

Figure 4i
Antenna Conducted Spurious Emissions 15.247(c) High Mid

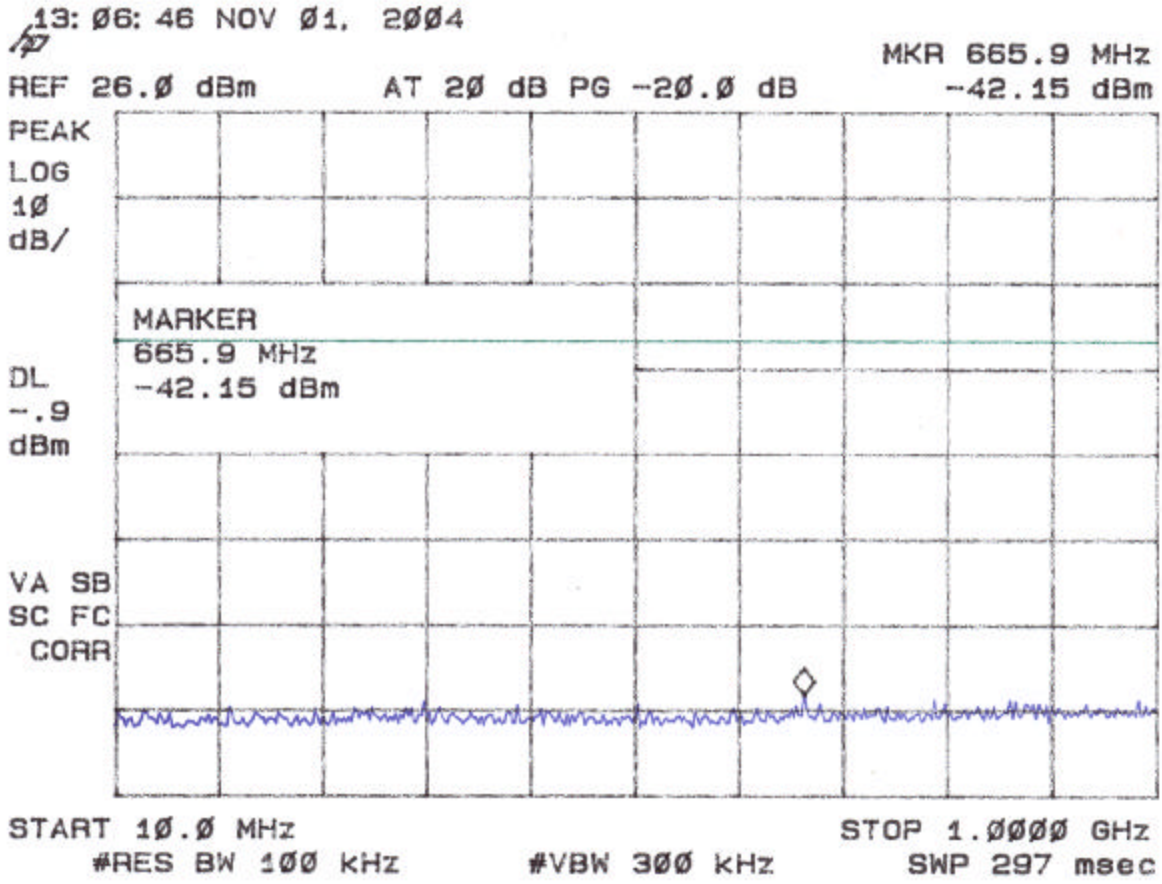


Figure 4j

Antenna Conducted Spurious Emissions 15.247(c) High Mid

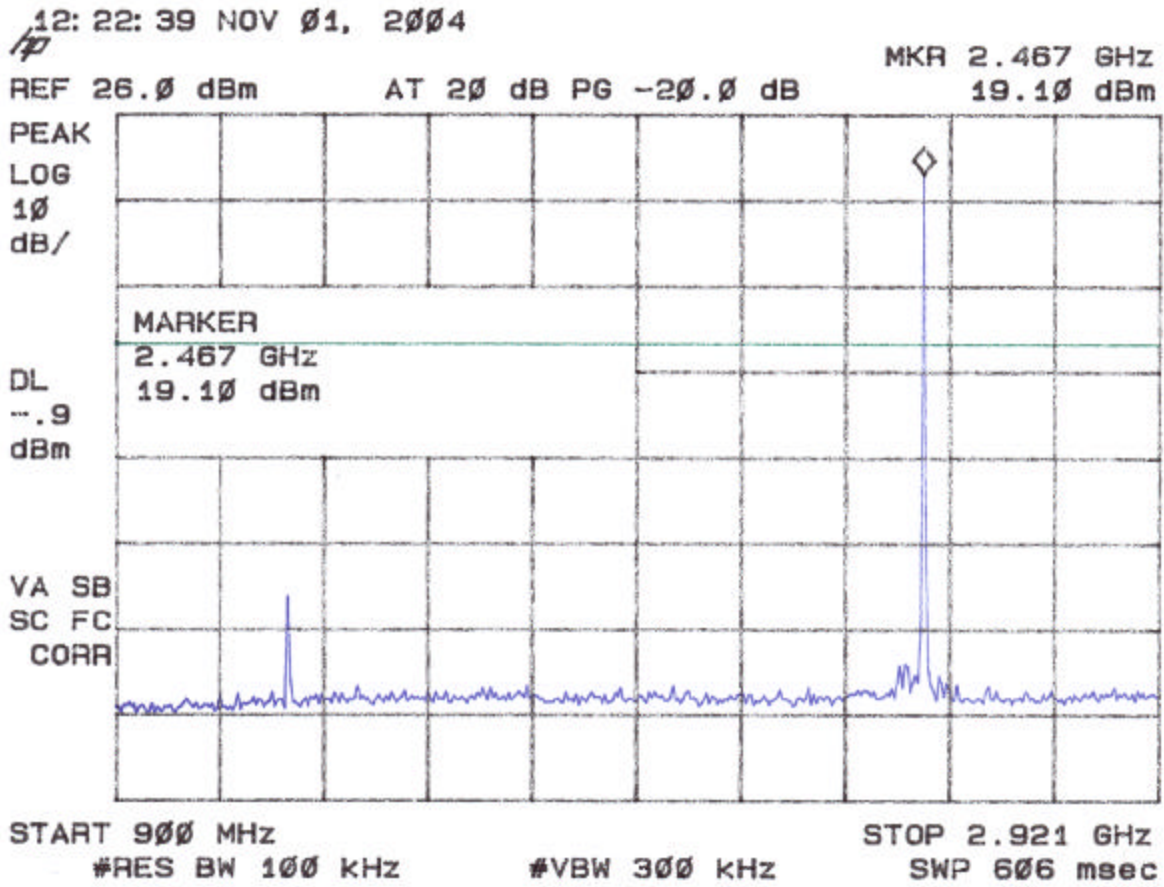


Figure 4k
Antenna Conducted Spurious Emissions 15.247(c) High Mid

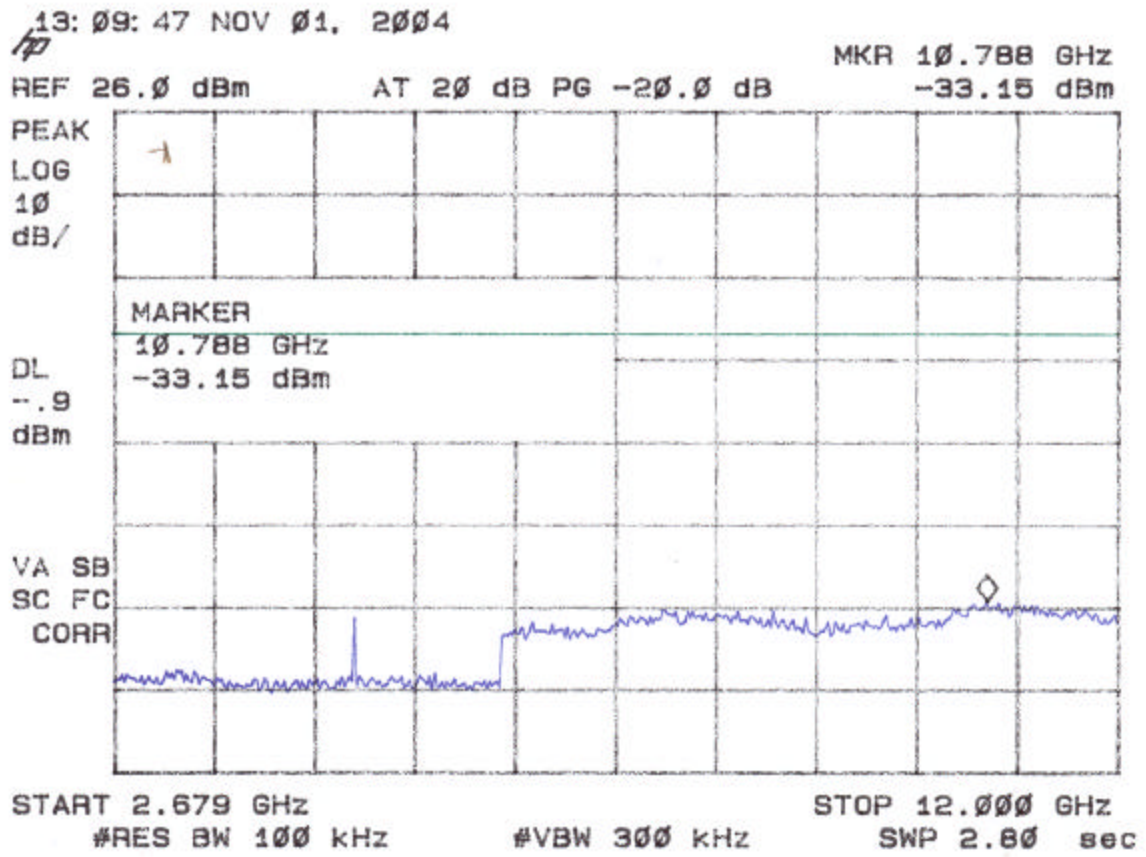


Figure 41
Antenna Conducted Spurious Emissions 15.247(c) High Mid

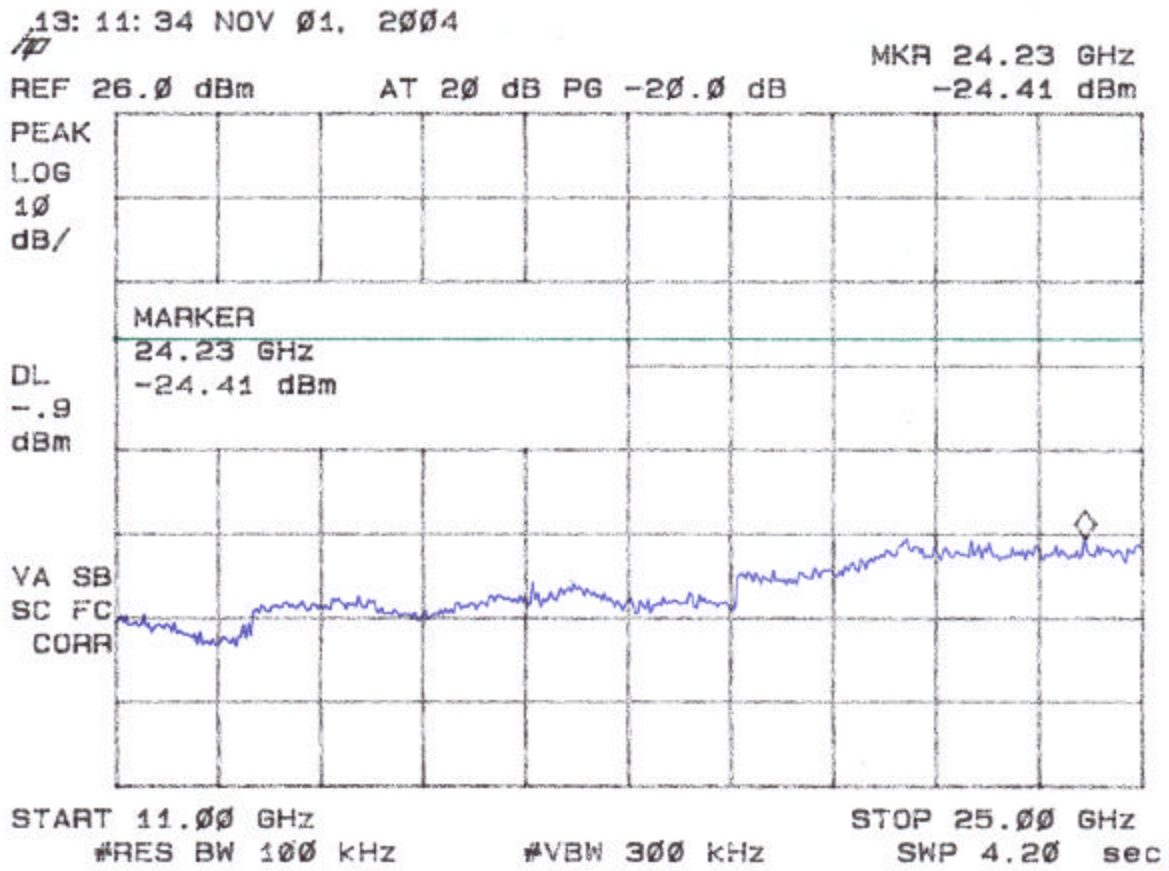


Figure 4m
Antenna Conducted Spurious Emissions 15.247(c) High

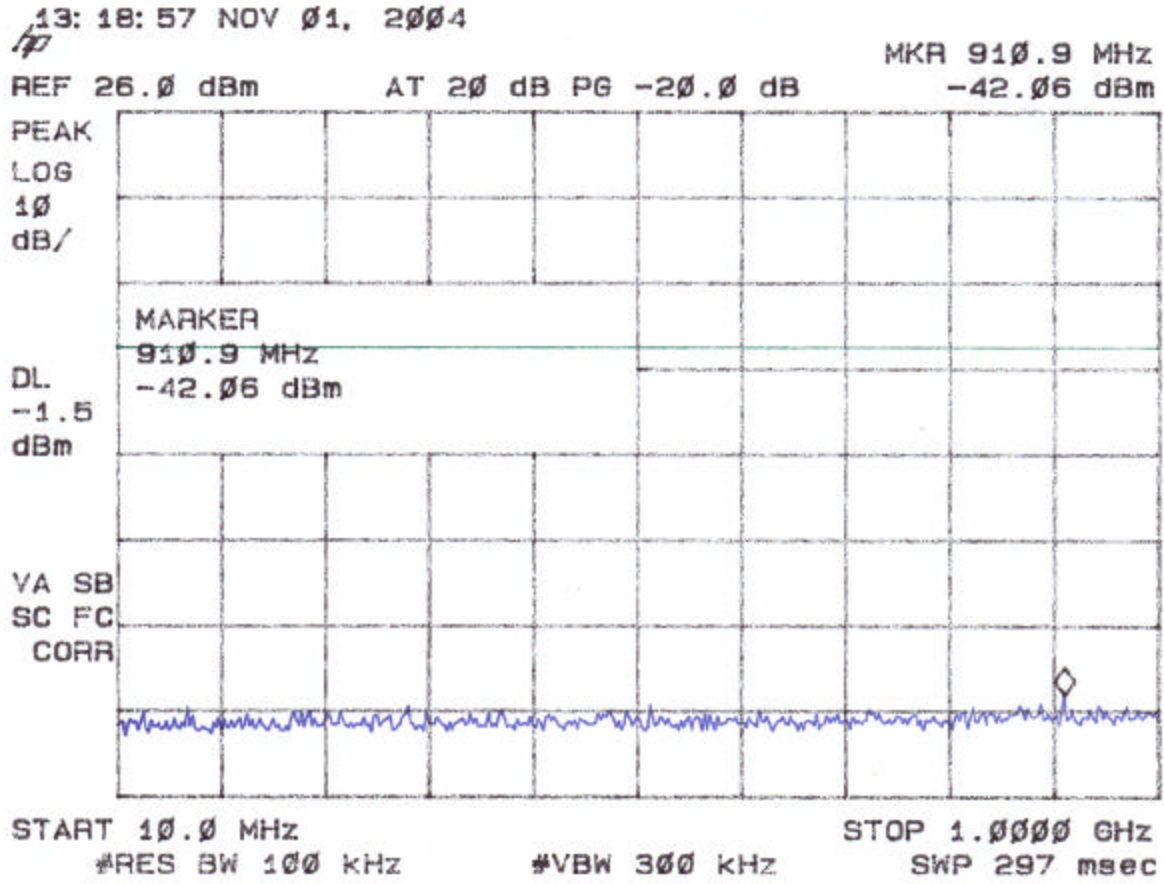


Figure 4n
Antenna Conducted Spurious Emissions 15.247(c) High

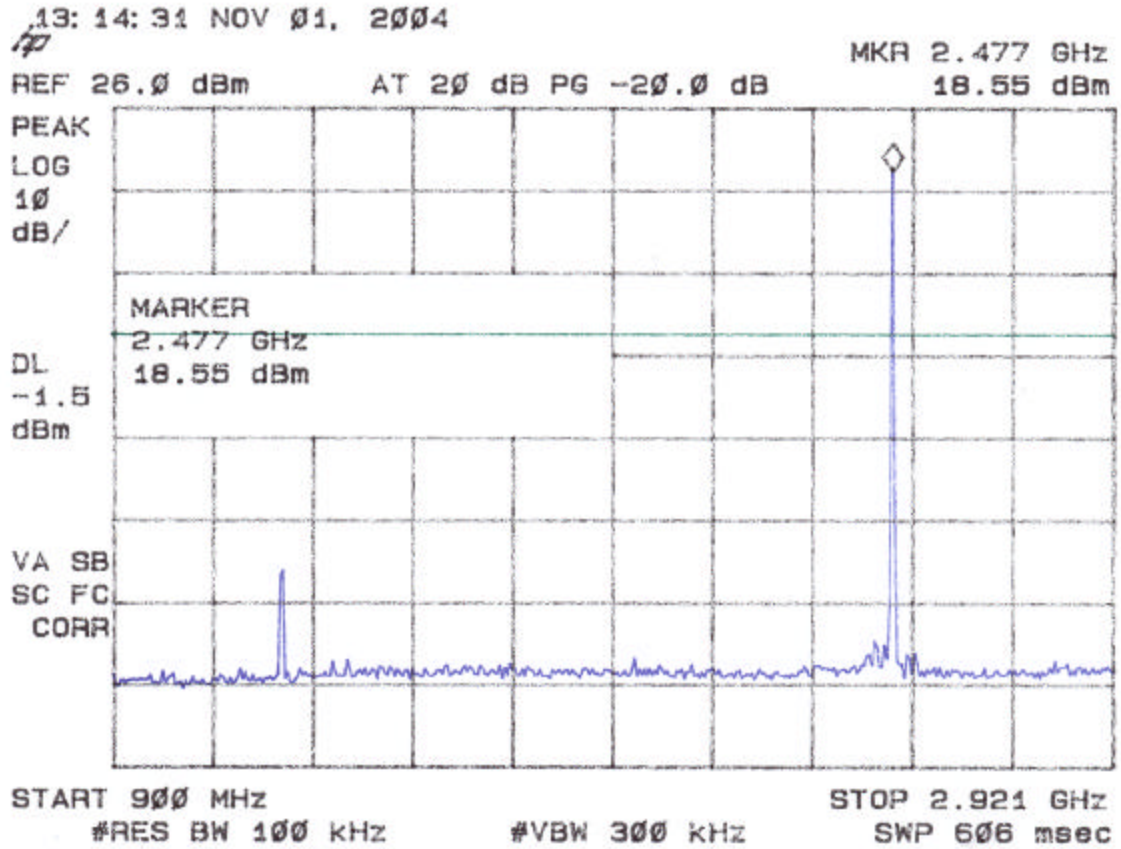


Figure 4o
Antenna Conducted Spurious Emissions 15.247(c) High

