

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 – Audio Frequency Response

- 6B-1: 12.5 kHz Channel Spacing, 823.9875MHz, Transmit Audio Frequency Response
- 6B-2: 12.5 kHz Channel Spacing, 851.0125MHz, Transmit Audio Frequency Response
- 6B-3: 12.5 kHz Channel Spacing, 896.9875MHz, Transmit Audio Frequency Response
- 6B-4: 12.5 kHz Channel Spacing, 901.5MHz, Transmit Audio Frequency Response (Part 24)
- 6B-5: 12.5 kHz Channel Spacing, 940.5MHz, Transmit Audio Frequency Response (Part 24)
- 6B-6: 25 kHz Channel Spacing, 823.9875MHz, Transmit Audio Frequency Response
- 6B-7: 25 kHz Channel Spacing, 851.0125MHz, Transmit Audio Frequency Response

EXHIBIT 6C – Audio Low Pass Filter Response

- 6C-1: 12.5 kHz Channel Spacing, 823.9875MHz, Transmit Audio Low Pass Filter Response
- 6C-2: 12.5 kHz Channel Spacing, 851.0125MHz, Transmit Audio Low Pass Filter Response
- 6C-3: 12.5 kHz Channel Spacing, 896.9875MHz, Transmit Audio Low Pass Filter Response
- 6C-4: 12.5 kHz Channel Spacing, 901.5MHz, Transmit Audio Low Pass Filter Response (Part 24)
- 6C-5: 12.5 kHz Channel Spacing, 940.5MHz, Transmit Audio Low Pass Filter Response (Part 24)
- 6C-6: 25 kHz Channel Spacing, 823.9875MHz, Transmit Audio Low Pass Filter Response
- 6C-7: 25 kHz Channel Spacing, 851.0125MHz, Transmit Audio Low Pass Filter Response

EXHIBIT 6D – Modulation Limiting

- 6D-1: 12.5 kHz Channel Spacing, 823.9875MHz, Modulation Limiting
- 6D-2: 12.5 kHz Channel Spacing, 851.0125 MHz, Modulation Limiting
- 6D-3: 12.5 kHz Channel Spacing, 896.9875MHz, Modulation Limiting
- 6D-4: 12.5 kHz Channel Spacing, 901.5MHz, Modulation Limiting (Part 24)
- 6D-5: 12.5 kHz Channel Spacing, 940.5MHz, Modulation Limiting (Part 24)
- 6D-6: 25 kHz Channel Spacing, 823.9875MHz, Modulation Limiting
- 6D-7: 25 kHz Channel Spacing, 851.0125MHz, Modulation Limiting

EXHIBIT 6E – Occupied Bandwidth

- 6E-1: 806.0125 MHz, 25 kHz Channel Spacing, 2500Hz Audio Modulation only, 16K0F3E Mask B, G
- 6E-2: 806.0125 MHz, 12.5 kHz Channel Spacing, 2500Hz Audio Modulation only, 11K0F3E Mask D, H
- 6E-3: 806.0125 MHz, O.153 Test Pattern, 4FSK Voice Modulation only, 7K60F1E Mask D, H
- 6E-4: 806.0125 MHz, O.153 Test Pattern, 4FSK Data Modulation only, 7K60F1D Mask D, H
- 6E-5: 806.0125 MHz, O.153 Test Pattern, 4FSK Voice and Data Modulation, 7K60F1W Mask D, H

- 6E-6: 823.9875 MHz, 25 kHz Channel Spacing, 2500Hz Audio Modulation only, 16K0F3E Mask B, G, 90.691
- 6E-7: 823.9875 MHz, 12.5 kHz Channel Spacing, 2500Hz Audio Modulation only, 11K0F3E Mask D, B, G, 90.691
- 6E-8: 823.9875 MHz, O.153 Test Pattern, 4FSK Voice Modulation only, 7K60F1E Mask D, B, G, 90.691
- 6E-9: 823.9875 MHz, O.153 Test Pattern, 4FSK Data Modulation only, 7K60F1D Mask D, B, G, 90.691
- 6E-10: 823.9875 MHz, O.153 Test Pattern, 4FSK Voice and Data Modulation, 7K60F1W Mask D, B, G, 90.691

- 6E-11: 860.0125 MHz, 25 kHz Channel Spacing, 2500Hz Audio Modulation only, 16K0F3E Mask B, G, 90.691
- 6E-12: 860.0125 MHz, 12.5 kHz Channel Spacing, 2500Hz Audio Modulation only, 11K0F3E Mask D, B, G, 90.691
- 6E-13: 860.0125 MHz, O.153 Test Pattern, 4FSK Voice Modulation only, 7K60F1E Mask D, B, G, 90.691
- 6E-14: 860.0125 MHz, O.153 Test Pattern, 4FSK Data Modulation only, 7K60F1D Mask D, B, G, 90.691
- 6E-15: 860.0125 MHz, O.153 Test Pattern, 4FSK Voice and Data Modulation, 7K60F1W Mask D, B, G, 90.691

- 6E-16: 868.8875 MHz, 25 kHz Channel Spacing, 2500Hz Audio Modulation only, 16K0F3E Mask B, G, 90.691
- 6E-17: 868.8875 MHz, 12.5 kHz Channel Spacing, 2500Hz Audio Modulation only, 11K0F3E Mask D, B, G, 90.691
- 6E-18: 868.8875 MHz, O.153 Test Pattern, 4FSK Voice Modulation only, 7K60F1E Mask D, B, G, 90.691
- 6E-19: 868.8875 MHz, O.153 Test Pattern, 4FSK Data Modulation only, 7K60F1D Mask D, B, G, 90.691

6E-20: 868.8875 MHz, 0.153 Test Pattern, 4FSK Voice and Data Modulation, 7K60F1W Mask D, B, G, 90.691

6E-21: 896.0125 MHz, 12.5 kHz Channel Spacing, 2500Hz Audio Modulation only, 11K0F3E Mask I, D

6E-22: 896.0125 MHz, 0.153 Test Pattern, 4FSK Voice Modulation only, 7K60F1E Mask I, D

6E-23: 896.0125 MHz, 0.153 Test Pattern, 4FSK Data Modulation only, 7K60F1D Mask I, D

6E-24: 896.0125 MHz, 0.153 Test Pattern, 4FSK Voice and Data Modulation, 7K60F1W Mask I, D

6E-25: 900.9875 MHz, 12.5 kHz Channel Spacing, 2500Hz Audio Modulation only, 11K0F3E Mask I, D

6E-26: 900.9875 MHz, 0.153 Test Pattern, 4FSK Voice Modulation only, 7K60F1E Mask I, D

6E-27: 900.9875 MHz, 0.153 Test Pattern, 4FSK Data Modulation only, 7K60F1D Mask I, D

6E-28: 900.9875 MHz, 0.153 Test Pattern, 4FSK Voice and Data Modulation, 7K60F1W Mask I, D

6E-29: 901.5 MHz, 12.5 kHz Channel Spacing, 2500Hz Audio Modulation only, 10K0F3E Mask 24.133 (Part 24)

6E-30: 901.5 MHz, 0.153 Test Pattern, 4FSK Voice Modulation only, 7K60F1E Mask 24.133 (Part 24)

6E-31: 901.5 MHz, 0.153 Test Pattern, 4FSK Data Modulation only, 7K60F1D Mask 24.133 (Part 24)

6E-32: 901.5 MHz, 0.153 Test Pattern, 4FSK Voice and Data Modulation, 7K60F1W Mask 24.133 (Part 24)

6E-33: 935.0125 MHz, 12.5 kHz Channel Spacing, 2500Hz Audio Modulation only, 11K0F3E Mask I, D

6E-34: 935.0125 MHz, 0.153 Test Pattern, 4FSK Voice Modulation only, 7K60F1E Mask I, D

6E-35: 935.0125 MHz, 0.153 Test Pattern, 4FSK Data Modulation only, 7K60F1D Mask I, D

6E-36: 935.0125 MHz, 0.153 Test Pattern, 4FSK Voice and Data Modulation, 7K60F1W Mask I, D

6E-37: 939.9875 MHz, 12.5 kHz Channel Spacing, 2500Hz Audio Modulation only, 11K0F3E Mask I, D

6E-38: 939.9875 MHz, 0.153 Test Pattern, 4FSK Voice Modulation only, 7K60F1E Mask I, D

6E-39: 939.9875 MHz, 0.153 Test Pattern, 4FSK Data Modulation only, 7K60F1D Mask I, D

6E-40: 939.9875 MHz, 0.153 Test Pattern, 4FSK Voice and Data Modulation, 7K60F1W Mask I, D

6E-41: 940.5 MHz, 12.5 kHz Channel Spacing, 2500Hz Audio Modulation only, 10K0F3E Mask 24.133 (Part 24)

6E-42: 940.5 MHz, 0.153 Test Pattern, 4FSK Voice Modulation only, 7K60F1E Mask 24.133 (Part 24)

6E-43: 940.5 MHz, 0.153 Test Pattern, 4FSK Data Modulation only, 7K60F1D Mask 24.133 (Part 24)

6E-44: 940.5 MHz, 0.153 Test Pattern, 4FSK Voice and Data Modulation, 7K60F1W Mask 24.133 (Part 24)

EXHIBIT 6F – Transmit Conducted Spurious Emissions

6F-1: 3W Harmonic of Carrier 806.0125 MHz, 12.5 kHz Channel Spacing, Digital Mode

6F-2: 3W Harmonic of Carrier 814.9875 MHz, 12.5 kHz Channel Spacing, Digital Mode

6F-3: 3W Harmonic of Carrier 823.9875MHz, 12.5 kHz Channel Spacing, Digital Mode

6F-4: 3W Harmonic of Carrier 851.0125MHz, 12.5 kHz Channel Spacing, Digital Mode

6F-5: 3W Harmonic of Carrier 860.0125 MHz, 12.5 kHz Channel Spacing, Digital Mode

6F-6: 3W Harmonic of Carrier 868.9875 MHz, 12.5 kHz Channel Spacing, Digital Mode

6F-7: 3W Harmonic of Carrier 896.0125 MHz, 12.5 kHz Channel Spacing, Analog Mode

6F-8: 3W Harmonic of Carrier 900.9875 MHz, 12.5 kHz Channel Spacing, Analog Mode

6F-9: 3W Harmonic of Carrier 901.5 MHz, 12.5 kHz Channel Spacing, Analog Mode (Part 24)

6F-10: 3W Harmonic of Carrier 935.0125 MHz, 12.5 kHz Channel Spacing, Analog Mode

6F-11: 3W Harmonic of Carrier 939.9875 MHz, 12.5 kHz Channel Spacing, Analog Mode

6F-12: 3W Harmonic of Carrier 940.5 MHz, 12.5 kHz Channel Spacing, Analog Mode (Part 24)

6F-13: 3W Harmonic of Carrier 806.0125 MHz, 25 kHz Channel Spacing, Analog Mode

6F-14: 3W Harmonic of Carrier 814.9875 MHz, 25 kHz Channel Spacing, Analog Mode

6F-15: 3W Harmonic of Carrier 823.9875 MHz, 25 kHz Channel Spacing, Analog Mode

6F-16: 3W Harmonic of Carrier 851.0125 MHz, 25 kHz Channel Spacing, Analog Mode

6F-17: 3W Harmonic of Carrier 860.0125 MHz, 25 kHz Channel Spacing, Analog Mode

6F-18: 3W Harmonic of Carrier 868.9875 MHz, 25 kHz Channel Spacing, Analog Mode

EXHIBIT 6G – Transmit Radiated Spurious Emissions

** Refer to ex06B_TUV LMR RE report*

EXHIBIT 6H - Frequency Stability

- 6H-1: 823.9875 MHz, 0.5 ppm Frequency Stability vs. Temperature
- 6H-2: 823.9875 MHz, 0.5 ppm Frequency Stability vs. Supply Voltage
- 6H-3: 896.9875 MHz, 0.5 ppm Frequency Stability vs. Temperature
- 6H-4: 896.9875 MHz, 0.5 ppm Frequency Stability vs. Supply Voltage
- 6H-5: 901.5 MHz, 0.5 ppm Frequency Stability vs. Temperature (Part 24)
- 6H-6: 901.5 MHz, 0.5 ppm Frequency Stability vs. Supply Voltage (Part 24)

EXHIBIT 6I – Effective Radiated Power (ERP)

**** 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 November 2015. See Table 2 in Ex07_test procedures**

Radio model tested: AAH56UCN9RB1AN

Important Note: The data in this test report meets or exceeds the technical requirements of FCC Rule Parts 24, 90 and RSS 134, 119.

EXHIBIT 6A

RF Output Power:

Frequency = 806.0125 MHz:

Output RF power	3.00 Watts
DC Voltage	7.50 Volts
DC Current	1.16 Amps

Output RF power	1.01 Watts
DC Voltage	7.50 Volts
DC Current	0.74 Amps

Frequency = 814.9875 MHz:

Output RF power	2.99 Watts
DC Voltage	7.50 Volts
DC Current	1.18 Amps

Output RF power	1.01 Watts
DC Voltage	7.50 Volts
DC Current	0.74 Amps

Frequency = 823.9875 MHz:

Output RF power	2.98 Watts
DC Voltage	7.50 Volts
DC Current	1.2 Amps

Output RF power	1.02 Watts
DC Voltage	7.50 Volts
DC Current	0.76 Amps

Frequency= 851.0125 MHz:

Output RF power	2.99 Watts
DC Voltage	7.50 Volts
DC Current	1.32 Amps

Output RF power	1.03 Watts
DC Voltage	7.50 Volts
DC Current	0.81 Amps

Frequency= 860.0125 MHz:

Output RF power	2.98 Watts
DC Voltage	7.50 Volts
DC Current	1.36 Amps

Output RF power	1.01 Watts
DC Voltage	7.50 Volts
DC Current	0.84 Amps

Frequency= 868.9875 MHz:

Output RF power	2.97 Watts
DC Voltage	7.50 Volts
DC Current	1.39 Amps

Output RF power	1.00 Watts
DC Voltage	7.50 Volts
DC Current	0.87 Amps

Frequency= 896.0125 MHz:

Output RF power	2.97 Watts
DC Voltage	7.50 Volts
DC Current	1.41 Amps

Output RF power	1.04 Watts
DC Voltage	7.50 Volts
DC Current	0.90 Amps

Frequency= 900.9875 MHz:

Output RF power	2.97 Watts
DC Voltage	7.50 Volts
DC Current	1.40 Amps

Output RF power	1.04 Watts
DC Voltage	7.50 Volts
DC Current	0.90 Amps

Frequency= 901.5 MHz (Part 24):

Output RF power	2.98 Watts
DC Voltage	7.50 Volts
DC Current	1.35 Amps

Output RF power	1.03 Watts
DC Voltage	7.50 Volts
DC Current	0.89 Amps

Frequency= 935.0125 MHz:

Output RF power	2.98 Watts
DC Voltage	7.50 Volts
DC Current	1.35 Amps

Output RF power	1.03 Watts
DC Voltage	7.50 Volts
DC Current	0.89 Amps

Frequency= 939.9875 MHz:

Output RF power	2.97 Watts
DC Voltage	7.50 Volts
DC Current	1.35 Amps

Output RF power	1.02 Watts
DC Voltage	7.50 Volts
DC Current	0.88 Amps

Frequency= 940.5 MHz (Part 24):

Output RF power	2.97 Watts
DC Voltage	7.50 Volts
DC Current	1.34 Amps

Output RF power	1.04 Watts
DC Voltage	7.50 Volts
DC Current	0.88Amps

EXHIBIT 6B

Audio Frequency Response

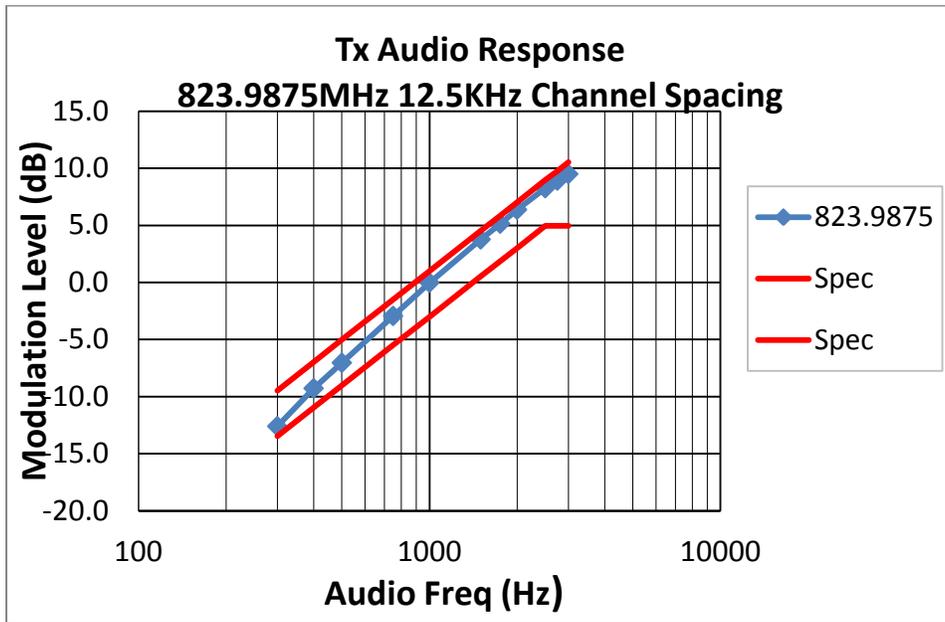


Figure 6B-1: 12.5 kHz Channel Spacing, 823.9875MHz, Transmit Audio Frequency Response

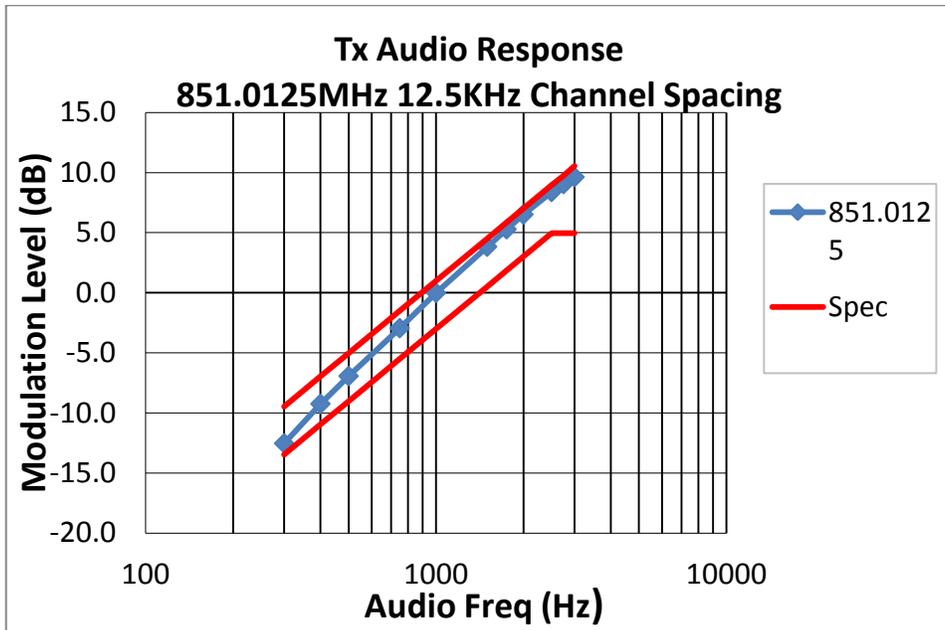


Figure 6B-2: 12.5 kHz Channel Spacing, 851.0125MHz, Transmit Audio Frequency Response

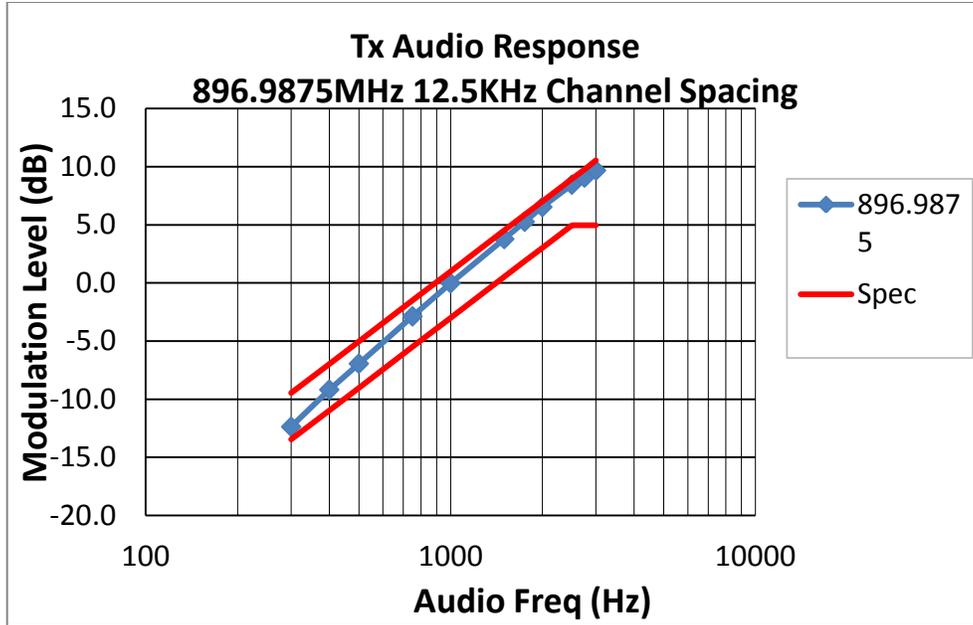


Figure 6B-3: 12.5 kHz Channel Spacing, 896.9875MHz, Transmit Audio Frequency Response

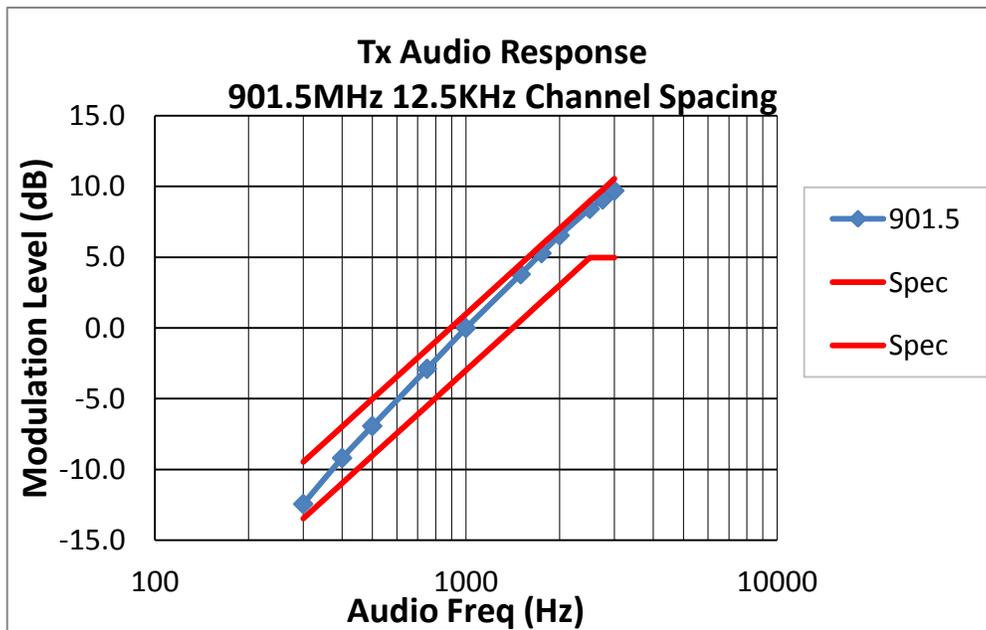


Figure 6B-4: 12.5 kHz Channel Spacing, 901.5MHz, Transmit Audio Frequency Response (Part 24)

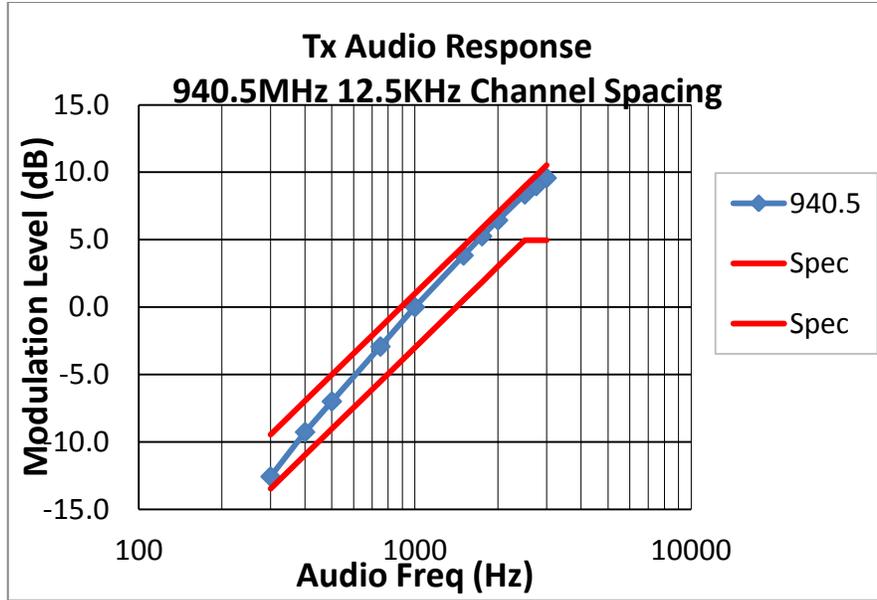


Figure 6B-5: 12.5 kHz Channel Spacing, 940.5MHz, Transmit Audio Frequency Response (Part 24)

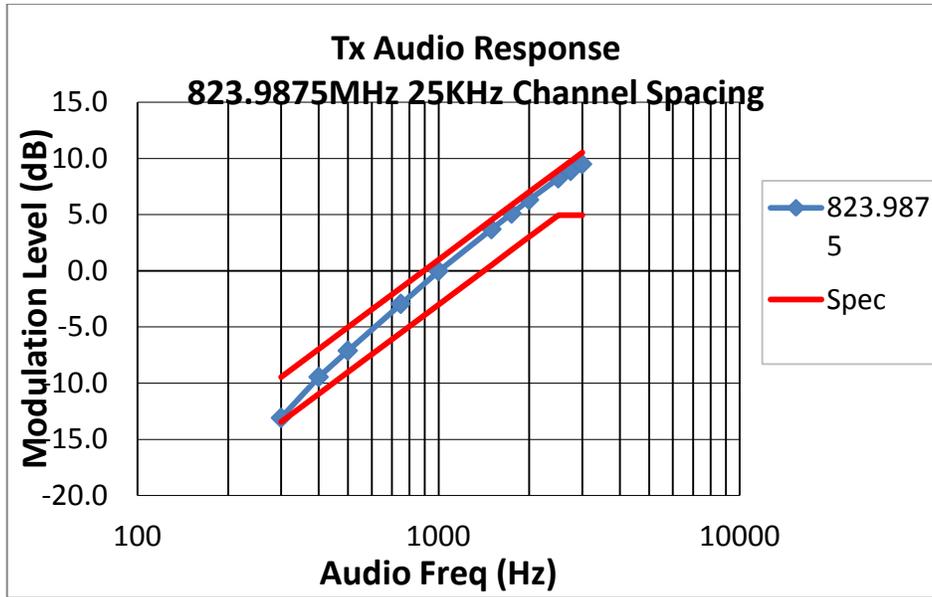


Figure 6B-6: 25 kHz Channel Spacing, 823.9875MHz, Transmit Audio Frequency Response

