

TEST REPORT

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

EXHIBIT 7A - RF Power Output (Table)

EXHIBIT 7B - Transmit Audio Response (1 Graph)

EXHIBIT 7C - Transmit Audio Post Limiter Lowpass Filter Response (1 Graph) (*)

EXHIBIT 7D - Modulation Limiting Characteristics (3 Graphs) (*)

- 7D-1 - Carrier Squelch (CSQ) Mode
- 7D-2 - Tone Private Line (TPL) Mode
- 7D-3 - Digital Private Line (DPL) Mode

EXHIBIT 7E - Occupied Bandwidth (13 Spectrum Analyzer Plots)

- 7E-1 - 2500 Hz Audio Modulation Only
- 7E-2 - 2500 Hz Audio and TPL Tone Modulation
- 7E-3 - 2500 Hz Audio and DPL Code Modulation
- 7E-4 - 2500 Hz Audio and LTR Data Modulation
- 7E-5 - DTMF Tones Modulation Only
- 7E-6 - DTMF Tones and TPL Tone Modulation
- 7E-7 - DTMF Tones and DPL Code Modulation
- 7E-8 - DTMF Tones and LTR Data Modulation
- 7E-9 - FSK Data Modulation Only
- 7E-10 - FSK Data and TPL Tone Modulation
- 7E-11 - FSK Data and DPL Code Modulation
- 7E-12 - FSK Data and LTR Data Modulation
- 7E-13 - 3600 Bauds Trunking Highspeed Data Modulation (*)

EXHIBIT 7F - Conducted Spurious Emissions 12 Graphs)

- 7F-1 - 896.000 MHz Transmitter 35 Watts
- 7F-2 - 899.000 MHz Transmitter 35 Watts
- 7F-3 - 902.000 MHz Transmitter 35 Watts
- 7F-4 - 935.000 MHz Transmitter 35 Watts
- 7F-5 - 938.000 MHz Transmitter 35 Watts
- 7F-6 - 941.000 MHz Transmitter 35 Watts
- 7F-7 - 896.000 MHz Transmitter 20 Watts
- 7F-8 - 899.000 MHz Transmitter 20 Watts
- 7F-9 - 902.000 MHz Transmitter 20 Watts
- 7F-10 - 935.000 MHz Transmitter 20 Watts
- 7F-11 - 938.000 MHz Transmitter 20 Watts
- 7F-12 - 941.000 MHz Transmitter 20 Watts

EXHIBIT 7G - Radiated Spurious Emissions – 35 Watts (2 Graphs)

- 7G-1 - 899.000 MHz
- 7G-2 - 938.000 MHz

EXHIBIT 7H - Frequency Stability vs. Temperature (2 Graphs) (*)

- 7H-1 – 896.0125 MHz
- 7H-2 – 940.9875 MHz

EXHIBIT 7J - Frequency Stability vs. Voltage – 896.0125 MHz (1 Graph) (*)

NOTE: Items marked with (*) are from filing FCC ID AZ492FT5782. That filing is referenced on each sheet for which it applies.

RF Output Table

The supply voltage to the transmitter was set to 13.6 volts DC.

FREQUENCY 896.000 MHzHIGH POWER SETTINGLOW POWER SETTING

Measured RF Output Power	34.5 Watts	20.6 Watts
Measured DC Voltage	12.97 Volts	13.15 Volts
Measured DC Current	6.64 Amperes	4.58 Amperes
Measured DC Input Power	86.1 Watts	60.2 Watts

FREQUENCY 899.000 MHzHIGH POWER SETTINGLOW POWER SETTING

Measured RF Output Power	34.6 Watts	20.5 Watts
Measured DC Voltage	13.00 Volts	13.16 Volts
Measured DC Current	6.65 Amperes	4.57 Amperes
Measured DC Input Power:	86.4 Watts	60.1 Watts

FREQUENCY 902.000 MHzHIGH POWER SETTINGLOW POWER SETTING

Measured RF Output Power	34.5 Watts	20.7 Watts
Measured DC Voltage	13.01 Volts	13.16 Volts
Measured DC Current	6.61 Amperes	4.59 Amperes
Measured DC Input Power	85.9 Watts	60.4 Watts

FREQUENCY 935.000 MHzHIGH POWER SETTINGLOW POWER SETTING

Measured RF Output Power	35.6 Watts	20.7 Watts
Measured DC Voltage	13.10 Volts	13.23 Volts
Measured DC Current	5.71 Amperes	4.03 Amperes
Measured DC Input Power	74.8 Watts	53.3 Watts

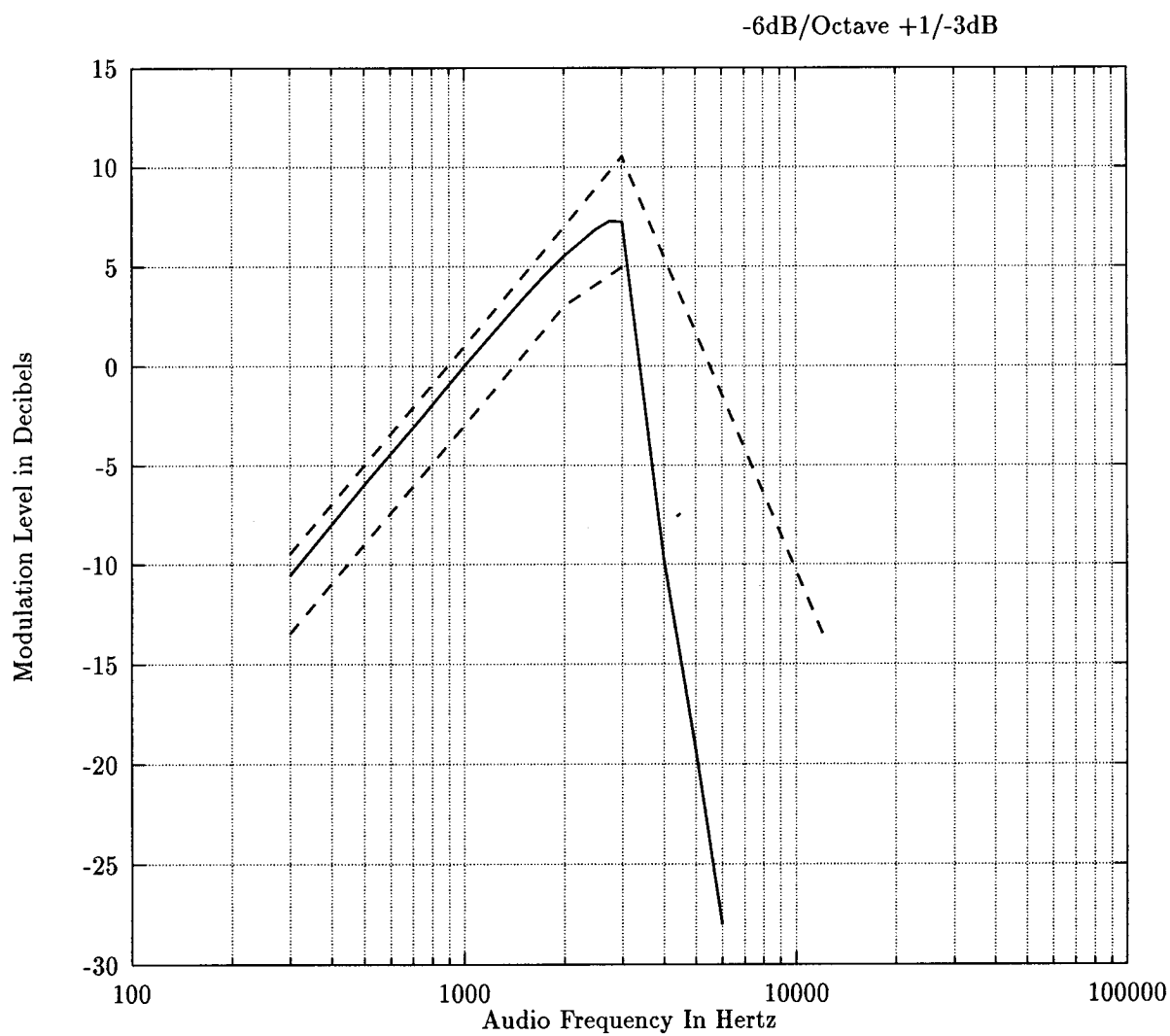
FREQUENCY 938.000 MHzHIGH POWER SETTINGLOW POWER SETTING

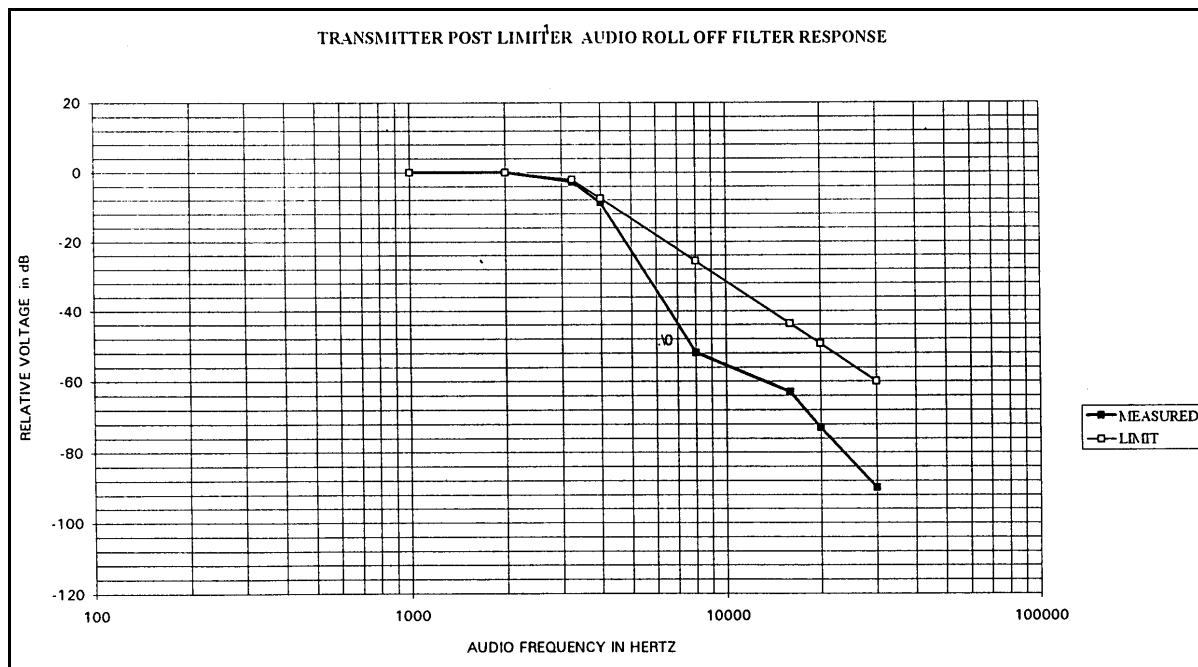
Measured RF Output Power	35.9 Watts	20.3 Watts
Measured DC Voltage	13.10 Volts	13.24 Volts
Measured DC Current	5.68 Amperes	3.93 Amperes
Measured DC Input Power	74.4 Watts	52.0 Watts

FREQUENCY 941.000 MHzHIGH POWER SETTINGLOW POWER SETTING

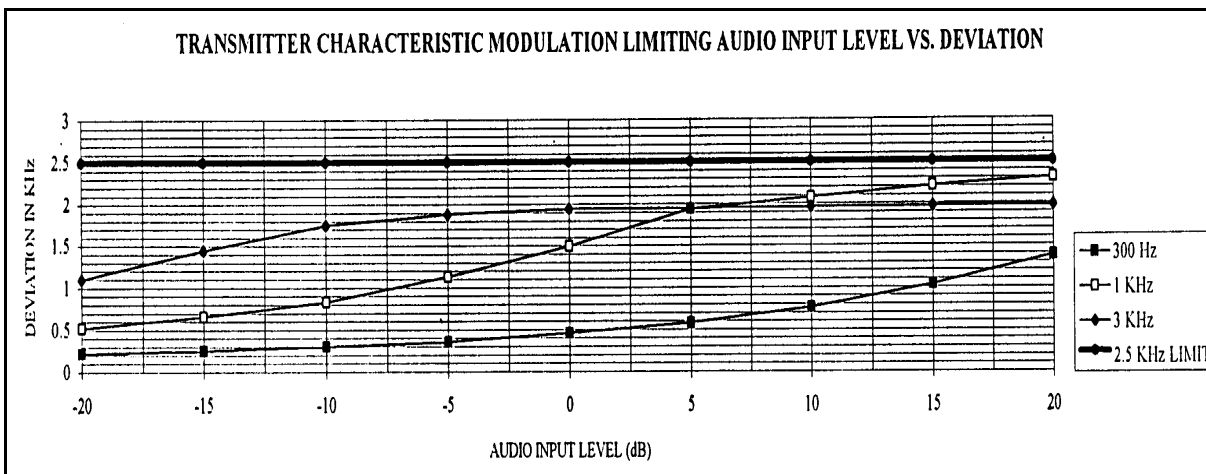
Measured RF Output Power	35.7 Watts	20.3 Watts
Measured DC Voltage	13.10 Volts	13.24 Volts
Measured DC Current	5.54 Amperes	3.83 Amperes
Measured DC Input Power	72.5 Watts	50.7 Watts

