

Table 4d. PEAK RADIATED SPURIOUS EMISSIONS Low Channel

Fractal Antenna

Freq. (MHz)	Test Data (dBm) @ 3m	AF + CA - AMP (dB)	Results (uV/m) 3m	FCC Limits (uV/m)	MARGIN BELOW FCC Limits (dB)
910.47	-25.0	30.7	429654.5	-	-
1820.98	-24.1	-6.9	6332.6	42965.5	16.6
2731.48	-53.5	-2.4	357.4	5000.0	22.9
3641.98	-53.4	1.0	539.8	5000.0	19.3
4552.5	-61.6	4.8	322.9	5000.0	23.8
5462.93	-64.8**	6.8	282.1	42965.5	43.7
6372.2	-73.6**	8.1	118.7	42965.5	51.2
7284.05	-69.0**	9.9	249.1	5000.0	26.1

Data corrected by 1 dB for loss of high pass filter except for fundamental frequency

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

SAMPLE CALCULATION:

RESULTS (uV/m @ 3m) = Antilog ((-24.1 + -6.9 + 107)/20) = 42965.5

CONVERSION FROM dBm TO dBuV = 107 dB

Tester


Signature:  **Name:** David Blethen

Figure 5d-1
Peak Radiated Spurious Emission 15.247(c) Low –
Fractal Fundamental

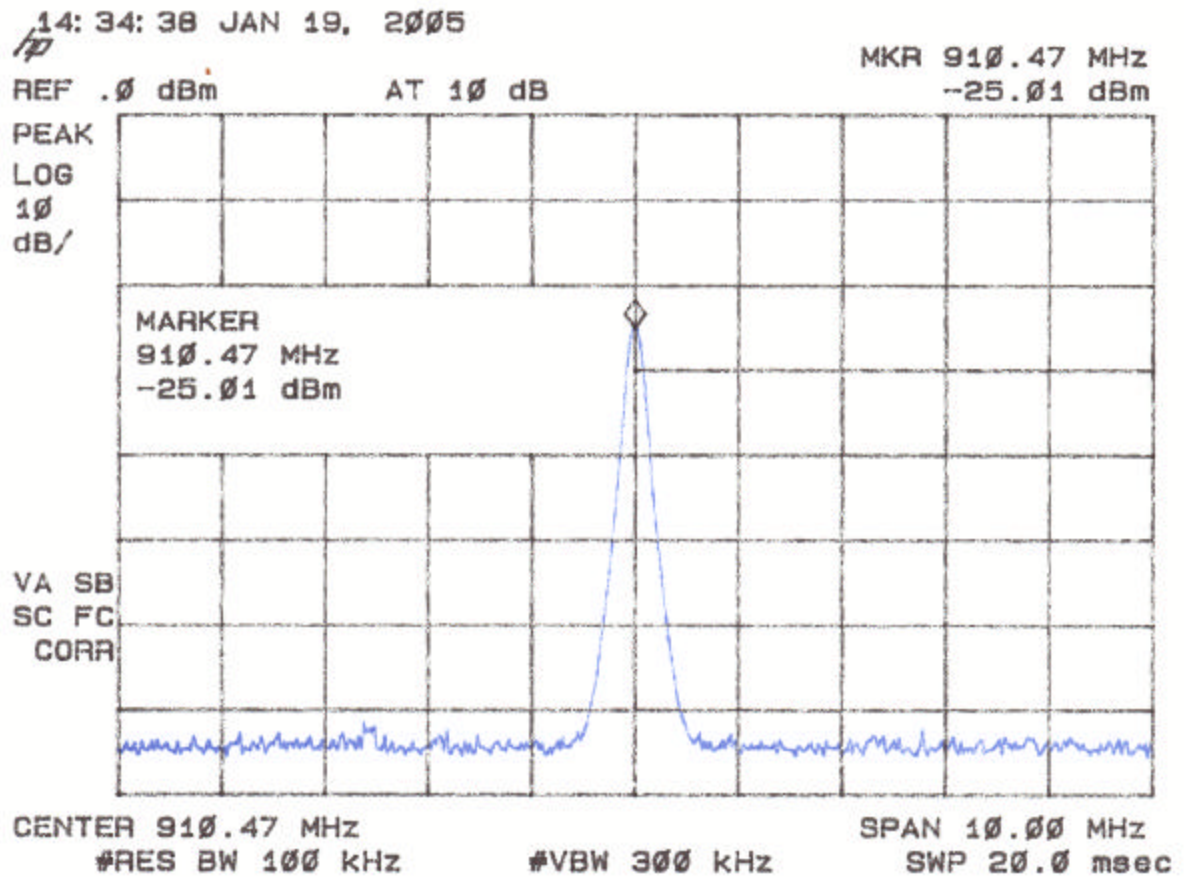


Figure 5d-2
Peak Radiated Spurious Emission 15.247(c) Low –
Fractal 2nd Harmonic

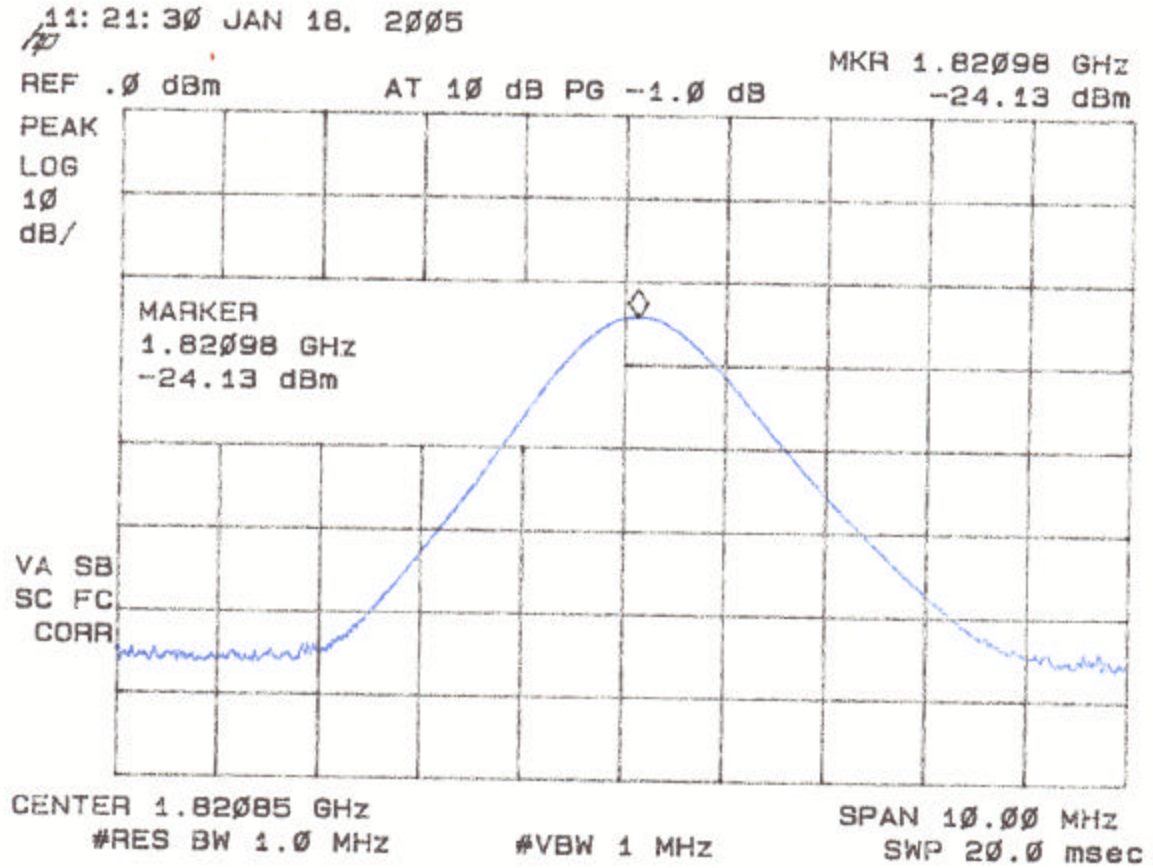


Figure 5d-3
Peak Radiated Spurious Emission 15.247(c) Low –
Fractal 3rd Harmonic

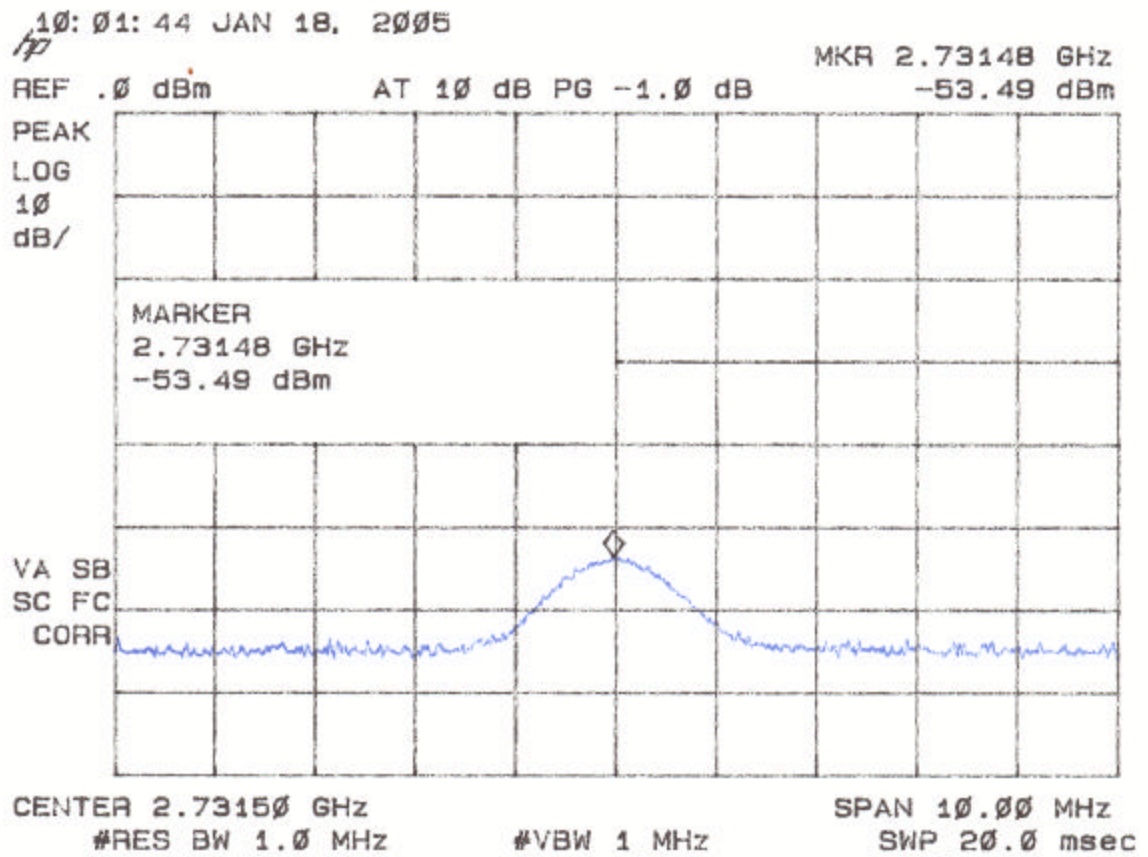


Figure 5d-4
Peak Radiated Spurious Emission 15.247(c) Low –
Fractal 4th Harmonic

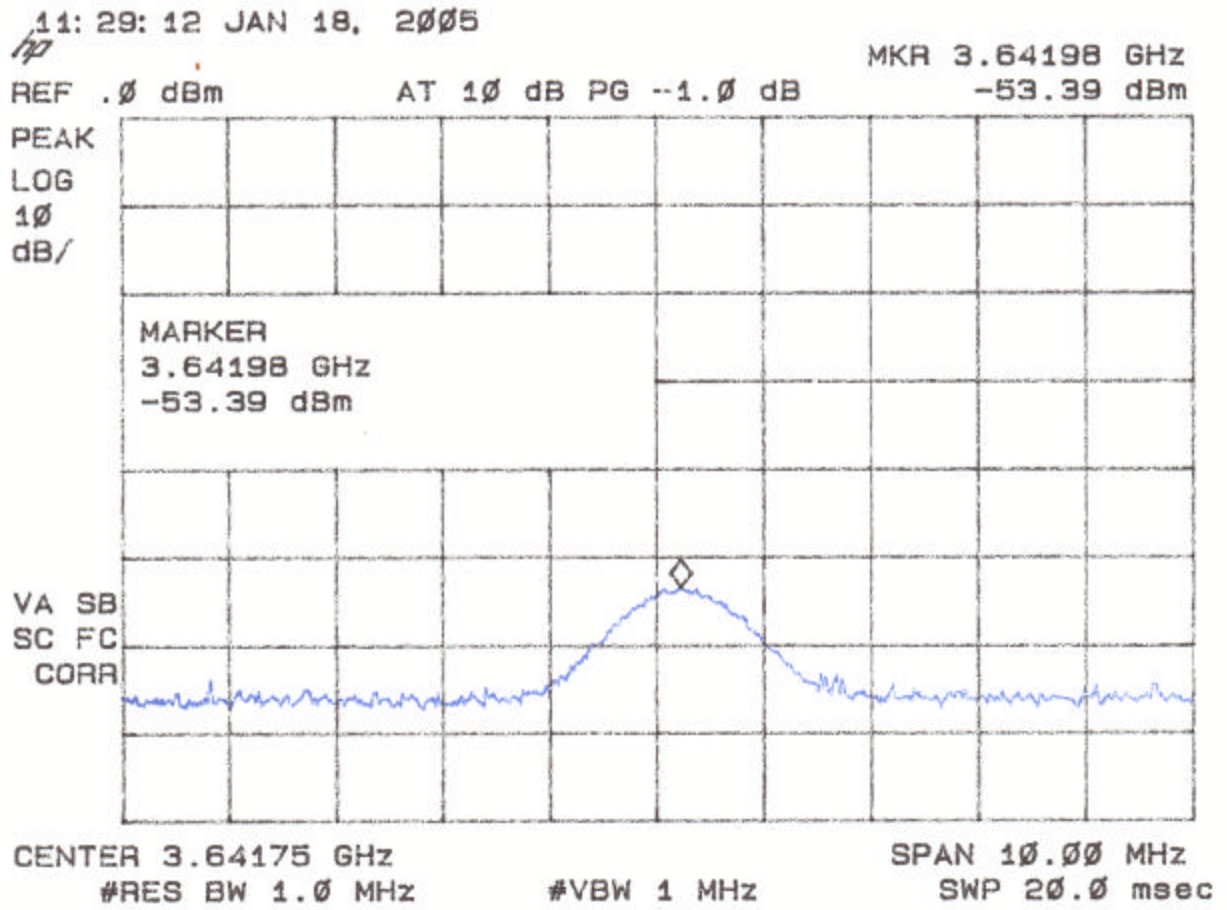


Figure 5d-5
Peak Radiated Spurious Emission 15.247(c) Low –
Fractal 5th Harmonic

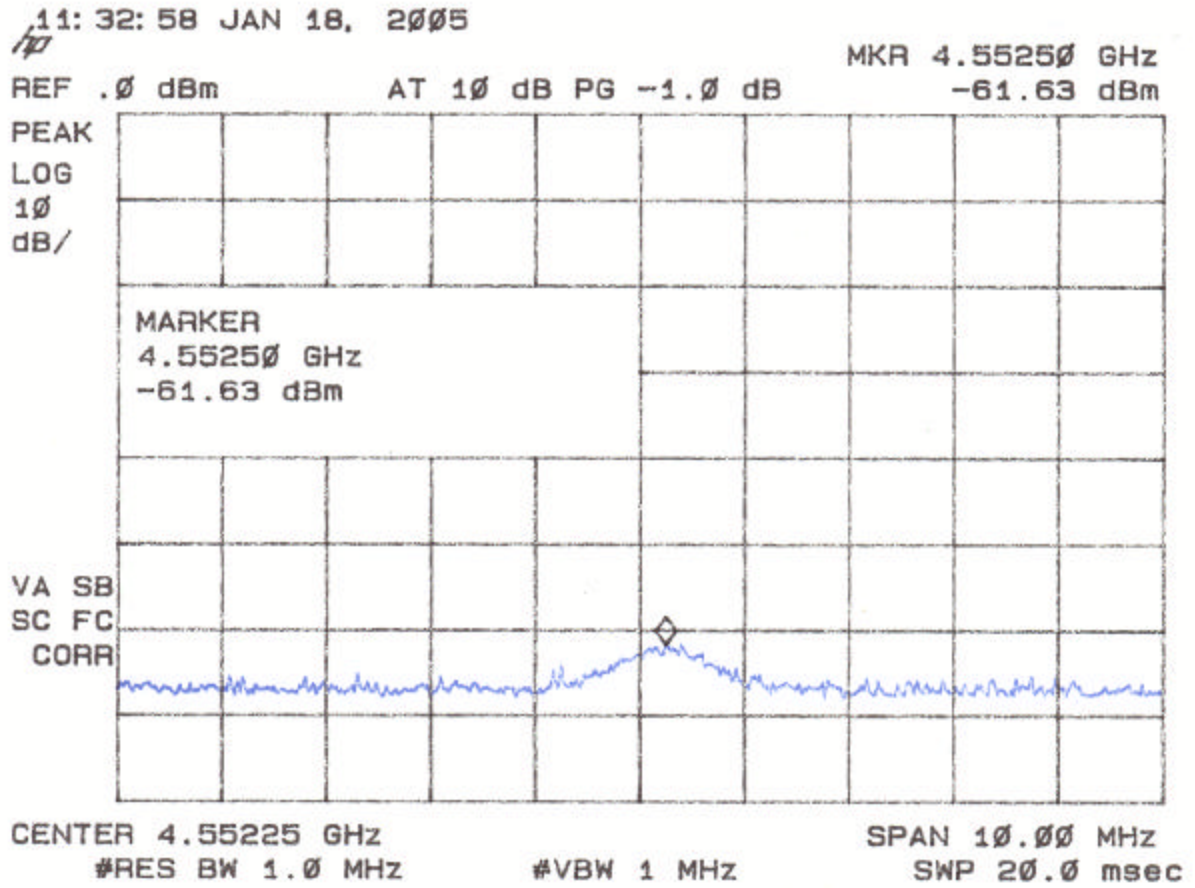


Figure 5d-6
Peak Radiated Spurious Emission 15.247(c) Low –
Fractal 6th Harmonic

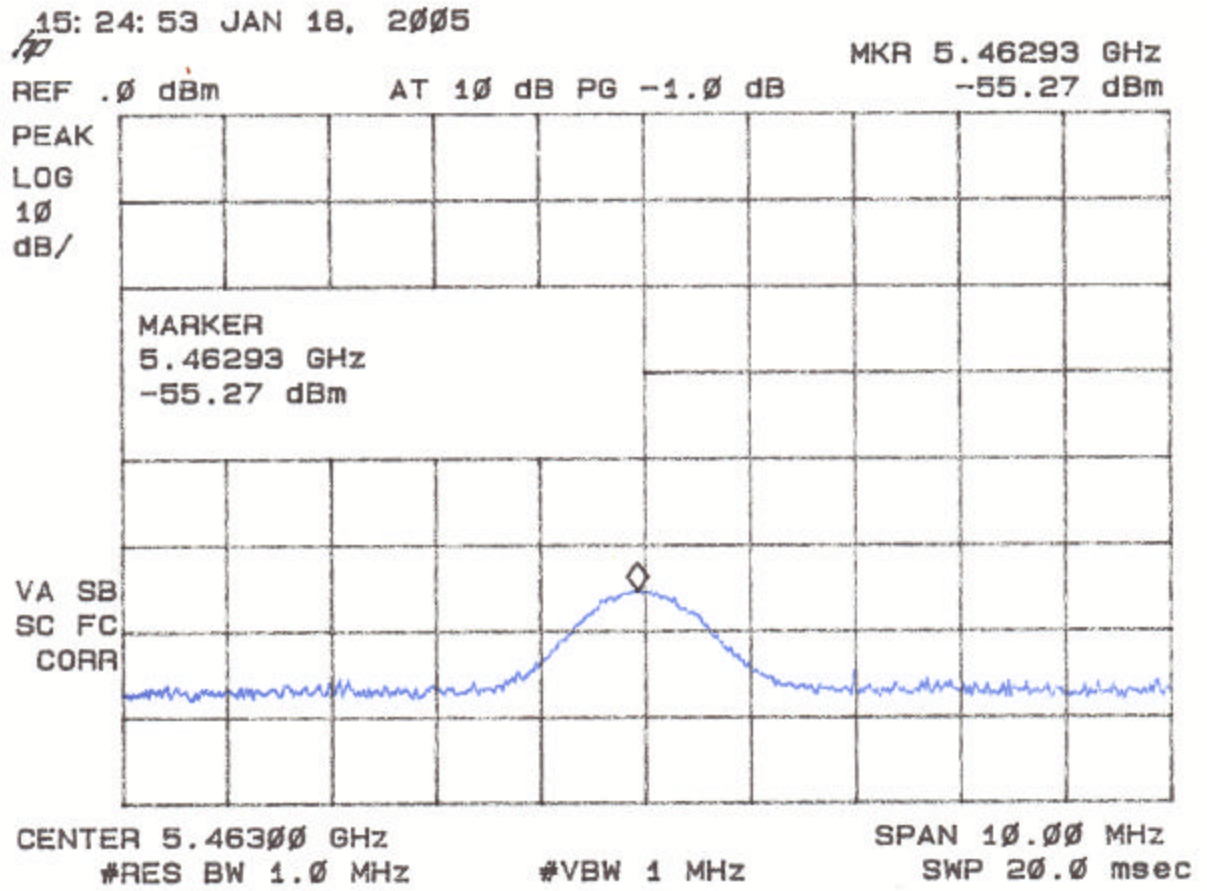


Figure 5d-7
Peak Radiated Spurious Emission 15.247(c) Low –
Fractal 7th Harmonic

