

SUBMITTED MEASURED DATA

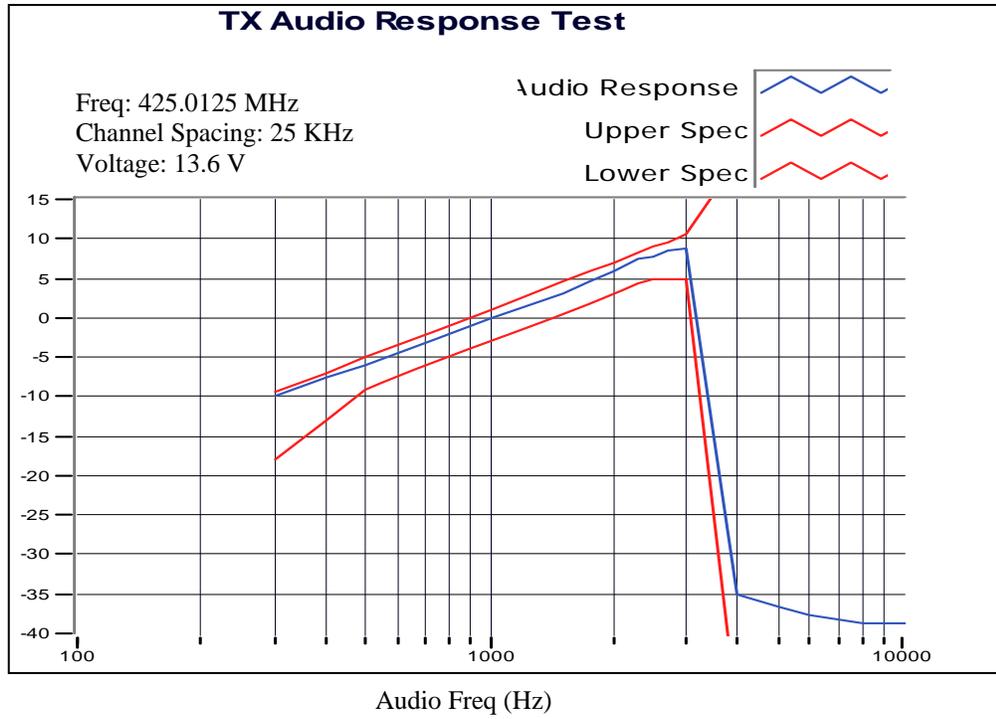
<u>MEASUREMENT</u>	<u>EXHIBIT</u>	<u>NUMBER OF PAGES</u>
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RF POWER OUTPUT DATA

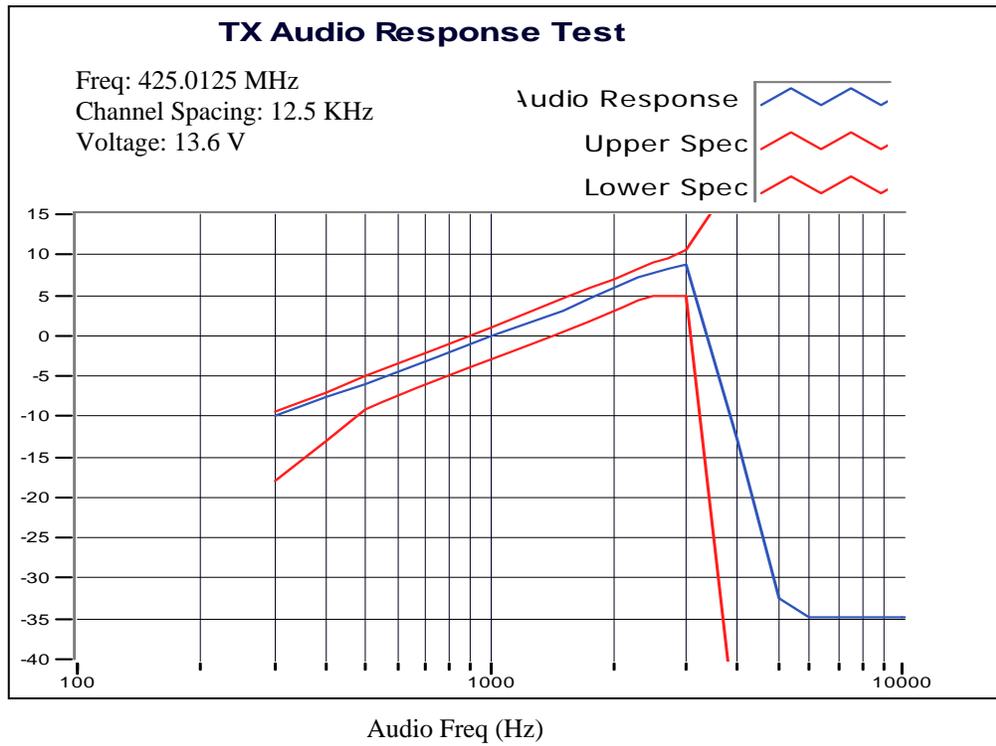
The RF power output was measured with the indicated voltage applied to and current into the final RF amplifying device.

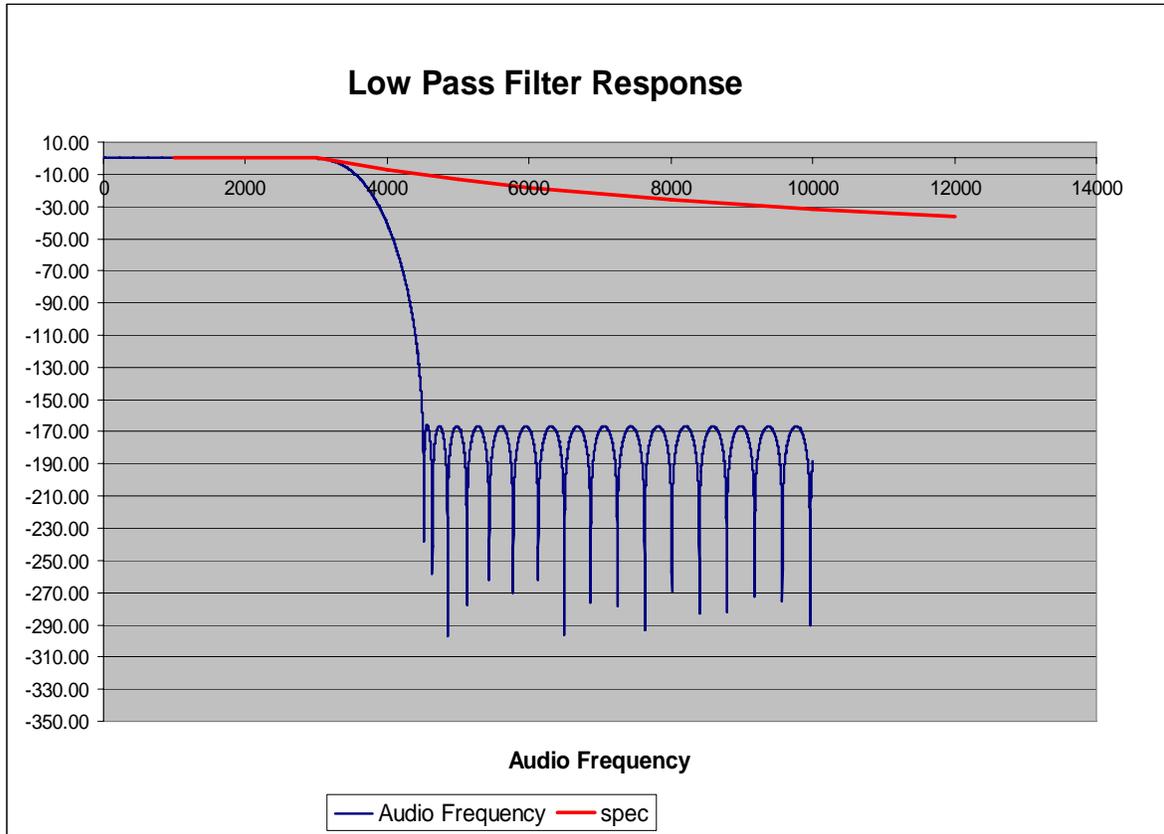
Frequency (MHz)	RF Output Power (W)	Nominal DC Voltage (Volts)	Nominal DC Current (Amps)
380.0125	25	13.4	9.30
	120	13.4	21.67
406.2000	25	13.4	8.25
	120	13.4	19.54
425.0125	25	13.4	8.46
	120	13.4	20.23
469.9875	25	13.4	9.87
	120	13.4	22.16

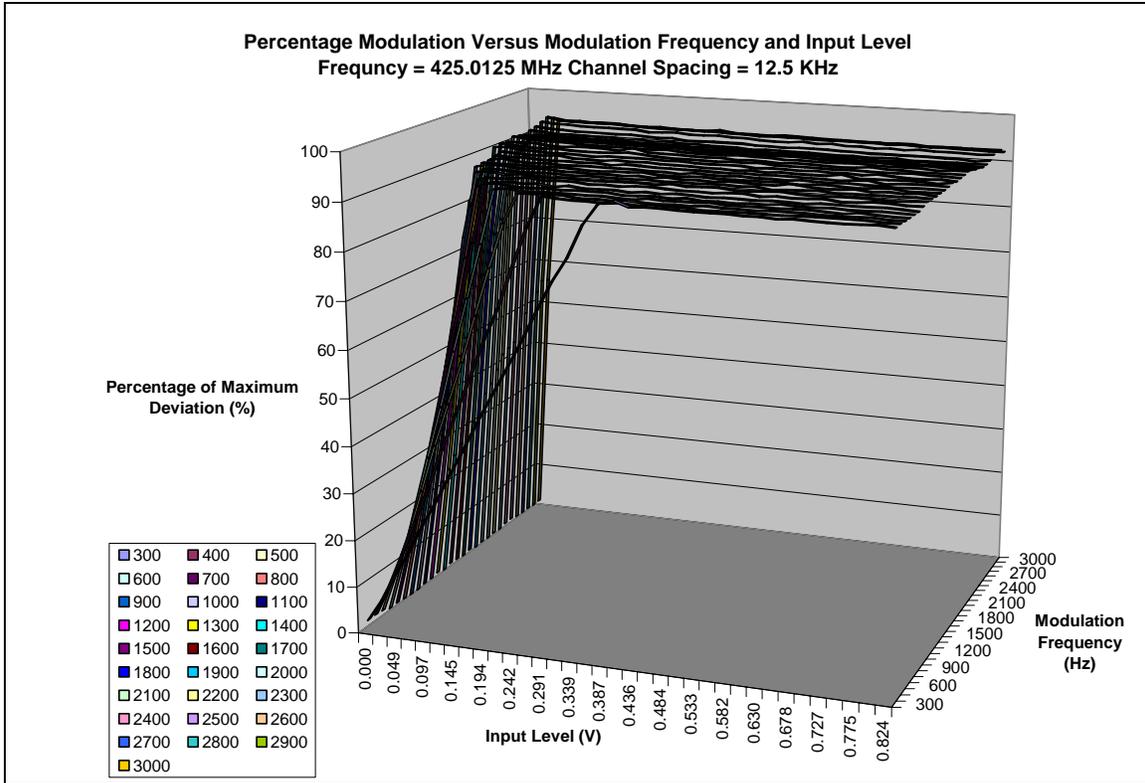
Audio Response in dB with reference to 1 KHz



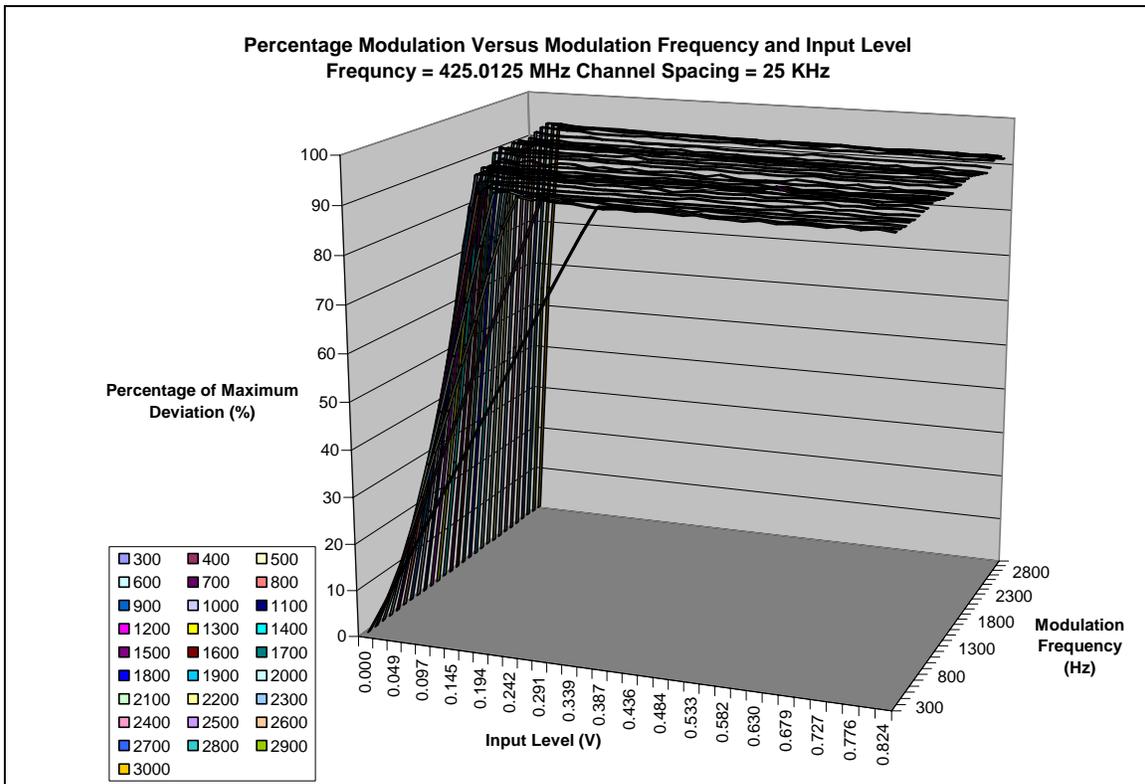
Audio Response in dB with reference to 1 KHz







The Percentage of Max. Deviation on the "Z" axis is referenced to 2.5 KHz for 12.5 KHz bandwidth



The Percentage of Max. Deviation on the "Z" axis is referenced to 5.0 KHz for 25 KHz bandwidth

OCCUPIED BANDWIDTH DATA

BANDWIDTH CALCULATIONS:

Carson's Rule for FM modulation is utilized to compute the bandwidth shown in the FCC emission designator. Carson's Rule is:

$$BW = 2 * (M + D) \quad \text{where: } BW = \text{Bandwidth}$$

$$M = \text{Maximum modulating frequency}$$

$$D = \text{Deviation}$$

Shown below are the calculations required for **FCC ID: AZ492FT3821**

EXHIBIT 6E-1

Standard Audio Modulation (25 kHz Channelization, Analog Voice):

Emission Designator 16K0F3E

In this case, the maximum modulating frequency is 3 kHz with a 5 kHz deviation.

$$BW = 2(M+D) = 2*(3 \text{ kHz} + 5 \text{ kHz}) = 16 \text{ kHz} \implies 16K0$$

F3E portion of the designator indicates voice.

Therefore, the entire designator for 25 kHz channelization analog voice is 16K0F3E.

EXHIBIT 6E-2

Standard Audio Modulation (12.5 kHz Channelization, Analog Voice):

Emission Designator 11K0F3E

In this case, the maximum modulating frequency is 3.0 kHz with a 2.5 kHz deviation.

$$BW = 2(M+D) = 2*(3.0 \text{ kHz} + 2.5 \text{ kHz}) = 11 \text{ kHz} \implies 11K0$$

F3E portion of the designator indicates voice.

Therefore, the entire designator for 12.5 kHz channelization analog voice is 11K0F3E.

EXHIBIT 6E-3

Digital (12.5 kHz Channelization, Digital Data):

Emission Designator 8K10F1D

Measurements per Rule Part 2.202 Section C (4) were done because Part 2.202 Section g Table III A, 1 formulation produces an excessive result using the value of K recommended in the Table. Therefore, the 99% energy rule (title 47CFR 2.989) was used for digital mode and is more accurate than Carson's rule. It basically states that 99% of the modulation energy falls within X KHz, in this case, 8.10 kHz. Measurements were performed in accordance with TIA/EIA 102.CAAB Section 2.2.5.2. The emission mask was obtained from 47CFR 90.210(d).

F1D portion of the designator indicates digital data.

Therefore, the entire designator for 12.5 kHz channelization digital data is 8K10F1D.

EXHIBIT 6E-4

Digital (12.5 kHz Channelization, Digital Voice):

Emission Designator 8K10F1E

Measurements per Rule Part 2.202 Section C (4) were done because Part 2.202 Section g Table III A, 1 formulation produces an excessive result using the value of K recommended in the Table. Therefore, the 99% energy rule (title 47CFR 2.989) was used for digital mode and is more accurate than Carson's rule. It basically states that 99% of the modulation energy falls within X KHz, in this case, 8.10 kHz. Measurements were performed in accordance with TIA/EIA 102.CAAB Section 2.2.5.2. The emission mask was obtained from 47CFR 90.210(d).

F1E portion of the designator indicates digital voice.

Therefore, the entire designator for 12.5 kHz channelization digital voice is 8K10F1E.

EXHIBIT 6E-5

Digital (12.5 kHz Channelization, Digital Voice with Encryption):

Emission Designator 8K10F1E (Per 47CFR 90.212(b))

Measurements per Rule Part 2.202 Section C (4) were done because Part 2.202 Section g Table III A, 1 formulation produces an excessive result using the value of K recommended in the Table. Therefore, the 99% energy rule (title 47CFR 2.989) was used for digital mode and is more accurate than Carson's rule. It basically states that 99% of the modulation energy falls within X KHz, in this case, 8.10 kHz. Measurements were performed in accordance with TIA/EIA 102.CAAB Section 2.2.5.2. The emission mask was obtained from 47CFR 90.210(d).

F1E portion of the designator indicates digital voice.

Therefore, the entire designator for 12.5 kHz channelization digital voice (with encryption) is 8K10F1E.

EXHIBIT 6E-6

Digital (12.5 kHz Channelization, Digital TDMA):

Emission Designator 8K10F1W

Measurements per Rule Part 2.202 Section C (4) were done because Part 2.202 Section g Table III A, 1 formulation produces an excessive result using the value of K recommended in the Table. Therefore, the 99% energy rule (title 47CFR 2.989) was used for digital mode and is more accurate than Carson's rule. It basically states that 99% of the modulation energy falls within X KHz, in this case, 8.10 kHz. Measurements were performed in accordance with TIA/EIA 102.CAAB Section 2.2.5.2. The emission mask was obtained from 47CFR 90.210(d).

F1W portion of the designator indicates digital TDMA.

Therefore, the entire designator for 12.5 kHz channelization digital TDMA is 8K10F1W.

EXHIBIT 6E-7

Securenet Mode (20.0 kHz Channelization, Analog Voice with Encryption):

Emission Designator 20K0F1E

In this case, the maximum modulating frequency is 6.0 kHz with a 4.0 kHz deviation.

$$BW = 2(M+D) = 2*(6.0 \text{ kHz} + 4.0 \text{ kHz}) = 20 \text{ kHz} \implies 20K0$$

F1E portion of the designator indicates digital voice.

Therefore, the entire designator for 20.0 kHz channelization securenet mode (analog voice with encryption) is 20K0F1E.

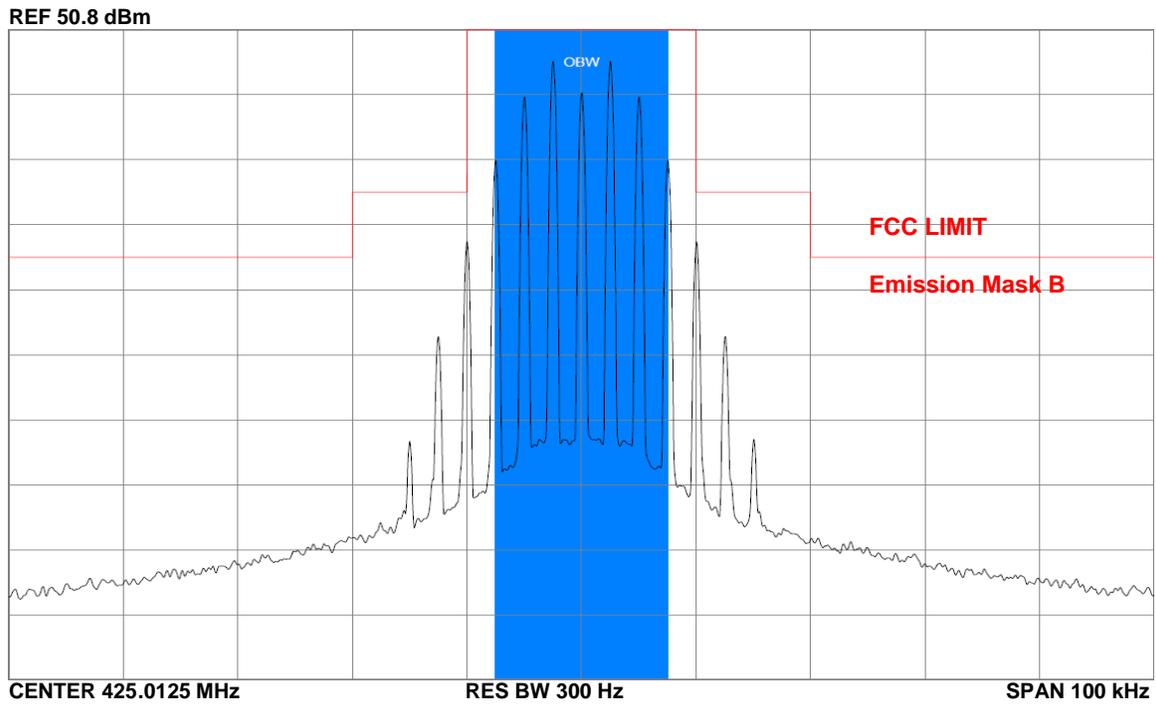
Note: The 90.203(j) efficiency standard for "F1D" emission is met by sending 2 bits at a time, at a rate of 4800 symbols/second. This yields 9600 bits/second, which is achieved using the modulation technique described in the note below. Modulation results from one of the digital 4-level standard symbol patterns applied to the modulation at a rate of 9600 bits/second. The modulation technique is 4-level FM. The information bits are commonly represented by a symbol that corresponds to one of 4 levels of FM deviation according to the following table.