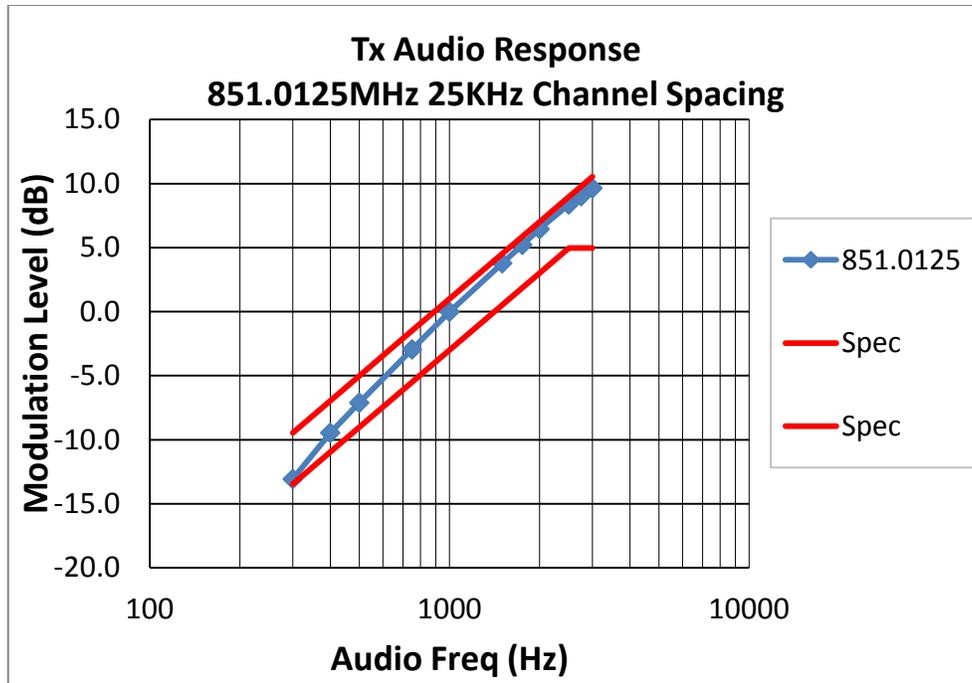


Figure 6B-7: 25 kHz Channel Spacing, 851.0125MHz, Transmit Audio Frequency Response

EXHIBIT 6C

Audio Low Pass Filter Response

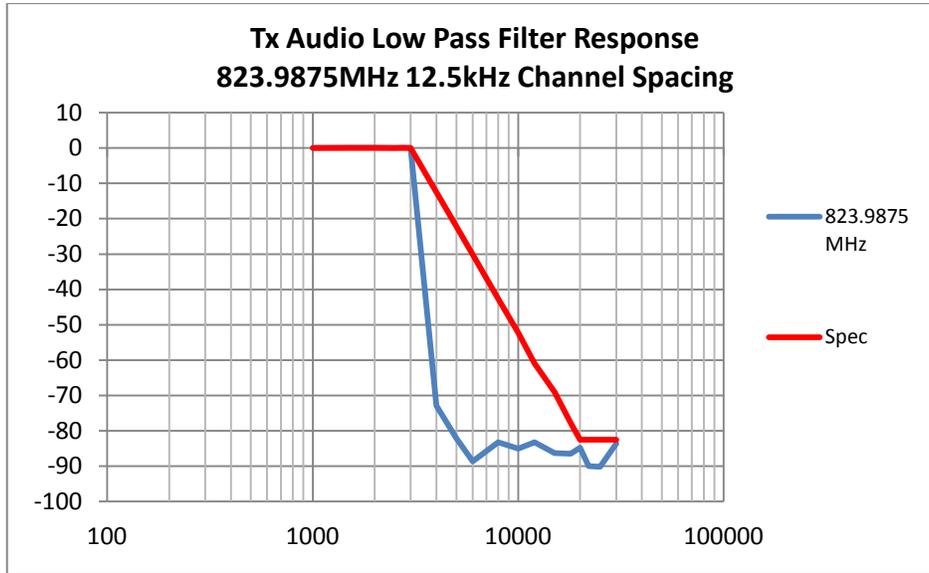


Figure 6C-1: 12.5 kHz Channel Spacing, 823.9875MHz, Transmit Audio Low Pass Filter Response

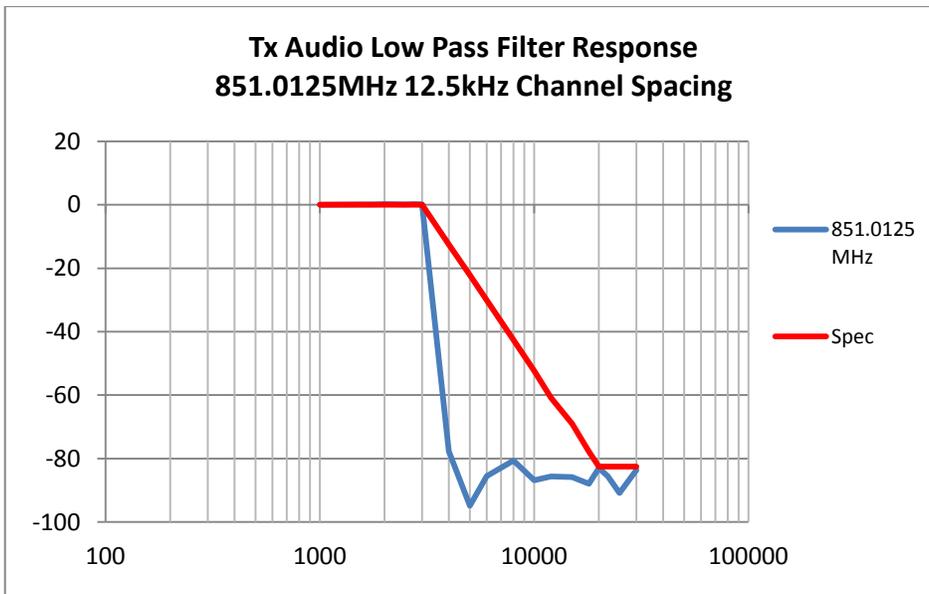


Figure 6C-2: 12.5 kHz Channel Spacing, 851.0125MHz, Transmit Audio Low Pass Filter Response

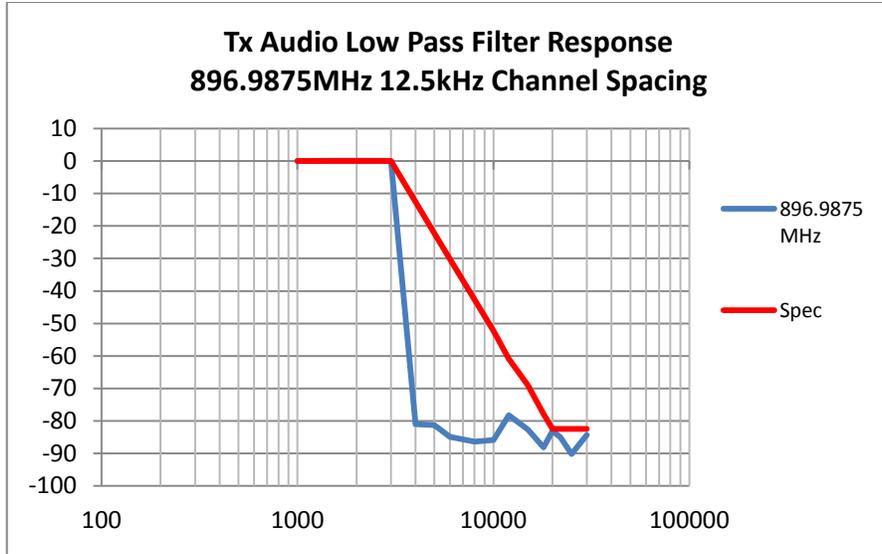


Figure 6C-3: 12.5 kHz Channel Spacing, 896.9875MHz, Transmit Audio Low Pass Filter Response

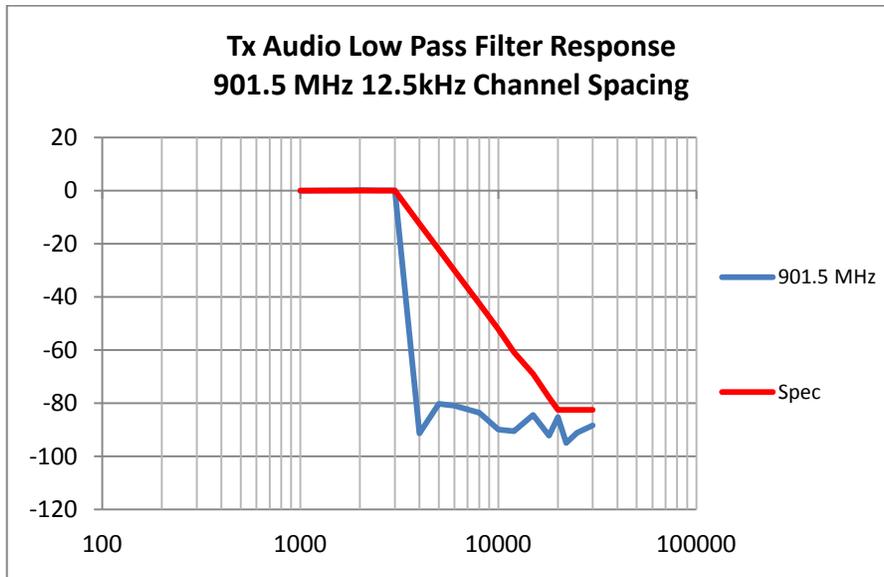


Figure 6C-4: 12.5 kHz Channel Spacing, 901.5MHz, Transmit Audio Low Pass Filter Response (Part 24)

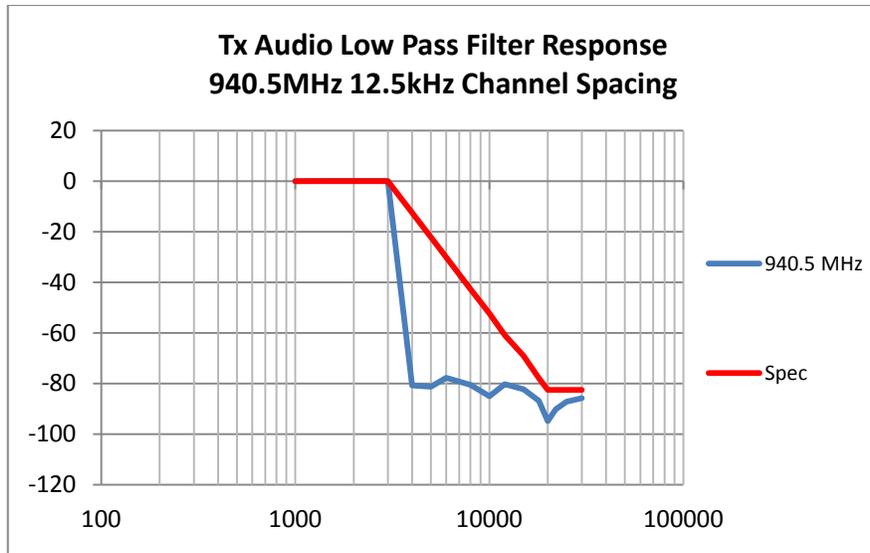


Figure 6C-5: 12.5 kHz Channel Spacing, 940.5MHz, Transmit Audio Low Pass Filter Response (Part 24)

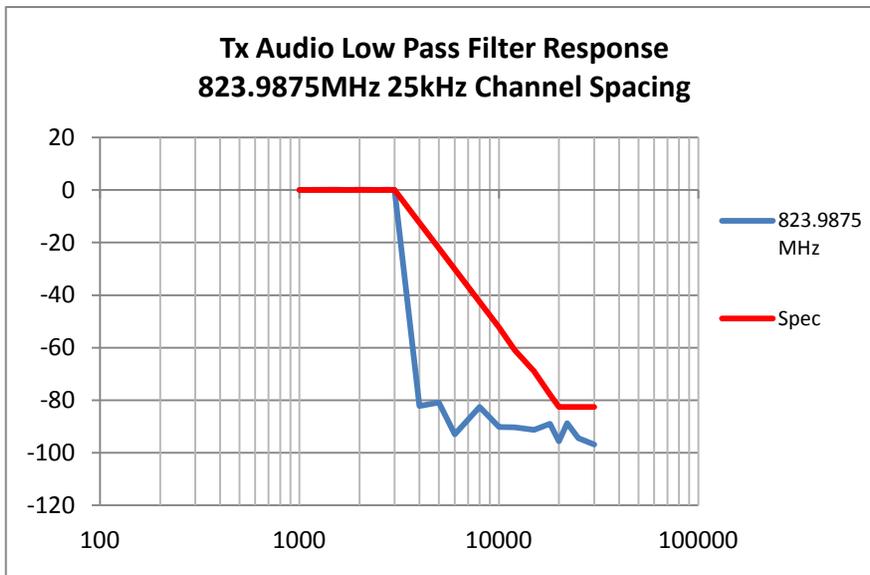


Figure 6C-6: 25 kHz Channel Spacing, 823.9875MHz, Transmit Audio Low Pass Filter Response

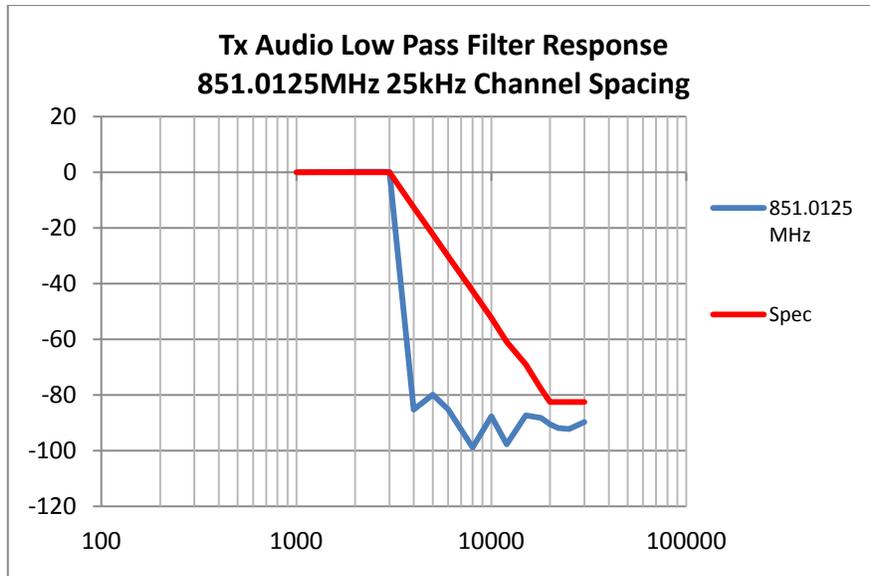


Figure 6C-7: 25 kHz Channel Spacing, 851.0125MHz, Transmit Audio Low Pass Filter Response

EXHIBIT 6D

Modulation Limiting

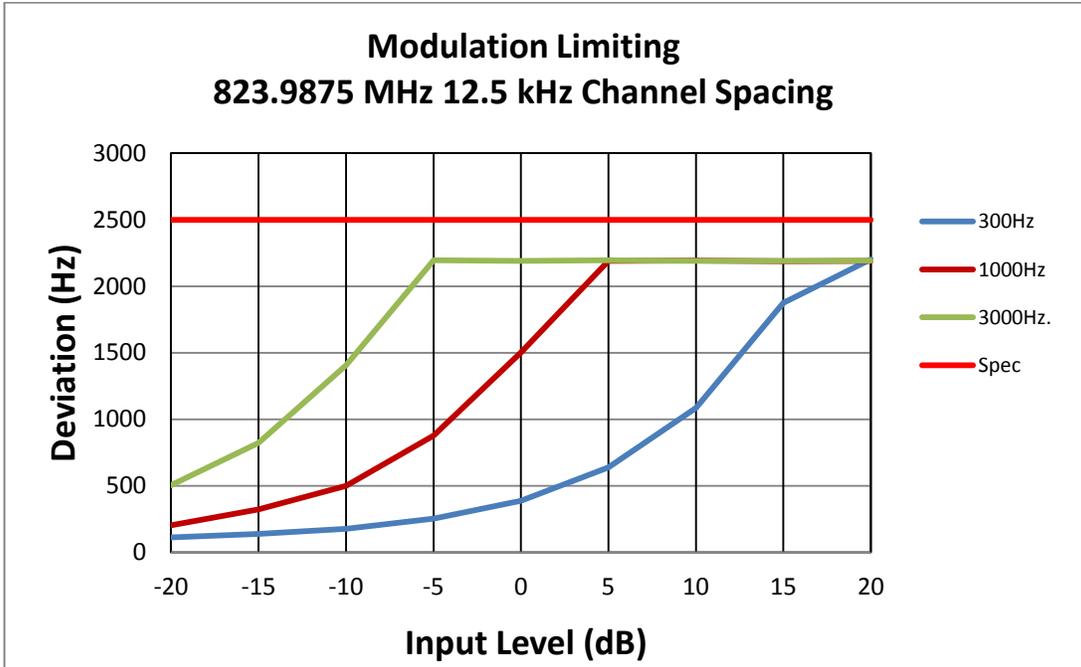


Figure 6D-1: 12.5 kHz Channel Spacing, 823.9875MHz, Modulation Limiting

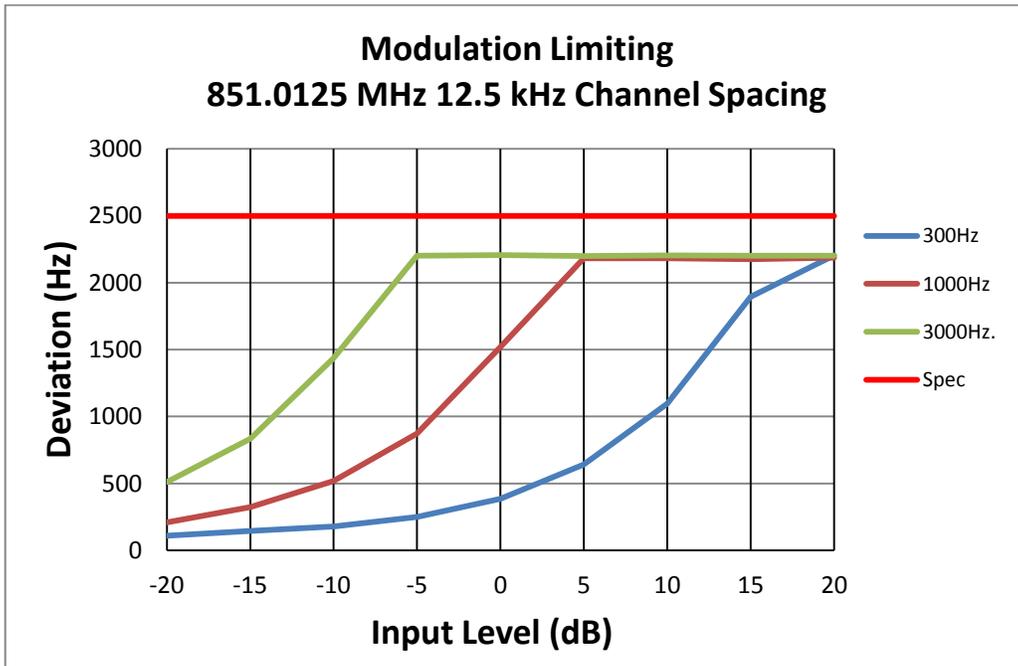


Figure 6D-2: 12.5 kHz Channel Spacing, 851.0125 MHz, Modulation Limiting

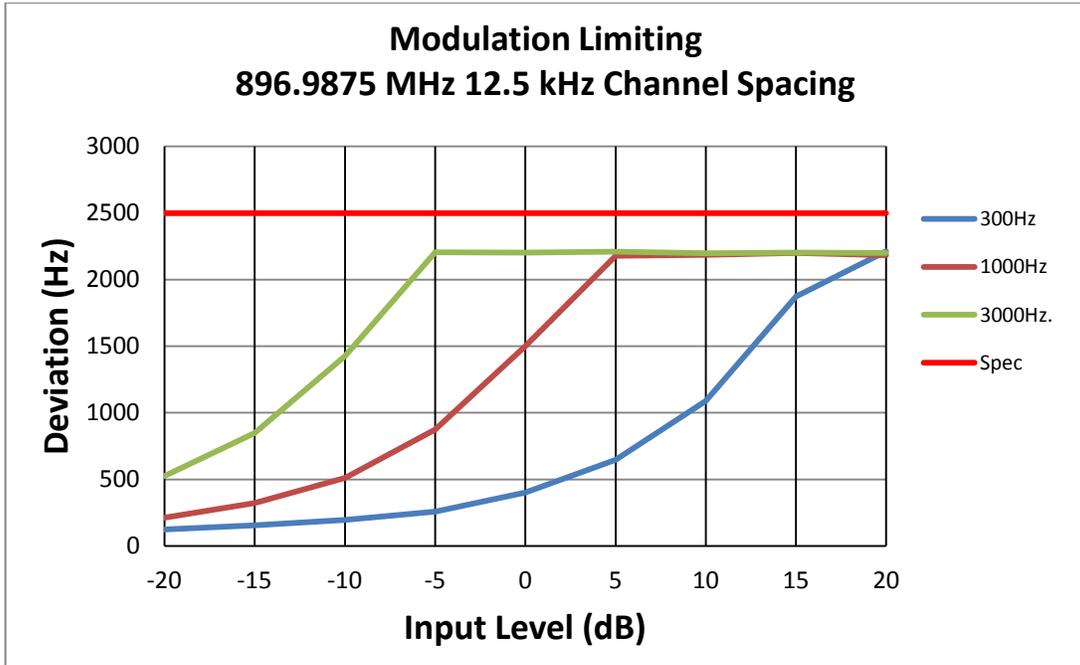


Figure 6D-3: 12.5 kHz Channel Spacing, 896.9875MHz, Modulation Limiting

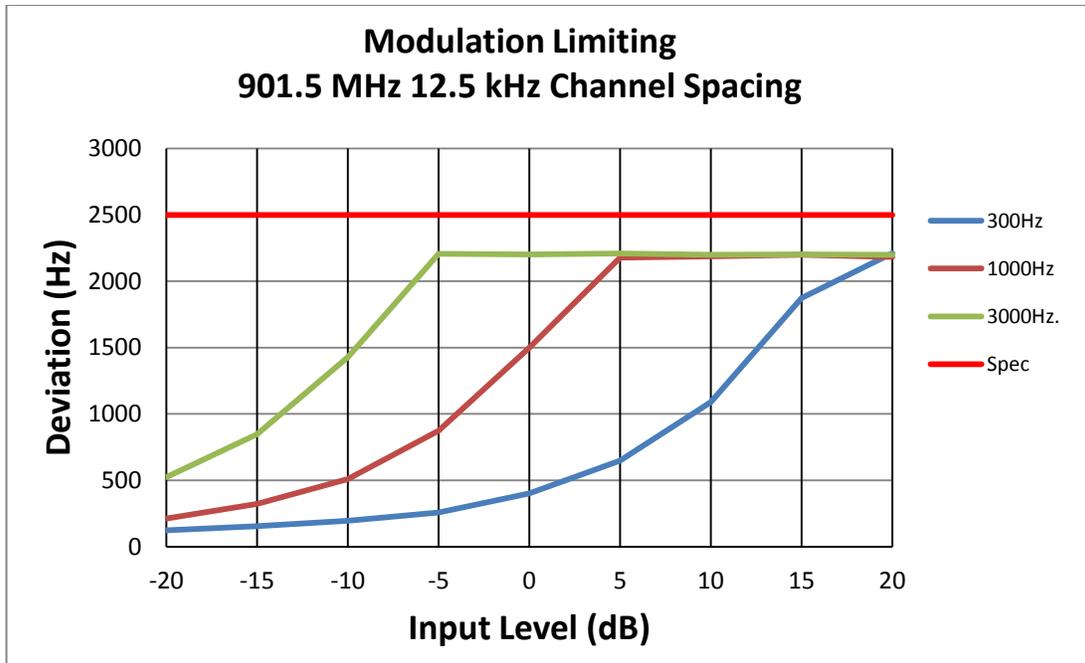


Figure 6D-4: 12.5 kHz Channel Spacing, 901.5 MHz, Modulation Limiting (Part 24)

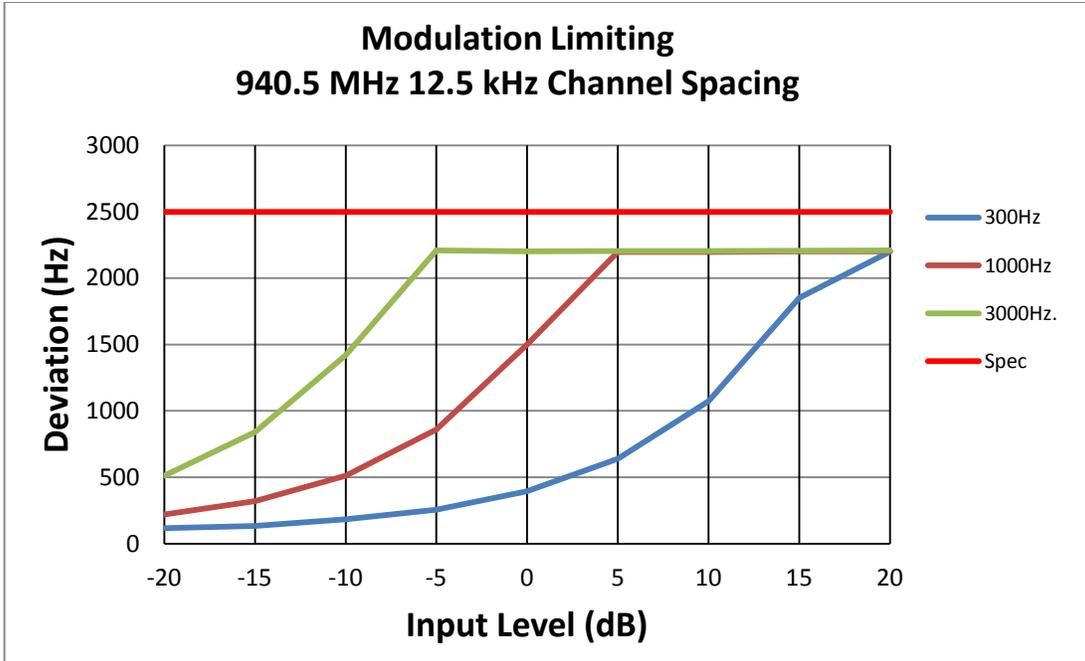


Figure 6D-5: 12.5 kHz Channel Spacing, 940.5MHz, Modulation Limiting (Part 24)

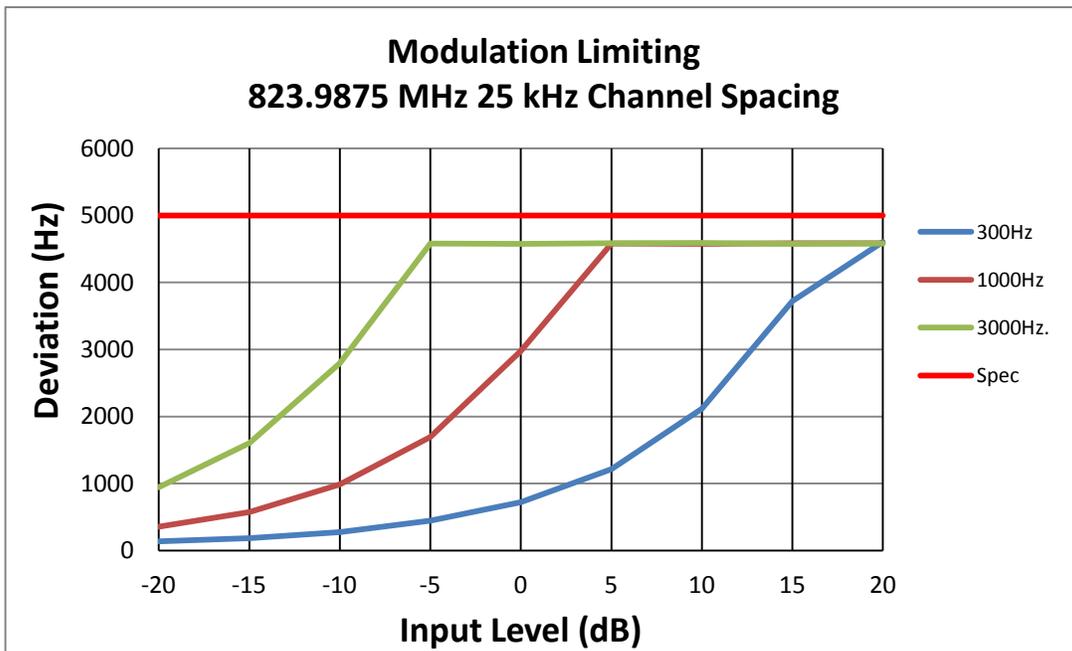


Figure 6D-6: 25 kHz Channel Spacing, 823.9875MHz, Modulation Limiting

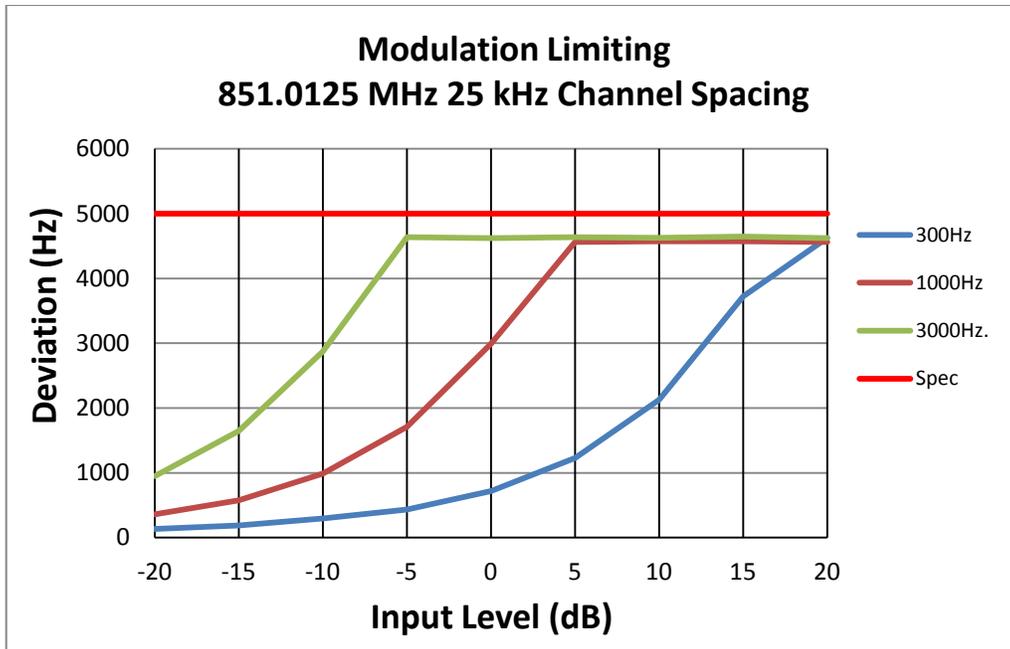


Figure 6D-7: 25 kHz Channel Spacing, 851.0125MHz, Modulation Limiting

EXHIBIT 6E

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 $|f| > 2880$ 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 and 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 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**.

