

MIZAR 300 SUPPLEMENTAL TEST DATA

FREQUENCY STABILITY VS TEMPERATURE PERFORMANCE

The equipment was configured as shown in Figure 1 of the test report block diagram with the transmitter enclosed within a temperature chamber. The loss through the RF output cable and directional coupler was calibrated at the carrier frequencies of 98 MHz. The audio generator was not energized. The transmitter was energized at room temperature at a power output of 300 watts. Power was read on the Bird 4391A Power Meter and a reference level was established on the Advantest R131 Spectrum Analyzer. The temperature was then varied from +50 °C to 0 °C per FCC rule 2.1055 (a) (3) and the frequency was measured with spectrum analyzer. The temperature was allowed to stabilize at each one of the measurement points. The output frequency was read on the spectrum analyzer with the counter mode engaged. The results meet the FCC tolerance requirements outlined in 73.1545 and are tabulated below.

Temperature [°C]	Frequency [MHz]
0	98.000009
10	98.000004
20	98.000000
30	97.999995
40	97.999991
50	97.999987