Intel Corporation

Clane2

EMC Test Report

Report No. INTE5221

Report Prepared By

www.nwemc.com
1-888-EMI-CERT

NORTHWEST EMC

22975 NW Evergreen Parkway
Suite 400
Hillsboro, Oregon 97124

Certificate of Test

Last Date of Test: May 14, 2010
Intel Corporation
Model: Clane2

Emissions			
Test Description	**Specification**	**Test Method**	**Pass/Fail**
Spurious Radiated Emissions	FCC 15.247:2010	ANSI C63.10:2009	**Pass**
Transmission Pulse Duration	FCC 15.247:2010	ANSI C63.10:2009	**Pass**
Occupied Bandwidth	FCC 15.247:2010	ANSI C63.10:2009	**Pass**
Output Power	FCC 15.247:2010	ANSI C63.10:2009	**Pass**
Band Edge Compliance	FCC 15.247:2010	ANSI C63.10:2009	**Pass**
Spurious Conducted Emissions	FCC 15.247:2010	ANSI C63.10:2009	**Pass**
Power Spectral Density	FCC 15.247:2010	ANSI C63.10:2009	**Pass**
AC Powerline Conducted Emissions	FCC 15.207:2010	ANSI C63.10:2009	**Pass**

Modifications made to the product
See the Modifications section of this report

Test Facility

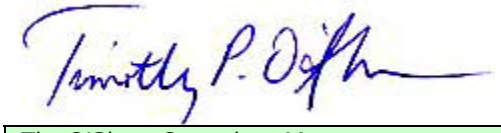
The measurement facility used to collect the data is located at:

Northwest EMC, Inc.
22975 NW Evergreen Parkway, Suite 400
Hillsboro, OR 97124

Phone: (503) 844-4066 Fax: 844-3826

This site has been fully described in a report filed with and accepted by the FCC (Federal Communications Commission) and Industry Canada (Site filing #2834D-1).

Approved By:



Tim O'Shea, Operations Manager

NVLAP Lab Code: 200630-0

This report must not be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government of the United States of America.

Product compliance is the responsibility of the client, therefore the tests and equipment modes of operation represented in this report were agreed upon by the client, prior to testing. This Report may only be duplicated in its entirety. The results of this test pertain only to the sample(s) tested. The specific description is noted in each of the individual sections of the test report supporting this certificate of test.

Revision Number	Description	Date	Page Number
00	None		

Barometric Pressure

The recorded barometric pressure has been normalized to sea level.

Accreditations and Authorizations

FCC

Accredited by NVLAP for performance of FCC radio, digital, and ISM device testing. Our Open Area Test Sites, certification chambers, and conducted measurement facilities have been fully described in reports filed with the FCC and accepted by the FCC in letters maintained in our files. Northwest EMC has been accredited by ANSI to ISO / IEC Guide 65 as a product certifier. We have been designated by the FCC as a Telecommunications Certification Body (TCB). This allows Northwest EMC to certify transmitters to FCC specifications in accordance with 47 CFR 2.960 and 2.962.

NVLAP

Northwest EMC, Inc. is accredited under the United States Department of Commerce, National Institute of Standards and Technology, and National Voluntary Laboratory Accreditation Program for satisfactory compliance with the requirements of ISO/IEC 17025 for Testing Laboratories. The NVLAP accreditation encompasses Electromagnetic Compatibility Testing in accordance with the European Union EMC Directive 2004/108/EC, and ANSI C63.4. Additionally, Northwest EMC is accredited by NVLAP to perform radio testing in accordance with the European Union R&TTE Directive 1999/5/EEC, the requirements of FCC, and the RSS radio standards for Industry Canada.

NVLAP LAB CODE 200629-0
NVLAP LAB CODE 200630-0
NVLAP LAB CODE 200676-0
NVLAP LAB CODE 200761-0
NVLAP LAB CODE 200881-0

Industry Canada

Accredited by NVLAP for performance of Industry Canada RSS and ICES testing. Our Open Area Test Sites and certification chambers comply with RSS-Gen, Issue 2 and have been filed with Industry Canada and accepted. Northwest EMC has been accredited by ANSI to ISO / IEC Guide 65 as a product certifier. We have been designated by NIST and recognized by Industry Canada as a Certification Body (CB) per the APEC Mutual Recognition Arrangement (MRA). This allows Northwest EMC to certify transmitters to Industry Canada technical requirements. (*Site Filing Numbers - Hillsboro: 2834D-1, 2834D-2, Sultan: 2834C-1, Irvine: 2834B-1, 2834B-2, Brooklyn Park: 2834E-1)*

CAB

Designated by NIST and validated by the European Commission as a Conformity Assessment Body (CAB) to conduct tests and approve products to the EMC directive and transmitters to the R&TTE directive, as described in the U.S. - EU Mutual Recognition Agreement.

NEMKO

Assessed and accredited by NEMKO (Norwegian testing and certification body) for European emissions and immunity testing. As a result of NEMKO's laboratory assessment, they will accept test results from Northwest EMC, Inc. for product certification (Authorization No. ELA 119).

Accreditations and Authorizations

Australia/New Zealand

The National Association of Testing Authorities (NATA), Australia has been appointed by the ACA as an accreditation body to accredit test laboratories and competent bodies for EMC standards. Accredited test reports or assessments by competent bodies must carry the NATA logo. Test reports made by an overseas laboratory that has been accredited for the relevant standards by an overseas accreditation body that has a Mutual Recognition Agreement (MRA) with NATA are also accepted as technical grounds for product conformity. The report should be endorsed with the respective logo of the accreditation body (NVLAP).

VCCI

Accepted as an Associate Member to the VCCI, Acceptance No. 564. Conducted and radiated measurement facilities have been registered in accordance with Regulations for Voluntary Control Measures, Article 8. *(Registration Numbers. - Hillsboro: C-1071, R-1025, G-84, C-2687, T-1658, and R-2318, Irvine: R-1943, G-85, C-2766, and T-1659, Sultan: R-871, G-83, C-1784, and T-1511, Brooklyn Park: R-3125, G-86, G-141, C-3464, and T-1634).*

BSMI

Northwest EMC has been designated by NIST and validated by C-Taipei (BSMI) as a CAB to conduct tests as described in the APEC Mutual Recognition Agreement (US0017). License No.SL2-IN-E-1017.

GOST

Northwest EMC, Inc. has been assessed and accredited by the Russian Certification bodies Certinform VNIINMASH, CERTINFO, SAMTES, and Federal CHEC, to perform EMC and Hygienic testing for Information Technology Products. As a result of their laboratory assessment, they will accept test results from Northwest EMC, Inc. for product certification

KCC

Northwest EMC, Inc is a CAB designated by MRA partners and recognized by Korea. (*Assigned Lab Numbers: Hillsboro: US0017, Irvine: US0158, Sultan: US0157)*

VIETNAM

Vietnam MIC has approved Northwest EMC as an accredited test lab. Per Decision No. 194/QD-QLCL (dated December 15, 2009), Northwest EMC test reports can be used for Vietnam approval submissions.

SCOPE

For details on the Scopes of our Accreditations, please visit:
http://www.nwemc.com/accreditations/

Northwest EMC Locations

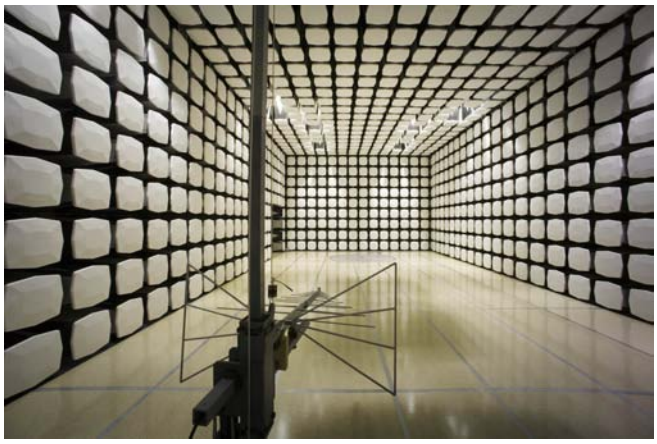
Oregon
Labs EV01-EV12
22975 NW Evergreen Pkwy
Suite 400
Hillsboro, OR 97124
(503) 844-4066

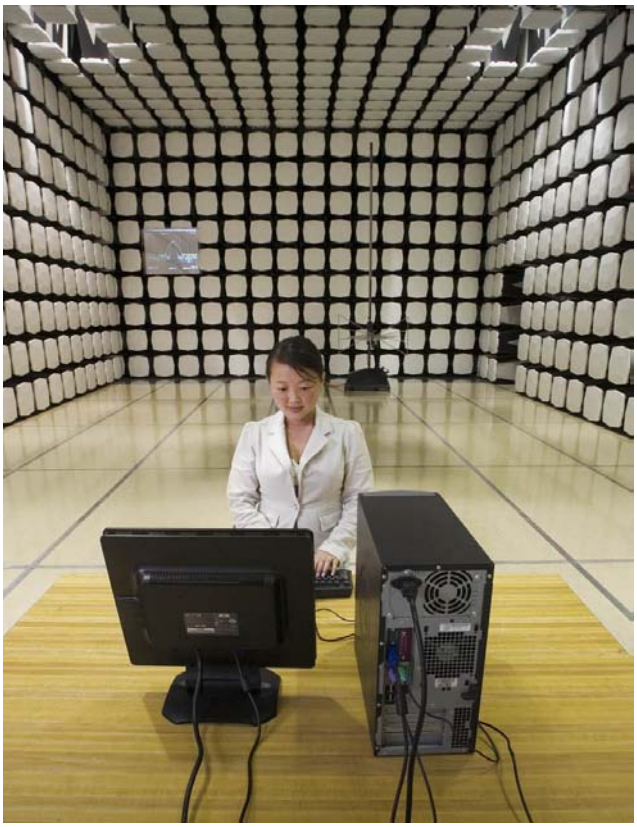
California
Labs OC01-OC13
41 Tesla
Irvine, CA 92618
(949) 861-8918

Minnesota
Labs MN01-MN08
9349 W Broadway Ave.
Brooklyn Park,
MN 55445
(763) 425-2281

Washington
Labs SU01-SU07
14128 339th Ave. SE
Sultan, WA 98294
(360) 793-8675

New York
Labs WA01-WA04
4939 Jordan Rd.
Elbridge, NY 13060
(315) 685-0796





Party Requesting the Test

Company Name:	Intel Corporation
Address:	5200 NE Elam Young Pkwy
City, State, Zip:	Hillsboro, OR 97124
Test Requested By:	Bob Hughes
Model:	Clane2
First Date of Test:	May 11, 2010
Last Date of Test:	May 14, 2010
Receipt Date of Samples:	May 11, 2010
Equipment Design Stage:	Preproduction
Equipment Condition:	No Damage

Information Provided by the Party Requesting the Test

Functional Description of the EUT (Equipment Under Test):
802.11b/g radio module

Testing Objective:
To demonstrate compliance with FCC 15.247 requirements

CONFIGURATION 1 INTE5221

EUT			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
EUT - 802.11(b/g) radio module	Intel	Clane2	5

Peripherals in test setup boundary			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
Battery Pack	Intel	none	none

Cables					
Cable Type	**Shield**	**Length (m)**	**Ferrite**	**Connection 1**	**Connection 2**
DC	No	0.3m	No	EUT - 802.11(b/g) radio module	Battery Pack
PA = Cable is permanently attached to the device. Shielding and/or presence of ferrite may be unknown.					

CONFIGURATION 2 INTE5221

EUT			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
EUT - 802.11(b/g) radio module	Intel	Clane2	5

Peripherals in test setup boundary			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
Test fixture	Intel	UART Programmer Rev 1.1	none

Remote Equipment Outside of Test Setup Boundary			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
Host PC	unknown	unknown	unknown

Cables					
Cable Type	**Shield**	**Length (m)**	**Ferrite**	**Connection 1**	**Connection 2**
USB	Yes	1.0m	No	Test fixture	Host PC
PA = Cable is permanently attached to the device. Shielding and/or presence of ferrite may be unknown.					

CONFIGURATION 3 INTE5221

EUT			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
EUT - 802.11(b/g) radio module	Intel	Clane2	5

Peripherals in test setup boundary			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
Linear DC Supply	Topward	TPS-2000	TPD

Cables					
Cable Type	**Shield**	**Length (m)**	**Ferrite**	**Connection 1**	**Connection 2**
DC	No	0.5m	No	EUT - 802.11(b/g) radio module	Linear DC Supply
PA = Cable is permanently attached to the device. Shielding and/or presence of ferrite may be unknown.					

Equipment modifications					
Item	Date	Test	Modification	Note	Disposition of EUT
1	5/11/2010	Occupied Bandwidth	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Northwest EMC following the test.
2	5/11/2010	Band Edge Compliance	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Northwest EMC following the test.
3	5/11/2010	Output Power – Channel Power	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Northwest EMC following the test.
4	5/12/2010	Power Spectral Density	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Northwest EMC following the test.
5	5/12/2010	Transmission Pulse Duration	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Northwest EMC following the test.
6	5/13/2010	Spurious Radiated Emissions	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Northwest EMC following the test.
7	5/12/2010	Spurious Conducted Emissions	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Northwest EMC following the test.
8	5/14/2010	AC Powerline Conducted Emissions	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	Scheduled testing was completed.

TRANSMISSION PULSE DURATION

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval
Spectrum Analyzer	Agilent	E4407B	AAU	12/12/2008	24
Attenuator 20 dB, SMA M/F 26GHz	S.M. Electronics	SA26B-20	AUY	7/21/2009	13
26 GHz DC Block, SMA	Pasternack	PE8210	AME	10/19/2009	13
EV01 Cables	N/A	Bilog Cables	EVA	7/10/2009	13

MEASUREMENT UNCERTAINTY

A measurement uncertainty estimation has been performed for each test per our internal quality document WP 342. The estimation is used to compare the measured result with its "true" or theoretically correct value. The expanded measurement uncertainty for radiated emissions measurements is less than +/- 4 dB, and for conducted emissions measurements is less than +/- 2.7 dB. Our measurement data meets or exceeds the measurement uncertainty requirements of CISPR 16-4; therefore, the test data can be compared directly to the specification limit to determine compliance. The calculations for measurement uncertainty are available upon request.

TEST DESCRIPTION

Per ANSI C63.10, for unlicensed wireless devices unable to be configured for 100 % duty cycle even in test mode, the system should be configured for the longest duration duty cycle supported. The transmission pulse duration is that time over which the unlicensed wireless device is on and transmitting at its maximum output power.

Measurement methods defined in ANSI C63.10 are often based upon the relationship between the EUT transmission pulse duration and the sweep speed of the measurement analyzer.

The measurements were made using a direct connection between the RF output of the EUT and the spectrum analyzer. The hopping function of the EUT was enabled.

NORTHWEST EMC

TRANSMISSION PULSE DURATION

XMit 2010.01.14

EUT:	Clane2			**Work Order:**	INTE5221
Serial Number:	5			**Date:**	05/12/10
Customer:	Intel Corporation			**Temperature:**	23°C
Attendees:	Bob Hughes			**Humidity:**	38%
Project:	None			**Barometric Pres.:**	30.05 in
Tested by:	Rod Peloquin	**Power:**	5 VDC via USB	**Job Site:**	EV06

TEST SPECIFICATIONS	Test Method
FCC 15.247:2010	ANSI C63.10:2009

COMMENTS

None

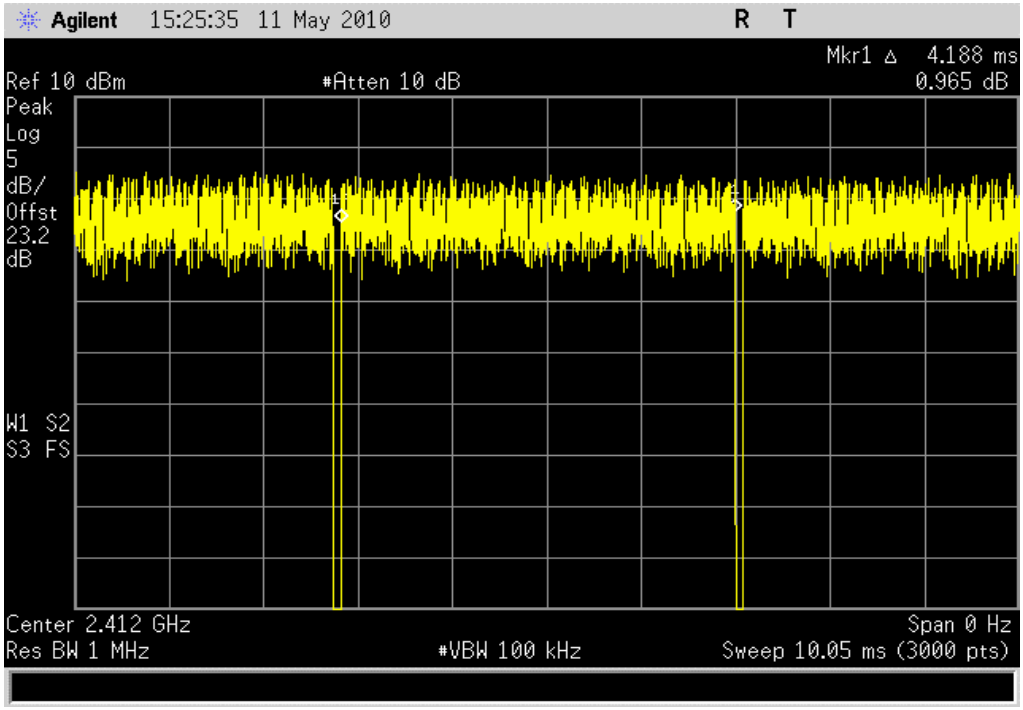
DEVIATIONS FROM TEST STANDARD

No Deviations

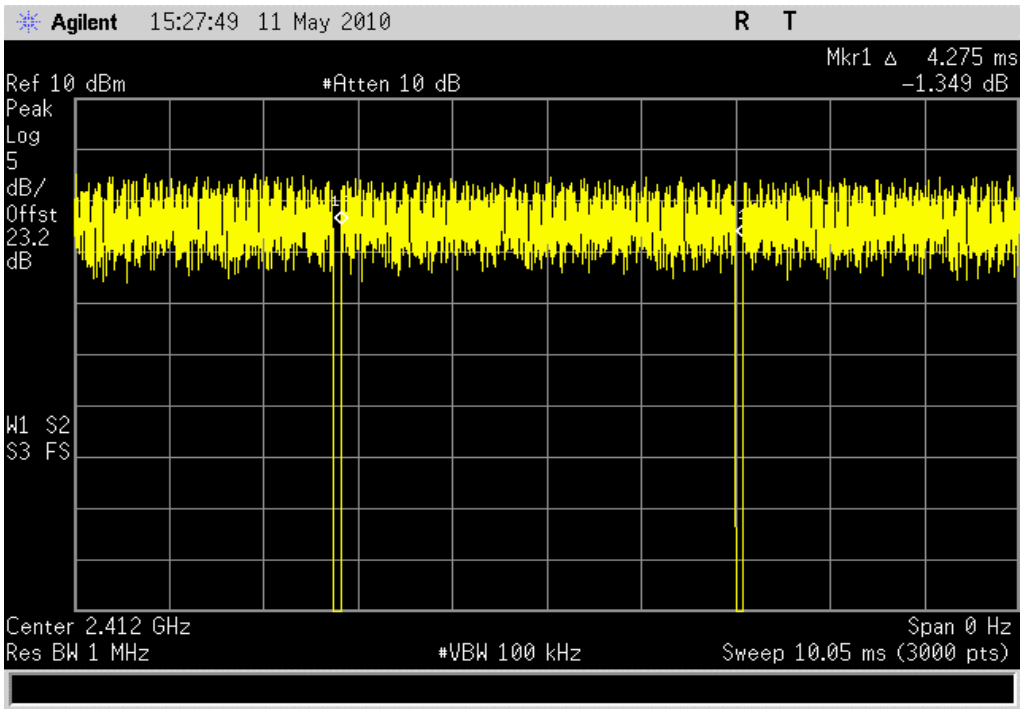
Configuration #	2	Signature

		Value	Limit	Results
802.11(b) 1 Mbps				
	Pulse Width	4.188 ms	N/A	N/A
	Period	4.275 ms	N/A	N/A
802.11(b) 11 Mbps				
	Pulse Width	0.455 ms	N/A	N/A
	Period	0.543 ms	N/A	N/A
802.11(g) 6 Mbps				
	Pulse Width	0.681 ms	N/A	N/A
	Period	0.780 ms	N/A	N/A
802.11(g) 36 Mbps				
	Pulse Width	0.122 ms	N/A	N/A
	Period	0.220 ms	N/A	N/A
802.11(g) 54 Mbps				
	Pulse Width	0.086 ms	N/A	N/A
	Period	0.183 ms	N/A	N/A

802.11(b) 1 Mbps, Pulse Width					
Result:	N/A	**Value:**	4.188 ms	**Limit:**	N/A

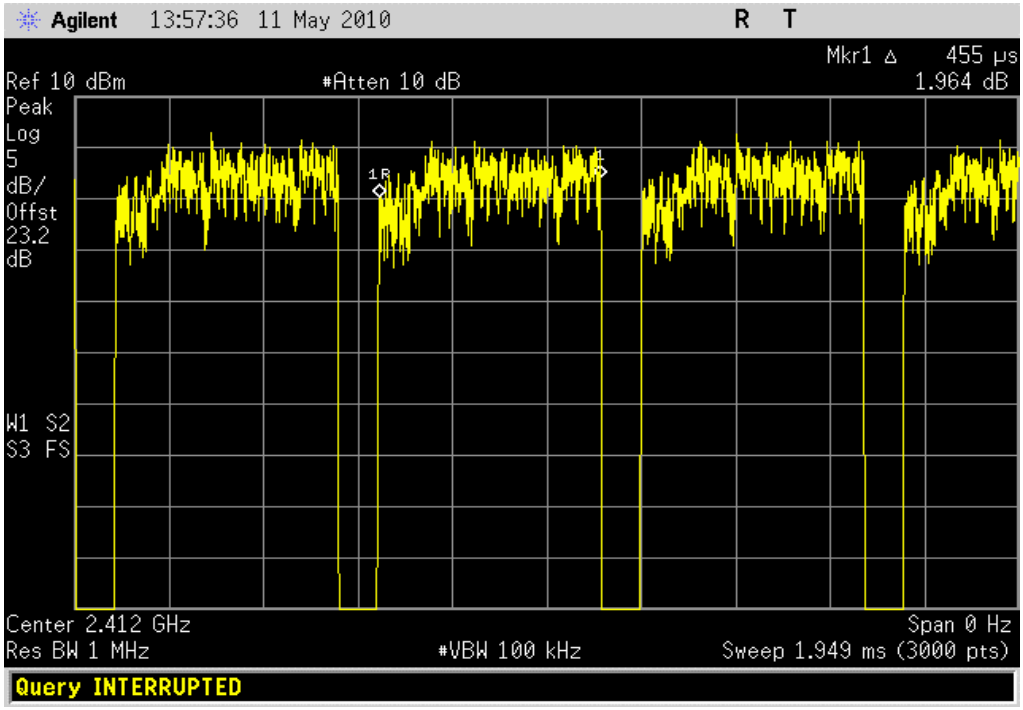


802.11(b) 1 Mbps, Period					
Result:	N/A	**Value:**	4.275 ms	**Limit:**	N/A

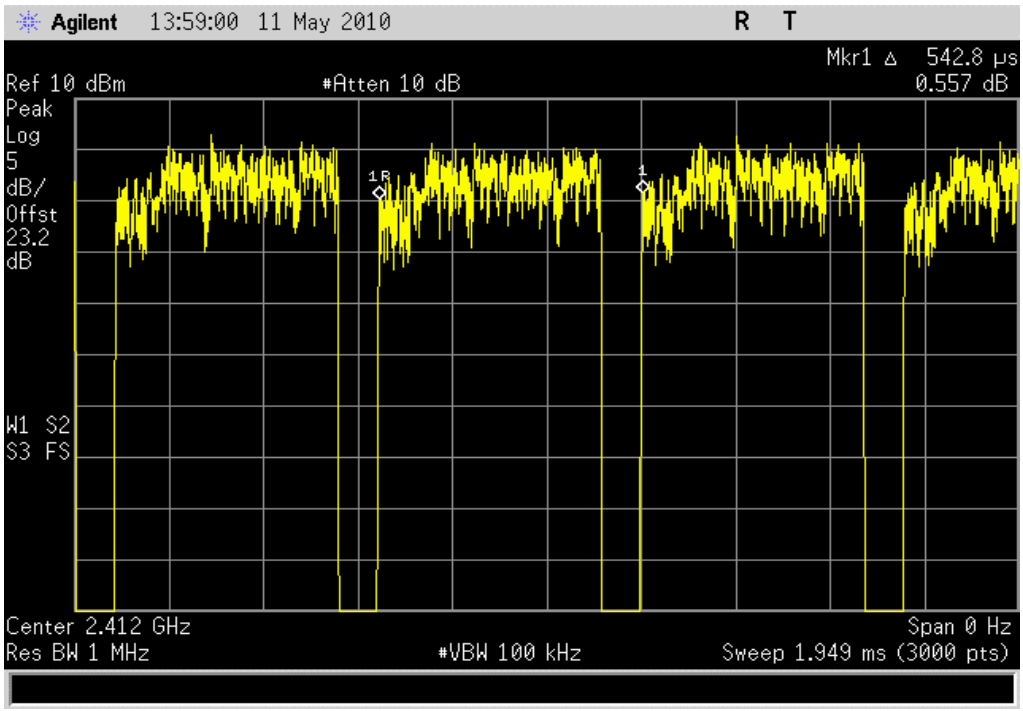


TRANSMISSION PULSE DURATION

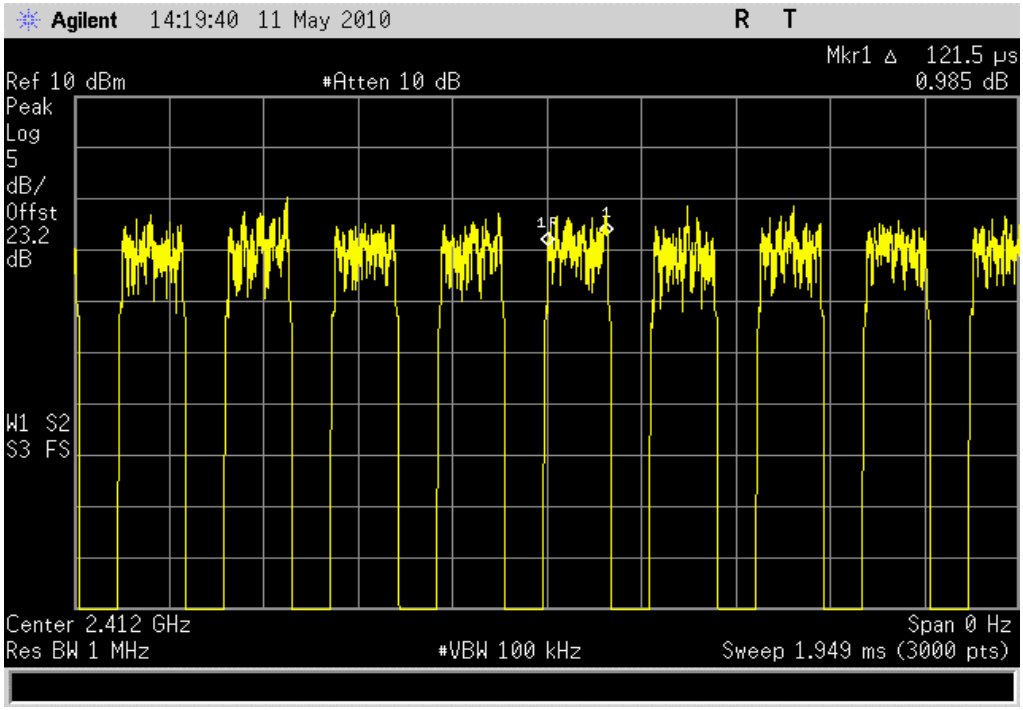
802.11(b) 11 Mbps, Pulse Width					
Result:	N/A	**Value:**	0.455 ms	**Limit:**	N/A



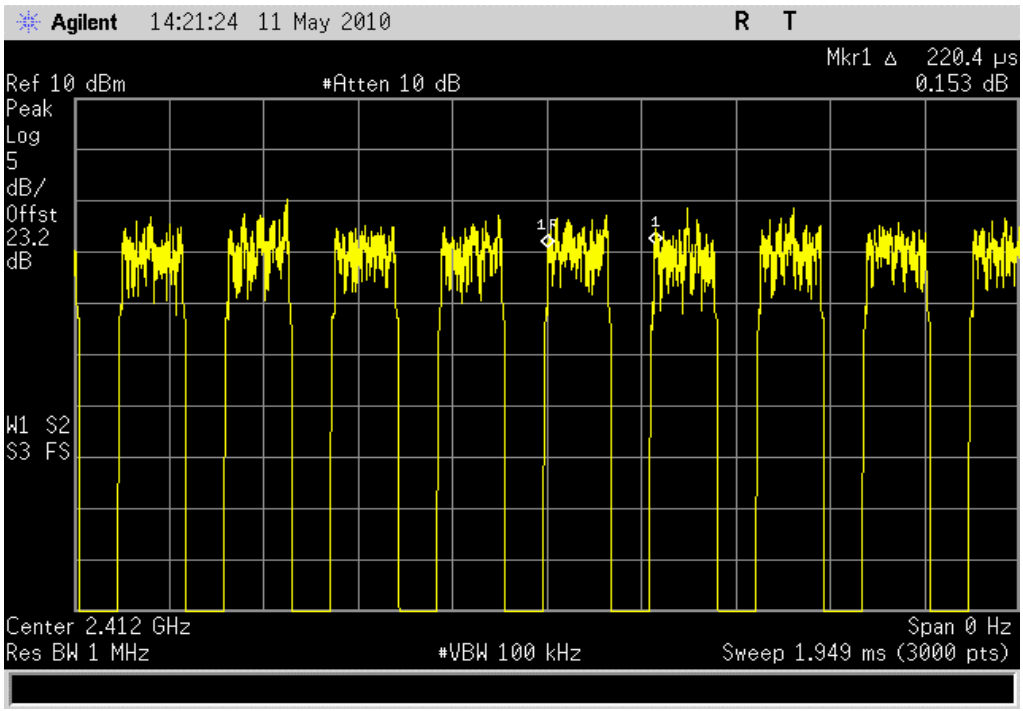
802.11(b) 11 Mbps, Period					
Result:	N/A	**Value:**	0.543 ms	**Limit:**	N/A



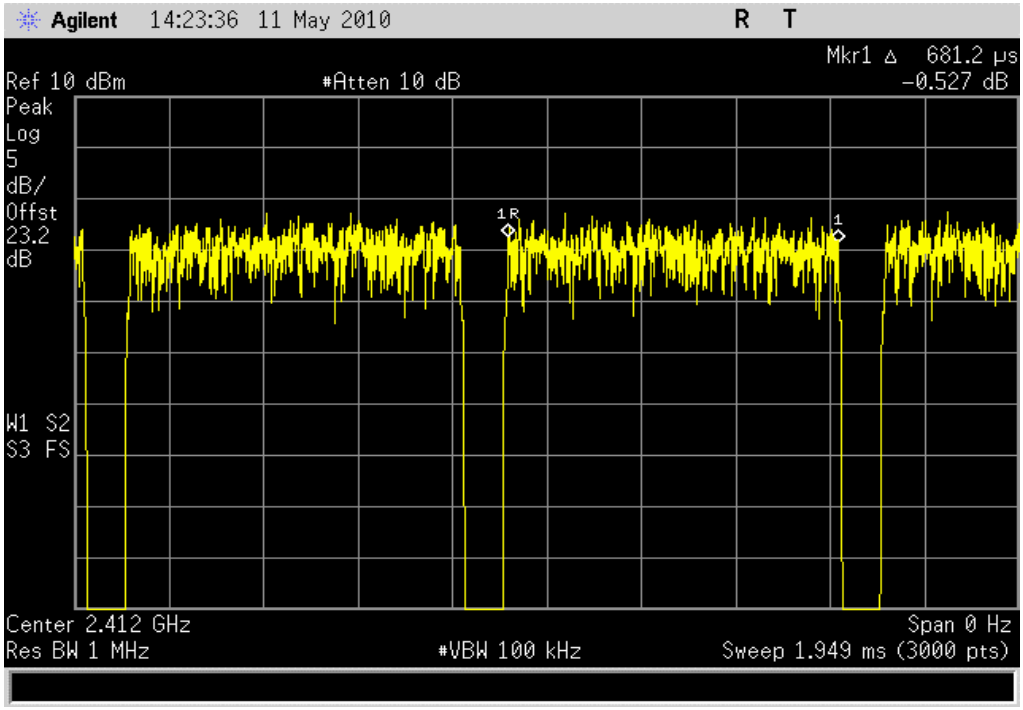
802.11(g) 36 Mbps, Pulse Width					
Result:	N/A	**Value:**	0.122 ms	**Limit:**	N/A



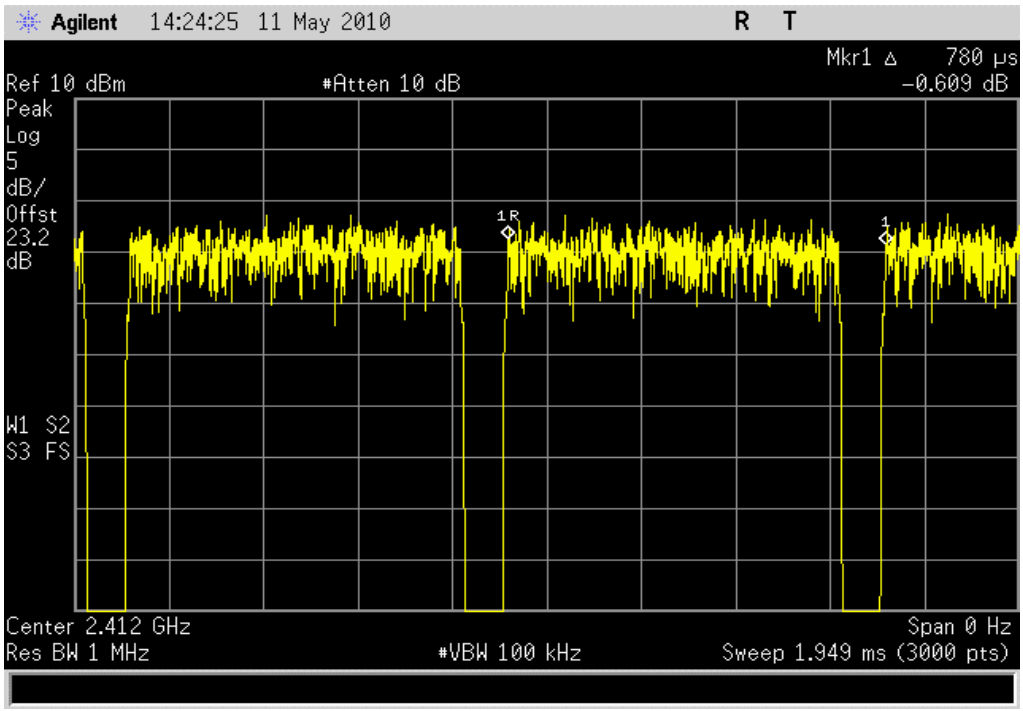
802.11(g) 36 Mbps, Period					
Result:	N/A	**Value:**	0.220 ms	**Limit:**	N/A



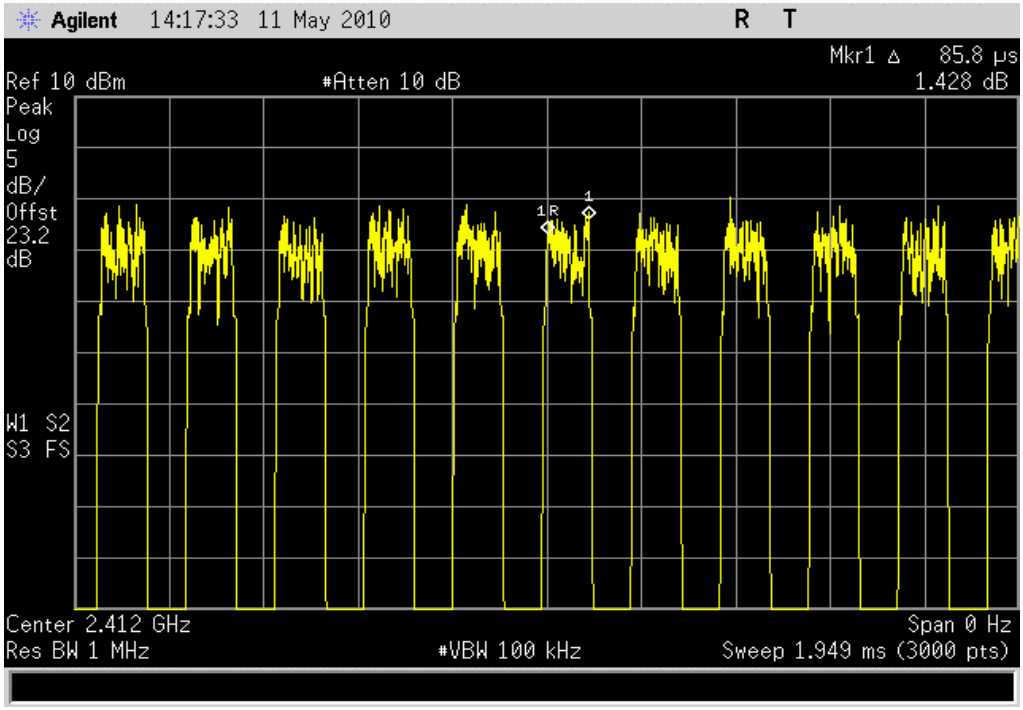
802.11(g) 6 Mbps, Pulse Width					
Result:	N/A	**Value:**	0.681 ms	**Limit:**	N/A



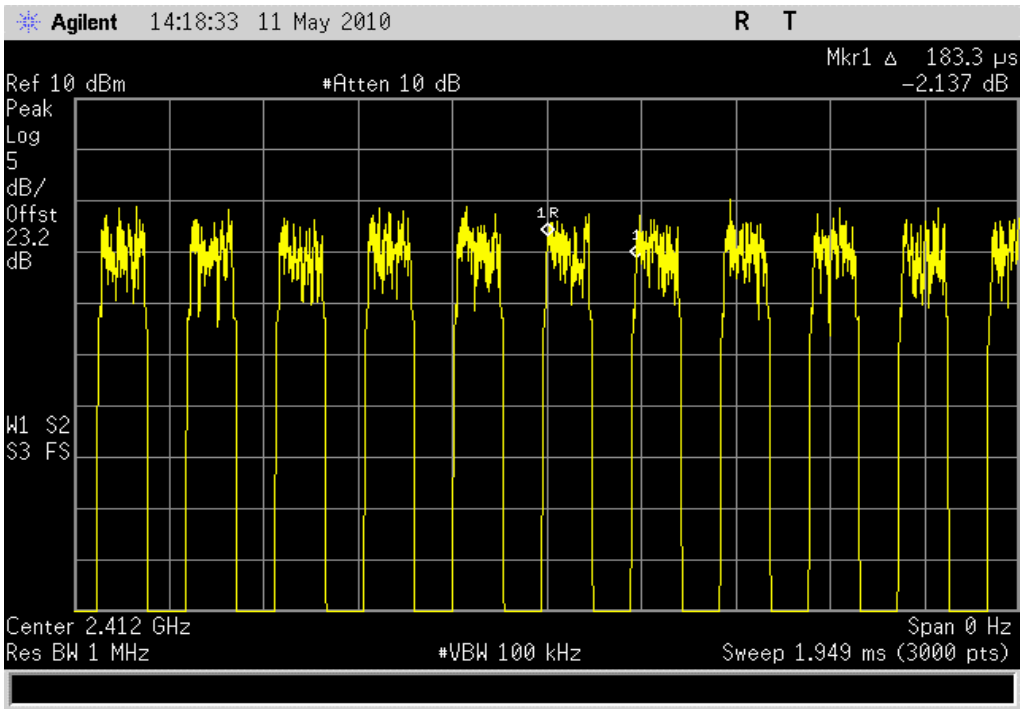
802.11(g) 6 Mbps, Period					
Result:	N/A	**Value:**	0.780 ms	**Limit:**	N/A



802.11(g) 54 Mbps, Pulse Width					
Result:	N/A	**Value:**	0.086 ms	**Limit:**	N/A



802.11(g) 54 Mbps, Period					
Result:	N/A	**Value:**	0.183 ms	**Limit:**	N/A



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TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval
Spectrum Analyzer	Agilent	E4407B	AAU	12/12/2008	24
Attenuator 20 dB, SMA M/F 26GHz	S.M. Electronics	SA26B-20	AUY	7/21/2009	13
26 GHz DC Block, SMA	Pasternack	PE8210	AME	10/19/2009	13
EV06 Direct Connect Cable	ESM Cable Corp.	TT	ECA	NCR	0

MEASUREMENT UNCERTAINTY

A measurement uncertainty estimation has been performed for each test per our internal quality document WP 342. The estimation is used to compare the measured result with its "true" or theoretically correct value. The expanded measurement uncertainty for radiated emissions measurements is less than +/- 4 dB, and for conducted emissions measurements is less than +/- 2.7 dB. Our measurement data meets or exceeds the measurement uncertainty requirements of CISPR 16-4; therefore, the test data can be compared directly to the specification limit to determine compliance. The calculations for measurement uncertainty are available upon request.

