

## 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

- 6B-1 –425.025 MHz, 12.5 kHz Channel Spacing
- 6B-2 –155.025 MHz, 12.5 kHz Channel Spacing
- 6B-3 –425.025 MHz, 25 kHz Channel Spacing
- 6B-4 –155.025 MHz, 25 kHz Channel Spacing

**EXHIBIT 6C** – Audio Low Pass Filter Response

- 6C-1 –425.025 MHz, 12.5 kHz Channel Spacing
- 6C-2 –155.025 MHz, 12.5 kHz Channel Spacing
- 6C-3 –425.025 MHz, 25 kHz Channel Spacing
- 6C-4 –155.025 MHz, 25 kHz Channel Spacing

**EXHIBIT 6D** – Modulation Limiting

- 6D-1 –425.025 MHz, 12.5 kHz Channel Spacing
- 6D-2 –155.025 MHz, 12.5 kHz Channel Spacing
- 6D-3 –425.025 MHz, 25 kHz Channel Spacing
- 6D-4 –155.025 MHz, 25 kHz Channel Spacing

**EXHIBIT 6E** – Occupied Bandwidth

- 6E-1 –425.025 MHz, 12.5 kHz Channel Spacing (Analog Voice)
- 6E-2 –156.675 MHz, 12.5 kHz Channel Spacing (Analog Voice)
- 6E-3 –425.025 MHz, 25 kHz Channel Spacing (Analog Voice)
- 6E-4 –156.675 MHz, 25 kHz Channel Spacing (Analog Voice)
- 6E-5 –425.025 MHz, 12.5 kHz Channel Spacing (Digital Data)
- 6E-6 –156.675 MHz, 12.5 kHz Channel Spacing (Digital Data)
- 6E-7 –425.025 MHz, 12.5 kHz Channel Spacing (Digital Voice)
- 6E-8 –156.675 MHz, 12.5 kHz Channel Spacing (Digital Voice)
- 6E-9 –425.025 MHz, 12.5 kHz Channel Spacing (Digital TDMA)
- 6E-10 –156.675 MHz, 12.5 kHz Channel Spacing (Digital TDMA)
- 6E-11 –425.025 MHz, (Digital Voice with Encryption)
- 6E-12 –156.675 MHz, (Digital Voice with Encryption)

**EXHIBIT 6F** – Radiated Spurious Emissions

- 6F-1 - High Power 380.075 MHz, 25 kHz Channel Spacing
- 6F-2 - High Power 424.975 MHz, 25 kHz Channel Spacing
- 6F-3 - High Power 469.975 MHz, 25 kHz Channel Spacing
- 6F-4 - High Power 136.0125 MHz, 25 kHz Channel Spacing
- 6F-5 - High Power 153.0125 MHz, 25 kHz Channel Spacing
- 6F-6 - High Power 173.9875 MHz, 25 kHz Channel Spacing

**EXHIBIT 6G** – Frequency Stability

- 6G-1 – 425.025 MHz vs. Supply Voltage
- 6G-2 –156.675 MHz vs. Supply Voltage
- 6G-3 – 425.0125 MHz vs. Temperature
- 6G-4 – 156.675 MHz vs. Temperature

**EXHIBIT 6H – Conducted Spurious Emissions**

- 6F-1 - High Power 380.075 MHz, 25 kHz Channel Spacing
- 6F-2 - High Power 424.975 MHz, 25 kHz Channel Spacing
- 6F-3 - High Power 469.975 MHz, 25 kHz Channel Spacing
- 6F-4 - High Power 136.0125 MHz, 25 kHz Channel Spacing
- 6F-5 - High Power 153.0125 MHz, 25 kHz Channel Spacing
- 6F-6 - High Power 173.9875 MHz, 25 kHz Channel Spacing

**EXHIBIT 6I – Transient Frequency Behavior**

- 6I-1 – 425.025 MHz, 12.5kHz Channel Spacing – Transmitter On
- 6I-2 – 425.025 MHz, 12.5kHz Channel Spacing – Transmitter Off
- 6I-3 – 155.025 MHz, 12.5kHz Channel Spacing – Transmitter On
- 6I-4 – 155.025 MHz, 12.5kHz Channel Spacing – Transmitter Off
- 6I-5 – 425.025 MHz, 25kHz Channel Spacing – Transmitter On
- 6I-6 – 425.025 MHz, 25kHz Channel Spacing – Transmitter Off
- 6I-7 – 155.025 MHz, 25kHz Channel Spacing – Transmitter On
- 6I-8 – 155.025 MHz, 25kHz Channel Spacing – Transmitter Off

**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)**Frequency = 425.0125 MHz:**

Output RF power	1.0 Watts
DC Voltage	7.50 Volts
DC Current	1.01 Amps
Output RF power	3.00 Watts
DC Voltage	7.50 Volts
DC Current	1.48 Amps
Output RF power	5.7 Watts
DC Voltage	7.50 Volts
DC Current	2.00 Amps

**Frequency = 154.5 MHz:**

Output RF power	1.0 Watts
DC Voltage	7.50 Volts
DC Current	1.25 Amps
Output RF power	3.00 Watts
DC Voltage	7.50 Volts
DC Current	1.52 Amps
Output RF power	6.6 Watts
DC Voltage	7.50 Volts
DC Current	2.02 Amps

EXHIBIT 6B

Transmit Audio Response - Pursuant 47 CFR 2.1047 and 2.1033(c) (13)

**Audio Frequency Response**  
(Freq: 425.025, ChSp: 12.5 kHz)

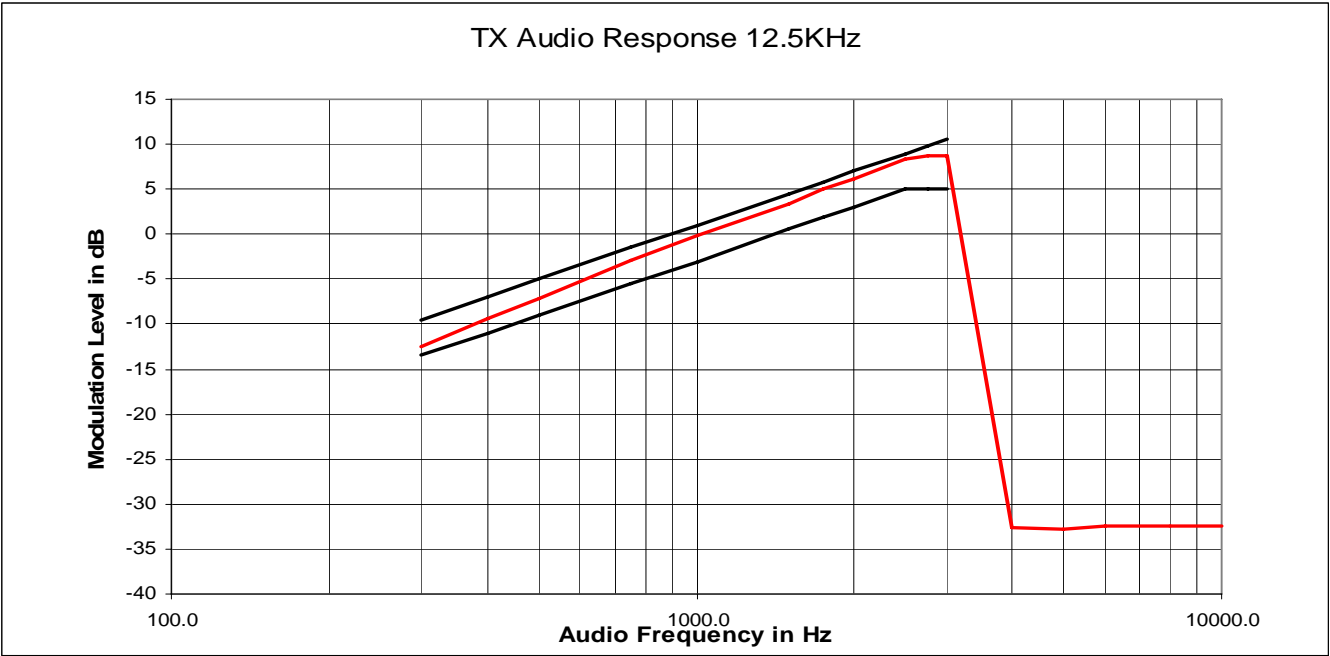


Exhibit 6B-1

**Audio Frequency Response**  
(Freq: 155.025, ChSp: 12.5 kHz)

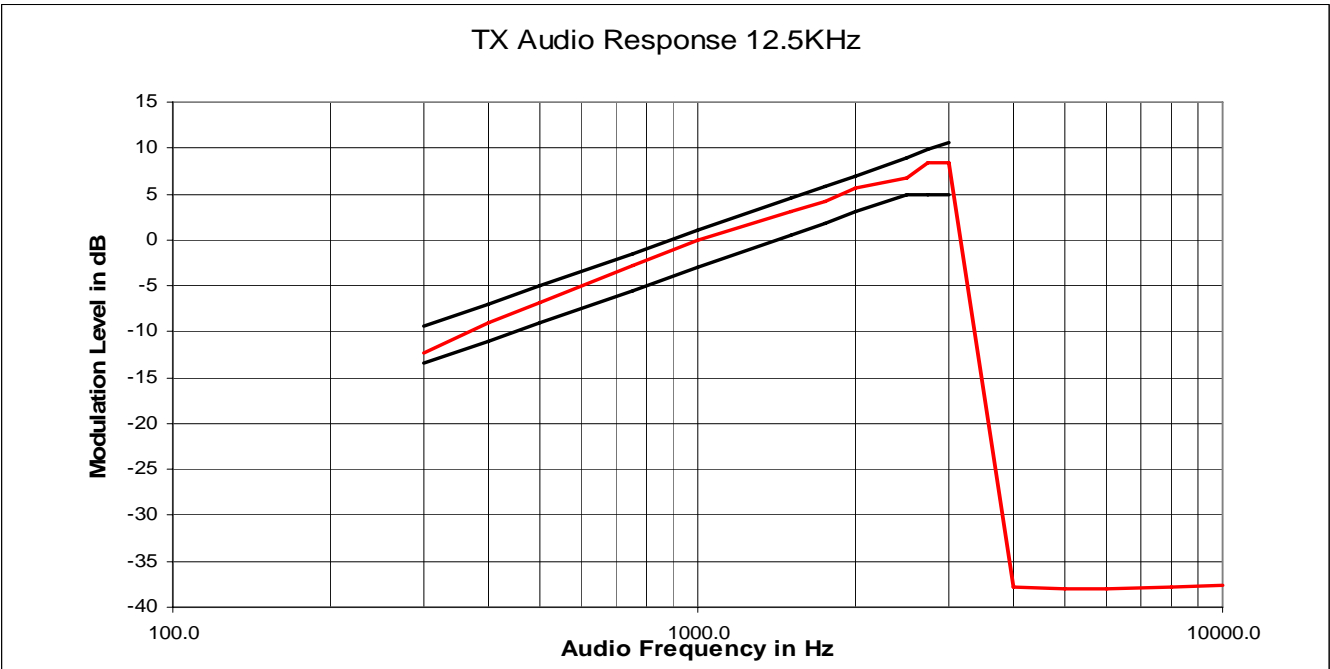


Exhibit 6B-2

Audio Frequency Response  
(Freq: 425.025, ChSp: 25 kHz)

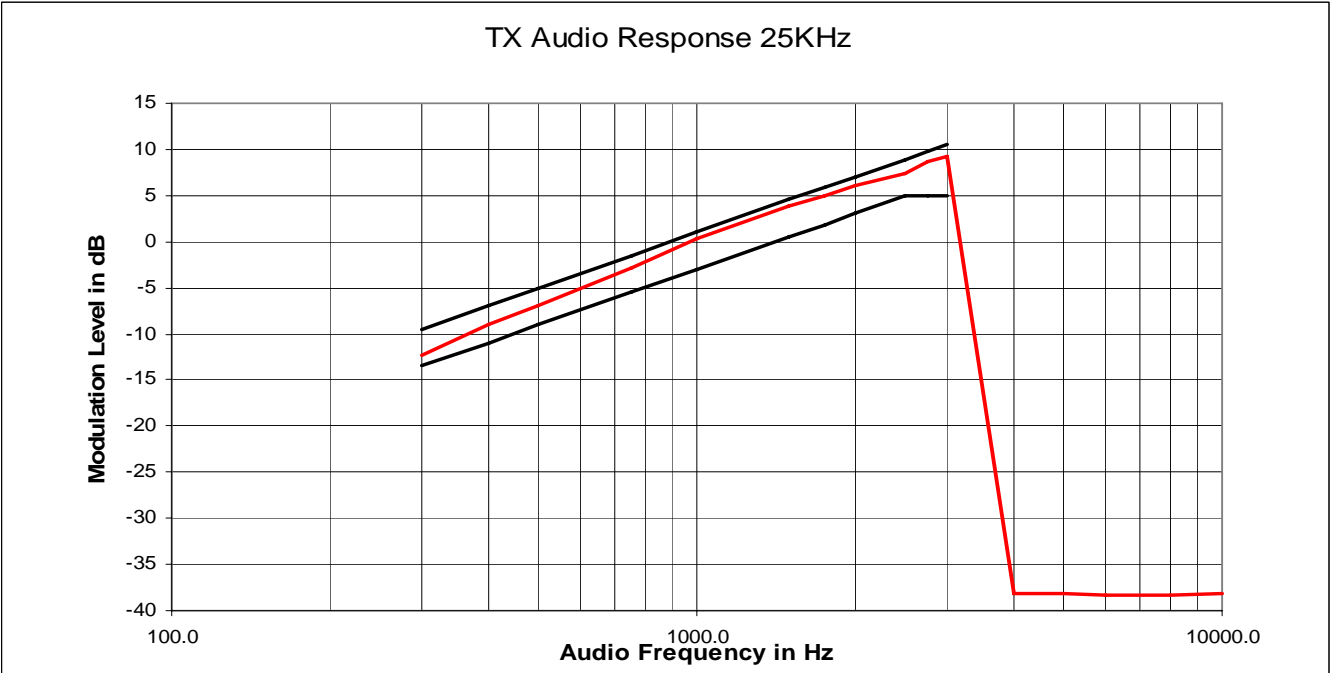


Exhibit 6B-3

Audio Frequency Response  
(Freq: 155.025, ChSp: 25 kHz)

