Exhibit 8: Test Report II
(Continuation of Test Report I)

Table Of Contents

7.7 Conducted Spurious Emissions

7.6.1 Controlling FCC Regulation - § 15.247(c)

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. Attenuation below the general limits specified in Section 15.209(a) is not required.

7.6.2 Test Procedure

The following Test Procedures / Measurement Standards were followed:

- Direct Connection
  The EUT's antenna port was connected directly to the input of a Rohde & Swartz EMI analyzer via a short Cable. The EUT has two antenna ports labeled Port 0 and Port 1. Each port was tested.

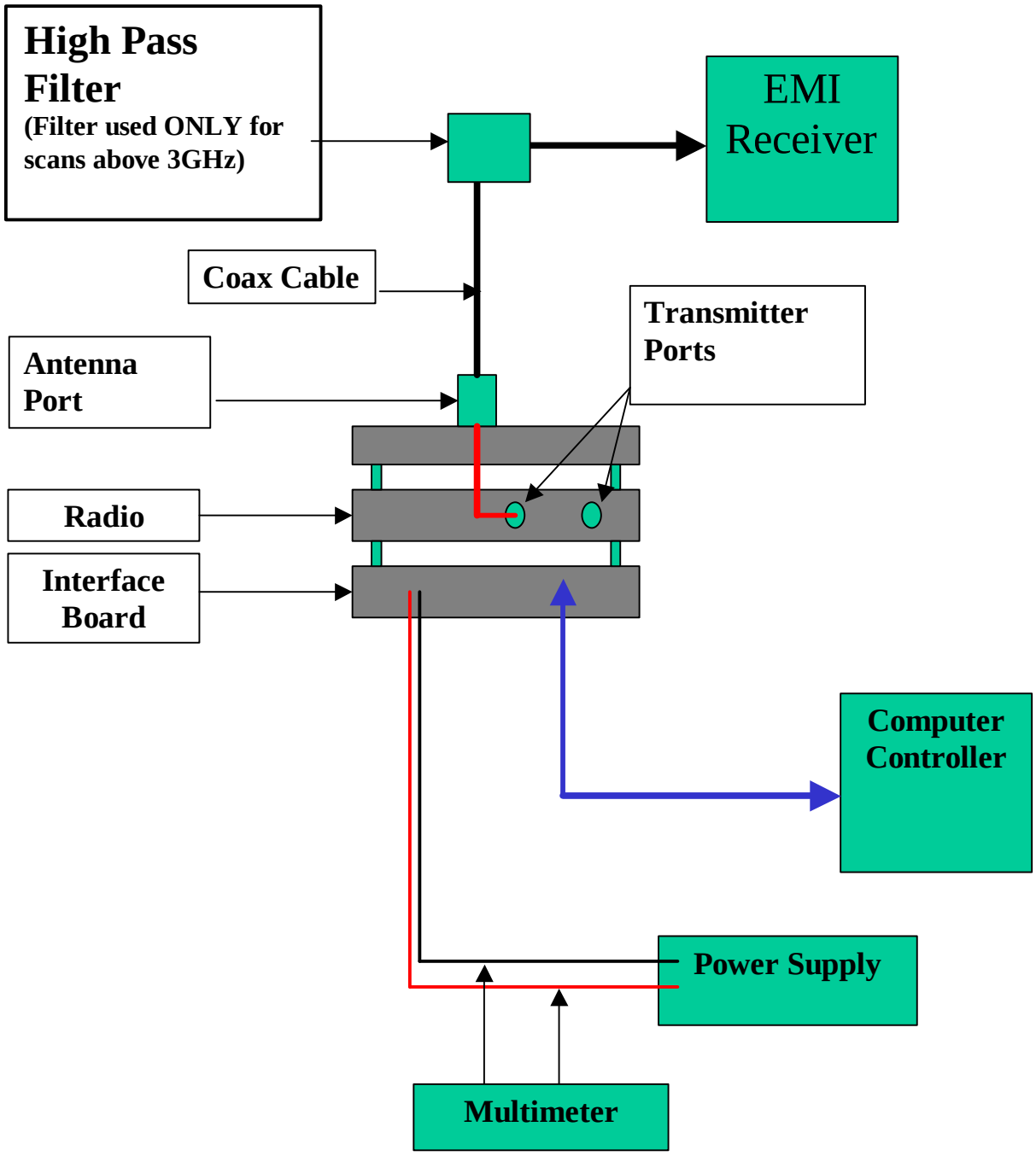
- Hopping Turned Off - **§ 15.31(c)**
  For swept frequency equipment, measurements shall be made with the frequency sweep stopped at those frequencies chosen for the measurements to be reported.

- Number of Test Frequency - **§ 15.31(m)**
  Measurements at three different frequencies are required on intentional radiators or receivers, other than TV broadcast receivers, that have a frequency range of operation of more than 10 MHz: (1) one near the top, (2) one near the middle, (3) one near the bottom.

  The EUT in this report transmits over a frequency range of approximately 80 MHz (2.4005 GHz to 2.4820 GHz). **Consequently, the output power will be measured at the following frequencies: (1) 2.482 GHz, (2) 2.4405 GHz, (3) 2.4005 GHz.**

- There is a danger that the strong carrier signal will overload the receiver front end causing harmonic distortion resulting in inaccurate data. To prevent harmonic distortion, a high pass filter was placed between the EUT antenna terminal and the receiver. The high pass filter is manufactured by Trilithic (M/N: 4HC3500/5000-1-KK). **Please note that the Trilihic Filter was only used for measurements made above 3GHz.**

7.6.3 Test Setup Block Diagram



7.6.4 TEST RESULTS – Conducted Spurious Emissions

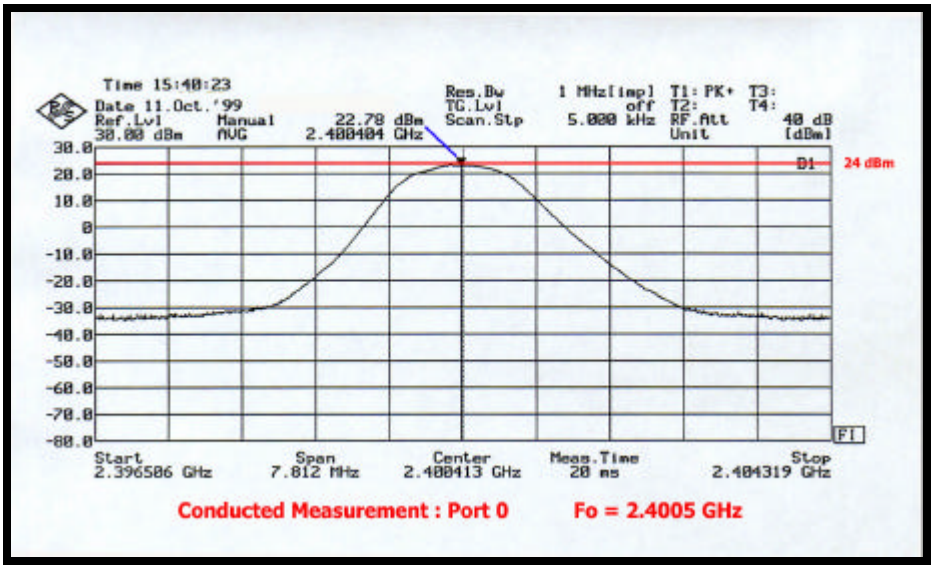
Test Date : October 11, 1999
Equipment Under Test: OverAir Solutions OS2400
Manufacturer: Locus Incorporated

PORT 0 – Fo = 2.4005 GHz (Low End)

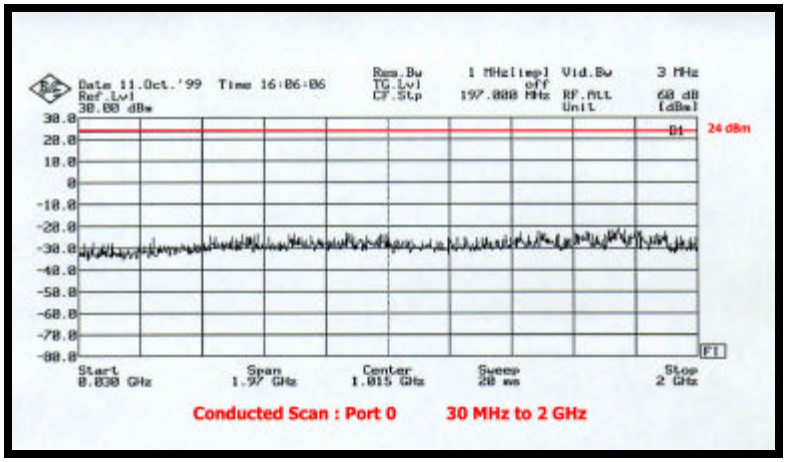
	Frequency (GHz)	Measured Reading (dBµV)	Corrected Reading (dB)	FCC Limit (dB)	Margin (Limit – Reading) (dB)
F_0	2.401	129.8	130.3	131.0	----------
2	4.802	55.9	57.4	110.3	53.8
3	7.203	59.6	61.2	110.3	49.0
4	9.604	69.1	71.0	110.3	39.3
5	12.005	44.3	46.6	110.3	63.7
6	14.406	32.7	35.5	110.3	74.8
7	16.807	47.9	51.9	110.3	58.3
8	19.208	-----	-----	-----	-----
9	21.609	-----	-----	-----	-----
10	24.010	-----	-----	-----	-----

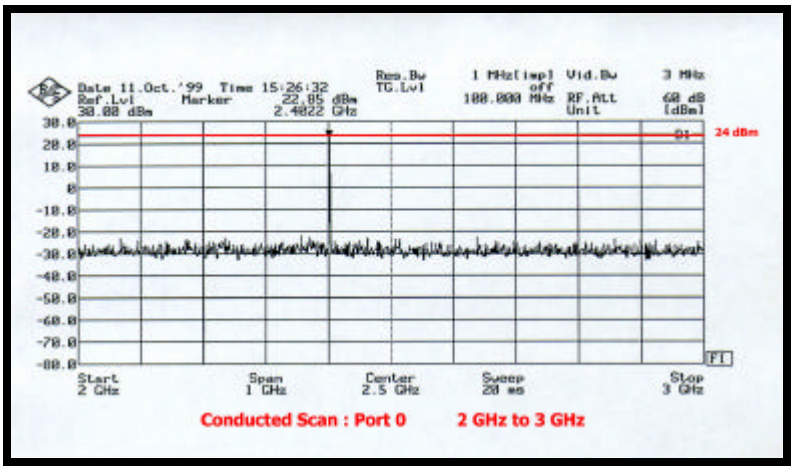
Calculations

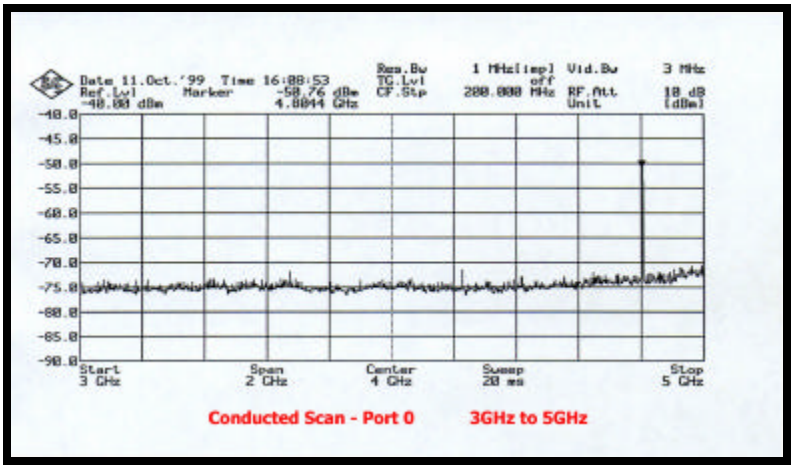
- FCC Limit = (Fo corrected reading) – 20dB;
- Corrected Reading = (Measured Reading) + (Filter Loss) + (Cable Loss);
- Margin = (FCC Limit) – (Corrected Reading);

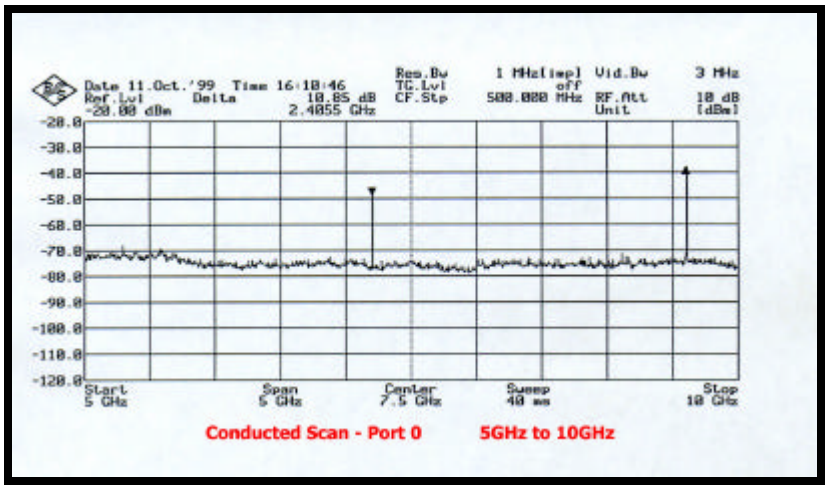


Test Data : Port 0; Fo = 2.4005 GHz

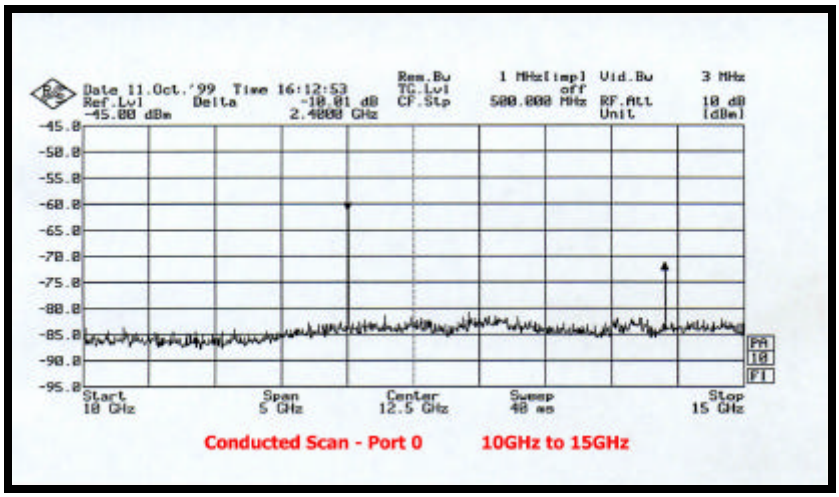




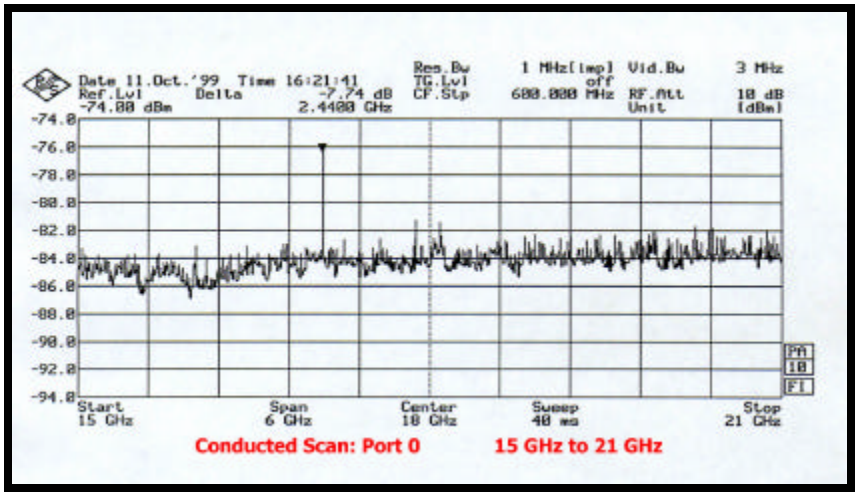




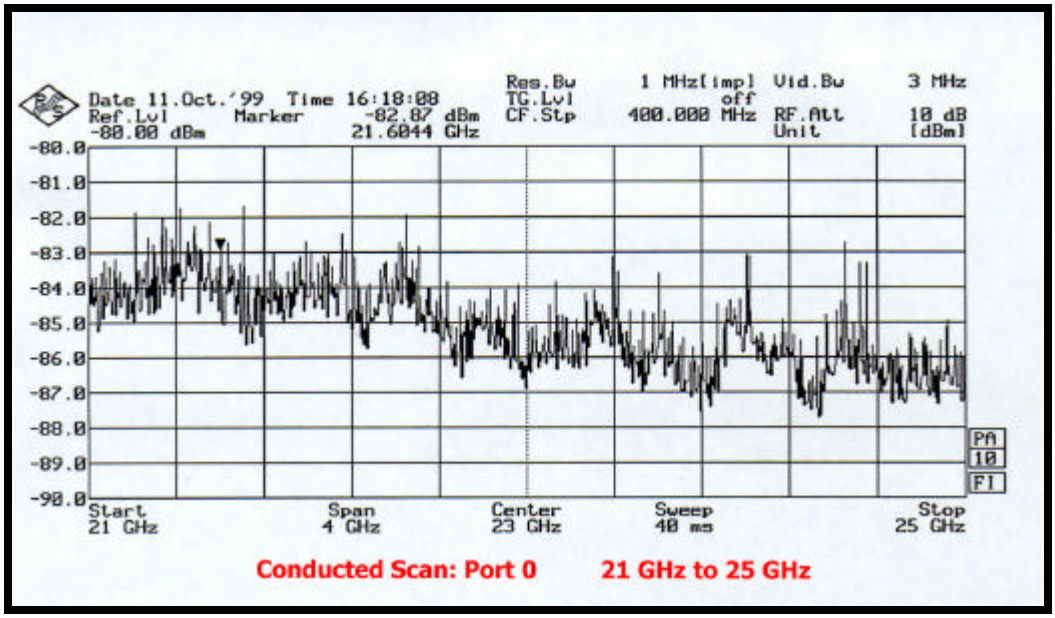
Conducted Scan - Port 0 5GHz to 10GHz



Conducted Scan - Port 0 10GHz to 15GHz



Conducted Scan: Port 0 15 GHz to 21 GHz

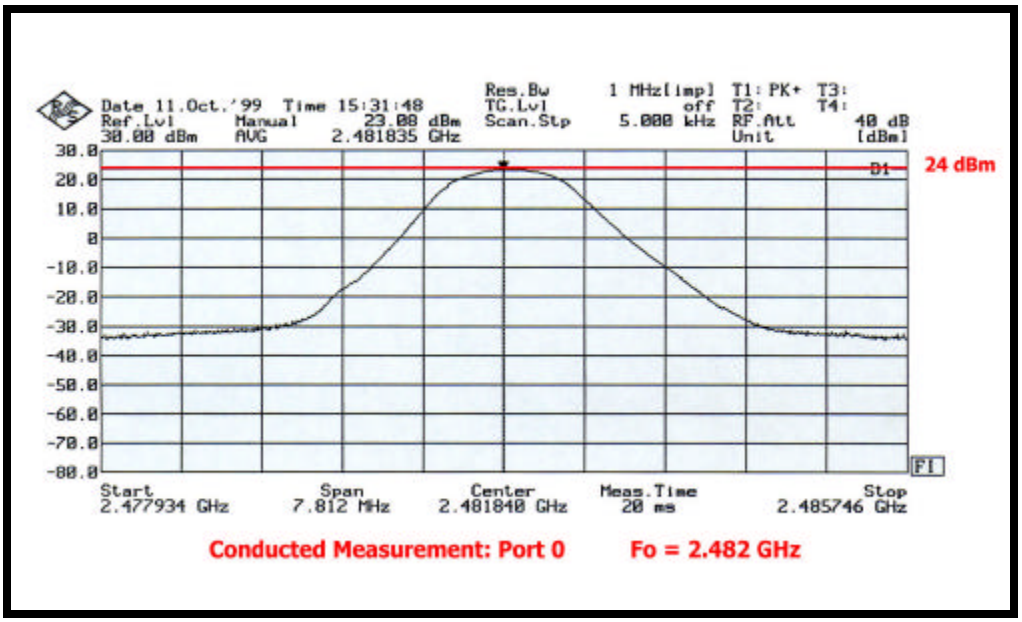

Date 11.Oct.'99 Time 16:18:08
Ref.Lvl
-80.00 dBm
Marker
-82.87 dBm
21.6044 GHz
Res.Bw
TG.Lvl
CF.Stp
1 MHz[imp]
off
400.000 MHz
Vid.Bw
3 MHz
RF.Att
Unit
10 dB
[dBm]
-80.0
-81.0
-82.0
-83.0
-84.0
-85.0
-86.0
-87.0
-88.0
-89.0
-90.0
PA
10
FI
Start
21 GHz
Span
4 GHz
Center
23 GHz
Sweep
40 ms
Stop
25 GHz
Conducted Scan: Port 0
21 GHz to 25 GHz

PORT 0 – Fo = 2.4405 GHz (Mid Band)

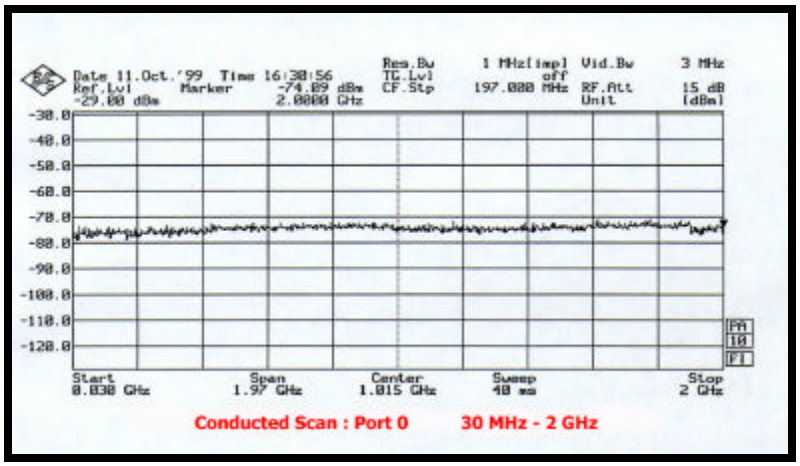
	Frequency (GHz)	Measured Reading (dBµV)	Corrected Reading (dB)	FCC Limit (dB)	Margin (Limit – Reading) (dB)
F_0	2.441	130.1	130.6	131.0	N/A
2	4.882	52.0	53.5	110.6	57.1
3	7.323	61.3	62.9	110.6	47.7
4	9.764	62.3	64.2	110.6	46.4
5	12.205	35.9	38.2	110.6	72.4
6	14.646	33.4	36.2	110.6	74.4
7	17.087	24.8	28.8	110.6	81.8
8	19.528	-----	-----	-----	-----
9	21.969	-----	-----	-----	-----
10	24.410	-----	-----	-----	-----

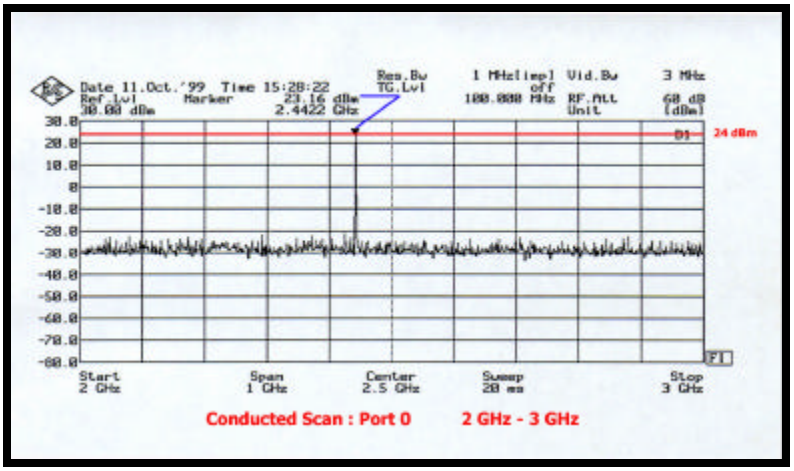
Calculations

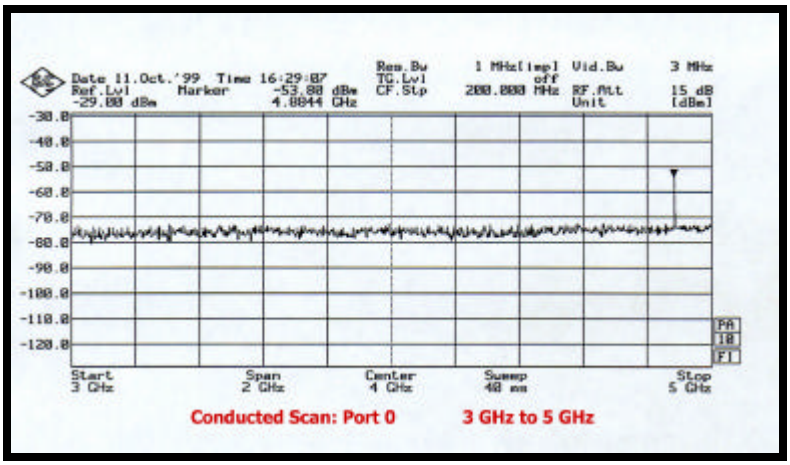
- FCC Limit = (Fo corrected reading) – 20dB;
- Corrected Reading = (Measured Reading) + (Filter Loss) + (Cable Loss);
- Margin = (FCC Limit) – (Corrected Reading);

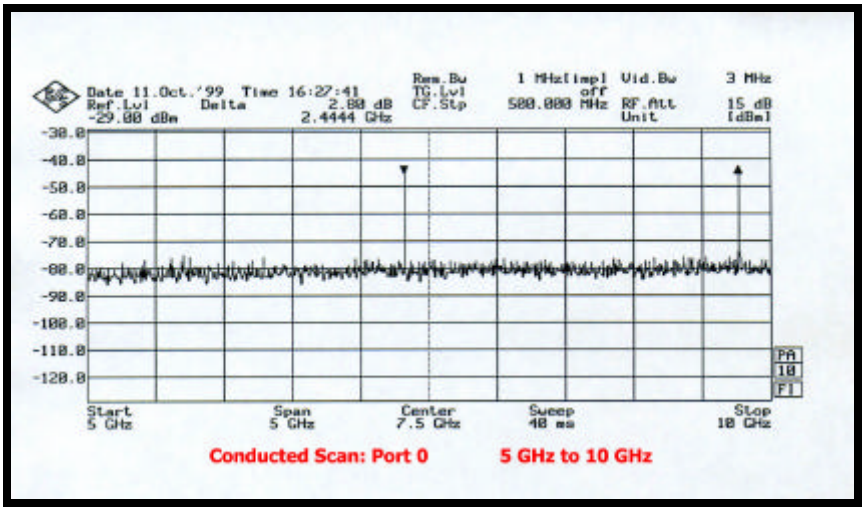


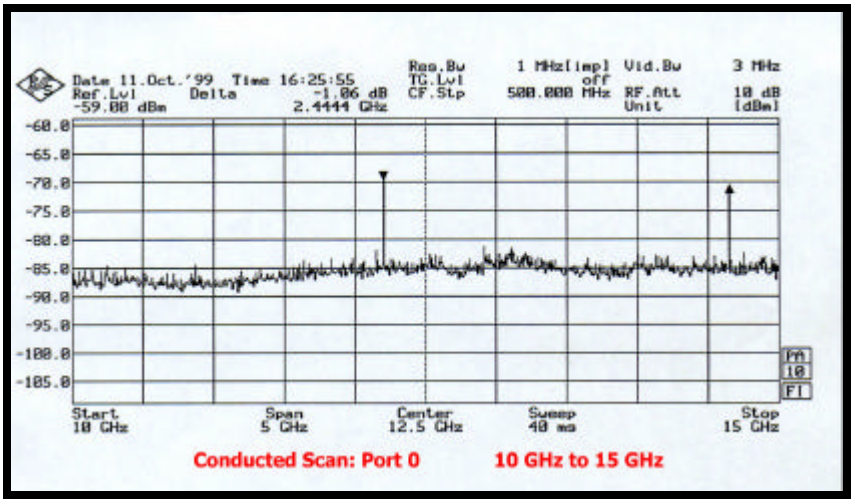
Test Data : Port 0; Fo = 2.4405 GHz

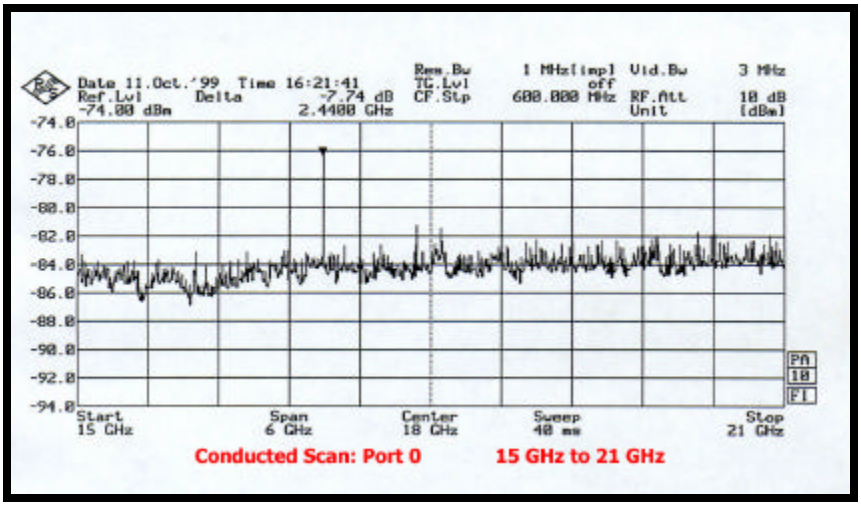


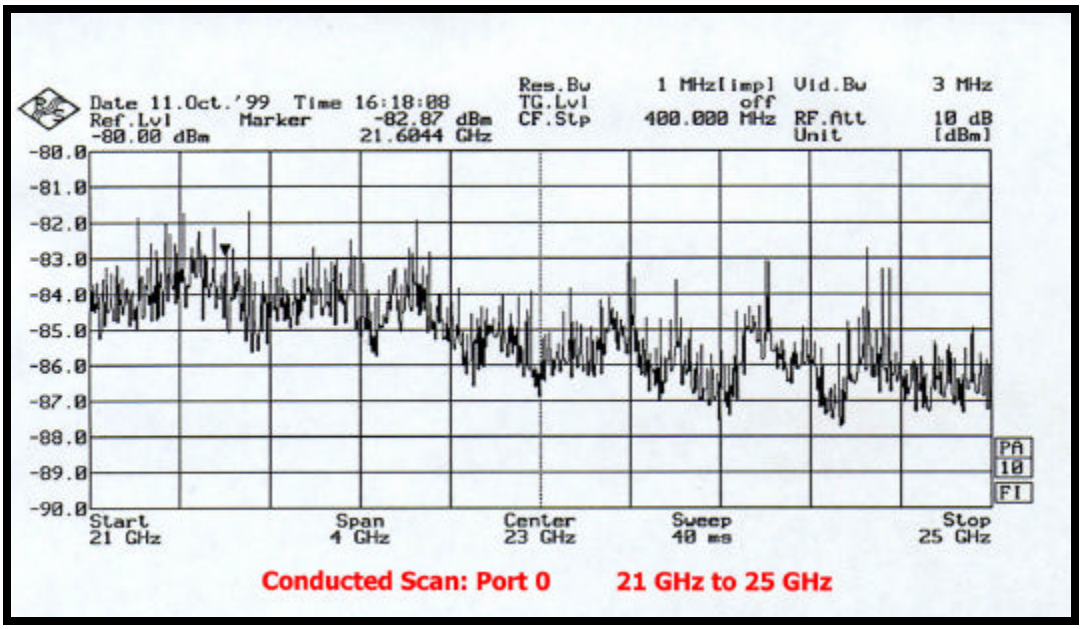





Date 11.Oct.'99 Time 16:27:41
Ref.Lvl -29.00 dBm
Delta 2.80 dB 2.4444 GHz
Res.Bw 1 MHz[imp]
TG.Lvl off
CF.Stp 500.000 MHz
Vid.Bw 3 MHz
RF.Att 15 dB
Unit [dBm]
-30.0
-40.0
-50.0
-60.0
-70.0
-80.0
-90.0
-100.0
-110.0
-120.0
PA
10
FI
Start 5 GHz
Span 5 GHz
Center 7.5 GHz
Sweep 40 ms
Stop 10 GHz
Conducted Scan: Port 0
5 GHz to 10 GHz


