

INDEX OF SUBMITTED MEASURED DATA

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

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- 7B-2 - 25 kHz Channel Spacing

EXHIBIT 7C - Transmit Audio Post Limiter Lowpass Filter Response (2 Graphs)

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- 7E-10 - 25 kHz 2500 Hz Audio Modulation Only
- 7E-11 - 25 kHz 2500 Hz Audio and PL Tone Modulation
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INDEX TO SUBMITTED MEASURED DATA (continued)

EXHIBIT 7G - Radiated Spurious Emissions – (4 Graphs)

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- 7I-5 - 25 Watts, 12.5 kHz Key-Up Attack Time
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- 7I-8 - 25 Watts, 25 kHz De-Key Decay Time

EXHIBIT 7A – RF OUTPUT DATA**HIGH POWER SETTING, FREQUENCY 136.000 MHz**

| | |
|----------------------------|--------------|
| Measured RF Output Power: | 54.0 Watts |
| Measured DC Voltage: | 13.58 Volts |
| Measured DC Input Current: | 6.70 Amperes |
| Measured DC Input Power: | 90.99 Watts |

LOW POWER SETTING, FREQUENCY 136.000 MHz

| | |
|----------------------------|--------------|
| Measured RF Output Power: | 25.0 Watts |
| Measured DC Voltage: | 13.58 Volts |
| Measured DC Input Current: | 4.13 Amperes |
| Measured DC Input Power: | 56.09 Watts |

HIGH POWER SETTING, FREQUENCY 155.000 MHz

| | |
|----------------------------|--------------|
| Measured RF Output Power: | 54.0 Watts |
| Measured DC Voltage: | 13.58 Volts |
| Measured DC Input Current: | 7.80 Amperes |
| Measured DC Input Power: | 105.92 Watts |

LOW POWER SETTING, FREQUENCY 155.000 MHz

| | |
|----------------------------|--------------|
| Measured RF Output Power: | 25.0 Watts |
| Measured DC Voltage: | 13.58 Volts |
| Measured DC Input Current: | 4.70 Amperes |
| Measured DC Input Power: | 63.83Watts |

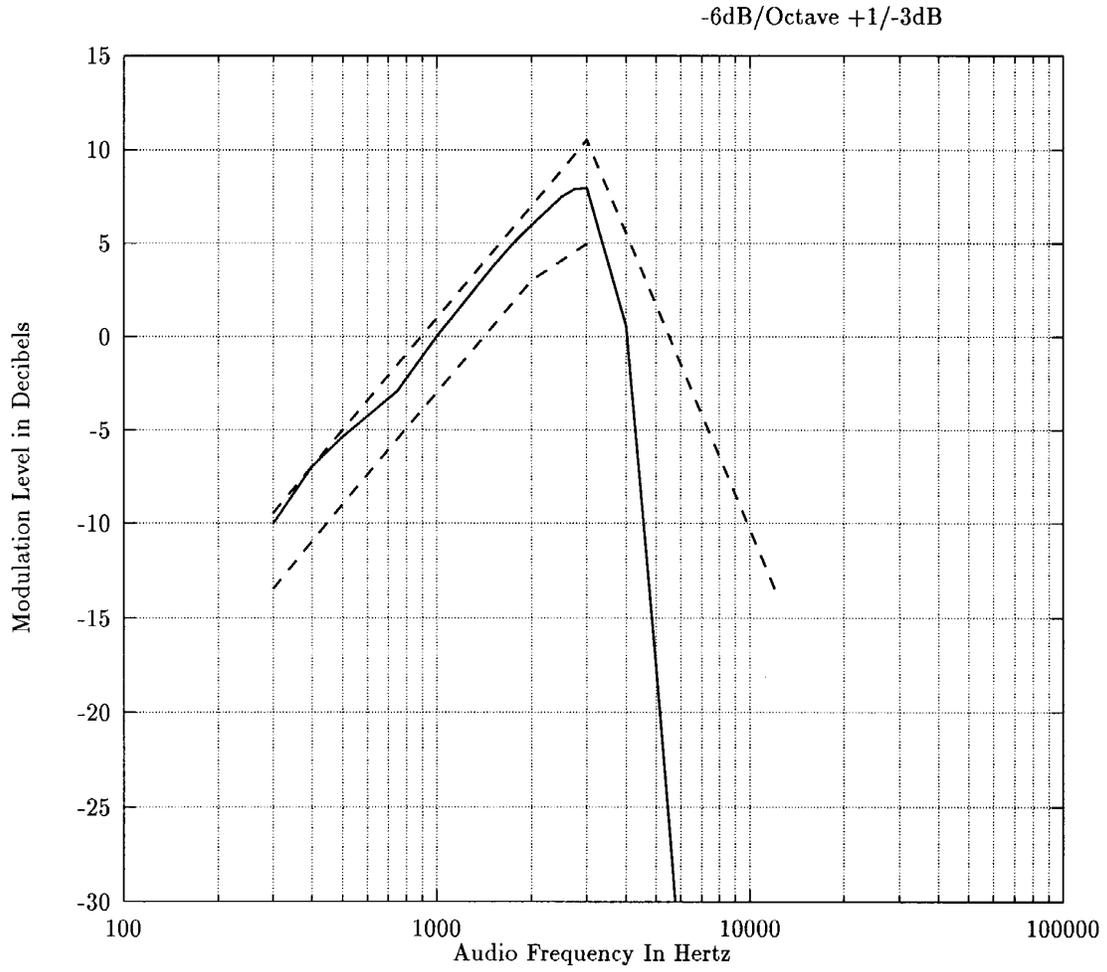
HIGH POWER SETTING, FREQUENCY 174.000 MHz

| | |
|----------------------------|--------------|
| Measured RF Output Power: | 54.0 Watts |
| Measured DC Voltage: | 13.58 Volts |
| Measured DC Input Current: | 6.88 Amperes |
| Measured DC Input Power: | 93.43 Watts |

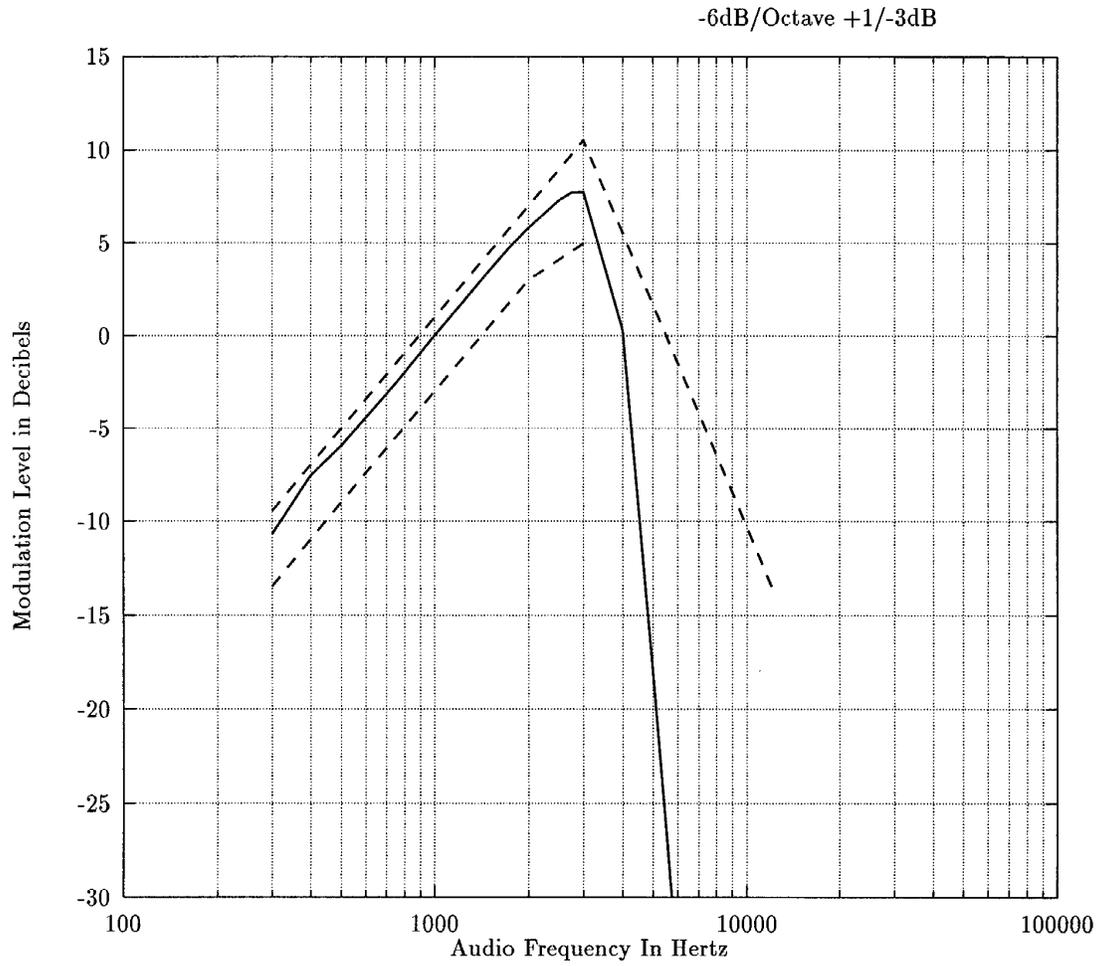
LOW POWER SETTING, FREQUENCY 174.000 MHz

| | |
|----------------------------|--------------|
| Measured RF Output Power: | 25.0 Watts |
| Measured DC Voltage: | 13.58 Volts |
| Measured DC Input Current: | 4.44 Amperes |
| Measured DC Input Power: | 60.30 Watts |

