

INDEX OF SUBMITTED MEASURED DATA

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

EXHIBIT 6A - RF Power Output (5 Tables)

- 6A-1 – Conducted, 746.500, 763.000 and 776.500 MHz
- 6A-2 – Conducted, 793.000 MHz
- 6A-3 – ERP, 746.000 and 762.000 MHz
- 6A-4 – ERP, 776.000 and 794.000 MHz

EXHIBIT 6B - Transmit Audio Response**EXHIBIT 6C - Transmit Audio Post Limiter Lowpass Filter Response****EXHIBIT 6D - Modulation Limiting Characteristics (4 Graphs)**

- 6D-1 - Carrier Squelch Mode
- 6D-2 - Tone Private Line (TPL) Mode
- 6D-3 - Digital Private Line (DPL) Mode
- 6D-4 - Trunking Mode

EXHIBIT 6E - Occupied Bandwidth (12 Spectrum Analyzer Plots)

- 6E-1 - 2500 Hz Audio Modulation Only
- 6E-2 - 2500 Hz Audio and TPL Modulation
- 6E-3 - 2500 Hz Audio and DPL Modulation
- 6E-4 - 2500 Hz Audio and Low Speed Trunking Modulation
- 6E-5 - DTMF Modulation Only
- 6E-6 - DTMF Modulation and TPL Modulation
- 6E-7 - DTMF Modulation and DPL Modulation
- 6E-8 - DTMF Modulation and Low Speed Trunking Modulation
- 6E-9 - 2000/3000 Hz FSK Data Modulation Only
- 6E-10 - 2000/3000 Hz FSK Data and TPL Modulation
- 6E-11 - 2000/3000 Hz FSK Data and DPL Modulation
- 6E-12 - 2000/3000 Hz FSK Data and Low Speed Trunking Modulation

EXHIBIT 6F - Conducted Spurious Emissions (8 Graphs)

- 6F-1 - 3 Watts, 746.500 MHz
- 6F-2 - 3 Watts, 763.000 MHz
- 6F-3 - 3 Watts, 776.500 MHz
- 6F-4 - 3 Watts, 793.000 MHz
- 6F-5 - 1 Watt, 746.500 MHz
- 6F-6 - 1 Watt, 763.000 MHz
- 6F-7 - 1 Watt, 776.500 MHz
- 6F-8 - 1 Watt, 793.000 MHz

EXHIBIT 6G – Radiated Spurious Emissions – (4 Graphs)

- 6G-1 – 3 Watts, 746.000 MHz, Horizontal & Vertical
- 6G-2 – 3 Watts, 762.000 MHz, Horizontal & Vertical
- 6G-3 – 3 Watts, 776.000 MHz, Horizontal & Vertical
- 6G-4 – 3 Watts, 794.000 MHz, Horizontal & Vertical
- 6G-1 – 1 Watt, 746.000 MHz, Horizontal & Vertical
- 6G-2 – 1 Watt, 762.000 MHz, Horizontal & Vertical
- 6G-3 – 1 Watt, 776.000 MHz, Horizontal & Vertical
- 6G-4 – 1 Watt, 794.000 MHz, Horizontal & Vertical

INDEX OF SUBMITTED MEASURED DATA (CONTINUED)

EXHIBIT 6H – Frequency Stability (2 Graphs)

6H-1 – Frequency Stability vs. Temperature

6H-2 – Frequency Stability vs. Voltage

EXHIBIT 6I – GNSS Radiated Spurious Emissions (Table)

EXHIBIT 6J – Adjacent Channel Coupled Power Ratios (2 Tables)

RF OUTPUT DATA - CONDUCTED

The RF power output was measured with the indicated voltage applied to and current into the final RF amplifying device, pursuant to 47 CFR 2.1033(c)(8) and 2.1046.

HIGH POWER SETTING, FREQUENCY 746.500 MHz

Measured RF Output Power:	3.0 Watts
Measured DC Voltage:	7.5 Volts
Measured DC Input Current:	1.078 Amperes
Measured DC Input Power:	8.09 Watts

LOW POWER SETTING, FREQUENCY 746.500 MHz

Measured RF Output Power:	1.0 Watt
Measured DC Voltage:	7.5 Volts
Measured DC Input Current:	0.648 Amperes
Measured DC Input Power:	4.86 Watts

HIGH POWER SETTING, FREQUENCY 763.000 MHz

Measured RF Output Power:	3.0 Watts
Measured DC Voltage:	7.5 Volts
Measured DC Input Current:	1.076 Amperes
Measured DC Input Power:	8.05 Watts

LOW POWER SETTING, FREQUENCY 763.000 MHz

Measured RF Output Power:	1.0 Watt
Measured DC Voltage:	7.5 Volts
Measured DC Input Current:	0.643 Amperes
Measured DC Input Power:	4.82 Watts

HIGH POWER SETTING, FREQUENCY 776.500 MHz

Measured RF Output Power:	3.0 Watts
Measured DC Voltage:	7.5 Volts
Measured DC Input Current:	1.100 Amperes
Measured DC Input Power:	8.25 Watts

LOW POWER SETTING, FREQUENCY 776.500 MHz

Measured RF Output Power:	1.0 Watt
Measured DC Voltage:	7.5 Volts
Measured DC Input Current:	0.650 Amperes
Measured DC Input Power:	4.88 Watts

RF OUTPUT DATA – CONDUCTED (CONTINUED)

HIGH POWER SETTING, FREQUENCY 793.000 MHz

Measured RF Output Power:	3.0 Watts
Measured DC Voltage:	7.5 Volts
Measured DC Input Current:	1.113 Amperes
Measured DC Input Power:	8.35 Watts

LOW POWER SETTING, FREQUENCY 793.000 MHz

Measured RF Output Power:	1.0 Watt
Measured DC Voltage:	7.5 Volts
Measured DC Input Current:	0.638 Amperes
Measured DC Input Power:	4.79 Watts

RF OUTPUT DATA – EFFECTIVE RADIATED POWER

Pursuant to 47 CFR 27.50(b)(3), portable stations transmitting in the 747–762 MHz band and the 776–794MHz band are limited to 3 watts ERP (+34.77 dBm) maximum.

	ERP	Horn	Path Loss	Ant. Height	Ant. Angle	Radiated Spur
	Frequency	Turn Table Deg.				Emiss. (dBm)
Horiz.	746	0	40.15			12.65
Horiz.	746	45	40.15			11.46
Horiz.	746	90	40.15			7.14
Horiz.	746	135	40.15			12.11
Horiz.	746	180	40.15			10.31
Horiz.	746	225	40.15			15.14
Horiz.	746	270	40.15			8.48
Horiz.	746	315	40.15			15.57
Vert.	746	0	41.57			30.66
Vert.	746	45	41.57			30.35
Vert.	746	90	41.57			28.84
Vert.	746	135	41.57			29.27
Vert.	746	180	41.57			30.45
Vert.	746	225	41.57			31.53
Vert.	746	270	41.57			30.74
Vert.	746	315	41.57			30.78

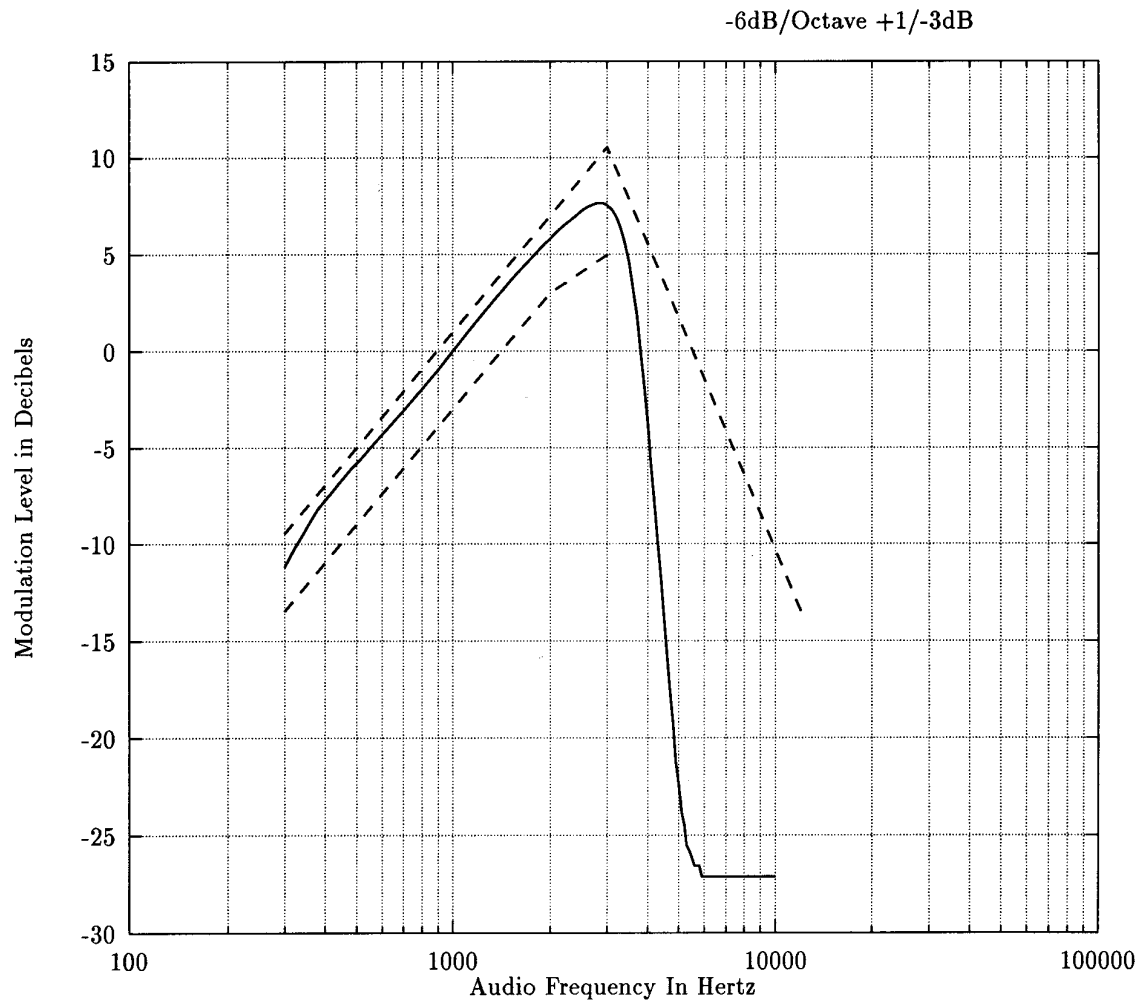
	ERP	Horn	Path Loss	Ant. Height	Ant. Angle	Radiated Spur Emiss. (dBm)
	Frequency	Turn Table Deg.				
Horiz.	762	0	39.77			11.96
Horiz.	762	45	39.77			10.47
Horiz.	762	90	39.77			10.21
Horiz.	762	135	39.77			12.28
Horiz.	762	180	39.77			11.41
Horiz.	762	225	39.77			15.24
Horiz.	762	270	39.77			8.42
Horiz.	762	315	39.77			14.50
Vert.	762	0	41.08			30.48
Vert.	762	45	41.08			30.82
Vert.	762	90	41.08			29.29
Vert.	762	135	41.08			30.45
Vert.	762	180	41.08			31.52
Vert.	762	225	41.08			32.09
Vert.	762	270	41.08			30.79
Vert.	762	315	41.08			30.93

RF OUTPUT DATA – EFFECTIVE RADIATED POWER (CONTINUED)

	ERP	Horn				
	Frequency	Turn Table Deg.	Path Loss	Ant. Height	Ant. Angle	Radiated Spur Emiss. (dBm)
Horiz.	794	0	39.17			13.95
Horiz.	794	45	39.17			13.01
Horiz.	794	90	39.17			9.25
Horiz.	794	135	39.17			11.95
Horiz.	794	180	39.17			14.09
Horiz.	794	225	39.17			13.30
Horiz.	794	270	39.17			9.58
Horiz.	794	315	39.17			14.53
Vert.	794	0	40.37			30.61
Vert.	794	45	40.37			30.89
Vert.	794	90	40.37			29.25
Vert.	794	135	40.37			29.78
Vert.	794	180	40.37			30.75
Vert.	794	225	40.37			31.41
Vert.	794	270	40.37			30.09
Vert.	794	315	40.37			30.21

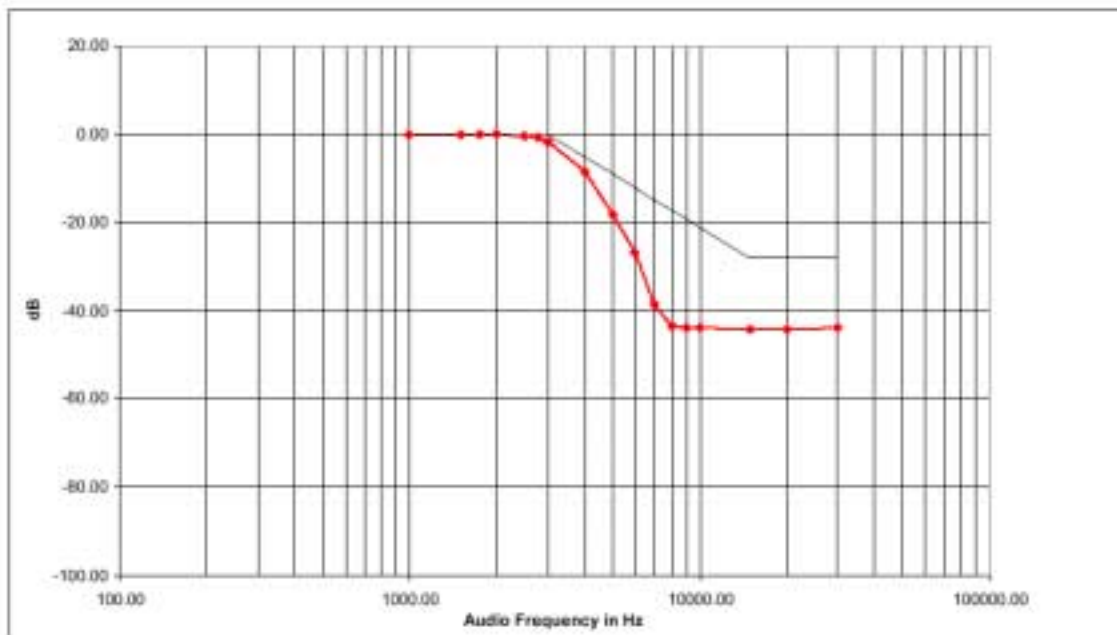
	ERP	Horn				
	Frequency	Turn Table Deg.	Path Loss	Ant. Height	Ant. Angle	Radiated Spur Emiss. (dBm)
Horiz.	776	0	39.46			13.96
Horiz.	776	45	39.46			9.94
Horiz.	776	90	39.46			9.87
Horiz.	776	135	39.46			12.01
Horiz.	776	180	39.46			12.17
Horiz.	776	225	39.46			13.87
Horiz.	776	270	39.46			8.21
Horiz.	776	315	39.46			14.90
Vert.	776	0	40.77			30.88
Vert.	776	45	40.77			31.49
Vert.	776	90	40.77			29.39
Vert.	776	135	40.77			29.94
Vert.	776	180	40.77			30.97
Vert.	776	225	40.77			31.98
Vert.	776	270	40.77			31.01
Vert.	776	315	40.77			31.45

