FCC CFR47 PART 15 SUBPART E
CERTIFICATION
TEST REPORT
FOR

HIGH POWER DUAL A+G WIRELESS USB 2.0 ADAPTER

MODEL NUMBER: WLI-U2-AG108HP

FCC ID: FDI-09102002-0

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1. ATTESTATION OF TEST RESULTS

COMPANY NAME: BUFFALO INC.
15, SHIBATA HONDORI 4-CHOME
MONAMI-KU, NAGOYA 457-8520, JAPAN

EUT DESCRIPTION: HIGH POWER DUAL A+G WIRELESS USB 2.0 ADAPTER

MODEL: WLI-U2-AG108HP

SERIAL NUMBER: 01672

DATE TESTED: FEBRUARY 17 to 27, 2006

APPLICABLE STANDARDS	
STANDARD	**TEST RESULTS**
FCC PART 15 SUBPART E	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: The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. 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. No part of this report may be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any government agency.

Approved & Released For CCS By: Tested By:

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2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with ANSI C63.4-2003, FCC CFR 47 Part 2 and FCC CFR 47 Part 15.

3. 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.

4. CALIBRATION AND UNCERTAINTY

4.1. 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.

4.2. 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%.

5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

The EUT is a high power dual a+g wireless USB 2.0 adapter.

The EUT description was changed after testing commenced. All data in this report is applicable to the EUT description documented in Section 1 above.

5.2. MODIFICATION

A ferrite core was added to the EUT USB cable on the host laptop computer end in order to pass radiated emissions 30-1000 MHz, the ferrite information is as follows:
Manufacturer: Fair-Rite
Part Number: 0444173951

5.3. MAXIMUM OUTPUT POWER

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

5150 to 5250 MHz Authorized Band

Frequency Range (MHz)	Mode	Output Power (dBm)	Output Power (mW)
5180 - 5250	802.11a	9.98	9.95
5210 - 5250	802.11a Turbo	11.61	14.49

5250 to 5350 MHz Authorized Band

Frequency Range (MHz)	Mode	Output Power (dBm)	Output Power (mW)
5250 - 5320	802.11a	10.89	12.27
5250 - 5290	802.11a Turbo	11.61	14.49

5.4. DESCRIPTION OF AVAILABLE ANTENNAS

The radio utilizes two Panel antennas for diversity, each with a maximum gain of 6dBi for 2.4 GHz band and 8dBi for 5.2 GHz Band

5.5. SOFTWARE AND FIRMWARE

The EUT driver software installed in the host support equipment during testing was art5523.bin,

The test utility software used during testing was Atheros ART 5.3.

5.6. WORST-CASE CONFIGURATION AND MODE

Two EUT configurations have been investigated: 1.EUT directly connected to the USB port of the host laptop / PC; 2. EUT connected to host laptop / PC via a USB cable. EUT connected to host laptop / PC via a USB cable was determined as the worst-case configuration. Data documented in this report is with this worst-case configuration.

The worst-case channel is determined as the channel with the highest output power. The highest measured output power was at 5320 MHz for normal mode and 5250 MHz for turbo mode.

The worst-case data rate for this channel is determined to be 6 Mb/s, based on previous experience with 802.11a WLAN product design architectures.

Thus all emissions tests were made in the 802.11a mode, 5320 MHz, 6 Mb/s for normal mode and 5250 MHz, 6 Mb/s for turbo mode.

5.7. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

PERIPHERAL SUPPORT EQUIPMENT LIST				
Description	**Manufacturer**	**Model**	**Serial Number**	**FCC ID**
Laptop	Toshiba	Satellite 1805-S204	91617937PU	DoC
AC Adapter	Toshiba	PA3083U-1ACA	0109A0043423G	N/A

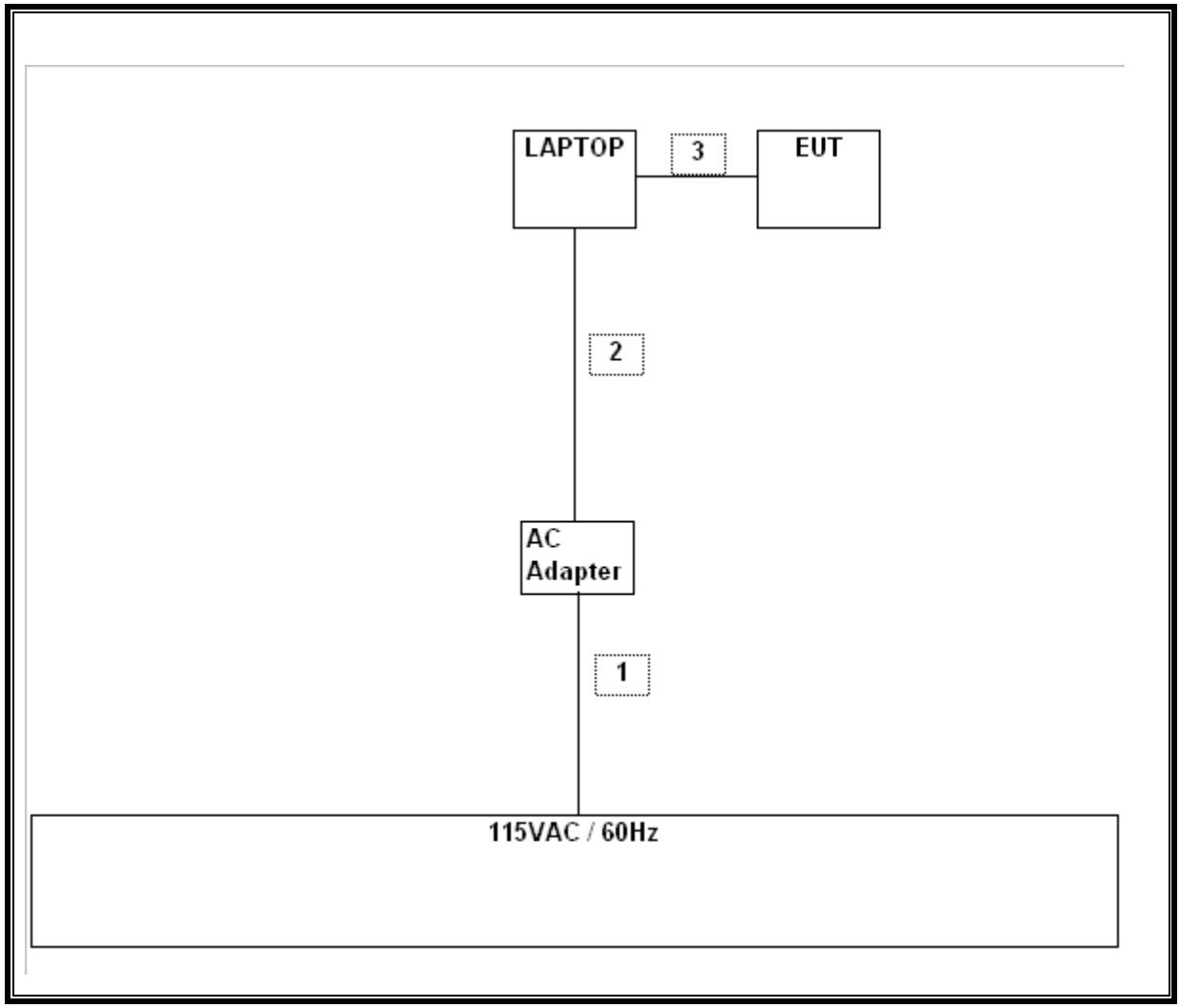
I/O CABLES

I/O CABLE LIST						
Cable No.	**Port**	**# of Identical Ports**	**Connector Type**	**Cable Type**	**Cable Length**	**Remarks**
1	AC	1	US 115V	Un-shielded	2m	No
2	DC	1	DC Plugin	Un-shielded	2m	No
3	USB	1	USB	Un-shielded	0.5	Ferrite on laptop end

TEST SETUP

The EUT is connected to a host laptop computer via a USB cable during the tests. Test software exercised the radio card.

SETUP DIAGRAM FOR TESTS



6. 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 Receiver, 9 kHz ~ 2.9 GHz	HP	8542E	3942A00286	03/29/2006
RF Filter Section	HP	85420E	3705A00256	03/29/2006
Antenna, Bilog 30 MHz ~ 2 Ghz	Sunol Sciences	JB1	A121003	03/03/2006
EMI Test Receiver	R & S	ESHS 20	827129/006	06/03/2006
LISN, 10 kHz ~ 30 MHz	FCC	LISN-50/250-25-2	2023	08/30/2006
LISN, 10 kHz ~ 30 MHz	Solar	8012-50-R-24-BNC	8379443	08/30/2006
AC Power Source, 10 kVA	ACS	AFC-10K-AFC-2	J1568	C.N.R.
Spectrum Analyzer 3 Hz ~ 44 GHz	Agilent	E4446A	US42510266	10/19/2006
Antenna, Horn 1 ~ 18 GHz	ETS	3117	29301	04/22/2006
Preamplifier, 1 ~ 26.5 GHz	HP	8449B	3008A00369	08/17/2006
7.6 High Pass Filter	Micro-Tronics	HPM13195	1	N/A
Power Meter	Giga-tronics	8651A	8651404	12/27/2006
Power Sensor 0.05 - 18 Ghz	Giga-tronics	80701A	1834588	3/27/07

7. LIMITS AND RESULTS

7.1. CHANNEL TESTS FOR THE 5150 TO 5350 MHz BAND

7.1.1. EMISSION BANDWIDTH

LIMIT

§15.403 (i) Emission bandwidth. For purposes of this subpart the emission bandwidth shall be determined by measuring the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, that are 26 dB down relative to the maximum level of the modulated carrier. Determination of the emissions bandwidth is based on the use of measurement instrumentation employing a peak detector function with an instrument resolutions bandwidth approximately equal to 1.0 percent of the emission bandwidth of the device under measurement.

TEST PROCEDURE

The transmitter output is connected to a spectrum analyzer. The RBW is set to 1% to 3% of the 26 dB bandwidth. The VBW is set to 3 times the RBW. The sweep time is coupled.

RESULTS

No non-compliance noted:

802.11a Mode

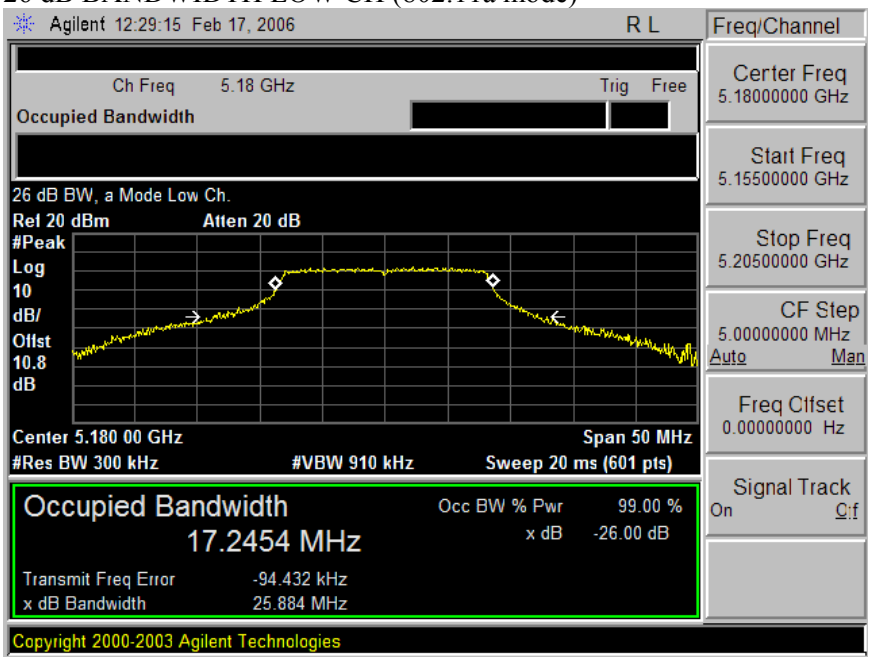
Channel	Frequency (MHz)	B (MHz)	10 Log B (dB)
Low	5180	17.25	12.37
Middle	5260	17.06	12.32
High	5320	17.05	12.32

802.11a Turbo Mode

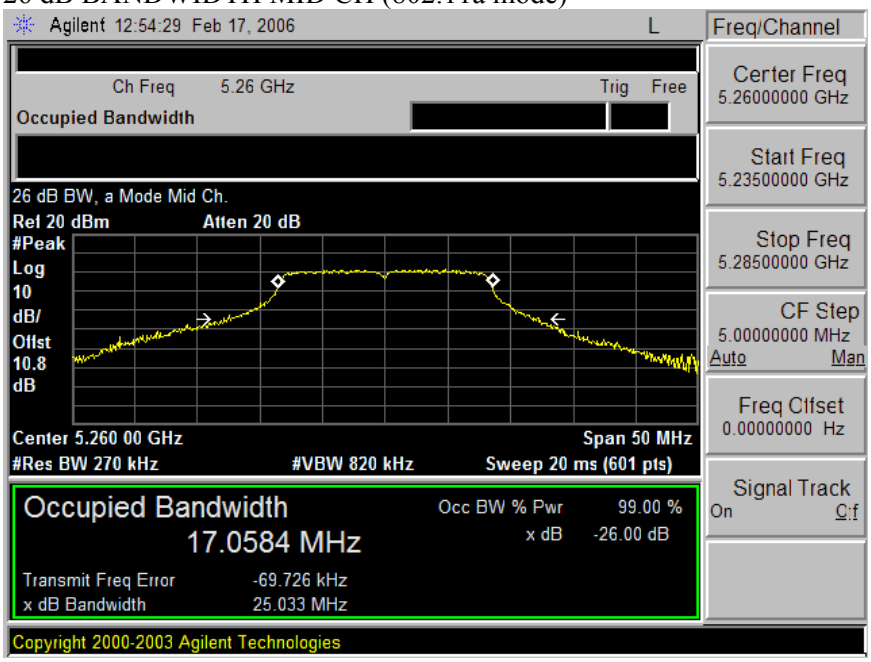
Channel	Frequency (MHz)	B (MHz)	10 Log B (dB)
Low	5210	49.69	16.96
Middle	5250	49.77	16.97
High	5290	49.42	16.94

26 dB EMISSION BANDWIDTH (802.11a MODE)

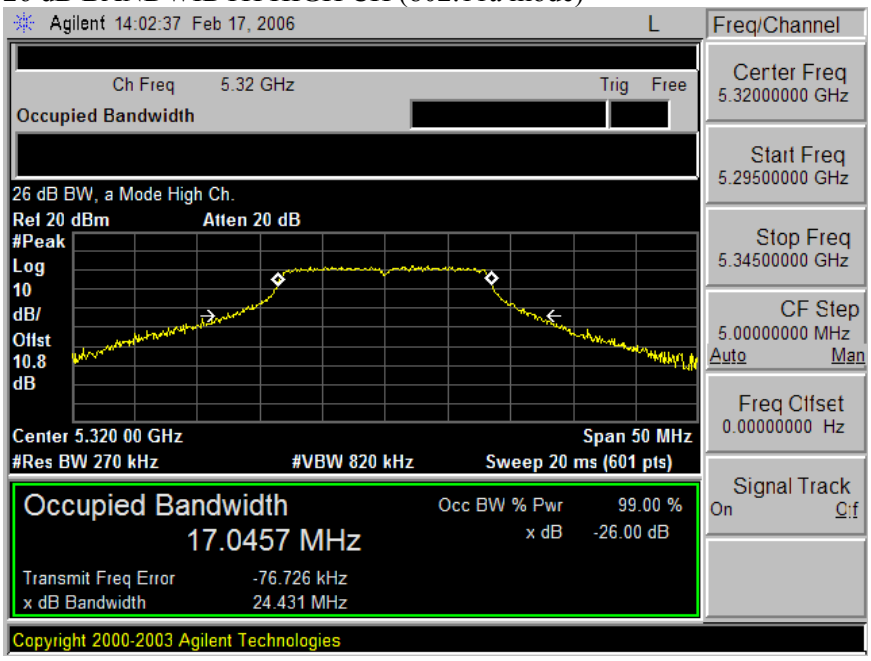
26 dB BANDWIDTH LOW CH (802.11a mode)



26 dB BANDWIDTH MID CH (802.11a mode)