TRANSMIT AUDIO RESPONSE
12.5 kHz CHANNEL SPACING

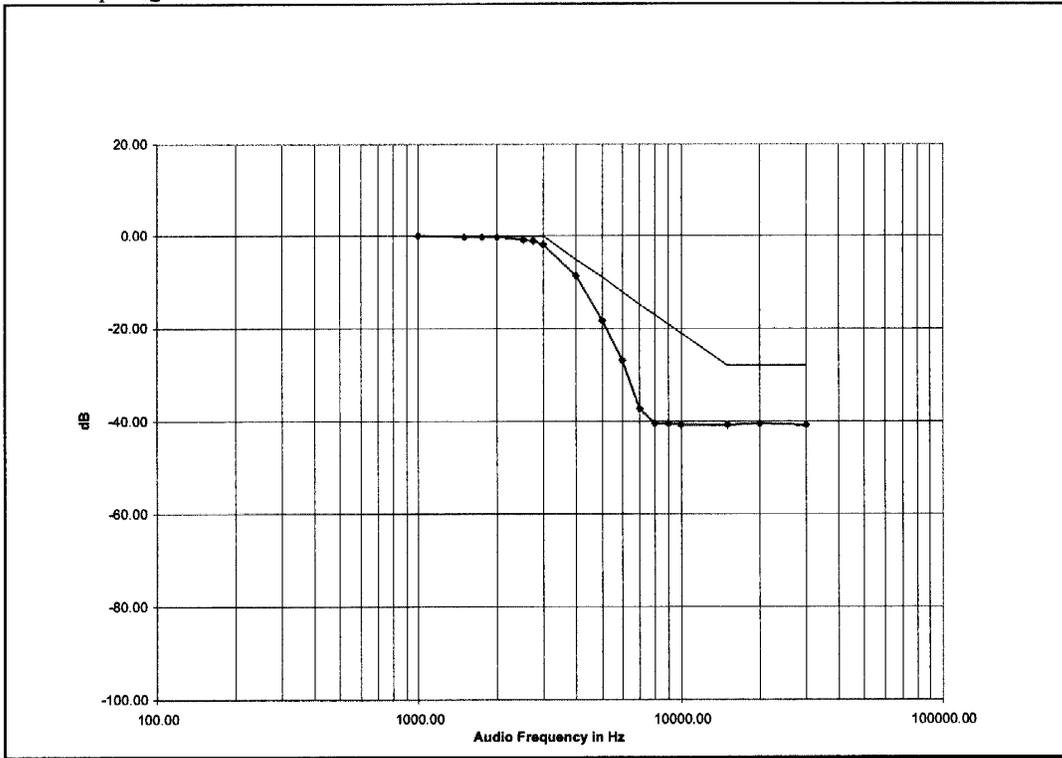


**TRANSMIT AUDIO RESPONSE
25 kHz CHANNEL SPACING**



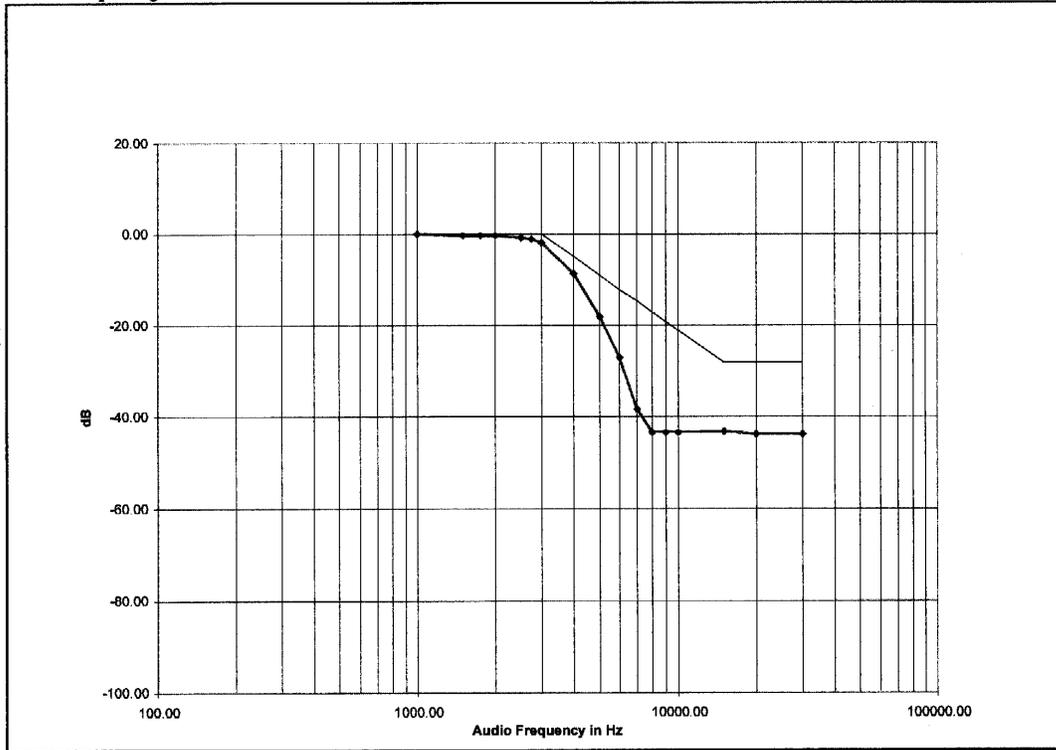
POST-LIMITER LOWPASS FILTER RESPONSE
12.5 kHz CHANNEL SPACING

Channel Spacing : 12.5KHz

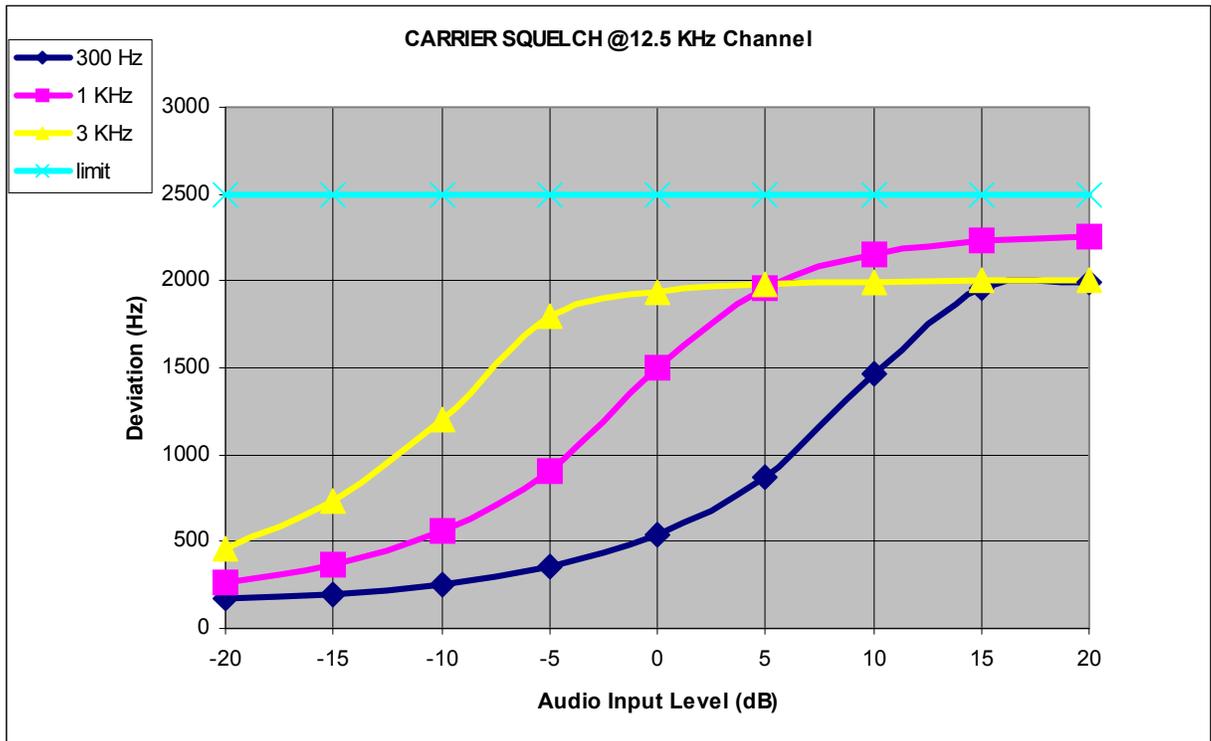


POST-LIMITER LOWPASS FILTER RESPONSE
25 kHz CHANNEL SPACING

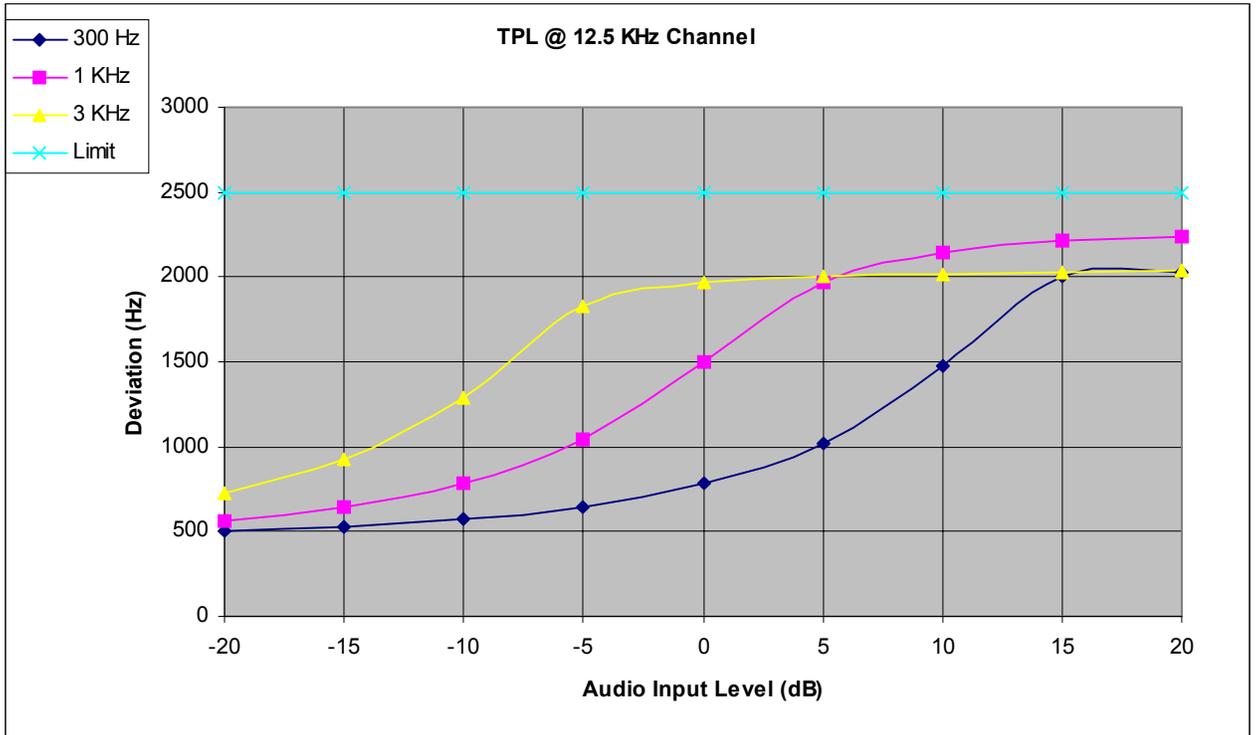
Channel Spacing : 25KHz



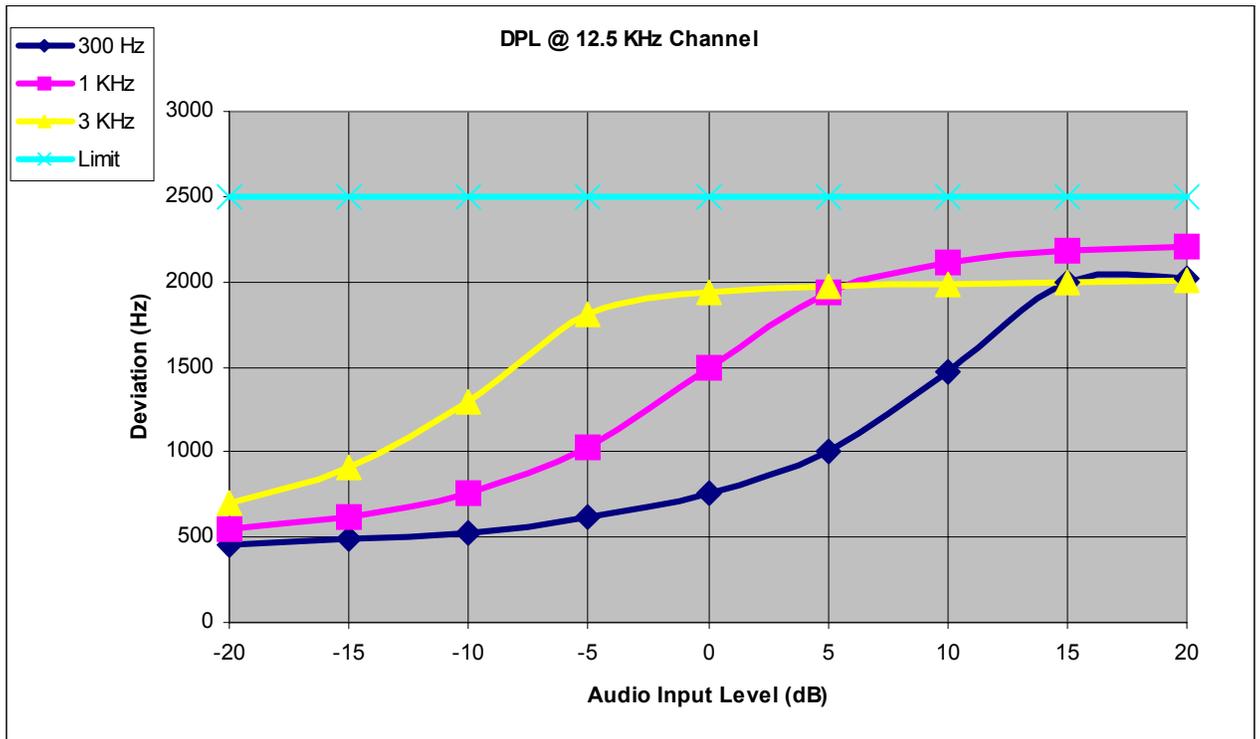
**MODULATION LIMITING CHARACTERISTIC
12.5 kHz CHANNEL SPACING, CARRIER SQUELCH MODE**



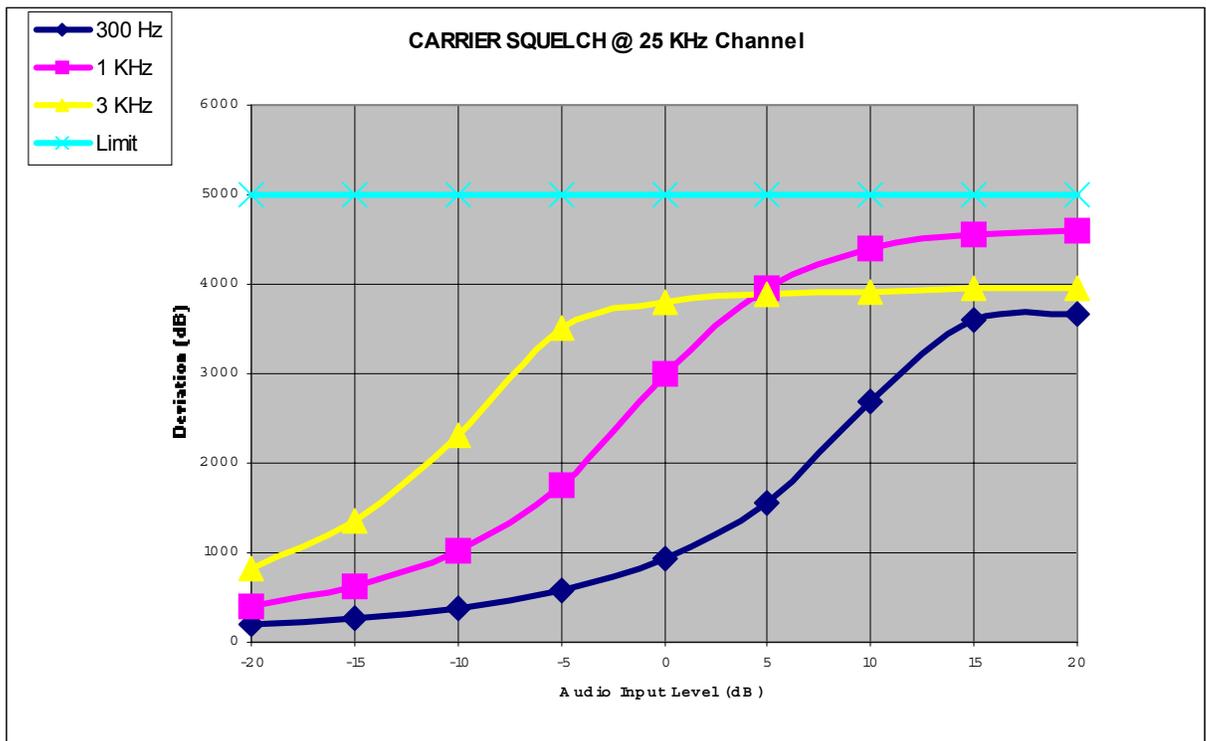
**MODULATION LIMITING CHARACTERISTIC
12.5 kHz CHANNEL SPACING, TONE PL MODE**



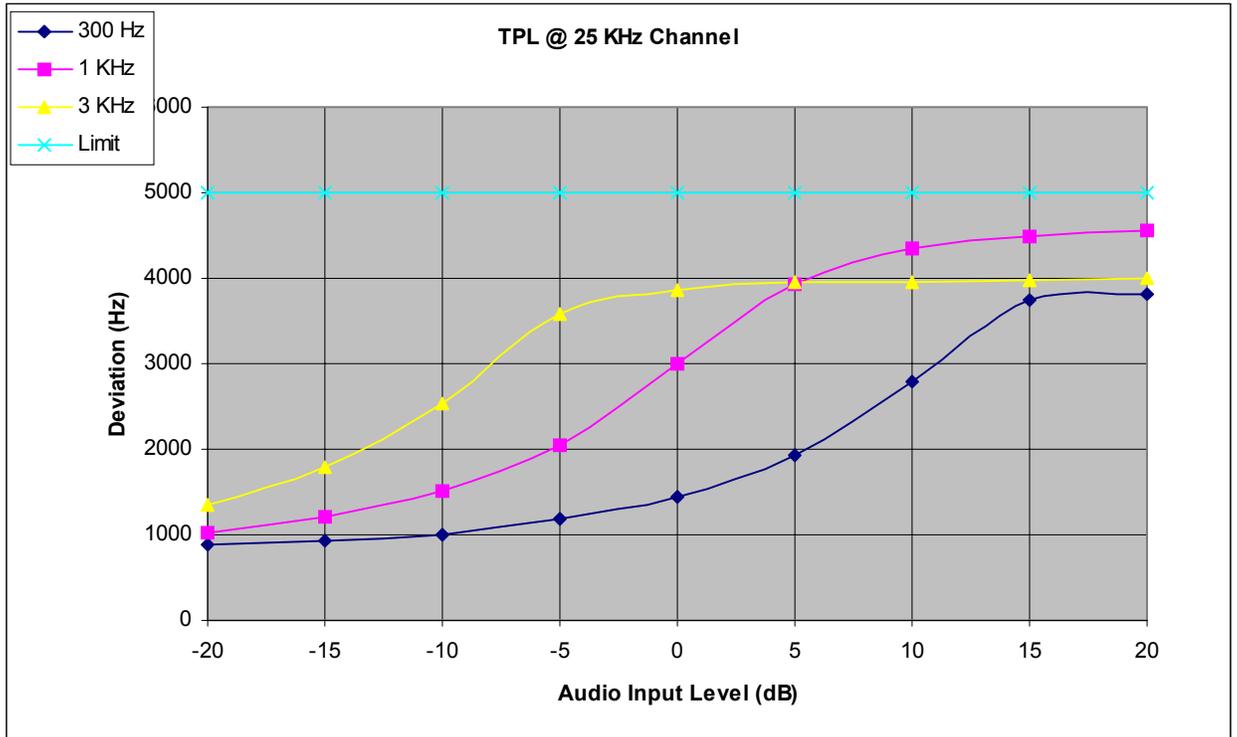
**MODULATION LIMITING CHARACTERISTIC
12.5 kHz CHANNEL SPACING, DPL MODE**



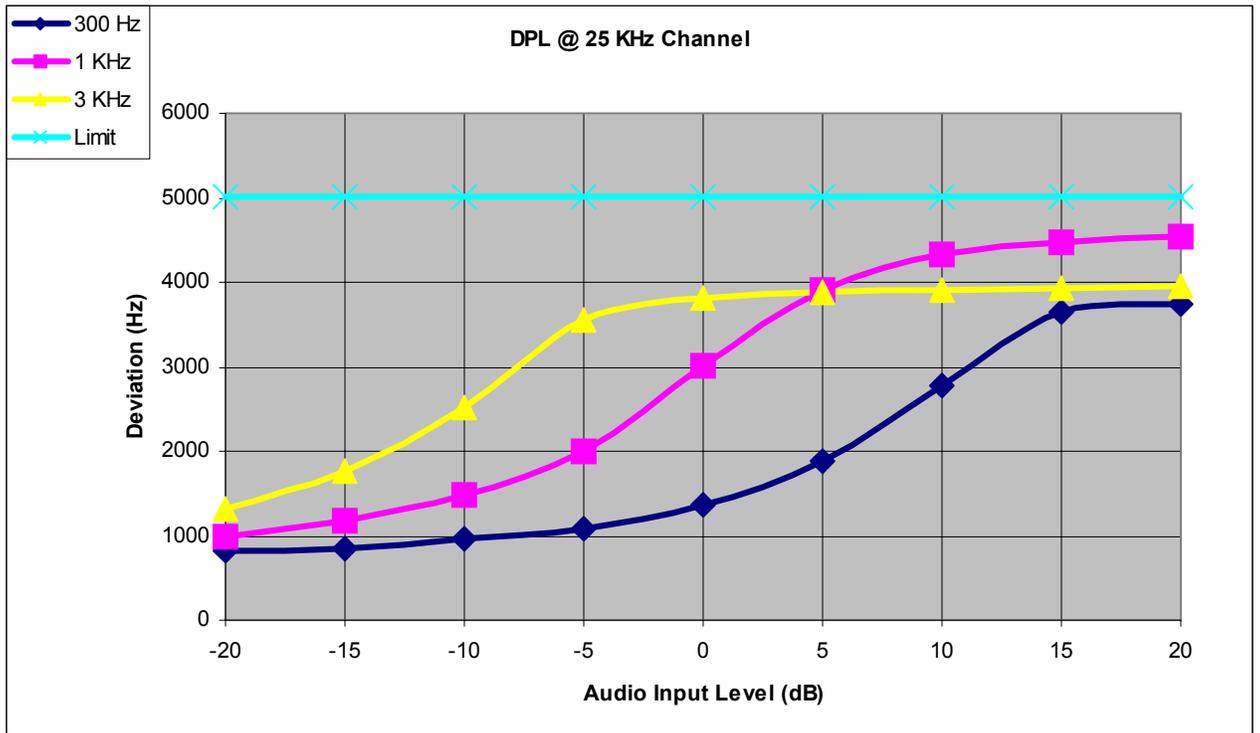
**MODULATION LIMITING CHARACTERISTIC
25 kHz CHANNEL SPACING, CARRIER SQUELCH MODE**



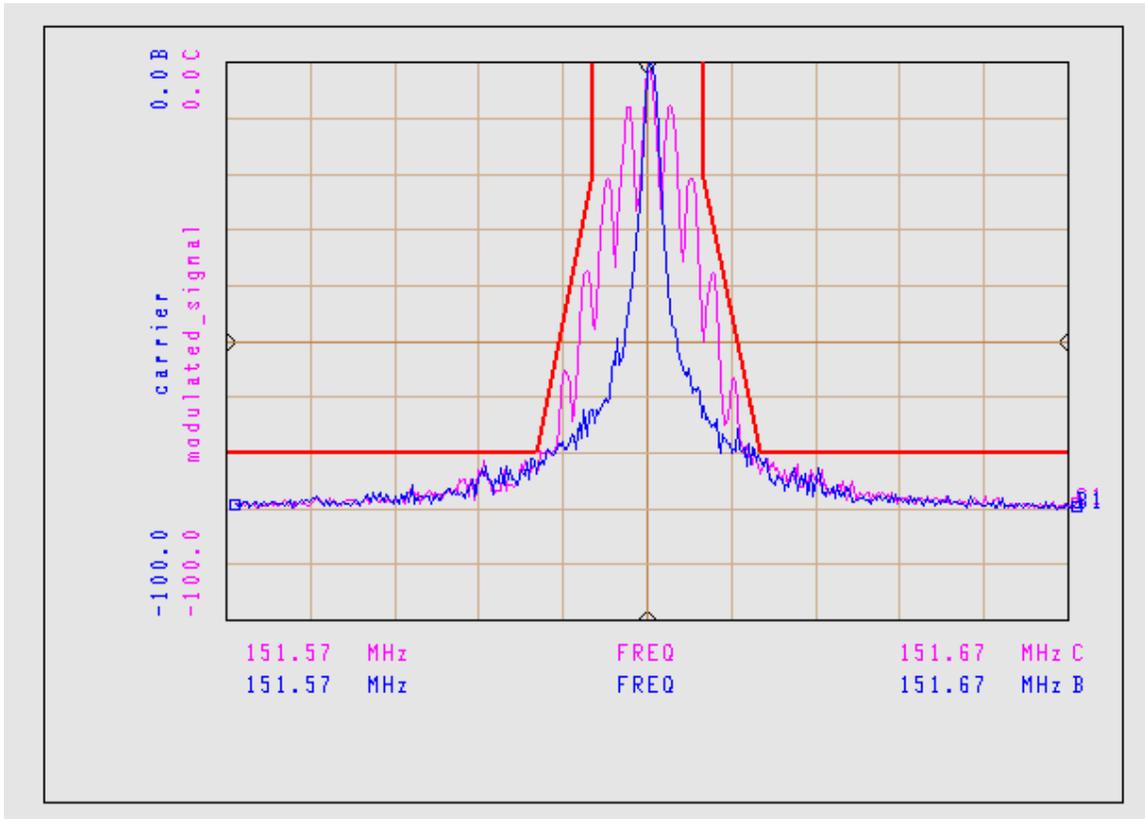
**MODULATION LIMITING CHARACTERISTIC
25 kHz CHANNEL SPACING, TONE PL MODE**



**MODULATION LIMITING CHARACTERISTIC
25 kHz CHANNEL SPACING, DPL MODE**

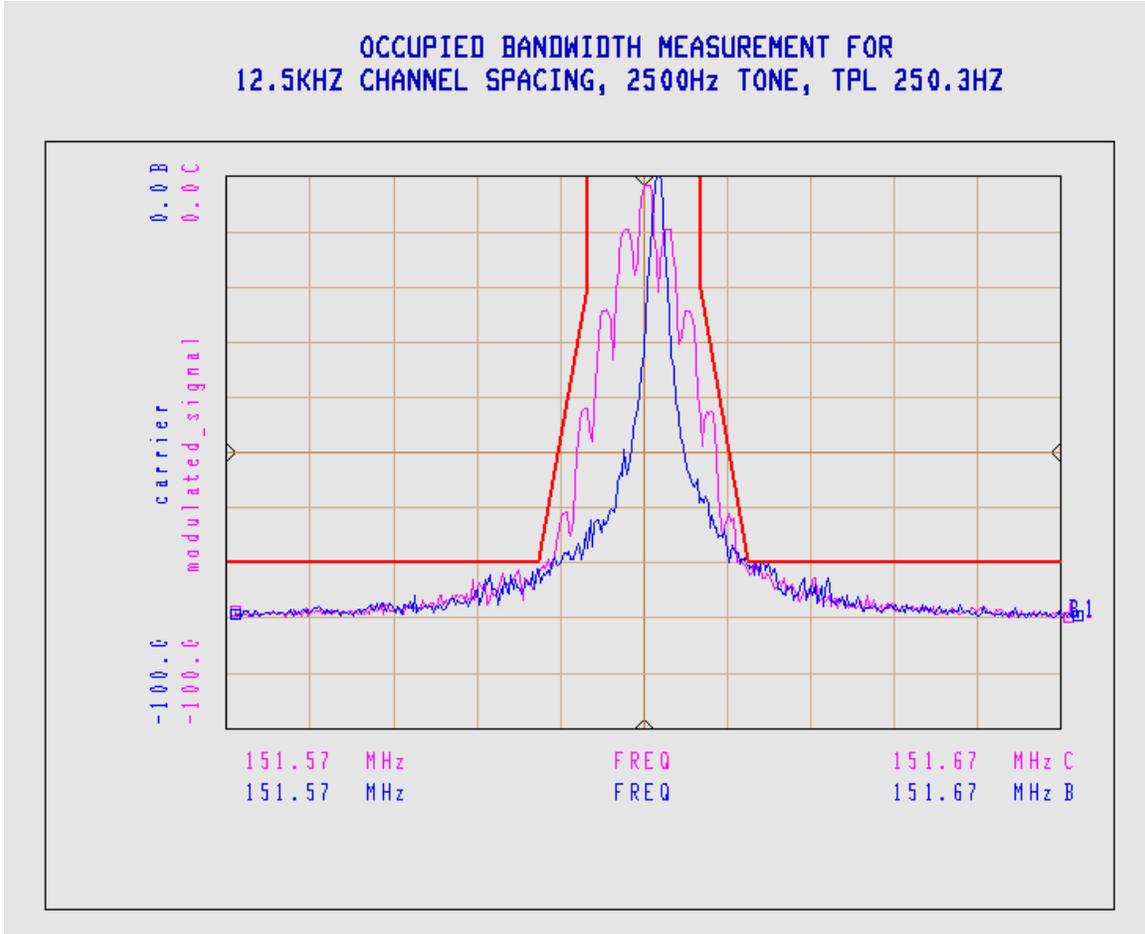


OCCUPIED BANDWIDTH MEASUREMENT FOR
12.5 kHz CHANNEL SPACING, 2500 Hz TONE, CARRIER SQUELCH
EMISSION MASK: D



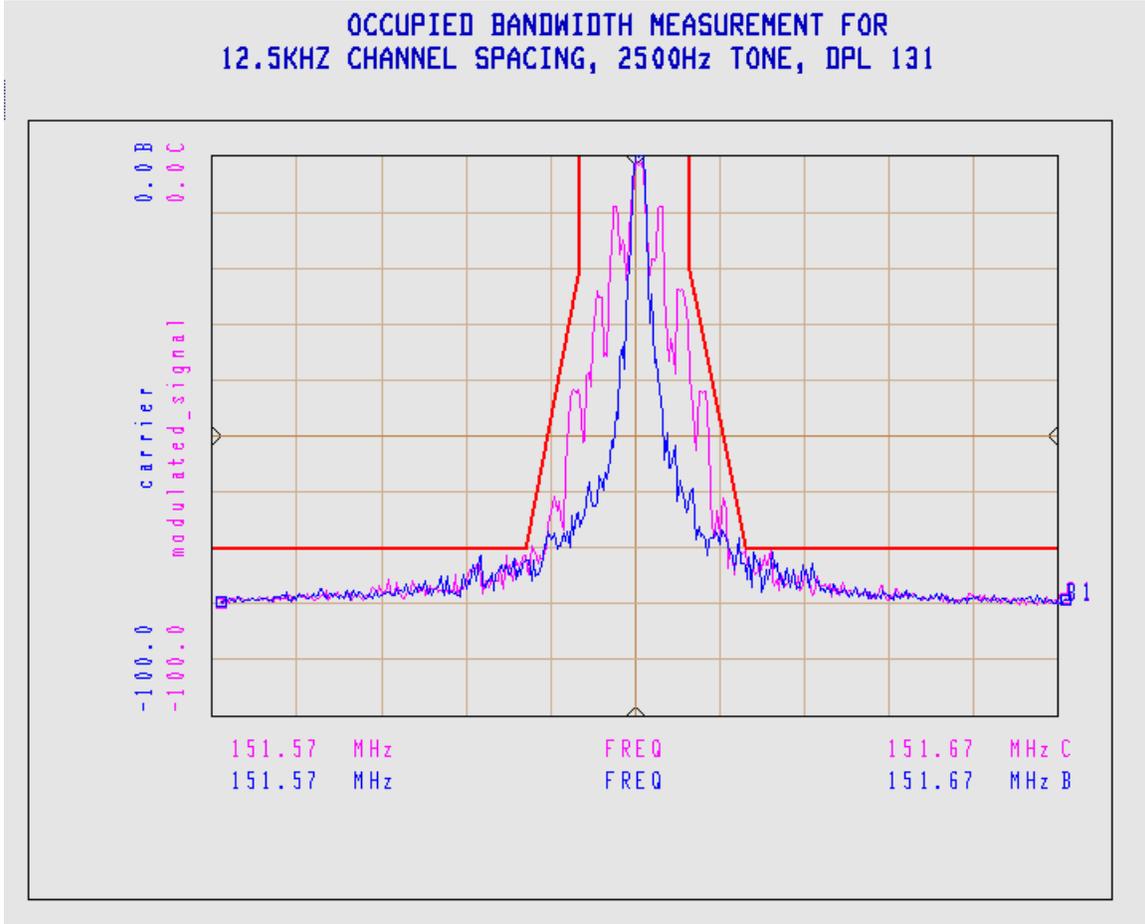
| | |
|-----------------------|-------------|
| CENTER FREQUENCY: | 151.625 MHz |
| RESOLUTION BANDWIDTH: | 300 kHz |
| VIDEO BANDWIDTH: | 300 kHz |
| SPAN: | 100 kHz |
| SWEEP TIME: | 3 Sec. |
| VERTICAL SCALE: | 10 dB/div |
| REFERENCE LEVEL: | 0 dBm |
| ATTENUATION: | 30 dB |

