

**TEST REPORT**

|      | <u>MEASUREMENT</u>                 | <u>EXHIBIT</u> | <u>NUMBER OF PAGES</u> |
|------|------------------------------------|----------------|------------------------|
| I    | RF Power Output                    | 6A             | 1                      |
| II   | Audio Response*                    | 6B             | 1                      |
| III  | Low Pass Filter Response*          | 6C             | 1                      |
| IV   | Modulation Limiting*               |                |                        |
|      | A. 12.5 kHz channel spacing case   | 6D-1           | 1                      |
|      | B. 25 kHz channel spacing case     | 6D-2           | 1                      |
| V    | Occupied Bandwidth                 | 6E 1-4         | 5                      |
| VI   | Conducted Spurious Emissions       | 6F 1-2         | 2                      |
| VII  | Radiated Spurious Emissions        |                | 4                      |
|      | A. Tx Vertical - 1 Watt            | 6G-1           |                        |
|      | B. Tx Vertical - 3 Watt            | 6G-2           |                        |
|      | D. Tx Horizontal- 1 Watt           | 6G-3           |                        |
|      | D. Tx Horizontal- 3 Watt           | 6G-4           |                        |
| VIII | Frequency Stability                |                |                        |
|      | A. Temperature*                    | 6H-1           | 1                      |
|      | B. Supply Voltage *                | 6H-2           | 1                      |
| IX   | Transient Frequency Behavior       |                |                        |
|      | A. Transmitter - ON -1 W-12.5 kHz  | 6I-1           | 1                      |
|      | B. Transmitter - OFF -1 W-12.5 kHz | 6I-2           | 1                      |
|      | C. Transmitter - ON -3 W-12.5 kHz  | 6I-3           | 1                      |
|      | D. Transmitter - OFF -3 W-12.5 kHz | 6I-4           | 1                      |
|      | E. Transmitter - ON - 25 kHz*      | 6I-5           | 1                      |
|      | F. Transmitter - OFF - 25 kHz*     | 6I-6           | 1                      |

\* Data for 1 and 3 watt are identical so only one plot is provided.

RF POWER OUTPUT DATA

The RF power output was measured with the indicated voltage applied to and current into the final RF amplifying device.

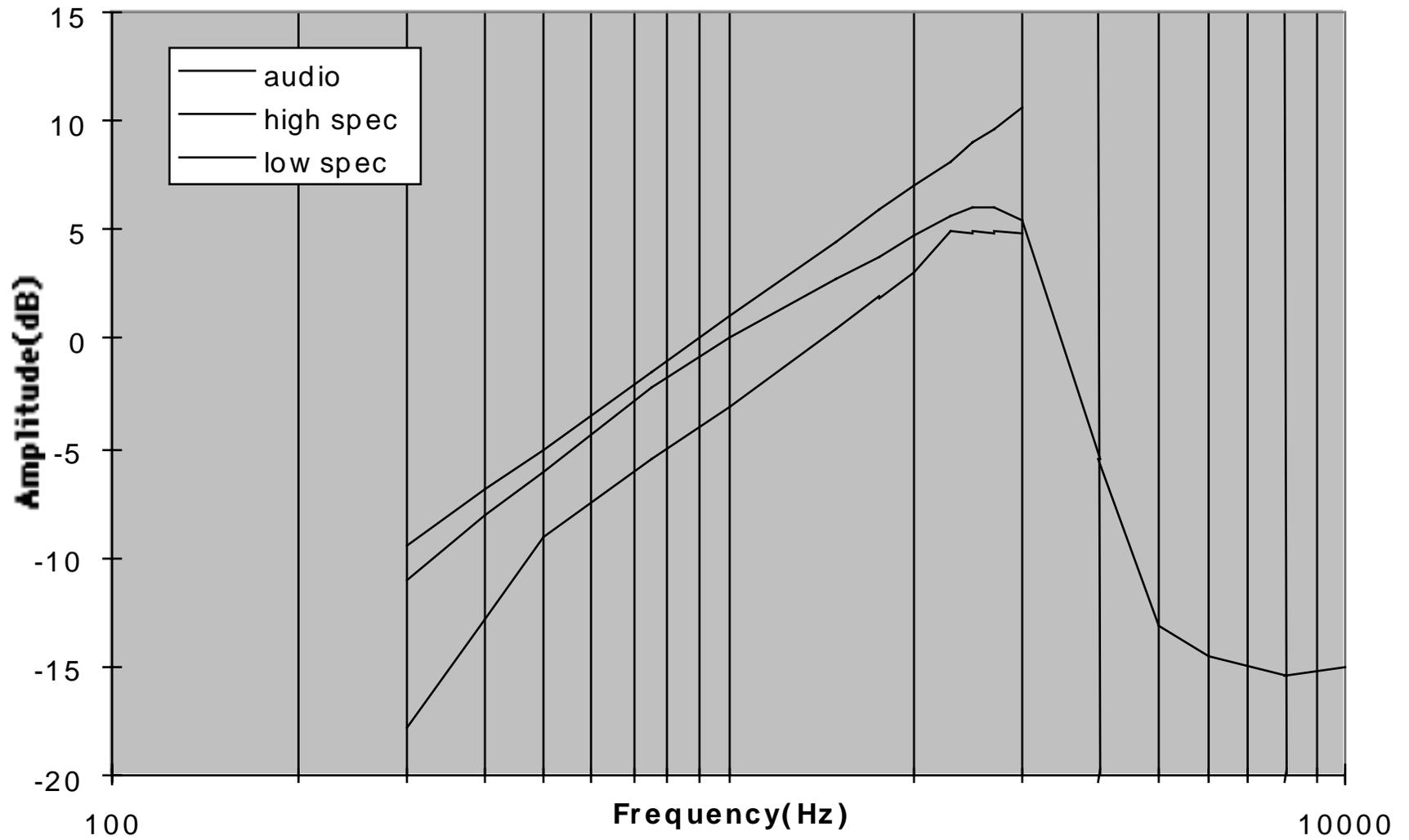
1 Watt

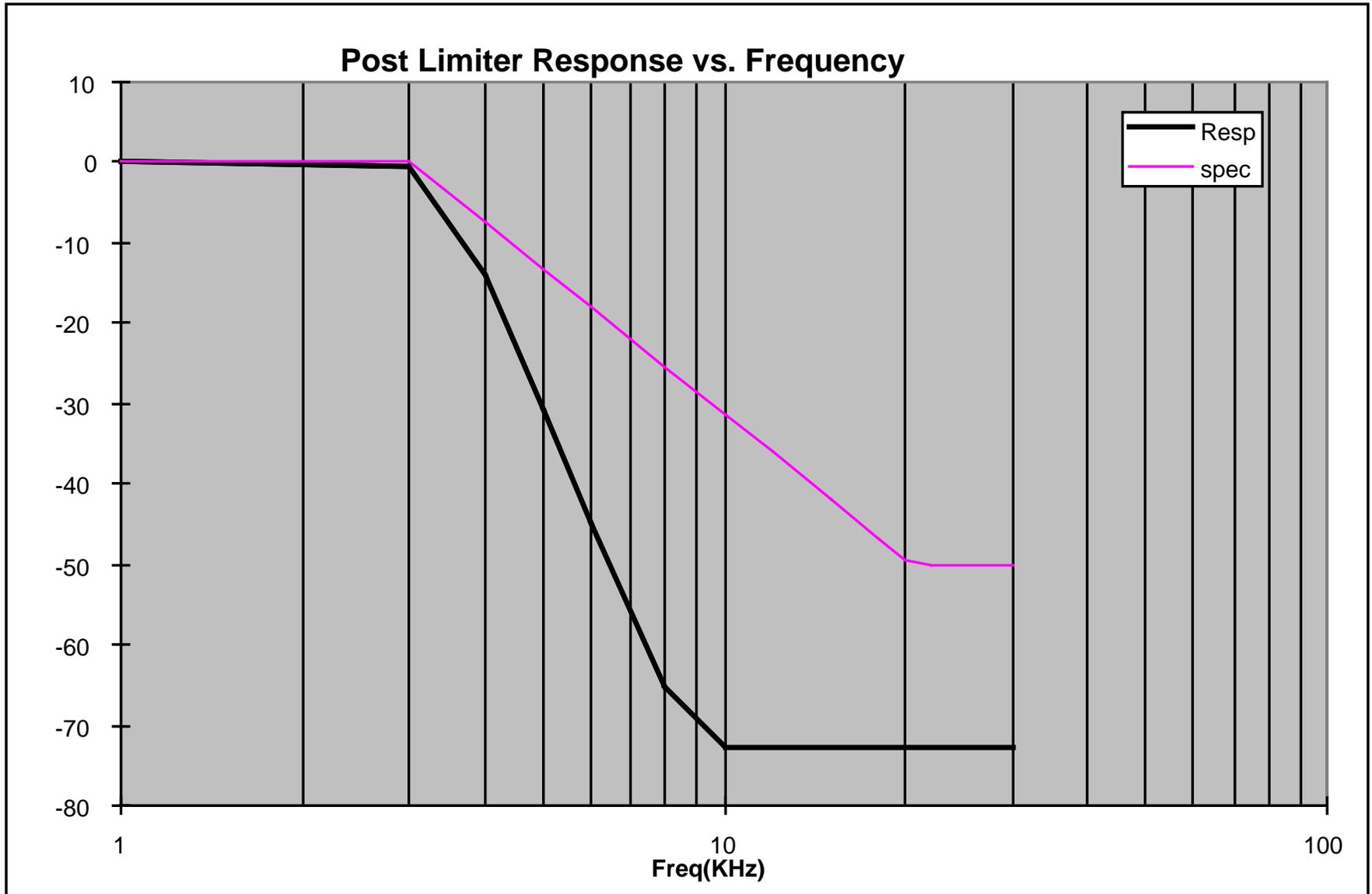
|                        |      |       |
|------------------------|------|-------|
| Measured RF output     | 1.05 | Watt  |
| Normal DC Voltage      | 7.50 | Volts |
| Normal DC Current      | 712  | mA    |
| Primary Supply Voltage | 7.50 | Volts |

