Applicant: Motorola Inc. FCC ID: AZ492FT1630

### **EXHIBIT 6**

### INDEX OF SUBMITTED MEASURED DATA

This exhibit contains the measured data for this equipment as follows:

**EXHIBIT 6A** – RF Power Output (Table)

**EXHIBIT 6B** – Audio Frequency Response (1 Graph)

Figure 6B-1: 20 kHz Channel Spacing

**EXHIBIT 6C** – Audio Low Pass Filter Response (1Graph)

Figure 6C-1: 20 kHz Channel Spacing

**EXHIBIT 6D** – Modulation Limiting (2Graphs)

Figure 6D-1: 20 kHz Channel Spacing, Positive Peak, Carrier Squelch (CSQ) Mode Figure 6D-2: 20 kHz Channel Spacing, Negative Peak, Carrier Squelch (CSQ) Mode

**EXHIBIT 6E-** Occupied Bandwidth Data (12 Spectrum Analyzer Plots)

Figure 6E-1: 20 kHz Channel Spacing, High Power, 37 MHz, 16K0F3E

Figure 6E-2: 20 kHz Channel Spacing, High Power, 37 MHz, 16K0F3E

Figure 6E-3: 20 kHz Channel Spacing, High Power, 43.5 MHz,16K0F3E

Figure 6E-4: 20 kHz Channel Spacing, High Power, 43.5 MHz,16K0F3E

Figure 6E-5: 20 kHz Channel Spacing, High Power, 50 MHz, 16K0F3E

Figure 6E-6: 20 kHz Channel Spacing, High Power, 50 MHz, 16K0F3E

Figure 6E-7: 20 kHz Channel Spacing, Low Power, 37 MHz, 16K0F3E

Figure 6E-8: 20 kHz Channel Spacing, Low Power, 37 MHz, 16K0F3E

Figure 6E-9: 20 kHz Channel Spacing, Low Power, 43.5 MHz, 16K0F3E

Figure 6E-10: 20 kHz Channel Spacing, Low Power, 43.5 MHz,16K0F3E

Figure 6E-11: 20 kHz Channel Spacing, Low Power, 50 MHz, 16K0F3E

Figure 6E-12: 20 kHz Channel Spacing, Low Power, 50 MHz, 16K0F3E

**EXHIBIT 6F** – Conducted Spurious Emissions ( 6 Graphs)

Figure 6F-1: High Power, 37.5 MHz, 20 kHz Channel Spacing

Figure 6F-2: High Power, 43.5 MHz, 20 kHz Channel Spacing

Figure 6F-3: High Power, 49.9 MHz, 20 kHz Channel Spacing

Figure 6F-4: Low Power, 37.5 MHz, 20 kHz Channel Spacing

Figure 6F-5: Low Power, 43.5 MHz, 20 kHz Channel Spacing

Figure 6F-6: Low Power, 49.9 MHz, 20 kHz Channel Spacing

**EXHIBIT 6G** – Radiated Spurious Emissions ( 6 Graphs)

Figure 6G-1: High Power, 37.025 MHz, 20 kHz Channel Spacing

Figure 6G-2: High Power, 44.5 MHz, 20 kHz Channel Spacing

Figure 6G-3: High Power, 49.975 MHz, 20 kHz Channel Spacing

Figure 6G-4: Low Power, 37.025 MHz, 20 kHz Channel Spacing

Figure 6G-5: Low Power, 44.5 MHz, 20 kHz Channel Spacing

Figure 6G-6: Low Power, 49.975 MHz, 20 kHz Channel Spacing

**EXHIBIT 6H** – Frequency Stability (Temperature/Supply Voltage (2 Graphs)

Figure 6H-1: Frequency Stability vs. Temperature, 43.5MHz

Figure 6H-2: Frequency Stability vs. Percentage of Supply Voltage Change, 43.5 MHz

Applicant: Motorola Inc. FCC ID: AZ492FT1630

**EXHIBIT 6A – RF Conducted Power Output Data** – Pursuant 47 CFR 2.1046(a), 2.1033(c)(6), 2.1033(c)(7) and 2.1033(c)(8)

The RF power output was measured with the indicated voltage applied to and current into the final RF amplifying device.

