

Table 5v. AVERAGE RADIATED SPURIOUS EMISSIONS (Low)
Large Patch Antenna

Freq. (GHz)	Test Data* (dBm) @ 3m	AF + CA -AMP (dB)	Results (uV/m) 3m	FCC Limits (uV/m)	MARGIN BELOW FCC Limits (dB)
4803.3	-76.77	5.81	63.4	500.0	17.9
7205.3	-72.09	9.84	172.8	500.0	23.7

Table 5w. AVERAGE RADIATED SPURIOUS EMISSIONS (Middle)
Large Patch Antenna

Freq. (GHz)	Test Data* (dBm) @ 3m	AF + CA -AMP (dB)	Results (uV/m) 3m	FCC Limits (uV/m)	MARGIN BELOW FCC Limits (dB)
4871.5	-78.01	6.05	56.5	500.0	18.9
7306.7	-72.60	9.88	163.7	500.0	9.7

Table 5x. AVERAGE RADIATED SPURIOUS EMISSIONS (High)
Large Patch Antenna

Freq. (GHz)	Test Data* (dBm) @ 3m	AF + CA -AMP (dB)	Results (uV/m) 3m	FCC Limits (uV/m)	MARGIN BELOW FCC Limits (dB)
4939.9	-78.90	6.28	52.4	500.0	19.6
7409.9	-71.68	9.92	182.9	500.0	8.7

- - Data corrected by 1 dB for loss of high pass filter

SAMPLE CALCULATION:

RESULTS (uV/m @ 3m) = Antilog ((-76.77 + 5.8 + 107)/20) = 63.4

CONVERSION FROM dBm TO dBuV = 107 dB

Tester

Signature: _____



Name: David Blethen

Table 5y. AVERAGE RADIATED SPURIOUS EMISSIONS (Low)
Whip Gold Plate Antenna

Freq. (GHz)	Test Data* (dBm) @ 3m	AF + CA -AMP (dB)	Results (uV/m) 3m	FCC Limits (uV/m)	MARGIN BELOW FCC Limits (dB)
2401.50	-47.8	31.9	35893.3	-	-
4803.58	-83.2	23.7	30.0	500.0	24.4
7205.2	-77.4	9.84	93.3	3589.3	31.7

Table 5z. AVERAGE RADIATED SPURIOUS EMISSIONS (Middle)
Whip Gold Plate Antenna

Freq. (GHz)	Test Data* (dBm) @ 3m	AF + CA -AMP (dB)	Results (uV/m) 3m	FCC Limits (uV/m)	MARGIN BELOW FCC Limits (dB)
4871.6	-84.59	6.05	26.5	500.0	25.5
7306.8	-74.36	9.88	133.7	500.0	11.4

Table 5aa. AVERAGE RADIATED SPURIOUS EMISSIONS (High)
Whip Gold Plate Antenna

Freq. (GHz)	Test Data* (dBm) @ 3m	AF + CA -AMP (dB)	Results (uV/m) 3m	FCC Limits (uV/m)	MARGIN BELOW FCC Limits (dB)
4939.7	-83.39	6.28	31.2	500.0	24.0
7409.1	-78.46	9.92	83.8	500.0	15.5

- - Data corrected by 1 dB for loss of high pass filter

SAMPLE CALCULATION:

RESULTS (uV/m @ 3m) = Antilog ((-83.27 + 5.8 + 107)/20) = 30.0

CONVERSION FROM dBm TO dBuV = 107 dB

Tester

Signature: _____



Name: David Blethen

2.9 Antenna Conducted Spurious Emission in the Frequency Range 30 - 25000 MHz (FCC Section 15.247(c))

Spurious emissions in the frequency range 10 – 25000 have been measured with a spectrum analyzer by connecting the spectrum analyzer directly via a short cable to the antenna output terminals or across the antenna leads on the PCB as specified by the manufacturer. The spectrum analyzer was set for a 50 Ω impedance with the RBW = 100 kHz. All spurious emissions were measured to be greater than 20 dB down from the fundamental. The results of conducted spurious emissions are given in Figure 4A through 4I.