Digital (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**.

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
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**.

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

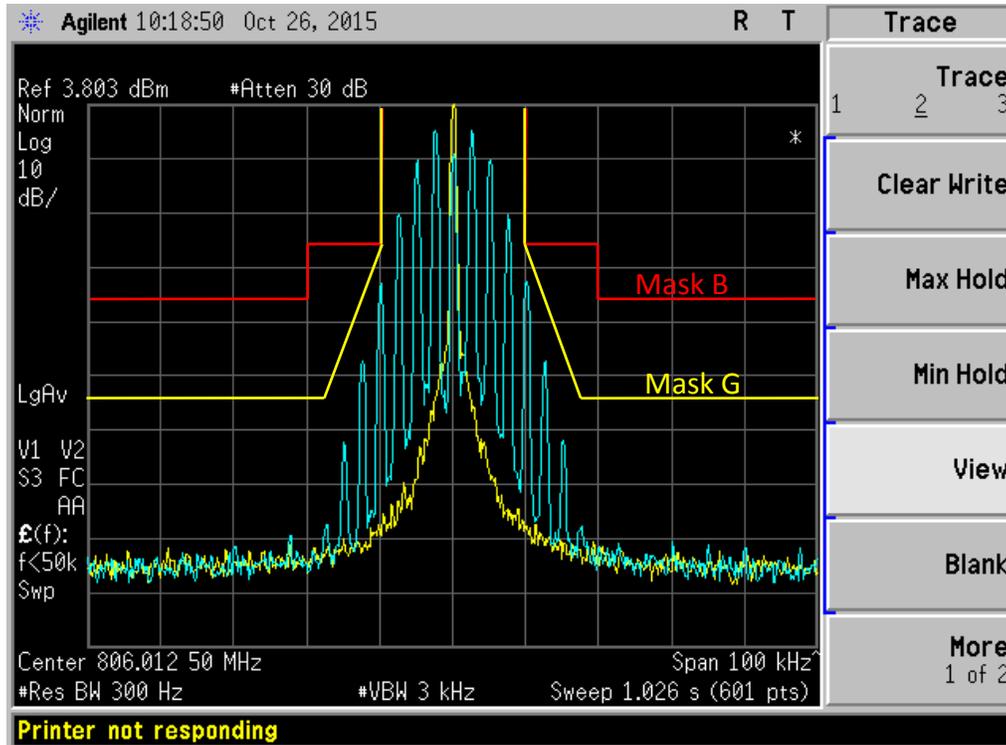


Figure 6E-1: 806.0125 MHz, 25 kHz Channel Spacing, 2500Hz Audio Modulation only, 16K0F3E Mask B, G

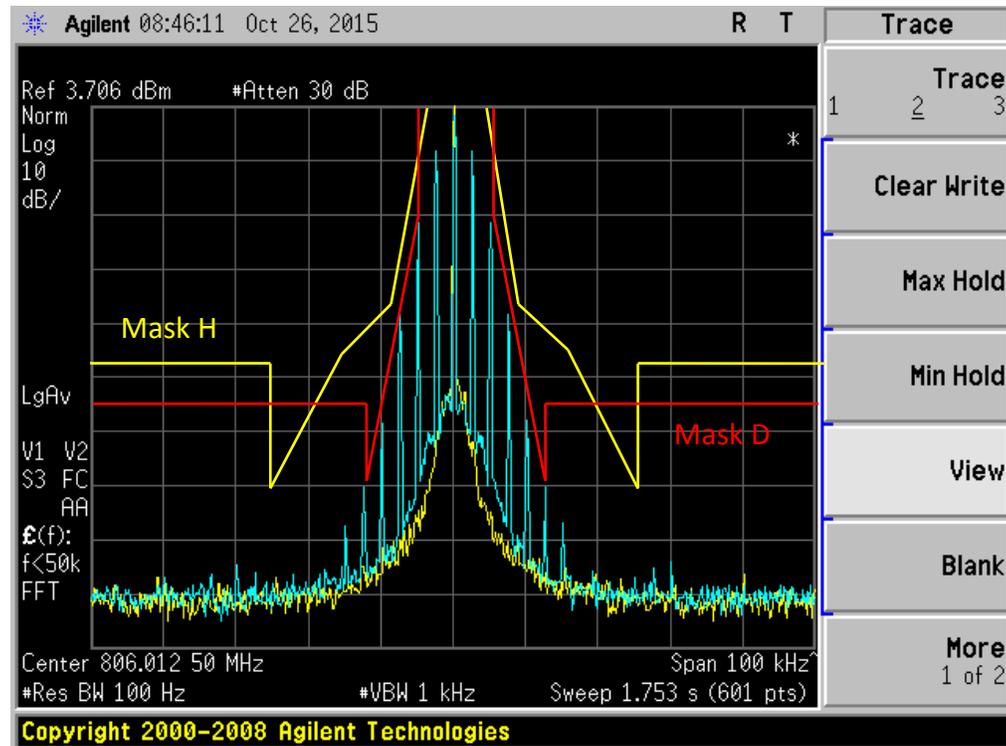


Figure 6E-2: 806.0125 MHz, 12.5 kHz Channel Spacing, 2500Hz Audio Modulation only, 11K0F3E Mask D, H

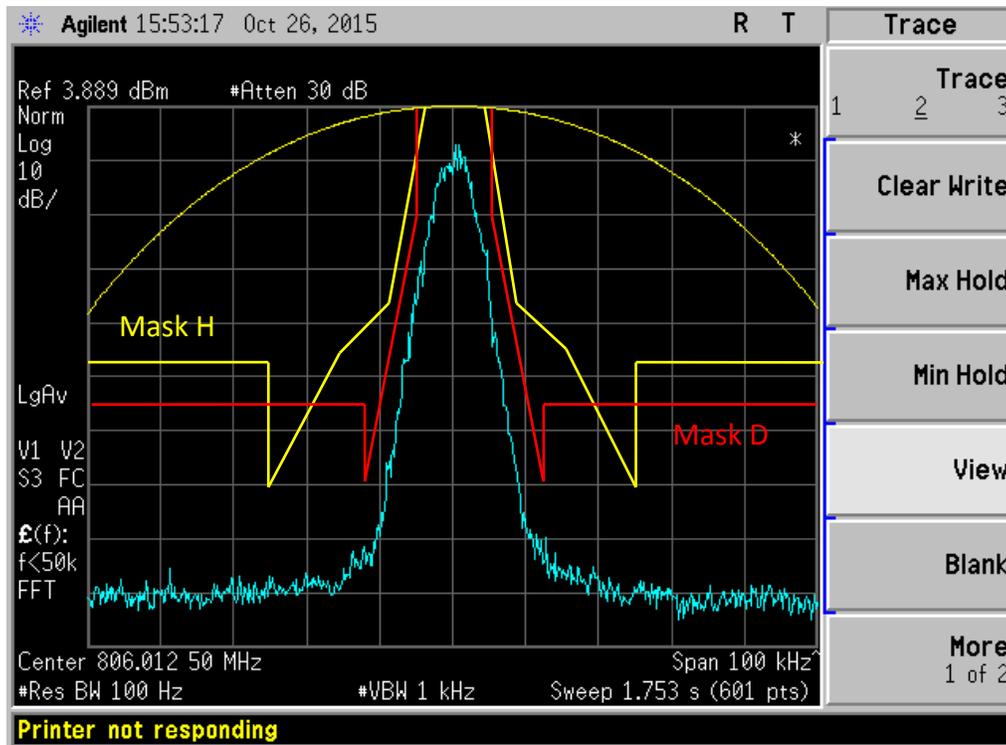


Figure 6E-3: 806.0125 MHz, O.153 Test Pattern, 4FSK Voice Modulation only, 7K60F1E Mask D, H

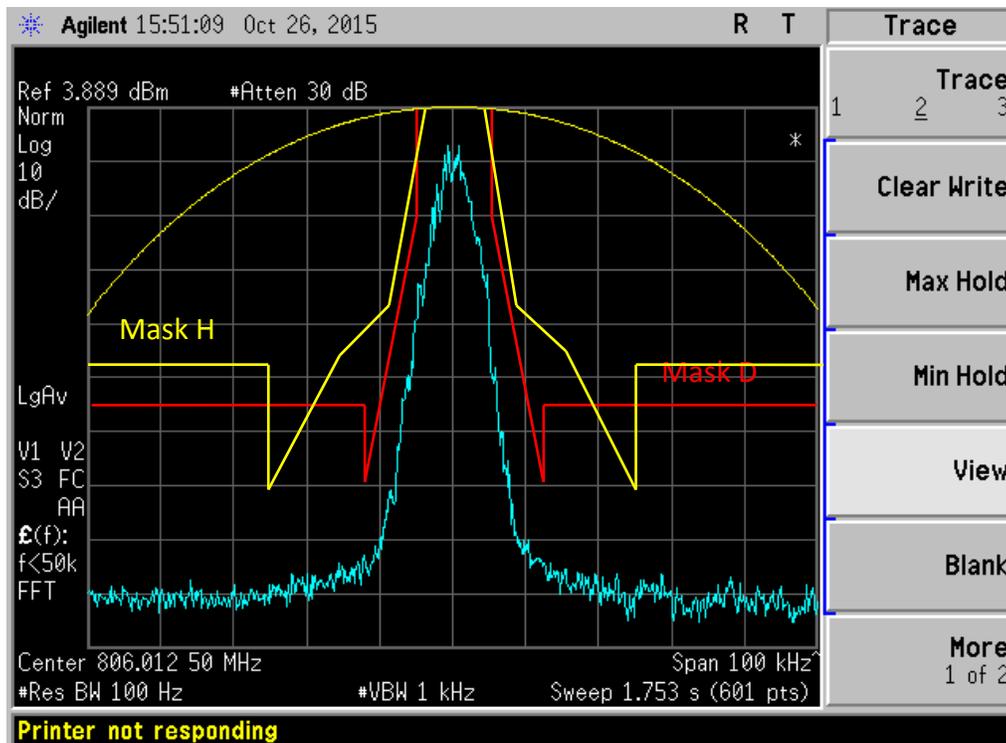


Figure 6E-4: 806.0125 MHz, O.153 Test Pattern, 4FSK Data Modulation only, 7K60F1D Mask D, H

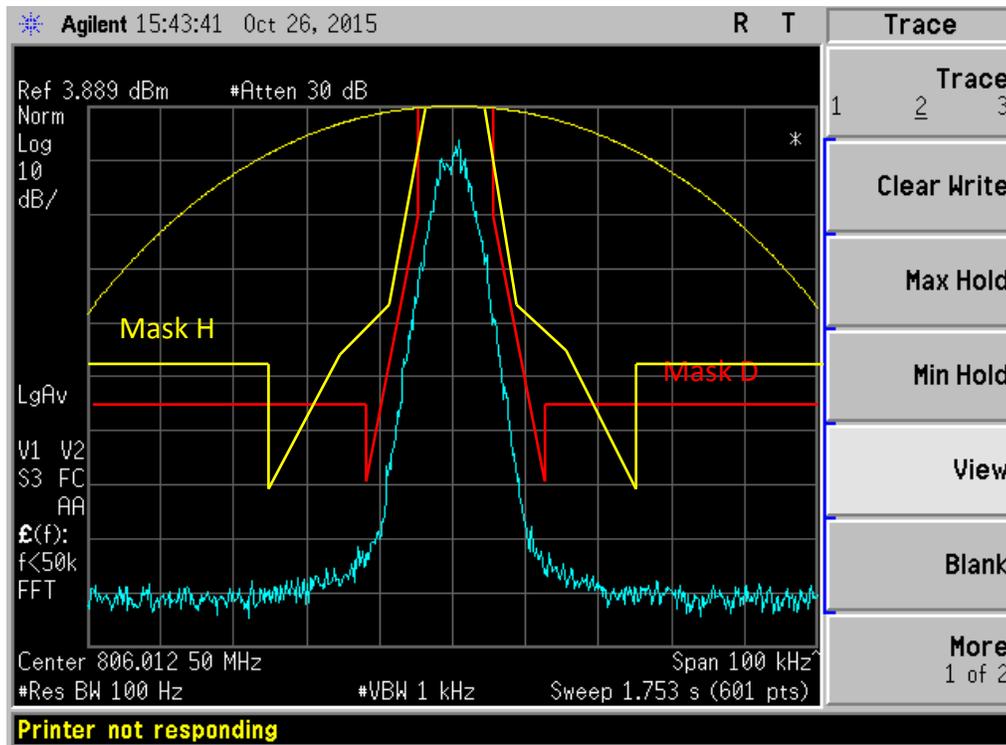


Figure 6E-5: 806.0125 MHz, O.153 Test Pattern, 4FSK Voice and Data Modulation, 7K60F1W Mask D, H

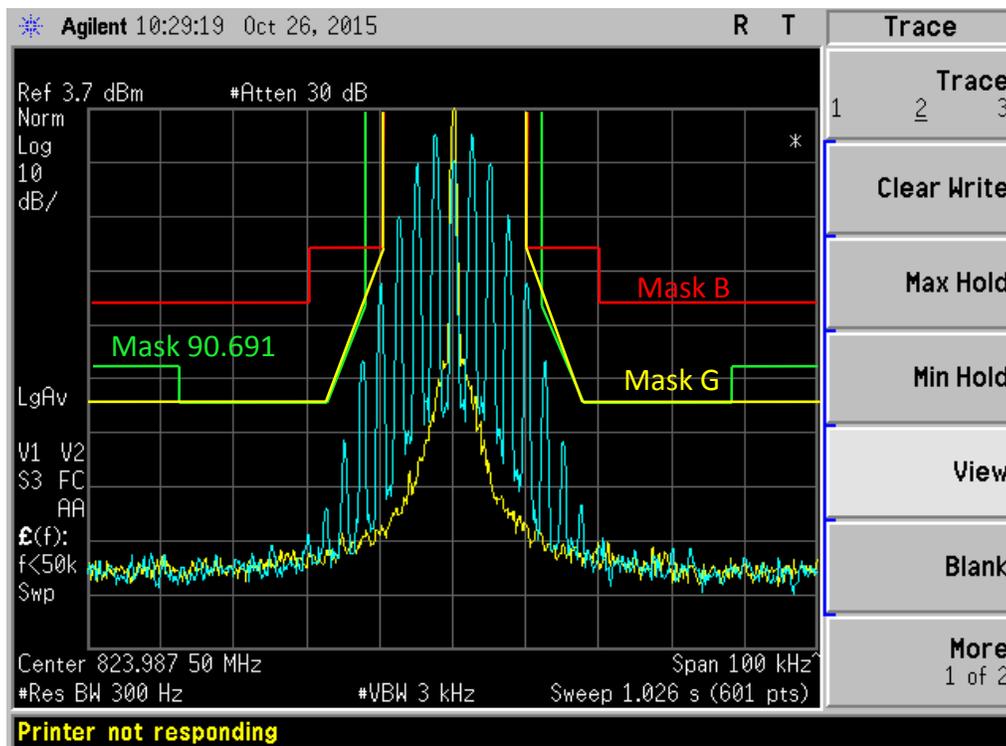


Figure 6E-6: 823.9875 MHz, 25 kHz Channel Spacing, 2500Hz Audio Modulation only, 16K0F3E Mask B, G, 90.691

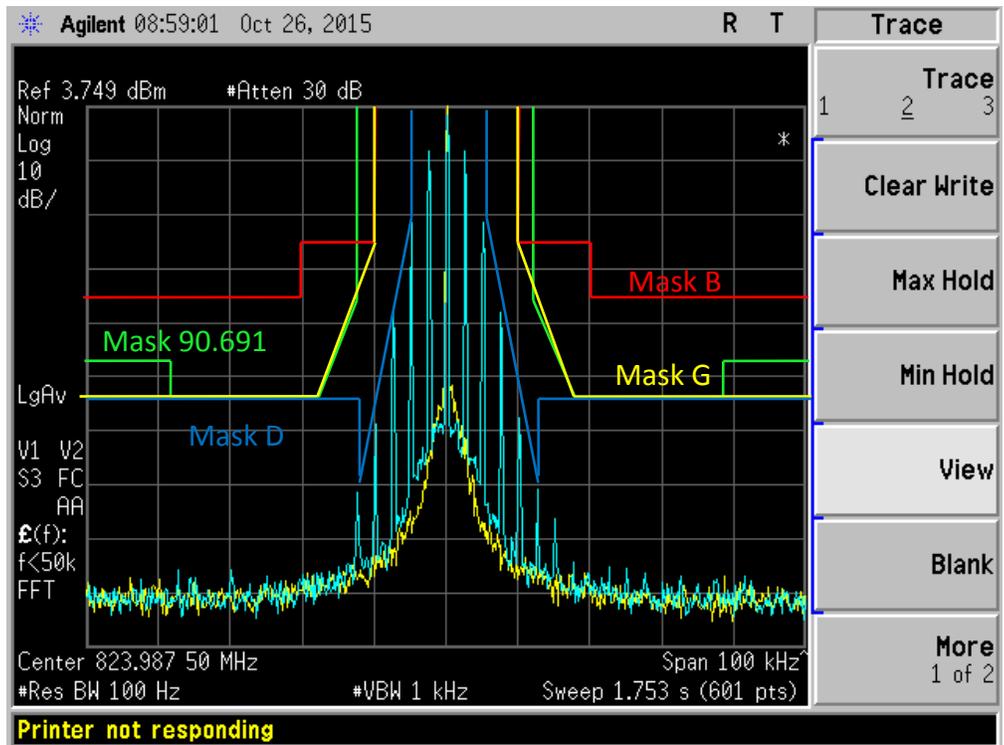


Figure 6E-7: 823.9875 MHz, 12.5 kHz Channel Spacing, 2500Hz Audio Modulation only, 11K0F3E Mask B, D, G, 90.691

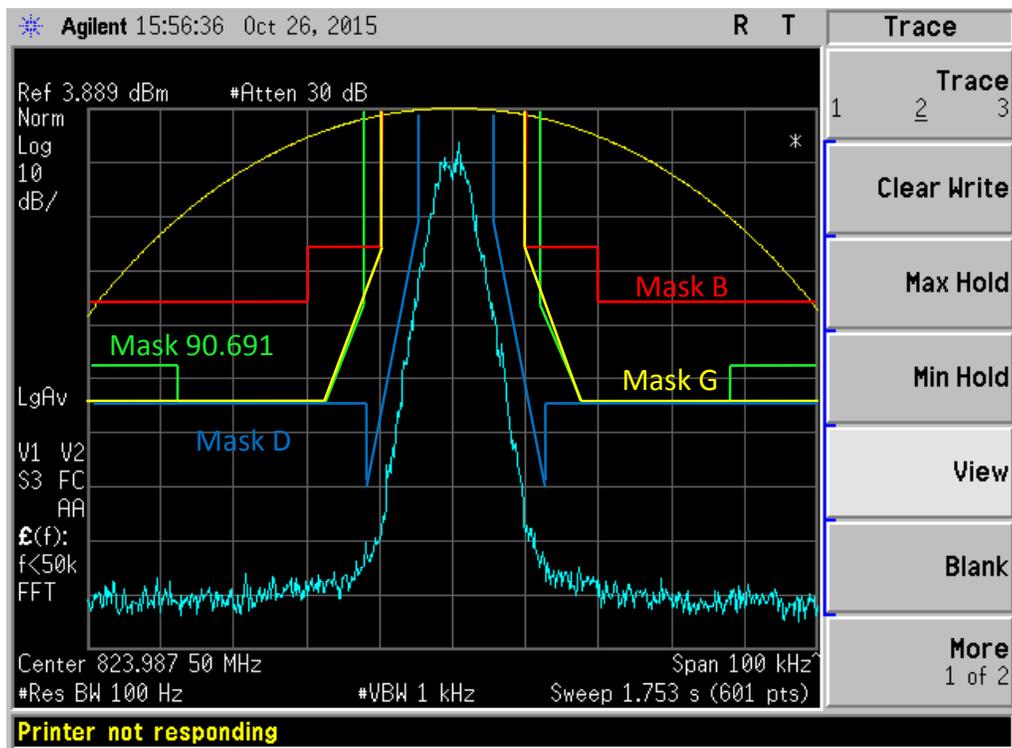


Figure 6E-8: 823.9875 MHz, 0.153 Test Pattern, 4FSK Voice Modulation only, 7K60F1E Mask B, D, G, 90.691

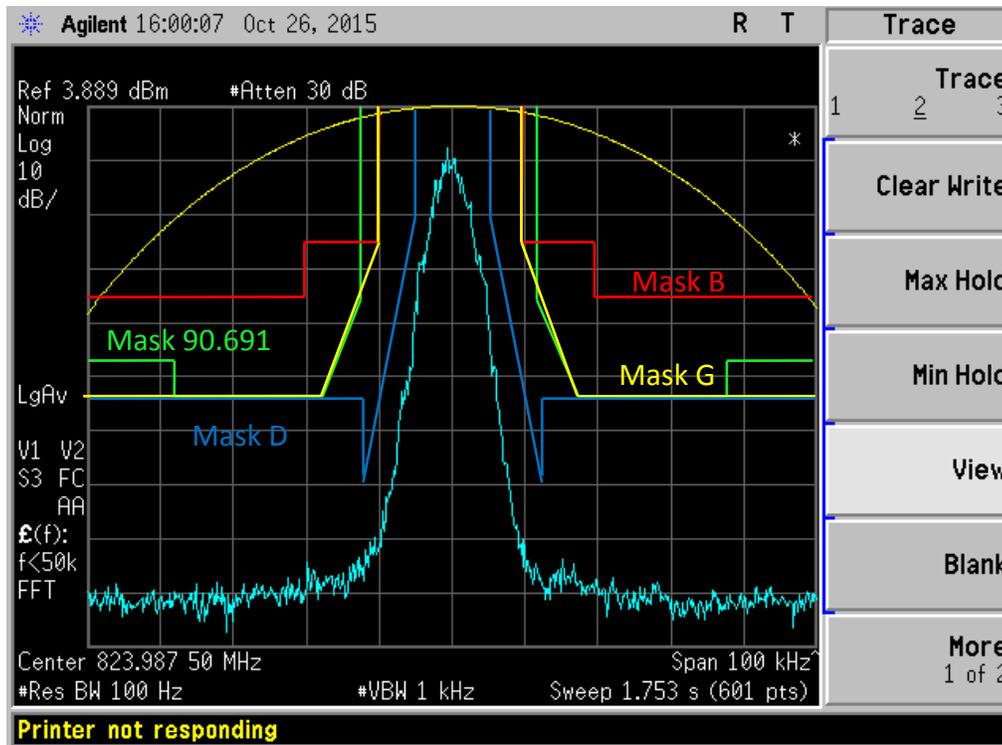


Figure 6E-9: 823.9875 MHz, O.153 Test Pattern, 4FSK Data Modulation only, 7K60F1D Mask B, D, G, 90.691

