

## 6.4 (Revised) 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).

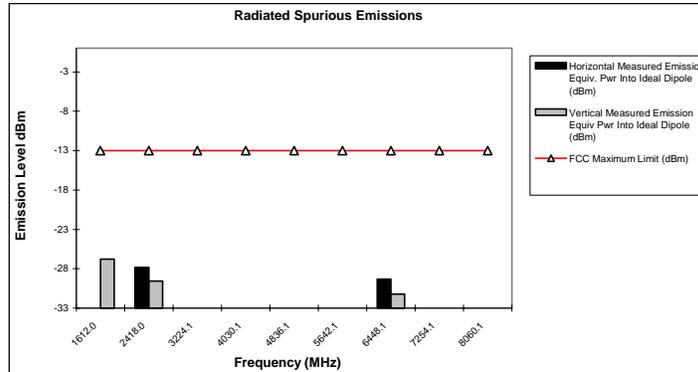
NOTE 1: The PA was tested at both maximum and minimum power output settings. The PA was tested at four frequencies within the transmit band.

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

**Radiated Spurious and Harmonic Emissions**

**CHANNEL: 806.0125 MHz**

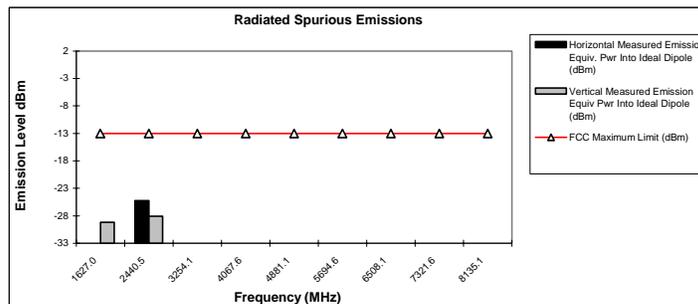
Frequency (MHz)	FCC Maximum Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
1612.0	-13	*	-26.8
2418.0	-13	-27.8	-29.6
3224.1	-13	*	*
4030.1	-13	*	*
4836.1	-13	*	*
5642.1	-13	*	*
6448.1	-13	-29.3	-31.2
7254.1	-13	*	*
8060.1	-13	*	*



**Radiated Spurious and Harmonic Emissions**

**CHANNEL: 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)
1627.0	-13	*	-29.2
2440.5	-13	-25.2	-28.1
3254.1	-13	*	*
4067.6	-13	*	*
4881.1	-13	*	*
5694.6	-13	*	*
6508.1	-13	*	*
7321.6	-13	*	*
8135.1	-13	*	*



**Notes:**

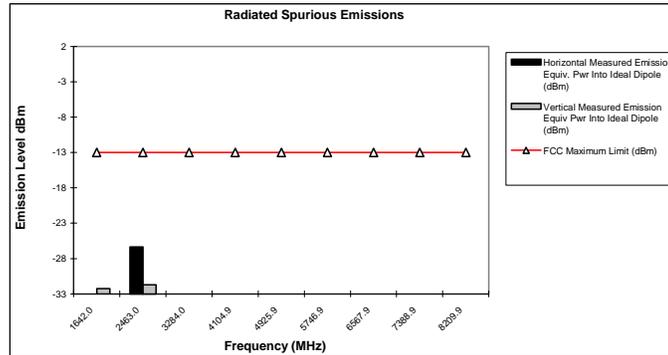
1. \* Indicates the spurious emission was below the reportable limit of -33 dBm.
2. Each emission reported reflects the highest absolute level at each harmonic at maximum power.
3. The Spectrum was investigated from 30 MHz to the tenth harmonic of the fundamental.

