

## EXHIBIT 6

### INDEX OF SUBMITTED MEASURED DATA

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

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- 6E-7: 935.0125MHz, O.153 Test Pattern 4FSK Data Modulation Only, **7K60FXD Mask I**
- 6E-8: 940.9875MHz, O.153 Test Pattern 4FSK Data Modulation Only, **7K60FXD Mask 24.133**
- 6E-9: 896.0125MHz, O.153 Test Pattern 4FSK Voice and Data Modulation, **7K60F1W Mask I**
- 6E-10: 901.9875MHz, O.153 Test Pattern 4FSK Voice and Data Modulation, **7K60F1W Mask 24.133**
- 6E-11: 935.0125MHz, O.153 Test Pattern 4FSK Voice and Data Modulation, **7K60F1W Mask I**
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- 6F-1: 2.4W, Harmonic of Carrier 896.0125 MHz, 12.5 kHz Channel Spacing
- 6F-2: 2.4W, Harmonic of Carrier 901.9875 MHz, 12.5 kHz Channel Spacing
- 6F-3: 2.4W, Harmonic of Carrier 935.0125 MHz, 12.5 kHz Channel Spacing
- 6F-4: 2.4W, Harmonic of Carrier 940.9875 MHz, 12.5 kHz Channel Spacing

#### EXHIBIT 6G – Transmit Radiated Spurious Emissions

- 6F-1: 2.4W, Harmonic of Carrier 896.0125 MHz, 12.5 kHz Channel Spacing
- 6F-2: 2.4W, Harmonic of Carrier 901.9875 MHz, 12.5 kHz Channel Spacing
- 6F-3: 2.4W, Harmonic of Carrier 935.0125 MHz, 12.5 kHz Channel Spacing
- 6F-4: 2.4W, Harmonic of Carrier 940.9875 MHz, 12.5 kHz Channel Spacing

**EXHIBIT 6H - Frequency Stability**

- 6H-1 – 1.5 ppm Frequency Stability vs. Temperature (896.0125 MHz)
- 6H-2 – 1.5 ppm Frequency Stability vs. Temperature (901.9875 MHz)
- 6H-3 – 1.5 ppm Frequency Stability vs. Temperature (935.0125 MHz)
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- 6H-5 – 1.5 ppm Frequency Stability vs. Voltage (896.0125 MHz)
- 6H-6 – 1.5 ppm Frequency Stability vs. Voltage (901.9875 MHz)
- 6H-7 – 1.5 ppm Frequency Stability vs. Voltage (935.0125 MHz)
- 6H-8 – 1.5 ppm Frequency Stability vs. Voltage (940.9875 MHz)

\*\* Please note that the above data were taken following the procedures and limits outlined in TIA 603-D and RSS 119 and 134 during the month of May 2013. . See Table 2 in Ex07\_test procedures

Radio model tested: AAH81WCN9NB2AN

**Important Note: The data in this test report meets or exceeds the technical requirements of FCC Rule Parts 24 and 90**

**EXHIBIT 6A**

**RF Conducted Output Power:**

**Frequency= 896.0125 MHz:**

Output RF power	2.39 Watts
DC Voltage	3.70 Volts
DC Current	2.15 Amps

Output RF power	1.15 Watts
DC Voltage	3.70 Volts
DC Current	1.37 Amps

**Frequency= 901.9875 MHz:**

Output RF power	2.40 Watts
DC Voltage	3.70 Volts
DC Current	2.16 Amps

Output RF power	1.16 Watts
DC Voltage	3.70 Volts
DC Current	1.37 Amps

**Frequency = 935.0125 MHz:**

Output RF power	2.40 Watts
DC Voltage	3.70 Volts
DC Current	2.12 Amps

Output RF power	1.14 Watts
DC Voltage	3.70 Volts
DC Current	1.30 Amps

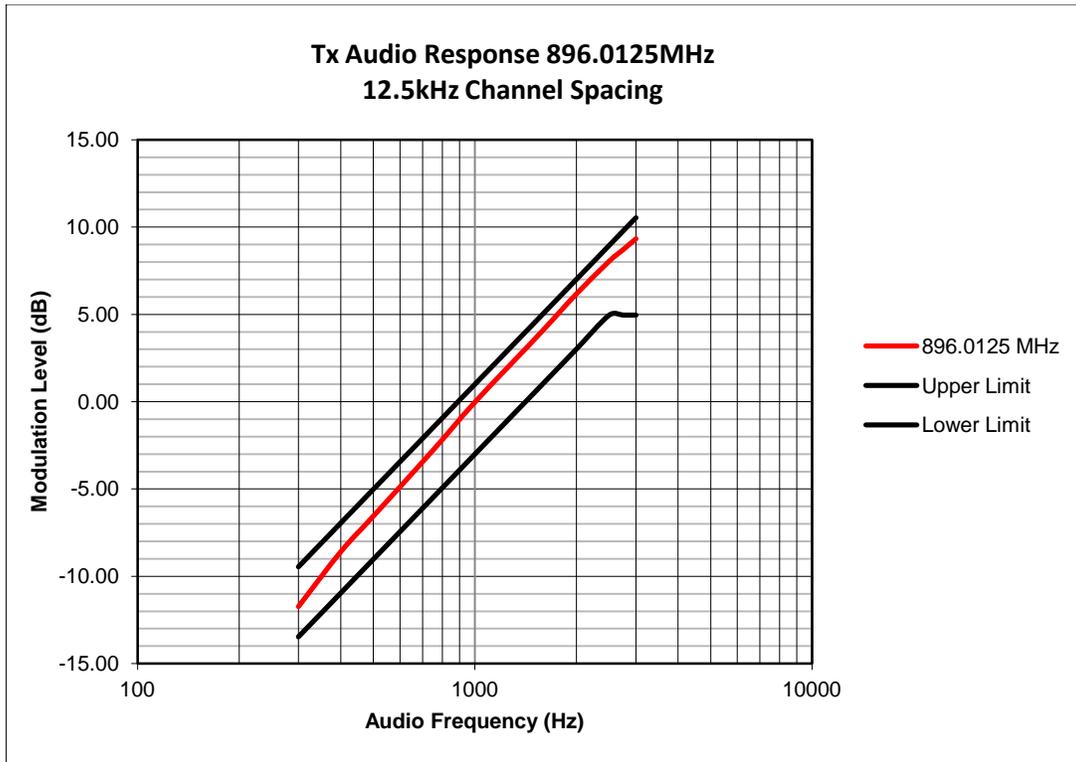
**Frequency = 940.9875 MHz:**

Output RF power	2.40 Watts
DC Voltage	3.70 Volts
DC Current	2.14 Amps

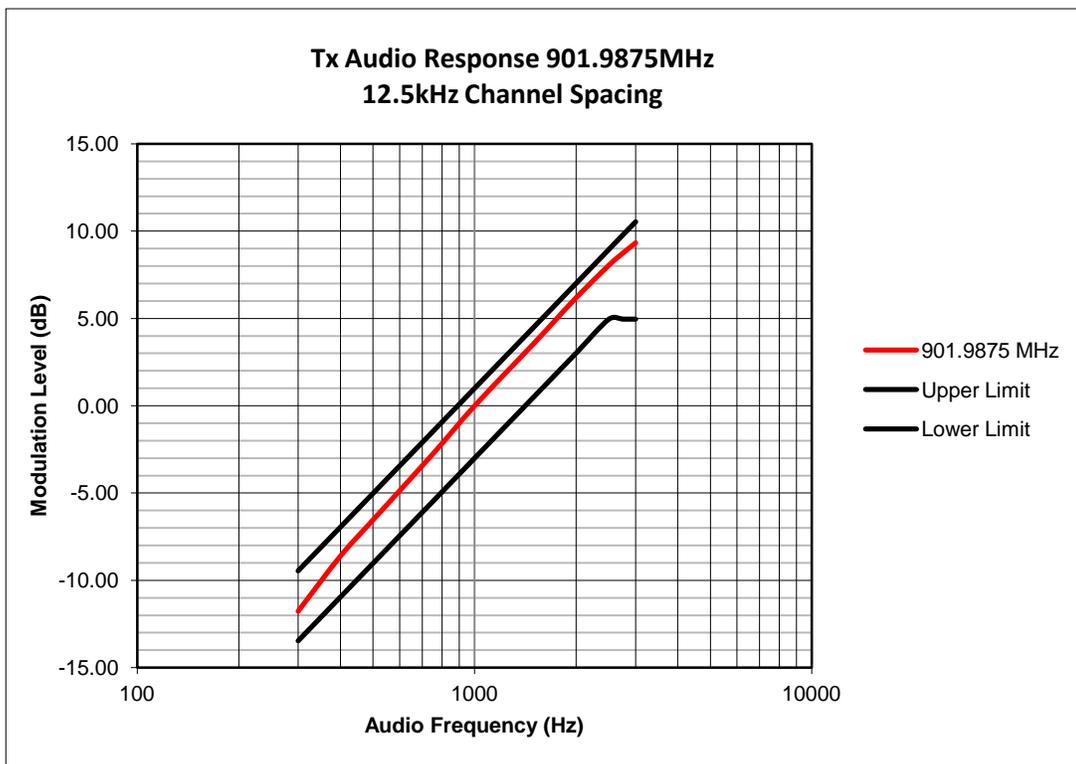
Output RF power	1.16 Watts
DC Voltage	7.50 Volts
DC Current	1.29 Amps

**EXHIBIT 6B**

**Transmit Audio Response**



**Figure 6B-1:** 12.5 kHz Channel Spacing, 896.0125 MHz, Transmit Audio Frequency Response



**Figure 6B-2:** 12.5 kHz Channel Spacing, 901.9875 MHz, Transmit Audio Frequency Response

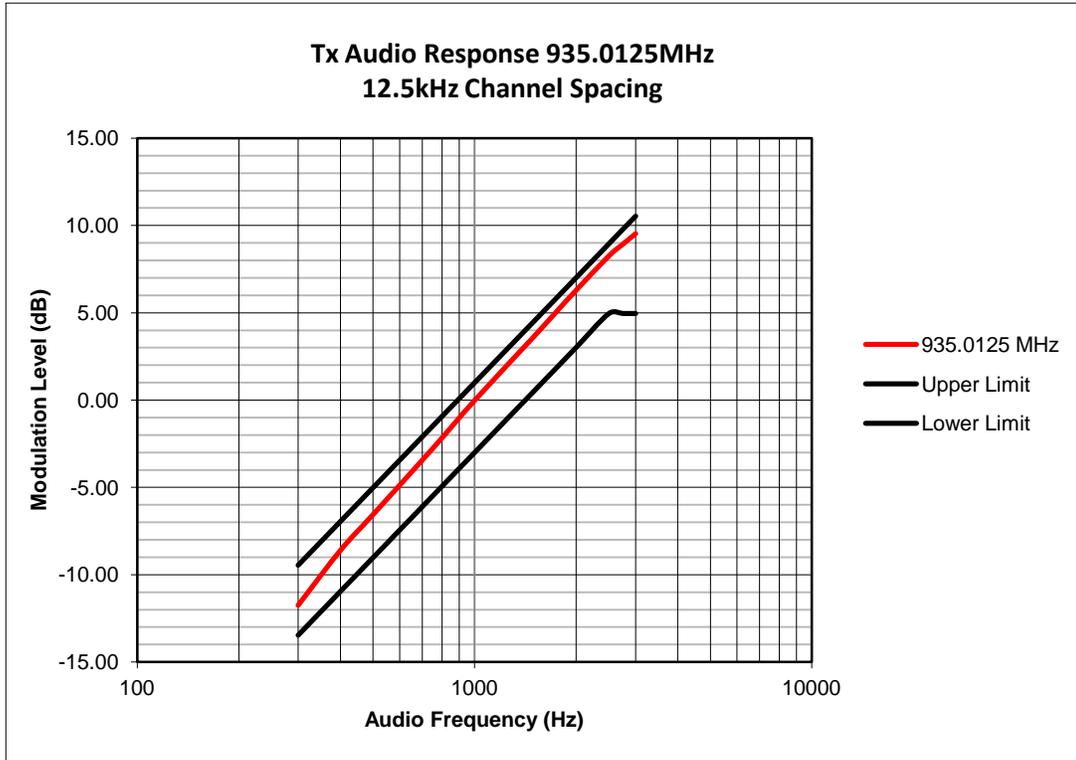


Figure 6B-3: 12.5 kHz Channel Spacing, 935.0125 MHz, Transmit Audio Frequency Response

