

Spacelabs Healthcare

Ultraview SL Wireless Option

Report No. SPAC0447

Report Prepared By



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

© 2008 Northwest EMC, Inc

EMC Test Report

Certificate of Test
Last Date of Test: November 14, 2008
Spacelabs Healthcare
Model: Ultraview SL Wireless Option

Emissions			
Test Description	Specification	Test Method	Pass/Fail
Spurious Radiated Emissions	FCC 15.247 (DTS):2008	ANSI C63.4:2003, KDB No. 558074	Pass
Occupied Bandwidth	FCC 15.247 (DTS):2008	ANSI C63.4:2003, KDB No. 558074	Pass
Peak Output Power	FCC 15.247 (DTS):2008	ANSI C63.4:2003, KDB No. 558074	Pass
Power Spectral Density	FCC 15.247 (DTS):2008	ANSI C63.4:2003, KDB No. 558074	Pass
Spurious Conducted Emissions	FCC 15.247 (DTS):2008	ANSI C63.4:2003, KDB No. 558074	Pass
Band Edge Compliance	FCC 15.247 (DTS):2008	ANSI C63.4:2003, KDB No. 558074	Pass
AC Powerline Conducted Emissions	FCC 15.207: 2008	ANSI C63.4:2003	Pass

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

Test Facility

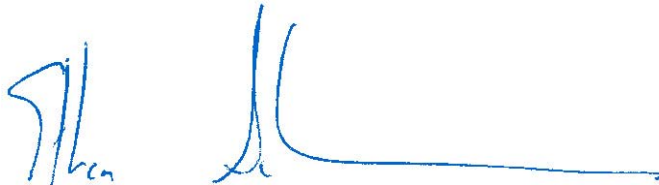
The measurement facility used to collect the data is located at:

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-2).

Approved By:



Ethan Schoonover, Sultan Lab 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		

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

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*)



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.



TÜV Product Service: Included in TÜV Product Service Group's Listing of Recognized Laboratories. It qualifies in connection with the TÜV Certification after Recognition of Agent's Testing Program for the product categories and/or standards shown in TÜV's current Listing of CARAT Laboratories, available from TÜV. A certificate was issued to represent that this laboratory continues to meet TÜV's CARAT Program requirements. Certificate No. USA0604C.



TÜV Rheinland: Authorized to carryout EMC tests by order and under supervision of TÜV Rheinland. This authorization is based on "Conditions for EMC-Subcontractors" of November 1992.



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).



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, C-2687, T-289, and R-2318, Irvine: R-1943, C-2766, and T-298, Sultan: R-871, C-1784, and T-294.*)



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



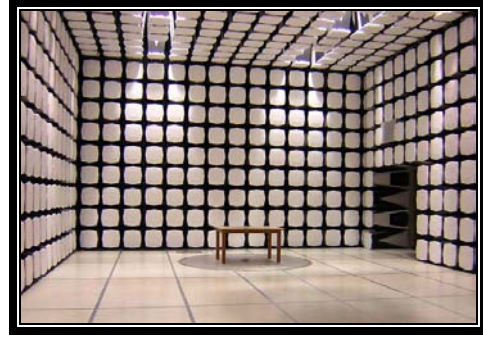
MIC: Northwest EMC, Inc is a CAB designated by MRA partners and recognized by Korea. (*Assigned Lab Numbers: Hillsboro: US0017, Irvine: US0158, Sultan: US0157*)



SCOPE

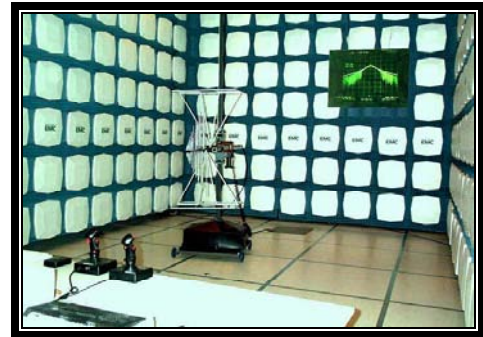
For details on the Scopes of our Accreditations, please visit:

<http://www.nwemc.com/accreditations/>



**California – Orange County Facility
Labs OC01 – OC13**

41 Tesla Ave. Irvine, CA 92618
(888) 364-2378 Fax: (503) 844-3826



**Oregon – Evergreen Facility
Labs EV01 – EV11**

22975 NW Evergreen Pkwy. Suite 400 Hillsboro, OR 97124
(503) 844-4066 Fax: (503) 844-3826



**Washington – Sultan Facility
Labs SU01 – SU07**

14128 339th Ave. SE Sultan, WA 98294
(888) 364-2378

Party Requesting the Test

Company Name:	Spacelabs Healthcare
Address:	5150 220th Ave SE, PO Box 7018
City, State, Zip:	Issaquah, WA 98027-7018
Test Requested By:	Steve Cantwell
Model:	Ultraview SL Wireless Option
First Date of Test:	November 7, 2008
Last Date of Test:	November 14, 2008
Receipt Date of Samples:	November 5, 2008
Equipment Design Stage:	Prototype
Equipment Condition:	No Damage

Information Provided by the Party Requesting the Test**Functional Description of the EUT (Equipment Under Test):**

One 802.11a/b/g radio module

Testing Objective:

Seeking to demonstrate compliance under FCC 15.247 for operation in the 2.4 and 5.8 GHz bands.

CONFIGURATION 1 SPAC0447**Software/Firmware Running during test**

Description	Version
UltraView SL operating system	Unknown
Hyperterminal	Unknown

EUT

Description	Manufacturer	Model/Part Number	Serial Number
EUT - 802.11(a/b/g) radio	Spacelabs Healthcare	WMIA-166AGI	08806B1000020
Host System - UltraView SL	Spacelabs Healthcare	91369	1369-P00003

Peripherals in test setup boundary

Description	Manufacturer	Model/Part Number	Serial Number
Power Supply	Spacelabs Healthcare	119-0479-00	Rev A
USB Mouse	Logitech	M-BJ58	PMA34664899
SpO2 Sensor	Nellcor	DS-100A	3192296

Remote Equipment Outside of Test Setup Boundary

Description	Manufacturer	Model/Part Number	Serial Number
Remote PC	IBM	A21m	IS108

Cables

Cable Type	Shield	Length (m)	Ferrite	Connection 1	Connection 2
AC Power	No	1.75m	No	Power Supply	AC Mains
DC Power	PA	1.85m	Yes	Power Supply	Host System - UltraView SL
RS-232 Null Modem	Yes	2.0m	No	Host System - UltraView SL	Remote PC
Video	Yes	1.8m	Yes	Host System - UltraView SL	Unterminated
Serial	Yes	5.0m	No	Host System - UltraView SL	RS-232 Null Modem Cable
SDLC	Yes	0.5m	Yes	Host System - UltraView SL	Terminated
RJ-11 Comms Cable	Yes	2.5m	No	Host System - UltraView SL	Unterminated
USB	Yes	1.8m	PA	Host System - UltraView SL	USB Mouse
LAN	No	0.9m	Yes	Host System - UltraView SL	Unterminated
ECG	PA	3.5m	No	Host System - UltraView SL	Terminated
Press Cable (700-0028-00)	PA	1.2m	PA	Host System - UltraView SL	Unterminated
Temp Cable (700-0031-00)	PA	0.3m	PA	Host System - UltraView SL	1/4 inch Temp Cable
1/4 inch Temp Cable	PA	3.1m	PA	Temp Cable (700-0031-00)	Terminated
SpO2 cable	PA	3.7m	PA	Host System - UltraView SL	SpO2 Sensor cable
SpO2 Sensor cable	PA	0.9m	PA	SpO2 cable	SpO2 Sensor
CO Cable (700-0027-00)	PA	0.3m	PA	Host System - UltraView SL	CO Sensor Cable
CO Sensor Cable (306655-001)	PA	2.9m	PA	CO Cable (700-0027-00)	Terminated

PA = Cable is permanently attached to the device. Shielding and/or presence of ferrite may be unknown.

CONFIGURATION 2 SPAC0447**Software/Firmware Running during test**

Description	Version
UltraView SL operating system	Unknown
Hyperterminal	Unknown

EUT

Description	Manufacturer	Model/Part Number	Serial Number
EUT - 802.11(a/b/g) radio	Spacelabs Healthcare	WMIA-166AGI	08806B1000020
Host System - UltraView SL	Spacelabs Healthcare	91369	1369-P00003

Peripherals in test setup boundary

Description	Manufacturer	Model/Part Number	Serial Number
Power Supply	Spacelabs Healthcare	119-0479-00	Rev A

Remote Equipment Outside of Test Setup Boundary

Description	Manufacturer	Model/Part Number	Serial Number
Remote PC	IBM	A21m	IS108

Cables

Cable Type	Shield	Length (m)	Ferrite	Connection 1	Connection 2
AC Power	No	1.75m	No	Power Supply	AC Mains
DC Power	PA	1.85m	Yes	Power Supply	Host System - UltraView SL
RS-232 Null Modem	Yes	2.0m	No	Host System - UltraView SL	Remote PC

PA = Cable is permanently attached to the device. Shielding and/or presence of ferrite may be unknown.

CONFIGURATION 3 SPAC0447**Software/Firmware Running during test**

Description	Version
UltraView SL operating system	Unknown
Hyperterminal	Unknown

EUT

Description	Manufacturer	Model/Part Number	Serial Number
EUT - 802.11(a/b/g) radio	Spacelabs Healthcare	WMIA-166AGI	08806B100020
Host System - UltraView SL	Spacelabs Healthcare	91369	1369-P00003

Peripherals in test setup boundary

Description	Manufacturer	Model/Part Number	Serial Number
Power Supply	Spacelabs Healthcare	119-0479-00	Rev A
USB Mouse	Logitech	M-BJ58	PMA34664899
SpO2 Sensor	Nellcor	DS-100A	3192296

Remote Equipment Outside of Test Setup Boundary

Description	Manufacturer	Model/Part Number	Serial Number
Remote PC	IBM	A21m	IS108

Cables

Cable Type	Shield	Length (m)	Ferrite	Connection 1	Connection 2
AC Power	No	1.75m	No	Power Supply	AC Mains
DC Power	PA	1.85m	Yes	Power Supply	Host System - UltraView SL
RS-232 Null Modem	Yes	2.0m	No	Host System - UltraView SL	Remote PC
Video	Yes	1.8m	Yes	Host System - UltraView SL	Unterminated
SDLC	Yes	0.5m	Yes	Host System - UltraView SL	Terminated
RJ-11 Comms Cable	Yes	2.5m	No	Host System - UltraView SL	Unterminated
USB	Yes	1.8m	PA	Host System - UltraView SL	USB Mouse
LAN	No	0.9m	Yes	Host System - UltraView SL	Unterminated
ECG	PA	3.5m	No	Host System - UltraView SL	Terminated
Press Cable (700-0028-00)	PA	1.2m	PA	Host System - UltraView SL	Unterminated
Temp Cable (700-0031-00)	PA	0.3m	PA	Host System - UltraView SL	1/4 inch Temp Cable
1/4 inch Temp Cable	PA	3.1m	PA	Temp Cable (700-0031-00)	Terminated
SpO2 cable	PA	3.7m	PA	Host System - UltraView SL	SpO2 Sensor cable
SpO2 Sensor cable	PA	0.9m	PA	SpO2 cable	SpO2 Sensor
CO Cable (700-0027-00)	PA	0.3m	PA	Host System - UltraView SL	CO Sensor Cable
CO Sensor Cable (306655-001)	PA	2.9m	PA	CO Cable (700-0027-00)	Terminated

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	11/7/2008	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.
2	11/10/2008	AC Power line 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.
3	11/10/2008	Peak Output 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	11/12/2008	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.
5	11/12/2008	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.
6	11/13/2008	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.
7	11/14/2008	Spurious Conducted Emissions	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	Scheduled testing was complete.

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), 1Mbps
802.11(b), 11Mbps
802.11(g), 6Mbps
802.11(g), 36Mbps
802.11(g), 54Mbps
802.11(a), 6Mbps
802.11(a), 36Mbps
802.11(a), 54Mbps

CHANNELS TESTED

Channel 1, 2412MHz
Channel 6, 2437MHz
Channel 11, 2462MHz
Channel 149, 5745MHz
Channel 157, 5785MHz
Channel 165, 5825MHz

POWER SETTINGS USED FOR FINAL DATA

120VAC/60Hz

FREQUENCY RANGE INVESTIGATED

Start Frequency	30 MHz	Stop Frequency	25 GHz
-----------------	--------	----------------	--------

CLOCKS AND OSCILLATORS

Not provided

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	AAV	12/18/2007	12
High Pass Filter	Micro-Tronics	50111	HGE	5/14/2008	13
Attenuator	Pasternack	PE7005-20	AUN	5/10/2008	13
Antenna, Horn	ETS	3160.07	AHZ	10/14/2008	24
Antenna, Horn	EMCO	3160-09	AHG	NCR	0
EV01 Cables		6GHz Standard Gain Horn C	EVD	7/25/2007	16
Pre-Amplifier	Miteq	JSD4-18002600-26-8P	APU	7/25/2007	16
Antenna, Horn	ETS	3160-08	AIA	NCR	0
Pre-Amplifier	Miteq	AMF-6F-12001800-30-10P	AVI	5/14/2008	13
EV12 Cables		Standard Gain Horn Cables	EVU	5/14/2008	13
Pre-Amplifier	Miteq	AMF-6F-08001200-30-10P	AVH	5/14/2008	13
Antenna, Horn	ETS	3115	AIB	8/25/2008	24
EV12 Cables		Double Ridge Horn Cables	EVT	6/17/2008	13
Pre-Amplifier	Miteq	AMF-3D00100800-32-13P	AVF	6/17/2008	13
Antenna, Biconilog	EMCO	3141	AXE	1/15/2008	24
EV12 Cables		Bilog Cables	EVS	6/17/2008	13
Pre-Amplifier	Miteq	AM-1616-1000	AVM	6/17/2008	13

MEASUREMENT BANDWIDTHS

	Frequency Range	Peak Data	Quasi-Peak Data	Average Data
	(MHz)	(kHz)	(kHz)	(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

Measurement uncertainty is used to reflect the accuracy of the measured result as compared with its "true" or theoretically correct

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 C63.4:2003). A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

EMC SPURIOUS RADIATED EMISSIONS

EUT: Ultraview SL Wireless Option	Work Order: SPAC0447
Serial Number: Various, see config page	Date: 11/07/08
Customer: Spacelabs Healthcare	Temperature: 24
Attendees: None	Humidity: 45%
Project: None	Barometric Pres.: 30.25
Tested by: Rod Peloquin	Power: 120VAC/60Hz
	Job Site: EV12

TEST SPECIFICATIONS	Test Method
FCC 15.247 (DTS):2008	ANSI C63.4:2003, KDB No. 558074

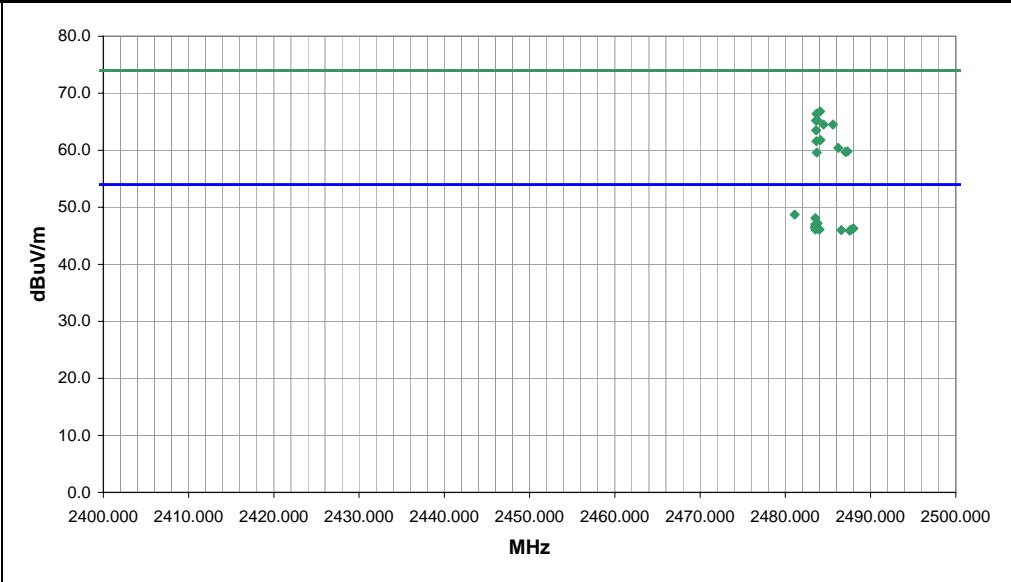
TEST PARAMETERS	
Antenna Height(s) (m) 1 - 4	Test Distance (m) 3

COMMENTS
None

EUT OPERATING MODES
Transmitting 802.11, high channel

DEVIATIONS FROM TEST STANDARD
No deviations.

Run #	1	 Signature
Configuration #	1	
Results	Pass	



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
2481.108	30.2	-1.5	317.0	1.0	3.0	20.0	V-Horn	AV	0.0	48.7	54.0	-5.3	6 Mbps, EUT screen down
2483.517	29.6	-1.5	353.0	1.0	3.0	20.0	V-Horn	AV	0.0	48.1	54.0	-5.9	6 Mbps, EUT typical orientation
2483.792	28.7	-1.5	75.0	2.0	3.0	20.0	H-Horn	AV	0.0	47.2	54.0	-6.8	6 Mbps, EUT on side
2483.508	28.5	-1.5	62.0	1.0	3.0	20.0	H-Horn	AV	0.0	47.0	54.0	-7.0	6 Mbps, EUT screen down
2484.083	48.3	-1.5	336.0	1.1	3.0	20.0	V-Horn	PK	0.0	66.8	74.0	-7.2	36 Mbps, EUT screen down
2483.525	28.1	-1.5	47.0	1.4	3.0	20.0	H-Horn	AV	0.0	46.6	54.0	-7.4	6 Mbps, EUT typical orientation
2483.500	28.0	-1.5	76.0	1.9	3.0	20.0	H-Horn	AV	0.0	46.5	54.0	-7.5	36 Mbps, EUT on side
2483.508	27.9	-1.5	336.0	1.1	3.0	20.0	V-Horn	AV	0.0	46.4	54.0	-7.6	36 Mbps, EUT screen down
2483.650	47.9	-1.5	75.0	2.0	3.0	20.0	H-Horn	PK	0.0	66.4	74.0	-7.6	6 Mbps, EUT on side
2487.992	27.8	-1.5	76.0	1.9	3.0	20.0	H-Horn	AV	0.0	46.3	54.0	-7.7	1 Mbps, EUT on side
2483.867	27.7	-1.5	176.0	1.1	3.0	20.0	V-Horn	AV	0.0	46.2	54.0	-7.8	6 Mbps, EUT on side
2483.525	27.6	-1.5	336.0	1.1	3.0	20.0	V-Horn	AV	0.0	46.1	54.0	-7.9	54 Mbps, EUT screen down
2484.008	27.6	-1.5	76.0	1.9	3.0	20.0	H-Horn	AV	0.0	46.1	54.0	-7.9	54 Mbps, EUT on side
2487.750	27.6	-1.5	336.0	1.1	3.0	20.0	V-Horn	AV	0.0	46.1	54.0	-7.9	1 Mbps, EUT screen down
2486.567	27.5	-1.5	76.0	1.9	3.0	20.0	H-Horn	AV	0.0	46.0	54.0	-8.0	11 Mbps, EUT on side
2487.550	27.4	-1.5	336.0	1.1	3.0	20.0	V-Horn	AV	0.0	45.9	54.0	-8.1	11 Mbps, EUT screen down
2483.725	46.8	-1.5	317.0	1.0	3.0	20.0	V-Horn	PK	0.0	65.3	74.0	-8.7	6 Mbps, EUT screen down
2483.592	46.7	-1.5	62.0	1.0	3.0	20.0	H-Horn	PK	0.0	65.2	74.0	-8.8	6 Mbps, EUT screen down
2483.675	46.7	-1.5	76.0	1.9	3.0	20.0	H-Horn	PK	0.0	65.2	74.0	-8.8	54 Mbps, EUT on side
2484.483	46.0	-1.5	76.0	1.9	3.0	20.0	H-Horn	PK	0.0	64.5	74.0	-9.5	36 Mbps, EUT on side

EUT: Ultraview SL Wireless Option	Work Order: SPAC0447
Serial Number: Various, see config page	Date: 11/07/08
Customer: Spacelabs Healthcare	Temperature: 24
Attendees: None	Humidity: 45%
Project: None	Barometric Pres.: 30.25
Tested by: Rod Peloquin	Power: 120VAC/60Hz
	Job Site: EV12

TEST SPECIFICATIONS	
FCC 15.247 (DTS):2008	Test Method ANSI C63.4:2003, KDB No. 558074

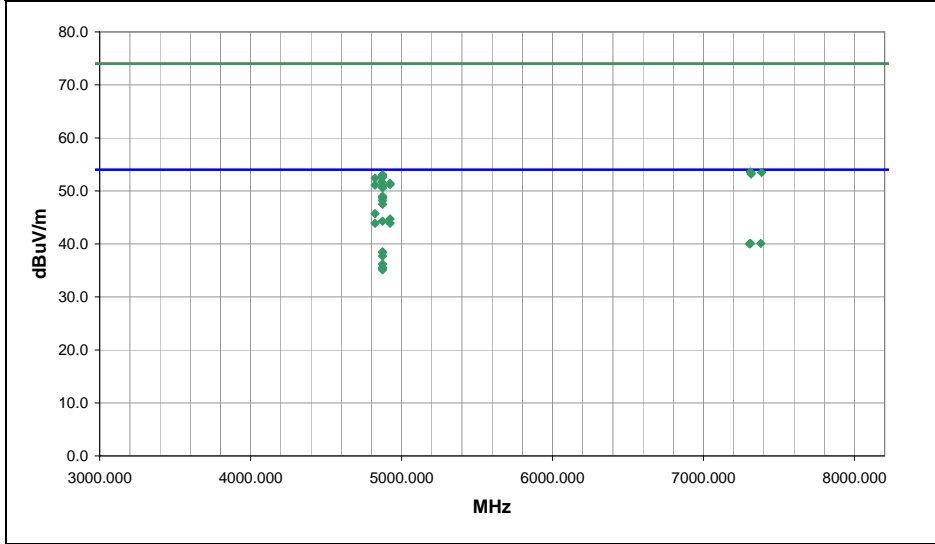
TEST PARAMETERS	
Antenna Height(s) (m)	1 - 4
Test Distance (m)	3

COMMENTS
None

EUT OPERATING MODES
Transmitting 802.11, See comments for channel and data rate

DEVIATIONS FROM TEST STANDARD
No deviations.