**Transmitter Audio Response Characteristic
Modulation Level versus Audio Frequency**

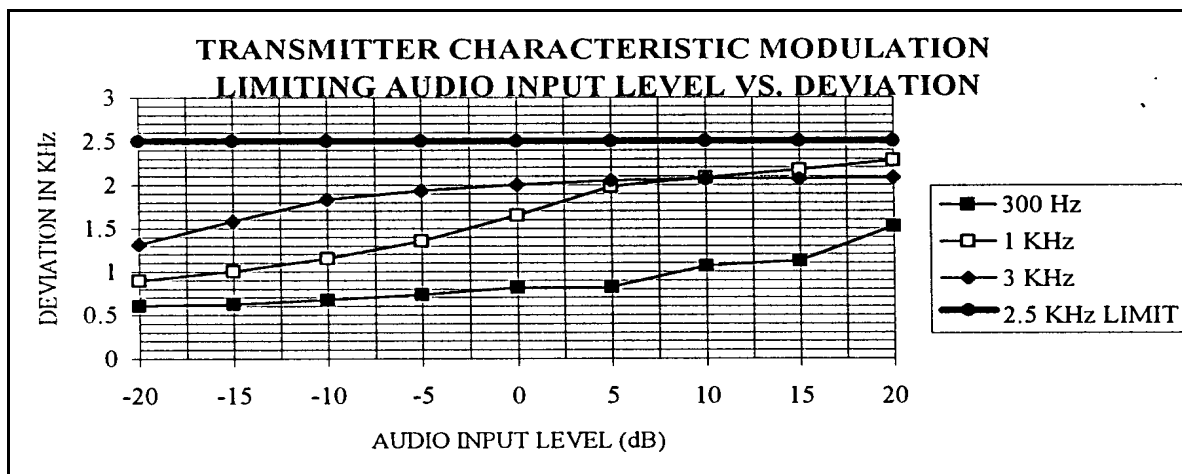


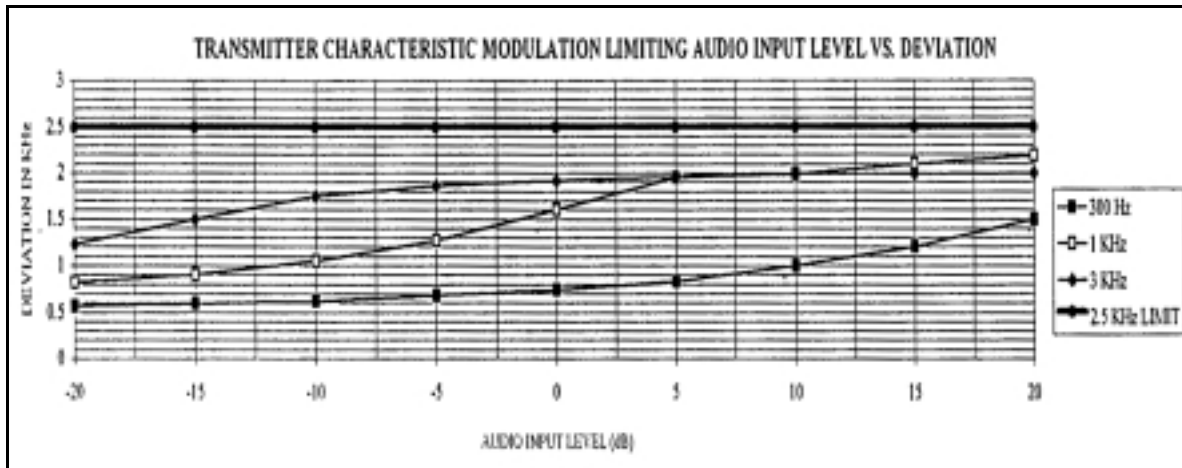
Transmit Audio Post Limiter Lowpass Filter Response

MODULATION LIMITING-Carrier Squelch Mode (CSQ @ 896 MHz)



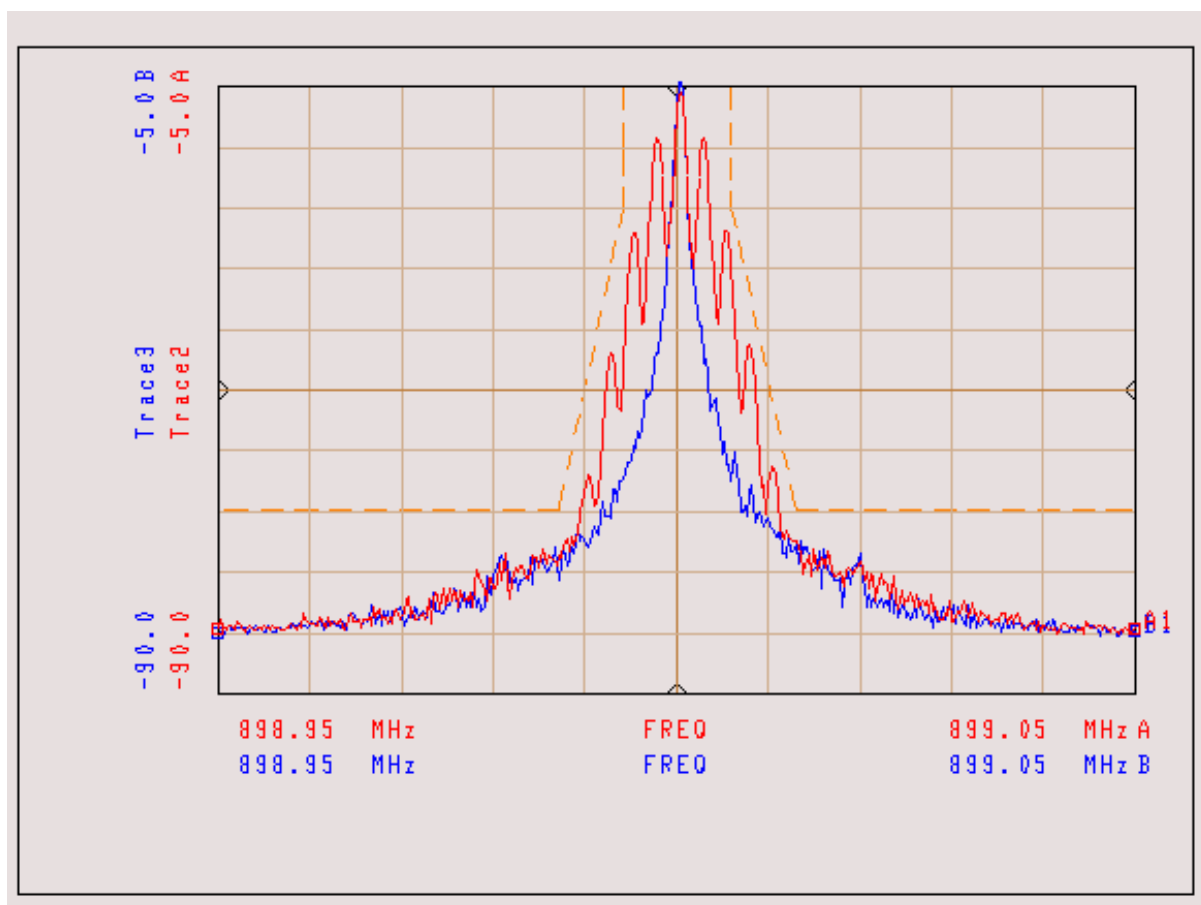
MODULATION LIMITING-Tone Private Line Mode (TPL @ 896 MHz)



MODULATION LIMITING-Digital Private Line Mode (DPL @ 896 MHz)

2500 Hz Audio Modulation Only

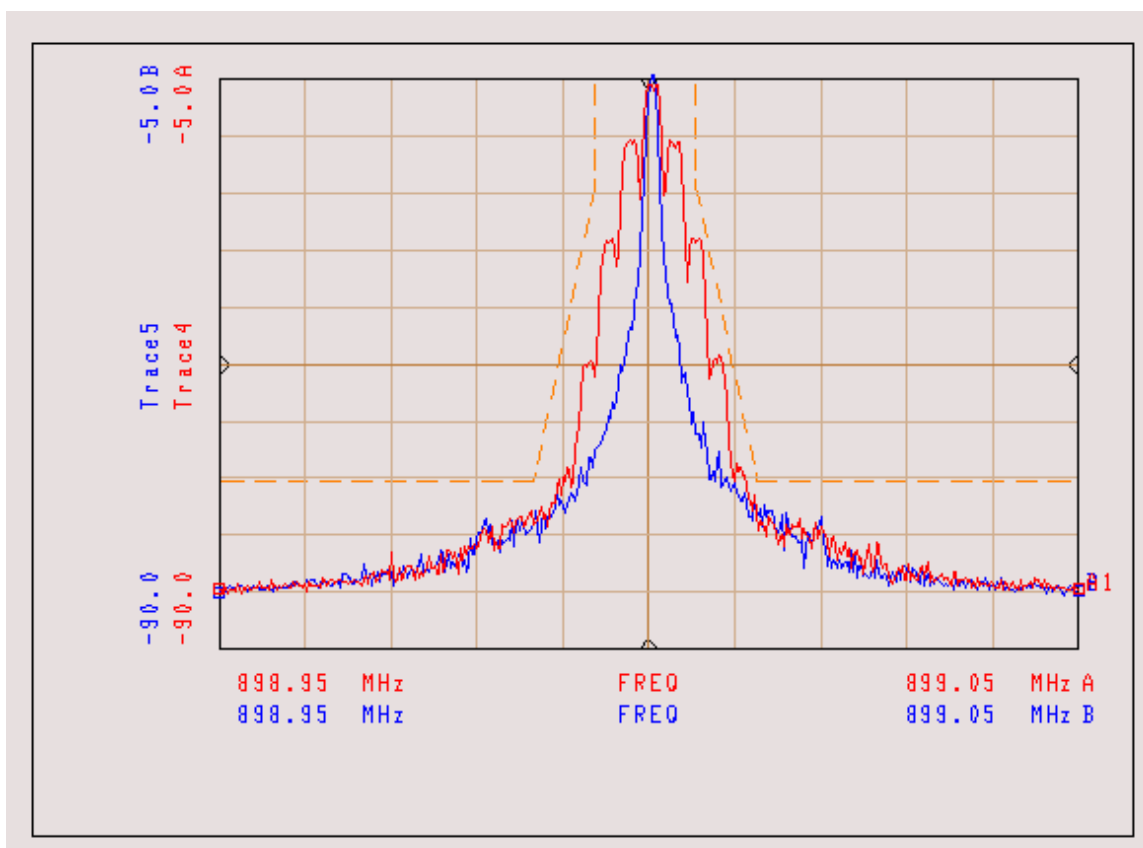
2500 HZ AUDIO – CARRIER SQUELCH MODE – 12.5 kHz



CENTER FREQUENCY:	899.0000 MHz
RESOLUTION BANDWIDTH:	300 Hz
VIDEO BANDWIDTH:	300 kHz
SPAN:	100 kHz
SWEEP TIME:	3 sec
SCALE:	10 dB/DIVISION
REF LEVEL:	5.8 dBm
ATTEN:	30 dB

2500 Hz Audio and TPL Tone Modulation

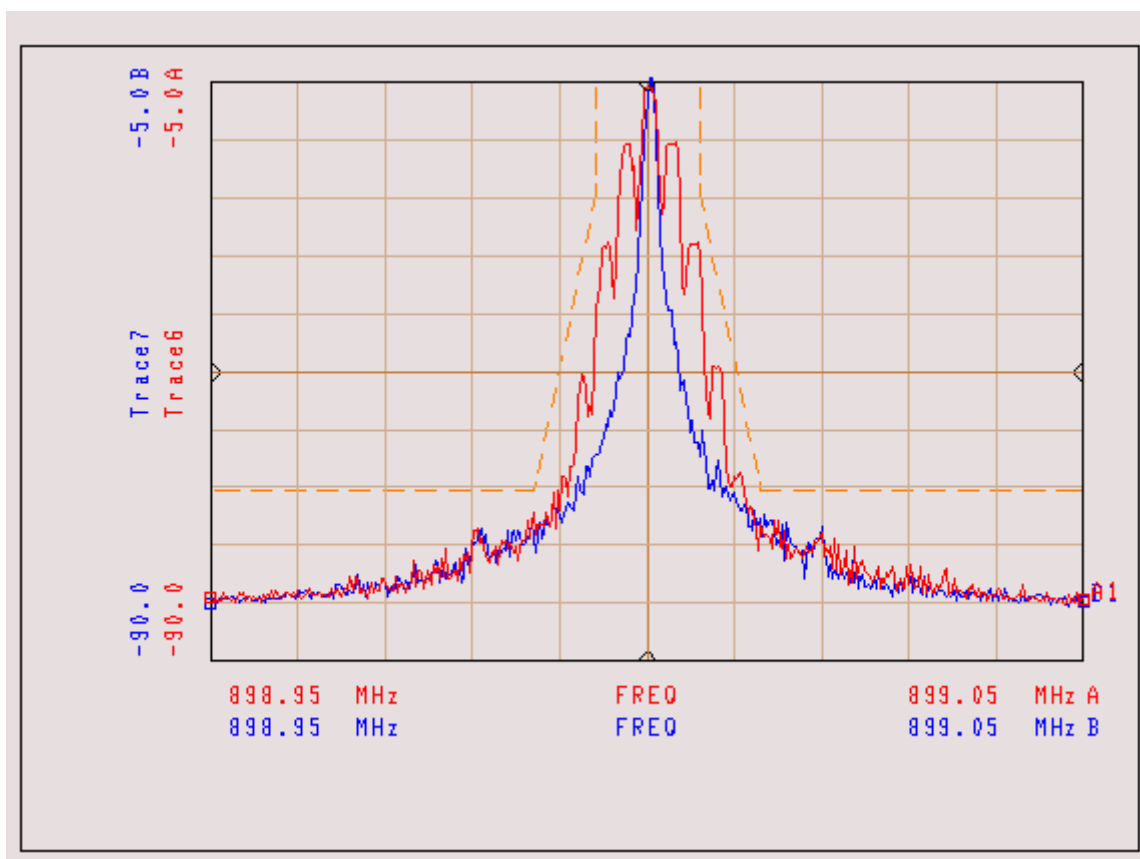
2500 HZ AUDIO MODULATION – PRIVATE LINE MODE – 12.5 kHz



CENTER FREQUENCY:	899.000 MHz
RESOLUTION BANDWIDTH:	300 Hz
VIDEO BANDWIDTH:	300 kHz
SPAN:	100 kHz
SWEEP TIME:	3 sec
SCALE:	10 dB/DIVISION
REFERENCE LEVEL:	0 dBm
ATTENUATOR:	10 dB

2500 Hz Audio and DPL Code Modulation

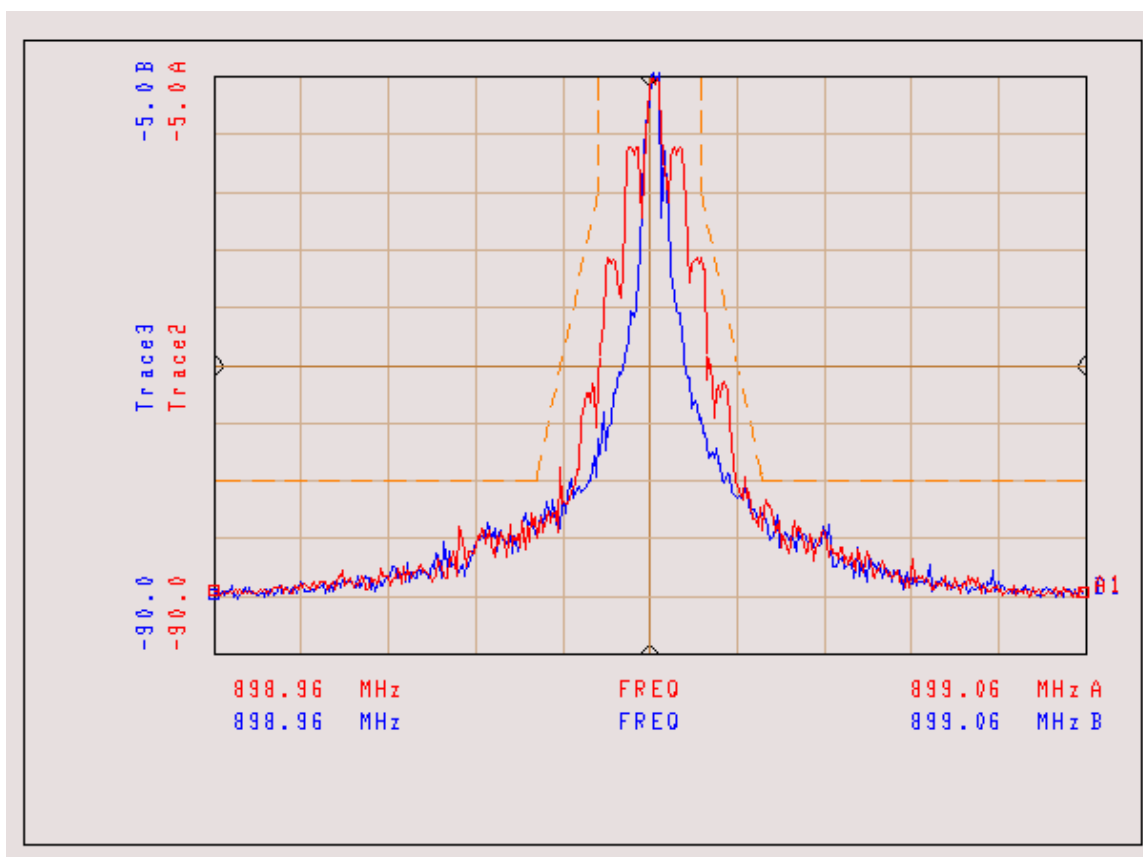
2500 HZ AUDIO MODULATION – DIGITAL PRIVATE LINE MODE – 12.5 kHz