At High Power setting, Low Frequency 37 MHz:	
Output RF power	132 Watts
DC Voltage	13.4 Volts
DC Current	17.6 Amps
At Nominal Power setting, Low Frequency 37 MHz:	77.07
Output RF power	119.3 Watts
DC Voltage	13.4 Volts
DC Current	16.2 Amps
At Low Power setting, Low Frequency 37 MHz:	
Output RF power	53.4Watts
DC Voltage	13.4 Volts
DC Current	12.4 Amps
At High power setting, Medium Frequency 43.5 MHz:	
Output RF power	131.8 Watts
DC Voltage	13.4 Volts
DC Current	17.25 Amps
At Nominal Power setting, Low Frequency 43.5 MHz:	•
Output RF power	118.9 Watts
DC Voltage	13.4 Volts
DC Current	17.6 Amps
At Low output power setting, Medium Frequency 43.5 MI	Hz:
Output RF power	54.5 Watts
DC Voltage	13.6 Volts
DC Current	12.63Amps
At High power setting, High Frequency 50 MHz:	
Output RF power	132 Watts
DC Voltage	13.4 Volts
DC Current	17.37 Amps
At Nominal Power setting, Low Frequency 50 MHz:	
Output RF power	119.5 Watts
DC Voltage	13.4 Volts
DC Current	17.6 Amps
At Low power setting, High Frequency 50 MHz:	
Output RF power	53.8 Watts
DC Voltage	13.4 Volts
DC Current	12.3 Amps

