

EXHIBIT 6**INDEX OF SUBMITTED MEASURED DATA**

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

EXHIBIT 6A - RF Power Output**EXHIBIT 6B - Transmit Audio Response**

- 6B-1 – 823.9875 MHz, 12.5 kHz Channel Spacing
- 6B-2 – 851.0125 MHz, 12.5 kHz Channel Spacing
- 6B-3 – 896.9875 MHz, 12.5 kHz Channel Spacing
- 6B-4 – 901.5 MHz, 12.5 kHz Channel Spacing (Part 24)
- 6B-5 – 935.0125 MHz, 12.5 kHz Channel Spacing
- 6B-6 – 940.5 MHz, 12.5 kHz Channel Spacing (Part 24)
- 6B-7 – 823.9875 MHz, 25 kHz Channel Spacing
- 6B-8 – 851.0125 MHz, 25 kHz Channel Spacing

EXHIBIT 6C - Transmit Audio Low pass Filter Response

- 6C-1 – 823.9875 MHz, 12.5 kHz Transmit Audio LPF Response
- 6C-2 – 851.0125 MHz, 12.5 kHz Transmit Audio LPF Response
- 6C-3 – 896.9875 MHz, 12.5 kHz Transmit Audio LPF Response
- 6C-4 – 901.5 MHz, 12.5 kHz Transmit Audio LPF Response (Part 24)
- 6C-5 – 935.0125 MHz, 12.5 kHz Transmit Audio LPF Response
- 6C-6 – 940.5 MHz, 12.5 kHz Transmit Audio LPF Response (Part 24)
- 6C-7 – 823.9875 MHz, 25 kHz Transmit Audio LPF Response
- 6C-8 – 851.0125 MHz, 25 kHz Transmit Audio LPF Response

EXHIBIT 6D - Modulation Limiting Characteristics

- 6D-1 – 823.9875 MHz, 12.5 kHz Carrier Squelch Mode
- 6D-2 – 851.0125 MHz, 12.5 kHz Carrier Squelch Mode
- 6D-3 – 896.9875 MHz, 12.5 kHz Carrier Squelch Mode
- 6D-4 – 901.5 MHz, 12.5 kHz Carrier Squelch Mode (Part 24)
- 6D-5 – 935.0125 MHz, 12.5 kHz Carrier Squelch Mode
- 6D-6 – 940.5 MHz, 12.5 kHz Carrier Squelch Mode (Part 24)
- 6D-7 – 823.9875 MHz, 25 kHz Carrier Squelch Mode
- 6D-8 – 851.0125 MHz, 25 kHz Carrier Squelch Mode

EXHIBIT 6E – Modulation Techniques and Occupied Bandwidth

- 6E-1: 806.0125 MHz, 12.5 kHz Channel Spacing, 2500Hz Audio Modulation only, 11K0F3E Mask B, D, G
- 6E-2: 806.0125 MHz, O.153 Test Pattern 4FSK Voice and Data Modulation, 7K60F1W Mask D, B, H
- 6E-3: 806.0125 MHz, O.153 Test Pattern 4FSK Data Modulation only, 7K60F1D Mask D, B, H
- 6E-4: 806.0125 MHz, O.153 Test Pattern 4FSK Voice Modulation only, 7K60F1E Mask D, B, H

- 6E-5: 823.9875 MHz, 12.5 kHz Channel Spacing, 2500Hz Audio Modulation only, 11K0F3E Mask D, B, G, 90.691
- 6E-6: 823.9875MHz, O.153 Test Pattern 4FSK Voice and Data Modulation, 7K60F1W Mask D, B, G, 90.691
- 6E-7: 823.9875MHz, O.153 Test Pattern 4FSK Data Modulation only, 7K60F1D Mask D, B, G, 90.691
- 6E-8: 823.9875MHz, O.153 Test Pattern 4FSK Voice Modulation only, 7K60F1E Mask D, B, G, 90.691

- 6E-9: 868.8875 MHz, 12.5 kHz Channel Spacing, 2500Hz Audio Modulation only, 11K0F3E Mask D, B, G, 90.691
- 6E-10: 868.8875 MHz, O.153 Test Pattern 4FSK Voice and Data Modulation, 7K60F1W Mask D, B, G, 90.691
- 6E-11: 868.8875 MHz, O.153 Test Pattern 4FSK Data Modulation only, 7K60F1D Mask D, B, G, 90.691
- 6E-12: 868.8875 MHz, O.153 Test Pattern 4FSK Voice Modulation only, 7K60F1E Mask D, B, G, 90.691

- 6E-13: 896.9875 MHz, 12.5 kHz Channel Spacing, 2500Hz Audio Modulation only, 11K0F3E Mask I, D
- 6E-14: 896.9875 MHz, O.153 Test Pattern 4FSK Voice and Data Modulation, 7K60F1W Mask D, I
- 6E-15: 896.9875 MHz, O.153 Test Pattern 4FSK Data Modulation only, 7K60F1D Mask D, I
- 6E-16: 896.9875 MHz, O.153 Test Pattern 4FSK Voice Modulation only, 7K60F1E Mask D, I

6E-17: 900.9875 MHz, 12.5 kHz Channel Spacing, 2500Hz Audio Modulation only, 11K0F3E Mask D, I
 6E-18: 900.9875 MHz, O.153 Test Pattern 4FSK Voice and Data Modulation, 7K60F1W Mask D, I
 6E-19: 900.9875 MHz, O.153 Test Pattern 4FSK Data Modulation only, 7K60F1D Mask D, I
 6E-20: 900.9875 MHz, O.153 Test Pattern 4FSK Voice Modulation only, 7K60F1E Mask D, I

6E-21: 901.5 MHz, 12.5 kHz Channel Spacing, 2500Hz Audio Modulation only, 10K0F3E Mask 24.133 (Part 24)
 6E-22: 901.5 MHz, O.153 Test Pattern 4FSK Voice and Data Modulation, 7K60F1W Mask 24.133 (Part 24)
 6E-23: 901.5 MHz, O.153 Test Pattern 4FSK Data Modulation only, 7K60F1D Mask 24.133 (Part 24)
 6E-24: 901.5 MHz, O.153 Test Pattern 4FSK Voice Modulation only, 7K60F1E Mask 24.133 (Part 24)

6E-25: 935.0125 MHz, 12.5 kHz Channel Spacing, 2500Hz Audio Modulation only, 11K0F3E Mask D, I
 6E-26: 935.0125 MHz, O.153 Test Pattern 4FSK Voice and Data Modulation, 7K60F1W Mask D, I
 6E-27: 935.0125 MHz, O.153 Test Pattern 4FSK Data Modulation only, 7K60F1D Mask D, I
 6E-28: 935.0125 MHz, O.153 Test Pattern 4FSK Voice Modulation only, 7K60F1E Mask D, I

6E-29: 939.9875 MHz, 12.5 kHz Channel Spacing, 2500Hz Audio Modulation only, 11K0F3E Mask D, I
 6E-30: 939.9875 MHz, O.153 Test Pattern 4FSK Voice and Data Modulation, 7K60F1W Mask D, I
 6E-31: 939.9875 MHz, O.153 Test Pattern 4FSK Data Modulation only, 7K60F1D Mask D, I
 6E-32: 939.9875 MHz, O.153 Test Pattern 4FSK Voice Modulation only, 7K60F1E Mask D, I

6E-33: 940.5 MHz, 12.5 kHz Channel Spacing, 2500Hz Audio Modulation only, 10K0F3E Mask 24.133 (Part 24)
 6E-34: 940.5 MHz, O.153 Test Pattern 4FSK Voice and Data Modulation, 7K60F1W Mask 24.133 (Part 24)
 6E-35: 940.5 MHz, O.153 Test Pattern 4FSK Data Modulation only, 7K60F1D Mask 24.133 (Part 24)
 6E-36: 940.5 MHz, O.153 Test Pattern 4FSK Voice Modulation only, 7K60F1E Mask 24.133 (Part 24)

6E-37: 806.0125 MHz, 25 kHz Channel Spacing, 2500Hz Audio Modulation only, 16K0F3E Mask B, G, 90.691
 6E-38: 823.9875 MHz, 25 kHz Channel Spacing, 2500Hz Audio Modulation only, 16K0F3E Mask B, G, 90.691
 6E-39: 868.8875 MHz, 25 kHz Channel Spacing, 2500Hz Audio Modulation only, 16K0F3E Mask B, G, 90.691

EXHIBIT 6F - Conducted Spurious Emissions

6F-1 – 42 Watts, 806.0125 MHz, Analog 25 kHz Channel Spacing
 6F-2 – 42 Watts, 814.9875 MHz, Analog 25 kHz Channel Spacing
 6F-3 – 42 Watts, 823.9875 MHz, Analog 25 kHz Channel Spacing
 6F-4 – 42 Watts, 851.0125 MHz, Analog 25 kHz Channel Spacing
 6F-5 – 42 Watts, 860.0125 MHz, Analog 25 kHz Channel Spacing
 6F-6 – 42 Watts, 868.9875 MHz, Analog 25 kHz Channel Spacing

6F-7 – 42 Watts, 806.0125 MHz, Digital 12.5 kHz Channel Spacing
 6F-8 – 42 Watts, 814.9875 MHz, Digital 12.5 kHz Channel Spacing
 6F-9 – 42 Watts, 823.9875 MHz, Digital 12.5 kHz Channel Spacing
 6F-10 – 42 Watts, 851.0125 MHz, Digital 12.5 kHz Channel Spacing
 6F-11 – 42 Watts, 860.0125 MHz, Digital 12.5 kHz Channel Spacing
 6F-12 – 42 Watts, 868.9875 MHz, Digital 12.5 kHz Channel Spacing

6F-13 – 36 Watts, 896.0125 MHz, Analog 12.5 kHz Channel Spacing
 6F-14 – 36 Watts, 900.9875 MHz, Analog 12.5 kHz Channel Spacing
 6F-15 – 9 Watts, 901.9875 MHz, Analog 12.5 kHz Channel Spacing (Part 24)
 6F-16 – 36 Watts, 935.0125 MHz, Analog 12.5 kHz Channel Spacing
 6F-17 – 36 Watts, 939.9875 MHz, Analog 12.5 kHz Channel Spacing
 6F-18 – 9 Watts, 940.9875 MHz, Analog 12.5 kHz Channel Spacing (Part 24)

EXHIBIT 6G – Radiated Spurious Emissions

6G-1 – 42 Watts, 806.0125 MHz, Digital 12.5 kHz Channel Spacing
 6G-2 – 42 Watts, 814.9875 MHz, Digital 12.5 kHz Channel Spacing
 6G-3 – 42 Watts, 823.9875 MHz, Digital 12.5 kHz Channel Spacing
 6G-4 – 42 Watts, 851.0125 MHz, Digital 12.5 kHz Channel Spacing
 6G-5 – 42 Watts, 860.0125 MHz, Digital 12.5 kHz Channel Spacing
 6G-6 – 42 Watts, 868.8875 MHz, Digital 12.5 kHz Channel Spacing
 6G-7 – 36 Watts, 896.0125 MHz, Digital 12.5 kHz Channel Spacing
 6G-8 – 36 Watts, 900.9875 MHz, Digital 12.5 kHz Channel Spacing

6G-9 – 36 Watts, 935.0125 MHz, Digital 12.5 kHz Channel Spacing
6G-10 – 36 Watts, 939.9875 MHz, Digital 12.5 kHz Channel Spacing

6G-11 – 42 Watts, 806.0125 MHz, Analog 25 kHz Channel Spacing
6G-12 – 42 Watts, 814.9875 MHz, Analog 25 kHz Channel Spacing
6G-13 – 42 Watts, 823.9875 MHz, Analog 25 kHz Channel Spacing
6G-14 – 42 Watts, 851.0125 MHz, Analog 25 kHz Channel Spacing
6G-15 – 42 Watts, 860.0125 MHz, Analog 25 kHz Channel Spacing
6G-16 – 42 Watts, 868.8875 MHz, Analog 25 kHz Channel Spacing
6G-17 – 9 Watts, 901.5 MHz, Analog 12.5 kHz Channel Spacing (Part 24)
6G-18 – 9 Watts, 940.5 MHz, Analog 12.5 kHz Channel Spacing (Part 24)

EXHIBIT 6H – Frequency Stability

6H-1 – 823.9825 MHz Frequency Stability vs. Temperature
6H-2 – 823.9825 MHz Frequency Stability vs. Voltage
6H-3 – 896.9875 MHz Frequency Stability vs. Temperature
6H-4 – 896.9875 MHz Frequency Stability vs. Voltage
6H-5 – 901.5 MHz Frequency Stability vs. Temperature (Part 24)
6H-6 – 901.5 MHz Frequency Stability vs. Voltage (Part 24)

EXHIBIT 6I – Effective Radiated Power

6I-1 – 8 Watts, 901.5 MHz, Analog 12.5 kHz Channel Spacing (Part 24)
6I-2 – 8 Watts, 940.5 MHz, Analog 12.5 kHz Channel Spacing (Part 24)

**** Please note that the above data were taken following the procedures and limits outlined in TIA 603-D, RSS 119 and RSS 134 during the month of September 2015. See Table 2 in Ex07_test_procedures**

Radio model tested: AAM28UMN9RA1AN

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

EXHIBIT 6A – RF POWER OUTPUT**HIGH POWER SETTING, FREQUENCY 806.0125 MHz**

Measured RF Output Power:	41.5	Watts
Measured DC Voltage:	13.2	Volts
Measured DC Input Current:	9.31	Amperes

HIGH POWER SETTING, FREQUENCY 806.0125 MHz (IC only)

Measured RF Output Power:	28.2	Watts
Measured DC Voltage:	13.2	Volts
Measured DC Input Current:	7.53	Amperes

LOW POWER SETTING, FREQUENCY 806.0125 MHz

Measured RF Output Power:	9.94	Watts
Measured DC Voltage:	13.2	Volts
Measured DC Input Current:	4.56	Amperes

HIGH POWER SETTING, FREQUENCY 814.9875 MHz

Measured RF Output Power:	41.5	Watts
Measured DC Voltage:	13.2	Volts
Measured DC Input Current:	9.01	Amperes

HIGH POWER SETTING, FREQUENCY 814.9875 MHz (IC only)

Measured RF Output Power:	28.2	Watts
Measured DC Voltage:	13.2	Volts
Measured DC Input Current:	7.16	Amperes

LOW POWER SETTING, FREQUENCY 814.9875 MHz

Measured RF Output Power:	9.93	Watts
Measured DC Voltage:	13.2	Volts
Measured DC Input Current:	4.36	Amperes

HIGH POWER SETTING, FREQUENCY 823.9875 MHz

Measured RF Output Power:	41.7	Watts
Measured DC Voltage:	13.2	Volts
Measured DC Input Current:	8.98	Amperes

HIGH POWER SETTING, FREQUENCY 823.9875 MHz (IC only)

Measured RF Output Power:	28.5	Watts
Measured DC Voltage:	13.2	Volts
Measured DC Input Current:	6.92	Amperes

LOW POWER SETTING, FREQUENCY 823.9875 MHz

Measured RF Output Power:	9.94	Watts
Measured DC Voltage:	13.2	Volts
Measured DC Input Current:	4.24	Amperes

HIGH POWER SETTING, FREQUENCY 851.0125 MHz

Measured RF Output Power:	41.5	Watts
Measured DC Voltage:	13.2	Volts
Measured DC Input Current:	9.6	Amperes

HIGH POWER SETTING, FREQUENCY 851.0125 MHz (IC only)

Measured RF Output Power:	27.8	Watts
Measured DC Voltage:	13.2	Volts
Measured DC Input Current:	6.90	Amperes

LOW POWER SETTING, FREQUENCY 851.0125 MHz

Measured RF Output Power:	9.9	Watts
Measured DC Voltage:	13.2	Volts
Measured DC Input Current:	4.28	Amperes

HIGH POWER SETTING, FREQUENCY 868.9875 MHz

Measured RF Output Power:	41.5	Watts
Measured DC Voltage:	13.2	Volts
Measured DC Input Current:	10.2	Amperes

HIGH POWER SETTING, FREQUENCY 868.9875 MHz (IC only)

Measured RF Output Power:	28.2	Watts
Measured DC Voltage:	13.2	Volts
Measured DC Input Current:	7.35	Amperes

LOW POWER SETTING, FREQUENCY 868.9875 MHz

Measured RF Output Power:	10	Watts
Measured DC Voltage:	13.2	Volts
Measured DC Input Current:	4.5	Amperes

HIGH POWER SETTING, FREQUENCY 896.0125 MHz

Measured RF Output Power:	35.6	Watts
Measured DC Voltage:	13.2	Volts
Measured DC Input Current:	8.78	Amperes

LOW POWER SETTING, FREQUENCY 896.0125 MHz

Measured RF Output Power:	10	Watts
Measured DC Voltage:	13.2	Volts
Measured DC Input Current:	4.6	Amperes

HIGH POWER SETTING, FREQUENCY 900.9875 MHz

Measured RF Output Power:	35.5	Watts
Measured DC Voltage:	13.2	Volts
Measured DC Input Current:	8.64	Amperes

LOW POWER SETTING, FREQUENCY 900.9875 MHz

Measured RF Output Power:	9.95	Watts
Measured DC Voltage:	13.2	Volts
Measured DC Input Current:	4.54	Amperes

HIGH POWER SETTING, FREQUENCY 901.5 MHz (Part 24)

Measured RF Output Power:	8.9	Watts
Measured DC Voltage:	13.2	Volts
Measured DC Input Current:	4.55	Amperes

HIGH POWER SETTING, FREQUENCY 935.0125 MHz

Measured RF Output Power:	35.4	Watts
Measured DC Voltage:	13.2	Volts
Measured DC Input Current:	7.3	Amperes

LOW POWER SETTING, FREQUENCY 935.0125 MHz

Measured RF Output Power:	9.9	Watts
Measured DC Voltage:	13.2	Volts
Measured DC Input Current:	3.9	Amperes

HIGH POWER SETTING, FREQUENCY 939.9875 MHz

Measured RF Output Power:	35.5	Watts
Measured DC Voltage:	13.2	Volts
Measured DC Input Current:	7.15	Amperes

LOW POWER SETTING, FREQUENCY 939.9875 MHz

Measured RF Output Power:	9.9	Watts
Measured DC Voltage:	13.2	Volts
Measured DC Input Current:	3.76	Amperes

HIGH POWER SETTING, FREQUENCY 940.5 MHz (Part 24)

Measured RF Output Power:	9	Watts
Measured DC Voltage:	13.2	Volts
Measured DC Input Current:	3.64	Amperes

EXHIBIT 6B – Transmit Audio Response

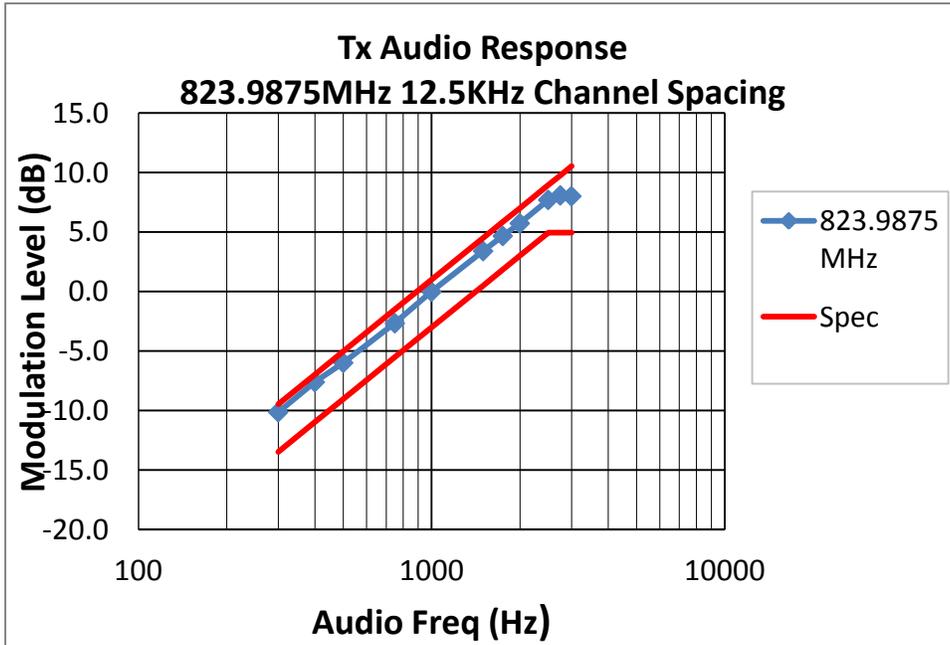


Figure 6B-1: 823.9875 MHz, 12.5 kHz Channel Spacing, Transmit Audio Frequency Response

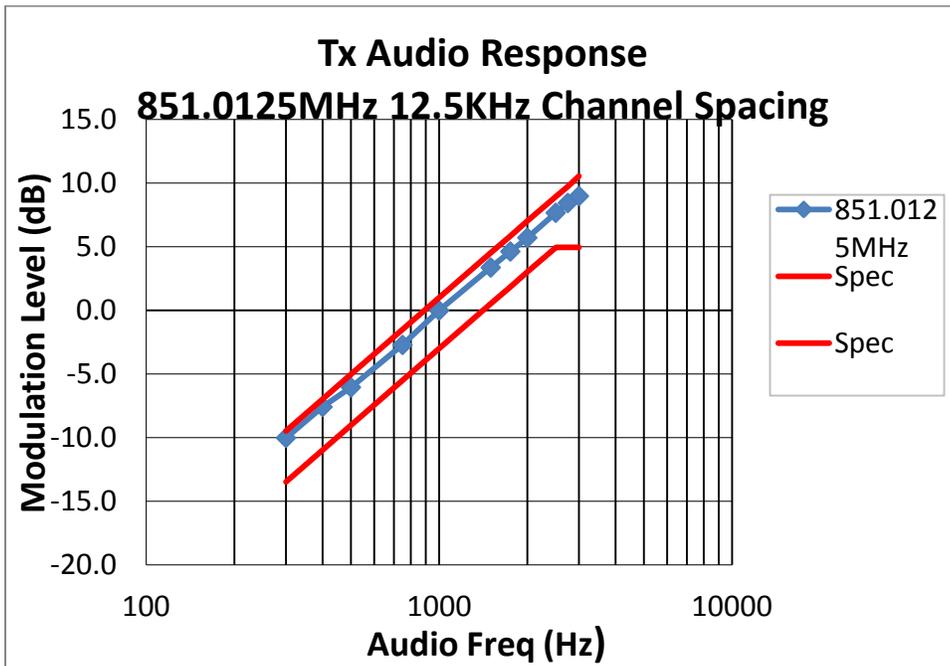


Figure 6B-2: 851.0125 MHz, 12.5 kHz Channel Spacing, Transmit Audio Frequency Response

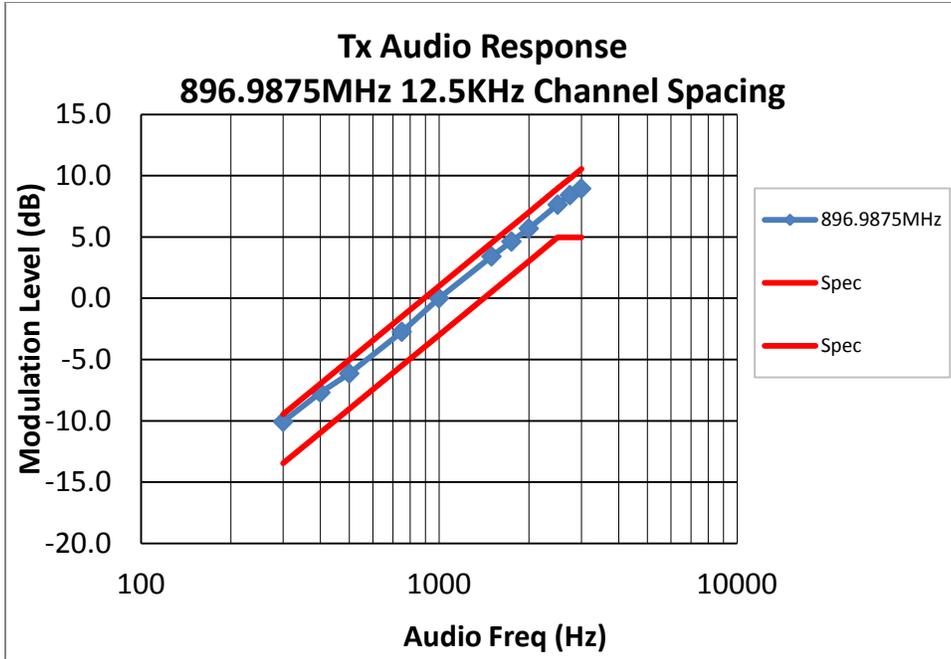


Figure 6B-3: 896.9875 MHz, 12.5 kHz Channel Spacing, Transmit Audio Frequency Response

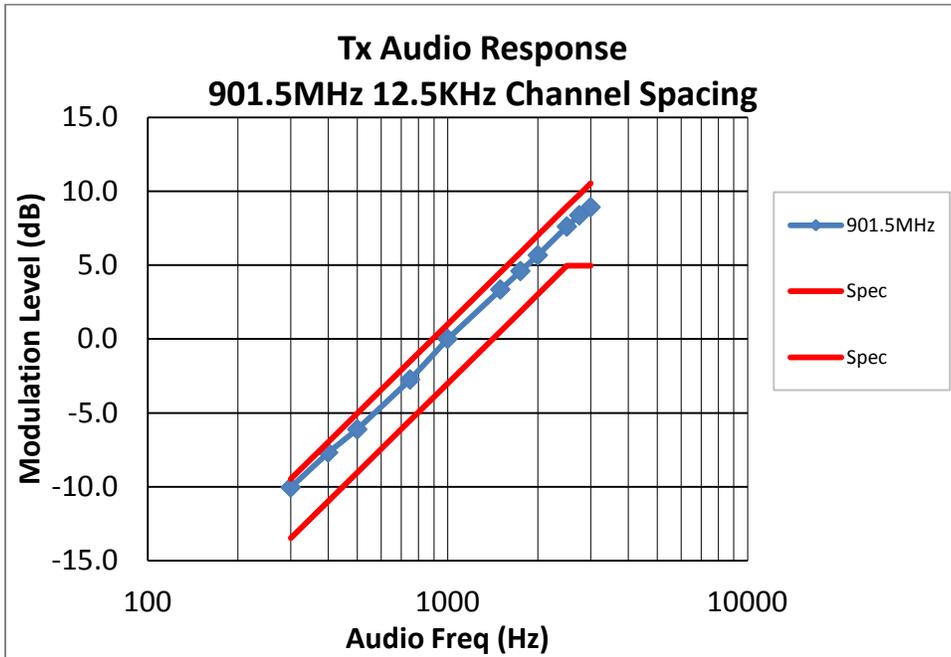


Figure 6B-4: 901.5 MHz, 12.5 kHz Channel Spacing, Transmit Audio Frequency Response (Part 24)

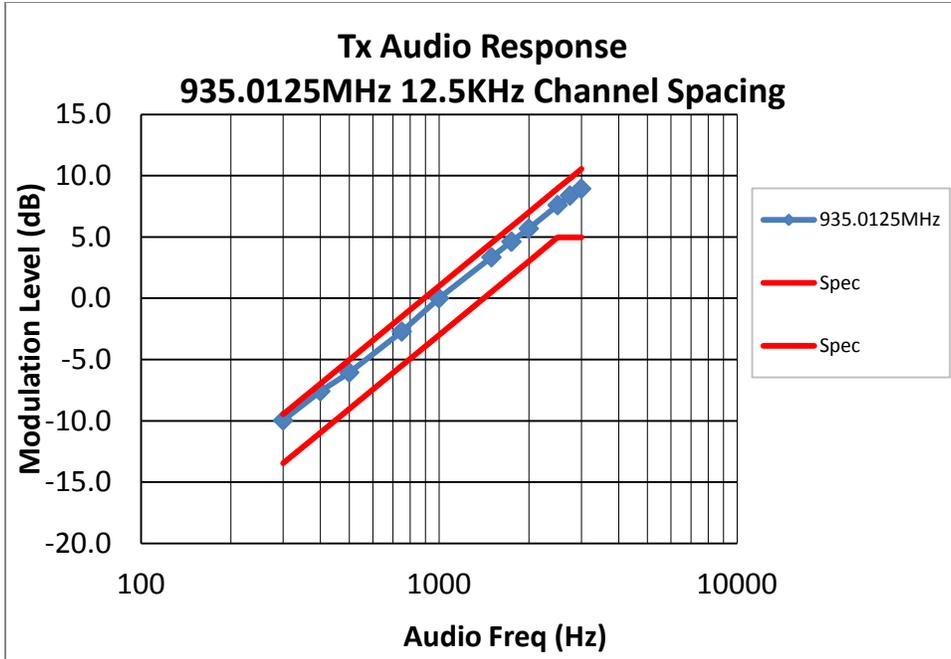


Figure 6B-5: 935.0125 MHz, 12.5 kHz Channel Spacing, Transmit Audio Frequency Response