TEST DESCRIPTION

The occupied bandwidth was measured with the EUT set to low, medium, and high transmit frequencies. The measurement was made using a direct connection between the RF output of the EUT and the spectrum analyzer. The EUT was transmitting at each of the required data rate and modulations for an 802.11(b/g) radio.

NORTHWEST EMC

OCCUPIED BANDWIDTH

XMit 2010.01.14

EUT:	Clane2			**Work Order:**	INTE5221
Serial Number:	5			**Date:**	05/11/10
Customer:	Intel Corporation			**Temperature:**	23°C
Attendees:	Bob Hughes			**Humidity:**	38%
Project:	None			**Barometric Pres.:**	30.05 in
Tested by:	Rod Peloquin	**Power:**	5 VDC via USB	**Job Site:**	EV06

TEST SPECIFICATIONS	Test Method
FCC 15.247:2010	ANSI C63.10:2009

COMMENTS

Adapter cable loss of 1.3 dB added to measurement analyzer reference level offset.

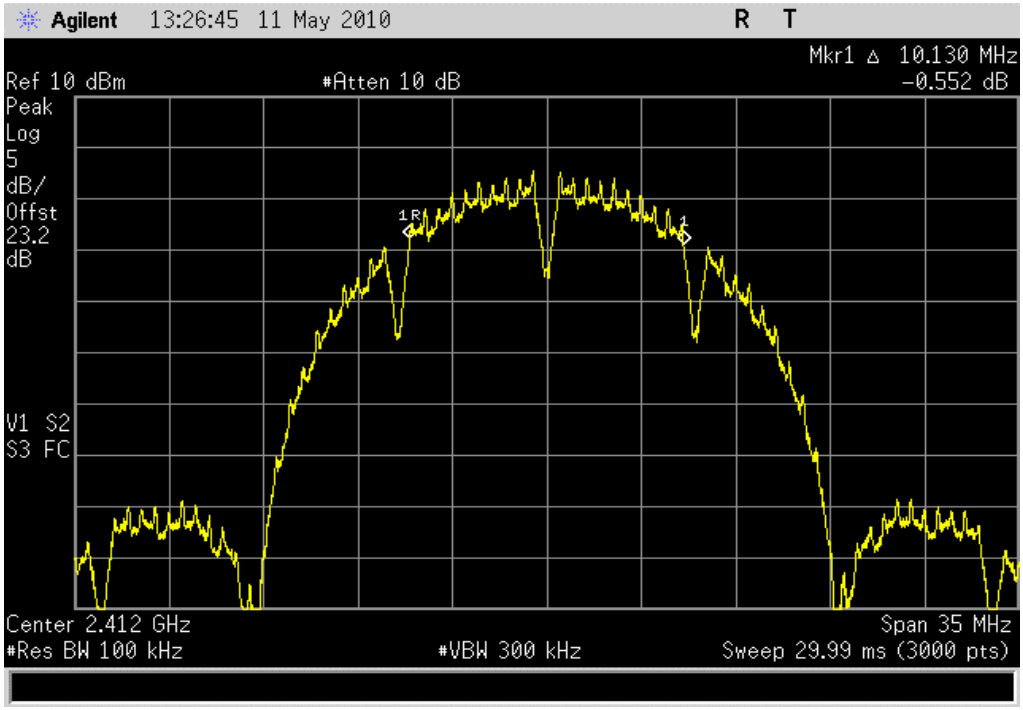
DEVIATIONS FROM TEST STANDARD

No Deviations

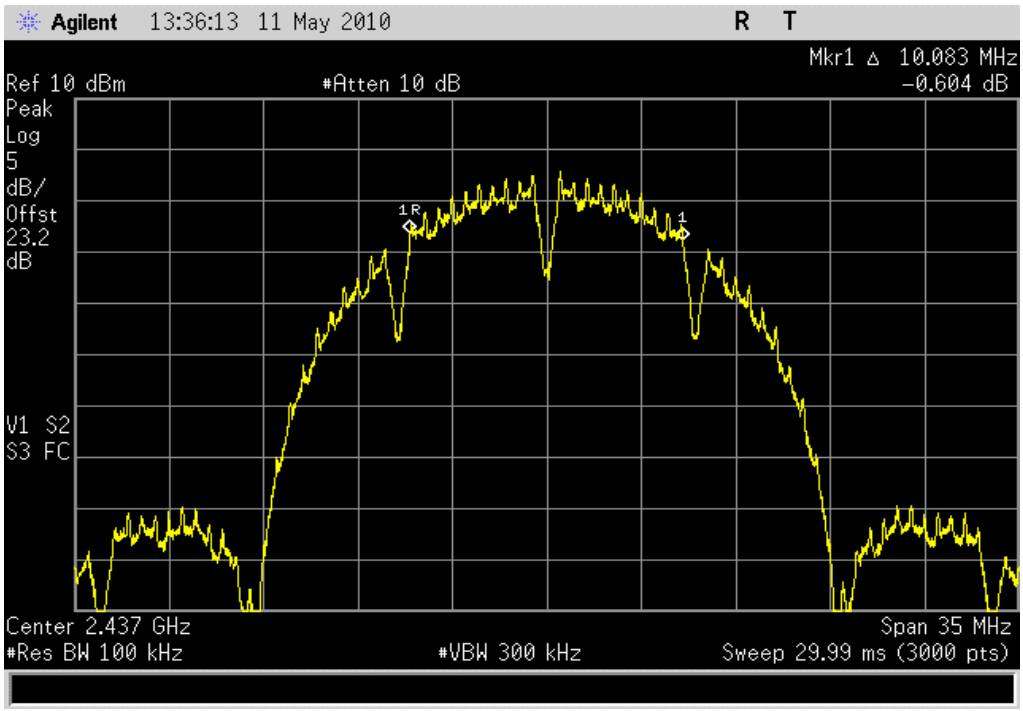
Configuration #	2	Signature

		Value	Limit	Results
802.11(b) 1 Mbps				
	Low Channel	10.130 MHz	> 500 kHz	Pass
	Mid Channel	10.083 MHz	> 500 kHz	Pass
	High Channel	10.130 MHz	> 500 kHz	Pass
802.11(b) 11 Mbps				
	Low Channel	10.363 MHz	> 500 kHz	Pass
	Mid Channel	11.005 MHz	> 500 kHz	Pass
	High Channel	10.363 MHz	> 500 kHz	Pass
802.11(g) 6 Mbps				
	Low Channel	16.292 MHz	> 500 kHz	Pass
	Mid Channel	16.164 MHz	> 500 kHz	Pass
	High Channel	16.304 MHz	> 500 kHz	Pass
802.11(g) 36 Mbps				
	Low Channel	16.397 MHz	> 500 kHz	Pass
	Mid Channel	16.385 MHz	> 500 kHz	Pass
	High Channel	16.362 MHz	> 500 kHz	Pass
802.11(g) 54 Mbps				
	Low Channel	16.444 MHz	> 500 kHz	Pass
	Mid Channel	16.444 MHz	> 500 kHz	Pass
	High Channel	16.444 MHz	> 500 kHz	Pass

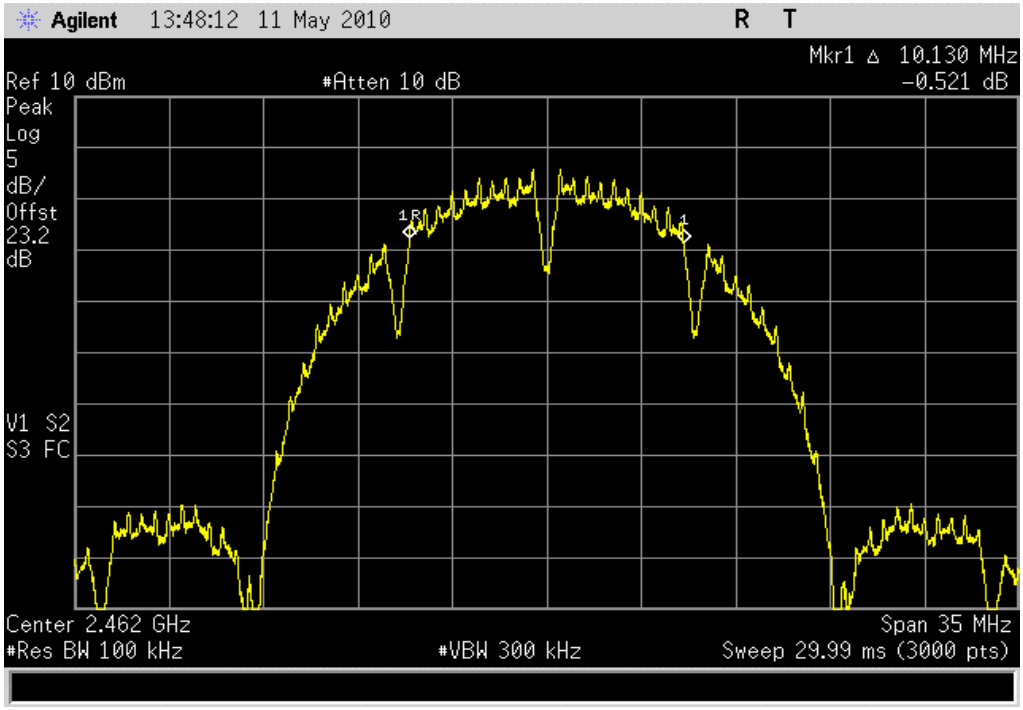
802.11(b) 1 Mbps, Low Channel					
Result:	Pass	**Value:**	10.130 MHz	**Limit:**	> 500 kHz



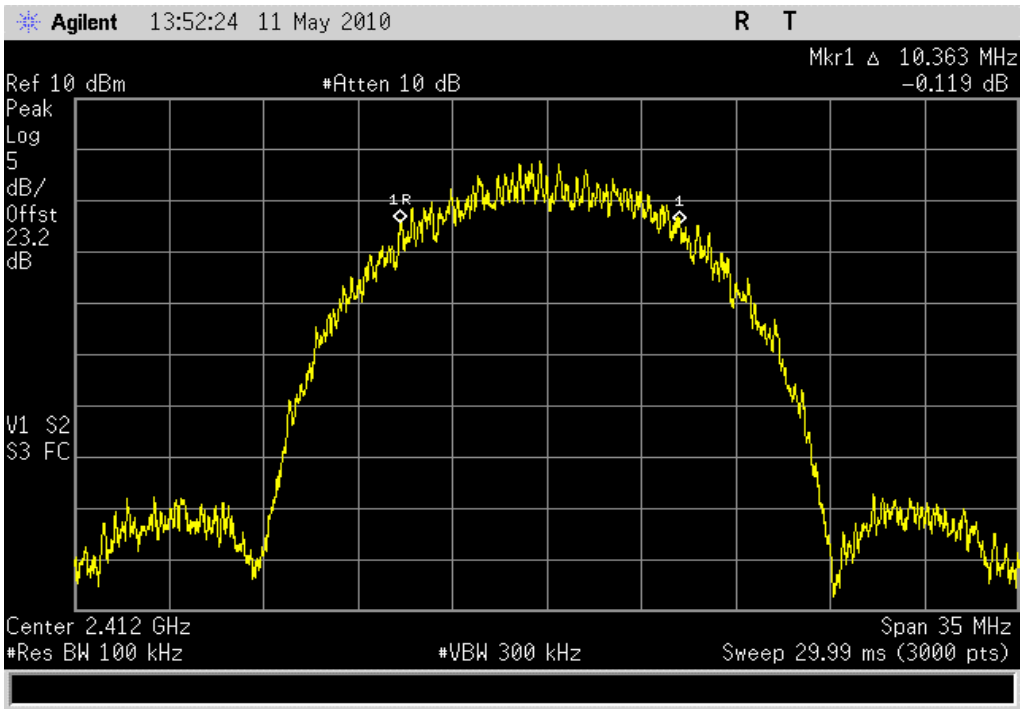
802.11(b) 1 Mbps, Mid Channel					
Result:	Pass	**Value:**	10.083 MHz	**Limit:**	> 500 kHz



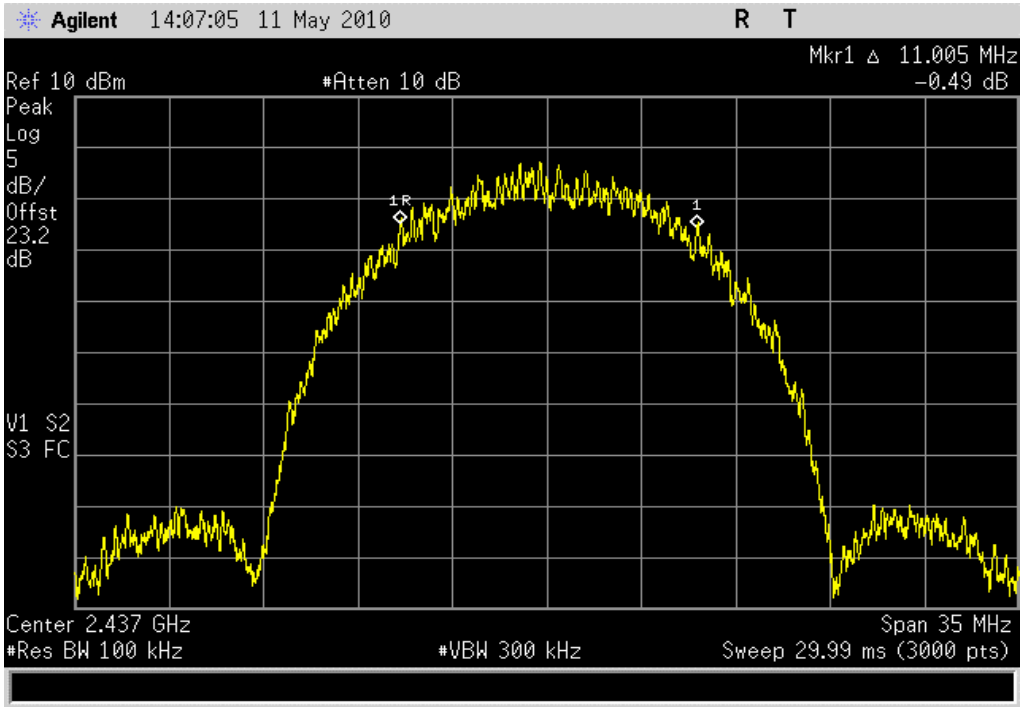
802.11(b) 1 Mbps, High Channel					
Result:	Pass	**Value:**	10.130 MHz	**Limit:**	> 500 kHz



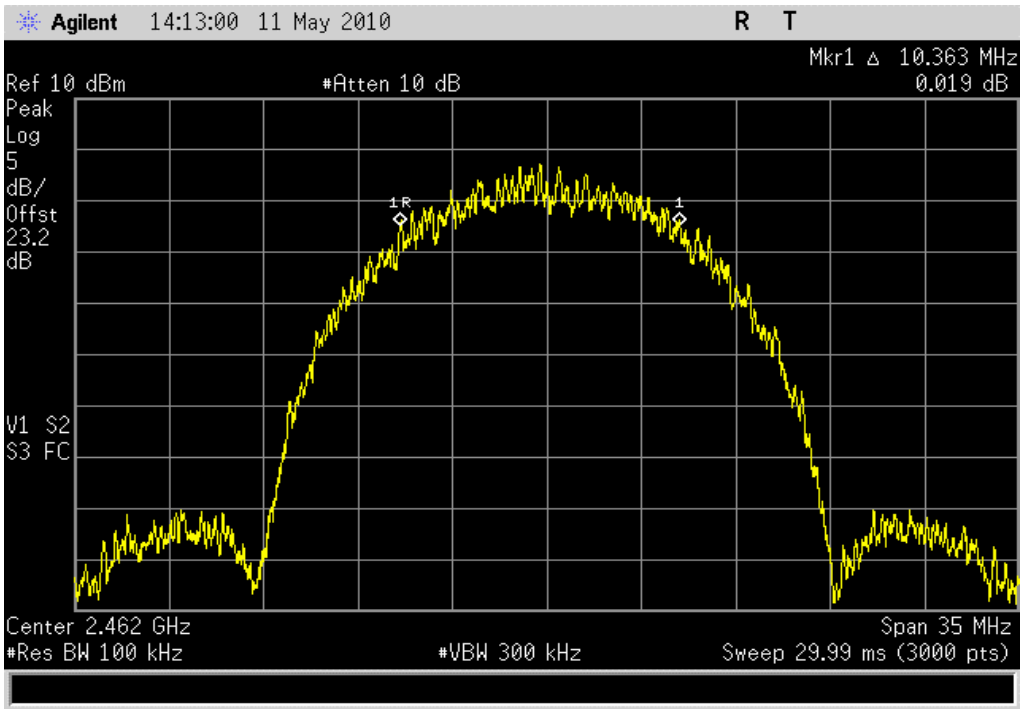
802.11(b) 11 Mbps, Low Channel					
Result:	Pass	**Value:**	10.363 MHz	**Limit:**	> 500 kHz



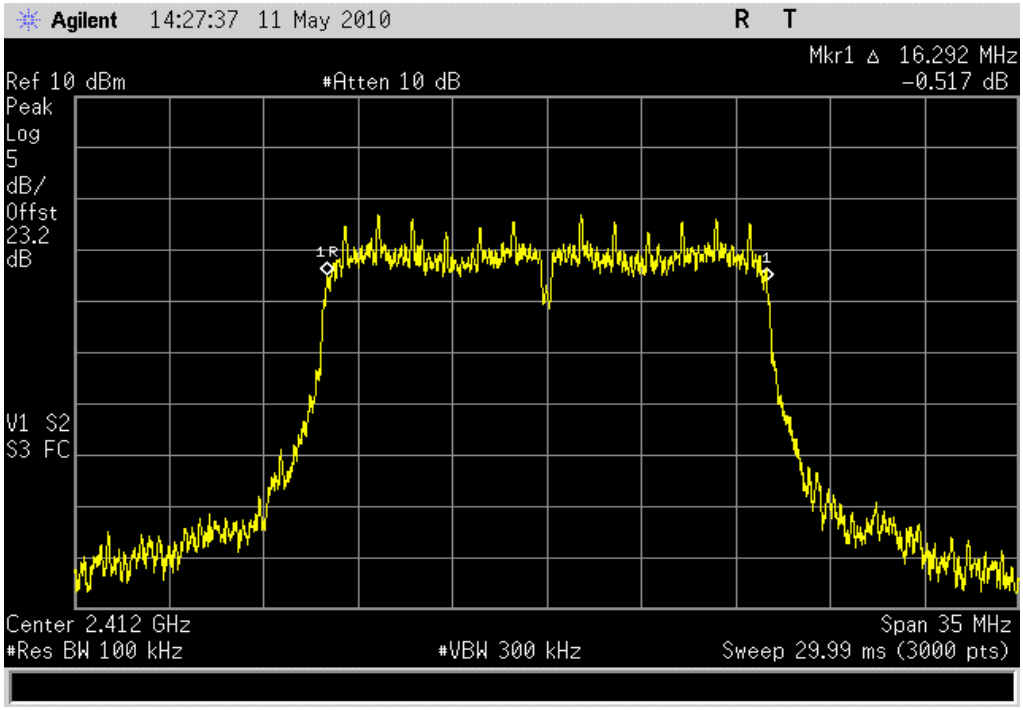
802.11(b) 11 Mbps, Mid Channel					
Result:	Pass	**Value:**	11.005 MHz	**Limit:**	> 500 kHz



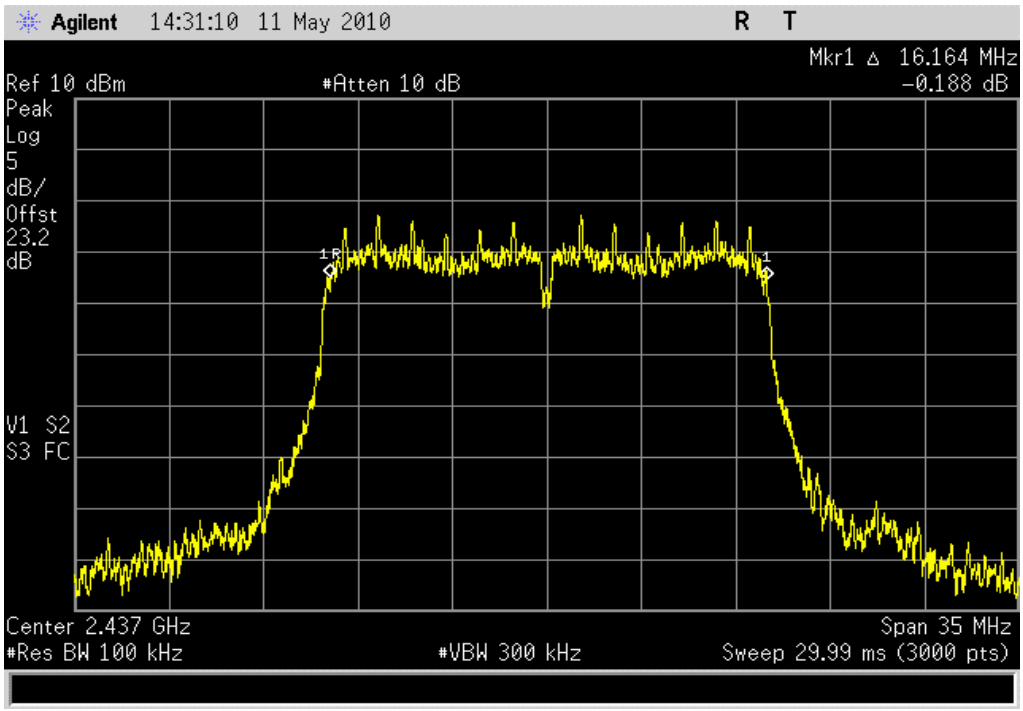
802.11(b) 11 Mbps, High Channel					
Result:	Pass	**Value:**	10.363 MHz	**Limit:**	> 500 kHz



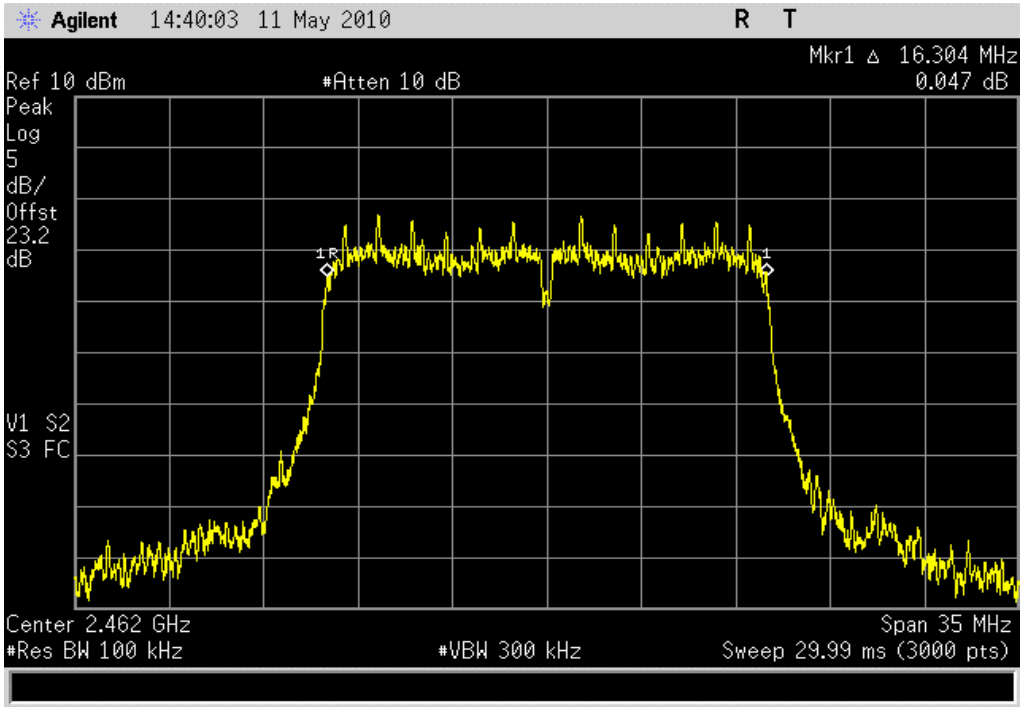
802.11(g) 6 Mbps, Low Channel					
Result:	Pass	**Value:**	16.292 MHz	**Limit:**	> 500 kHz



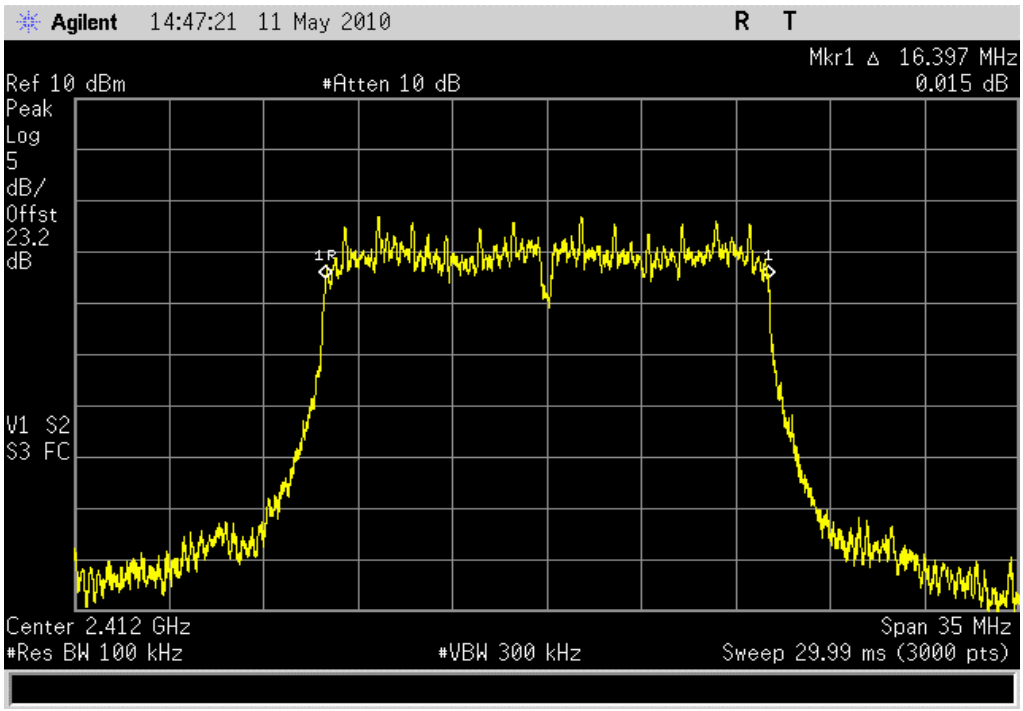
802.11(g) 6 Mbps, Mid Channel					
Result:	Pass	**Value:**	16.164 MHz	**Limit:**	> 500 kHz



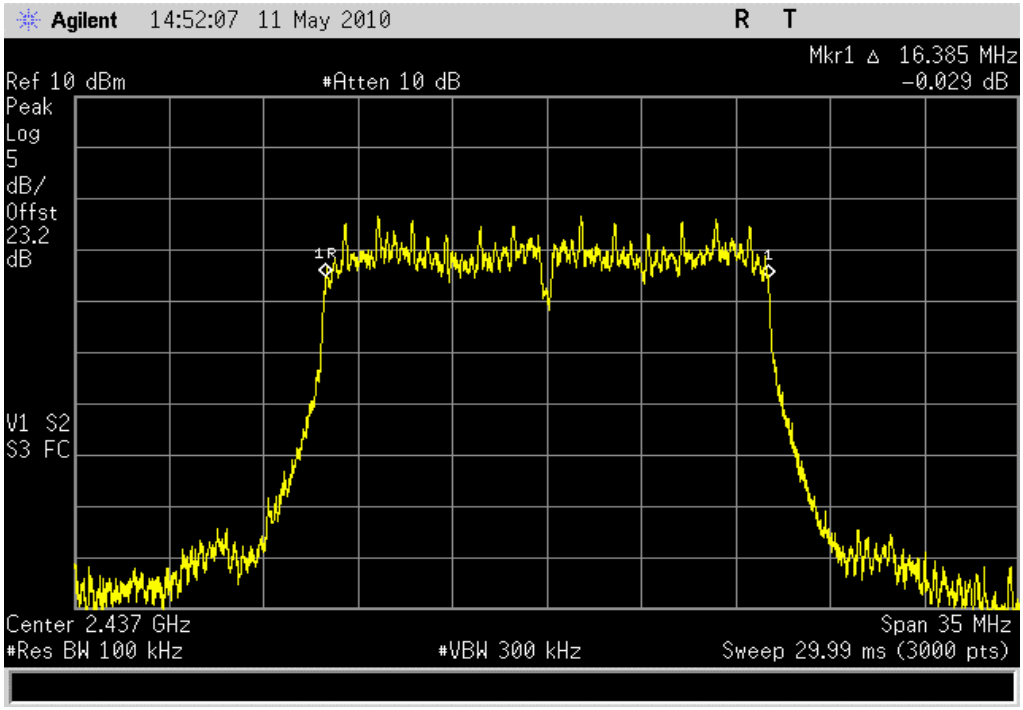
802.11(g) 6 Mbps, High Channel					
Result:	Pass	**Value:**	16.304 MHz	**Limit:**	> 500 kHz



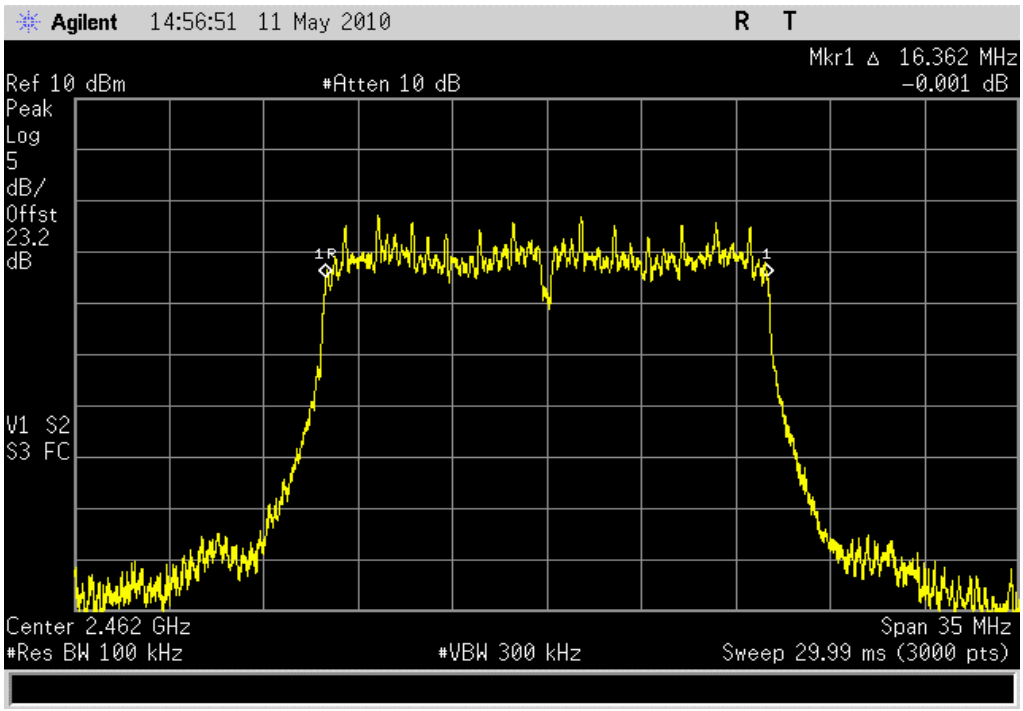
802.11(g) 36 Mbps, Low Channel					
Result:	Pass	**Value:**	16.397 MHz	**Limit:**	> 500 kHz



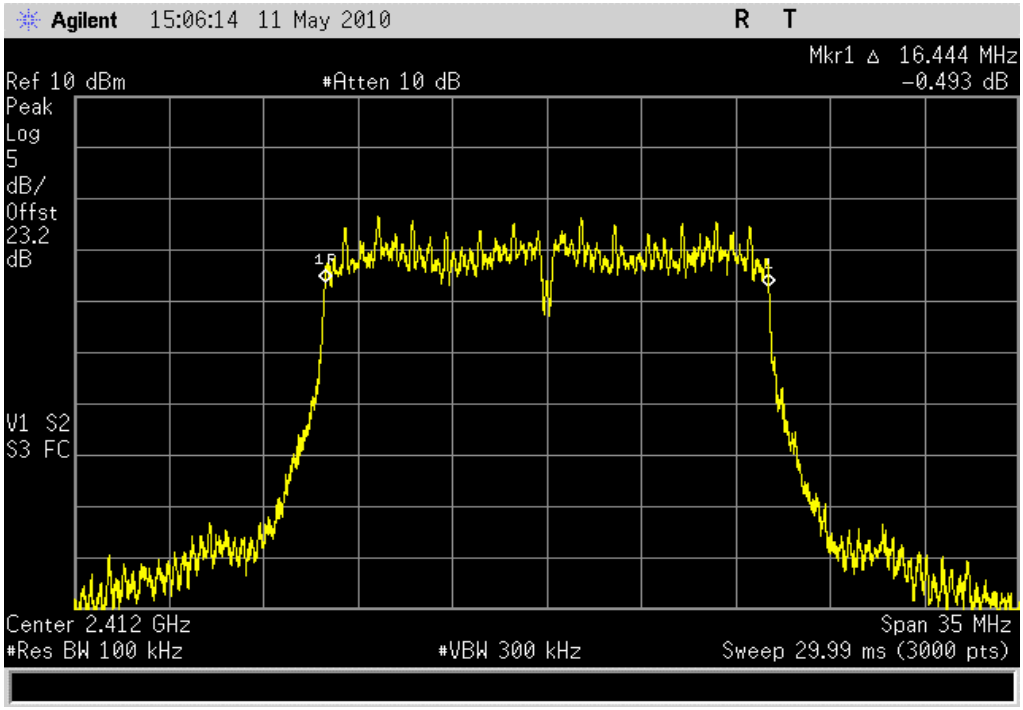
802.11(g) 36 Mbps, Mid Channel					
Result:	Pass	**Value:**	16.385 MHz	**Limit:**	> 500 kHz



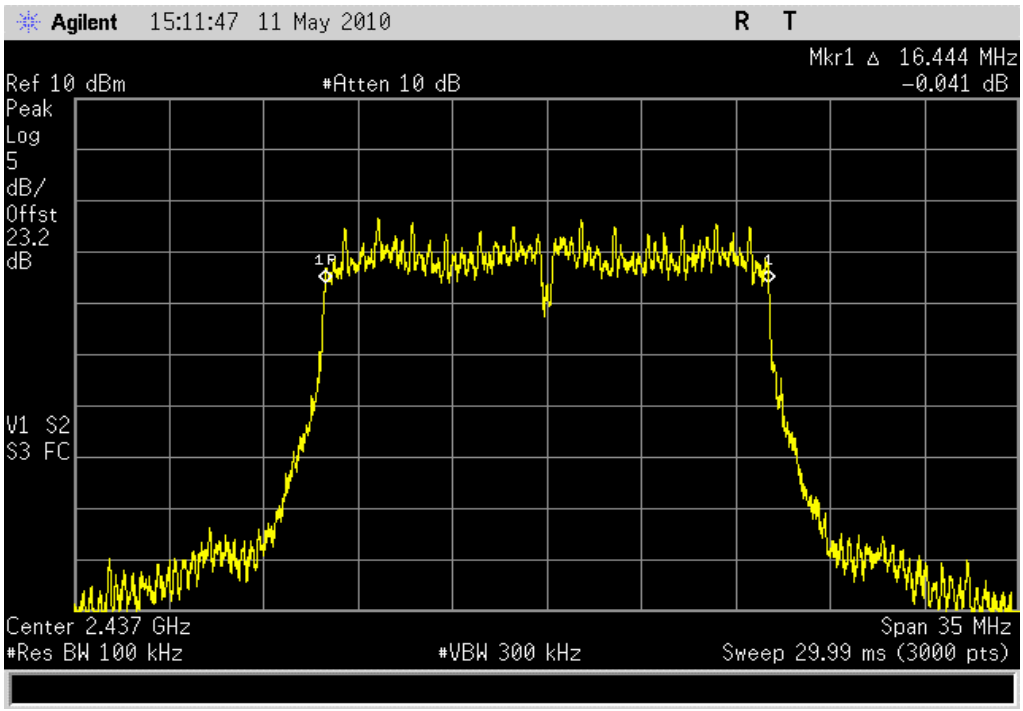
802.11(g) 36 Mbps, High Channel					
Result:	Pass	**Value:**	16.362 MHz	**Limit:**	> 500 kHz



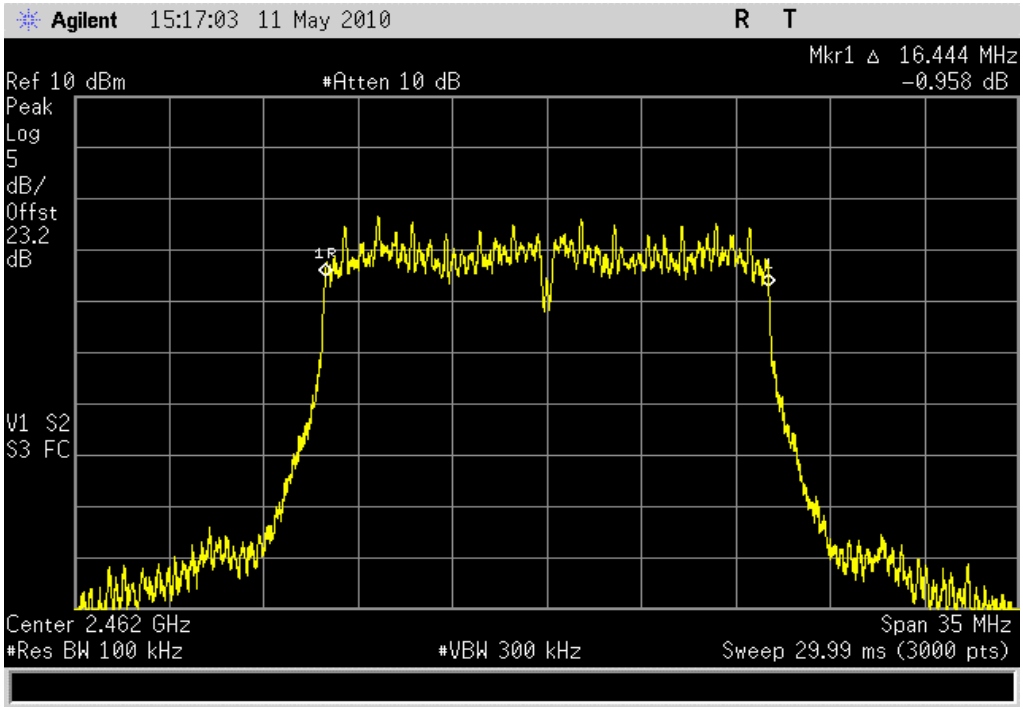
802.11(g) 54 Mbps, Low Channel					
Result:	Pass	**Value:**	16.444 MHz	**Limit:**	> 500 kHz



802.11(g) 54 Mbps, Mid Channel					
Result:	Pass	**Value:**	16.444 MHz	**Limit:**	> 500 kHz



802.11(g) 54 Mbps, High Channel					
Result:	Pass	**Value:**	16.444 MHz	**Limit:**	> 500 kHz



Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval
Spectrum Analyzer	Agilent	E4407B	AAU	12/12/2008	24
EV06 Direct Connect Cable	ESM Cable Corp.	TT	ECA	NCR	0
26 GHz DC Block, SMA	Pasternack	PE8210	AME	10/19/2009	13
Attenuator 20 dB, SMA M/F 26GHz	S.M. Electronics	SA26B-20	AUY	7/21/2009	13
Attenuator, 6 dB, 'SMA'	N/A	93459 3330A-6	AUF	4/1/2010	13
Power Meter	Gigatronics	8651A	SPM	1/7/2010	13
Power Sensor	Gigatronics	80701A	SPL	1/7/2010	13
Signal Generator	Agilent	E8257D	TGX	12/10/2008	24

MEASUREMENT UNCERTAINTY

A measurement uncertainty estimation has been performed for each test per our internal quality document WP 342. The estimation is used to compare the measured result with its "true" or theoretically correct value. The expanded measurement uncertainty for radiated emissions measurements is less than +/- 4 dB, and for conducted emissions measurements is less than +/- 2.7 dB. Our measurement data meets or exceeds the measurement uncertainty requirements of CISPR 16-4; therefore, the test data can be compared directly to the specification limit to determine compliance. The calculations for measurement uncertainty are available upon request.

