

Figure 50-1  
Peak Radiated Spurious Emission 15.247(c) High Mid Channel – Yagi Antenna  
2nd Harmonic

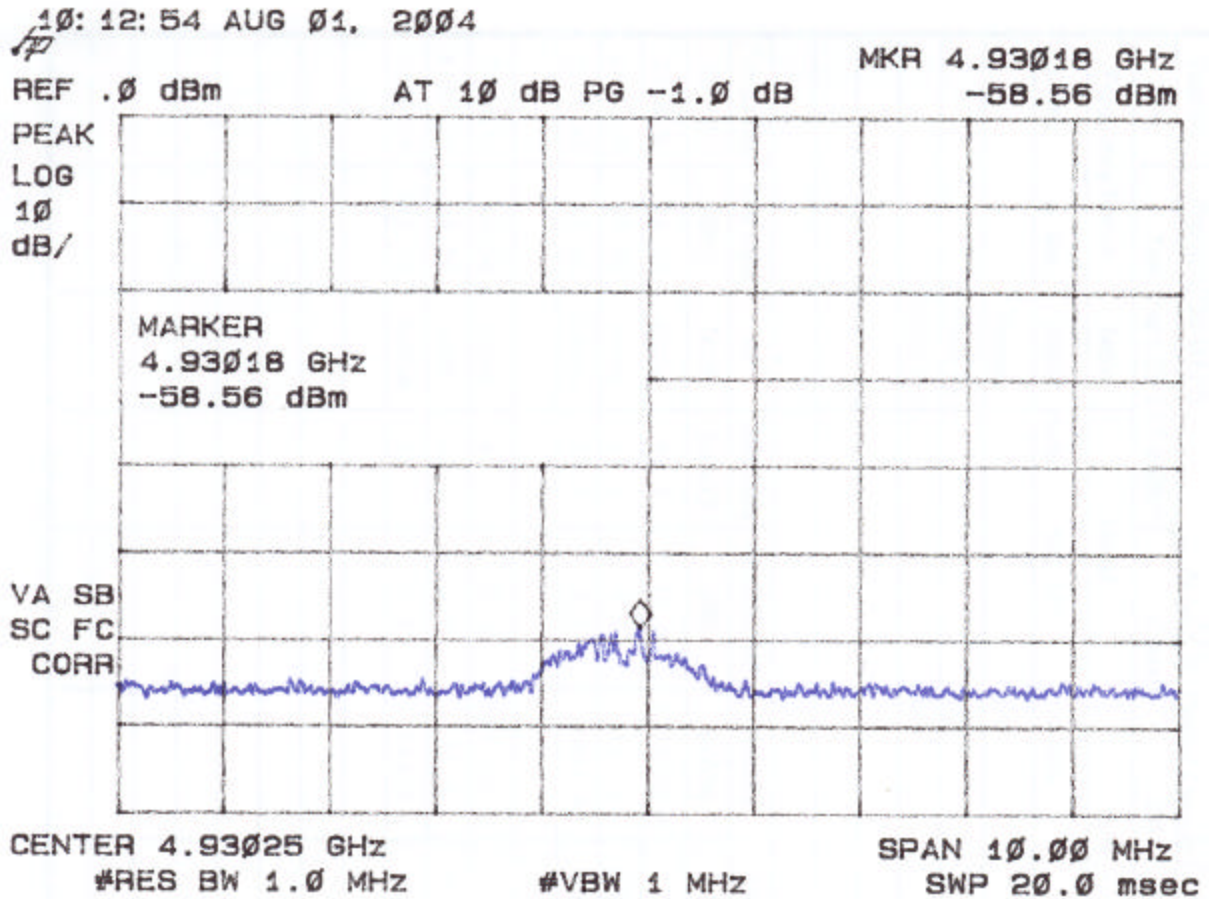


Figure 50-2  
Peak Radiated Spurious Emission 15.247(c) High Mid Channel – Yagi Antenna  
3rd Harmonic

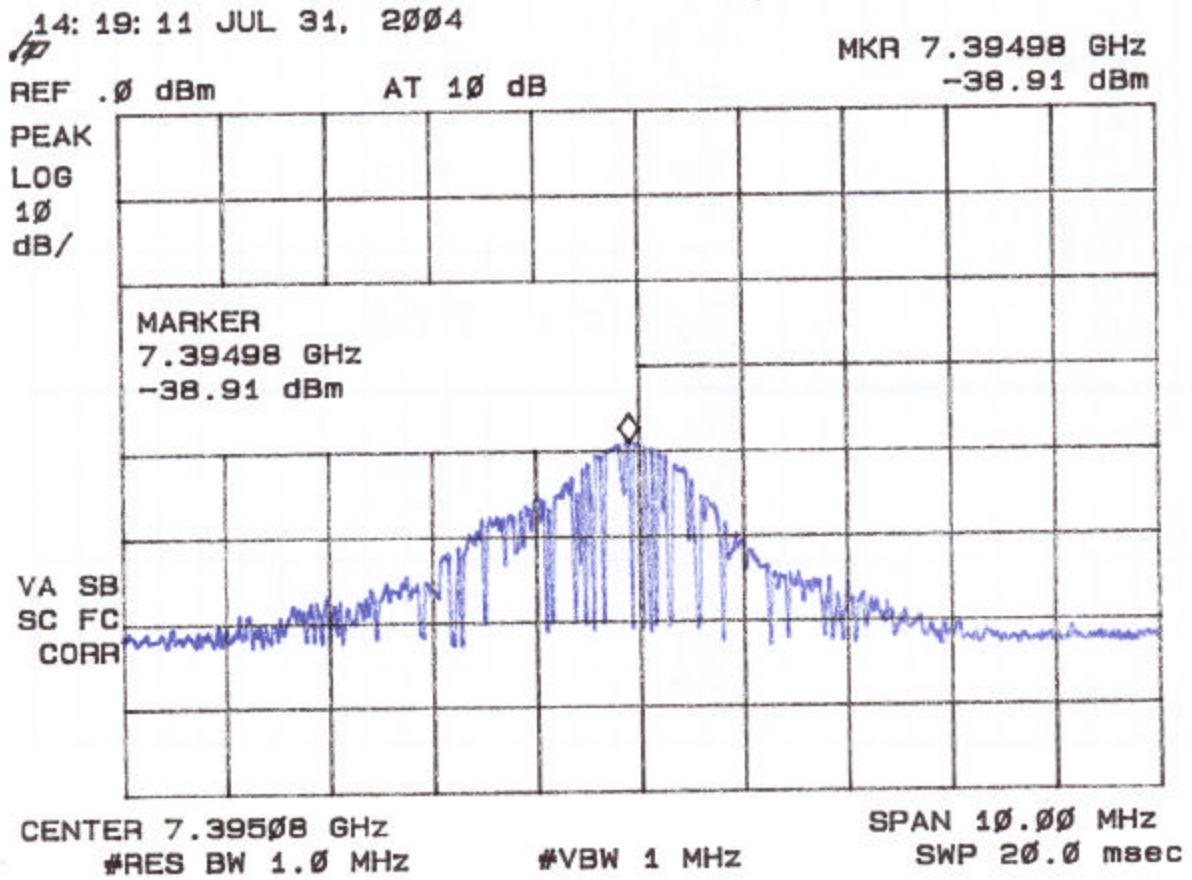


Figure 5p-1  
Peak Radiated Spurious Emission 15.247(c) High Channel – Yagi Antenna  
2nd Harmonic

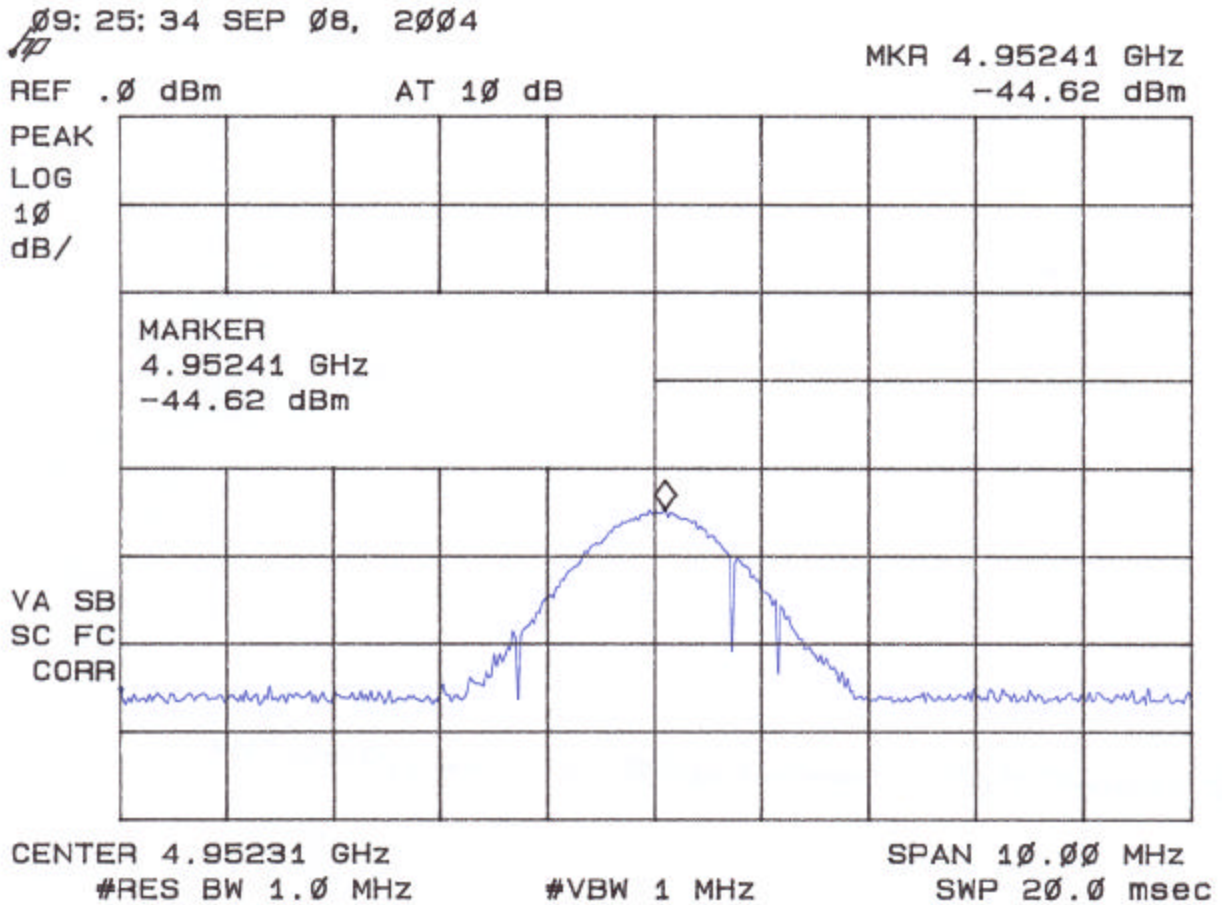
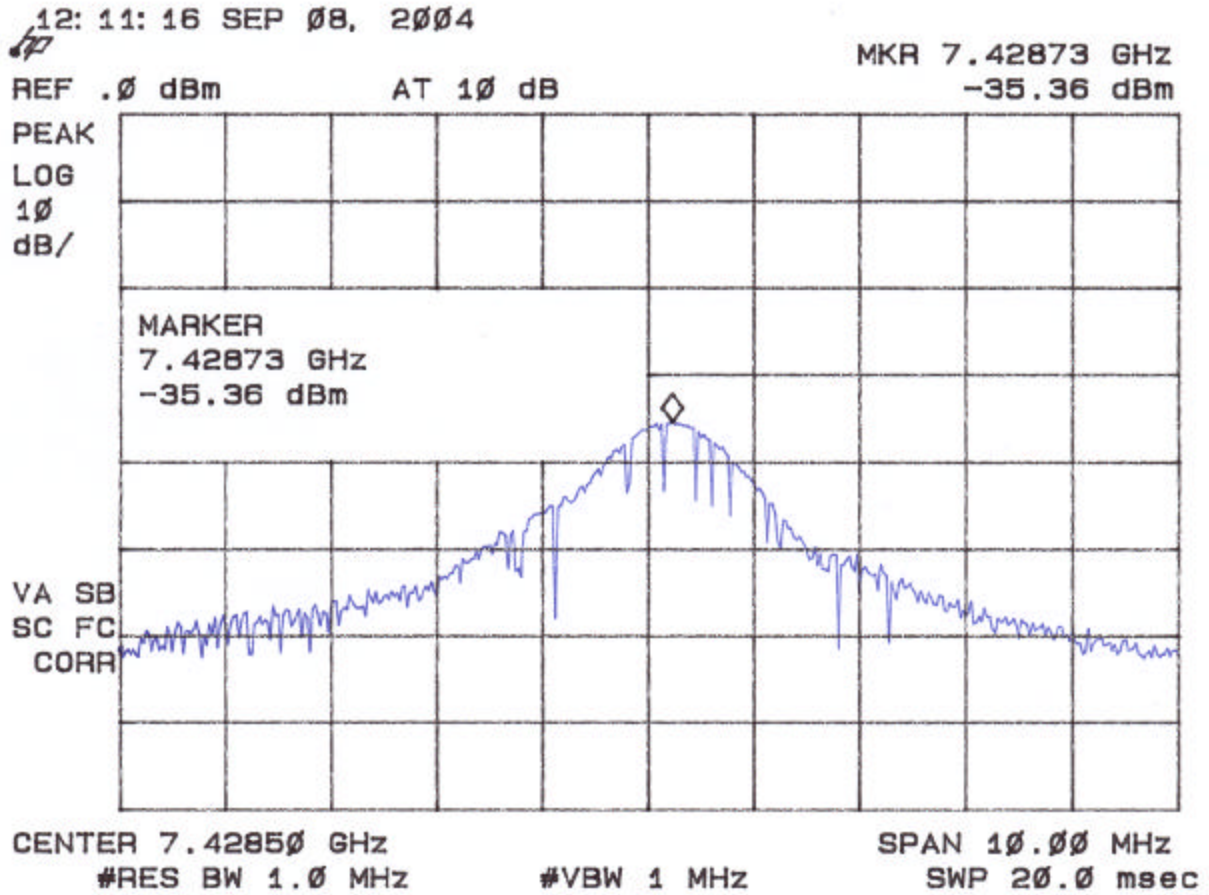


