

6.4. Radiated Spurious Emissions -- Pursuant 47 CFR 2.1053 & 2.1057

FCC Limits

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).

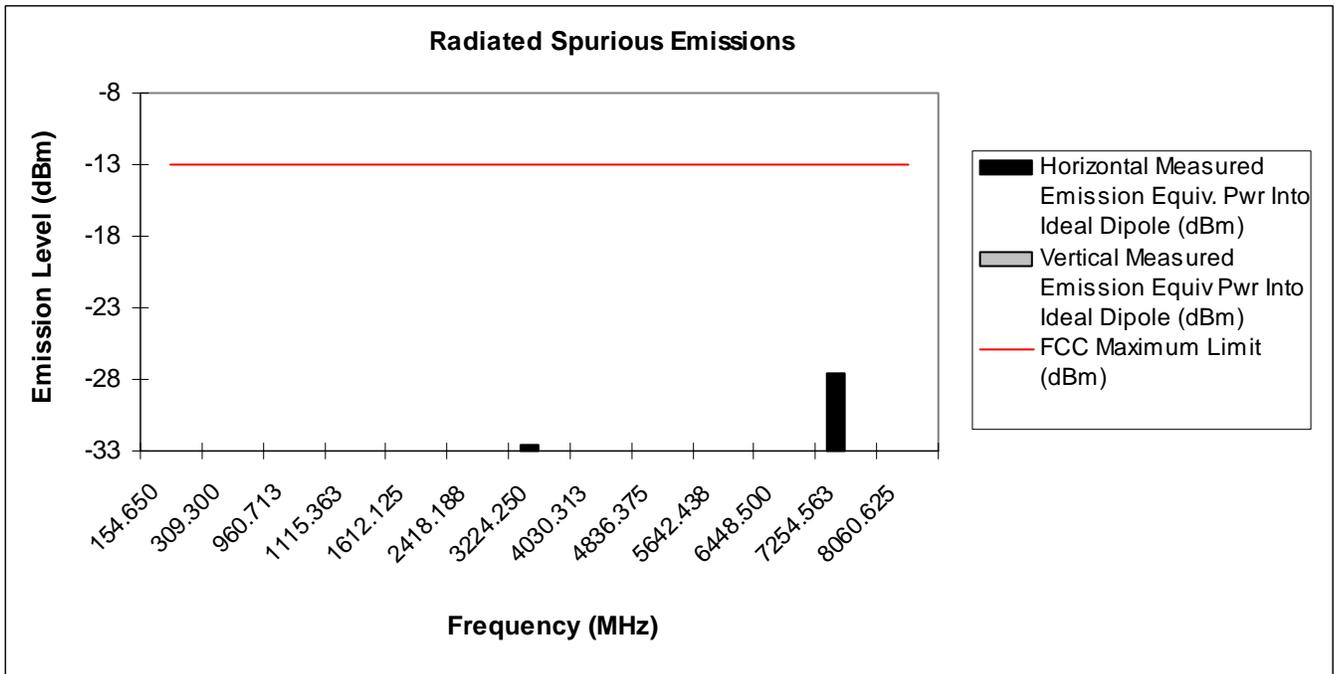
NOTE 1: U500 was tested at both maximum and minimum power output settings.

NOTE 2: Spurious emissions are independent of modulation type. Quad-16QAM was used to obtain the results reported.

NOTE 3: An asterisk (*) in the data indicates the spurious emission was less than -33dBm or could not be detected due to noise limitations or ambients.

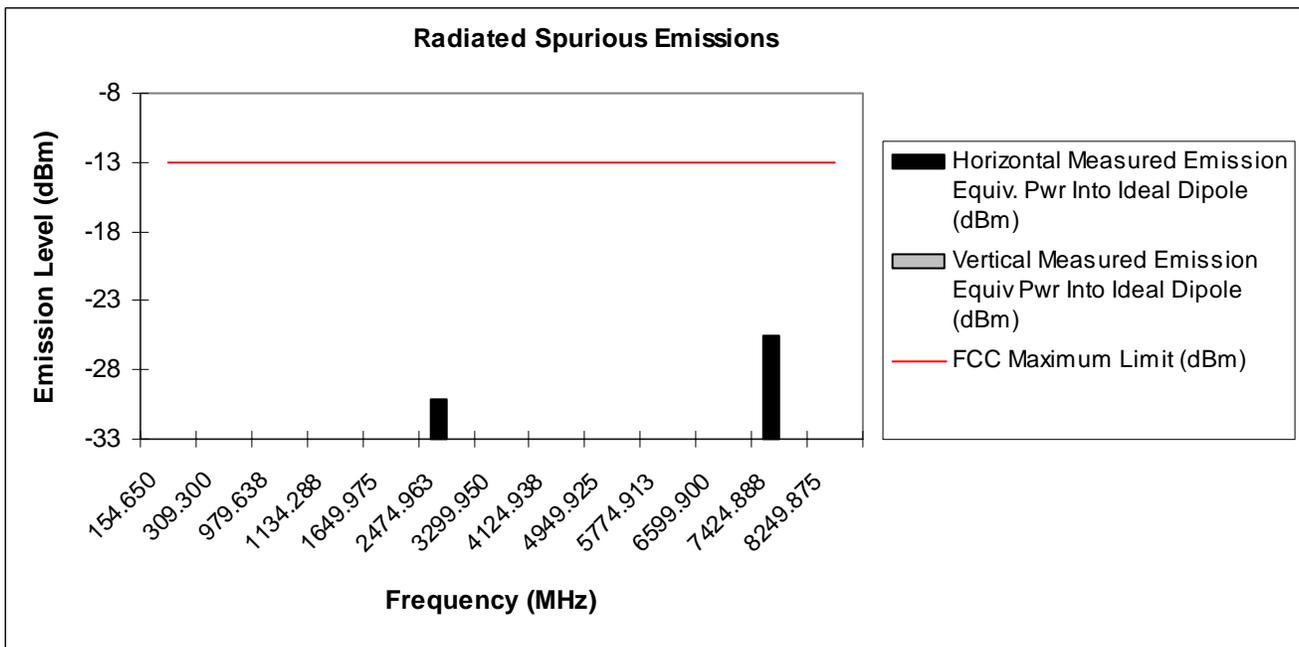
**Transmitter Radiated Spurious Emissions: (Maximum Power Setting)
806.0625 MHz**