Run #	2	 Signature
Configuration #	1	
Results	Pass	



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
4873.900	41.4	6.8	183.0	1.2	3.0	0.0	H-Horn	AV	0.0	48.2	54.0	-5.8	Mid channel, 1 Mbps, EUT typical orientation
4873.960	40.7	6.8	258.0	1.0	3.0	0.0	V-Horn	AV	0.0	47.5	54.0	-6.5	Mid channel, 1 Mbps, EUT on side
4823.967	39.1	6.6	267.0	1.0	3.0	0.0	V-Horn	AV	0.0	45.7	54.0	-8.3	Low channel, 1 Mbps, EUT on side
4923.920	37.8	6.9	265.0	1.2	3.0	0.0	V-Horn	AV	0.0	44.7	54.0	-9.3	High channel, 1 Mbps, EUT on side
4873.950	37.5	6.8	297.0	1.0	3.0	0.0	H-Horn	AV	0.0	44.3	54.0	-9.7	Mid channel, 1 Mbps, EUT screen down
4823.847	37.3	6.6	191.0	1.4	3.0	0.0	H-Horn	AV	0.0	43.9	54.0	-10.1	Low channel, 1 Mbps, EUT typical orientation
4923.923	37.0	6.9	187.0	1.4	3.0	0.0	H-Horn	AV	0.0	43.9	54.0	-10.1	High channel, 1 Mbps, EUT typical orientation
7309.700	26.0	14.1	186.0	1.1	3.0	0.0	H-Horn	AV	0.0	40.1	54.0	-13.9	Low channel, 1 Mbps, EUT typical orientation
7309.820	26.0	14.1	186.0	1.1	3.0	0.0	H-Horn	AV	0.0	40.1	54.0	-13.9	Low channel, 1 Mbps, EUT typical orientation
7379.867	25.9	14.2	27.0	1.0	3.0	0.0	V-Horn	AV	0.0	40.1	54.0	-13.9	Mid channel, 1 Mbps, EUT on side
7305.350	26.0	14.0	32.0	1.0	3.0	0.0	V-Horn	AV	0.0	40.0	54.0	-14.0	Low channel, 1 Mbps, EUT on side
4874.050	31.7	6.8	13.0	1.9	3.0	0.0	V-Horn	AV	0.0	38.5	54.0	-15.5	Mid channel, 1 Mbps, EUT screen down
4874.003	31.6	6.8	311.0	1.1	3.0	0.0	H-Horn	AV	0.0	38.4	54.0	-15.6	Mid channel, 1 Mbps, EUT on side
4874.073	30.9	6.8	227.0	1.5	3.0	0.0	V-Horn	AV	0.0	37.7	54.0	-16.3	Mid channel, 1 Mbps, EUT typical orientation
4873.700	29.4	6.8	284.0	1.0	3.0	0.0	V-Horn	AV	0.0	36.2	54.0	-17.8	Mid channel, 6 Mbps, EUT on side
4874.000	28.7	6.8	189.0	1.3	3.0	0.0	H-Horn	AV	0.0	35.5	54.0	-18.5	Mid channel, 6 Mbps, EUT typical orientation
4873.842	28.5	6.8	284.0	1.0	3.0	0.0	V-Horn	AV	0.0	35.3	54.0	-18.7	Mid channel, 11 Mbps, EUT on side
4874.467	28.3	6.8	192.0	1.3	3.0	0.0	H-Horn	AV	0.0	35.1	54.0	-18.9	Mid channel, 11 Mbps, EUT typical orientation
7310.200	39.6	14.0	32.0	1.0	3.0	0.0	V-Horn	PK	0.0	53.6	74.0	-20.4	Low channel, 1 Mbps, EUT on side
7384.750	39.3	14.2	27.0	1.0	3.0	0.0	V-Horn	PK	0.0	53.5	74.0	-20.5	Mid channel, 1 Mbps, EUT on side
7314.720	39.4	14.0	186.0	1.1	3.0	0.0	H-Horn	PK	0.0	53.4	74.0	-20.6	Low channel, 1 Mbps, EUT typical orientation
7315.720	39.1	14.1	186.0	1.1	3.0	0.0	H-Horn	PK	0.0	53.2	74.0	-20.8	Low channel, 1 Mbps, EUT typical orientation
4873.908	46.2	6.8	284.0	1.0	3.0	0.0	V-Horn	PK	0.0	53.0	74.0	-21.0	Mid channel, 11 Mbps, EUT on side
4873.957	46.2	6.8	183.0	1.2	3.0	0.0	H-Horn	PK	0.0	53.0	74.0	-21.0	Mid channel, 1 Mbps, EUT typical orientation
4873.927	45.9	6.8	257.0	1.0	3.0	0.0	V-Horn	PK	0.0	52.7	74.0	-21.3	Mid channel, 1 Mbps, EUT on side
4872.120	45.6	6.9	284.0	1.0	3.0	0.0	V-Horn	PK	0.0	52.5	74.0	-21.5	Mid channel, 6 Mbps, EUT on side
4824.070	45.8	6.6	267.0	1.0	3.0	0.0	V-Horn	PK	0.0	52.4	74.0	-21.6	Low channel, 1 Mbps, EUT on side
4868.420	44.9	6.8	189.0	1.3	3.0	0.0	H-Horn	PK	0.0	51.7	74.0	-22.3	Mid channel, 6 Mbps, EUT typical orientation
4923.853	44.5	6.9	265.0	1.2	3.0	0.0	V-Horn	PK	0.0	51.4	74.0	-22.6	High channel, 1 Mbps, EUT on side
4923.943	44.3	6.9	187.0	1.4	3.0	0.0	H-Horn	PK	0.0	51.2	74.0	-22.8	High channel, 1 Mbps, EUT typical orientation
4823.687	44.5	6.6	191.0	1.4	3.0	0.0	H-Horn	PK	0.0	51.1	74.0	-22.9	Low channel, 1 Mbps, EUT typical orientation
4873.920	44.2	6.8	192.0	1.3	3.0	0.0	H-Horn	PK	0.0	51.0	74.0	-23.0	Mid channel, 11 Mbps, EUT typical orientation
4873.973	43.8	6.8	297.0	1.0	3.0	0.0	H-Horn	PK	0.0	50.6	74.0	-23.4	Mid channel, 1 Mbps, EUT screen down
4874.077	42.2	6.8	13.0	1.9	3.0	0.0	V-Horn	PK	0.0	49.0	74.0	-25.0	Mid channel, 1 Mbps, EUT screen down
4873.723	42.0	6.8	311.0	1.1	3.0	0.0	H-Horn	PK	0.0	48.8	74.0	-25.2	Mid channel, 1 Mbps, EUT on side
4874.167	41.9	6.8	227.0	1.5	3.0	0.0	V-Horn	PK	0.0	48.7	74.0	-25.3	Mid channel, 1 Mbps, EUT typical orientation

SPURIOUS RADIATED EMISSIONS

EMC

EUT: Ultraview SL Wireless Option	Work Order: SPAC0447
Serial Number: Various, see config page	Date: 11/07/08
Customer: Spacelabs Healthcare	Temperature: 24
Attendees: None	Humidity: 45%
Project: None	Barometric Pres.: 30.25
Tested by: Rod Peloquin	Power: 120VAC/60Hz
	Job Site: EV12

TEST SPECIFICATIONS		Test Method
FCC 15.247 (DTS):2008		ANSI C63.4:2003, KDB No. 558074

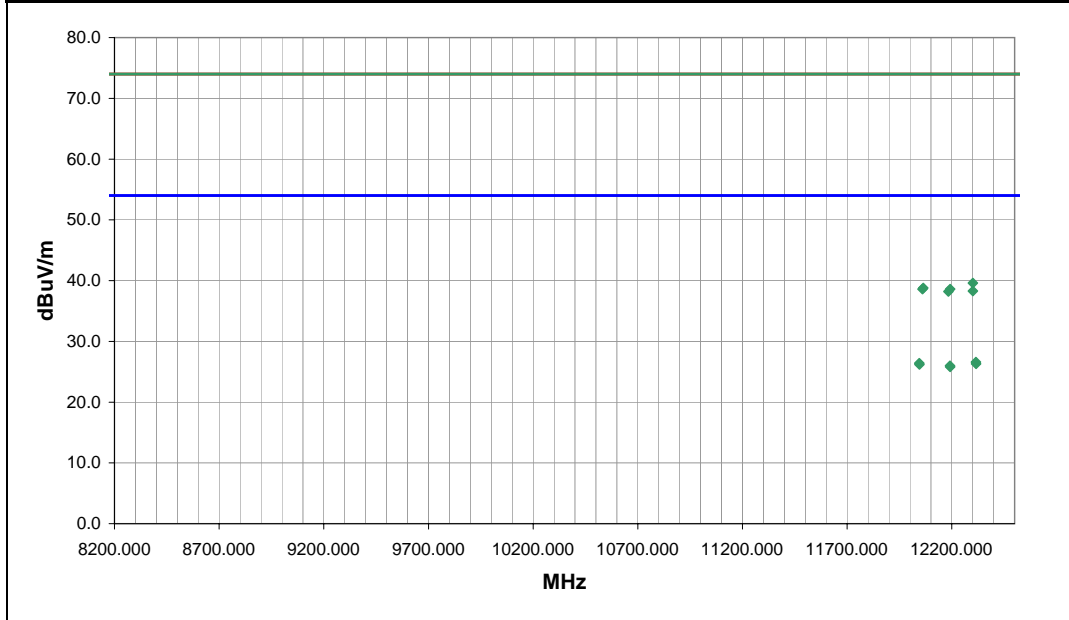
TEST PARAMETERS		
Antenna Height(s) (m)	1 - 4	Test Distance (m)
		3

COMMENTS
None

EUT OPERATING MODES
Transmitting 802.11, See comments for channel and data rate

DEVIATIONS FROM TEST STANDARD
No deviations.

Run #	3	 Signature
Configuration #	1	
Results	Pass	



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
12315.000	37.4	-10.8	43.0	1.0	3.0	0.0	H-Horn	AV	0.0	26.6	54.0	-27.4	High channel, 1 Mbps
12044.230	37.7	-11.3	27.0	1.0	3.0	0.0	V-Horn	AV	0.0	26.4	54.0	-27.6	Low channel, 1 Mbps
12316.000	37.1	-10.8	302.0	1.0	3.0	0.0	V-Horn	AV	0.0	26.3	54.0	-27.7	High channel, 1 Mbps
12045.570	37.5	-11.3	354.0	1.0	3.0	0.0	H-Horn	AV	0.0	26.2	54.0	-27.8	Low channel, 1 Mbps
12191.000	37.1	-11.1	92.0	1.0	3.0	0.0	H-Horn	AV	0.0	26.0	54.0	-28.0	Mid channel, 1 Mbps
12191.900	36.9	-11.1	274.0	1.0	3.0	0.0	V-Horn	AV	0.0	25.8	54.0	-28.2	Mid channel, 1 Mbps
12300.400	50.3	-10.7	43.0	1.0	3.0	0.0	H-Horn	PK	0.0	39.6	74.0	-34.4	High channel, 1 Mbps
12063.530	50.1	-11.3	354.0	1.0	3.0	0.0	H-Horn	PK	0.0	38.8	74.0	-35.2	Low channel, 1 Mbps
12059.730	49.9	-11.3	27.0	1.0	3.0	0.0	V-Horn	PK	0.0	38.6	74.0	-35.4	Low channel, 1 Mbps
12192.200	49.7	-11.1	92.0	1.0	3.0	0.0	H-Horn	PK	0.0	38.6	74.0	-35.4	Mid channel, 1 Mbps
12300.630	49.0	-10.7	302.0	1.0	3.0	0.0	V-Horn	PK	0.0	38.3	74.0	-35.7	High channel, 1 Mbps
12183.270	49.3	-11.1	274.0	1.0	3.0	0.0	V-Horn	PK	0.0	38.2	74.0	-35.8	Mid channel, 1 Mbps

EUT: Ultraview SL Wireless Option	Work Order: SPAC0447
Serial Number: Various, see config page	Date: 11/11/08
Customer: Spacelabs Healthcare	Temperature: 24
Attendees: None	Humidity: 45%
Project: None	Barometric Pres.: 30.25
Tested by: David DiVergigelis	Power: 120VAC/60Hz
	Job Site: EV12

TEST SPECIFICATIONS	Test Method
FCC 15.247 (DTS):2008	ANSI C63.4:2003, KDB No. 558074

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

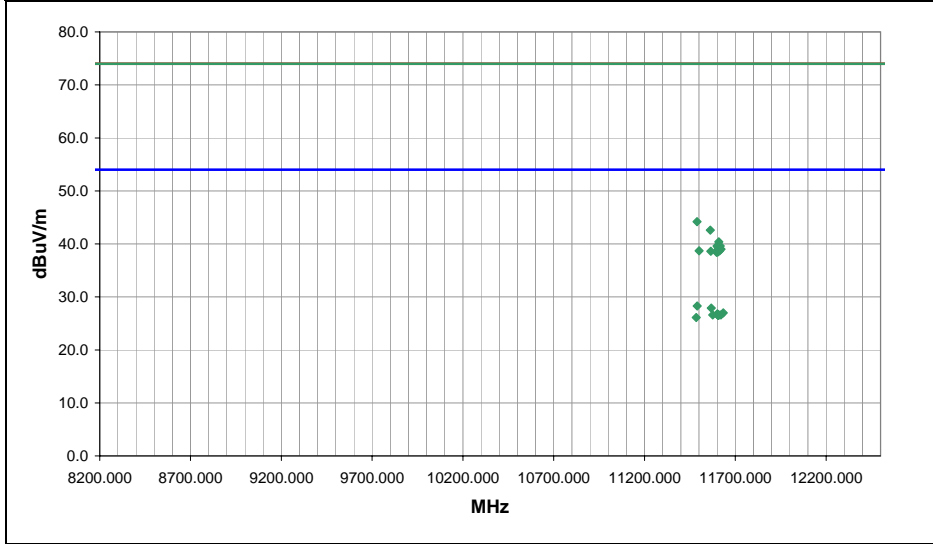
COMMENTS
See comments below for channel and data rate.

EUT OPERATING MODES
Transmitting 802.11(a)

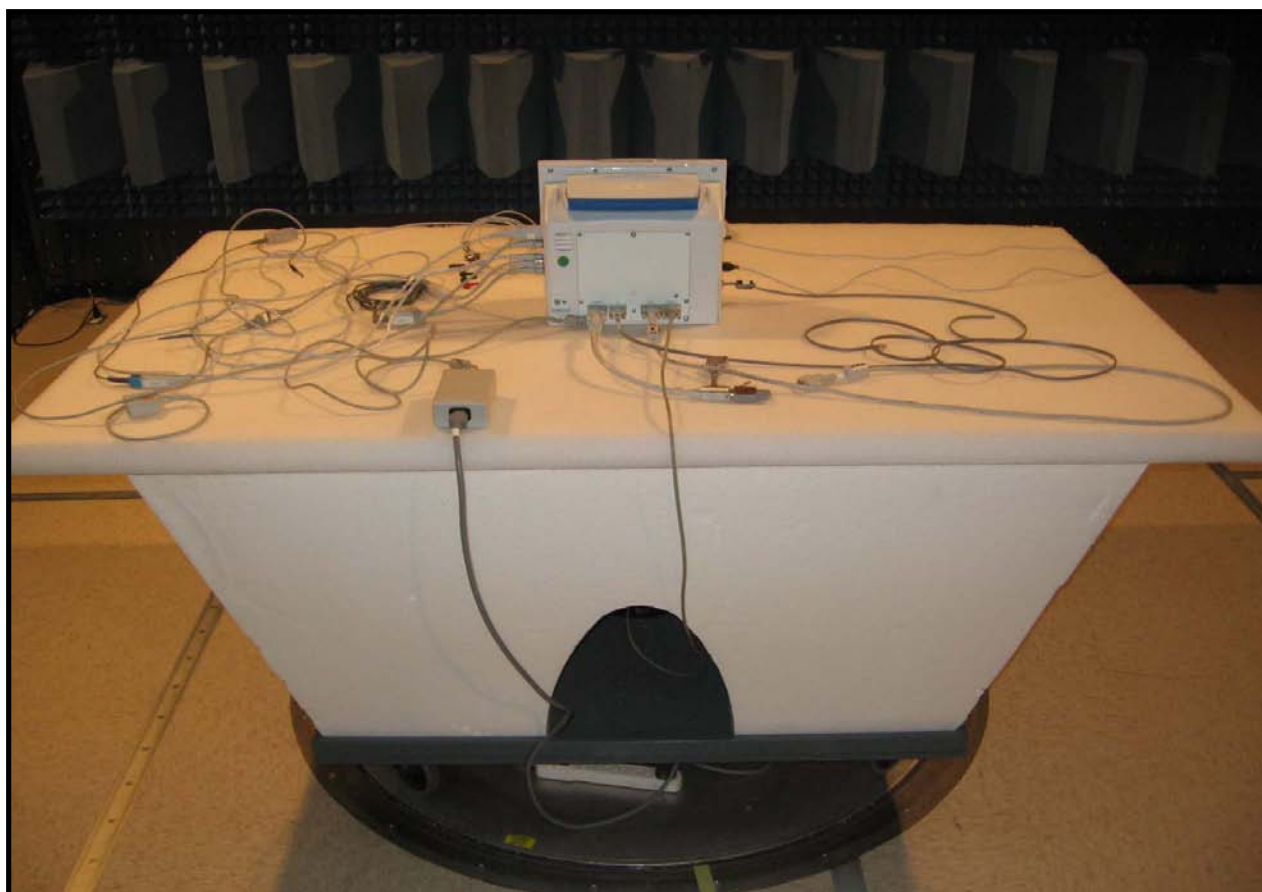
DEVIATIONS FROM TEST STANDARD
No deviations.