<u>Information Bits</u>	<u>Symbol</u>	<u>C4FM Deviation</u>
01	+3	+1.8 kHz
00	+1	+0.6 kHz
10	-1	-0.6 kHz
11	-3	-1.8 kHz

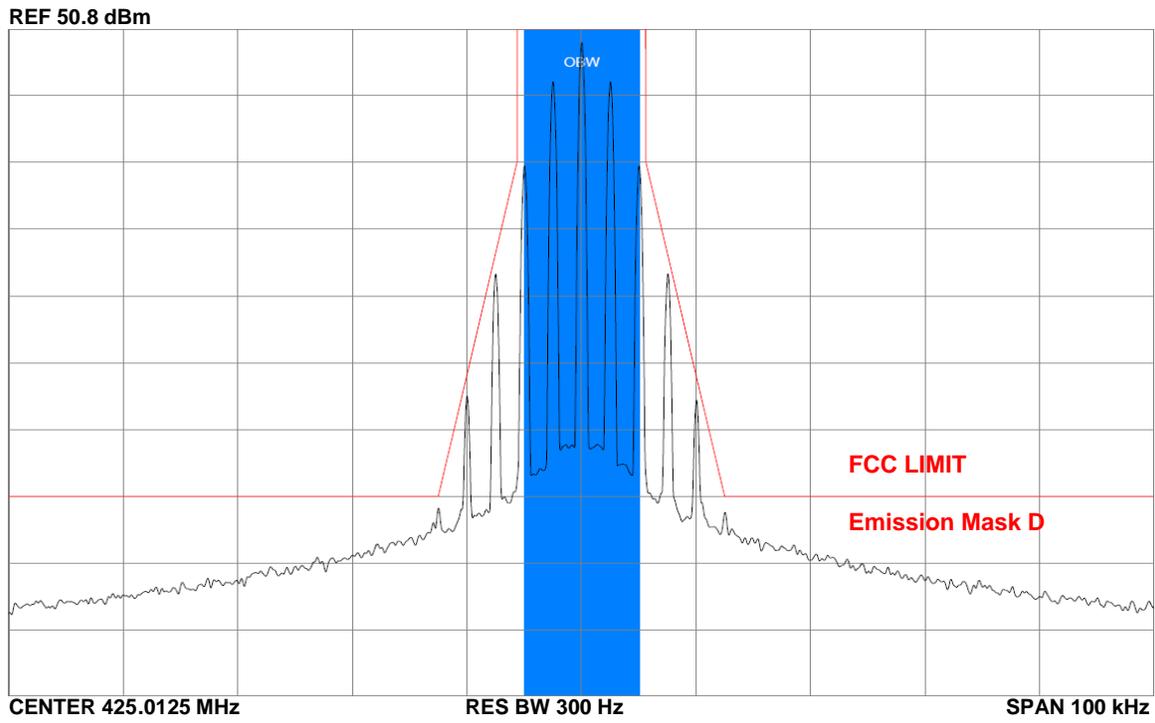
For example, an 8-bit binary pattern of 0010 1101 would be sent as symbols +1, -1, -3, +3, which would cause a modulation signal (Frequency-Shift-Keyed) of +1.8 kHz, -600 Hz, -1.8 kHz, and +1.8 kHz. This results in 9600 bits/second of information being sent on a 12.5 kHz channel, which is the equivalent of 4800 bits/second per 6.25 kHz.

Note: The "F1D", "F1E" and "F1W" signal parameters are described as follows: The modulation is 4-level FSK with +/-600 Hz and +/-1.8 kHz shifting (+/-600 Hz and +/-1.8 kHz are the 4 distinct levels of signals). The digital voice test pattern is created by a 2500 Hz sine wave modulated at a level that is 16 dB above that required to produce 50% deviation at the radio output. The digital data test signal is generated by an internally generated pseudo random test pattern based on ITU-T 0.153 (formally CCITT V.52).

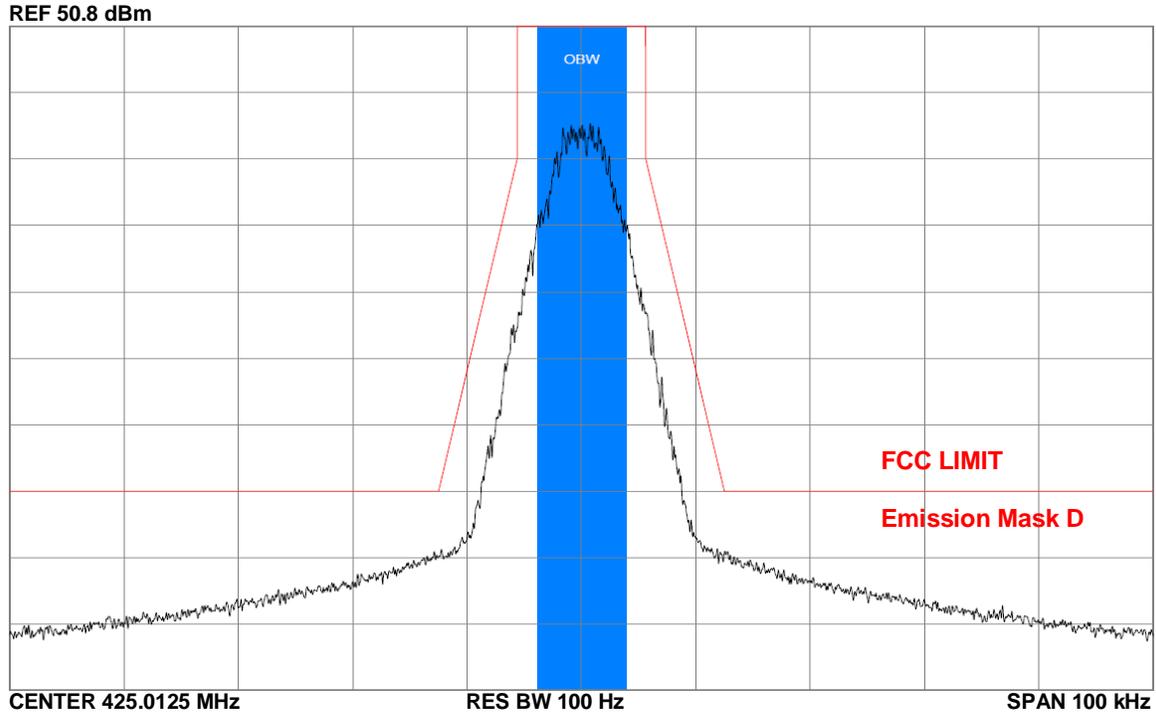
**Occupied Bandwidth -- Standard Audio Modulation (25 KHz Channelization, Analog Voice)
- 16K0F3E - 120 Watts**



Occupied Bandwidth -- Standard Audio Modulation (12.5 KHz Channelization, Analog Voice) - 11K0F3E - 120 Watts



**Occupied Bandwidth -- Digital (12.5 KHz Channelization, Digital Data)
- 8K10F1D - 120 Watts**



**Occupied Bandwidth -- Digital (12.5 KHz Channelization, Digital Voice)
- 8K10F1E – 120 Watts**

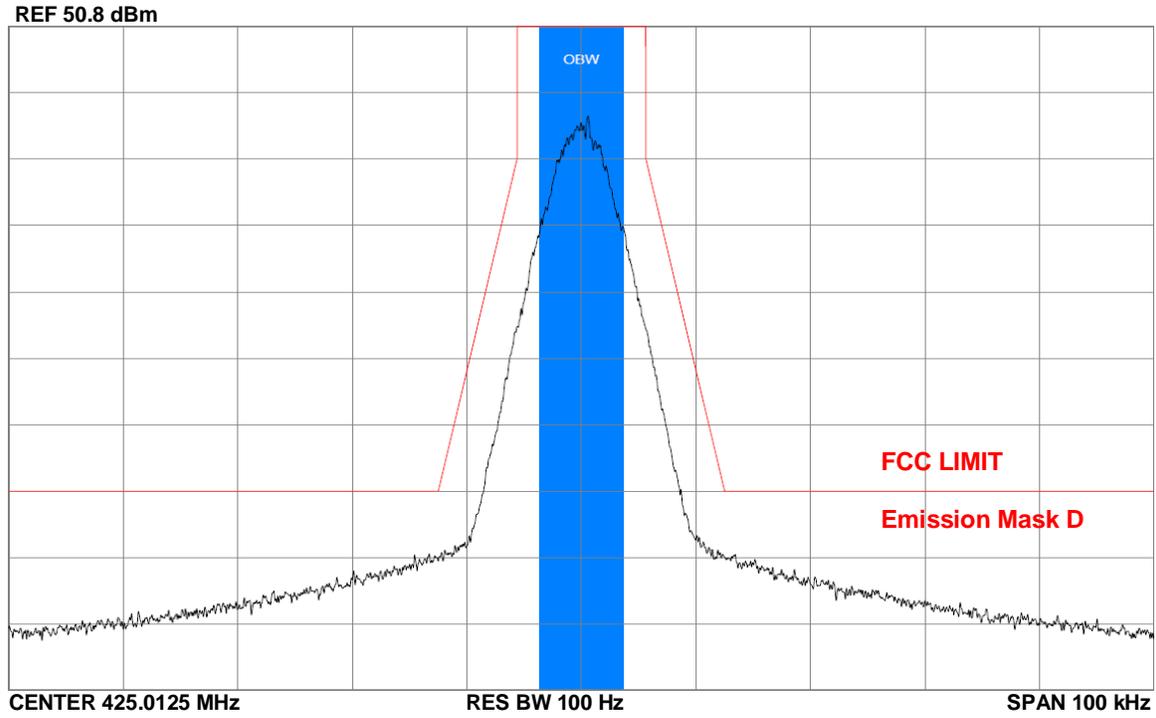
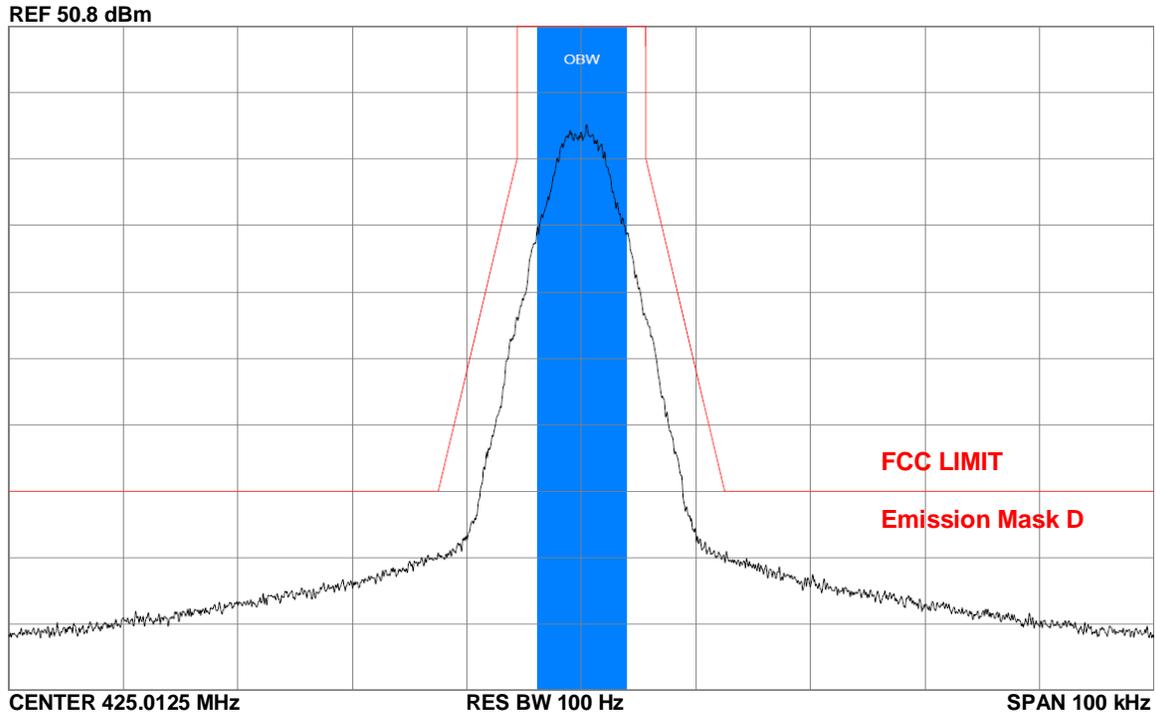
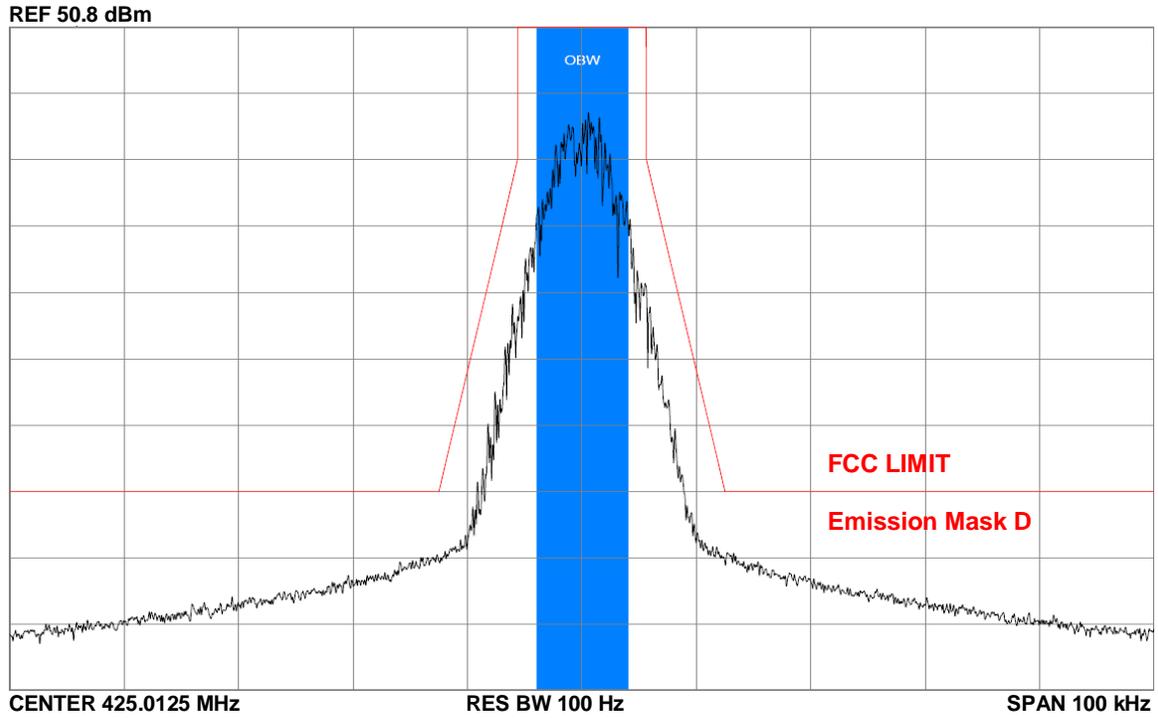


EXHIBIT 6E-4

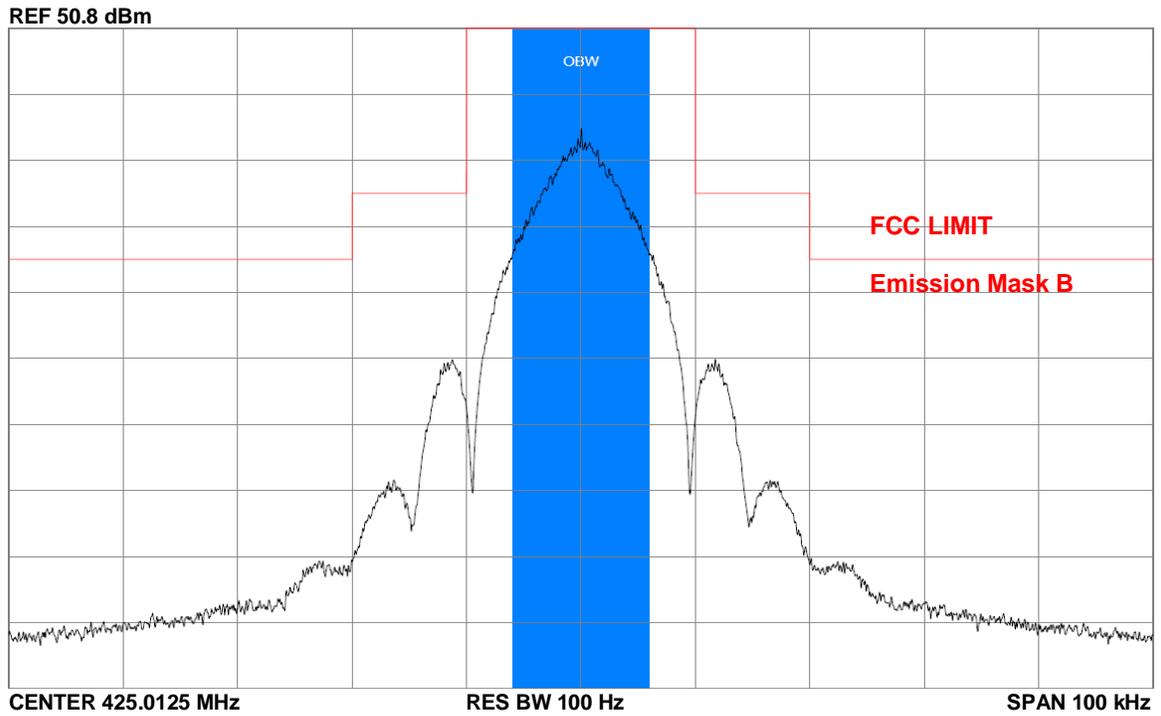
Occupied Bandwidth -- Digital (12.5 KHz Channelization, Digital Voice Encryption) -
8K10F1E - 120 Watts



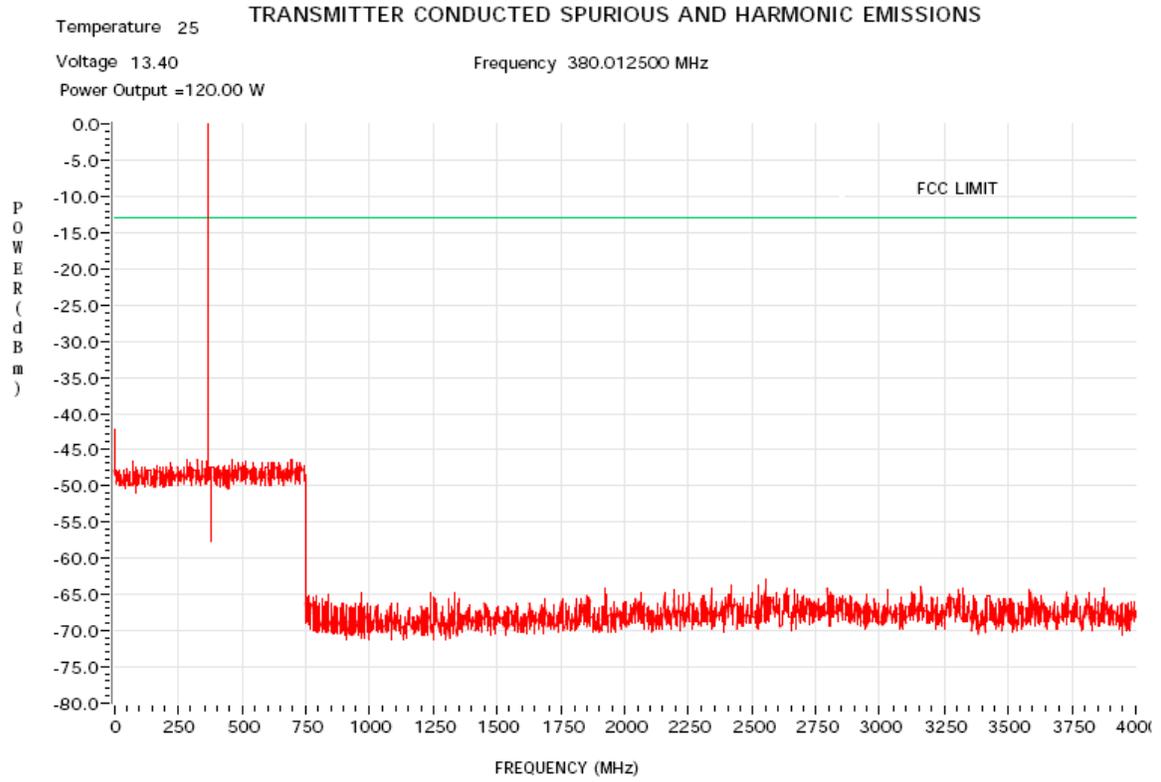
Occupied Bandwidth – Digital (12.5 KHz Channelization, Digital TDMA)
- 8K10F1W - 120 Watts