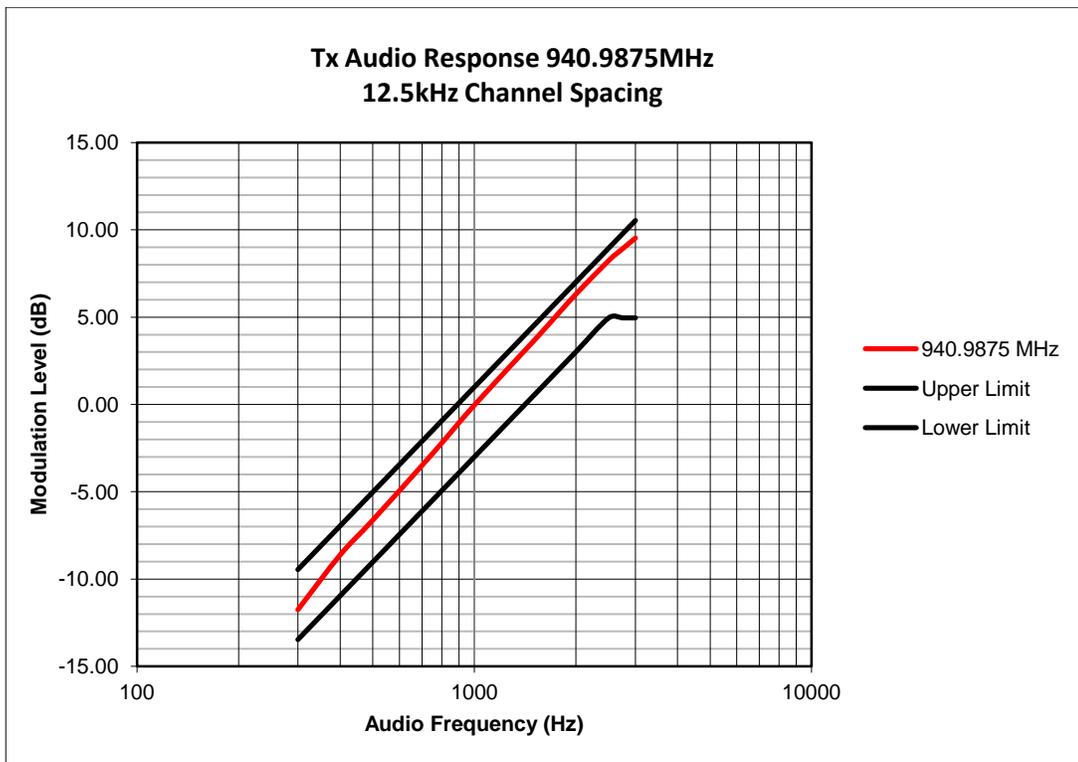
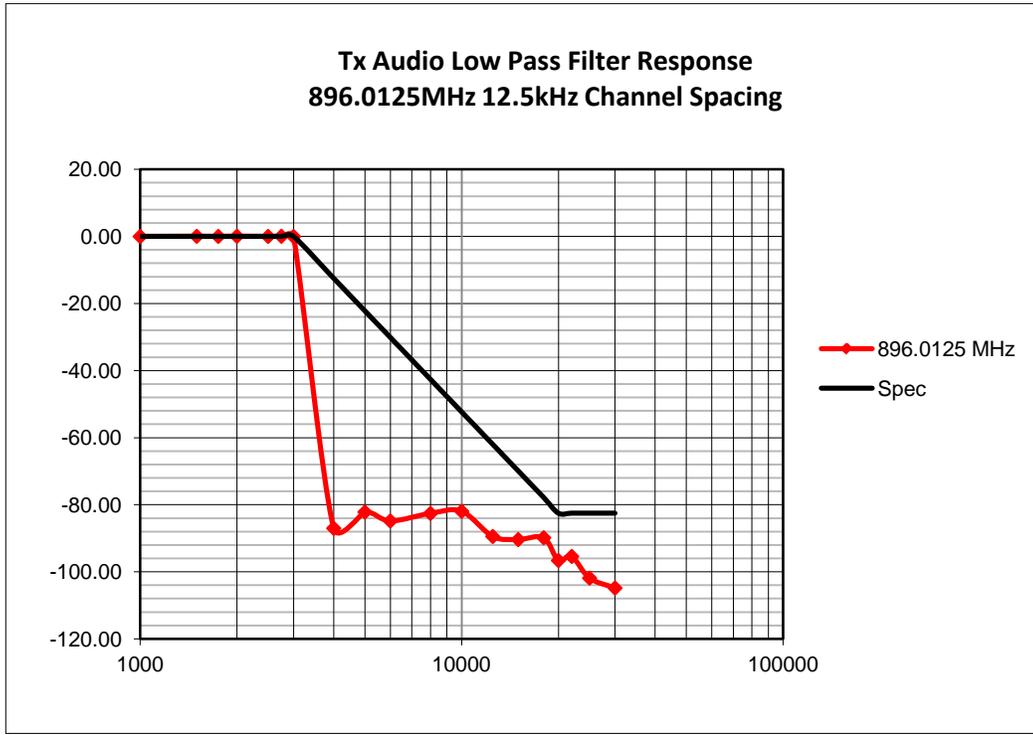


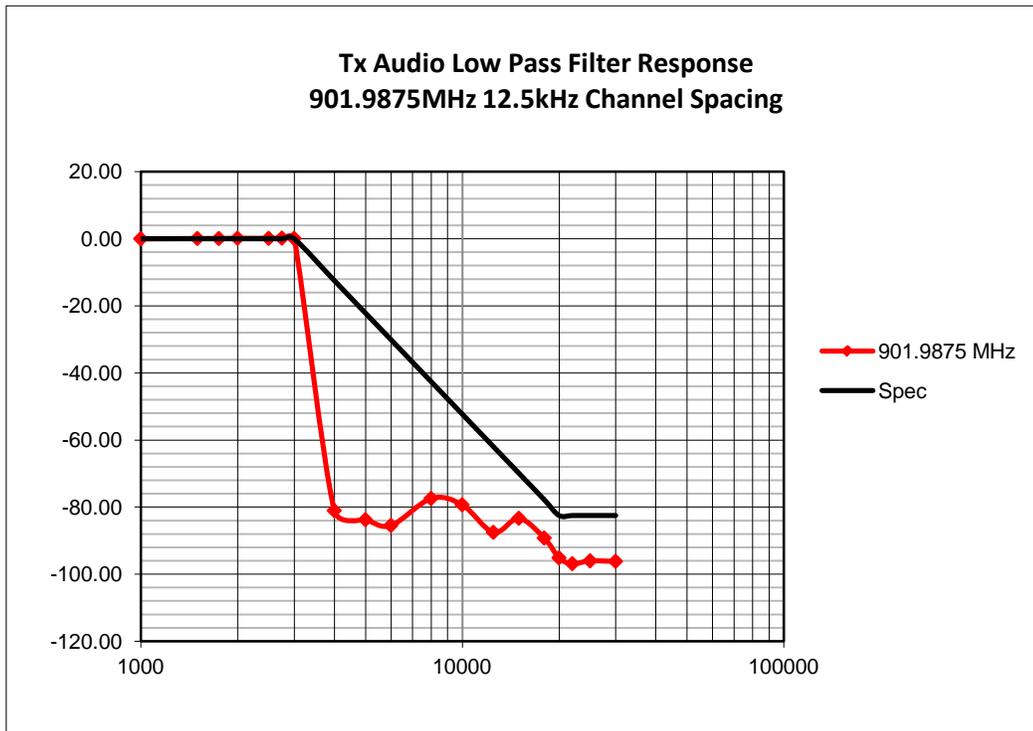
Figure 6B-4: 12.5 kHz Channel Spacing, 940.9875 MHz, Transmit Audio Frequency Response

**EXHIBIT 6C**

**Transmit Audio Low Pass Filter Response**



**Figure 6C-1:** 12.5 kHz Channel Spacing, 896.0125 MHz, Transmit Audio Low Pass Filter Response



**Figure 6C-2:** 12.5 kHz Channel Spacing, 901.9875 MHz, Transmit Audio Low Pass Filter Response

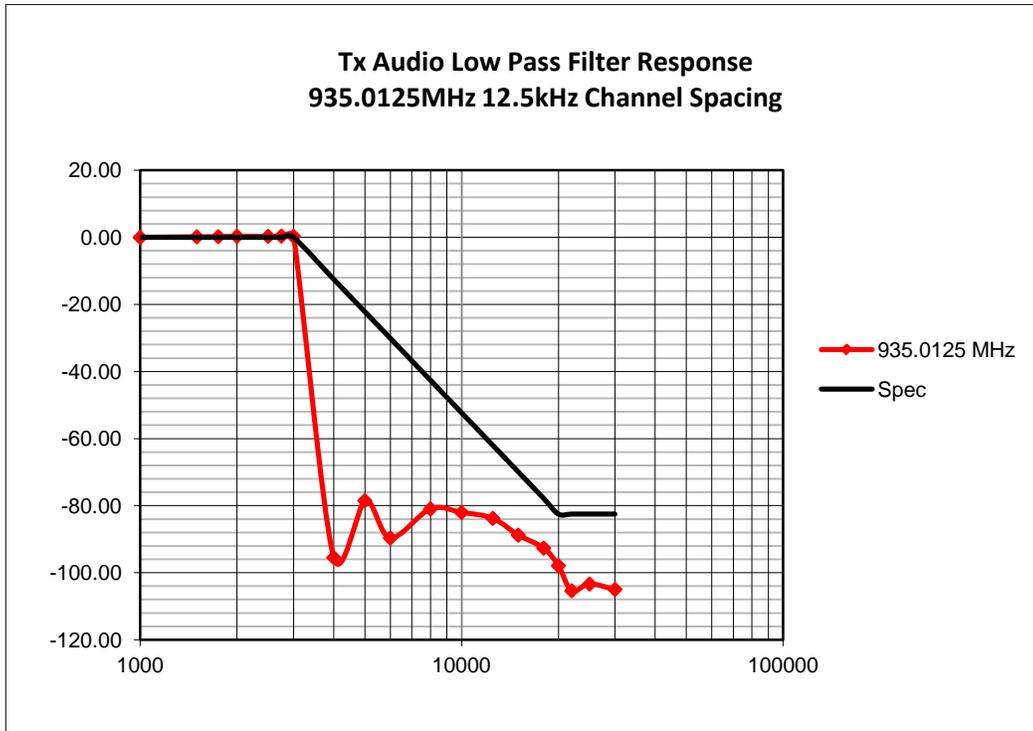


Figure 6C-3: 12.5 kHz Channel Spacing, 935.0125 MHz, Transmit Audio Low Pass Filter Response

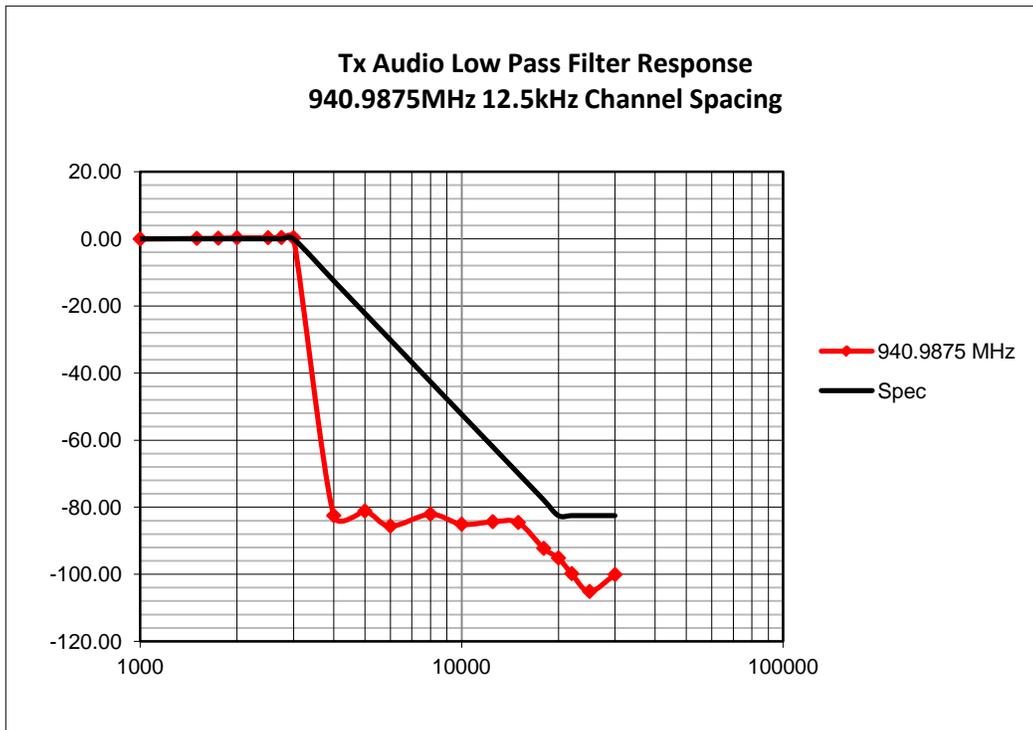


Figure 6C-4: 12.5 kHz Channel Spacing, 940.9875 MHz, Transmit Audio Low Pass Filter Response

