

6.4. Radiated Spurious Emissions Data -- 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 = $43 + 10 \log_{10} (P)$

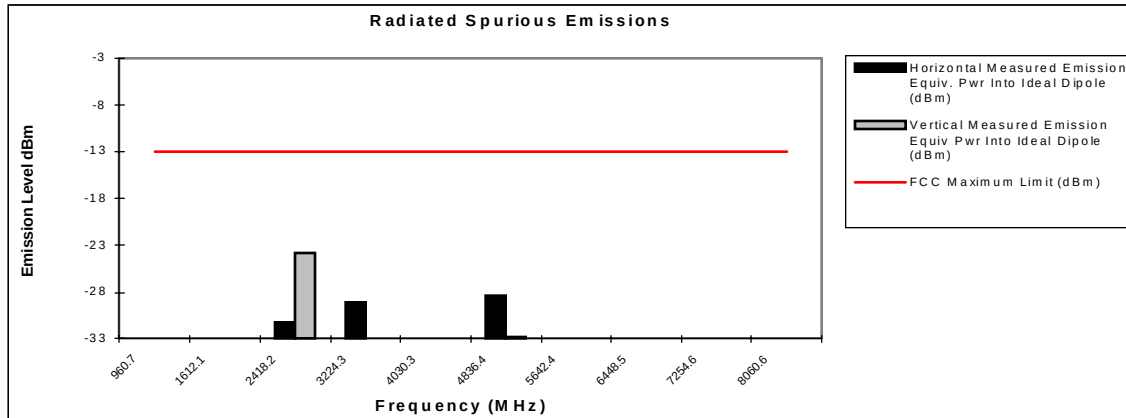
(Thus the effective limit is -13 dBm for any transmitter power level).

NOTE 1: The PA was tested at both maximum and minimum power output settings. The PA was tested at four frequencies within the transmit band.

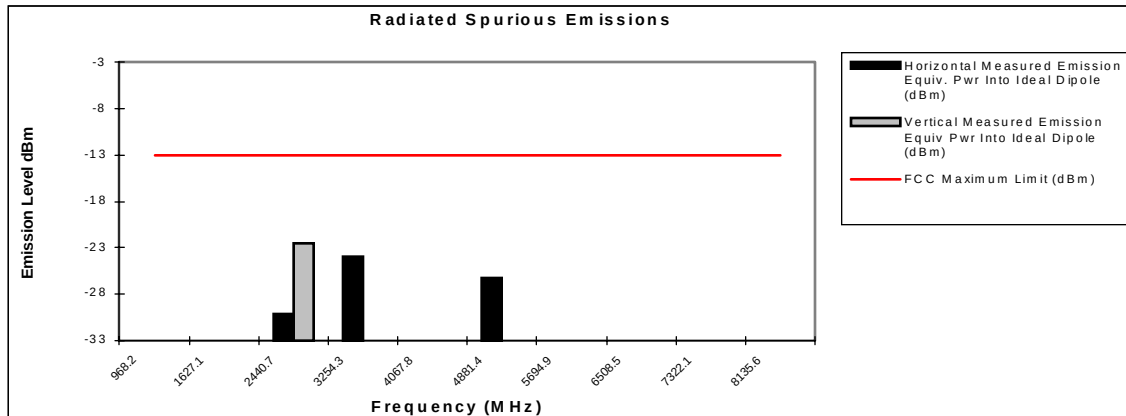
NOTE 2: Spurious emissions are independent of modulation type. Quad-16QAM was used to obtain the results reported.

FREQUENCY: 806.0625 MHz

Frequency (MHz)	FCC Maximum Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
960.7	-13	*	*
1612.1	-13	*	*
2418.2	-13	-31.3	-23.8
3224.3	-13	-29.1	*
4030.3	-13	*	*
4836.4	-13	-28.3	-32.8
5642.4	-13	*	*
6448.5	-13	*	*
7254.6	-13	*	*
8060.6	-13	*	*

**FREQUENCY: 813.5625 MHz**

Frequency (MHz)	FCC Maximum Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
968.2	-13	*	*
1627.1	-13	*	*
2440.7	-13	-30.2	-22.5
3254.3	-13	-24.0	*
4067.8	-13	*	*
4881.4	-13	-26.2	*
5694.9	-13	*	*
6508.5	-13	*	*
7322.1	-13	*	*
8135.6	-13	*	*