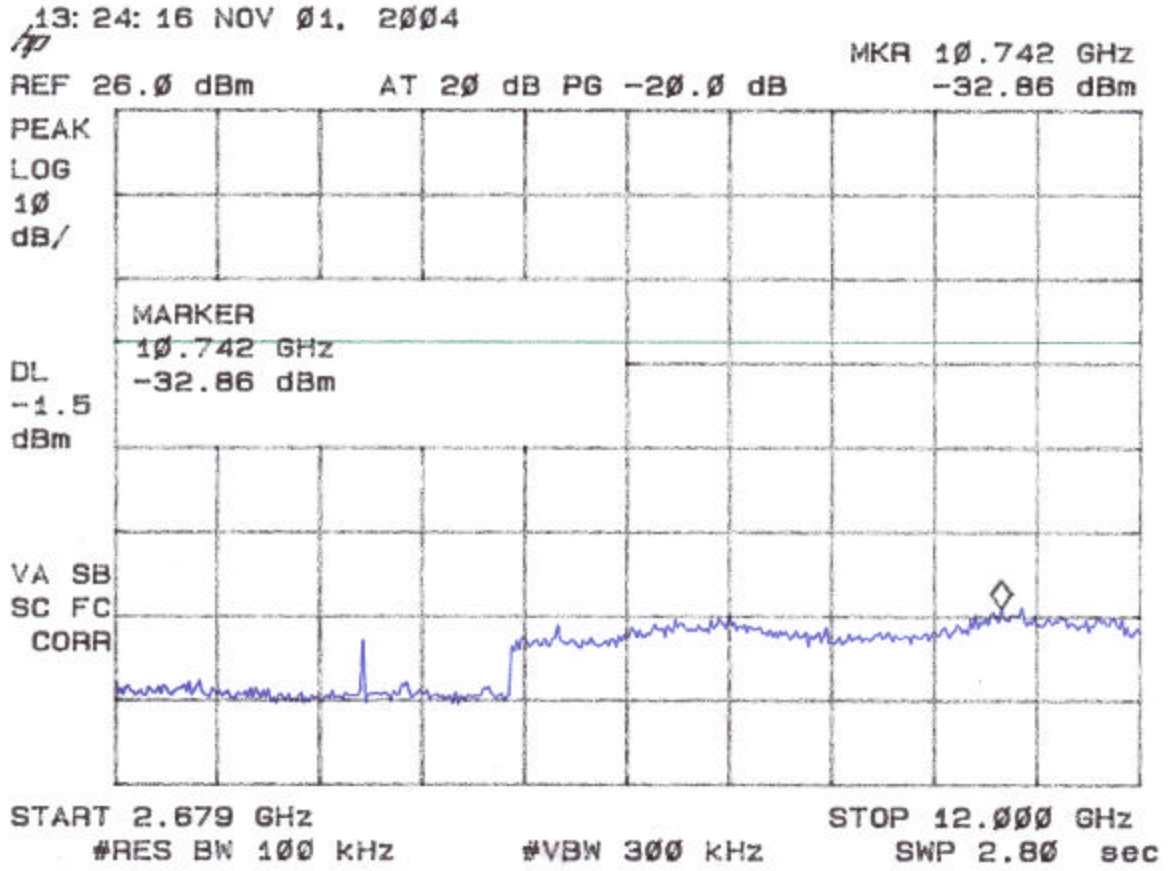
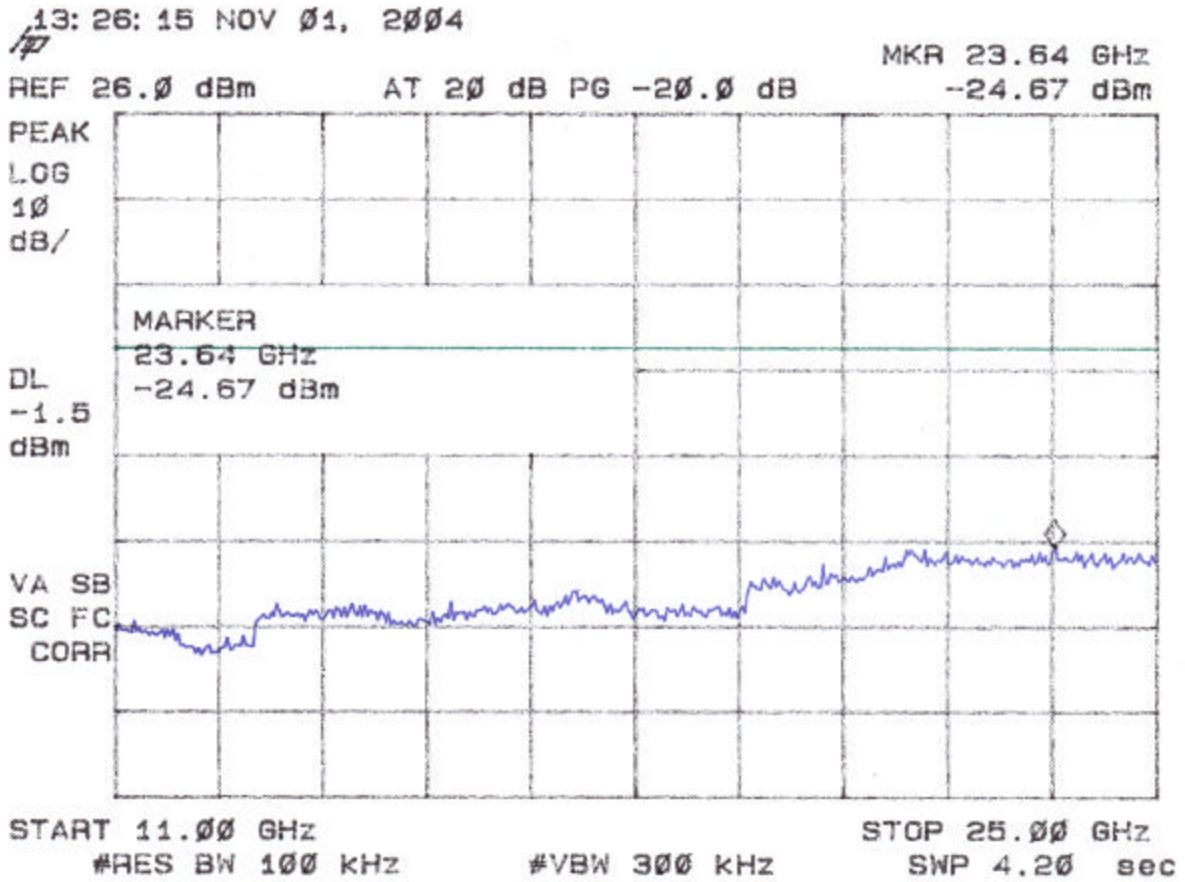


Figure 4p
Antenna Conducted Spurious Emissions 15.247(c) High



2.8 Peak Radiated Spurious Emission in the Frequency Range 30 -25000 MHz (FCC Section 15.247(c))

The EUT was hop-stopped and when possible, placed into a continuous transmit mode of operation. A preliminary scan was performed on the EUT to determine frequencies that were caused by the transmitter portion of the product. Significant emissions that fell within restricted bands were then measured on an OAT's site. Radiated measurements below 1 GHz were tested with a RBW = 120 kHz. Radiated measurements above 1 GHz were measured using a RBW = VBW = 1 MHz. The results of peak radiated spurious emissions falling within restricted bands are given in Table 4a –4g and Figure 5a – Figure 5ai.