Figure 5a. Antenna Conducted Spurious Emissions for Transmitter
Low Channel

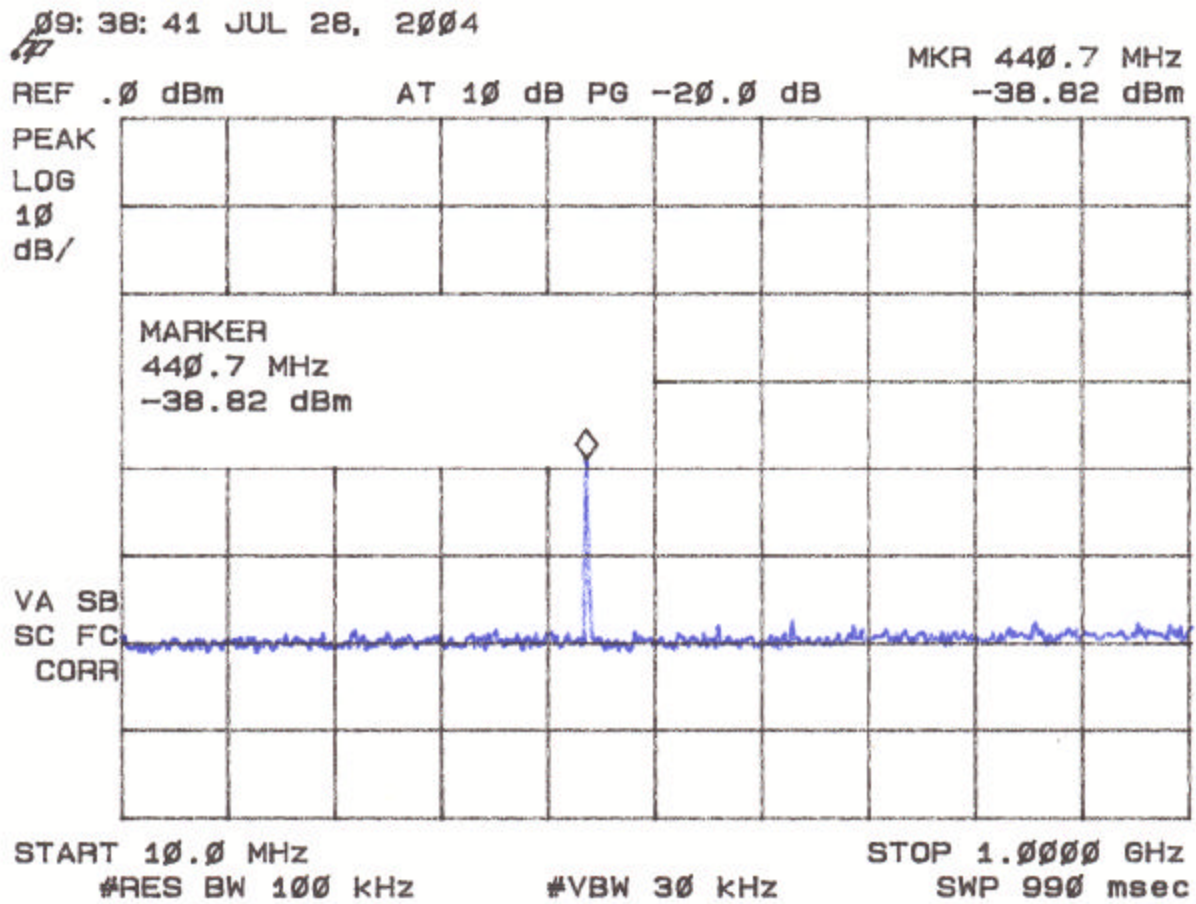


Figure 5b. Antenna Conducted Spurious Emissions for Transmitter
Low Channel

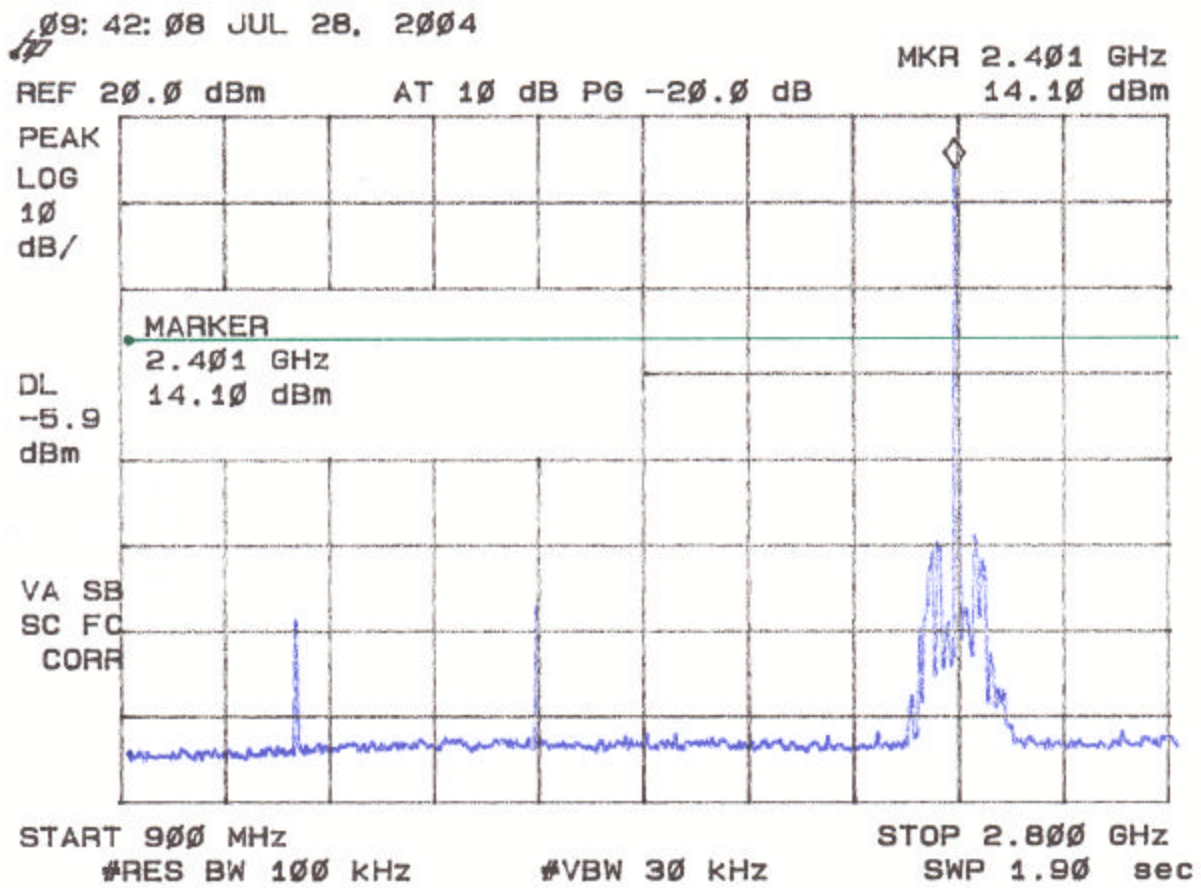


Figure 5c. Antenna Conducted Spurious Emissions for Transmitter