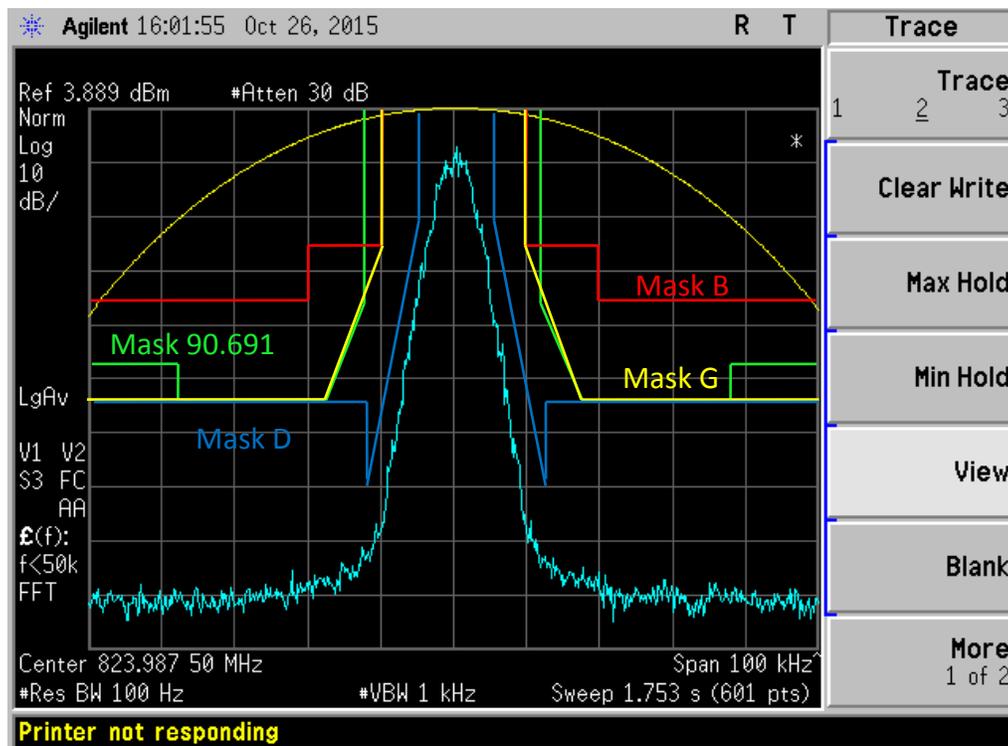


Figure 6E-10: 823.9875 MHz, O.153 Test Pattern, 4FSK Voice and Data Modulation, 7K60F1W Mask B, D, G, 90.691

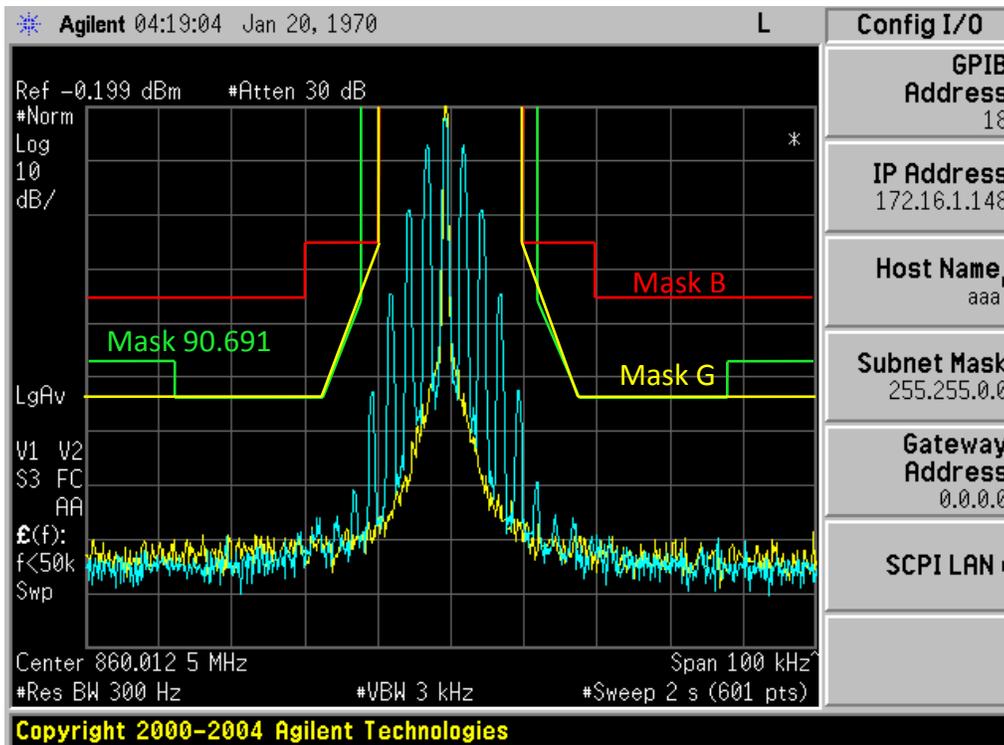


Figure 6E-11: 860.0125 MHz, 25 kHz Channel Spacing, 2500Hz Audio Modulation only, 16K0F3E Mask B, G, 90.691

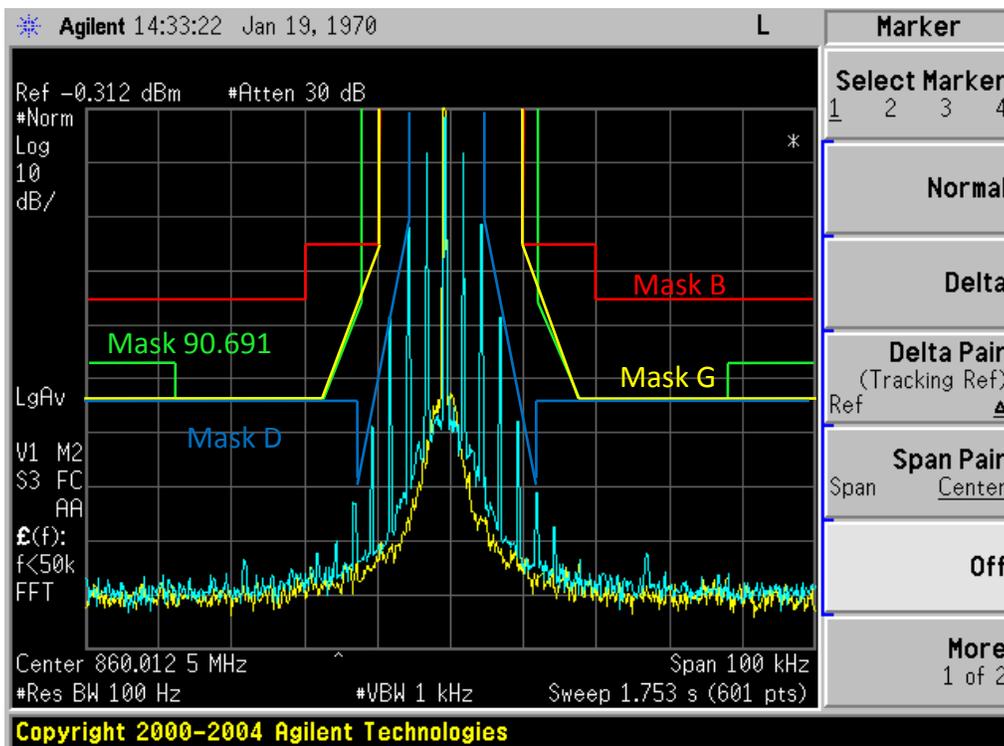


Figure 6E-12: 860.0125 MHz, 12.5 kHz Channel Spacing, 2500Hz Audio Modulation only, 11K0F3E Mask B, D, G, 90.691

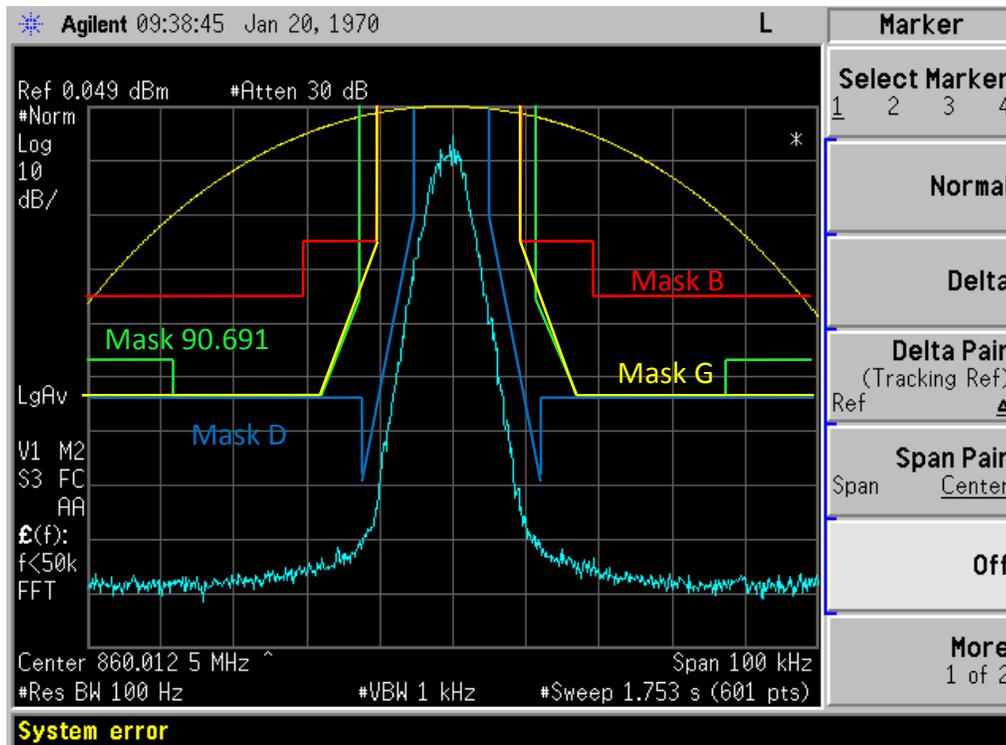


Figure 6E-13: 860.0125 MHz, O.153 Test Pattern, 4FSK Voice Modulation only, 7K60F1E Mask B, D, G, 90.691

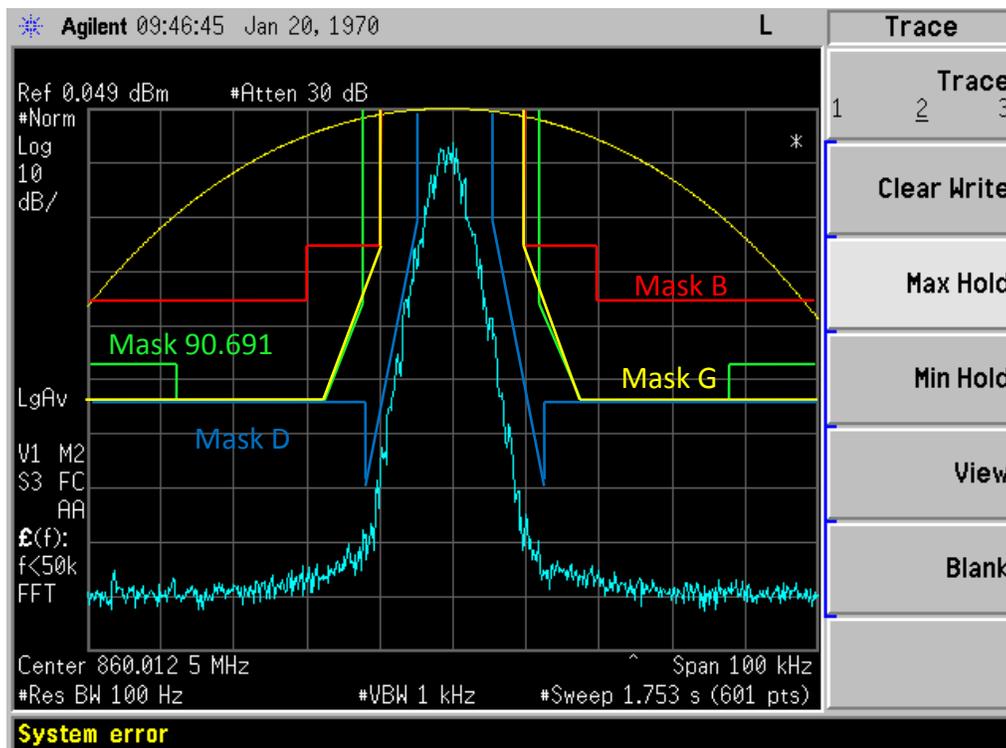


Figure 6E-14: 860.0125 MHz, O.153 Test Pattern, 4FSK Data Modulation only, 7K60F1D Mask B, D, G, 90.691

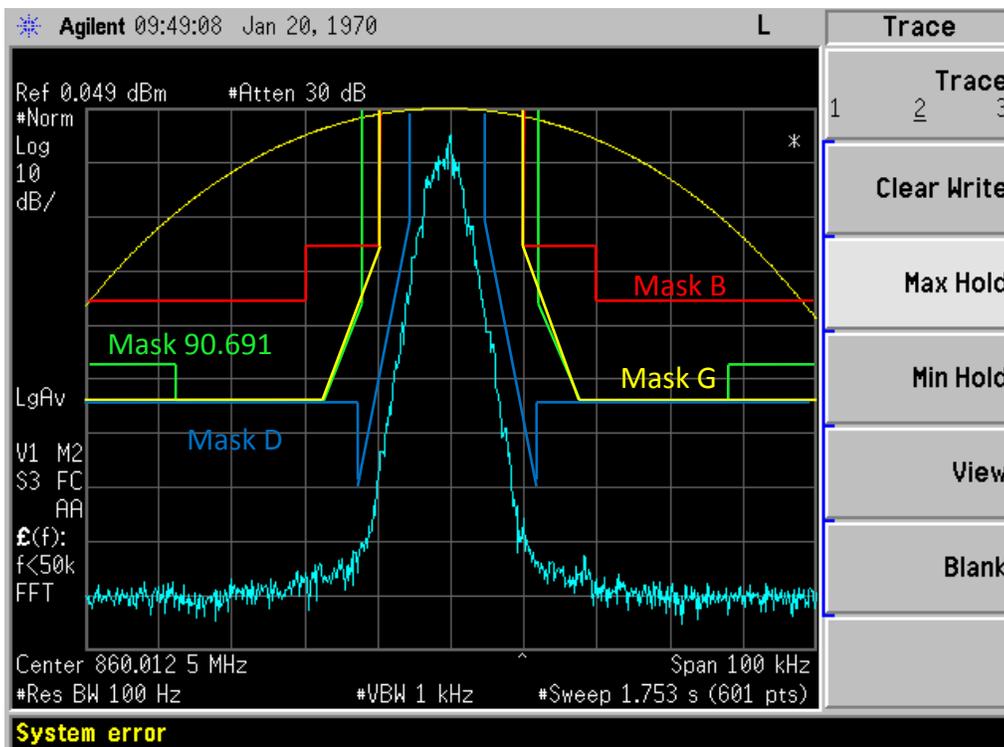


Figure 6E-15: 860.0125 MHz, O.153 Test Pattern, 4FSK Voice and Data Modulation, 7K60F1W Mask B, D, G, 90.691

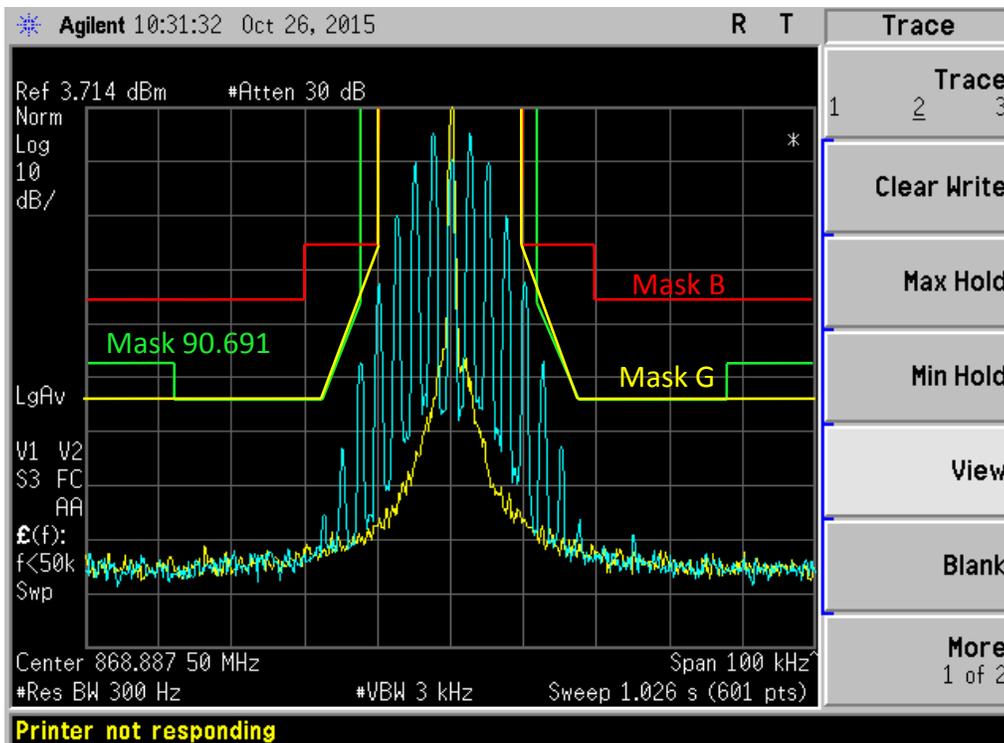


Figure 6E-16: 868.8875 MHz, 25 kHz Channel Spacing, 2500Hz Audio Modulation only, 16K0F3E Mask B, G, 90.691

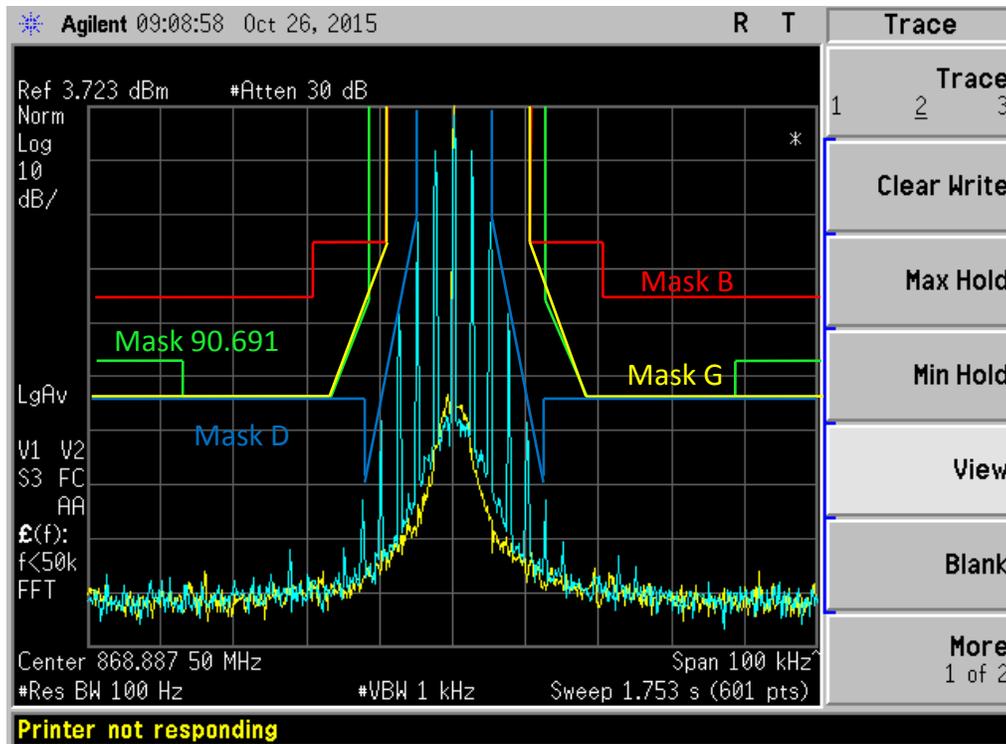


Figure 6E-17: 868.8875 MHz, 12.5 kHz Channel Spacing, 2500Hz Audio Modulation only, 11K0F3E Mask B, D, G, 90.691

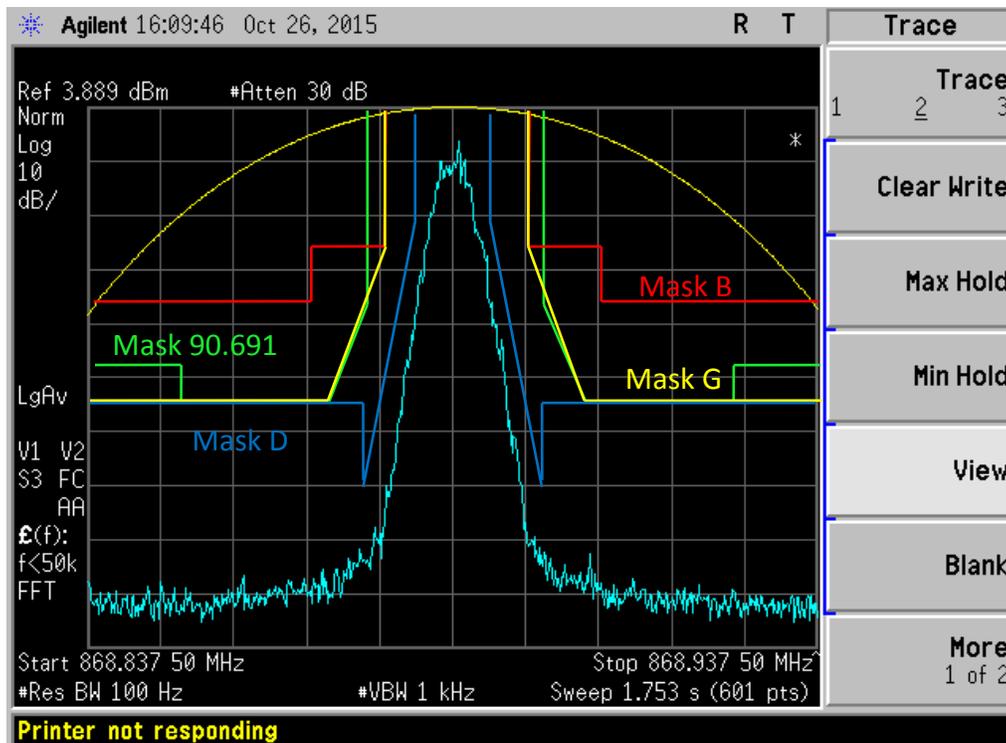


Figure 6E-18: 868.8875 MHz, O.153 Test Pattern, 4FSK Voice Modulation only, 7K60F1E Mask B, D, G, 90.691

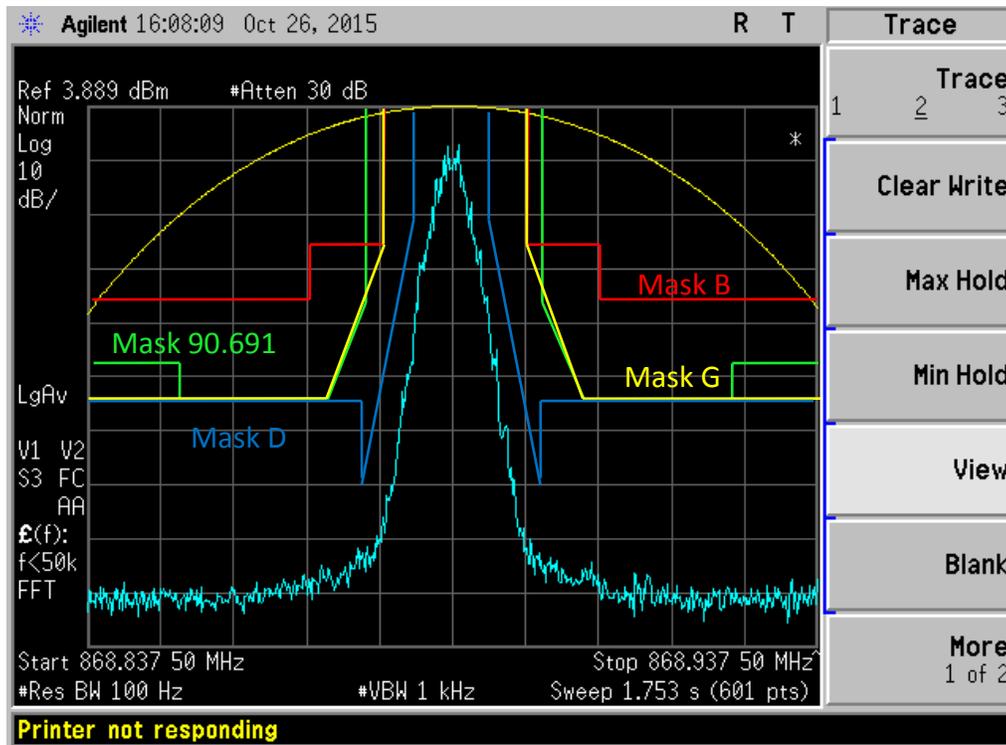


Figure 6E-19: 868.8875 MHz, O.153 Test Pattern, 4FSK Data Modulation only, 7K60F1D Mask B, D, G, 90.691

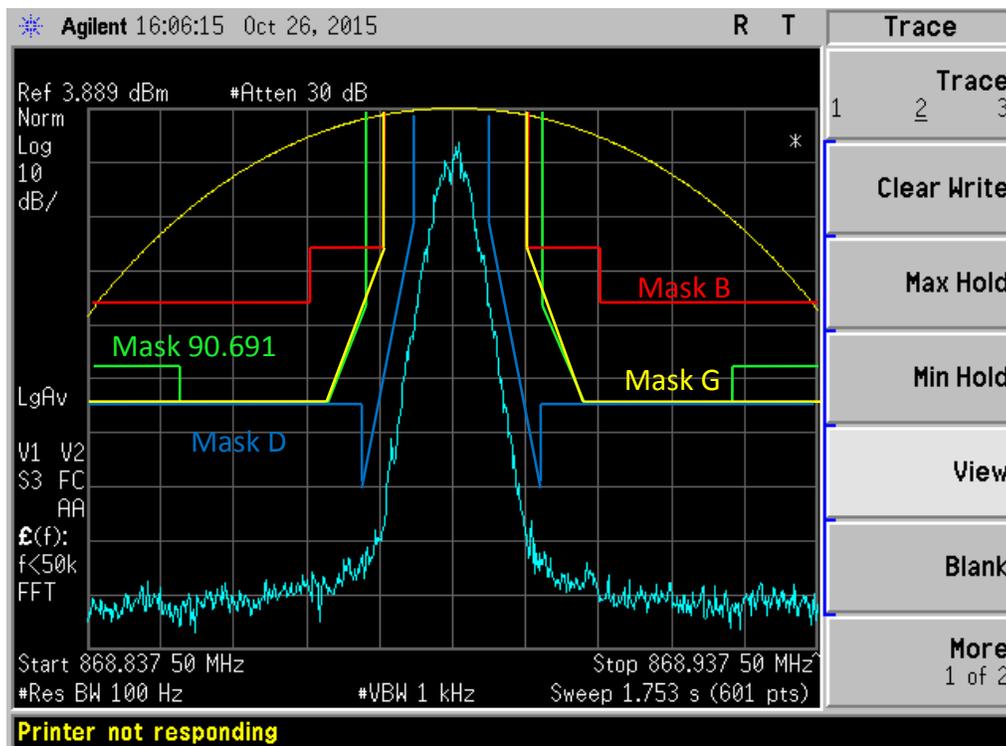


Figure 6E-20: 868.8875 MHz, O.153 Test Pattern, 4FSK Voice and Data Modulation, 7K60F1W Mask B, D, G, 90.691