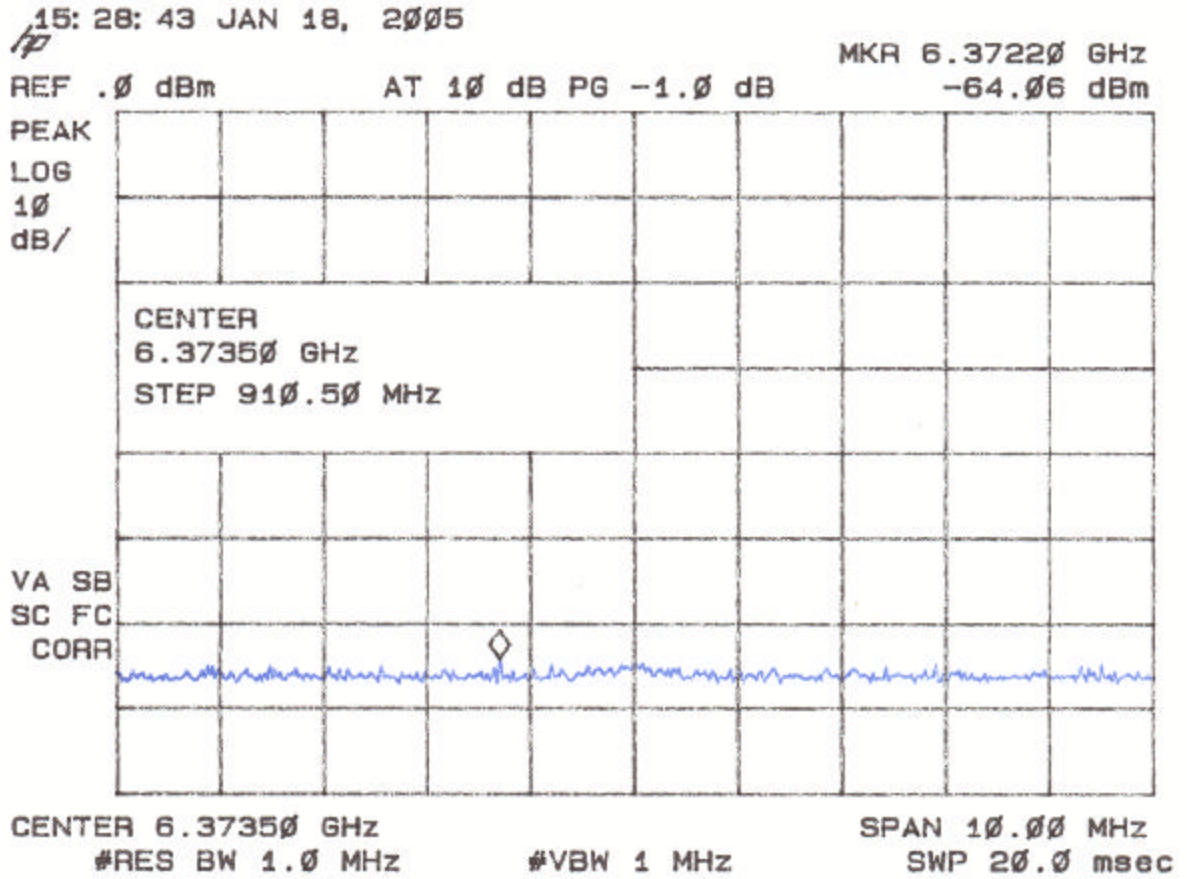


Figure 5d-8
Peak Radiated Spurious Emission 15.247(c) Low –
Fractal 8th Harmonic

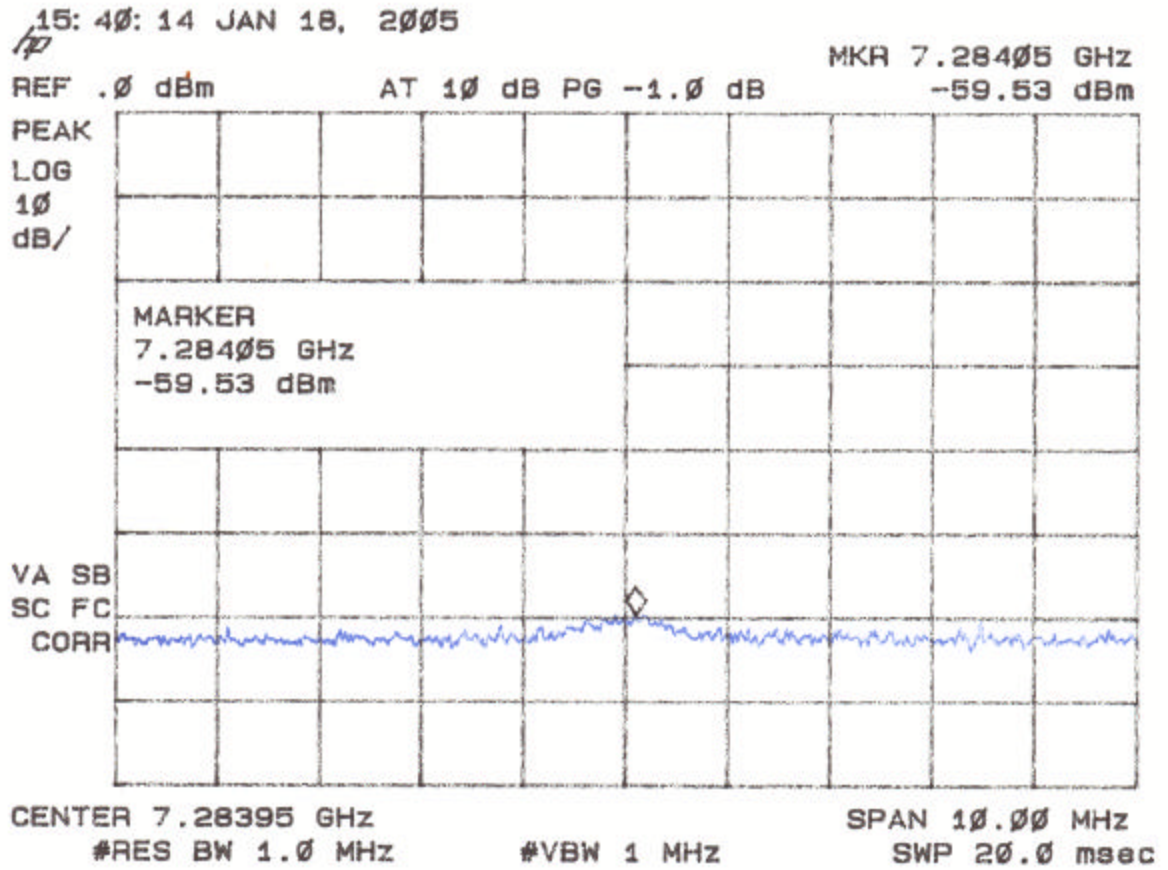


Table 4e. PEAK RADIATED SPURIOUS EMISSIONS Mid Channel

Fractal Antenna

Freq. (MHz)	Test Data (dBm) @ 3m	AF + CA - AMP (dB)	Results (uV/m) 3m	FCC Limits (uV/m)	MARGIN BELOW FCC Limits (dB)
918.97	-25.1	30.7	427921.8	-	-
1837.93	-29.1	-6.6	3675.4	42792.2	21.3
2756.9	-56.7	-2.4	249.6	5000.0	26.0
3675.93	-56.9	1.2	368.6	5000.0	22.6
4595.05	-63.2	4.9	273.8	5000.0	25.2
5514.05	-65.6**	6.9	259.0	42792.2	44.4
6430.75	-74.1**	8.1	112.0	42792.2	51.6
7351.95	-67.7**	9.9	290.1	5000.0	24.7

Data corrected by 1 dB for loss of high pass filter except for fundamental frequency

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

SAMPLE CALCULATION:

