FCC CFR47 PART 15 SUBPART C CERTIFICATION

TEST REPORT

FOR

WIRELESS TABLET with 802.11 b/g

MODEL NUMBER: PC5NR3-XXXXXXXXX and PCNR-3XXXXXXXXX

BRAND NAME: VisionPlate

FCC ID: R8Q-PC5NR3-J2

REPORT NUMBER: 04U2959-1

ISSUE DATE: SEPTEMBER 28, 2004

Prepared for

HITACHI KEIYO ENGINEERING AND SYSTEMS, LTD
7CHOME-1-1 HIGASHINARASHINO
NARASHINO-SHI, CHIBA-KEN
JAPAN, 275-0001

Prepared by

COMPLIANCE CERTIFICATION SERVICES
561F MONTEREY ROAD,
MORGAN HILL, CA 95037, USA
TEL: (408) 463-0885
FAX: (408) 463-0888

Revision History

Rev.	Revisions	Revised By

TABLE OF CONTENTS

1. TEST RESULT DECLARATION

COMPANY NAME: Hitachi Keiyo Engineering and Systems, Ltd
7chome-1-1 Higashinarashino
Narashino-shi, Chiba-ken
Japan, 275-0001

EUT: WIRELESS TABLET with 802.11 b/g

MODEL NAME: PC5NR3-XXXXXXXXX and PCNR-3XXXXXXXXX

DATE TESTED: SEPTEMBER 15 –SEPTEMBER 24, 2004

APPLICABLE STANDARDS	
STANDARD	**TEST RESULTS**
FCC PART 15 SUBPART C	NO NON-COMPLIANCE NOTED

Compliance Certification Services, Inc. tested the above equipment in accordance with the requirements set forth in the above standards. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

Note: This document reports conditions under which testing was conducted and results of tests performed. This document may not be altered or revised in any way unless done so by Compliance Certification Services and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by Compliance Certification Services will constitute fraud and shall nullify the document.

Approved & Released For CCS By:

YAN ZHENG /EMC SUPERVISOR
COMPLIANCE CERTIFICATION SERVICES

Tested By:

DAVID GARCIA /EME ENGINEER
COMPLIANCE CERTIFICATION SERVICES

2. EUT DESCRIPTION

The EUT is a Hitachi Tablet computer with an 802.11b/g mini PCI transceiver installed.

The transmitter has a maximum peak conducted output power as follows:

Frequency Range (MHz)	Mode	Output Power (dBm)	Output Power (mW)
2412 - 2462	802.11b	23.78	238.78
2412 - 2462	802.11g	26.05	402.72
2412 - 2462	802.11g Turbo	25.92	390.84

The radio utilizes two integral antennas for diversity, each with a maximum gain of 1.6dBi.

3. MANUFACTURER'S STATEMENT

The EUT has the following two models:

- PC5NR3-XXXXXXXXX and
- PCNR-3XXXXXXXXX

The two models are identical to each other, two model names are used for marketing purpose only.

4. TEST METHODOLOGY

The tests documented in this report were performed in accordance with ANSI C63.4/2001, FCC CFR 47 Part 2 and FCC CFR 47 Part 15.

5. FACILITIES AND ACCREDITATION

The test sites and measurement facilities used to collect data are located at 561F Monterey Road, Morgan Hill, California, USA. The sites are constructed in conformance with the requirements of ANSI C63.4, ANSI C63.7 and CISPR Publication 22. All receiving equipment conforms to CISPR Publication 16-1, "Radio Interference Measuring Apparatus and Measurement Methods."

CCS is accredited by NVLAP, Laboratory Code 200065-0. The full scope of accreditation can be viewed at http://www.ccsemc.com.

NVLAP®

LAB CODE:200065-0

No part of this report may be used to claim or imply product endorsement by NVLAP or any agency of the US Government.

6. CALIBRATION AND UNCERTAINTY

6.1. MEASURING INSTRUMENT CALIBRATION

The measuring equipment utilized to perform the tests documented in this report has been calibrated in accordance with the manufacturer's recommendations, and is traceable to recognized national standards.

6.2. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

PARAMETER	UNCERTAINTY
Radiated Emission, 30 to 200 MHz	+/- 3.3 dB
Radiated Emission, 200 to 1000 MHz	+4.5 / -2.9 dB
Radiated Emission, 1000 to 2000 MHz	+4.5 / -2.9 dB
Power Line Conducted Emission	+/- 2.9 dB

Uncertainty figures are valid to a confidence level of 95%.

6.3. TEST AND MEASUREMENT EQUIPMENT

The following test and measurement equipment was utilized for the tests documented in this report:

TEST EQUIPMENT LIST				
Description	**Manufacturer**	**Model**	**Serial Number**	**Cal Due**
EMI Test Receiver	R & S	ESIB40	4/24/2174	11/21/2004
Peak Power Meter	Agilent	E4416A	GB41291160	11/7/04
Peak / Average Power Sensor	Agilent	E9327A	US40440755	11/7/04
Amplifier 1-26GHz	MITEQ	NSP2600-SP	924341	8/17/05
Antenna, Horn 1 ~ 18 GHz	EMCO	3115	6717	2/4/05
EMI Test Receiver	R & S	ESHS 20	827129/006	7/17/05
Site A Line Stabilizer / Conditioner	Tripplite	LC-1800a	A0051681	CNR
LISN, 10 kHz ~ 30 MHz	Solar	8012-50-R-24-BNC	8379443	10/13/04
LISN, 10 kHz ~ 30 MHz	FCC	LISN-50/250-25-2	2023	10/13/04
EMI Receiver, 9 kHz ~ 2.9 GHz	HP	8542E	3942A00286	11/21/04
RF Filter Section	HP	85420E	3705A00256	11/21/04
10 dB Attenuator	Weinschel	56-10	M2351	N/A
25 - 2000 MHz Bilog Antenna	ARA	LPB25201A	1185	9/13/05

7. SETUP OF EQUIPMENT UNDER TEST

SUPPORT EQUIPMENT

PERIPHERAL SUPPORT EQUIPMENT LIST				
Description	**Manufacturer**	**Model**	**Serial Number**	**FCC ID**
AC/DC Adapter	Sanken Electric	SEA60N2-16.0	G03700324	N/A
Keyboard	Hitachi	FKB8579-652	12000007	N/A
Mouse	Microsoft	Intellemouse 1.1a	N/A	N/A
Cradle	Hitachi	PC-AU3220	N/A	N/A

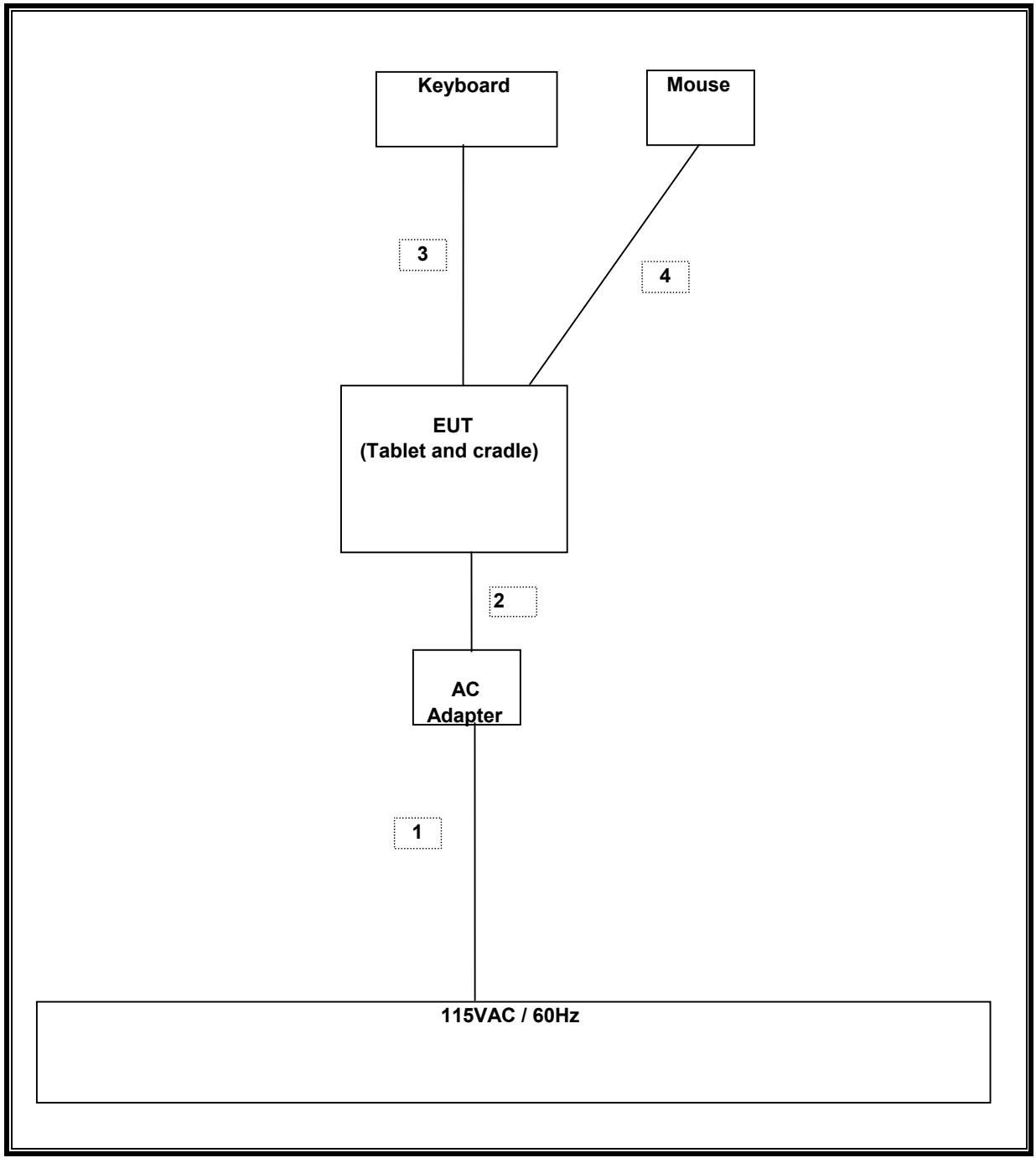
I/O CABLES

I/O CABLE LIST						
Cable No.	**Port**	**# of Identical Ports**	**Connector Type**	**Cable Type**	**Cable Length**	**Remarks**
1	AC	1	AC	Unshielded	1.8	
2	DC	1	DC	Unshielded	1.8	
3	Keyboard	1	USB	Shielded	1.8	
4	Mouse	1	USB	Shielded	1.8	

TEST SETUP

The EUT has the mini PCI card installed during the tests. Test software exercised the radio card.

SETUP DIAGRAM FOR TESTS



TEST SETUP

The EUT has an 802.11 b/g mini PCI card adapter installed. Test software exercised the radio card.

8. APPLICABLE LIMITS AND TEST RESULTS

8.1. CHANNEL TESTS FOR THE 2400 TO 2483.5 MHz BAND

8.1.1. 6 dB BANDWIDTH

LIMIT

§15.247 (a) (2) For direct sequence systems, the minimum 6 dB bandwidth shall be at least 500 kHz.

TEST PROCEDURE

The transmitter output is connected to a spectrum analyzer. The RBW is set to 100 kHz and the VBW is set to 100 kHz. The sweep time is coupled.

RESULTS

No non-compliance noted:

802.11b Mode

Channel	Frequency (MHz)	6 dB Bandwidth (kHz)	Minimum Limit (kHz)	Margin (kHz)
Low	2412	11583.333	500	11083
Middle	2437	11083.333	500	10583
High	2462	11083.333	500	10583

802.11g Mode

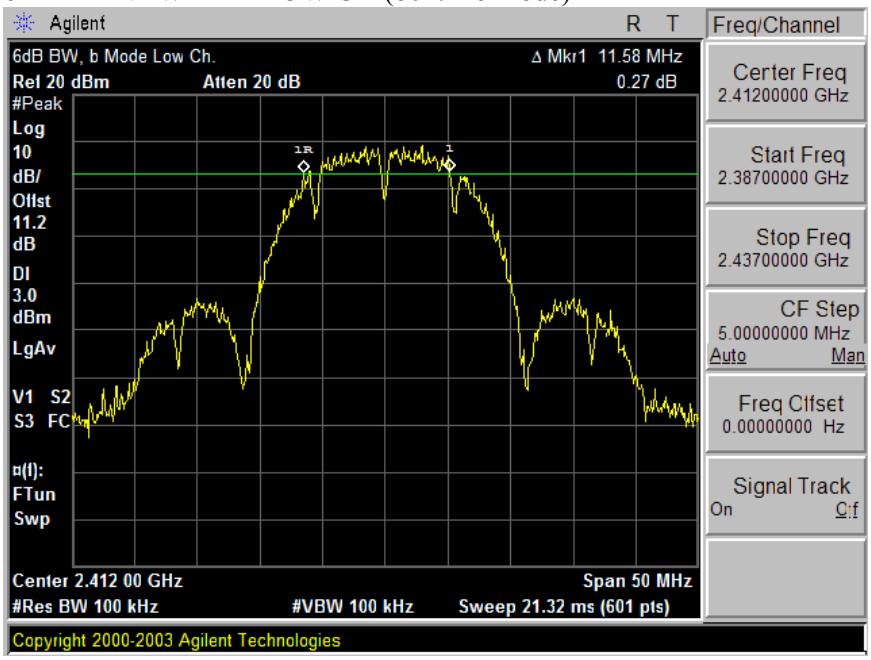
Channel	Frequency (MHz)	6 dB Bandwidth (kHz)	Minimum Limit (kHz)	Margin (kHz)
Low	2412	16416.667	500	15917
Middle	2437	16416.667	500	15917
High	2462	16166.667	500	15667

802.11g Turbo Mode

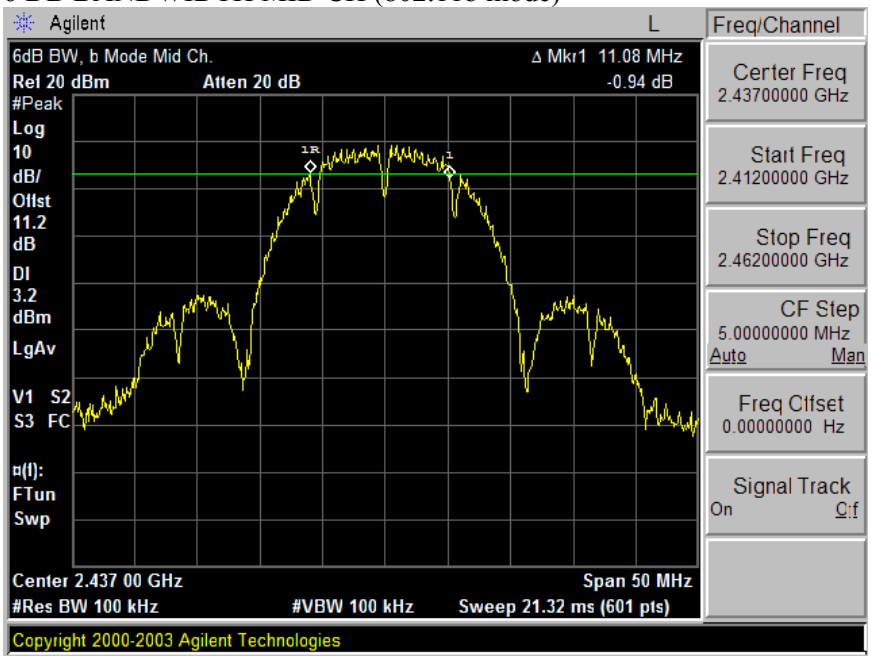
Channel	Frequency (MHz)	6 dB Bandwidth (kHz)	Minimum Limit (kHz)	Margin (kHz)
Middle	2437	31333.333	500	30833

6 DB BANDWIDTH (802.11b MODE)

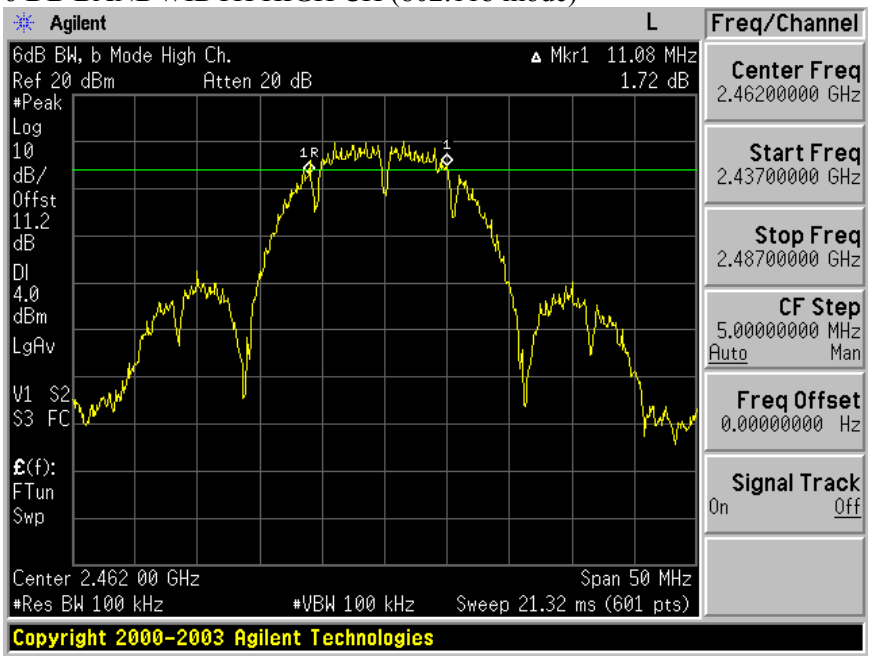
6 DB BANDWIDTH LOW CH (802.11b mode)



6 DB BANDWIDTH MID CH (802.11b mode)

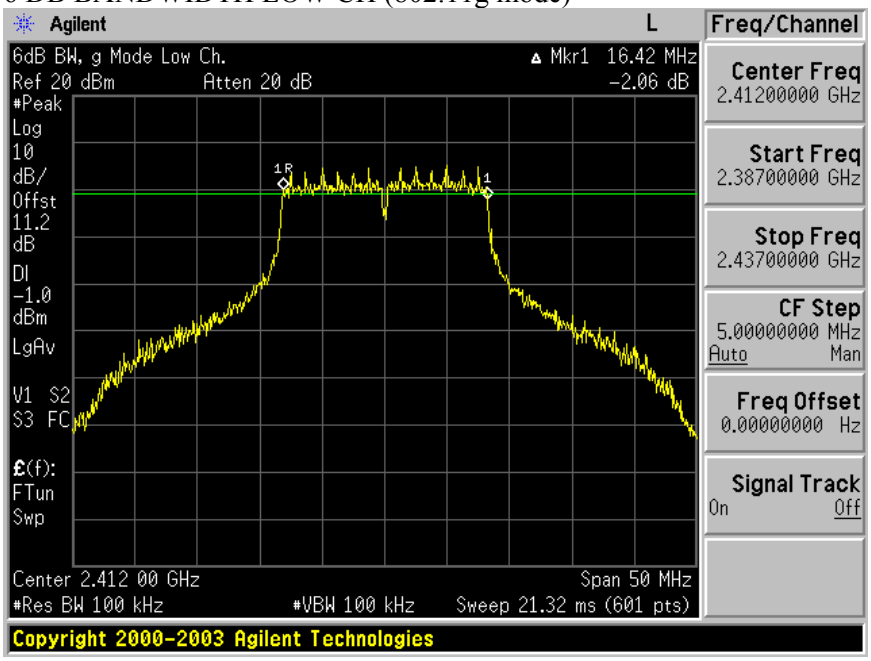


6 DB BANDWIDTH HIGH CH (802.11b mode)

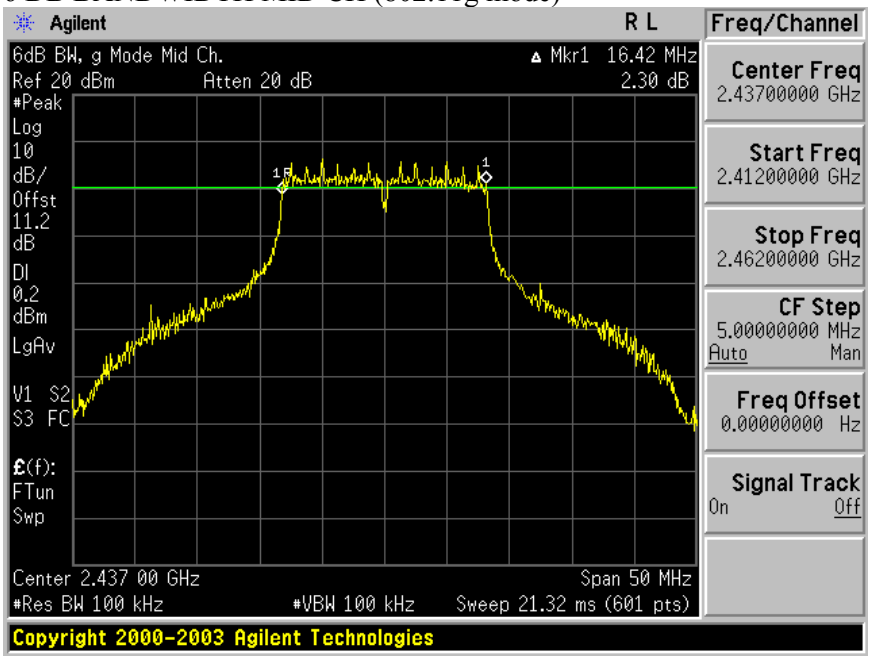


6 DB BANDWIDTH (802.11g MODE)

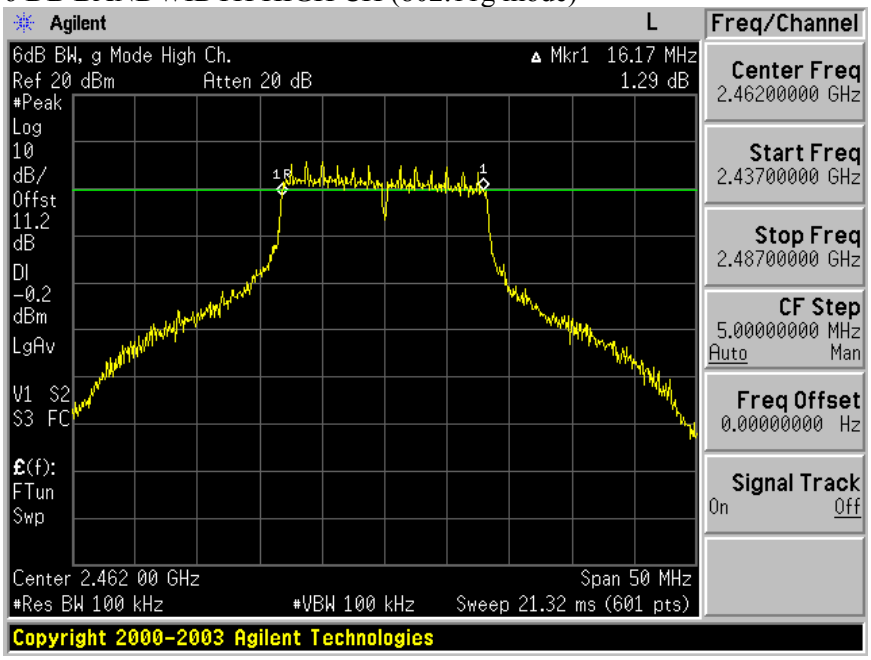
6 DB BANDWIDTH LOW CH (802.11g mode)



6 DB BANDWIDTH MID CH (802.11g mode)

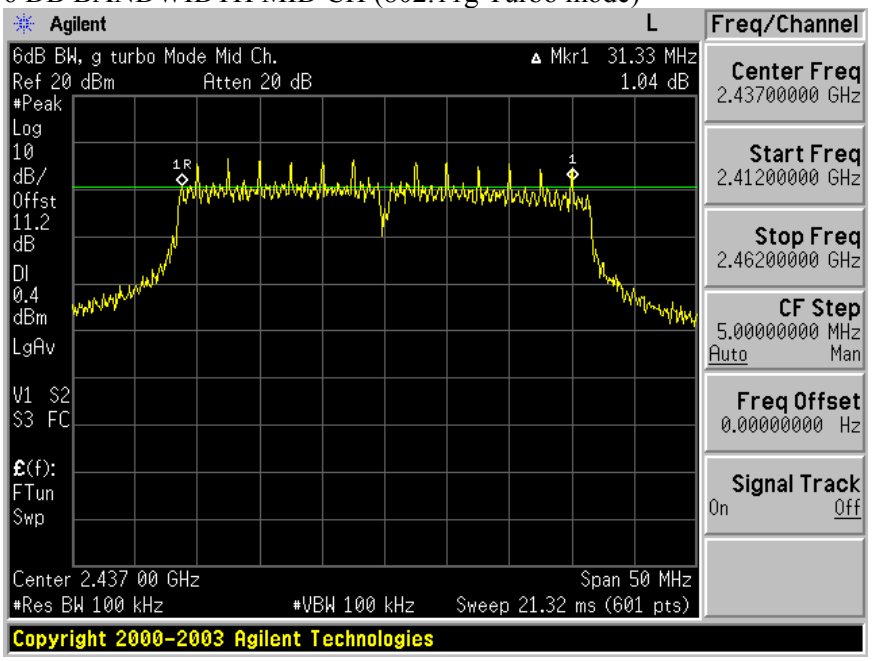


6 DB BANDWIDTH HIGH CH (802.11g mode)



6 DB BANDWIDTH (802.11g TURBO MODE)

6 DB BANDWIDTH MID CH (802.11g Turbo mode)



8.1.2. 99% BANDWIDTH

LIMIT

None; for reporting purposes only.

TEST PROCEDURE

The transmitter output is connected to the spectrum analyzer. The RBW is set to 1% to 3% of the 99 % bandwidth. The VBW is set to 3 times the RBW. The sweep time is coupled. The spectrum analyzer internal 99% bandwidth function is utilized.