OCCUPIED BANDWIDTH MEASUREMENT FOR
12.5 kHz CHANNEL SPACING, 2500 Hz TONE, PL
EMISSION MASK: D



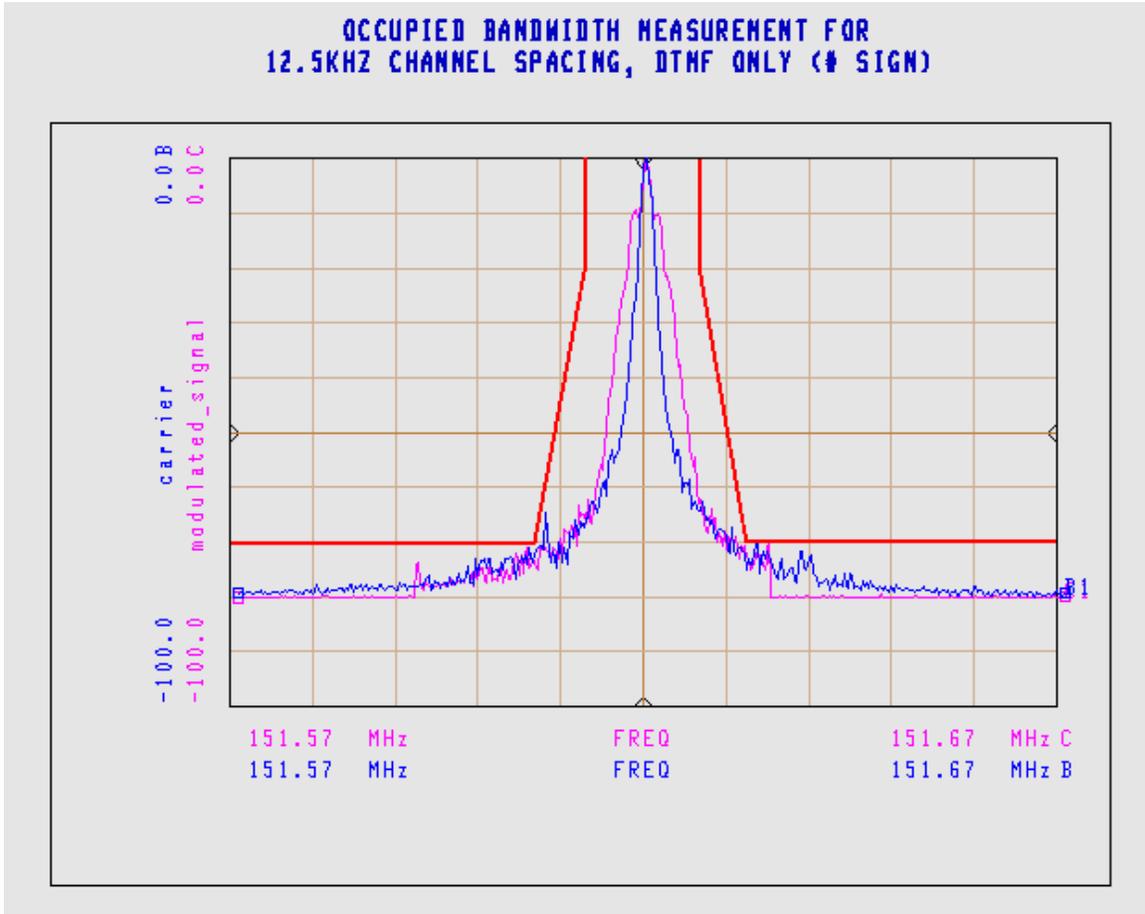
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|-----------------------|-------------|
| CENTER FREQUENCY: | 151.625 MHz |
| RESOLUTION BANDWIDTH: | 300 kHz |
| VIDEO BANDWIDTH: | 300 kHz |
| SPAN: | 100 kHz |
| SWEEP TIME: | 3 Sec. |
| VERTICAL SCALE: | 10 dB/div |
| REFERENCE LEVEL: | 0 dBm |
| ATTENUATION: | 30 dB |

OCCUPIED BANDWIDTH MEASUREMENT FOR
12.5 kHz CHANNEL SPACING, 2500 Hz TONE, DPL
EMISSION MASK: D



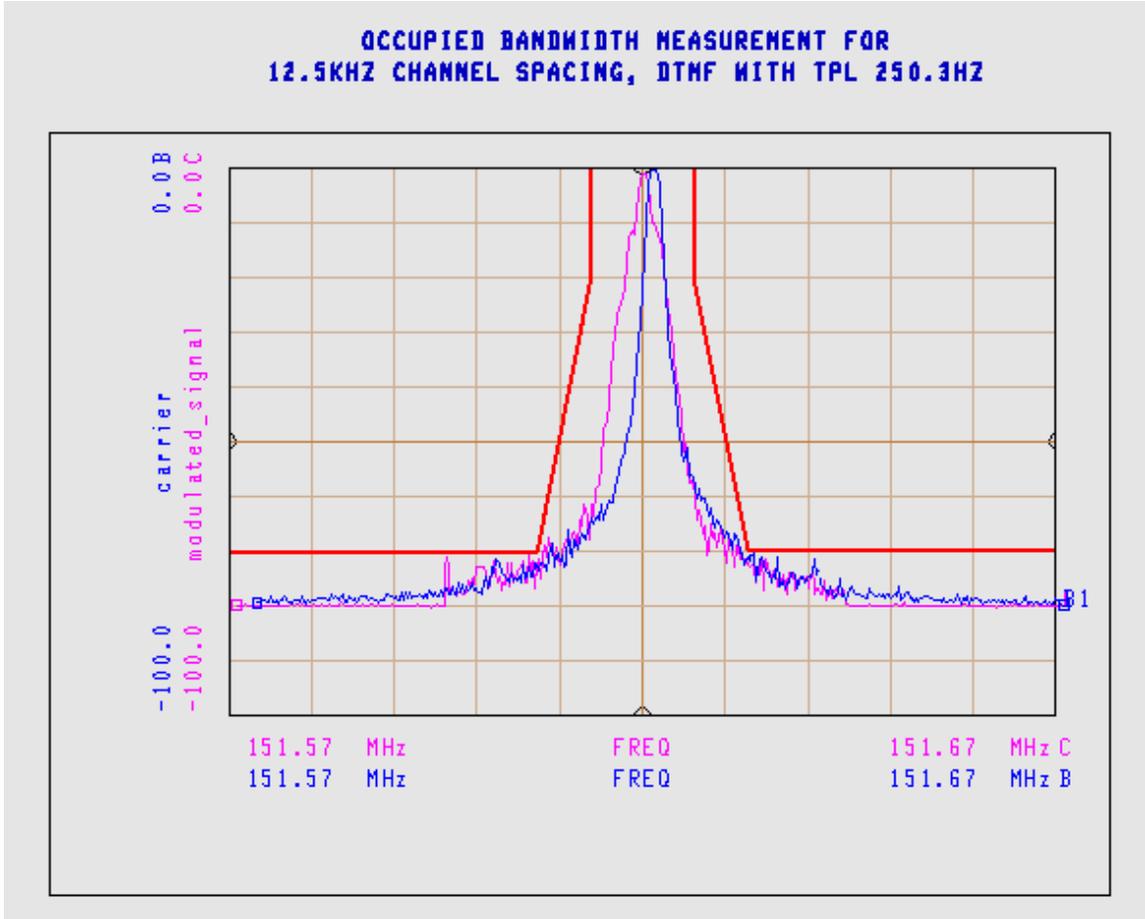
| | |
|-----------------------|-------------|
| CENTER FREQUENCY: | 151.625 MHz |
| RESOLUTION BANDWIDTH: | 300 kHz |
| VIDEO BANDWIDTH: | 300 kHz |
| SPAN: | 100 kHz |
| SWEEP TIME: | 3 Sec. |
| VERTICAL SCALE: | 10 dB/div |
| REFERENCE LEVEL: | 0 dBm |
| ATTENUATION: | 30 dB |

OCCUPIED BANDWIDTH MEASUREMENT FOR
12.5 kHz CHANNEL SPACING, DTMF MODULATION, CARRIER SQUELCH
EMISSION MASK: D



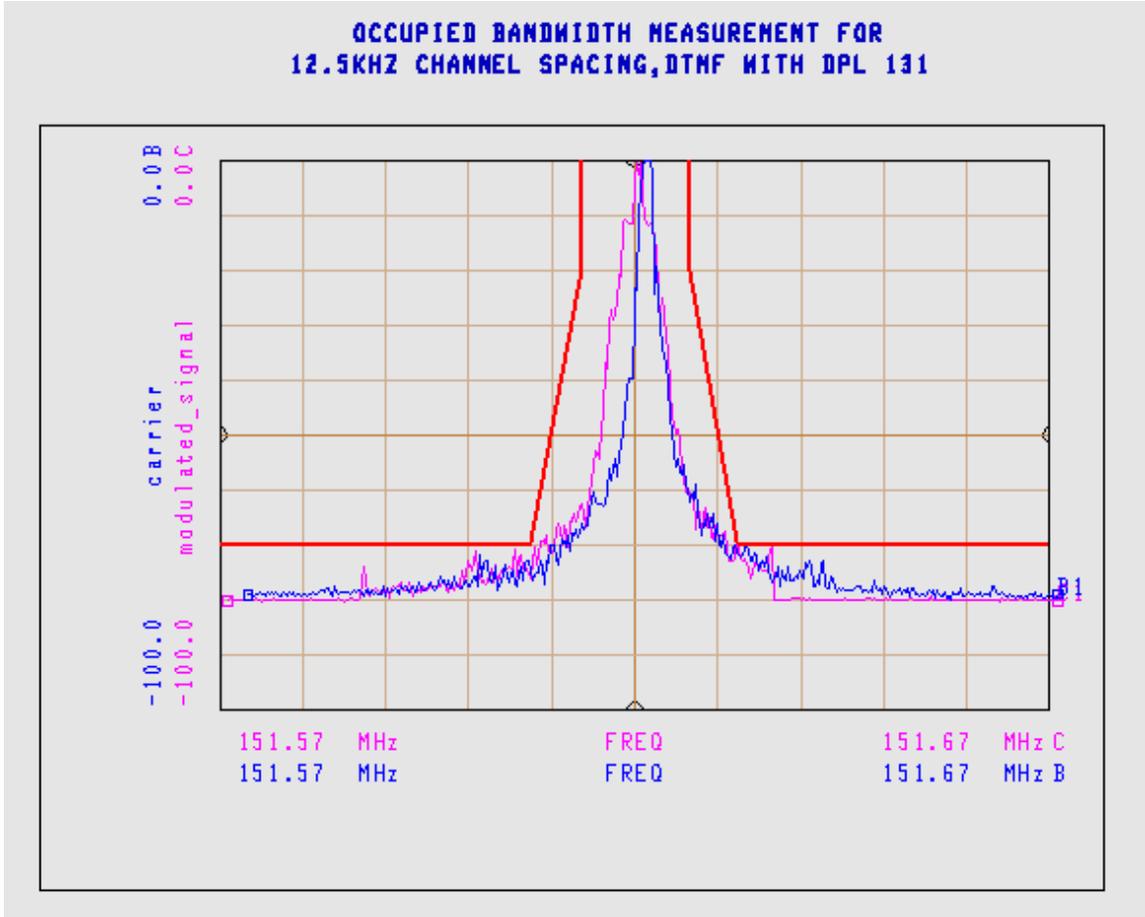
| | |
|-----------------------|-------------|
| CENTER FREQUENCY: | 151.625 MHz |
| RESOLUTION BANDWIDTH: | 300 kHz |
| VIDEO BANDWIDTH: | 300 kHz |
| SPAN: | 100 kHz |
| SWEEP TIME: | 3 Sec. |
| VERTICAL SCALE: | 10 dB/div |
| REFERENCE LEVEL: | 0 dBm |
| ATTENUATION: | 30 dB |

OCCUPIED BANDWIDTH MEASUREMENT FOR
12.5 KHZ CHANNEL SPACING, DTMF MODULATION, PL
EMISSION MASK: D



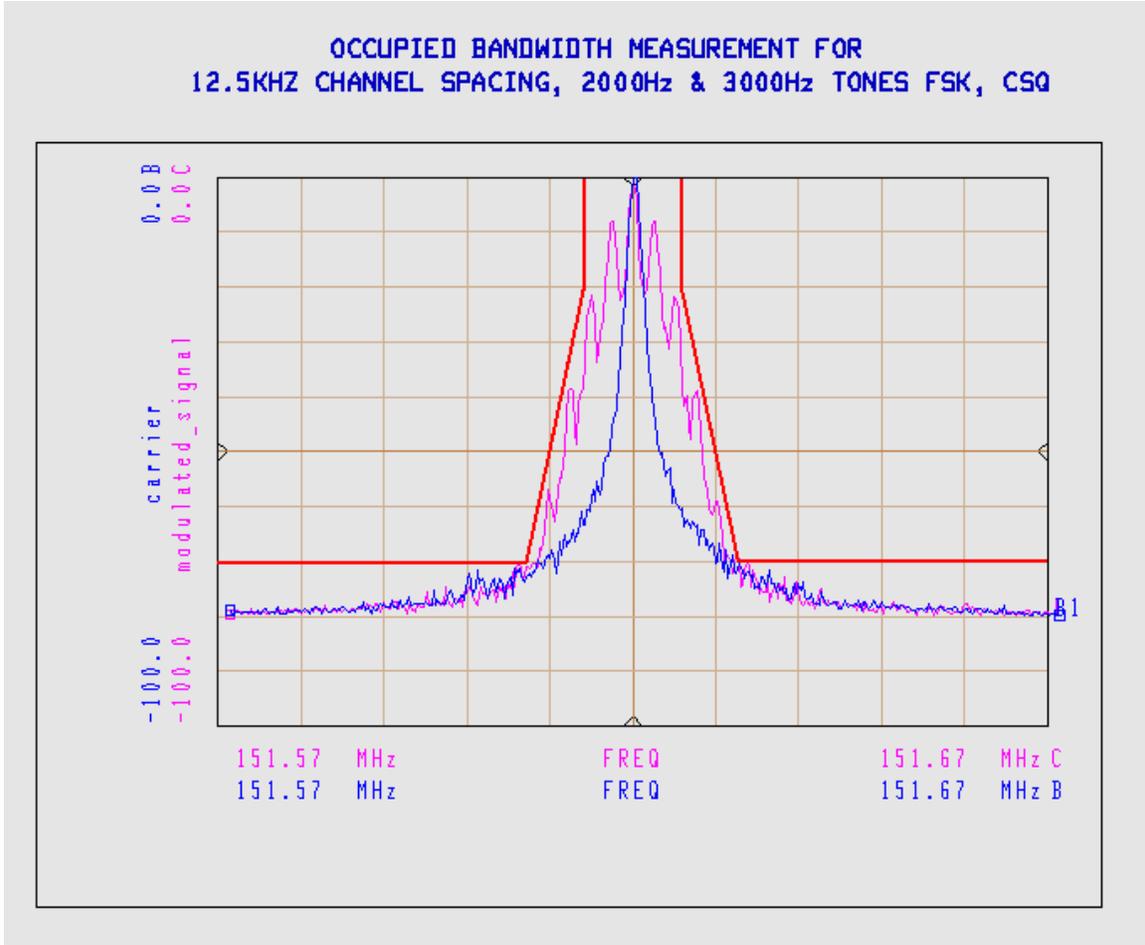
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|-----------------------|-------------|
| CENTER FREQUENCY: | 151.625 MHz |
| RESOLUTION BANDWIDTH: | 300 kHz |
| VIDEO BANDWIDTH: | 300 kHz |
| SPAN: | 100 kHz |
| SWEEP TIME: | 3 Sec. |
| VERTICAL SCALE: | 10 dB/div |
| REFERENCE LEVEL: | 0 dBm |
| ATTENUATION: | 30 dB |

OCCUPIED BANDWIDTH MEASUREMENT FOR
12.5 KHZ CHANNEL SPACING, DTMF MODULATION, DPL
EMISSION MASK: D



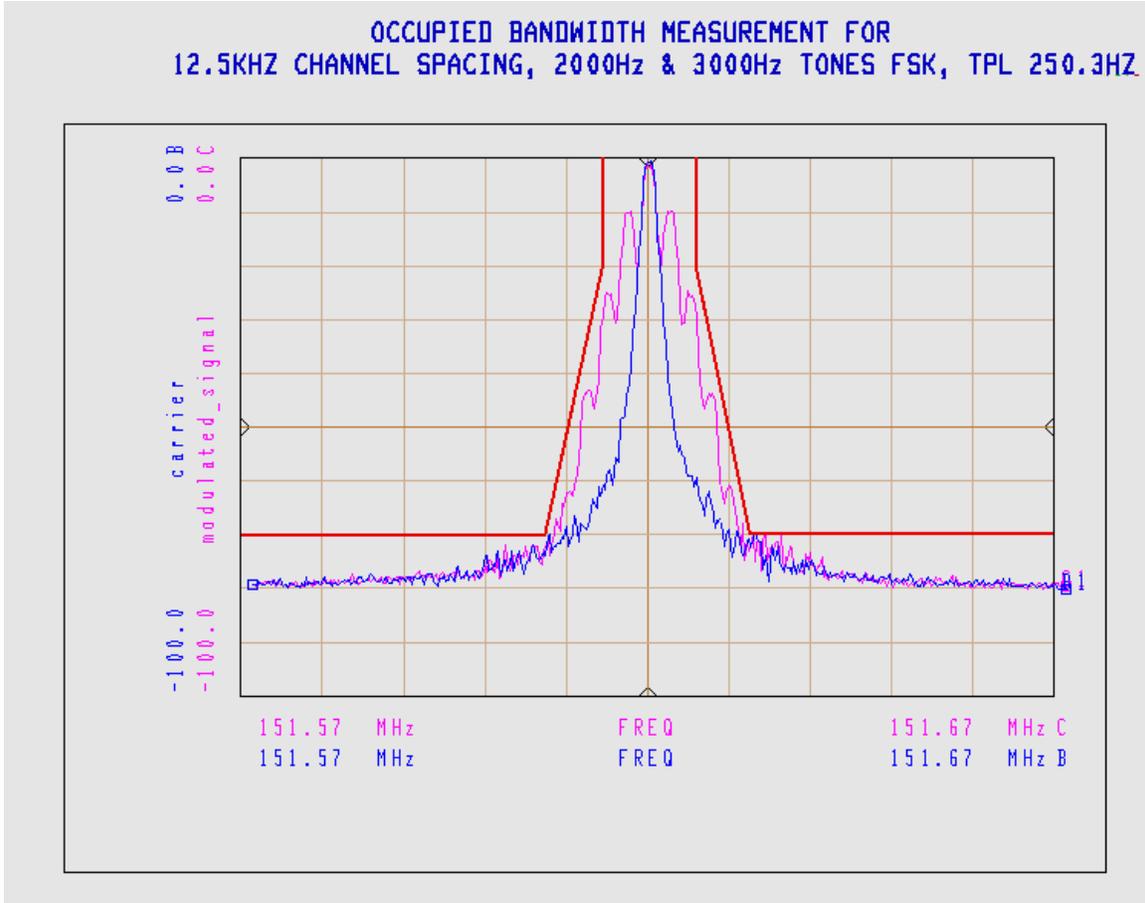
| | |
|-----------------------|-------------|
| CENTER FREQUENCY: | 151.625 MHz |
| RESOLUTION BANDWIDTH: | 300 kHz |
| VIDEO BANDWIDTH: | 300 kHz |
| SPAN: | 100 kHz |
| SWEEP TIME: | 3 Sec. |
| VERTICAL SCALE: | 10 dB/div |
| REFERENCE LEVEL: | 0 dBm |
| ATTENUATION: | 30 dB |

