

**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: 12.5kHz Channel Spacing, 429.9875MHz, Transmit Audio Frequency Response

6B-2: 25kHz Channel Spacing, 429.9875MHz, Transmit Audio Frequency Response (Not for FCC review)

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

6C-1: 12.5kHz Channel Spacing, 429.9875MHz, Transmit Audio Low Pass Filter Response

6C-2: 25kHz Channel Spacing, 429.9875MHz, Transmit Audio Low Pass Filter Response (Not for FCC review)

**EXHIBIT 6D – Modulation Limiting**

6D-1: 12.5kHz Channel Spacing, 429.9875MHz, Modulation Limiting

6D-2: 25kHz Channel Spacing, 429.9875MHz, Modulation Limiting (Not for FCC review)

**EXHIBIT 6E – Occupied Bandwidth**

6E-1: 429.9875MHz, 12.5kHz, 2500Hz Audio Modulation Only, 11K0F3E Mask D

6E-2: 429.9875MHz, 25kHz, 2500Hz Audio Modulation Only, 16K0F3E Mask B (Not for FCC review)

6E-3: 429.9875MHz, 12.5kHz, 2500Hz Audio and PL Tone Modulation, 11K0F3E Mask D

6E-4: 429.9875MHz, 12.5kHz, 2500Hz Audio and DPL Tone Modulation, 11K0F3E Mask D

6E-5: 429.9875MHz, 25kHz, 2500Hz Audio and PL Tone Modulation, 16K0F3E Mask B (Not for FCC review)

6E-6: 429.9875MHz, 25kHz, 2500Hz Audio and DPL Tone Modulation, 16K0F3E Mask B (Not for FCC review)

6E-7: 429.9875MHz, 12.5kHz, 2000/3000Hz FSK Data Modulation Only, 11K0F3E Mask D

6E-8: 429.9875MHz, 25kHz, 2000/3000Hz FSK Data Modulation Only, 11K0F3E Mask B (Not for FCC review)

6E-9: 429.9875MHz, 12.5kHz, 2000/3000Hz FSK Data and PL Tone Modulation, 11K0F3E Mask D

6E-10: 429.9875MHz, 12.5kHz, 2000/3000Hz FSK Data and DPL Tone Modulation, 11K0F3E Mask D

6E-11: 429.9875MHz, 25kHz, 2000/3000Hz FSK Data and PL Tone Modulation, 16K0F3E Mask B (Not for FCC review)

6E-12: 429.9875MHz, 25kHz, 2000/3000Hz FSK Data and DPL Tone Modulation, 16K0F3E Mask B (Not for FCC review)

6E-13: 429.9875MHz, O.153 Test Pattern 4FSK Voice (F2 Silent) Modulation, 7K60FXE Mask D

6E-14: 429.9875MHz, O.153 Test Pattern 4FSK Data (F2 BER) Modulation, 7K60FXD Mask D

6E-15: 429.9875MHz, O.153 Test Pattern 4FSK Data and Voice Modulation, 7K60F1W Mask D

6E-16: 459.6500MHz, 25kHz, 2500Hz Audio Modulation Only, 16K0F3E (Part 22)

**EXHIBIT 6F – Transmit Radiated Spurious Emissions**

6F-1: 4.8W, 403.0125MHz, 12.5kHz Channel Spacing

6F-2: 4.8W, 406.1125MHz, 12.5kHz Channel Spacing

6F-3: 4.8W, 429.9875MHz, 12.5kHz Channel Spacing

6F-4: 4.8W, 469.9875MHz, 12.5kHz Channel Spacing

6F-5: 4.8W, 403.0125MHz, 25kHz Channel Spacing

6F-6: 4.8W, 406.1125MHz, 25kHz Channel Spacing

6F-7: 4.8W, 429.9875MHz, 25kHz Channel Spacing (Not for FCC review)

6F-8: 4.8W, 459.6500MHz, 25kHz Channel Spacing (Part 22)

6F-9: 4.8W, 469.9875MHz, 25kHz Channel Spacing (Not for FCC review)

**EXHIBIT 6G – Transmit Conducted Spurious Emissions**

6G-1: 4.8W Harmonic of Carrier 403.0125MHz, 12.5kHz Channel Spacing

6G-2: 4.8W Harmonic of Carrier 406.0125MHz, 12.5kHz Channel Spacing

6G-3: 4.8W Harmonic of Carrier 429.9875MHz, 12.5kHz Channel Spacing

6G-4: 4.8W Harmonic of Carrier 469.9875MHz, 12.5kHz Channel Spacing

6G-5: 4.8W Harmonic of Carrier 403.0125MHz, 25kHz Channel Spacing

6G-6: 4.8W Harmonic of Carrier 406.1125MHz, 25kHz Channel Spacing

6G-7: 4.8W Harmonic of Carrier 429.9875MHz, 25kHz Channel Spacing (Not for FCC review)

6G-8: 4.8W Harmonic of Carrier 459.6500MHz, 25kHz Channel Spacing (Part 22)

6G-9: 4.8W Harmonic of Carrier 469.9875MHz, 25kHz Channel Spacing (Not for FCC review)

**EXHIBIT 6H - Frequency Stability**

6H-1 – 0.5 ppm Frequency Stability vs. Temperature

6H-2 – 0.5 ppm Frequency Stability vs. Voltage

**EXHIBIT 6I – Transient Frequency Behavior**

6I-1 – 429.9875MHz, 12.5kHz Channel Spacing – Transmitter On

6I-2 – 429.9875MHz, 12.5kHz Channel Spacing – Transmitter Off

6I-3 – 429.9875MHz, 25kHz Channel Spacing – Transmitter On (Not for FCC review)

6I-4 – 429.9875MHz, 25kHz Channel Spacing – Transmitter Off (Not for FCC review)

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

Radio model tested: AAH01QDC9JC2AN

**Important Note: The data in this test report meets or exceeds the technical requirements of FCC Rule Parts 22 and 90**

**EXHIBIT 6A****RF Conducted Output Power:****Frequency = 403.0125MHz:**

Output RF power	4.69 Watts
DC Voltage	7.50 Volts
DC Current	1.50 Amps

Output RF power	1.09 Watts
DC Voltage	7.50 Volts
DC Current	0.78 Amps

**Frequency= 406.1125MHz:**

Output RF power	4.78 Watts
DC Voltage	7.50 Volts
DC Current	1.47 Amps

Output RF power	1.14 Watts
DC Voltage	7.50 Volts
DC Current	0.77 Amps

**Frequency= 429.9875MHz:**

Output RF power	4.73 Watts
DC Voltage	7.50 Volts
DC Current	1.43 Amps

Output RF power	1.16 Watts
DC Voltage	7.50 Volts
DC Current	0.70 Amps

**Frequency= 459.6500MHz:**

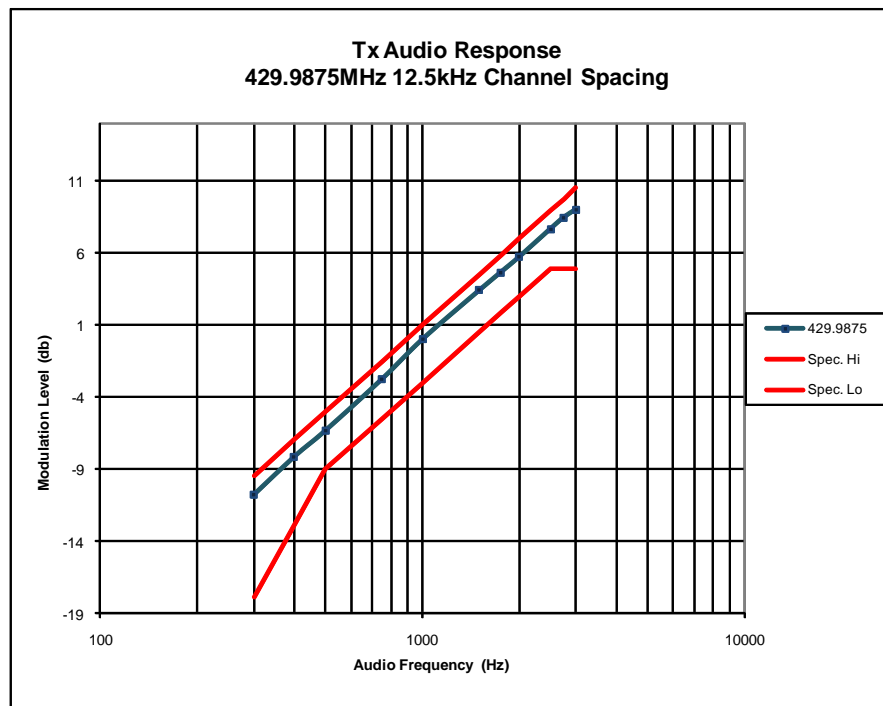
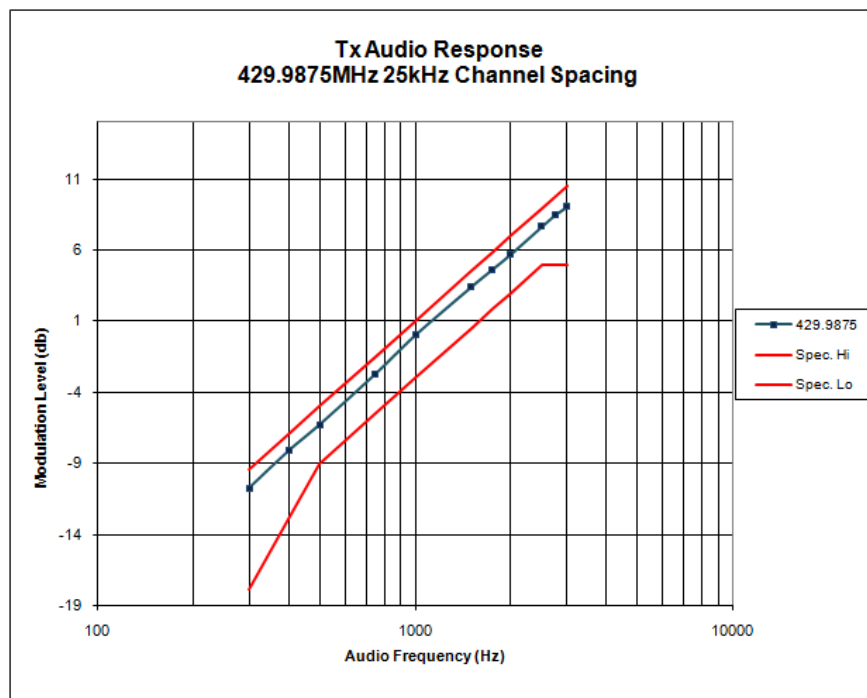
Output RF power	4.74 Watts
DC Voltage	7.50 Volts
DC Current	1.51 Amps

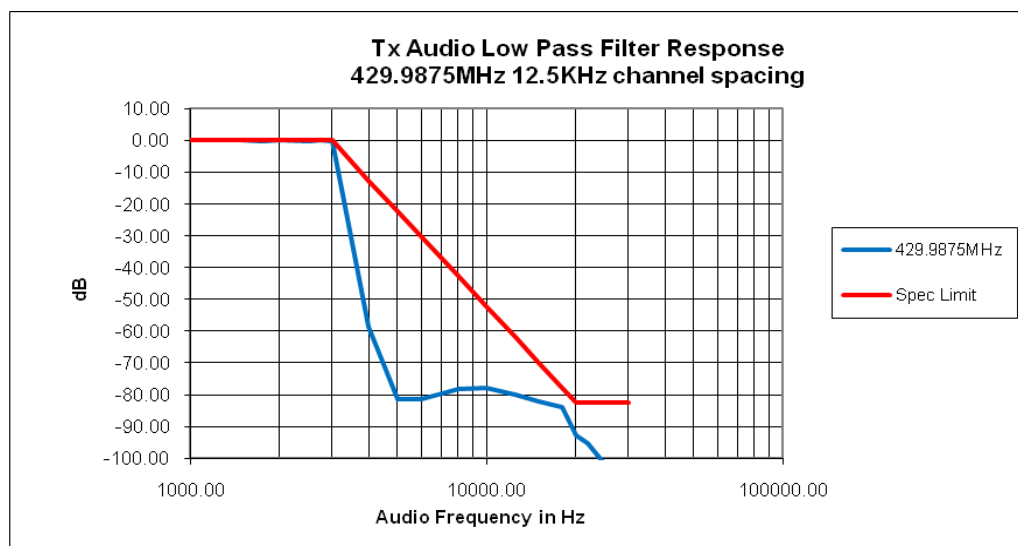
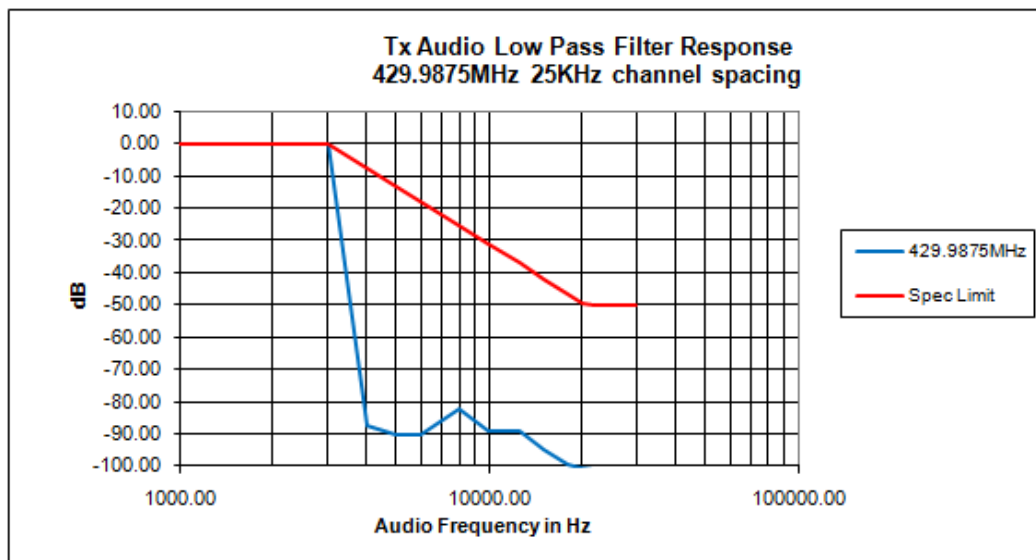
Output RF power	1.16 Watts
DC Voltage	7.50 Volts
DC Current	0.73 Amps