## EXHIBIT 6B - Transmit Audio Response - Pursuant 47 CFR 2.1047 and 2.1033(c)(13)

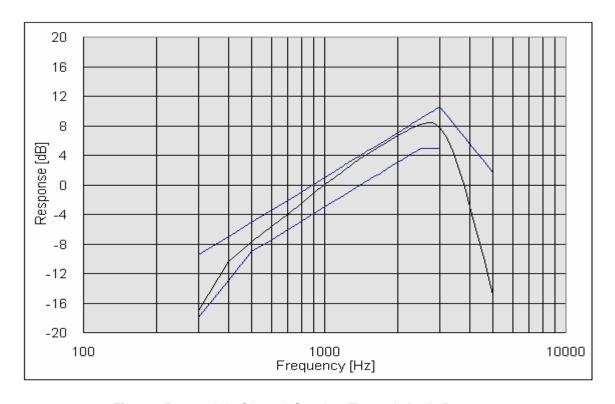


Figure 6B-1: 20 kHz Channel Spacing, Transmit Audio Response

# **EXHIBIT 6C – Transmit Audio Post Limiter Low Pass Filter Response** – Pursuant 47 CFR 2.1047 and 2.1033(c) (13)

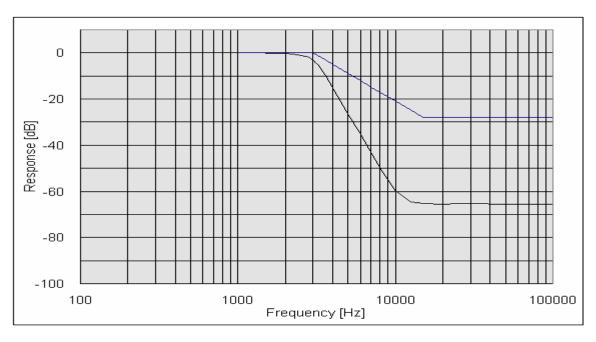


Figure 6C-1: 20 kHz Channel Spacing, Transmit Audio Low Pass Filter Response

**EXHIBIT 6D – Modulation Limiting Characteristics –** Pursuant 47 CFR 2.1047 and 2.1033(c)(13)

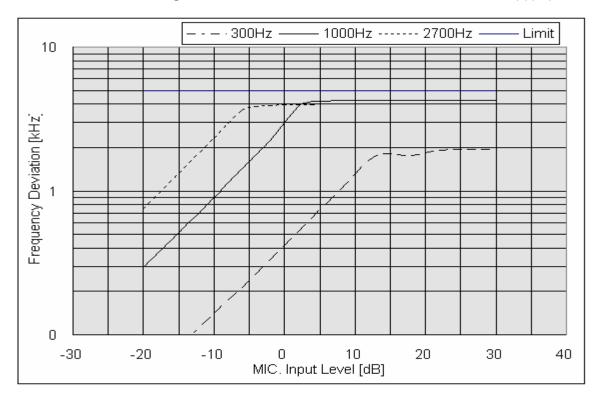


Figure 6D-1: 20 kHz Channel Spacing, Positive Peak, Carrier Squelch Mode

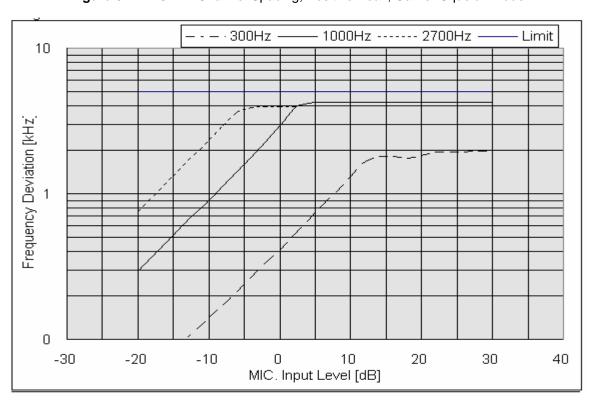


Figure 6D-2: 20kHz Channel Spacing, Negative Peak, Carrier Squelch Mode

EXHIBIT 6E- Occupied Bandwidth Data – Pursuant 47 CFR 2.1049, 90.210(g) and 90.691