EXHIBIT 6D

Modulation Limiting

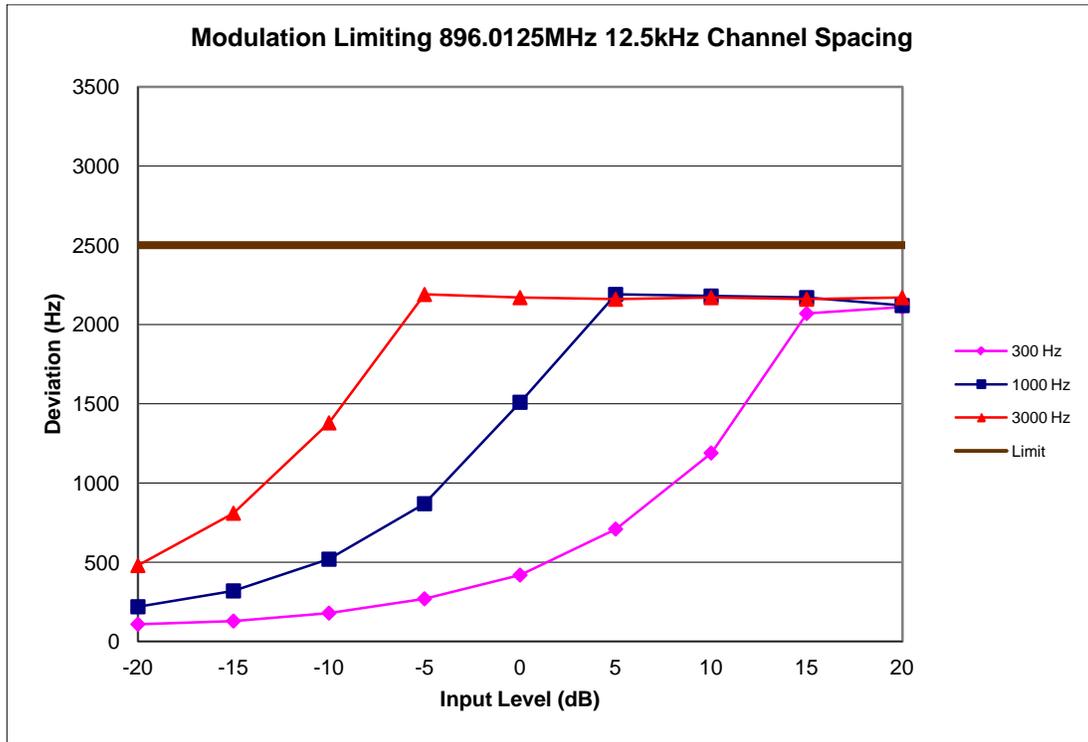


Figure 6D-1: 12.5 kHz Channel Spacing, 896.0125 MHz, Modulation Limiting

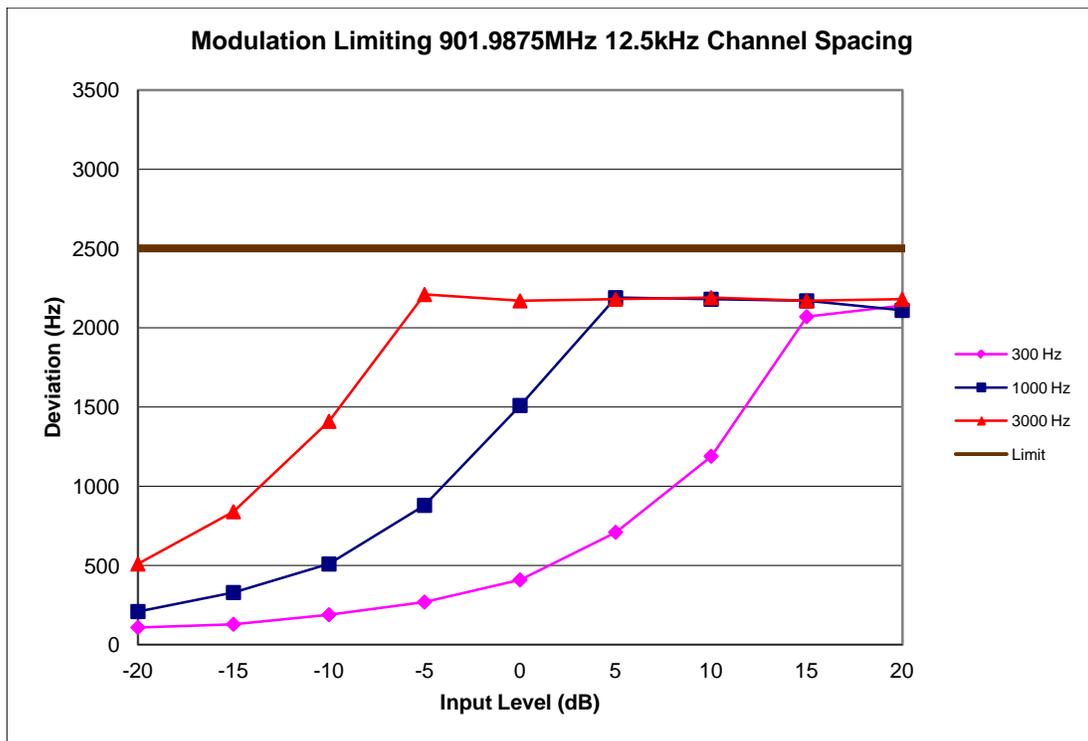


Figure 6D-2: 12.5 kHz Channel Spacing, 901.9875 MHz, Modulation Limiting

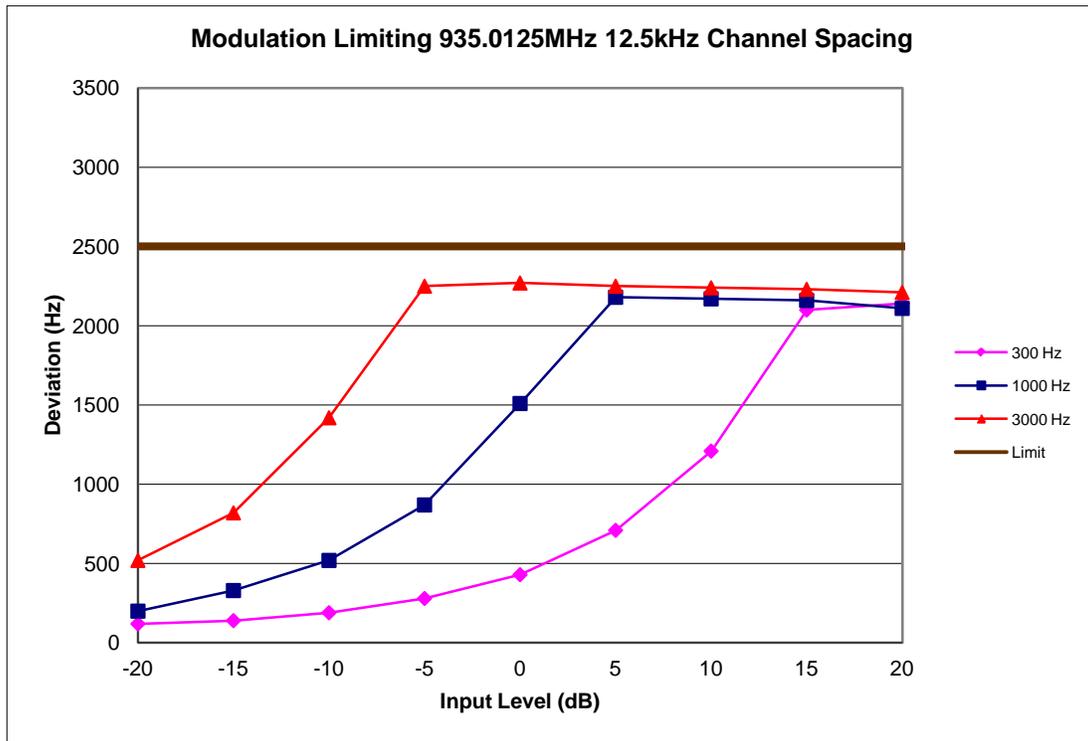


Figure 6D-3: 12.5 kHz Channel Spacing, 935.0125 MHz, Modulation Limiting

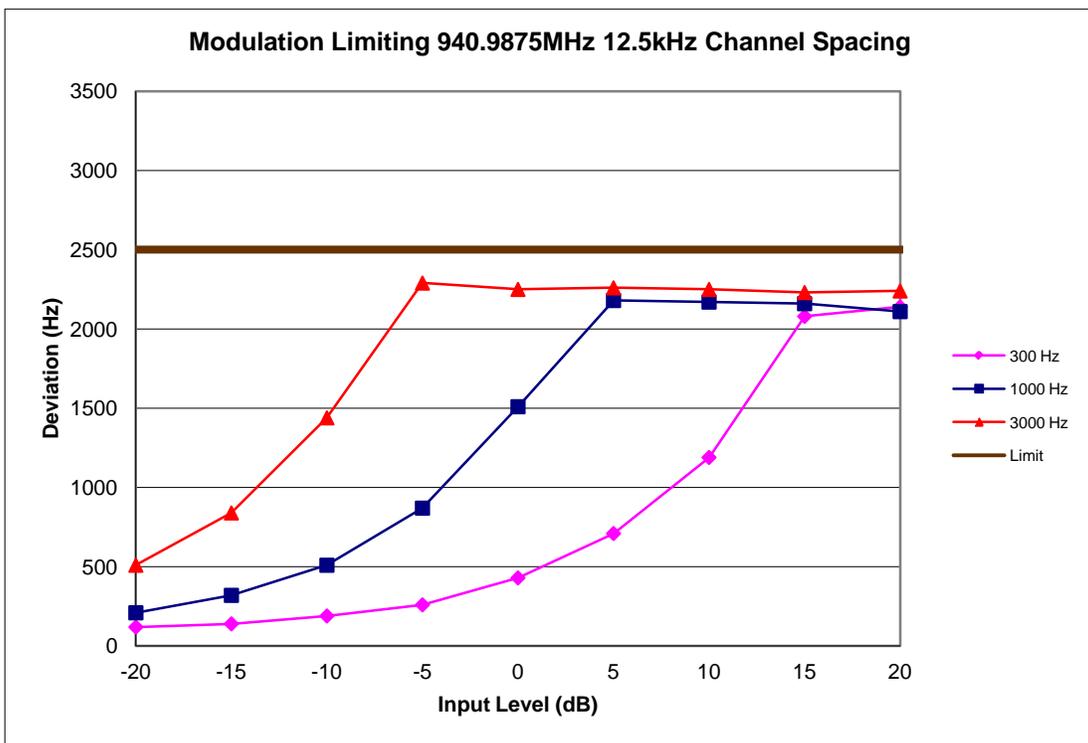


Figure 6D-4: 12.5 kHz Channel Spacing, 940.9875 MHz, Modulation Limiting

**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: **AZ489FT5867**.

a) 4 Level FSK Digital Modulation (12.5 kHz Channelization, Digital Data)  
Emission Designator **7K60F1D**

*Measurement's per Rule Part 2.202(c)(4) where employed because Part 2.202(g) Table III A formulation produces an excessive result using the value of K recommended in the Table. Therefore, the 99% energy rule (Title 47 CFR 2.989) was used for digital mode and is more accurate than Carson's rule. It states that 99% of the modulation energy falls within X kHz, which in this case is 7.6 kHz (7K60 designator).*

Per CFR Title 47, Part 2, Section 2.201:

Frequency Modulation ..... **F**  
A single channel containing quantized or digital information without the use of a modulating sub-carrier, excluding time-division multiplex ..... **1**  
Data Transmission, telemetry, telecommand ..... **D**

The complete emissions designator for this transmitter is **7K60F1D**.

b) 4 Level FSK Digital Modulation (12.5 kHz Channelization, Digital Voice and Data)  
Emission Designator **7K60F1E**

*Measurement's per Rule Part 2.202(c)(4) where employed because Part 2.202(g) Table III A formulation produces an excessive result using the value of K recommended in the Table. Therefore the 99% energy rule (title 47CFR2.989) was used for digital mode and is more accurate than Carson's rule. It states that 99% of the modulation energy falls within X kHz, which in this case is 7.6 kHz (7K60 designator).*

Per CFR Title 47, Part 2, Section 2.201:

Frequency Modulation ..... **F**  
A single channel containing quantized or digital information without the use of a modulating sub-carrier, excluding time-division multiplex ..... **1**  
Telephony (including sound broadcasting) ..... **E**

The complete emissions designator for this transmitter is **7K60F1E**.

c) 4 Level FSK Digital Modulation (12.5 kHz Channelization, Digital Data)  
Emission Designator **7K60FXD**

*Measurement's per Rule Part 2.202(c)(4) where employed because Part 2.202(g) Table III A formulation produces an excessive result using the value of K recommended in the Table. Therefore, the 99% energy rule (Title 47 CFR 2.989) was used for digital mode and is more accurate than Carson's rule. It states that 99% of the modulation energy falls within X kHz, which in this case is 7.6 kHz (7K60 designator).*

Per CFR Title 47, Part 2, Section 2.201:

Frequency Modulation ..... **F**  
Case not otherwise covered ..... **X**  
Data Transmission, telemetry, telecommand ..... **D**

The complete emissions designator for this transmitter is **7K60FXD**.

d) 4 Level FSK Digital Modulation (12.5 kHz Channelization, Digital Voice and Data)

Emission Designator **7K60FXE**

*Measurement's per Rule Part 2.202(c)(4) where employed because Part 2.202(g) Table III A formulation produces an excessive result using the value of K recommended in the Table. Therefore the 99% energy rule (title 47CFR2.989) was used for digital mode and is more accurate than Carson's rule. It states that 99% of the modulation energy falls within X kHz, which in this case is 7.6 kHz (7K60 designator).*

Per CFR Title 47, Part 2, Section 2.201:

- Frequency Modulation ..... **F**
- Case not otherwise covered ..... **X**
- Telephony (including sound broadcasting) ..... **E**

The complete emissions designator for this transmitter is **7K60FXE**.

e) Digital (12.5 kHz Channelization, Digital TDMA)

Emission Designator **7K60F1W**

*Measurement's per Rule Part 2.202(c)(4) where employed because Part 2.202(g) Table III A formulation produces an excessive result using the value of K recommended in the Table. Therefore the 99% energy rule (title 47CFR2.989) was used for digital mode and is more accurate than Carson's rule. It states that 99% of the modulation energy falls within X kHz, which in this case is 7.6 kHz (7K60 designator).*

