

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 (6 Graphs)

6F-1 – 40 Watts, 403.025 MHz, 12.5 kHz Channel Spacing

6F-2 – 40 Watts, 421.500 MHz, 12.5 kHz Channel Spacing

6F-3 – 40 Watts, 439.975 MHz, 12.5 kHz Channel Spacing

6F-4 – 40 Watts, 403.025 MHz, 25 kHz Channel Spacing

6F-5 – 40 Watts, 421.500 MHz, 25 kHz Channel Spacing

6F-6 – 40 Watts, 439.975 MHz, 25 kHz Channel Spacing

6F-7 – 25 Watts, 403.025 MHz, 12.5 kHz Channel Spacing

6F-8 – 25 Watts, 421.500 MHz, 12.5 kHz Channel Spacing

6F-9 – 25 Watts, 439.975 MHz, 12.5 kHz Channel Spacing

6F-10 – 25 Watts, 403.025 MHz, 25 kHz Channel Spacing

6F-11 – 25 Watts, 421.500 MHz, 25 kHz Channel Spacing

6F-12 – 25 Watts, 439.975 MHz, 25 kHz Channel Spacing

EXHIBIT 6G – Radiated Spurious Emissions

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 – 40 Watts, 12.5 KHz Key-Up Attack Time

6I-2 – 40 Watts, 12.5 KHz De-Key Decay Time

6I-3 – 40 Watts, 25 KHz Key-Up Attack Time

6I-4 – 40 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 403.025 MHz:

Output RF power	43.4	Watts
DC Voltage	13.6	Volts
DC Current	8.26	A
DC Input Power	112.34	Watts

At minimum output power setting, Frequency 403.025MHz:

Output RF power	25.0	Watts
DC Voltage	13.6	Volts
DC Current	6.38	A
DC Input Power	86.77	Watts

At maximum output power setting, Frequency 421.500 MHz:

Output RF power	43.4	Watts
DC Voltage	13.6	Volts
DC Current	7.85	A
DC Input Power	106.76	Watts

At minimum output power setting, Frequency 421.500 MHz:

Output RF power	25.0	Watts
DC Voltage	13.6	Volts
DC Current	5.99	A
DC Input Power	81.46	Watts

At maximum output power setting, Frequency 439.975 MHz:

Output RF power	43.8	Watts
DC Voltage	13.6	Volts
DC Current	7.17	A
DC Input Power	97.512	Watts

At minimum output power setting, Frequency 439.975 MHz:

Output RF power	25.2	Watts
DC Voltage	13.6	Volts
DC Current	5.54	A
DC Input Power	75.34	Watts

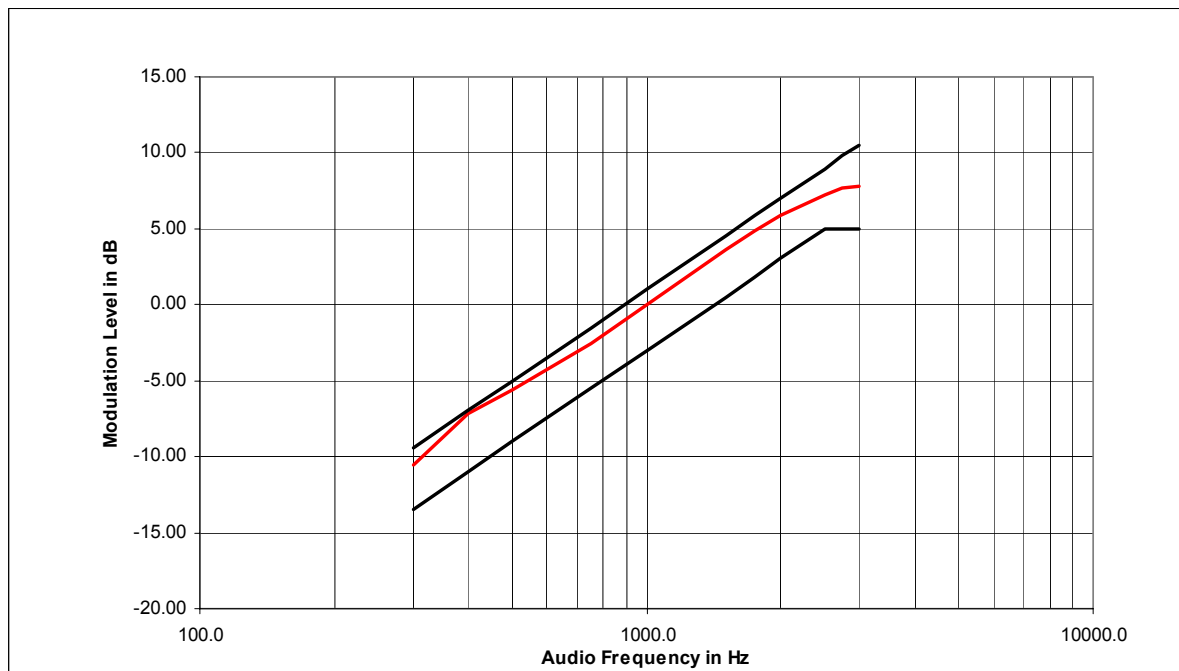
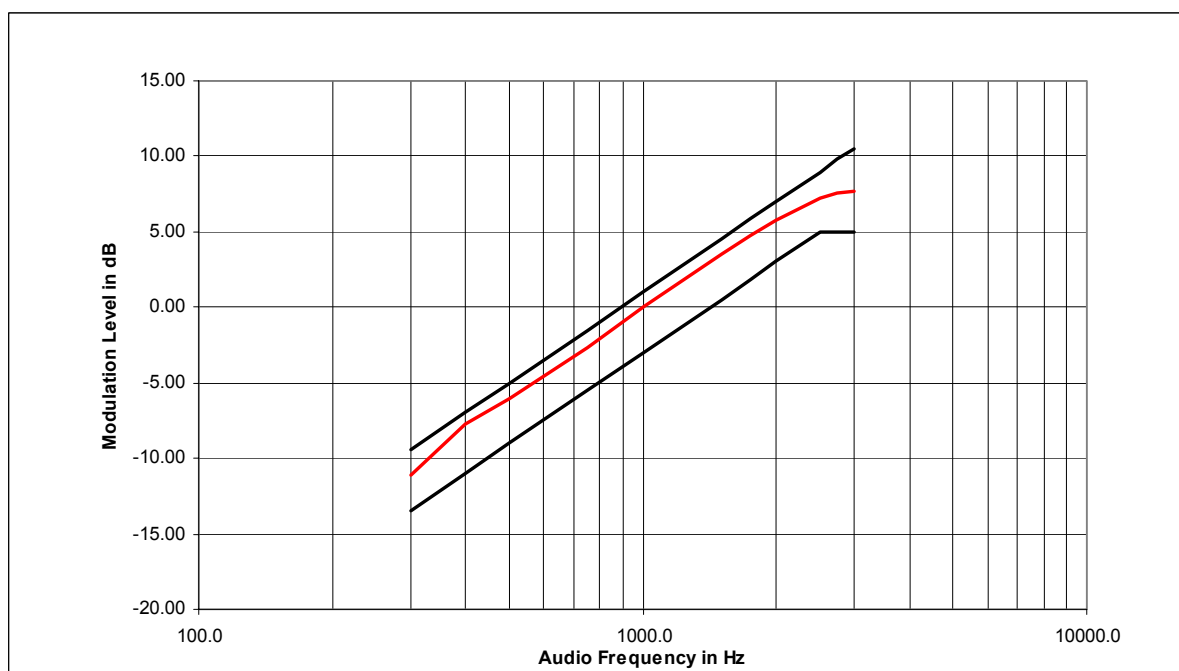
EXHIBIT 6B – Transmit Audio Response - Pursuant 47 CFR 2.1047 and 2.1033(c)(13)**Figure 6B-1: 12.5 KHz Channel Spacing, Transmit Audio Response****Figure 6B-2: 25 KHz Channel Spacing, Transmit Audio Response**

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

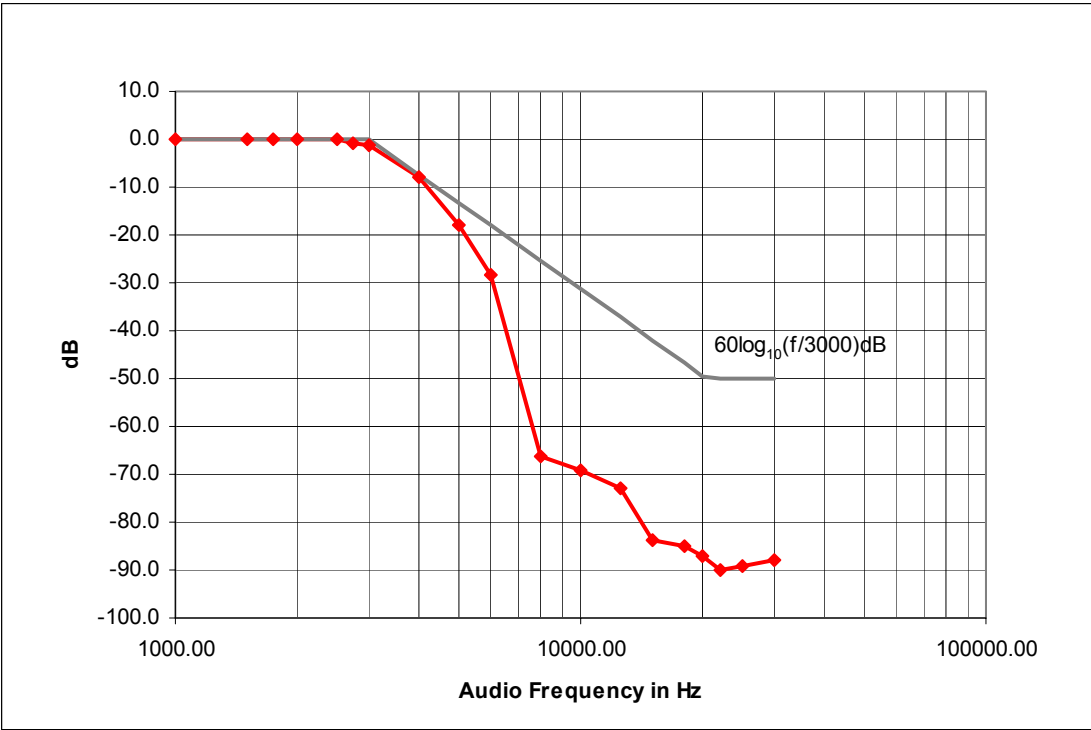


Figure 6C-1: 12.5 KHz Channel Spacing, Transmit Audio Post Limiter Low Pass Filter Response

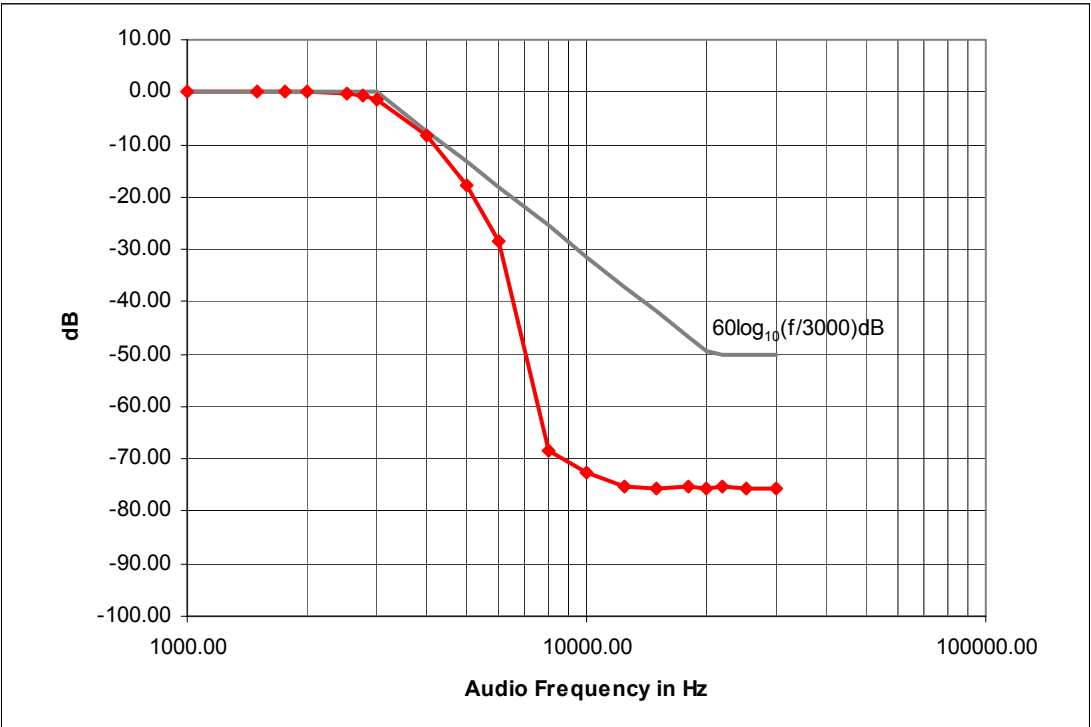


Figure 6C-2: 25 KHz Channel Spacing, Transmit Audio Post Limiter Low Pass Filter Response

