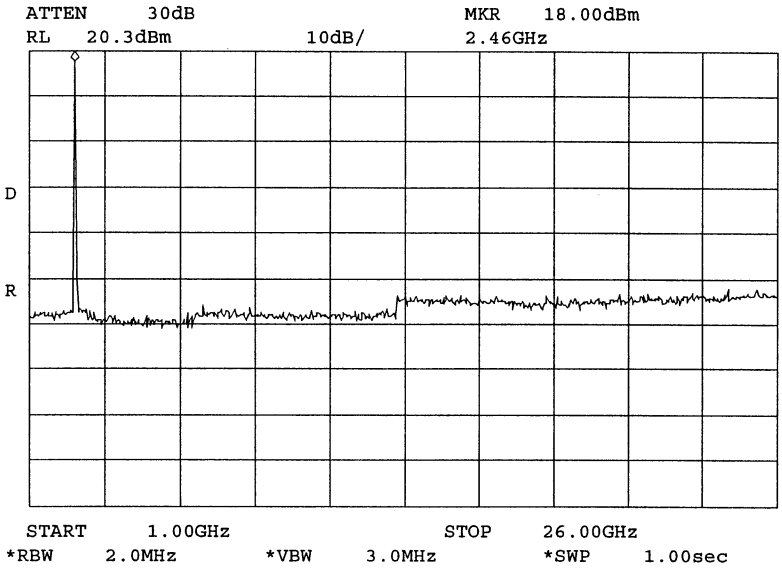
PAGE NO. 15 of 53.

NAME OF TEST: Transmitter Conducted Spurious Emissions
g0040264: 2000-Apr-21 Fri 08:20:00
STATE: 2:High Power



POWER: HIGH
MODULATION: 1 MB/SEC PSEUDO RANDOM DATA
15.247(C) SPURIOUS EMISSIONS

SUPERVISED BY: Morton Flom, P. Eng.

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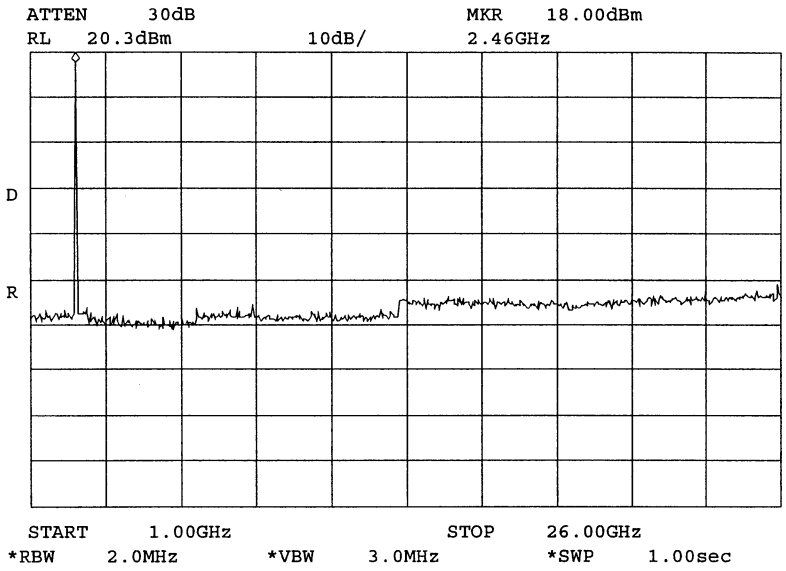
NAME OF TEST: Transmitter Conducted Spurious Emissions
g0040263: 2000-Apr-21 Fri 08:19:00
STATE: 2:High Power



POWER: HIGH
MODULATION: 2 MB/SEC PSEUDO RANDOM DATA
15.247(C) SPURIOUS EMISSIONS

SUPERVISED BY: Morton Flom, P. Eng.

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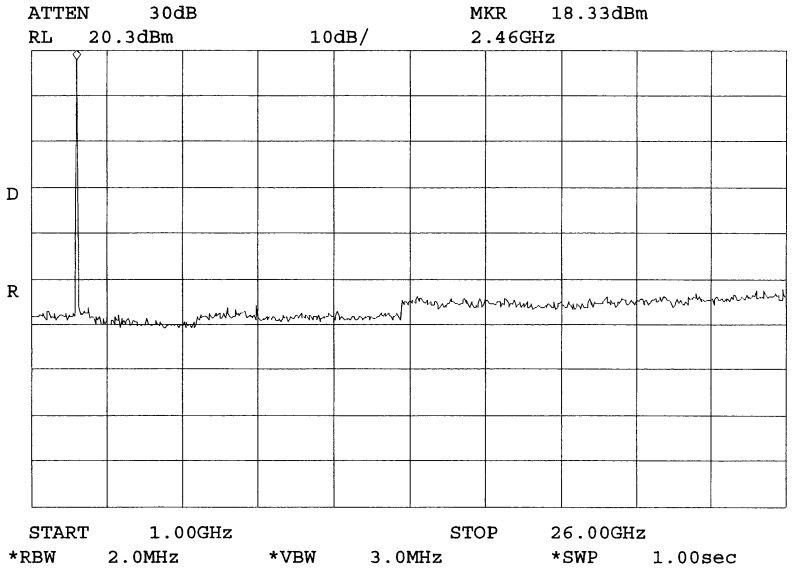
NAME OF TEST: Transmitter Conducted Spurious Emissions
g0040262: 2000-Apr-21 Fri 08:18:00
STATE: 2:High Power



POWER: HIGH
MODULATION: 5.5 MB/SEC PSEUDO RANDOM DATA
15.247(C) SPURIOUS EMISSIONS

SUPERVISED BY: Morton Flom, P. Eng.

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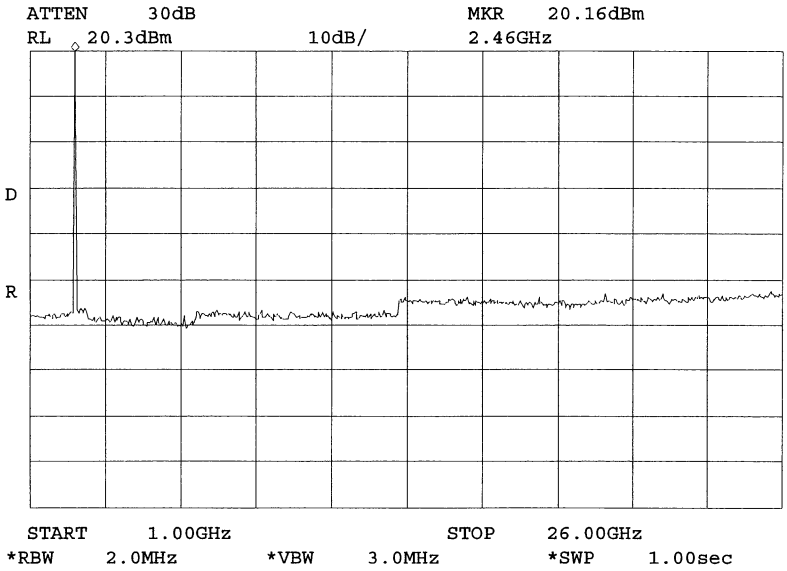
NAME OF TEST: Transmitter Conducted Spurious Emissions
g0040261: 2000-Apr-21 Fri 08:17:00
STATE: 2:High Power



POWER: HIGH
MODULATION: 11 MB/SEC PSEUDO RANDOM DATA
15.247(C) SPURIOUS EMISSIONS

SUPERVISED BY: Morton Flom, P. Eng.

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NAME OF TEST: Out of Band Emissions

SPECIFICATION: 47 CFR 15.247(c), 15.209(a)

SPEC. LIMIT: See Below

TEST EQUIPMENT: As per previous page

SEARCH ANTENNAS: 10 kHz - 32 MHz: LOOP 94598-1
32 MHz - 1 GHz: SINGER DM105, $T_1T_2T_3$
1 GHz - 18 GHz: EMCO 3115

LIMIT

In any 100 kHz bandwidth outside these frequency bands, radio frequency power that is produced by the modulation products of the spreading sequence, information sequence, and the carrier frequency shall be either:

at least 20 dB below that in any 100 kHz bandwidth within the band that contains the highest level of the desired power

or

shall not exceed the general levels specified in 15.209(a),

whichever results in the lesser attenuation.
All other emissions outside these bands shall not exceed the general radiated emission limits specified in 15.209(a).

MEASUREMENTS PROCEDURE:
At first, bench tests were performed to locate the emissions ar the antenna terminals.

In the field, tests were conducted over the range shown. The test sample was set up on a wooden turntable above ground, and at a distance of three meters from the antenna connected to the spectrum analyzer.

In order to obtain the maximum response at each frequency, the turntable was rotated, and the search antenna was raised and lowered. The EUT was also adjusted for maximum response.

The field strength was calculated from:

$$E\ \mu V/m\ @\ 3\ m = LOG_{10}^{-1}(dBm + 107 + A.F. + C.L.)$$

The following results are worst case conditions. Tests were conducted in Horizontal and Vertical polarization modes.