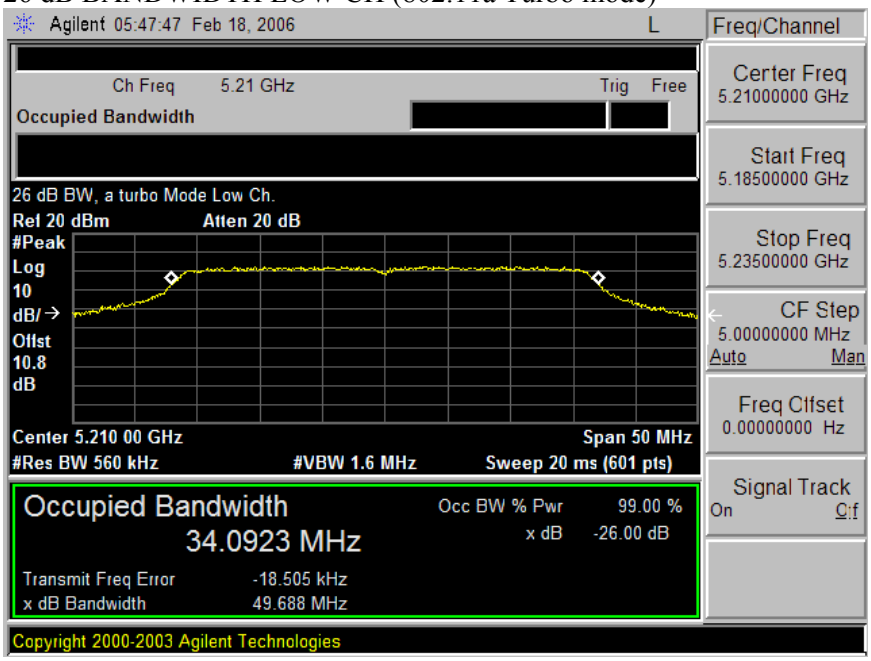


26 dB BANDWIDTH HIGH CH (802.11a mode)

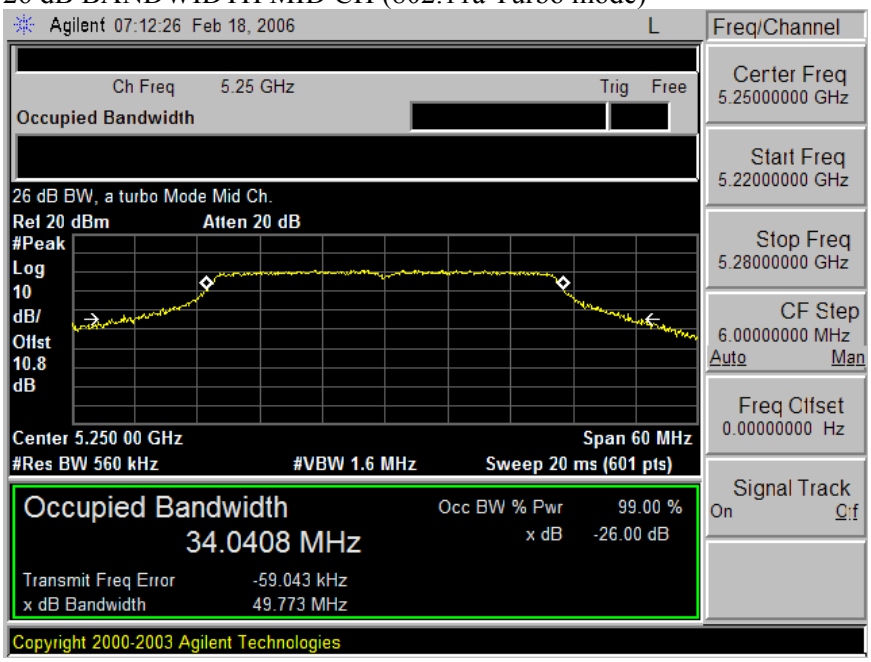


26 dB EMISSION BANDWIDTH (802.11a TURBO MODE)

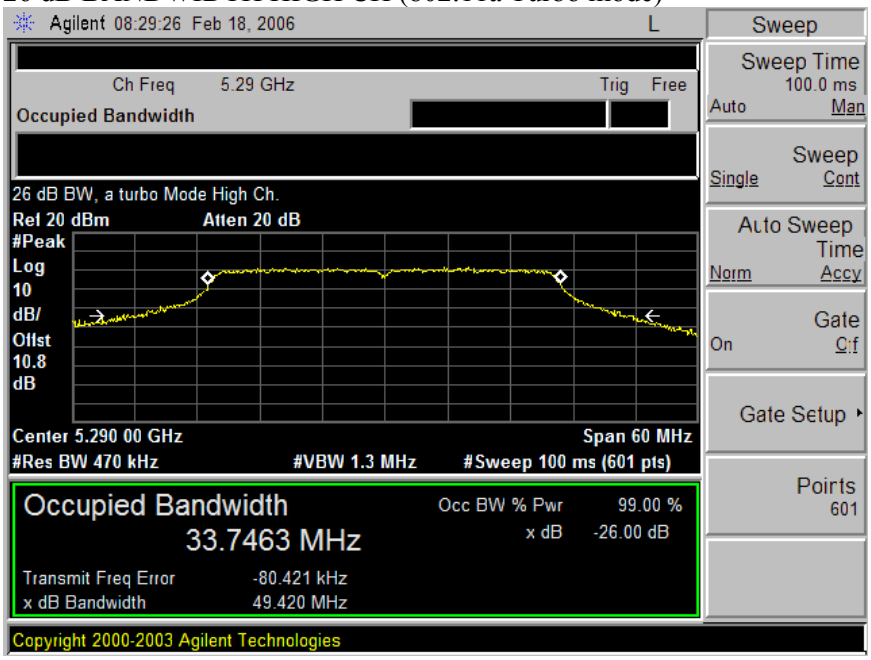
26 dB BANDWIDTH LOW CH (802.11a Turbo mode)



26 dB BANDWIDTH MID CH (802.11a Turbo mode)



26 dB BANDWIDTH HIGH CH (802.11a Turbo mode)



7.1.2. PEAK POWER

LIMIT

§15.407 (a) (1) For the band 5.15-5.25 GHz, the peak transmit power over the frequency band of operation shall not exceed the lesser of 50 mW or 4 dBm + 10 log B, where B is the 26-dB emission bandwidth in MHz. If transmitting antennas of directional gain greater than 6 dBi are used, both the peak transmit power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

§15.407 (a) (1) For the band 5.25-5.35 GHz, the peak transmit power over the frequency band of operation shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26-dB emission bandwidth in MHz. If transmitting antennas of directional gain greater than 6 dBi are used, both the peak transmit power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

TEST PROCEDURE

The test is performed in accordance with FCC Public Notice: APPENDIX A Guidelines for Assessing Unlicensed National Information Infrastructure (U-NII) Devices – Part 15, Subpart E, August 2002.

The transmitter output operates continuously therefore Method # 1 is used.

LIMITS AND RESULTS FOR A MODE

No non-compliance noted:

Limit in 5150 to 5250 MHz Band

Channel	Frequency (MHz)	Fixed Limit (dBm)	B (MHz)	4 + 10 Log B Limit (dBm)	Antenna Gain (dBi)	Limit (dBm)
Low	5180	17	17.2454	16.37	8.00	14.37

Limit in 5250 to 5350 MHz Band

Channel	Frequency (MHz)	Fixed Limit (dBm)	B (MHz)	11 + 10 Log B Limit (dBm)	Antenna Gain (dBi)	Limit (dBm)
Mid	5260	24	17.0584	23.32	8.00	21.32
High	5320	24	17.0457	23.32	8.00	21.32

Results

Channel	Frequency (MHz)	Power (dBm)	Limit (dBm)	Margin (dB)
Low	5180	9.98	14.37	-4.39
Mid	5260	10.55	21.32	-10.77
High	5320	10.89	21.32	-10.43

LIMITS AND RESULTS FOR A TURBO MODE

Limit in 5150 to 5250 MHz Band

Turbo Channel	Frequency (MHz)	Fixed Limit (dBm)	B (MHz)	4 + 10 Log B Limit (dBm)	Antenna Gain (dBi)	Limit (dBm)
Low	5210	17	49.688	20.96	8.00	15.00
Mid	5250	17	49.773	20.97	8.00	15.00

Limit in 5250 to 5350 MHz Band

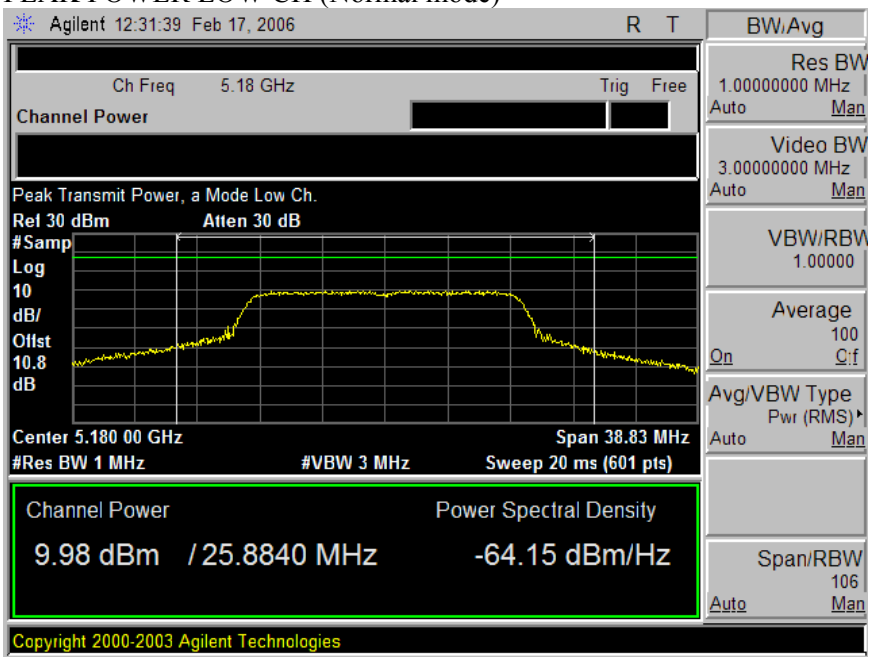
Turbo Channel	Frequency (MHz)	Fixed Limit (dBm)	B (MHz)	11 + 10 Log B Limit (dBm)	Antenna Gain (dBi)	Limit (dBm)
High	5290	24	49.42	27.94	8.00	22.00

Results

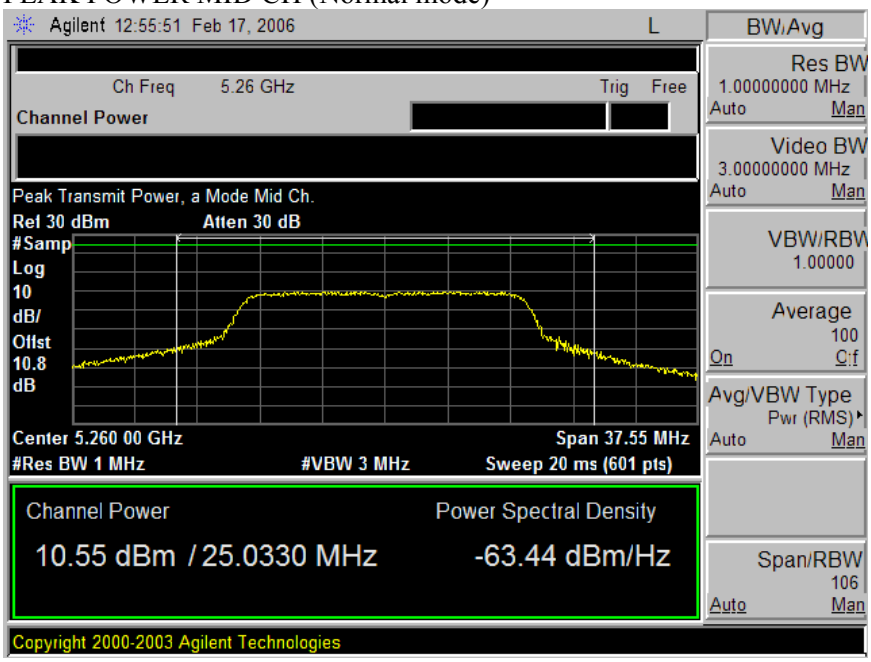
Turbo Channel	Frequency (MHz)	Power (dBm)	Limit (dBm)	Margin (dB)
Low	5210	10.92	15.00	-4.08
Mid	5250	11.61	15.00	-3.39
High	5290	11.59	22.00	-10.41

PEAK POWER (NORMAL MODE)

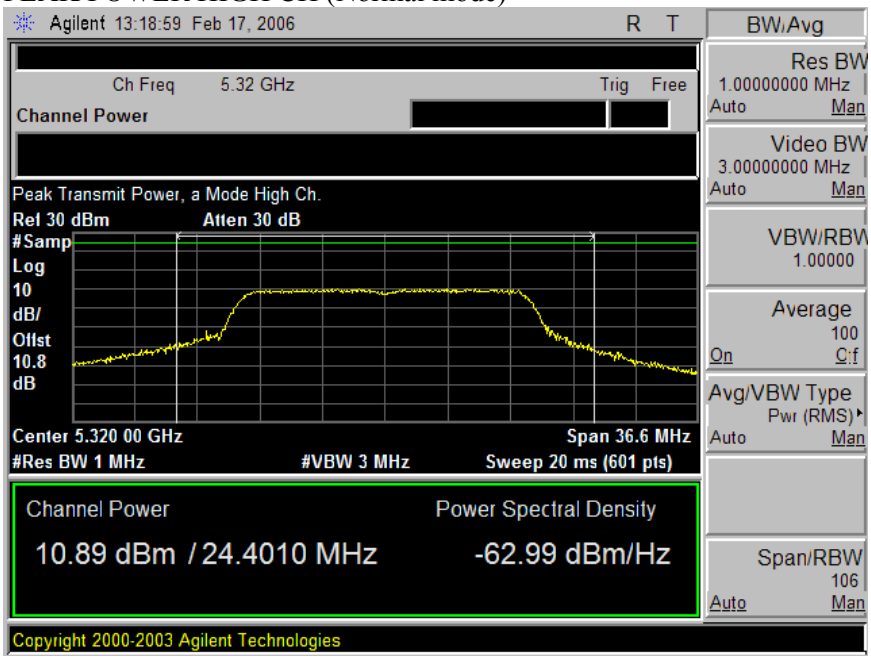
PEAK POWER LOW CH (Normal mode)



PEAK POWER MID CH (Normal mode)

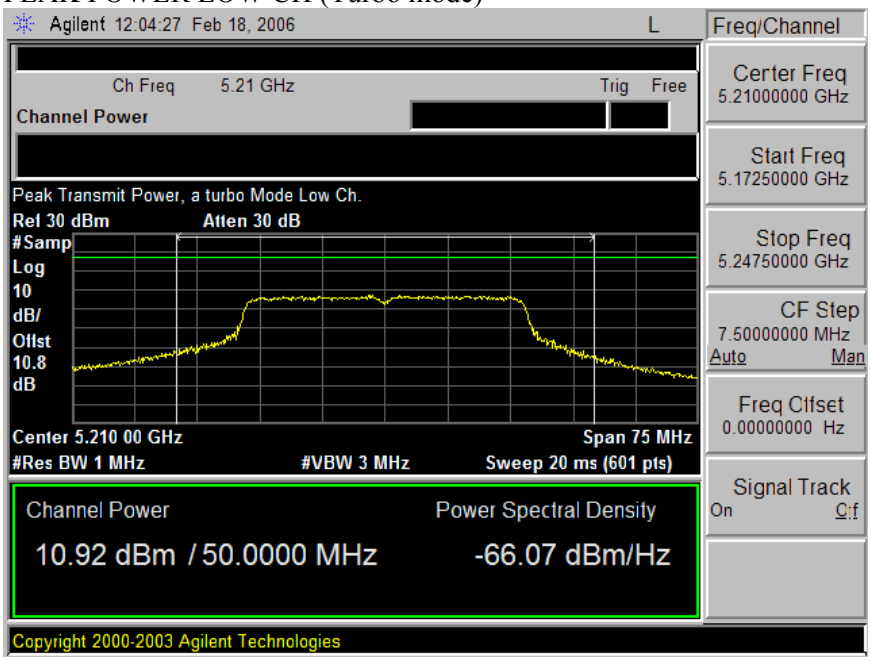


PEAK POWER HIGH CH (Normal mode)