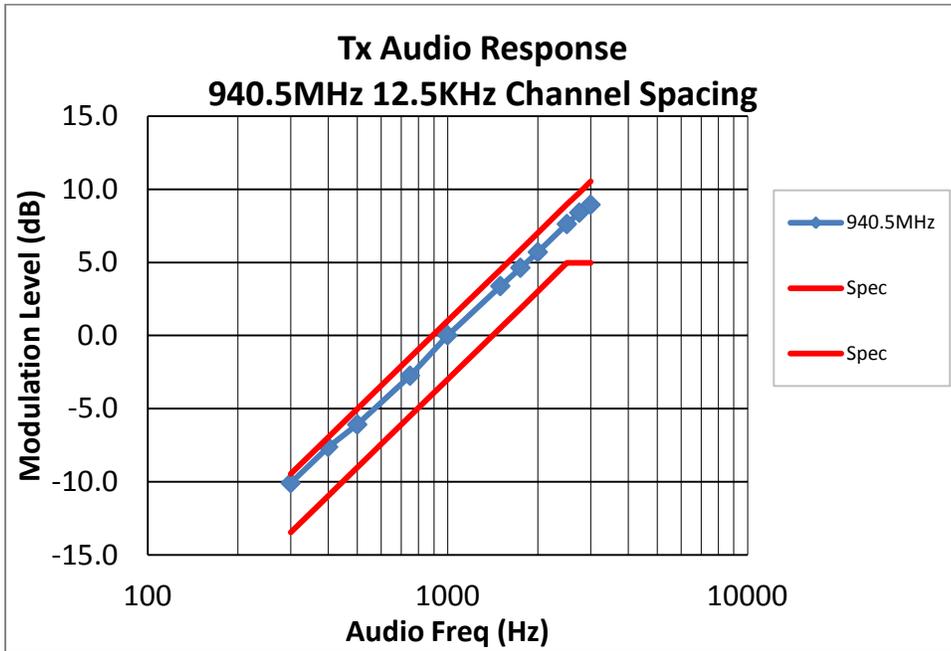


Figure 6B-6: 940.5 MHz, 12.5 kHz Channel Spacing, Transmit Audio Frequency Response (Part 24)

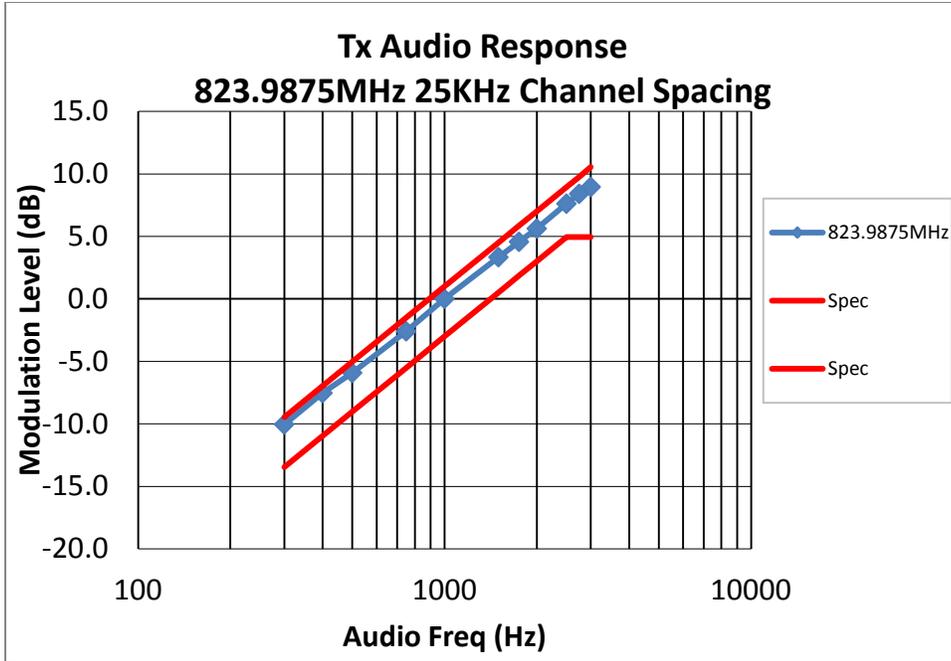


Figure 6B-7: 823.9875 MHz, 25 kHz Channel Spacing, Transmit Audio Frequency Response

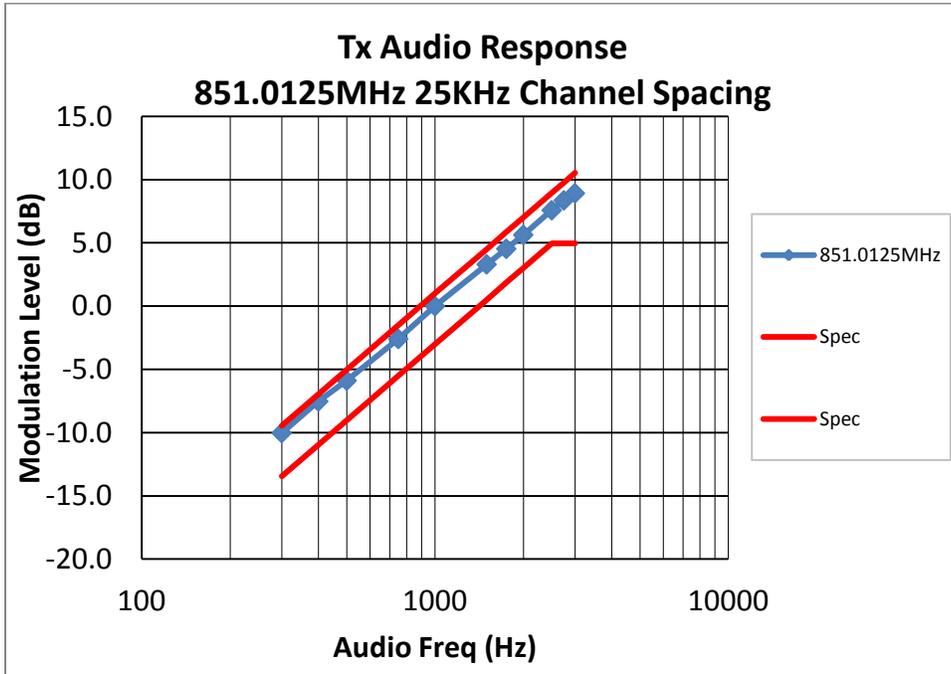


Figure 6B-8: 851.0125 MHz, 25 kHz Channel Spacing, Transmit Audio Frequency Response

EXHIBIT 6C – Transmit Audio Post Limiter Low Pass Filter Response

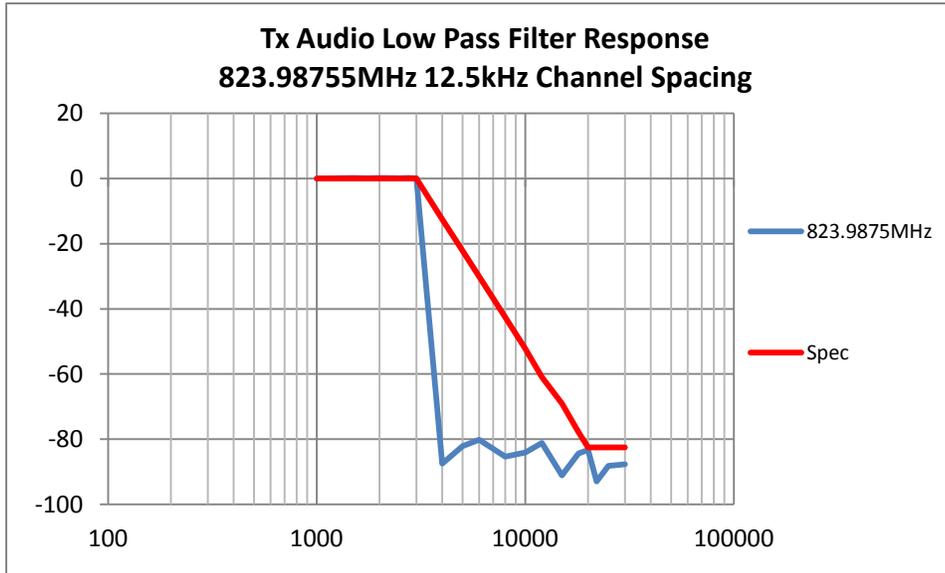


Figure 6C-1: 823.9875 MHz, 12.5 kHz Channel Spacing, Transmit Audio Low Pass Filter Response

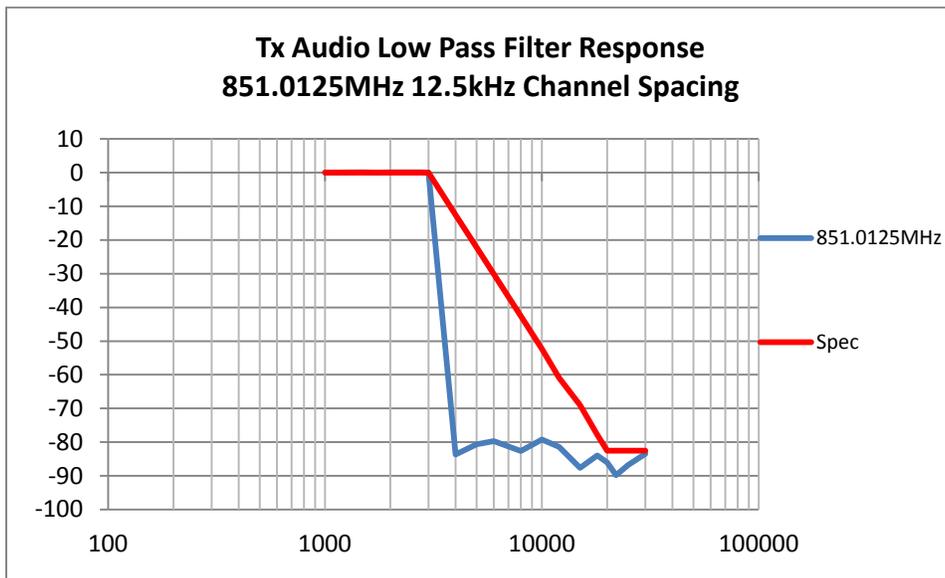


Figure 6C-2: 851.0125 MHz, 12.5 kHz Channel Spacing, Transmit Audio Low Pass Filter Response

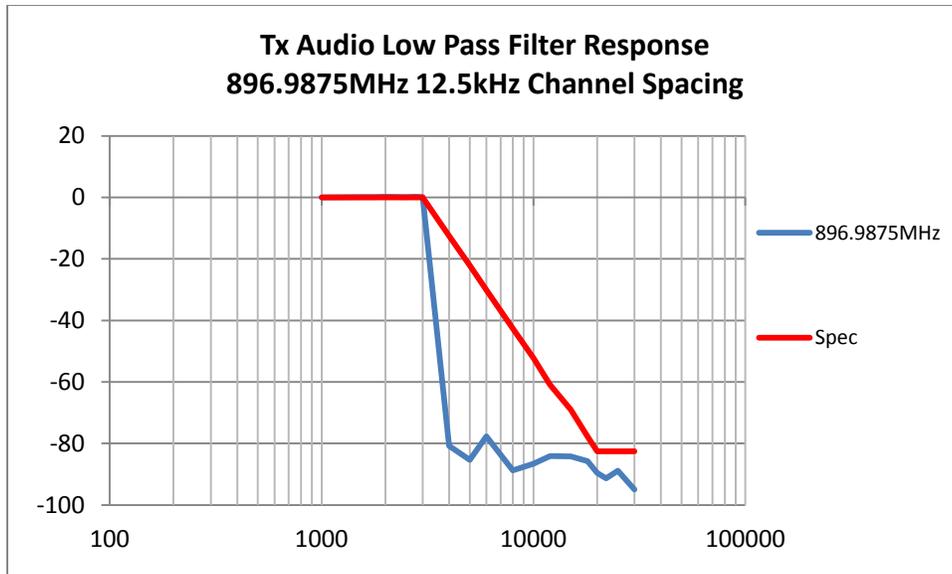


Figure 6C-3: 896.9875 MHz, 12.5 kHz Channel Spacing, Transmit Audio Low Pass Filter Response

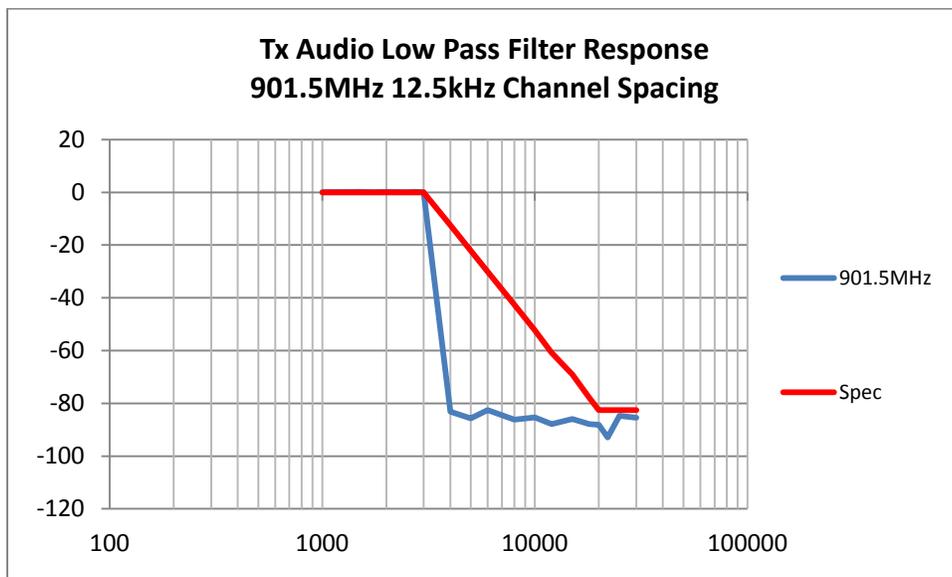


Figure 6C-4: 901.5 MHz, 12.5 kHz Channel Spacing, Transmit Audio Low Pass Filter Response (Part 24)

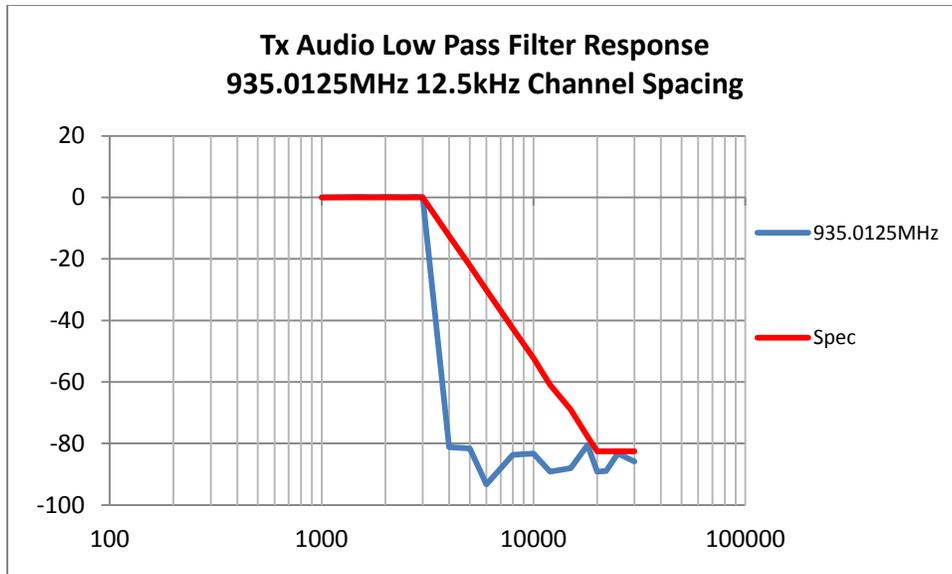


Figure 6C-5: 935.0125 MHz, 12.5 kHz Channel Spacing, Transmit Audio Low Pass Filter Response

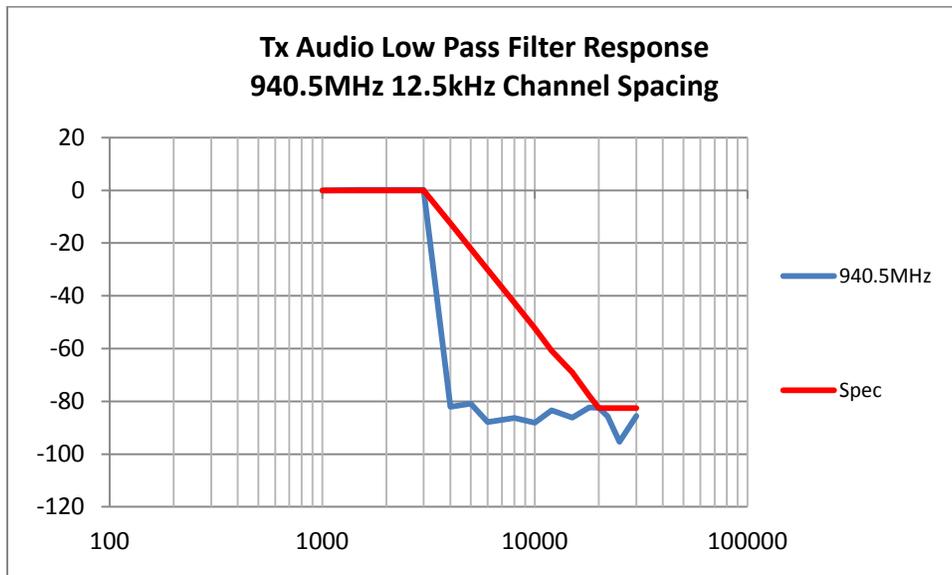


Figure 6C-6: 940.5 MHz, 12.5 kHz Channel Spacing, Transmit Audio Low Pass Filter Response (Part 24)

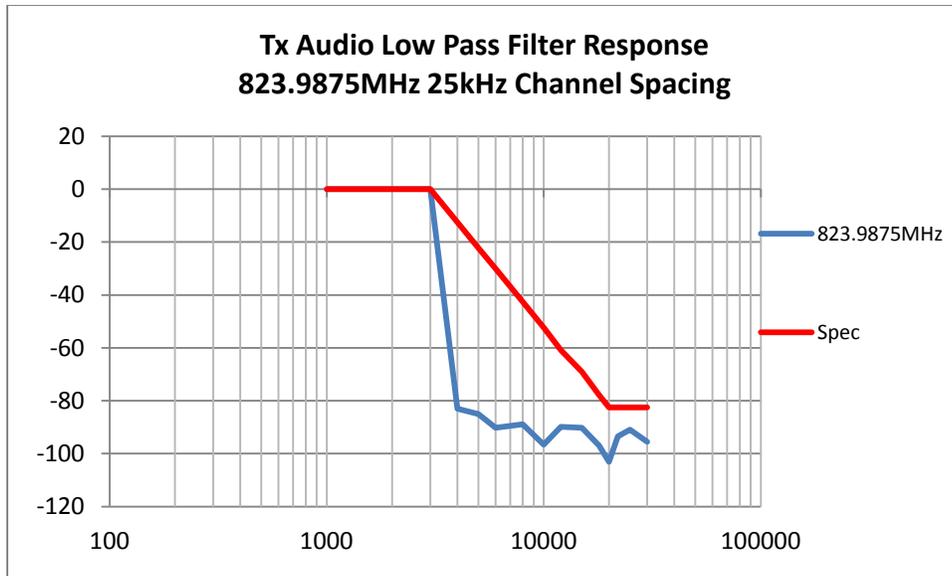


Figure 6C-7: 823.9875 MHz, 25 kHz Channel Spacing, Transmit Audio Low Pass Filter Response

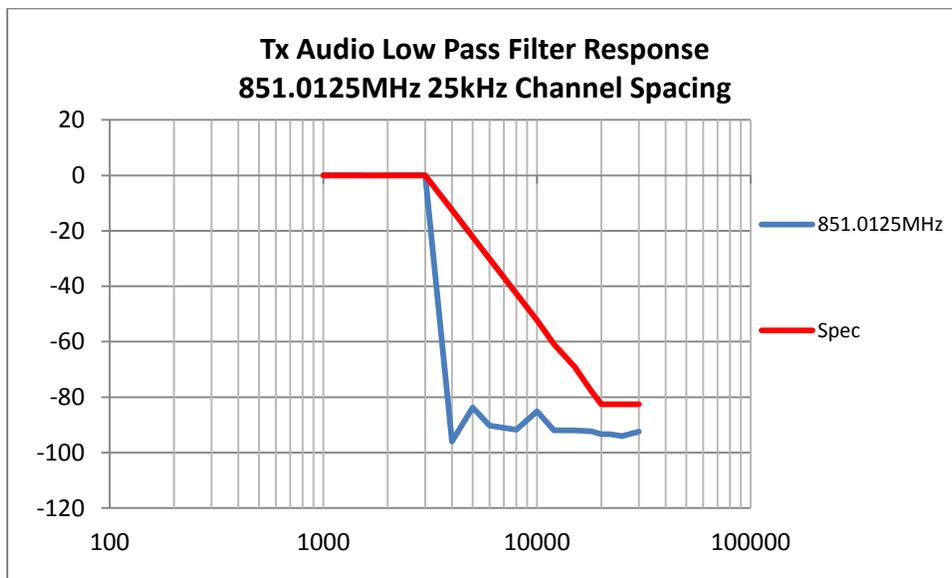


Figure 6C-8: 851.0125 MHz, 25 kHz Channel Spacing, Transmit Audio Low Pass Filter Response

EXHIBIT 6D – Modulation Limiting Characteristic

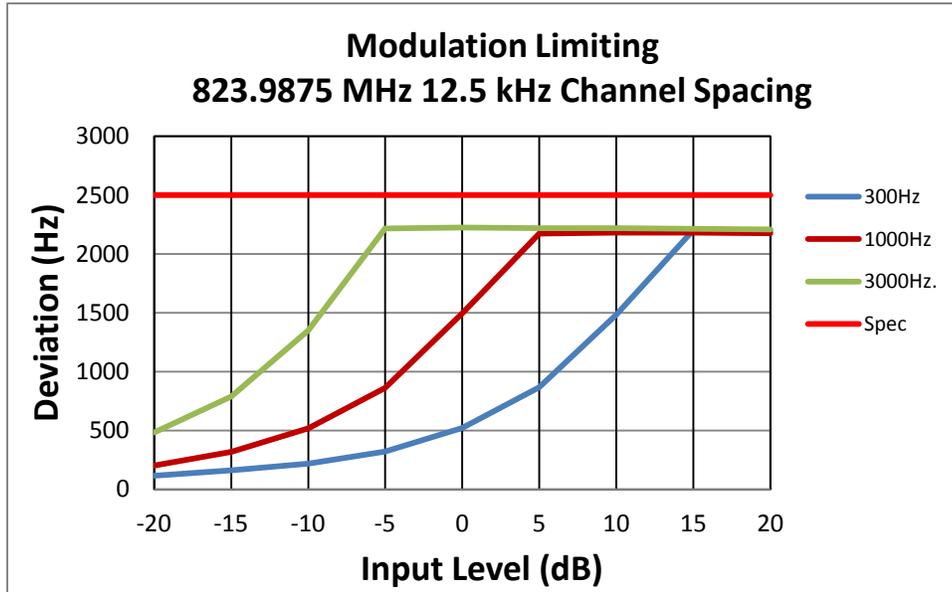


Figure 6D-1: 823.9875 MHz, 12.5 KHz Channel Spacing, Modulation Limiting

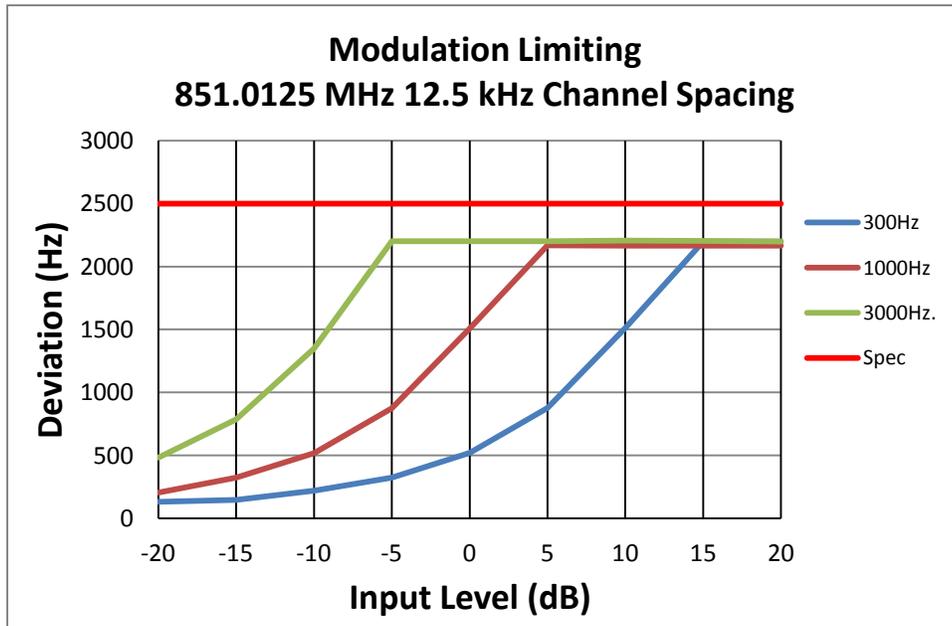


Figure 6D-2: 851.0125 MHz, 12.5 KHz Channel Spacing, Modulation Limiting

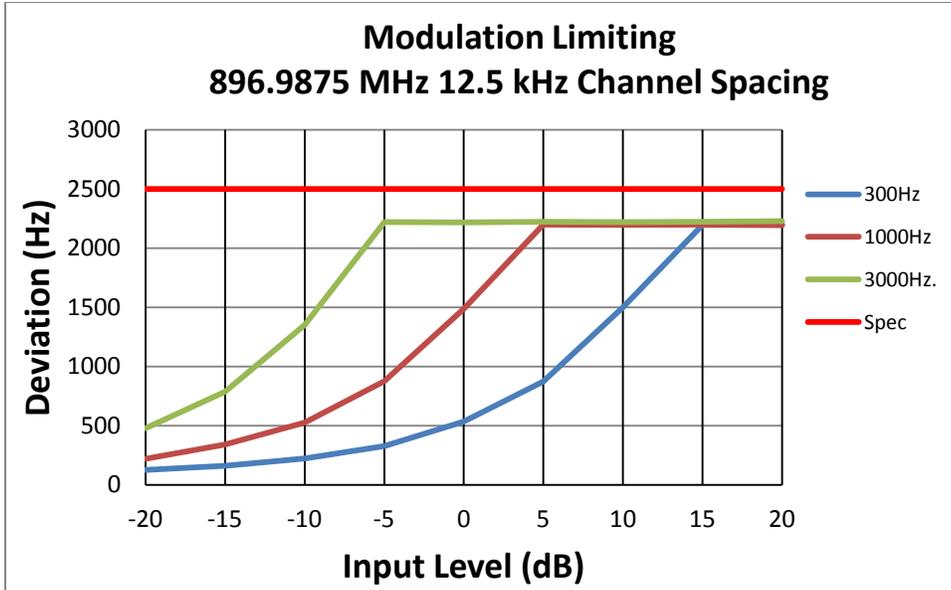


Figure 6D-3: 896.9875 MHz, 12.5 KHz Channel Spacing, Modulation Limiting

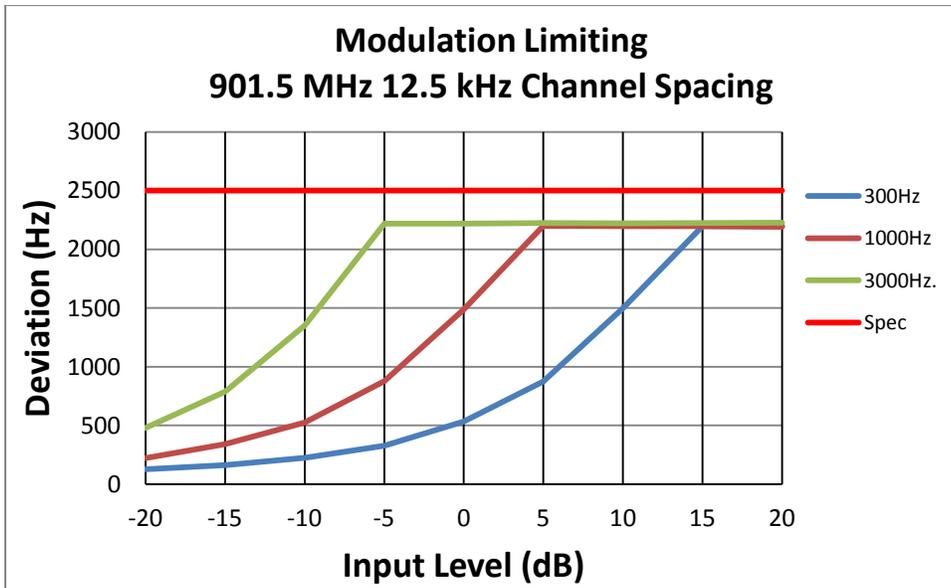


Figure 6D-4: 901.5 MHz, 12.5 KHz Channel Spacing, Modulation Limiting (Part 24)