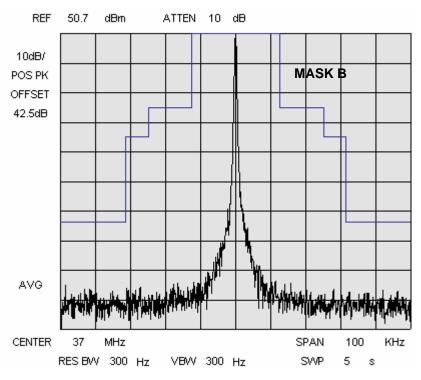


Figure 6E-1: 20 kHz Channel Spacing, High Power, 37 MHz, 16K0F3E

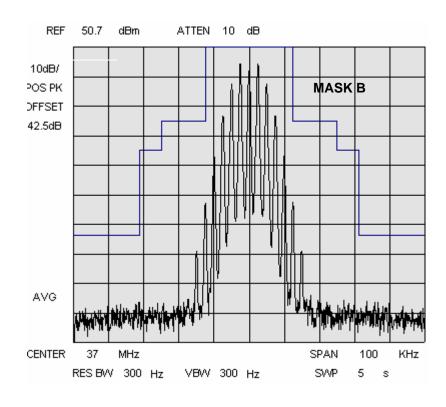


Figure 6E-2: 20 kHz Channel Spacing, High Power, 37MHz, 16K0F3E

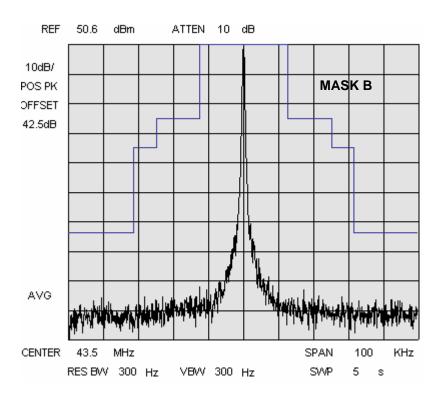


Figure 6E-3: 20 kHz Channel Spacing, High Power, 43.5MHz, 16K0F3E

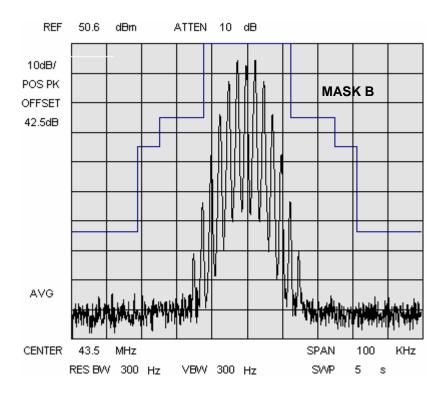


Figure 6E-4: 20 kHz Channel Spacing, High Power, 43.5MHz, 16K0F3E

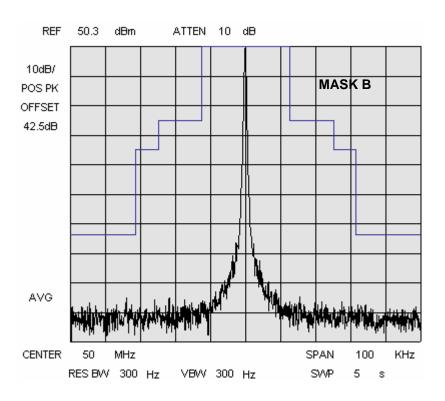


Figure 6E-5: 20 kHz Channel Spacing, High Power, 50MHz, 16K0F3E

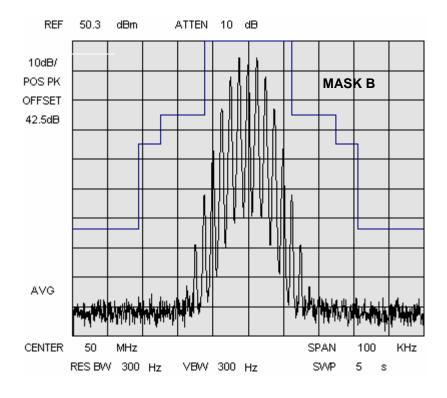


Figure 6E-6: 20 kHz Channel Spacing, High Power, 50 MHz, 16K0F3E

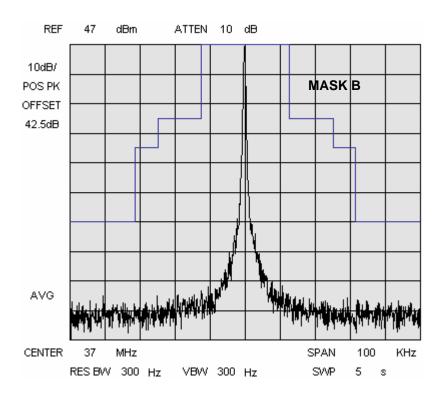