Spur	Frequency (MHz)	FCC Maximum Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
IF	154.650	-13	*	*
2XIF	309.300	-13	*	*
LO	960.713	-13	*	*
IF+LO	1115.363	-13	*	*
2XFUND	1612.125	-13	*	*
3XFUND	2418.188	-13	*	*
4XFUND	3224.250	-13	-32.6	*
5XFUND	4030.313	-13	*	*
6XFUND	4836.375	-13	*	*
7XFUND	5642.438	-13	*	*
8XFUND	6448.500	-13	*	*
9XFUND	7254.563	-13	-27.6	*
10XFUND	8060.625	-13	*	*



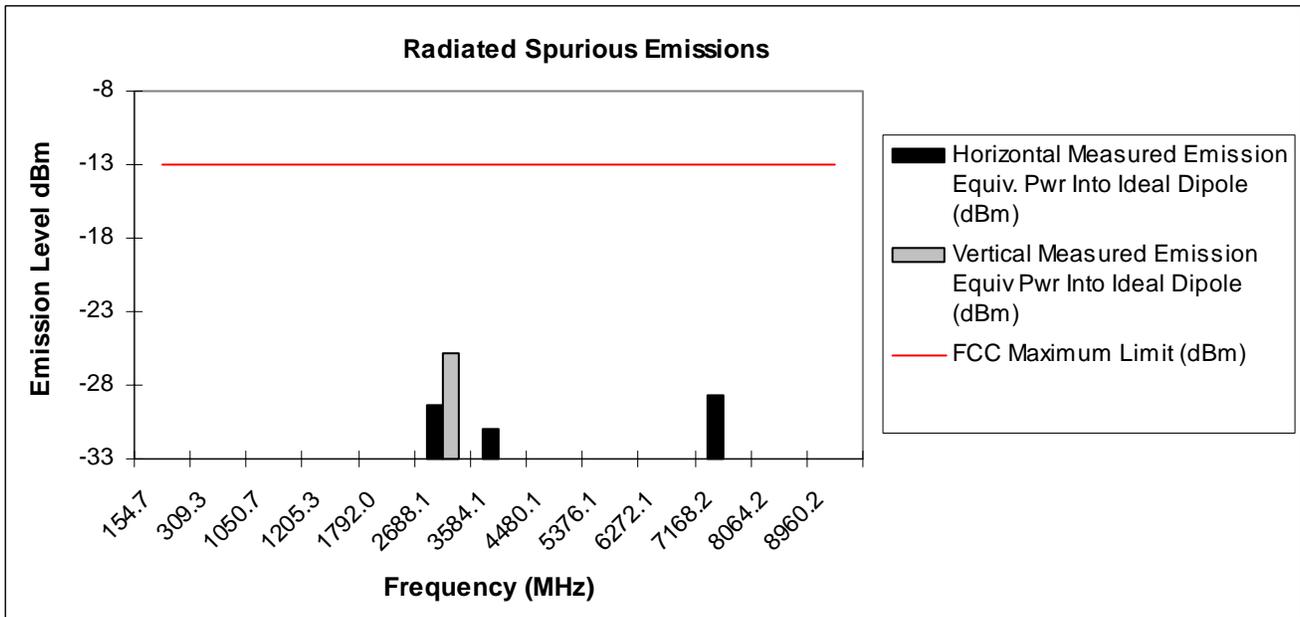
**Transmitter Radiated Spurious Emissions: (Maximum Power Setting)
824.9875 MHz**

Spur	Frequency (MHz)	FCC Maximum Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
IF	154.650	-13	*	*
2XIF	309.300	-13	*	*
LO	979.638	-13	*	*
IF+LO	1134.288	-13	*	*
2XFUND	1649.975	-13	*	*
3XFUND	2474.963	-13	-30.1	*
4XFUND	3299.950	-13	*	*
5XFUND	4124.938	-13	*	*
6XFUND	4949.925	-13	*	*
7XFUND	5774.913	-13	*	*
8XFUND	6599.900	-13	*	*
9XFUND	7424.888	-13	-25.5	*
10XFUND	8249.875	-13	*	*



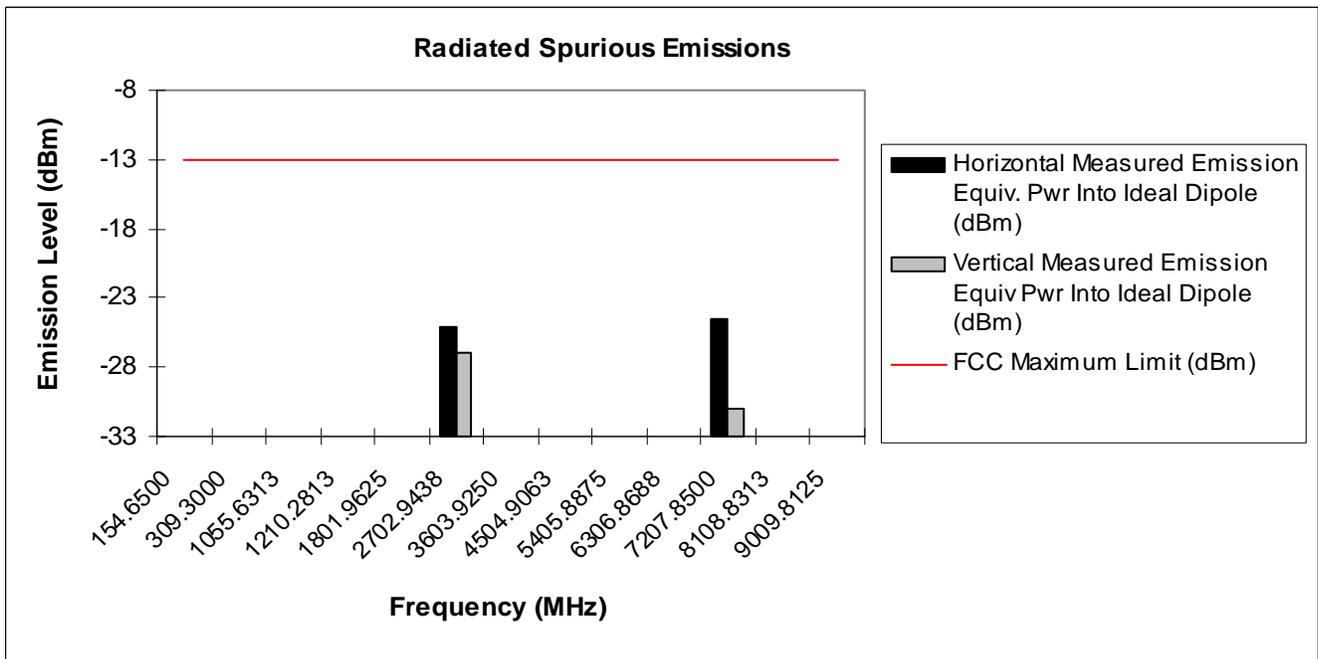
**Transmitter Radiated Spurious Emissions: (Maximum Power Setting)
896.01875 MHz**