CENTER FREQUENCY:	899.000 MHz
RESOLUTION BANDWIDTH:	300 Hz
VIDEO BANDWIDTH:	300 kHz
SPAN:	100 kHz
SWEEP TIME:	3 sec
SCALE:	10 dB/DIVISION
REFERENCE LEVEL:	5.8 dBm
ATTENUATOR:	30 dB

2500 Hz Audio and LTR Data Modulation

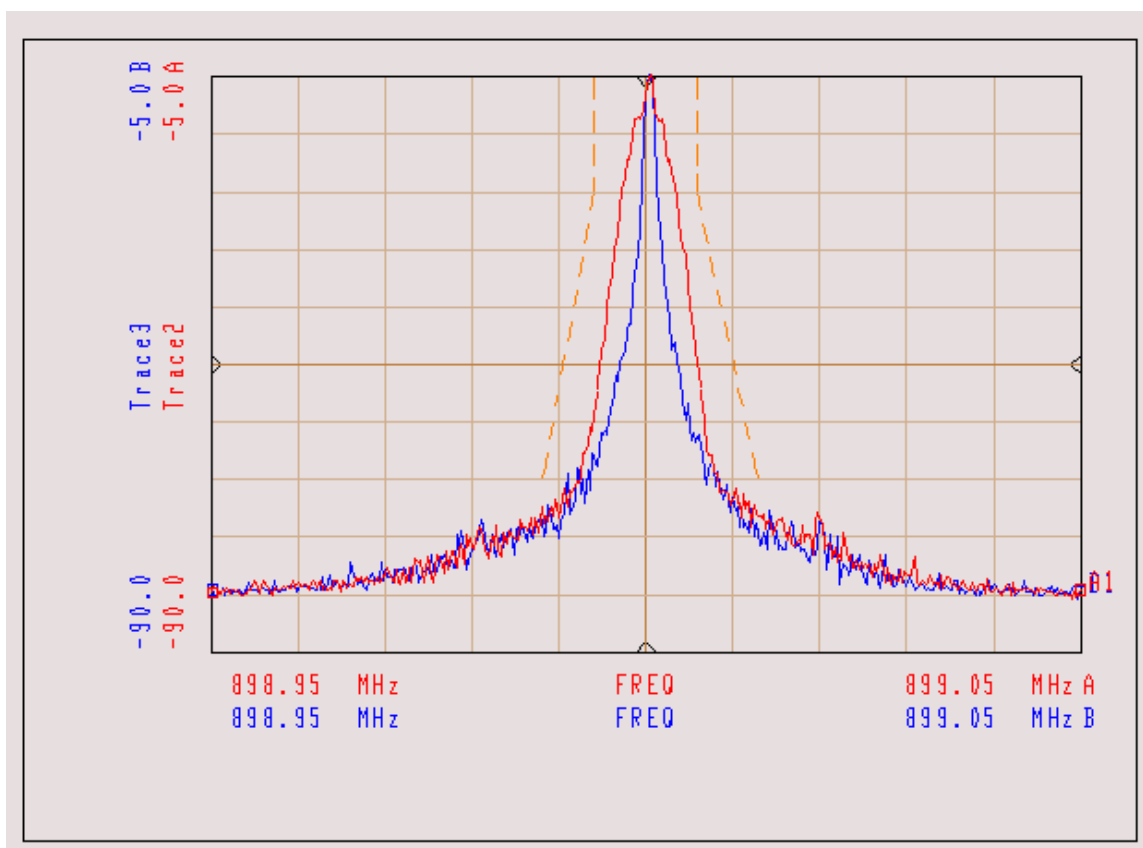
2500 HZ AUDIO – LTR TRUNKING MODE – 12.5 kHz



CENTER FREQUENCY:	899.000 MHz
RESOLUTION BANDWIDTH:	300 Hz
VIDEO BANDWIDTH:	300 kHz
SPAN:	100 kHz
SWEEP TIME:	3 sec
SCALE:	10 dB/DIVISION
REFERENCE LEVEL:	5.8 dBm
ATTENUATOR:	30 dB

DTMF Tones Modulation Only

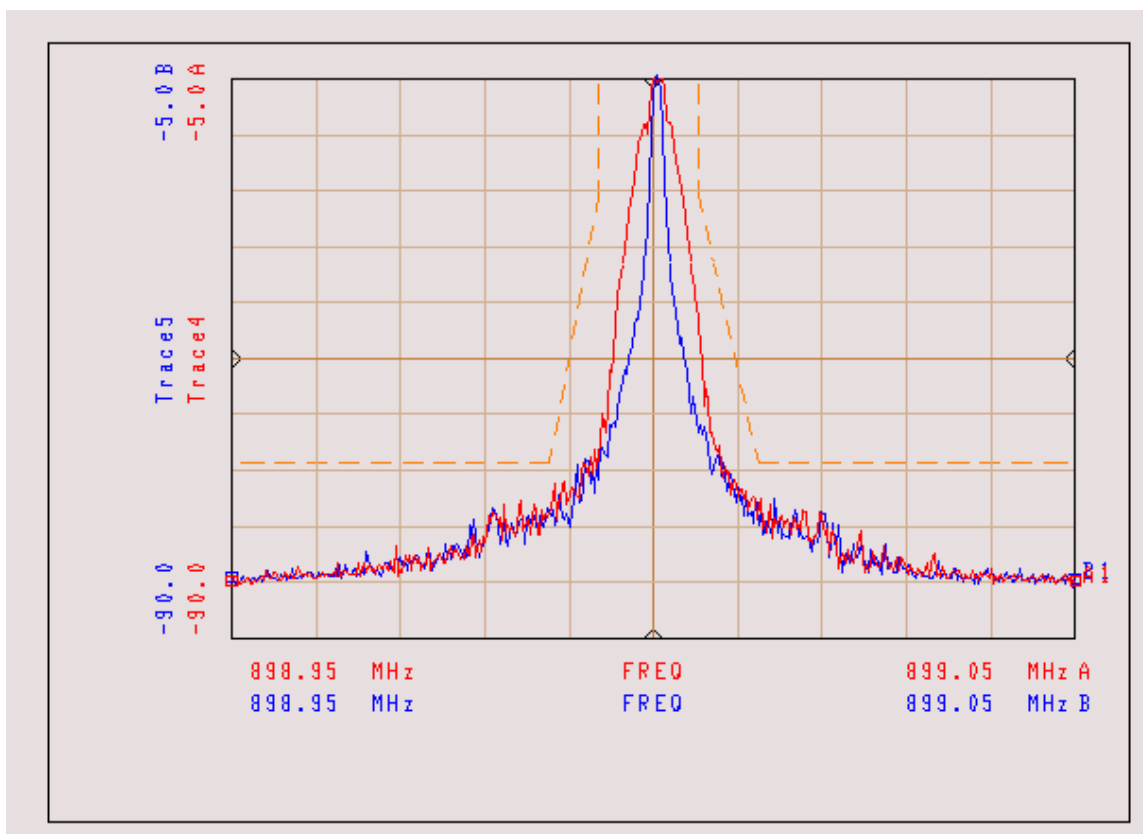
DTMF MODULATION – CARRIER SQUELCH MODE – 12.5 kHz



CENTER FREQUENCY:	899.000 MHz
RESOLUTION BANDWIDTH:	300 Hz
VIDEO BANDWIDTH:	300 kHz
SPAN:	100 kHz
SWEEP TIME:	3 sec
SCALE:	10 dB/DIVISION
REFERENCE LEVEL:	5.8 dBm
ATTENUATOR:	30 dB

DTMF Tones and TPL Tone Modulation

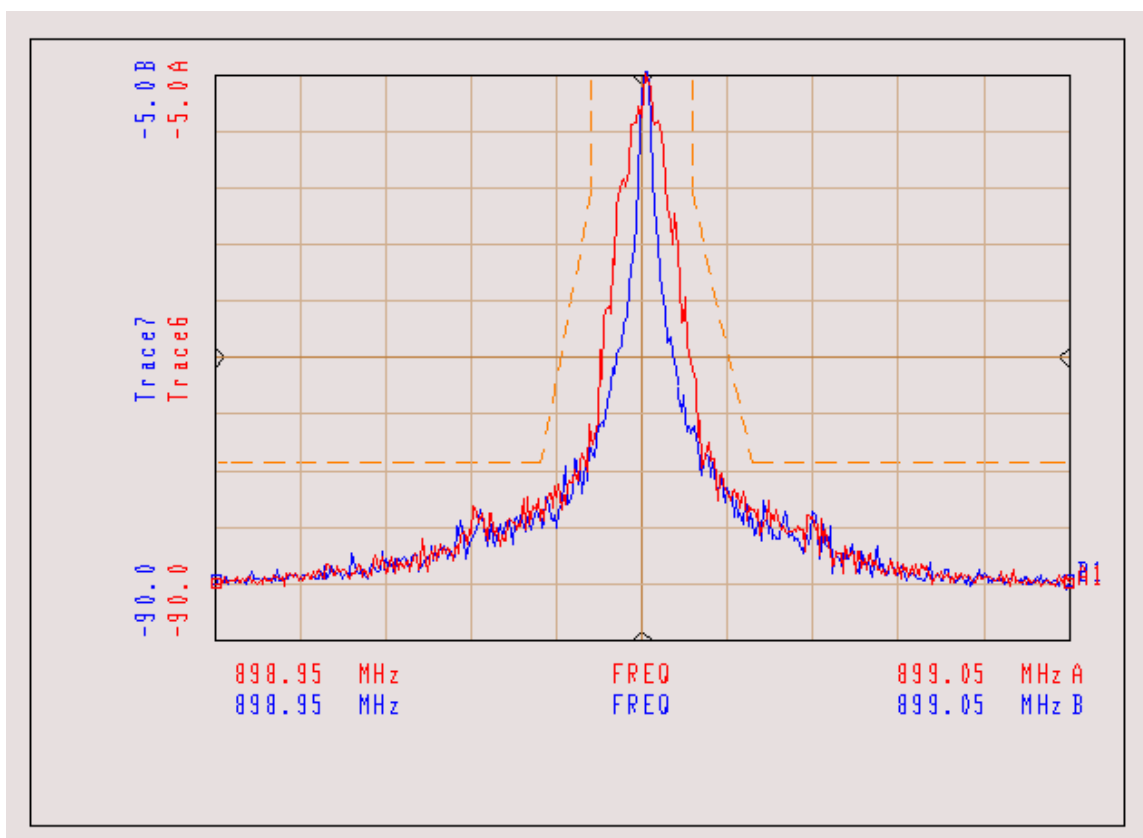
DTMF MODULATION – PRIVATE LINE MODE – 12.5 kHz



CENTER FREQUENCY:	899.000 MHz
RESOLUTION BANDWIDTH:	300 Hz
VIDEO BANDWIDTH:	300 kHz
SPAN:	100 kHz
SWEEP TIME:	3 sec
SCALE:	10 dB/DIVISION
REFERENCE LEVEL:	5.8 dBm
ATTENUATOR:	30 dB

DTMF Tones and DPL Code Modulation

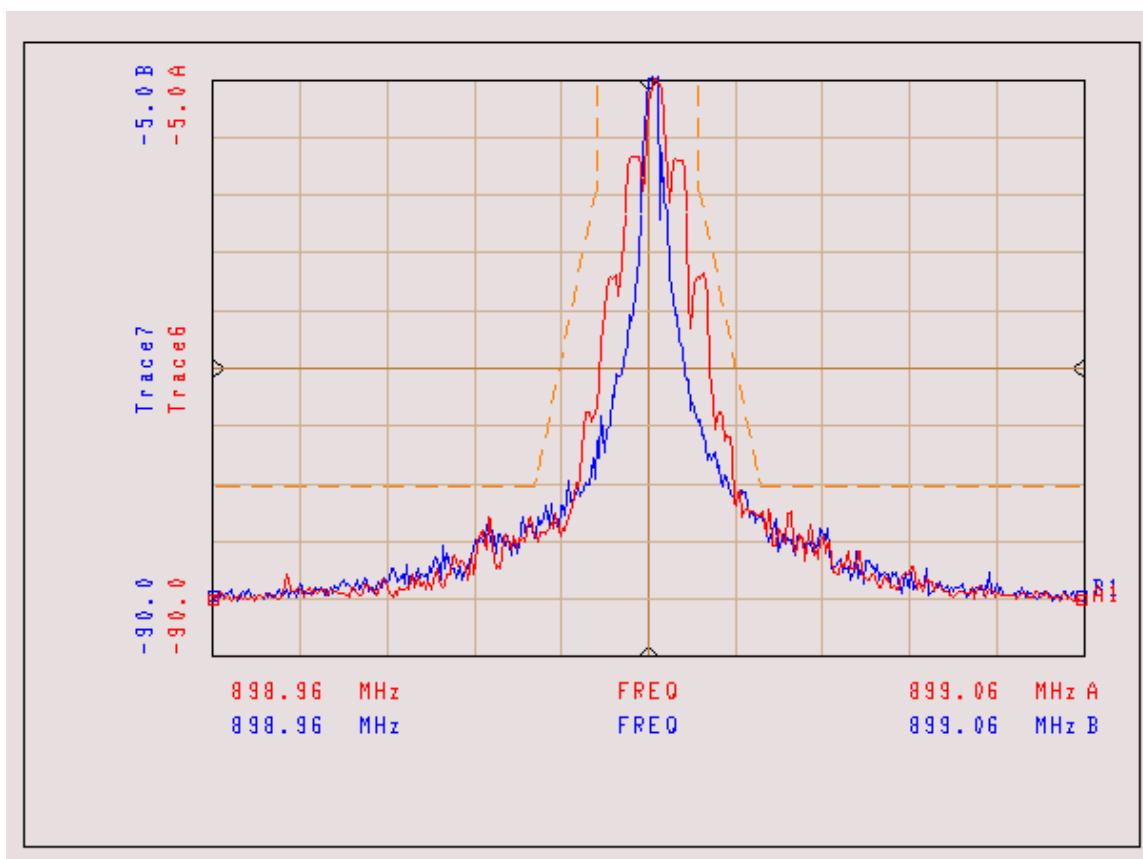
DTMF MODULATION – DIGITAL PRIVATE LINE MODE – 12.5 kHz