MEASUREMENT RESULTS: ATTACHED

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NAME OF TEST: Band Edge Emissions
g0040231: 2000-Apr-17 Mon 16:04:00 Snap On Antenna
Lower Band Edge

FREQUENCY TUNED, MHz	FREQUENCY EMISSION, MHz	METER, dBuV	CF, dB	uV/m @ 3m	PEAK (P) OR AVERAGE (A)
2412.000000	2375.200000	31.67	41.2	4400.48	P
2412.000000	2375.300000	9.5	41.2	342.77	A
2412.000000	2376.500000	9.5	41.21	343.16	A
2412.000000	2376.850000	31.83	41.21	4487.45	P
2412.000000	2378.000000	9.5	41.21	343.16	A
2412.000000	2378.400000	31.5	41.21	4320.16	P
2412.000000	2378.950000	9.5	41.21	343.16	A
2412.000000	2380.700000	31.67	41.22	4410.62	P
2412.000000	2380.950000	9.67	41.22	350.35	A
2412.000000	2382.100000	9.5	41.22	343.56	A
2412.000000	2382.950000	32.5	41.22	4852.89	P
2412.000000	2383.300000	9.5	41.22	343.56	A
2412.000000	2384.350000	32.5	41.23	4858.48	P
2412.000000	2384.650000	9.5	41.23	343.95	A
2412.000000	2385.550000	9.67	41.23	350.75	A
2412.000000	2385.800000	32.83	41.24	5052.43	P
2412.000000	2386.250000	9.5	41.24	344.35	A
2412.000000	2386.750000	32.33	41.24	4769.8	P
2412.000000	2387.100000	9.5	41.25	344.75	A
2412.000000	2387.950000	9.5	41.25	344.75	A
2412.000000	2388.000000	32.33	41.25	4775.29	P
2412.000000	2388.450000	9.5	41.25	344.75	A
2412.000000	2388.900000	31.67	41.25	4425.88	P
2412.000000	2389.150000	9.5	41.25	344.75	A
2412.000000	2390.000000	9.67	41.25	351.56	A
2412.000000	2390.000000	31.33	41.25	4255.98	P

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NAME OF TEST: Band Edge Emissions
g0040292: 2000-Apr-19 Wed 11:57:00 Dipole Antenna
Lower Band Edge

FREQUENCY TUNED, MHz	FREQUENCY EMISSION, MHz	METER, dBuV	CF, dB	uV/m @ 3m	PEAK (P) OR AVERAGE (A)
2412.000000	2375.000000	20	41.2	1148.15	P
2412.000000	2375.000000	9.17	41.2	329.99	A
2412.000000	2376.500000	21.33	41.21	1339.68	P
2412.000000	2377.300000	9	41.21	323.97	A
2412.000000	2377.650000	19.83	41.21	1127.2	P
2412.000000	2378.700000	9.17	41.21	330.37	A
2412.000000	2379.200000	19.83	41.21	1127.2	P
2412.000000	2380.350000	20.17	41.22	1173.55	P
2412.000000	2380.400000	9.17	41.22	330.75	A
2412.000000	2381.600000	20.17	41.22	1173.55	P
2412.000000	2381.650000	9.17	41.22	330.75	A
2412.000000	2382.850000	9	41.22	324.34	A
2412.000000	2383.100000	20.33	41.22	1195.36	P
2412.000000	2384.250000	9.17	41.23	331.13	A
2412.000000	2384.300000	20	41.23	1152.13	P
2412.000000	2385.450000	9.33	41.23	337.29	A
2412.000000	2385.950000	20.67	41.24	1245.95	P
2412.000000	2386.300000	9.17	41.24	331.51	A
2412.000000	2387.350000	20.5	41.25	1223.21	P
2412.000000	2387.400000	9.33	41.25	338.06	A
2412.000000	2388.550000	9	41.25	325.46	A
2412.000000	2388.850000	20.33	41.25	1199.5	P
2412.000000	2390.000000	9.33	41.25	338.06	A
2412.000000	2390.000000	20.5	41.25	1223.21	P

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NAME OF TEST: Band Edge Emissions
g0040266: 2000-Apr-18 Tue 15:10:00 Yagi Antenna
Lower Band Edge

FREQUENCY TUNED, MHz	FREQUENCY EMISSION, MHz	METER, dBuV	CF, dB	uV/m @ 3m	PEAK (P) OR AVERAGE (A)
2412.000000	2375.000000	18.67	41.2	985.14	P
2412.000000	2375.000000	9.67	41.2	349.54	A
2412.000000	2375.750000	19	41.2	1023.29	P
2412.000000	2375.900000	10.33	41.2	377.14	A
2412.000000	2376.950000	22.33	41.21	1503.14	P
2412.000000	2377.150000	9.5	41.21	343.16	A
2412.000000	2378.000000	20.33	41.21	1193.99	P
2412.000000	2378.400000	9.33	41.21	336.51	A
2412.000000	2379.200000	20.5	41.21	1217.59	P
2412.000000	2379.600000	9.67	41.21	349.95	A
2412.000000	2381.100000	19.67	41.22	1107.9	P
2412.000000	2381.200000	9.67	41.22	350.35	A
2412.000000	2382.550000	21.17	41.22	1316.74	P
2412.000000	2382.650000	9.33	41.22	336.9	A
2412.000000	2383.850000	21	41.23	1292.71	P
2412.000000	2384.050000	9.33	41.23	337.29	A
2412.000000	2385.000000	19.83	41.23	1129.8	P
2412.000000	2385.450000	9.83	41.23	357.27	A
2412.000000	2385.900000	19.5	41.24	1088.93	P
2412.000000	2386.200000	9.67	41.24	351.16	A
2412.000000	2386.800000	9.67	41.24	351.16	A
2412.000000	2387.000000	20.5	41.24	1221.8	P
2412.000000	2388.050000	9.33	41.25	338.06	A
2412.000000	2389.000000	9.67	41.25	351.56	A
2412.000000	2389.000000	20.33	41.25	1199.5	P

NAME OF TEST: Band Edge Emissions
g0040235:2000-Apr-18 Tue 08:17:00 Snap On Antenna
Upper Band Edge

FREQUENCY TUNED, MHz	FREQUENCY EMISSION, MHz	METER, dBuV	CF, dB	uV/m @ 3m	PEAK (P) OR AVERAGE (A)
2462.000000	2483.500000	20.5	40.56	1129.8	A
2462.000000	2483.500000	9.5	40.56	318.42	P
2462.000000	2484.950000	9.33	40.57	312.61	P
2462.000000	2485.200000	21.67	40.57	1294.2	A
2462.000000	2486.400000	9.33	40.58	312.97	P
2462.000000	2486.500000	20.83	40.58	1176.25	A
2462.000000	2487.950000	21.83	40.58	1319.78	P
2462.000000	2488.100000	9.33	40.58	312.97	A
2462.000000	2489.450000	9.33	40.58	312.97	A
2462.000000	2489.600000	21	40.58	1199.5	P
2462.000000	2490.900000	9.17	40.59	307.61	A
2462.000000	2491.100000	21.67	40.59	1297.18	P
2462.000000	2492.500000	21.5	40.59	1272.04	A
2462.000000	2492.500000	9.33	40.59	313.33	P
2462.000000	2493.800000	21.67	40.6	1298.67	A
2462.000000	2494.150000	9.5	40.6	319.89	P
2462.000000	2495.550000	21	40.6	1202.26	A
2462.000000	2495.600000	9.33	40.6	313.69	P
2462.000000	2496.750000	10.17	40.6	345.54	A
2462.000000	2497.350000	23.17	40.6	1543.48	P
2462.000000	2498.500000	21	40.61	1203.65	P
2462.000000	2498.500000	9.33	40.61	314.05	A

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NAME OF TEST: Band Edge Emissions
g0040295:2000-Apr-19 Wed 12:20:00 Dipole Antenna
Upper Band Edge

FREQUENCY TUNED, MHz	FREQUENCY EMISSION, MHz	METER, dBuV	CF, dB	uV/m @ 3m	PEAK (P) OR AVERAGE (A)
2462.000000	2483.500000	20.67	41.56	1292.71	P
2462.000000	2483.500000	10	41.56	378.44	A
2462.000000	2484.400000	9.83	41.56	371.11	A
2462.000000	2484.650000	21.17	41.57	1370.88	P
2462.000000	2485.650000	21	41.57	1344.31	P
2462.000000	2485.850000	10.17	41.57	386.37	A
2462.000000	2487.050000	20.33	41.58	1245.95	P
2462.000000	2487.250000	10	41.58	379.31	A
2462.000000	2488.150000	10	41.58	379.31	A
2462.000000	2488.200000	21.5	41.58	1425.61	P
2462.000000	2489.200000	22	41.58	1510.08	P
2462.000000	2489.500000	9.83	41.58	371.96	A
2462.000000	2490.550000	20.67	41.59	1297.18	P
2462.000000	2490.950000	9.67	41.59	365.59	A
2462.000000	2491.950000	20.5	41.59	1272.04	P
2462.000000	2492.200000	9.67	41.59	365.59	A
2462.000000	2493.200000	21.83	41.59	1482.52	P
2462.000000	2493.800000	9.5	41.6	358.92	A
2462.000000	2494.500000	21.5	41.6	1428.89	P
2462.000000	2495.050000	9.5	41.6	358.92	A
2462.000000	2495.700000	21.5	41.6	1428.89	P
2462.000000	2496.450000	9.5	41.6	358.92	A
2462.000000	2497.300000	21	41.6	1348.96	P
2462.000000	2498.500000	20.17	41.61	1227.44	P
2462.000000	2498.500000	9.5	41.61	359.34	A