Figure 5p-2  
Peak Radiated Spurious Emission 15.247(c) High Channel – Yagi Antenna  
3rd Harmonic



**Table 4q. PEAK RADIATED SPURIOUS EMISSIONS Low Channel  
Corner Reflector Antenna**

Freq. (MHz)	Test Data (dBm) @ 3m	AF + CA - AMP (dB)	Results (uV/m) 3m	FCC Limits (uV/m)	MARGIN BELOW FCC Limits (dB)
2401.1	-10.79	31.9	2543781.2	-	-
4802.13	-45.68*	5.8	2272.3	5000.0	6.9
7203.13	-43.64* **	9.8	4571.5	254378.1	34.9

**Table 4r. PEAK RADIATED SPURIOUS EMISSIONS Low Mid Channel  
Corner Reflector Antenna**

Freq. (MHz)	Test Data (dBm) @ 3m	AF + CA - AMP (dB)	Results (uV/m) 3m	FCC Limits (uV/m)	MARGIN BELOW FCC Limits (dB)
4865.95	-47.68*	6.0	1851.2	5000.0	8.6
7299.13	-47.00* **	9.9	3118.8	5000.0	4.1

**Table 4s. PEAK RADIATED SPURIOUS EMISSIONS High Mid Channel  
Corner Reflector Antenna**

Freq. (MHz)	Test Data (dBm) @ 3m	AF + CA - AMP (dB)	Results (uV/m) 3m	FCC Limits (uV/m)	MARGIN BELOW FCC Limits (dB)
4930.09	-49.59*	6.2	1524.0	5000.0	10.3
7203.18	-43.47* **	9.8	4661.9	5000.0	0.6

**Table 4t. PEAK RADIATED SPURIOUS EMISSIONS High Channel  
Corner Reflector Antenna**

Freq. (MHz)	Test Data (dBm) @ 3m	AF + CA - AMP (dB)	Results (uV/m) 3m	FCC Limits (uV/m)	MARGIN BELOW FCC Limits (dB)
4952.38	-44.89*	6.3	2641.2	5000.0	5.54
7428.71	-44.70* **	9.9	4088.6	5000.0	1.75

\* Data corrected by 1 dB for loss of high pass filter

\*\* Data conversion from 1 meter to 3 meters = -9.54

SAMPLE CALCULATION:

RESULTS (uV/m @ 3m) = Antilog  $((-45.68 + 5.8 + 107)/20)$  = 2272.3

CONVERSION FROM dBm TO dBuV = 107 dB

Tester

Signature:  Name: David Blethen

Figure 5q-1

**Peak Radiated Spurious Emission 15.247(c) Low Channel –  
Corner Reflector Antenna  
2nd Harmonic**



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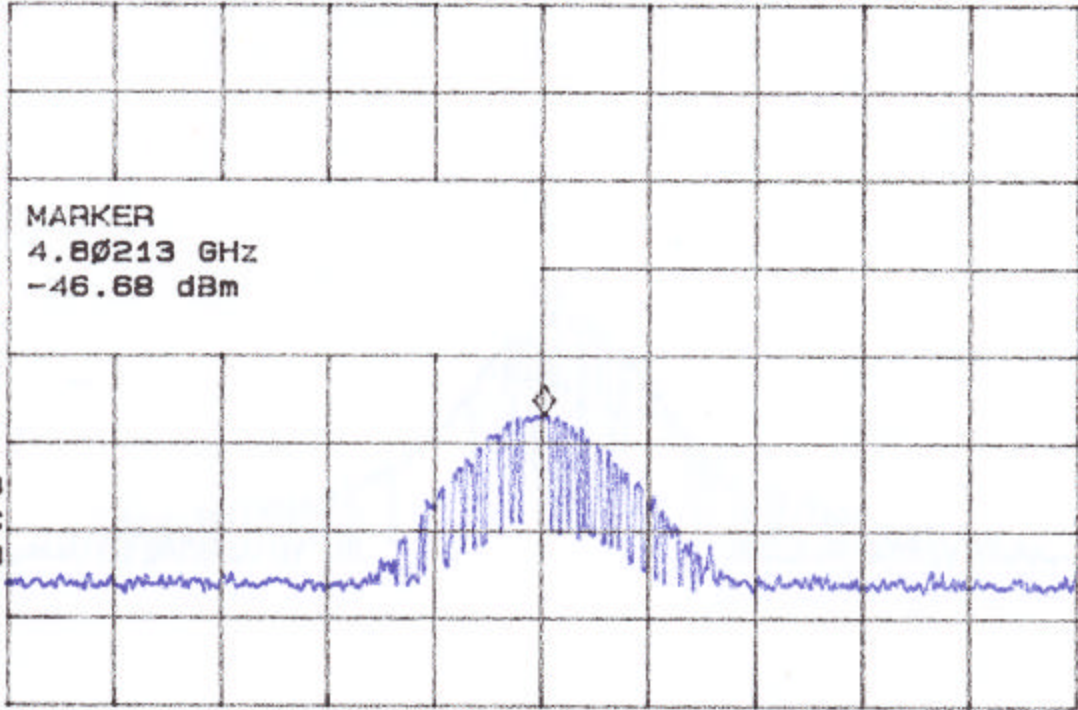
MKR 4.80213 GHz  
-46.68 dBm

REF .0 dBm AT 10 dB

PEAK  
LOG  
10  
dB/

MARKER  
4.80213 GHz  
-46.68 dBm

VA SB  
SC FC  
CORR



CENTER 4.80210 GHz  
#RES BW 1.0 MHz

#VBW 1 MHz

SPAN 10.00 MHz  
SWP 20.0 msec

Figure 5q-2  
Peak Radiated Spurious Emission 15.247(c) Low Channel –  
Corner Reflector Antenna  
3rd Harmonic

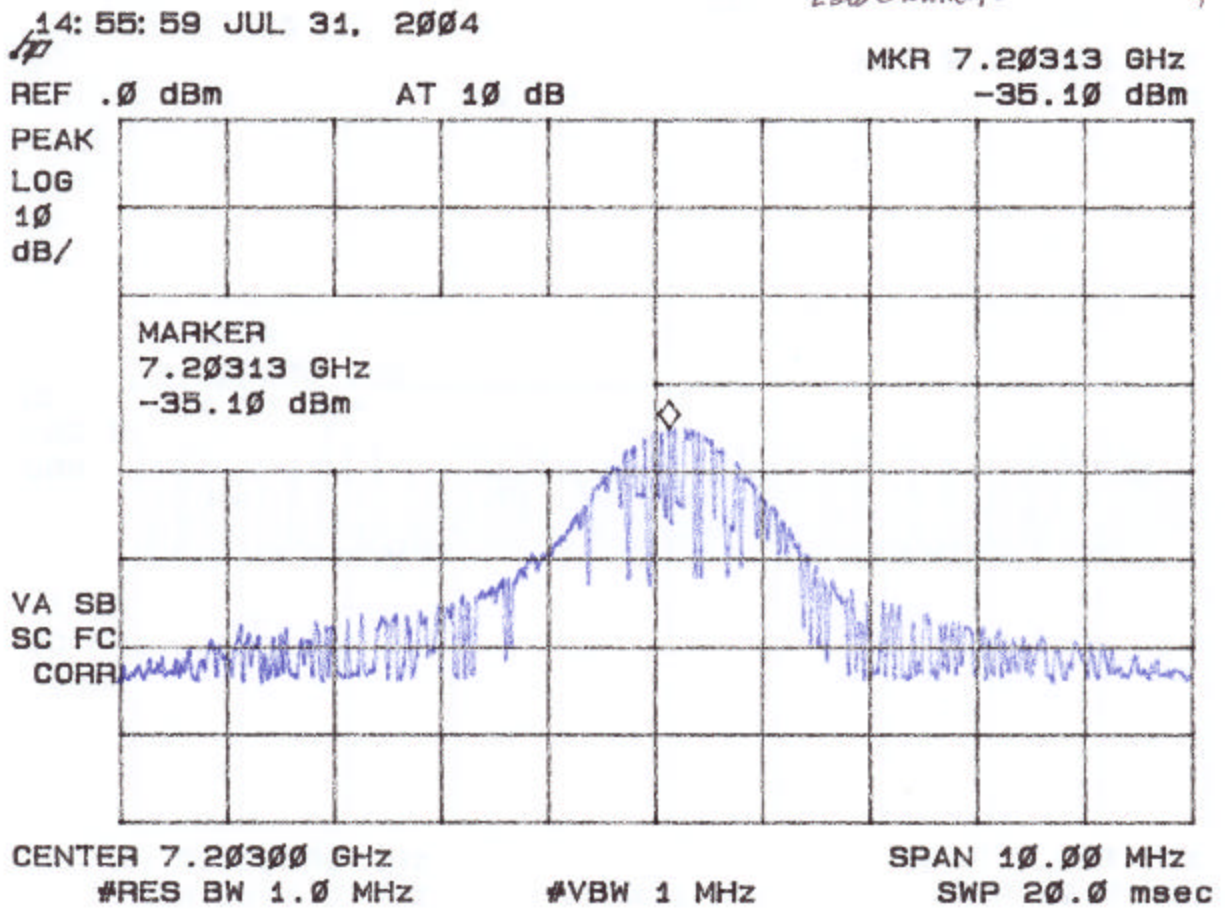


Figure 5r-1  
Peak Radiated Spurious Emission 15.247(c) Low Mid Channel –  
Corner Reflector Antenna  
2nd Harmonic