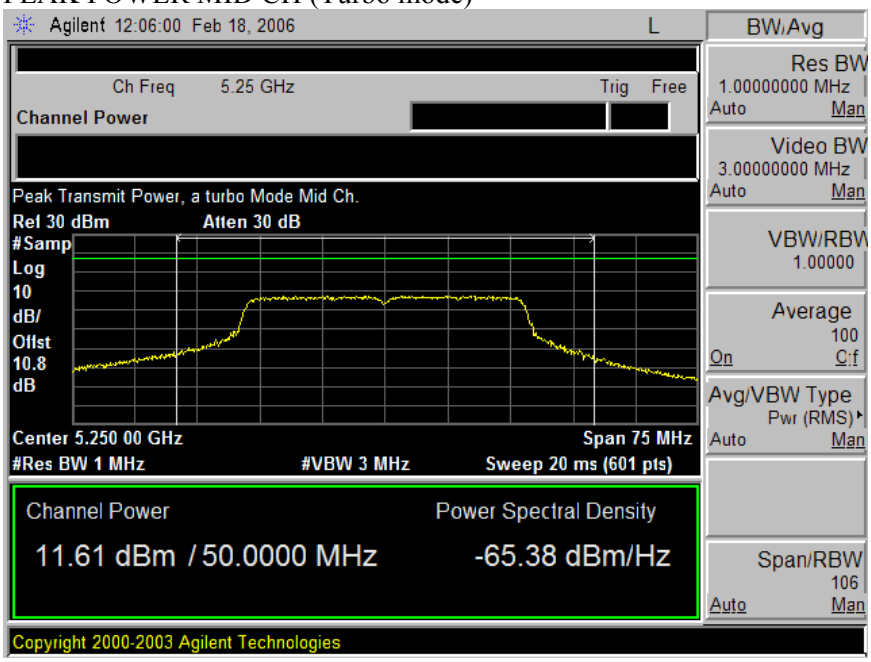


PEAK POWER (TURBO MODE)

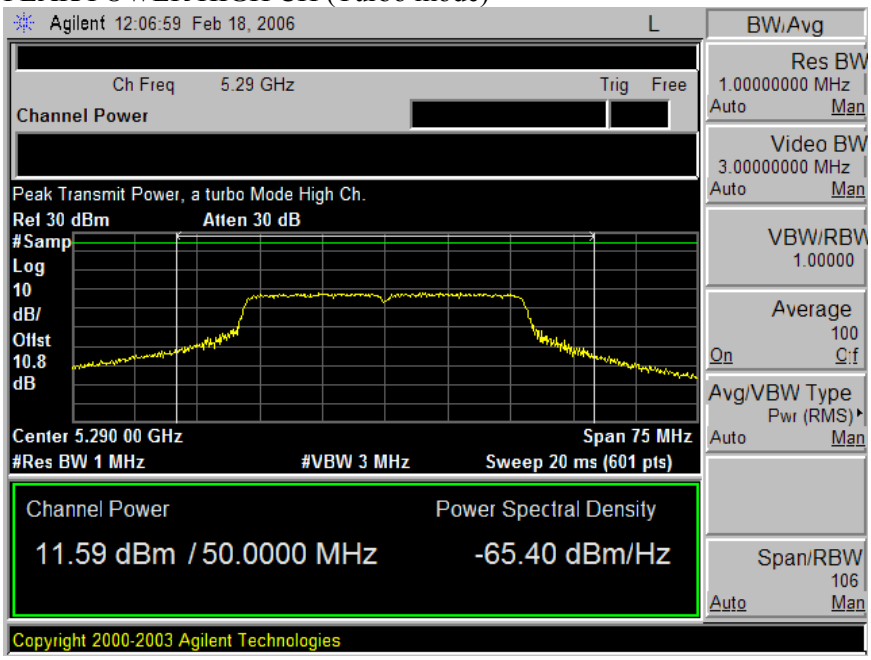
PEAK POWER LOW CH (Turbo mode)



PEAK POWER MID CH (Turbo mode)



PEAK POWER HIGH CH (Turbo mode)



7.1.3. MAXIMUM PERMISSIBLE EXPOSURE

LIMITS

§1.1310 The criteria listed in Table 1 shall be used to evaluate the environmental impact of human exposure to radio-frequency (RF) radiation as specified in §1.1307(b), except in the case of portable devices which shall be evaluated according to the provisions of §2.1093 of this chapter.

TABLE 1—LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm^2)	Averaging time (minutes)
(A) Limits for Occupational/Controlled Exposures				
0.3–3.0	614	1.63	*(100)	6
3.0–30	1842/f	4.89/f	*(900/f^2)	6
30–300	61.4	0.163	1.0	6
300–1500			f/300	6
1500–100,000			5	6
(B) Limits for General Population/Uncontrolled Exposure				
0.3–1.34	614	1.63	*(100)	30
1.34–30	824/f	2.19/f	*(180/f^2)	30

TABLE 1—LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)—Continued

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm^2)	Averaging time (minutes)
30–300	27.5	0.073	0.2	30
300–1500			f/1500	30
1500–100,000			1.0	30

f = frequency in MHz
* = Plane-wave equivalent power density

NOTE 1 TO TABLE 1: Occupational/controlled limits apply in situations in which persons are exposed as a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure. Limits for occupational/controlled exposure also apply in situations when an individual is transient through a location where occupational/controlled limits apply provided he or she is made aware of the potential for exposure.

NOTE 2 TO TABLE 1: General population/uncontrolled exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or can not exercise control over their exposure.

CALCULATIONS

Given

$E = \sqrt{(30 * P * G)} / d$

and

$S = E \wedge 2 / 3770$

where

E = Field Strength in Volts/meter
P = Power in Watts
G = Numeric antenna gain
d = Distance in meters
S = Power Density in milliwatts/square centimeter

Combining equations and rearranging the terms to express the distance as a function of the remaining variables yields:

$d = \sqrt{((30 * P * G) / (3770 * S))}$

Changing to units of Power to mW and Distance to cm, using:

P (mW) = P (W) / 1000 and
d (cm) =100 * d (m)

yields

$d = 100 * \sqrt{((30 * (P / 1000) * G) / (3770 * S))}$
$d = 0.282 * \sqrt{(P * G / S)}$

where

d = distance in cm
P = Power in mW
G = Numeric antenna gain
S = Power Density in mW/cm^2

Substituting the logarithmic form of power and gain using:

P (mW) = 10 ^ (P (dBm) / 10) and
G (numeric) = 10 ^ (G (dBi) / 10)

yields

$d = 0.282 * 10 \wedge ((P + G) / 20) / \sqrt{S}$

where

d = MPE distance in cm
P = Power in dBm
G = Antenna Gain in dBi
S = Power Density Limit in mW/cm^2

Rearranging terms to calculate the power density at a specific distance yields

$S = 0.0795 * 10 \wedge ((P + G) / 10) / (d^2)$

LIMITS

From §1.1310 Table 1 (B), the maximum value of S = 1.0 mW/cm^2

RESULT

No non-compliance noted

Mode	MPE Distance (cm)	Output Power (dBm)	Antenna Gain (dBi)	Power Density (mW/cm^2)
802.11a	20.0	10.89	8.00	0.02
802.11a Turbo	20.0	11.61	8.00	0.02

NOTE: For mobile or fixed location transmitters, the minimum separation distance is 20 cm, even if calculations indicate that the MPE distance would be less.

7.1.4. 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 10.8 dB (including 10 dB pad and .8 dB cable) was entered as an offset in the power meter to allow for direct reading of power.

802.11a Mode

Channel	Frequency (MHz)	Average Power (dBm)
Low	5180	8.40
Middle	5260	8.66
High	5320	8.70

802.11a Turbo Mode

Channel	Frequency (MHz)	Average Power (dBm)
Low	5210	8.70
Middle	5250	8.70
High	5290	8.80

7.1.5. PEAK POWER SPECTRAL DENSITY

LIMIT

§15.407 (a) (1) For the band 5.15-5.25 GHz, the peak power spectral density shall not exceed 4 dBm in any 1-MHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the peak transmit power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

§15.407 (a) (1) For the band 5.25-5.35 GHz, the peak power spectral density shall not exceed 11 dBm in any 1-MHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the peak transmit power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

The maximum antenna gain = 8 dBi, therefore there is a reduction of 2dB due to antenna gain.

TEST PROCEDURE

The test is performed in accordance with FCC Public Notice: APPENDIX A Guidelines for Assessing Unlicensed National Information Infrastructure (U-NII) Devices – Part 15, Subpart E, August 2002. PPSD method #2 was used.

RESULTS

No non-compliance noted:

802.11a Mode

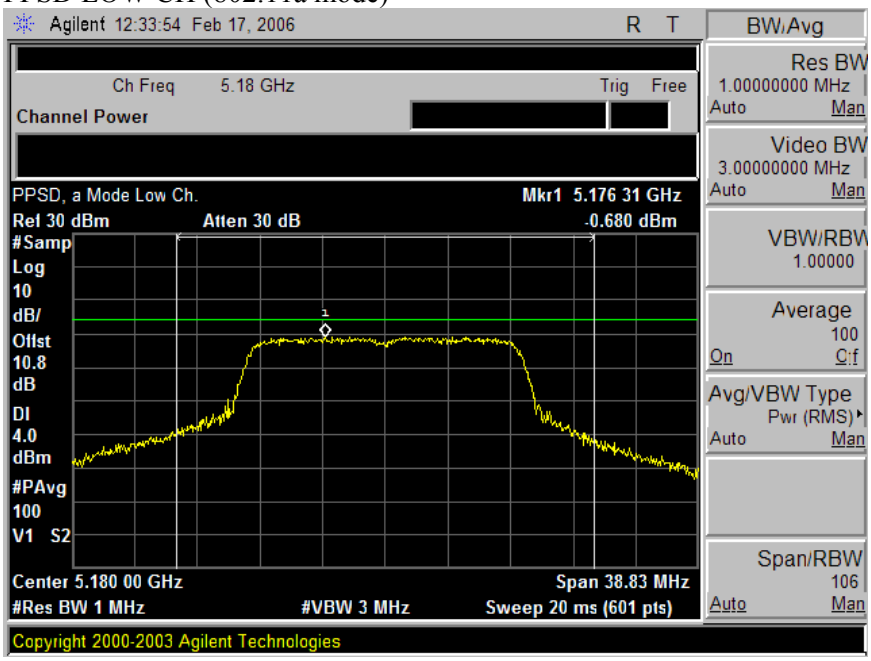
Channel	Frequency (MHz)	PPSD (dBm)	Limit (dBm)	Margin (dB)
Low	5180	-0.68	2.00	-2.68
Mid	5260	-0.34	9.00	-9.34
High	5320	-0.04	9.00	-9.04

802.11a Turbo Mode

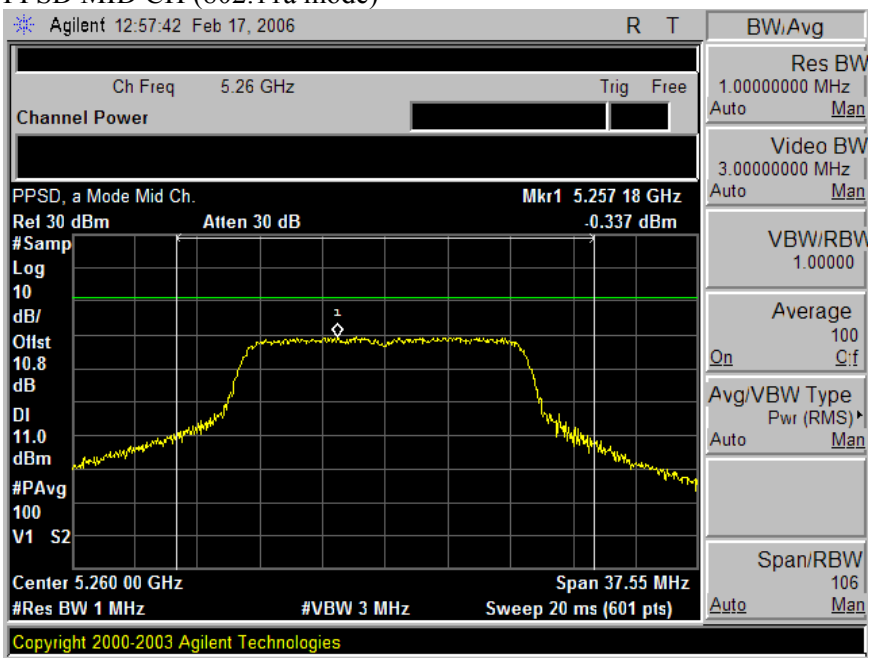
Channel	Frequency (MHz)	PPSD (dBm)	Limit (dBm)	Margin (dB)
Low	5210	-3.29	2.00	-5.29
Mid	5250	-3.49	9.00	-12.49
High	5290	-3.23	9.00	-12.23

PEAK POWER SPECTRAL DENSITY (802.11a MODE)

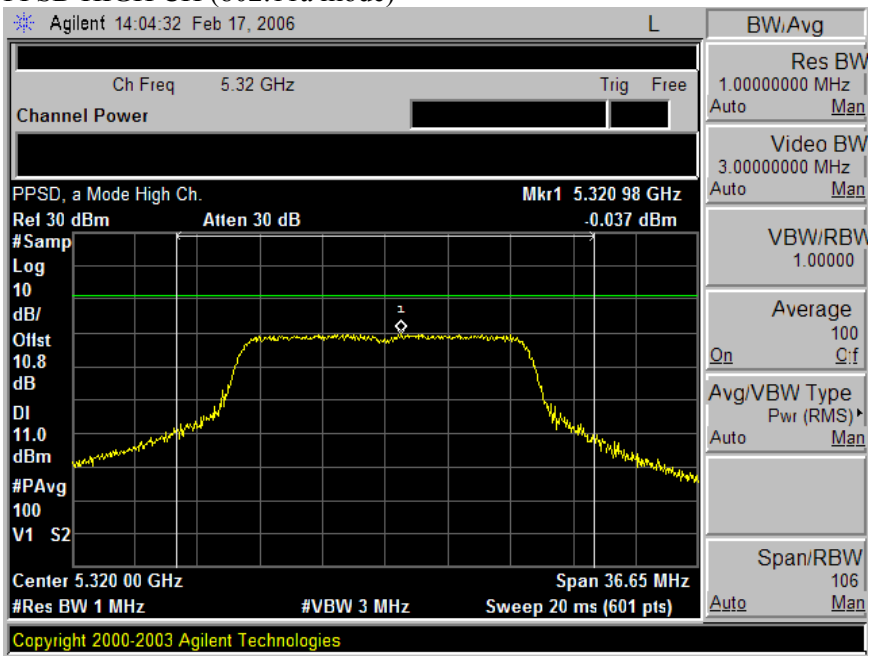
PPSD LOW CH (802.11a mode)



PPSD MID CH (802.11a mode)

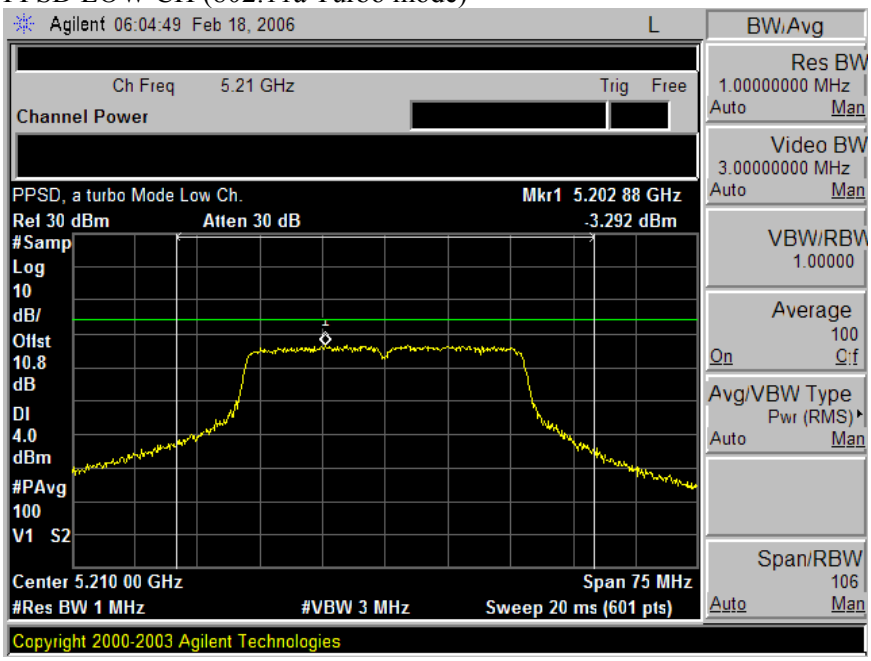


PPSD HIGH CH (802.11a mode)