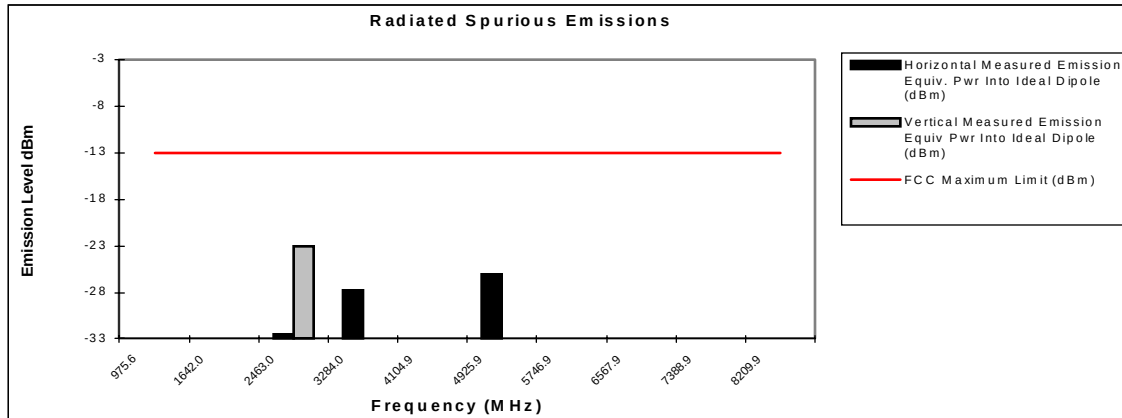
**Notes:**

- * Indicates the spurious emission was less than -33 dBm.
- Each emission reported reflects the highest absolute level at each harmonic at maximum power.
- The Spectrum was investigated from 30 MHz to the tenth harmonic of the fundamental.

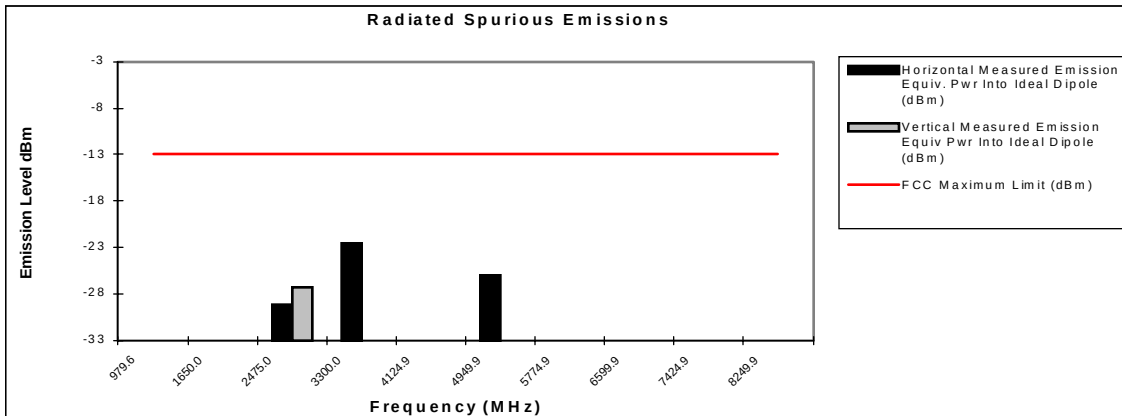
Figure 6-29: Radiated Spurious Emissions at 806.0125 and 813.5625 MHz (High Power Setting, Primary U500)

FREQUENCY : 820.9875 MHz

Frequency (MHz)	FCC Maximum Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
975.6	-13	*	*
1642.0	-13	*	*
2463.0	-13	-32.5	-23.0
3284.0	-13	-27.8	*
4104.9	-13	*	*
4925.9	-13	-26.1	*
5746.9	-13	*	*
6567.9	-13	*	*
7388.9	-13	*	*
8209.9	-13	*	*

**FREQUENCY : 824.9875 MHz**

Frequency (MHz)	FCC Maximum Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
979.6	-13	*	*
1650.0	-13	*	*
2475.0	-13	-29.2	-27.3
3300.0	-13	-22.5	*
4124.9	-13	*	*
4949.9	-13	-25.9	*
5774.9	-13	*	*
6599.9	-13	*	*
7424.9	-13	*	*
8249.9	-13	*	*