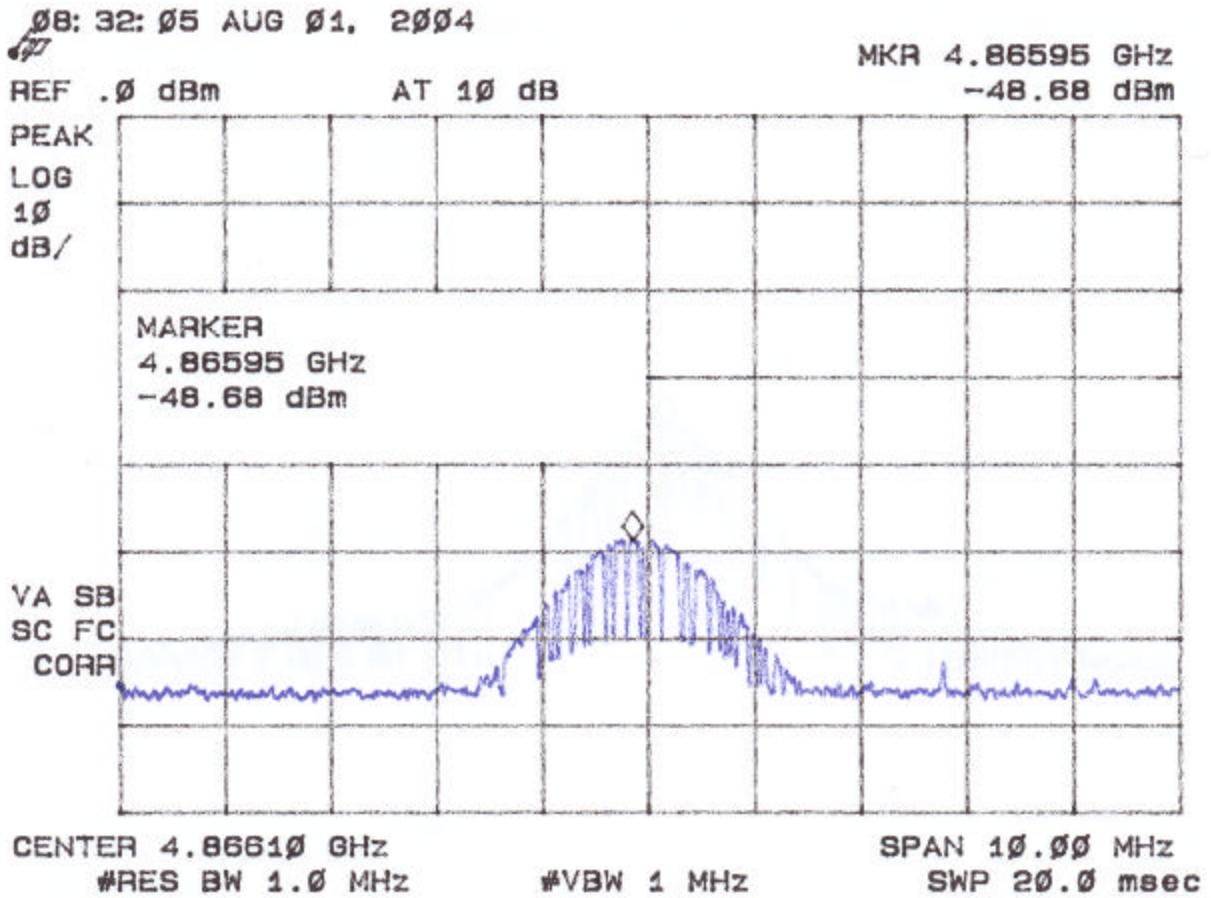




Figure 5r-2  
Peak Radiated Spurious Emission 15.247(c) Low Mid Channel –  
Corner Reflector Antenna  
3<sup>rd</sup> Harmonic

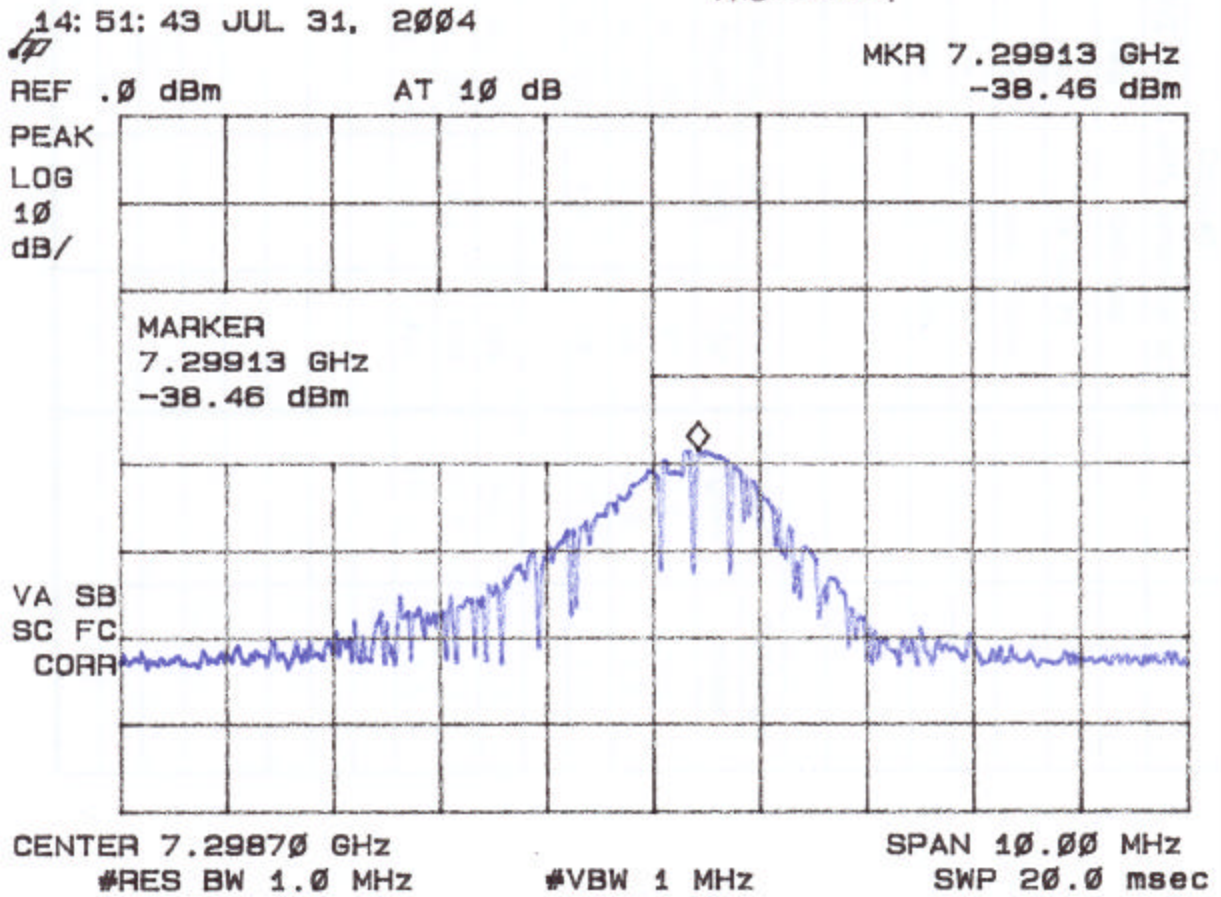


Figure 5s-1  
Peak Radiated Spurious Emission 15.247(c) High Mid Channel –  
Corner Reflector Antenna  
2nd Harmonic

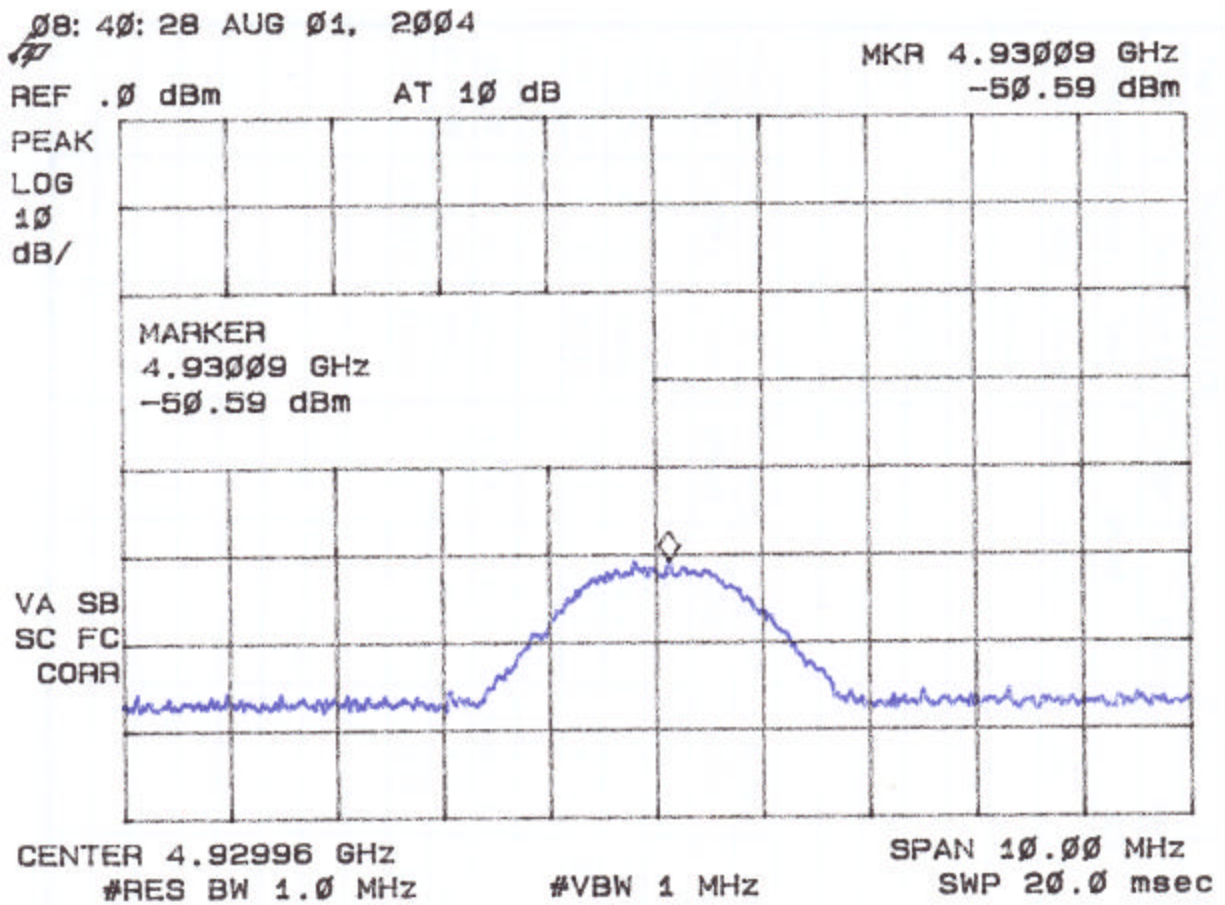


Figure 5s-2  
Peak Radiated Spurious Emission 15.247(c) High Mid Channel – Corner Reflector  
Antenna  
3rd Harmonic

