

INDEX OF SUBMITTED MEASURED DATA

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

EXHIBIT 6A – RF Power Output (Table)**EXHIBIT 6B – Transmit Audio Response (2 Graphs)**

6B-1 – 12.5 KHz Channel Spacing

6B-2 – 25 KHz Channel Spacing

EXHIBIT 6C – Transmit Audio Post Limiter Low Pass Filter Response (2 Graphs)

6C-1 – 12.5 KHz Channel Spacing

6C-2 – 25 KHz Channel Spacing

EXHIBIT 6D – Modulation Limiting Characteristics (6 Graphs)

6D-1 – 12.5 KHz Channel Spacing, Carrier Squelch Mode

6D-2 – 12.5 KHz Channel Spacing, Tone Private Line (TPL) Mode

6D-3 – 12.5 KHz Channel Spacing, Digital Private Line (DPL) Mode

6D-4 – 25 KHz Channel Spacing, Carrier Squelch Mode

6D-5 – 25 KHz Channel Spacing, Tone Private Line (TPL) Mode

6D-6 – 25 KHz Channel Spacing, Digital Private Line (DPL) Mode

EXHIBIT 6E – Occupied Bandwidth (18 Spectrum Analyzer Plots)

6E-1 - 12.5 KHz Channel Spacing, 2500 Hz Audio Modulation Only

6E-2 - 12.5 KHz Channel Spacing, 2500 Hz Audio and PL Tone Modulation

6E-3 - 12.5 KHz Channel Spacing, 2500 Hz Audio and DPL Tone Modulation

6E-4 - 12.5 KHz Channel Spacing, 2000/3000 Hz FSK Data Modulation Only

6E-5 - 12.5 KHz Channel Spacing, 2000/3000 Hz FSK Data and PL Tone Modulation

6E-6 - 12.5 KHz Channel Spacing, 2000/3000 Hz FSK Data and DPL Tone Modulation

6E-7 - 12.5 KHz Channel Spacing, DTMF Modulation Only

6E-8 - 12.5 KHz Channel Spacing, DTMF Modulation and PL Tone Modulation

6E-9 - 12.5 KHz Channel Spacing, DTMF Modulation and DPL Tone Modulation

6E-10 - 25 KHz Channel Spacing, 2500 Hz Audio Modulation Only

6E-11 - 25 KHz Channel Spacing, 2500 Hz Audio and PL Tone Modulation

6E-12 - 25 KHz Channel Spacing, 2500 Hz Audio and DPL Tone Modulation

6E-13 - 25 KHz Channel Spacing, 2000/3000 Hz FSK Data Modulation Only

6E-14 - 25 KHz Channel Spacing, 2000/3000 Hz FSK Data and PL Tone Modulation

6E-15 - 25 KHz Channel Spacing, 2000/3000 Hz FSK Data and DPL Tone Modulation

6E-16 - 25 KHz Channel Spacing, DTMF Modulation Only

6E-17 - 25 KHz Channel Spacing, DTMF Modulation and PL Tone Modulation

6E-18 - 25 KHz Channel Spacing, DTMF Modulation and DPL Tone Modulation

EXHIBIT 6F – Conducted Spurious Emissions (12 Graphs)

6F-1 – 44 Watts, 465.0125 MHz, 12.5 kHz Channel Spacing

6F-2 – 44 Watts, 480.0125 MHz, 12.5 kHz Channel Spacing

6F-3 – 44 Watts, 494.9875 MHz, 12.5 kHz Channel Spacing

6F-4 – 44 Watts, 465.0125 MHz, 25 kHz Channel Spacing

6F-5 – 44 Watts, 480.0125 MHz, 25 kHz Channel Spacing

6F-6 – 44 Watts, 494.9875 MHz, 25 kHz Channel Spacing

6F-7 – 25 Watts, 465.0125 MHz, 12.5 kHz Channel Spacing

6F-8 – 25 Watts, 480.0125 MHz, 12.5 kHz Channel Spacing

6F-9 – 25 Watts, 494.9875 MHz, 12.5 kHz Channel Spacing

6F-10 – 25 Watts, 465.0125 MHz, 25 kHz Channel Spacing

6F-11 – 25 Watts, 480.0125 MHz, 25 kHz Channel Spacing

6F-12 – 25 Watts, 494.9875 MHz, 25 kHz Channel Spacing

EXHIBIT 6G – Radiated Spurious Emissions

- 6G-1 – 44 Watts, 465.0125 and 480.0125 MHz
- 6G-2 – 44 Watts, 494.9875 MHz
- 6G-3 – 25 Watts, 465.0125 and 480.0125 MHz
- 6G-4 – 25 Watts, 494.9875 MHz

EXHIBIT 6H – Frequency Stability (2 Graphs)

- 6H-1 – Frequency Stability vs. Temperature
- 6H-2 – Frequency Stability vs. Voltage

EXHIBIT 6I – Transient Frequency Behavior (8 Graphs)

- 6I-1 – 44 Watts, 12.5 KHz Key-Up Attack Time
- 6I-2 – 44 Watts, 12.5 KHz De-Key Decay Time
- 6I-3 – 44 Watts, 25 KHz Key-Up Attack Time
- 6I-4 – 44 Watts, 25 KHz De-Key Decay Time
- 6I-5 – 25 Watt, 12.5 KHz Key-Up Attack Time
- 6I-6 – 25 Watt, 12.5 KHz De-Key Decay Time
- 6I-7 – 25 Watt, 25 KHz Key-Up Attack Time
- 6I-8 – 25 Watt, 25 KHz De-Key Decay Time

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 (Q100).

At maximum output power setting, Frequency 465.0125 MHz:

Output RF power	44.7	Watts
DC Voltage	13.6	Volts
DC Current	5.98	A
DC Input Power	81.328	Watts

At minimum output power setting, Frequency 465.0125 MHz:

Output RF power	28.7	Watts
DC Voltage	13.6	Volts
DC Current	4.71	A
DC Input Power	64.056	Watts

At maximum output power setting, Frequency 480.0125 MHz:

Output RF power	43.8	Watts
DC Voltage	13.6	Volts
DC Current	5.64	A
DC Input Power	76.704	Watts

At minimum output power setting, Frequency 480.0125 MHz:

Output RF power	27.9	Watts
DC Voltage	13.6	Volts
DC Current	4.41	A
DC Input Power	59.976	Watts

At maximum output power setting, Frequency 494.9875 MHz:

Output RF power	45.0	Watts
DC Voltage	13.6	Volts
DC Current	5.31	A
DC Input Power	72.216	Watts

At minimum output power setting, Frequency 494.9875 MHz:

Output RF power	28.6	Watts
DC Voltage	13.6	Volts
DC Current	4.11	A
DC Input Power	55.896	Watts

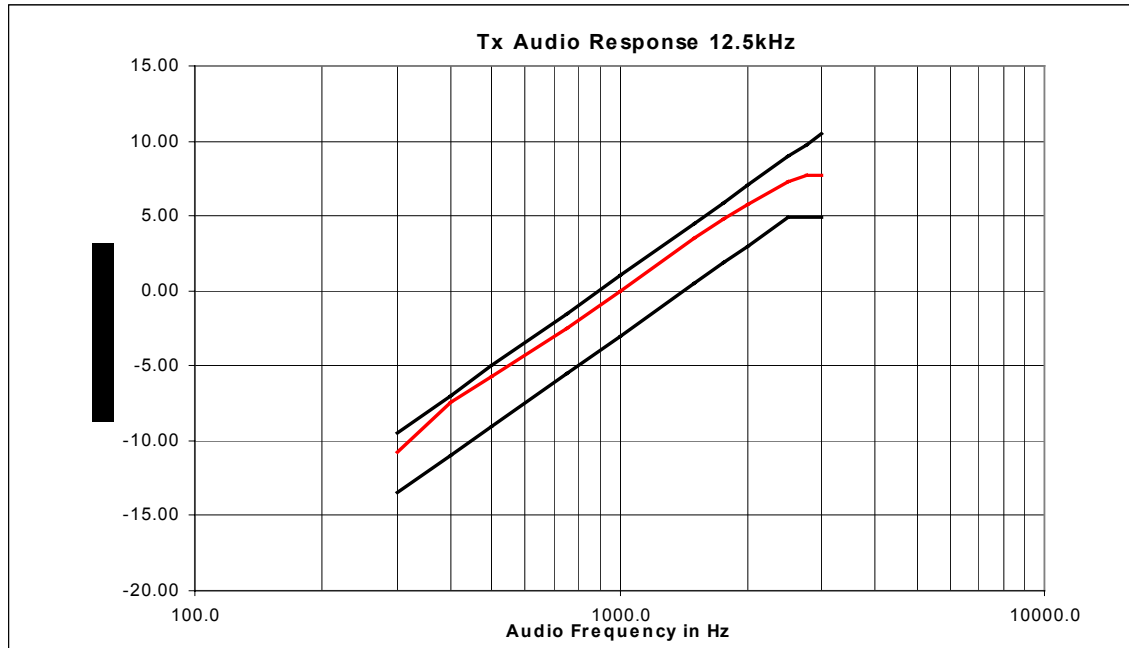
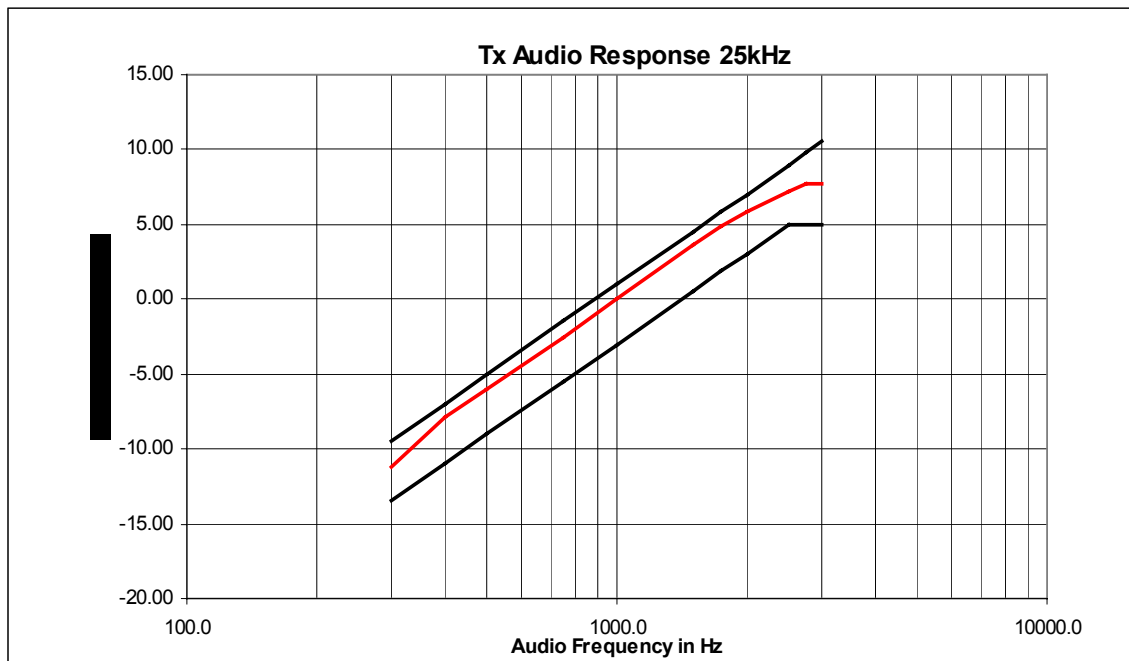
EXHIBIT 6B – Transmit Audio Response - Pursuant 47 CFR 2.1047 and 2.1033(c)(13)**Figure 6B-1: 12.5 KHz Channel Spacing, Transmit Audio Response****Figure 6B-2: 25 KHz Channel Spacing, Transmit Audio Response**

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

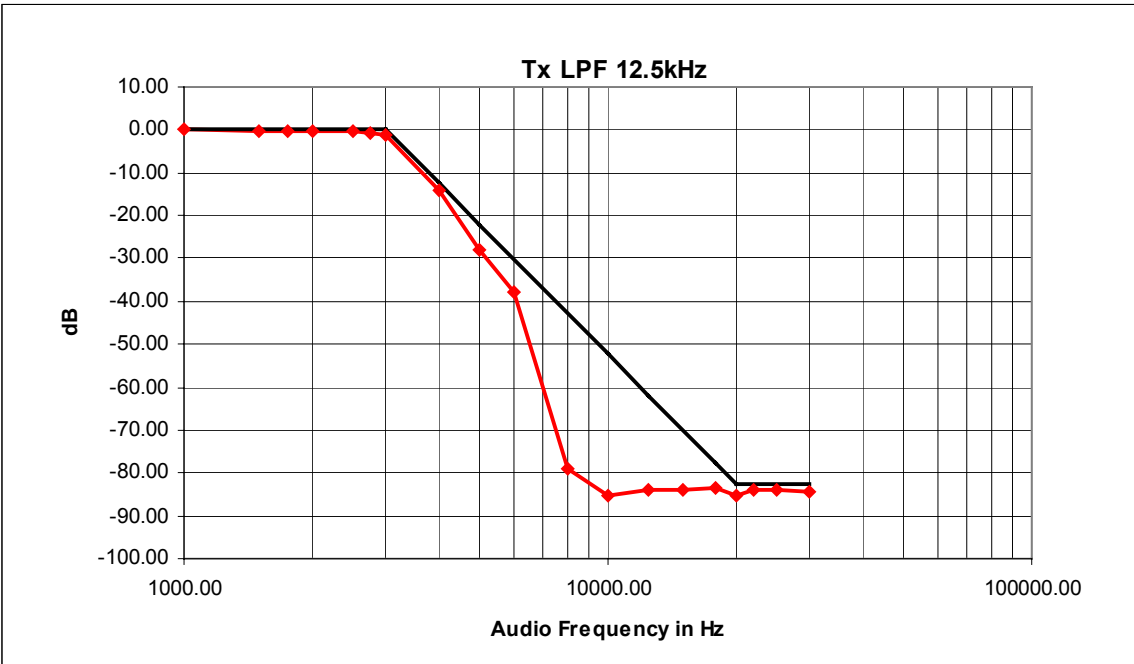


Figure 6C-1: 12.5 KHz Channel Spacing, Transmit Audio Post Limiter Low Pass Filter Response

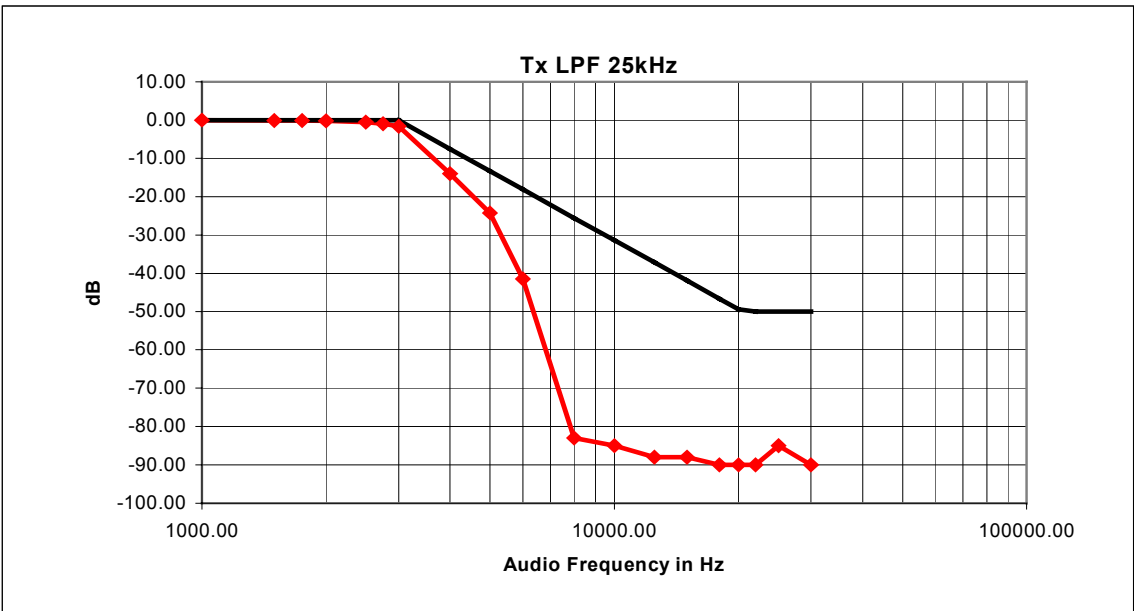


Figure 6C-2: 25 KHz Channel Spacing, Transmit Audio Post Limiter Low Pass Filter Response