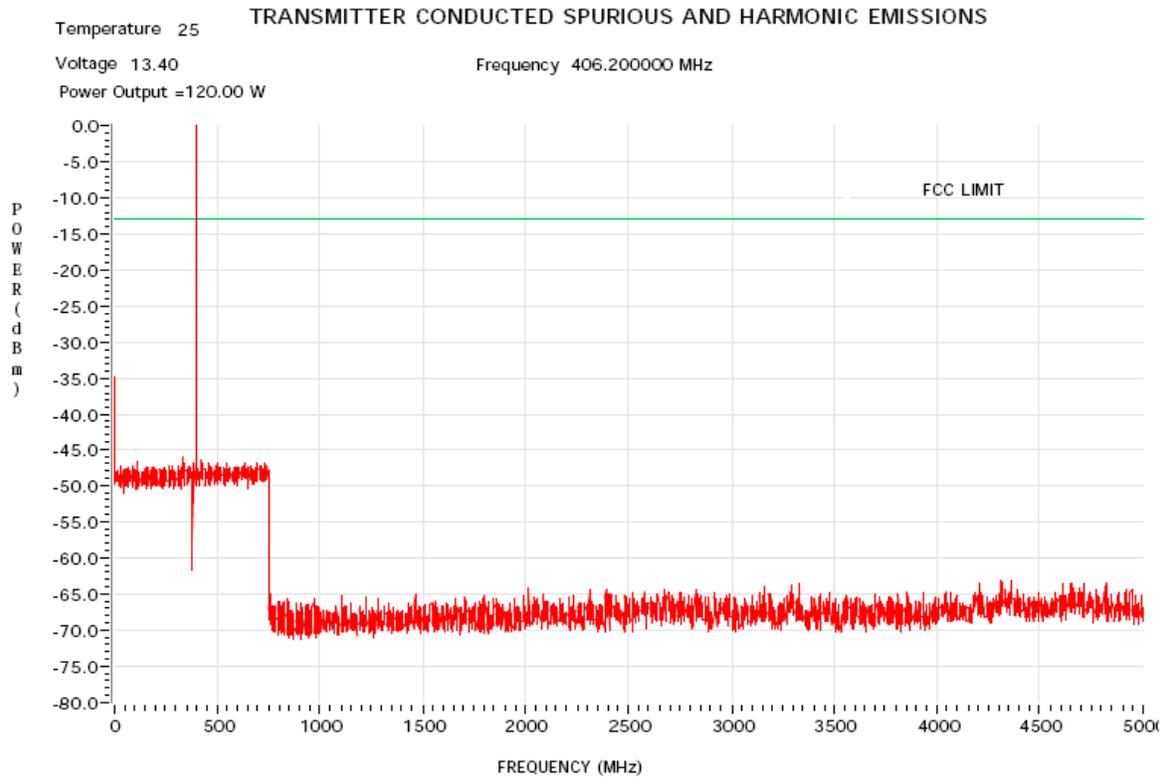
Occupied Bandwidth - Standard Audio Modulation (20 KHz Channelization, Analog Encryption) - 20K0F1E - 120 Watts