Spur	Frequency (MHz)	FCC Maximum Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
IF	154.6500	-13	*	*
2XIF	309.3000	-13	*	*
LO	1050.6688	-13	*	*
IF+LO	1205.3188	-13	*	*
2XFUND	1792.0375	-13	*	*
3XFUND	2688.0563	-13	-29.4	-25.9
4XFUND	3584.0750	-13	-31.0	*
5XFUND	4480.0936	-13	*	*
6XFUND	5376.1125	-13	*	*
7XFUND	6272.1313	-13	*	*
8XFUND	7168.1500	-13	-28.6	*
9XFUND	8064.1688	-13	*	*
10XFUND	8960.1875	-13	*	*



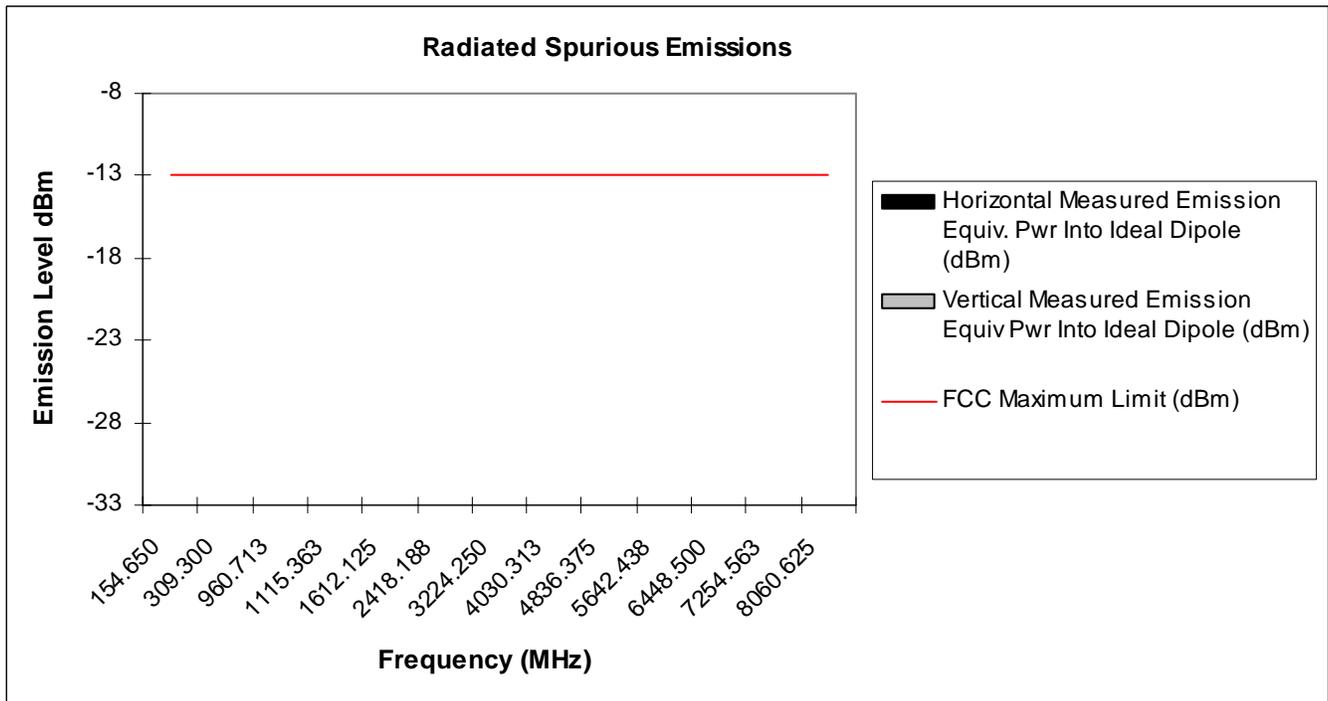
**Transmitter Radiated Spurious Emissions: (Maximum Power Setting)
900.98125 MHz**

Spur	Frequency (MHz)	FCC Maximum Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
IF	154.6500	-13	*	*
2XIF	309.3000	-13	*	*
LO	1055.6313	-13	*	*
IF+LO	1210.2813	-13	*	*
2XFUND	1801.9625	-13	*	*
3XFUND	2702.9438	-13	-25.1	-27
4XFUND	3603.9250	-13	*	*
5XFUND	4504.9063	-13	*	*
6XFUND	5405.8875	-13	*	*
7XFUND	6306.8688	-13	*	*
8XFUND	7207.8500	-13	-24.6	-31
9XFUND	8108.8313	-13	*	*
10XFUND	9009.8125	-13	*	*



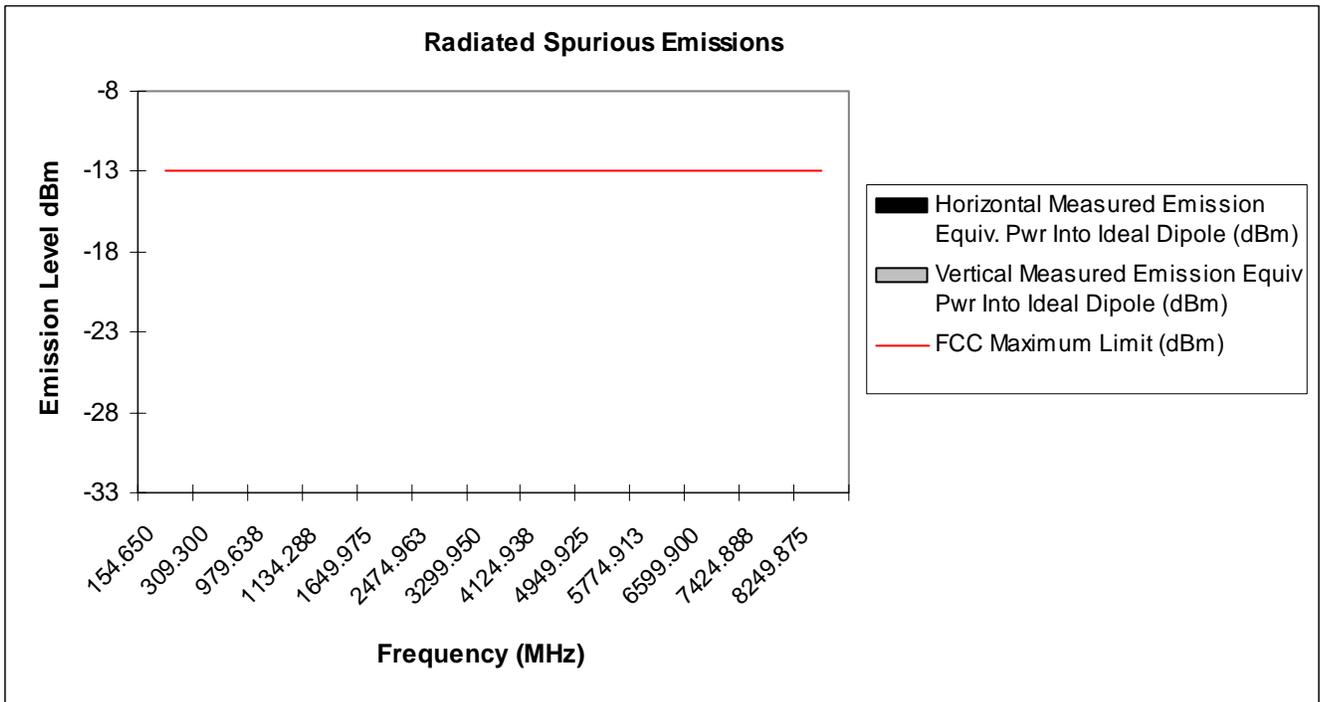
**Transmitter Radiated Spurious Emissions: (Minimum Power Setting)
806.0625 MHz**