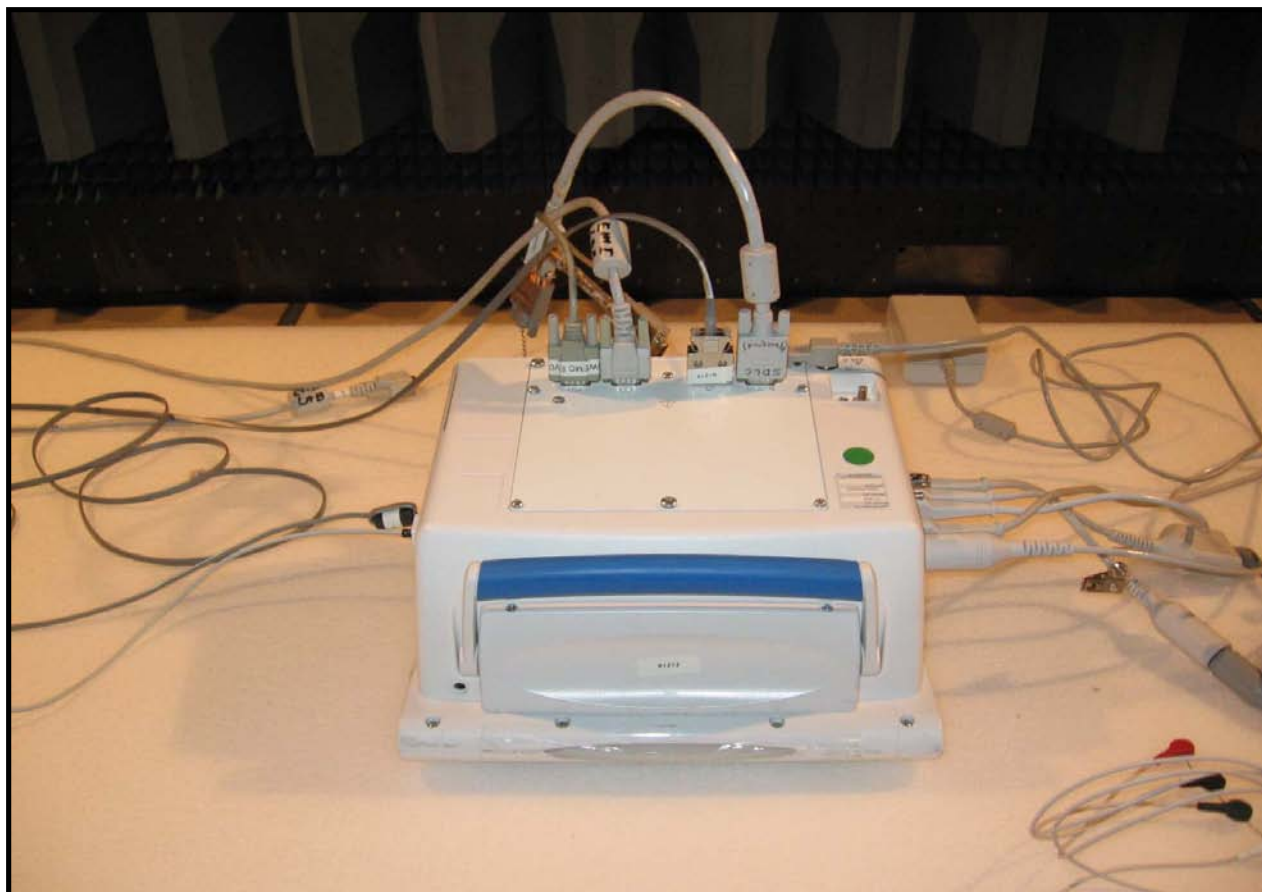
Run #	4
Configuration #	1
Results	Pass

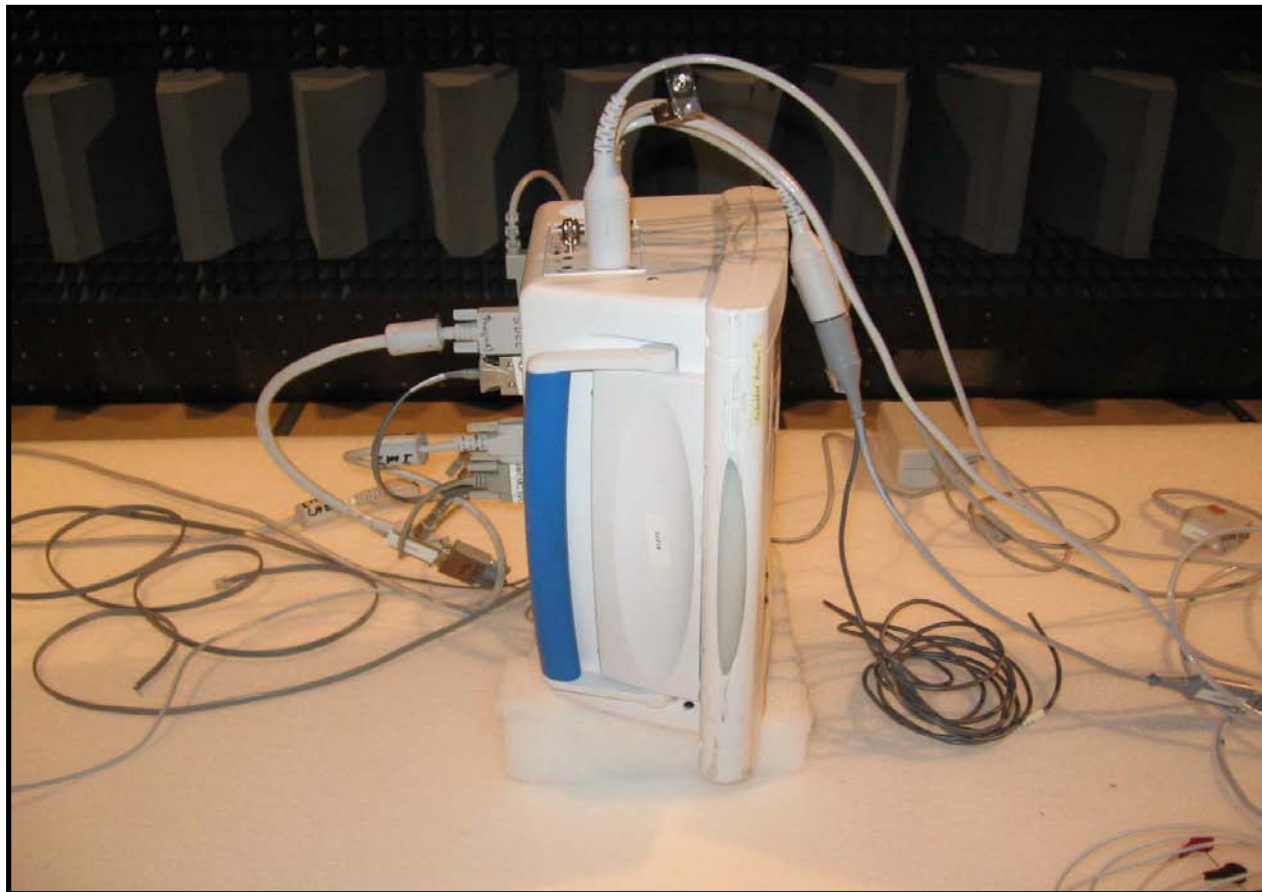
Signature *David DiVergigelis*



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
11490.500	40.4	-12.1	3.0	1.0	3.0	0.0	H-Horn	AV	0.0	28.3	54.0	-25.7	Device typical position. Channel 149. 6Mbps
11568.050	39.9	-12.0	30.0	1.0	3.0	0.0	H-Horn	AV	0.0	27.9	54.0	-26.1	Device typical position. Channel 157. 6Mbps
11633.500	38.9	-11.9	8.0	1.0	3.0	0.0	H-Horn	AV	0.0	27.0	54.0	-27.0	Device typical position. Channel 165. 6Mbps
11601.370	38.7	-11.9	16.0	3.1	3.0	0.0	V-Horn	AV	0.0	26.8	54.0	-27.2	Device typical position. Channel 165. 6Mbps
11603.750	38.6	-11.9	172.0	2.9	3.0	0.0	H-Horn	AV	0.0	26.7	54.0	-27.3	Device face down. Channel 165. 6Mbps
11603.870	38.6	-11.9	129.0	1.0	3.0	0.0	H-Horn	AV	0.0	26.7	54.0	-27.3	Device typical position. Channel 165. 36Mbps
11602.830	38.5	-11.9	289.0	1.0	3.0	0.0	H-Horn	AV	0.0	26.6	54.0	-27.4	Device typical position. Channel 165. 54Mbps
11604.000	38.5	-11.9	161.0	2.9	3.0	0.0	H-Horn	AV	0.0	26.6	54.0	-27.4	Device on side. Channel 165. 6Mbps
11607.210	38.5	-11.9	20.0	2.3	3.0	0.0	V-Horn	AV	0.0	26.6	54.0	-27.4	Device typical position. Channel 165. 54Mbps
11608.330	38.5	-11.9	230.0	2.3	3.0	0.0	V-Horn	AV	0.0	26.6	54.0	-27.4	Device on side. Channel 165. 6Mbps
11620.500	38.5	-11.9	122.0	2.7	3.0	0.0	V-Horn	AV	0.0	26.6	54.0	-27.4	Device face down. Channel 165. 6Mbps
11575.630	38.6	-12.0	148.0	1.2	3.0	0.0	V-Horn	AV	0.0	26.6	54.0	-27.4	Device typical position. Channel 157. 6Mbps
11606.960	38.4	-11.9	305.0	2.3	3.0	0.0	V-Horn	AV	0.0	26.5	54.0	-27.5	Device typical position. Channel 165. 36Mbps
11484.750	38.2	-12.1	305.0	1.0	3.0	0.0	V-Horn	AV	0.0	26.1	54.0	-27.9	Device typical position. Channel 149. 6Mbps
11489.300	56.3	-12.1	3.0	1.0	3.0	0.0	H-Horn	PK	0.0	44.2	74.0	-29.8	Device typical position. Channel 149. 6Mbps
11562.530	54.6	-12.0	30.0	1.0	3.0	0.0	H-Horn	PK	0.0	42.6	74.0	-31.4	Device typical position. Channel 157. 6Mbps
11609.250	52.3	-11.9	8.0	1.0	3.0	0.0	H-Horn	PK	0.0	40.4	74.0	-33.6	Device typical position. Channel 165. 6Mbps
11599.670	51.5	-11.9	305.0	2.3	3.0	0.0	V-Horn	PK	0.0	39.6	74.0	-34.4	Device typical position. Channel 165. 36Mbps
11617.420	51.5	-11.9	16.0	3.1	3.0	0.0	V-Horn	PK	0.0	39.6	74.0	-34.4	Device typical position. Channel 165. 6Mbps
11603.000	51.4	-11.9	129.0	1.0	3.0	0.0	H-Horn	PK	0.0	39.5	74.0	-34.5	Device typical position. Channel 165. 36Mbps







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	12/7/2007	13
Attenuator 20 dB, SMA M/F 26GHz	S.M. Electronics	SA26B-20	AUY	6/27/2008	13

MEASUREMENT UNCERTAINTY

Measurement uncertainty is used to reflect the accuracy of the measured result as compared with its "true" or theoretically correct value. Our measurement data meets or exceeds the measurement uncertainty requirements of CISPR 16-4. In the case of transient tests our test equipment has been demonstrated by calibration to provide at least a 95% confidence that it complies with the test specification requirements. The measurement uncertainty for any test is available upon request.

TEST DESCRIPTION

The occupied bandwidth was measured with the EUT set to low, medium, and high transmit frequencies in each operating mode and band. The EUT was tested at the lowest, middle, and highest data rate available in each of those modes. 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 in a no hop mode.

EMC

OCCUPIED BANDWIDTH

EUT:	Ultraview SL Wireless Option	Work Order:	SPAC0447
Serial Number:	Various, see config page	Date:	11/12/08
Customer:	Spacelabs Healthcare	Temperature:	22°C
Attendees:	None	Humidity:	55%
Project:	None	Barometric Pres.:	30.05
Tested by:	Rod Peloquin	Power:	120VAC/60Hz
		Job Site:	EV06

TEST SPECIFICATIONS		Test Method
FCC 15.247 (DTS):2008		ANSI C63.4:2003 KDB No. 558074

COMMENTS
None

DEVIATIONS FROM TEST STANDARD
No Deviations

Configuration #	2	Signature 
-----------------	---	---

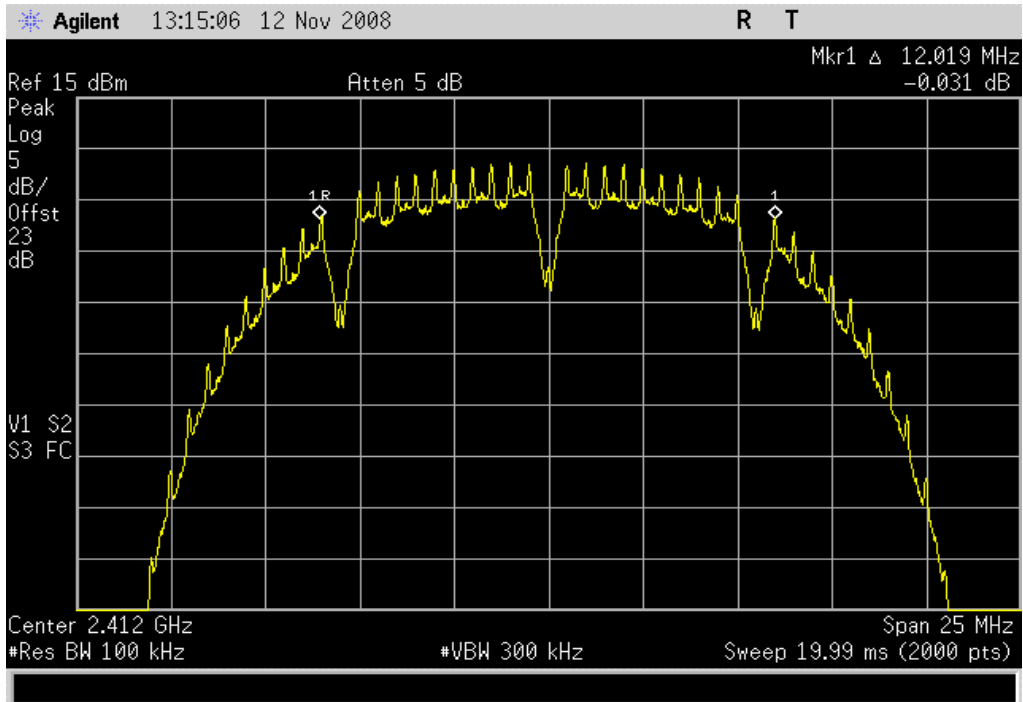
		Value	Limit	Results
802.11(b) 1 Mbps	Low Channel	12.02 MHz	> 500 kHz	Pass
	Mid Channel	12.04 MHz	> 500 kHz	Pass
	High Channel	12.04 MHz	> 500 kHz	Pass
802.11(b) 11 Mbps	Low Channel	12.08 MHz	> 500 kHz	Pass
	Mid Channel	12.24 MHz	> 500 kHz	Pass
	High Channel	12.07 MHz	> 500 kHz	Pass
802.11(g) 6 Mbps	Low Channel	16.35 MHz	> 500 kHz	Pass
	Mid Channel	16.36 MHz	> 500 kHz	Pass
	High Channel	16.33 MHz	> 500 kHz	Pass
802.11(g) 36 Mbps	Low Channel	16.48 MHz	> 500 kHz	Pass
	Mid Channel	16.47 MHz	> 500 kHz	Pass
	High Channel	16.48 MHz	> 500 kHz	Pass
802.11(g) 54 Mbps	Low Channel	16.47 MHz	> 500 kHz	Pass
	Mid Channel	16.48 MHz	> 500 kHz	Pass
	High Channel	16.48 MHz	> 500 kHz	Pass
802.11(a) 6 Mbps	Low Channel	16.46 MHz	> 500 kHz	Pass
	Mid Channel	16.41 MHz	> 500 kHz	Pass
	High Channel	16.35 MHz	> 500 kHz	Pass
802.11(a) 36 Mbps	Low Channel	16.46 MHz	> 500 kHz	Pass
	Mid Channel	16.46 MHz	> 500 kHz	Pass
	High Channel	16.51 MHz	> 500 kHz	Pass
802.11(a) 54 Mbps	Low Channel	16.51 MHz	> 500 kHz	Pass
	Mid Channel	16.46 MHz	> 500 kHz	Pass
	High Channel	16.48 MHz	> 500 kHz	Pass