RESULTS

No non-compliance noted:

802.11b Mode

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	2412	15.796
Middle	2437	15.729
High	2462	15.751

802.11g Mode

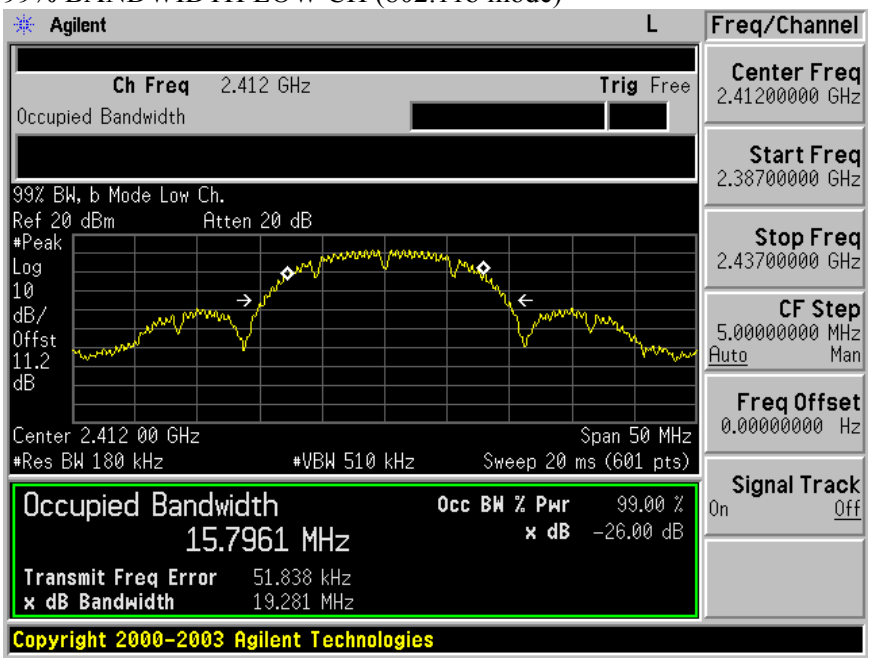
Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	2412	16.795
Middle	2437	16.891
High	2462	16.918

802.11g Turbo Mode

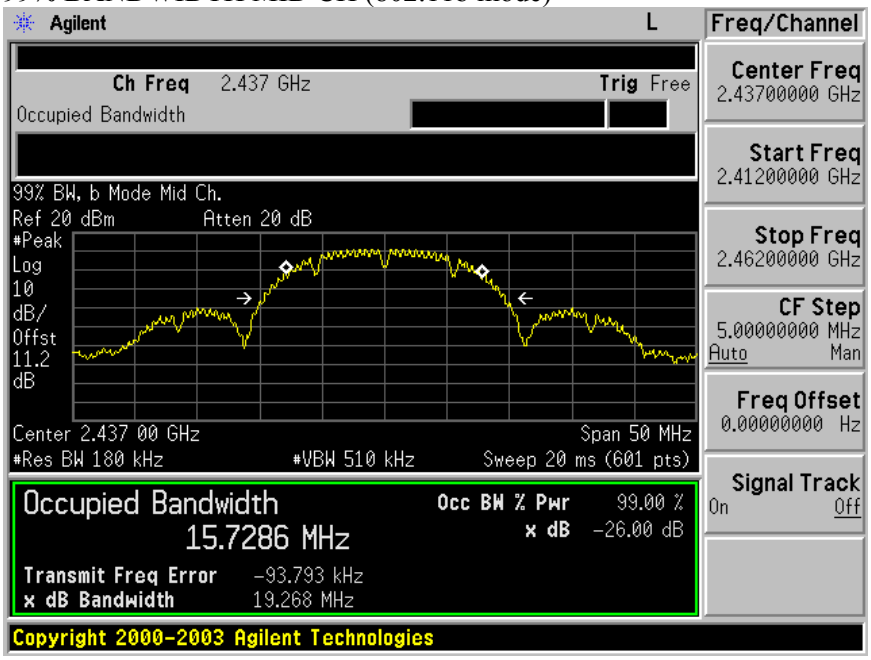
Channel	Frequency (MHz)	99% Bandwidth (MHz)
Middle	2437	33.335

99% BANDWIDTH (802.11b MODE)

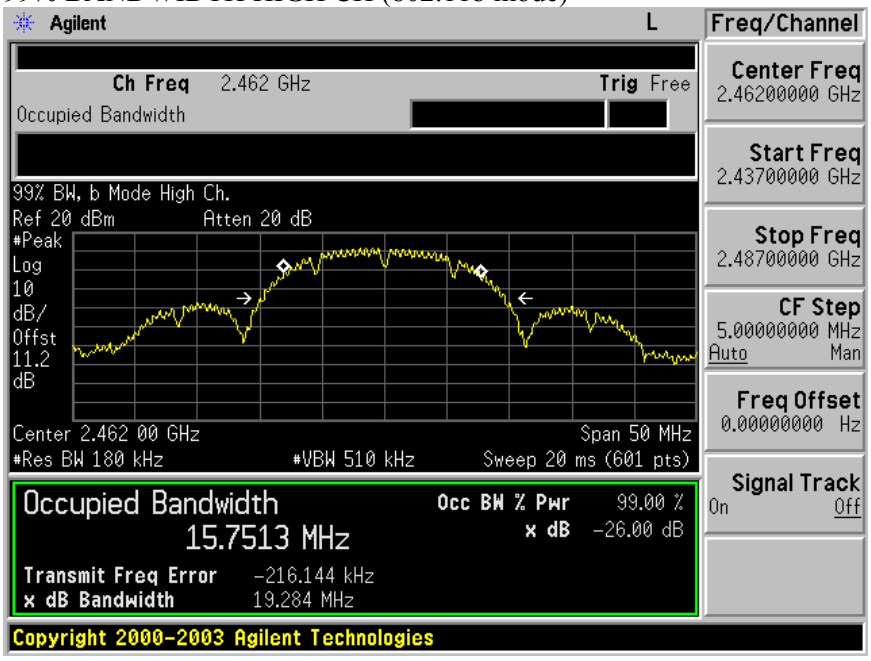
99% BANDWIDTH LOW CH (802.11b mode)



99% BANDWIDTH MID CH (802.11b mode)

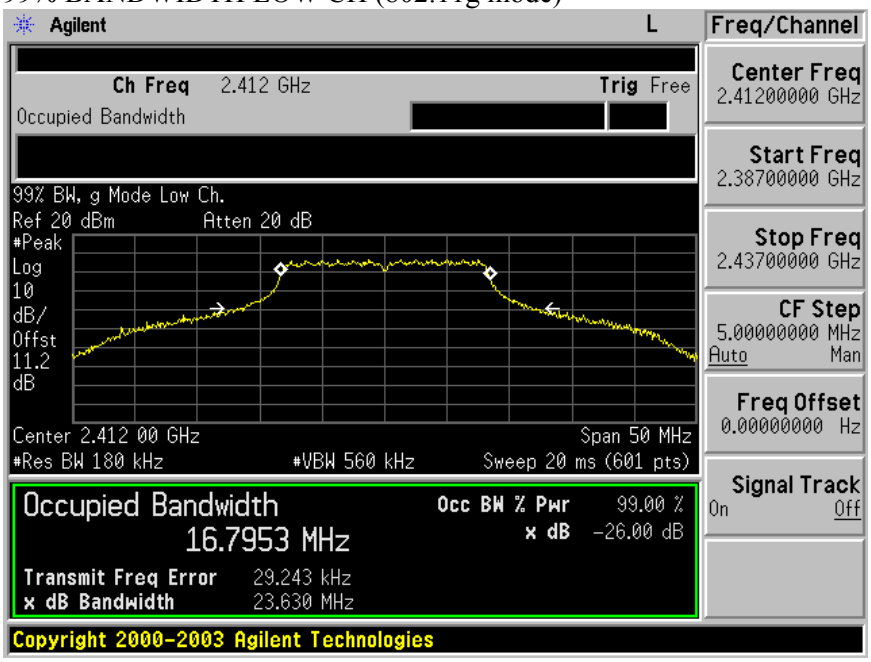


99% BANDWIDTH HIGH CH (802.11b mode)

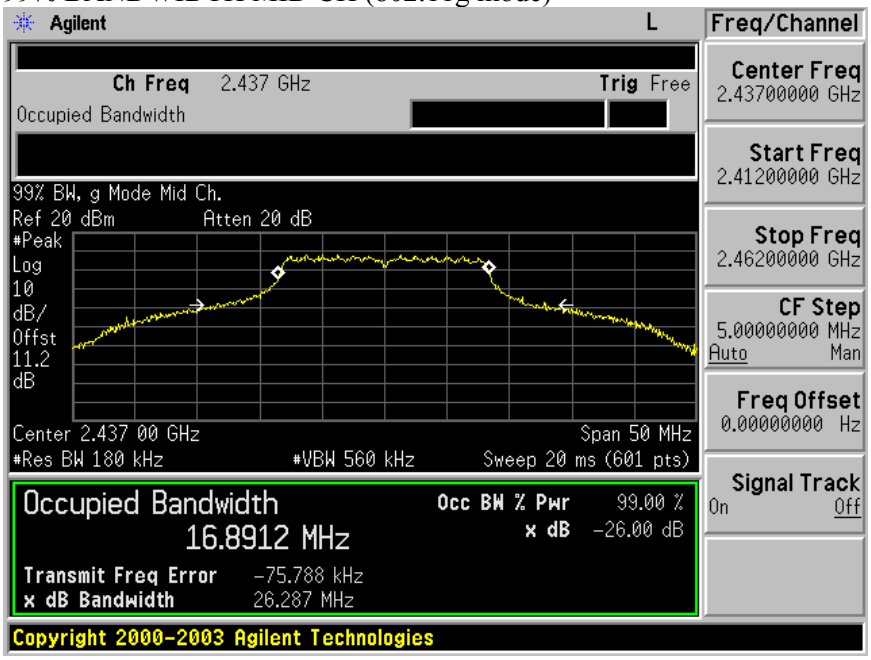


99% BANDWIDTH (802.11g MODE)

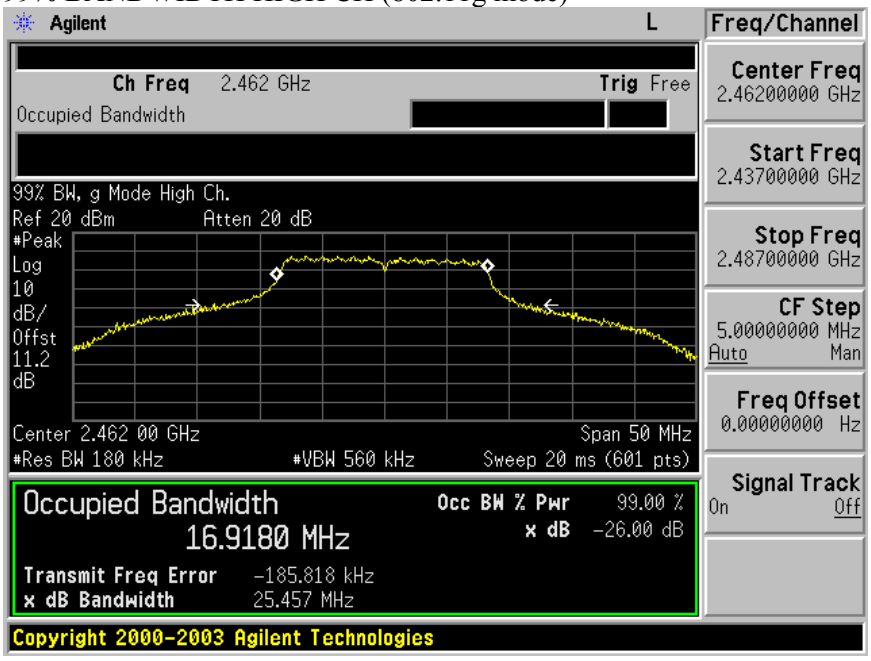
99% BANDWIDTH LOW CH (802.11g mode)



99% BANDWIDTH MID CH (802.11g mode)

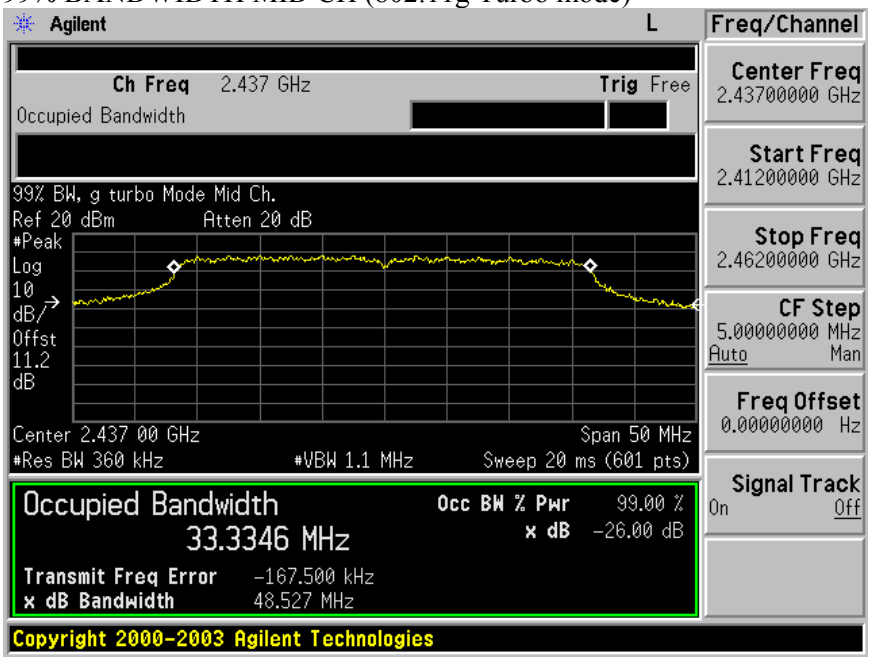


99% BANDWIDTH HIGH CH (802.11g mode)



99% BANDWIDTH (802.11g TURBO MODE)

99% BANDWIDTH MID CH (802.11g Turbo mode)



8.1.3. PEAK OUTPUT POWER

PEAK POWER LIMIT

§15.247 (b) The maximum peak output power of the intentional radiator shall not exceed the following:

§15.247 (b) (3) For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz , and 5725-5850 MHz bands: 1 watt.

§15.247 (b) (4) Except as shown in paragraphs (b)(4) (i), (ii) and (iii) of this section, if transmitting antennas of directional gain greater than 6 dBi are used the peak output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1) or (b)(2) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

§15.247 (b) (4) (i) Systems operating in the 2400–2483.5 MHz band that are used exclusively for fixed, point-to-point operations may employ transmitting antennas with directional gain greater than 6 dBi provided the maximum peak output power of the intentional radiator is reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6 dBi.

TEST PROCEDURE

The transmitter output is connected to a spectrum analyzer and the analyzer's internal channel power integration function is used to integrate the power over a bandwidth greater than or equal to the 99% bandwidth.

RESULTS

The maximum antenna gain is 1.6dBi for other than fixed point-to-point operations, therefore the limit is 30 dBm.

No non-compliance noted:

802.11b Mode

Channel	Frequency (MHz)	Peak Power (dBm)	Limit (dBm)	Margin (dB)
Low	2412	23.78	30	-6.22
Middle	2437	23.47	30	-6.53
High	2462	23.59	30	-6.41

802.11g Mode

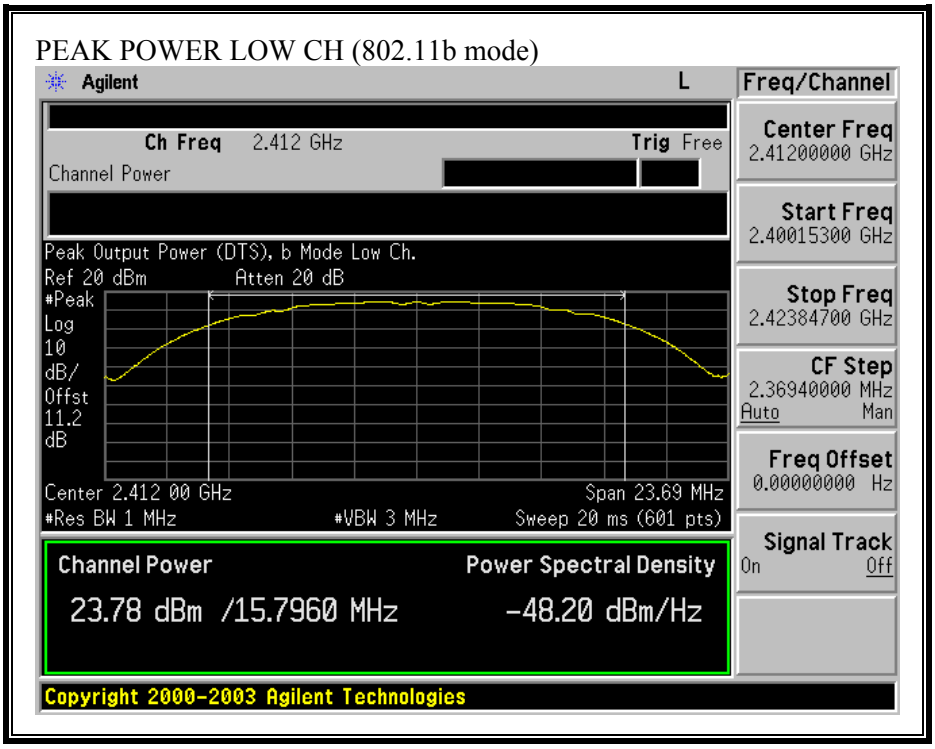
Channel	Frequency (MHz)	Peak Power (dBm)	Limit (dBm)	Margin (dB)
Low	2412	25.02	30	-4.98
Middle	2437	26.05	30	-3.95
High	2462	25.32	30	-4.68

802.11g Turbo Mode

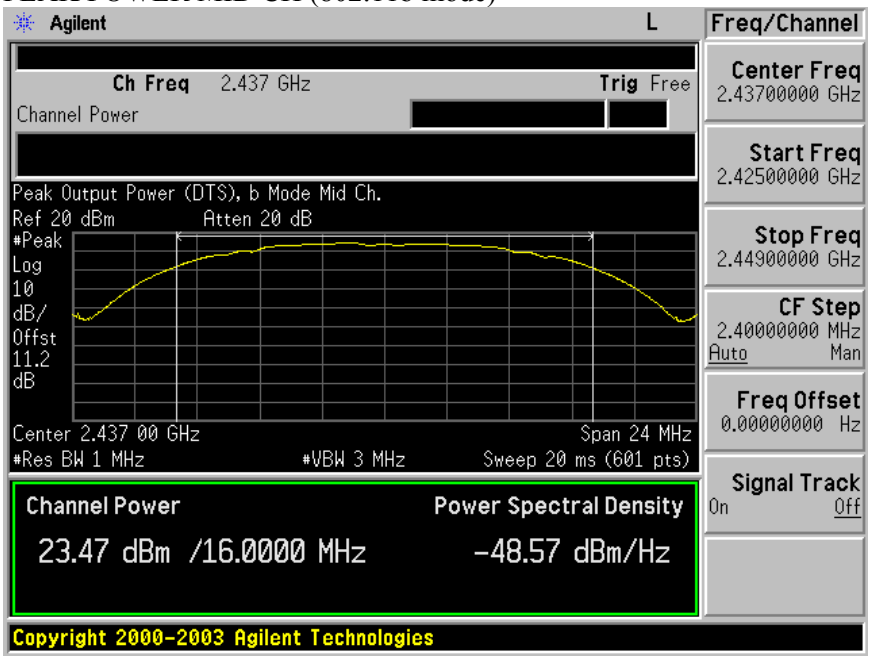
Channel	Frequency (MHz)	Peak Power (dBm)	Limit (dBm)	Margin (dB)
Middle	2437	25.92	30	-4.08

OUTPUT POWER (802.11b MODE)

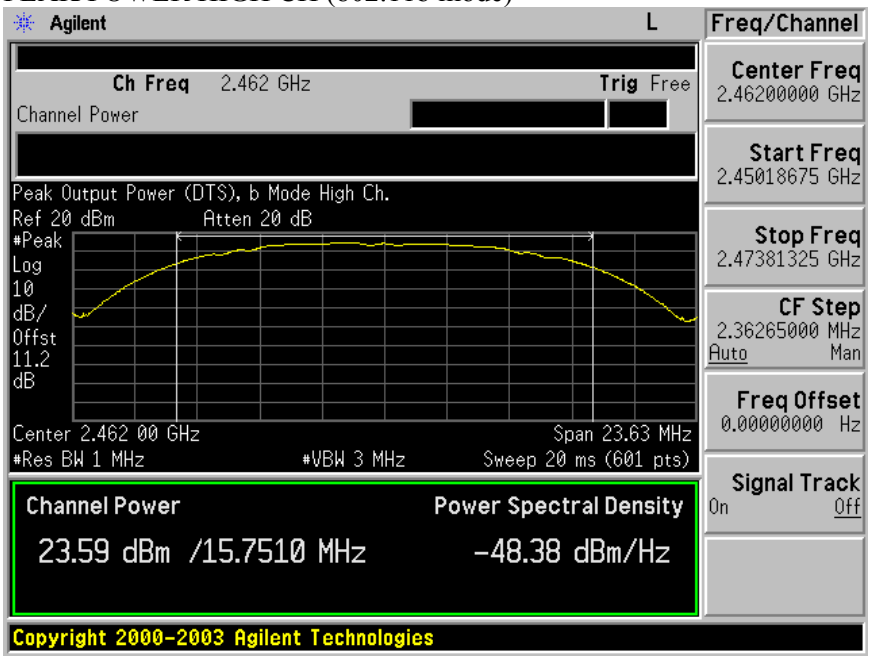
PEAK POWER LOW CH (802.11b mode)



PEAK POWER MID CH (802.11b mode)

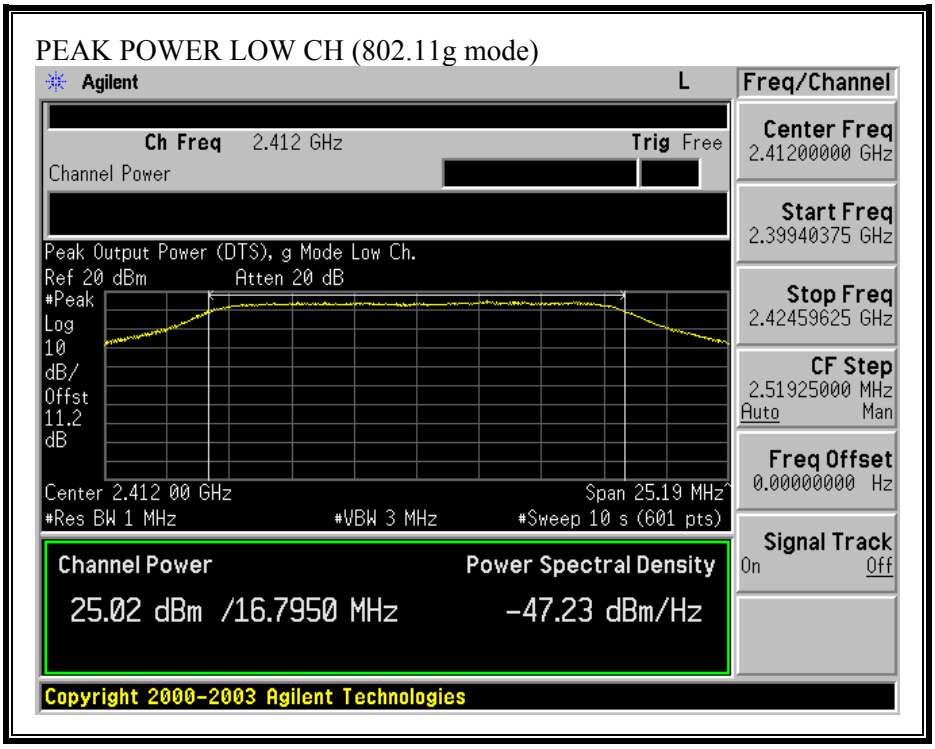


PEAK POWER HIGH CH (802.11b mode)

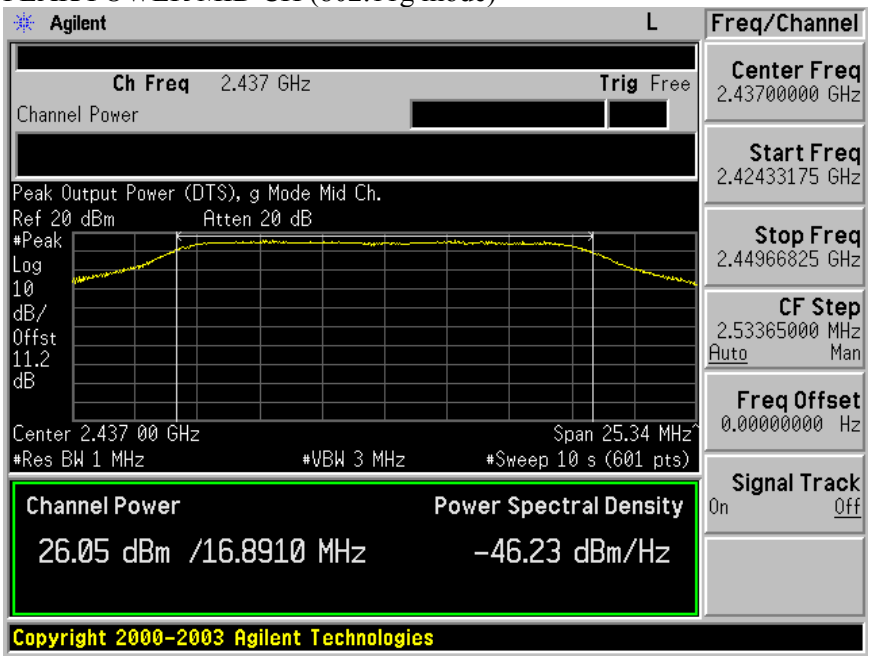


OUTPUT POWER (802.11g MODE)

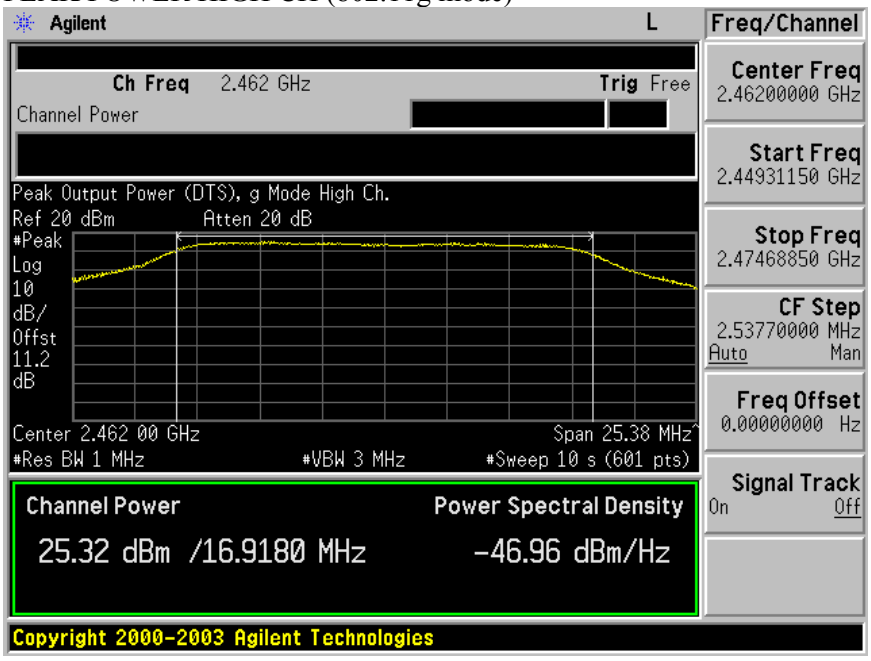
PEAK POWER LOW CH (802.11g mode)



PEAK POWER MID CH (802.11g mode)

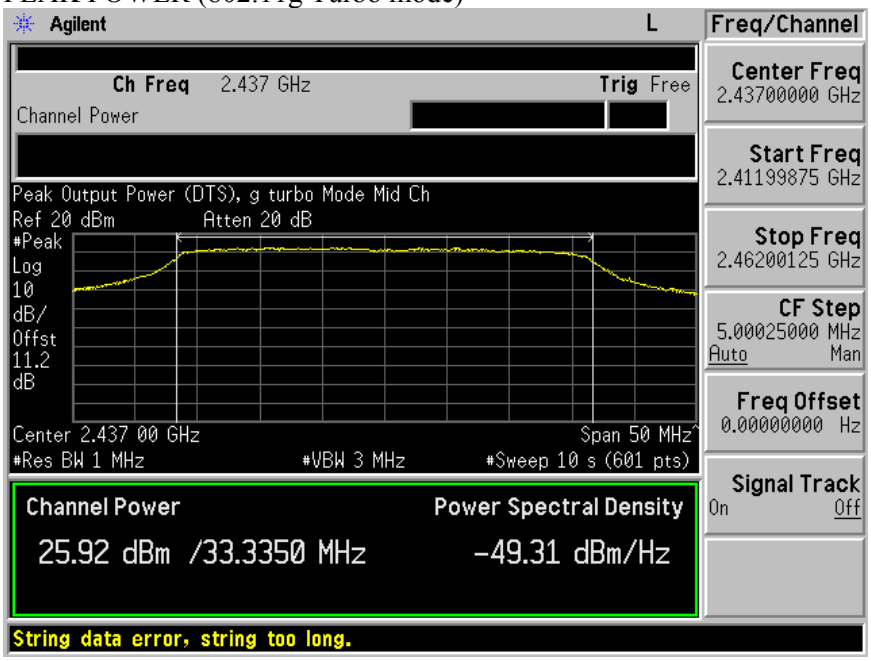


PEAK POWER HIGH CH (802.11g mode)



OUTPUT POWER (802.11g TURBO MODE)

PEAK POWER (802.11g Turbo mode)



8.1.4. AVERAGE POWER

AVERAGE POWER LIMIT

None; for reporting purposes only.