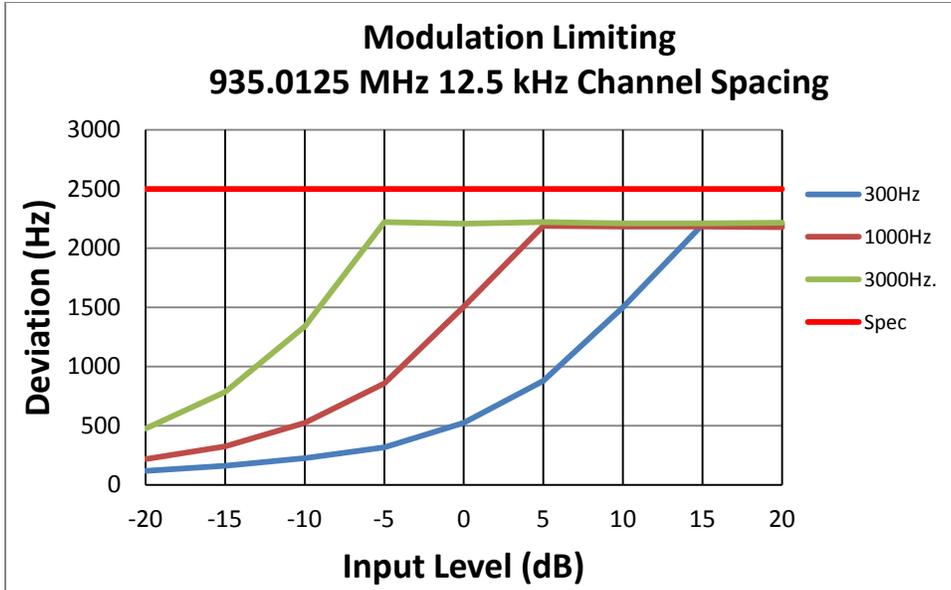


Figure 6D-5: 935.0125 MHz, 12.5 KHz Channel Spacing, Modulation Limiting

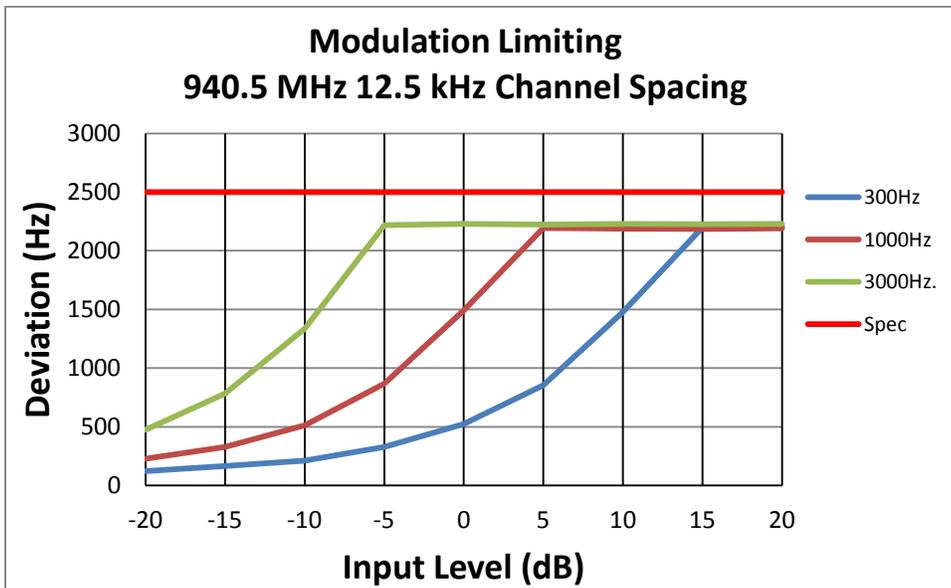


Figure 6D-6: 940.5 MHz, 12.5 KHz Channel Spacing, Modulation Limiting (Part 24)

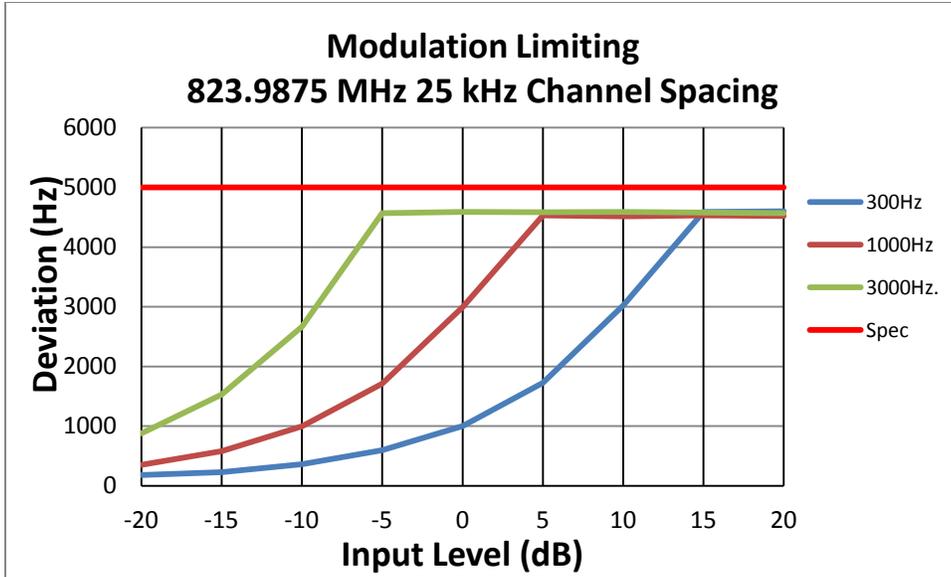


Figure 6D-7: 823.9875 MHz, 25 KHz Channel Spacing, Modulation Limiting

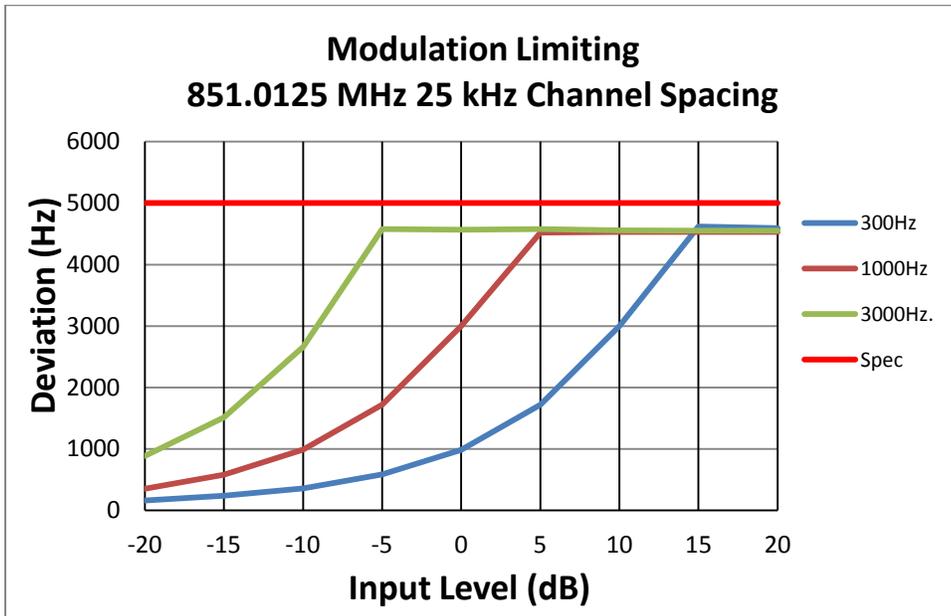


Figure 6D-8: 851.0125 MHz, 25 KHz Channel Spacing, Modulation Limiting

EXHIBIT 6E – Modulation Techniques

The transmitter is capable of the following types of modulation:

Standard Audio Modulation (25 kHz Channelization, Analog Voice)

Per CFR Title 47, Part 2, Section 2.201, the Carson’s Rule calculation for necessary bandwidth, $BW = 2M + 2DK$, where M = maximum modulating frequency in Hz, D = peak deviation in Hz, and $K=1$, is as follows:

In this case the maximum modulating frequency is 3.0 kHz with a 5.0 kHz deviation.

$BW = 2(M+D) = 2*(3.0 \text{ kHz} + 5.0 \text{ kHz}) = 16 \text{ kHz}$ (**16K0** designator)

Per CFR Title 47, Part 2, Section 2.201:

- Frequency Modulation **F**
- A single channel containing analogue information **3**
- Telephony (including sound broadcasting) **E**

The complete emissions designator for this transmitter is **16K0F3E**.

Standard Audio Modulation (12.5 kHz Channelization, Analog Voice)

Per CFR Title 47, Part 2, Section 2.201, the Carson’s Rule calculation for necessary bandwidth, $BW = 2M + 2DK$, where M = maximum modulating frequency in Hz, D = peak deviation in Hz, and $K=1$, is as follows:

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

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

Per CFR Title 47, Part 2, Section 2.201:

- Frequency Modulation **F**
- A single channel containing analogue information **3**
- Telephony (including sound broadcasting)..... **E**

The complete emissions designator for this transmitter is **11K0F3E**.

4 Level FSK Digital Modulation Techniques

The modulation sends 4800 symbols/sec with each symbol conveying 2 bits of information for a data rate of 9600 bps in a 12.5 kHz channel, which is equivalent to 4800 bps per 6.25kHz. The maximum deviation D , of the symbol is defined as:

$$D = 3h / 2T$$

where:

- h is the deviation index defined for the modulation
- T is the symbol time (1/4800) in seconds

The deviation index, h , is 0.27. This yields a symbol deviation of 1.944 kHz at the symbol center. The mapping between symbols and bits is shown below:

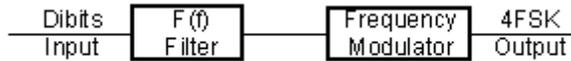
Information Bits		Symbol	4FSK Deviation
Bit 1	Bit 0		
0	1	+3	+1.944 kHz
0	0	+1	+0.648 kHz
1	0	-1	-0.648 kHz
1	1	-3	-1.944 kHz

A Square Root Raised Cosine Filter is implemented for the modulation low pass filter. The input to the modulation low pass filter consists of a series of impulses separated in time by 208.33 microseconds (1/4800 sec). The group delay of the filter is flat over the passband for $|f| < 2880$ Hz. The magnitude response of the filter is given by the following formula.

$|F(f)|$ = magnitude response of the Square Root Raised Cosine Filter

$|F(f)| = 1$ for $|f| \leq 1920$ Hz
 $|F(f)| = |\cos(\pi f / 1920)|$ for $1920 \text{ Hz} < |f| \leq 2880 \text{ Hz}$
 $|F(f)| = 0$ for $|f| > 2880 \text{ Hz}$
 where f = frequency in hertz.

The 4FSK modulator consists of a Square Root Raised Cosine Filter, cascaded with a frequency modulator.



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

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**

Note: This product utilizes a Time Division Multiple Access (TDMA) protocol.

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

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

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

Note: This product utilizes a Time Division Multiple Access (TDMA) protocol.

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

4 Level FSK Digital Modulation (12.5 kHz Channelization, Digital TDMA)

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	

Note: This product utilizes a Time Division Multiple Access (TDMA) protocol.

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

Digital Modulation (12.5 kHz Channelization, Digital Data)

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

Note: This product utilizes a Time Division Multiple Access (TDMA) protocol.

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

Digital Modulation (12.5 kHz Channelization, Digital Voice)

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

Note: This product utilizes a Time Division Multiple Access (TDMA) protocol.

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

OCCUPIED BANDWIDTH MEASUREMENT

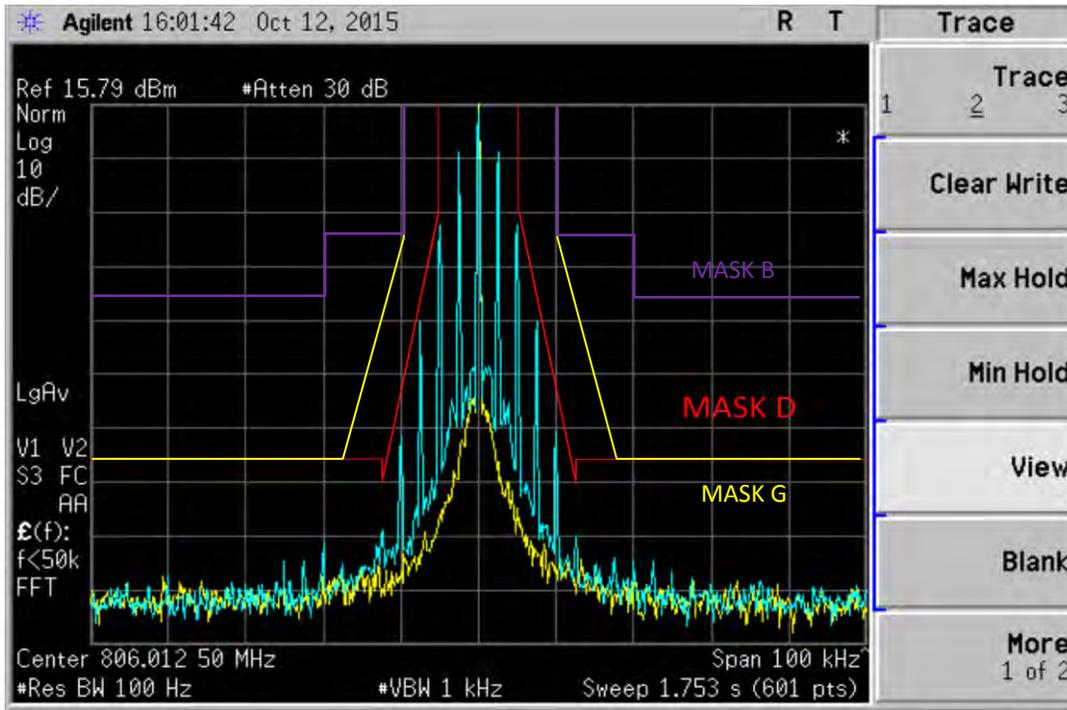


Figure 6E-1: 806.0125 MHz, 12.5 kHz Channel Spacing, 2500Hz Audio Modulation only, 11K0F3E Mask B, D, G

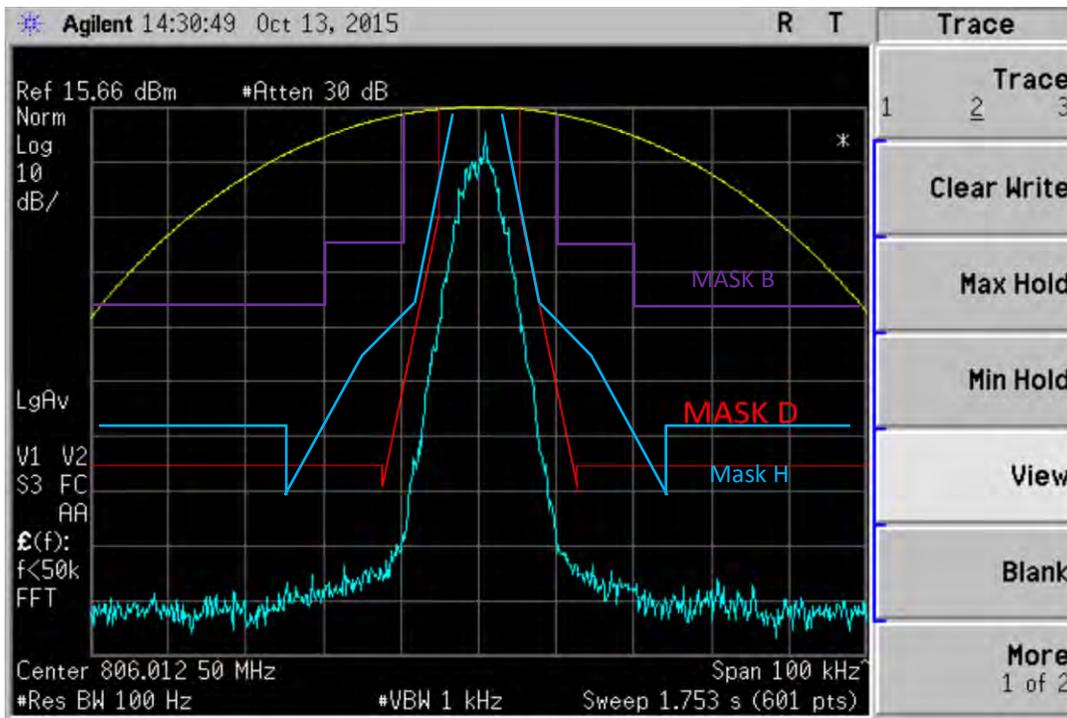


Figure 6E-2: 806.0125 MHz, 0.153 Test Pattern 4FSK Voice and Data Modulation, 7K60F1W Mask B, D, H

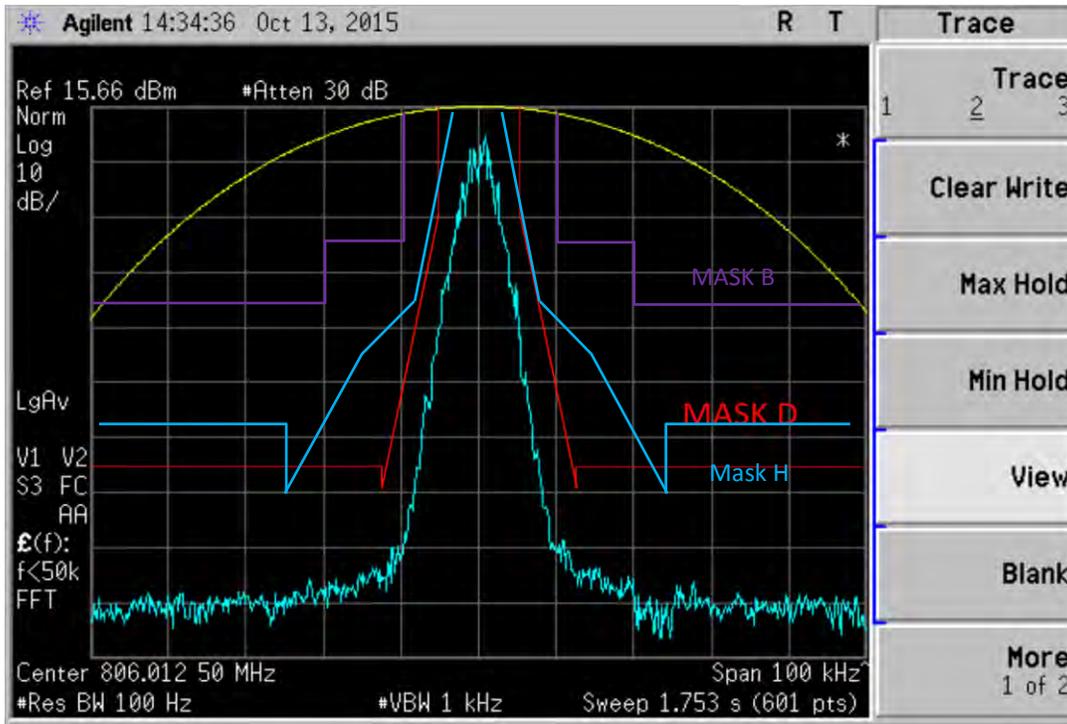


Figure 6E-3: 806.0125 MHz, O.153 Test Pattern 4FSK Data Modulation only, 7K60F1D Mask B, D, H

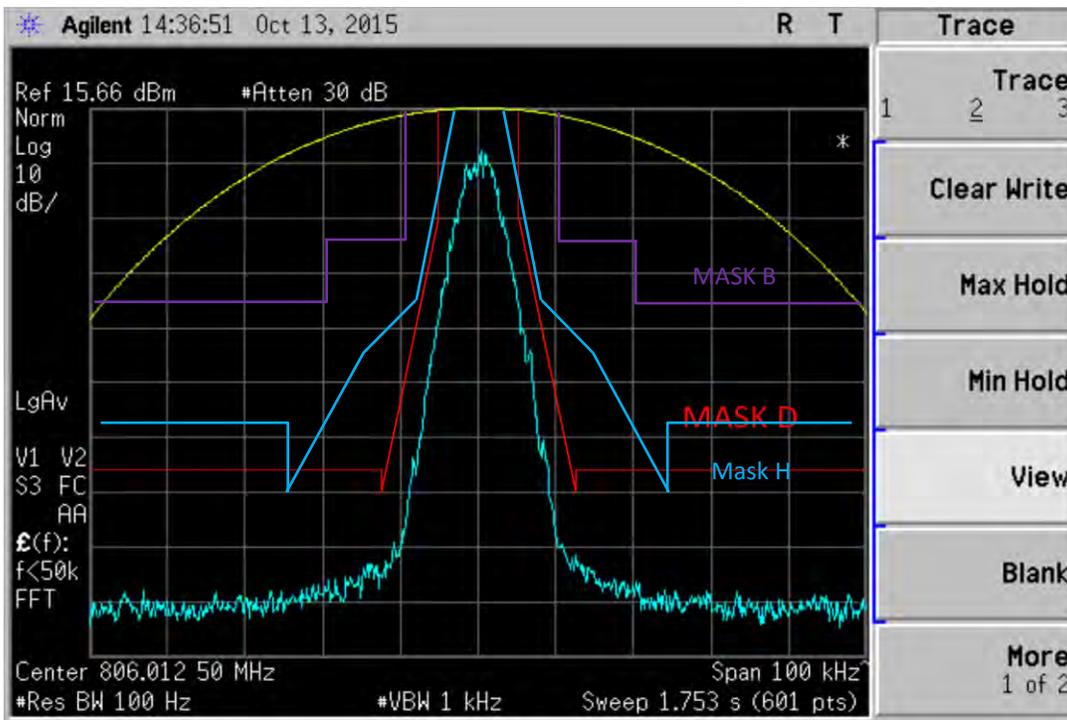


Figure 6E-4: 806.0125 MHz, O.153 Test Pattern 4FSK Voice Modulation only, 7K60F1E Mask Mask B, D, H

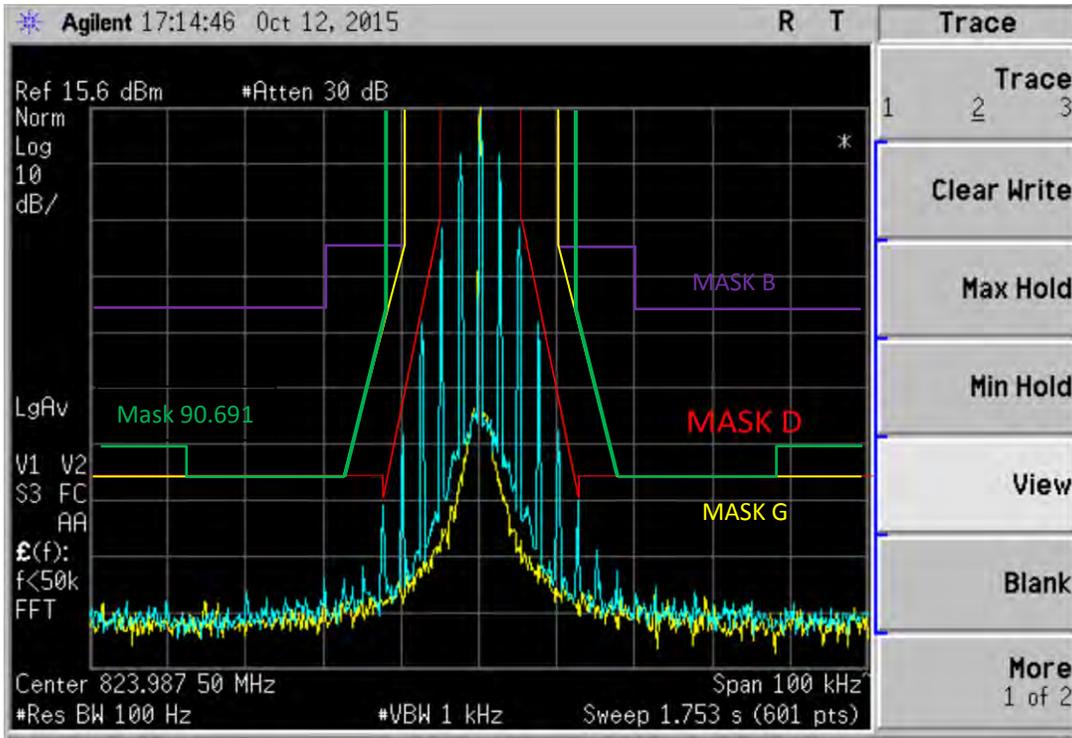


Figure 6E-5: 823.9875 MHz, 12.5 kHz Channel Spacing, 2500Hz Audio Modulation only, 11K0F3E Mask B, D, G, 90.691

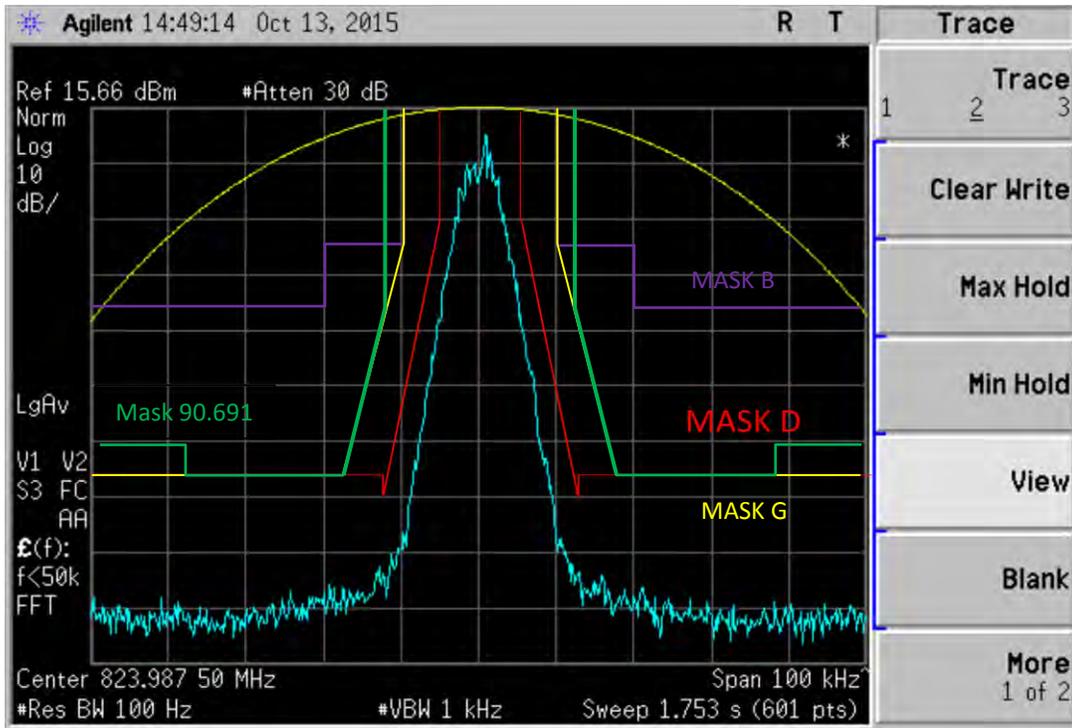


Figure 6E-6: 823.9875MHz, O.153 Test Pattern 4FSK Voice and Data Modulation, 7K60F1W Mask B, D, G, 90.691