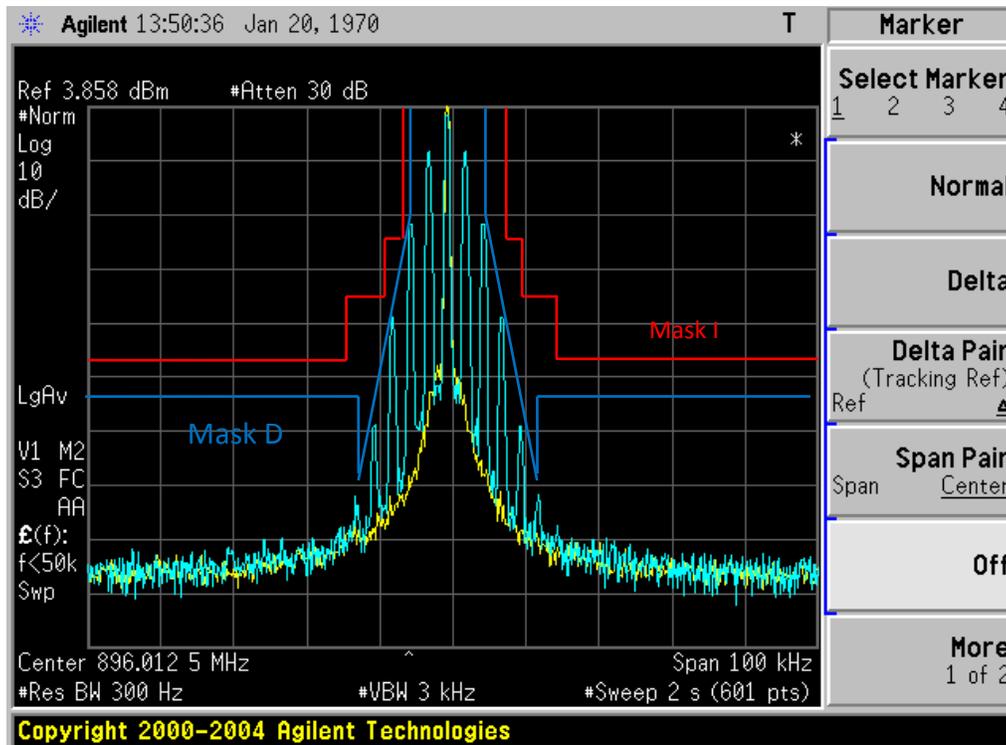


Figure 6E-21: 896.0125 MHz, 12.5 kHz Channel Spacing, 2500Hz Audio Modulation only, 11K0F3E Mask D, I

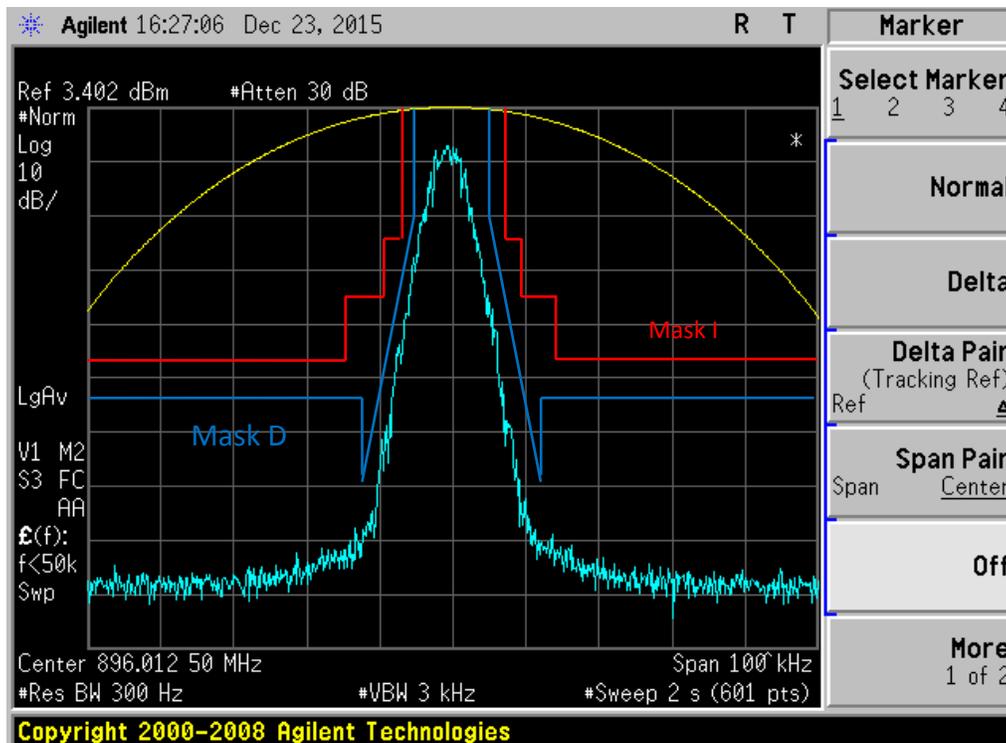


Figure 6E-22: 896.0125 MHz, O.153 Test Pattern, 4FSK Voice Modulation only, 7K60F1E Mask D, I

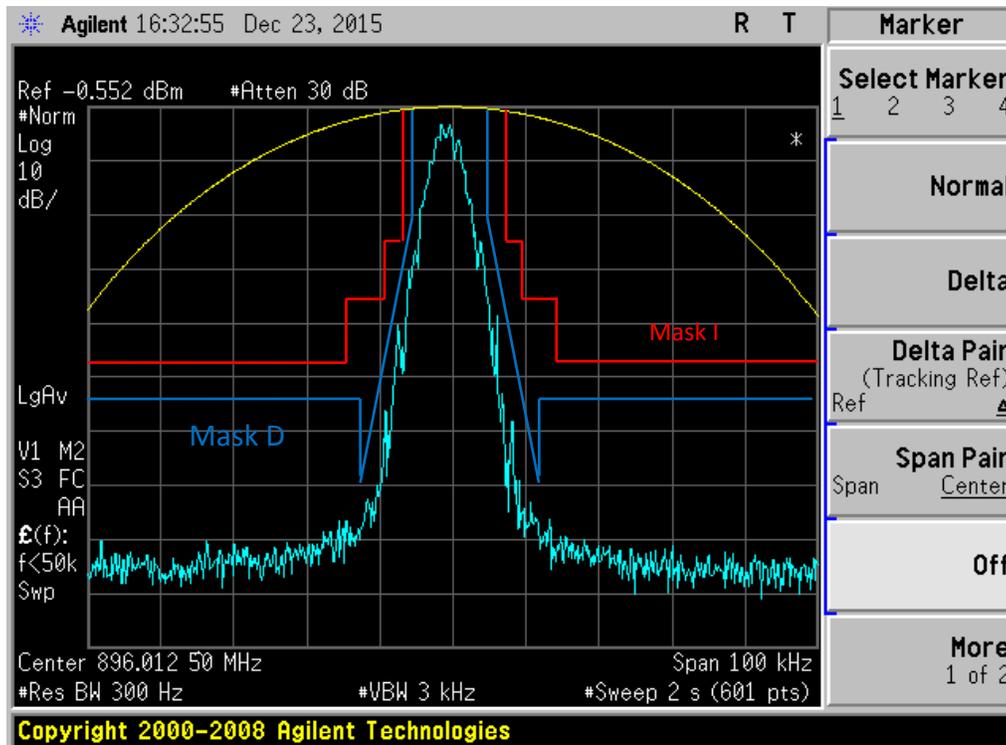


Figure 6E-23: 896.0125 MHz, O.153 Test Pattern, 4FSK Data Modulation only, 7K60F1D Mask D, I

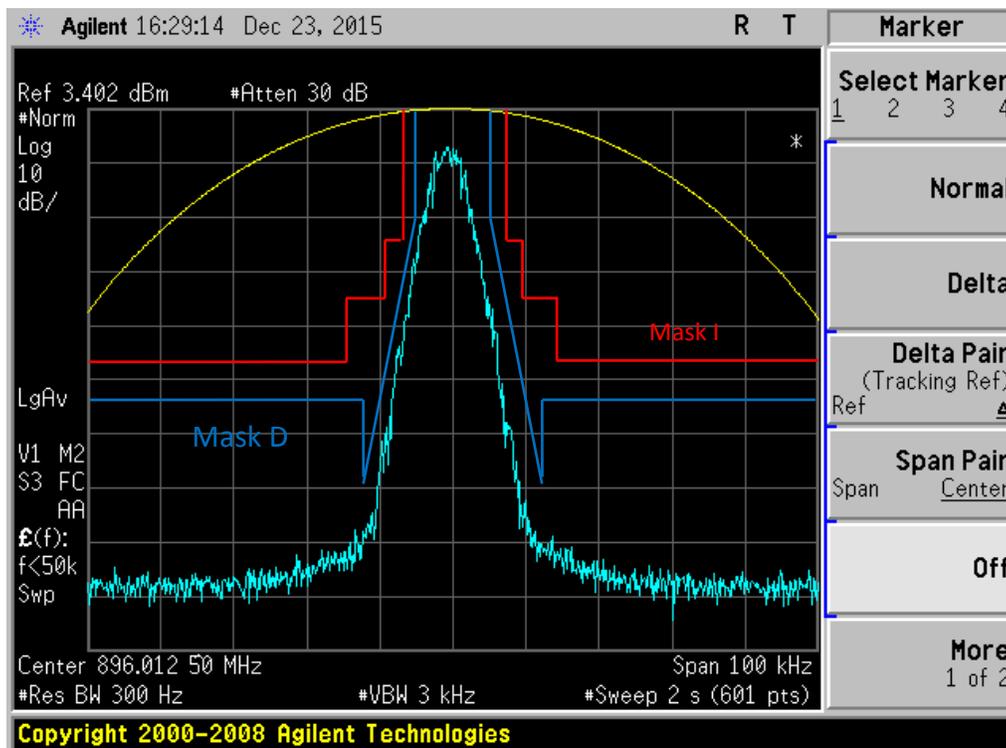


Figure 6E-24: 896.0125 MHz, O.153 Test Pattern, 4FSK Voice and Data Modulation, 7K60F1W Mask D, I

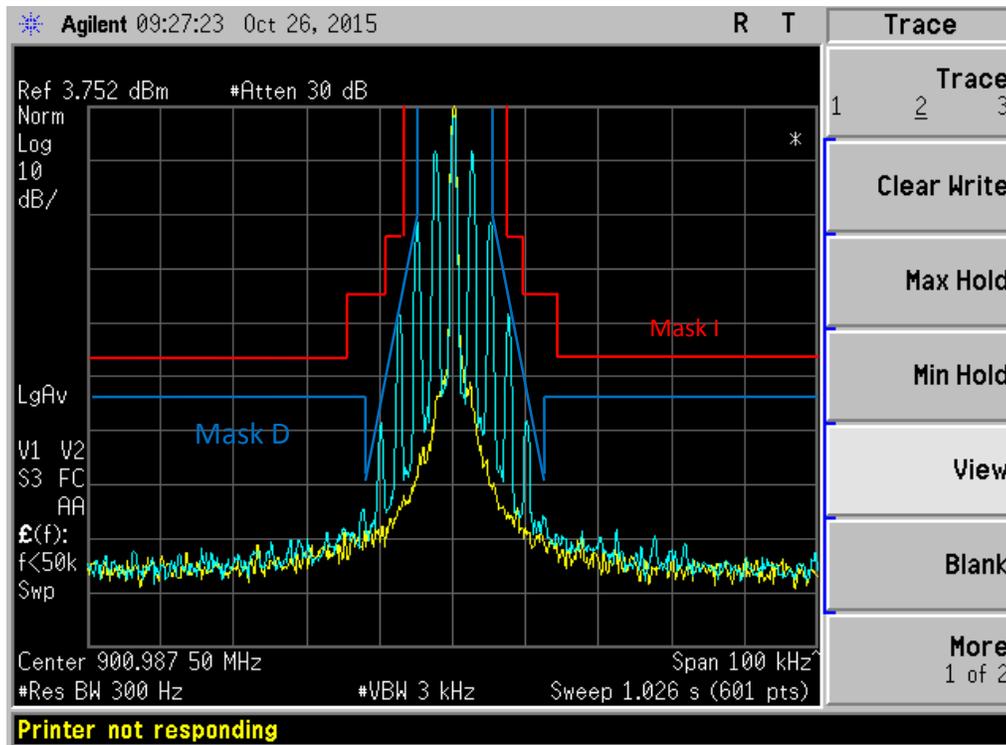


Figure 6E-25: 900.9875 MHz, 12.5 kHz Channel Spacing, 2500Hz Audio Modulation only, 11K0F3E Mask D, I

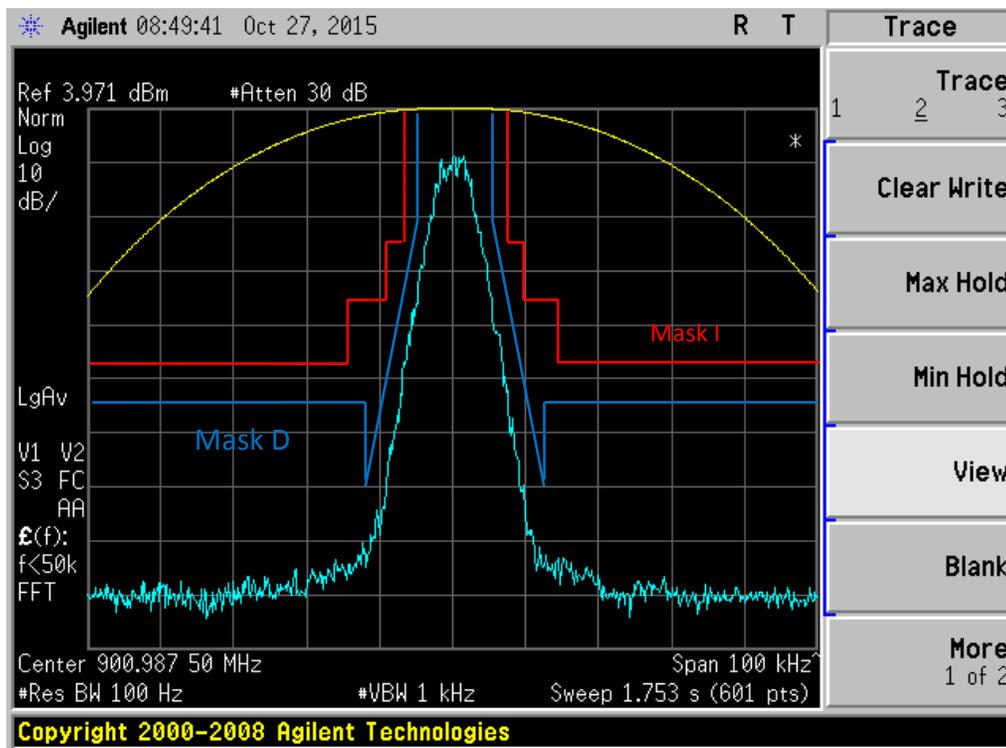


Figure 6E-26: 900.9875 MHz, O.153 Test Pattern, 4FSK Voice Modulation only, 7K60F1E Mask D, I

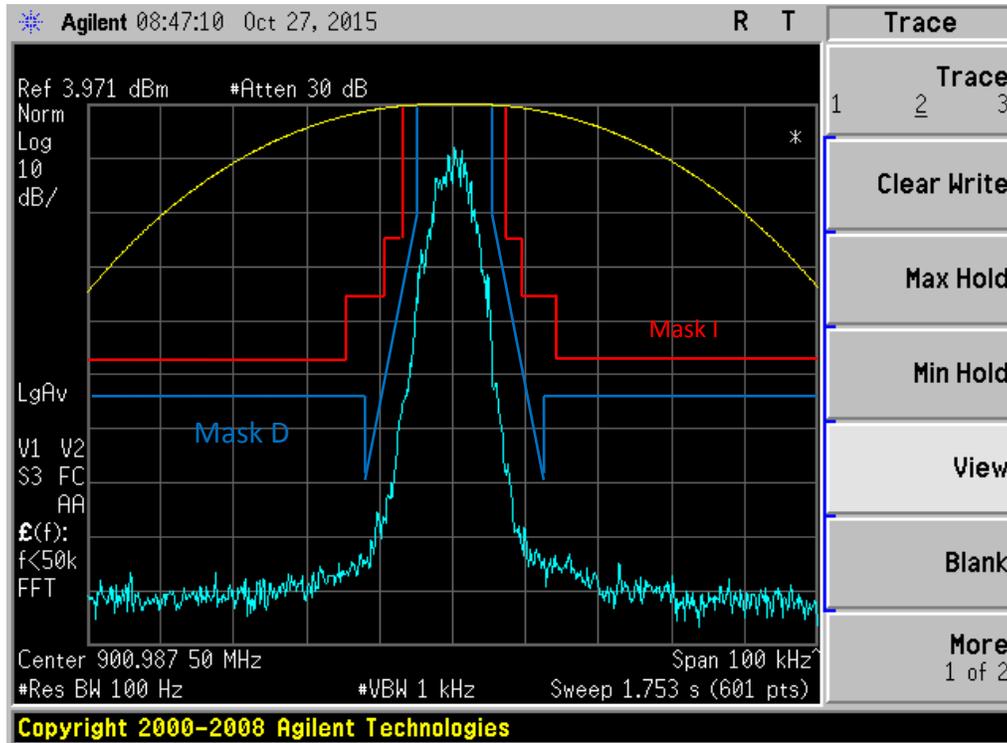


Figure 6E-27: 900.9875 MHz, O.153 Test Pattern, 4FSK Data Modulation only, 7K60F1D Mask D, I

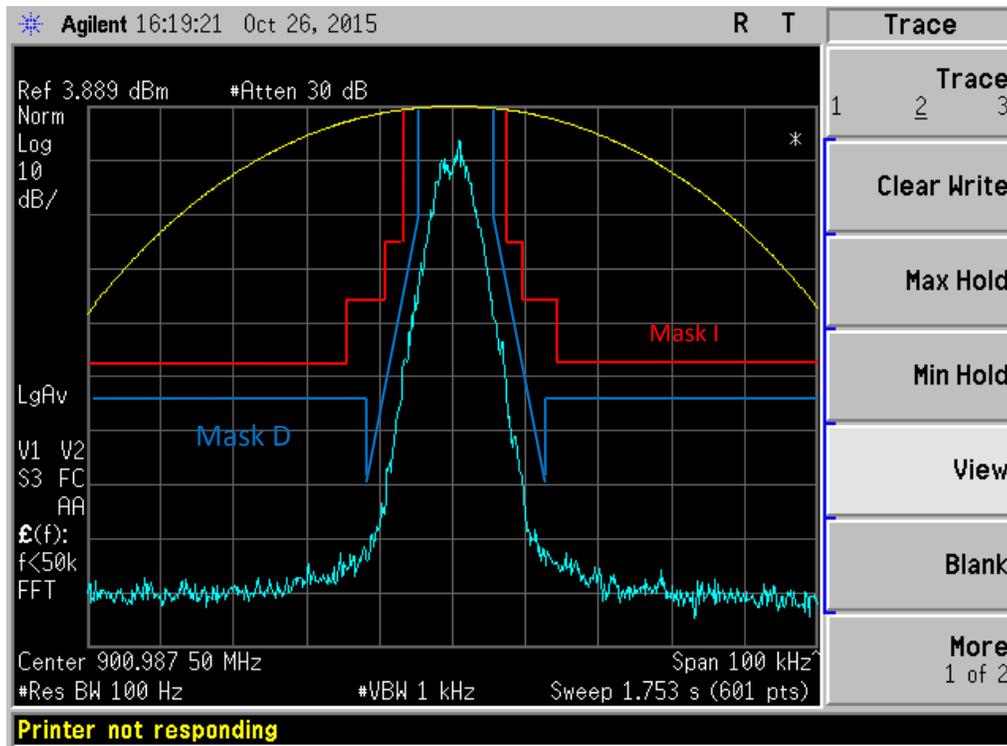


Figure 6E-28: 900.9875 MHz, O.153 Test Pattern, 4FSK Voice and Data Modulation, 7K60F1W Mask D, I

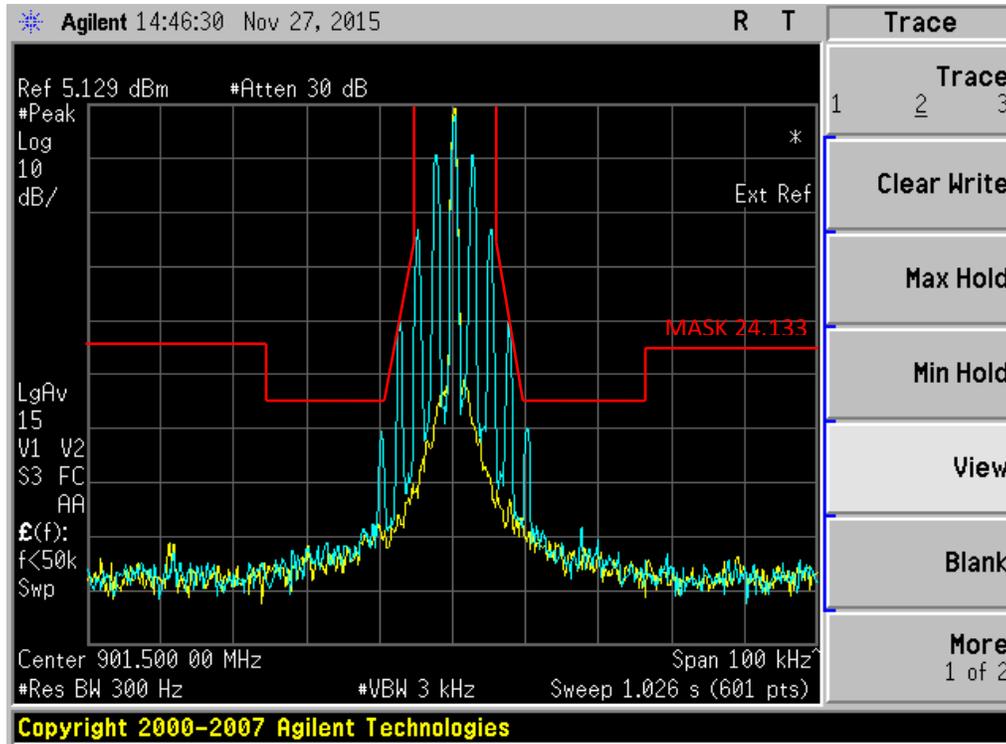


Figure 6E-29: 901.5 MHz, 12.5 kHz Channel Spacing, 2500Hz Audio Modulation only, 10K0F3E Mask 24.133 (Part 24)

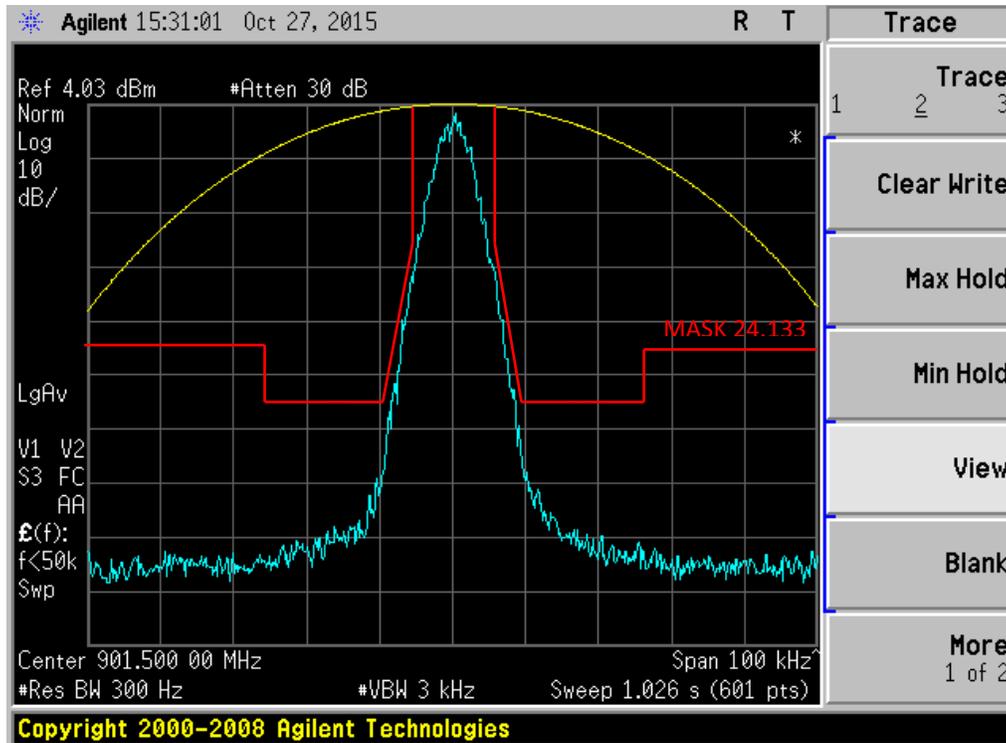


Figure 6E-30: 901.5 MHz, O.153 Test Pattern, 4FSK Voice Modulation only, 7K60F1E Mask 24.133 (Part 24)

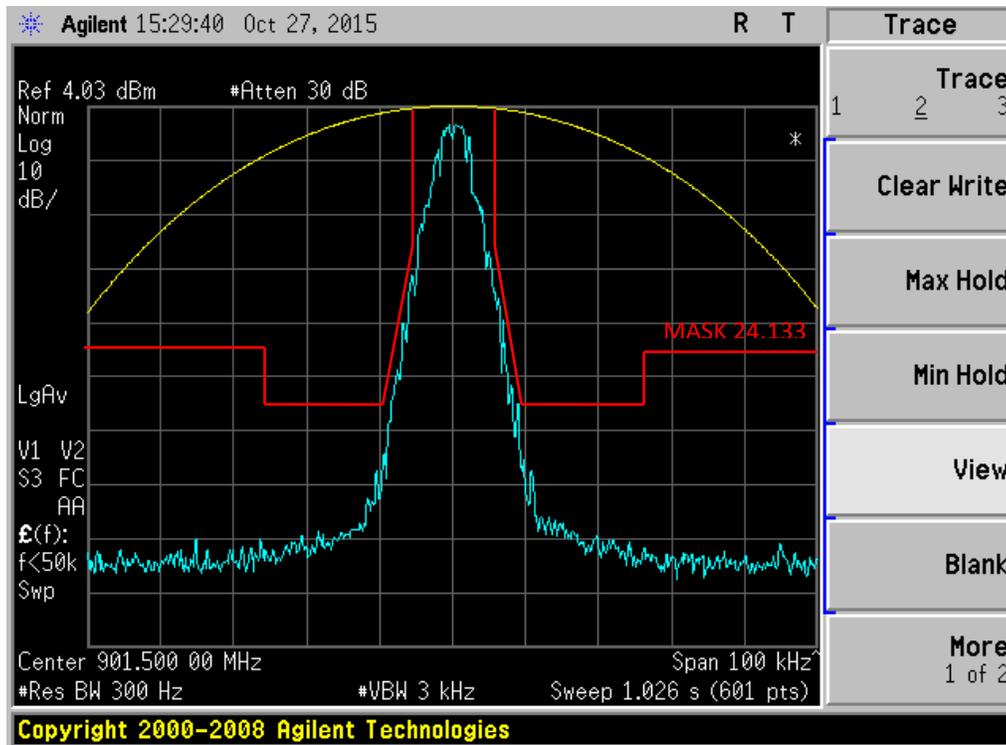


Figure 6E-31: 901.5 MHz, O.153 Test Pattern, 4FSK Data Modulation only, 7K60F1D Mask 24.133 (Part 24)