TEST PROCEDURE

The transmitter output is connected to a power meter.

RESULTS

No non-compliance noted:

The cable assembly insertion loss of 11.18 dB (including 10 dB pad and 1.18 dB cable) was entered as an offset in the power meter to allow for direct reading of power.

802.11b Mode

Channel	Frequency (MHz)	Power (dBm)
Low	2412	19.9
Middle	2437	20
High	2462	20.2

802.11g Mode

Channel	Frequency (MHz)	Power (dBm)
Low	2412	16.40
Middle	2437	17.20
High	2462	16.50

802.11g Turbo Mode

Channel	Frequency (MHz)	Power (dBm)
Middle	2437	17.10

8.1.5. PEAK POWER SPECTRAL DENSITY

LIMIT

§15.247 (d) For direct sequence systems, the peak power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

TEST PROCEDURE

The transmitter output is connected to a spectrum analyzer, the maximum level in a 3 kHz bandwidth is measured with the spectrum analyzer using RBW = 3 kHz and VBW > 3 kHz, sweep time = span / 3 kHz, and video averaging is turned off. The PPSD is the highest level found across the emission in any 3 kHz band.

RESULTS

No non-compliance noted:

802.11b Mode

Channel	Frequency (MHz)	PPSD (dBm)	Limit (dBm)	Margin (dB)
Low	2412	-3.57	8	-11.57
Middle	2437	-3.35	8	-11.35
High	2462	-3.68	8	-11.68

802.11g Mode

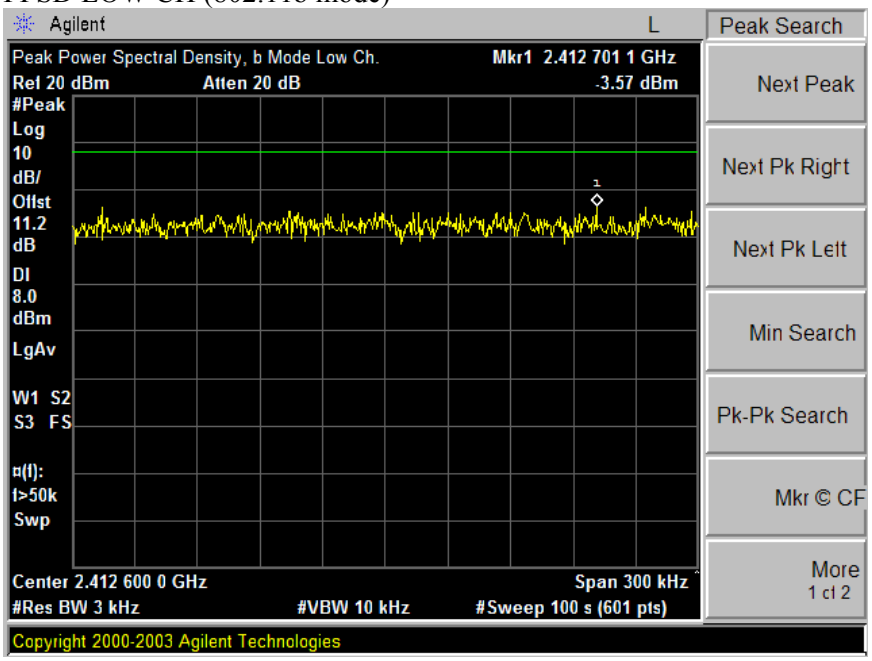
Channel	Frequency (MHz)	PPSD (dBm)	Limit (dBm)	Margin (dB)
Low	2412	-6.78	8	-14.78
Middle	2437	-6.83	8	-14.83
High	2462	-7.78	8	-15.78

802.11g Turbo Mode

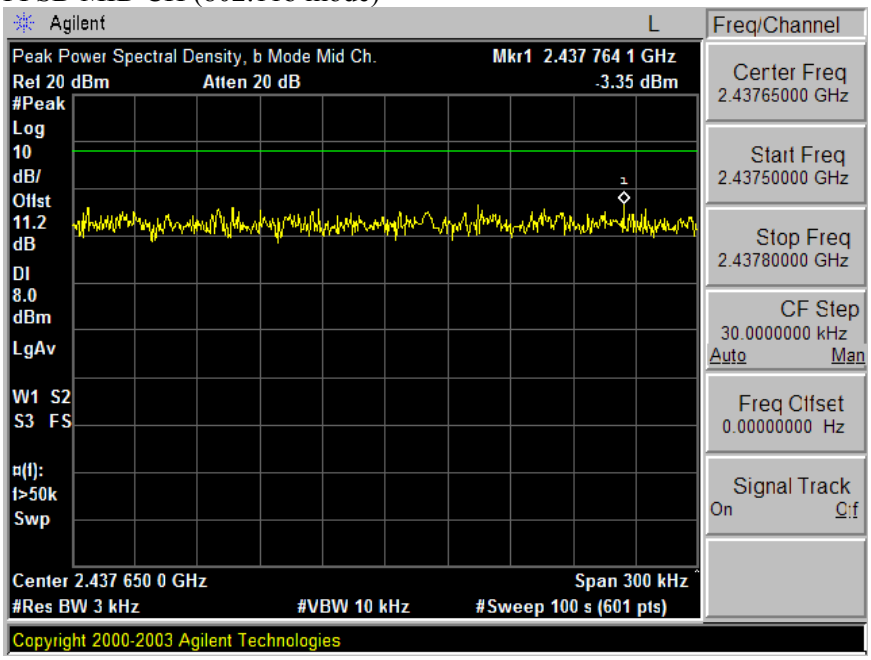
Channel	Frequency (MHz)	PPSD (dBm)	Limit (dBm)	Margin (dB)
Middle	2437	-8.77	8	-16.77

PEAK POWER SPECTRAL DENSITY (802.11b MODE)

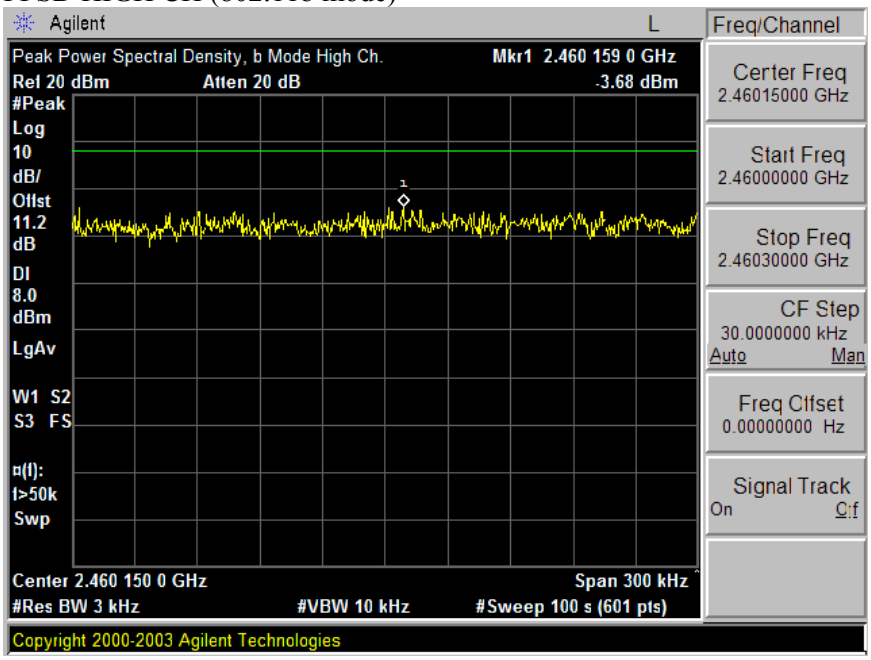
PPSD LOW CH (802.11b mode)



PPSD MID CH (802.11b mode)

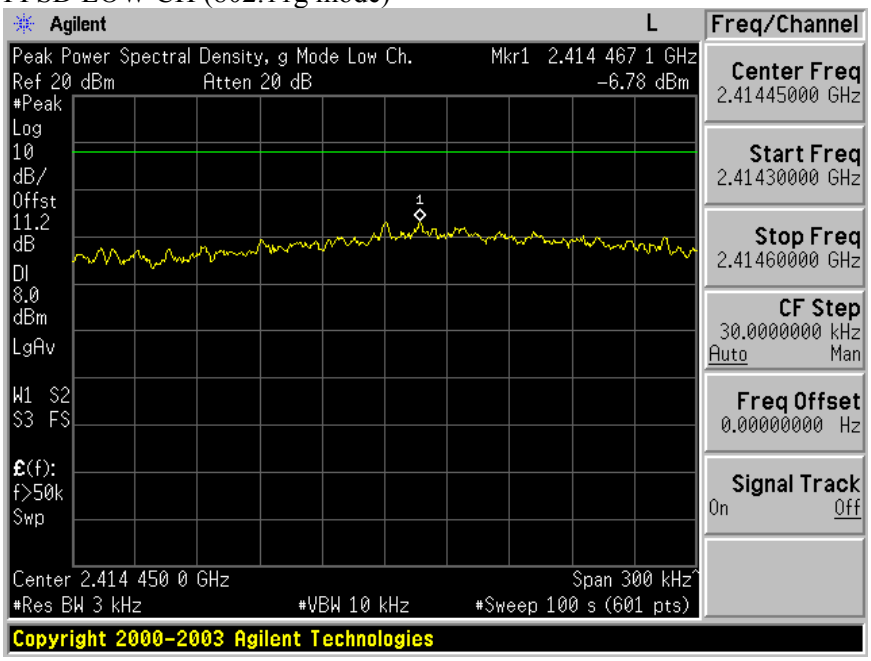


PPSD HIGH CH (802.11b mode)

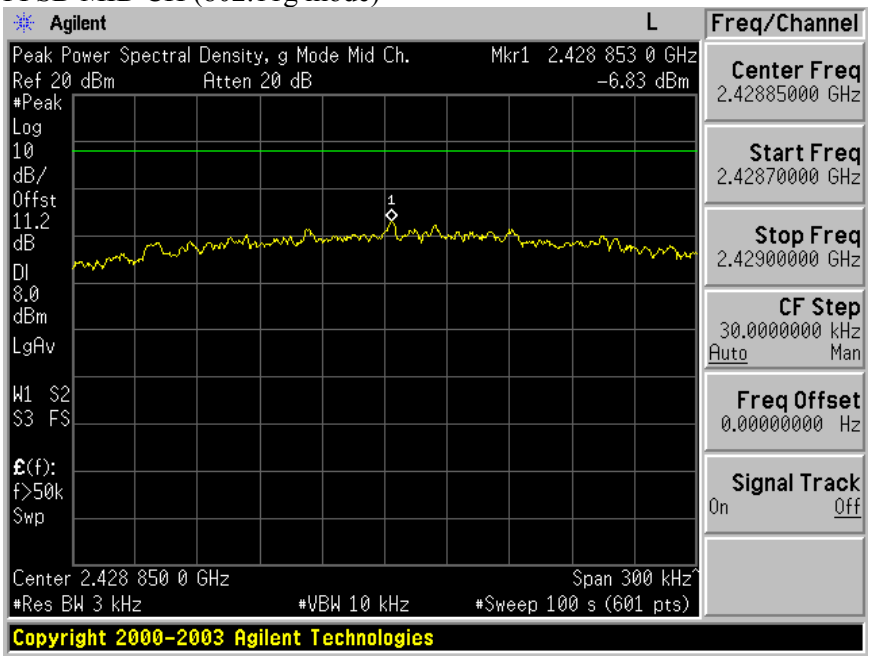


PEAK POWER SPECTRAL DENSITY (802.11g MODE)

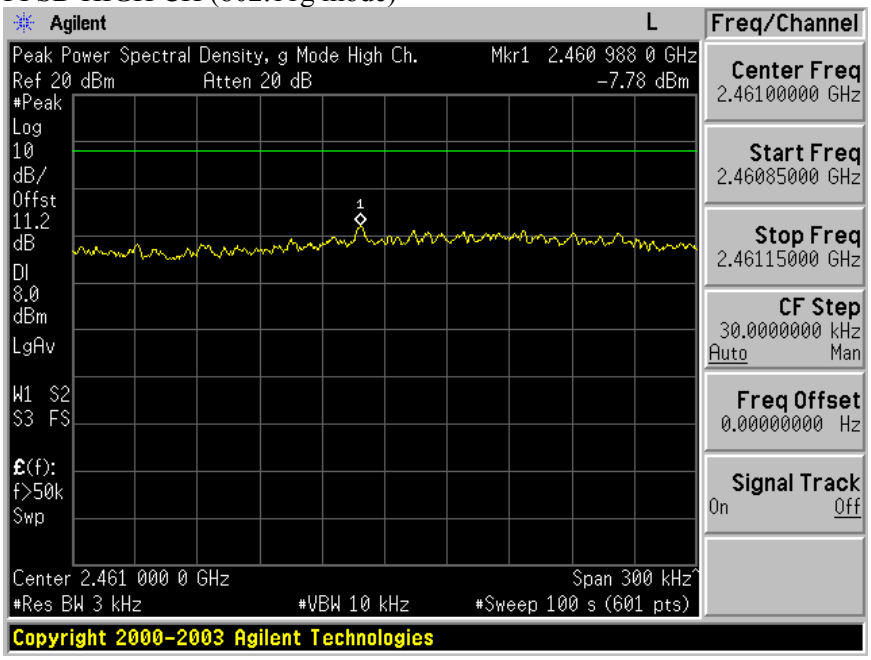
PPSD LOW CH (802.11g mode)



PPSD MID CH (802.11g mode)

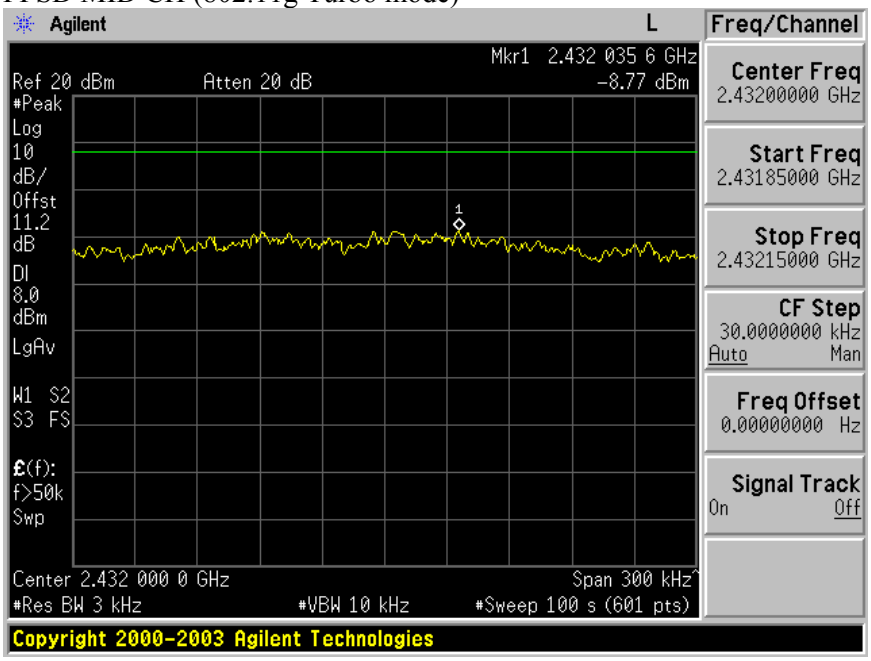


PPSD HIGH CH (802.11g mode)



PEAK POWER SPECTRAL DENSITY (802.11g TURBO MODE)

PPSD MID CH (802.11g Turbo mode)



8.1.6. CONDUCTED SPURIOUS EMISSIONS

LIMITS

§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 §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in§15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

TEST PROCEDURE

The transmitter output is connected to a spectrum analyzer. The resolution bandwidth is set to 100 kHz. The video bandwidth is set to 300 kHz.

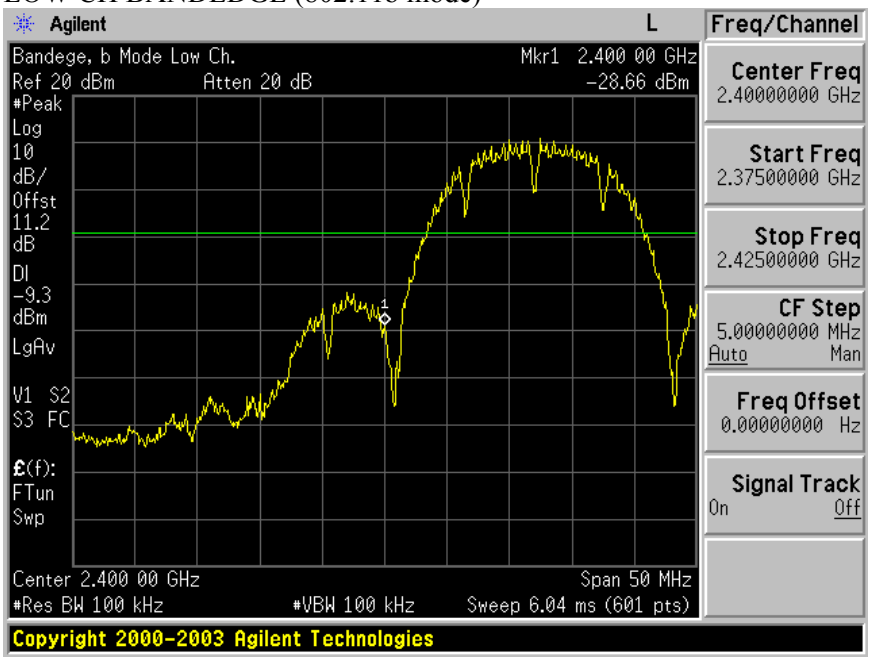
The spectrum from 30 MHz to 26 GHz is investigated with the transmitter set to the lowest, middle, and highest channels.

RESULTS

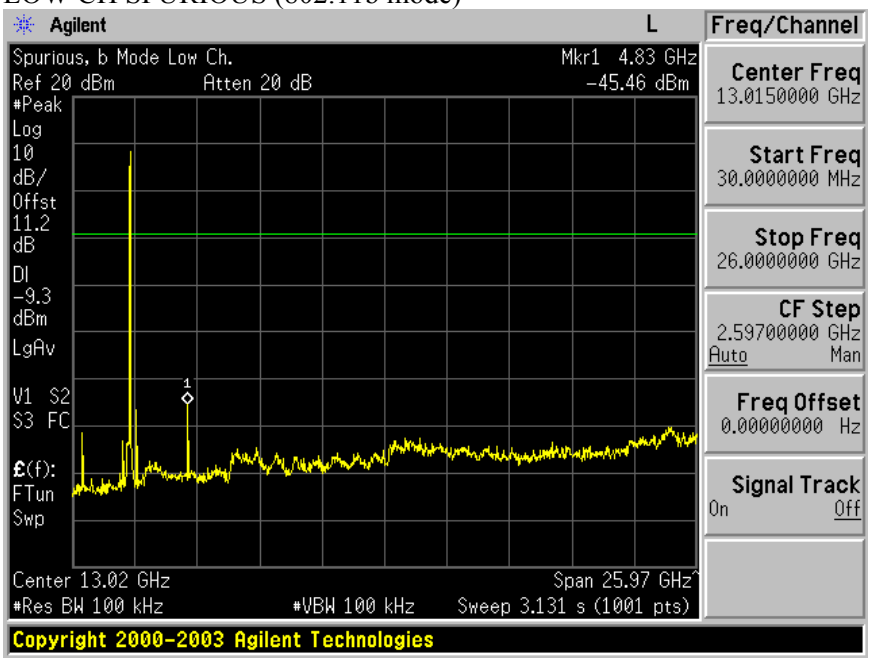
No non-compliance noted:

SPURIOUS EMISSIONS, LOW CHANNEL (802.11b MODE)

LOW CH BANDEDGE (802.11b mode)

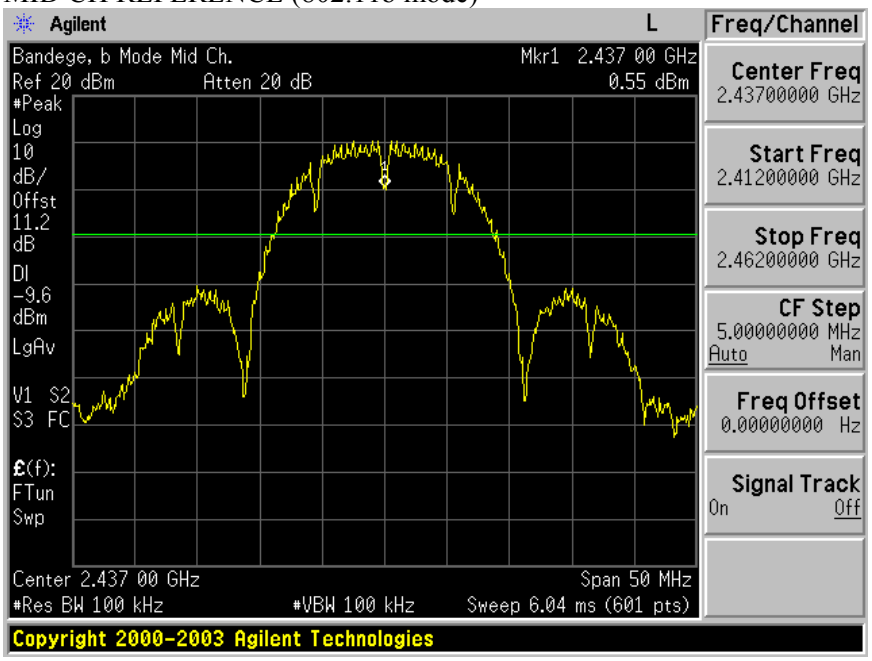


LOW CH SPURIOUS (802.11b mode)

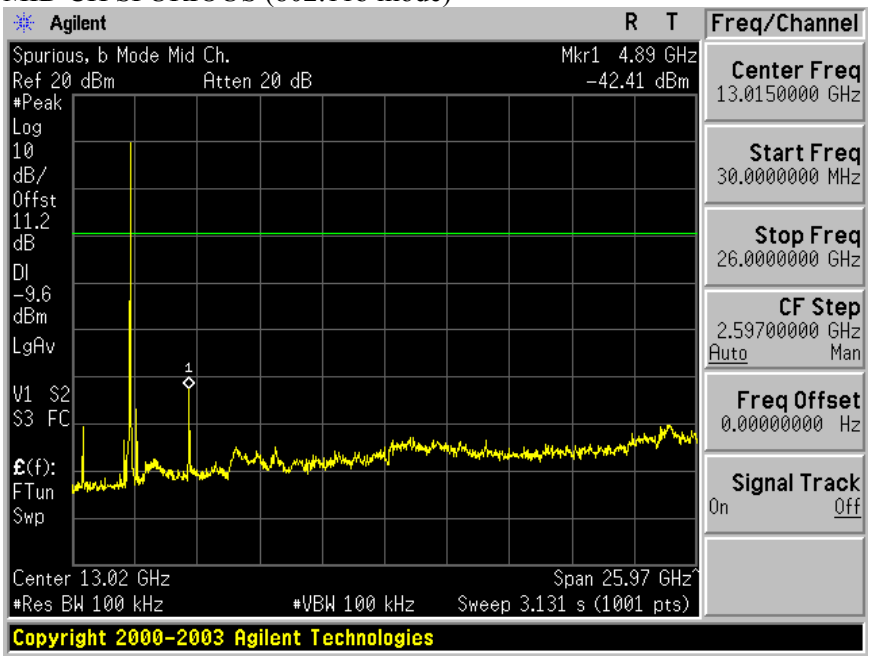


SPURIOUS EMISSIONS, MID CHANNEL (802.11b MODE)

MID CH REFERENCE (802.11b mode)