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NAME OF TEST: Band Edge Emissions
g0040271:2000-Apr-18 Tue 15:44:00 Yagi Antenna
Upper Band Edge

FREQUENCY TUNED, MHz	FREQUENCY EMISSION, MHz	METER, dBuV	CF, dB	uV/m @ 3m	PEAK (P) OR AVERAGE (A)
2462.000000	2483.500000	11.67	41.56	458.67	A
2462.000000	2483.500000	19.5	41.56	1129.8	P
2462.000000	2484.700000	20.5	41.57	1269.11	P
2462.000000	2484.950000	10.83	41.57	416.87	A
2462.000000	2485.850000	20.33	41.57	1244.51	P
2462.000000	2486.300000	11.17	41.58	434.01	A
2462.000000	2487.250000	20.67	41.58	1295.69	P
2462.000000	2487.800000	10.83	41.58	417.35	A
2462.000000	2488.850000	11.5	41.58	450.82	A
2462.000000	2488.900000	20.67	41.58	1295.69	P
2462.000000	2490.000000	10.83	41.59	417.83	A
2462.000000	2490.100000	20.83	41.59	1321.3	P
2462.000000	2491.100000	10.67	41.59	410.2	A
2462.000000	2491.800000	19	41.59	1070.29	P
2462.000000	2492.300000	10.17	41.59	387.26	A
2462.000000	2493.200000	19.5	41.59	1133.7	P
2462.000000	2493.600000	9.83	41.59	372.39	A
2462.000000	2494.500000	18.83	41.6	1050.75	P
2462.000000	2495.150000	9.83	41.6	372.82	A
2462.000000	2495.900000	18.5	41.6	1011.58	P
2462.000000	2497.050000	9.83	41.6	372.82	A
2462.000000	2497.200000	19.83	41.6	1178.96	P
2462.000000	2498.500000	20.67	41.61	1300.17	P
2462.000000	2498.500000	9.83	41.61	373.25	A

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NAME OF TEST: Restricted Bands of Operation

SPECIFICATION: 47 CFR 15.205

TEST EQUIPMENT: As per attached page

MEASUREMENT PROCEDORE

The EUT was set up on a three meter open field site according to the procedure on ANSI C63.4.

Sensitivity of system was measured:

Below 2 GHz:		
CISPR Bandwidths	=	8 dBµV
1 MHz RBW, 1 MHz VBW	=	12 dBµV
1 MHz RBW, 10 Hz VBW	=	3 dBµV
Above 2 GHz:		
1 MHz RBW, 1 MHz VBW	=	33 dBµV
1 MHz RBW, 10 Hz VBW	=	22 dBµV

Sensitivity of system with preamps:

Below 2 GHz:		
Preamps are not used in this range.		
Above 2 GHz:		
Peak	=	3 dBµV
Average	=	-8 dBµV

Cable Loss:

915 MHz	=	-0.8 dB
2450 MHz	=	-3 dB

Note:
dB loss vs. frequency included in programmed software.

Reference Level Offset:
set @ 1 dB, accounts for cable and connector loss.

TEST RESULTS: No harmonic or spurious emissions were detected in the restricted bands in excess of the limits of 15.205. System measurement sensitivity was -130 dBm.

SUPERVISED BY: Morton Flom, P. Eng.

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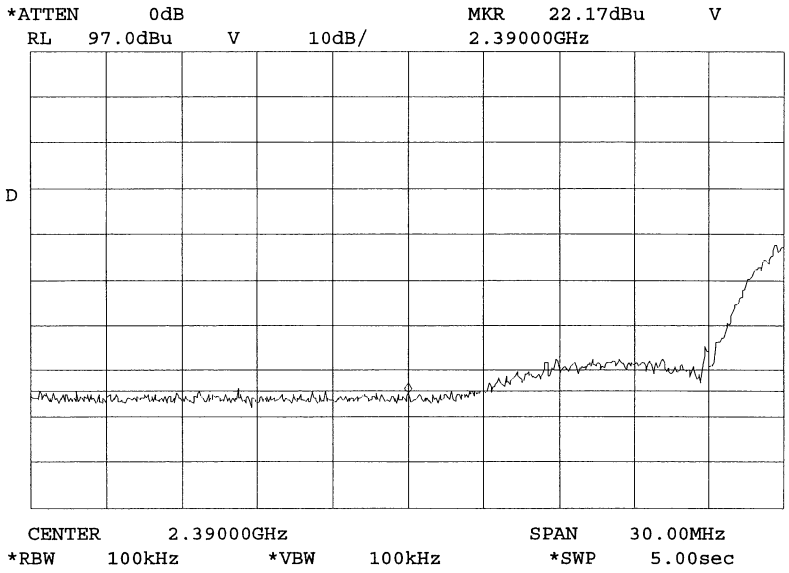
NAME OF TEST: Radiated Band Edge
g0040233: 2000-Apr-17 Mon 16:27:00
Snap On Antenna



POWER: HIGH
MODULATION: DIRECT SEQUENCE (Worst Case)
LOWER BANDEDGE FREQ. 2412/PEAK

SUPERVISED BY: Morton Flom, P. Eng.

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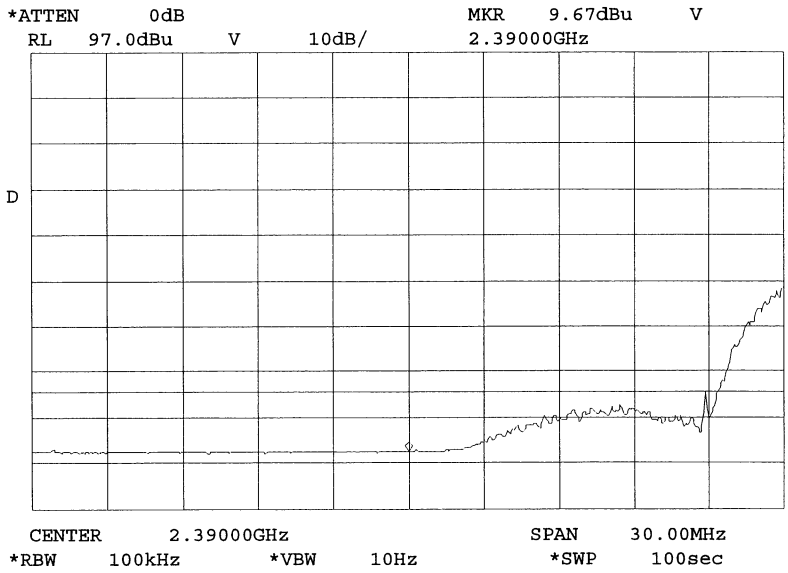
NAME OF TEST: Radiated Band Edge
g0040232: 2000-Apr-17 Mon 16:26:00
Snap On Antenna



POWER: HIGH
MODULATION: DIRECT SEQUENCE (Worst Case)
LOWER BANDEDGE FREQ. 2412/AVG

SUPERVISED BY: Morton Flom, P. Eng.

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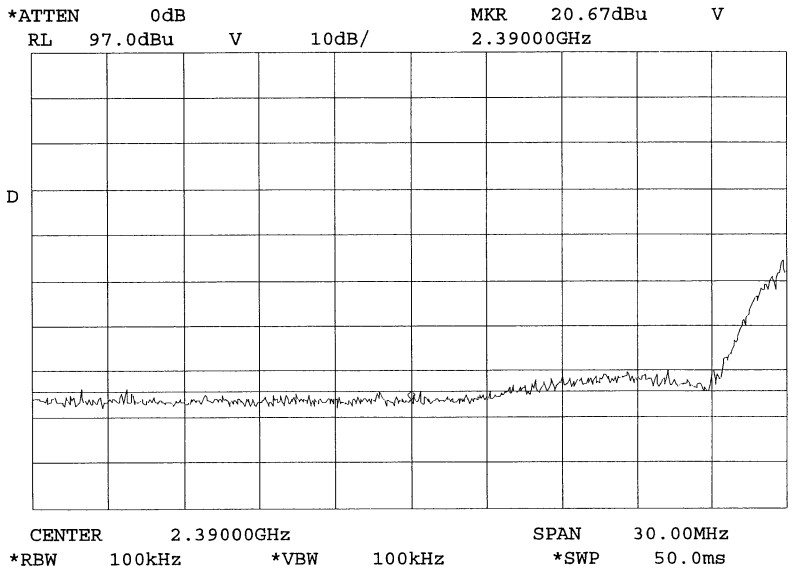
NAME OF TEST: Radiated Band Edge
g0040293: 2000-Apr-19 Wed 12:04:00
Dipole Antenna



POWER: HIGH
MODULATION: DIRECT SEQUENCE (Worst Case)
LOWER BANDEDGE FREQ. 2442/PEAK

SUPERVISED BY: Morton Flom, P. Eng.