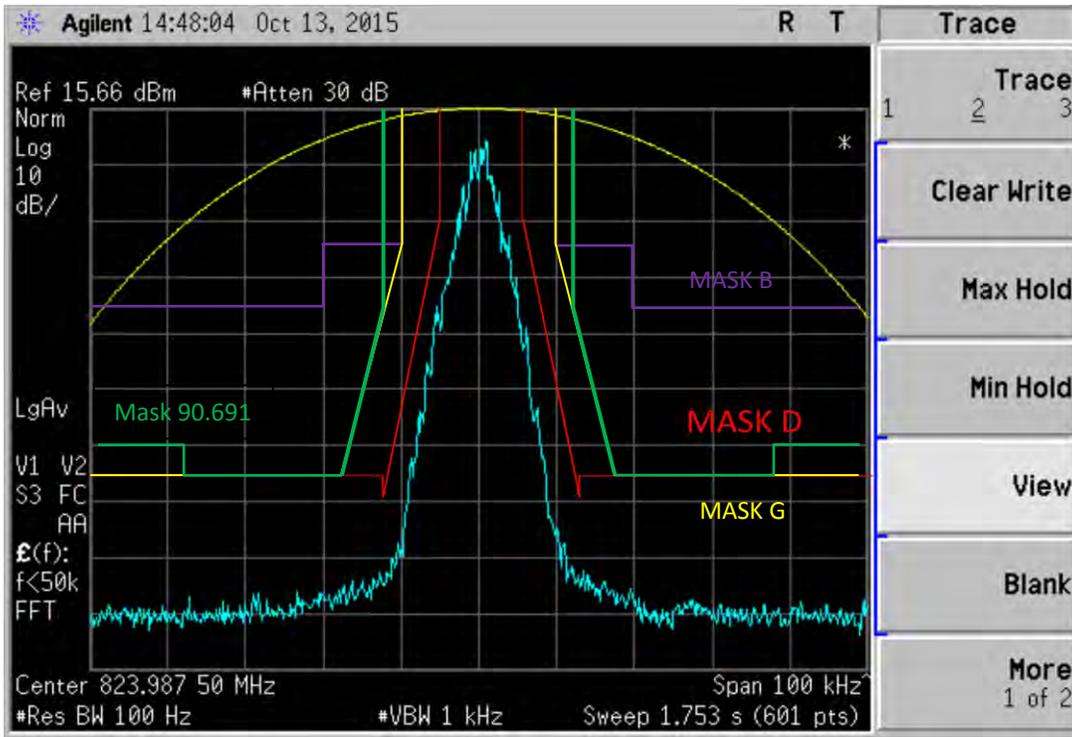


Figure 6E-7: 823.9875MHz, O.153 Test Pattern 4FSK Data Modulation only, 7K60F1D Mask B, D, G, 90.691

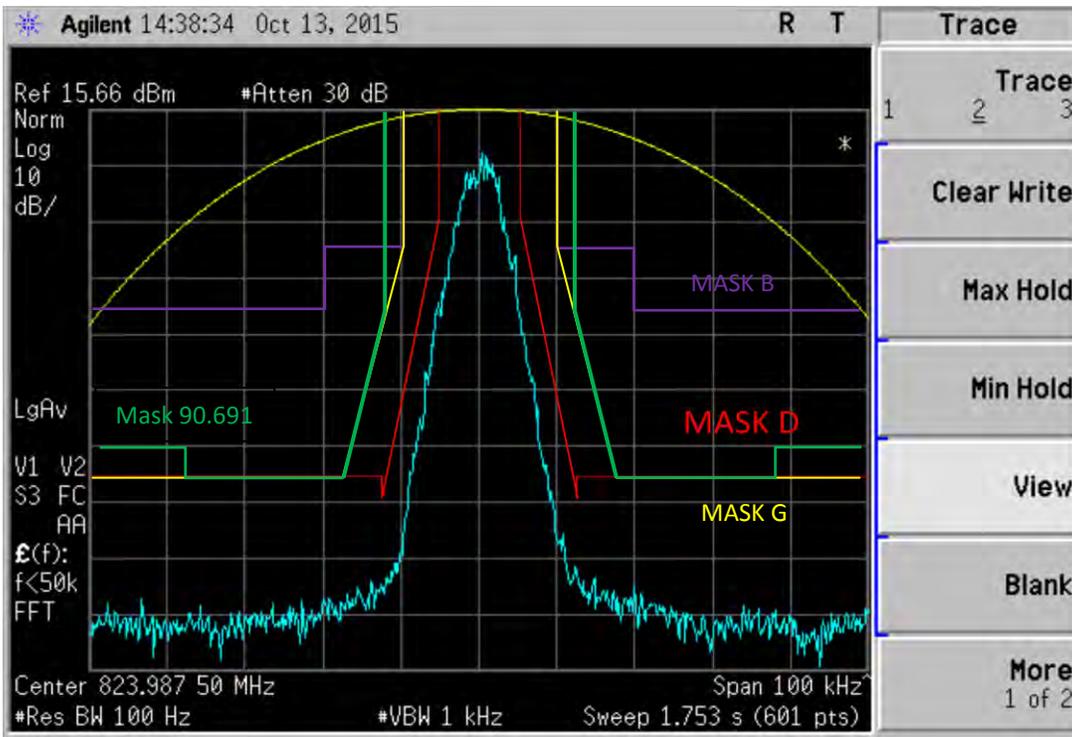


Figure 6E-8: 823.9875MHz, O.153 Test Pattern 4FSK Voice Modulation only, 7K60F1E Mask B, D, G, 90.691

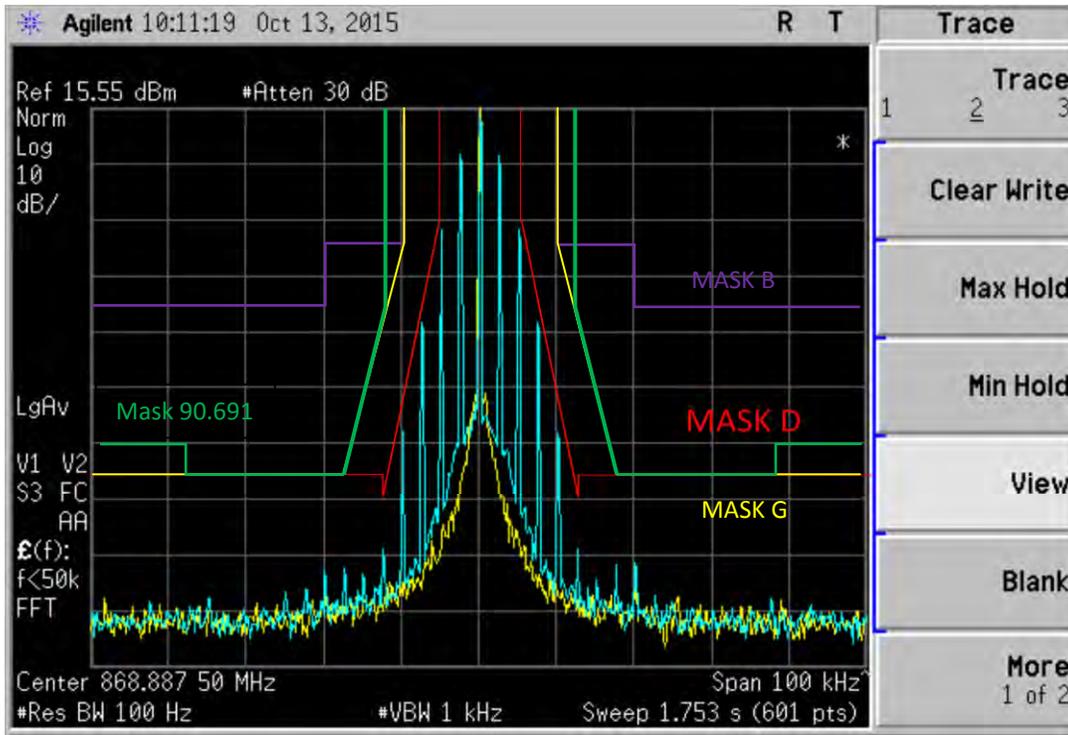


Figure 6E-9: 868.8875 MHz, 12.5 kHz Channel Spacing, 2500Hz Audio Modulation only, 11K0F3E Mask B, D, G, 90.691

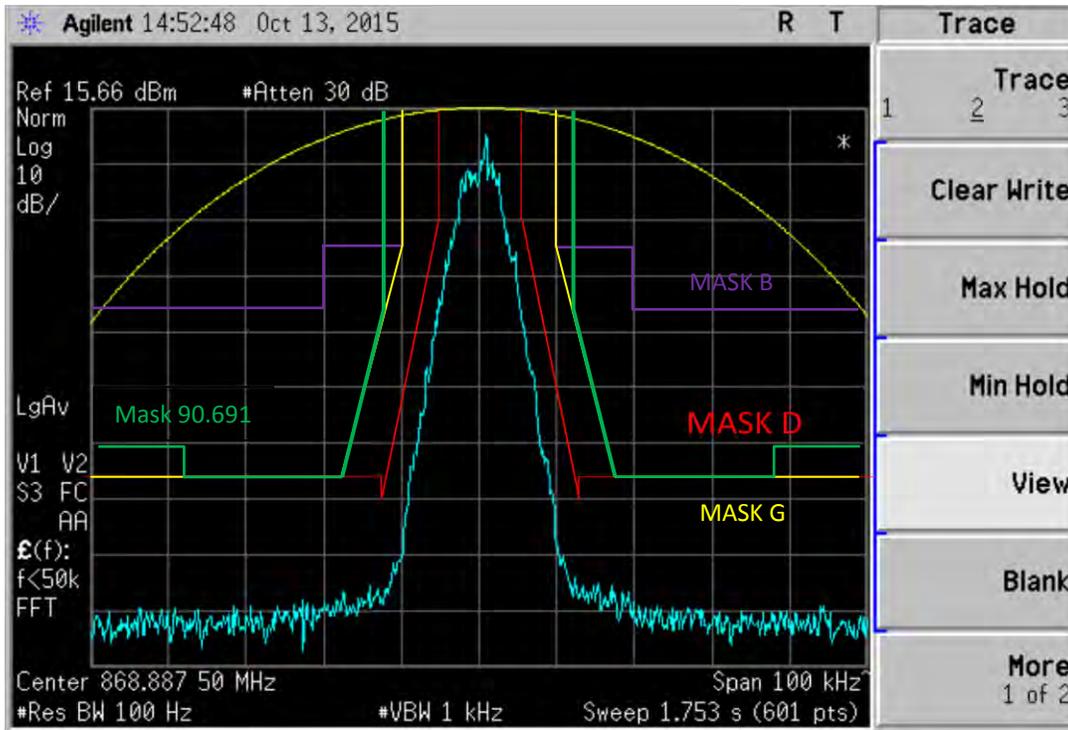


Figure 6E-10: 868.8875 MHz, O.153 Test Pattern 4FSK Voice and Data Modulation, 7K60F1W Mask B, D, G, 90.691

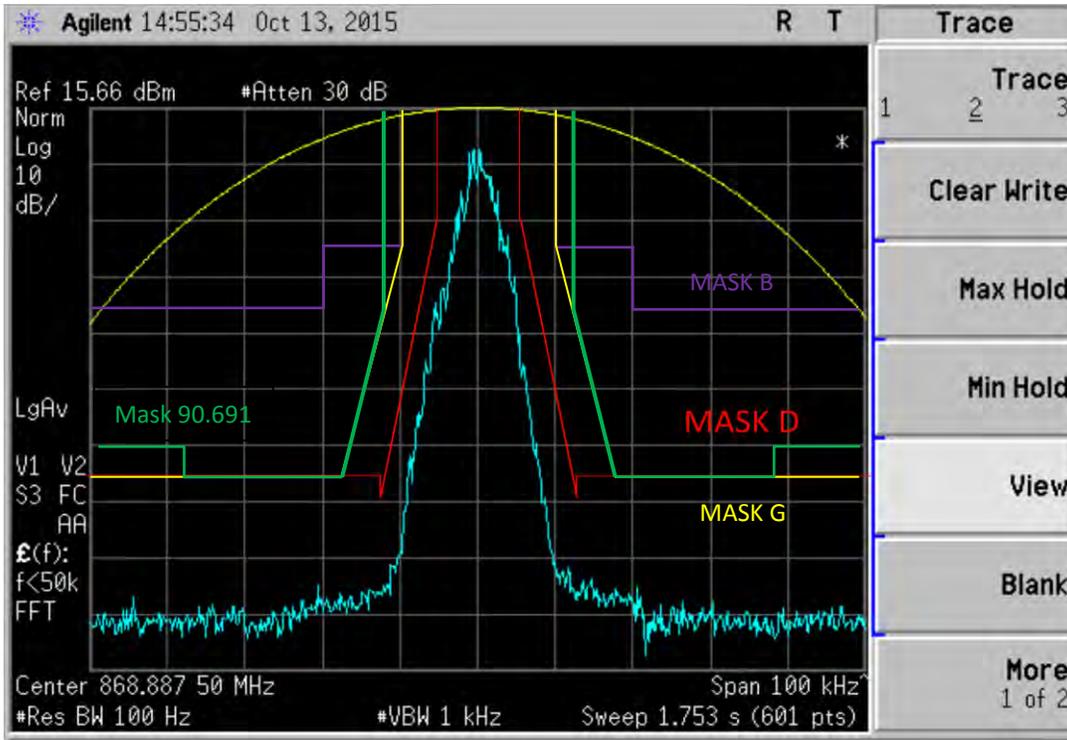


Figure 6E-11: 868.8875 MHz, O.153 Test Pattern 4FSK Data Modulation only, 7K60F1D Mask B, D, G, 90.691

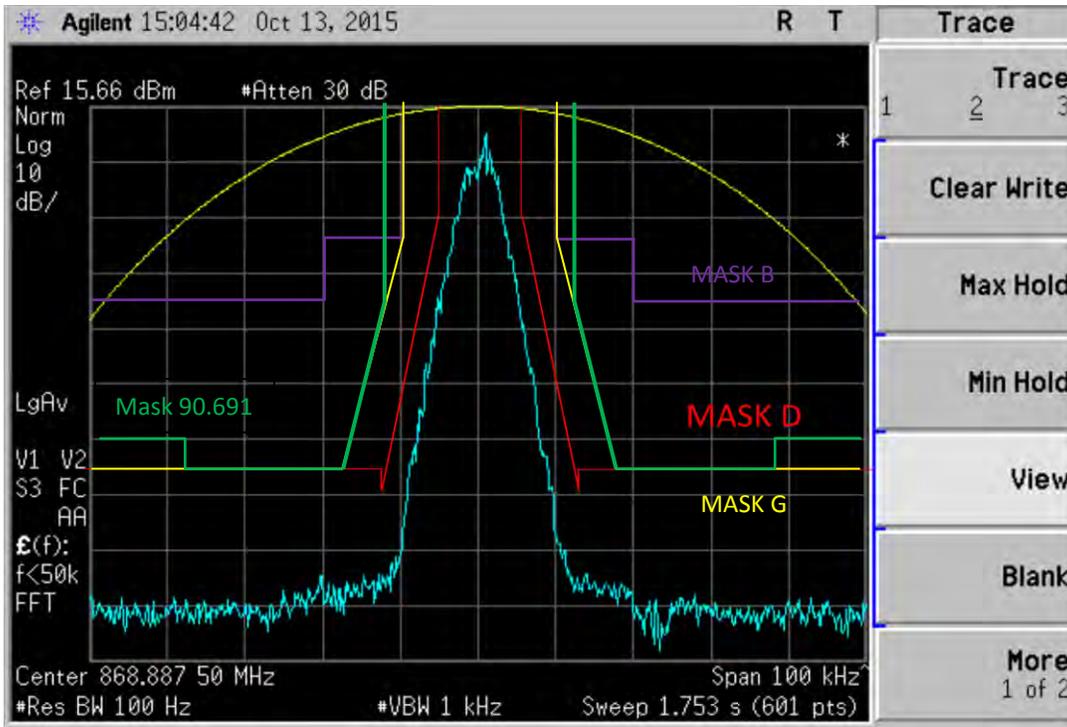


Figure 6E-12: 868.8875 MHz, O.153 Test Pattern 4FSK Voice Modulation only, 7K60F1E Mask B, D, G, 90.691

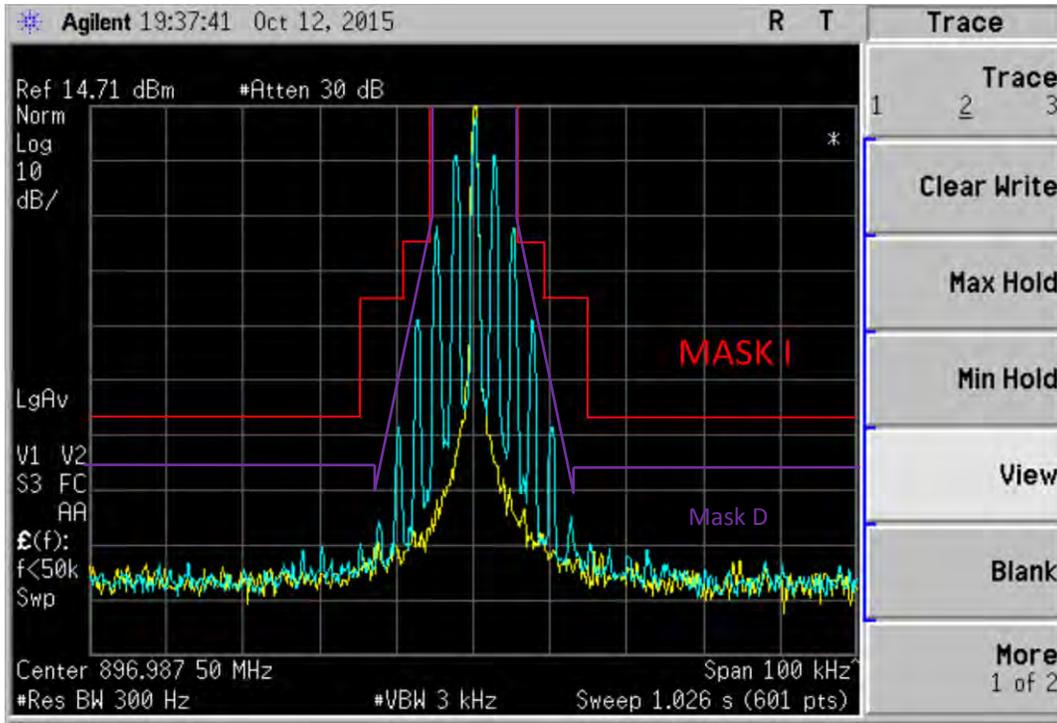


Figure 6E-13: 896.9875 MHz, 12.5 kHz Channel Spacing, 2500Hz Audio Modulation only, **11K0F3E Mask D, I**

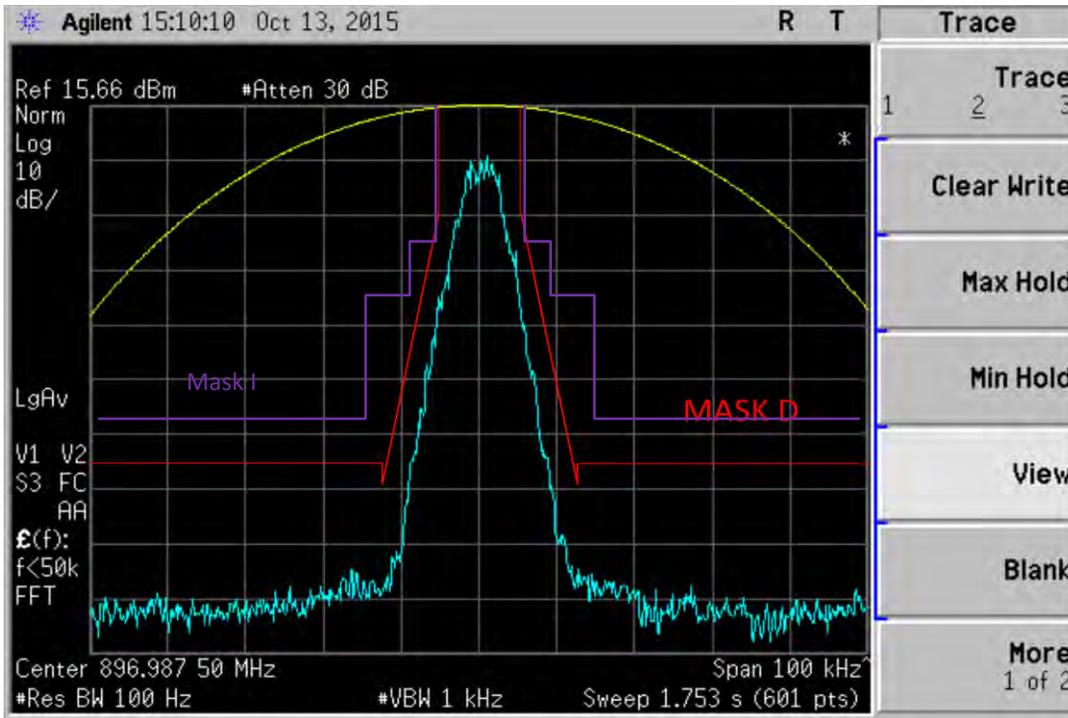


Figure 6E-14: 896.9875 MHz, O.153 Test Pattern 4FSK Voice and Data Modulation, **7K60F1W Mask D, I**

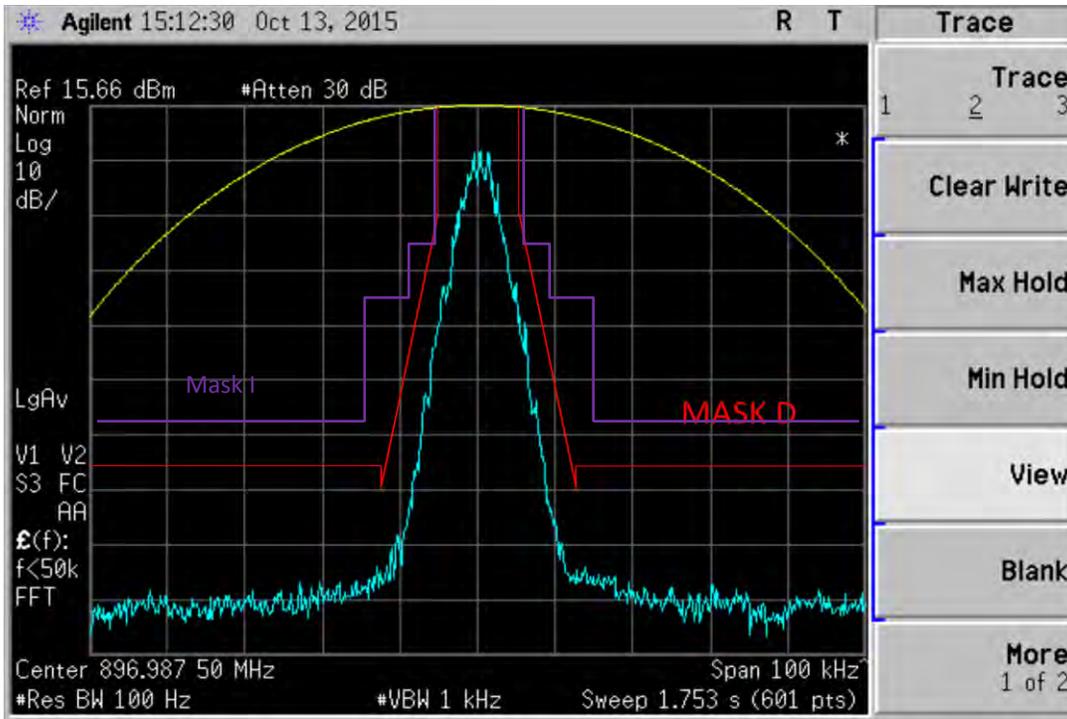


Figure 6E-15: 896.9875 MHz, O.153 Test Pattern 4FSK Data Modulation only, 7K60F1D Mask D, I

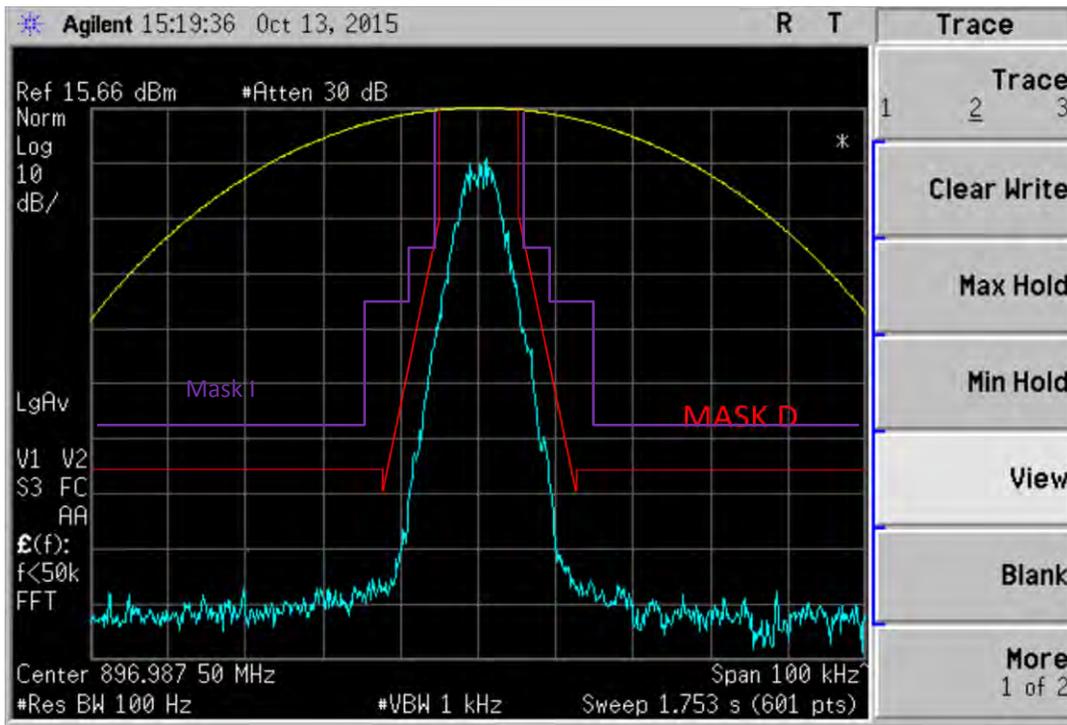


Figure 6E-16: 896.9875 MHz, O.153 Test Pattern 4FSK Voice Modulation only, 7K60F1E Mask D, I