**Table 4a. PEAK RADIATED SPURIOUS EMISSIONS Low Channel
Dipole Antenna**

Freq. (MHz)	Test Data (dBm) @ 3m	AF + CA - AMP (dB)	Results (uV/m) 3m	FCC Limits (uV/m)	MARGIN BELOW FCC Limits (dB)
2401.00	-21.12	31.90	774418.9	-	-
4802.1	-43.72*	5.8	2847.5	5000.0	4.9
7203.08**	-45.08	9.8	3873.2	77441.9	26.0

**Table 4b. PEAK RADIATED SPURIOUS EMISSIONS Low Mid Channel
Dipole Antenna**

Freq. (MHz)	Test Data (dBm) @ 3m	AF + CA - AMP (dB)	Results (uV/m) 3m	FCC Limits (uV/m)	MARGIN BELOW FCC Limits (dB)
4865.85	-49.74*	6.0	1460.2	5000.0	10.7
7299.0	-45.28**	9.9	3801.7	5000.0	2.4

**Table 4c. PEAK RADIATED SPURIOUS EMISSIONS High Mid Channel
Dipole Antenna**

Freq. (MHz)	Test Data (dBm) @ 3m	AF + CA - AMP (dB)	Results (uV/m) 3m	FCC Limits (uV/m)	MARGIN BELOW FCC Limits (dB)
4929.83	-53.58*	6.3	962.6	5000.0	14.3
7394.95	-44.93**	9.9	3975.6	5000.0	2.0

**Table 4d. PEAK RADIATED SPURIOUS EMISSIONS High Channel
Dipole Antenna**

Freq. (MHz)	Test Data (dBm) @ 3m	AF + CA - AMP (dB)	Results (uV/m) 3m	FCC Limits (uV/m)	MARGIN BELOW FCC Limits (dB)
4952.4	-42.7*	6.3	3390.9	5000.0	3.4
7428.71	-44.94* **	9.9	3977.2	5000.0	2.0

* 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 ((-43.72 + 5.8 + 107)/20) = 2847.5

CONVERSION FROM dBm TO dBuV = 107 dB

Tester

Signature:  ne: David Blethen

Figure 5a-1
Peak Radiated Spurious Emission 15.247(c) Low – Ace Dipole 2nd Harmonic