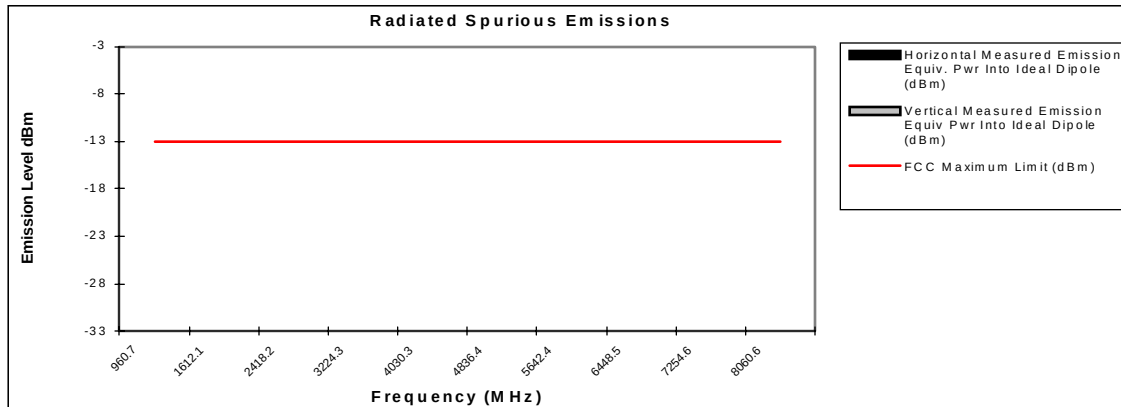
**Notes:**

- * Indicates the spurious emission was less than -33 dBm.
- Each emission reported reflects the highest absolute level at each harmonic at maximum power.
- The Spectrum was investigated from 30 MHz to the tenth harmonic of the fundamental.

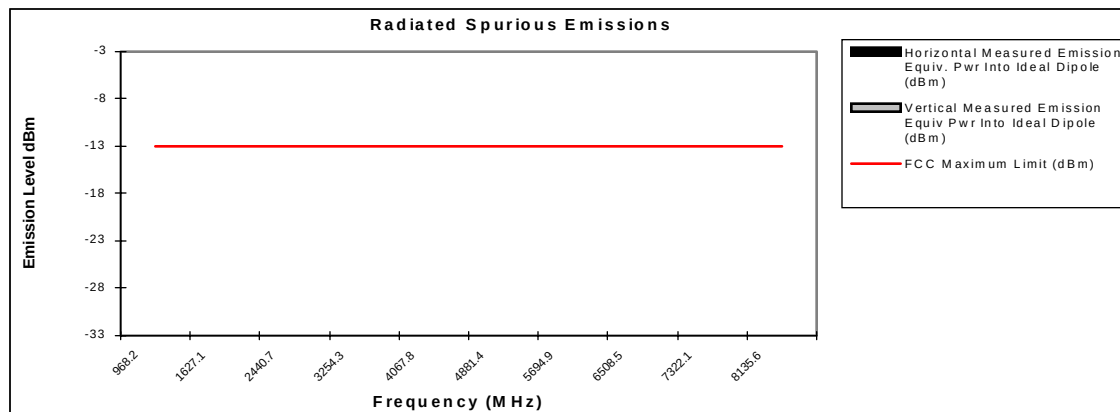
Figure 6-30: Radiated Spurious Emissions at 820.9875 and 824.9875 MHz (High Power Setting, Primary U500)

FREQUENCY : 806.0625 MHZ

Frequency (MHz)	FCC Maximum Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
960.7	-13	*	*
1612.1	-13	*	*
2418.2	-13	*	*
3224.3	-13	*	*
4030.3	-13	*	*
4836.4	-13	*	*
5642.4	-13	*	*
6448.5	-13	*	*
7254.6	-13	*	*
8060.6	-13	*	*

**FREQUENCY : 813.5625 MHZ**

Frequency (MHz)	FCC Maximum Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
968.2	-13	*	*
1627.1	-13	*	*
2440.7	-13	*	*
3254.3	-13	*	*
4067.8	-13	*	*
4881.4	-13	*	*
5694.9	-13	*	*
6508.5	-13	*	*
7322.1	-13	*	*
8135.6	-13	*	*

