

EXHIBIT 6

INDEX OF SUBMITTED MEASURED DATA

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

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- 6B-2 –481.0125 MHz, 25 kHz Channel Spacing

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- 6G-5 - High Power 450.0125 MHz, 25 kHz Channel Spacing
- 6G-6 - High Power 481.0125 MHz, 25 kHz Channel Spacing
- 6G-7 - High Power 511.9875 MHz, 25 kHz Channel Spacing
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- 6H-1– 481.0125 MHz vs. Supply Voltage
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- 6I-4 - 481.0125 MHz, 25 kHz Channel Spacing – Transmitter Off

** Please note that the above data were taken following the procedures and limits outlined in TIA 603-D and RSS 119 during the month of February 2013. See Table 2 in Ex07_test procedures

** Radio model tested: H59SDD9PW4AN

EXHIBIT 6A - RF Conducted Power Output Data

Frequency = 450.0125 MHz:

Output RF power	1.00 Watts
DC Voltage	7.50 Volts
DC Current	0.90 Amps
Output RF power	3.00 Watts
DC Voltage	7.50 Volts
DC Current	1.42 Amps
Output RF power	5.60 Watts
DC Voltage	7.50 Volts
DC Current	1.94 Amps

Frequency = 481.0125 MHz:

Output RF power	1.00 Watts
DC Voltage	7.50 Volts
DC Current	0.89 Amps
Output RF power	3.00 Watts
DC Voltage	7.50 Volts
DC Current	1.40 Amps
Output RF power	5.60 Watts
DC Voltage	7.50 Volts
DC Current	1.90 Amps

Frequency= 511.9875 MHz:

Output RF power	1.00 Watts
DC Voltage	7.50 Volts
DC Current	0.90 Amps
Output RF power	3.00 Watts
DC Voltage	7.50 Volts
DC Current	1.40 Amps
Output RF power	5.60 Watts
DC Voltage	7.50 Volts
DC Current	1.89 Amps

Frequency = 519.9875 MHz: (Not for FCC Review)

Output RF power	1.00 Watts
DC Voltage	7.50 Volts
DC Current	0.92 Amps
Output RF power	3.00 Watts
DC Voltage	7.50 Volts
DC Current	1.42 Amps
Output RF power	5.60 Watts
DC Voltage	7.50 Volts
DC Current	1.91 Amps

EXHIBIT 6B - Transmit Audio Response

Audio Frequency Response
(Freq: 481.0125 MHz, ChSp: 12.5kHz)

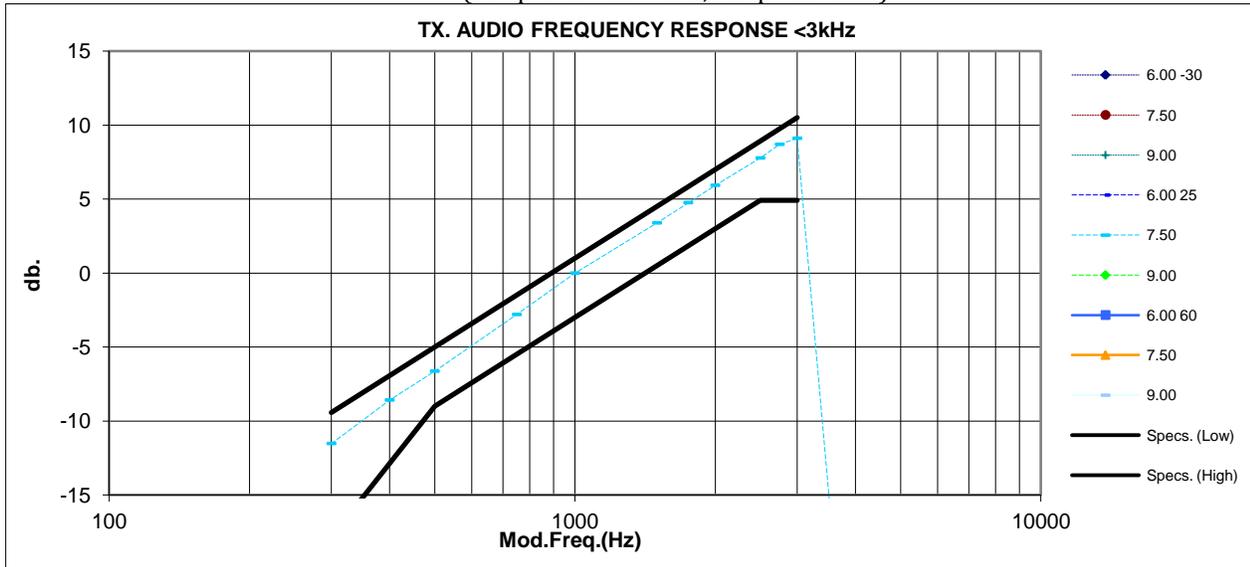


Exhibit 6B-1

Audio Frequency Response
(Freq: 481.0125 MHz, ChSp: 25 kHz)

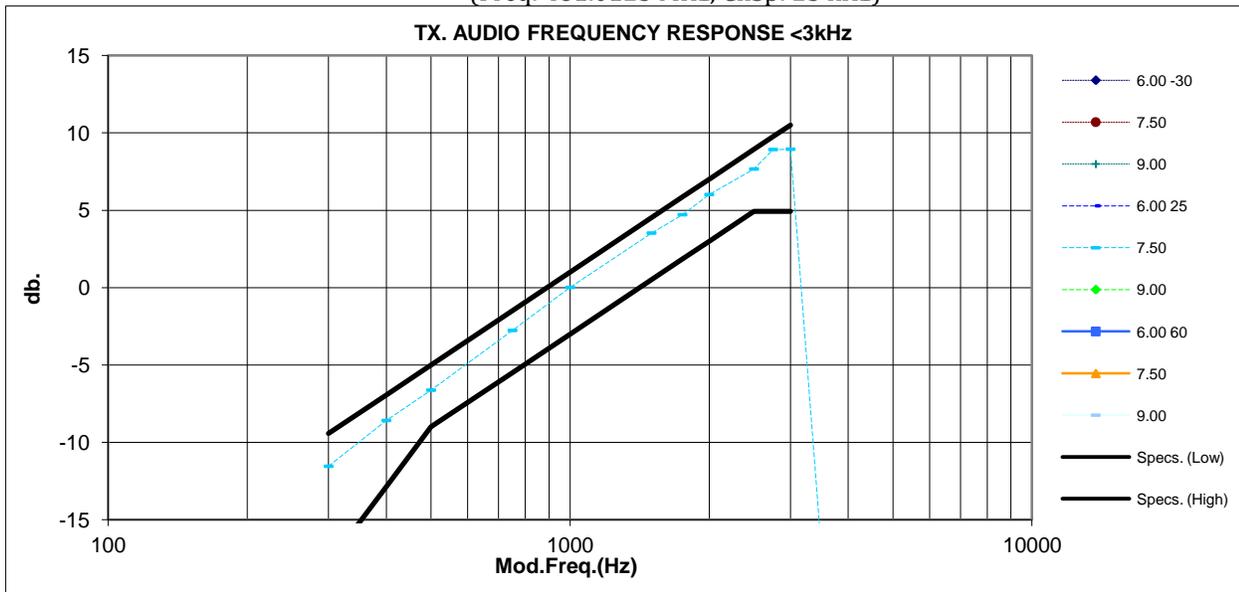


Exhibit 6B-2

EXHIBIT 6C - Transmit Audio Response

Transmit Low Pass Filter Frequency Response

(Freq: 481.0125 MHz, ChSp: 12.5 kHz)

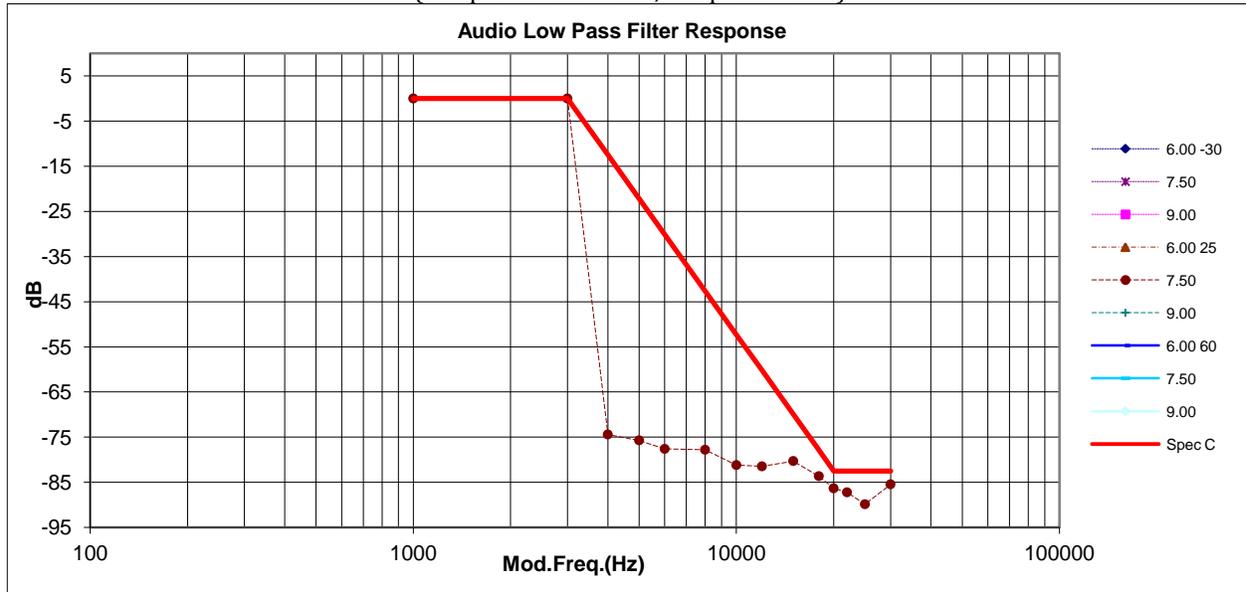


Exhibit 6C-1

Transmit Low Pass Filter Frequency Response

(Freq: 481.0125MHz, ChSp: 25 kHz)