Figure 6E-7: 20 kHz Channel Spacing, Low Power, 37MHz, 16K0F3E

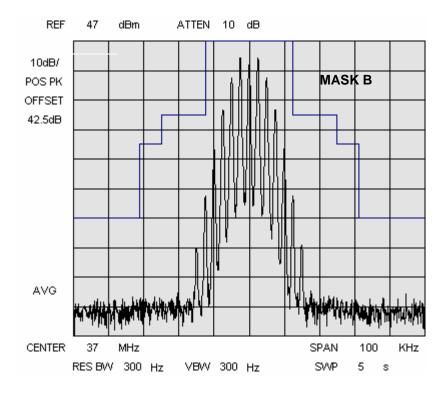


Figure 6E-8: 20 kHz Channel Spacing, Low Power, 37MHz, 16K0F3E

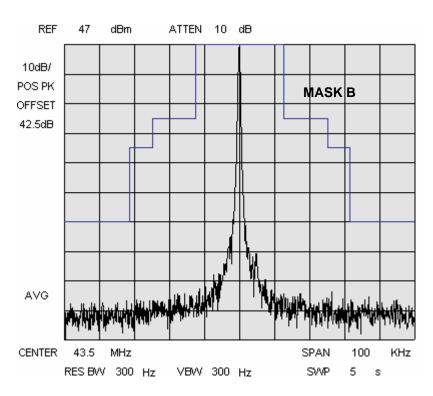


Figure 6E-9: 20 kHz Channel Spacing, Low Power, 43.5MHz, 16K0F3E

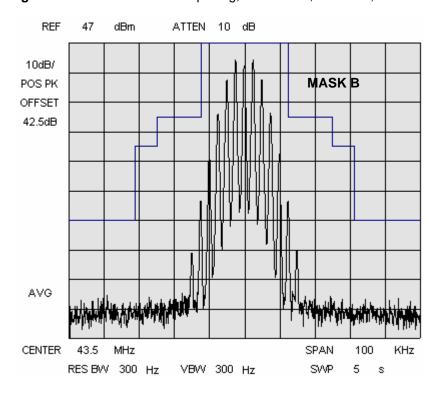


Figure 6E-10: 20 kHz Channel Spacing, Low Power, 43.5MHz, 16K0F3E

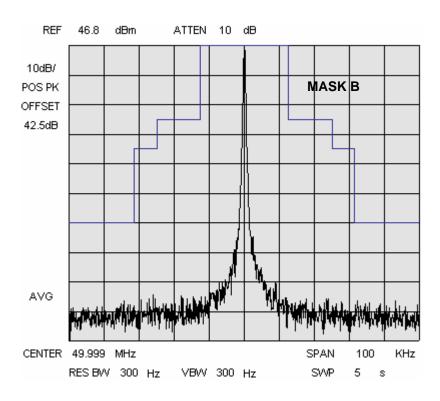


Figure 6E-11: 20 kHz Channel Spacing, Low Power, 50MHz, 16K0F3E

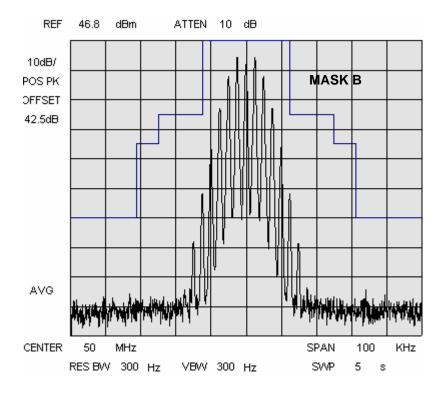


Figure 6E-12: 20 kHz Channel Spacing, Low Power, 50MHz, 16K0F3E

EXHIBIT 6F - Conducted Spurious Emissions - Pursuant 47 CFR 2.1047 and 2.1033(c)(13)