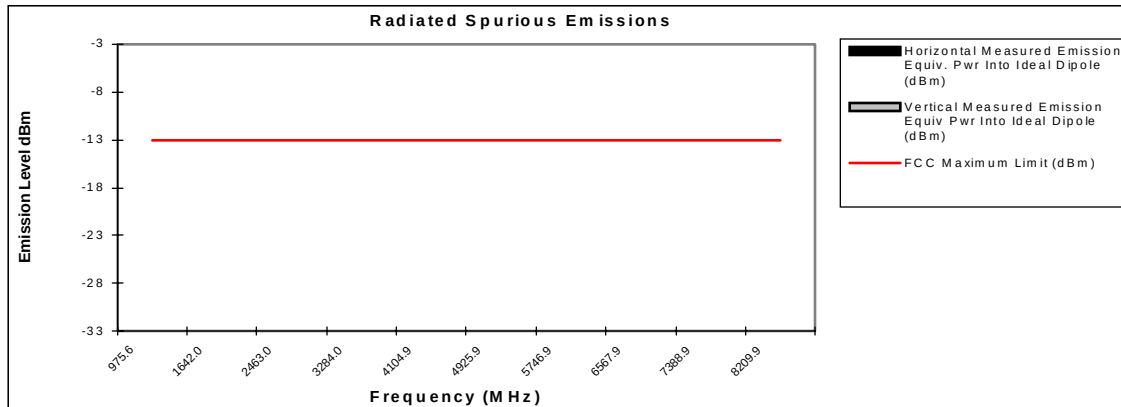
**Notes:**

1. * Indicates the spurious emission was less than -33 dBm.
2. Each emission reported reflects the highest absolute level at each harmonic at maximum power.
3. The Spectrum was investigated from 30 MHz to the tenth harmonic of the fundamental.

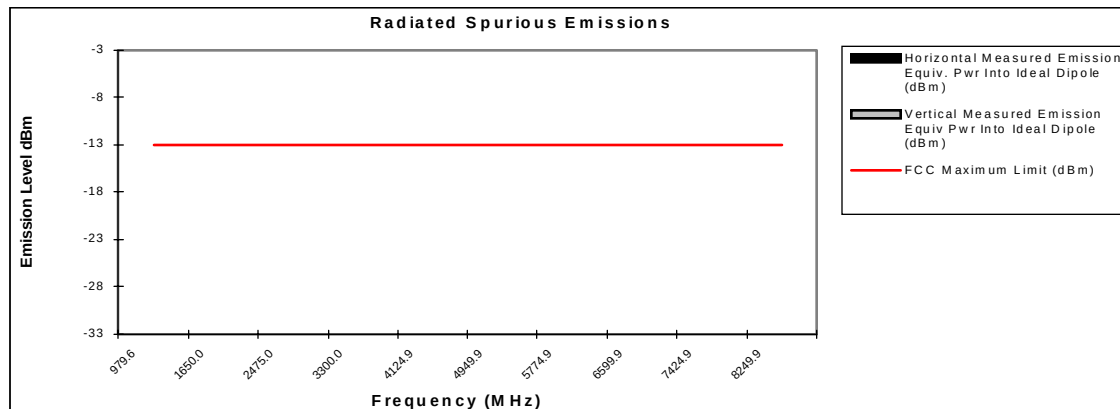
Figure 6-31: Radiated Spurious Emissions at 806.0125 and 813.5625 MHz (Low Power Setting, Primary U500)

FREQUENCY: 820.9875 MHz

Frequency (MHz)	FCC Maximum Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
975.6	-13	*	*
1642.0	-13	*	*
2463.0	-13	*	*
3284.0	-13	*	*
4104.9	-13	*	*
4925.9	-13	*	*
5746.9	-13	*	*
6567.9	-13	*	*
7388.9	-13	*	*
8209.9	-13	*	*

**FREQUENCY: 824.9875 MHz**

Frequency (MHz)	FCC Maximum Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
979.6	-13	*	*
1650.0	-13	*	*
2475.0	-13	*	*
3300.0	-13	*	*
4124.9	-13	*	*
4949.9	-13	*	*
5774.9	-13	*	*
6599.9	-13	*	*
7424.9	-13	*	*
8249.9	-13	*	*