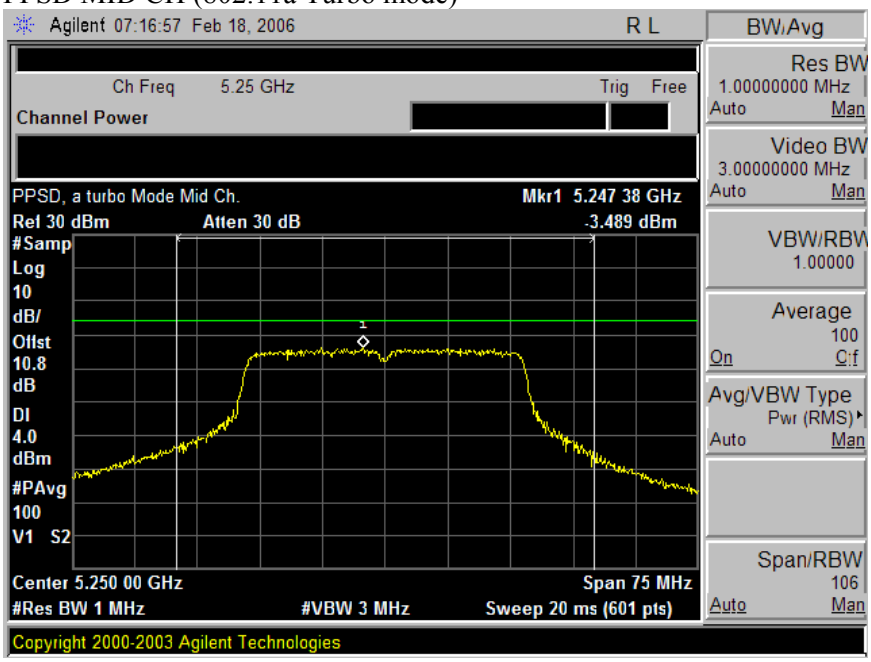


PEAK POWER SPECTRAL DENSITY (802.11a TURBO MODE)

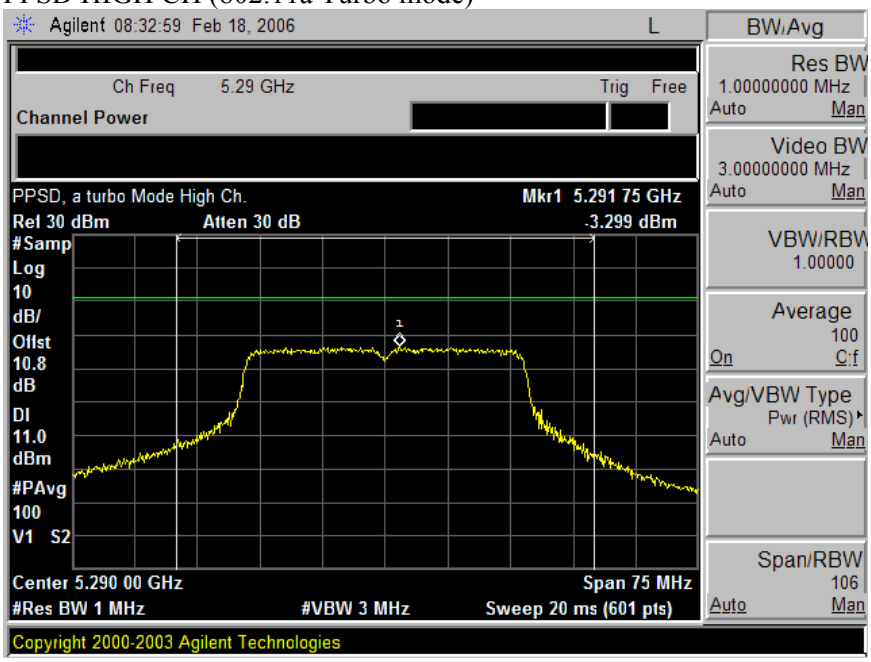
PPSD LOW CH (802.11a Turbo mode)



PPSD MID CH (802.11a Turbo mode)



PPSD HIGH CH (802.11a Turbo mode)



7.1.6. PEAK EXCURSION

LIMIT

§15.407 (a) (6) The ratio of the peak excursion of the modulation envelope (measured using a peak hold function) to the peak transmit power (measured as specified above) shall not exceed 13 dB across any 1 MHz bandwidth or the emission bandwidth whichever is less.

TEST PROCEDURE

The test is performed in accordance with FCC Public Notice: APPENDIX A Guidelines for Assessing Unlicensed National Information Infrastructure (U-NII) Devices – Part 15, Subpart E, August 2002.

Since Method # 1 was used for peak power measurements, Method # 1 settings are used for the second PPSD trace.

RESULTS

No non-compliance noted:

802.11a Mode

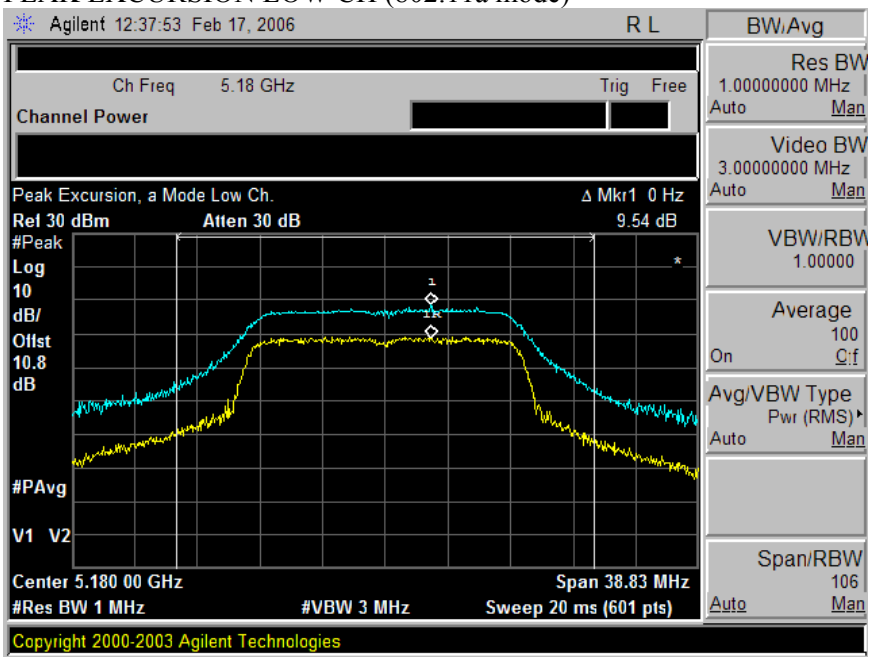
Channel	Frequency (MHz)	Peak Excursion (dB)	Limit (dB)	Margin (dB)
Low	5180	9.54	13	-3.46
Middle	5200	8.57	13	-4.43
High	5240	8.80	13	-4.20

802.11a Turbo Mode

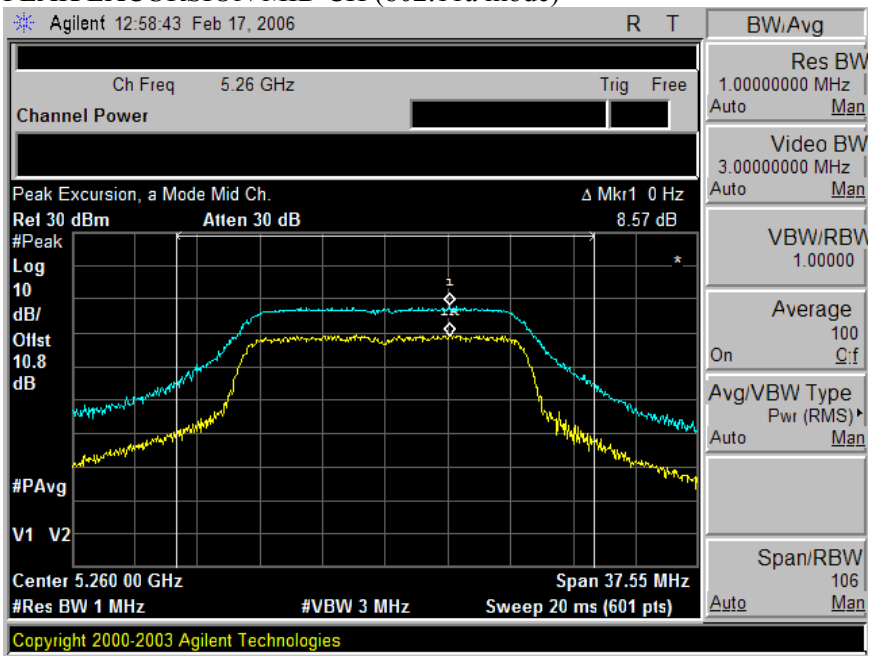
Channel	Frequency (MHz)	Peak Excursion (dB)	Limit (dB)	Margin (dB)
Low	5210	9.14	13	-3.86
Mid	5250	8.63	13	-4.37
High	5290	9.62	13	-3.38

PEAK EXCURSION (802.11a MODE)

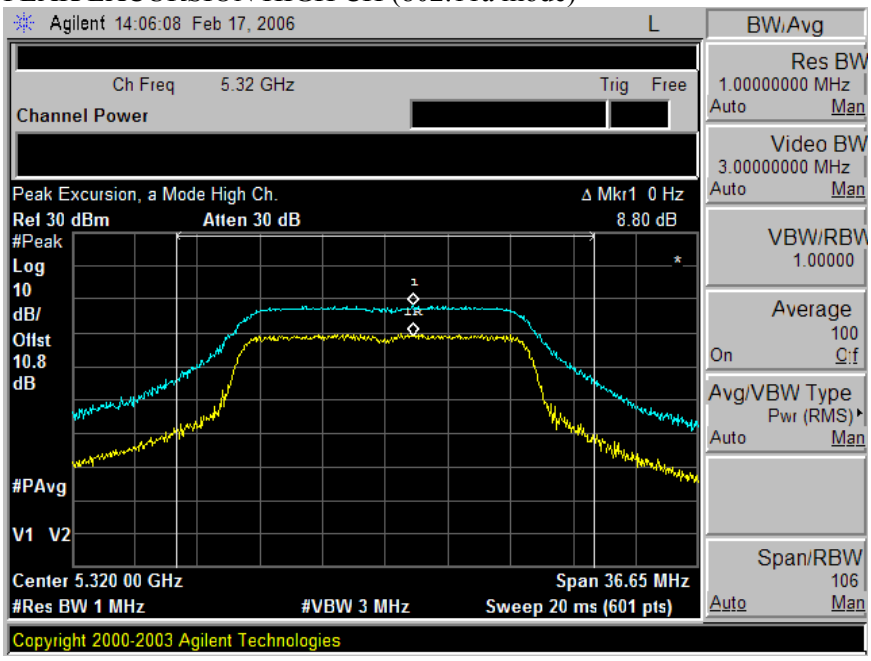
PEAK EXCURSION LOW CH (802.11a mode)



PEAK EXCURSION MID CH (802.11a mode)

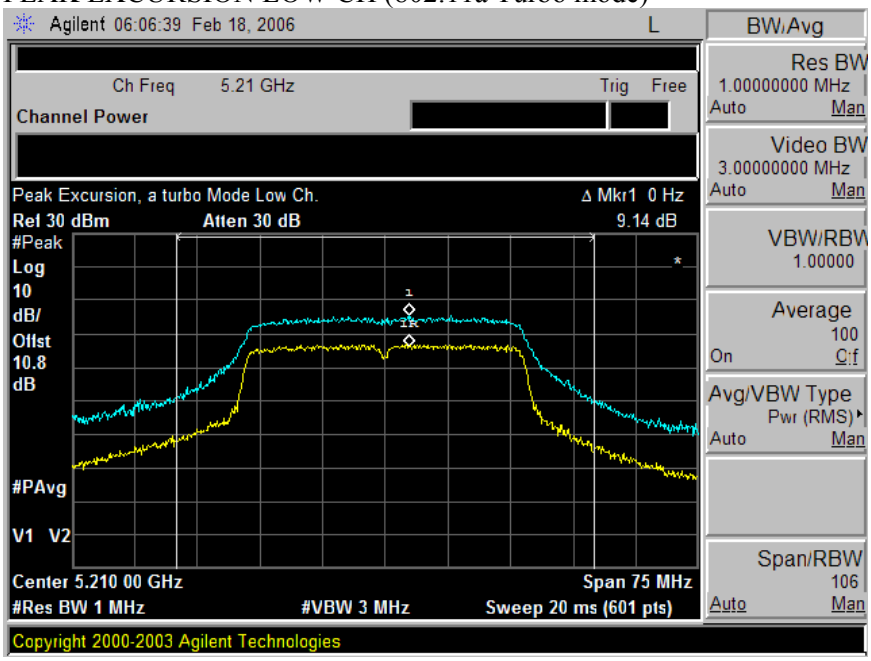


PEAK EXCURSION HIGH CH (802.11a mode)

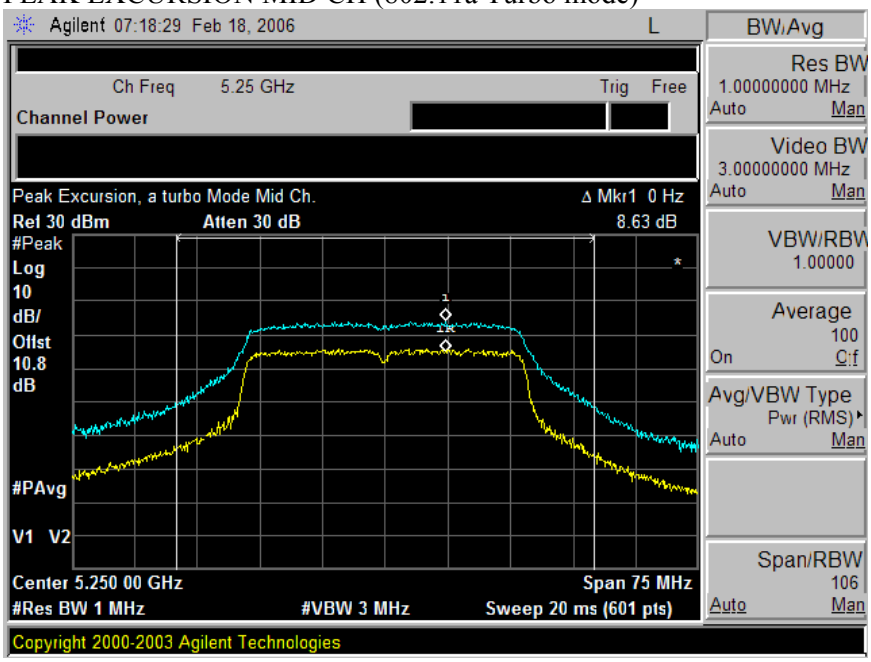


PEAK EXCURSION (802.11a TURBO MODE)

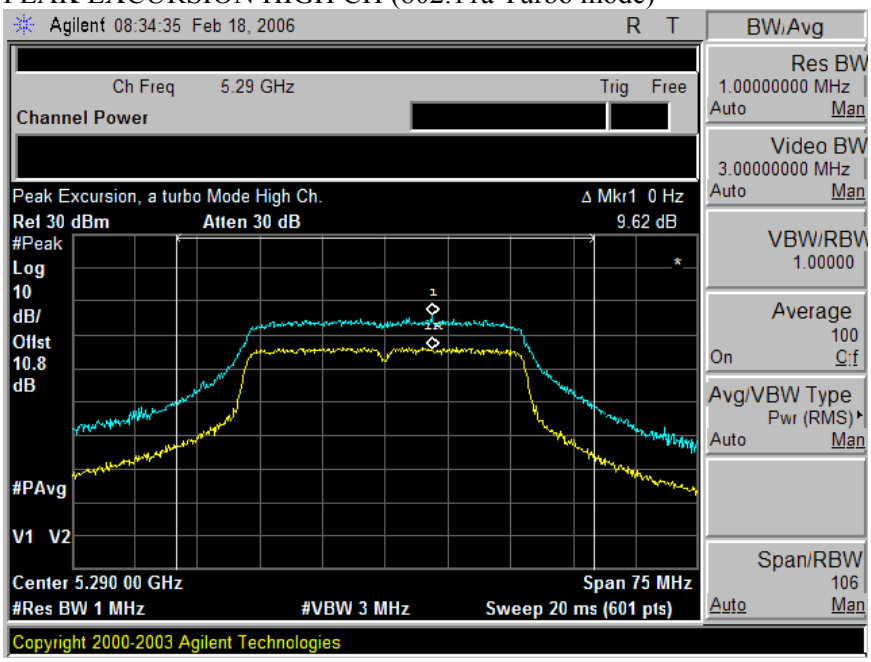
PEAK EXCURSION LOW CH (802.11a Turbo mode)



PEAK EXCURSION MID CH (802.11a Turbo mode)



PEAK EXCURSION HIGH CH (802.11a Turbo mode)



7.1.7. CONDUCTED SPURIOUS EMISSIONS

LIMITS

§15.407 (b) (1 & 2) For transmitters operating in the 5.15-5.35 GHz band: all emissions outside of the 5.15-5.35 GHz band shall not exceed an EIRP of -27dBm / MHz.

