

6.4. Radiated Spurious Emissions -- Pursuant 47 CFR 2.1053, 2.1057, 90.210(g) (3), 90.691(a) (2)

FCC Limits

-Per 90.210(g) (3) and 90.691(a) (2), radiated spurious emissions shall be attenuated below the maximum level of emission of the carrier frequency in accordance with the following formula:

Spurious attenuation in dB = $43 + 10 \log_{10}(P)$
(Thus the effective limit is -13 dBm for any transmitter power level).

NOTE 1: Spurious emissions are dependent on the linearity of the Power Amplifier (U516) and are independent of modulation type or TDM interleaving. Thus emissions were tested with the radio set to Quad-16QAM at both maximum and minimum radio output power settings. Data is presented for both primary source and alternate source Power Amplifier (U516).

NOTE 2: An asterisk () in the data indicates the spurious emission was less than -33 dBm or could not be detected due to noise limitations or ambients.*

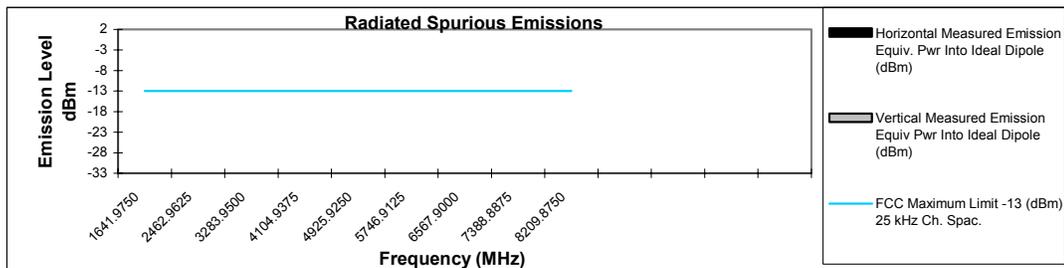
NOTE 3: Spurious emission levels were measured with the non-detachable antenna mounted on the radio product, as in intended use. Measurement setup is described in Exhibit 7.3.

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FCC ID:AZ489FT5845

Transmitter Radiated Spurious Emissions: i415
820.9875 MHz 0.7 Channel Spacing 25KHZ S/N 364VFEPLDX

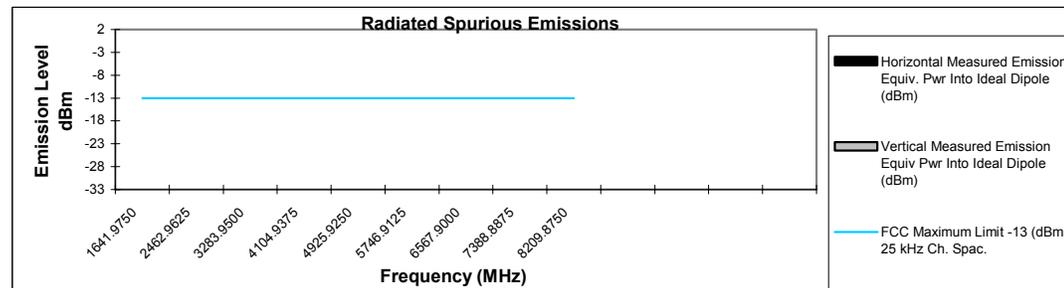
Spur	Frequency (MHz)	FCC Maximum Limit -13 (dBm) 25 kHz Ch. Spac.	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
2XFund	1641.9750	-13	*	*
3XFund	2462.9625	-13	*	*
4XFund	3283.9500	-13	*	*
5XFund	4104.9375	-13	*	*
6XFund	4925.9250	-13	*	*
7XFund	5746.9125	-13	*	*
8XFund	6567.9000	-13	*	*
9XFund	7388.8875	-13	*	*
10XFund	8209.8750	-13	*	*



* Indicates the spurious emission could not be detected due to noise limitations or ambients.