TEST DESCRIPTION

The transmit frequency was set to the lowest, the middle, and the highest channels available. The transmit power was set to its default maximum. A direct connection was made between the RF output of the EUT and a spectrum analyzer. Attenuation and a DC block were used. The reference level offset on the spectrum analyzer was adjusted to compensate for cable loss and the external attenuation used between the RF output and the spectrum analyzer input. The amplitude accuracy of the spectrum analyzer was further enhanced by calibrating the setup using the power meter and synthesized signal generator.

Prior to measuring peak transmit power; the emission bandwidth (B) and the transmission pulse duration (T) were measured. Both are required to determine the method of measuring Maximum Conducted Output Power. The Integration Bandwidth under the Channel Power measurement function of the analyzer was set to the widest emission bandwidth of the modes tested The transmission pulse duration (T) was measured using a zero span on the spectrum analyzer to see the pulses in the time domain. This data is contained elsewhere in the report.

Method #3 found in ANSI C63.10 section 6.10.3.3 was used because the analyzer sweep time was greater than T for the operating mode which has the shortest transmission pulse duration and the Emission Bandwidth was greater than the largest RBW on the analyzer.

The spectrum analyzer settings were as follows:

- The span was set to encompass entire emission bandwidth (B), centered on the transmit channel.
- The RBW = 1 MHz, VBW > / = 1/T
- Sample detector mode because the bin width (span / number of spectral points) < 0.5 RBW.
- Power was integrated across “B”, by using the channel power function of the analyzer.

NORTHWEST EMC

OUTPUT POWER - CHANNEL POWER

XMit 2010.01.14

EUT:	Clane2			**Work Order:**	INTE5221
Serial Number:	5			**Date:**	05/11/10
Customer:	Intel Corporation			**Temperature:**	23°C
Attendees:	Bob Hughes			**Humidity:**	38%
Project:	None			**Barometric Pres.:**	30.05 in
Tested by:	Rod Peloquin	**Power:**	5 VDC via USB	**Job Site:**	EV06

TEST SPECIFICATIONS	Test Method
FCC 15.247:2010	ANSI C63.10:2009

COMMENTS

Adapter cable loss of 1.3 dB added to measurement analyzer reference level offset.

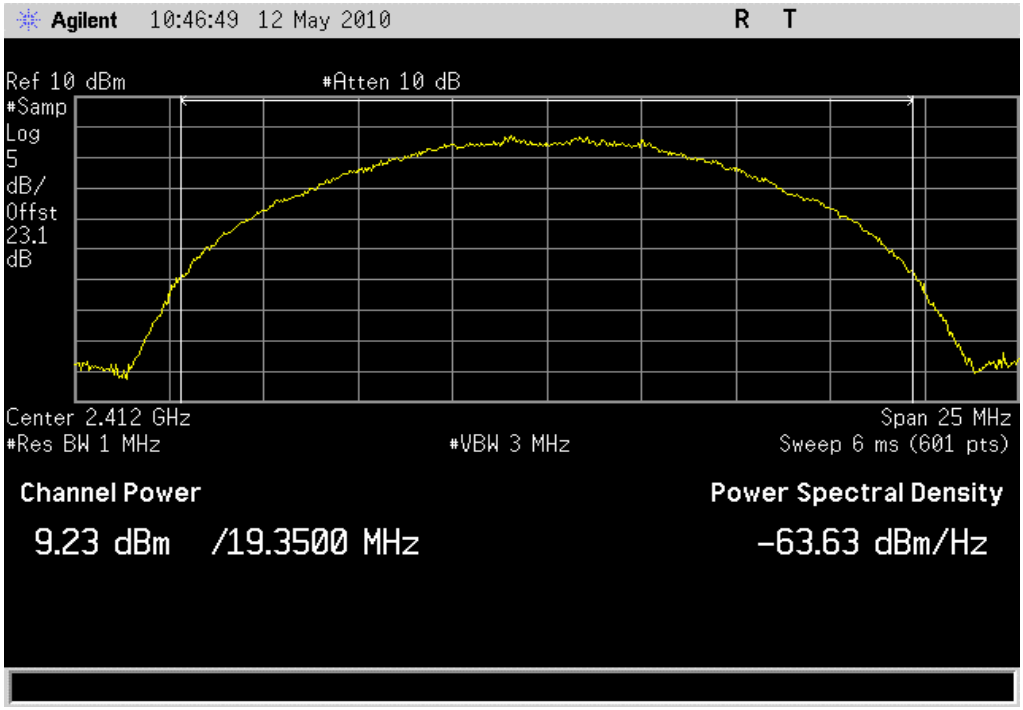
DEVIATIONS FROM TEST STANDARD

No Deviations

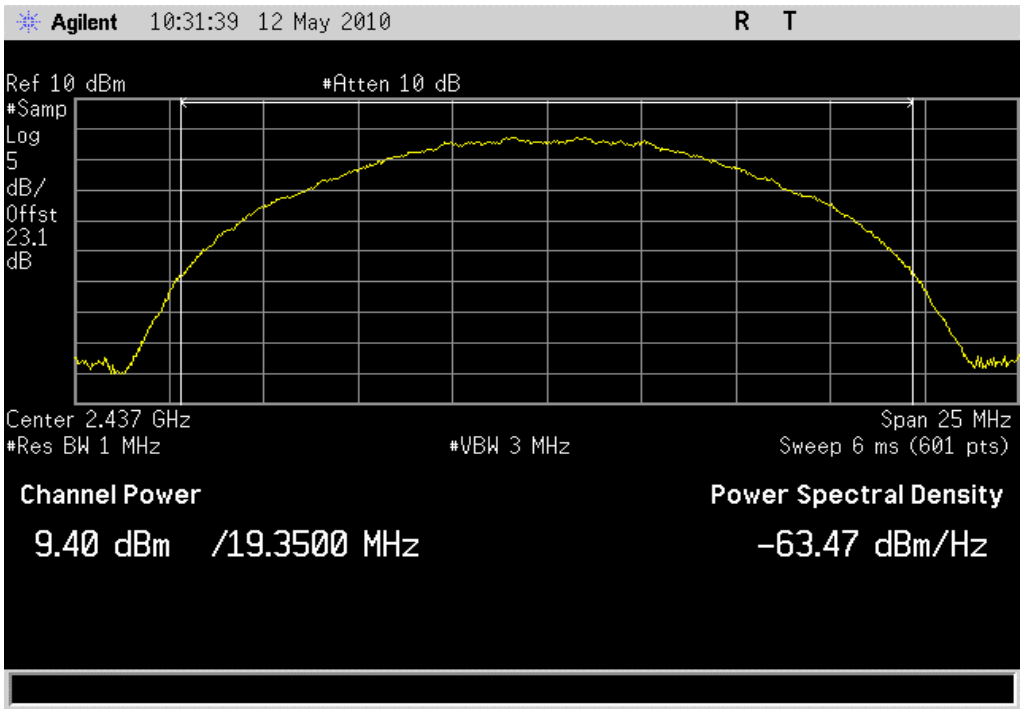
Configuration #	2	Signature

		Value	Limit	Results
802.11(b) 1 Mbps				
	Low Channel	9.2 dBm	30 dBm	Pass
	Mid Channel	9.4 dBm	30 dBm	Pass
	High Channel	9.3 dBm	30 dBm	Pass
802.11(b) 11 Mbps				
	Low Channel	9.1 dBm	30 dBm	Pass
	Mid Channel	9.2 dBm	30 dBm	Pass
	High Channel	9.0 dBm	30 dBm	Pass
802.11(g) 6 Mbps				
	Low Channel	5.7 dBm	30 dBm	Pass
	Mid Channel	5.7 dBm	30 dBm	Pass
	High Channel	5.6 dBm	30 dBm	Pass
802.11(g) 36 Mbps				
	Low Channel	3.7 dBm	30 dBm	Pass
	Mid Channel	3.8 dBm	30 dBm	Pass
	High Channel	3.5 dBm	30 dBm	Pass
802.11(g) 54 Mbps				
	Low Channel	3.5 dBm	30 dBm	Pass
	Mid Channel	3.1 dBm	30 dBm	Pass
	High Channel	3.3 dBm	30 dBm	Pass

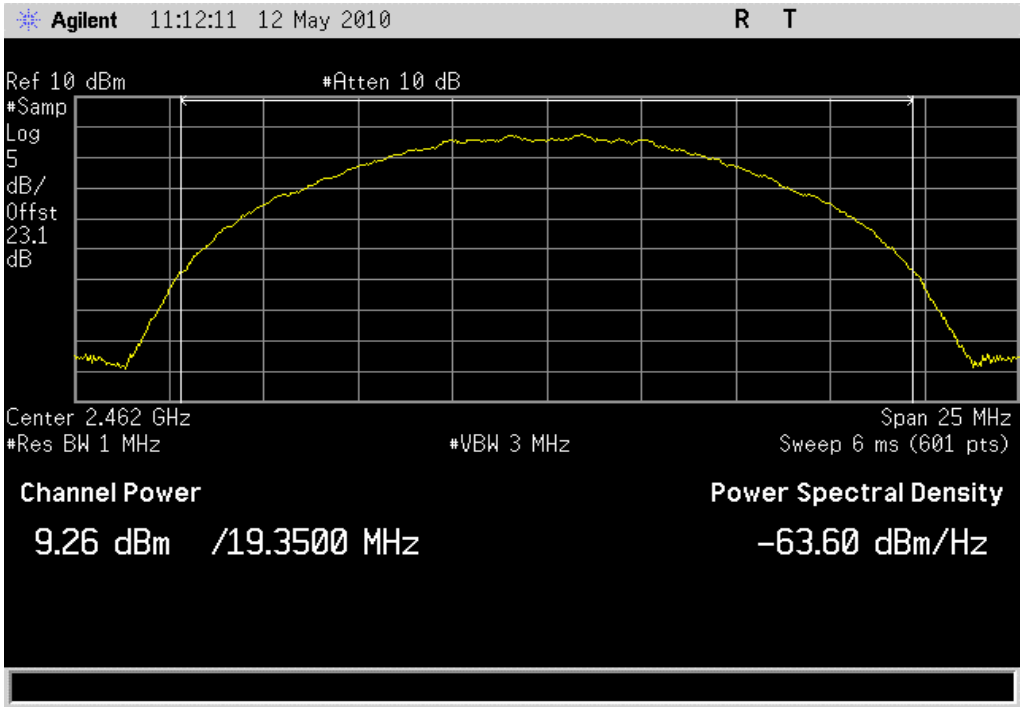
802.11(b) 1 Mbps, Low Channel					
Result:	Pass	**Value:**	9.2 dBm	**Limit:**	30 dBm



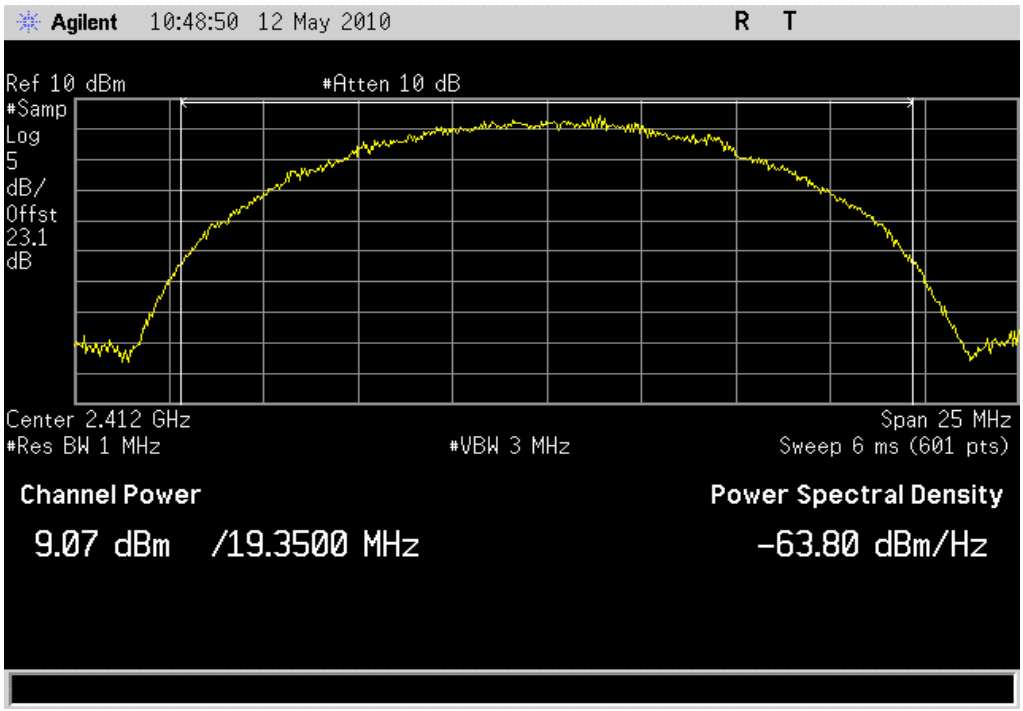
802.11(b) 1 Mbps, Mid Channel					
Result:	Pass	**Value:**	9.4 dBm	**Limit:**	30 dBm



802.11(b) 1 Mbps, High Channel					
Result:	Pass	**Value:**	9.3 dBm	**Limit:**	30 dBm

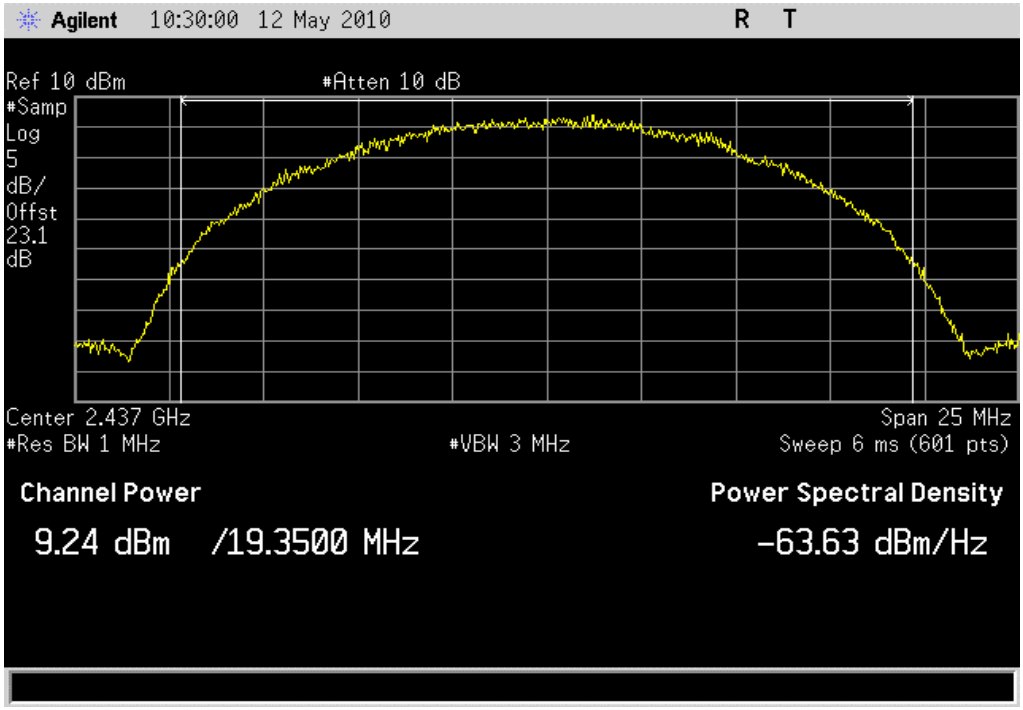


802.11(b) 11 Mbps, Low Channel					
Result:	Pass	**Value:**	9.1 dBm	**Limit:**	30 dBm

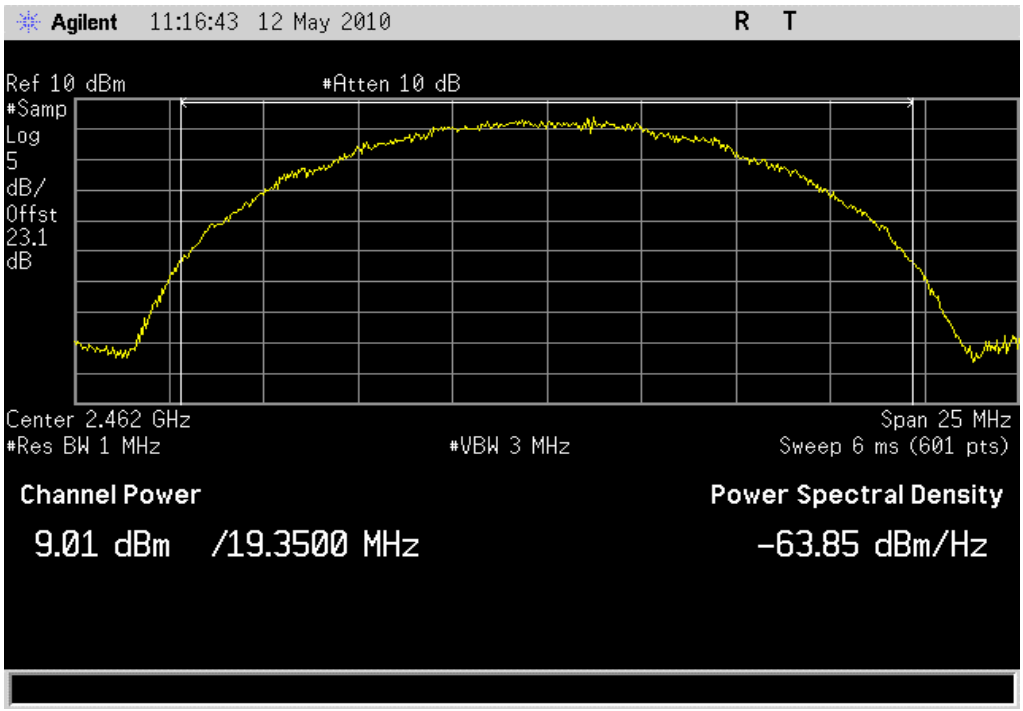


OUTPUT POWER - CHANNEL POWER

802.11(b) 11 Mbps, Mid Channel					
Result:	Pass	**Value:**	9.2 dBm	**Limit:**	30 dBm

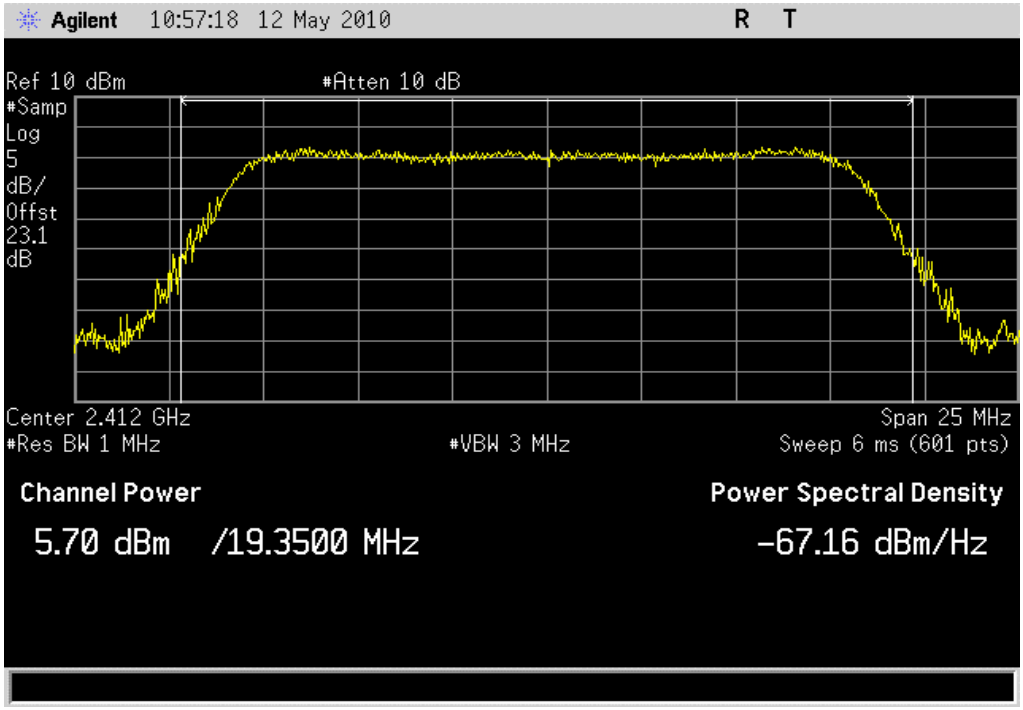


802.11(b) 11 Mbps, High Channel					
Result:	Pass	**Value:**	9.0 dBm	**Limit:**	30 dBm

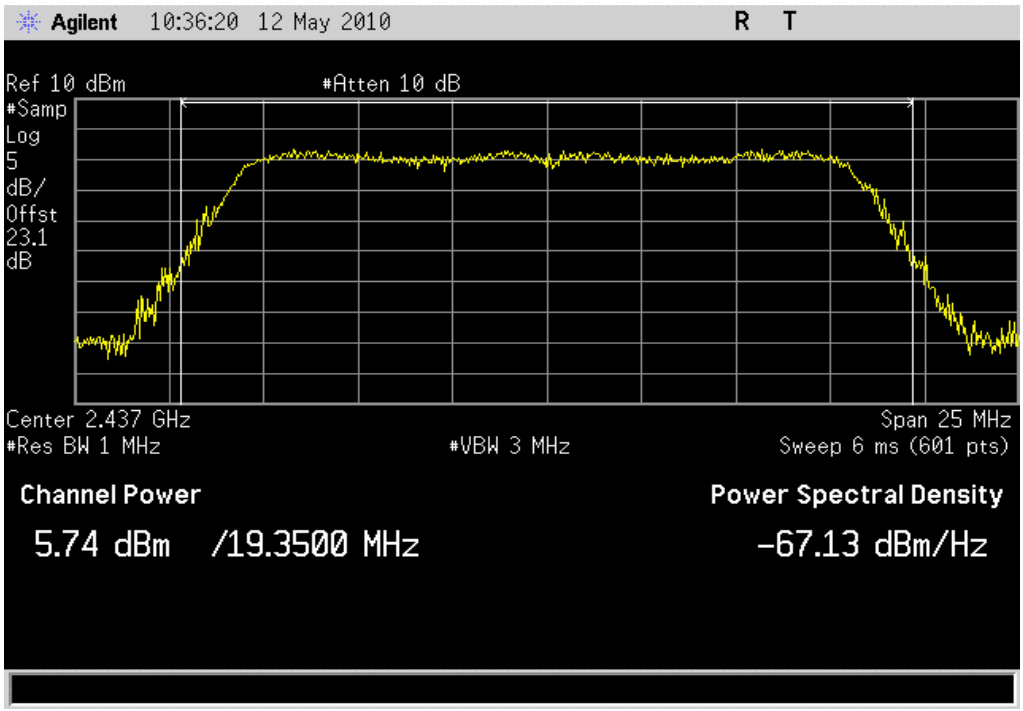


OUTPUT POWER - CHANNEL POWER

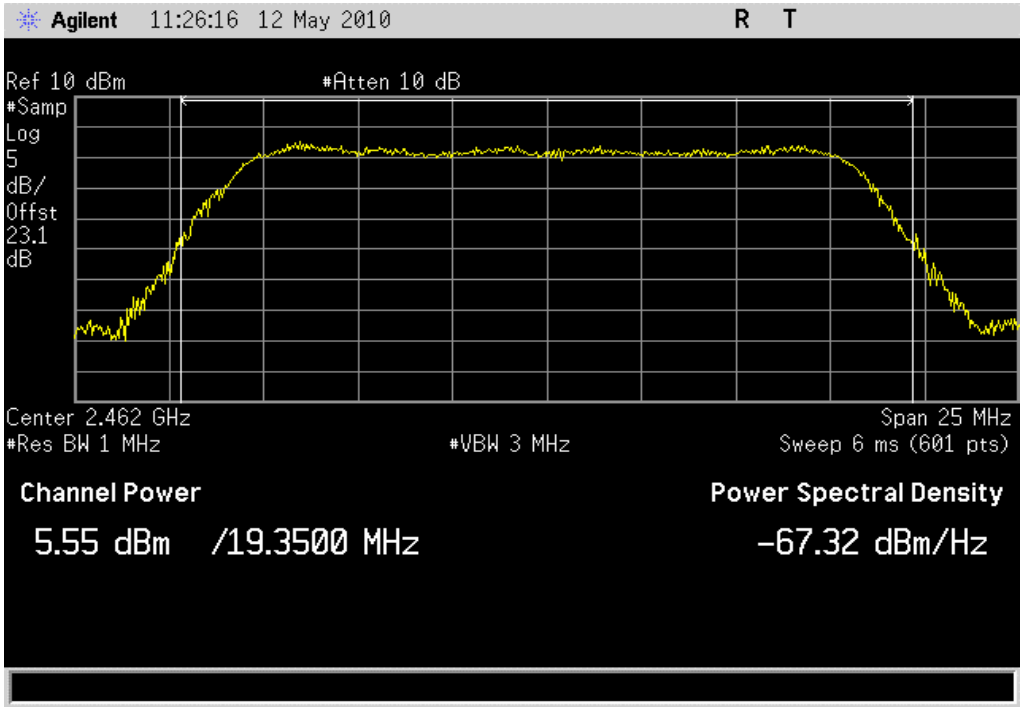
802.11(g) 6 Mbps, Low Channel					
Result:	Pass	**Value:**	5.7 dBm	**Limit:**	30 dBm



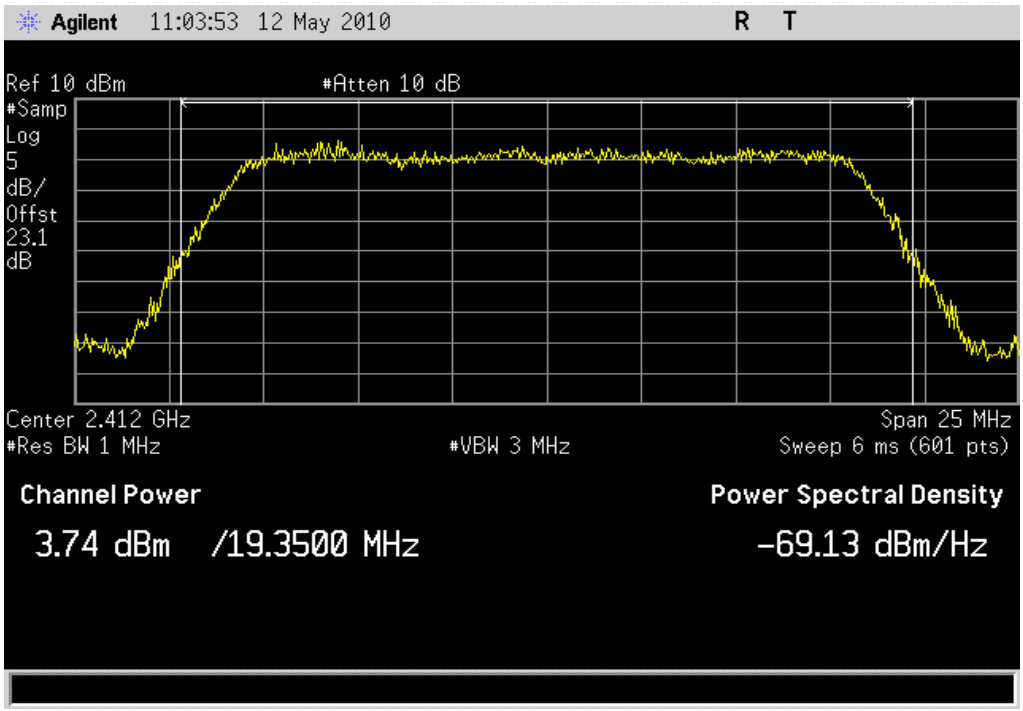
802.11(g) 6 Mbps, Mid Channel					
Result:	Pass	**Value:**	5.7 dBm	**Limit:**	30 dBm



802.11(g) 6 Mbps, High Channel					
Result:	Pass	**Value:**	5.6 dBm	**Limit:**	30 dBm

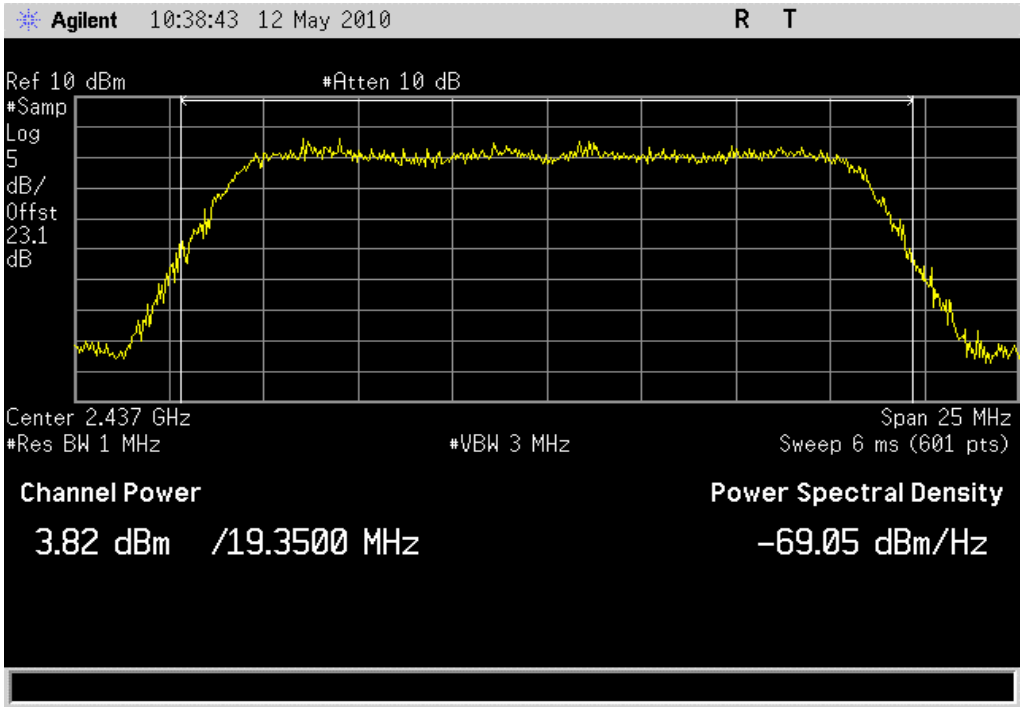


802.11(g) 36 Mbps, Low Channel					
Result:	Pass	**Value:**	3.7 dBm	**Limit:**	30 dBm

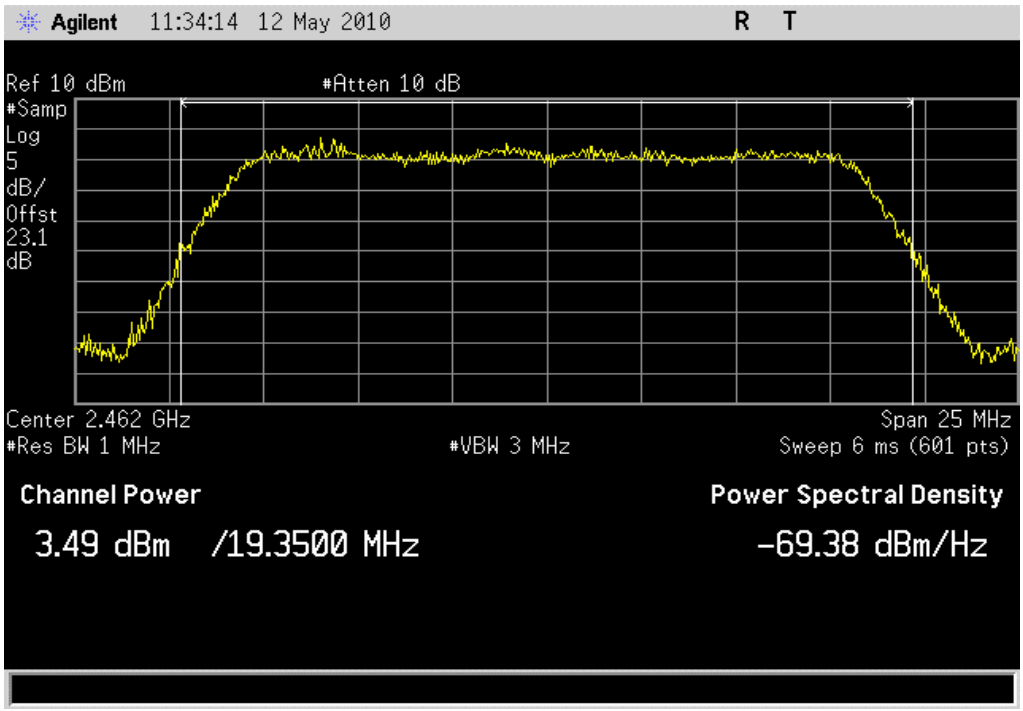


OUTPUT POWER - CHANNEL POWER

802.11(g) 36 Mbps, Mid Channel					
Result:	Pass	**Value:**	3.8 dBm	**Limit:**	30 dBm

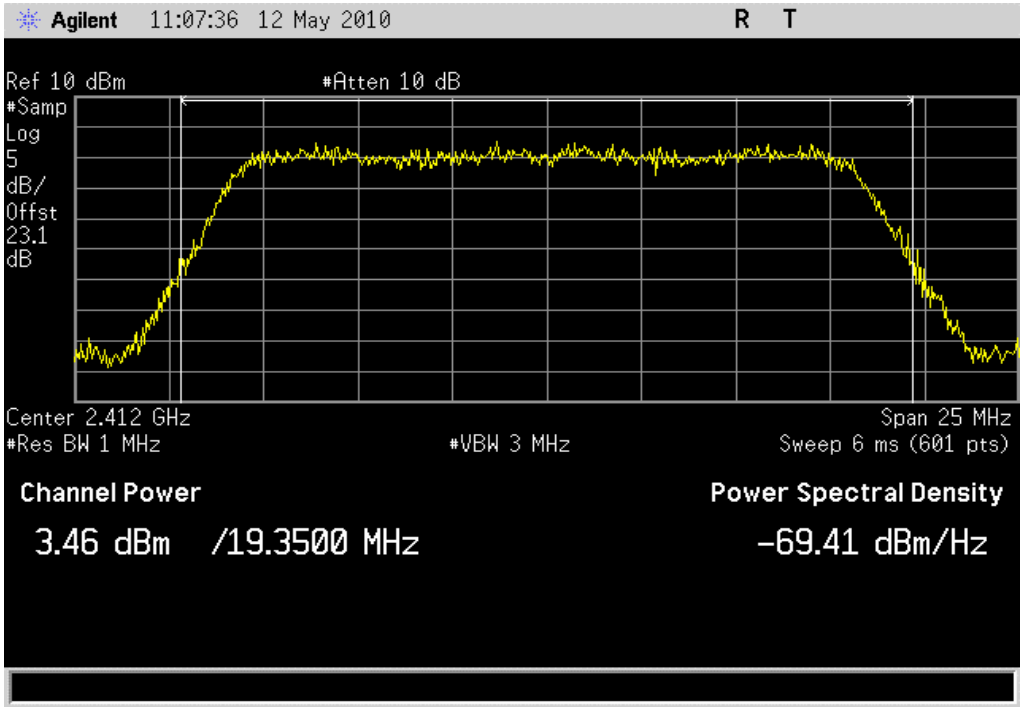


802.11(g) 36 Mbps, High Channel					
Result:	Pass	**Value:**	3.5 dBm	**Limit:**	30 dBm

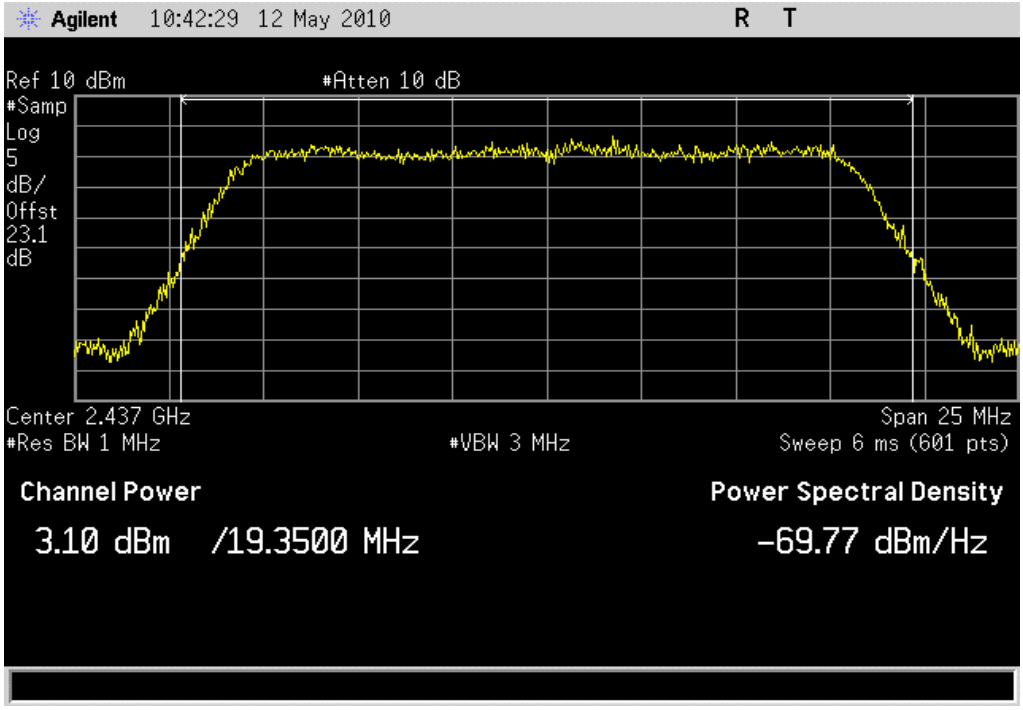


OUTPUT POWER - CHANNEL POWER

802.11(g) 54 Mbps, Low Channel					
Result:	Pass	**Value:**	3.5 dBm	**Limit:**	30 dBm

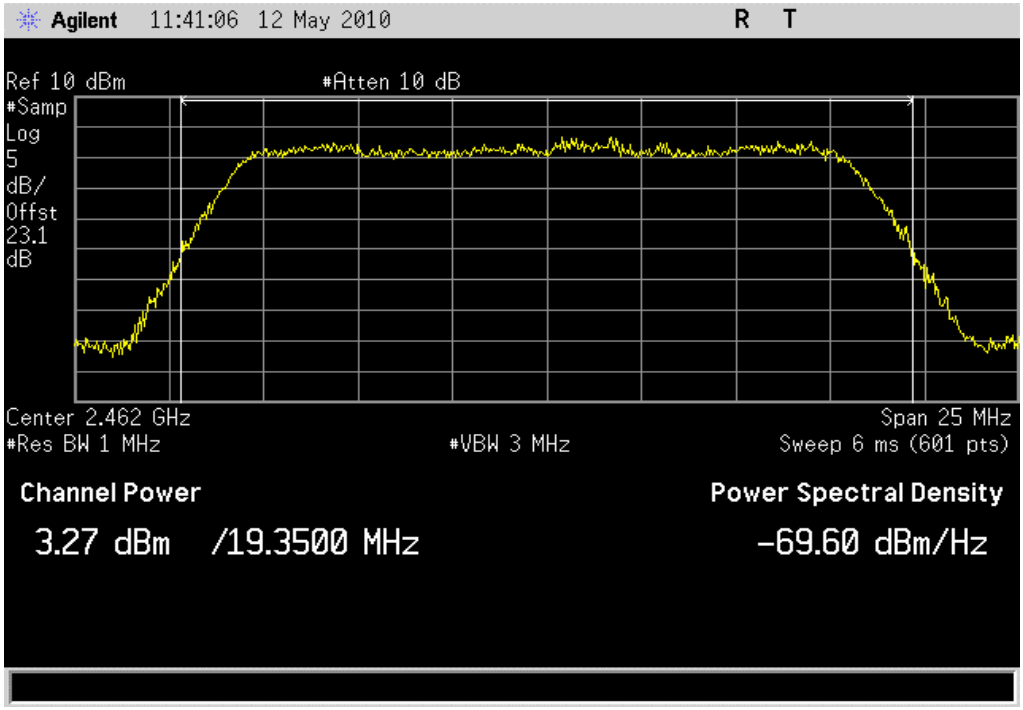


802.11(g) 54 Mbps, Mid Channel					
Result:	Pass	**Value:**	3.1 dBm	**Limit:**	30 dBm



OUTPUT POWER - CHANNEL POWER

802.11(g) 54 Mbps, High Channel					
Result:	Pass	**Value:**	3.3 dBm	**Limit:**	30 dBm



BAND EDGE COMPLIANCE

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval
Spectrum Analyzer	Agilent	E4407B	AAU	12/12/2008	24
Attenuator 20 dB, SMA M/F 26GHz	S.M. Electronics	SA26B-20	AUY	7/21/2009	13
26 GHz DC Block, SMA	Pasternack	PE8210	AME	10/19/2009	13
EV06 Direct Connect Cable	ESM Cable Corp.	TT	ECA	NCR	0

MEASUREMENT UNCERTAINTY

A measurement uncertainty estimation has been performed for each test per our internal quality document WP 342. The estimation is used to compare the measured result with its "true" or theoretically correct value. The expanded measurement uncertainty for radiated emissions measurements is less than +/- 4 dB, and for conducted emissions measurements is less than +/- 2.7 dB. Our measurement data meets or exceeds the measurement uncertainty requirements of CISPR 16-4; therefore, the test data can be compared directly to the specification limit to determine compliance. The calculations for measurement uncertainty are available upon request.