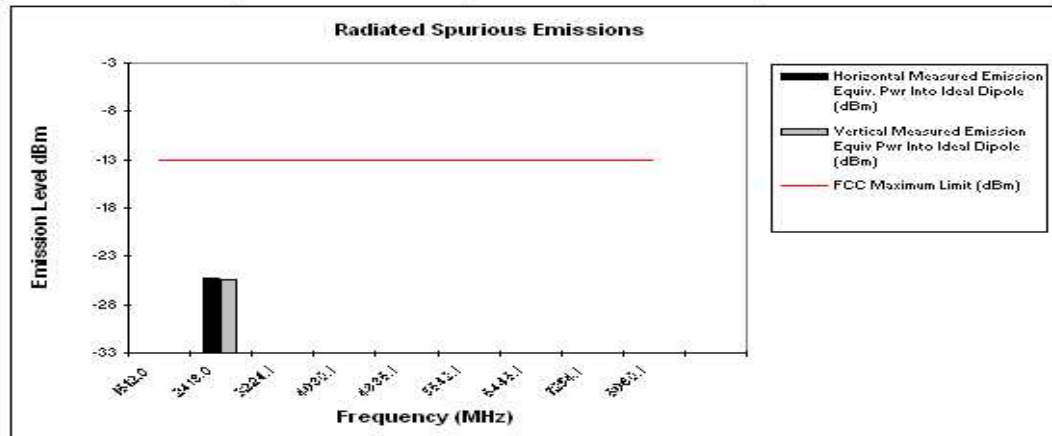
**Notes:**

1. * Indicates the spurious emission was less than -33 dBm.
2. Each emission reported reflects the highest absolute level at each harmonic at maximum power.
3. The Spectrum was investigated from 30 MHz to the tenth harmonic of the fundamental.

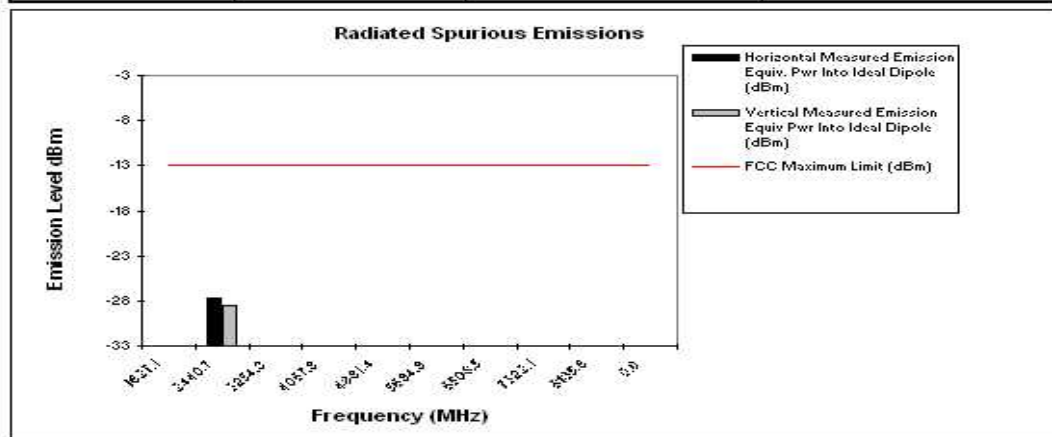
Figure 6-32: Radiated Spurious Emissions at 820.9875 and 824.9875 MHz (Low Power Setting, Primary U500)

FREQUENCY: 806.0625 MHZ

Frequency (MHz)	FCC Maximum Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
1612.0	-13	*	*
2418.0	-13	-25.2	-25.4
3224.1	-13	*	*
4030.1	-13	*	*
4836.1	-13	*	*
5642.1	-13	*	*
6448.1	-13	*	*
7254.1	-13	*	*
8060.1	-13	*	*

**FREQUENCY: 813.5625**

Frequency (MHz)	FCC Maximum Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
1627.1	-13	*	*
2440.7	-13	-27.7	-28.6
3254.3	-13	*	*
4067.8	-13	*	*
4881.4	-13	*	*
5694.9	-13	*	*
6508.5	-13	*	*
7322.1	-13	*	*
8135.6	-13	*	*