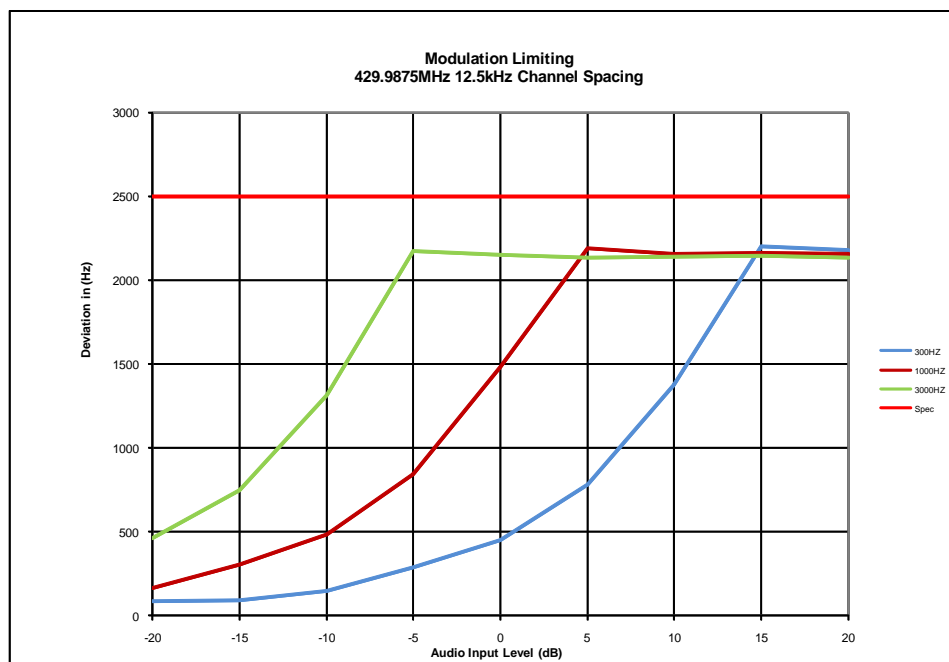
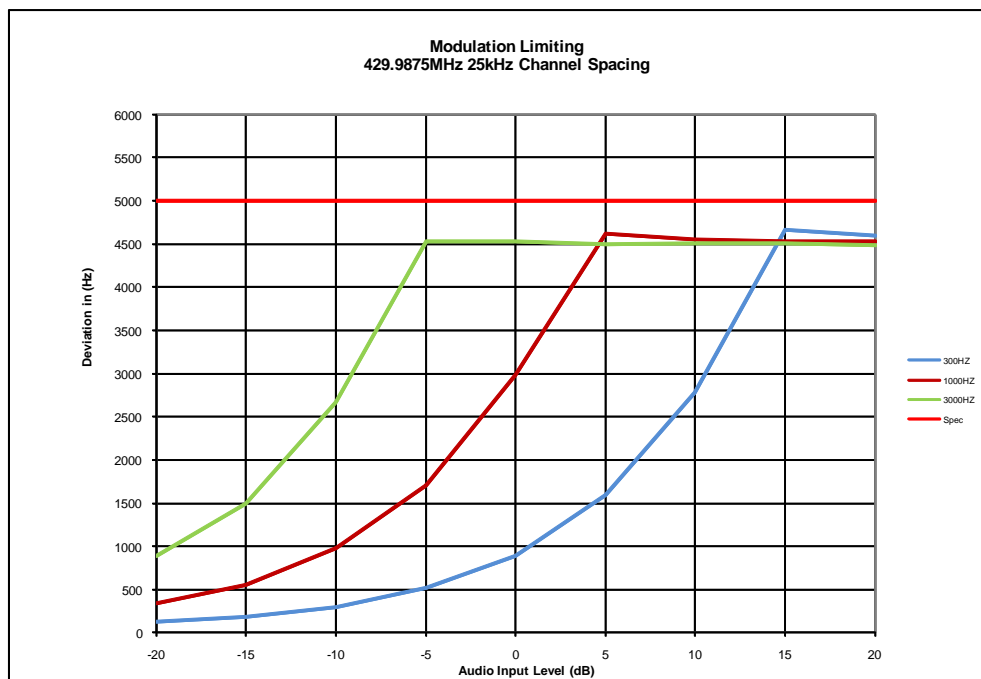
**Frequency = 469.9875MHz:**

Output RF power	4.73 Watts
DC Voltage	7.50 Volts
DC Current	1.50 Amps

Output RF power	1.13 Watts
DC Voltage	7.50 Volts
DC Current	0.72 Amps

**EXHIBIT 6B****Transmit Audio Response****Figure 6B-1:** 12.5kHz Channel Spacing, 429.9875MHz, Transmit Audio Frequency Response**Figure 6B-2:** 25kHz Channel Spacing, 429.9875MHz, Transmit Audio Frequency Response (Not for FCC review)

**EXHIBIT 6C****Transmit Audio Post Limiter Low Pass Filter Response****Figure 6C-1:** 12.5kHz Channel Spacing, 429.9875MHz, Transmit Audio Low Pass Filter Response**Figure 6C-2:** 25kHz Channel Spacing, 429.9875MHz, Transmit Audio Low Pass Filter Response (Not for FCC review)

**EXHIBIT 6D****Modulation Limiting****Figure 6D-1: 12.5kHz Channel Spacing, 429.9875MHz, Modulation Limiting****Figure 6D-2: 25kHz Channel Spacing, 429.9875MHz, Modulation Limiting (Not for FCC review)**

**BANDWIDTH CALCULATIONS:**

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

$$BW = 2 * (M + D) \quad \text{where: } BW = \text{Bandwidth}$$

M= Maximum modulating frequency  
D = Deviation

Shown below are the calculations required for FCC ID: ABZ99FT4094

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.

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

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 (12.5kHz 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 3.0kHz with a 2.5kHz deviation.

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

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	+1.944kHz
0	0	+1	+0.648kHz
1	0	-1	-0.648kHz
1	1	-3	-1.944kHz

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

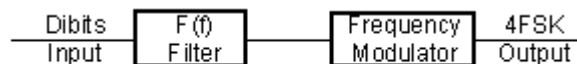
$|F(f)| = 1$  for  $|f| \leq 1920\text{Hz}$

$|F(f)| = |\cos(\pi f / 1920)|$  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 7.6kHz (**7K60** designator).

Per CFR Title 47, Part 2, Section 2.201:

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

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 (12.5kHz 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 7.6kHz (**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 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**  
 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 (12.5kHz 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 (12.5kHz 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 7.6kHz (**7K60** designator).

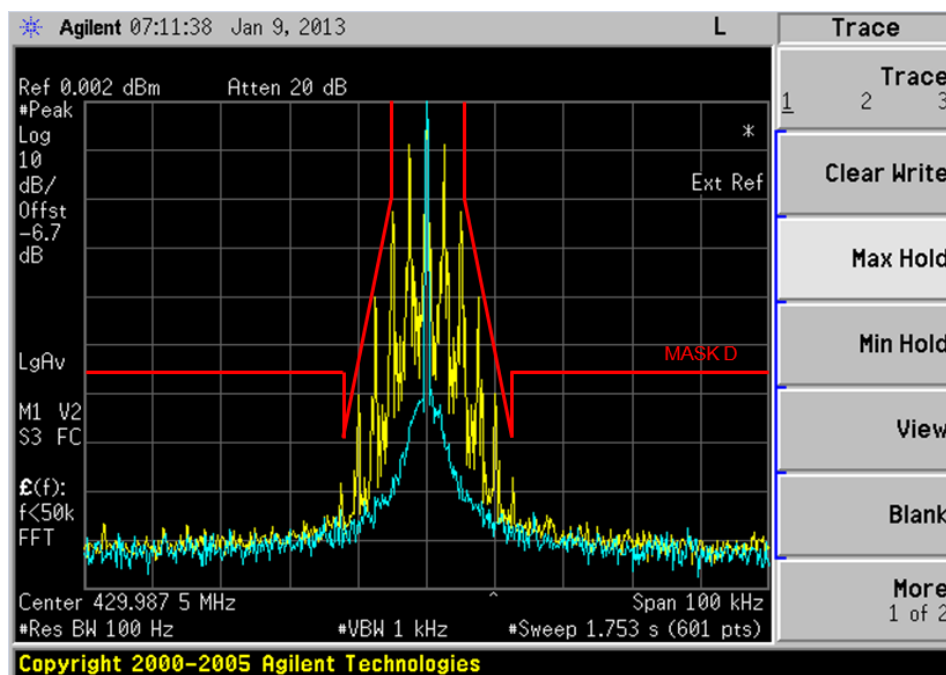
Per CFR Title 47, Part 2, Section 2.201:

Frequency Modulation ..... **F**

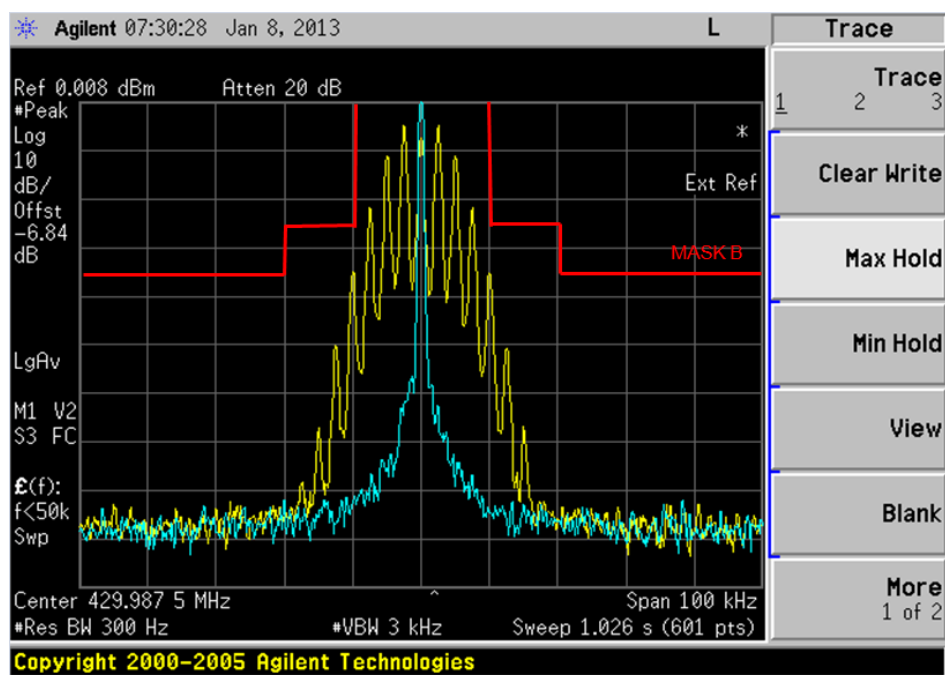
Case not otherwise covered ..... **X**  
Telephony (including sound broadcasting)..... **E**

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

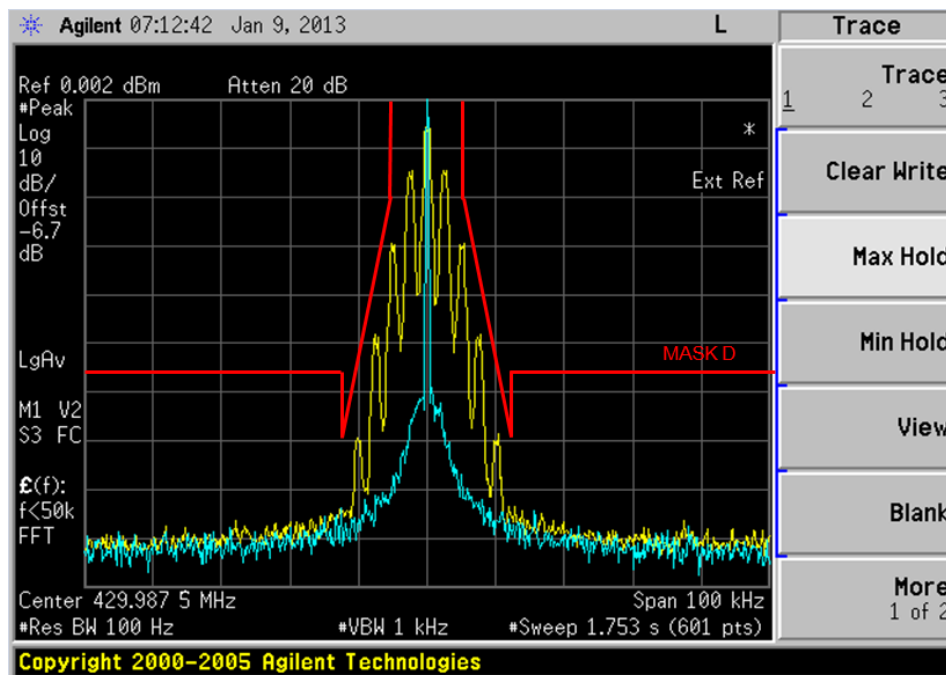
The complete emissions designator for this transmitter is **7K60FXE**.