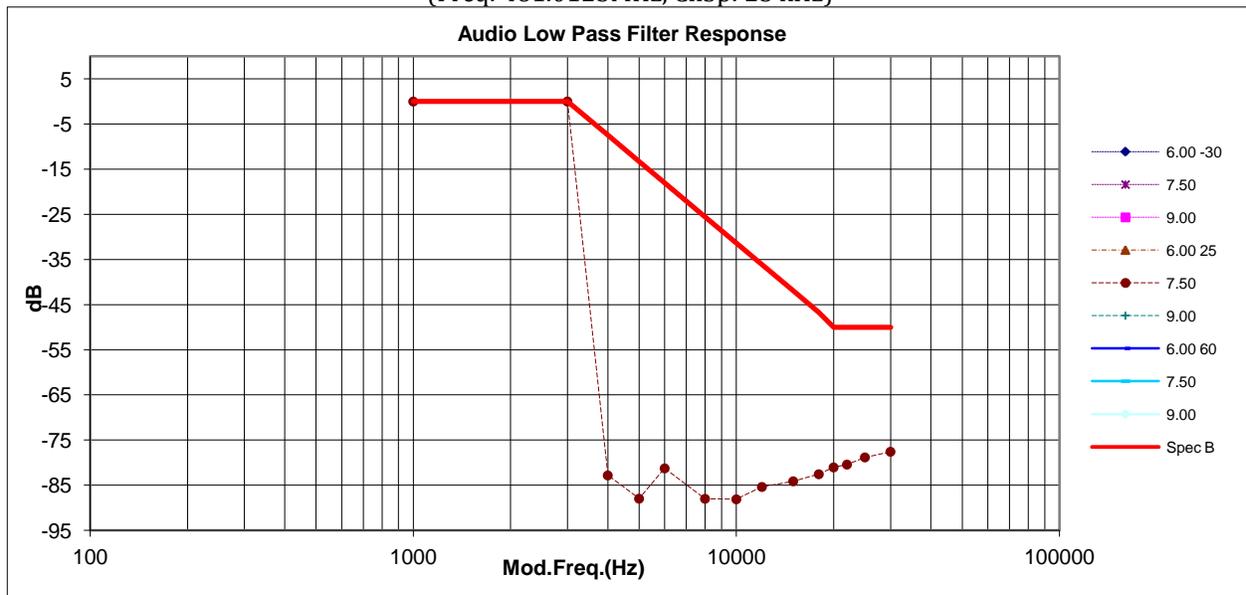


Exhibit 6C-2

EXHIBIT 6D - Modulation Limiting

Modulation Limiting (Freq: 481.0125 MHz, ChSp: 12.5 kHz)

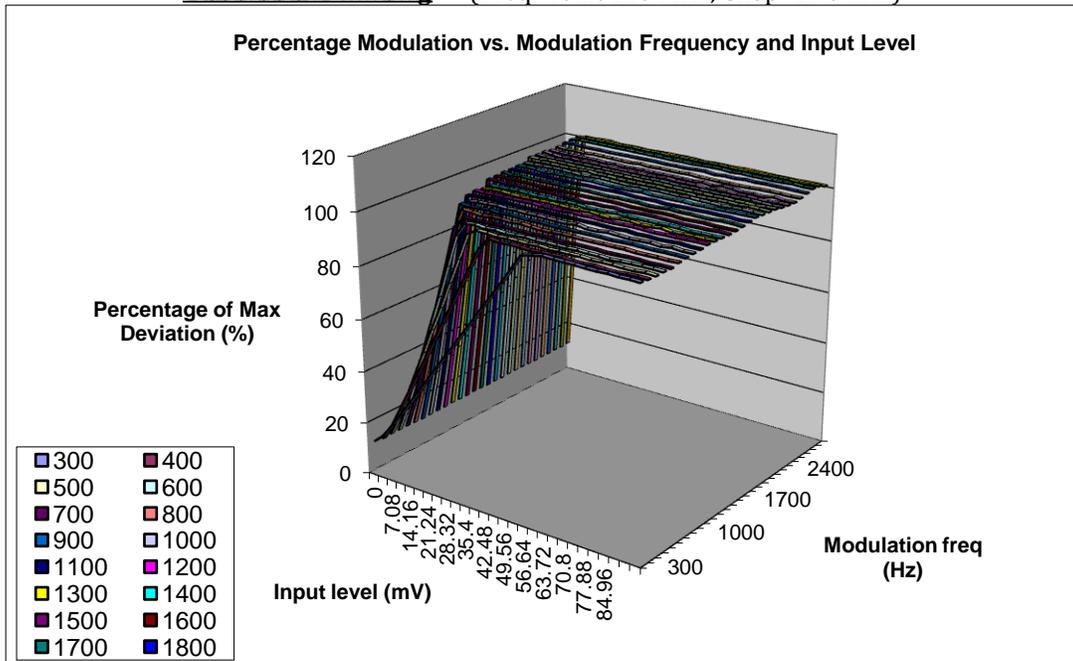


Exhibit 6D-1

Modulation Limiting (Freq: 481.0125 MHz, ChSp: 25 kHz)

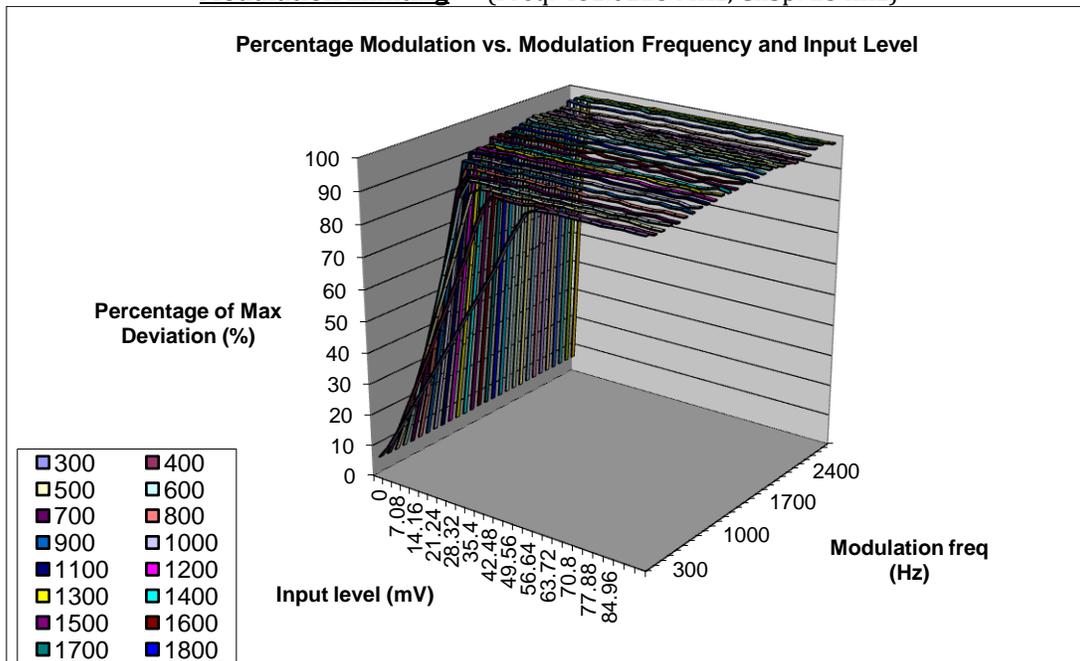


Exhibit 6D-2

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: AZ489FT4912.

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.

EXHIBIT 6E-3

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

Occupied Bandwidth (Analog Voice: 11K0F3E)
Frequency = 481.0125 MHz Channel Spacing = 12.5 kHz

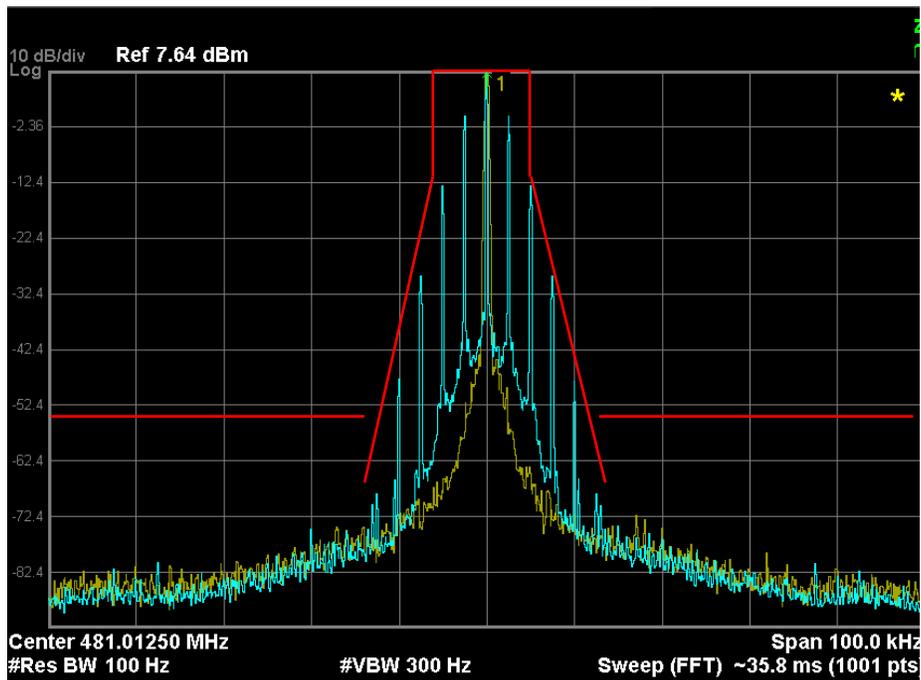


Exhibit 6E-1

Occupied Bandwidth (Analog Voice: 16K0F3E)
Frequency = 481.0125 MHz Channel Spacing = 25 kHz