Spur	Frequency (MHz)	FCC Maximum Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
IF	154.650	-13	*	*
2XIF	309.300	-13	*	*
LO	960.713	-13	*	*
IF+LO	1115.363	-13	*	*
2XFUND	1612.125	-13	*	*
3XFUND	2418.188	-13	*	*
4XFUND	3224.250	-13	*	*
5XFUND	4030.313	-13	*	*
6XFUND	4836.375	-13	*	*
7XFUND	5642.438	-13	*	*
8XFUND	6448.500	-13	*	*
9XFUND	7254.563	-13	*	*
10XFUND	8060.625	-13	*	*



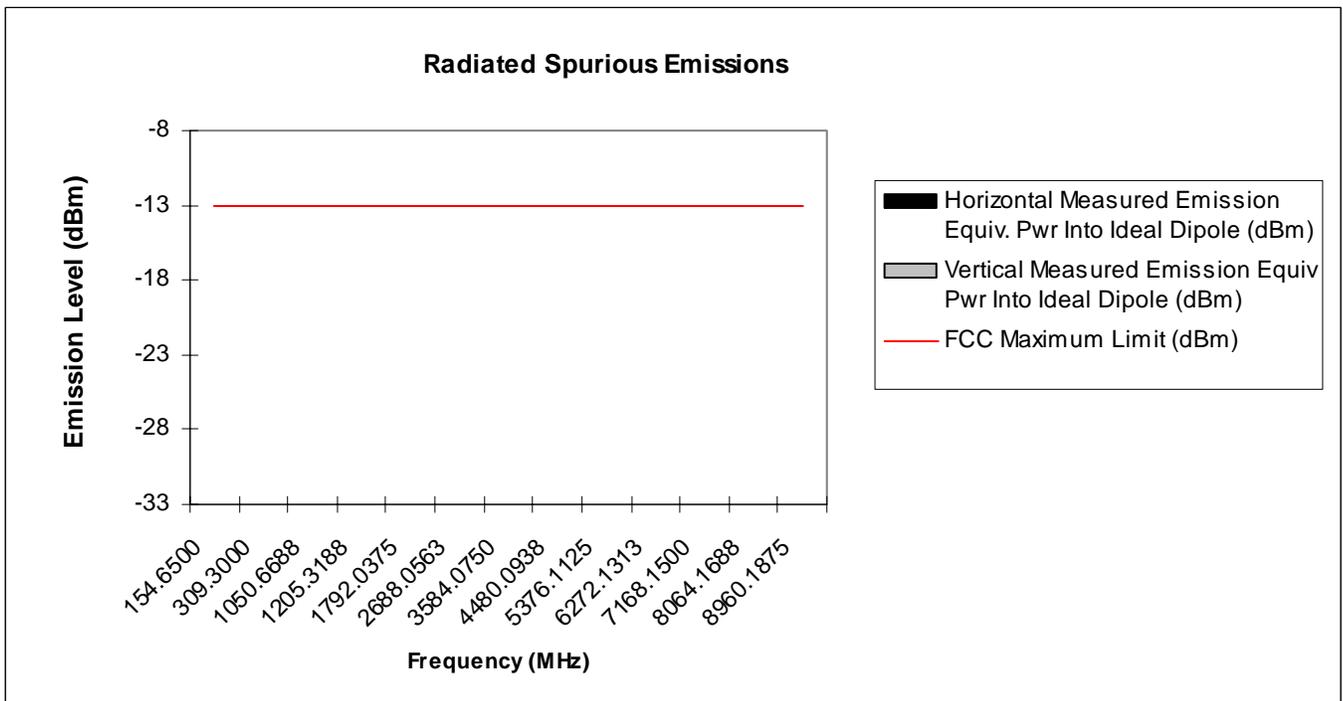
**Transmitter Radiated Spurious Emissions: (Minimum Power Setting)
824.9875MHz**

Spur	Frequency (MHz)	FCC Maximum Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
IF	154.650	-13	*	*
2XIF	309.300	-13	*	*
LO	979.638	-13	*	*
IF+LO	1134.288	-13	*	*
2XFUND	1649.975	-13	*	*
3XFUND	2474.963	-13	*	*
4XFUND	3299.950	-13	*	*
5XFUND	4124.938	-13	*	*
6XFUND	4949.925	-13	*	*
7XFUND	5774.913	-13	*	*
8XFUND	6599.900	-13	*	*
9XFUND	7424.888	-13	*	*
10XFUND	8249.875	-13	*	*