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

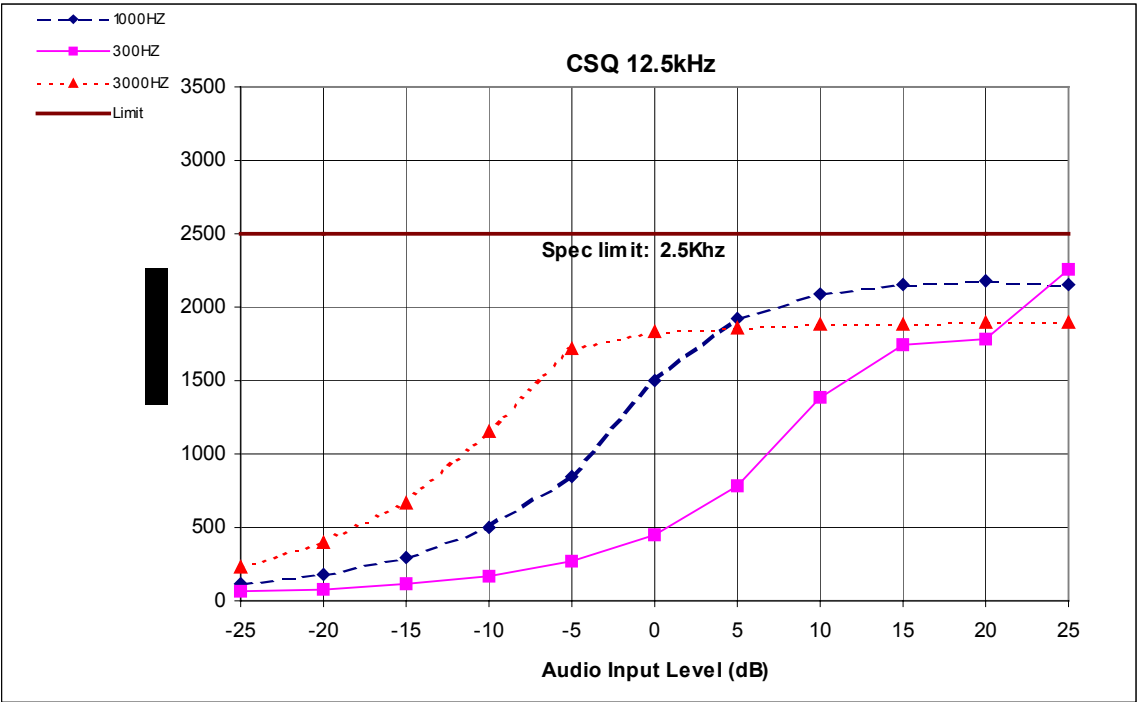


Figure 6D-1: 12.5 KHz Channel Spacing, Carrier Squelch Mode

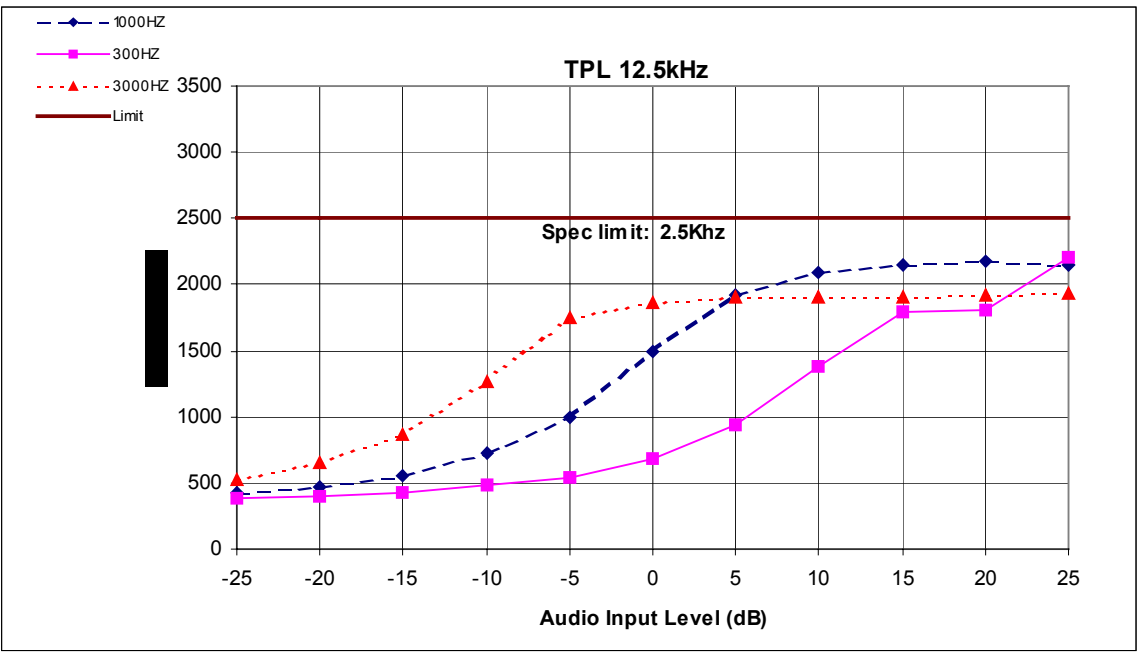


Figure 6D-2: 12.5 KHz Channel Spacing, Tone Private Line (TPL) Mode

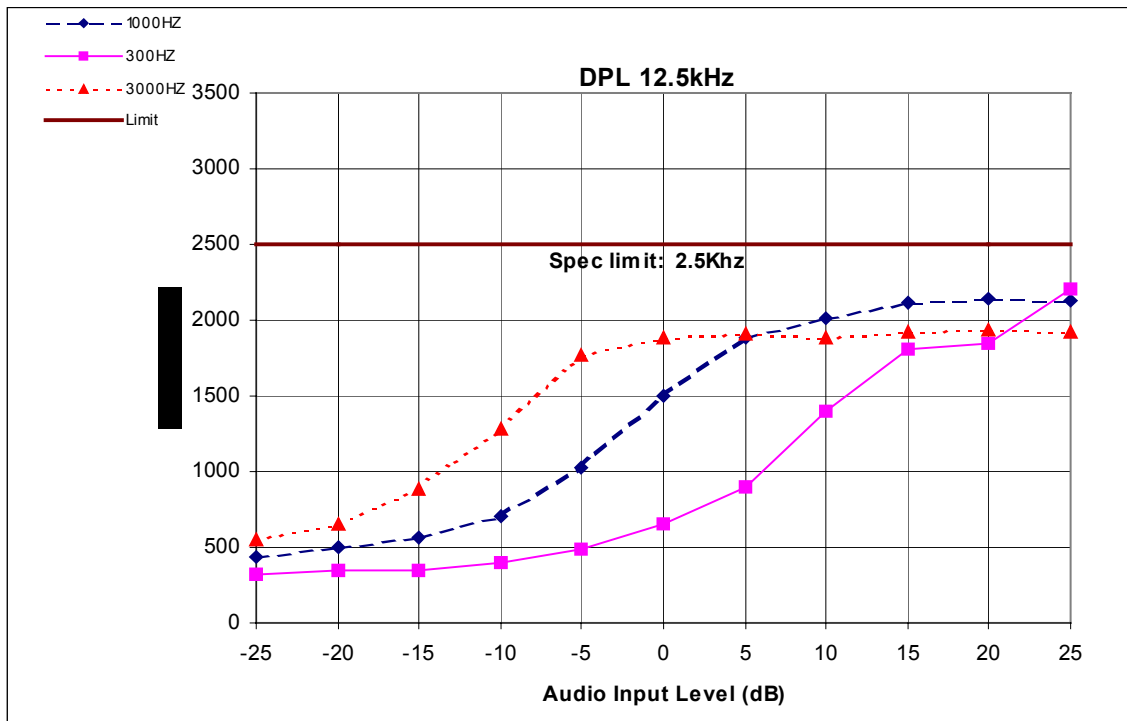


Figure 6D-3: 12.5 KHz Channel Spacing, Digital Private Line (DPL) Mode

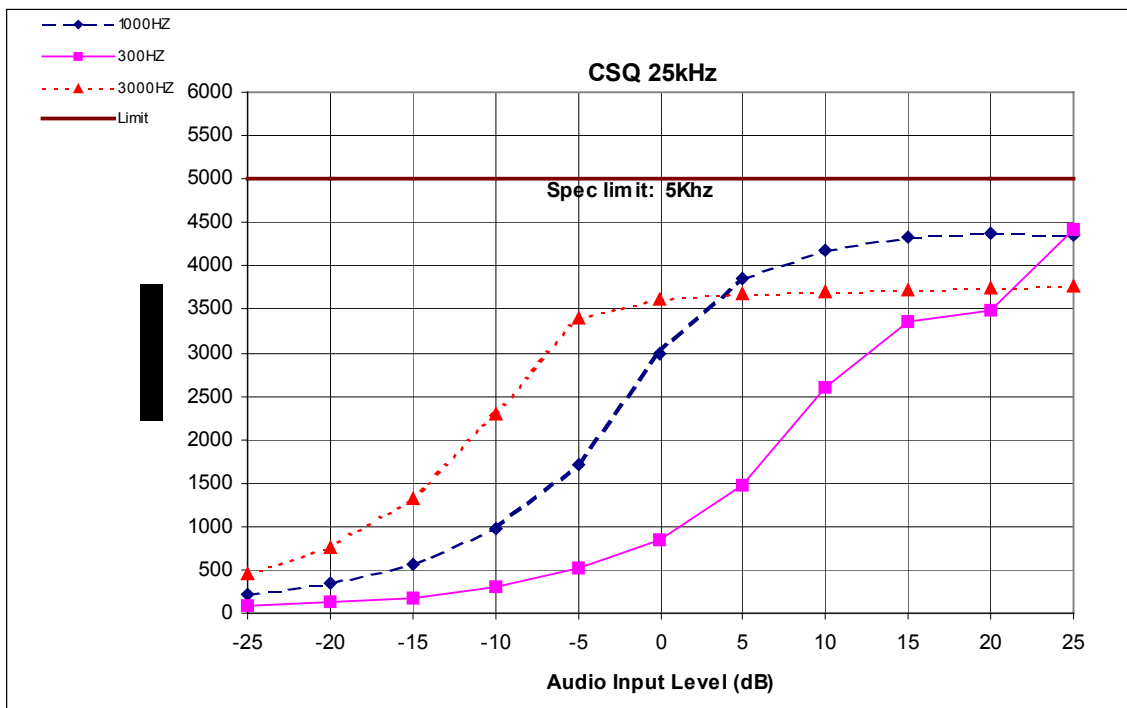


Figure 6D-4: 25 KHz Channel Spacing, Carrier Squelch Mode

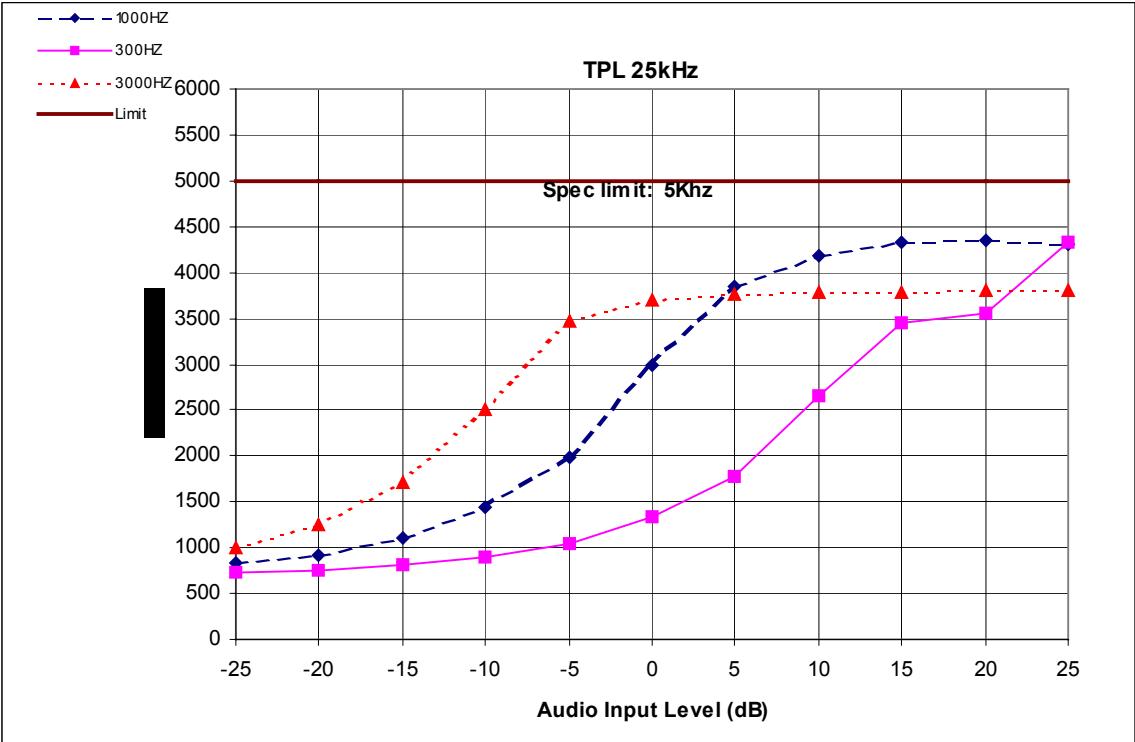


Figure 6D-5: 25 KHz Channel Spacing, Tone Private Line (TPL) Mode

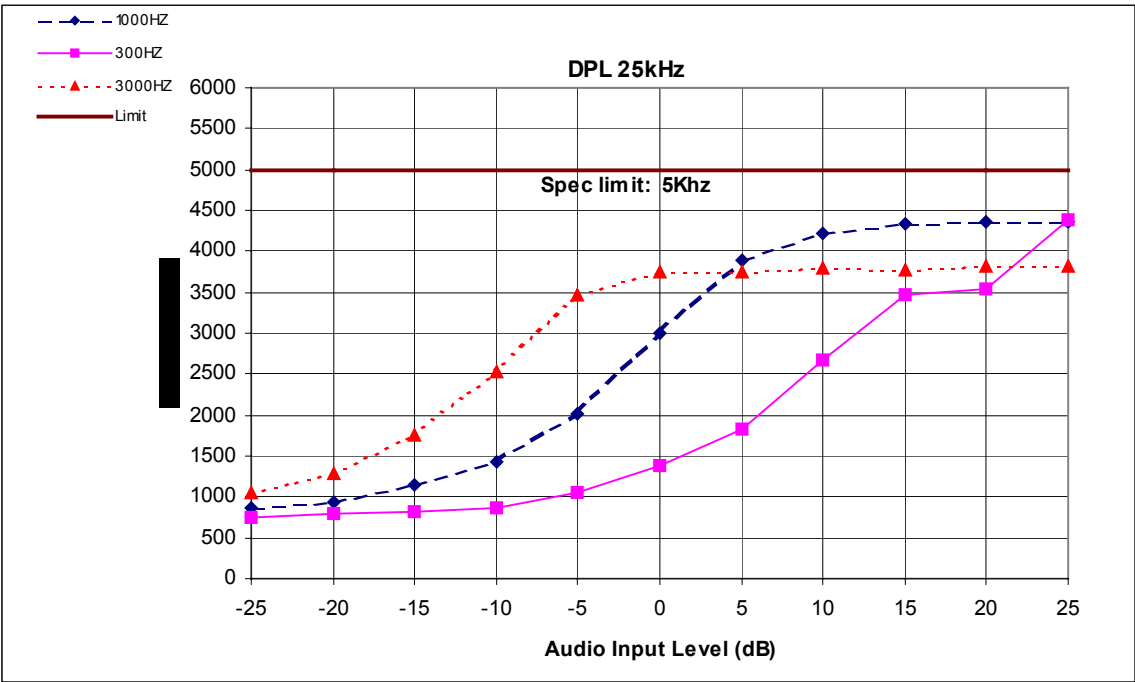
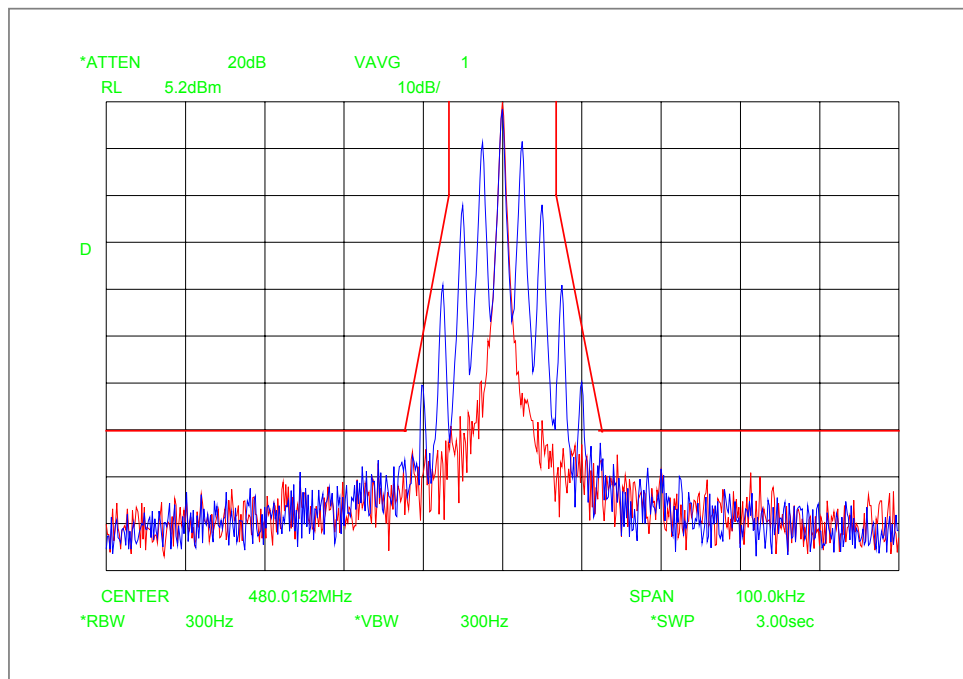
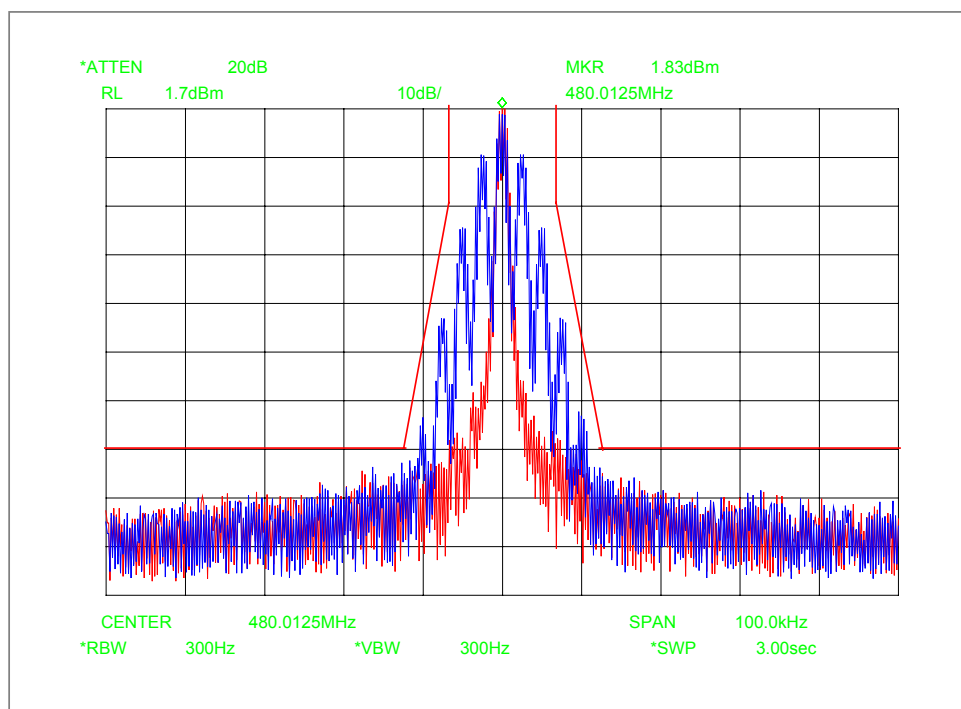