**EXHIBIT 6E****Occupied Bandwidth Data**

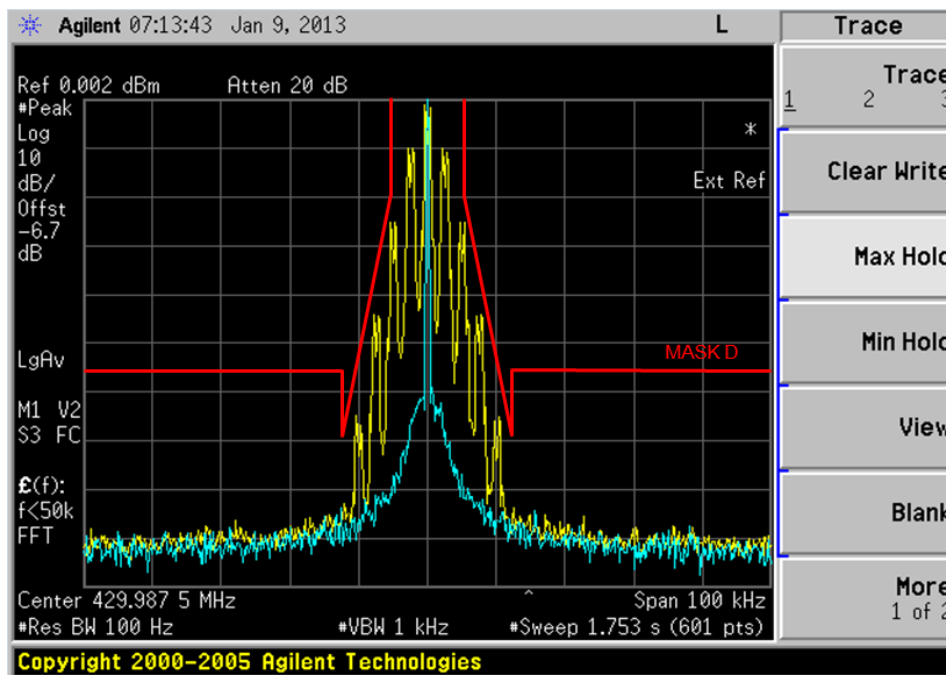
**Figure 6E-1: 429.9875MHz, 12.5kHz Channel Spacing, 2500Hz Audio Modulation only, 11K0F3E Mask D**



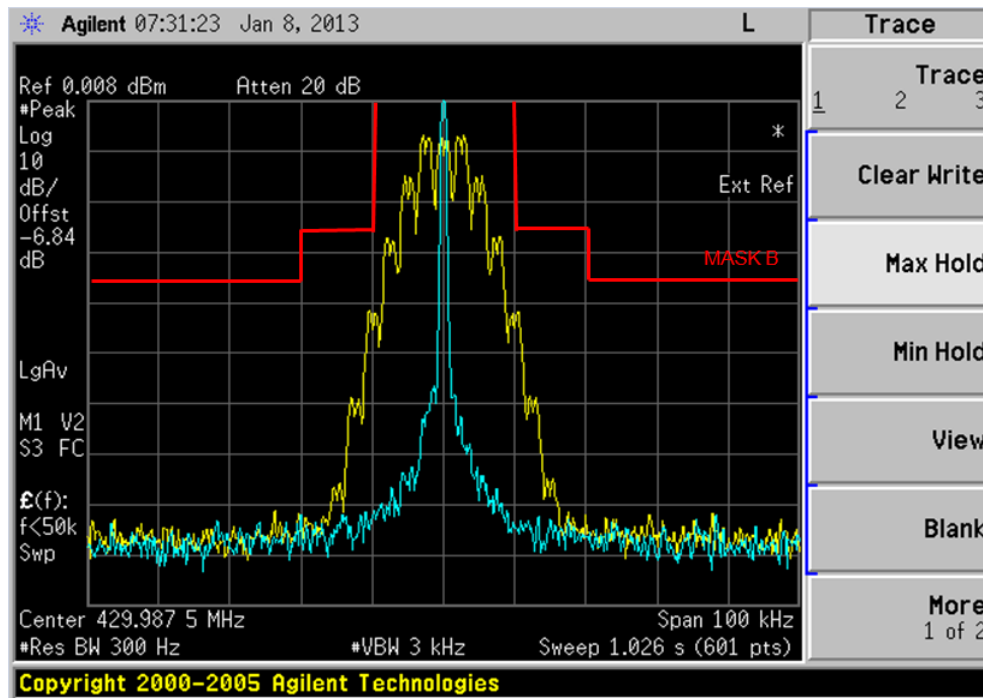
**Figure 6E-2: 429.9875MHz, 25kHz Channel Spacing, 2500Hz Audio Modulation Only, 16K0F3E Mask B (Not for FCC review)**



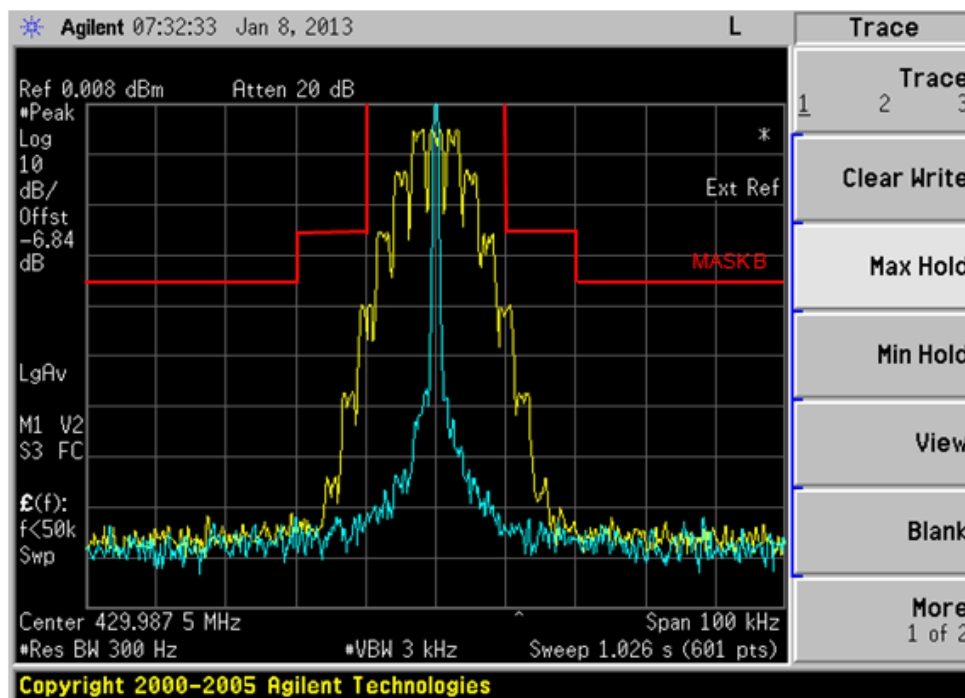
**Figure 6E-3:** 429.9875MHz, 12.5kHz Channel Spacing, 2500Hz Audio and PL Tone Modulation, 11K0F3E Mask D



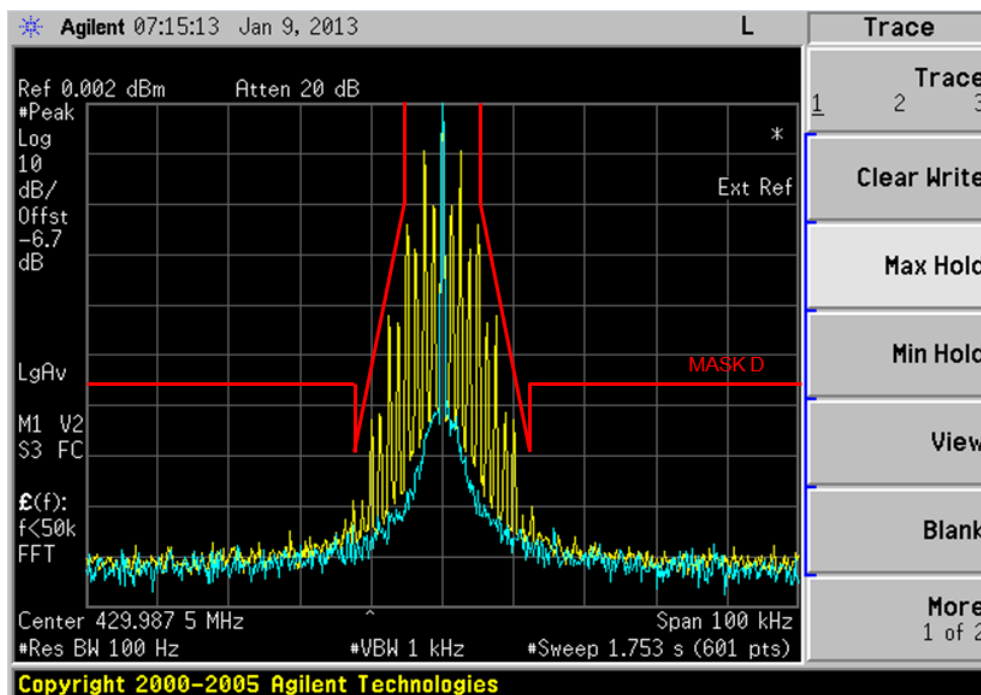
**Figure 6E-4:** 429.9875MHz, 12.5kHz Channel Spacing, 2500Hz Audio and DPL Tone Modulation, 11K0F3E Mask D



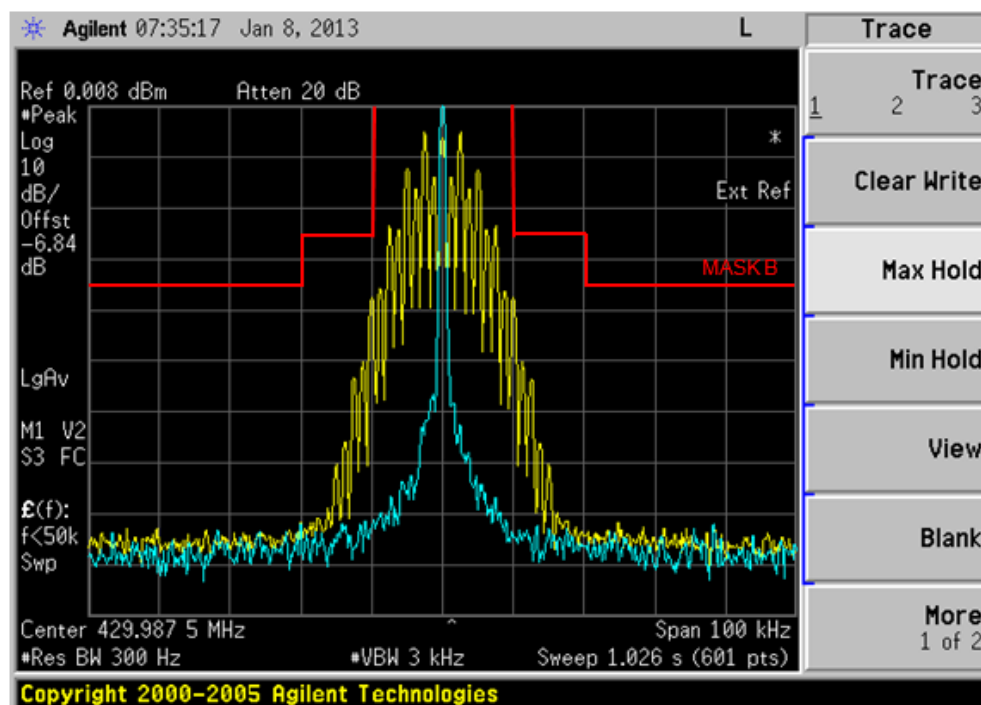
**Figure 6E-5: 429.9875MHz, 25kHz Channel Spacing, 2500Hz Audio and PL Tone Modulation, 16K0F3E Mask B (Not for FCC review)**