CENTER FREQUENCY:	899.000 MHz
RESOLUTION BANDWIDTH:	300 Hz
VIDEO BANDWIDTH:	300 kHz
SPAN:	100 kHz
SWEEP TIME:	3 sec
SCALE:	10 dB/DIVISION
REFERENCE LEVEL:	5.8 dBm
ATTENUATOR:	30 dB

DTMF Tones and LTR Data Modulation

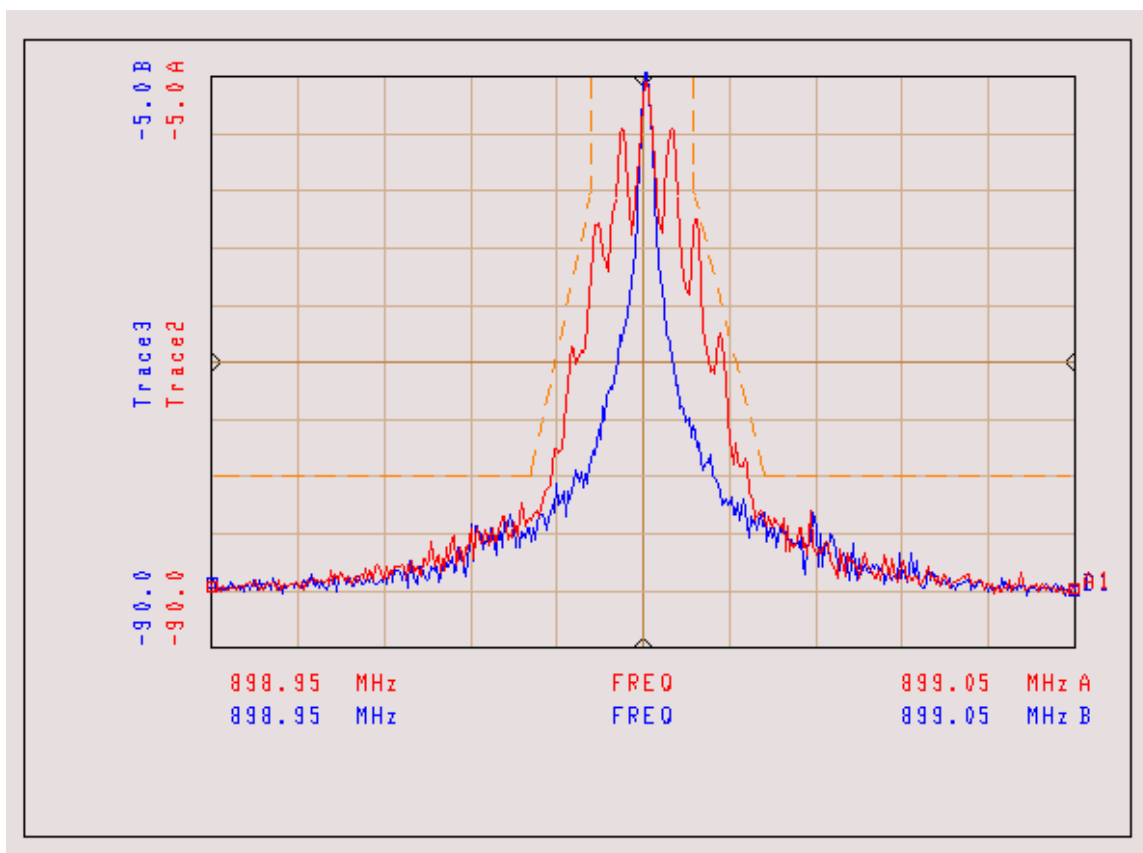
DTMF MODULATION – LTR TRUNKING MODE – 12.5 kHz



CENTER FREQUENCY: 899.0125 MHz
RESOLUTION BANDWIDTH: 300 Hz
VIDEO BANDWIDTH: 300 kHz
SPAN: 100 kHz
SWEEP TIME: 3 sec
SCALE: 10 dB/DIVISION
REFERENCE LEVEL: 0 dBm
ATTENUATOR: 10 dB

FSK Data Modulation Only

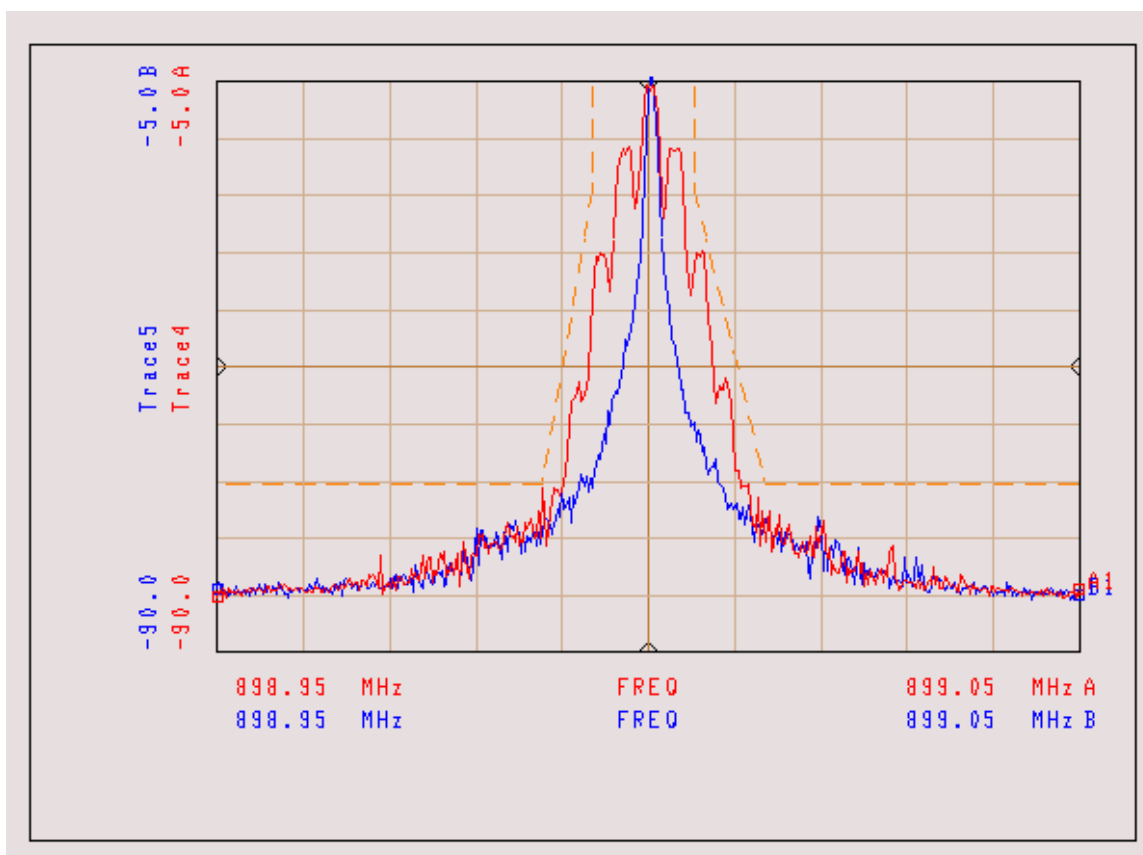
2000/3000 FSK DATA MODULATION – CARRIER SQUELCH MODE – 12.5 kHz



CENTER FREQUENCY: 899.000 MHz
RESOLUTION BANDWIDTH: 300 Hz
VIDEO BANDWIDTH: 300 kHz
SPAN: 100 kHz
SWEEP TIME: 3 sec
SCALE: 10 dB/DIVISION
REFERENCE LEVEL: 5.8 dBm
ATTENUATOR: 30 dB

FSK Data and TPL Tone Modulation

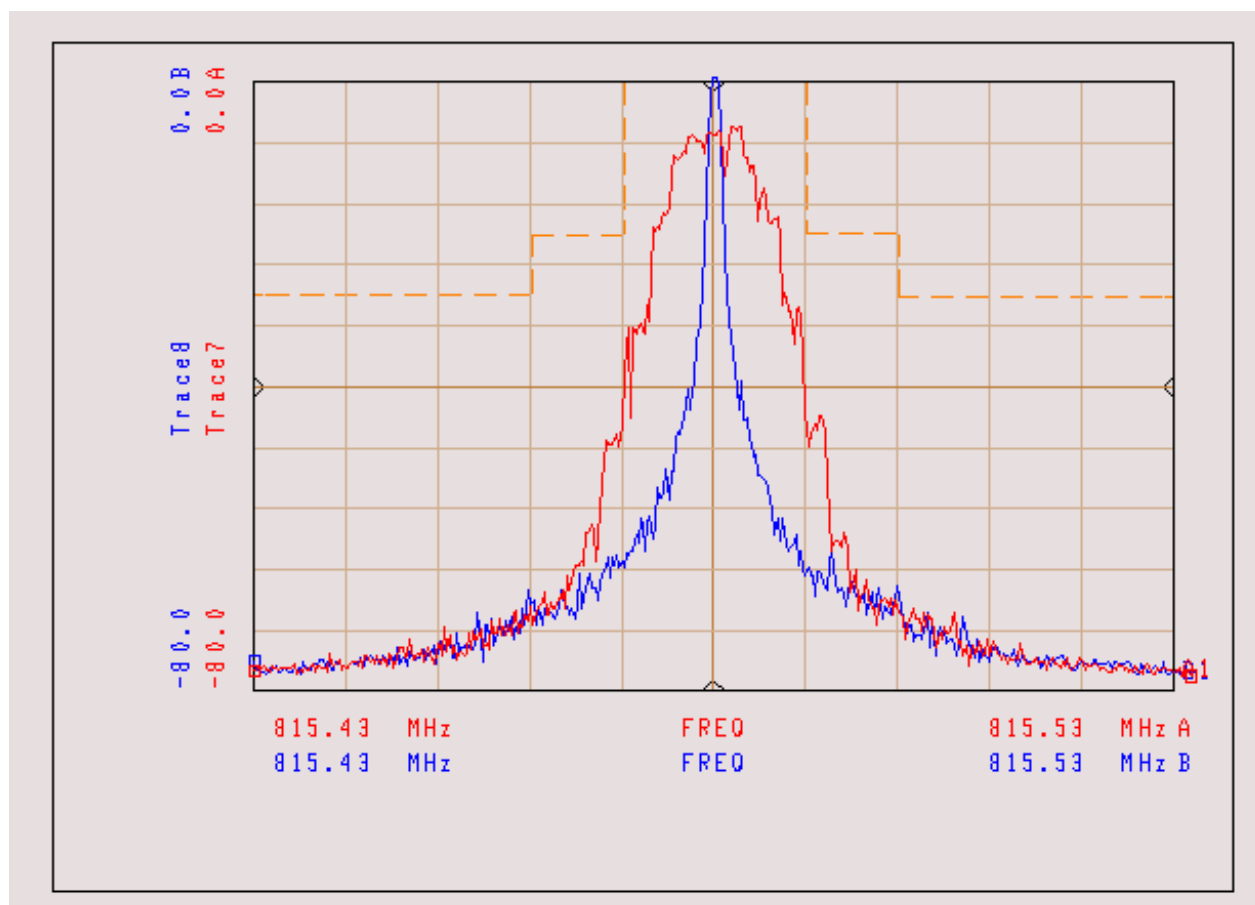
2000/3000 FSK DATA MODULATION – PRIVATE LINE MODE – 12.5 kHz



CENTER FREQUENCY:	899.000 MHz
RESOLUTION BANDWIDTH:	300 Hz
VIDEO BANDWIDTH:	300 kHz
SPAN:	100 kHz
SWEEP TIME:	3 sec
SCALE:	10 dB/DIVISION
REFERENCE LEVEL:	5.8 dBm
ATTENUATOR:	30 dB

FSK Data and DPL Code Modulation

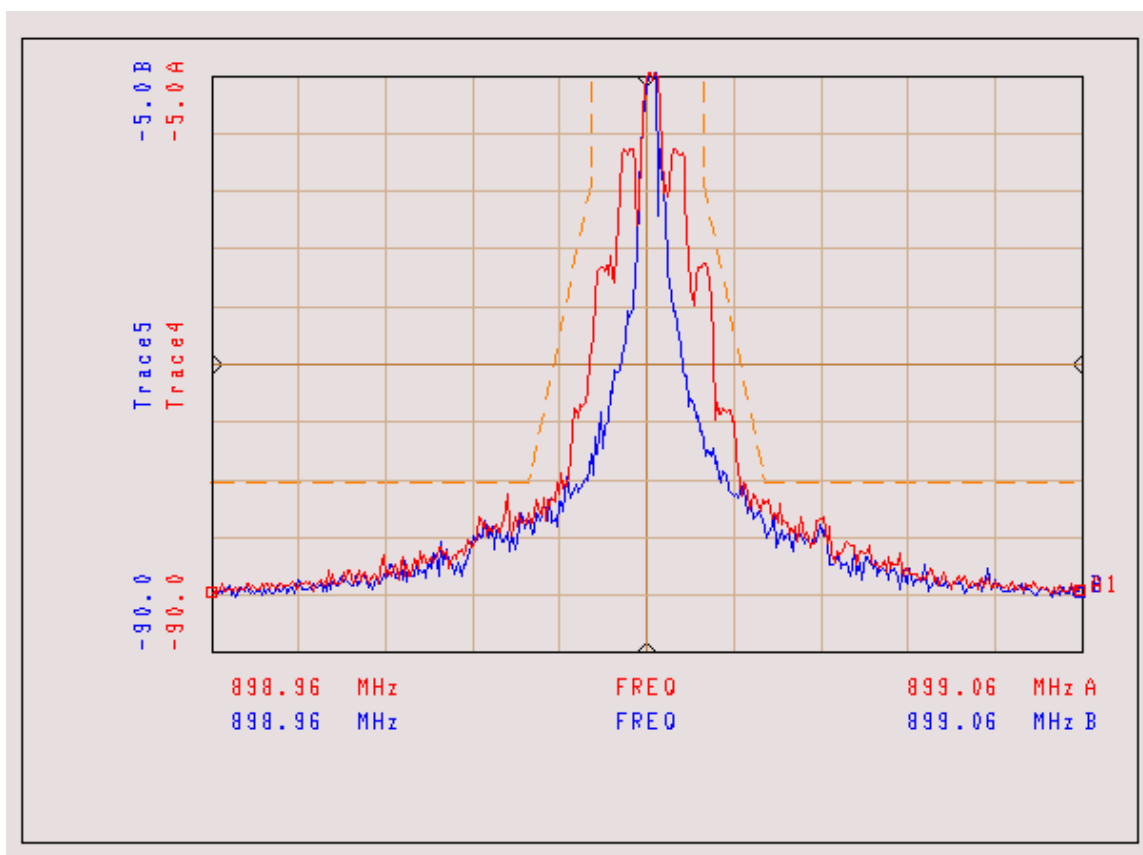
2000/3000 FSK DATA MODULATION – DIGITAL PRIVATE LINE MODE – 12.5 kHz