3 Watt

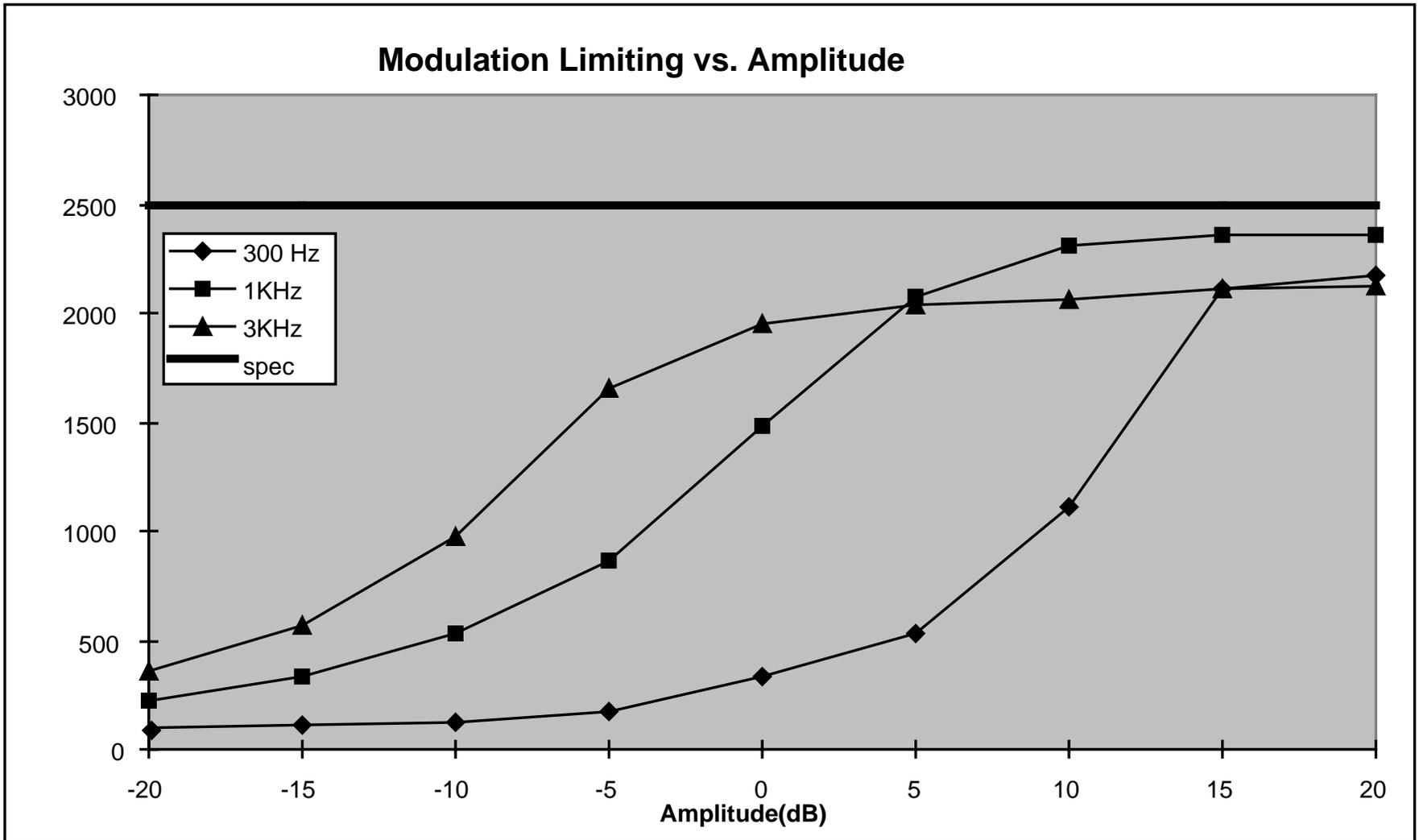
|                        |      |       |
|------------------------|------|-------|
| Measured RF output     | 2.98 | Watts |
| Normal DC Voltage      | 7.50 | Volts |
| Normal DC Current      | 1090 | mA    |
| Primary Supply Voltage | 7.50 | Volts |

### Audio Frequency Response





From 10K to 30Khz was in the noise floor of instrument.



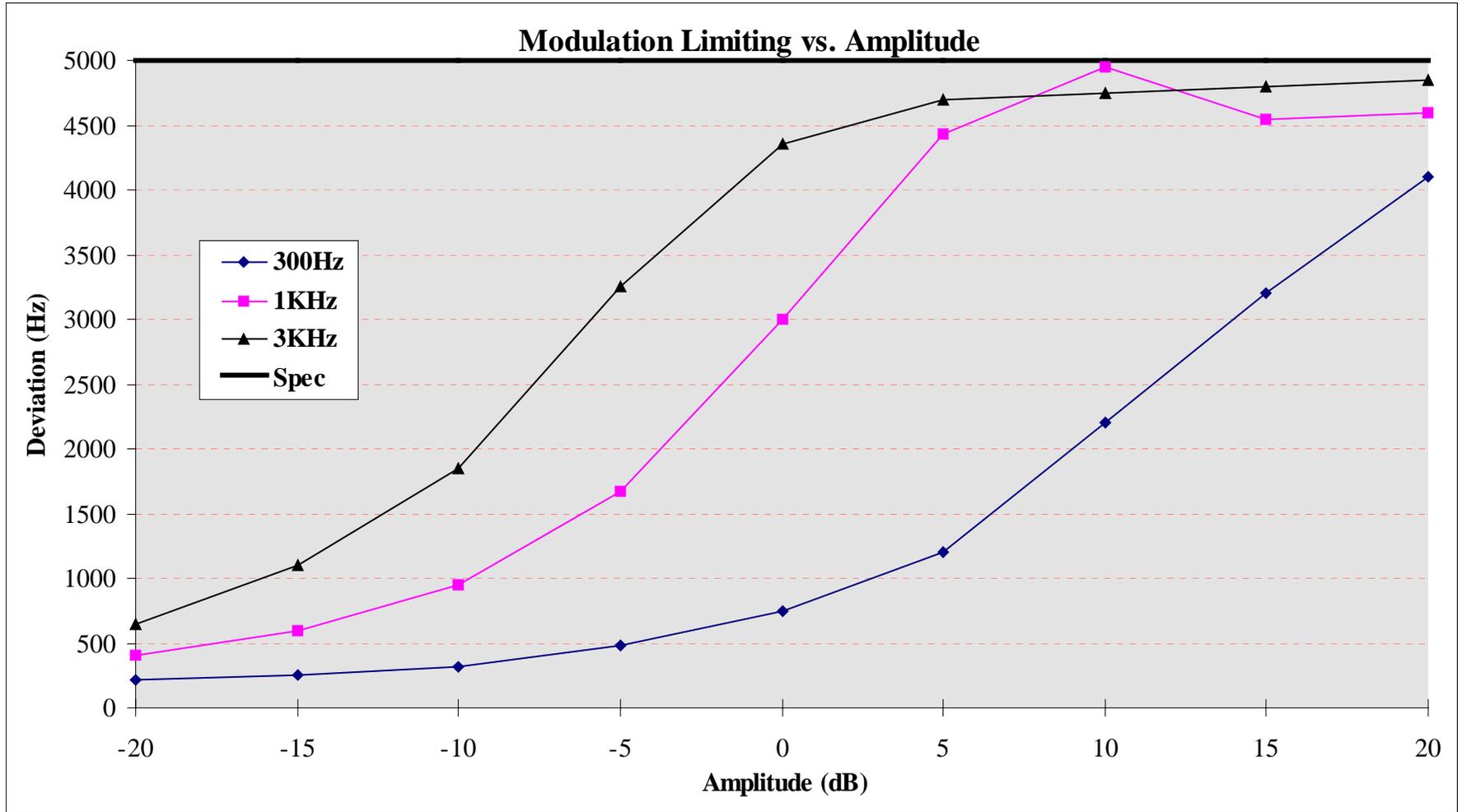


EXHIBIT 6D-2

OCCUPIED BANDWIDTH DATA

12.5 KHz  
Channel Spacing

EXHIBIT 9E-1  
2500 Hz Audio Modulation  
Emission Type: 11K0F3E  
Horizontal: 5 kHz /Div.  
Vertical: 10 dB/Div.  
Carrier Ref: 0 dB  
Specification Mask D, 90.210