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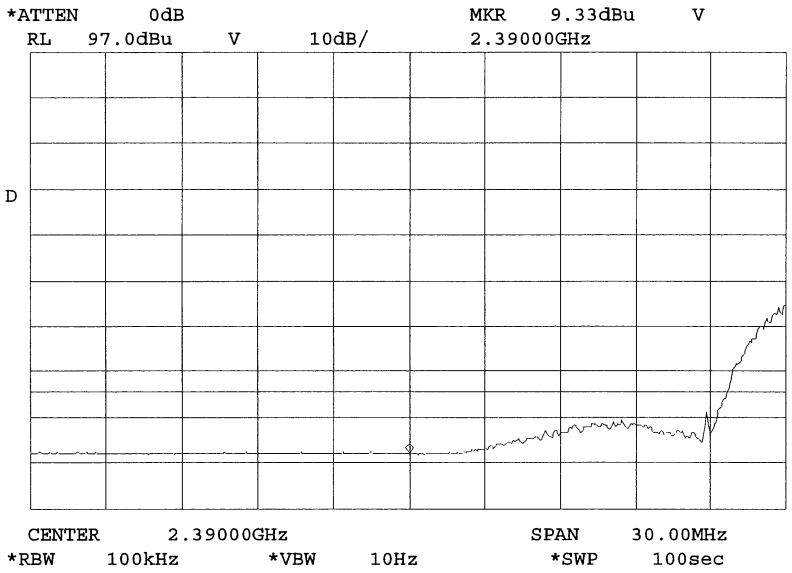
NAME OF TEST: Radiated Band Edge
g0040294: 2000-Apr-19 Wed 12:08:00
Dipole Antenna



POWER: HIGH
MODULATION: DIRECT SEQUENCE (Worst Case)
LOWER BANDEDGE FREQ. 2442/AVG

SUPERVISED BY: Morton Flom, P. Eng.

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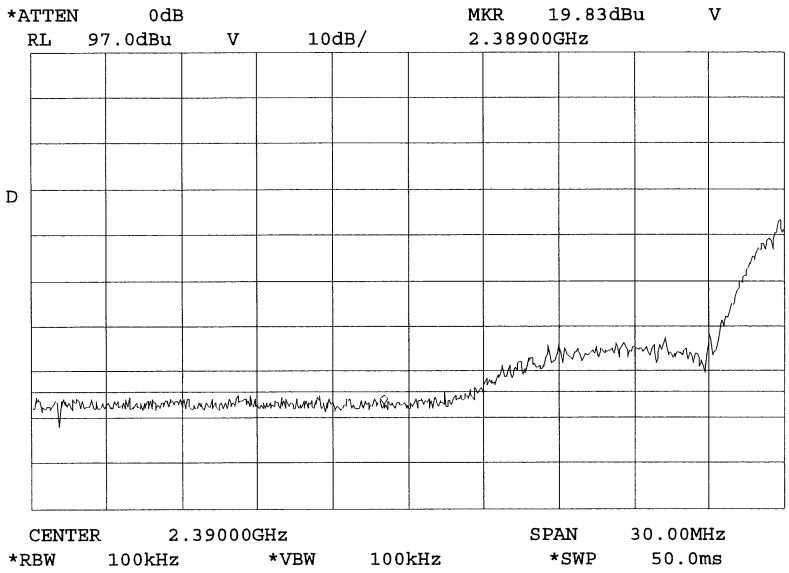
NAME OF TEST: Radiated Band Edge
g0040267: 2000-Apr-18 Tue 15:19:00
Yagi Antenna



POWER: HIGH
MODULATION: DIRECT SEQUENCE (Worst Case)
LOWER BANDEDGE FREQ. 2412/PEAK

SUPERVISED BY: Morton Flom, P. Eng.

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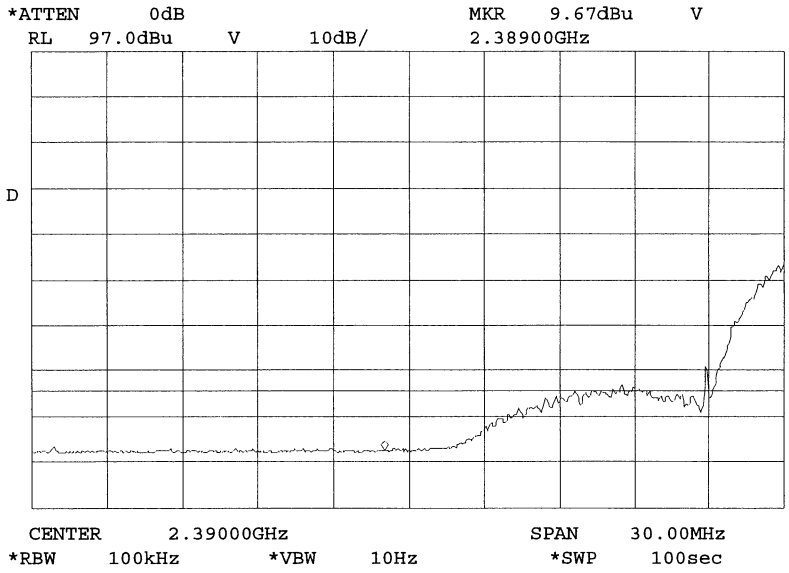
NAME OF TEST: Radiated Band Edge
g0040268: 2000-Apr-18 Tue 15:23:00
Yagi Antenna



POWER: HIGH
MODULATION: DIRECT SEQUENCE (Worst Case)
LOWER BANDEDGE FREQ. 2412/AVG

SUPERVISED BY: Morton Flom, P. Eng.

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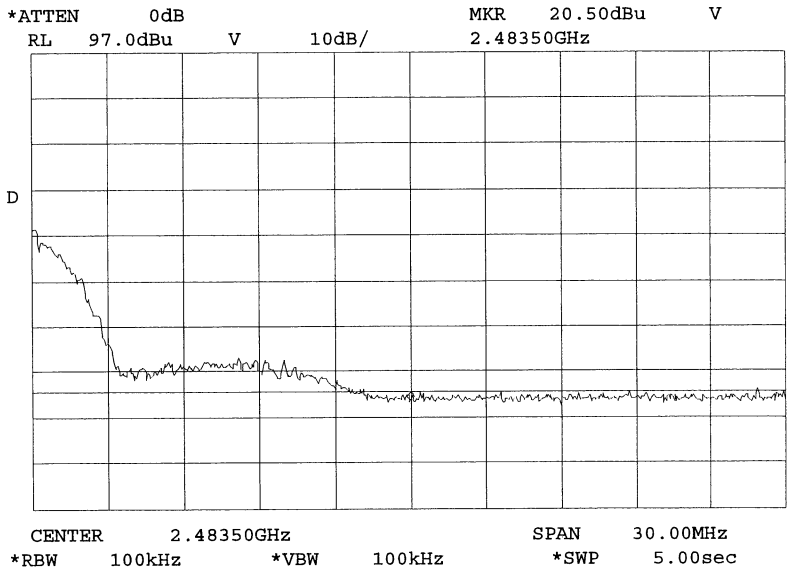
NAME OF TEST: Radiated Band Edge
g0040236: 2000-Apr-18 Tue 08:28:00
Snap On Antenna



POWER: HIGH
MODULATION: DIRECT SEQUENCE (Worst Case)
UPPER BANDEDGE FREQ. 2462/PEAK

SUPERVISED BY: Morton Flom, P. Eng.

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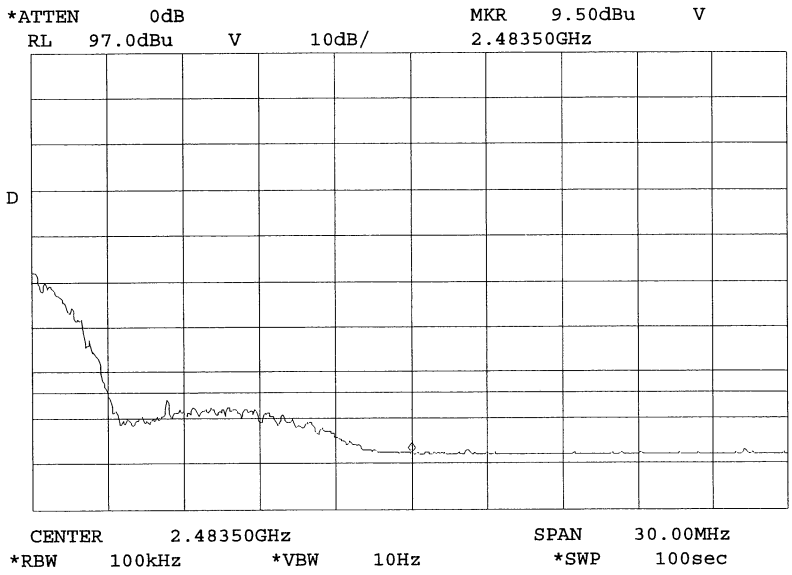
NAME OF TEST: Radiated Band Edge
g0040234: 2000-Apr-18 Tue 08:15:00
Snap On Antenna



POWER: HIGH
MODULATION: DIRECT SEQUENCE (Worst Case)
UPPER BANDEDGE FREQ. 2462/AVG

SUPERVISED BY: Morton Flom, P. Eng.