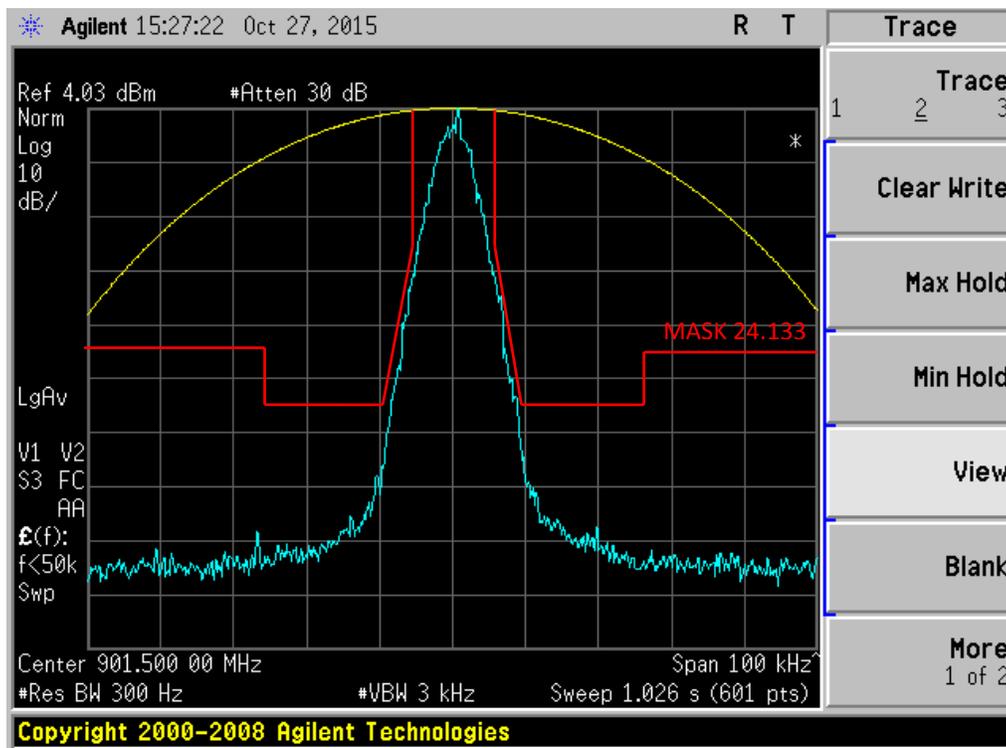


Figure 6E-32: 901.5 MHz, O.153 Test Pattern, 4FSK Voice and Data Modulation, 7K60F1W Mask 24.133 (Part 24)

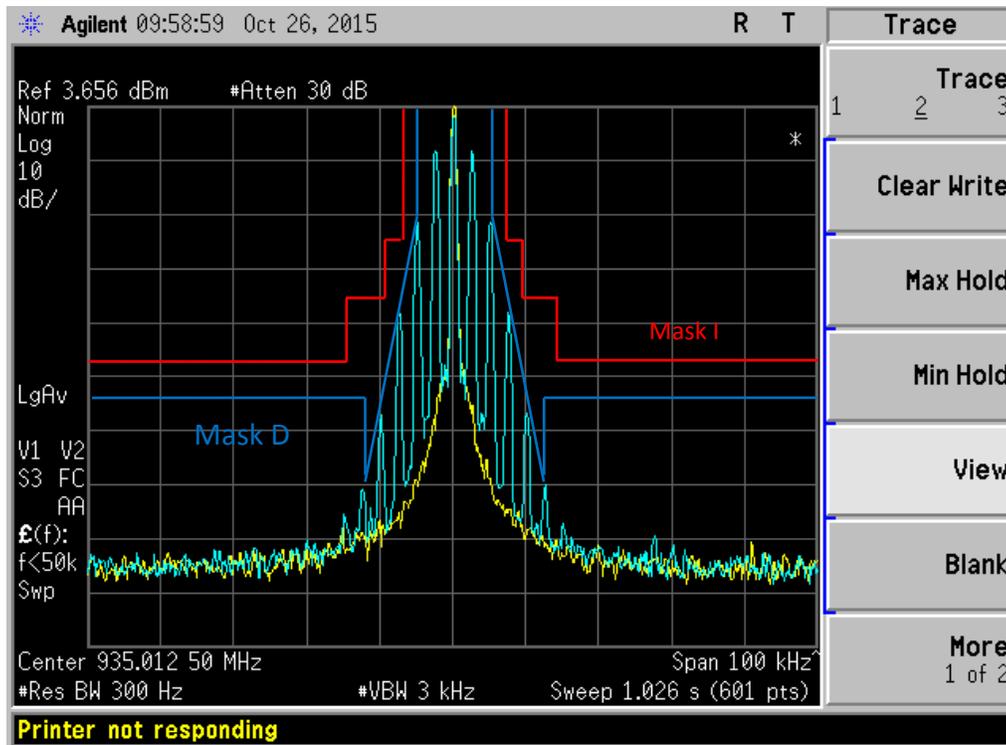


Figure 6E-33: 935.0125 MHz, 12.5 kHz Channel Spacing, 2500Hz Audio Modulation only, 11K0F3E Mask D, I

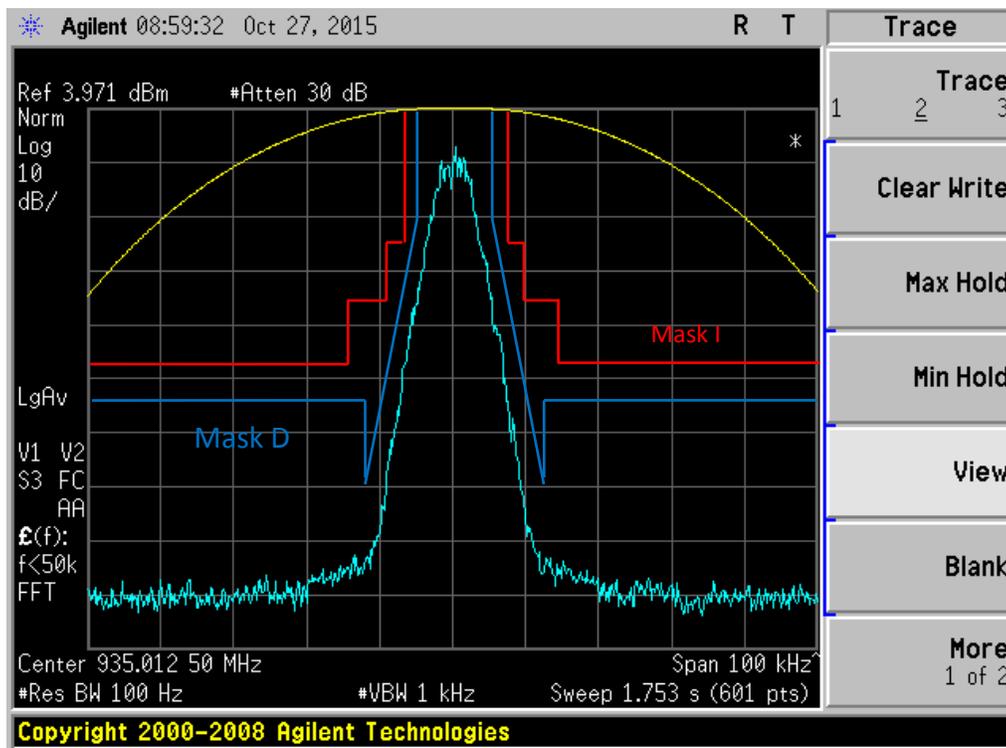


Figure 6E-34: 935.0125 MHz, O.153 Test Pattern, 4FSK Voice Modulation only, 7K60F1E Mask D, I

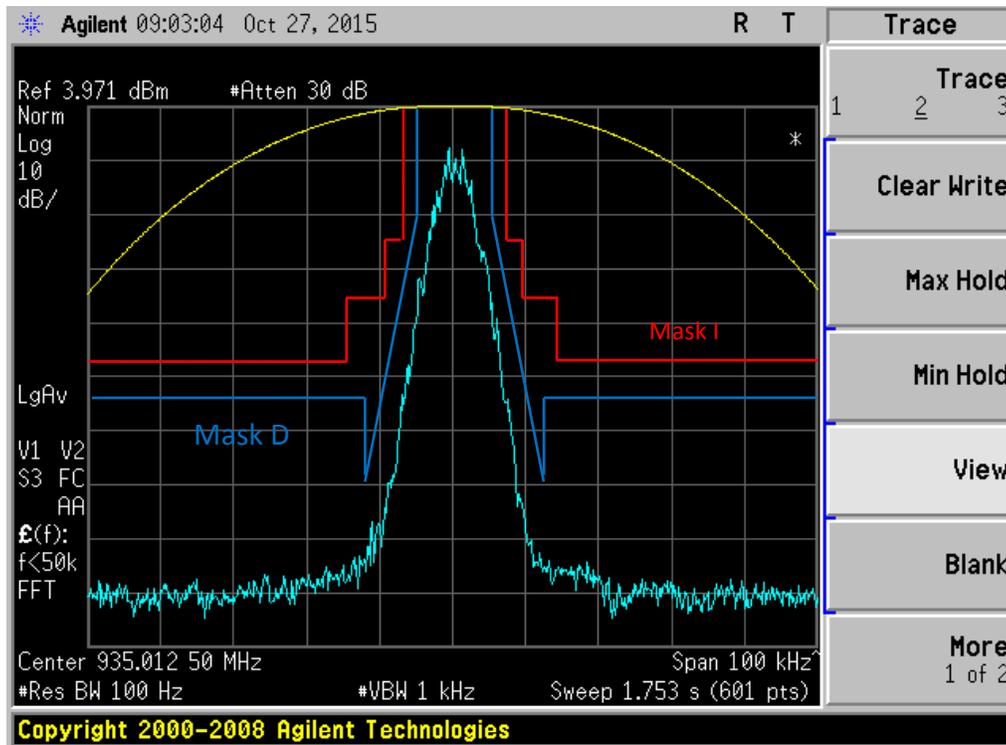


Figure 6E-35: 935.0125 MHz, O.153 Test Pattern, 4FSK Data Modulation only, 7K60F1D Mask D, I

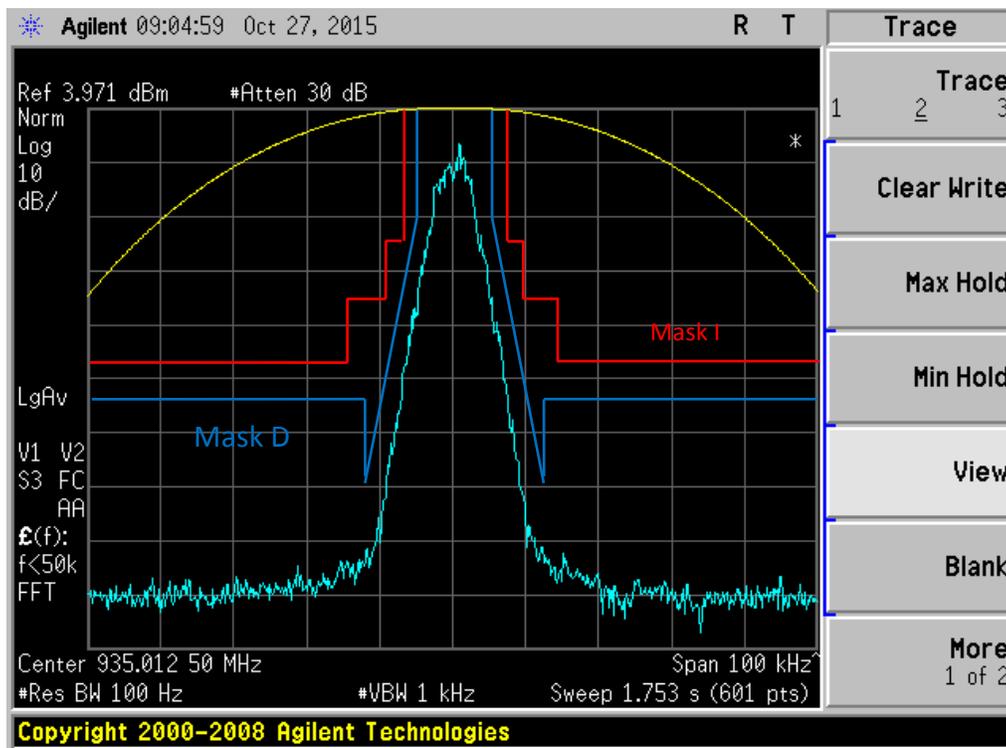


Figure 6E-36: 935.0125 MHz, O.153 Test Pattern, 4FSK Voice and Data Modulation, 7K60F1W Mask D, I

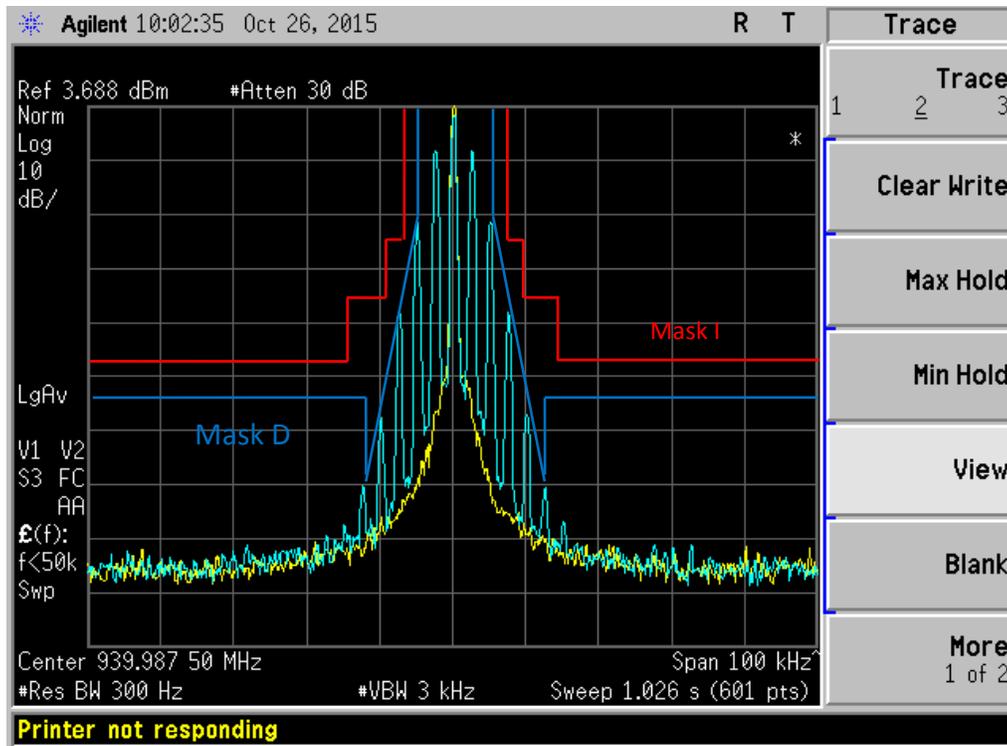


Figure 6E-37: 939.9875 MHz, 12.5 kHz Channel Spacing, 2500Hz Audio Modulation only, 11K0F3E Mask D, I

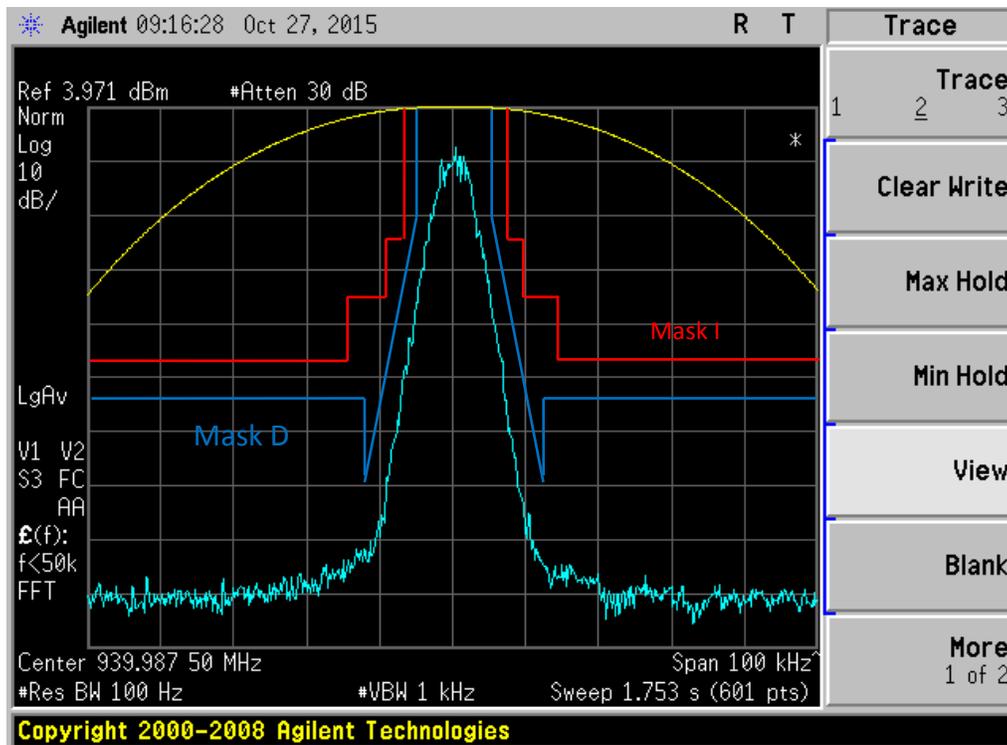


Figure 6E-38: 939.9875 MHz, O.153 Test Pattern, 4FSK Voice Modulation only, 7K60F1E Mask D, I

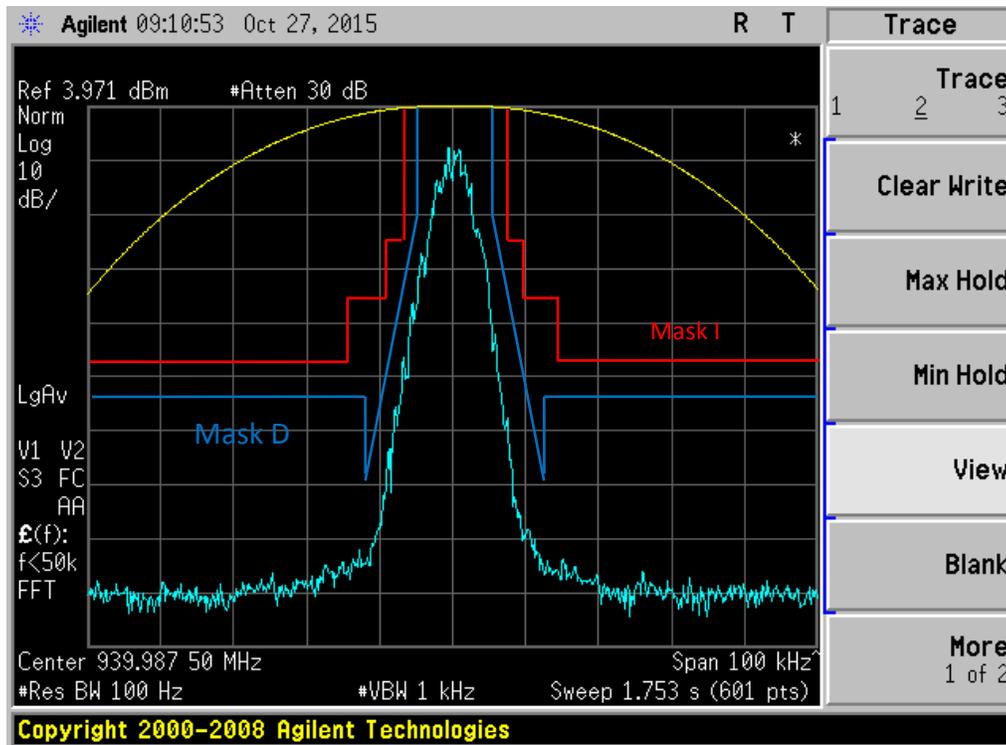


Figure 6E-39: 939.9875 MHz, O.153 Test Pattern, 4FSK Data Modulation only, 7K60F1D Mask D, I

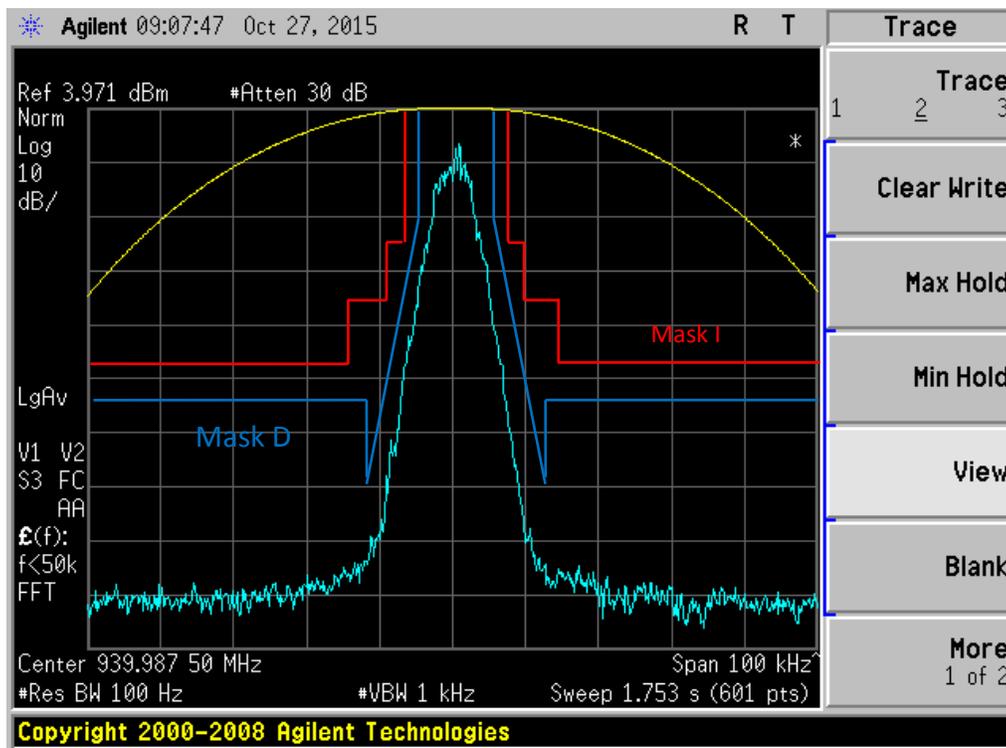


Figure 6E-40: 939.9875 MHz, O.153 Test Pattern, 4FSK Voice and Data Modulation, 7K60F1W Mask D, I

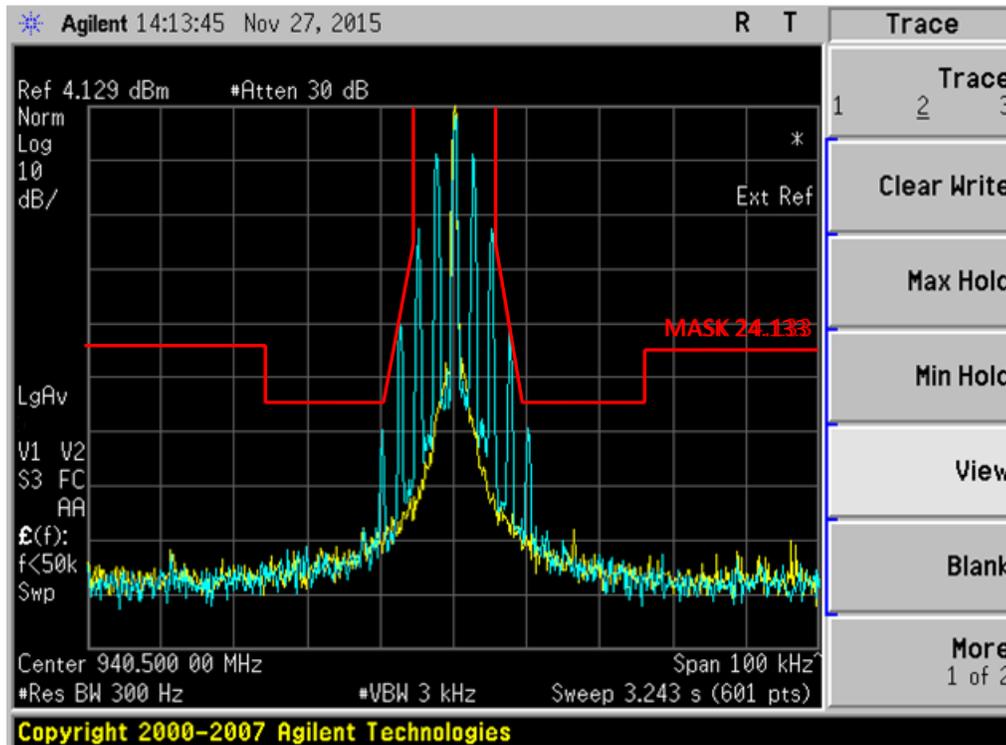


Figure 6E-41: 940.5 MHz, 12.5 kHz Channel Spacing, 2500Hz Audio Modulation only, 10K0F3E Mask 24.133 (Part 24)

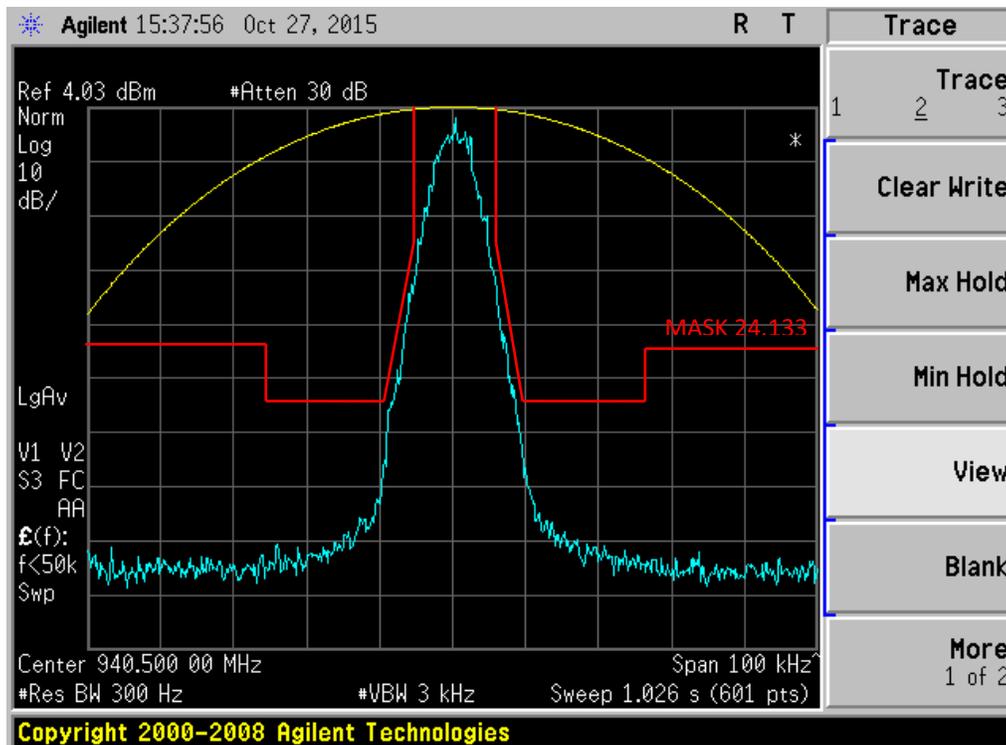


Figure 6E-42: 940.5 MHz, O.153 Test Pattern, 4FSK Voice Modulation only, 7K60F1E Mask 24.133 (Part 24)