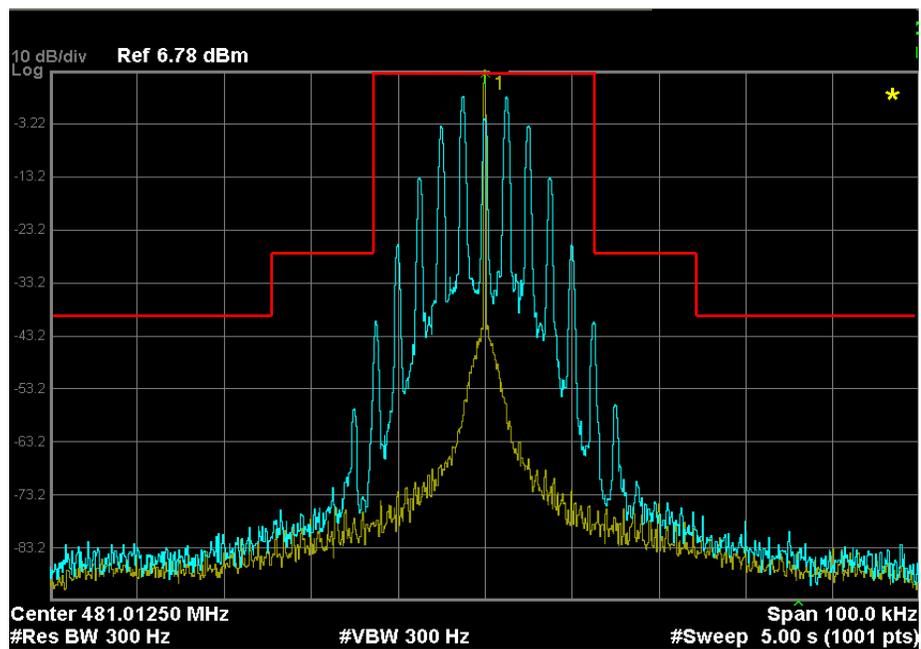


Exhibit 6E-2

Occupied Bandwidth (Digital Data: 8K10F1D)
Frequency = 481.0125 MHz Channel Spacing = 12.5 kHz

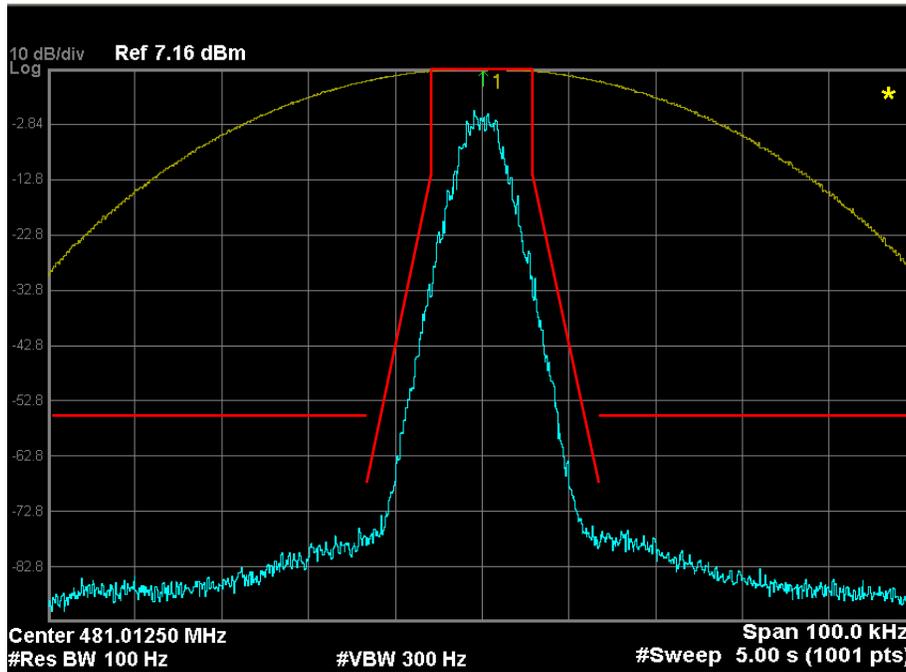


Exhibit 6E-3

Occupied Bandwidth (Digital Voice: 8K10F1E)
Frequency = 481.0125 MHz Channel Spacing = 12.5 kHz

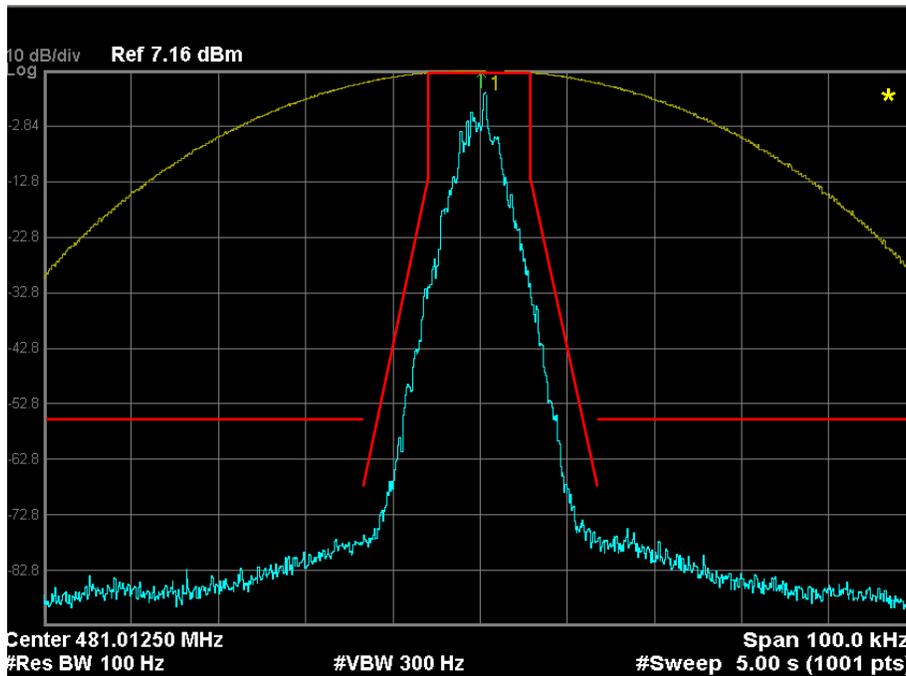


Exhibit 6E-4

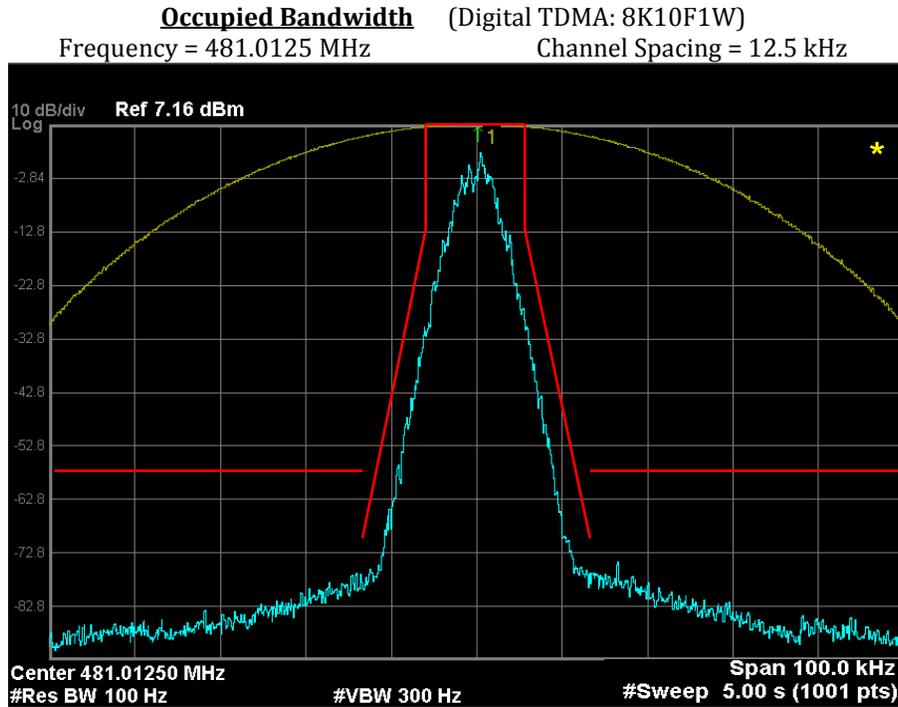


Exhibit 6E-5

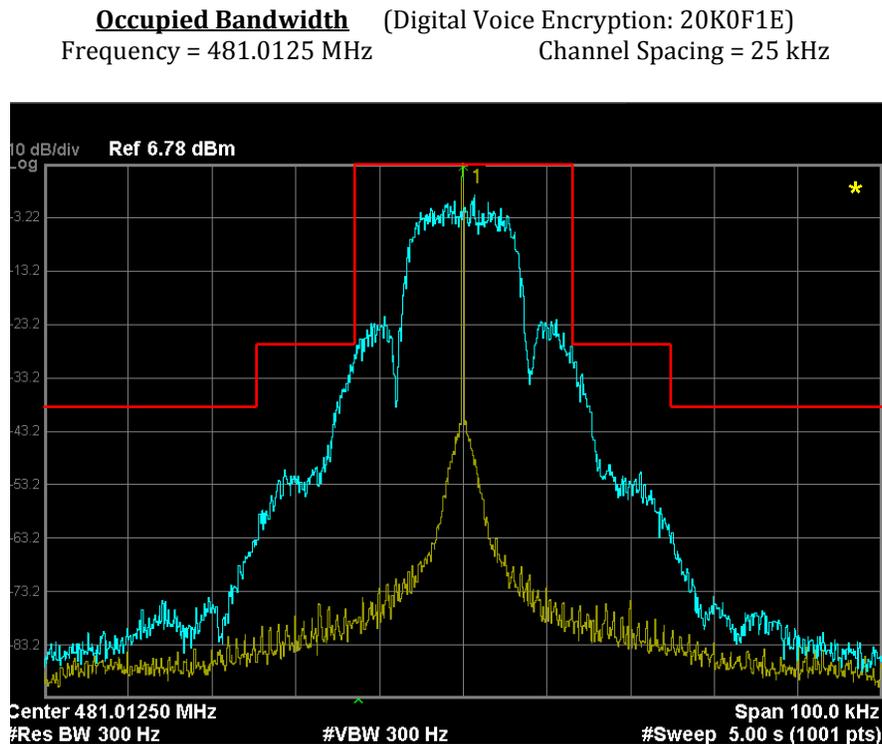


Exhibit 6E-6

****NOTE:-**

- All measurements of Occupied Bandwidth which are shown on the above plots are measured using a Spectrum Analyzer
- Measurement using a Spectrum Analyzer must use a 30dB attenuation in order to avoid damage to it
- Therefore the reference power level (Ref) shown on each plot refers to its true power level