RESULTS (uV/m @ 3m) = Antilog ((-29.1 + -6.6 + 107)/20) = 3675.4

CONVERSION FROM dBm TO dBuV = 107 dB

Tester

Signature:  Name: David Blethen

Figure 5e-1
Peak Radiated Spurious Emission 15.247(c) Mid –
Fractal Fundamental

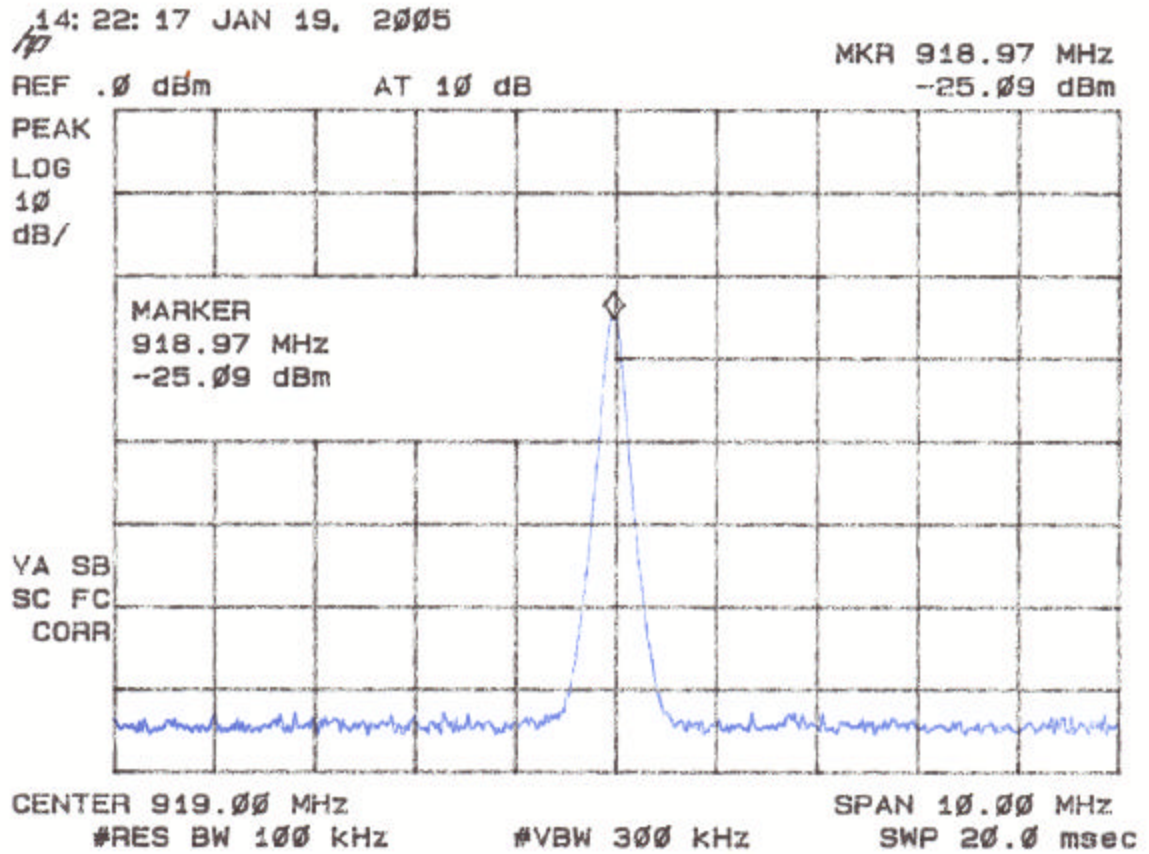


Figure 5e-2
Peak Radiated Spurious Emission 15.247(c) Mid –
Fractal 2nd Harmonic

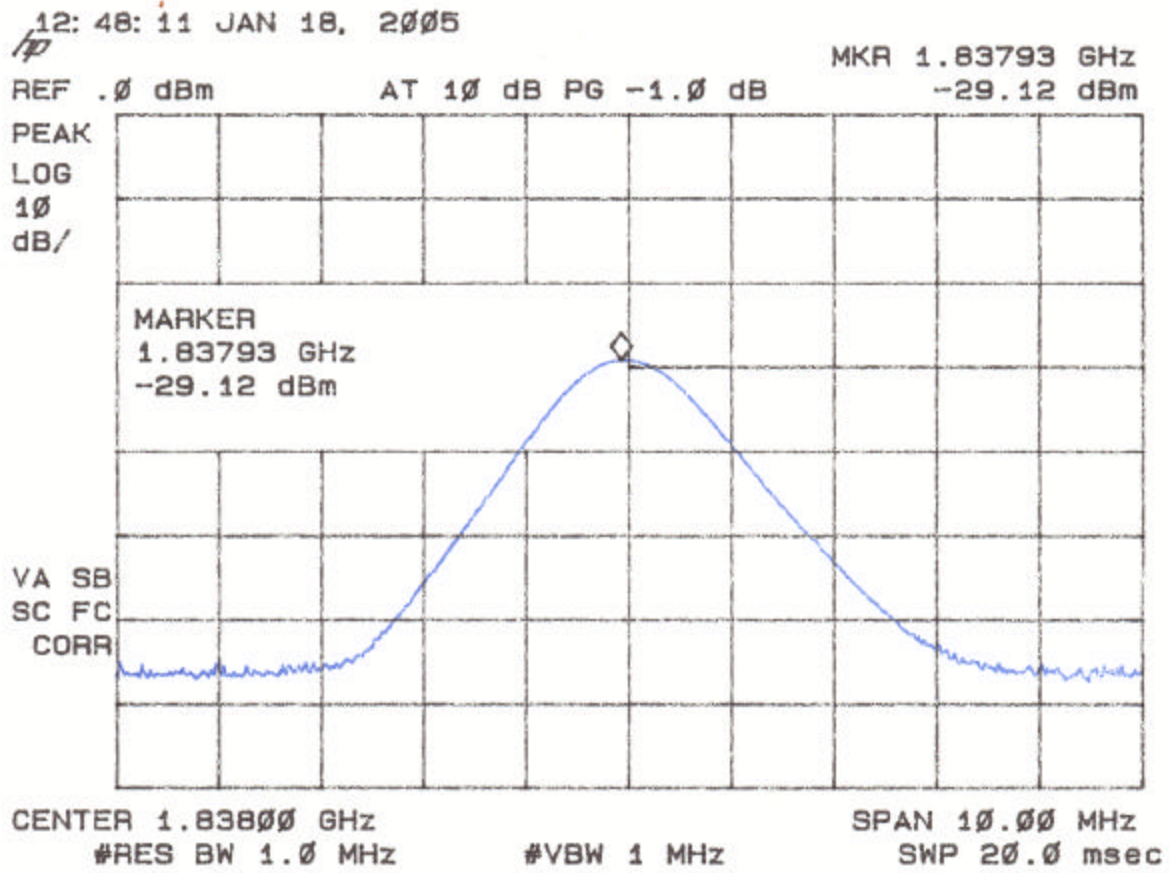


Figure 5e-3
Peak Radiated Spurious Emission 15.247(c) Mid –
Fractal 3rd Harmonic

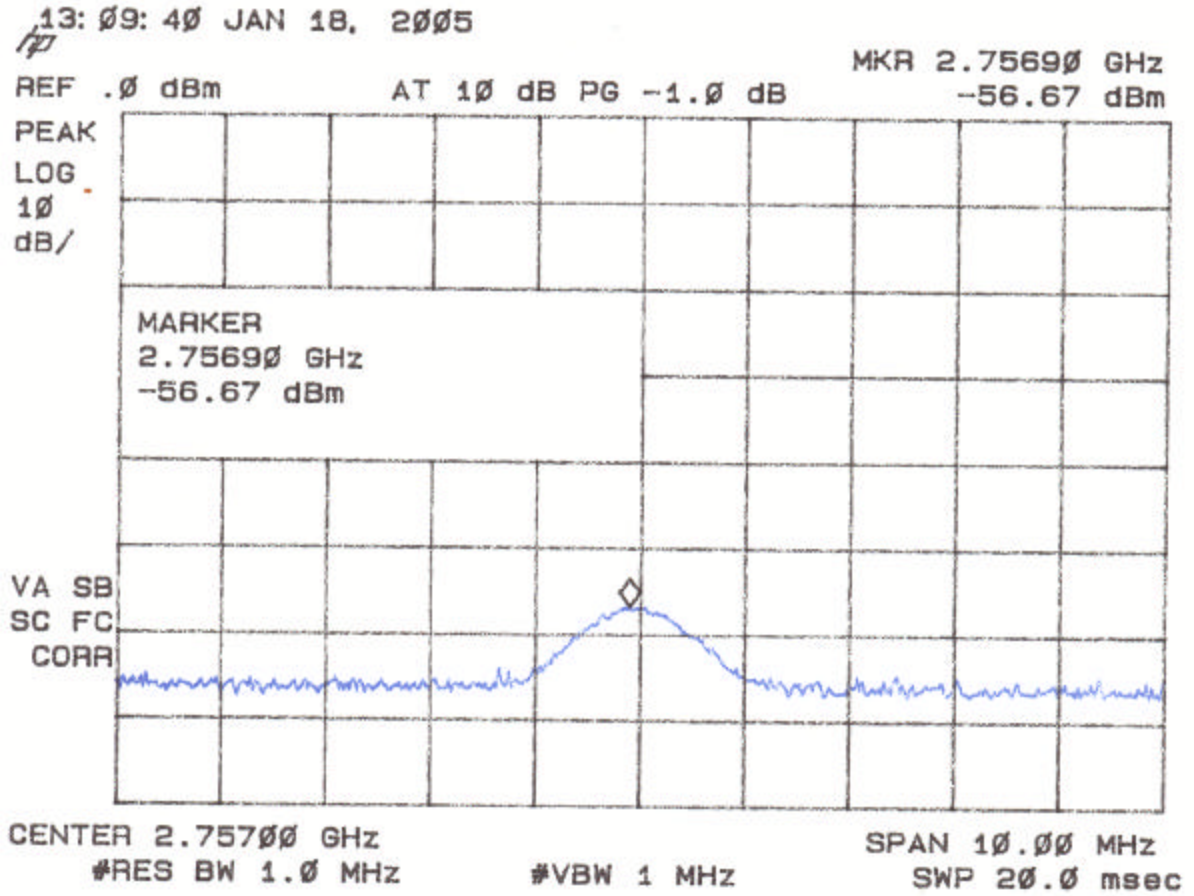


Figure 5e-4
Peak Radiated Spurious Emission 15.247(c) Mid –
Fractal 4th Harmonic

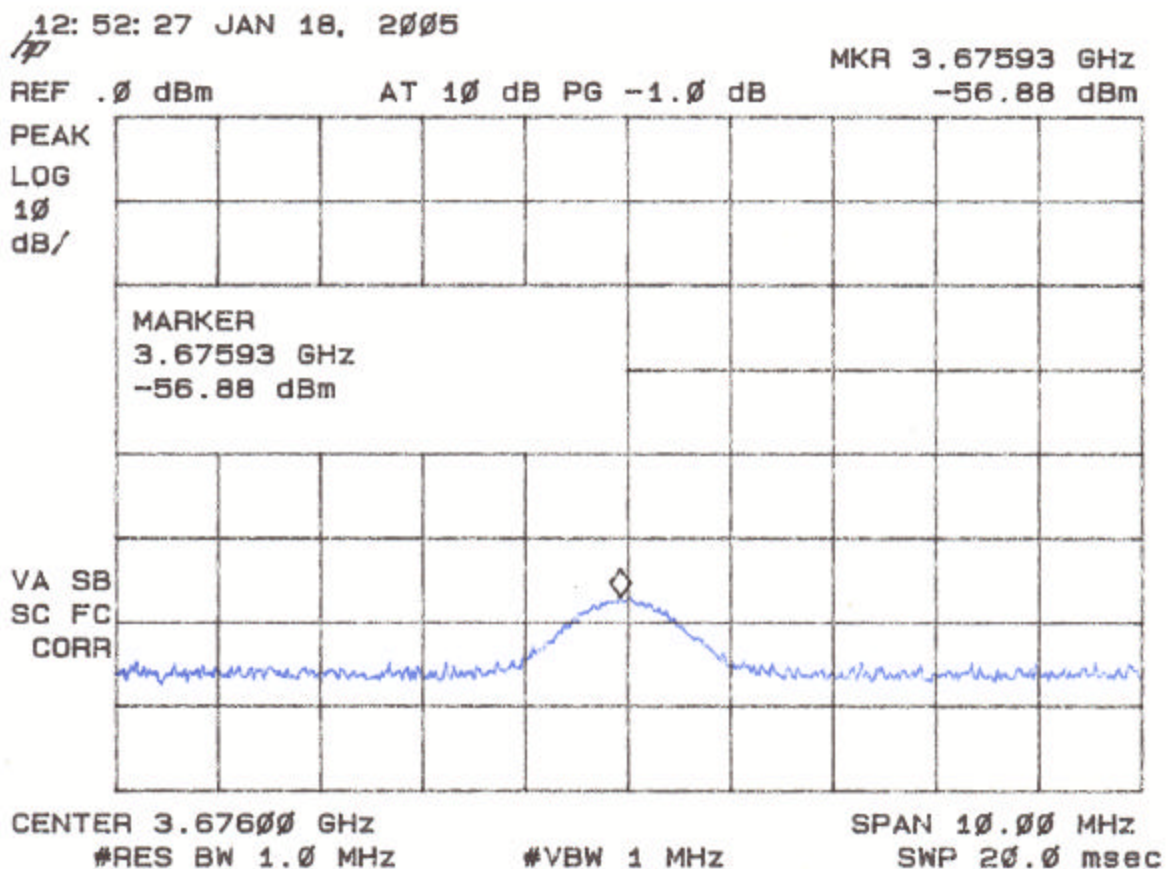


Figure 5e-5
Peak Radiated Spurious Emission 15.247(c) Mid –