**Figure 6-17a (Revised): Radiated Spurious Emissions for i60c at 806.0125 and 813.5625 MHz (High Power Setting)**

**Radiated Spurious and Harmonic Emissions**

**CHANNEL: 820.9875 MHz**

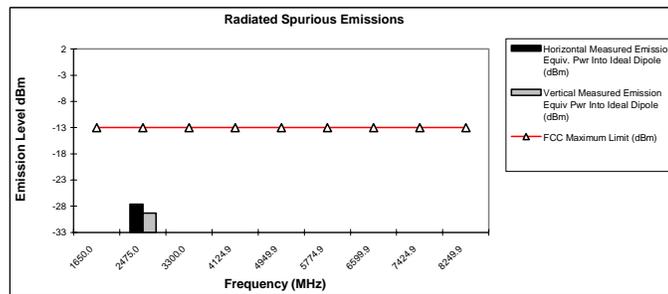
Frequency (MHz)	FCC Maximum Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
1642.0	-13	*	-32.2
2463.0	-13	-26.4	-31.7
3284.0	-13	*	*
4104.9	-13	*	*
4925.9	-13	*	*
5746.9	-13	*	*
6567.9	-13	*	*
7388.9	-13	*	*
8209.9	-13	*	*



**Radiated Spurious and Harmonic Emissions**

**CHANNEL: 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	-27.7	-29.3
3300.0	-13	*	*
4124.9	-13	*	*
4949.9	-13	*	*
5774.9	-13	*	*
6599.9	-13	*	*
7424.9	-13	*	*
8249.9	-13	*	*



**Notes:**

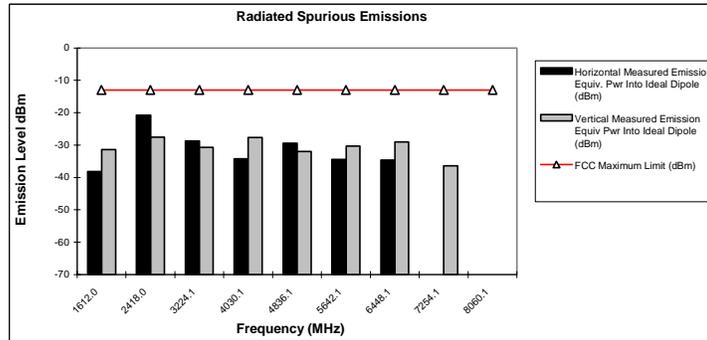
1. \* Indicates the spurious emission was below the reportable limit of -33 dBm.
2. Each emission reported reflects the highest absolute level at each harmonic at maximum power.
3. The Spectrum was investigated from 30 MHz to the tenth harmonic of the fundamental.

**Figure 6-18a (Revised): Radiated Spurious Emissions for i60c at 820.9875 and 824.9875 MHz (High Power Setting)**

**Radiated Spurious and Harmonic Emissions**

**CHANNEL: 806.0125 MHz**

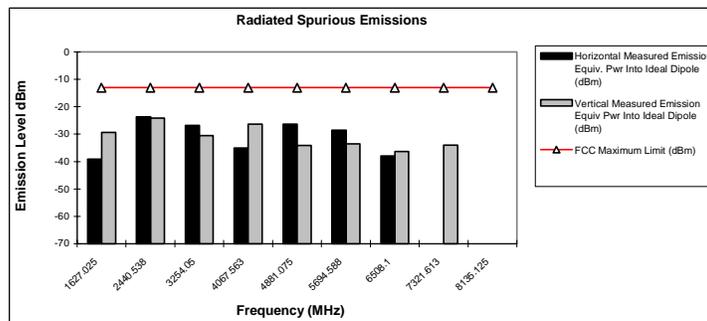
Frequency (MHz)	FCC Maximum Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
1612.0	-13	*	-31.4
2418.0	-13	-20.7	-27.6
3224.1	-13	-28.7	-30.8
4030.1	-13	*	-27.7
4836.1	-13	-29.5	-32.0
5642.1	-13	*	-30.3
6448.1	-13	*	-29.0
7254.1	-13	*	*
8060.1	-13	*	*



**Radiated Spurious and Harmonic Emissions**

**CHANNEL: 813.5125 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)
1627.0	-13	*	-29.4
2440.5	-13	-23.7	-24.1
3254.1	-13	-26.8	-30.6
4067.6	-13	*	-26.4
4881.1	-13	-26.3	*
5694.6	-13	-28.6	*
6508.1	-13	*	*
7321.6	-13	*	*
8135.1	-13	*	*