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

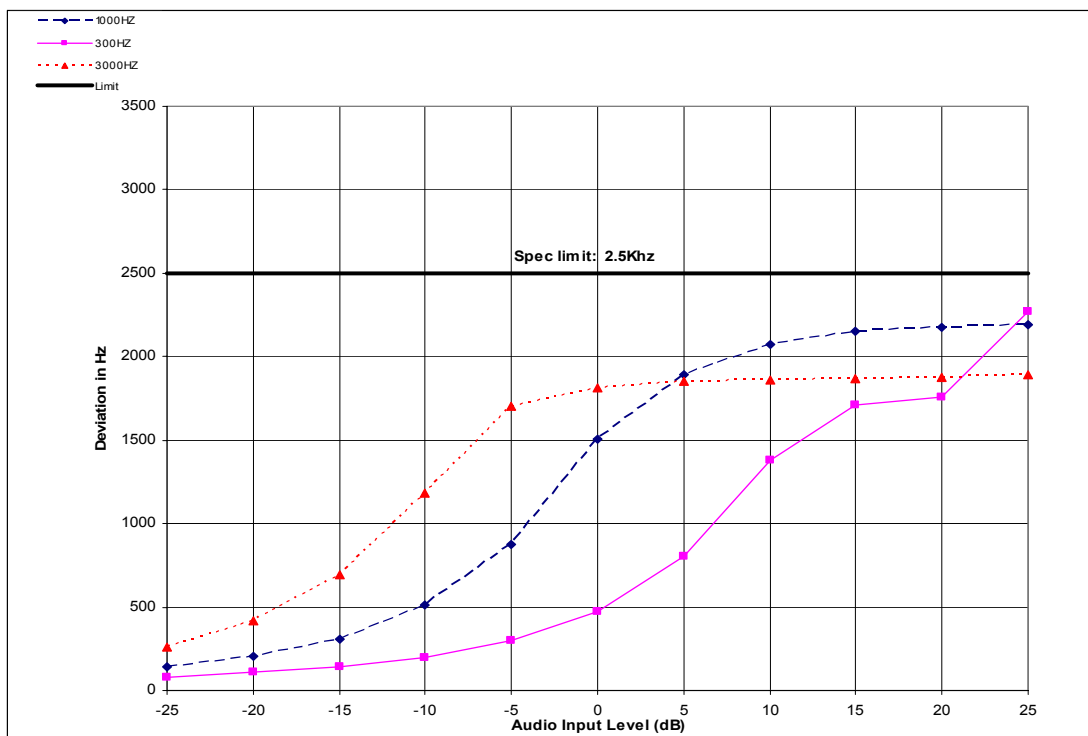


Figure 6D-1: 12.5 KHz Channel Spacing, Carrier Squelch Mode

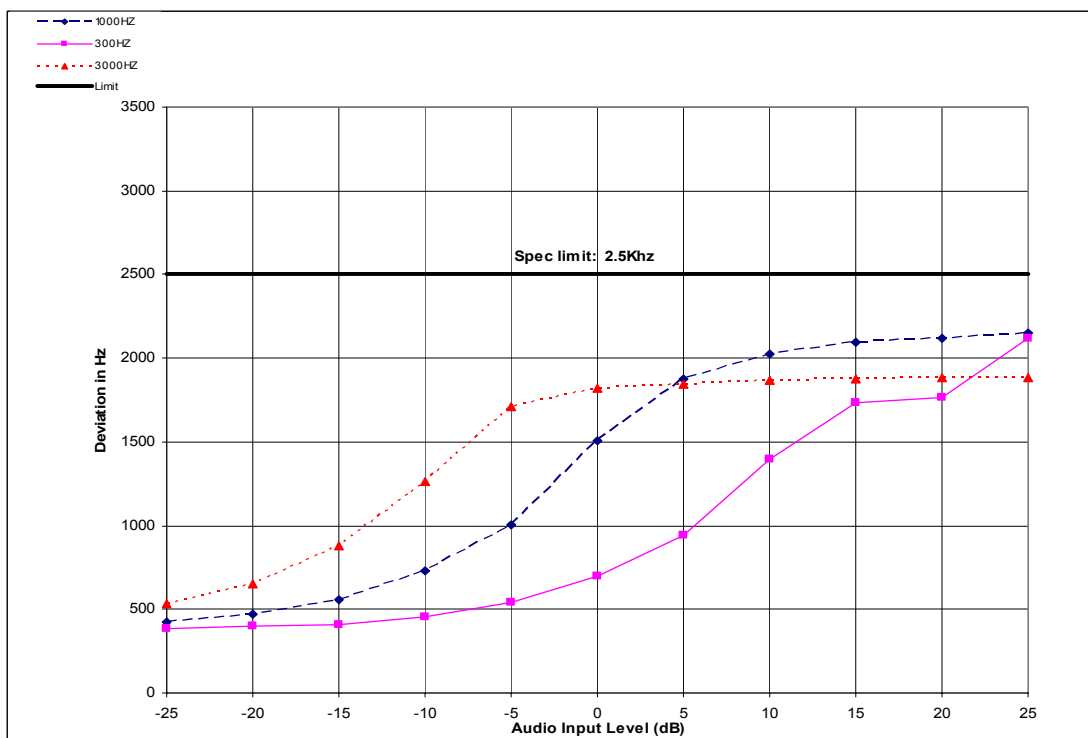


Figure 6D-2: 12.5 KHz Channel Spacing, Tone Private Line (TPL) Mode

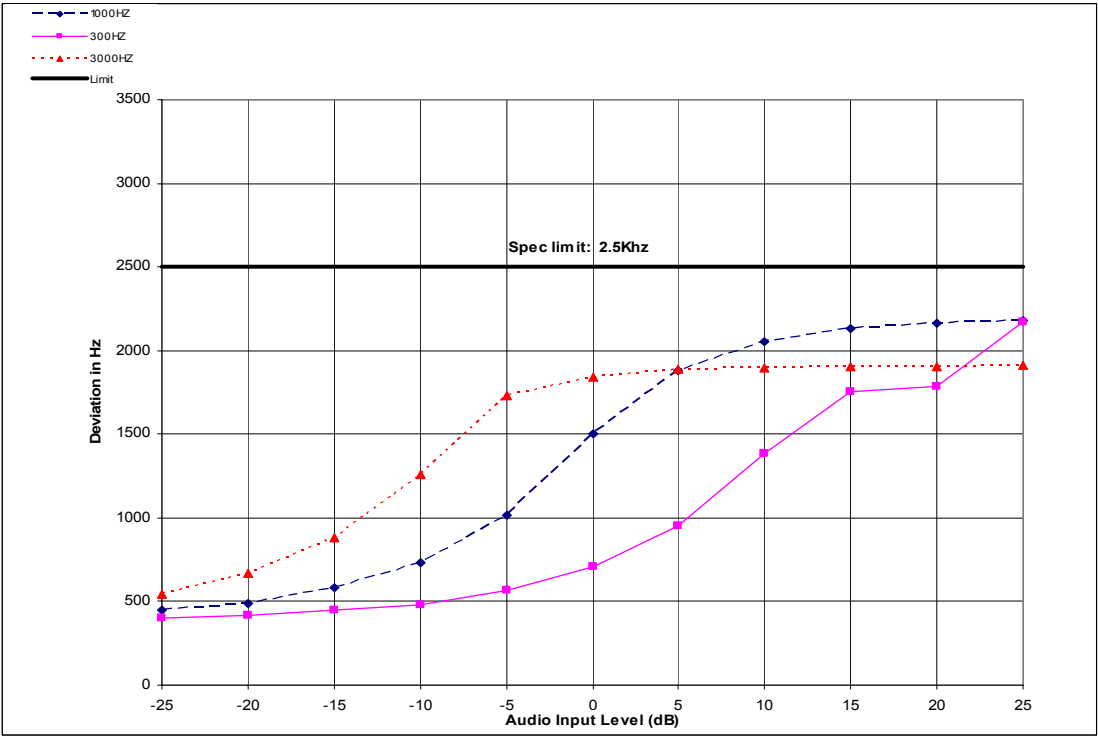


Figure 6D-3: 12.5 KHz Channel Spacing, Digital Private Line (DPL) Mode

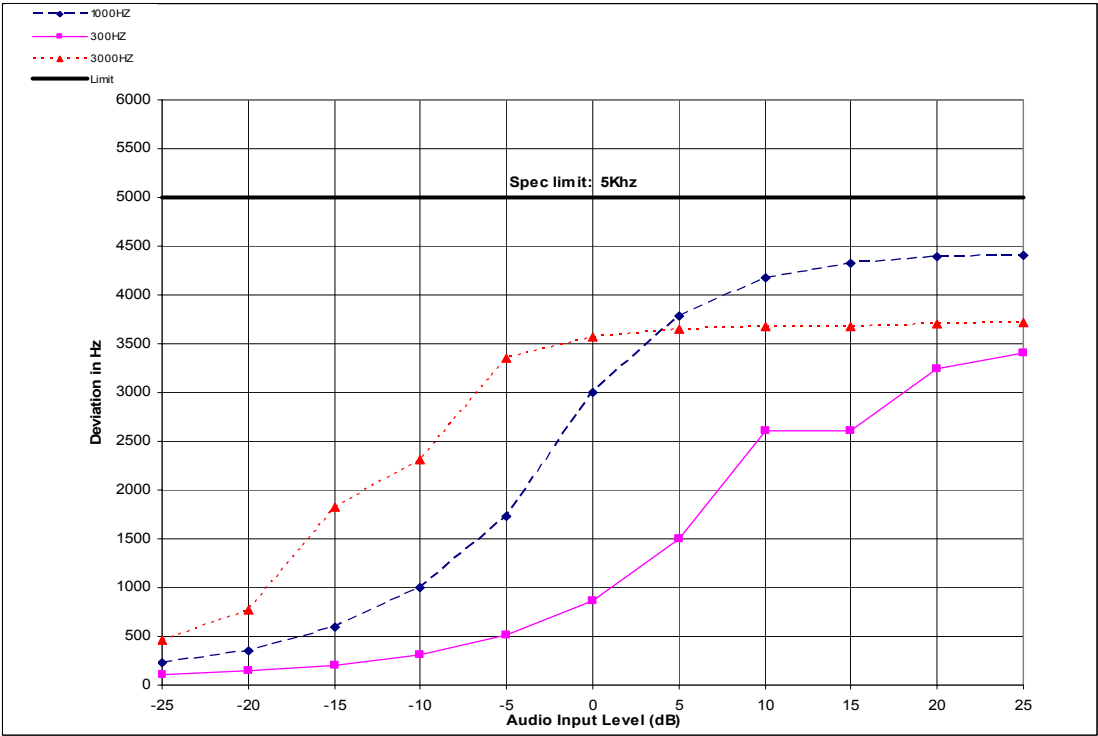


Figure 6D-4: 25 KHz Channel Spacing, Carrier Squelch Mode

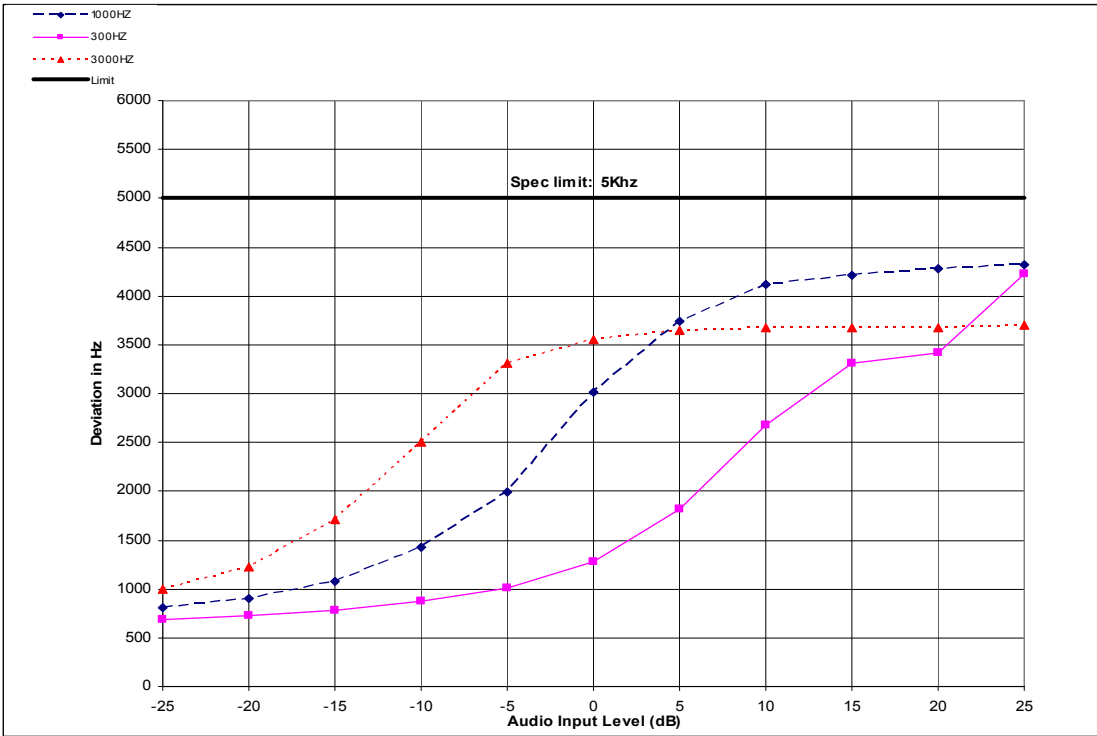


Figure 6D-5: 25 KHz Channel Spacing, Tone Private Line (TPL) Mode

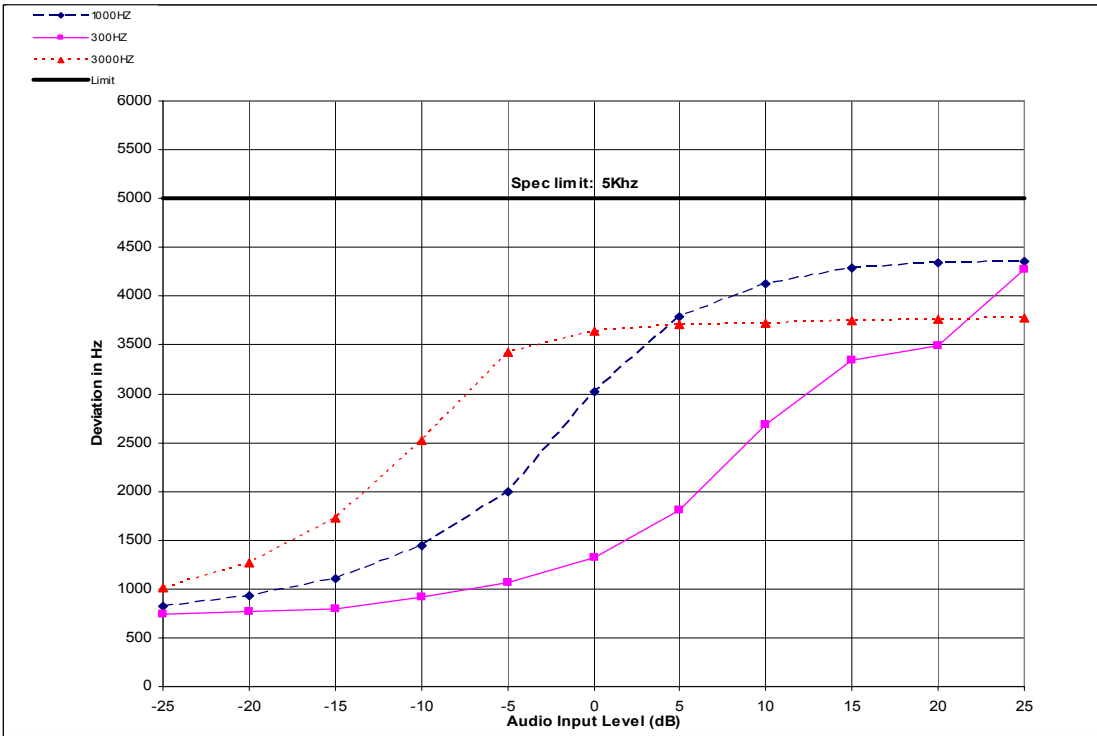


Figure 6D-6: 25 KHz Channel Spacing, Digital Private Line (DPL) Mode

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

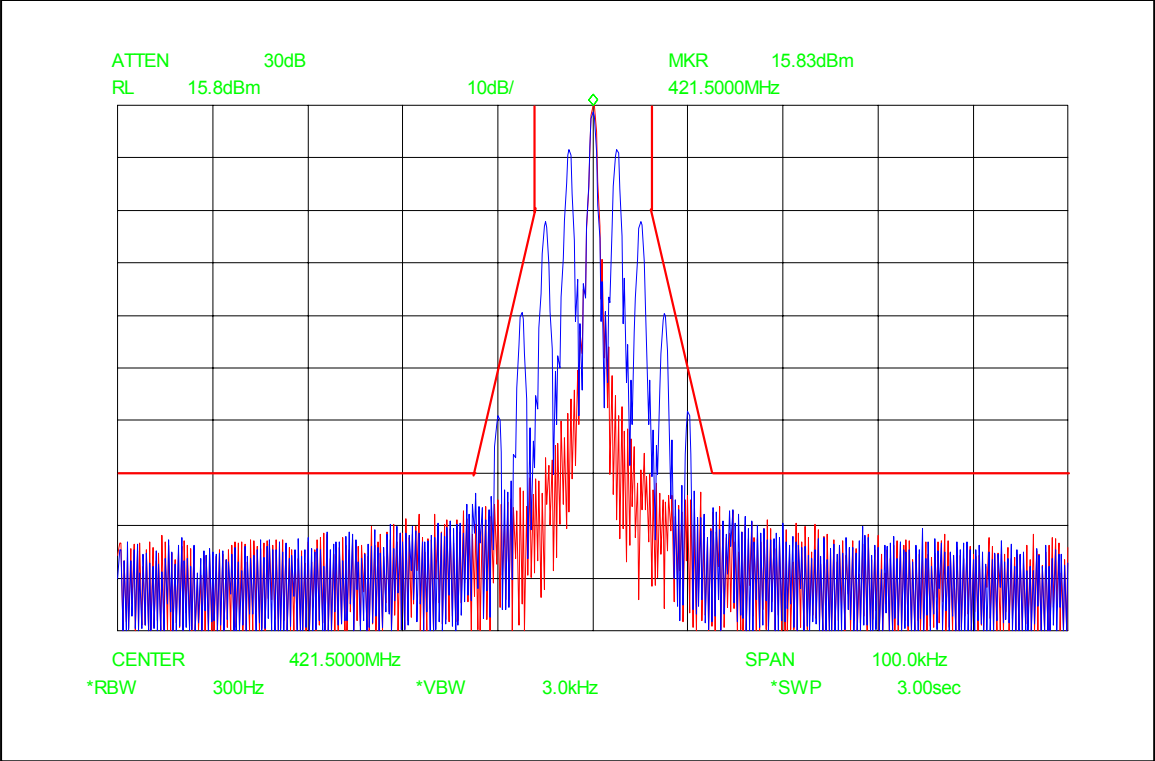