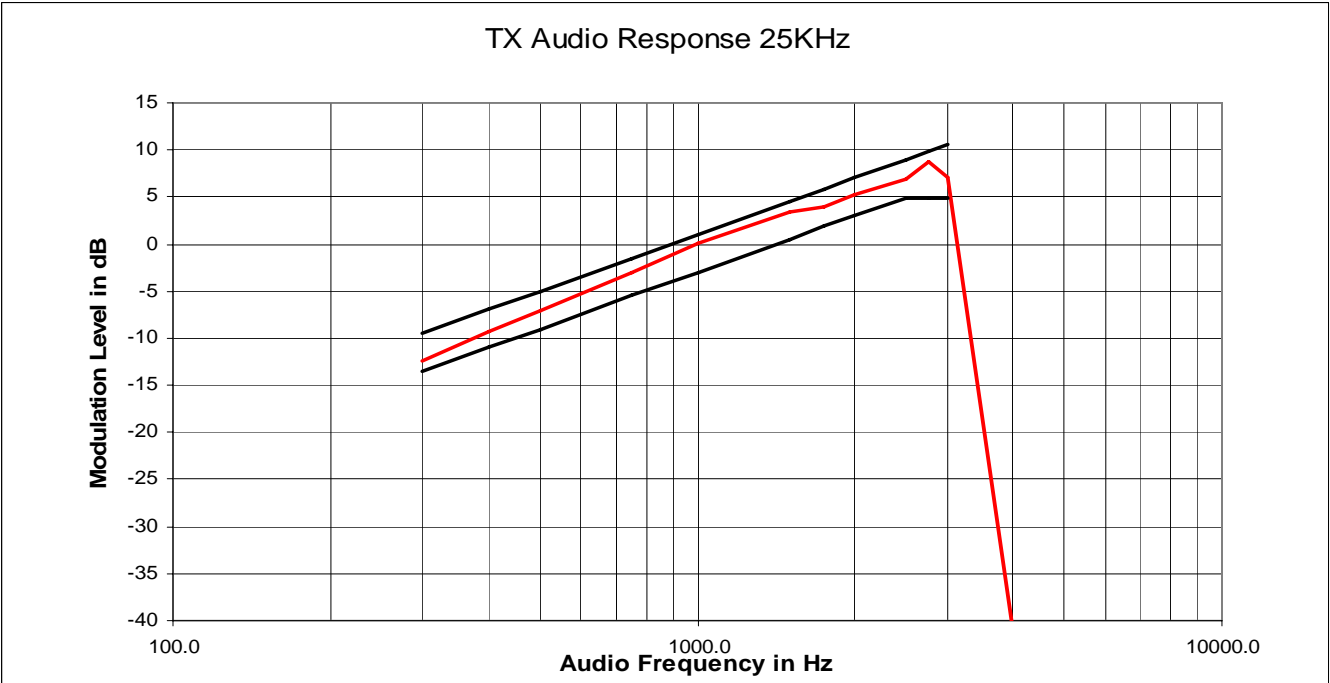


Exhibit 6B-4

**Transmit Low Pass Filter Frequency Response**  
(Freq: 425.025, ChSp: 12.5 kHz)

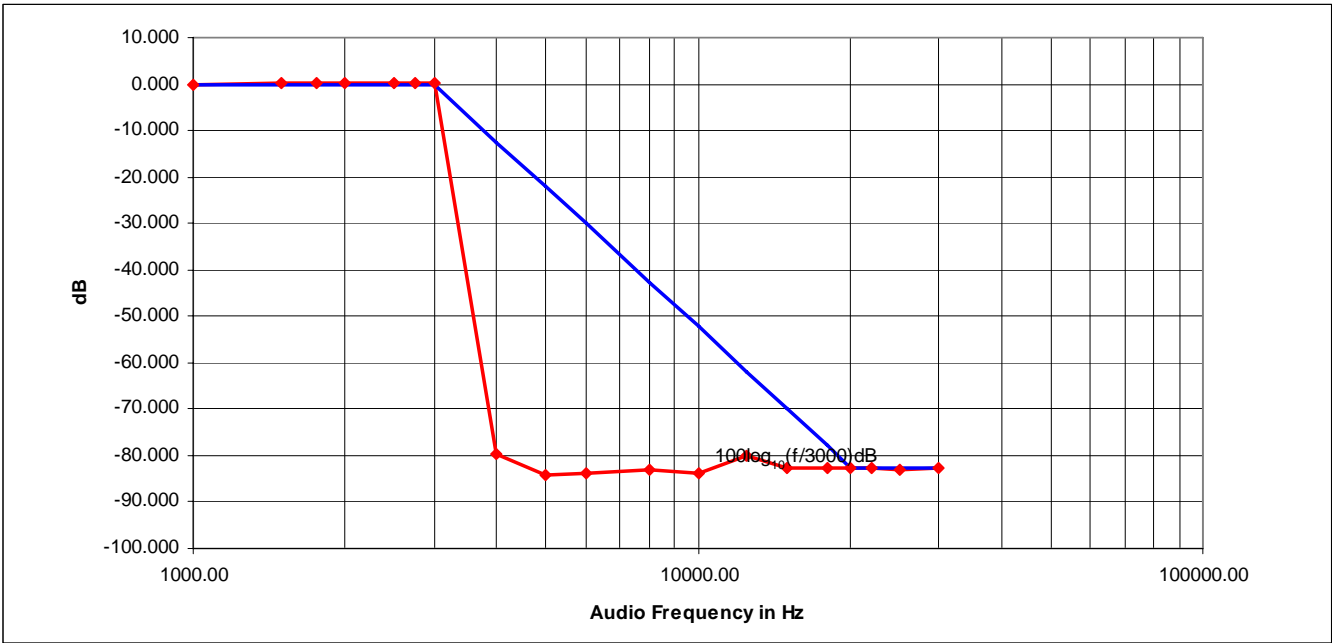


Exhibit 6C-1

**Transmit Low Pass Filter Frequency Response**  
(Freq: 155.025, ChSp: 12.5 kHz)

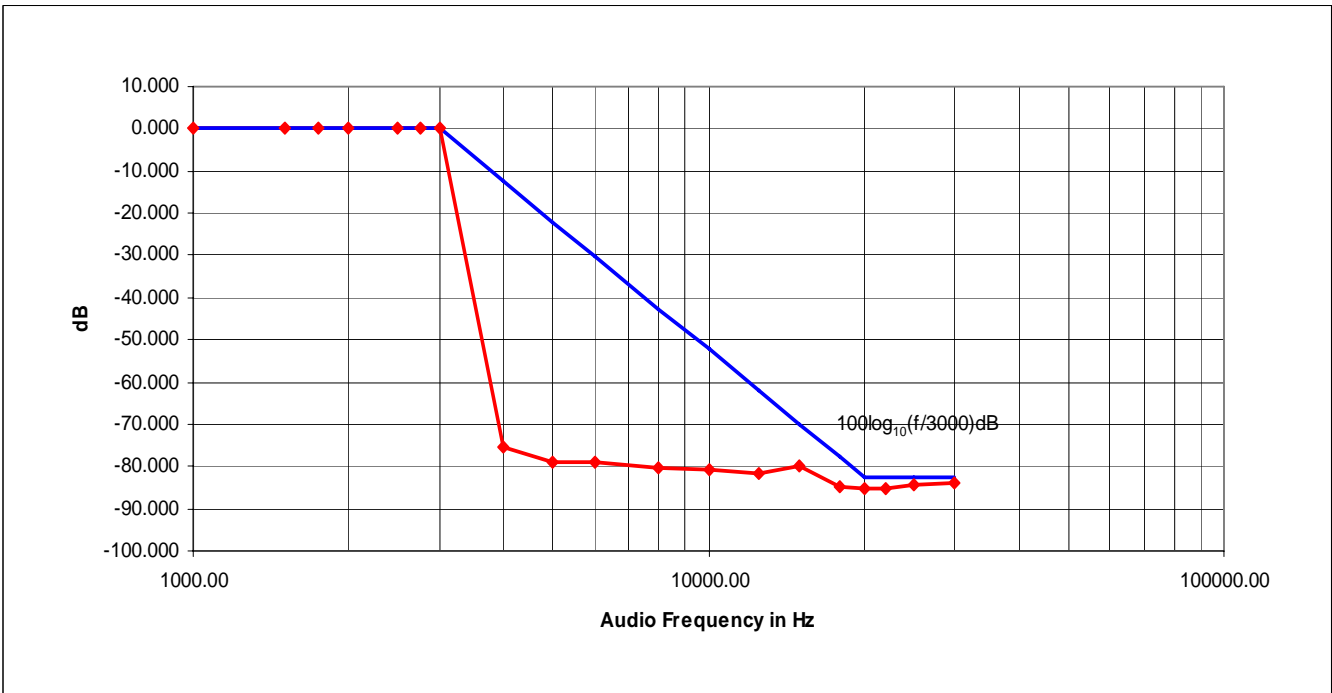


Exhibit 6C-2

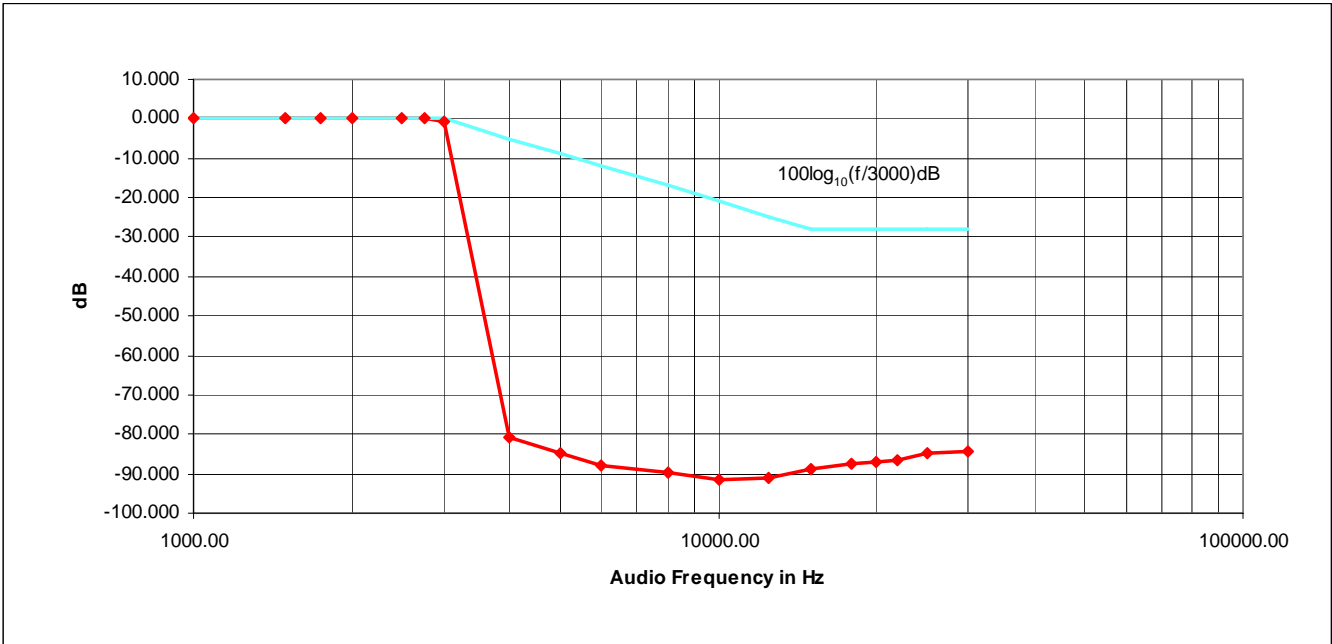


Exhibit 6C-3

Transmit Low Pass Filter Frequency Response (Freq: 425.025, ChSp: 25 kHz)

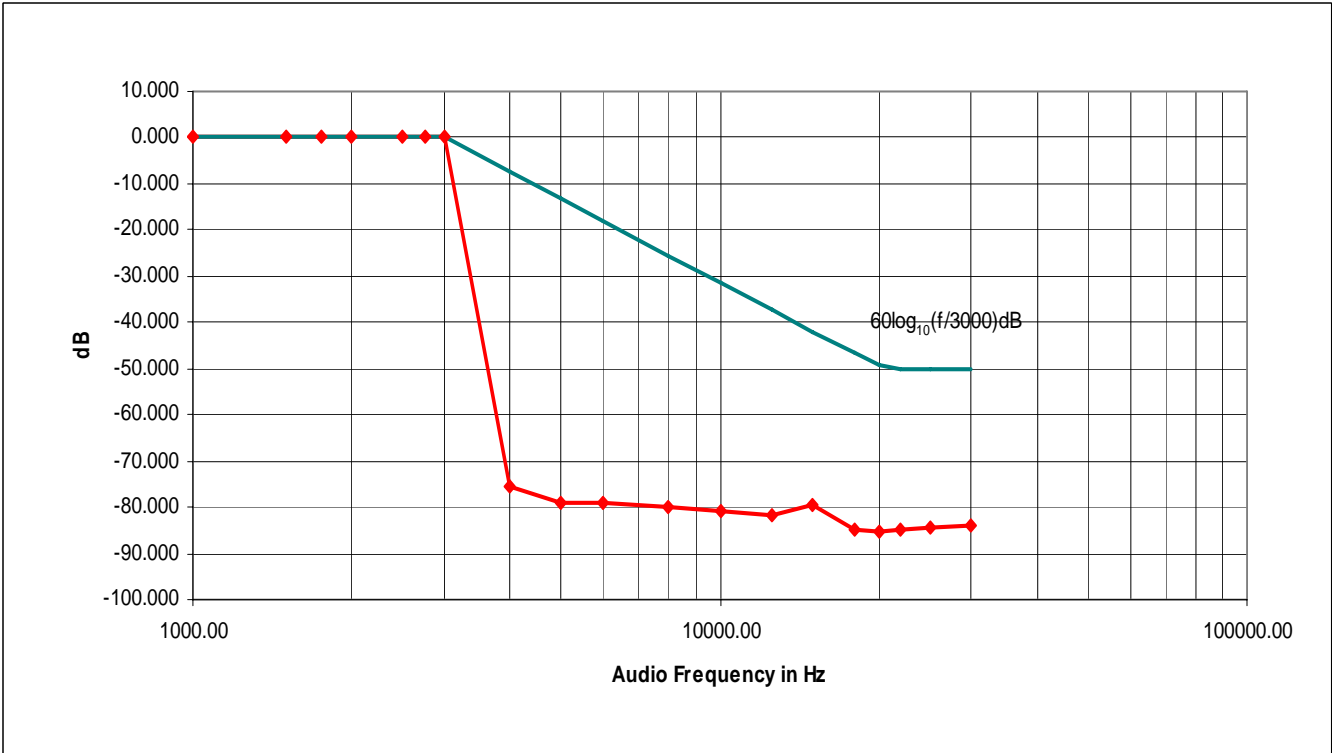


Exhibit 6C-4

Transmit Low Pass Filter Frequency Response (Freq: 155.025, ChSp: 25 kHz)

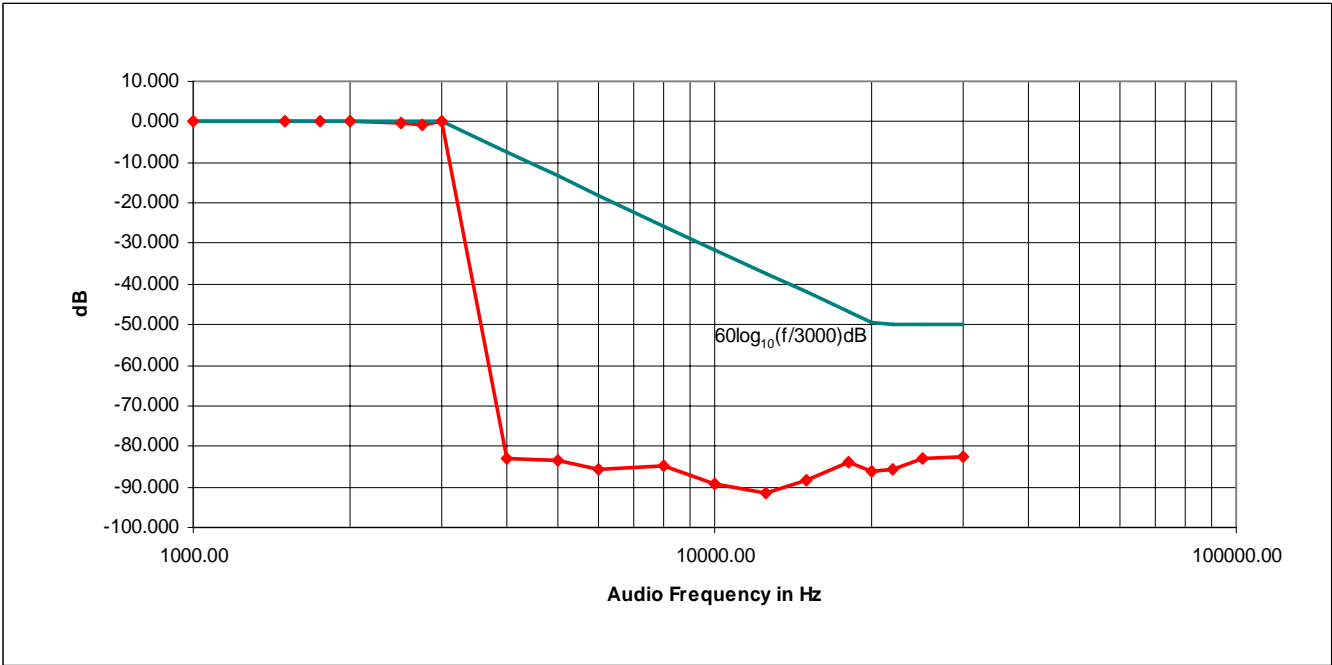


Exhibit 6C-5

Transmit Low Pass Filter Frequency Response (Freq: 155.025, ChSp: 25 kHz)