TRANSMIT AUDIO RESPONSE

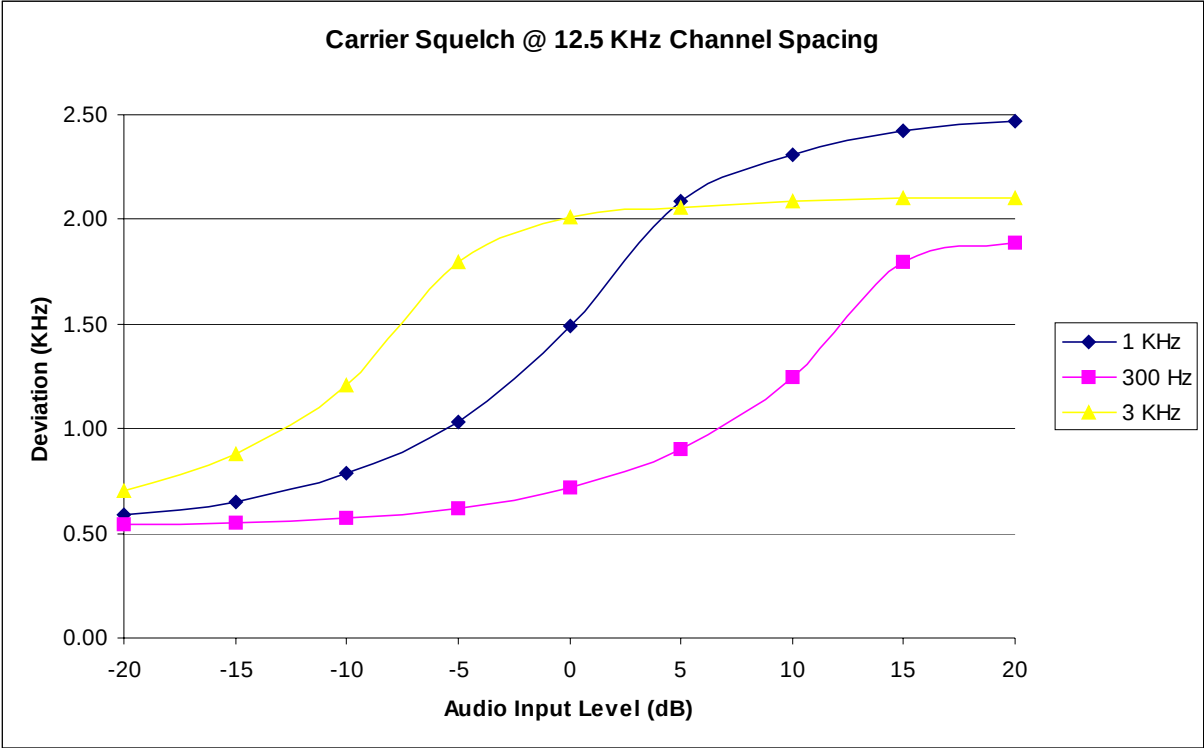


POST-LIMITER LOWPASS FILTER RESPONSE

12.5 kHz Channel Spacing

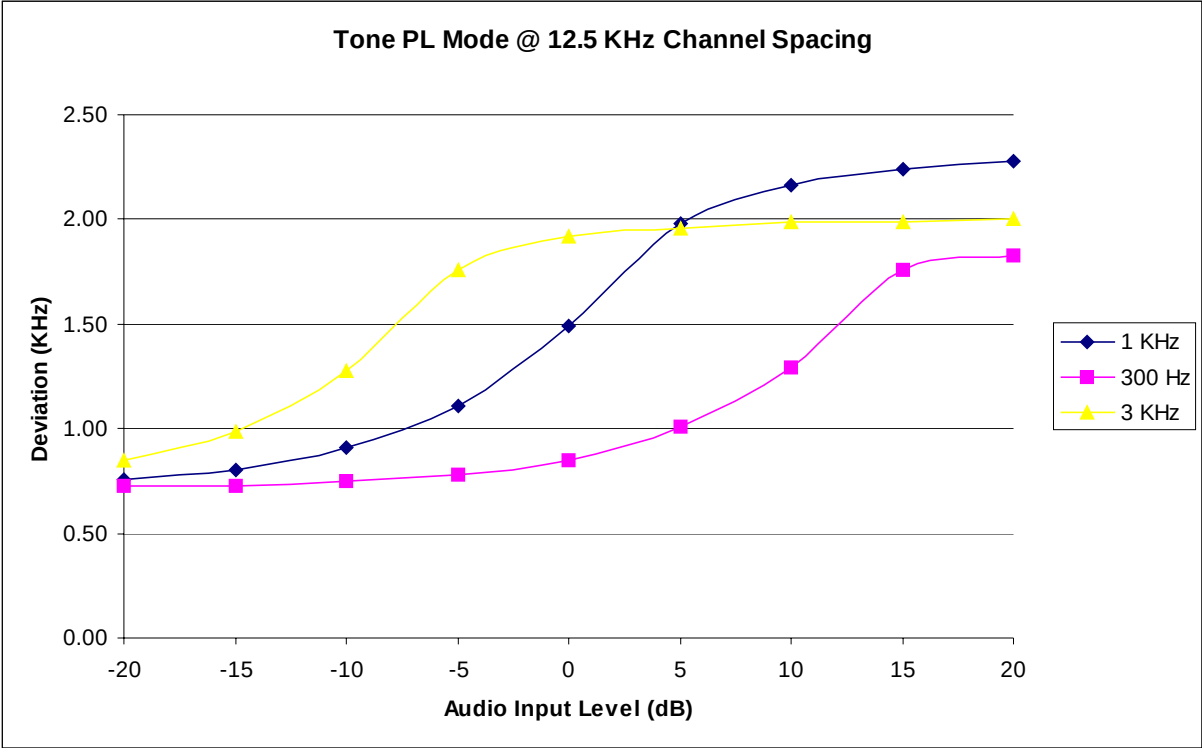


MODULATION LIMITING CHARACTERISTIC
CARRIER SQUELCH MODE



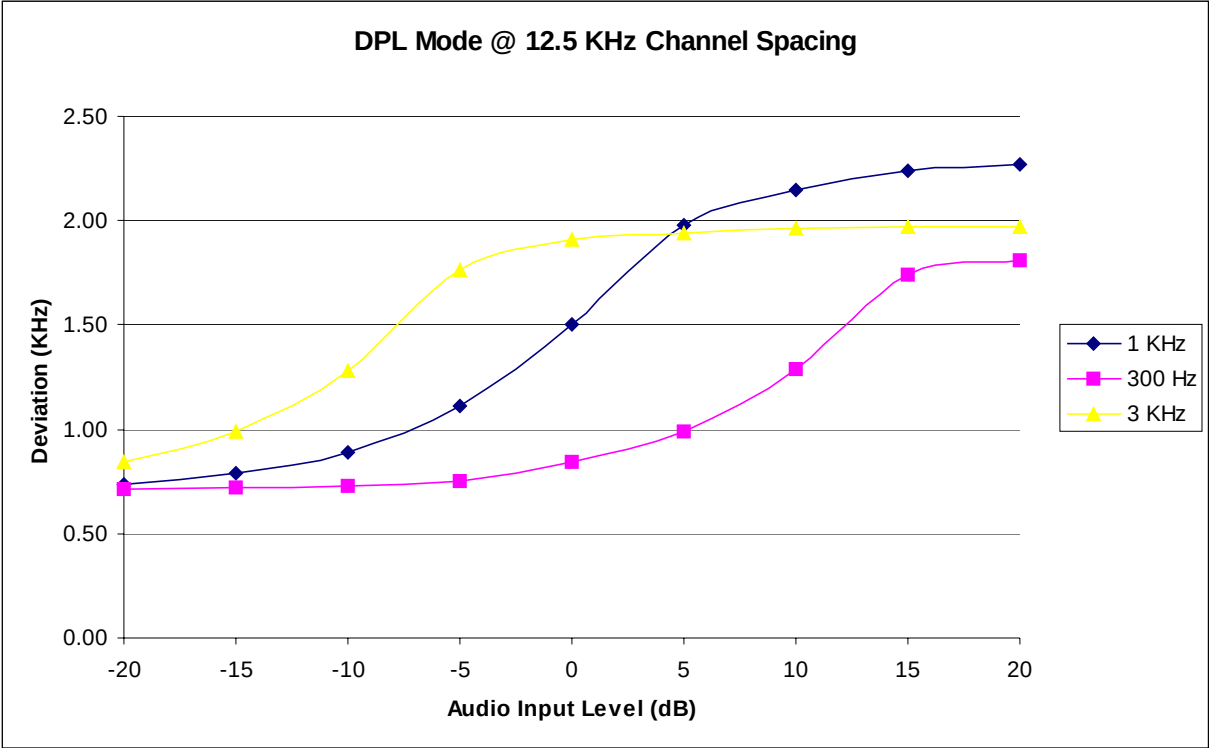
LIMIT: $\pm$ 2.5 kHz MAXIMUM

MODULATION LIMITING CHARACTERISTIC
TONE PL MODE



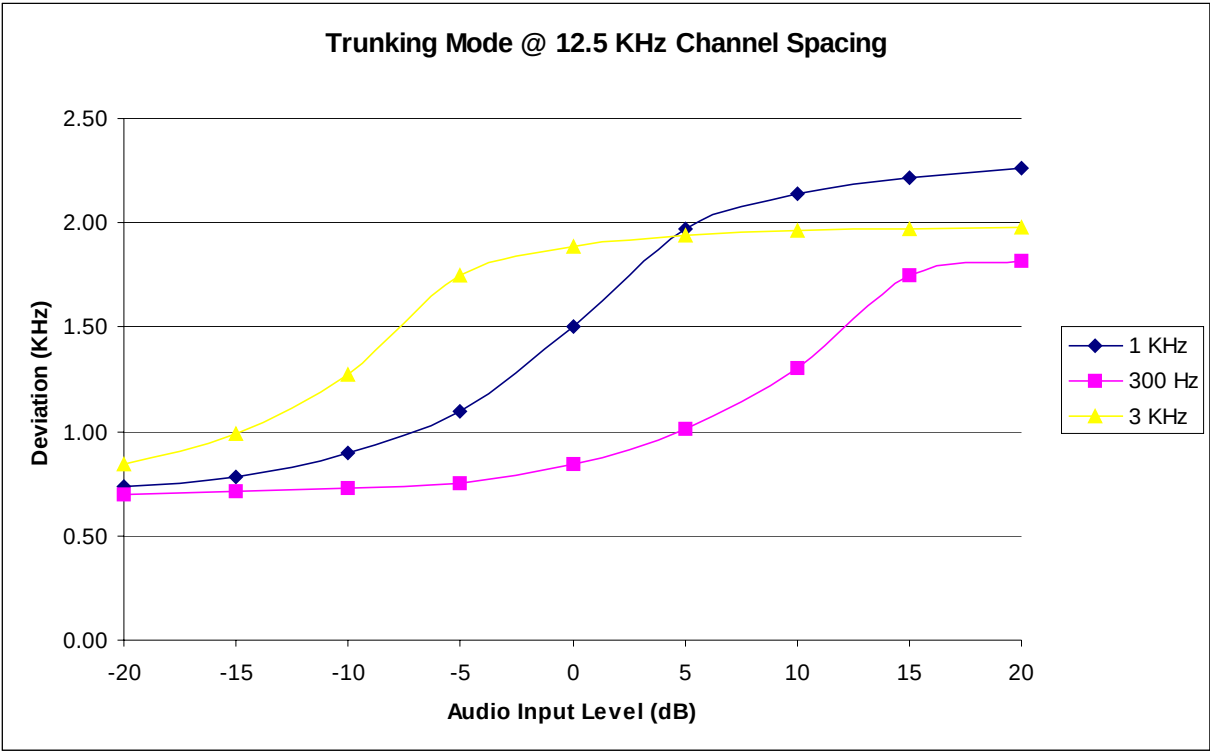
LIMIT: $\pm$ 2.5 kHz MAXIMUM

MODULATION LIMITING CHARACTERISTIC
DPL MODE



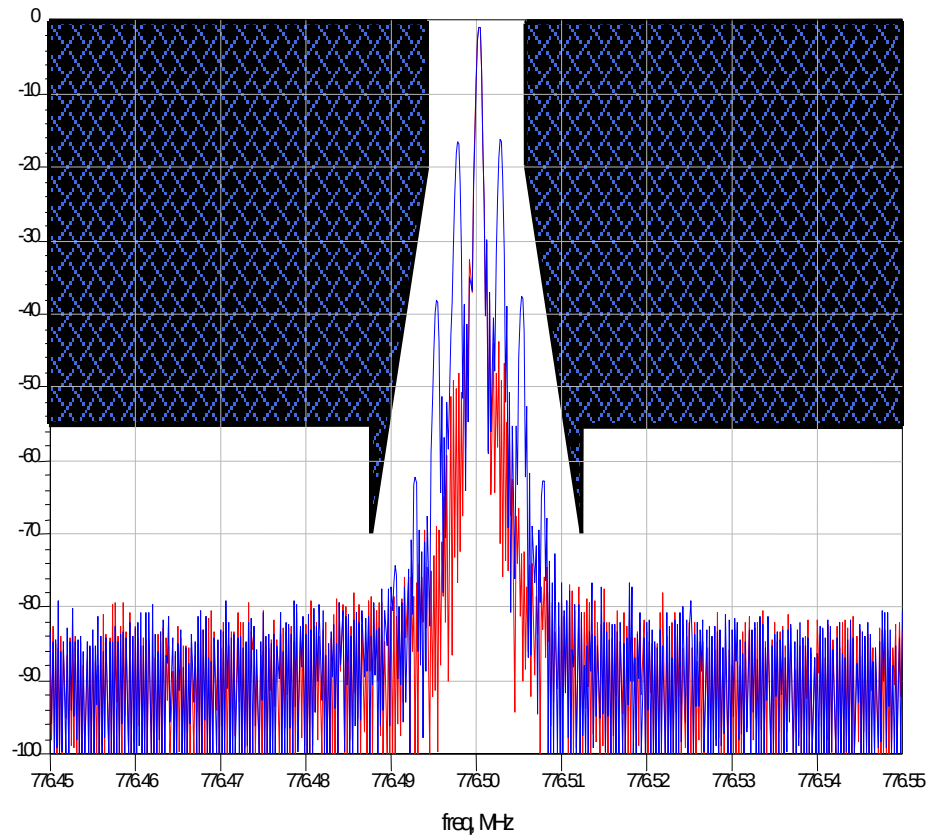
LIMIT: $\pm$ 2.5 kHz MAXIMUM

MODULATION LIMITING CHARACTERISTIC
TRUNKING MODE



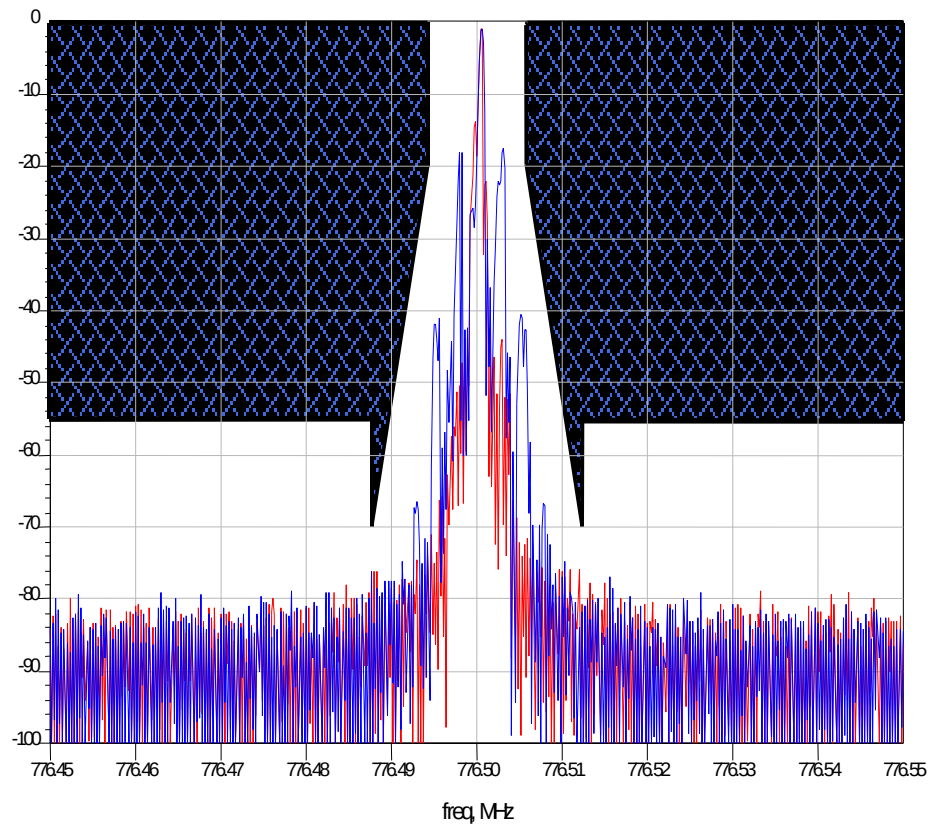
LIMIT: ± 2.5 kHz MAXIMUM

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



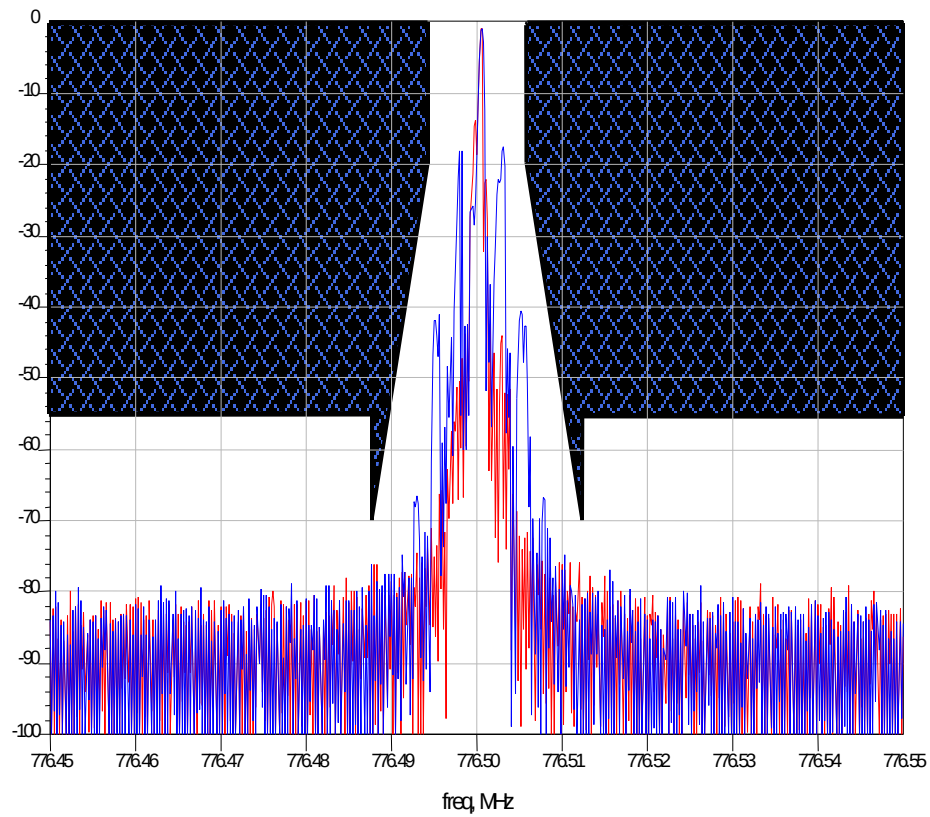
CENTER FREQUENCY:	776.500 MHz
RESOLUTION BANDWIDTH:	300 Hz
VIDEO BANDWIDTH:	3 kHz
SPAN:	100 kHz
HORIZONTAL SCALE:	10 kHz/div
SWEEP TIME:	2 Sec.
VERTICAL SCALE:	10 dB/div
REFERENCE LEVEL:	0 dBm
ATTENUATION:	30 dB

OCCUPIED BANDWIDTH MEASUREMENT FOR