Low Channel

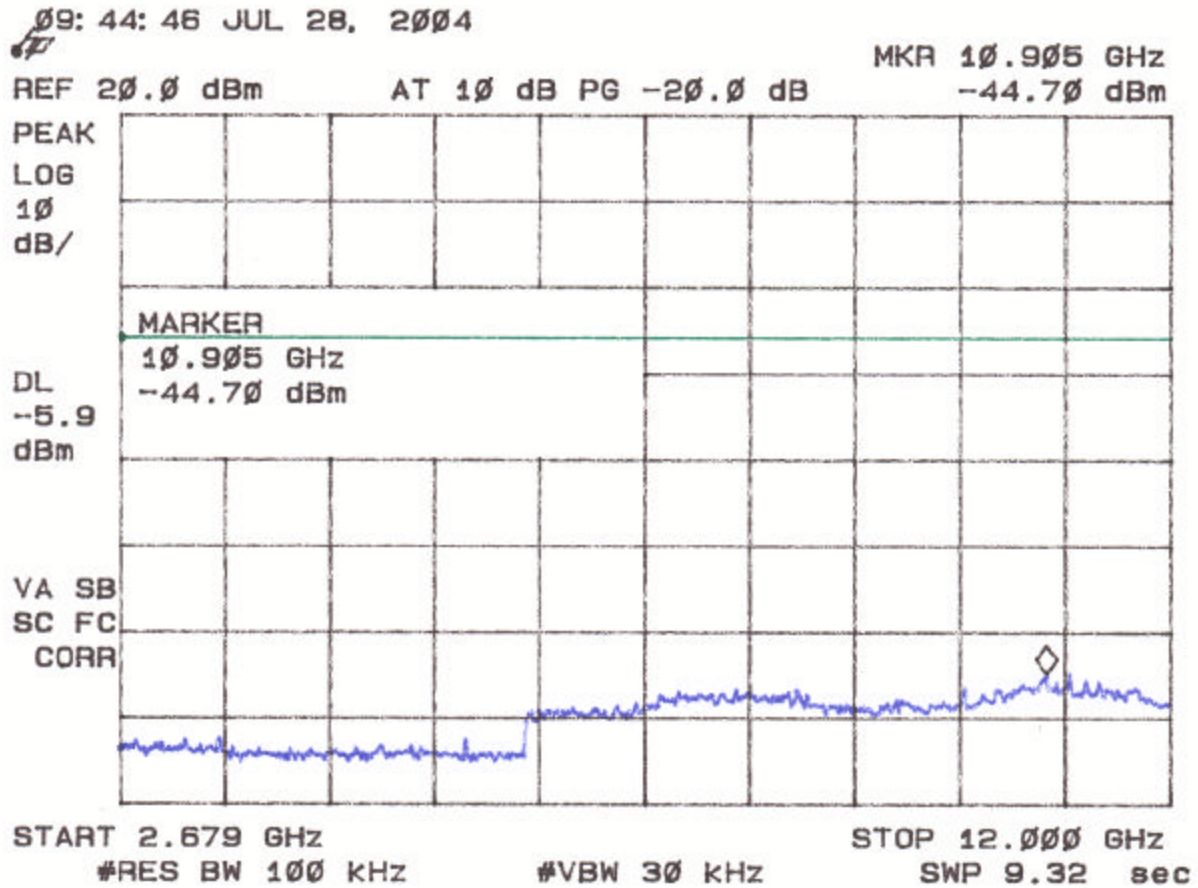


Figure 5d. Antenna Conducted Spurious Emissions for Transmitter
Low Channel

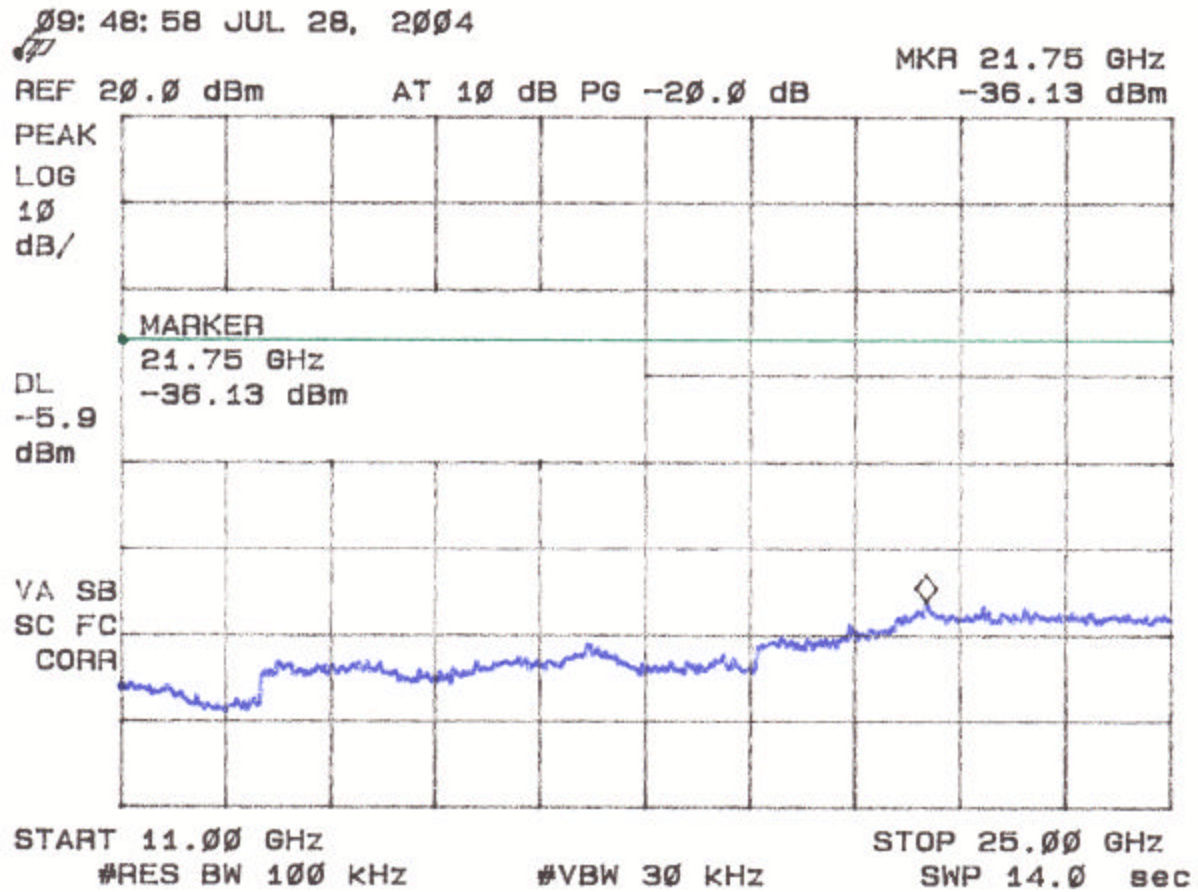


Figure 5e. Antenna Conducted Spurious Emissions for Transmitter