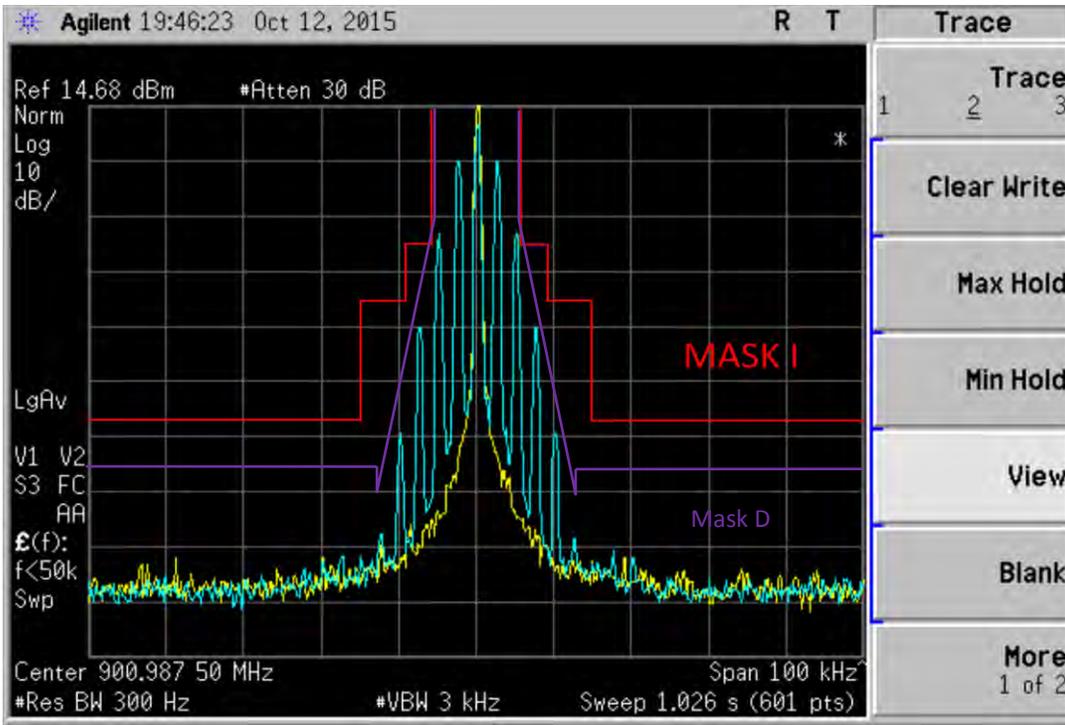


Figure 6E-17: 900.9875 MHz, 12.5 kHz Channel Spacing, 2500Hz Audio Modulation only, 11K0F3E Mask D, I

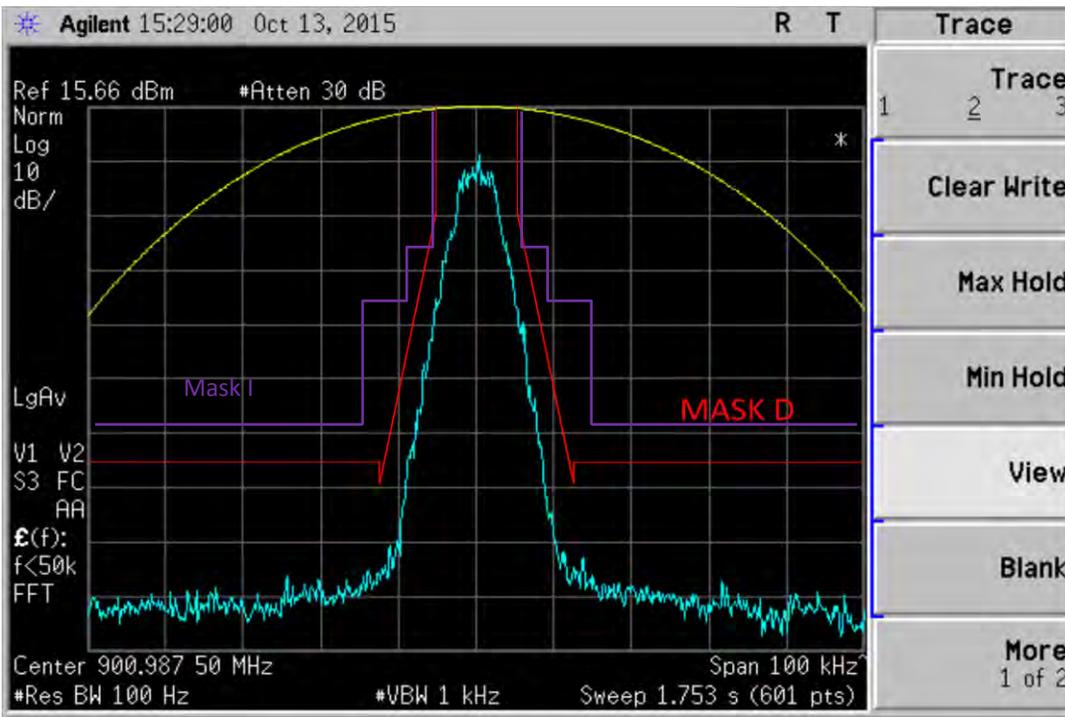


Figure 6E-18: 900.9875 MHz, O.153 Test Pattern 4FSK Voice and Data Modulation, 7K60F1D Mask D, I

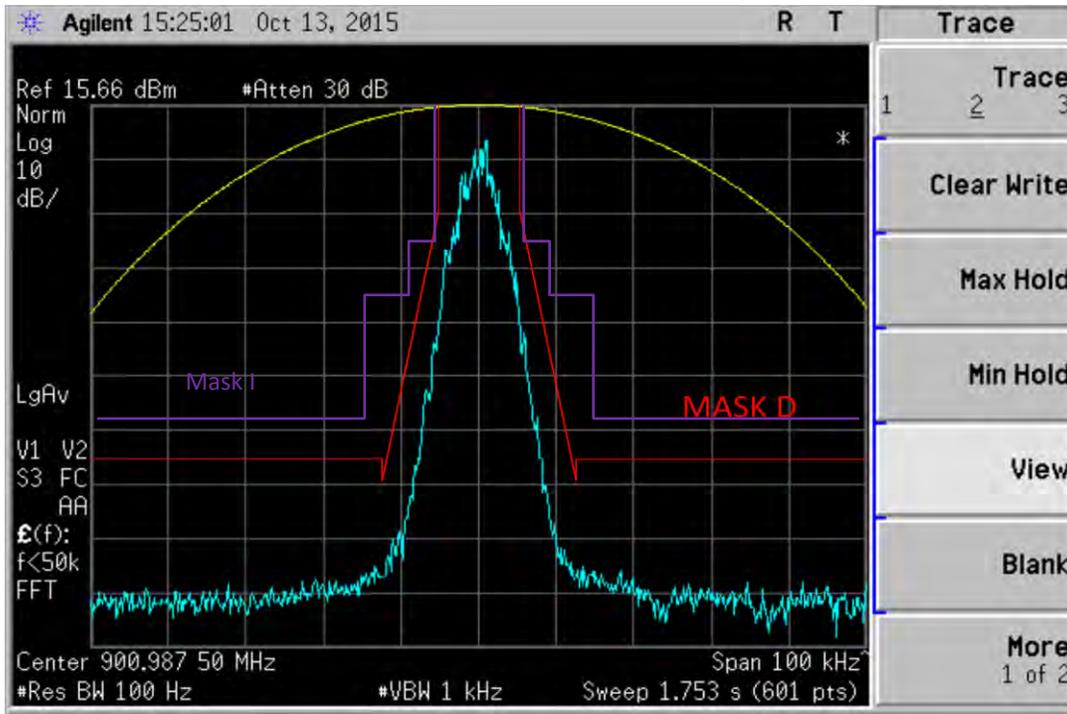


Figure 6E-19: 900.9875 MHz, O.153 Test Pattern 4FSK Data Modulation only, 7K60F1D Mask D, I

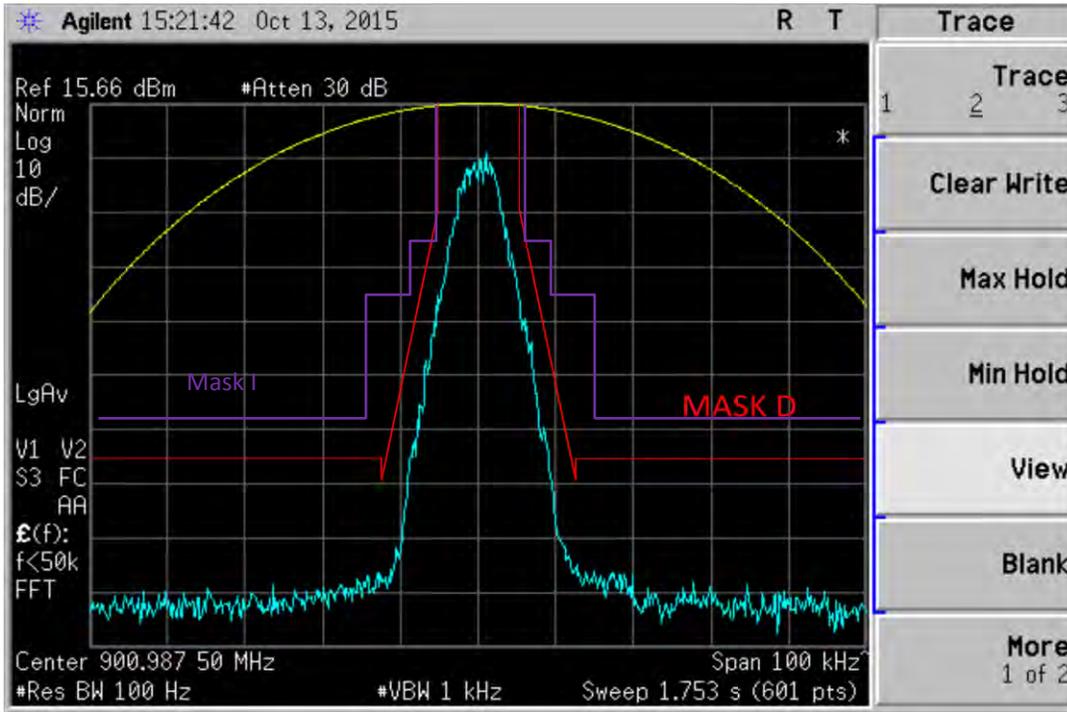


Figure 6E-20: 900.9875 MHz, O.153 Test Pattern 4FSK Voice Modulation only, 7K60F1E Mask D, I

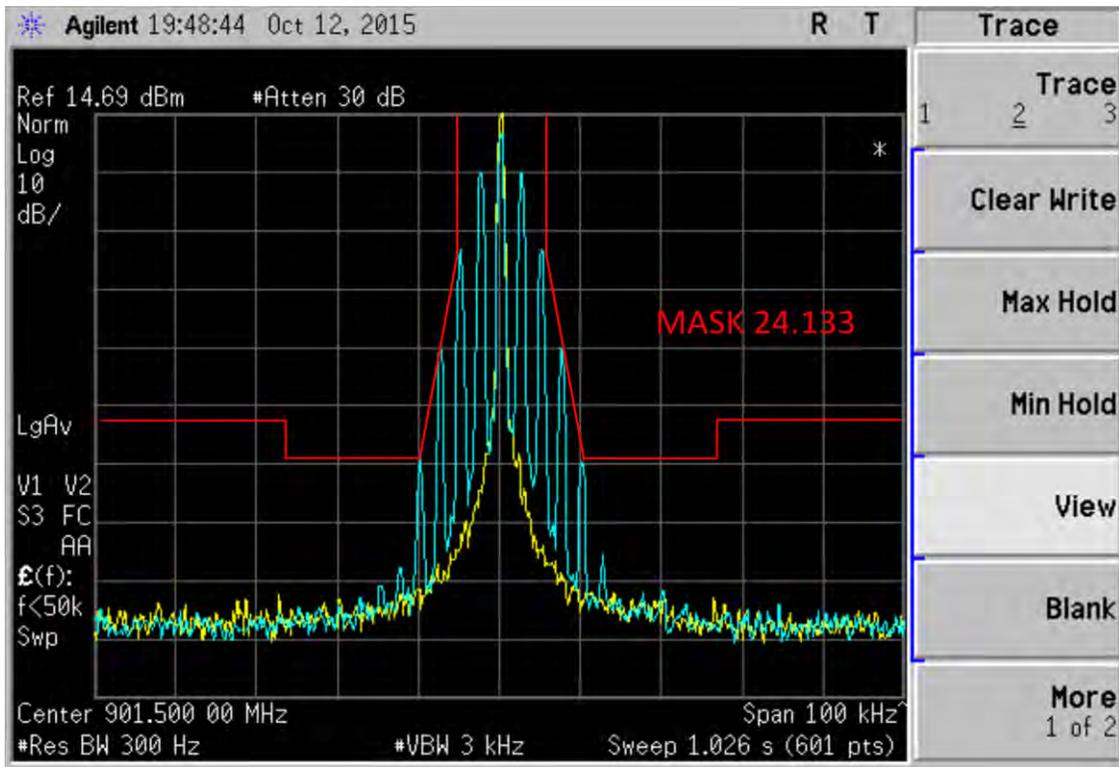


Figure 6E-21: 901.5 MHz, 12.5 kHz Channel Spacing, 2500Hz Audio Modulation only, 11K0F3E Mask 24.133 (Part 24)

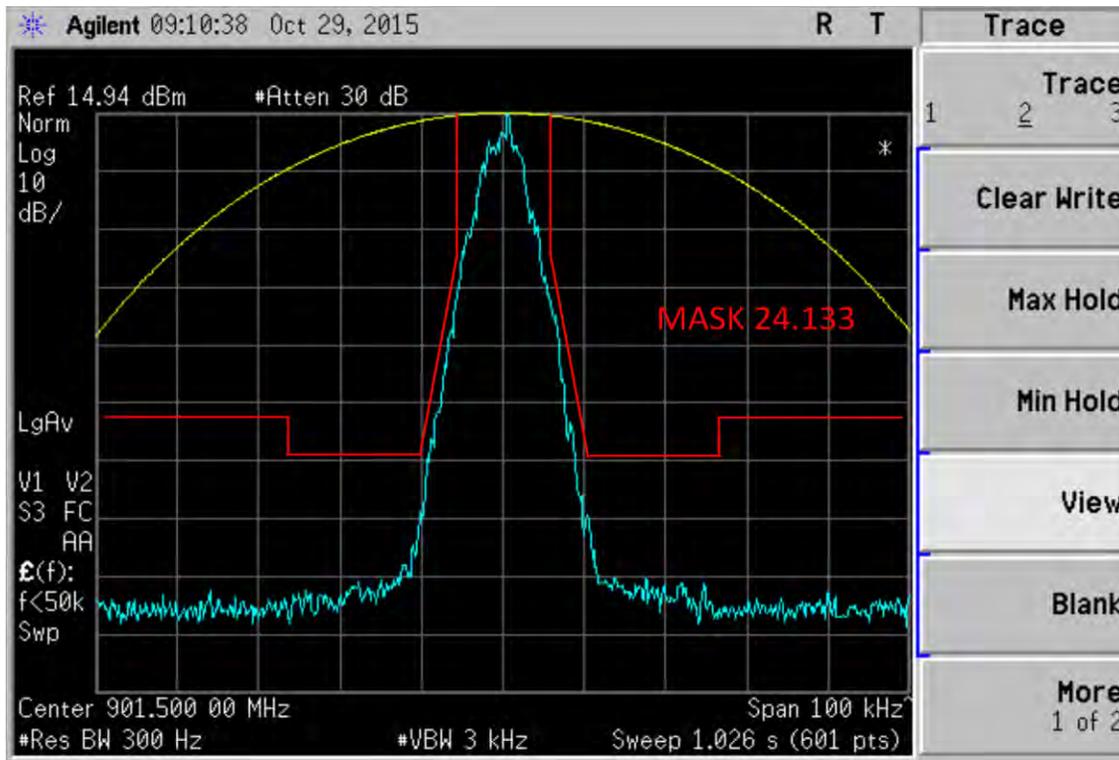


Figure 6E-22: 901.5 MHz, O.153 Test Pattern 4FSK Voice and Data Modulation, 7K60F1D Mask 24.133 (Part 24)

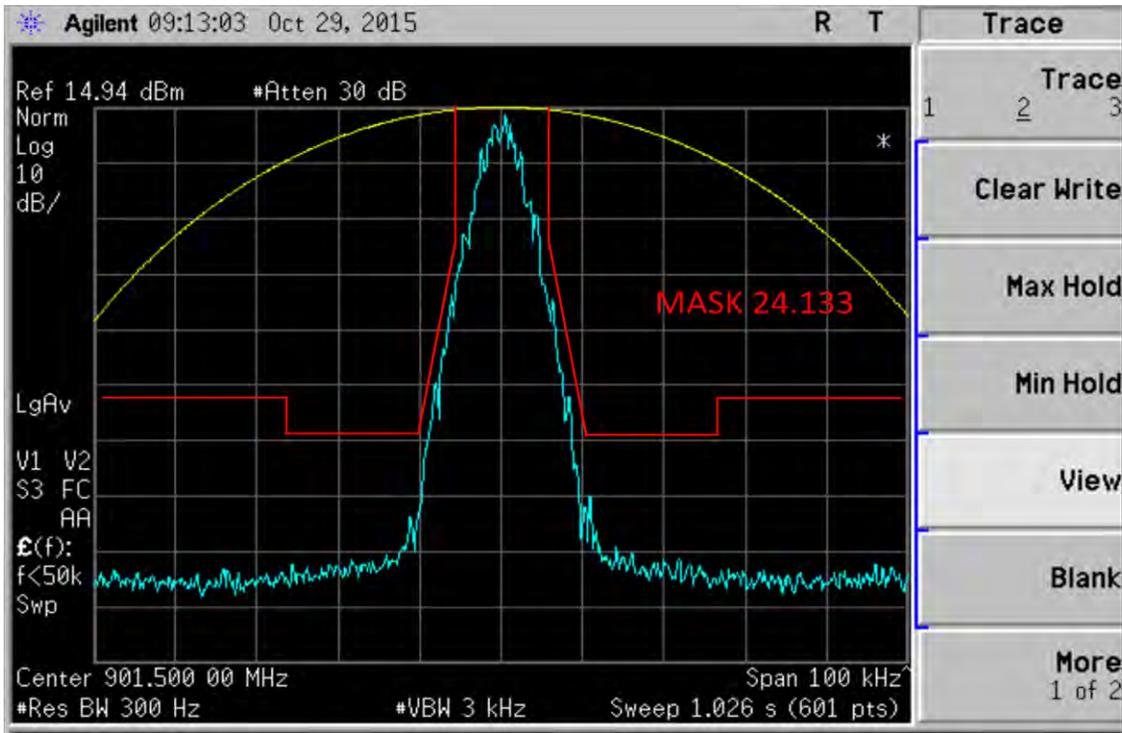


Figure 6E-23: 901.5 MHz, O.153 Test Pattern 4FSK Data Modulation only, 7K60F1D Mask 24.133 (Part 24)

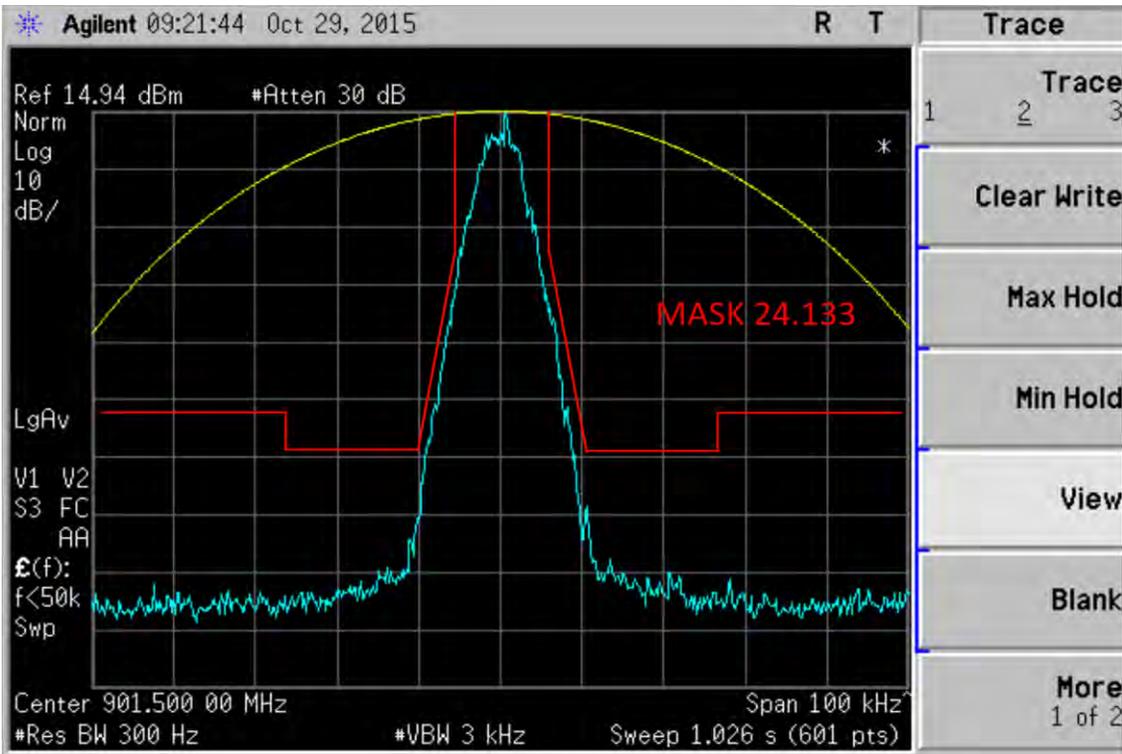


Figure 6E-24: 901.5 MHz, O.153 Test Pattern 4FSK Voice Modulation only, 7K60F1E Mask 24.133 (Part 24)

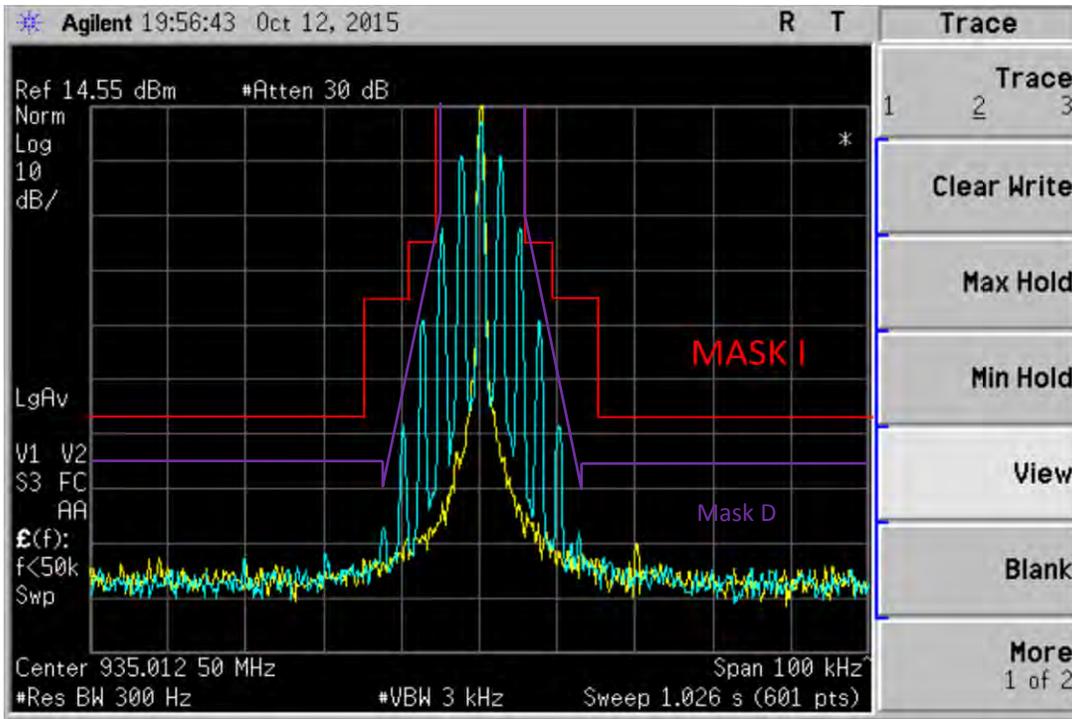


Figure 6E-25: 935.0125 MHz, 12.5 kHz Channel Spacing, 2500Hz Audio Modulation only, 11K0F3E Mask D, I

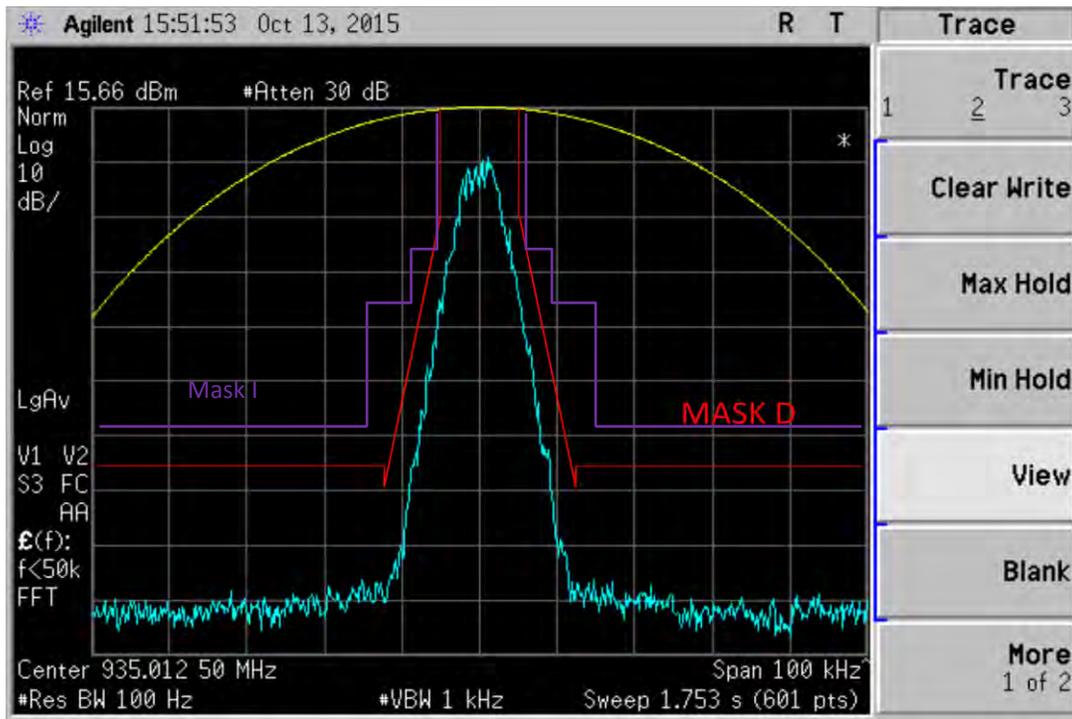


Figure 6E-26: 935.0125 MHz, 0.153 Test Pattern 4FSK Voice and Data Modulation, 7K60F1D Mask D, I