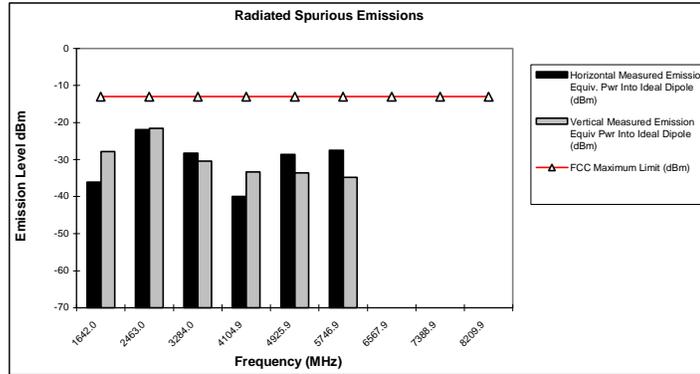
Notes:

1. \* Indicates the spurious emission was below the reportable limit of -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 6-17b (Revised): Radiated Spurious Emissions for i95cl at 806.0125 and 813.5125 MHz (High Power Setting)**

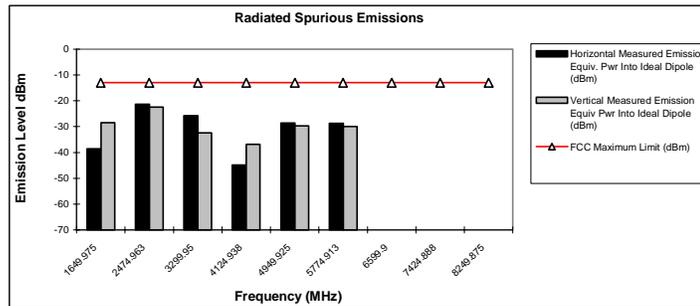
**Radiated Spurious and Harmonic Emissions**  
**CHANNEL: 820.9875 MHz**

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	*	-27.8
2463.0	-13	-22.0	-21.6
3284.0	-13	-28.3	-30.4
4104.9	-13	*	*
4925.9	-13	-28.6	*
5746.9	-13	-27.5	*
6567.9	-13	*	*
7388.9	-13	*	*
8209.9	-13	*	*



**Radiated Spurious and Harmonic Emissions**  
**CHANNEL: 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	*	-28.5
2475.0	-13	-21.4	-22.4
3300.0	-13	-25.8	-32.5
4124.9	-13	*	*
4949.9	-13	-28.6	-29.7
5774.9	-13	-28.8	-29.9
6599.9	-13	*	*
7424.9	-13	*	*
8249.9	-13	*	*



Notes:

1. \* Indicates the spurious emission was below the reportable limit of -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 6-18b (Revised): Radiated Spurious Emissions for i95cl at 820.9875 and 824.9875 MHz (High Power Setting)**

**(Revised) Conducted Spurious Emissions – Pursuant 47 CFR 2.1053 and 2.1057**

The conducted spurious emissions were measured according to the method described in paragraph 7.6.

Conducted spurious emissions shall be attenuated below the maximum level of emission of the carrier frequency in accordance with the following formula:

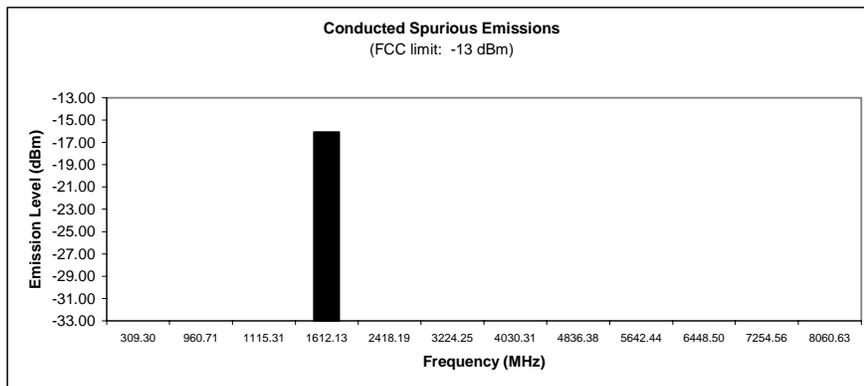
Spurious attenuation in dB =  $43 + 10 \log_{10}(P)$   
(Thus the effective limit is -13 dBm for any transmitter power level).

NOTE 1: Spurious emissions are independent of modulation type. Quad-16QAM was used to obtain the results reported.