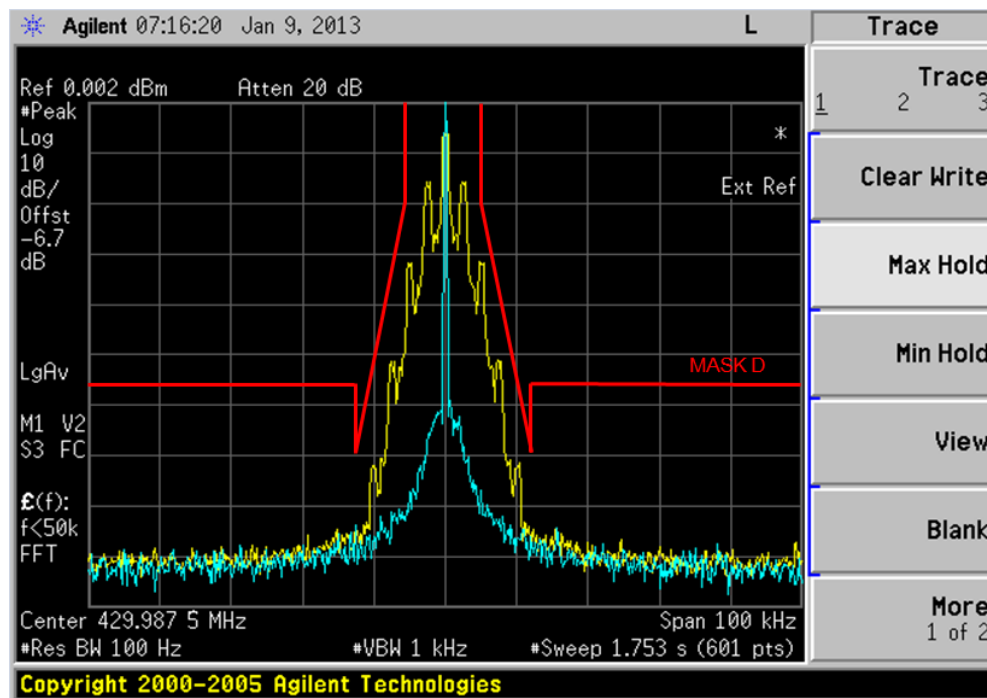
**Figure 6E-6: 429.9875MHz, 25kHz Channel Spacing, 2500Hz Audio and DPL Tone Modulation, 16K0F3E Mask B (Not for FCC review)**



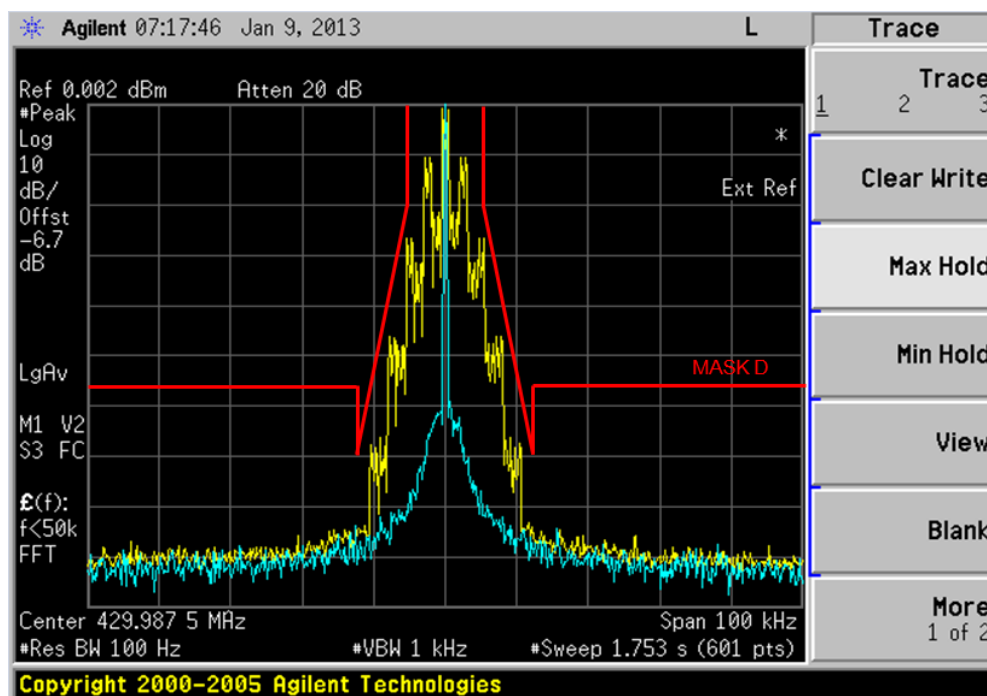
**Figure 6E-7: 429.9875MHz, 12.5kHz Channel Spacing, 2000/3000 Hz FSK Data Modulation only, 11K0F3E Mask D**



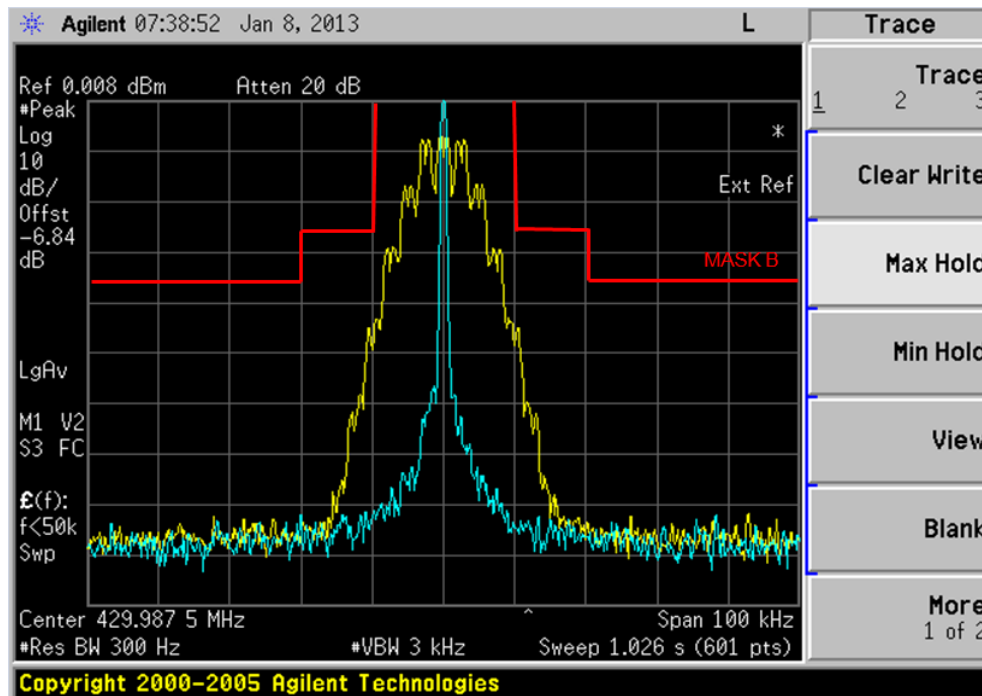
**Figure 6E-8: 429.9875MHz, 25kHz Channel Spacing, 2000/3000 Hz FSK Data Modulation only, 16K0F3E Mask B (Not for FCC review)**



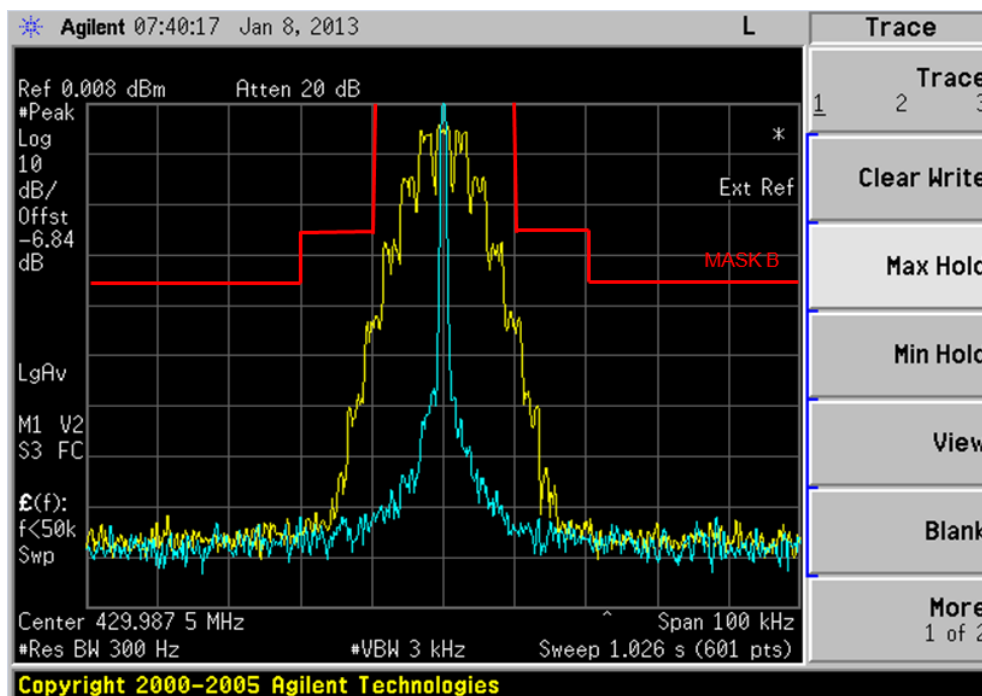
**Figure 6E-9:** 429.9875MHz, 12.5kHz Channel Spacing, 2000/3000 Hz FSK Data and PL Tone Modulation, 11K0F3E Mask D



**Figure 6E-10:** 429.9875MHz, 12.5kHz Channel Spacing, 2000/3000 Hz FSK Data and DPL Tone Modulation, 11K0F3E Mask D

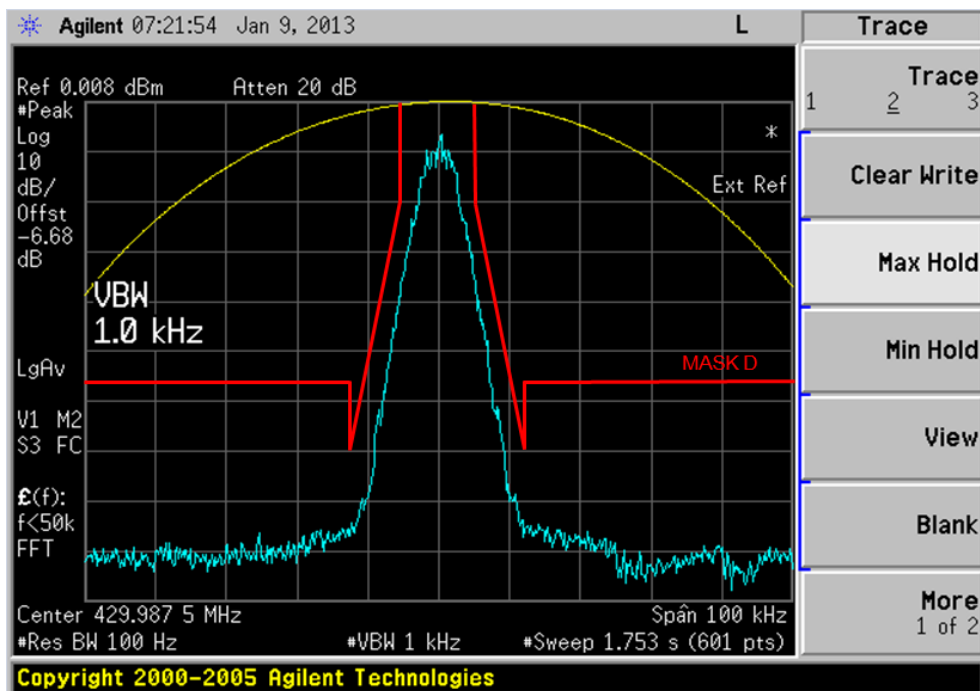


**Figure 6E-11:** 429.9875MHz, 25kHz Channel Spacing, 2000/3000 Hz FSK Data and PL Tone Modulation, 16K0F3E Mask B (Not for FCC review)

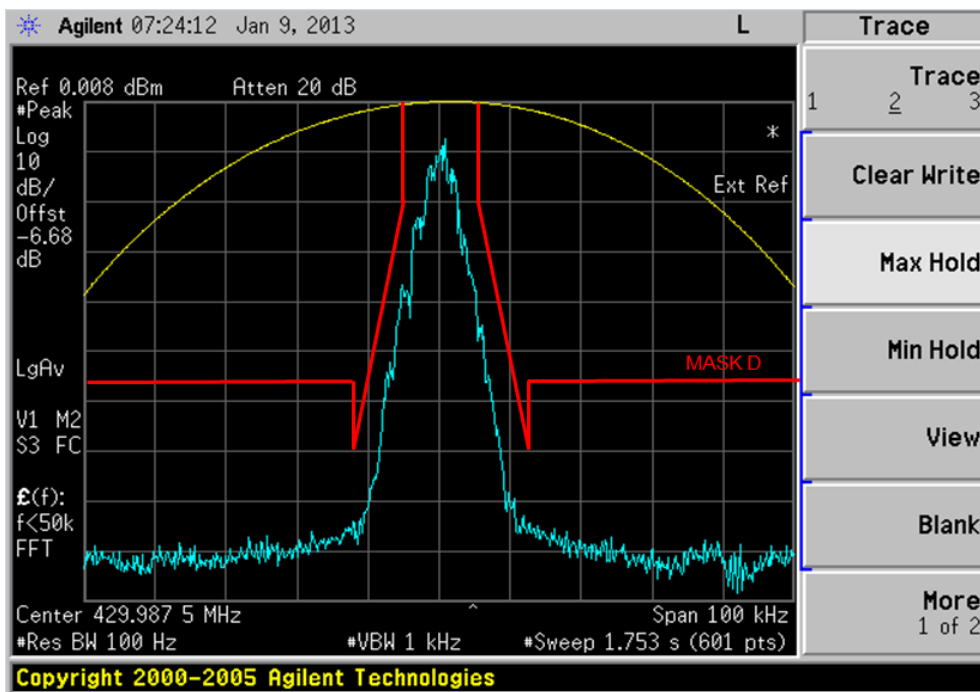


**Figure 6E-12:** 429.9875MHz, 25kHz Channel Spacing, 2000/3000 Hz FSK Data and DPL Tone Modulation, 16K0F3E Mask B (Not for FCC review)