Transmitter Radiated Spurious Emissions: i415
824.9875 MHz 0.7 Channel Spacing 25KHZ S/N 364VFEPLDX

Spur	Frequency (MHz)	FCC Maximum Limit -13 (dBm) 25 kHz Ch. Spac.	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
2XFund	1641.9750	-13	*	*
3XFund	2462.9625	-13	*	*
4XFund	3283.9500	-13	*	*
5XFund	4104.9375	-13	*	*
6XFund	4925.9250	-13	*	*
7XFund	5746.9125	-13	*	*
8XFund	6567.9000	-13	*	*
9XFund	7388.8875	-13	*	*
10XFund	8209.8750	-13	*	*



* Indicates the spurious emission could not be detected due to noise limitations or ambients.

The data presented here was taken using the substitution method as found in the TIA/EIA-603 document.

Motorola Plantation EMC Lab – Test Performed by: Frank Baader

May 27, 2005

FCC Registration: 91932 / Industry Canada: IC3679

Figure 6-23b: Maximum Power Setting Transmitter Spurious Emissions

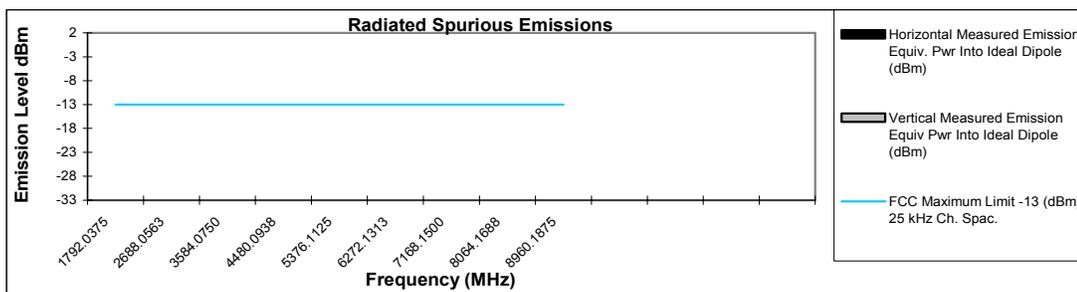
Motorola Inc.

FCC ID:AZ489FT5845

Transmitter Radiated Spurious Emissions: i415

896.01875 MHz 0.7 Channel Spacing 25KHZ S/N 364VFEPLDX

Spur	Frequency (MHz)	FCC Maximum Limit -13 (dBm) 25 kHz Ch. Spac.	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
2XFund	1792.0375	-13	*	-38.83
3XFund	2688.0563	-13	*	*
4XFund	3584.0750	-13	*	*
5XFund	4480.0938	-13	*	*
6XFund	5376.1125	-13	*	*
7XFund	6272.1313	-13	*	*
8XFund	7168.1500	-13	*	*
9XFund	8064.1688	-13	*	*
10XFund	8960.1875	-13	*	*

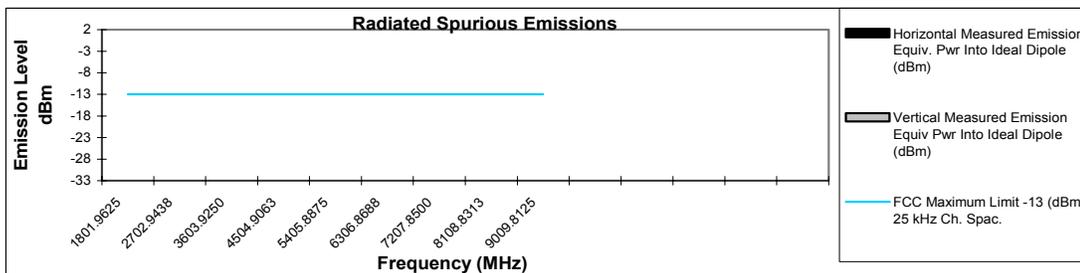


* Indicates the spurious emission could not be detected due to noise limitations or ambients.