Figure 6E-1: 12.5 KHz Channel Spacing, 2500 Hz Audio Modulation Only, Mask D

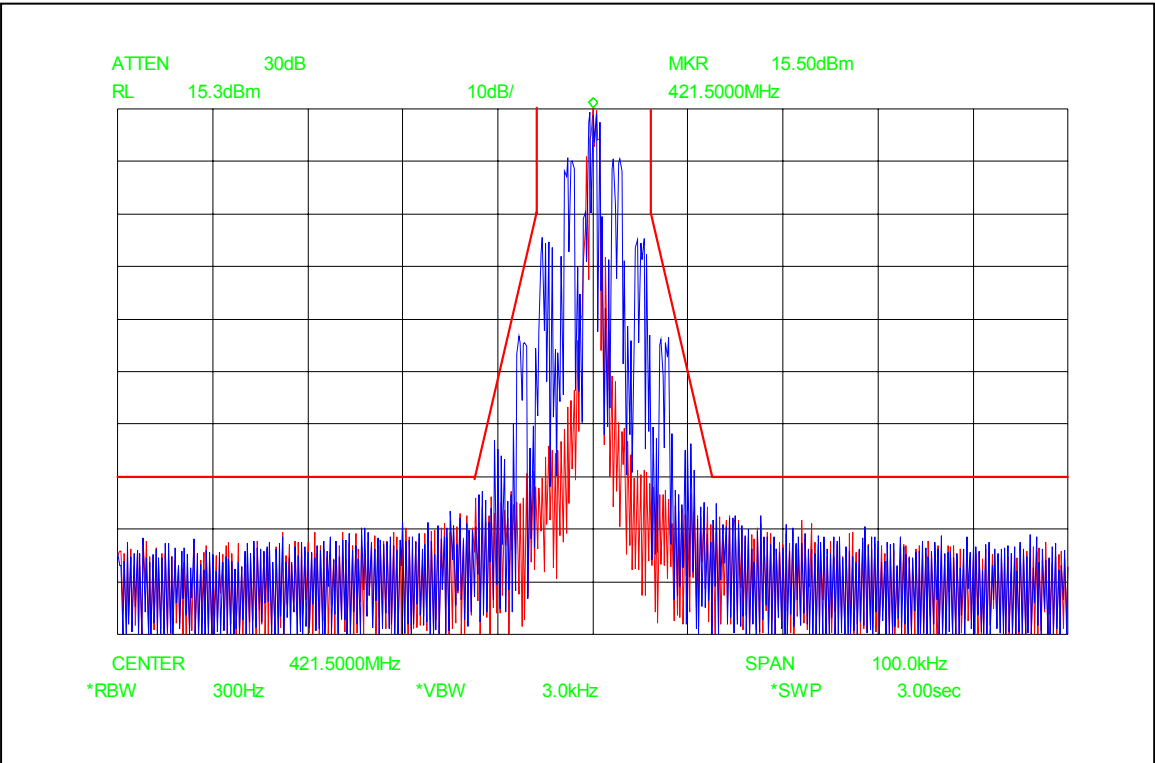
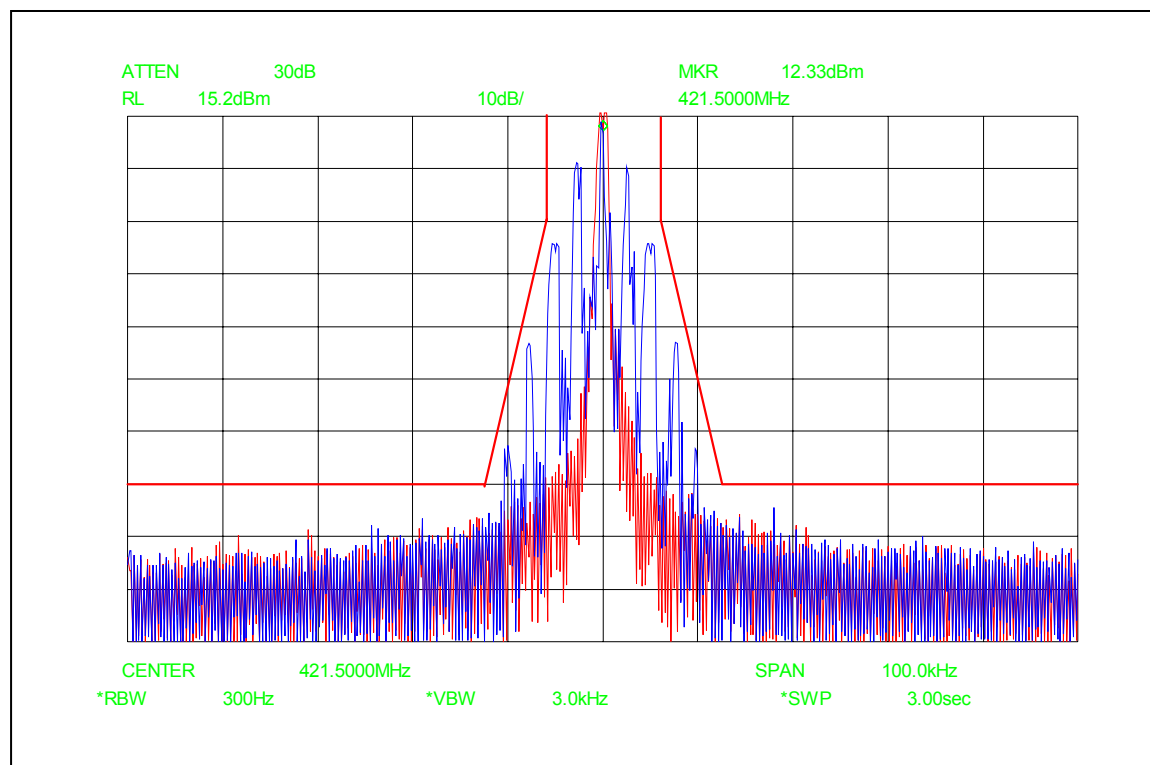
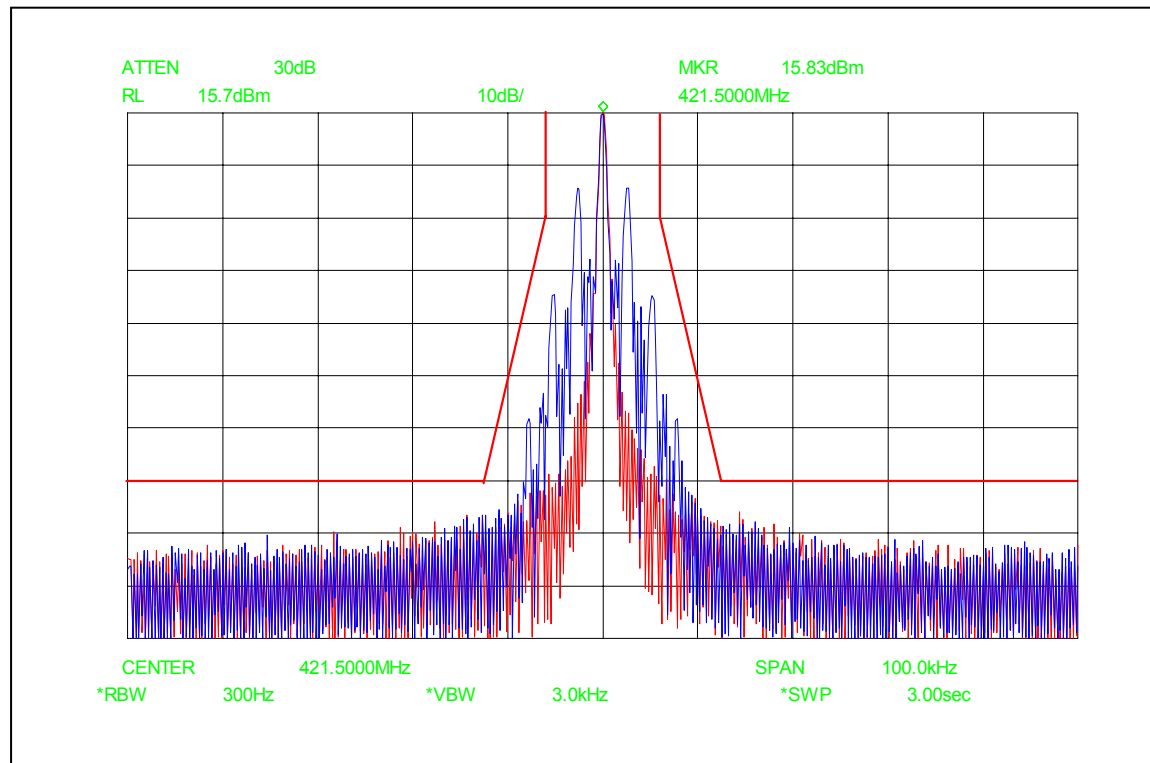
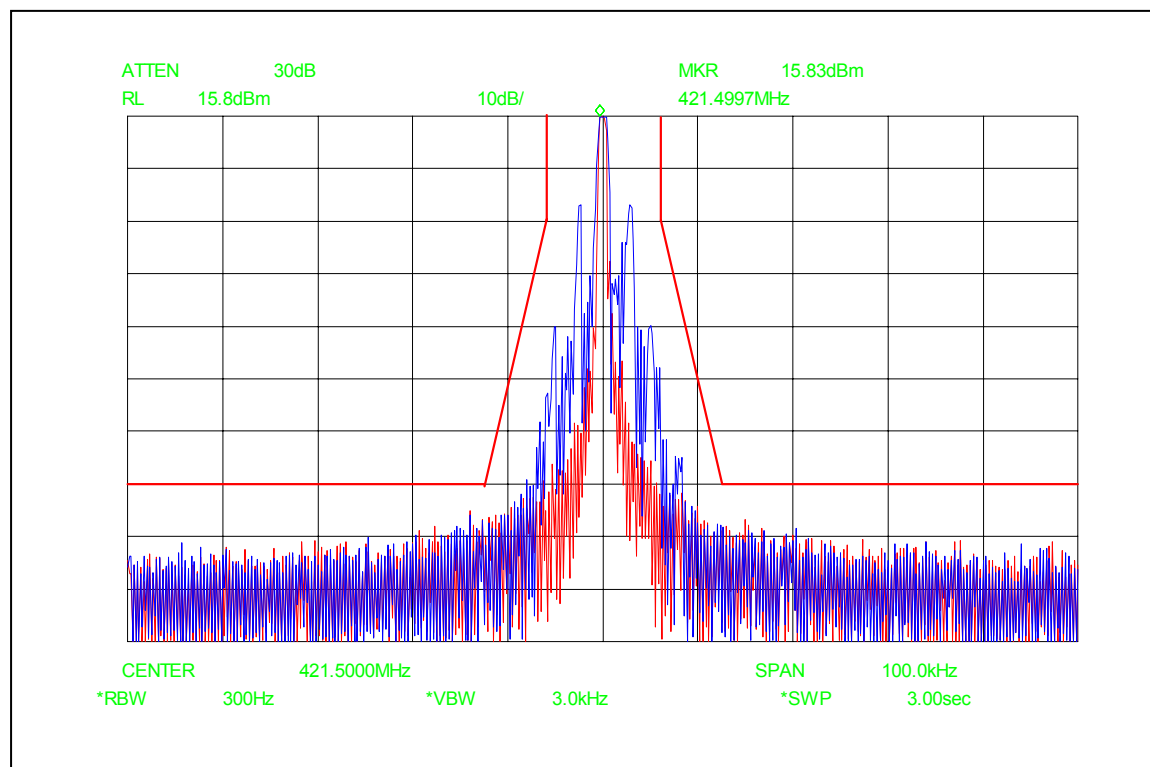
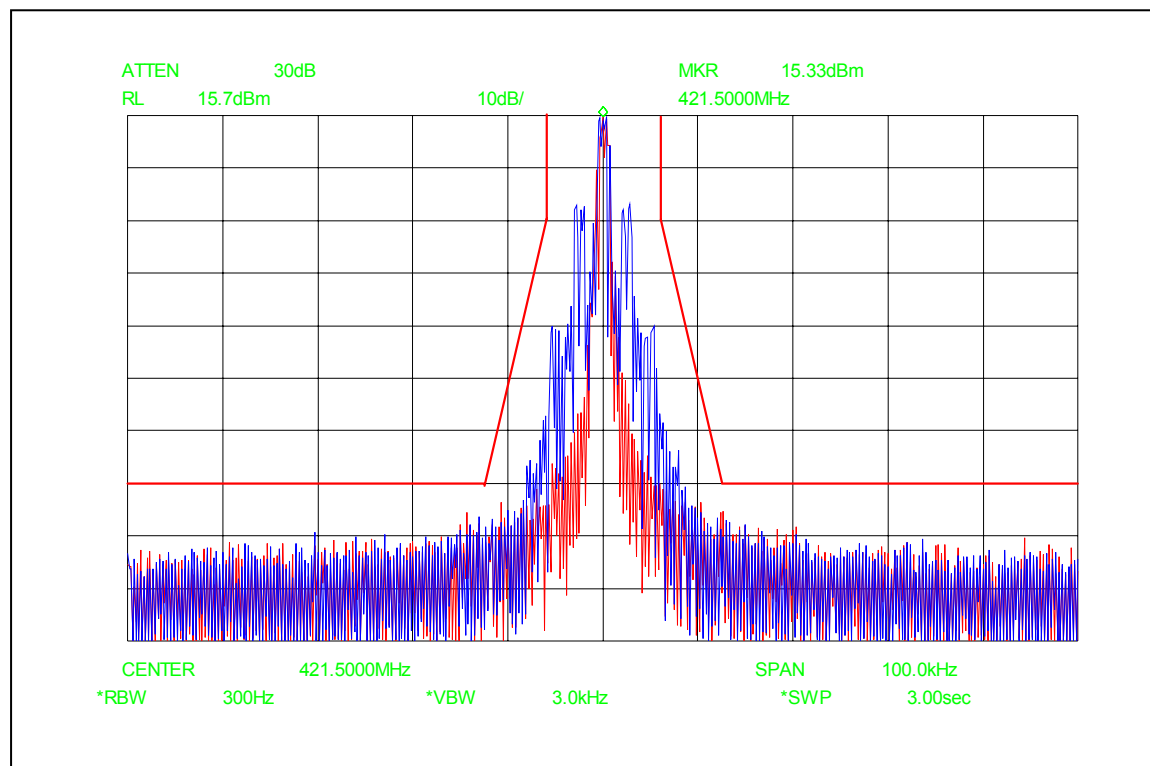


Figure 6E-2: 12.5 KHz Channel Spacing, 2500 Hz Audio and PL Tone Modulation, Mask D

**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**



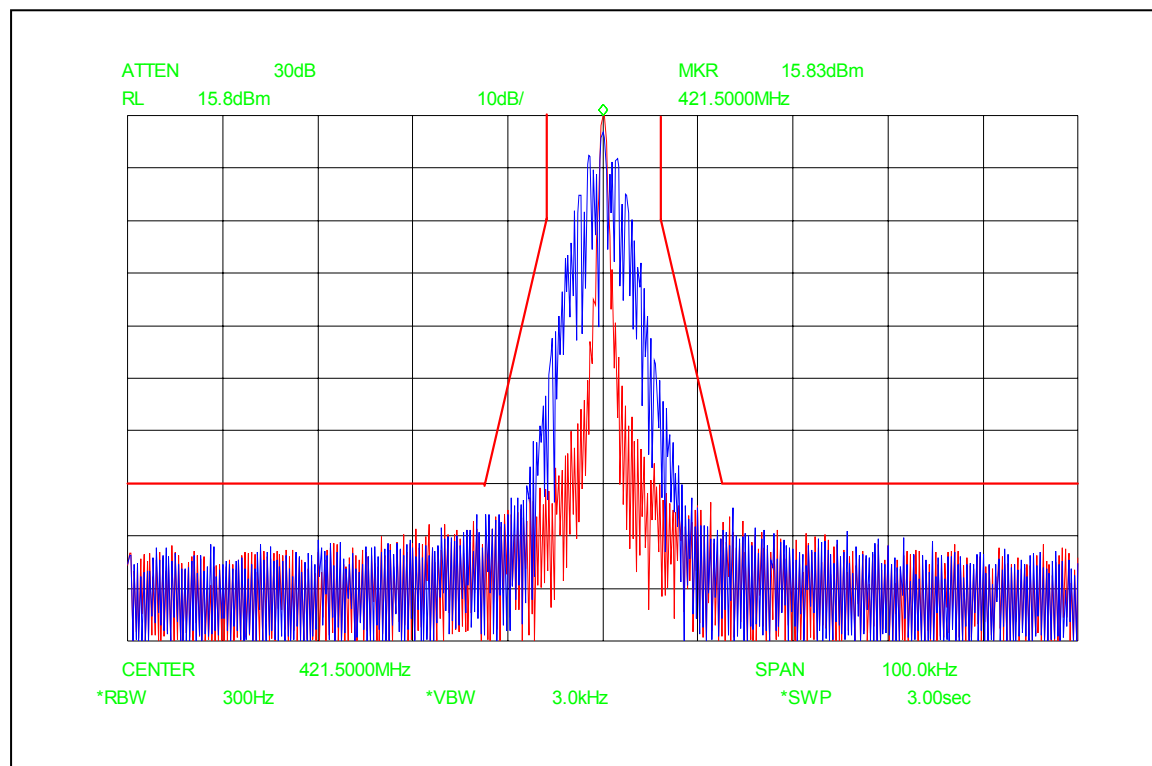


Figure 6E-7: 12.5 KHz Channel Spacing, DTMF Modulation Only , Mask D

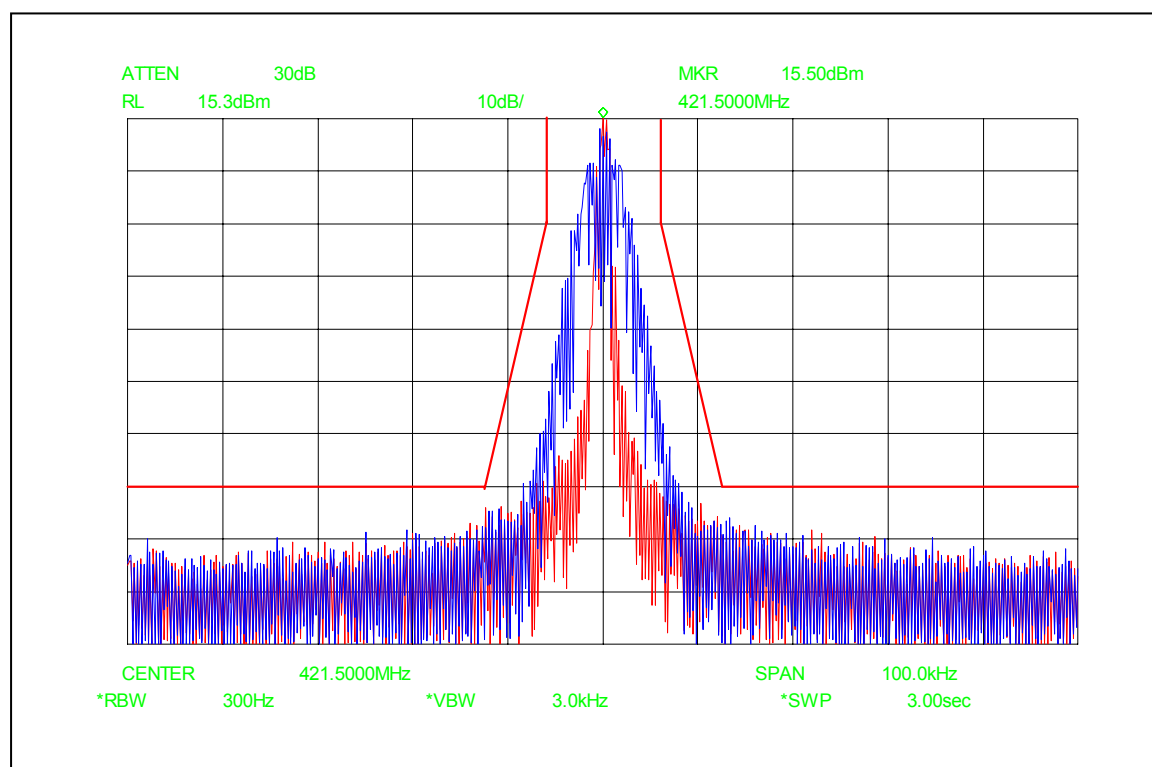


Figure 6E-8: 12.5 KHz Channel Spacing, DTMF Modulation and PL Tone Modulation, Mask D

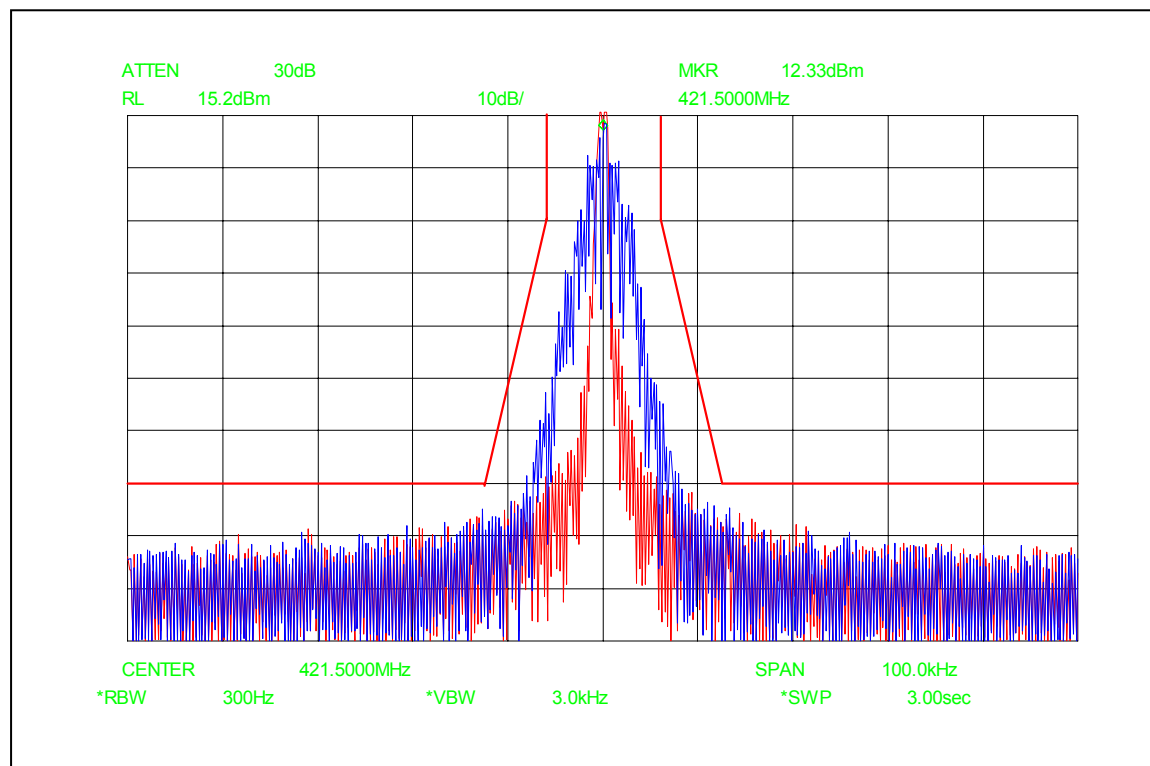


Figure 6E-9: 12.5 KHz Channel Spacing, DTMF Modulation and DPL Tone Modulation , Mask D