802.11(b) 1 Mbps, Low Channel

Result: Pass

Value: 12.02 MHz

Limit: > 500 kHz

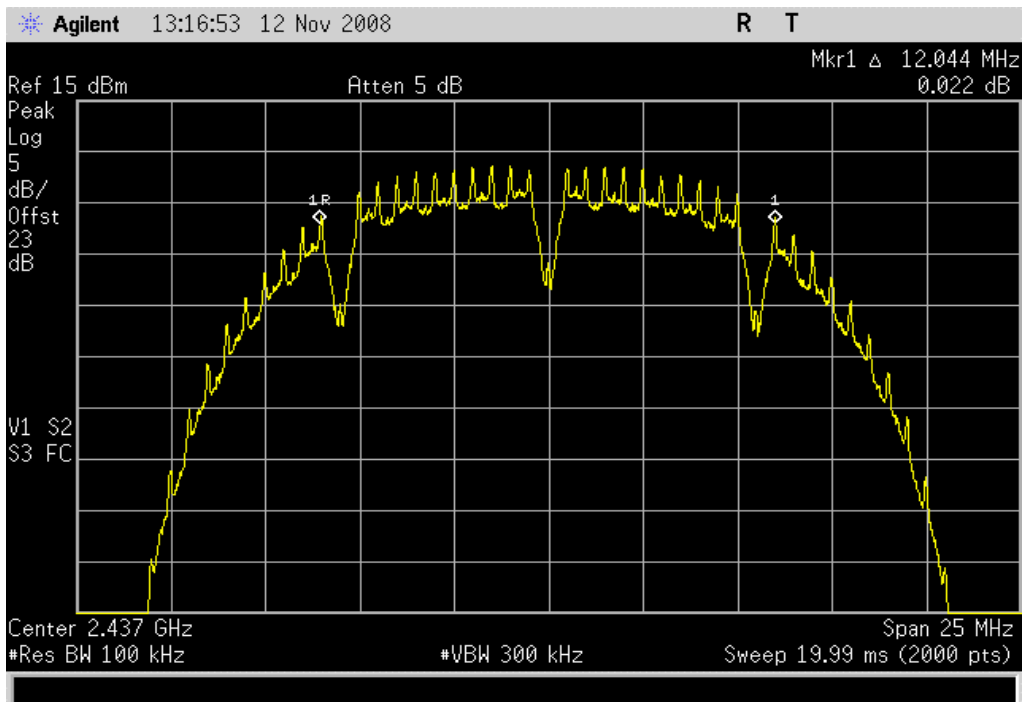


802.11(b) 1 Mbps, Mid Channel

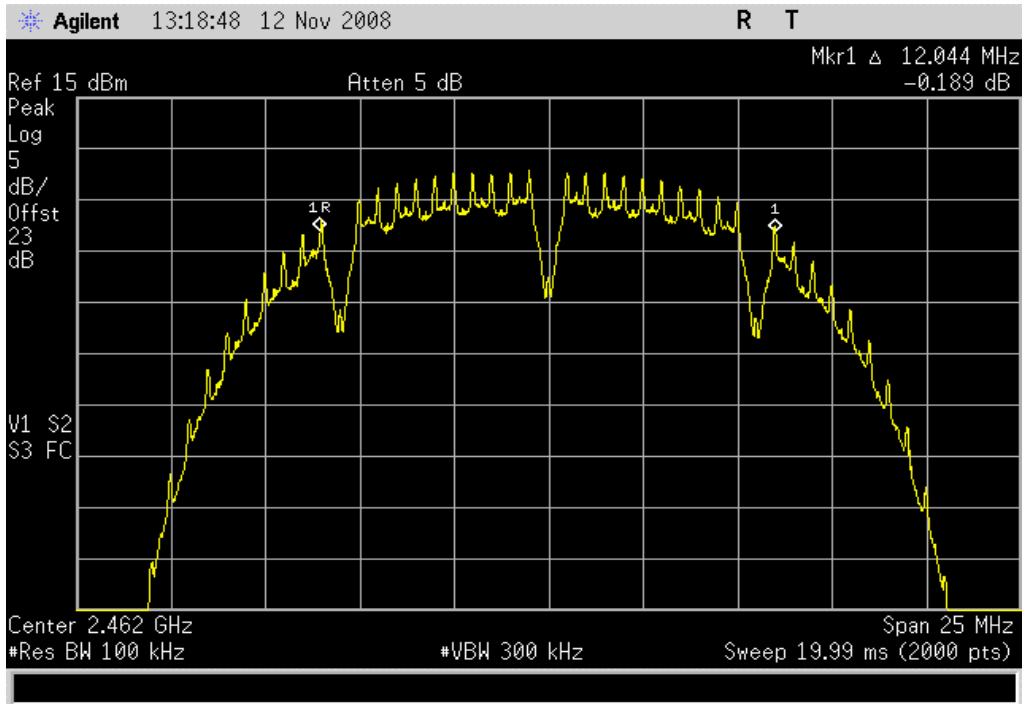
Result: Pass

Value: 12.04 MHz

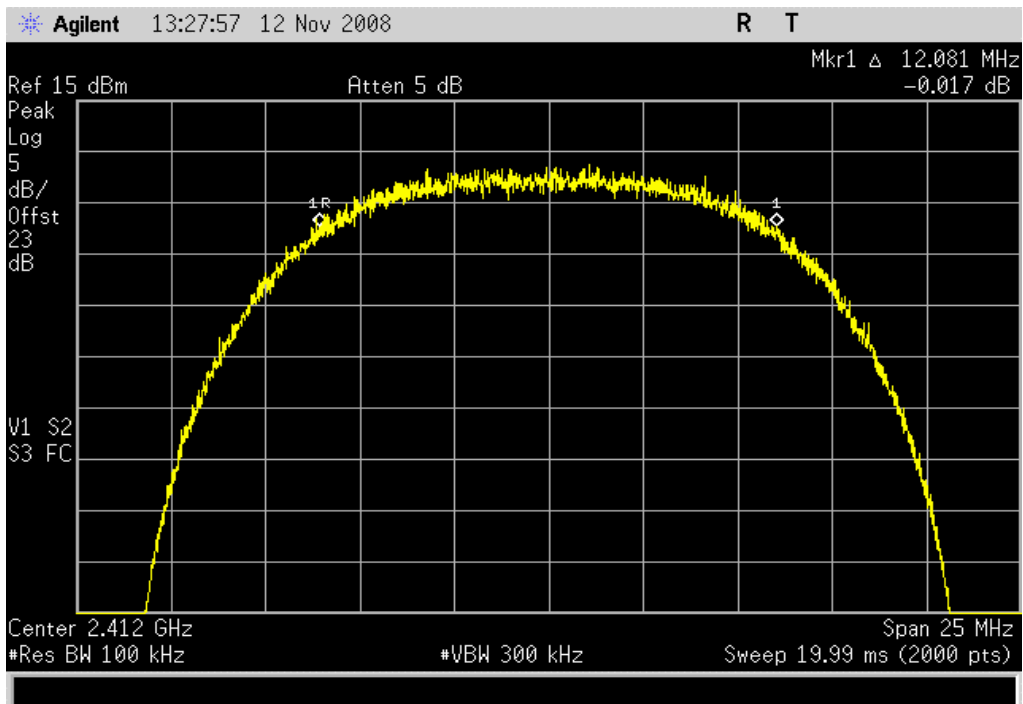
Limit: > 500 kHz



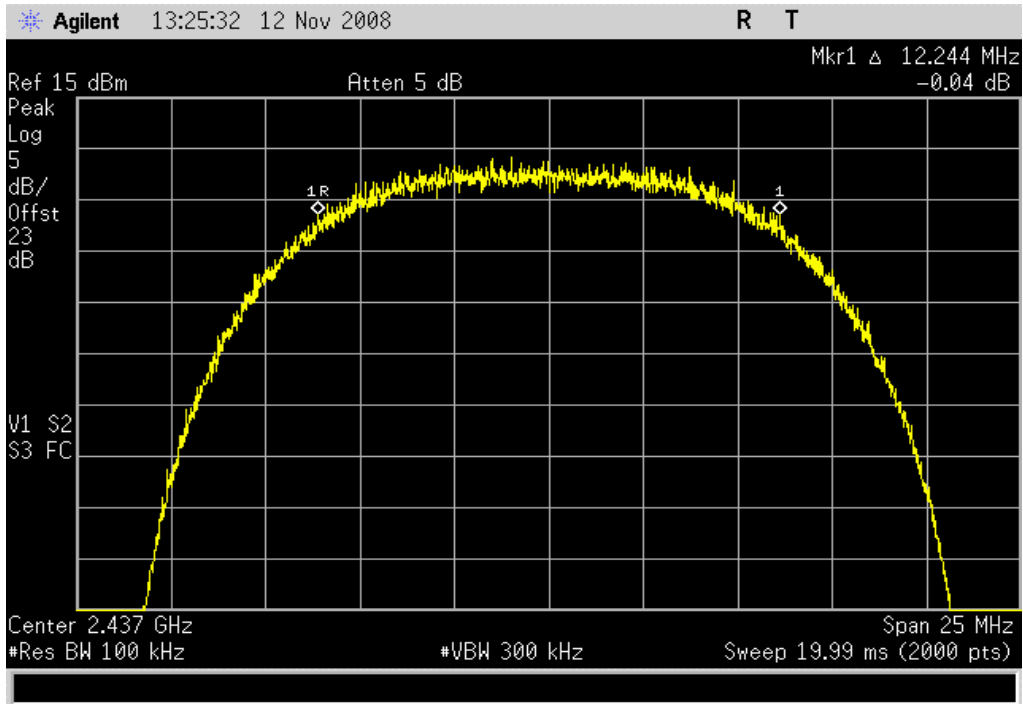
802.11(b) 1 Mbps, High Channel
Result: Pass **Value:** 12.04 MHz **Limit:** > 500 kHz



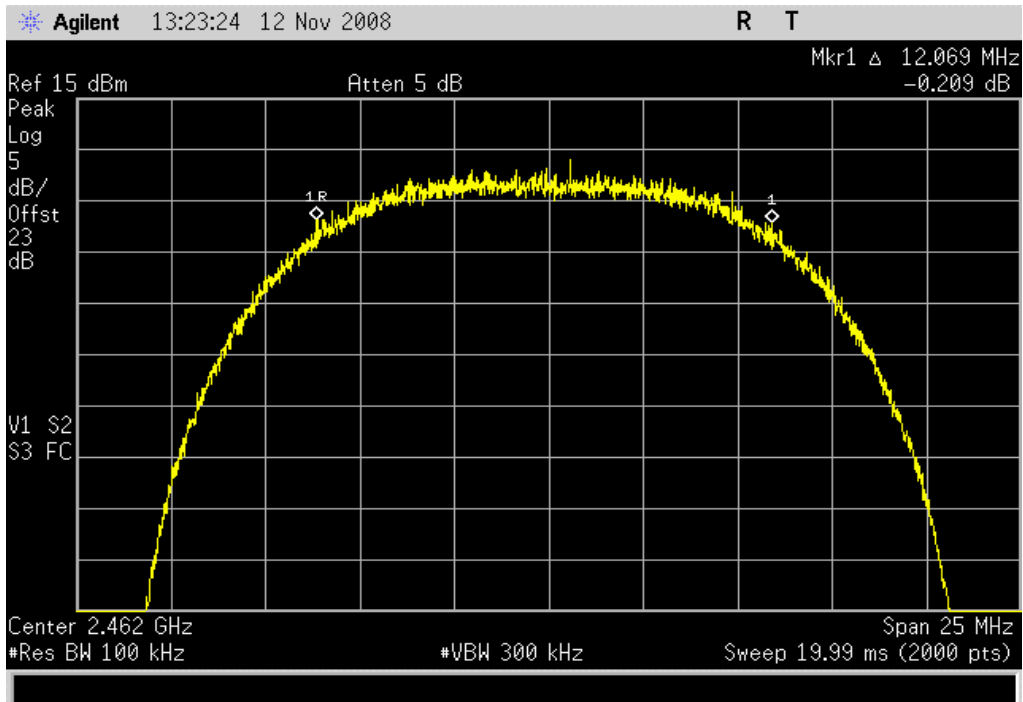
802.11(b) 11 Mbps, Low Channel
Result: Pass **Value:** 12.08 MHz **Limit:** > 500 kHz



802.11(b) 11 Mbps, Mid Channel
Result: Pass **Value:** 12.24 MHz **Limit:** > 500 kHz



802.11(b) 11 Mbps, High Channel
Result: Pass **Value:** 12.07 MHz **Limit:** > 500 kHz

