



## 4.0 FCC Rules and Regulations Part 2 §2.1051: Spurious Emissions at Antenna Terminals

### 4.1 Test Procedure

ANSI/TIA/EIA-603-1992, Section 2.2.13

The transmitter is terminated with a 50  $\Omega$  load and interfaced with a spectrum analyzer.

The transmitter is modulated with a 2,500 Hz sine wave at an input level 16 dB greater than that required to produce 50% of the rated system deviation at 1000 Hz.

### 4.2 Test Data

#### 4.2.1 CFR PART 90 REQUIREMENTS

Frequency range of measurement per Part 2.1057: 9kHz to 10 x Fc

Limits: Mask B (dBm):  $P(\text{dBm}) - (43 + 10 \times \text{LOG } P(\text{W}))$

Mask D (dBm):  $P(\text{dBm}) - (50 + 10 \times \text{LOG } P(\text{W}))$

The following channel (in MHz) were investigated: 450.025, 469.975, 487.975

The worst case (unwanted emissions) channels are shown. The magnitude of emissions attenuated more than 20 dB below the FCC limit need not be recorded.

Channel 1 (450.025 MHz) – 4 Watt and 25 kHz Channel Bandwidth: Mask B

Frequency (MHz)	Level Measured (dBm)	Limit (dBm)	Margin (dB)
900.05	-52.2	-13.0	-39.2
1350.075	-39.9	-13.0	-26.9

Channel 6 (487.975 MHz) – 4 Watt and 12.5 kHz Channel Bandwidth: Mask B

Frequency (MHz)	Level Measured (dBm)	Limit (dBm)	Margin (dB)
975.95	-22.4	-20.0	-2.4
1463.925	-25.7	-20.0	-5.7
1951.9	-44.0	-20.0	-24.0

### 4.3 Test Equipment

Audio Generator:

Synthesized Level Generator HP3336B s/n 2127A00559

Audio Signal Analyzer Tektronix ASG 100 s/n B032374

Spectrum Analyzer:

HP8564E s/n 3943A01719

HP8546A s/n 3525A00159