TEST PROCEDURE

Conducted RF measurements of the transmitter output are made to confirm that the EUT antenna port conducted emissions meet the specified limit and to identify any spurious signals that require further investigation or measurements on the radiated emissions site.

The transmitter output is connected to the spectrum analyzer. The resolution bandwidth is set to 1 MHz. The video bandwidth is set to 1 MHz peak detection measurements are compared to the average EIRP limit, adjusted for the maximum antenna gain. If necessary, additional average detection measurements are made.

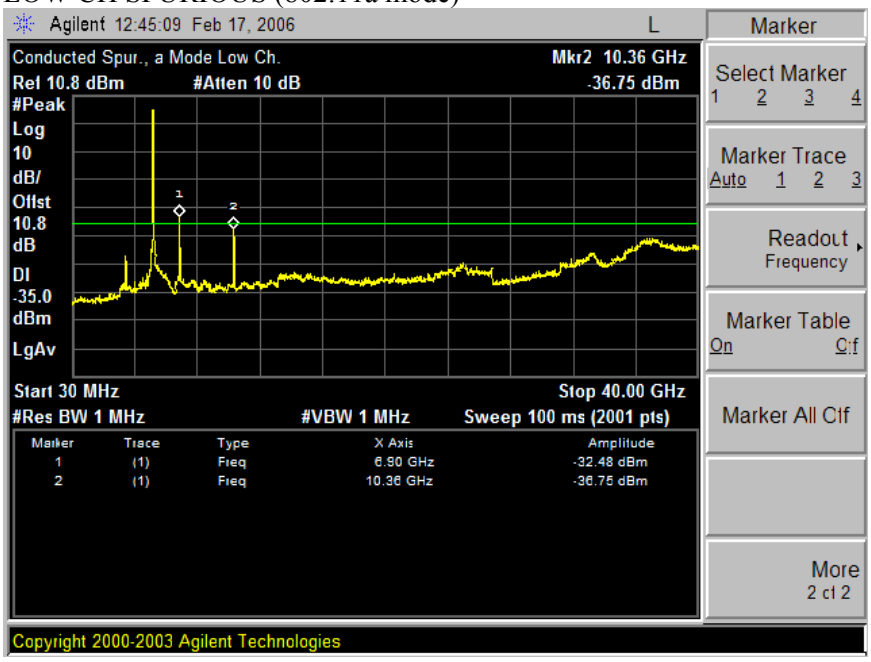
Measurements are made over the 30 MHz to 40 GHz range with the transmitter set to the lowest, middle, and highest channels.

RESULTS

SPURIOUS EMISSIONS (802.11a MODE)

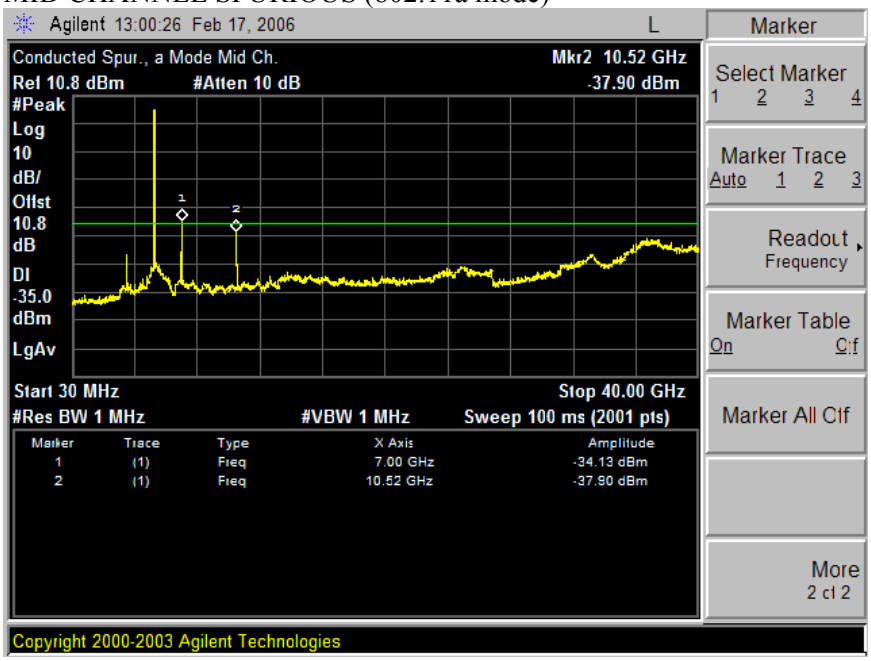
Please see High Frequency Substitution Measurement Template below for 6.9 GHz & 7.0 GHz spurious.

LOW CH SPURIOUS (802.11a mode)



Please see High Frequency Substitution Measurement Template below for 6.9 GHz & 7.0 GHz spurious.

MID CHANNEL SPURIOUS (802.11a mode)



02/23/06 **High Frequency Substitution Measurement**

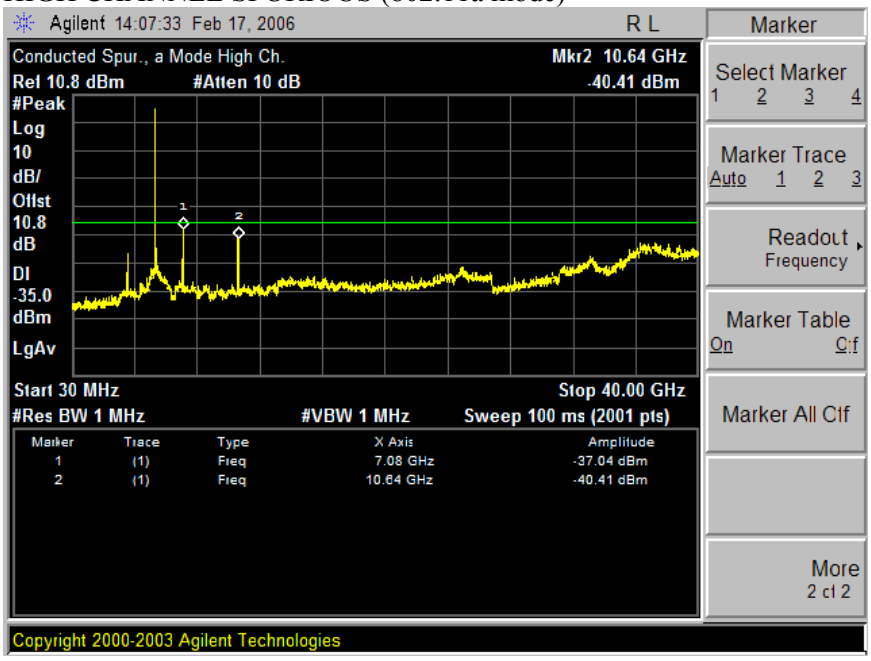
Compliance Certification Services, Morgan Hill 5m Chamber Site

Test Engineer:Vien Tran
Project #:06J10094-1
Company:Buffalo
EUT Description:802.11 abg USB adapter with high gain antenna
WLI-U2-AG108HP
EUT S/N:0014A557CA92
Test Target:FCC 15.407 _ FCC UNII
Mode Of Operation:TX, 11a
Average Power Meter: Low = 8dBm, Mid = 8dBm, High = 8dBm

EMCO Horn 1-18GHz: T73; S/N: 6717 @3m
Horn > 18GHz:
Limit: EIRP
High Pass Filter
Hi Frequency Cables: (2 ft) (2 ~ 3 ft) (4 ~ 6 ft) (12 ft)
Pre-amplifer 1-26GHz: T145 Agilent 3008A(
Pre-amplifer 26-40GHz:

f GHz	SA reading (dBuV/m)	Ant. Pol. (H/V)	SG reading (dBm)	CL (dB)	Gain (dBi)	Gain (dBd)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes
LOW CH, 5180 MHz										
6.900	75.0	H	-24.4	3.6	12.0	9.8	-16.0	-7.0	-9.0	Peak
6.900	62.2	H	-37.2	3.6	12.0	9.8	-28.8	-27.0	-1.8	Average
6.900	55.6	V	-43.8	3.6	12.0	9.8	-35.4	-7.0	-28.4	Peak
6.900	52.2	V	-47.2	3.6	12.0	9.8	-38.8	-27.0	-11.8	Average
MID CH, 5260 MHz										
7.013	76.0	H	-23.2	3.6	12.0	9.9	-14.8	-7.0	-7.8	Peak
7.013	61.0	H	-38.2	3.6	12.0	9.9	-29.8	-27.0	-2.8	Average
7.013	57.0	V	-43.0	3.6	12.0	9.9	-34.6	-7.0	-27.6	Peak
7.013	54.0	V	-46.0	3.6	12.0	9.9	-37.6	-27.0	-10.6	Average
		V								

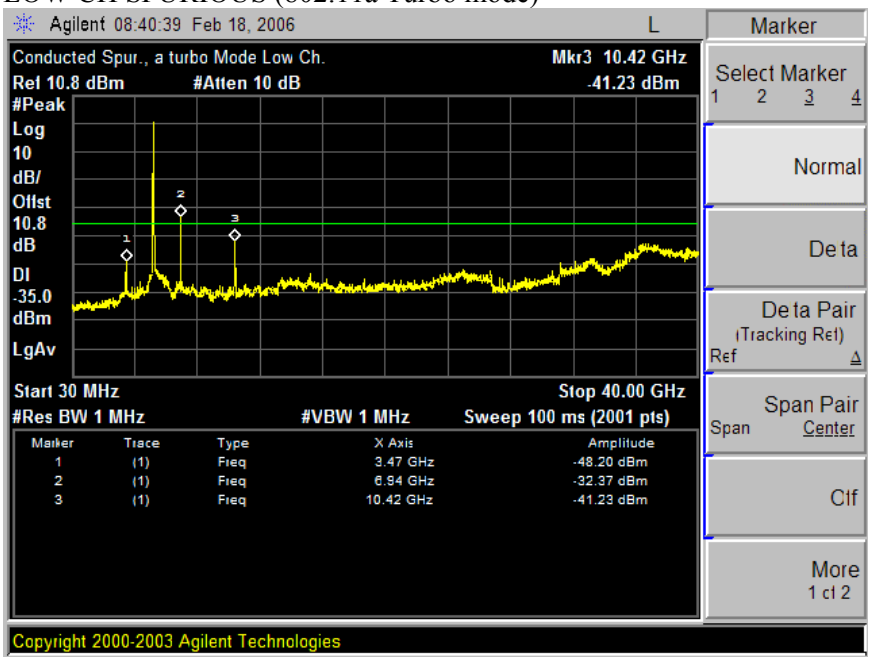
HIGH CHANNEL SPURIOUS (802.11a mode)



SPURIOUS EMISSIONS (802.11a TURBO MODE)

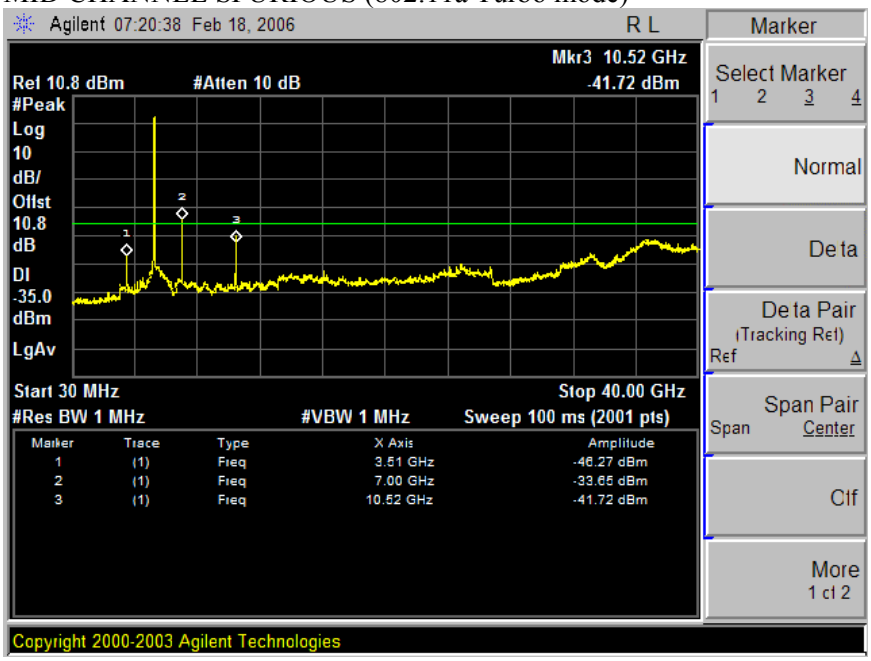
Please see High Frequency Substitution Measurement Template below for 6.9 GHz & 7.0 GHz spurious

LOW CH SPURIOUS (802.11a Turbo mode)



Please see High Frequency Substitution Measurement Template below for 6.9 GHz & 7.0 GHz spurious

MID CHANNEL SPURIOUS (802.11a Turbo mode)



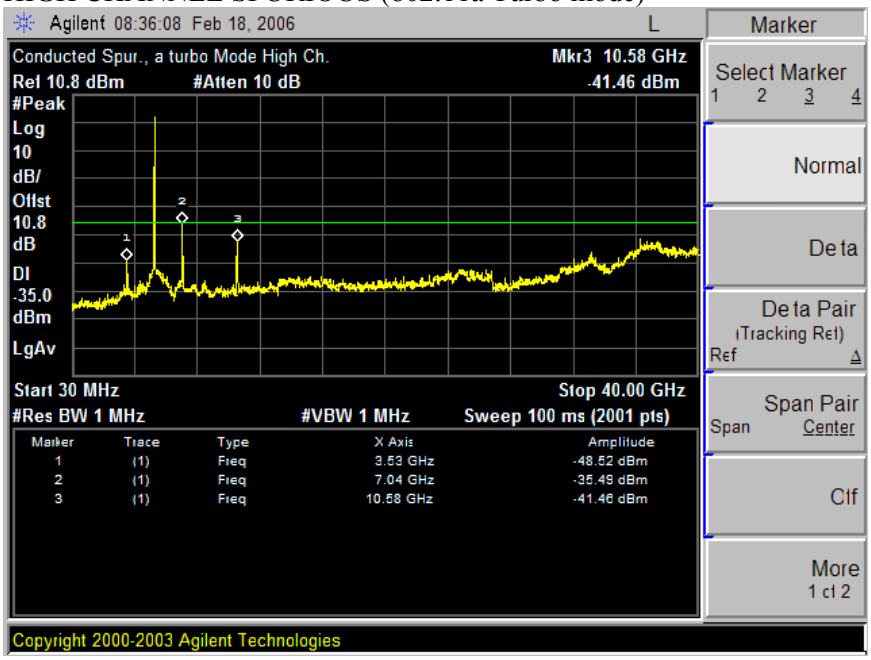
02/23/06 High Frequency Substitution Measurement
Compliance Certification Services, Morgan Hill 5m Chamber Site

Test Engineer:Vien Tran
Project #:06J10094-1
Company: Buffalo
EUT Description:802.11 abg USB adapter with high gain antenna
WLI-U2-AG108HP
Test Target:FCC 15.407 _ FCC UNII
Mode Of Operation:TX, 11a

EMCO Horn 1-18GHz: T73; S/N: 6717 @3m
Horn > 18GHz:
Limit: EIRP
High Pass Filter
Hi Frequency Cables: (2 ft) (2 ~ 3 ft) (4 ~ 6 ft) (12 ft)
Pre-amplifer 1-26GHz: T145 Agilent 3008A
Pre-amplifer 26-40GHz:

f GHz	SA reading (dBuV/m)	Ant. Pol. (H/V)	SG reading (dBm)	CL (dB)	Gain (dBi)	Gain (dBd)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes
LOW CH, 5180 MHz										
6.900	34.0	H	-32.1	2.9	12.0	9.8	-23.0	-7.0	-16.0	P_No Pre-Amp
6.900	26.0	H	-40.1	2.9	12.0	9.8	-31.0	-27.0	-4.0	A_No Pre-Amp
6.900	75.0	H	-24.4	3.6	12.0	9.8	-16.0	-7.0	-9.0	P_With Pre-Amp
6.900	62.2	H	-37.2	3.6	12.0	9.8	-28.8	-27.0	-1.8	A_With Pre-Amp
6.900	30.0	V	-36.7	2.9	12.0	9.8	-27.6	-7.0	-20.6	P_No Pre-Amp
6.900	18.0	V	-48.7	2.9	12.0	9.8	-39.6	-27.0	-12.6	A_No Pre-Amp
6.900	55.6	V	-43.8	3.6	12.0	9.8	-35.4	-7.0	-28.4	P_With Pre-Amp
6.900	52.2	V	-47.2	3.6	12.0	9.8	-38.8	-27.0	-11.8	A_With Pre-Amp
MID CH, 5260 MHz										
7.013	32.6	H	-33.4	2.9	12.0	9.9	-24.2	-7.0	-17.2	P_No Pre-Amp
7.013	24.5	H	-41.5	2.9	12.0	9.9	-32.3	-27.0	-5.3	A_No Pre-Amp
7.013	76.0	H	-23.2	3.6	12.0	9.9	-14.8	-7.0	-7.8	P_With Pre-Amp
7.013	61.0	H	-38.2	3.6	12.0	9.9	-29.8	-27.0	-2.8	A_With Pre-Amp
7.013	31.0	V	-35.8	2.9	12.0	9.9	-26.6	-7.0	-19.6	P_No Pre-Amp
7.013	19.8	V	-47.0	2.9	12.0	9.9	-37.8	-27.0	-10.8	A_No Pre-Amp
7.013	57.0	V	-43.0	3.6	12.0	9.9	-34.6	-7.0	-27.6	P_With Pre-Amp
7.013	54.0	V	-46.0	3.6	12.0	9.9	-37.6	-27.0	-10.6	A_With Pre-Amp
		V								

HIGH CHANNEL SPURIOUS (802.11a Turbo mode)



7.1.8. FREQUENCY STABILITY

LIMIT

§15.407 (g) Manufacturers of UNII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation as specified in the user manual.