Fractal 5th Harmonic

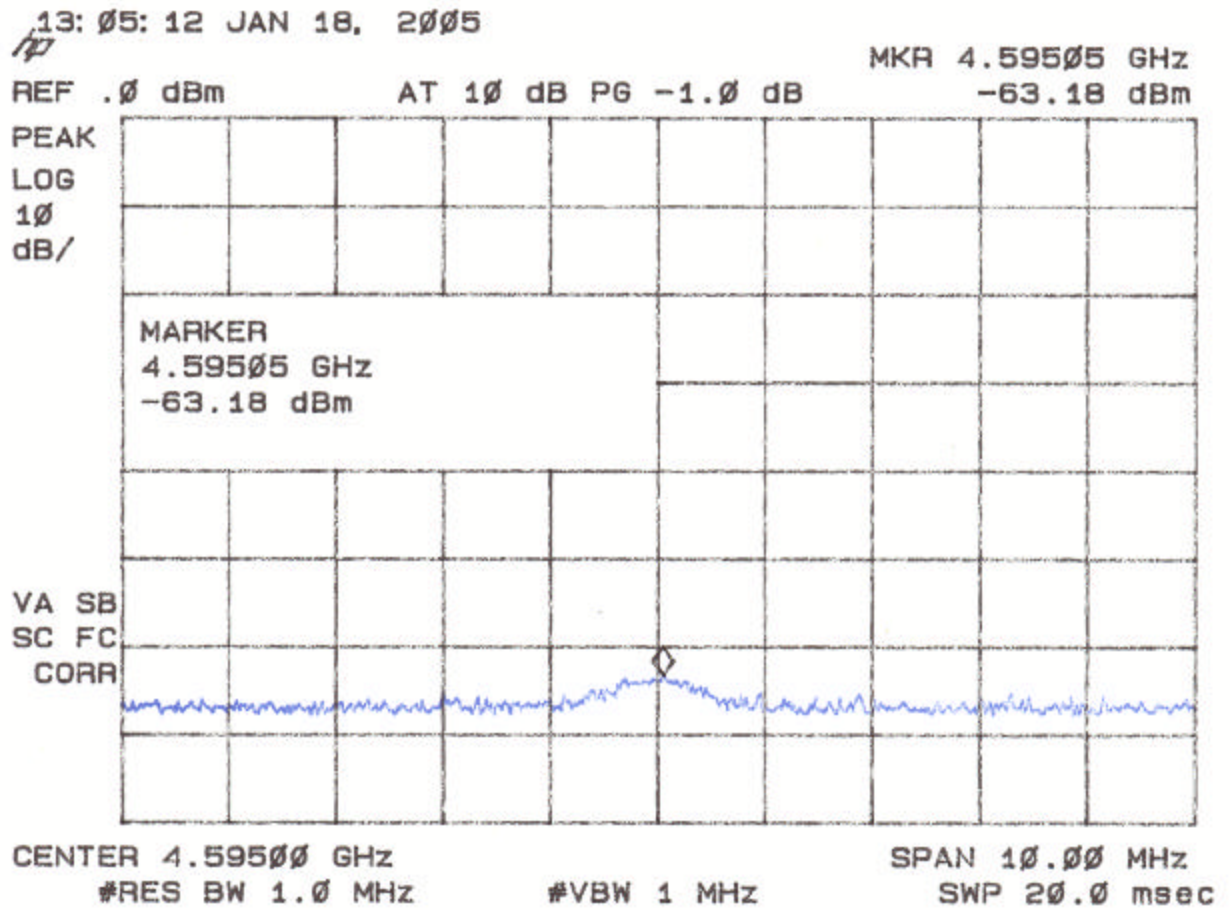


Figure 5e-6
Peak Radiated Spurious Emission 15.247(c) Mid –
Fractal 6th Harmonic

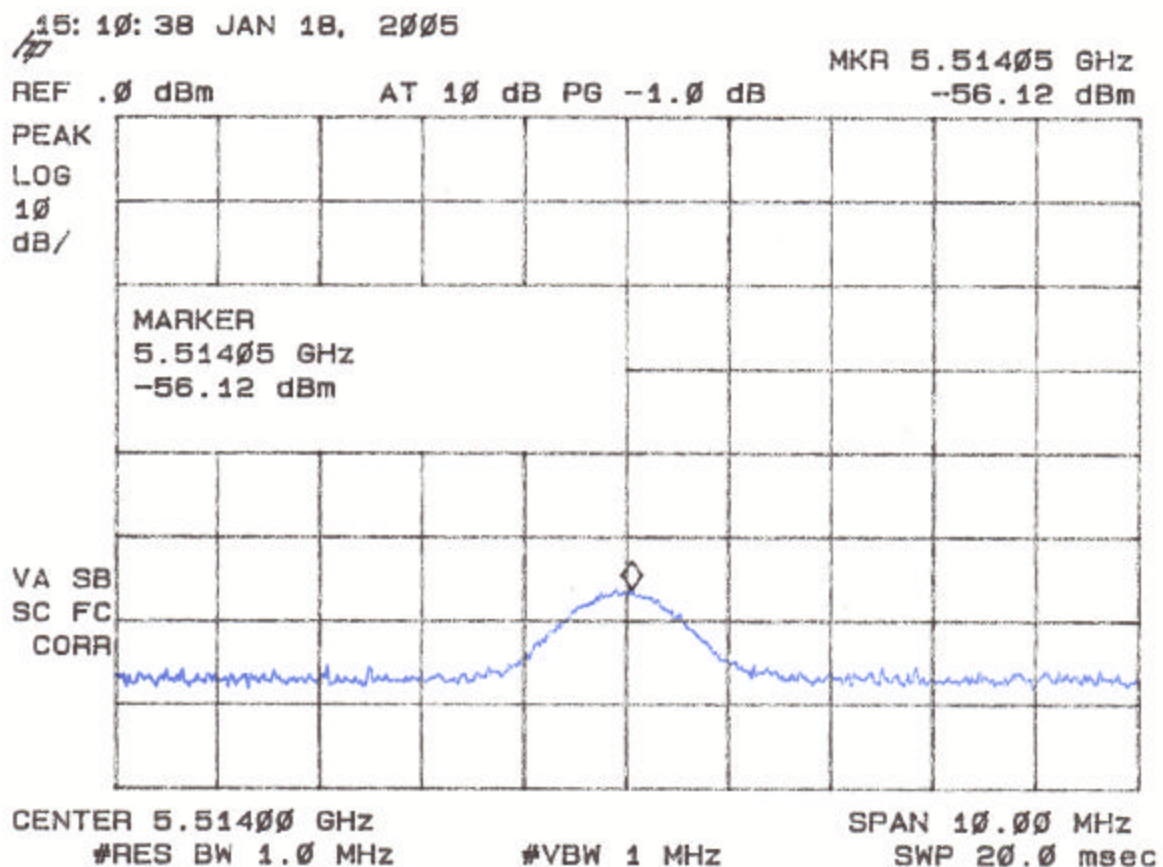


Figure 5e-7
Peak Radiated Spurious Emission 15.247(c) Mid –
Fractal 7th Harmonic

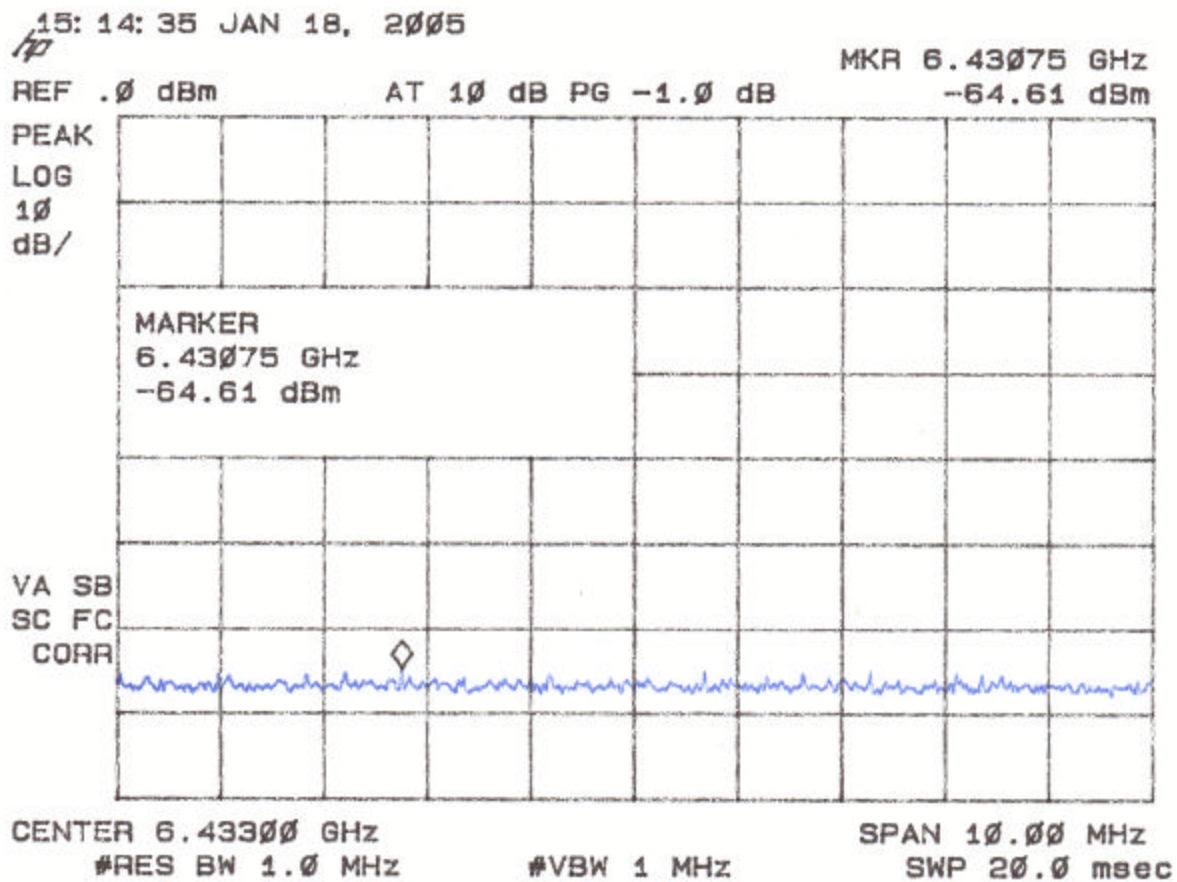


Figure 5e-8
Peak Radiated Spurious Emission 15.247(c) Mid –
Fractal 8th Harmonic

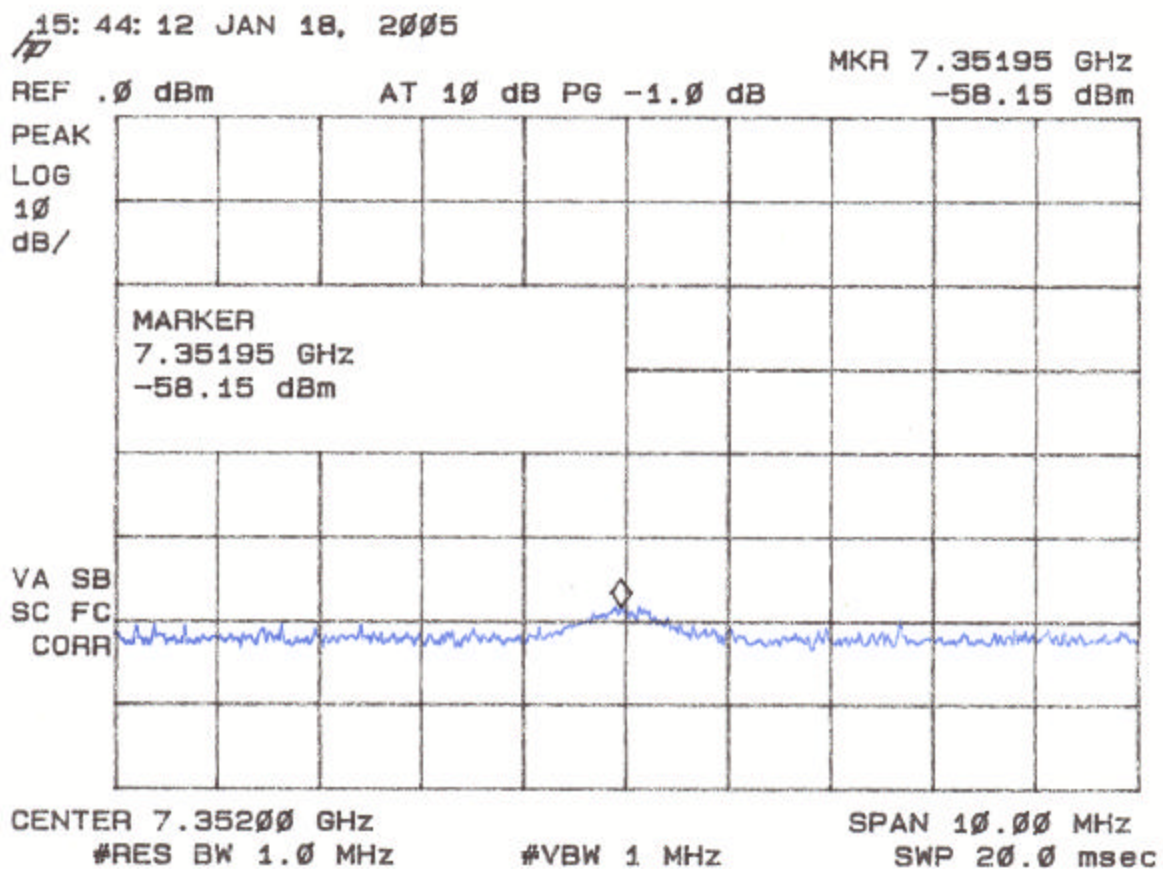


Table 4f. PEAK RADIATED SPURIOUS EMISSIONS High Channel

Fractal Antenna

Freq. (MHz)	Test Data (dBm) @ 3m	AF + CA - AMP (dB)	Results (uV/m) 3m	FCC Limits (uV/m)	MARGIN BELOW FCC Limits (dB)
927.47	-24.4	30.7	464896.7	-	-
1854.95	-29.9	-6.3	3460.0	46489.7	22.6
2782.3	-58.2	-2.3	212.0	5000.0	27.5