12.5 kHz CHANNEL SPACING, 2500 Hz TONE, TPL 250.3 Hz
EMISSION MASK: D



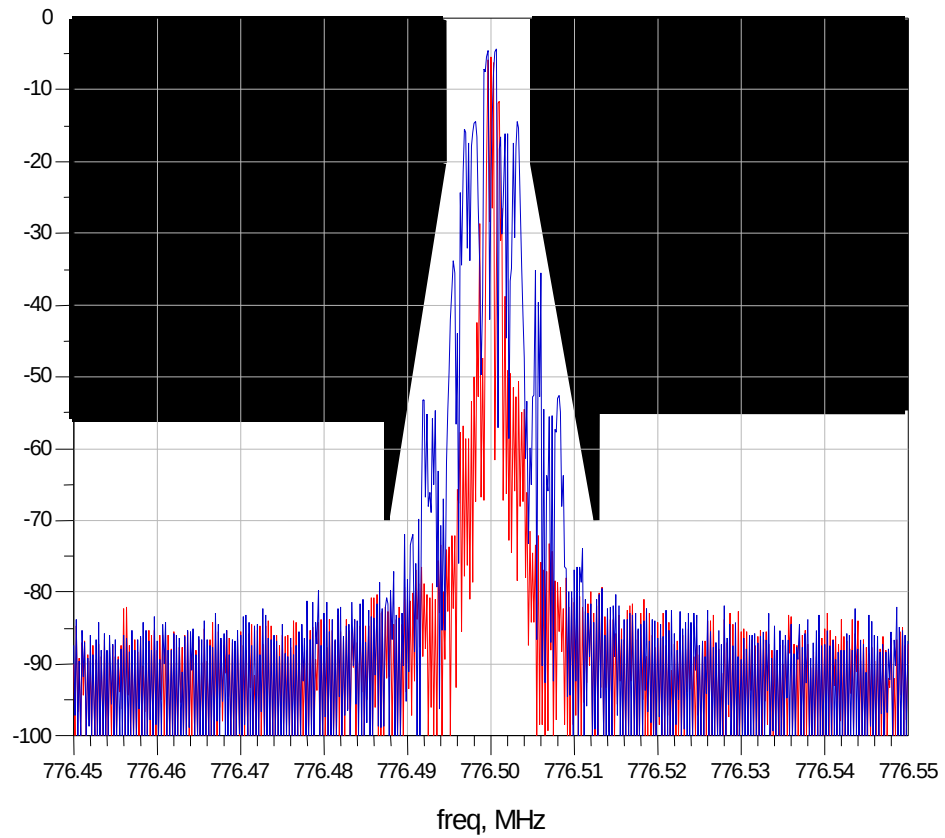
CENTER FREQUENCY:	776.500 MHz
RESOLUTION BANDWIDTH:	300 Hz
VIDEO BANDWIDTH:	3 kHz
SPAN:	100 kHz
HORIZONTAL SCALE:	10 kHz/div
SWEEP TIME:	2 Sec.
VERTICAL SCALE:	10 dB/div
REFERENCE LEVEL:	0 dBm
ATTENUATION:	30 dB

OCCUPIED BANDWIDTH MEASUREMENT FOR
12.5 kHz CHANNEL SPACING, 2500 Hz TONE, DPL 131
EMISSION MASK: D



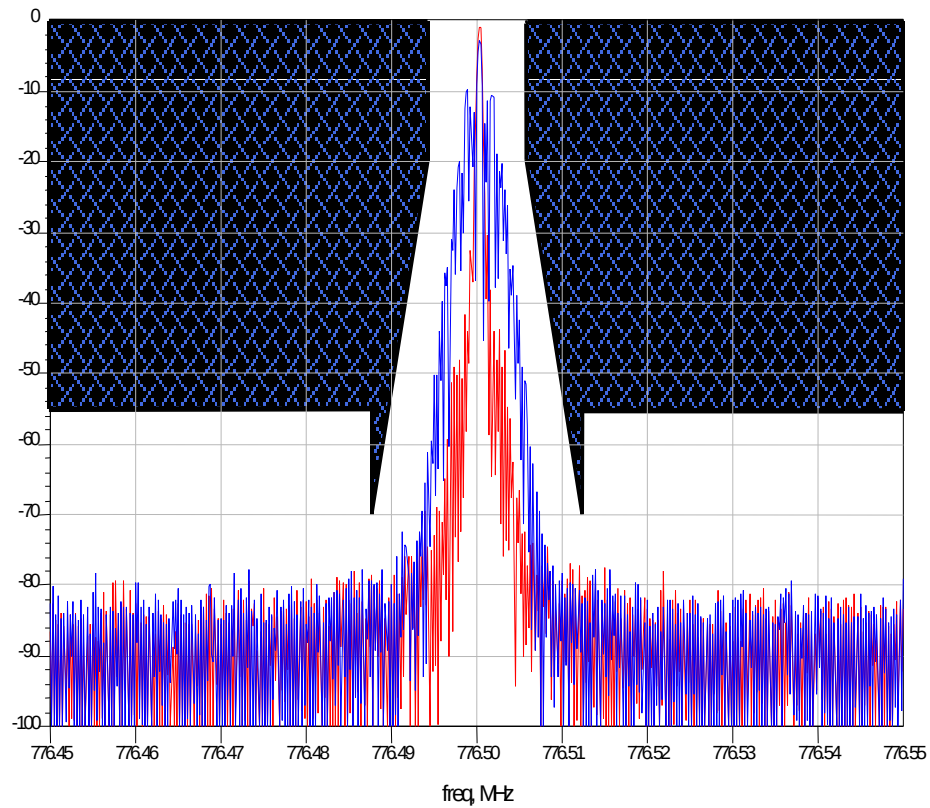
CENTER FREQUENCY:	776.500 MHz
RESOLUTION BANDWIDTH:	300 Hz
VIDEO BANDWIDTH:	3 kHz
SPAN:	100 kHz
HORIZONTAL SCALE:	10 kHz/div
SWEEP TIME:	2 Sec.
VERTICAL SCALE:	10 dB/div
REFERENCE LEVEL:	0 dBm
ATTENUATION:	30 dB

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



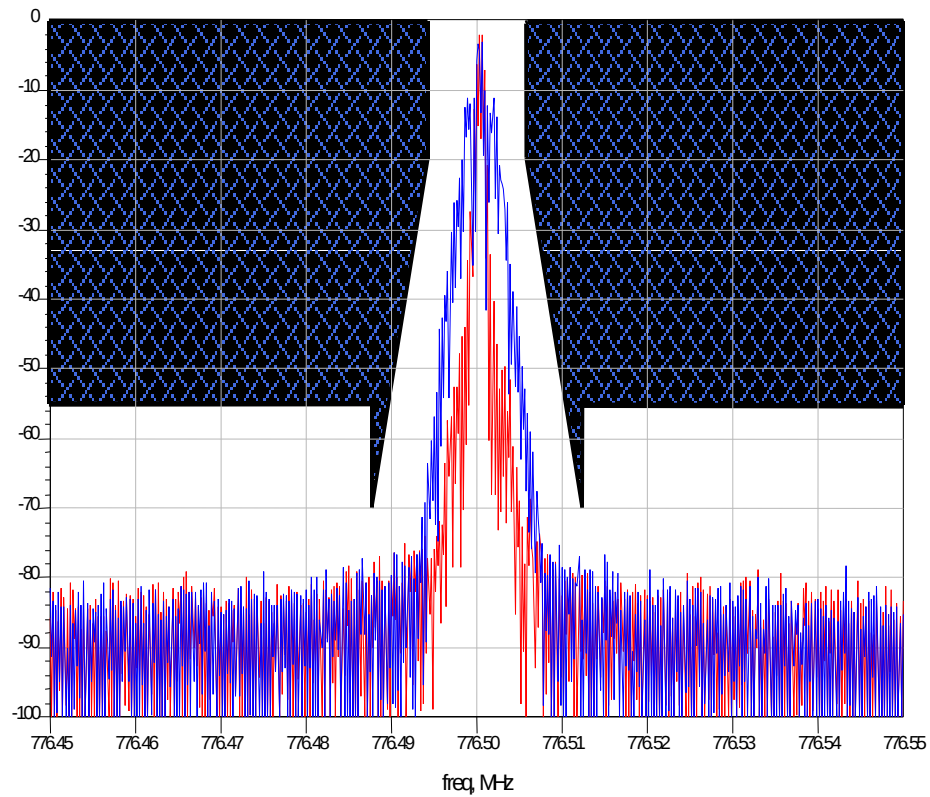
CENTER FREQUENCY:	776.500 MHz
RESOLUTION BANDWIDTH:	300 Hz
VIDEO BANDWIDTH:	3 kHz
SPAN:	100 kHz
HORIZONTAL SCALE:	10 kHz/div
SWEEP TIME:	2 Sec.
VERTICAL SCALE:	10 dB/div
REFERENCE LEVEL:	0 dBm
ATTENUATION:	30 dB