TEST PROCEDURE

Frequency stability versus environmental temperature
The equipment under test was connected to an external DC power supply and the RF output was connected to a frequency counter via feed through attenuators. The EUT was placed inside the temperature chamber. After the temperature stabilized for approximately 20 minutes, the frequency of the output signal was recorded from the counter.

Frequency Stability versus Input Voltage
At room temperature (25±5°C), an external variable DC power supply was connected to the EUT. The frequency of the transmitter was measured for 115%, 100% and 85% of the nominal operating input voltage.

RESULTS

No non-compliance noted.

Reference Frequency: High Channel 5.320GHz Limit: Within the band of operation (or +- 10 ppm) = 53.199446 kHz					
Power Supply	**Environment**	**Frequency Deviation Measureed with Time Elapse**			
(Vac)	**Temperature (*C)**	**(GHz)**	**Delta (ppm)**	**Limit (ppm)**	**Delta (kHz)**
115.00	50	5.31998356	-7.327	+- 10	38.980
115.00	40	5.31995814	-2.549	+- 10	13.560
115.00	30	5.31994772	-0.590	+- 10	3.140
115.00	**25**	5.31994458	0.000	+- 10	0.000
115.00	20	5.31994421	0.070	+- 10	-0.370
115.00	10	5.31994598	-0.263	+- 10	1.400
115.00	0	5.31994798	-0.639	+- 10	3.400
115.00	-10	5.31995692	-2.320	+- 10	12.340
115.00	-20	5.31996147	-3.175	+- 10	16.890
115.00	-30	5.31996447	-3.739	+- 10	19.890
103.50	25	5.31994463	-0.009	+- 10	0.050
126.50	25	5.31994455	0.000	+- 10	-0.030

7.2. RADIATED EMISSIONS

7.2.1. 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 40 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in each band.

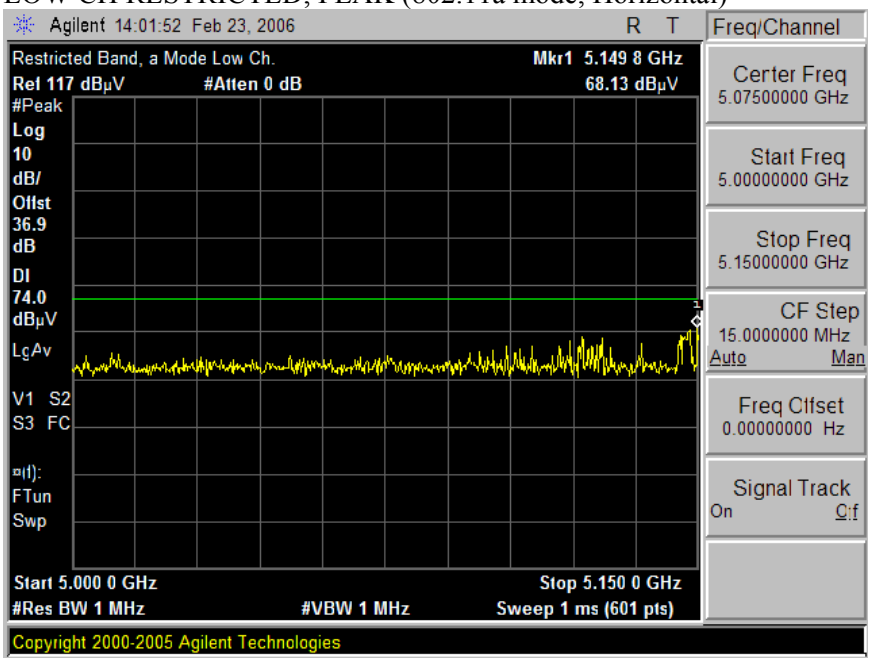
The frequency range of interest is monitored at a fixed antenna height and EUT azimuth. The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized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

7.2.2. TRANSMITTER ABOVE 1 GHZ FOR 5150 TO 5350 MHz BAND

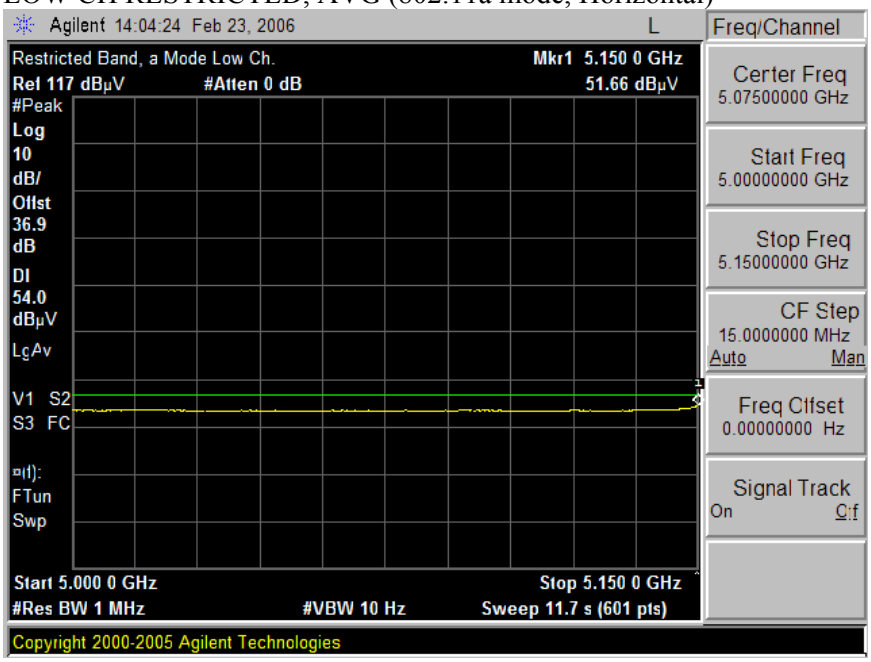
FOR THE A MODE

RESTRICTED BANDEDGE (802.11a MODE, LOW CHANNEL, HORIZONTAL)

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

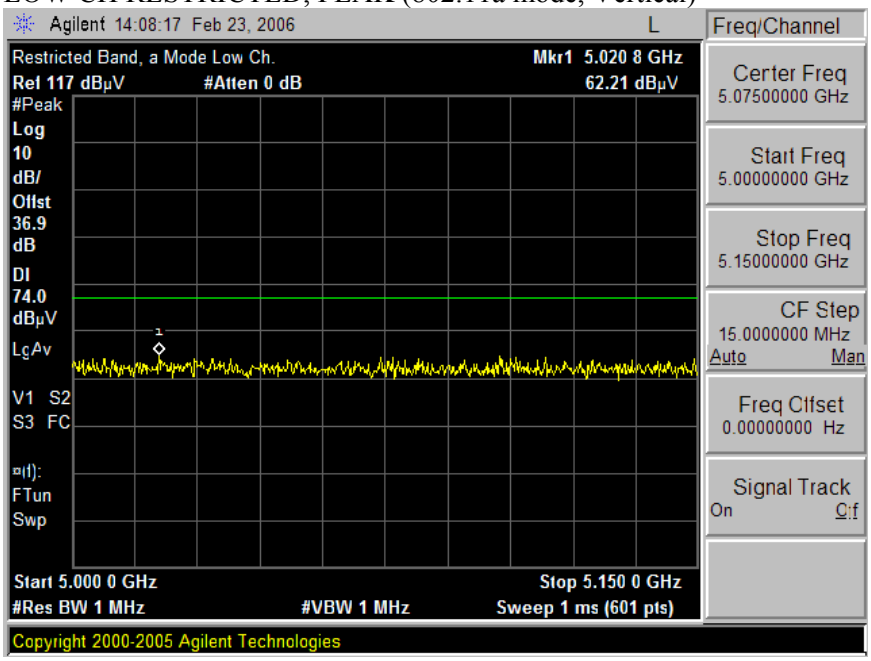


LOW CH RESTRICTED, AVG (802.11a mode, Horizontal)

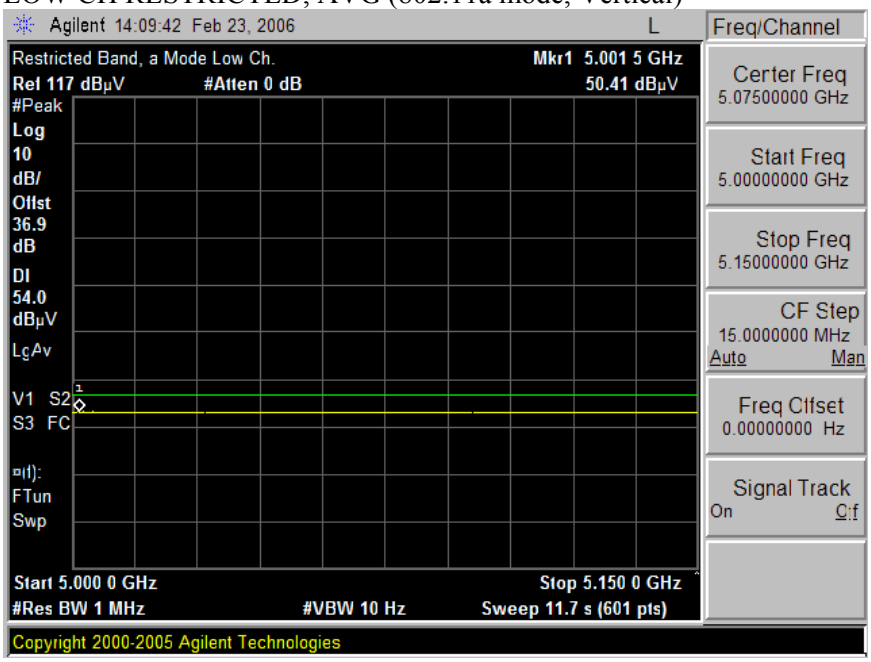


RESTRICTED BANDEDGE (802.11a MODE, LOW CHANNEL, VERTICAL)

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

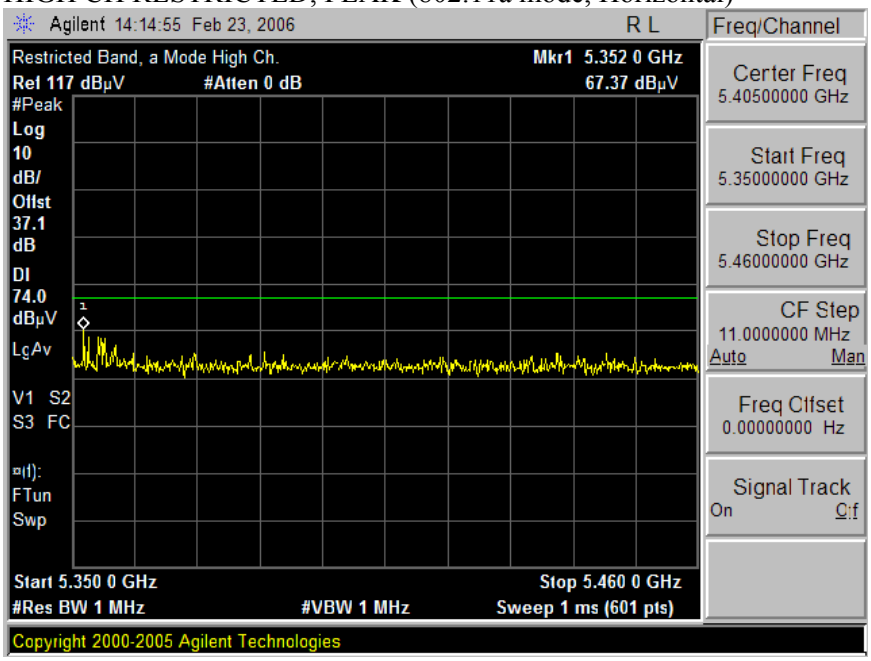


LOW CH RESTRICTED, AVG (802.11a mode, Vertical)

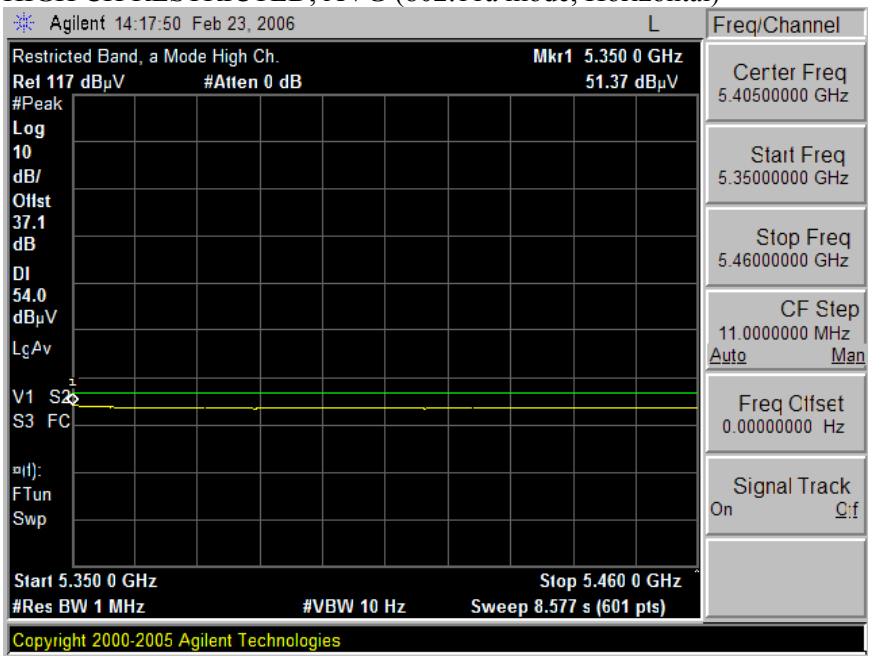


RESTRICTED BANDEDGE (802.11a MODE, HIGH CHANNEL, HORIZONTAL)

HIGH CH RESTRICTED, PEAK (802.11a mode, Horizontal)