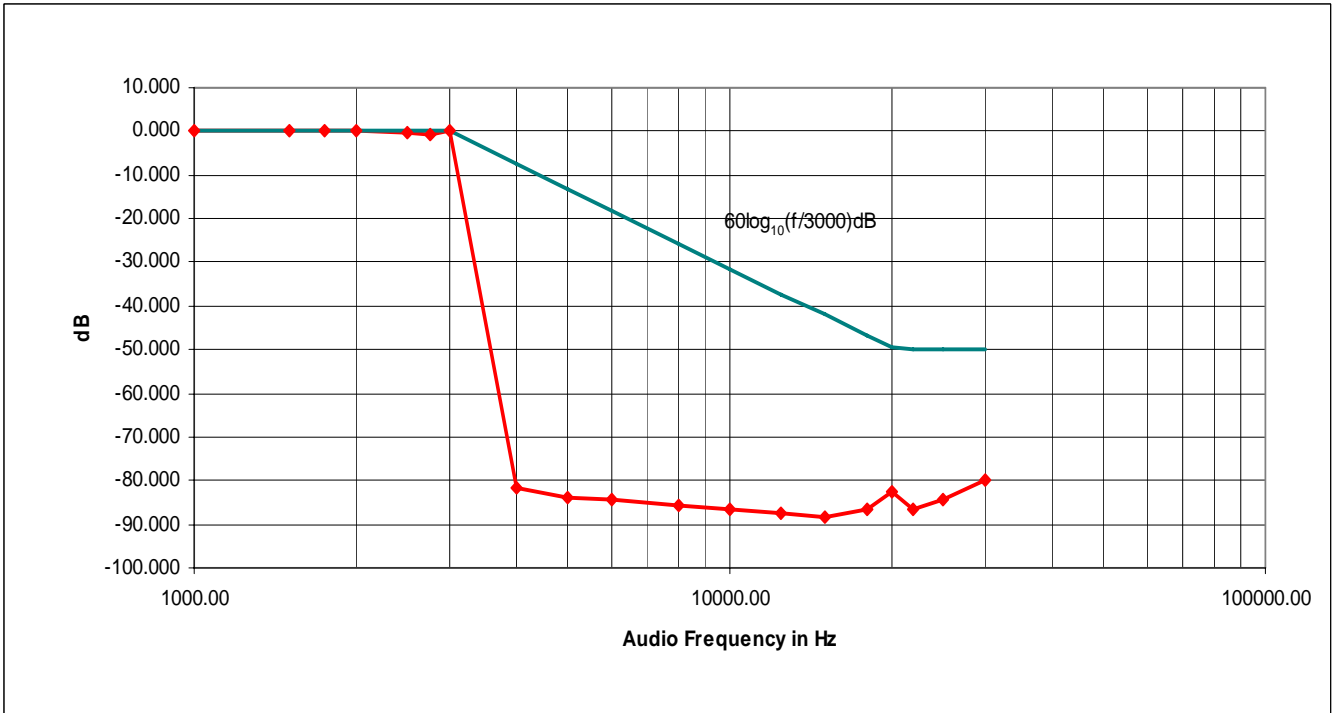


Exhibit 6C-6



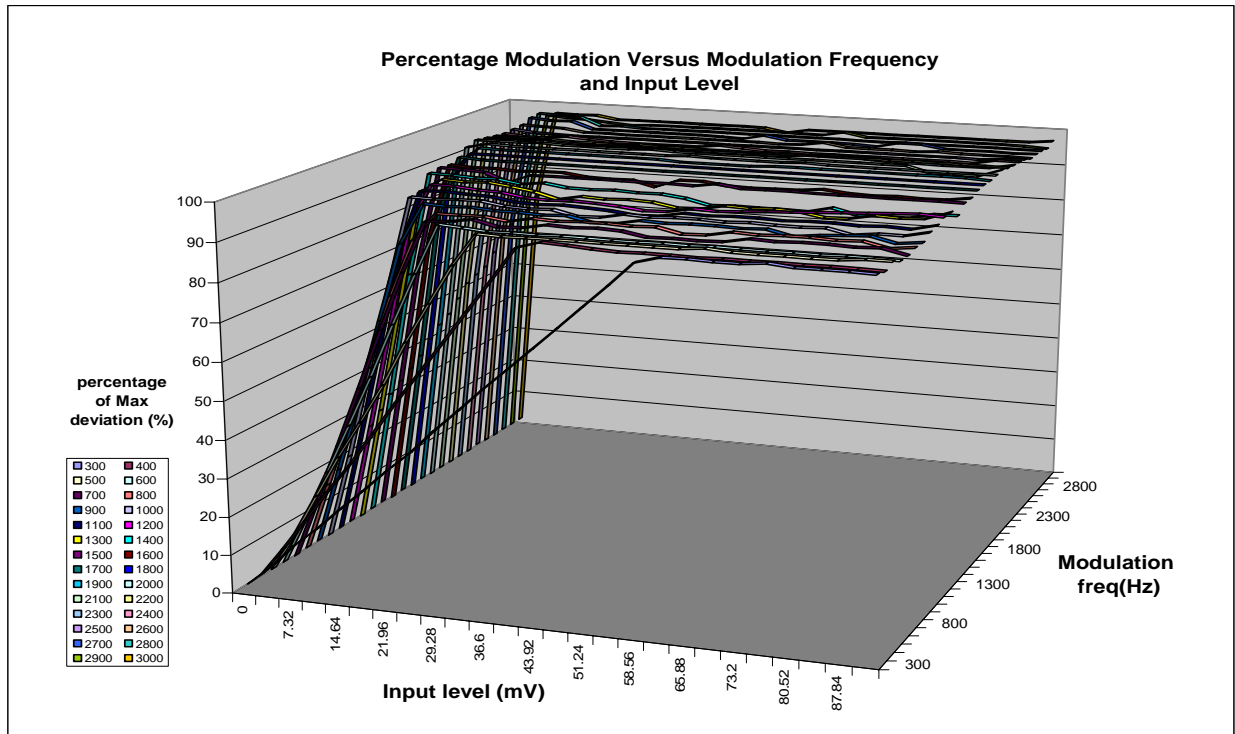
**EXHIBIT 6D****Modulation Limiting** - Pursuant 47 CFR 2.1047 and 2.1033(c)(13)**Modulation Limiting** (Freq: 425.025, ChSp: 12.5 kHz)

Exhibit 6D-1

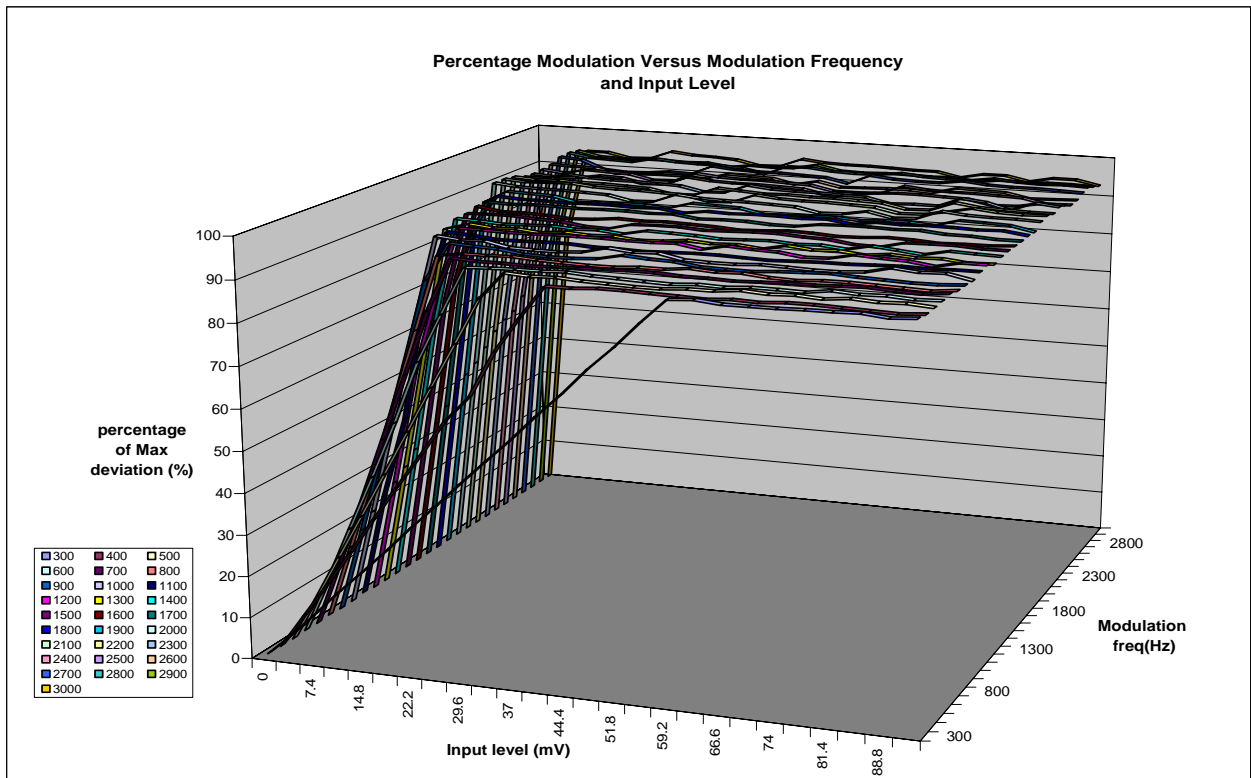
**Modulation Limiting** (Freq: 155.025MHz, ChSp: 12.5 kHz)

Exhibit 6D-2

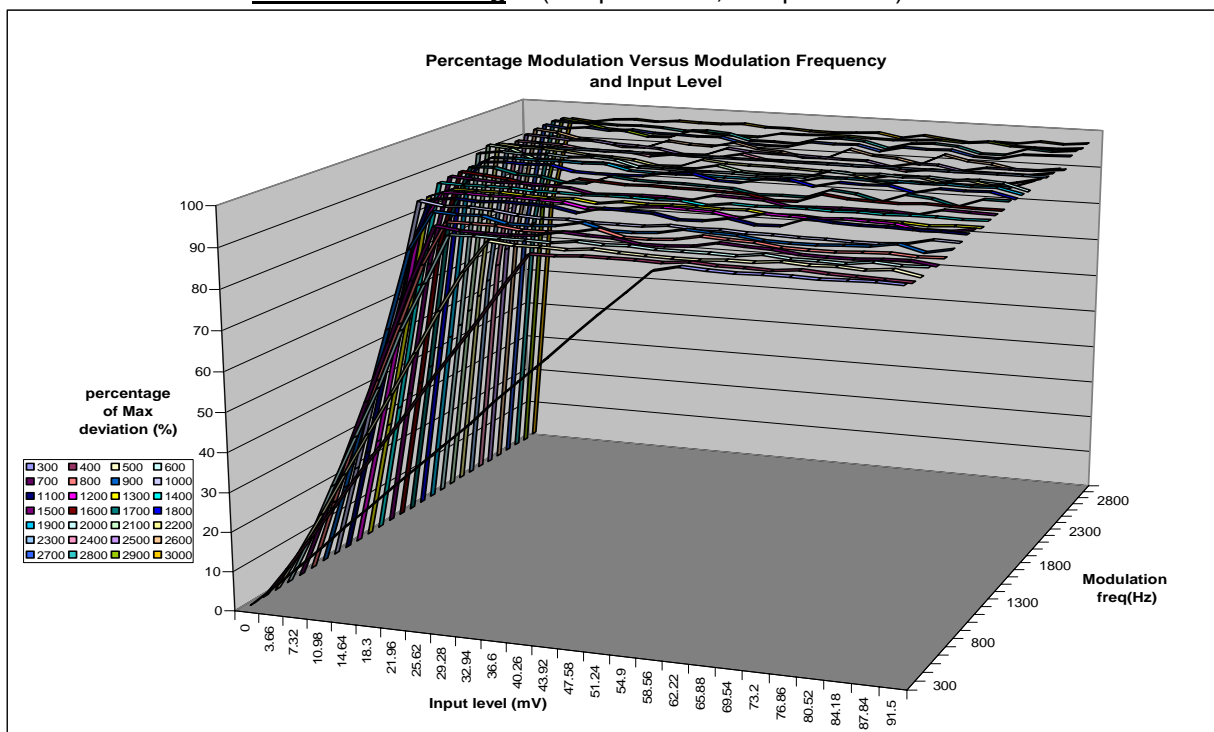
**Modulation Limiting** (Freq: 425.025, ChSp: 25 kHz)

Exhibit 6D-3

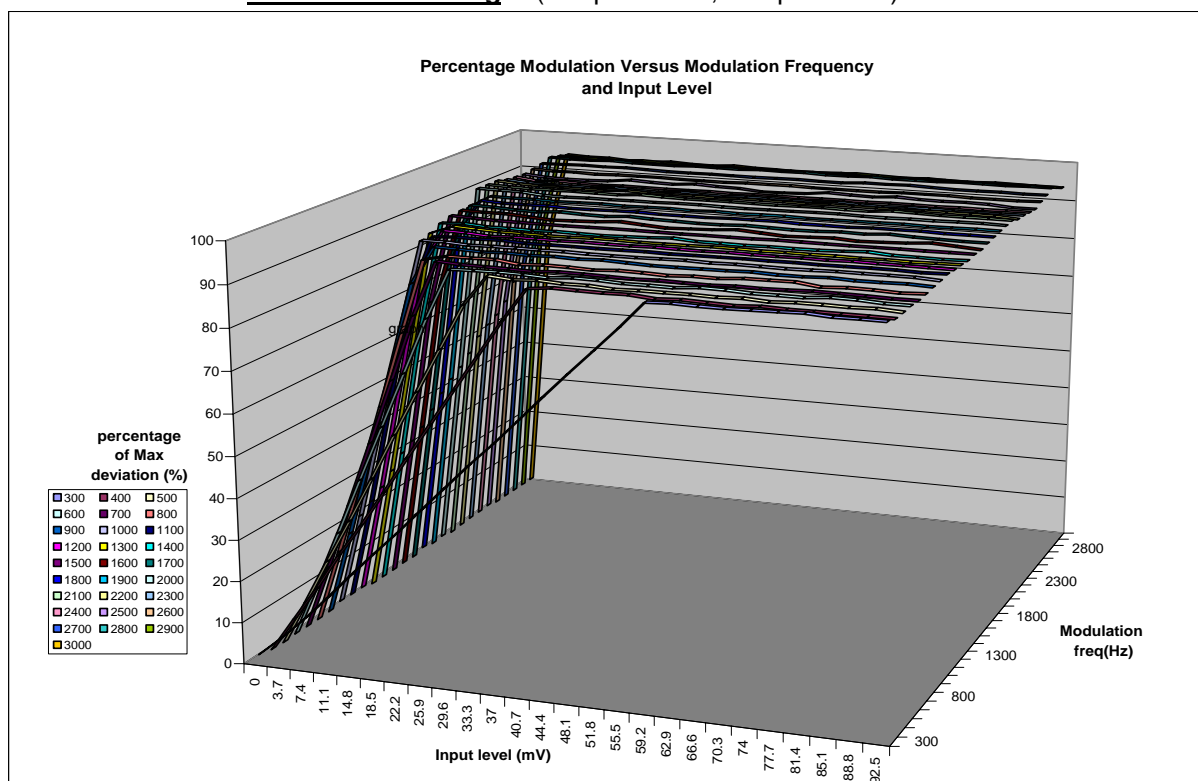
**Modulation Limiting** (Freq: 155.025, ChSp: 25 kHz)

Exhibit 6D-4

BANDWIDTH CALCULATIONS:

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

$$BW = 2 * (M + D)$$

where: BW = Bandwidth  
M= Maximum modulating frequency  
D = Deviation

Shown below are the calculations required for FCC ID: AZ489FT7036.

#### **EXHIBIT 6E-1**

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.

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

F3E portion of the designator indicates voice.

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

#### **EXHIBIT 6E-2**

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.

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

F3E portion of the designator indicates voice.

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

Digital (12.5 kHz Channelization, Digital Data):

Emission Designator 8K10F1D

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 TSB102.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

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 TSB102.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 TDMA):

Emission Designator      8K10F1W

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 TSB102.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-6**

Digital Modulation (20 kHz Channelization, Digital Voice with encryption):

Emission Designator      20K0F1E

In this case, the maximum modulating frequency is 6 kHz with a 4 kHz deviation.

$BW = 2(M+D) = 2*(6 \text{ kHz} + 4 \text{ kHz}) = 20 \text{ kHz} \Rightarrow 20K0$

F1E portion of the designator indicates digital voice.

Therefore, the entire designator for 20 kHz channelization analog voice is 20K0F1E.