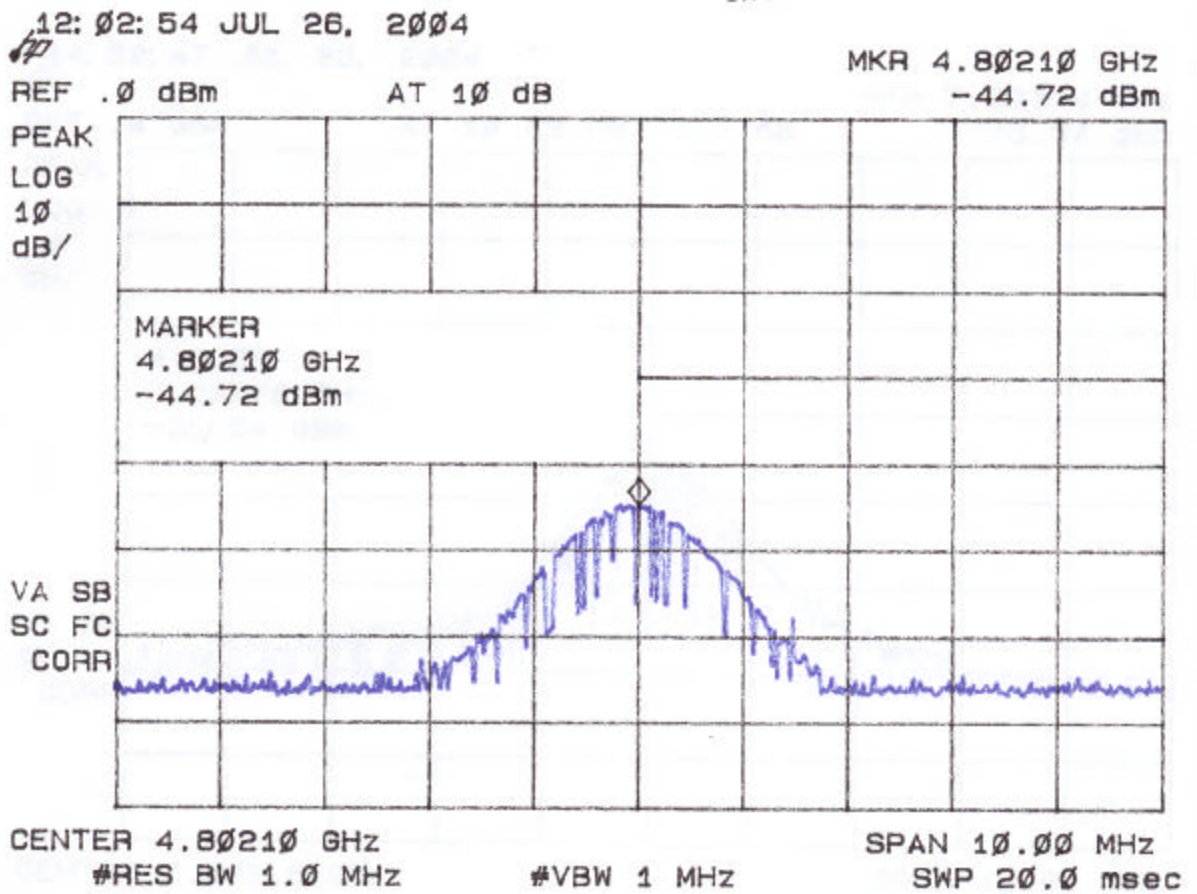


Figure 5a-2
Peak Radiated Spurious Emission 15.247(c) Low – Ace Dipole 3rd Harmonic

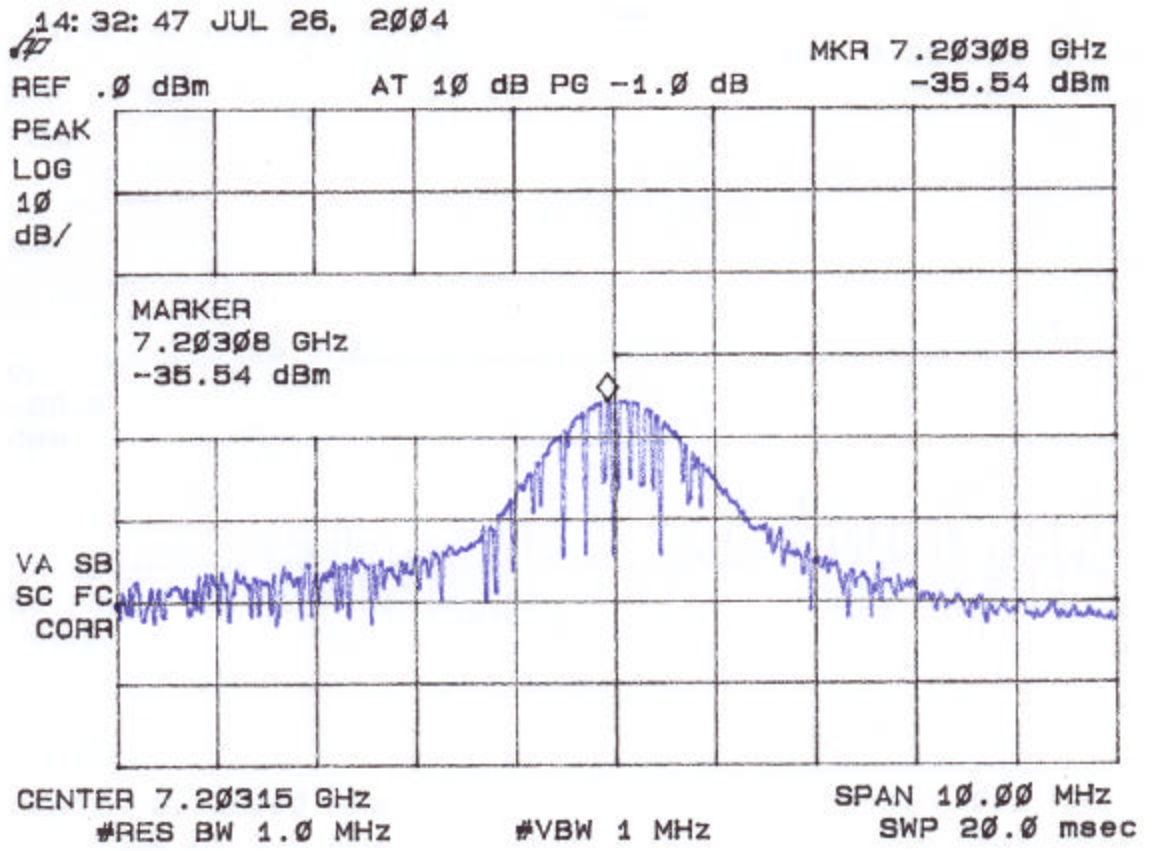


Figure 5b-1
Peak Radiated Spurious Emission 15.247(c) Low Mid Channel – Ace Dipole
2nd Harmonic