EXHIBIT 9E-2  
2500 Hz & 77 Hz Tone "PL" Modulation  
Emission Type: 11K0F3E  
Horizontal: 5 kHz /Div.  
Vertical: 10 dB/Div.  
Carrier Ref: 0 dB  
Specification Mask D, 90.210

25 Khz  
Channel Spacing

EXHIBIT 9E-3  
2500 Hz Audio Modulation  
Emission Type: 16K0F3E  
Horizontal: 5 kHz /Div.  
Vertical: 10 dB/Div.  
Carrier Ref: 0 dB  
Specification Mask B, 90.210

EXHIBIT 9E-4  
2500 Hz & 77 Hz Tone "PL" Modulation  
Emission Type: 16K0F3E  
Horizontal: 5 kHz /Div.  
Vertical: 10 dB/Div.  
Carrier Ref: 0 dB  
Specification Mask B, 90.210

CARSON'S RULE

**11K0F3E:**

$$BW = 2(M + D)$$

$$BW = 2 (3 \text{ kHz maximum modulation frequency} + 2.5 \text{ kHz deviation})$$

$$BW = 2 (5.5)$$

$$BW = 11 \text{ kHz}$$

**16K0F3E:**

$$BW=2(3+5)=16\text{kHz}$$

EXHIBIT 6E

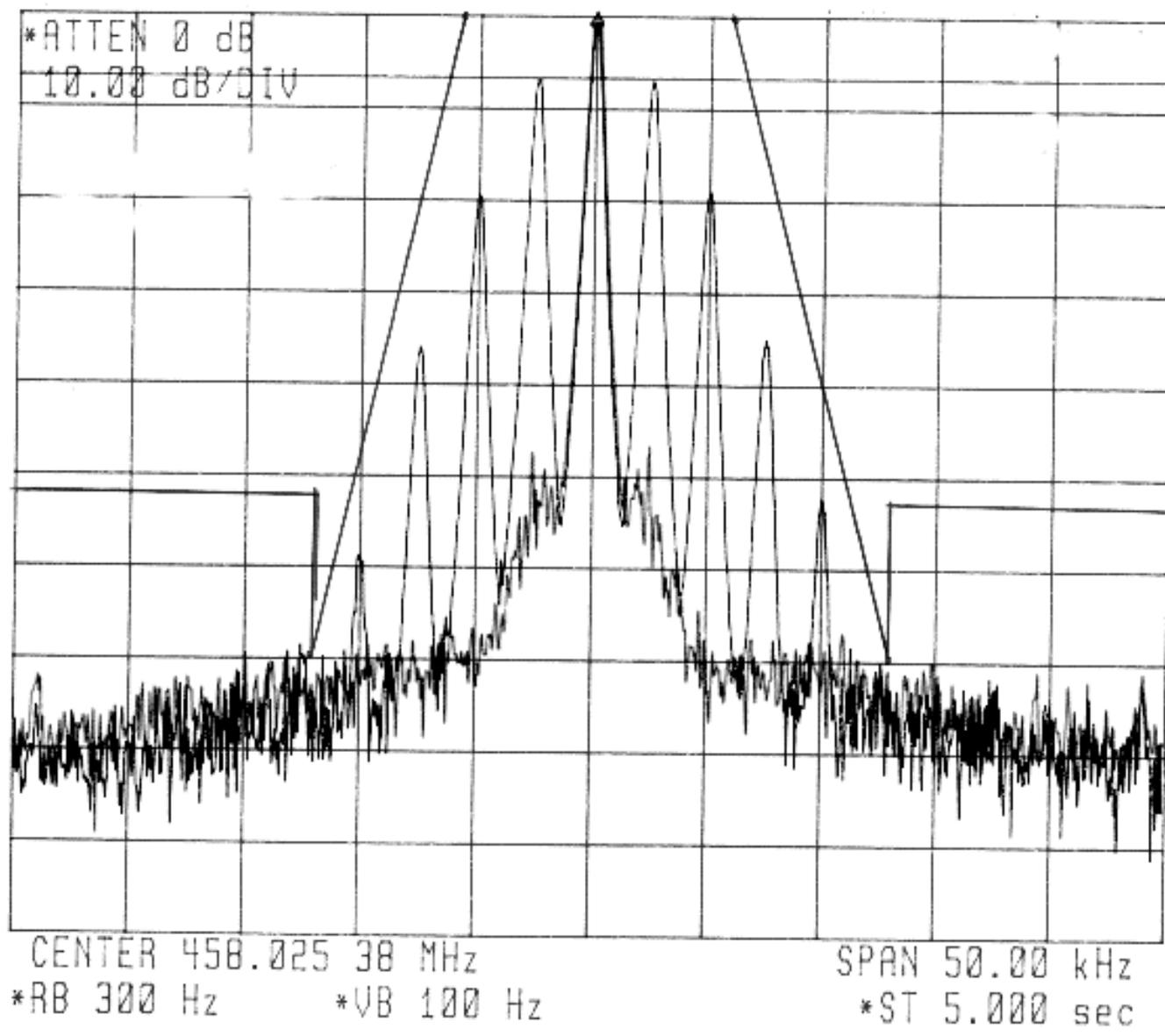


EXHIBIT 6E-1

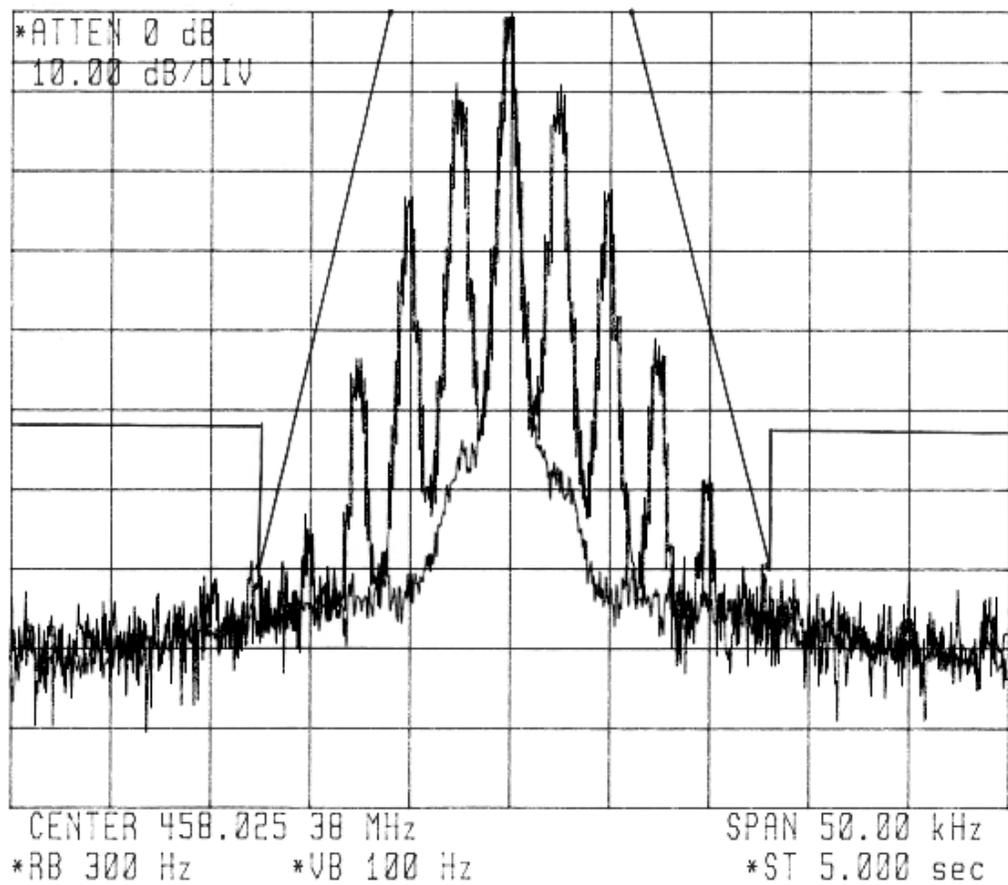