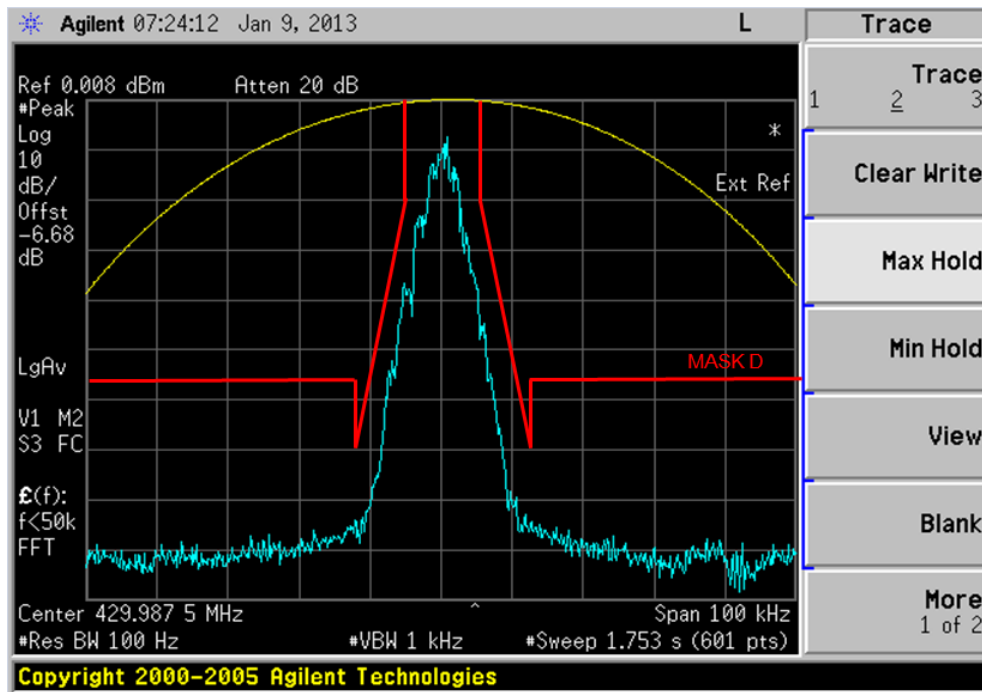




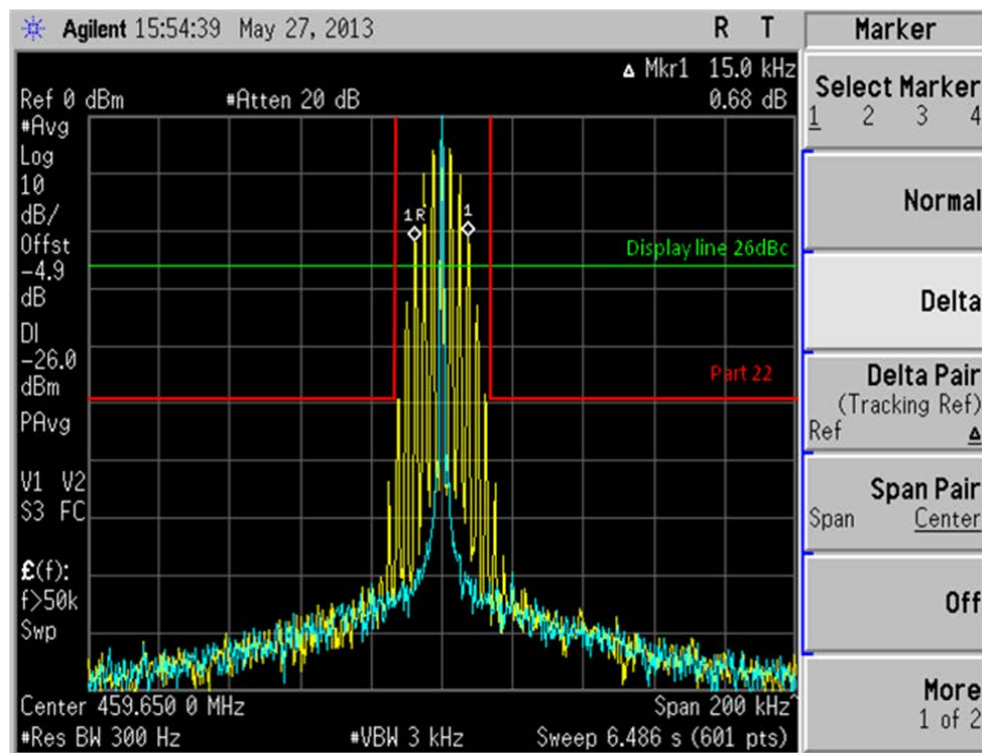
**Figure 6E-13:** 429.9875MHz, O.153 Test Pattern 4FSK Voice (F2 BER) Modulation, 7K60FXE Mask D



**Figure 6E-14:** 429.9875MHz, O.153 Test Pattern 4FSK Data (F2 BER) Modulation, 7K60FXD Mask D



**Figure 6E-15: 429.9875MHz, O.153 Test Pattern 4FSK Data and Voice Modulation, 7K60F1W Mask D**



**Figure 6E-16: 459.650 MHz, 25 kHz Channel Spacing, 2500 Hz Audio Modulation Only, 16K0F3E (Part 22)**

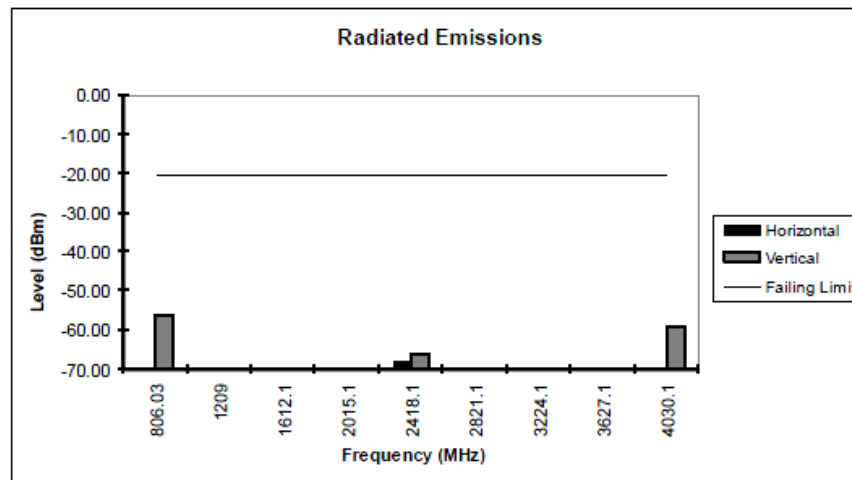
**\*\*NOTE:-**

- For 4FSK Digital Modulation, 12.5kHz Data 7K60F1D & 7K60FXD would be the same. Therefore only measurements with 7K60FXD shown above.
- For 4FSK Digital Modulation, 12.5kHz Voice 7K60F1E & 7K60FXE would be the same. Therefore only measurements with 7K60FXE shown above.
- All measurements of Occupied Bandwidth which are shown on the above plots are measured using a Spectrum Analyzer
- Measurement using a Spectrum Analyzer must use 30dB attenuation in order to avoid damage to it
- Therefore the reference power level (Ref) shown on each plot refers to its true power level

**EXHIBIT 6F****Transmitter Radiated Spurious Emissions**

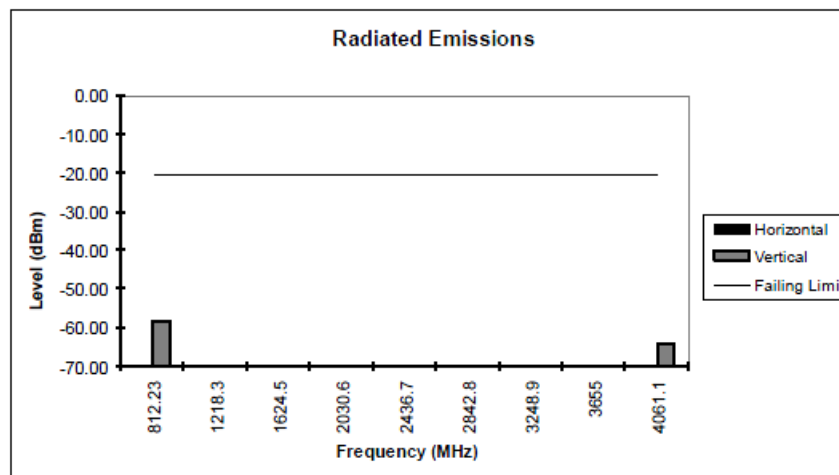
\*\*The following test data was based on Analog model that is the worst case condition. Digital model performance shall not degrade from analog performance.

Frequency (MHz)	Spectrum Analyzer Level (dBm)	Antenna Polarity (H/V)	Antenna Height (cm)	Angle (degrees)	Correction Factor (dB)	Spurious ERP (dBm)	Limit (dBm)	Margin (dB)
2418.075	-58.10	H	100	1	-9.57	-67.67	-20.00	47.67
806.025	-63.45	V	121	248	7.28	-56.17	-20.00	36.17
2418.075	-58.20	V	100	146	-8.02	-66.22	-20.00	46.22
4030.125	-60.65	V	100	174	1.40	-59.25	-20.00	39.25



**Figure 6F-1: 4.8W, 403.0125MHz, 12.5kHz Channel Spacing**

Frequency (MHz)	Spectrum Analyzer Level (dBm)	Antenna Polarity (H/V)	Antenna Height (cm)	Angle (degrees)	Correction Factor (dB)	Spurious ERP (dBm)	Limit (dBm)	Margin (dB)
812.225	-63.65	V	118	302	5.23	-58.42	-20.00	38.42
4061.125	-60.45	V	101	344	-3.49	-63.94	-20.00	43.94



**Figure 6F-2: 4.8W, 406.1125MHz, 12.5kHz Channel Spacing**

Frequency (MHz)	Spectrum Analyzer Level (dBm)	Antenna Polarity (H/V)	Antenna Height (cm)	Angle (degrees)	Correction Factor (dB)	Spurious ERP (dBm)	Limit (dBm)	Margin (dB)
3009.9125	-59.05	H	168	86	-8.68	-67.73	-20.00	47.73
3439.9	-57.55	H	173	321	1.47	-56.08	-20.00	36.08
4299.875	-59.95	H	146	346	0.80	-59.15	-20.00	39.15
859.975	-58.65	V	117	53	6.29	-52.36	-20.00	32.36
2579.925	-58.70	V	101	38	-8.95	-67.65	-20.00	47.65
3009.9125	-58.00	V	105	36	-2.98	-60.98	-20.00	40.98
3439.9	-57.20	V	119	41	2.22	-54.98	-20.00	34.98
3869.8875	-59.10	V	142	8	-0.75	-59.85	-20.00	39.85
4299.875	-60.15	V	128	315	1.10	-59.05	-20.00	39.05

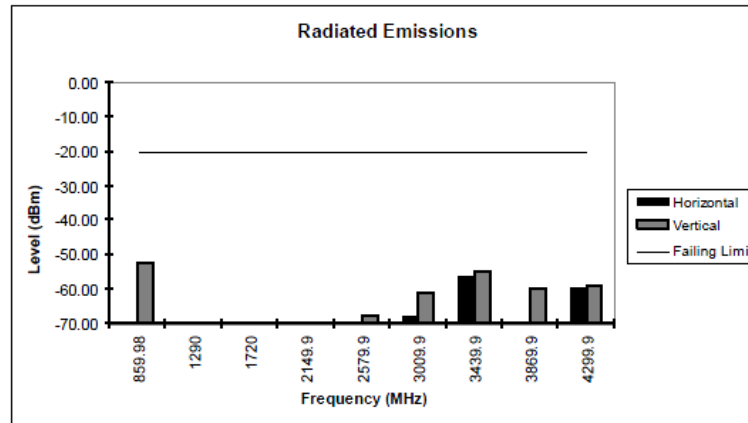


Figure 6F-3: 4.8W, 429.9875MHz, 12.5kHz Channel Spacing

Frequency (MHz)	Spectrum Analyzer Level (dBm)	Antenna Polarity (H/V)	Antenna Height (cm)	Angle (degrees)	Correction Factor (dB)	Spurious ERP (dBm)	Limit (dBm)	Margin (dB)
3289.9125	-57.95	H	161	239	-3.16	-61.11	-20.00	41.11
4229.8875	-62.20	H	117	345	-5.70	-67.90	-20.00	47.90
4699.875	-60.75	H	101	36	-7.23	-67.98	-20.00	47.98
939.975	-53.05	V	109	309	7.90	-45.15	-20.00	25.15
3289.9125	-55.05	V	123	27	4.89	-50.16	-20.00	30.16
3759.9	-59.90	V	170	355	-2.91	-62.81	-20.00	42.81
4229.8875	-62.55	V	101	157	-1.50	-64.05	-20.00	44.05
4699.875	-60.45	V	130	20	-3.03	-63.48	-20.00	43.48