Figure 6D-6: 25 KHz Channel Spacing, Digital Private Line (DPL) Mode

EXHIBIT 6E- Occupied Bandwidth Data -- Pursuant 47 CFR 2.1049, 90.210(g) and 90.691**Figure 6E-1: 12.5 KHz Channel Spacing, 2500 Hz Audio Modulation Only, Mask D****Figure 6E-2: 12.5 KHz Channel Spacing, 2500 Hz Audio and PL Tone Modulation, Mask D**

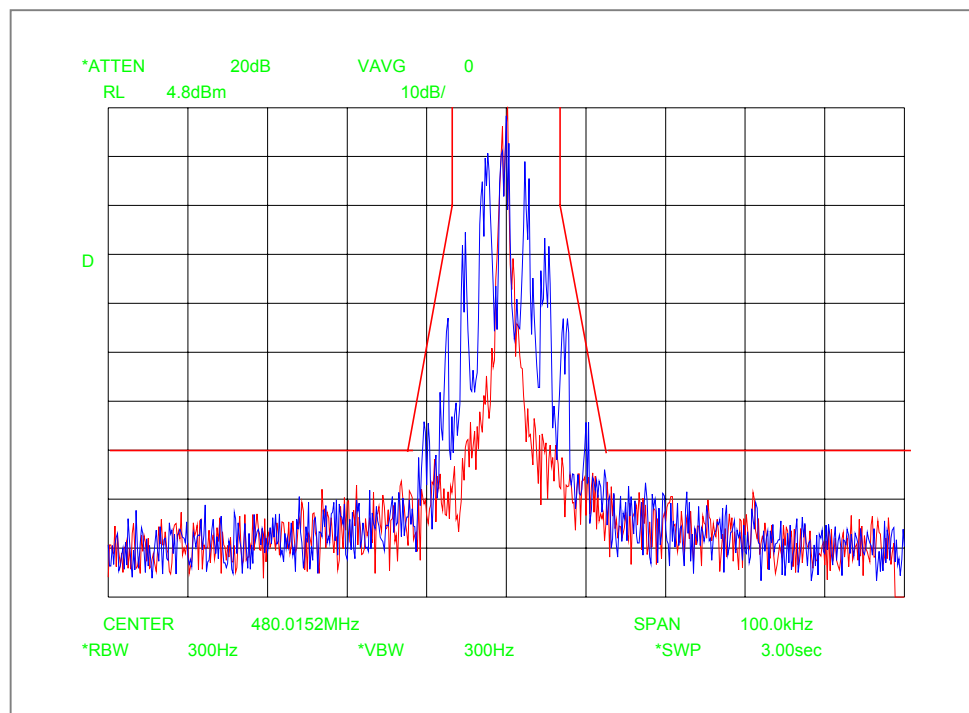


Figure 6E-3: 12.5 KHz Channel Spacing, 2500 Hz Audio and DPL Tone Modulation, Mask D

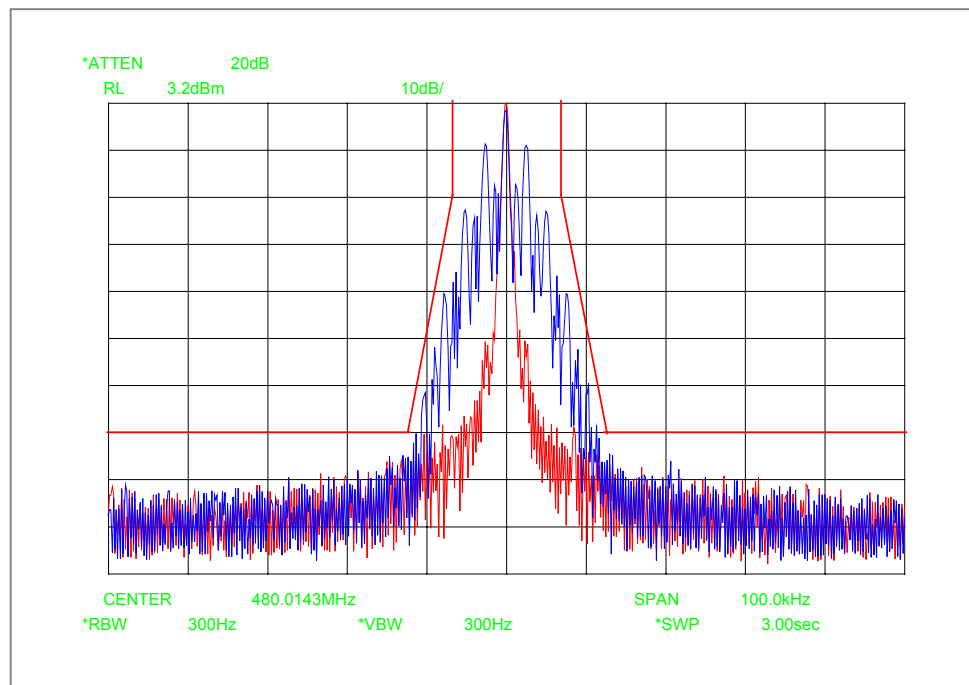


Figure 6E-4: 12.5 KHz Channel Spacing, 2000/3000 Hz FSK Data Modulation Only, Mask D

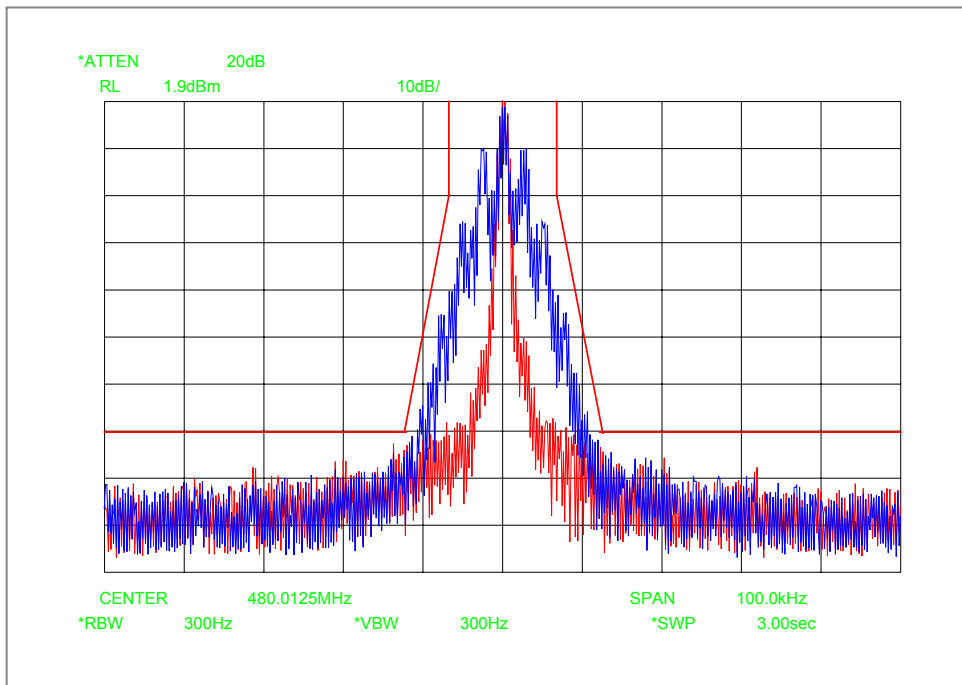


Figure 6E-5: 12.5 KHz Channel Spacing, 2000/3000 Hz FSK Data and PL Tone Modulation, Mask D

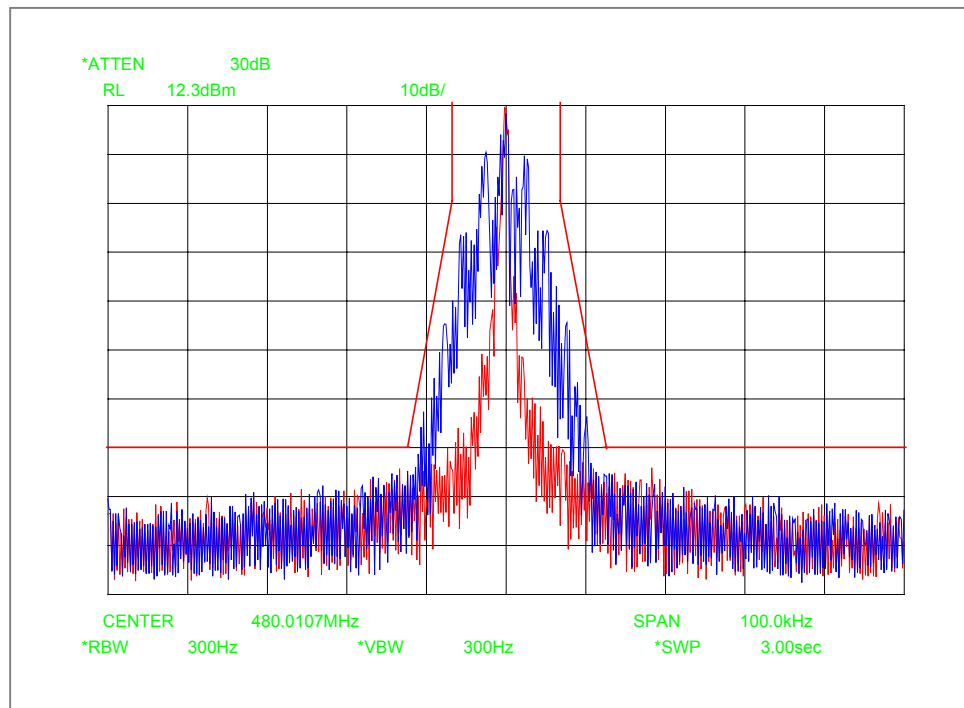


Figure 6E-6: 12.5 KHz Channel Spacing, 2000/3000 Hz FSK Data and DPL Tone Modulation, Mask D

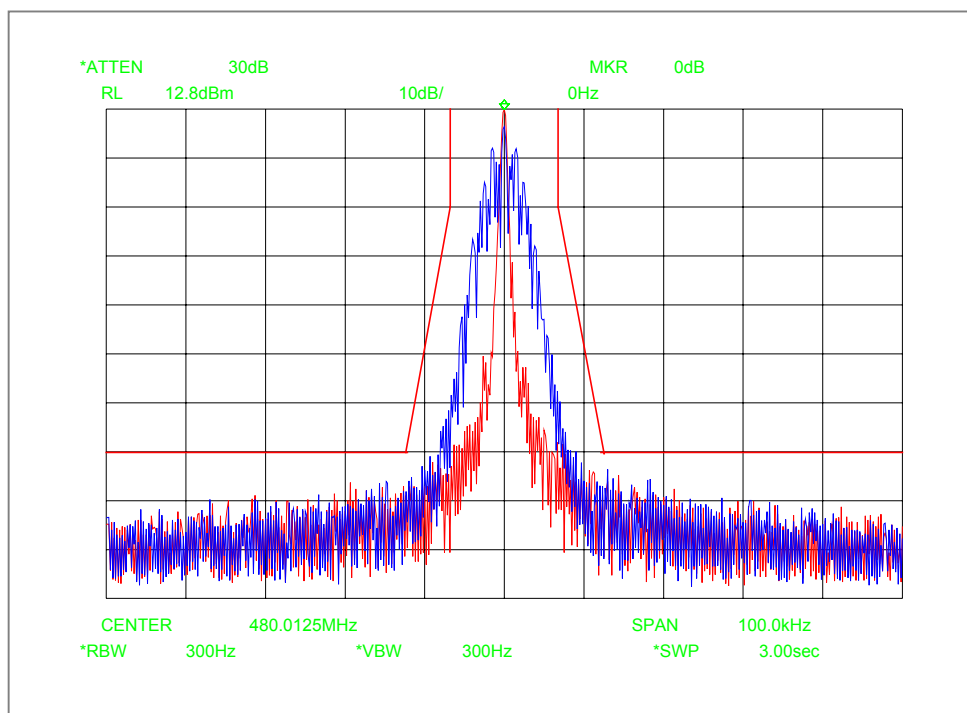


Figure 6E-7: 12.5 KHz Channel Spacing, DTMF Modulation Only , Mask D

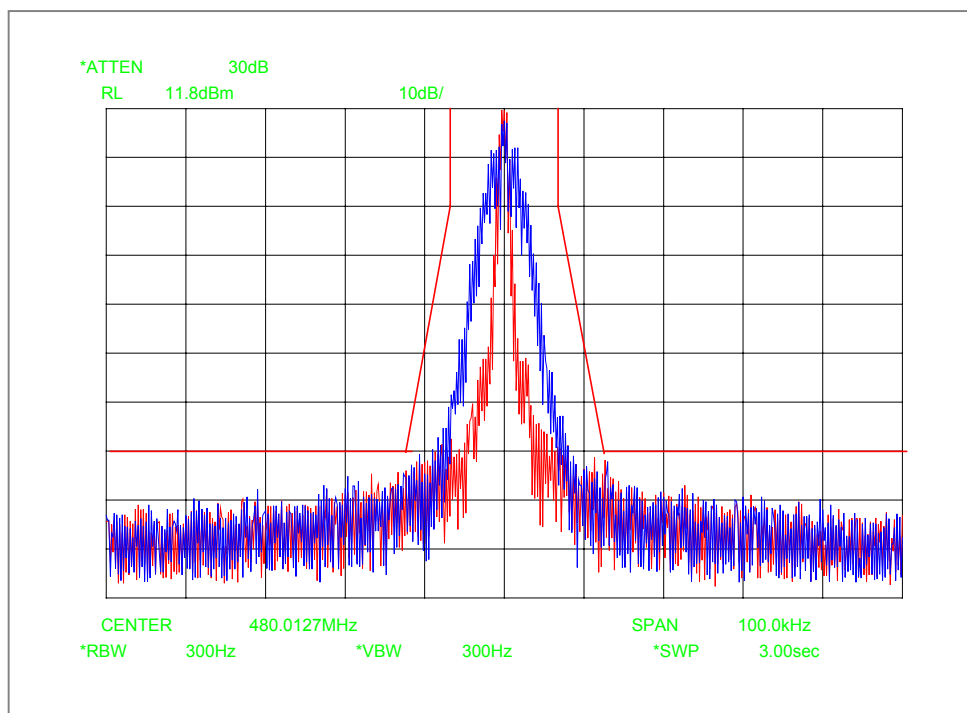


Figure 6E-8: 12.5 KHz Channel Spacing, DTMF Modulation and PL Tone Modulation, Mask D