Date 11.Oct.'99 Time 16:25:55
Ref.Lvl -59.00 dBm
Delta -1.06 dB 2.4444 GHz
Res.Bw 1 MHz[imp]
TG.Lvl off
CF.Stp 500.000 MHz
Vid.Bw 3 MHz
RF.Att 10 dB
Unit [dBm]
-60.0
-65.0
-70.0
-75.0
-80.0
-85.0
-90.0
-95.0
-100.0
-105.0
PA
10
FI
Start 10 GHz
Span 5 GHz
Center 12.5 GHz
Sweep 40 ms
Stop 15 GHz
Conducted Scan: Port 0
10 GHz to 15 GHz


Date 11.Oct.'99 Time 16:21:41
Ref.Lvl -74.00 dBm
Delta -7.74 dB 2.4400 GHz
Res.Bw 1 MHz[imp]
TG.Lvl off
CF.Stp 600.000 MHz
Vid.Bw 3 MHz
RF.Att 10 dB
Unit [dBm]
-74.0
-76.0
-78.0
-80.0
-82.0
-84.0
-86.0
-88.0
-90.0
-92.0
-94.0
PA
10
FI
Start 15 GHz
Span 6 GHz
Center 18 GHz
Sweep 40 ms
Stop 21 GHz
Conducted Scan: Port 0
15 GHz to 21 GHz

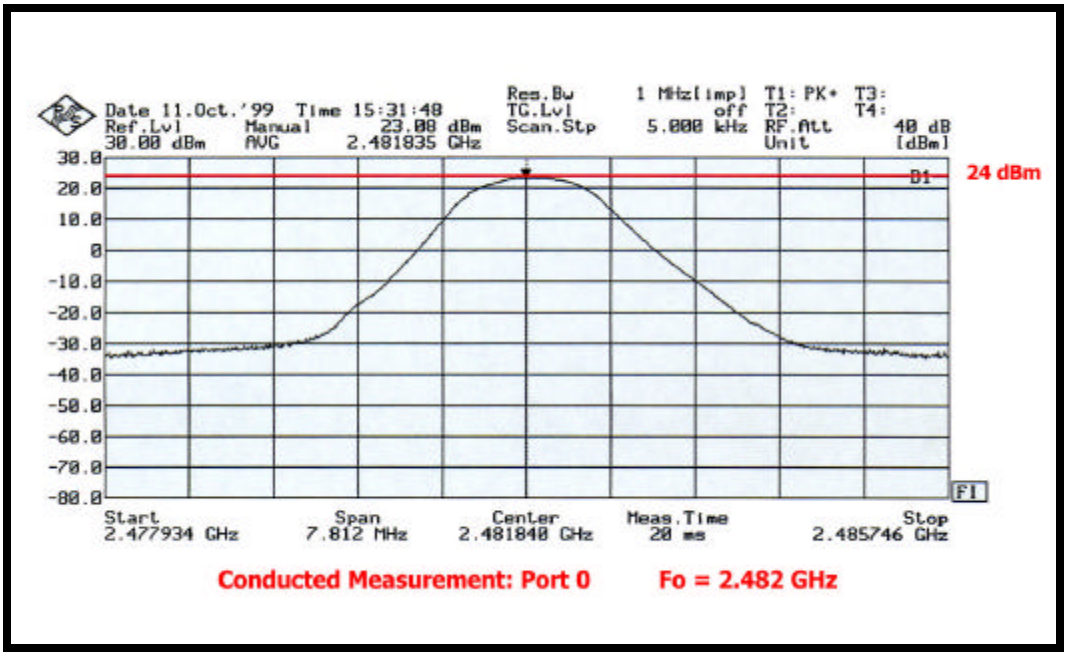

Date 11.Oct.'99 Time 16:18:08
Ref.Lvl
-80.00 dBm
Marker
-82.87 dBm
21.6044 GHz
Res.Bw
TG.Lvl
CF.Stp
1 MHz[imp]
off
400.000 MHz
Vid.Bw
3 MHz
RF.Att
10 dB
Unit
[dBm]
-80.0
-81.0
-82.0
-83.0
-84.0
-85.0
-86.0
-87.0
-88.0
-89.0
-90.0
PA
10
FI
Start
21 GHz
Span
4 GHz
Center
23 GHz
Sweep
40 ms
Stop
25 GHz
Conducted Scan: Port 0
21 GHz to 25 GHz

PORT 0 - Fo = 2.4820 GHz (High End)

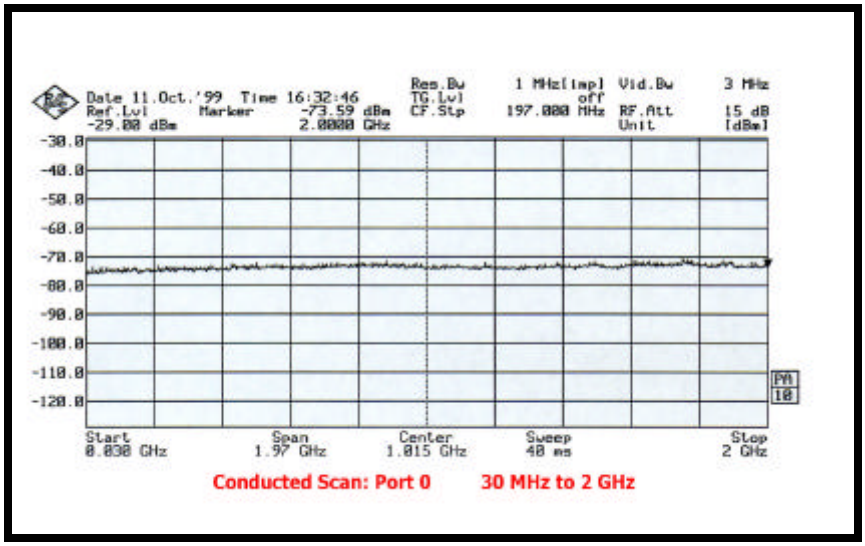
	Frequency (GHz)	Measured Reading (dBµV)	Corrected Reading (dB)	FCC Limit (dB)	Margin (Limit – Reading) (dB)
F_0	2.481	130.08	130.6	131.0	---------
2	4.962	60.5	62.0	110.6	48.6
3	7.443	60.2	61.8	110.6	48.8
4	9.924	64.3	66.2	110.6	44.4
5	12.405	29.6	31.9	110.6	78.7
6	14.886	52.9	55.7	110.6	54.9
7	17.367	34.1	38.1	110.6	72.5
8	19.848	27.2	32.1	110.6	78.5
9	22.329	--------	--------	110.6	--------
10	24.810	--------	--------	110.6	--------

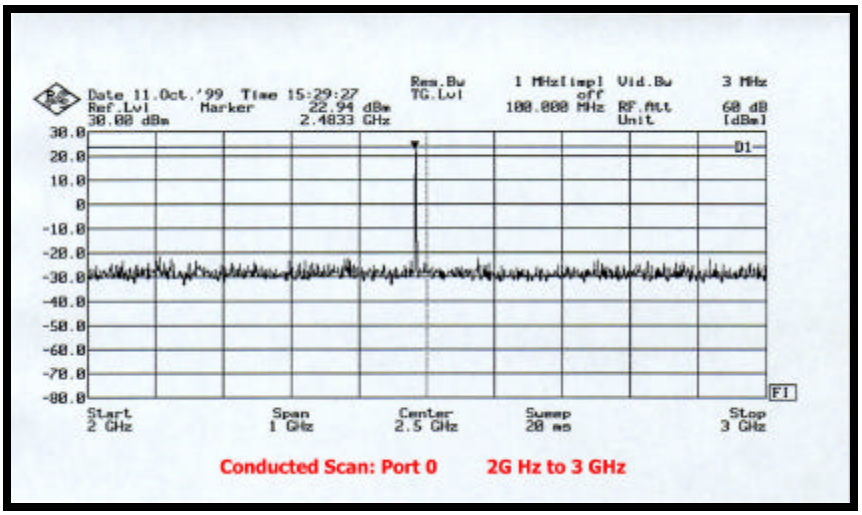
Calculations

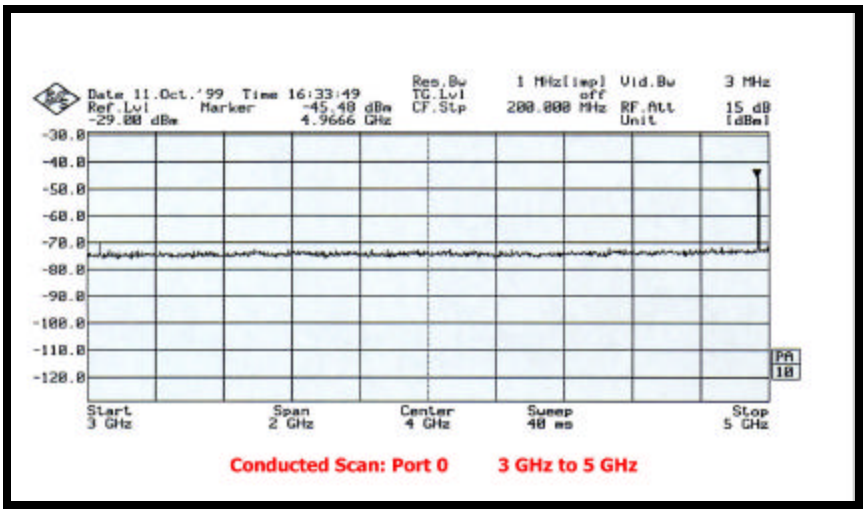
- FCC Limit = (Fo corrected reading) – 20dB;
- Corrected Reading = (Measured Reading) + (Filter Loss) + (Cable Loss);
- Margin = (FCC Limit) – (Corrected Reading);

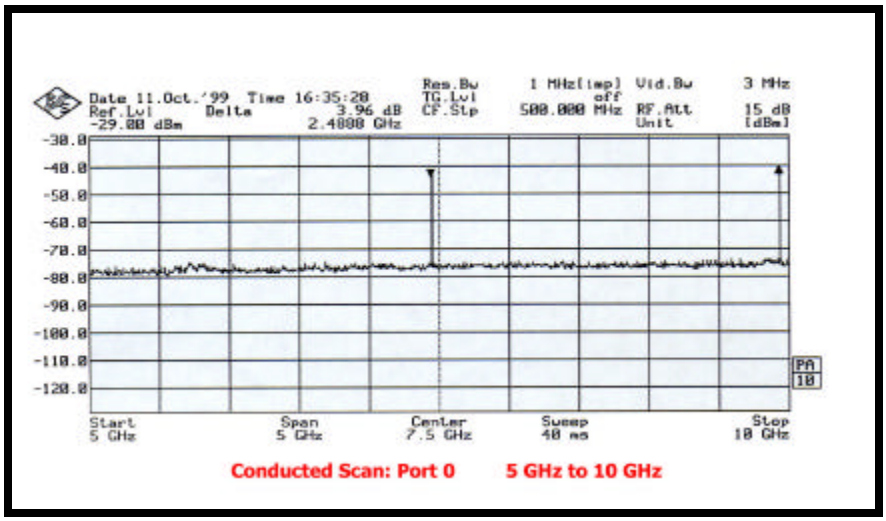


Test Data : Port 0; Fo = 2.4820 GHz

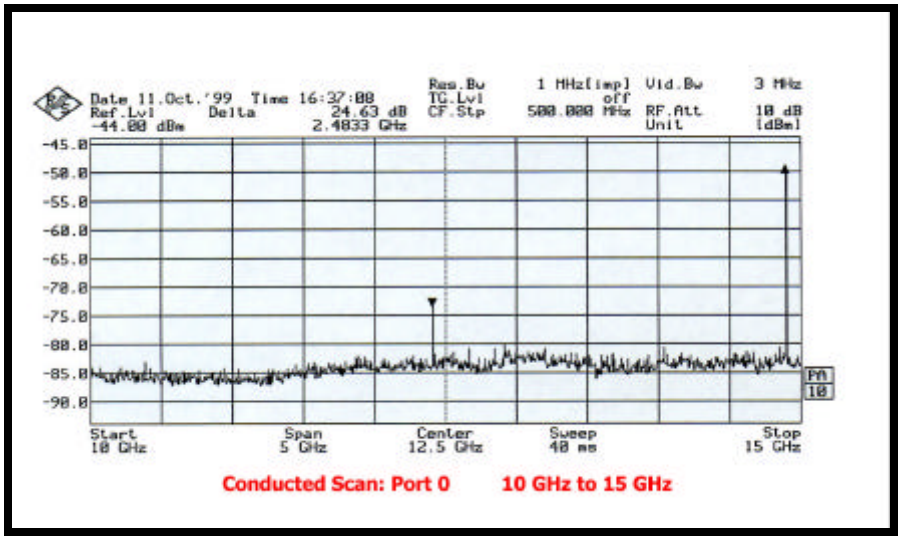




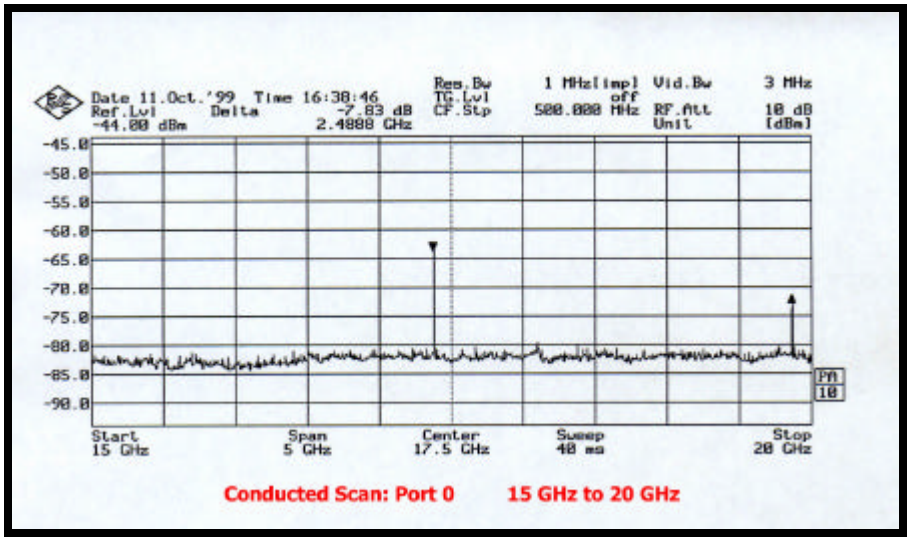

Date 11.Oct.'99 Time 16:33:49
Ref.Lvl -29.00 dBm
Marker -45.48 dBm 4.9666 GHz
Res.Bw 1 MHz[imp] Vid.Bw 3 MHz
TG.Lvl off
CF.Stp 200.000 MHz RF.Att 15 dB
Unit [dBm]
-30.0
-40.0
-50.0
-60.0
-70.0
-80.0
-90.0
-100.0
-110.0
-120.0
PA
10
Start 3 GHz
Span 2 GHz
Center 4 GHz
Sweep 40 ms
Stop 5 GHz
Conducted Scan: Port 0 3 GHz to 5 GHz



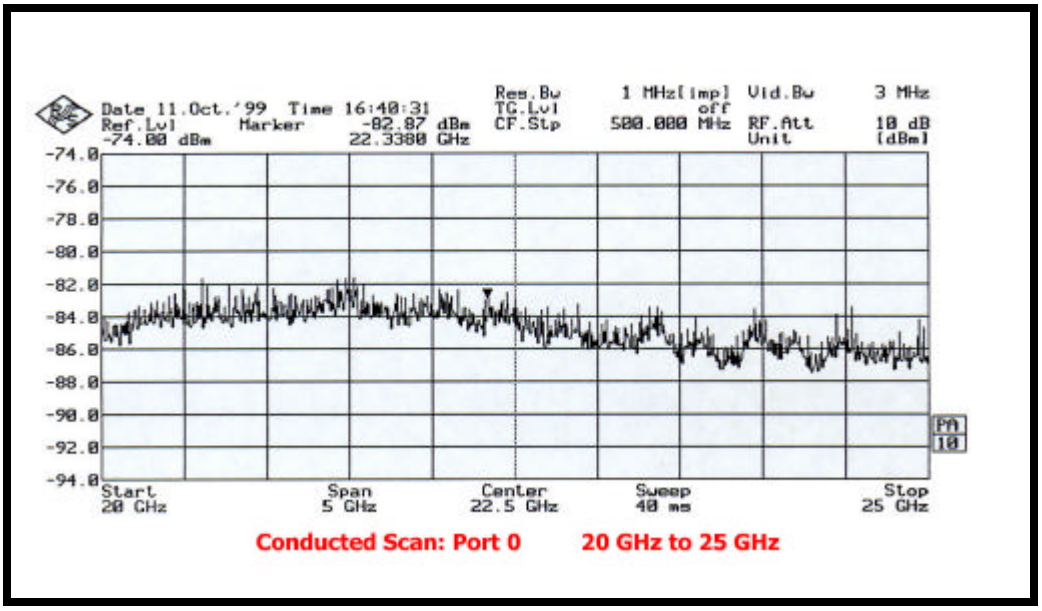
Conducted Scan: Port 0 5 GHz to 10 GHz



Conducted Scan: Port 0 10 GHz to 15 GHz



Conducted Scan: Port 0 15 GHz to 20 GHz

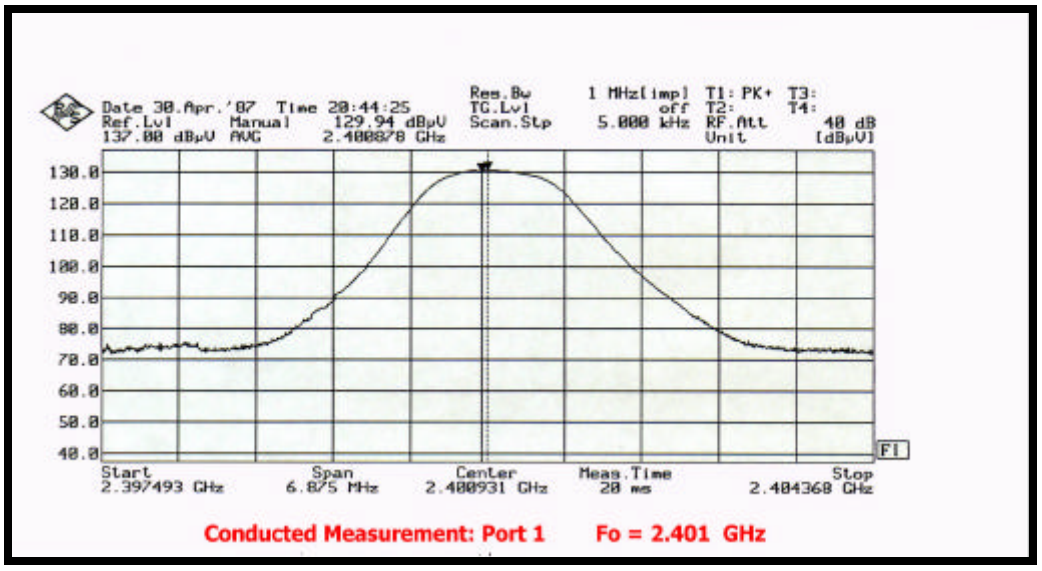

Date 11.Oct.'99 Time 16:40:31
Ref.Lvl
-74.00 dBm
Marker
-82.87 dBm
22.3380 GHz
Res.Bw
TG.Lvl
CF.Stp
1 MHz[imp]
off
500.000 MHz
Vid.Bw
3 MHz
RF.Att
Unit
10 dB
[dBm]
-74.0
-76.0
-78.0
-80.0
-82.0
-84.0
-86.0
-88.0
-90.0
-92.0
-94.0
PA
10
Start
20 GHz
Span
5 GHz
Center
22.5 GHz
Sweep
40 ms
Stop
25 GHz
Conducted Scan: Port 0
20 GHz to 25 GHz

PORT 1 – Fo = 2.401 GHz (Low End)

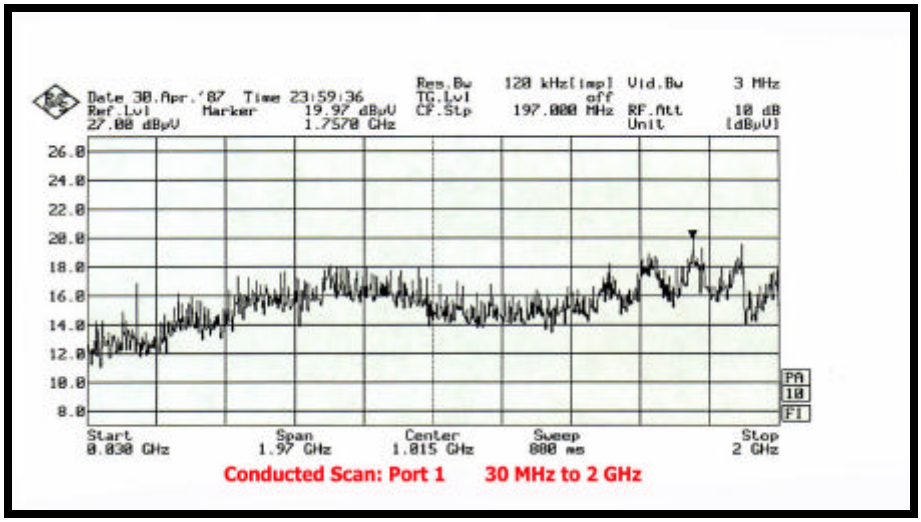
	Frequency (GHz)	Measured Reading (dBµV)	Corrected Reading (dB)	FCC Limit (dB)	Margin (Limit – Reading) (dB)
F_0	2.401	129.9	130.9	131.0	-----
2	4.802	87.4	88.4	110.9	22.5
3	7.203	62.4	63.4	110.9	47.5
4	9.604	56.6	57.6	110.9	53.3
5	12.005	52.8	53.8	110.9	57.1
6	14.406	32.3	33.3	110.9	77.6
7	16.807	35.0	36.0	110.9	74.9
8	19.208	-----	-----	-----	-----
9	21.609	-----	-----	-----	-----
10	24.010	-----	-----	-----	-----

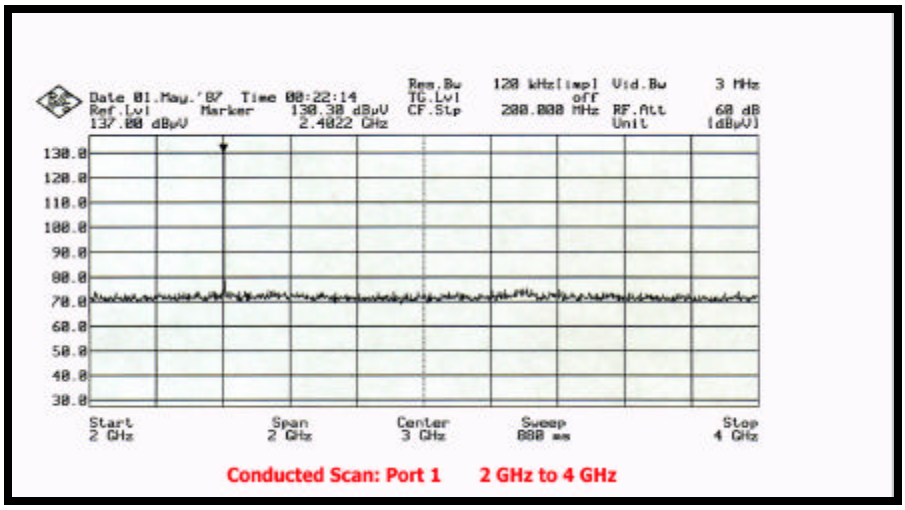
Calculations

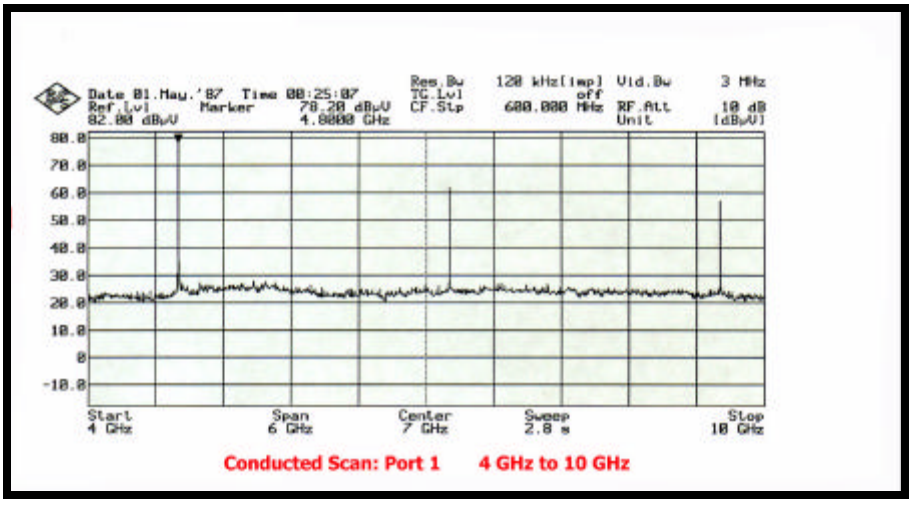
- FCC Limit = (Fo corrected reading) – 20dB;
- Corrected Reading = (Measured Reading) + (Filter Loss) + (Cable Loss);
- Margin = (FCC Limit) – (Corrected Reading);

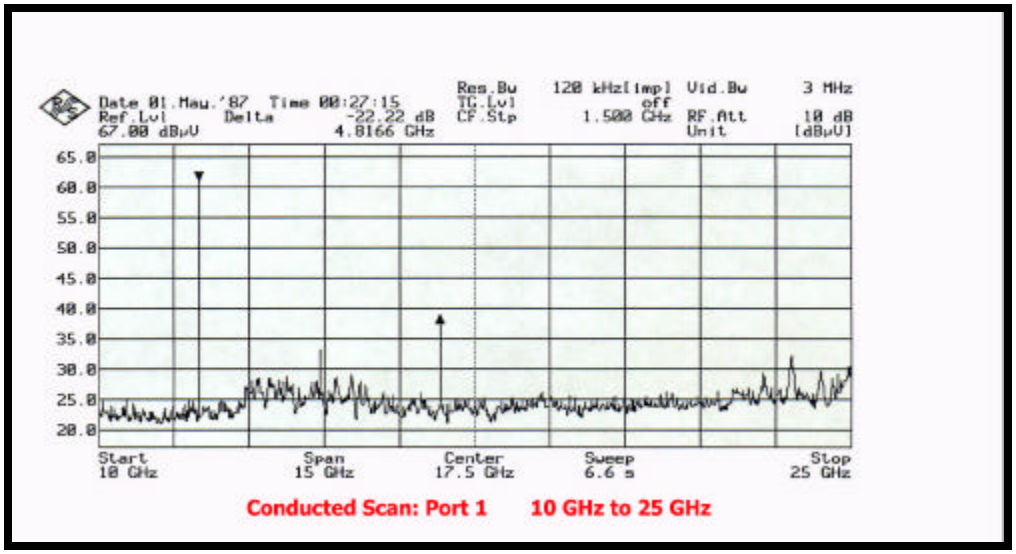


Test Data : Port 1; Fo = 2.4010 GHz







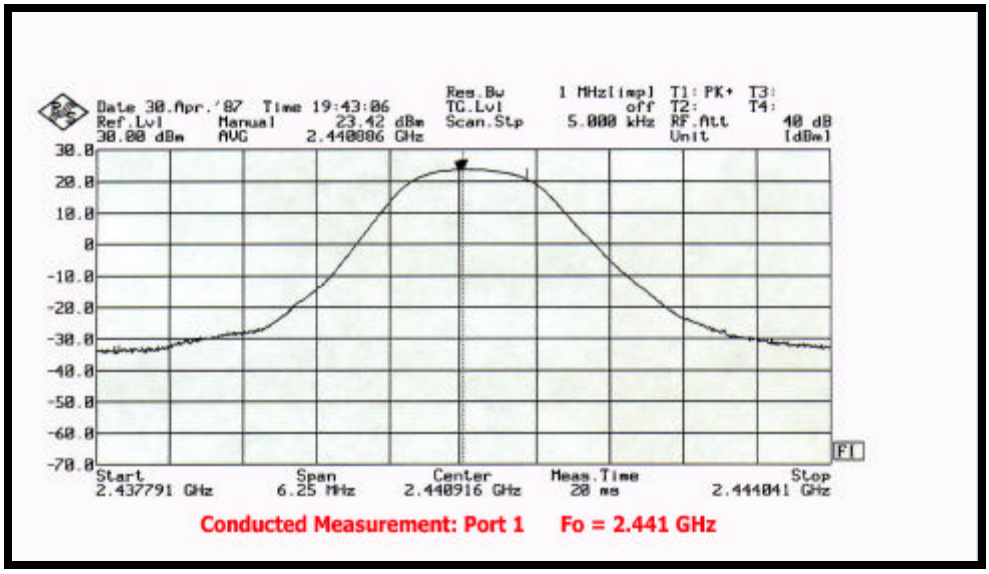

Date 01.Mau.'87 Time 00:27:15
Ref.Lvl 67.00 dBµV
Delta -22.22 dB
4.8166 GHz
Res.Bw 120 kHz[imp]
TG.Lvl off
CF.Stp 1.500 GHz
Vid.Bw 3 MHz
RF.Att 10 dB
Unit [dBµV]
65.0
60.0
55.0
50.0
45.0
40.0
35.0
30.0
25.0
20.0
Start 10 GHz
Span 15 GHz
Center 17.5 GHz
Sweep 6.6 s
Stop 25 GHz
Conducted Scan: Port 1 10 GHz to 25 GHz