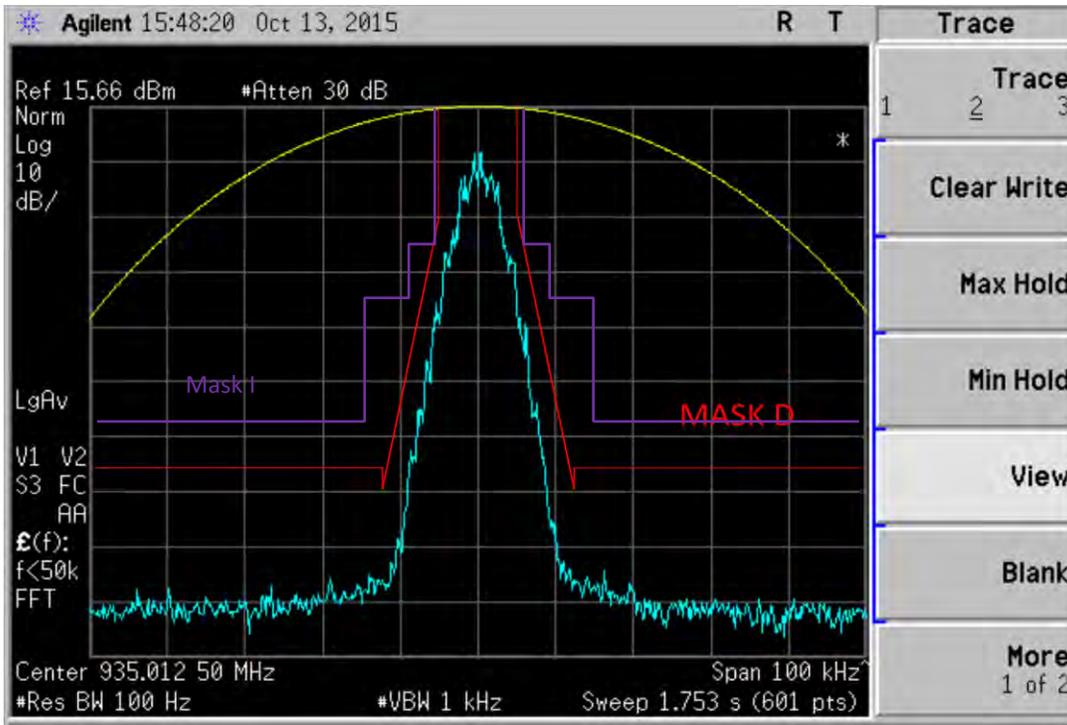


Figure 6E-27: 935.0125 MHz, O.153 Test Pattern 4FSK Data Modulation only, 7K60F1D Mask D, I

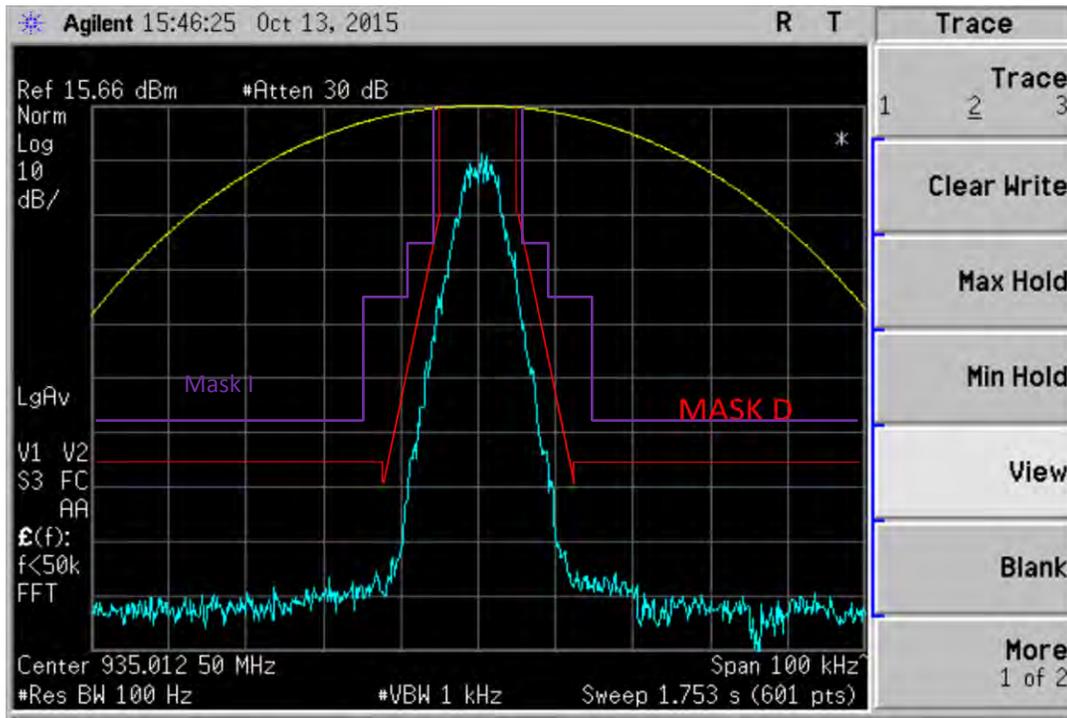


Figure 6E-28: 935.0125 MHz, O.153 Test Pattern 4FSK Voice Modulation only, 7K60F1E Mask D, I

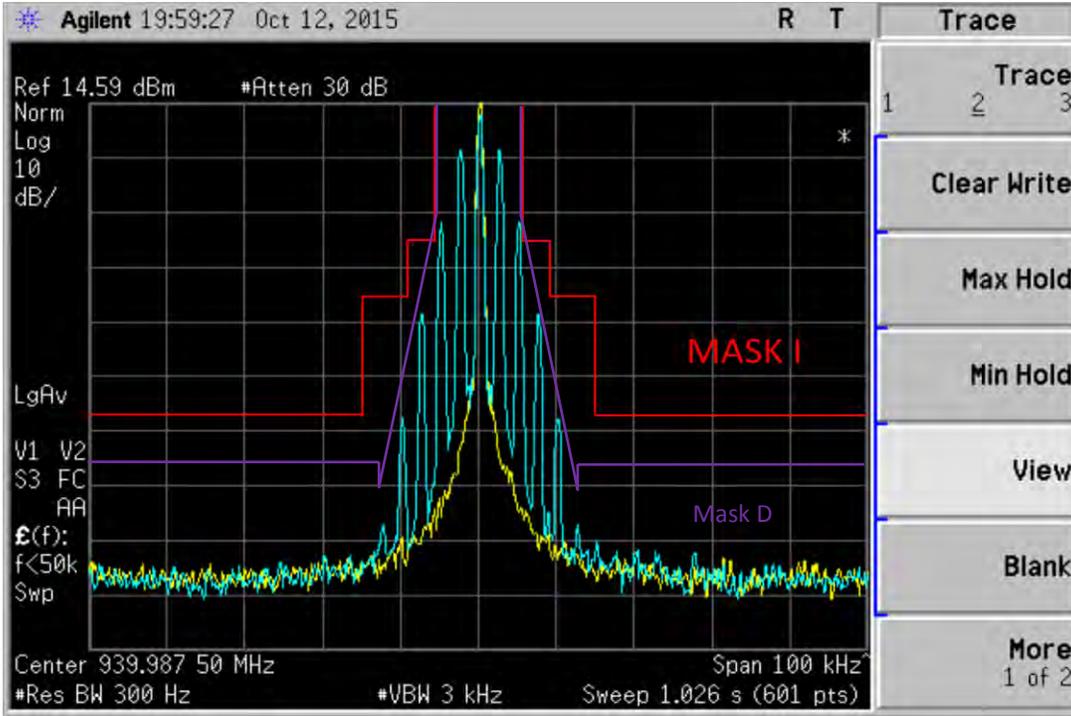


Figure 6E-29: 939.9875 MHz, 12.5 kHz Channel Spacing, 2500Hz Audio Modulation only, 11K0F3E Mask D, I

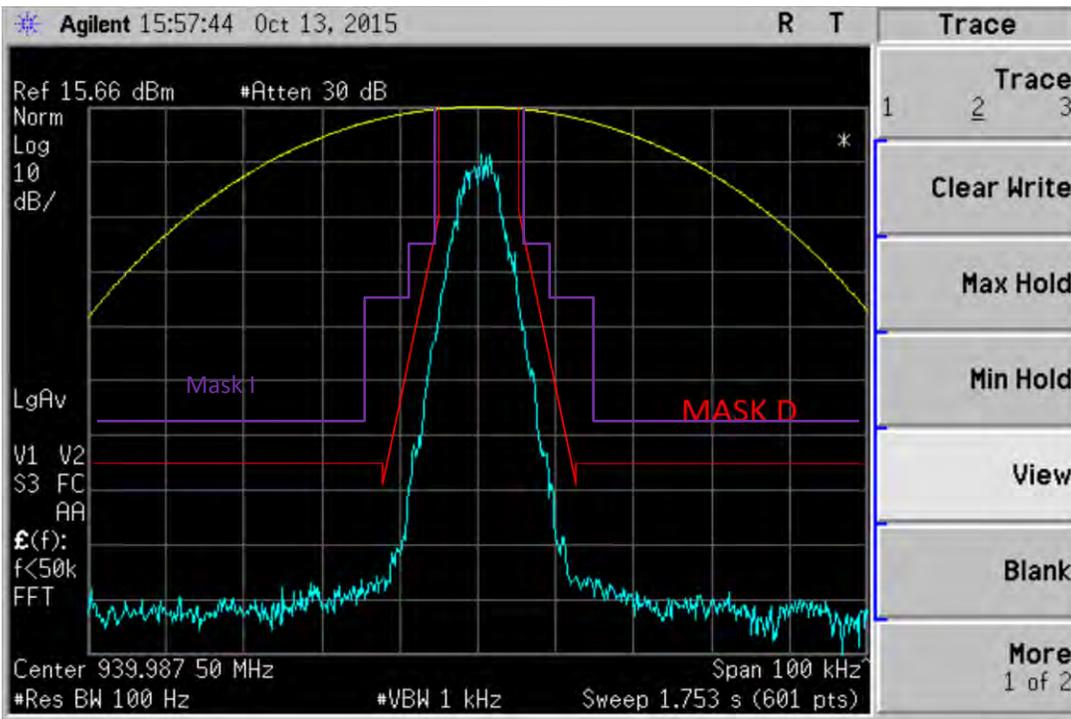


Figure 6E-30: 939.9875 MHz, 0.153 Test Pattern 4FSK Voice and Data Modulation, 7K60F1W Mask D, I

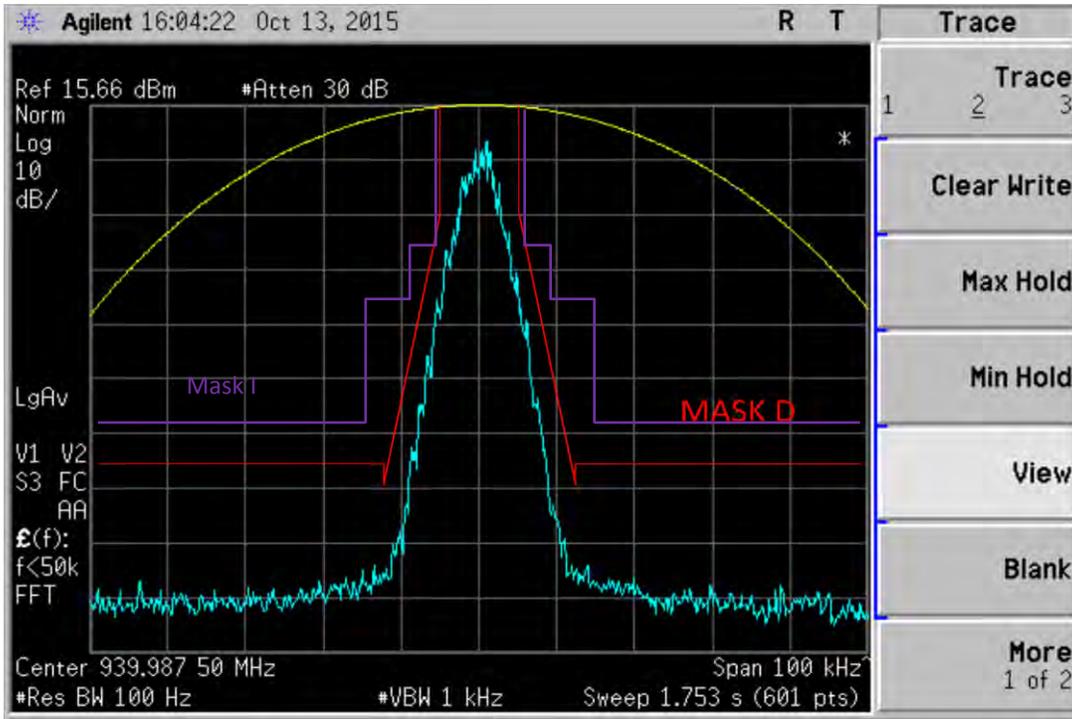


Figure 6E-31: 939.9875 MHz, O.153 Test Pattern 4FSK Data Modulation only, 7K60F1D Mask D, I

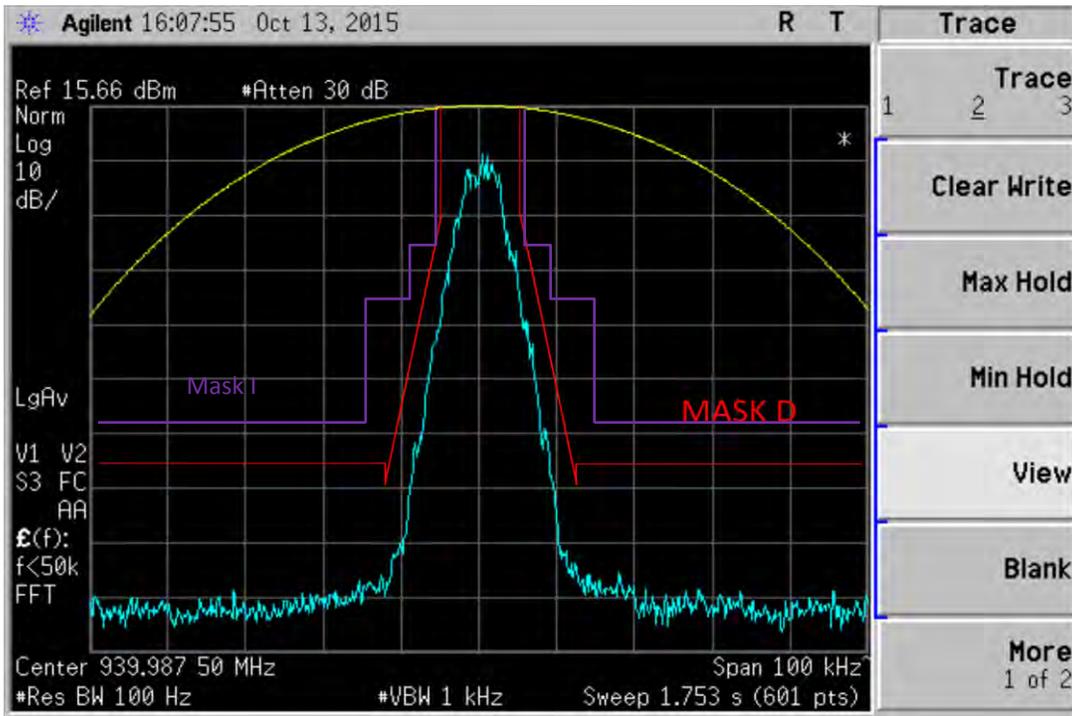


Figure 6E-32: 939.9875 MHz, O.153 Test Pattern 4FSK Voice Modulation only, 7K60F1E Mask D, I

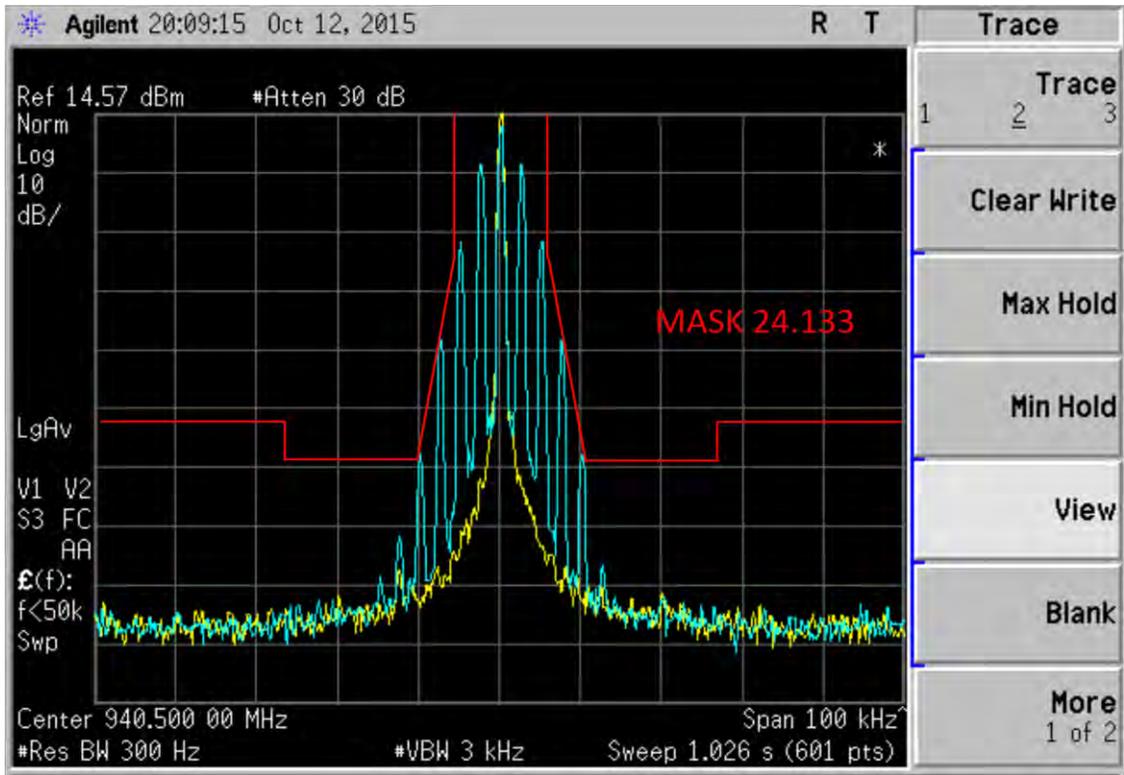


Figure 6E-33: 940.5 MHz, 12.5 kHz Channel Spacing, 2500Hz Audio Modulation only, 10K0F3E Mask 24.133 (Part 24)

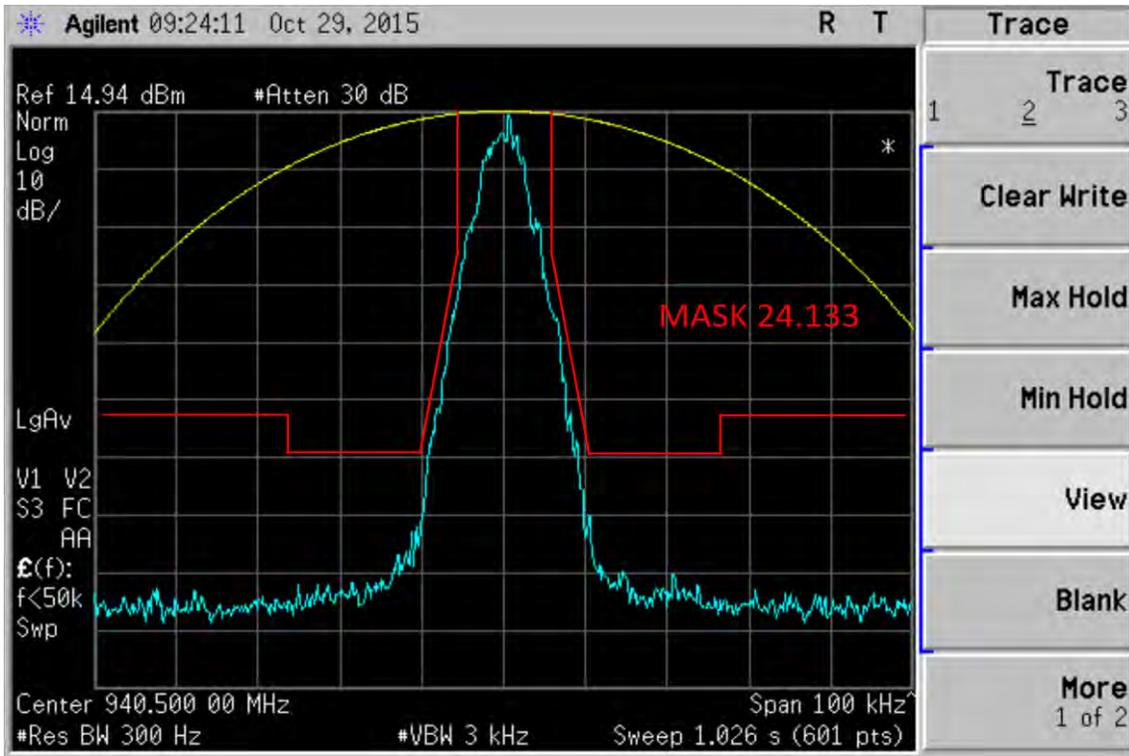


Figure 6E-34: 940.5 MHz, O.153 Test Pattern 4FSK Voice and Data Modulation, 7K60F1D Mask 24.133 (Part 24)

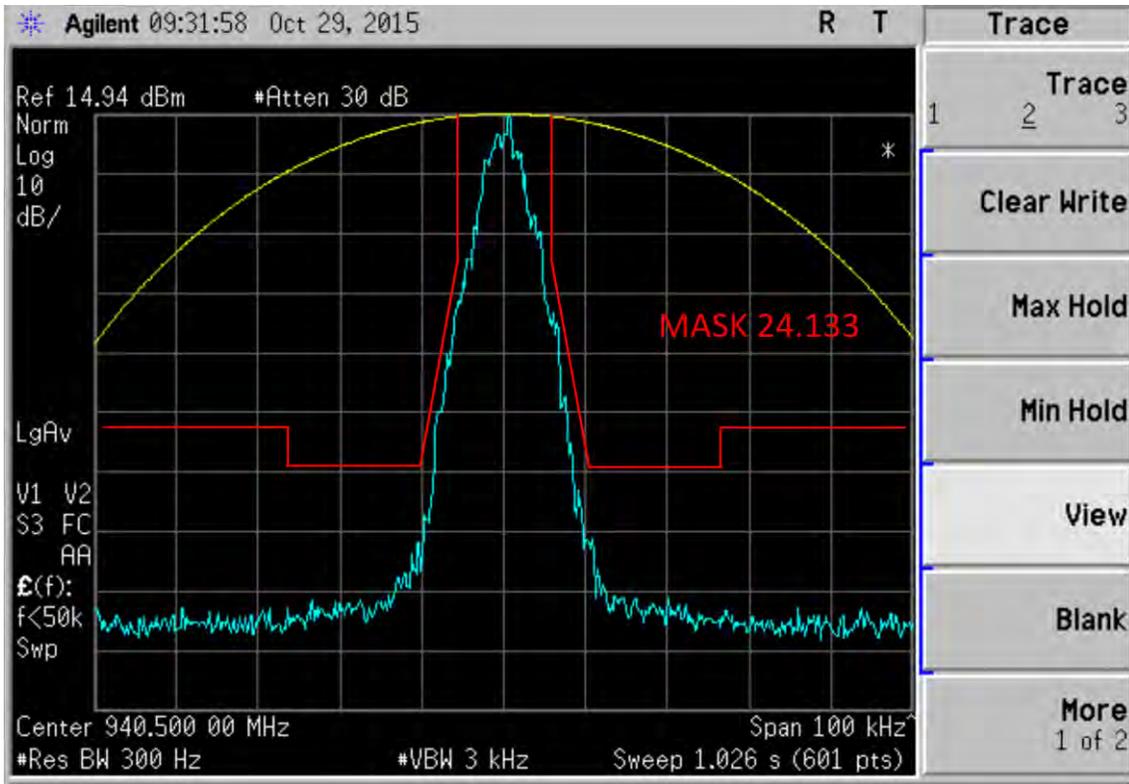


Figure 6E-35: 940.5 MHz, O.153 Test Pattern 4FSK Data Modulation only, 7K60F1D Mask 24.133 (Part 24)

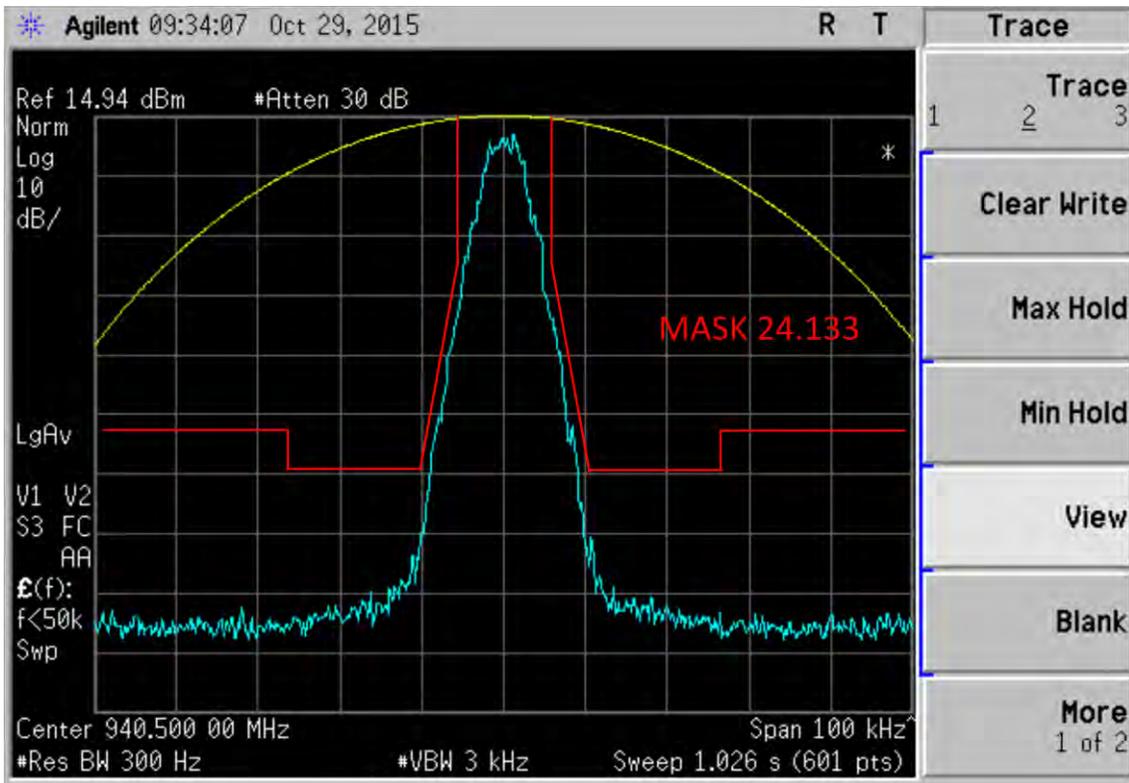


Figure 6E-36: 940.5 MHz, O.153 Test Pattern 4FSK Voice Modulation only, 7K60F1E Mask 24.133 (Part 24)

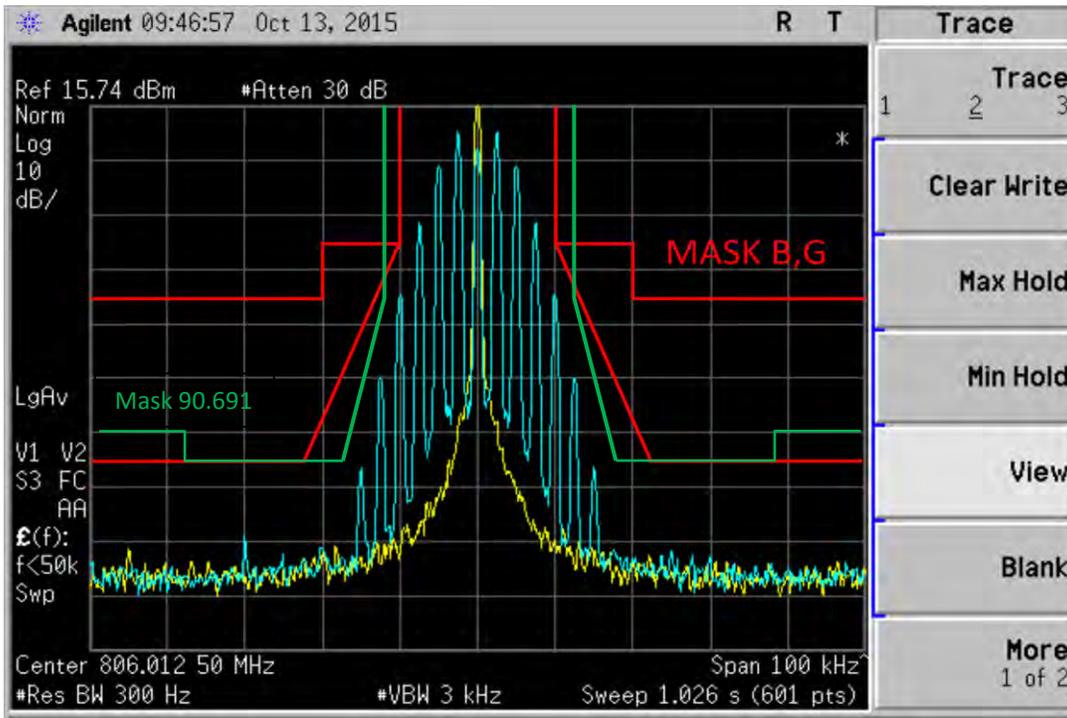


Figure 6E-37: 806.0125 MHz, 25 kHz Channel Spacing, 2500Hz Audio Modulation only, 16K0F3E Mask B, G, 90.691