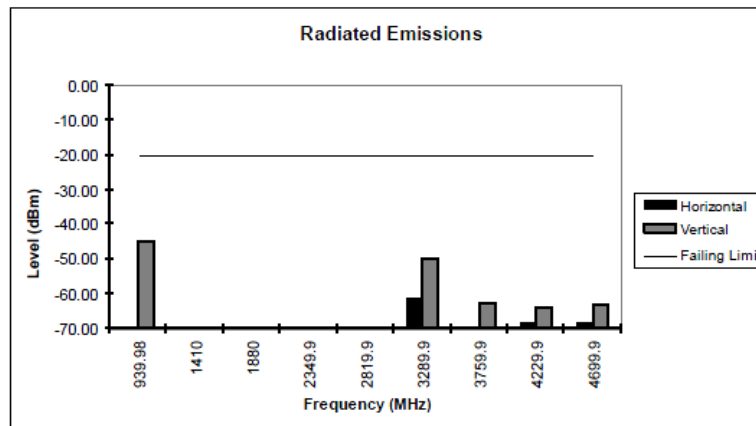


Figure 6F-4: 4.8W, 469.9875MHz, 12.5kHz Channel Spacing

Frequency (MHz)	Spectrum Analyzer Level (dBm)	Antenna Polarity (H/V)	Antenna Height (cm)	Angle (degrees)	Correction Factor (dB)	Spurious ERP (dBm)	Limit (dBm)	Margin (dB)
806.025	-62.55	V	123	214	7.83	-54.72	-13.00	41.72
1209.0375	-55.50	V	100	204	-12.92	-68.42	-13.00	55.42
2418.075	-57.30	V	100	147	-7.12	-64.42	-13.00	51.42
4030.125	-60.45	V	100	174	1.40	-59.05	-13.00	46.05

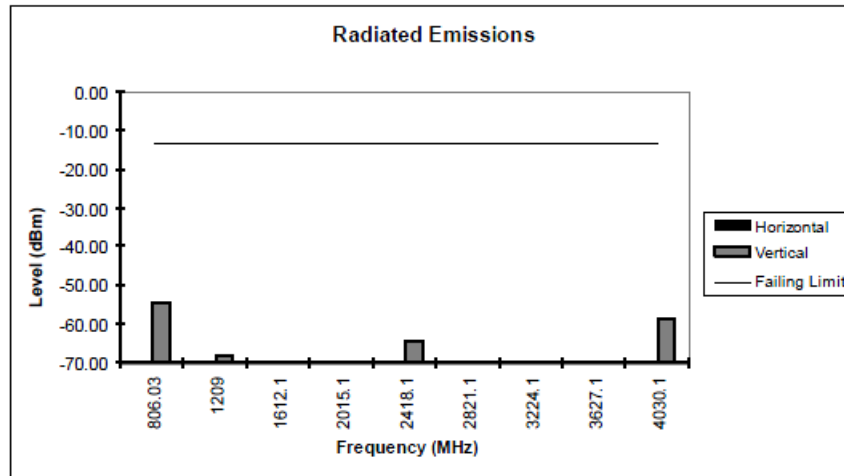


Figure 6F-5: 4.8W, 403.0125MHz, 25kHz Channel Spacing

Frequency (MHz)	Spectrum Analyzer Level (dBm)	Antenna Polarity (H/V)	Antenna Height (cm)	Angle (degrees)	Correction Factor (dB)	Spurious ERP (dBm)	Limit (dBm)	Margin (dB)
4061.125	-60.55	H	155	227	-7.09	-67.64	-13.00	54.64
812.225	-63.50	V	121	308	5.23	-58.27	-13.00	45.27
4061.125	-61.30	V	135	1	-7.34	-68.64	-13.00	55.64

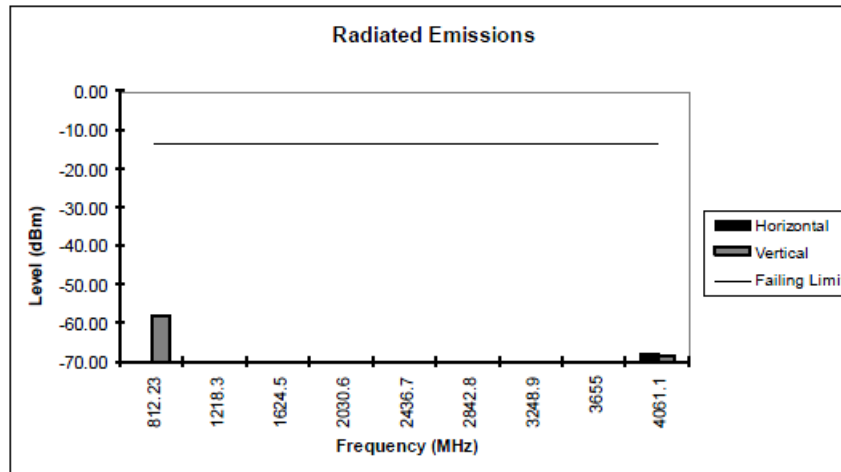


Figure 6F-6: 4.8W, 406.1125MHz, 25kHz Channel Spacing

Frequency (MHz)	Spectrum Analyzer Level (dBm)	Antenna Polarity (H/V)	Antenna Height (cm)	Angle (degrees)	Correction Factor (dB)	Spurious ERP (dBm)	Limit (dBm)	Margin (dB)
3009.9125	-58.65	H	140	346	-8.98	-67.63	-13.00	54.63
3439.9	-56.90	H	172	320	1.77	-55.13	-13.00	42.13
4299.875	-60.40	H	145	338	-2.50	-62.90	-13.00	49.90
859.975	-57.95	V	117	308	6.39	-51.56	-13.00	38.56
3009.9125	-58.10	V	108	358	-2.98	-61.08	-13.00	48.08
3439.9	-57.65	V	116	40	1.72	-55.93	-13.00	42.93
3869.8875	-59.55	V	163	350	-0.75	-60.30	-13.00	47.30
4299.875	-59.85	V	107	318	0.80	-59.05	-13.00	46.05

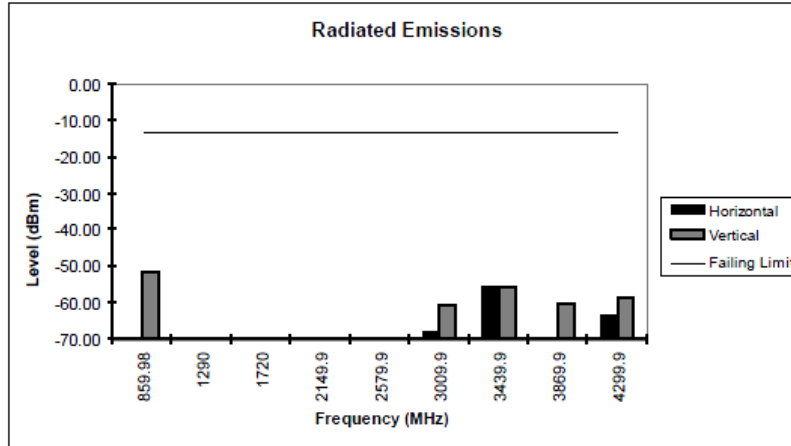


Figure 6F-7: 4.8W, 429.9875MHz, 25kHz Channel Spacing (Not for FCC review)

Frequency (MHz)	Spectrum Analyzer Level (dBm)	Antenna Polarity (H/V)	Antenna Height (cm)	Angle (degrees)	Correction Factor (dB)	Spurious ERP (dBm)	Limit (dBm)	Margin (dB)
919.3	-68.30	H	100	327	2.60	-65.70	-13.00	52.70
2298.25	-58.55	H	179	1	-9.57	-68.12	-13.00	55.12
2757.9	-57.90	H	108	165	-3.33	-61.23	-13.00	48.23
3217.55	-58.25	H	189	201	-2.76	-61.01	-13.00	48.01
4136.85	-59.60	H	131	343	2.67	-56.94	-13.00	43.94
4596.5	-59.10	H	103	28	3.94	-55.16	-13.00	42.16
919.3	-52.90	V	107	238	7.35	-45.55	-13.00	32.55
2757.9	-58.35	V	114	358	-5.18	-63.53	-13.00	50.53
3217.55	-57.70	V	126	1	1.54	-56.16	-13.00	43.16
4136.85	-59.65	V	113	321	2.52	-57.14	-13.00	44.14
4596.5	-59.50	V	116	26	3.49	-56.01	-13.00	43.01

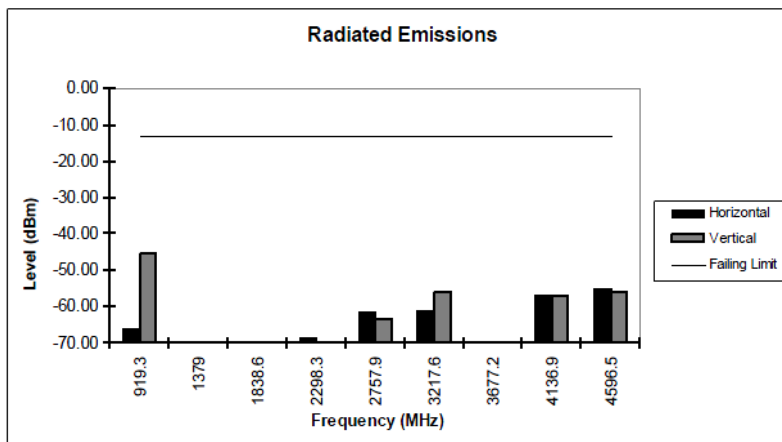


Figure 6F-8: 4.8W, 459.6500MHz, 25kHz Channel Spacing (Part 22)

Frequency (MHz)	Spectrum Analyzer Level (dBm)	Antenna Polarity (H/V)	Antenna Height (cm)	Angle (degrees)	Correction Factor (dB)	Spurious ERP (dBm)	Limit (dBm)	Margin (dB)
2349.9375	-57.35	H	169	1	-9.46	-66.81	-13.00	53.81
2819.925	-58.25	H	125	358	-7.81	-66.06	-13.00	53.06
3289.9125	-55.85	H	164	232	1.99	-53.86	-13.00	40.86
4229.8875	-61.65	H	147	339	3.30	-58.35	-13.00	45.35
4699.875	-60.05	H	101	38	-7.73	-67.78	-13.00	54.78
939.975	-53.75	V	107	309	7.80	-45.95	-13.00	32.95
2819.925	-58.35	V	111	351	-8.61	-66.96	-13.00	53.96
3289.9125	-55.80	V	101	321	3.29	-52.51	-13.00	39.51
3759.9	-59.25	V	147	358	0.34	-58.91	-13.00	45.91
4229.8875	-62.05	V	101	155	-1.35	-63.40	-13.00	50.40
4699.875	-59.40	V	111	19	0.62	-58.78	-13.00	45.78

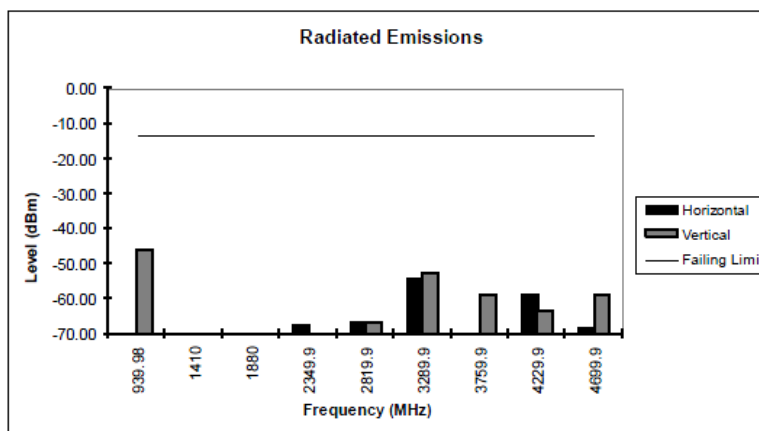
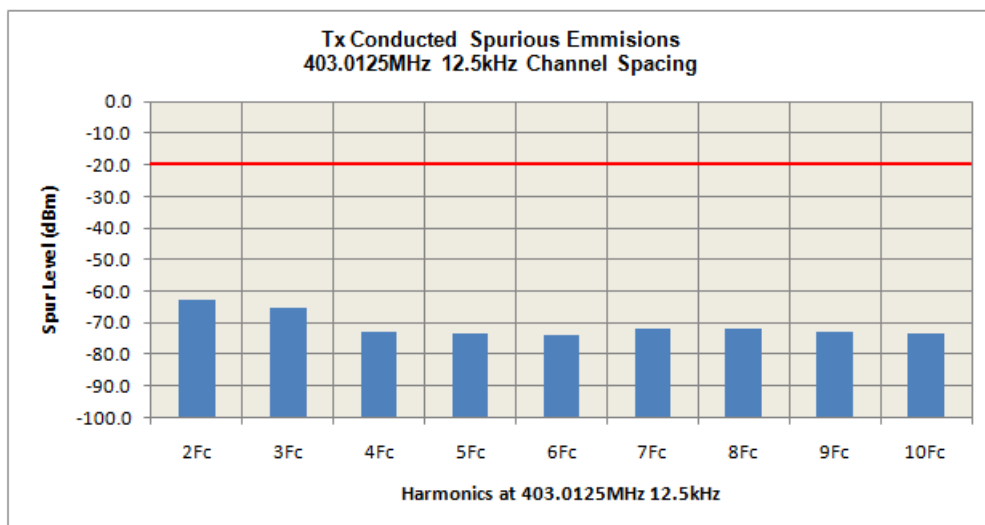