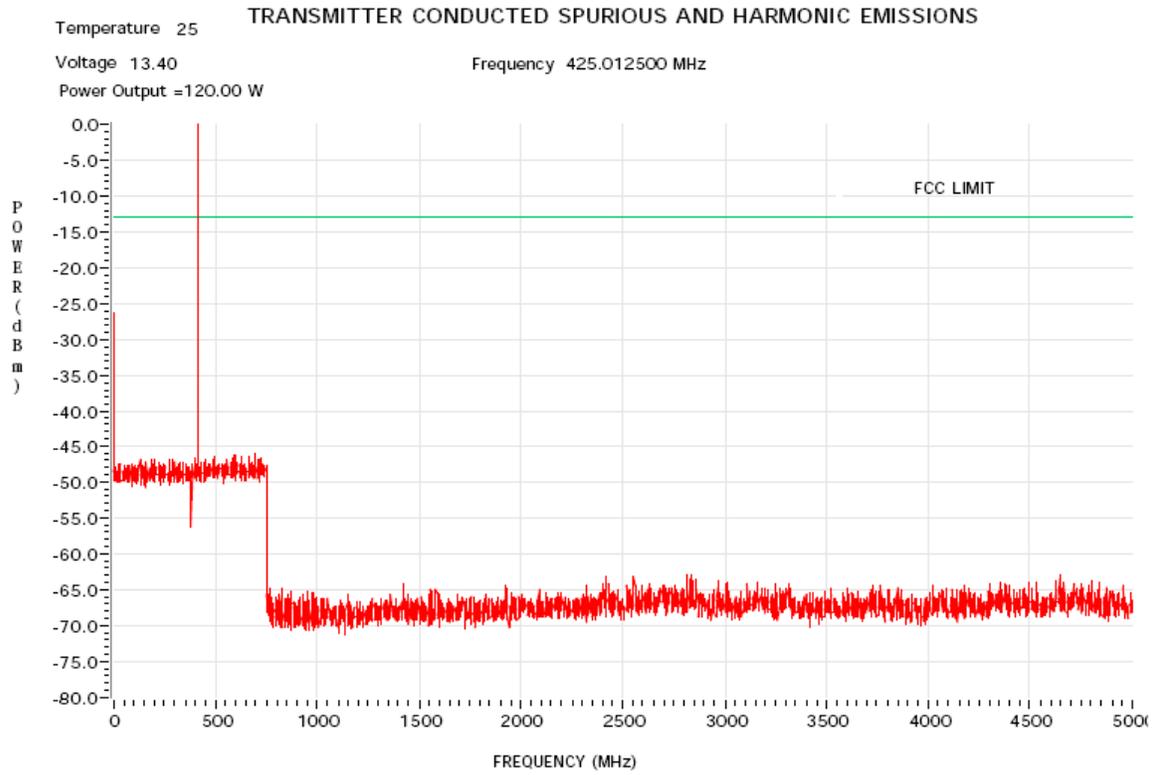
ANALOG MODE – 380.0125 MHz



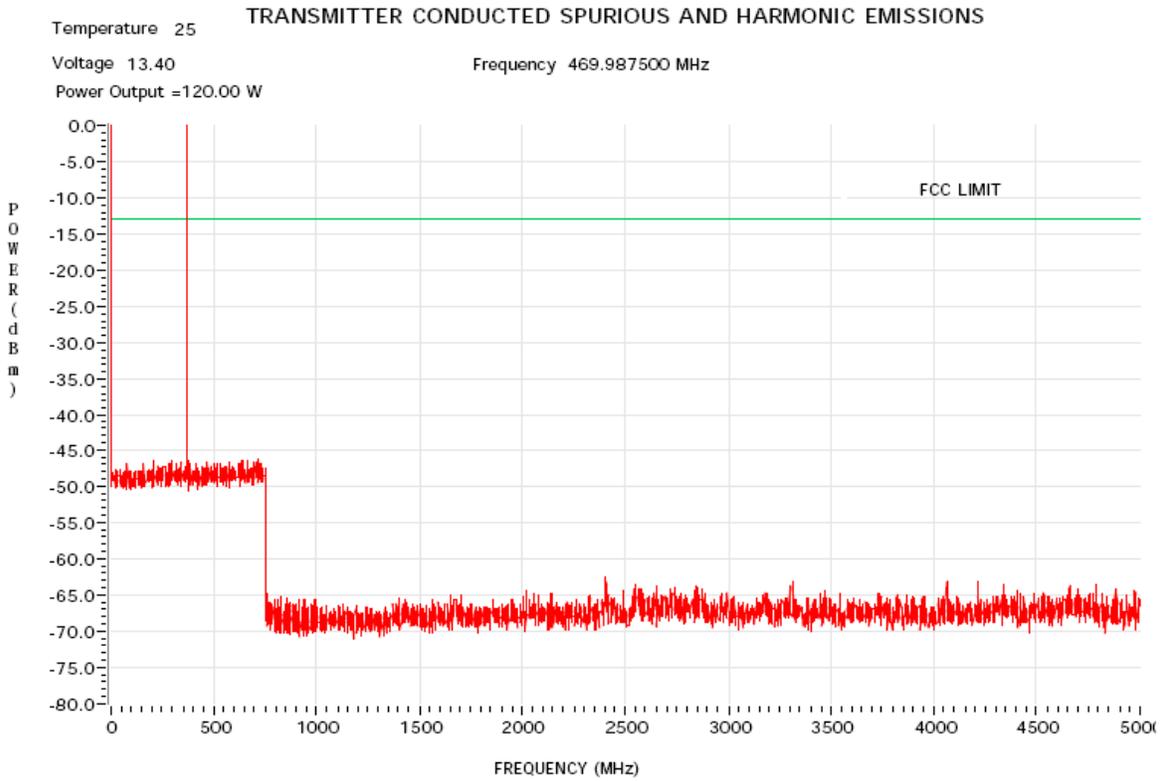
ANALOG MODE – 406.2000 MHz



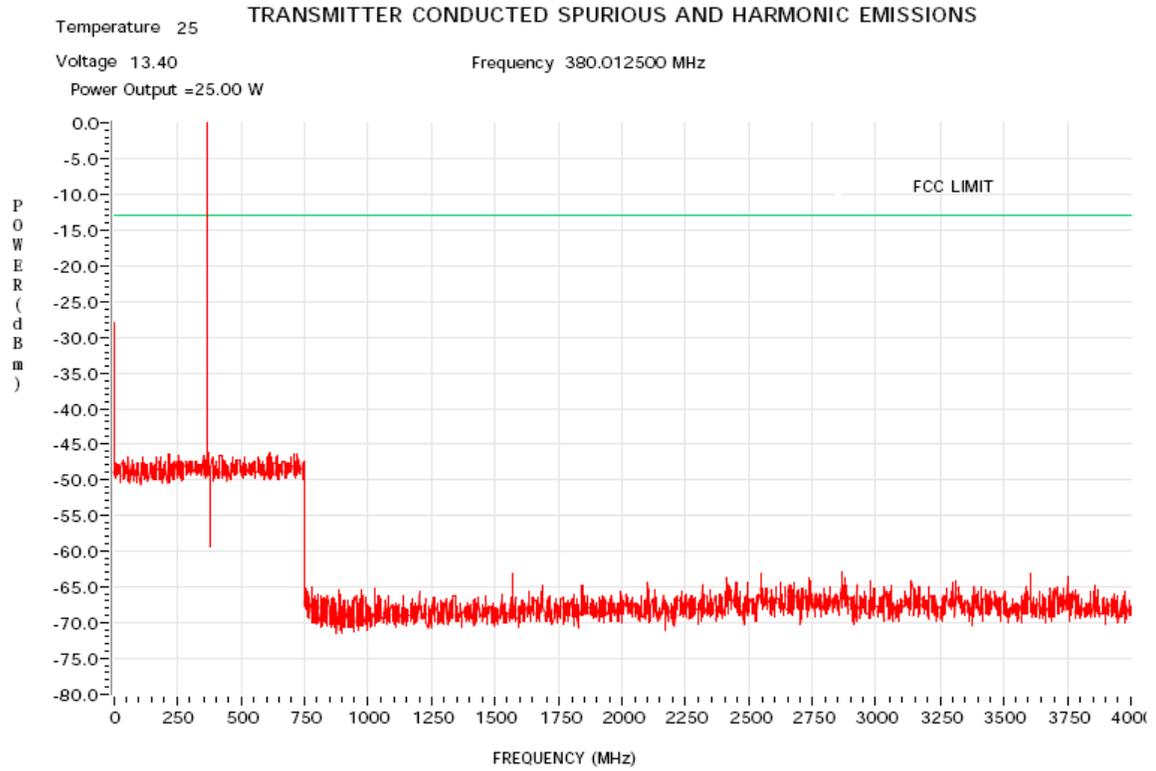
ANALOG MODE – 425.0125 MHz



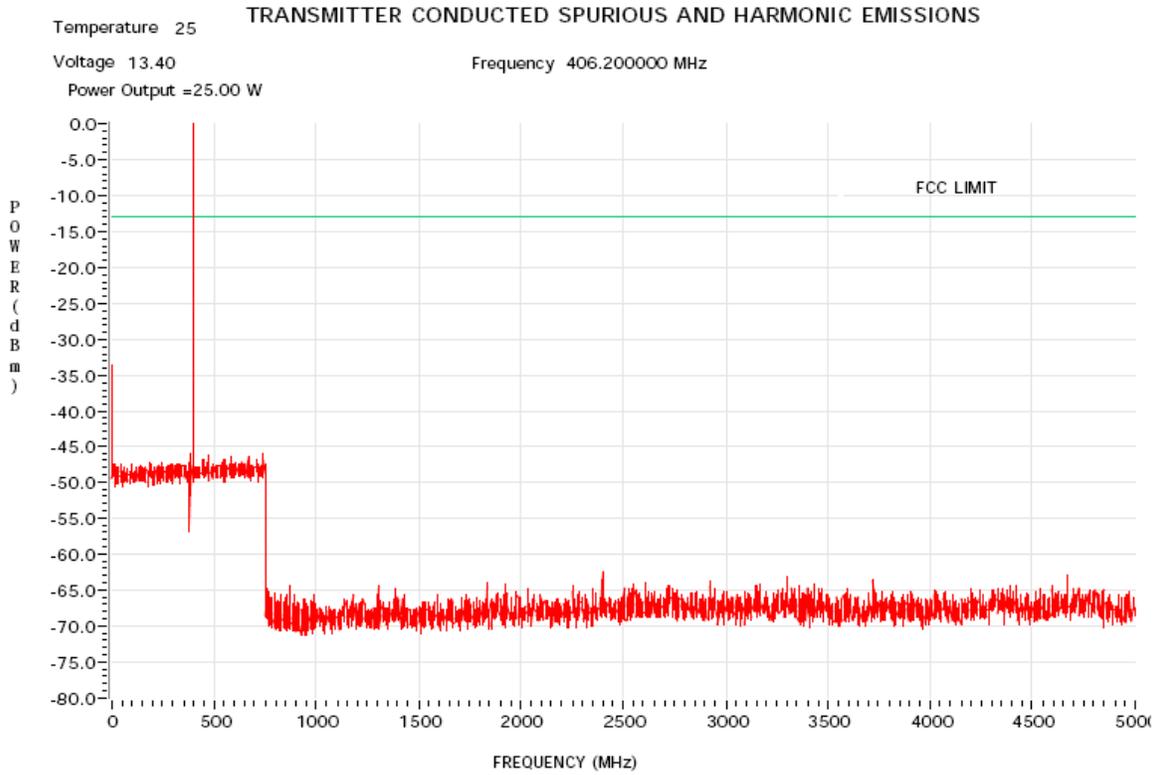
ANALOG MODE – 469.9875 MHz



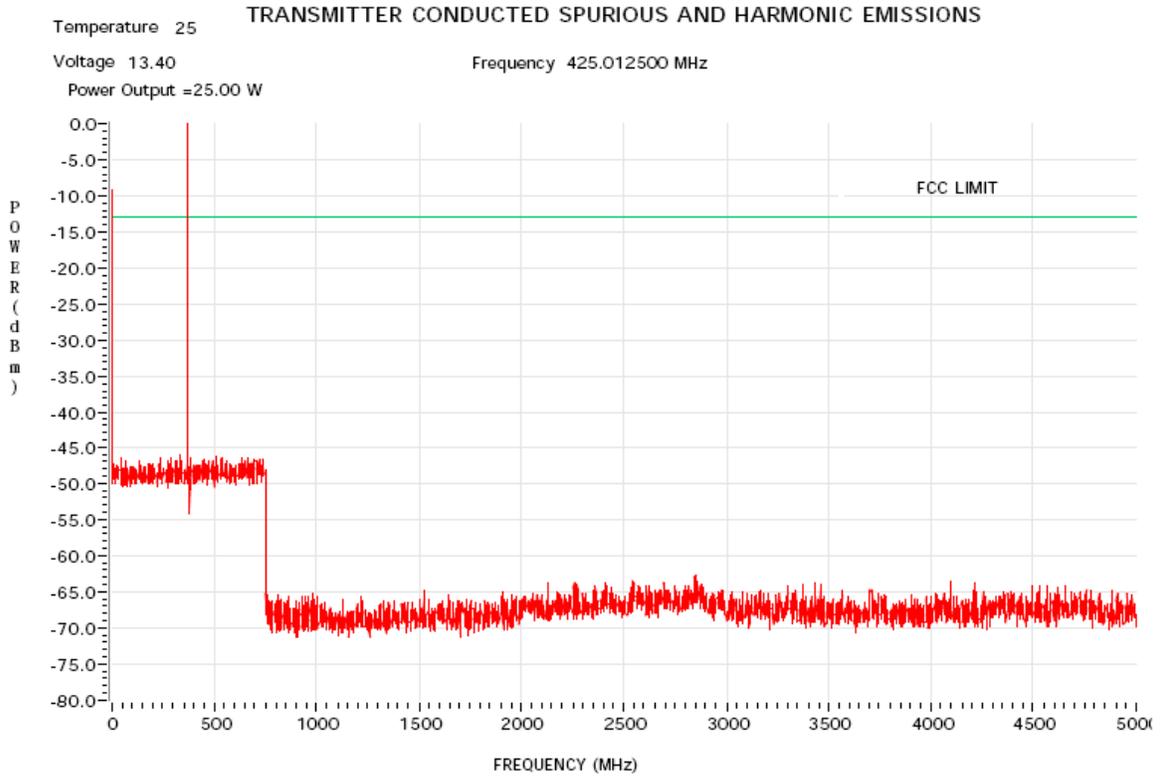
ANALOG MODE – 380.0125 MHz



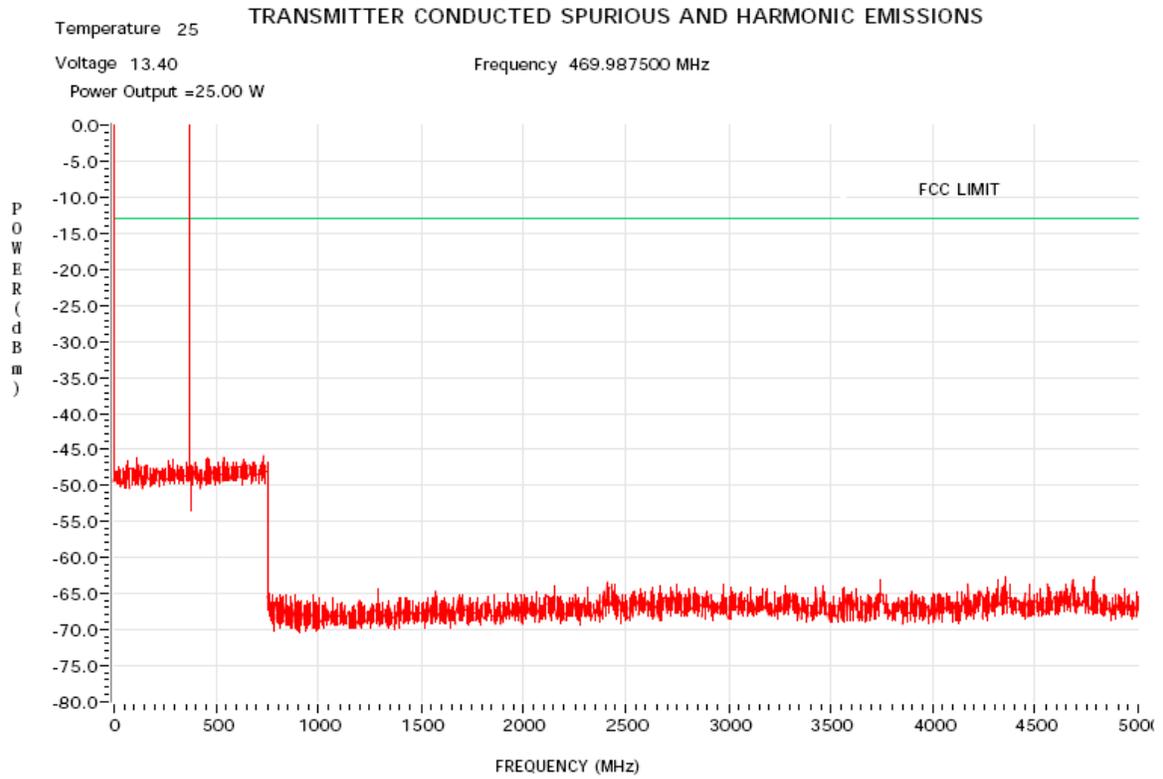
ANALOG MODE – 406.2000 MHz



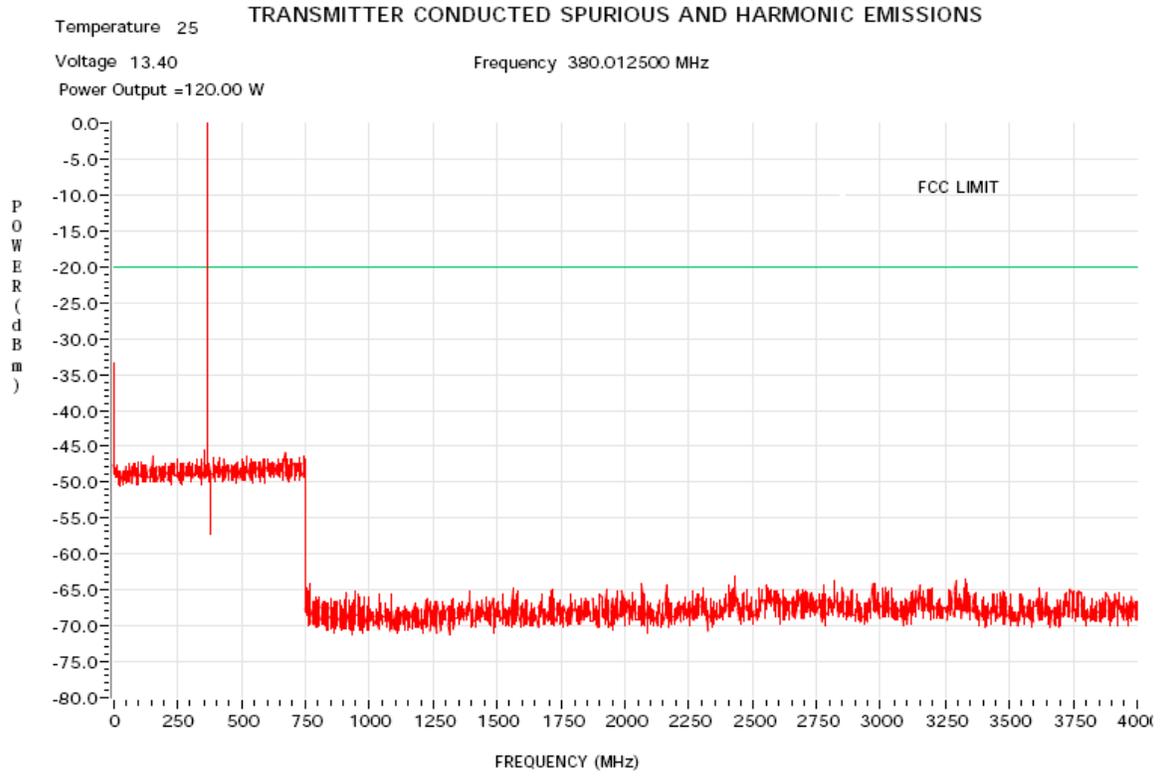
ANALOG MODE – 425.0125 MHz



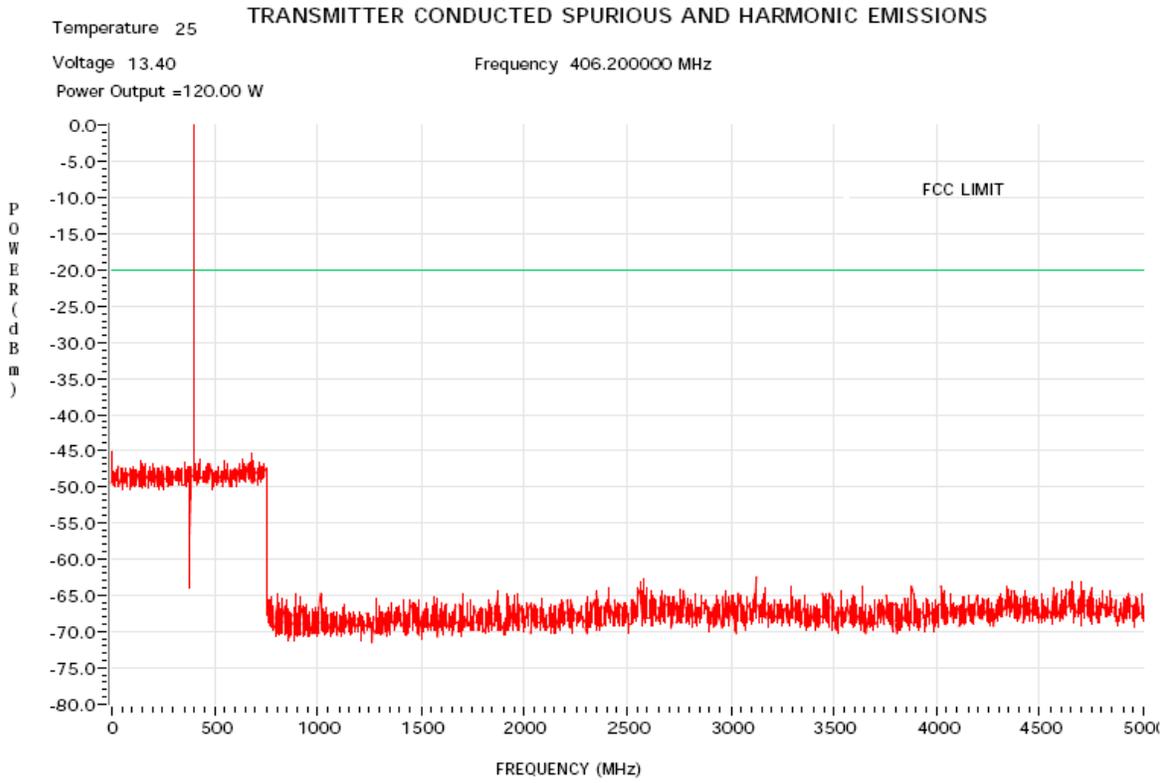
ANALOG MODE – 469.9875 MHz



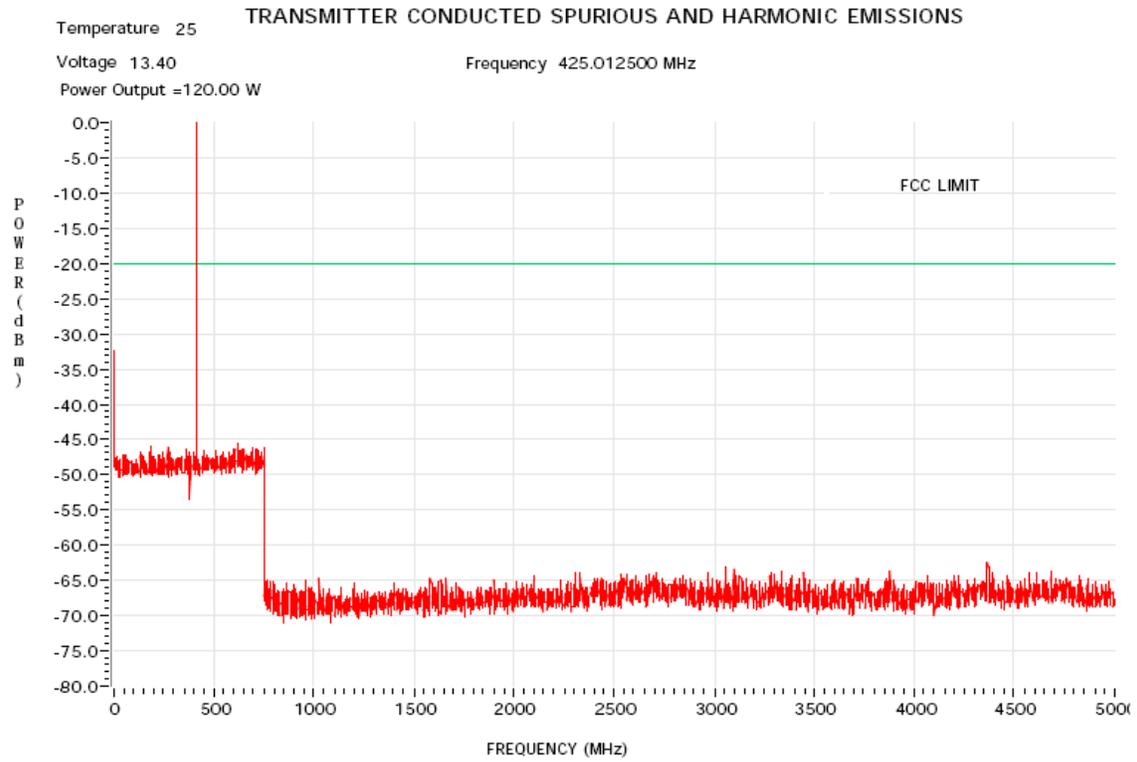
APCO DIGITAL MODE – 380.0125 MHz



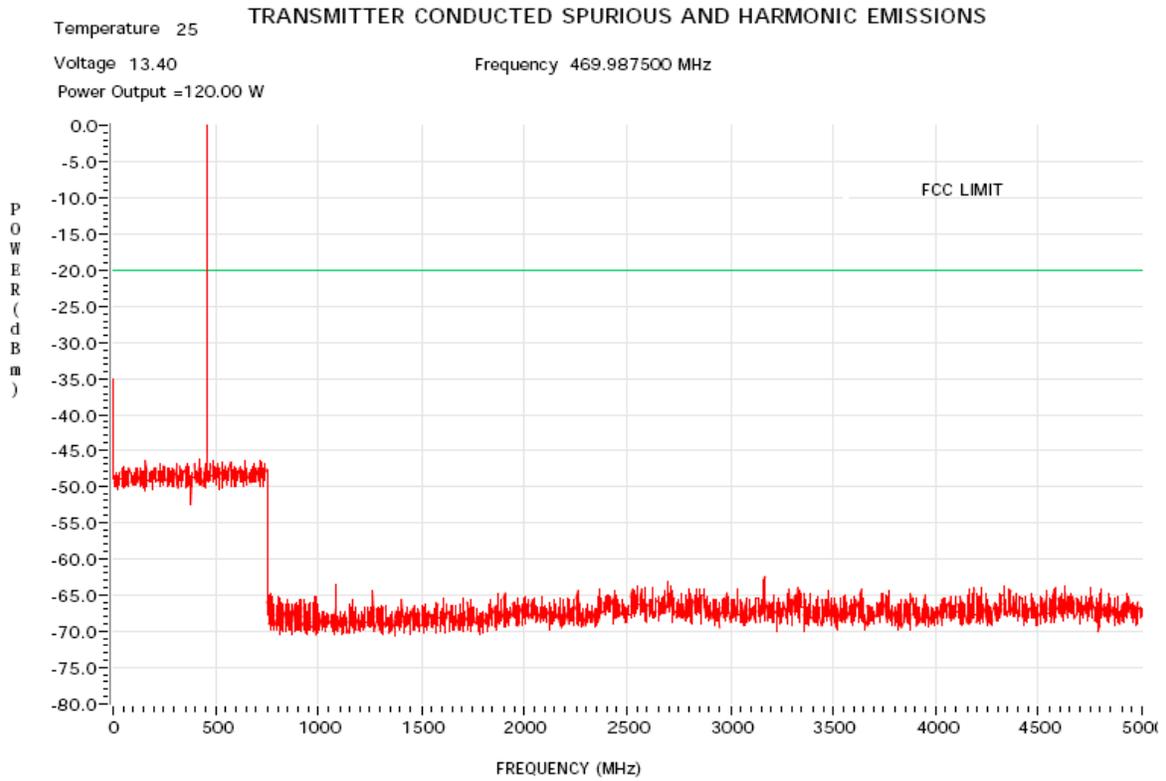
APCO DIGITAL MODE – 406.2000 MHz



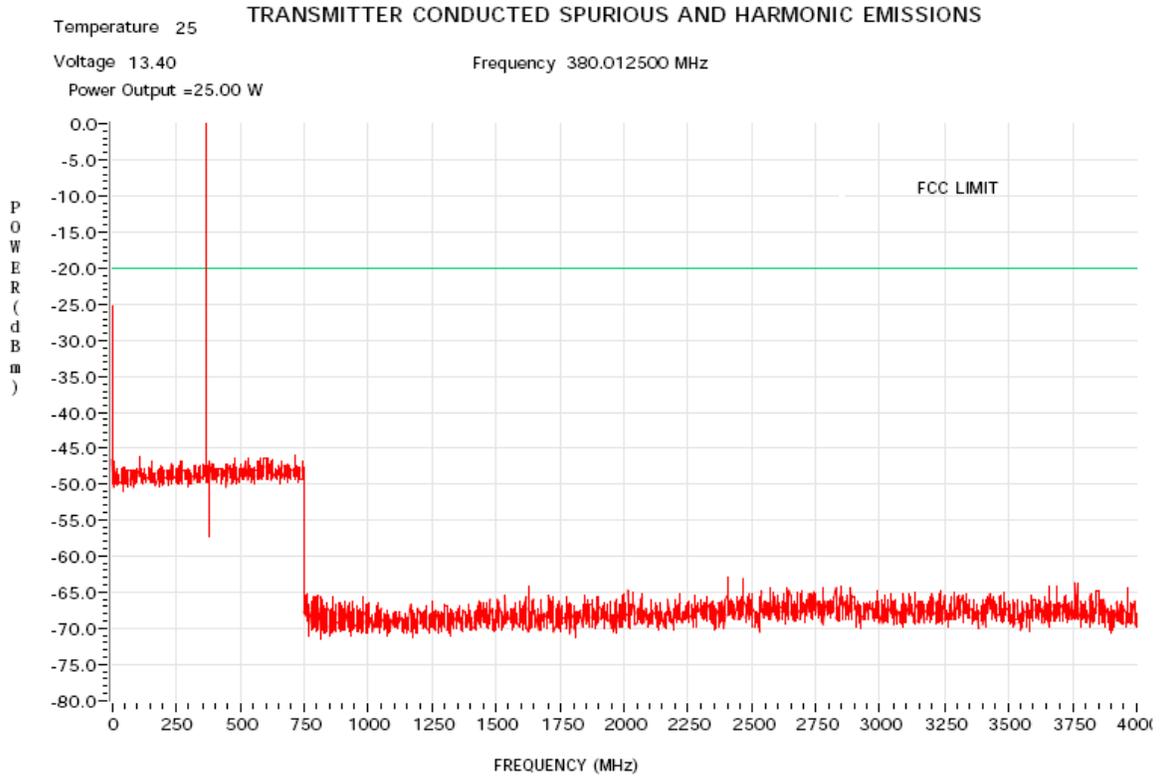
APCO DIGITAL MODE – 425.0125 MHz



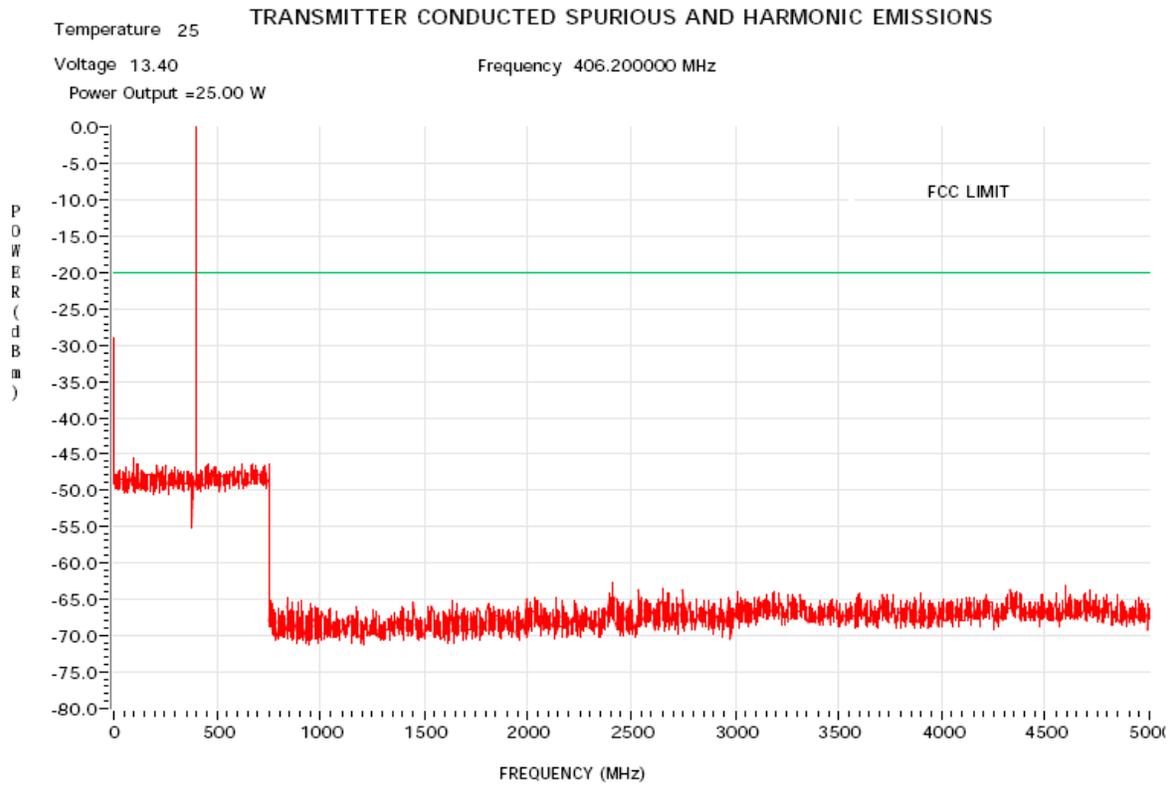
APCO DIGITAL MODE – 469.9875 MHz



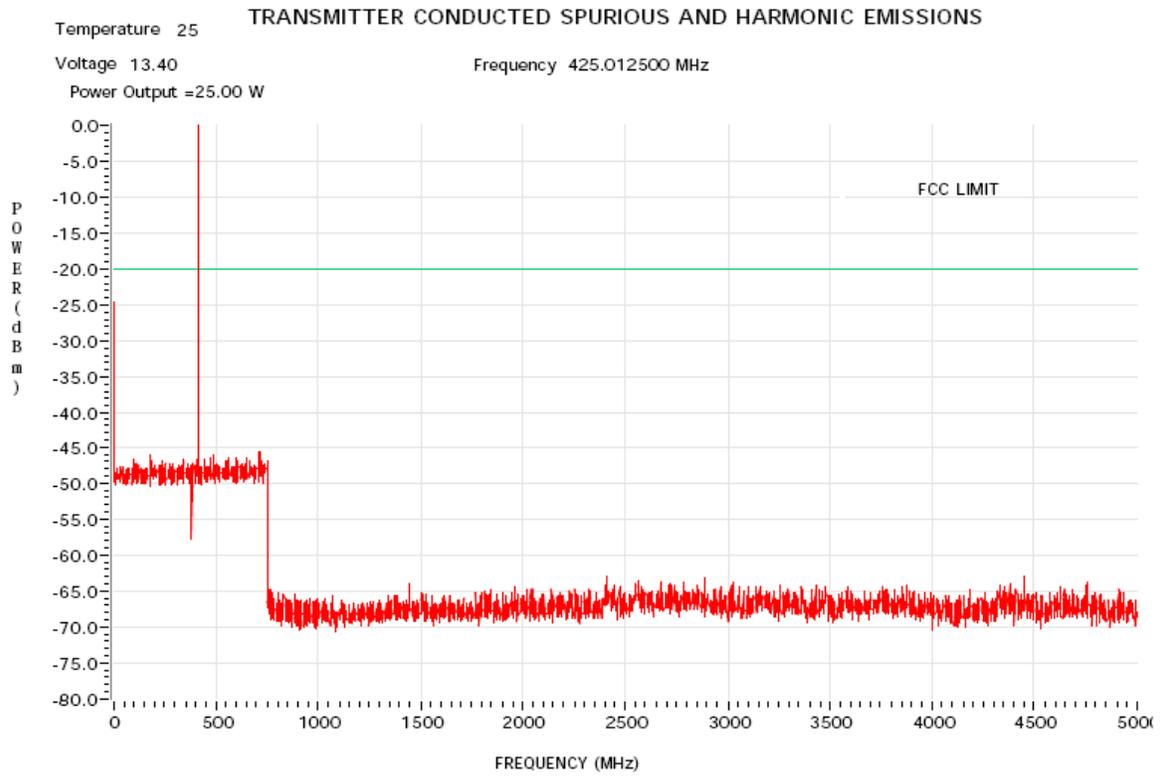
APCO DIGITAL MODE – 380.0125 MHz



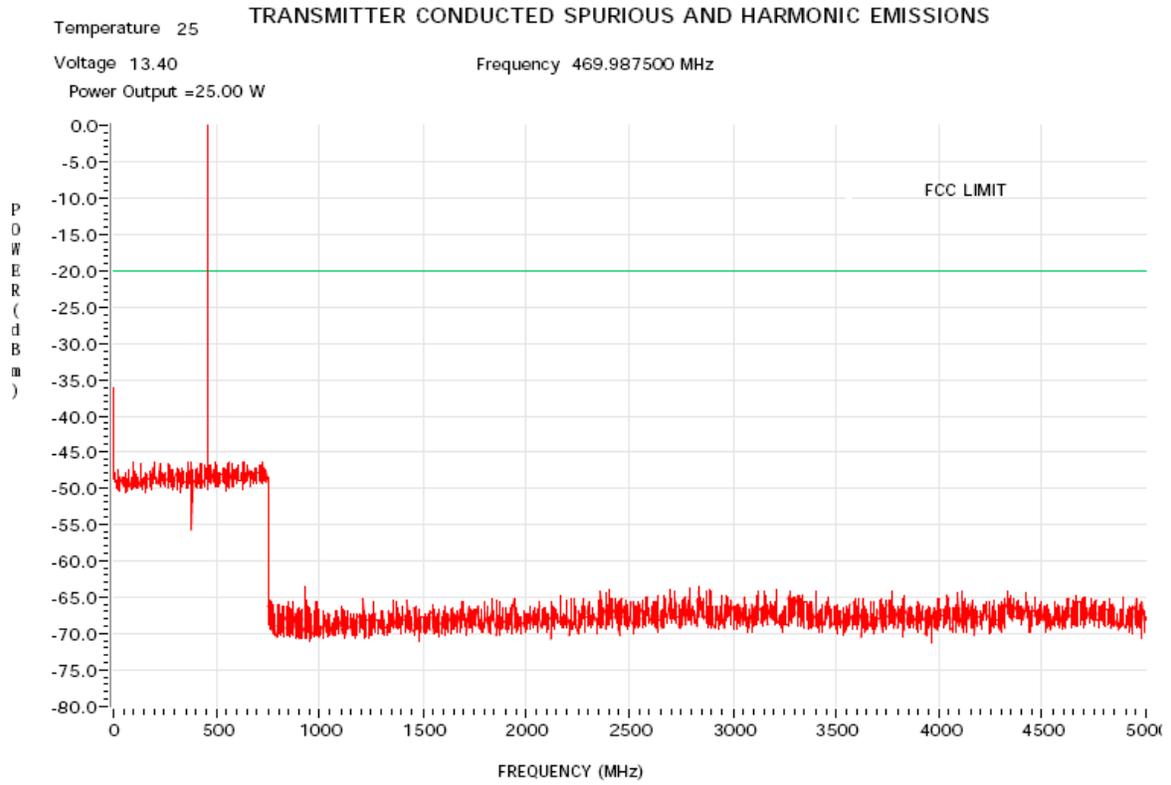
APCO DIGITAL MODE – 406.2000 MHz



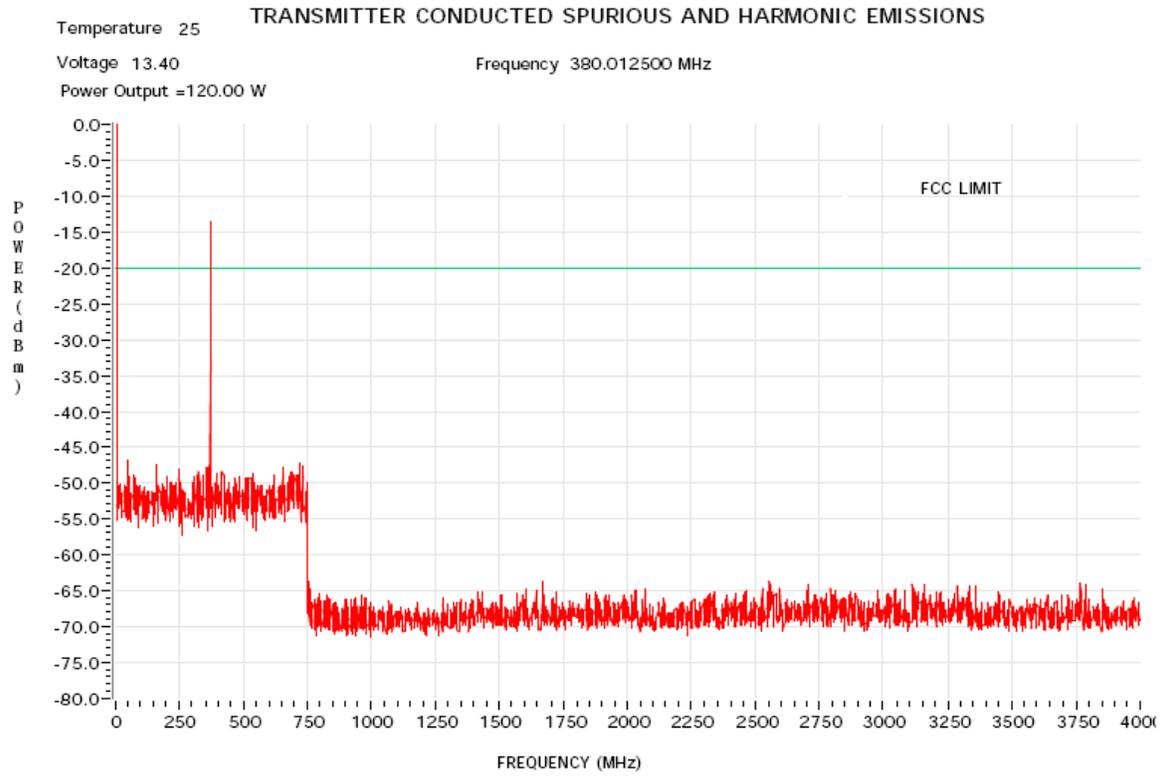
APCO DIGITAL MODE – 425.0125 MHz



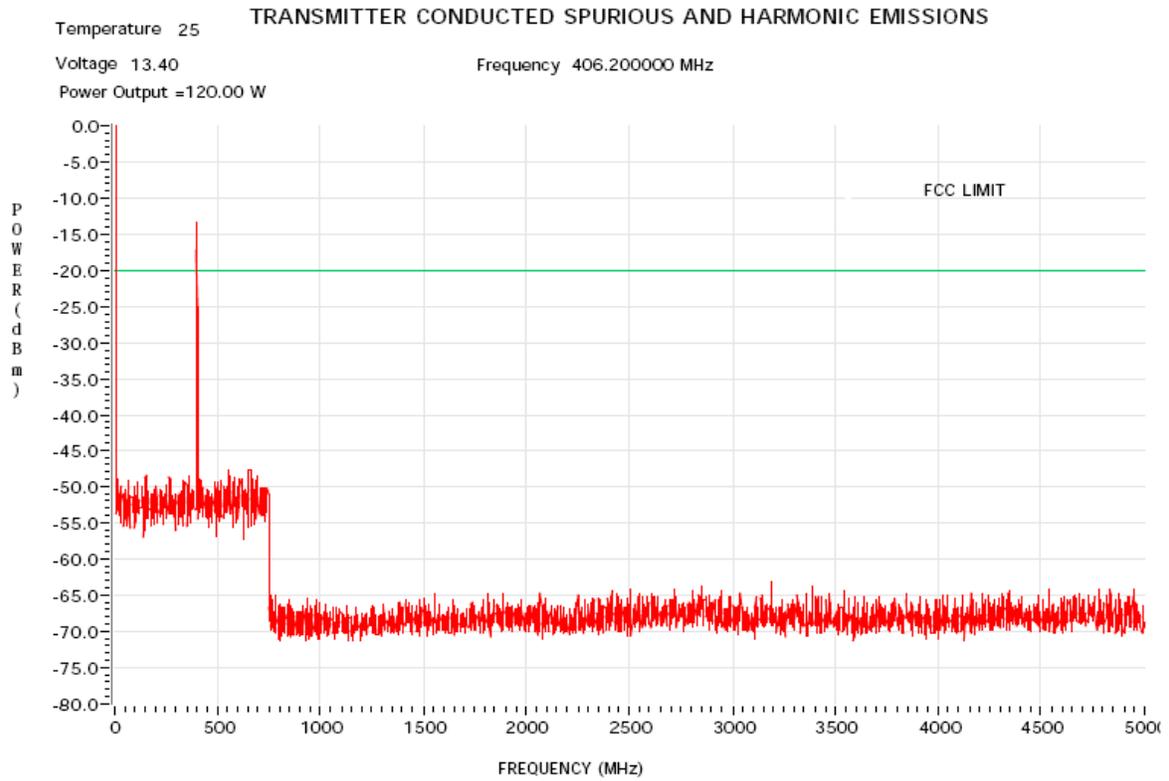
APCO DIGITAL MODE – 469.9875 MHz



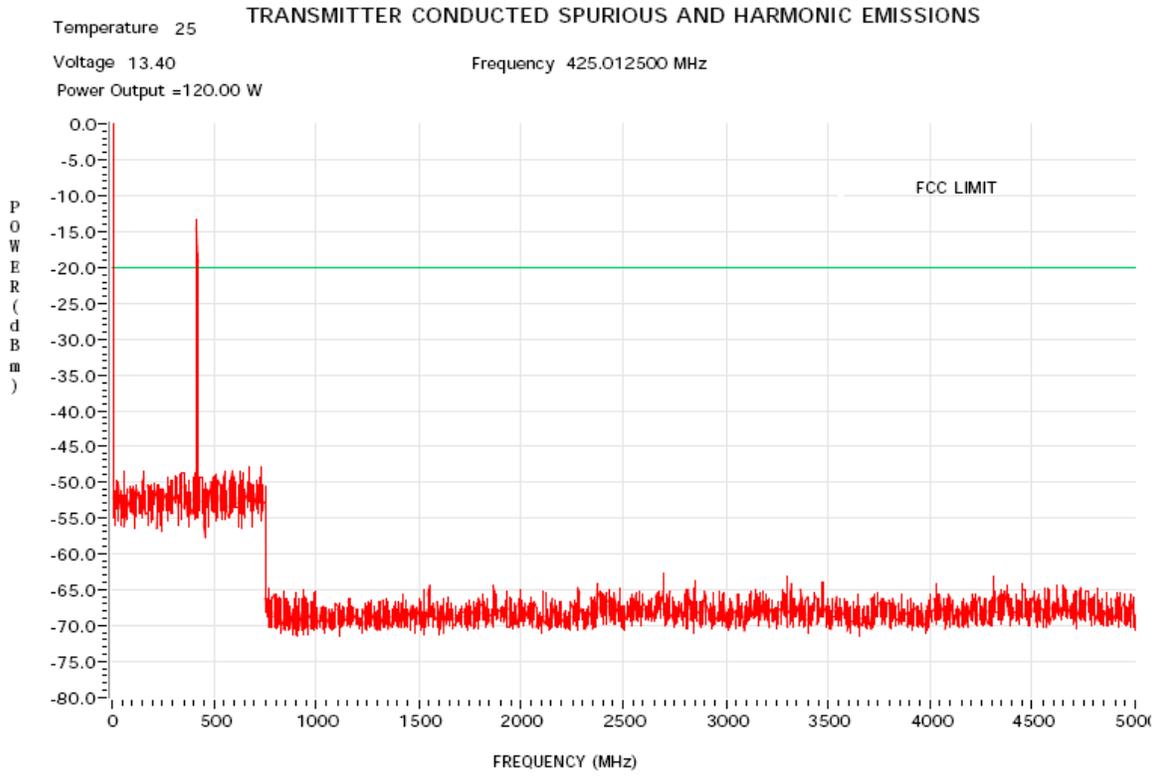
F2 TDMA MODE – 380.0125 MHz



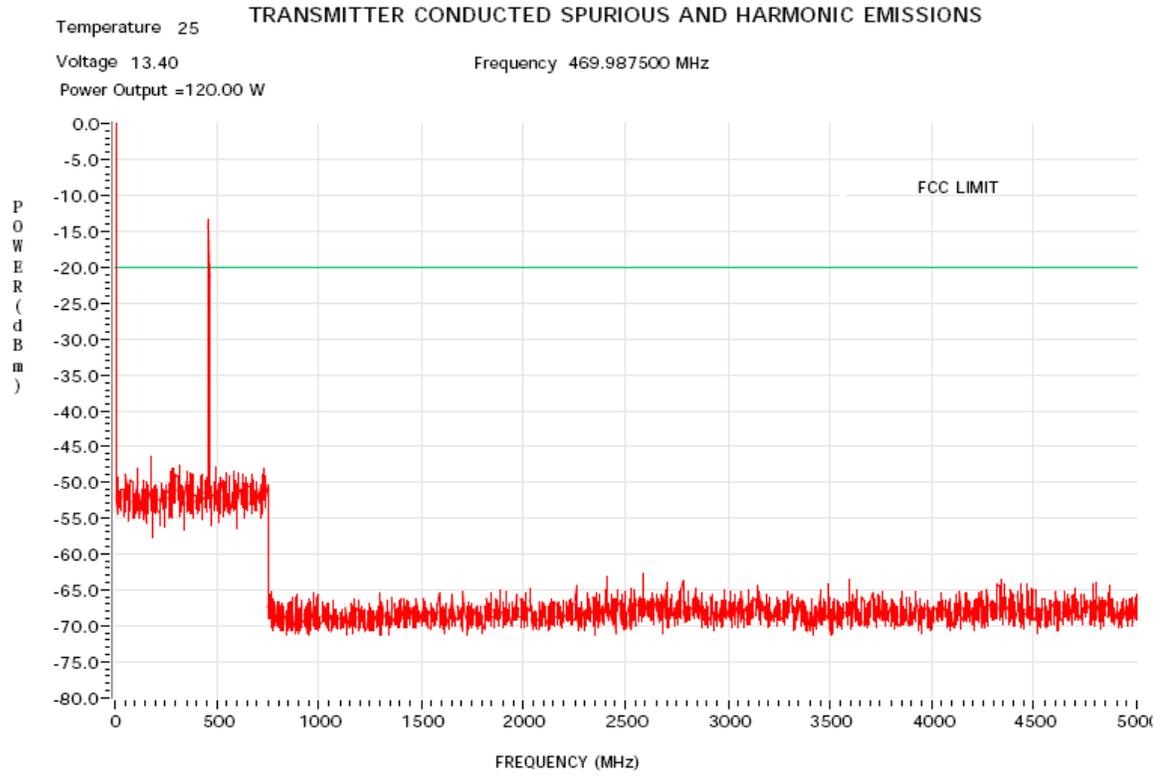
F2 TDMA MODE – 406.2000 MHz



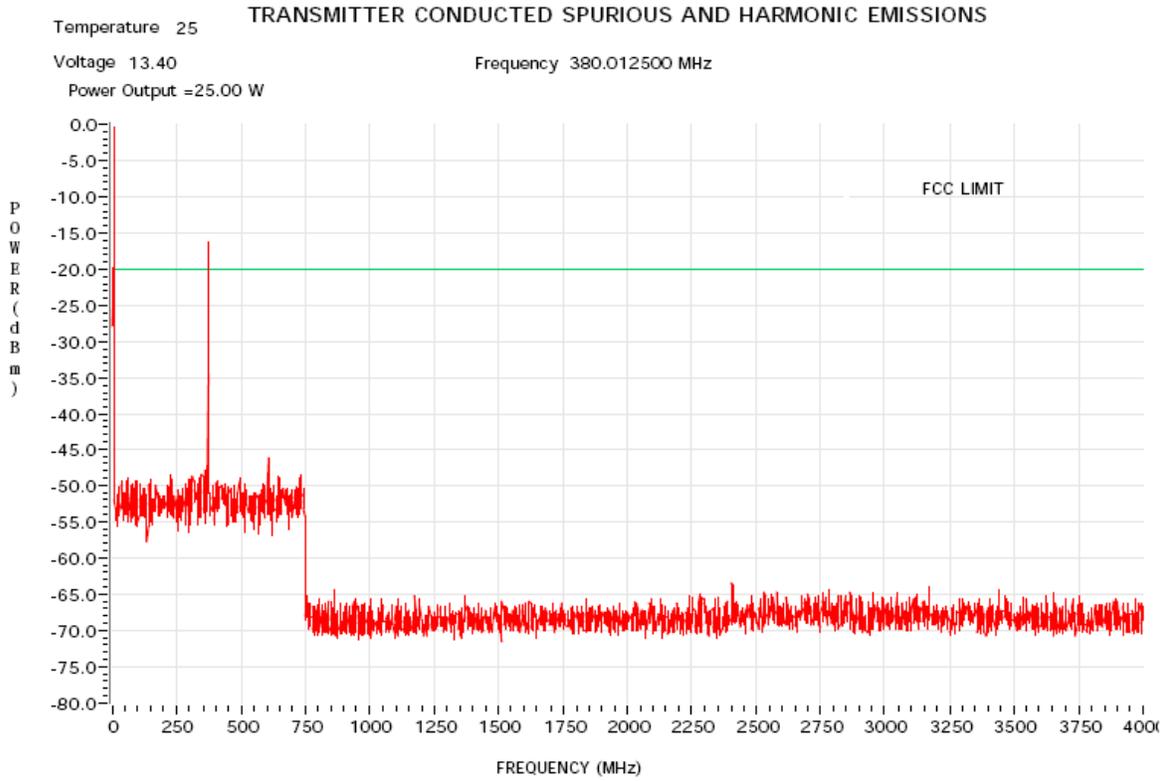
F2 TDMA MODE – 425.0125 MHz



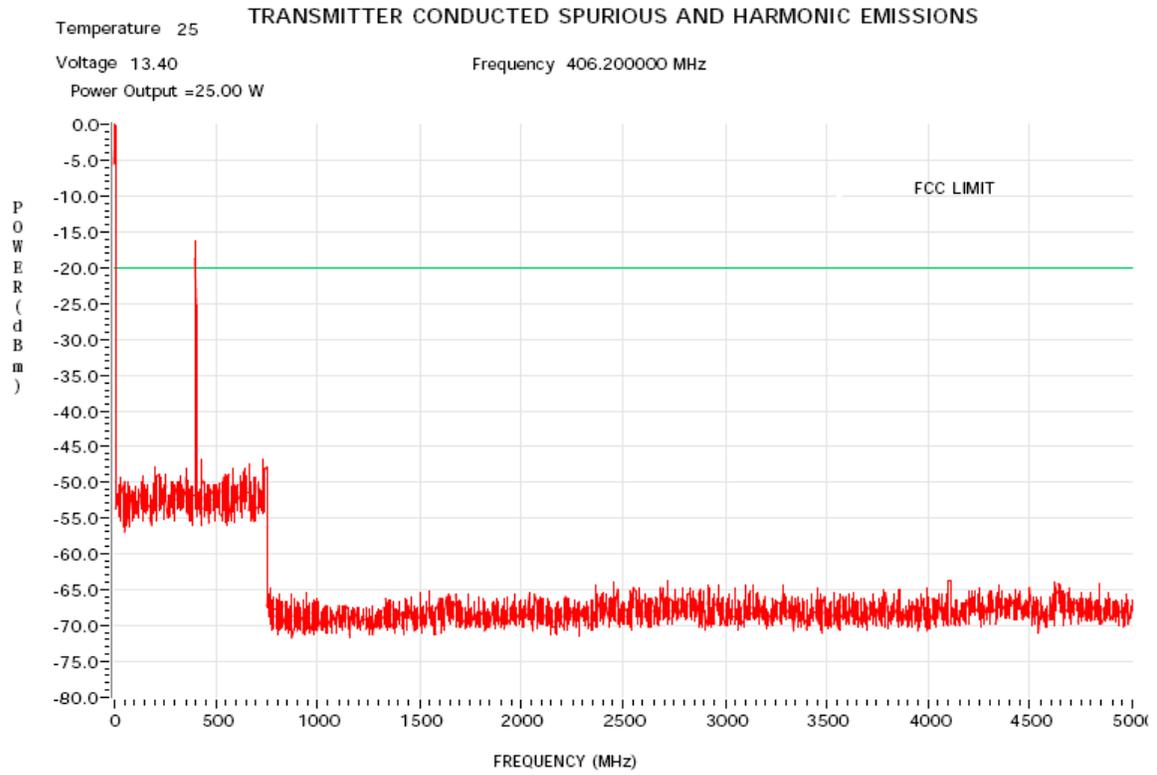
F2 TDMA MODE – 469.9875 MHz



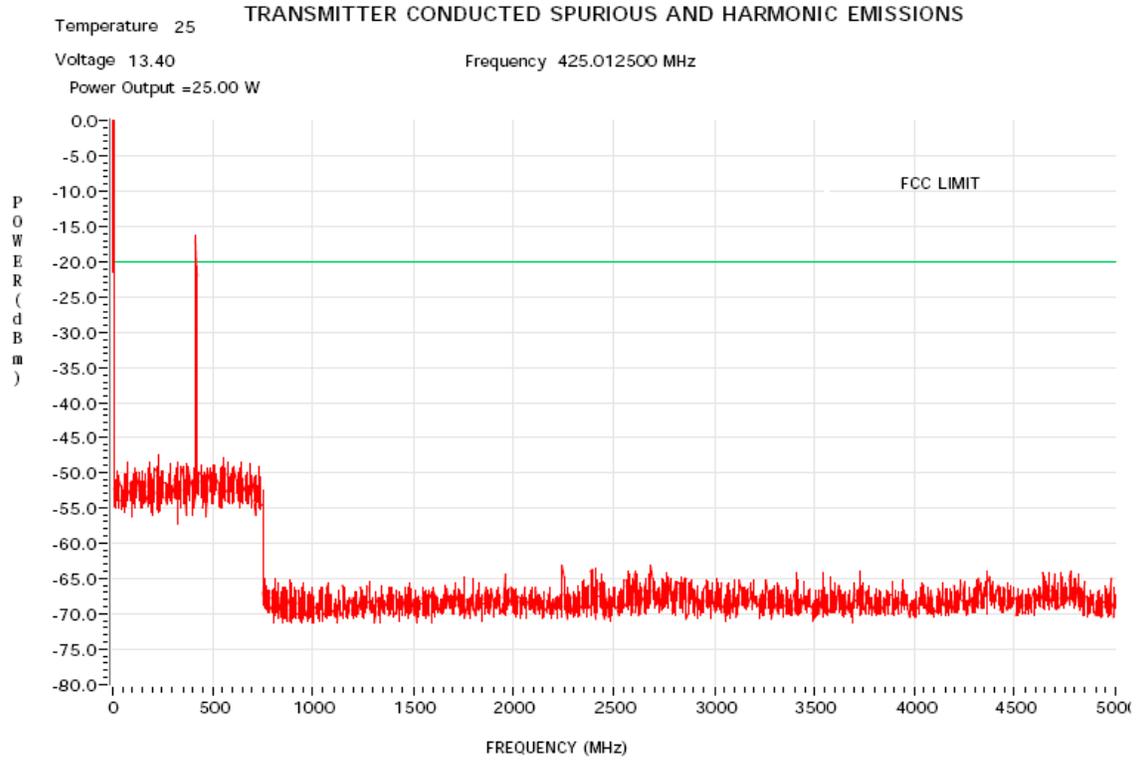
F2 TDMA MODE – 380.0125 MHz



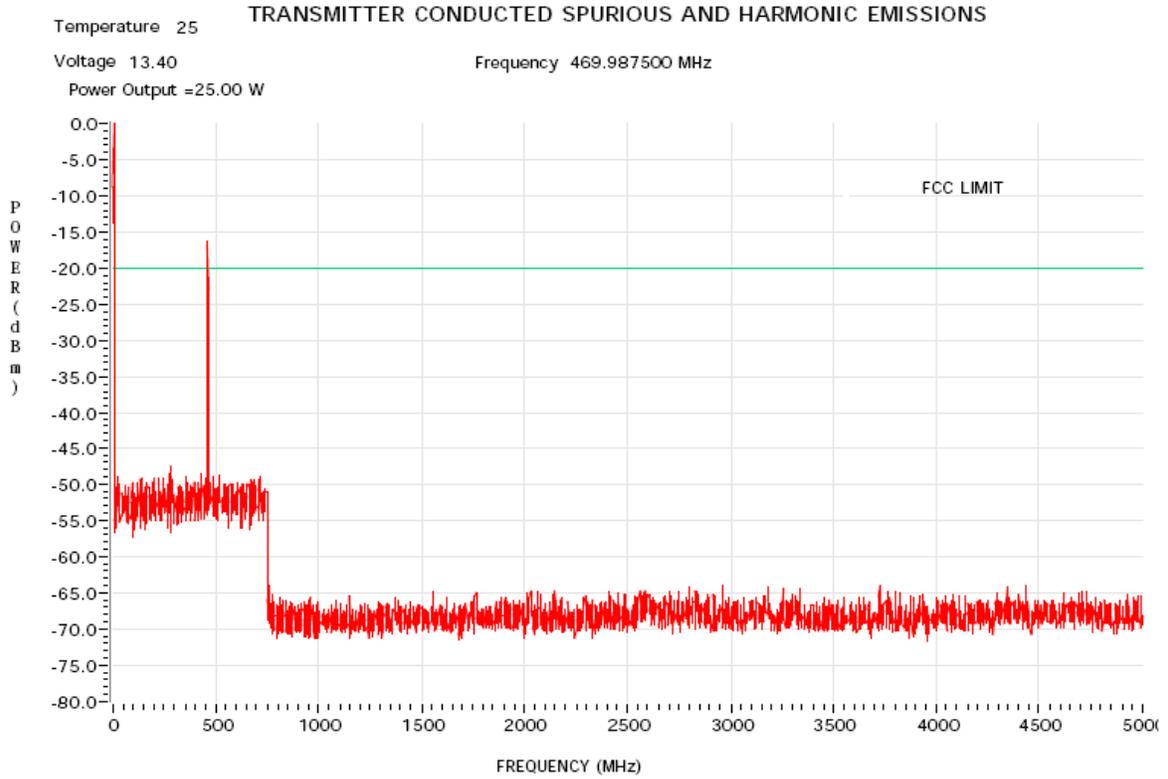
F2 TDMA MODE – 406.2000 MHz



F2 TDMA MODE – 425.0125 MHz



F2 TDMA MODE – 469.9875 MHz



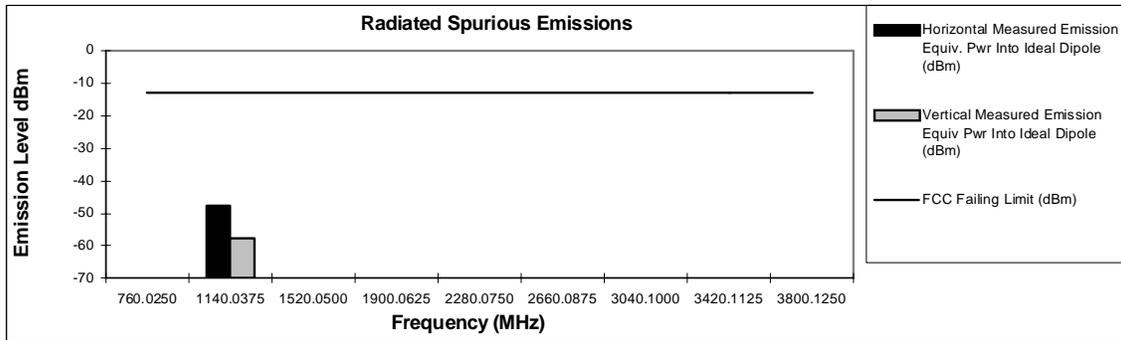
Transmit Radiated Spurious Emissions: APX7500 (Analog Mode)

Tx Power: 120 Watts

380.0125 MHz

Channel Spacing 25kHz | S/N CAI1004DW0

Frequency (MHz)	FCC Failing Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
760.0250	-13	-75.05	*
1140.0375	-13	-47.76	-57.61
1520.0500	-13	*	*
1900.0625	-13	*	*
2280.0750	-13	*	*
2660.0875	-13	*	*
3040.1000	-13	*	*
3420.1125	-13	*	*
3800.1250	-13	*	*



* 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.

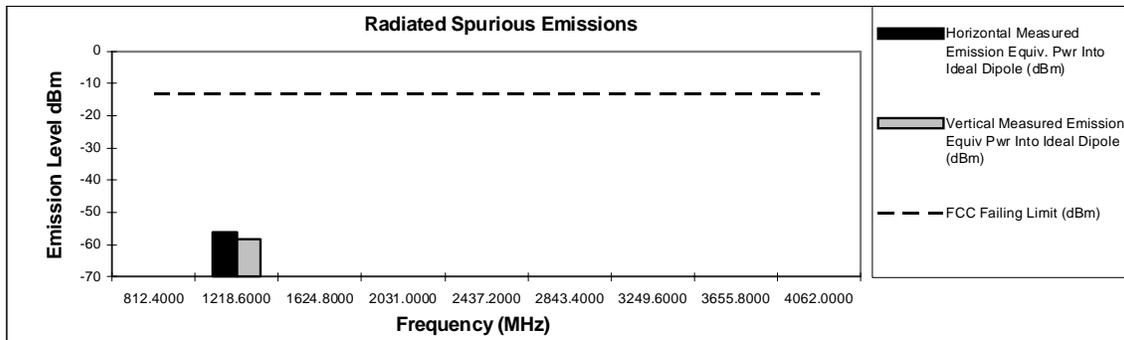
Transmit Radiated Spurious Emissions: APX7500 (Analog Mode)