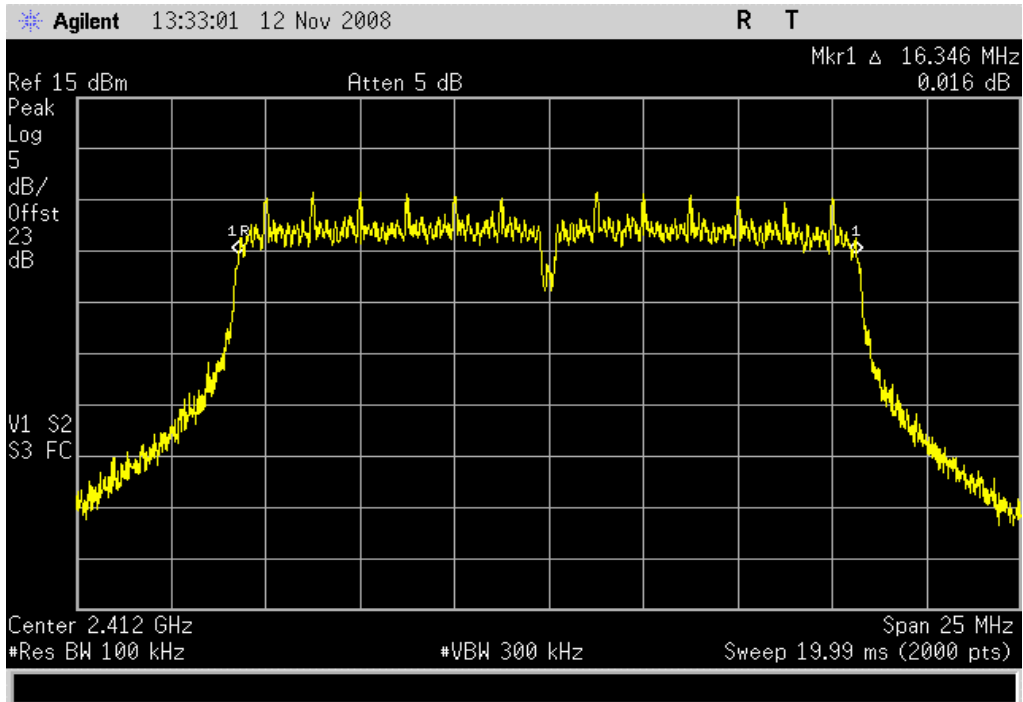


802.11(g) 6 Mbps, Low Channel

Result: Pass

Value: 16.35 MHz

Limit: > 500 kHz

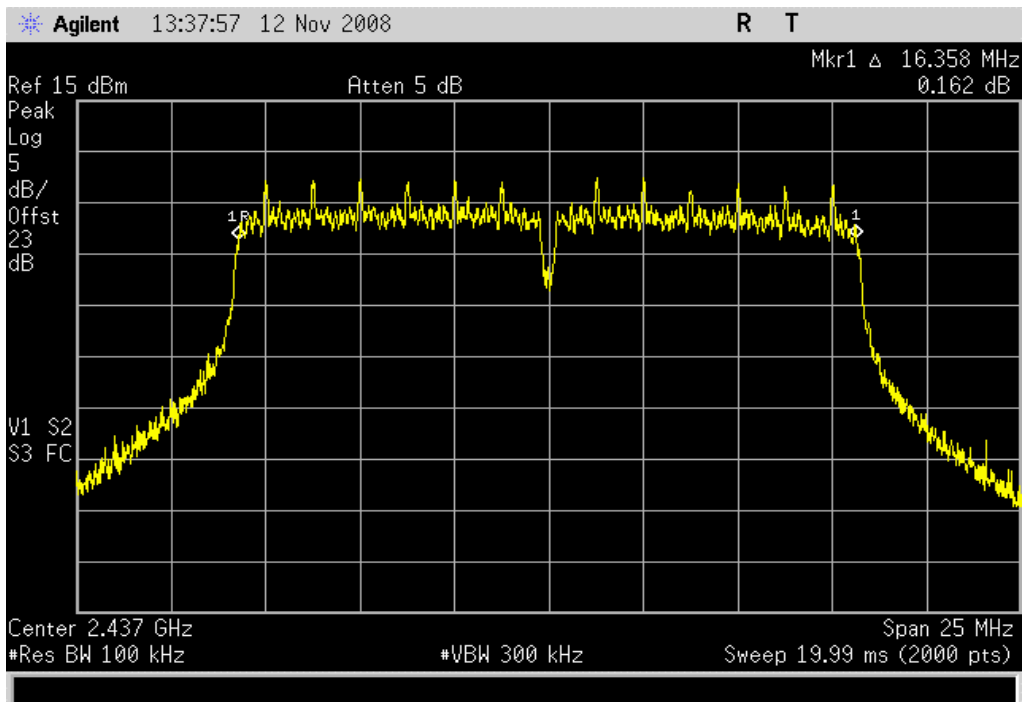


802.11(g) 6 Mbps, Mid Channel

Result: Pass

Value: 16.36 MHz

Limit: > 500 kHz

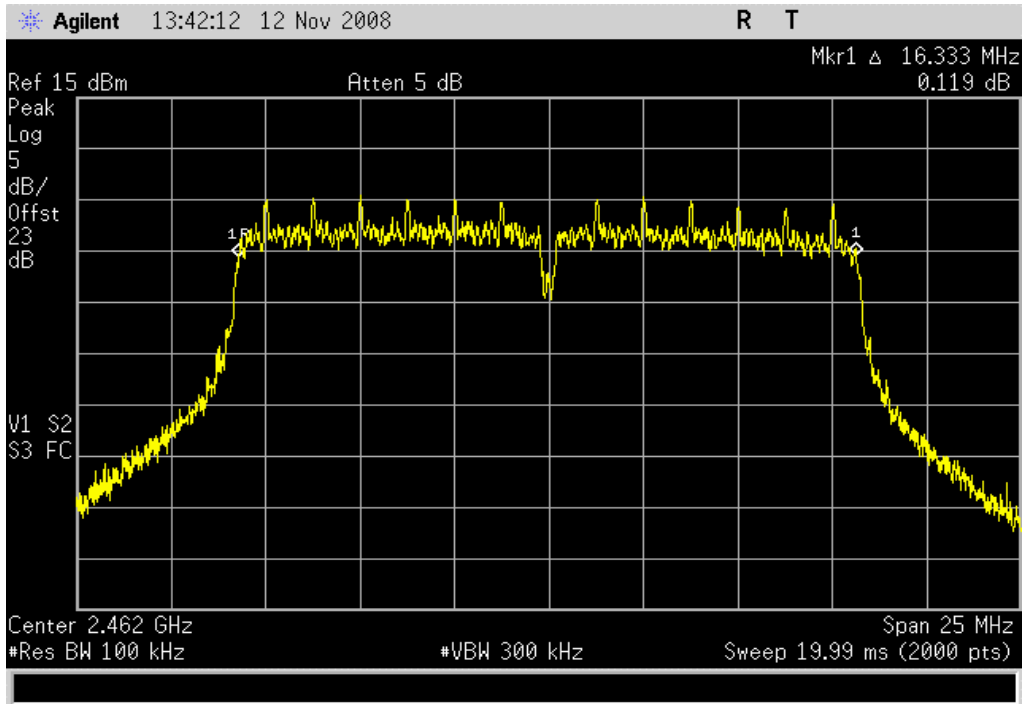


802.11(g) 6 Mbps, High Channel

Result: Pass

Value: 16.33 MHz

Limit: > 500 kHz

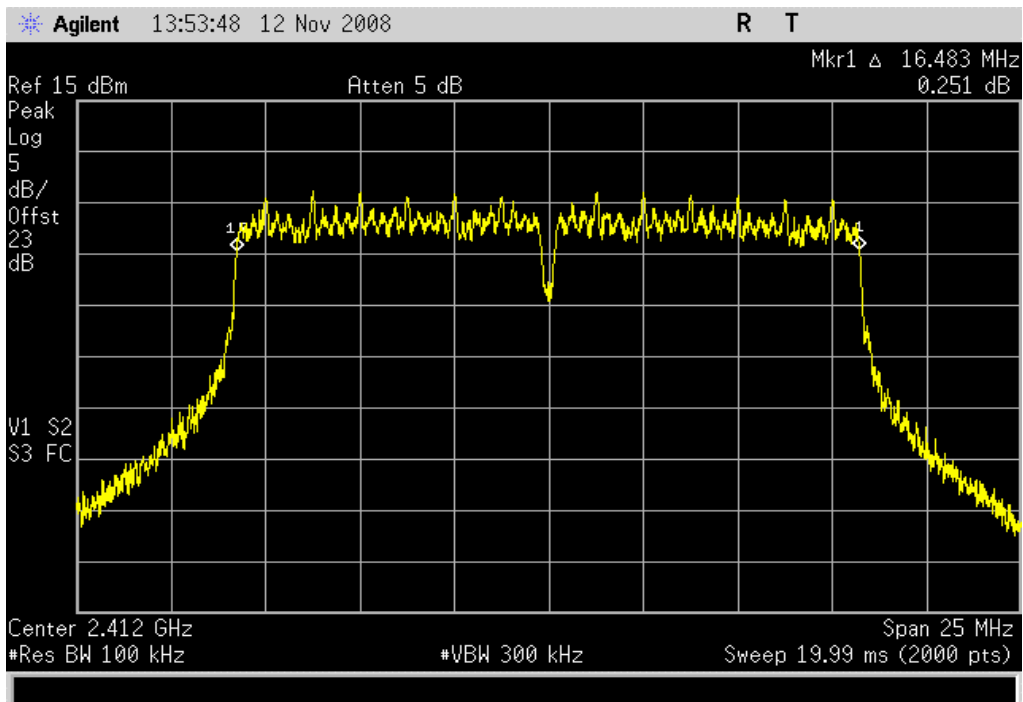


802.11(g) 36 Mbps, Low Channel

Result: Pass

Value: 16.48 MHz

Limit: > 500 kHz

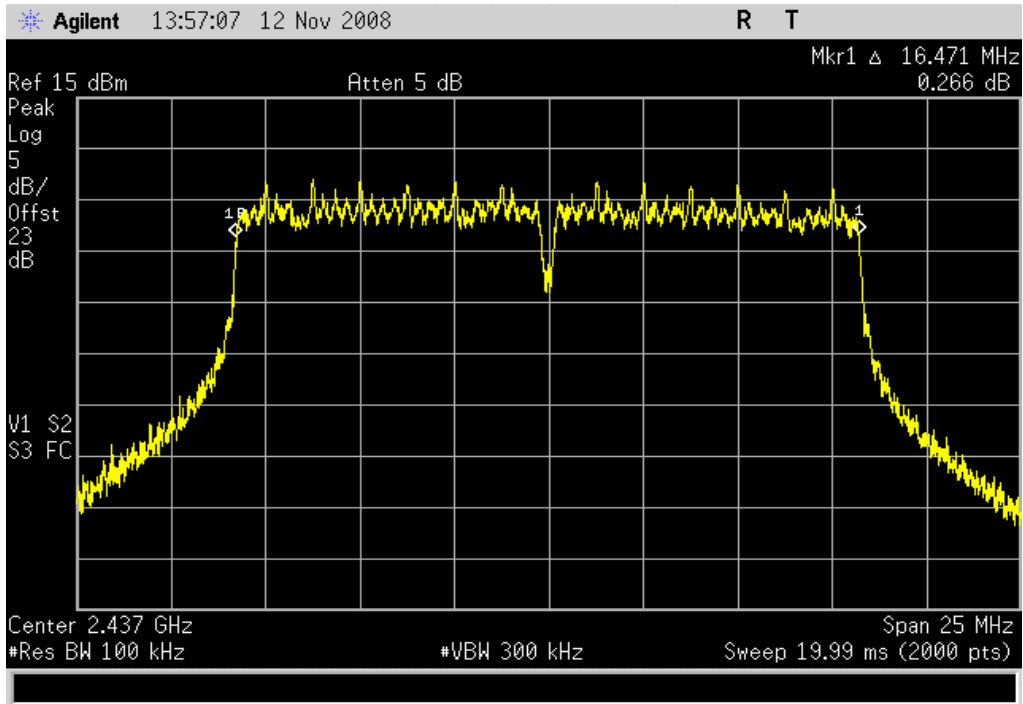


802.11(g) 36 Mbps, Mid Channel

Result: Pass

Value: 16.47 MHz

Limit: > 500 kHz

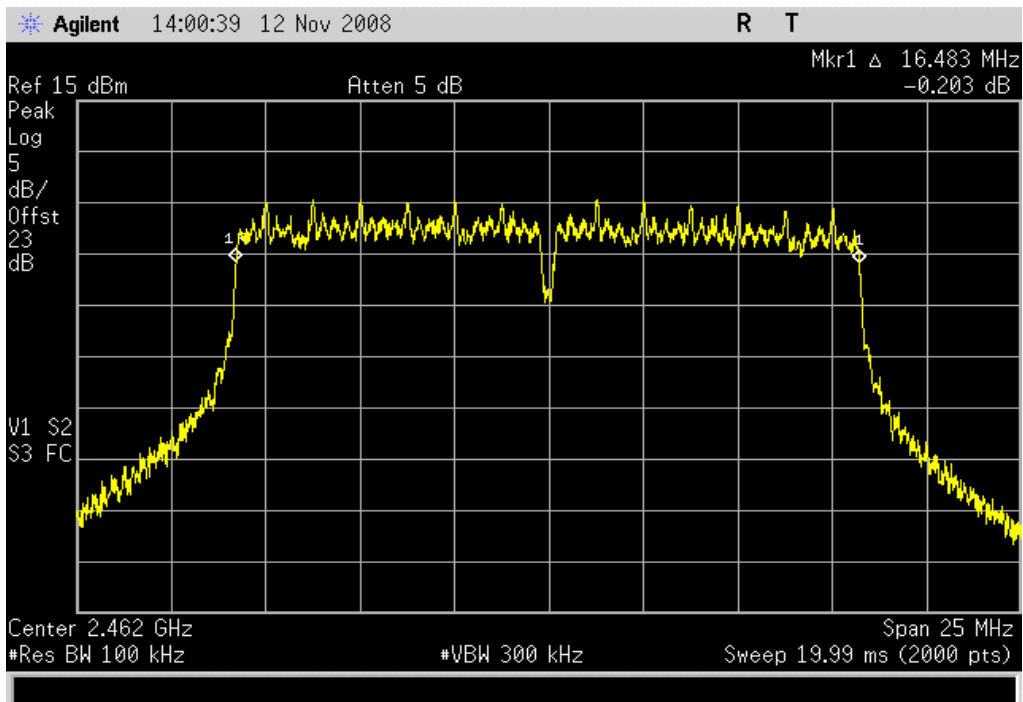


802.11(g) 36 Mbps, High Channel

Result: Pass

Value: 16.48 MHz

Limit: > 500 kHz

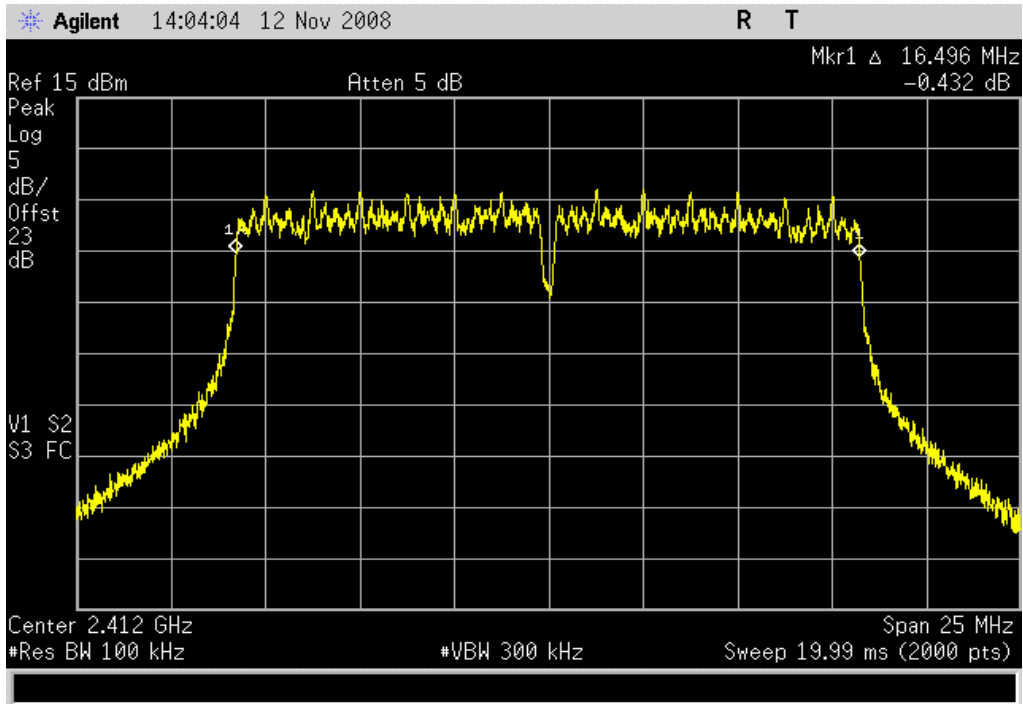


802.11(g) 54 Mbps, Low Channel

Result: Pass

Value: 16.47 MHz

Limit: > 500 kHz

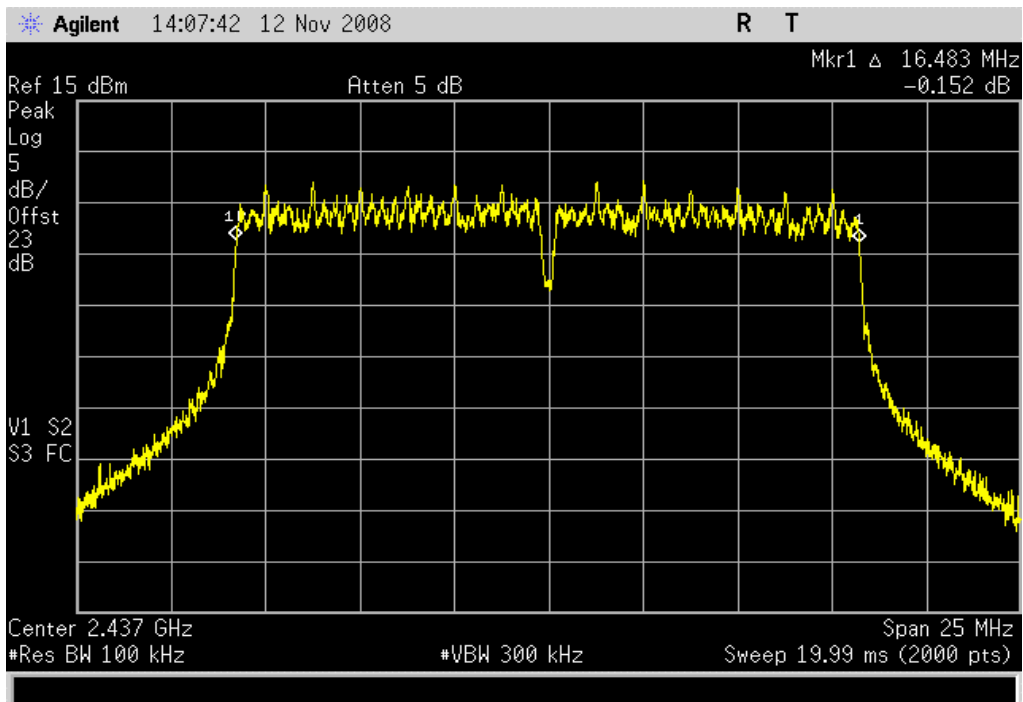


802.11(g) 54 Mbps, Mid Channel

Result: Pass

Value: 16.48 MHz

Limit: > 500 kHz

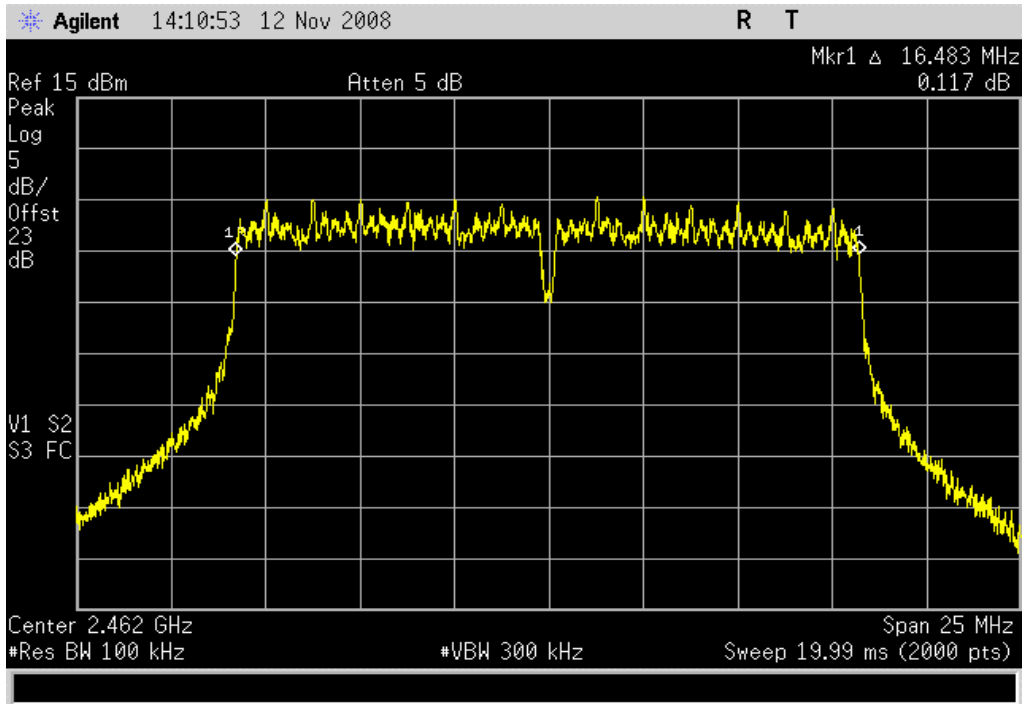


802.11(g) 54 Mbps, High Channel

Result: Pass

Value: 16.48 MHz

Limit: > 500 kHz

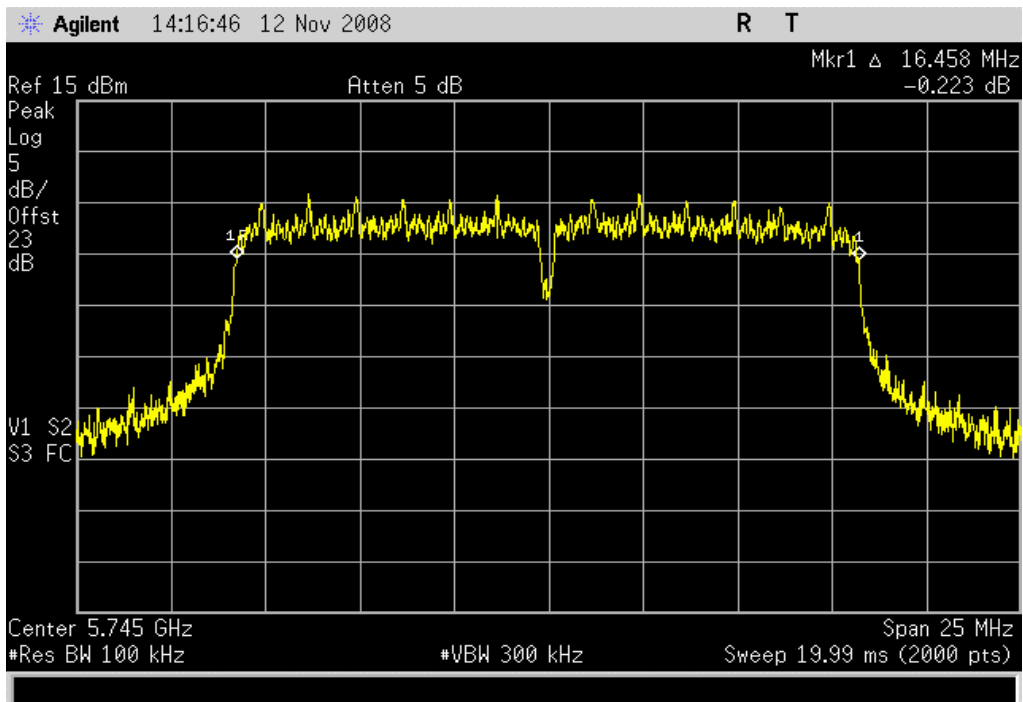


802.11(a) 6 Mbps, Low Channel

Result: Pass

Value: 16.46 MHz

Limit: > 500 kHz

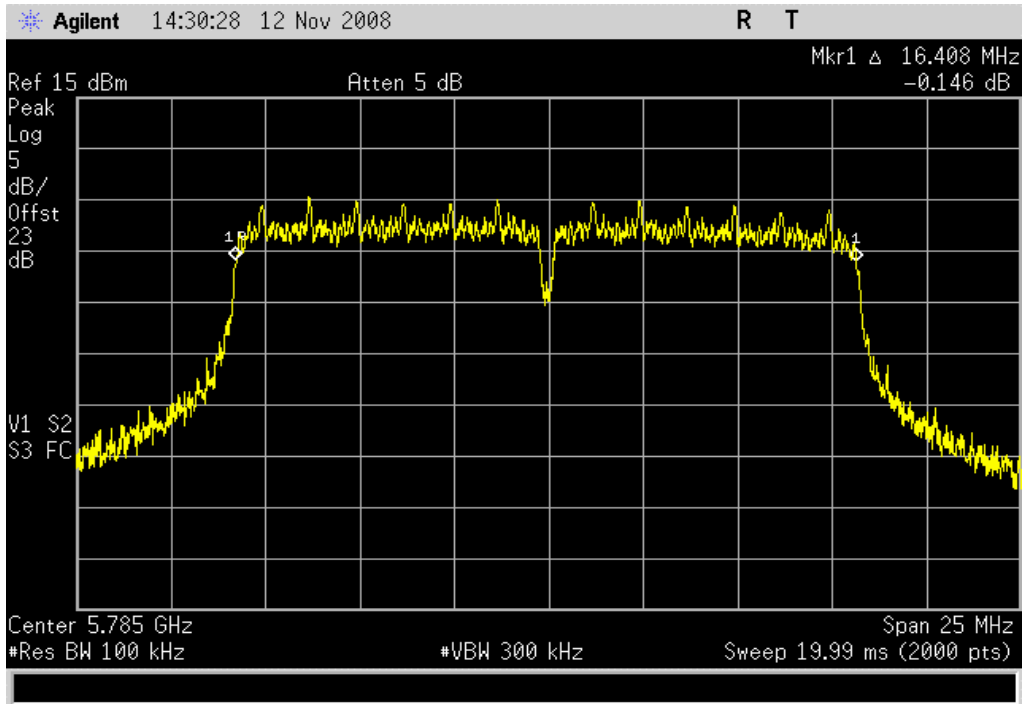


802.11(a) 6 Mbps, Mid Channel

Result: Pass

Value: 16.41 MHz

Limit: > 500 kHz

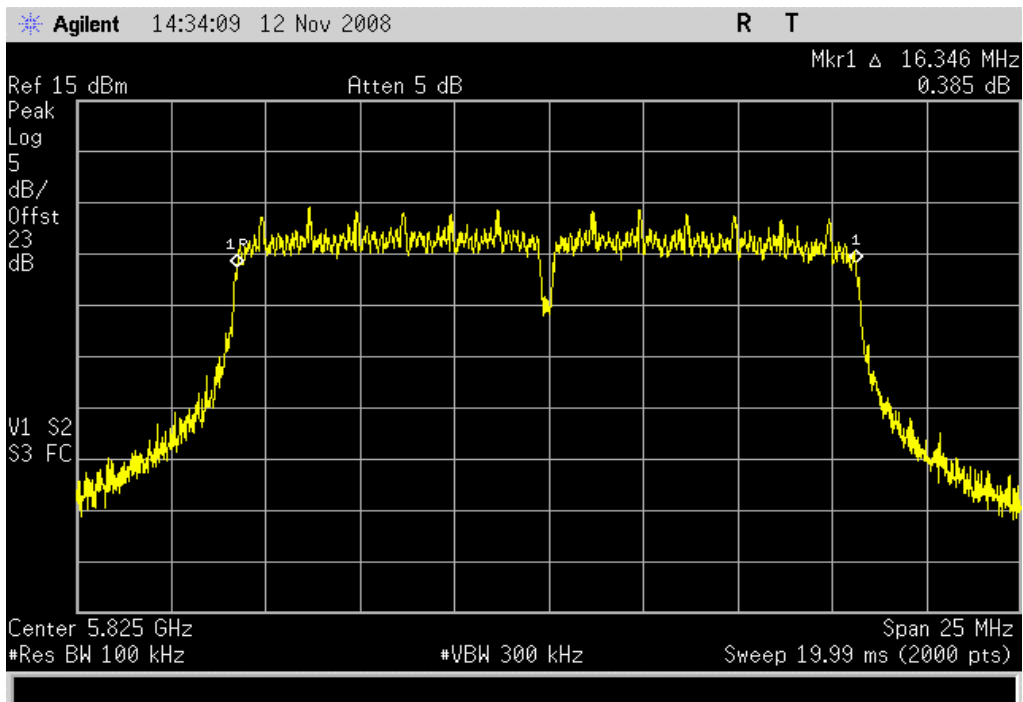


802.11(a) 6 Mbps, High Channel

Result: Pass

Value: 16.35 MHz

Limit: > 500 kHz

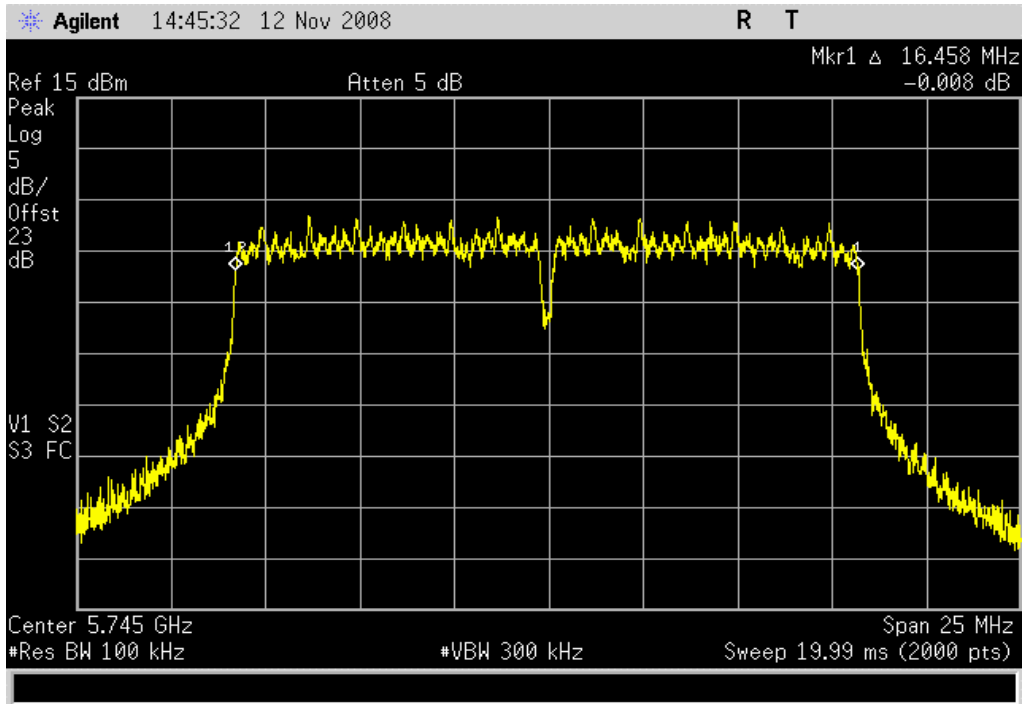


802.11(a) 36 Mbps, Low Channel

Result: Pass

Value: 16.46 MHz

Limit: > 500 kHz

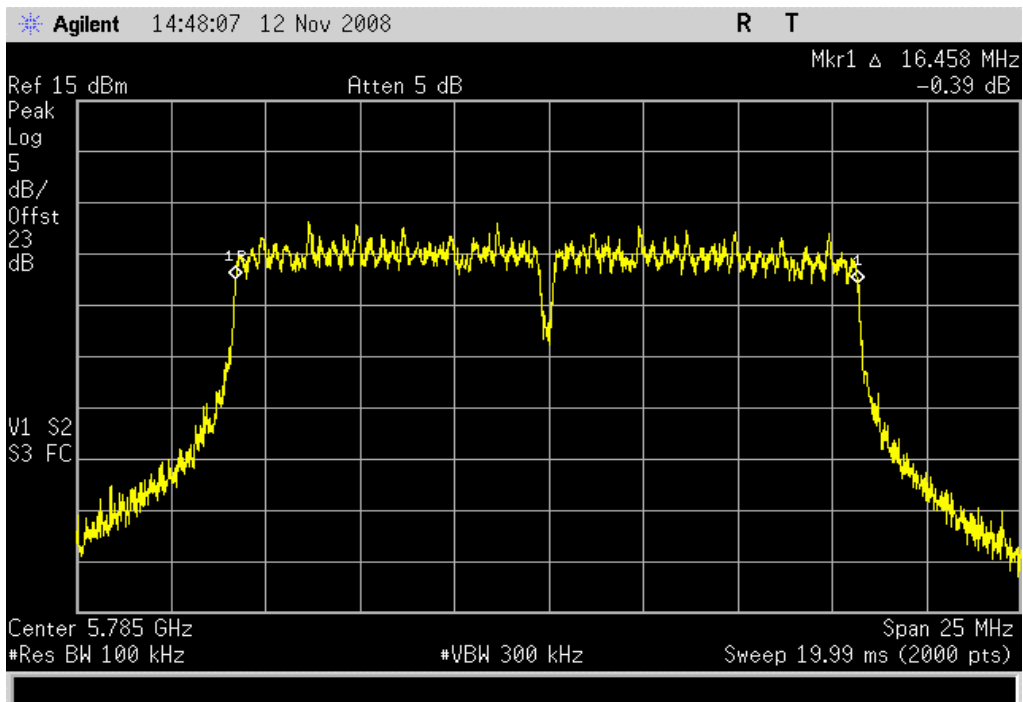


802.11(a) 36 Mbps, Mid Channel

Result: Pass

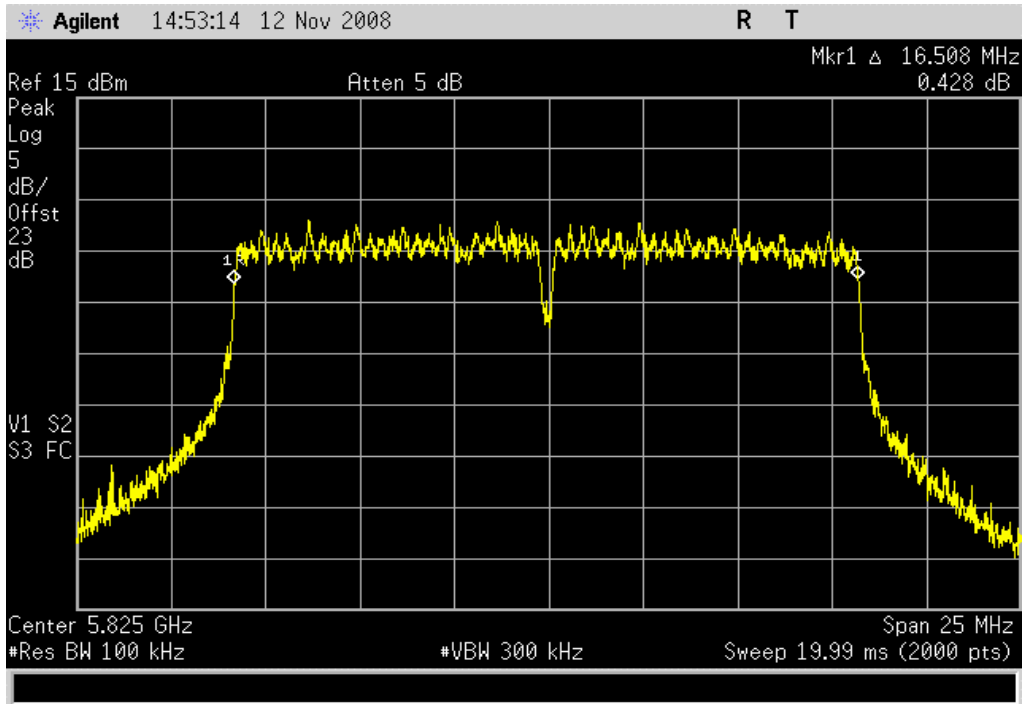
Value: 16.46 MHz

Limit: > 500 kHz



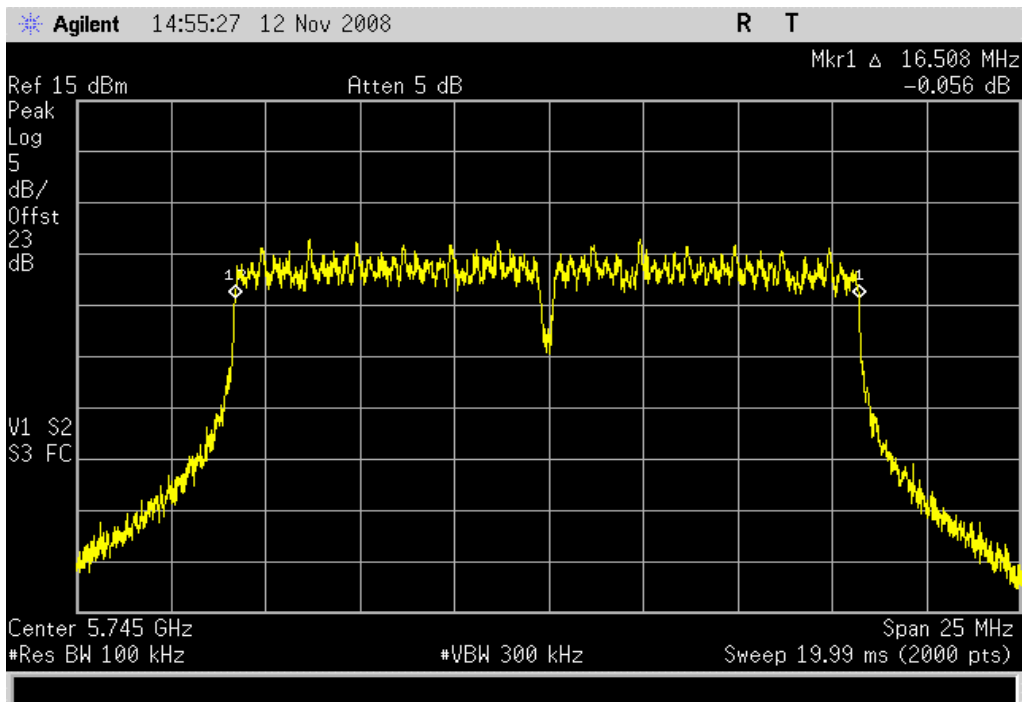
802.11(a) 36 Mbps, High Channel

Result: Pass **Value:** 16.51 MHz **Limit:** > 500 kHz



802.11(a) 54 Mbps, Low Channel

Result: Pass **Value:** 16.51 MHz **Limit:** > 500 kHz

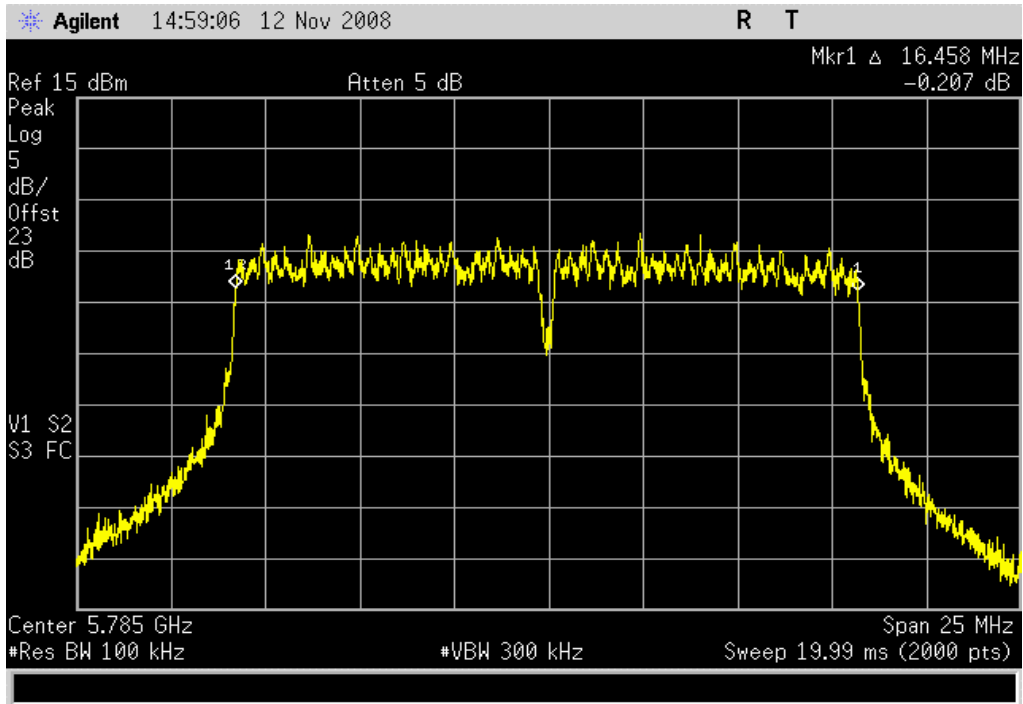


802.11(a) 54 Mbps, Mid Channel

Result: Pass

Value: 16.46 MHz

Limit: > 500 kHz

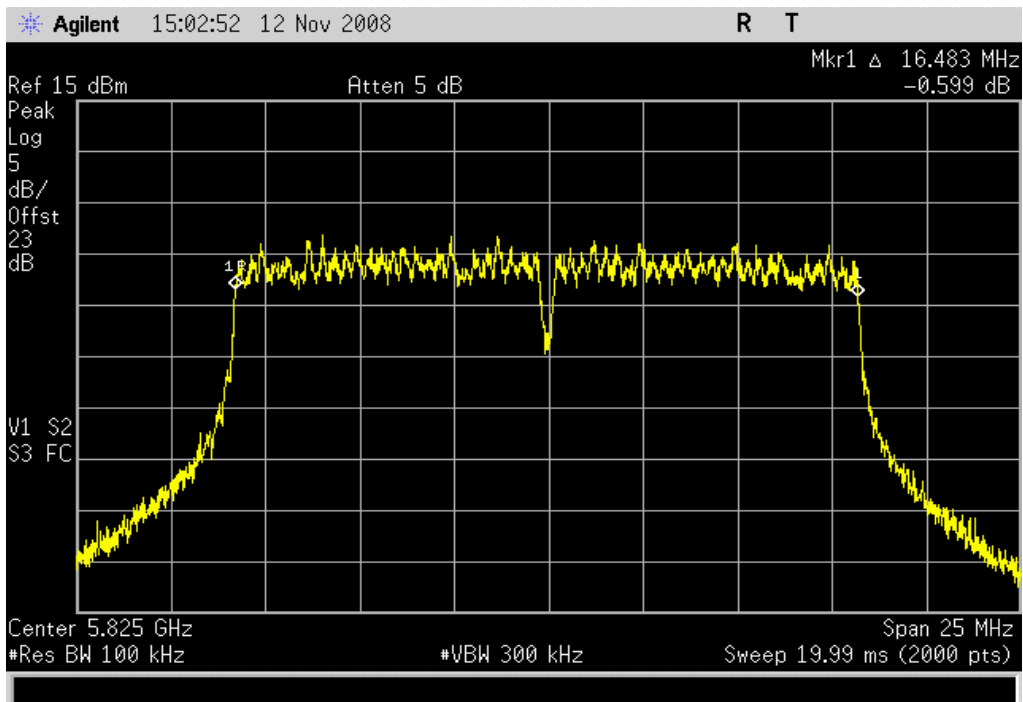


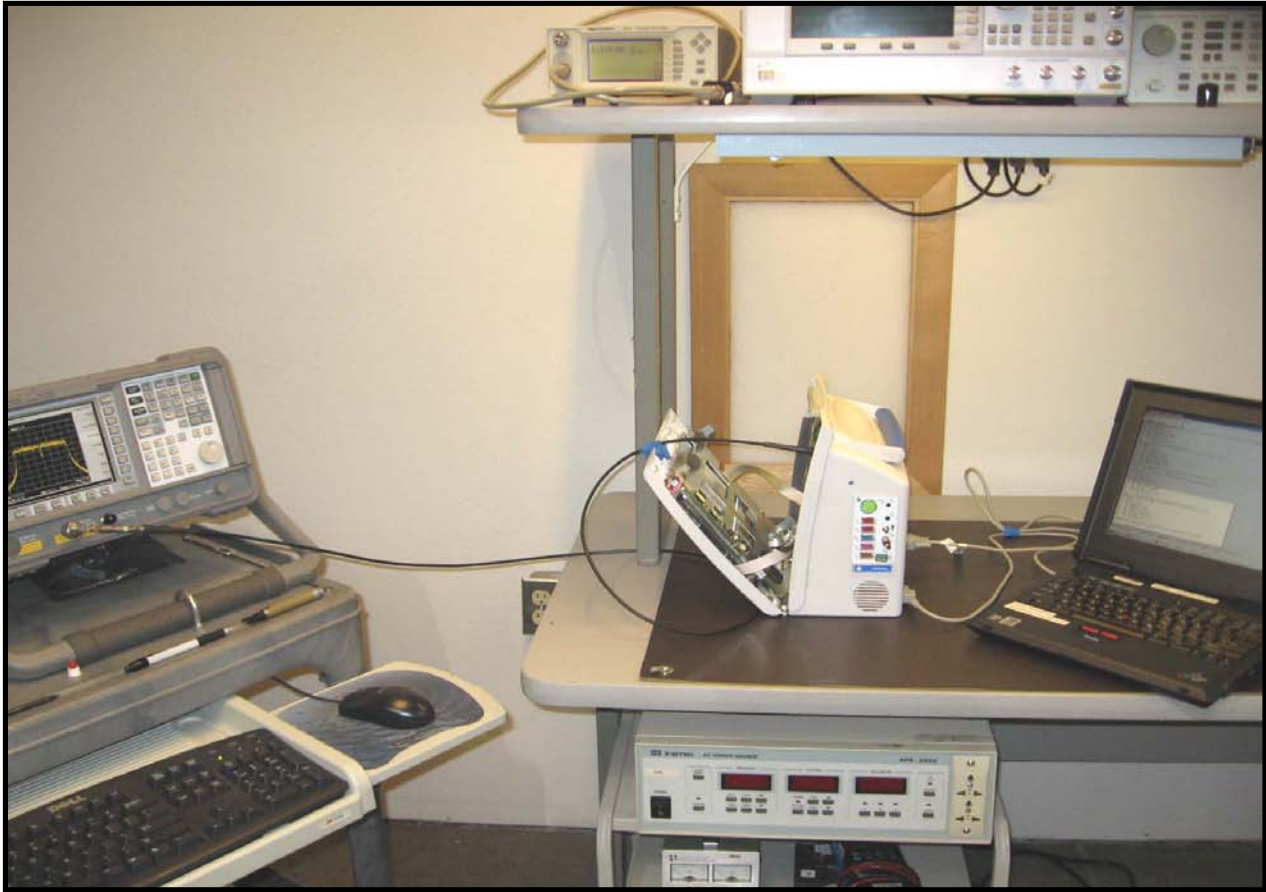
802.11(a) 54 Mbps, High Channel

Result: Pass

Value: 16.48 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
Attenuator	Weinschel Corp.	54A-30	RBM	9/16/2008	13
DC Block	Miteq	DCB4000	919834	NCR	0
RF Detector	RLC Electronics	CR-133-R	ZZA	NCR	0
Signal Generator	Agilent	E8257D	TGX	12/7/2007	13
Power Meter	Gigatronics	8651A	SPM	12/7/2007	13
Power Sensor	Gigatronics	80701A	SPL	12/7/2007	13

MEASUREMENT UNCERTAINTY

Measurement uncertainty is used to reflect the accuracy of the measured result as compared with its "true" or theoretically correct value. Our measurement data meets or exceeds the measurement uncertainty requirements of CISPR 16-4. In the case of transient tests our test equipment has been demonstrated by calibration to provide at least a 95% confidence that it complies with the test specification requirements. The measurement uncertainty for any test is available upon request.

TEST DESCRIPTION

The peak output power was measured with the EUT set to low, medium, and high transmit frequencies. The EUT was transmitting at its maximum output power. The data rate of the radio was varied to determine the level that produced the highest output power.

The measurement was made using a direct connection between the RF output of the EUT and a RF detector diode. The DC output of the diode was measured with the oscilloscope. The signal generator, tuned to the transmit frequency, was then substituted for the EUT. The CW output of the signal generator was adjusted until the DC output of the RF detector diode match the peak level produced when connected to the EUT. To further reduce measurement error, the power meter and sensor were then used to measure the output power level of the signal generator.