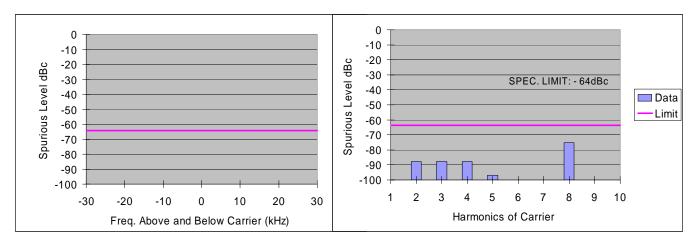


Figure 6F-1: High Power, 37.5 MHz, 20 kHz Channel Spacing

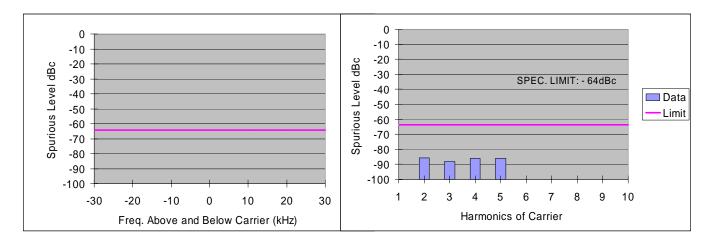


Figure 6F-2: High Power, 43.5 MHz, 20 kHz Channel Spacing

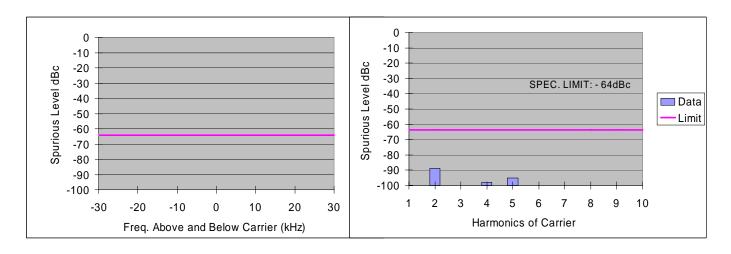


Figure 6F-3: High Power, 49.9 MHz, 20 kHz Channel Spacing

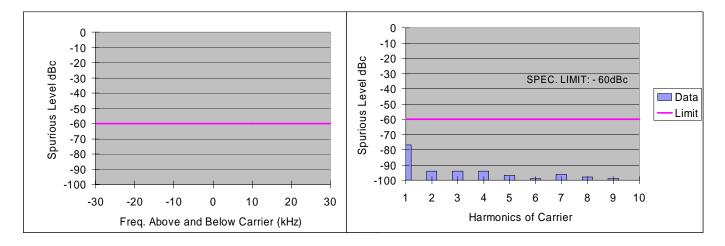


Figure 6F-4: Low Power, 37.5 MHz, 20 kHz Channel Spacing

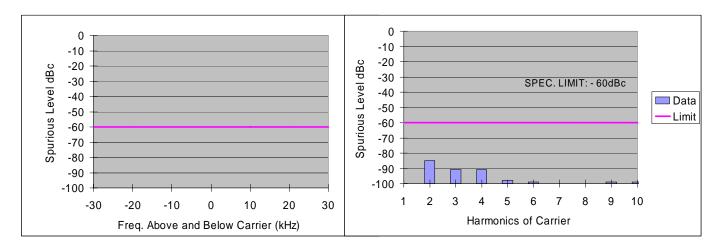


Figure 6F-5: Low Power, 43.5 MHz, 20 kHz Channel Spacing

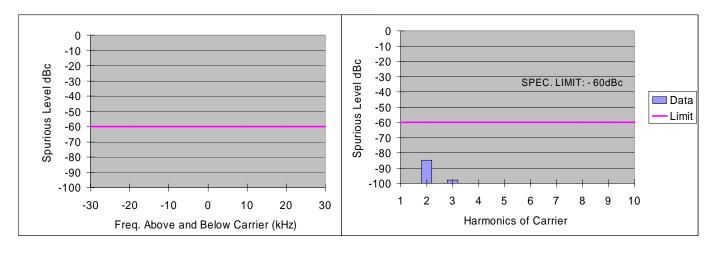


Figure 6F-6: Low Power, 49.9 MHz, 20 kHz Channel Spacing

EXHIBIT 6G - Radiated Spurious Emissions - Pursuant 47 CFR 2.1047 and 2.1033(c)(13)

Tx Power: 132 Watts 37.025 MHz Channel St

37.025 MHz	Channel Spacing 20kHz   S/N 1591HE0029			
Frequency (MHz)	FCC Failing Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	
74.0500	-13	-39.53	-38.92	
111.0750	-13	-35.80	-43.54	
148.1000	-13	-50.95	-45.75	
185.1250	-13	-44.37	-50.44	
222.1500	-13	-43.40	-36.43	
259.1750	-13	-53.11	-48.42	
296.2000	-13	-56.15	-55.31	
333.2250	-13	-53.28	-50.25	
370.2500	-13	*	*	