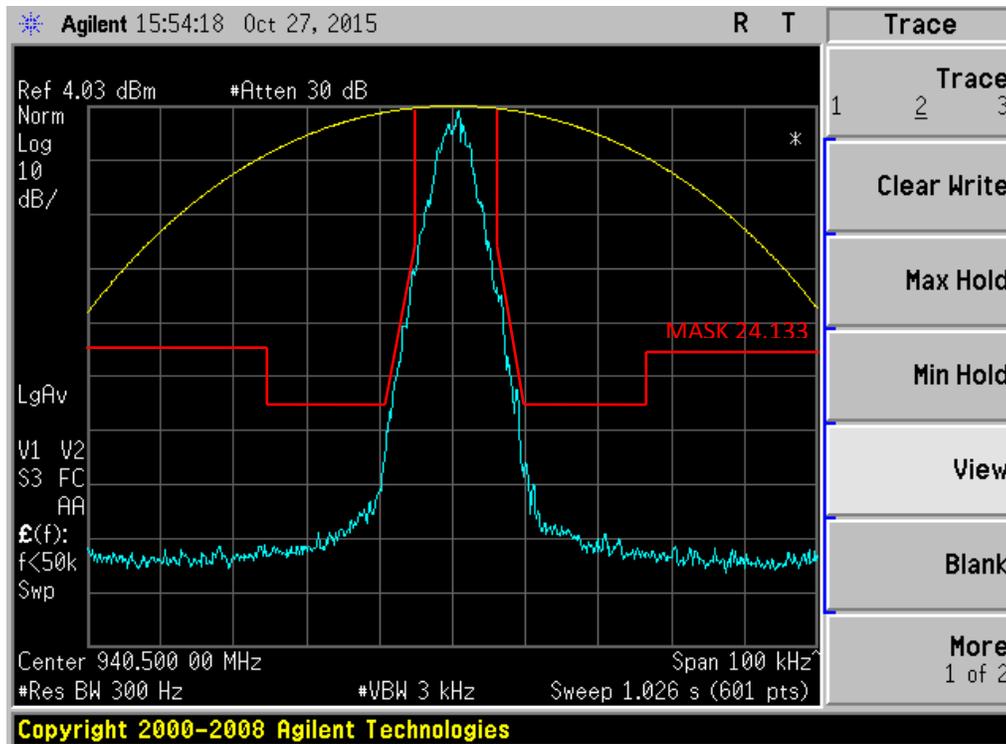


Figure 6E-43: 940.5 MHz, O.153 Test Pattern, 4FSK Data Modulation only, 7K60F1D Mask 24.133 (Part 24)

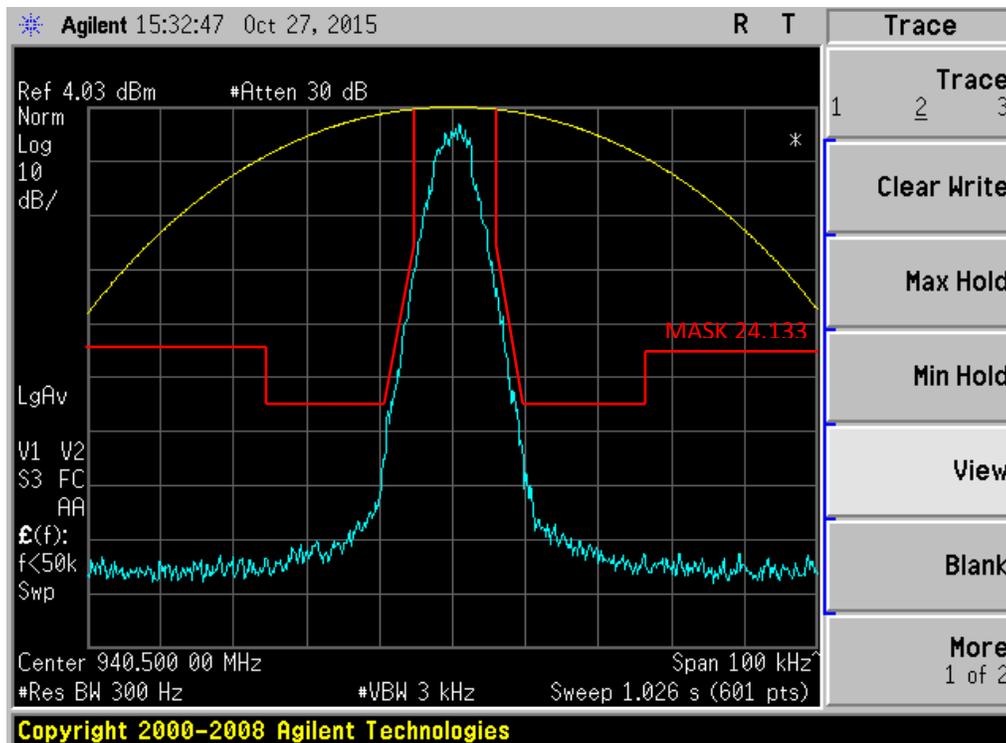


Figure 6E-44: 940.5 MHz, O.153 Test Pattern, 4FSK Voice and Data Modulation, 7K60F1W Mask 24.133 (Part 24)

****NOTE:-**

- For 4FSK Digital Modulation, 12.5kHz Data 7K60F1D & 7K60FXD would be the same. Therefore only measurements with 7K60F1D shown above.
- For 4FSK Digital Modulation, 12.5kHz 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 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
- All OBW plots were tested at max power

99% Bandwidth Power

Spectrum Analyzer setting as below:

RBW = 150 Hz, VBW = 15 kHz, Span = 40 kHz

Description	Bandwidth Power (99%)
Carrier, 4FSK data, O.153 test pattern, 7K60F1D, 7K60F1E, 7K60F1W, 7K60FXD, 7K60FXE	7.29kHz
Carrier, 2500 Hz Audio only 12.5kHz channel, 11K0F3E	9.43kHz
Carrier, 2500 Hz Audio only 25kHz channel, 16K0F3E	14.75kHz

EXHIBIT 6F

Transmitter Conducted Spurious Emissions

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

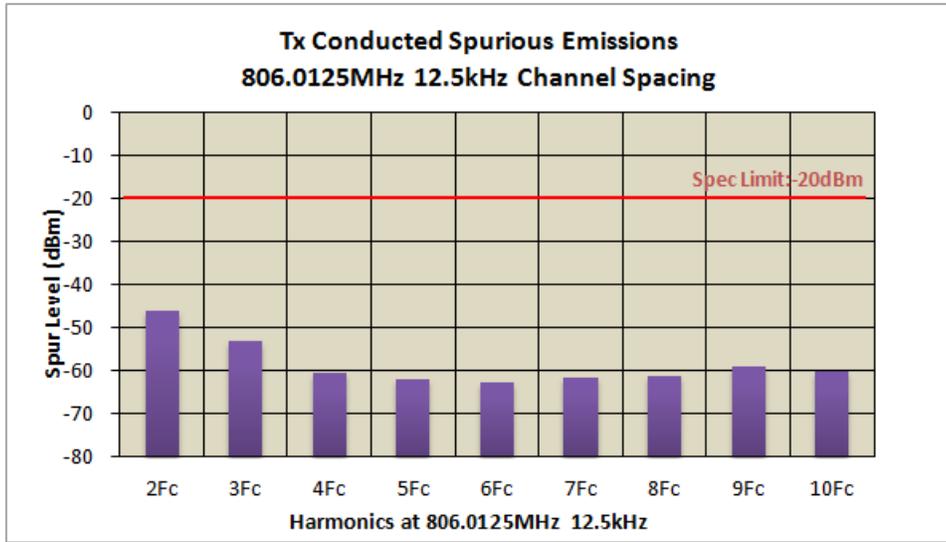


Figure 6F-1: 3W Harmonic of Carrier 806.0125 MHz, 12.5 kHz Channel Spacing, Digital Mode.

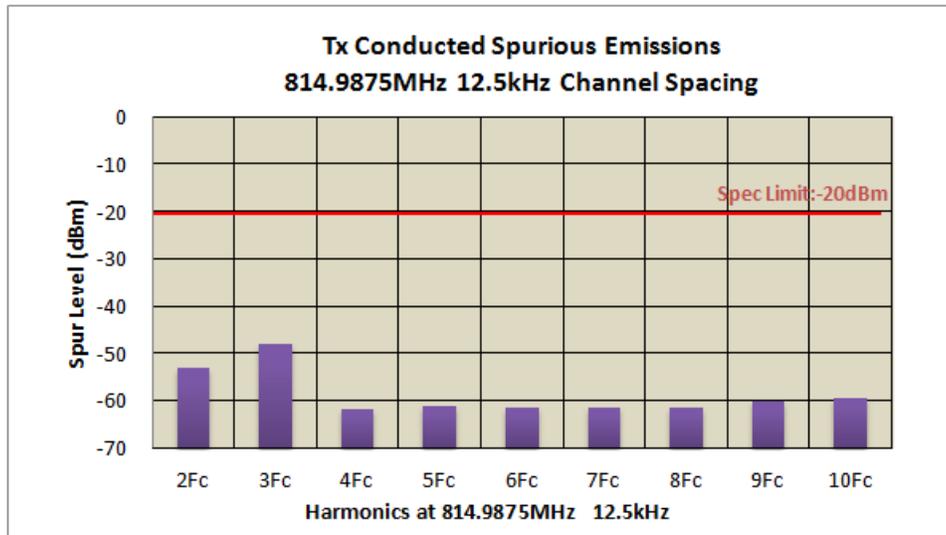


Figure 6F-2: 3W Harmonic of Carrier 814.9875 MHz, 12.5 kHz Channel Spacing, Digital Mode.

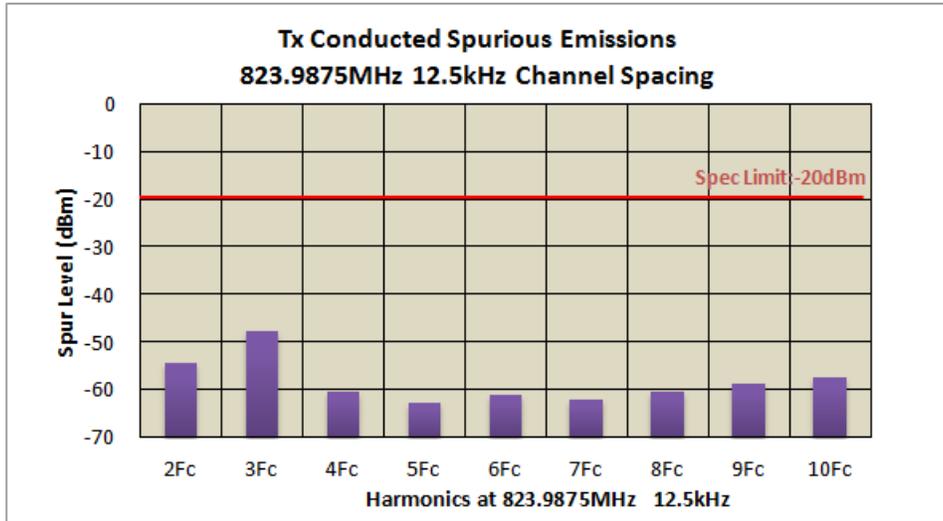


Figure 6F-3: 3W Harmonic of Carrier 823.9875MHz, 12.5 kHz Channel Spacing, Digital Mode

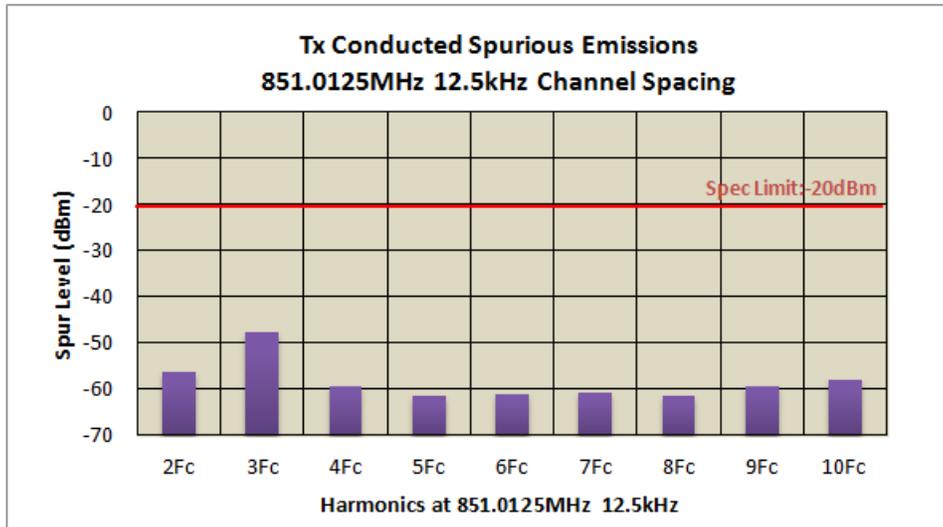


Figure 6F-4: 3W Harmonic of Carrier 851.0125MHz, 12.5 kHz Channel Spacing, Digital Mode.

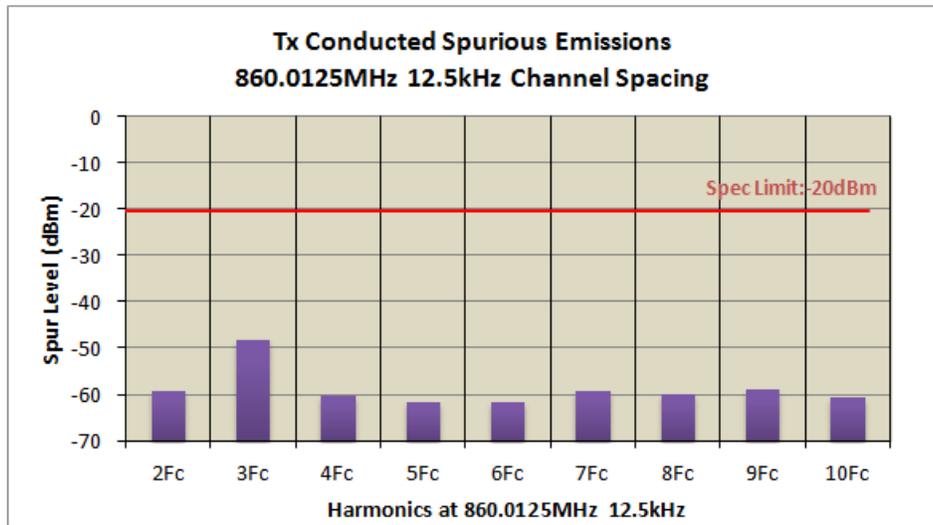


Figure 6F-5: 3W Harmonic of Carrier 860.0125 MHz, 12.5 kHz Channel Spacing, Digital Mode.

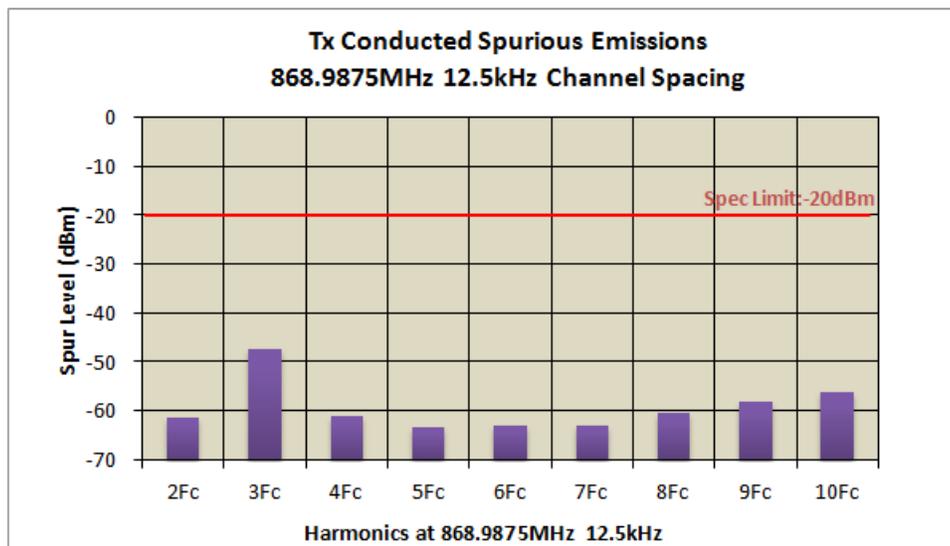


Figure 6F-6: 3W Harmonic of Carrier 868.9875 MHz, 12.5 kHz Channel Spacing, Digital Mode.

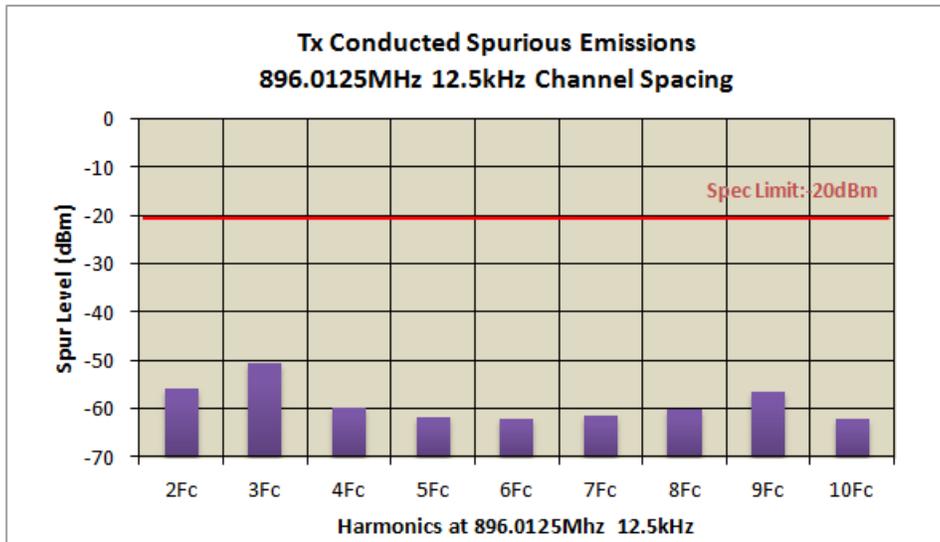


Figure 6F-7: 3W Harmonic of Carrier 896.0125 MHz, 12.5 kHz Channel Spacing, Analog Mode.

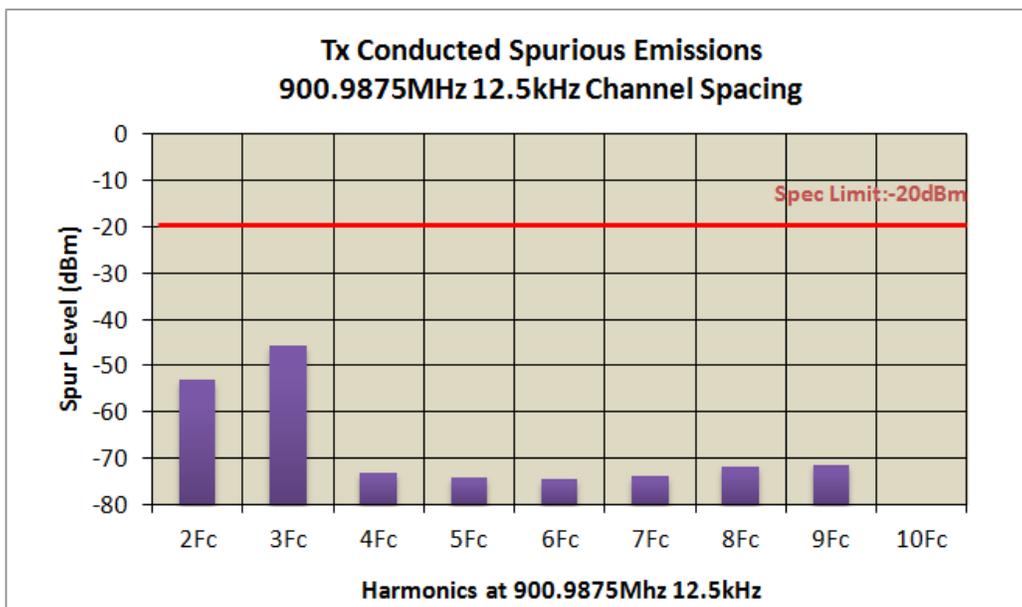


Figure 6F-8: 3W Harmonic of Carrier 900.9875 MHz, 12.5 kHz Channel Spacing, Analog Mode.

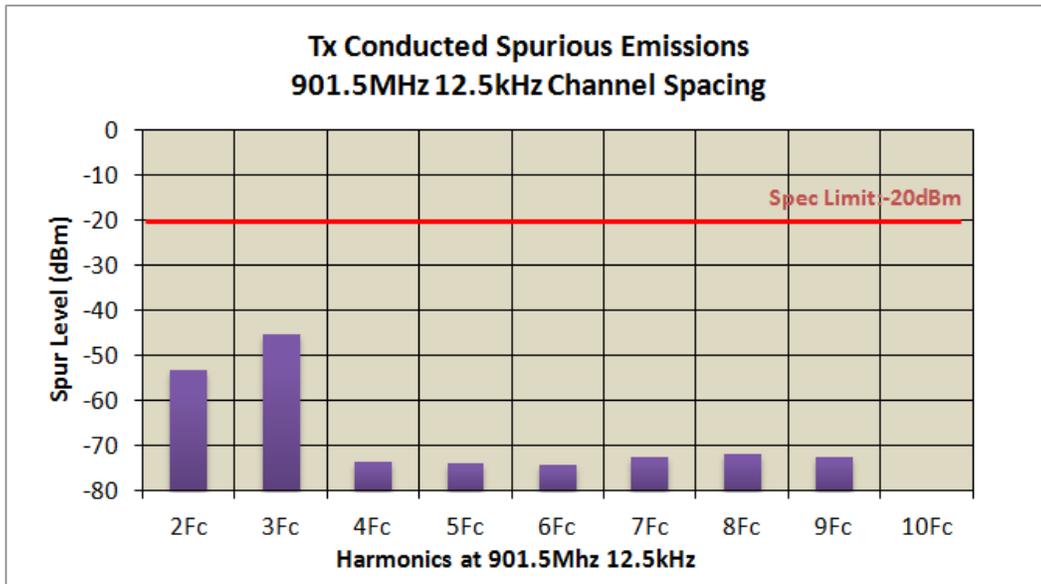


Figure 6F-9: 3W Harmonic of Carrier 901.5 MHz, 12.5 kHz Channel Spacing, Analog Mode.

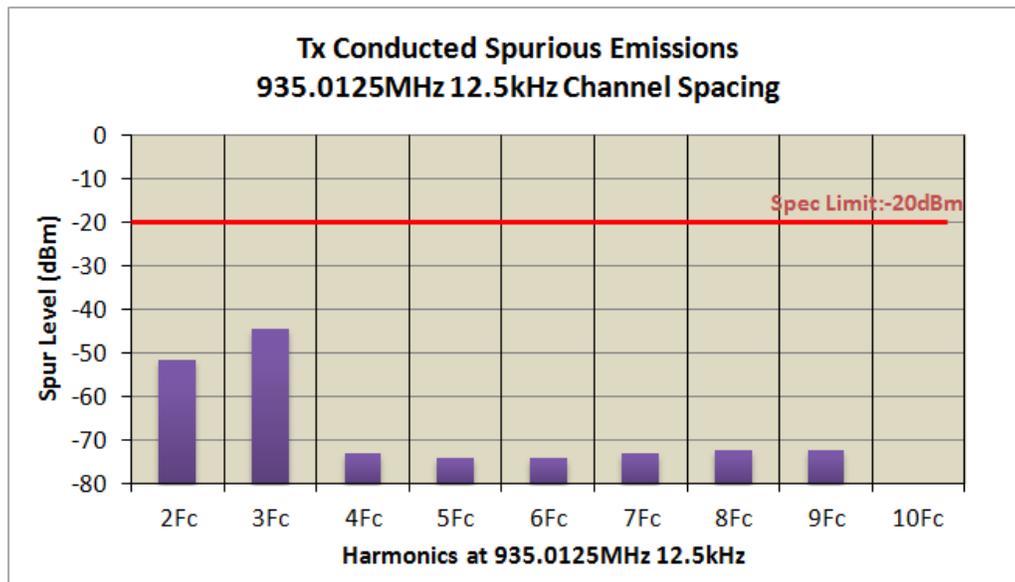


Figure 6F-10: 3W Harmonic of Carrier 935.0125 MHz, 12.5 kHz Channel Spacing, Analog Mode.

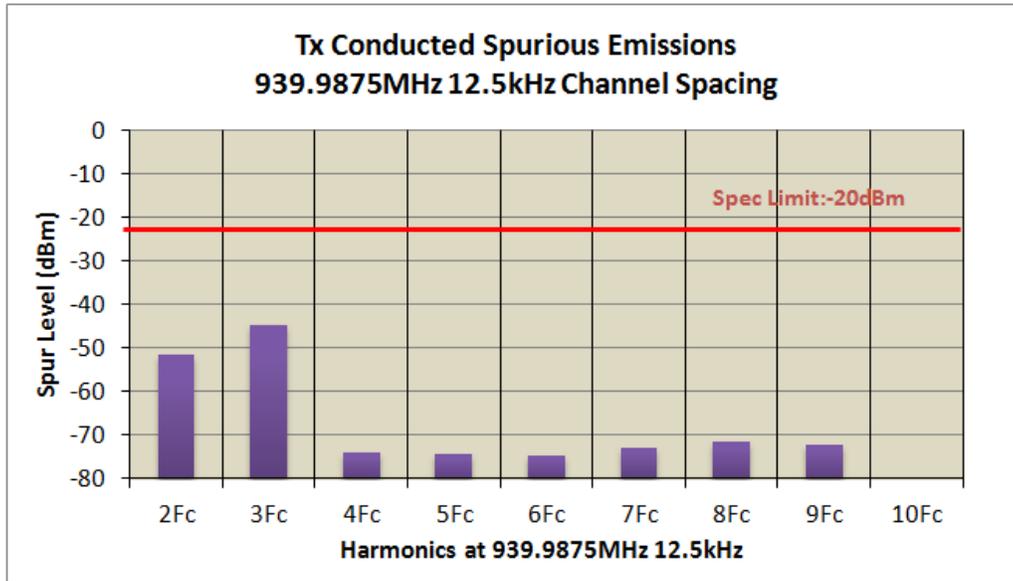


Figure 6F-11: 3W Harmonic of Carrier 939.9875 MHz, 12.5 kHz Channel Spacing, Analog Mode.

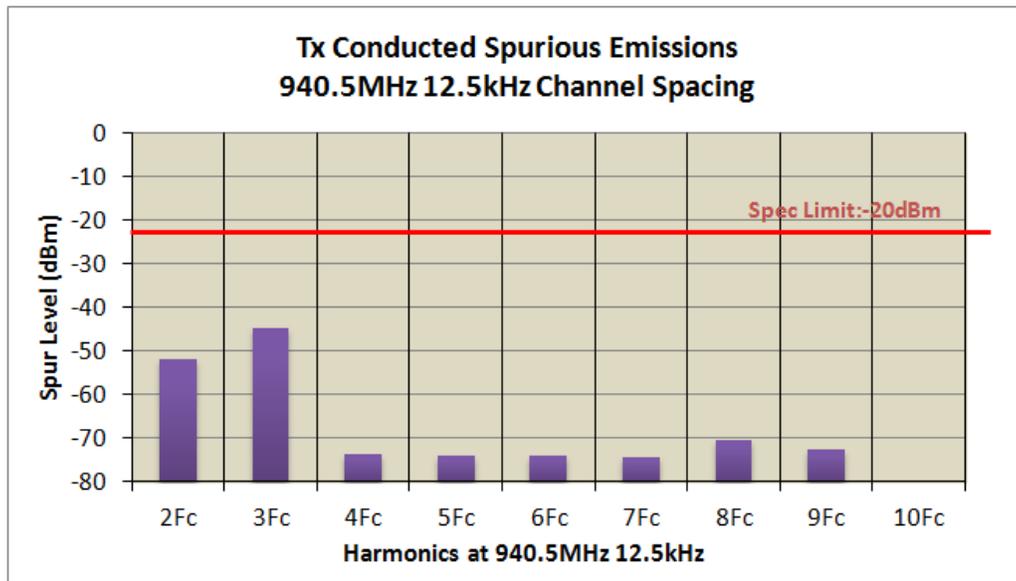


Figure 6F-12: 3W Harmonic of Carrier 940.5 MHz, 12.5 kHz Channel Spacing, Analog Mode.