Figure 6F-9: 4.8W, 469.9875MHz, 25kHz Channel Spacing (Not for FCC review)

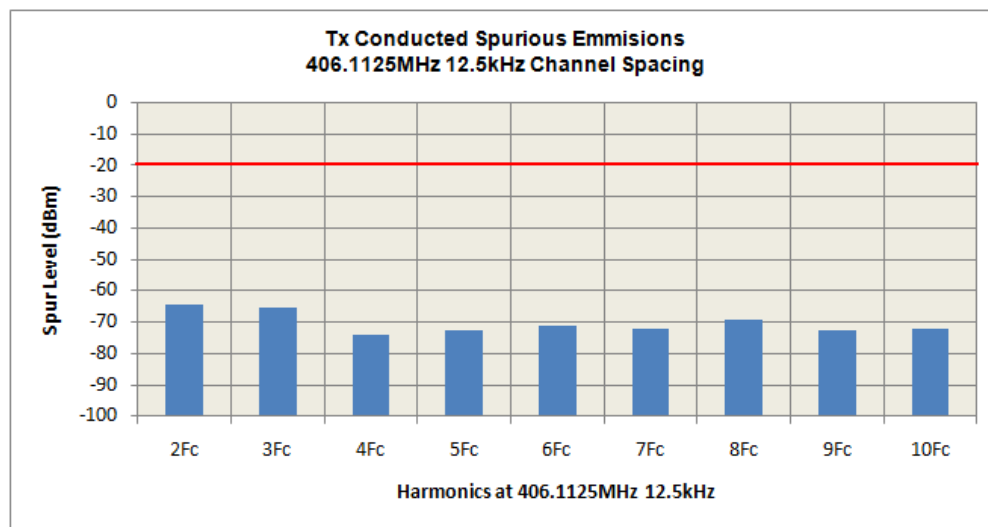


**EXHIBIT 6G****Transmitter Conducted Spurious Emissions**

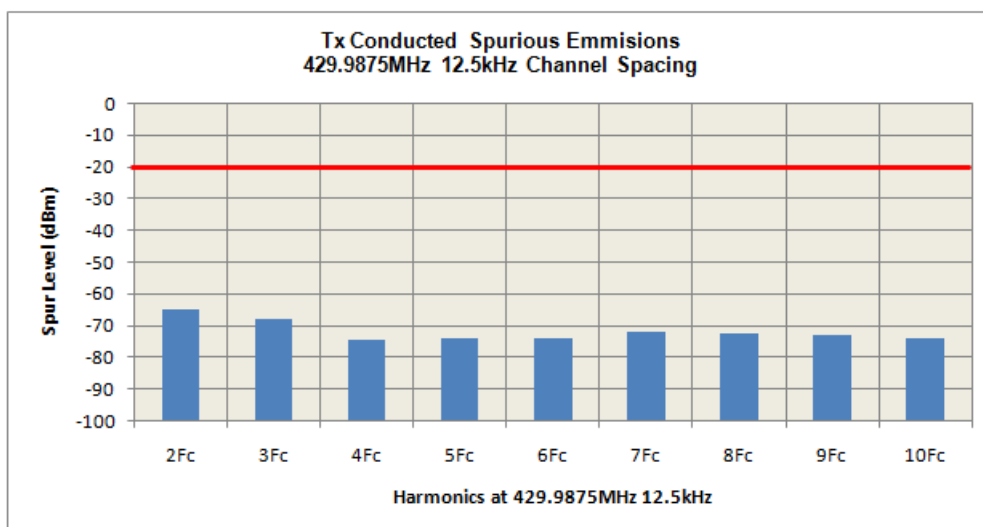
Note: Display lines on graphs correspond to the FCC limit of -13dBm (25kHz) & -20dBm (12.5kHz).



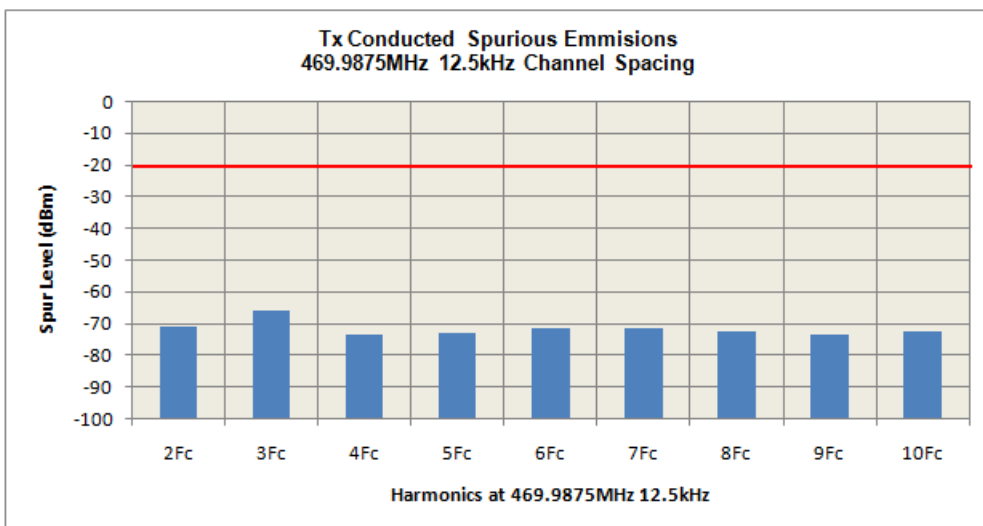
**Figure 6G-1:** 4.8W Harmonic of Carrier 403.0125MHz, 12.5kHz Channel Spacing



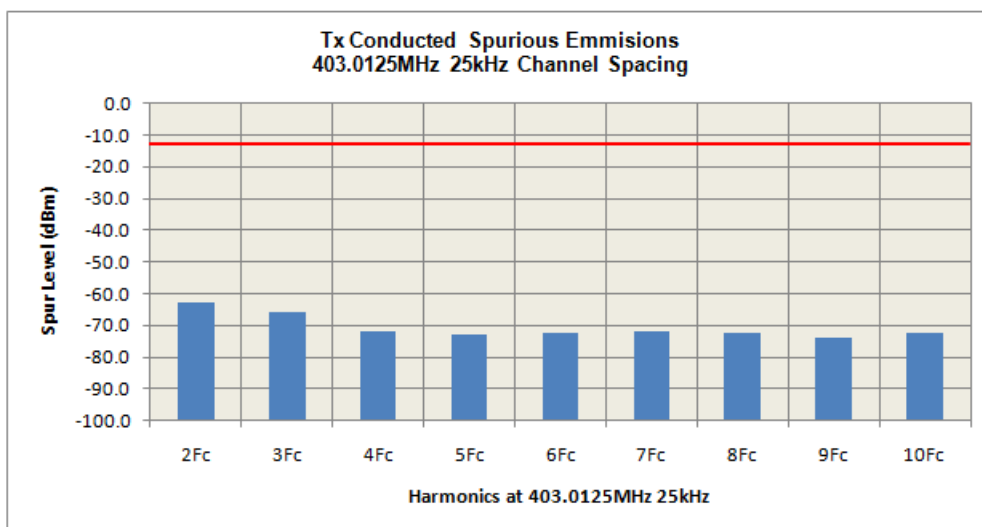
**Figure 6G-2:** 4.8W Harmonic of Carrier 406.1125MHz, 12.5kHz Channel Spacing



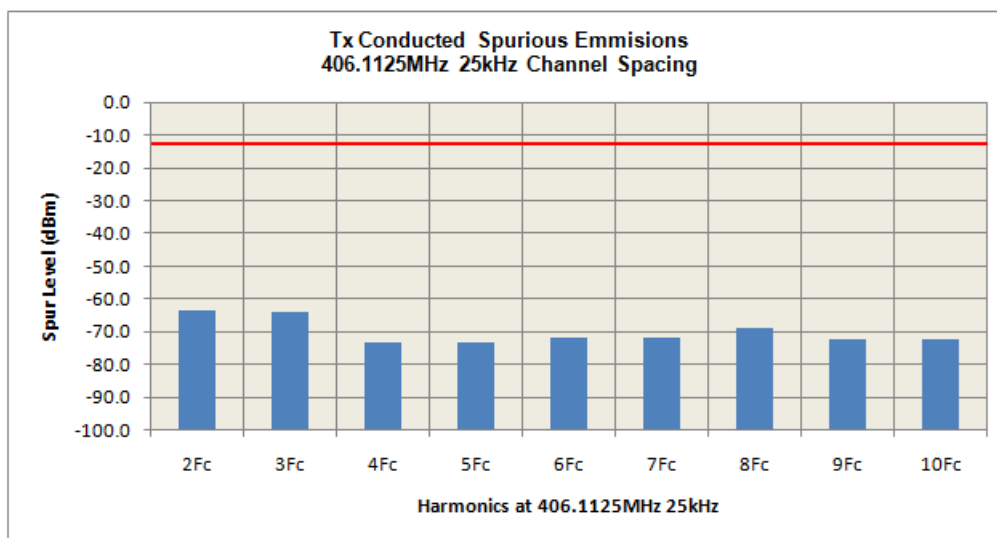
**Figure 6G-3:** 4.8W Harmonic of Carrier 429.9875MHz, 12.5kHz Channel Spacing



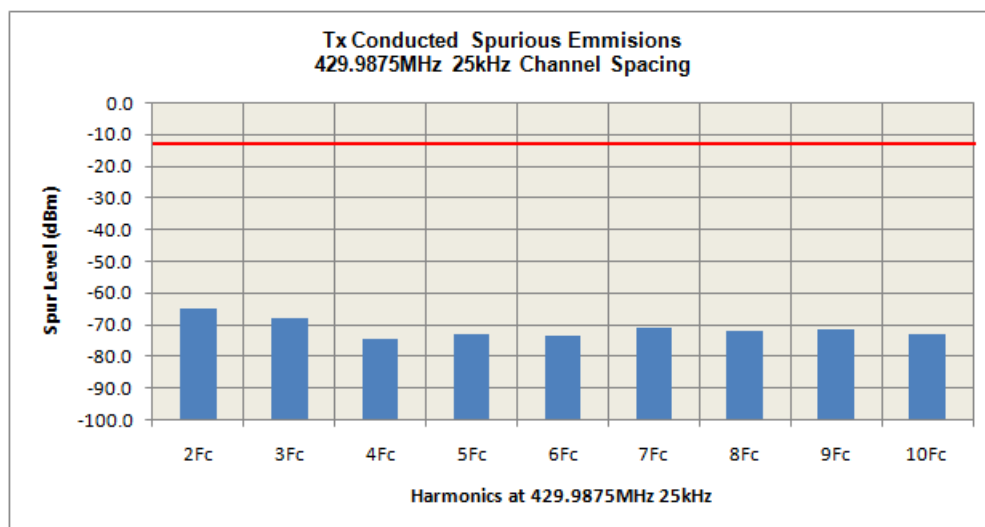
**Figure 6G-4:** 4.8W Harmonic of Carrier 469.9875MHz, 12.5kHz Channel Spacing



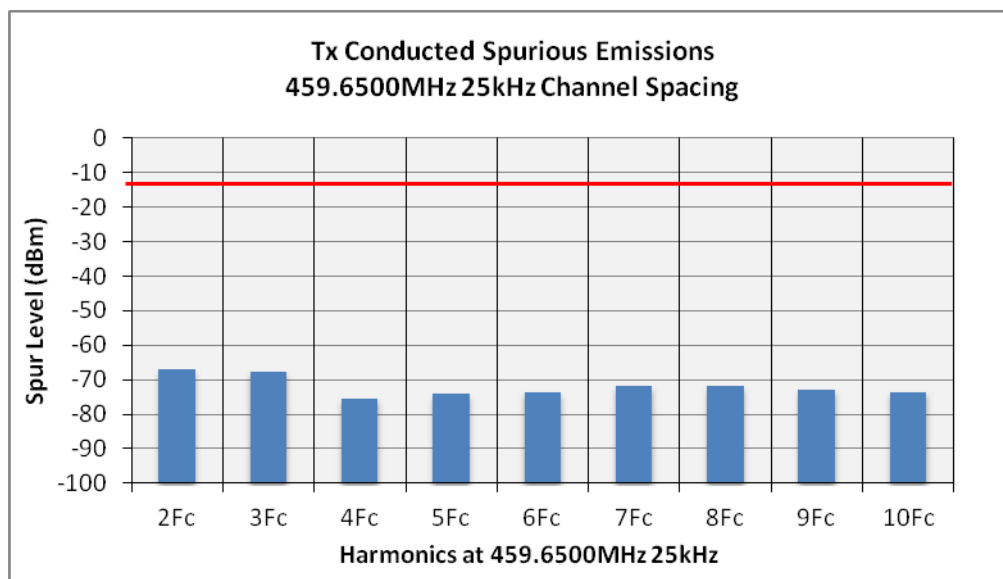
**Figure 6G-5:** 4.8W Harmonic of Carrier 403.0125MHz, 25kHz Channel Spacing