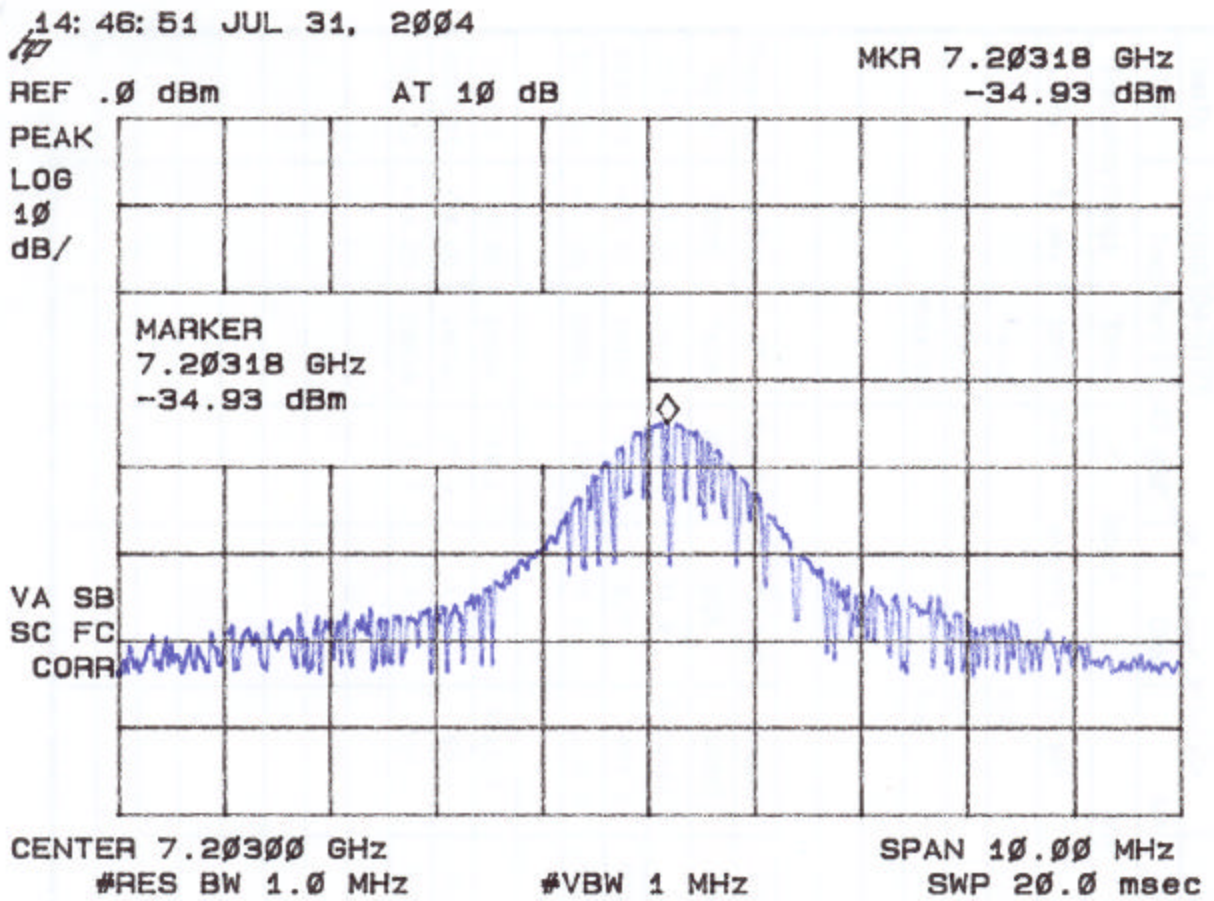


Figure 5t-1  
Peak Radiated Spurious Emission 15.247(c) High Channel –  
Corner Reflector Antenna  
2nd Harmonic

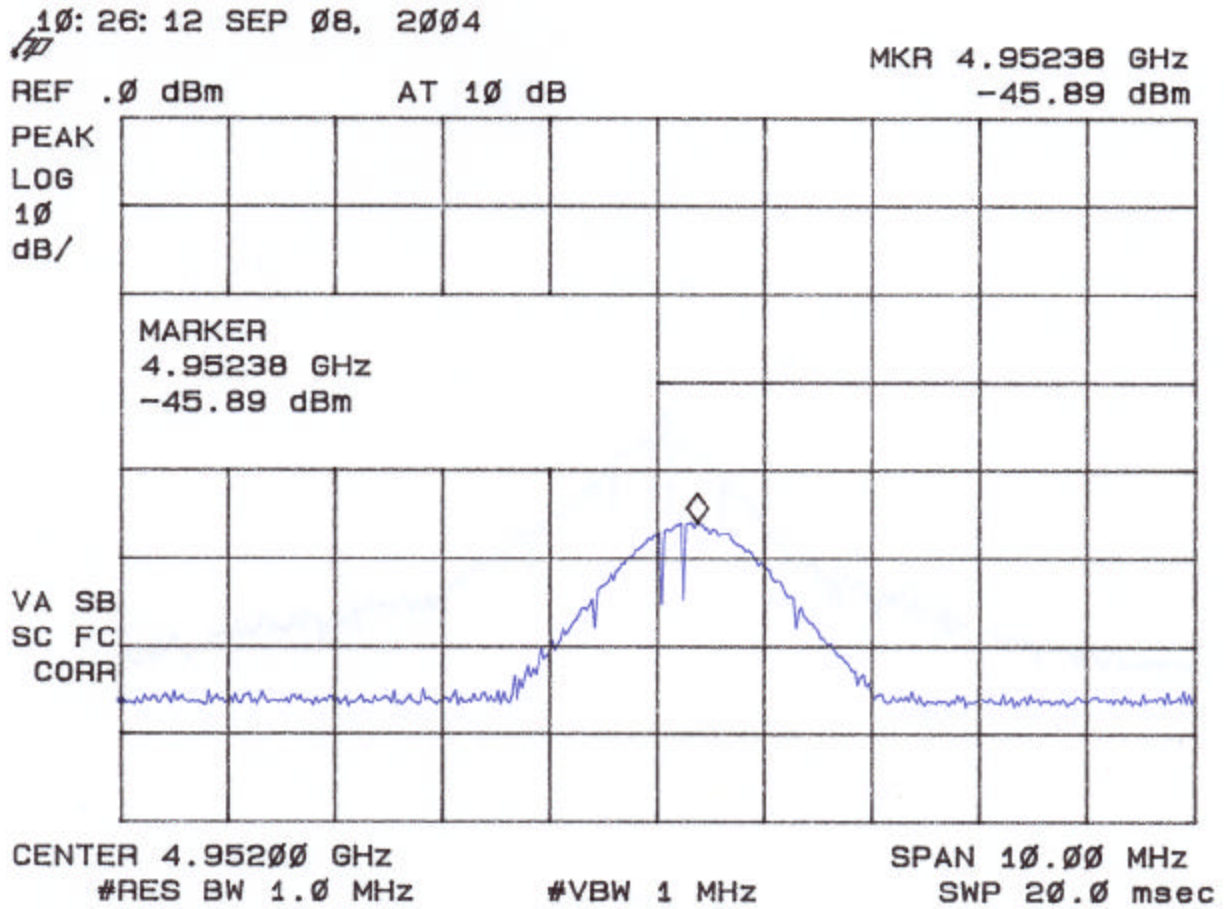
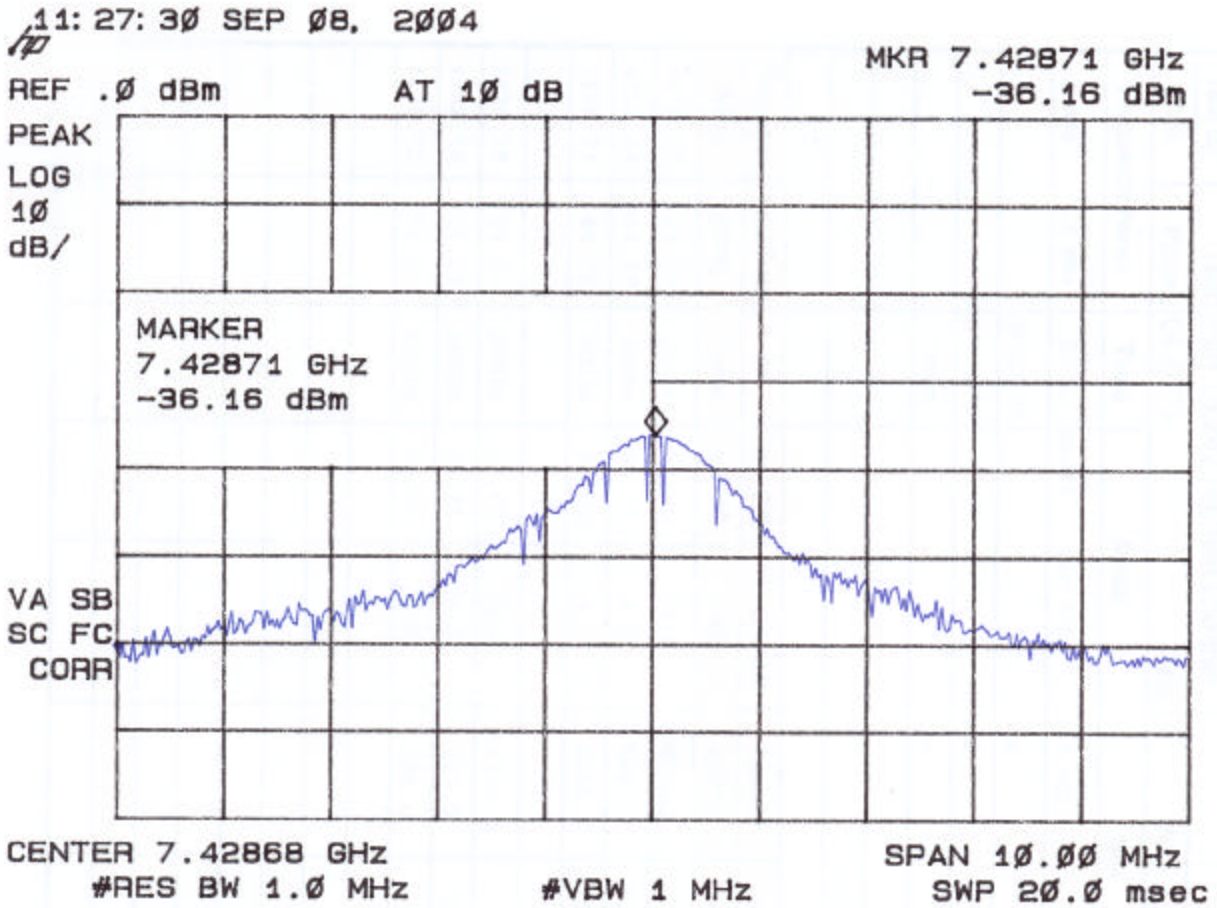