EXHIBIT 6E-2

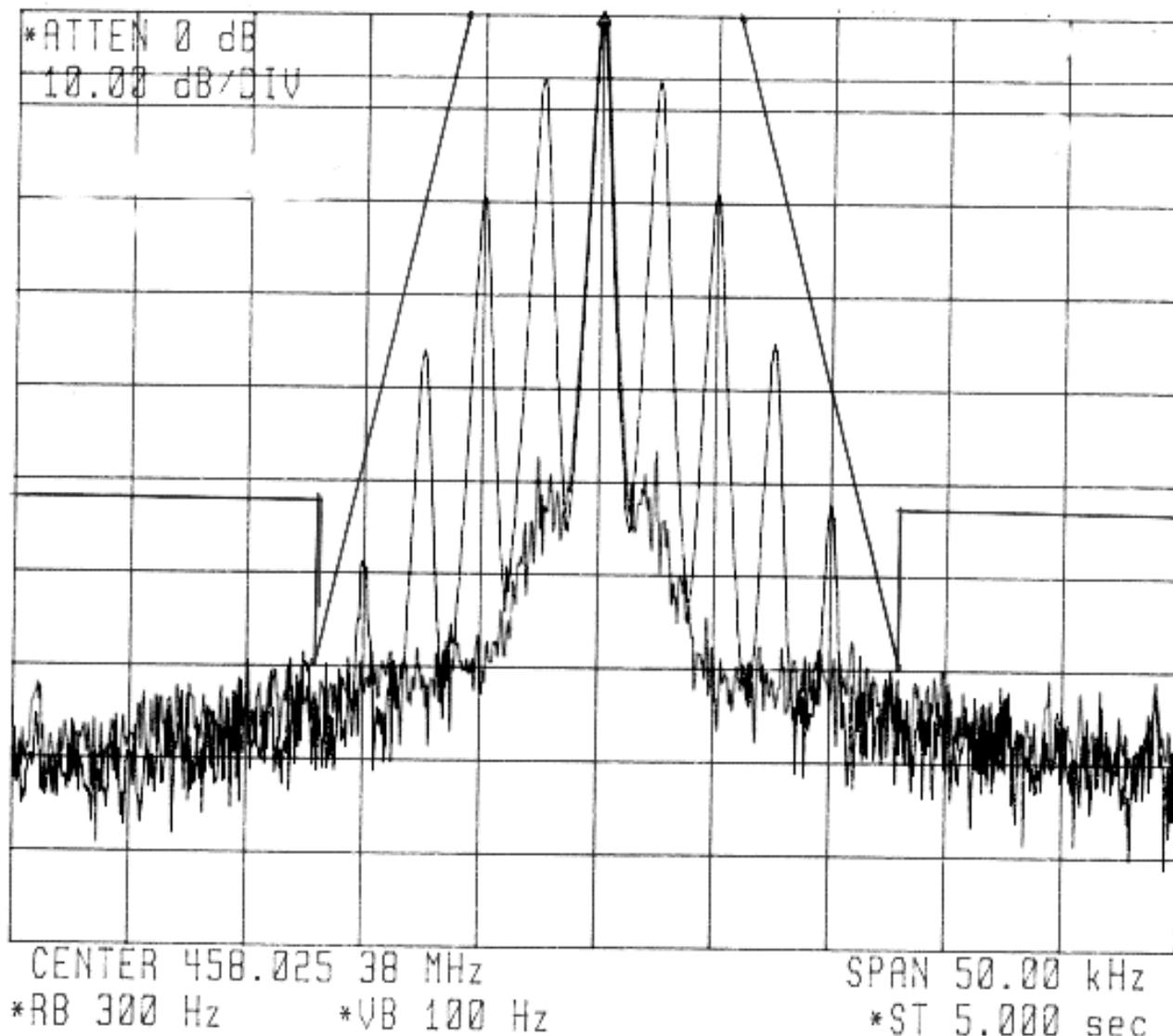


EXHIBIT 6E-3

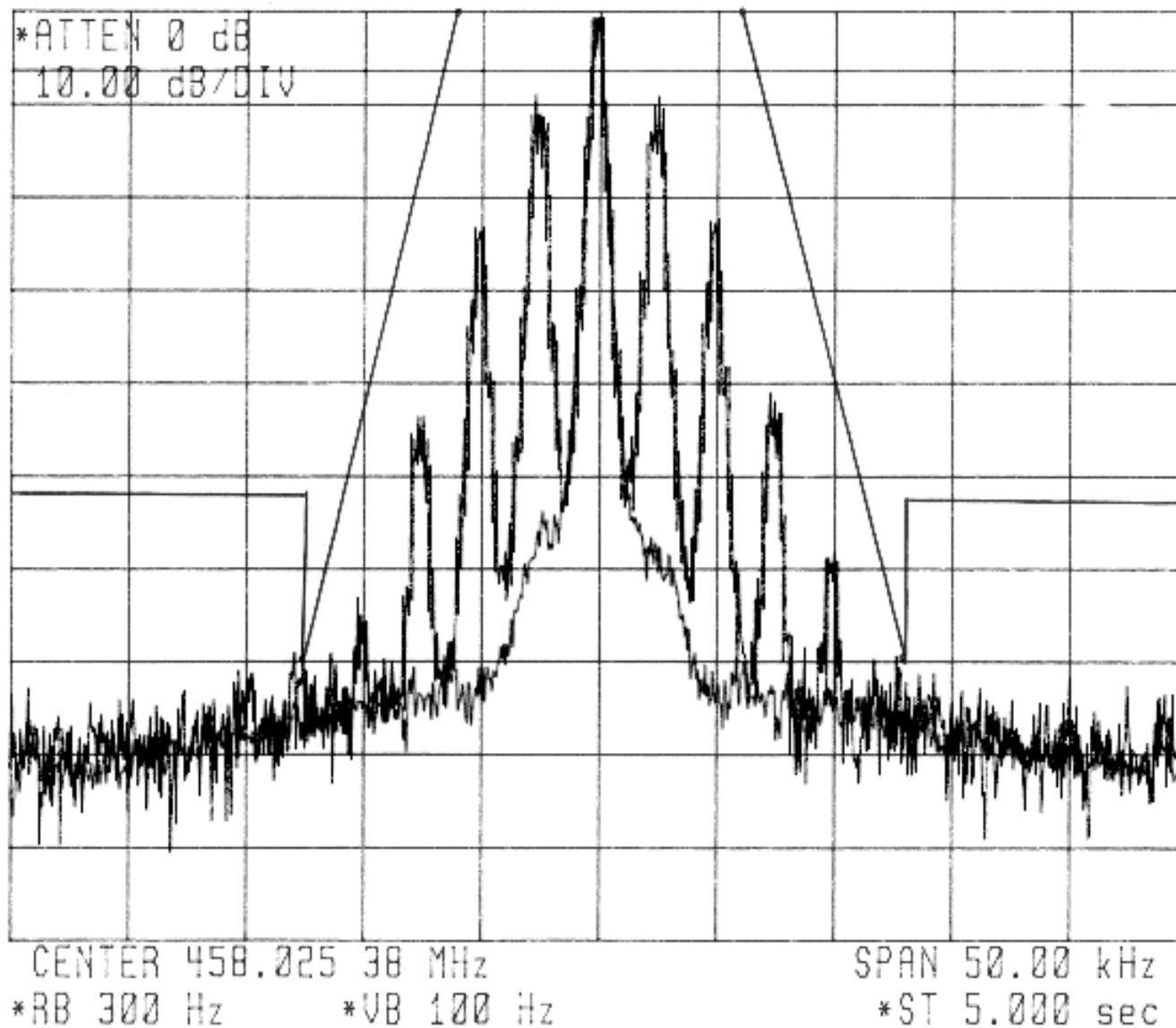


EXHIBIT 6E-4

### EIA/TIA RS-603 TX Conducted Spurs

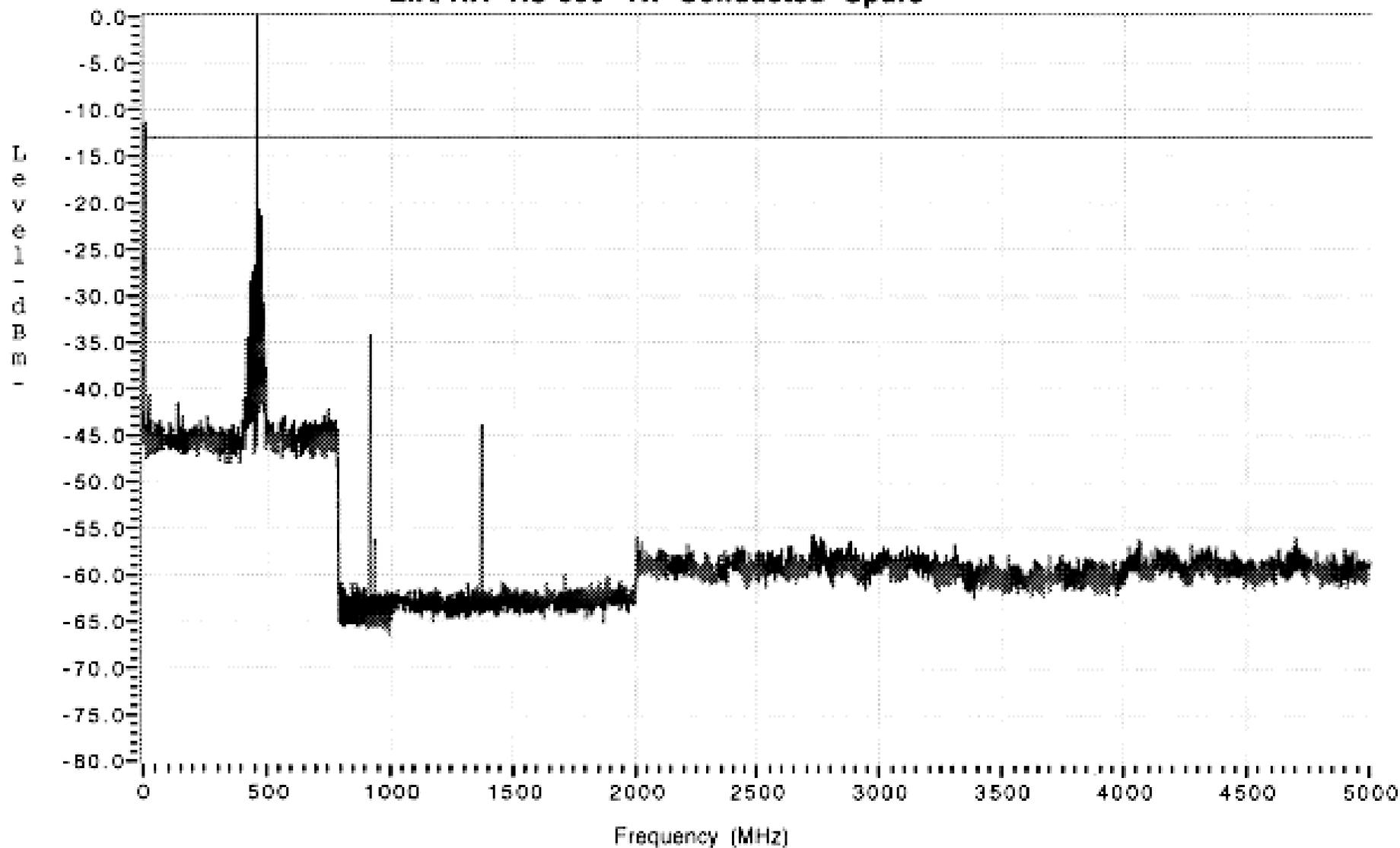


EXHIBIT 6F-1

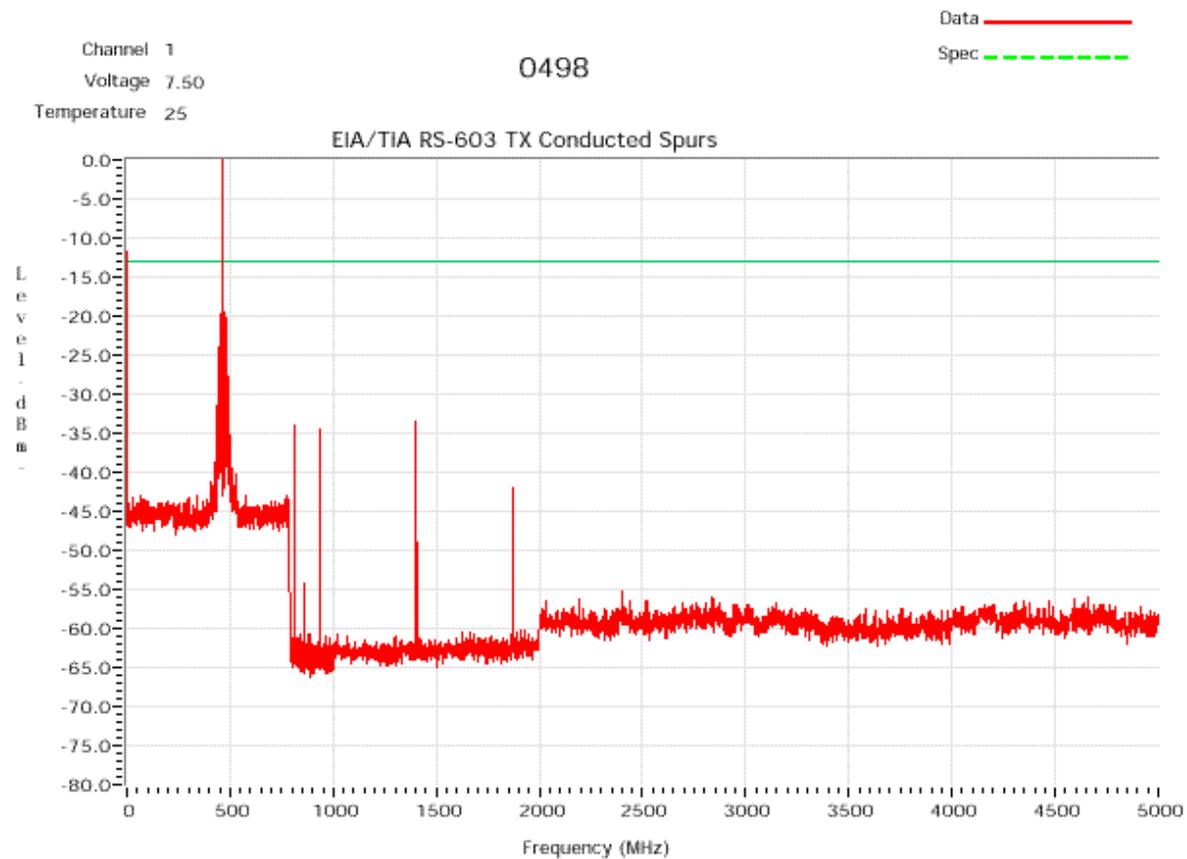
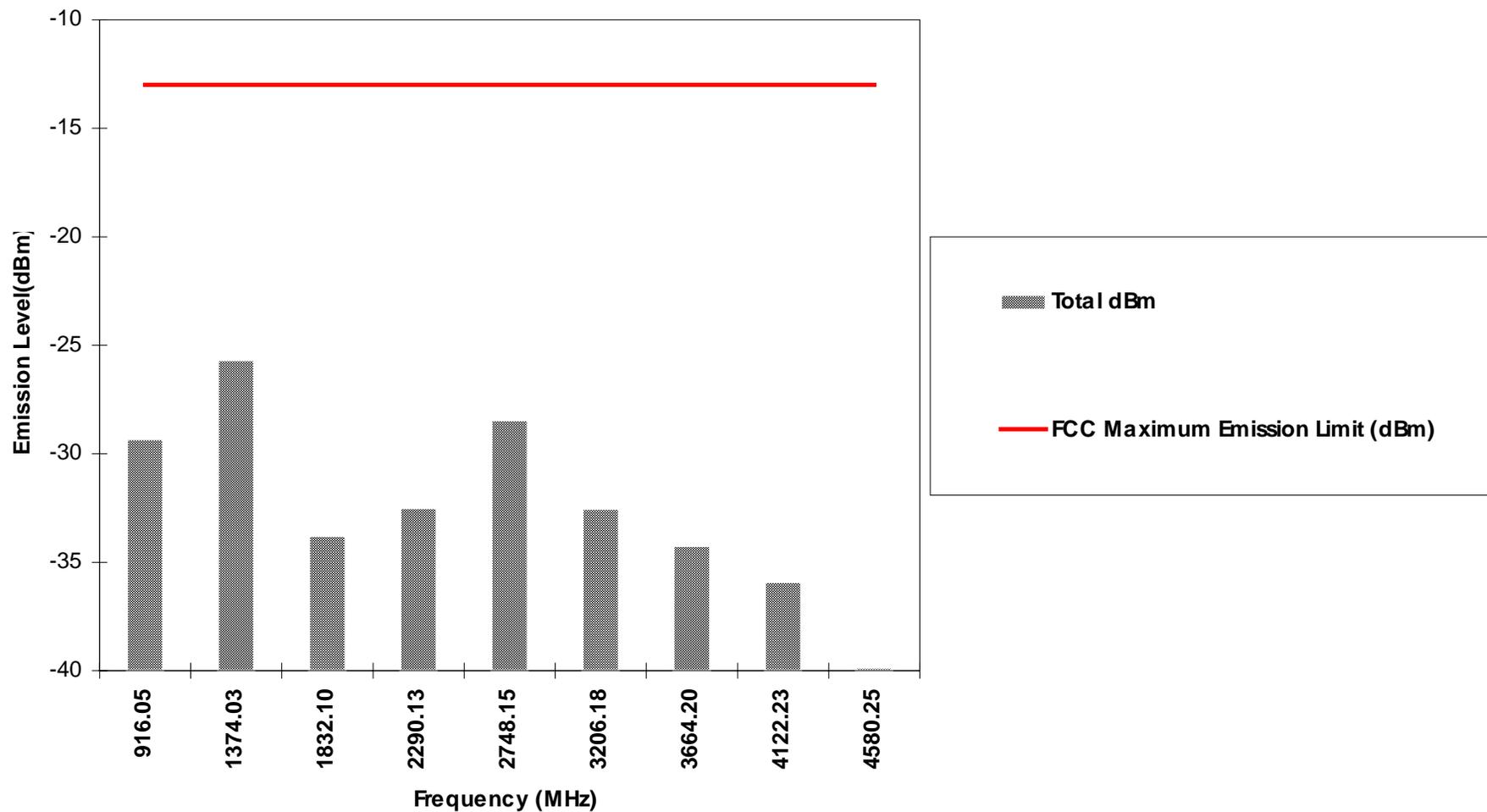


EXHIBIT 6F-2

FCC\_UHF\_1WATT\_Transmit\_458.025MHz\_Vertical Polarization  
FCC ID: AZ489FT4831