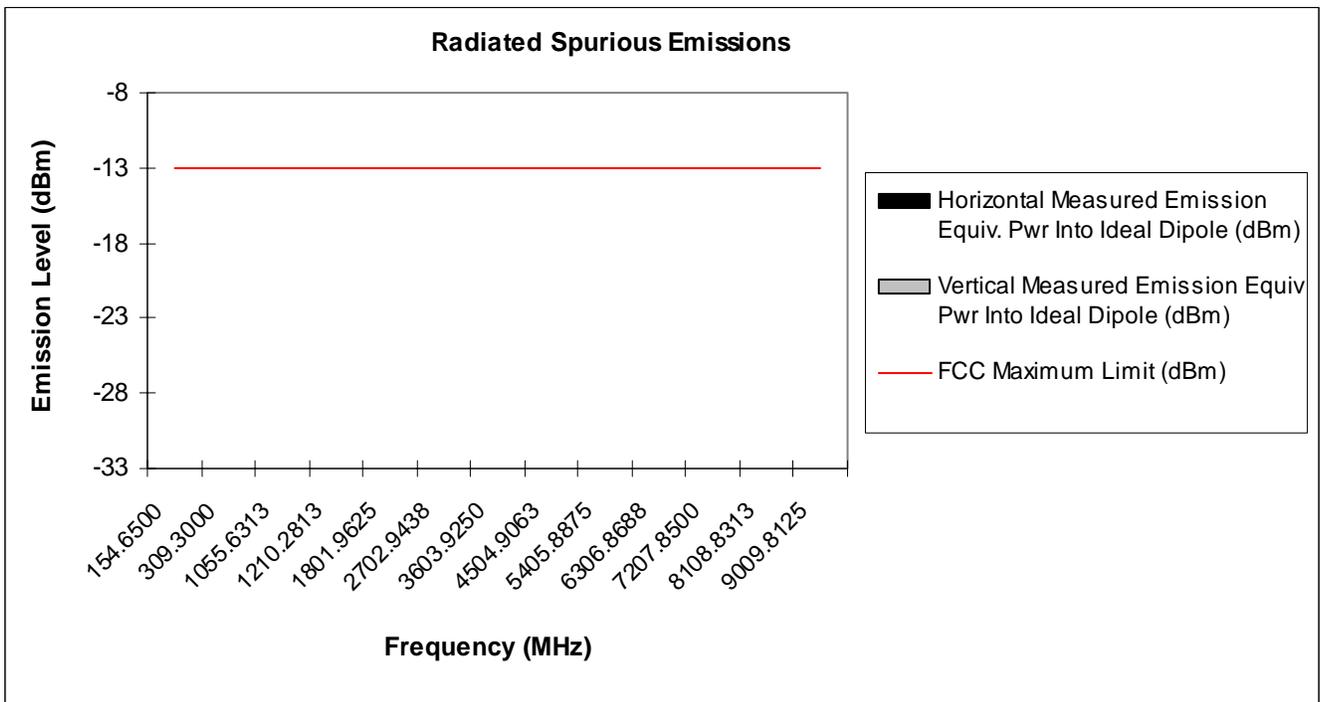
**Transmitter Radiated Spurious Emissions: (Minimum Power Setting)
896.01875 MHz**

Spur	Frequency (MHz)	FCC Maximum Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
IF	154.6500	-13	*	*
2XIF	309.3000	-13	*	*
LO	1050.6688	-13	*	*
IF+LO	1205.3188	-13	*	*
2XFUND	1792.0375	-13	*	*
3XFUND	2688.0563	-13	*	*
4XFUND	3584.0750	-13	*	*
5XFUND	4480.0936	-13	*	*
6XFUND	5376.1125	-13	*	*
7XFUND	6272.1313	-13	*	*
8XFUND	7168.1500	-13	*	*
9XFUND	8064.1688	-13	*	*
10XFUND	8960.1875	-13	*	*



**Transmitter Radiated Spurious Emissions: (Minimum Power Setting)
900.98125 MHz**

Spur	Frequency (MHz)	FCC Maximum Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
IF	154.6500	-13	*	*
2XIF	309.3000	-13	*	*
LO	1055.6313	-13	*	*
IF+LO	1210.2813	-13	*	*
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	*	*



6.5. Conducted Spurious Emissions – Pursuant 47 CFR 2.1053 & 2.1057

FCC Limits

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).

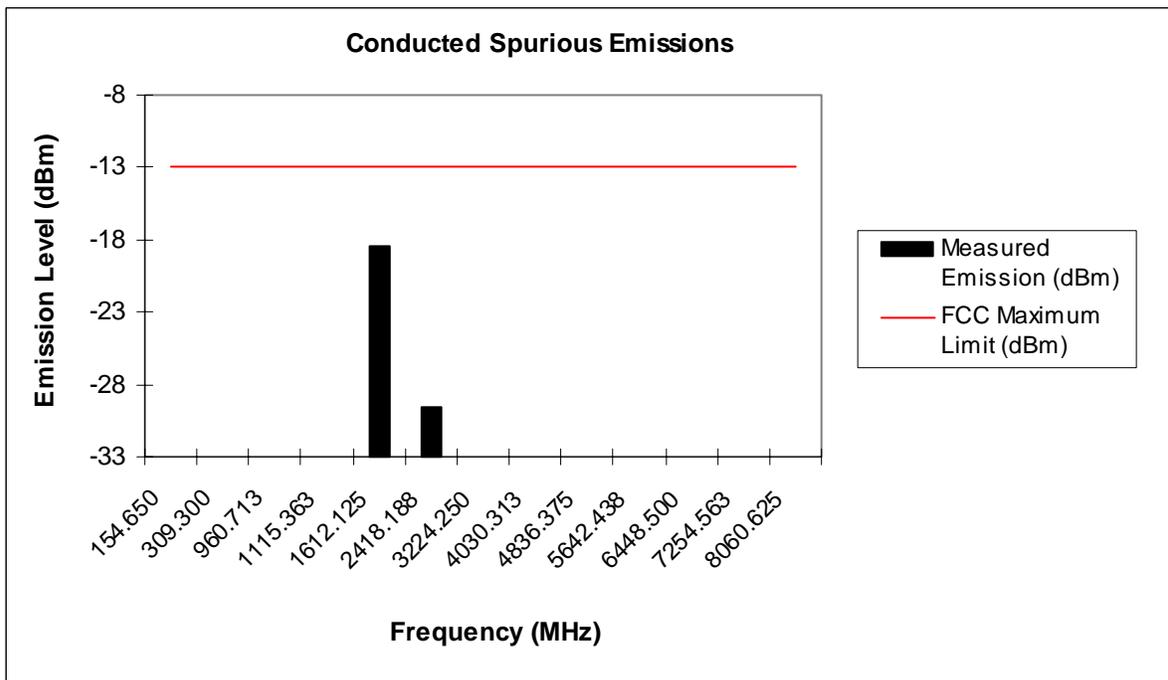
NOTE 1: U500 was tested at both maximum and minimum power output settings.

NOTE 2: Spurious emissions are independent of modulation type. Quad-16QAM was used to obtain the results reported.

NOTE 3: An asterisk (*) in the data indicates the spurious emission was less than -33dBm or could not be detected due to noise limitations or ambients.

