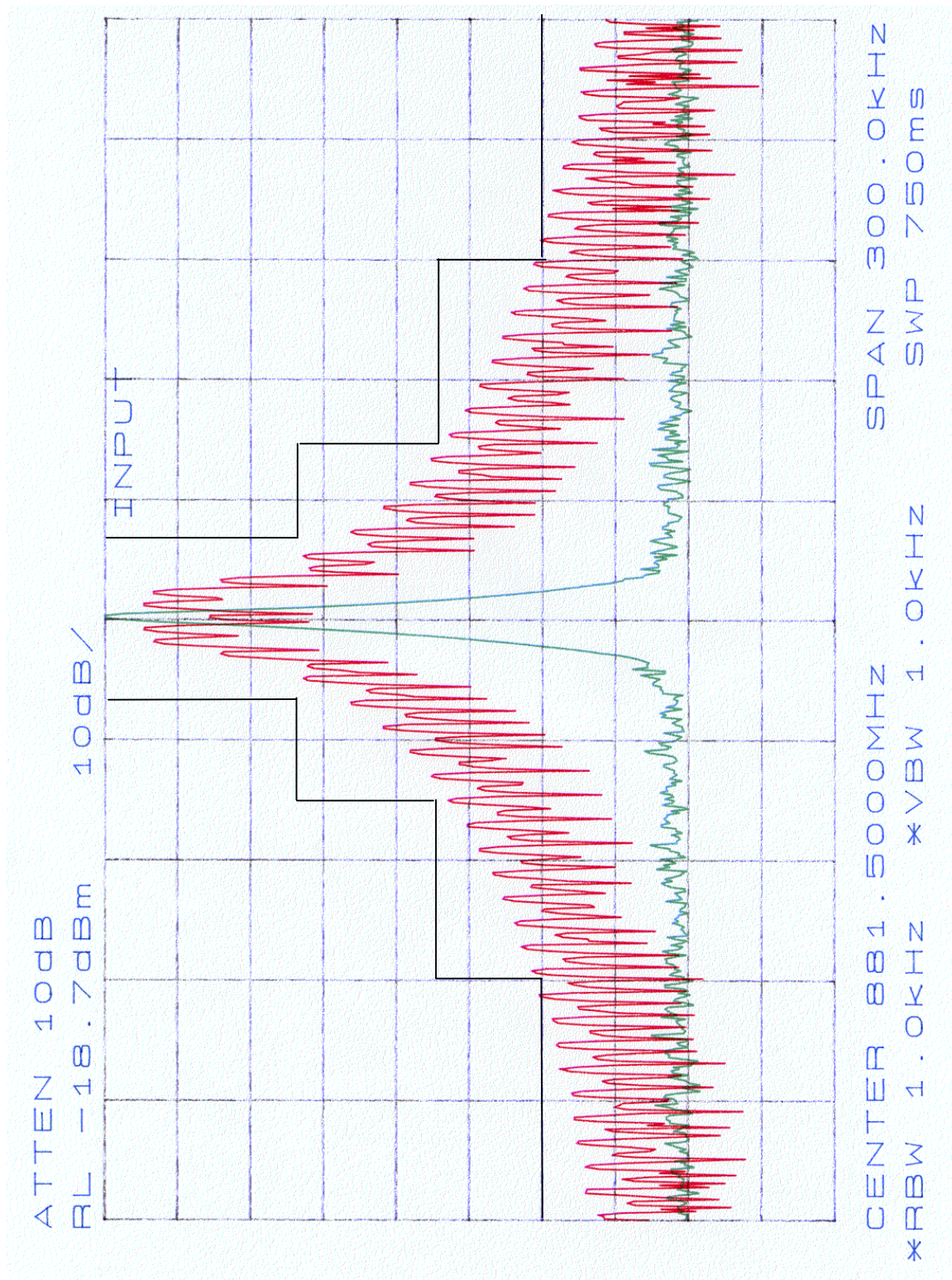


Figure 2. Output Spectrum