NOTE 2: Emissions more than 20dB below the limit are not reported.

806.0625 MHz

Spur	Frequency (MHz)	FCC Maximum Limit -13 (dBm)	Corrected Measured Emissions (dBm)
2 * IF	309.3000	-13	
LO	960.7125	-13	
IF + LO	1115.3125	-13	
2 * Fund.	1612.1250	-13	-16.10
3 * Fund.	2418.1875	-13	
4 * Fund.	3224.2500	-13	
5 * Fund.	4030.3125	-13	
6 * Fund.	4836.3750	-13	
7 * Fund.	5642.4375	-13	
8 * Fund.	6448.5000	-13	
9 * Fund.	7254.5625	-13	
10 * Fund.	8060.6250	-13	



813.5625 MHz

Spur	Frequency (MHz)	FCC Maximum Limit -13 (dBm)	Corrected Measured Emissions (dBm)
2 * IF	309.3	-13	
LO	968.2125	-13	-32.9
IF + LO	1122.8625	-13	
2 * Fund.	1627.125	-13	-19.10
3 * Fund.	2440.6875	-13	
4 * Fund.	3254.25	-13	
5 * Fund.	4067.8125	-13	
6 * Fund.	4881.375	-13	
7 * Fund.	5694.9375	-13	
8 * Fund.	6508.5	-13	
9 * Fund.	7322.0625	-13	
10 * Fund.	8135.625	-13	

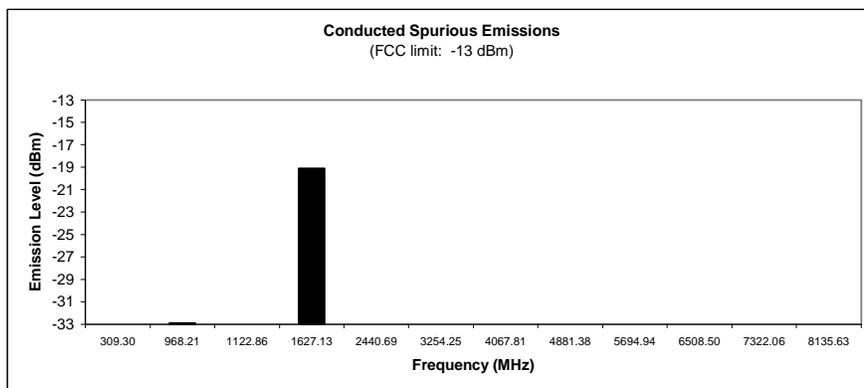
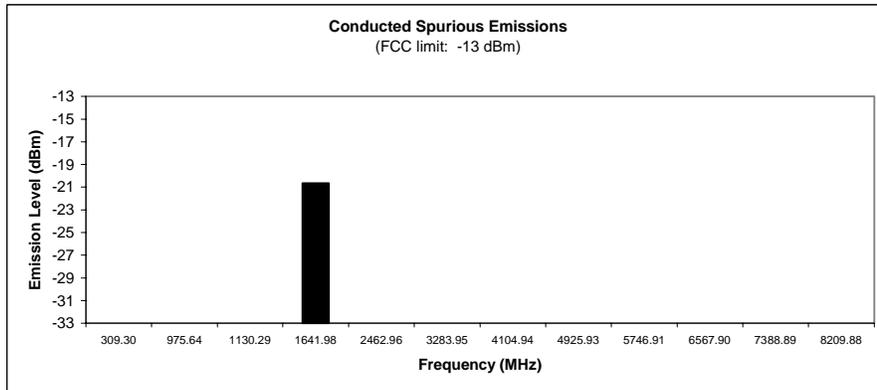


Figure 6-25a: TX Conducted Spurious Emissions for i60c at 806.0125 MHz and 813.5625 MHz

820.9875 MHz

Spur	Frequency (MHz)	FCC Maximum Limit -13 (dBm)	Corrected Measured Emissions (dBm)
2 * IF	309.3	-13	
LO	975.6375	-13	
IF + LO	1130.2875	-13	
2 * Fund.	1641.975	-13	-20.6
3 * Fund.	2462.9625	-13	
4 * Fund.	3283.95	-13	
5 * Fund.	4104.9375	-13	
6 * Fund.	4925.925	-13	
7 * Fund.	5746.9125	-13	
8 * Fund.	6567.9	-13	
9 * Fund.	7388.8875	-13	
10 * Fund.	8209.875	-13	