De Facto EIRP Limit: Per 47 CFR 15.247 (b)(1-3), the EUT meets the de facto EIRP limit of +36dBm.

PEAK OUTPUT POWER

EMC

EUT: Ultraview SL Wireless Option		Work Order: SPAC0447
Serial Number: Various, see config page		Date: 11/10/08
Customer: Spacelabs Healthcare		Temperature: 22°C
Attendees: None		Humidity: 46%
Project: None		Barometric Pres.: 30.05
Tested by: Rod Peloquin		Power: 120VAC/60Hz
		Job Site: EV06

TEST SPECIFICATIONS		Test Method
FCC 15.247 (DTS):2008		ANSI C63.4:2003 KDB No. 558074

COMMENTS
None

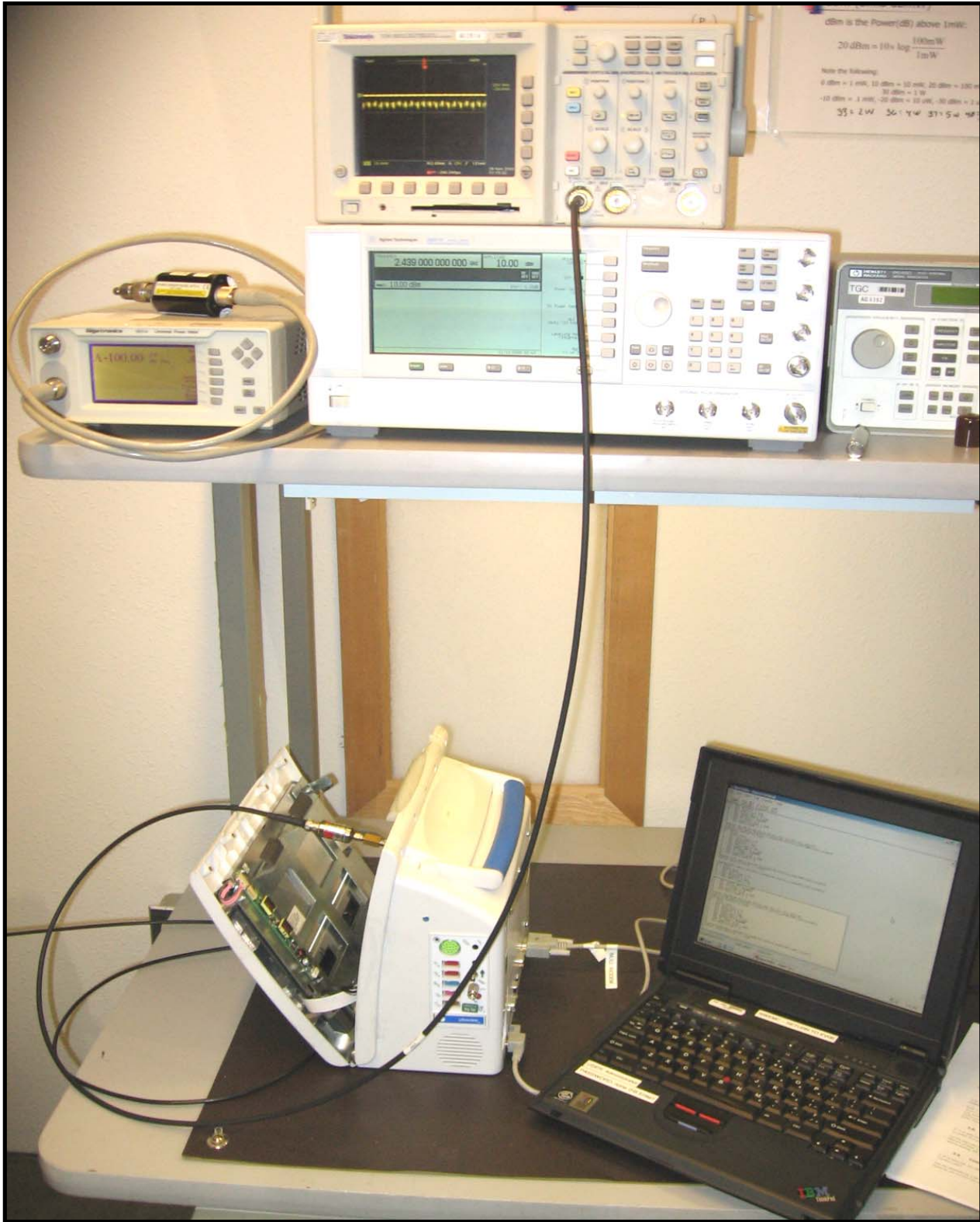
DEVIATIONS FROM TEST STANDARD
No Deviations

Configuration #	2	Signature <i>Rod Peloquin</i>
-----------------	---	-------------------------------

	Value	Limit	Results
--	-------	-------	---------

RF Diode Detector Method

802.11(b) 1 Mbps							
Xmit Frequency (MHz)	Channel	DC on Scope (mV)	Attenuator Specific Ref.Offset (dB)	Sig Gen Output (dBm)	Power Meter (dBm)	Power Meter (mW)	Limit (mW)
2412	1	39.2	29.0	-11.18	17.7	58.2	1000
2437	6	42.0	29.0	-10.8	18.0	63.5	1000
2462	11	38.0	29.0	-11.28	17.6	56.9	1000
802.11(b) 11 Mbps							
Xmit Frequency (MHz)	Channel	DC on Scope (mV)	Attenuator Specific Ref.Offset (dB)	Sig Gen Output (dBm)	Power Meter (dBm)	Power Meter (mW)	Limit (mW)
2412	1	41.2	29.0	-10.8	18.0	63.5	1000
2437	6	46.0	29.0	-10.22	18.6	72.5	1000
2462	11	36.4	29.0	-11.58	17.3	53.1	1000
802.11(g) 6 Mbps							
Xmit Frequency (MHz)	Channel	DC on Scope (mV)	Attenuator Specific Ref.Offset (dB)	Sig Gen Output (dBm)	Power Meter (dBm)	Power Meter (mW)	Limit (mW)
2412	1	66.0	29.0	-7.98	20.8	121.0	1000
2437	6	88.0	29.0	-6.14	22.7	186.0	1000
2462	11	60.4	29.0	-8.64	20.2	104.0	1000
802.11(g) 36 Mbps							
Xmit Frequency (MHz)	Channel	DC on Scope (mV)	Attenuator Specific Ref.Offset (dB)	Sig Gen Output (dBm)	Power Meter (dBm)	Power Meter (mW)	Limit (mW)
2412	1	62.8	29.0	-8.36	20.5	111.0	1000
2437	6	76.0	29.0	-7.10	21.7	149.0	1000
2462	11	54.8	29.0	-9.16	19.7	92.5	1000
802.11(g) 54 Mbps							
Xmit Frequency (MHz)	Channel	DC on Scope (mV)	Attenuator Specific Ref.Offset (dB)	Sig Gen Output (dBm)	Power Meter (dBm)	Power Meter (mW)	Limit (mW)
2412	1	64.4	29.0	-8.18	20.6	116.0	1000
2437	6	76.2	29.0	-7.10	21.7	149.0	1000
2462	11	63.0	29.0	-8.30	20.5	113.0	1000
802.11(a) 6 Mbps							
Xmit Frequency (MHz)	Channel	DC on Scope (mV)	Attenuator Specific Ref.Offset (dB)	Sig Gen Output (dBm)	Power Meter (dBm)	Power Meter (mW)	Limit (mW)
5745	149	64.8	29.3	-7.68	21.2	132.0	1000
5785	157	61.2	29.3	-8.06	20.8	121.0	1000
5825	165	60.4	29.3	-8.16	20.7	118.0	1000
802.11(a) 36 Mbps							
Xmit Frequency (MHz)	Channel	DC on Scope (mV)	Attenuator Specific Ref.Offset (dB)	Sig Gen Output (dBm)	Power Meter (dBm)	Power Meter (mW)	Limit (mW)
5745	149	48.4	29.3	-9.52	19.4	86.2	1000
5785	157	45.2	29.3	-9.90	19.0	79.0	1000
5825	165	46.0	29.3	-9.80	19.1	80.9	1000
802.11(a) 54 Mbps							
Xmit Frequency (MHz)	Channel	DC on Scope (mV)	Attenuator Specific Ref.Offset (dB)	Sig Gen Output (dBm)	Power Meter (dBm)	Power Meter (mW)	Limit (mW)
5745	149	34.4	29.3	-11.54	17.3	54.1	1000
5785	157	33.2	29.3	-11.70	17.2	52.2	1000
5825	165	36.4	29.3	-11.22	17.7	58.4	1000



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	12/7/2007	13
Attenuator 20 dB, SMA M/F 26GHz	S.M. Electronics	SA26B-20	AUY	6/27/2008	13

MEASUREMENT UNCERTAINTY

Measurement uncertainty is used to reflect the accuracy of the measured result as compared with its "true" or theoretically correct value. Our measurement data meets or exceeds the measurement uncertainty requirements of CISPR 16-4. In the case of transient tests our test equipment has been demonstrated by calibration to provide at least a 95% confidence that it complies with the test specification requirements. The measurement uncertainty for any test is 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 its lowest, middle, and maximum data rate available.