OCCUPIED BANDWIDTH MEASUREMENT FOR
12.5 kHz CHANNEL SPACING, 2000/3000 Hz FSK, CARRIER SQUELCH
EMISSION MASK: D



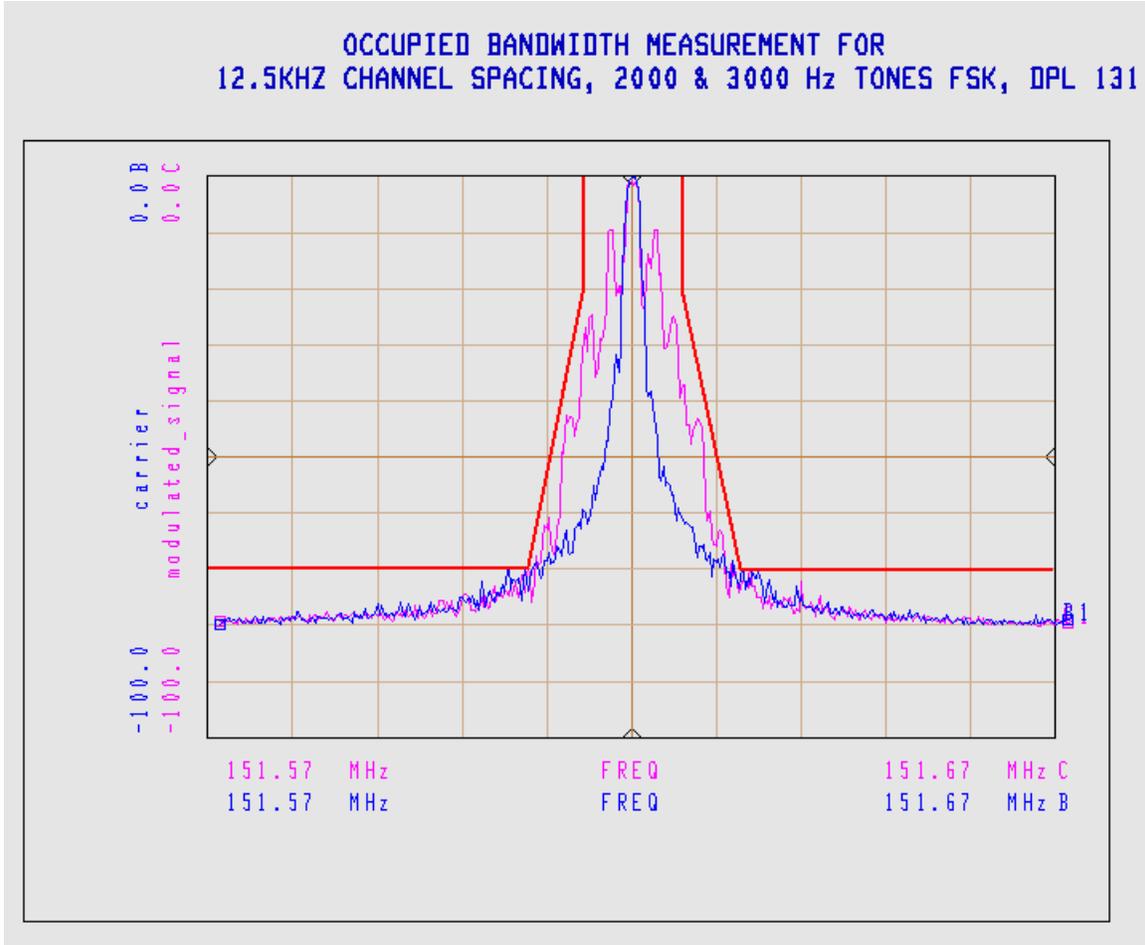
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| CENTER FREQUENCY: | 151.625 MHz |
| RESOLUTION BANDWIDTH: | 300 kHz |
| VIDEO BANDWIDTH: | 300 kHz |
| SPAN: | 100 kHz |
| SWEEP TIME: | 3 Sec. |
| VERTICAL SCALE: | 10 dB/div |
| REFERENCE LEVEL: | 0 dBm |
| ATTENUATION: | 30 dB |

OCCUPIED BANDWIDTH MEASUREMENT FOR
12.5 KHZ CHANNEL SPACING, 2000/3000 Hz FSK, PL
EMISSION MASK: D



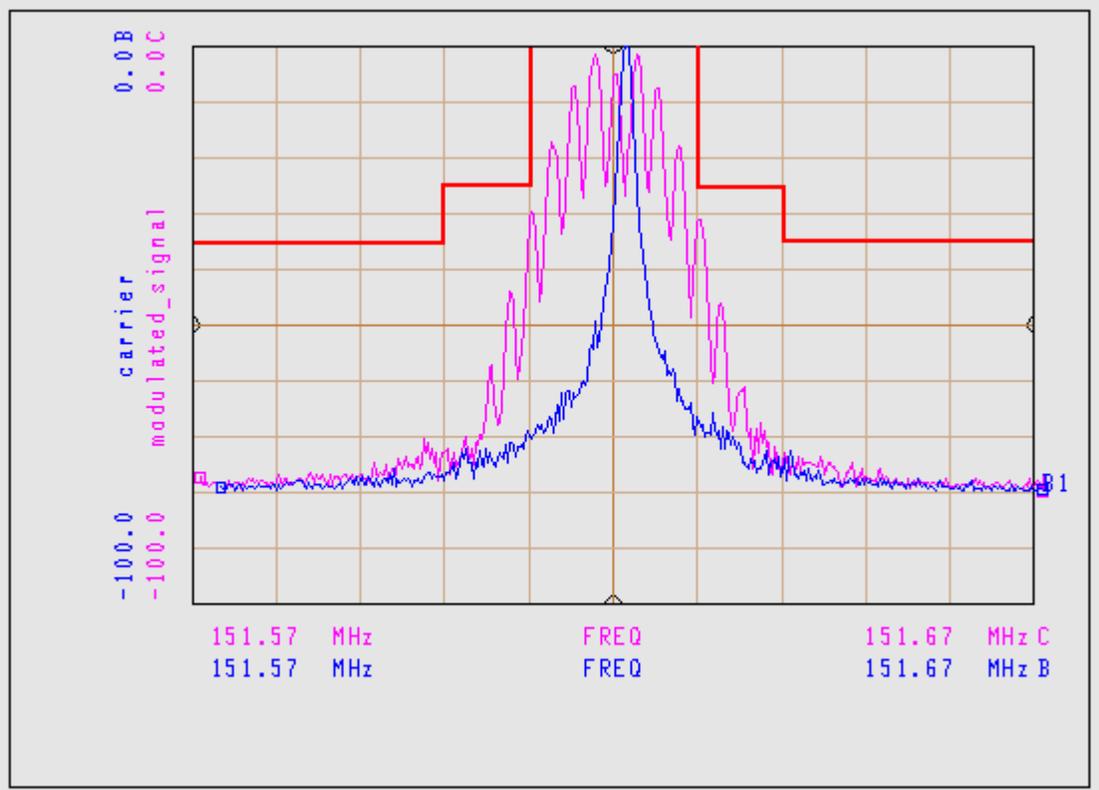
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|-----------------------|-------------|
| CENTER FREQUENCY: | 151.625 MHz |
| RESOLUTION BANDWIDTH: | 300 kHz |
| VIDEO BANDWIDTH: | 300 kHz |
| SPAN: | 100 kHz |
| SWEEP TIME: | 3 Sec. |
| VERTICAL SCALE: | 10 dB/div |
| REFERENCE LEVEL: | 0 dBm |
| ATTENUATION: | 30 dB |

OCCUPIED BANDWIDTH MEASUREMENT FOR
 12.5 KHZ CHANNEL SPACING, 2000/3000 Hz FSK, DPL
 EMISSION MASK: D



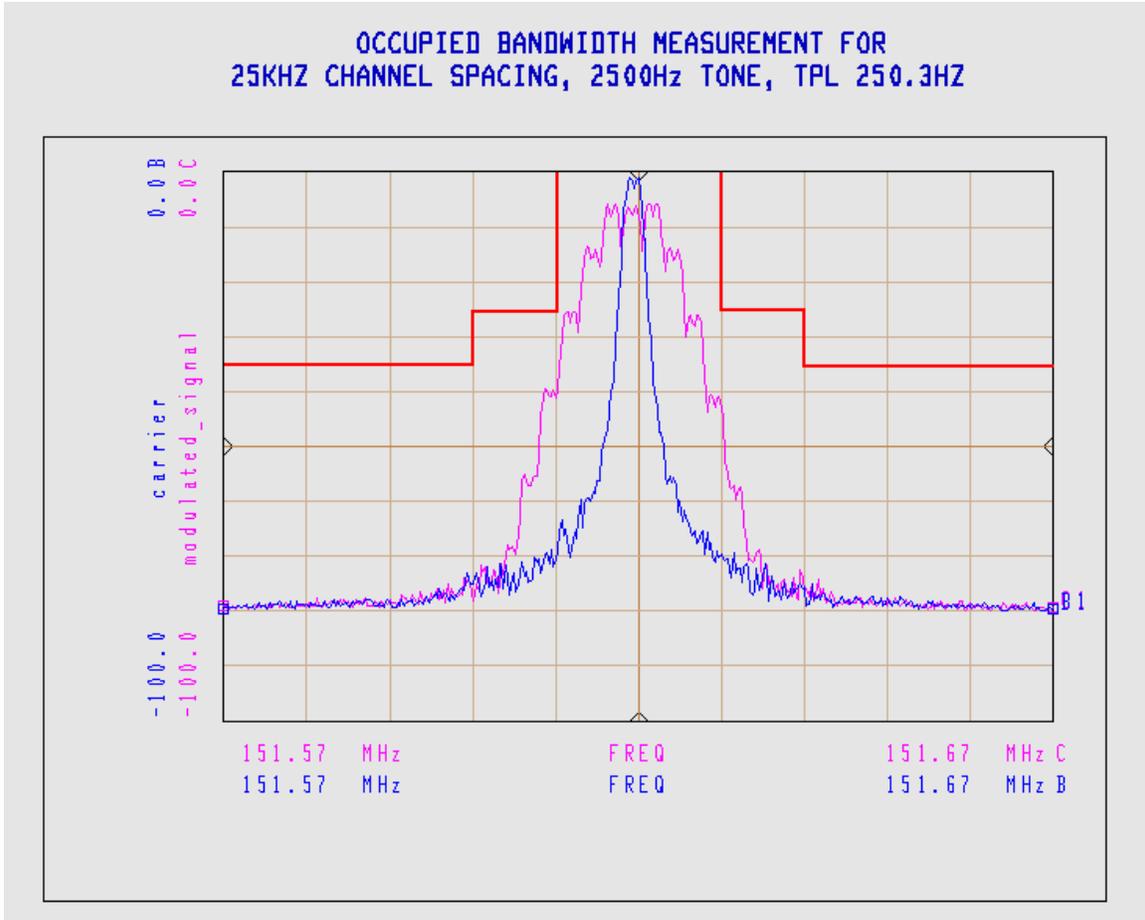
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|-----------------------|-------------|
| CENTER FREQUENCY: | 151.625 MHz |
| RESOLUTION BANDWIDTH: | 300 kHz |
| VIDEO BANDWIDTH: | 300 kHz |
| SPAN: | 100 kHz |
| SWEEP TIME: | 3 Sec. |
| VERTICAL SCALE: | 10 dB/div |
| REFERENCE LEVEL: | 0 dBm |
| ATTENUATION: | 30 dB |

OCCUPIED BANDWIDTH MEASUREMENT FOR
25 kHz CHANNEL SPACING, 2500 Hz TONE, CARRIER SQUELCH
EMISSION MASK: B



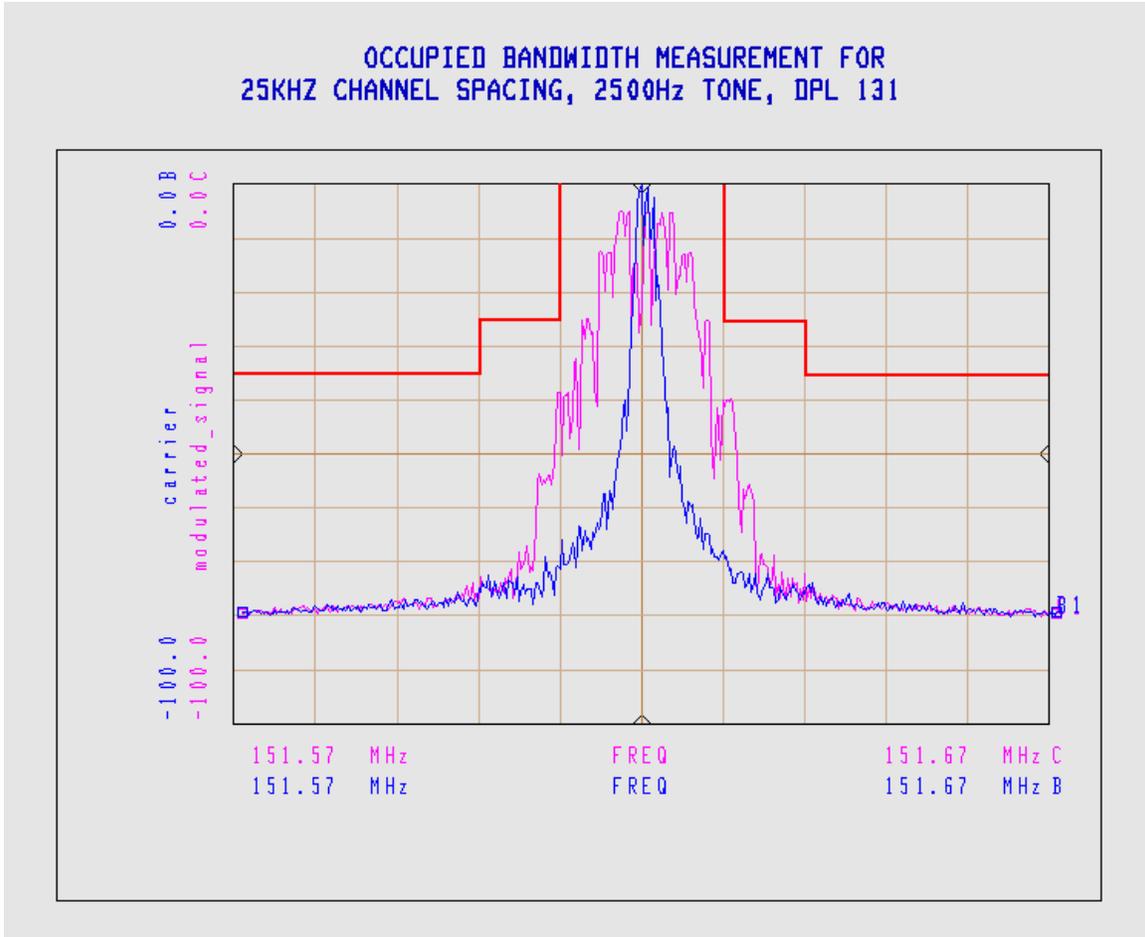
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|-----------------------|-------------|
| CENTER FREQUENCY: | 151.625 MHz |
| RESOLUTION BANDWIDTH: | 300 kHz |
| VIDEO BANDWIDTH: | 300 kHz |
| SPAN: | 100 kHz |
| SWEEP TIME: | 3 Sec. |
| VERTICAL SCALE: | 10 dB/div |
| REFERENCE LEVEL: | 0 dBm |
| ATTENUATION: | 30 dB |

OCCUPIED BANDWIDTH MEASUREMENT FOR
 25 kHz CHANNEL SPACING, 2500 Hz TONE, PL
 EMISSION MASK: B



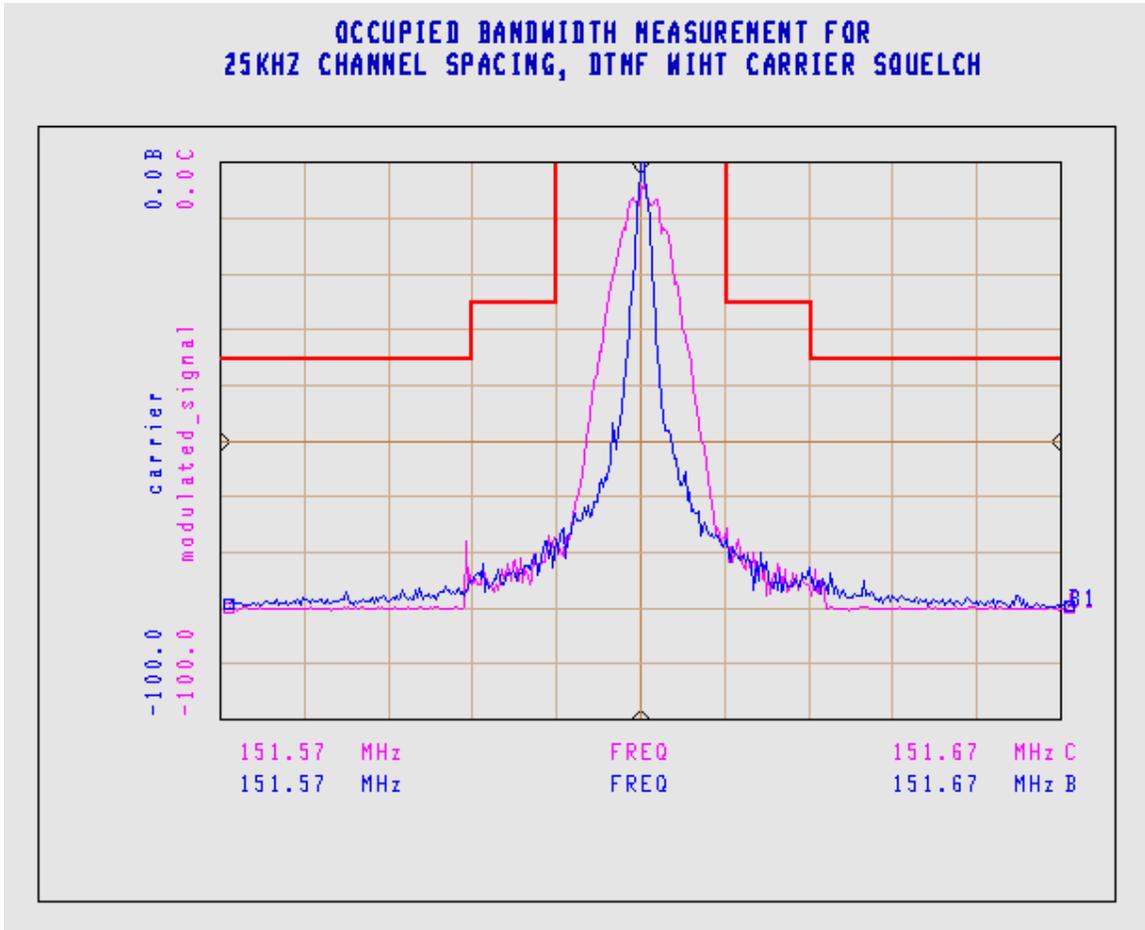
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|-----------------------|-------------|
| CENTER FREQUENCY: | 151.625 MHz |
| RESOLUTION BANDWIDTH: | 300 kHz |
| VIDEO BANDWIDTH: | 300 kHz |
| SPAN: | 100 kHz |
| SWEEP TIME: | 3 Sec. |
| VERTICAL SCALE: | 10 dB/div |
| REFERENCE LEVEL: | 0 dBm |
| ATTENUATION: | 30 dB |