Transmitter Radiated Spurious Emissions: i415

900.98125 MHz 0.7 Channel Spacing 25KHZ S/N 364VFEPLDX

Spur	Frequency (MHz)	FCC Maximum Limit -13 (dBm) 25 kHz Ch. Spac.	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
2XFund	1801.9625	-13	*	*
3XFund	2702.9438	-13	*	*
4XFund	3603.9250	-13	*	*
5XFund	4504.9063	-13	*	*
6XFund	5405.8875	-13	*	*
7XFund	6306.8688	-13	*	*
8XFund	7207.8500	-13	*	*
9XFund	8108.8313	-13	*	*
10XFund	9009.8125	-13	*	*



* Indicates the spurious emission could not be detected due to noise limitations or ambients.

The data presented here was taken using the substitution method as found in the TIA/EIA-603 document.

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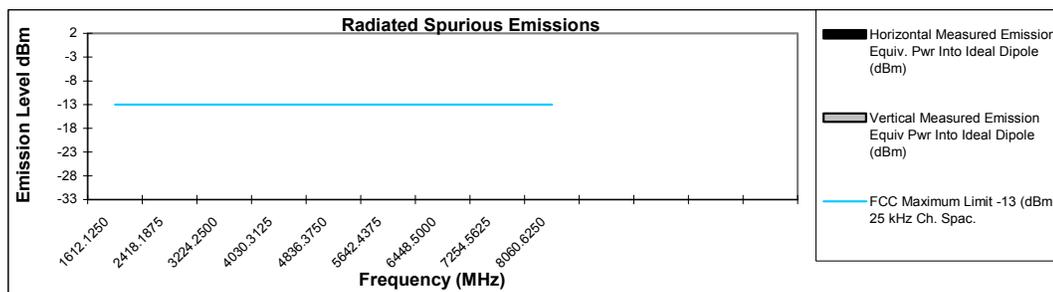
Figure 6-23c: Maximum Power Setting Transmitter Spurious Emissions

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Transmitter Radiated Spurious Emissions: i415

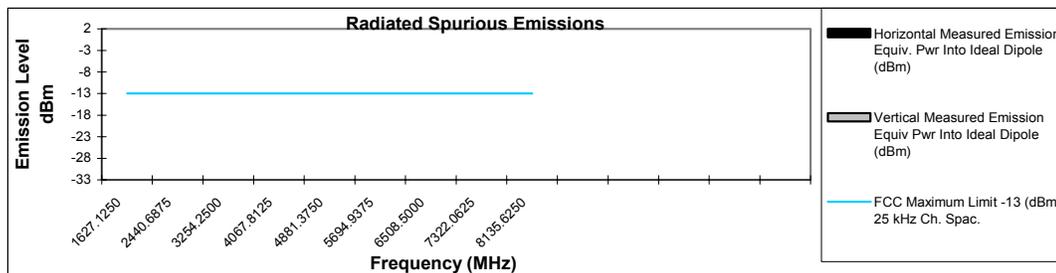
806.0625 MHz		cutback		Channel Spacing 25KHZ		S/N 364VFEPLDX	
Spur	Frequency (MHz)	FCC Maximum Limit -13 (dBm) 25 kHz Ch. Spac.	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)			
2XFund	1612.1250	-13	*	*			
3XFund	2418.1875	-13	*	*			
4XFund	3224.2500	-13	*	*			
5XFund	4030.3125	-13	*	*			
6XFund	4836.3750	-13	*	*			
7XFund	5642.4375	-13	*	*			
8XFund	6448.5000	-13	*	*			
9XFund	7254.5625	-13	*	*			
10XFund	8060.6250	-13	*	*			



* Indicates the spurious emission could not be detected due to noise limitations or ambients.