Middle Channel

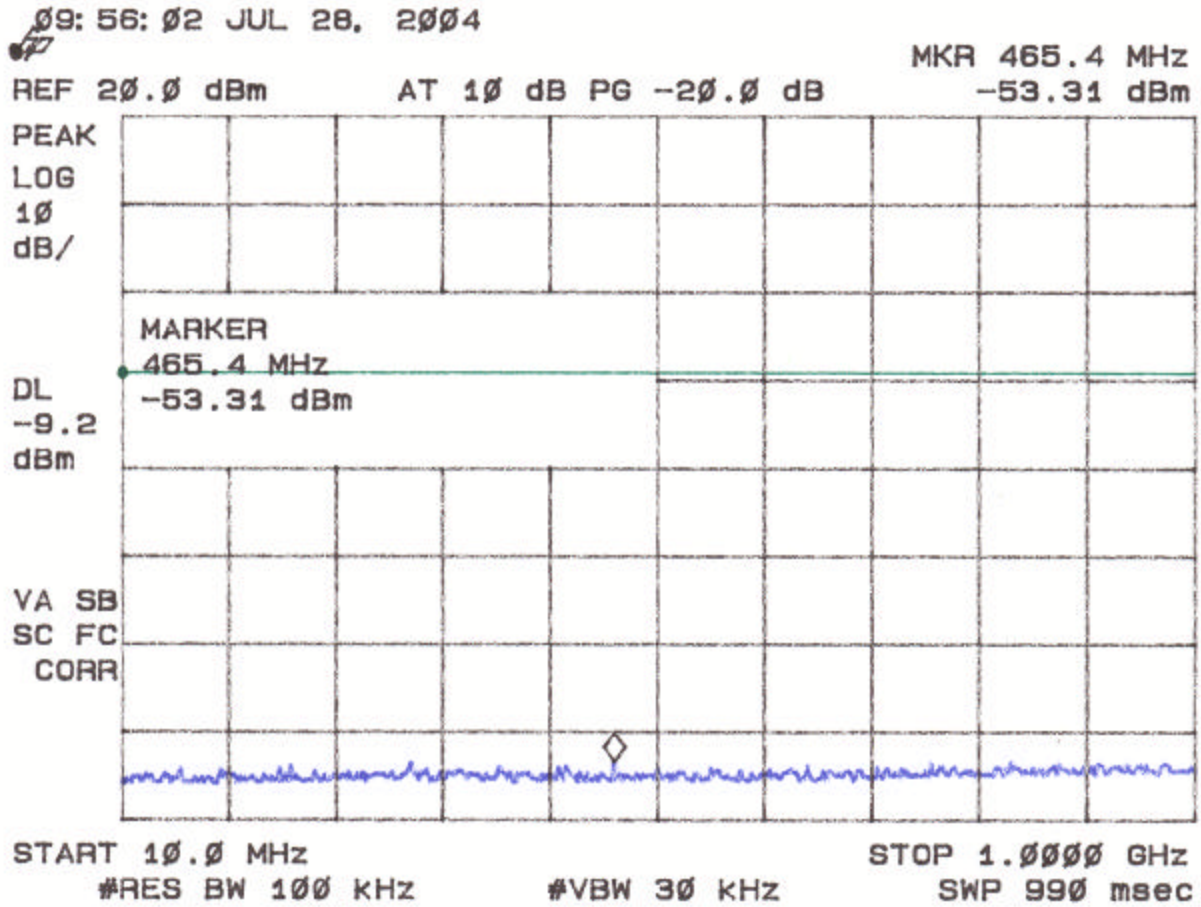


Figure 5f. Antenna Conducted Spurious Emissions for Transmitter
Middle Channel

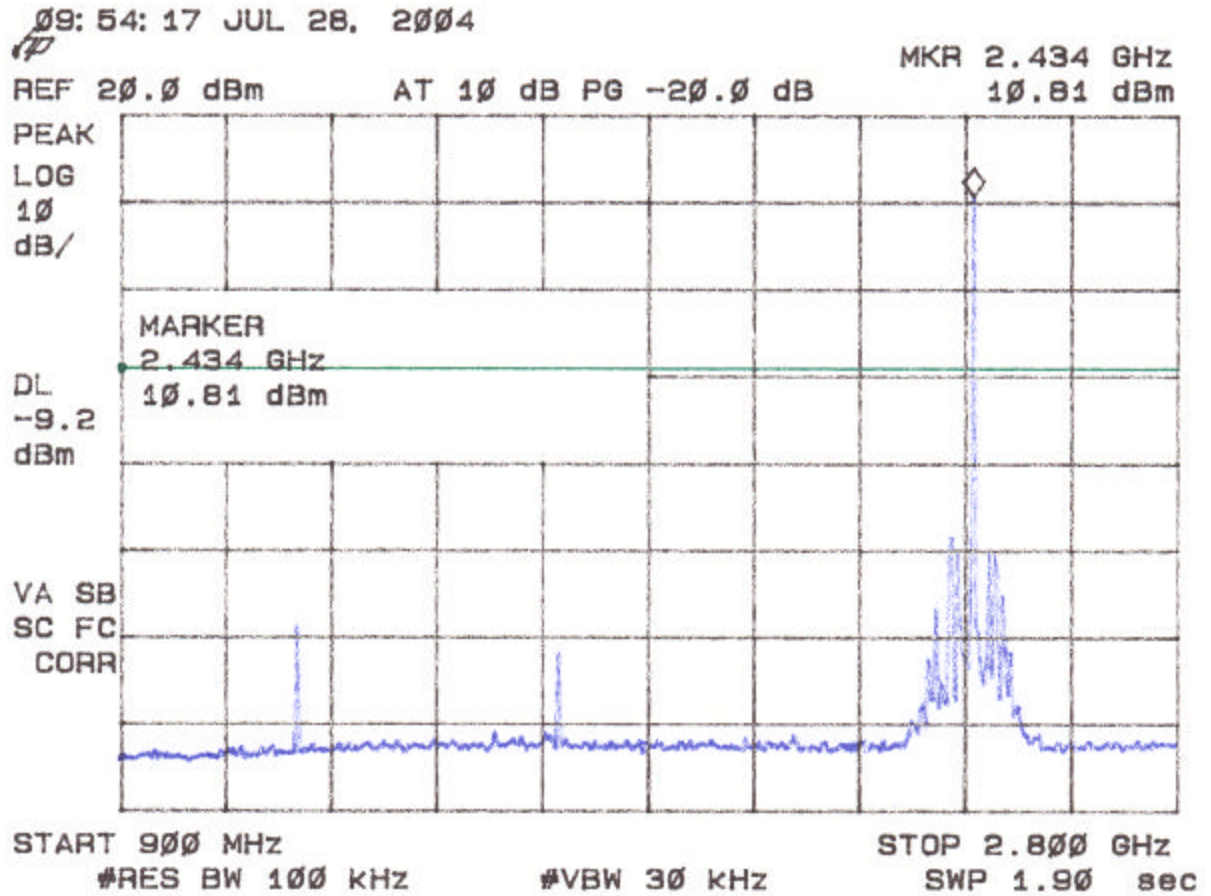


Figure 5g. Antenna Conducted Spurious Emissions for Transmitter
Middle Channel