824.9875 MHz

Spur	Frequency (MHz)	FCC Maximum Limit -13 (dBm)	Corrected Measured Emissions (dBm)
2 * IF	309.3	-13	
LO	979.6375	-13	-29.4
IF + LO	1134.2875	-13	
2 * Fund.	1649.975	-13	-21.5
3 * Fund.	2474.9625	-13	
4 * Fund.	3299.95	-13	
5 * Fund.	4124.9375	-13	
6 * Fund.	4949.925	-13	
7 * Fund.	5774.9125	-13	
8 * Fund.	6599.9	-13	
9 * Fund.	7424.8875	-13	
10 * Fund.	8249.875	-13	

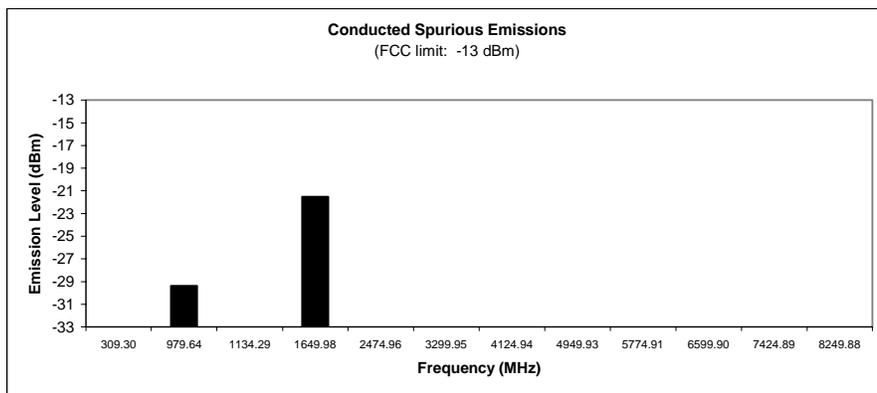
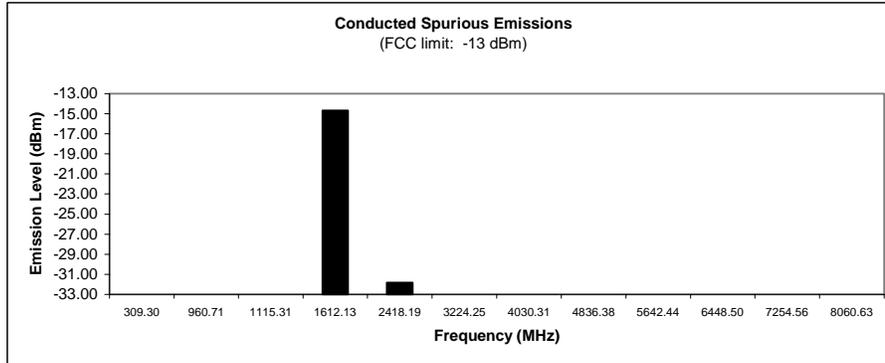


Figure 6-25b: TX Conducted Spurious Emissions for i60c at 820.9875 MHz and 824.9875 MHz

806.0625 MHz

Spur	Frequency (MHz)	FCC Maximum Limit -13 (dBm)	Corrected Measured Emissions (dBm)
2 * IF	309.3000	-13	
LO	960.7125	-13	
IF + LO	1115.3125	-13	
2 * Fund.	1612.1250	-13	-14.7
3 * Fund.	2418.1875	-13	-31.9
4 * Fund.	3224.2500	-13	
5 * Fund.	4030.3125	-13	
6 * Fund.	4836.3750	-13	
7 * Fund.	5642.4375	-13	
8 * Fund.	6448.5000	-13	
9 * Fund.	7254.5625	-13	
10 * Fund.	8060.6250	-13	