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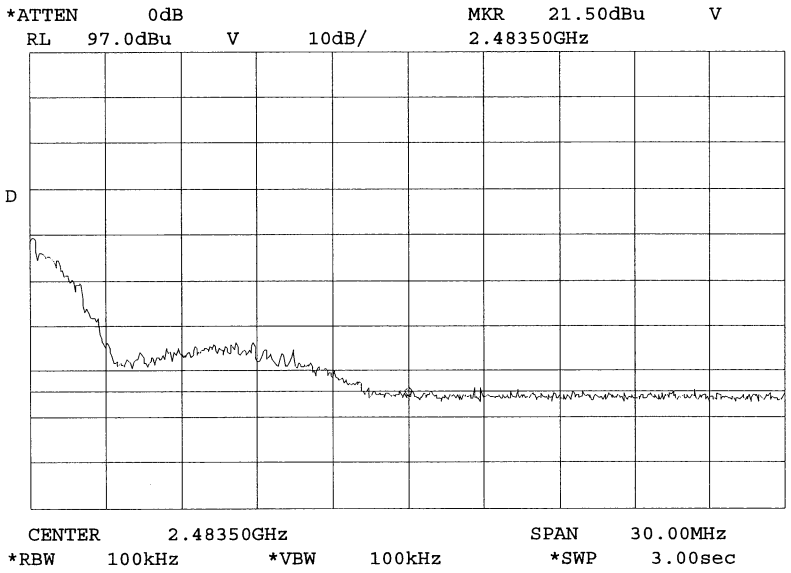
NAME OF TEST: Radiated Band Edge
g0040296: 2000-Apr-19 Wed 12:24:00
Dipole Antenna



POWER: HIGH
MODULATION: DIRECT SEQUENCE (Worst Case)
UPPER BANDEDGE FREQ. 2462/PEAK

SUPERVISED BY: Morton Flom, P. Eng.

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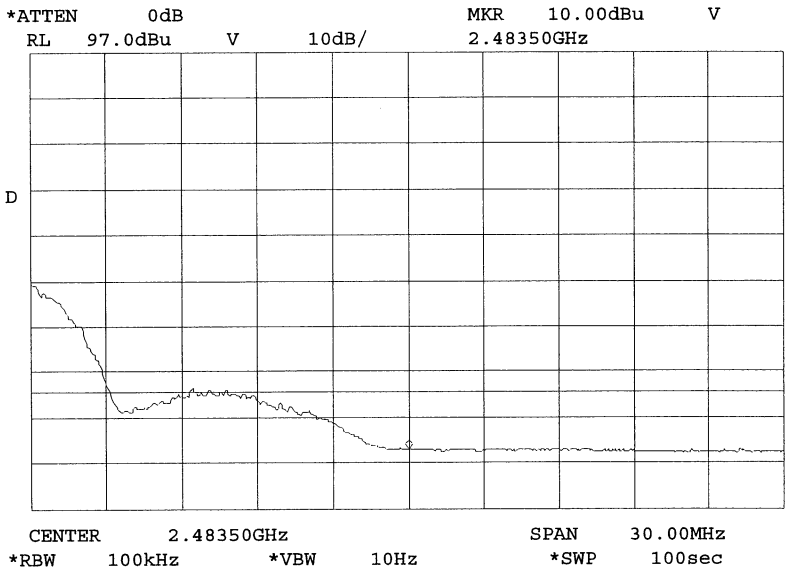
NAME OF TEST: Radiated Band Edge
g0040297: 2000-Apr-19 Wed 12:30:00
Dipole Antenna



POWER: HIGH
MODULATION: DIRECT SEQUENCE (Worst Case)
UPPER BANDEDGE FREQ. 2462/AVG

SUPERVISED BY: Morton Flom, P. Eng.

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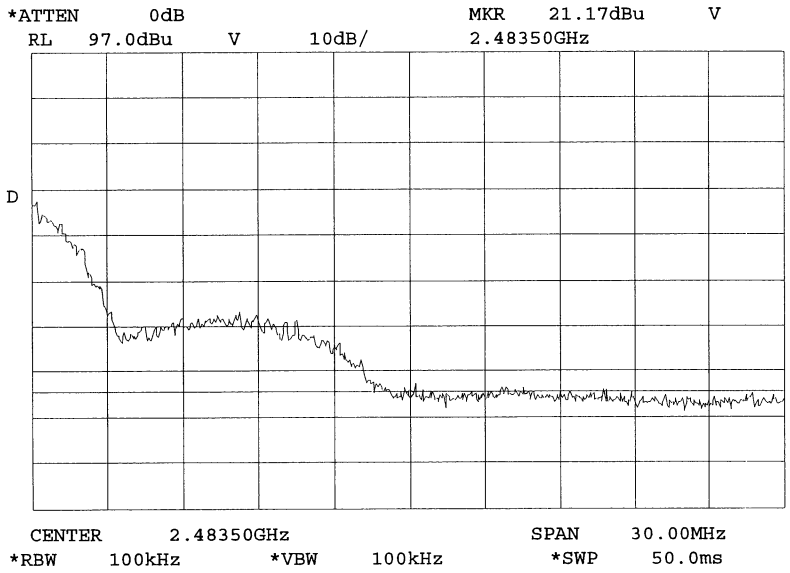
NAME OF TEST: Radiated Band Edge
g0040269: 2000-Apr-18 Tue 15:40:00
Yagi Antenna



POWER: HIGH
MODULATION: DIRECT SEQUENCE (Worst Case)
UPPER BANDEDGE FREQ. 2462/PEAK

SUPERVISED BY: Morton Flom, P. Eng.

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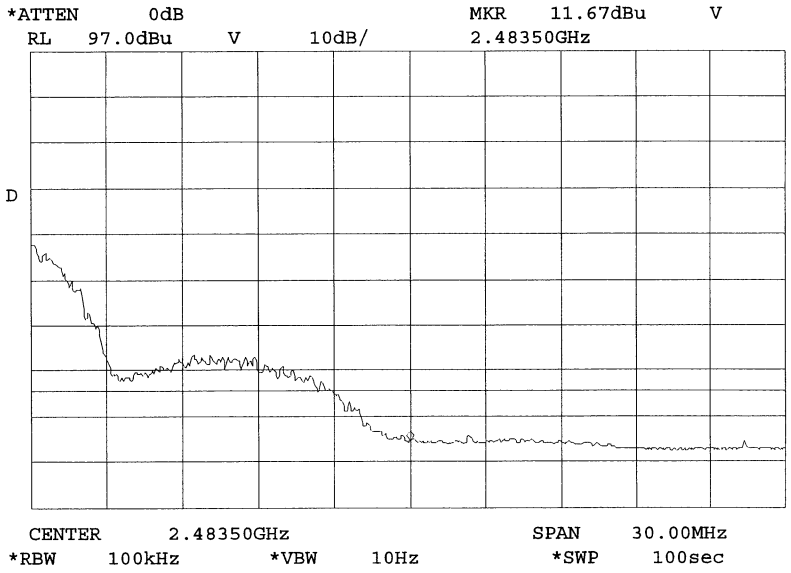
NAME OF TEST: Radiated Band Edge
g0040270: 2000-Apr-18 Tue 15:44:00
Yagi Antenna



POWER: HIGH
MODULATION: DIRECT SEQUENCE (Worst Case)
UPPER BANDEDGE FREQ. 2462/AVG

SUPERVISED BY: Morton Flom, P. Eng.