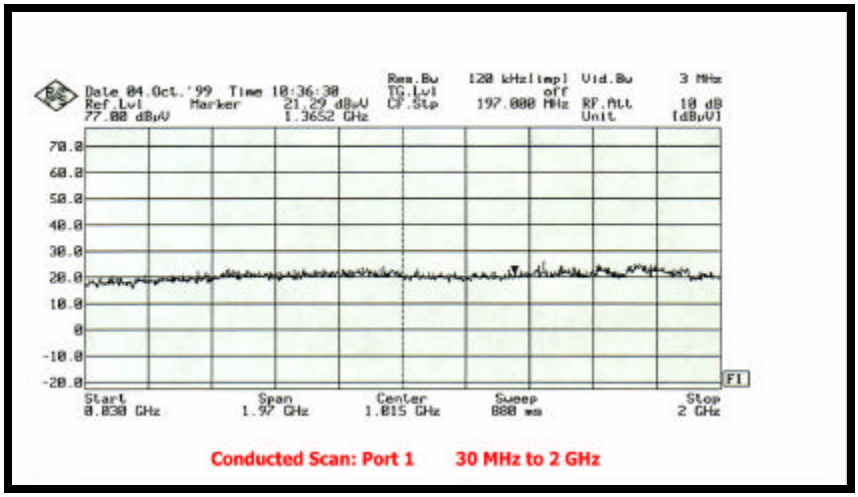
PORT 1 - Fo = 2.4410 2.4820 GHz (Mid Band)

	Frequency (GHz)	Measured Reading (dBµV)	Corrected Reading (dB)	FCC Limit (dB)	Margin (Limit – Reading) (dB)
F_0	2.441	130.4	130.9	131.0	-----
2	4.882	63.4	64.9	110.4	45.5
3	7.323	59.6	61.2	110.4	49.2
4	9.764	50.3	52.2	110.4	58.2
5	12.205	34.5	36.8	110.4	73.7
6	14.646	30.6	33.4	110.4	77.0
7	17.087	38.0	42.0	110.4	68.4
8	19.528	21.6	26.5	110.4	83.9
9	21.969	-----	-----	-----	-----
10	24.410	-----	-----	-----	-----

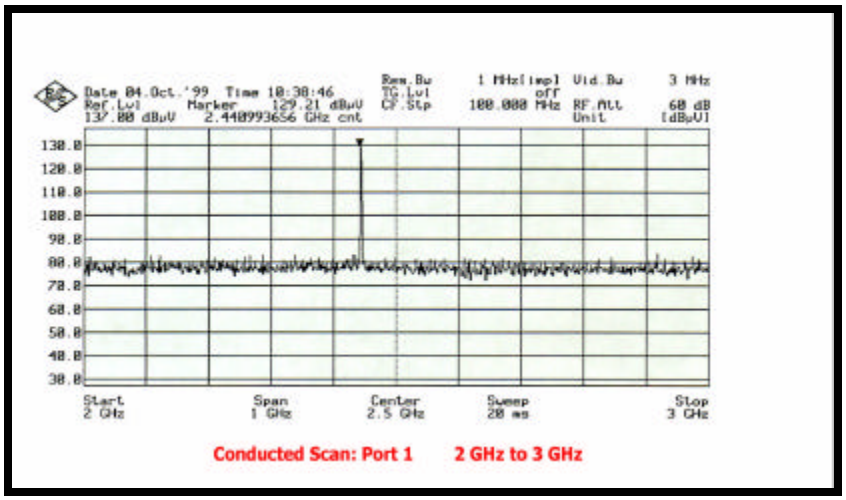
Calculations

- FCC Limit = (Fo corrected reading) – 20dB;
- Corrected Reading = (Measured Reading) + (Filter Loss) + (Cable Loss);
- Margin = (FCC Limit) – (Corrected Reading);

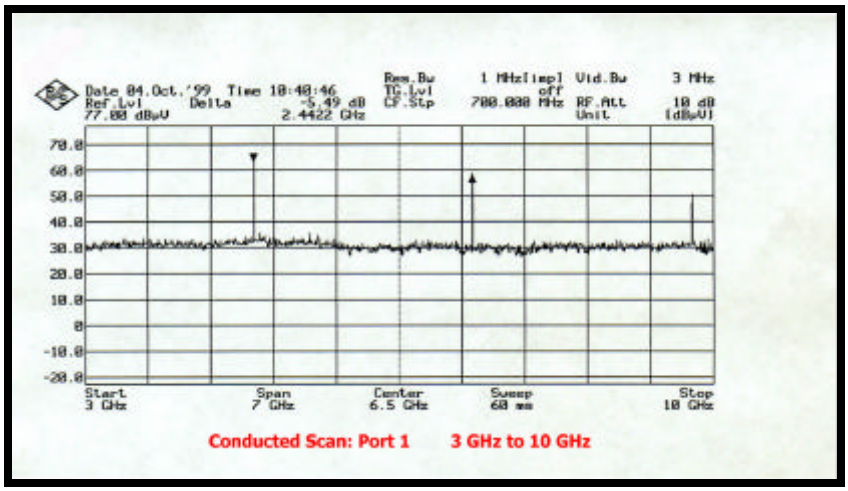




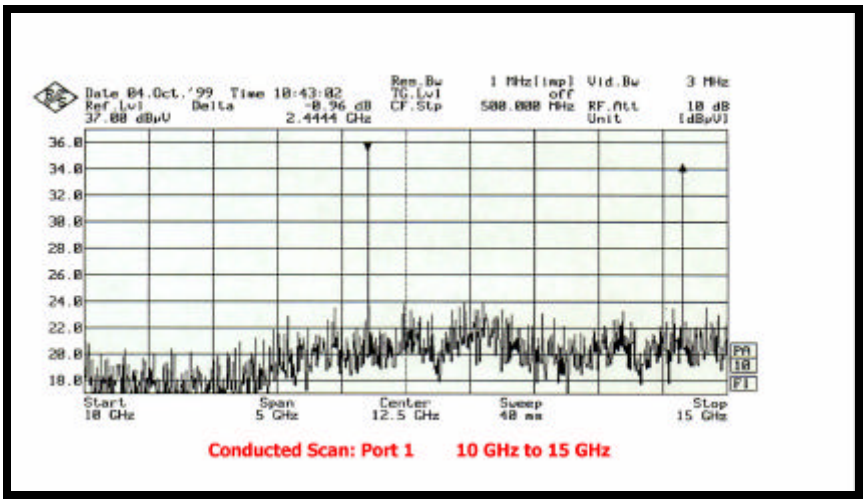
Conducted Scan: Port 1 30 MHz to 2 GHz



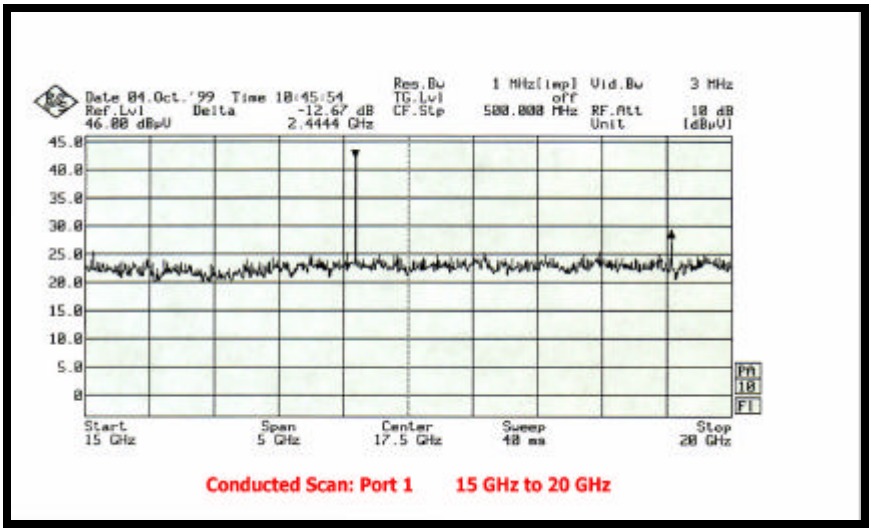
Conducted Scan: Port 1 2 GHz to 3 GHz



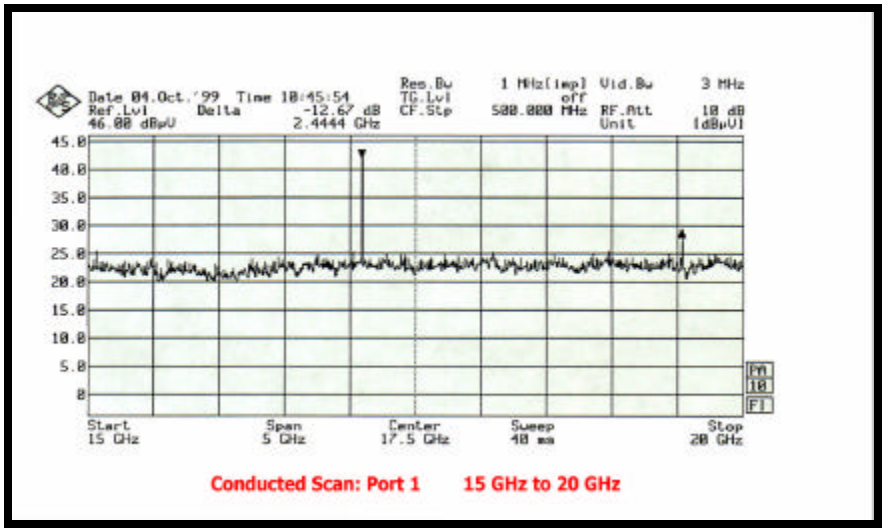
Conducted Scan: Port 1 3 GHz to 10 GHz



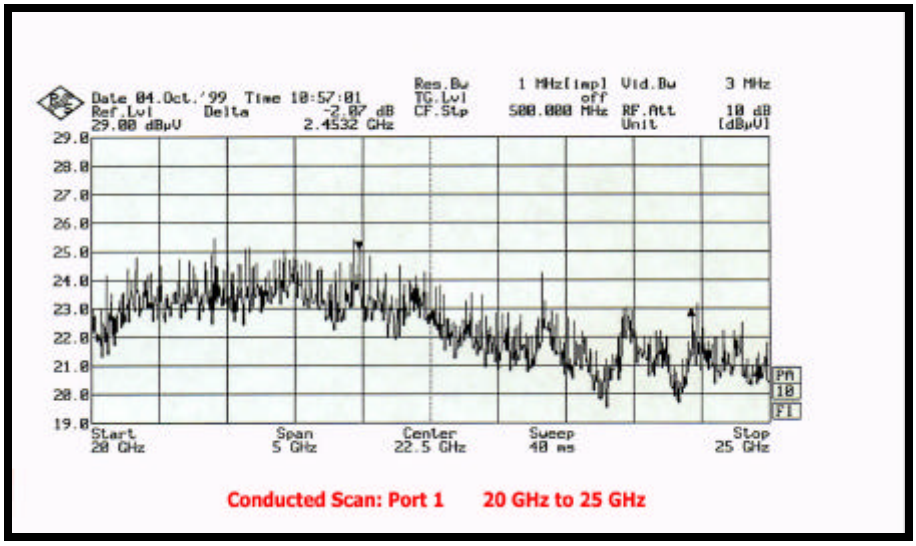
Conducted Scan: Port 1 10 GHz to 15 GHz



Conducted Scan: Port 1 15 GHz to 20 GHz



Conducted Scan: Port 1 15 GHz to 20 GHz

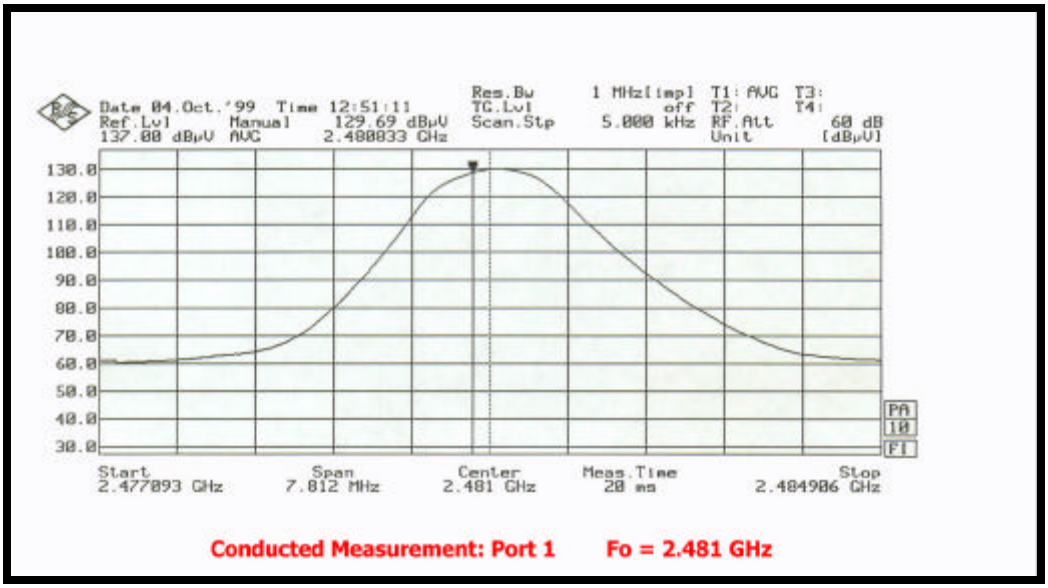

Date 04.Oct.'99 Time 10:57:01
Ref.Lvl
29.00 dBµV
Delta
-2.87 dB
2.4532 GHz
Res.Bw
TG.Lvl
CF.Stp
1 MHz[imp]
off
500.000 MHz
Vid.Bw
RF.Att
Unit
3 MHz
10 dB
[dBµV]
29.0
28.0
27.0
26.0
25.0
24.0
23.0
22.0
21.0
20.0
19.0
PM
10
FI
Start
20 GHz
Span
5 GHz
Center
22.5 GHz
Sweep
40 ms
Stop
25 GHz
Conducted Scan: Port 1 20 GHz to 25 GHz

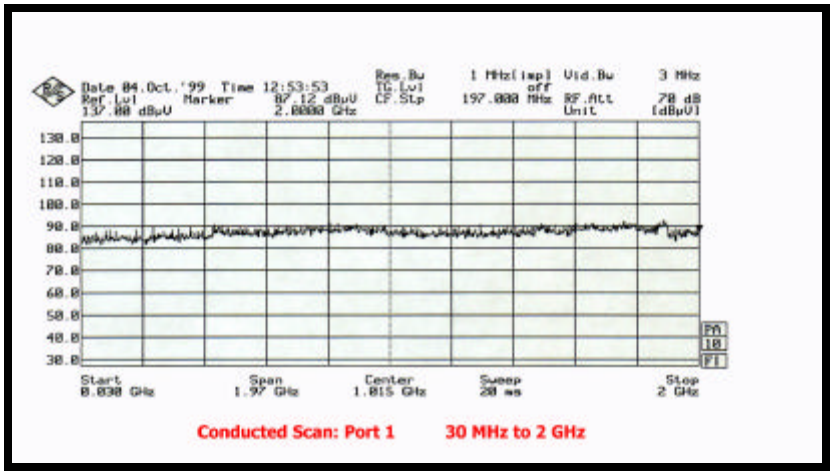
PORT 1 – Fo = 2.4820 GHz (High End)

	Frequency (GHz)	Measured Reading (dBµV)	Corrected Reading (dB)	FCC Limit (dB)	Margin (Limit – Reading) (dB)
F_0	2.481	129.7	130.2	131.0	----------
2	4.962	80.4	81.9	110.2	28.3
3	7.443	69.4	71.0	110.2	39.2
4	9.924	66.8	68.7	110.2	41.5
5	12.405	26.5	28.8	110.2	81.4
6	14.886	43.0	45.8	110.2	64.4
7	17.367	47.9	51.9	110.2	58.3
8	19.848	31.2	36.1	110.2	74.2
9	22.329	----------	----------	----------	----------
10	24.810	----------	----------	----------	----------

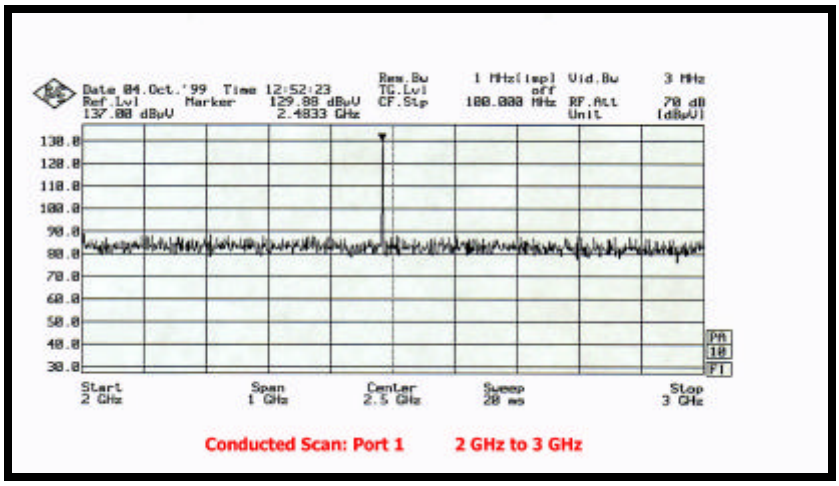
Calculations

- FCC Limit = (Fo corrected reading) – 20dB;
- Corrected Reading = (Measured Reading) + (Filter Loss) + (Cable Loss);
- Margin = (FCC Limit) – (Corrected Reading);

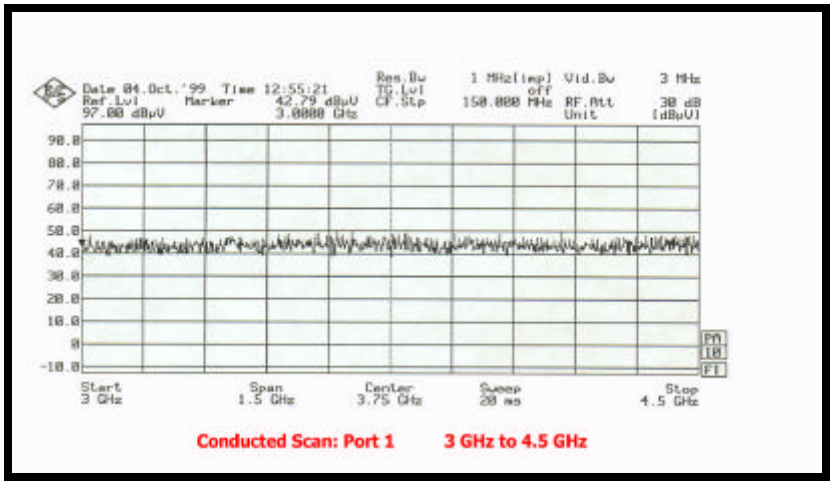




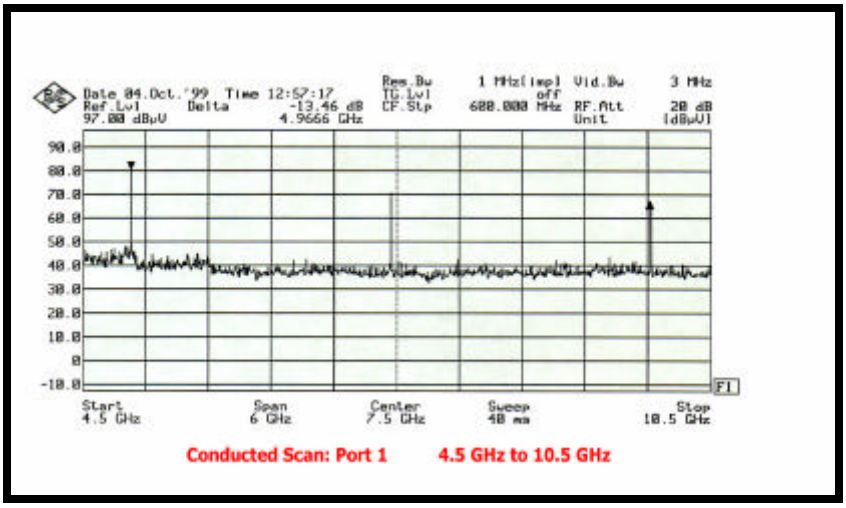
Conducted Scan: Port 1 30 MHz to 2 GHz

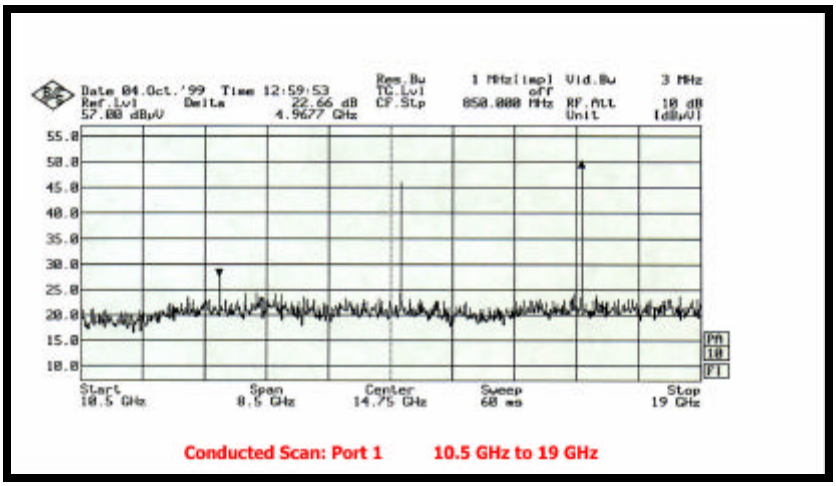


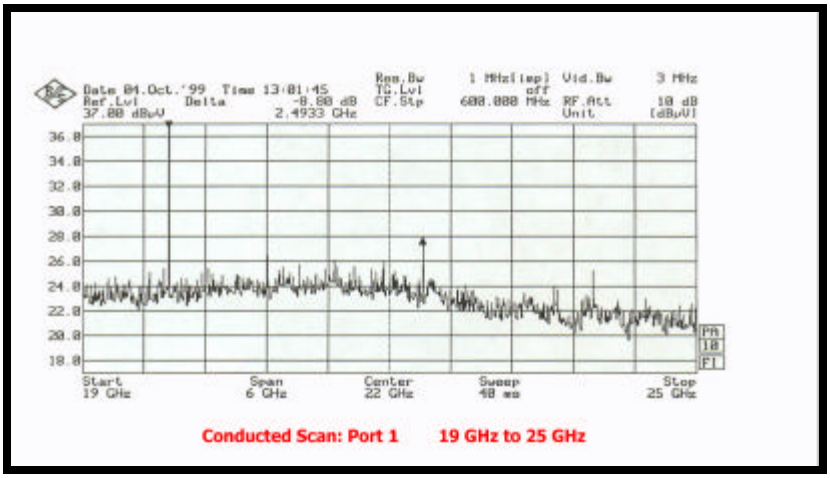
Conducted Scan: Port 1 2 GHz to 3 GHz



Conducted Scan: Port 1 3 GHz to 4.5 GHz


Date 04.Oct.'99 Time 12:57:17
Ref.Lvl 97.00 dBµV
Delta -13.46 dB 4.9666 GHz
Res.Bw 1 MHz(imp)
TG.Lvl off
CF.Stp 600.000 MHz
Vid.Bw 3 MHz
RF.Att 20 dB
Unit [dBµV]
Start 4.5 GHz
Span 6 GHz
Center 7.5 GHz
Sweep 40 ms
Stop 10.5 GHz
Conducted Scan: Port 1 4.5 GHz to 10.5 GHz


Date 04.Oct.'99 Time 12:59:53
Ref.Lvl 57.00 dBµV
Delta 22.66 dB 4.9677 GHz
Res.Bw 1 MHz(imp)
TG.Lvl off
CF.Stp 850.000 MHz
Vid.Bw 3 MHz
RF.Att 10 dB
Unit [dBµV]
Start 10.5 GHz
Span 8.5 GHz
Center 14.75 GHz
Sweep 68 ms
Stop 19 GHz
Conducted Scan: Port 1 10.5 GHz to 19 GHz


Date 04.Oct.'99 Time 13:01:45
Ref.Lvl 37.00 dBµV
Delta -8.00 dB 2.4933 GHz
Res.Bw 1 MHz(imp)
TG.Lvl off
CF.Stp 600.000 MHz
Vid.Bw 3 MHz
RF.Att 10 dB
Unit [dBµV]
Start 19 GHz
Span 6 GHz
Center 22 GHz
Sweep 48 ms
Stop 25 GHz
Conducted Scan: Port 1 19 GHz to 25 GHz

7.8 Radiated Spurious Emissions

7.7.1 Controlling FCC Regulation - §15.205

The FCC permits ONLY spurious emissions in any of the frequency bands listed in the table of frequencies listed in §15.205(a).

- The field strength of emissions appearing within these frequency bands shall not exceed the limits shown in §15.209;
- At frequencies equal to or less than 1000 MHz, compliance with the limits in §15.209 shall be demonstrated using measurement instrumentation employing a **CISPR quasi-peak detector**;
- Above 1000 MHz, compliance with the emission limits in Section 15.209 shall be demonstrated based on the **average** value of the measured emissions. **The provisions in §15.35 apply to these measurements.**

§15.209 – Radiated Emission Limits; General Requirements

- The emissions from an intentional radiator shall not exceed the field strength levels specified in the table presented in §15.209(a) at a distance of 3 meters from the EUT.

  30 MHz – 88 MHz : Limit = 100 µV/m;
  88 MHz – 216 MHz : Limit = 150 µV/m;
  216 MHz – 960MHz: Limit = 200 µV/m;
  Above 960MHz: Limit = 500 µV/m;

- The tighter limit applies at the band edges.

- The level of any unwanted emissions from an intentional radiator operating under these general provisions shall not exceed the level of the fundamental emission.

§15.35 Measurement Detector Functions and Bandwidths.

The conducted and radiated emission limits shown in this Part are based on the following, unless otherwise specified elsewhere in this Part: . . .

(a) Unless otherwise specified, when the radiated emission limits are expressed in terms of the average value of the emission, and pulsed operation is employed, **the measurement field strength shall be determined by averaging over one complete pulse train, including blanking intervals, as long as the pulse train does not exceed 0.1 seconds.** The exact method of calculating the average field strength shall be submitted with any application for certification or shall be retained in the measurement data file for equipment subject to notification or verification.

7.7.2 Antennas Tested

The EUT was tested with each antenna listed below. Please refer to the "Exhibit 6 – Antennas" for more details concerning antenna characteristics.

(1) Whip Antenna
- Name Used : Whip I (Name use on data sheets)
- Manufacturer : NCC
- Model Number : N24ARSMAI

(2) Whip Antenna
- Name Used : Whip II
- Manufacturer : NCC
- Model Number : N24HGASMIB

(3) Colliner Array
- Name Used : Mobile Mark
- Manufacturer : Mobile Mark
- Model Number : OD9-2400

(4) YAGI
- Name Used : YAGI
- Manufacturer : ASTRON
- Model Number : P-2415

(5) Patch
- Name Used : Patch
- Manufacturer : Maxrad
- Model Number : MP24013FSMA

7.7.3 Test Procedure

- **Test Setup**
  The EUT is setup on a RF transparent table that rests on an EMCO turntable capable of rotating from 0 to 360 degrees. EUT cables are oriented to maximize the field strength amplitudes. Three meters from the EUT is an EMCO antenna mast capable of moving the receiving antenna up and down (from 1 meter to 4 meters).

- **Hopping Turned Off - § 15.31(c)**
  For swept frequency equipment, measurements shall be made with the frequency sweep stopped at those frequencies chosen for the measurements to be reported.