Tx Power: 120 Watts

406.2 MHz

Channel Spacing 25kHz | S/N CAI1004DW0

Frequency (MHz)	FCC Failing Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
812.4000	-13	-72.53	-73.59
1218.6000	-13	-56.07	-58.11
1624.8000	-13	*	*
2031.0000	-13	*	*
2437.2000	-13	*	*
2843.4000	-13	*	*
3249.6000	-13	*	*
3655.8000	-13	*	*
4062.0000	-13	*	*



* 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.

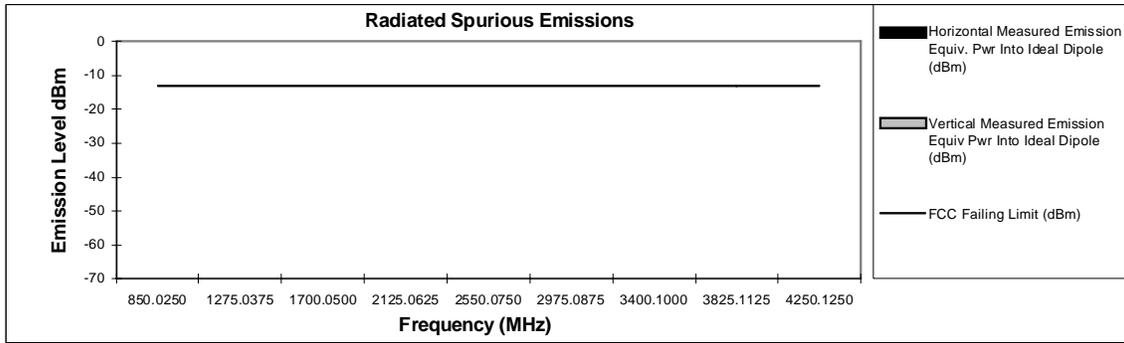
Transmit Radiated Spurious Emissions: APX7500 (Analog Mode)

Tx Power: 120 Watts

425.0125 MHz

Channel Spacing 25kHz | S/N CA11004DW0

Frequency (MHz)	FCC Failing Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
850.0250	-13	-73.44	*
1275.0375	-13	-71.38	-72.31
1700.0500	-13	*	*
2125.0625	-13	*	*
2550.0750	-13	*	*
2975.0875	-13	*	*
3400.1000	-13	*	*
3825.1125	-13	*	*
4250.1250	-13	*	*



* 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.

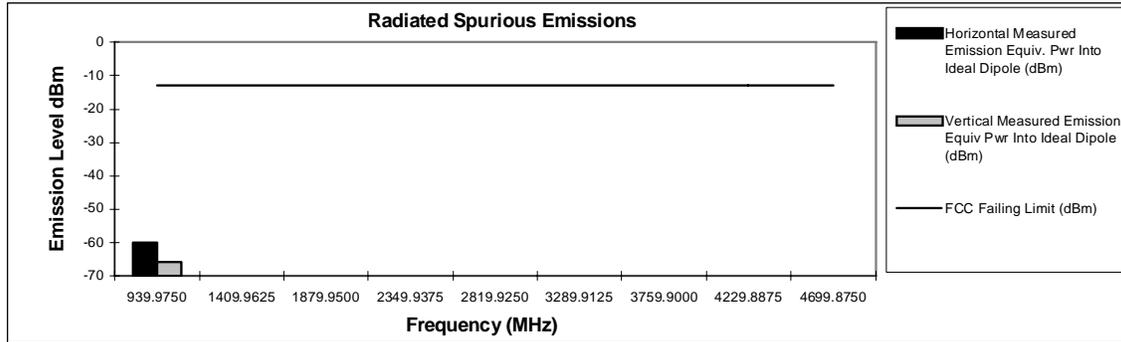
Transmit Radiated Spurious Emissions: APX7500 (Analog Mode)

Tx Power: 120 Watts

469.9875 MHz

Channel Spacing 25kHz | S/N CA11004DW0

Frequency (MHz)	FCC Failing Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
939.9750	-13	-59.77	-65.56
1409.9625	-13	*	*
1879.9500	-13	*	*
2349.9375	-13	*	*
2819.9250	-13	*	*
3289.9125	-13	*	*
3759.9000	-13	*	*
4229.8875	-13	*	*
4699.8750	-13	*	*



* Indicates the spurious emission was less than -70dBm or could not be detected due to noise limitations or ambients.

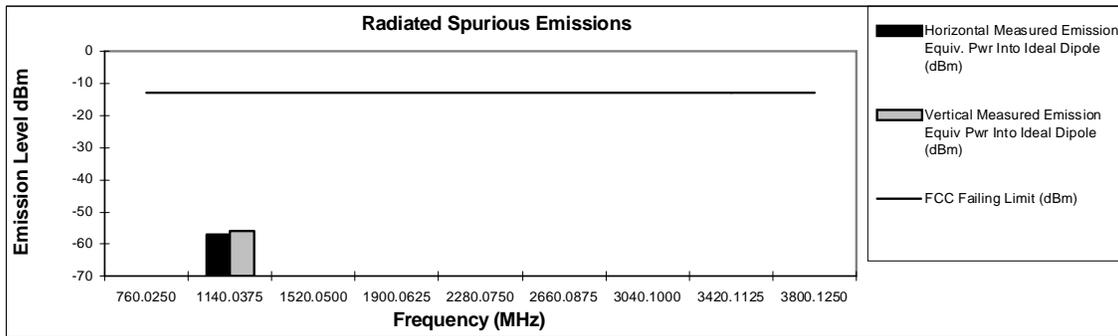
The data presented here was taken using the substitution method as found in the TIA/EIA-603 document.

Transmit Radiated Spurious Emissions: APX7500 (Analog Mode)
Tx Power: 25 Watts

380.0125 MHz

Channel Spacing 25kHz | S/N CA11004DW0

Frequency (MHz)	FCC Failing Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
760.0250	-13	*	*
1140.0375	-13	-57.17	-56.04
1520.0500	-13	*	*
1900.0625	-13	*	*
2280.0750	-13	*	*
2660.0875	-13	*	*
3040.1000	-13	*	*
3420.1125	-13	*	*
3800.1250	-13	*	*



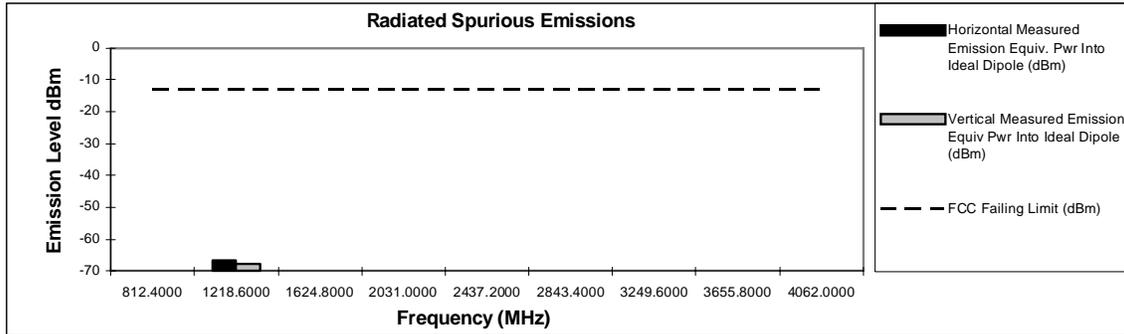
* Indicates the spurious emission was less than -70dBm or could not be detected due to noise limitations or ambients.
 The data presented here was taken using the substitution method as found in the TIA/EIA-603 document.