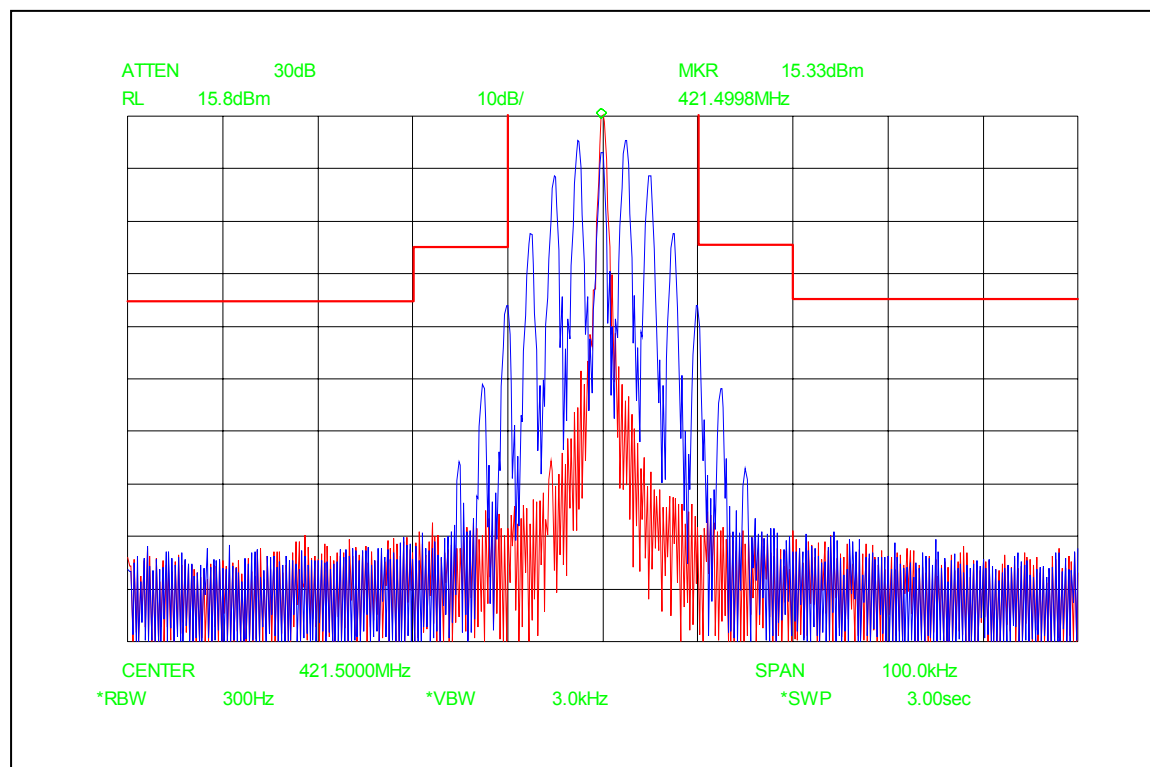


Figure 6E-10: 25 KHz Channel Spacing, 2500 Hz Audio Modulation Only, Mask B

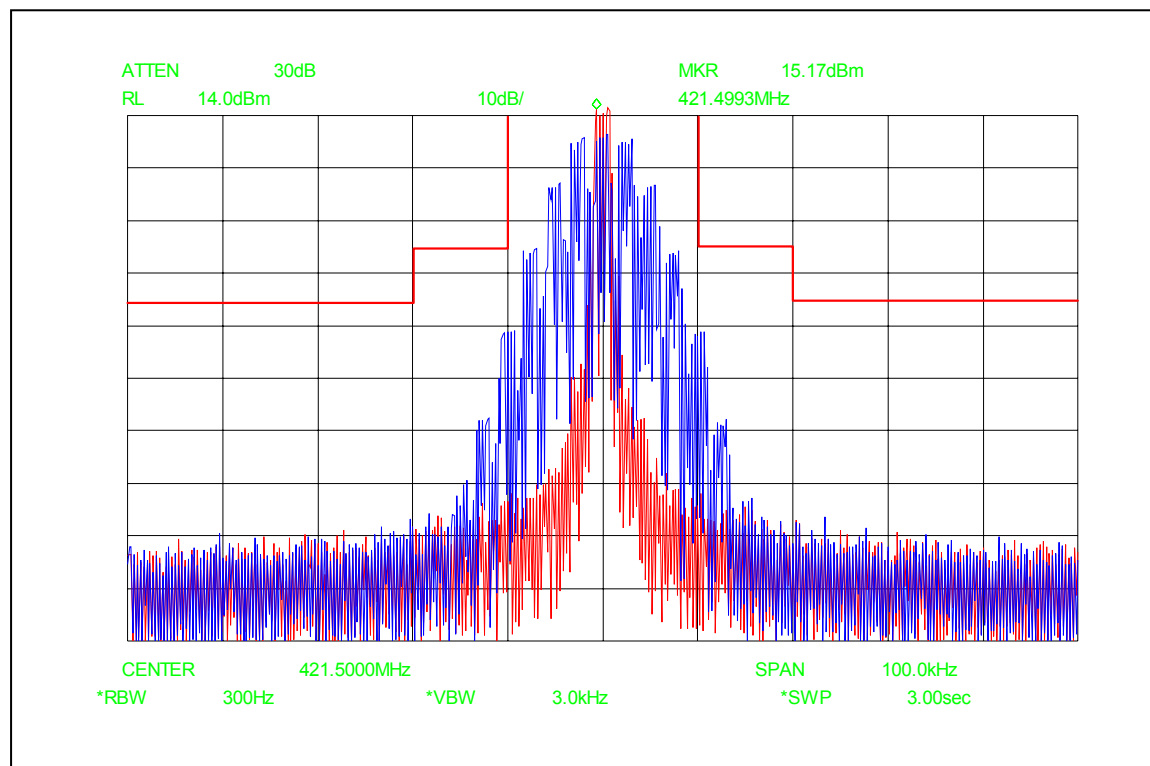


Figure 6E-11: 25 KHz Channel Spacing, 2500 Hz Audio and PL Tone Modulation, Mask B

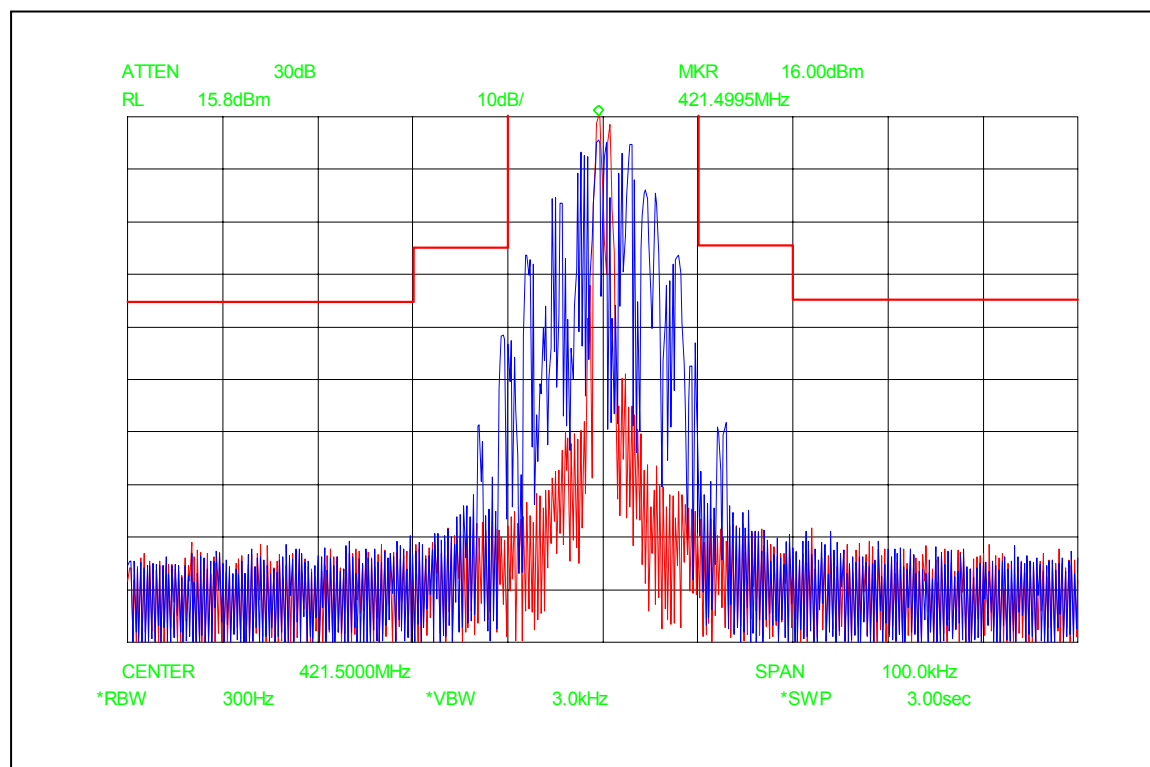


Figure 6E-12: 25 KHz Channel Spacing, 2500 Hz Audio and DPL Tone Modulation, Mask B

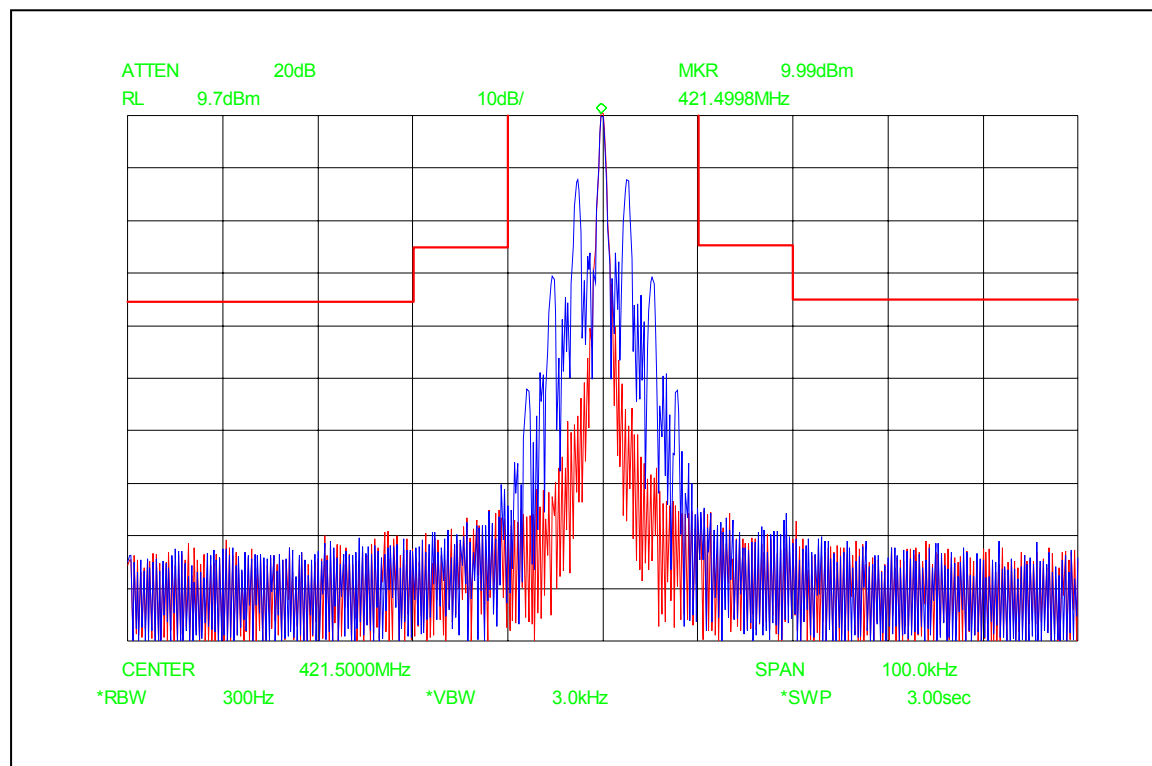


Figure 6E-13: 25 KHz Channel Spacing, 2000/3000 Hz FSK Data Modulation Only ,Mask B

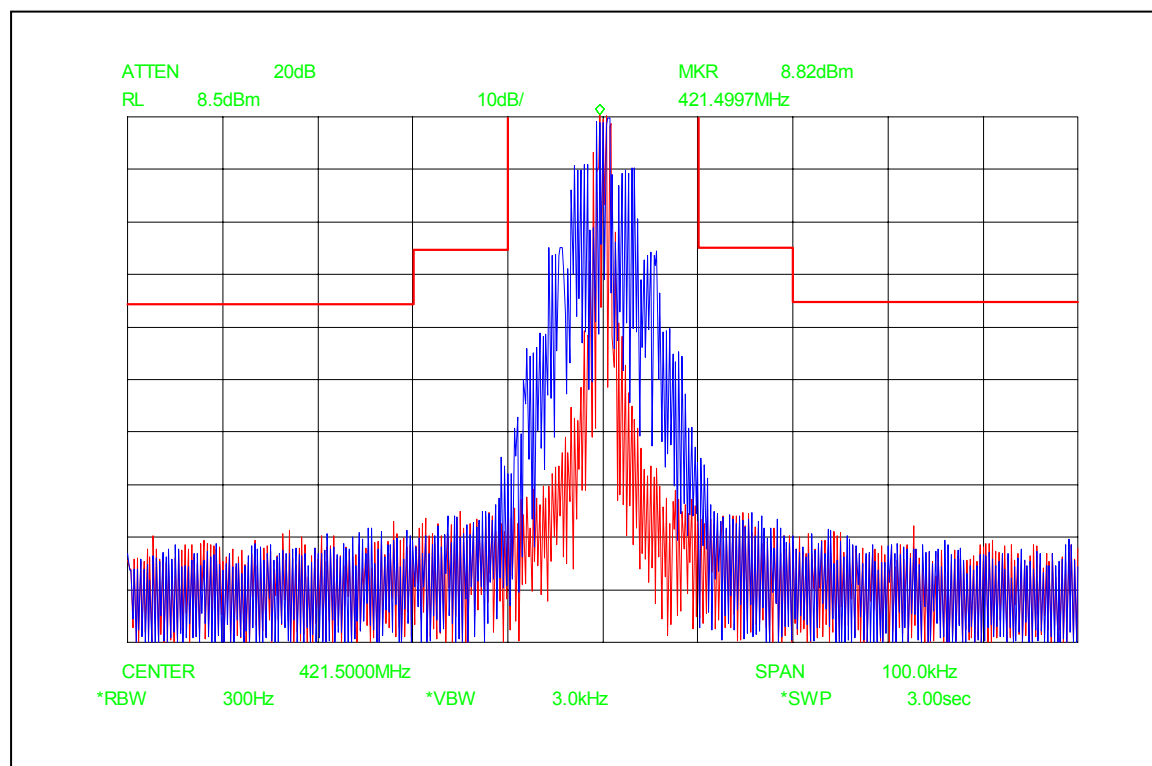


Figure 6E-14: 25 KHz Channel Spacing, 2000/3000 Hz FSK Data and PL Tone Modulation, Mask B

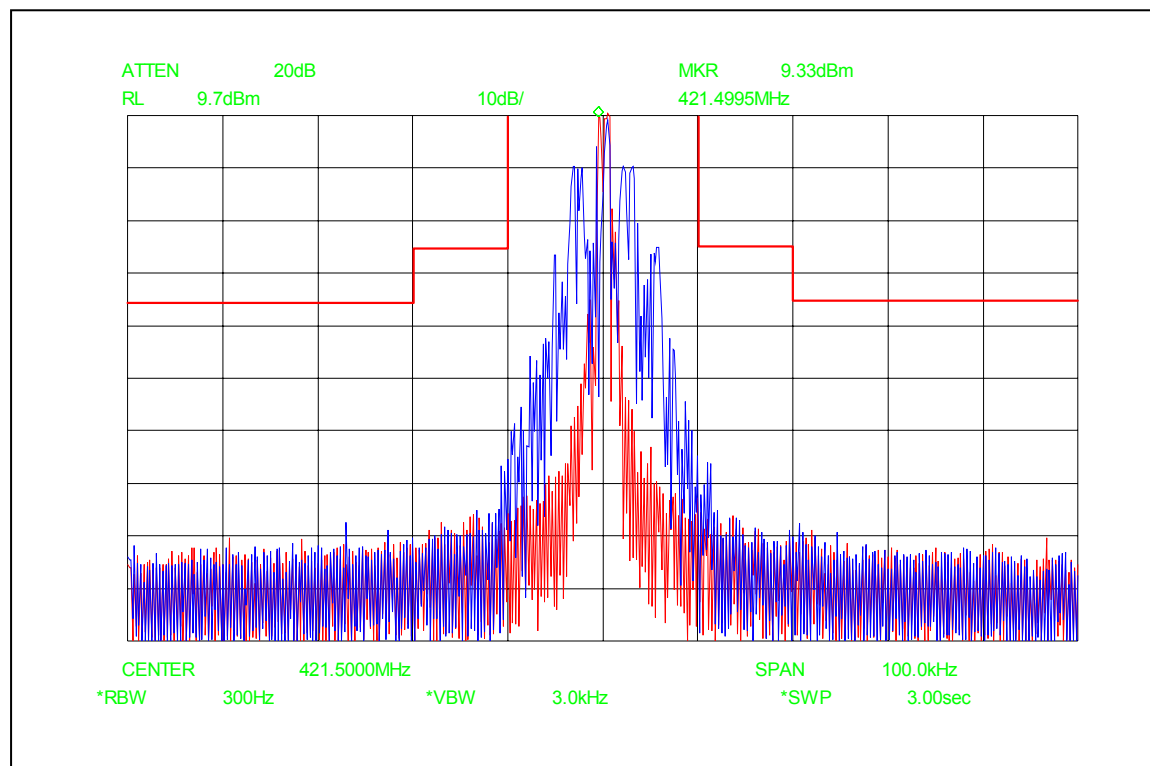


Figure 6E-15: 25 KHz Channel Spacing, 2000/3000 Hz FSK Data and DPL Tone Modulation, Mask B