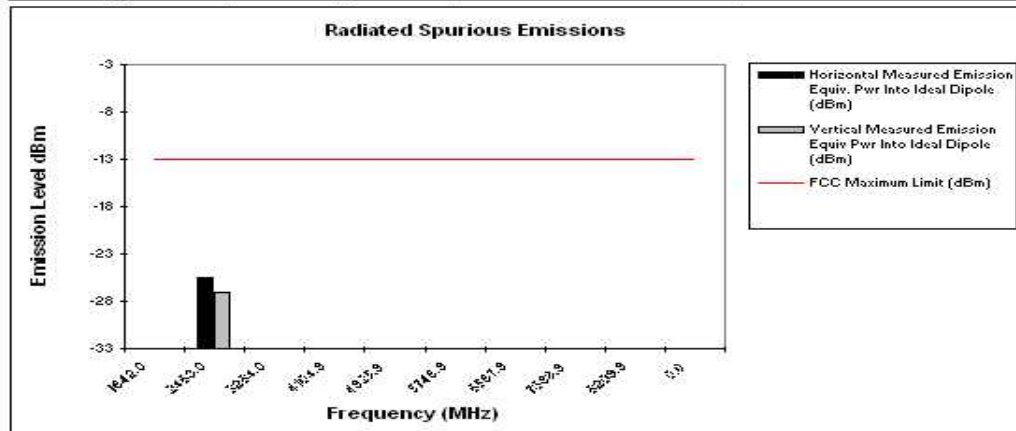
**Notes:**

- * Indicates the spurious emission was less than -33 dBm.
- Each emission reported reflects the highest absolute level at each harmonic at maximum power.
- The Spectrum was investigated from 30 MHz to the tenth harmonic of the fundamental.

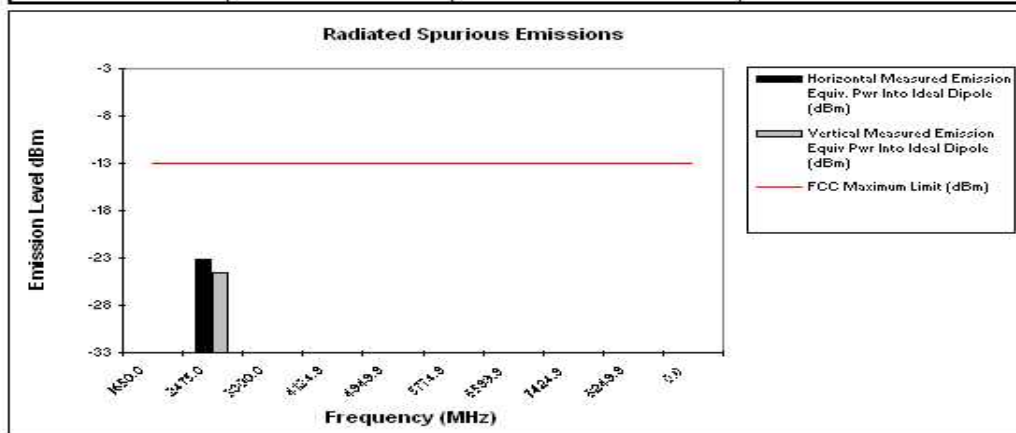
Figure 6-33: Radiated Spurious Emissions at 806.0625 and 813.5625 MHz (High Power Setting, Alternate U500)

FREQUENCY: 820.9875 MHZ

Frequency (MHz)	FCC Maximum Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
1642.0	-13	*	*
2463.0	-13	-25.6	-27.1
3284.0	-13	*	*
4104.9	-13	*	*
4925.9	-13	*	*
5746.9	-13	*	*
6567.9	-13	*	*
7388.9	-13	*	*
8209.9	-13	*	*
0.0	-13	*	*

**FREQUENCY: 824.9875 MHz**

Frequency (MHz)	FCC Maximum Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
1650.0	-13	*	*
2475.0	-13	-23.2	-24.6
3300.0	-13	*	*
4124.9	-13	*	*
4949.9	-13	*	*
5774.9	-13	*	*
6599.9	-13	*	*
7424.9	-13	*	*
8249.9	-13	*	*