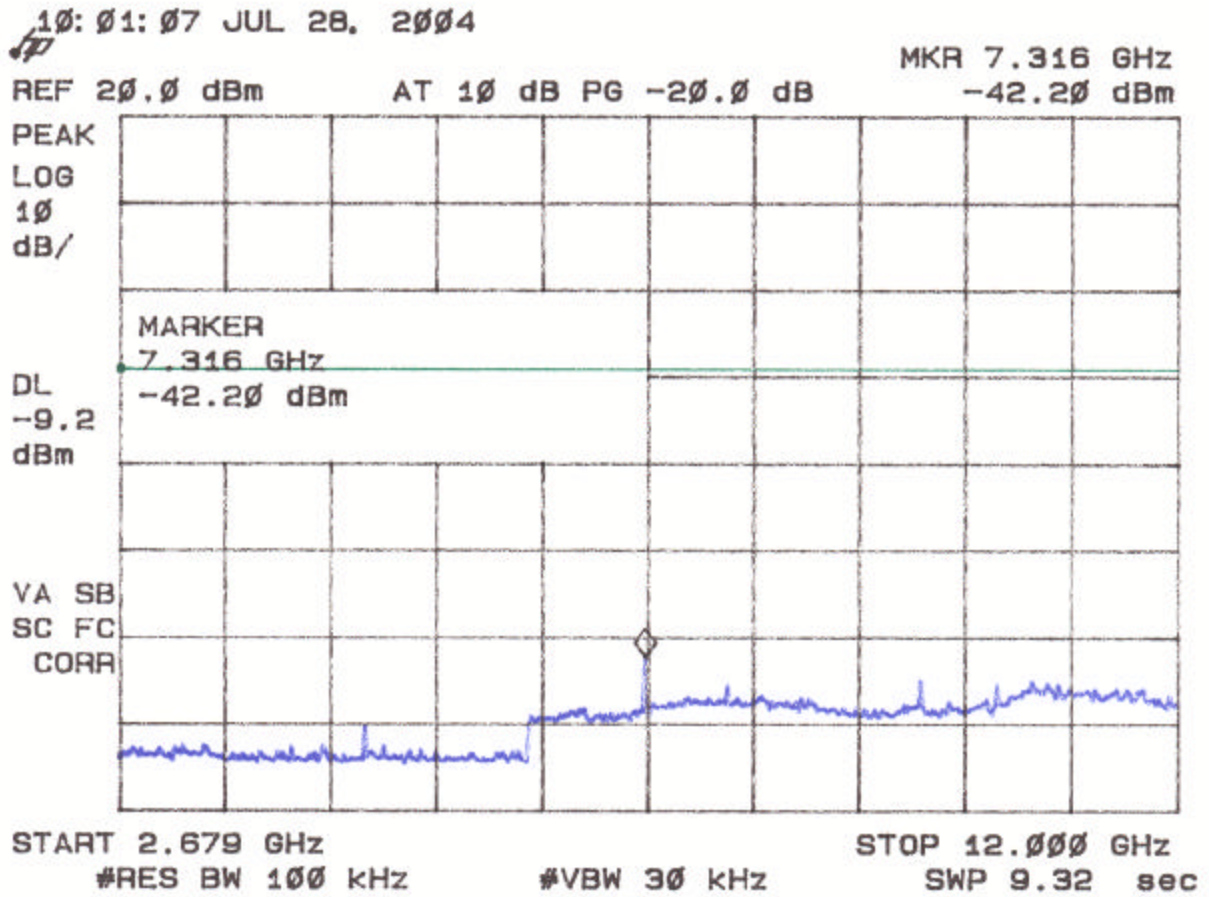


Figure 5h. Antenna Conducted Spurious Emissions for Transmitter
Middle Channel

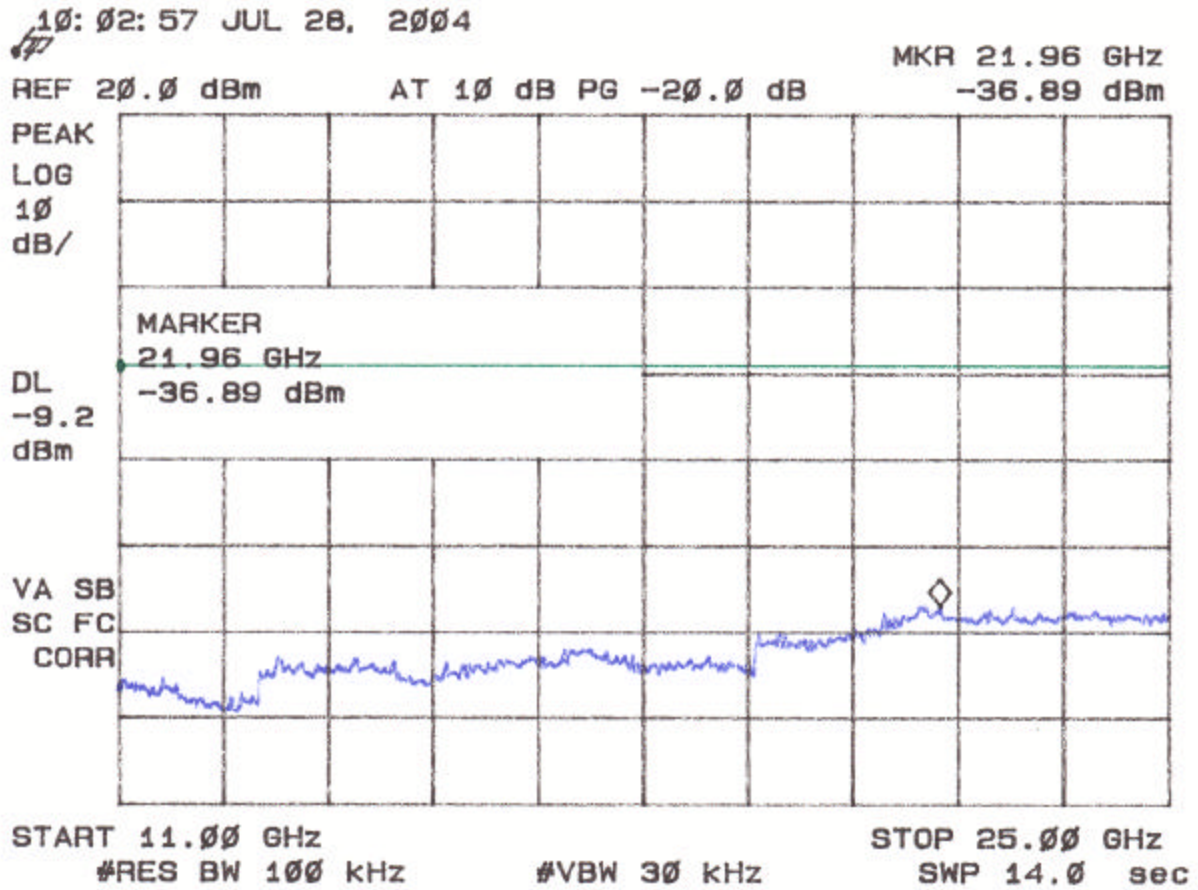


Figure 5i. Antenna Conducted Spurious Emissions for Transmitter
High Channel

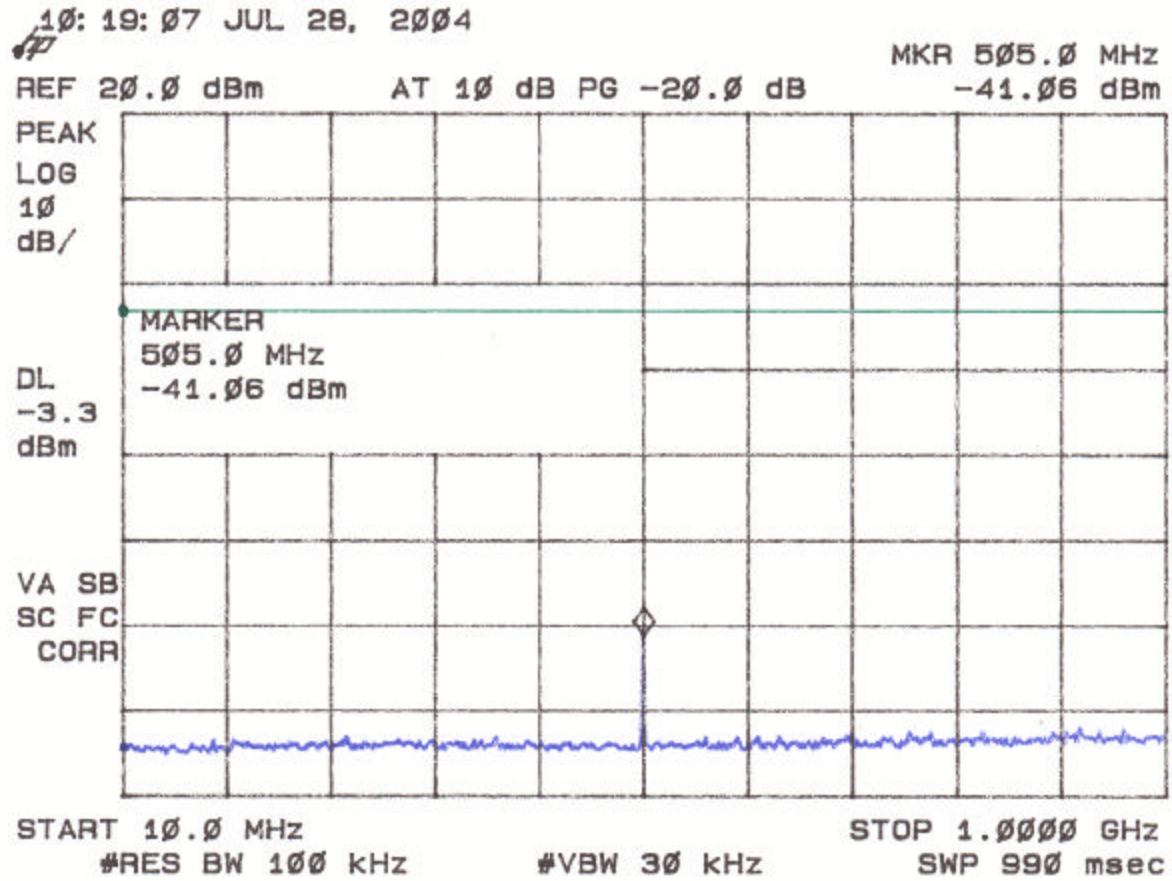