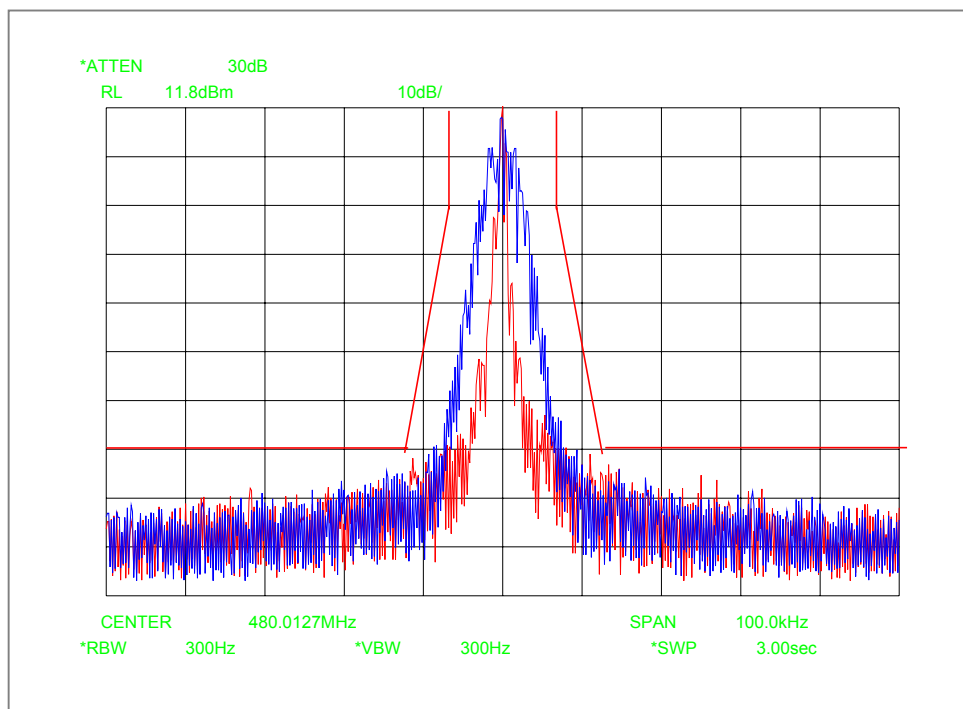


Figure 6E-9: 12.5 KHz Channel Spacing, DTMF Modulation and DPL Tone Modulation , Mask D

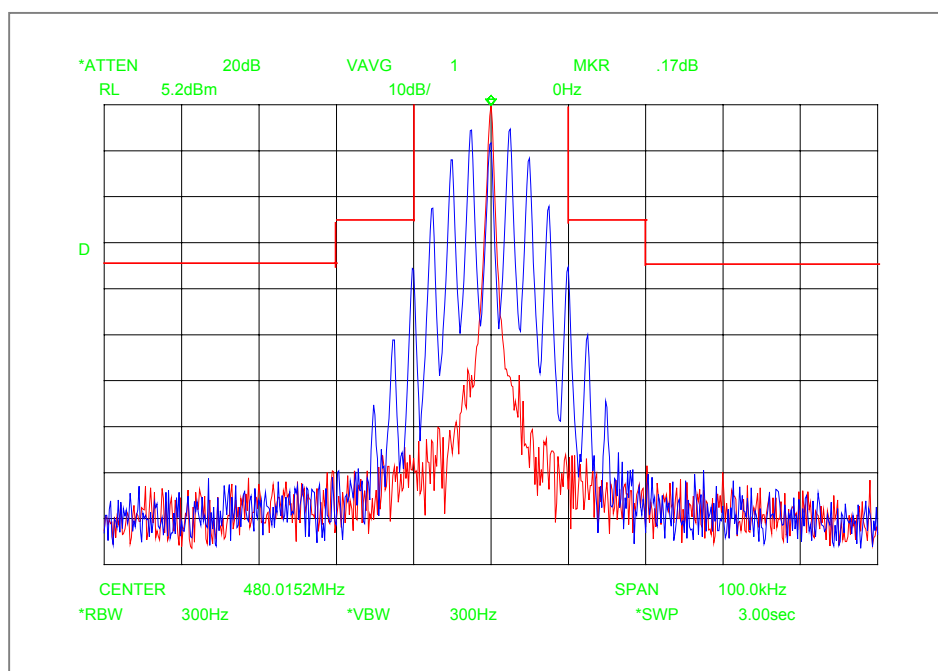


Figure 6E-10: 25 KHz Channel Spacing, 2500 Hz Audio Modulation Only, Mask B

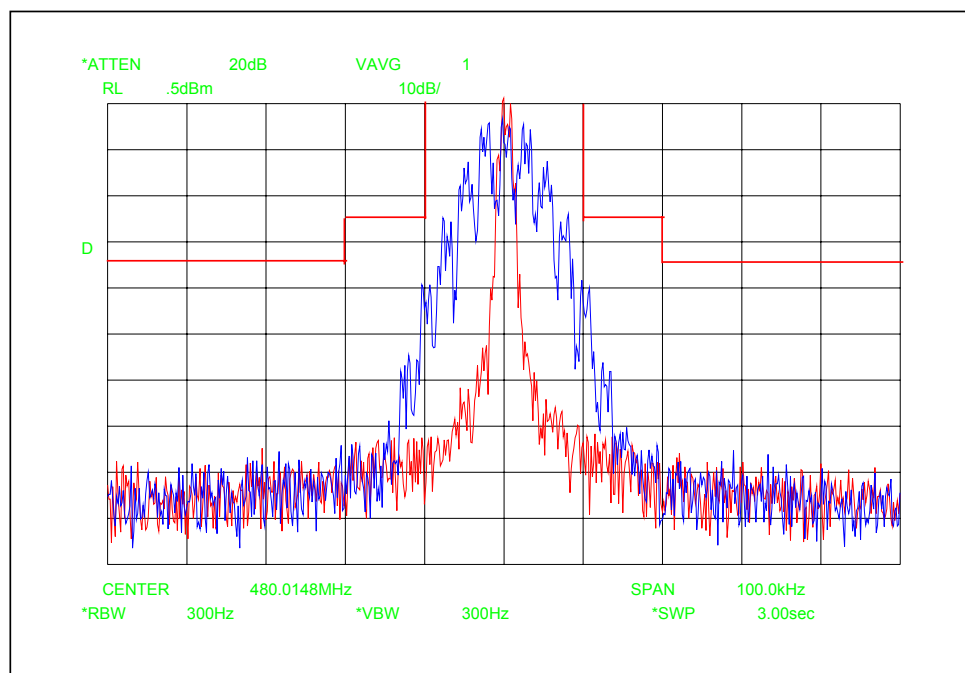


Figure 6E-11: 25 KHz Channel Spacing, 2500 Hz Audio and PL Tone Modulation, Mask B

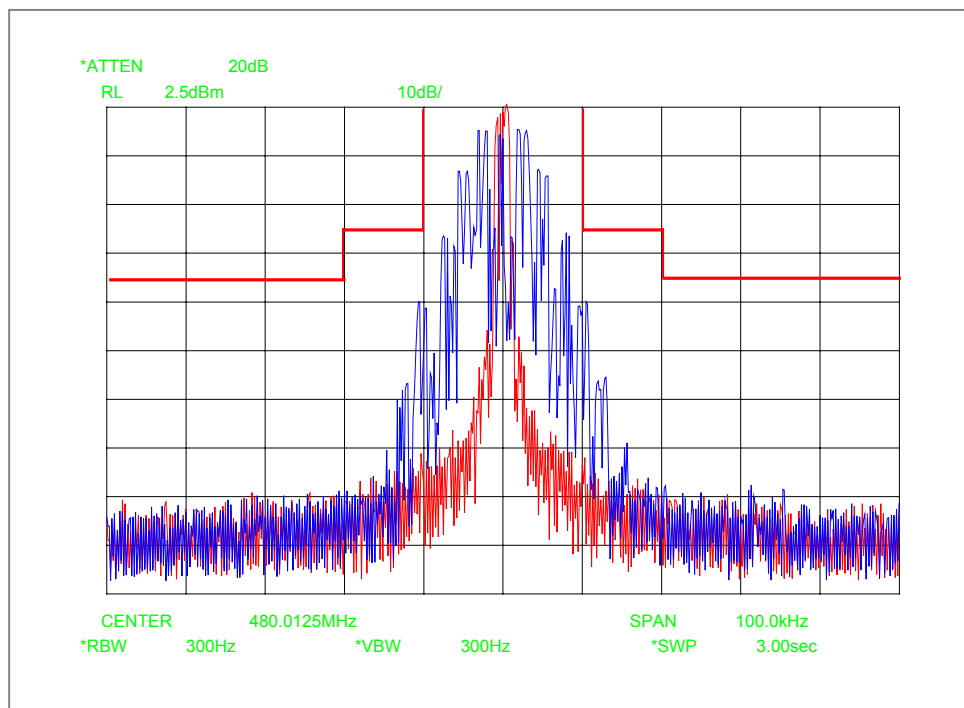


Figure 6E-12: 25 KHz Channel Spacing, 2500 Hz Audio and DPL Tone Modulation, Mask B

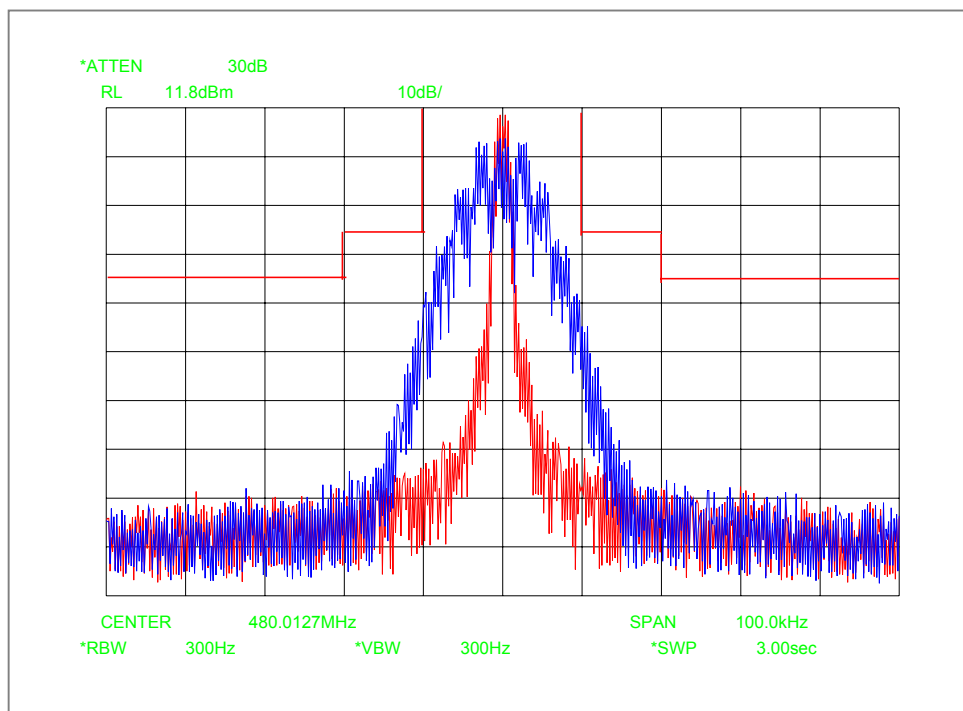


Figure 6E-13: 25 KHz Channel Spacing, 2000/3000 Hz FSK Data Modulation Only ,Mask B

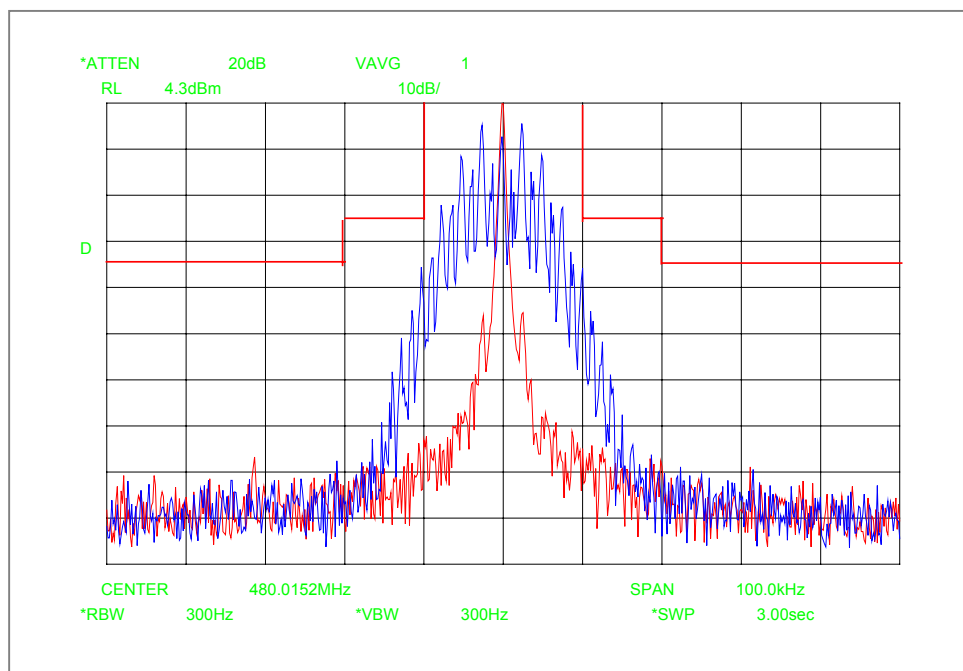


Figure 6E-14: 25 KHz Channel Spacing, 2000/3000 Hz FSK Data and PL Tone Modulation, Mask B

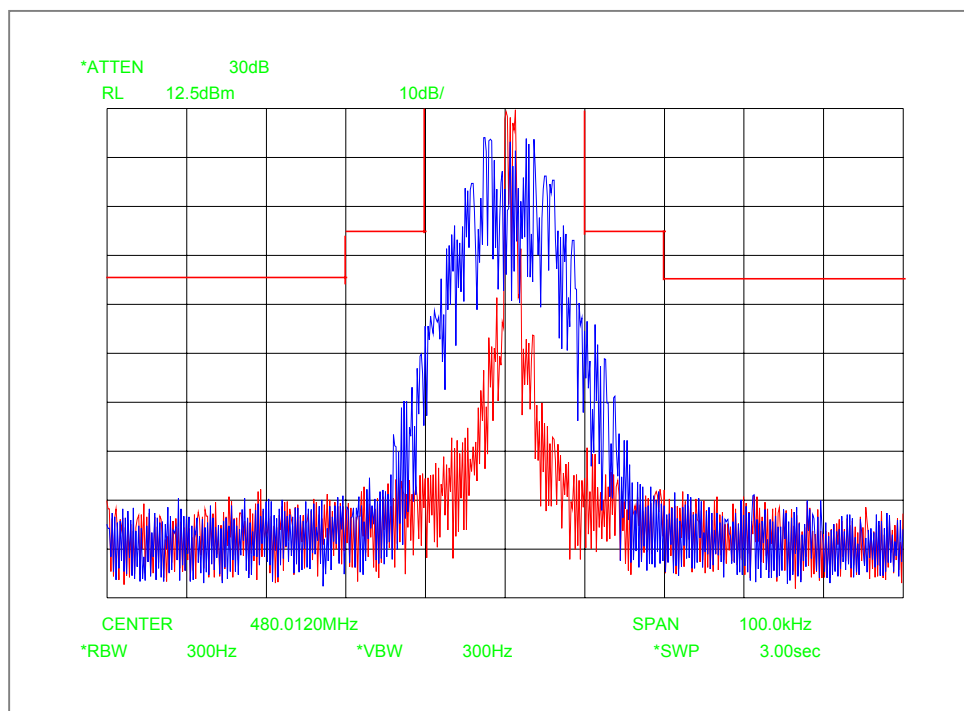


Figure 6E-15: 25 KHz Channel Spacing, 2000/3000 Hz FSK Data and DPL Tone Modulation, Mask B