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

EMC

BAND EDGE COMPLIANCE

EUT:	Ultraview SL Wireless Option	Work Order:	SPAC0447
Serial Number:	Various, see config page	Date:	11/12/08
Customer:	Spacelabs Healthcare	Temperature:	22°C
Attendees:	None	Humidity:	55%
Project:	None	Barometric Pres.:	30.05
Tested by:	Rod Peloquin	Power:	120VAC/60Hz
		Job Site:	EV06

TEST SPECIFICATIONS		Test Method
FCC 15.247 (DTS):2008		ANSI C63.4:2003 KDB No. 558074

COMMENTS
None

DEVIATIONS FROM TEST STANDARD
No Deviations

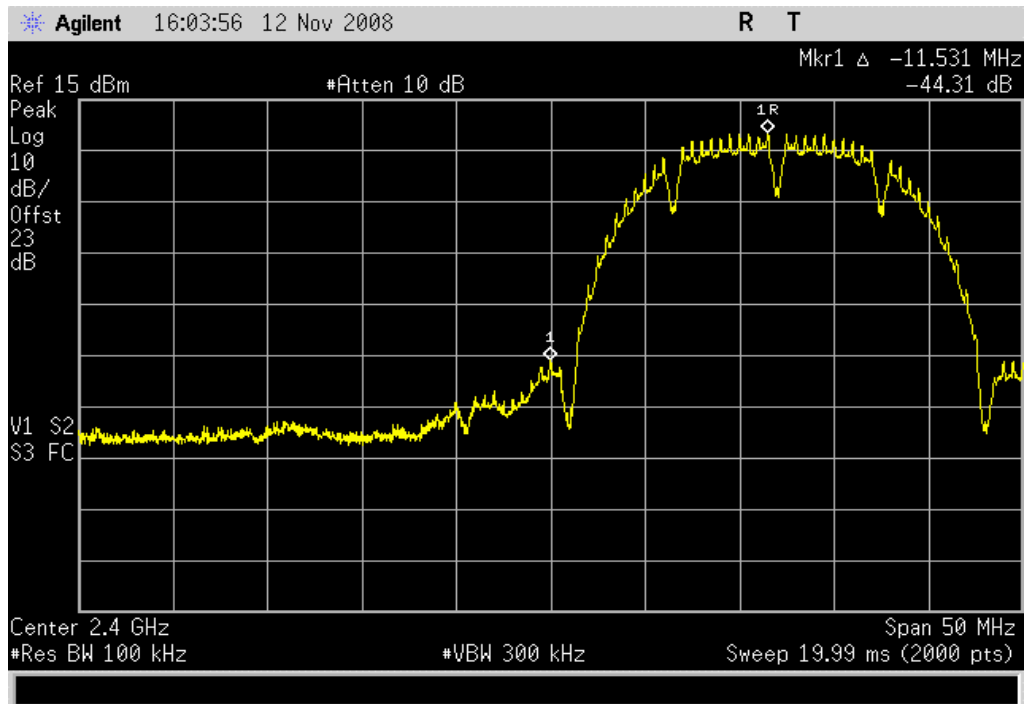
Configuration #	2	Signature 
------------------------	---	---

		Value	Limit	Results
802.11(b) 1 Mbps	Low Channel	-44.3 dBc	≤ -20 dBc	Pass
	High Channel	-57.6 dBc	≤ -20 dBc	Pass
802.11(b) 11 Mbps	Low Channel	-44.9 dBc	≤ -20 dBc	Pass
	High Channel	-57.7 dBc	≤ -20 dBc	Pass
802.11(g) 6 Mbps	Low Channel	-28.5 dBc	≤ -20 dBc	Pass
	High Channel	-50.6 dBc	≤ -20 dBc	Pass
802.11(g) 36 Mbps	Low Channel	-28.9 dBc	≤ -20 dBc	Pass
	High Channel	-51.9 dBc	≤ -20 dBc	Pass
802.11(g) 54 Mbps	Low Channel	-30.5 dBc	≤ -20 dBc	Pass
	High Channel	-52.2 dBc	≤ -20 dBc	Pass
802.11(a) 6 Mbps	Low Channel	-28.4 dBc	≤ -20 dBc	Pass
	High Channel	-33.2 dBc	≤ -20 dBc	Pass
802.11(a) 36 Mbps	Low Channel	-36.2 dBc	≤ -20 dBc	Pass
	High Channel	-35.4 dBc	≤ -20 dBc	Pass
802.11(a) 54 Mbps	Low Channel	-42.8 dBc	≤ -20 dBc	Pass
	High Channel	-41.2 dBc	≤ -20 dBc	Pass