- **Number of Test Frequency - § 15.31(m)**
  Measurements at three different frequencies are required on intentional radiators or receivers, other than TV broadcast receivers, that have a frequency range of operation of more than 10 MHz: (1) one near the top, (2) one near the middle, (3) one near the bottom. The EUT in this report transmits over a frequency range of approximately 80 MHz (2.4005 GHz to 2.4820 GHz). **Consequently, the output power will be measured at the following frequencies: (1) 2.482 GHz, (2) 2.4405 GHz, (3) 2.4005 GHz.**

- **Use Filter** - For this test, when measuring signals above 3 GHz, an HP Preamp is utilized. Calculations indicate that the strong carrier signal will overload the preamp, causing harmonic distortion, resulting in inaccurate data. To prevent harmonic distortion, a high pass filter was placed between the receive antenna and the preamp input. The high pass filter is manufactured by Trilithic (M/N: 4HC3500/5000-1-KK). **Please note that the Trilihic Filter was only used for measurements made above 3GHz.**

- **30MHz to 2GHz**: The frequency band from 30MHz to 2GHz was scanned and the spurious EMI emissions measured (using a Quasi-Peak detector) and recorded;

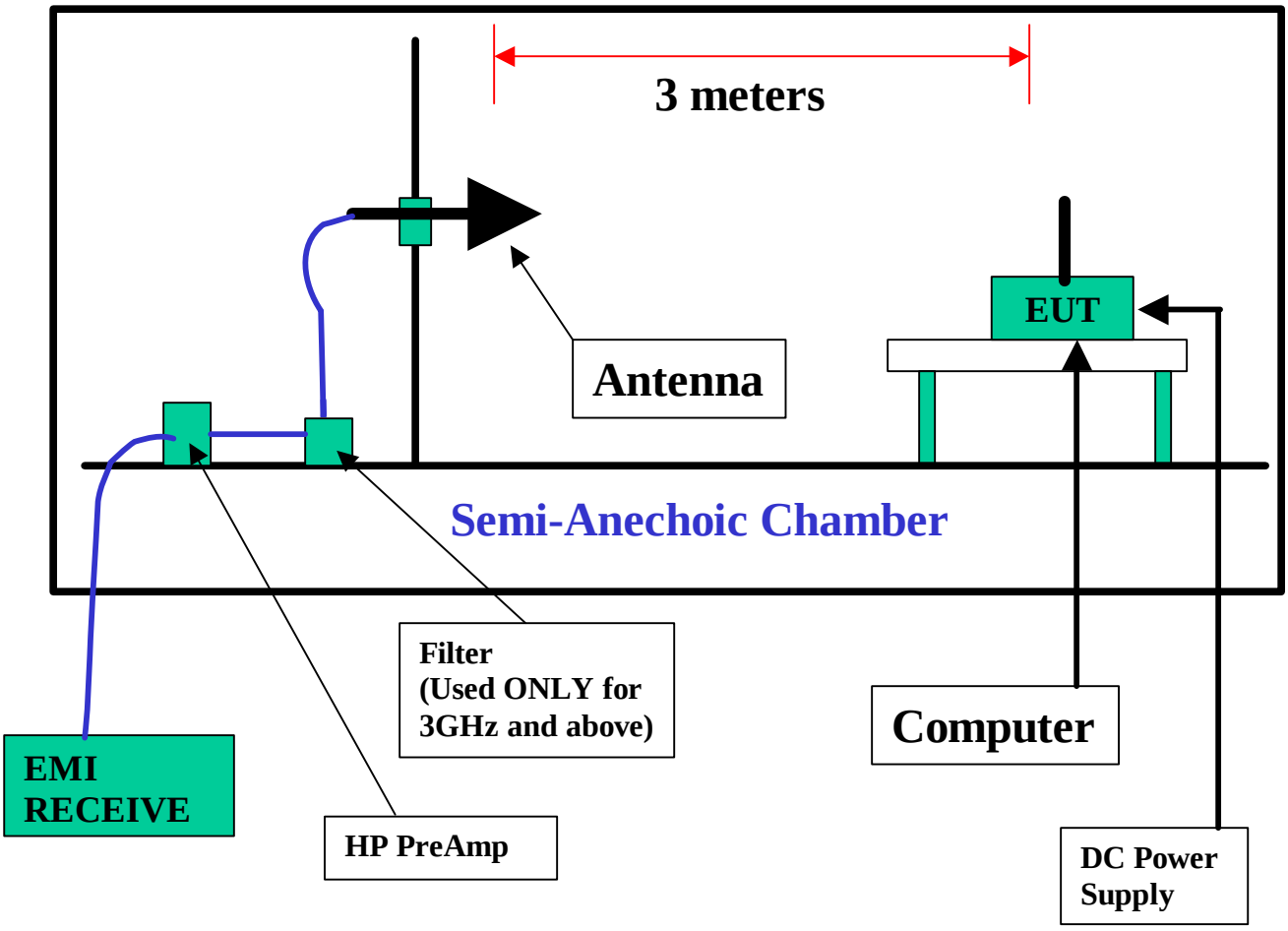
- **2GHz to 25GHz**: The measurement procedure used to verify compliance to the above-referenced regulations is given below:

  (1) Set EUT to transmit, continuously, at the desired frequency;
  (2) Tune the receiver to the Harmonic of interest;
  (3) Setup measurement instrumentation in proper measurement mode;
  (4) Place the antenna in the horizontal position and move to find height where maximum reception occurs;
  (5) Rotate EUT and record the maximum emission level detected, antenna height, antenna polarization, and turntable angle;
  (6) Place the antenna in the vertical position and move to find height where maximum reception occurs;
  (7) Rotate EUT and record the maximum emission level detected, antenna height, antenna polarization, and turntable angle;
  (8) Return to step (2) and repeat for each harmonic;
  (9) Return to step (1) for each fundamental frequency;

  Create a report presenting the test results;

  (This procedure was used as scans above 2GHz proved that the only detectable emissions above 2GHz were harmonics of the fundamental transmitter frequency)

7.7.4 Test Setup Block Diagram



7.7.5 Calculations – Duty Cycle Corrections

As stated previously, under certain conditions, **§15.35 (**Measurement detector functions and bandwidths) authorizes duty cycle corrections.

For the EUT described in this report, for any 100ms interval, in normal hopping mode, the EUT only transmits for 5ms. During the test, however, hopping is turned off. Consequently, a duty cycle correction is required to determine the true AVERAGE value. There are no duty cycle corrections required for PEAK measurements.

Duty Cycle Correction (DCC)

Let TT = the EUT's transmission time duration, in any 100ms interval (when EUT is operated as designed).

- DCC = 20 Log_{10} (TT/.1)

For the EUT described in this report, the DCC to be added to the AVERAGE measurements is calculated as follows:

- EUT's TT = 5 ms; DCC = 20 Log_{10}(.005/.1) = - 26.02 dB
- True Average Reading = (Measured Average Reading) + (- 26 dB);

Finally, for the reading presented in this section, "**Correction Factors**" are calculated as follows:

"Correction Factors" = (Antenna Factor) + (Cable Loss) – (Preamp Gain) + (DCC)

7.7.6 Test Results – Radiated Spurious Emissions

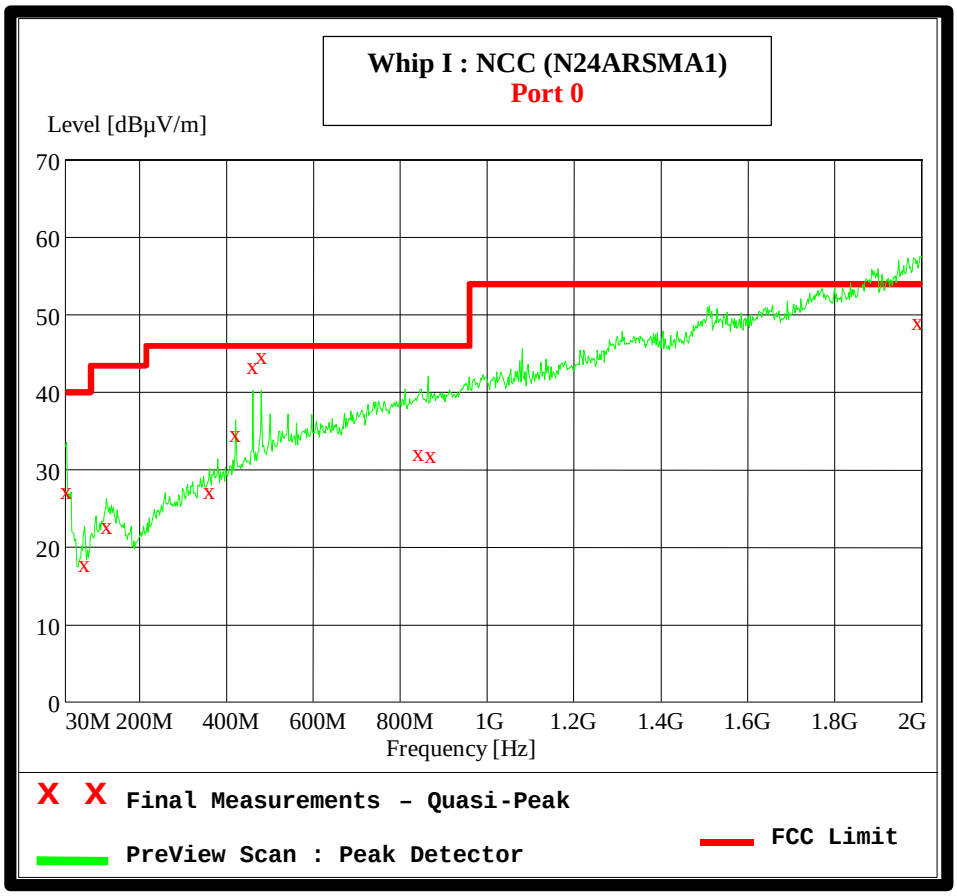
Test Data : Port 0 : NCC Whip I (M/N: N24ARSMAI)

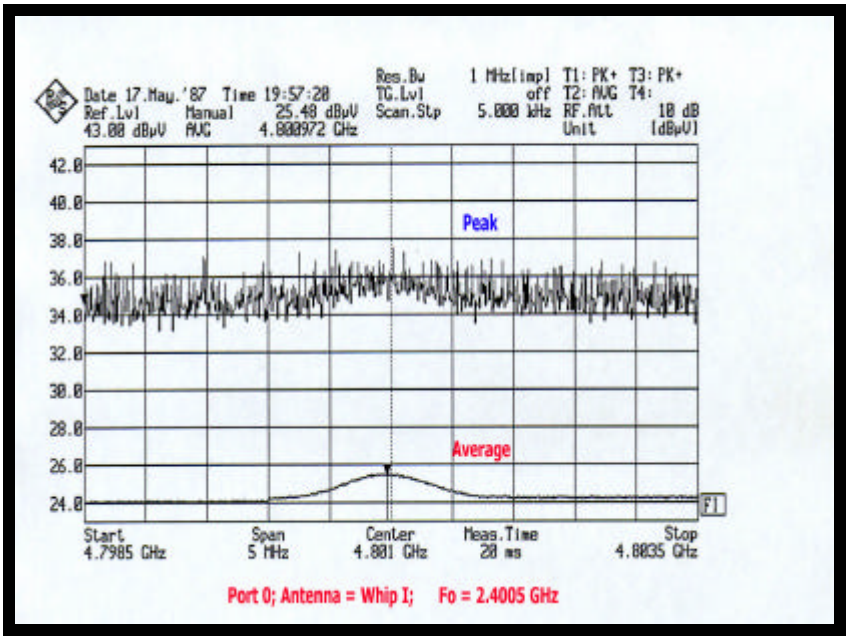
October 7, 1999

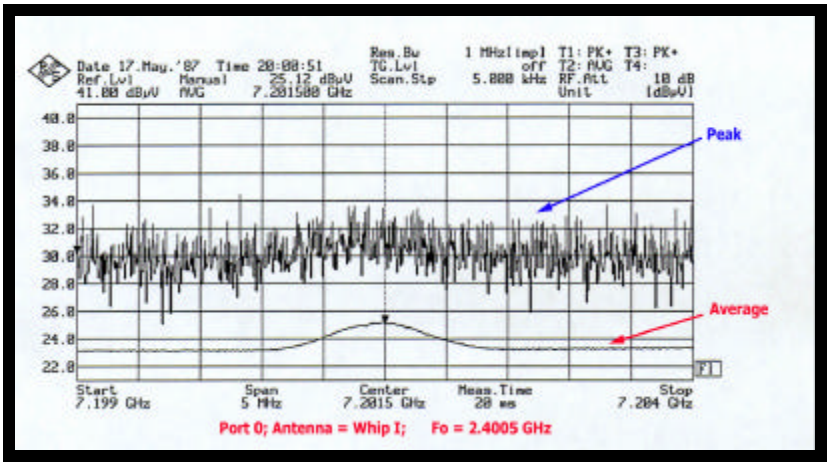
Equipment : OS2400 DSS Transmitter
Manufacturer : Locus
Test Distance : 3 meters

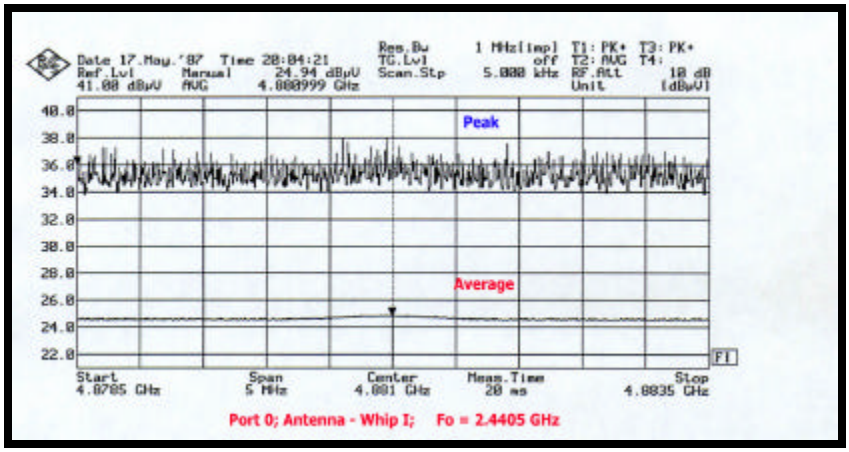
Frequency (MHz)	Detector	Measured EMI (dBµV/m)	Correction Factors (dB)	FCC LIMIT (dBµV/m)	Margin (dB)	Height (cm)	Azimuth (Degrees)	Ant. Pol.
31.840	Q-Peak	7.0	20.5	40.0	**12.5**	100	62	V
73.280	Q-Peak	9.0	9.4	40.0	**21.6**	140	74	V
124.40	Q-Peak	8.3	14.7	43.5	**20.4**	100	82	V
360.00	Q-Peak	7.7	19.9	46.0	**18.3**	100	54	H
420.00	Q-Peak	12.8	22.1	46.0	**11.0**	125	71	V
460.00	Q-Peak	21.5	22.2	46.0	**2.2**	125	93	V
480.00	**Q-Peak**	**22.0**	**22.9**	**46.0**	**1.0**	**101**	**86**	**V**
840.64	Q-Peak	2.4	30.0	46.0	**13.5**	172	97	H
869.76	Q-Peak	2.4	29.7	46.0	**13.8**	125	81	H
1,990.48	Average	2.2	47.2	54.0	**4.5**	175	70	H
Fo = 2.4005 GHz								
4,801.00	Average	25.5	0.1	54.0	**28.9**	100	0	H
4,801.00	Peak	36.0	26.1	74.0	**11.9**	100	0	H
7,201.50	Average	25.1	9.7	54.0	**19.2**	100	0	H
7,201.50	Peak	32.0	35.7	74.0	**6.3**	100	0	H
Fo = 2.4405 GHz								
4,881.0	Average	24.9	0.1	54.0	**29.0**	120	10	H
4,881.0	Peak	36.0	26.1	74.0	**11.9**	120	10	H
Fo = 2.4820 GHz								
4,964.0	Average	27.6	0.1	54.0	**26.3**	100	0	H
4,964.0	Peak	38.0	26.1	74.0	**9.9**	100	0	H
7,446.0	Average	23.8	9.7	54.0	**20.5**	100	10	H
7.446.0	Peak	34.0	35.7	74.0	**4.3**	100	10	H

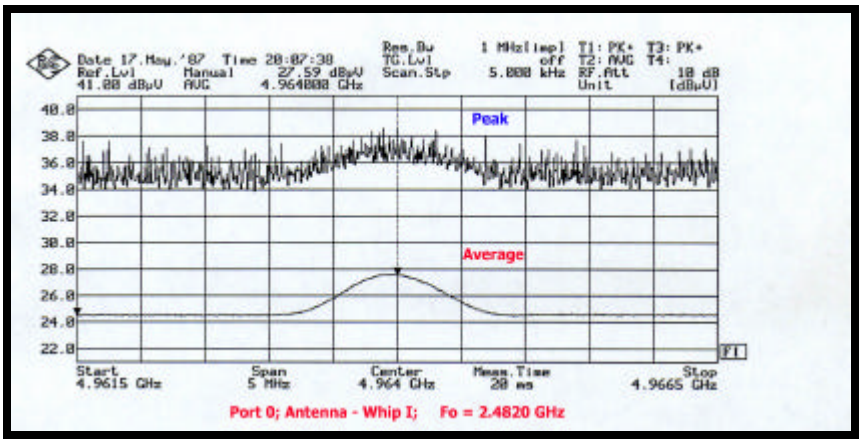
Calculation Formula: Margin = Limit – Measurement – Correction Factor

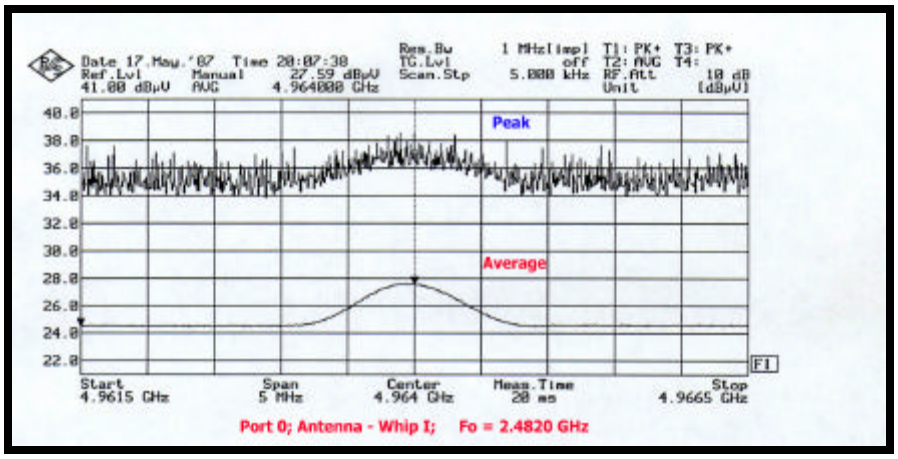

Whip I : NCC (N24ARSMA1)
Port 0
Level [dBµV/m]
70
60
50
40
30
20
10
0
30M 200M 400M 600M 800M 1G 1.2G 1.4G 1.6G 1.8G 2G
Frequency [Hz]
X X Final Measurements – Quasi-Peak
PreView Scan : Peak Detector
FCC Limit

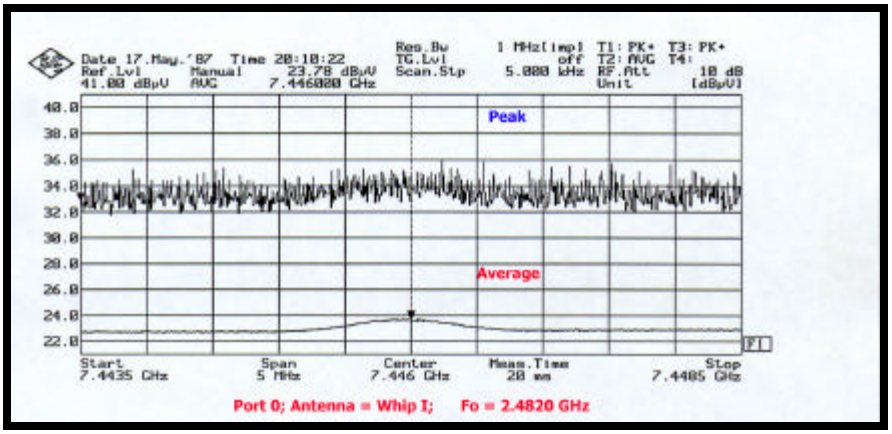

Date 17.May.'87 Time 19:57:20
Ref.Lvl 43.00 dBµV
Manual 25.48 dBµV
AUC 4.000972 GHz
Res.Bw 1 MHz[imp]
TG.Lvl off
Scan.Stp 5.000 kHz
T1: PK+ T3: PK+
T2: AVG T4:
RF.Att 10 dB
Unit [dBµV]
42.0
40.0
38.0
36.0
34.0
32.0
30.0
28.0
26.0
24.0
Peak
Average
F1
Start 4.7985 GHz
Span 5 MHz
Center 4.801 GHz
Meas.Time 20 ms
Stop 4.8035 GHz
Port 0; Antenna = Whip I; Fo = 2.4005 GHz


Date 17.May.'87 Time 20:08:51
Ref.Lvl Manual 25.12 dBµV
41.00 dBµV AVG 7.201500 GHz
Res.Bw 1 MHz[imp] T1: PK+ T3: PK+
TG.Lvl off T2: AVG T4:
Scan.Stp 5.000 kHz RF.Att 10 dB
Unit [dBµV]
Peak
Average
Start 7.199 GHz
Span 5 MHz
Center 7.2015 GHz
Meas.Time 20 ms
Stop 7.204 GHz
Port 0; Antenna = Whip I; Fo = 2.4005 GHz


Date 17.May.'87 Time 20:04:21
Ref.Lvl Manual 24.94 dBµV
41.00 dBµV AVG 4.000999 GHz
Res.Bw 1 MHz[imp] T1: PK+ T3: PK+
TG.Lvl off T2: AVG T4:
Scan.Stp 5.000 kHz RF.Att 10 dB
Unit [dBµV]
Peak
Average
Start 4.0785 GHz
Span 5 MHz
Center 4.001 GHz
Meas.Time 20 ms
Stop 4.0835 GHz
Port 0; Antenna - Whip I; Fo = 2.4405 GHz


Date 17.May.'87 Time 20:07:30
Ref.Lvl Manual 27.59 dBµV
41.00 dBµV AVG 4.964000 GHz
Res.Bw 1 MHz[imp] T1: PK+ T3: PK+
TG.Lvl off T2: AVG T4:
Scan.Stp 5.000 kHz RF.Att 10 dB
Unit [dBµV]
Peak
Average
Start 4.9615 GHz
Span 5 MHz
Center 4.964 GHz
Meas.Time 20 ms
Stop 4.9665 GHz
Port 0; Antenna - Whip I; Fo = 2.4820 GHz


Date 17.May.'07 Time 20:07:30
Ref.Lvl Manual 27.59 dBµV
41.00 dBµV AVG 4.964000 GHz
Res.Bw 1 MHz[Imp] T1: PK+ T3: PK+
TG.Lvl off T2: AVG T4:
Scan.Stp 5.000 kHz RF.Att 10 dB
Unit [dBµV]
Peak
Average
Start 4.9615 GHz
Span 5 MHz
Center 4.964 GHz
Meas.Time 28 ms
Stop 4.9665 GHz
Port 0; Antenna - Whip I; Fo = 2.4820 GHz


Date 17.May.'07 Time 20:10:22
Ref.Lvl Manual 23.78 dBµV
41.00 dBµV AVG 7.446000 GHz
Res.Bw 1 MHz[Imp] T1: PK+ T3: PK+
TG.Lvl off T2: AVG T4:
Scan.Stp 5.000 kHz RF.Att 10 dB
Unit [dBµV]
Peak
Average
Start 7.4435 GHz
Span 5 MHz
Center 7.446 GHz
Meas.Time 28 ms
Stop 7.4485 GHz
Port 0; Antenna - Whip I; Fo = 2.4820 GHz

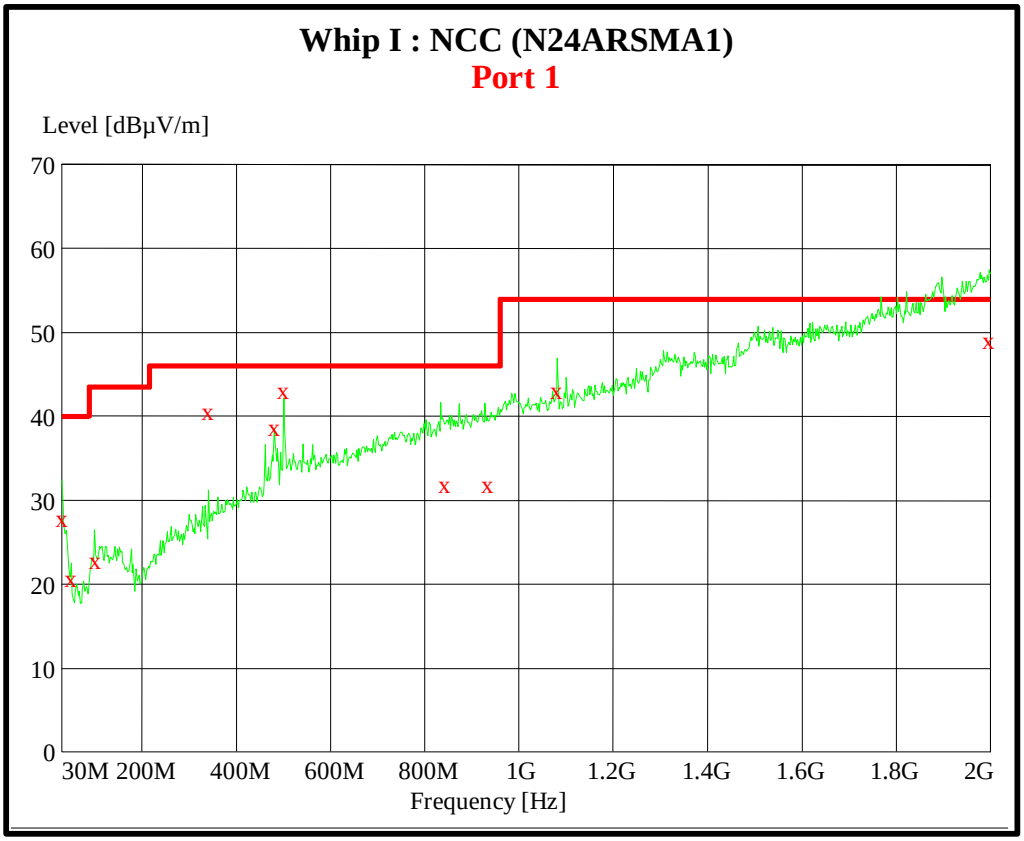
Test Data : Port 1: NCC Whip I (M/N: N24ARSMAI)

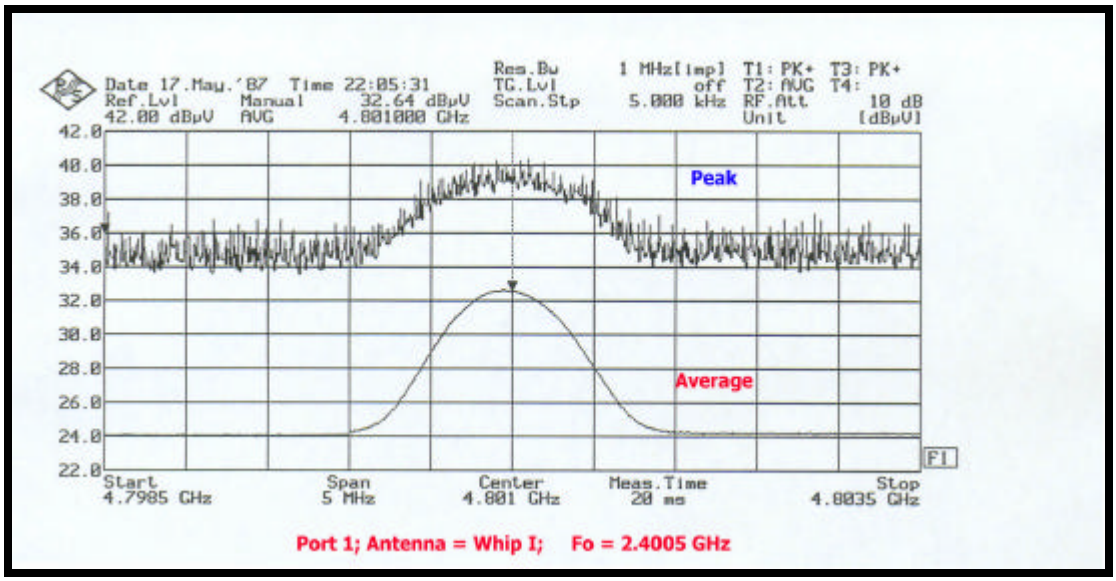
October 7, 1999

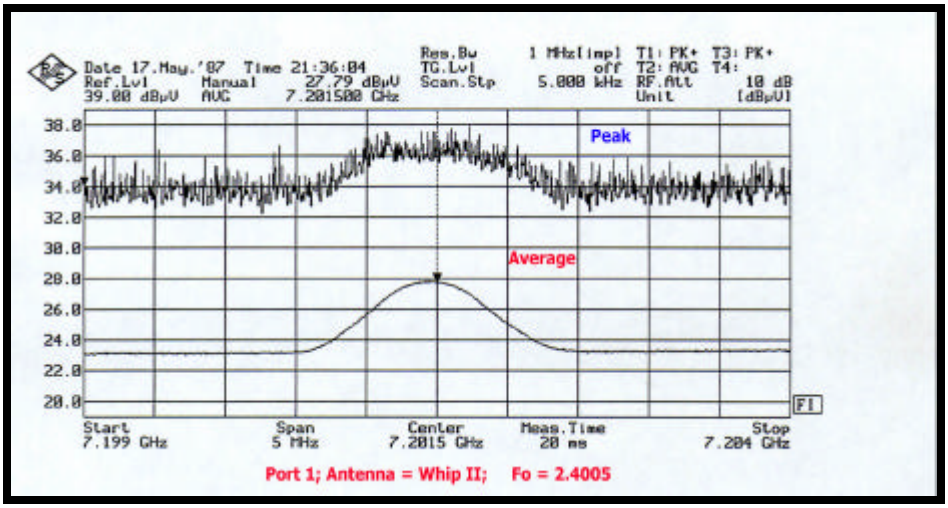
Equipment : OS2400 DSS Transmitter
Manufacturer : Locus
Test Distance : 3 meters