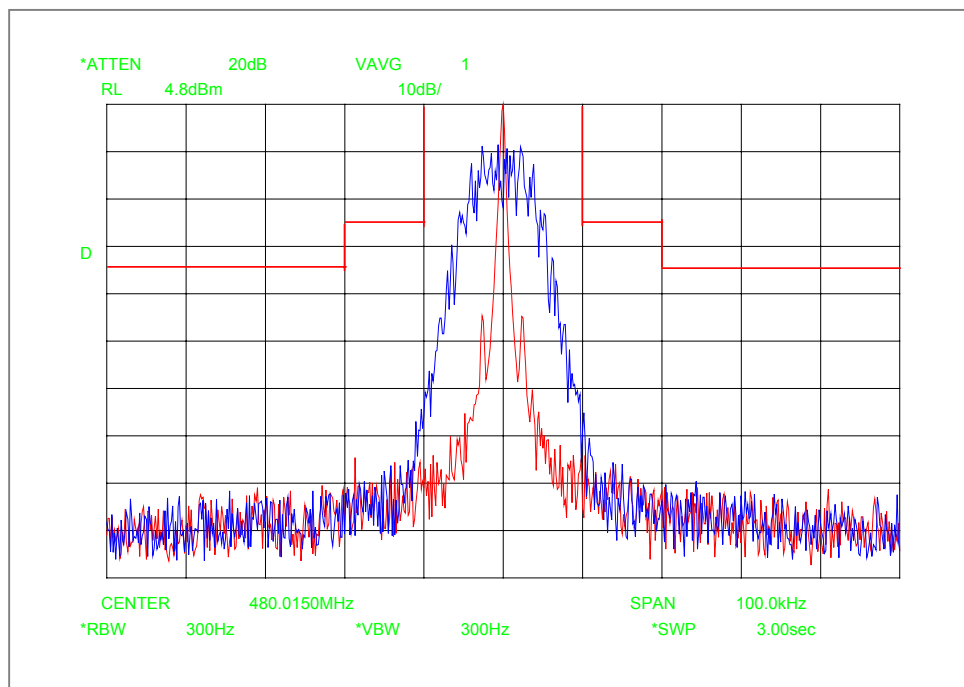


Figure 6E-16: 25 KHz Channel Spacing, DTMF Modulation Only , Mask B

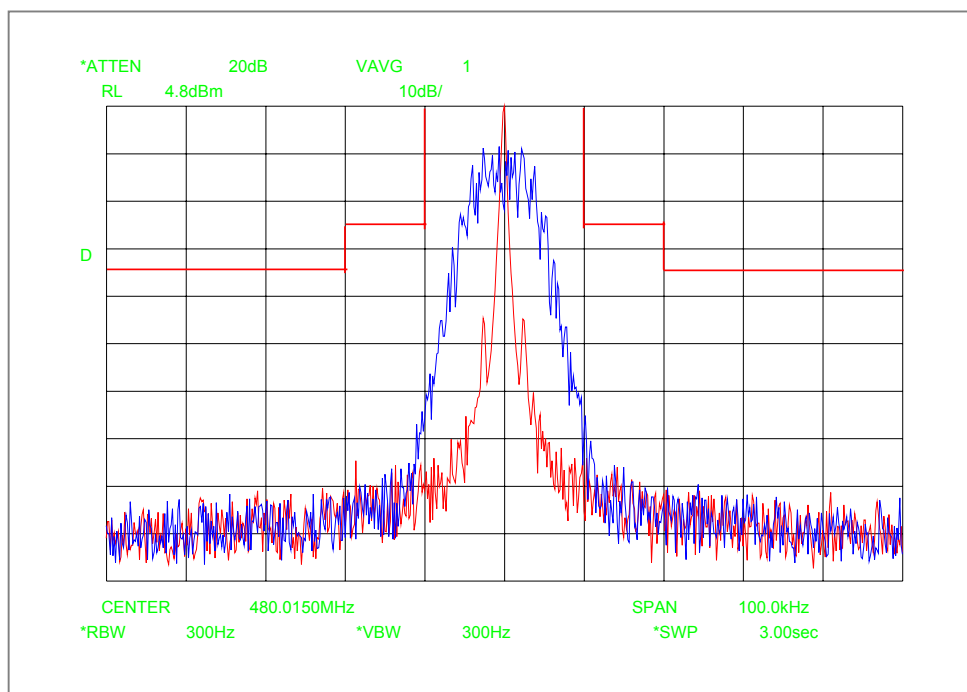


Figure 6E-17: 25 KHz Channel Spacing, DTMF Modulation and PL Tone Modulation, Mask B

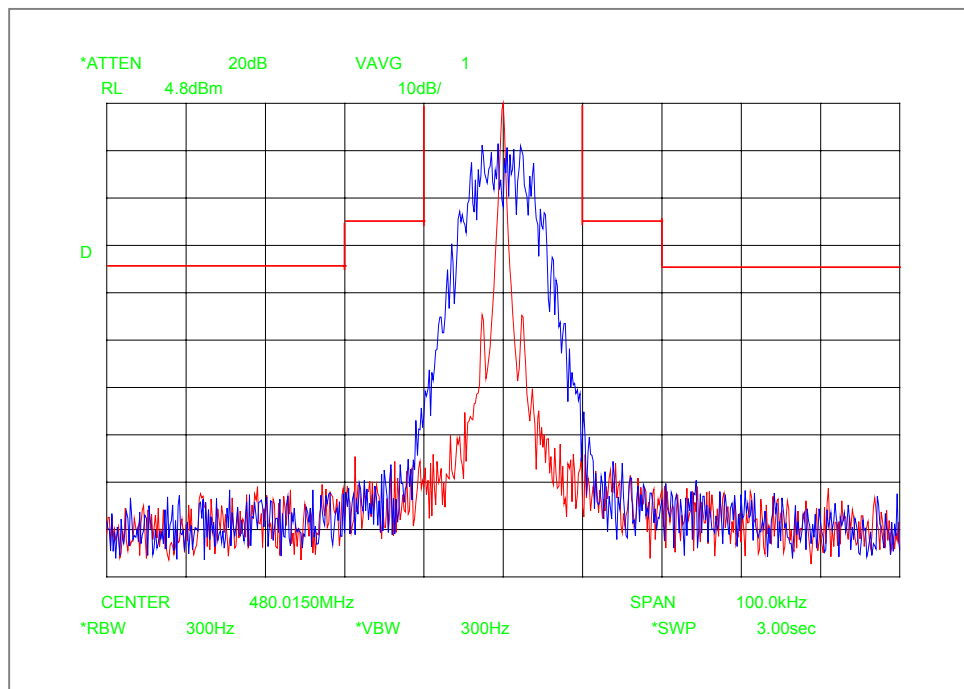


Figure 6E-18: 25 KHz Channel Spacing, DTMF Modulation and DPL Tone Modulation, Mask B