3709.93	-57.5	1.4	351.5	5000.0	23.1
4637.2	-63.2	5.1	279.1	5000.0	25.1
5565.0	-66.6**	7.0	234.4	46489.7	45.9
6493.0	-73.4**	8.1	121.3	46489.7	51.7
7420.08	-65.7**	10.0	366.1	5000.0	22.7

Data corrected by 1 dB for loss of high pass filter except for fundamental frequency

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

SAMPLE CALCULATION:

RESULTS (uV/m @ 3m) = Antilog ((-29.9 + -6.3 + 107)/20) = 3460.0

CONVERSION FROM dBm TO dBuV = 107 dB

Tester

Signature:



Name: David Blethen

Figure 5f-1
Peak Radiated Spurious Emission 15.247(c) High –
Fractal Fundamental

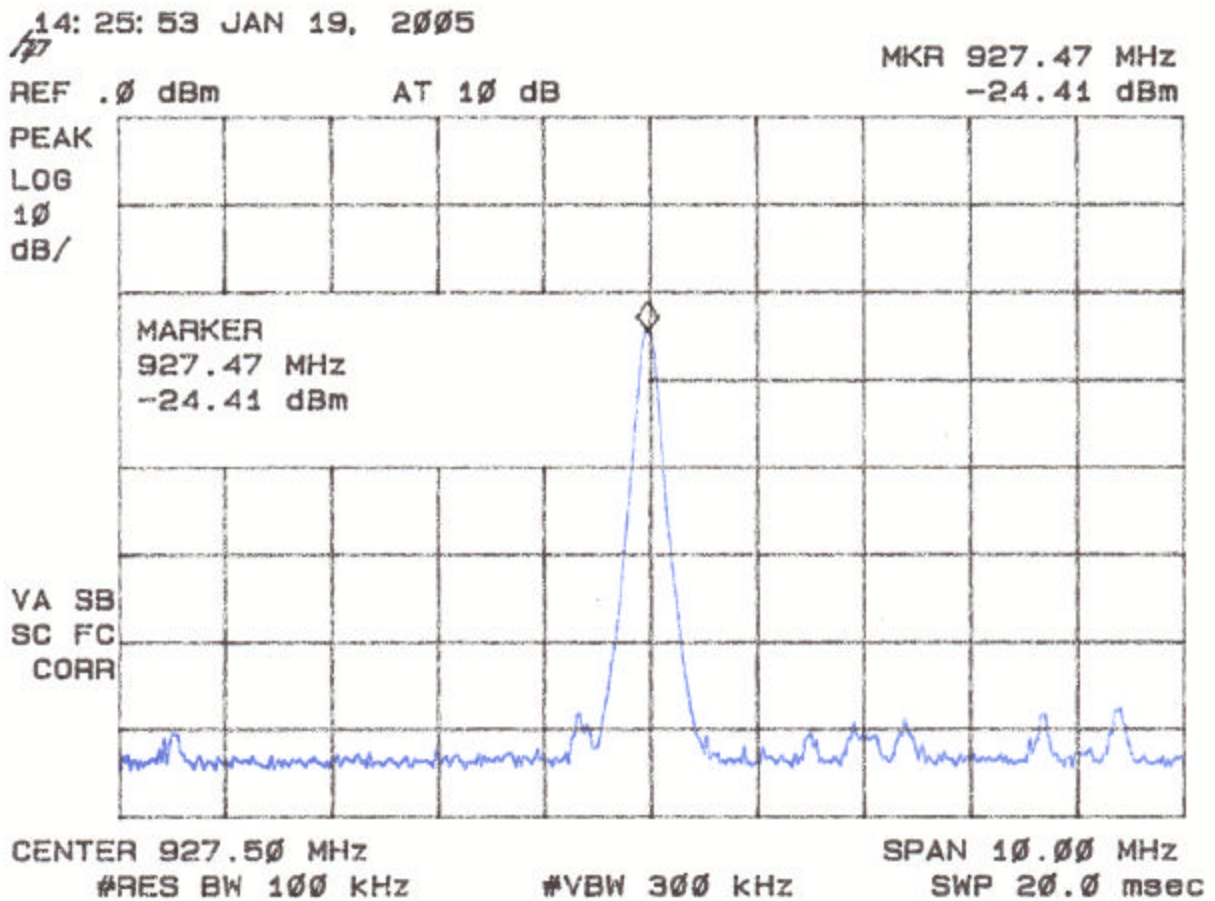


Figure 5f-2
Peak Radiated Spurious Emission 15.247(c) High –
Fractal 2nd Harmonic