**EXHIBIT 6E**

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

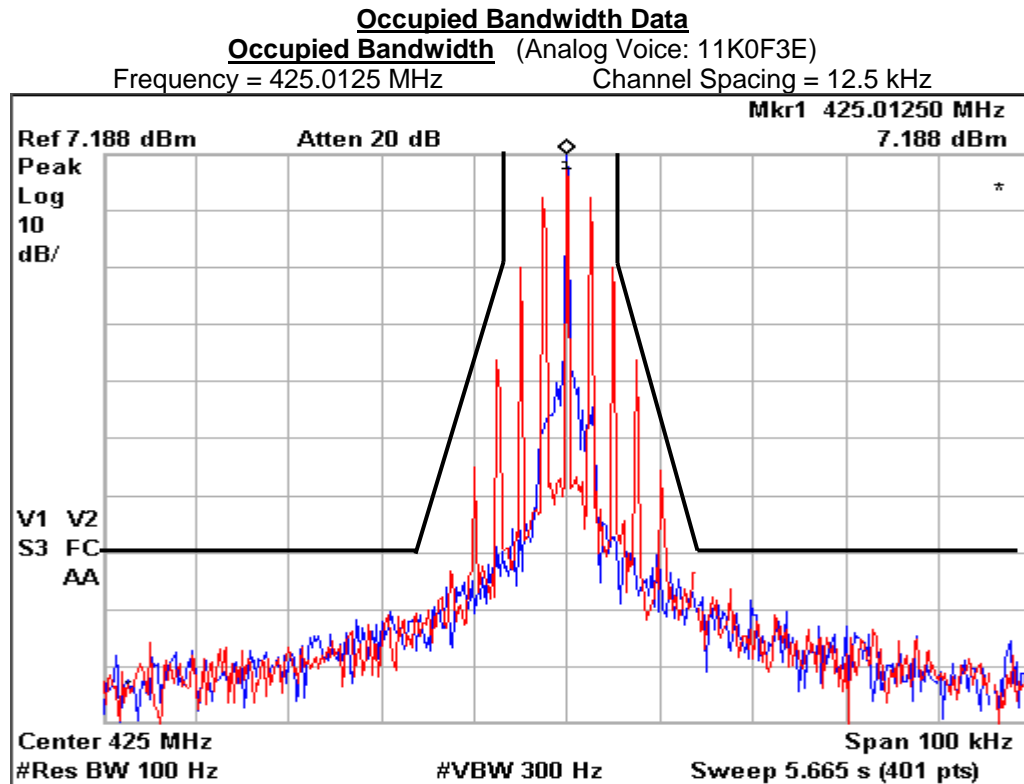


Exhibit 6E-1

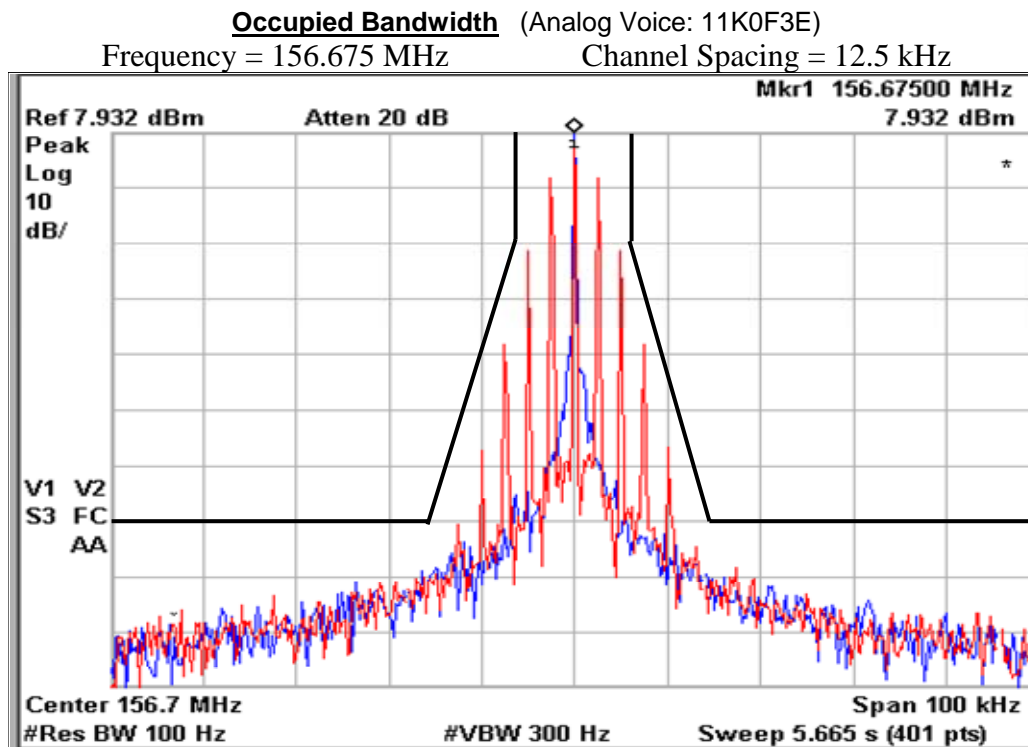


Exhibit 6E-2

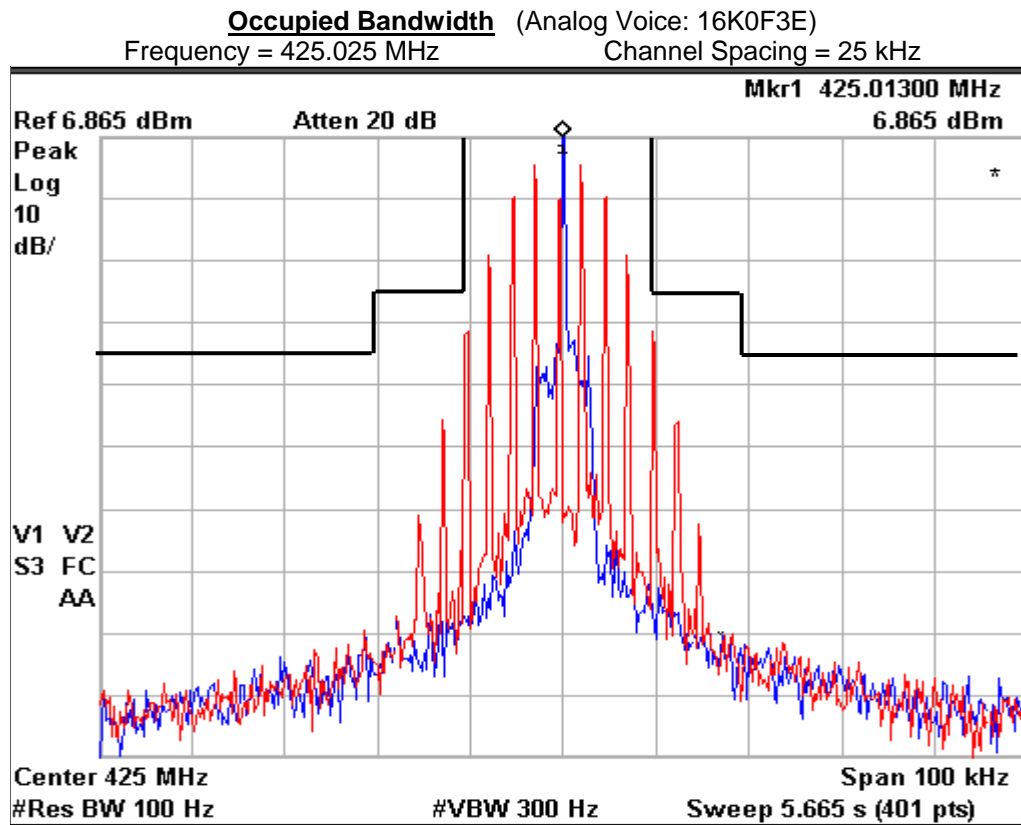


Exhibit 6E-3

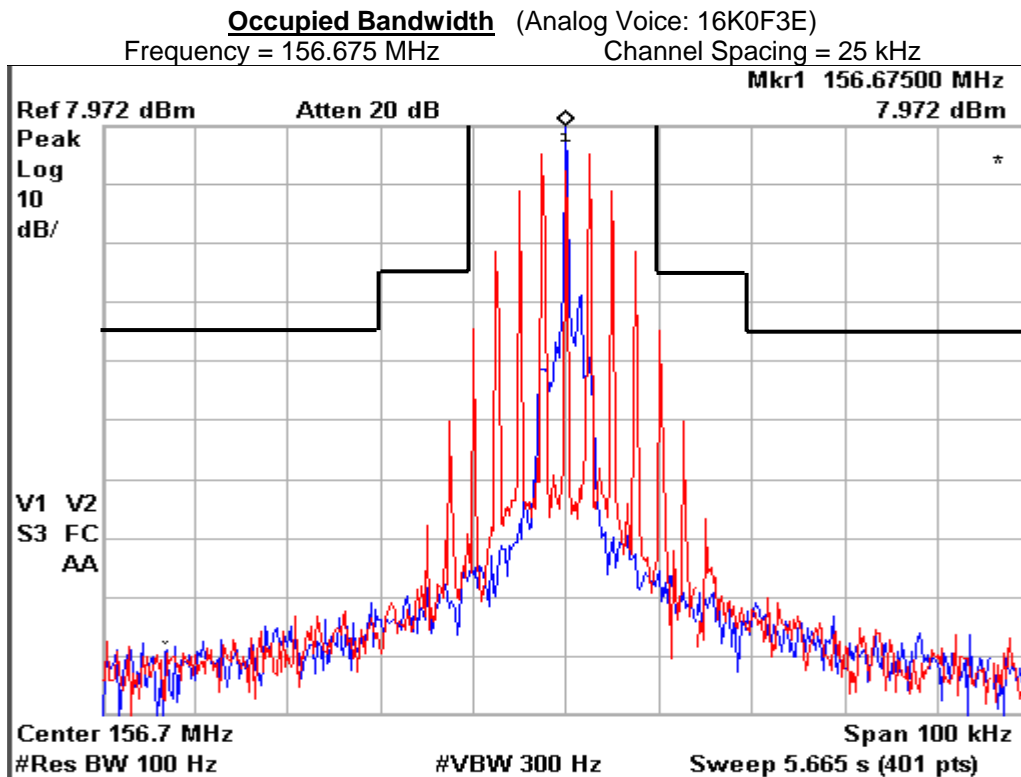


Exhibit 6E-4



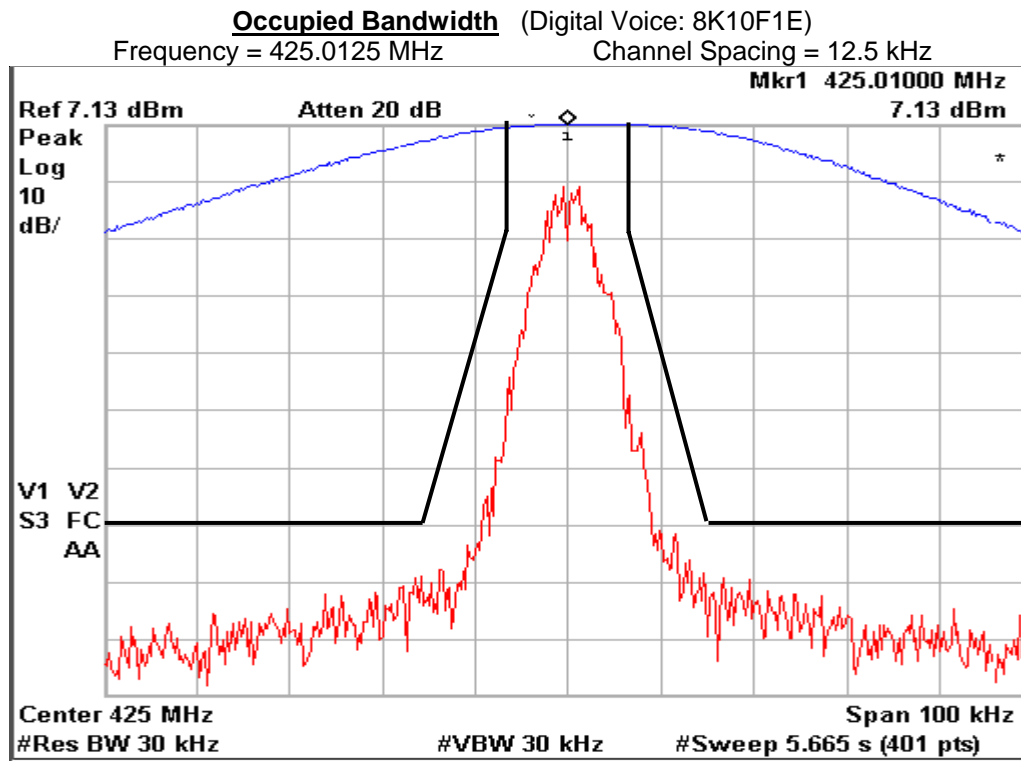


Exhibit 6E-7

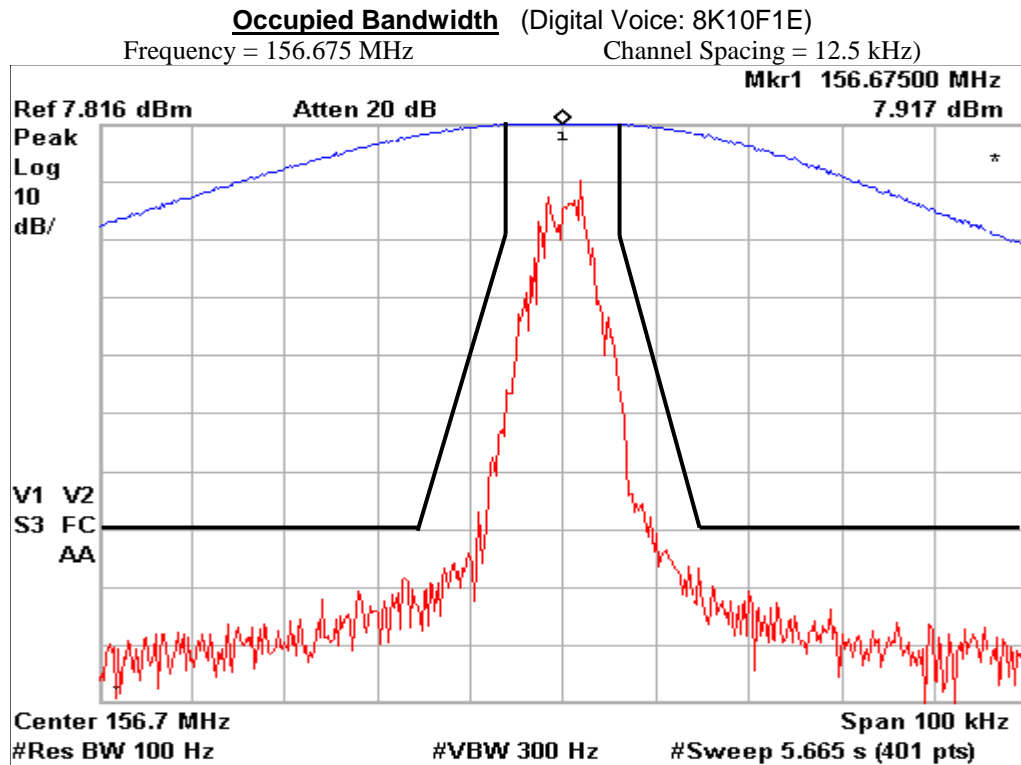


Exhibit 6E-8



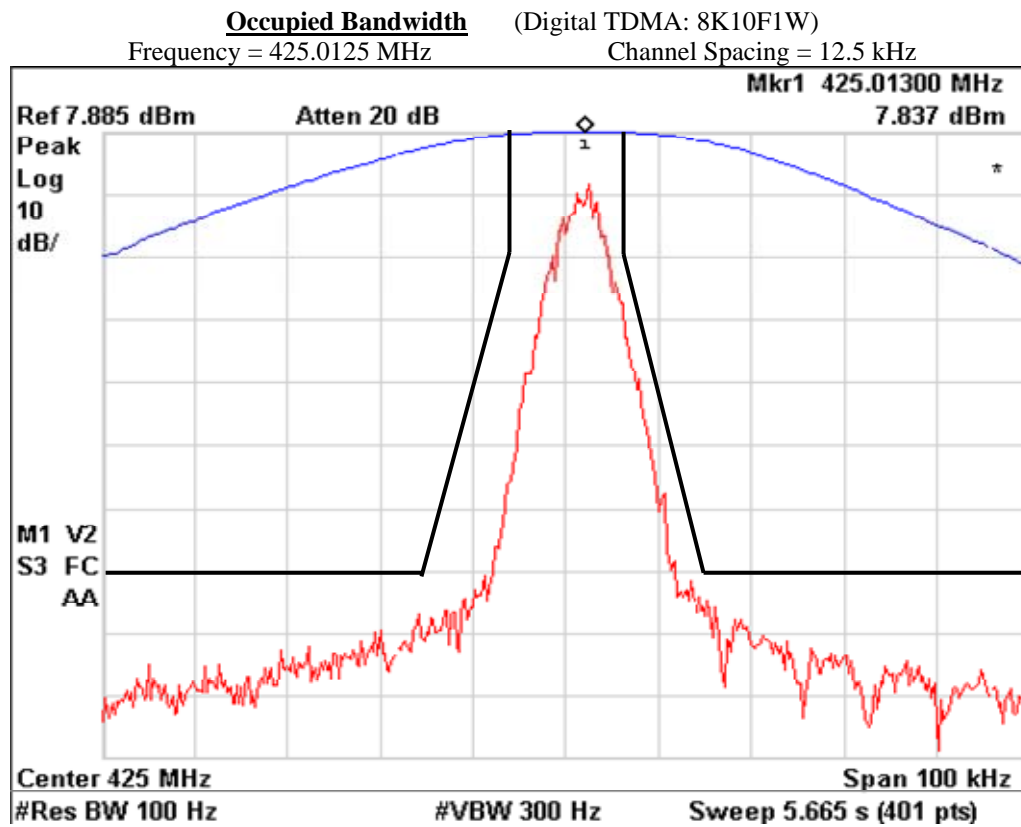


Exhibit 6E-9

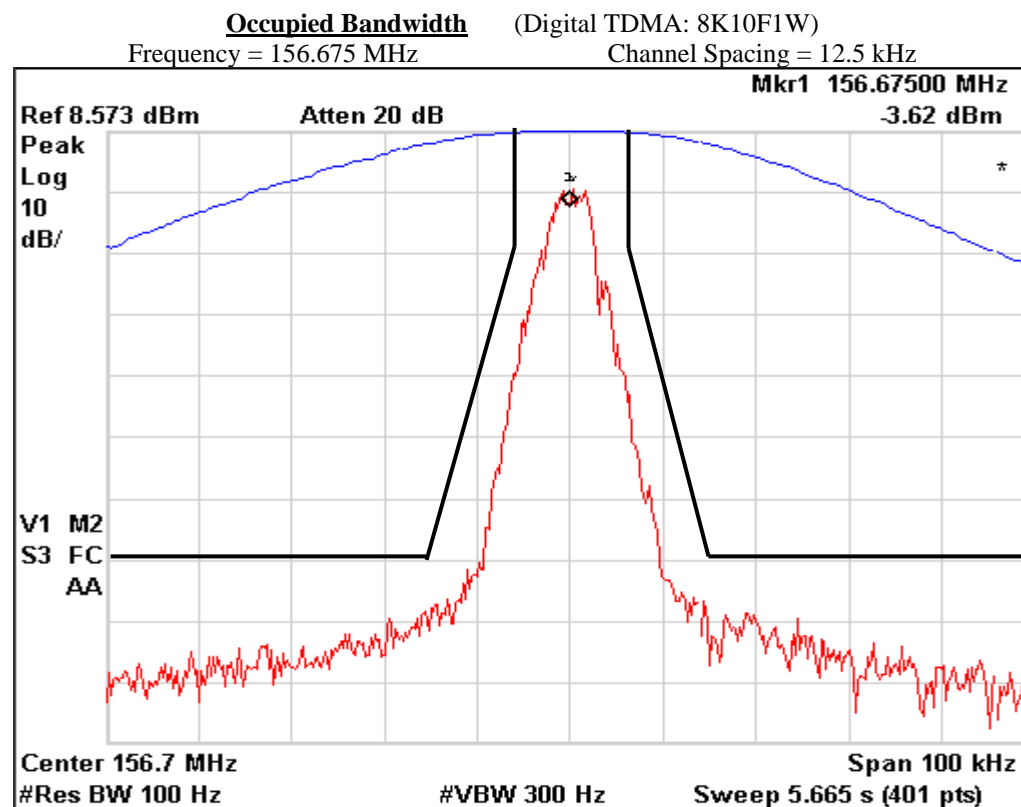


Exhibit 6E-10

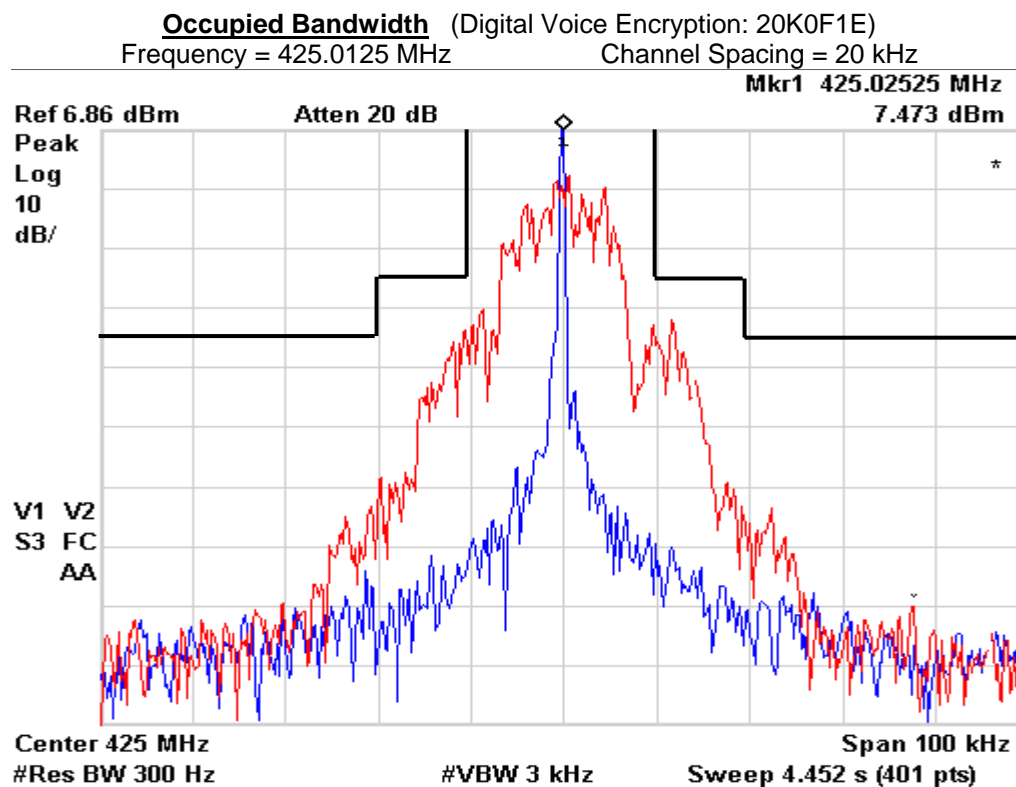
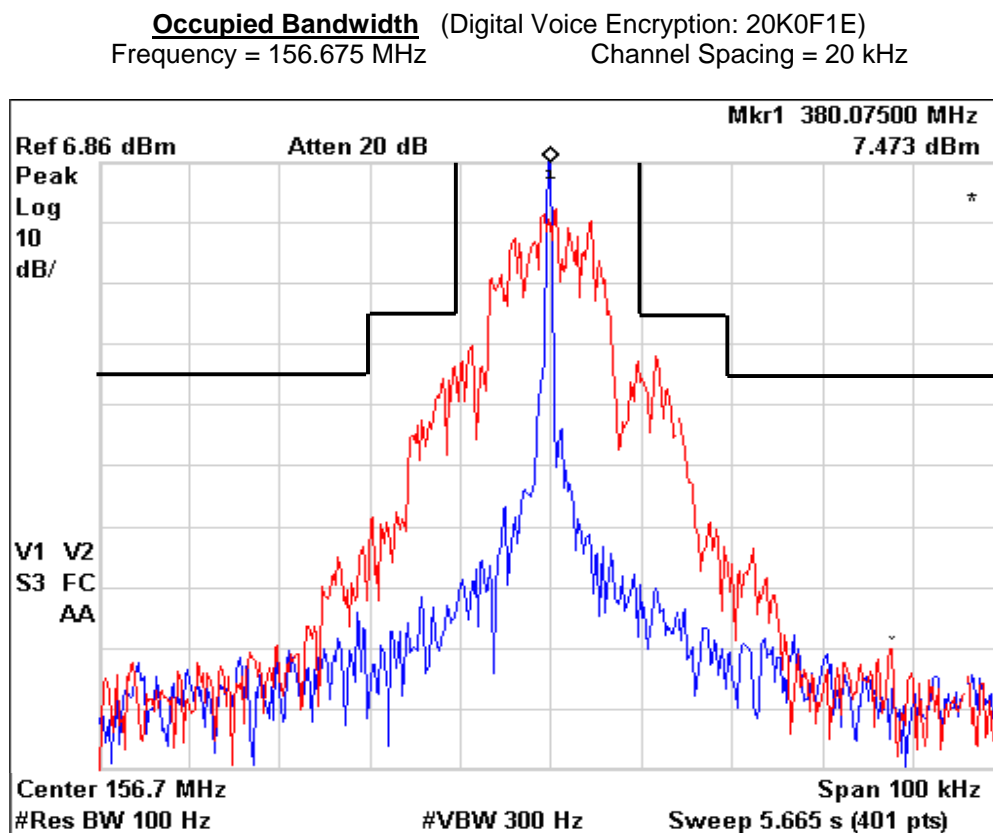


Exhibit 6E-11



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

Freq: 380.075 MHz, Power: 5.7 Watts

**Transmit Radiated Spurious Emissions: APX7000 Battery-NNTN7034A**

Tx Power: 5.7 Watts

380.075 MHz		Channel Spacing 25kHz   S/N Q0DKL09T	
Frequency (MHz)	FCC Failing Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
760.1500	-13	-62.21	-52.97
1140.2250	-13	-72.62	-69.03
1520.3000	-13	*	-69.12
1900.3750	-13	*	*
2280.4500	-13	*	*
2660.5250	-13	*	*
3040.6000	-13	*	*
3420.6750	-13	*	*
3800.7500	-13	*	*

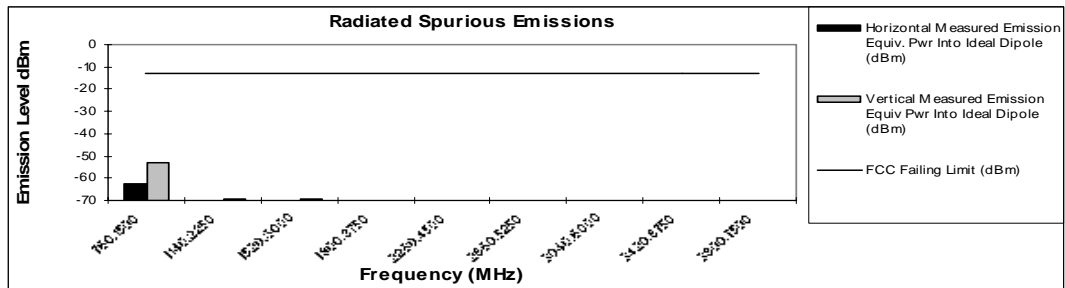


Exhibit 6F-1

Freq: 424.975 MHz, Power: 5.7 Watts

**Transmit Radiated Spurious Emissions: APX7000 Battery-NNTN7034A**

Tx Power: 5.7 Watts

424.975 MHz		Channel Spacing 25kHz   S/N Q0DKL09T	
Frequency (MHz)	FCC Failing Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
849.9500	-13	-67.68	-63.20
1274.9250	-13	-65.85	-55.17
1699.9000	-13	-68.35	-63.16
2124.8750	-13	-64.45	-60.55
2549.8500	-13	*	*
2974.8250	-13	*	*
3399.8000	-13	*	*
3824.7750	-13	*	*
4249.7500	-13	*	*

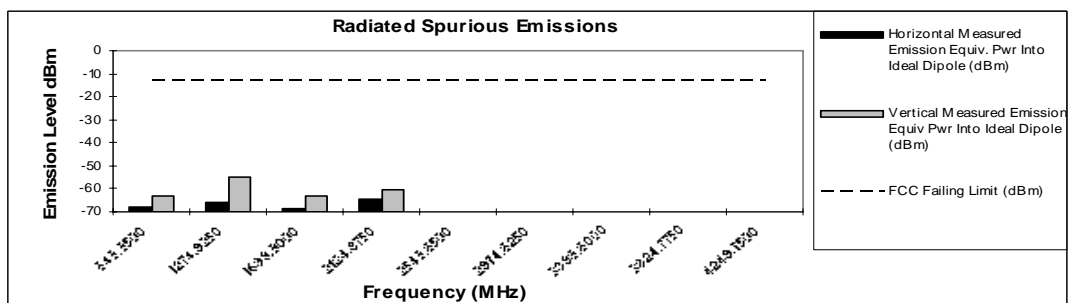


Exhibit 6F-2

Freq: 469.975 MHz, Power: 5.7 Watts

**Transmit Radiated Spurious Emissions: APX7000 Battery-NNTN7034A**

Tx Power: 5.7 Watts

**469.975 MHz****Channel Spacing 25kHz | S/N Q0DKL09T**

Frequency (MHz)	FCC Failing Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
939.9500	-13	-70.86	-67.18
1409.9250	-13	-67.12	-53.50