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



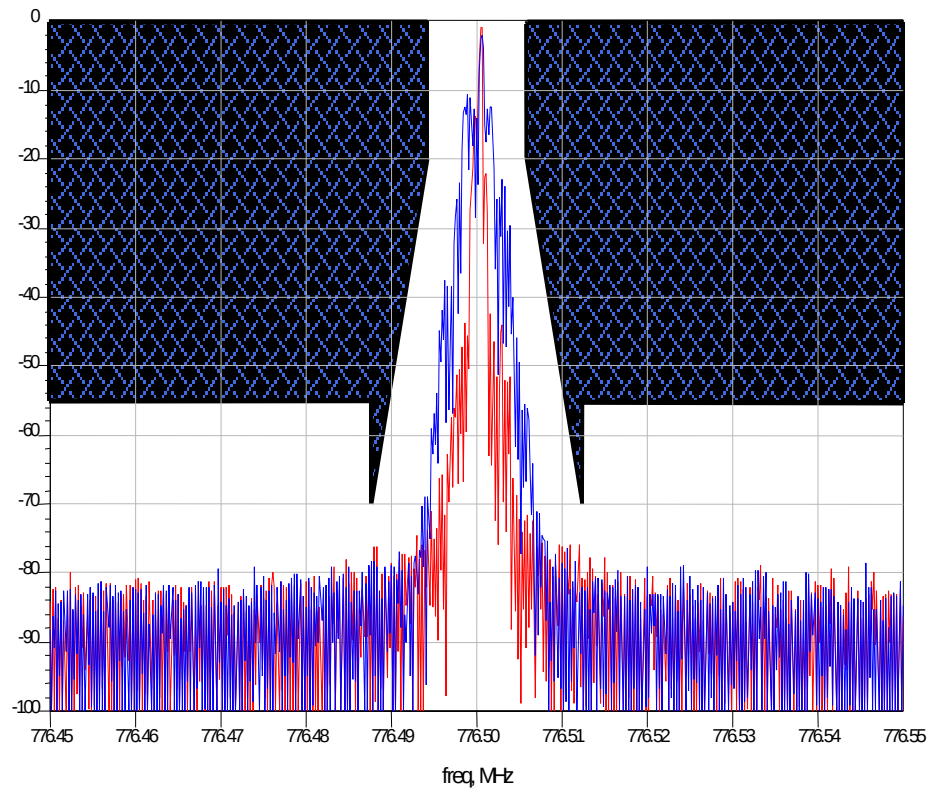
CENTER FREQUENCY:	776.500 MHz
RESOLUTION BANDWIDTH:	300 Hz
VIDEO BANDWIDTH:	3 kHz
SPAN:	100 kHz
HORIZONTAL SCALE:	10 kHz/div
SWEEP TIME:	2 Sec.
VERTICAL SCALE:	10 dB/div
REFERENCE LEVEL:	0 dBm
ATTENUATION:	30 dB

OCCUPIED BANDWIDTH MEASUREMENT FOR
12.5 kHz CHANNEL SPACING, DTMF MODULATION, TPL 250.3 Hz
EMISSION MASK: D



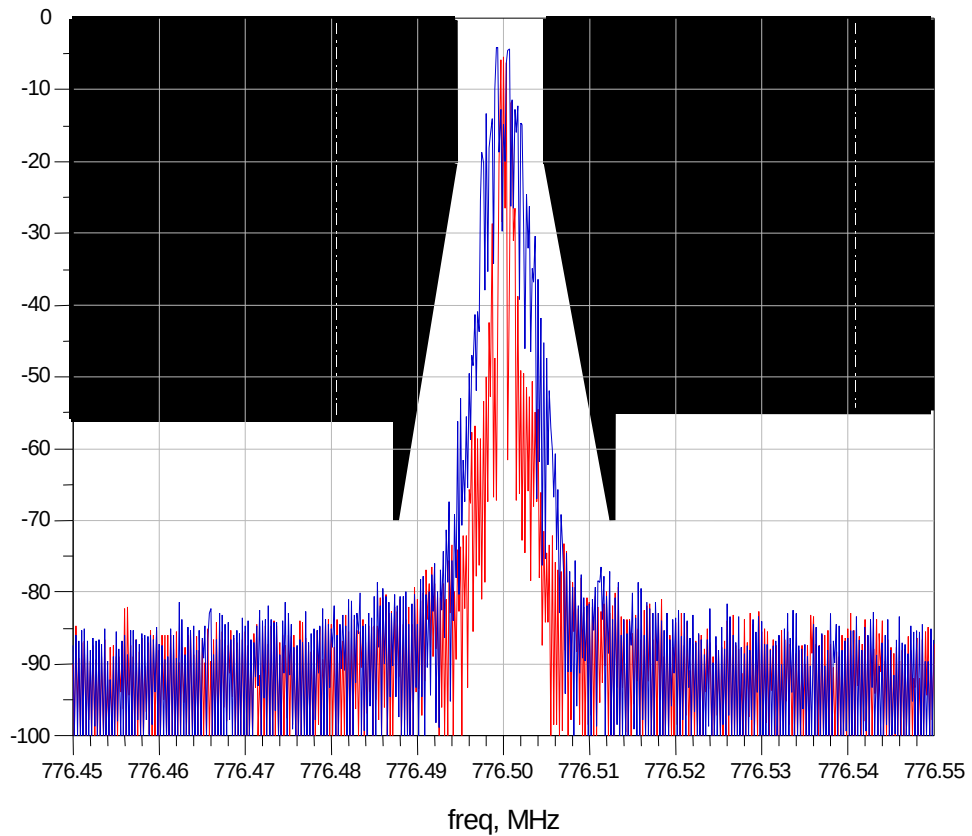
CENTER FREQUENCY:	776.500 MHz
RESOLUTION BANDWIDTH:	300 Hz
VIDEO BANDWIDTH:	3 kHz
SPAN:	100 kHz
HORIZONTAL SCALE:	10 kHz/div
SWEEP TIME:	2 Sec.
VERTICAL SCALE:	10 dB/div
REFERENCE LEVEL:	0 dBm
ATTENUATION:	30 dB

OCCUPIED BANDWIDTH MEASUREMENT FOR
12.5 kHz CHANNEL SPACING, DTMF MODULATION, DPL 131
EMISSION MASK: D



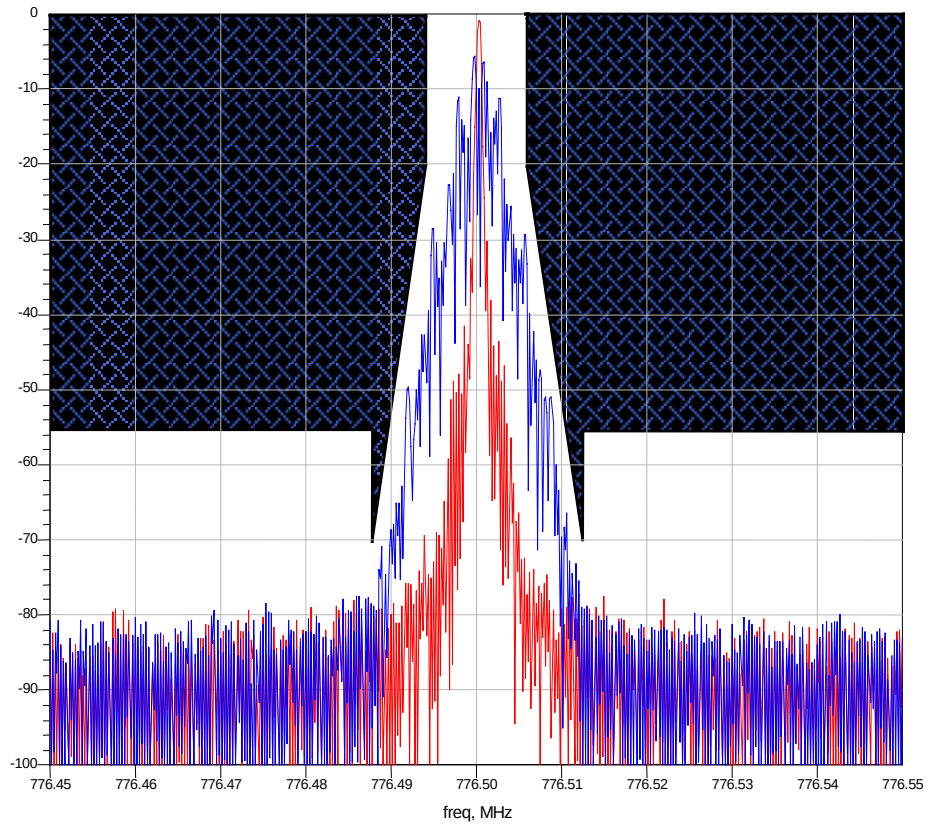
CENTER FREQUENCY:	776.500 MHz
RESOLUTION BANDWIDTH:	300 Hz
VIDEO BANDWIDTH:	3 kHz
SPAN:	100 kHz
HORIZONTAL SCALE:	10 kHz/div
SWEEP TIME:	2 Sec.
VERTICAL SCALE:	10 dB/div
REFERENCE LEVEL:	0 dBm
ATTENUATION:	30 dB

OCCUPIED BANDWIDTH MEASUREMENT FOR
12.5 kHz CHANNEL SPACING, DTMF MODULATION, LOW SPEED TRUNKING
EMISSION MASK: D



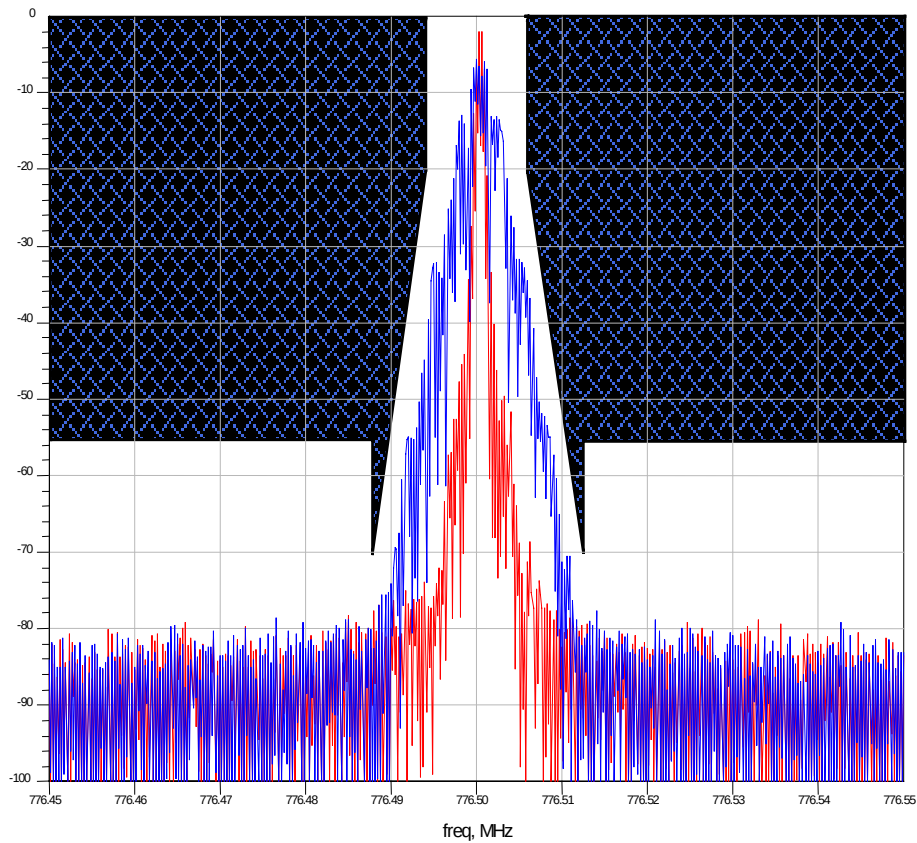
CENTER FREQUENCY:	776.500 MHz
RESOLUTION BANDWIDTH:	300 Hz
VIDEO BANDWIDTH:	3 kHz
SPAN:	100 kHz
HORIZONTAL SCALE:	10 kHz/div
SWEEP TIME:	2 Sec.
VERTICAL SCALE:	10 dB/div
REFERENCE LEVEL:	0 dBm
ATTENUATION:	30 dB

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



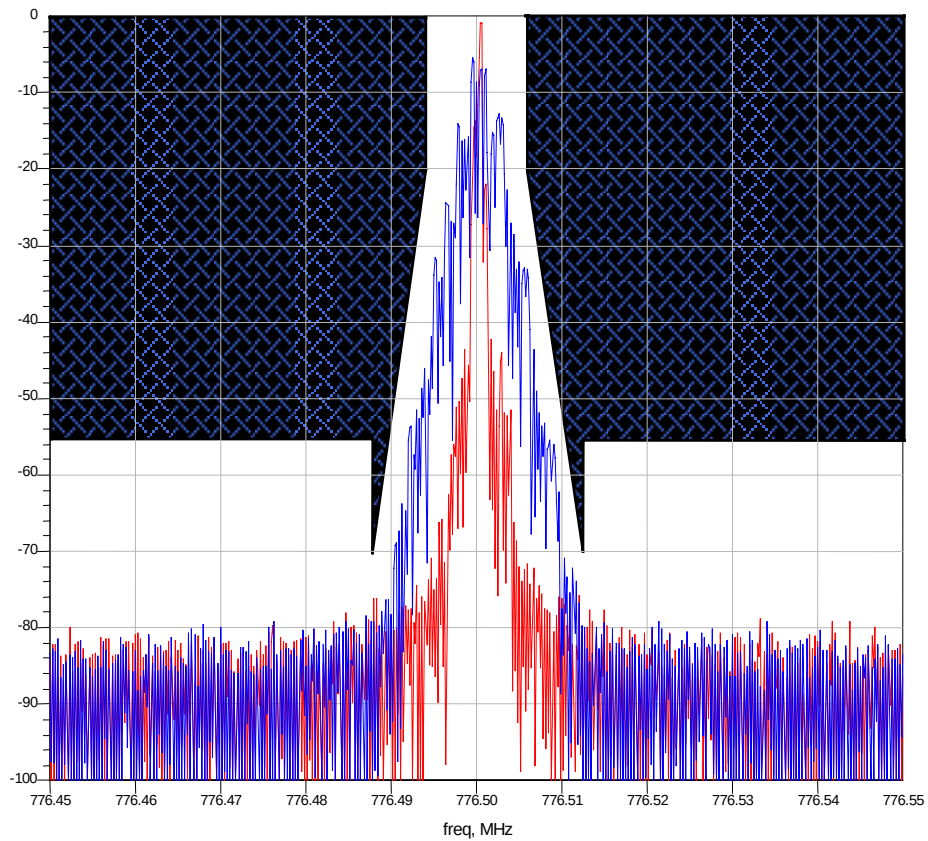
CENTER FREQUENCY:	776.500 MHz
RESOLUTION BANDWIDTH:	300 Hz
VIDEO BANDWIDTH:	3 kHz
SPAN:	100 kHz
HORIZONTAL SCALE:	10 kHz/div
SWEEP TIME:	2 Sec.
VERTICAL SCALE:	10 dB/div
REFERENCE LEVEL:	0 dBm
ATTENUATION:	30 dB