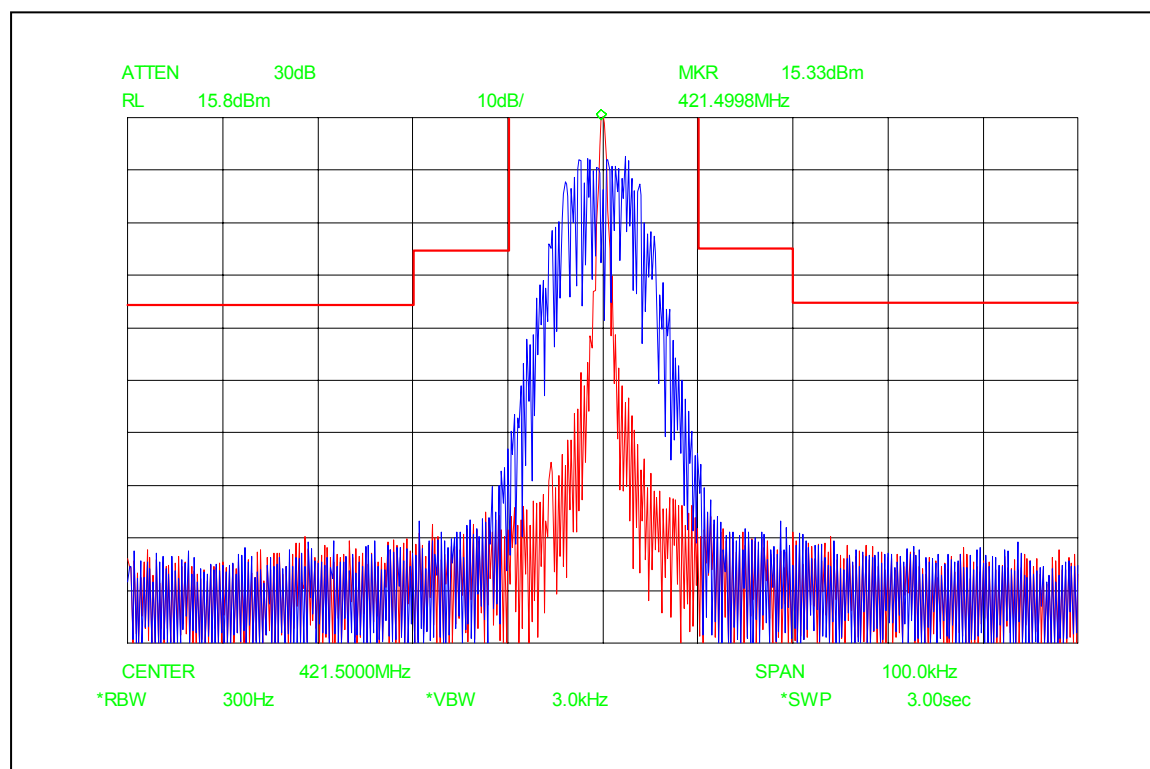


Figure 6E-16: 25 KHz Channel Spacing, DTMF Modulation Only , Mask B

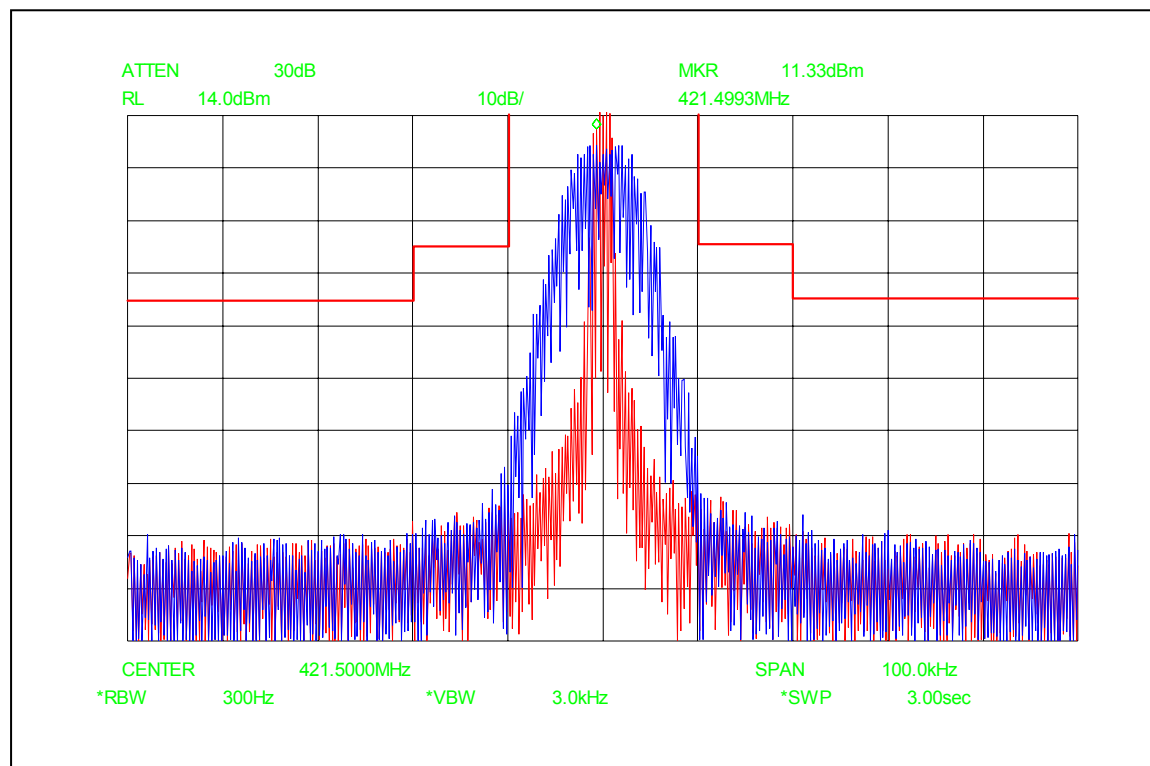


Figure 6E-17: 25 KHz Channel Spacing, DTMF Modulation and PL Tone Modulation, Mask B

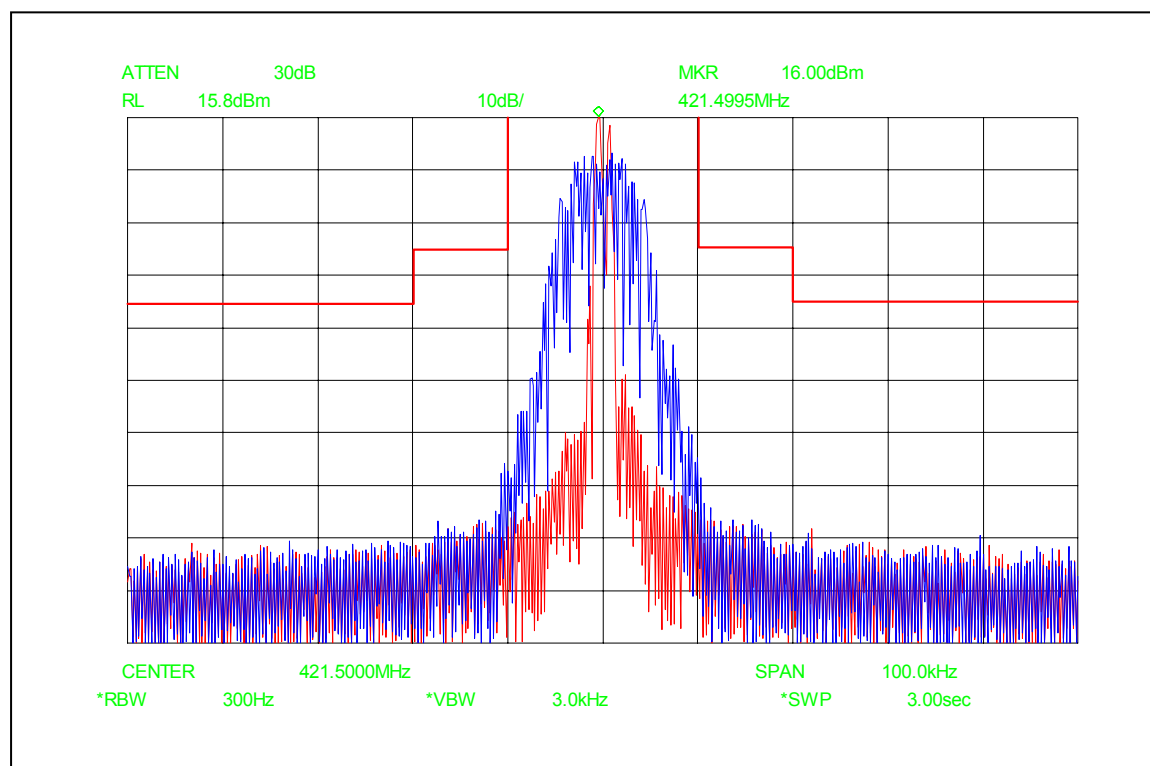


Figure 6E-18: 25 KHz Channel Spacing, DTMF Modulation and DPL Tone Modulation, Mask B