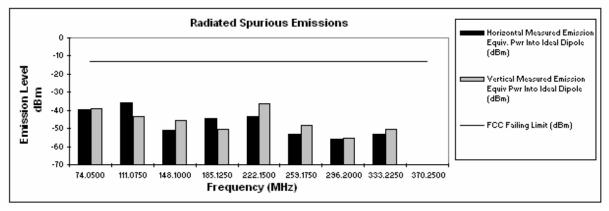


Figure 6G-1: High Power, 37.025 MHz, 20 kHz Channel Spacing

Tx Power: 132 Watts

44.5 MHz Channel Spacing 20kHz | S/N 1591HE0029

Frequency (MHz)	FCC Failing Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
89.0000	-13	-40.63	-37.82
133.5000	-13	-27.66	-26.02
178.0000	-13	-45.87	-46.30
222.5000	-13	-52.87	-44.91
267.0000	-13	-47.72	-43.03
311.5000	-13	-51.40	-46.23
356.0000	-13	-54.51	-53.38
400.5000	-13	-48.94	-47.77
445.0000	-13	*	*

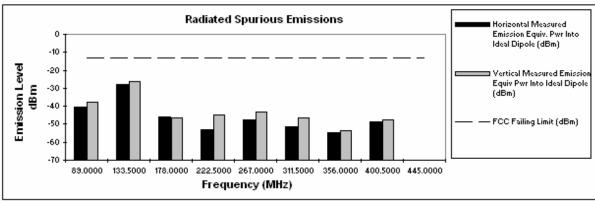


Figure 6G-2: High Power, 44.5 MHz, 20 kHz Channel Spacing
Tx Power: 132 Watts

49.975 MHz

## Channel Spacing 20kHz | S/N 1591HE0029

Frequency (MHz)	FCC Failing Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
99.9500	-13	*	*
149.9250	-13	-33.67	-25.12
199.9000	-13	-32.29	-23.36
249.8750	-13	-32.56	-29.11
299.8500	-13	-39.86	-37.04
349.8250	-13	-39.00	-35.82
399.8000	-13	-42.65	-33.61
449.7750	-13	-39.27	-40.22
499.7500	-13	-39.84	-39.34

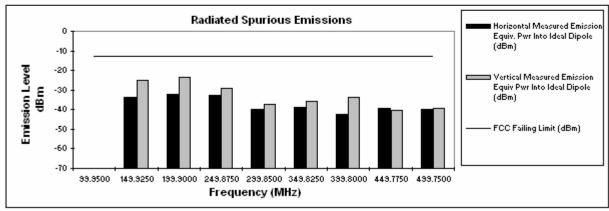


Figure 6G-3: High Power, 49.975 MHz, 20 kHz Channel Spacing

Tx Power: 50 Watts

37.025 MHz Channel Spacing 20kHz | S/N 1591HE0029

Frequency (MHz)	FCC Failing Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
74.0500	-13	*	-52.86
111.0750	-13	-42.13	-47.78
148.1000	-13	*	-51.50
185.1250	-13	*	-41.21
222.1500	-13	-50.44	-50.03
259.1750	-13	-56.53	-48.10
296.2000	-13	*	*
333.2250	-13	*	*
370.2500	-13	*	*

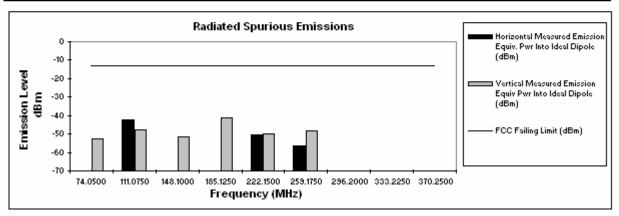


Figure 6G-4: Low Power, 37.025 MHz, 20 kHz Channel Spacing
Tx Power: 50 Watts

44.5 MHz

## Channel Spacing 20kHz | S/N 1591HE0029

Frequency (MHz)	FCC Failing Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
89.0000	-13	-55.25	*
133.5000	-13	-35.83	-28.07
178.0000	-13	-55.56	-56.66
222.5000	-13	*	-57.38
267.0000	-13	-57.46	*
311.5000	-13	*	*
356.0000	-13	*	*
400.5000	-13	*	*
445.0000	-13	*	*