TEST DESCRIPTION

The spurious RF conducted emissions at the edges of the authorized bands were measured with the EUT set to low and high transmit frequencies in each available band. The channels closest to the band edges were selected. The measurement was made using a direct connection between the RF output of the EUT and the spectrum analyzer. The EUT was transmitting at the required FCC modulation data rates.

The spectrum was scanned across each band edge from at least 25 MHz below the band edge to 25 MHz above the band edge.

Per FCC 15.247, a sample detector was used due to use of averaging method of measuring output power (ANSI C63.10-2009, 6.10.3.3)

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NORTHWEST EMC

BAND EDGE COMPLIANCE

XMit 2010.01.14

EUT:	Clane2			**Work Order:**	INTE5221
Serial Number:	5			**Date:**	05/11/10
Customer:	Intel Corporation			**Temperature:**	23°C
Attendees:	Bob Hughes			**Humidity:**	38%
Project:	None			**Barometric Pres.:**	30.05 in
Tested by:	Rod Peloquin	**Power:**	5 VDC via USB	**Job Site:**	EV06

TEST SPECIFICATIONS	Test Method
FCC 15.247:2010	ANSI C63.10:2009

COMMENTS

Adapter cable loss of 1.3 dB added to measurement analyzer reference level offset.

DEVIATIONS FROM TEST STANDARD

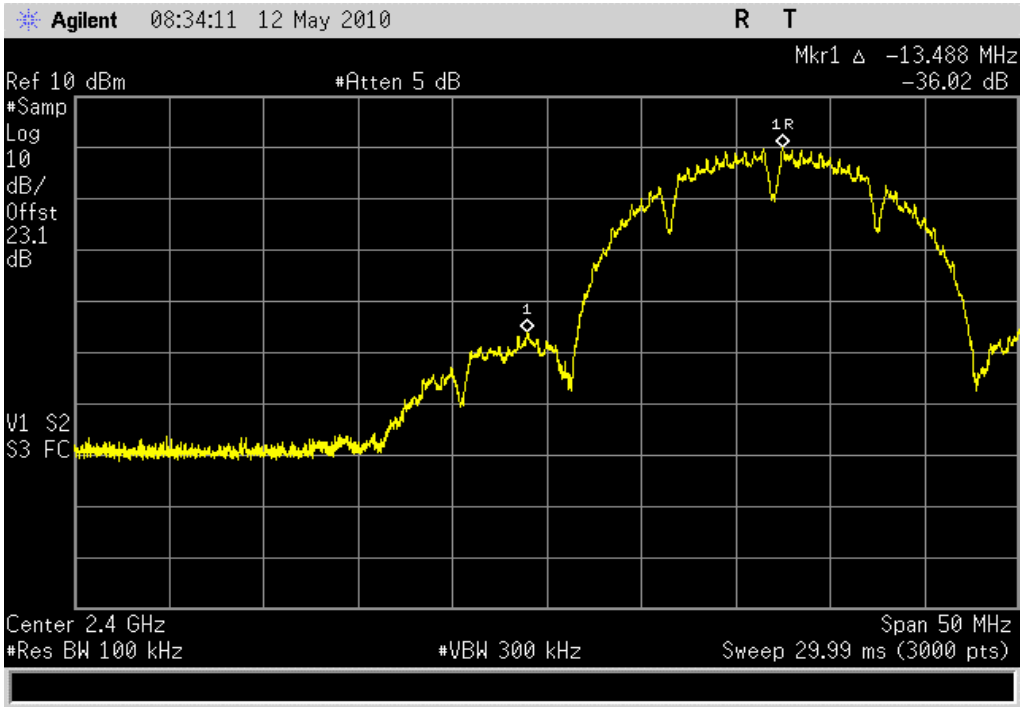
No Deviations

Configuration #	2	Signature

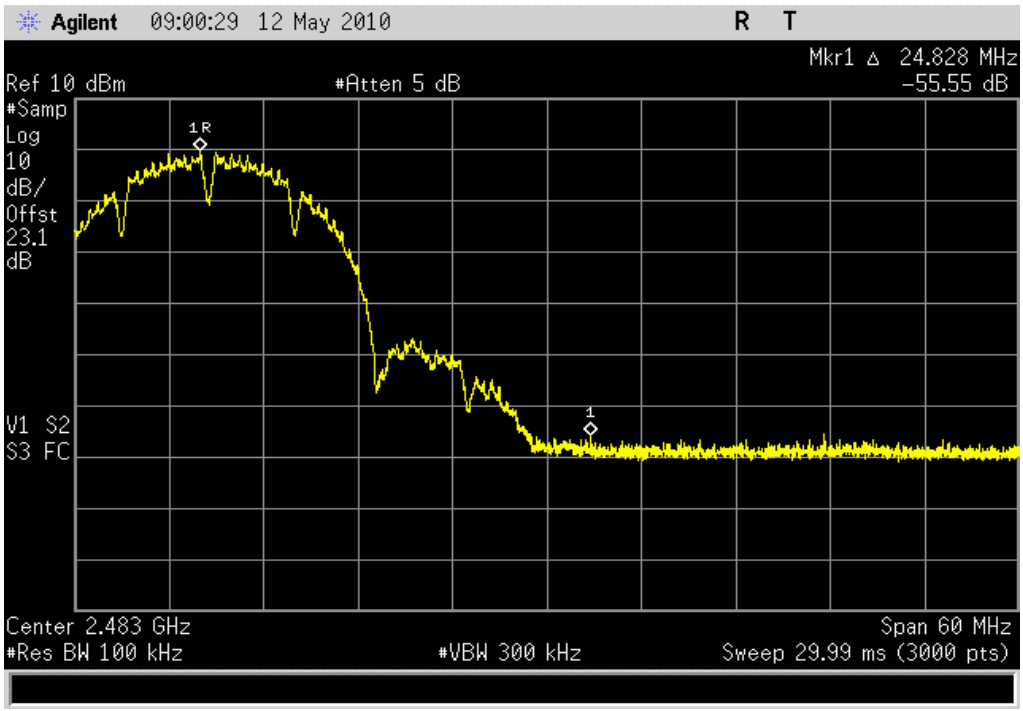
		Value	Limit	Results
802.11(b) 1 Mbps				
	Low Channel	-36.0 dBc	≤ -30 dBc	Pass
	High Channel	-55.6 dBc	≤ -30 dBc	Pass
802.11(b) 11 Mbps				
	Low Channel	-36.5 dBc	≤ -30 dBc	Pass
	High Channel	-56.4 dBc	≤ -30 dBc	Pass
802.11(g) 6 Mbps				
	Low Channel	-33.7 dBc	≤ -30 dBc	Pass
	High Channel	-48.4 dBc	≤ -30 dBc	Pass
802.11(g) 36 Mbps				
	Low Channel	-33.7 dBc	≤ -30 dBc	Pass
	High Channel	-49.5 dBc	≤ -30 dBc	Pass
802.11(g) 54 Mbps				
	Low Channel	-32.9 dBc	≤ -30 dBc	Pass
	High Channel	-50.2 dBc	≤ -30 dBc	Pass

BAND EDGE COMPLIANCE

802.11(b) 1 Mbps, Low Channel					
Result:	Pass	**Value:**	-36.0 dBc	**Limit:**	≤ -30 dBc

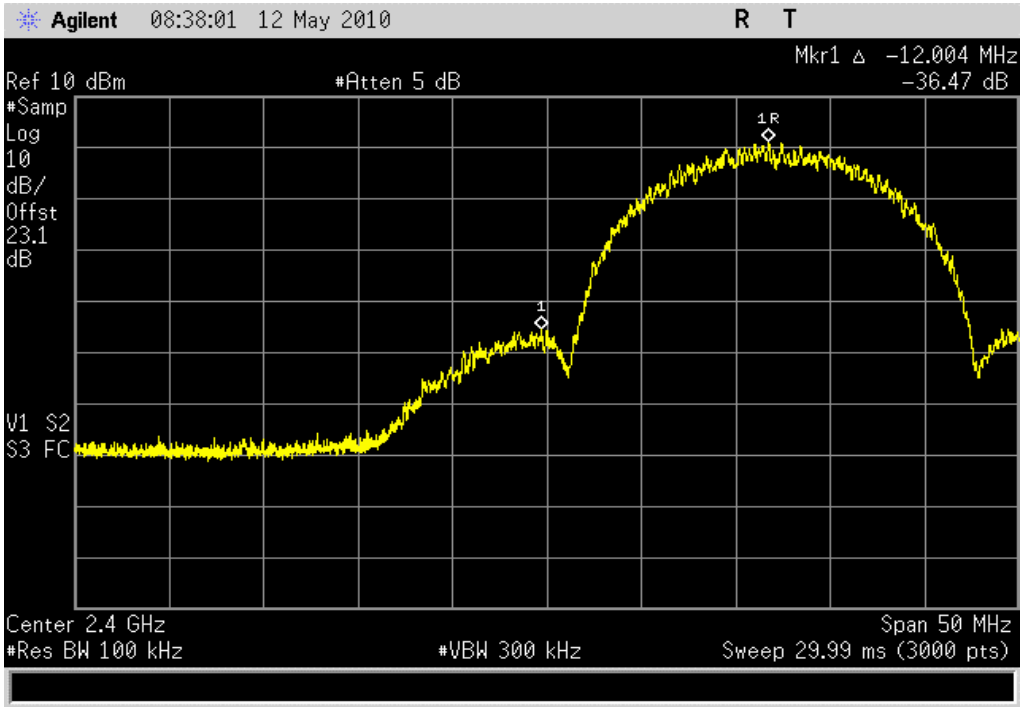


802.11(b) 1 Mbps, High Channel					
Result:	Pass	**Value:**	-55.6 dBc	**Limit:**	≤ -30 dBc

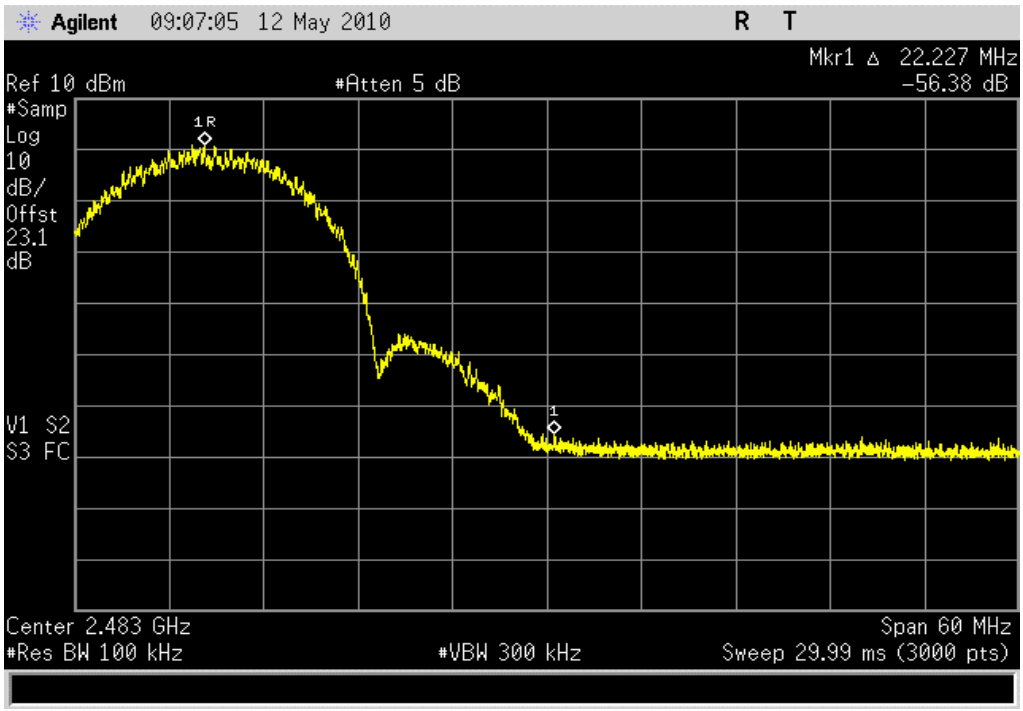


BAND EDGE COMPLIANCE

802.11(b) 11 Mbps, Low Channel					
Result:	Pass	**Value:**	-36.5 dBc	**Limit:**	≤ -30 dBc

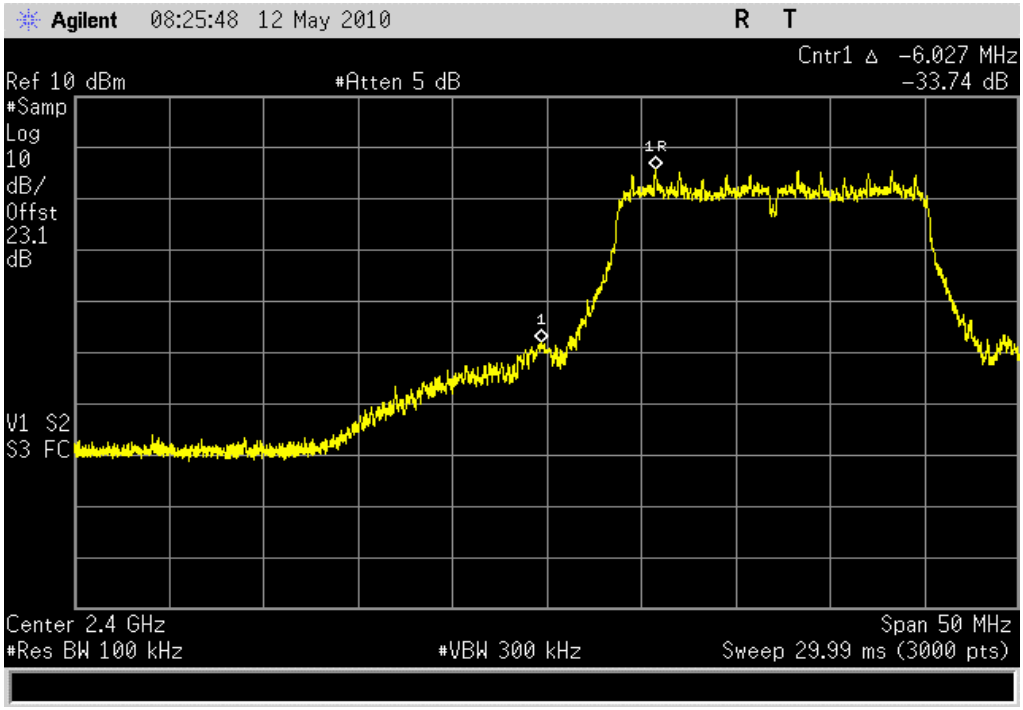


802.11(b) 11 Mbps, High Channel					
Result:	Pass	**Value:**	-56.4 dBc	**Limit:**	≤ -30 dBc

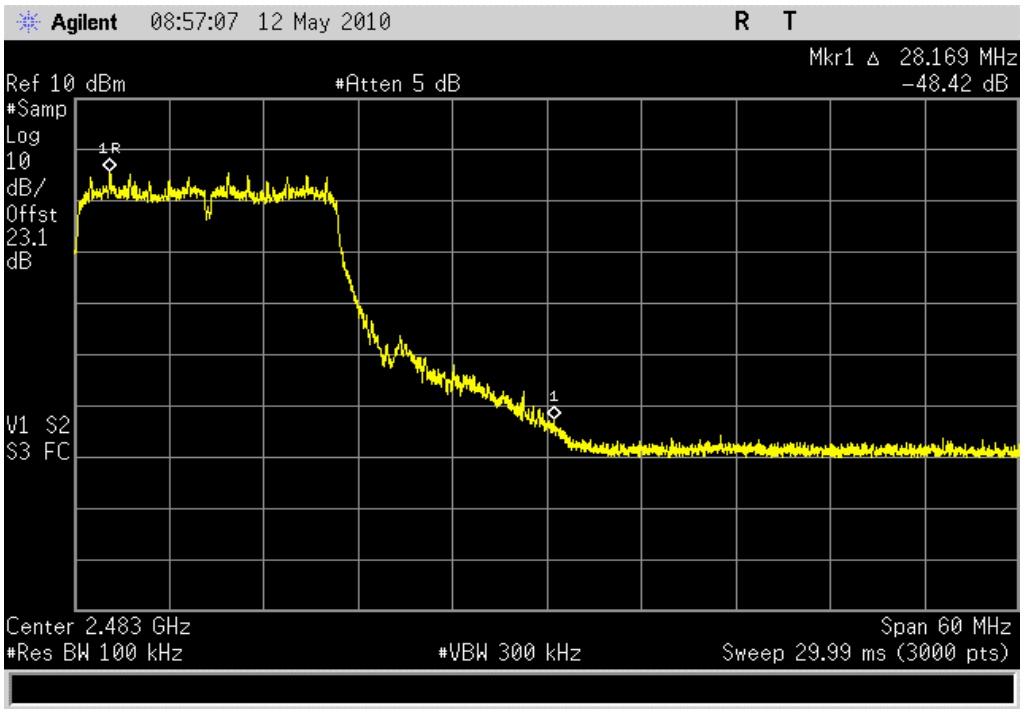


BAND EDGE COMPLIANCE

802.11(g) 6 Mbps, Low Channel					
Result:	Pass	**Value:**	-33.7 dBc	**Limit:**	≤ -30 dBc

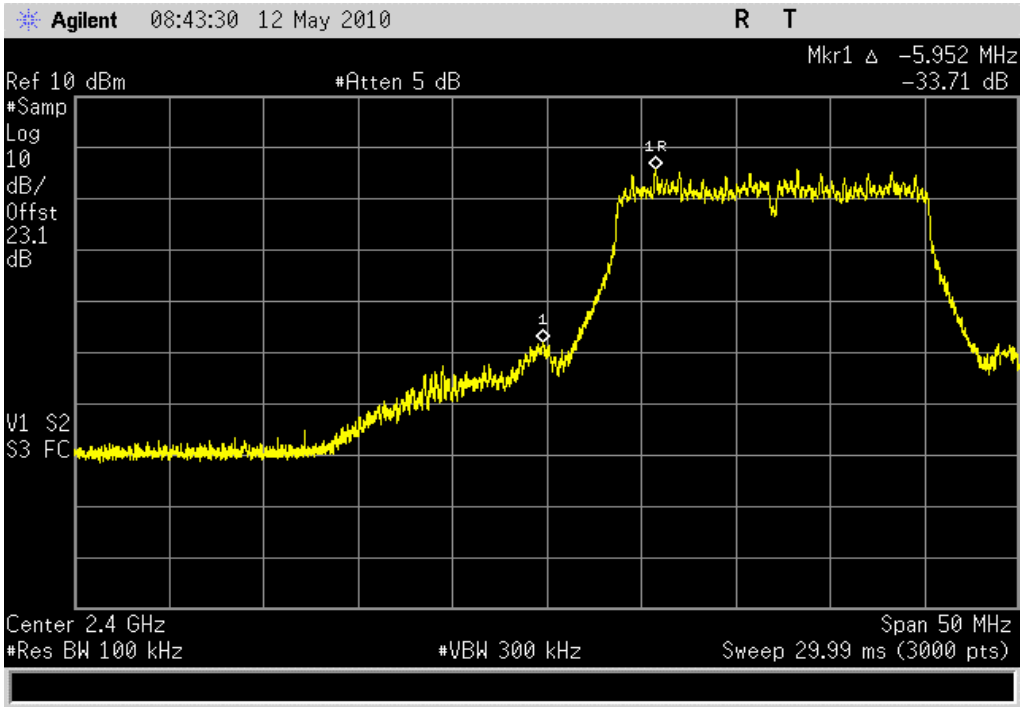


802.11(g) 6 Mbps, High Channel					
Result:	Pass	**Value:**	-48.4 dBc	**Limit:**	≤ -30 dBc

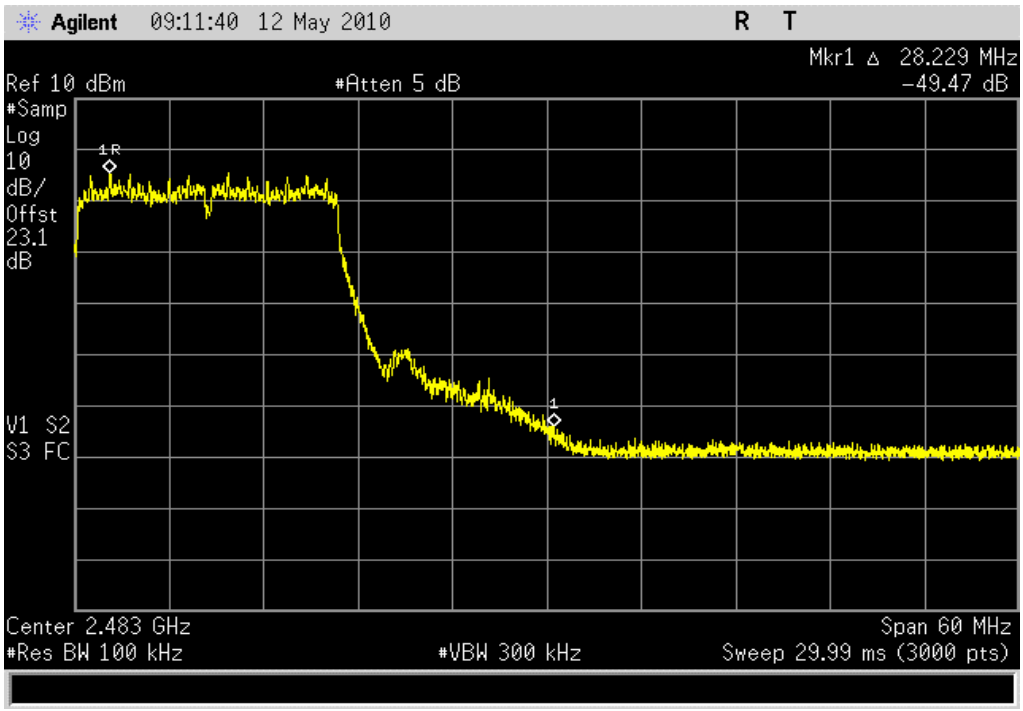


BAND EDGE COMPLIANCE

802.11(g) 36 Mbps, Low Channel					
Result:	Pass	**Value:**	-33.7 dBc	**Limit:**	≤ -30 dBc

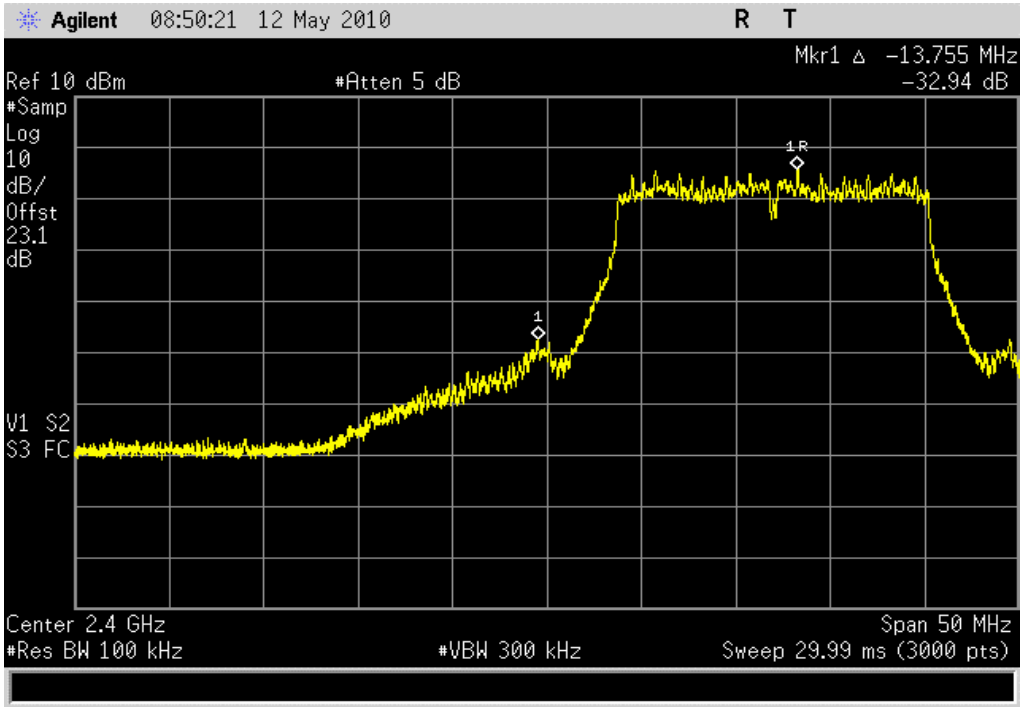


802.11(g) 36 Mbps, High Channel					
Result:	Pass	**Value:**	-49.5 dBc	**Limit:**	≤ -30 dBc

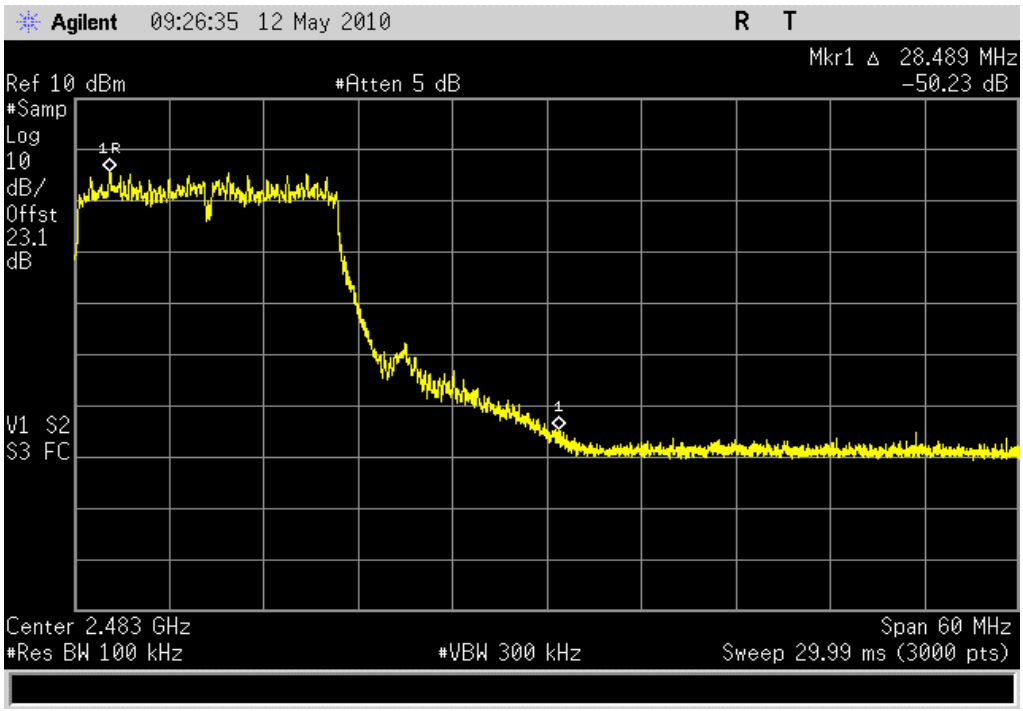


BAND EDGE COMPLIANCE

802.11(g) 54 Mbps, Low Channel					
Result:	Pass	**Value:**	-32.9 dBc	**Limit:**	≤ -30 dBc



802.11(g) 54 Mbps, High Channel					
Result:	Pass	**Value:**	-50.2 dBc	**Limit:**	≤ -30 dBc



SPURIOUS CONDUCTED EMISSIONS

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval
Spectrum Analyzer	Agilent	E4407B	AAU	12/12/2008	24
Attenuator 20 dB, SMA M/F 26GHz	S.M. Electronics	SA26B-20	AUY	7/21/2009	13
26 GHz DC Block, SMA	Pasternack	PE8210	AME	10/19/2009	13
EV06 Direct Connect Cable	ESM Cable Corp.	TT	ECA	NCR	0

MEASUREMENT UNCERTAINTY

A measurement uncertainty estimation has been performed for each test per our internal quality document WP 342. The estimation is used to compare the measured result with its "true" or theoretically correct value. The expanded measurement uncertainty for radiated emissions measurements is less than +/- 4 dB, and for conducted emissions measurements is less than +/- 2.7 dB. Our measurement data meets or exceeds the measurement uncertainty requirements of CISPR 16-4; therefore, the test data can be compared directly to the specification limit to determine compliance. The calculations for measurement uncertainty are available upon request.

TEST DESCRIPTION

The spurious RF conducted emissions were measured with the EUT set to low, medium, and high transmit frequencies. The measurements were made using a direct connection between the RF output of the EUT and the spectrum analyzer. The EUT was transmitting at its maximum data rate using direct sequence modulation. For each transmit frequency, the spectrum was scanned throughout the specified frequency range.

NORTHWEST EMC

SPURIOUS CONDUCTED EMISSIONS

XMit 2010.01.14

EUT:	Clane2			**Work Order:**	INTE5221
Serial Number:	5			**Date:**	05/12/10
Customer:	Intel Corporation			**Temperature:**	23°C
Attendees:	Bob Hughes			**Humidity:**	38%
Project:	None			**Barometric Pres.:**	30.05 in
Tested by:	Rod Peloquin	**Power:**	5 VDC via USB	**Job Site:**	EV06

TEST SPECIFICATIONS	Test Method
FCC 15.247:2010	ANSI C63.10:2009

COMMENTS

None

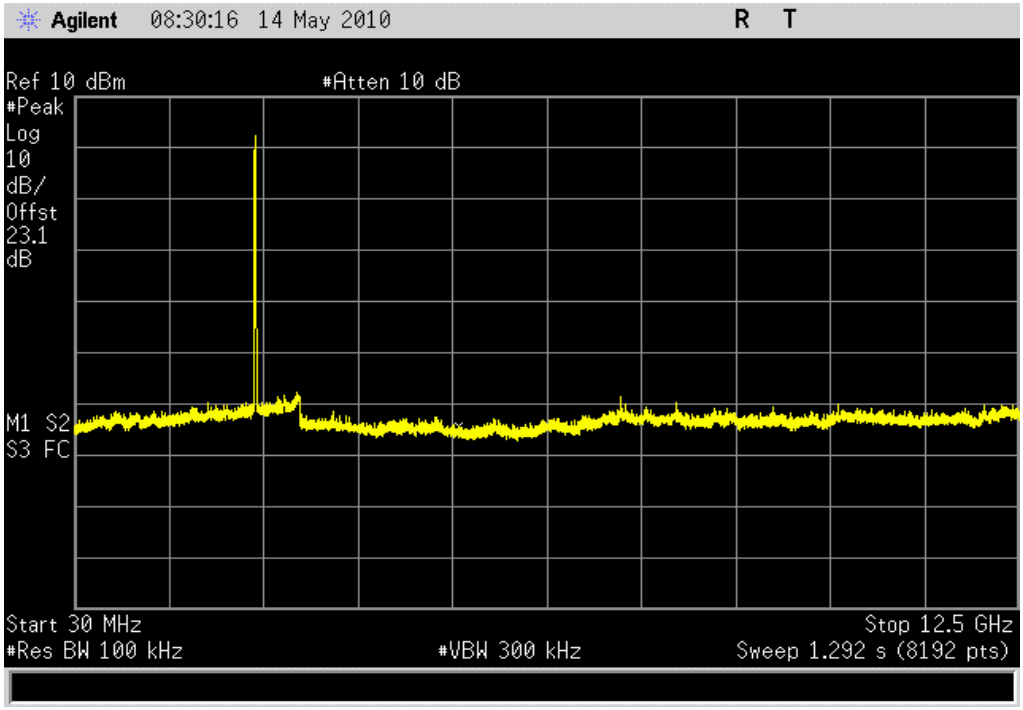
DEVIATIONS FROM TEST STANDARD

No Deviations

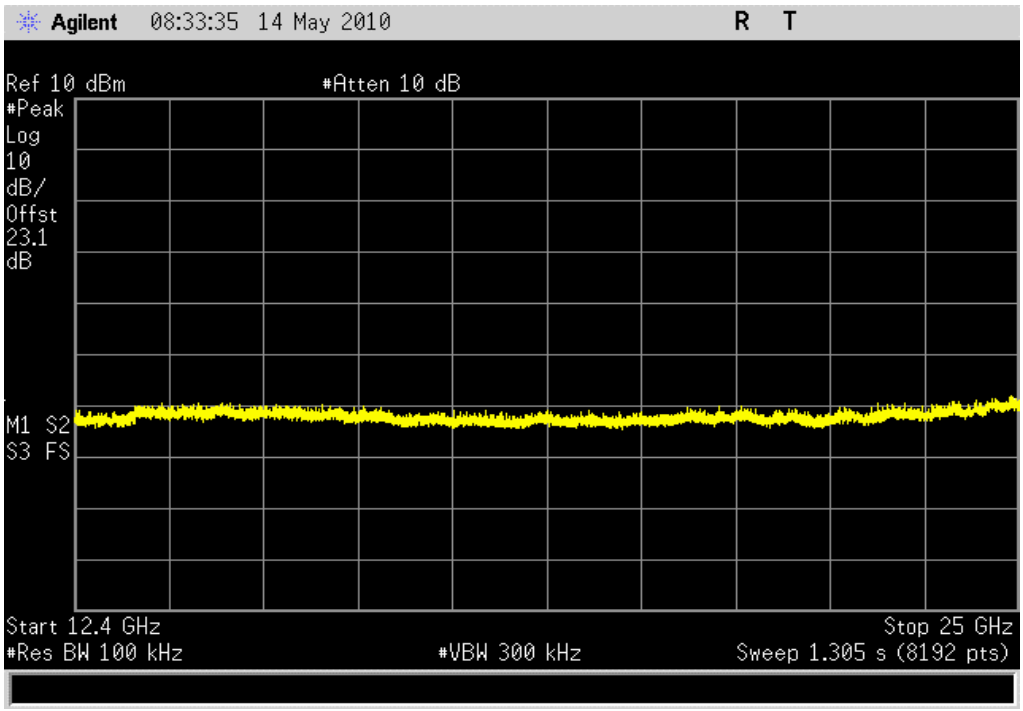
Configuration #	2	Signature

		Value	Limit	Results
802.11(b) 1 Mbps				
	Low Channel			
	30MHz - 12.5GHz	< -40 dBc	≤ -30 dBc	Pass
	12.4GHz-25GHz	< -40 dBc	≤ -30 dBc	Pass
	Mid Channel			
	30MHz - 12.5GHz	< -40 dBc	≤ -30 dBc	Pass
	12.4GHz-25GHz	< -40 dBc	≤ -30 dBc	Pass
	High Channel			
	30MHz - 12.5GHz	< -40 dBc	≤ -30 dBc	Pass
	12.4GHz-25GHz	< -40 dBc	≤ -30 dBc	Pass
802.11(b) 11 Mbps				
	Low Channel			
	30MHz - 12.5GHz	< -40 dBc	≤ -30 dBc	Pass
	12.4GHz-25GHz	< -40 dBc	≤ -30 dBc	Pass
	Mid Channel			
	30MHz - 12.5GHz	< -40 dBc	≤ -30 dBc	Pass
	12.4GHz-25GHz	< -40 dBc	≤ -30 dBc	Pass
	High Channel			
	30MHz - 12.5GHz	< -40 dBc	≤ -30 dBc	Pass
	12.4GHz-25GHz	< -40 dBc	≤ -30 dBc	Pass
802.11(g) 6 Mbps				
	Low Channel			
	30MHz - 12.5GHz	< -40 dBc	≤ -30 dBc	Pass
	12.4GHz-25GHz	< -40 dBc	≤ -30 dBc	Pass
	Mid Channel			
	30MHz - 12.5GHz	< -40 dBc	≤ -30 dBc	Pass
	12.4GHz-25GHz	< -40 dBc	≤ -30 dBc	Pass
	High Channel			
	30MHz - 12.5GHz	< -40 dBc	≤ -30 dBc	Pass
	12.4GHz-25GHz	< -40 dBc	≤ -30 dBc	Pass
802.11(g) 36 Mbps				
	Low Channel			
	30MHz - 12.5GHz	< -40 dBc	≤ -30 dBc	Pass
	12.4GHz-25GHz	< -40 dBc	≤ -30 dBc	Pass
	Mid Channel			
	30MHz - 12.5GHz	< -40 dBc	≤ -30 dBc	Pass
	12.4GHz-25GHz	< -40 dBc	≤ -30 dBc	Pass
	High Channel			
	30MHz - 12.5GHz	< -40 dBc	≤ -30 dBc	Pass
	12.4GHz-25GHz	< -40 dBc	≤ -30 dBc	Pass
802.11(g) 54 Mbps				
	Low Channel			
	30MHz - 12.5GHz	< -40 dBc	≤ -30 dBc	Pass
	12.4GHz-25GHz	< -40 dBc	≤ -30 dBc	Pass
	Mid Channel			
	30MHz - 12.5GHz	< -40 dBc	≤ -30 dBc	Pass
	12.4GHz-25GHz	< -40 dBc	≤ -30 dBc	Pass
	High Channel			
	30MHz - 12.5GHz	< -40 dBc	≤ -30 dBc	Pass
	12.4GHz-25GHz	< -40 dBc	≤ -30 dBc	Pass

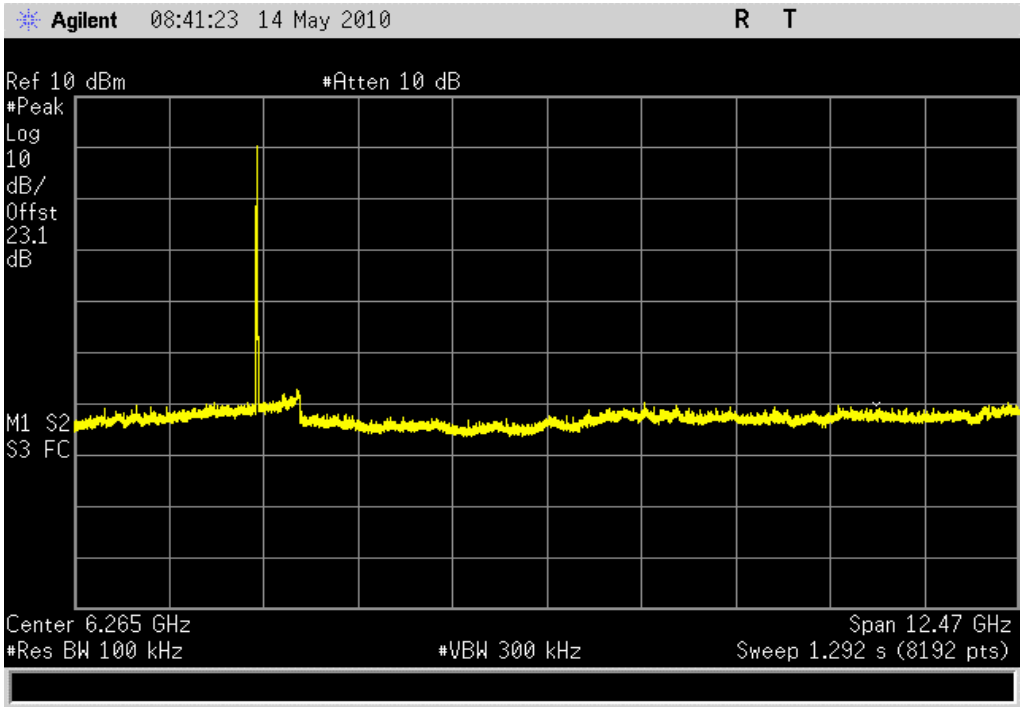
802.11(b) 1 Mbps, Low Channel, 30MHz - 12.5GHz					
Result:	Pass	**Value:**	< -40 dBc	**Limit:**	≤ -30 dBc