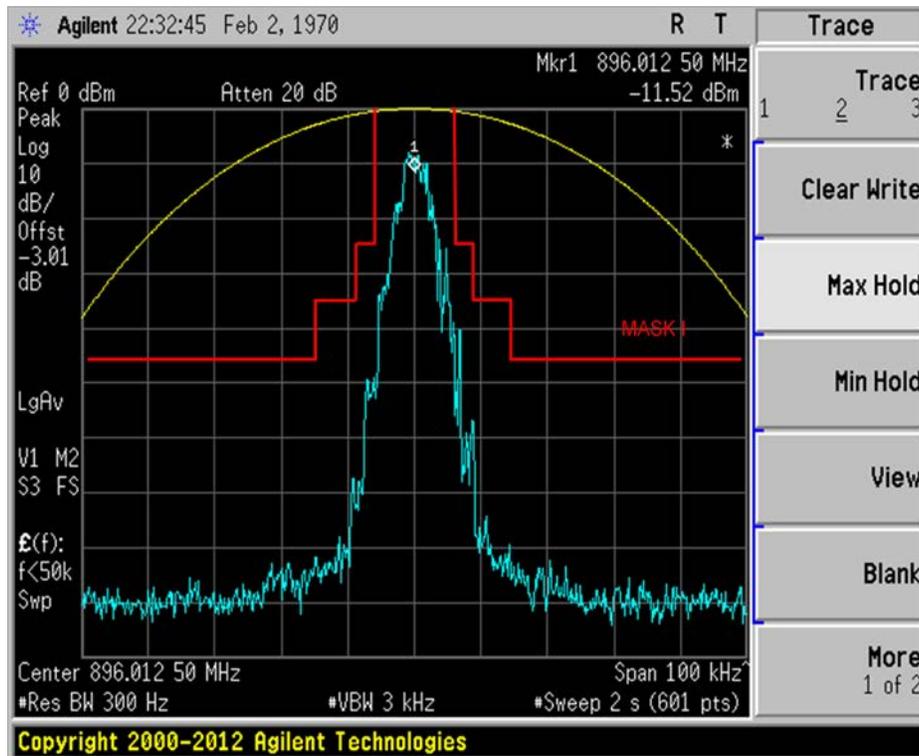
Per CFR Title 47, Part 2, Section 2.201:

- Frequency Modulation ..... **F**
- A single channel containing quantized or digital information without the use of a modulating sub-carrier, excluding time-division multiplex ..... **1**
- Combination of Data Transmission, telemetry, telecommand (D), and Telephony (E)...**W**

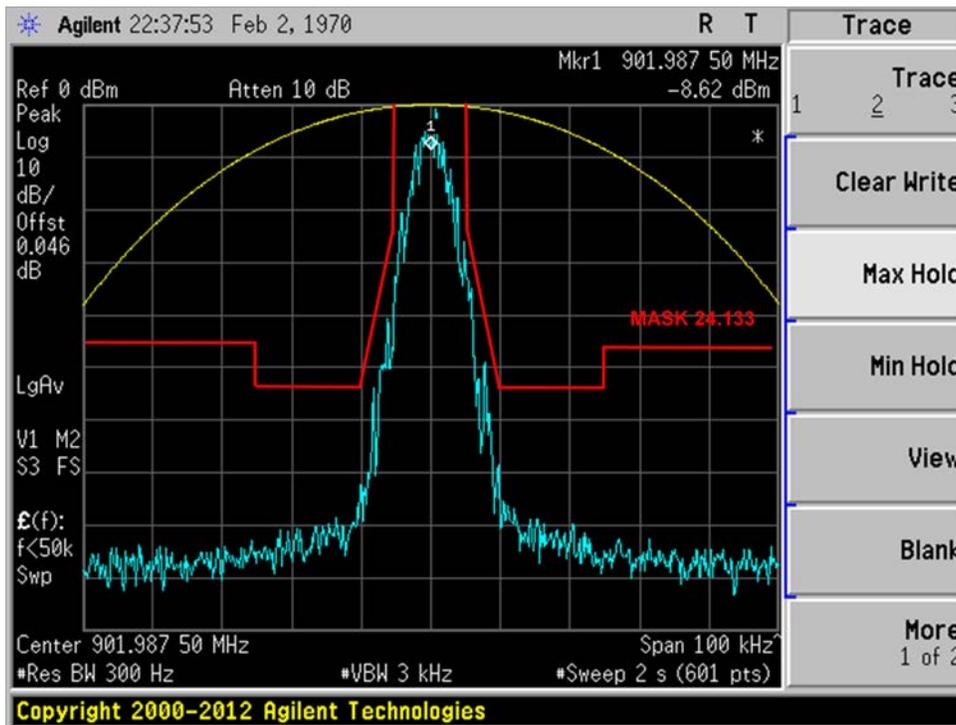
The complete emissions designator for this transmitter is **7K60F1W**.

**EXHIBIT 6E**

**Occupied Bandwidth Data**



**Figure 6E-1: 896.0125MHz, O.153 Test Pattern 4FSK Voice Modulation Only, 7K60FXE Mask I**



**Figure 6E-2: 901.9875MHz, O.153 Test Pattern 4FSK Voice Modulation Only, 7K60FXE Mask 24.133**

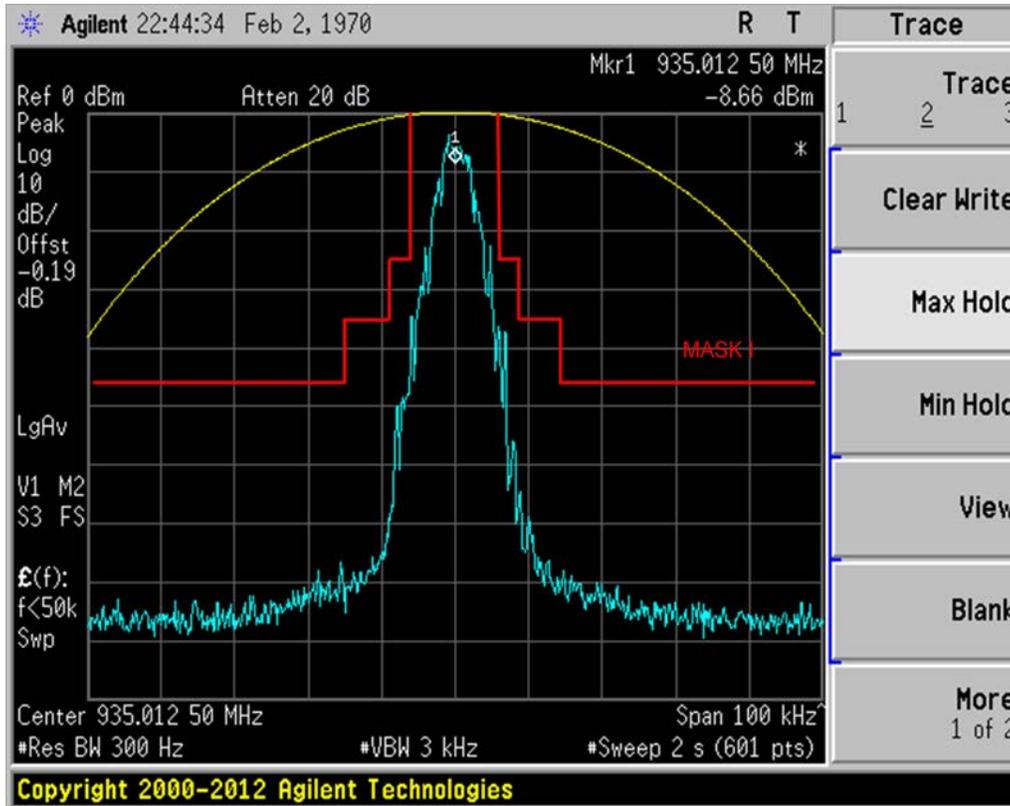


Figure 6E-3: 935.0125MHz, O.153 Test Pattern 4FSK Voice Modulation Only, 7K60FXE Mask I

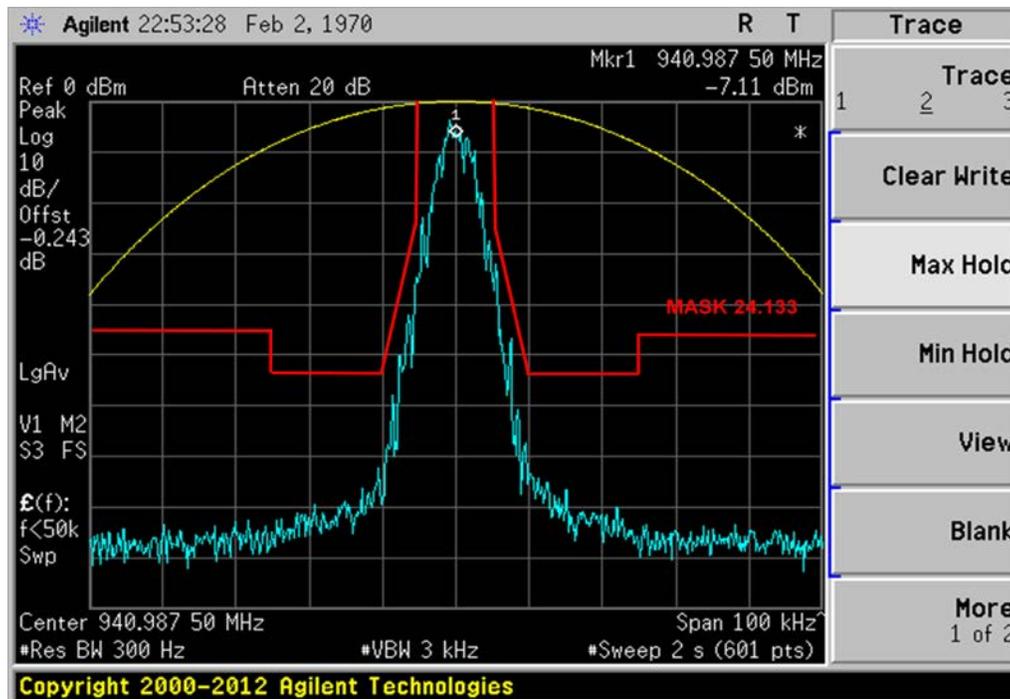


Figure 6E-4: 940.9875MHz, O.153 Test Pattern 4FSK Voice Modulation Only, 7K60FXE Mask 24.133

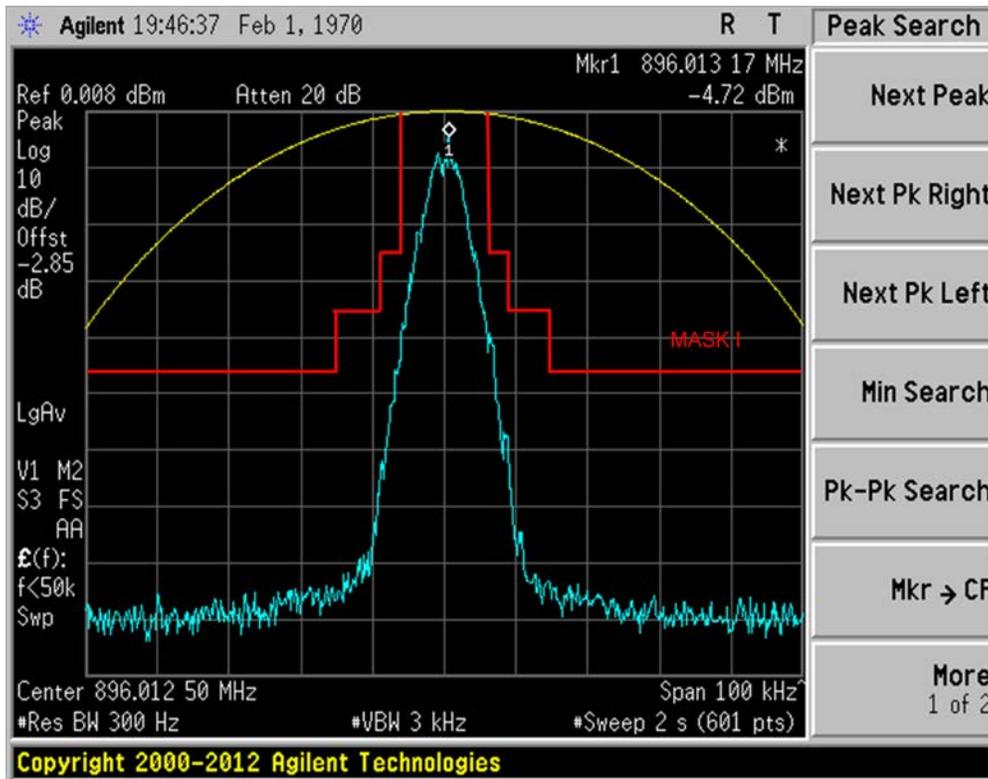


Figure 6E-5: 896.0125MHz, O.153 Test Pattern 4FSK Data Modulation Only, 7K60FXD Mask I

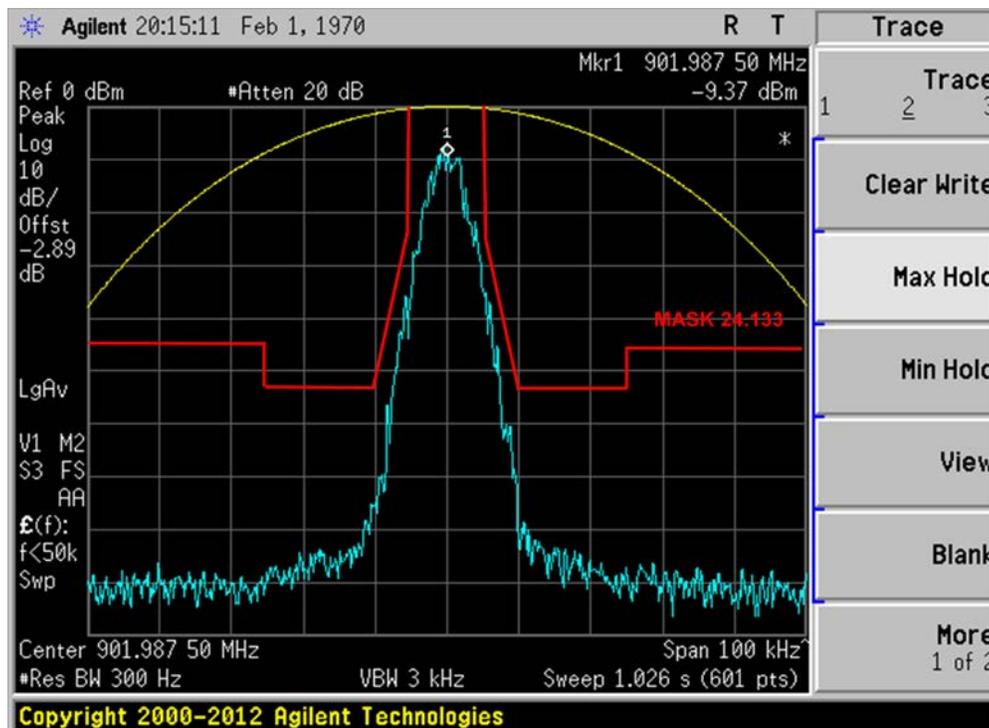


Figure 6E-6: 901.9875MHz, O.153 Test Pattern 4FSK Data Modulation Only, 7K60FXD Mask 24.133