FCC\_UHF\_1WATT\_Transmit\_458.025MHz\_Horizontal Polarization  
FCC ID: AZ489FT4831

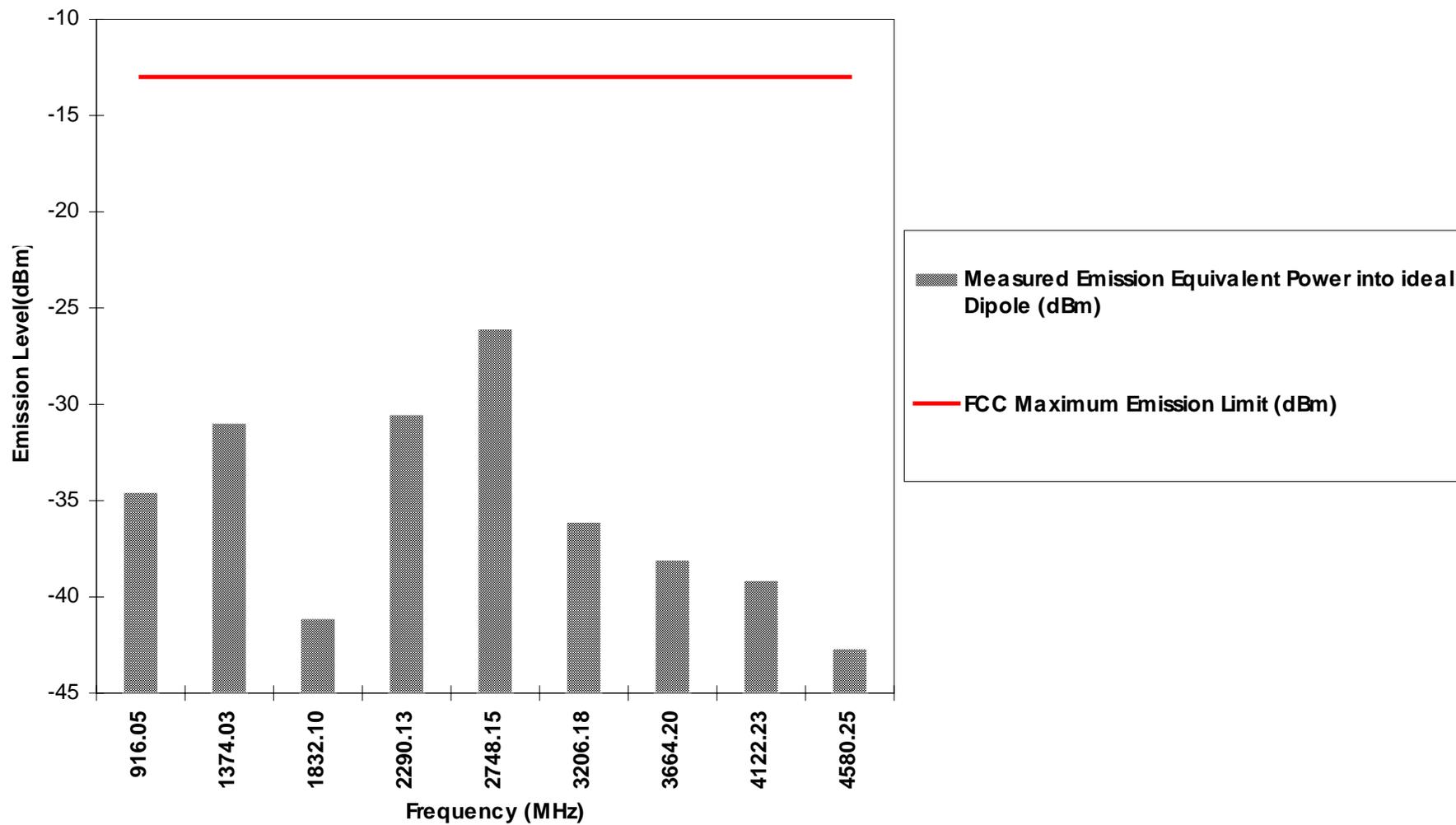


EXHIBIT 6G-2

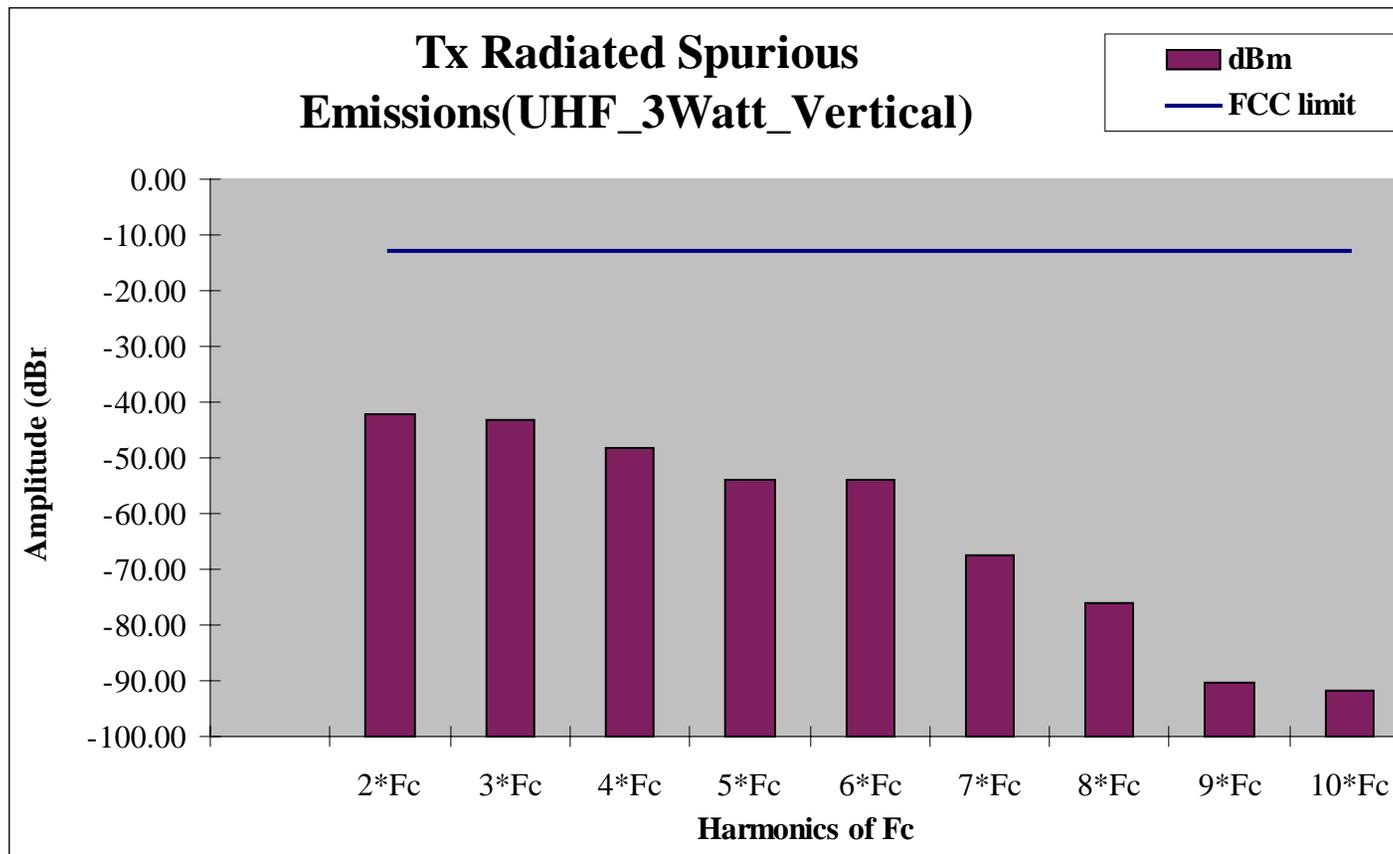
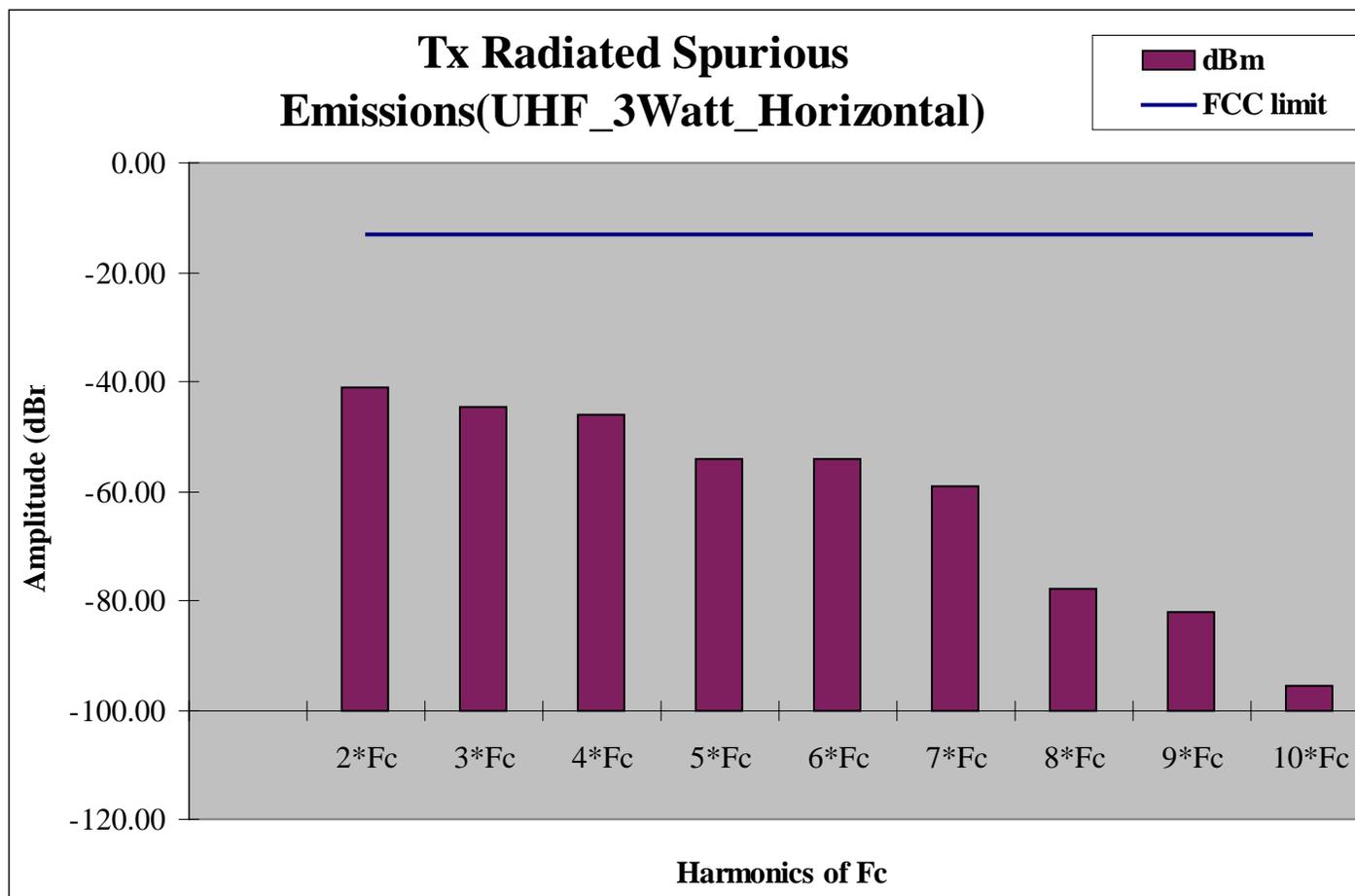