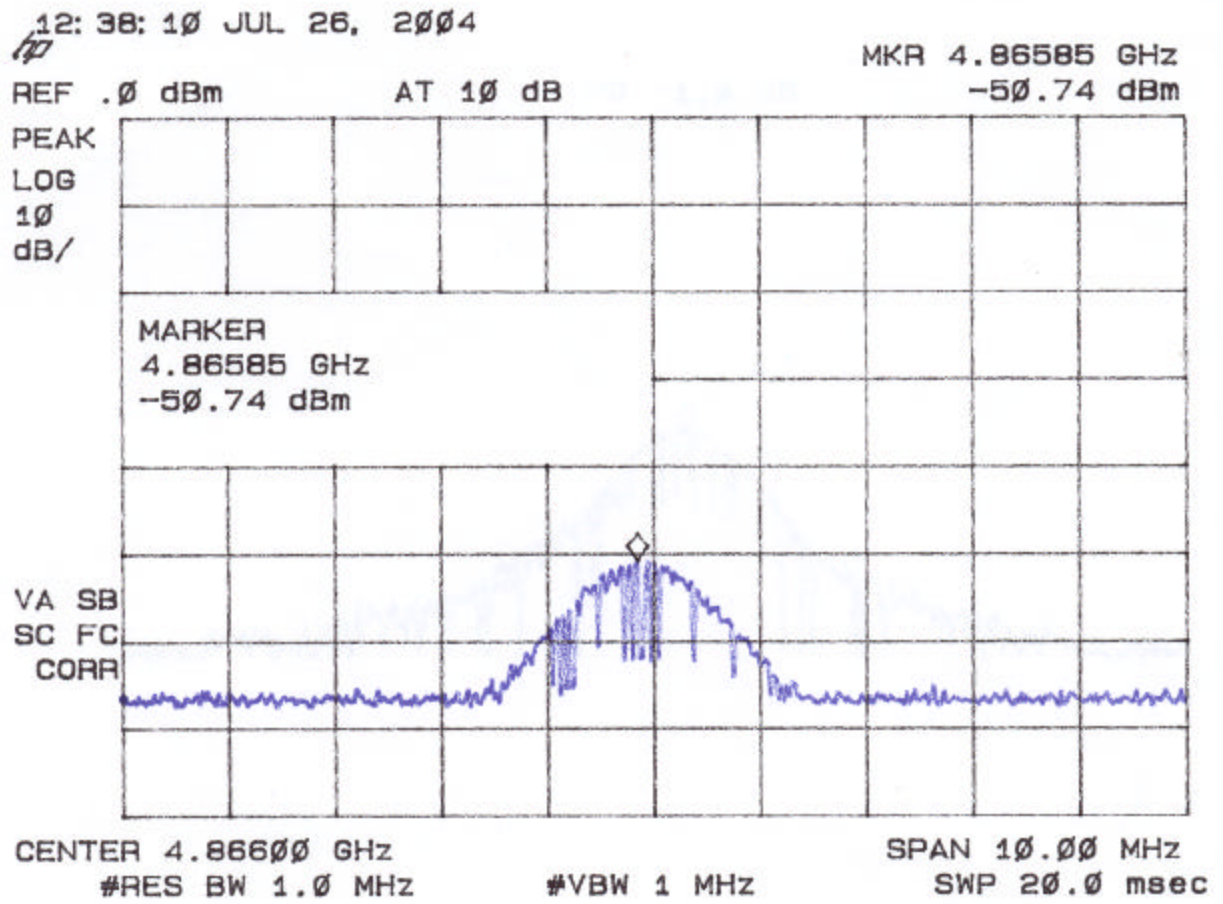


Figure 5b-2
Peak Radiated Spurious Emission 15.247(c) Low Mid Channel – Ace Dipole
3rd Harmonic

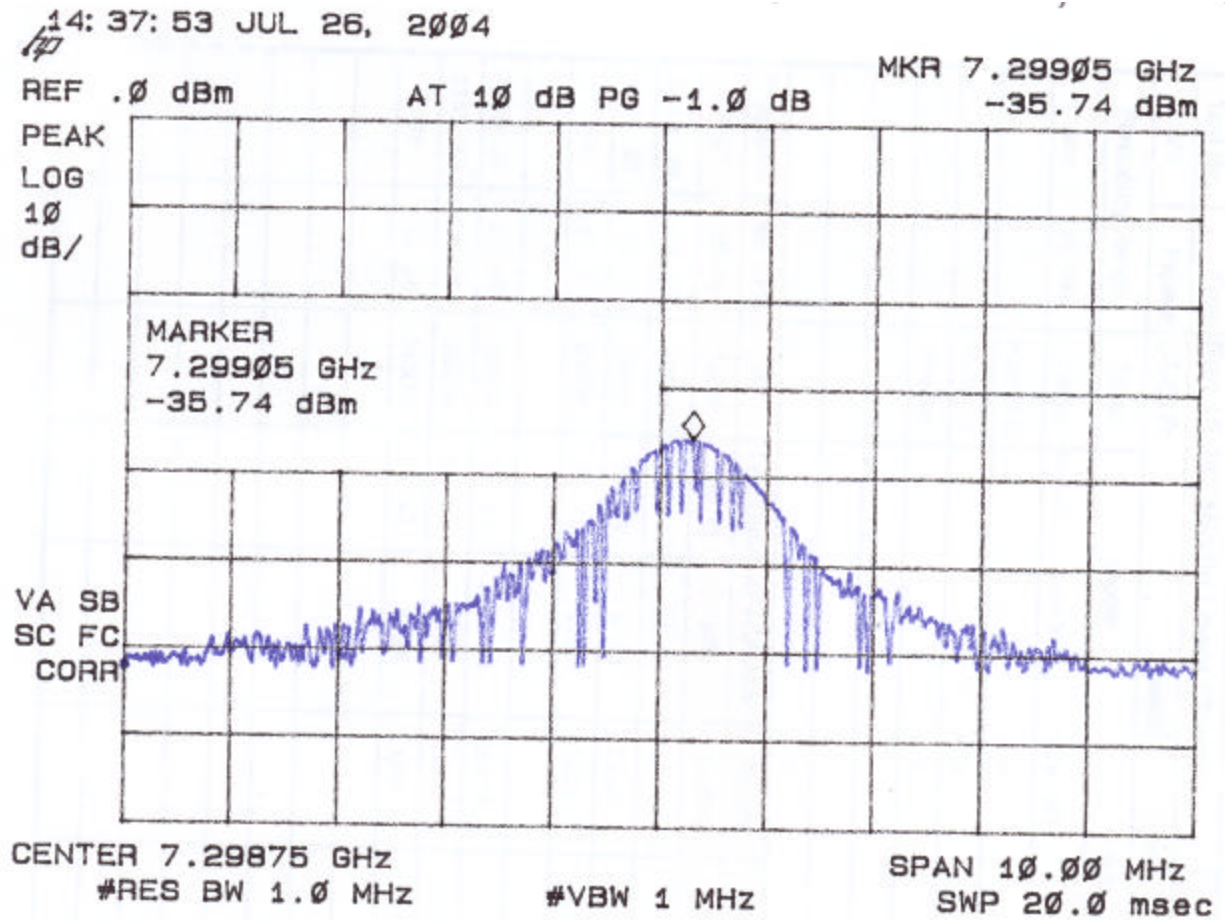


Figure 5c-1
Peak Radiated Spurious Emission 15.247(c) High Mid Channel – Ace Dipole
2nd Harmonic