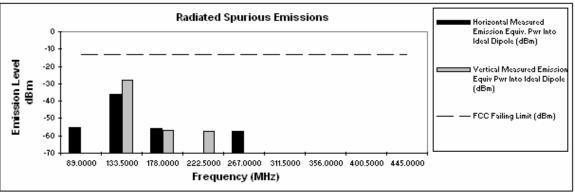
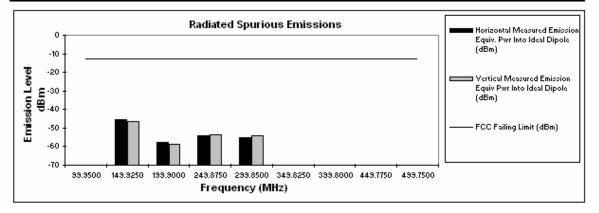


Figure 6G-5: Low Power, 44.5 MHz, 20 kHz Channel Spacing

49.975 MHz

	Tx Power: 50 Watts	
1	Channel Spacing 20kHz	S/N 1591HE0029

Frequency (MHz)	FCC Failing Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
99.9500	-13	*	*
149.9250	-13	-45.54	-46.25
199.9000	-13	-57.83	-58.89
249.8750	-13	-54.08	-53.43
299.8500	-13	-55.39	-54.39
349.8250	-13	*	*
399.8000	-13	*	*
449.7750	-13	*	*
499.7500	-13	*	*



<sup>\*</sup> Indicates the spurious emission could not be detected due to noise limitations or ambients.

The data presented here was taken using the substitution method as found in the TIA/EIA-603 document.

Figure 6G-6: Low Power, 49.975 MHz, 20 kHz Channel Spacing

EXHIBIT 6H – Frequency Stability (Temperature/Supply Voltage) - Pursuant 47 CFR 2.1047 and 2.1033(c)(13)

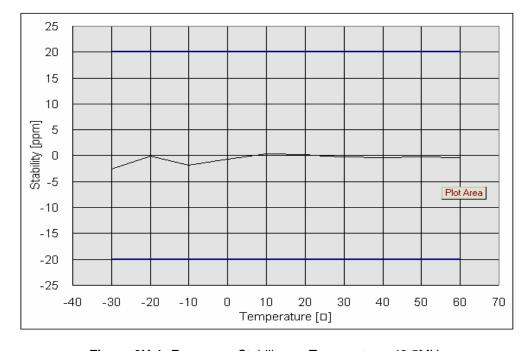


Figure 6H-1: Frequency Stability vs. Temperature, 43.5MHz

% of STV	Voltage	Frequency, MHz	Change, Hz	Change, ppm
85	11.39	43.499980	-20	-0.46
100	13.40	43.499980	-20	-0.46
115	15.41	43.499980	-20	-0.46

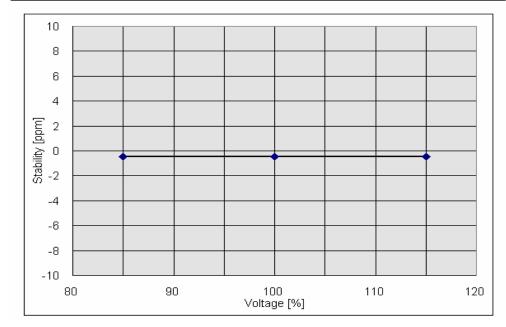


Figure 6H-2: Frequency Stability vs. Percentage of Supply Voltage Change, 43.5MHz