OCCUPIED BANDWIDTH MEASUREMENT FOR
25 kHz CHANNEL SPACING, 2500 Hz TONE, DPL
EMISSION MASK: B



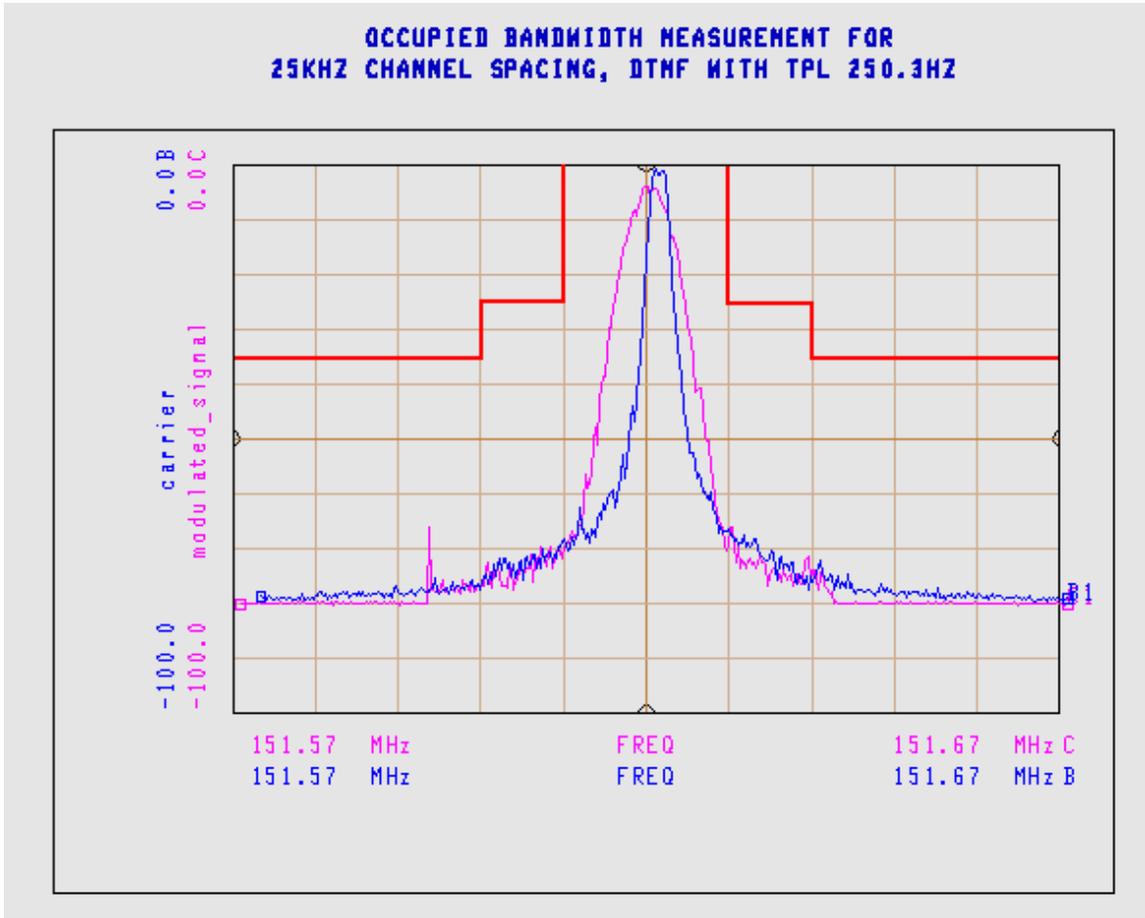
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|-----------------------|-------------|
| CENTER FREQUENCY: | 151.625 MHz |
| RESOLUTION BANDWIDTH: | 300 kHz |
| VIDEO BANDWIDTH: | 300 kHz |
| SPAN: | 100 kHz |
| SWEEP TIME: | 3 Sec. |
| VERTICAL SCALE: | 10 dB/div |
| REFERENCE LEVEL: | 0 dBm |
| ATTENUATION: | 30 dB |

OCCUPIED BANDWIDTH MEASUREMENT FOR
25 kHz CHANNEL SPACING, DTMF MODULATION, CARRIER SQUELCH
EMISSION MASK: B



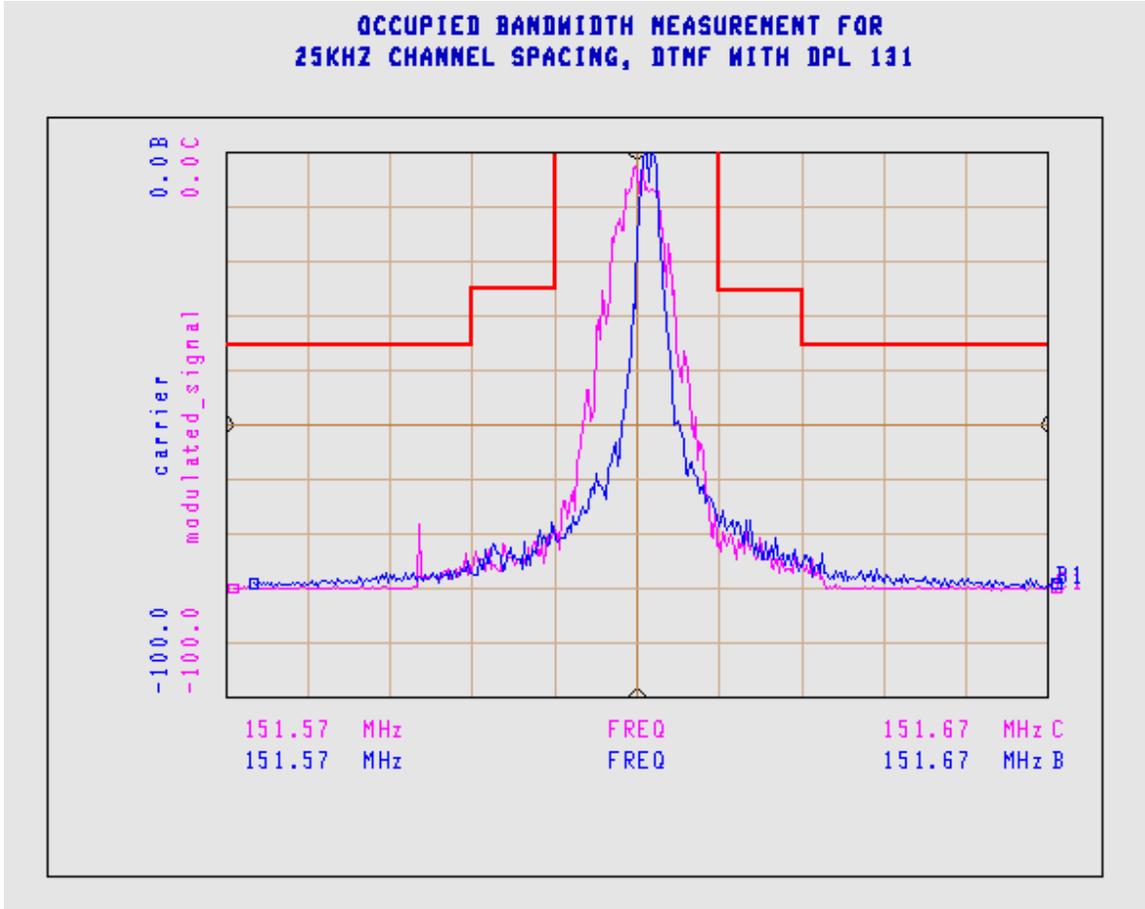
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|-----------------------|-------------|
| CENTER FREQUENCY: | 151.625 MHz |
| RESOLUTION BANDWIDTH: | 300 kHz |
| VIDEO BANDWIDTH: | 300 kHz |
| SPAN: | 100 kHz |
| SWEEP TIME: | 3 Sec. |
| VERTICAL SCALE: | 10 dB/div |
| REFERENCE LEVEL: | 0 dBm |
| ATTENUATION: | 30 dB |

OCCUPIED BANDWIDTH MEASUREMENT FOR
25 KHZ CHANNEL SPACING, DTMF MODULATION, PL
EMISSION MASK: B



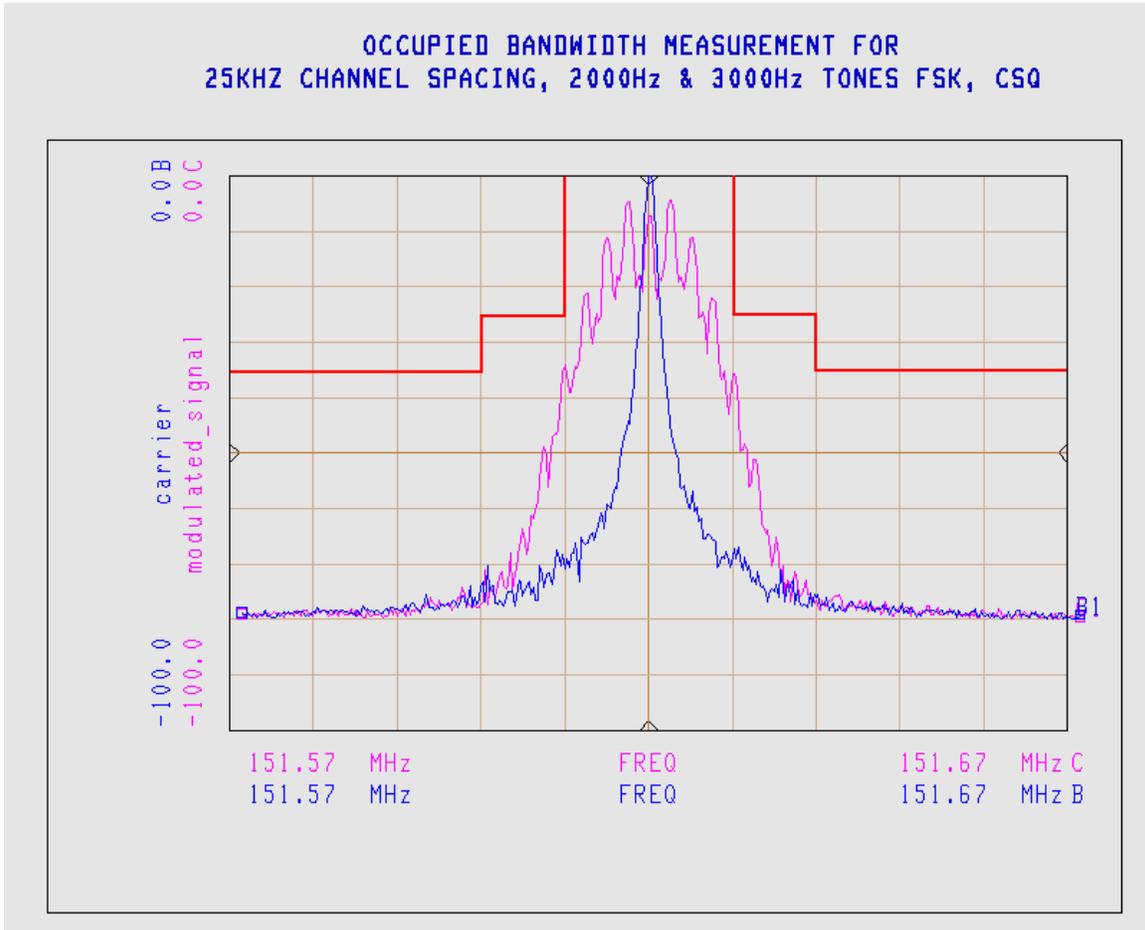
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|-----------------------|-------------|
| CENTER FREQUENCY: | 151.625 MHz |
| RESOLUTION BANDWIDTH: | 300 kHz |
| VIDEO BANDWIDTH: | 300 kHz |
| SPAN: | 100 kHz |
| SWEEP TIME: | 3 Sec. |
| VERTICAL SCALE: | 10 dB/div |
| REFERENCE LEVEL: | 0 dBm |
| ATTENUATION: | 30 dB |

OCCUPIED BANDWIDTH MEASUREMENT FOR
25 KHZ CHANNEL SPACING, DTMF MODULATION, DPL
EMISSION MASK: B



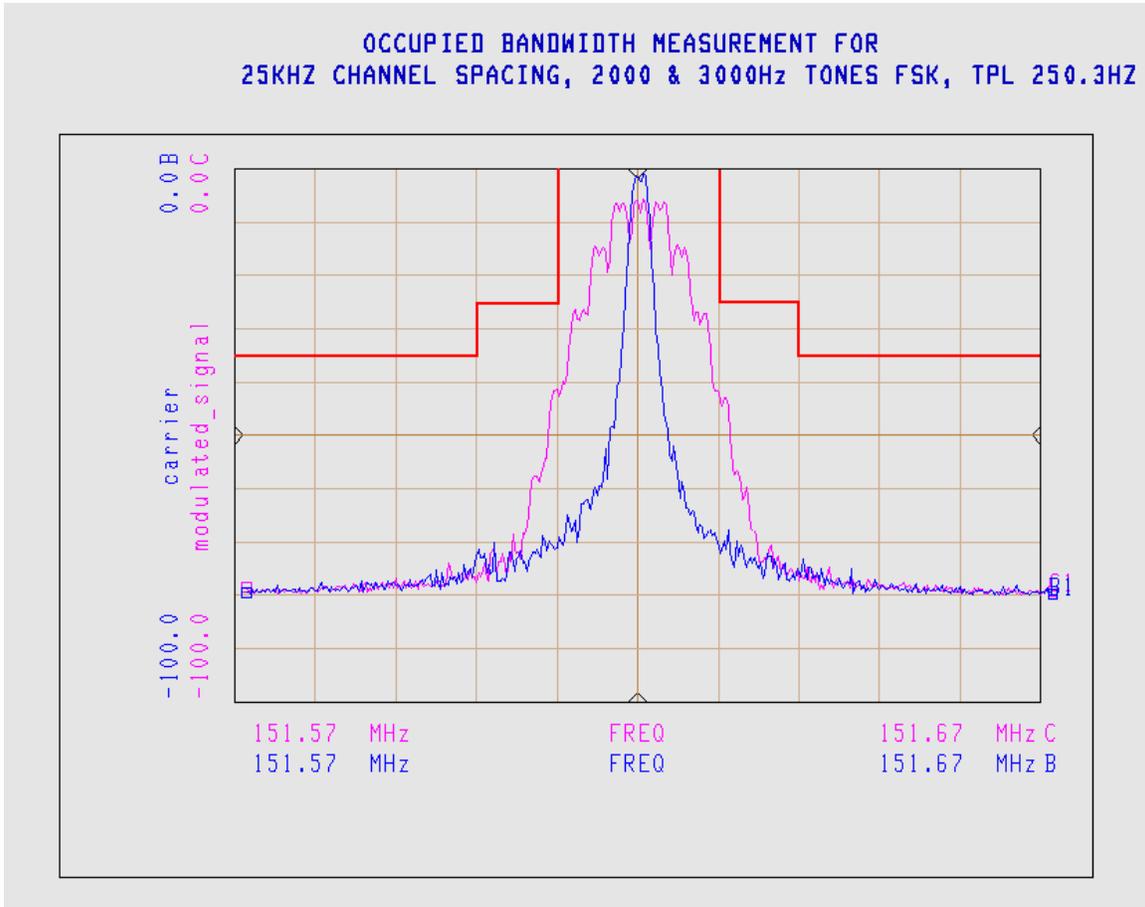
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|-----------------------|-------------|
| CENTER FREQUENCY: | 151.625 MHz |
| RESOLUTION BANDWIDTH: | 300 kHz |
| VIDEO BANDWIDTH: | 300 kHz |
| SPAN: | 100 kHz |
| SWEEP TIME: | 3 Sec. |
| VERTICAL SCALE: | 10 dB/div |
| REFERENCE LEVEL: | 0 dBm |
| ATTENUATION: | 30 dB |

**OCCUPIED BANDWIDTH MEASUREMENT FOR
25 kHz CHANNEL SPACING, 2000/3000 Hz FSK, CARRIER SQUELCH
EMISSION MASK: B**



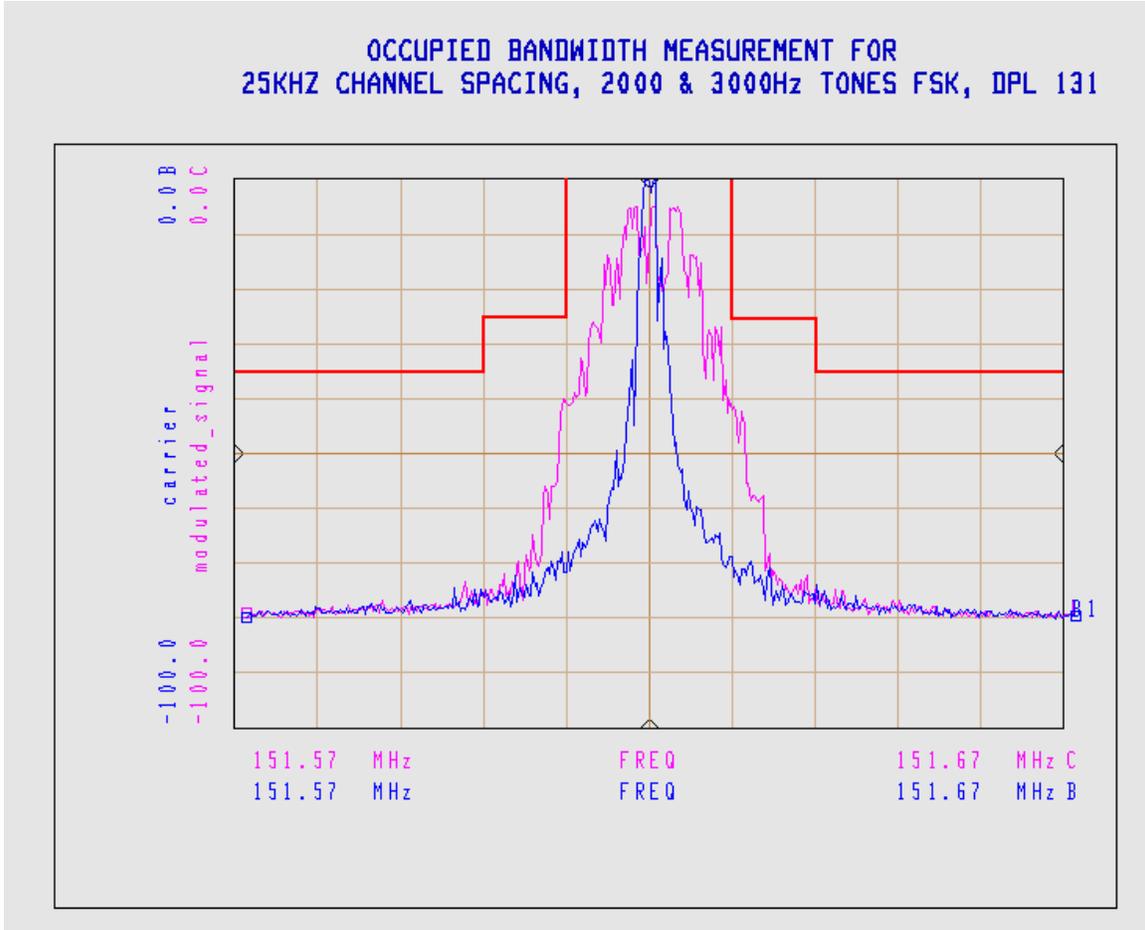
| | |
|-----------------------|-------------|
| CENTER FREQUENCY: | 151.625 MHz |
| RESOLUTION BANDWIDTH: | 300 kHz |
| VIDEO BANDWIDTH: | 300 kHz |
| SPAN: | 100 kHz |
| SWEEP TIME: | 3 Sec. |
| VERTICAL SCALE: | 10 dB/div |
| REFERENCE LEVEL: | 0 dBm |
| ATTENUATION: | 30 dB |