OCCUPIED BANDWIDTH MEASUREMENT FOR
12.5 kHz CHANNEL SPACING, 2000/3000 Hz FSK, TPL 250.3 Hz
EMISSION MASK: D



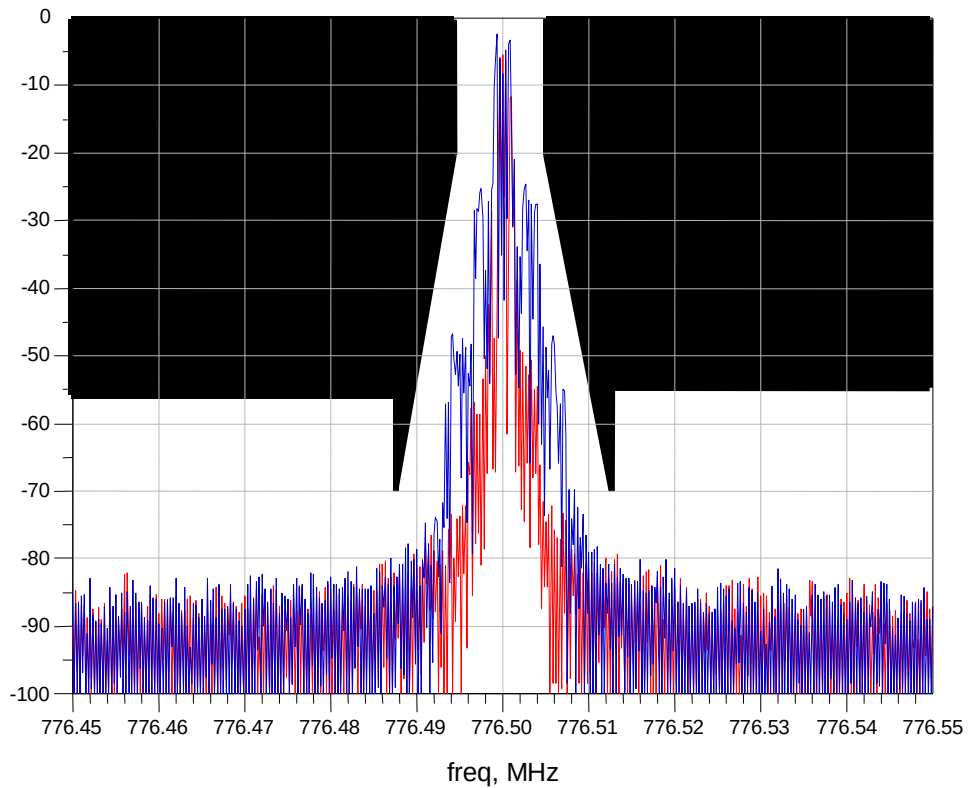
CENTER FREQUENCY:	776.500 MHz
RESOLUTION BANDWIDTH:	300 Hz
VIDEO BANDWIDTH:	3 kHz
SPAN:	100 kHz
HORIZONTAL SCALE:	10 kHz/div
SWEEP TIME:	2 Sec.
VERTICAL SCALE:	10 dB/div
REFERENCE LEVEL:	0 dBm
ATTENUATION:	30 dB

OCCUPIED BANDWIDTH MEASUREMENT FOR
12.5 kHz CHANNEL SPACING, 2000/3000 Hz FSK, DPL 131
EMISSION MASK: D



CENTER FREQUENCY:	776.500 MHz
RESOLUTION BANDWIDTH:	300 Hz
VIDEO BANDWIDTH:	3 kHz
SPAN:	100 kHz
HORIZONTAL SCALE:	10 kHz/div
SWEEP TIME:	2 Sec.
VERTICAL SCALE:	10 dB/div
REFERENCE LEVEL:	0 dBm
ATTENUATION:	30 dB

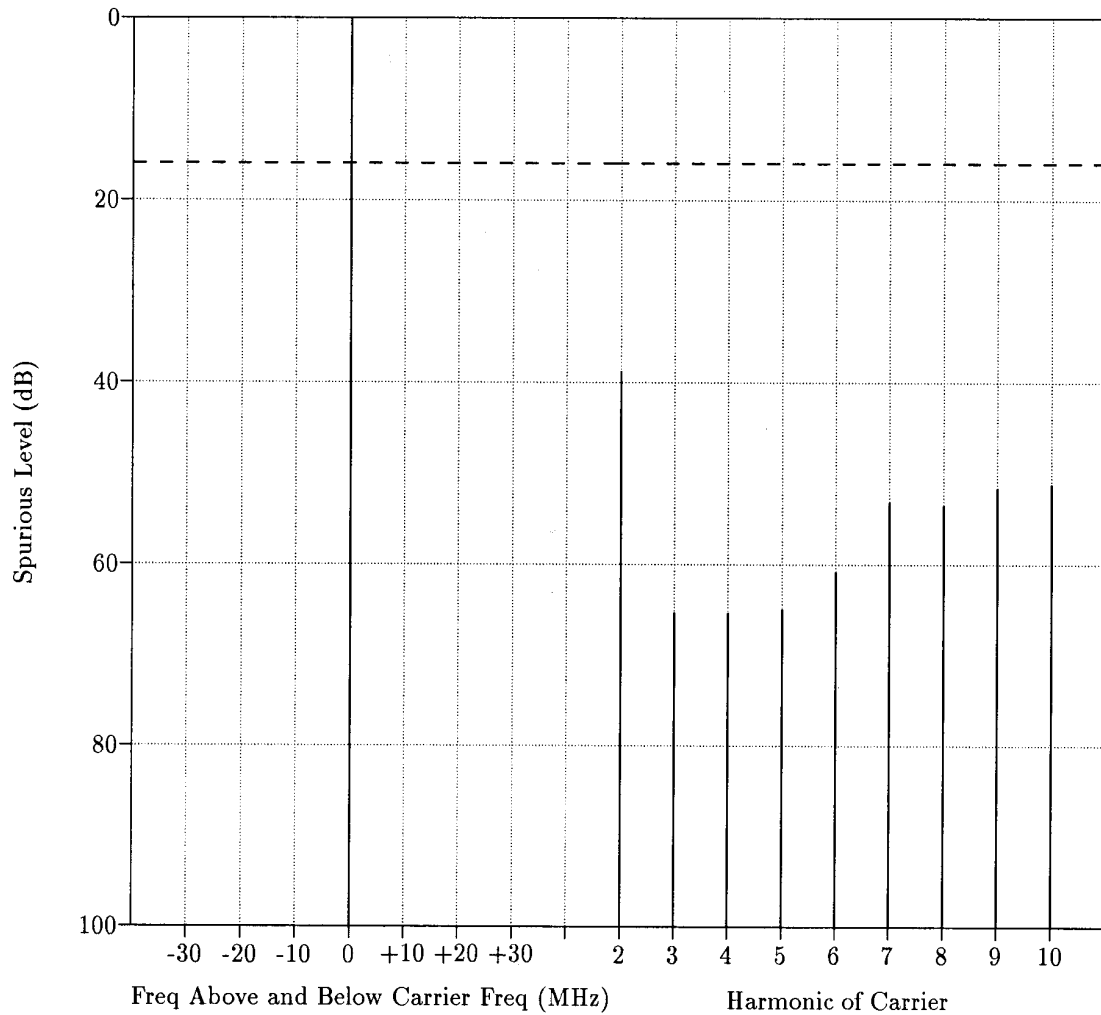
OCCUPIED BANDWIDTH MEASUREMENT FOR
12.5 kHz CHANNEL SPACING, 2000/3000 Hz FSK, LOW SPEED TRUNKING
EMISSION MASK: D



CENTER FREQUENCY:	776.500 MHz
RESOLUTION BANDWIDTH:	300 Hz
VIDEO BANDWIDTH:	3 kHz
SPAN:	100 kHz
HORIZONTAL SCALE:	10 kHz/div
SWEEP TIME:	2 Sec.
VERTICAL SCALE:	10 dB/div
REFERENCE LEVEL:	0 dBm
ATTENUATION:	30 dB

**CONDUCTED SPURIOUS EMISSIONS
HIGH POWER, 746.500 MHz**

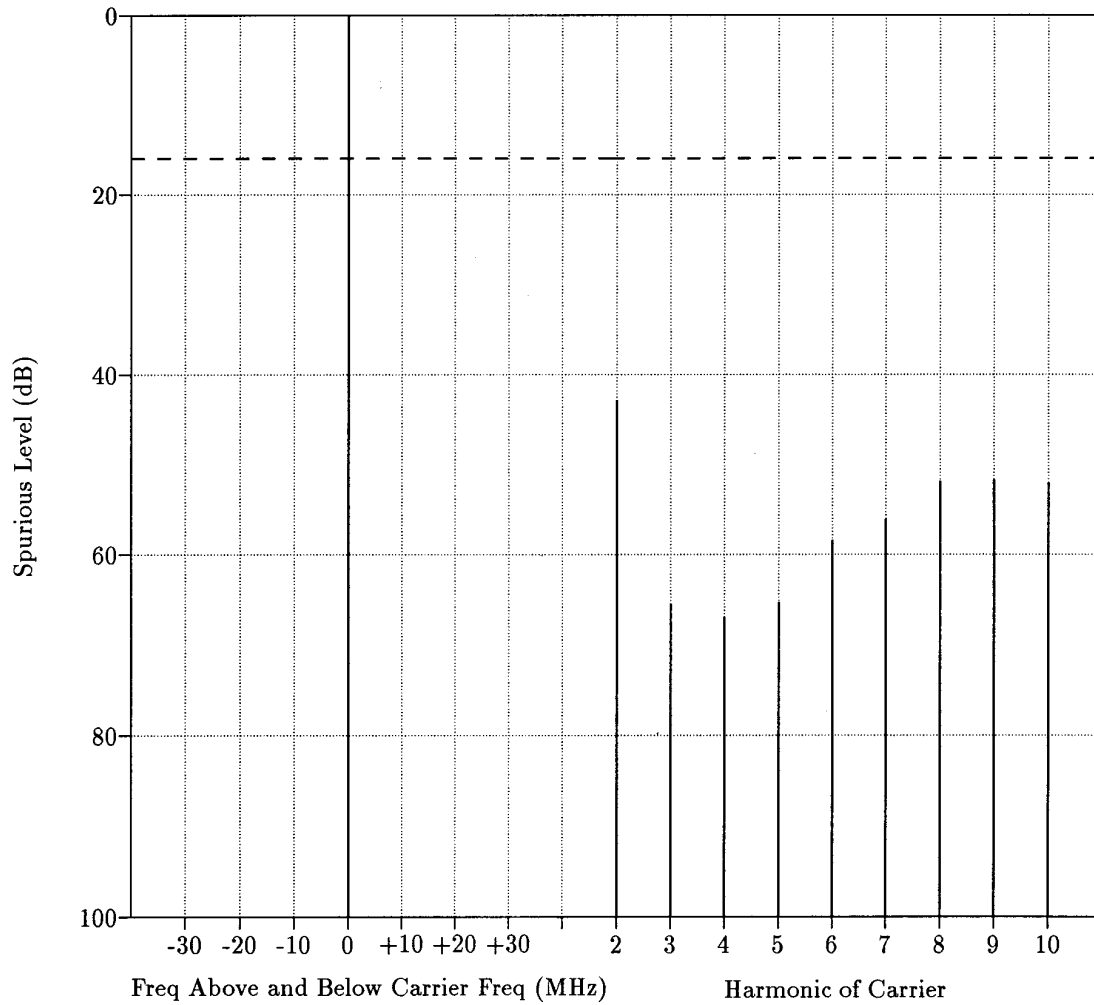
Transmitter Type: See Above
Power Output: 3.00W at 746.5000MHz



The conducted spurious level is plotted in dBm on the vertical axis.
The specification for conducted spurious emissions is -16 dBm.

**CONDUCTED SPURIOUS EMISSIONS
HIGH POWER, 763.000 MHz**

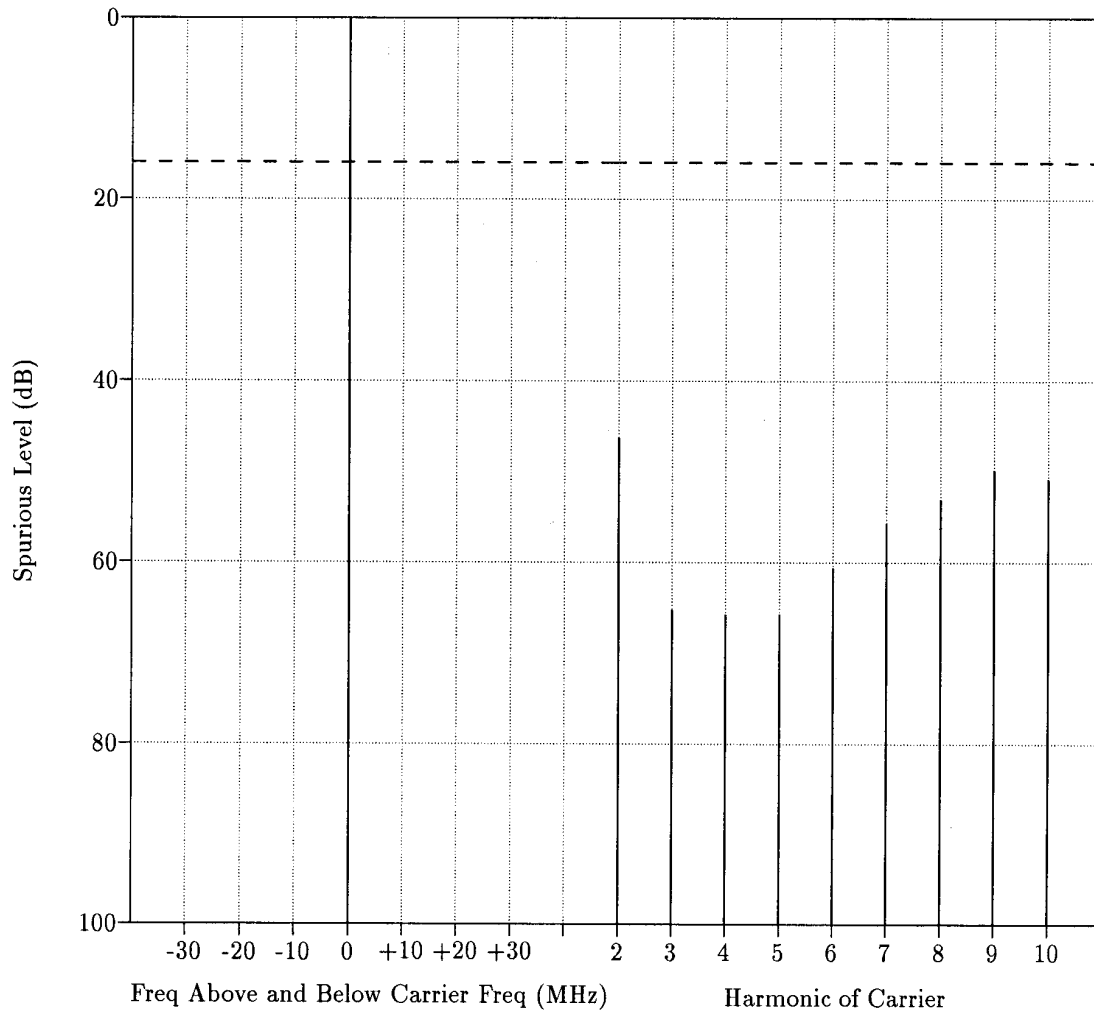
Transmitter Type: See Above
Power Output: 3.00W at 763.0000MHz