EXHIBIT 6F - Transmitter Radiated Spurious Emissions

High Power (5.6 W)

Transmit Radiated Spurious Emissions: **PMUE4151A**

Tx Power: 5.6 Watts

450.0125 MHz

Channel Spacing 12.5kHz | S/N 536TPB0024

Frequency (MHz)	FCC Failing Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)
900.0250	-20	*	*
1350.0375	-20	*	*
1800.0500	-20	*	*
2250.0625	-20	*	*
2700.0750	-20	*	*
3150.0875	-20	*	*
3600.1000	-20	*	*
4050.1125	-20	*	*
4500.1250	-20	*	*

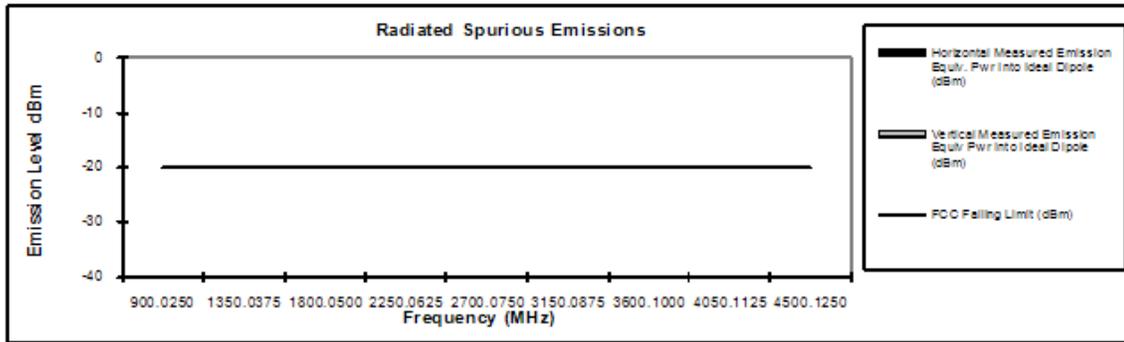


Exhibit 6F-1

High Power (5.6 W)

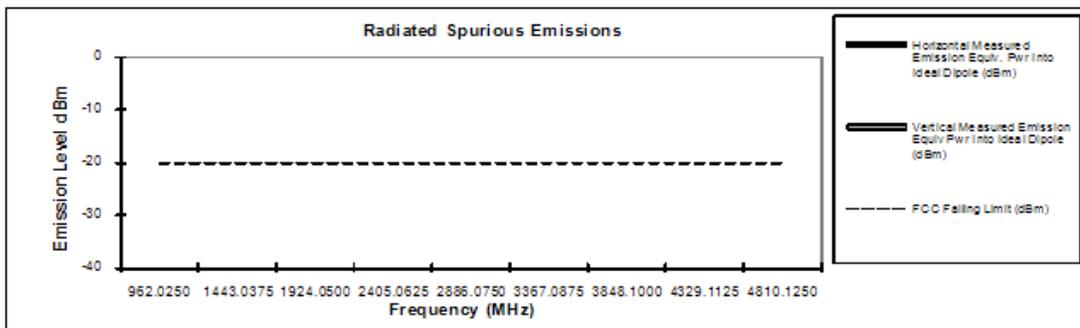
Transmit Radiated Spurious Emissions: **PMUE4151A**

Tx Power: 5.6 Watts

481.0125 MHz

Channel Spacing 12.5kHz | S/N 536TPB0024

Frequency (MHz)	FCC Failing Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)
962.0250	-20	*	*
1443.0375	-20	*	*
1924.0500	-20	*	*
2405.0625	-20	*	*
2886.0750	-20	*	*
3367.0875	-20	*	*
3848.1000	-20	*	*
4329.1125	-20	*	*
4810.1250	-20	*	*



* Indicates the spurious emission could not be detected due to noise limitations or ambients.

Pursuant to CFR 47 Part 2.1057(c), emissions attenuated more than 20 dB below the permissible limit are not reported.

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

Exhibit 6F-2

High Power (5.6 W)

Transmit Radiated Spurious Emissions: PMUE4151A

Tx Power: 5.6 Watts

511.9875 MHz

Channel Spacing 12.5kHz | S/N 536TPB0024

Frequency (MHz)	FCC Failing Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
1023.9750	-20	*	*
1535.9625	-20	*	*
2047.9500	-20	*	*
2559.9375	-20	*	*
3071.9250	-20	*	*
3583.9125	-20	*	*
4095.9000	-20	*	*
4607.8875	-20	*	*
5119.8750	-20	*	*

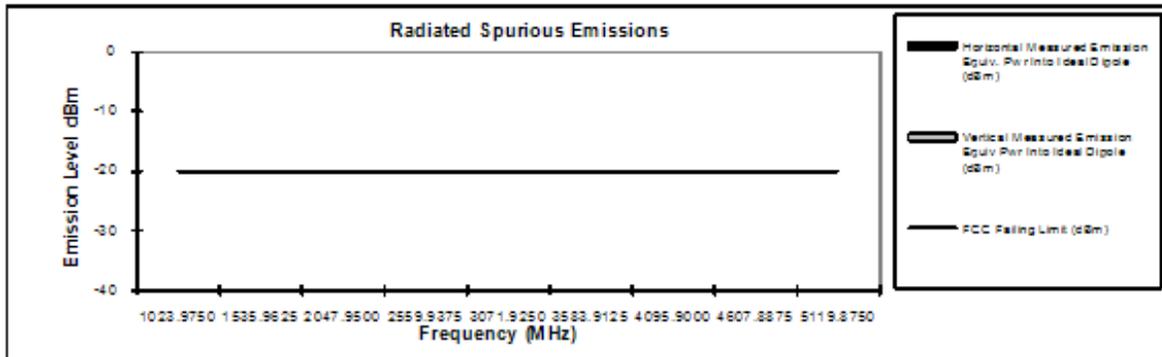


Exhibit 6F-3

High Power (5.6 W) (Not for FCC Review)

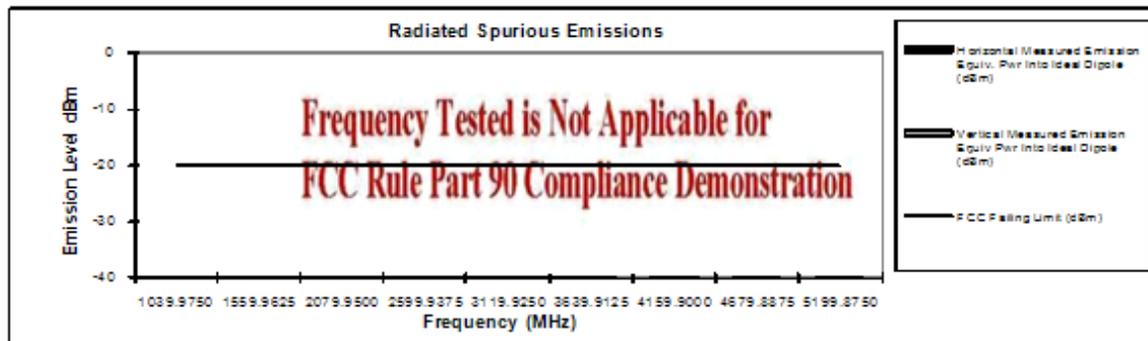
Transmit Radiated Spurious Emissions: PMUE4151A

Tx Power: 5.6 Watts

519.9875 MHz

Channel Spacing 12.5kHz | S/N 536TPB0024

Frequency (MHz)	FCC Failing Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
1039.9750	-20	*	*
1559.9625	-20	*	*
2079.9500	-20	*	*
2599.9375	-20	*	*
3119.9250	-20	*	*
3639.9125	-20	*	*
4159.9000	-20	*	*
4679.8875	-20	*	*
5199.8750	-20	*	*



* Indicates the spurious emission could not be detected due to noise limitations or ambients.

Pursuant to CFR 47 Part 2.1057(c), emissions attenuated more than 20 dB below the permissible limit are not reported.

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

Exhibit 6F-4

High Power (5.9 W)

Transmit Radiated Spurious Emissions: PMUE4151A

Tx Power: 5.6 Watts

450.0125 MHz

Channel Spacing 25kHz | S/N 536TPB0024

Frequency (MHz)	FCC Failing Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
900.0250	-13	*	*
1350.0375	-13	*	*
1800.0500	-13	*	*
2250.0625	-13	*	*
2700.0750	-13	*	*
3150.0875	-13	*	*
3600.1000	-13	*	*
4050.1125	-13	*	*
4500.1250	-13	*	*

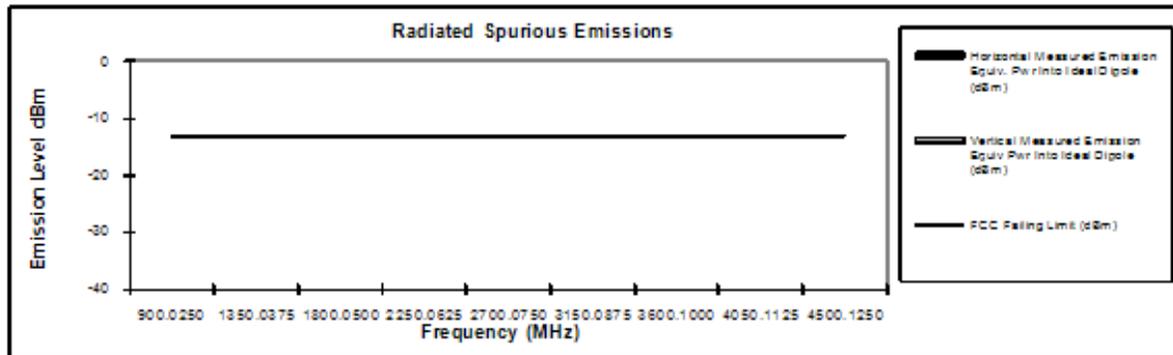


Exhibit 6F-5

High Power (5.9 W)