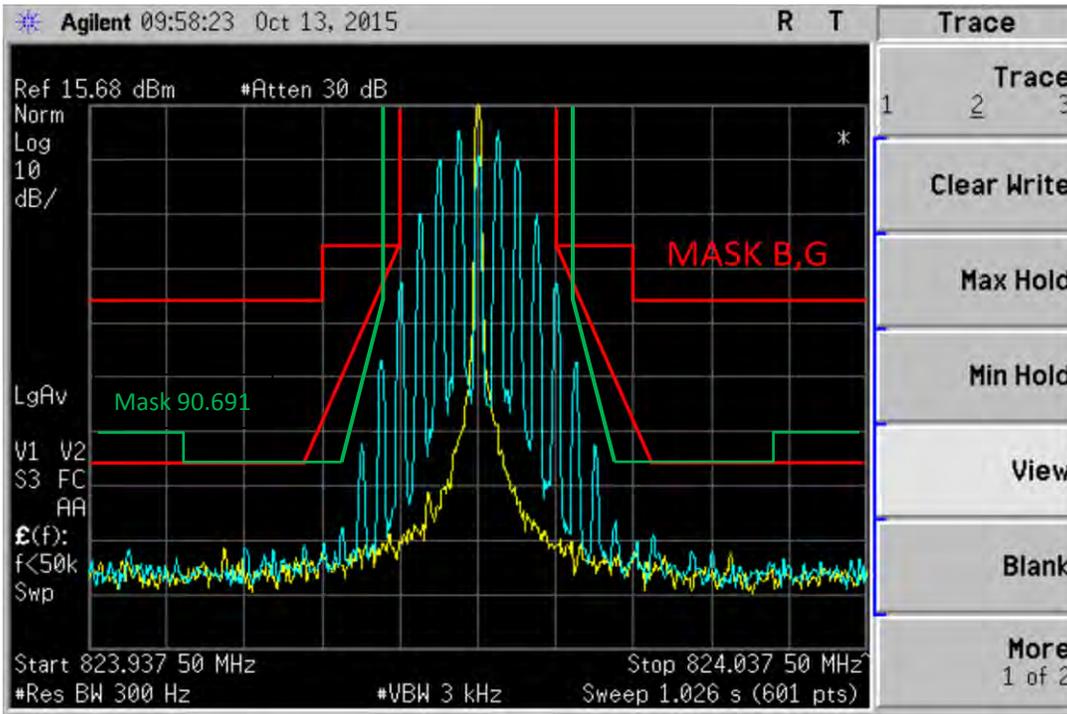


Figure 6E-38: 823.9875 MHz, 25 kHz Channel Spacing, 2500Hz Audio Modulation only, 16K0F3E Mask B,G, 90.691

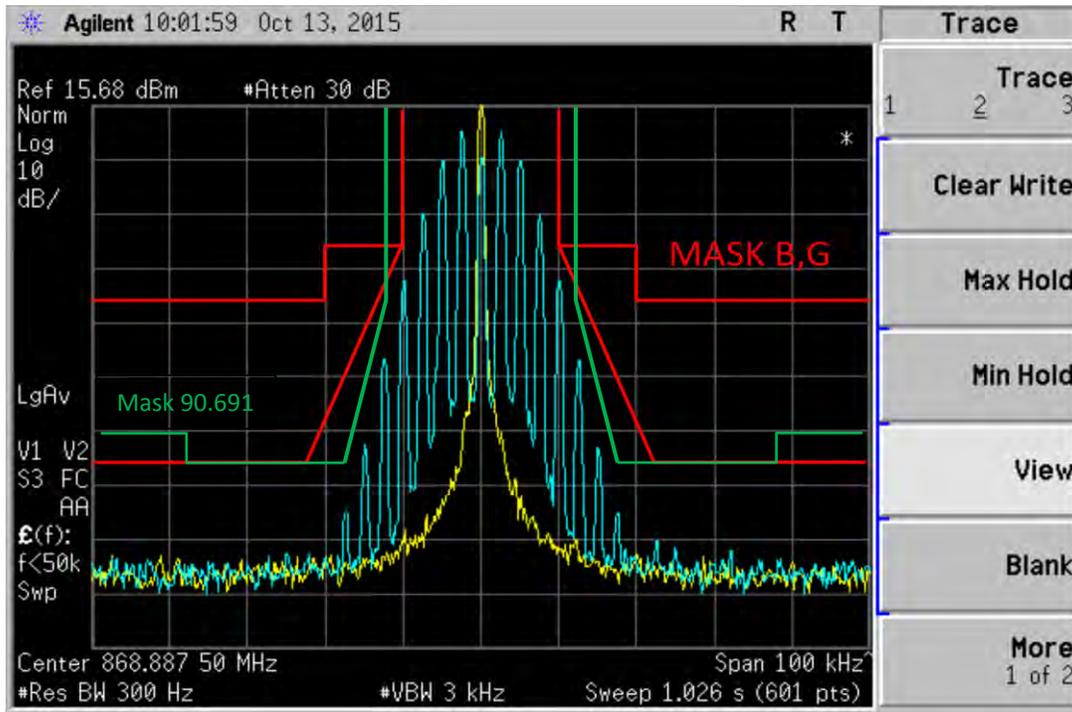


Figure 6E-39: 868.8875 MHz, 25 kHz Channel Spacing, 2500Hz Audio Modulation only, 16K0F3E Mask B, G, 90.691

*** NOTE:-**

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

Note: Display lines on graphs correspond to the FCC limit of – 13dBm (25 kHz) & -20dBm (12.5 kHz).

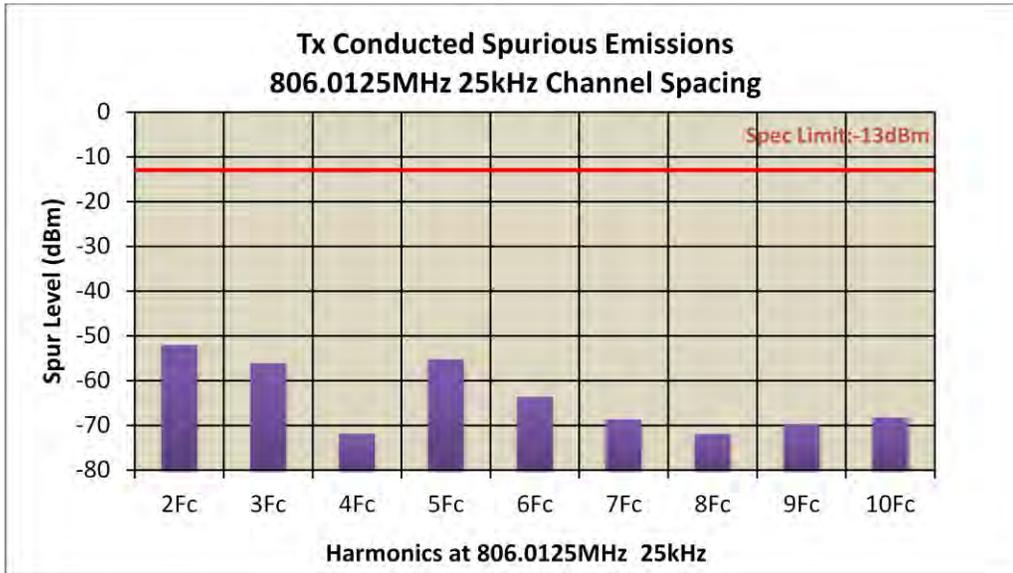


Figure 6F-1 : 42 W Harmonic of Carrier 806.0125 MHz, 25 kHz Channel Spacing

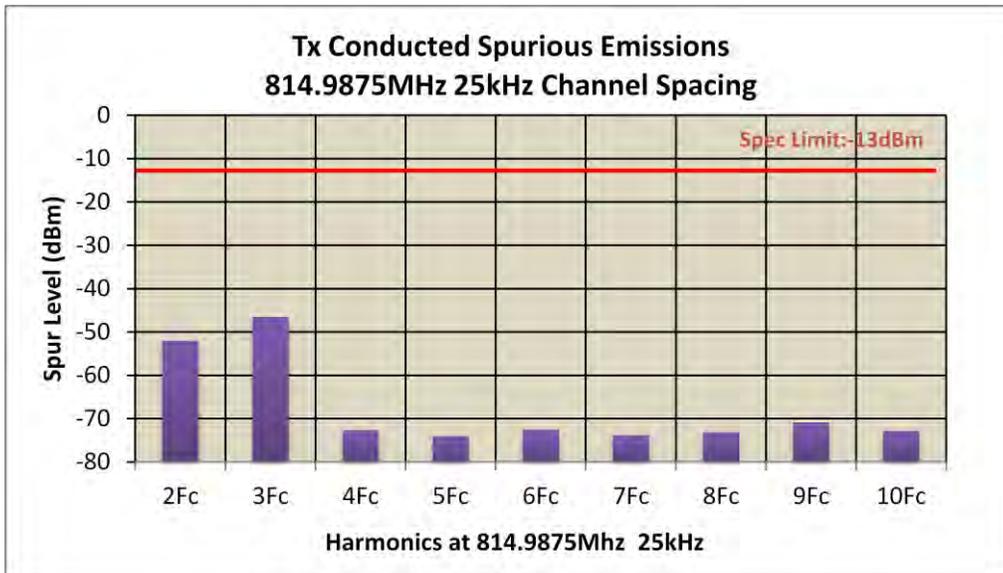


Figure 6F-2 : 42 W Harmonic of Carrier 814.9875 MHz, 25 kHz Channel Spacing

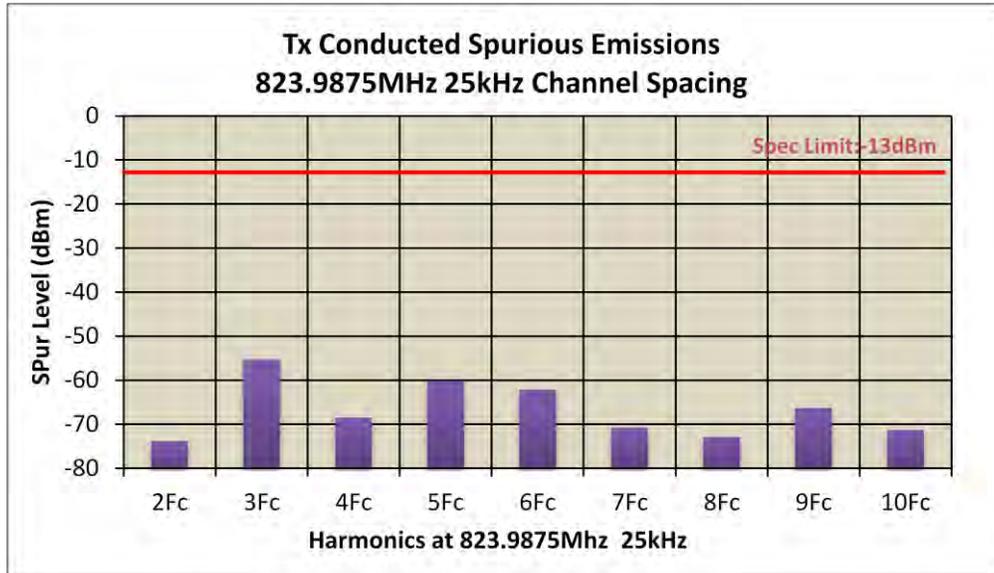


Figure 6F-3 : 42 W Harmonic of Carrier 823.9875 MHz, 25 kHz Channel Spacing

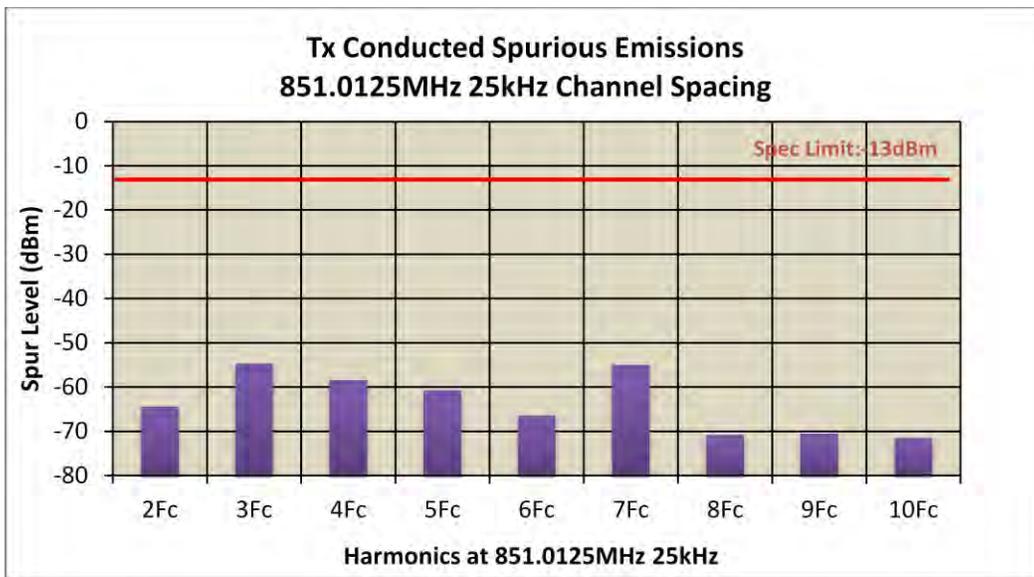


Figure 6F-4 : 42 W Harmonic of Carrier 851.0125 MHz, 25 kHz Channel Spacing

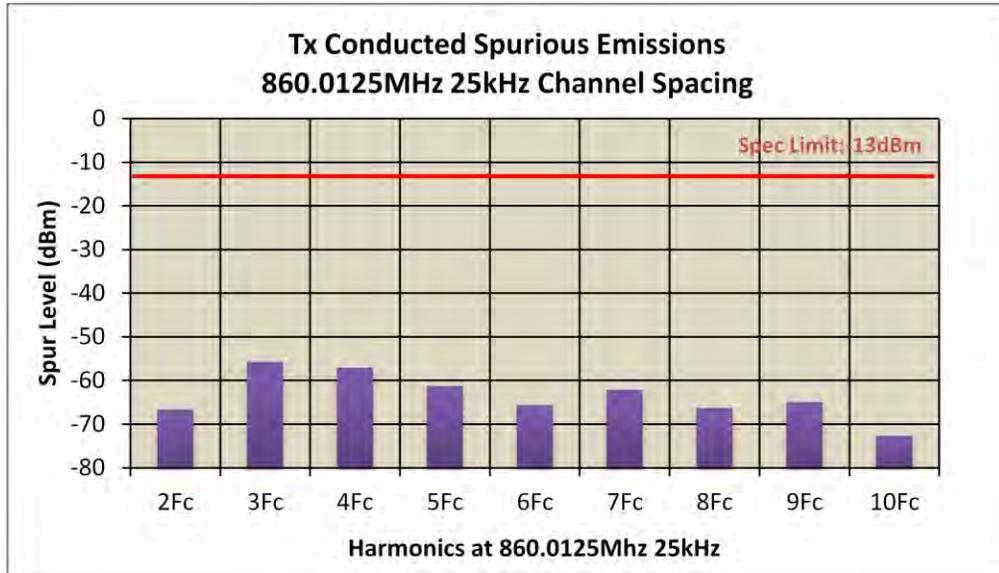


Figure 6F-5 : 42 W Harmonic of Carrier 860.0125 MHz, 25 kHz Channel Spacing

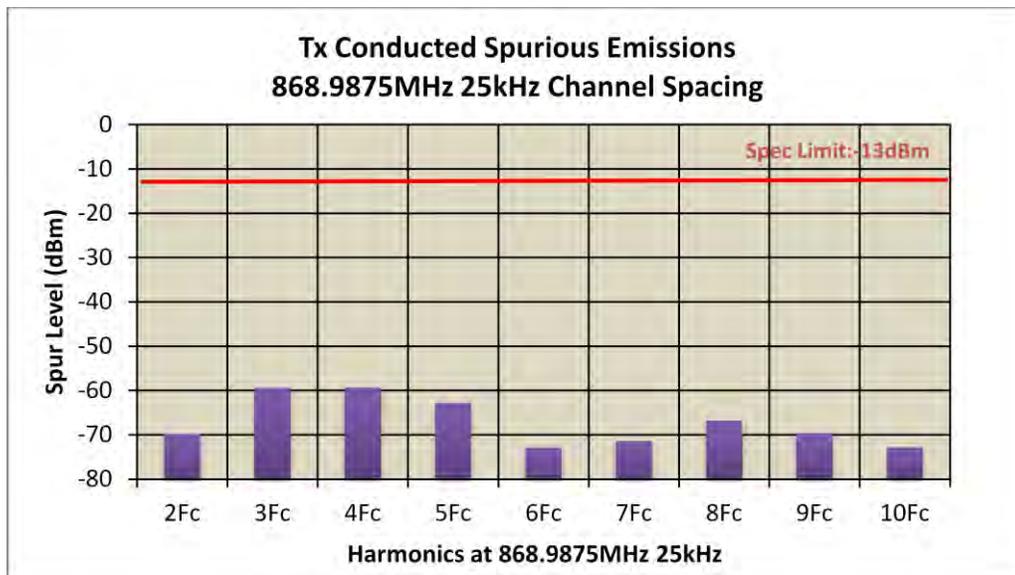


Figure 6F-6 : 42 W Harmonic of Carrier 868.9875 MHz, 25 kHz Channel Spacing

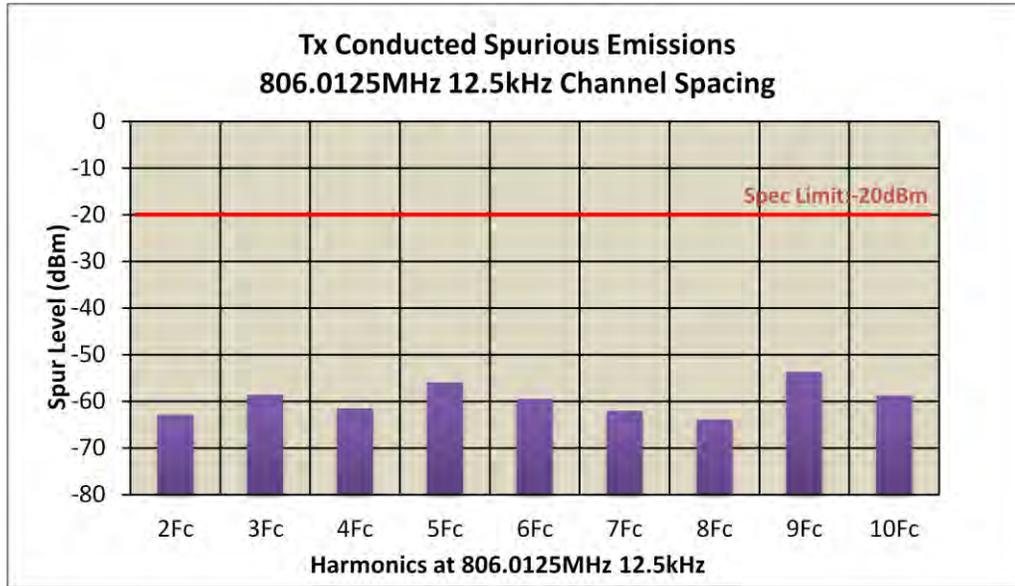


Figure 6F-7 : 42 W Harmonic of Carrier 806.0125 MHz, Digital 12.5 kHz Channel Spacing

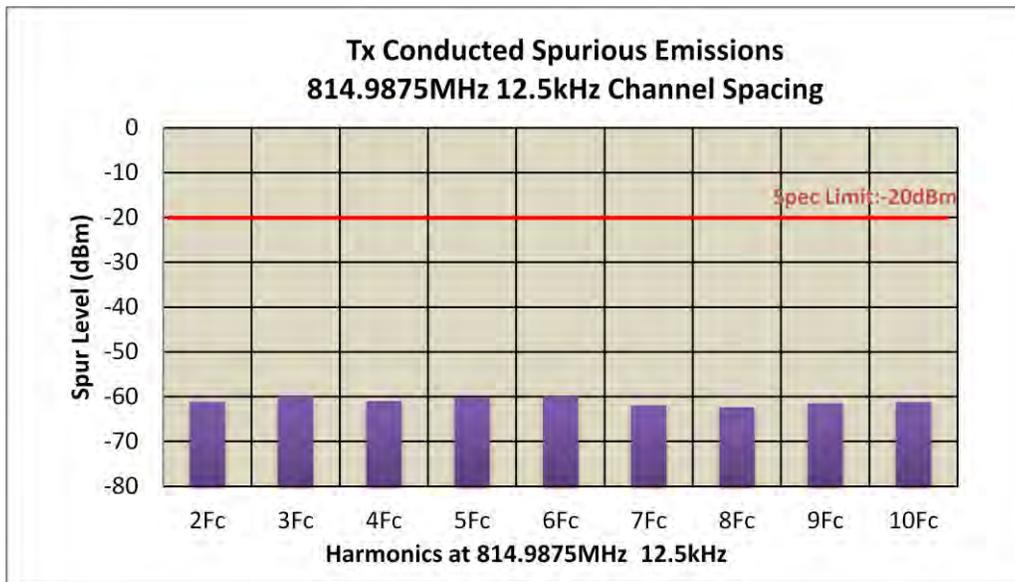


Figure 6F-8 : 42 W Harmonic of Carrier 814.9875 MHz, Digital 12.5 kHz Channel Spacing

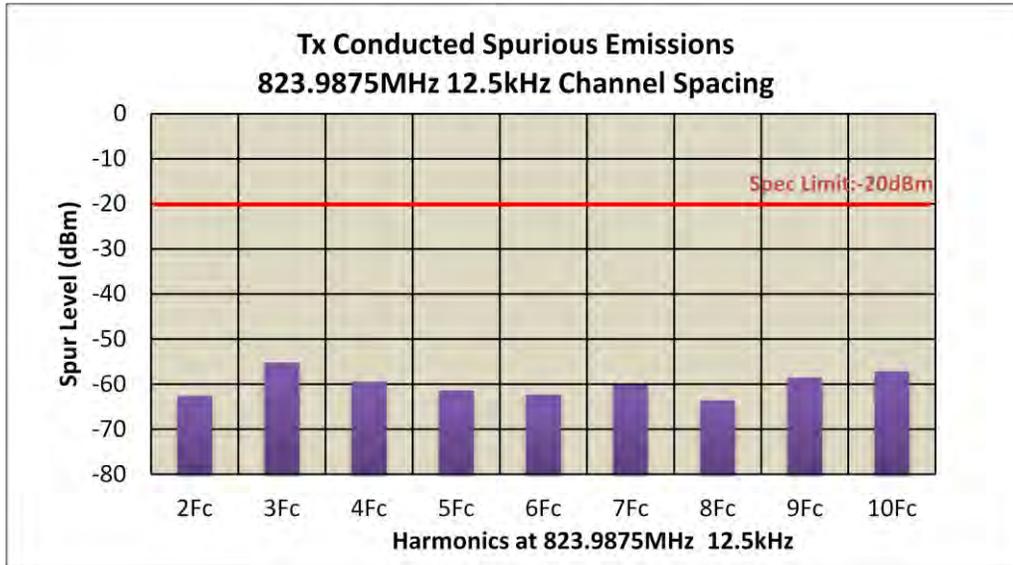


Figure 6F-9: 42 W Harmonic of Carrier 823.9875 MHz, Digital 12.5 kHz Channel Spacing

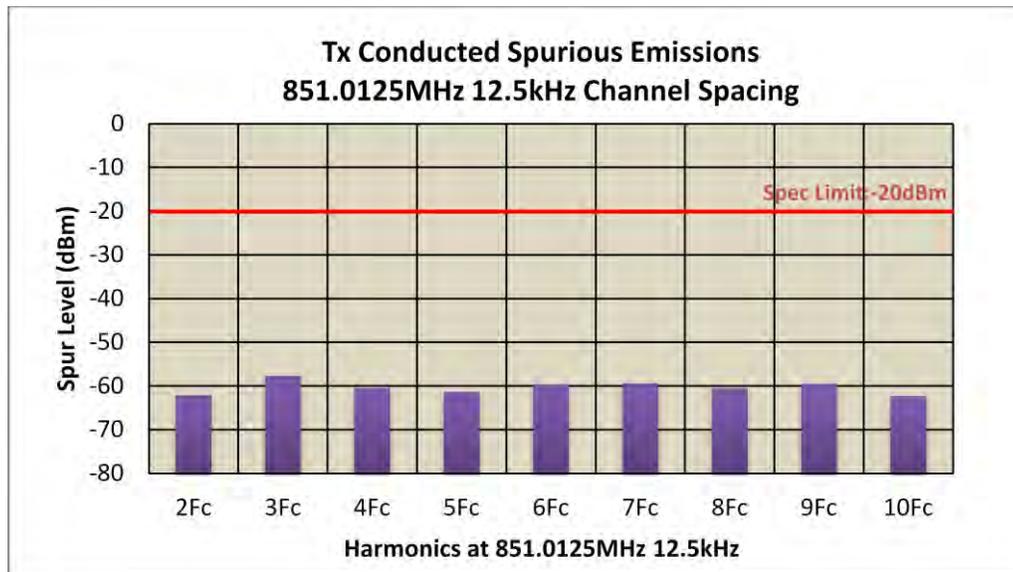


Figure 6F-10 : 42 W Harmonic of Carrier 851.0125 MHz, Digital 12.5 kHz Channel Spacing

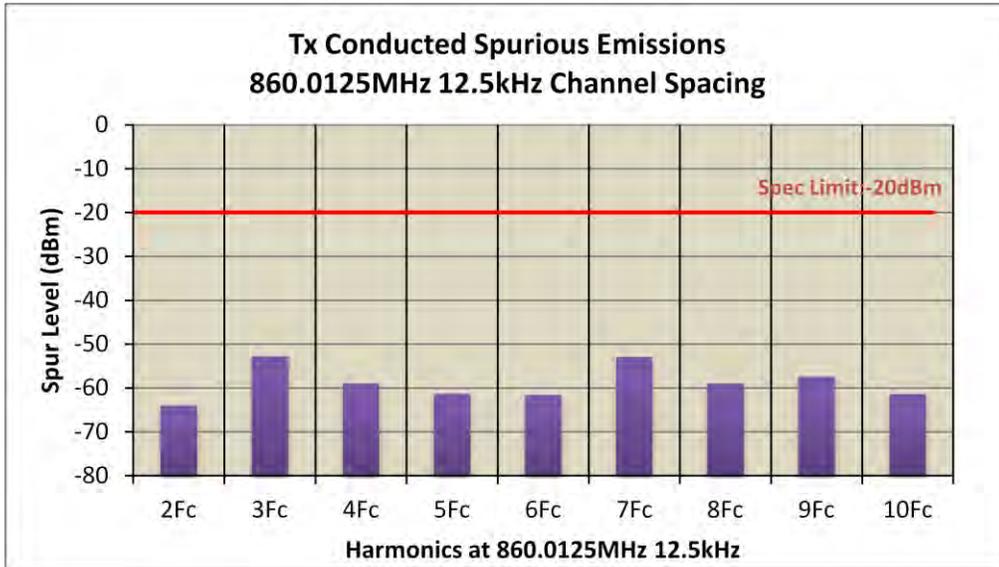


Figure 6F-11 : 42 W Harmonic of Carrier 860.0125 MHz, Digital 12.5 kHz Channel Spacing