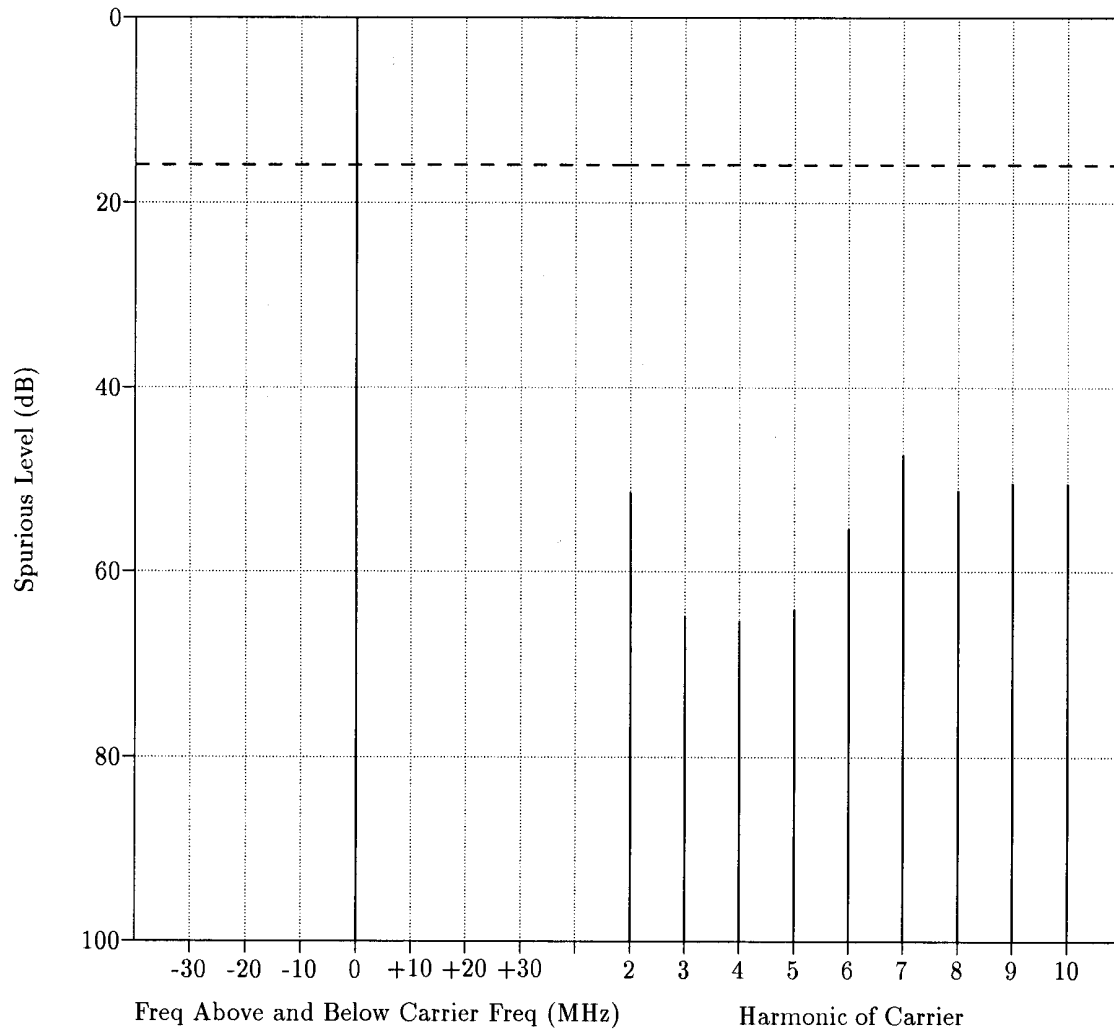
The conducted spurious level is plotted in dBm on the vertical axis.
The specification for conducted spurious emissions is -16 dBm.

**CONDUCTED SPURIOUS EMISSIONS
HIGH POWER, 776.500 MHz**

Transmitter Type: See Above
Power Output: 3.00W at 776.500MHz



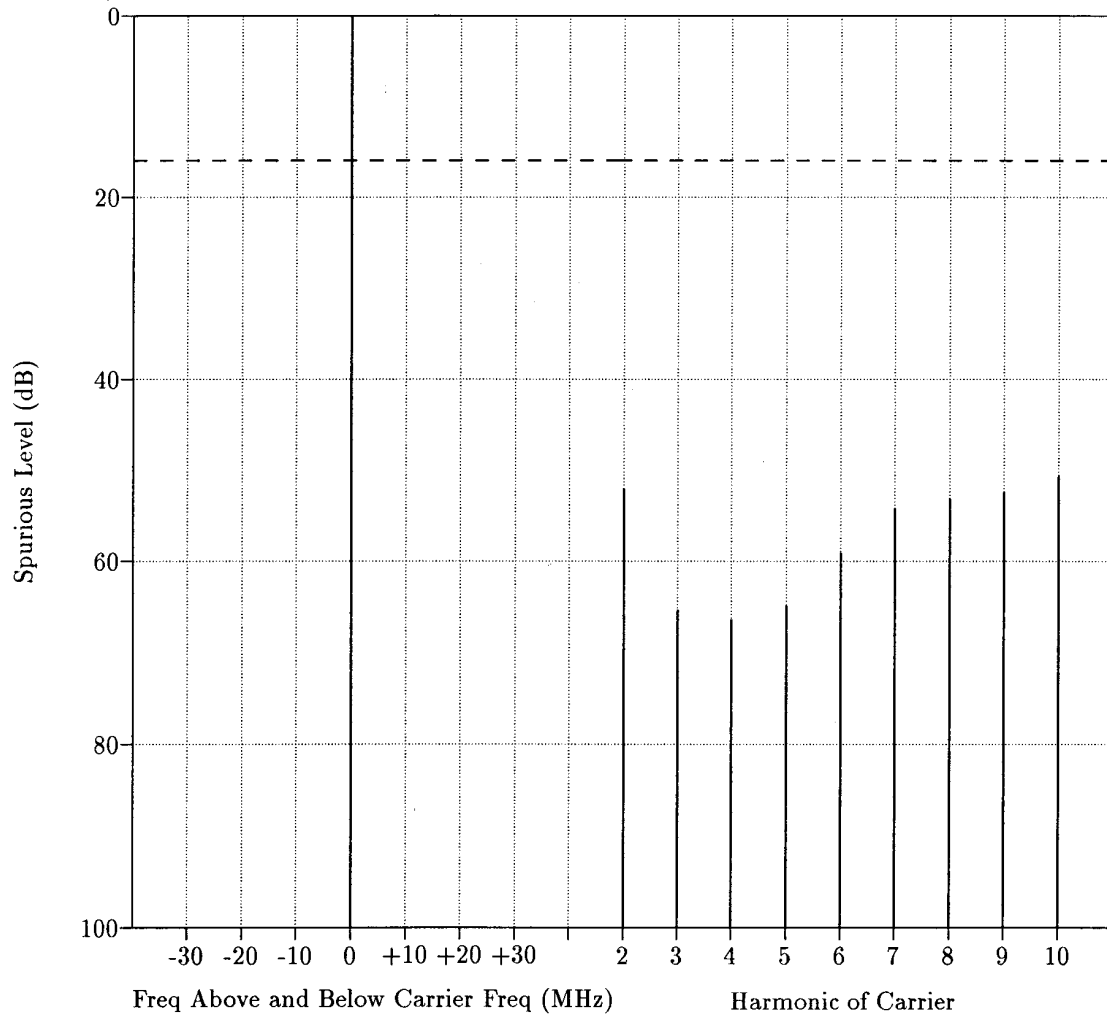
The conducted spurious level is plotted in dBm on the vertical axis.
The specification for conducted spurious emissions is -16 dBm.

**CONDUCTED SPURIOUS EMISSIONS
HIGH POWER, 793.000MHz****Transmitter Type: See Above****Power Output: 3.00W at 793.0000MHz**

The conducted spurious level is plotted in dBm on the vertical axis.
The specification for conducted spurious emissions is -16 dBm.

**CONDUCTED SPURIOUS EMISSIONS
LOW POWER, 746.500 MHz**

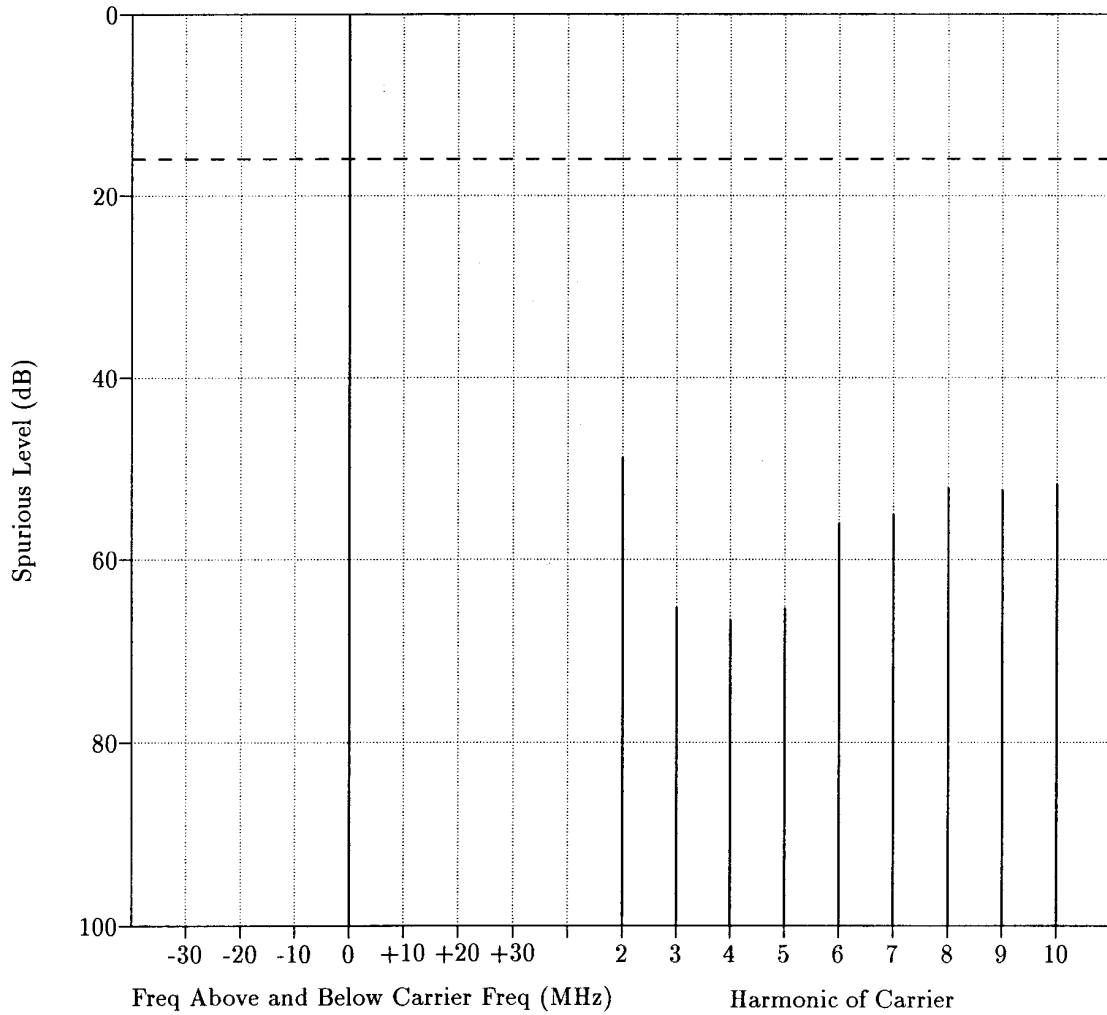
Transmitter Type: See Above
Power Output: 1.00W at 746.500MHz



The conducted spurious level is plotted in dBm on the vertical axis.
The specification for conducted spurious emissions is -16 dBm.

CONDUCTED SPURIOUS EMISSIONS
LOW POWER, 763.000 MHz

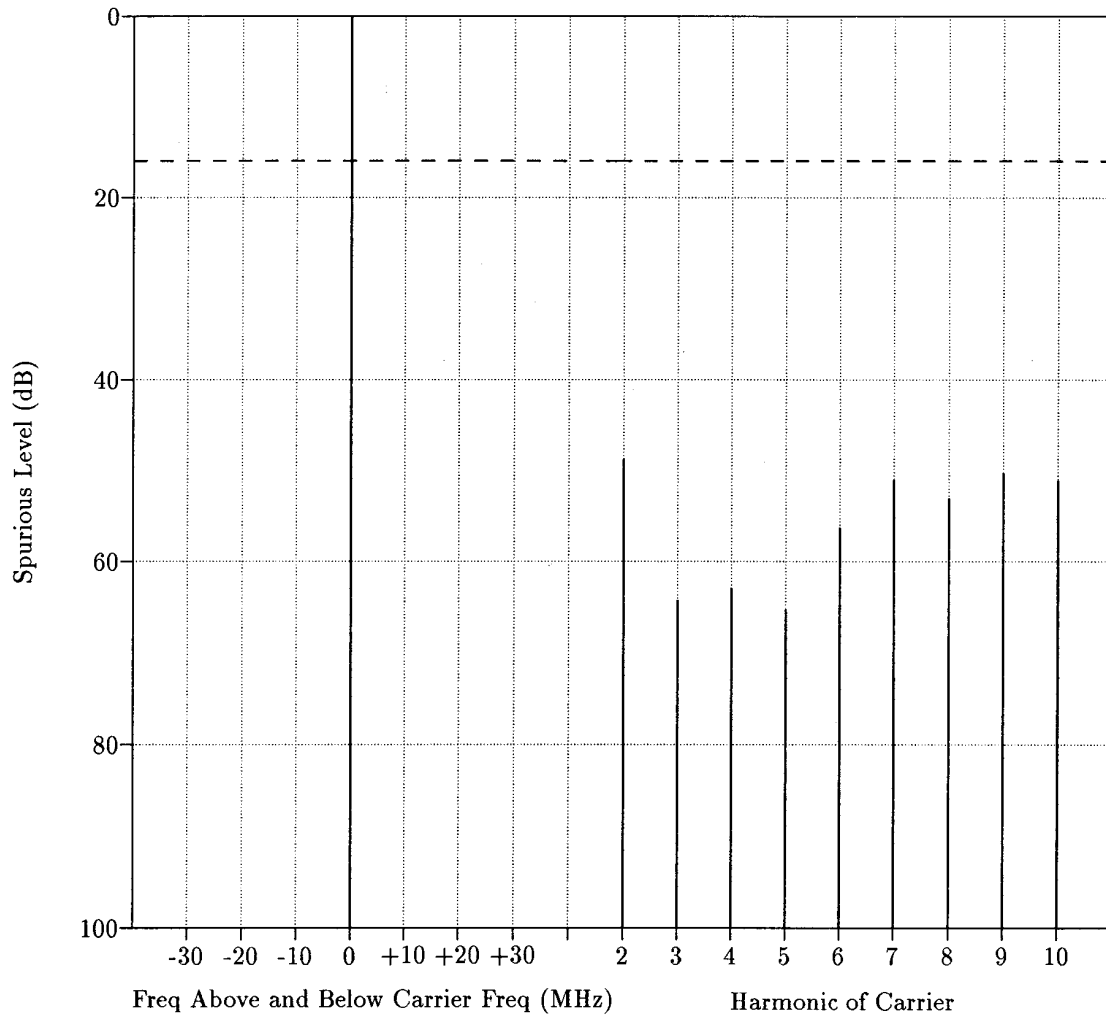
Transmitter Type: See Above
Power Output: 1.00W at 763.0000MHz



The conducted spurious level is plotted in dBm on the vertical axis.
The specification for conducted spurious emissions is -16 dBm.