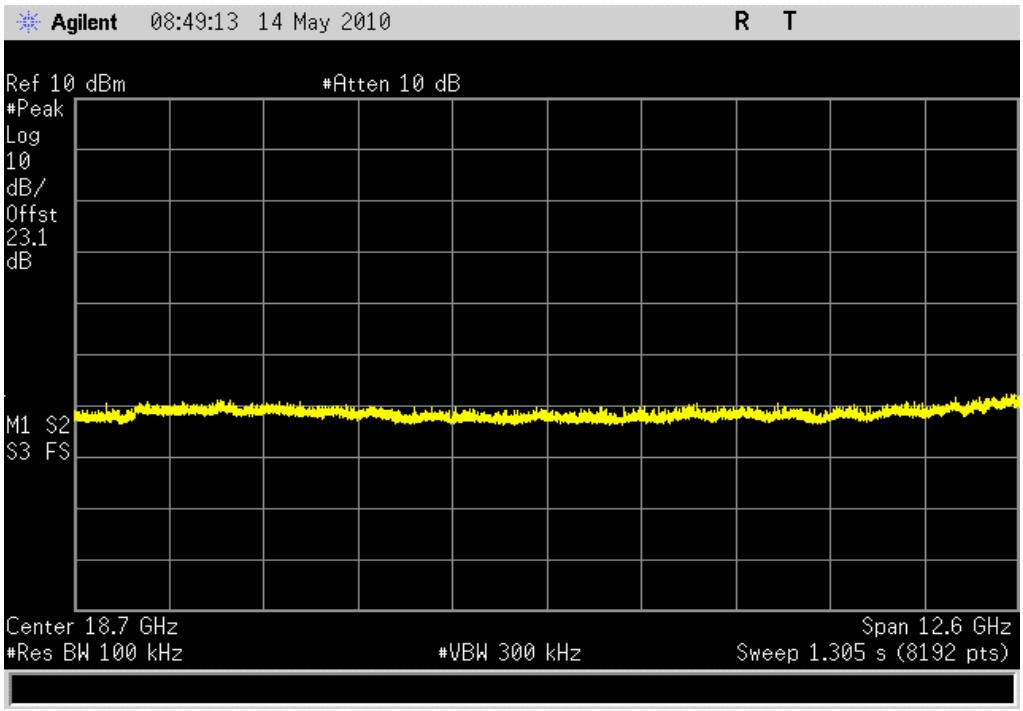
802.11(b) 1 Mbps, Low Channel, 12.4GHz-25GHz					
Result:	Pass	**Value:**	< -40 dBc	**Limit:**	≤ -30 dBc



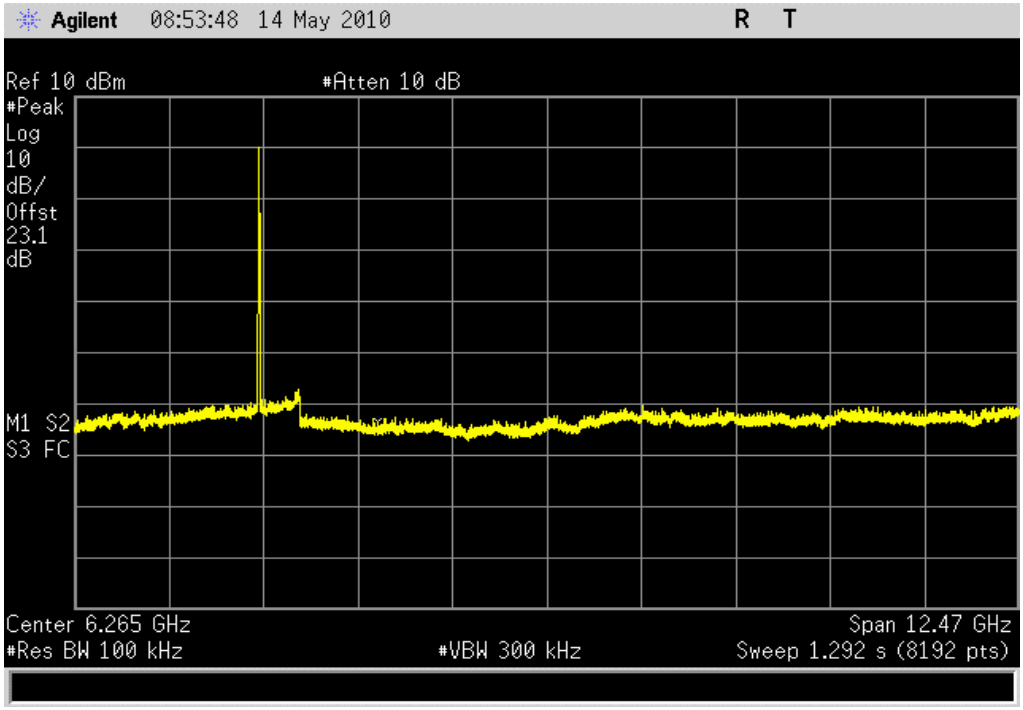
802.11(b) 1 Mbps, Mid Channel, 30MHz - 12.5GHz					
Result:	Pass	**Value:**	< -40 dBc	**Limit:**	≤ -30 dBc



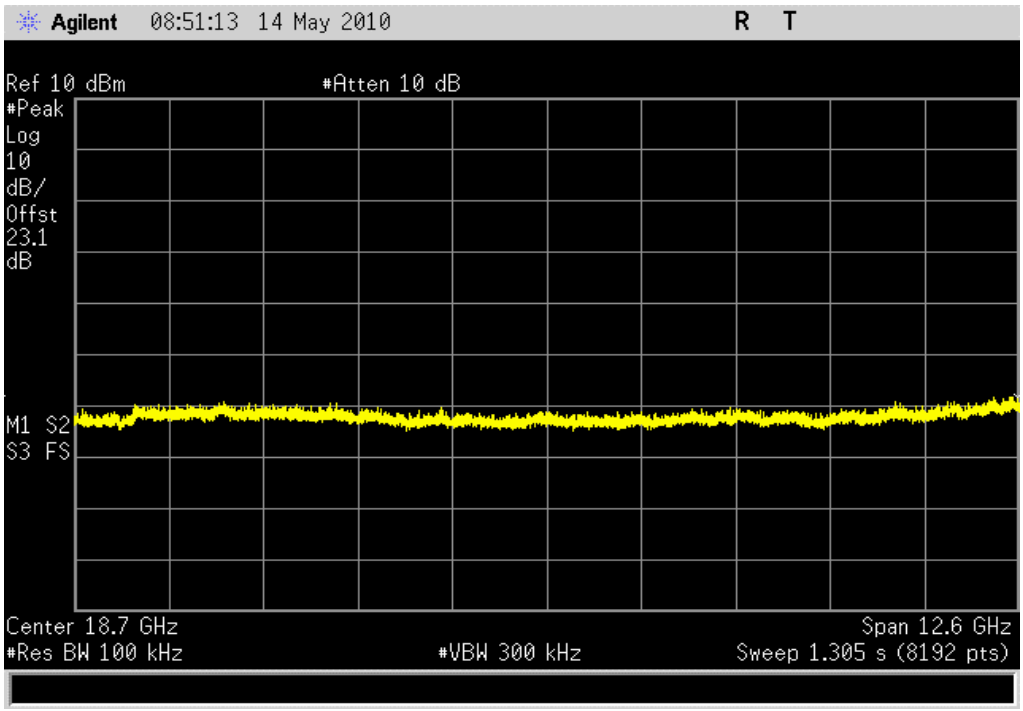
802.11(b) 1 Mbps, Mid Channel, 12.4GHz-25GHz					
Result:	Pass	**Value:**	< -40 dBc	**Limit:**	≤ -30 dBc



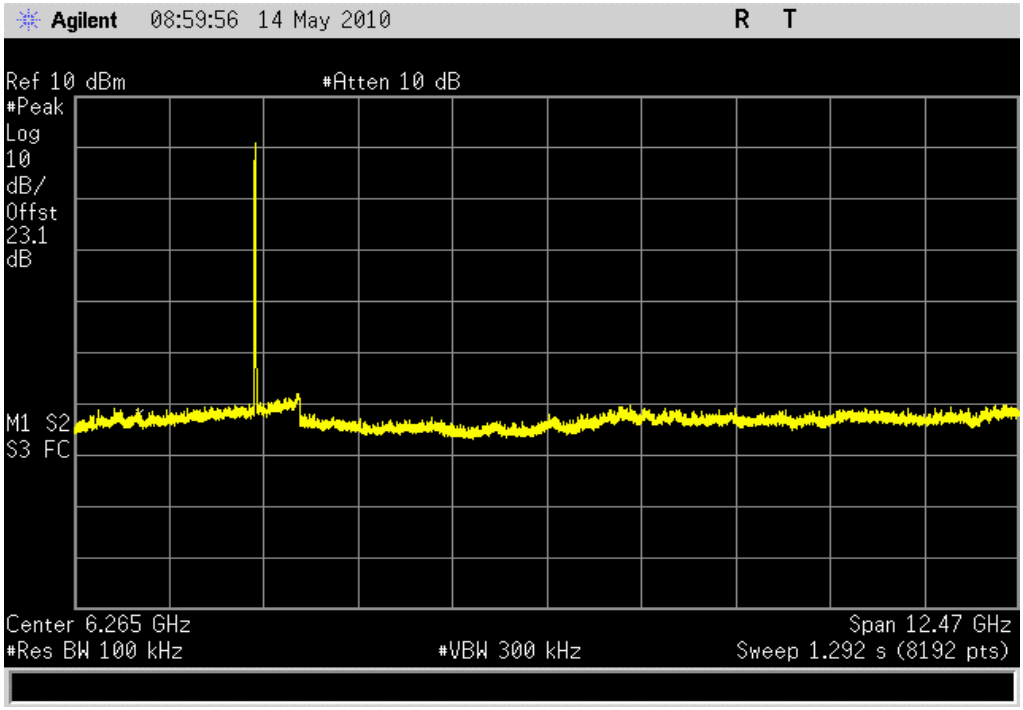
802.11(b) 1 Mbps, High Channel, 30MHz - 12.5GHz					
Result:	Pass	**Value:**	< -40 dBc	**Limit:**	≤ -30 dBc



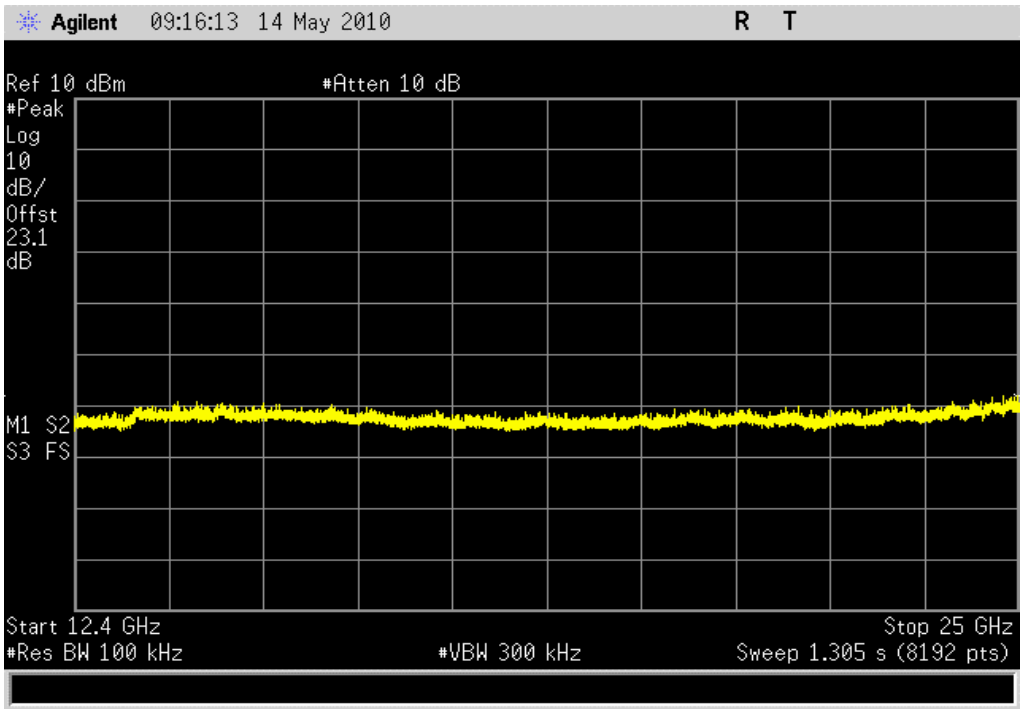
802.11(b) 1 Mbps, High Channel, 12.4GHz-25GHz					
Result:	Pass	**Value:**	< -40 dBc	**Limit:**	≤ -30 dBc



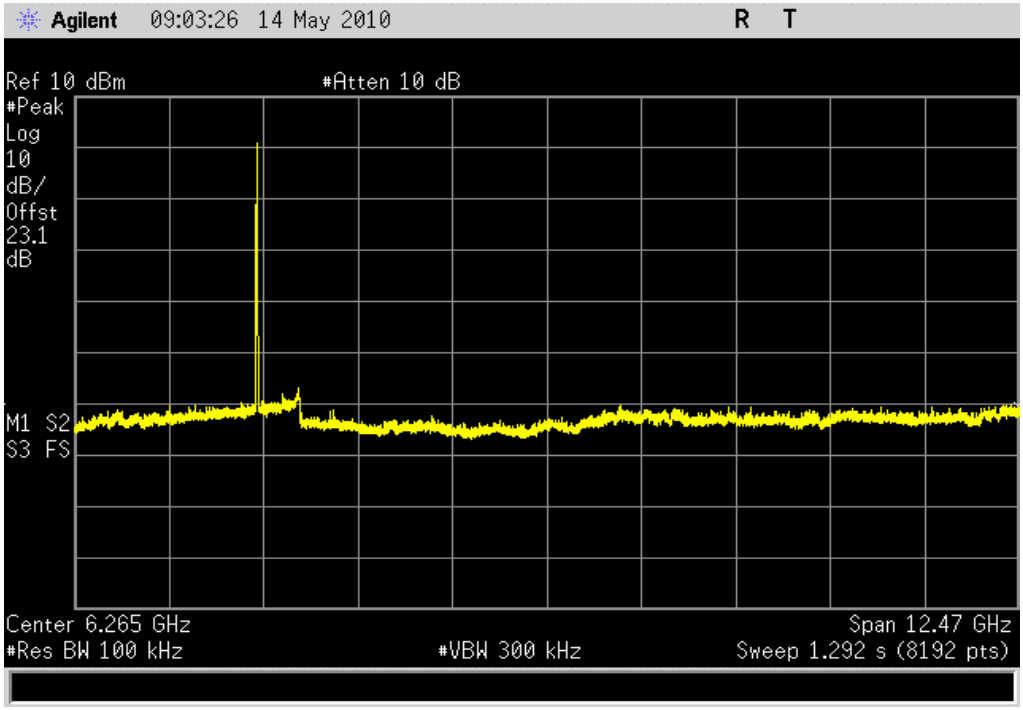
802.11(b) 11 Mbps, Low Channel, 30MHz - 12.5GHz					
Result:	Pass	**Value:**	< -40 dBc	**Limit:**	≤ -30 dBc



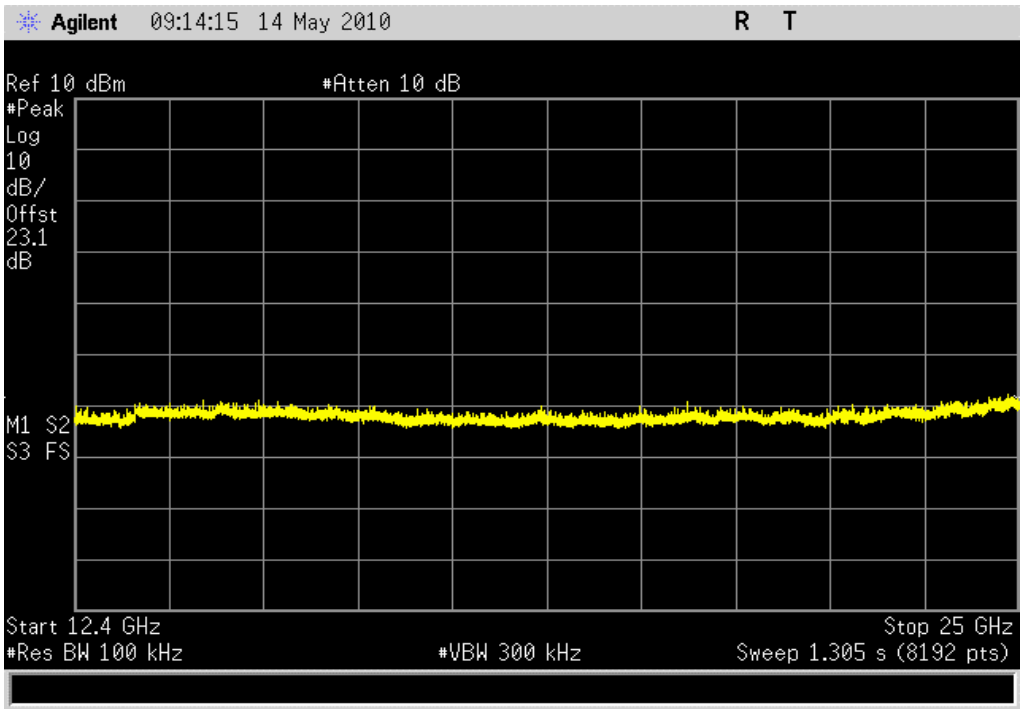
802.11(b) 11 Mbps, Low Channel, 12.4GHz-25GHz					
Result:	Pass	**Value:**	< -40 dBc	**Limit:**	≤ -30 dBc



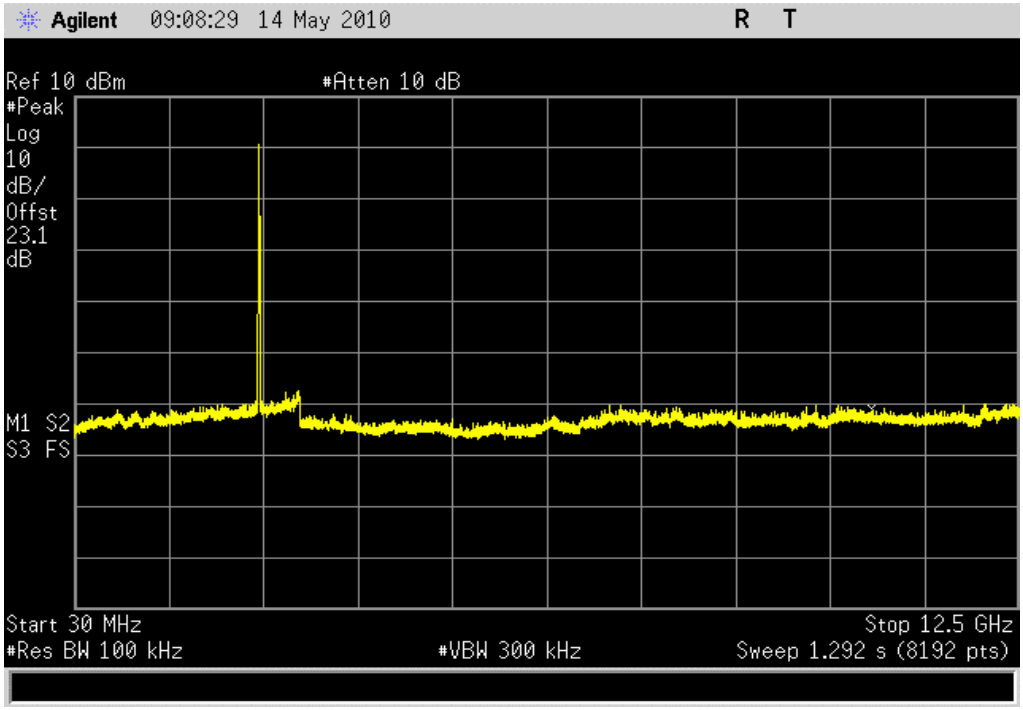
802.11(b) 11 Mbps, Mid Channel, 30MHz - 12.5GHz					
Result:	Pass	**Value:**	< -40 dBc	**Limit:**	≤ -30 dBc



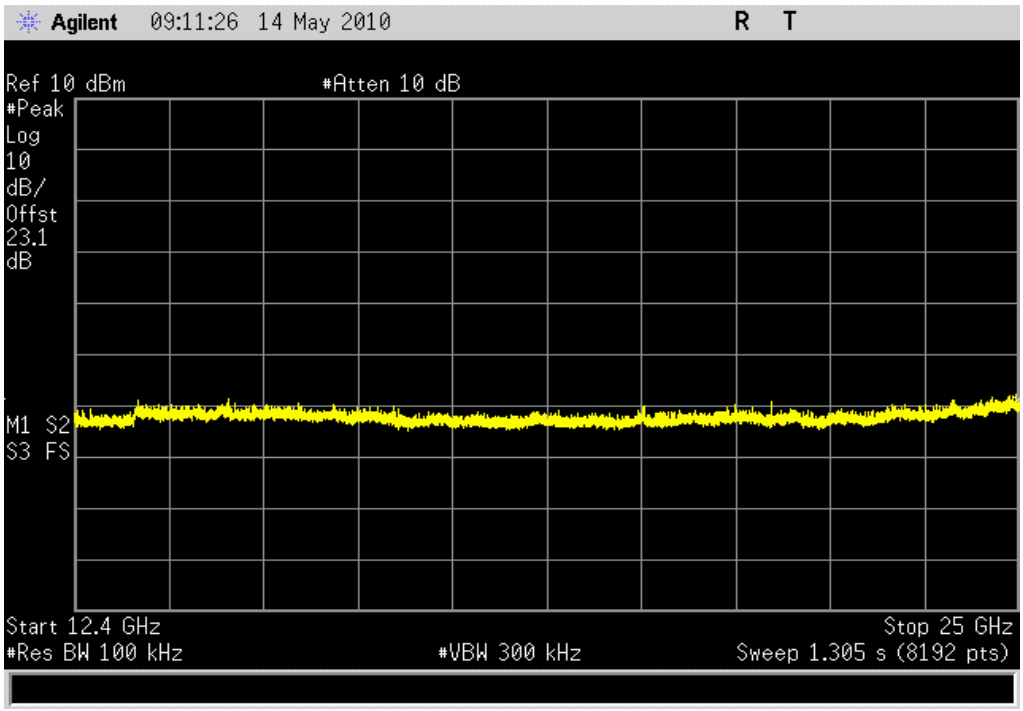
802.11(b) 11 Mbps, Mid Channel, 12.4GHz-25GHz					
Result:	Pass	**Value:**	< -40 dBc	**Limit:**	≤ -30 dBc



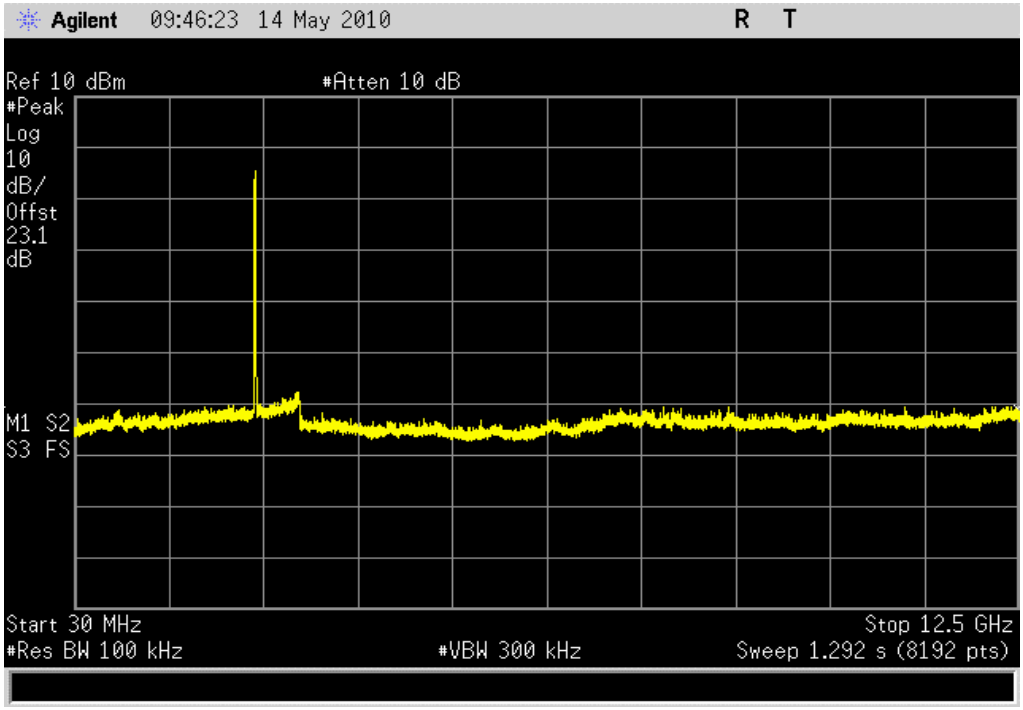
802.11(b) 11 Mbps, High Channel, 30MHz - 12.5GHz					
Result:	Pass	**Value:**	< -40 dBc	**Limit:**	≤ -30 dBc



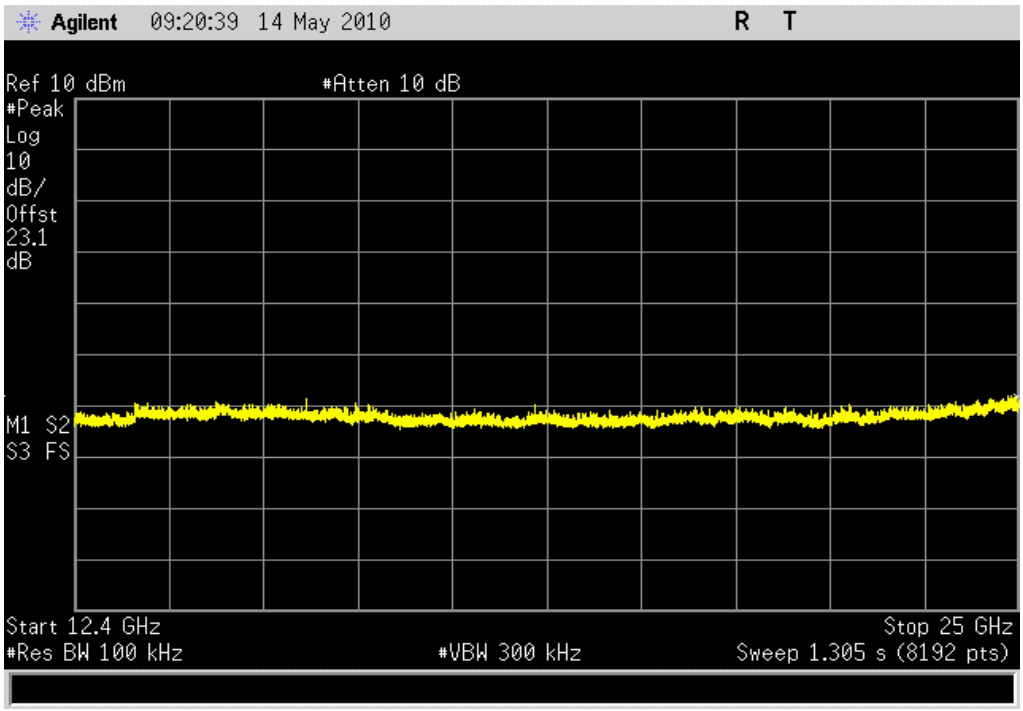
802.11(b) 11 Mbps, High Channel, 12.4GHz-25GHz					
Result:	Pass	**Value:**	< -40 dBc	**Limit:**	≤ -30 dBc



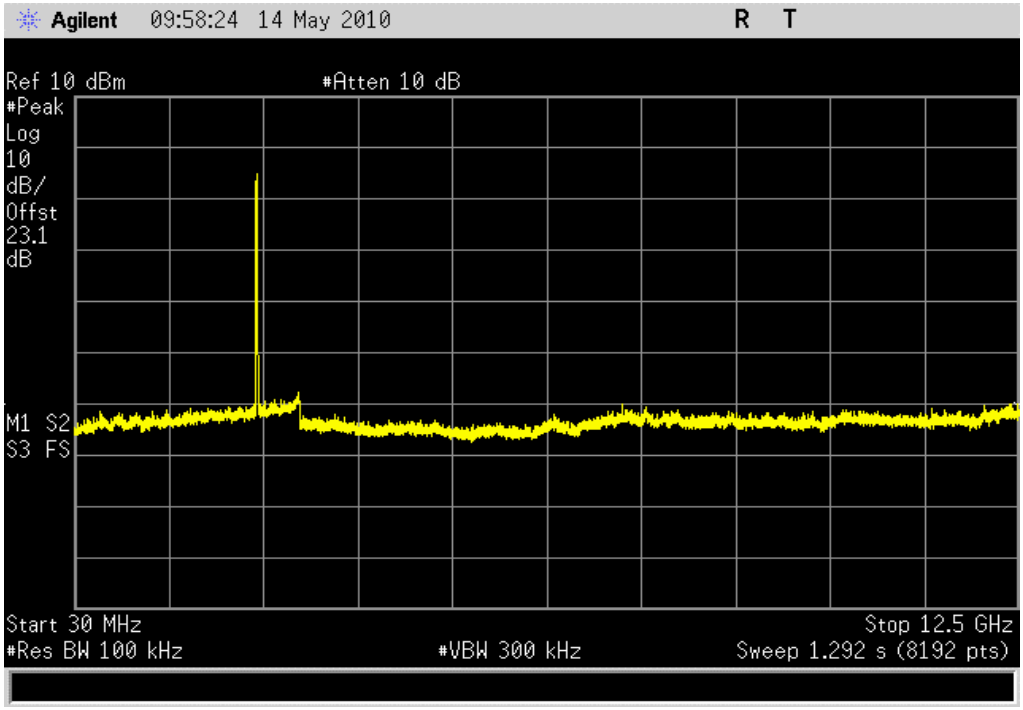
802.11(g) 6 Mbps, Low Channel, 30MHz - 12.5GHz					
Result:	Pass	**Value:**	< -40 dBc	**Limit:**	≤ -30 dBc



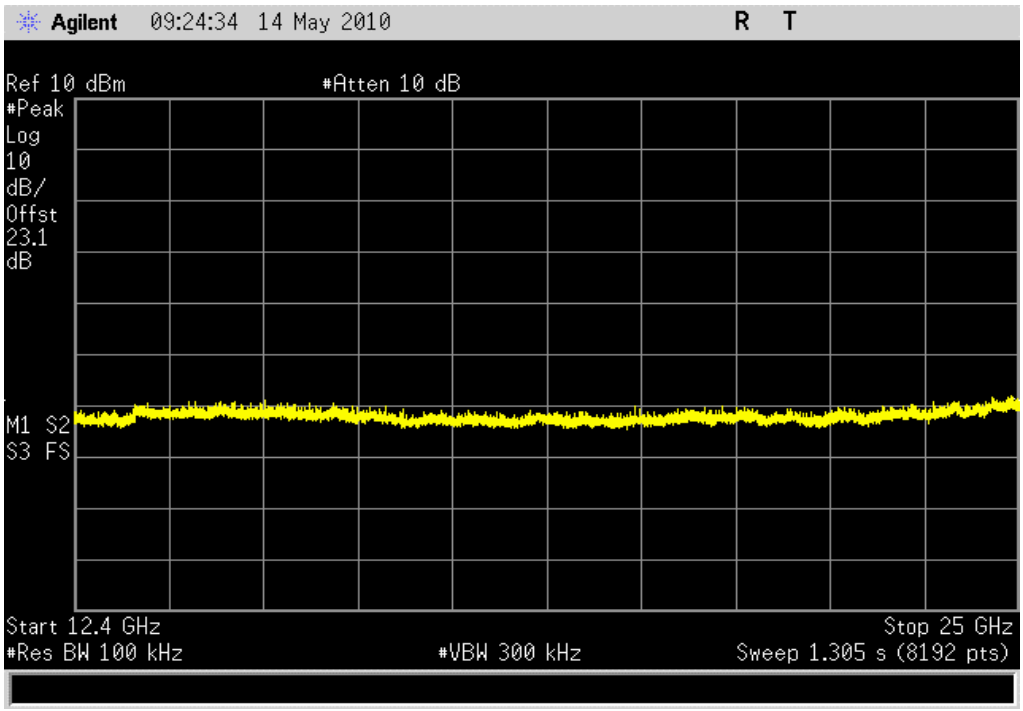
802.11(g) 6 Mbps, Low Channel, 12.4GHz-25GHz					
Result:	Pass	**Value:**	< -40 dBc	**Limit:**	≤ -30 dBc



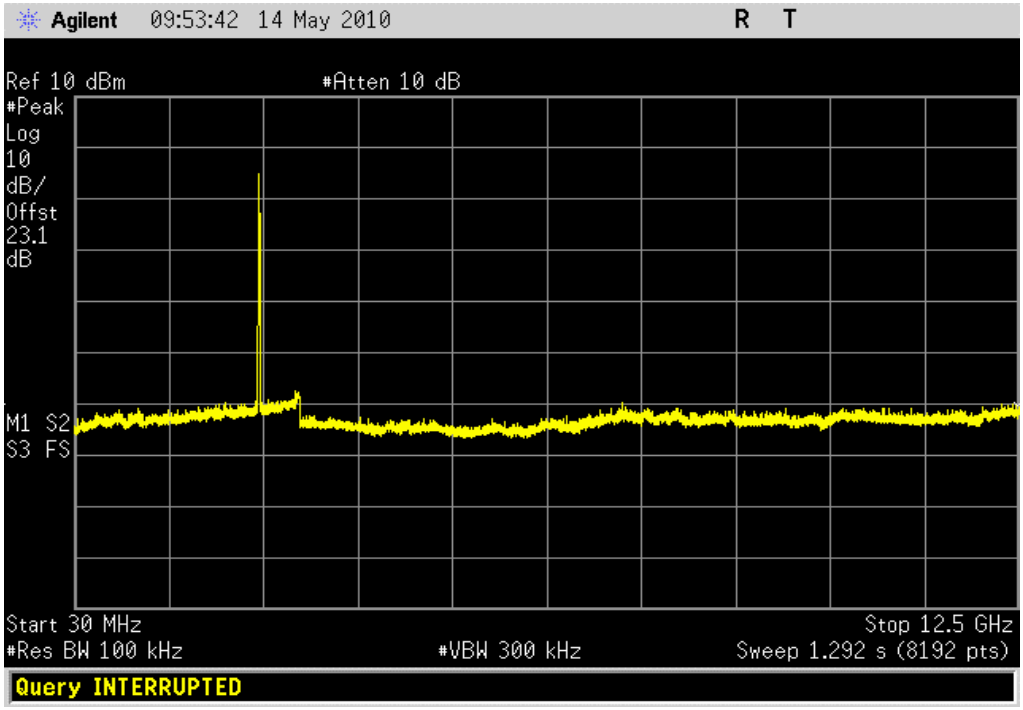
802.11(g) 6 Mbps, Mid Channel, 30MHz - 12.5GHz					
Result:	Pass	**Value:**	< -40 dBc	**Limit:**	≤ -30 dBc



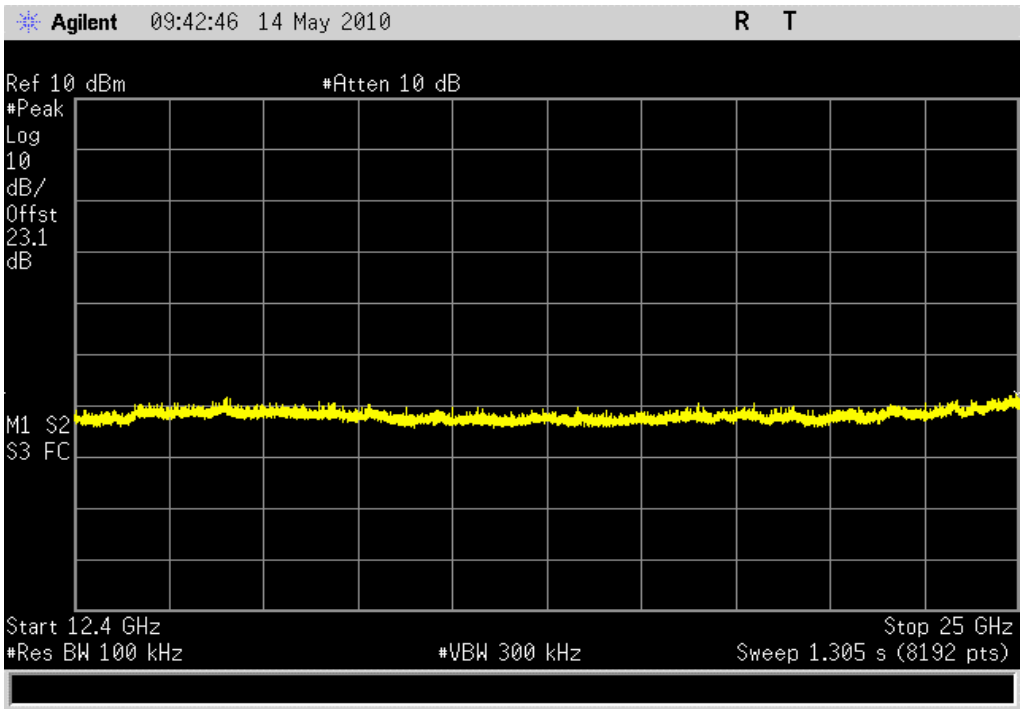
802.11(g) 6 Mbps, Mid Channel, 12.4GHz-25GHz					
Result:	Pass	**Value:**	< -40 dBc	**Limit:**	≤ -30 dBc



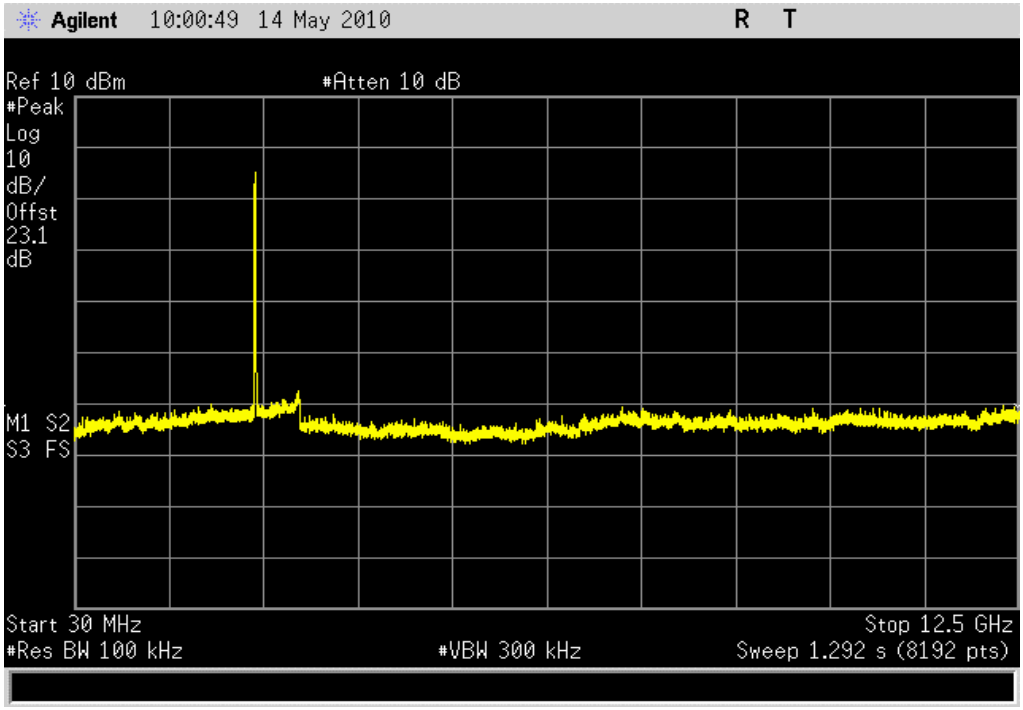
802.11(g) 6 Mbps, High Channel, 30MHz - 12.5GHz					
Result:	Pass	**Value:**	< -40 dBc	**Limit:**	≤ -30 dBc



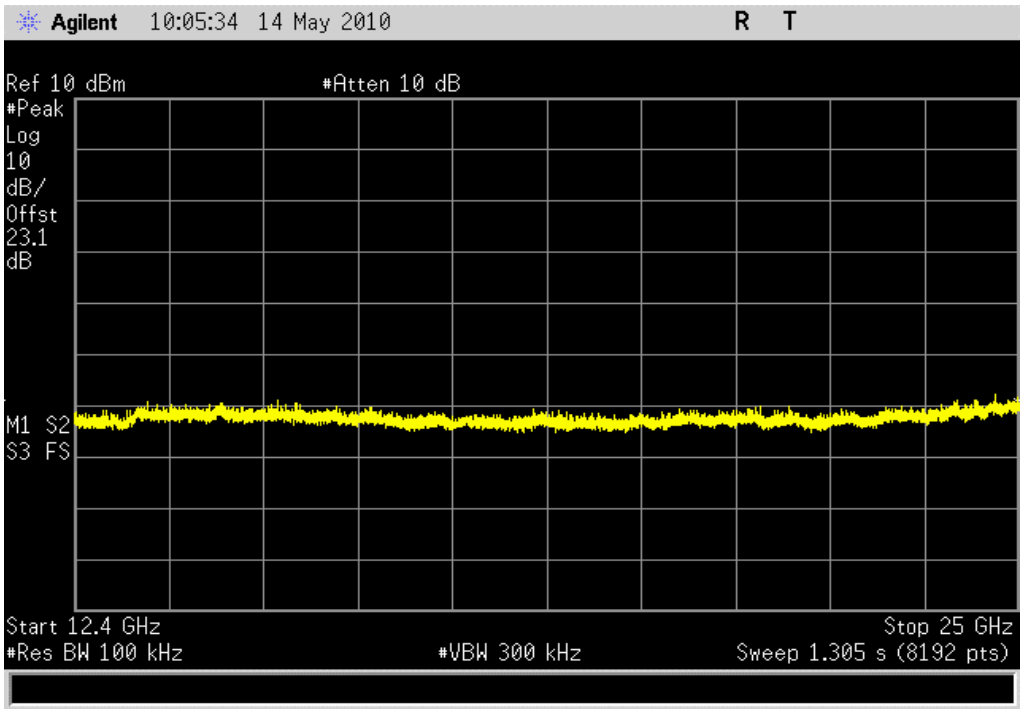
802.11(g) 6 Mbps, High Channel, 12.4GHz-25GHz					
Result:	Pass	**Value:**	< -40 dBc	**Limit:**	≤ -30 dBc