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NAME OF TEST: Allowed Occupied Bandwidth

SPECIFICATION: 47 CFR 15.247(a)(2)

TEST EQUIPMENT: As per attached page

LIMITS

RULE	TYPE	BANDS (MHz)	LIMIT (kHz)
15.247(a)(1)(i)	F.H.	902-928	20 dB BW ≤ 500
15.247(a)(1)(ii)	F.H.	2400-2483.5, 5725-5850	20 dB BW ≤ 1000
15.247(a)(2)	D.S.	ALL	6 dB BW ≥ 500

MEASUREMENT DATA

RESULTS = ATTACHED

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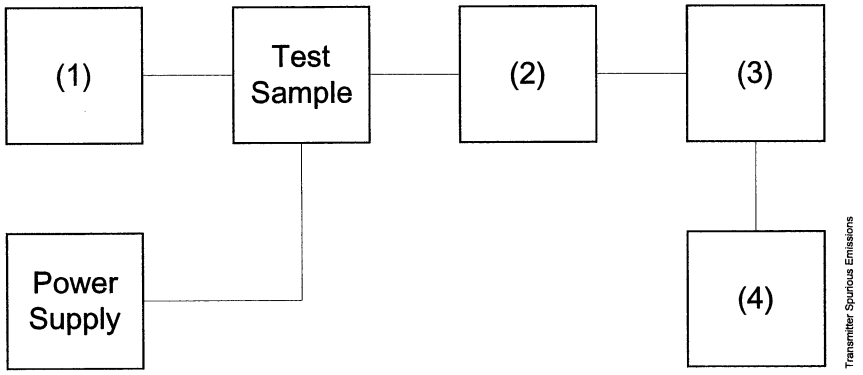
TRANSMITTER SPURIOUS EMISSION

TEST A. OCCUPIED BANDWIDTH (IN-BAND SPURIOUS)
TEST B. OUT-OF-BAND SPURIOUS



Asset	Description (as applicable)	s/n
(1)	AUDIO OSCILLATOR/GENERATOR	
i00010	HP 204D	1105A04683
i00017	HP 8903A	2216A01753
i00012	HP 3312A	1432A11250
(2)	COAXIAL ATTENUATOR	
i00122	Narda 766-10	7802
i00123	Narda 766-10	7802A
i00069	Bird 8329 (30 dB)	1006
i00113	Sierra 661A-3D	1059
(3)	FILTERS; NOTCH, HP, LP, BP	
i00126	Eagle TNF-1	100-250
i00125	Eagle TNF-1	50-60
i00124	Eagle TNF-1	250-850
(4)	SPECTRUM ANALYZER	
i00048	HP 8566B	2511A01467
i00029	HP 8563E	3213A00104

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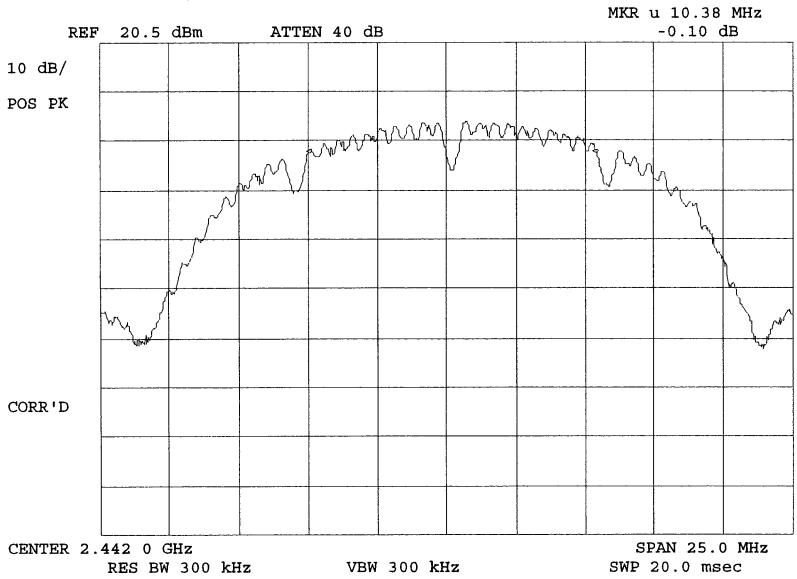
NAME OF TEST: Emission Masks (Occupied Bandwidth)
g0040278: 2000-Apr-21 Fri 09:20:00
STATE: 2:High Power



POWER: HIGH
MODULATION: 1 MB/SEC PSEUDO RANDOM DATA
15.247(a)(2) 6 DB BANDWIDTH

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MFA p0040008, d0050047

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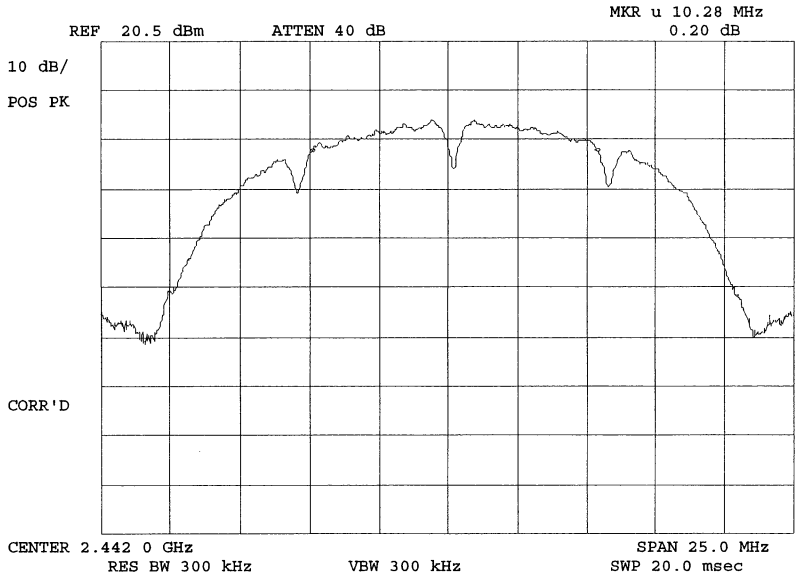
NAME OF TEST: Emission Masks (Occupied Bandwidth)
g0040279: 2000-Apr-21 Fri 09:21:00
STATE: 2:High Power



POWER: HIGH
MODULATION: 2 MB/SEC PSEUDO RANDOM DATA
15.247(a)(2) 6 DB BANDWIDTH

SUPERVISED BY: Morton Flom, P. Eng.

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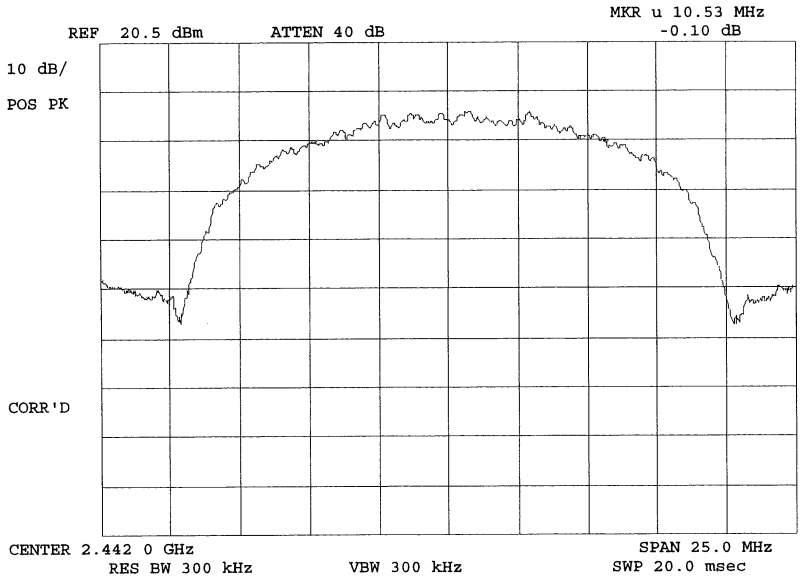
NAME OF TEST: Emission Masks (Occupied Bandwidth)
g0040280: 2000-Apr-21 Fri 09:23:00
STATE: 2:High Power



POWER: HIGH
MODULATION: 5.5 MB/SEC PSEUDO RANDOM DATA
15.247(a)(2) 6 DB BANDWIDTH

SUPERVISED BY: Morton Flom, P. Eng.

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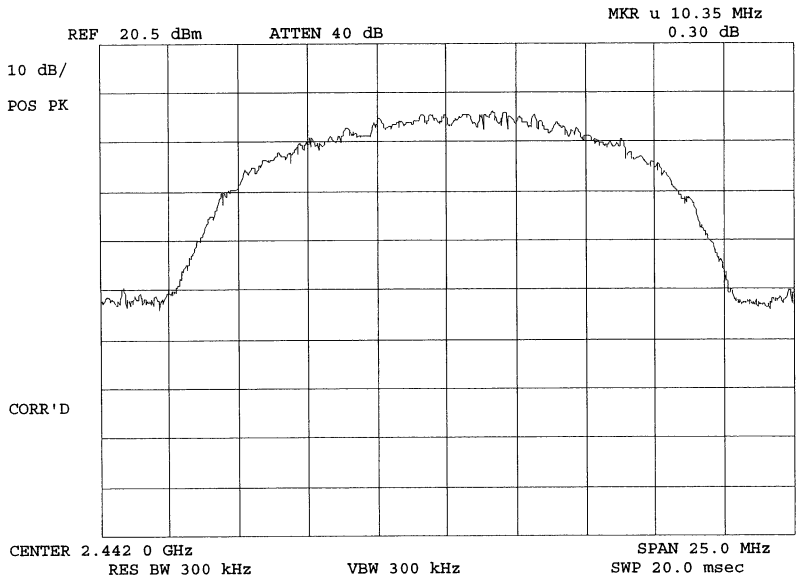
NAME OF TEST: Emission Masks (Occupied Bandwidth)
g0040281: 2000-Apr-21 Fri 09:24:00
STATE: 2:High Power