**CONDUCTED SPURIOUS EMISSIONS
LOW POWER, 776.500 MHz**

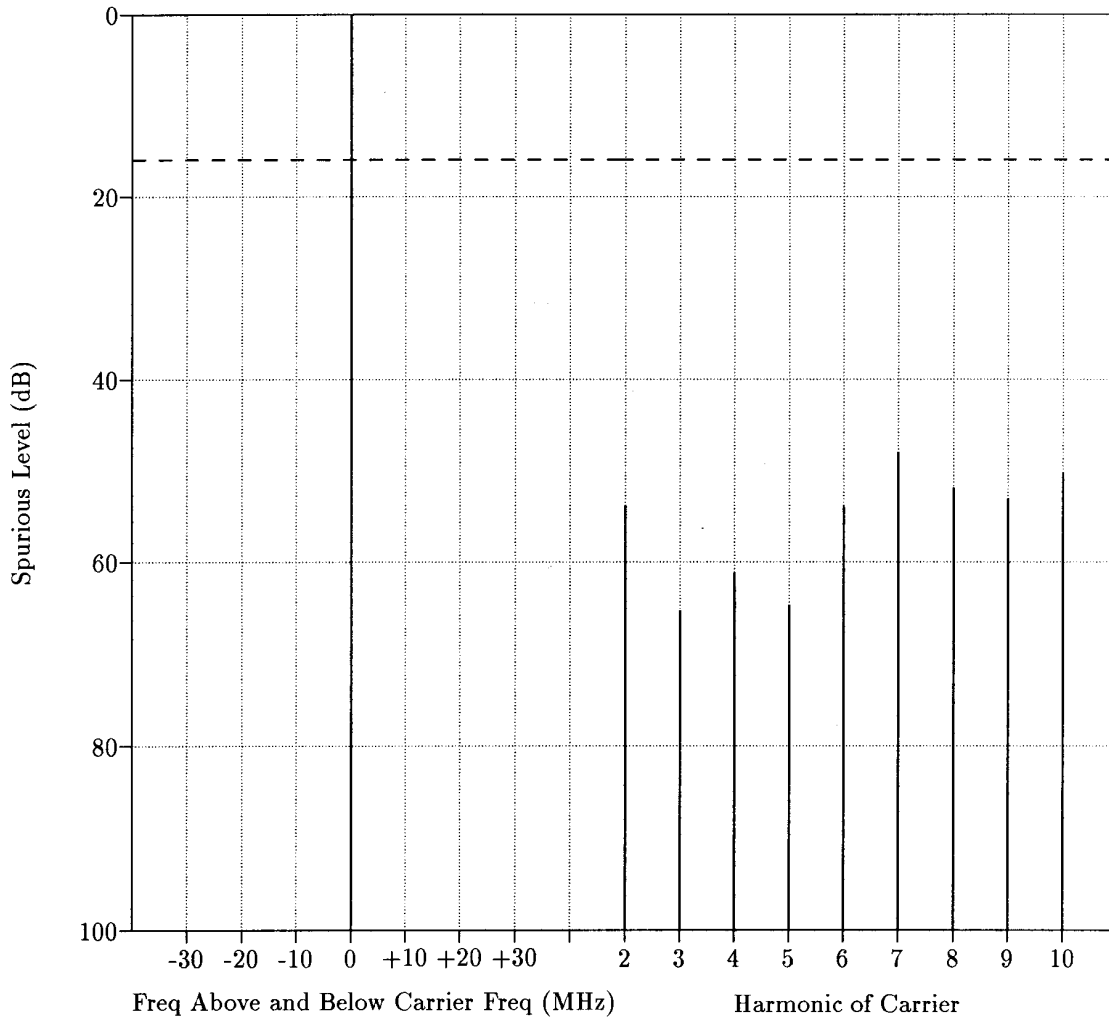
Transmitter Type: See Above
Power Output: 1.00W at 776.500MHz



The conducted spurious level is plotted in dBm on the vertical axis.
The specification for conducted spurious emissions is -16 dBm.

**CONDUCTED SPURIOUS EMISSIONS
LOW POWER, 793.000 MHz**

Transmitter Type: See Above
Power Output: 1.00W at 793.0000MHz



The conducted spurious level is plotted in dBm on the vertical axis.
The specification for conducted spurious emissions is -16 dBm.

RADIATED SPURIOUS EMISSIONS
746.000 MHz, HORIZONTAL & VERTICAL POLARIZATION
OUTPUT POWER = 3.0 WATTS

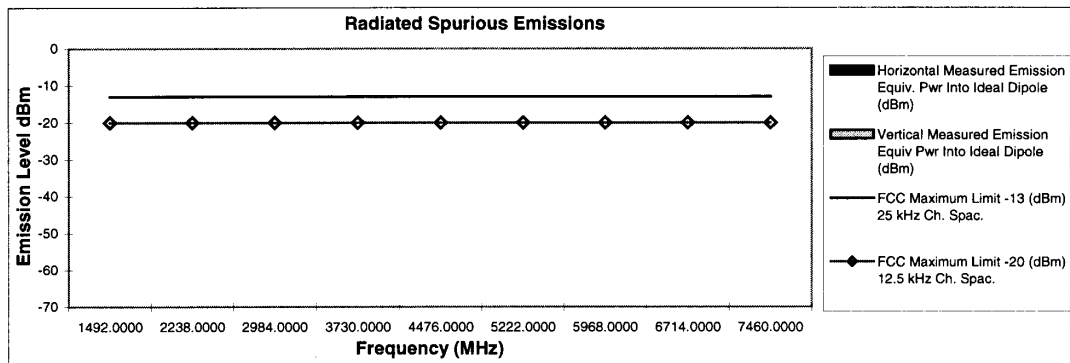
Transmitter Radiated Spurious Emissions: Waris Portable 700MHz

746 MHz

3 Watts

Channel Spacing 12.5kHz I S/N WQCWB05R

Frequency (MHz)	FCC Maximum Limit -13 (dBm) 25 kHz Ch. Spac.	FCC Maximum Limit -20 (dBm) 12.5 kHz Ch. Spac.	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
1492.0000	-13	-20	*	*
2238.0000	-13	-20	*	*
2984.0000	-13	-20	*	*
3730.0000	-13	-20	*	*
4476.0000	-13	-20	*	*
5222.0000	-13	-20	*	*
5968.0000	-13	-20	*	*
6714.0000	-13	-20	*	*
7460.0000	-13	-20	*	*



* Indicates the spurious emission was less than -70dBm or could not be detected due to noise limitations or ambients.

RADIATED SPURIOUS EMISSIONS
762.000 MHz, HORIZONTAL & VERTICAL POLARIZATION
OUTPUT POWER = 3.0 WATTS

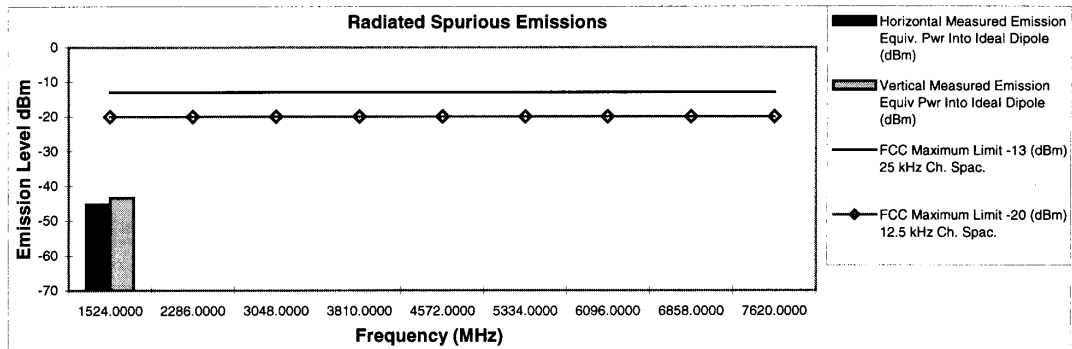
Transmitter Radiated Spurious Emissions: Waris Portable 700MHz

762 MHz

3 Watts

Channel Spacing 12.5kHz | S/N WQCWB05R

Frequency (MHz)	FCC Maximum Limit -13 (dBm) 25 kHz Ch. Spac.	FCC Maximum Limit -20 (dBm) 12.5 kHz Ch. Spac.	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
1524.0000	-13	-20	-45.24	-43.29
2286.0000	-13	-20	*	*
3048.0000	-13	-20	*	*
3810.0000	-13	-20	*	*
4572.0000	-13	-20	*	*
5334.0000	-13	-20	*	*
6096.0000	-13	-20	*	*
6858.0000	-13	-20	*	*
7620.0000	-13	-20	*	*



* Indicates the spurious emission was less than -70dBm or could not be detected due to noise limitations or ambients.

RADIATED SPURIOUS EMISSIONS
776.000 MHz, HORIZONTAL & VERTICAL POLARIZATION
OUTPUT POWER = 3.0 WATTS

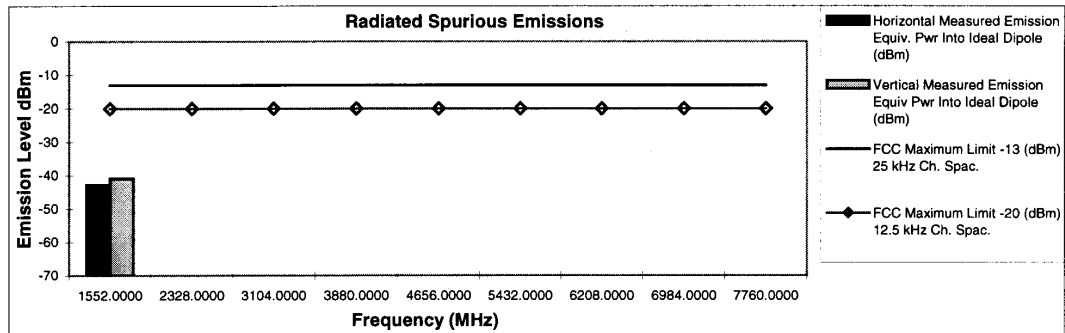
Transmitter Radiated Spurious Emissions: Waris Portable 700MHz

776 MHz

3 Watts

Channel Spacing 12.5kHz | S/N WQCWB05R

Frequency (MHz)	FCC Maximum Limit -13 (dBm) 25 kHz Ch. Spac.	FCC Maximum Limit -20 (dBm) 12.5 kHz Ch. Spac.	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
1552.0000	-13	-20	-42.77	-40.87
2328.0000	-13	-20	*	*
3104.0000	-13	-20	*	*
3880.0000	-13	-20	*	*
4656.0000	-13	-20	*	*
5432.0000	-13	-20	*	*
6208.0000	-13	-20	*	*
6984.0000	-13	-20	*	*
7760.0000	-13	-20	*	*

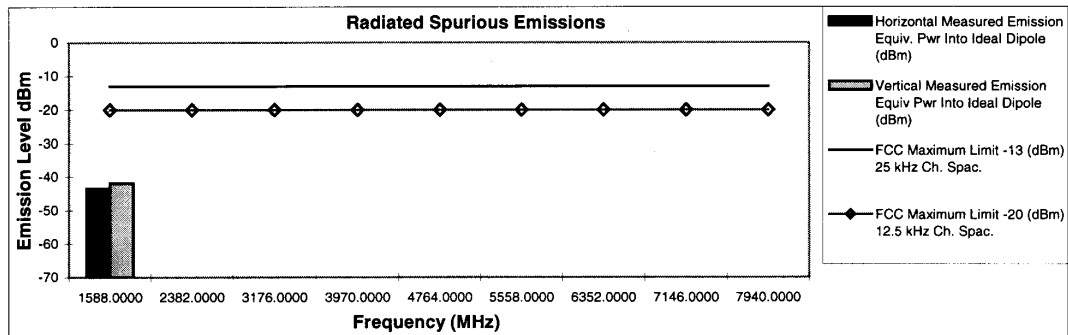


* Indicates the spurious emission was less than -70dBm or could not be detected due to noise limitations or ambients.

RADIATED SPURIOUS EMISSIONS
794.000 MHz, HORIZONTAL & VERTICAL POLARIZATION
OUTPUT POWER = 3.0 WATTS

Transmitter Radiated Spurious Emissions: Waris Portable 700MHz

794 MHz	3 Watts	Channel Spacing 12.5kHz S/N WQCWB05R		
Frequency (MHz)	FCC Maximum Limit -13 (dBm) 25 kHz Ch. Spac.	FCC Maximum Limit -20 (dBm) 12.5 kHz Ch. Spac.	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
1588.0000	-13	-20	-43.40	-41.72
2382.0000	-13	-20	*	*
3176.0000	-13	-20	*	*
3970.0000	-13	-20	*	*
4764.0000	-13	-20	*	*
5558.0000	-13	-20	*	*
6352.0000	-13	-20	*	*
7146.0000	-13	-20	*	*
7940.0000	-13	-20	*	*



* Indicates the spurious emission was less than -70dBm or could not be detected due to noise limitations or ambients.

RADIATED SPURIOUS EMISSIONS
746.000 MHz, HORIZONTAL & VERTICAL POLARIZATION
OUTPUT POWER = 1.0 WATT

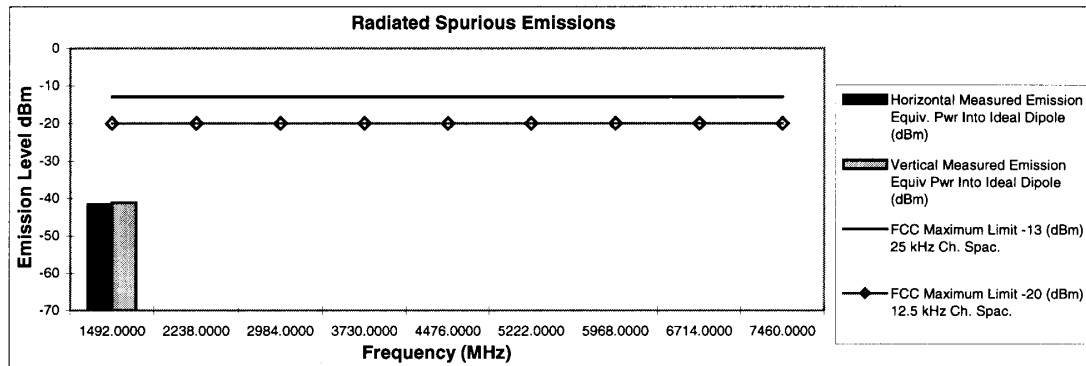
Transmitter Radiated Spurious Emissions: Waris Portable 700MHz

746 MHz

1 Watts

Channel Spacing 12.5kHz | S/N WQCWB044

Frequency (MHz)	FCC Maximum Limit -13 (dBm) 25 kHz Ch. Spac.	FCC Maximum Limit -20 (dBm) 12.5 kHz Ch. Spac.	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
1492.0000	-13	-20	-41.50	-41.05
2238.0000	-13	-20	*	*
2984.0000	-13	-20	*	*
3730.0000	-13	-20	*	*
4476.0000	-13	-20	*	*
5222.0000	-13	-20	*	*
5968.0000	-13	-20	*	*
6714.0000	-13	-20	*	*
7460.0000	-13	-20	*	*



* Indicates the spurious emission was less than -70dBm or could not be detected due to noise limitations or ambients.