Figure 5j. Antenna Conducted Spurious Emissions for Transmitter
High Channel

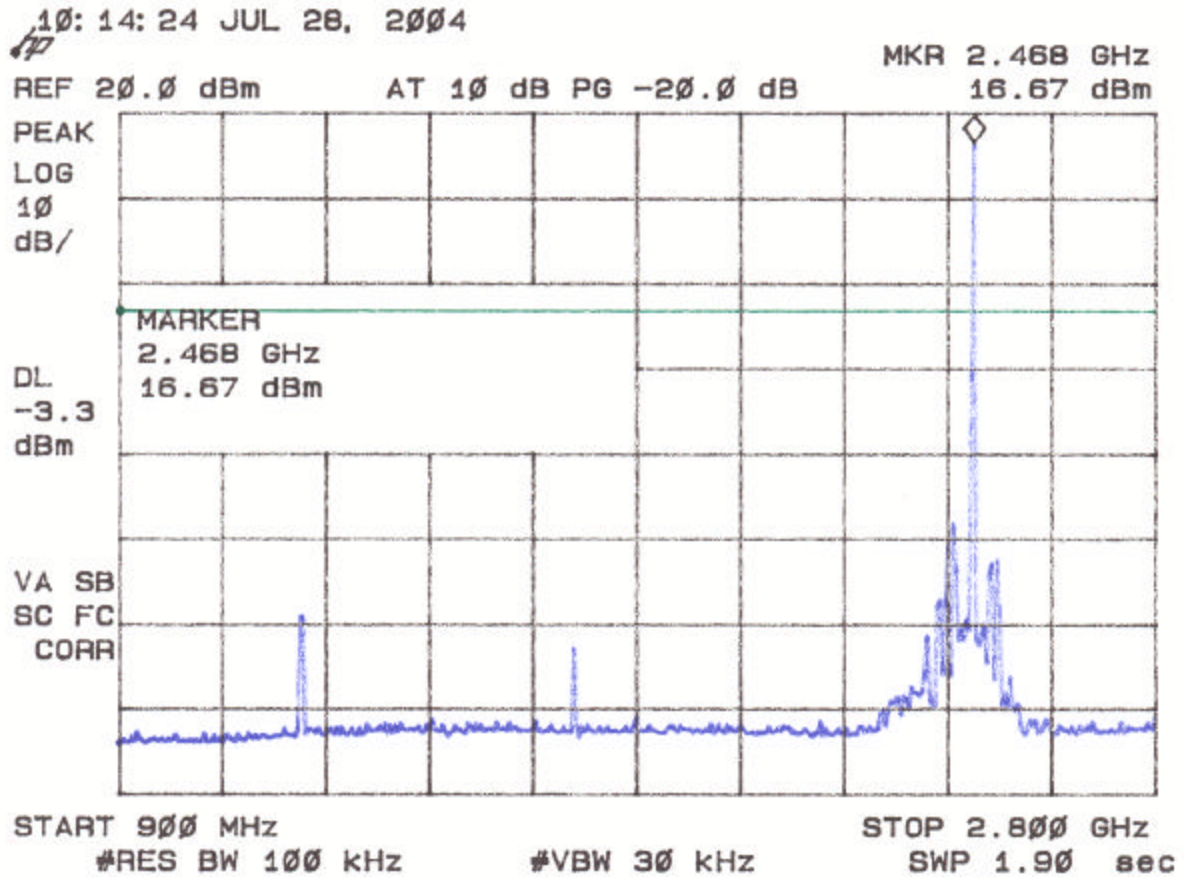


Figure 5k. Antenna Conducted Spurious Emissions for Transmitter
High Channel

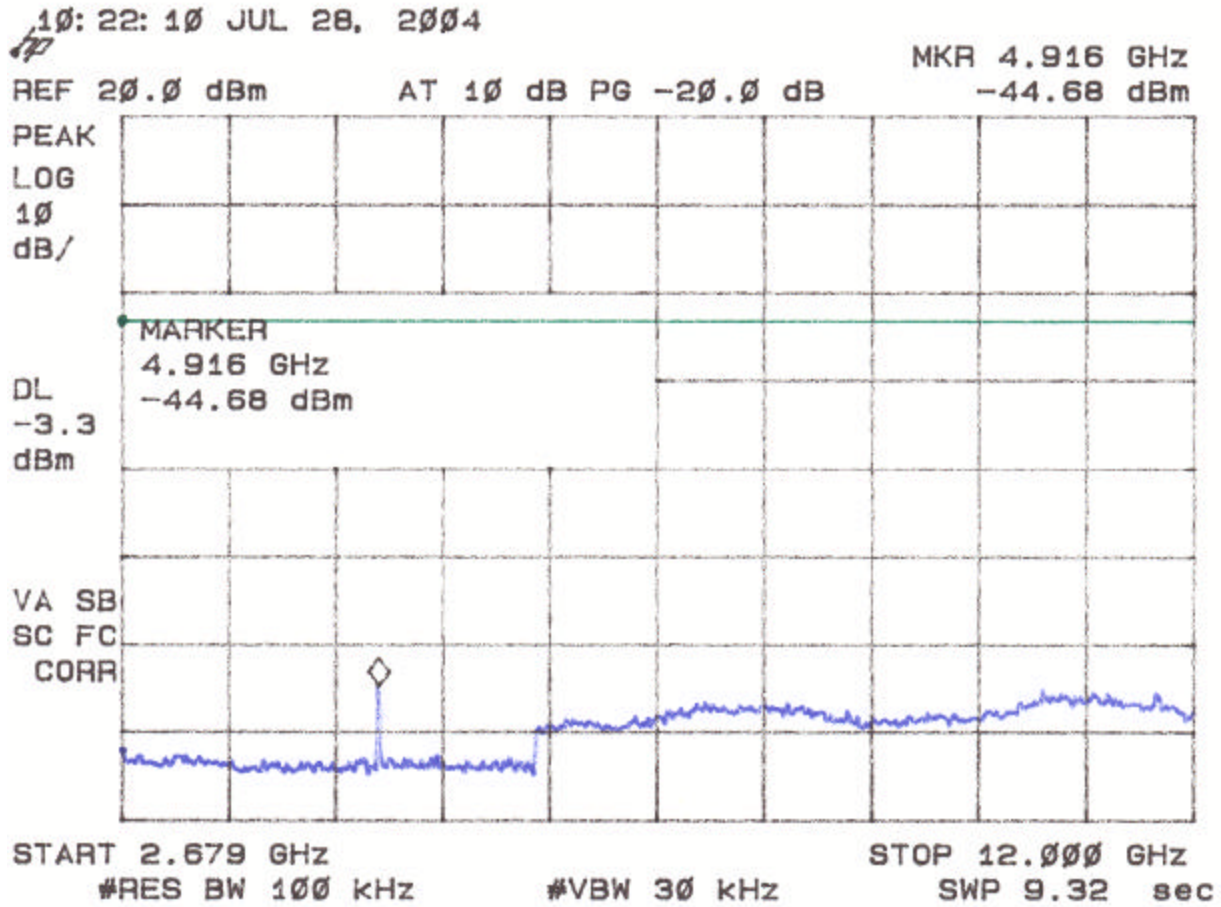
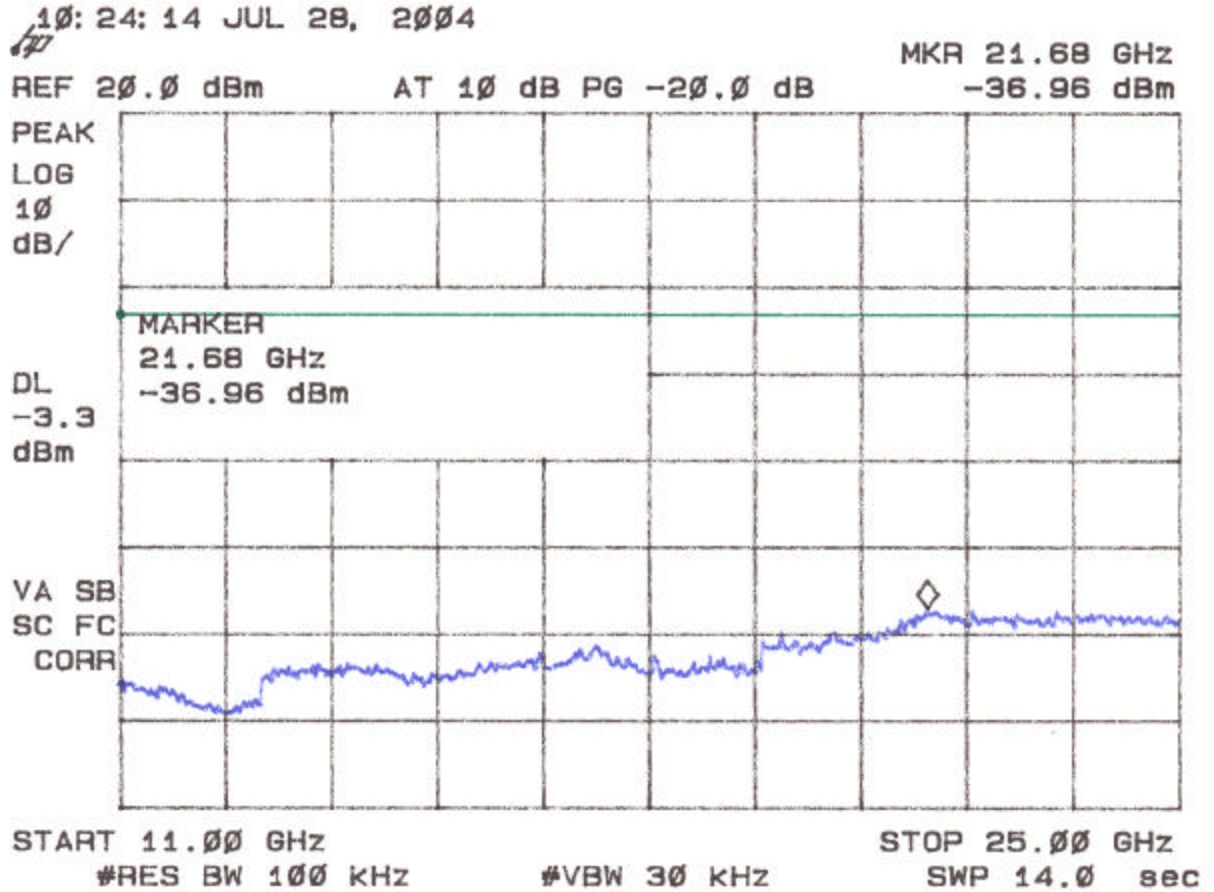