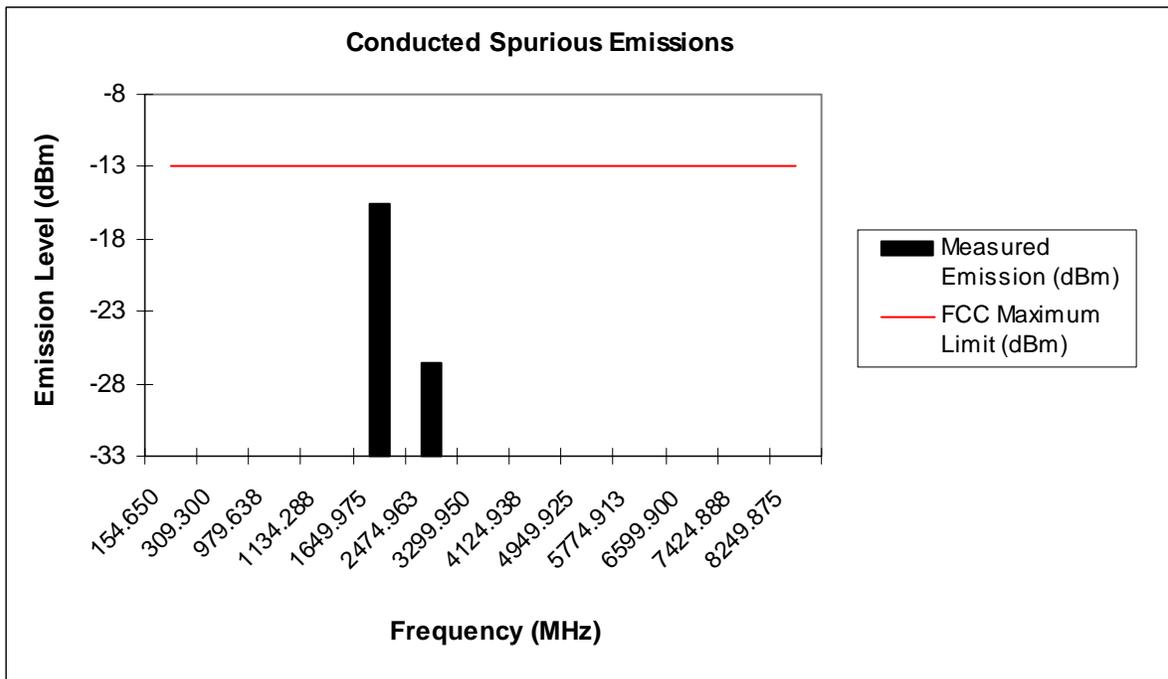
**Conducted Spurious Emissions (Maximum Power Setting)
806.0625 MHz**

Spur	Frequency (MHz)	FCC Maximum Limit (dBm)	Measured Emission (dBm)
IF	154.650	-13	*
2XIF	309.300	-13	*
LO	960.713	-13	*
IF + LO	1115.363	-13	*
2XFund	1612.125	-13	-18.49
3XFund	2418.188	-13	-29.60
4XFund	3224.250	-13	*
5XFund	4030.313	-13	*
6XFund	4836.375	-13	*
7XFund	5642.438	-13	*
8XFund	6448.500	-13	*
9XFund	7254.563	-13	*
10XFund	8060.625	-13	*



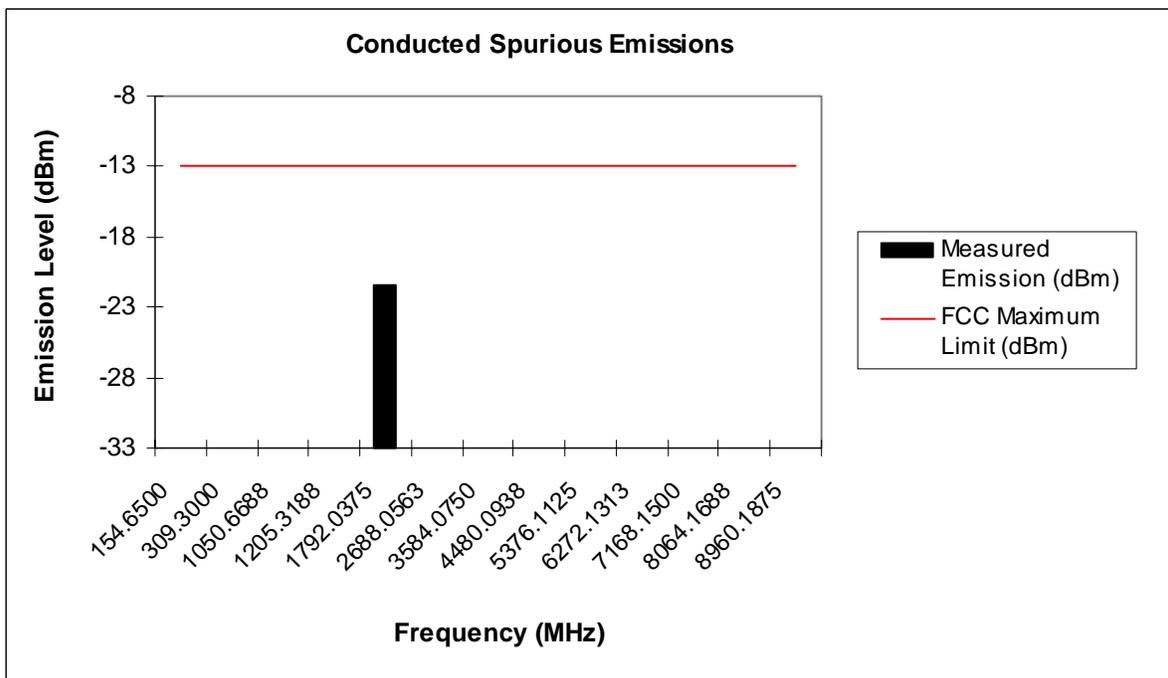
**Conducted Spurious Emissions (Maximum Power Setting)
824.9875 MHz**

Spur	Frequency (MHz)	FCC Maximum Limit (dBm)	Measured Emission (dBm)
IF	154.650	-13	*
2XIF	309.300	-13	*
LO	979.638	-13	*
IF + LO	1134.288	-13	*
2XFund	1649.975	-13	-15.49
3XFund	2474.963	-13	-26.60
4XFund	3299.950	-13	*
5XFund	4124.938	-13	*
6XFund	4949.925	-13	*
7XFund	5774.913	-13	*
8XFund	6599.900	-13	*
9XFund	7424.888	-13	*
10XFund	8249.875	-13	*