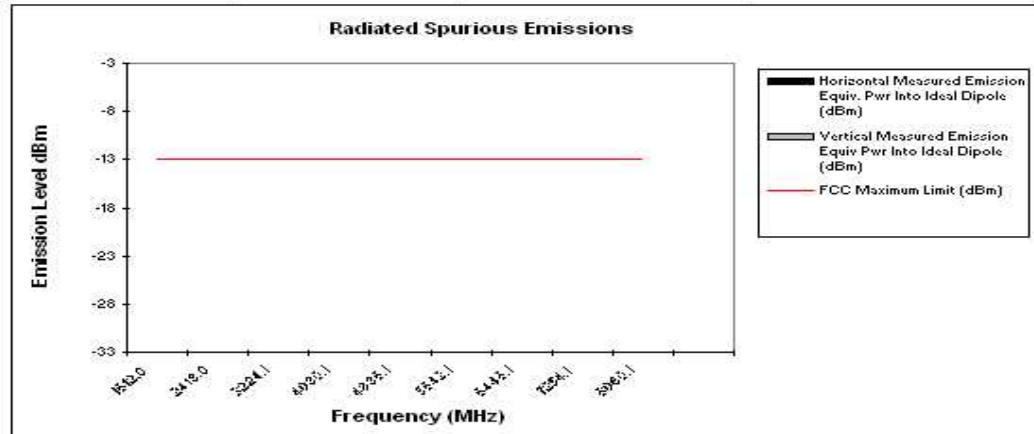
**Notes:**

1. * Indicates the spurious emission was less than -33 dBm.
2. Each emission reported reflects the highest absolute level at each harmonic at maximum power.
3. The Spectrum was investigated from 30 MHz to the tenth harmonic of the fundamental.

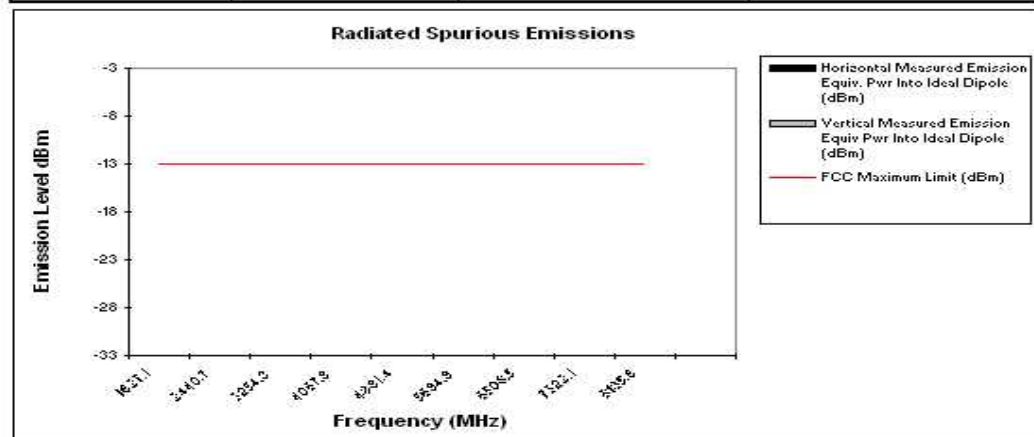
Figure 6-34: Radiated Spurious Emissions at 820.9875 and 824.9875 MHz (High Power Setting, Alternate U500)

FREQUENCY: 806.0625 MHZ

Frequency (MHz)	FCC Maximum Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
1612.0	-13	*	*
2418.0	-13	*	*
3224.1	-13	*	*
4030.1	-13	*	*
4836.1	-13	*	*
5642.1	-13	*	*
6448.1	-13	*	*
7254.1	-13	*	*
8060.1	-13	*	*

**FREQUENCY: 813.5625 MHZ**

Frequency (MHz)	FCC Maximum Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
1627.1	-13	*	*
2440.7	-13	*	*
3254.3	-13	*	*
4067.8	-13	*	*
4881.4	-13	*	*
5694.9	-13	*	*
6508.5	-13	*	*
7322.1	-13	*	*
8135.6	-13	*	*