Figure 5I. Antenna Conducted Spurious Emissions for Transmitter High Channel



2.10 Band Edge Measurements

Band Edge measurements were made at a Low Channel peak and highest EUT related emission outside the occupied bandwidth. A peak measurement was made of the fundamental, and the emission was measured using a peak setting. A Resolution Bandwidth of $> 1\%$ of the emission bandwidth was used. This procedure was repeated for the high channel.

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Figure 6a. Band Edge Compliance
Parabolic Dish, Low Channel

Worst Case Antenna

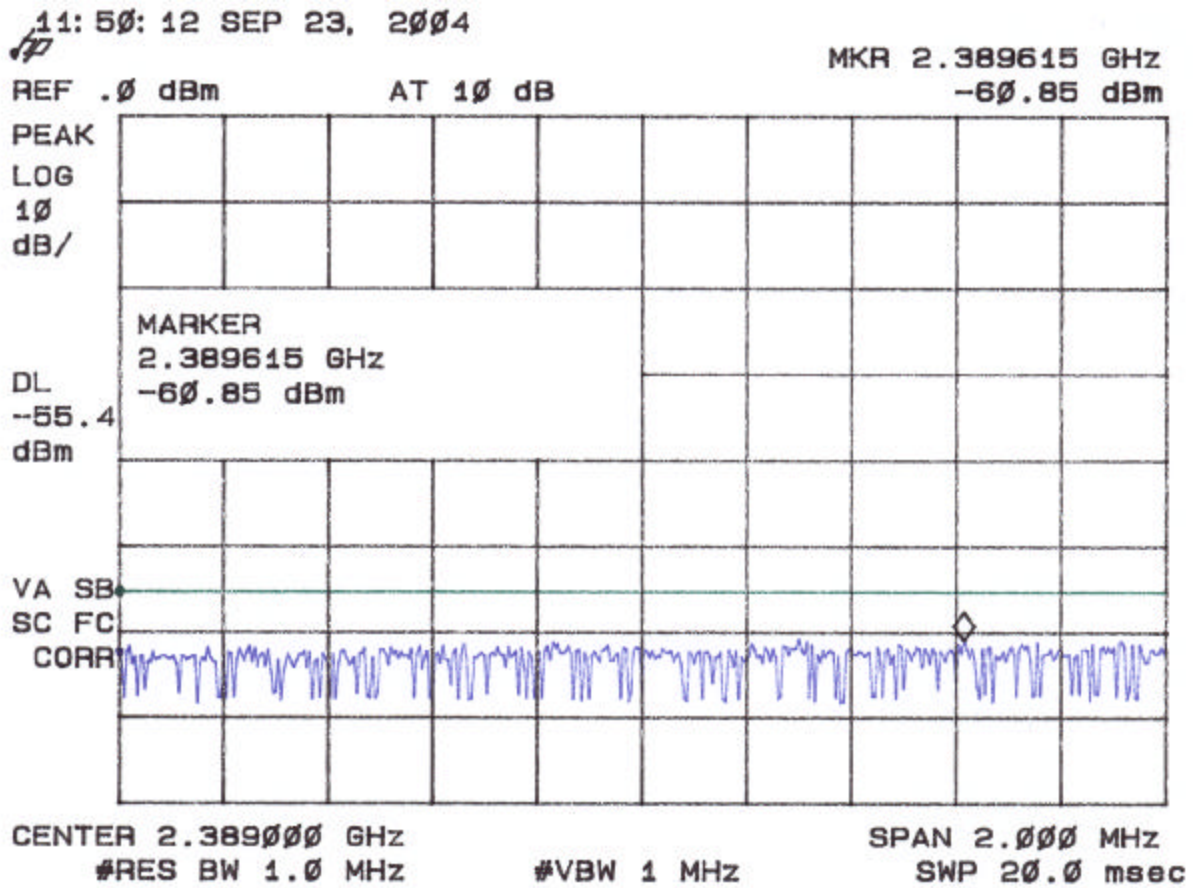
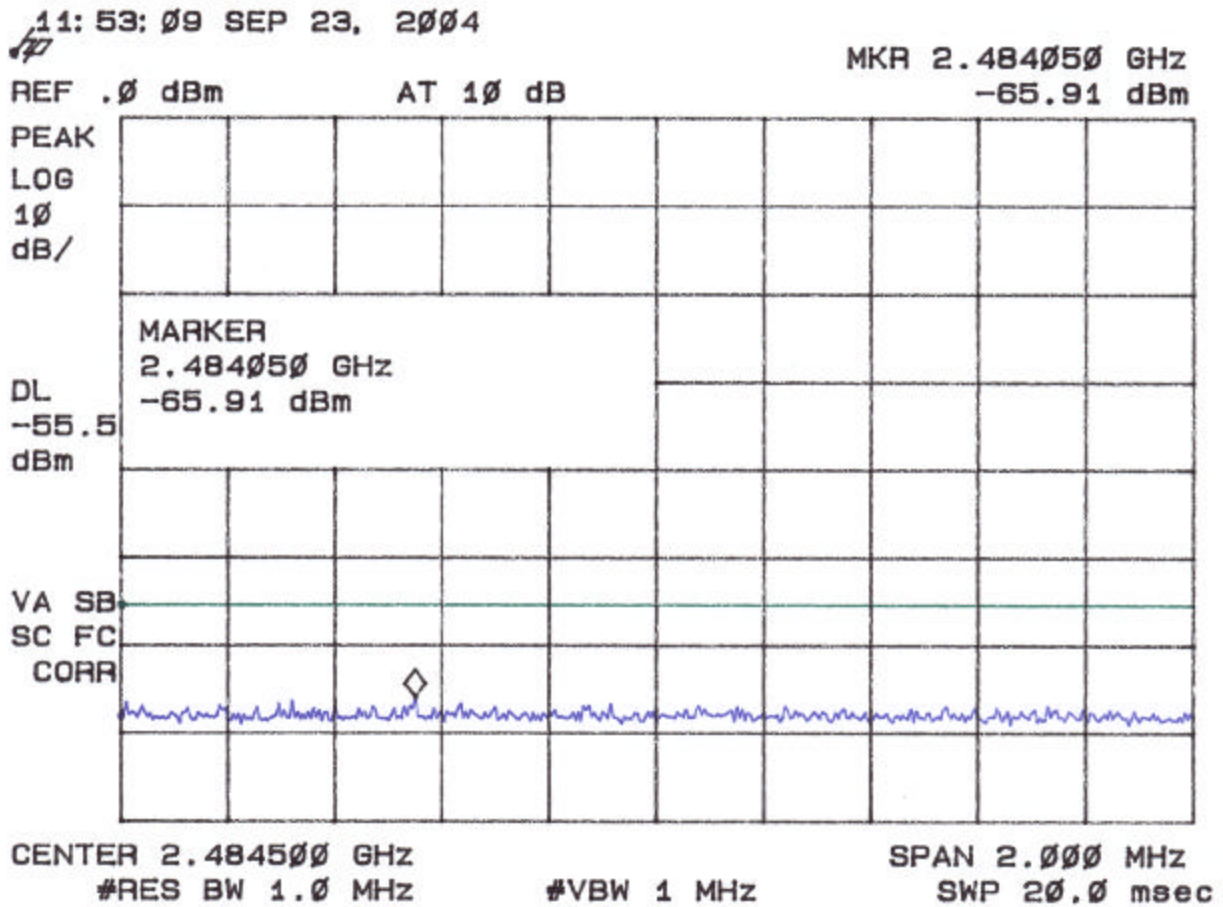