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

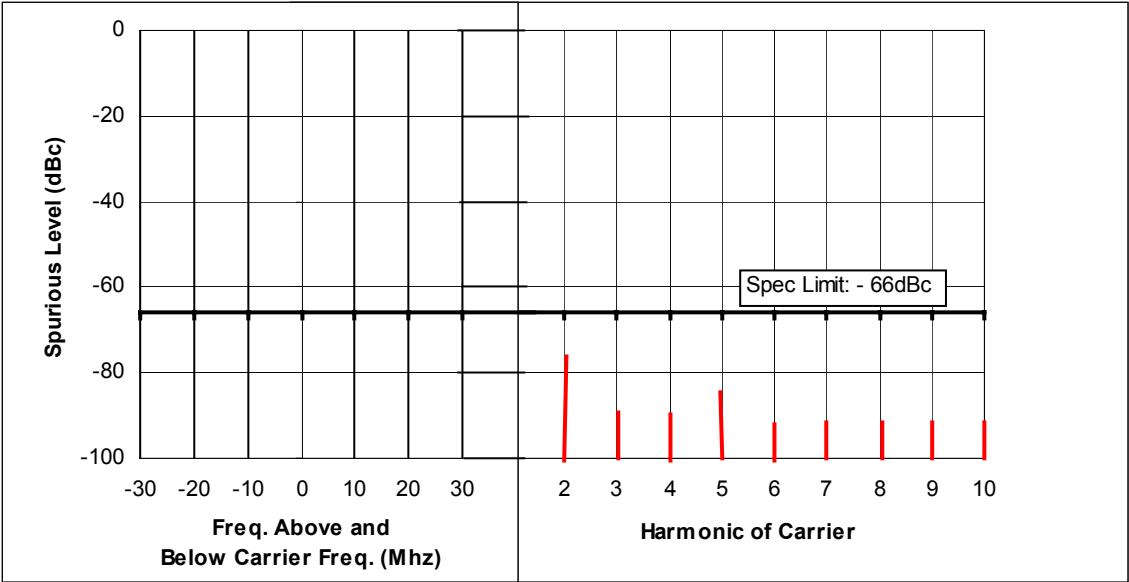


Figure 6F-1: 44 Watts, 465.0125 MHz, 12.5 kHz Channel Spacing

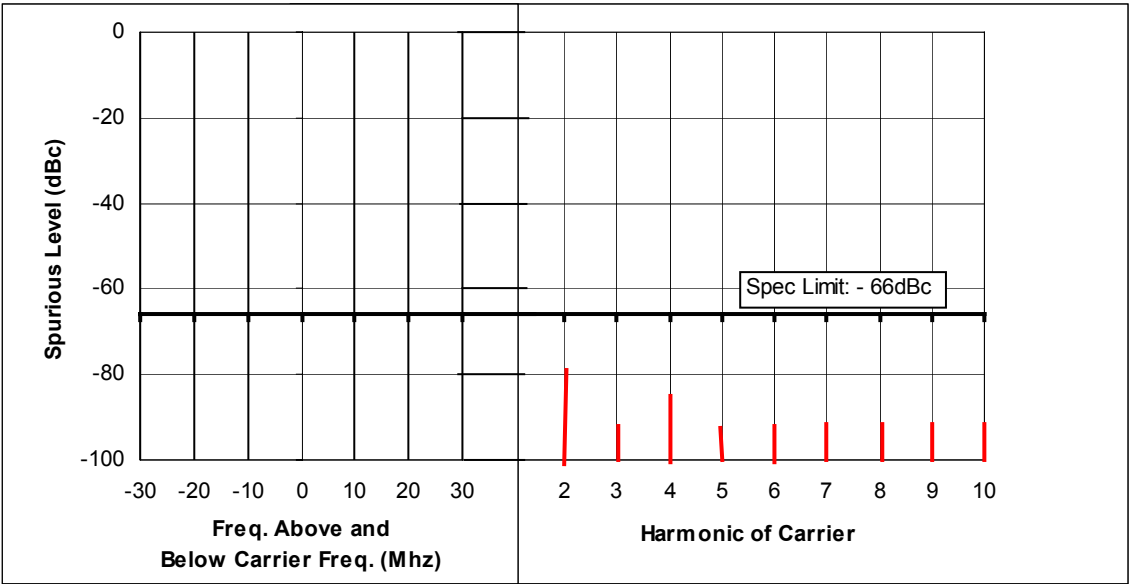


Figure 6F-2: 44 Watts, 480.0125 MHz, 12.5 kHz Channel Spacing

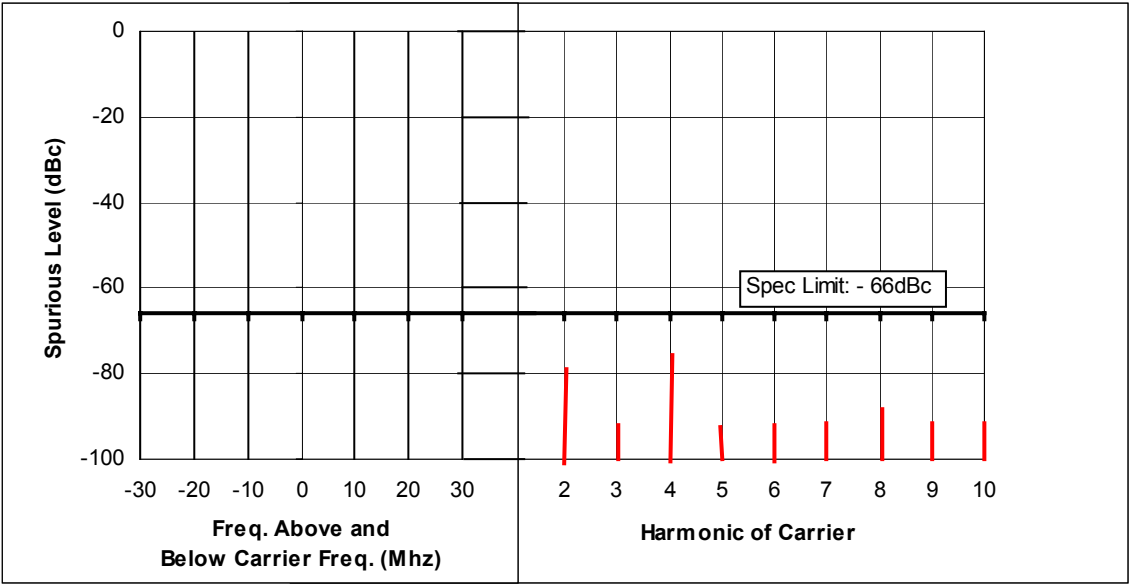


Figure 6F-3: 44 Watts, 494.9875 MHz, 12.5 kHz Channel Spacing

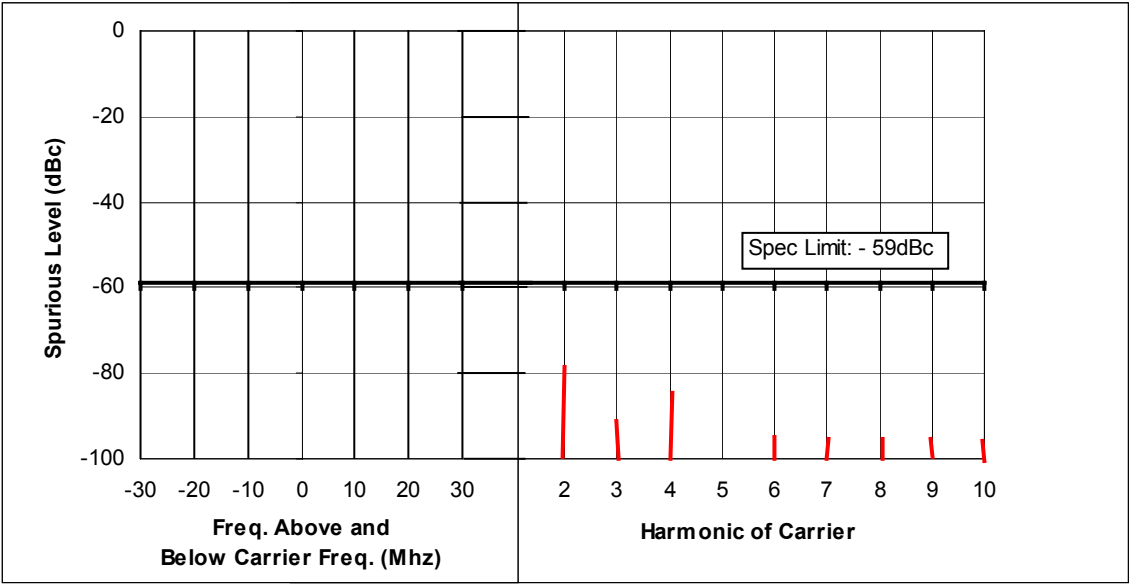


Figure 6F-4: 44 Watts, 465.0125 MHz, 25 kHz Channel Spacing

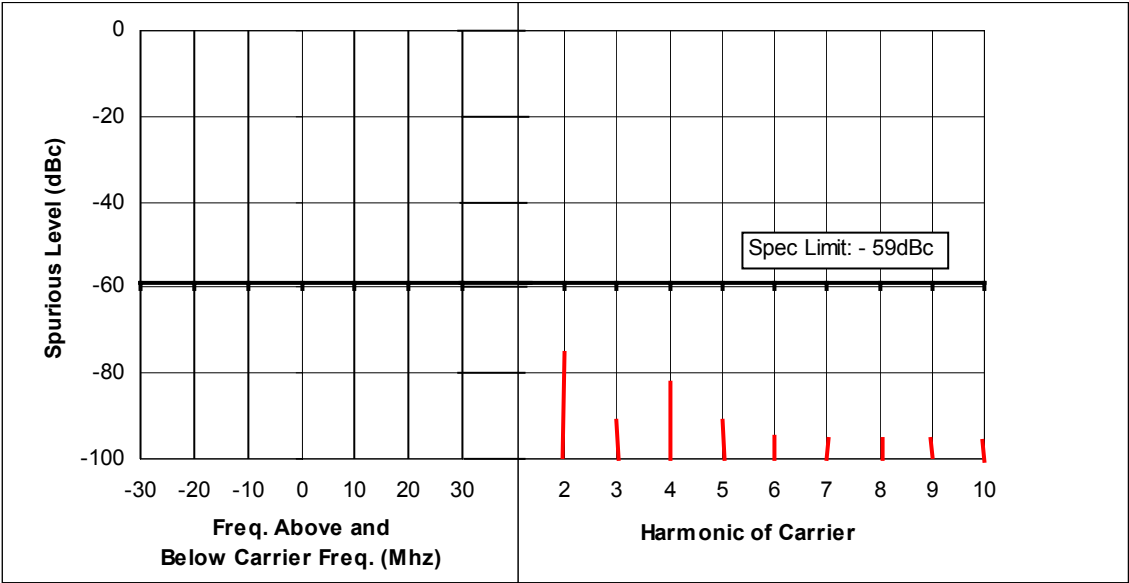


Figure 6F-5: 44 Watts, 480.0125 MHz, 25 kHz Channel Spacing

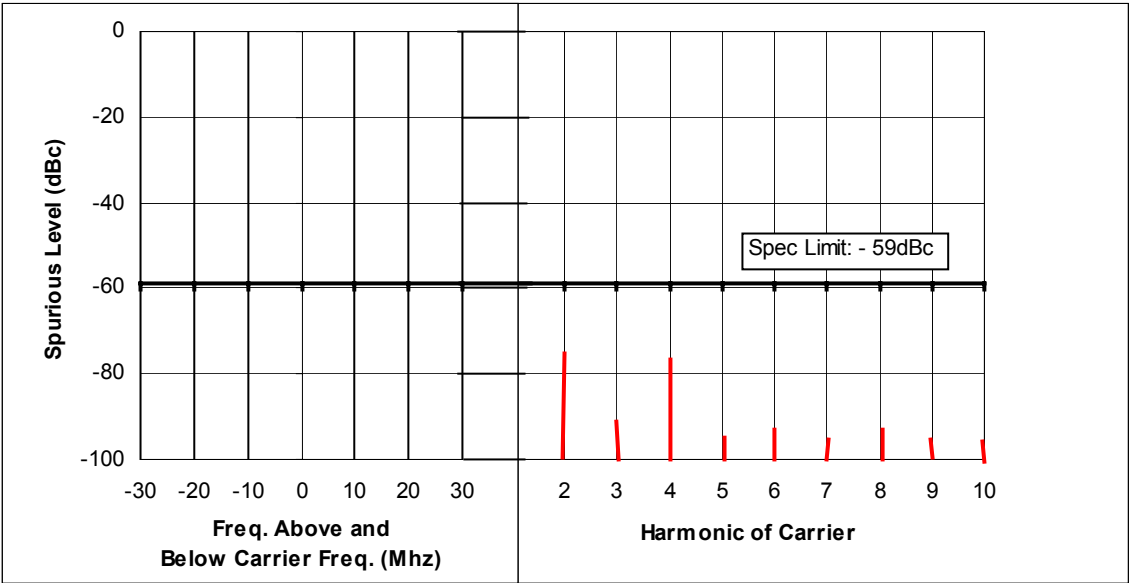


Figure 6F-6: 44 Watts, 494.9875 MHz, 25 kHz Channel Spacing

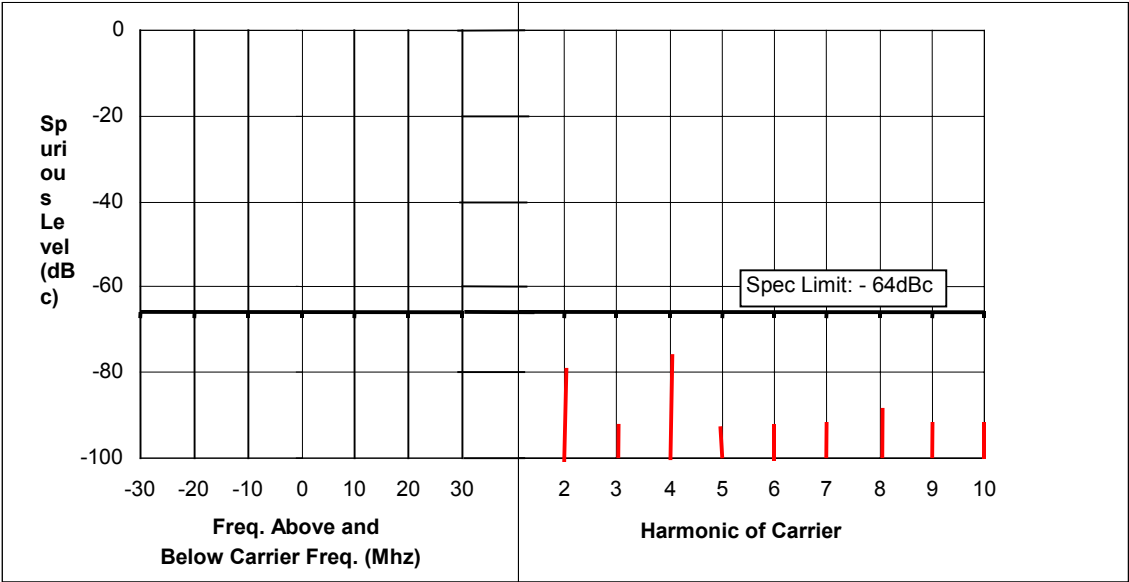


Figure 6F-7: 25 Watts, 465.0125 MHz, 12.5 kHz Channel Spacing

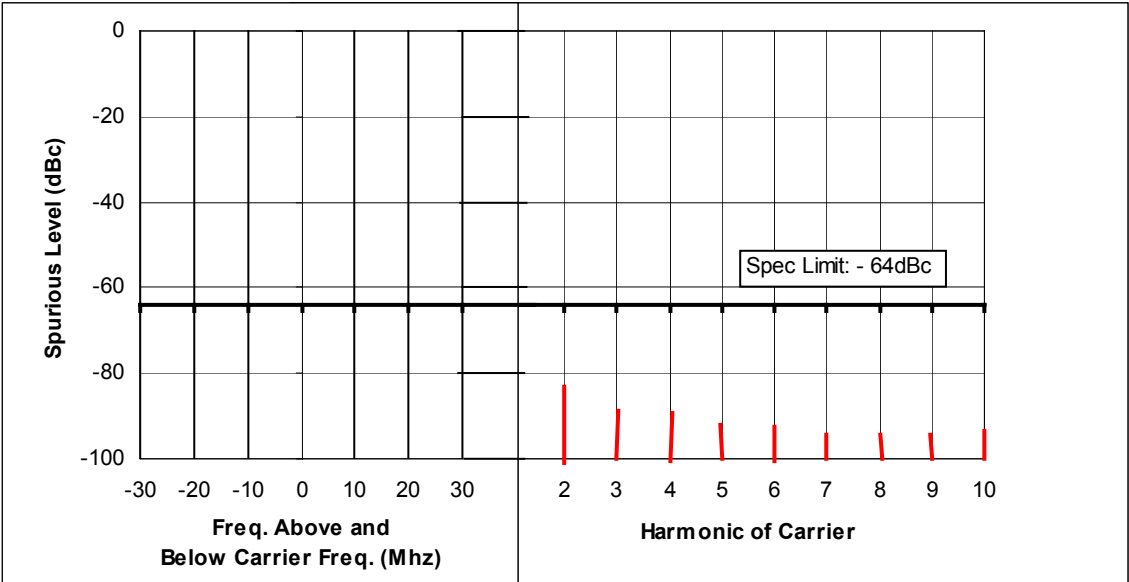


Figure 6F-8: 25 Watts, 480.0125 MHz, 12.5 kHz Channel Spacing

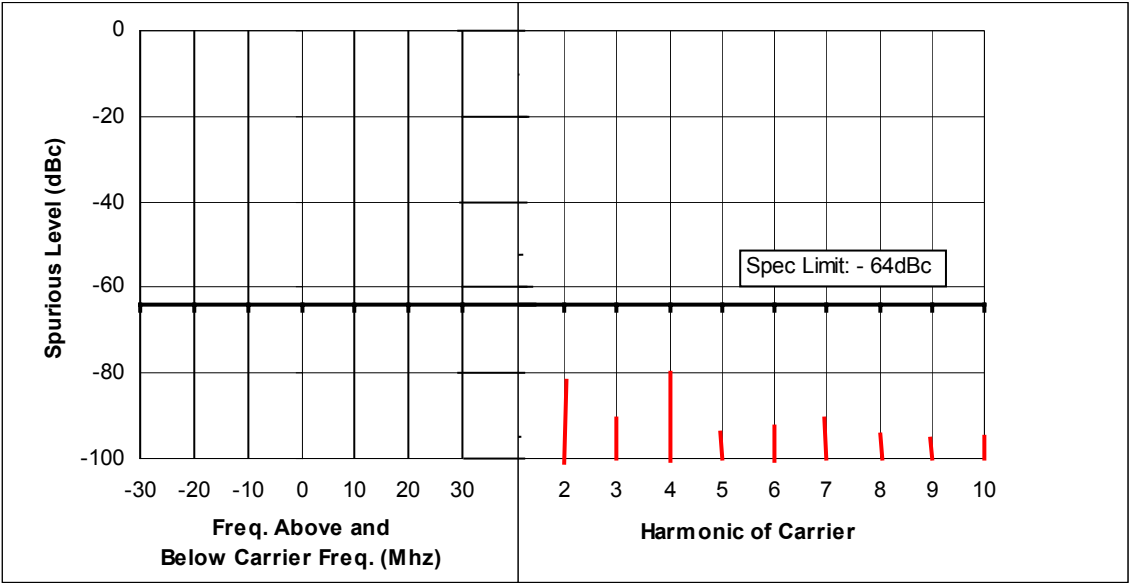


Figure 6F-9: 25 Watts, 494.9875 MHz, 12.5 kHz Channel Spacing

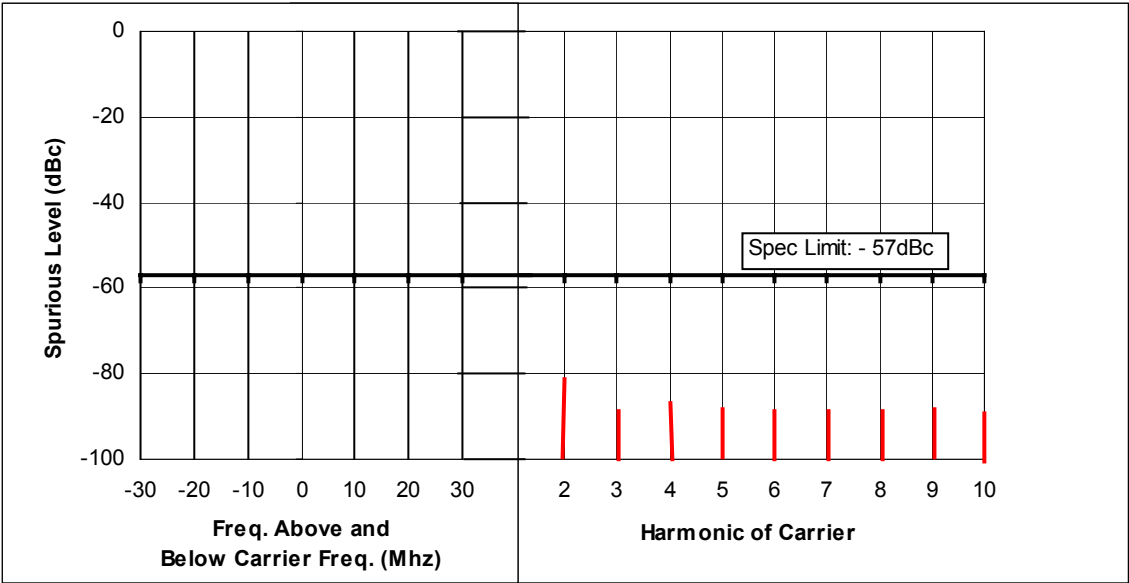


Figure 6F-10: 25 Watts, 465.0125 MHz, 25 kHz Channel Spacing

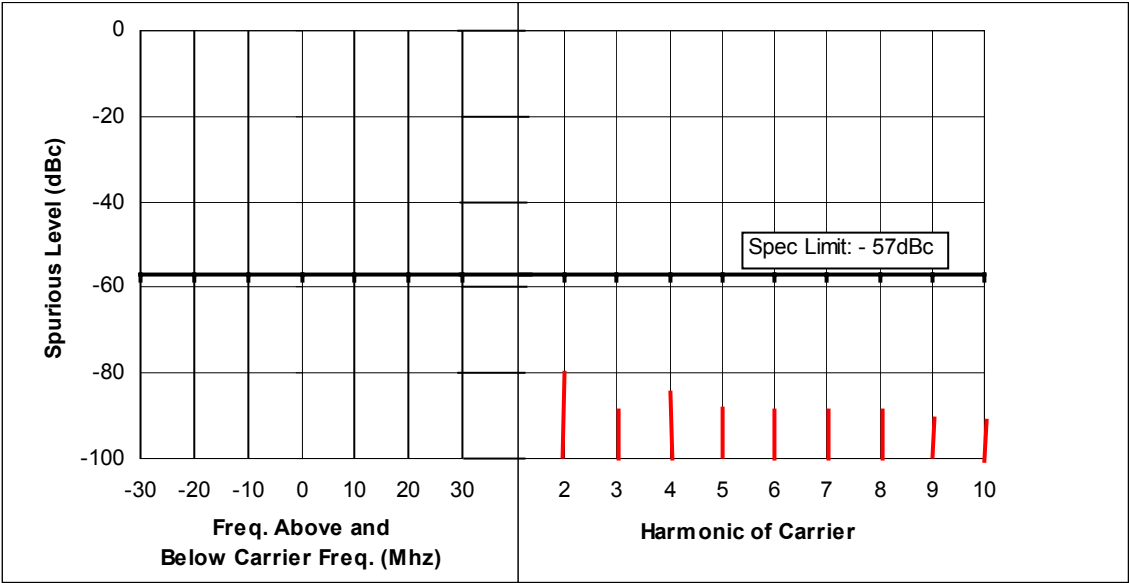


Figure 6F-11: 25 Watts, 480.0125 MHz, 25 kHz Channel Spacing

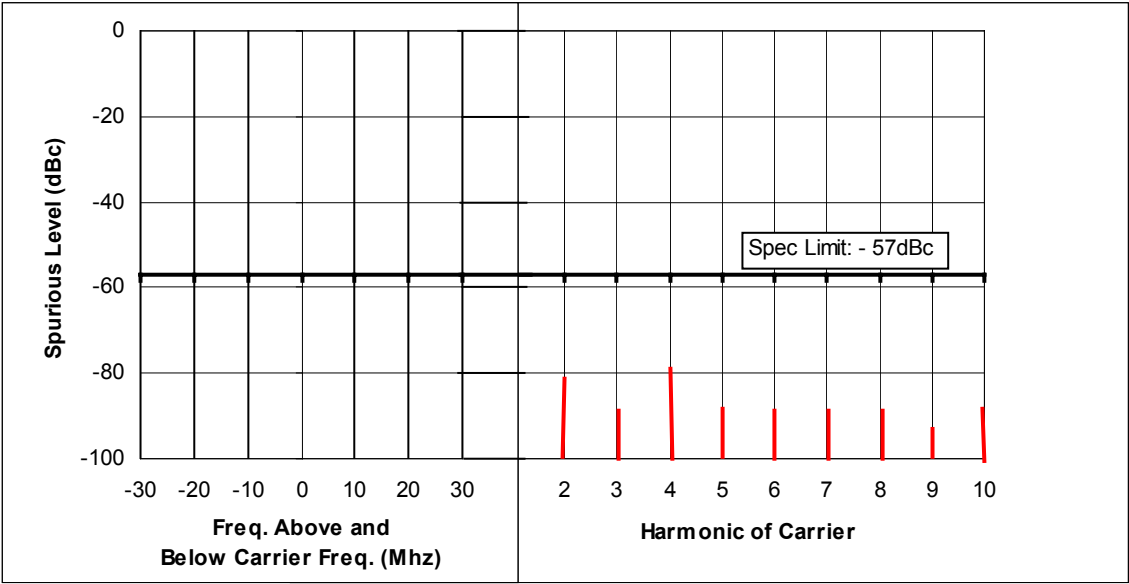


Figure 6F-12: 25 Watts, 494.9875 MHz, 25 kHz Channel Spacing

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

- Notes:
- 1) The shown results are the worst case results for the given frequency. Measurements were made to the 10th harmonic, antenna polarization horizontal and vertical.
 - 2) The margin [dB] is the amount in dB below the FCC specification limit of –13dBm(red line on graphs)