POWER: HIGH
MODULATION: 11 MB/SEC PSEUDO RANDOM DATA
15.247(a)(2) 6 DB BANDWIDTH

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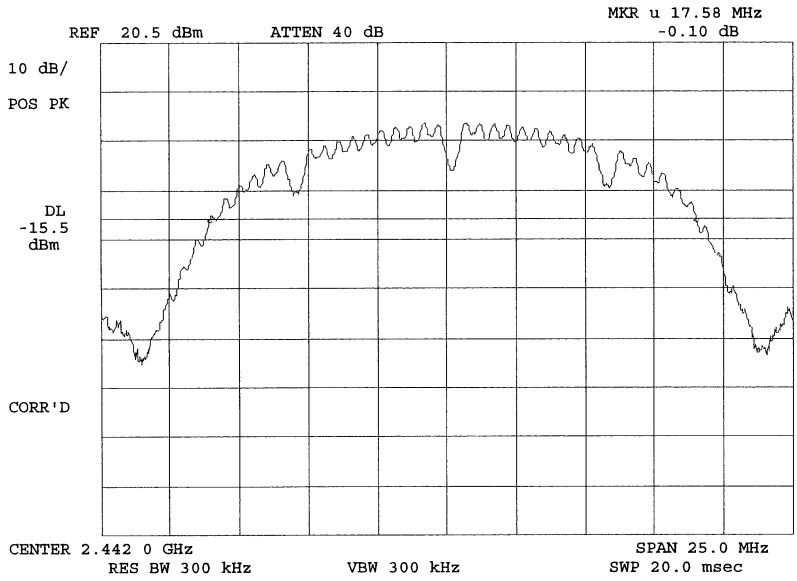
NAME OF TEST: Emission Masks (Occupied Bandwidth)
g0040277: 2000-Apr-21 Fri 09:08:00
STATE: 2:High Power



POWER: HIGH
MODULATION: 1 MB/SEC PSEUDO RANDOM DATA
15.247(a)(1)(I) 20 DB
BANDWIDTH

SUPERVISED BY: Morton Flom, P. Eng.

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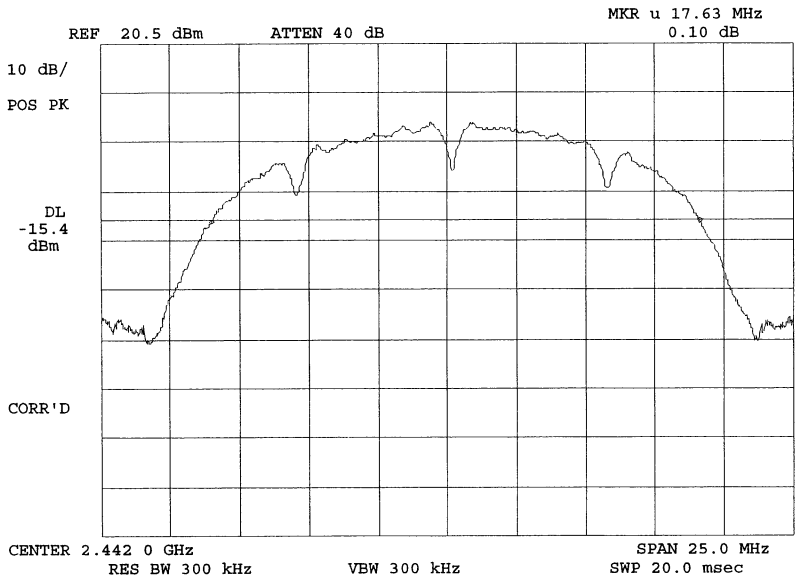
NAME OF TEST: Emission Masks (Occupied Bandwidth)
g0040276: 2000-Apr-21 Fri 09:06:00
STATE: 2:High Power



POWER: HIGH
MODULATION: 2 MB/SEC PSEUDO RANDOM DATA
15.247(a)(1)(i) 20 DB BANDWIDTH

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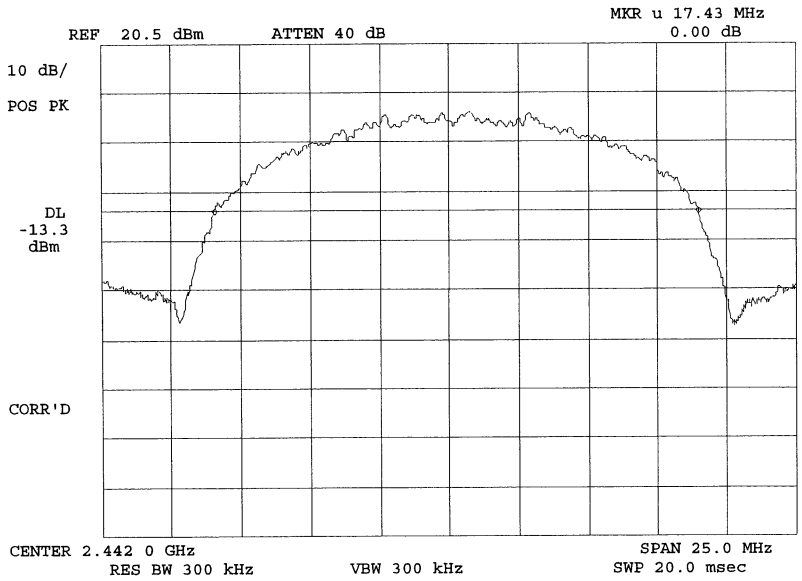
NAME OF TEST: Emission Masks (Occupied Bandwidth)
g0040275: 2000-Apr-21 Fri 09:04:00
STATE: 2:High Power



POWER: HIGH
MODULATION: 5.5 MB/SEC PSEUDO RANDOM DATA
15.247(a)(1)(i) 20 DB BANDWIDTH

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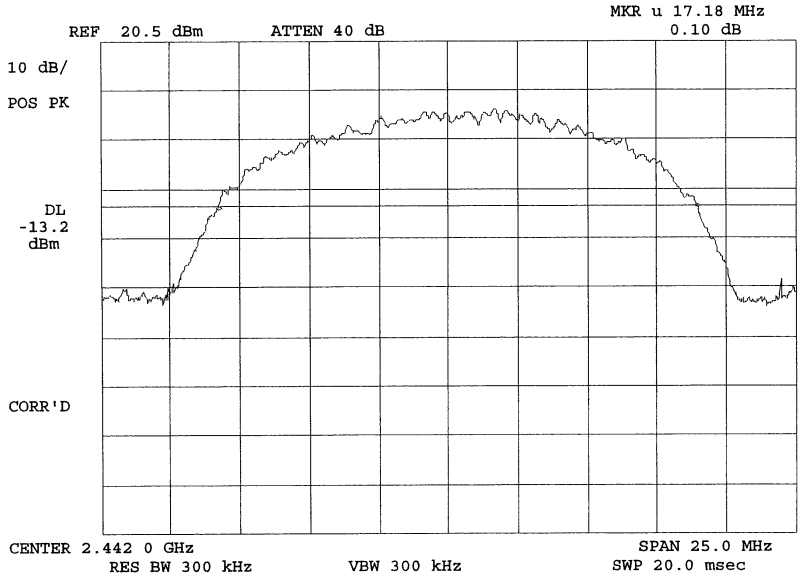
NAME OF TEST: Emission Masks (Occupied Bandwidth)
g0040274: 2000-Apr-21 Fri 09:02:00
STATE: 2:High Power



POWER: HIGH
MODULATION: 11 MB/SEC PSEUDO RANDOM DATA
15.247(a)(1)(i) 20 DB BANDWIDTH

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NAME OF TEST: Spread Spectrum Technology
Direct Sequence Systems

15.247(a)(2) Minimum 6 dB Bandwidth
RESULTS: Please see results for "Allowed Occupied Bandwidth"

15.247(d) Transmitter Power Density
LIMIT: The transmitter power density peak over any 1 second interval shall not be greater that 8 dBm in any 3 kHz Bandwidth within these bands.
RESULTS: Please see attached plots.
Transmitter Power Density, dBm = Attached

15.247(e) Processing Gain
LIMIT: The processing gain shall be ≥ 10 dB
RESULTS: See Applicant's statement
Processing Gain, dB = Attached

Psuedorandom Sequence Description
RESULTS: Not Applicable to Direct Sequence Systems

Chip Rate
RESULTS: See Applicant's statement

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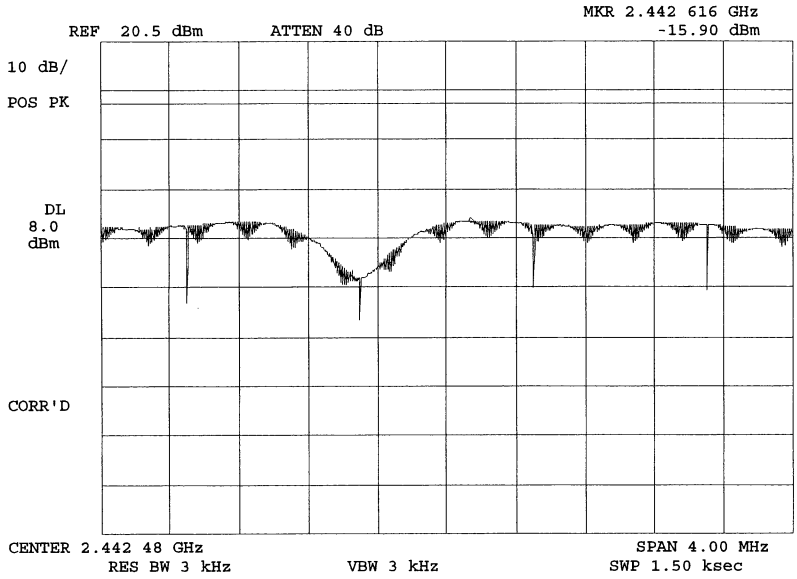
NAME OF TEST: Spectral Power Density
g0040287: 2000-Apr-21 Fri 10:42:00
Yagi Antenna



POWER: HIGH
MODULATION: 1 MB/SEC PSEUDO RANDOM DATA
15.247(D) SPECTRAL POWER DENSITY

SUPERVISED BY: Morton Flom, P. Eng.