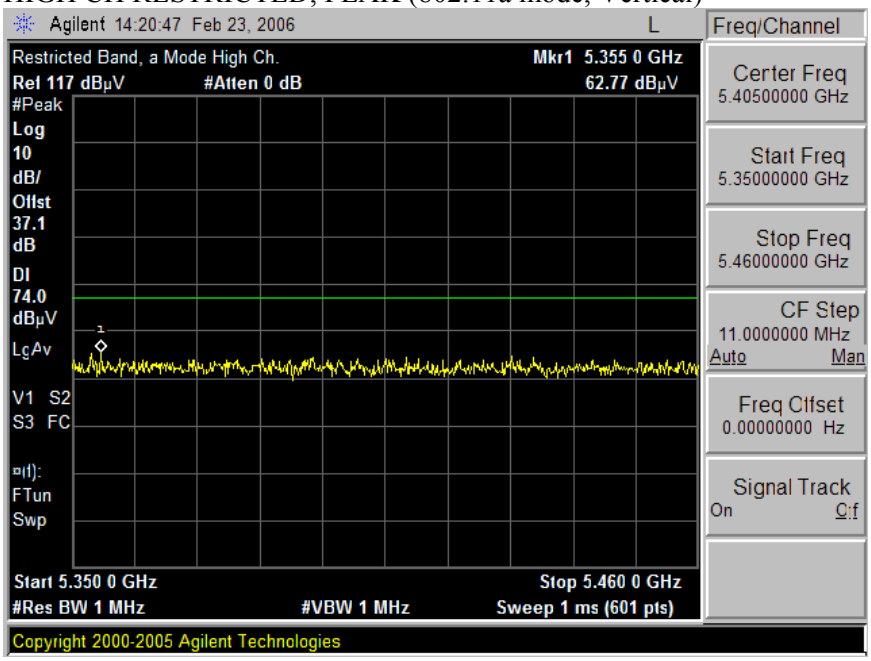


HIGH CH RESTRICTED, AVG (802.11a mode, Horizontal)

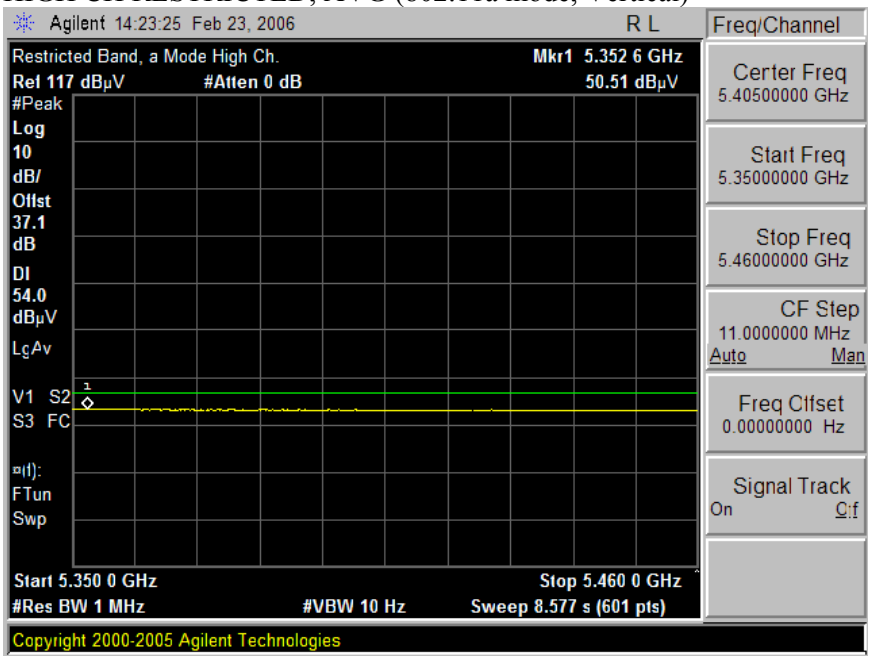


RESTRICTED BANDEDGE (802.11a MODE, HIGH CHANNEL, VERTICAL)

HIGH CH RESTRICTED, PEAK (802.11a mode, Vertical)



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



HARMONICS AND SPURIOUS EMISSIONS (802.11a MODE)

02/23/06 High Frequency Measurement
Compliance Certification Services, Morgan Hill Open Field Site

Test Engineer: Vien tran
Project #: 06J10094-1
Company: Buffalo
EUT Description: 802.11 abg USB adapter with high gain antenna
EUT M/N: WLI-U2-AG108HP
Test Target: 15.407 _FCC UNII
Mode Of Operation: Tx, 11a

Test Equipment:

Horn 1-18GHz	Pre-amplifer 1-26GHz	Pre-amplifer 26-40GHz	Horn > 18GHz	Limit
T73; S/N: 6717 @3m	T145 Agilent 3008A005(			FCC 15.205

Hi Frequency Cables

2 foot cable	3 foot cable	12 foot cable	HPF	Reject Filter
	Vien 187215002	Vien 197209005	HPF_7.6GHz	

Peak Measurements
RBW=VBW=1MHz
Average Measurements
RBW=1MHz ; VBW=10Hz

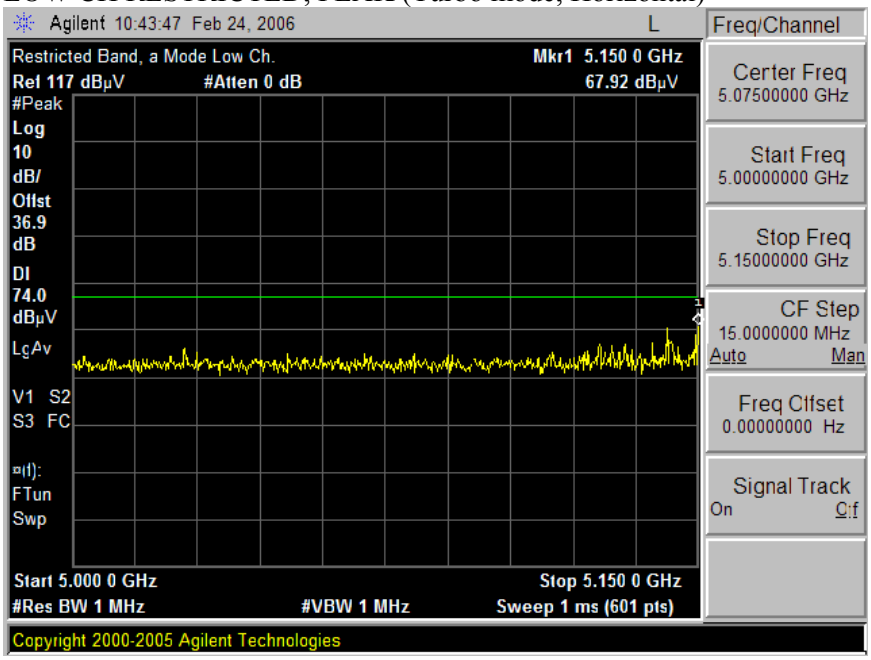
f GHz	Dist (m)	Read Pk dBuV	Read Avg dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	Fltr dB	Peak dBuV/m	Avg dBuV/m	Pk Lim dBuV/m	Avg Lim dBuV/m	Pk Mar dB	Avg Mar dB	Notes (V/H)
Low Ch, 5180MHz															
15.540	3.0	42.9	31.4	39.6	5.8	-32.3	0.0	0.7	56.6	45.2	74	54	-17.4	-8.8	V
15.540	3.0	46.8	33.2	39.6	5.8	-32.3	0.0	0.7	60.6	47.0	74	54	-13.4	-7.0	H
Mid Ch, 5260MHz															
15.780	3.0	43.2	32.1	39.2	5.8	-32.2	0.0	0.7	56.6	45.6	74	54	-17.4	-8.4	V
15.780	3.0	47.0	34.0	39.2	5.8	-32.2	0.0	0.7	60.4	47.5	74	54	-13.6	-6.5	H
High Ch, 5320MHz															
10.640	3.0	50.3	38.0	38.0	4.8	-34.2	0.0	0.8	59.5	47.2	74	54	-14.5	-6.8	V
15.960	3.0	42.0	31.0	38.9	5.9	-32.2	0.0	0.7	55.2	44.2	74	54	-18.8	-9.8	V
10.640	3.0	55.3	44.3	38.0	4.8	-34.2	0.0	0.8	64.5	53.5	74	54	-9.5	-0.5	H
15.960	3.0	45.7	34.0	38.9	5.9	-32.2	0.0	0.7	58.9	47.2	74	54	-15.1	-6.8	H
No other emissions were detected above system noise floor															

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		

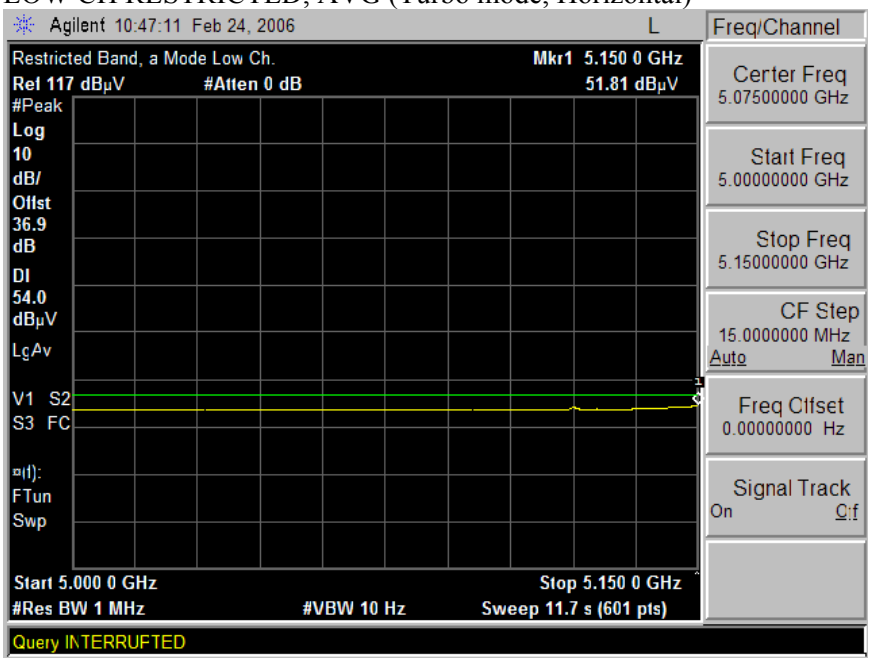
FOR THE A TURBO MODE

RESTRICTED BANDEDGE (802.11a TURBO MODE, LOW CHANNEL, HORIZONTAL)

LOW CH RESTRICTED, PEAK (Turbo mode, Horizontal)

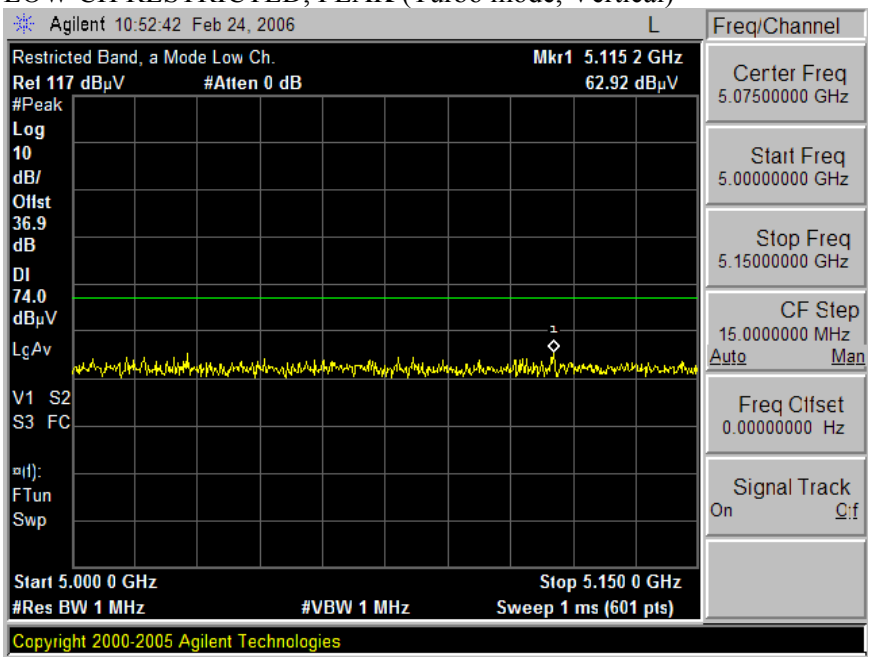


LOW CH RESTRICTED, AVG (Turbo mode, Horizontal)

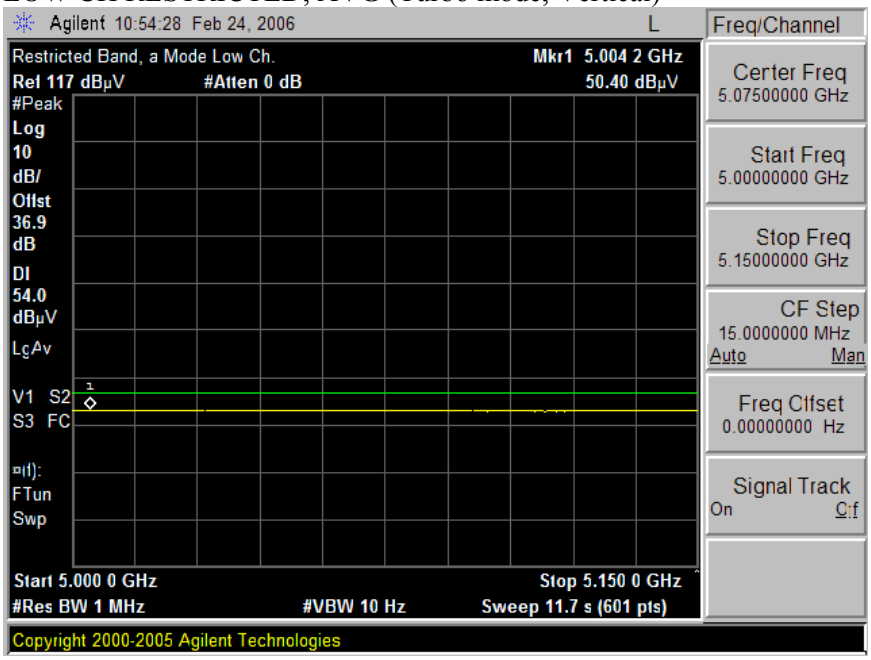


RESTRICTED BANDEDGE (802.11a TURBO MODE, LOW CHANNEL, VERTICAL)

LOW CH RESTRICTED, PEAK (Turbo mode, Vertical)

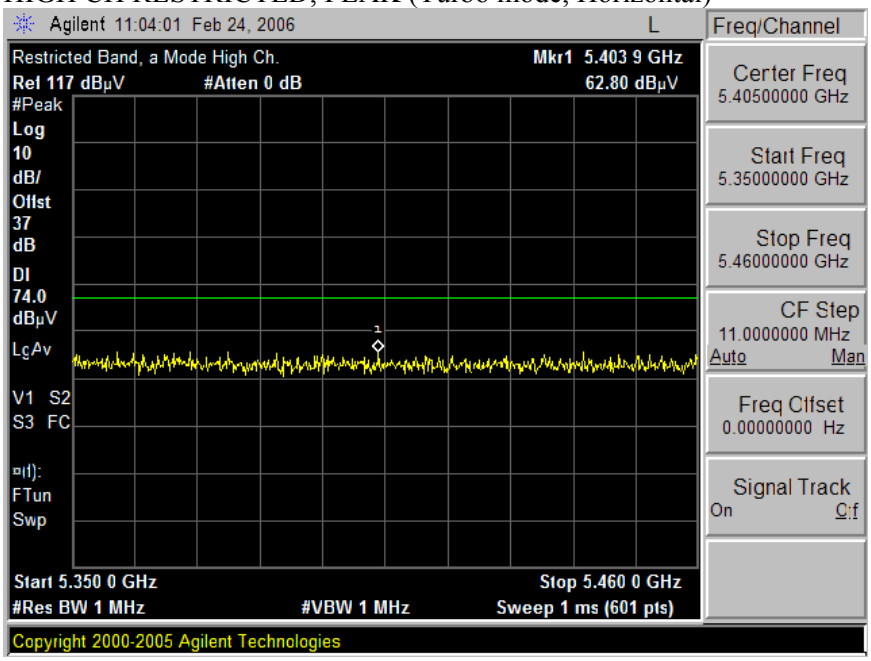


LOW CH RESTRICTED, AVG (Turbo mode, Vertical)