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

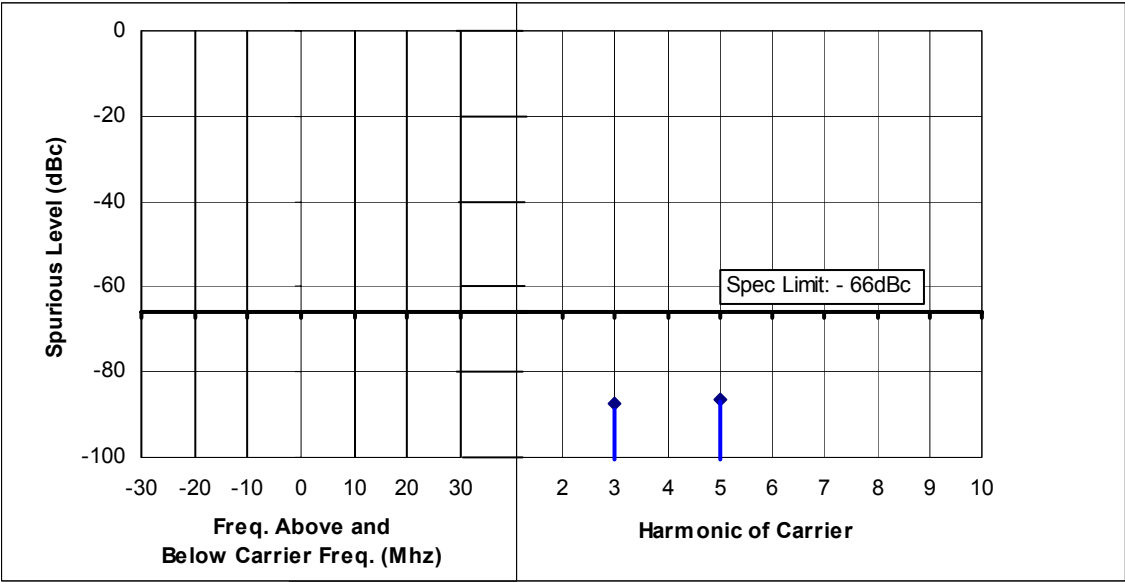


Figure 6F-1: 40 Watts, 403.125 MHz, 12.5 kHz Channel Spacing

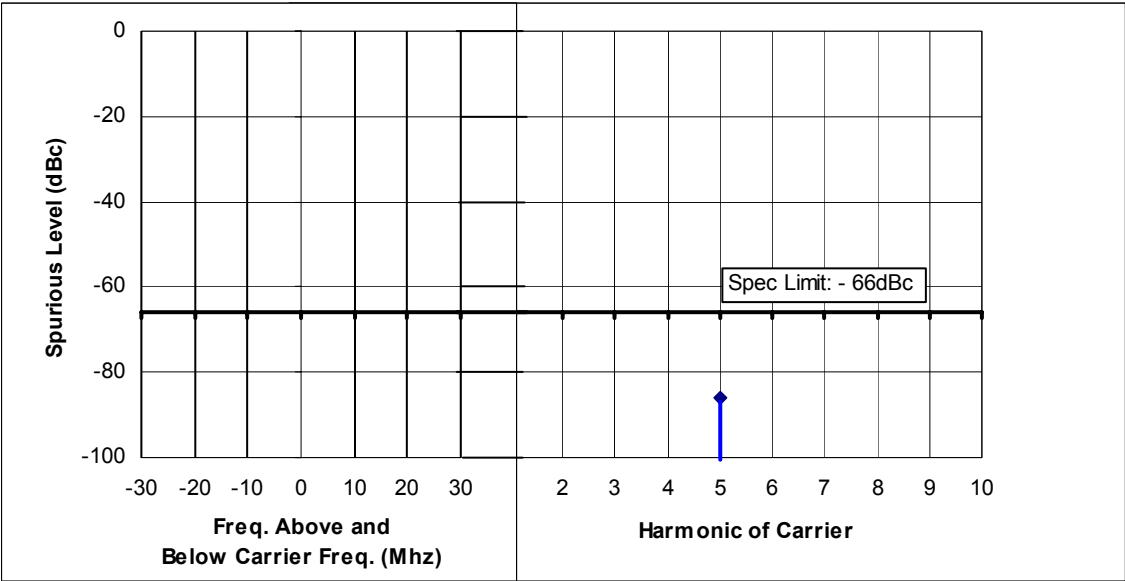


Figure 6F-2: 40 Watts, 421.500 MHz, 12.5 kHz Channel Spacing

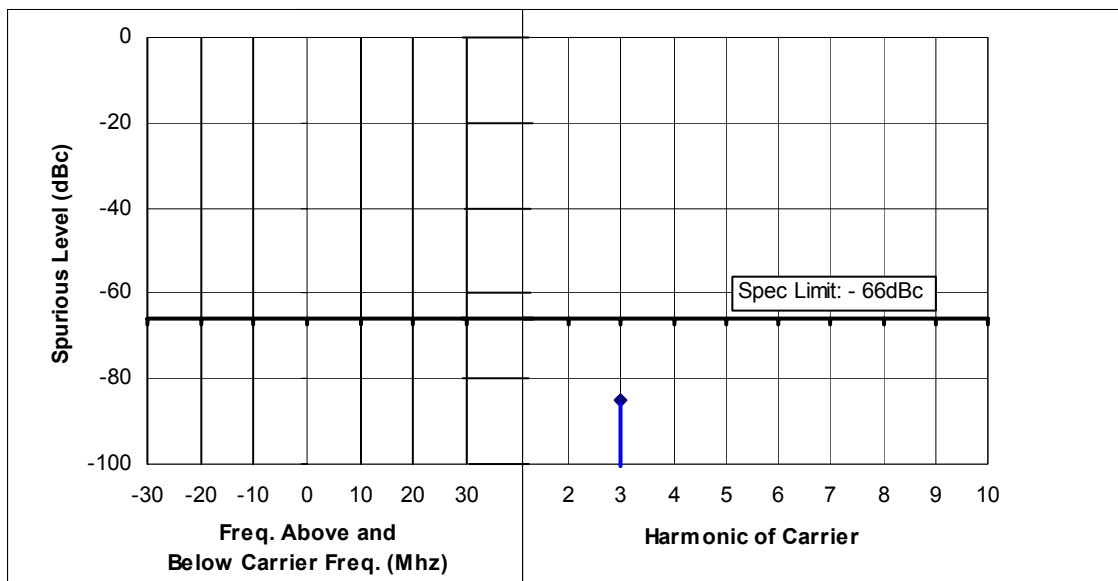


Figure 6F-3: 40 Watts, 439.975 MHz, 12.5 kHz Channel Spacing

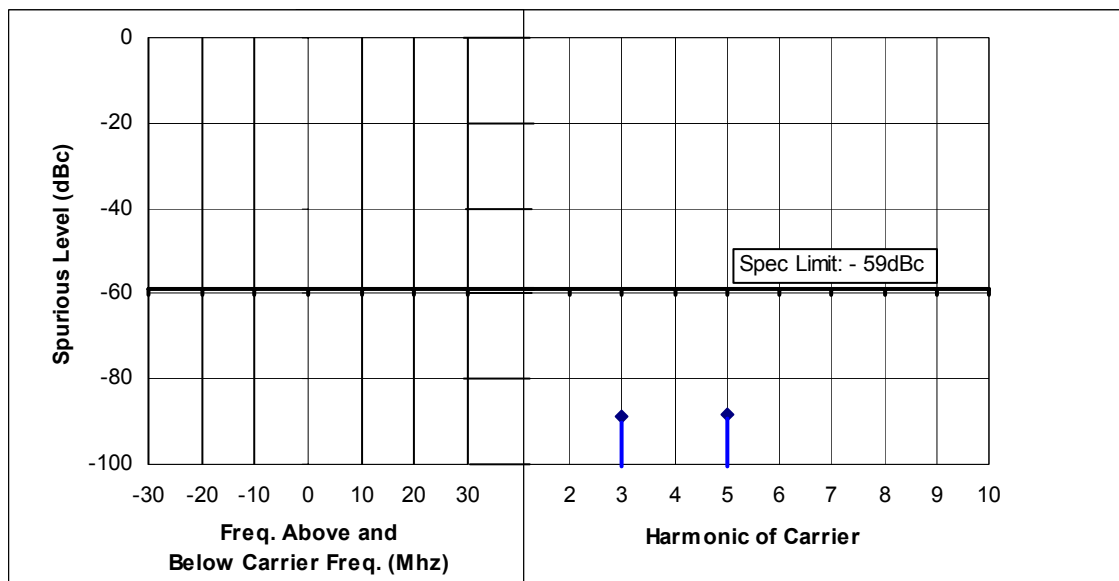


Figure 6F-4: 40 Watts, 403.025 MHz, 25 kHz Channel Spacing

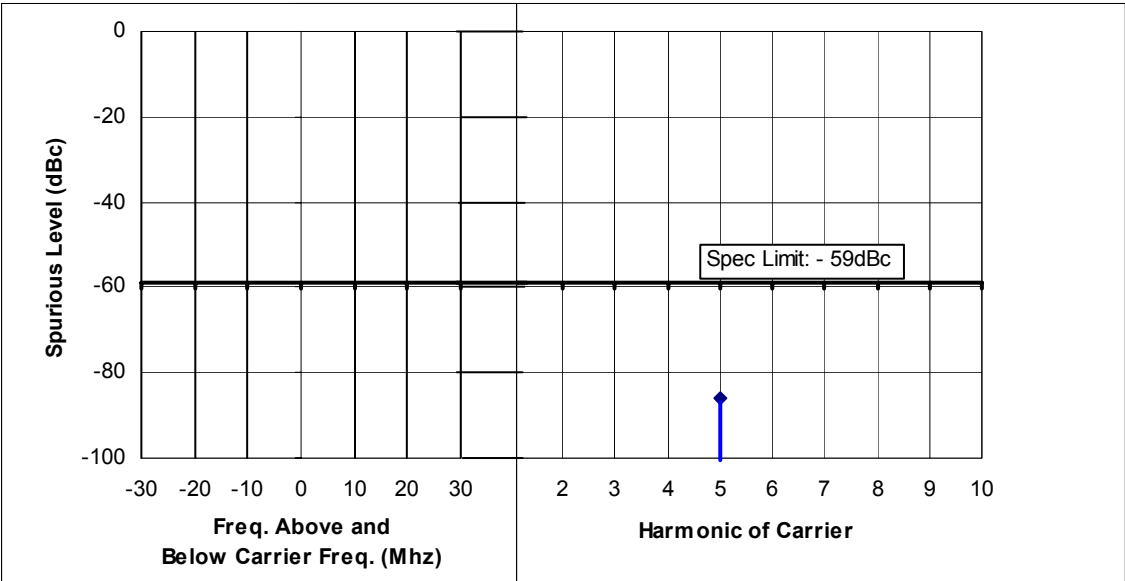


Figure 6F-5: 40 Watts, 421.500 MHz, 25 kHz Channel Spacing

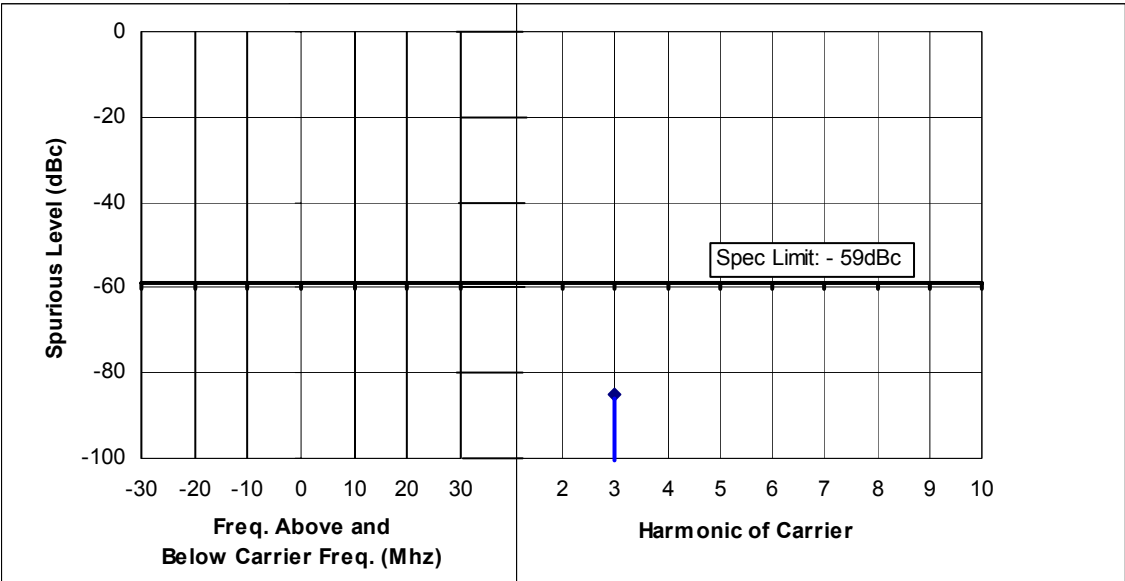


Figure 6F-6: 40 Watts, 439.975 MHz, 25 kHz Channel Spacing

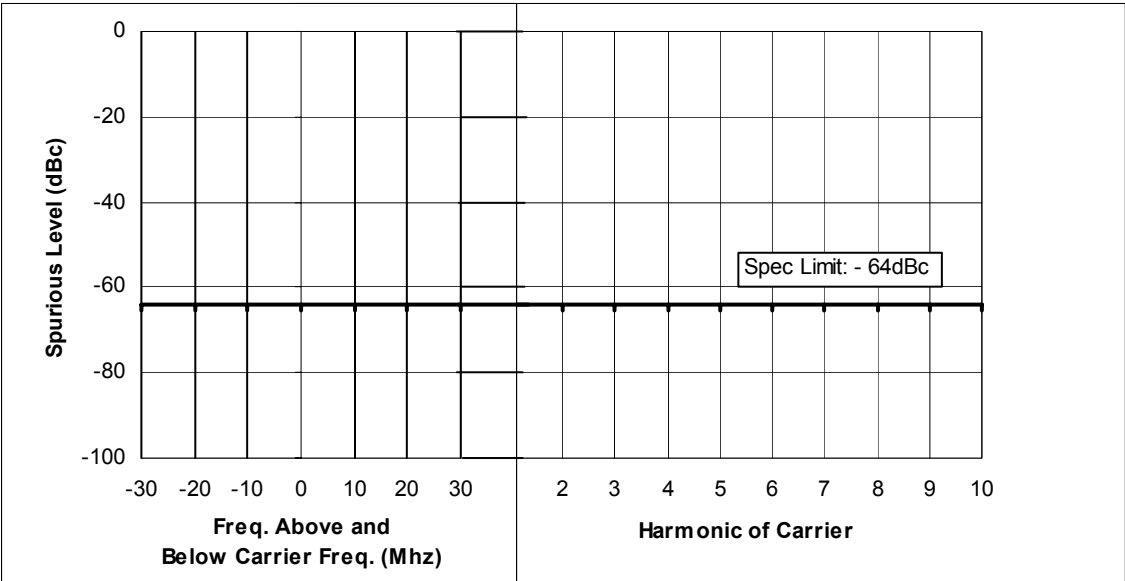


Figure 6F-7: 25 Watts, 403.025 MHz, 12.5 kHz Channel Spacing
Note: Spurious Level could not be detected due to noise limitations

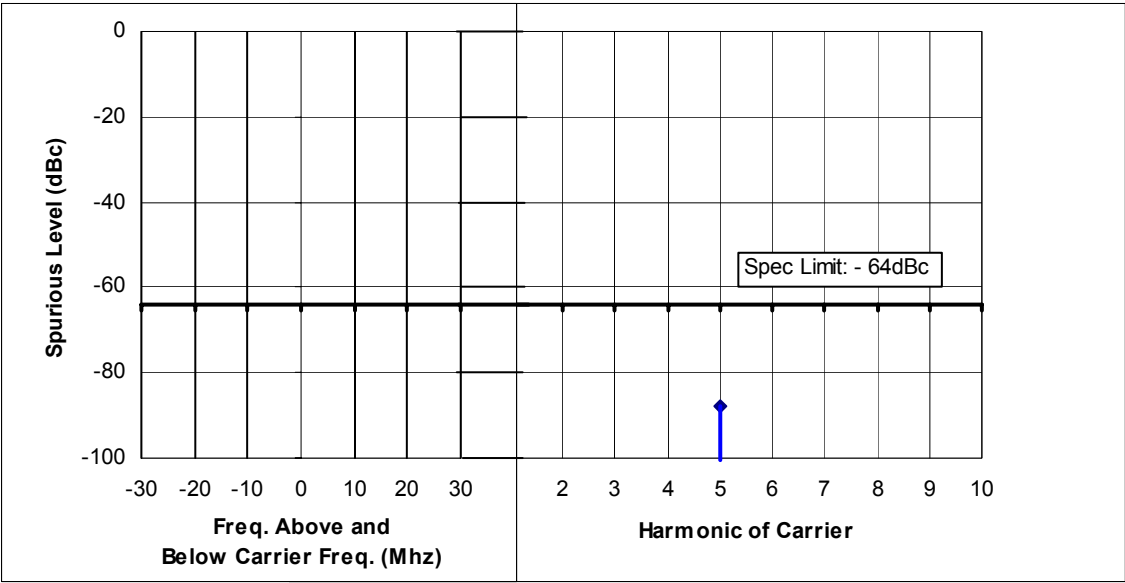


Figure 6F-8: 25 Watts, 421.500 MHz, 12.5 kHz Channel Spacing

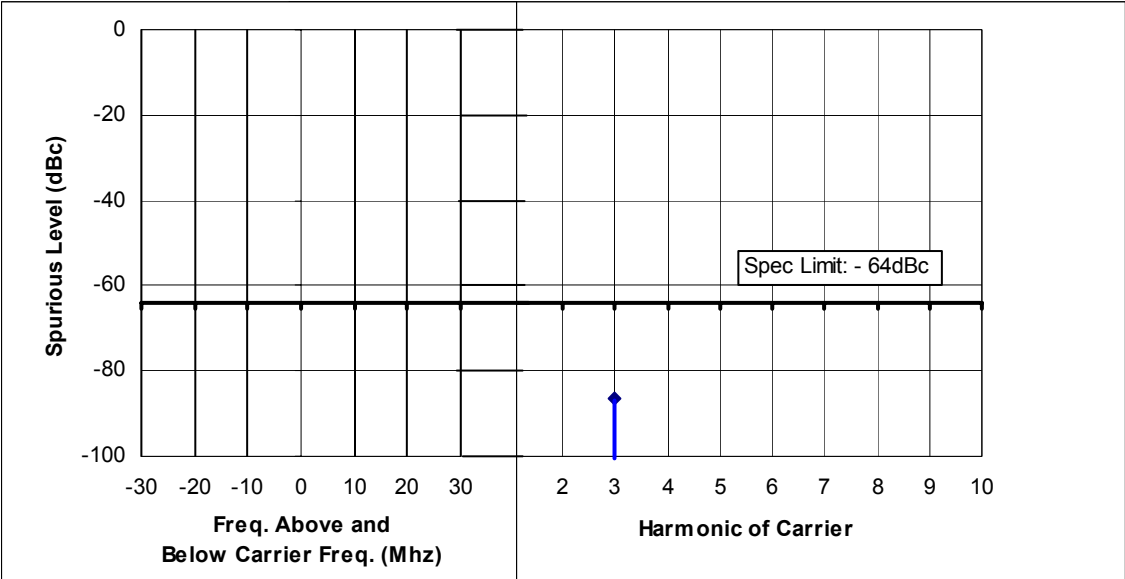


Figure 6F-9: 25 Watts, 439.975MHz, 12.5 kHz Channel Spacing

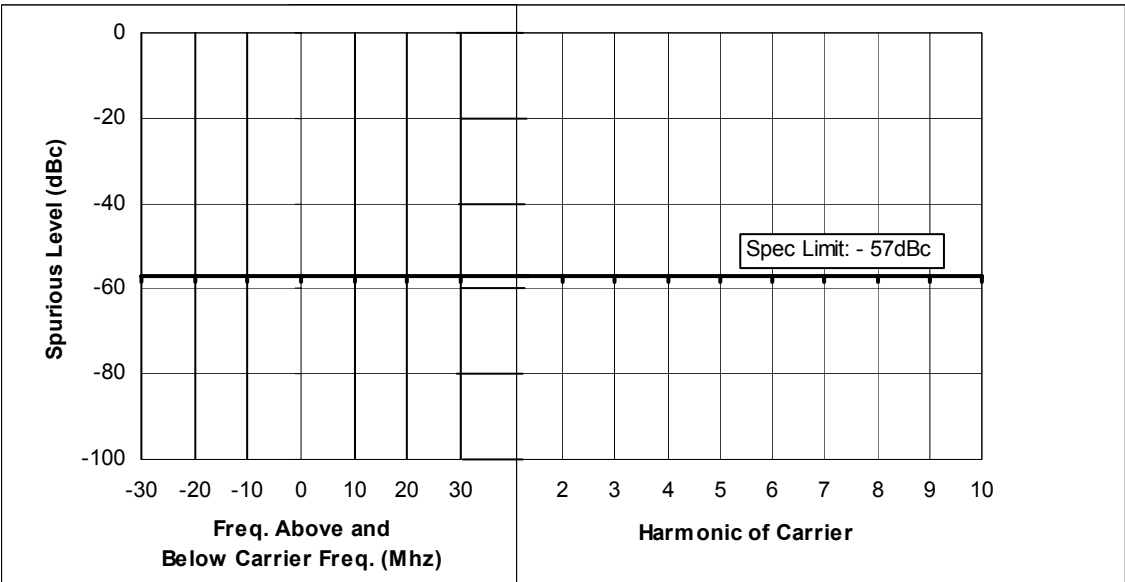


Figure 6F-10: 25 Watts, 403.025 MHz, 25 kHz Channel Spacing
Note: Spurious Level could not be detected due to noise limitations

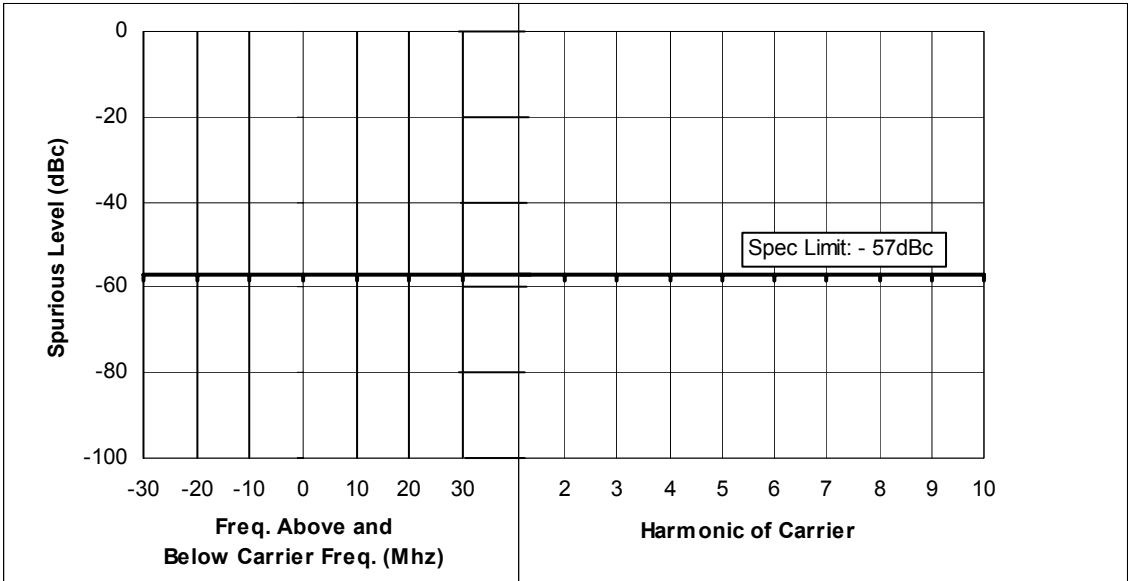


Figure 6F-11: 25 Watts, 421.500 MHz, 25 kHz Channel Spacing
Note: Spurious Level could not be detected due to noise limitations