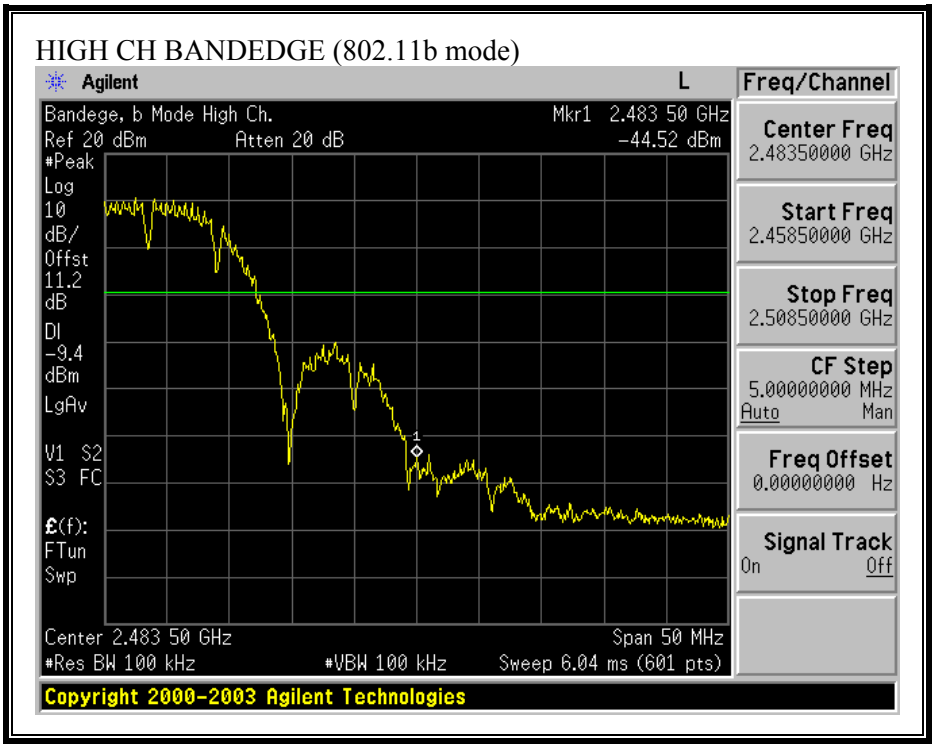


MID CH SPURIOUS (802.11b mode)

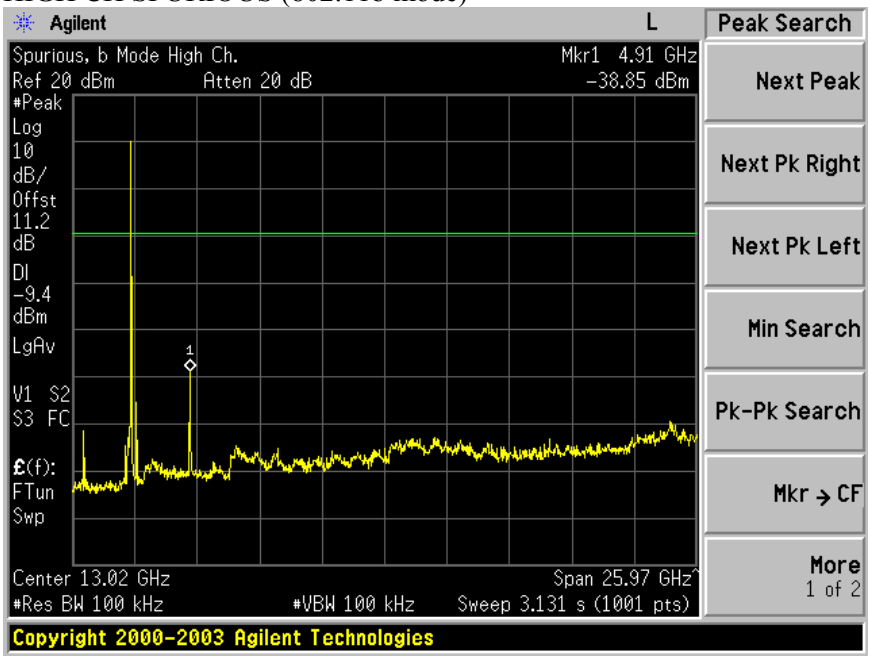


SPURIOUS EMISSIONS, HIGH CHANNEL (802.11b MODE)

HIGH CH BANDEDGE (802.11b mode)

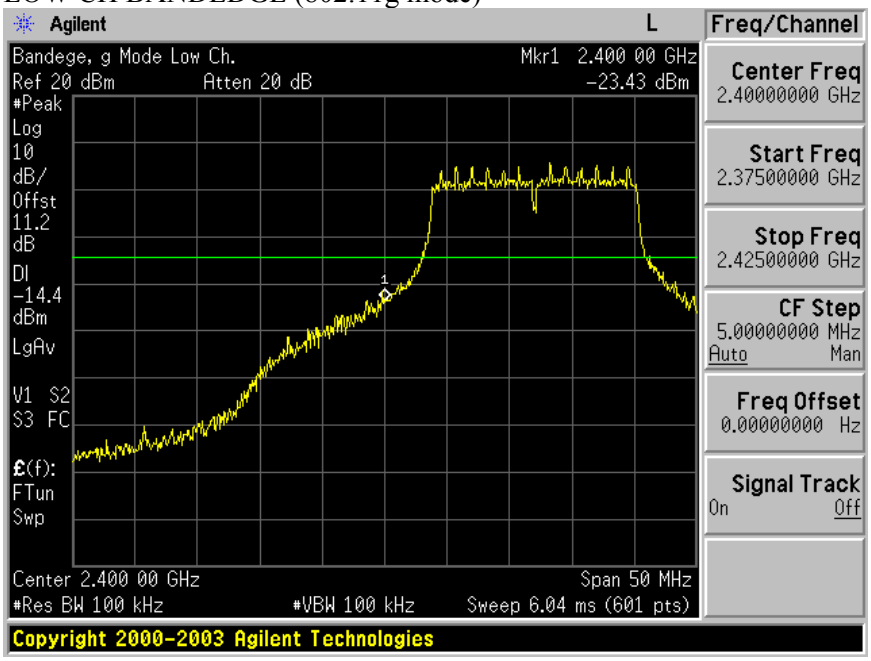


HIGH CH SPURIOUS (802.11b mode)

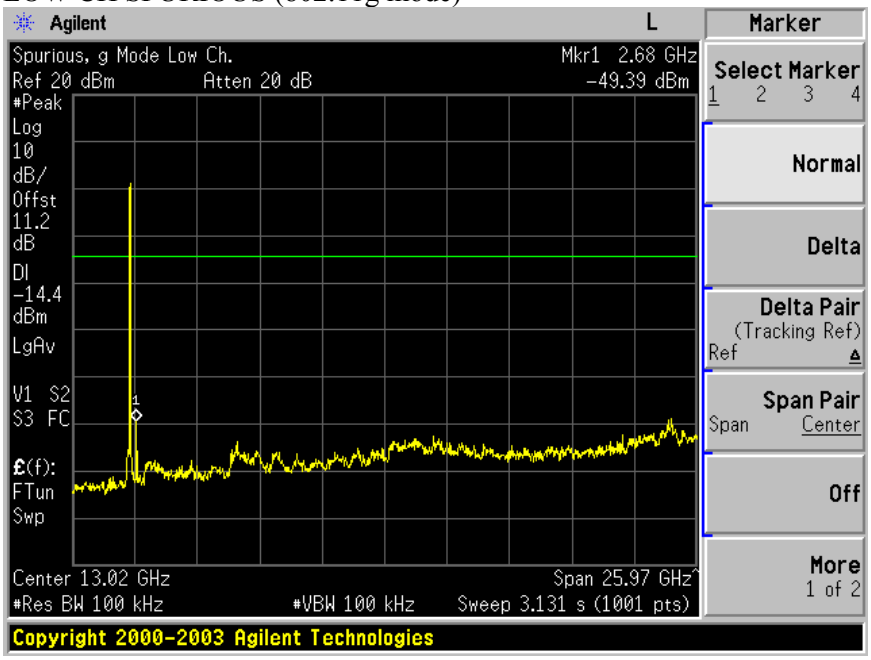


SPURIOUS EMISSIONS, LOW CHANNEL (802.11g MODE)

LOW CH BANDEDGE (802.11g mode)

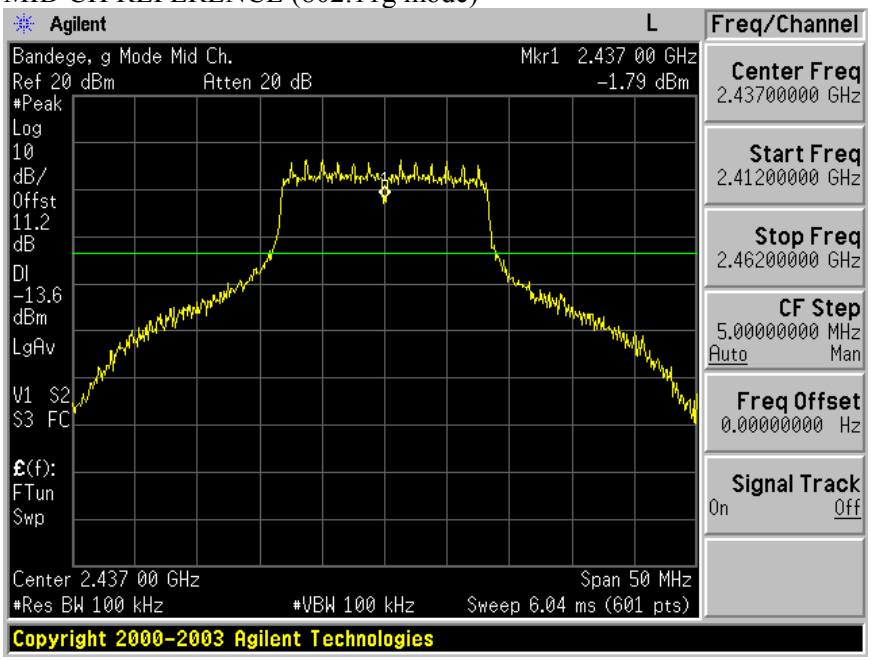


LOW CH SPURIOUS (802.11g mode)

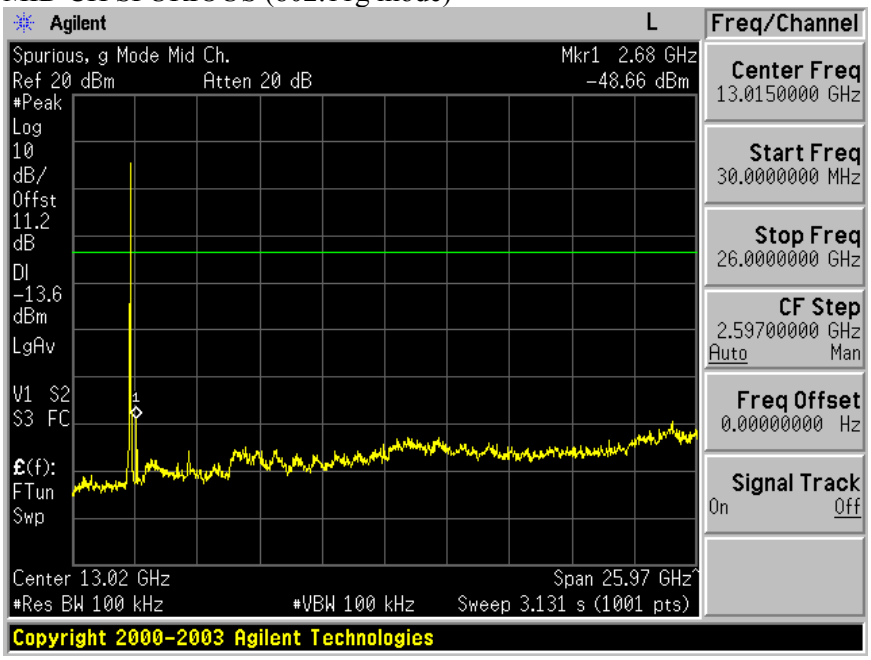


SPURIOUS EMISSIONS, MID CHANNEL (802.11g MODE)

MID CH REFERENCE (802.11g mode)

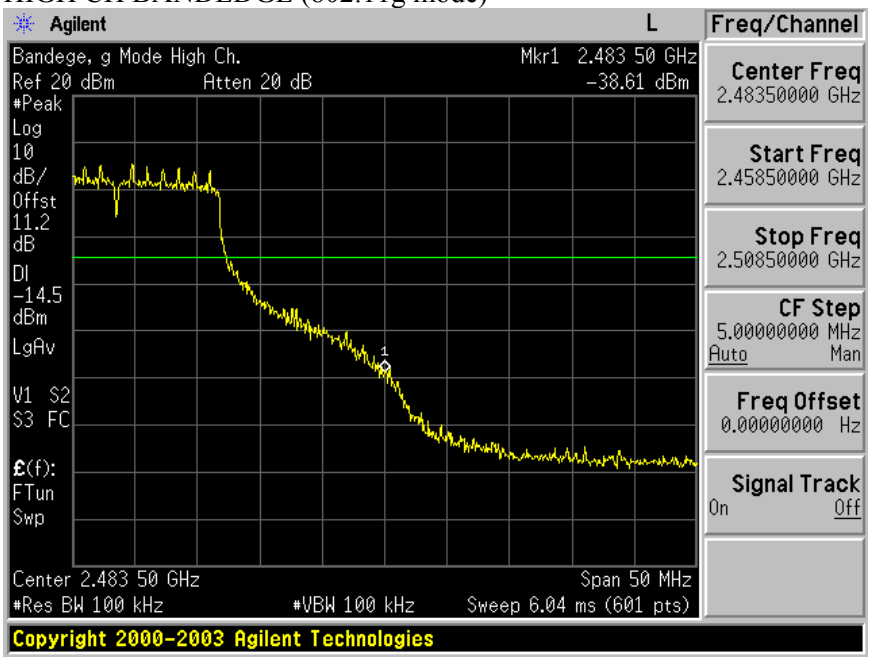


MID CH SPURIOUS (802.11g mode)

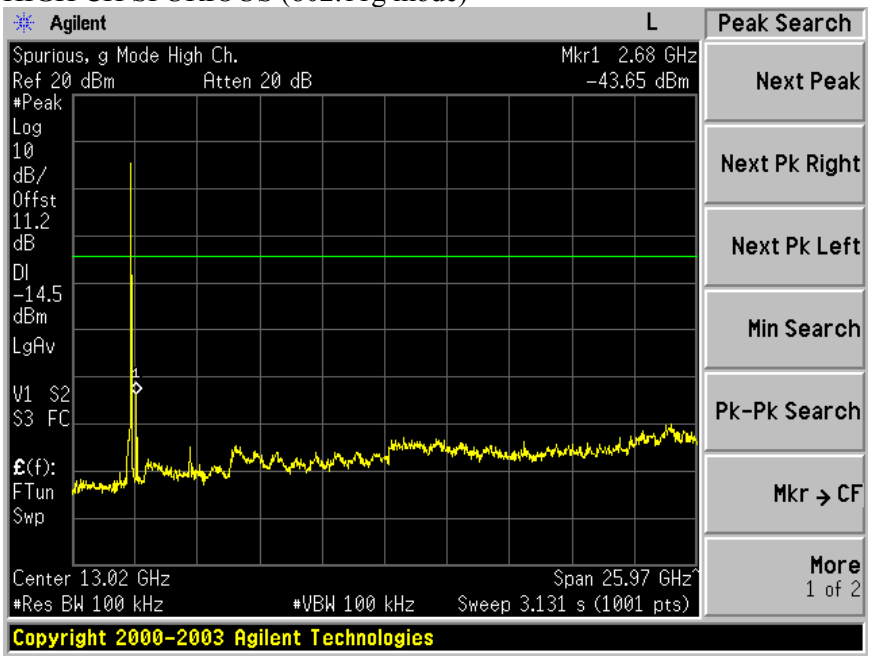


SPURIOUS EMISSIONS, HIGH CHANNEL (802.11g MODE)

HIGH CH BANDEDGE (802.11g mode)

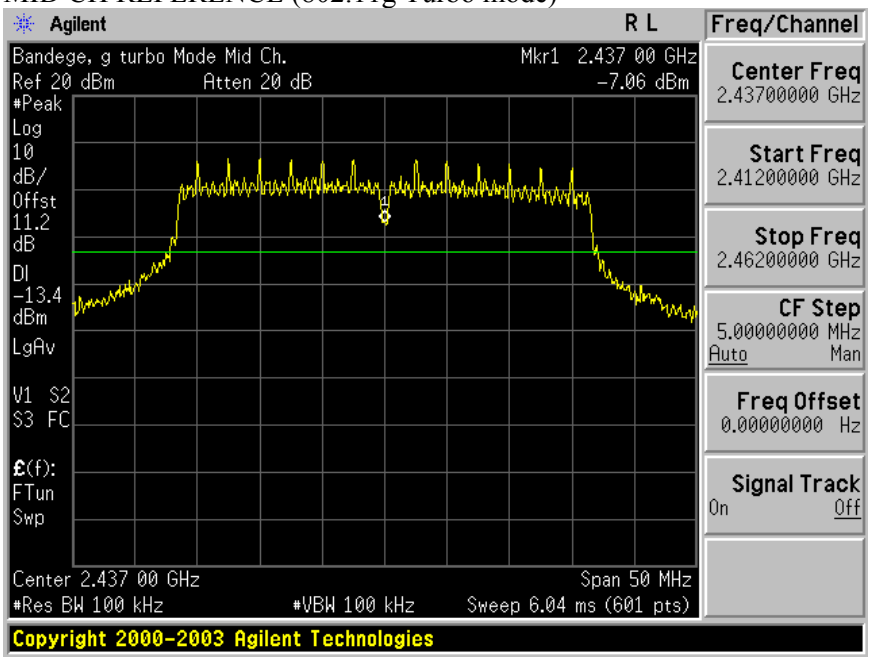


HIGH CH SPURIOUS (802.11g mode)

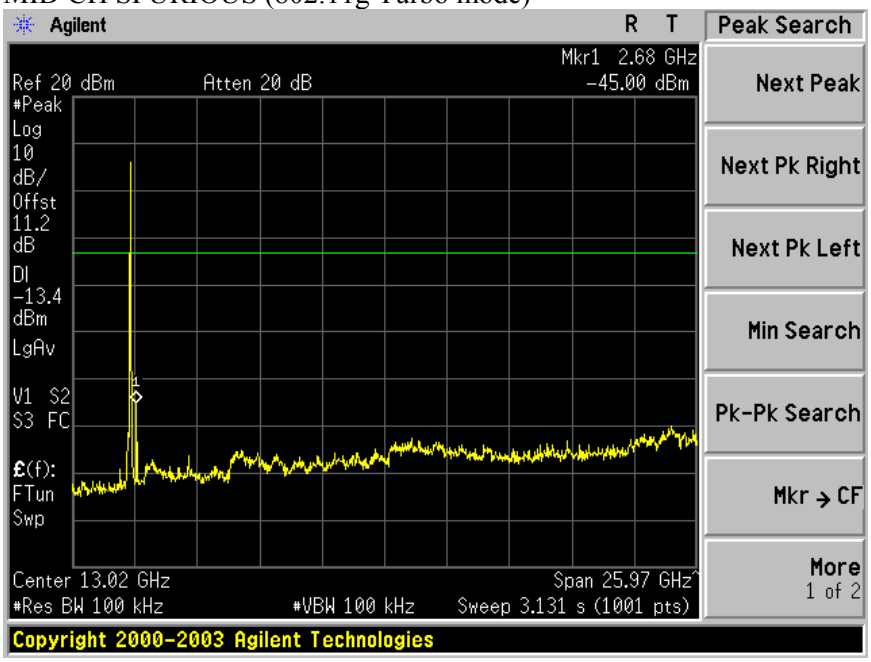


SPURIOUS EMISSIONS, MID CHANNEL (802.11g TURBO MODE)

MID CH REFERENCE (802.11g Turbo mode)



MID CH SPURIOUS (802.11g Turbo mode)



8.2. RADIATED EMISSIONS

8.2.1. TRANSMITTER RADIATED SPURIOUS EMISSIONS

LIMITS

§15.205 (a) Except as shown in paragraph (d) 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 - 5.15
[1]0.495 - 0.505	16.69475 - 16.69525	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 - 335.4	3600 - 4400	([2])
13.36 - 13.41			

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

§15.205 (b) Except as provided in paragraphs (d) and (e), the field strength of emissions appearing within these frequency bands shall not exceed the limits shown in Section 15.209. At frequencies equal to or less than 1000 MHz, compliance with the limits in Section 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 Section 15.35 apply to these measurements.

§15.209 (a) Except as provided elsewhere in this Subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
30 - 88	100 **	3
88 - 216	150 **	3
216 - 960	200 **	3
Above 960	500	3

** Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this Section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this Part, e.g., Sections 15.231 and 15.241.

§15.209 (b) In the emission table above, the tighter limit applies at the band edges.

TEST PROCEDURE

The EUT is placed on a non-conducting table 80 cm above the ground plane. The antenna to EUT distance is 3 meters. The EUT is configured in accordance with ANSI C63.4. The EUT is set to transmit in a continuous mode.

For measurements below 1 GHz the resolution bandwidth is set to 100 kHz for peak detection measurements or 120 kHz for quasi-peak detection measurements. Peak detection is used unless otherwise noted as quasi-peak.

For measurements above 1 GHz the resolution bandwidth is set to 1 MHz, then the video bandwidth is set to 1 MHz for peak measurements and 10 Hz for average measurements.

The spectrum from 30 MHz to 26 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in the 2.4 GHz band.

The spectrum from 30 MHz to 40 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in each 5 GHz band.

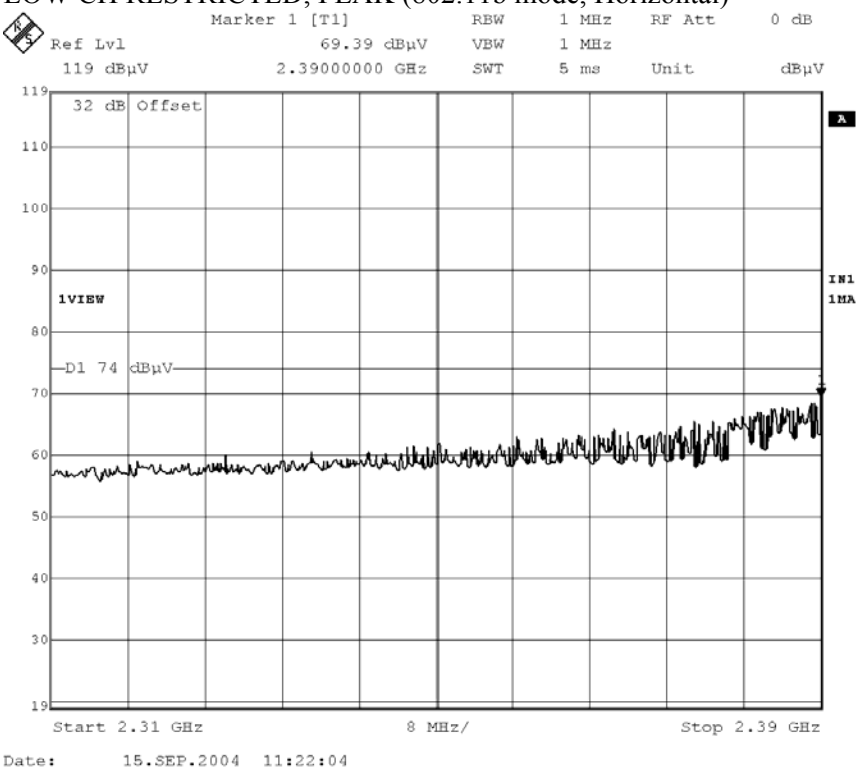
The frequency range of interest is monitored at a fixed antenna height and EUT azimuth. The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized in both the vertical and the horizontal positions.

For the portable configuration, x, y and z axis positions were investigated, and testing was performed at the worst-case position.