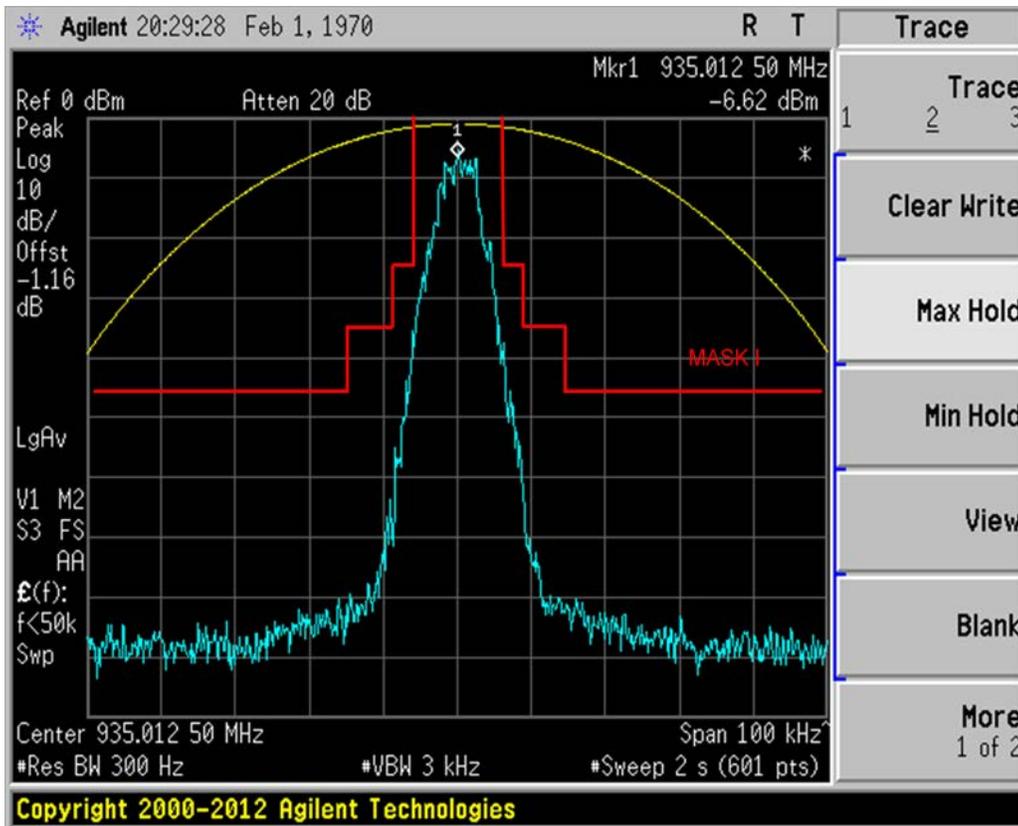


Figure 6E-7: 935.0125MHz, O.153 Test Pattern 4FSK Data Modulation Only, 7K60FXD Mask I

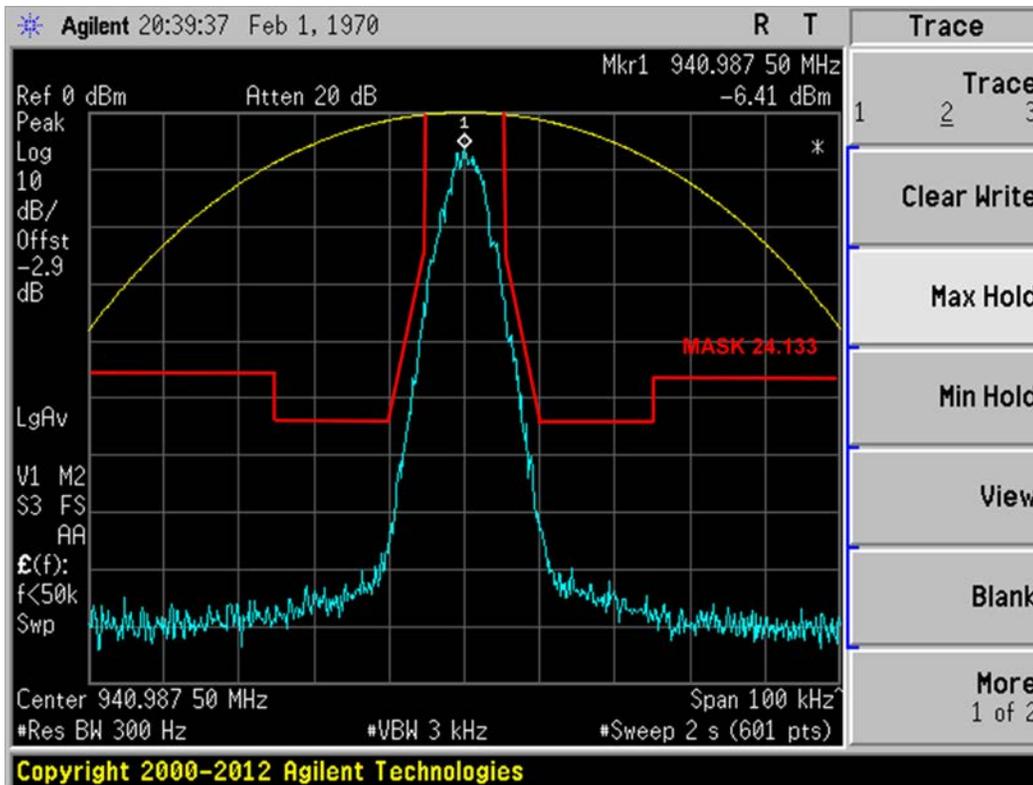


Figure 6E-8: 940.9875MHz, O.153 Test Pattern 4FSK Data Modulation Only, 7K60FXD Mask 24.133

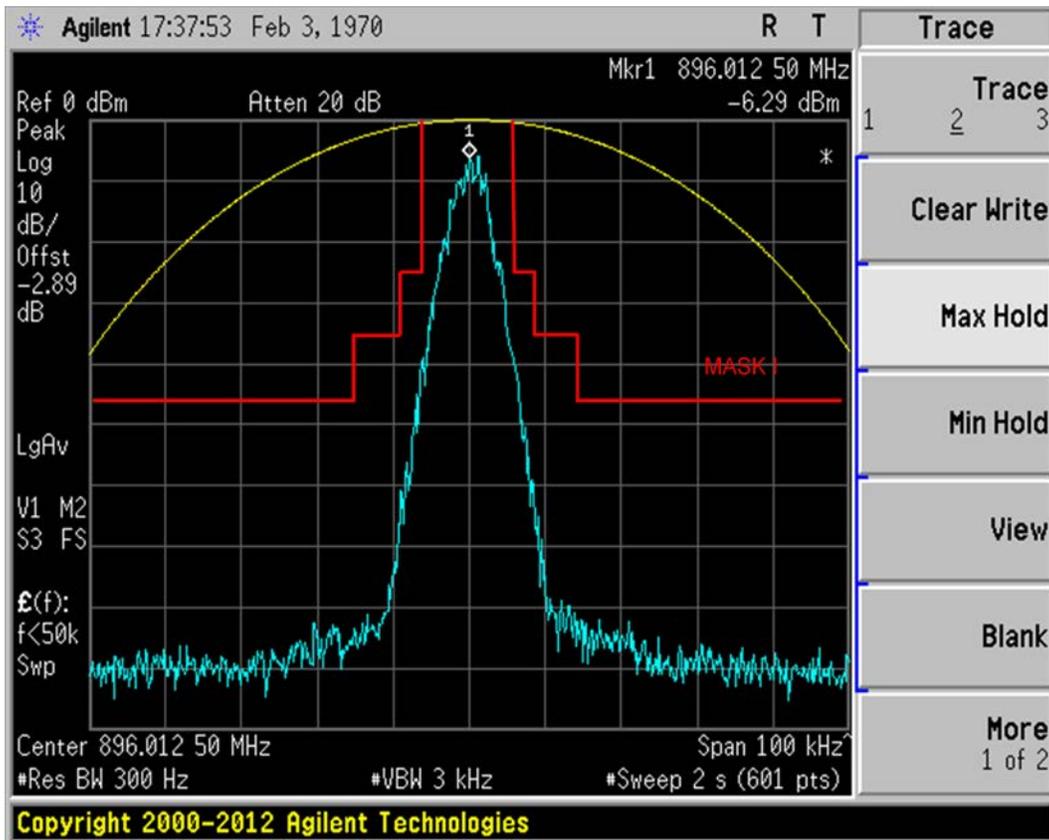


Figure 6E-9: 896.0125MHz, O.153 Test Pattern 4FSK Voice and Data Modulation Only, 7K60F1W Mask I

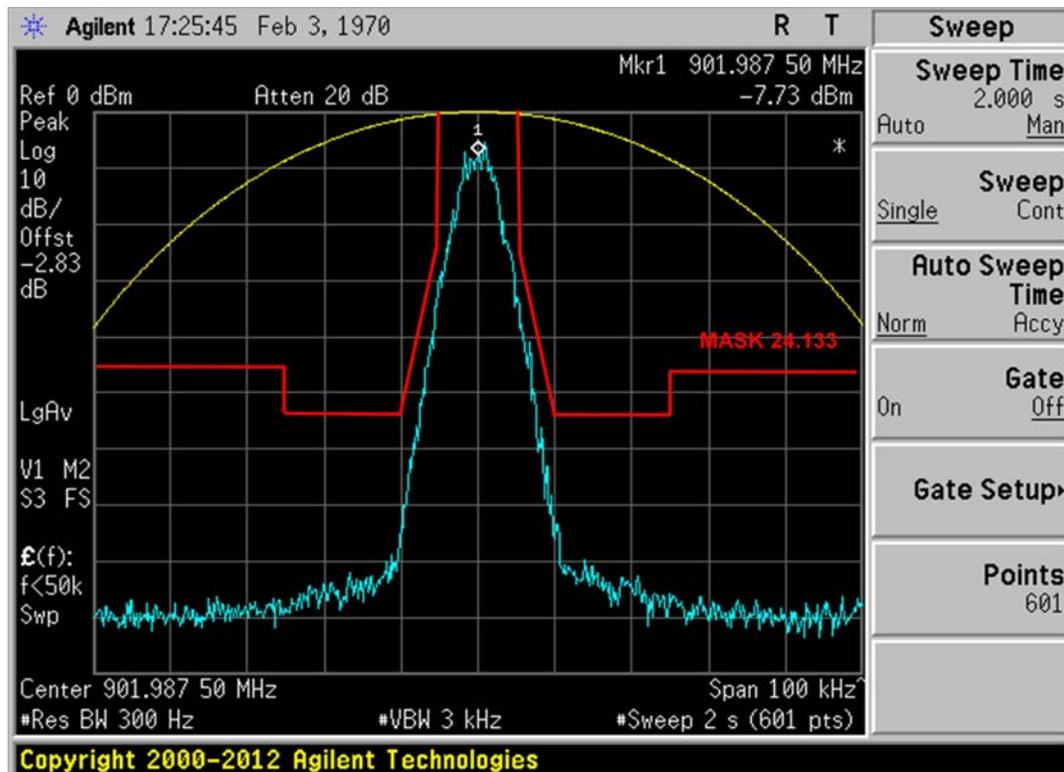


Figure 6E-10: 901.9875MHz, O.153 Test Pattern 4FSK Voice and Data Modulation Only, 7K60F1W Mask 24.133

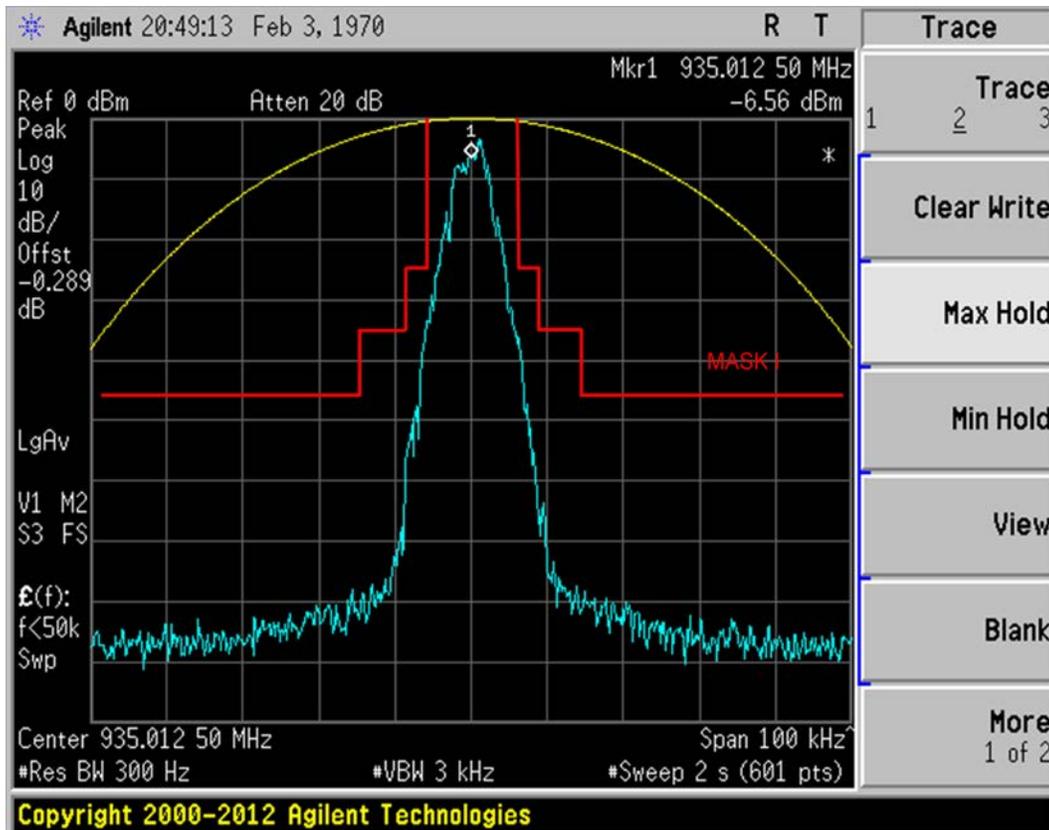


Figure 6E-11: 935.0125MHz, O.153 Test Pattern 4FSK Voice and Data Modulation Only, 7K60F1W Mask I