Transmit Radiated Spurious Emissions: APX7500 (Analog Mode)
Tx Power: 25 Watts

406.2 MHz

Channel Spacing 25kHz | S/N CAI1004DW0

Frequency (MHz)	FCC Failing Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
812.4000	-13	-75.03	*
1218.6000	-13	-66.67	-67.52
1624.8000	-13	-72.06	*
2031.0000	-13	*	*
2437.2000	-13	*	*
2843.4000	-13	*	*
3249.6000	-13	*	*
3655.8000	-13	*	*
4062.0000	-13	*	*



* Indicates the spurious emission was less than -70dBm or could not be detected due to noise limitations or ambients.

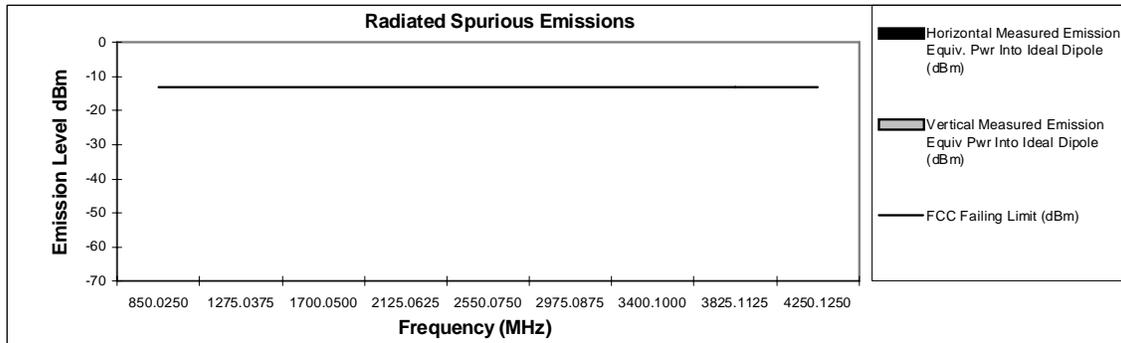
The data presented here was taken using the substitution method as found in the TIA/EIA-603 document.

Transmit Radiated Spurious Emissions: APX7500 (Analog Mode)
Tx Power: 25 Watts

425.0125 MHz

Channel Spacing 25kHz | S/N CAI1004DW0

Frequency (MHz)	FCC Failing Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
850.0250	-13	-75.42	*
1275.0375	-13	*	*
1700.0500	-13	*	*
2125.0625	-13	*	*
2550.0750	-13	*	*
2975.0875	-13	*	*
3400.1000	-13	*	*
3825.1125	-13	*	*
4250.1250	-13	*	*



* Indicates the spurious emission was less than -70dBm or could not be detected due to noise limitations or ambients.

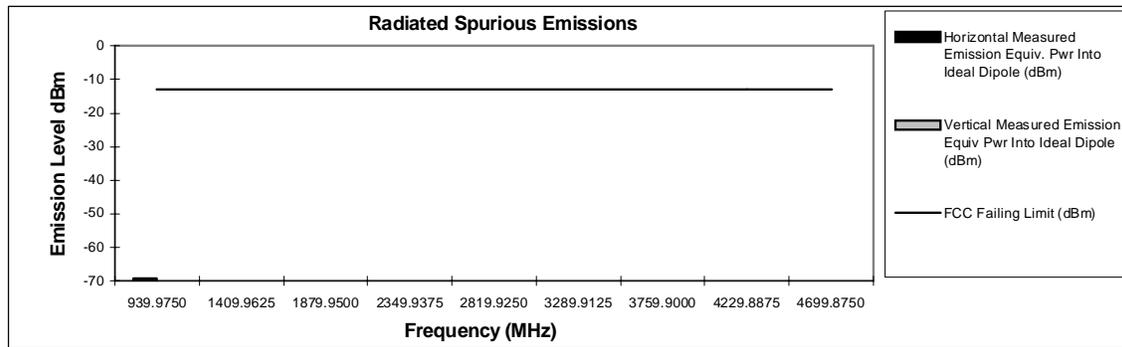
The data presented here was taken using the substitution method as found in the TIA/EIA-603 document.

Transmit Radiated Spurious Emissions: APX7500 (Analog Mode)
Tx Power: 25 Watts

469.9875 MHz

Channel Spacing 25kHz | S/N CAI1004DW0

Frequency (MHz)	FCC Failing Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
939.9750	-13	-69.20	*
1409.9625	-13	*	*
1879.9500	-13	*	*
2349.9375	-13	*	*
2819.9250	-13	*	*
3289.9125	-13	*	*
3759.9000	-13	*	*
4229.8875	-13	*	*
4699.8750	-13	*	*



* 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.

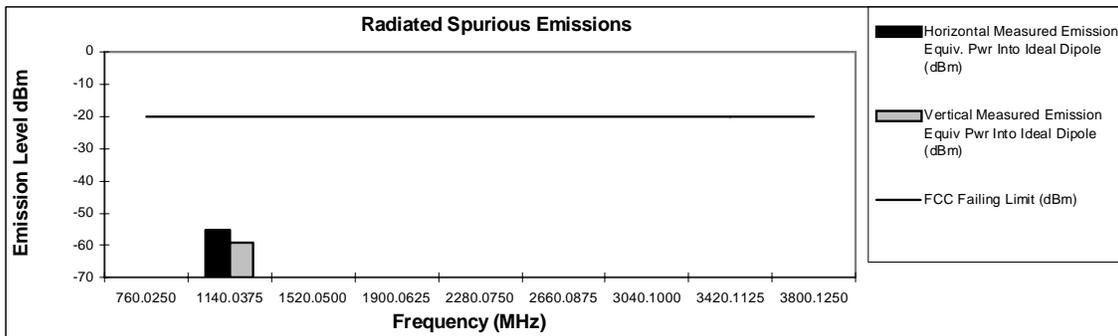
Transmit Radiated Spurious Emissions: APX7500 (APCO Digital)

Tx Power: 120 Watts

380.0125 MHz

Channel Spacing 12.5kHz | S/N CAI1004DW0

Frequency (MHz)	FCC Failing Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
760.0250	-20	-77.26	*
1140.0375	-20	-55.32	-59.22
1520.0500	-20	*	*
1900.0625	-20	*	*
2280.0750	-20	*	*
2660.0875	-20	*	*
3040.1000	-20	*	*
3420.1125	-20	*	*
3800.1250	-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.