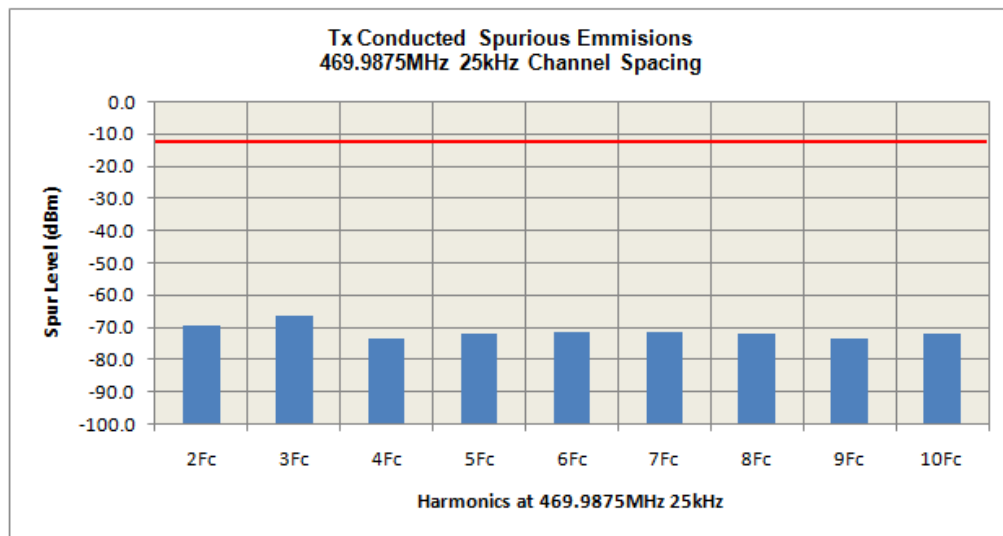
**Figure 6G-6:** 4.8W Harmonic of Carrier 406.1125MHz, 25kHz Channel Spacing



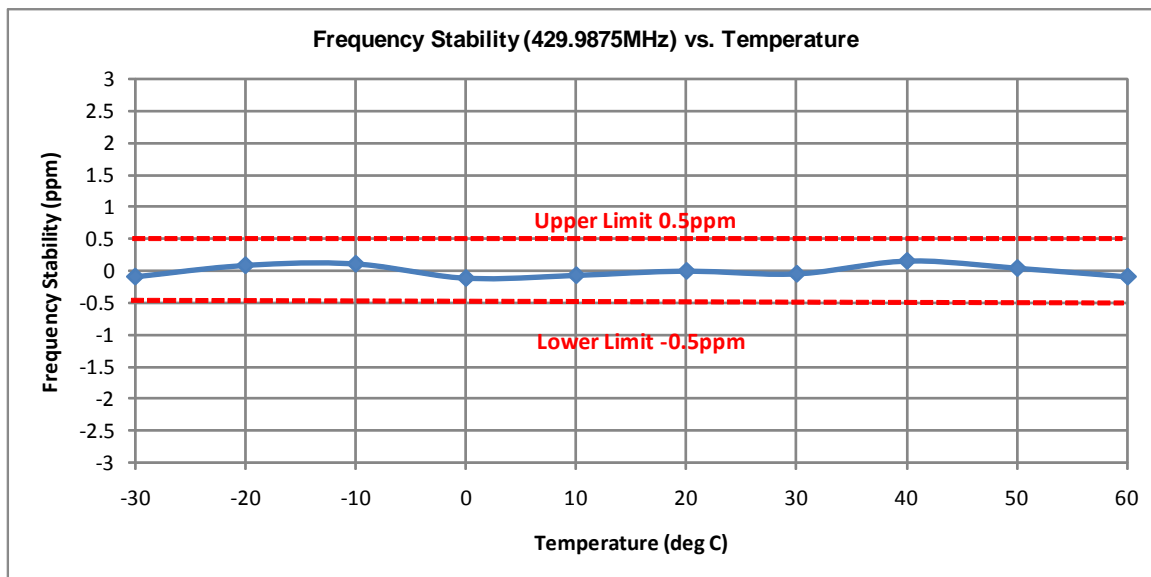
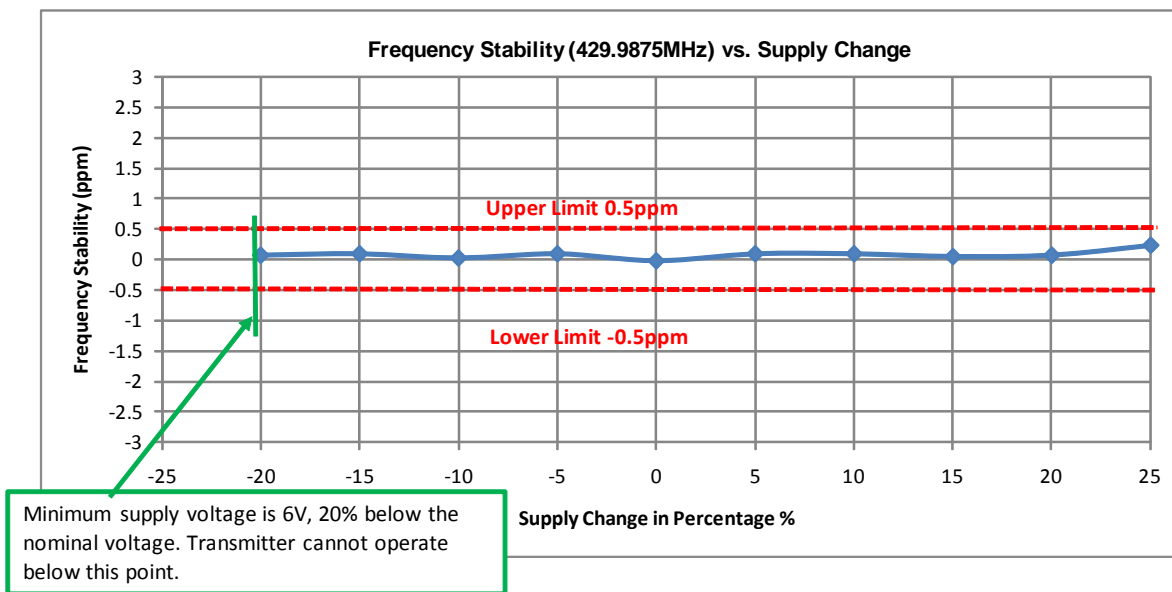
**Figure 6G-7:** 4.8W Harmonic of Carrier 429.9875MHz, 25kHz Channel Spacing (Not for FCC review)

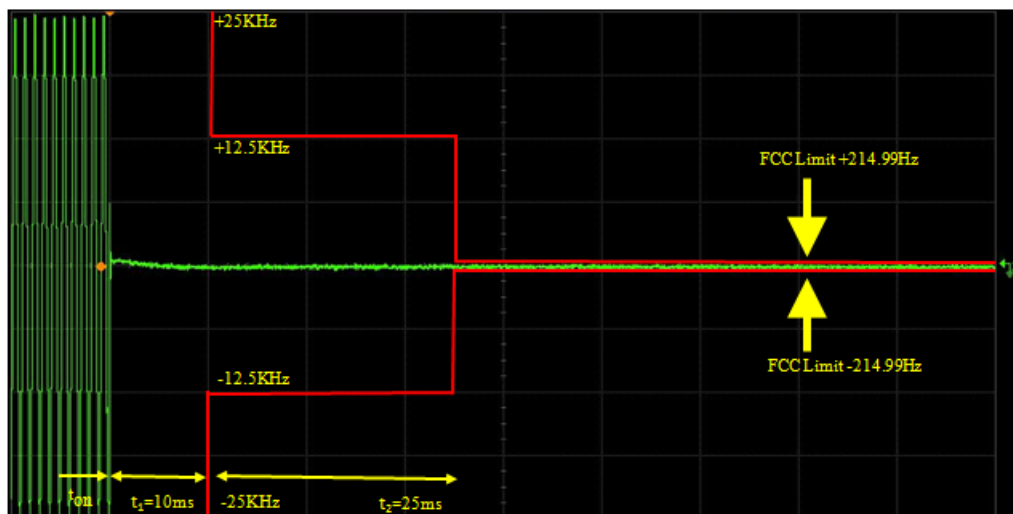


**Figure 6G-8:** 4.8W Harmonic of Carrier 459.6500MHz, 25kHz Channel Spacing (Part 22)

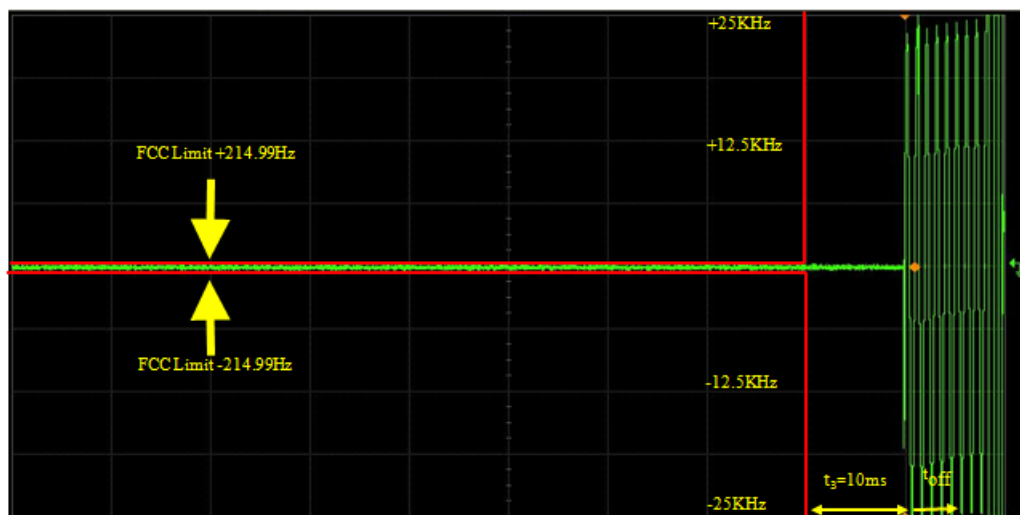


**Figure 6G-9:** 4.8W Harmonic of Carrier 469.9875MHz, 25kHz Channel Spacing (Not for FCC review)

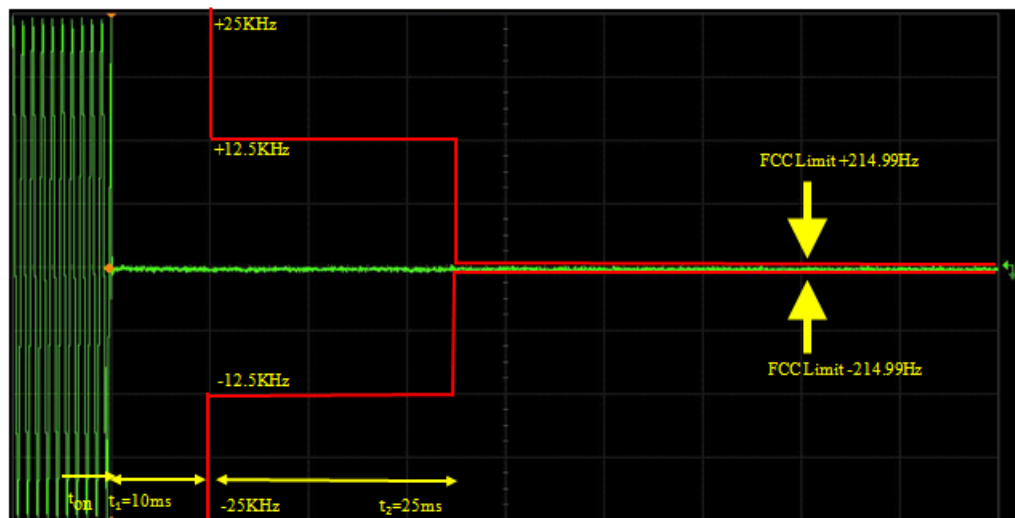
**EXHIBIT 6H****Frequency Stability****Figure 6H-1: 0.5 ppm Frequency Stability vs. Temperature****Figure 6H-2: 0.5 ppm Frequency Stability vs. Supply Voltage**

**EXHIBIT 6I****TRANSIENT FREQUENCY BEHAVIOR**

**Figure 6I-1: TX 429.9875MHz – 12.5kHz Channel Spacing – Transmitter On**



**Figure 6I-2: TX 429.9875MHz – 12.5kHz Channel Spacing – Transmitter Off**



**Figure 6I-3: TX 429.9875MHz – 25kHz Channel Spacing – Transmitter On** (Not for FCC review)



**Figure 6I-4: TX 429.9875MHz – 25kHz Channel Spacing – Transmitter Off** (Not for FCC review)