Figure 5t-2  
Peak Radiated Spurious Emission 15.247(c) High Channel –  
Corner Reflector Antenna  
3rd Harmonic





**Table 4u. PEAK RADIATED SPURIOUS EMISSIONS Low Channel  
Large Patch Antenna**

Freq. (MHz)	Test Data (dBm) @ 3m	AF + CA - AMP (dB)	Results (uV/m) 3m	FCC Limits (uV/m)	MARGIN BELOW FCC Limits (dB)
2400.94	-19.46	31.90	937500.3	-	-
4802.0	-41.87*	5.8	3523.3	5000.0	3.04
7203.2	-41.86* **	9.8	5630.7	93750.0	24.43
9604.34	-55.17* **	12.4	1629.7	93750.0	35.2

**Table 4v. PEAK RADIATED SPURIOUS EMISSIONS Low Mid Channel  
Large Patch Antenna**

Freq. (MHz)	Test Data (dBm) @ 3m	AF + CA - AMP (dB)	Results (uV/m) 3m	FCC Limits (uV/m)	MARGIN BELOW FCC Limits (dB)
2433.03	-19.65	31.95	922380.9	-	-
4865.88	-45.56*	6.0	2362.8	5000.0	6.5
7299.13	-49.19* **	9.9	2423.7	5000.0	6.3
9732.02	-59.91* **	127	970.2	92238.1	39.6

**Table 4w. PEAK RADIATED SPURIOUS EMISSIONS High Mid Channel  
Large Patch Antenna**

Freq. (MHz)	Test Data (dBm) @ 3m	AF + CA - AMP (dB)	Results (uV/m) 3m	FCC Limits (uV/m)	MARGIN BELOW FCC Limits (dB)
2464.88	-20.78	32.0	814387.1	-	-
4929.9	-47.11*	6.3	2027.5	5000.0	7.8
7395.1	-42.98* **	9.9	4976.2	5000.0	0.04
9860.05	-58.66* **	12.9	1157.5	81438.7	36.9

**Table 4x. PEAK RADIATED SPURIOUS EMISSIONS High Channel  
Large Patch Antenna**

Freq. (MHz)	Test Data (dBm) @ 3m	AF + CA - AMP (dB)	Results (uV/m) 3m	FCC Limits (uV/m)	MARGIN BELOW FCC Limits (dB)
4952.34	-45.22*	6.3	2542.7	5000.0	5.9
7428.63	-45.93	9.9	3548.7	5000.0	3.0

\* Data corrected by 1 dB for loss of high pass filter

\*\* Data conversion from 1 meter to 3 meters = -9.54

**SAMPLE CALCULATION:**

RESULTS (uV/m @ 3m) = Antilog  $((-41.87 + 5.8 + 107)/20)$  = 3523.3

CONVERSION FROM dBm TO dBuV = 107 dB

**Tester**

**Signature:**  **Name:** David Blethen

Figure 5u-1  
Peak Radiated Spurious Emission 15.247(c) Low Channel – Large Patch Antenna  
2<sup>nd</sup> Harmonic

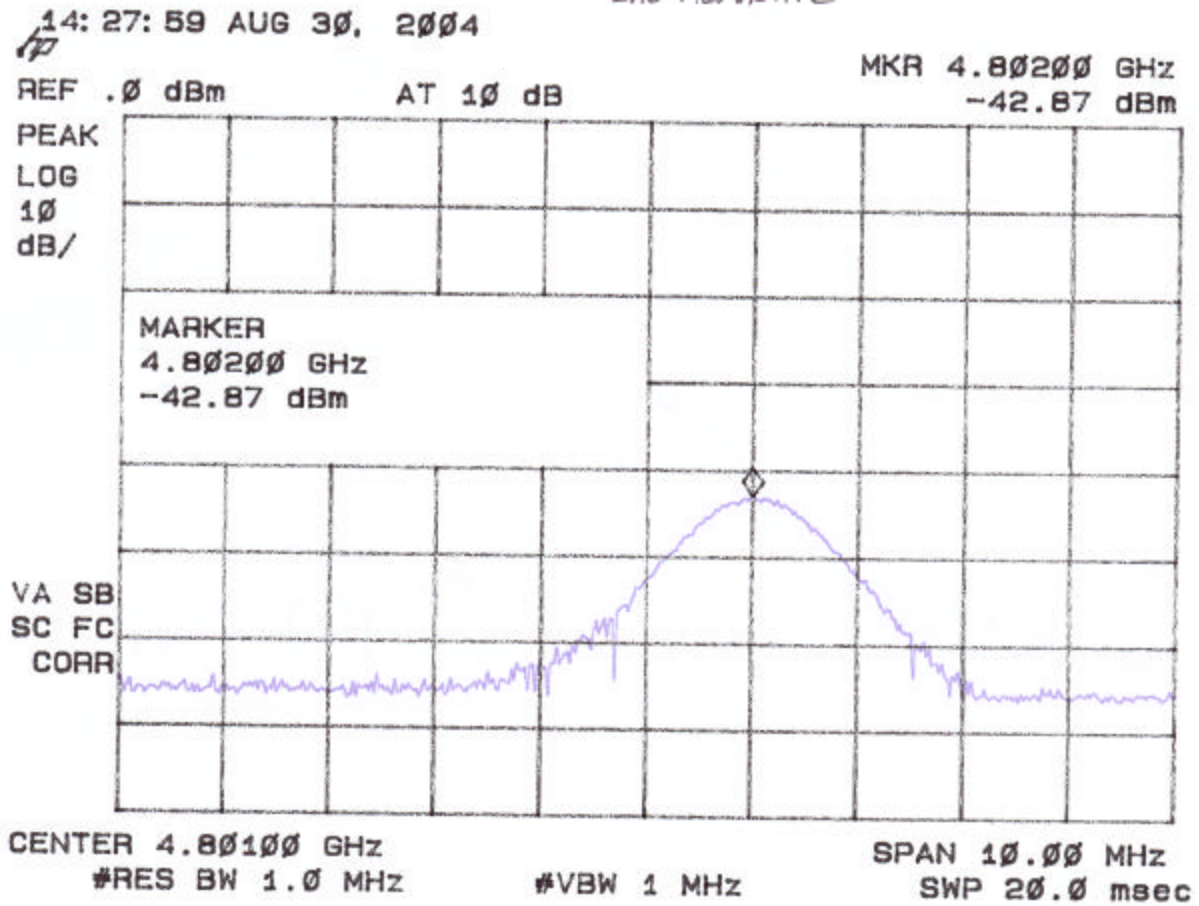
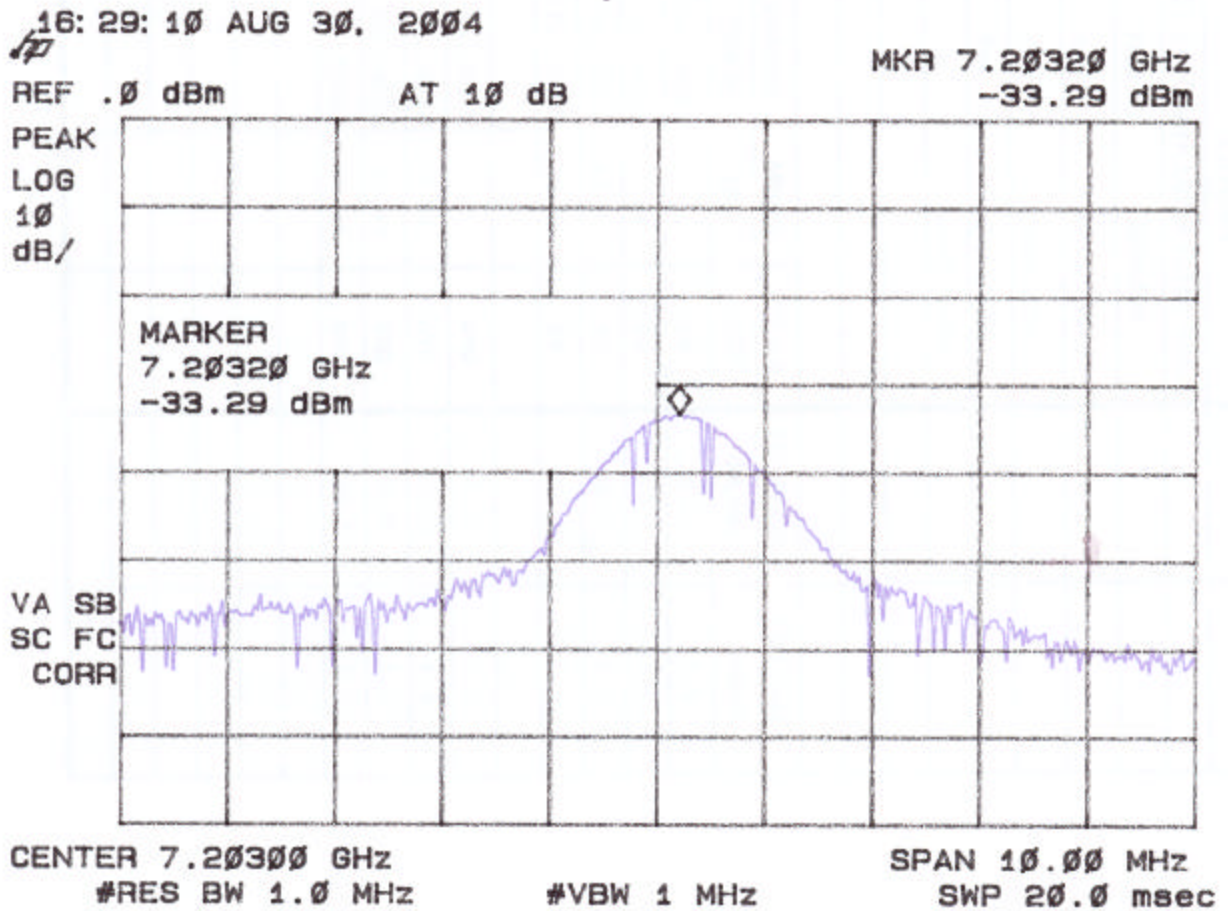