OCCUPIED BANDWIDTH MEASUREMENT FOR
25 KHZ CHANNEL SPACING, 2000/3000 Hz FSK, PL
EMISSION MASK: B



| | |
|-----------------------|-------------|
| CENTER FREQUENCY: | 151.625 MHz |
| RESOLUTION BANDWIDTH: | 300 kHz |
| VIDEO BANDWIDTH: | 300 kHz |
| SPAN: | 100 kHz |
| SWEEP TIME: | 3 Sec. |
| VERTICAL SCALE: | 10 dB/div |
| REFERENCE LEVEL: | 0 dBm |
| ATTENUATION: | 30 dB |

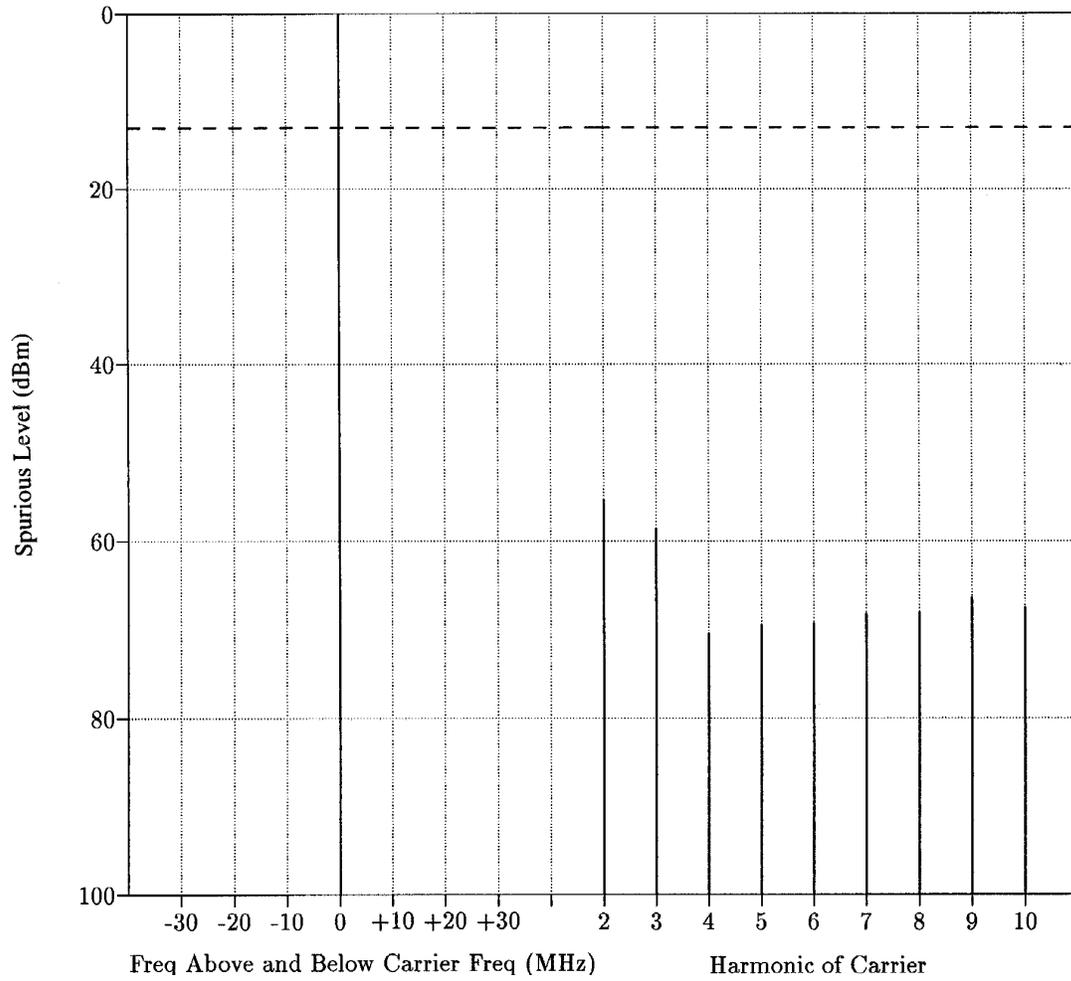
OCCUPIED BANDWIDTH MEASUREMENT FOR
25 kHz CHANNEL SPACING, 2000/3000 Hz FSK, DPL
EMISSION MASK: B



| | |
|-----------------------|-------------|
| CENTER FREQUENCY: | 151.625 MHz |
| RESOLUTION BANDWIDTH: | 300 kHz |
| VIDEO BANDWIDTH: | 300 kHz |
| SPAN: | 100 kHz |
| SWEEP TIME: | 3 Sec. |
| VERTICAL SCALE: | 10 dB/div |
| REFERENCE LEVEL: | 0 dBm |
| ATTENUATION: | 30 dB |

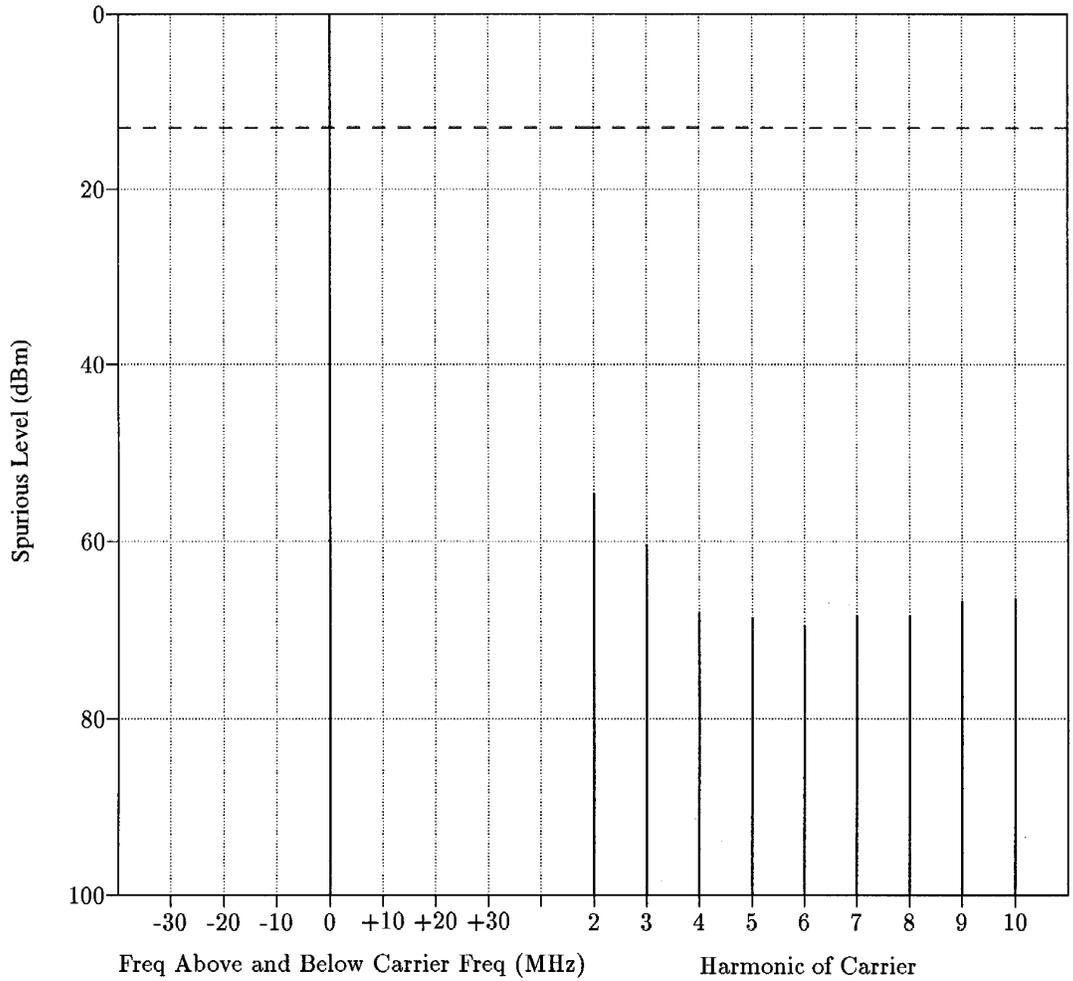
**CONDUCTED SPURIOUS EMISSIONS
HIGH POWER, 136.000 MHz**

Transmitter Type: See Above
Power Output: 54.00W at 136.000MHz



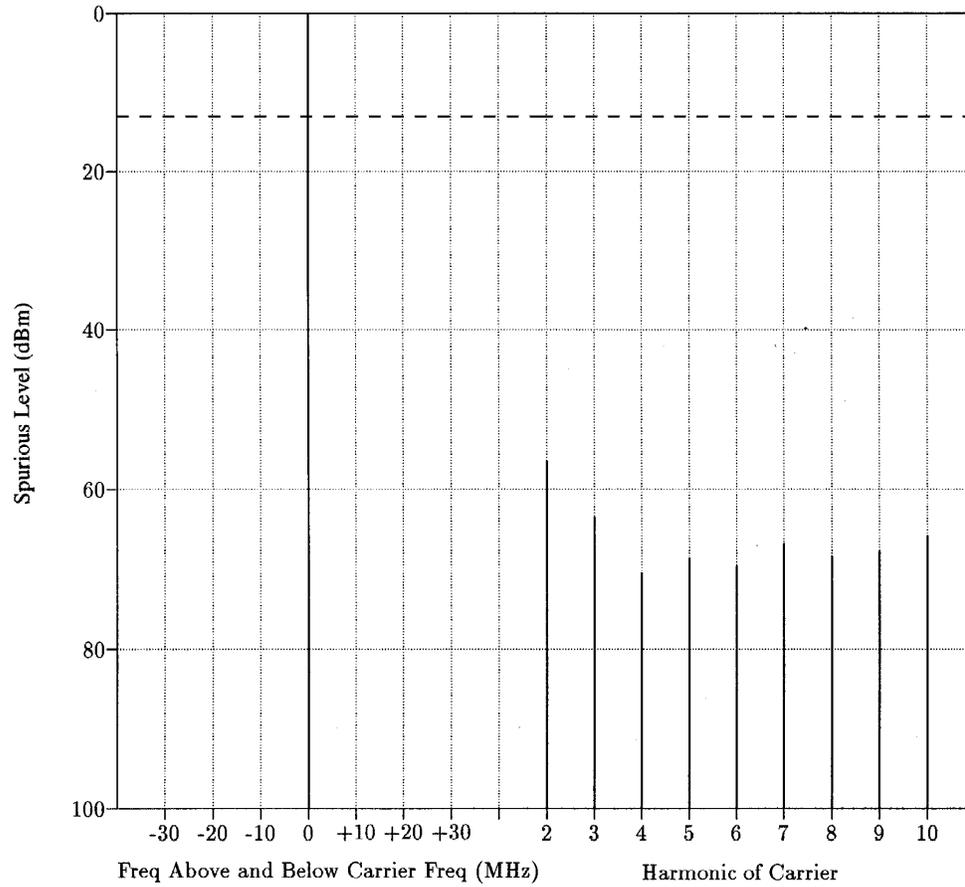
**CONDUCTED SPURIOUS EMISSIONS
HIGH POWER, 155.000 MHz**

Transmitter Type: See Above
Power Output: 54.00W at 155.000MHz



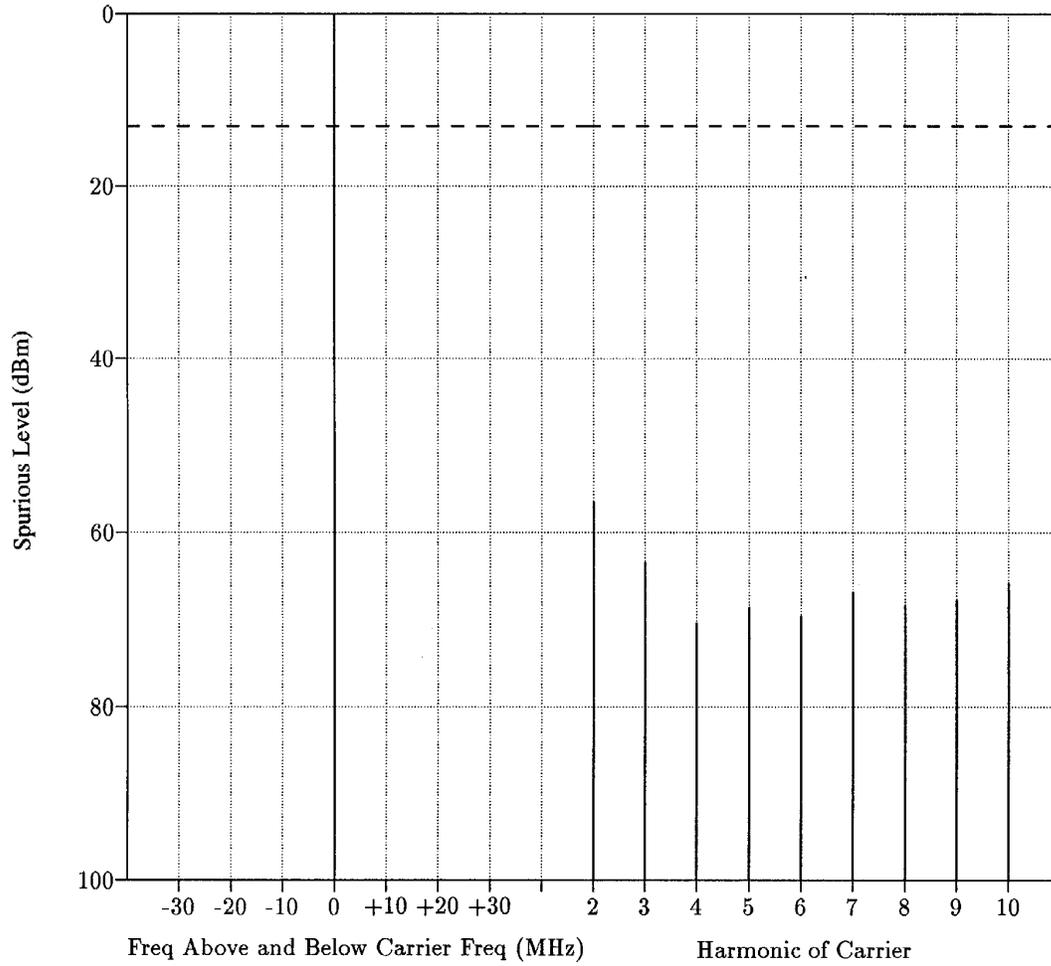
**CONDUCTED SPURIOUS EMISSIONS
HIGH POWER, 174.000 MHz**

Transmitter Type: See Above
Power Output: 54.00W at 174.000MHz



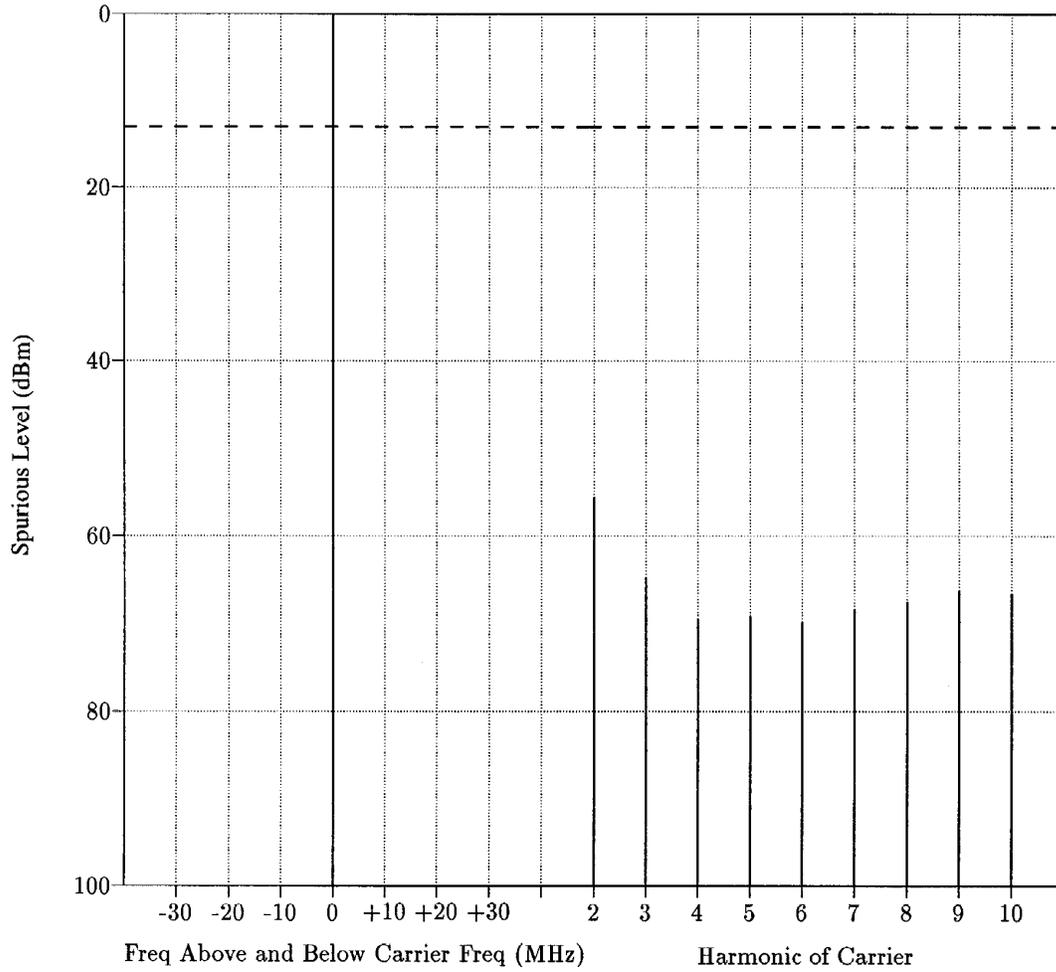
**CONDUCTED SPURIOUS EMISSIONS
LOW POWER, 136.000 MHz**

Transmitter Type: See Above
Power Output: 25.00W at 136.000MHz



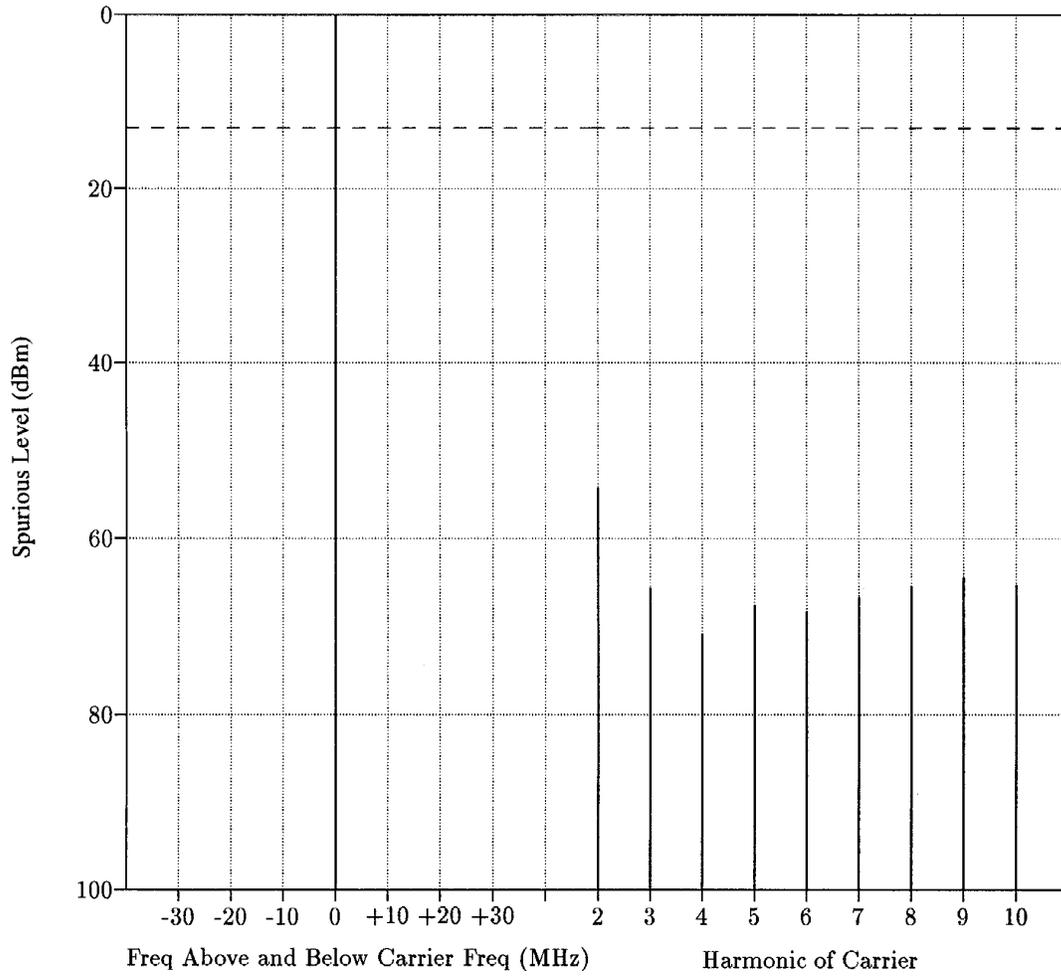
**CONDUCTED SPURIOUS EMISSIONS
LOW POWER, 155.000 MHz**