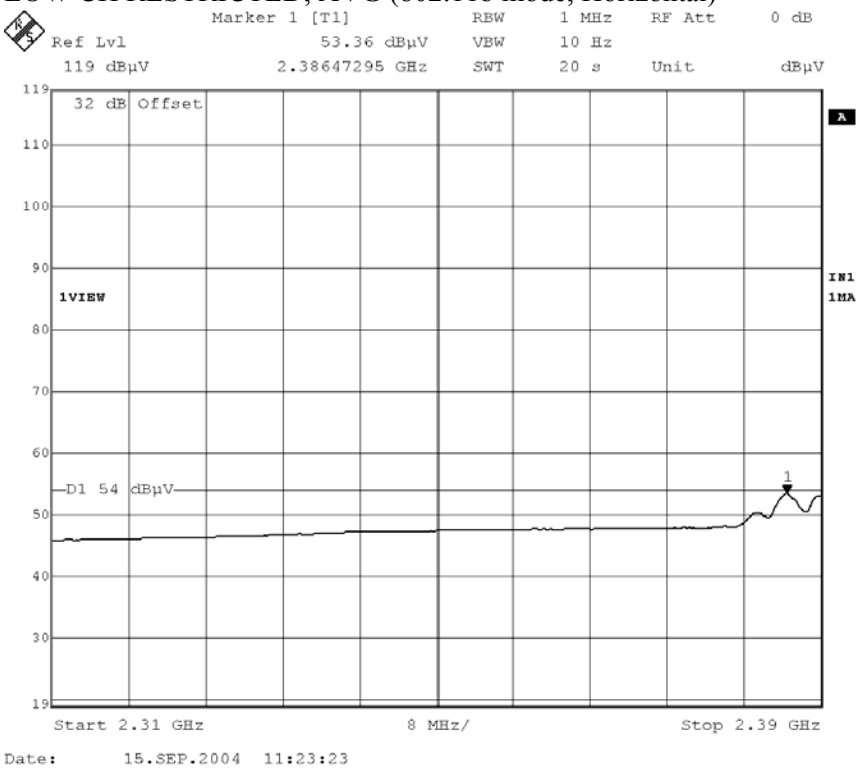
8.2.2. TRANSMITTER ABOVE 1 GHz FOR 2400 TO 2483.5 MHz BAND CRADLE CONFIGURATION

RESTRICTED BANDEDGE (b MODE, LOW CHANNEL, HORIZONTAL)

LOW CH RESTRICTED, PEAK (802.11b mode, Horizontal)

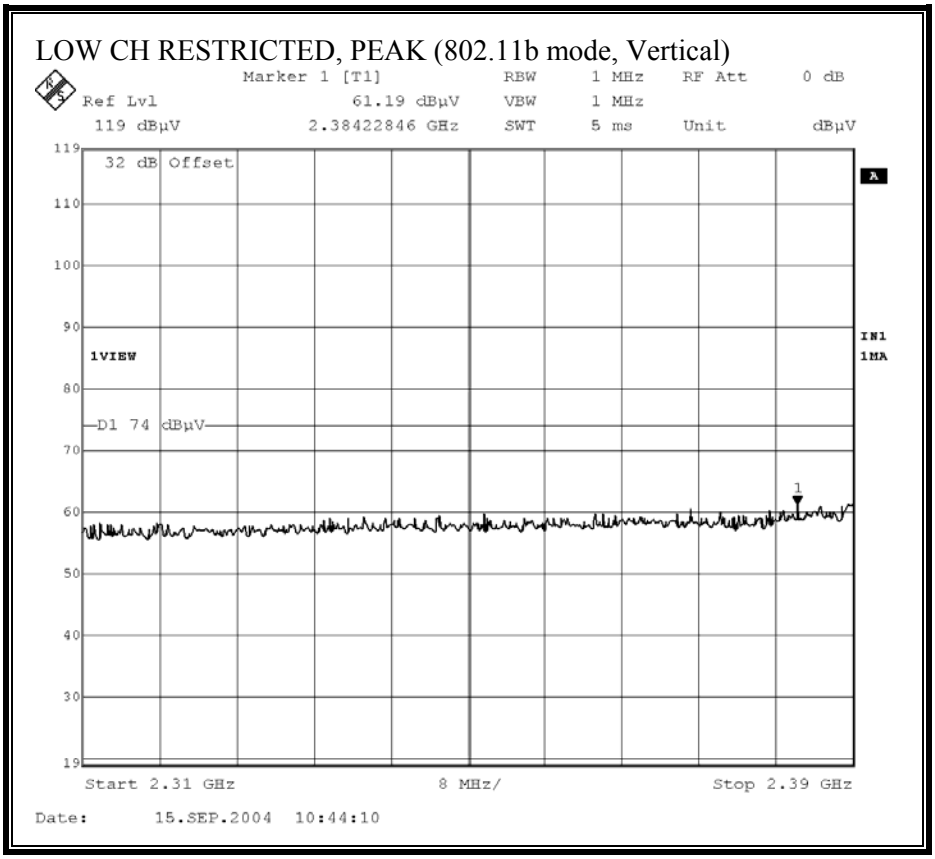


LOW CH RESTRICTED, AVG (802.11b mode, Horizontal)

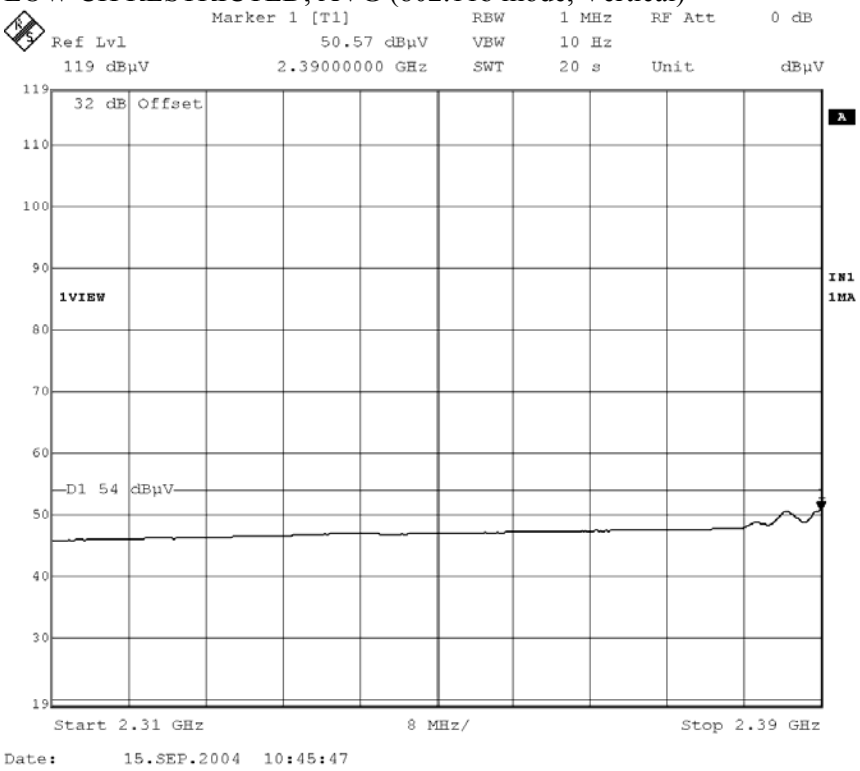


RESTRICTED BANDEDGE (b MODE, LOW CHANNEL, VERTICAL)

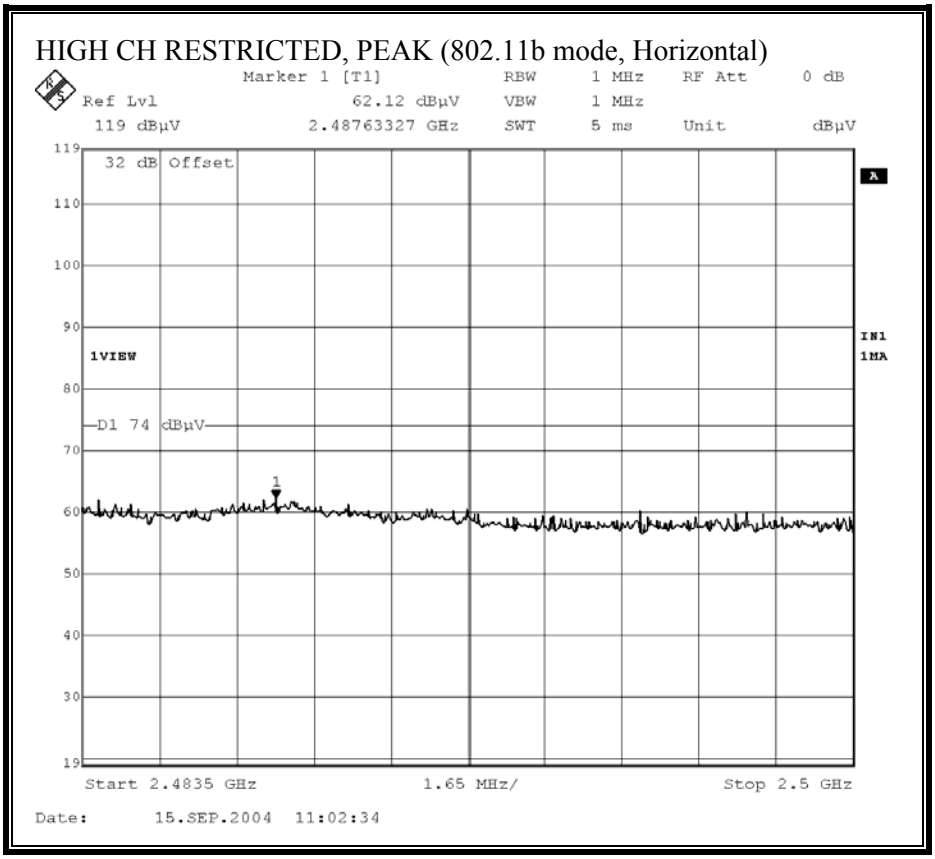
LOW CH RESTRICTED, PEAK (802.11b mode, Vertical)



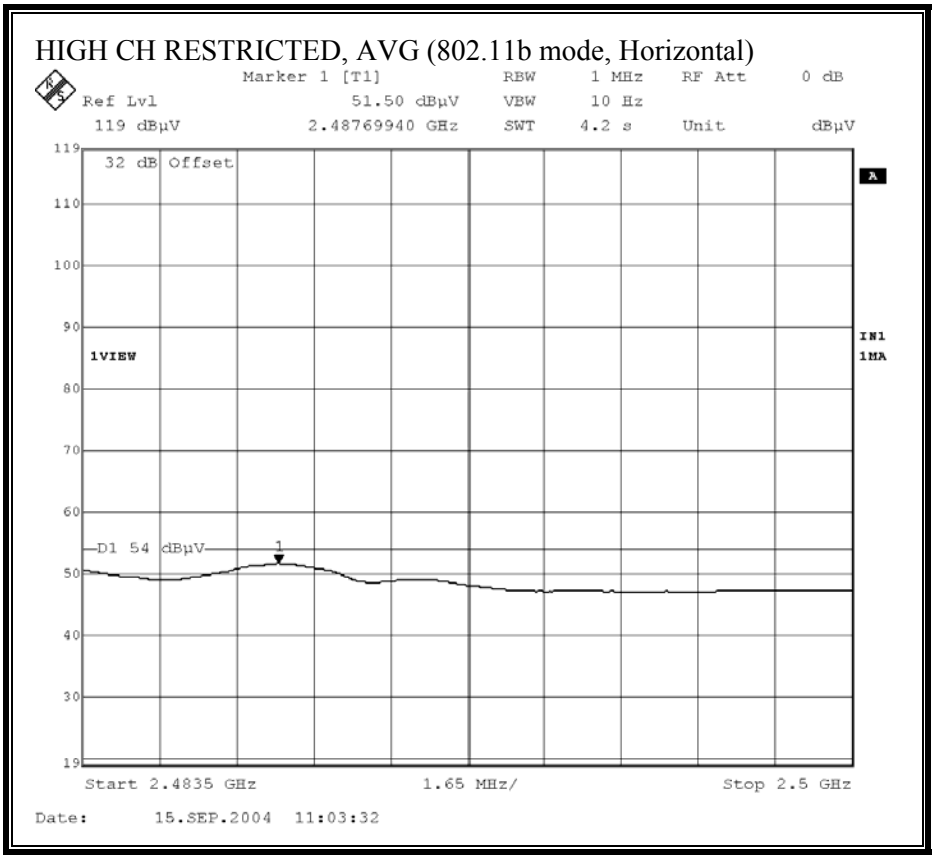
LOW CH RESTRICTED, AVG (802.11b mode, Vertical)



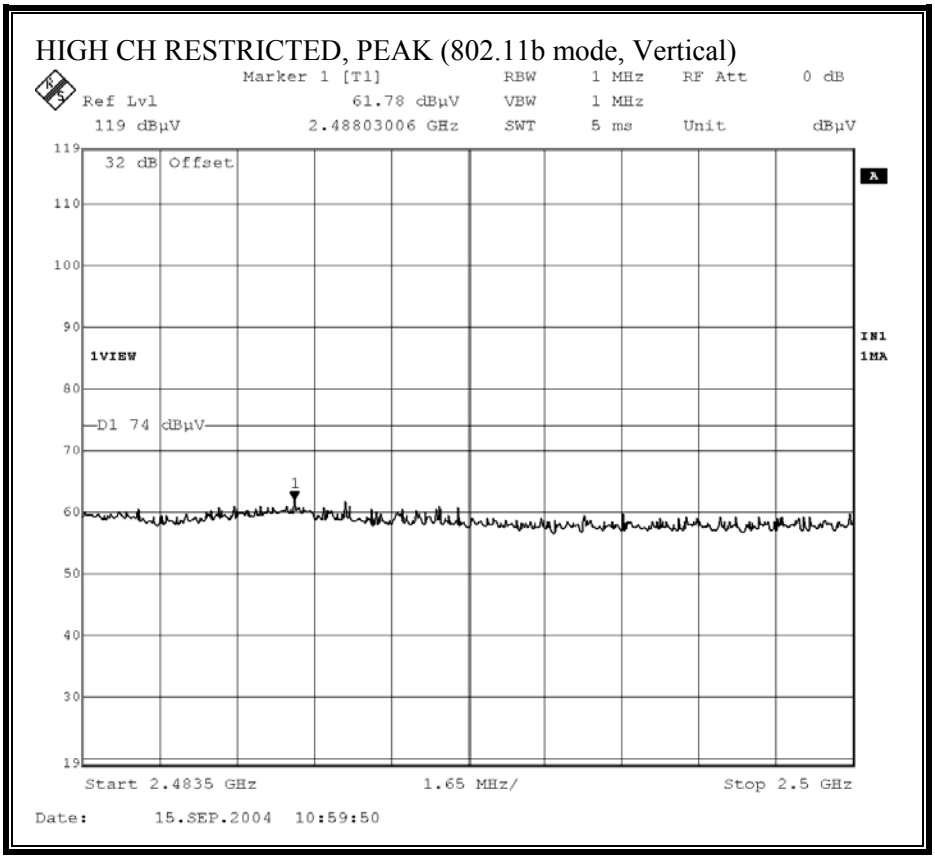
RESTRICTED BANDEDGE (b MODE, HIGH CHANNEL, HORIZONTAL)



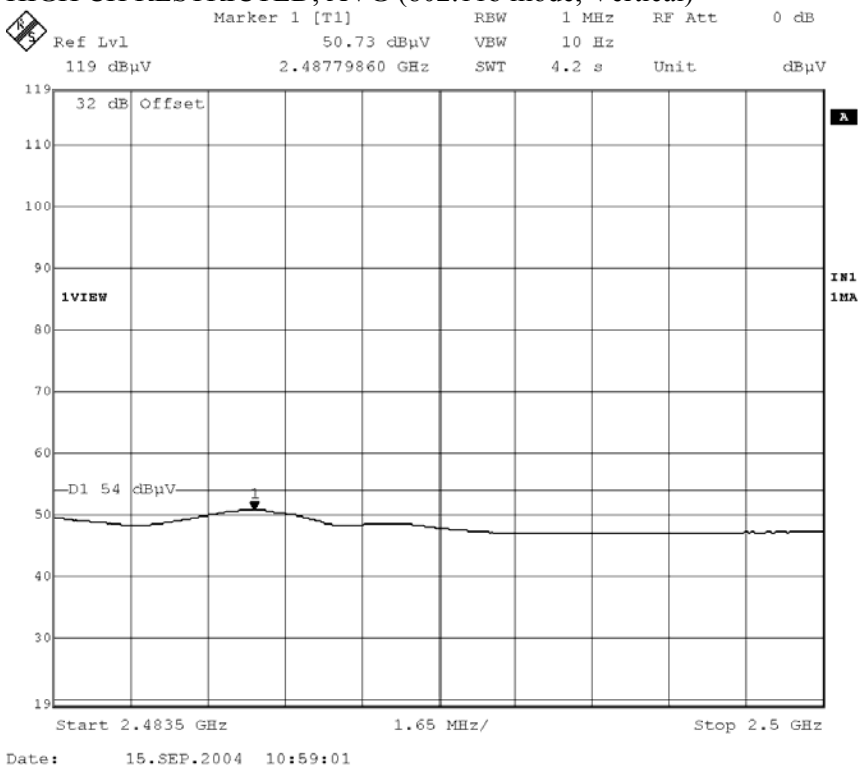
HIGH CH RESTRICTED, AVG (802.11b mode, Horizontal)



RESTRICTED BANDEDGE (b MODE, HIGH CHANNEL, VERTICAL)



HIGH CH RESTRICTED, AVG (802.11b mode, Vertical)



HARMONICS AND SPURIOUS EMISSIONS (b MODE)

09/15/04 **High Frequency Measurement**
Compliance Certification Services, Morgan Hill Open Field Site

Test Engr: David Garcia
Project #: 04U2959
Company: Hitachi
EUT Descrip.: 802.11 b/g Mini PCI card installed in Tablet PC
EUT M/N: Visionplate (PC5NR3-XXXXXXXX)
Test Target: 15.247
Mode Oper: 11b Tx mode, Cradle position

Test Equipment:

EMCO Horn 1-18GHz	Spectrum Analyzer	Pre-amplifer 1-26GHz	Pre-amplifer 26-40GHz	Horn > 18GHz
T73; S/N: 6717 @3m	Agilent E4446A Analyzer	T86 Miteq 924341		

Hi Frequency Cables
☐ (2 ft) ☐ (2.0 ft) ☑ (3 ft) ☑ (12 ft)

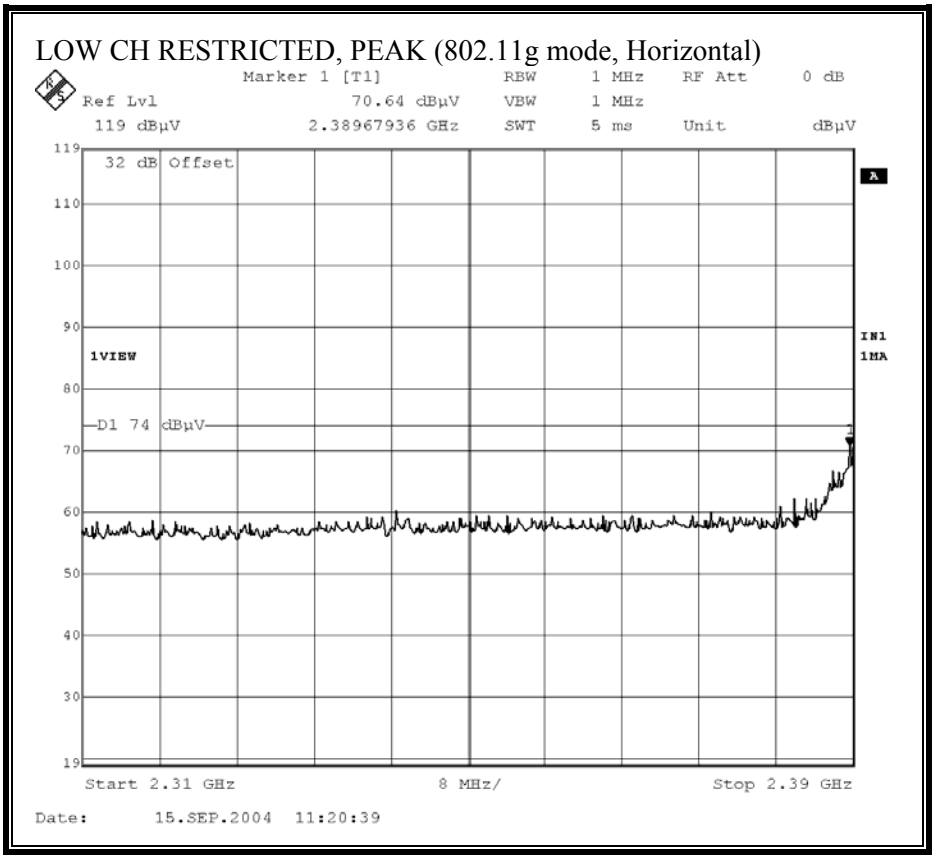
Peak Measurements:
1 MHz Resolution Bandwidth
1MHz Video Bandwidth

Average Measurements:
1 MHz Resolution Bandwidth
10Hz Video Bandwidth

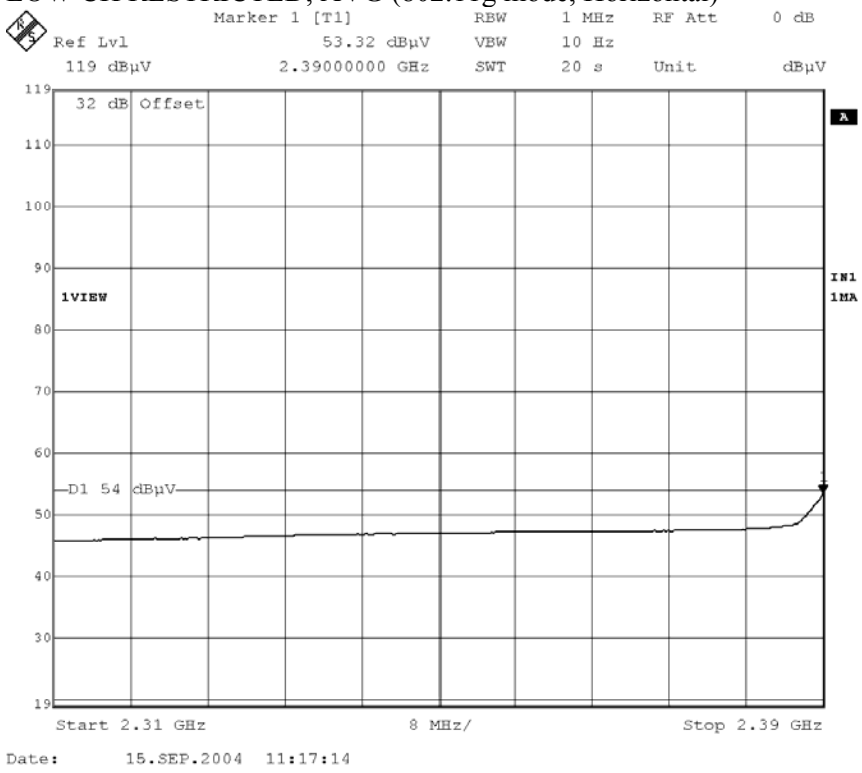
f GHz	Dist feet	Read Pk dBuV	Read Avg. dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	HPF	Peak dBuV/m	Avg dBuV/m	Pk Lim dBuV/m	Avg Lim dBuV/m	Pk Mar dB	Avg Mar dB	Notes
11b 2412 channel															
4.824	9.8	54.5	41.8	33.4	4.8	-45.0	0.0	1.0	48.6	35.9	74.0	54.0	-25.4	-18.1	V
4.824	9.8	53.2	40.4	33.4	4.8	-45.0	0.0	1.0	47.3	34.5	74.0	54.0	-26.7	-19.5	H
11b 2437 channel															
4.874	9.8	54.1	41.8	33.4	4.9	-45.1	0.0	1.0	48.3	36.0	74.0	54.0	-25.7	-18.0	V
4.874	9.8	53.2	42.5	33.4	4.9	-45.1	0.0	1.0	47.4	36.7	74.0	54.0	-26.6	-17.3	H
11b 2462 channel															
4.924	9.8	55.0	44.9	33.5	4.9	-45.1	0.0	1.0	49.2	39.1	74.0	54.0	-24.8	-14.9	V
4.924	9.8	53.4	40.9	33.5	4.9	-45.1	0.0	1.0	47.6	35.1	74.0	54.0	-26.4	-18.9	H
No further emissions were detected.															

f	Measurement Frequency	Amp	Preamp Gain	Avg Lim	Average Field Strength Limit
Dist	Distance to Antenna	D Corr	Distance Correct to 3 meters	Pk Lim	Peak Field Strength Limit
Read	Analyzer Reading	Avg	Average Field Strength @ 3 m	Avg Mar	Margin vs. Average Limit
AF	Antenna Factor	Peak	Calculated Peak Field Strength	Pk Mar	Margin vs. Peak Limit
CL	Cable Loss	HPF	High Pass Filter		

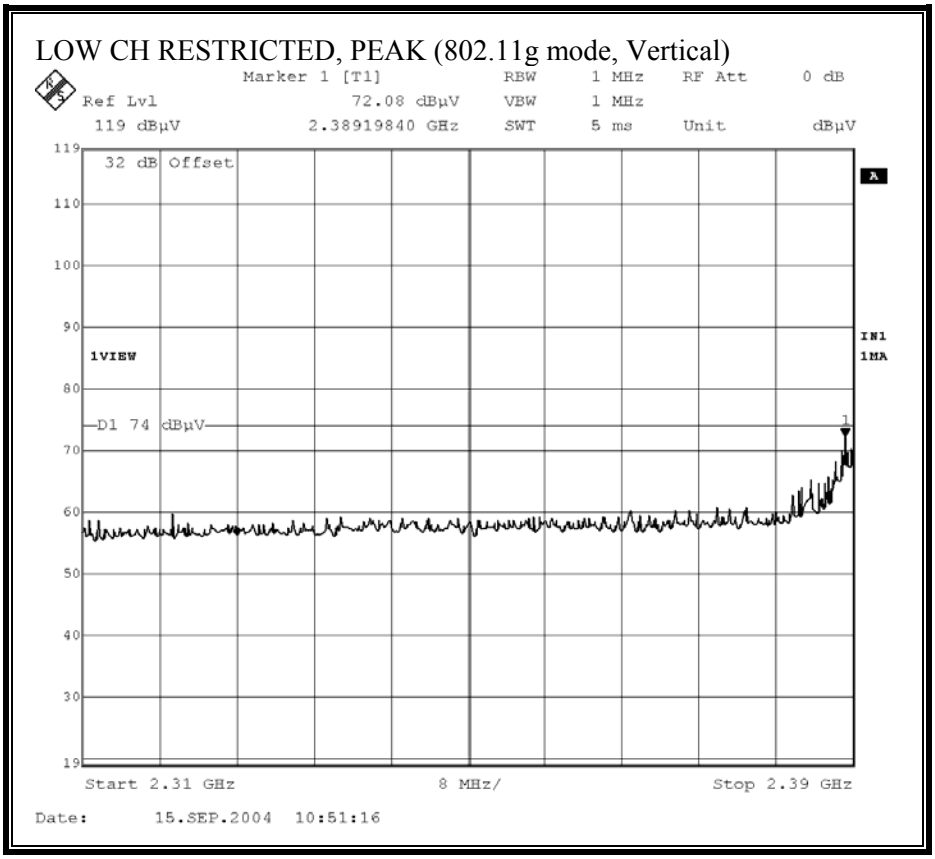
RESTRICTED BANDEDGE (g MODE, LOW CHANNEL, HORIZONTAL)



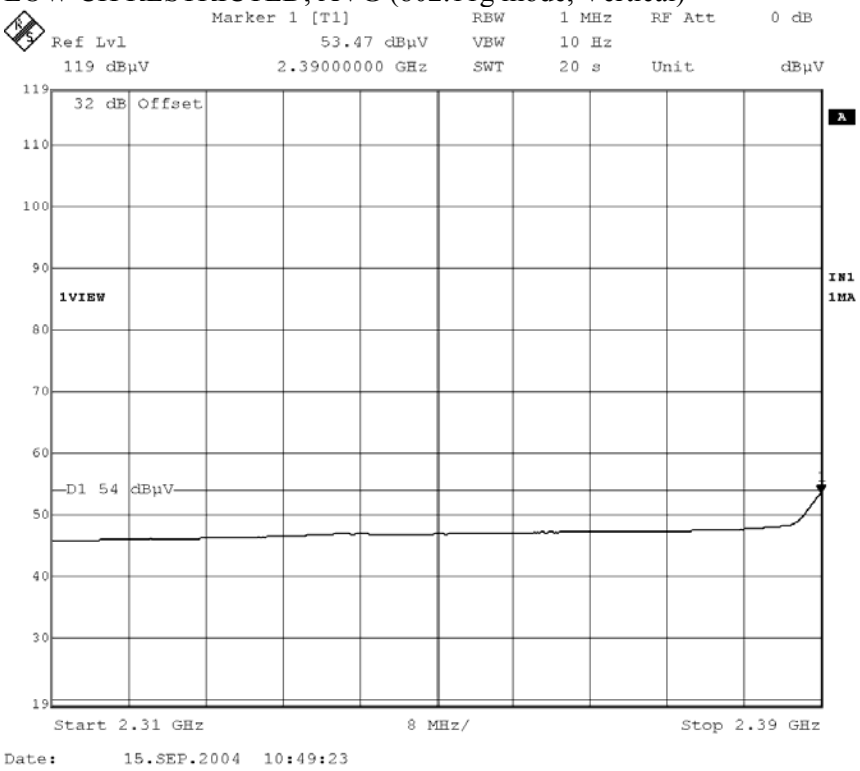
LOW CH RESTRICTED, AVG (802.11g mode, Horizontal)