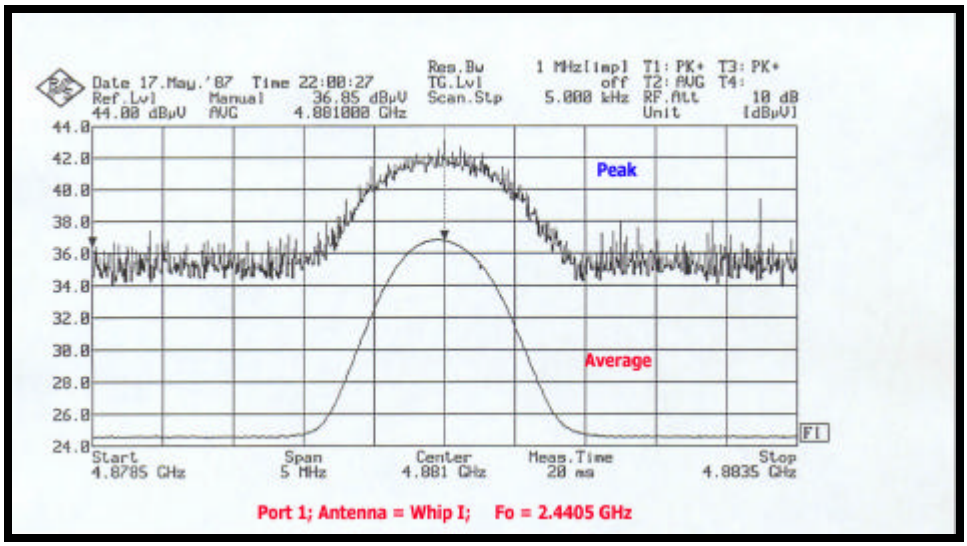
Frequency (MHz)	Detector	Measured EMI (dBµV/m)	Correction Factors (dB)	FCC LIMIT (dBµV/m)	Margin (dB)	Height (cm)	Azimuth (Degrees)	Ant. Pol.
30.16	Q-Peak	6.6	21.4	40.0	**12.0**	175	74	V
49.20	Q-Peak	9.3	11.5	40.0	**19.2**	125	66	V
100.24	Q-Peak	10.7	12.3	43.5	**20.5**	140	54	V
340.00	Q-Peak	21.8	19.0	46.0	**5.2**	101	97	H
480.00	Q-Peak	15.9	22.9	46.0	**7.2**	125	70	V
500.00	Q-Peak	20.0	23.2	46.0	**2.8**	107	57	V
841.44	Q-Peak	2.1	30.0	46.0	**13.9**	115	77	V
933.28	Q-Peak	1.6	30.5	46.0	**13.9**	200	54	H
1,080.24	Average	10.3	33.0	54.0	**10.7**	101	81	V
1,996.96	Average	1.7	47.4	54.0	**4.9**	165	73	V
Fo = 2.4005 GHz								
4,801.00	Average	32.6	0.1	54.0	**21.3**	110	0	H
4,801.00	Peak	40.0	26.1	74.0	**7.9**	110	0	H
Fo = 2.4405 GHz								
4,881.0	Average	36.9	0.1	54.0	**17.0**	100	10	H
4,881.0	Peak	42.0	26.1	74.0	**5.9**	100	10	H
7,321.5	Average	25.7	9.7	54.0	**18.6**	100	0	H
7,321.5	Peak	36.0	35.7	74.0	**2.3**	100	0	H
Fo = 2.4820 GHz								
4,964.0	Average	45.62	0.1	54.0	**6.4**	100	10	H
4,964.0	**Peak**	**46.5**	**26.1**	**74.0**	**1.4**	**100**	**10**	**H**
7,446.0	Average	28.7	9.7	54.0	**15.6**	100	0	H
7.446.0	**Peak**	**37.0**	**35.7**	**74.0**	**1.3**	**100**	**0**	**H**

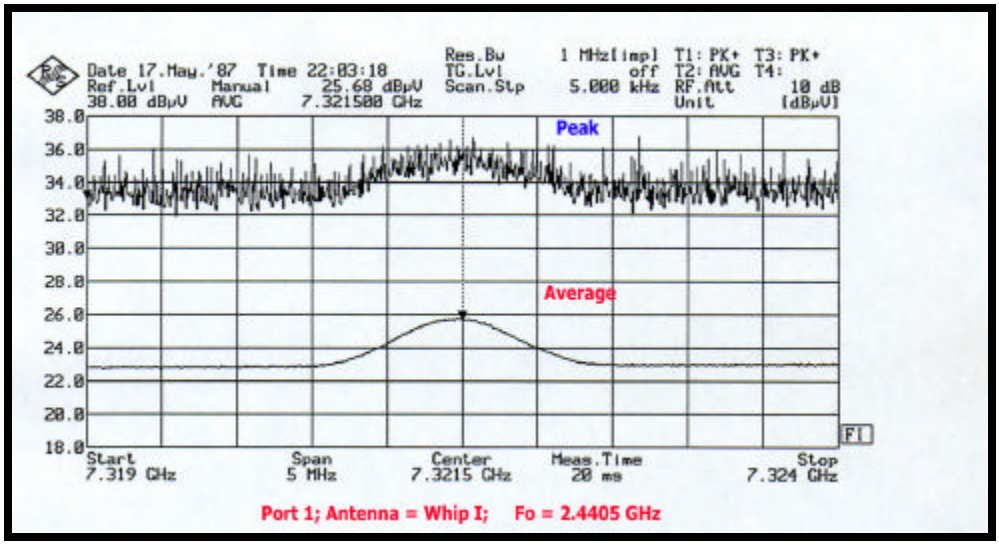
Calculation Formula: Margin = Limit – Measurement – Correction Factor

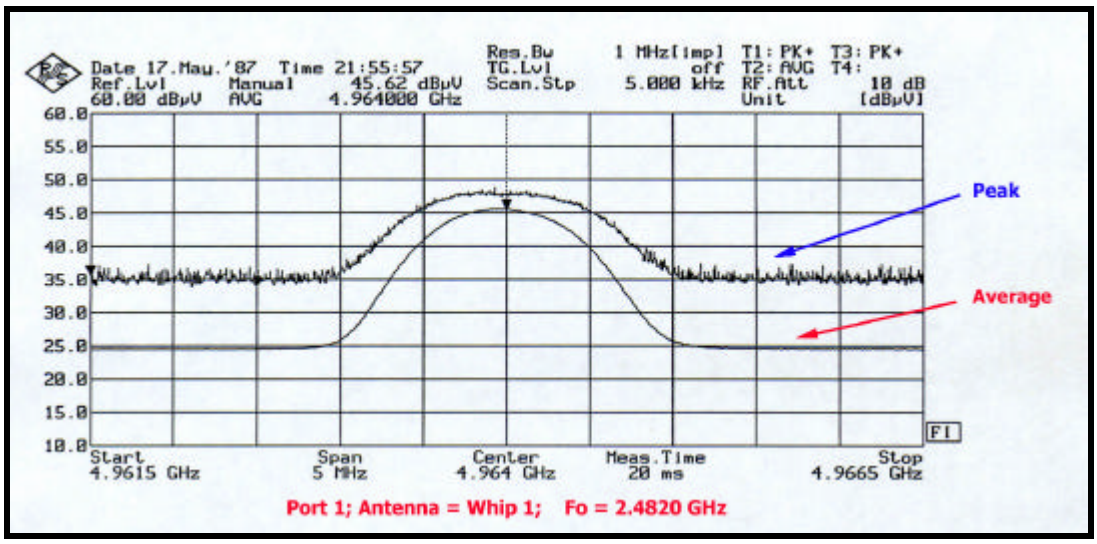

Whip I : NCC (N24ARSMA1)
Port 1
Level [dBµV/m]
70
60
50
40
30
20
10
0
30M 200M 400M 600M 800M 1G 1.2G 1.4G 1.6G 1.8G 2G
Frequency [Hz]

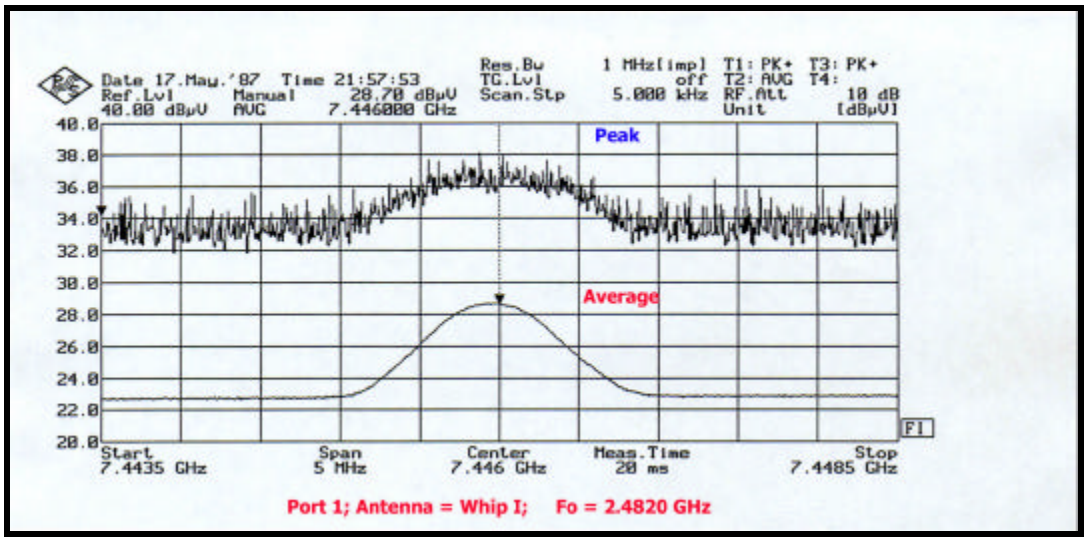

Date 17.May.'87 Time 22:05:31
Ref.Lvl Manual 32.64 dBµV
42.00 dBµV AVG 4.801000 GHz
Res.Bw 1 MHz[Imp] T1: PK+ T3: PK+
TG.Lvl off T2: AVG T4:
Scan.Stp 5.000 kHz RF.Att 10 dB
Unit [dBµV]
42.0
40.0
38.0
36.0
34.0
32.0
30.0
28.0
26.0
24.0
22.0
Peak
Average
Start 4.7985 GHz
Span 5 MHz
Center 4.801 GHz
Meas.Time 20 ms
Stop 4.8035 GHz
Port 1; Antenna = Whip I; Fo = 2.4005 GHz


Date 17.May.'87 Time 21:36:04
Ref.Lvl Manual 27.79 dBµV
39.00 dBµV AVG 7.201500 GHz
Res.Bw 1 MHz[imp] T1: PK+ T3: PK+
TG.Lvl off T2: AVG T4:
Scan.Stp 5.000 kHz RF.Att 10 dB
Unit [dBµV]
Peak
Average
Start 7.199 GHz
Span 5 MHz
Center 7.2015 GHz
Meas.Time 20 ms
Stop 7.204 GHz
Port 1; Antenna = Whip II; Fo = 2.4005


Date 17.May.'87 Time 22:00:27
Ref.Lvl Manual 36.85 dBµV
44.00 dBµV AVG 4.881000 GHz
Res.Bw 1 MHz[imp] T1: PK+ T3: PK+
TG.Lvl off T2: AVG T4:
Scan.Stp 5.000 kHz RF.Att 10 dB
Unit [dBµV]
Peak
Average
Start 4.8785 GHz
Span 5 MHz
Center 4.881 GHz
Meas.Time 20 ms
Stop 4.8835 GHz
Port 1; Antenna = Whip I; Fo = 2.4405 GHz


Date 17.May.'87 Time 22:03:18
Ref.Lvl Manual 25.68 dBµV
30.00 dBµV AVG 7.321500 GHz
Res.Bw 1 MHz[imp] T1: PK+ T3: PK+
TG.Lvl off T2: AVG T4:
Scan.Stp 5.000 kHz RF.Att 10 dB
Unit [dBµV]
Peak
Average
Start 7.319 GHz
Span 5 MHz
Center 7.3215 GHz
Meas.Time 20 ms
Stop 7.324 GHz
Port 1; Antenna = Whip I; Fo = 2.4405 GHz


Date 17.May.'87 Time 21:55:57
Ref.Lvl Manual 45.62 dBµV
60.00 dBµV AVG 4.964000 GHz
Res.Bw 1 MHz[imp] T1: PK+ T3: PK+
TG.Lvl off T2: AVG T4:
Scan.Stp 5.000 kHz RF.Att 10 dB
Unit [dBµV]
60.0
55.0
50.0
45.0
40.0
35.0
30.0
25.0
20.0
15.0
10.0
Peak
Average
FI
Start 4.9615 GHz
Span 5 MHz
Center 4.964 GHz
Meas.Time 20 ms
Stop 4.9665 GHz
Port 1; Antenna = Whip 1; Fo = 2.4820 GHz


Date 17.May.'87 Time 21:57:53
Ref.Lvl Manual 28.70 dBµV
40.00 dBµV AVG 7.446000 GHz
Res.Bw 1 MHz[imp] T1: PK+ T3: PK+
TG.Lvl off T2: AVG T4:
Scan.Stp 5.000 kHz RF.Att 10 dB
Unit [dBµV]
40.0
38.0
36.0
34.0
32.0
30.0
28.0
26.0
24.0
22.0
20.0
Peak
Average
FI
Start 7.4435 GHz
Span 5 MHz
Center 7.446 GHz
Meas.Time 20 ms
Stop 7.4485 GHz
Port 1; Antenna = Whip I; Fo = 2.4820 GHz

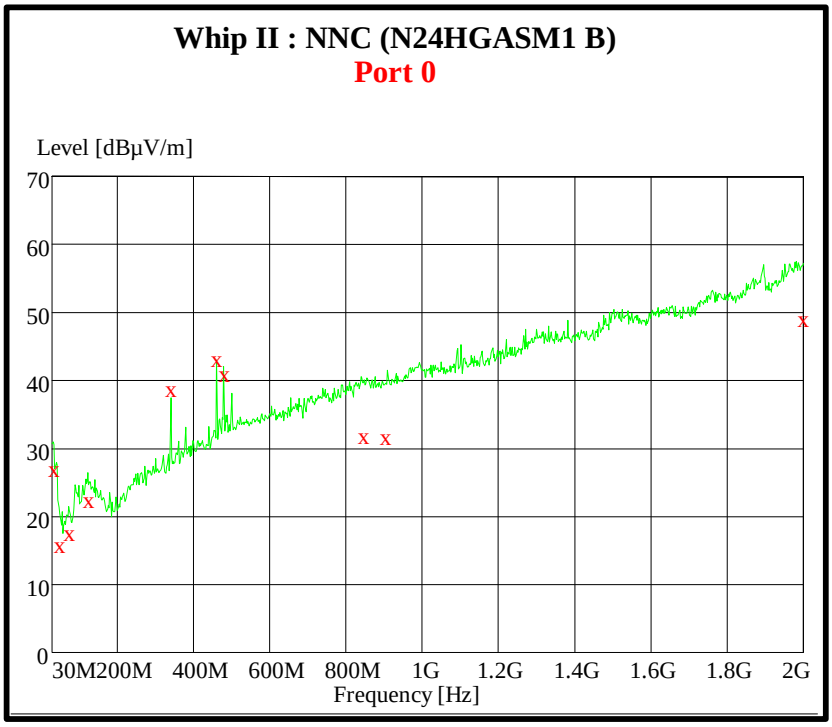
Test Data : Port 0 : NCC Whip II (M/N: N24HGASMI B)

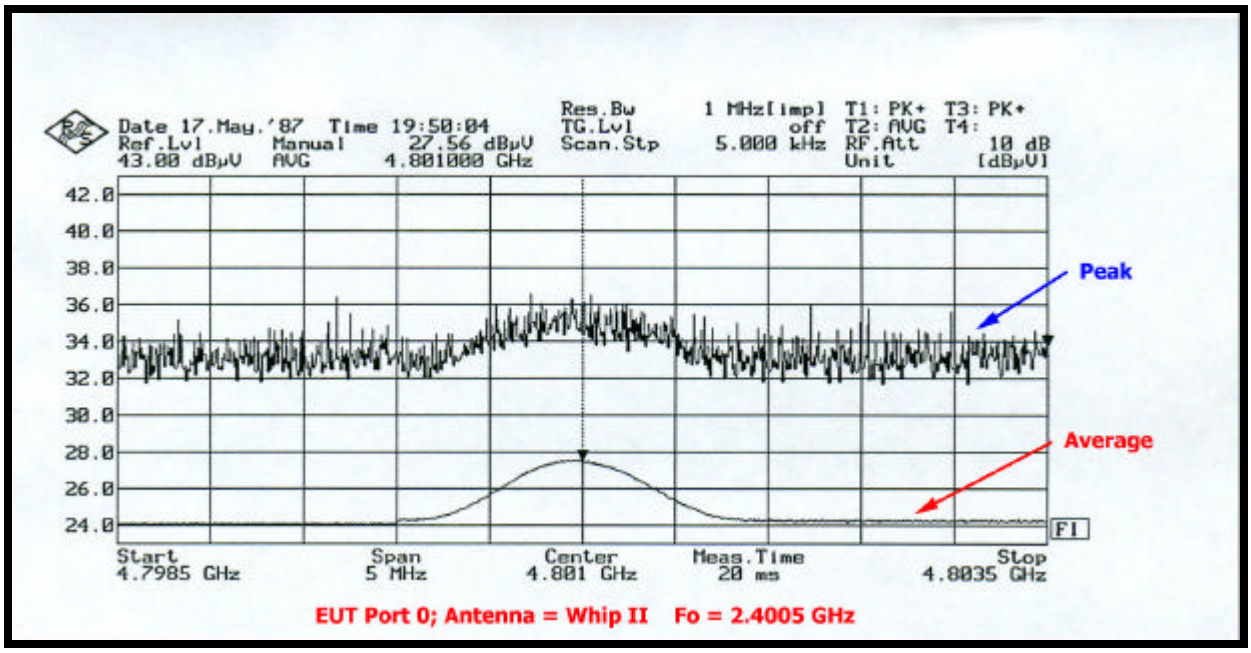
October 8, 1999

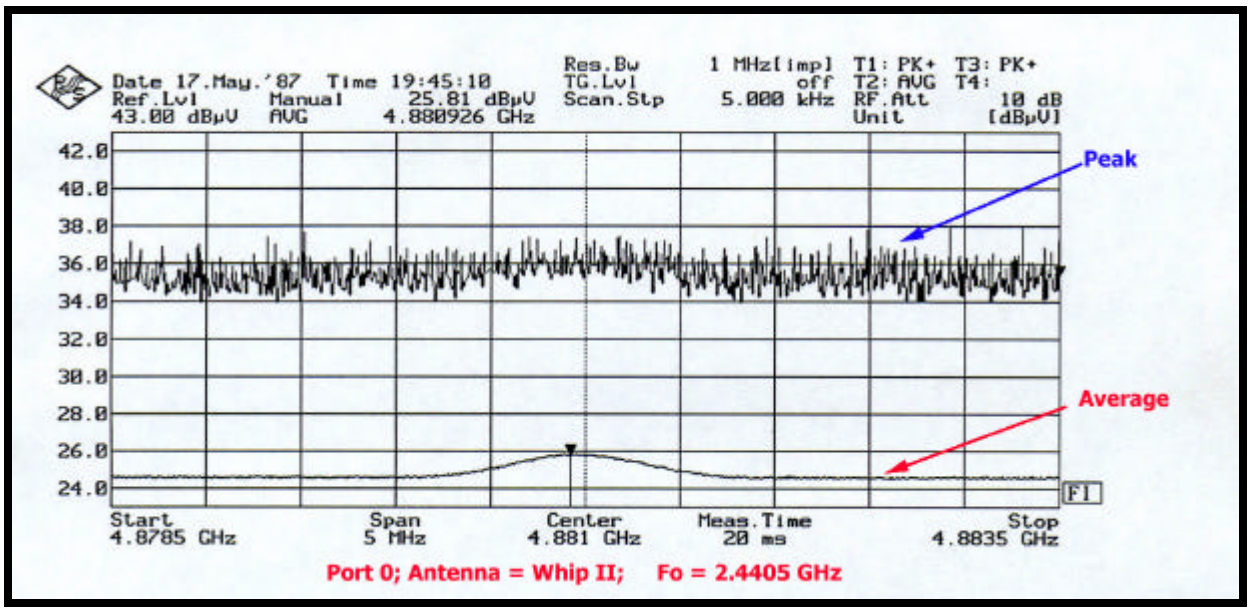
Equipment : OS2400 DSS Transmitter
Manufacturer : Locus
Test Distance : 3 meters

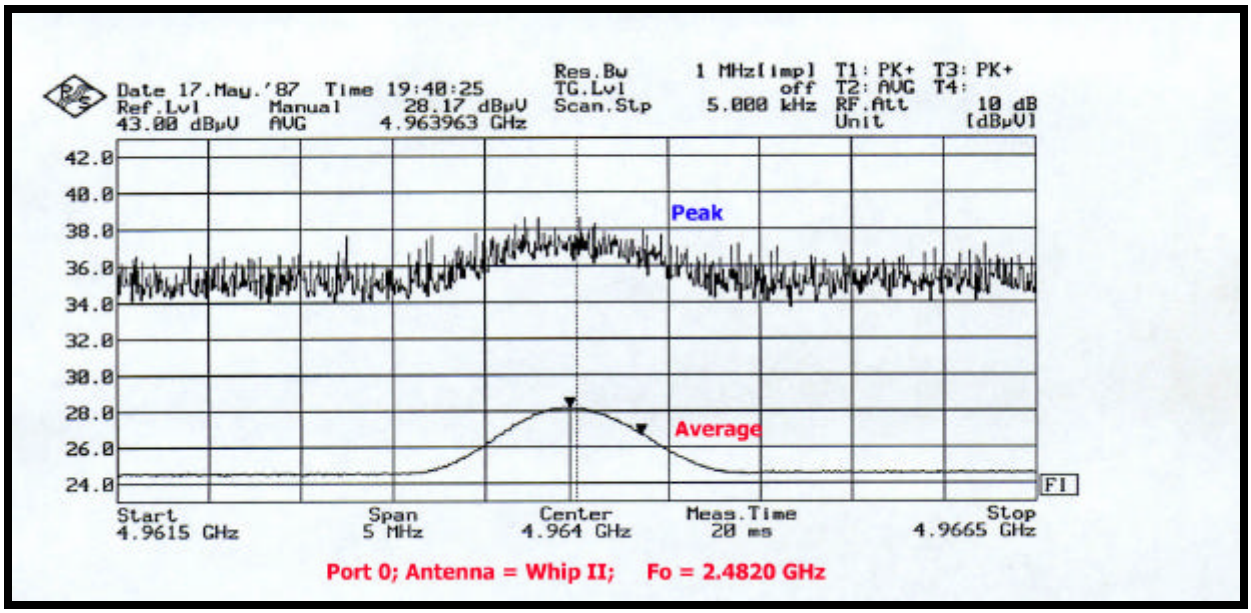
Frequency (MHz)	Detector	Measured EMI (dBµV/m)	Correction Factors (dB)	FCC LIMIT (dBµV/m)	Margin (dB)	Height (cm)	Azimuth (Degrees)	Ant. Pol.
32.80	Q-Peak	7.5	20.0	40.0	**12.5**	100	82	V
47.60	Q-Peak	4.0	12.3	40.0	**23.7**	125	97	V
73.28	Q-Peak	8.7	9.4	40.0	**21.9**	100	96	V
124.00	Q-Peak	8.3	14.7	43.5	**20.5**	100	82	V
340.00	Q-Peak	20.2	19.0	46.0	**6.8**	100	94	V
460.00	Q-Peak	21.5	22.2	46.0	**2.3**	115	73	V
480.00	Q-Peak	18.5	22.9	46.0	**4.6**	125	69	V
845.28	Q-Peak	2.4	29.9	46.0	**13.7**	175	81	H
903.84	Q-Peak	2.2	30.0	46.0	**13.8**	194	53	H
1,997.92	Average	2.2	47.4	54.0	**4.4**	193	65	V
Fo = 2.4005 GHz								
4,801.00	Average	27.6	0.1	54.0	**26.3**	100	0	H
4,801.00	Peak	37.0	26.1	74.0	**10.9**	100	0	H
Fo = 2.4405 GHz								
4,881.0	Average	25.8	0.1	54.0	**28.1**	120	0	H
4,881.0	Peak	36.0	26.1	74.0	**11.9**	120	0	H
Fo = 2.4820 GHz								
4,964.0	Average	28.2	0.1	54.0	**25.7**	110	15	H
4,964.0	Peak	38.0	26.1	74.0	**9.9**	110	15	H

Calculation Formula: Margin = Limit – Measurement – Correction Factor


Whip II : NNC (N24HGASM1 B)
Port 0
Level [dBµV/m]
70
60
50
40
30
20
10
0
30M200M
400M
600M
800M
1G
1.2G
1.4G
1.6G
1.8G
2G
Frequency [Hz]


Date 17.May.'87 Time 19:50:04
Ref.Lvl 43.00 dBµV
Manual AVG
27.56 dBµV
4.801000 GHz
Res.Bw
TG.Lvl
Scan.Stp
1 MHz[imp]
off
5.000 kHz
T1: PK+
T2: AVG
RF.Att
Unit
T3: PK+
T4:
10 dB
[dBµV]
42.0
40.0
38.0
36.0
34.0
32.0
30.0
28.0
26.0
24.0
Peak
Average
F1
Start 4.7985 GHz
Span 5 MHz
Center 4.801 GHz
Meas.Time 20 ms
Stop 4.8035 GHz
EUT Port 0; Antenna = Whip II Fo = 2.4005 GHz


Date 17.May.'87 Time 19:45:10
Ref.Lvl Manual 25.81 dBµV
43.00 dBµV AVG 4.880926 GHz
Res.Bw 1 MHz[imp] T1: PK+ T3: PK+
TG.Lvl off T2: AVG T4:
Scan.Stp 5.000 kHz RF.Att 10 dB
Unit [dBµV]
42.0
40.0
38.0
36.0
34.0
32.0
30.0
28.0
26.0
24.0
Peak
Average
FI
Start 4.8785 GHz
Span 5 MHz
Center 4.881 GHz
Meas.Time 20 ms
Stop 4.8835 GHz
Port 0; Antenna = Whip II; Fo = 2.4405 GHz


Date 17.May.'87 Time 19:40:25
Ref.Lvl Manual 28.17 dBµV
43.00 dBµV AVG 4.963963 GHz
Res.Bw 1 MHz[imp] T1: PK+ T3: PK+
TG.Lvl off T2: AVG T4:
Scan.Stp 5.000 kHz RF.Att 10 dB
Unit [dBµV]
42.0
40.0
38.0
36.0
34.0
32.0
30.0
28.0
26.0
24.0
Peak
Average
FI
Start 4.9615 GHz
Span 5 MHz
Center 4.964 GHz
Meas.Time 20 ms
Stop 4.9665 GHz
Port 0; Antenna = Whip II; Fo = 2.4820 GHz

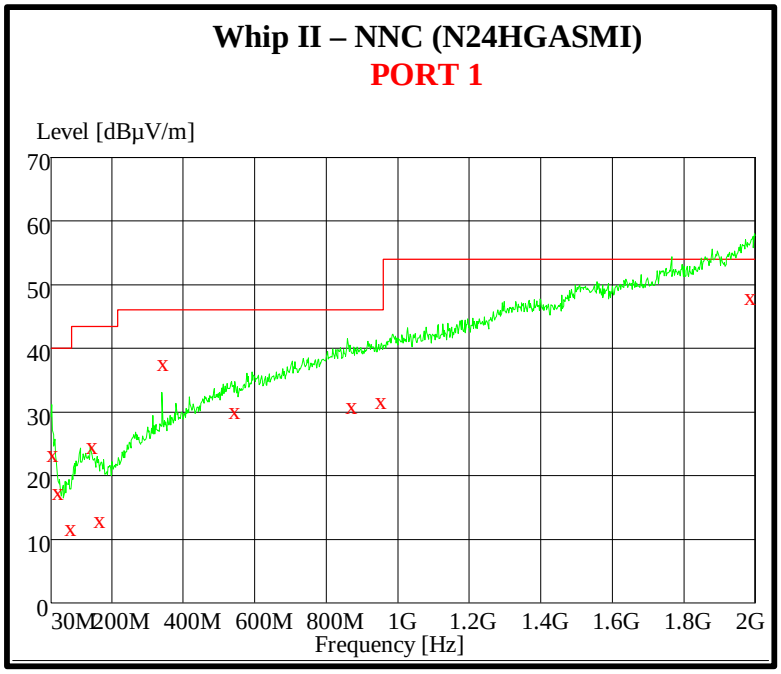
Test Data : Port 1 : NCC Whip II (M/N: N24HGASMI B)

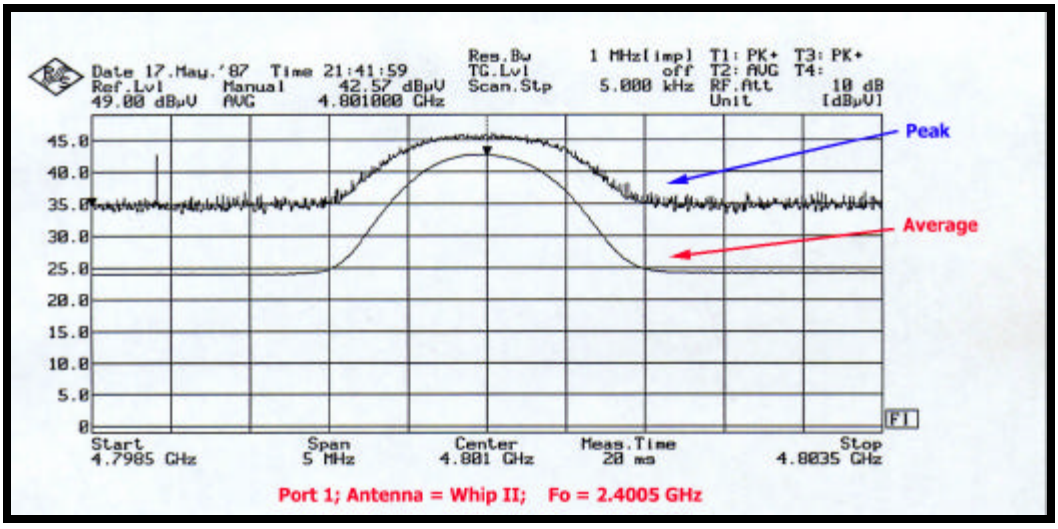
October 8, 1999

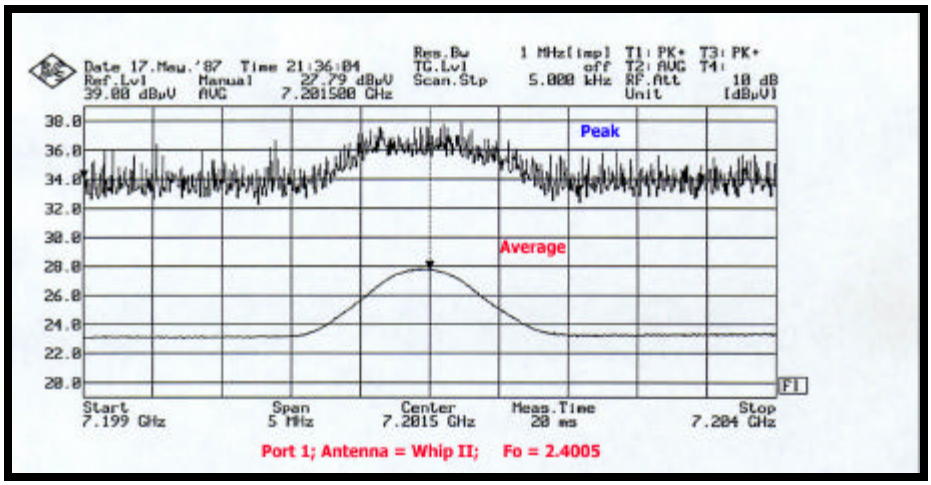
Equipment : OS2400 DSS Transmitter
Manufacturer : Locus
Test Distance : 3 meters