CENTER FREQUENCY: 899.000 MHz
RESOLUTION BANDWIDTH: 300 Hz
VIDEO BANDWIDTH: 300 kHz
SPAN: 100 kHz
SWEEP TIME: 3 sec
SCALE: 10 dB/DIVISION
REFERENCE LEVEL: 5.8 dBm
ATTENUATOR: 30 dB

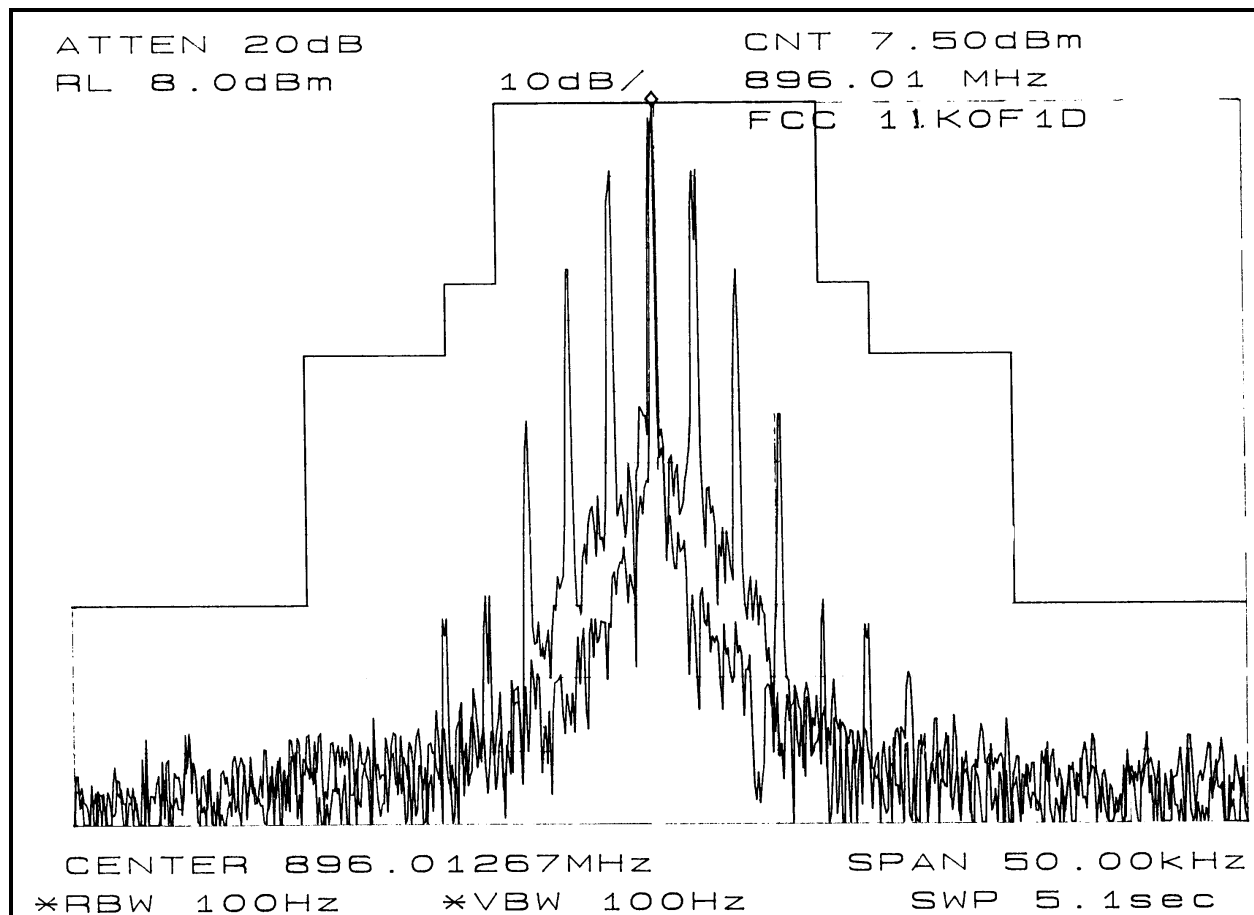
FSK Data and LTR Data Modulation

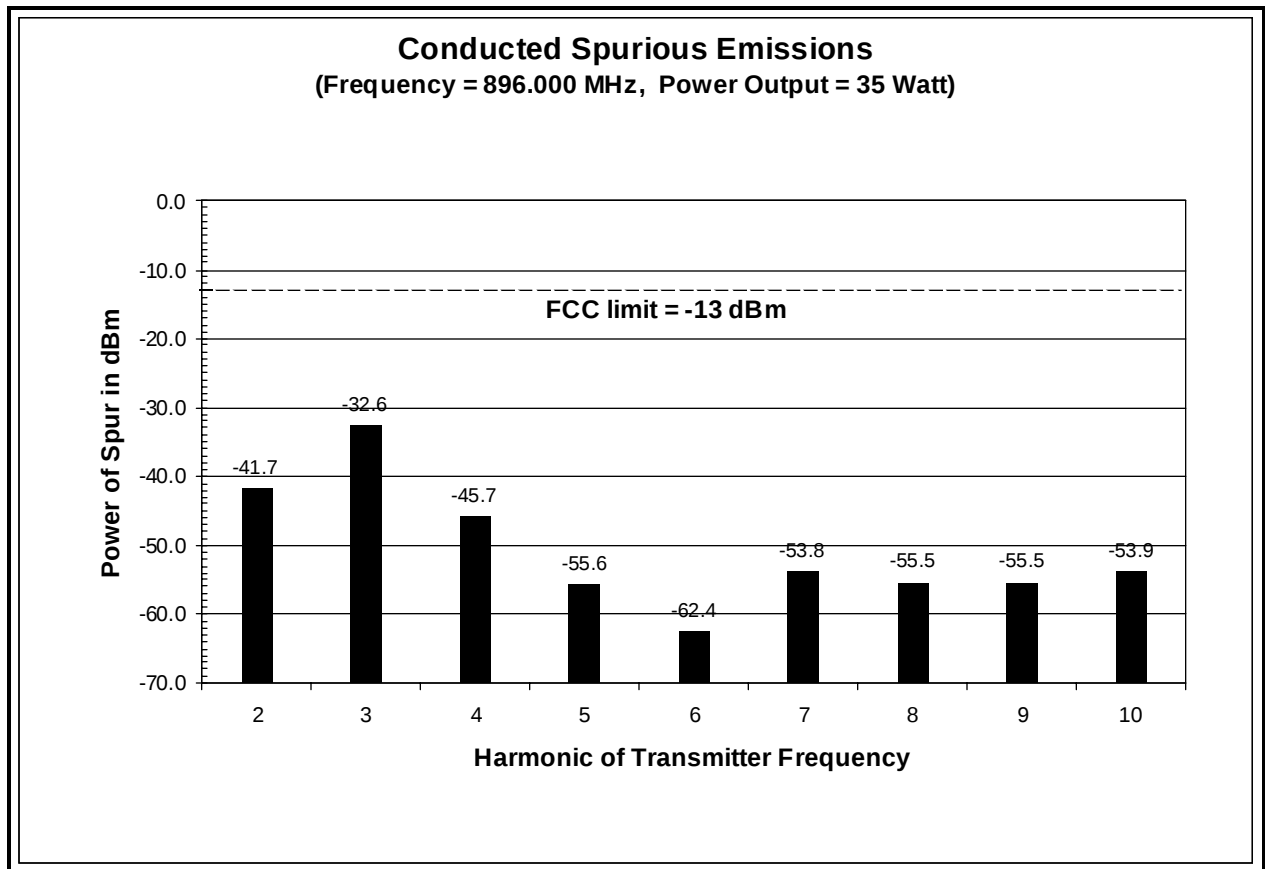
2000/3000 FSK DATA MODULATION – LTR TRUNKING MODE – 12.5 kHz

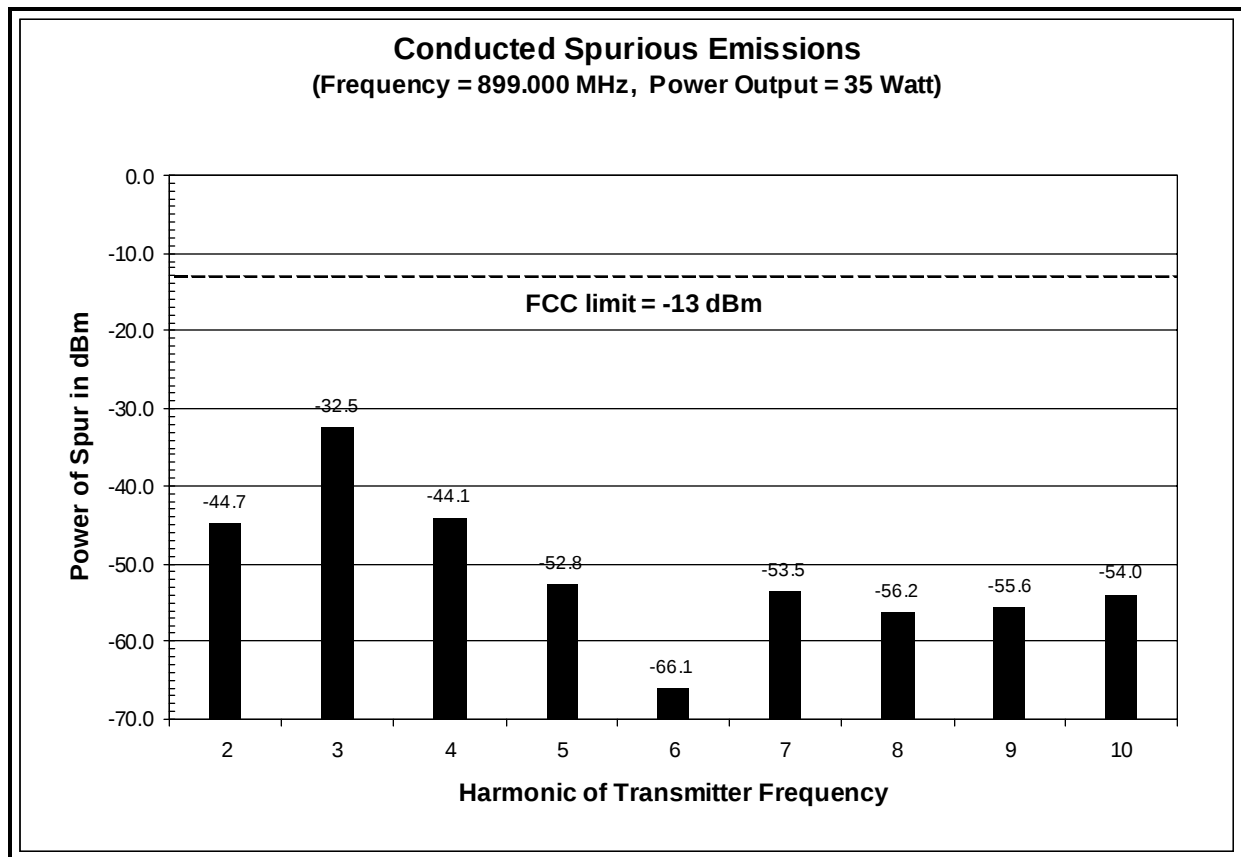


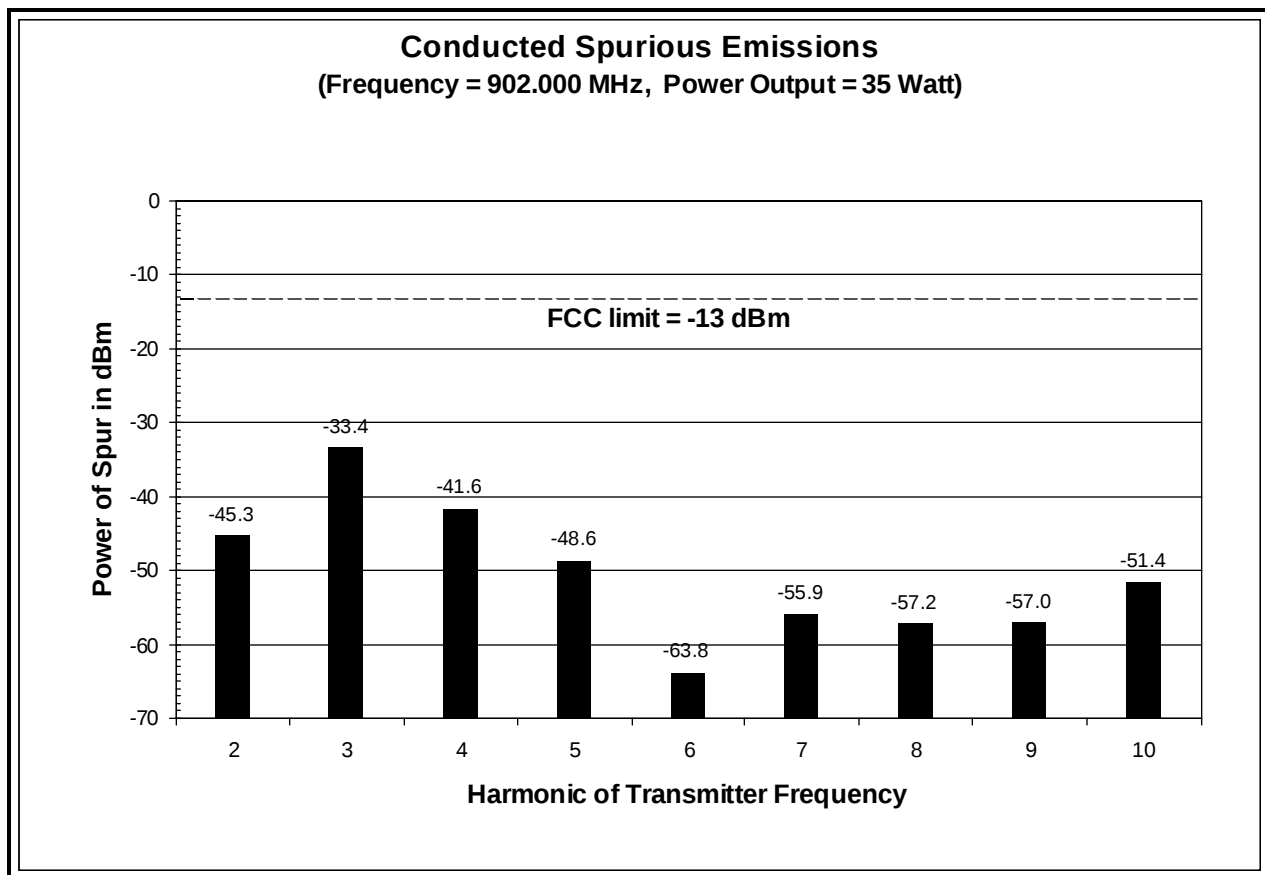
CENTER FREQUENCY: 899.0125 MHz
RESOLUTION BANDWIDTH: 300 Hz
VIDEO BANDWIDTH: 300 kHz
SPAN: 100 kHz
SWEEP TIME: 3 sec
SCALE: 10 dB/DIVISION
REFERENCE LEVEL: 5.8 dBm
ATTENUATOR: 30 dB