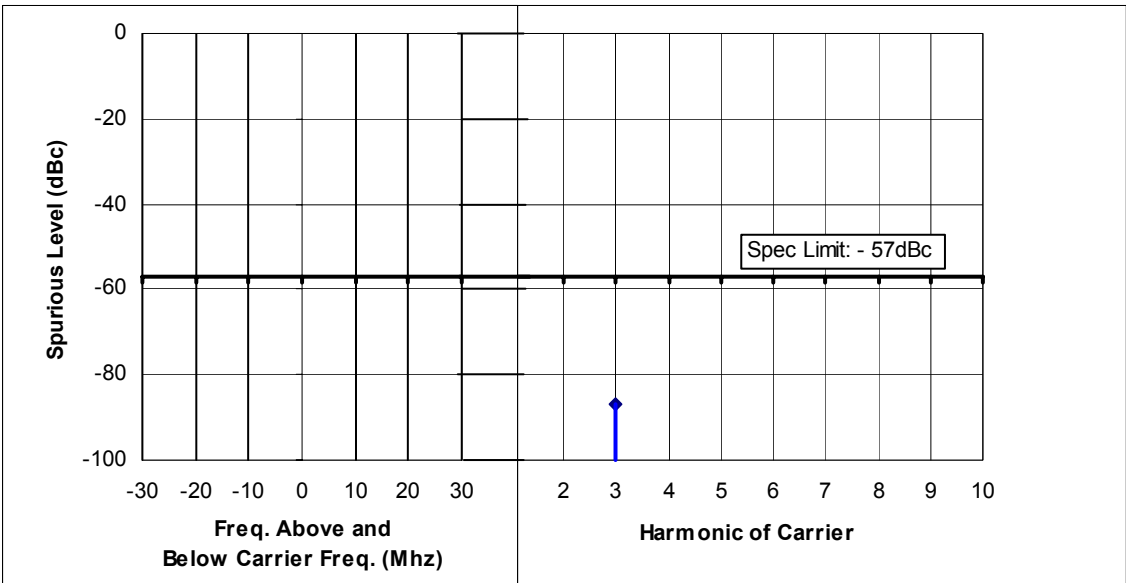


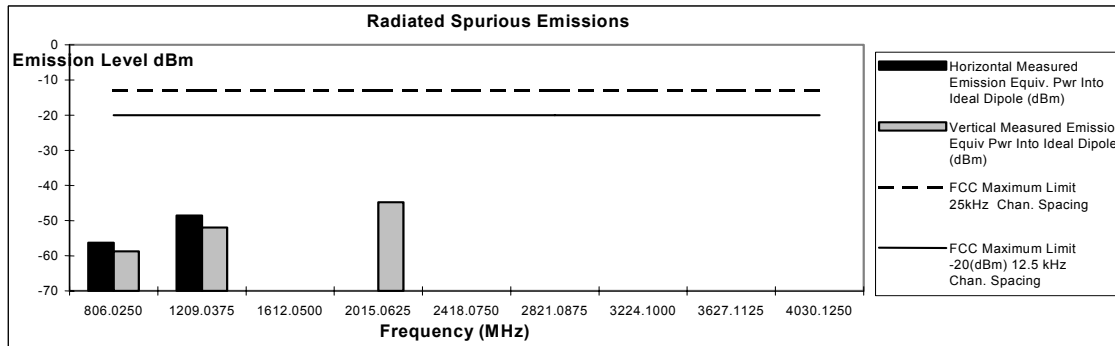
Figure 6F-12: 25 Watts, 439.975 MHz, 25 kHz Channel Spacing

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

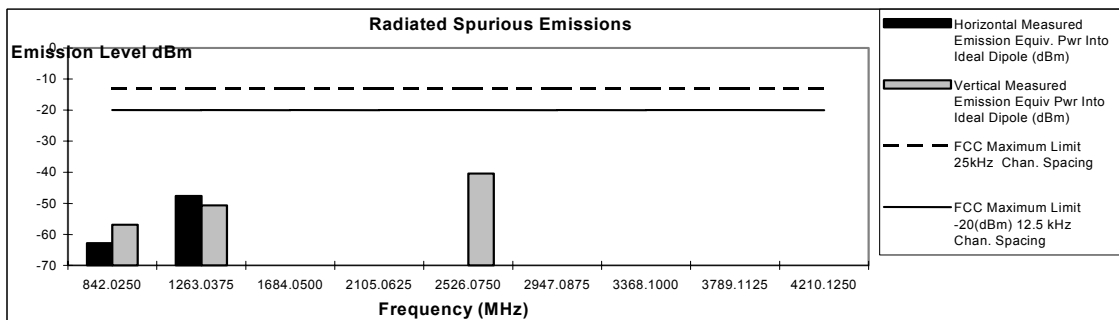
- Notes: 1) The shown results are the worst case results for the given frequency. Measurements were made to the 10th harmonic, antenna polarization horizontal and vertical.
- 2) The margin [dB] is the amount in dB below the FCC specification limit of -13dBm(red line on graphs)

Transmitter Radiated Spurious Emissions: ELM UHF R1**403.0125 MHz 40 Watts Channel Spacing 25kHz | S/N XIDA**

Frequency (MHz)	FCC Maximum Limit 25kHz 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)
806.0250	-13	-20	-56.25	-58.74
1209.0375	-13	-20	-48.59	-51.99
1612.0500	-13	-20	*	*
2015.0625	-13	-20	*	-44.80
2418.0750	-13	-20	*	*
2821.0875	-13	-20	*	*
3224.1000	-13	-20	*	*
3627.1125	-13	-20	*	*
4030.1250	-13	-20	*	*

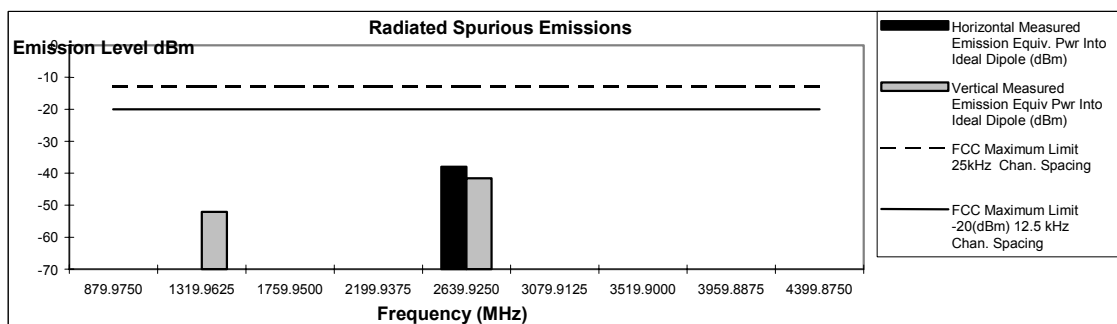
**Transmitter Radiated Spurious Emissions: ELM UHF R1****421.0125 MHz 40 Watts Channel Spacing 25kHz | S/N XIDA**

Frequency (MHz)	FCC Maximum Limit 25kHz 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)
842.0250	-13	-20	-62.88	-56.93
1263.0375	-13	-20	-47.68	-50.70
1684.0500	-13	-20	*	*
2105.0625	-13	-20	*	*
2526.0750	-13	-20	*	-40.43
2947.0875	-13	-20	*	*
3368.1000	-13	-20	*	*
3789.1125	-13	-20	*	*
4210.1250	-13	-20	*	*



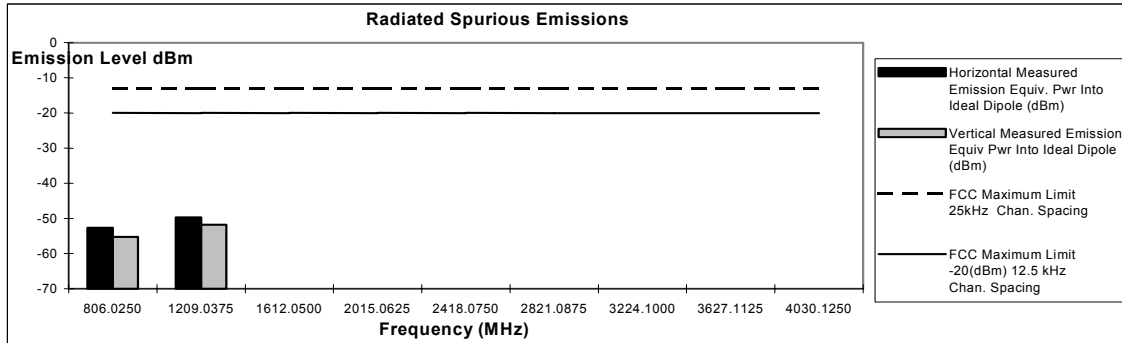
Transmitter Radiated Spurious Emissions: ELM UHF R1**439.9875 MHz****40 Watts****Channel Spacing 25kHz | S/N XIDAN01N**

Frequency (MHz)	FCC Maximum Limit 25kHz 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)
879.9750	-13	-20	*	*
1319.9625	-13	-20	*	-52.10
1759.9500	-13	-20	*	*
2199.9375	-13	-20	*	*
2639.9250	-13	-20	-37.91	-41.58
3079.9125	-13	-20	*	*
3519.9000	-13	-20	*	*
3959.8875	-13	-20	*	*
4399.8750	-13	-20	*	*

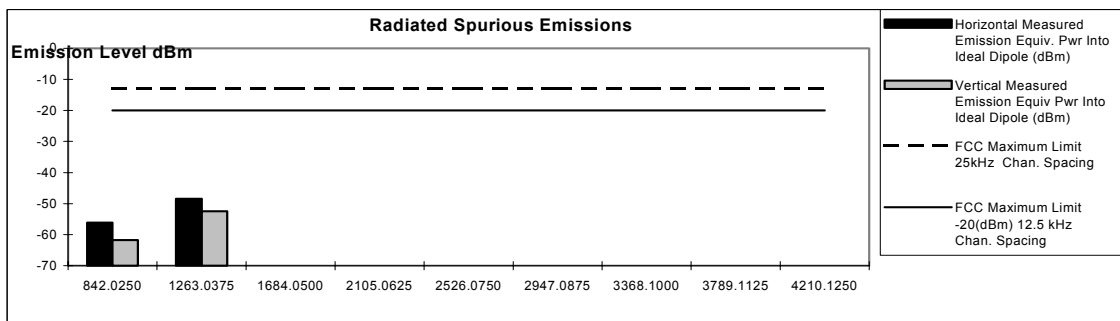


Transmitter Radiated Spurious Emissions: ELM UHF R1**403.0125 MHz 25 Watts****Channel Spacing 25kHz | S/N XIDA**

Frequency (MHz)	FCC Maximum Limit 25kHz 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)
806.0250	-13	-20	-52.64	-55.22
1209.0375	-13	-20	-49.66	-51.78
1612.0500	-13	-20	*	*
2015.0625	-13	-20	*	*
2418.0750	-13	-20	*	*
2821.0875	-13	-20	*	*
3224.1000	-13	-20	*	*
3627.1125	-13	-20	*	*
4030.1250	-13	-20	*	*

**Transmitter Radiated Spurious Emissions: ELM UHF R1****421.0125 MHz 25 Watts****Channel Spacing 25kHz | S/N XIDA**

Frequency (MHz)	FCC Maximum Limit 25kHz 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)
842.0250	-13	-20	-56.13	-61.75
1263.0375	-13	-20	-48.45	-52.47
1684.0500	-13	-20	*	*
2105.0625	-13	-20	*	*
2526.0750	-13	-20	*	*
2947.0875	-13	-20	*	*
3368.1000	-13	-20	*	*
3789.1125	-13	-20	*	*
4210.1250	-13	-20	*	*



Transmitter Radiated Spurious Emissions: ELM UHF R1**439.9875 MHz****25 Watts****Channel Spacing 25kHz | S/N XIDAN01N**

Frequency (MHz)	FCC Maximum Limit 25kHz 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)
879.9750	-13	-20	*	*
1319.9625	-13	-20	*	*
1759.9500	-13	-20	*	*
2199.9375	-13	-20	*	-45.53
2639.9250	-13	-20	*	*
3079.9125	-13	-20	*	*
3519.9000	-13	-20	*	*
3959.8875	-13	-20	*	*
4399.8750	-13	-20	*	*

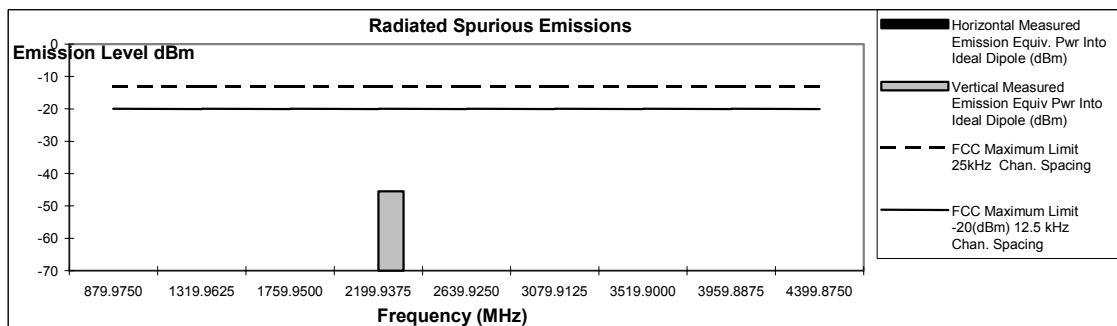
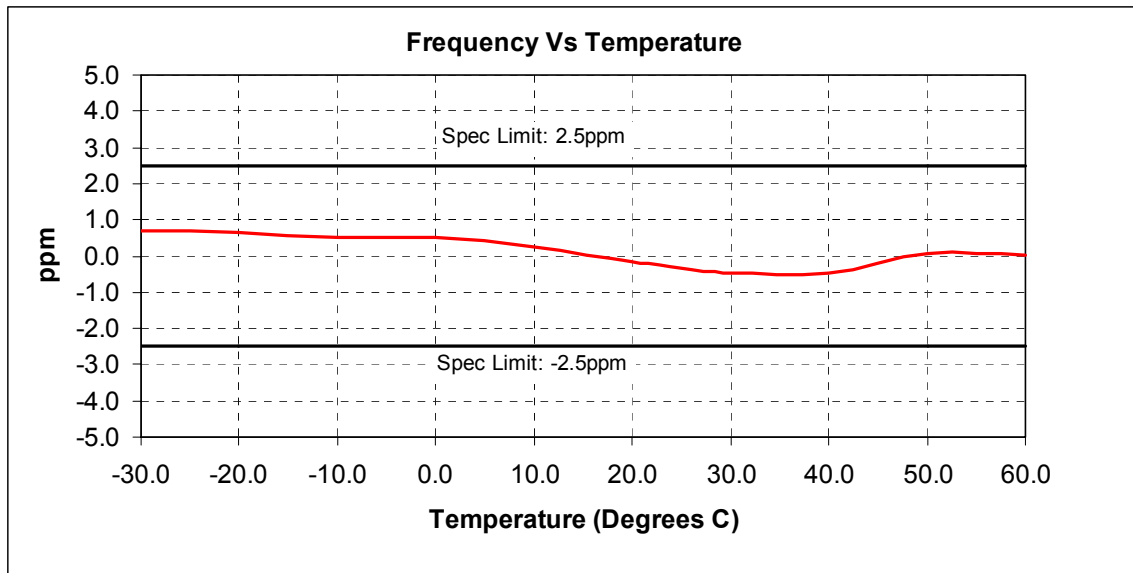
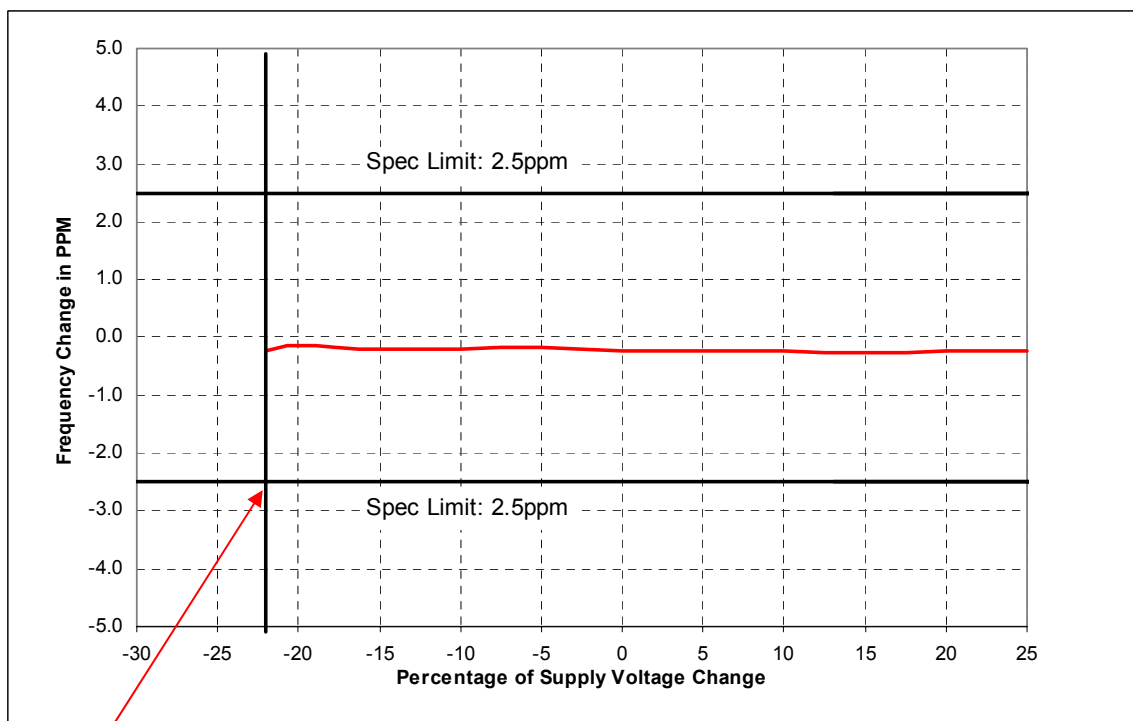


EXHIBIT 6H – Frequency Stability - Pursuant 47 CFR 2.1047 and 2.1033(c)(13)**Figure 6H-1: Frequency Stability vs. Temperature****Figure 6H-2: Frequency Stability vs. Supply Voltage**

Minimum supply voltage 10.6, 22%
below nominal supply voltage
Transmitter cannot function below this
point