1879.9000	-13	-70.75	*
2349.8750	-13	*	*
2819.8500	-13	*	*
3289.8250	-13	*	*
3759.8000	-13	*	*
4229.7750	-13	*	*
4699.7500	-13	*	*

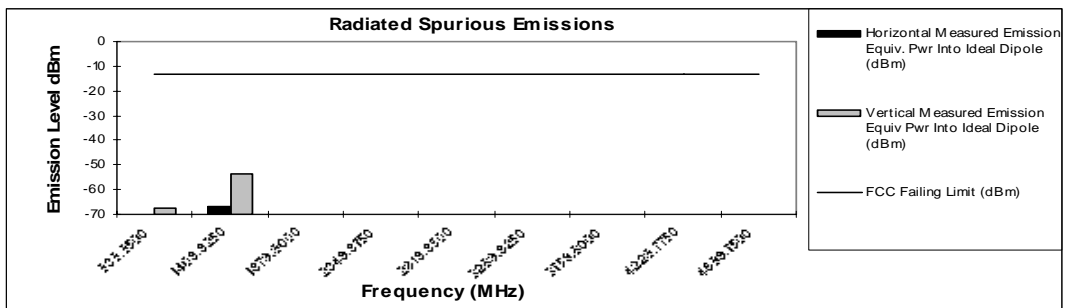


Exhibit 6F-3

Freq: 136.0125 MHz, Power: 6.6 Watts

**Transmit Radiated Spurious Emissions: APX7000 Battery-NNTN7034A**

Tx Power: 6.6 Watts

**136.0125 MHz****Channel Spacing 25kHz | S/N Q0DKL081**

Frequency (MHz)	FCC Failing Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
272.0250	-13	-79.28	-73.77
408.0375	-13	-73.81	-61.48
544.0500	-13	*	*
680.0625	-13	*	*
816.0750	-13	*	*
952.0875	-13	*	*
1088.1000	-13	*	*
1224.1125	-13	*	*
1360.1250	-13	*	*

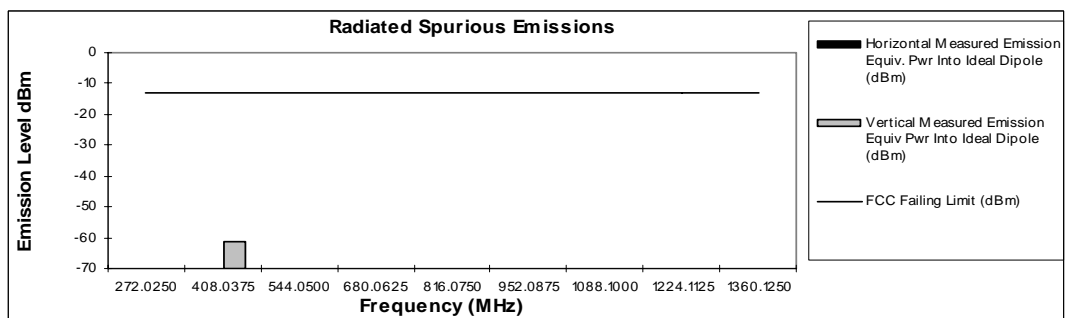


Exhibit 6F-4

Freq: 153.0125 MHz, Power: 6.6 Watts

Transmit Radiated Spurious Emissions: APX7000 Battery-NNTN7034A

Tx Power: 6.6 Watts

153.0125 MHz

Channel Spacing 25kHz | S/N Q0DKL081

Frequency (MHz)	FCC Failing Limit (dBm)	Horizontal Measured Emission Equiv. Pwr r Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr r Into Ideal Dipole (dBm)
306.0250	-13	*	-67.41
459.0375	-13	-74.88	-57.82
612.0500	-13	*	*
765.0625	-13	*	*
918.0750	-13	*	*
1071.0875	-13	*	*
1224.1000	-13	*	*
1377.1125	-13	*	*
1530.1250	-13	*	*

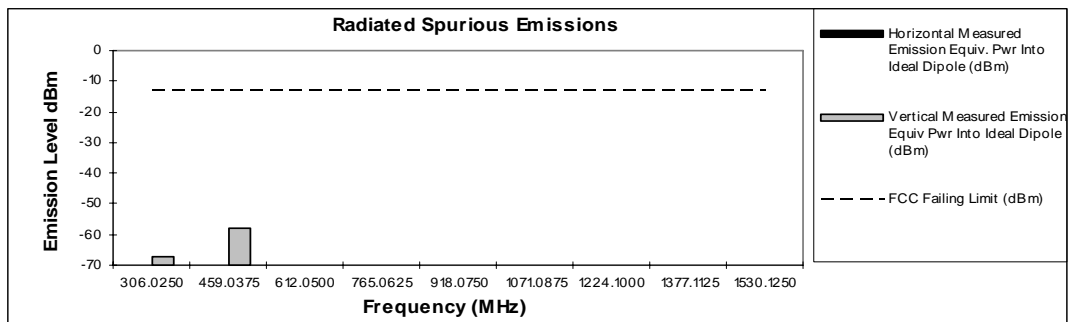


Exhibit 6F-5

Freq: 173.9875MHz, Power: 6.6 Watts

Transmit Radiated Spurious Emissions: APX7000 Battery-NNTN7034A

Tx Power: 6.6 Watts

173.9875 MHz

Channel Spacing 25kHz | S/N Q0DKL081

Frequency (MHz)	FCC Failing Limit (dBm)	Horizontal Measured Emission Equiv. Pwr r Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr r Into Ideal Dipole (dBm)
347.9750	-13	*	*
521.9625	-13	*	*
695.9500	-13	*	*
869.9375	-13	*	*
1043.9250	-13	*	*
1217.9125	-13	*	*
1391.9000	-13	*	*
1565.8875	-13	*	*
1739.8750	-13	*	*

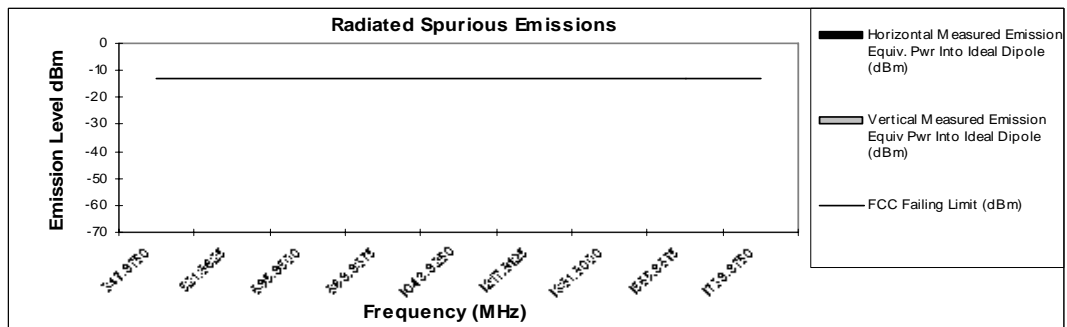


Exhibit 6F-6

EXHIBIT 6G

Frequency Stability - Pursuant 47 CFR 2.1047 and 2.1033(c)(13)

Frequency Stability (425.0125 MHz) vs. Supply Voltage

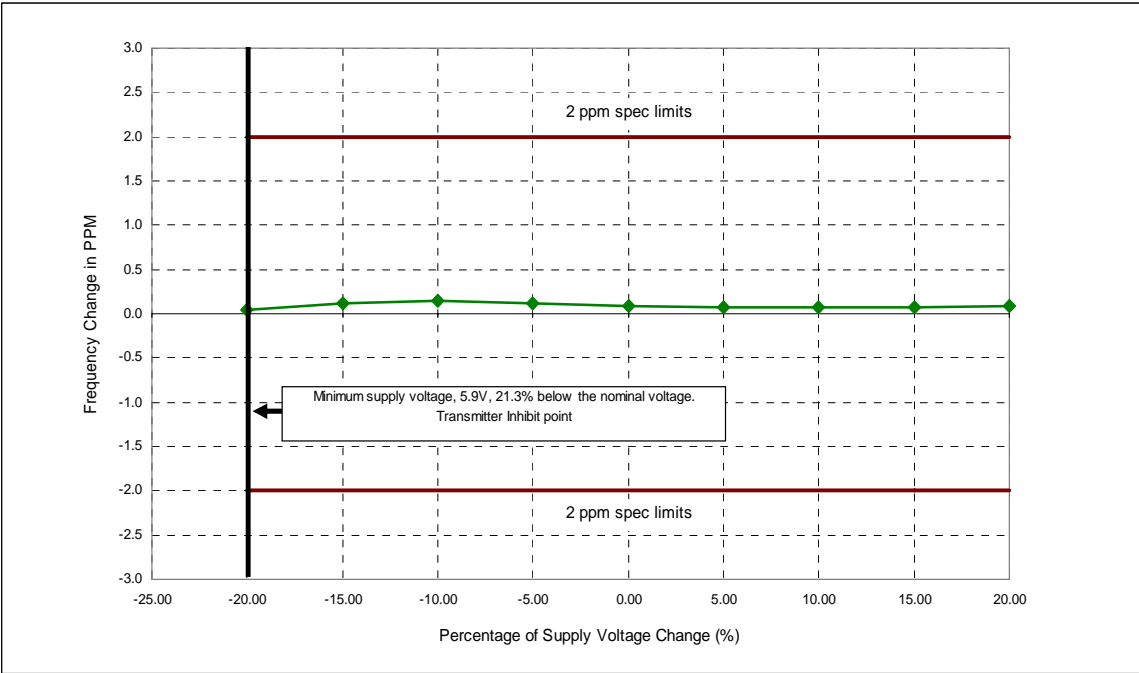
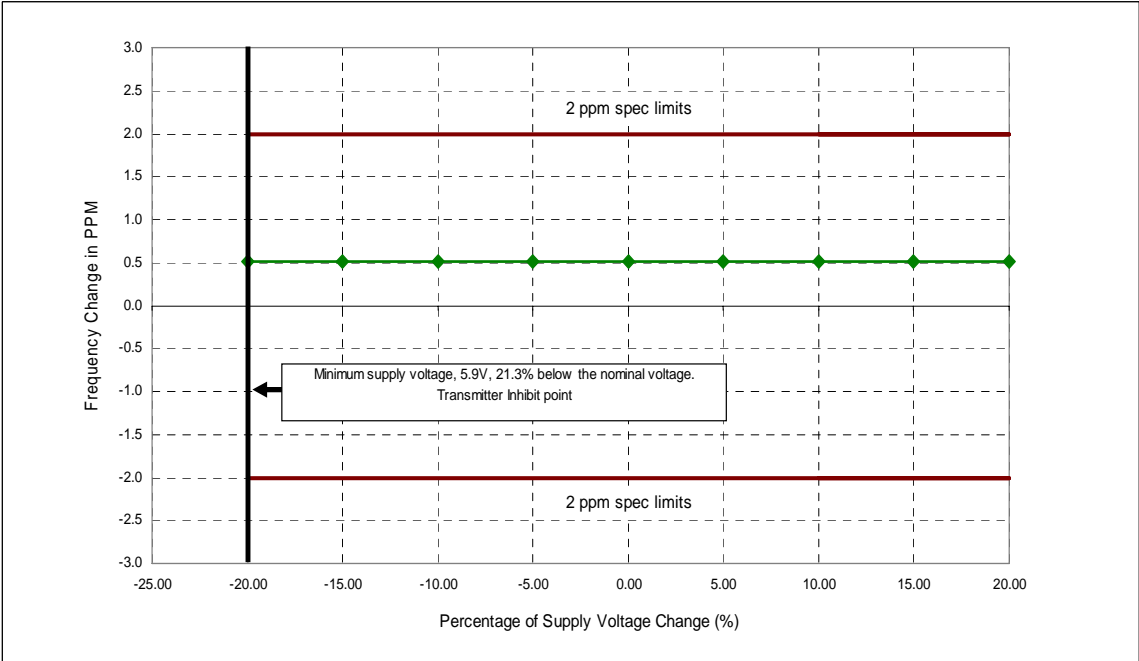