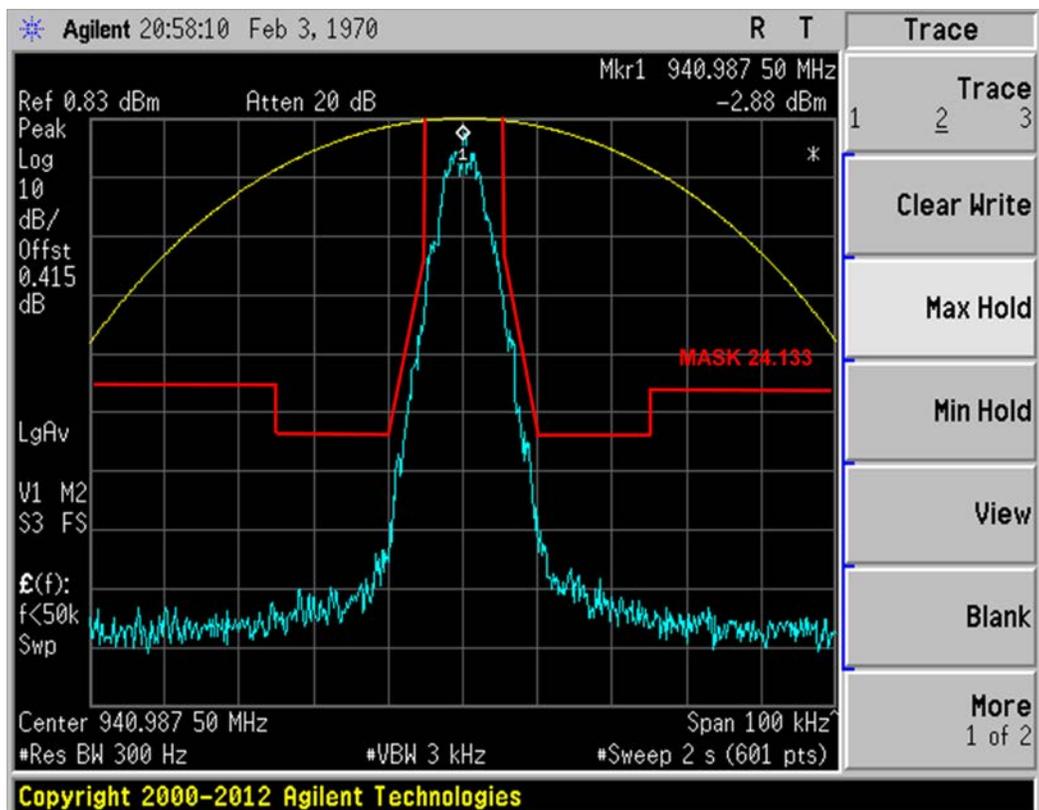


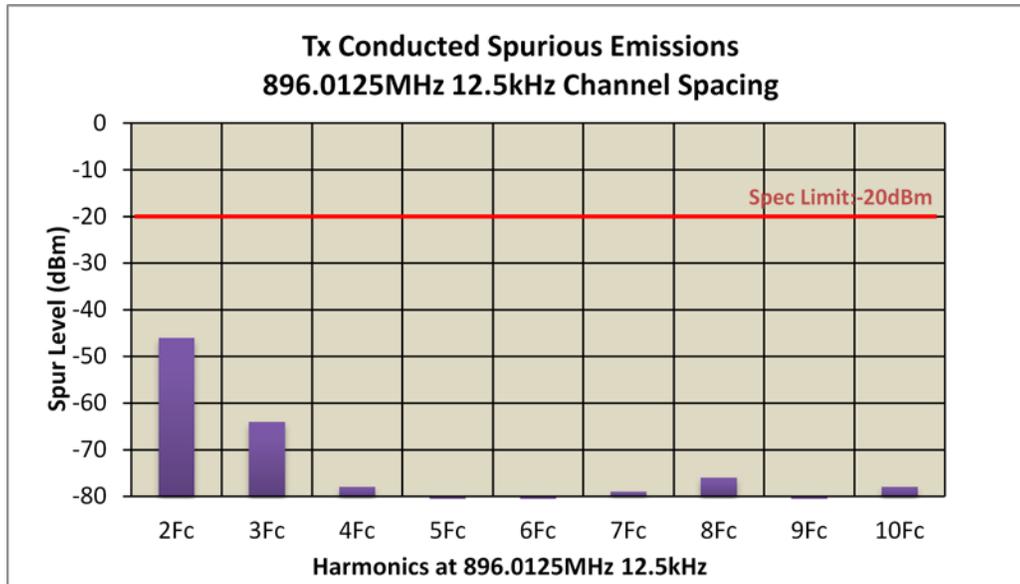
Figure 6E-12: 940.9875MHz, O.153 Test Pattern 4FSK Voice and Data Modulation Only, 7K60F1W Mask 24.133

**\*\*NOTE:-**

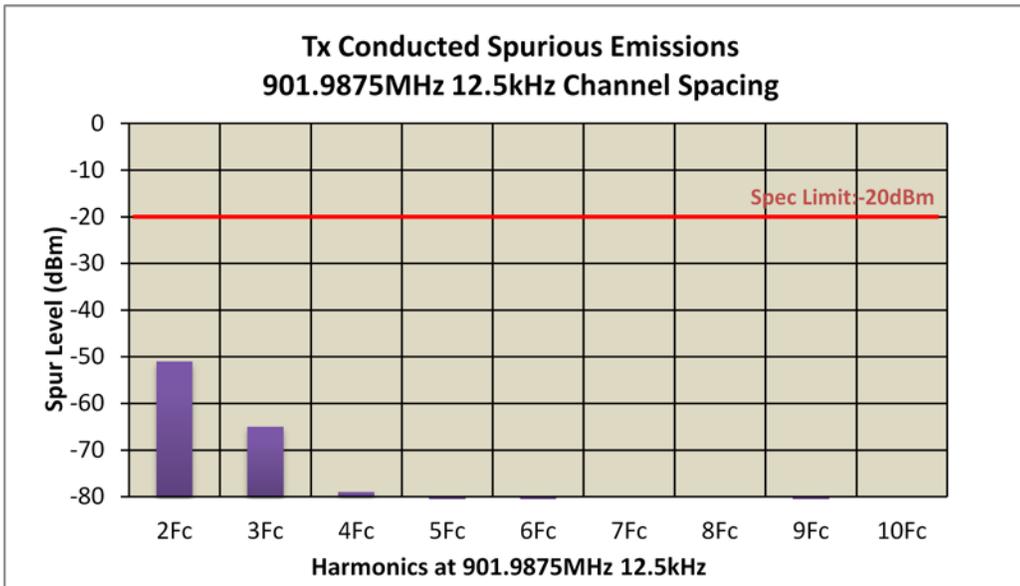
- For 4FSK Digital Modulation, 12.5kHz Data 7K60F1D & 7K60FXD would be the same. Therefore only measurements with 7K60FXD shown above.
- For 4FSK Digital Modulation, 12.5kHz Voice 7K60F1E & 7K60FXE would be the same. Therefore only measurements with 7K60FXE shown above.
- All measurements of Occupied 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 Conducted Spurious Emissions**



**Figure 6F-1:** 2.4W Harmonic of Carrier 896.0125 MHz, 12.5 kHz Channel Spacing



**Figure 6F-2:** 2.4W Harmonic of Carrier 901.9875 MHz, 12.5 kHz Channel Spacing

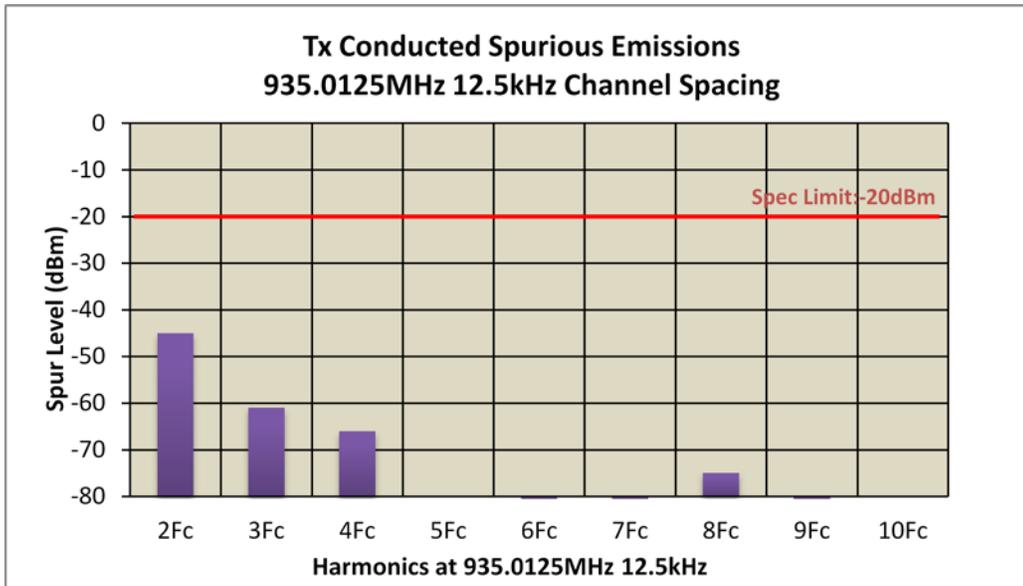


Figure 6F-3: 2.4W Harmonic of Carrier 935.0125 MHz, 12.5 kHz Channel Spacing

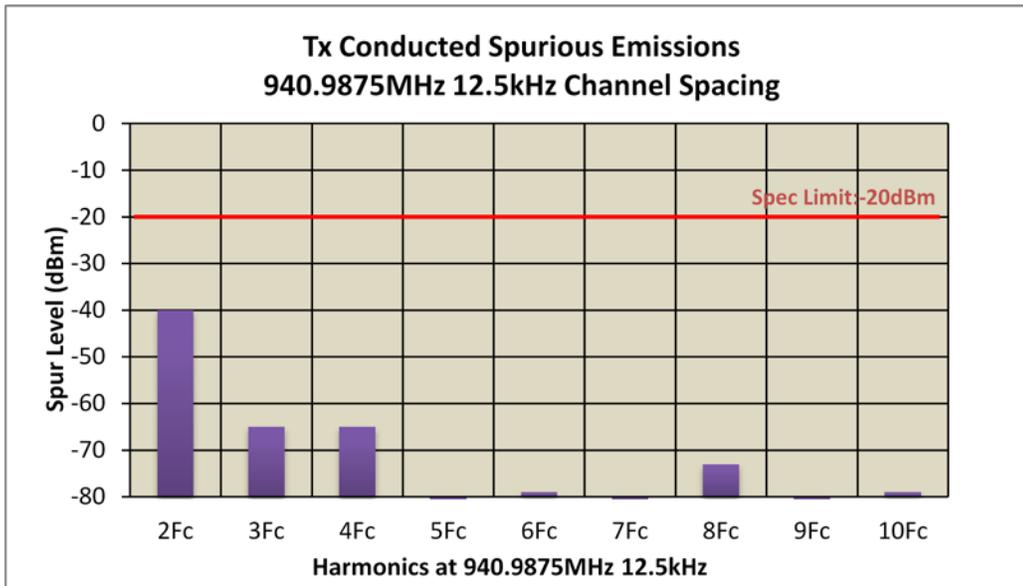


Figure 6F-4: 2.4W Harmonic of Carrier 940.9875 MHz, 12.5 kHz Channel Spacing

**EXHIBIT 6G**

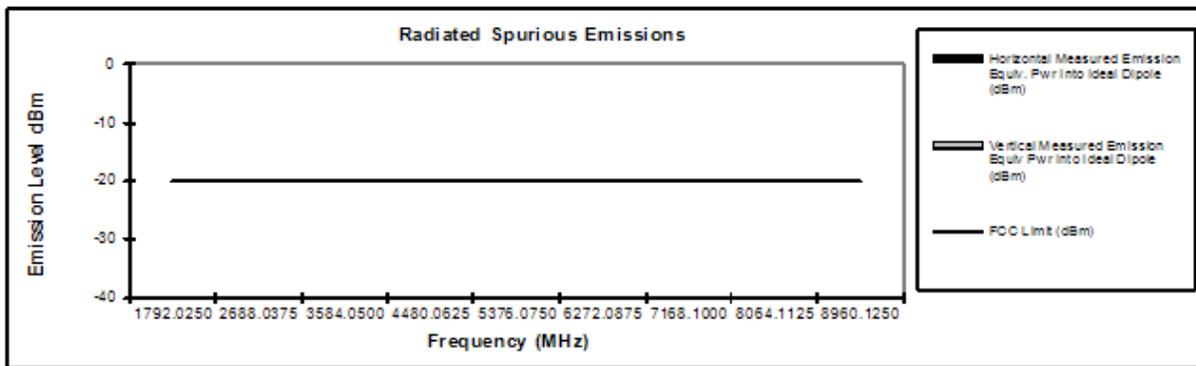
**Transmitter Radiated Spurious Emissions**