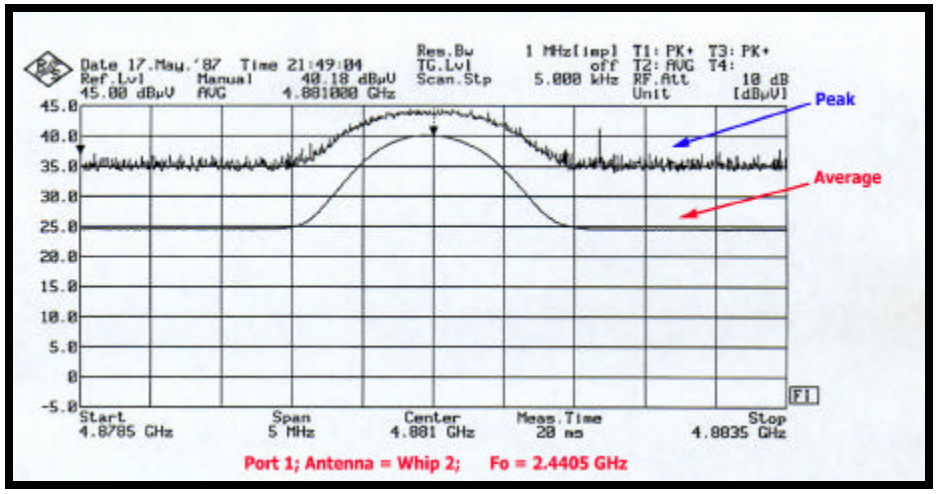
Frequency (MHz)	Detector	Measured EMI (dBµV/m)	Correction Factors (dB)	FCC LIMIT (dBµV/m)	Margin (dB)	Height (cm)	Azimuth (Degrees)	Ant. Pol.
32.24	Q-Peak	3.9	20.3	40.0	15.8	125	97	V
47.44	Q-Peak	5.8	12.4	40.0	21.8	115	54	V
80.48	Q-Peak	2.3	10.2	40.0	27.5	101	78	V
140.00	Q-Peak	10.4	15.0	43.5	18.1	100	97	V
162.08	Q-Peak	0	13.8	43.5	29.7	125	69	V
340.00	Q-Peak	19.5	19.0	46.0	7.5	125	86	V
540.00	Q-Peak	6.6	24.4	46.0	15.0	101	57	V
867.12	Q-Peak	2.1	29.7	46.0	14.2	185	61	V
949.92	Q-Peak	1.6	30.9	46.0	13.5	101	54	H
1983.04	Average	1.8	47.0	54.0	5.2	100	69	V
Fo = 2.4005 GHz								
4,801.00	Average	42.6	0.1	54.0	11.3	100	0	H
4,801.00	Peak	45.0	26.1	74.0	2.9	100	0	H
7,201.5	Average	27.8	9.7	54.0	16.5	100	0	H
7,201.5	Peak	37.0	35.7	74.0	1.3	100	0	H
Fo = 2.4405 GHz								
4,881.0	Average	40.2	0.1	54.0	**13.7**	120	0	H
4,881.0	Peak	45.0	26.1	74.0	**2.9**	120	0	H
Fo = 2.4820 GHz								
4,964.0	Average	42.6	0.1	54.0	11.3	110	15	H
4,964.0	Peak	47.0	26.1	74.0	0.9	110	15	H
7,446.0	Average	29.6	9.7	54.0	14.7	100	0	H
7,446.0	Peak	37.0	35.7	74.0	1.3	100	0	H

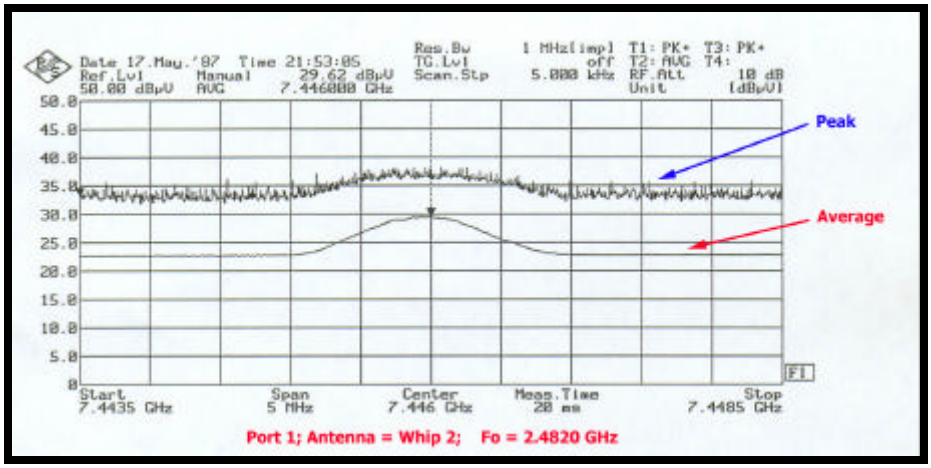
Calculation Formula: Margin = Limit – Measurement – Correction Factor


Whip II – NNC (N24HGASMI)
PORT 1
Level [dBµV/m]
70
60
50
40
30
20
10
0
30M 200M 400M 600M 800M 1G 1.2G 1.4G 1.6G 1.8G 2G
Frequency [Hz]


Date 17.May.'87 Time 21:41:59
Ref.Lvl Manual 42.57 dBµV
49.00 dBµV AVG 4.801000 GHz
Res.Bw 1 MHz[imp] T1: PK+ T3: PK+
TG.Lvl off T2: AVG T4:
Scan.Stp 5.000 kHz RF.Att 10 dB
Unit [dBµV]
45.0
40.0
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0
Peak
Average
Start 4.7985 GHz
Span 5 MHz
Center 4.801 GHz
Meas.Time 20 ms
Stop 4.8035 GHz
Port 1; Antenna = Whip II; Fo = 2.4005 GHz


Date 17.May.'87 Time 21:36:04
Ref.Lvl Manual 27.79 dBµV
39.00 dBµV AVG 7.201500 GHz
Res.Bw 1 MHz[imp] T1: PK+ T3: PK+
TG.Lvl off T2: AVG T4:
Scan.Stp 5.000 kHz RF.Att 10 dB
Unit [dBµV]
Peak
Average
Start 7.199 GHz
Span 5 MHz
Center 7.2015 GHz
Meas.Time 20 ms
Stop 7.204 GHz
Port 1; Antenna = Whip II; Fo = 2.4005


Date 17.May.'87 Time 21:49:04
Ref.Lvl Manual 40.18 dBµV
45.00 dBµV AVG 4.881000 GHz
Res.Bw 1 MHz[imp] T1: PK+ T3: PK+
TG.Lvl off T2: AVG T4:
Scan.Stp 5.000 kHz RF.Att 10 dB
Unit [dBµV]
Peak
Average
Start 4.8785 GHz
Span 5 MHz
Center 4.881 GHz
Meas.Time 20 ms
Stop 4.8835 GHz
Port 1; Antenna = Whip 2; Fo = 2.4405 GHz


Date 17.May.'87 Time 21:53:05
Ref.Lvl Manual 29.62 dBµV
50.00 dBµV AVG 7.446000 GHz
Res.Bw 1 MHz[imp] T1: PK+ T3: PK+
TG.Lvl off T2: AVG T4:
Scan.Stp 5.000 kHz RF.Att 10 dB
Unit [dBµV]
Peak
Average
Start 7.4435 GHz
Span 5 MHz
Center 7.446 GHz
Meas.Time 20 ms
Stop 7.4485 GHz
Port 1; Antenna = Whip 2; Fo = 2.4820 GHz

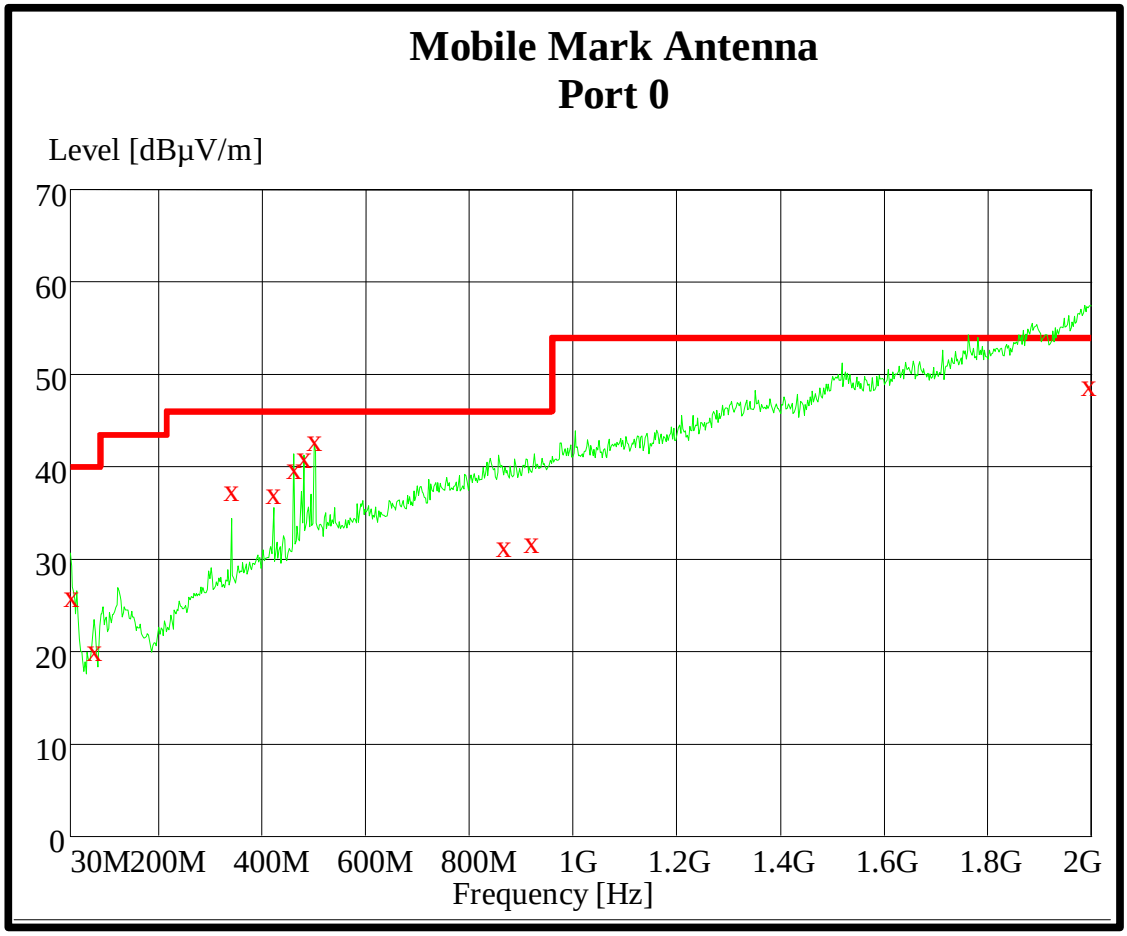
Test Data : Port 0 : Mobile Mark Antenna

October 8, 1999

Equipment : OS2400 DSS Transmitter
Manufacturer : Locus
Test Distance : 3 meters

Frequency (MHz)	Detector	Measured EMI (dBµV/m)	Correction Factors (dB)	FCC LIMIT (dBµV/m)	Margin (dB)	Height (cm)	Azimuth (Degrees)	Ant. Pol.
30.32	Q-Peak	5.2	21.3	40.0	13.5	131	97	V
75.44	Q-Peak	11.0	9.7	40.0	19.3	125	96	V
340.00	Q-Peak	19.1	19.0	46.0	7.9	101	94	V
420.00	Q-Peak	15.6	22.1	46.0	8.3	125	59	V
460.00	Q-Peak	18.2	22.2	46.0	5.6	148	69	V
480.00	Q-Peak	18.7	22.9	46.0	4.4	126	61	V
500.00	Q-Peak	20.3	23.2	46.0	2.5	140	54	V
864.88	Q-Peak	2.3	29.7	46.0	14.0	185	97	V
918.72	Q-Peak	2.1	30.3	46.0	13.6	149	69	H
1994.08	Average	2.1	47.3	54.0	4.6	125	54	V
Fo = 2.4005 GHz								
4,801.00	Average	-----	0.1	54.0	-----	-----	-----	H
4,801.00	Peak	-----	26.1	74.0	-----	-----	-----	H
7,201.5	Average	-----	9.7	54.0	-----	-----	-----	H
7,201.5	Peak	-----	35.7	74.0	-----	-----	-----	H
Fo = 2.4405 GHz								
4,881.0	Average	-----	0.1	54.0	-----	-----	-----	H
4,881.0	Peak	-----	26.1	74.0	-----	-----	-----	H
Fo = 2.4820 GHz								
4,964.0	Average	-----	0.1	54.0	-----	-----	-----	H
4,964.0	Peak	-----	26.1	74.0	-----	-----	-----	H
7,446.0	Average	-----	9.7	54.0	-----	-----	-----	H
7,446.0	Peak	-----	35.7	74.0	-----	-----	-----	H

Calculation Formula: Margin = Limit – Measurement – Correction Factor


Mobile Mark Antenna
Port 0
Level [dBµV/m]
70
60
50
40
30
20
10
0
30M200M
400M
600M
800M
1G
1.2G
1.4G
1.6G
1.8G
2G
Frequency [Hz]

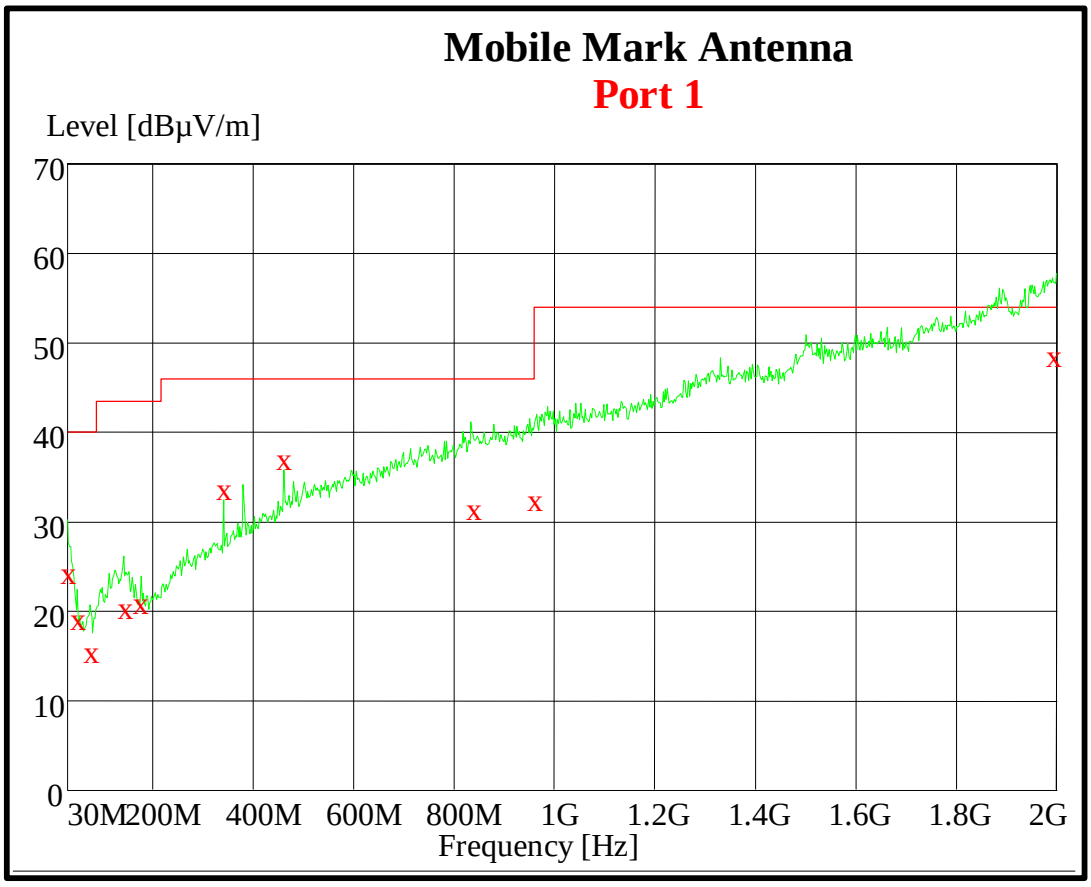
Test Data : Port 1 : Mobile Mark Antenna

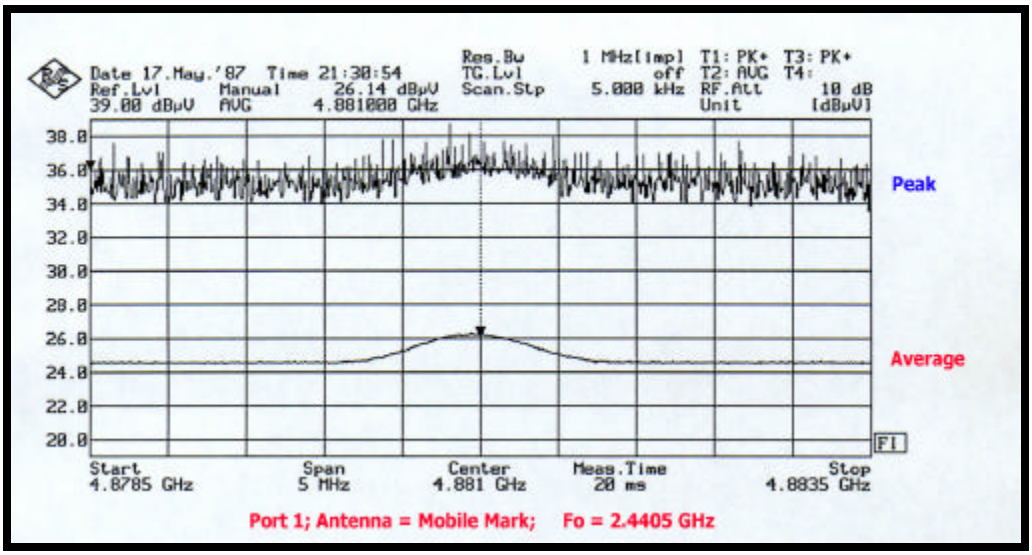
October 8, 1999

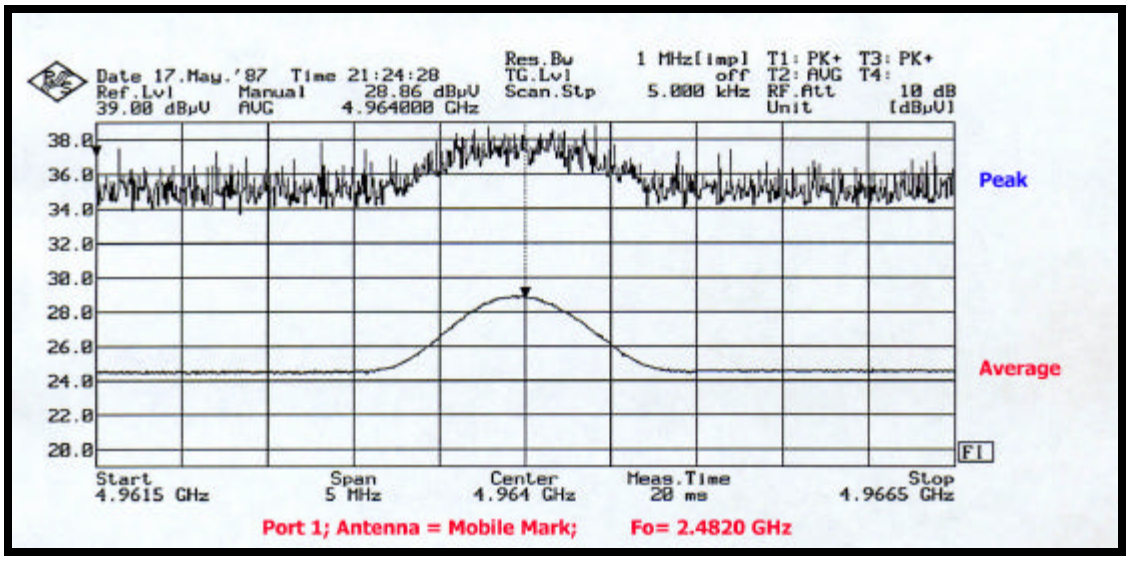
Equipment : OS2400 DSS Transmitter
Manufacturer : Locus
Test Distance : 3 meters

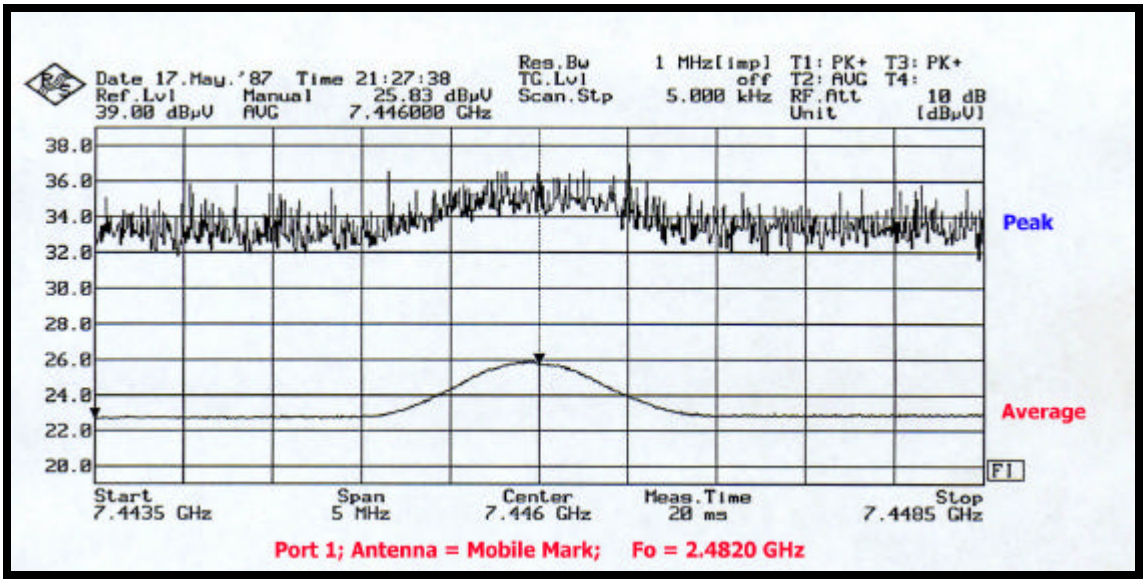
Frequency (MHz)	Detector	Measured EMI (dBµV/m)	Correction Factors (dB)	FCC LIMIT (dBµV/m)	Margin (dB)	Height (cm)	Azimuth (Degrees)	Ant. Pol.
30.40	Q-Peak	3.6	21.2	40.0	**15.2**	125	54	V
49.20	Q-Peak	8.2	11.5	40.0	**20.3**	125	70	V
75.44	Q-Peak	6.3	9.7	40.0	**24.0**	123	66	V
142.72	Q-Peak	6.1	14.8	43.5	**22.6**	125	97	V
175.28	Q-Peak	8.3	13.1	43.5	**22.1**	166	97	V
340.00	Q-Peak	15.2	19.0	46.0	**11.8**	158	97	V
460.00	Q-Peak	15.3	22.2	46.0	**8.5**	176	54	V
839.28	Q-Peak	2.0	30.0	46.0	**14.0**	200	65	H
959.12	Q-Peak	1.8	31.2	46.0	**13.0**	101	97	H
1993.04	Average	1.9	47.2	54.0	**4.9**	125	54	H
Fo = 2.4005 GHz								
4,801.00	Average	31.9	0.1	54.0	**22.0**	100	10	H
4,801.00	Peak	39.0	26.1	74.0	**8.9**	100	10	H
7,201.5	Average	27.8	9.7	54.0	**16.5**	120	15	H
7,201.5	**Peak**	**37.0**	**35.7**	**74.0**	**1.3**	**120**	**15**	**H**
Fo = 2.4405 GHz								
4,881.0	Average	26.1	0.1	54.0	**27.8**	100	0	H
4,881.0	Peak	37.0	26.1	74.0	**10.9**	100	0	H
Fo = 2.4820 GHz								
4,964.0	Average	28.9	0.1	54.0	**25.0**	100	10	H
4,964.0	Peak	38.0	26.1	74.0	**9.9**	100	10	H
7,446.0	Average	25.8	9.7	54.0	**18.5**	100	15	H
7,446.0	**Peak**	**36.0**	**35.7**	**74.0**	**2.3**	**100**	**15**	**H**

Calculation Formula: Margin = Limit – Measurement – Correction Factor


Mobile Mark Antenna
Port 1
Level [dBµV/m]
70
60
50
40
30
20
10
0
30M
200M
400M
600M
800M
1G
1.2G
1.4G
1.6G
1.8G
2G
Frequency [Hz]


Date 17.May.'87 Time 21:30:54
Ref.Lvl Manual 26.14 dBµV
39.00 dBµV AVG 4.881000 GHz
Res.Bw 1 MHz[imp] T1: PK+ T3: PK+
TG.Lvl off T2: AVG T4:
Scan.Stp 5.000 kHz RF.Att 10 dB
Unit [dBµV]
38.0
36.0
34.0
32.0
30.0
28.0
26.0
24.0
22.0
20.0
Peak
Average
FI
Start 4.8785 GHz
Span 5 MHz
Center 4.881 GHz
Meas.Time 20 ms
Stop 4.8835 GHz
Port 1; Antenna = Mobile Mark; Fo = 2.4405 GHz


Date 17.May.'87 Time 21:24:28
Ref.Lvl 39.00 dBµV
Manual AVG
28.86 dBµV
4.964000 GHz
Res.Bw
TG.Lvl
Scan.Stp
1 MHz[Imp]
off
5.000 kHz
T1: PK+ T3: PK+
T2: AVG T4:
RF.Att 10 dB
Unit [dBµV]
38.0
36.0
34.0
32.0
30.0
28.0
26.0
24.0
22.0
20.0
Peak
Average
FI
Start 4.9615 GHz
Span 5 MHz
Center 4.964 GHz
Meas.Time 20 ms
Stop 4.9665 GHz
Port 1; Antenna = Mobile Mark; Fo= 2.4820 GHz


Date 17.May.'87 Time 21:27:38
Ref.Lvl 39.00 dBµV
Manual AVG
25.83 dBµV
7.446000 GHz
Res.Bw
TG.Lvl
Scan.Stp
1 MHz[Imp]
off
5.000 kHz
T1: PK+ T3: PK+
T2: AVG T4:
RF.Att 10 dB
Unit [dBµV]
38.0
36.0
34.0
32.0
30.0
28.0
26.0
24.0
22.0
20.0
Peak
Average
FI
Start 7.4435 GHz
Span 5 MHz
Center 7.446 GHz
Meas.Time 20 ms
Stop 7.4485 GHz
Port 1; Antenna = Mobile Mark; Fo = 2.4820 GHz

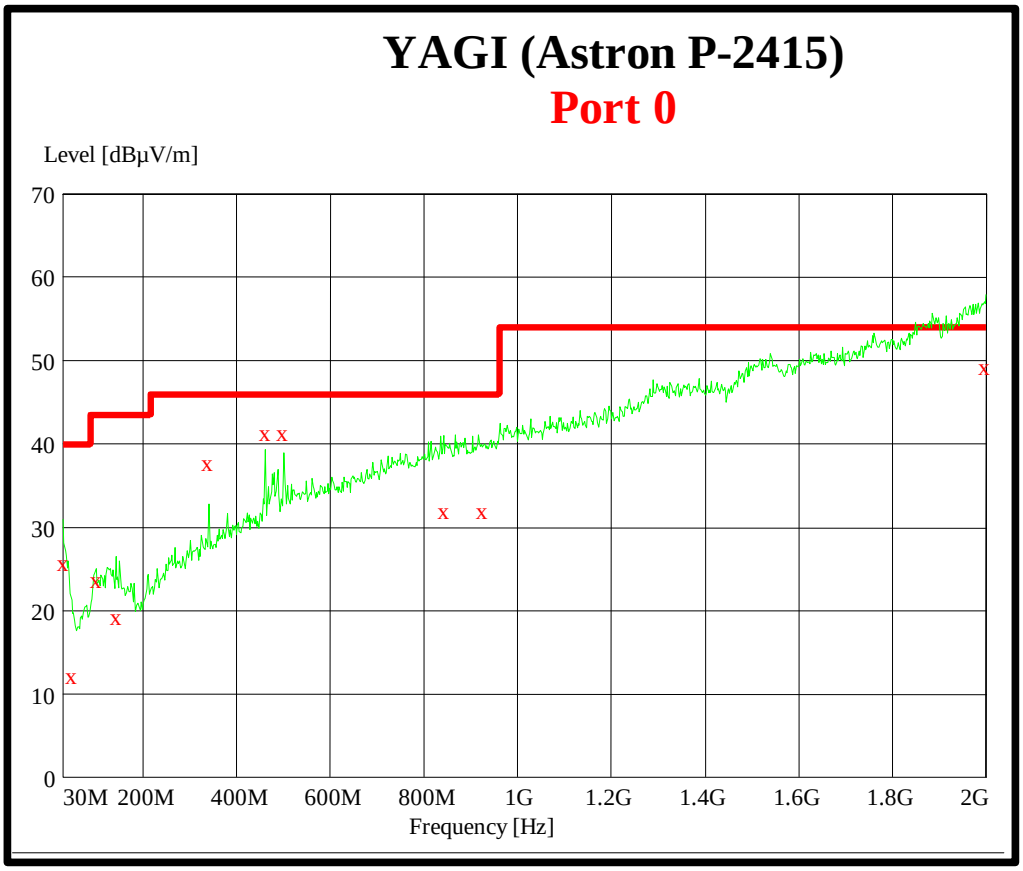
Test Data : Port 0 : YAGI (Astron P-2415)