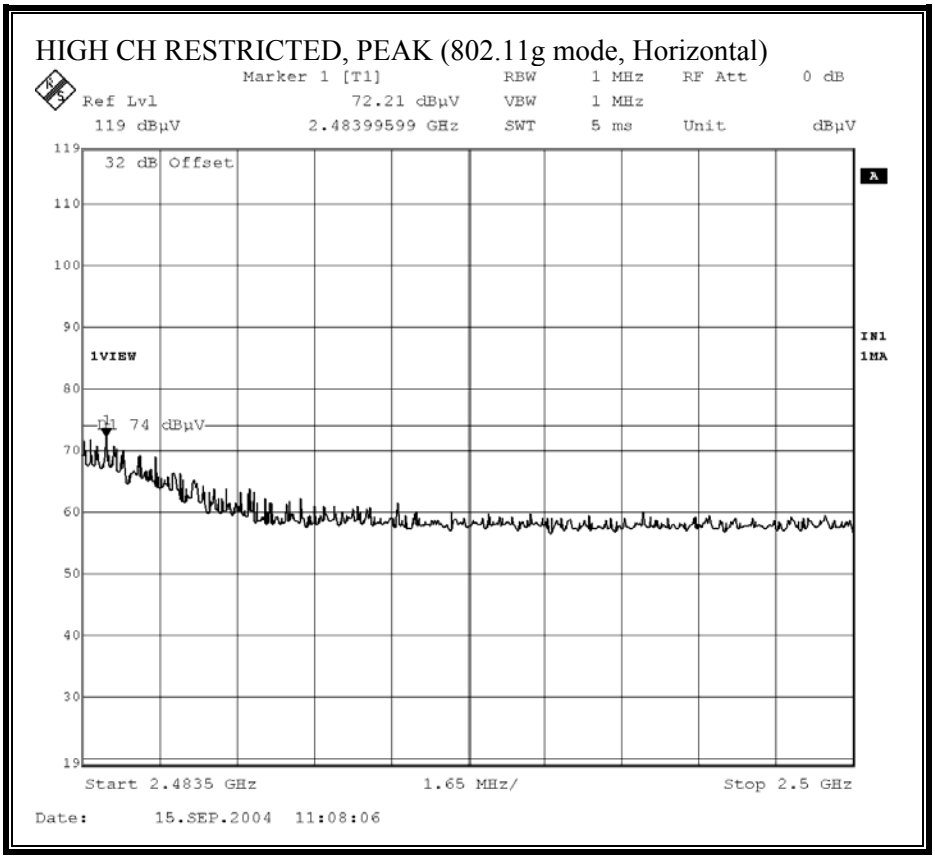
RESTRICTED BANDEDGE (g MODE, LOW CHANNEL, VERTICAL)



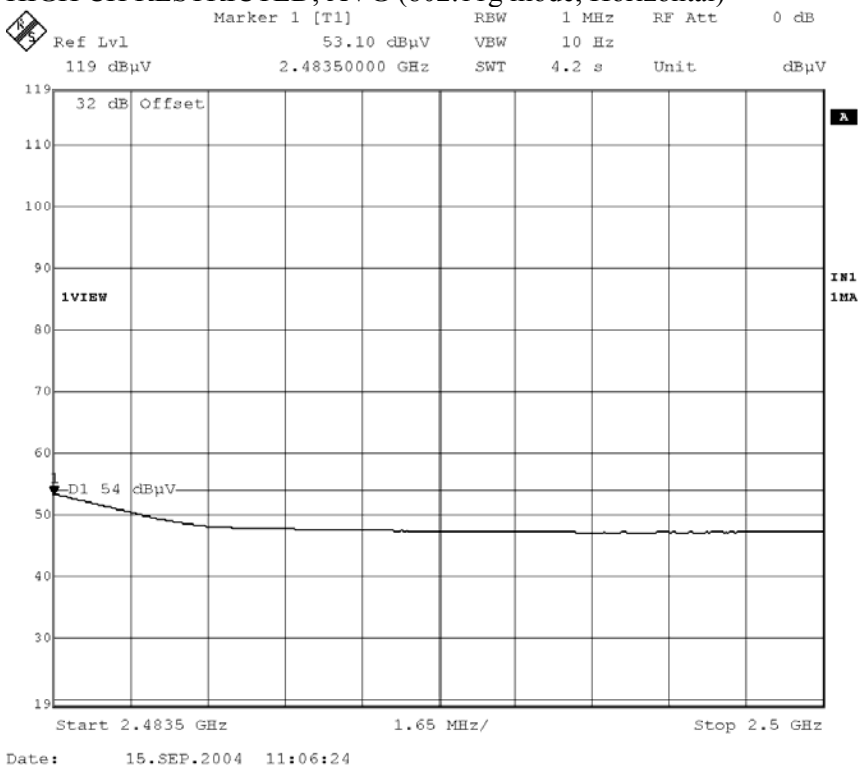
LOW CH RESTRICTED, AVG (802.11g mode, Vertical)



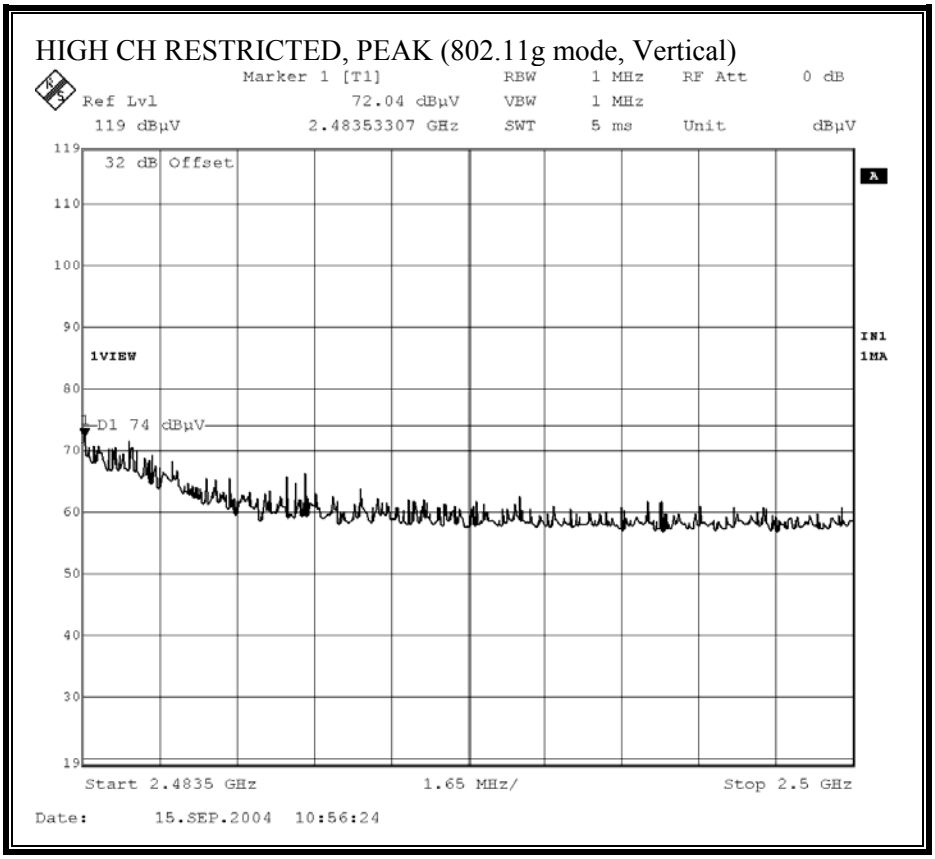
RESTRICTED BANDEDGE (g MODE, HIGH CHANNEL, HORIZONTAL)



HIGH CH RESTRICTED, AVG (802.11g mode, Horizontal)



RESTRICTED BANDEDGE (g MODE, HIGH CHANNEL, VERTICAL)



HIGH CH RESTRICTED, AVG (802.11g mode, Vertical)

HARMONICS AND SPURIOUS EMISSIONS (g MODE)

09/15/04 **High Frequency Measurement**
Compliance Certification Services, Morgan Hill Open Field Site

Test Engr: David Garcia
Project #: 04U2959
Company: Hitachi
EUT Descrip.: 802.11 b/g Mini PCI card installed in Tablet PC
EUT M/N: Visionplate (PC5NR3-XXXXXXXX)
Test Target: 15.247
Mode Oper: 11g, Tx mode, Cradle position

Test Equipment:

EMCO Horn 1-18GHz	Spectrum Analyzer	Pre-amplifer 1-26GHz	Pre-amplifer 26-40GHz	Horn > 18GHz
T73; S/N: 6717 @3m	Agilent E4446A Analyzer	T86 Miteq 924341		

Hi Frequency Cables: ☐ (2 ft) ☐ (2.0 ft) ☑ (3 ft) ☑ (12 ft)

Peak Measurements:
1 MHz Resolution Bandwidth
1MHz Video Bandwidth

Average Measurements:
1 MHz Resolution Bandwidth
10Hz Video Bandwidth

f GHz	Dist feet	Read Pk dBuV	Read Avg. dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	HPF	Peak dBuV/m	Avg dBuV/m	Pk Lim dBuV/m	Avg Lim dBuV/m	Pk Mar dB	Avg Mar dB	Notes
11g 2412 channel															
4.824	9.8	54.4	41.3	33.4	4.8	-45.0	0.0	1.0	48.5	35.4	74.0	54.0	-25.5	-18.6	V
4.824	9.8	52.0	40.1	33.4	4.8	-45.0	0.0	1.0	46.1	34.2	74.0	54.0	-27.9	-19.8	H
11g 2437 channel															
4.874	9.8	54.1	41.6	33.4	4.9	-45.1	0.0	1.0	48.3	35.8	74.0	54.0	-25.7	-18.2	V
4.874	9.8	51.7	40.5	33.4	4.9	-45.1	0.0	1.0	45.9	34.7	74.0	54.0	-28.1	-19.3	H
11g 2462 channel															
4.924	9.8	53.8	41.6	33.5	4.9	-45.1	0.0	1.0	48.0	35.8	74.0	54.0	-26.0	-18.2	V
4.924	9.8	51.9	40.2	33.5	4.9	-45.1	0.0	1.0	46.1	34.4	74.0	54.0	-27.9	-19.6	H
No further emissions were detected.															

f	Measurement Frequency	Amp	Preamp Gain	Avg Lim	Average Field Strength Limit
Dist	Distance to Antenna	D Corr	Distance Correct to 3 meters	Pk Lim	Peak Field Strength Limit
Read	Analyzer Reading	Avg	Average Field Strength @ 3 m	Avg Mar	Margin vs. Average Limit
AF	Antenna Factor	Peak	Calculated Peak Field Strength	Pk Mar	Margin vs. Peak Limit
CL	Cable Loss	HPF	High Pass Filter		

HARMONICS AND SPURIOUS EMISSIONS (g TURBO MODE)

09/15/04 **High Frequency Measurement**
Compliance Certification Services, Morgan Hill Open Field Site

Test Engr: David Garcia
Project #: 04U2959
Company: Hitachi
EUT Descrip.: 802.11 b/g Mini PCI card installed in Tablet PC
EUT M/N: Visionplate (PC5NR3-XXXXXXXX)
Test Target: 15.247
Mode Oper: 11g turbo, Tx mode, Cradle position

Test Equipment:

EMCO Horn 1-18GHz	Spectrum Analyzer	Pre-amplifer 1-26GHz	Pre-amplifer 26-40GHz	Horn > 18GHz
T73; S/N: 6717 @3m	Agilent E4446A Analyzer	T86 Miteq 924341		

Hi Frequency Cables
☐ (2 ft) ☐ (2.0 ft) ☑ (3 ft) ☑ (12 ft)

Peak Measurements:
1 MHz Resolution Bandwidth
1MHz Video Bandwidth

Average Measurements:
1 MHz Resolution Bandwidth
10Hz Video Bandwidth

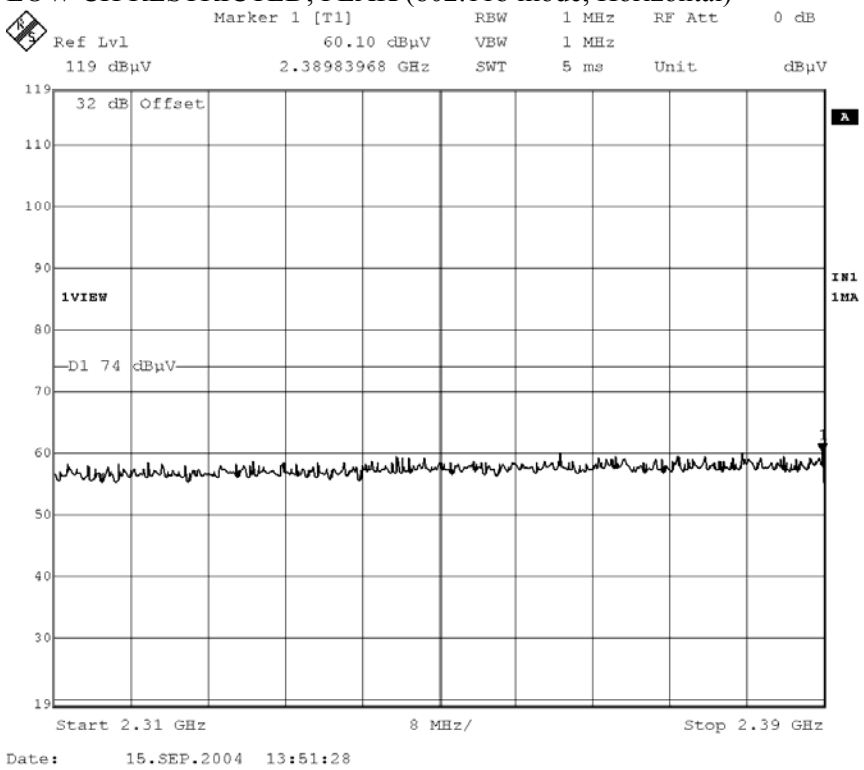
f GHz	Dist feet	Read Pk dBuV	Read Avg. dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	HPF	Peak dBuV/m	Avg dBuV/m	Pk Lim dBuV/m	Avg Lim dBuV/m	Pk Mar dB	Avg Mar dB	Notes
11g turbo 2437 channel															
4.874	9.8	54.2	41.0	33.4	4.9	-45.1	0.0	1.0	48.4	35.2	74.0	54.0	-25.6	-18.8	V
4.874	9.8	51.3	40.2	33.4	4.9	-45.1	0.0	1.0	45.5	34.4	74.0	54.0	-28.5	-19.6	H
No further emissions were detected.															

f	Measurement Frequency	Amp	Preamp Gain	Avg Lim	Average Field Strength Limit
Dist	Distance to Antenna	D Corr	Distance Correct to 3 meters	Pk Lim	Peak Field Strength Limit
Read	Analyzer Reading	Avg	Average Field Strength @ 3 m	Avg Mar	Margin vs. Average Limit
AF	Antenna Factor	Peak	Calculated Peak Field Strength	Pk Mar	Margin vs. Peak Limit
CL	Cable Loss	HPF	High Pass Filter		

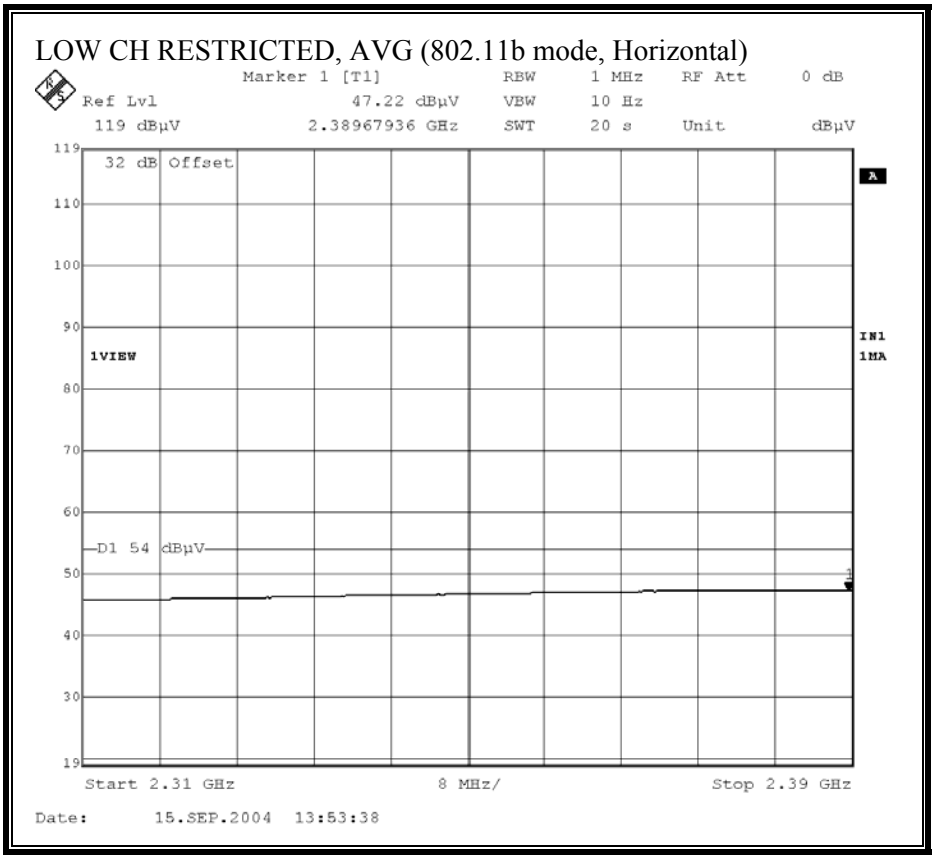
8.2.3. TRANSMITTER ABOVE 1 GHz FOR 2400 TO 2483.5 MHz BAND PORTABLE CONFIGURATION

RESTRICTED BANDEDGE (b MODE, LOW CHANNEL, HORIZONTAL)

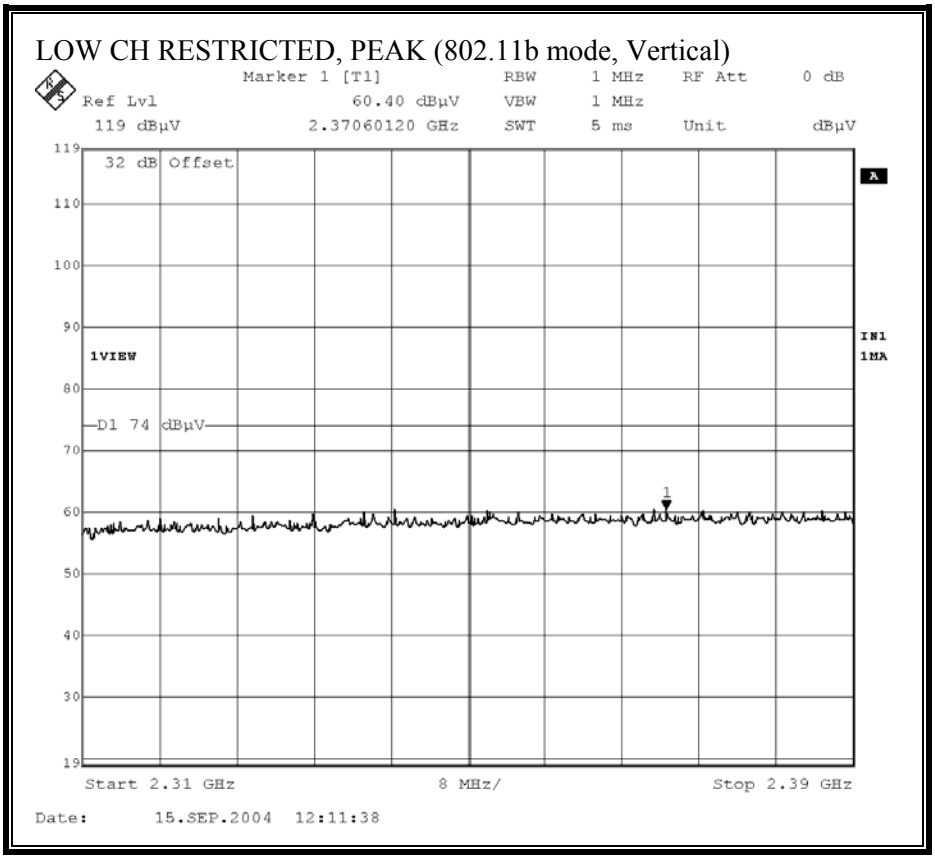
LOW CH RESTRICTED, PEAK (802.11b mode, Horizontal)



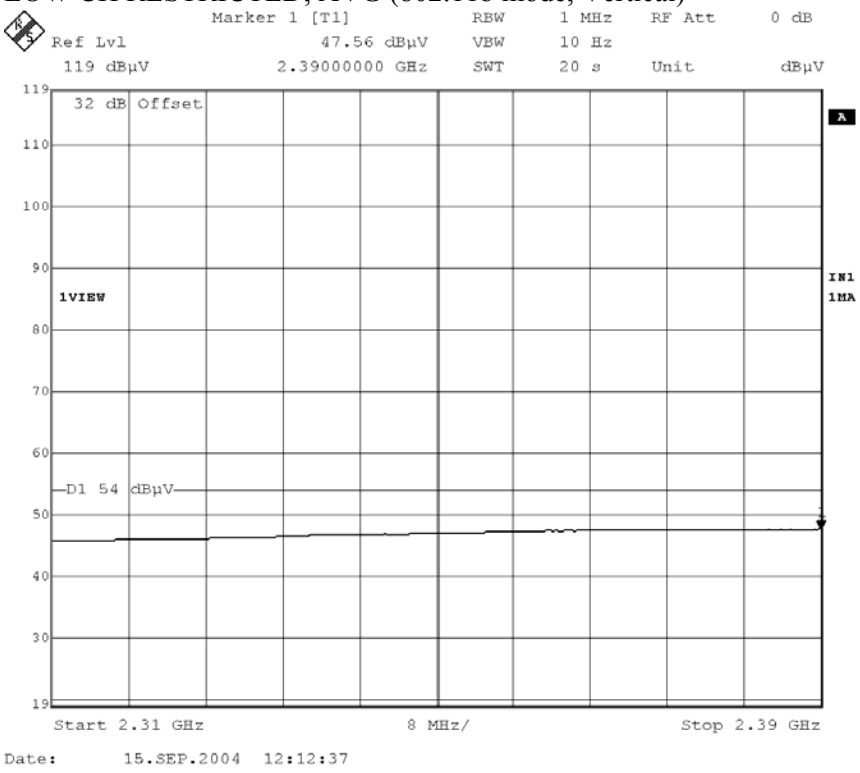
LOW CH RESTRICTED, AVG (802.11b mode, Horizontal)



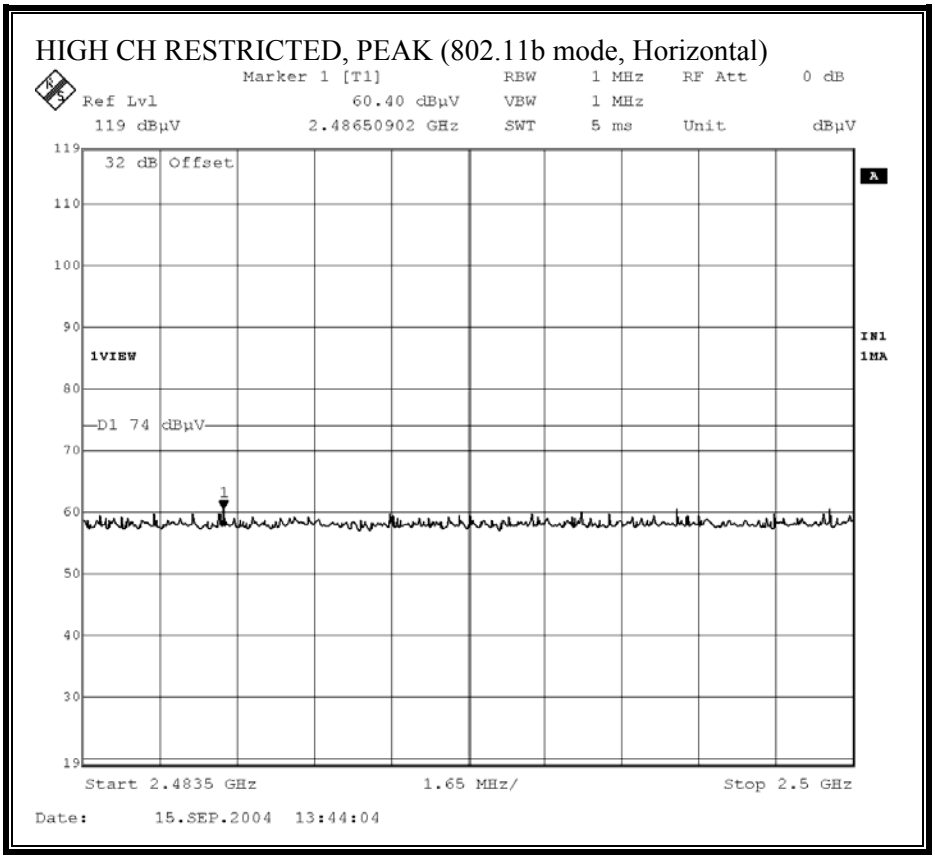
RESTRICTED BANDEDGE (b MODE, LOW CHANNEL, VERTICAL)



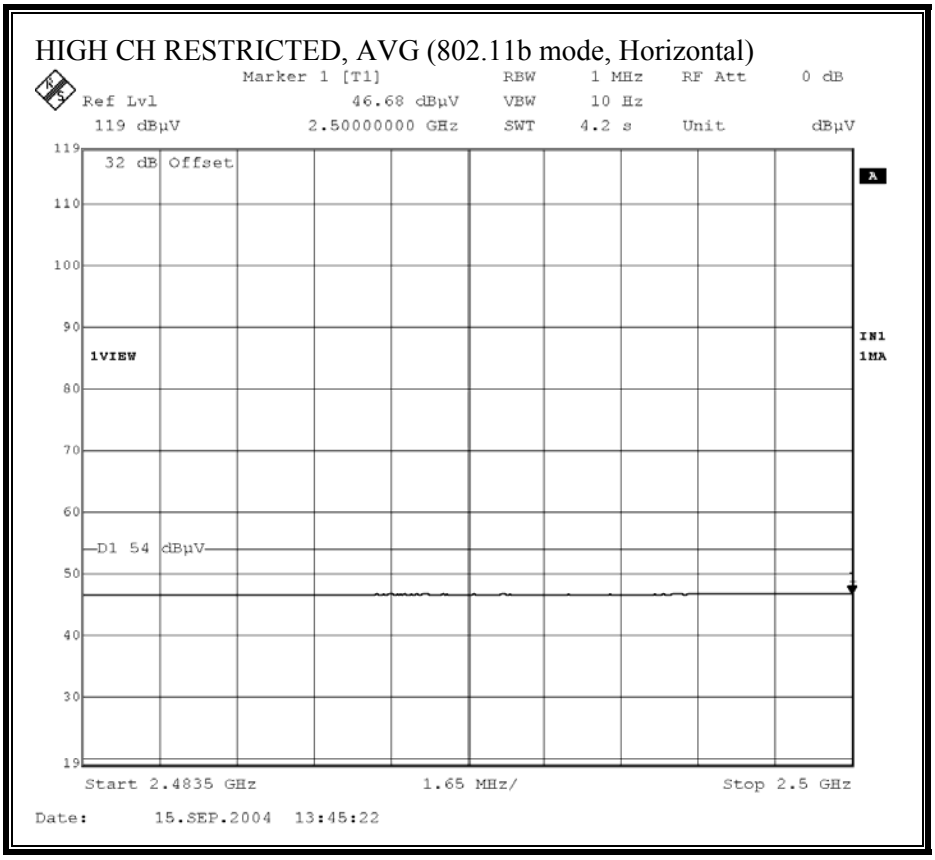
LOW CH RESTRICTED, AVG (802.11b mode, Vertical)