Transmitter Radiated Spurious Emissions: i415

813.5625 MHz		cutback		Channel Spacing 25KHZ		S/N 364VFEPLDX	
Spur	Frequency (MHz)	FCC Maximum Limit -13 (dBm) 25 kHz Ch. Spac.	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)			
2XFund	1627.1250	-13	*	*			
3XFund	2440.6875	-13	*	*			
4XFund	3254.2500	-13	*	*			
5XFund	4067.8125	-13	*	*			
6XFund	4881.3750	-13	*	*			
7XFund	5694.9375	-13	*	*			
8XFund	6508.5000	-13	*	*			
9XFund	7322.0625	-13	*	*			
10XFund	8135.6250	-13	*	*			



* Indicates the spurious emission could not be detected due to noise limitations or ambients.

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Figure 6-23d: Minimum Power Setting Transmitter Spurious Emissions

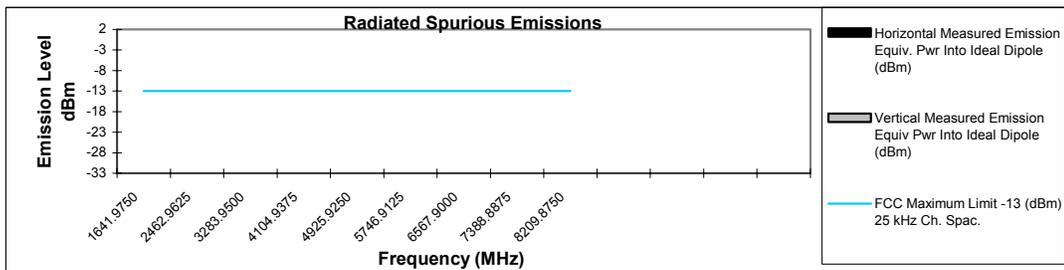
Motorola Inc.

FCC ID:AZ489FT5845

Transmitter Radiated Spurious Emissions: i415

820.9875 MHz cutback Channel Spacing 25KHZ S/N 364VFEPLDX

Spur	Frequency (MHz)	FCC Maximum Limit -13 (dBm) 25 kHz Ch. Spac.	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
2XFund	1641.9750	-13	*	*
3XFund	2462.9625	-13	*	*
4XFund	3283.9500	-13	*	*
5XFund	4104.9375	-13	*	*
6XFund	4925.9250	-13	*	*
7XFund	5746.9125	-13	*	*
8XFund	6567.9000	-13	*	*
9XFund	7388.8875	-13	*	*
10XFund	8209.8750	-13	*	*

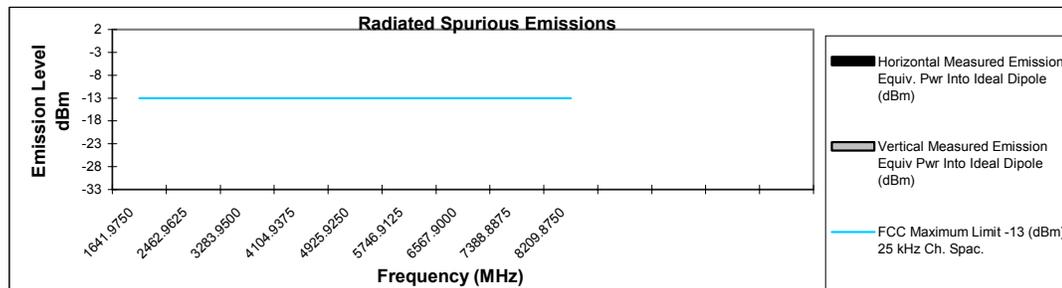


* Indicates the spurious emission could not be detected due to noise limitations or ambients.

Transmitter Radiated Spurious Emissions: i415

824.9875 MHz cutback Channel Spacing 25KHZ S/N 364VFEPLDX

Spur	Frequency (MHz)	FCC Maximum Limit -13 (dBm) 25 kHz Ch. Spac.	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
2XFund	1641.9750	-13	*	*
3XFund	2462.9625	-13	*	*
4XFund	3283.9500	-13	*	*
5XFund	4104.9375	-13	*	*
6XFund	4925.9250	-13	*	*
7XFund	5746.9125	-13	*	*
8XFund	6567.9000	-13	*	*
9XFund	7388.8875	-13	*	*
10XFund	8209.8750	-13	*	*



* Indicates the spurious emission could not be detected due to noise limitations or ambients.