Figure 5u-2  
Peak Radiated Spurious Emission 15.247(c) Low Channel – Large Patch Antenna  
3rd Harmonic



**Figure 5u-3**  
**Peak Radiated Spurious Emission 15.247(c) Low Channel– Large Patch Antenna**  
**4th Harmonic**

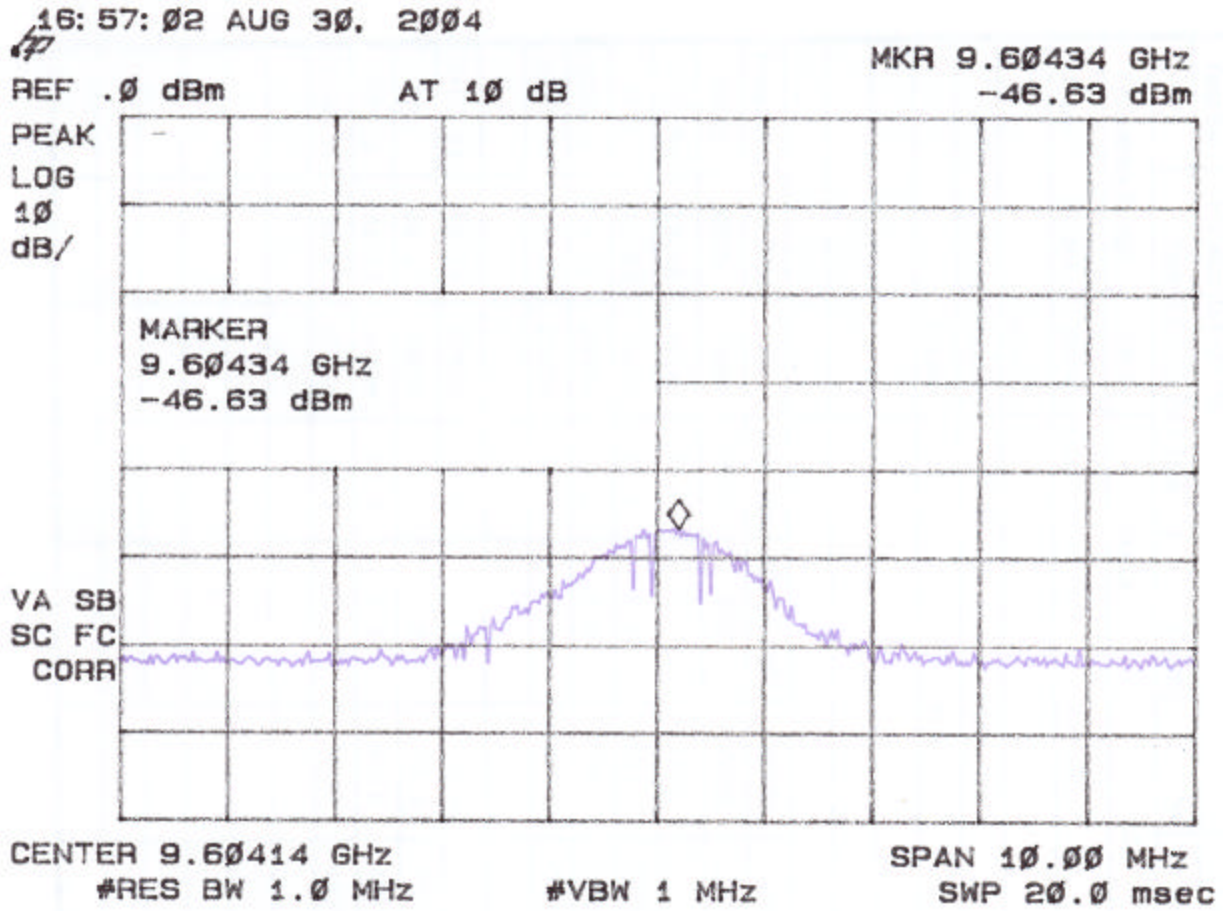




Figure 5v-1  
Peak Radiated Spurious Emission 15.247(c) Low Mid Channel –  
Large Patch Antenna  
2nd Harmonic

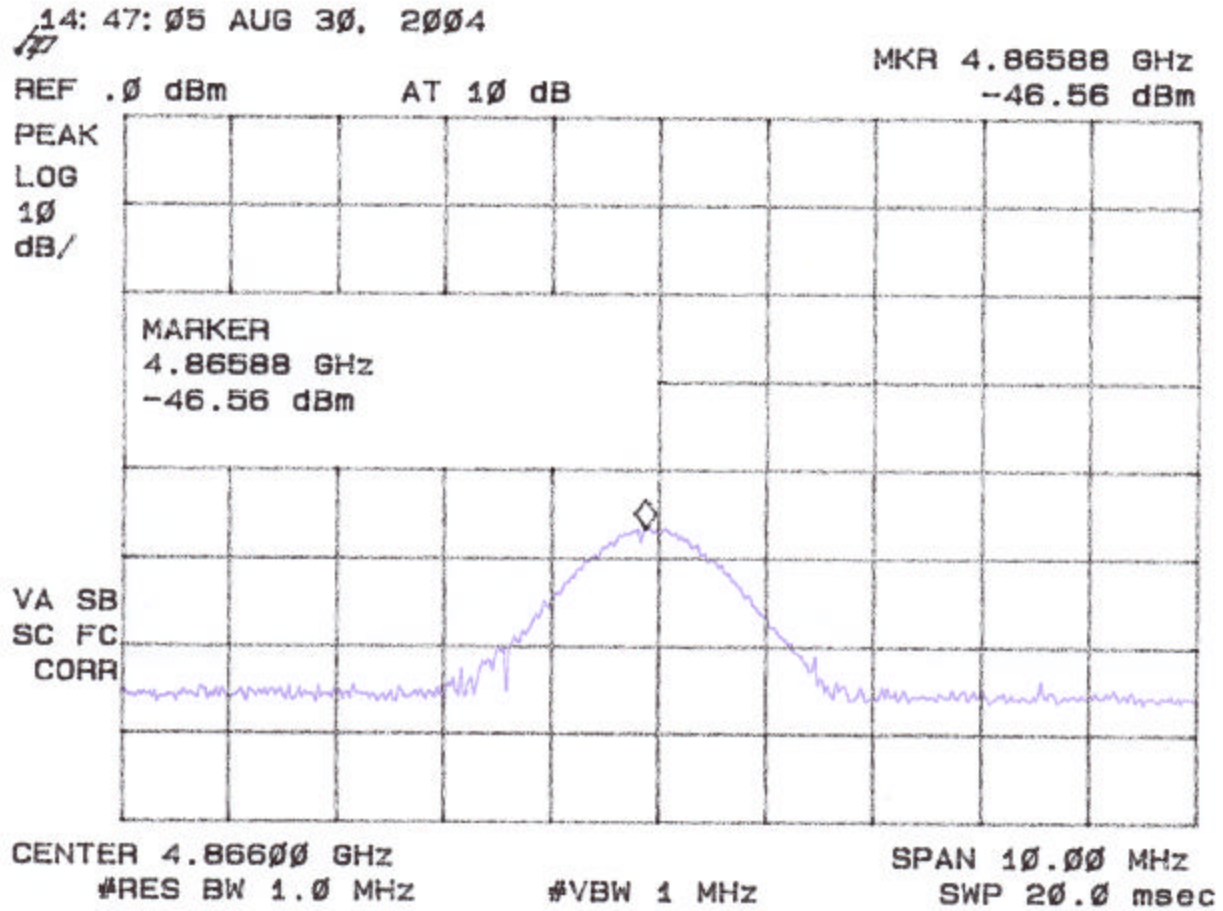


Figure 5v-2  
Peak Radiated Spurious Emission 15.247(c) Low Mid Channel –  
Large Patch Antenna  
3rd Harmonic

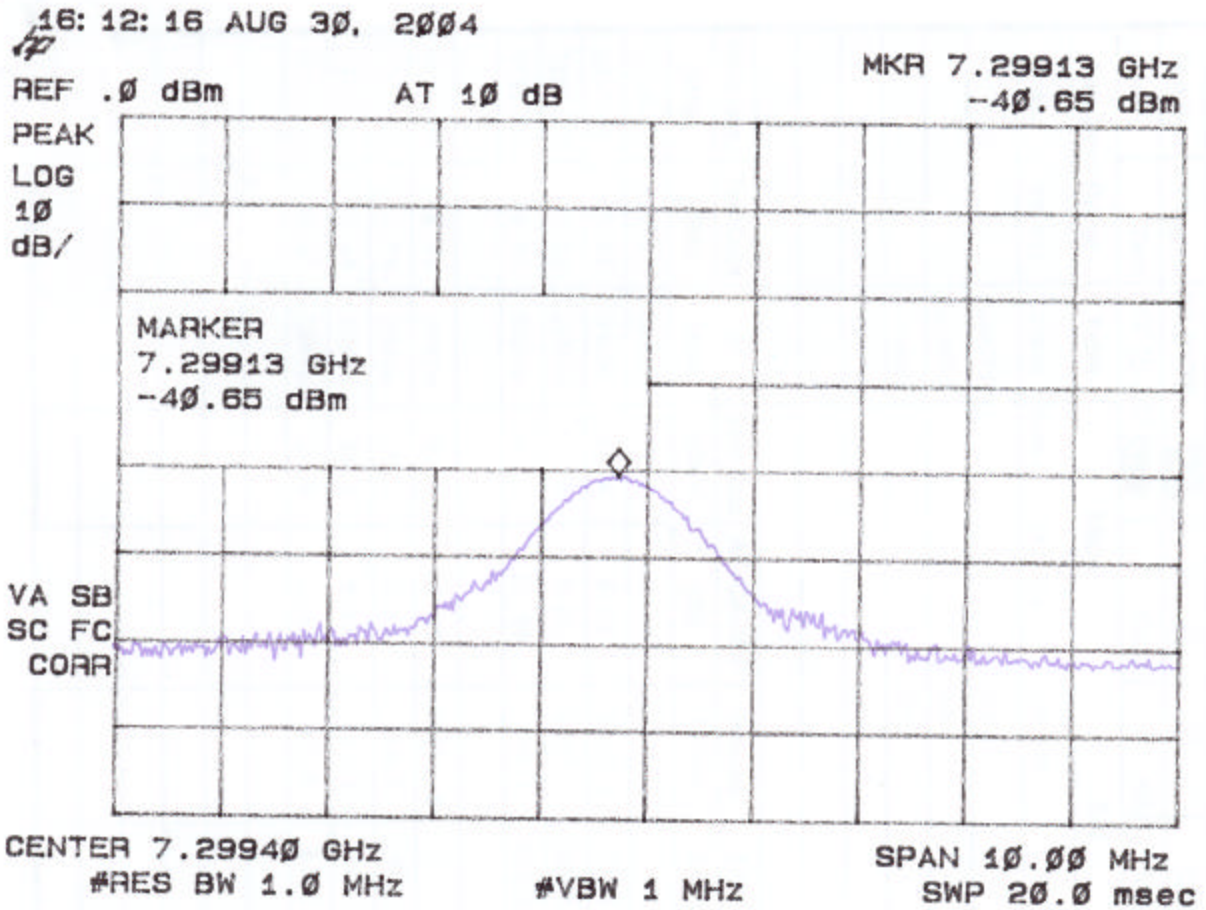


Figure 5v-3  
Peak Radiated Spurious Emission 15.247(c) Low Mid Channel –  
Large Patch Antenna  
4th Harmonic