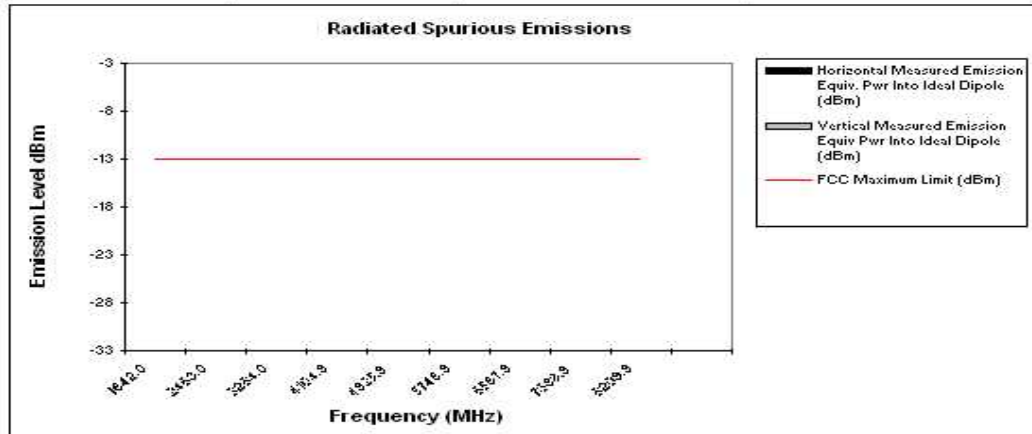
**Notes:**

1. * Indicates the spurious emission was less than -33 dBm.
2. Each emission reported reflects the highest absolute level at each harmonic at maximum power.
3. The Spectrum was investigated from 30 MHz to the tenth harmonic of the fundamental.

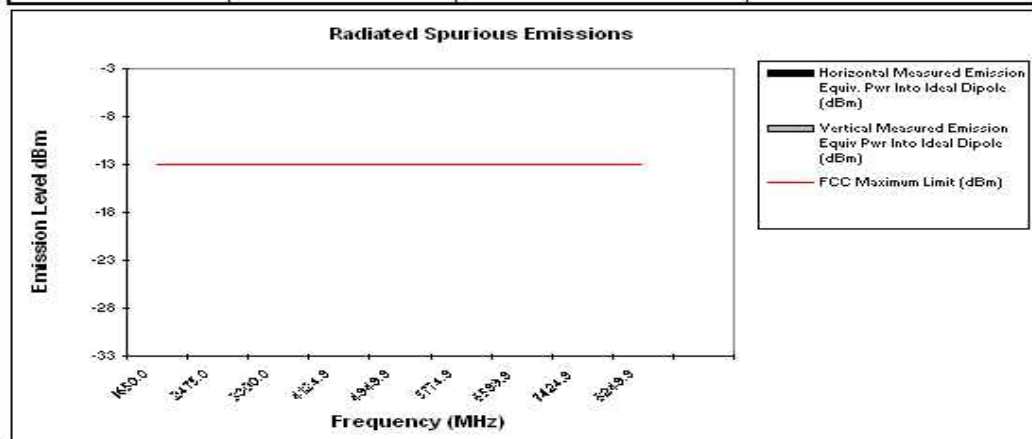
Figure 6-35: Radiated Spurious Emissions at 806.0625 and 813.5625 MHz (Low Power Setting, Alternate U500)

FREQUENCY: 820.9875 MHz

Frequency (MHz)	FCC Maximum Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
1642.0	-13	*	*
2463.0	-13	*	*
3284.0	-13	*	*
4104.9	-13	*	*
4925.9	-13	*	*
5746.9	-13	*	*
6567.9	-13	*	*
7388.9	-13	*	*
8209.9	-13	*	*

**FREQUENCY: 824.9875 MHz**

Frequency (MHz)	FCC Maximum Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
1650.0	-13	*	*
2475.0	-13	*	*
3300.0	-13	*	*
4124.9	-13	*	*
4949.9	-13	*	*
5774.9	-13	*	*
6599.9	-13	*	*
7424.9	-13	*	*
8249.9	-13	*	*

**Notes:**

1. * Indicates the spurious emission was less than -33 dBm.
2. Each emission reported reflects the highest absolute level at each harmonic at maximum power.
3. The Spectrum was investigated from 30 MHz to the tenth harmonic of the fundamental.

Figure 6-36: Radiated Spurious Emissions at 820.9875 and 824.9875 MHz (High Power Setting, Alternate U500)