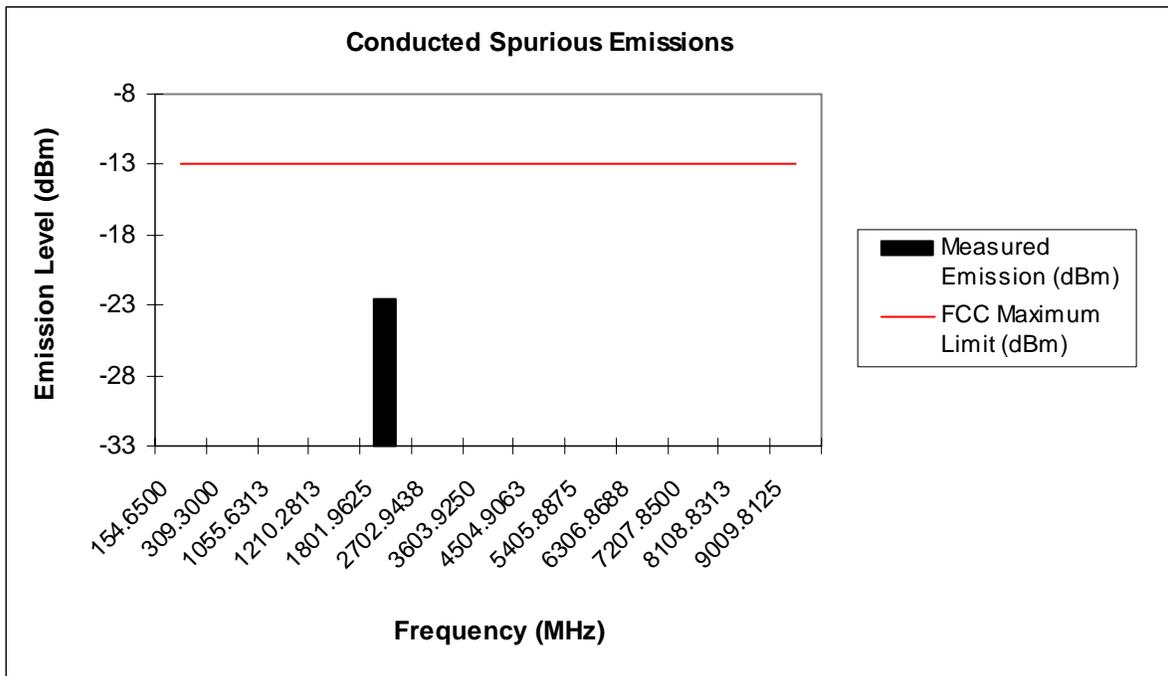
**Conducted Spurious Emissions (Maximum Power Setting)
896.01875 MHz**

Spur	Frequency (MHz)	FCC Maximum Limit (dBm)	Measured Emission (dBm)
IF	154.6500	-13	*
2XIF	309.3000	-13	*
LO	1050.6688	-13	*
IF + LO	1205.3188	-13	*
2XFund	1792.0375	-13	-21.49
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	*



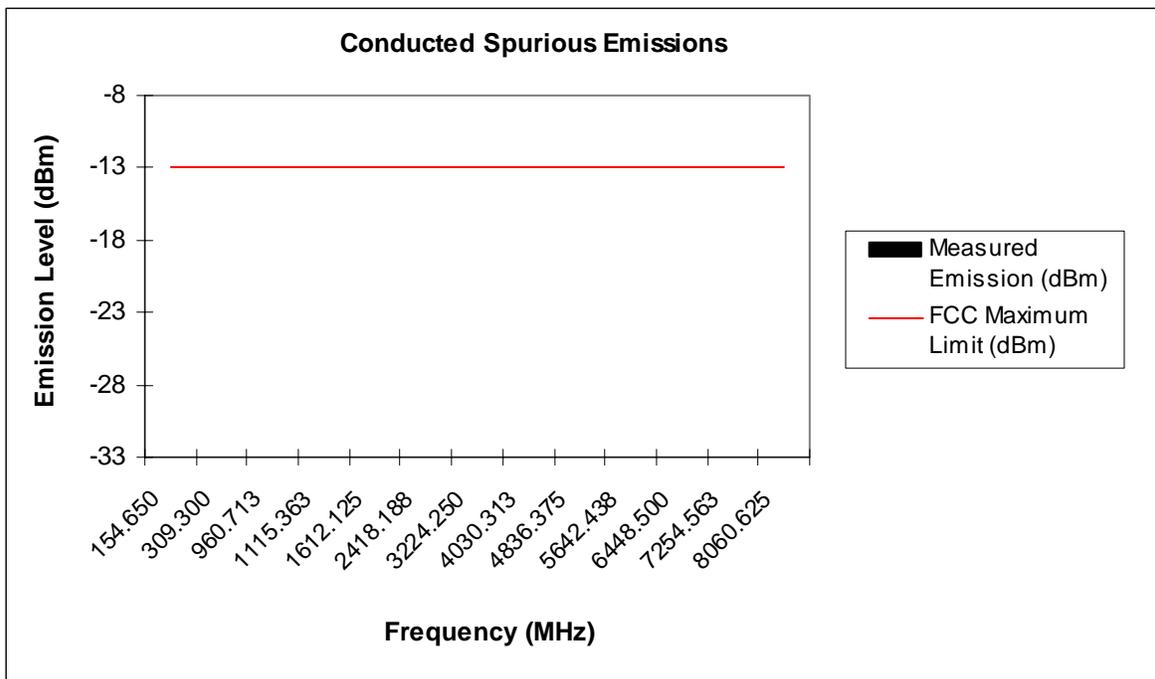
**Conducted Spurious Emissions (Maximum Power Setting)
900.98125 MHz**

Spur	Frequency (MHz)	FCC Maximum Limit (dBm)	Measured Emission (dBm)
IF	154.650	-13	*
2XIF	309.300	-13	*
LO	1055.631	-13	*
IF + LO	1210.281	-13	*
2XFund	1801.963	-13	-22.49
3XFund	2702.944	-13	*
4XFund	3603.925	-13	*
5XFund	4504.906	-13	*
6XFund	5405.888	-13	*
7XFund	6306.869	-13	*
8XFund	7207.850	-13	*
9XFund	8108.831	-13	*
10XFund	9009.813	-13	*