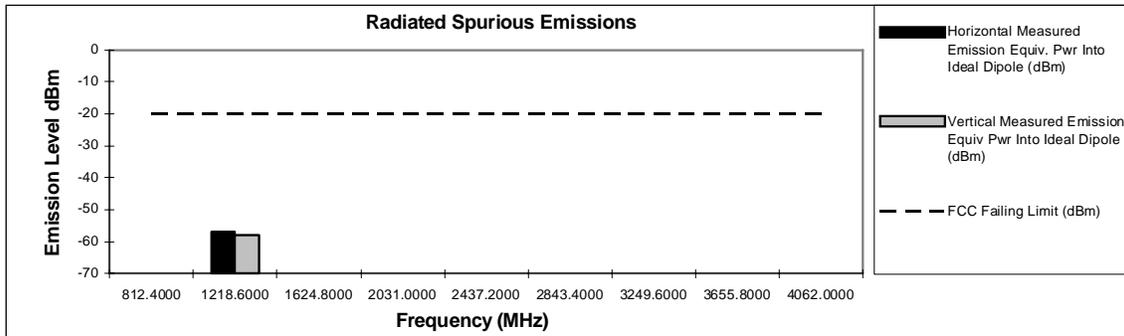
Transmit Radiated Spurious Emissions: APX7500 (APCO Digital)

Tx Power: 120 Watts

406.2 MHz

Channel Spacing 12.5kHz | S/N CAI1004DW0

Frequency (MHz)	FCC Failing Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
812.4000	-20	-74.25	*
1218.6000	-20	-56.84	-58.01
1624.8000	-20	*	*
2031.0000	-20	*	*
2437.2000	-20	*	*
2843.4000	-20	*	*
3249.6000	-20	*	*
3655.8000	-20	*	*
4062.0000	-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.

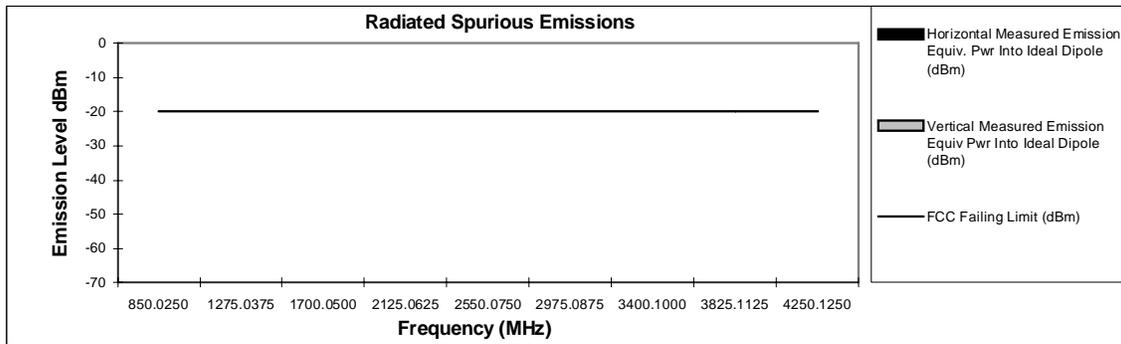
Transmit Radiated Spurious Emissions: APX7500 (APCO Digital)

Tx Power: 120 Watts

425.0125 MHz

Channel Spacing 12.5kHz | S/N CA11004DW0

Frequency (MHz)	FCC Failing Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
850.0250	-20	-74.85	*
1275.0375	-20	-74.34	-71.08
1700.0500	-20	*	*
2125.0625	-20	*	*
2550.0750	-20	*	*
2975.0875	-20	*	*
3400.1000	-20	*	*
3825.1125	-20	*	*
4250.1250	-20	*	*



* Indicates the spurious emission was less than -70dBm or could not be detected due to noise limitations or ambients.

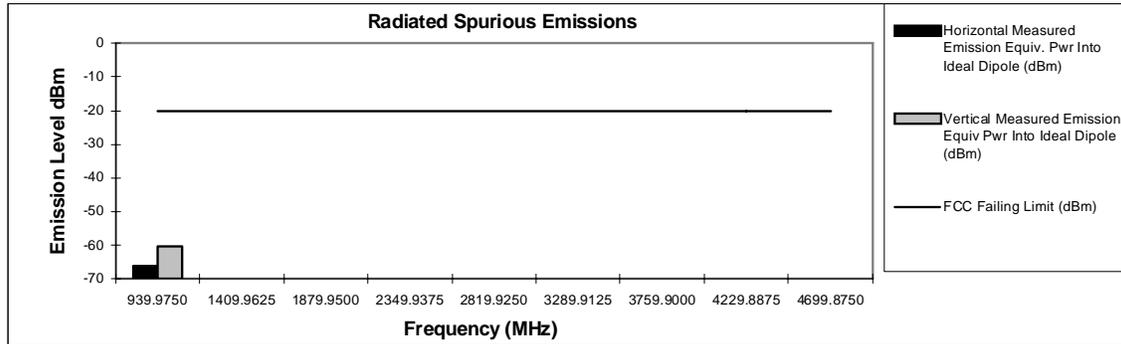
The data presented here was taken using the substitution method as found in the TIA/EIA-603 document.

Transmit Radiated Spurious Emissions: APX7500 (APCO Digital)
Tx Power: 120 Watts

469.9875 MHz

Channel Spacing 12.5kHz | S/N CA11004DW0

Frequency (MHz)	FCC Failing Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
939.9750	-20	-65.91	-60.34
1409.9625	-20	*	*
1879.9500	-20	*	*
2349.9375	-20	*	*
2819.9250	-20	*	*
3289.9125	-20	*	*
3759.9000	-20	*	*
4229.8875	-20	*	*
4699.8750	-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.

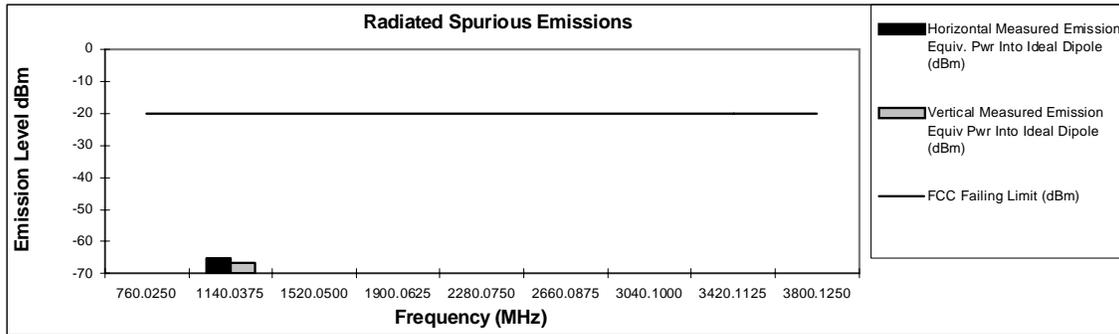
Transmit Radiated Spurious Emissions: APX7500 (APCO Digital)

Tx Power: 25 Watts

380.0125 MHz

Channel Spacing 12.5kHz | S/N CAI1004DW0

Frequency (MHz)	FCC Failing Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
760.0250	-20	-78.91	*
1140.0375	-20	-65.39	-66.85
1520.0500	-20	*	*
1900.0625	-20	*	*
2280.0750	-20	*	*
2660.0875	-20	*	*
3040.1000	-20	*	*
3420.1125	-20	*	*
3800.1250	-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.

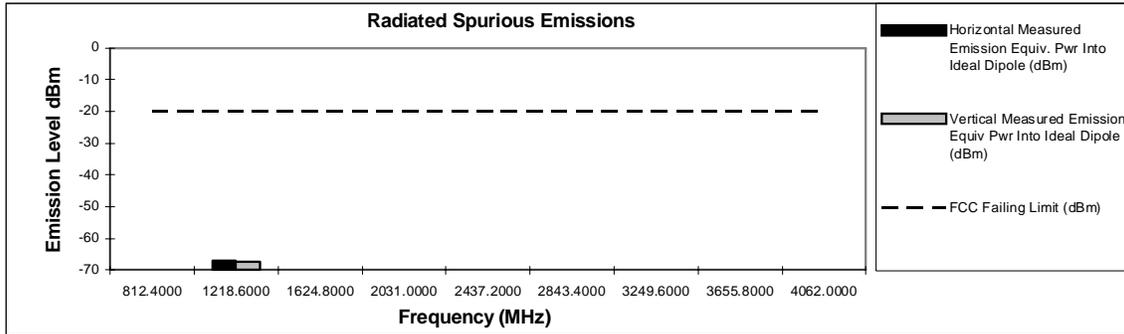
Transmit Radiated Spurious Emissions: APX7500 (APCO Digital)

Tx Power: 25 Watts

406.2 MHz

Channel Spacing 12.5kHz | S/N CAI1004DW0

Frequency (MHz)	FCC Failing Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
812.4000	-20	-74.73	*
1218.6000	-20	-66.78	-67.15
1624.8000	-20	*	*
2031.0000	-20	*	*
2437.2000	-20	*	*
2843.4000	-20	*	*
3249.6000	-20	*	*
3655.8000	-20	*	*
4062.0000	-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.

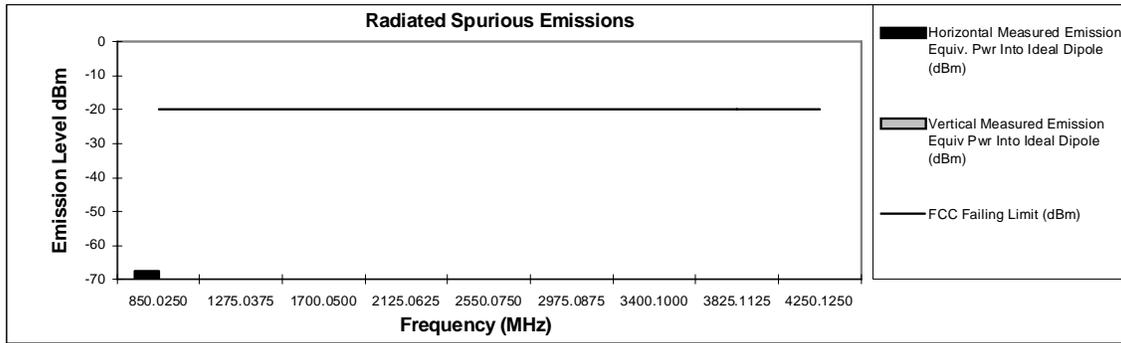
Transmit Radiated Spurious Emissions: APX7500 (APCO Digital)

Tx Power: 25 Watts

425.0125 MHz

Channel Spacing 12.5kHz | S/N CAI1004DW0

Frequency (MHz)	FCC Failing Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
850.0250	-20	-67.53	*
1275.0375	-20	*	*
1700.0500	-20	*	*
2125.0625	-20	*	*
2550.0750	-20	*	*
2975.0875	-20	*	*
3400.1000	-20	*	*
3825.1125	-20	*	*
4250.1250	-20	*	*



* Indicates the spurious emission was less than -70dBm or could not be detected due to noise limitations or ambients.

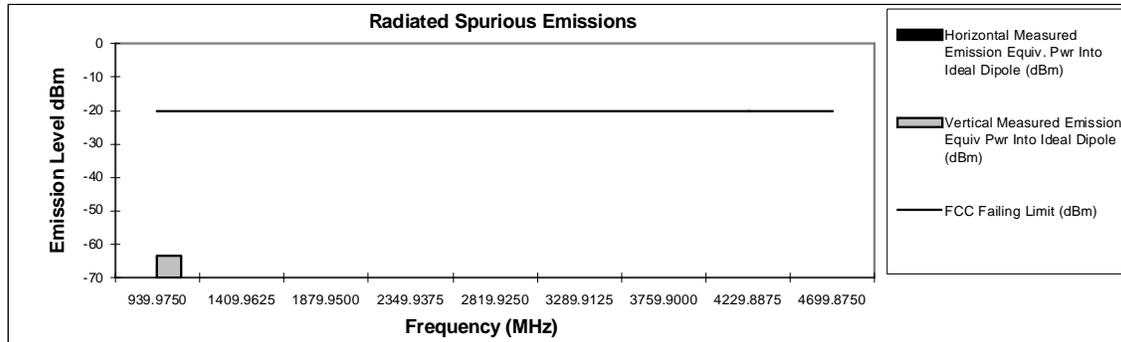
The data presented here was taken using the substitution method as found in the TIA/EIA-603 document.

Transmit Radiated Spurious Emissions: APX7500 (APCO Digital)
Tx Power: 25 Watts

469.9875 MHz

Channel Spacing 12.5kHz | S/N CAI1004DW0

Frequency (MHz)	FCC Failing Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
939.9750	-20	-70.49	-63.38
1409.9625	-20	*	*
1879.9500	-20	*	*
2349.9375	-20	*	*
2819.9250	-20	*	*
3289.9125	-20	*	*
3759.9000	-20	*	*
4229.8875	-20	*	*
4699.8750	-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.

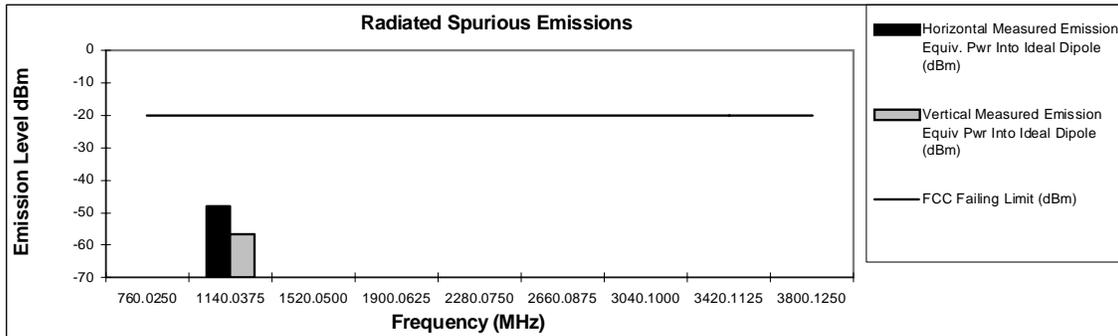
Transmit Radiated Spurious Emissions: APX7500 (F2 Mode)

Tx Power: 120 Watts

380.0125 MHz

Channel Spacing 12.5kHz | S/N CAI1004DW0

Frequency (MHz)	FCC Failing Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
760.0250	-20	-75.08	*
1140.0375	-20	-48.06	-56.61
1520.0500	-20	*	*
1900.0625	-20	*	*
2280.0750	-20	*	*
2660.0875	-20	*	*
3040.1000	-20	*	*
3420.1125	-20	*	*
3800.1250	-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.

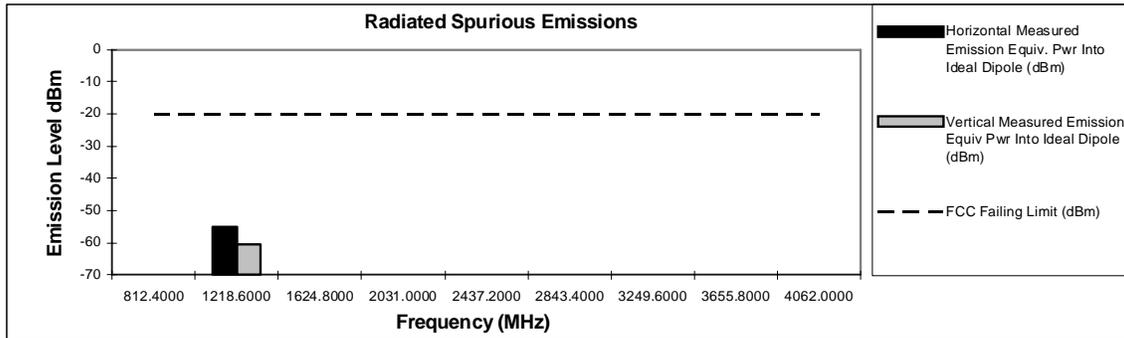
Transmit Radiated Spurious Emissions: APX7500 (F2 Mode)

Tx Power: 120 Watts

406.2 MHz

Channel Spacing 12.5kHz | S/N CAI1004DW0

Frequency (MHz)	FCC Failing Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
812.4000	-20	-71.82	-71.30
1218.6000	-20	-54.86	-60.55
1624.8000	-20	*	*
2031.0000	-20	*	*
2437.2000	-20	*	*
2843.4000	-20	*	*
3249.6000	-20	*	*
3655.8000	-20	*	*
4062.0000	-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.

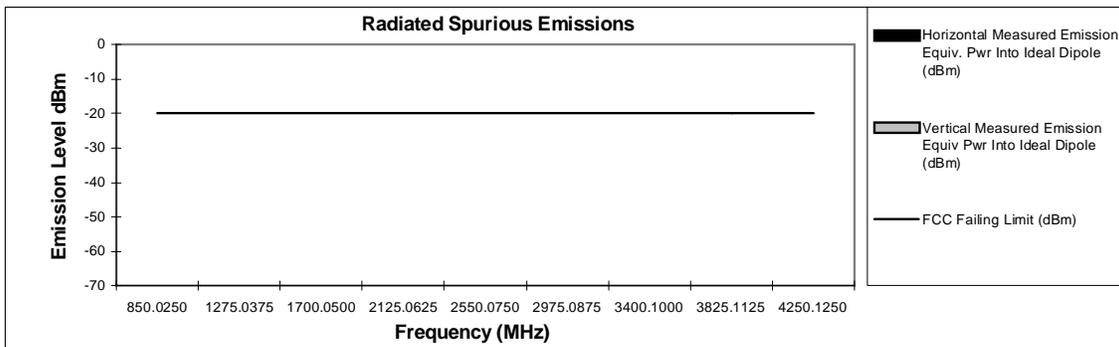
Transmit Radiated Spurious Emissions: APX7500 (F2 Mode)

Tx Power: 120 Watts

425.0125 MHz

Channel Spacing 12.5kHz | S/N CAI1004DW0

Frequency (MHz)	FCC Failing Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
850.0250	-20	-74.17	*
1275.0375	-20	-70.13	*
1700.0500	-20	*	*
2125.0625	-20	*	*
2550.0750	-20	*	*
2975.0875	-20	*	*
3400.1000	-20	*	*
3825.1125	-20	*	*
4250.1250	-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.

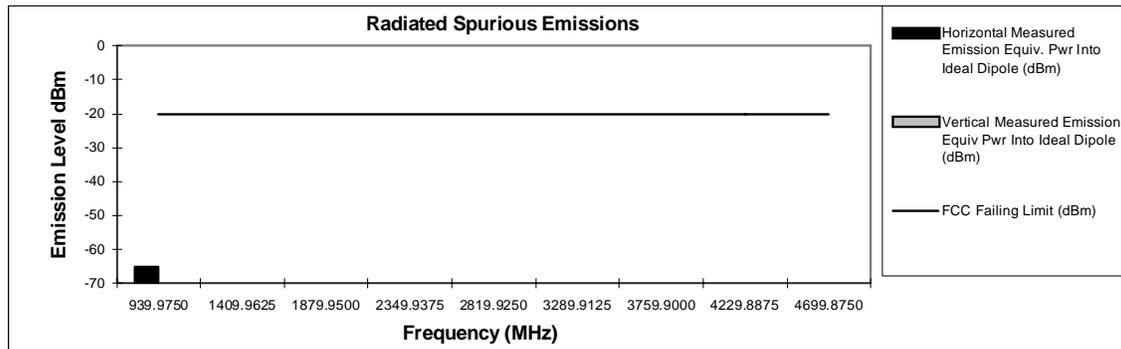
Transmit Radiated Spurious Emissions: APX7500 (F2 Mode)

Tx Power: 120 Watts

469.9875 MHz

Channel Spacing 12.5kHz | S/N CAI1004DW0

Frequency (MHz)	FCC Failing Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
939.9750	-20	-65.13	*
1409.9625	-20	-74.37	*
1879.9500	-20	*	*
2349.9375	-20	*	*
2819.9250	-20	*	*
3289.9125	-20	*	*
3759.9000	-20	*	*
4229.8875	-20	*	*
4699.8750	-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.

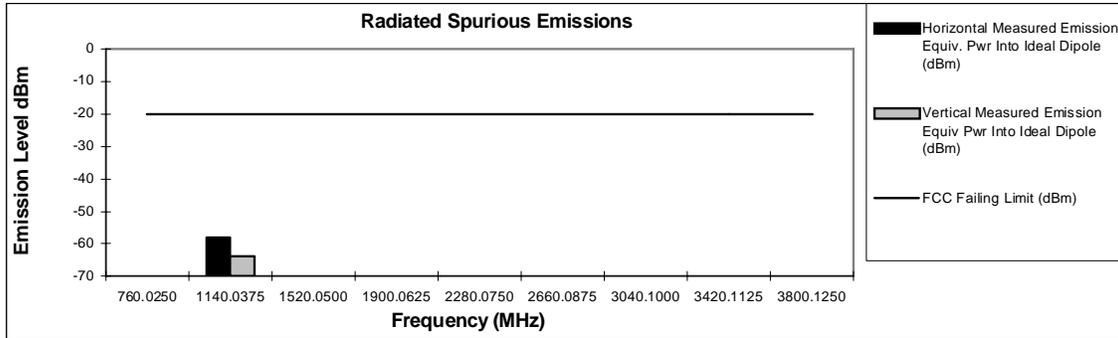
Transmit Radiated Spurious Emissions: APX7500 (F2 Mode)

Tx Power: 25 Watts

380.0125 MHz

Channel Spacing 12.5kHz | S/N CAI1004DW0

Frequency (MHz)	FCC Failing Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
760.0250	-20	*	*
1140.0375	-20	-58.13	-63.88
1520.0500	-20	*	*
1900.0625	-20	*	*
2280.0750	-20	*	*
2660.0875	-20	*	*
3040.1000	-20	*	*
3420.1125	-20	*	*
3800.1250	-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.