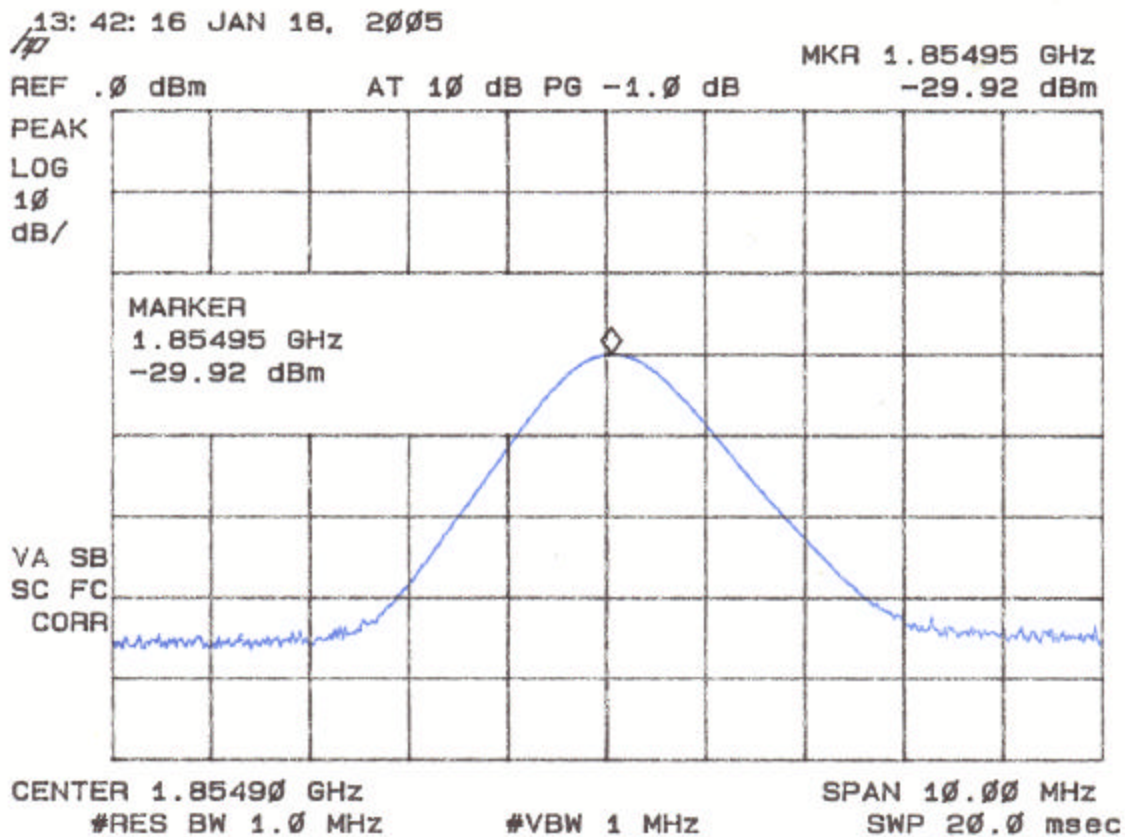


Figure 5f-3
Peak Radiated Spurious Emission 15.247(c) High –
Fractal 3rd Harmonic

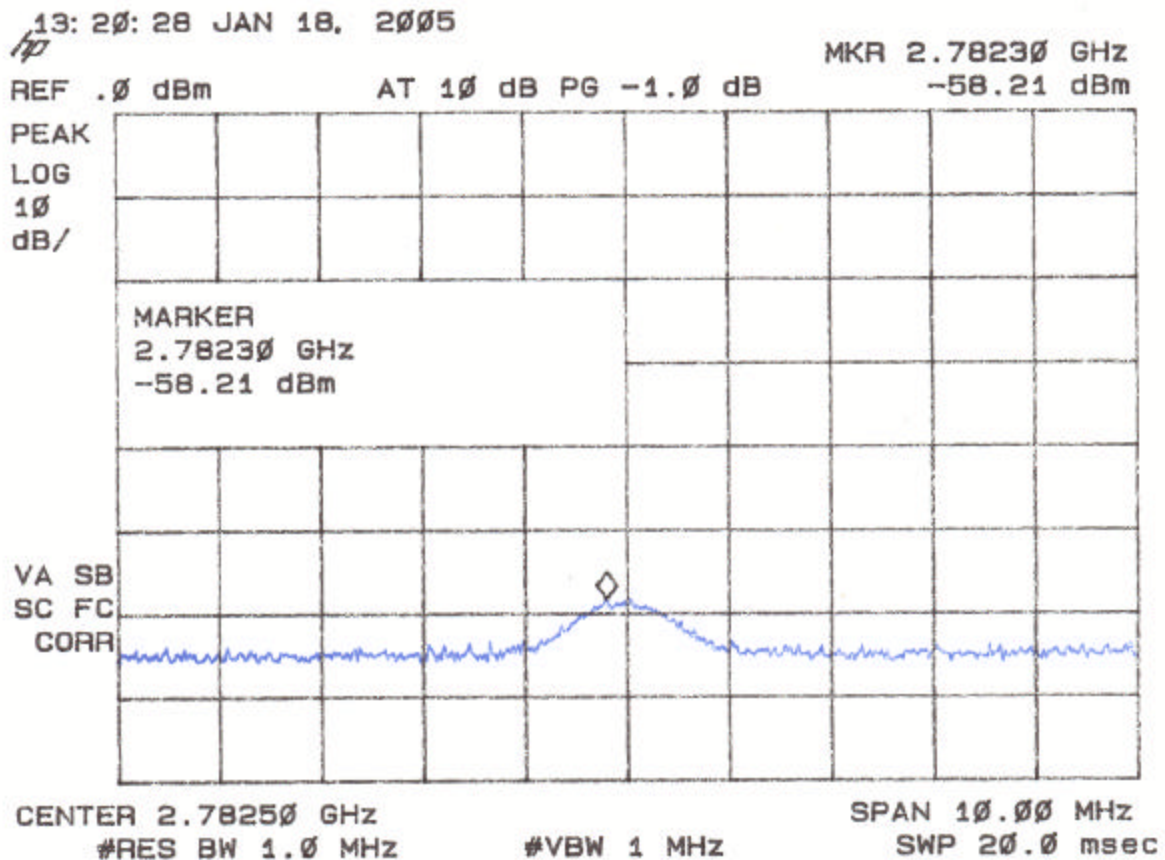


Figure 5f-4
Peak Radiated Spurious Emission 15.247(c) High –
Fractal 4th Harmonic

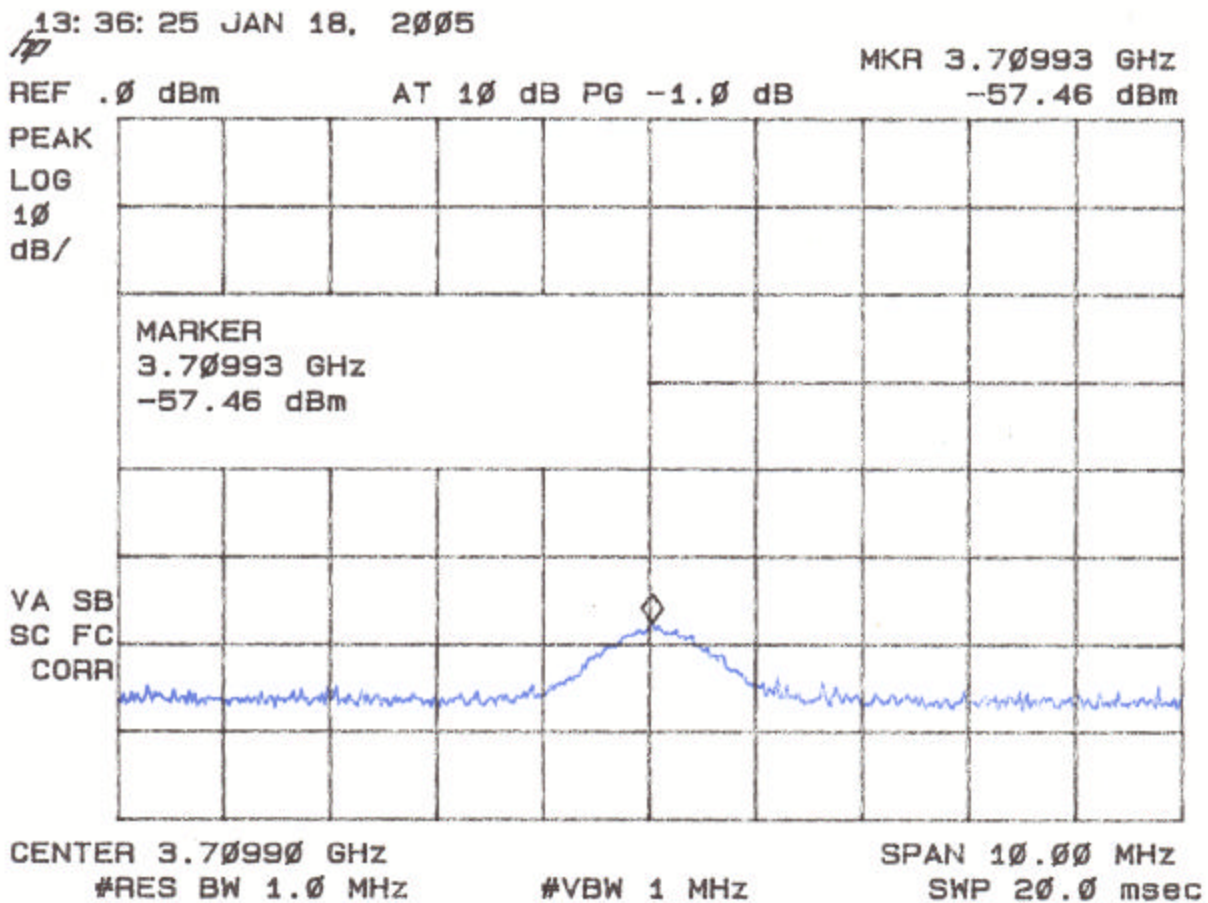


Figure 5f-5
Peak Radiated Spurious Emission 15.247(c) High –
Fractal 5th Harmonic