Exhibit 6G-1

Frequency Stability (156.675 MHz) vs. Supply Voltage



Frequency Stability (425.0125 MHz) vs. Temperature

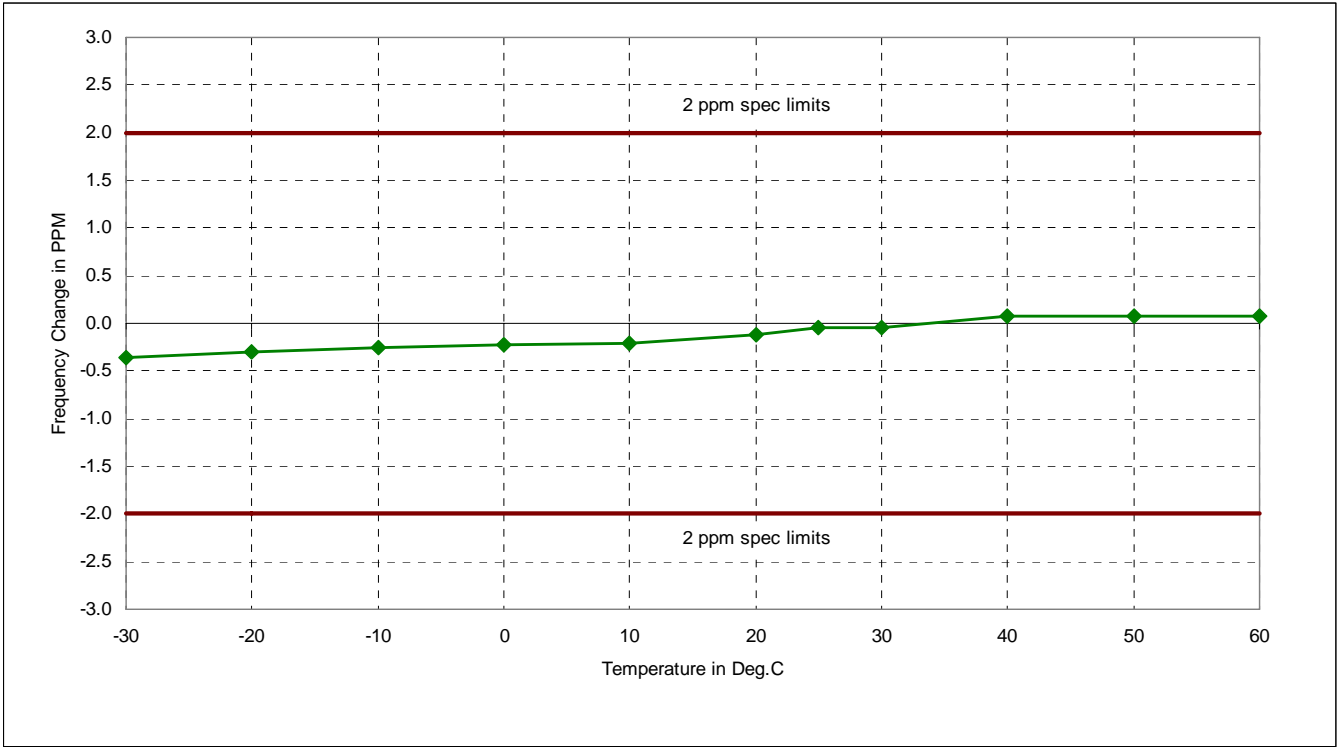


Exhibit 6G-4

Frequency Stability (156.675 MHz) vs. Temperature

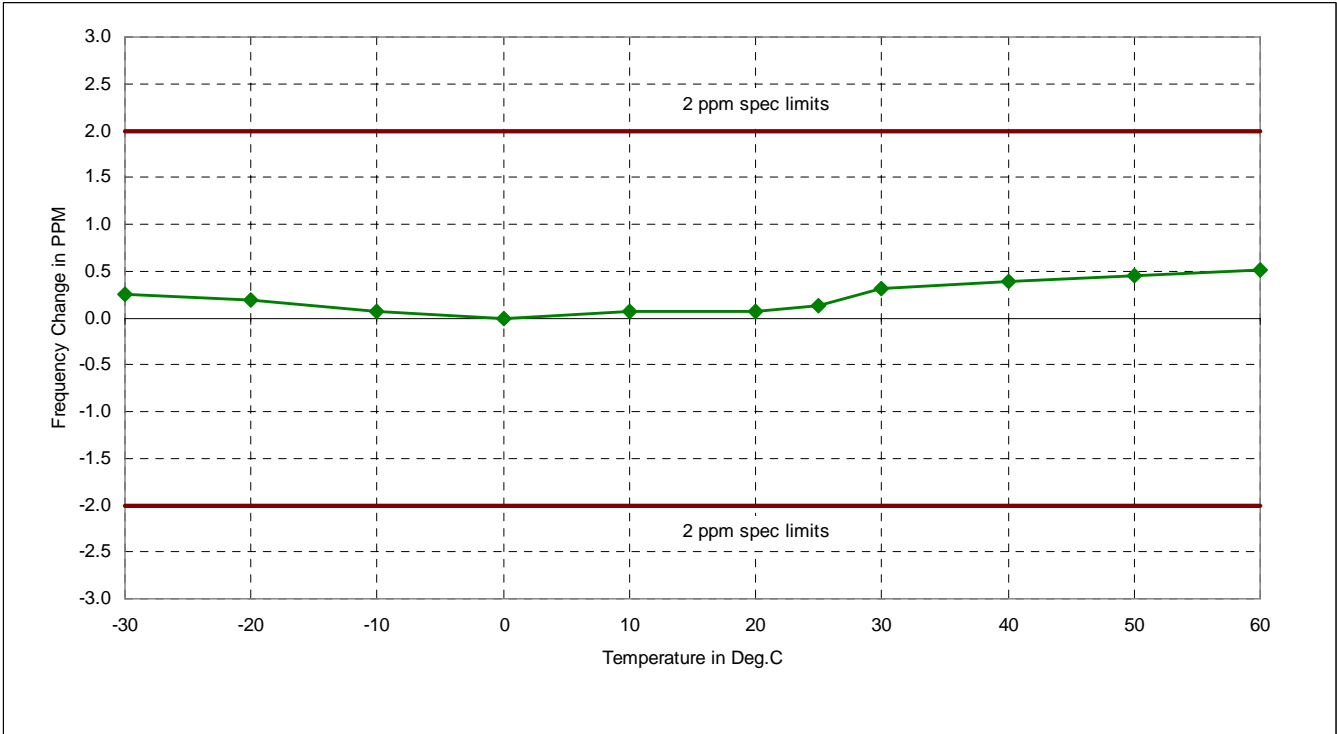


EXHIBIT 6H  
Transmitter Conducted Spurious Emissions - Pursuant 47 CFR 2.1047 and 2.1033(c) (13)  
Note: Lines on graphs correspond to the FCC limit of -13dBm.  
Spurs which are not shown is less than 100dB