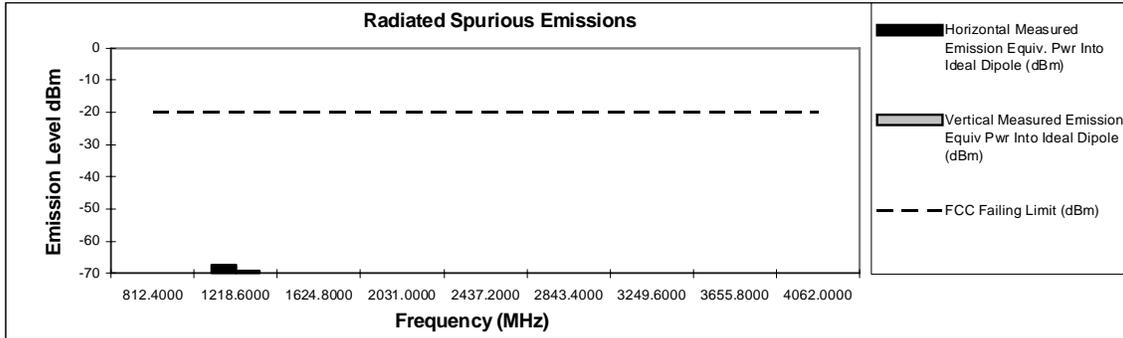
Transmit Radiated Spurious Emissions: APX7500 (F2 Mode)

Tx Power: 25 Watts

406.2 MHz

Channel Spacing 12.5kHz | S/N CAI1004DW0

Frequency (MHz)	FCC Failing Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
812.4000	-20	-73.18	*
1218.6000	-20	-67.22	-69.14
1624.8000	-20	*	*
2031.0000	-20	*	*
2437.2000	-20	*	*
2843.4000	-20	*	*
3249.6000	-20	*	*
3655.8000	-20	*	*
4062.0000	-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.

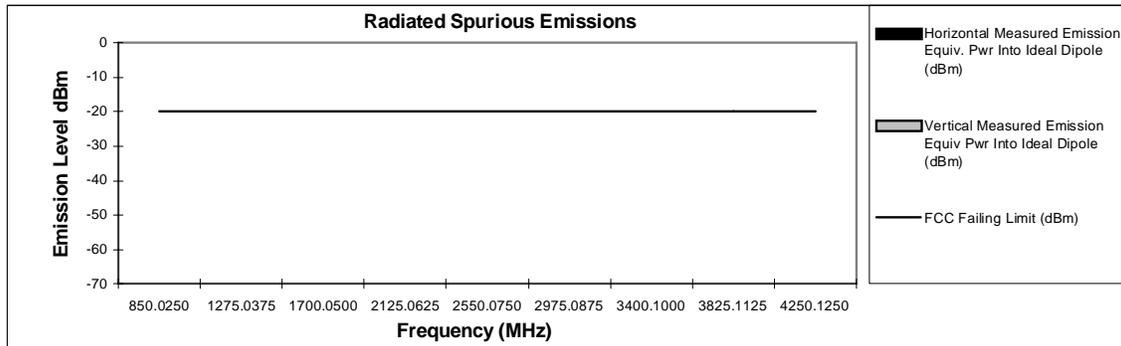
Transmit Radiated Spurious Emissions: APX7500 (F2 Mode)

Tx Power: 25 Watts

425.0125 MHz

Channel Spacing 12.5kHz | S/N CAI1004DW0

Frequency (MHz)	FCC Failing Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
850.0250	-20	-72.16	*
1275.0375	-20	*	*
1700.0500	-20	*	*
2125.0625	-20	*	*
2550.0750	-20	*	*
2975.0875	-20	*	*
3400.1000	-20	*	*
3825.1125	-20	*	*
4250.1250	-20	*	*



* Indicates the spurious emission was less than -70dBm or could not be detected due to noise limitations or ambients.

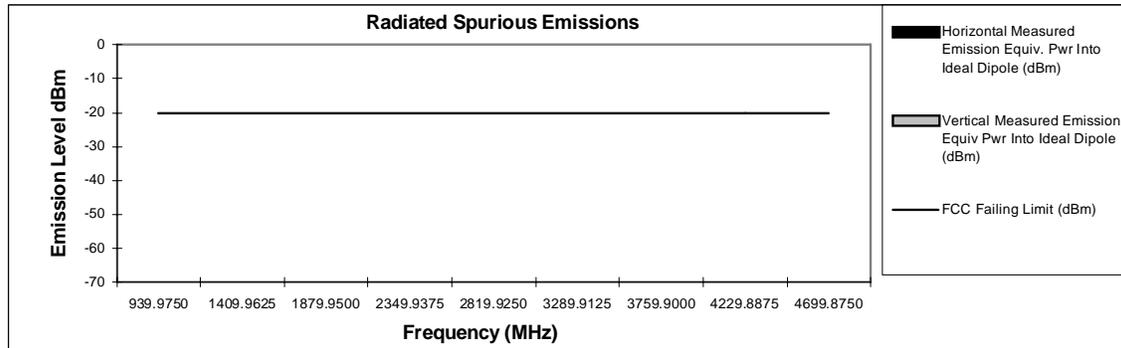
The data presented here was taken using the substitution method as found in the TIA/EIA-603 document.

Transmit Radiated Spurious Emissions: APX7500 (F2 Mode)
Tx Power: 25 Watts

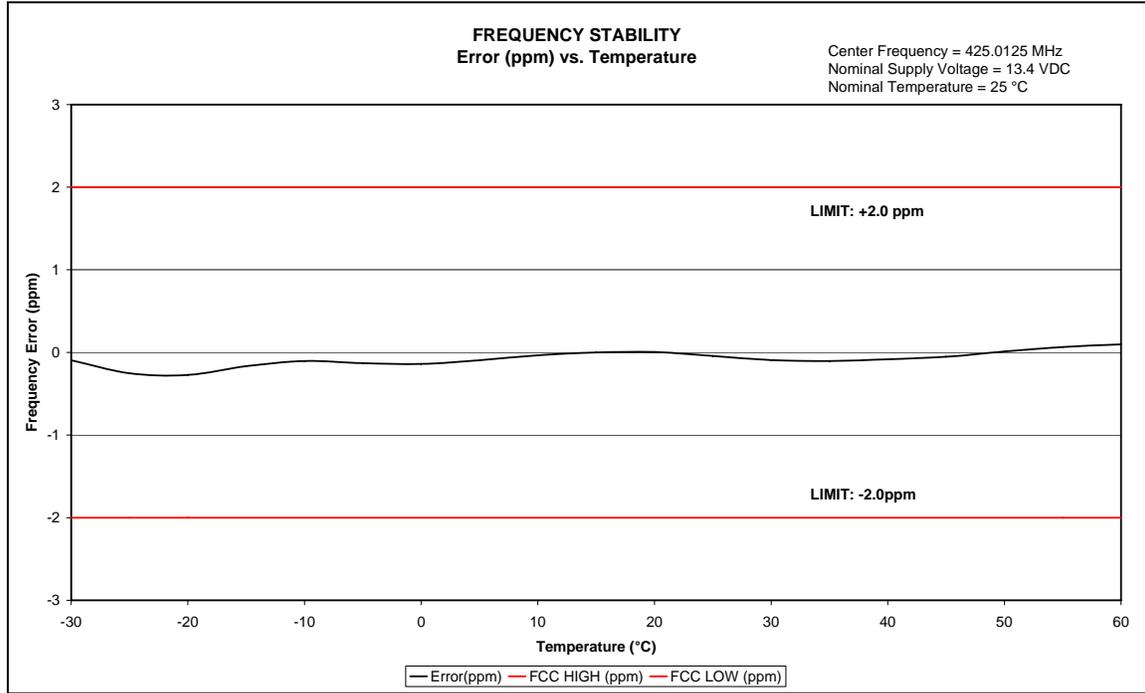
469.9875 MHz

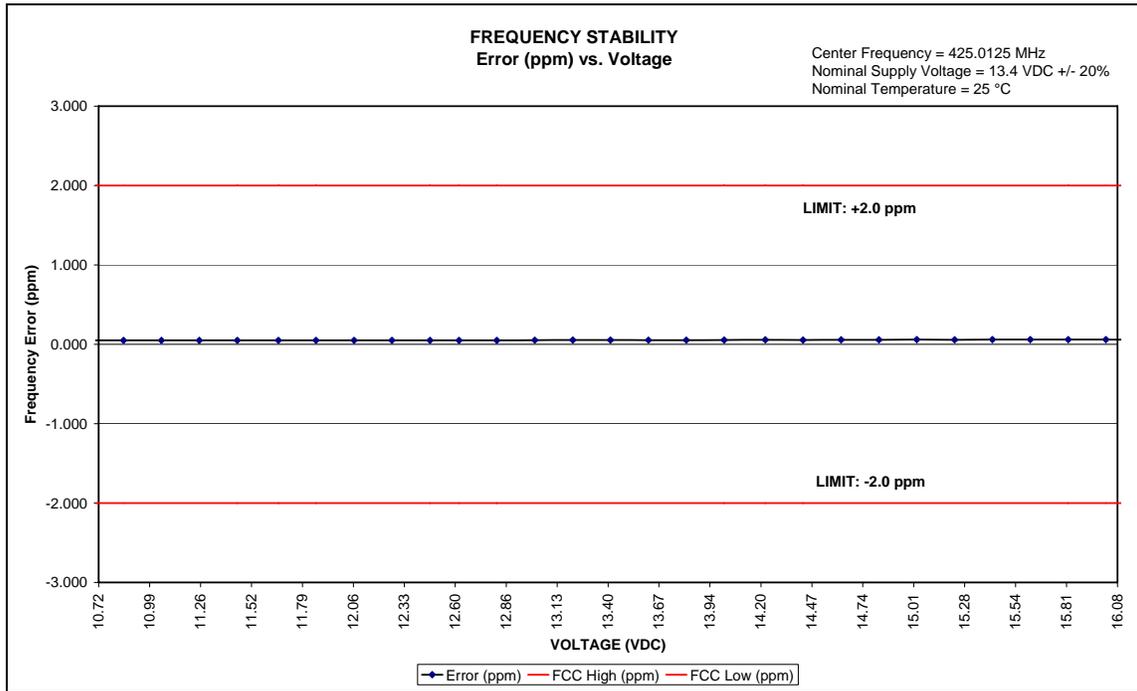
Channel Spacing 12.5kHz | S/N CAI1004DW0

Frequency (MHz)	FCC Failing Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
939.9750	-20	-70.12	*
1409.9625	-20	*	*
1879.9500	-20	*	*
2349.9375	-20	*	*
2819.9250	-20	*	*
3289.9125	-20	*	*
3759.9000	-20	*	*
4229.8875	-20	*	*
4699.8750	-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.

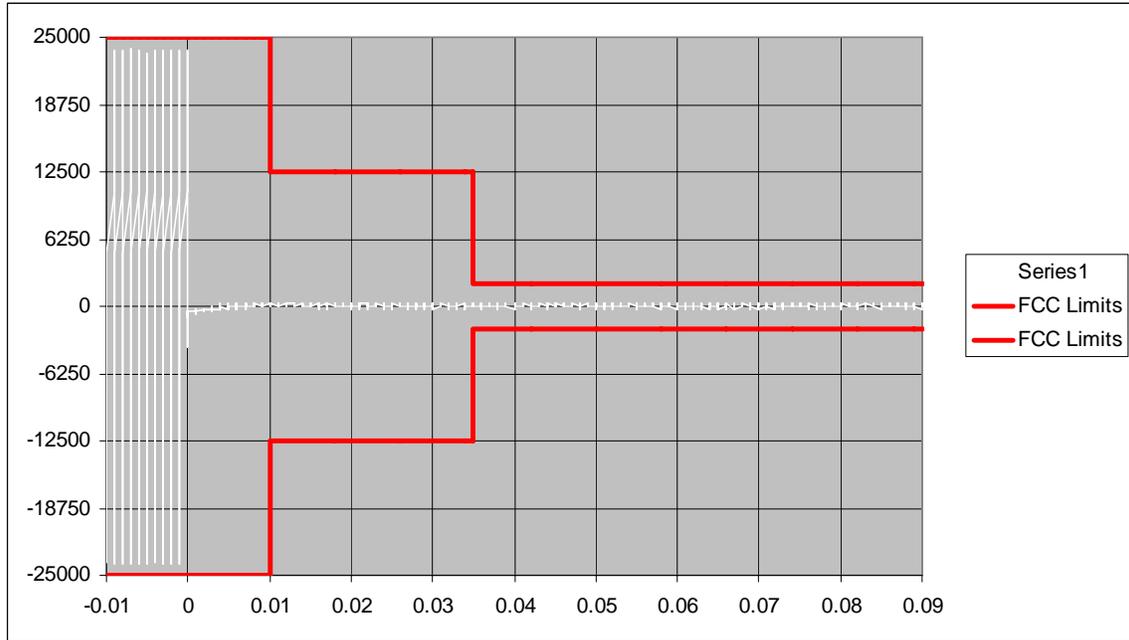




TRANSIENT FREQUENCY BEHAVIOR

Transient Frequency Behavior – 25 KHz Channelization – Key-up – 120 Watts

REF 50.8 dBm



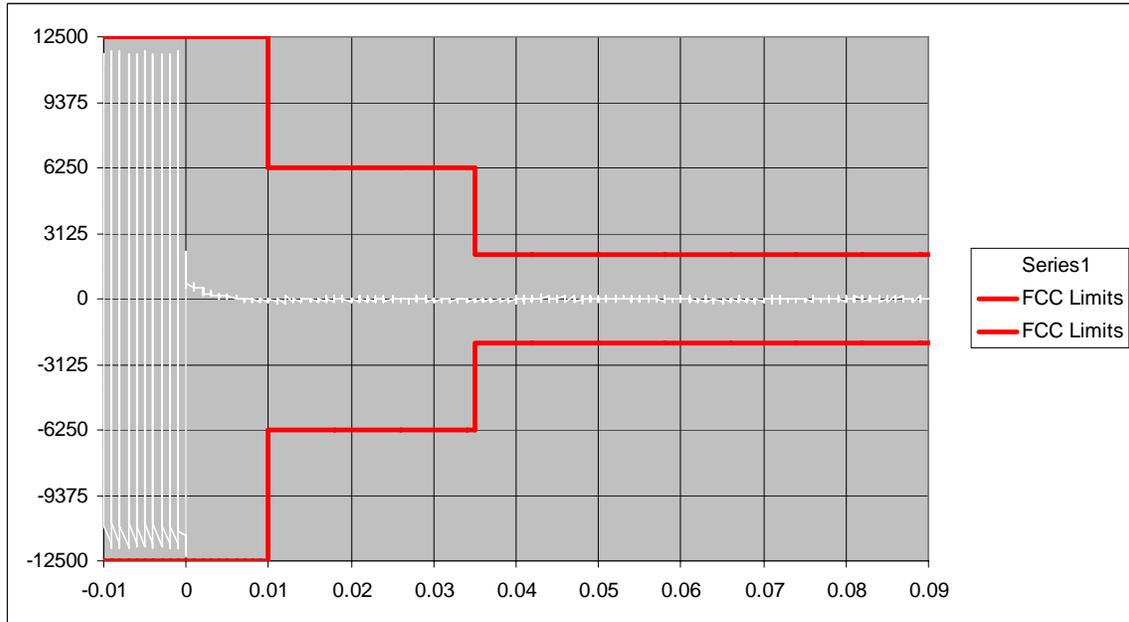
CENTER 425.0125 MHz

10 ms/div

6.25KHz/div

Transient Frequency Behavior – 12.5 KHz Channelization – Key-up – 120 Watts

REF 50.8 dBm



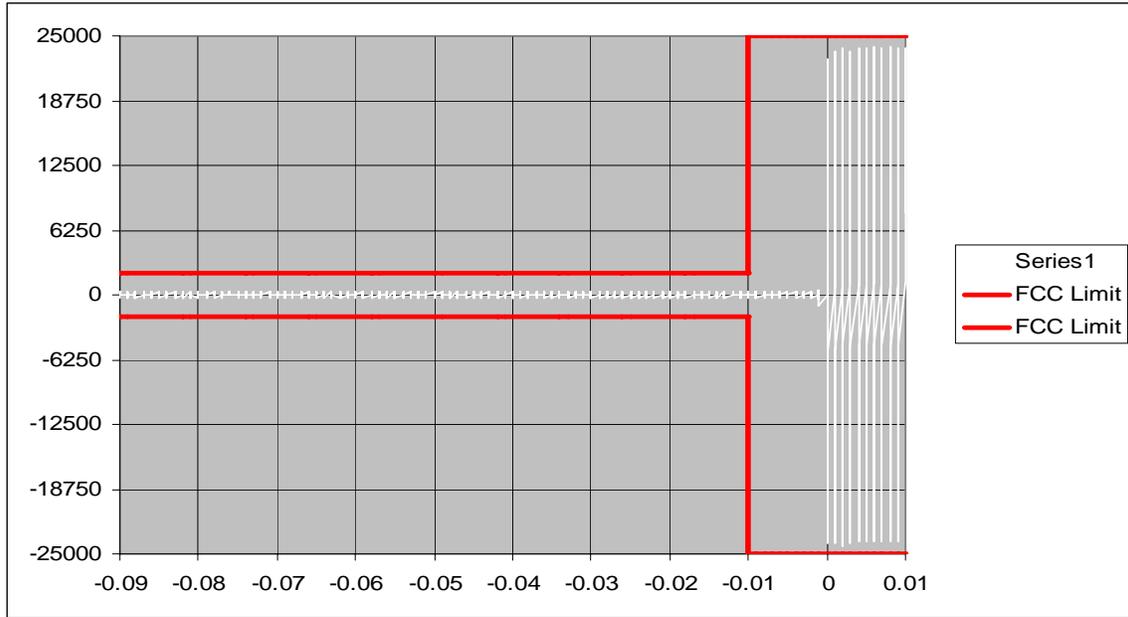
CENTER 425.0125 MHz

10 ms/div

3.125 KHz/div

Transient Frequency Behavior – 25 KHz Channelization – De-Key – 120 Watts

REF 50.8 dBm



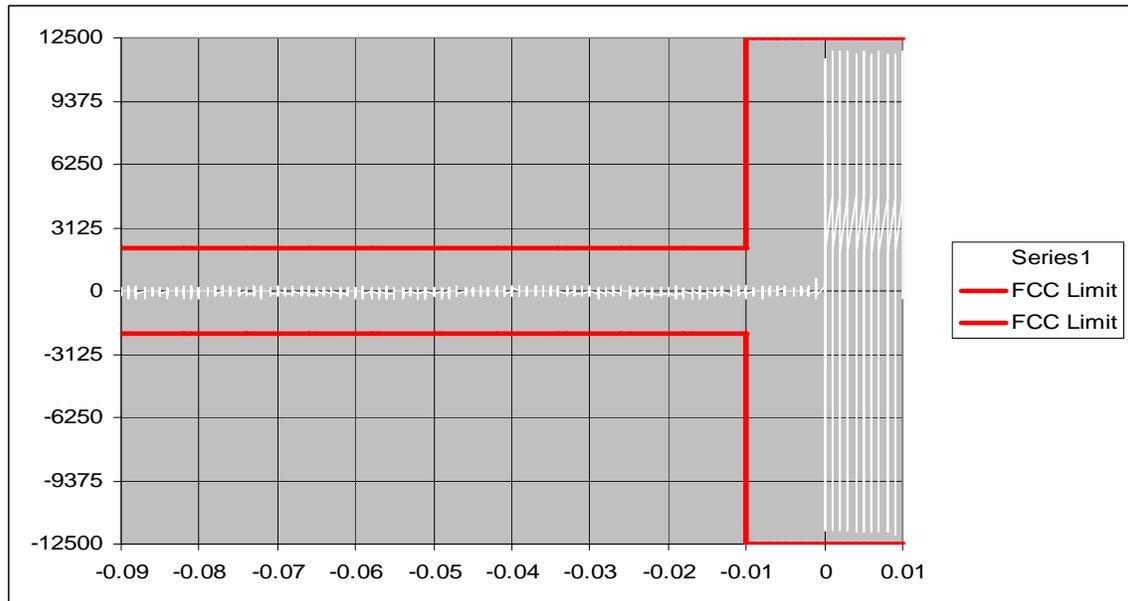
CENTER 425.0125 MHz

10 ms/div

6.25 KHz/div

Transient Frequency Behavior – 12.5 KHz Channelization – De-Key – 120 Watts

REF 50.8 dBm



CENTER 425.0125 MHz

10 ms/div

3.125 KHz/div