EXHIBIT 6G-3



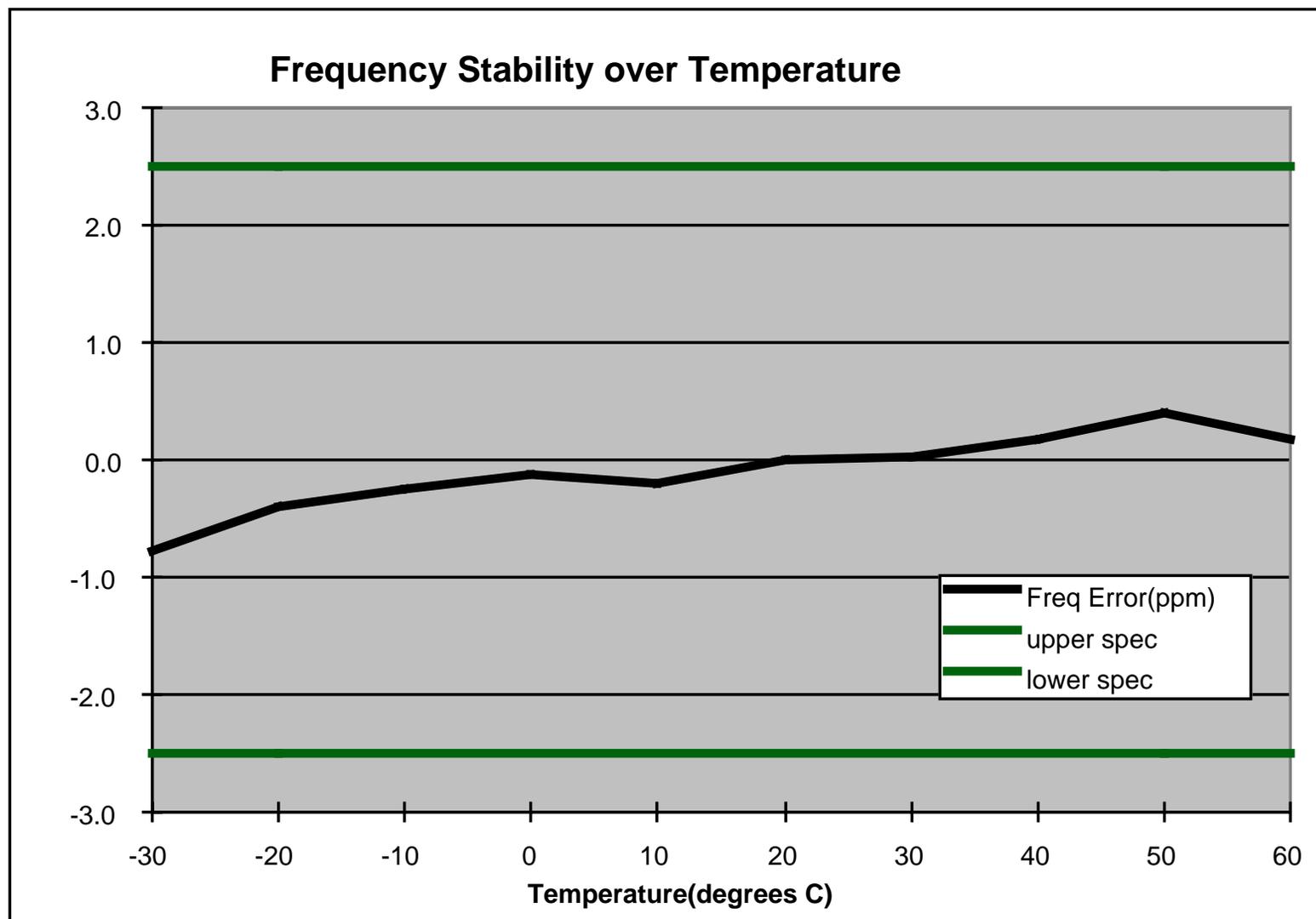
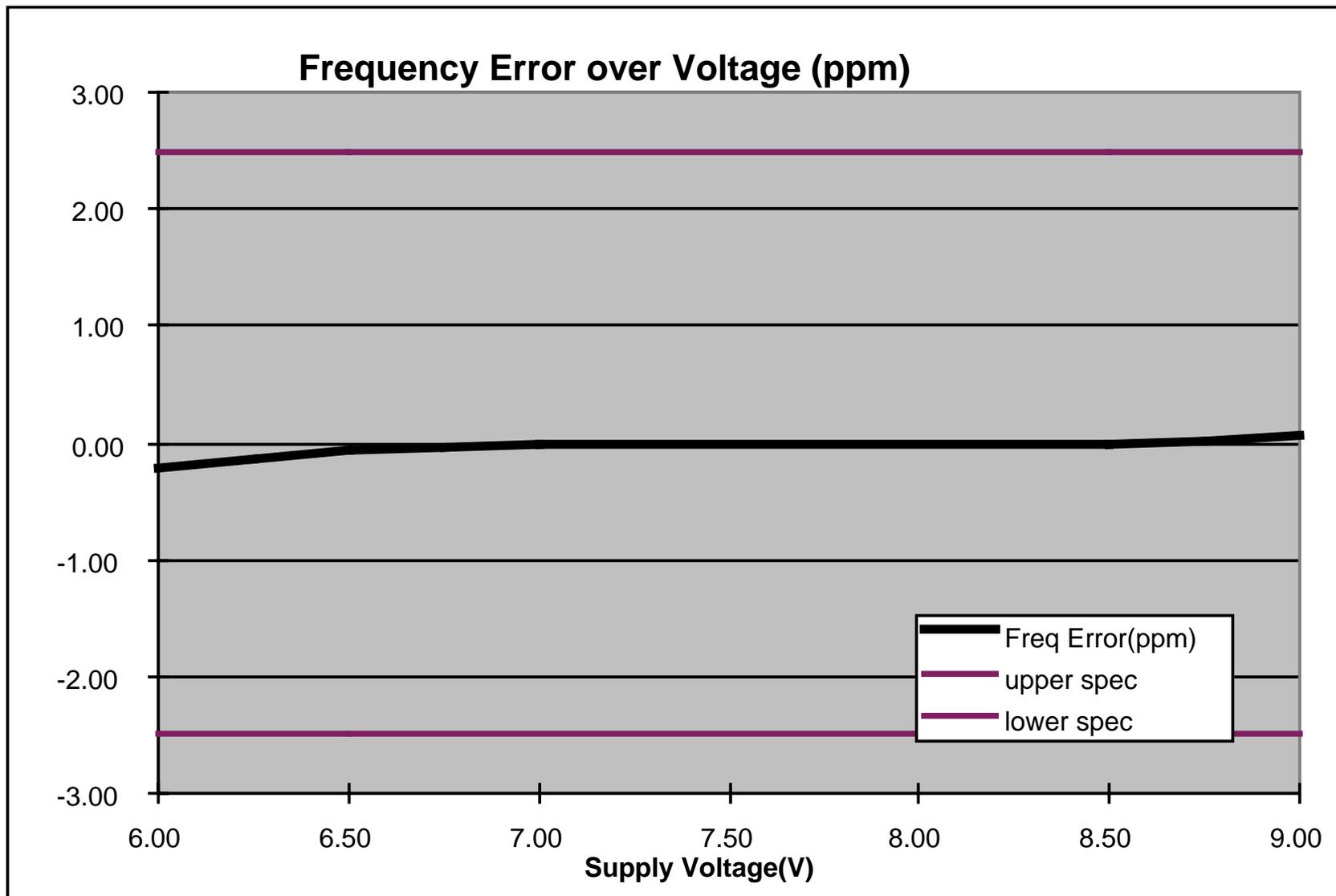