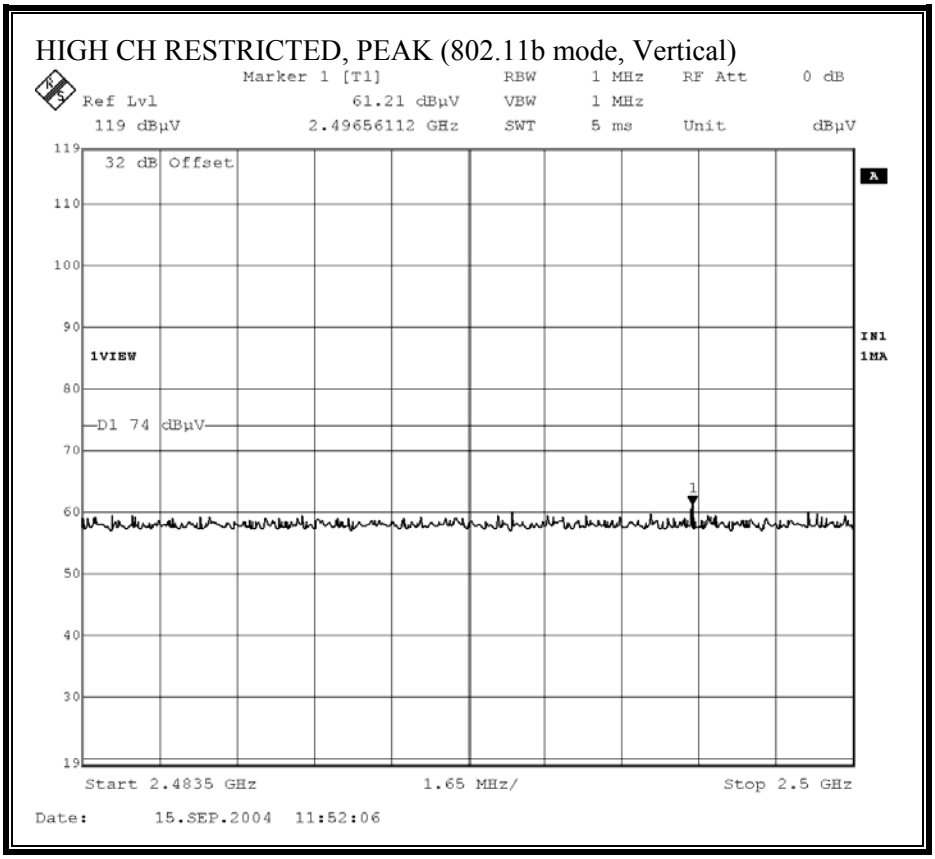
RESTRICTED BANDEDGE (b MODE, HIGH CHANNEL, HORIZONTAL)



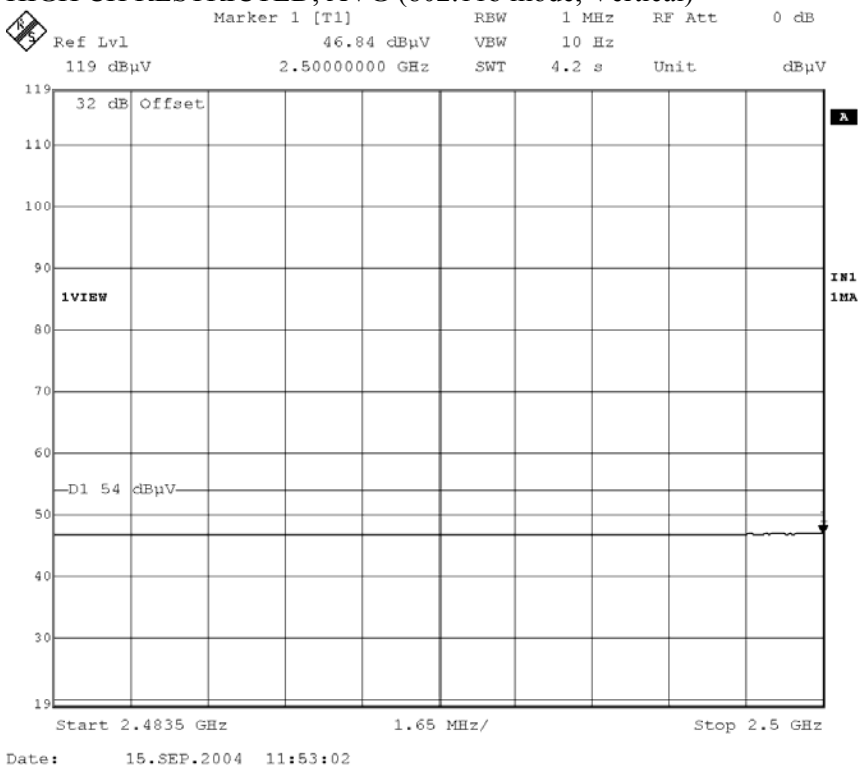
HIGH CH RESTRICTED, AVG (802.11b mode, Horizontal)



RESTRICTED BANDEDGE (b MODE, HIGH CHANNEL, VERTICAL)



HIGH CH RESTRICTED, AVG (802.11b mode, Vertical)



HARMONICS AND SPURIOUS EMISSIONS (b MODE)

09/15/04 **High Frequency Measurement**

Compliance Certification Services, Morgan Hill Open Field Site

Test Engr: David Garcia
Project #: 04U2959
Company: Hitachi
EUT Descrip.: 802.11 b/g Mini PCI card installed in Tablet PC
EUT M/N: Visionplate (PC5NR3-XXXXXXXX)
Test Target: 15.247
Mode Oper: 11b Tx mode, worst case portable position
x= worst case vertical, y=worst case horizontal

Test Equipment:

EMCO Horn 1-18GHz	Spectrum Analyzer	Pre-amplifer 1-26GHz	Pre-amplifer 26-40GHz	Horn > 18GHz
T73; S/N: 6717 @3m	Agilent E4446A Analyzer	T86 Miteq 924341		

Hi Frequency Cables: ☐ (2 ft) ☐ (2.0 ft) ☑ (3 ft) ☑ (12 ft)

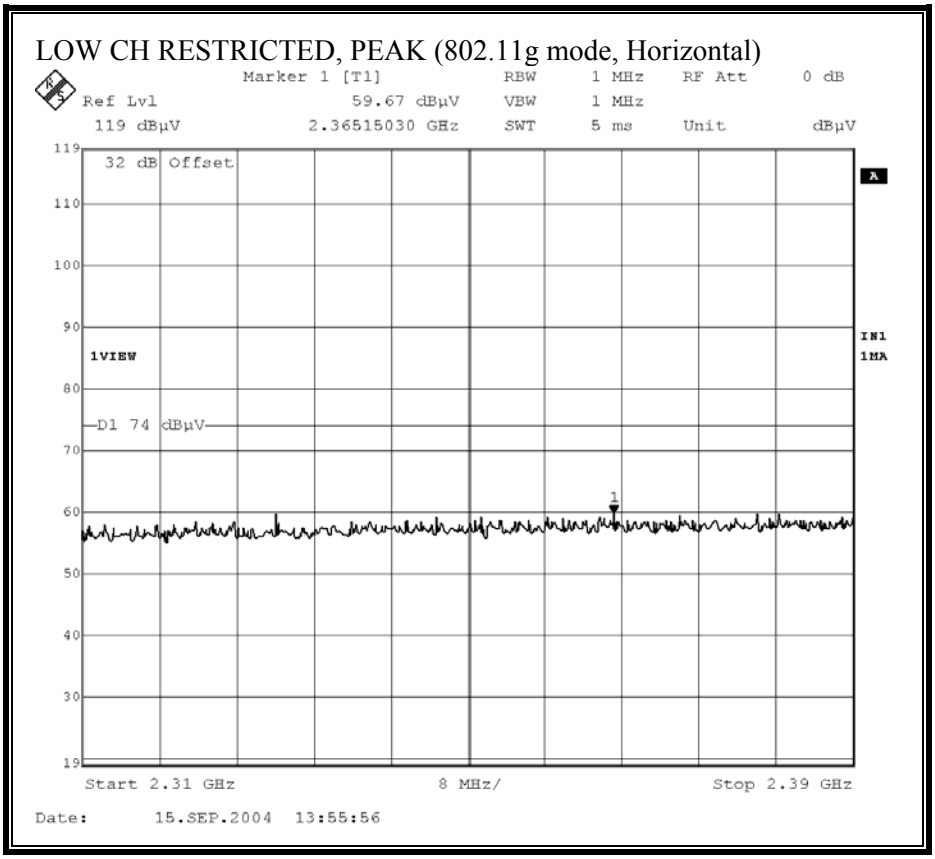
Peak Measurements:
1 MHz Resolution Bandwidth
1MHz Video Bandwidth

Average Measurements:
1 MHz Resolution Bandwidth
10Hz Video Bandwidth

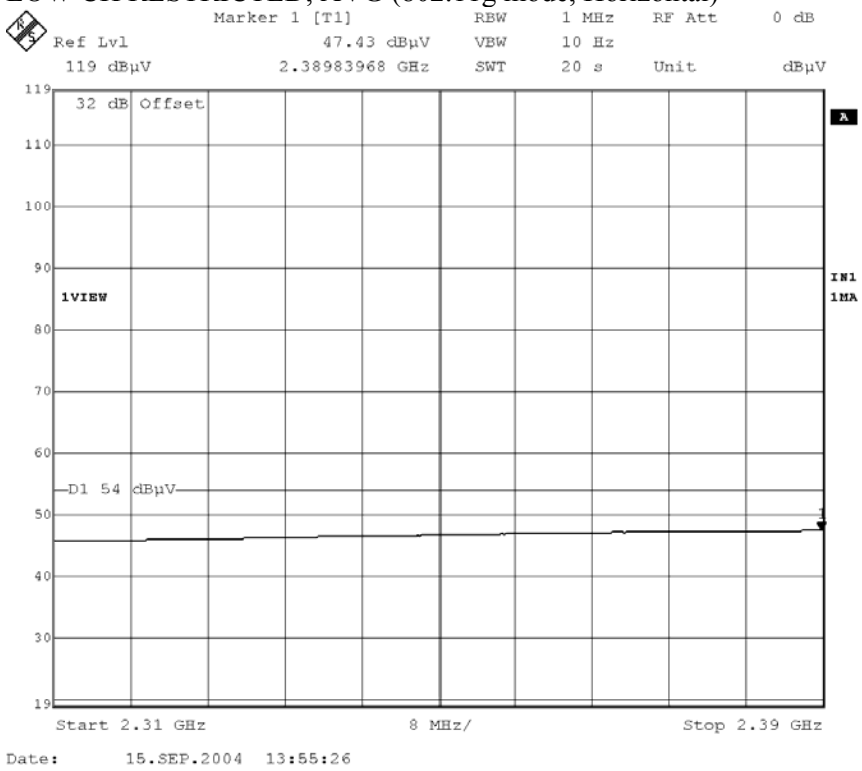
f GHz	Dist feet	Read Pk dBuV	Read Avg. dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	HPF	Peak dBuV/m	Avg dBuV/m	Pk Lim dBuV/m	Avg Lim dBuV/m	Pk Mar dB	Avg Mar dB	Notes
11b 2412 channel															
4.824	9.8	54.1	41.2	33.4	4.8	-45.0	0.0	1.0	48.2	35.3	74.0	54.0	-25.8	-18.7	V
4.824	9.8	53.2	40.4	33.4	4.8	-45.0	0.0	1.0	47.3	34.5	74.0	54.0	-26.7	-19.5	H
11b 2437 channel															
4.874	9.8	53.9	42.7	33.4	4.9	-45.1	0.0	1.0	48.1	36.9	74.0	54.0	-25.9	-17.1	V
4.874	9.8	52.9	41.8	33.4	4.9	-45.1	0.0	1.0	47.1	36.0	74.0	54.0	-26.9	-18.0	H
11b 2462 channel															
4.924	9.8	54.9	41.9	33.5	4.9	-45.1	0.0	1.0	49.1	36.1	74.0	54.0	-24.9	-17.9	V
4.924	9.8	53.2	40.2	33.5	4.9	-45.1	0.0	1.0	47.4	34.4	74.0	54.0	-26.6	-19.6	H
No further emissions were detected above the noise floor of the test receiver.															

f	Measurement Frequency	Amp	Preamp Gain	Avg Lim	Average Field Strength Limit
Dist	Distance to Antenna	D Corr	Distance Correct to 3 meters	Pk Lim	Peak Field Strength Limit
Read	Analyzer Reading	Avg	Average Field Strength @ 3 m	Avg Mar	Margin vs. Average Limit
AF	Antenna Factor	Peak	Calculated Peak Field Strength	Pk Mar	Margin vs. Peak Limit
CL	Cable Loss	HPF	High Pass Filter		

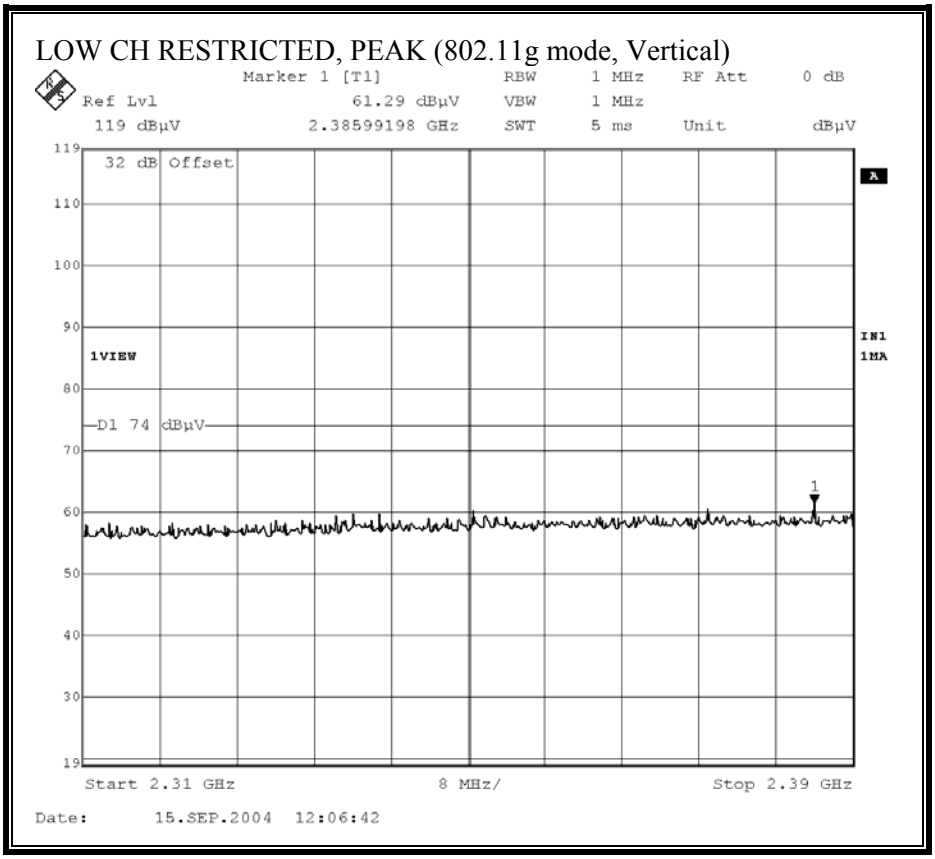
RESTRICTED BANDEDGE (g MODE, LOW CHANNEL, HORIZONTAL)



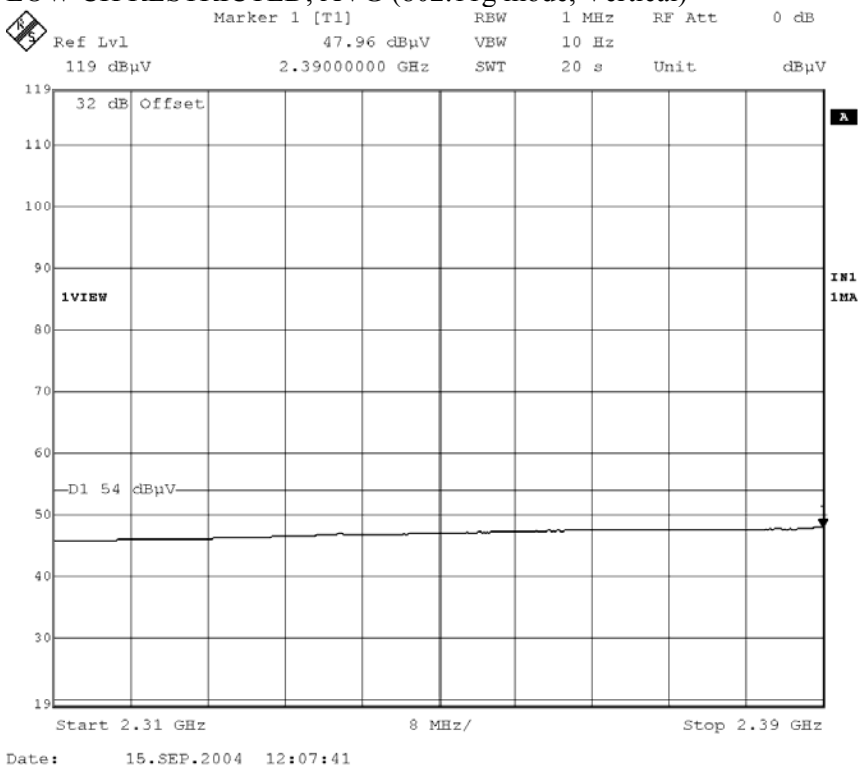
LOW CH RESTRICTED, AVG (802.11g mode, Horizontal)



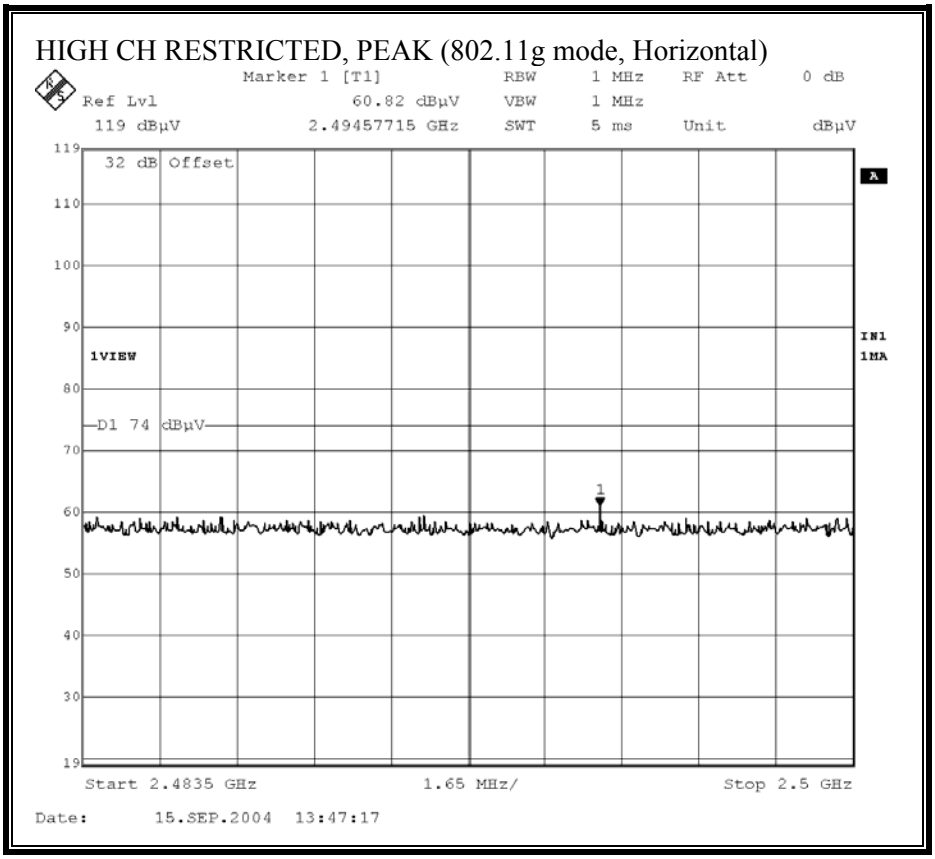
RESTRICTED BANDEDGE (g MODE, LOW CHANNEL, VERTICAL)



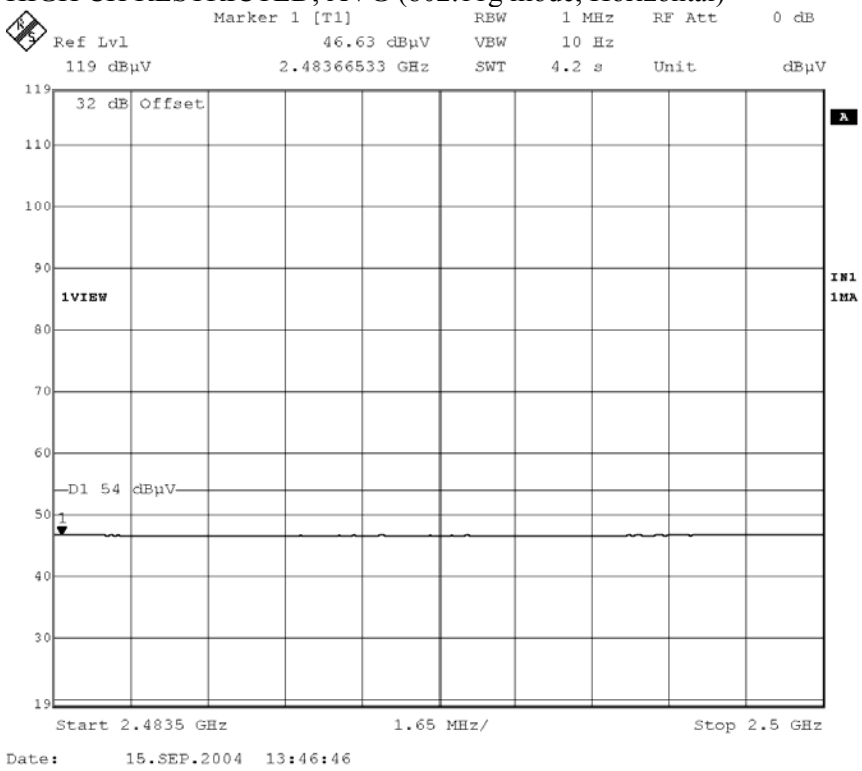
LOW CH RESTRICTED, AVG (802.11g mode, Vertical)



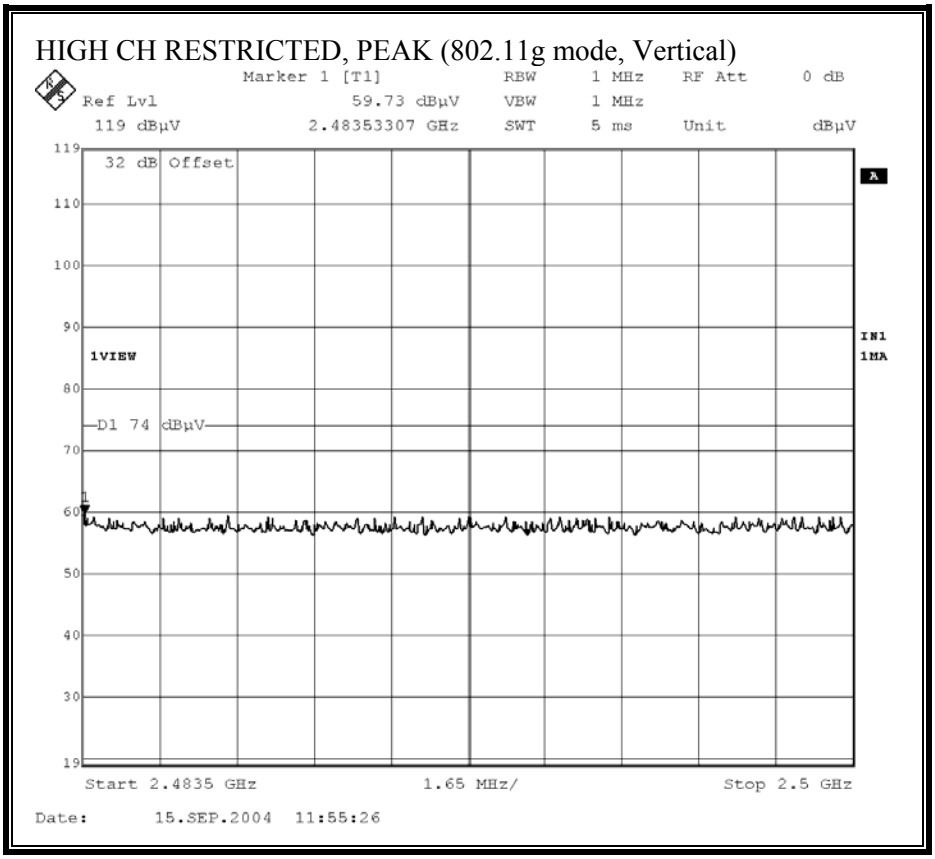
RESTRICTED BANDEDGE (g MODE, HIGH CHANNEL, HORIZONTAL)



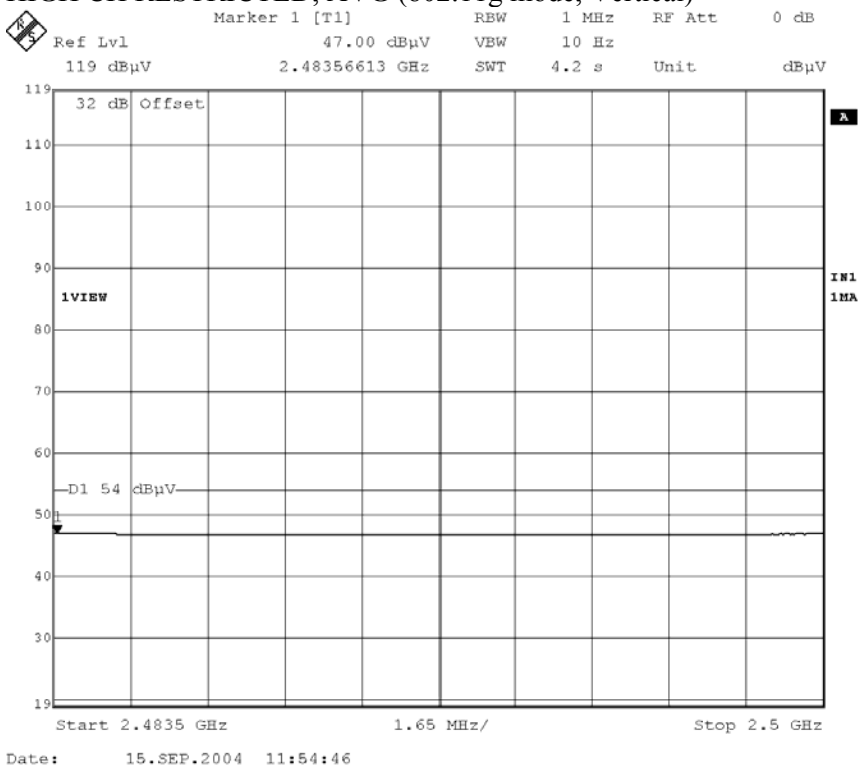
HIGH CH RESTRICTED, AVG (802.11g mode, Horizontal)