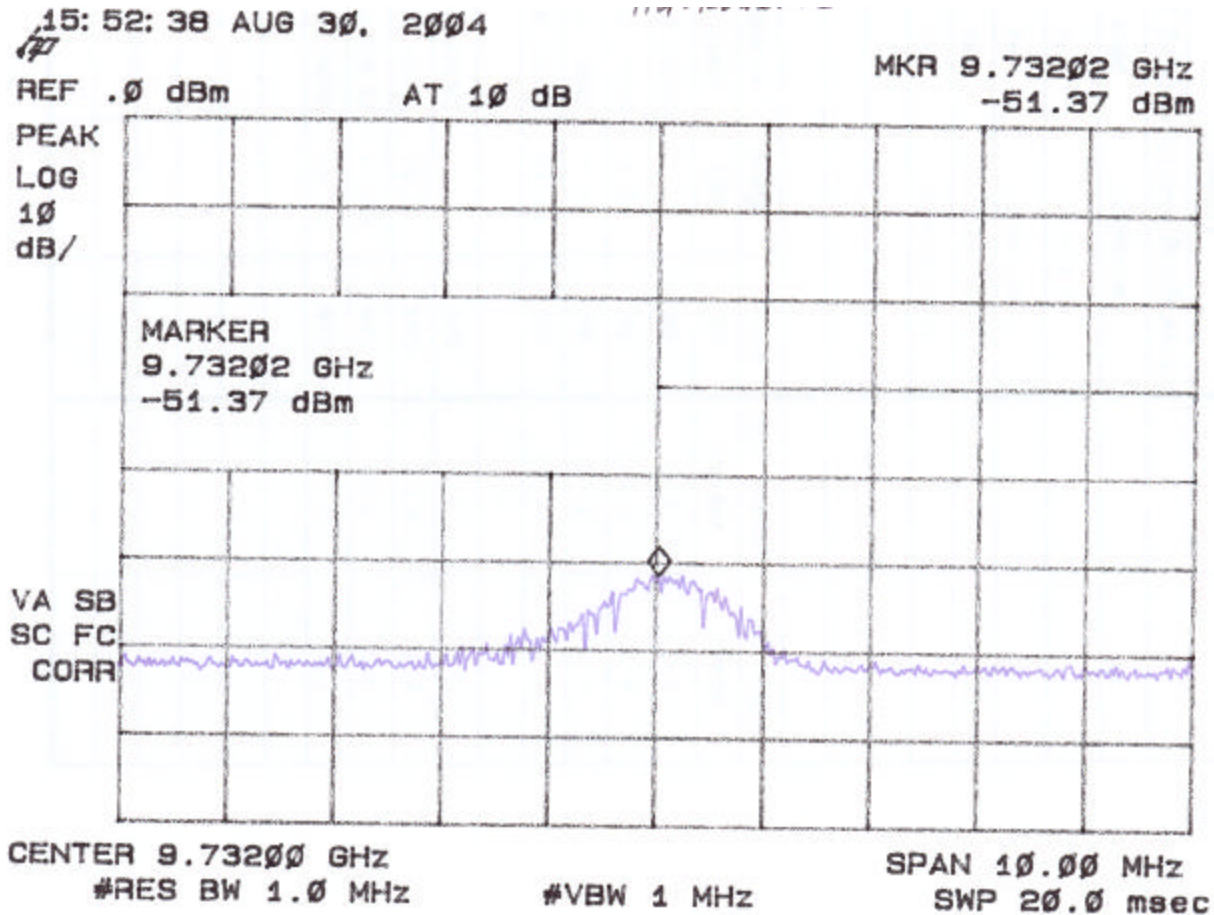


Figure 5w-1  
Peak Radiated Spurious Emission 15.247(c) High Mid Channel –  
Large Patch Antenna  
2nd Harmonic

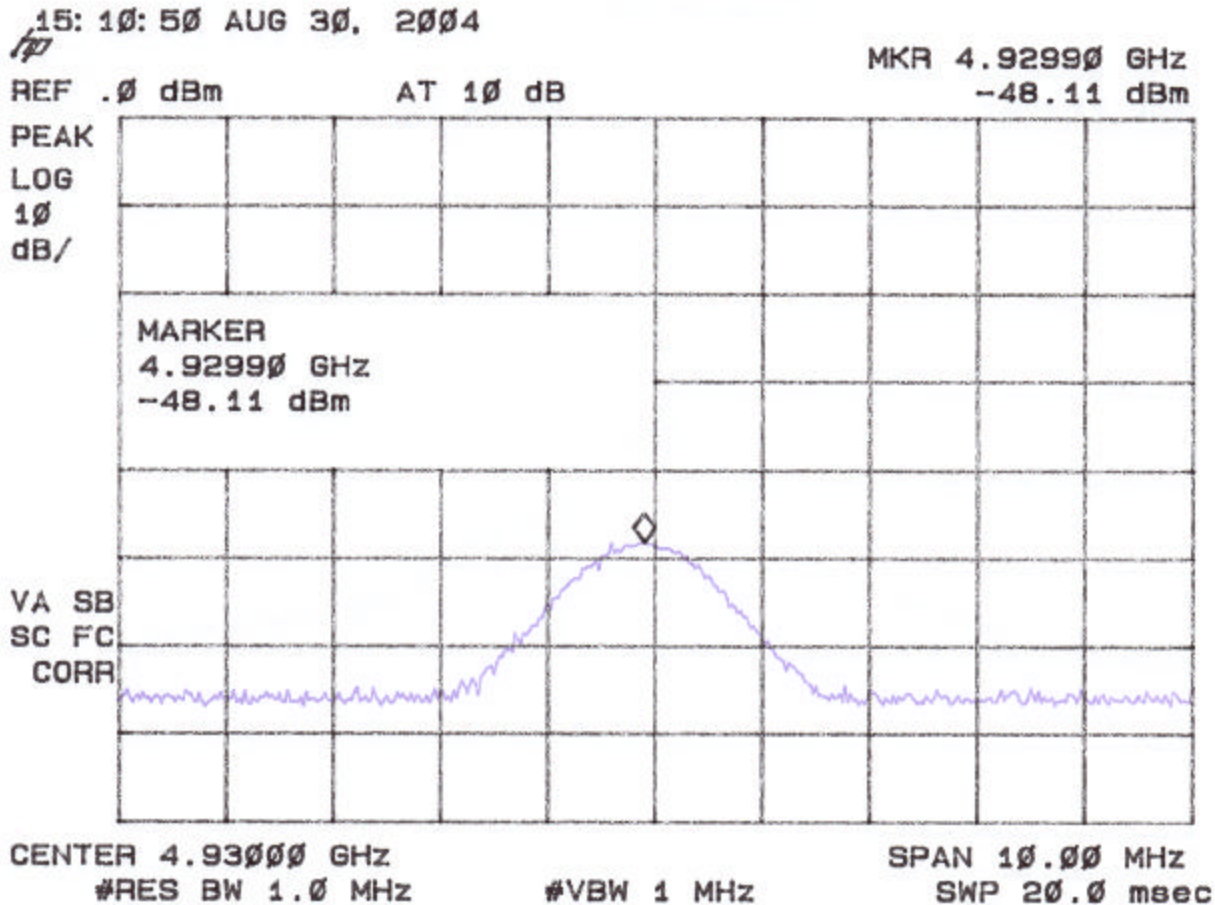


Figure 5w-2  
Peak Radiated Spurious Emission 15.247(c) High Mid Channel –  
Large Patch Antenna  
3rd Harmonic

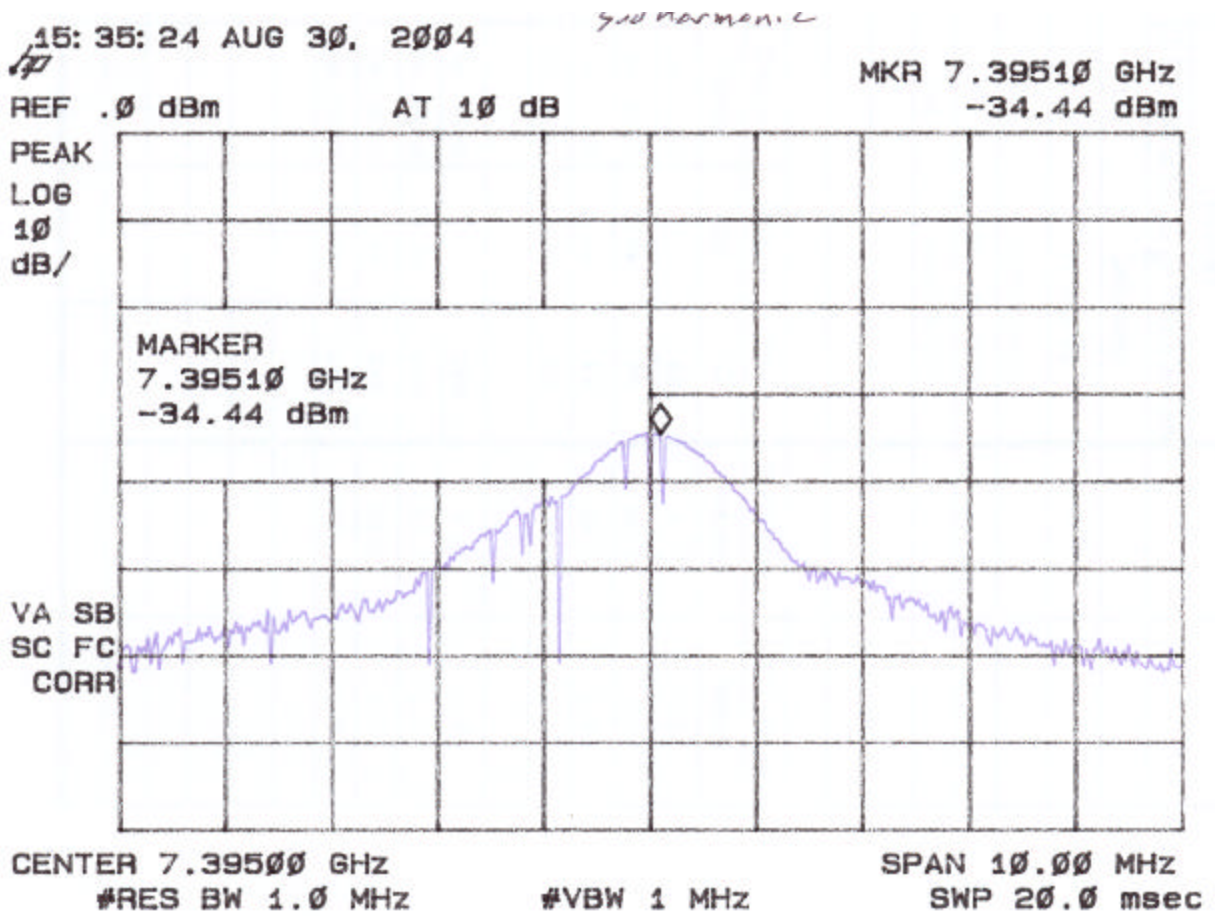




Figure 5w-3  
Peak Radiated Spurious Emission 15.247(c) High Mid Channel –  
Large Patch Antenna  
4th Harmonic