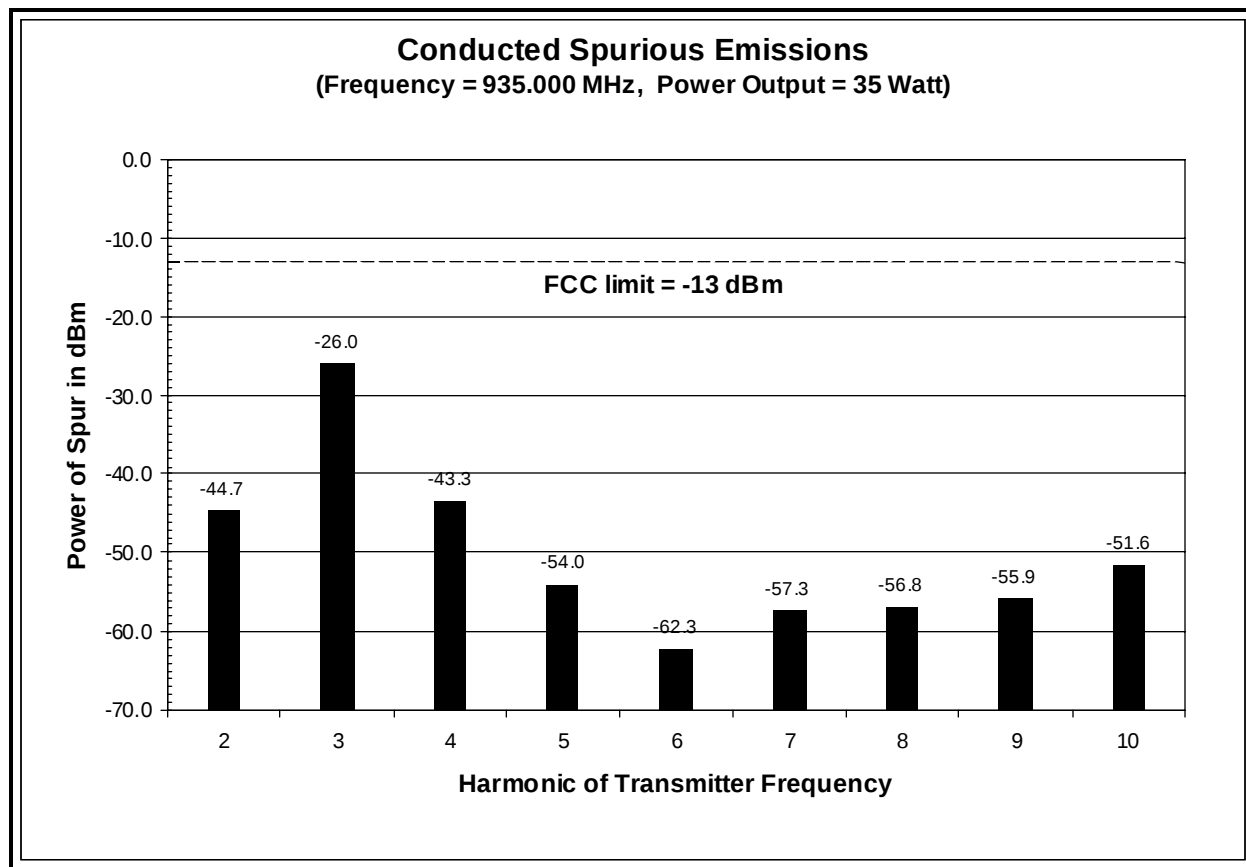
3600 Bauds Trunking Highspeed Data Modulation