Exhibit 6G-1

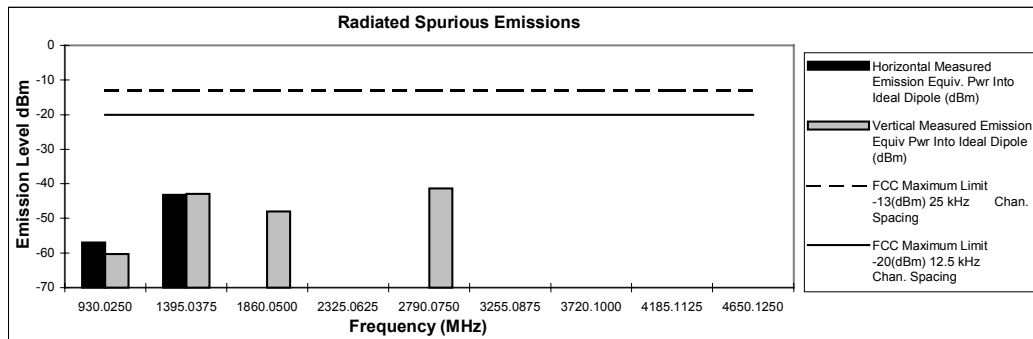
Transmitter Radiated Spurious Emissions: ELM 40W Marlin

465.0125 MHz

44 Watts

Channel Spacing 25KHZ | S/N OATS #2

Frequency (MHz)	FCC Maximum Limit -13(dBm) 25 kHz Chan. Spacing	FCC Maximum Limit -20(dBm) 12.5 kHz Chan. Spacing	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
930.0250	-13	-20	-57.04	-60.29
1395.0375	-13	-20	-43.13	-42.95
1860.0500	-13	-20	*	-48.05
2325.0625	-13	-20	*	*
2790.0750	-13	-20	*	-41.31
3255.0875	-13	-20	*	*
3720.1000	-13	-20	*	*
4185.1125	-13	-20	*	*
4650.1250	-13	-20	*	*



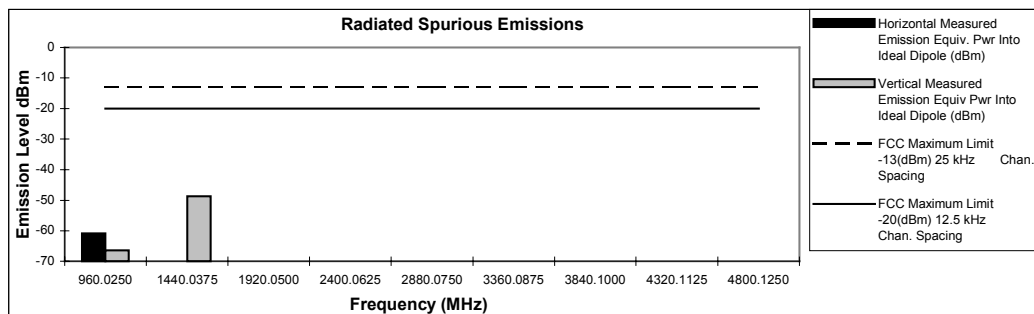
Transmitter Radiated Spurious Emissions: ELM 40W Marlin

480.0125 MHz

44 Watts

Channel Spacing 25KHZ | S/N OATS #2

Frequency (MHz)	FCC Maximum Limit -13(dBm) 25 kHz Chan. Spacing	FCC Maximum Limit -20(dBm) 12.5 kHz Chan. Spacing	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
960.0250	-13	-20	-60.82	-66.36
1440.0375	-13	-20	*	-48.69
1920.0500	-13	-20	*	*
2400.0625	-13	-20	*	*
2880.0750	-13	-20	*	*
3360.0875	-13	-20	*	*
3840.1000	-13	-20	*	*
4320.1125	-13	-20	*	*
4800.1250	-13	-20	*	*



* Indicates the spurious emission was less than -70dBm or 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.

Motorola Plantation EMC Lab – Test Performed by: Curt Mc Lennan
FCC Registration: 91932 / Industry Canada: IC3679

July 2, 2003

Exhibit 6G-2

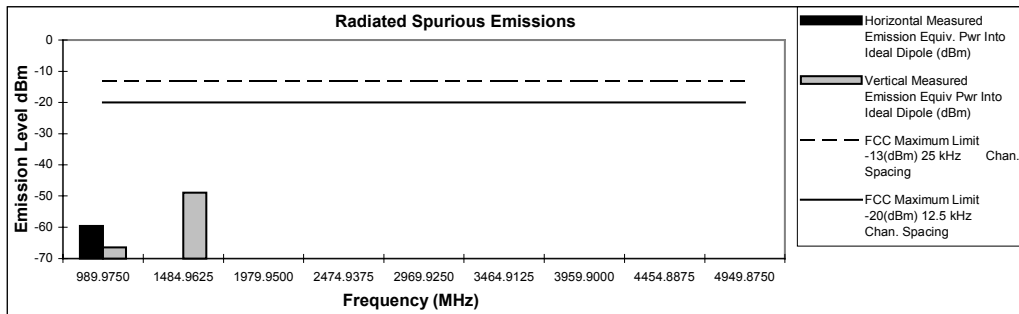
Transmitter Radiated Spurious Emissions: ELM 40W Marlin

494.9875 MHz

44 Watts

Channel Spacing 25KHZ | S/N OATS #2

Frequency (MHz)	FCC Maximum Limit -13(dBm) 25 kHz Chan. Spacing	FCC Maximum Limit -20(dBm) 12.5 kHz Chan. Spacing	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
989.9750	-13	-20	-59.57	-66.45
1484.9625	-13	-20	*	-48.94
1979.9500	-13	-20	*	*
2474.9375	-13	-20	*	*
2969.9250	-13	-20	*	*
3464.9125	-13	-20	*	*
3959.9000	-13	-20	*	*
4454.8875	-13	-20	*	*
4949.8750	-13	-20	*	*



* Indicates the spurious emission was less than -70dBm or 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.

Motorola Plantation EMC Lab – Test Performed by: Curt Mc Lennan
FCC Registration: 91932 / Industry Canada: IC3679

July 2, 2003

Exhibit 6G-3

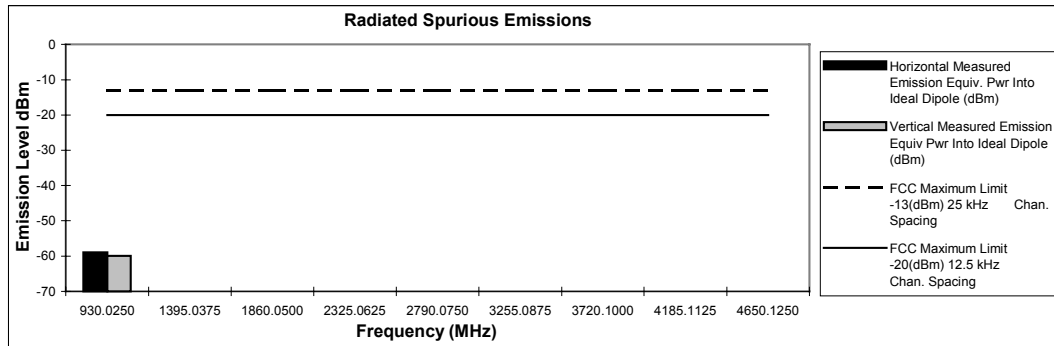
Transmitter Radiated Spurious Emissions: ELM 40W Marlin

465.0125 MHz

25 Watts

Channel Spacing 25KHZ | S/N OATS #2

Frequency (MHz)	FCC Maximum Limit -13(dBm) 25 kHz Chan. Spacing	FCC Maximum Limit -20(dBm) 12.5 kHz Chan. Spacing	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
930.0250	-13	-20	-58.92	-59.93
1395.0375	-13	-20	*	*
1860.0500	-13	-20	*	*
2325.0625	-13	-20	*	*
2790.0750	-13	-20	*	*
3255.0875	-13	-20	*	*
3720.1000	-13	-20	*	*
4185.1125	-13	-20	*	*
4650.1250	-13	-20	*	*



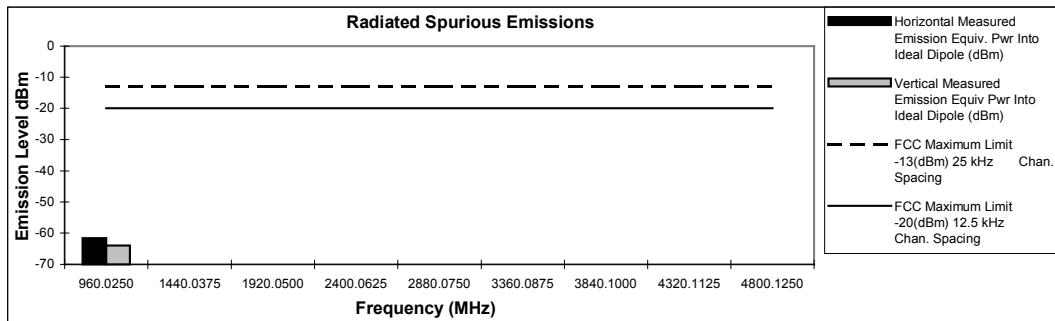
Transmitter Radiated Spurious Emissions: ELM 40W Marlin

480.0125 MHz

25 Watts

Channel Spacing 25KHZ | S/N OATS #2

Frequency (MHz)	FCC Maximum Limit -13(dBm) 25 kHz Chan. Spacing	FCC Maximum Limit -20(dBm) 12.5 kHz Chan. Spacing	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
960.0250	-13	-20	-61.64	-63.98
1440.0375	-13	-20	*	*
1920.0500	-13	-20	*	*
2400.0625	-13	-20	*	*
2880.0750	-13	-20	*	*
3360.0875	-13	-20	*	*
3840.1000	-13	-20	*	*
4320.1125	-13	-20	*	*
4800.1250	-13	-20	*	*



* Indicates the spurious emission was less than -70dBm or 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.

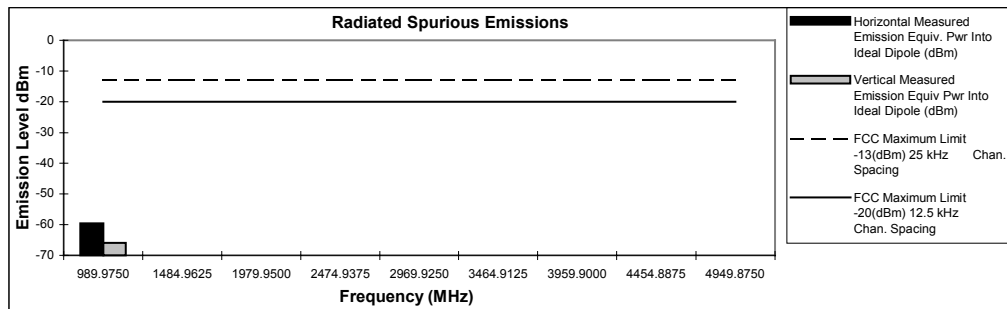
Motorola Plantation EMC Lab – Test Performed by: Curt Mc Lennan
FCC Registration: 91932 / Industry Canada: IC3679

July 2, 2003

Exhibit 6G-4

Transmitter Radiated Spurious Emissions: ELM 40W Marlin

494.9875 MHz	25 Watts	Channel Spacing 25KHZ S/N OATS #2		
Frequency (MHz)	FCC Maximum Limit -13(dBm) 25 kHz Chan. Spacing	FCC Maximum Limit -20(dBm) 12.5 kHz Chan. Spacing	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
989.9750	-13	-20	-59.59	-65.87
1484.9625	-13	-20	*	*
1979.9500	-13	-20	*	*
2474.9375	-13	-20	*	*
2969.9250	-13	-20	*	*
3464.9125	-13	-20	*	*
3959.9000	-13	-20	*	*
4454.8875	-13	-20	*	*
4949.8750	-13	-20	*	*



* Indicates the spurious emission was less than -70dBm or 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.

Motorola Plantation EMC Lab – Test Performed by: Curt Mc Lennan
FCC Registration: 91932 / Industry Canada: IC3679

July 2, 2003

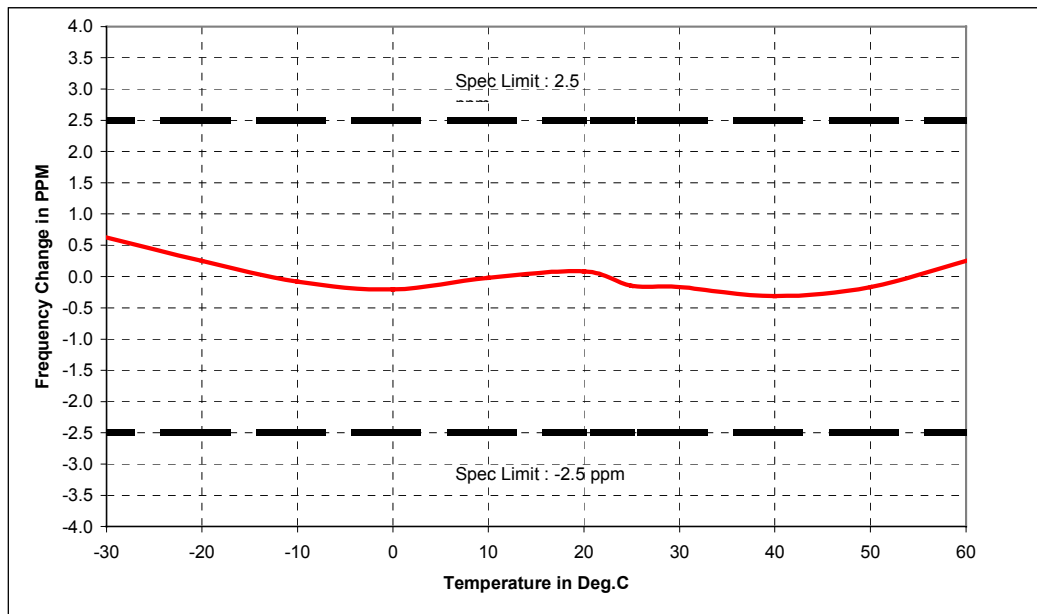
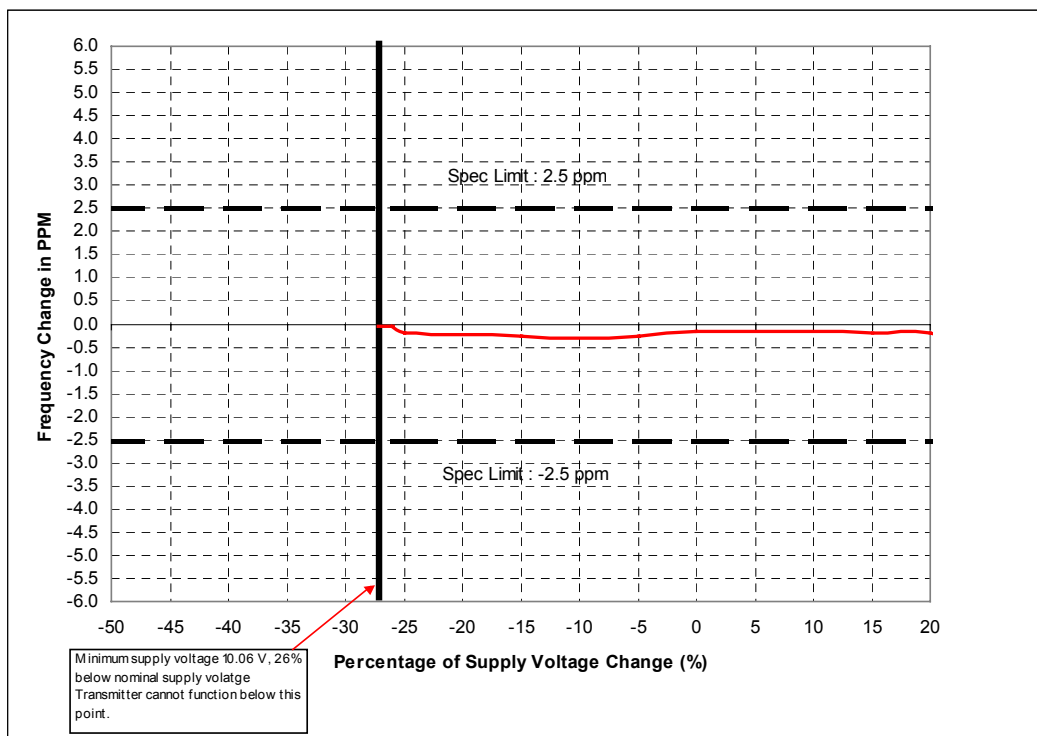
EXHIBIT 6H – Frequency Stability - Pursuant 47 CFR 2.1047 and 2.1033(c)(13)**Figure 6H-1: Frequency Stability vs. Temperature****Figure 6H-2: Frequency Stability vs. Supply Voltage**