October 8, 1999

Equipment : OS2400 DSS Transmitter
Manufacturer : Locus
Test Distance : 3 meters

Frequency (MHz)	Detector	Measured EMI (dBµV/m)	Correction Factors (dB)	FCC LIMIT (dBµV/m)	Margin (dB)	Height (cm)	Azimuth (Degrees)	Ant. Pol.
30.48	Q-Peak	4.7	21.2	40.0	**14.0**	126	54	V
47.20	Q-Peak	-0.1	12.5	40.0	**27.5**	200	81	H
100.24	Q-Peak	11.5	12.3	43.5	**19.6**	107	54	V
143.04	Q-Peak	4.6	14.8	43.5	**24.0**	114	97	V
340.00	Q-Peak	18.8	19.0	46.0	**8.1**	101	90	V
460.00	Q-Peak	19.3	22.2	46.0	**4.4**	148	65	V
500.00	Q-Peak	18.3	23.2	46.0	**4.4**	125	54	V
843.20	Q-Peak	2.2	30.0	46.0	**13.7**	101	89	H
925.44	Q-Peak	1.8	30.4	46.0	**13.7**	194	54	V
30.48	Average	2.0	47.4	54.0	**4.5**	106	94	H
Fo = 2.4005 GHz								
4,801.00	Average	------	0.1	54.0	------	------	------	---
4,801.00	Peak	------	26.1	74.0	------	------	------	---
7,201.5	Average	------	9.7	54.0	------	------	------	---
7,201.5	Peak	------	35.7	74.0	------	------	------	---
Fo = 2.4405 GHz								
4,881.0	Average	------	0.1	54.0	------	------	------	---
4,881.0	Peak	------	26.1	74.0	------	------	------	---
Fo = 2.4820 GHz								
4,964.0	Average	------	0.1	54.0	------	------	------	---
4,964.0	Peak	------	26.1	74.0	------	------	------	---
7,446.0	Average	------	9.7	54.0	------	------	------	---
7,446.0	Peak	------	35.7	74.0	------	------	------	---

Calculation Formula: Margin = Limit – Measurement – Correction Factor


YAGI (Astron P-2415)
Port 0
Level [dBµV/m]
70
60
50
40
30
20
10
0
30M
200M
400M
600M
800M
1G
1.2G
1.4G
1.6G
1.8G
2G
Frequency [Hz]

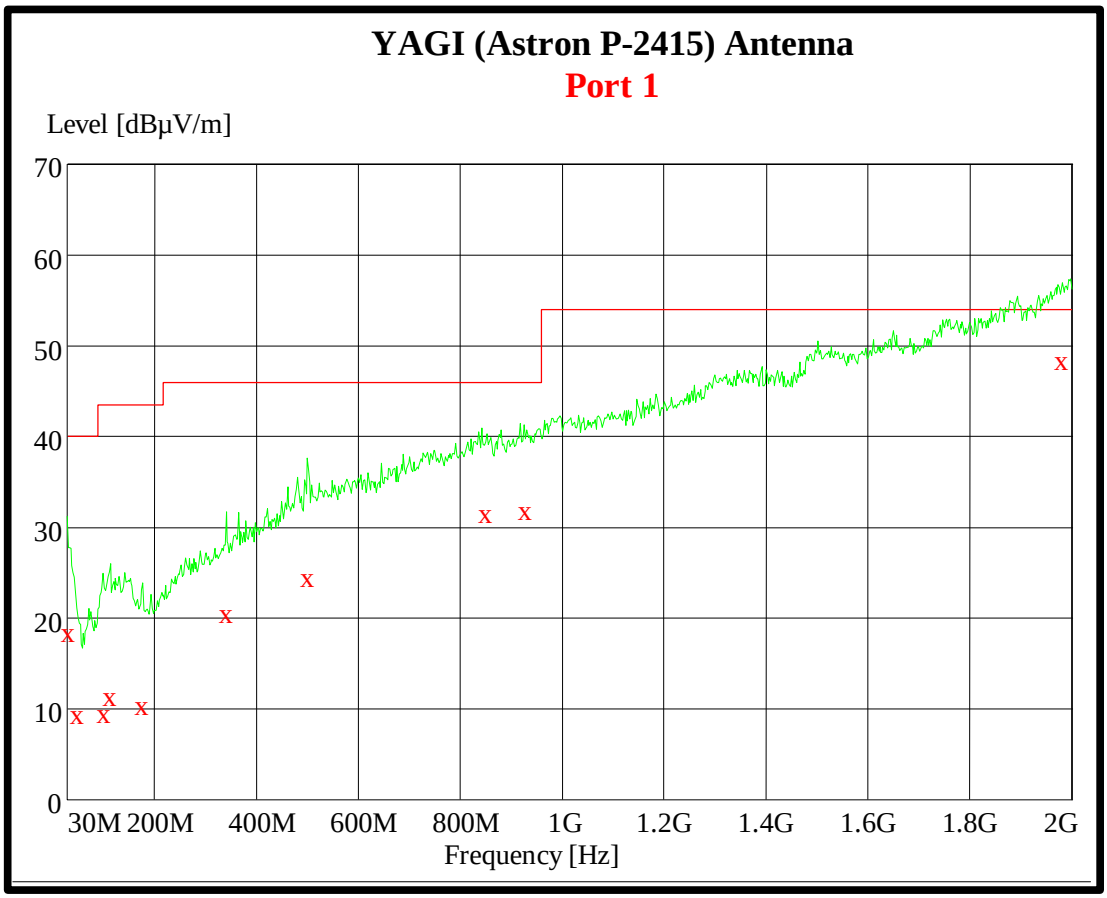
Test Data : Port 1 : YAGI (Astron P-2415)

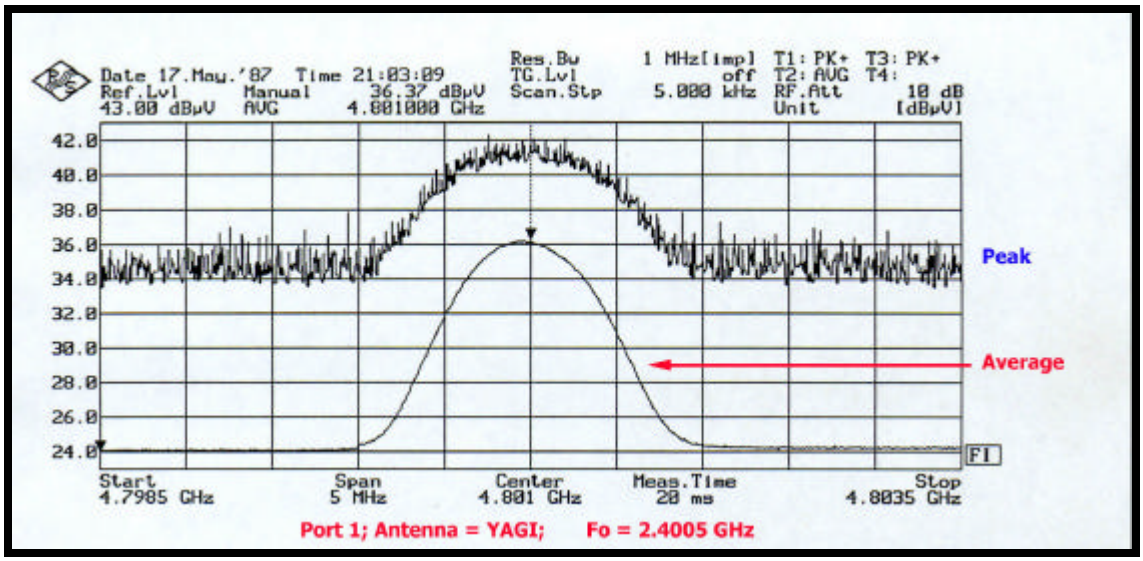
October 8, 1999

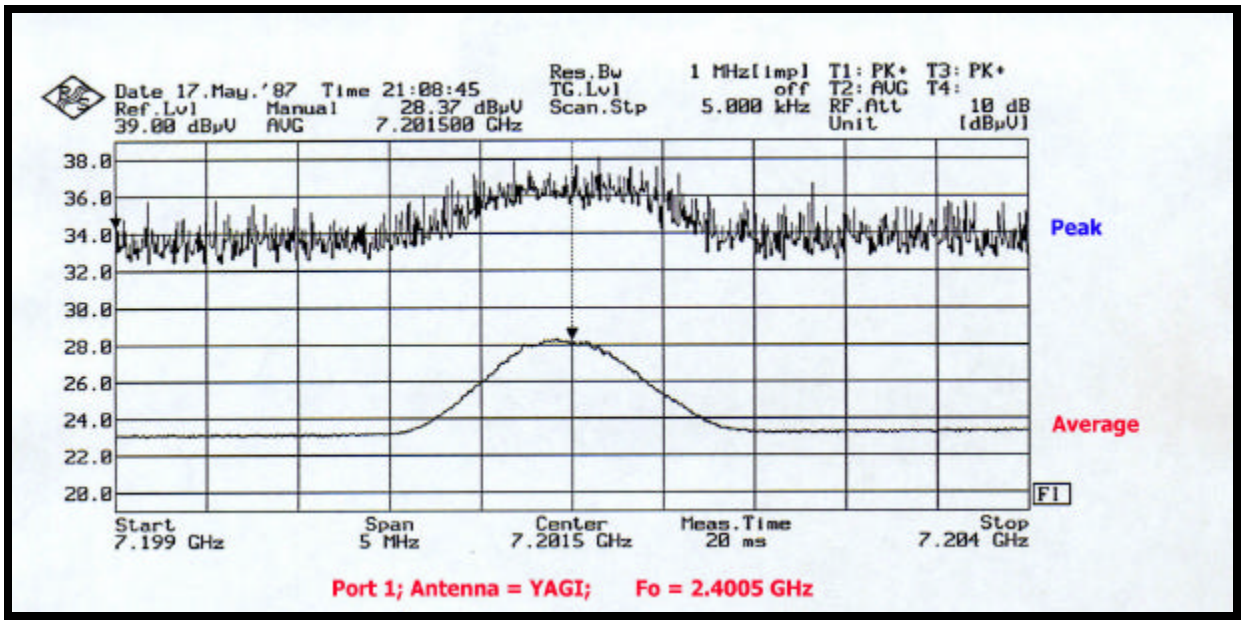
Equipment : OS2400 DSS Transmitter
Manufacturer : Locus
Test Distance : 3 meters

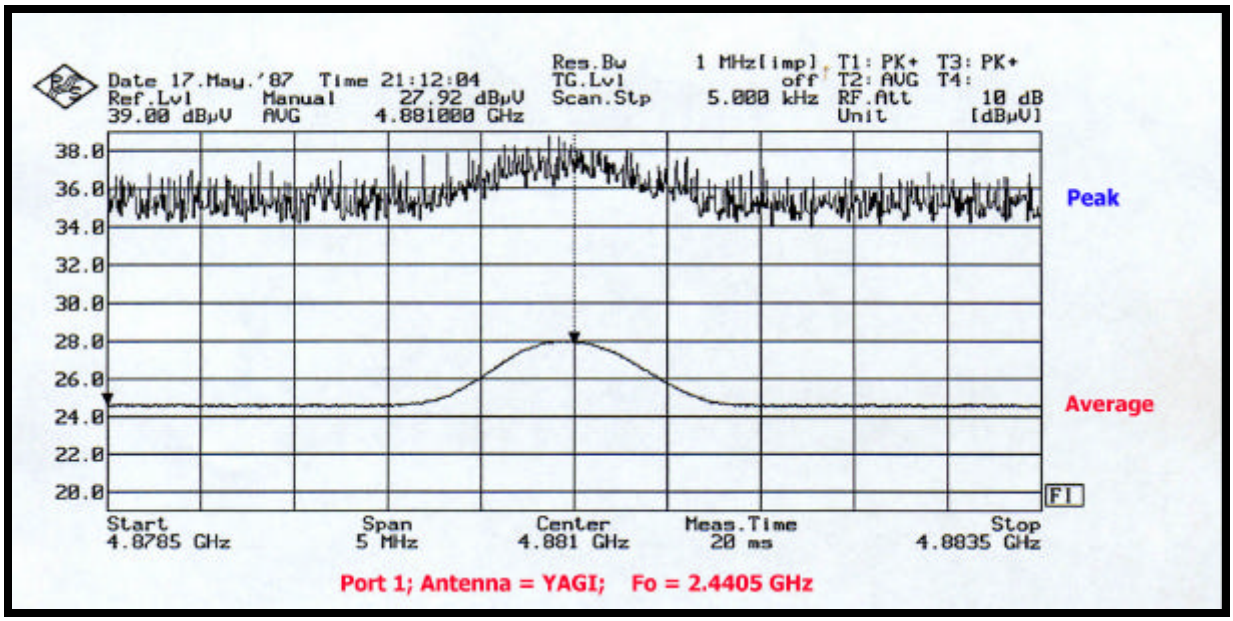
Frequency (MHz)	Detector	Measured EMI (dBµV/m)	Correction Factors (dB)	FCC LIMIT (dBµV/m)	Margin (dB)	Height (cm)	Azimuth (Degrees)	Ant. Pol.
30.24	Q-Peak	-2.4	21.3	40.0	**21.1**	166	97	V
47.76	Q-Peak	-2.4	12.2	40.0	**30.2**	185	57	H
99.68	Q-Peak	-2.3	12.2	43.5	**33.6**	100	54	V
112.88	Q-Peak	-2.1	13.9	43.5	**31.7**	100	54	V
175.28	Q-Peak	-2.3	13.1	43.5	**32.7**	140	86	V
340.00	Q-Peak	2.0	19.0	46.0	**25.0**	101	69	H
500.00	Q-Peak	1.6	23.2	46.0	**21.2**	176	97	H
848.00	Q-Peak	2.1	29.9	46.0	**14.0**	175	54	V
926.72	Q-Peak	1.9	30.5	46.0	**13.6**	101	69	H
1978.64	Average	2.0	46.8	54.0	**5.2**	184	77	H
Fo = 2.4005 GHz								
4,801.00	Average	36.4	0.1	54.0	**17.5**	125	0	H
4,801.00	Peak	42.0	26.1	74.0	**5.9**	125	0	H
7,201.5	Average	28.4	9.7	54.0	**15.9**	110	10	H
17,201.5	Peak	36.5	35.7	74.0	**1.8**	110	10	H
Fo = 2.4405 GHz								
4,881.0	Average	27.9	0.1	54.0	**26.0**	110	0	H
4,881.0	Peak	38.0	26.1	74.0	**9.9**	110	0	H
Fo = 2.4820 GHz								
4,964.0	Average	30.2	0.1	54.0	**23.7**	125	0	H
4,964.0	Peak	35.0	26.1	74.0	**12.9**	125	0	H
7,446.0	Average	26.1	9.7	54.0	**18.2**	100	15	H
7,446.0	Peak	36.0	35.7	74.0	**2.3**	100	15	H

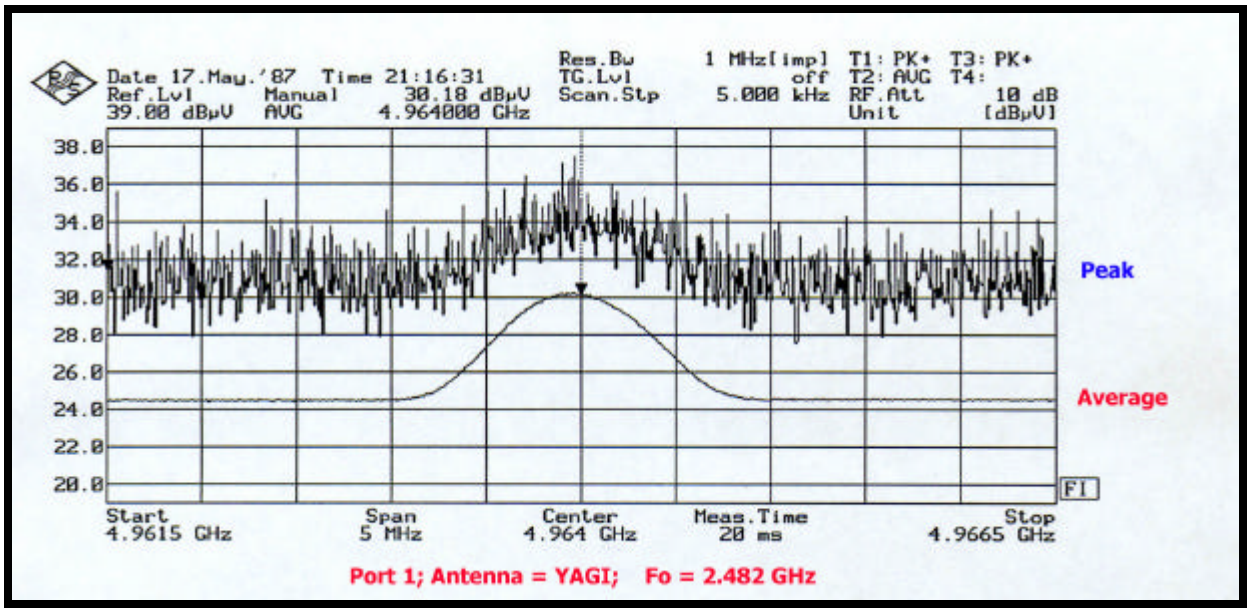
Calculation Formula: Margin = Limit – Measurement – Correction Factor

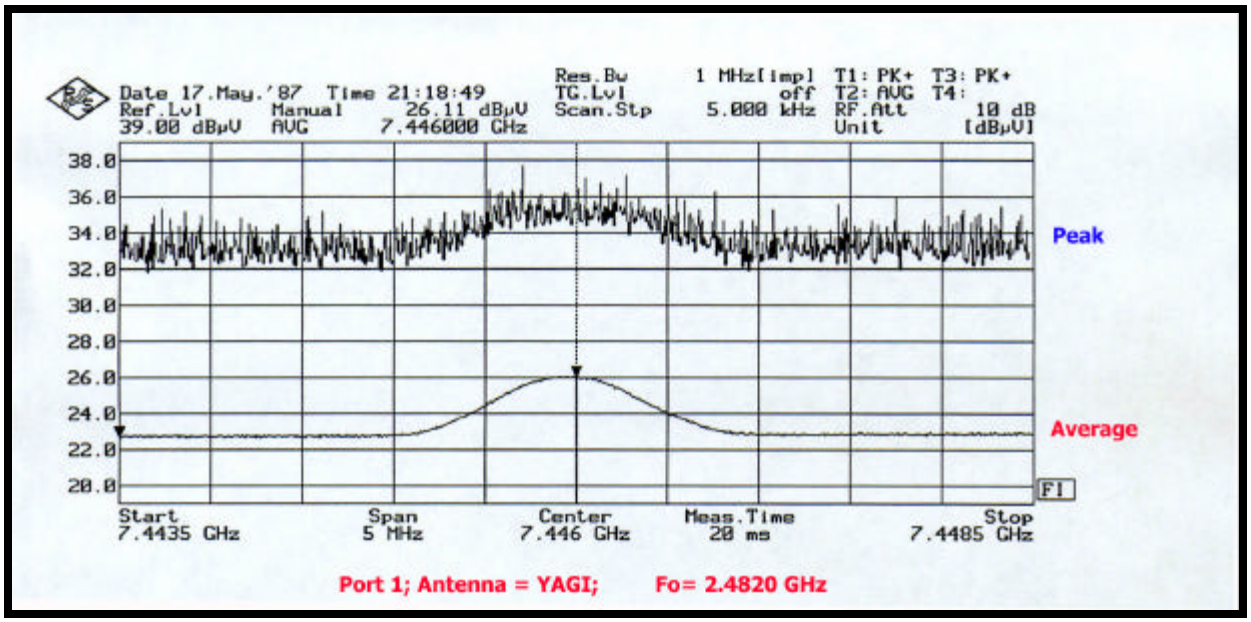

YAGI (Astron P-2415) Antenna
Port 1
Level [dBµV/m]
70
60
50
40
30
20
10
0
30M 200M 400M 600M 800M 1G 1.2G 1.4G 1.6G 1.8G 2G
Frequency [Hz]


Date 17.May.'87 Time 21:03:09
Ref.Lvl 43.00 dBµV
Manual AVG
36.37 dBµV 4.801000 GHz
Res.Bw 1 MHz[Imp]
TG.Lvl off
Scan.Stp 5.000 kHz
T1: PK+ T3: PK+
T2: AVG T4:
RF.Att 10 dB
Unit [dBµV]
42.0
40.0
38.0
36.0
34.0
32.0
30.0
28.0
26.0
24.0
Peak
Average
F1
Start 4.7985 GHz
Span 5 MHz
Center 4.801 GHz
Meas.Time 20 ms
Stop 4.8035 GHz
Port 1; Antenna = YAGI; Fo = 2.4005 GHz


Date 17.May.'87 Time 21:08:45
Ref.Lvl Manual 28.37 dBµV
39.00 dBµV AVG 7.201500 GHz
Res.Bw 1 MHz[imp] T1: PK+ T3: PK+
TG.Lvl off T2: AVG T4:
Scan.Stp 5.000 kHz RF.Att 10 dB
Unit [dBµV]
38.0
36.0
34.0
32.0
30.0
28.0
26.0
24.0
22.0
20.0
Peak
Average
FI
Start 7.199 GHz
Span 5 MHz
Center 7.2015 GHz
Meas.Time 20 ms
Stop 7.204 GHz
Port 1; Antenna = YAGI; Fo = 2.4005 GHz


Date 17.May.'87 Time 21:12:04
Ref.Lvl Manual 27.92 dBµV
39.00 dBµV AVG 4.881000 GHz
Res.Bw 1 MHz[imp] T1: PK+ T3: PK+
TG.Lvl off T2: AVG T4:
Scan.Stp 5.000 kHz RF.Att 10 dB
Unit [dBµV]
38.0
36.0
34.0
32.0
30.0
28.0
26.0
24.0
22.0
20.0
Peak
Average
FI
Start 4.8785 GHz
Span 5 MHz
Center 4.881 GHz
Meas.Time 20 ms
Stop 4.8835 GHz
Port 1; Antenna = YAGI; Fo = 2.4405 GHz


Date 17.May.'87 Time 21:16:31
Ref.Lvl Manual 30.18 dBµV
39.00 dBµV AVG 4.964000 GHz
Res.Bw 1 MHz[imp]
TG.Lvl off
Scan.Stp 5.000 kHz
T1: PK+ T3: PK+
T2: AVG T4:
RF.Att 10 dB
Unit [dBµV]
38.0
36.0
34.0
32.0
30.0
28.0
26.0
24.0
22.0
20.0
Peak
Average
FI
Start 4.9615 GHz
Span 5 MHz
Center 4.964 GHz
Meas.Time 20 ms
Stop 4.9665 GHz
Port 1; Antenna = YAGI; Fo = 2.482 GHz


Date 17.May.'87 Time 21:18:49
Ref.Lvl Manual 26.11 dBµV
39.00 dBµV AVG 7.446000 GHz
Res.Bw 1 MHz[imp]
TG.Lvl off
Scan.Stp 5.000 kHz
T1: PK+ T3: PK+
T2: AVG T4:
RF.Att 10 dB
Unit [dBµV]
38.0
36.0
34.0
32.0
30.0
28.0
26.0
24.0
22.0
20.0
Peak
Average
FI
Start 7.4435 GHz
Span 5 MHz
Center 7.446 GHz
Meas.Time 20 ms
Stop 7.4485 GHz
Port 1; Antenna = YAGI; Fo= 2.4820 GHz

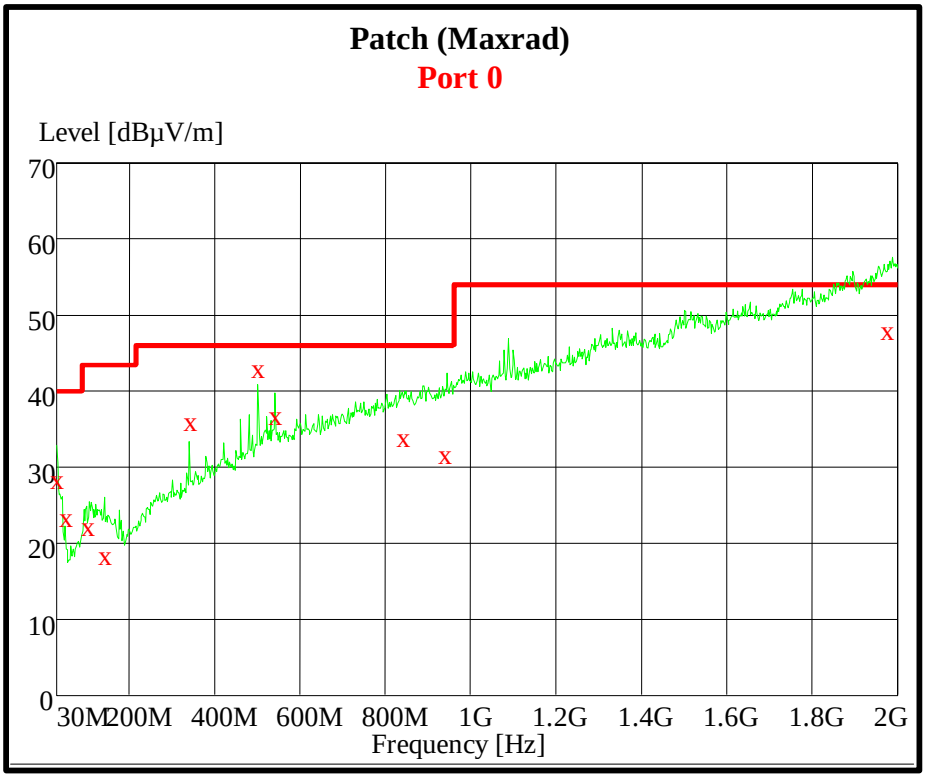
Test Data : Port 0 : Patch (Maxrad)

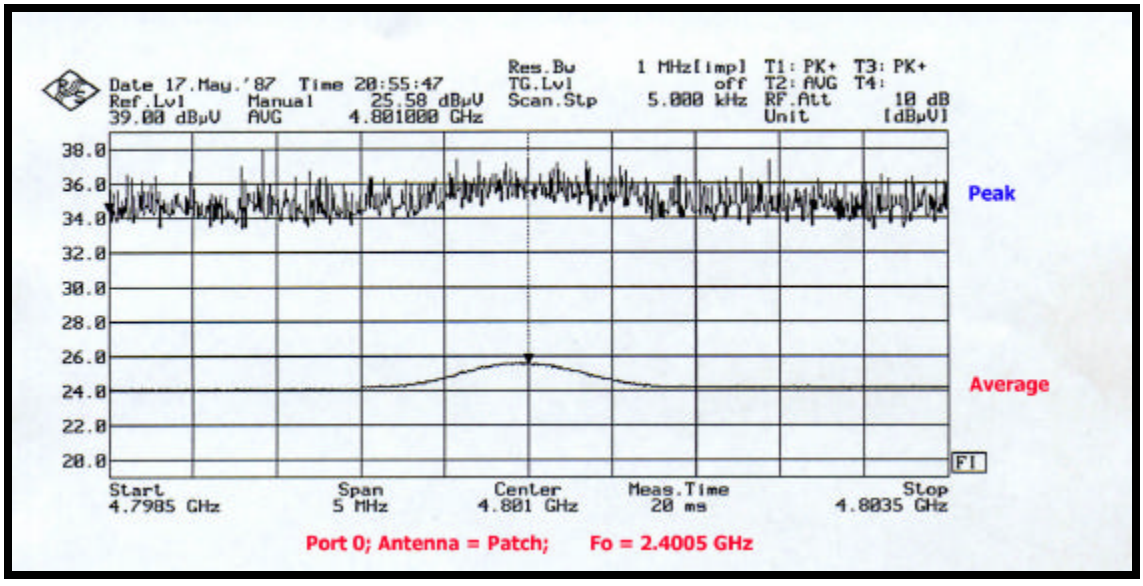
October 8, 1999

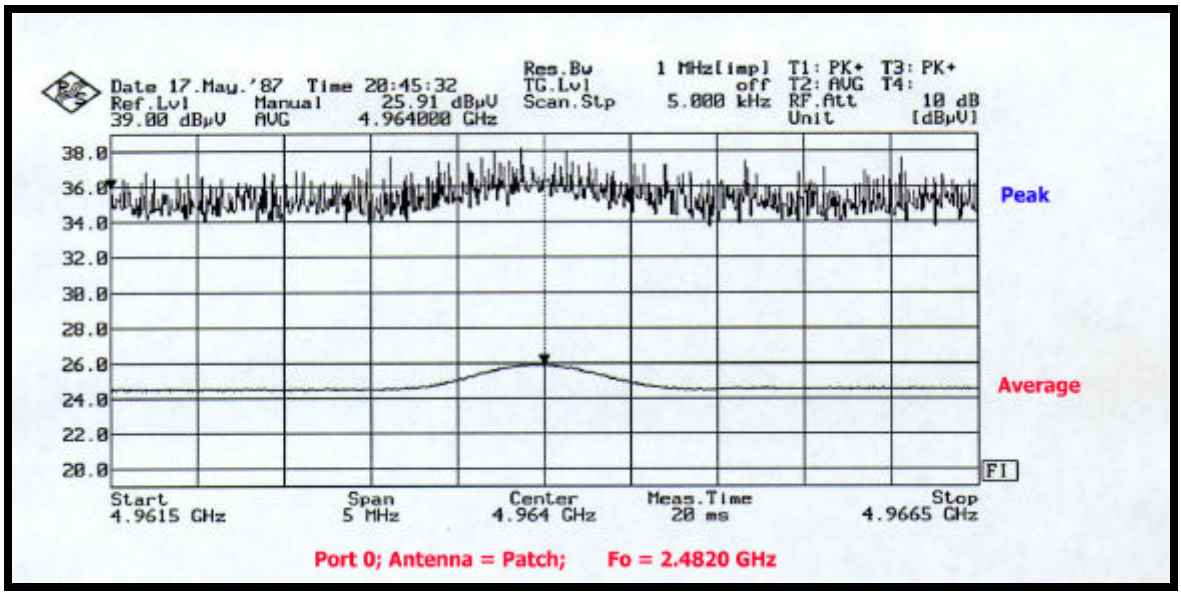
Equipment : OS2400 DSS Transmitter
Manufacturer : Locus
Test Distance : 3 meters