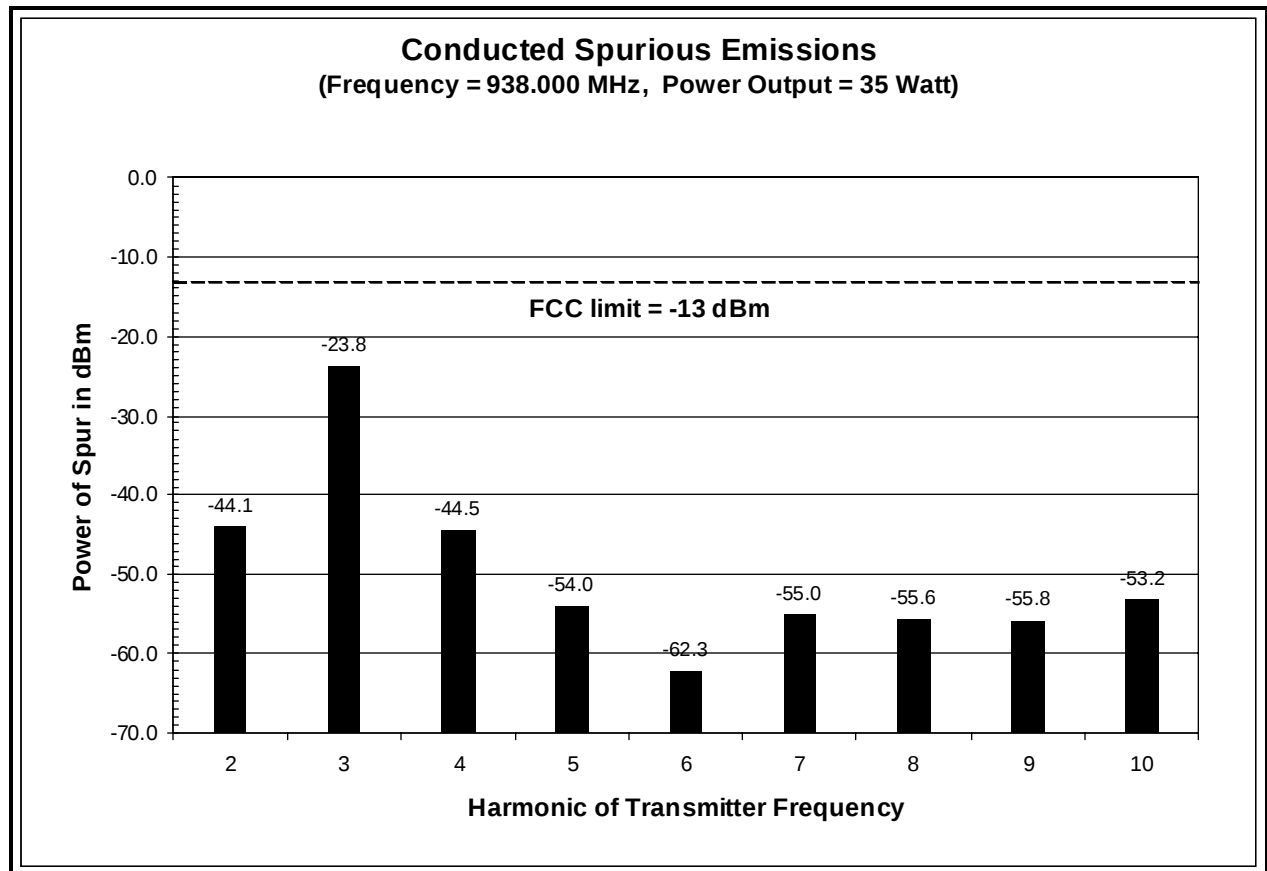


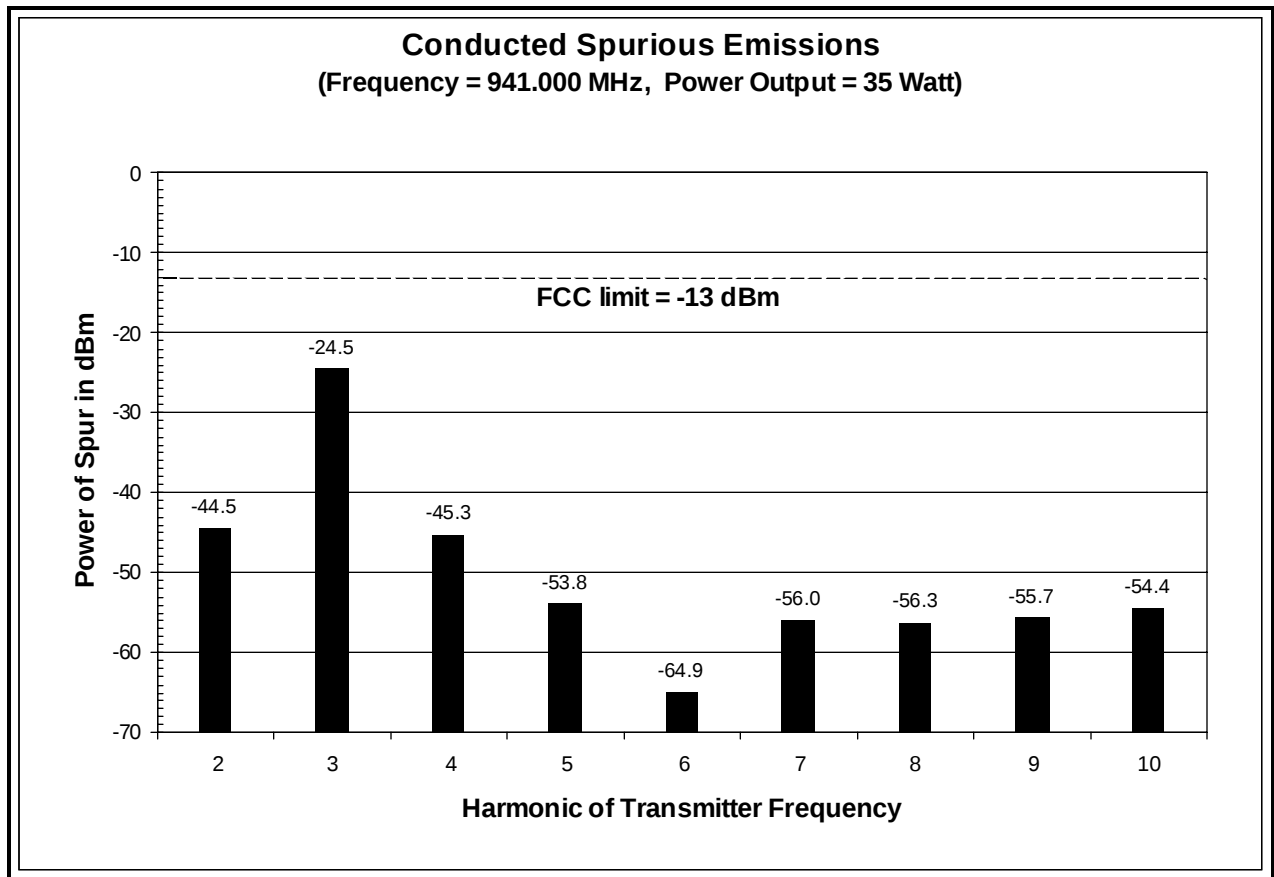


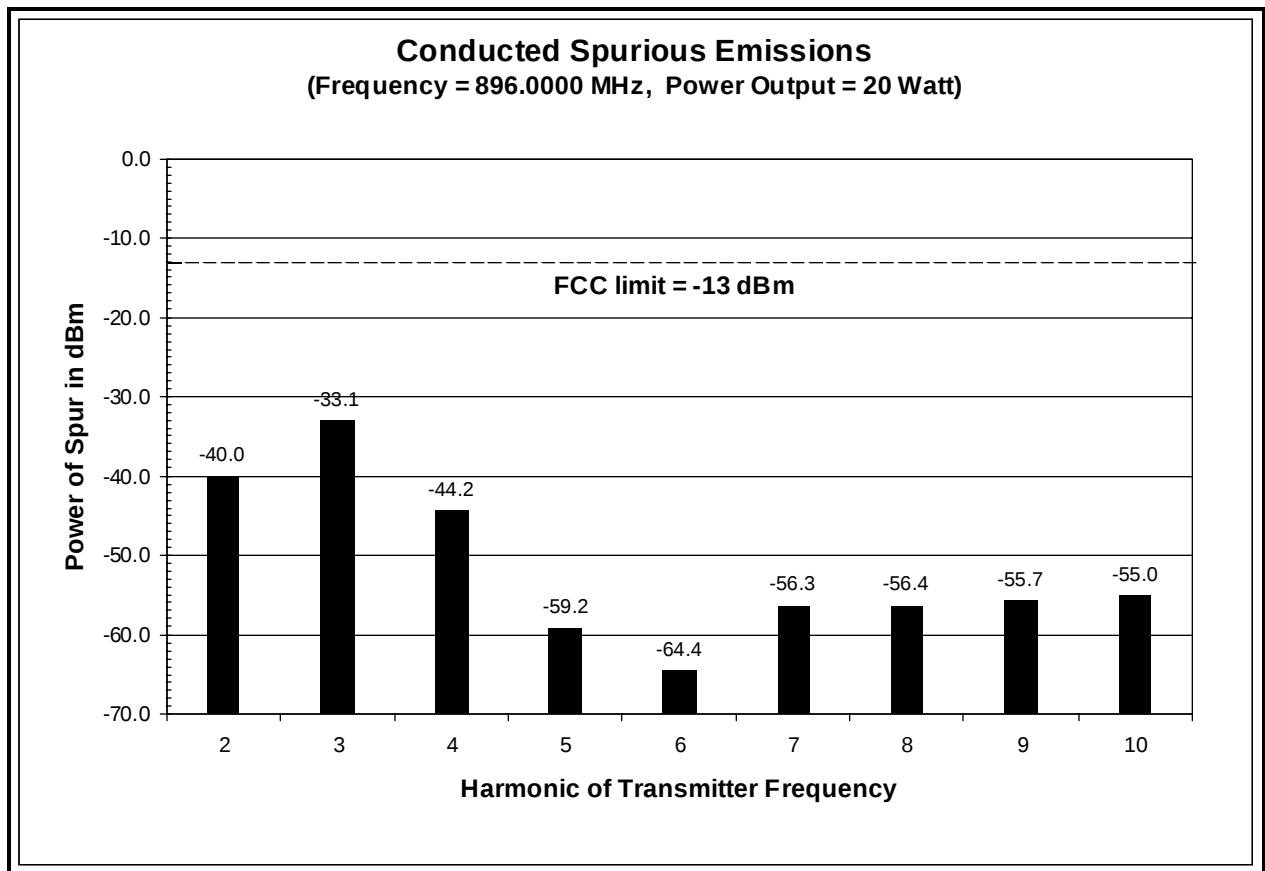


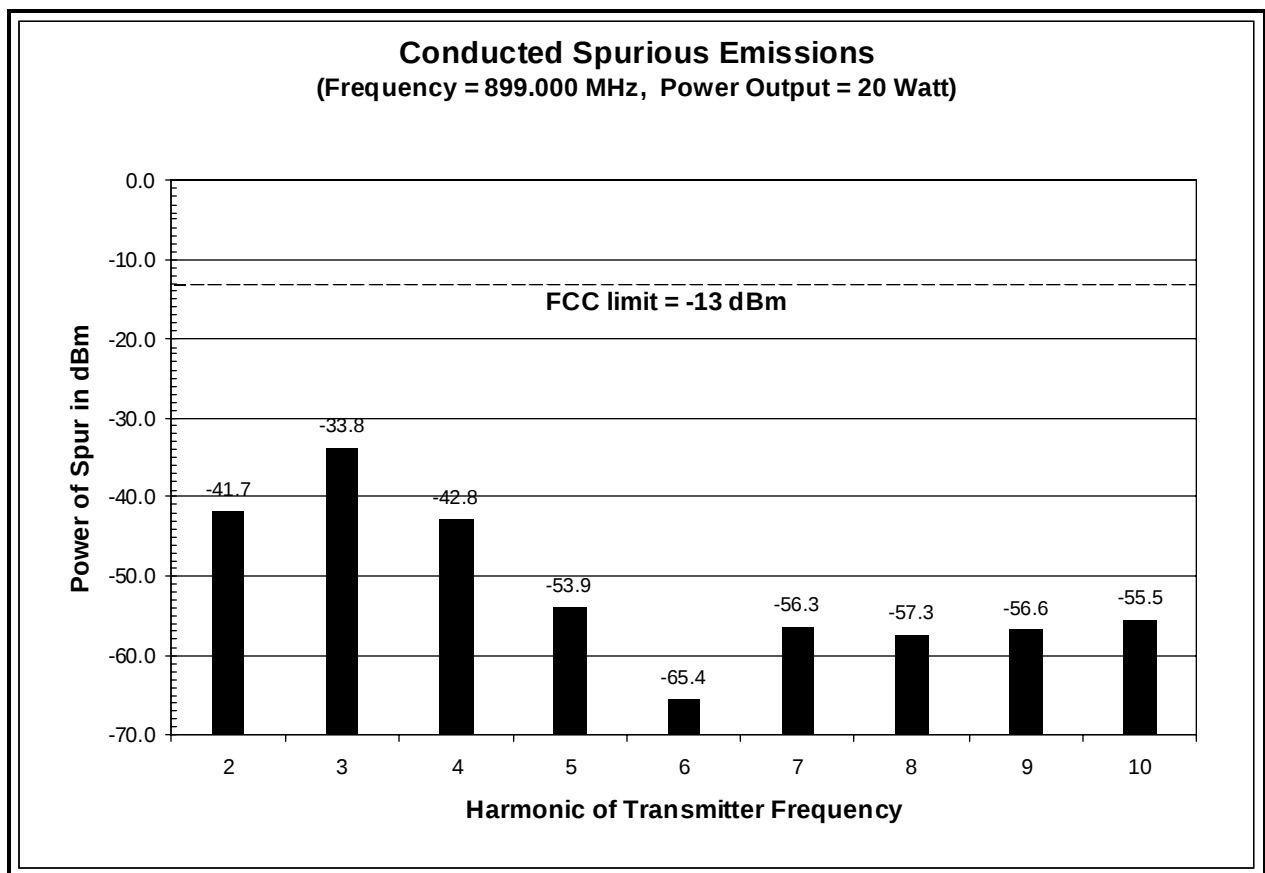


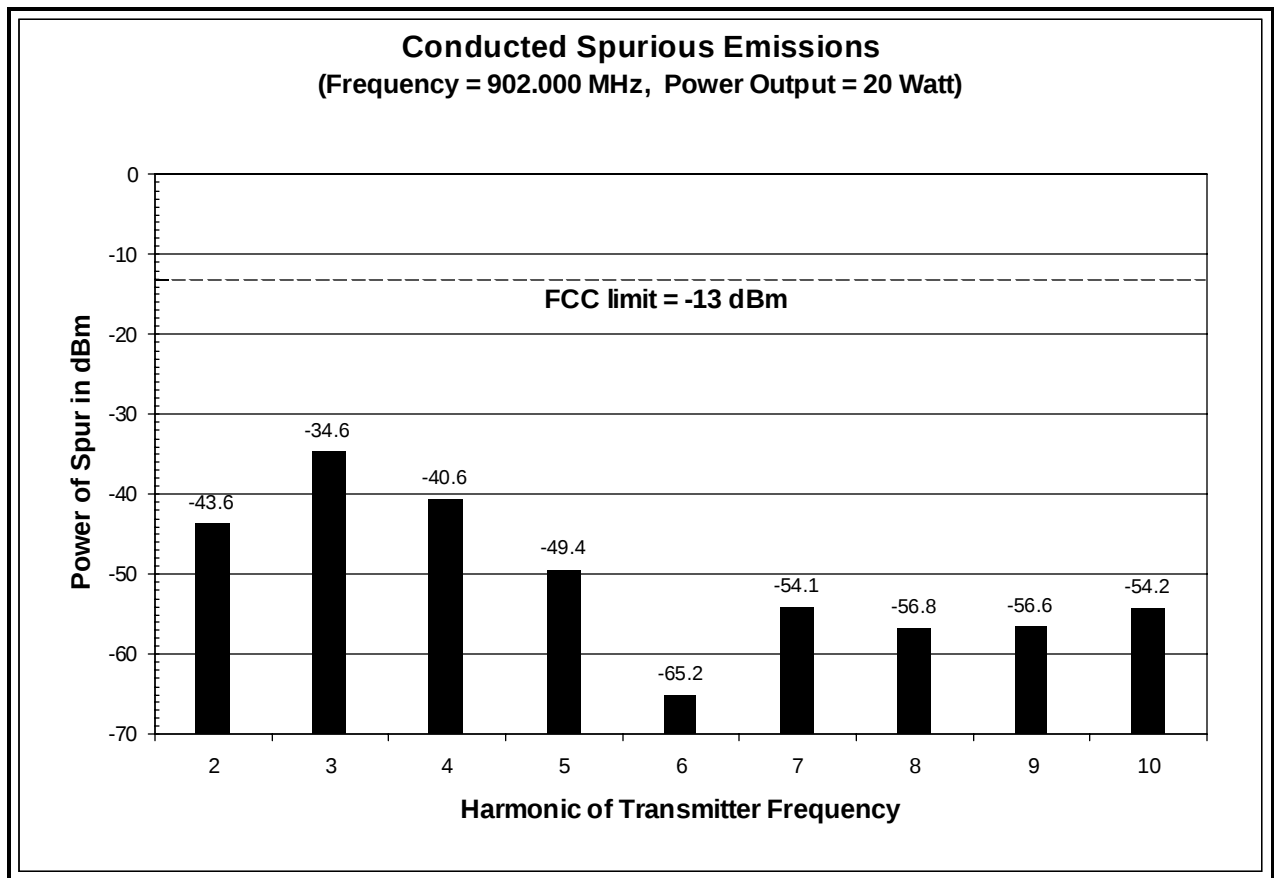


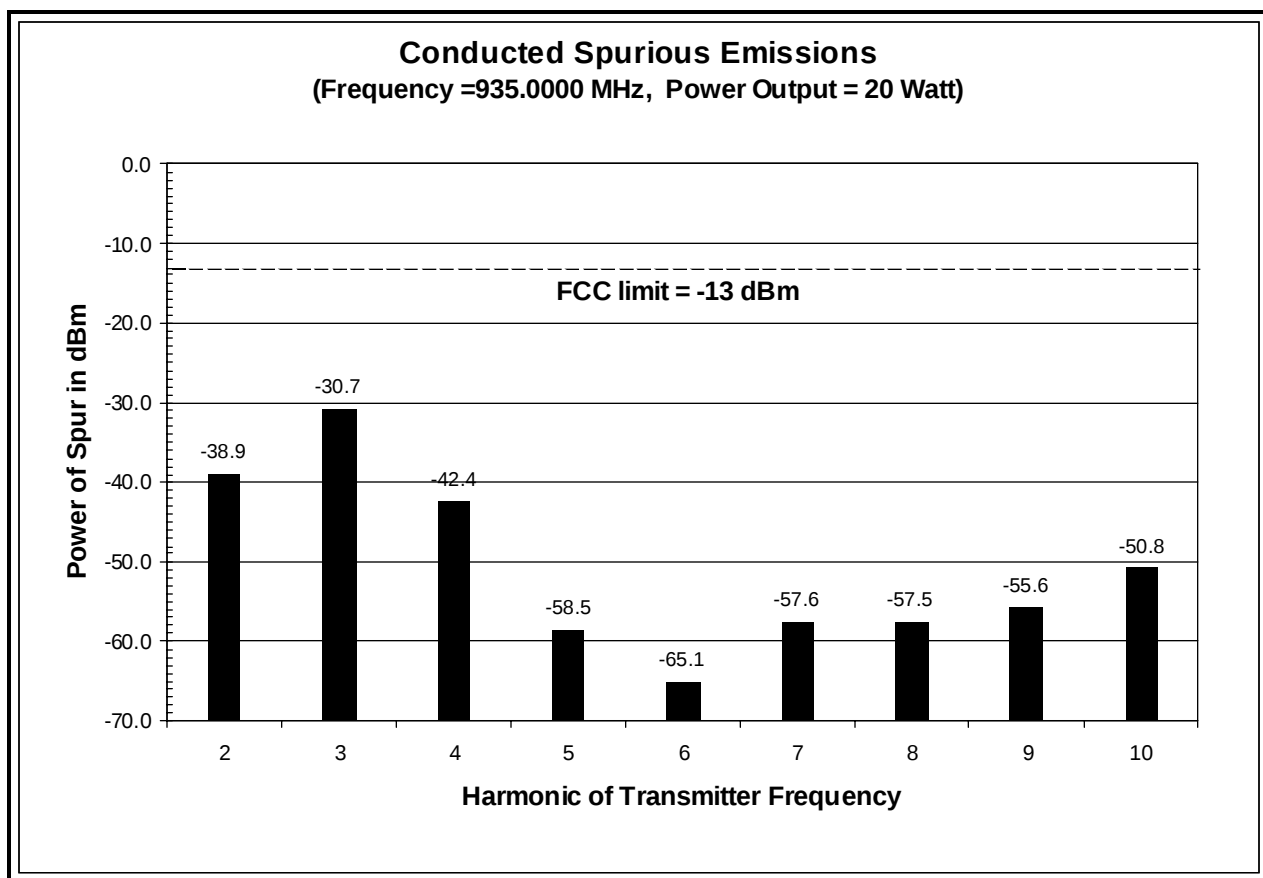


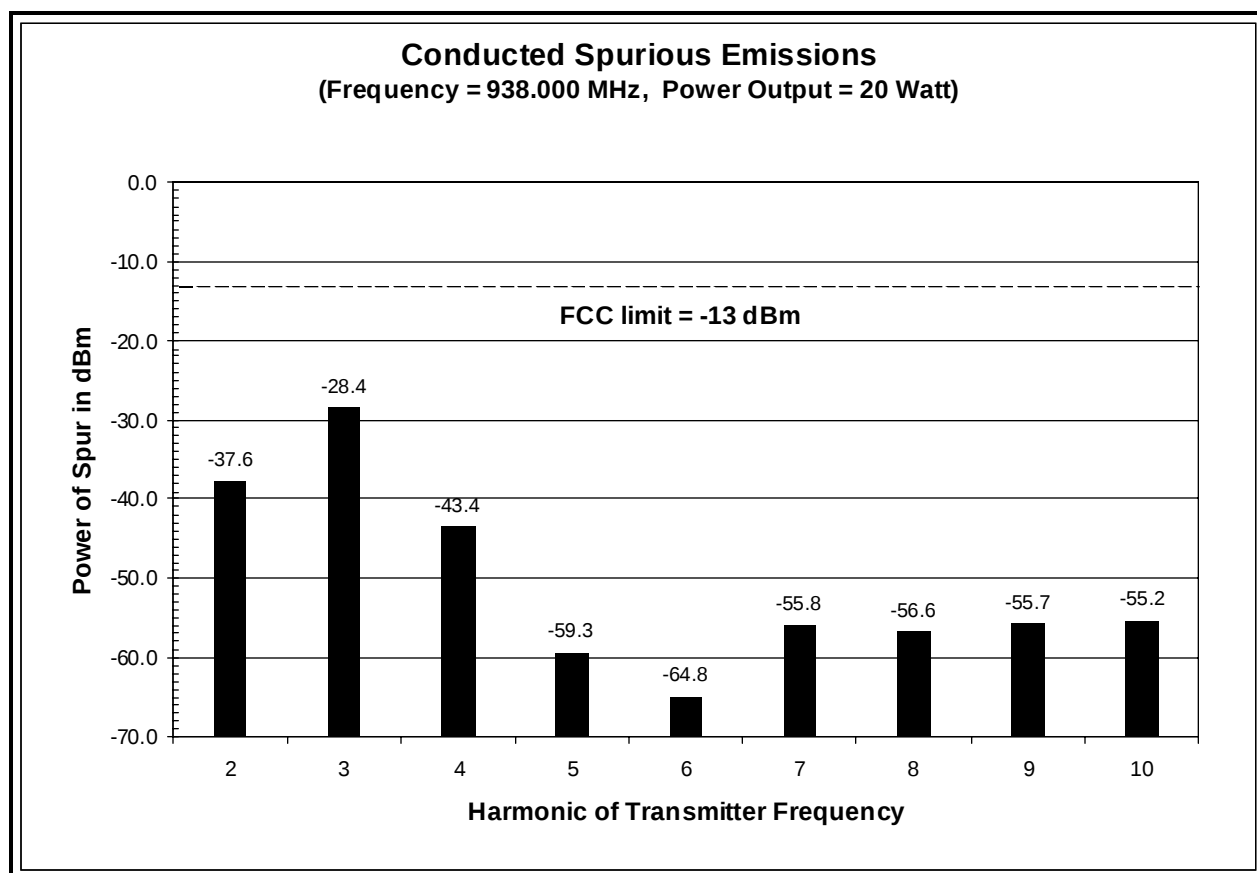


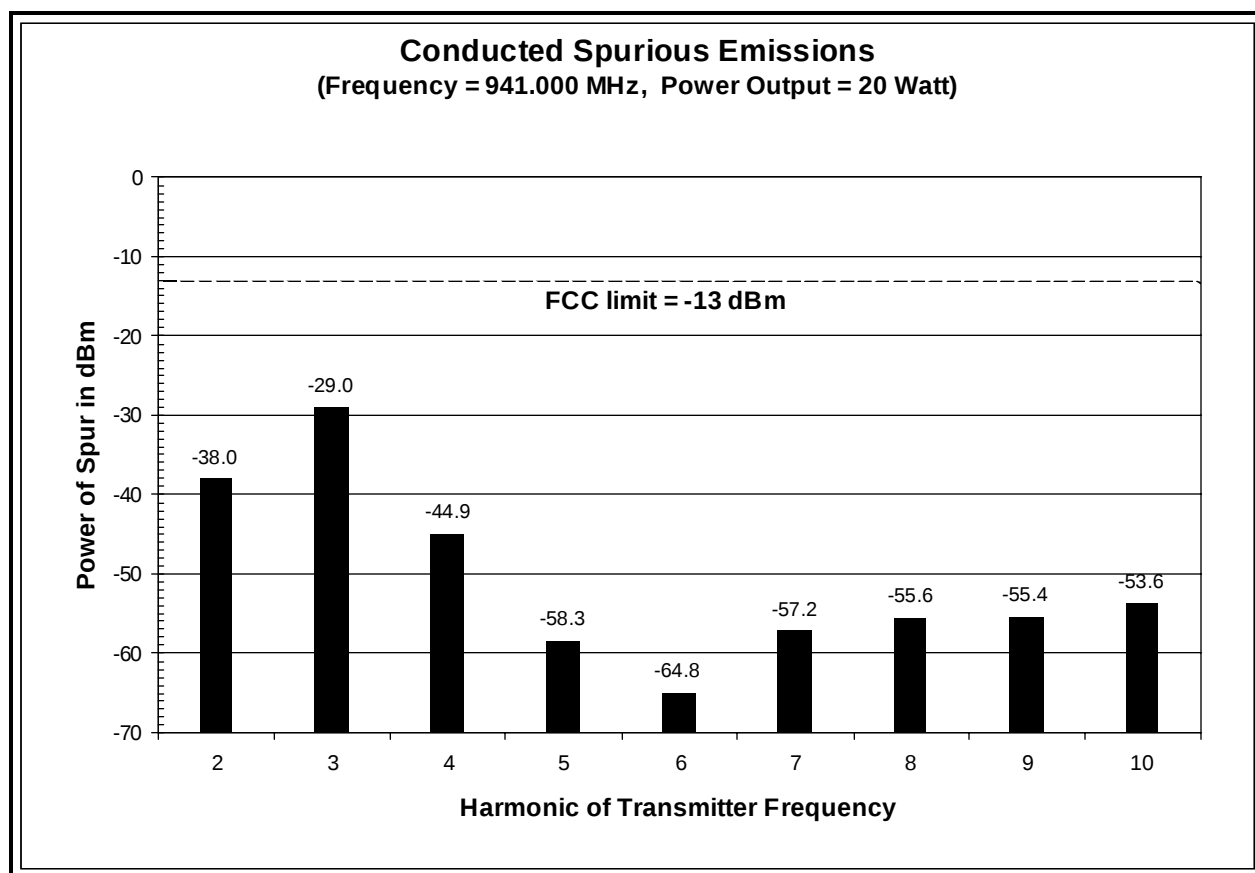