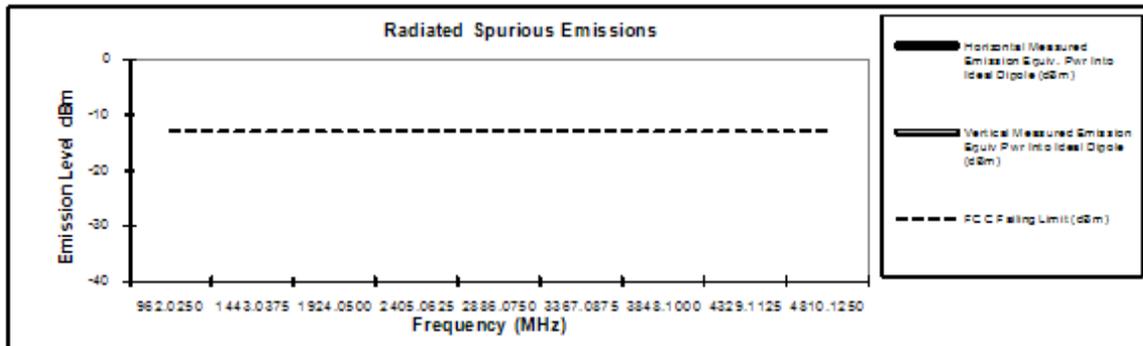
Transmit Radiated Spurious Emissions: PMUE4151A

Tx Power: 5.6 Watts

481.0125 MHz

Channel Spacing 25kHz | S/N 536TPB0024

Frequency (MHz)	FCC Failing Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
962.0250	-13	*	*
1443.0375	-13	*	*
1924.0500	-13	*	*
2405.0625	-13	*	*
2886.0750	-13	*	*
3367.0875	-13	*	*
3848.1000	-13	*	*
4329.1125	-13	*	*
4810.1250	-13	*	*



* Indicates the spurious emission could not be detected due to noise limitations or ambients.

Pursuant to CFR 47 Part 2.1057(c), emissions attenuated more than 20 dB below the permissible limit are not reported.

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

Exhibit 6F-6

High Power (5.9 W)

Transmit Radiated Spurious Emissions: PMUE4151A

Tx Power: 5.6 Watts

511.9875 MHz

Channel Spacing 25kHz | S/N 536TPB0024

Frequency (MHz)	FCC Failing Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
1023.9750	-13	*	*
1535.9625	-13	*	*
2047.9500	-13	*	*
2559.9375	-13	*	*
3071.9250	-13	*	*
3583.9125	-13	*	*
4095.9000	-13	*	*
4607.8875	-13	*	*
5119.8750	-13	*	*

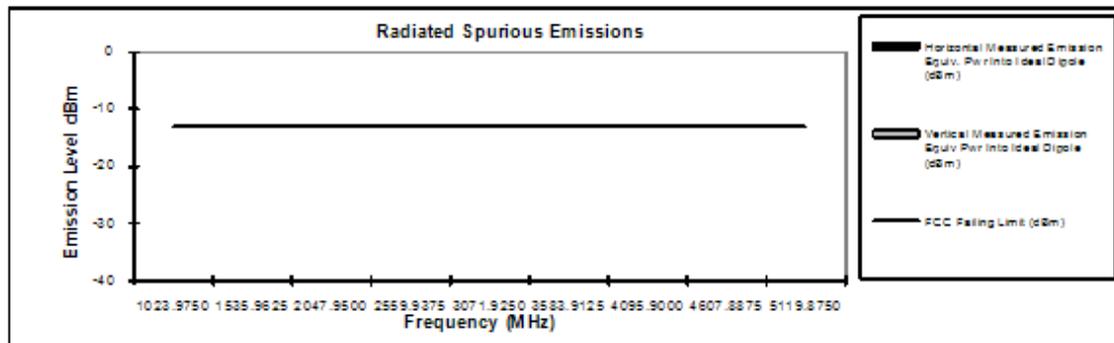


Exhibit 6F-7

High Power (5.9 W) (Not for FCC Review)

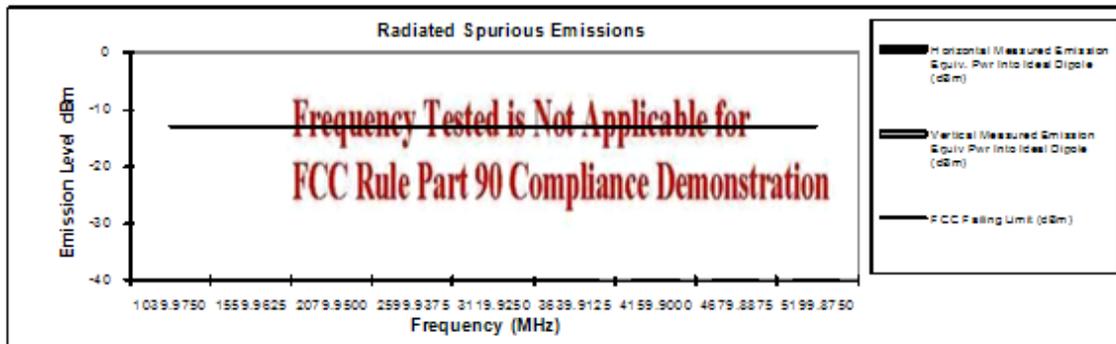
Transmit Radiated Spurious Emissions: PMUE4151A

Tx Power: 5.6 Watts

519.9875 MHz

Channel Spacing 25kHz | S/N 536TPB0024

Frequency (MHz)	FCC Failing Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
1039.9750	-13	*	*
1559.9625	-13	*	*
2079.9500	-13	*	*
2599.9375	-13	*	*
3119.9250	-13	*	*
3639.9125	-13	*	*
4159.9000	-13	*	*
4679.8875	-13	*	*
5199.8750	-13	*	*



* Indicates the spurious emission could not be detected due to noise limitations or ambients.

Pursuant to CFR 47 Part 2.1057(e), emissions attenuated more than 20 dB below the permissible limit are not reported.

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

EXHIBIT 6G - Transmitter Conducted Spurious Emissions

Spurs which are not shown is less than 100dB

Freq: 450.0125 MHz, Power: 5.6Watts (channel spacing 12.5 kHz)

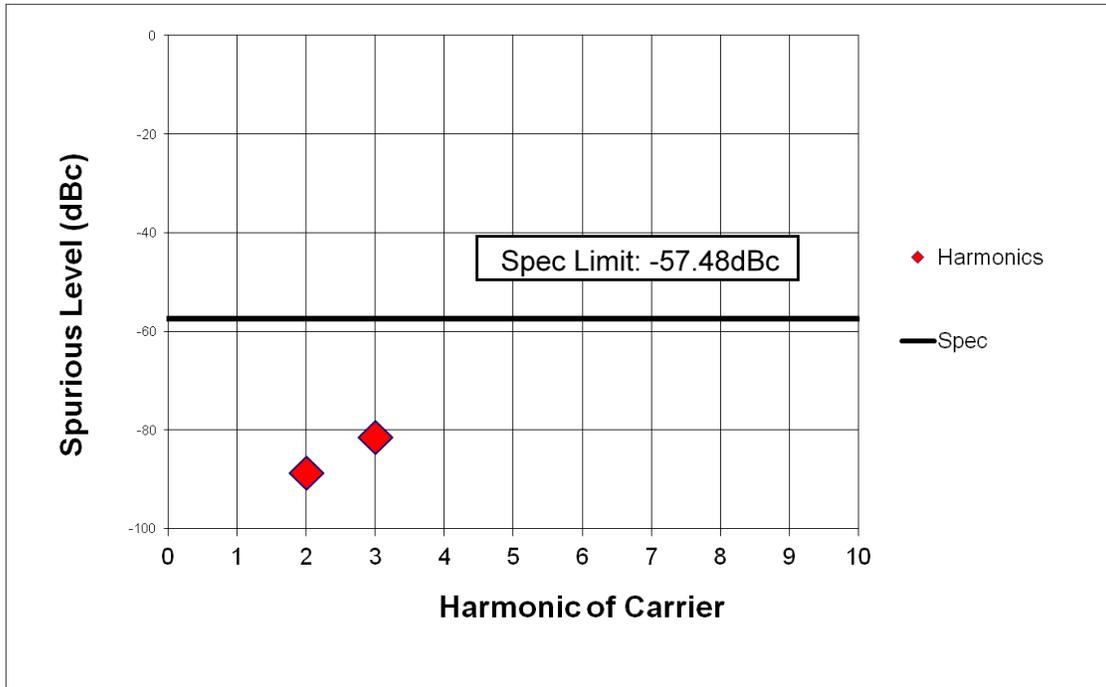
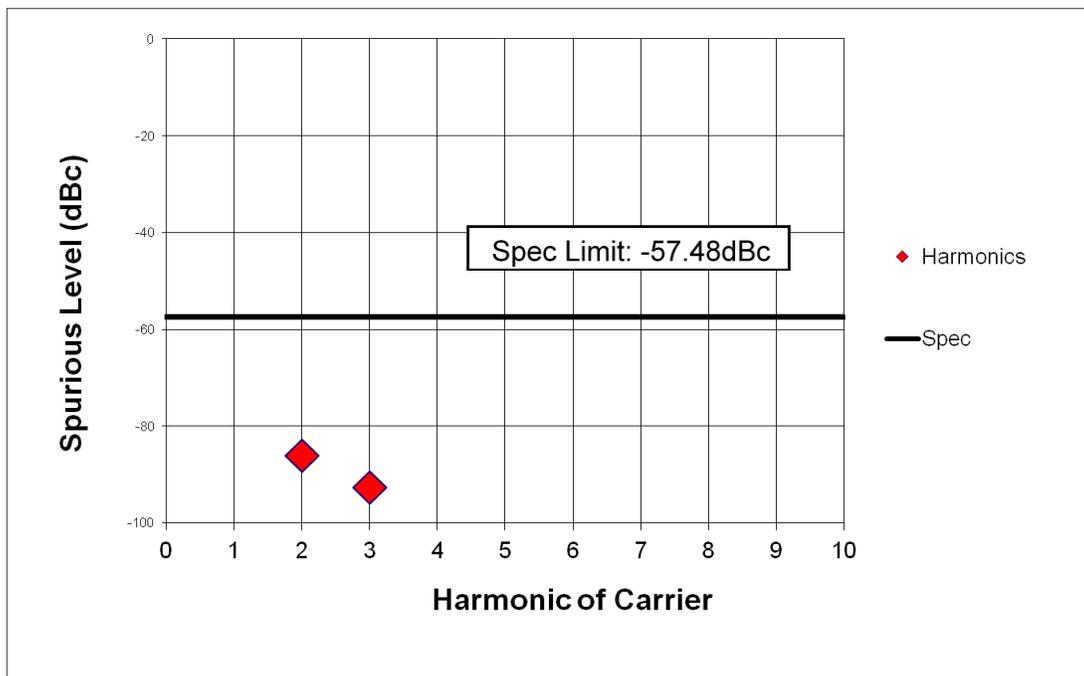