Frequency (MHz)	Detector	Measured EMI (dBµV/m)	Correction Factors (dB)	FCC LIMIT (dBµV/m)	Margin (dB)	Height (cm)	Azimuth (Degrees)	Ant. Pol.
30.48	Q-Peak	7.9	21.2	40.0	**10.9**	124	62	V
49.20	Q-Peak	12.5	11.5	40.0	**16.0**	107	54	V
99.68	Q-Peak	10.6	12.2	43.5	**20.7**	125	54	V
140.72	Q-Peak	4.2	14.9	43.5	**24.4**	101	97	V
340.00	Q-Peak	17.7	19.0	46.0	**9.3**	101	96	V
500.00	Q-Peak	20.6	23.2	46.0	**2.2**	100	57	V
539.60	Q-Peak	13.2	24.3	46.0	**8.5**	101	81	V
840.00	Q-Peak	4.5	30.1	46.0	**11.4**	107	97	H
937.44	Q-Peak	1.8	30.6	46.0	**13.6**	200	96	V
1975.04	Average	2.0	46.7	54.0	**5.3**	175	97	V
Fo = 2.4005 GHz								
4,801.00	Average	25.6	0.1	54.0	**28.3**	100	0	H
4,801.00	Peak	36.0	26.1	74.0	**11.9**	100	0	H
7,201.5	Average	------	9.7	54.0	------	------	------	---
17,201.5	Peak	------	35.7	74.0	------	------	------	---
Fo = 2.4405 GHz								
4,881.0	Average	------	0.1	54.0	------	------	------	---
4,881.0	Peak	------	26.1	74.0	------	------	------	---
Fo = 2.4820 GHz								
4,964.0	Average	25.9	0.1	54.0	**28.0**	110	0	H
4,964.0	Peak	37.0	26.1	74.0	**10.9**	110	0	H
7,446.0	Average	------	9.7	54.0	------	------	------	---
7,446.0	Peak	------	35.7	74.0	------	------	------	---

Calculation Formula: Margin = Limit – Measurement – Correction Factor


Patch (Maxrad)
Port 0
Level [dBµV/m]
70
60
50
40
30
20
10
0
30M
200M
400M
600M
800M
1G
1.2G
1.4G
1.6G
1.8G
2G
Frequency [Hz]


Date 17.May.'87 Time 20:55:47
Ref.Lvl 39.00 dBµV
Manual AVG
25.58 dBµV 4.801000 GHz
Res.Bw 1 MHz[imp]
TG.Lvl off
Scan.Stp 5.000 kHz
T1: PK+ T3: PK+
T2: AVG T4:
RF.Att 10 dB
Unit [dBµV]
38.0
36.0
34.0
32.0
30.0
28.0
26.0
24.0
22.0
20.0
Peak
Average
FI
Start 4.7985 GHz
Span 5 MHz
Center 4.801 GHz
Meas.Time 20 ms
Stop 4.8035 GHz
Port 0; Antenna = Patch; Fo = 2.4005 GHz


Date 17.May.'87 Time 20:45:32
Ref.Lvl 25.91 dBµV
39.00 dBµV AVG 4.964000 GHz
Res.Bw 1 MHz[imp]
TG.Lvl off
Scan.Stp 5.000 kHz
T1: PK+ T3: PK+
T2: AVG T4:
RF.Att 10 dB
Unit [dBµV]
38.0
36.0
34.0
32.0
30.0
28.0
26.0
24.0
22.0
20.0
Peak
Average
FI
Start 4.9615 GHz
Span 5 MHz
Center 4.964 GHz
Meas.Time 20 ms
Stop 4.9665 GHz
Port 0; Antenna = Patch; Fo = 2.4820 GHz

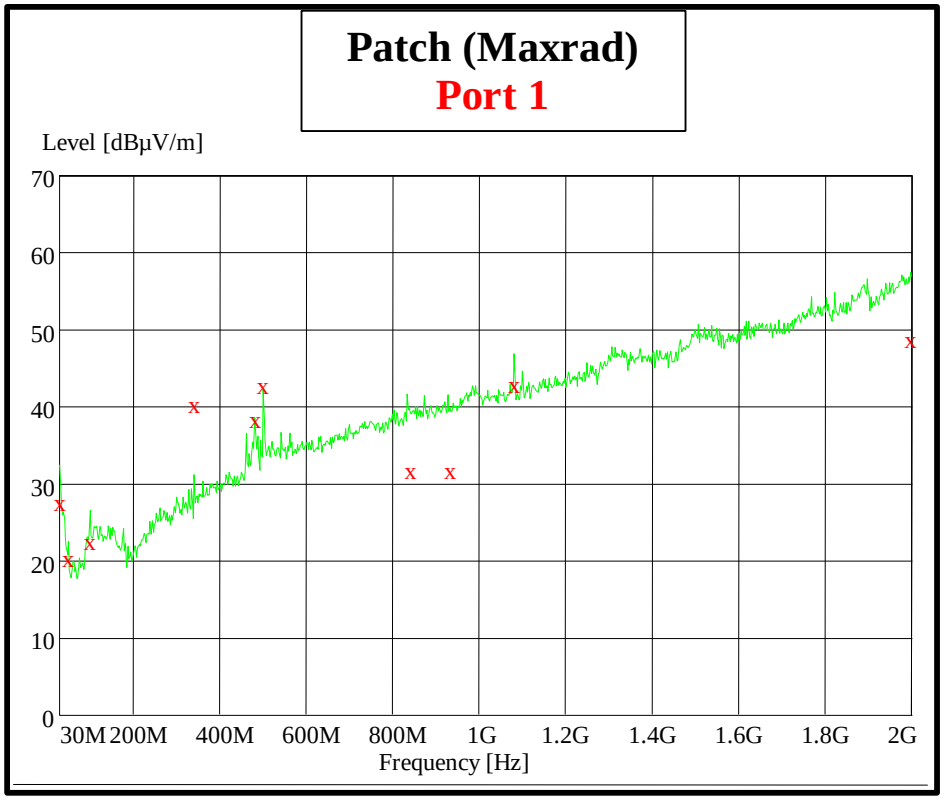
Test Data : Port 1 : Patch (Maxrad)

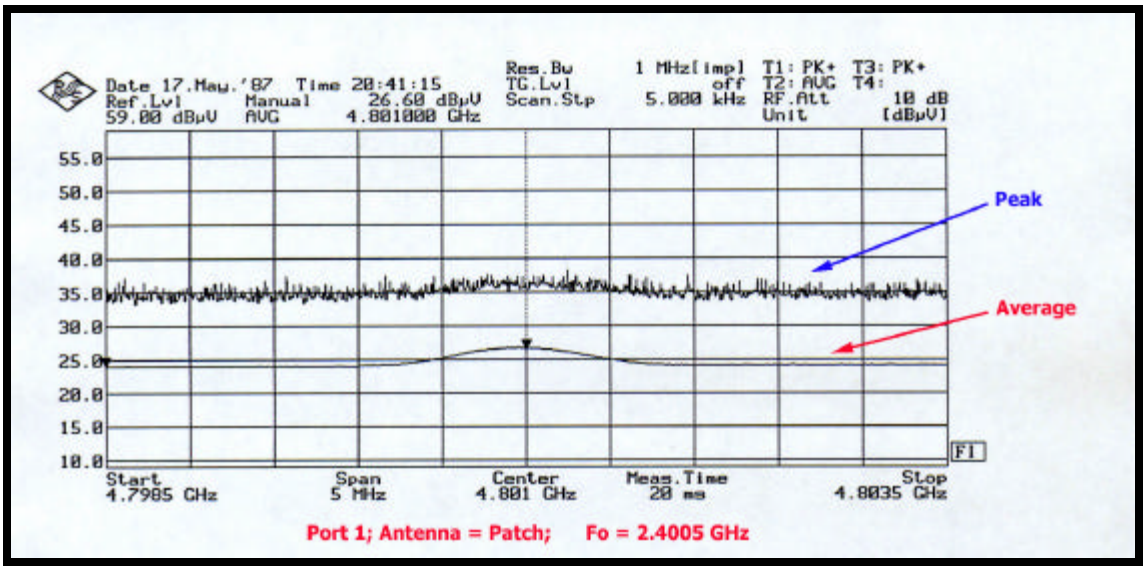
October 8, 1999

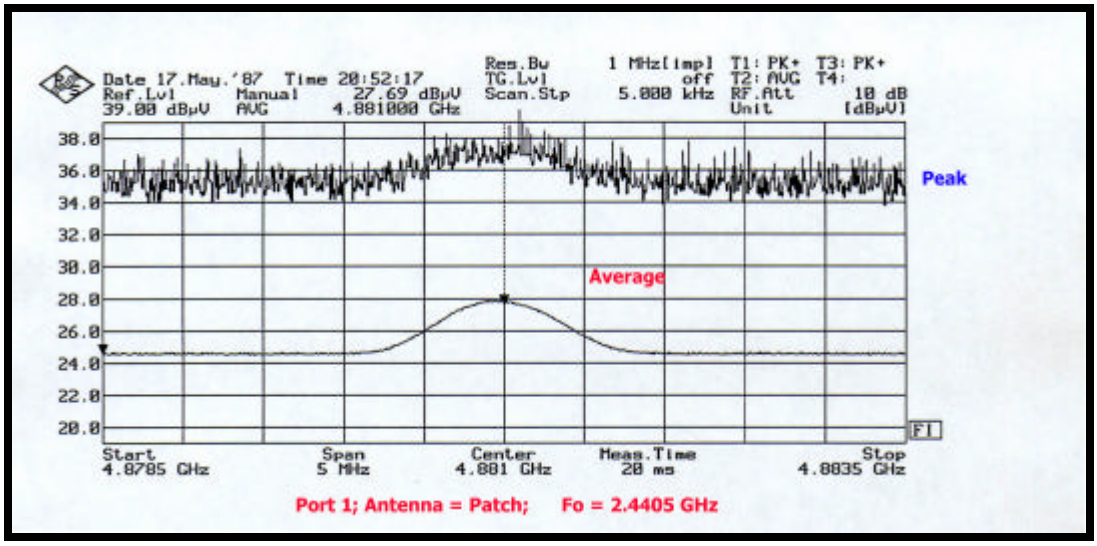
Equipment : OS2400 DSS Transmitter
Manufacturer : Locus
Test Distance : 3 meters

Frequency (MHz)	Detector	Measured EMI (dBµV/m)	Correction Factors (dB)	FCC LIMIT (dBµV/m)	Margin (dB)	Height (cm)	Azimuth (Degrees)	Ant. Pol.
30.160	Q-Peak	6.6	21.4	40.0	12.0	175	74	V
49.200	Q-Peak	9.3	11.5	40.0	19.2	125	66	V
100.240	Q-Peak	10.7	12.3	43.5	20.5	140	54	V
340.000	Q-Peak	21.8	19.0	46.0	5.2	101	97	H
480.000	Q-Peak	15.9	22.9	46.0	7.2	125	70	V
500.000	Q-Peak	20.0	23.2	46.0	2.8	107	57	V
841.440	Q-Peak	2.1	30.0	46.0	13.9	115	77	V
933.280	Q-Peak	1.6	30.5	46.0	13.9	200	54	H
1080.240	Q-Peak	10.3	33.0	54.0	10.7	101	81	V
1975.04	Average	1.7	47.4	54.0	4.9	165	73	V
Fo = 2.4005 GHz								
4,801.00	Average	26.7	0.1	54.0	27.3	100	0	H
4,801.00	Peak	36.0	26.1	74.0	11.9	100	0	H
7,201.5	Average	------	0.1	54.0	------	------	------	---
17,201.5	Peak	------	26.1	74.0	------	------	------	---
Fo = 2.4405 GHz								
4,881.0	Average	27.7	0.1	54.0	26.2	100	10	H
4,881.0	Peak	38.0	26.1	74.0	9.9	100	10	H
Fo = 2.4820 GHz								
4,964.0	Average	------	0.1	54.0	------	------	------	---
4,964.0	Peak	------	26.1	74.0	------	------	------	---
7,446.0	Average	------	9.7	54.0	------	------	------	---
7,446.0	Peak	------	35.7	74.0	------	------	------	---

Calculation Formula: Margin = Limit – Measurement – Correction Factor


Patch (Maxrad)
Port 1
Level [dBµV/m]
70
60
50
40
30
20
10
0
30M 200M 400M 600M 800M 1G 1.2G 1.4G 1.6G 1.8G 2G
Frequency [Hz]


Date 17.Mau.'87 Time 20:41:15
Ref.Lvl 59.00 dBµV
Manual AVG
26.60 dBµV 4.801000 GHz
Res.Bw TG.Lvl Scan.Stp
1 MHz[imp] off 5.000 kHz
T1: PK+ T2: AVG T3: PK+ T4:
RF.Att 10 dB
Unit [dBµV]
55.0
50.0
45.0
40.0
35.0
30.0
25.0
20.0
15.0
10.0
Peak
Average
FI
Start 4.7985 GHz
Span 5 MHz
Center 4.801 GHz
Meas.Time 20 ms
Stop 4.8035 GHz
Port 1; Antenna = Patch; Fo = 2.4005 GHz


Date 17.May.'87 Time 20:52:17
Ref.Lvl Manual 27.69 dBµV
39.00 dBµV AVG 4.881000 GHz
Res.Bw 1 MHz[Imp]
TG.Lvl off
Scan.Stp 5.000 kHz
T1: PK+ T3: PK+
T2: AVG T4:
RF.Att 10 dB
Unit [dBµV]
38.0
36.0
34.0
32.0
30.0
28.0
26.0
24.0
22.0
20.0
Peak
Average
Start 4.8785 GHz
Span 5 MHz
Center 4.881 GHz
Meas.Time 20 ms
Stop 4.8835 GHz
Port 1; Antenna = Patch; Fo = 2.4405 GHz

7.7 Conducted RF Spurious Emissions – Power Mains

7.7.1 Controlling FCC Regulation - §15.207

The radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 450 kHz to 30 MHz shall not exceed 250 microvolts for intentional radiator designed to be connected to the public utility (AC) power line. Compliance with this provision shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminals.

7.7.2 Test Procedure

The conducted emission amplitudes were measured between 450kHz and 30MHz on the hot and neutral sides of the ac power lines of the EUT. These measurements were acquired utilizing a 50O/50uH LISN and a Rohde & Schwarz ESMI receiver.

The measurements are taken by a computer program implementing the following procedures:

(1) Set Detection Mode to Peak detection with 10kHz bandwidth;
(2) Scan receiver from 450kHz to 30MHz using a 10kHz step size;
(3) Record Peak emission amplitude for each frequency;
(4) Plot Peak Values;
(5) Set Detection Mode to CISPR detection with 9kHz bandwidth;
(6) Record CISPR amplitude value for each frequency with a PEAK margin of less than 10dB;
(7) Set Detection Mode to Average detection with a 10kHz bandwidth;
(8) Record Average amplitude values for each frequency with a CISPR margin of less than 6dB;
(9) Generate Test Report presenting test results.

7.7.3 Calculations

The calculation process for conducted emissions is as follows:

(1) Margin (dB) = Applicable Limit (dB) - Voltage (dB)
(2) Voltage (dB) = Meter Reading (dBuV) + Loss (dB) - Gain (dB)
- Loss = Cable Loss (dB) + Probe Factor (dB) + Attenuation (dB)
- Gain = Amplifier Gain (dB)

EXAMPLE CALCULATION - Frequency: 10 MHz

- Meter Reading = 25 (dBuV)
- Cable Loss = 0 (dB)
- Probe Factor = 0 (dB)
- Attenuation = 10 (dB) [10 dB transient limiter in signal path]
- Amplifier Gain = 0 (dB) [no amplifier in signal path]
- Applicable Limit = 48 (dB)

Margin (dB) = 48 (dB) - [25 (dBuV) +10 (dB)] = 13 dB

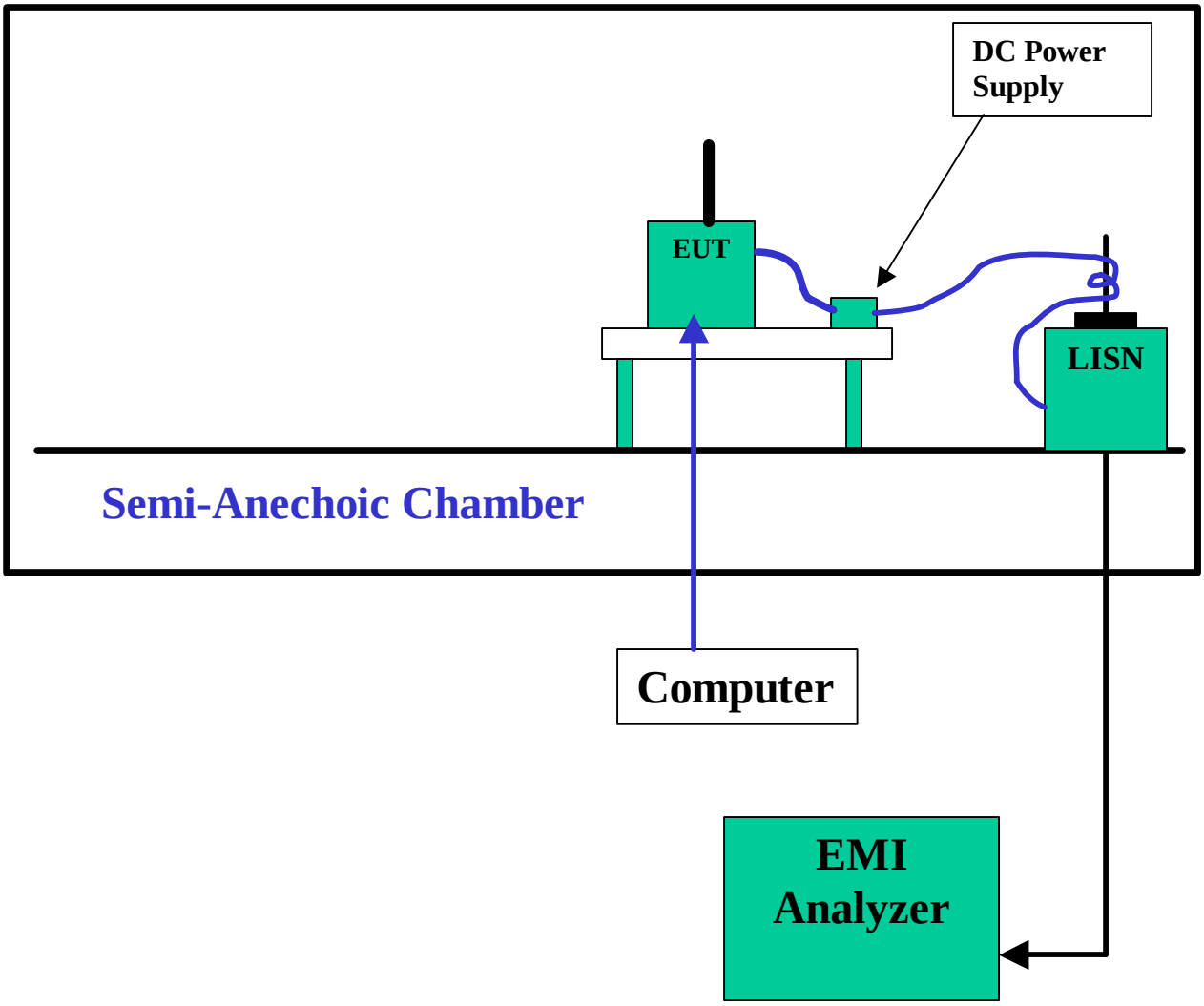
7.7.4 Power Source

The EUT described in this exhibit is an RF MODULE, and consequently, the end user's product must supply power source for the RF module.

To prove that the EUT can be powered by a FCC Class B compliant power source and not degrade the power source's conducted RF emissions such that it no longer complies with Class B emissions limits, an off the shelf power source was used to power the RF Module. The power source was a Motorola AC Power Supply with the following specifications:

- Input : 100 – 240 Vac; 50-60Hz; 0.2 A;
- Output: 4.4 Vdc; 1.1A;
- M/N : SPN4604A

7.7.5 Test Setup Block Diagram



7.7.6 Test Results - Conducted Spurious Emissions – Power Mains

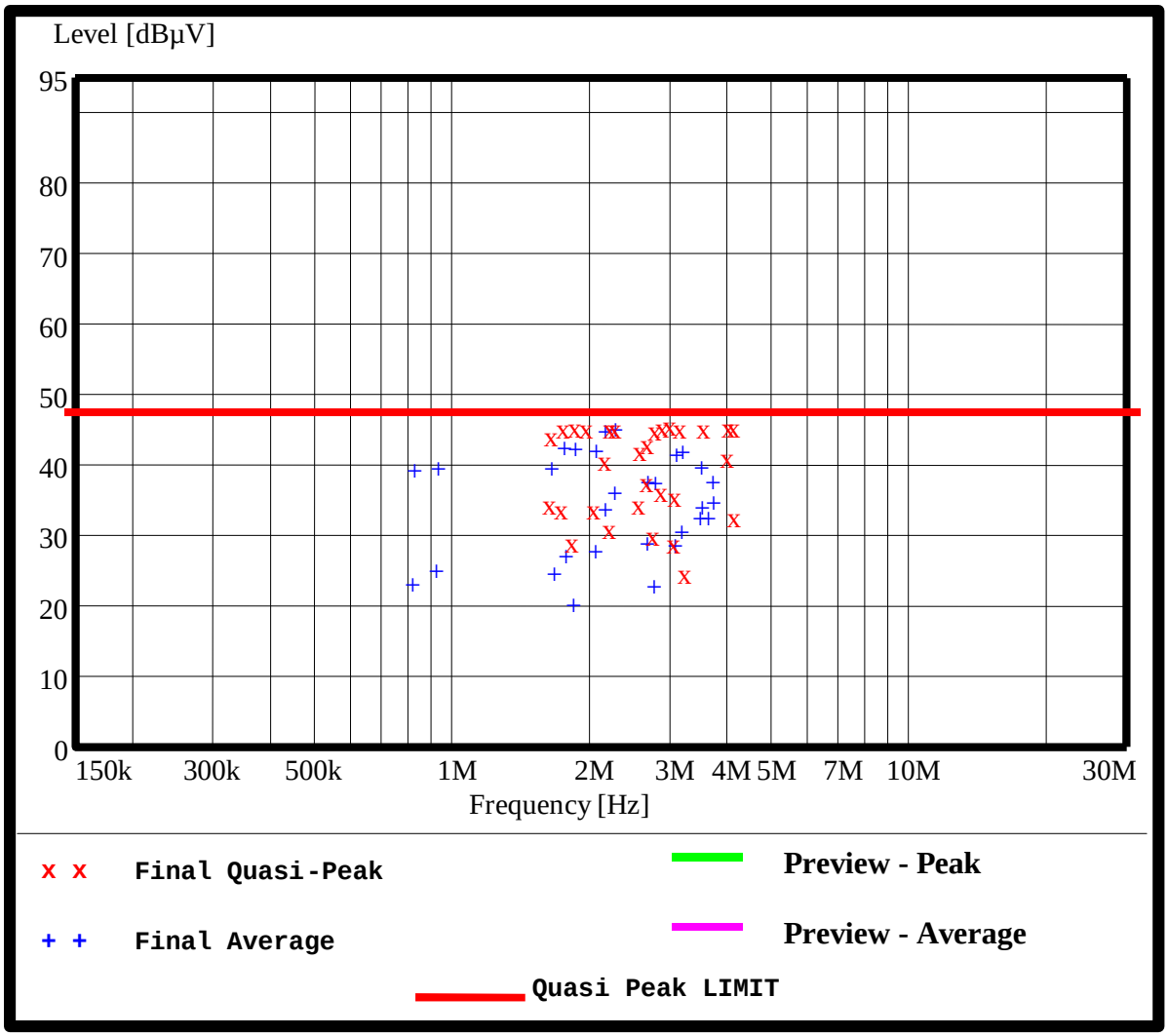
Test : 120 Vac; 60Hz – Line

Test Date	**October 21, 1999**	Barometric Pressure	**1018**	mbars
Test Performed	**Conducted Emissions**	Relative Humidity	**45**	%
Limit Values	**FCC Class B**	Temperature	**25**	°C

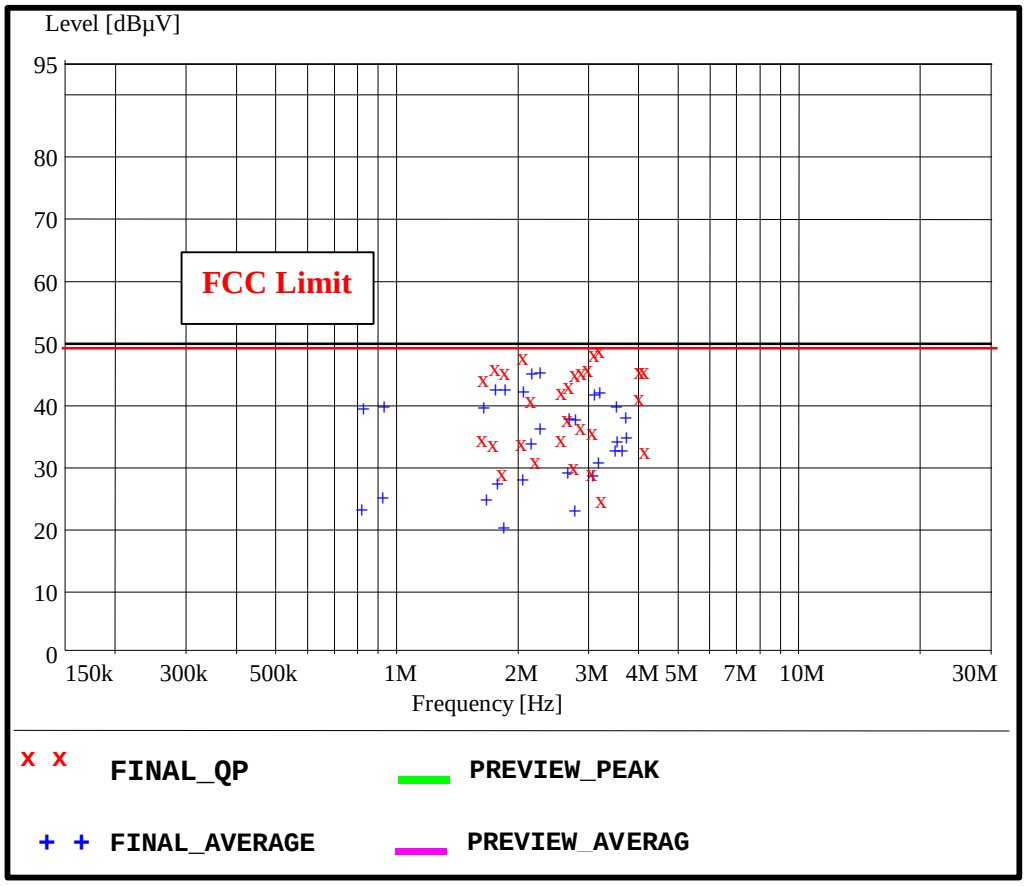
EUT DESCRIPTION

(1) OS2400 DSS Transmitter
(2) Operating Condition: Continuous Operation in normal hopping mode;
(3) Input Voltage: 120 Volts 60Hz (1 Hot Phase, 1 Neutral Phase);
(4) **Max Transmitter Power Level**

LINE				NEUTRAL			
Quasi–Peak Detection Mode				**Quasi–Peak Detection Mode**			
Frequency (MHz)	**Phase Quasi-Peak Emission (dB)**	**Quasi-Peak Limit (dB)**	**Phase Quasi-Peak Margin (dB)**	**Frequency (MHz)**	**Phase Quasi-Peak Emission (dB)**	**Quasi-Peak Limit (dB)**	**Phase Quasi-Peak Margin (dB)**
1.634	34.7	48.0	13.3	1.522	35.6	48.0	12.4
1.650	44.4	48.0	3.6	1.538	38.4	48.0	9.6
1.738	34.0	48.0	14.0	1.626	34.9	48.0	13.1
1.754	46.2	48.0	1.8	1.642	37.9	48.0	10.1
1.858	45.6	48.0	2.4	2.058	42.4	48.0	5.6
2.042	34.1	48.0	13.9	2.154	42.2	48.0	5.8
2.066	47.0	48.0	1.0	2.218	34.3	48.0	13.7
2.162	41.0	48.0	7.0	***2.242***	***43.8***	***48.0***	***4.2***
2.170	47.5	48.0	0.5	2.274	40.6	48.0	7.4
2.210	31.3	48.0	16.7	2.322	39.1	48.0	8.9
2.274	47.5	48.0	0.5	2.346	41.5	48.0	6.5
2.578	42.4	48.0	5.6	2.394	38.9	48.0	9.1
2.666	38.0	48.0	10.0	2.474	42.1	48.0	5.9
2.682	43.4	48.0	4.6	2.498	36.7	48.0	11.3
2.762	30.3	48.0	17.7	2.514	37.0	48.0	11.0
2.786	45.3	48.0	2.7	2.546	34.0	48.0	14.0
2.874	36.6	48.0	11.4	2.650	36.0	48.0	12.0
2.890	45.6	48.0	2.4	2.730	31.9	48.0	16.1
2.994	46.0	48.0	2.0	3.114	39.2	48.0	8.8
3.074	35.8	48.0	12.2	3.338	37.1	48.0	10.9
3.098	***47.6***	***48.0***	***0.4***	3.450	36.6	48.0	11.4
3.202	47.0	48.0	1.0				
4.010	41.4	48.0	6.6				
4.026	45.7	48.0	2.3				
4.130	45.7	48.0	2.3				
4.146	32.9	48.0	15.1				



Test Data : Neutral



Test Data : Line