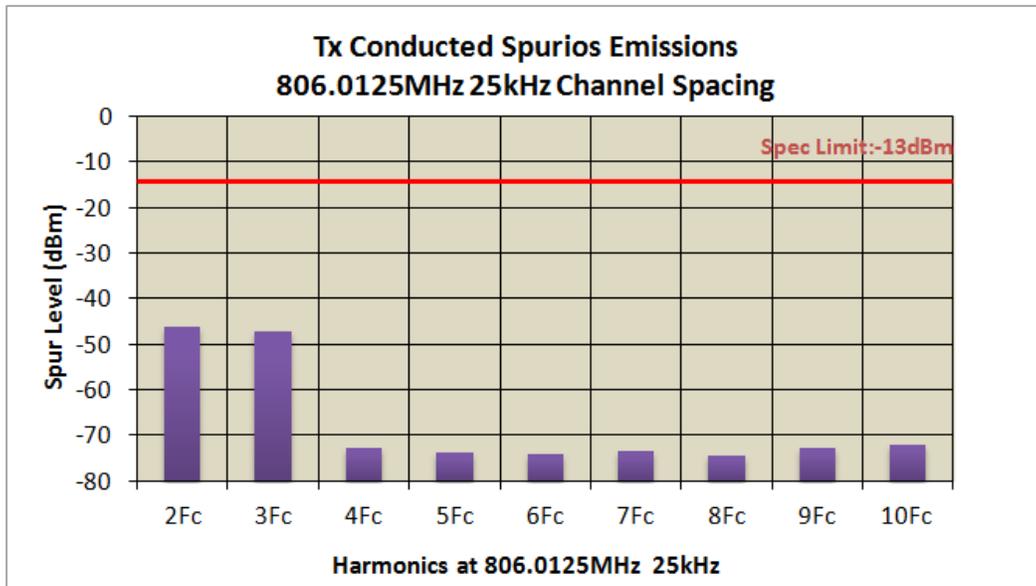


Figure 6F-13: 3W Harmonic of Carrier 806.0125 MHz, 25 kHz Channel Spacing, Analog Mode.

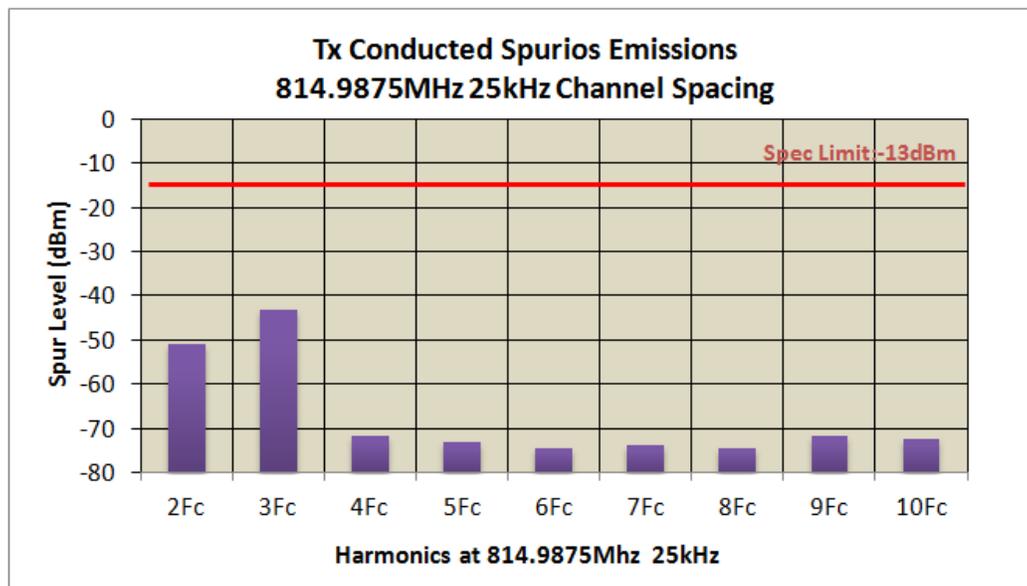


Figure 6F-14: 3W Harmonic of Carrier 814.9875 MHz, 25 kHz Channel Spacing, Analog Mode.

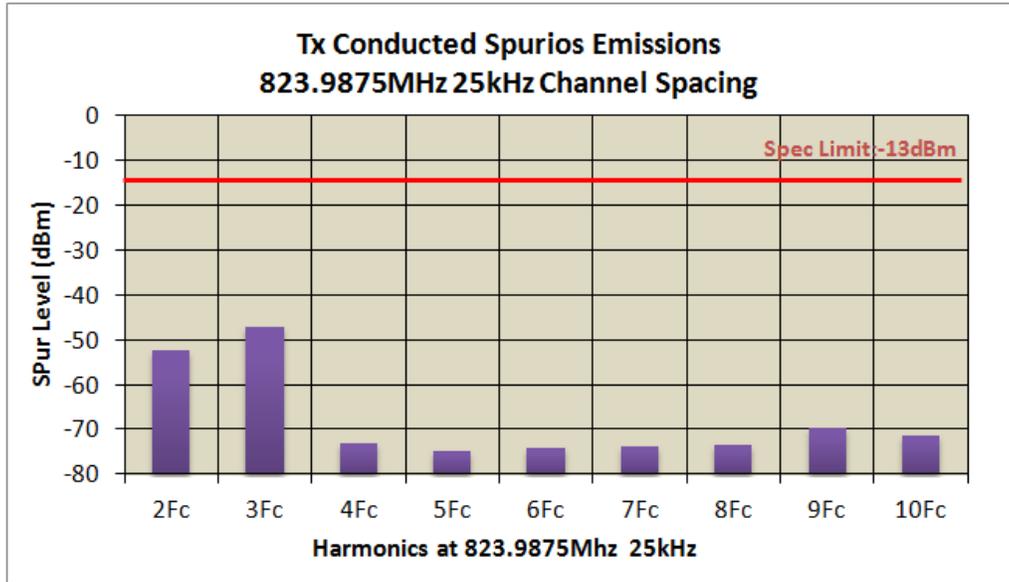


Figure 6F-15: 3W Harmonic of Carrier 823.9875 MHz, 25 kHz Channel Spacing, Analog Mode.

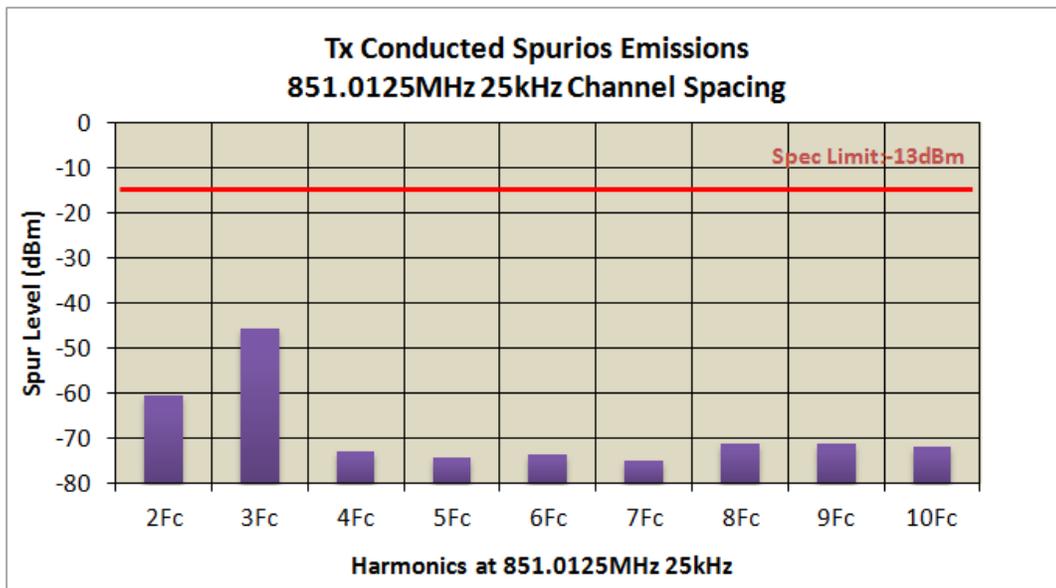


Figure 6F-16: 3W Harmonic of Carrier 851.0125 MHz, 25 kHz Channel Spacing, Analog Mode.

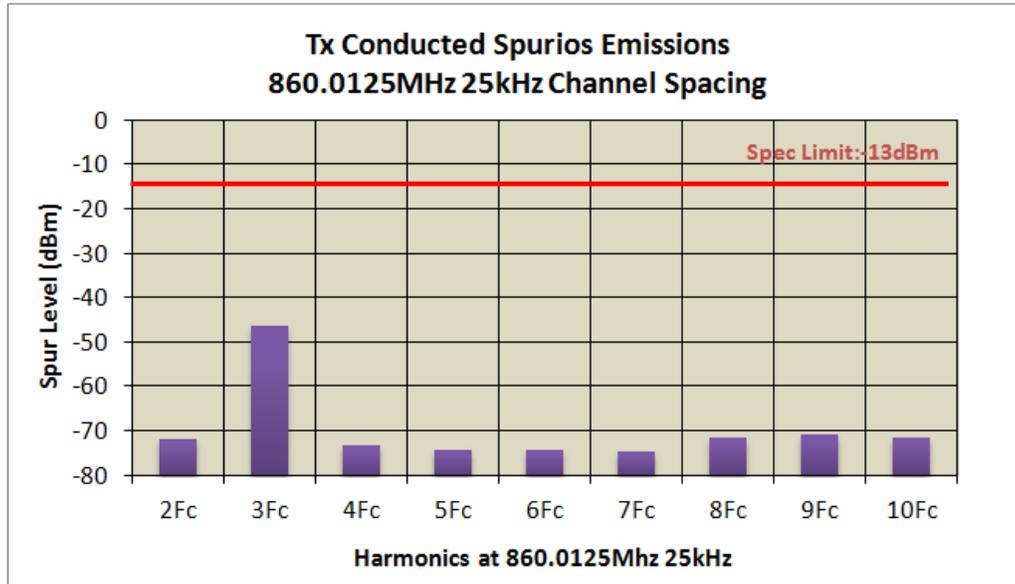


Figure 6F-17: 3W Harmonic of Carrier 860.0125 MHz, 25 kHz Channel Spacing, Analog Mode.

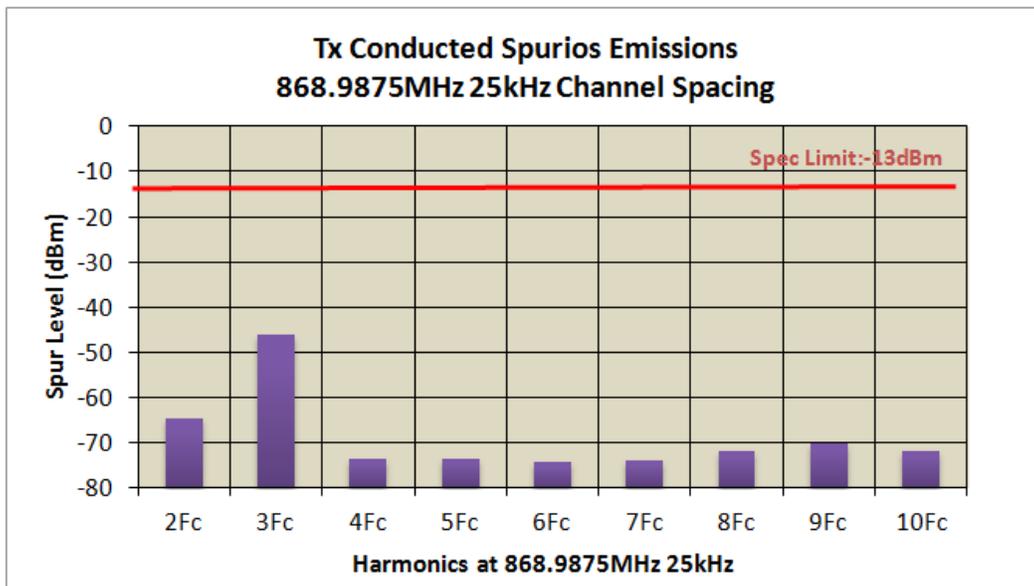


Figure 6F-18: 3W Harmonic of Carrier 868.9875 MHz, 25 kHz Channel Spacing, Analog Mode.

EXHIBIT 6G

Transmitter Radiated Spurious Emissions

For the transmitter radiated spurious emissions data, please refer to external test lab report FT7066_ex06b_TUV, section “Radiated Transmitter Unwanted Emission Test”, from Pg 10 onwards.

EXHIBIT 6H

Frequency Stability

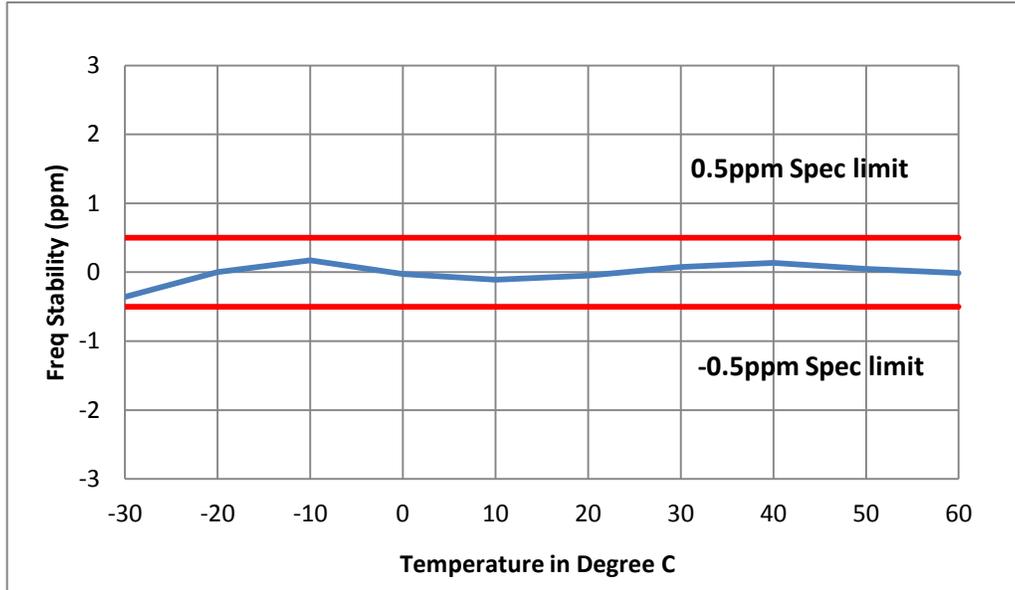


Figure 6H-1: 823.9875 MHz, 0.5 ppm Frequency Stability vs. Temperature

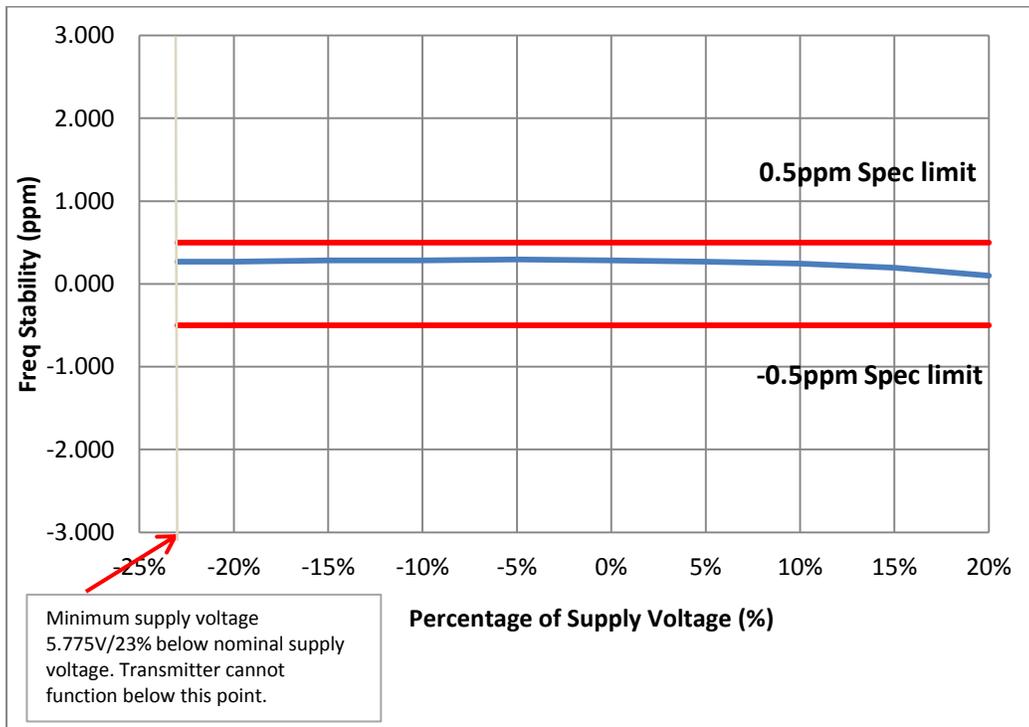


Figure 6H-2: 823.9875 MHz, 0.5 ppm Frequency Stability vs. Supply Voltage

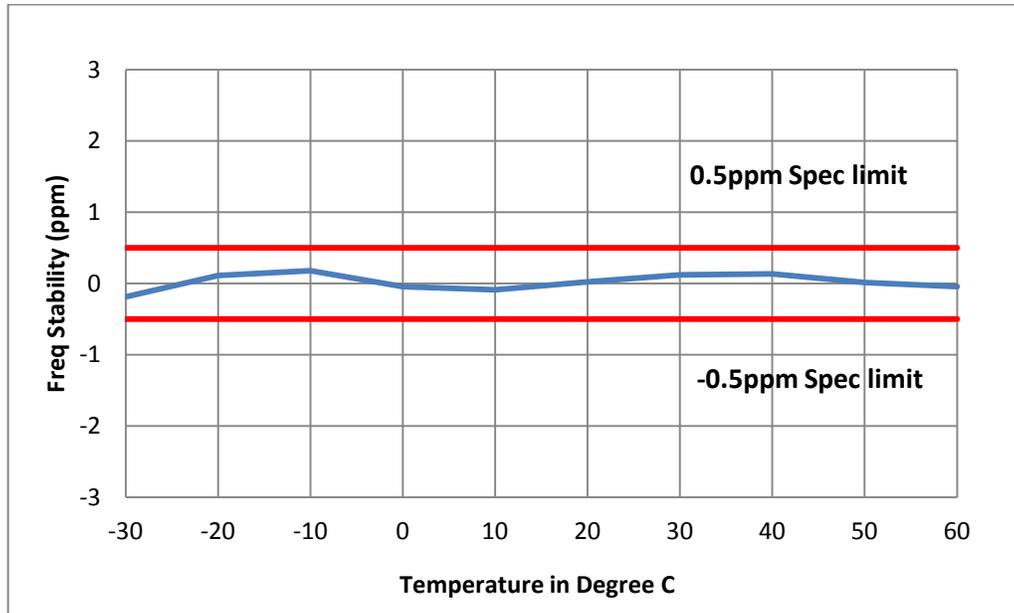


Figure 6H-3: 896.9875 MHz, 0.5 ppm Frequency Stability vs. Temperature

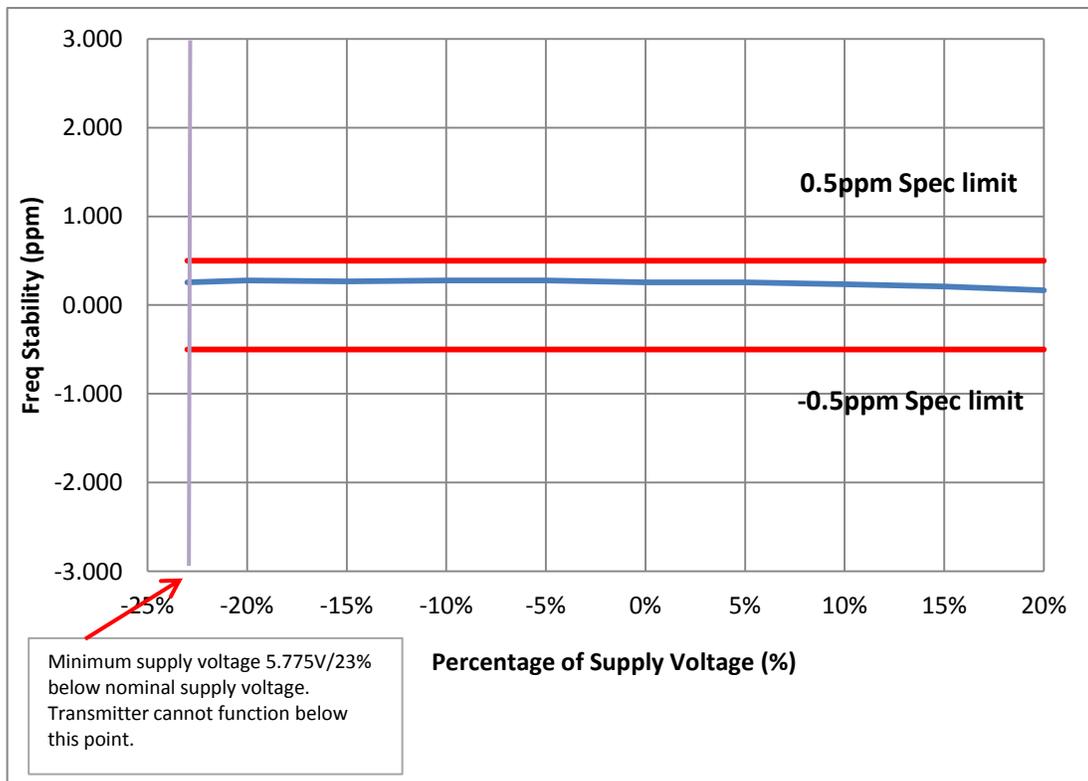


Figure 6H-4: 896.9875 MHz, 0.5 ppm Frequency Stability vs. Supply Voltage

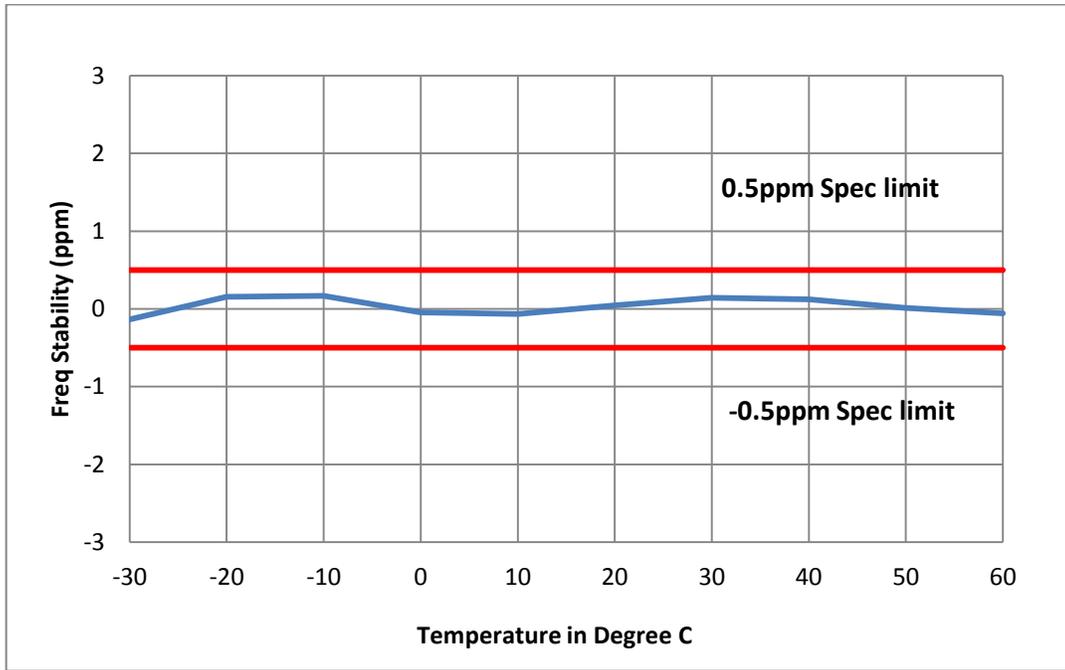


Figure 6H-5: 901.5 MHz, 0.5 ppm Frequency Stability vs. Temperature (Part 24)

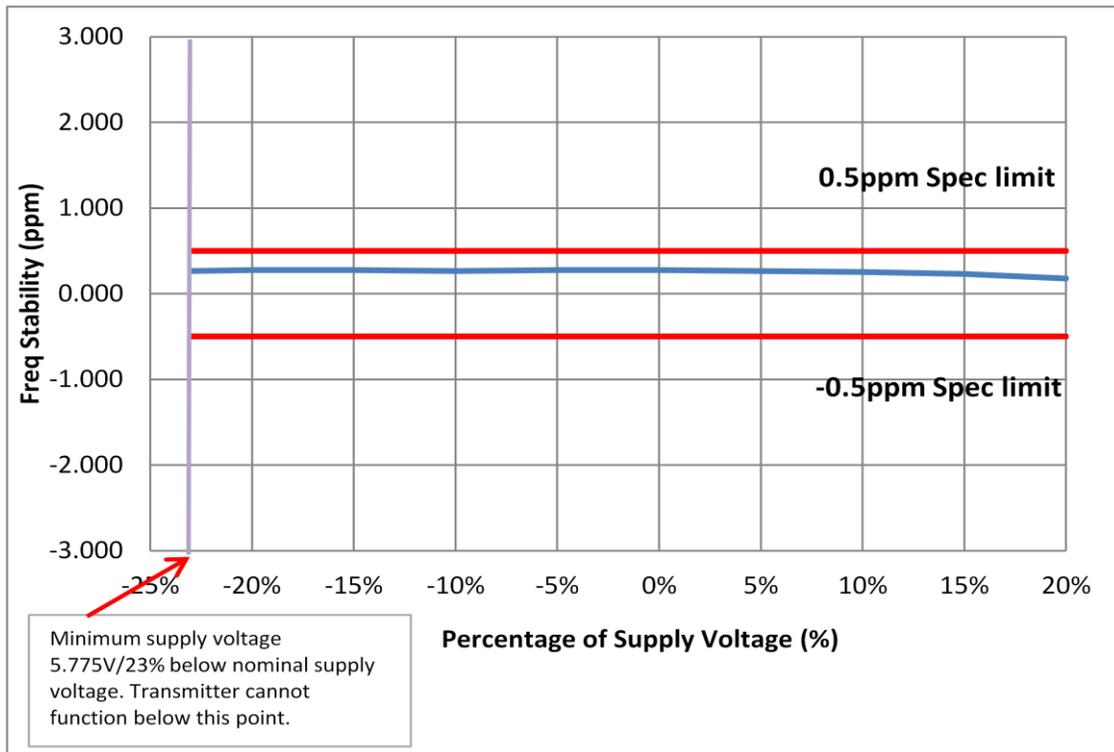


Figure 6H-6: 901.5 MHz, 0.5 ppm Frequency Stability vs. Supply Voltage (Part 24)

EXHIBIT 6I – Effective Radiated Power (ERP)

The highest gain antenna on offer for this product is +1dBi (-1.15dBd).
The total antenna system gain for this device at 900MHz band is -1.15dBd.

The ERP is calculated below as follows.

$$\begin{aligned} \text{ERP} &= \text{Power (dBm)} + \text{Gain (antenna, dBd)} - \text{Loss (cable, if any)} \\ \text{ERP} &= 34.77\text{dBm (3W)} + (-1.15) = 33.62\text{dBm (2.301W)} \end{aligned}$$

Therefore, the calculated ERP is 2.301W which demonstrates compliance to the Part 24 7W ERP limit.