EXHIBIT 6I – Transient Frequency Behavior

Note: Measurement made at 421.50 MHz

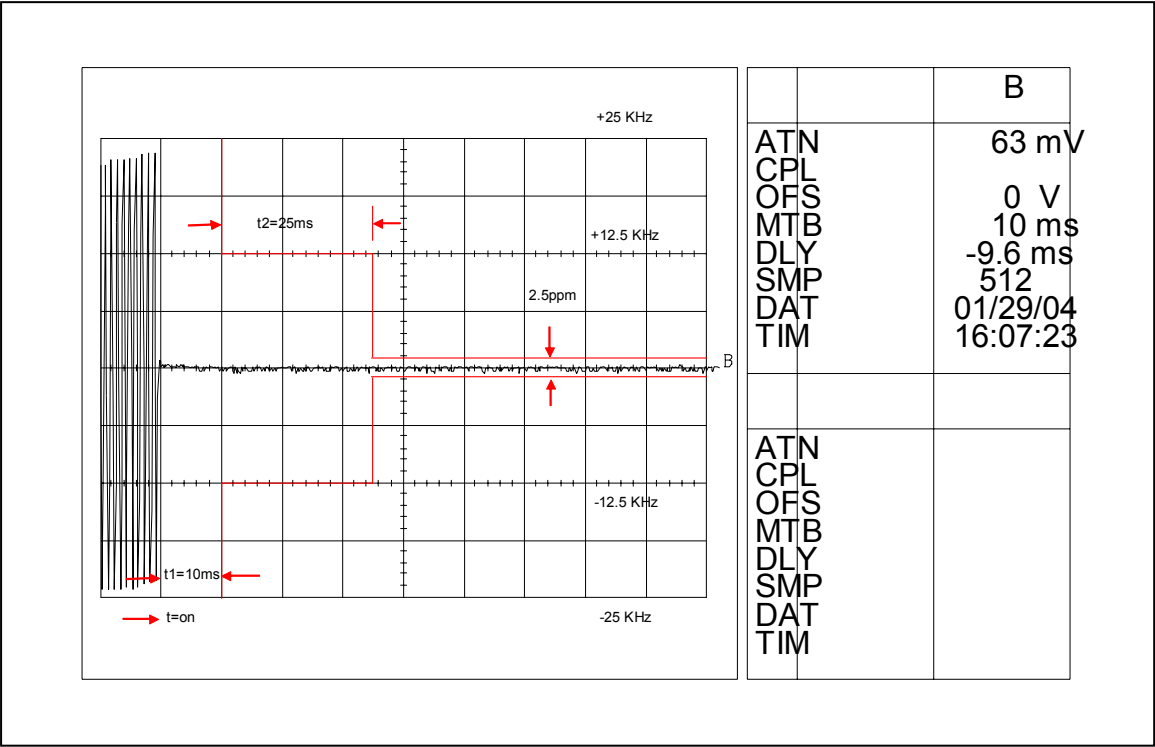


Figure 6I-1: 40 Watts, 12.5 KHz Key-Up Attack Time

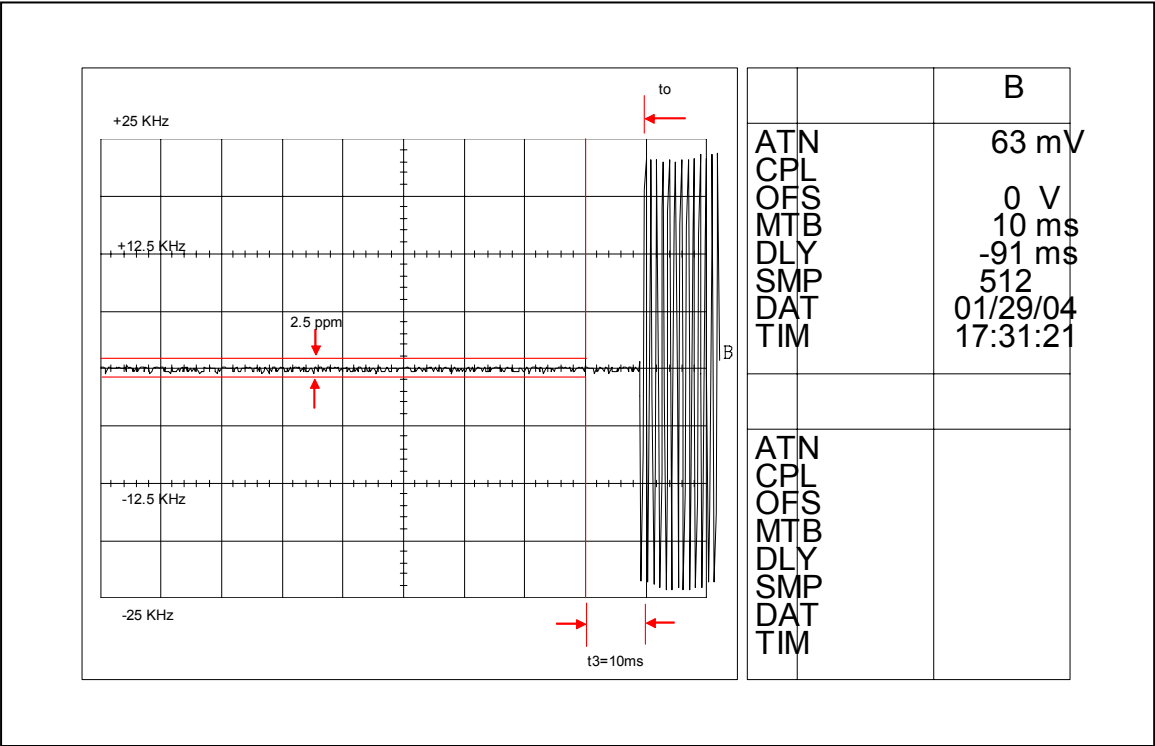


Figure 6I-2: 40 Watts, 12.5 KHz De-Key Decay Time

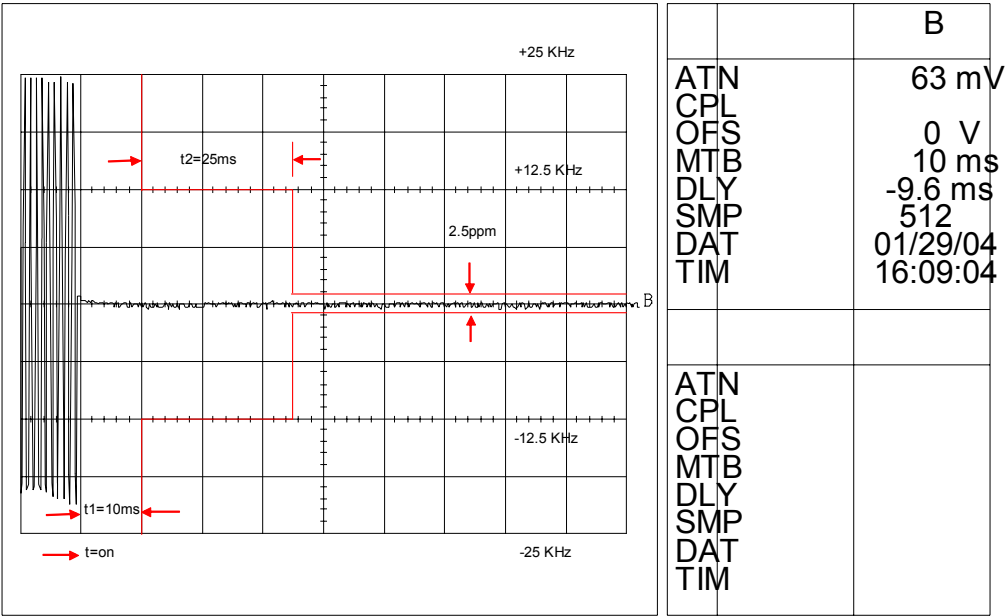


Figure 6I-3: 40 Watts, 25 KHz Key-Up Attack Time

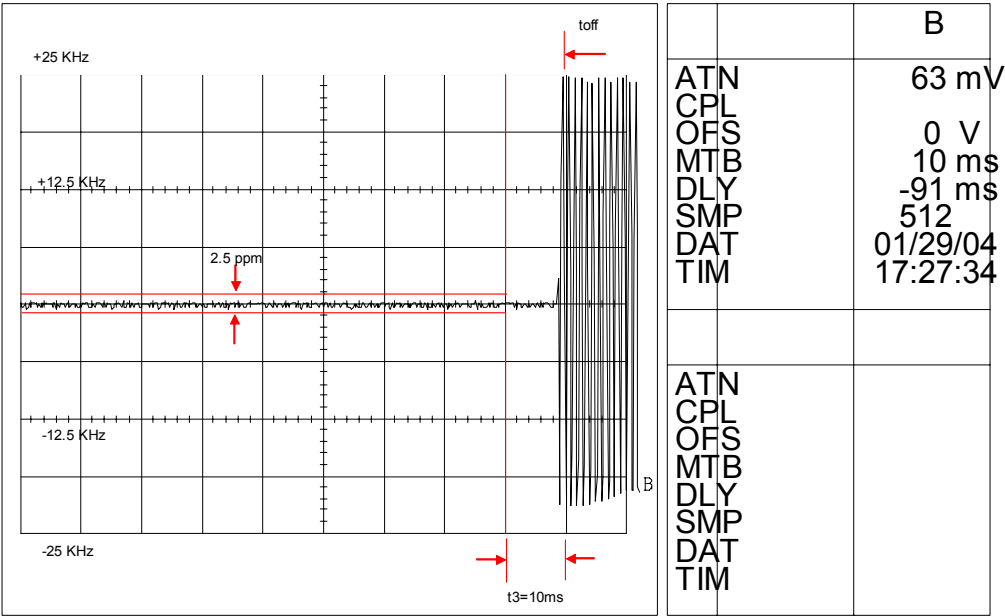


Figure 6i-4: 40 Watts, 25 KHz De-Key Decay Time

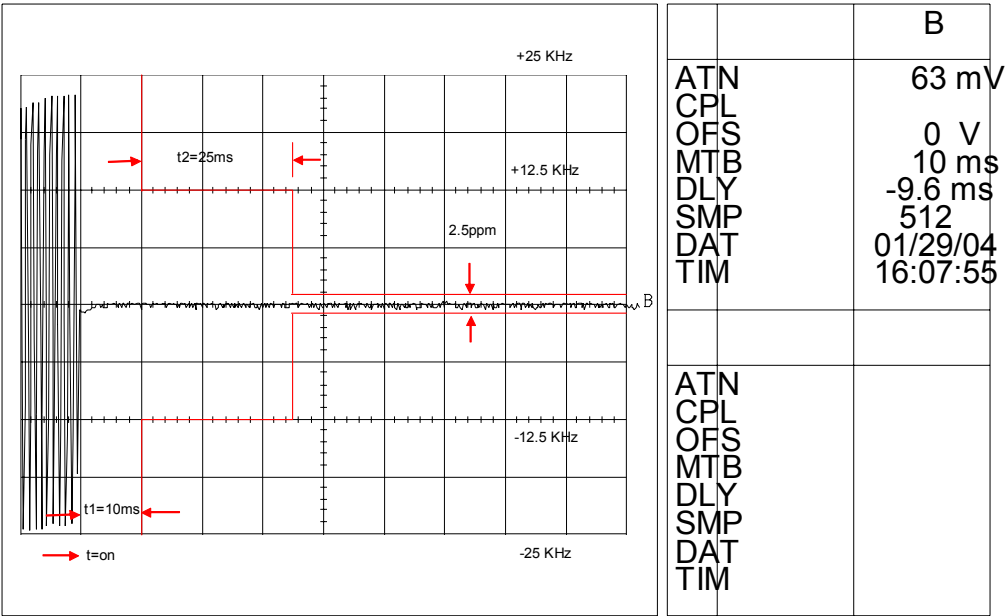


Figure 6I-5: 25 Watts, 12.5 KHz Key-Up Attack Time

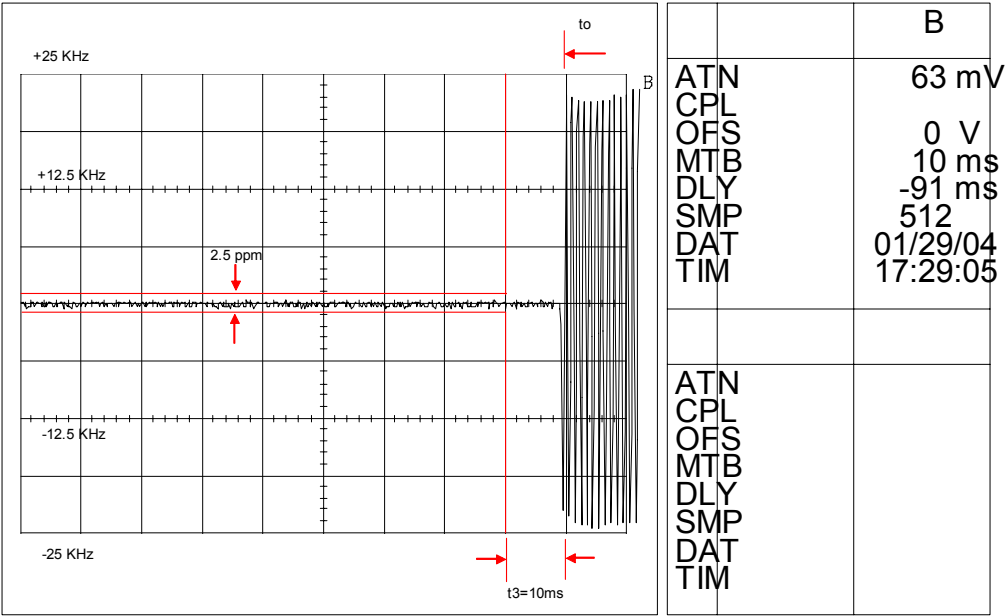


Figure 6I-6: 25 Watts, 12.5 KHz De-Key Decay Time

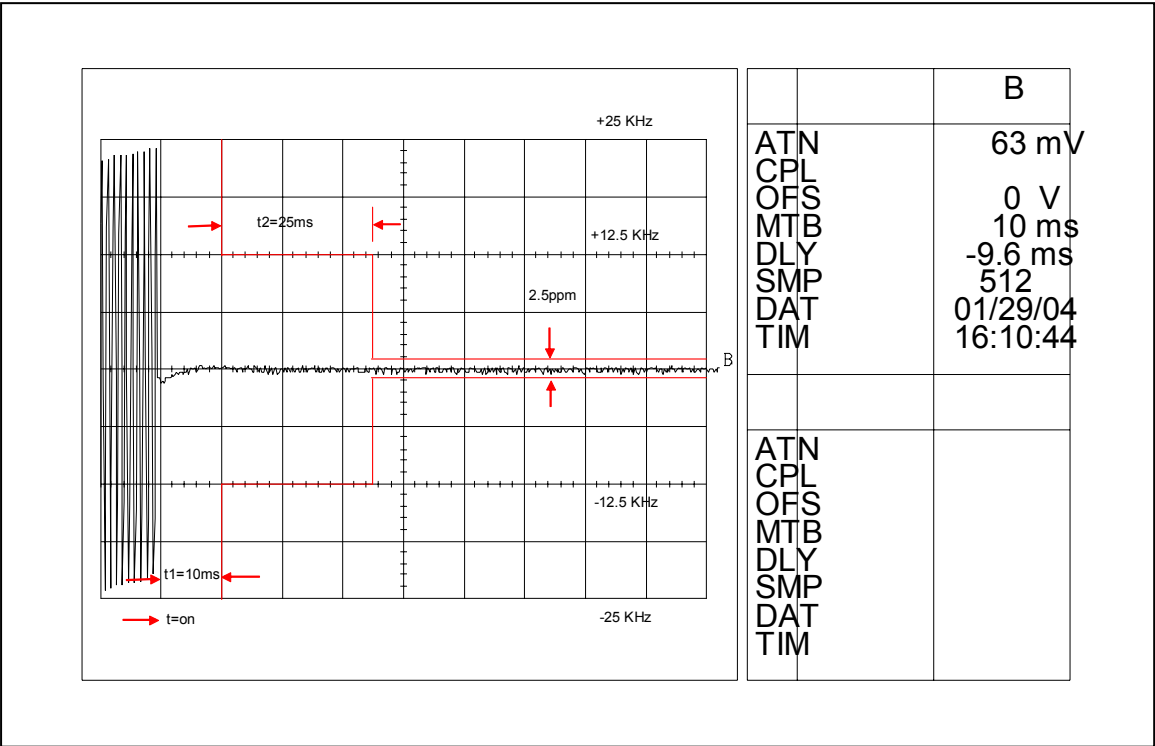


Figure 6I-7: 25 Watts, 25 KHz Key-Up Attack Time

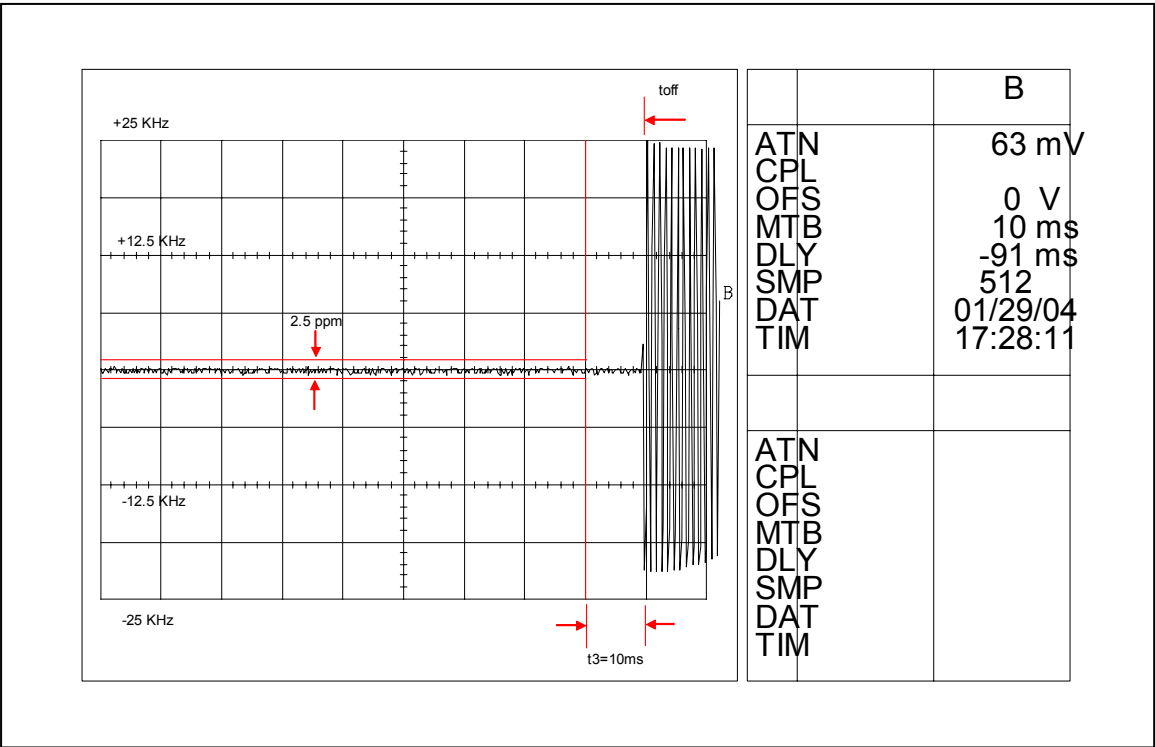


Figure 6I-8: 25 Watts, 25 KHz De-Key Decay Time