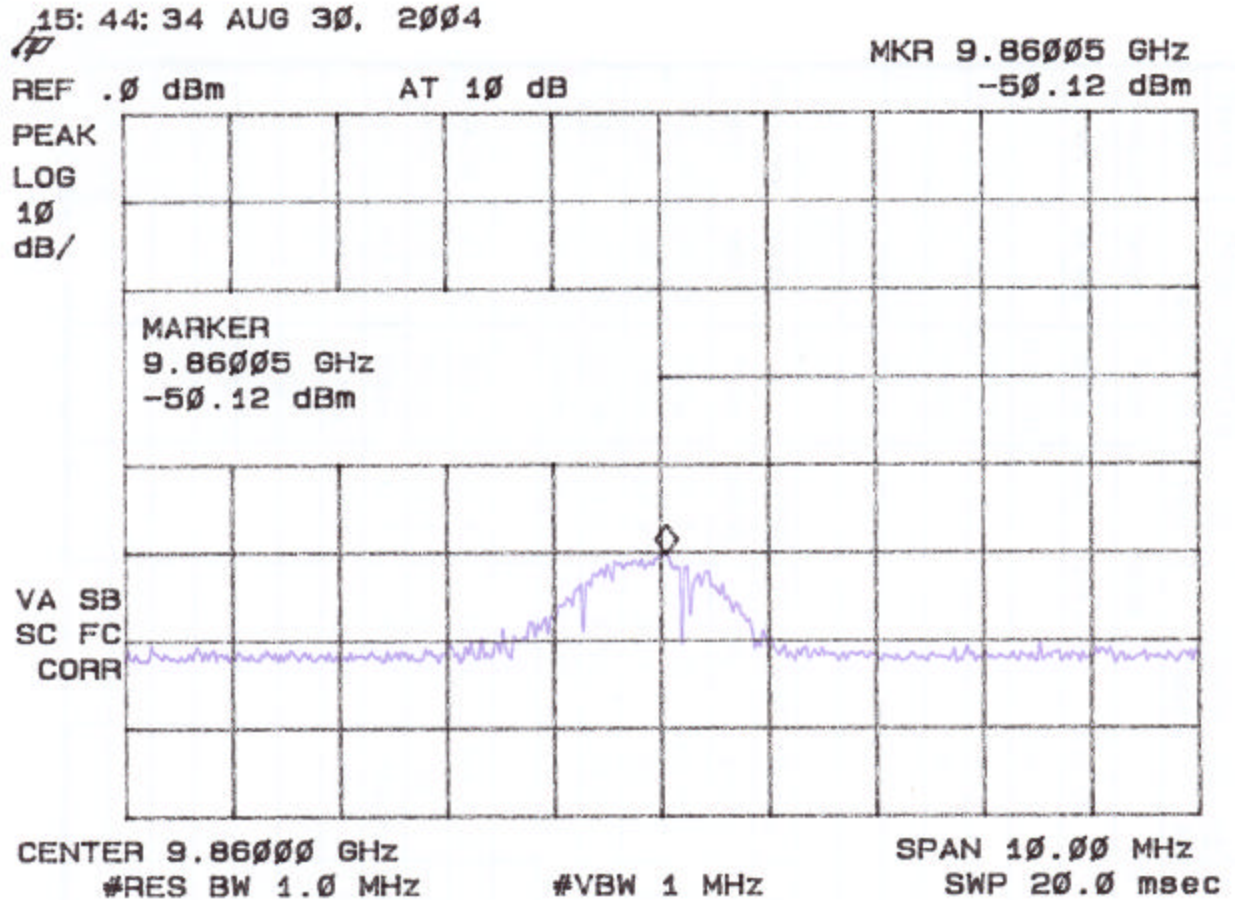


Figure 5x-1  
Peak Radiated Spurious Emission 15.247(c) High Channel –  
Large Patch Antenna  
2nd Harmonic

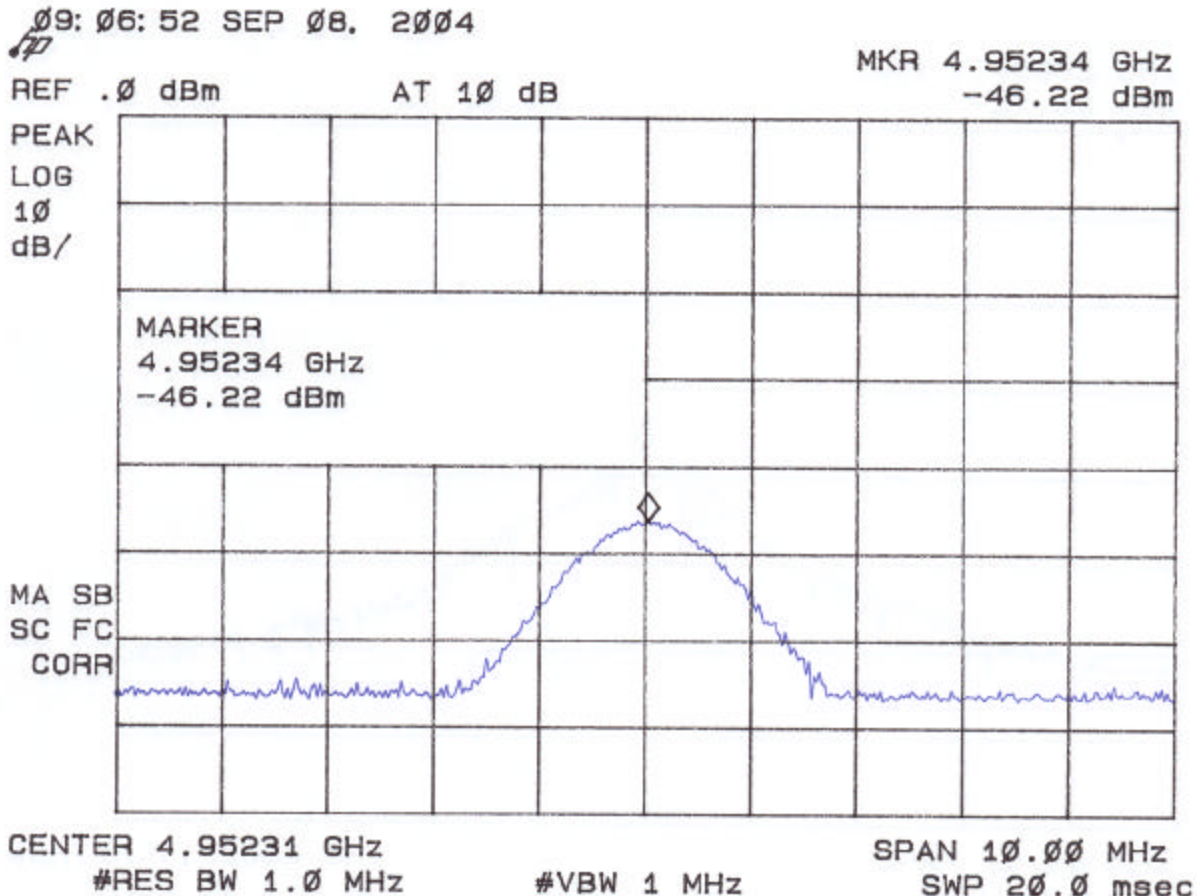
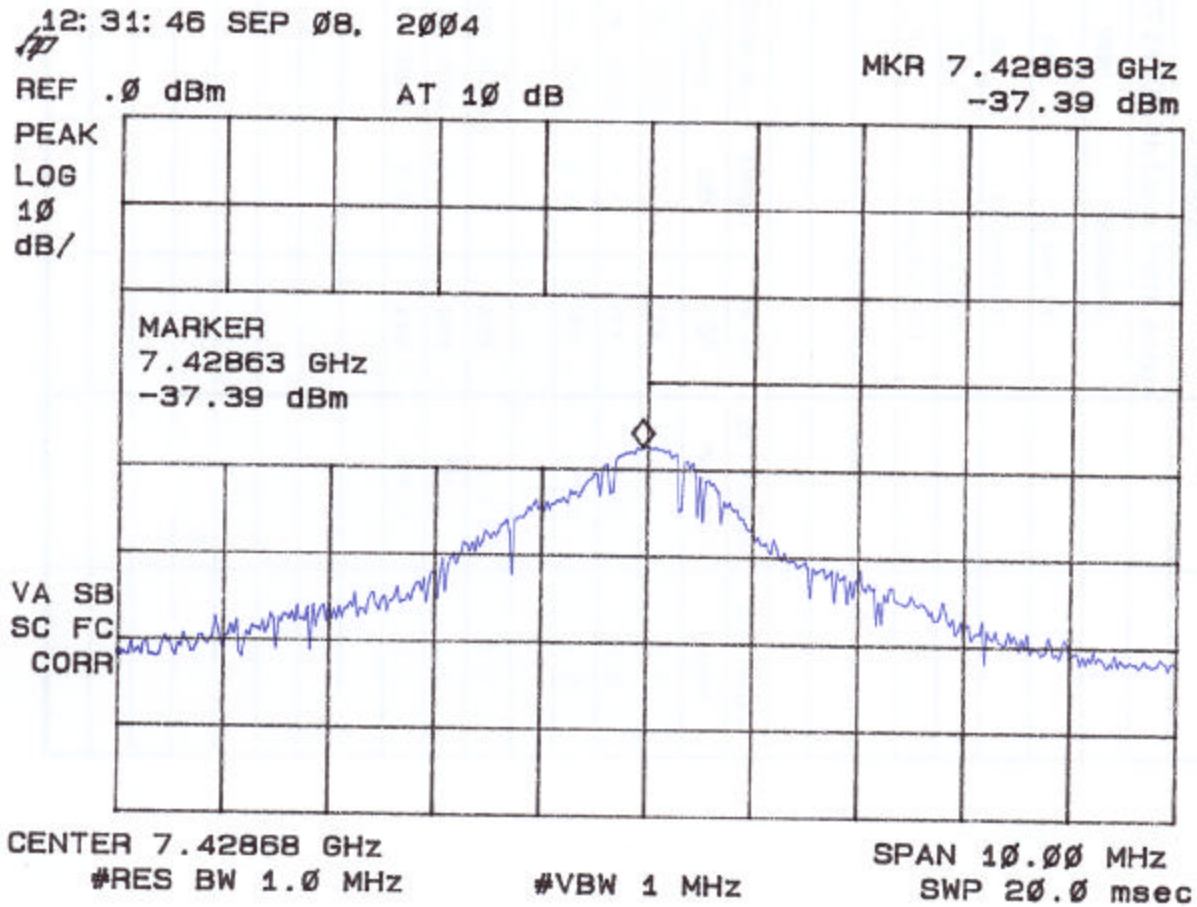


Figure 5x-2  
Peak Radiated Spurious Emission 15.247(c) High Channel –  
Large Patch Antenna  
3rd Harmonic



FCC ID: HSW-2450