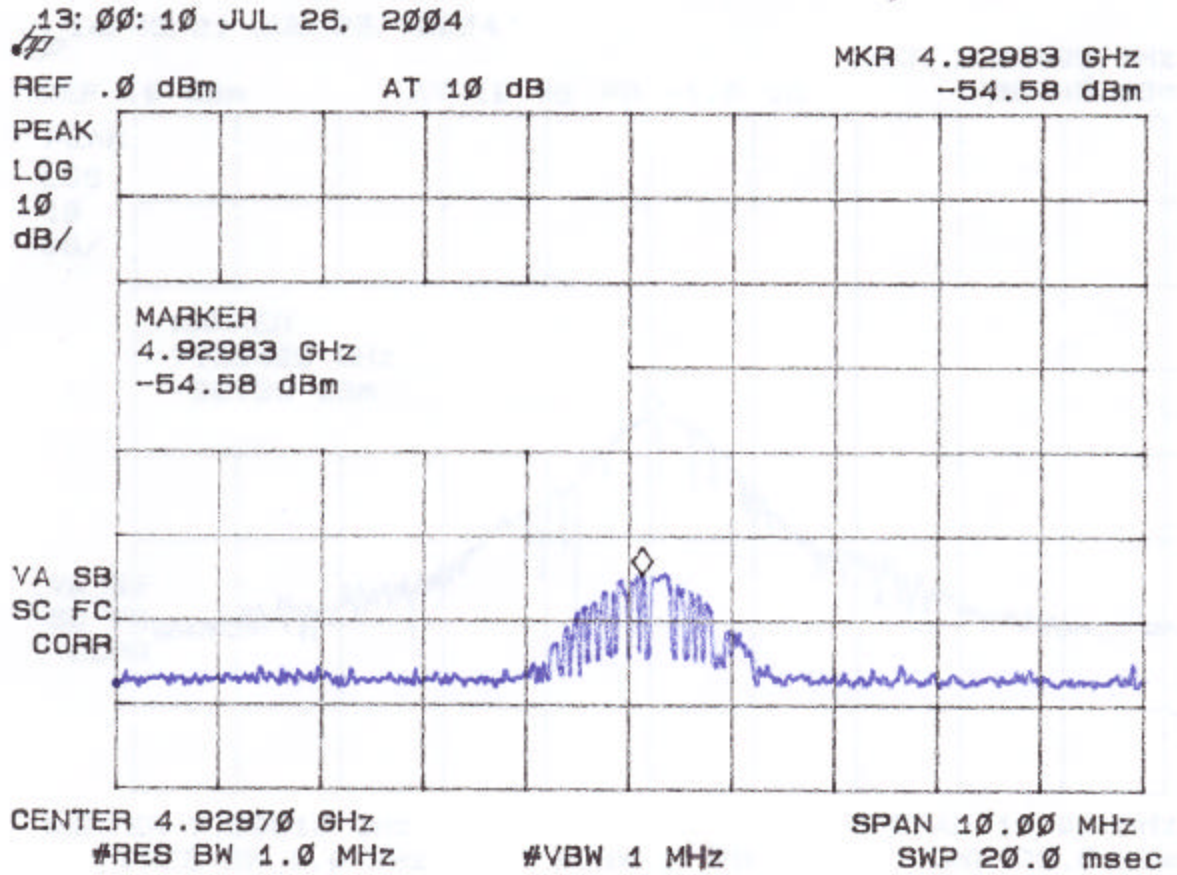


Figure 5c-2
Peak Radiated Spurious Emission 15.247(c) High Mid Channel – Ace Dipole
3rd Harmonic

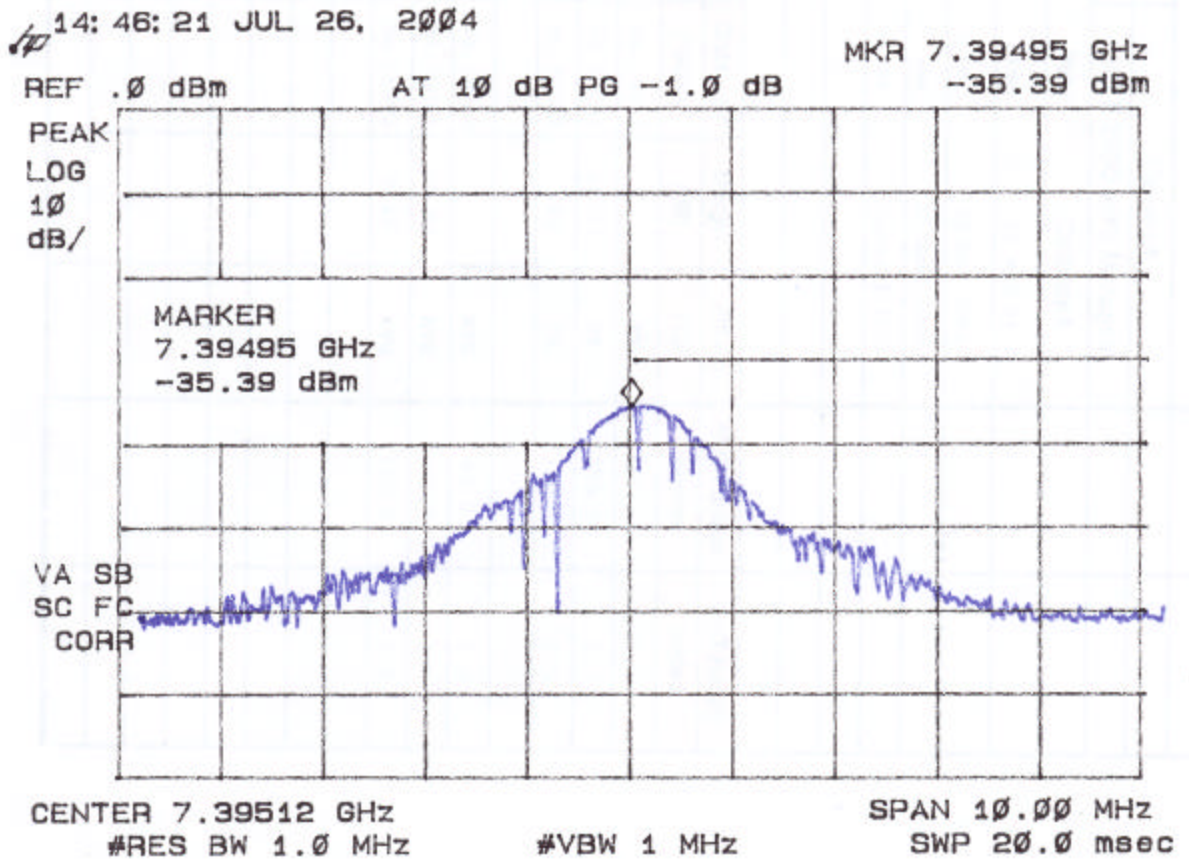


Figure 5d-1
Peak Radiated Spurious Emission 15.247(c) High Channel– Ace Dipole
2nd Harmonic