Exhibit 6G-1

Freq: 481.0125 MHz, Power: 5.6Watts (channel spacing 12.5 kHz)



Freq: 511.9875 MHz, Power: 5.6Watts (channel spacing 12.5 kHz)

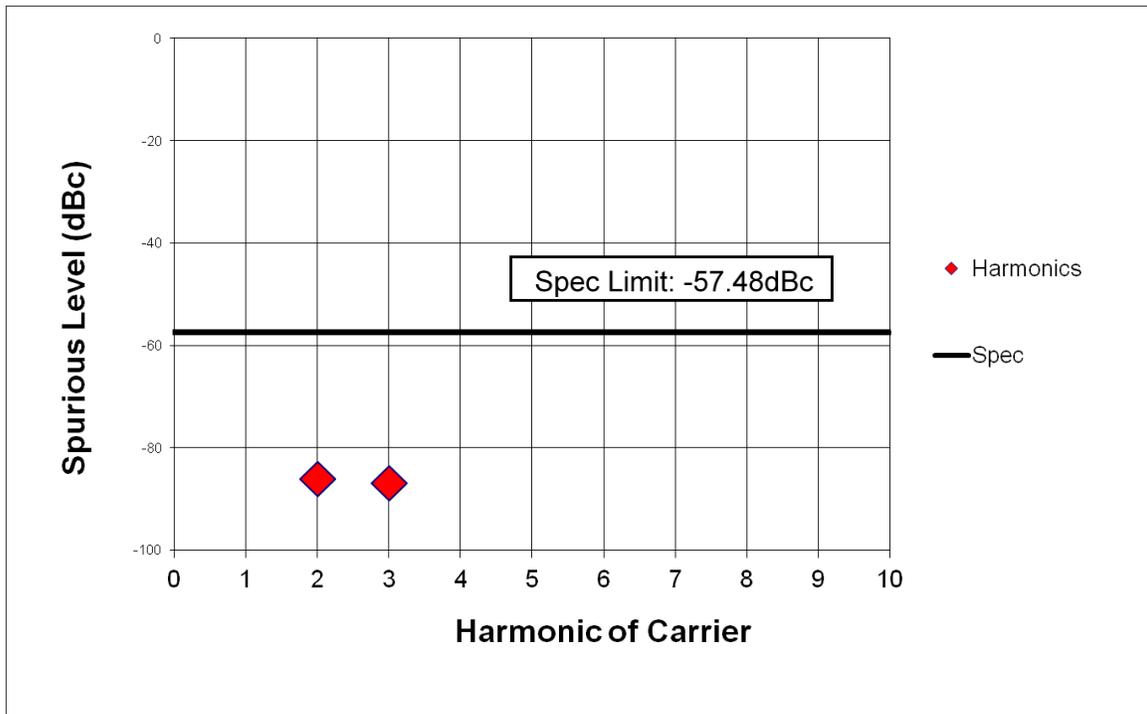


Exhibit 6G-3

Freq: 519.9875 MHz, Power: 5.6Watts (channel spacing 12.5 kHz) (Not for FCC Review)

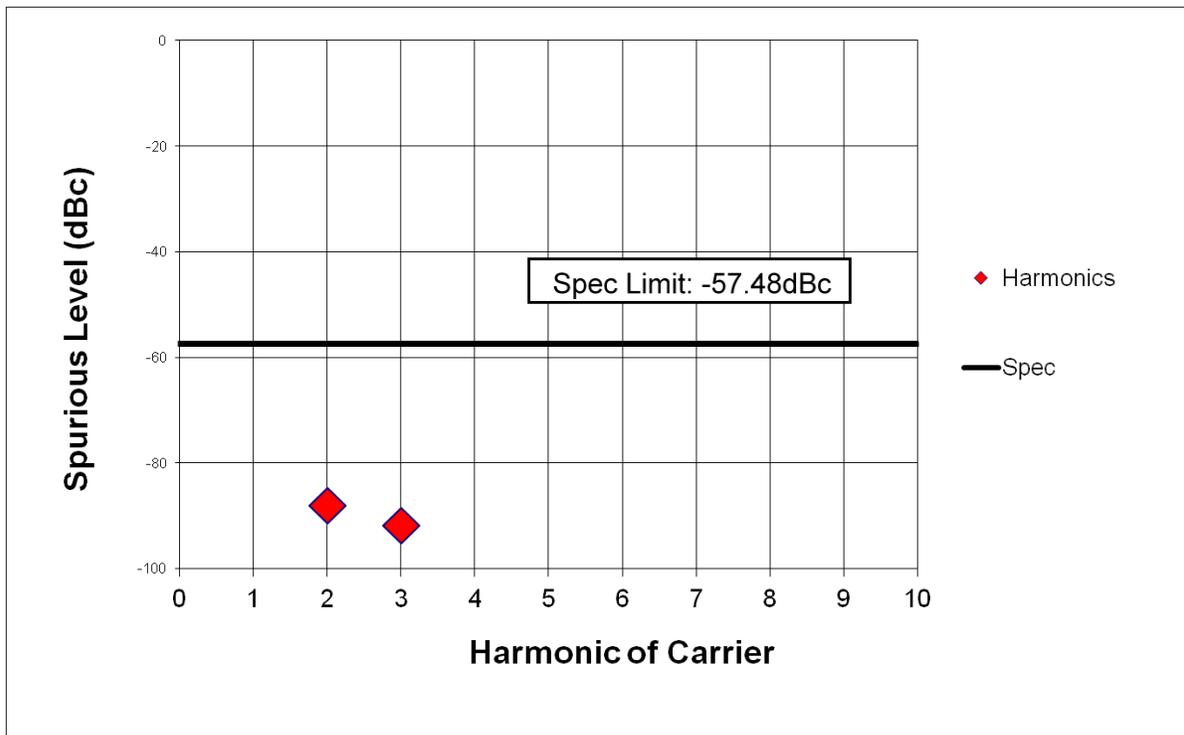


Exhibit 6G-4

Freq: 450.0125 MHz, Power: 5.6Watts (channel spacing 25 kHz)



Exhibit 6G-5

Freq: 481.0125 MHz, Power: 5.6Watts (channel spacing 25 kHz)

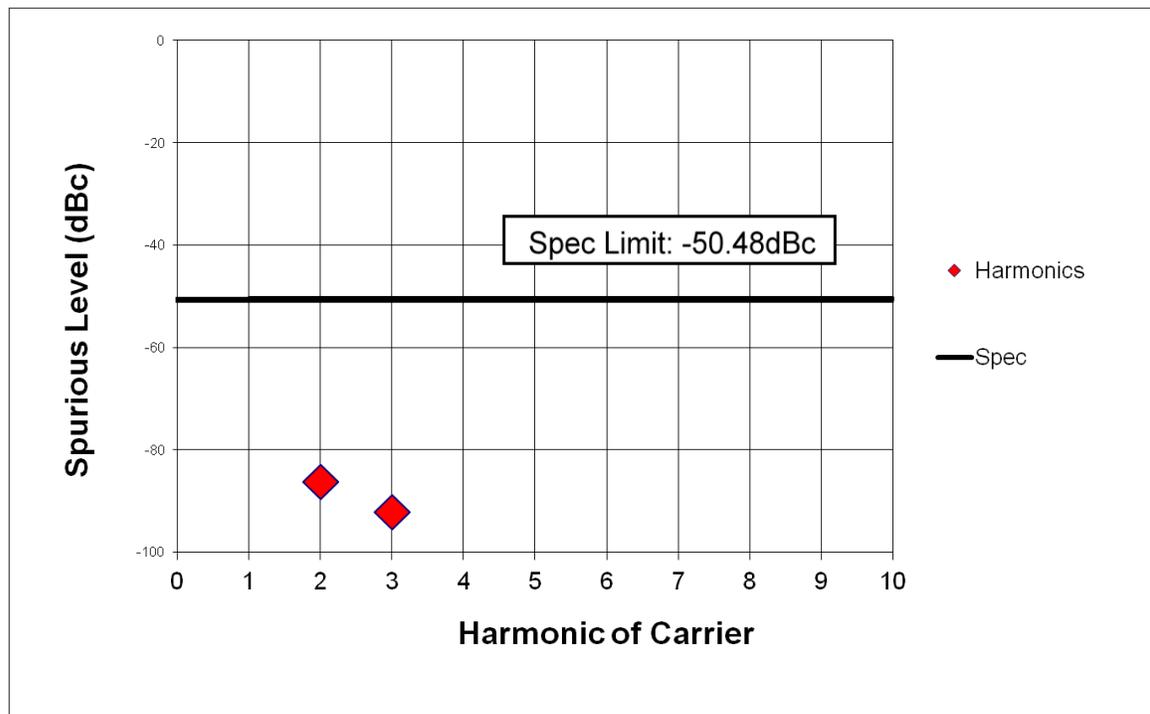


Exhibit 6G-6

Freq: 511.9875 MHz, Power: 5.6Watts (channel spacing 25 kHz)