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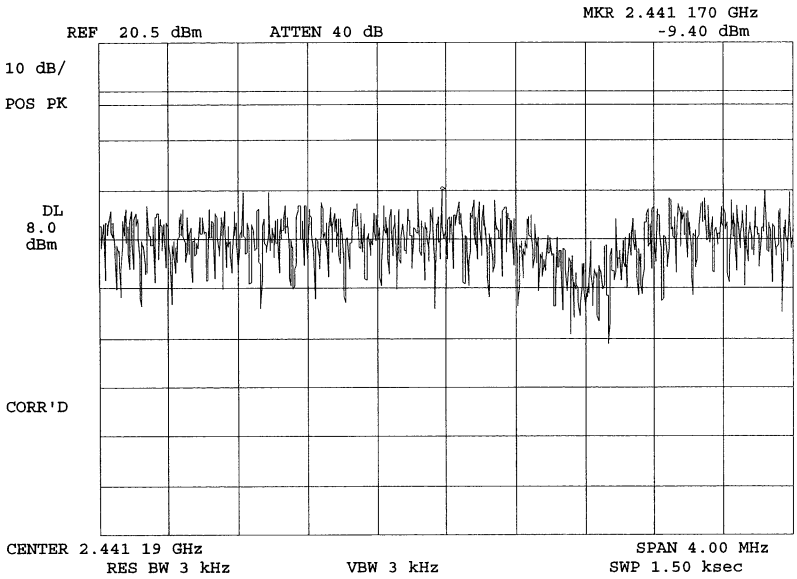
NAME OF TEST: Spectral Power Density
g0040288: 2000-Apr-21 Fri 11:11:00
Yagi Antenna



POWER: HIGH
MODULATION: 2 MB/SEC PSEUDO RANDOM DATA
15.247(D) SPECTRAL POWER DENSITY

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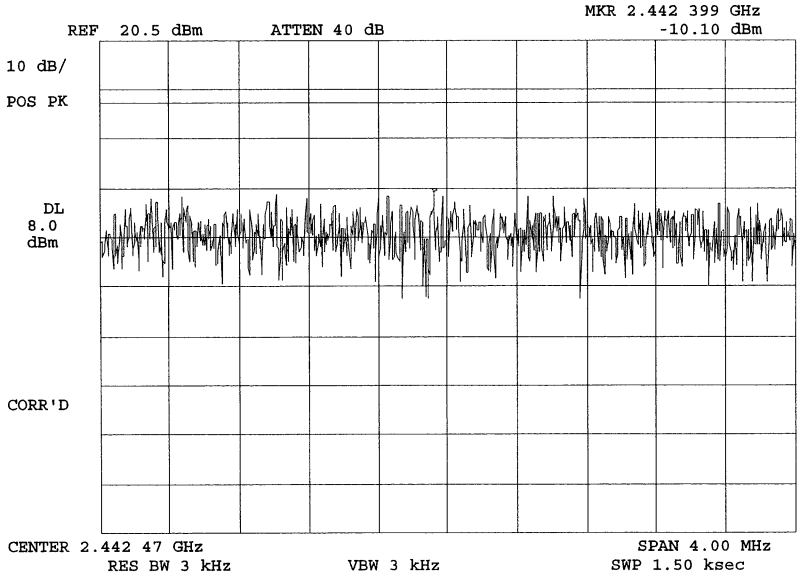
NAME OF TEST: Spectral Power Density
g0040289: 2000-Apr-21 Fri 11:44:00
Yagi Antenna



POWER: HIGH
MODULATION: 5.5 MB/SEC PSEUDO RANDOM DATA
15.247(D) SPECTRAL POWER DENSITY

SUPERVISED BY: Morton Flom, P. Eng.

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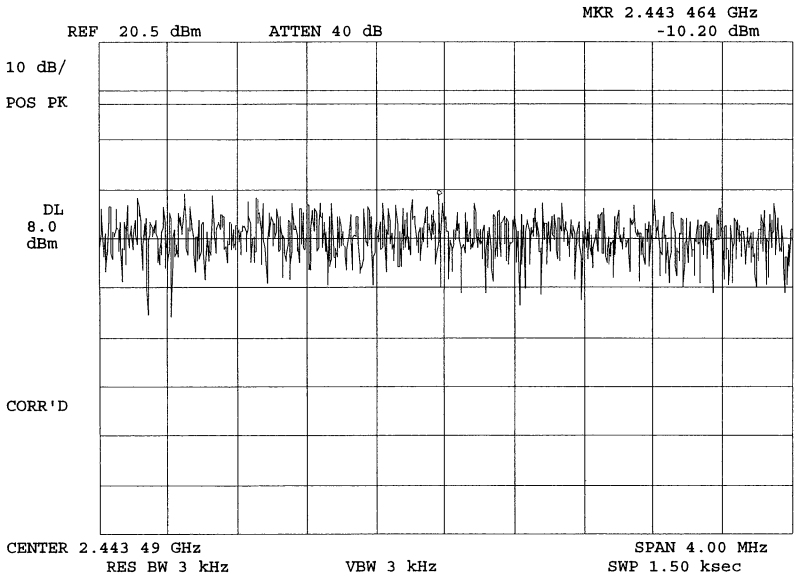
NAME OF TEST: Spectral Power Density
g0040290: 2000-Apr-21 Fri 12:23:00
Yagi Antenna



POWER: HIGH
MODULATION: 11 MB/SEC PSEUDO RANDOM DATA
15.247(D) SPECTRAL POWER DENSITY

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RADIATED MEASUREMENTS
FOR PART 15 TRANSMITTERS (INTENTIONAL RADIATORS)

Radiated Measurements

RANGE OF MEASUREMENT	SPECIFICATION	RESOLUTION B/W	VIDEO B/A
30 to 1000 MHz	CISPR	≥100 kHz	≥100 kHz
>1000 MHz	FCC, 15.37(b)	1 MHz	≥1 MHz
(if averaging)	FCC, 15.37(b)	1 MHz	10 Hz

Measuring Equipment

a. ANTENNAS:

EMCO 3109	20 - 300 MHz
APREL AALP2001	200 - 1000 MHz
APREL AAB20200	20 - 200 MHz
APREL AAH118	1 - 18 GHz

b. INSTRUMENTS:

HP8566B	Spectrum Analyzer
HP85685A	Preselector, w/ preamp below 2 GHz
HP85650A	Quasi Peak Adapter
HP8449	Preamp, above 2 GHz
HP8563E	Spectrum Analyzer, above 2 GHz

All test instrumentation is calibrated every January and every July. In addition, all test instrumentation is calibrated daily, or as required by the manufacturer. A Calibration Agreement is maintained with Hewlett Packard.

Occupied Bandwidth

Occupied Bandwidth is measured as a radiated signal without attenuators and/or filter. RBW, VBW and scan settings as shown were set to produce a meaningful result in accordance with ANSI C63.4, Section 13.1.7.

Part 15.21, Information to User

The users manual or instruction manual for an intentional or unintentional radiator shall caution the user that changes or modifications not expressly avoided by the party responsible for compliance could void the user's authority to operate the equipment.

§ 15.205 Restricted Bands of Operation

(a) Except as shown in paragraph (b) of this section, only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.25
0.495-0.505	16.69475-16.69625	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4
6.31175-6.31225	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2655-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-339.4	3600-4400	(2)
13.36-13.41			

Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz. Above 38.6

TESTIMONIAL AND STATEMENT OF CERTIFICATION

THIS IS TO CERTIFY THAT:

1. THAT the application was prepared either by, or under the direct supervision of, the undersigned.

2. THAT the technical data supplied with the application was taken under my direction and supervision.

3. THAT the data was obtained on representative units, randomly selected.

4. THAT, to the best of my knowledge and belief, the facts set forth in the application and accompanying technical data are true and correct.

CERTIFYING ENGINEER: Morton Flom, P. Eng.