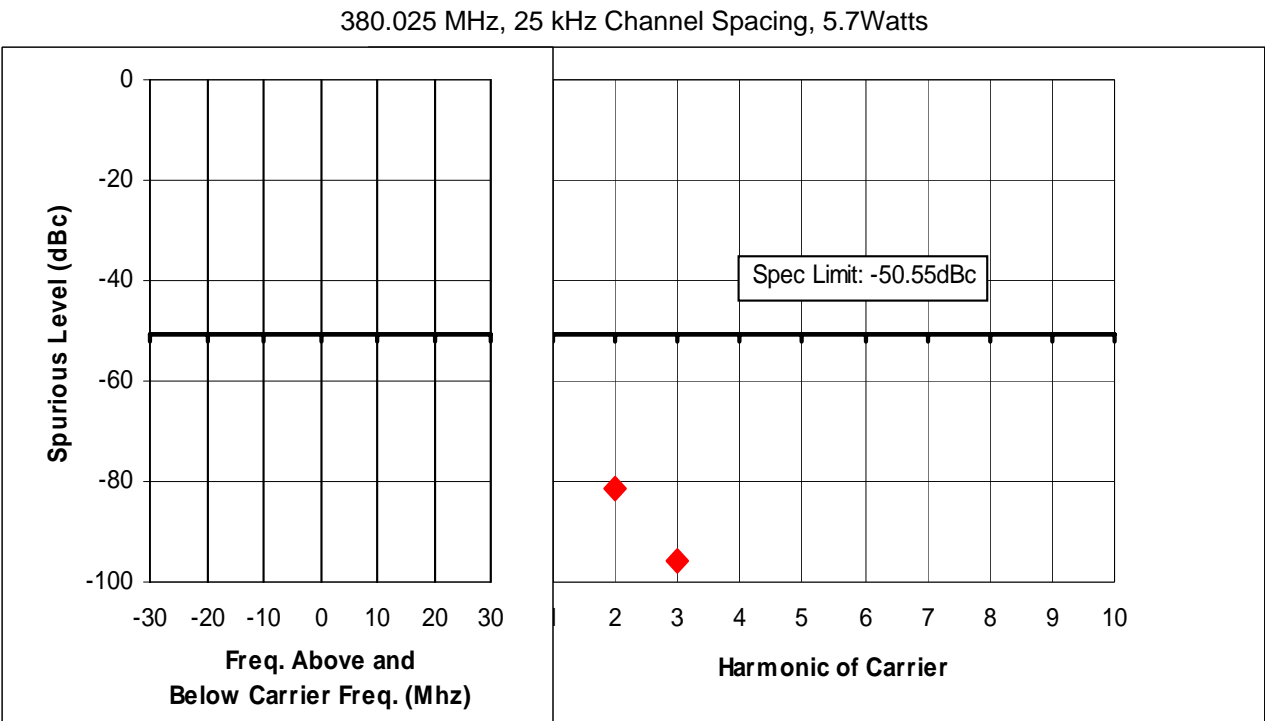


Exhibit 6H-1

424.924 MHz, 25 kHz Channel Spacing, 5.7Watts



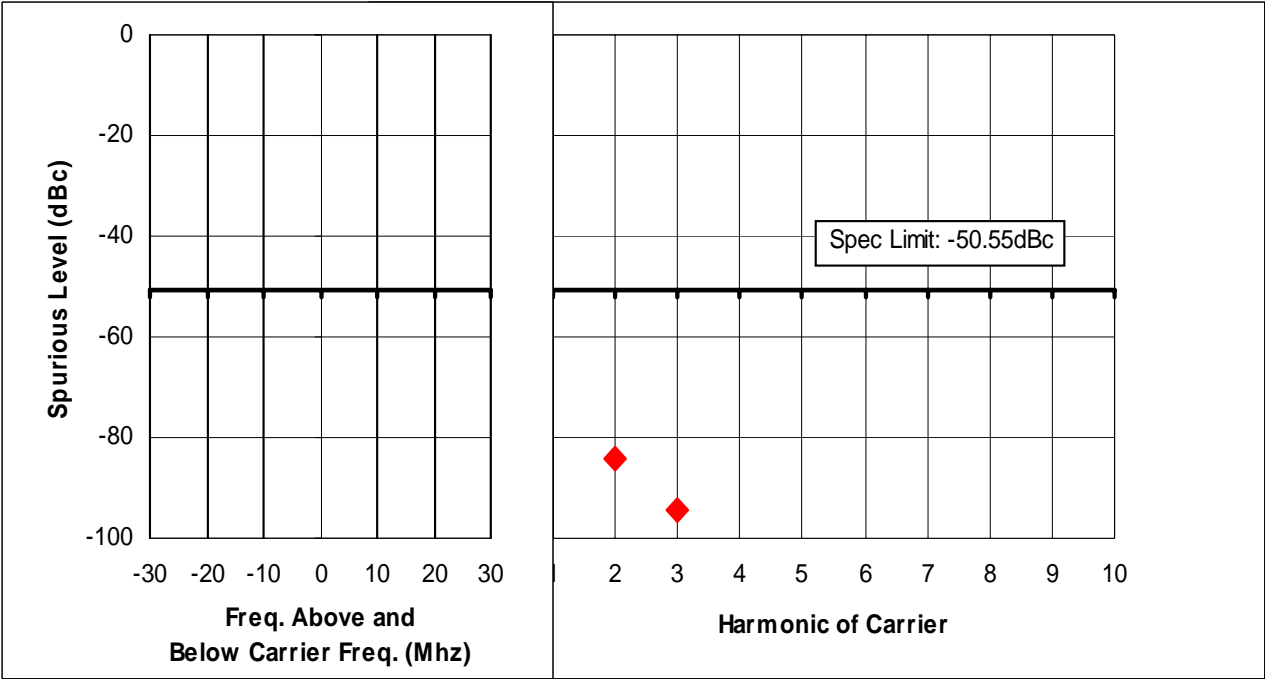


Exhibit 6H-2

469.975 MHz, 25 kHz Channel Spacing, 5.7Watts

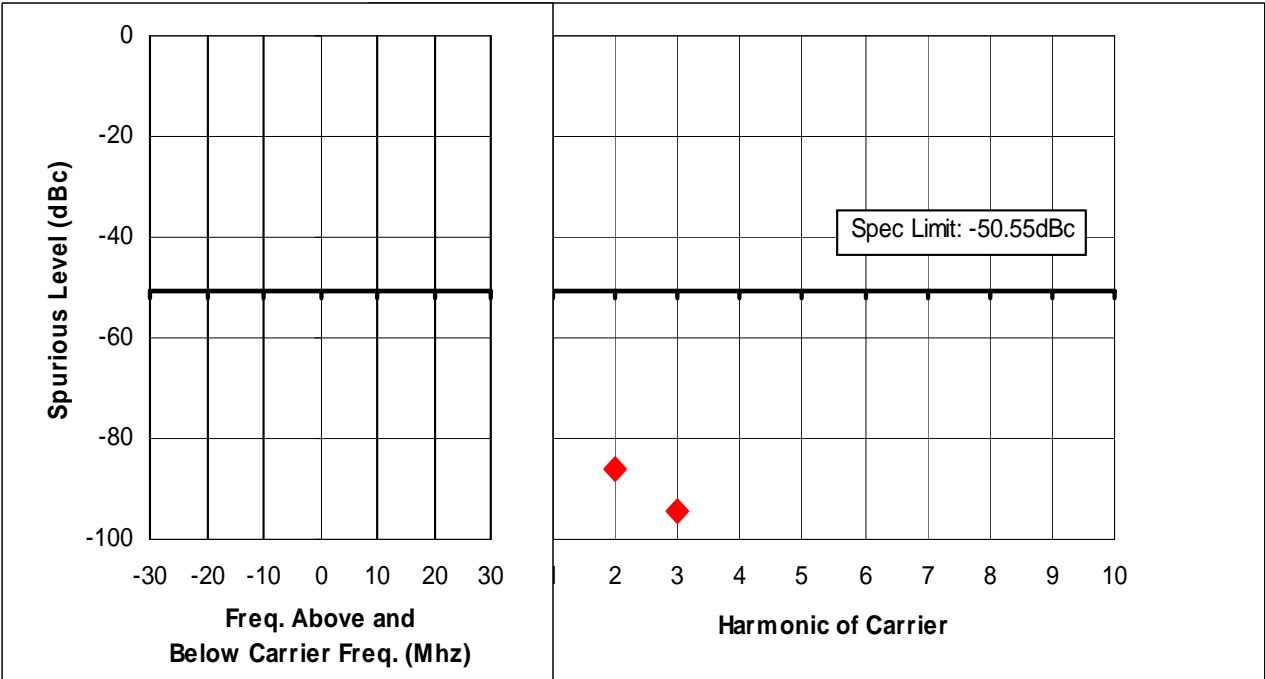


Exhibit 6H-3

136.025 MHz, 25KH Channel Spacing, 6.6 Watts

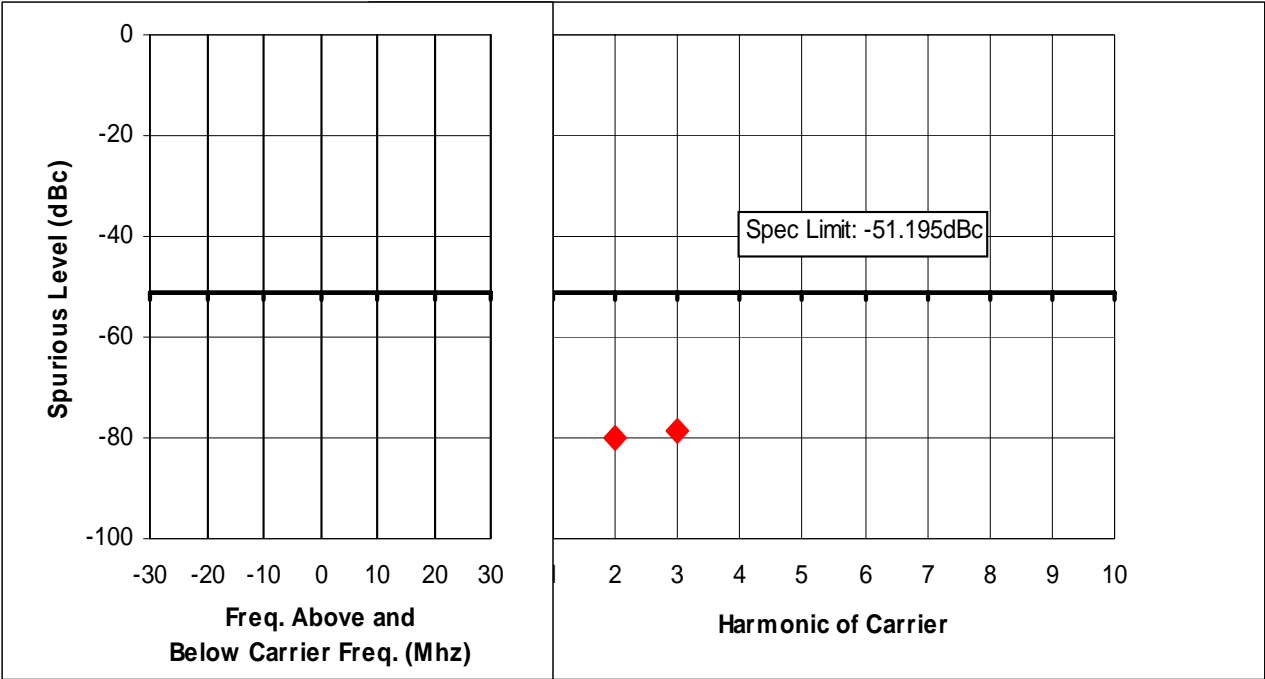


Exhibit 6H-4

155.0125 MHz, 25 kHz Channel Spacing, 6.6 Watts

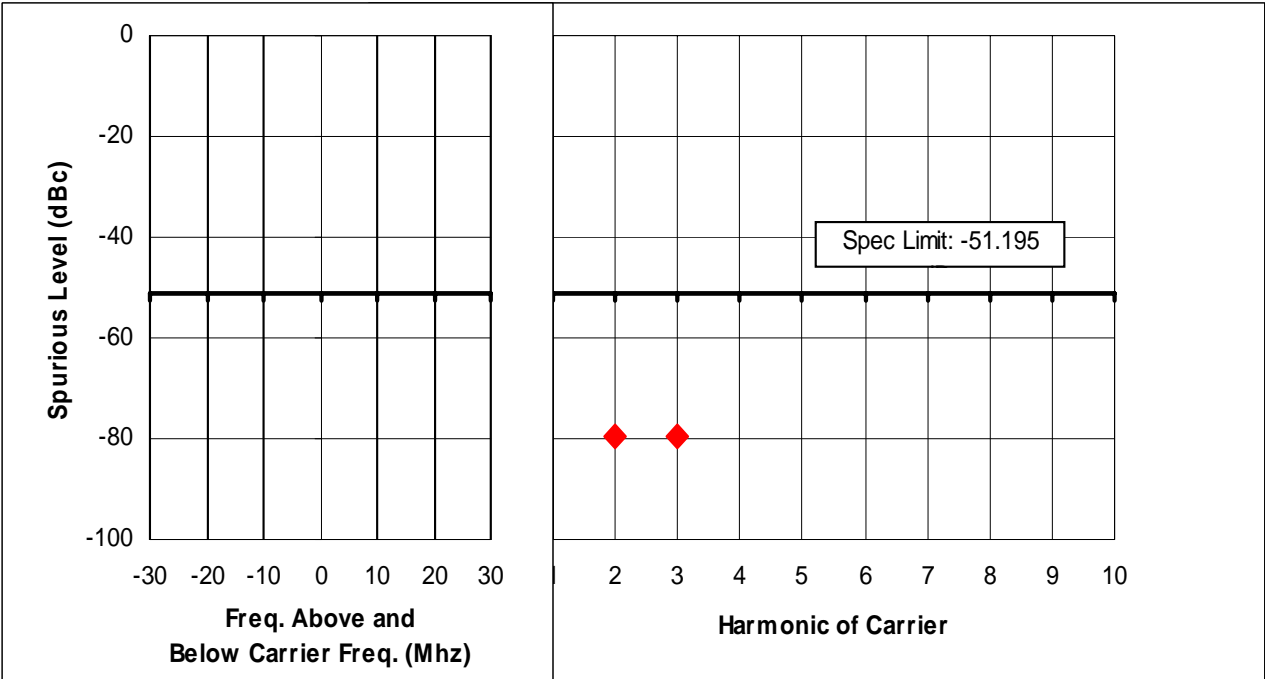


Exhibit 6H-5

173.975 MHz, 25KH Channel Spacing, 6.6 Watts

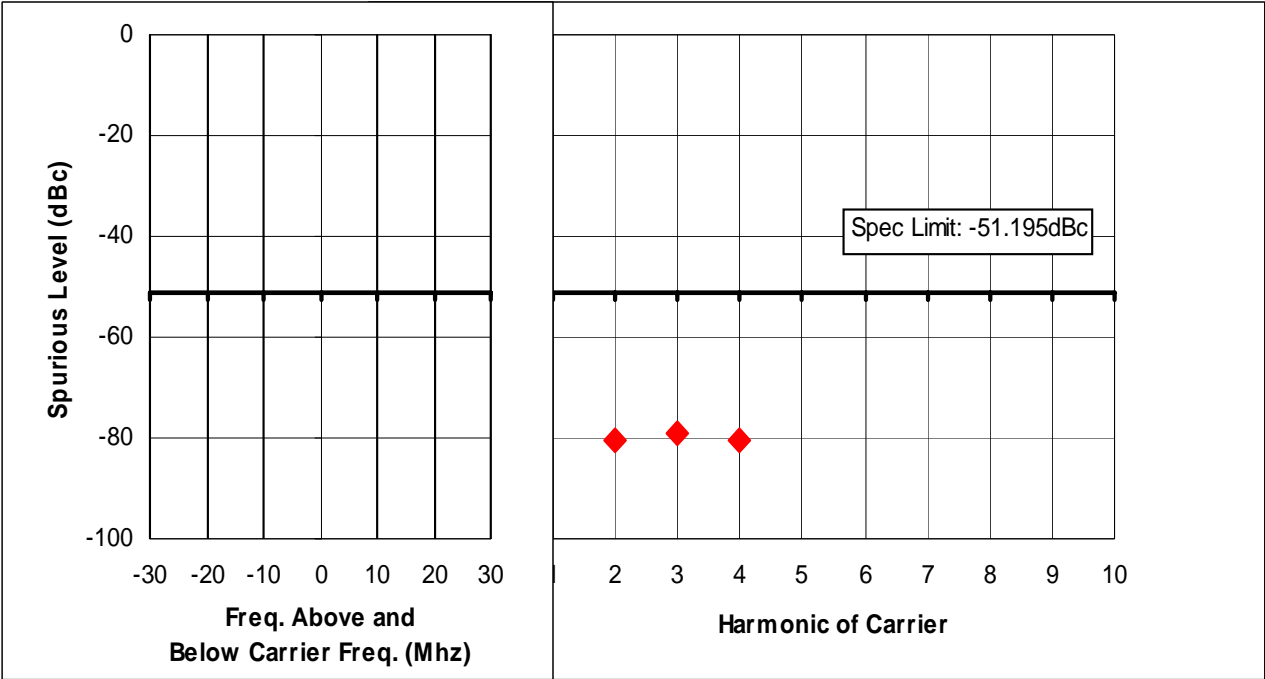


Exhibit 6H-6

EXHIBIT 6I

POWER LINE CONDUCTED INTERFERENCE

Rules Part No.: Part 15.107

Requirements:

Frequency (MHz)	Quasi Peak Limits (dBμV)	Average Limits (dBμV)
0.15 – 0.5	66 – 56 *	56 – 46 *
0.5 – 5.0	56	46
5.0 – 30	60	50
* Decrease with logarithm of frequency		

Test Data: The following plots represent the emissions for power line conducted. Both lines were observed.

NOTE: Not applicable to this product

**RADIATED SPURIOUS EMISSIONS****Rules Part No.:** 15.109**Requirements:**

Frequency MHz	Limits
30 – 88	40.0 dB $\mu$ V/m measured @ 3 meters
88 – 216	43.5 dB $\mu$ V/m measured @ 3 meters
216 – 960	46.0 dB $\mu$ V/m measured @ 3 meters
Above 960	54.0 dB $\mu$ V/m measured @ 3 meters

**Test Data:**

Attached laptop running APX Family CPS software.

Tuned Frequency MHz	Emission Frequency MHz	Meter Reading dB $\mu$ V	Ant. Polarity	Coax Loss dB	Correction Factor dB/m	Field Strength dB $\mu$ V/m	Margin dB
155.0	30.58	21.2	H	0.40	12.99	34.59	5.41
155.0	30.64	26.8	V	0.40	11.70	38.90	1.10
155.0	39.90	26.7	V	0.45	9.91	37.06	2.94
155.0	39.98	18.5	H	0.45	10.80	29.75	10.25
155.0	48.00	19.3	H	0.49	10.86	30.65	9.35
155.0	48.06	25.0	V	0.49	10.61	36.10	3.90
155.0	81.34	18.6	H	0.60	6.46	25.66	14.34
155.0	84.07	23.0	V	0.61	7.91	31.52	8.48
155.0	85.01	16.6	H	0.61	6.90	24.11	15.89
155.0	85.01	19.0	V	0.61	8.00	27.61	12.39
155.0	206.05	19.3	V	0.91	11.70	31.91	11.59
155.0	240.03	17.2	H	0.98	12.00	30.18	15.82
155.0	249.42	15.5	V	1.00	12.47	28.97	17.03
155.0	249.57	17.8	H	1.00	12.48	31.28	14.72
425.0	30.63	22.8	V	0.40	11.70	34.90	5.10
425.0	39.96	19.1	H	0.45	10.80	30.35	9.65
425.0	47.98	24.0	V	0.49	10.60	35.09	4.91
425.0	74.57	15.2	H	0.58	6.73	22.51	17.49

(cont....)

Tuned Frequency MHz	Emission Frequency MHz	Meter Reading dB $\mu$ V	Ant. Polarity	Coax Loss dB	Correction Factor dB/m	Field Strength dB $\mu$ V/m	Margin dB
425.0	74.70	19.2	V	0.58	7.42	27.20	12.80
425.0	80.75	29.6	V	0.60	7.58	37.78	2.22
425.0	80.90	25.0	H	0.60	6.41	32.01	7.99
425.0	85.03	21.3	V	0.61	8.01	29.92	10.08
425.0	85.13	20.5	H	0.61	6.93	28.04	11.96
425.0	256.38	24.6	H	1.01	12.76	38.37	7.63
425.0	377.60	17.2	V	1.18	15.25	33.63	12.37