813.5625 MHz

Spur	Frequency (MHz)	FCC Maximum Limit -13 (dBm)	Corrected Measured Emissions (dBm)
2 * IF	309.3	-13	
LO	968.2125	-13	
IF + LO	1122.8625	-13	
2 * Fund.	1627.125	-13	-17.5
3 * Fund.	2440.6875	-13	-31.6
4 * Fund.	3254.25	-13	
5 * Fund.	4067.8125	-13	
6 * Fund.	4881.375	-13	
7 * Fund.	5694.9375	-13	
8 * Fund.	6508.5	-13	
9 * Fund.	7322.0625	-13	
10 * Fund.	8135.625	-13	

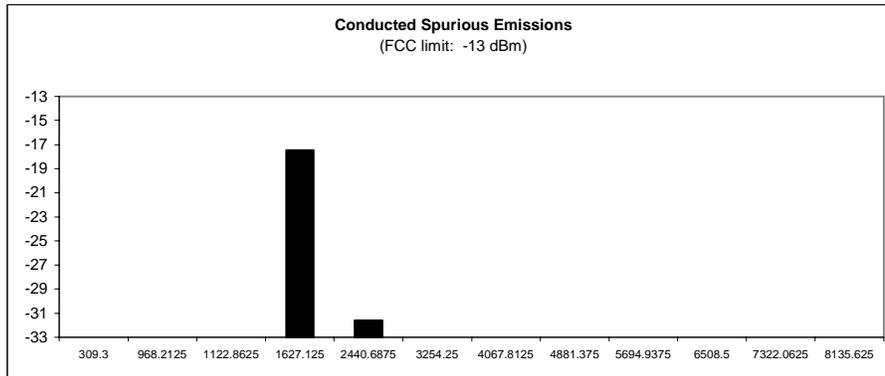
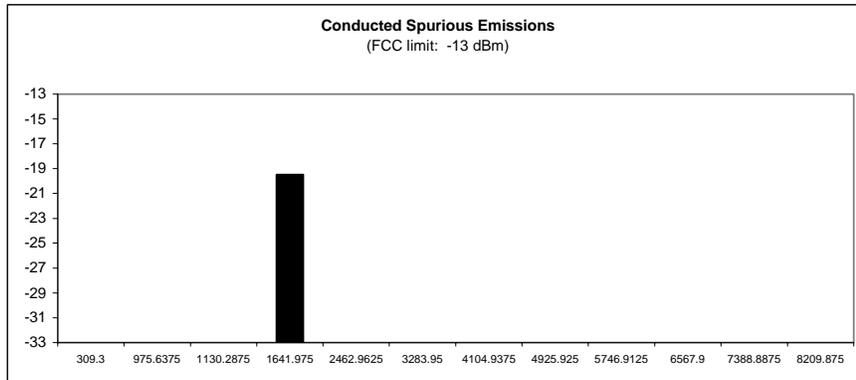


Figure 6-25c: TX Conducted Spurious Emissions for i90c 806.0125 MHz and 813.5625 MHz

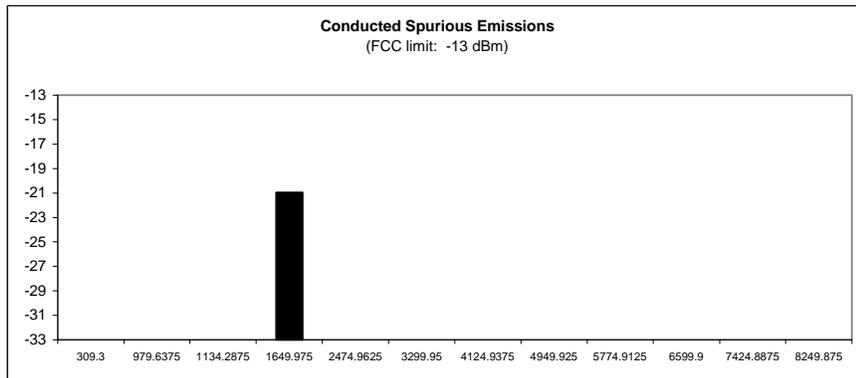
**820.9875 MHz**

Spur	Frequency (MHz)	FCC Maximum Limit -13 (dBm)	Corrected Measured Emissions (dBm)
2 * IF	309.3	-13	
LO	975.6375	-13	
IF + LO	1130.2875	-13	
2 * Fund.	1641.975	-13	-19.5
3 * Fund.	2462.9625	-13	
4 * Fund.	3283.95	-13	
5 * Fund.	4104.9375	-13	
6 * Fund.	4925.925	-13	
7 * Fund.	5746.9125	-13	
8 * Fund.	6567.9	-13	
9 * Fund.	7388.8875	-13	
10 * Fund.	8209.875	-13	