EXHIBIT 6H-1



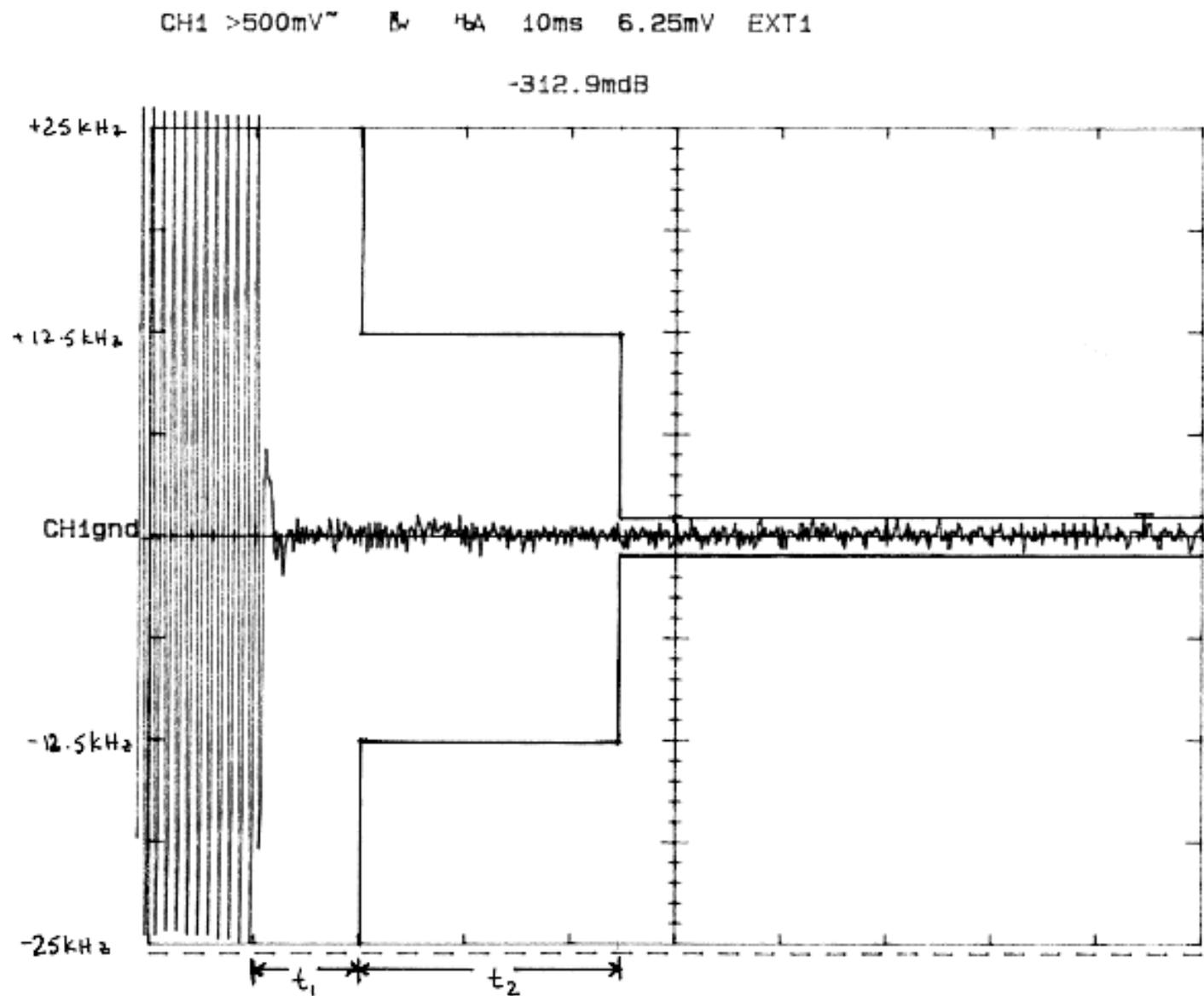


EXHIBIT 6I-1

CH1 >500mV A 10ms -5.08mV EXT1

-312.9mdB

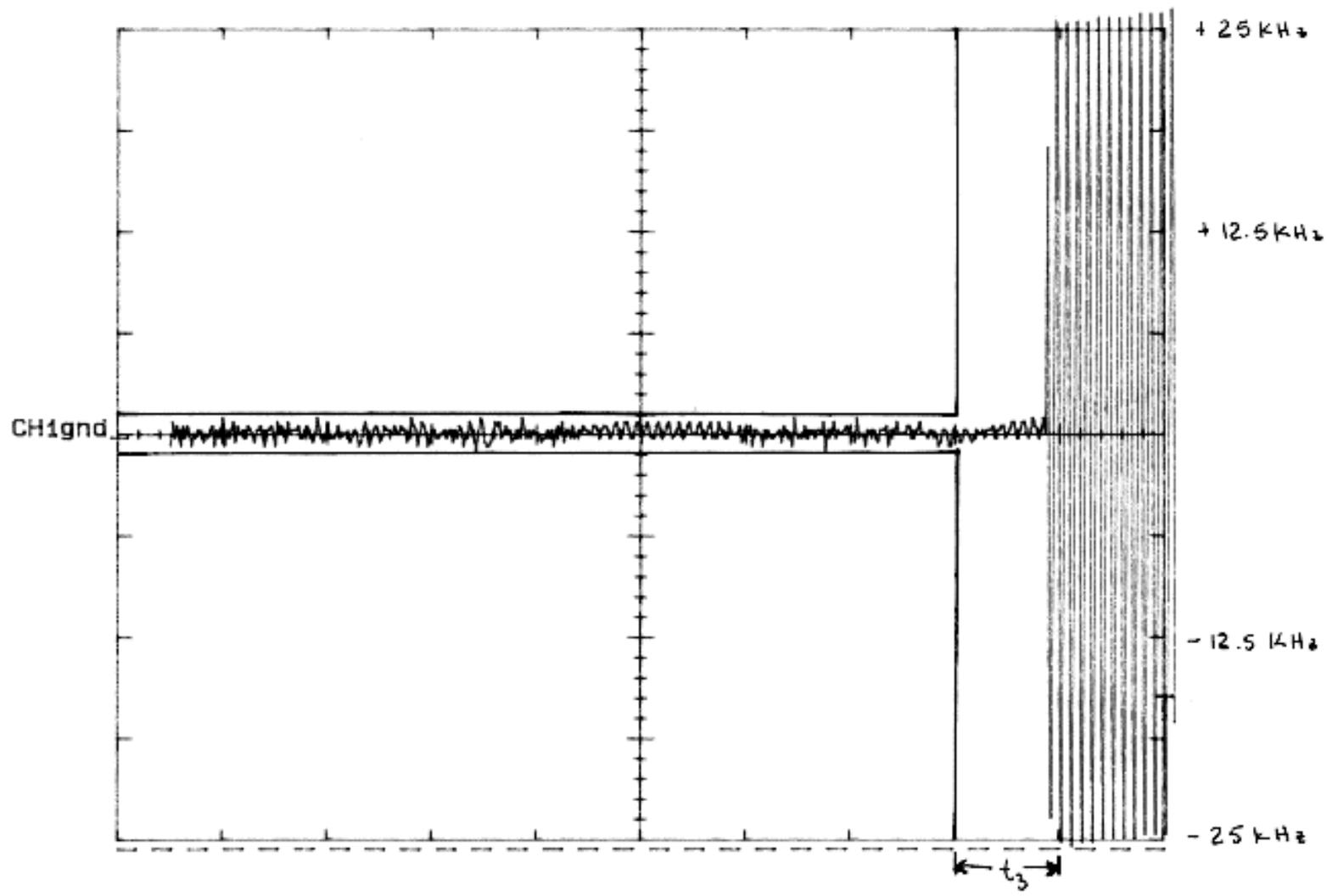


EXHIBIT6I 2



**MOTOROLA**

FCC ID: AZ489FT4831

For Exhibits 6I 3, 4,5 6---See attachment.