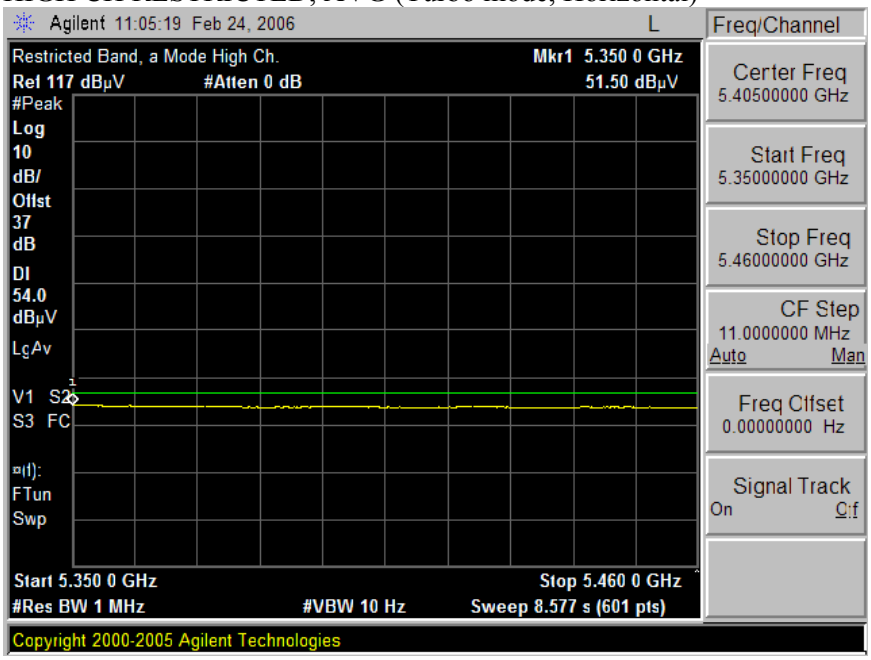


RESTRICTED BANDEDGE (802.11a TURBO MODE, HIGH CHANNEL, HORIZONTAL)

HIGH CH RESTRICTED, PEAK (Turbo mode, Horizontal)

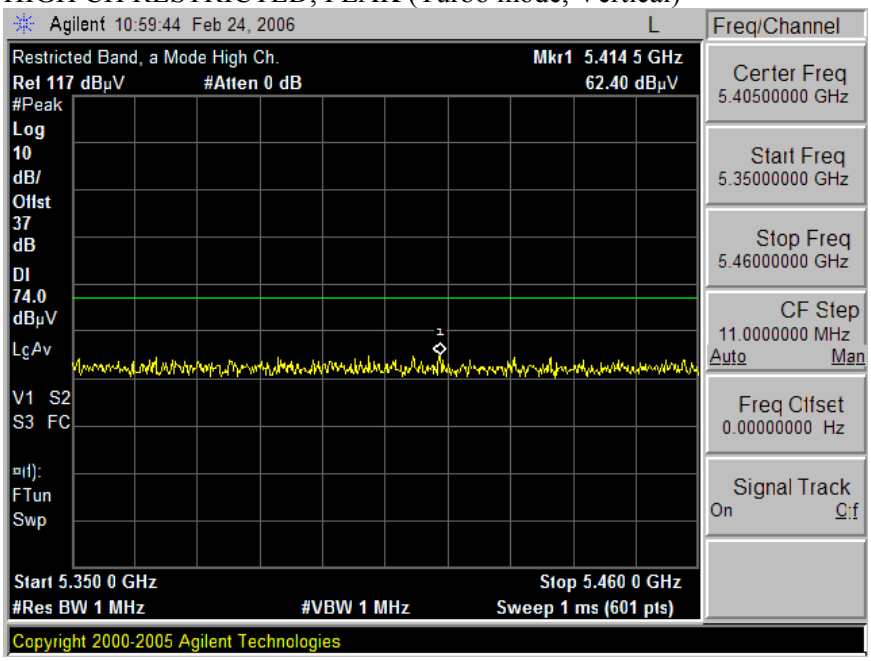


HIGH CH RESTRICTED, AVG (Turbo mode, Horizontal)

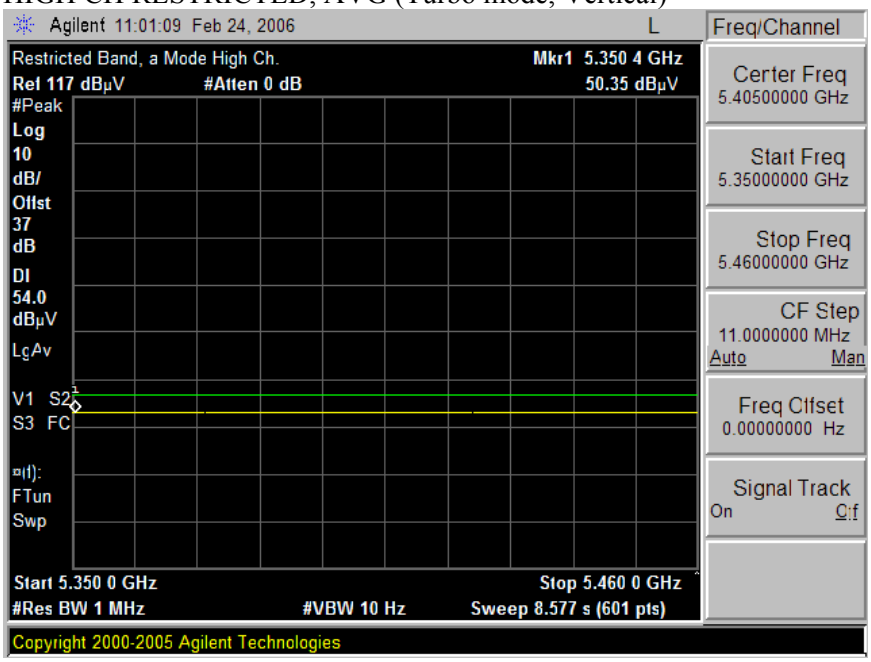


RESTRICTED BANDEDGE (802.11a TURBO MODE, HIGH CHANNEL, VERTICAL)

HIGH CH RESTRICTED, PEAK (Turbo mode, Vertical)



HIGH CH RESTRICTED, AVG (Turbo mode, Vertical)



HARMONICS AND SPURIOUS EMISSIONS (802.11a TURBO MODE)

02/24/06 High Frequency Measurement
Compliance Certification Services, Morgan Hill Open Field Site

Test Engineer: Vien tran
Project #: 06J10094-1
Company: Buffalo
EUT Description: 802.11 abg USB adapter with high gain antenna
WLI-U2-AG108HP
Test Target: 15.407 FCC UNII
Mode Of Operation: Tx, 11a Turbo

Test Equipment:

Horn 1-18GHz	Pre-amplifer 1-26GHz	Pre-amplifer 26-40GHz	Horn > 18GHz	Limit
T73; S/N: 6717 @3m	T145 Agilent 3008A005(			FCC 15.205

Hi Frequency Cables

2 foot cable	3 foot cable	12 foot cable	HPF	Reject Filter
	Vien 187215002	Vien 197209005	HPF_7.6GHz	

Peak Measurements
RBW=VBW=1MHz
Average Measurements
RBW=1MHz ; VBW=10Hz

f GHz	Dist (m)	Read Pk dBuV	Read Avg. dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	Fltr dB	Peak dBuV/m	Avg dBuV/m	Pk Lim dBuV/m	Avg Lim dBuV/m	Pk Mar dB	Avg Mar dB	Notes (V/H)
Low Ch, 5210MHz															
15.630	3.0	44.5	33.0	39.4	5.8	-32.3	0.0	0.7	58.2	46.7	74	54	-15.8	-7.3	V
15.630	3.0	45.0	32.8	39.4	5.8	-32.3	0.0	0.7	58.7	46.5	74	54	-15.3	-7.5	H
Mid Ch, 5250MHz															
15.750	3.0	44.0	33.0	39.2	5.8	-32.3	0.0	0.7	57.5	46.5	74	54	-16.5	-7.5	V
15.750	3.0	44.2	33.1	39.2	5.8	-32.3	0.0	0.7	57.7	46.6	74	54	-16.3	-7.4	H
High Ch, 5290MHz															
15.870	3.0	43.7	32.1	39.0	5.8	-32.2	0.0	0.7	57.0	45.4	74	54	-17.0	-8.6	V
15.870	3.0	44.3	32.2	39.0	5.8	-32.2	0.0	0.7	57.6	45.5	74	54	-16.4	-8.5	H
No other emissions were detected above system noise floor															

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		

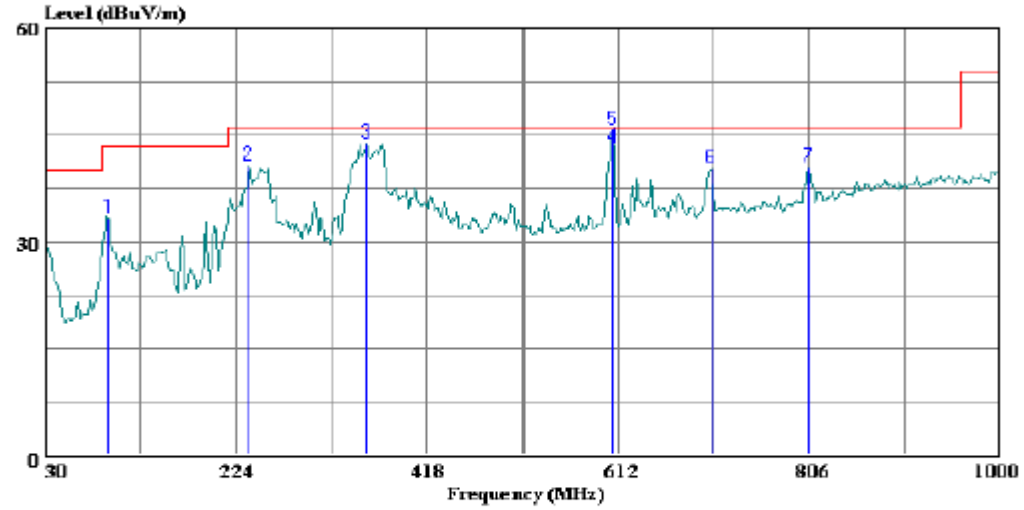
7.2.3. WORST-CASE RADIATED EMISSIONS BELOW 1 GHz

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#: 63 File#: LowEMI.EMI Date: 02-28-2006 Time: 11:57:11



(Audix ATC)

Trace: 48 Ref Trace:

Condition: FCC CLASS-B HORIZONTAL
Test Operator : Thanh Nguyen
Project # : 06U10094
Company : BUFFALO Inc.
EUT : 802.11 a/b/g USB Adapter with high gain
: Antenna
Model No : WLI-U2-AG108HP
Configuration : EUT
Mode of operation: Tx a mode worst case
Target of Test : FCC, DGT Class B

HORIZONTAL DATA

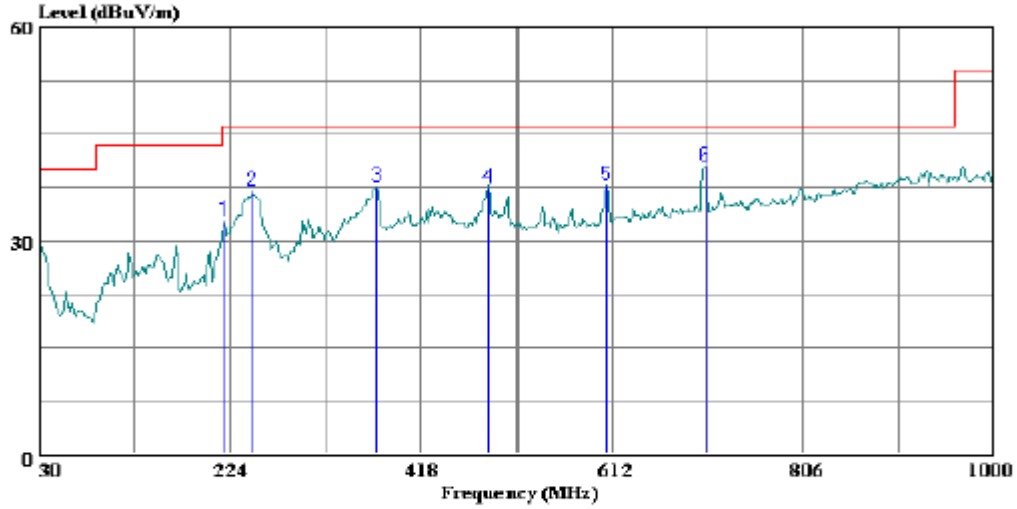
	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1	94.020	23.46	9.85	33.32	43.50	-10.18	Peak
2	237.580	27.26	13.39	40.65	46.00	-5.35	Peak
3	356.890	26.74	17.05	43.79	46.00	-2.21	Peak
4	606.180	21.56	21.63	43.19	46.00	-2.81	QP
5	606.180	23.97	21.63	45.60	46.00	-0.40	Peak
6	706.090	17.21	23.17	40.38	46.00	-5.62	Peak
7	805.030	15.92	24.61	40.53	46.00	-5.47	Peak

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#: 64 File#: LowEMI.EMI Date: 02-23-2006 Time: 16:29:37



(Audix ATC)

Trace: 52 Ref Trace:

Condition: FCC CLASS-B VERTICAL
Test Operator : Thanh Nguyen
Project # : 06U10094
Company : BUFFALO Inc.
EUT : 802.11 a/b/g USB Adapter with high gain
: Antenna
Model No : WLI-U2-AG108HP
Configuration : EUT,
Mode of operation: Tx a mode worst case
Target of Test : FCC, DGT Class B

VERTICAL DATA

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1	218.180	20.29	12.51	32.80	46.00	-13.20	Peak
2	247.280	23.31	13.75	37.05	46.00	-8.95	Peak
3	373.380	20.08	17.46	37.54	46.00	-8.46	Peak
4	486.870	17.32	19.97	37.29	46.00	-8.71	Peak
5	606.180	16.24	21.63	37.87	46.00	-8.13	Peak
6	706.090	17.24	23.17	40.41	46.00	-5.59	Peak

7.3. 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:

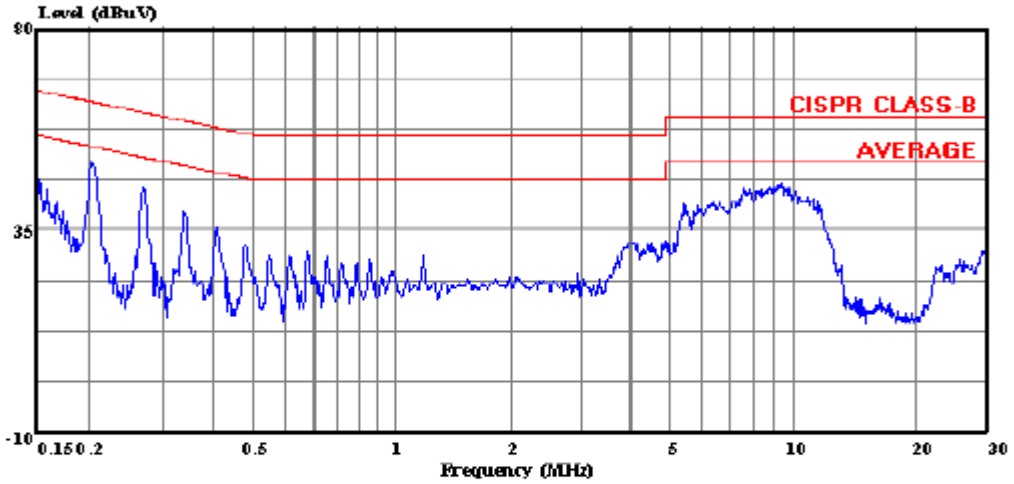
6 WORST EMISSIONS

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
0.20	49.86	--	--	0.00	63.49	53.49	-13.63	-3.63	L1
1.29	28.44	--	--	0.00	56.00	46.00	-27.56	-17.56	L1
15.47	31.10	--	--	0.00	60.00	50.00	-28.90	-18.90	L1
0.20	48.02	--	--	0.00	63.45	53.45	-15.43	-5.43	L2
1.29	29.92	--	--	0.00	56.00	46.00	-26.08	-16.08	L2
10.96	44.16	--	--	0.00	60.00	50.00	-15.84	-5.84	L2
6 Worst Data									

LINE 1 RESULTS

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

Data#: 28 File#: Fcclc.emi Date: 02-24-2006 Time: 18:13:36



(Audix ATC)

Trace: Ref Trace:

Condition: CISPR CLASS-B
Test Operator : Thanh Nguyen
Project # : 05U10094
Company : BUFFALO Inc.
EUT Description: 802.11 a/b/g USB Adapter with high gain antenna
Model : WLI-U2-AG108HP
EUT Config : EUT with Laptop
Mode Of Oper : a mode worst case
Target : FCC Class B
Power Source : L1: Peak (Blue)
: 115 VAC, 60 Hz

LINE 2 RESULTS