**824.9875 MHz**

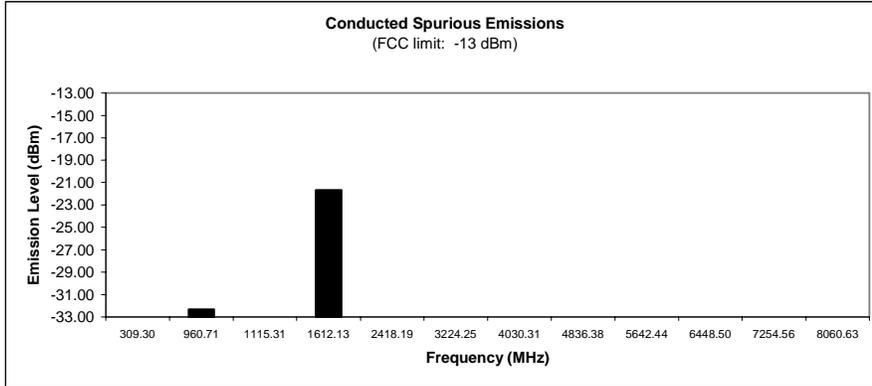
Spur	Frequency (MHz)	FCC Maximum Limit -13 (dBm)	Corrected Measured Emissions (dBm)
2 * IF	309.3	-13	
LO	979.6375	-13	
IF + LO	1134.2875	-13	
2 * Fund.	1649.975	-13	-21.0
3 * Fund.	2474.9625	-13	
4 * Fund.	3299.95	-13	
5 * Fund.	4124.9375	-13	
6 * Fund.	4949.925	-13	
7 * Fund.	5774.9125	-13	
8 * Fund.	6599.9	-13	
9 * Fund.	7424.8875	-13	
10 * Fund.	8249.875	-13	



**Figure 6-25d: TX Conducted Spurious Emissions for i90c at 820.9875 MHz and 824.9875 MHz**

806.0625 MHz

Spur	Frequency (MHz)	FCC Maximum Limit -13 (dBm)	Corrected Measured Emissions (dBm)
2 * IF	309.3000	-13	
LO	960.7125	-13	-32.3
IF + LO	1115.3125	-13	
2 * Fund.	1612.1250	-13	-21.7
3 * Fund.	2418.1875	-13	
4 * Fund.	3224.2500	-13	
5 * Fund.	4030.3125	-13	
6 * Fund.	4836.3750	-13	
7 * Fund.	5642.4375	-13	
8 * Fund.	6448.5000	-13	
9 * Fund.	7254.5625	-13	
10 * Fund.	8060.6250	-13	



813.5625 MHz

Spur	Frequency (MHz)	FCC Maximum Limit -13 (dBm)	Corrected Measured Emissions (dBm)
2 * IF	309.3	-13	
LO	968.2125	-13	
IF + LO	1122.8625	-13	
2 * Fund.	1627.125	-13	-23.9
3 * Fund.	2440.6875	-13	
4 * Fund.	3254.25	-13	
5 * Fund.	4067.8125	-13	
6 * Fund.	4881.375	-13	
7 * Fund.	5694.9375	-13	
8 * Fund.	6508.5	-13	
9 * Fund.	7322.0625	-13	
10 * Fund.	8135.625	-13	