**Tx Power: 2.4 Watts**

**896.0125 MHz**

**Channel Spacing 12.5kHz | S/N 806TPK0171**

Frequency (MHz)	FCC Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)
1792.0250	-20	*	*
2688.0375	-20	*	*
3584.0500	-20	*	*
4480.0625	-20	*	*
5376.0750	-20	*	*
6272.0875	-20	*	*
7168.1000	-20	*	*
8064.1125	-20	*	*
8960.1250	-20	*	*



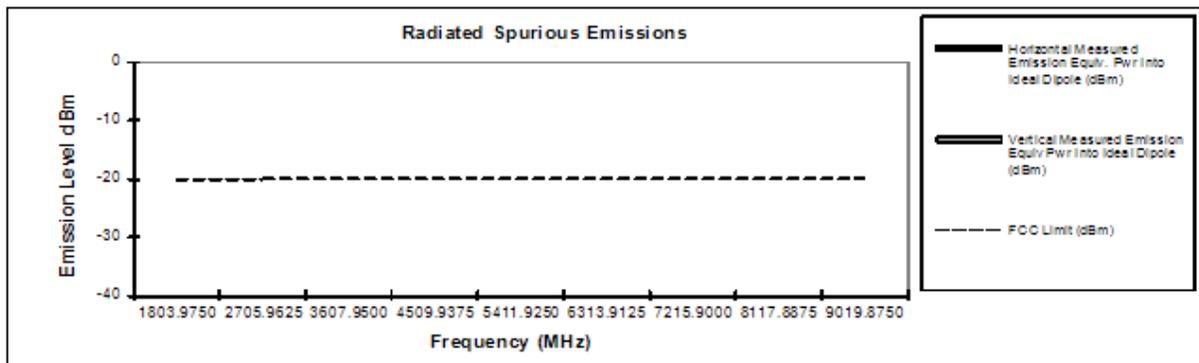
**Figure 6G-1: 2.4W, 896.0125 MHz, 12.5 kHz Channel Spacing**

**Tx Power: 2.4 Watts**

**901.9875 MHz**

**Channel Spacing 12.5kHz | S/N 806TPK0171**

Frequency (MHz)	FCC Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)
1803.9750	-20	*	*
2705.9625	-20	*	*
3607.9500	-20	*	*
4509.9375	-20	*	*
5411.9250	-20	*	*
6313.9125	-20	*	*
7215.9000	-20	*	*
8117.8875	-20	*	*
9019.8750	-20	*	*



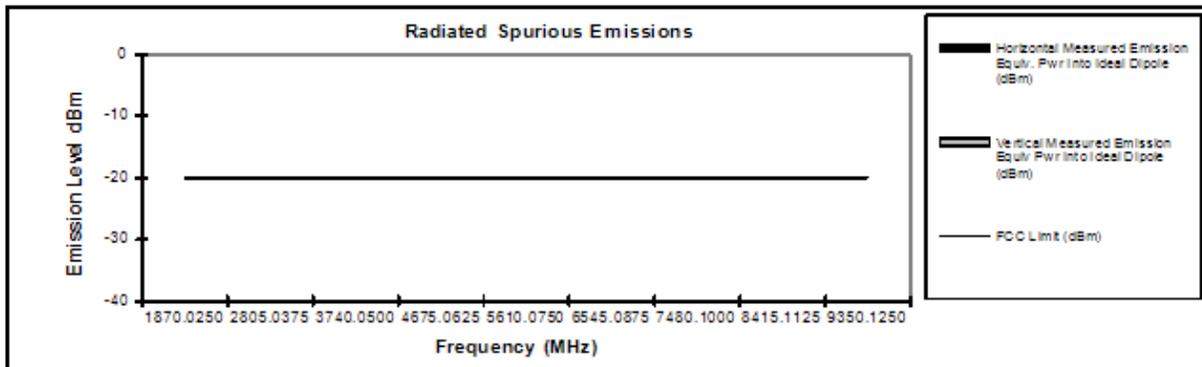
**Figure 6G-2: 2.4W, 901.9875 MHz, 12.5 kHz Channel Spacing**

**Tx Power: 2.4 Watts**

**935.0125 MHz**

**Channel Spacing 12.5kHz | S/N 806TPK0171**

Frequency (MHz)	FCC Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)
1870.0250	-20	*	*
2805.0375	-20	*	*
3740.0500	-20	*	*
4675.0625	-20	*	*
5610.0750	-20	*	*
6545.0875	-20	*	*
7480.1000	-20	*	*
8415.1125	-20	*	*
9350.1250	-20	*	*



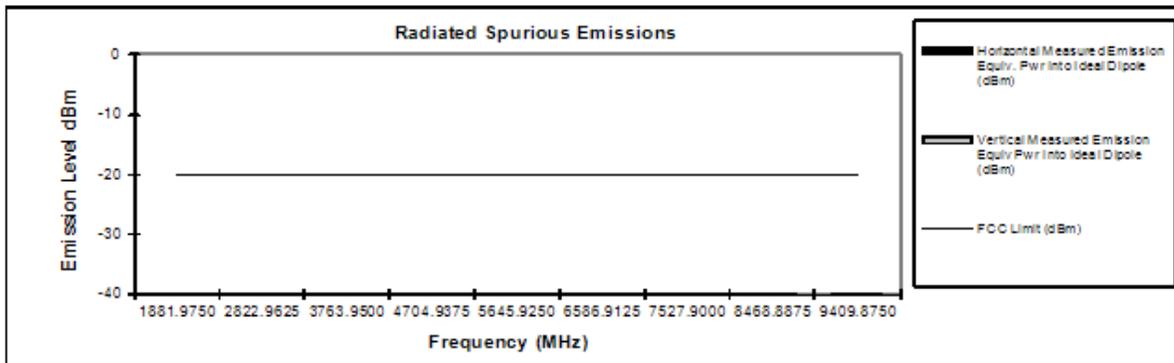
**Figure 6G-3: 2.4W, 935.0125 MHz, 12.5 kHz Channel Spacing**

**Tx Power: 2.4 Watts**

**940.9875 MHz**

**Channel Spacing 12.5kHz | S/N 806TPK0171**

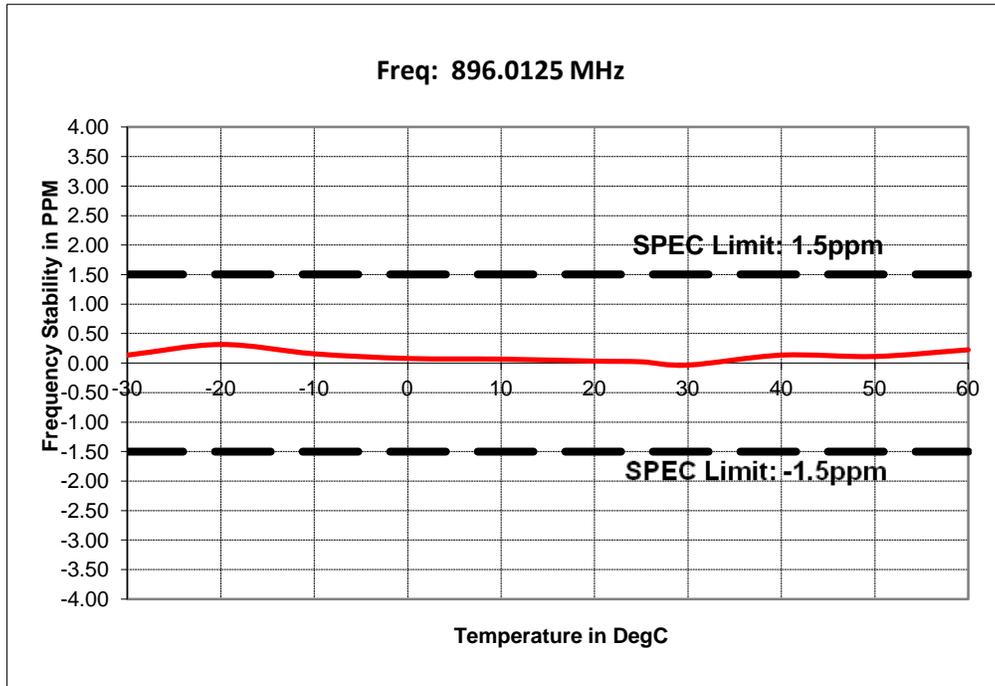
Frequency (MHz)	FCC Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)
1881.9750	-20	*	*
2822.9625	-20	*	*
3763.9500	-20	*	*
4704.9375	-20	*	*
5645.9250	-20	*	*
6586.9125	-20	*	*
7527.9000	-20	*	*
8468.8875	-20	*	*
9409.8750	-20	*	*



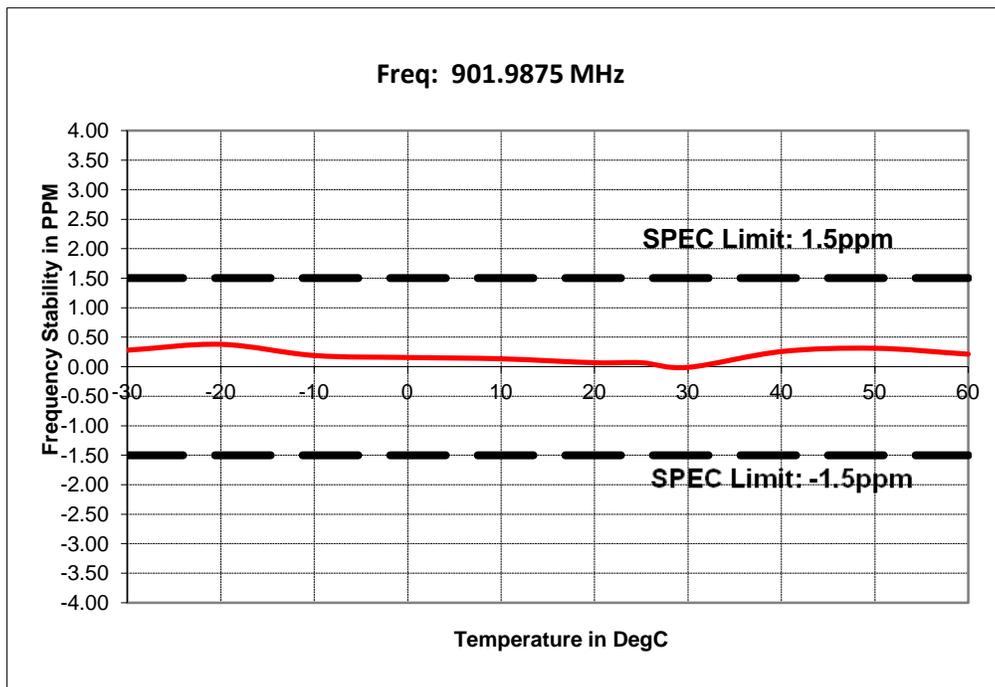
**Figure 6G-4: 2.4W, 940.9875 MHz, 12.5 kHz Channel Spacing**