Exhibit 6H-1

## EXHIBIT 6J

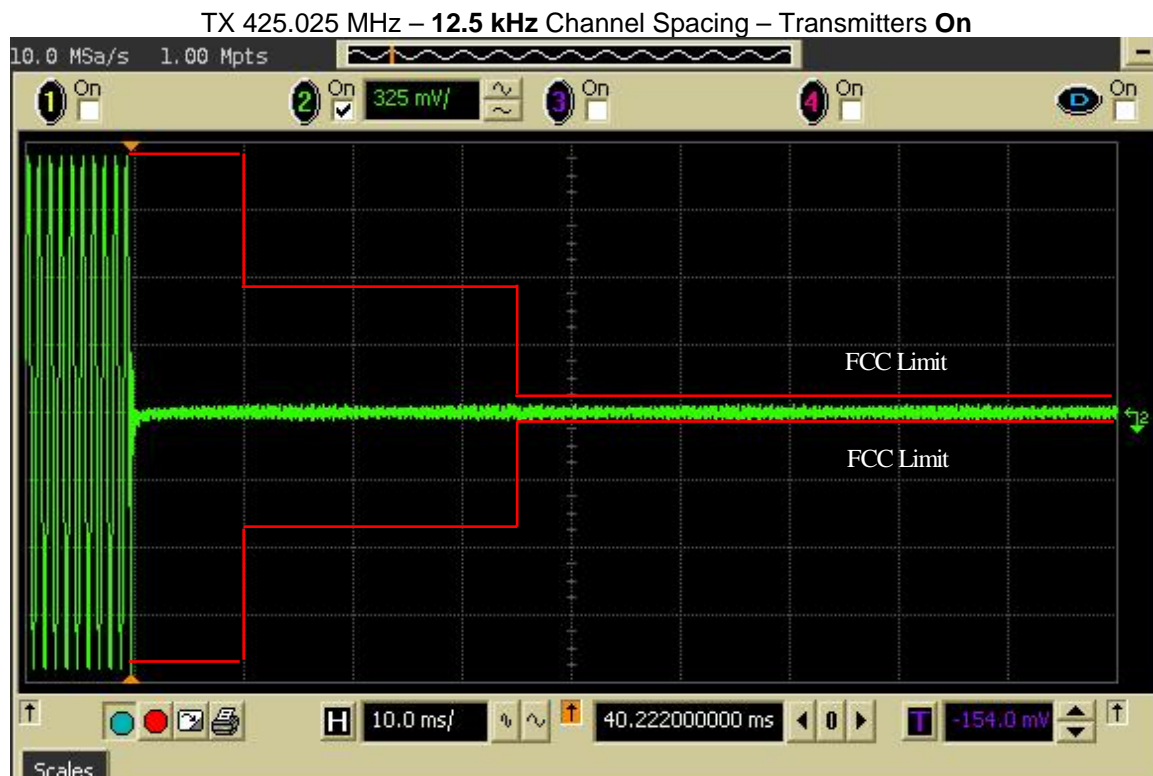
Transient Frequency Behavior

Exhibit 6I-1

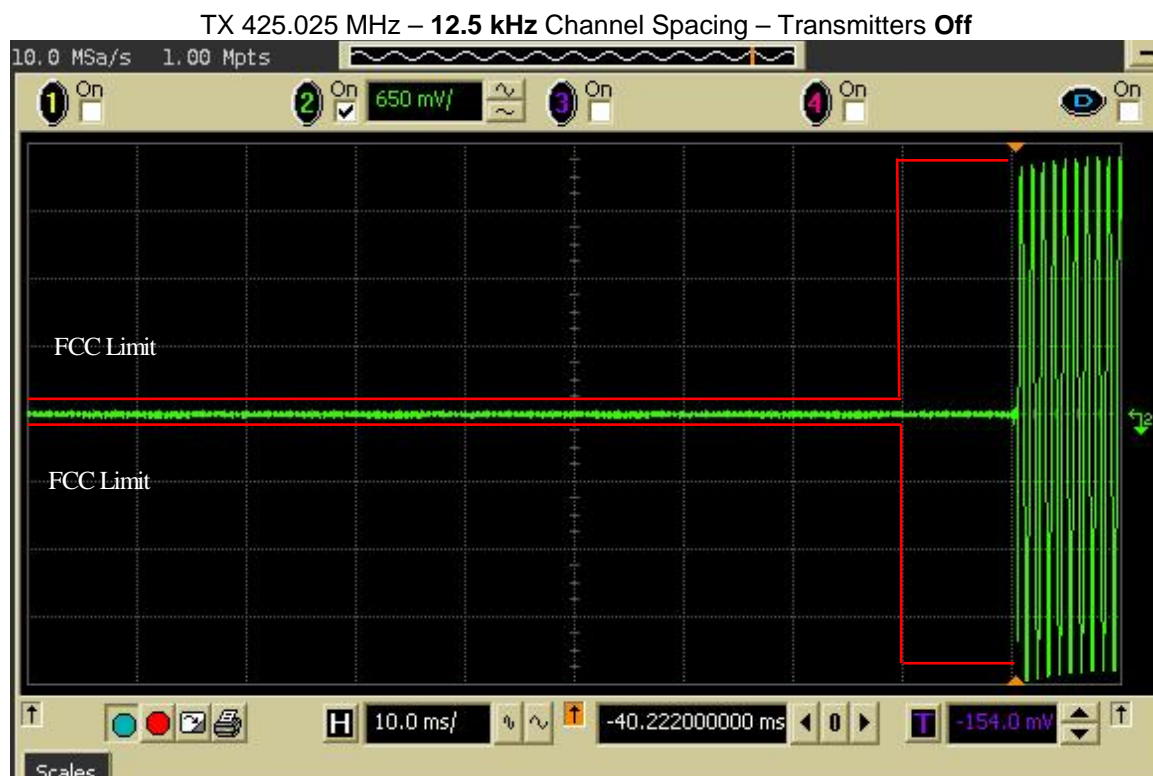


Exhibit 6I-3

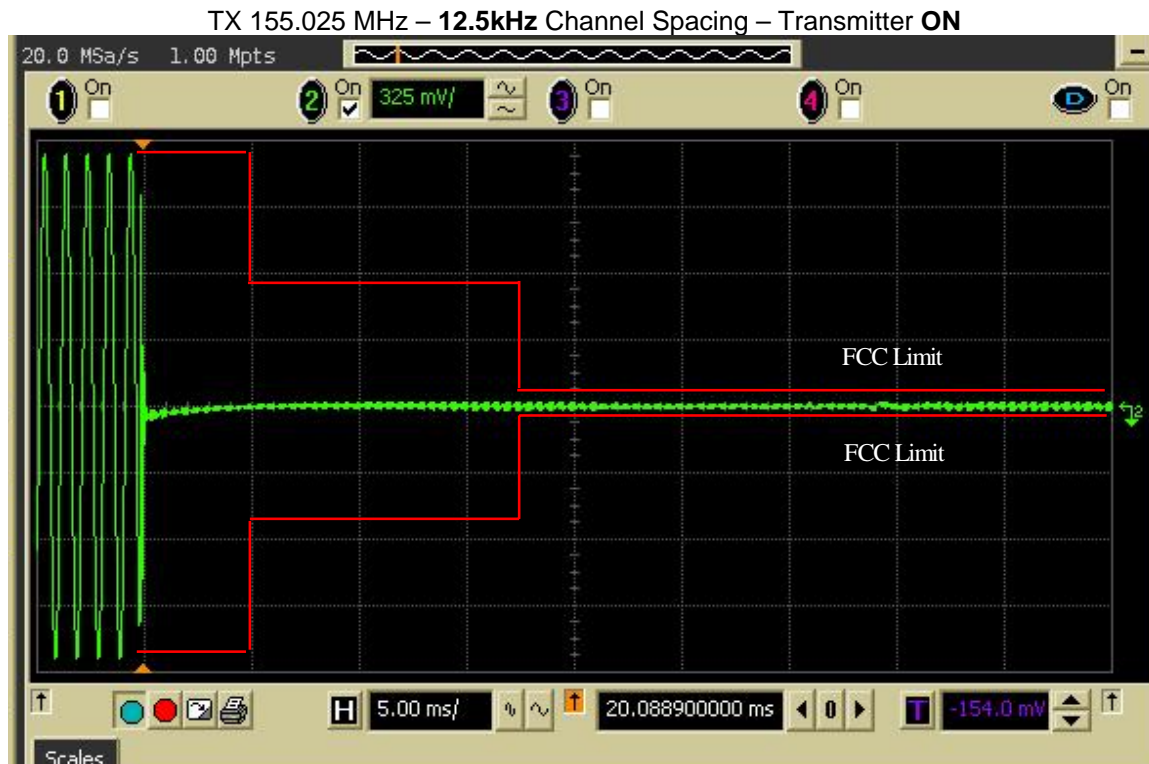


Exhibit 6I-3

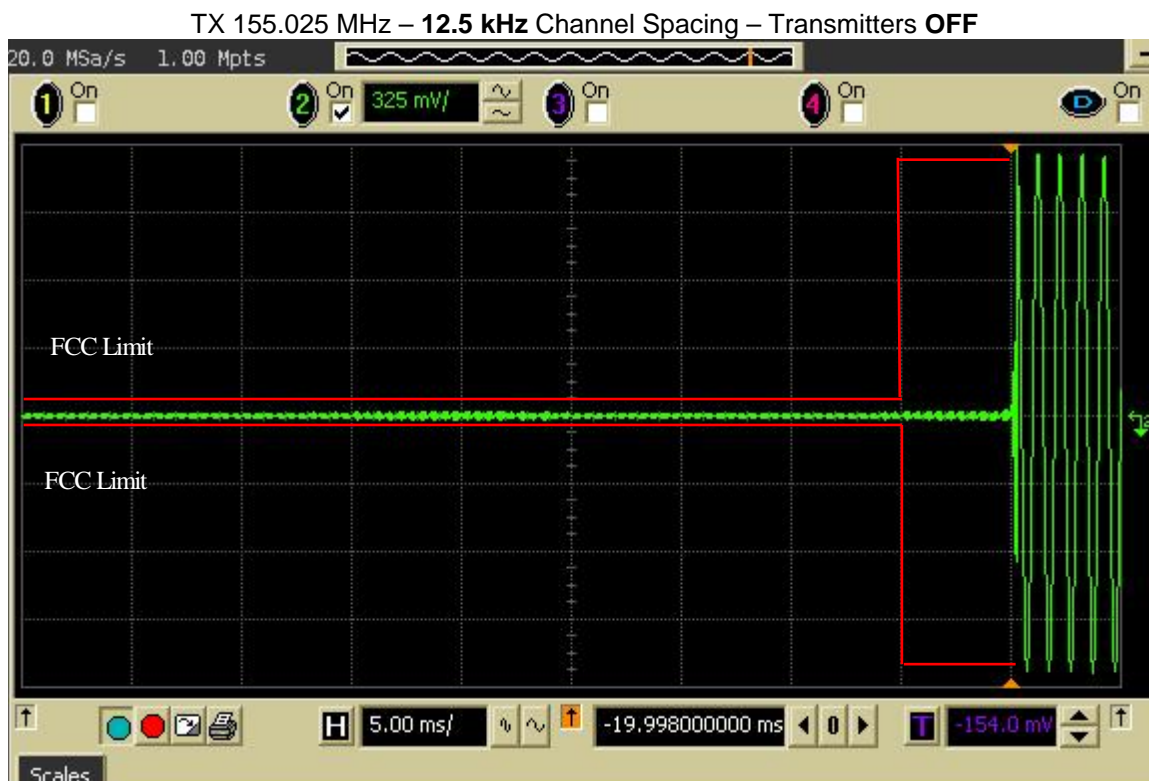


Exhibit 6I-4

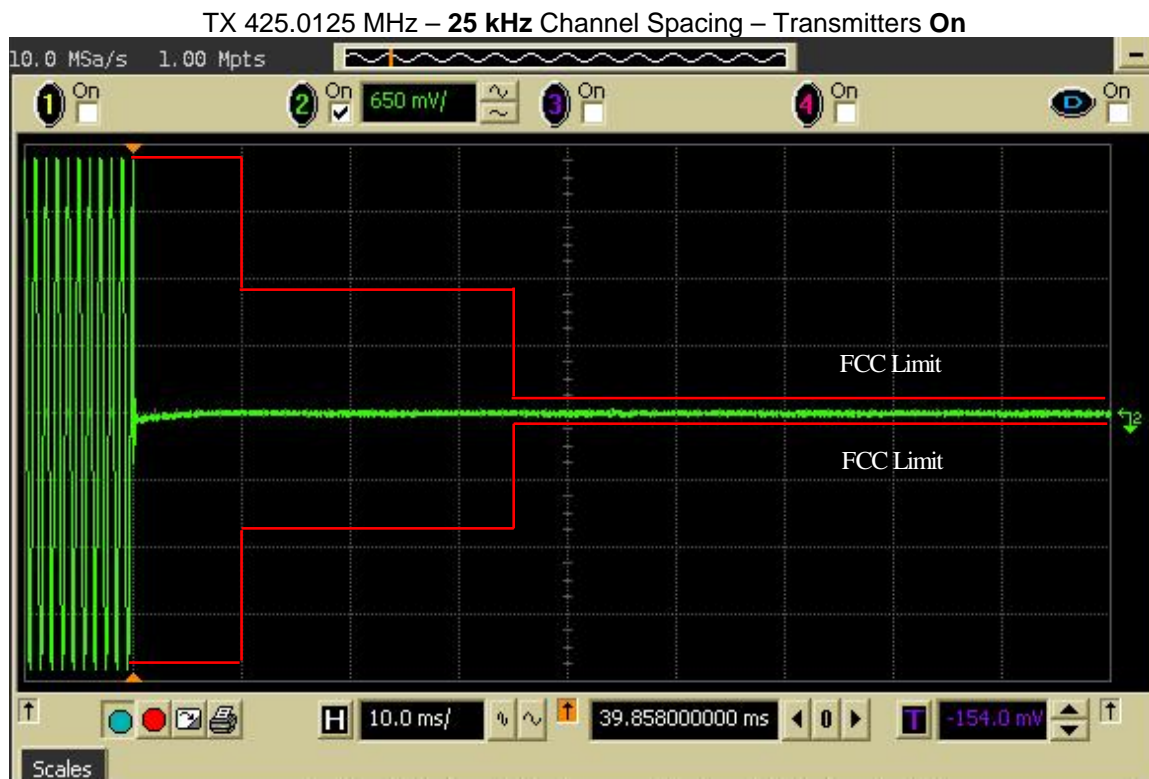


Exhibit 6I-5

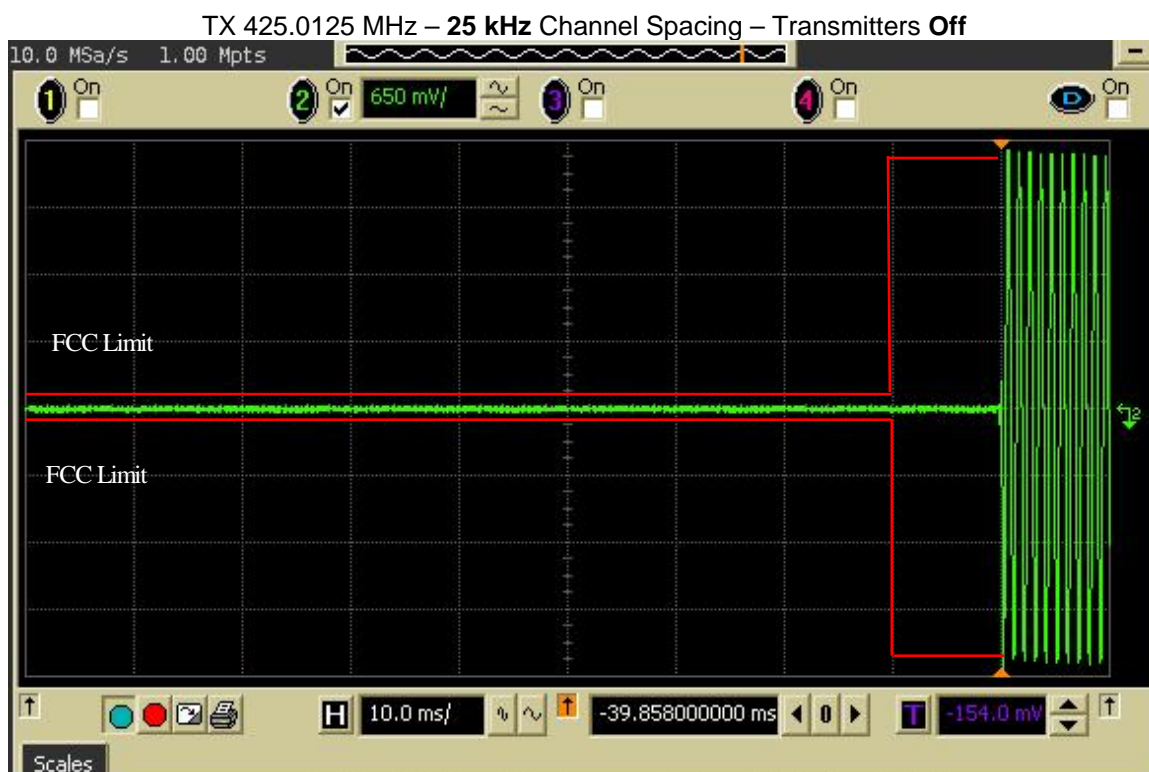


Exhibit 6I-6



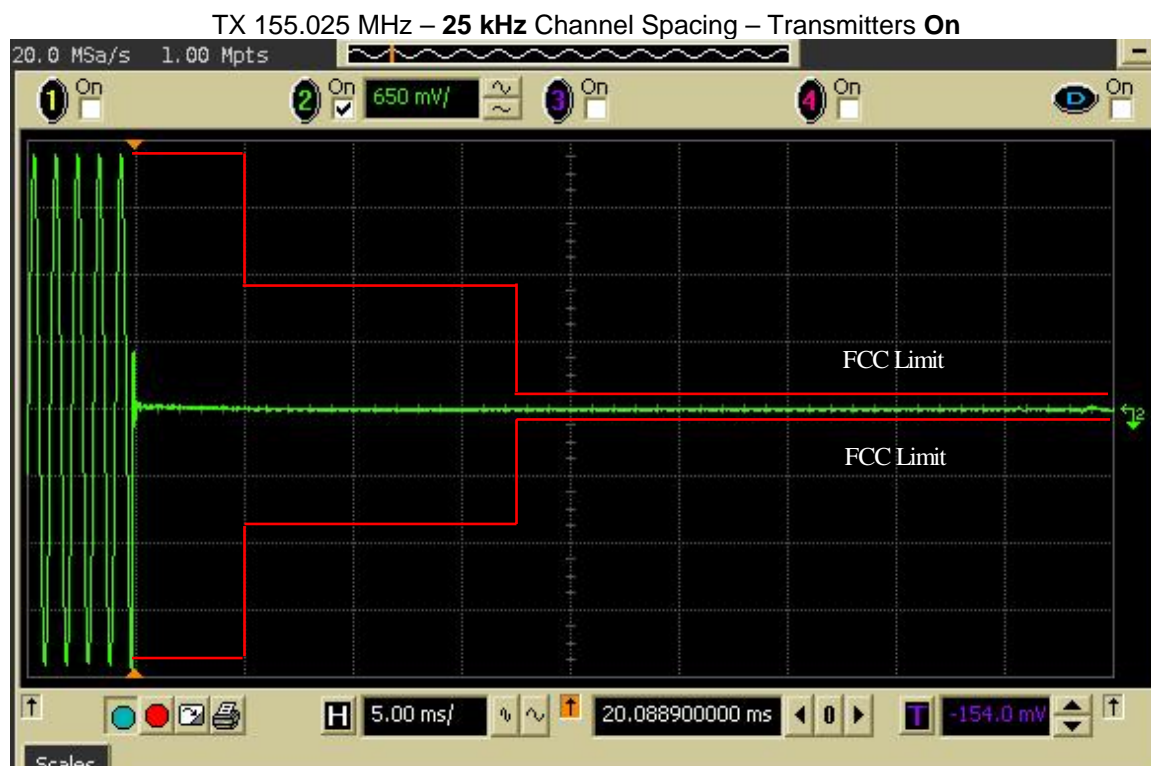


Exhibit 6I-7

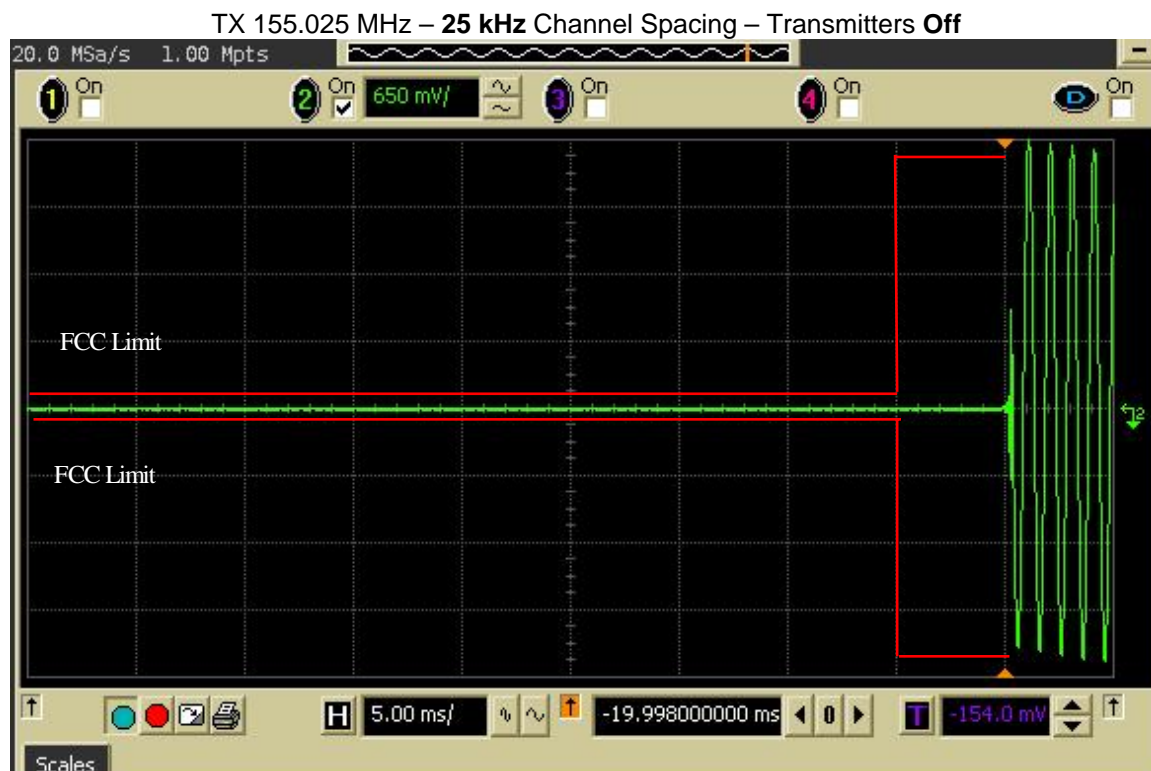


Exhibit 6I-8