RESTRICTED BANDEDGE (g MODE, HIGH CHANNEL, VERTICAL)



HIGH CH RESTRICTED, AVG (802.11g mode, Vertical)



HARMONICS AND SPURIOUS EMISSIONS (g MODE)

09/15/04 **High Frequency Measurement**

Compliance Certification Services, Morgan Hill Open Field Site

Test Engr: David Garcia
Project #: 04U2959
Company: Hitachi
EUT Descrip.: 802.11 b/g Mini PCI card installed in Tablet PC
EUT M/N: Visionplate (PC5NR3-XXXXXXXX)
Test Target: 15.247
Mode Oper: 11g, Tx mode, worst case portable position
x= worst case vertical, y=worst case horizontal

Test Equipment:

EMCO Horn 1-18GHz	Spectrum Analyzer	Pre-amplifer 1-26GHz	Pre-amplifer 26-40GHz	Horn > 18GHz
T73; S/N: 6717 @3m	Agilent E4446A Analyzer	T86 Miteq 924341		

Hi Frequency Cables: ☐ (2 ft) ☐ (2.0 ft) ☑ (3 ft) ☑ (12 ft)

Peak Measurements:
1 MHz Resolution Bandwidth
1MHz Video Bandwidth

Average Measurements:
1 MHz Resolution Bandwidth
10Hz Video Bandwidth

f GHz	Dist feet	Read Pk dBuV	Read Avg. dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	HPF	Peak dBuV/m	Avg dBuV/m	Pk Lim dBuV/m	Avg Lim dBuV/m	Pk Mar dB	Avg Mar dB	Notes
11g 2412 channel															
4.824	9.8	53.6	41.0	33.4	4.8	-45.0	0.0	1.0	47.7	35.1	74.0	54.0	-26.3	-18.9	V
4.824	9.8	51.8	39.2	33.4	4.8	-45.0	0.0	1.0	45.9	33.3	74.0	54.0	-28.1	-20.7	H
11g 2437 channel															
4.874	9.8	53.3	40.7	33.4	4.9	-45.1	0.0	1.0	47.5	34.9	74.0	54.0	-26.5	-19.1	V
4.874	9.8	51.5	40.0	33.4	4.9	-45.1	0.0	1.0	45.7	34.2	74.0	54.0	-28.3	-19.8	H
11g 2462 channel															
4.924	9.8	53.4	41.2	33.5	4.9	-45.1	0.0	1.0	47.6	35.4	74.0	54.0	-26.4	-18.6	V
4.924	9.8	51.4	39.7	33.5	4.9	-45.1	0.0	1.0	45.6	33.9	74.0	54.0	-28.4	-20.1	H
No further emissions were detected.															

f	Measurement Frequency	Amp	Preamp Gain	Avg Lim	Average Field Strength Limit
Dist	Distance to Antenna	D Corr	Distance Correct to 3 meters	Pk Lim	Peak Field Strength Limit
Read	Analyzer Reading	Avg	Average Field Strength @ 3 m	Avg Mar	Margin vs. Average Limit
AF	Antenna Factor	Peak	Calculated Peak Field Strength	Pk Mar	Margin vs. Peak Limit
CL	Cable Loss	HPF	High Pass Filter		

HARMONICS AND SPURIOUS EMISSIONS (g TURBO MODE)

09/15/04 **High Frequency Measurement**
Compliance Certification Services, Morgan Hill Open Field Site

Test Engr: David Garcia
Project #: 04U2959
Company: Hitachi
EUT Descrip.: 802.11 b/g Mini PCI card installed in Tablet PC
EUT M/N: Visionplate (PC5NR3-XXXXXXXX)
Test Target: 15.247
Mode Oper: 11g Turbo, Tx mode, worst case portable position
x= worst case vertical, y=worst case horizontal

Test Equipment:

EMCO Horn 1-18GHz	Spectrum Analyzer	Pre-amplifer 1-26GHz	Pre-amplifer 26-40GHz	Horn > 18GHz
T73; S/N: 6717 @3m	Agilent E4446A Analyzer	T86 Miteq 924341		

Hi Frequency Cables
☐ (2 ft) ☐ (2.0 ft) ☑ (3 ft) ☑ (12 ft)

Peak Measurements:
1 MHz Resolution Bandwidth
1MHz Video Bandwidth

Average Measurements:
1 MHz Resolution Bandwidth
10Hz Video Bandwidth

f GHz	Dist feet	Read Pk dBuV	Read Avg. dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	HPF	Peak dBuV/m	Avg dBuV/m	Pk Lim dBuV/m	Avg Lim dBuV/m	Pk Mar dB	Avg Mar dB	Notes
11g turbo 2437 channel															
4.874	9.8	54.1	41.3	33.4	4.9	-45.1	0.0	1.0	48.3	35.5	74.0	54.0	-25.7	-18.5	V
4.874	9.8	50.9	40.1	33.4	4.9	-45.1	0.0	1.0	45.1	34.3	74.0	54.0	-28.9	-19.7	H
No further emissions were detected.															

f	Measurement Frequency	Amp	Preamp Gain	Avg Lim	Average Field Strength Limit
Dist	Distance to Antenna	D Corr	Distance Correct to 3 meters	Pk Lim	Peak Field Strength Limit
Read	Analyzer Reading	Avg	Average Field Strength @ 3 m	Avg Mar	Margin vs. Average Limit
AF	Antenna Factor	Peak	Calculated Peak Field Strength	Pk Mar	Margin vs. Peak Limit
CL	Cable Loss	HPF	High Pass Filter		

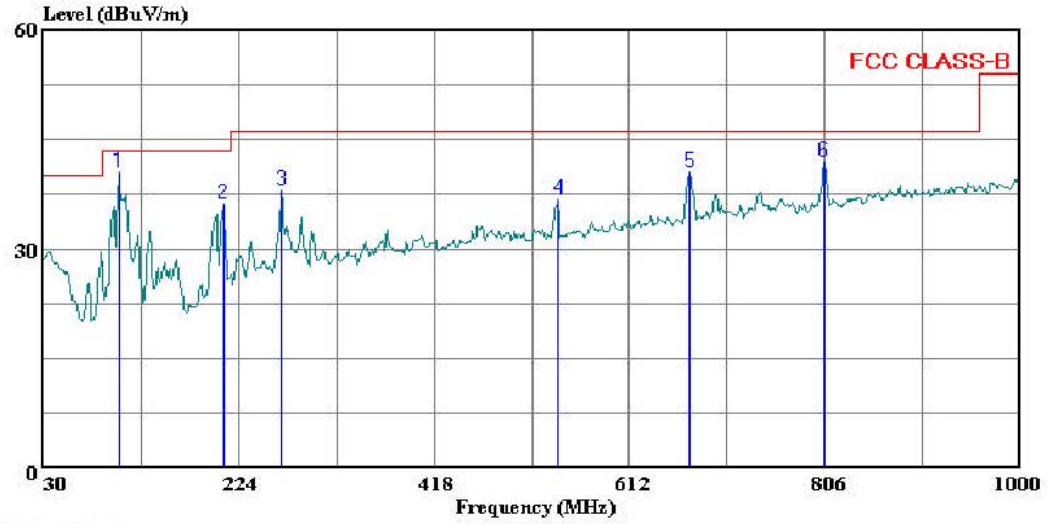
8.2.4. WORST-CASE RADIATED EMISSIONS BELOW 1 GHz

SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, HORIZONTAL)

HORIZONTAL PLOT

561F Monterey Road
Morgan Hill, CA 95037
Tel: (408) 463-0888
Fax: (408) 463-0885

Data#: 13 File#: 2959.EMI Date: 09-21-2004 Time: 18:39:47



(Audix ATC)

Trace: 12 Ref Trace:

Condition: FCC CLASS-B HORIZONTAL
Test Operator: : David Garcia
Project #: : 04U2959-1
Company: : Hitachi Data Systems
EUT: : Tablet with 802.11 b/g Mini PCI card
Model No: : VisionPlate
Configuration: : EUT within Laptop
Target of Test: : FCC Class B
Mode of Operation: Transmit Worst Case

Page: 1

HORIZONTAL DATA

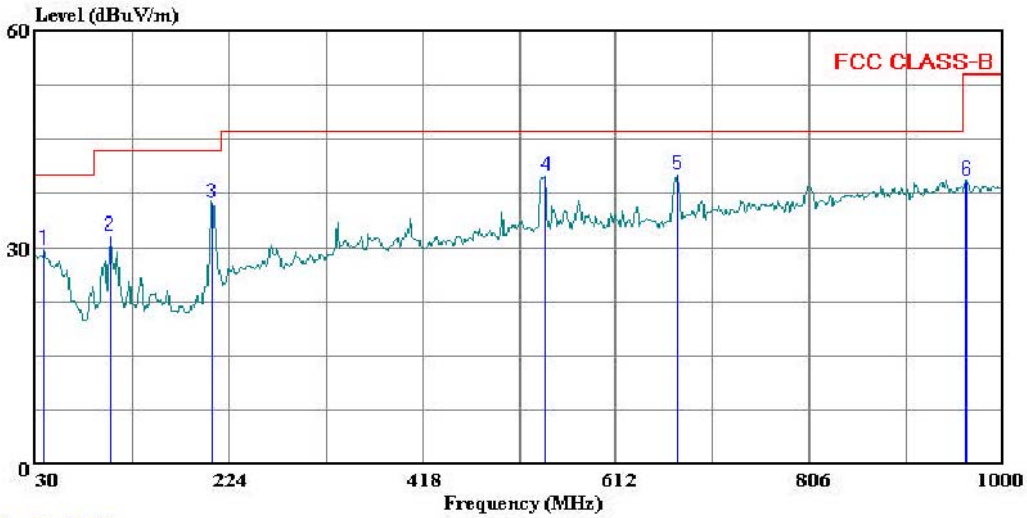
	Freq	Remark	Read Level	Factor	Level	Limit Line	Over Limit
	MHz		dBuV	dB	dBuV/m	dBuV/m	dB
1	104.690	Peak	28.10	12.34	40.44	43.50	-3.06
2	208.480	Peak	23.60	12.47	36.07	43.50	-7.43
3	266.680	Peak	22.69	15.37	38.06	46.00	-7.94
4	541.190	Peak	15.91	20.80	36.71	46.00	-9.29
5	672.140	Peak	17.91	22.64	40.55	46.00	-5.45
6	805.030	Peak	17.61	24.44	42.05	46.00	-3.95

SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, VERTICAL)

VERTICAL PLOT

561F Monterey Road
Morgan Hill, CA 95037
Tel: (408) 463-0888
Fax: (408) 463-0885

Data#: 11 File#: 2959.EMI Date: 09-21-2004 Time: 18:35:04



(Audix ATC)

Trace: 10 Ref Trace:

Condition: FCC CLASS-B VERTICAL
Test Operator: : David Garcia
Project #: : 04U2959-1
Company: : Hitachi Data Systems
EUT: : Tablet with 802.11 b/g Mini PCI card
Model No: : VisionPlate
Configuration: : EUT within Laptop
Target of Test: : FCC Class B
Mode of Operation: Transmit Worst Case

Page: 1

VERTICAL DATA

	Freq	Remark	Read Level	Factor	Level	Limit Line	Over Limit
	MHz		dBuV	dB	dBuV/m	dBuV/m	dB
1	38.730	Peak	10.64	19.00	29.64	40.00	-10.36
2	104.690	Peak	19.28	12.34	31.62	43.50	-11.88
3	207.510	Peak	23.69	12.41	36.10	43.50	-7.40
4	541.190	Peak	19.10	20.80	39.90	46.00	-6.10
5	674.080	Peak	17.40	22.66	40.06	46.00	-5.94
6	963.140	Peak	13.22	26.11	39.33	54.00	-14.67

8.3. POWERLINE CONDUCTED EMISSIONS

LIMIT

§15.207 (a) Except as shown in paragraphs (b) and (c) of this section, for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table, as measured using a 50 μH/50 ohms line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal.

The lower limit applies at the boundary between the frequency ranges.

Frequency of Emission (MHz)	Conducted Limit (dBuV)	
	Quasi-peak	Average
0.15-0.5	66 to 56 *	56 to 46 *
0.5-5	56	46
5-30	60	50

* Decreases with the logarithm of the frequency.

TEST PROCEDURE

The EUT is placed on a non-conducting table 40 cm from the vertical ground plane and 80 cm above the horizontal ground plane. The EUT is configured in accordance with ANSI C63.4.

The resolution bandwidth is set to 9 kHz for both peak detection and quasi-peak detection measurements. Peak detection is used unless otherwise noted as quasi-peak.

Line conducted data is recorded for both NEUTRAL and HOT lines.

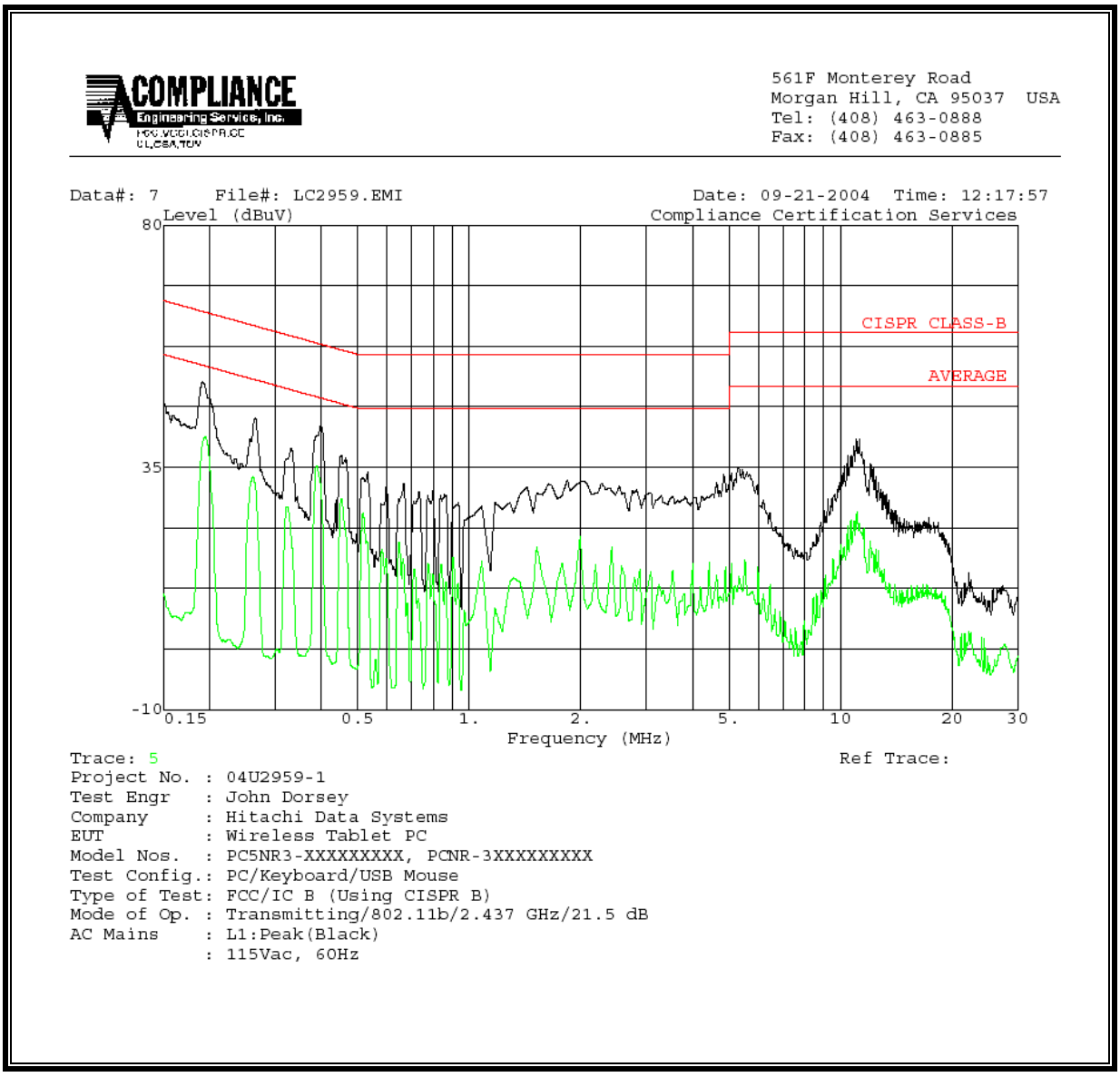
RESULTS

No non-compliance noted:

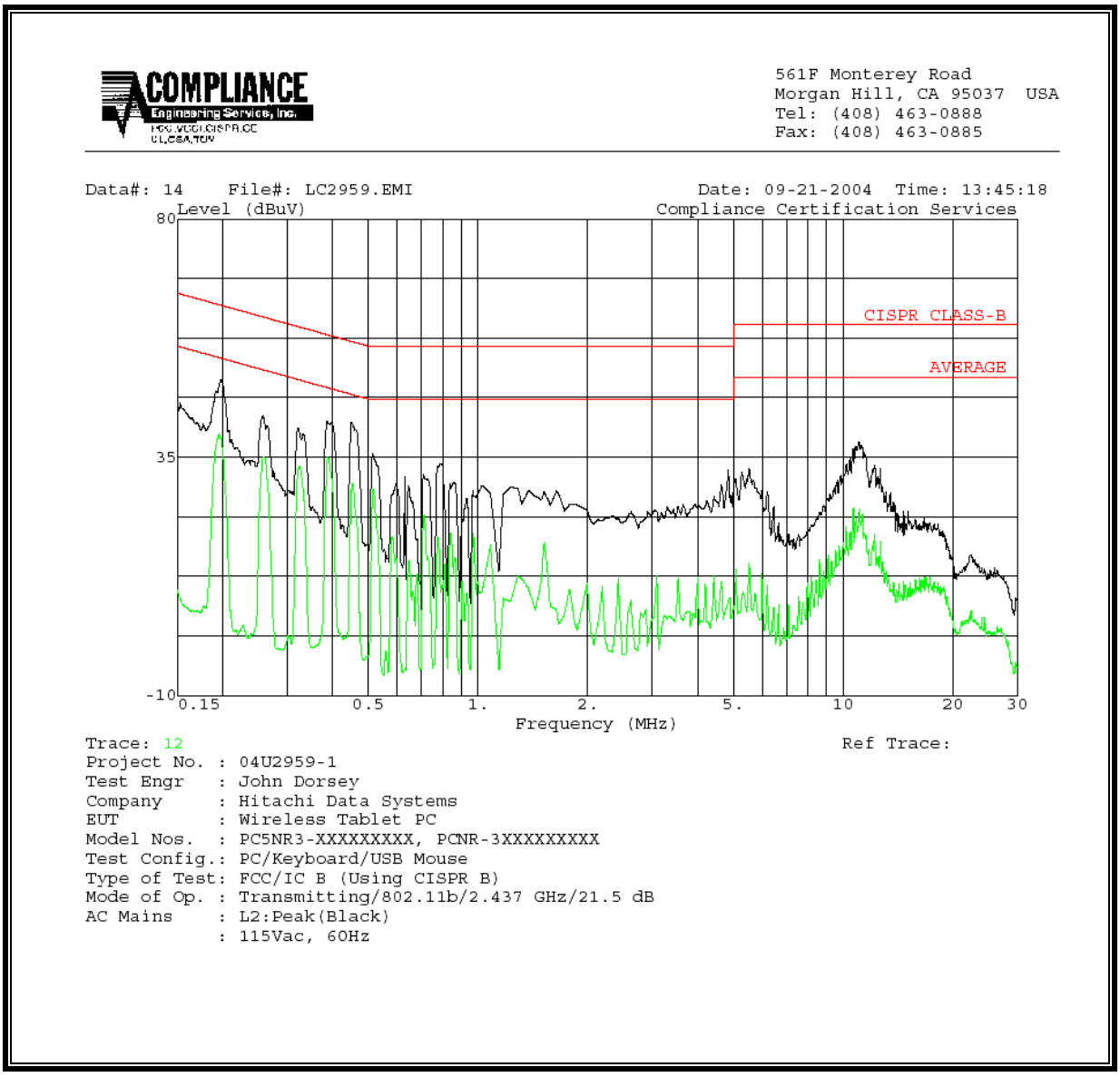
6 WORST EMISSIONS

CONDUCTED EMISSIONS DATA (115VAC 60Hz)									
Freq.	Reading			Closs	Limit	EN_B	Margin		Remark
(MHz)	PK (dBuV)	QP (dBuV)	AV (dBuV)	(dB)	QP	AV	QP (dB)	AV (dB)	L1 / L2
0.19	50.96	--	40.69	0.00	64.83	54.83	-13.87	-14.14	L1
0.40	42.79	--	35.27	0.00	58.91	48.91	-16.12	-13.64	L1
11.02	40.32	--	26.80	0.00	60.00	50.00	-19.68	-23.20	L1
0.20	49.58	--	39.49	0.00	64.63	54.63	-15.05	-15.14	L2
0.45	41.68	--	30.11	0.00	57.46	47.46	-15.78	-17.35	L2
11.08	37.94	--	25.49	0.00	60.00	50.00	-22.06	-24.51	L2
6 Worst Data									

LINE 1 RESULTS



LINE 2 RESULTS



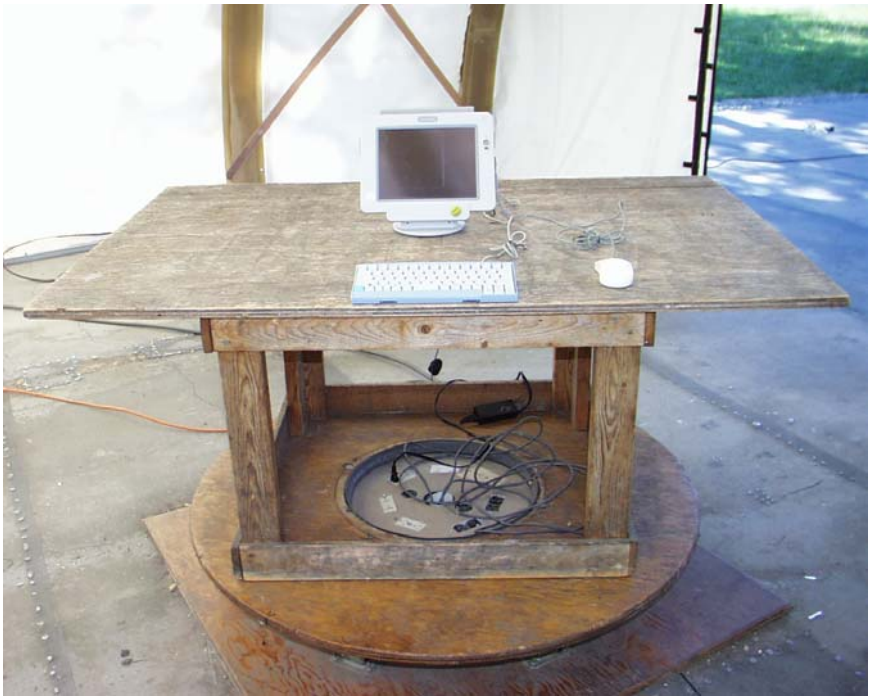
9. SETUP PHOTOS

ANTENNA PORT CONDUCTED RF MEASUREMENT SETUP

ANTENNA PORT CONDUCTED PHOTO

RADIATED RF MEASUREMENT SETUP FOR MOBILE CONFIGURATION

RADIATED FRONT PHOTO



RADIATED BACK PHOTO

RADIATED RF MEASUREMENT SETUP FOR PORTABLE CONFIGURATION

X-AXIS FRONT PHOTO

X-AXIS BACK PHOTO

Y-AXIS FRONT PHOTO

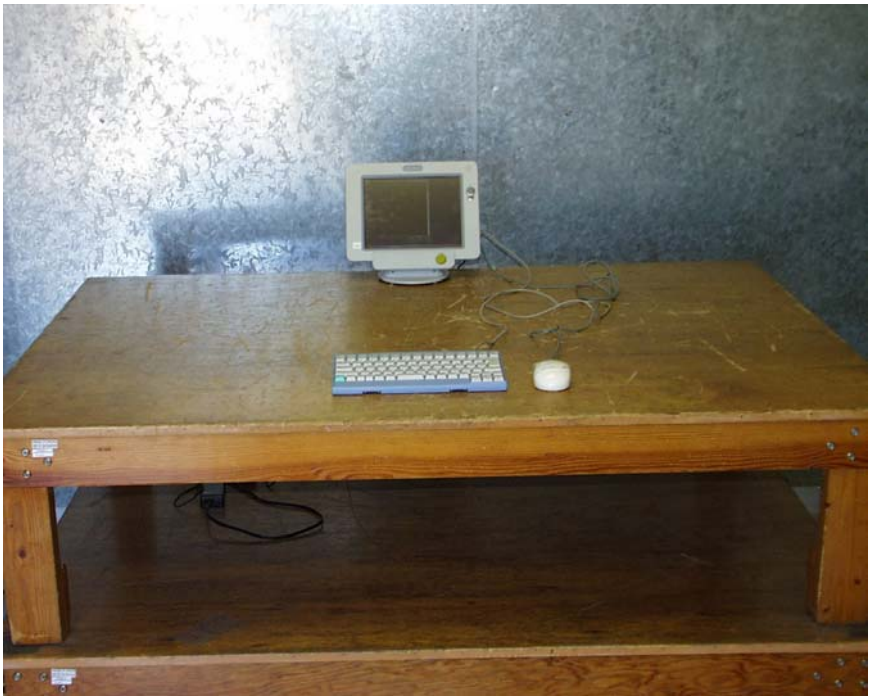
Y-AXIS BACK PHOTO

Z-AXIS FRONT PHOTO

Z-AXIS BACK PHOTO

POWERLINE CONDUCTED EMISSIONS MEASUREMENT SETUP

LINE CONDUCTED FRONT PHOTO



LINE CONDUCTED BACK PHOTO

END OF REPORT