EXHIBIT 6I – Transient Frequency Behavior
Note: Measurement made at 480.0125 MHz

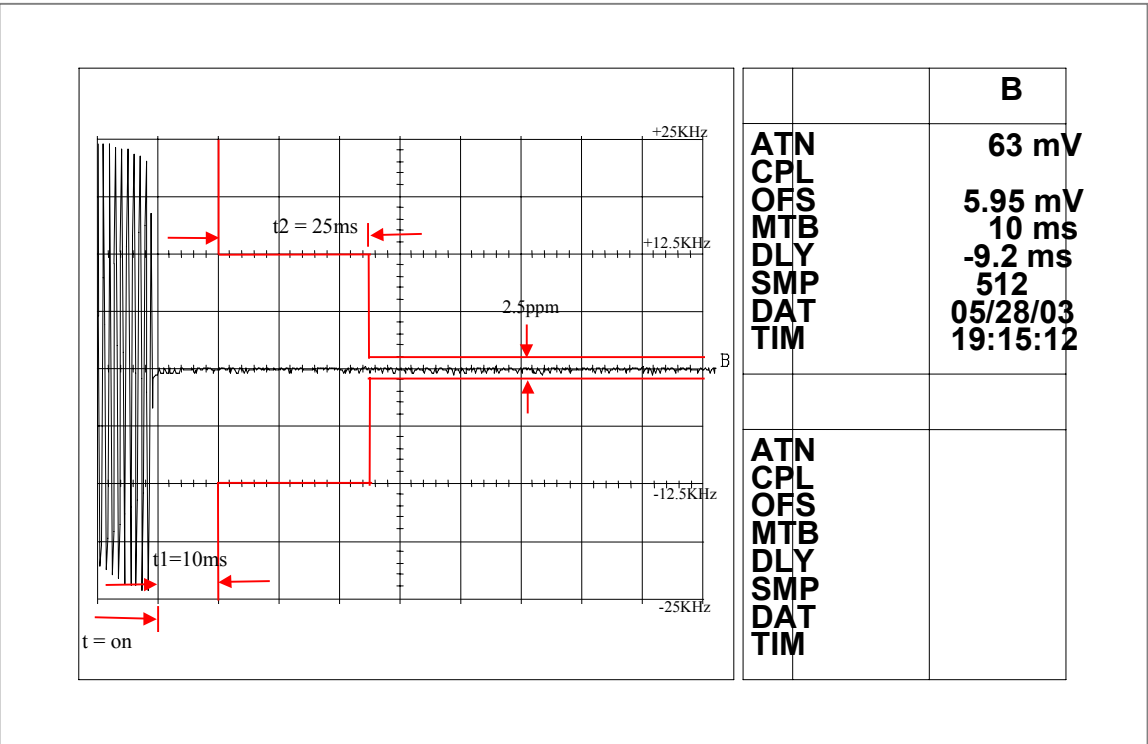


Figure 6I-1: 44 Watts, 12.5 KHz Key-Up Attack Time

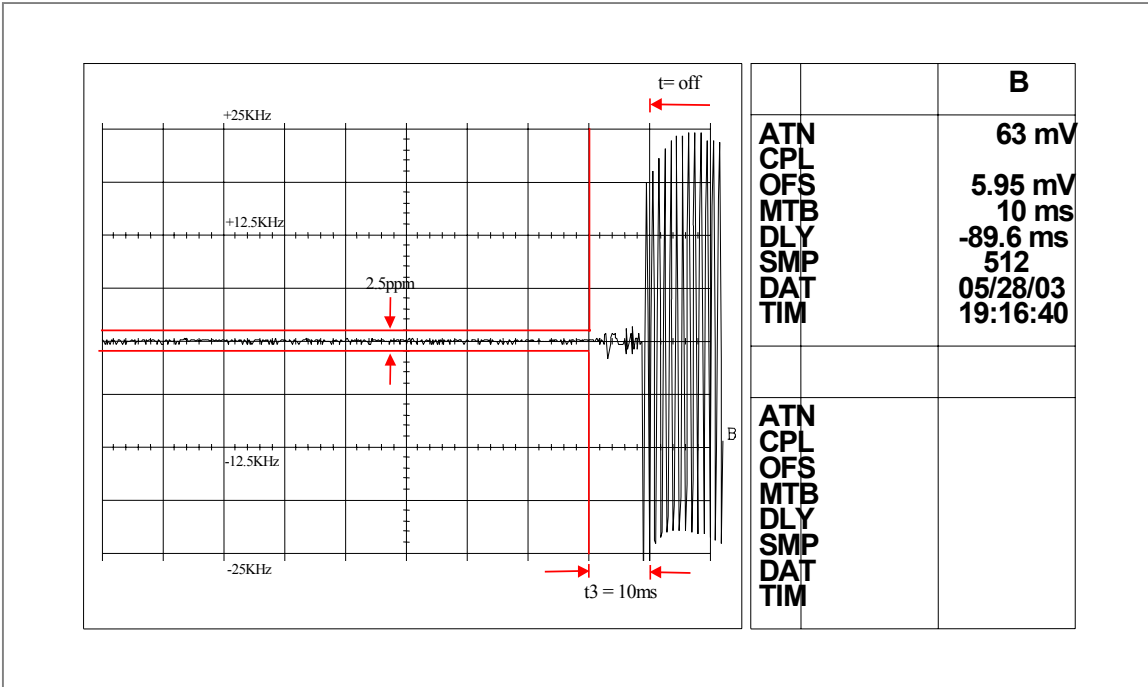


Figure 6I-2: 44 Watts, 12.5 KHz De-Key Decay Time

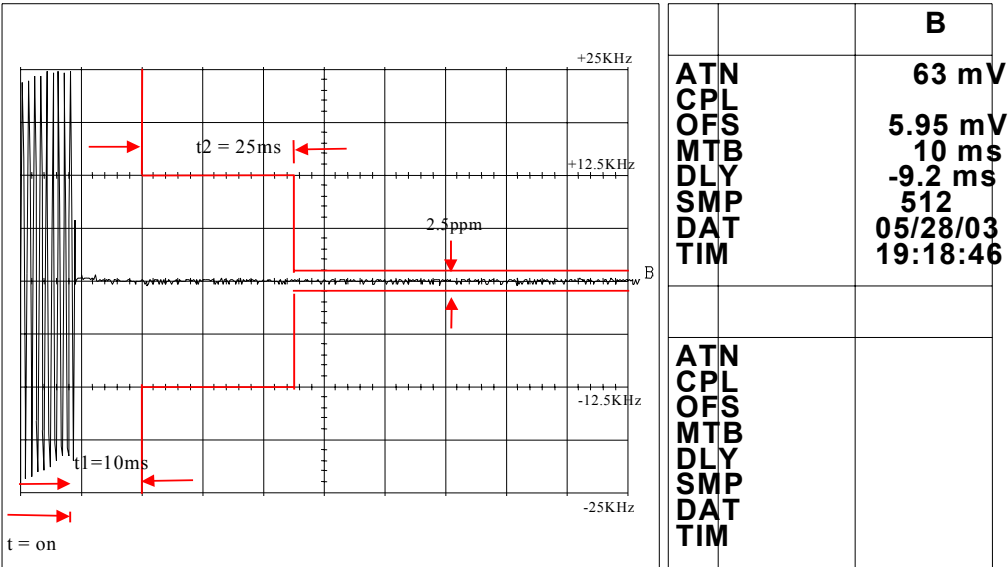


Figure 6I-3: 44 Watts, 25 KHz Key-Up Attack Time

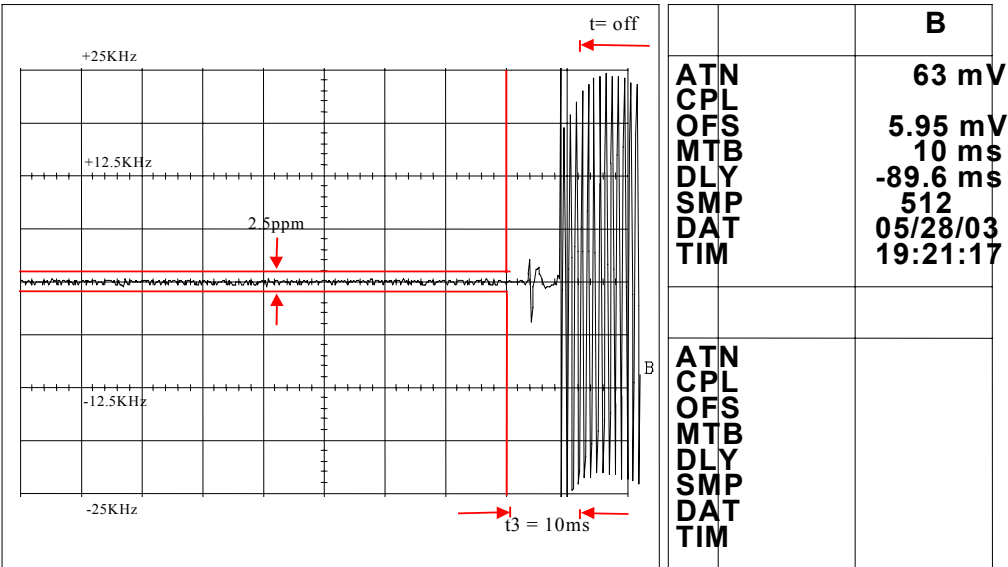


Figure 6i-4: 44 Watts, 25 KHz De-Key Decay Time

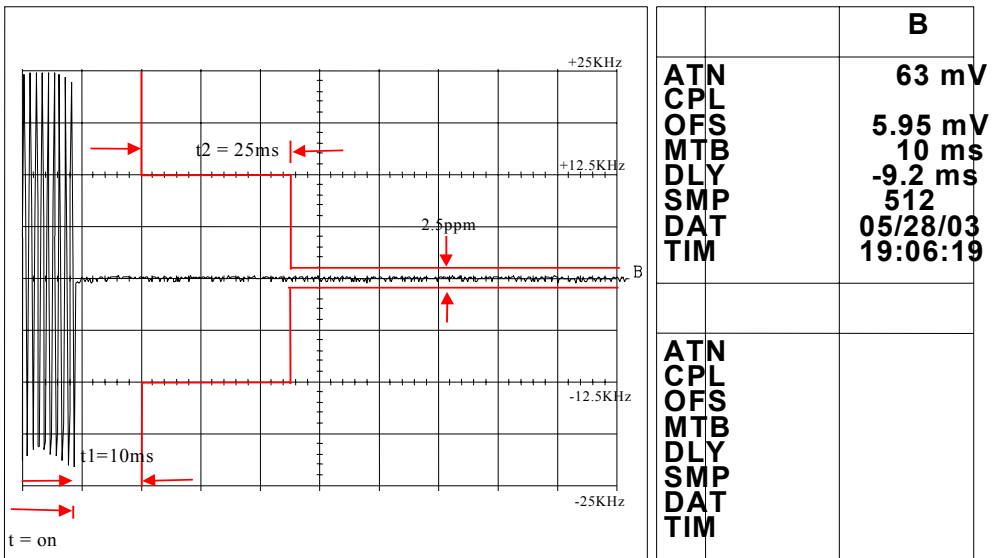


Figure 6I-5: 25 Watts, 12.5 KHz Key-Up Attack Time

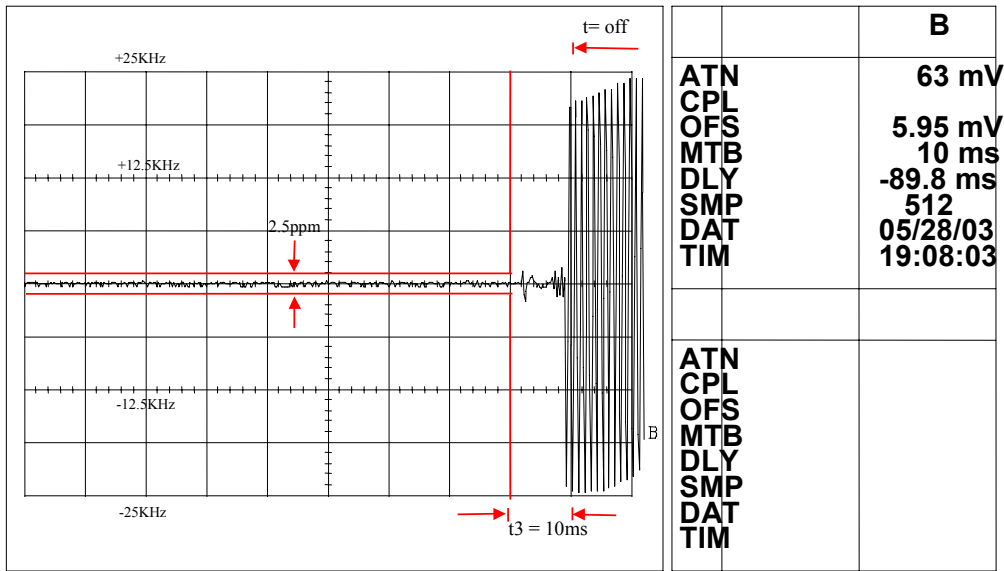
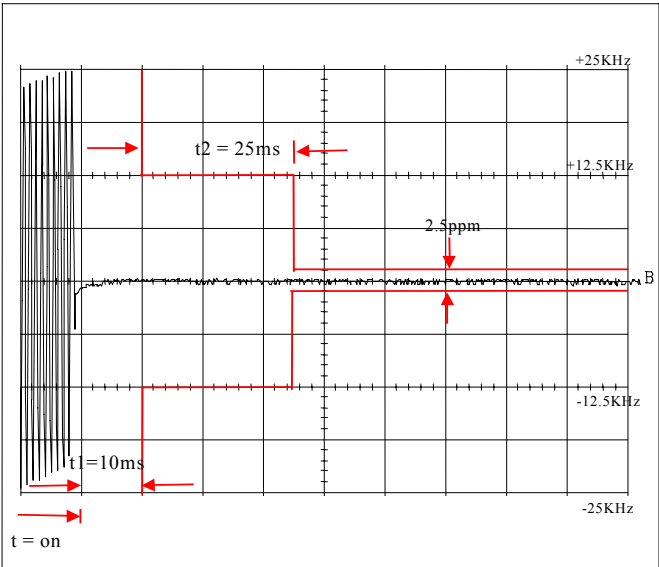
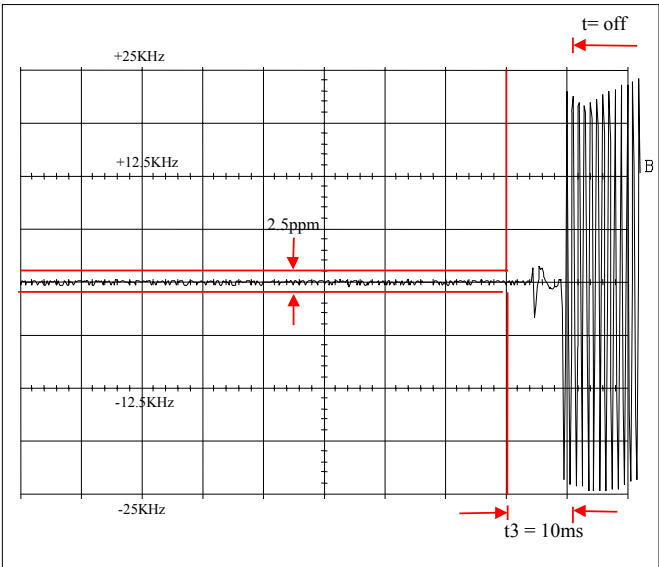


Figure 6I-6: 25 Watts, 12.5 KHz De-Key Decay Time



		B
ATN		63 mV
CPL		5.95 mV
OFS		10 ms
MTB		-9.4 ms
DLY		512
SMP		05/28/03
DAT		19:10:32
TIM		
ATN		
CPL		
OFS		
MTB		
DLY		
SMP		
DAT		
TIM		

Figure 6I-7: 25 Watts, 25 KHz Key-Up Attack Time



		B
ATN		63 mV
CPL		5.95 mV
OFS		10 ms
MTB		-89.8 ms
DLY		512
SMP		05/28/03
DAT		19:12:23
TIM		
ATN		
CPL		
OFS		
MTB		
DLY		
SMP		
DAT		
TIM		

Figure 6I-8: 25 Watts, 25 KHz De-Key Decay Time