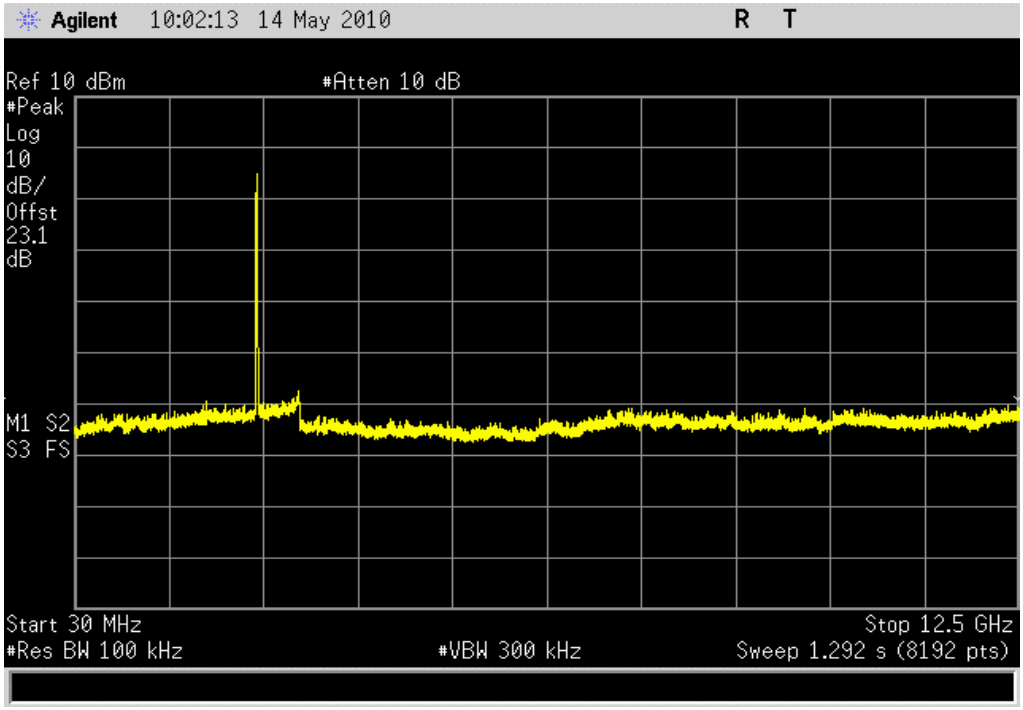
802.11(g) 36 Mbps, Low Channel, 30MHz - 12.5GHz					
Result:	Pass	**Value:**	< -40 dBc	**Limit:**	≤ -30 dBc



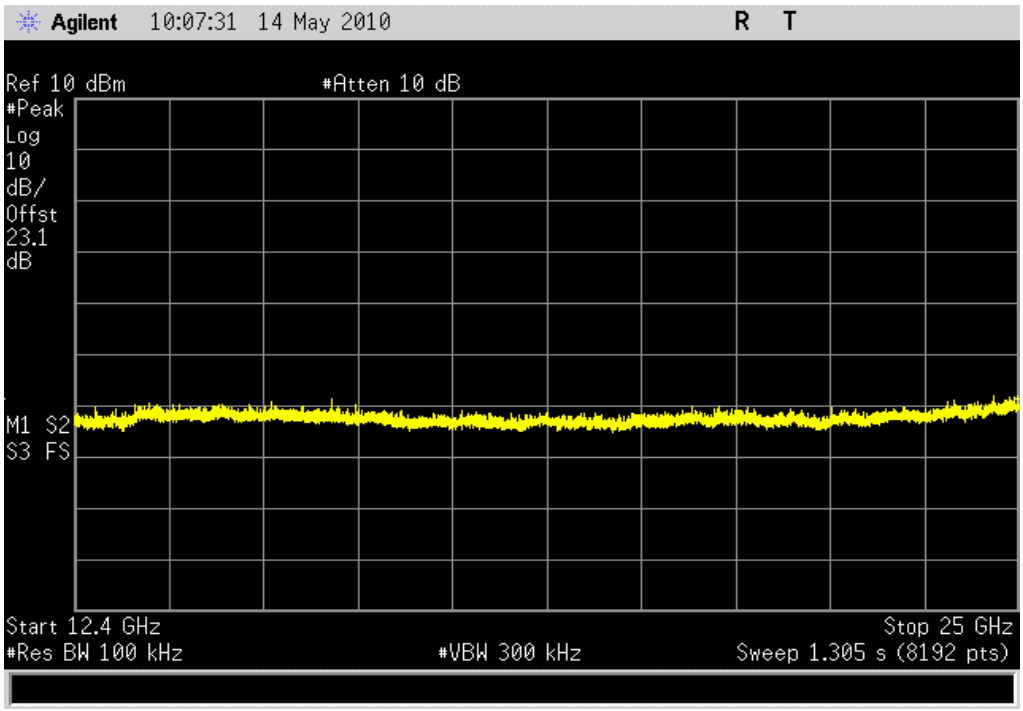
802.11(g) 36 Mbps, Low Channel, 12.4GHz-25GHz					
Result:	Pass	**Value:**	< -40 dBc	**Limit:**	≤ -30 dBc



802.11(g) 36 Mbps, Mid Channel, 30MHz - 12.5GHz					
Result:	Pass	**Value:**	< -40 dBc	**Limit:**	≤ -30 dBc

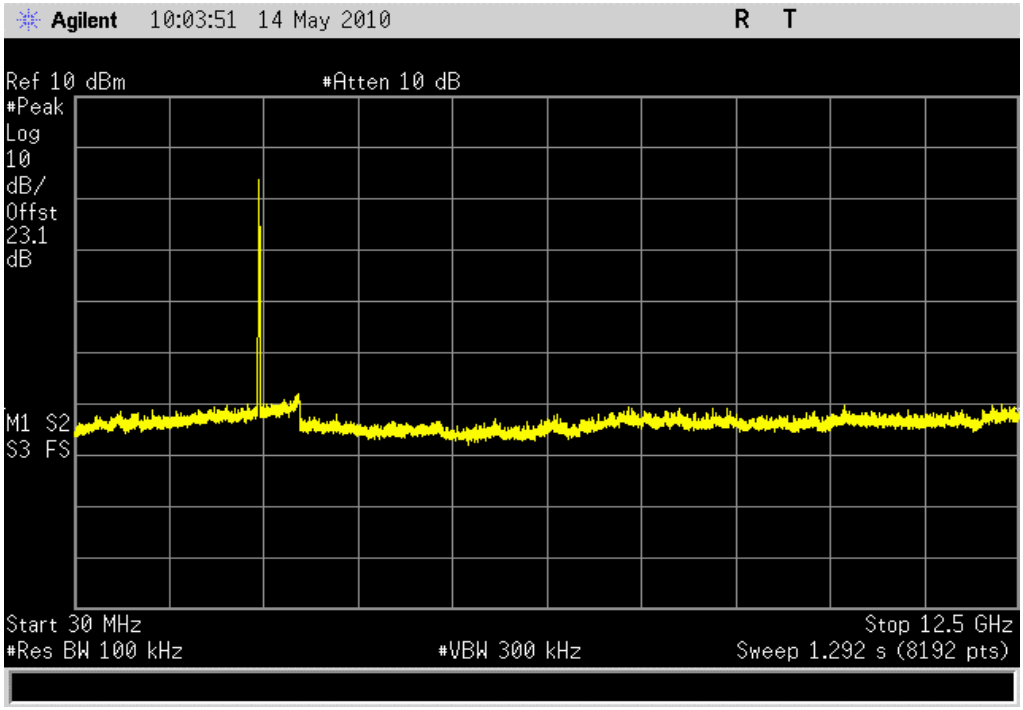


802.11(g) 36 Mbps, Mid Channel, 12.4GHz-25GHz					
Result:	Pass	**Value:**	< -40 dBc	**Limit:**	≤ -30 dBc

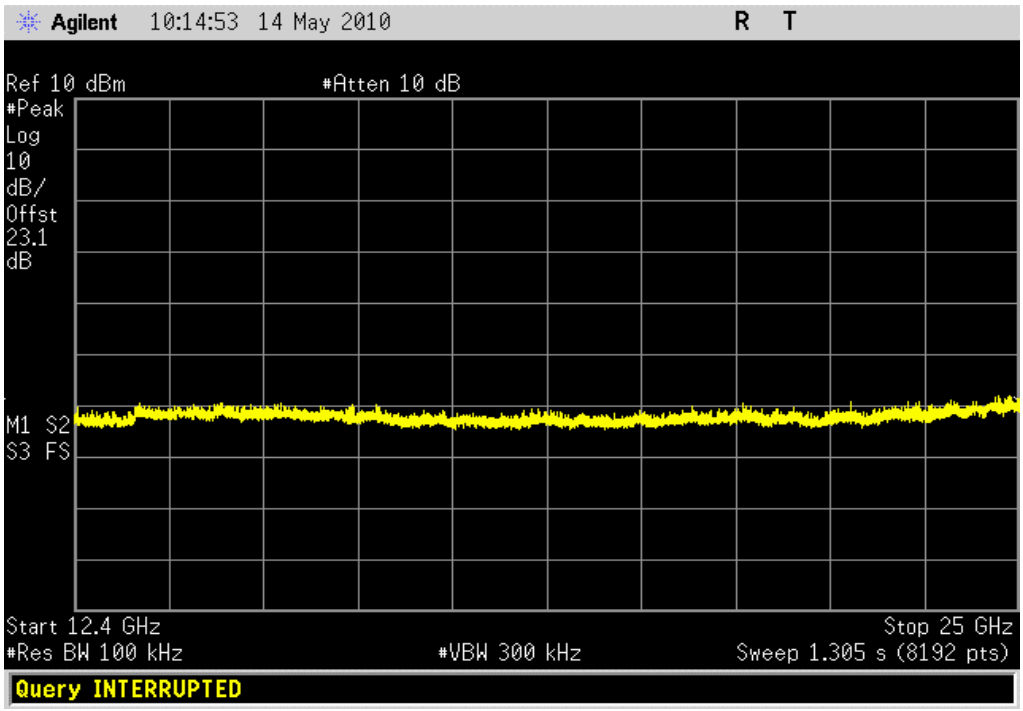


SPURIOUS CONDUCTED EMISSIONS

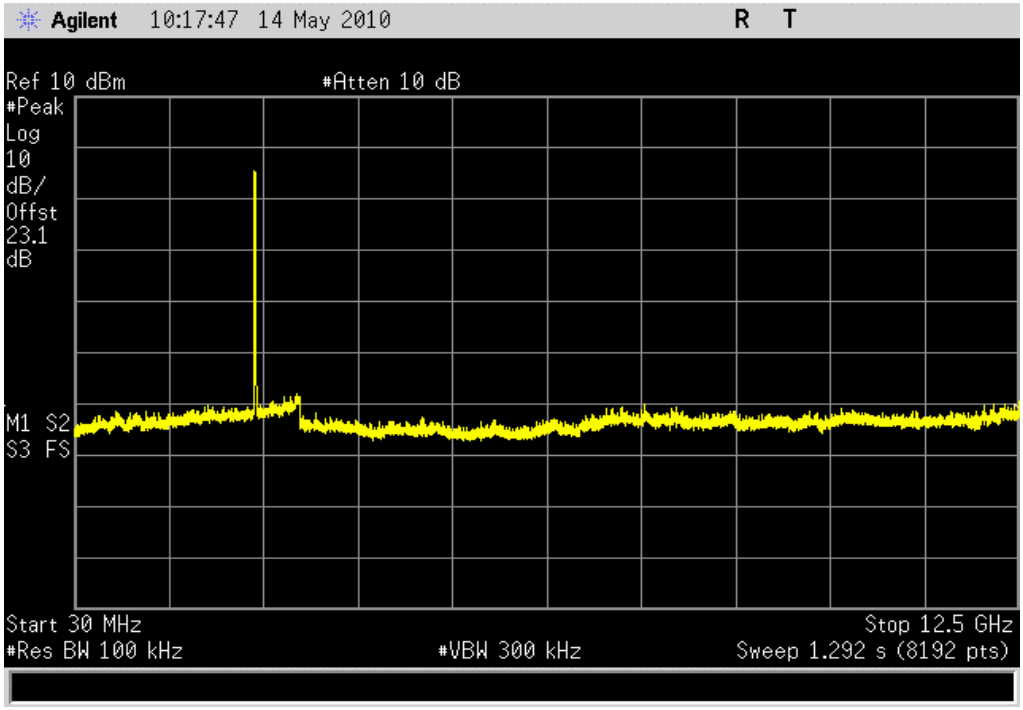
802.11(g) 36 Mbps, High Channel, 30MHz - 12.5GHz					
Result:	Pass	**Value:**	< -40 dBc	**Limit:**	≤ -30 dBc



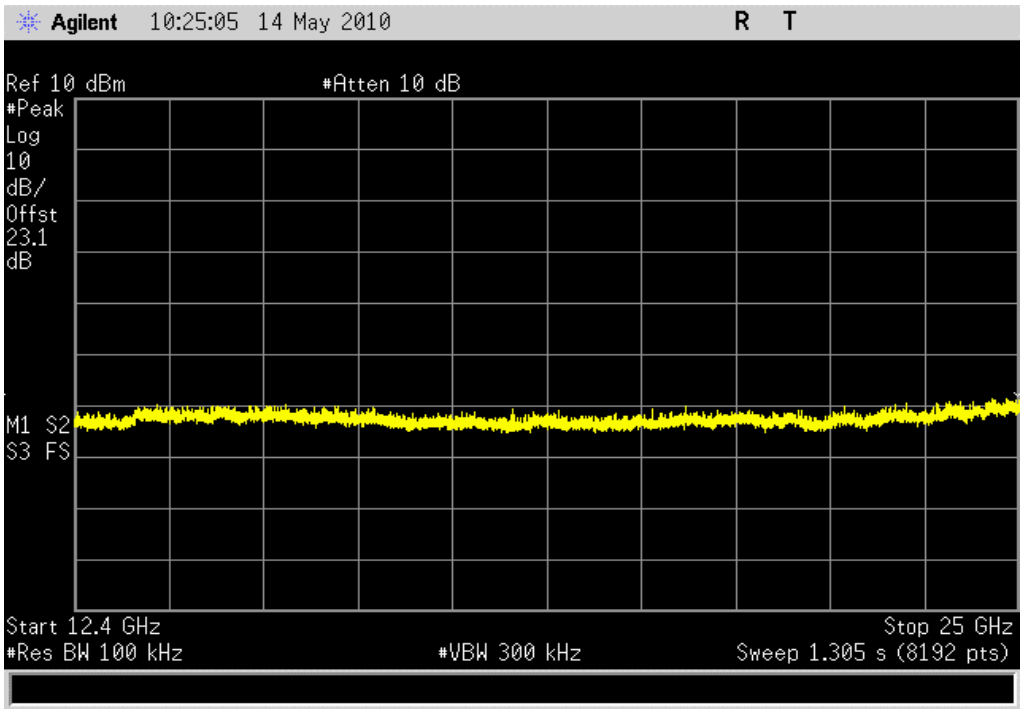
802.11(g) 36 Mbps, High Channel, 12.4GHz-25GHz					
Result:	Pass	**Value:**	< -40 dBc	**Limit:**	≤ -30 dBc



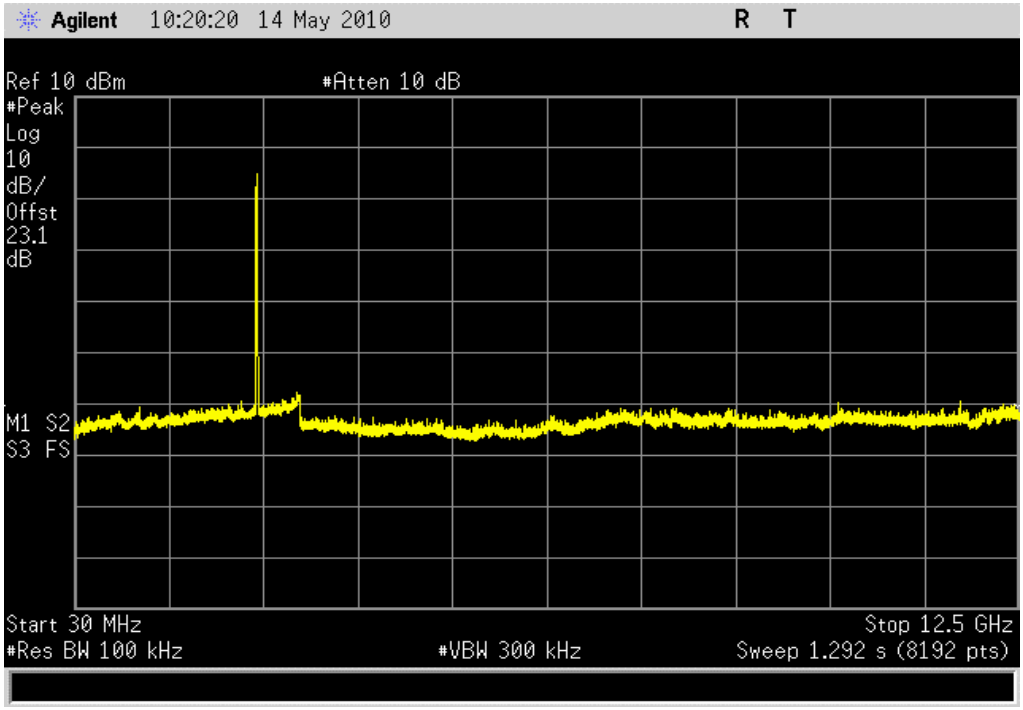
802.11(g) 54 Mbps, Low Channel, 30MHz - 12.5GHz					
Result:	Pass	**Value:**	< -40 dBc	**Limit:**	≤ -30 dBc



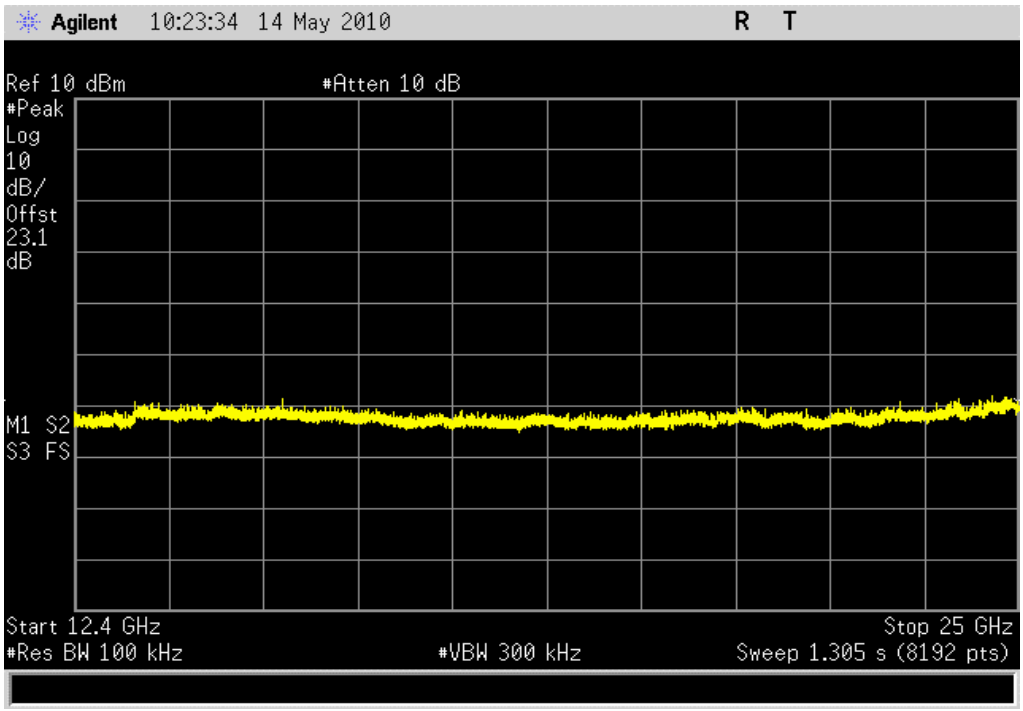
802.11(g) 54 Mbps, Low Channel, 12.4GHz-25GHz					
Result:	Pass	**Value:**	< -40 dBc	**Limit:**	≤ -30 dBc



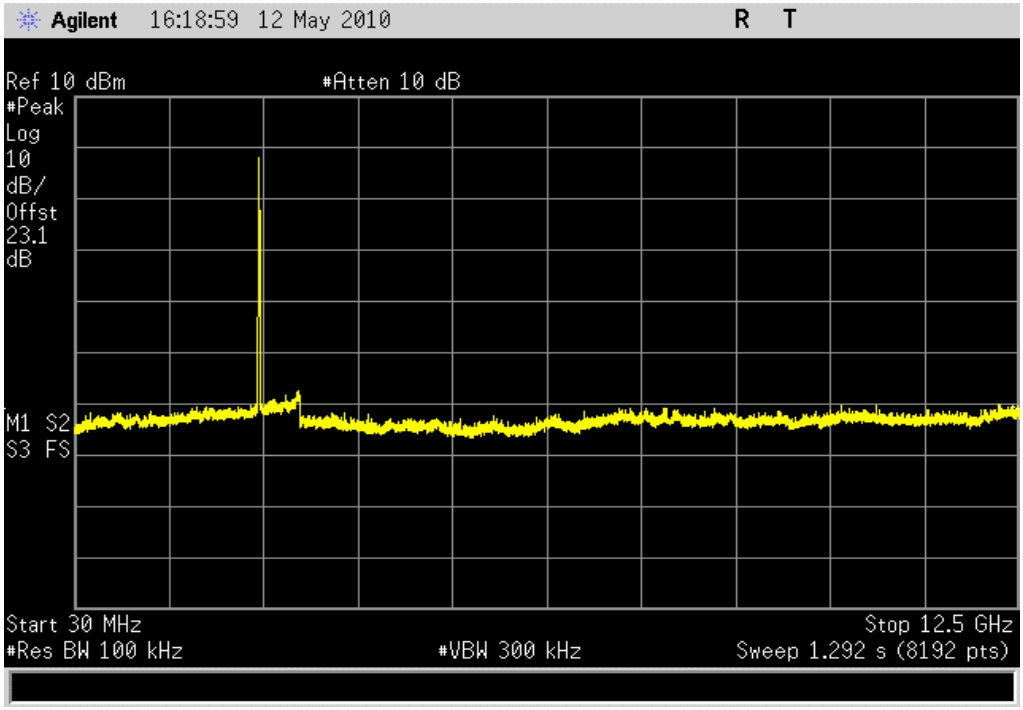
802.11(g) 54 Mbps, Mid Channel, 30MHz - 12.5GHz					
Result:	Pass	**Value:**	< -40 dBc	**Limit:**	≤ -30 dBc



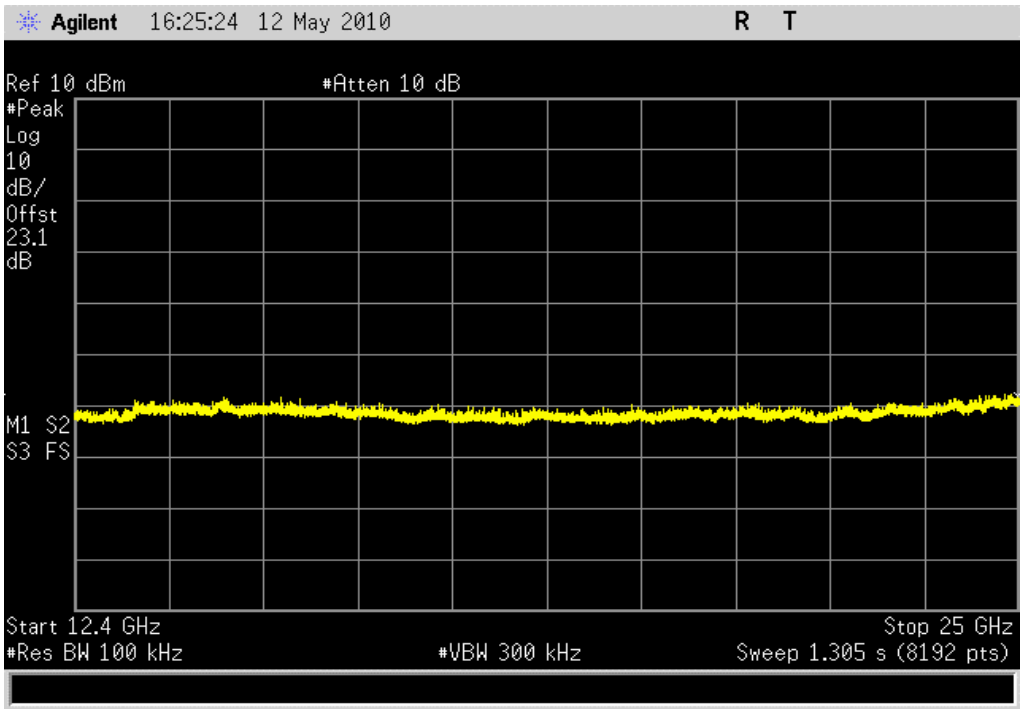
802.11(g) 54 Mbps, Mid Channel, 12.4GHz-25GHz					
Result:	Pass	**Value:**	< -40 dBc	**Limit:**	≤ -30 dBc



802.11(g) 54 Mbps, High Channel, 30MHz - 12.5GHz					
Result:	Pass	**Value:**	< -40 dBc	**Limit:**	≤ -30 dBc



802.11(g) 54 Mbps, High Channel, 12.4GHz-25GHz					
Result:	Pass	**Value:**	< -40 dBc	**Limit:**	≤ -30 dBc



POWER SPECTRAL DENSITY

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval
Spectrum Analyzer	Agilent	E4407B	AAU	12/12/2008	24
Attenuator 20 dB, SMA M/F 26GHz	S.M. Electronics	SA26B-20	AUY	7/21/2009	13
26 GHz DC Block, SMA	Pasternack	PE8210	AME	10/19/2009	13
EV06 Direct Connect Cable	ESM Cable Corp.	TT	ECA	NCR	0
Attenuator, 6 dB, 'SMA'	N/A	93459 3330A-6	AUF	4/1/2010	13
Power Meter	Gigatronics	8651A	SPM	1/7/2010	13
Power Sensor	Gigatronics	80701A	SPL	1/7/2010	13
Signal Generator	Agilent	E8257D	TGX	12/10/2008	24

MEASUREMENT UNCERTAINTY

A measurement uncertainty estimation has been performed for each test per our internal quality document WP 342. The estimation is used to compare the measured result with its "true" or theoretically correct value. The expanded measurement uncertainty for radiated emissions measurements is less than +/- 4 dB, and for conducted emissions measurements is less than +/- 2.7 dB. Our measurement data meets or exceeds the measurement uncertainty requirements of CISPR 16-4; therefore, the test data can be compared directly to the specification limit to determine compliance. The calculations for measurement uncertainty are available upon request.

TEST DESCRIPTION

The power spectral density measurements were measured with the EUT set to low, mid, and high transmit frequencies. The measurement was made using a direct connection between the RF output of the EUT and the spectrum analyzer. The EUT was transmitting at its maximum data rate for each modulation type available. While the average output power was measured as defined in section ANSI C63.10:2009, section 6.10.2.2, procedure 6.11.2.4, (d), 2) could not be met due to low pulse duration. Section 6.11.2.3 was followed . The the spectrum analyzer was set as follows:

The emission peak was located and zoomed in on within the passband.

a) RBW = 3 kHz

b) VBW = 10 kHz

c) Span = 300 kHz

d) Sweep time = 100s

e) Trace set to MAX

f) The 1 hz Marker Noise function on the analyzer was used. The data was corrected to 3 kHz by adding 34.8 dB to the reading.

NORTHWEST EMC

POWER SPECTRAL DENSITY

XMit 2010.01.14

EUT:	Clane2			Work Order:	INTE5221
Serial Number:	5			Date:	05/12/10
Customer:	Intel Corporation			Temperature:	23°C
Attendees:	Bob Hughes			Humidity:	38%
Project:	None			Barometric Pres.:	30.05 in
Tested by:	Rod Peloquin	Power:	5 VDC via USB	Job Site:	EV06

TEST SPECIFICATIONS	Test Method
FCC 15.247:2010	ANSI C63.10:2009

COMMENTS

None

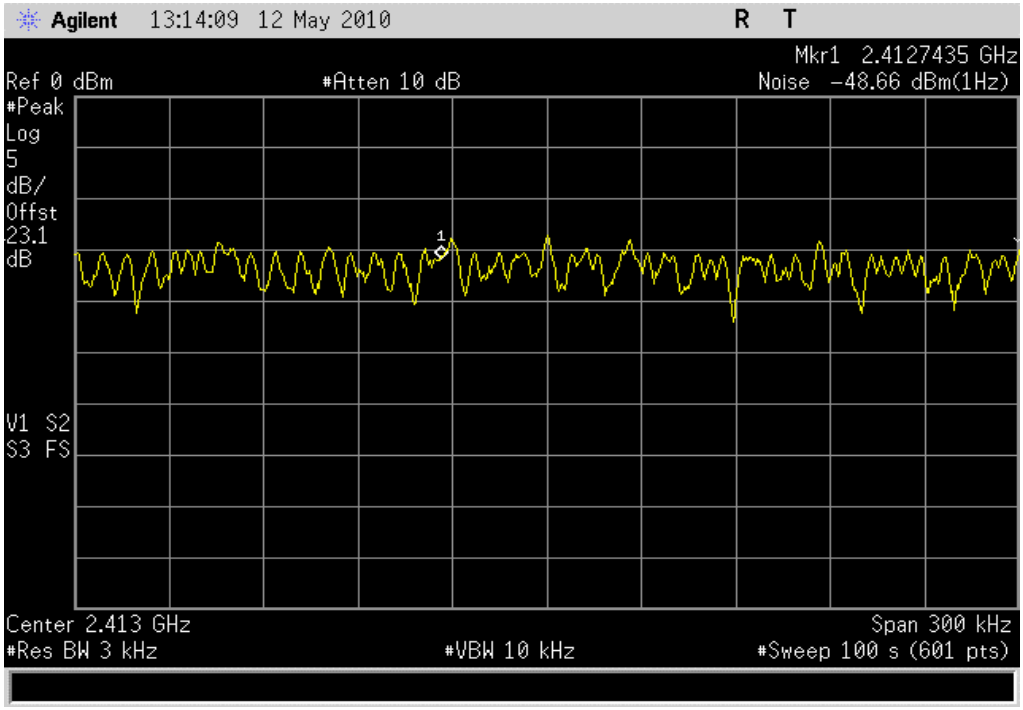
DEVIATIONS FROM TEST STANDARD

No Deviations

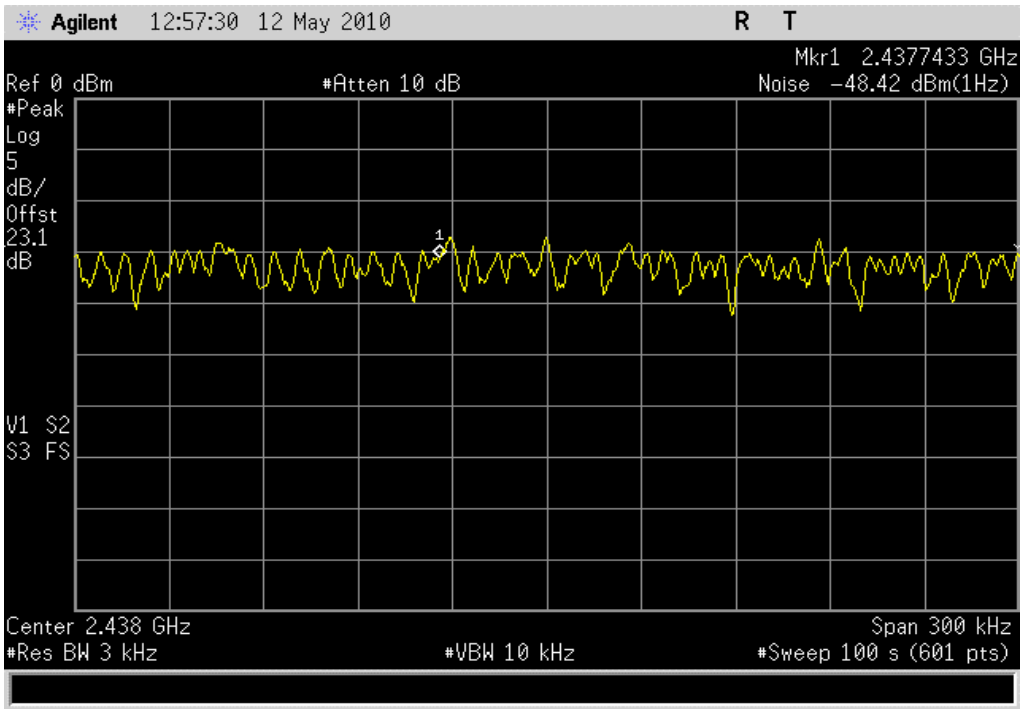
Configuration #	2	Signature

		Value	Limit	Results
802.11(b) 1 Mbps				
	Low Channel	-13.9 dBm / 3 kHz	8 dBm / 3 kHz	Pass
	Mid Channel	-13.6 dBm / 3 kHz	8 dBm / 3 kHz	Pass
	High Channel	-13.9 dBm / 3 kHz	8 dBm / 3 kHz	Pass
802.11(b) 11 Mbps				
	Low Channel	-13.2 dBm / 3 kHz	8 dBm / 3 kHz	Pass
	Mid Channel	-12.0 dBm / 3 kHz	8 dBm / 3 kHz	Pass
	High Channel	-12.0 dBm / 3 kHz	8 dBm / 3 kHz	Pass
802.11(g) 6 Mbps				
	Low Channel	-17.1 dBm / 3 kHz	8 dBm / 3 kHz	Pass
	Mid Channel	-16.7 dBm / 3 kHz	8 dBm / 3 kHz	Pass
	High Channel	-16.9 dBm / 3 kHz	8 dBm / 3 kHz	Pass
802.11(g) 36 Mbps				
	Low Channel	-16.9 dBm / 3 kHz	8 dBm / 3 kHz	Pass
	Mid Channel	-16.7 dBm / 3 kHz	8 dBm / 3 kHz	Pass
	High Channel	-16.8 dBm / 3 kHz	8 dBm / 3 kHz	Pass
802.11(g) 54 Mbps				
	Low Channel	-16.8 dBm / 3 kHz	8 dBm / 3 kHz	Pass
	Mid Channel	-16.7 dBm / 3 kHz	8 dBm / 3 kHz	Pass
	High Channel	-16.8 dBm / 3 kHz	8 dBm / 3 kHz	Pass

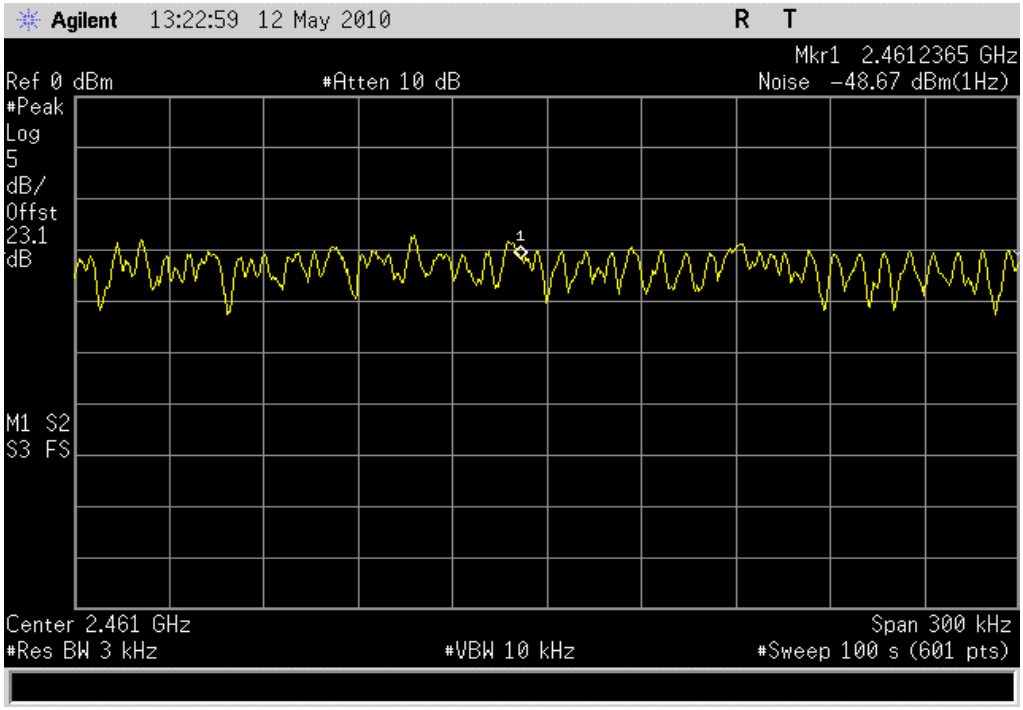
802.11(b) 1 Mbps, Low Channel					
Result:	Pass	**Value:**	-13.9 dBm / 3 kHz	**Limit:**	8 dBm / 3 kHz



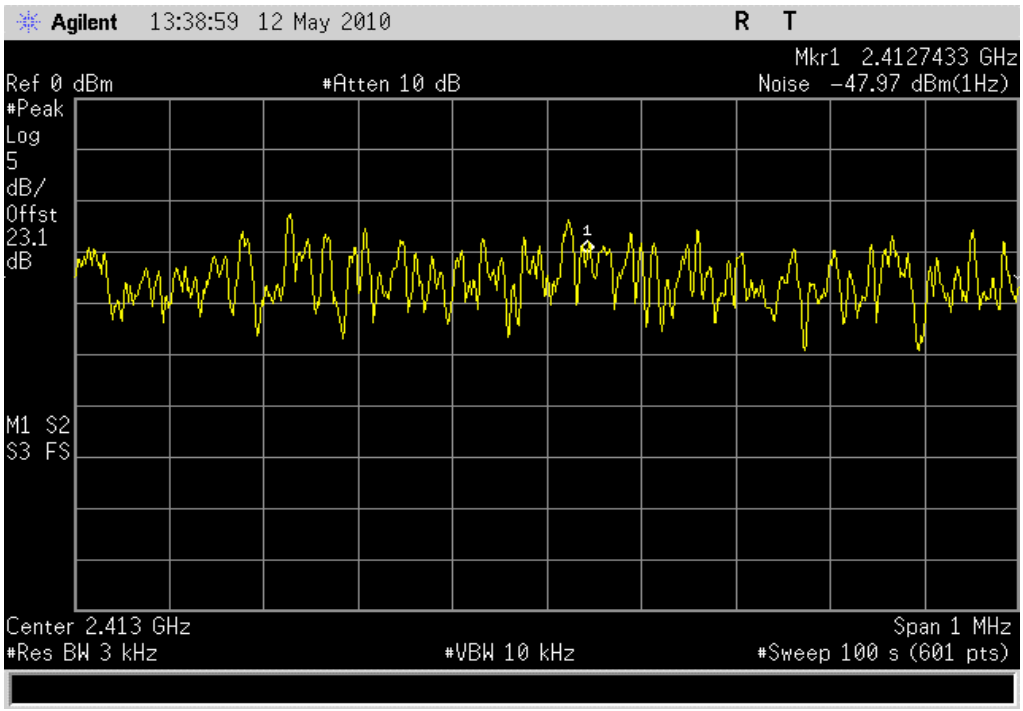
802.11(b) 1 Mbps, Mid Channel					
Result:	Pass	**Value:**	-13.6 dBm / 3 kHz	**Limit:**	8 dBm / 3 kHz