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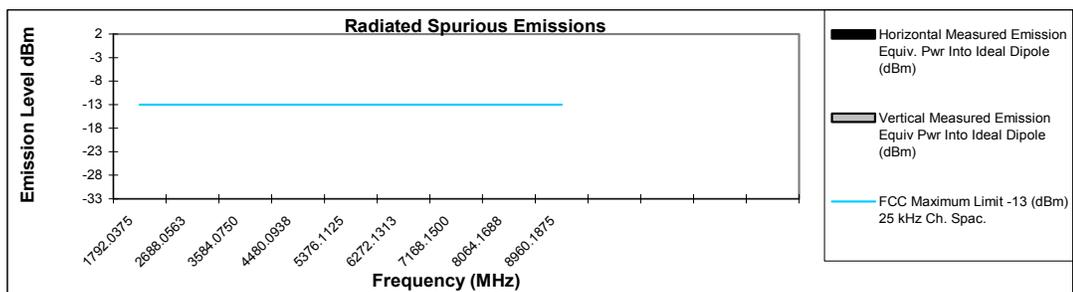
Figure 6-23e: Minimum Power Setting Transmitter Spurious Emissions

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Transmitter Radiated Spurious Emissions: i415

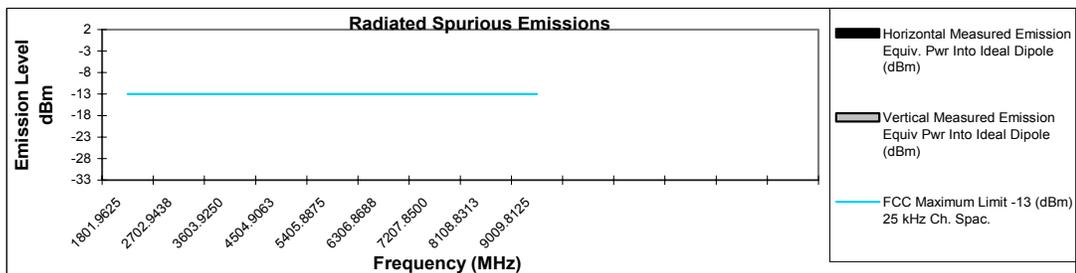
896.01875 MHz		cutback		Channel Spacing 25KHZ		S/N 364VFEPLDX	
Spur	Frequency (MHz)	FCC Maximum Limit -13 (dBm) 25 kHz Ch. Spac.	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)			
2XFund	1792.0375	-13	*	*			
3XFund	2688.0563	-13	*	*			
4XFund	3584.0750	-13	*	*			
5XFund	4480.0938	-13	*	*			
6XFund	5376.1125	-13	*	-43.01			
7XFund	6272.1313	-13	*	*			
8XFund	7168.1500	-13	*	*			
9XFund	8064.1688	-13	*	*			
10XFund	8960.1875	-13	*	*			



* Indicates the spurious emission could not be detected due to noise limitations or ambients.

Transmitter Radiated Spurious Emissions: i415

900.98125 MHz		cutback		Channel Spacing 25KHZ		S/N 364VFEPLDX	
Spur	Frequency (MHz)	FCC Maximum Limit -13 (dBm) 25 kHz Ch. Spac.	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)			
2XFund	1801.9625	-13	*	*			
3XFund	2702.9438	-13	*	*			
4XFund	3603.9250	-13	*	*			
5XFund	4504.9063	-13	*	*			
6XFund	5405.8875	-13	*	*			
7XFund	6306.8688	-13	*	*			
8XFund	7207.8500	-13	*	*			
9XFund	8108.8313	-13	*	*			
10XFund	9009.8125	-13	*	*			



* Indicates the spurious emission could not be detected due to noise limitations or ambients.

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May 31, 2005

6-23f: Minimum Power Setting Transmitter Spurious Emissions