Transmitter Type: See Above
Power Output: 25.00W at 155.000MHz



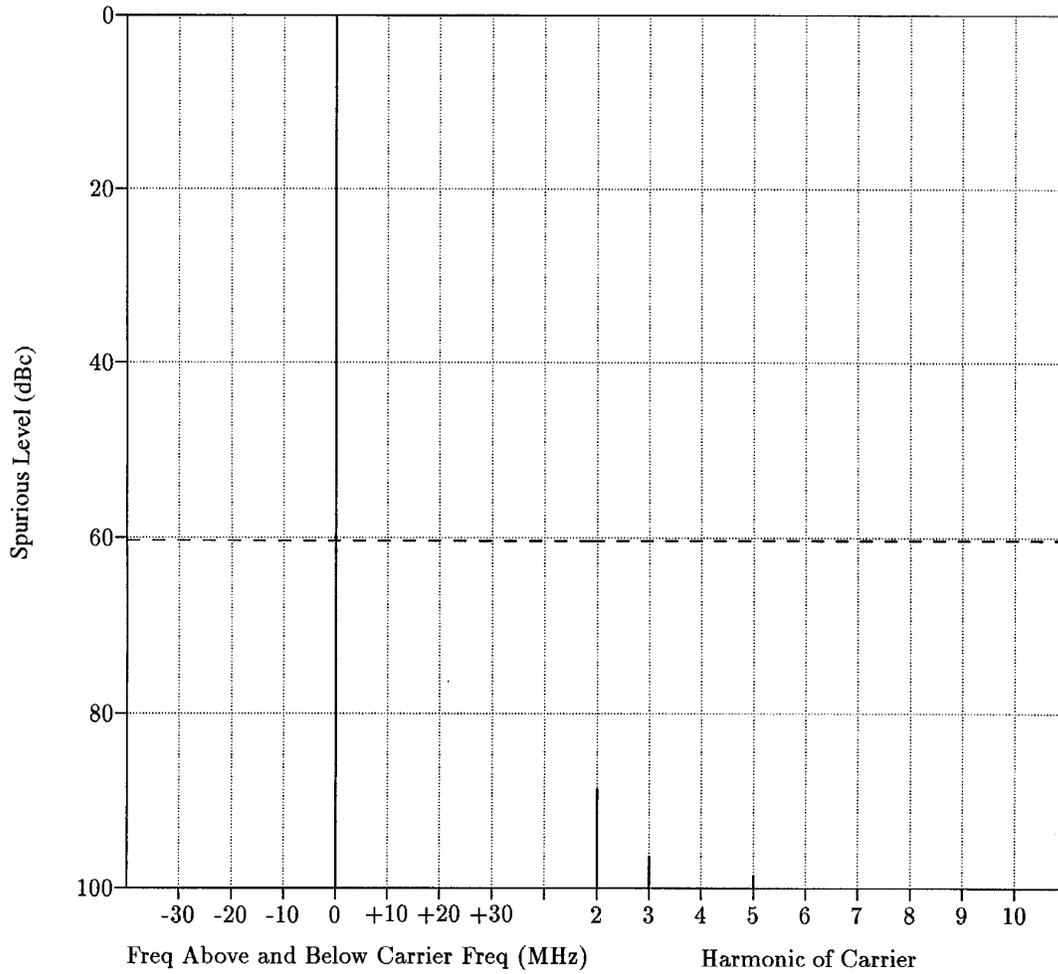
**CONDUCTED SPURIOUS EMISSIONS
LOW POWER, 174.000 MHz**

Transmitter Type: See Above
Power Output: 25.00W at 174.000MHz



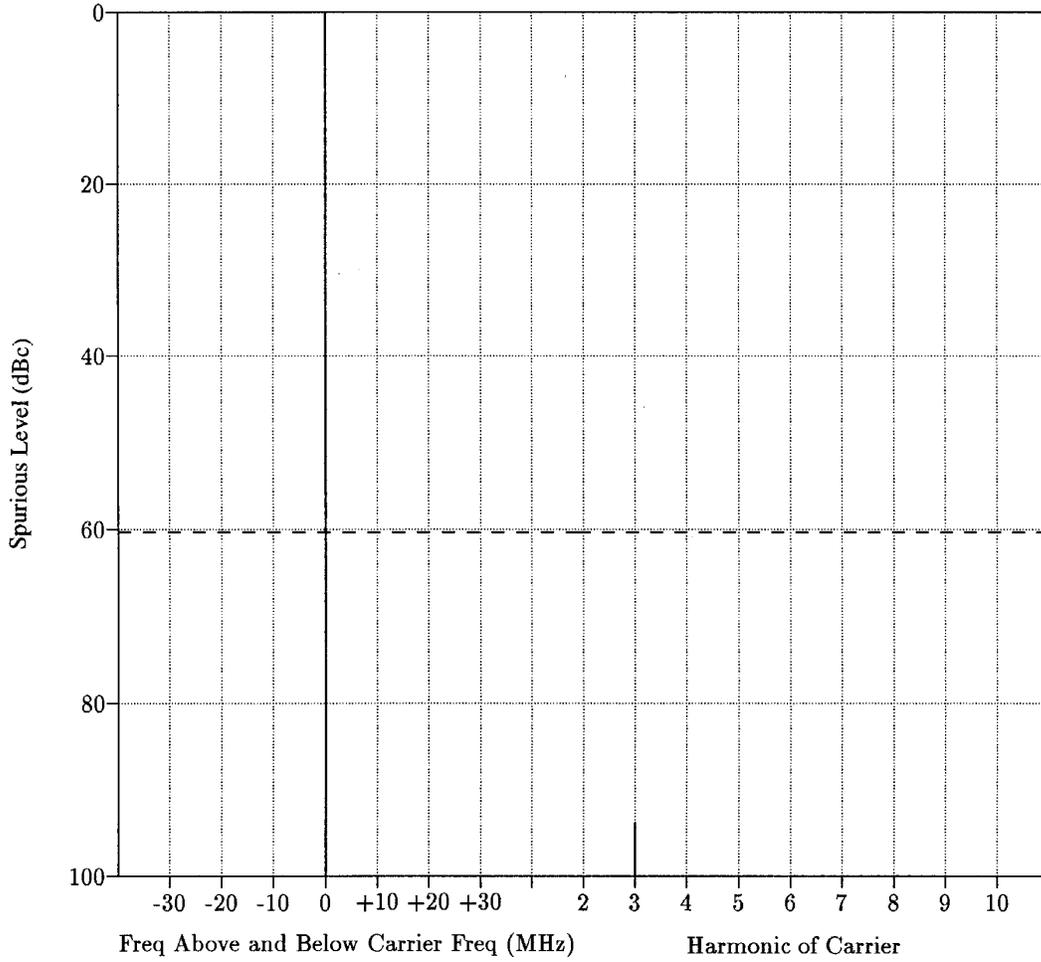
**RADIATED SPURIOUS EMISSIONS
HIGH POWER, 150.000 MHz, HORIZONTAL POLARIZATION**

**Antenna Polarization: HORIZONTAL
Power Output: 54.00W at 150.000MHz**



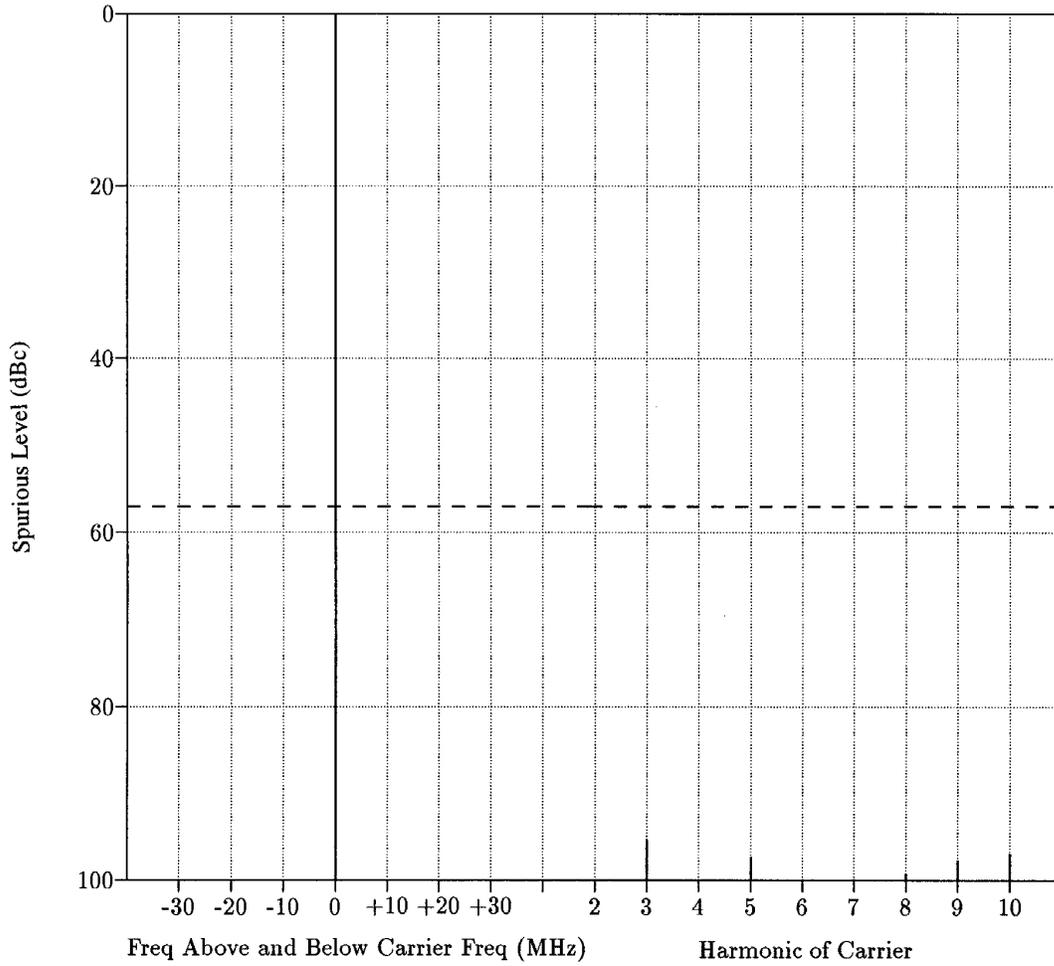
**RADIATED SPURIOUS EMISSIONS
HIGH POWER, 150.000 MHz, VERTICAL POLARIZATION**

**Antenna Polarization: VERTICAL
Power Output: 54.00W at 150.000MHz**



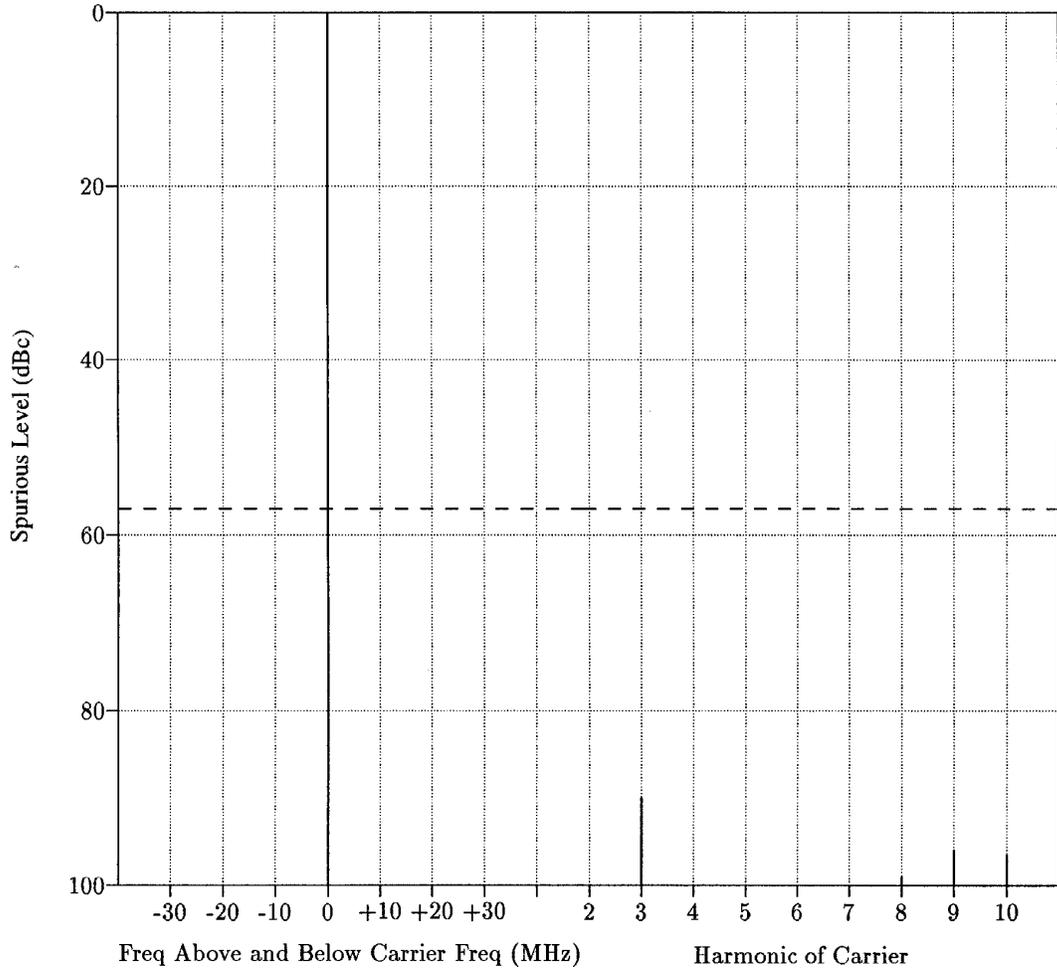
**RADIATED SPURIOUS EMISSIONS
LOW POWER, 150.000 MHz, HORIZONTAL POLARIZATION**

**Antenna Polarization: HORIZONTAL
Power Output: 25.00W at 150.0000MHz**

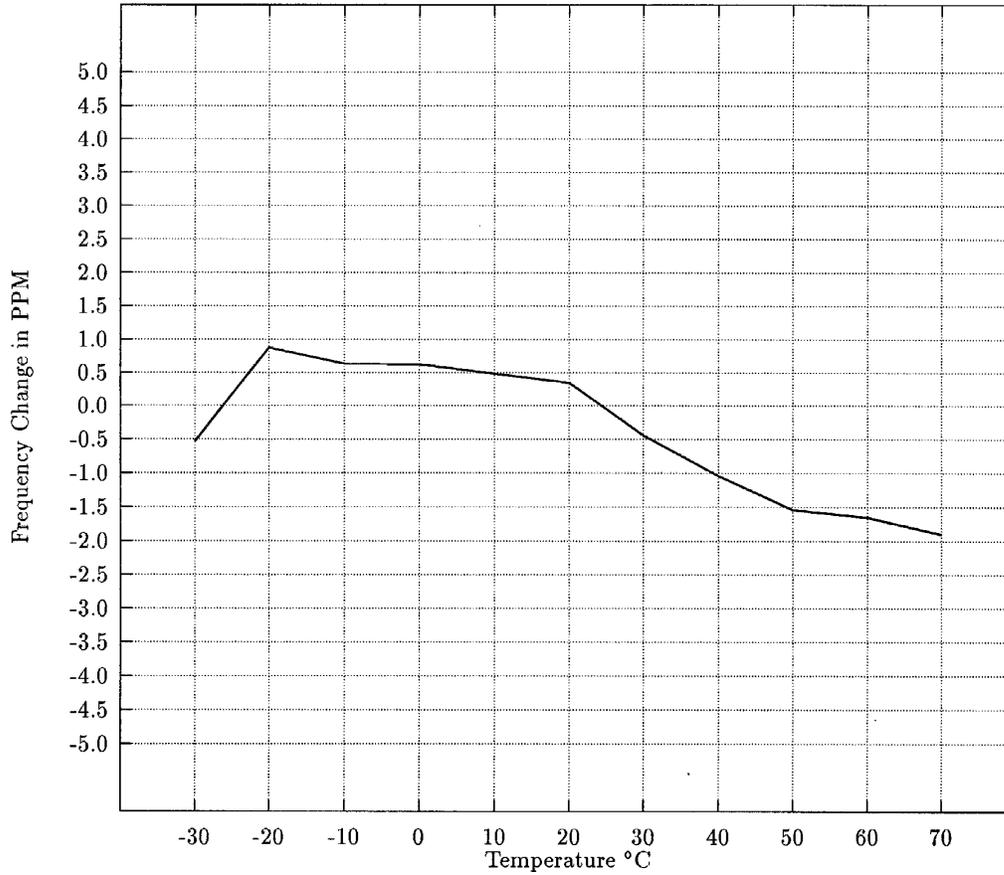


**RADIATED SPURIOUS EMISSIONS
LOW POWER, 150.000 MHz, VERTICAL POLARIZATION**

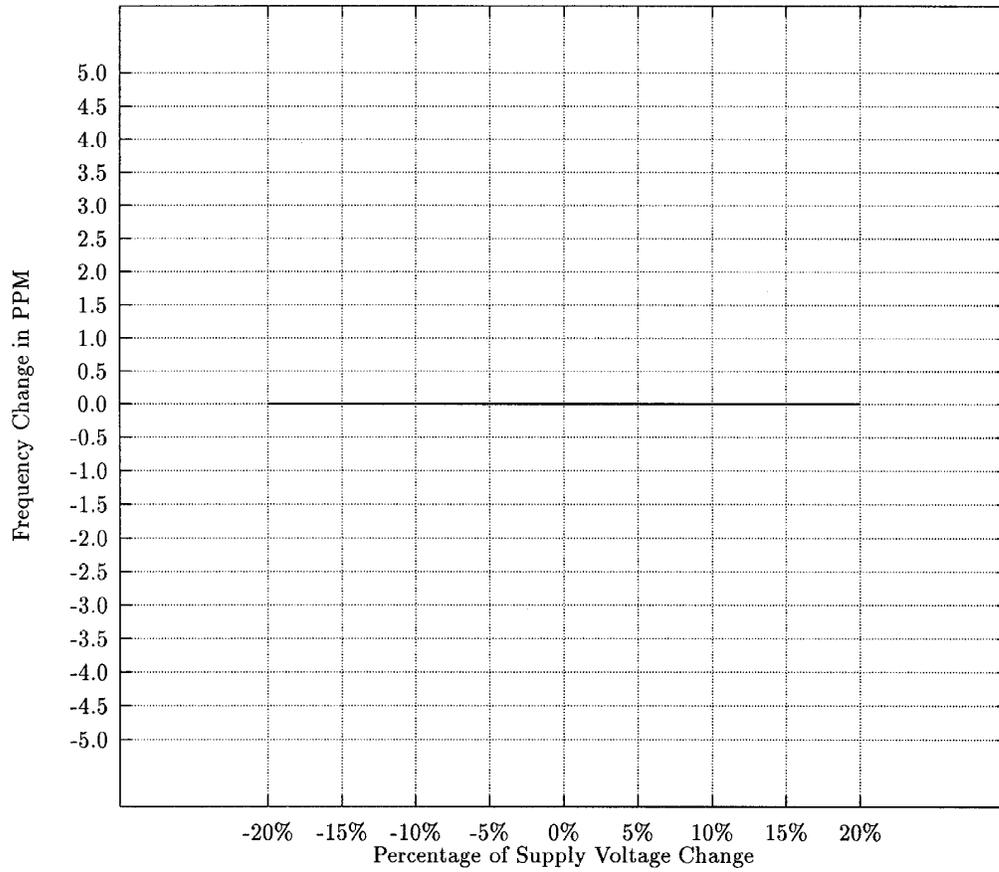
Antenna Polarization: **VERTICAL**
Power Output: **25.00W at 150.000MHz**