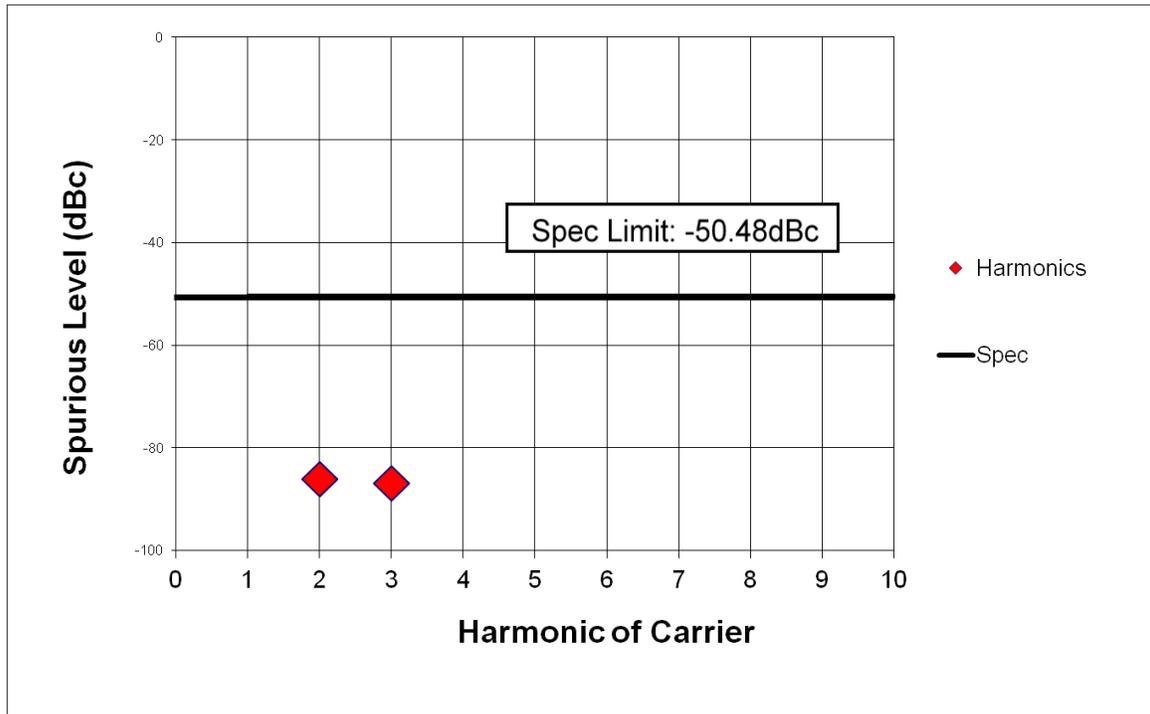


Exhibit 6G-7

Freq: 519.9875 MHz, Power: 5.6Watts (channel spacing 25 kHz) (Not for FCC Review)