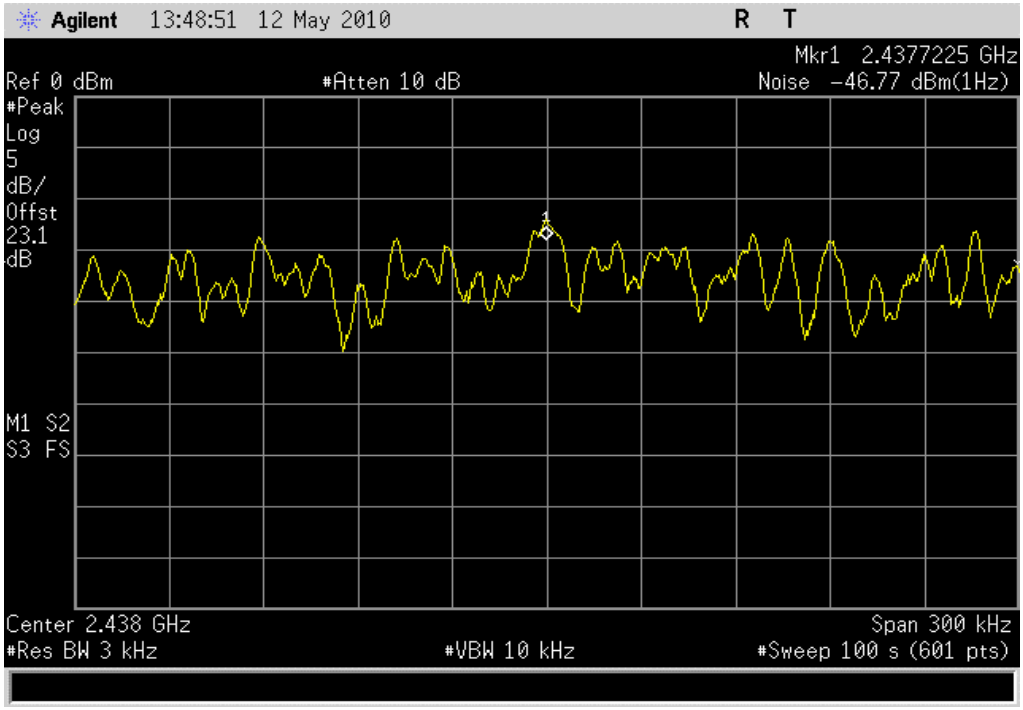
802.11(b) 1 Mbps, High Channel					
Result:	Pass	**Value:**	-13.9 dBm / 3 kHz	**Limit:**	8 dBm / 3 kHz



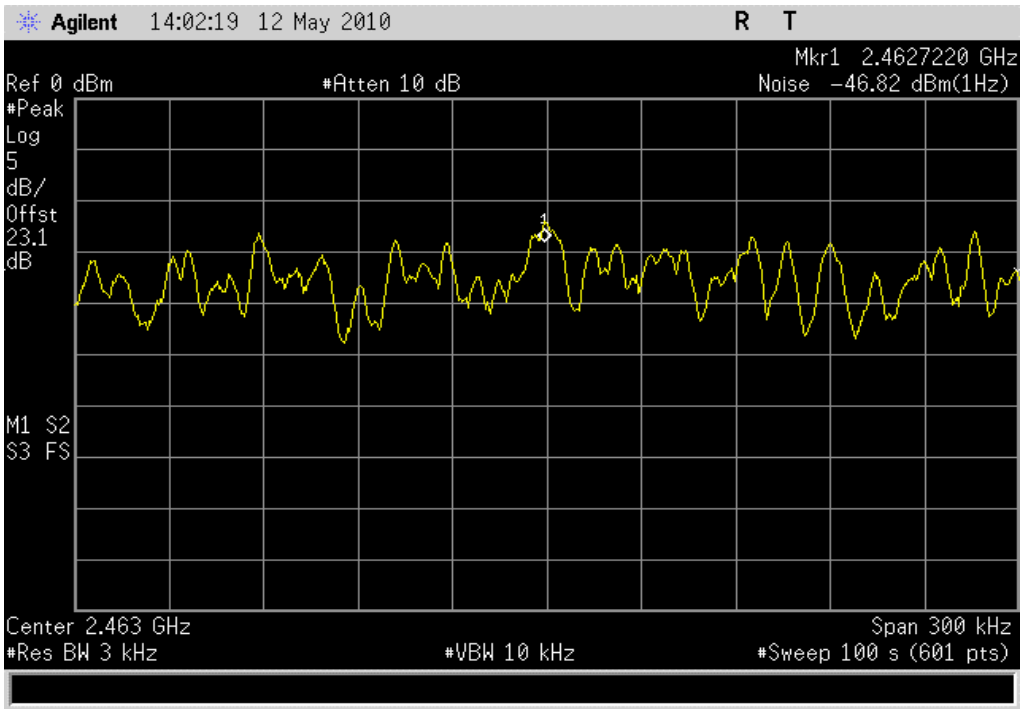
802.11(b) 11 Mbps, Low Channel					
Result:	Pass	**Value:**	-13.2 dBm / 3 kHz	**Limit:**	8 dBm / 3 kHz



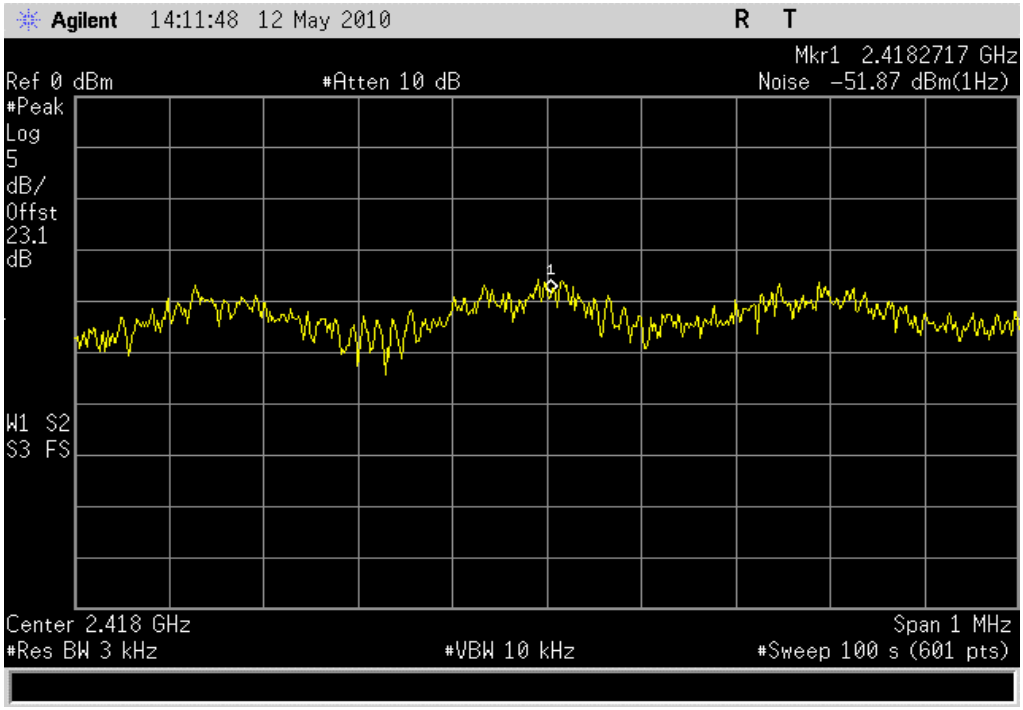
802.11(b) 11 Mbps, Mid Channel					
Result:	Pass	**Value:**	-12.0 dBm / 3 kHz	**Limit:**	8 dBm / 3 kHz



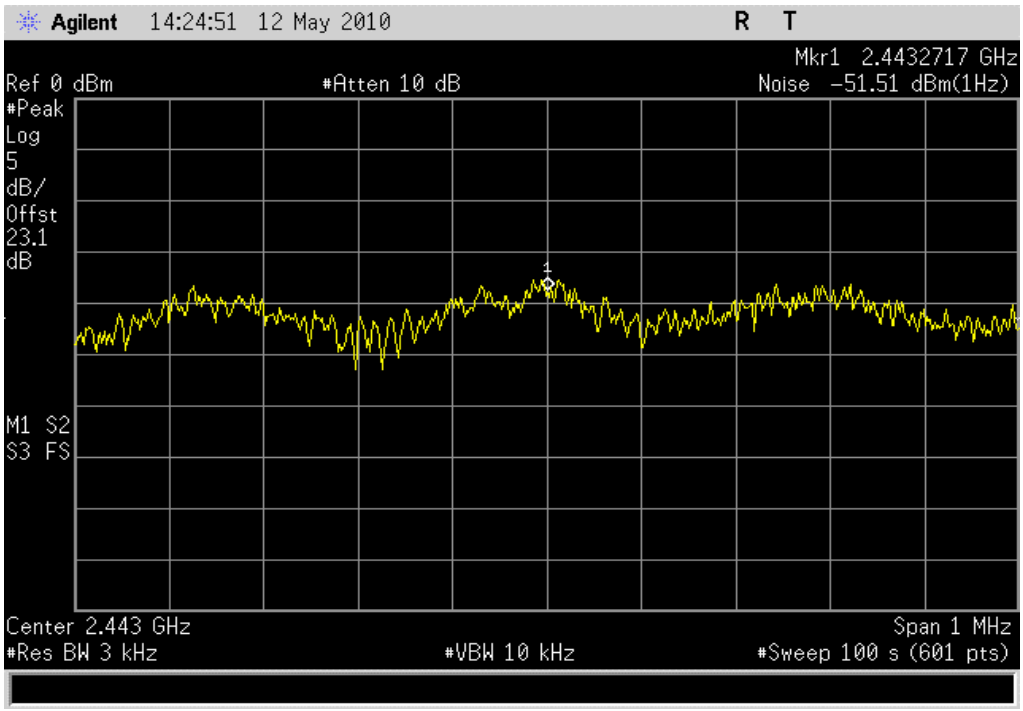
802.11(b) 11 Mbps, High Channel					
Result:	Pass	**Value:**	-12.0 dBm / 3 kHz	**Limit:**	8 dBm / 3 kHz



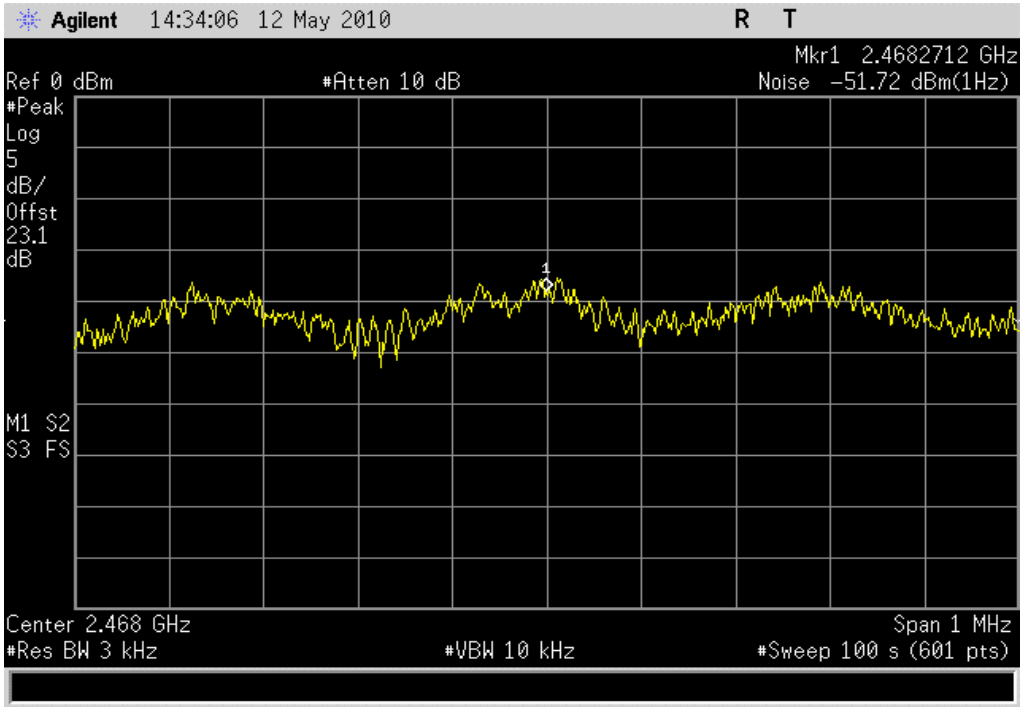
802.11(g) 6 Mbps, Low Channel					
Result:	Pass	**Value:**	-17.1 dBm / 3 kHz	**Limit:**	8 dBm / 3 kHz



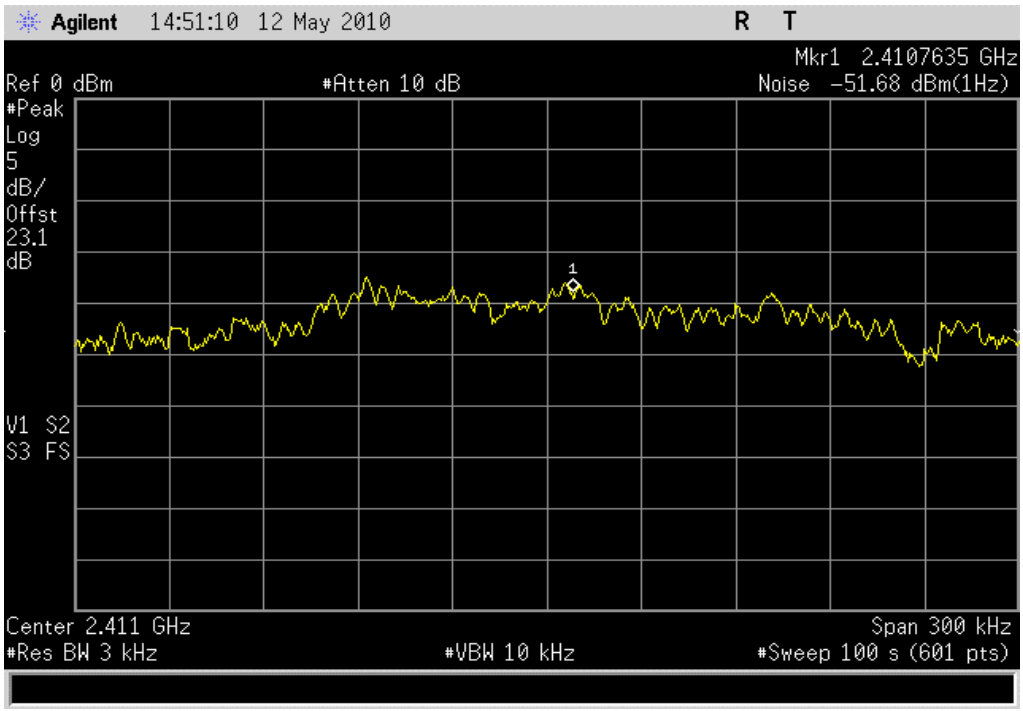
802.11(g) 6 Mbps, Mid Channel					
Result:	Pass	**Value:**	-16.7 dBm / 3 kHz	**Limit:**	8 dBm / 3 kHz



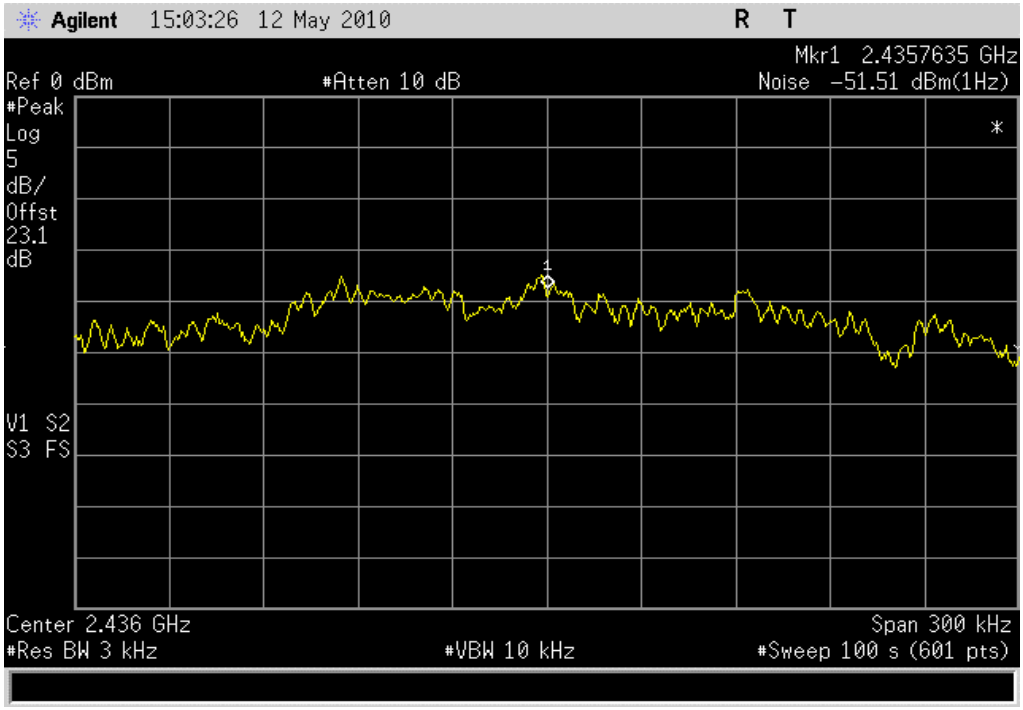
802.11(g) 6 Mbps, High Channel					
Result:	Pass	**Value:**	-16.9 dBm / 3 kHz	**Limit:**	8 dBm / 3 kHz



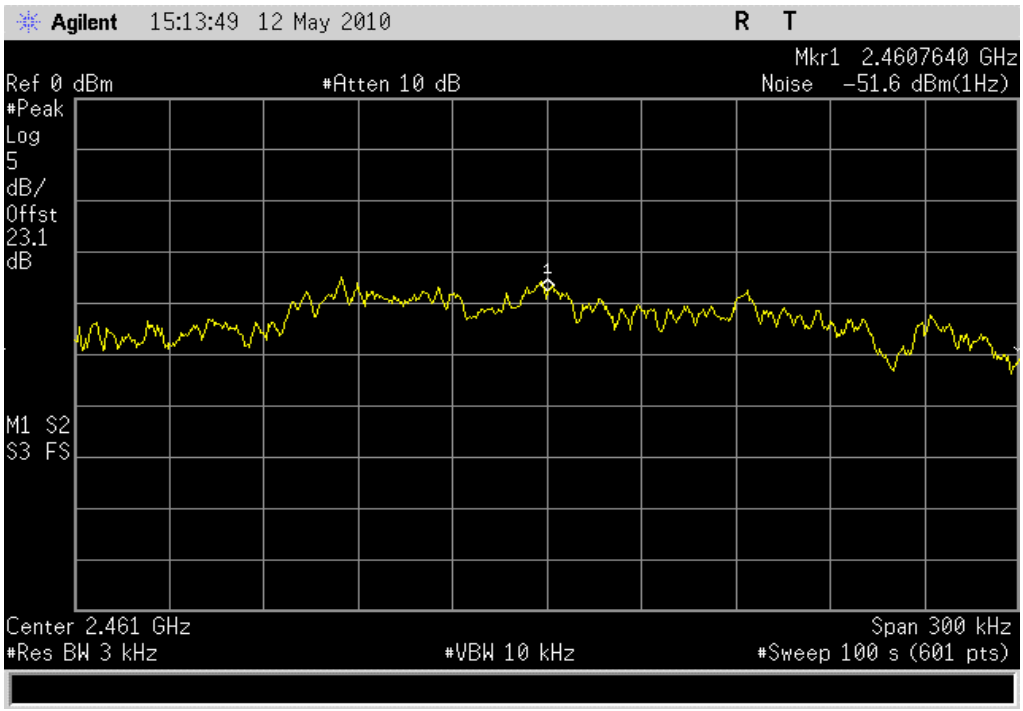
802.11(g) 36 Mbps, Low Channel					
Result:	Pass	**Value:**	-16.9 dBm / 3 kHz	**Limit:**	8 dBm / 3 kHz



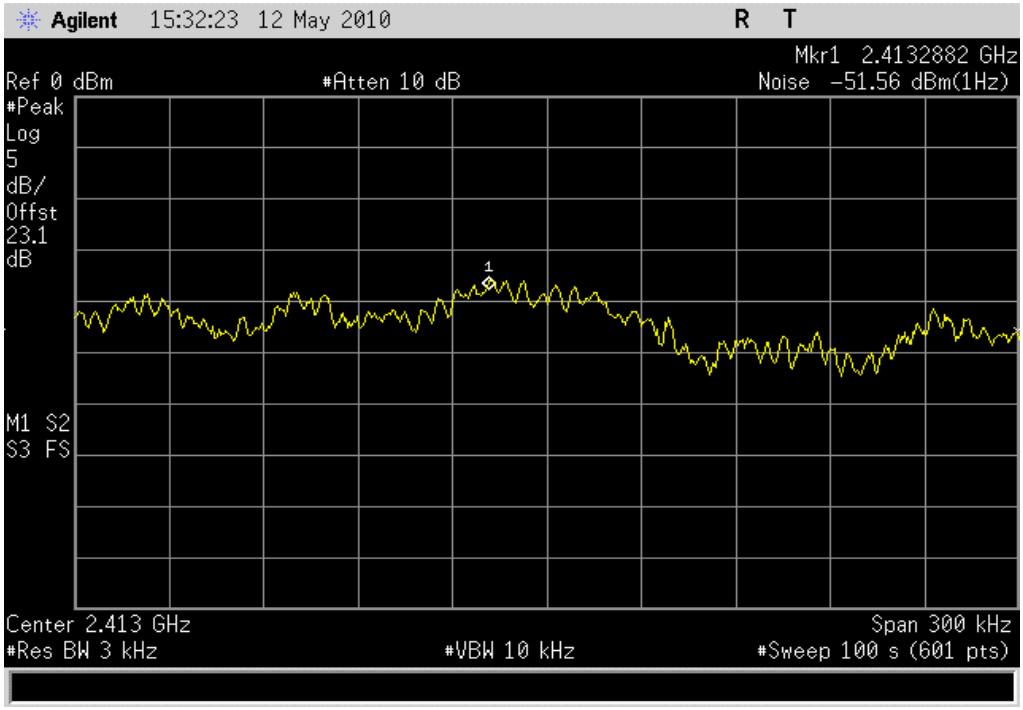
802.11(g) 36 Mbps, Mid Channel					
Result:	Pass	**Value:**	-16.7 dBm / 3 kHz	**Limit:**	8 dBm / 3 kHz



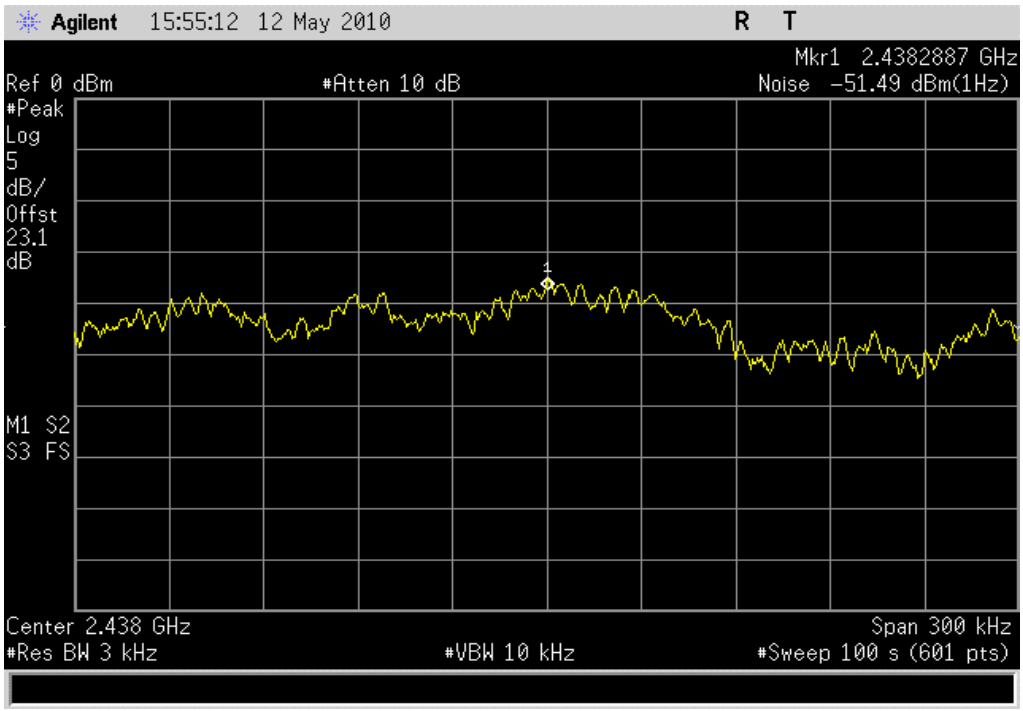
802.11(g) 36 Mbps, High Channel					
Result:	Pass	**Value:**	-16.8 dBm / 3 kHz	**Limit:**	8 dBm / 3 kHz



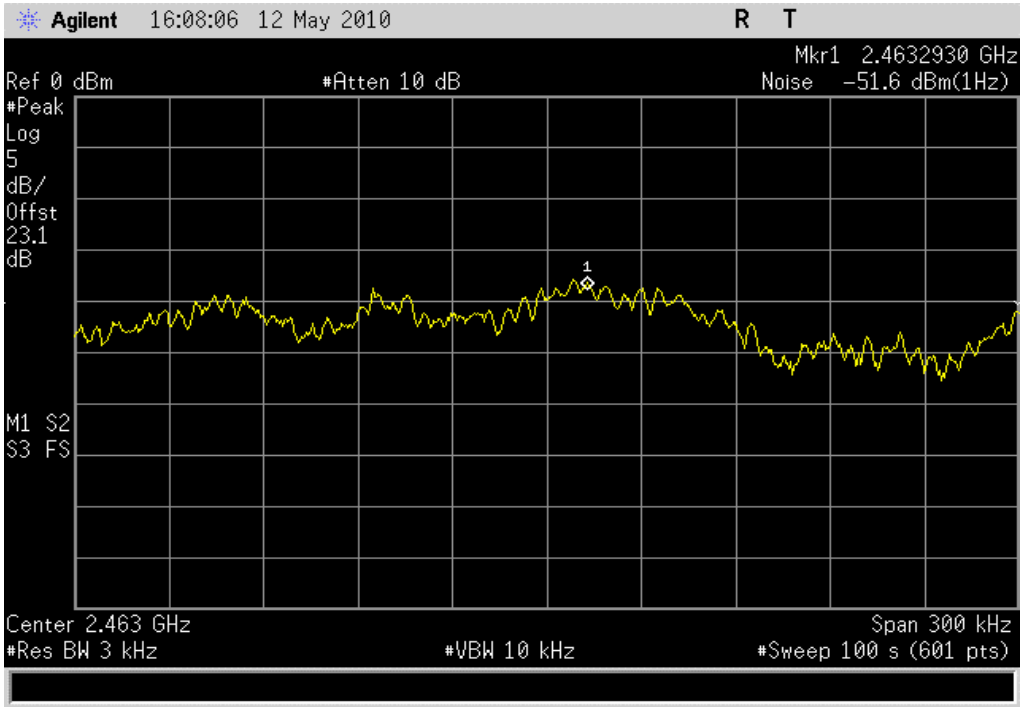
802.11(g) 54 Mbps, Low Channel					
Result:	Pass	**Value:**	-16.8 dBm / 3 kHz	**Limit:**	8 dBm / 3 kHz



802.11(g) 54 Mbps, Mid Channel					
Result:	Pass	**Value:**	-16.7 dBm / 3 kHz	**Limit:**	8 dBm / 3 kHz



802.11(g) 54 Mbps, High Channel					
Result:	Pass	**Value:**	-16.8 dBm / 3 kHz	**Limit:**	8 dBm / 3 kHz



SPURIOUS RADIATED EMISSIONS

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

MODES OF OPERATION
802.11(b), 1 Mbps
802.11(b), 11 Mbps
802.11(g), 6 Mbps
802.11(g), 54 Mbps
802.11(g), 36 Mbps

CHANNELS TESTED
Channel 1, 2412 MHz
Channel 6, 2437 MHz
Channel 11, 2462 MHz

POWER SETTINGS INVESTIGATED
Battery

FREQUENCY RANGE INVESTIGATED			
Start Frequency	30 MHz	Stop Frequency	25 GHz

SAMPLE CALCULATIONS
Radiated Emissions: Field Strength = Measured Level + Antenna Factor + Cable Factor - Amplifier Gain + Distance Adjustment Factor + External Attenuation

TEST EQUIPMENT					
Description	Manufacturer	Model	ID	Last Cal.	Interval
Spectrum Analyzer	Agilent	E4446A	AAQ	1/6/2010	13
High Pass Filter	Micro-Tronics	HPM50111	HFO	7/10/2009	13
Low Pass Filter 0-1000 MHz	Micro-Tronics	LPM50004	LFD	7/10/2009	13
Pre-Amplifier	Miteq	AM-1616-1000	AOL	7/10/2009	13
Antenna, Biconilog	EMCO	3141	AXE	1/14/2010	13
EV01 Cables	N/A	Bilog Cables	EVA	7/10/2009	13
Pre-Amplifier	Miteq	AMF-4D-010100-24-10P	APW	7/10/2009	13
Antenna, Horn	EMCO	3115	AHC	8/12/2008	24
EV01 Cables	N/A	Double Ridge Horn Cables	EVB	7/10/2009	13
Pre-Amplifier	Miteq	AMF-6F-08001200-30-10P	AVC	7/10/2009	13
Antenna, Horn	ETS	3160-07	AHU	NCR	0
EV01 Cables	N/A	Standard Gain Horns Cables	EVF	4/2/2010	13
Pre-Amplifier	Miteq	AMF-6F-18002650-25-10P	AVU	5/19/2009	13
Antenna, Horn	ETS Lindgren	3160-09	AIV	NCR	0
Pre-Amplifier	Miteq	AM-1616-1000	AVY	7/1/2009	13

MEASUREMENT BANDWIDTHS		
	Frequency Range (MHz)	**BWI (kHz)**
	0.15 - 30.0	1.0
	30.0 - 400.0	10.0
	400.0 - 1000.0	100.0
	1000.0 - 6000.0	1000.0

MEASUREMENT UNCERTAINTY

A measurement uncertainty estimation has been performed for each test per our internal quality document WP 342. The estimation is used to compare the measured result with its "true" or theoretically correct value. Our measurement data meets or exceeds the measurement uncertainty requirements of CISPR 16-4. The measurement uncertainty estimation is available upon request.

TEST DESCRIPTION

The highest gain of each type of antenna to be used with the EUT was tested. The EUT was configured for low, mid, and high band transmit frequencies. For each configuration, the spectrum was scanned throughout the specified range. In addition, measurements were made in the restricted bands to verify compliance. While scanning, emissions from the EUT were maximized by rotating the EUT on a turntable, adjusting the position of the EUT and the EUT antenna in three orthogonal axis, and adjusting measurement antenna height and polarization, and manipulating the EUT antenna in 3 orthogonal planes (per ANSI C63.10:2009). A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

NORTHWEST EMC

SPURIOUS RADIATED EMISSIONS

PSA 2008.07.21
EMI 2008.1.9

EUT:	Clane2			Work Order:	INTE5221
Serial Number:	5			Date:	05/13/10
Customer:	Intel Corporation			Temperature:	21
Attendees:	none			Humidity:	39%
Project:	None			Barometric Pres.:	30.15 in
Tested by:	Rod Peloquin	Power:	3 VDC from Battery	Job Site:	EV01

TEST SPECIFICATIONS	Test Method
FCC 15.247:2010	ANSI C63.10:2009

TEST PARAMETERS			
Antenna Height(s) (m)	1 - 4	Test Distance (m)	3

COMMENTS

None

EUT OPERATING MODES

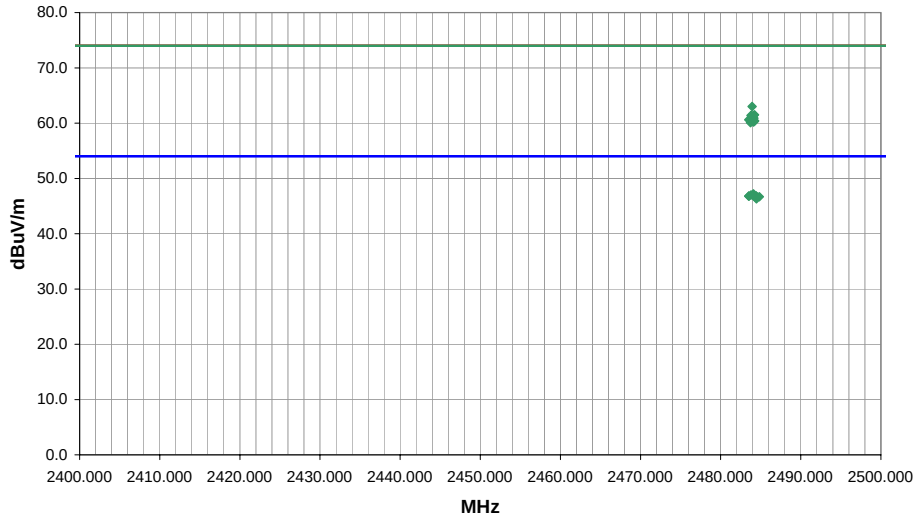
Transmitting high channel

DEVIATIONS FROM TEST STANDARD

No deviations.

Run #	2
Configuration #	1
Results	Pass

Signature



Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Azimuth (degrees)	Height (meters)	Distance (meters)	External Attenuation (dB)	Polarity	Detector	Distance Adjustment (dB)	Adjusted dBuV/m	Spec. Limit dBuV/m	Compared to Spec. (dB)	Comments
2484.087	24.5	2.7	47.0	1.1	3.0	20.0	V-Horn	AV	0.0	47.2	54.0	-6.8	6 Mbps, EUT vertical - antenna on side
2483.780	24.3	2.7	338.0	1.1	3.0	20.0	V-Horn	AV	0.0	47.0	54.0	-7.0	36 Mbps, EUT vertical - antenna on side
2483.500	24.1	2.7	88.0	1.8	3.0	20.0	H-Horn	AV	0.0	46.8	54.0	-7.2	6 Mbps, EUT on side - antenna at top
2483.520	24.1	2.7	51.0	1.1	3.0	20.0	V-Horn	AV	0.0	46.8	54.0	-7.2	54 Mbps, EUT vertical - antenna on side
2484.200	24.1	2.7	71.0	1.1	3.0	20.0	V-Horn	AV	0.0	46.8	54.0	-7.2	11 Mbps, EUT vertical - antenna on side
2484.430	24.1	2.7	191.0	1.1	3.0	20.0	V-Horn	AV	0.0	46.8	54.0	-7.2	1 Mbps, EUT vertical - antenna on side
2484.438	24.1	2.7	235.0	2.8	3.0	20.0	H-Horn	AV	0.0	46.8	54.0	-7.2	11 Mbps, EUT on side - antenna at top
2484.262	24.0	2.7	303.0	1.8	3.0	20.0	H-Horn	AV	0.0	46.7	54.0	-7.3	36 Mbps, EUT on side - antenna at top
2484.832	24.0	2.7	243.0	1.8	3.0	20.0	H-Horn	AV	0.0	46.7	54.0	-7.3	54 Mbps, EUT on side - antenna at top
2484.470	23.6	2.7	80.0	2.8	3.0	20.0	H-Horn	AV	0.0	46.3	54.0	-7.7	1 Mbps, EUT on side - antenna at top
2483.932	40.3	2.7	47.0	1.1	3.0	20.0	V-Horn	PK	0.0	63.0	74.0	-11.0	6 Mbps, EUT vertical - antenna on side
2484.225	38.8	2.7	338.0	1.1	3.0	20.0	V-Horn	PK	0.0	61.5	74.0	-12.5	36 Mbps, EUT vertical - antenna on side
2483.785	38.7	2.7	303.0	1.8	3.0	20.0	H-Horn	PK	0.0	61.4	74.0	-12.6	36 Mbps, EUT on side - antenna at top
2484.110	38.7	2.7	243.0	1.8	3.0	20.0	H-Horn	PK	0.0	61.4	74.0	-12.6	54 Mbps, EUT on side - antenna at top
2484.143	38.2	2.7	80.0	2.8	3.0	20.0	H-Horn	PK	0.0	60.9	74.0	-13.1	1 Mbps, EUT on side - antenna at top
2483.898	38.1	2.7	235.0	2.8	3.0	20.0	H-Horn	PK	0.0	60.8	74.0	-13.2	11 Mbps, EUT on side - antenna at top
2483.505	37.9	2.7	191.0	1.1	3.0	20.0	V-Horn	PK	0.0	60.6	74.0	-13.4	1 Mbps, EUT vertical - antenna on side
2484.253	37.7	2.7	51.0	1.1	3.0	20.0	V-Horn	PK	0.0	60.4	74.0	-13.6	54 Mbps, EUT vertical - antenna on side
2484.110	37.5	2.7	88.0	1.8	3.0	20.0	H-Horn	PK	0.0	60.2	74.0	-13.8	6 Mbps, EUT on side - antenna at top
2483.735	37.4	2.7	71.0	1.1	3.0	20.0	V-Horn	PK	0.0	60.1	74.0	-13.9	11 Mbps, EUT vertical - antenna on side

NORTHWEST EMC

SPURIOUS RADIATED EMISSIONS

PSA 2008.07.21
EMI 2008.1.9

EUT:	Clane2	Work Order:	INTE5221
Serial Number:	5	Date:	05/13/10
Customer:	Intel Corporation	Temperature:	21
Attendees:	none	Humidity:	39%
Project:	None	Barometric Pres.:	30.15 in
Tested by:	Rod Peloquin	Power: 3 VDC from Battery	Job Site: EV01

TEST SPECIFICATIONS	Test Method
FCC 15.247:2010	ANSI C63.10:2009

TEST PARAMETERS			
Antenna Height(s) (m)	1 - 4	Test Distance (m)	3

COMMENTS

None

EUT OPERATING MODES

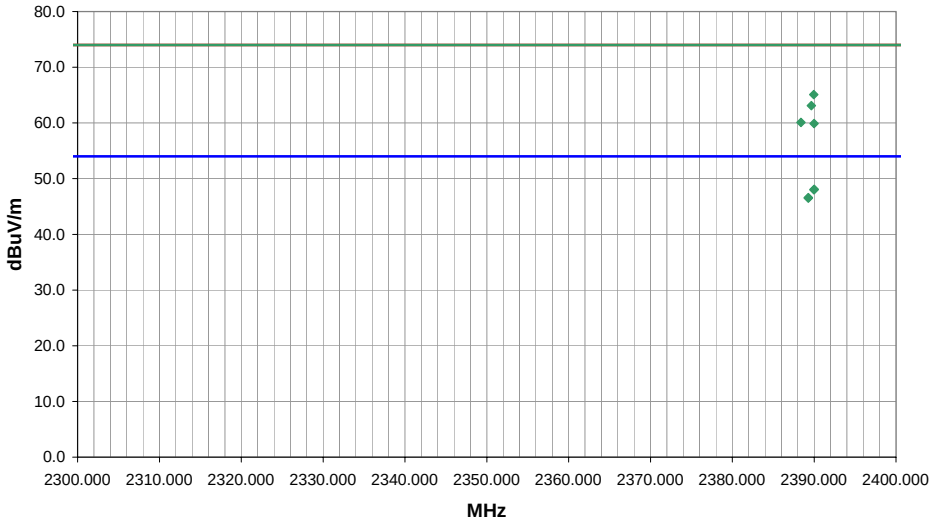
Transmitting low channel

DEVIATIONS FROM TEST STANDARD

No deviations.

Run #	3
Configuration #	1
Results	Pass

Signature



Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Azimuth (degrees)	Height (meters)	Distance (meters)	External Attenuation (dB)	Polarity	Detector	Distance Adjustment (dB)	Adjusted dBuV/m	Spec. Limit dBuV/m	Compared to Spec. (dB)	Comments
2390.000	26.0	2.1	179.0	1.1	3.0	20.0	V-Horn	AV	0.0	48.1	54.0	-5.9	6 Mbps, EUT vertical - antenna on side
2389.970	25.9	2.1	184.0	1.1	3.0	20.0	H-Horn	AV	0.0	48.0	54.0	-6.0	6 Mbps, EUT on side - antenna at top
2389.290	24.5	2.1	167.0	1.1	3.0	20.0	H-Horn	AV	0.0	46.6	54.0	-7.4	1 Mbps, EUT on side - antenna at top
2389.290	24.4	2.1	146.0	1.1	3.0	20.0	V-Horn	AV	0.0	46.5	54.0	-7.5	1 Mbps, EUT vertical - antenna on side
2389.960	43.0	2.1	184.0	1.1	3.0	20.0	H-Horn	PK	0.0	65.1	74.0	-8.9	6 Mbps, EUT on side - antenna at top
2389.663	41.0	2.1	179.0	1.1	3.0	20.0	V-Horn	PK	0.0	63.1	74.0	-10.9	6 Mbps, EUT vertical - antenna on side
2388.383	38.0	2.1	167.0	1.1	3.0	20.0	H-Horn	PK	0.0	60.1	74.0	-13.9	1 Mbps, EUT on side - antenna at top
2389.983	37.8	2.1	146.0	1.1	3.0	20.0	V-Horn	PK	0.0	59.9	74.0	-14.1	1 Mbps, EUT vertical - antenna on side

NORTHWEST EMC

SPURIOUS RADIATED EMISSIONS

PSA 2008.07.21
EMI 2008.1.9

EUT:	Clane2	Work Order:	INTE5221
Serial Number:	5	Date:	05/13/10
Customer:	Intel Corporation	Temperature:	21
Attendees:	none	Humidity:	39%
Project:	None	Barometric Pres.:	30.15 in
Tested by:	Rod Peloquin	Power: 3 VDC from Battery	Job Site: EV01

TEST SPECIFICATIONS	Test Method
FCC 15.247:2010	ANSI C63.10:2009

TEST PARAMETERS			
Antenna Height(s) (m)	1 - 4	Test Distance (m)	3

COMMENTS

None

EUT OPERATING MODES

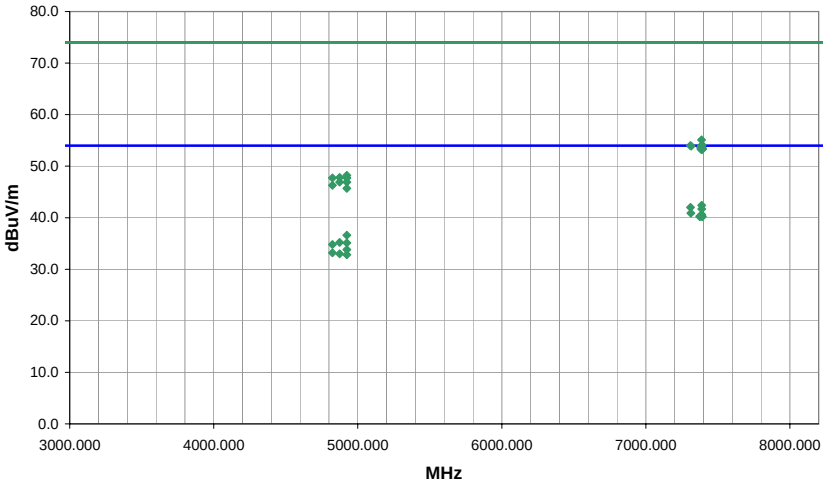
Transmitting. See comments for channel and data rate

DEVIATIONS FROM TEST STANDARD

No deviations.