Figure 6a. Band Edge Compliance
Parabolic Dish, High Channel

Worst Case Antenna



SECTION 3

PHOTOGRAPHS

PHOTOS OF THE TESTED EUT

The following photos are attached:

- | | |
|----------|--------------------------|
| Photo 1. | Yagi Antenna |
| Photo 2. | Corner Reflector Antenna |
| Photo 3. | Patch Antenna |
| Photo 4. | Omni Antenna |
| Photo 5. | Dipole Antenna |
| Photo 6. | Parabolic Dish Antenna |
| Photo 7. | Stub Antenna |
| Photo 8. | Large patch Antenna |
| Photo 9. | Whip Gold Plate Antenna |

Photo 1. Yagi Antenna

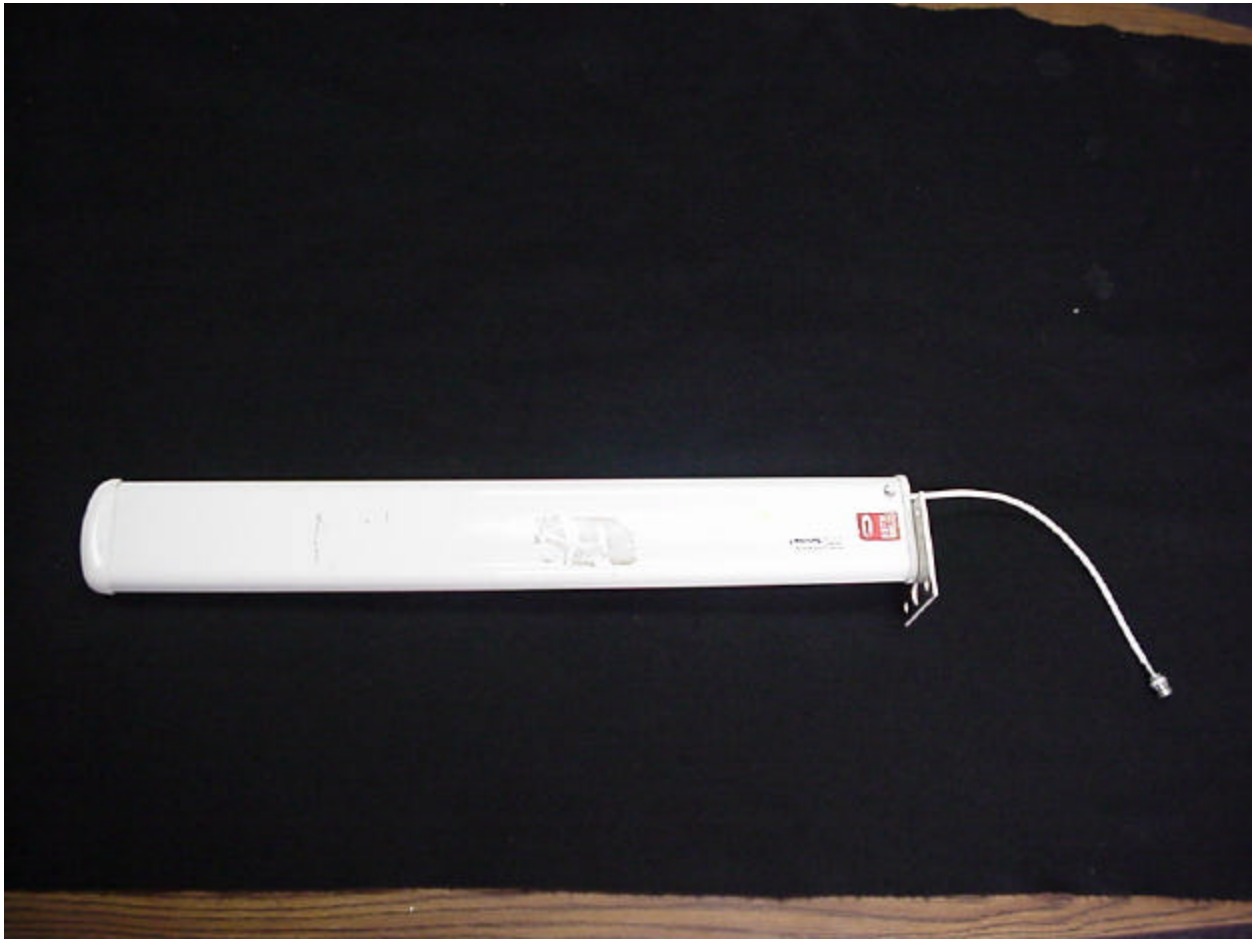


Photo 2. Corner Reflector Antenna