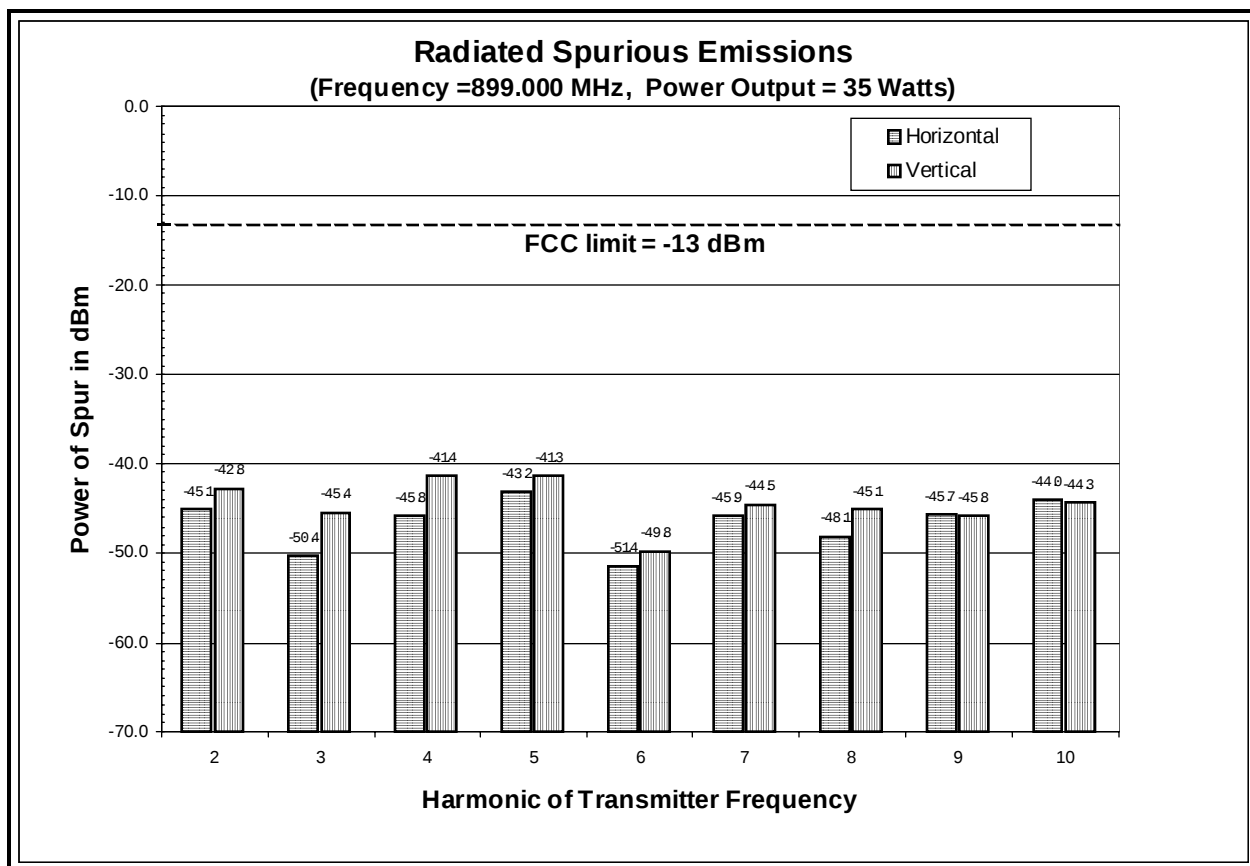


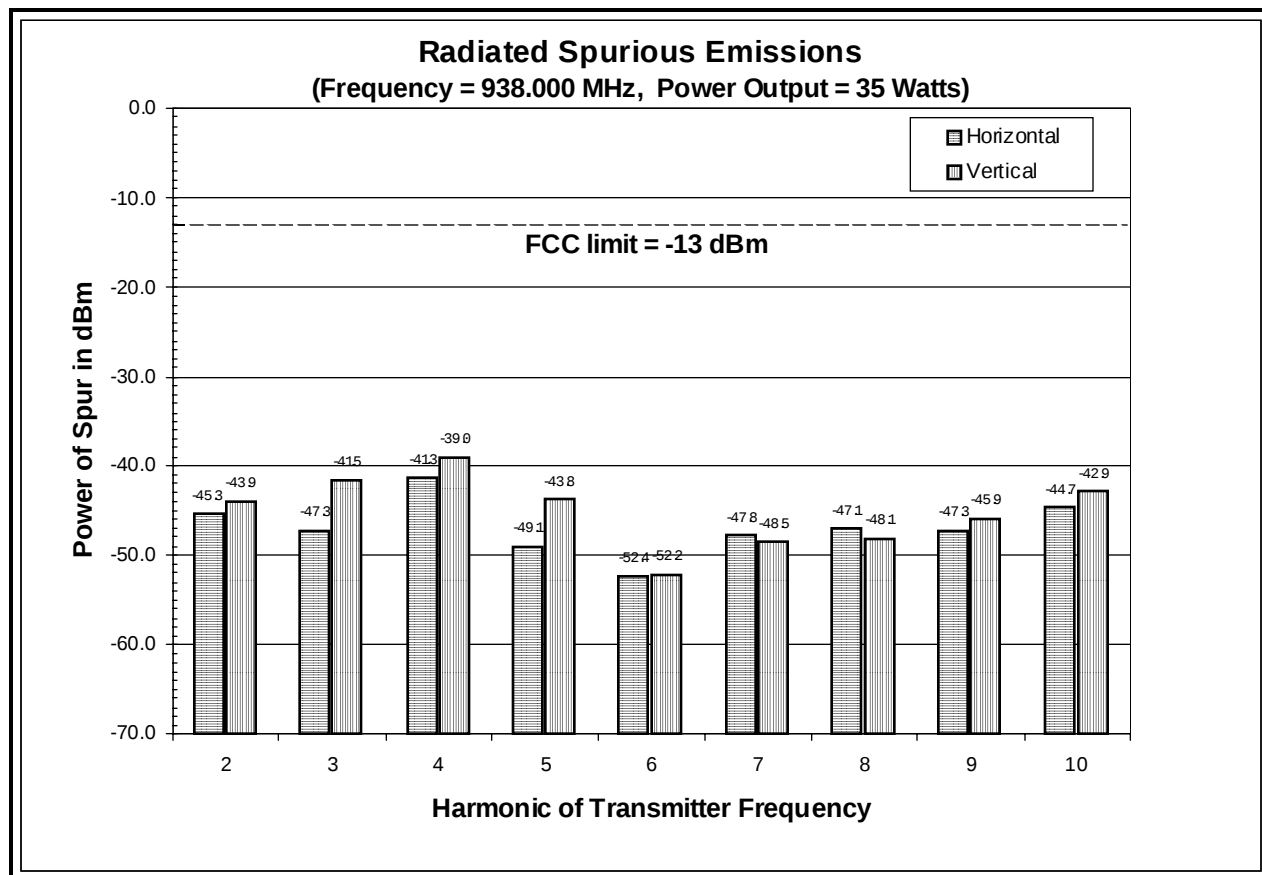




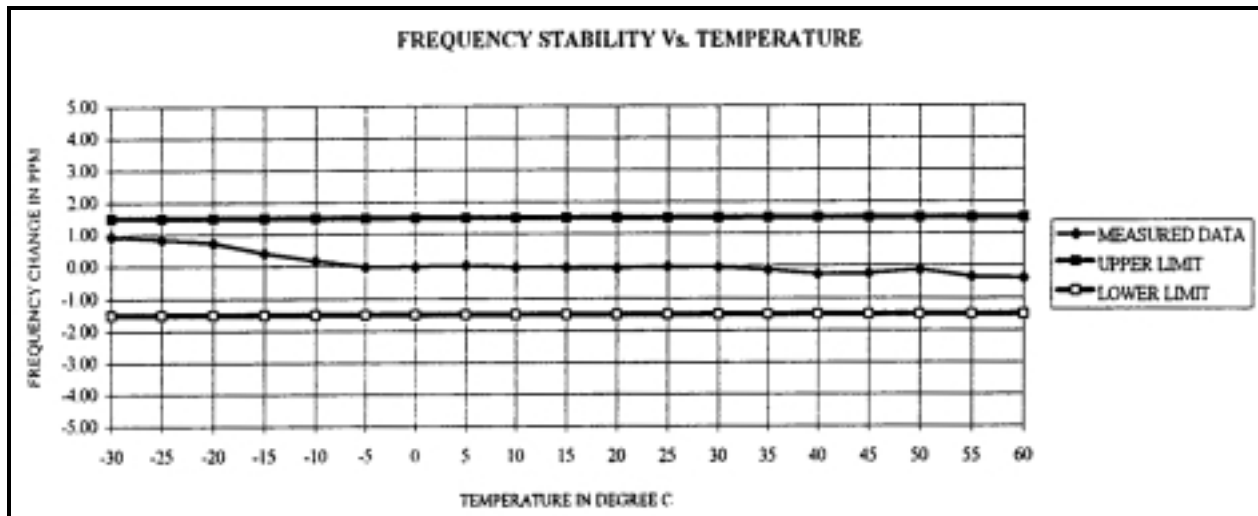




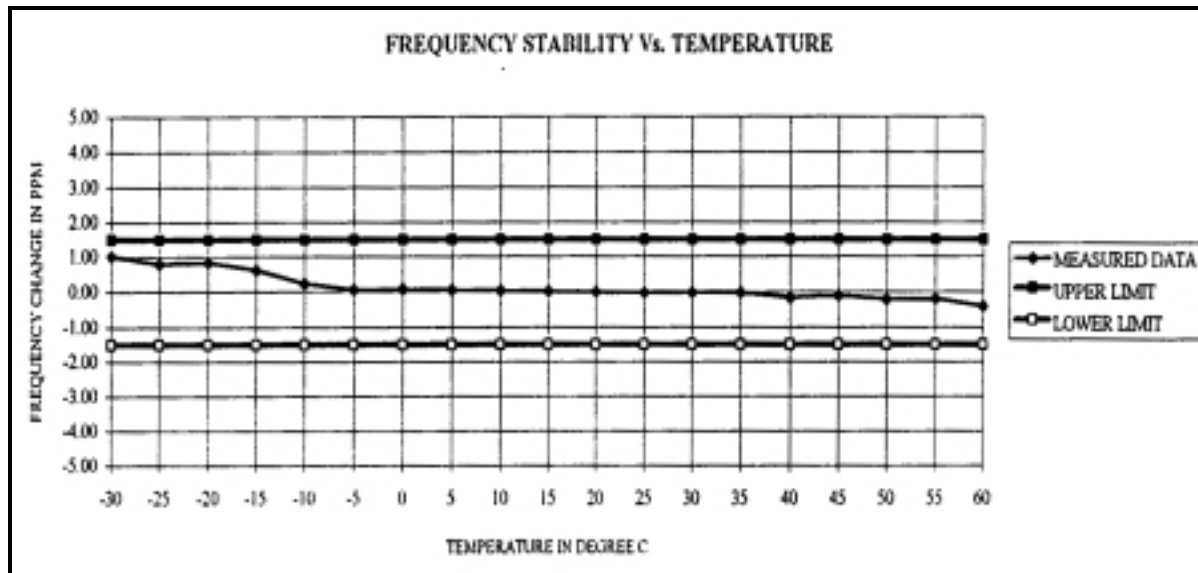




FREQUENCY STABILITY vs. TEMPERATURE (896.0125 MHz)



FREQUENCY STABILITY vs. TEMPERATURE (940.9875 MHz)



FREQUENCY STABILITY vs. VOLTAGE (896.0125 MHz)