Run #	4
Configuration #	1
Results	Pass

Signature



Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Azimuth (degrees)	Height (meters)	Distance (meters)	External Attenuation (dB)	Polarity	Detector	Distance Adjustment (dB)	Adjusted dBuV/m	Spec. Limit dBuV/m	Compared to Spec. (dB)	Comments
7387.600	25.8	16.6	229.0	1.0	3.0	0.0	V-Horn	AV	0.0	42.4	54.0	-11.6	High channel, 1 Mbps, EUT vertical - antenna on side
7309.900	25.8	16.2	249.0	1.2	3.0	0.0	V-Horn	AV	0.0	42.0	54.0	-12.0	Mid channel, 1 Mbps, EUT vertical - antenna on side
7388.200	25.1	16.6	252.0	1.4	3.0	0.0	V-Horn	AV	0.0	41.7	54.0	-12.3	High channel, 11 Mbps, EUT vertical - antenna on side
7312.617	24.7	16.2	157.0	1.0	3.0	0.0	H-Horn	AV	0.0	40.9	54.0	-13.1	Mid channel, 1 Mbps, EUT on side - antenna at top
7388.375	24.0	16.6	250.0	1.3	3.0	0.0	V-Horn	AV	0.0	40.6	54.0	-13.4	High channel, 6 Mbps, EUT vertical - antenna on side
7387.567	23.9	16.6	327.0	1.2	3.0	0.0	H-Horn	AV	0.0	40.5	54.0	-13.5	High channel, 1 Mbps, EUT on side - antenna at top
7375.975	23.7	16.6	98.0	1.3	3.0	0.0	V-Horn	AV	0.0	40.3	54.0	-13.7	High channel, 54 Mbps, EUT vertical - antenna on side
7389.375	23.7	16.6	221.0	1.1	3.0	0.0	H-Horn	AV	0.0	40.3	54.0	-13.7	High channel, 6 Mbps, EUT on side - antenna at top
7374.175	23.7	16.5	67.0	1.2	3.0	0.0	V-Horn	AV	0.0	40.2	54.0	-13.8	High channel, 36 Mbps, EUT vertical - antenna on side
7392.850	23.7	16.5	326.0	1.2	3.0	0.0	H-Horn	AV	0.0	40.2	54.0	-13.8	High channel, 6 Mbps, EUT on side - antenna at top
4923.977	26.7	9.9	255.0	1.0	3.0	0.0	H-Horn	AV	0.0	36.6	54.0	-17.4	High channel, 1 Mbps, EUT on side - antenna at top
4873.983	25.5	9.7	240.0	1.5	3.0	0.0	H-Horn	AV	0.0	35.2	54.0	-18.8	Mid channel, 1 Mbps, EUT on side - antenna at top
4923.957	25.2	9.9	183.0	1.1	3.0	0.0	V-Horn	AV	0.0	35.1	54.0	-18.9	High channel, 1 Mbps, EUT vertical - antenna on side
7387.000	38.5	16.6	229.0	1.0	3.0	0.0	V-Horn	PK	0.0	55.1	74.0	-18.9	High channel, 1 Mbps, EUT vertical - antenna on side
4823.943	25.2	9.6	126.0	1.7	3.0	0.0	H-Horn	AV	0.0	34.8	54.0	-19.2	Low channel, 1 Mbps, EUT on side - antenna at top
7391.425	37.5	16.6	250.0	1.3	3.0	0.0	V-Horn	PK	0.0	54.1	74.0	-19.9	High channel, 6 Mbps, EUT vertical - antenna on side
7309.383	37.8	16.2	249.0	1.2	3.0	0.0	V-Horn	PK	0.0	54.0	74.0	-20.0	Mid channel, 1 Mbps, EUT vertical - antenna on side
7315.017	37.7	16.2	157.0	1.0	3.0	0.0	H-Horn	PK	0.0	53.9	74.0	-20.1	Mid channel, 1 Mbps, EUT on side - antenna at top
7383.525	37.3	16.6	252.0	1.4	3.0	0.0	V-Horn	PK	0.0	53.9	74.0	-20.1	High channel, 11 Mbps, EUT vertical - antenna on side
4924.117	23.9	9.9	243.0	1.0	3.0	0.0	H-Horn	AV	0.0	33.8	54.0	-20.2	High channel, 6 Mbps, EUT on side - antenna at top
7380.625	37.0	16.6	67.0	1.2	3.0	0.0	V-Horn	PK	0.0	53.6	74.0	-20.4	High channel, 36 Mbps, EUT vertical - antenna on side
7393.250	36.9	16.6	221.0	1.1	3.0	0.0	H-Horn	PK	0.0	53.5	74.0	-20.5	High channel, 6 Mbps, EUT on side - antenna at top
7382.625	36.7	16.6	326.0	1.2	3.0	0.0	H-Horn	PK	0.0	53.3	74.0	-20.7	High channel, 6 Mbps, EUT on side - antenna at top
7393.350	36.7	16.6	98.0	1.3	3.0	0.0	V-Horn	PK	0.0	53.3	74.0	-20.7	High channel, 54 Mbps, EUT vertical - antenna on side
4823.870	23.6	9.6	306.0	1.1	3.0	0.0	V-Horn	AV	0.0	33.2	54.0	-20.8	Low channel, 1 Mbps, EUT vertical - antenna on side
7388.200	36.6	16.6	327.0	1.2	3.0	0.0	H-Horn	PK	0.0	53.2	74.0	-20.8	High channel, 1 Mbps, EUT on side - antenna at top
4874.035	23.3	9.7	72.0	1.2	3.0	0.0	V-Horn	AV	0.0	33.0	54.0	-21.0	Mid channel, 1 Mbps, EUT vertical - antenna on side
4923.692	22.9	9.9	144.0	1.0	3.0	0.0	V-Horn	AV	0.0	32.8	54.0	-21.2	High channel, 6 Mbps, EUT vertical - antenna on side
4923.663	38.3	9.9	255.0	1.0	3.0	0.0	H-Horn	PK	0.0	48.2	74.0	-25.8	High channel, 1 Mbps, EUT on side - antenna at top
4873.977	38.1	9.7	240.0	1.5	3.0	0.0	H-Horn	PK	0.0	47.8	74.0	-26.2	Mid channel, 1 Mbps, EUT on side - antenna at top
4924.033	37.8	9.9	183.0	1.1	3.0	0.0	V-Horn	PK	0.0	47.7	74.0	-26.3	High channel, 1 Mbps, EUT vertical - antenna on side
4824.057	38.1	9.6	126.0	1.7	3.0	0.0	H-Horn	PK	0.0	47.7	74.0	-26.3	Low channel, 1 Mbps, EUT on side - antenna at top
4873.957	37.2	9.7	72.0	1.2	3.0	0.0	V-Horn	PK	0.0	46.9	74.0	-27.1	Mid channel, 1 Mbps, EUT vertical - antenna on side
4923.925	37.0	9.9	243.0	1.0	3.0	0.0	H-Horn	PK	0.0	46.9	74.0	-27.1	High channel, 6 Mbps, EUT on side - antenna at top
4824.210	36.7	9.6	306.0	1.1	3.0	0.0	V-Horn	PK	0.0	46.3	74.0	-27.7	Low channel, 1 Mbps, EUT vertical - antenna on side
4923.592	35.8	9.9	144.0	1.0	3.0	0.0	V-Horn	PK	0.0	45.7	74.0	-28.3	High channel, 6 Mbps, EUT vertical - antenna on side

AC POWERLINE CONDUCTED EMISSIONS

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

MODES OF OPERATION
Transmitting, high channel, 1 Mbps
Transmitting, mid channel, 1 Mbps
Transmitting, low channel, 1 Mbps

POWER SETTINGS INVESTIGATED
120VAC/60Hz

CONFIGURATIONS INVESTIGATED
INTE5221 - 3

SAMPLE CALCULATIONS
Conducted Emissions: Adjusted Level = Measured Level + Transducer Factor + Cable Attenuation Factor + External Attenuator

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval
Receiver	Rohde & Schwarz	ESCI	ARE	4/29/2010	12 mo
Attenuator	Coaxicom	66702 2910-20	ATO	7/21/2009	13 mo
High Pass Filter	TTE	H97-100K-50-720B	HFX	2/16/2010	13 mo
LISN	Solar	9252-50-R-24-BNC	LIP	3/2/2010	13 mo
EV07 Cables	N/A	Conducted Cables	EVG	6/1/2009	13 mo

MEASUREMENT BANDWIDTHS

Frequency Range (MHz)	Peak Data (kHz)	Quasi-Peak Data (kHz)	Average Data (kHz)
0.01 - 0.15	1.0	0.2	0.2
0.15 - 30.0	10.0	9.0	9.0
30.0 - 1000	100.0	120.0	120.0
Above 1000	1000.0	N/A	1000.0

Measurements were made using the bandwidths and detectors specified. No video filter was used.

MEASUREMENT UNCERTAINTY

A measurement uncertainty estimation has been performed for each test per our internal quality document WP 342. The estimation is used to compare the measured result with its "true" or theoretically correct value. The expanded measurement uncertainty for radiated emissions measurements is less than +/- 4 dB, and for conducted emissions measurements is less than +/- 2.7 dB. Our measurement data meets or exceeds the measurement uncertainty requirements of CISPR 16-4; therefore, the test data can be compared directly to the specification limit to determine compliance. The calculations for measurement uncertainty are available upon request.

TEST DESCRIPTION

Using the mode of operation and configuration noted within this report, conducted emissions tests were performed. The frequency range investigated (scanned), is also noted in this report. Conducted power line measurements are made, unless otherwise specified, over the frequency range from 150 kHz to 30 MHz to determine the line-to-ground radio-noise voltage that is conducted from the EUT power-input terminals that are directly (or indirectly via separate transformer or power supplies) connected to a public power network. Equipment is tested with power cords that are normally used or that have electrical or shielding characteristics that are the same as those cords normally used. Typically those measurements are made using a LISN (Line Impedance Stabilization Network), the 50ohm measuring port is terminated by a 50ohm EMI meter or a 50ohm resistive load. All 50ohm measuring ports of the LISN are terminated by 50ohm.

NORTHWEST

EMC

AC POWERLINE CONDUCTED EMISSIONS

PSA-ESCI 2010.02.16
Version 2010.3.17

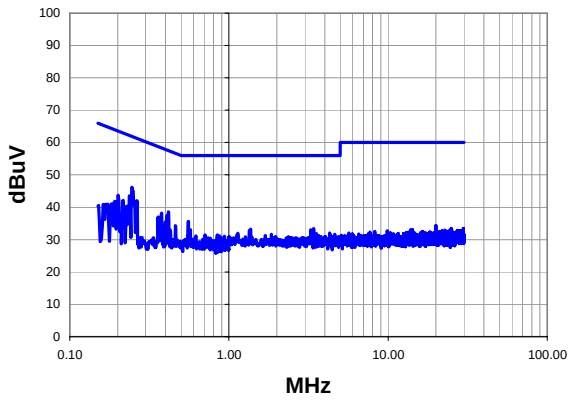
Work Order:	INTE5221	**Date:**	05/14/10		
Project:	None	**Temperature:**	21		
Job Site:	EV07	**Humidity:**	39		
Serial Number:	5	**Barometric Pres.:**	30.15 in	**Tested by:**	Rod Peloquin

EUT:	Clane2
Configuration:	3 - AC Conducted Emissions
Customer:	Intel Corporation
Attendees:	Bob Hughes
EUT Power:	120VAC/60Hz
Operating Mode:	Transmitting, low channel, 1 Mbps
Deviations:	No deviations.
Comments:	None

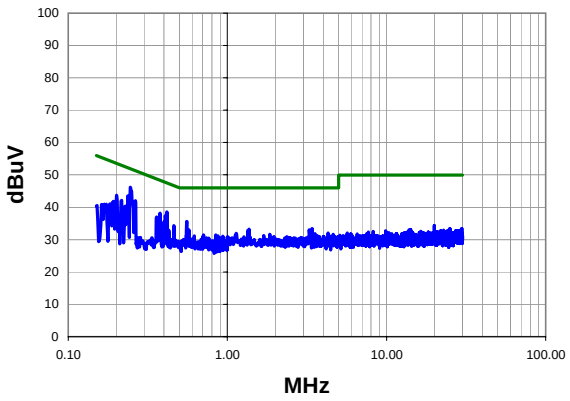
Test Specifications	**Test Method**
FCC 15.207:2010	ANSI C63.10:2009

Run #	1	**Line:**	High Line	**Ext. Attenuation:**	20	**Results**	Pass

Peak Data - vs - Quasi Peak Limit



Peak Data - vs - Average Limit



Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.245	26.0	20.2	46.2	61.9	-15.7
0.237	23.4	20.2	43.6	62.2	-18.6
0.417	18.4	20.2	38.6	57.5	-18.9
0.264	21.9	20.2	42.1	61.3	-19.2
0.201	23.6	20.2	43.8	63.6	-19.8
0.378	18.0	20.2	38.2	58.3	-20.2
0.407	17.2	20.2	37.4	57.7	-20.3
0.555	15.4	20.2	35.6	56.0	-20.4
0.216	22.0	20.2	42.2	63.0	-20.8
0.369	16.7	20.2	36.9	58.5	-21.6
0.359	16.8	20.2	37.0	58.7	-21.8
0.193	21.7	20.2	41.9	63.9	-22.1
0.228	20.2	20.2	40.4	62.5	-22.1
0.461	14.2	20.2	34.4	56.7	-22.3
0.400	15.3	20.2	35.5	57.9	-22.4
3.408	13.1	20.3	33.4	56.0	-22.6
1.368	13.0	20.2	33.2	56.0	-22.8
0.573	12.9	20.2	33.1	56.0	-22.9
3.272	12.7	20.3	33.0	56.0	-23.0
1.344	12.6	20.2	32.8	56.0	-23.2

Peak Data - vs - Average Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.245	26.0	20.2	46.2	51.9	-5.7
0.237	23.4	20.2	43.6	52.2	-8.6
0.417	18.4	20.2	38.6	47.5	-8.9
0.264	21.9	20.2	42.1	51.3	-9.2
0.201	23.6	20.2	43.8	53.6	-9.8
0.378	18.0	20.2	38.2	48.3	-10.2
0.407	17.2	20.2	37.4	47.7	-10.3
0.555	15.4	20.2	35.6	46.0	-10.4
0.216	22.0	20.2	42.2	53.0	-10.8
0.369	16.7	20.2	36.9	48.5	-11.6
0.359	16.8	20.2	37.0	48.7	-11.8
0.193	21.7	20.2	41.9	53.9	-12.1
0.228	20.2	20.2	40.4	52.5	-12.1
0.461	14.2	20.2	34.4	46.7	-12.3
0.400	15.3	20.2	35.5	47.9	-12.4
3.408	13.1	20.3	33.4	46.0	-12.6
1.368	13.0	20.2	33.2	46.0	-12.8
0.573	12.9	20.2	33.1	46.0	-12.9
3.272	12.7	20.3	33.0	46.0	-13.0
1.344	12.6	20.2	32.8	46.0	-13.2

NORTHWEST

EMC

AC POWERLINE CONDUCTED EMISSIONS

PSA-ESCI 2010.02.16
Version 2010.3.17

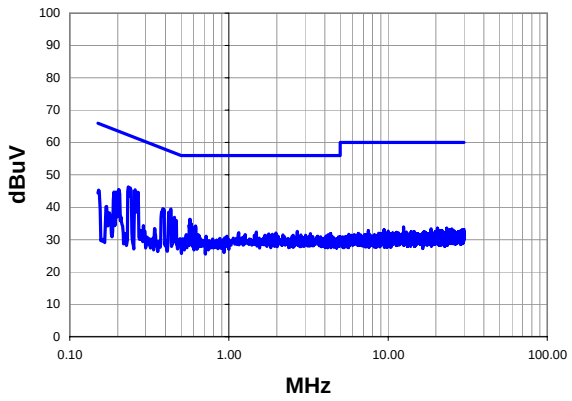
Work Order:	INTE5221	**Date:**	05/14/10		
Project:	None	**Temperature:**	21		
Job Site:	EV07	**Humidity:**	39		
Serial Number:	5	**Barometric Pres.:**	30.15 in	**Tested by:**	Rod Peloquin

EUT:	Clane2
Configuration:	3 - AC Conducted Emissions
Customer:	Intel Corporation
Attendees:	Bob Hughes
EUT Power:	120VAC/60Hz
Operating Mode:	Transmitting, low channel, 1 Mbps
Deviations:	No deviations.
Comments:	None

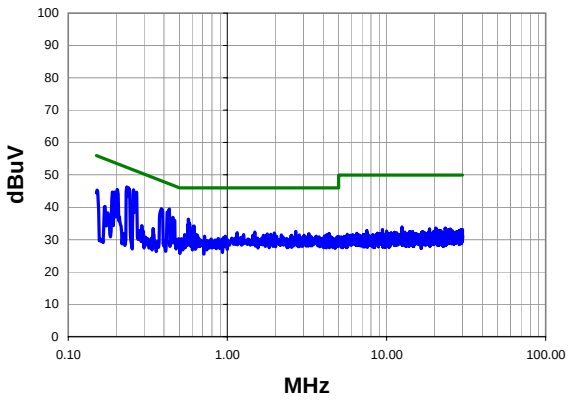
Test Specifications	**Test Method**
FCC 15.207:2010	ANSI C63.10:2009

Run #	2	**Line:**	Neutral	**Ext. Attenuation:**	20	**Results**	Pass

Peak Data - vs - Quasi Peak Limit



Peak Data - vs - Average Limit



Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.233	26.1	20.2	46.3	62.3	-16.1
0.257	25.2	20.2	45.4	61.5	-16.2
0.267	24.4	20.2	44.6	61.2	-16.6
0.432	19.3	20.2	39.5	57.2	-17.7
0.203	25.3	20.2	45.5	63.5	-18.0
0.385	19.4	20.2	39.6	58.2	-18.6
0.419	18.3	20.2	38.5	57.5	-19.0
0.196	24.5	20.2	44.7	63.8	-19.1
0.189	24.5	20.2	44.7	64.1	-19.4
0.568	16.1	20.2	36.3	56.0	-19.7
0.454	16.7	20.2	36.9	56.8	-19.9
0.152	25.1	20.2	45.3	65.9	-20.6
0.466	15.7	20.2	35.9	56.6	-20.7
0.573	15.1	20.2	35.3	56.0	-20.7
0.578	14.7	20.2	34.9	56.0	-21.1
0.618	14.0	20.2	34.2	56.0	-21.8
0.611	13.8	20.2	34.0	56.0	-22.0
2.688	12.2	20.3	32.5	56.0	-23.5
1.488	12.1	20.2	32.3	56.0	-23.7
1.152	11.9	20.2	32.1	56.0	-23.9

Peak Data - vs - Average Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.233	26.1	20.2	46.3	52.3	-6.1
0.257	25.2	20.2	45.4	51.5	-6.2
0.267	24.4	20.2	44.6	51.2	-6.6
0.432	19.3	20.2	39.5	47.2	-7.7
0.203	25.3	20.2	45.5	53.5	-8.0
0.385	19.4	20.2	39.6	48.2	-8.6
0.419	18.3	20.2	38.5	47.5	-9.0
0.196	24.5	20.2	44.7	53.8	-9.1
0.189	24.5	20.2	44.7	54.1	-9.4
0.568	16.1	20.2	36.3	46.0	-9.7
0.454	16.7	20.2	36.9	46.8	-9.9
0.152	25.1	20.2	45.3	55.9	-10.6
0.466	15.7	20.2	35.9	46.6	-10.7
0.573	15.1	20.2	35.3	46.0	-10.7
0.578	14.7	20.2	34.9	46.0	-11.1
0.618	14.0	20.2	34.2	46.0	-11.8
0.611	13.8	20.2	34.0	46.0	-12.0
2.688	12.2	20.3	32.5	46.0	-13.5
1.488	12.1	20.2	32.3	46.0	-13.7
1.152	11.9	20.2	32.1	46.0	-13.9

NORTHWEST

EMC

AC POWERLINE CONDUCTED EMISSIONS

PSA-ESCI 2010.02.16
Version 2010.3.17

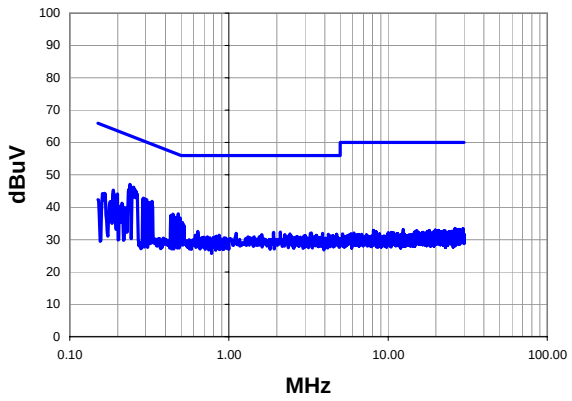
Work Order:	INTE5221	**Date:**	05/14/10		
Project:	None	**Temperature:**	21		
Job Site:	EV07	**Humidity:**	39		
Serial Number:	5	**Barometric Pres.:**	30.15 in	**Tested by:**	Rod Peloquin

EUT:	Clane2
Configuration:	3 - AC Conducted Emissions
Customer:	Intel Corporation
Attendees:	Bob Hughes
EUT Power:	120VAC/60Hz
Operating Mode:	Transmitting, mid channel, 1 Mbps
Deviations:	No deviations.
Comments:	None

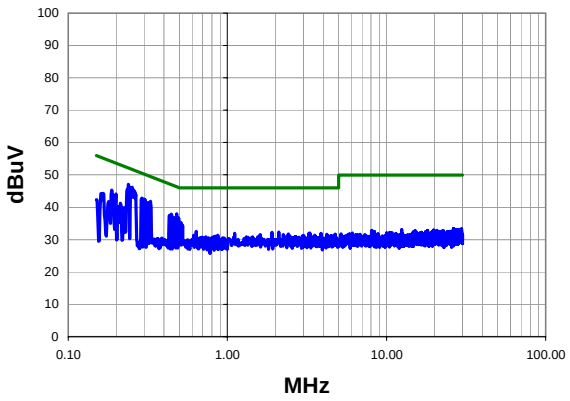
Test Specifications	**Test Method**
FCC 15.207:2010	ANSI C63.10:2009

Run #	3	**Line:**	High Line	**Ext. Attenuation:**	20	**Results**	Pass

Peak Data - vs - Quasi Peak Limit



Peak Data - vs - Average Limit



Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.238	26.9	20.2	47.1	62.2	-15.1
0.252	26.0	20.2	46.2	61.7	-15.5
0.329	21.7	20.2	41.9	59.5	-17.6
0.289	22.7	20.2	42.9	60.5	-17.7
0.298	22.4	20.2	42.6	60.3	-17.7
0.317	21.3	20.2	41.5	59.8	-18.3
0.480	17.8	20.2	38.0	56.3	-18.4
0.187	25.1	20.2	45.3	64.2	-18.9
0.444	17.7	20.2	37.9	57.0	-19.1
0.495	16.5	20.2	36.7	56.1	-19.4
0.199	24.0	20.2	44.2	63.6	-19.5
0.432	17.3	20.2	37.5	57.2	-19.7
0.459	16.7	20.2	36.9	56.7	-19.8
0.510	15.1	20.2	35.3	56.0	-20.7
0.165	24.2	20.2	44.4	65.2	-20.8
0.516	14.6	20.2	34.8	56.0	-21.2
0.524	14.0	20.2	34.2	56.0	-21.8
0.213	21.1	20.2	41.3	63.1	-21.8
0.179	21.6	20.2	41.8	64.5	-22.8
0.223	19.7	20.2	39.9	62.7	-22.8

Peak Data - vs - Average Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.238	26.9	20.2	47.1	52.2	-5.1
0.252	26.0	20.2	46.2	51.7	-5.5
0.329	21.7	20.2	41.9	49.5	-7.6
0.289	22.7	20.2	42.9	50.5	-7.7
0.298	22.4	20.2	42.6	50.3	-7.7
0.317	21.3	20.2	41.5	49.8	-8.3
0.480	17.8	20.2	38.0	46.3	-8.4
0.187	25.1	20.2	45.3	54.2	-8.9
0.444	17.7	20.2	37.9	47.0	-9.1
0.495	16.5	20.2	36.7	46.1	-9.4
0.199	24.0	20.2	44.2	53.6	-9.5
0.432	17.3	20.2	37.5	47.2	-9.7
0.459	16.7	20.2	36.9	46.7	-9.8
0.510	15.1	20.2	35.3	46.0	-10.7
0.165	24.2	20.2	44.4	55.2	-10.8
0.516	14.6	20.2	34.8	46.0	-11.2
0.524	14.0	20.2	34.2	46.0	-11.8
0.213	21.1	20.2	41.3	53.1	-11.8
0.179	21.6	20.2	41.8	54.5	-12.8
0.223	19.7	20.2	39.9	52.7	-12.8

NORTHWEST

EMC

AC POWERLINE CONDUCTED EMISSIONS

PSA-ESCI 2010.02.16
Version 2010.3.17

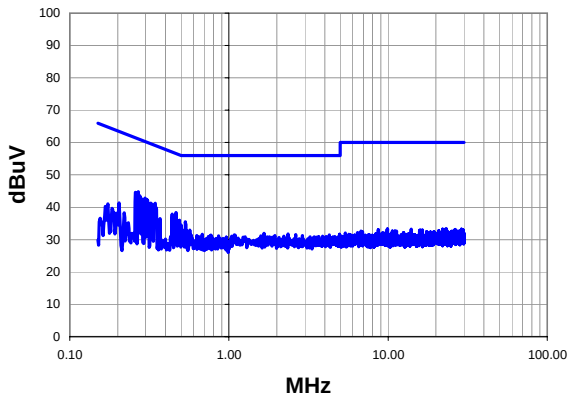
Work Order:	INTE5221	**Date:**	05/14/10		
Project:	None	**Temperature:**	21		
Job Site:	EV07	**Humidity:**	39		
Serial Number:	5	**Barometric Pres.:**	30.15 in	**Tested by:**	Rod Peloquin

EUT:	Clane2
Configuration:	3 - AC Conducted Emissions
Customer:	Intel Corporation
Attendees:	Bob Hughes
EUT Power:	120VAC/60Hz
Operating Mode:	Transmitting, mid channel, 1 Mbps
Deviations:	No deviations.
Comments:	None

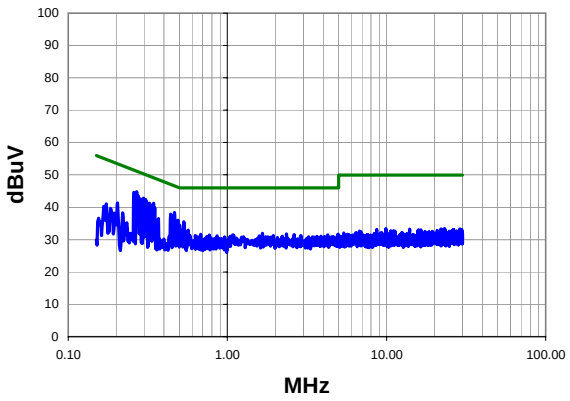
Test Specifications	**Test Method**
FCC 15.207:2010	ANSI C63.10:2009

Run #	4	**Line:**	Neutral	**Ext. Attenuation:**	20	**Results**	Pass

Peak Data - vs - Quasi Peak Limit



Peak Data - vs - Average Limit



Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.269	24.6	20.2	44.8	61.1	-16.4
0.259	24.4	20.2	44.6	61.5	-16.9
0.276	23.4	20.2	43.6	60.9	-17.4
0.296	22.7	20.2	42.9	60.3	-17.5
0.305	22.3	20.2	42.5	60.1	-17.6
0.344	21.1	20.2	41.3	59.1	-17.8
0.284	22.4	20.2	42.6	60.7	-18.1
0.465	18.2	20.2	38.4	56.6	-18.2
0.322	21.1	20.2	41.3	59.7	-18.4
0.332	20.5	20.2	40.7	59.4	-18.7
0.439	17.7	20.2	37.9	57.1	-19.2
0.456	17.2	20.2	37.4	56.8	-19.4
0.488	15.8	20.2	36.0	56.2	-20.2
0.533	15.3	20.2	35.5	56.0	-20.5
0.482	15.6	20.2	35.8	56.3	-20.5
0.502	14.3	20.2	34.5	56.0	-21.5
0.369	16.3	20.2	36.5	58.5	-22.0
0.204	21.2	20.2	41.4	63.4	-22.1
0.567	12.8	20.2	33.0	56.0	-23.0
0.543	12.7	20.2	32.9	56.0	-23.1

Peak Data - vs - Average Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.269	24.6	20.2	44.8	51.1	-6.4
0.259	24.4	20.2	44.6	51.5	-6.9
0.276	23.4	20.2	43.6	50.9	-7.4
0.296	22.7	20.2	42.9	50.3	-7.5
0.305	22.3	20.2	42.5	50.1	-7.6
0.344	21.1	20.2	41.3	49.1	-7.8
0.284	22.4	20.2	42.6	50.7	-8.1
0.465	18.2	20.2	38.4	46.6	-8.2
0.322	21.1	20.2	41.3	49.7	-8.4
0.332	20.5	20.2	40.7	49.4	-8.7
0.439	17.7	20.2	37.9	47.1	-9.2
0.456	17.2	20.2	37.4	46.8	-9.4
0.488	15.8	20.2	36.0	46.2	-10.2
0.533	15.3	20.2	35.5	46.0	-10.5
0.482	15.6	20.2	35.8	46.3	-10.5
0.502	14.3	20.2	34.5	46.0	-11.5
0.369	16.3	20.2	36.5	48.5	-12.0
0.204	21.2	20.2	41.4	53.4	-12.1
0.567	12.8	20.2	33.0	46.0	-13.0
0.543	12.7	20.2	32.9	46.0	-13.1

NORTHWEST

EMC

AC POWERLINE CONDUCTED EMISSIONS

PSA-ESCI 2010.02.16
Version 2010.3.17

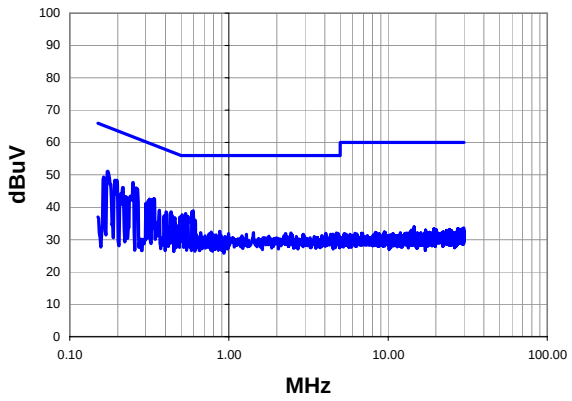
Work Order:	INTE5221	**Date:**	05/14/10		
Project:	None	**Temperature:**	21		
Job Site:	EV07	**Humidity:**	39		
Serial Number:	5	**Barometric Pres.:**	30.15 in	**Tested by:**	Rod Peloquin

EUT:	Clane2
Configuration:	3 - AC Conducted Emissions
Customer:	Intel Corporation
Attendees:	Bob Hughes
EUT Power:	120VAC/60Hz
Operating Mode:	Transmitting, high channel, 1 Mbps
Deviations:	No deviations.
Comments:	None

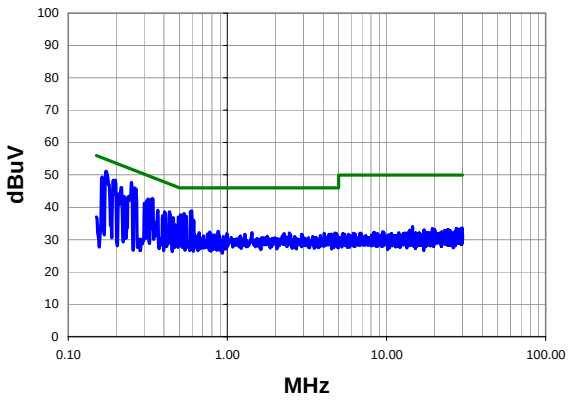
Test Specifications	**Test Method**
FCC 15.207:2010	ANSI C63.10:2009

Run #	5	**Line:**	High Line	**Ext. Attenuation:**	20	**Results**	Pass

Peak Data - vs - Quasi Peak Limit



Peak Data - vs - Average Limit



Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.174	31.0	20.2	51.2	64.8	-13.6
0.250	27.5	20.2	47.7	61.7	-14.1
0.198	28.2	20.2	48.4	63.7	-15.4
0.261	25.8	20.2	46.0	61.4	-15.4
0.193	28.2	20.2	48.4	63.9	-15.6
0.164	29.2	20.2	49.4	65.3	-15.9
0.339	22.6	20.2	42.8	59.2	-16.5
0.216	25.9	20.2	46.1	63.0	-16.9
0.330	22.3	20.2	42.5	59.4	-17.0
0.595	18.7	20.2	38.9	56.0	-17.1
0.317	22.4	20.2	42.6	59.8	-17.2
0.585	18.5	20.2	38.7	56.0	-17.3
0.534	17.9	20.2	38.1	56.0	-17.9
0.509	17.5	20.2	37.7	56.0	-18.3
0.432	18.4	20.2	38.6	57.2	-18.6
0.553	17.0	20.2	37.2	56.0	-18.8
0.301	21.1	20.2	41.3	60.2	-18.9
0.208	24.0	20.2	44.2	63.3	-19.1
0.492	16.8	20.2	37.0	56.1	-19.2
0.403	18.4	20.2	38.6	57.8	-19.2

Peak Data - vs - Average Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.174	31.0	20.2	51.2	54.8	-3.6
0.250	27.5	20.2	47.7	51.7	-4.1
0.198	28.2	20.2	48.4	53.7	-5.4
0.261	25.8	20.2	46.0	51.4	-5.4
0.193	28.2	20.2	48.4	53.9	-5.6
0.164	29.2	20.2	49.4	55.3	-5.9
0.339	22.6	20.2	42.8	49.2	-6.5
0.216	25.9	20.2	46.1	53.0	-6.9
0.330	22.3	20.2	42.5	49.4	-7.0
0.595	18.7	20.2	38.9	46.0	-7.1
0.317	22.4	20.2	42.6	49.8	-7.2
0.585	18.5	20.2	38.7	46.0	-7.3
0.534	17.9	20.2	38.1	46.0	-7.9
0.509	17.5	20.2	37.7	46.0	-8.3
0.432	18.4	20.2	38.6	47.2	-8.6
0.553	17.0	20.2	37.2	46.0	-8.8
0.301	21.1	20.2	41.3	50.2	-8.9
0.208	24.0	20.2	44.2	53.3	-9.1
0.492	16.8	20.2	37.0	46.1	-9.2
0.403	18.4	20.2	38.6	47.8	-9.2

NORTHWEST

EMC

AC POWERLINE CONDUCTED EMISSIONS

PSA-ESCI 2010.02.16
Version 2010.3.17

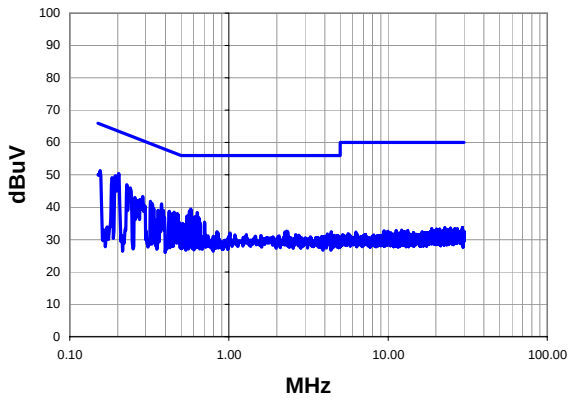
Work Order:	INTE5221	**Date:**	05/14/10		
Project:	None	**Temperature:**	21		
Job Site:	EV07	**Humidity:**	39		
Serial Number:	5	**Barometric Pres.:**	30.15 in	**Tested by:**	Rod Peloquin

EUT:	Clane2
Configuration:	3 - AC Conducted Emissions
Customer:	Intel Corporation
Attendees:	Bob Hughes
EUT Power:	120VAC/60Hz
Operating Mode:	Transmitting, high channel, 1 Mbps
Deviations:	No deviations.
Comments:	None

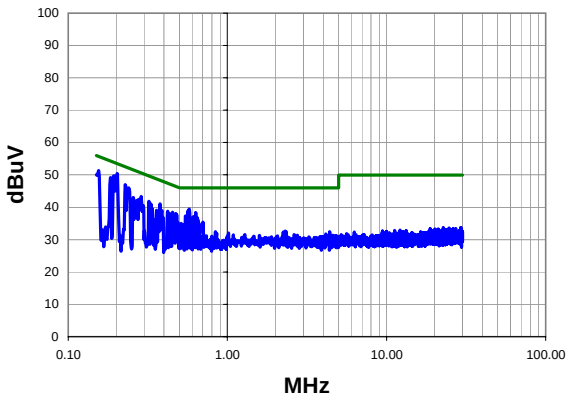
Test Specifications	**Test Method**
FCC 15.207:2010	ANSI C63.10:2009

Run #	6	**Line:**	Neutral	**Ext. Attenuation:**	20	**Results**	Pass

Peak Data - vs - Quasi Peak Limit



Peak Data - vs - Average Limit



Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.203	30.3	20.2	50.5	63.5	-13.0
0.194	29.6	20.2	49.8	63.9	-14.1
0.155	31.2	20.2	51.4	65.7	-14.4
0.184	29.0	20.2	49.2	64.3	-15.1
0.228	26.8	20.2	47.0	62.5	-15.5
0.240	25.8	20.2	46.0	62.1	-16.1
0.577	19.3	20.2	39.5	56.0	-16.5
0.565	18.7	20.2	38.9	56.0	-17.1
0.288	23.2	20.2	43.4	60.6	-17.2
0.378	20.9	20.2	41.1	58.3	-17.3
0.633	18.2	20.2	38.4	56.0	-17.6
0.322	21.7	20.2	41.9	59.7	-17.8
0.453	18.3	20.2	38.5	56.8	-18.4
0.475	17.9	20.2	38.1	56.4	-18.4
0.330	20.9	20.2	41.1	59.4	-18.4
0.278	22.3	20.2	42.5	60.9	-18.4
0.255	22.9	20.2	43.1	61.6	-18.5
0.422	18.6	20.2	38.8	57.4	-18.6
0.480	17.5	20.2	37.7	56.3	-18.7
0.544	17.1	20.2	37.3	56.0	-18.7

Peak Data - vs - Average Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.203	30.3	20.2	50.5	53.5	-3.0
0.194	29.6	20.2	49.8	53.9	-4.1
0.155	31.2	20.2	51.4	55.7	-4.4
0.184	29.0	20.2	49.2	54.3	-5.1
0.228	26.8	20.2	47.0	52.5	-5.5
0.240	25.8	20.2	46.0	52.1	-6.1
0.577	19.3	20.2	39.5	46.0	-6.5
0.565	18.7	20.2	38.9	46.0	-7.1
0.288	23.2	20.2	43.4	50.6	-7.2
0.378	20.9	20.2	41.1	48.3	-7.3
0.633	18.2	20.2	38.4	46.0	-7.6
0.322	21.7	20.2	41.9	49.7	-7.8
0.453	18.3	20.2	38.5	46.8	-8.4
0.475	17.9	20.2	38.1	46.4	-8.4
0.330	20.9	20.2	41.1	49.4	-8.4
0.278	22.3	20.2	42.5	50.9	-8.4
0.255	22.9	20.2	43.1	51.6	-8.5
0.422	18.6	20.2	38.8	47.4	-8.6
0.480	17.5	20.2	37.7	46.3	-8.7
0.544	17.1	20.2	37.3	46.0	-8.7