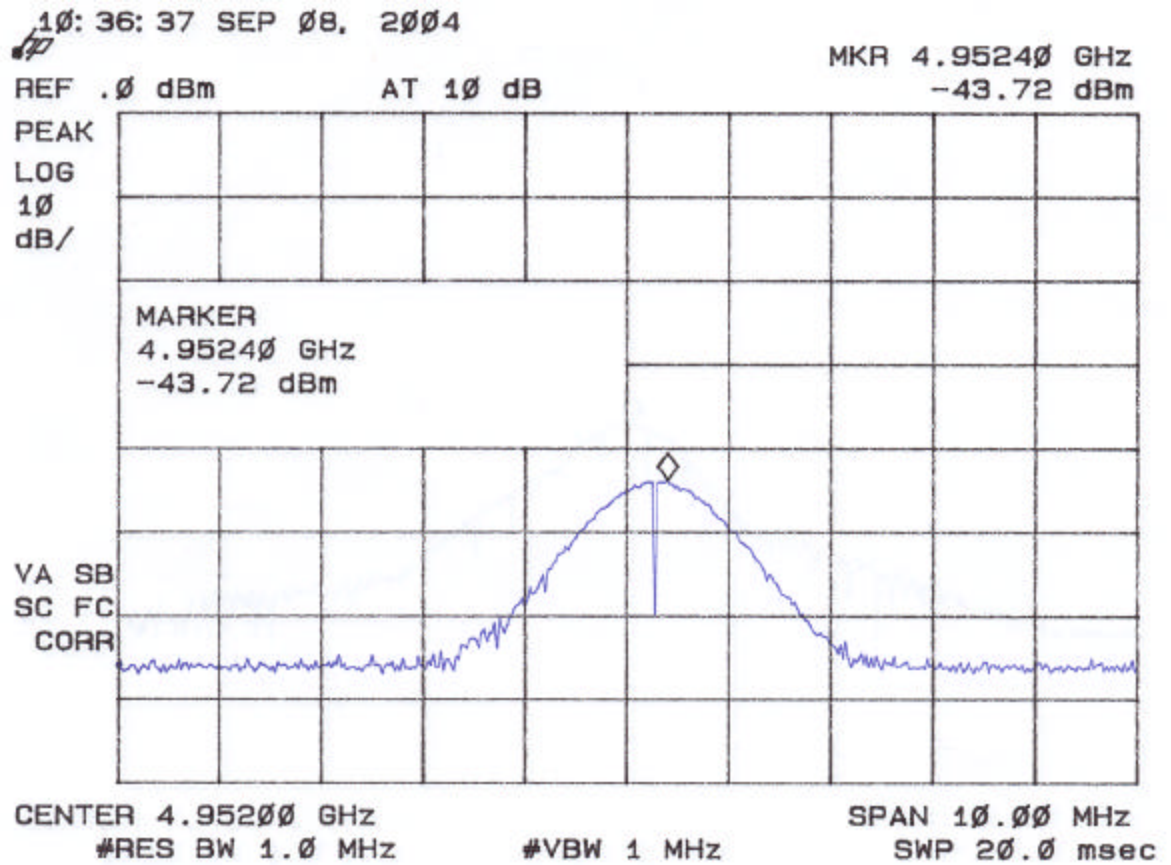
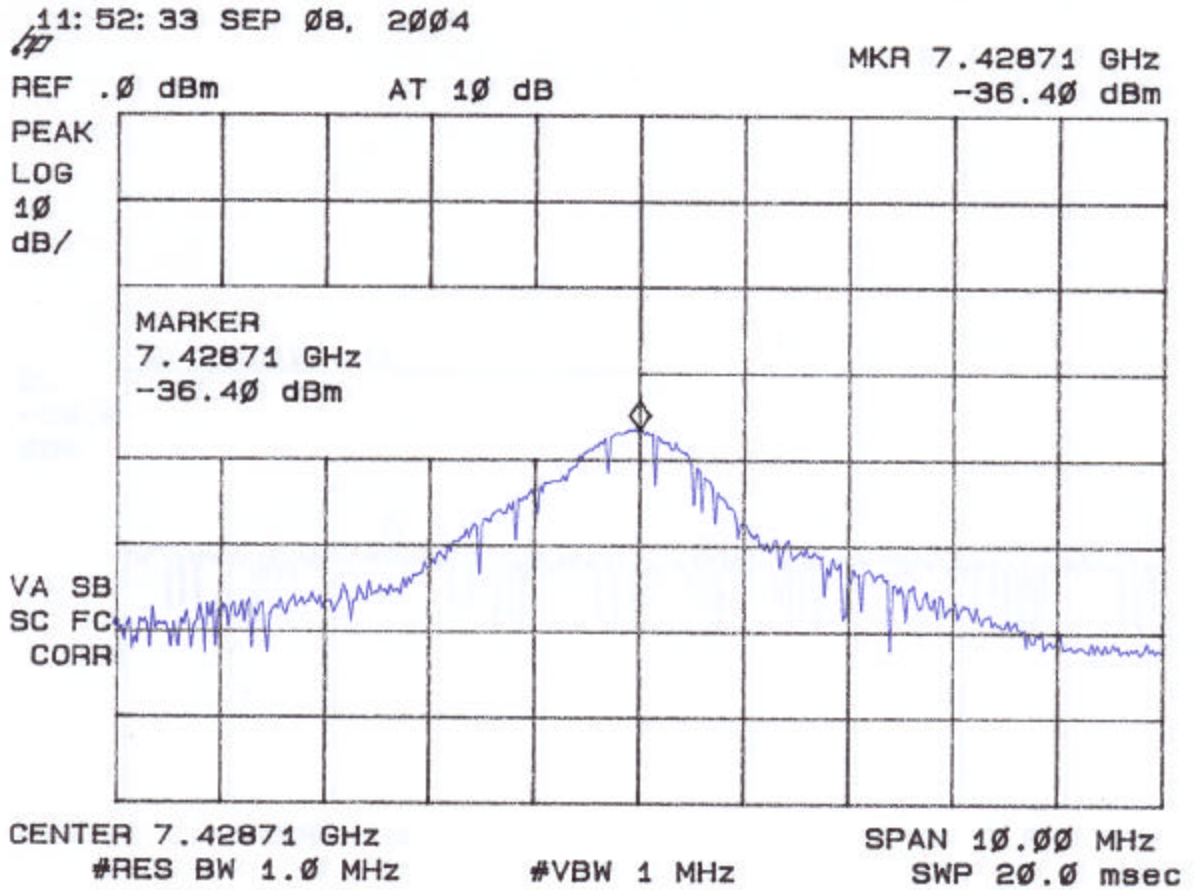


Figure 5d-2
Peak Radiated Spurious Emission 15.247(c) High Channel – Ace Dipole
3rd Harmonic



**Table 4e. PEAK RADIATED SPURIOUS EMISSIONS Low Channel
Parabolic Dish Antenna**

Freq. (MHz)	Test Data (dBm) @ 3m	AF + CA - AMP (dB)	Results (uV/m) 3m	FCC Limits (uV/m)	MARGIN BELOW FCC Limits (dB)
2400.83	-5.27	31.91	4,808,734.1	-	-
4802.15	-46.72*	5.8	2015.9	5000.0	7.9
7203.22**	-45.02	9.8	3900.0	480873.4	41.8

**Table 4f. PEAK RADIATED SPURIOUS EMISSIONS Low Mid Channel
Parabolic Dish Antenna**

Freq. (MHz)	Test Data (dBm) @ 3m	AF + CA - AMP (dB)	Results (uV/m) 3m	FCC Limits (uV/m)	MARGIN BELOW FCC Limits (dB)
4865.99	-50.34*	6.0	1362.9	5000.0	11.3
7298.99	-47.46* **	9.9	2957.9	5000.0	4.6

**Table 4g. PEAK RADIATED SPURIOUS EMISSIONS High Mid Channel
Parabolic Dish Antenna**

Freq. (MHz)	Test Data (dBm) @ 3m	AF + CA - AMP (dB)	Results (uV/m) 3m	FCC Limits (uV/m)	MARGIN BELOW FCC Limits (dB)
4929.93	-45.76*	6.3	2365.4	5000.0	6.5
7394.98	-46.38* **	9.9	3364.3	5000.0	3.4

**Table 4h. PEAK RADIATED SPURIOUS EMISSIONS High Channel
Parabolic Dish Antenna**

Freq. (MHz)	Test Data (dBm) @ 3m	AF + CA - AMP (dB)	Results (uV/m) 3m	FCC Limits (uV/m)	MARGIN BELOW FCC Limits (dB)
4952.31	-42.15*	6.3	3620.7	5000.0	2.8
7428.68	-48.02**	9.9	2789.8	5000.0	5.0

* 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 $((-46.72 + 5.8 + 107)/20)$ = 2015.9

CONVERSION FROM dBm TO dBuV = 107 dB

Tester



Name: David Blethen