RADIATED SPURIOUS EMISSIONS
762.000 MHz, HORIZONTAL & VERTICAL POLARIZATION
OUTPUT POWER = 1.0 WATT

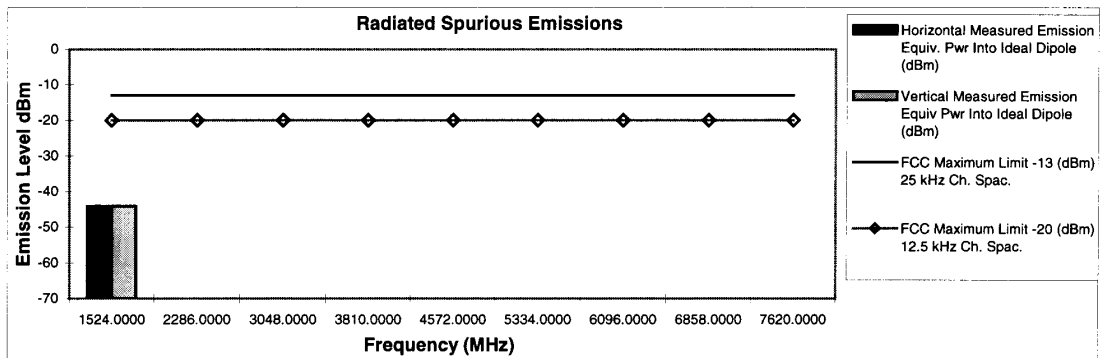
Transmitter Radiated Spurious Emissions: Waris Portable 700MHz

762 MHz

1 Watts

Channel Spacing 12.5kHz | S/N WQCWB044

Frequency (MHz)	FCC Maximum Limit -13 (dBm) 25 kHz Ch. Spac.	FCC Maximum Limit -20 (dBm) 12.5 kHz Ch. Spac.	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
1524.0000	-13	-20	-44.10	-44.11
2286.0000	-13	-20	*	*
3048.0000	-13	-20	*	*
3810.0000	-13	-20	*	*
4572.0000	-13	-20	*	*
5334.0000	-13	-20	*	*
6096.0000	-13	-20	*	*
6858.0000	-13	-20	*	*
7620.0000	-13	-20	*	*



* Indicates the spurious emission was less than -70dBm or could not be detected due to noise limitations or ambients.

RADIATED SPURIOUS EMISSIONS
776.000 MHz, HORIZONTAL & VERTICAL POLARIZATION
OUTPUT POWER = 1.0 WATT

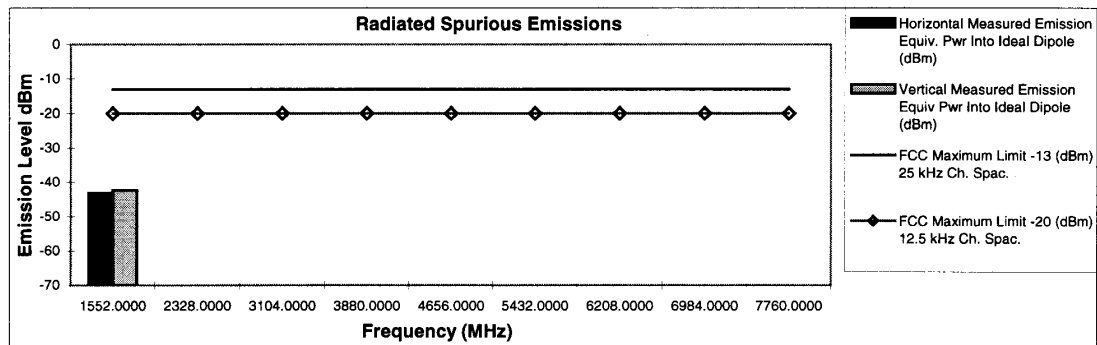
Transmitter Radiated Spurious Emissions: Waris Portable 700MHz

776 MHz

1 Watts

Channel Spacing 12.5kHz | S/N WQCWB044

Frequency (MHz)	FCC Maximum Limit -13 (dBm) 25 kHz Ch. Spac.	FCC Maximum Limit -20 (dBm) 12.5 kHz Ch. Spac.	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
1552.0000	-13	-20	-43.15	-42.27
2328.0000	-13	-20	*	*
3104.0000	-13	-20	*	*
3880.0000	-13	-20	*	*
4656.0000	-13	-20	*	*
5432.0000	-13	-20	*	*
6208.0000	-13	-20	*	*
6984.0000	-13	-20	*	*
7760.0000	-13	-20	*	*



* Indicates the spurious emission was less than -70dBm or could not be detected due to noise limitations or ambients.

RADIATED SPURIOUS EMISSIONS
794.000 MHz, HORIZONTAL & VERTICAL POLARIZATION
OUTPUT POWER = 1.0 WATT

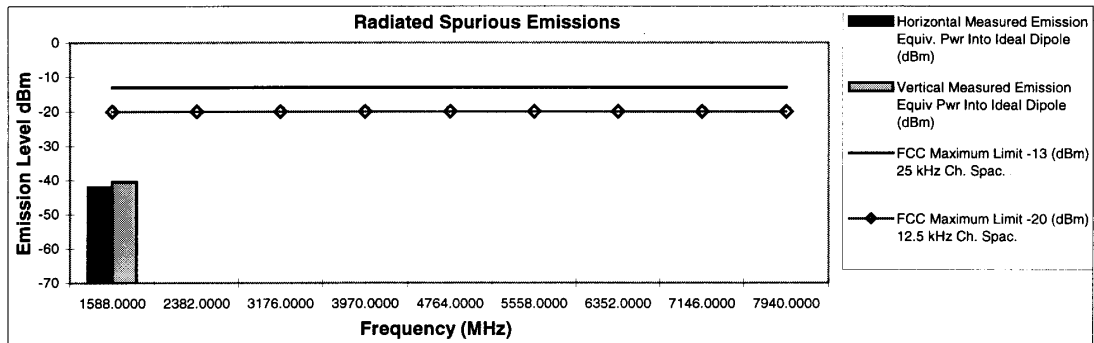
Transmitter Radiated Spurious Emissions: Waris Portable 700MHz

794 MHz

1 Watts

Channel Spacing 12.5kHz | S/N WQCWB044

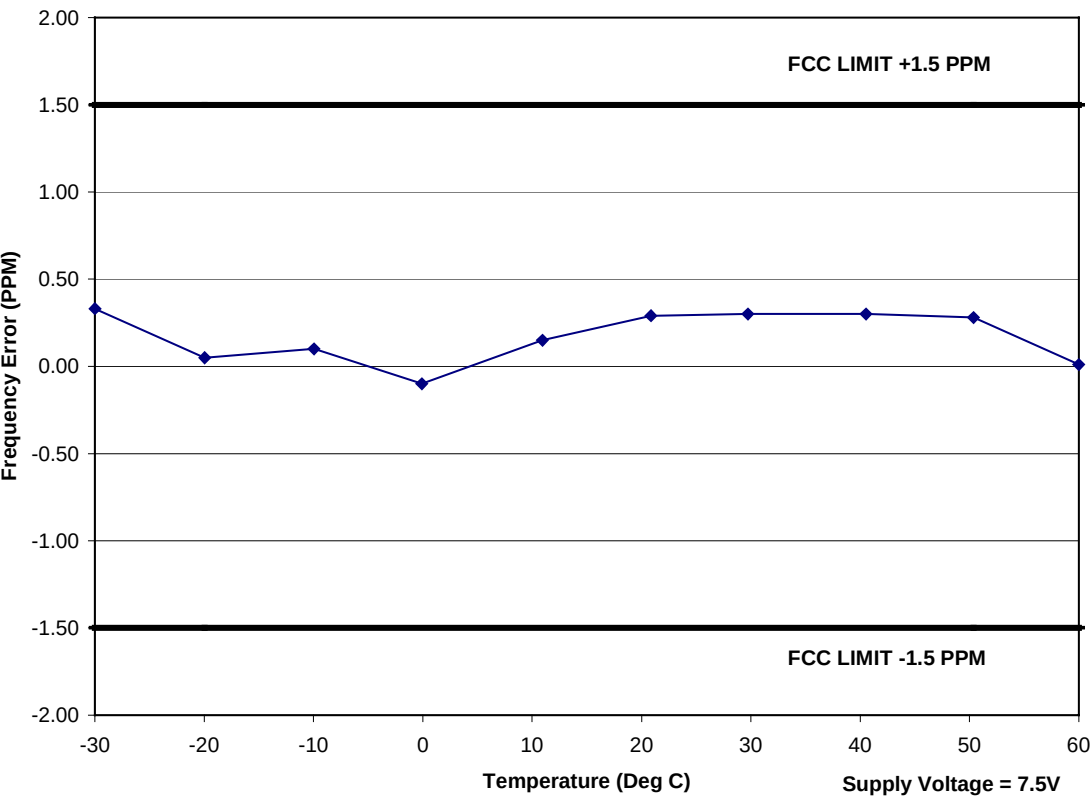
Frequency (MHz)	FCC Maximum Limit -13 (dBm) 25 kHz Ch. Spac.	FCC Maximum Limit -20 (dBm) 12.5 kHz Ch. Spac.	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
1588.0000	-13	-20	-42.01	-40.43
2382.0000	-13	-20	*	*
3176.0000	-13	-20	*	*
3970.0000	-13	-20	*	*
4764.0000	-13	-20	*	*
5558.0000	-13	-20	*	*
6352.0000	-13	-20	*	*
7146.0000	-13	-20	*	*
7940.0000	-13	-20	*	*



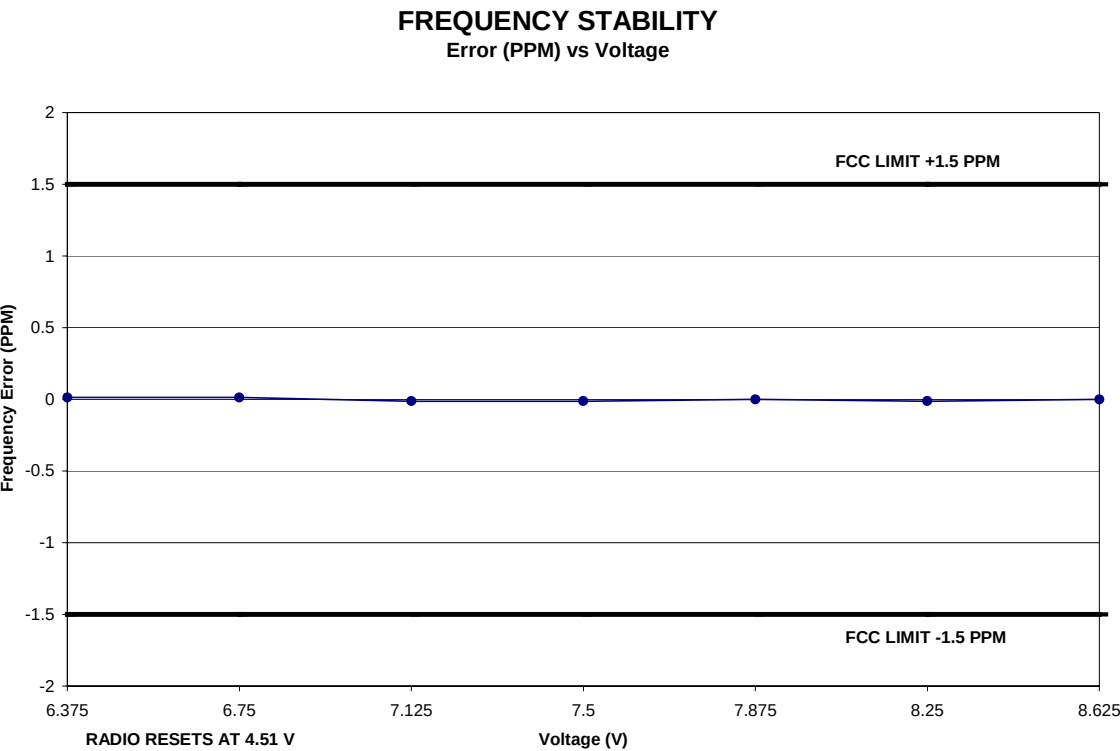
* Indicates the spurious emission was less than -70dBm or could not be detected due to noise limitations or ambients.

FREQUENCY STABILITY VS. TEMPERATURE
SPECIFIED LIMITS: ± 1.5 PPM (-30 TO +60 DEGREES C)

FREQUENCY STABILITY
Error (PPM) vs Temperature



FREQUENCY STABILITY VS. SUPPLY VOLTAGE
REFERENCE 0% = 7.5 VOLTS DC



GNSS RADIATED SPURIOUS EMISSIONS

Pursuant to 47 CFR 27.53(d)(4)(e), for operations in the 746–764 MHz and 776–794 MHz bands, emissions in the band 1559–1610 MHz shall be limited to -70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and -80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth.

This equipment operates in a necessary bandwidth of 11.0 kHz as calculated in Exhibit 4F, which is greater than 700 Hz but significantly less than 1 MHz. Integration of the emissions bandwidth shows that the total energy per necessary bandwidth approaches the total energy per MHz, and the emissions limit therefore approaches -70 dBW.

The measured emission at TX frequency of 794.000 MHz produces a second harmonic emission at 1588.000 MHz, which lies within the 1559–1610 MHz band, having a worst-case level of -40.57 dBm (or -70.57 dBW).

GNSS Testing				
Date: 3/4/02		EMC#: EMC01302002-043		Temp: 72F /65%
Product: Waris Portable 700MHz		S/N WQCVB044		Channel Spacing: 12.5
		Notes: GNSS		
Tx Freq. 746.0000				
		Horizontal Radiated	Vertical Radiated	
Spur	Frequency MHz	Spur. Emiss. (dBm)	Spur. Emiss. (dBm)	
2XFund	1492.0000	-41.79	-39.51	
Notes: GNSS				
Tx Freq. 762.0000				
		Horizontal Radiated	Vertical Radiated	
Spur	Frequency MHz	Spur. Emiss. (dBm)	Spur. Emiss. (dBm)	
2XFund	1524.0000	-42.96	-45.38	
Notes: GNSS				
Tx Freq. 776.0000				
		Horizontal Radiated	Vertical Radiated	
Spur	Frequency MHz	Spur. Emiss. (dBm)	Spur. Emiss. (dBm)	
2XFund	1552.0000	-45.81	-49.79	
Notes: GNSS				
Tx Freq. 794.0000				
		Horizontal Radiated	Vertical Radiated	
Spur	Frequency MHz	Spur. Emiss. (dBm)	Spur. Emiss. (dBm)	
2XFund	1588.0000	-40.57	-43.65	

ADJACENT CHANNEL COUPLED POWER RATIOS

Pursuant to 47 CFR 90.543(a)

Block A 777.050 MHz 12.5 kHz Channel Spacing Analog						
Offset (kHz)	Meas. BW (kHz)		Lower		Upper	Spec (dBc)
9.375	6.25		-43.14		-43.37	-40
15.625	6.25		-74.13		-74.23	-60
21.875	6.25		-77.05		-77.18	-60
37.500	25		-77.85		-77.62	-65
62.500	25		-82.31		-82.68	-65
87.500	25		-84.99		-85.24	-65
150.000	100		-83.18		-83.87	-65
250.000	100		-87.25		-87.31	-65
> 400k – RX band	30 (swept)		< -75			-75
RX band	30 (swept)		< -100			-100

Block B 793.925 MHz 12.5 kHz Channel Spacing Analog						
Offset (kHz)	Meas. BW (kHz)		Lower		Upper	Spec (dBc)
9.375	6.25		-43.61		-43.75	-40
15.625	6.25		-74.96		-74.60	-60
21.875	6.25		-77.79		-77.98	-60
37.500	25		-78.48		-78.81	-65
62.500	25		-82.39		-82.68	-65
87.500	25		-84.68		-84.94	-65
150.000	100		-83.67		-83.77	-65
250.000	100		-87.75		-88.05	-65
> 400k – RX band	30 (swept)		< -75			-75
RX band	30 (swept)		< -100			-100