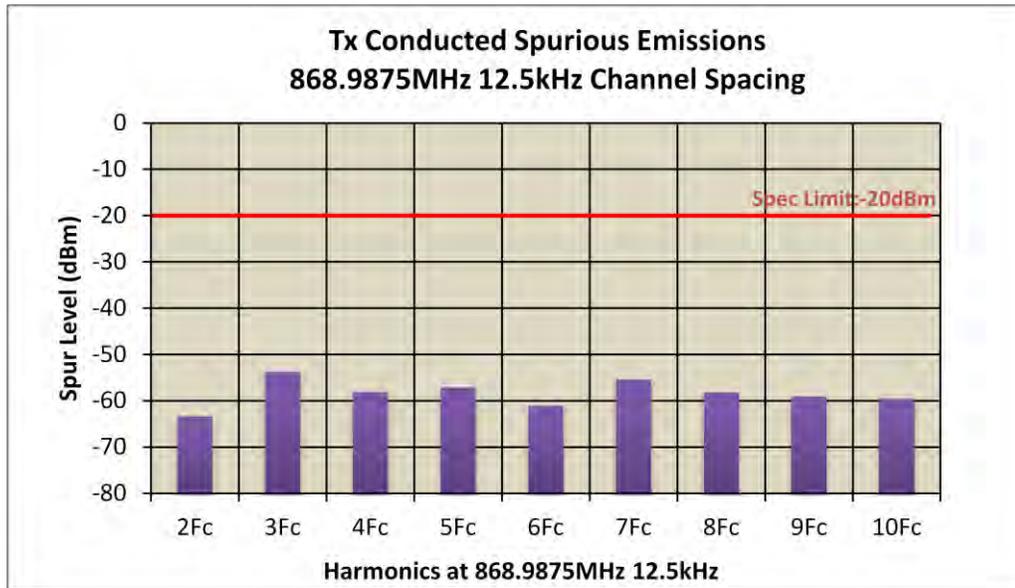


Figure 6F-12 : 42 W Harmonic of Carrier 868.9875 MHz, Digital 12.5 kHz Channel Spacing

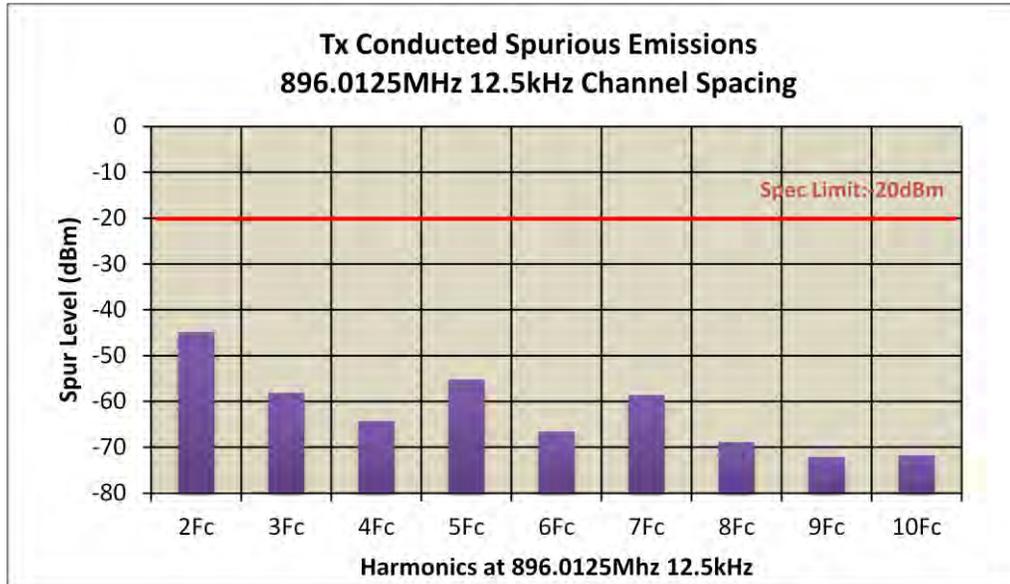


Figure 6F-13 : 36 W Harmonic of Carrier 896.0125 MHz, 12.5 kHz Channel Spacing

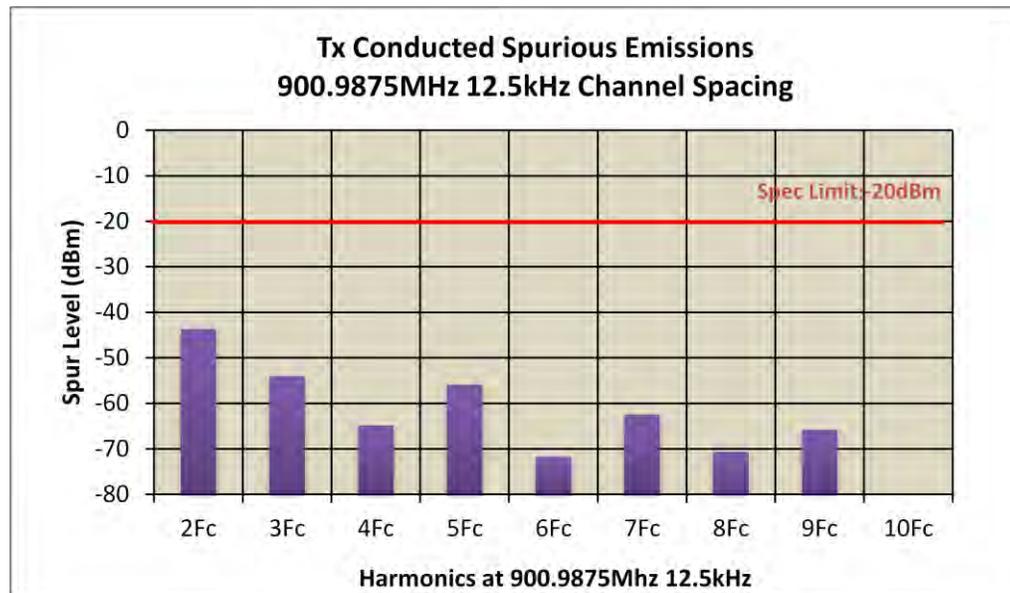


Figure 6F-14 : 36 W Harmonic of Carrier 900.9875 MHz, 12.5 kHz Channel Spacing

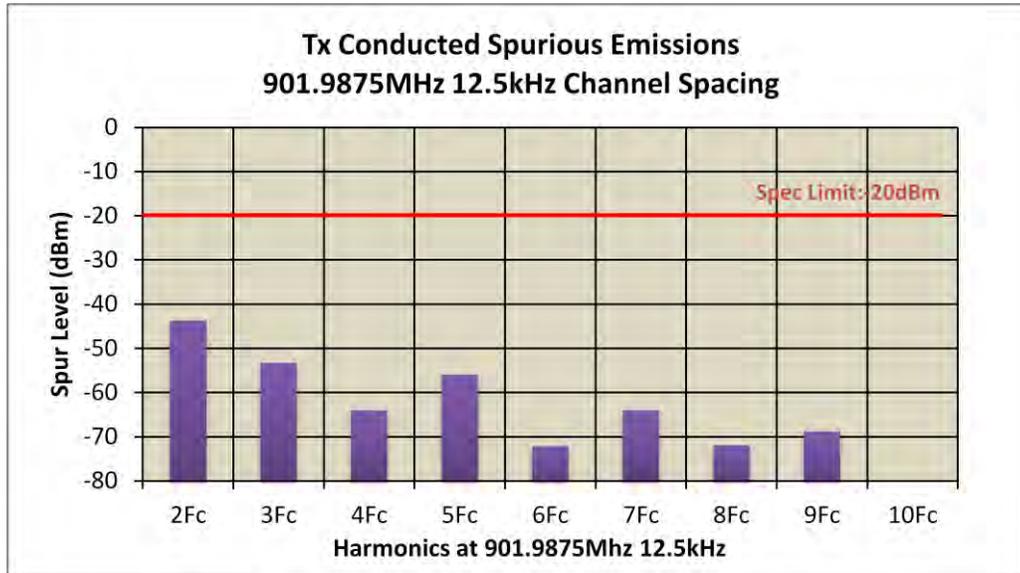


Figure 6F-15 : 9 W Harmonic of Carrier 901.9875 MHz, 12.5 kHz Channel Spacing (Part 24)

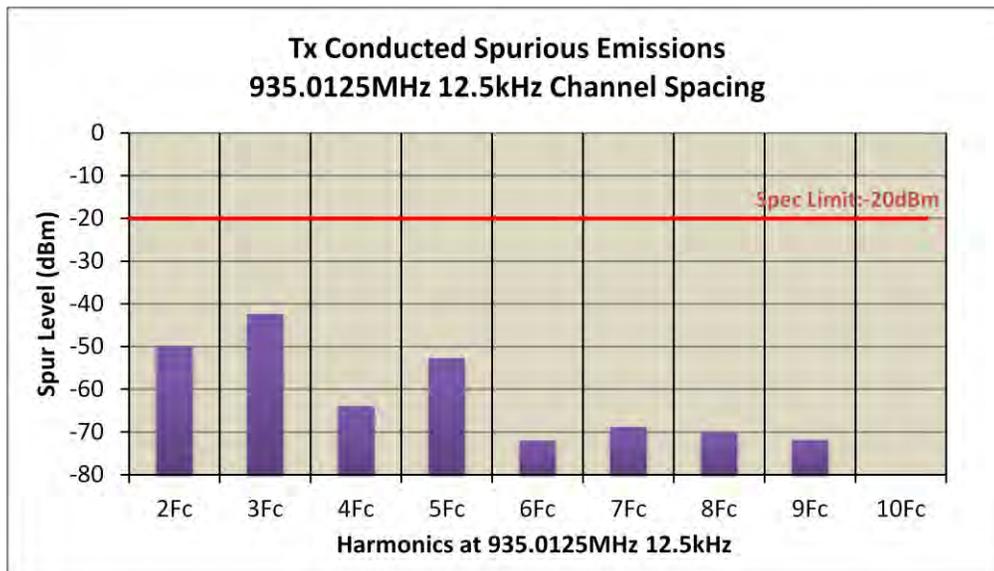


Figure 6F-16 : 36 W Harmonic of Carrier 935.0125 MHz, 12.5 kHz Channel Spacing

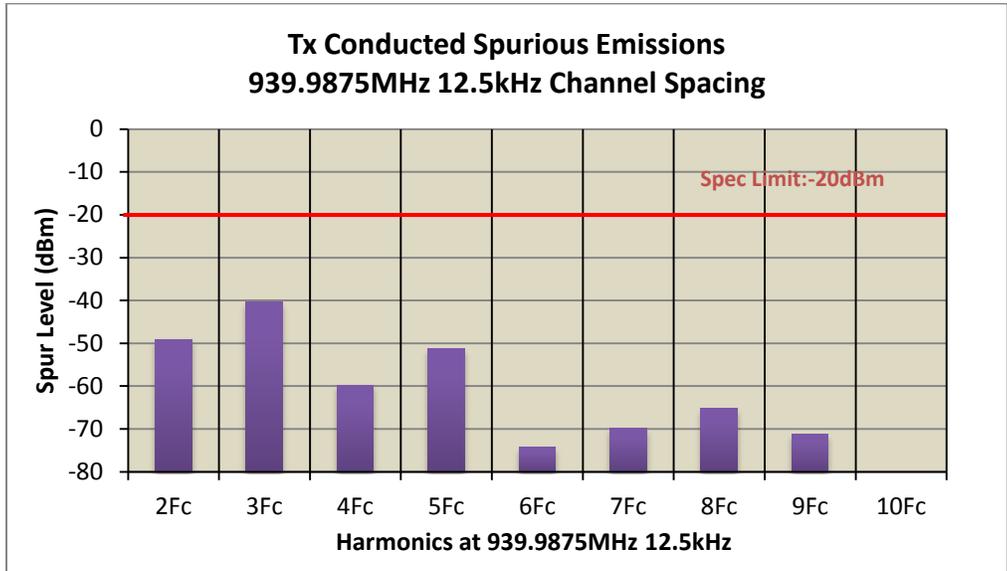


Figure 6F-17 : 36 W Harmonic of Carrier 939.9875 MHz, 12.5 kHz Channel Spacing

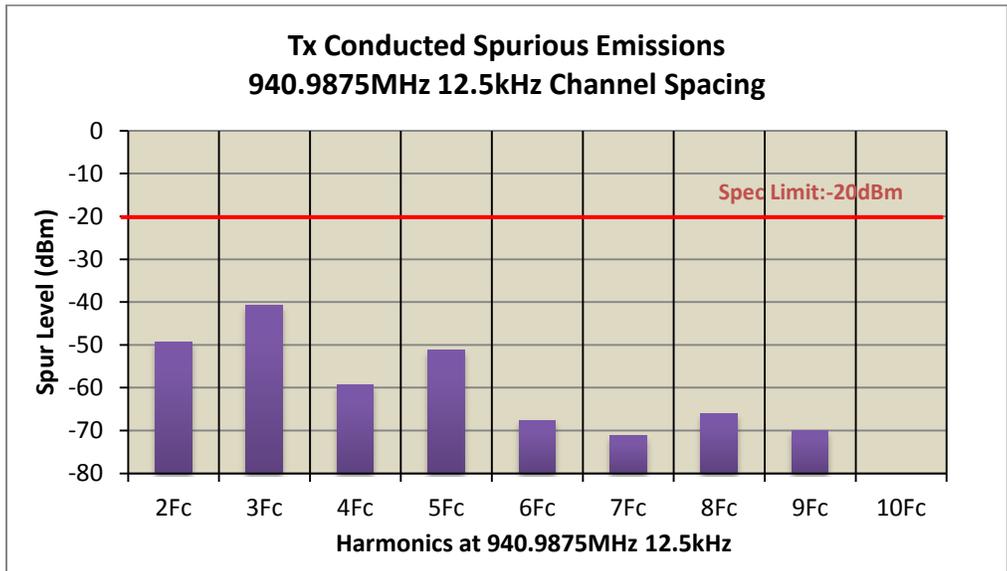
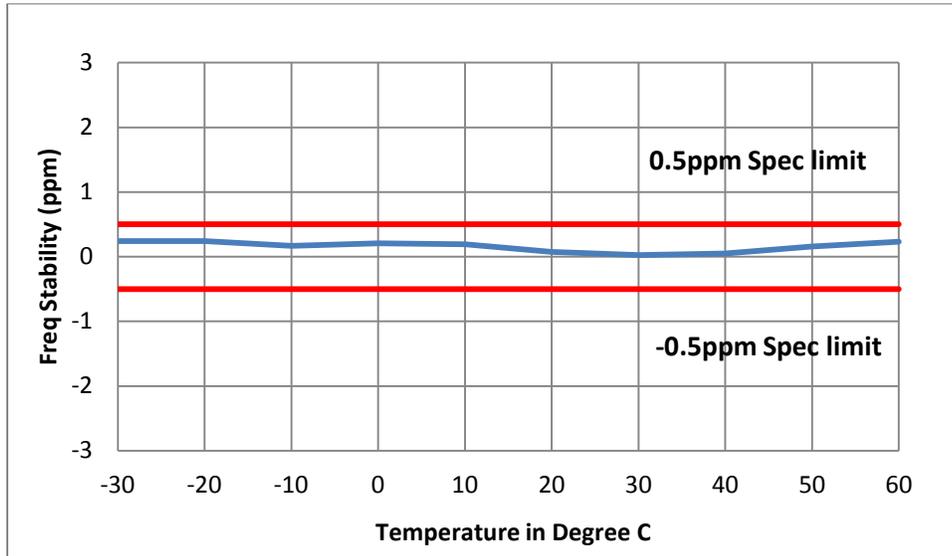
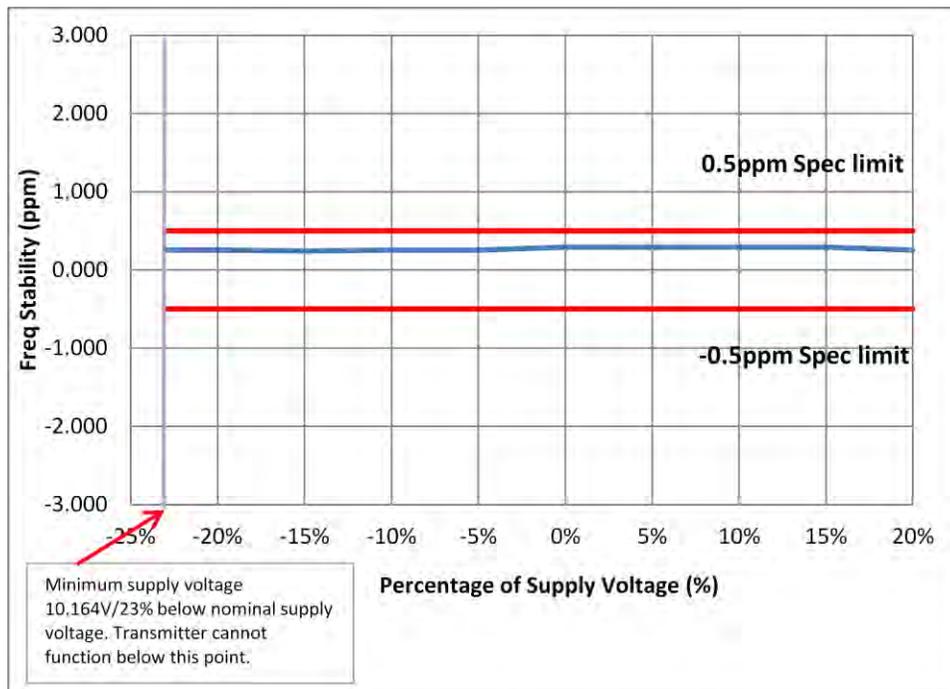


Figure 6F-18 : 9 W Harmonic of Carrier 940.9875 MHz, 12.5 kHz Channel Spacing (Part 24)

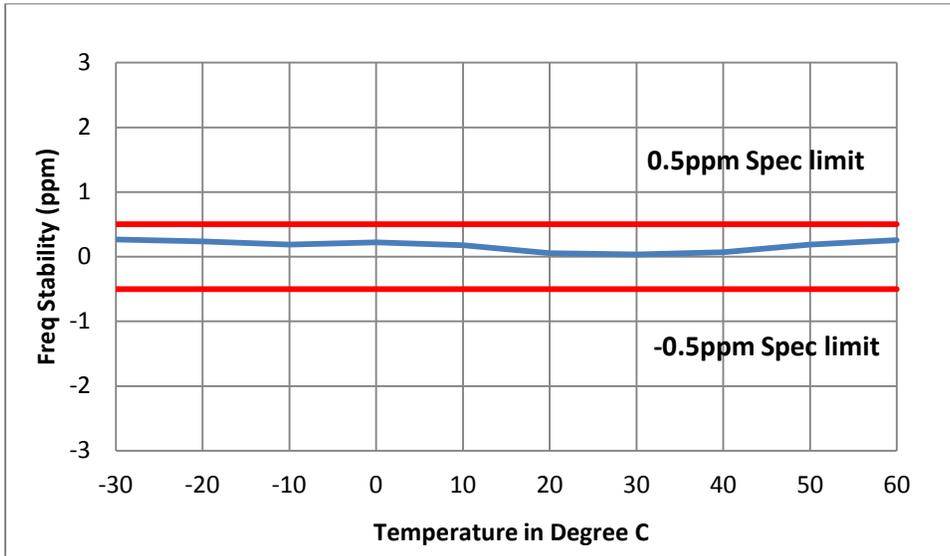
EXHIBIT 6H – Frequency Stability



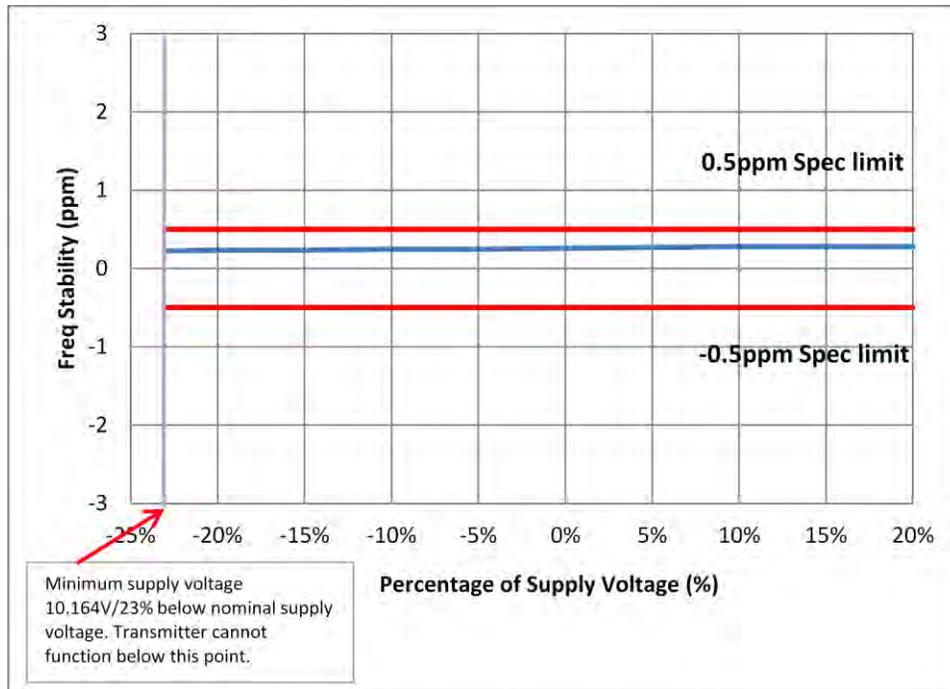
6H-1 – 823.9825 MHz Frequency Stability vs. Temperature



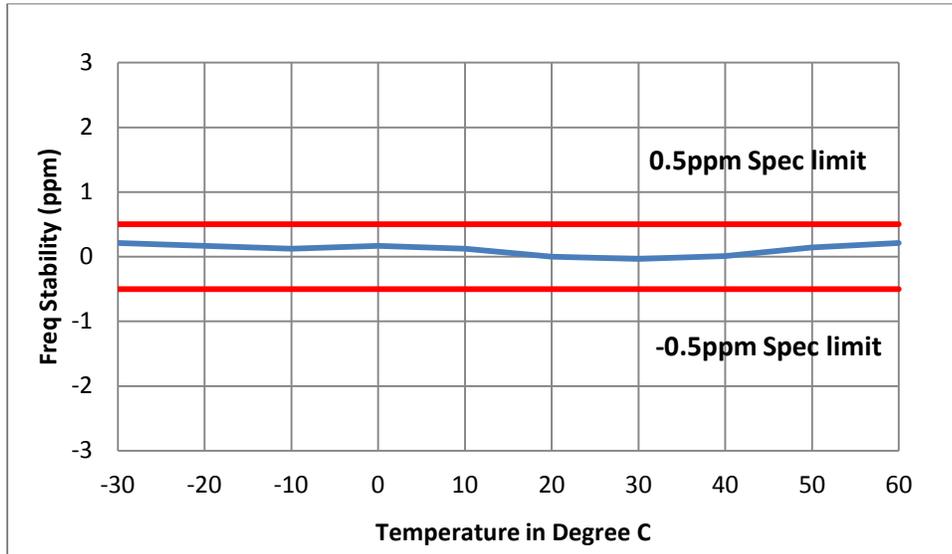
6H-2 – 823.9825 MHz Frequency Stability vs. Supply Voltage



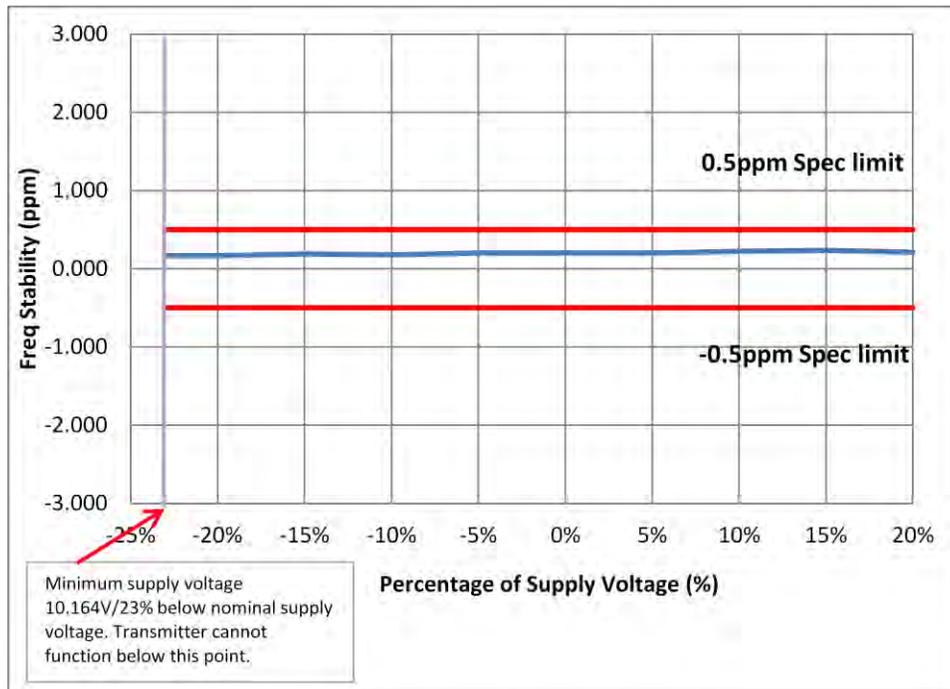
6H-3 – 896.9875 MHz Frequency Stability vs. Temperature



6H-4 – 896.9875 MHz Frequency Stability vs. Supply Voltage



6H-5 – 901.5 MHz Frequency Stability vs. Temperature (Part 24)



6H-6 – 901.5 MHz Frequency Stability vs. Supply Voltage (Part 24)

EXHIBIT 6I – Effective Radiated Power

**FCC ID: AZ492FT7083
IC ID: 109U-92FT7083**

EIRP **BALI REFRESH MOBILE 8/900MHZ 10-35W/10-30W 12.5 Channel Spacing**
S/N: 203TRP2595 Tx Power: 8 Watts
SR ID: 02810-EMC-00020
Antenna: 2810-HAF4027A-1
Analog Mode

	Frequency	Turn Table Deg.	EIRP (dBm)
Horiz.	901.5	0	26.06
Horiz.	901.5	45	24.90
Horiz.	901.5	90	29.69
Horiz.	901.5	135	25.93
Horiz.	901.5	180	25.73
Horiz.	901.5	225	24.22
Horiz.	901.5	270	19.74
Horiz.	901.5	315	26.96
Vert.	901.5	0	39.32
Vert.	901.5	45	38.62
Vert.	901.5	90	36.55
Vert.	901.5	135	40.43
Vert.	901.5	180	39.27
Vert.	901.5	225	37.57
Vert.	901.5	270	37.69
Vert.	901.5	315	39.96

Figure 6I-1 – 8 Watts, 901.5 MHz, Analog 12.5 kHz Channel Spacing (Part 24)

FCC ID: AZ492FT7083
IC ID: 109U-92FT7083

EIRP **BALI REFRESH MOBILE 8/900MHZ 10-35W/10-30W 12.5 Channel Spacing**
S/N: 203TRP2595 Tx Power: 8 Watts
SR ID: 02810-EMC-00020
Antenna: 2810-HAF4027A-1
Analog Mode

	Frequency	Turn Table Deg.	EIRP (dBm)
Horiz.	940.5	0	21.72
Horiz.	940.5	45	24.40
Horiz.	940.5	90	22.85
Horiz.	940.5	135	15.24
Horiz.	940.5	180	21.61
Horiz.	940.5	225	19.12
Horiz.	940.5	270	14.91
Horiz.	940.5	315	23.52
Vert.	940.5	0	38.21
Vert.	940.5	45	38.18
Vert.	940.5	90	36.46
Vert.	940.5	135	37.99
Vert.	940.5	180	37.48
Vert.	940.5	225	36.91
Vert.	940.5	270	35.88
Vert.	940.5	315	36.14

Figure 6I-2 – 8 Watts, 940.5 MHz, Analog 12.5 kHz Channel Spacing (Part 24)

***Note:**

Max EIRP is 40.43 dBm
Hence, ERP = 40.43-2.15 = 38.28 dBm,
which is equivalent to 6.73W ERP