**EXHIBIT 6H**

**Frequency Stability**



**Figure 6H-1: 1.5 ppm Frequency Stability vs. Temperature**



**Figure 6H-2: 1.5 ppm Frequency Stability vs. Temperature**

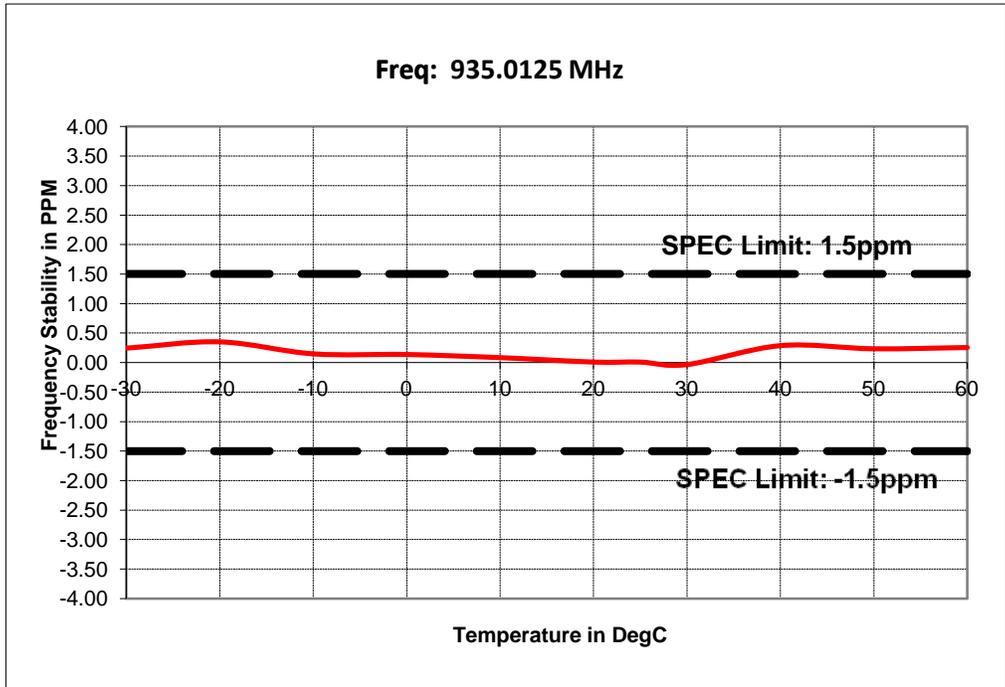


Figure 6H-3: 1.5 ppm Frequency Stability vs. Temperature

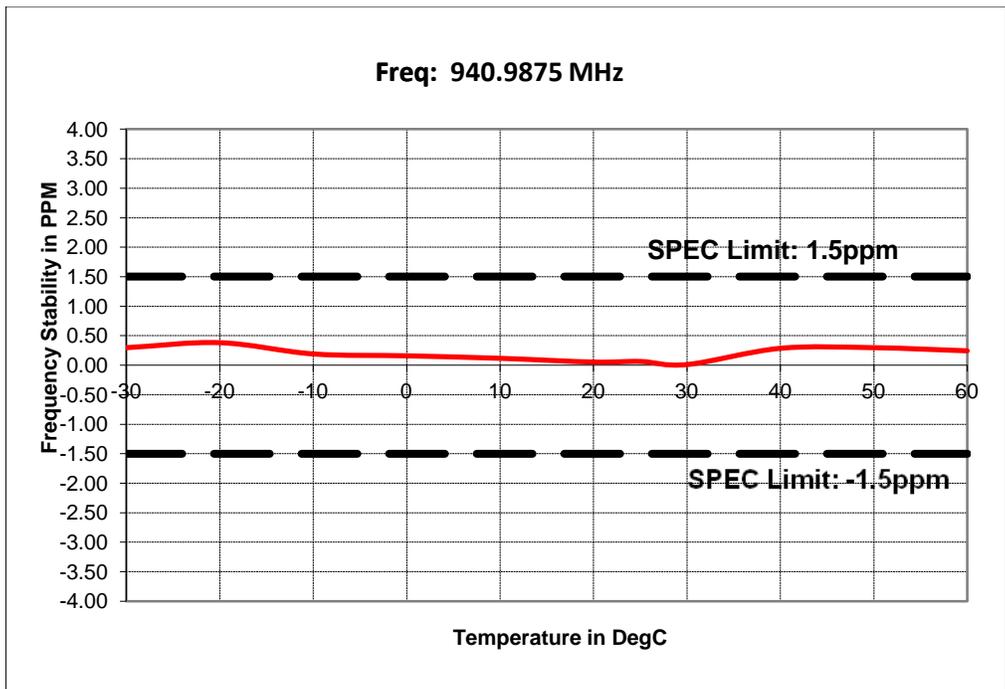


Figure 6H-4: 1.5 ppm Frequency Stability vs. Temperature

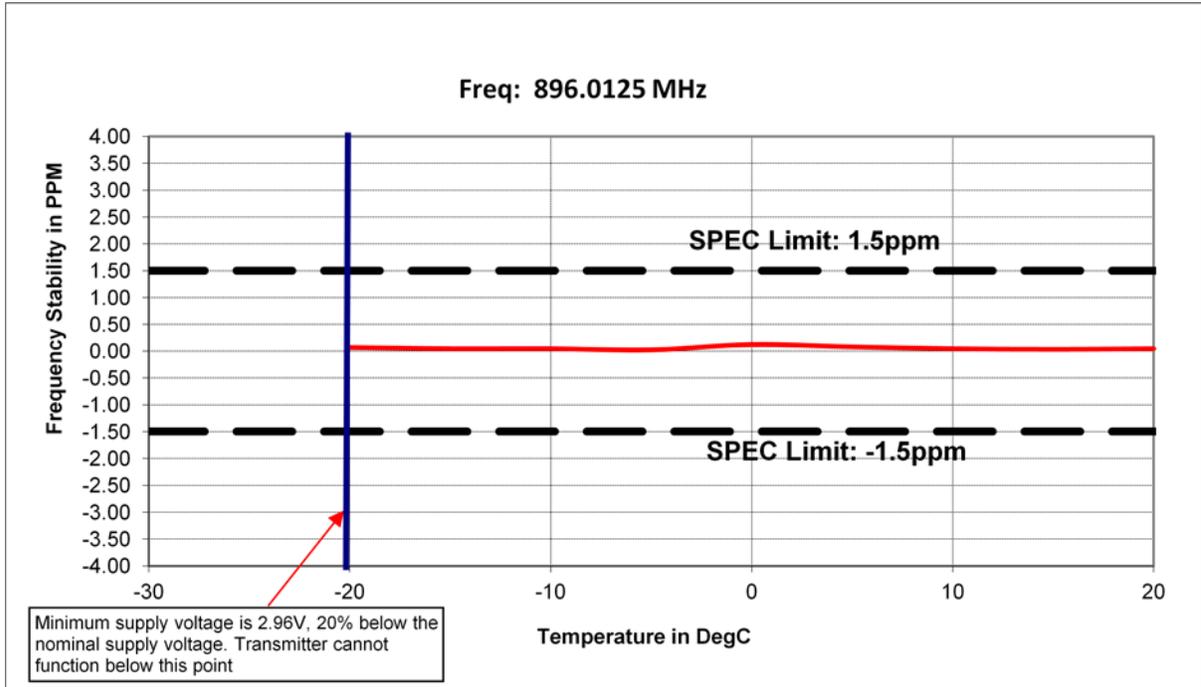


Figure 6H-5: 1.5 ppm Frequency Stability vs. Supply Voltage

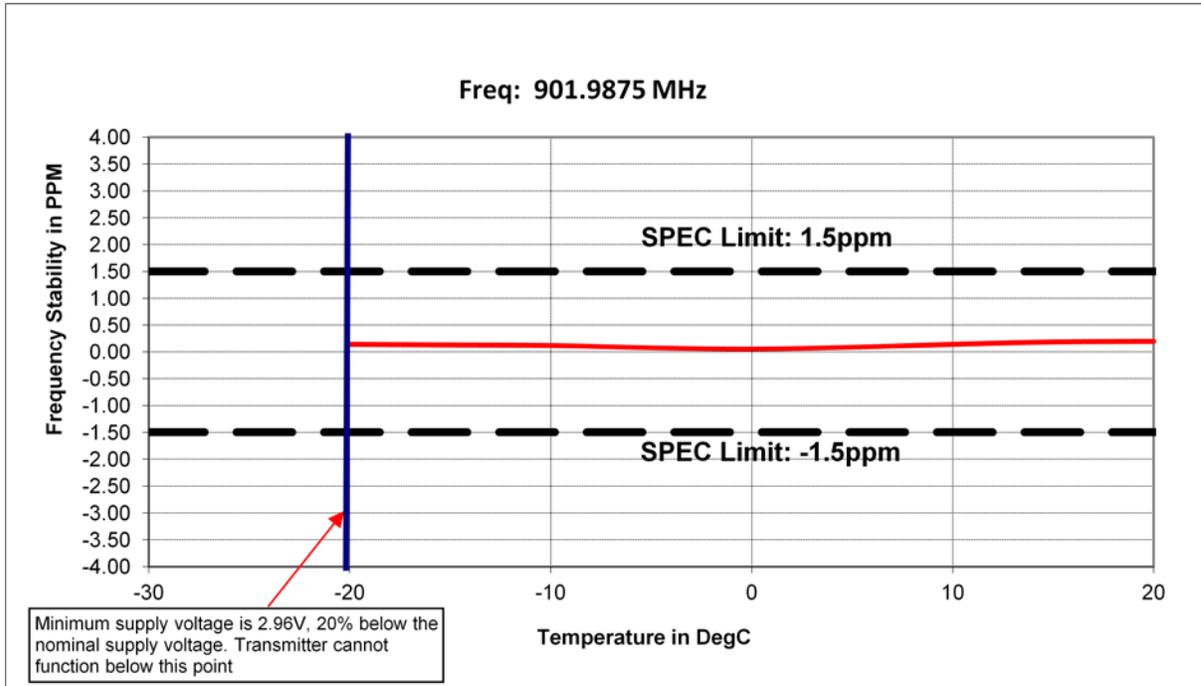


Figure 6H-6: 1.5 ppm Frequency Stability vs. Supply Voltage

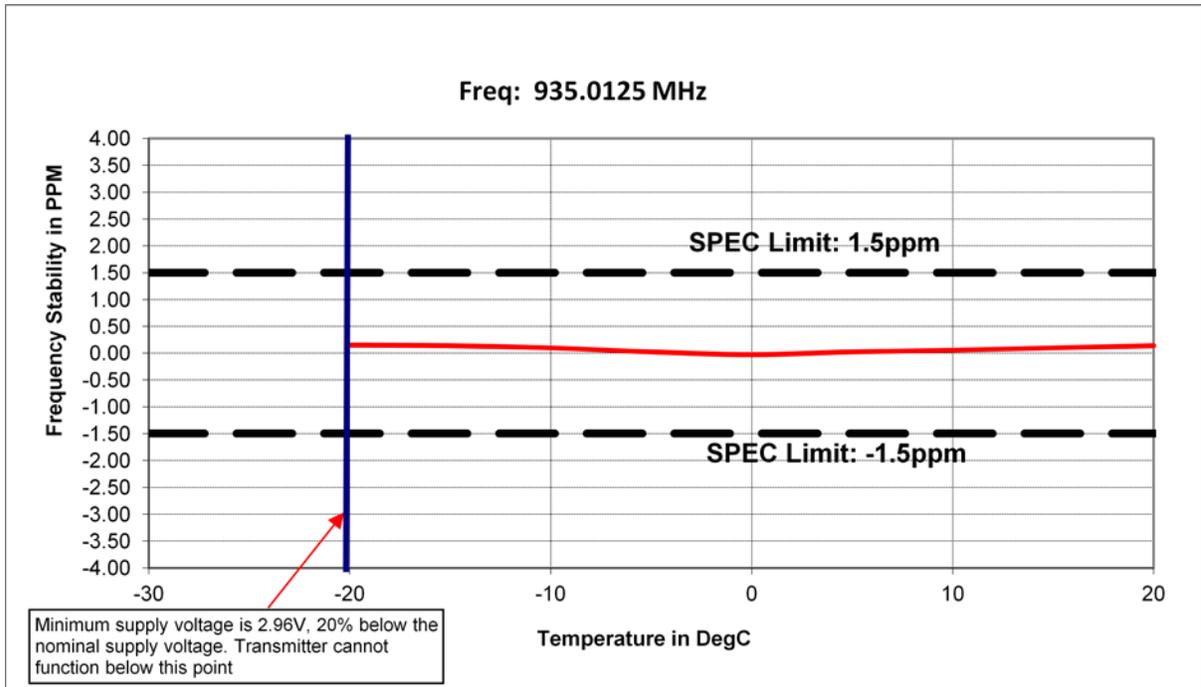


Figure 6H-7: 1.5 ppm Frequency Stability vs. Supply Voltage

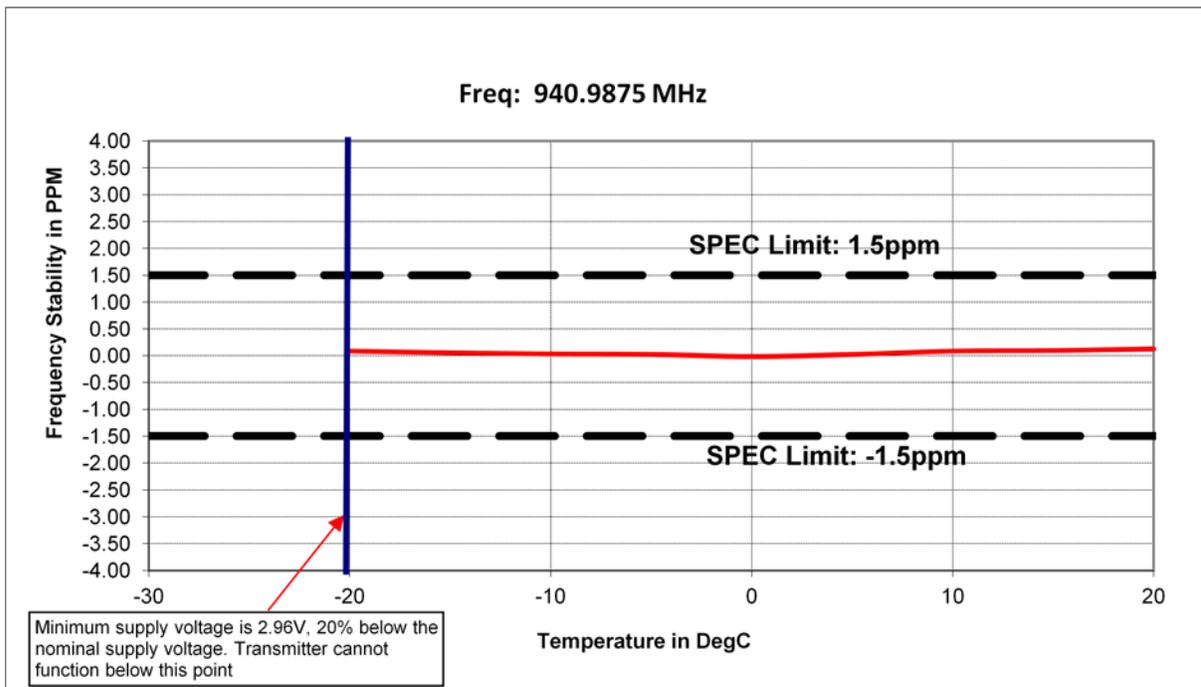


Figure 6H-8: 1.5 ppm Frequency Stability vs. Supply Voltage