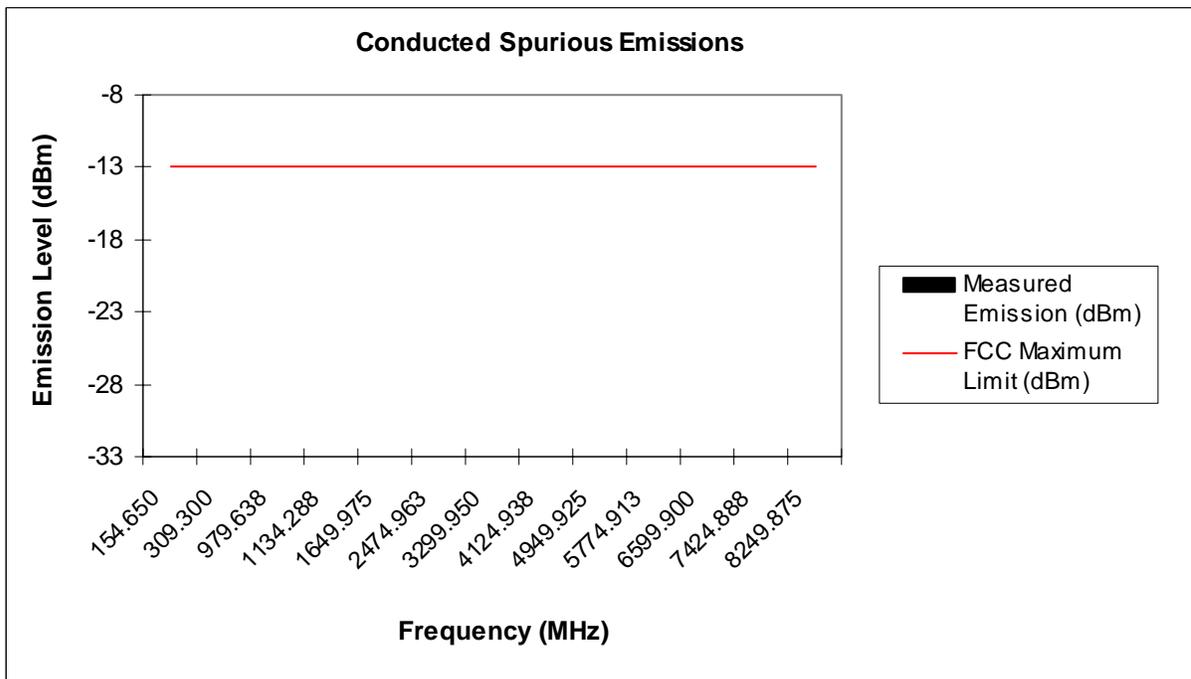
**Conducted Spurious Emissions (Minimum Power Setting)
806.0625 MHz**

Spur	Frequency (MHz)	FCC Maximum Limit (dBm)	Measured Emission (dBm)
IF	154.650	-13	*
2XIF	309.300	-13	*
LO	960.713	-13	*
IF + LO	1115.363	-13	*
2XFund	1612.125	-13	*
3XFund	2418.188	-13	*
4XFund	3224.250	-13	*
5XFund	4030.313	-13	*
6XFund	4836.375	-13	*
7XFund	5642.438	-13	*
8XFund	6448.500	-13	*
9XFund	7254.563	-13	*
10XFund	8060.625	-13	*



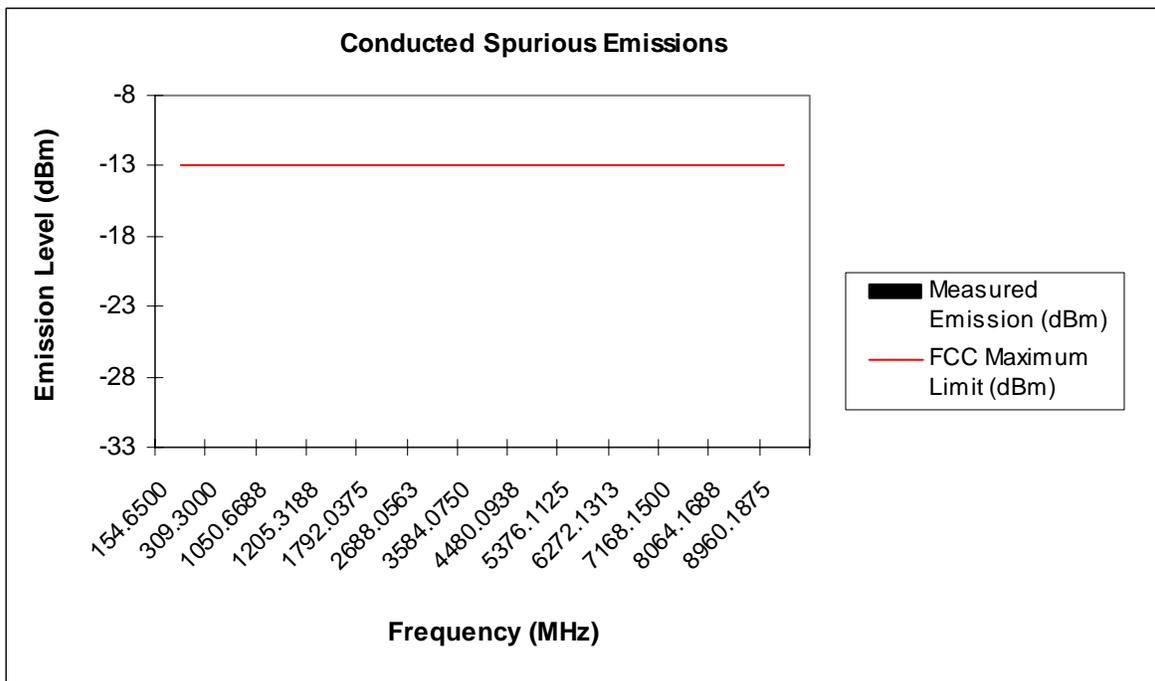
**Conducted Spurious Emissions (Minimum Power Setting)
824.9875 MHz**

Spur	Frequency (MHz)	FCC Maximum Limit (dBm)	Measured Emission (dBm)
IF	154.650	-13	*
2XIF	309.300	-13	*
LO	979.638	-13	*
IF + LO	1134.288	-13	*
2XFund	1649.975	-13	*
3XFund	2474.963	-13	*
4XFund	3299.950	-13	*
5XFund	4124.938	-13	*
6XFund	4949.925	-13	*
7XFund	5774.913	-13	*
8XFund	6599.900	-13	*
9XFund	7424.888	-13	*
10XFund	8249.875	-13	*



**Conducted Spurious Emissions (Minimum Power Setting)
896.01875 MHz**

Spur	Frequency (MHz)	FCC Maximum Limit (dBm)	Measured Emission (dBm)
IF	154.6500	-13	*
2XIF	309.3000	-13	*
LO	1050.6688	-13	*
IF + LO	1205.3188	-13	*
2XFund	1792.0375	-13	*
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	*



**Conducted Spurious Emissions (Minimum Power Setting)
900.98125 MHz**

Spur	Frequency (MHz)	FCC Maximum Limit (dBm)	Measured Emission (dBm)
IF	154.6500	-13	*
2XIF	309.3000	-13	*
LO	1055.6313	-13	*
IF + LO	1210.2813	-13	*
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	*