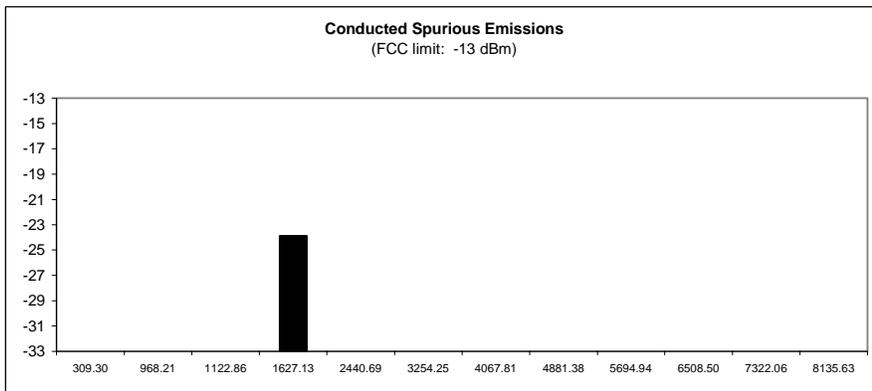
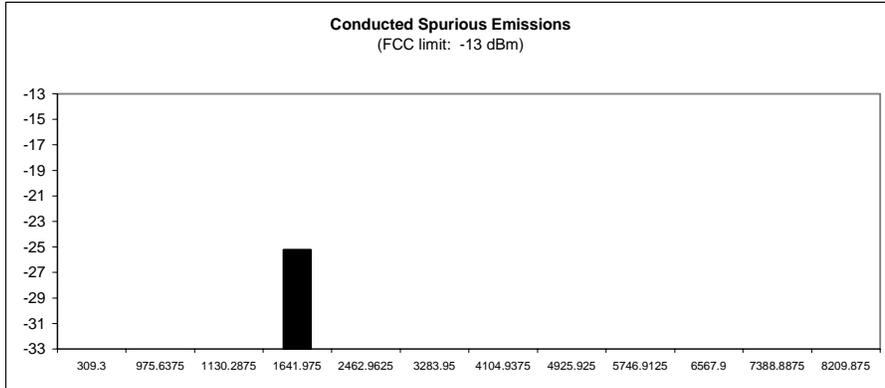


Figure 6-25e:TX Conducted Spurious Emissions for i95cl at 806.0125 MHz and 813.5625 MHz

820.9875 MHz

Spur	Frequency (MHz)	FCC Maximum Limit -13 (dBm)	Corrected Measured Emissions (dBm)
2 * IF	309.3	-13	
LO	975.6375	-13	
IF + LO	1130.2875	-13	
2 * Fund.	1641.975	-13	-25.2
3 * Fund.	2462.9625	-13	
4 * Fund.	3283.95	-13	
5 * Fund.	4104.9375	-13	
6 * Fund.	4925.925	-13	
7 * Fund.	5746.9125	-13	
8 * Fund.	6567.9	-13	
9 * Fund.	7388.8875	-13	
10 * Fund.	8209.875	-13	



824.9875 MHz

Spur	Frequency (MHz)	FCC Maximum Limit -13 (dBm)	Corrected Measured Emissions (dBm)
2 * IF	309.3	-13	
LO	979.6375	-13	-31.5
IF + LO	1134.2875	-13	
2 * Fund.	1649.975	-13	-26.4
3 * Fund.	2474.9625	-13	
4 * Fund.	3299.95	-13	
5 * Fund.	4124.9375	-13	
6 * Fund.	4949.925	-13	
7 * Fund.	5774.9125	-13	
8 * Fund.	6599.9	-13	
9 * Fund.	7424.8875	-13	
10 * Fund.	8249.875	-13	

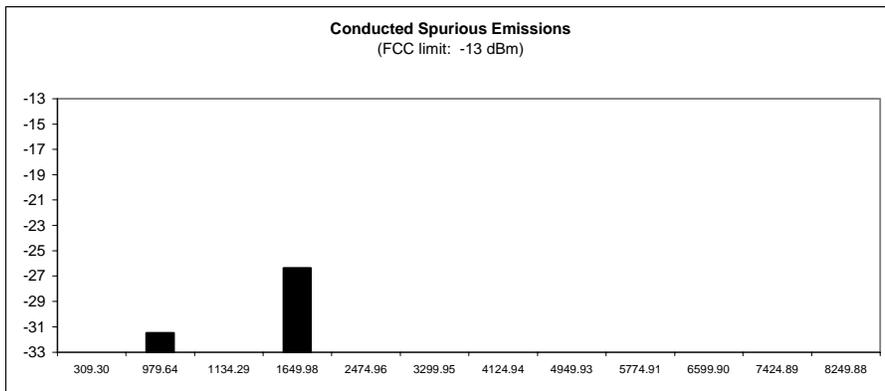


Figure 6-25f: TX Conducted Spurious Emissions for i95cl at 820.9875 MHz and 824.9875 MHz