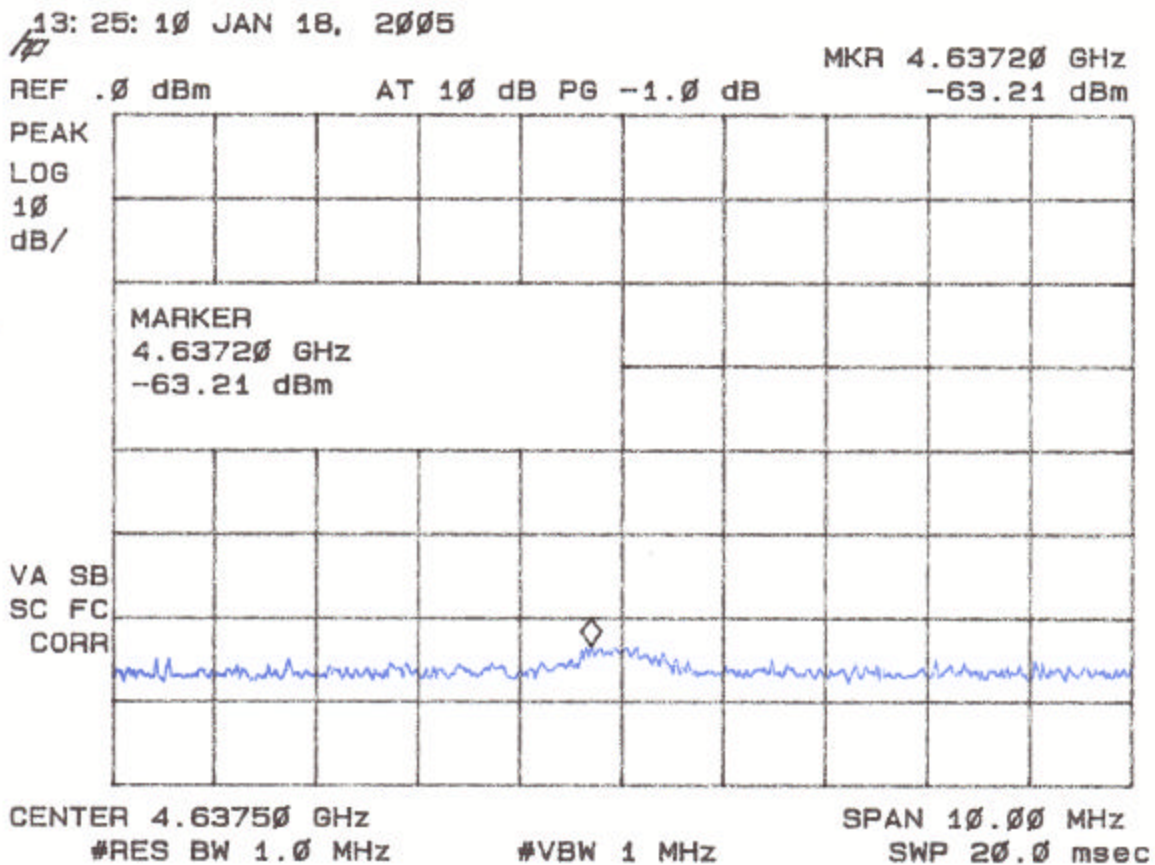


Figure 5f-6
Peak Radiated Spurious Emission 15.247(c) High –
Fractal 6th Harmonic

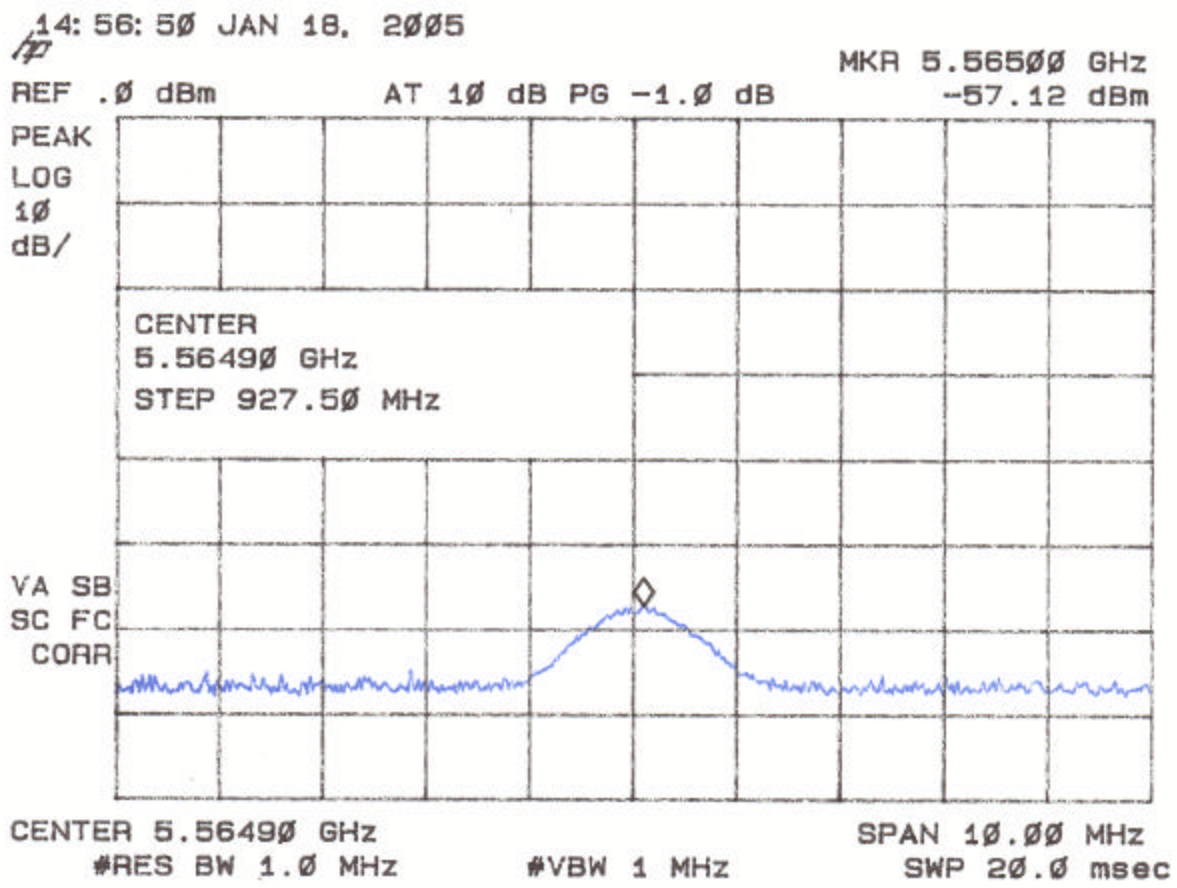


Figure 5f-7
Peak Radiated Spurious Emission 15.247(c) High –
Fractal 7th Harmonic

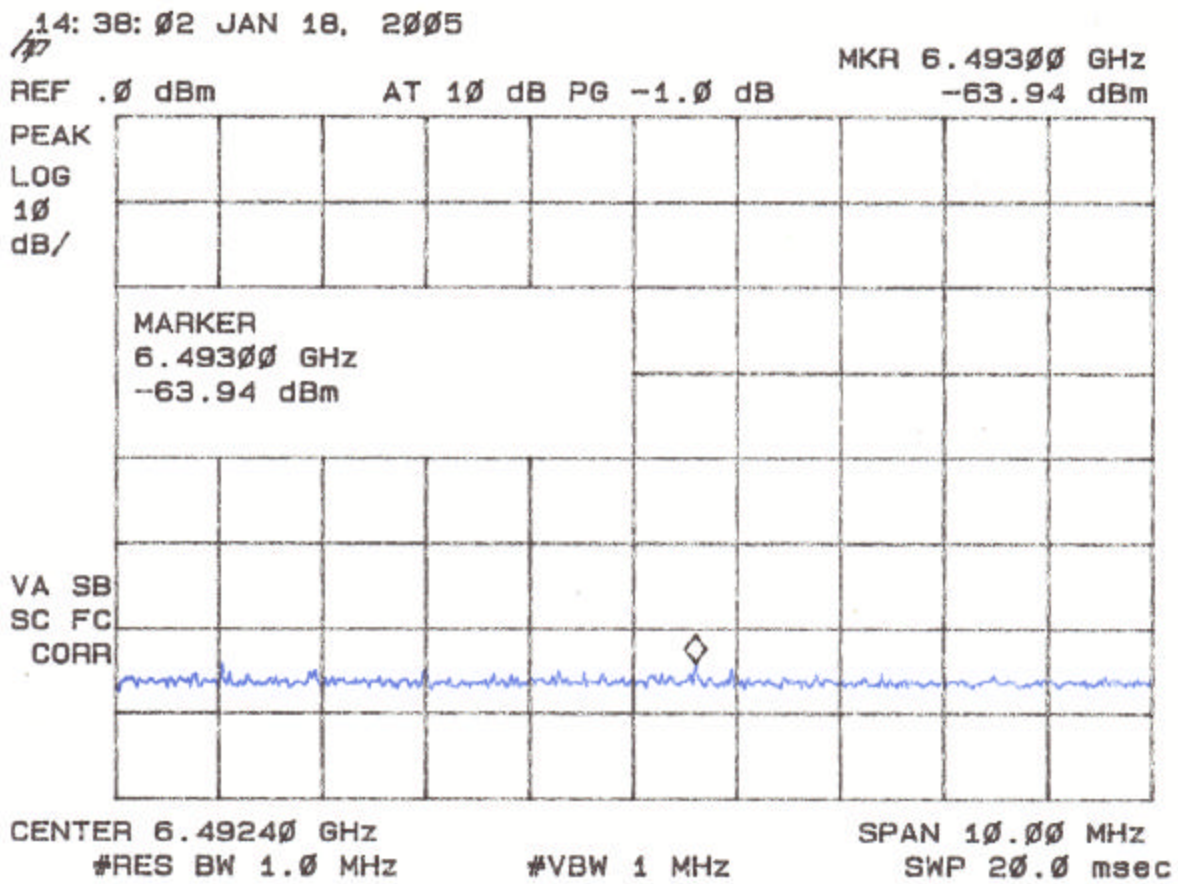


Figure 5f-8
Peak Radiated Spurious Emission 15.247(c) High –
Fractal 8th Harmonic