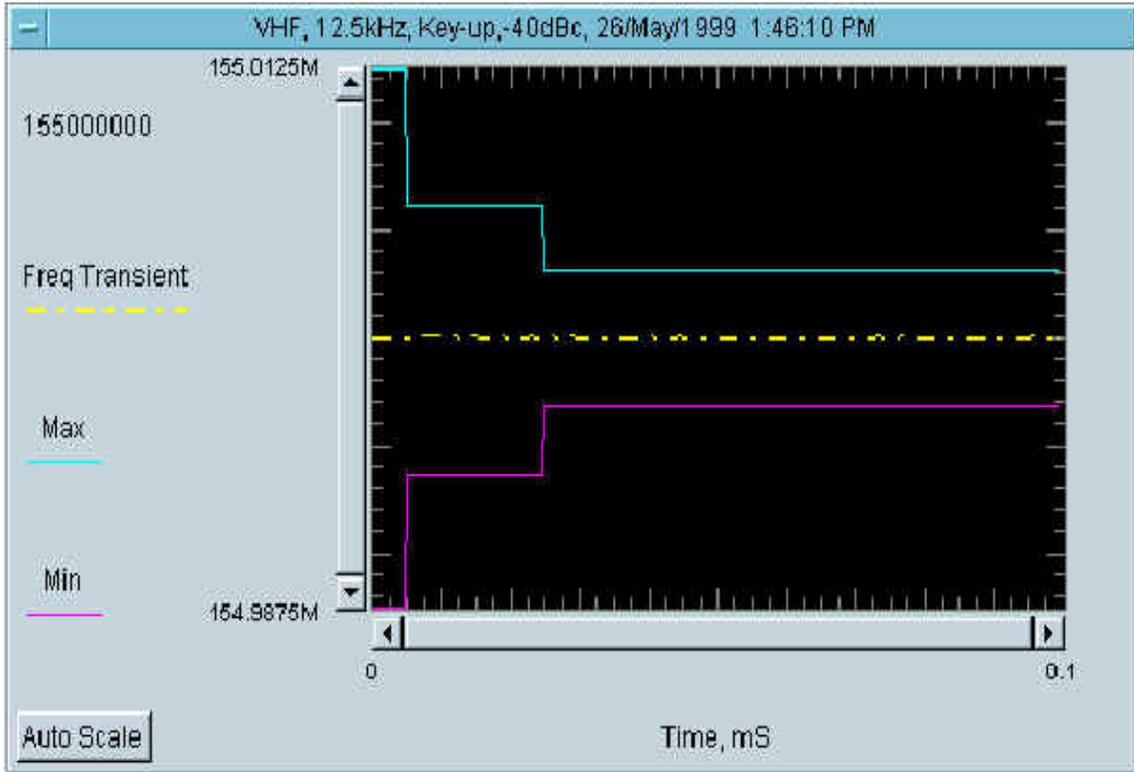
FREQUENCY STABILITY VS. TEMPERATURE
SPECIFIED LIMITS: ± 2.5 PPM (-30 TO +60 DEGREES C)



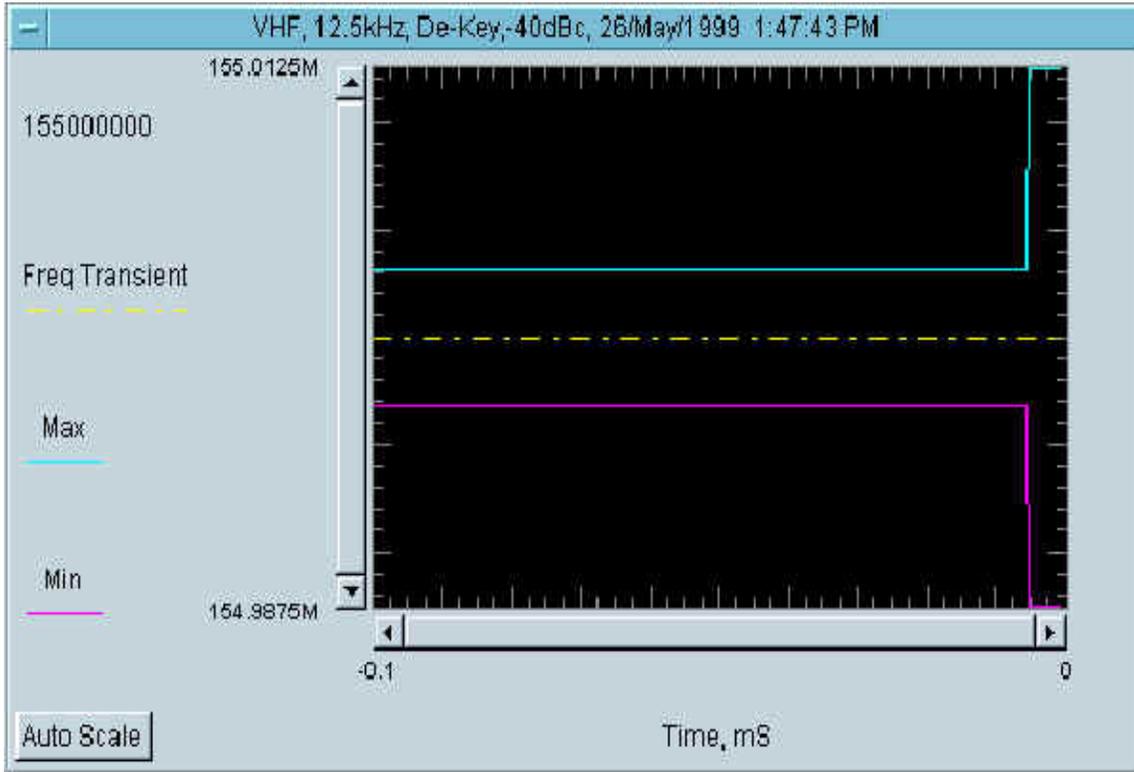
FREQUENCY STABILITY VS. SUPPLY VOLTAGE
REFERENCE 0% = 13.6 VOLTS DC



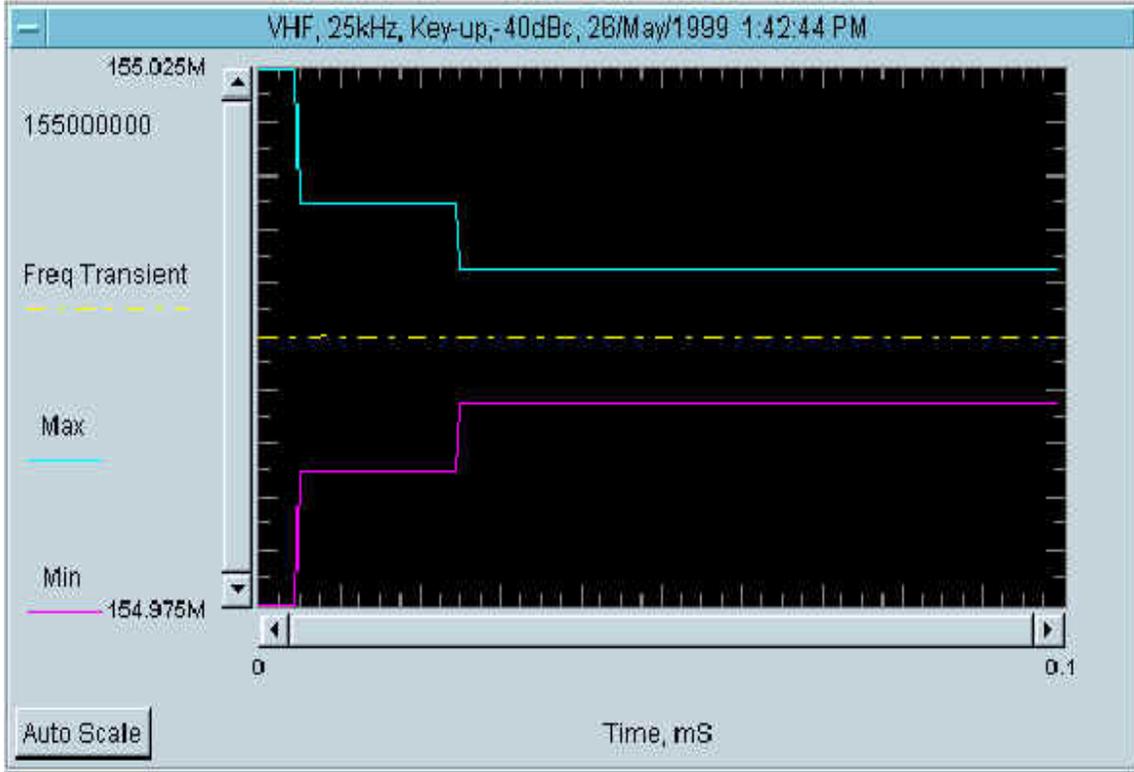
TRANSIENT FREQUENCY BEHAVIOR
54 WATTS, 155 MHz, 12.5 kHz, KEY-UP



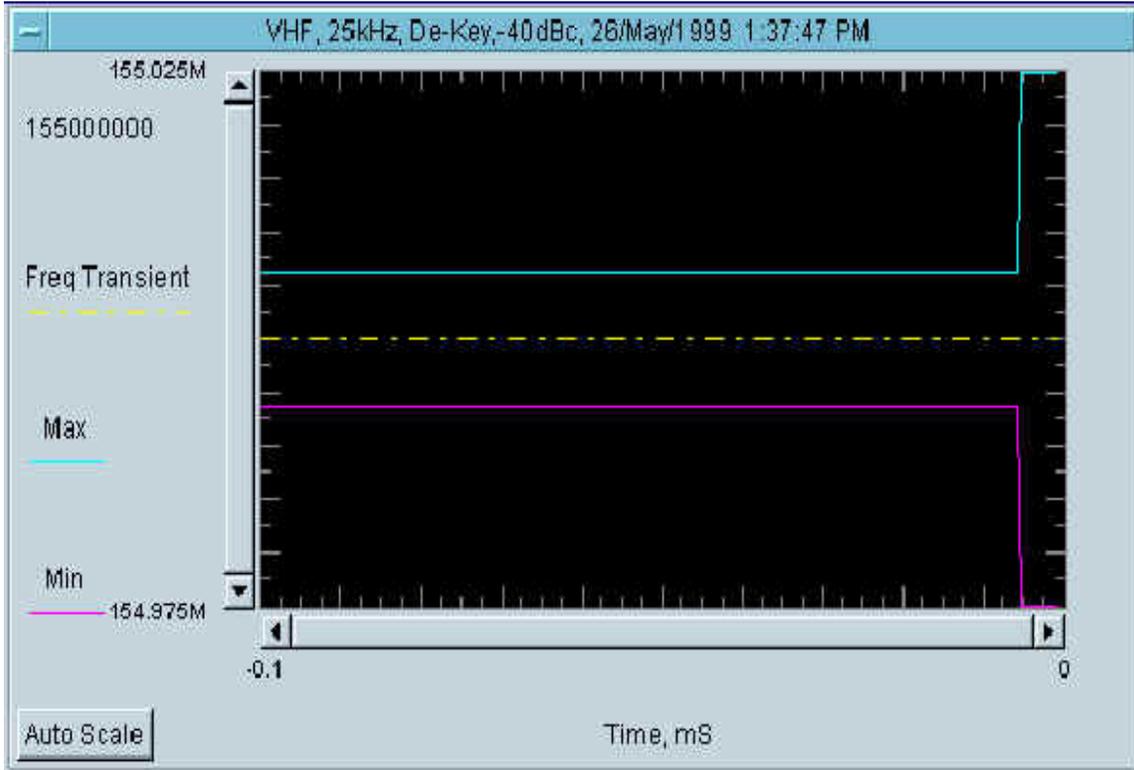
TRANSIENT FREQUENCY BEHAVIOR
54 WATTS, 155 MHz, 12.5 kHz, DE-KEY



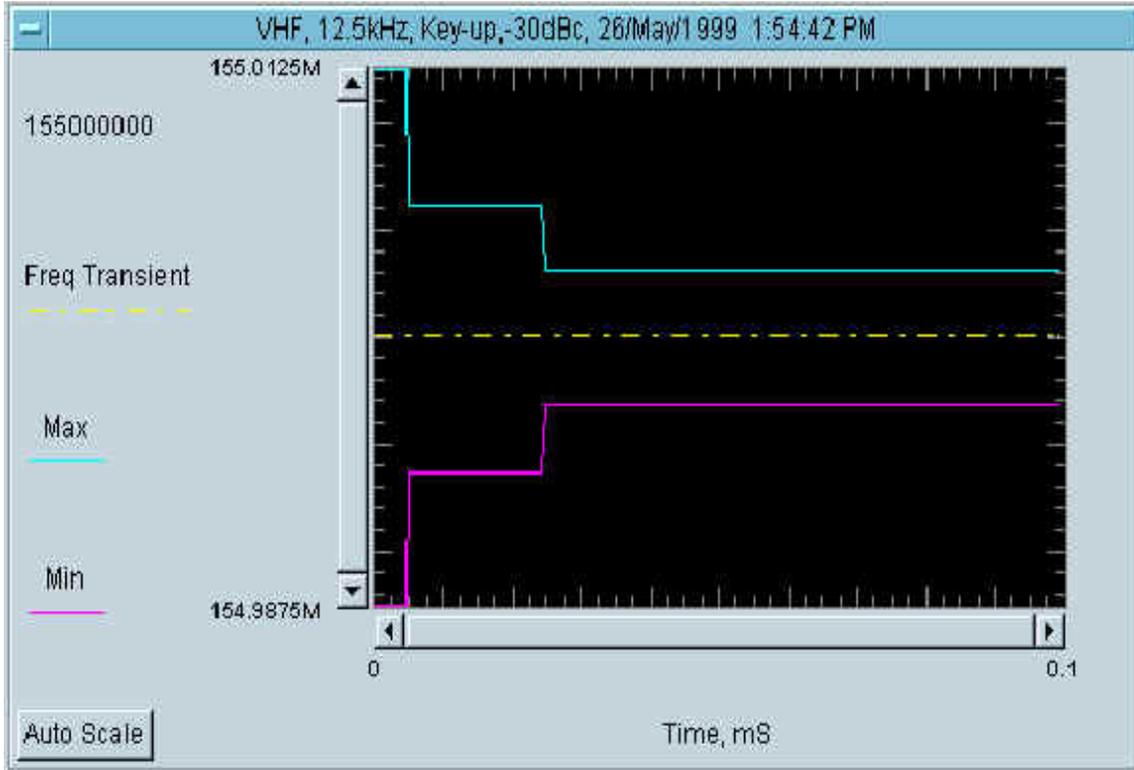
TRANSIENT FREQUENCY BEHAVIOR
54 WATTS, 155 MHz, 25 kHz, KEY-UP



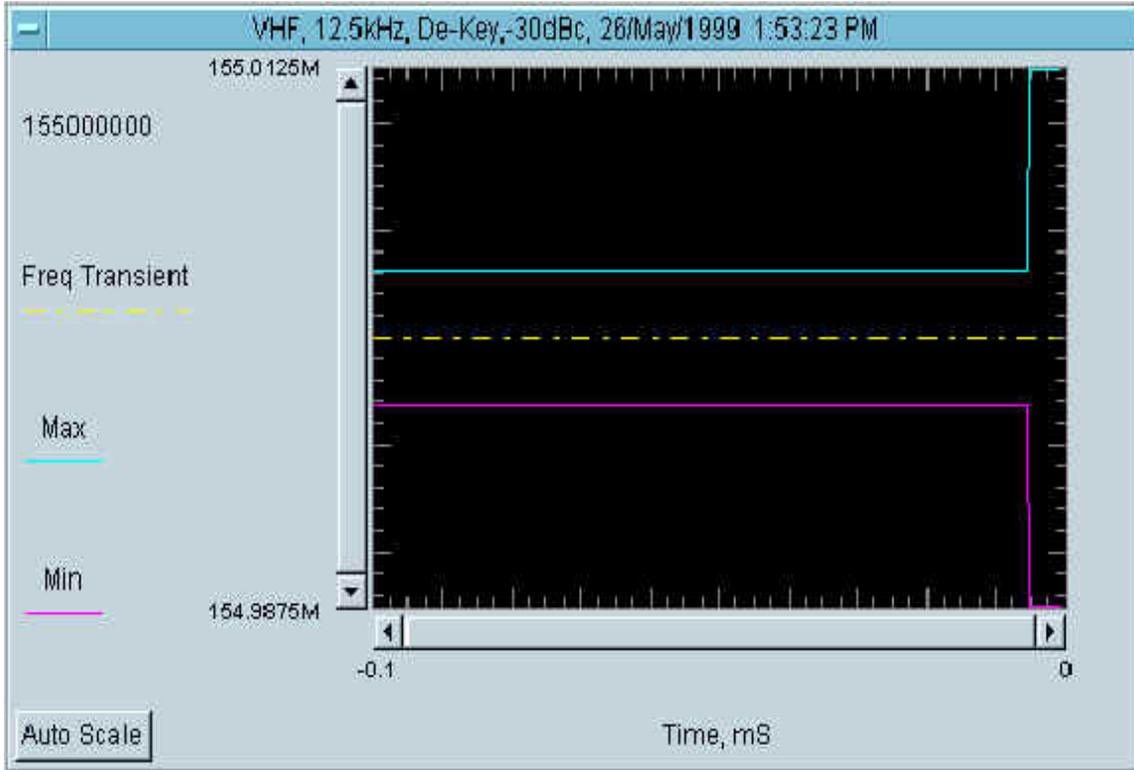
TRANSIENT FREQUENCY BEHAVIOR
54 WATTS, 155 MHz, 25 kHz, DE-KEY



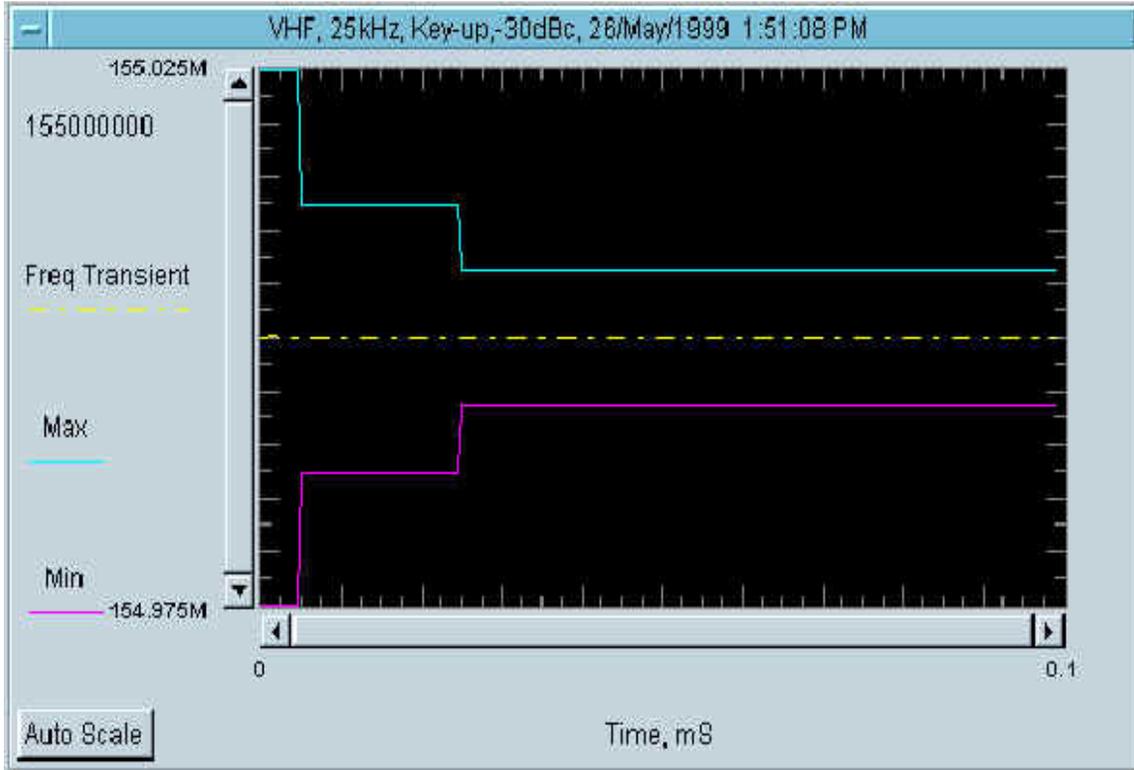
**TRANSIENT FREQUENCY BEHAVIOR
25 WATTS, 155 MHz, 12.5 kHz, KEY-UP**



**TRANSIENT FREQUENCY BEHAVIOR
25 WATTS, 155 MHz, 12.5 kHz, DE-KEY**



TRANSIENT FREQUENCY BEHAVIOR
25 WATTS, 155 MHz, 25 kHz, KEY-UP



TRANSIENT FREQUENCY BEHAVIOR
25 WATTS, 155 MHz, 25 kHz, DE-KEY