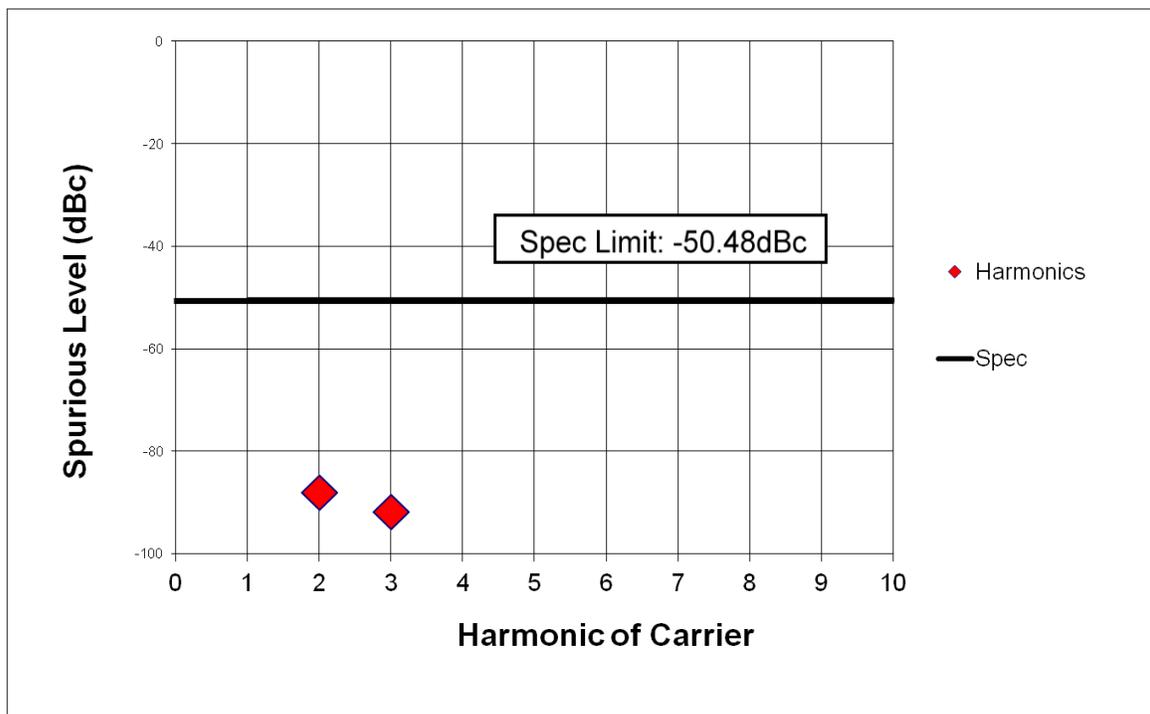


Exhibit 6G-8

EXHIBIT 6H - Frequency Stability

Frequency Stability (481.0125 MHz) vs. Supply Voltage

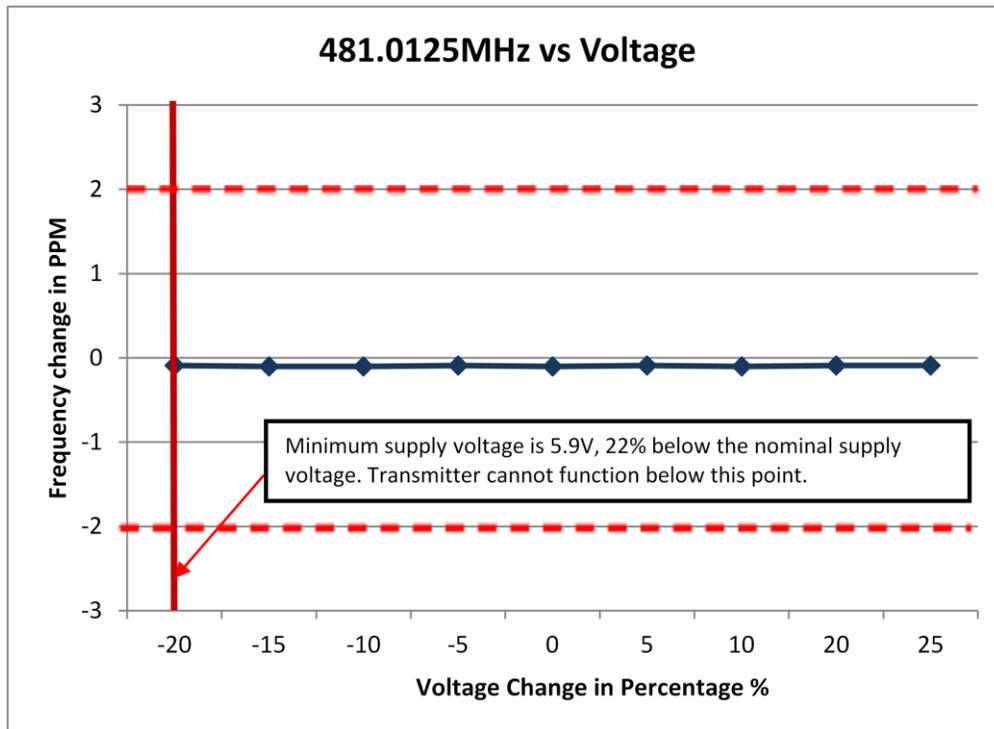


Exhibit 6H-1

Frequency Stability (481.0125 MHz) vs. Temperature

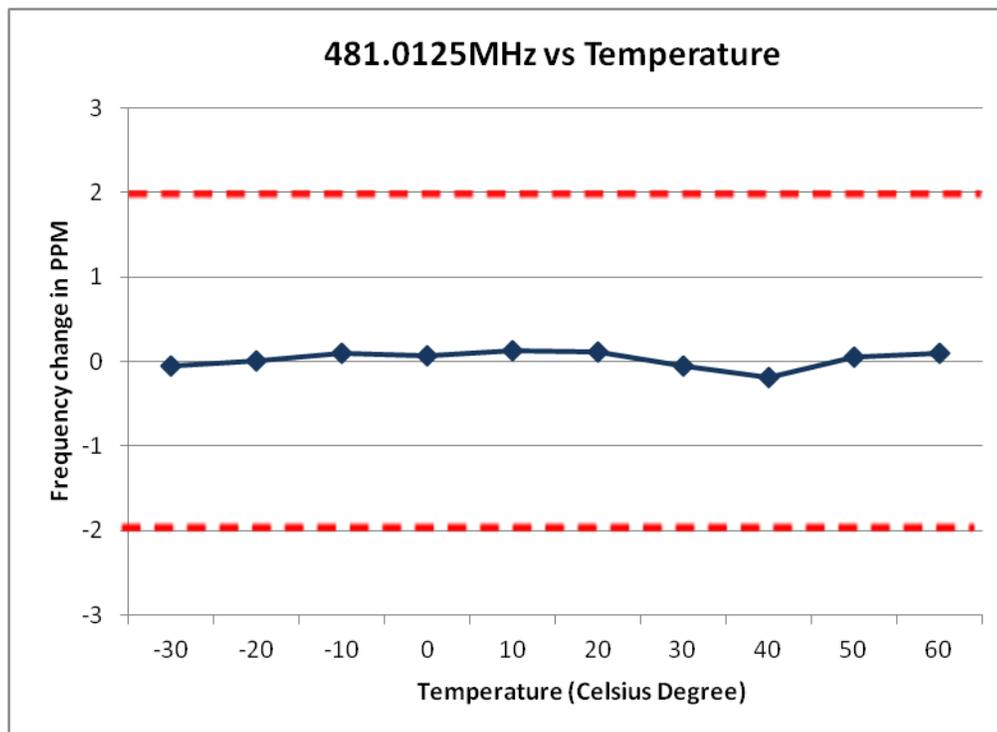


Exhibit 6H-2

EXHIBIT 6I - Transient Frequency Behavior

TX 481.0125 MHz - 12.5 kHz Channel Spacing - Transmitter On

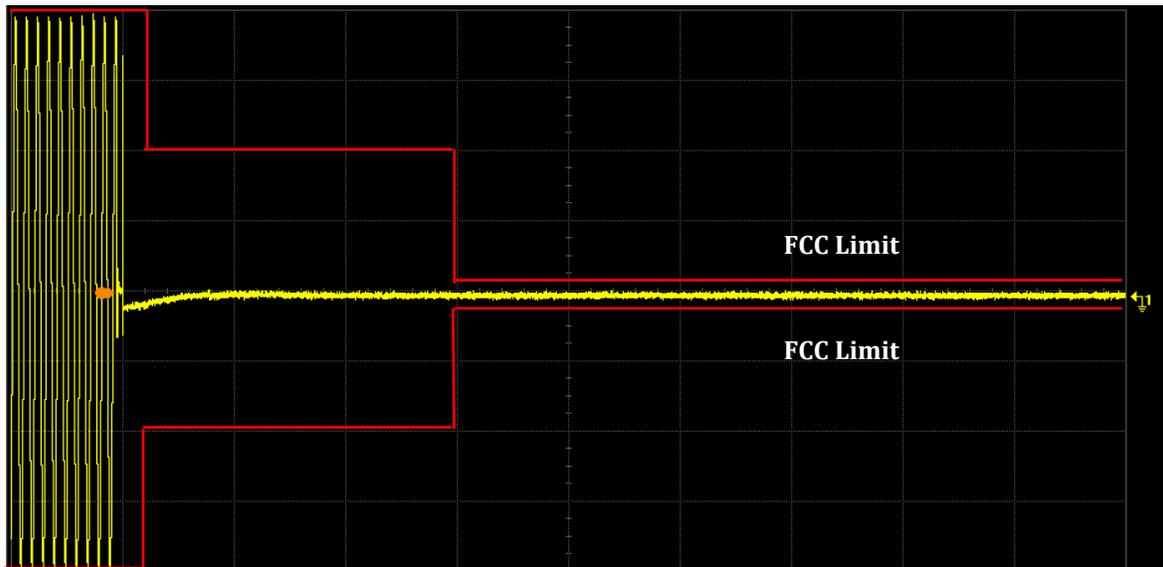


Exhibit 6I-1

TX 481.0125 MHz - 12.5 kHz Channel Spacing - Transmitter Off

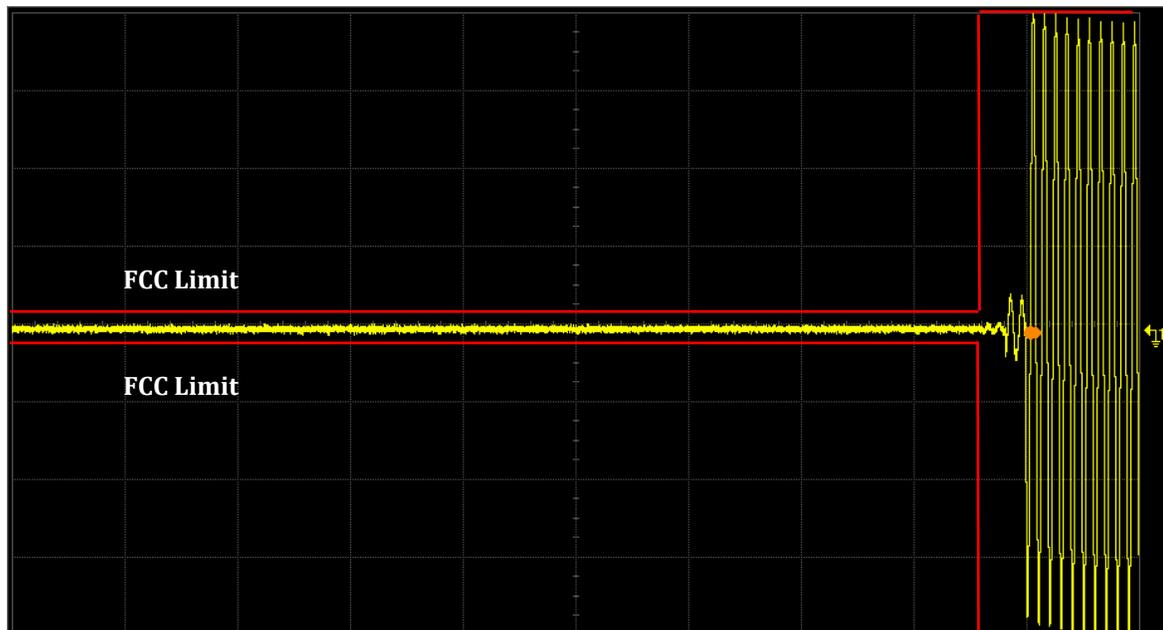


Exhibit 6I-2

TX 481.0125 MHz - 25 kHz Channel Spacing - Transmitter On

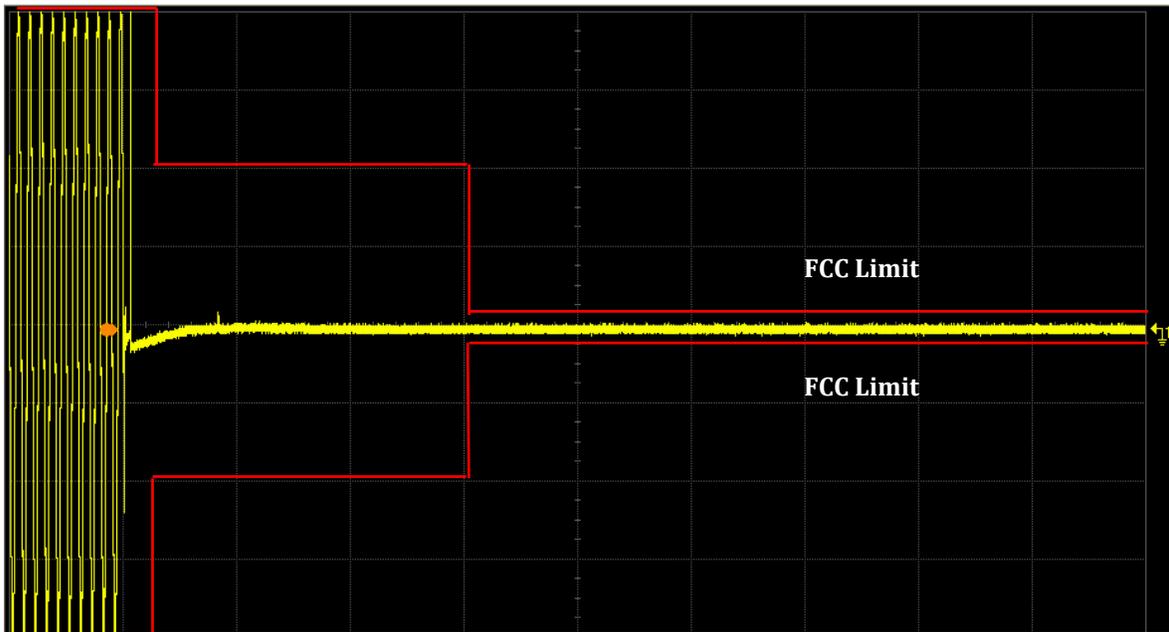


Exhibit 6I-3

TX 481.0125 MHz - 25 kHz Channel Spacing - Transmitter Off

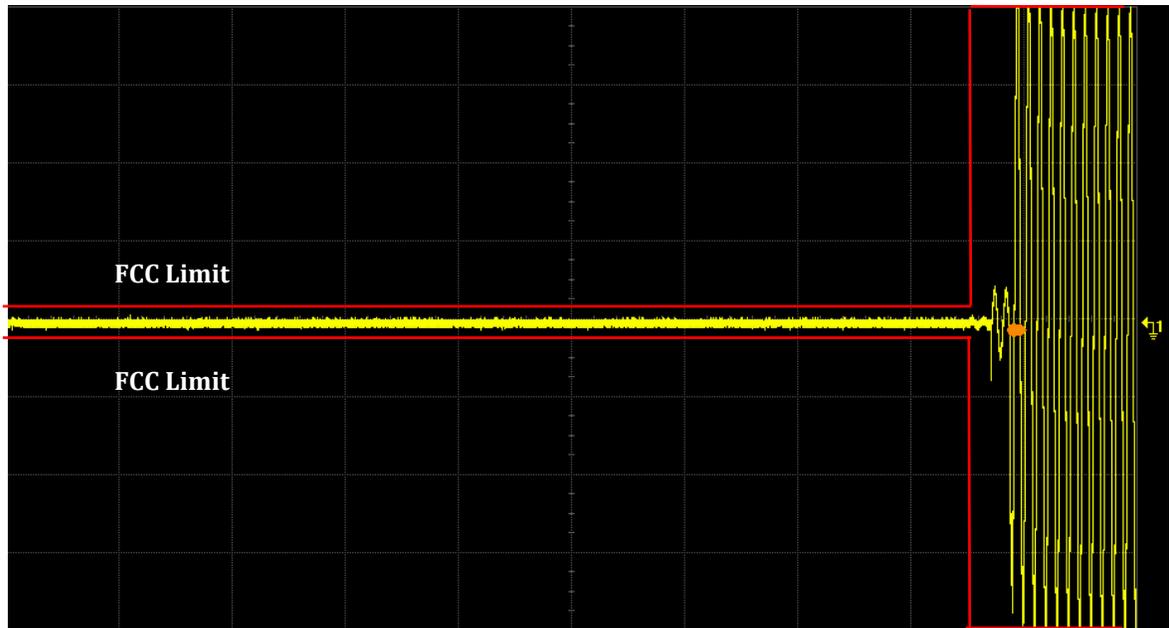


Exhibit 6I-4