802.11(b) 1 Mbps, Low Channel

Result: Pass

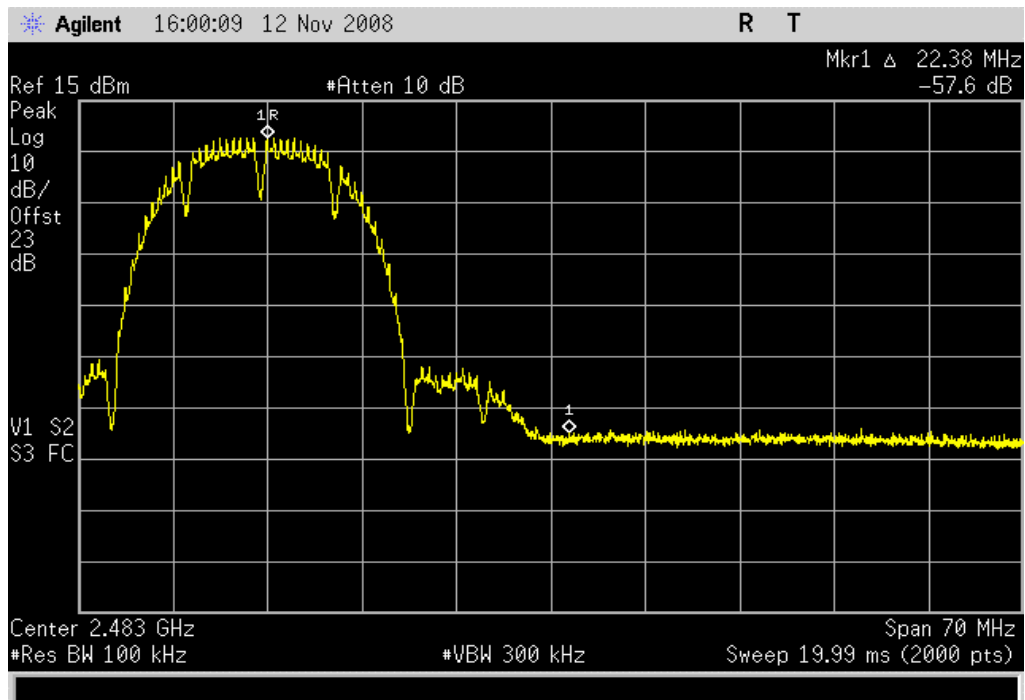
Value: -44.3 dBc

Limit: ≤ -20 dBc

802.11(b) 1 Mbps, High Channel

Result: Pass

Value: -57.6 dBc

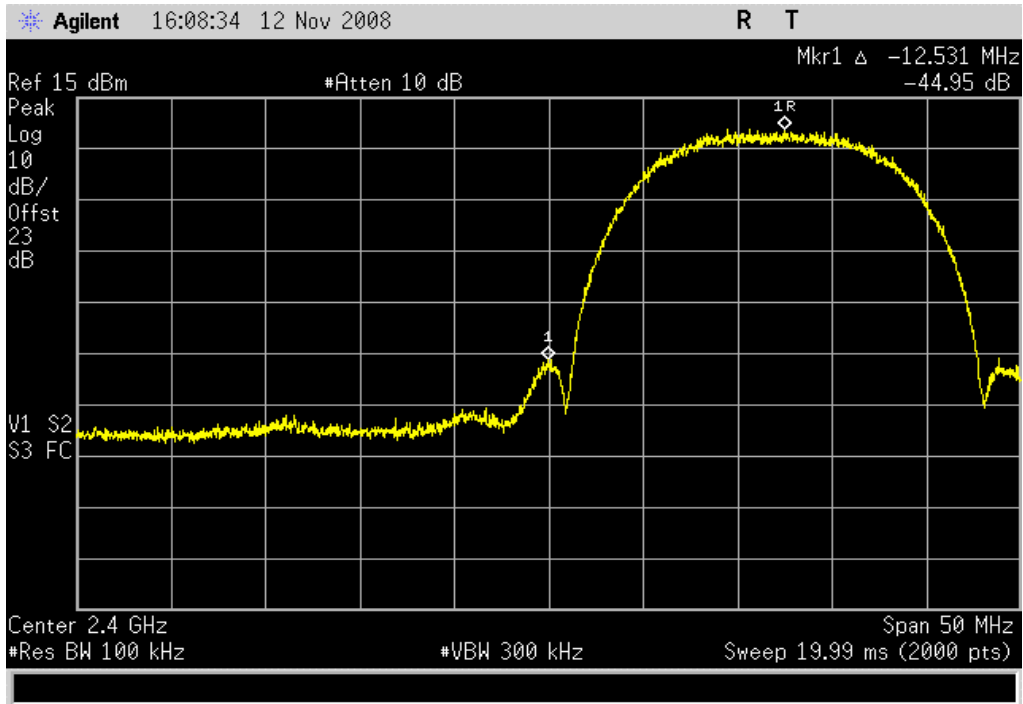
Limit: ≤ -20 dBc

802.11(b) 11 Mbps, Low Channel

Result: Pass

Value: -44.9 dBc

Limit: ≤ -20 dBc

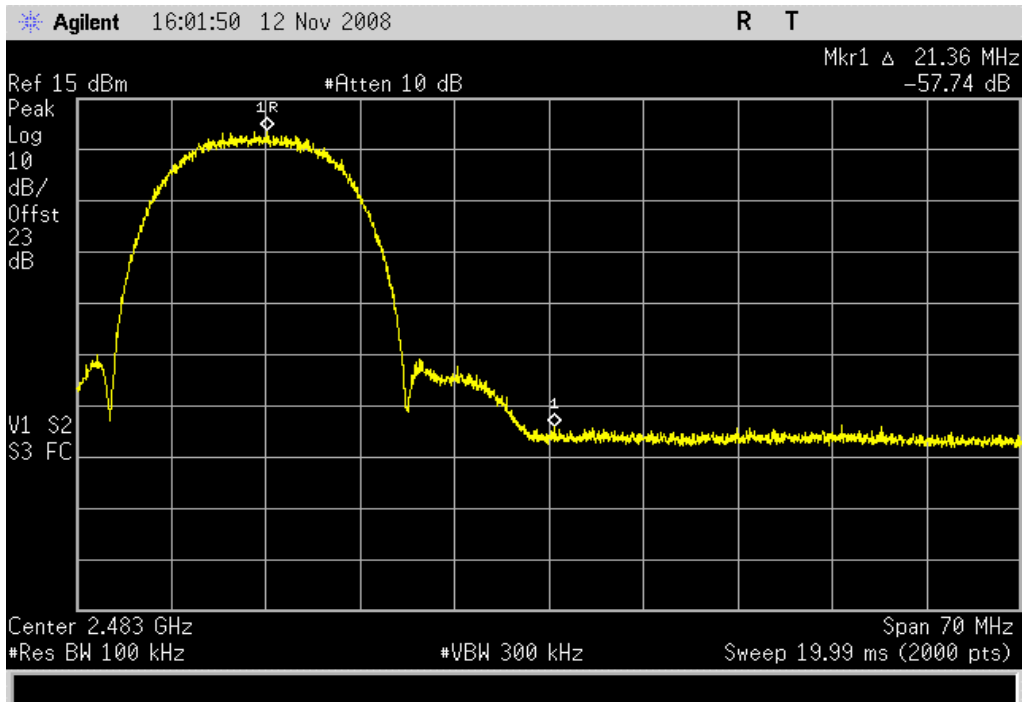


802.11(b) 11 Mbps, High Channel

Result: Pass

Value: -57.7 dBc

Limit: ≤ -20 dBc

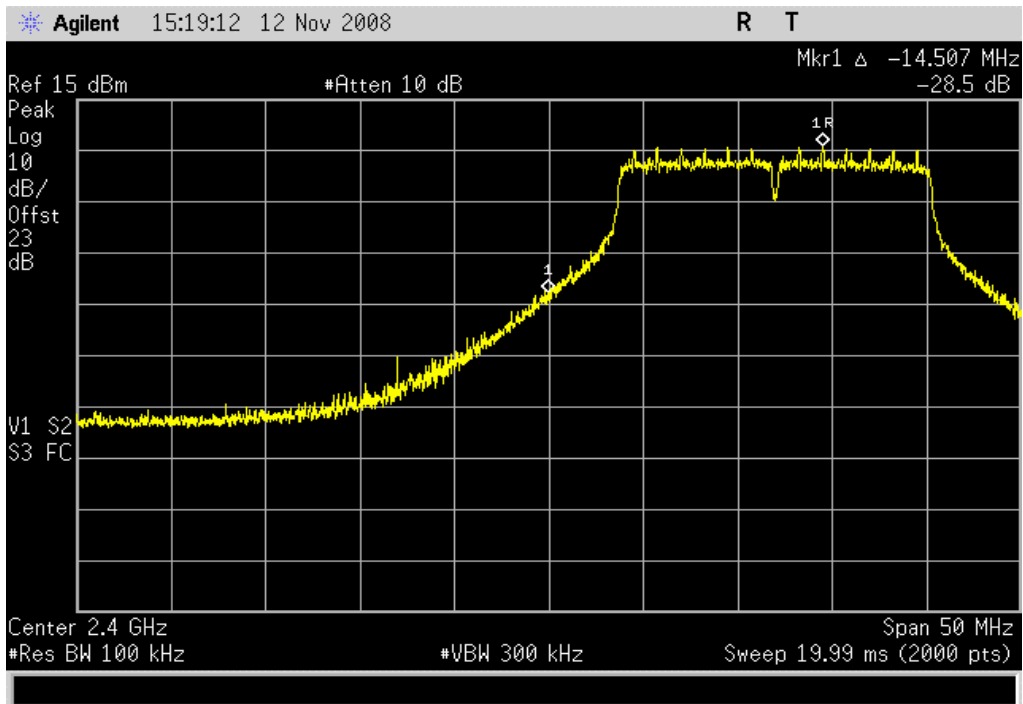


802.11(g) 6 Mbps, Low Channel

Result: Pass

Value: -28.5 dBc

Limit: ≤ -20 dBc

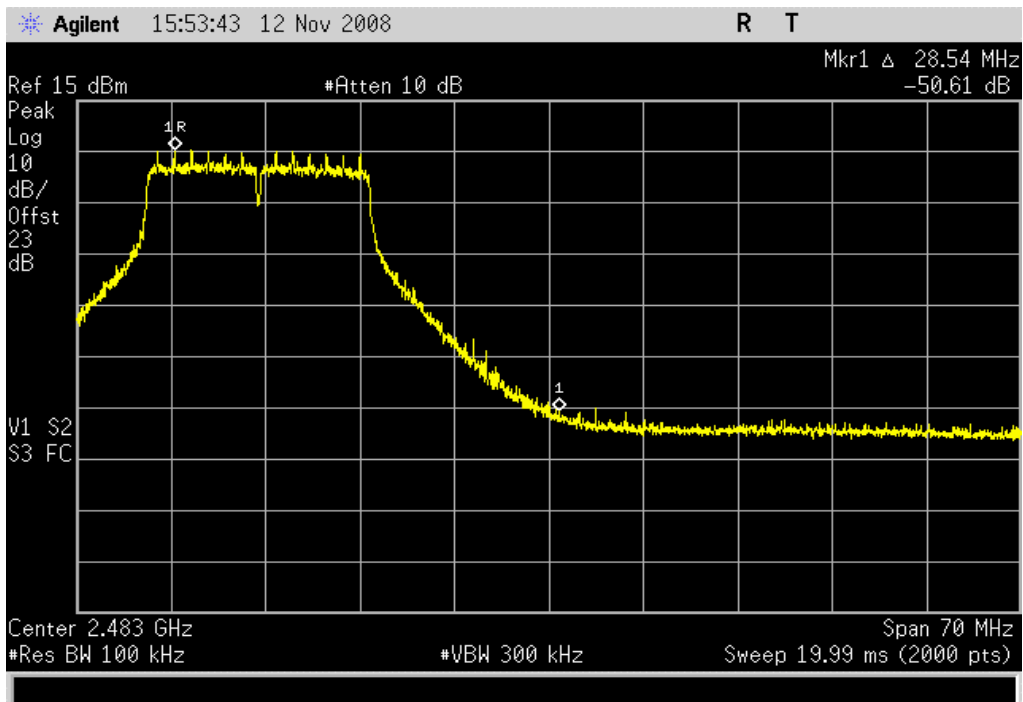


802.11(g) 6 Mbps, High Channel

Result: Pass

Value: -50.6 dBc

Limit: ≤ -20 dBc

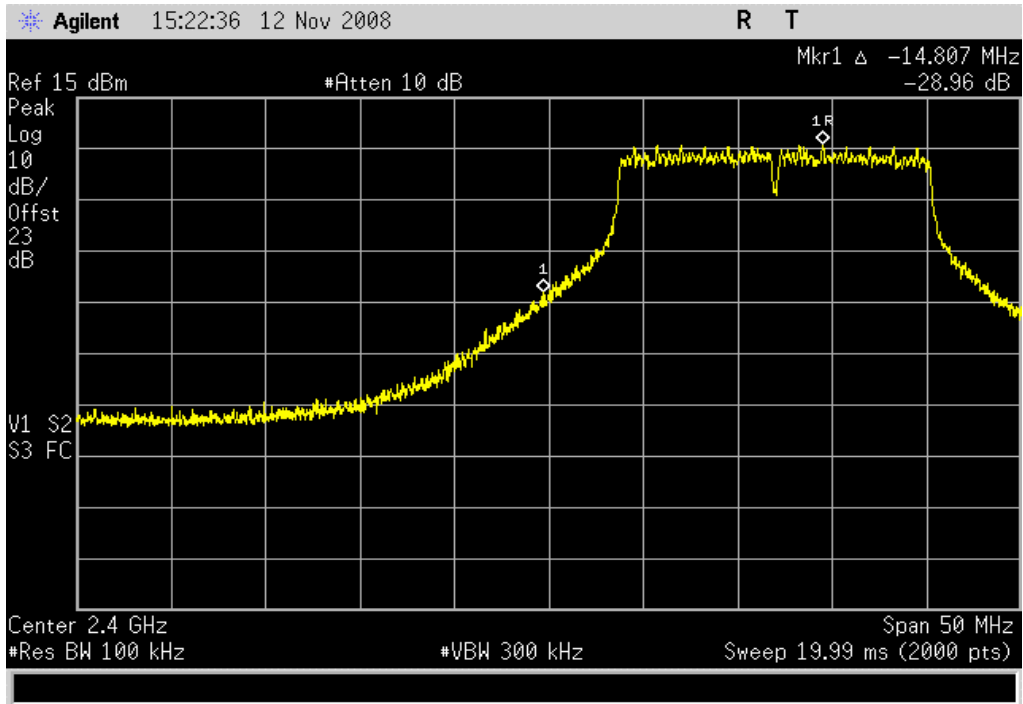


802.11(g) 36 Mbps, Low Channel

Result: Pass

Value: -28.9 dBc

Limit: ≤ -20 dBc

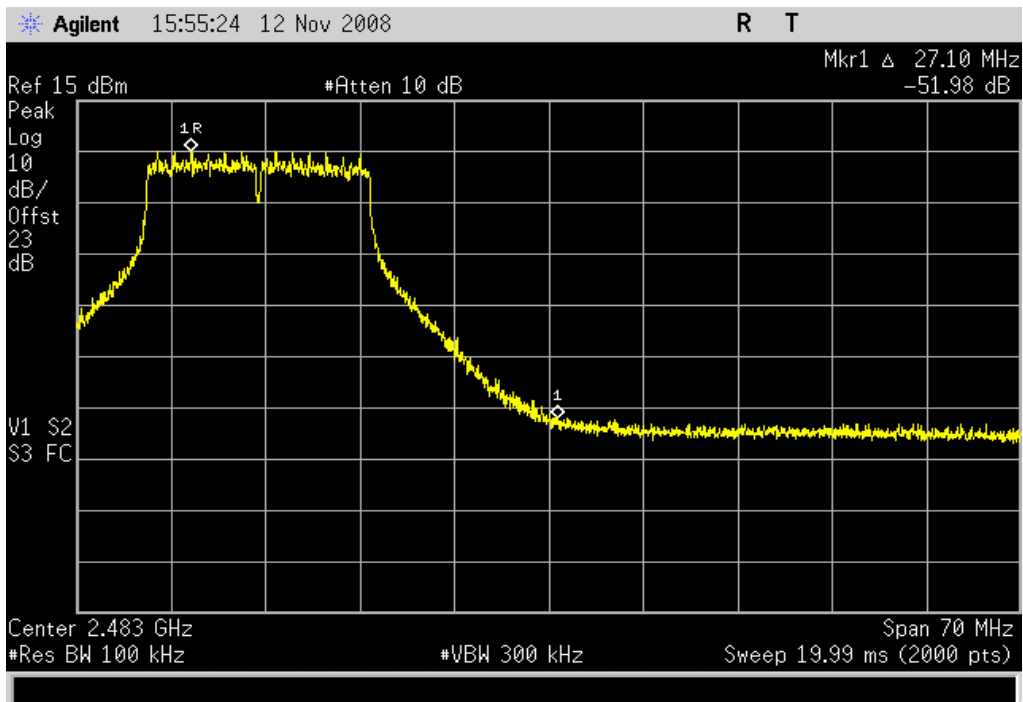


802.11(g) 36 Mbps, High Channel

Result: Pass

Value: -51.9 dBc

Limit: ≤ -20 dBc

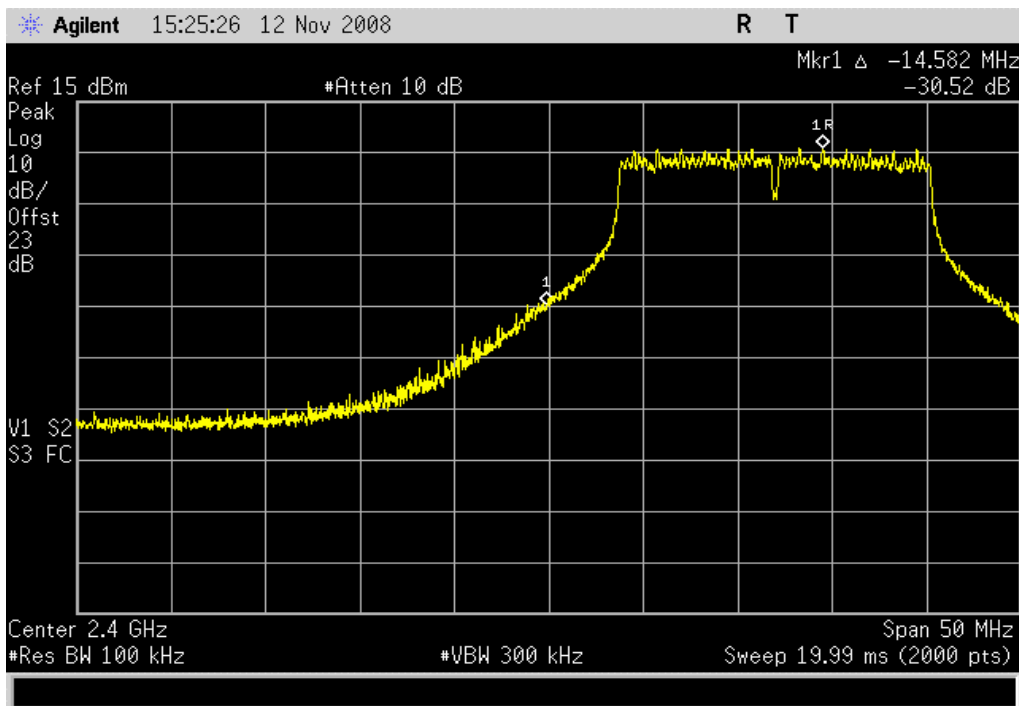


802.11(g) 54 Mbps, Low Channel

Result: Pass

Value: -30.5 dBc

Limit: ≤ -20 dBc

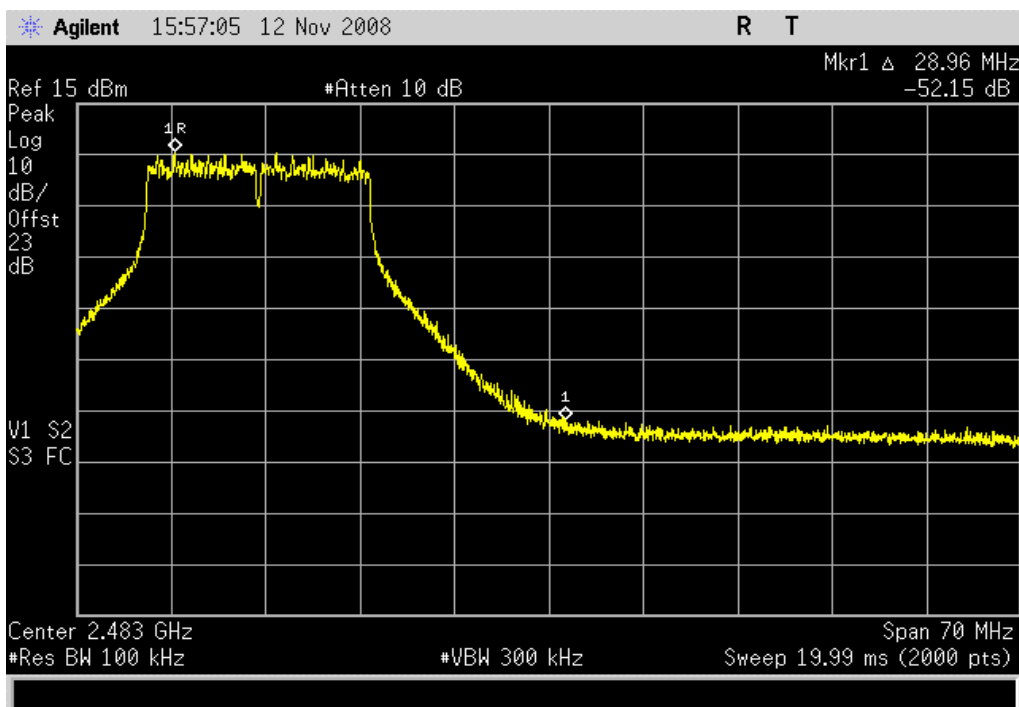


802.11(g) 54 Mbps, High Channel

Result: Pass

Value: -52.2 dBc

Limit: ≤ -20 dBc

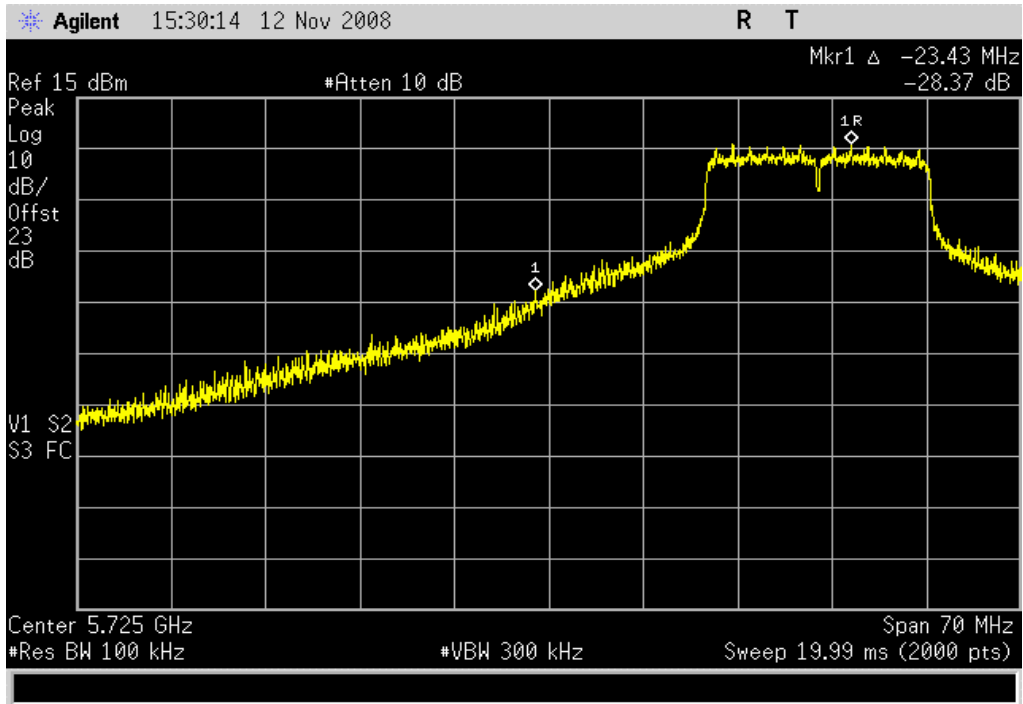


802.11(a) 6 Mbps, Low Channel

Result: Pass

Value: -28.4 dBc

Limit: ≤ -20 dBc

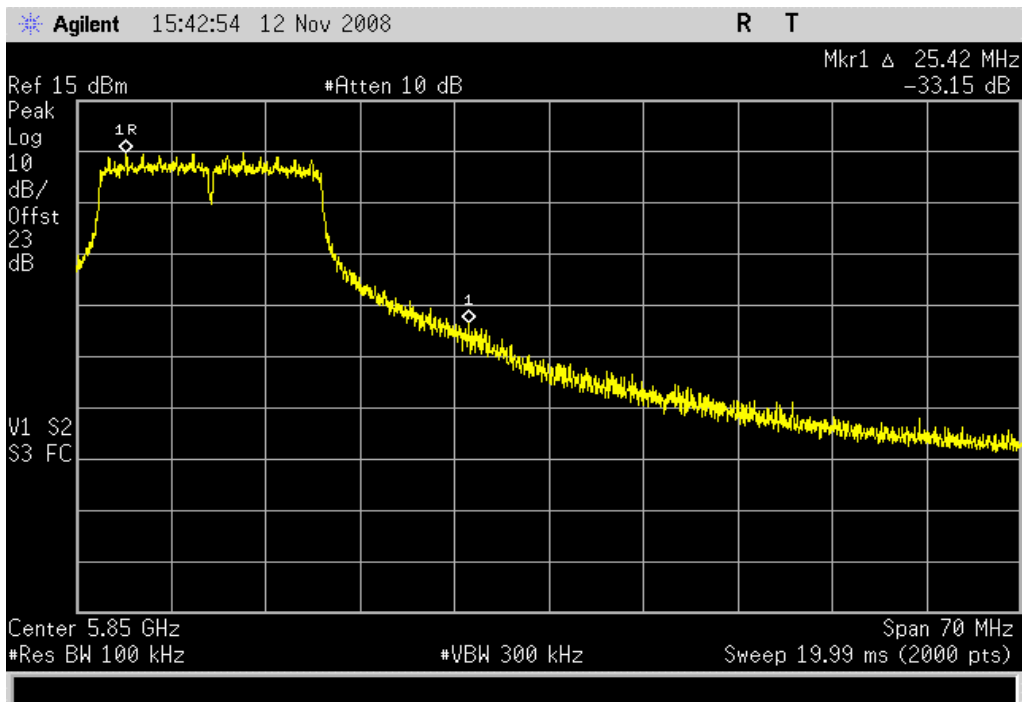


802.11(a) 6 Mbps, High Channel

Result: Pass

Value: -33.2 dBc

Limit: ≤ -20 dBc

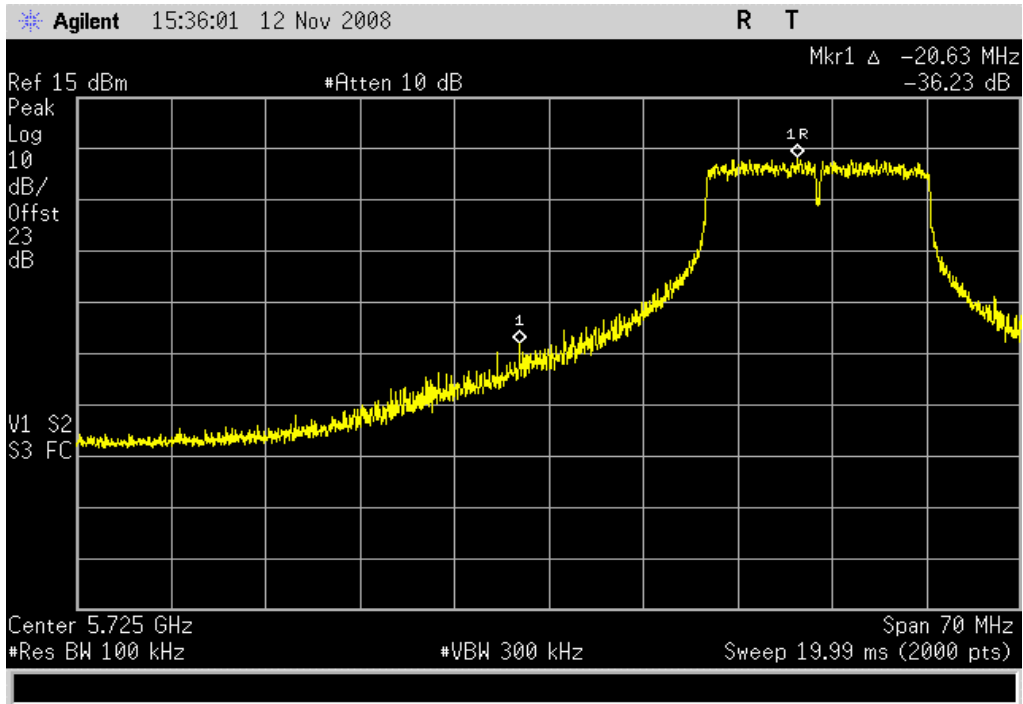


802.11(a) 36 Mbps, Low Channel

Result: Pass

Value: -36.2 dBc

Limit: ≤ -20 dBc

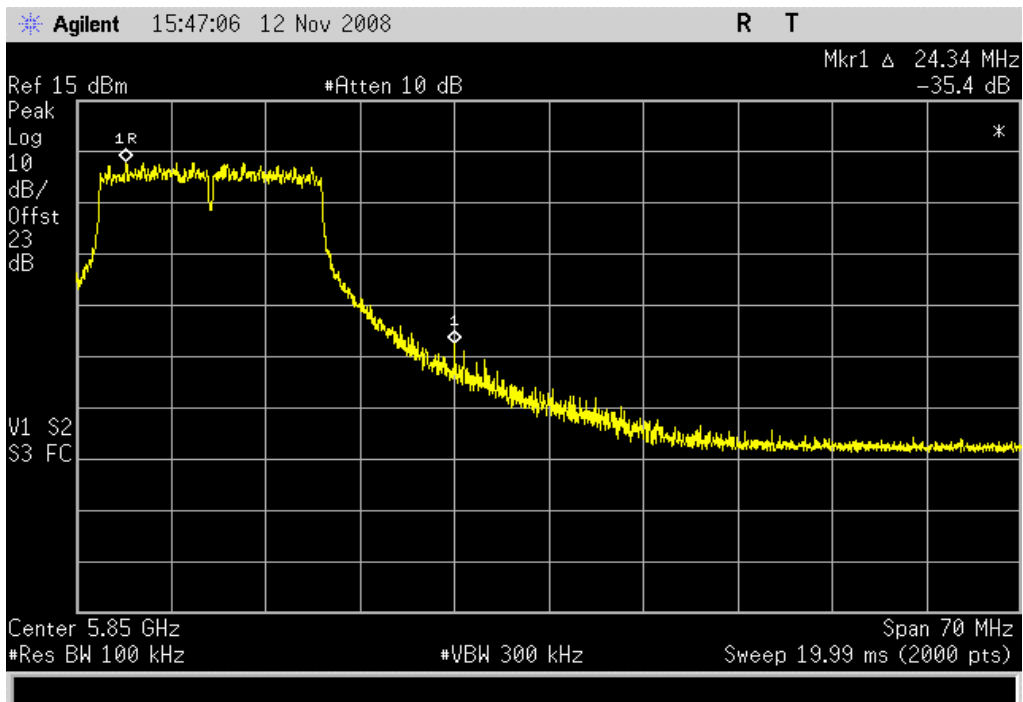


802.11(a) 36 Mbps, High Channel

Result: Pass

Value: -35.4 dBc

Limit: ≤ -20 dBc

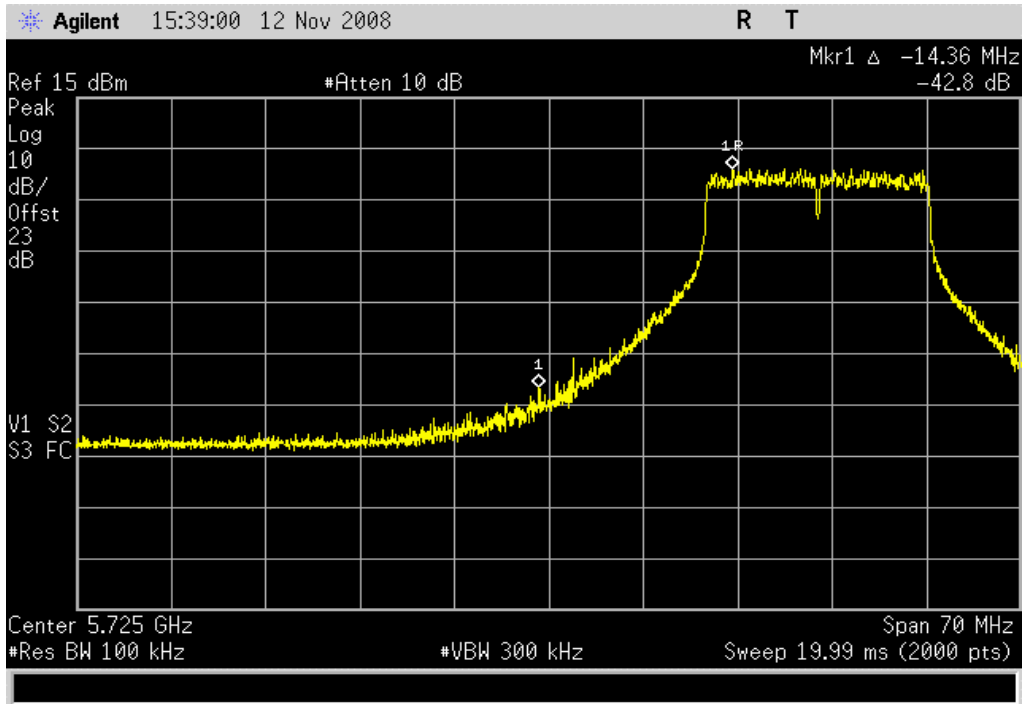


802.11(a) 54 Mbps, Low Channel

Result: Pass

Value: -42.8 dBc

Limit: ≤ -20 dBc

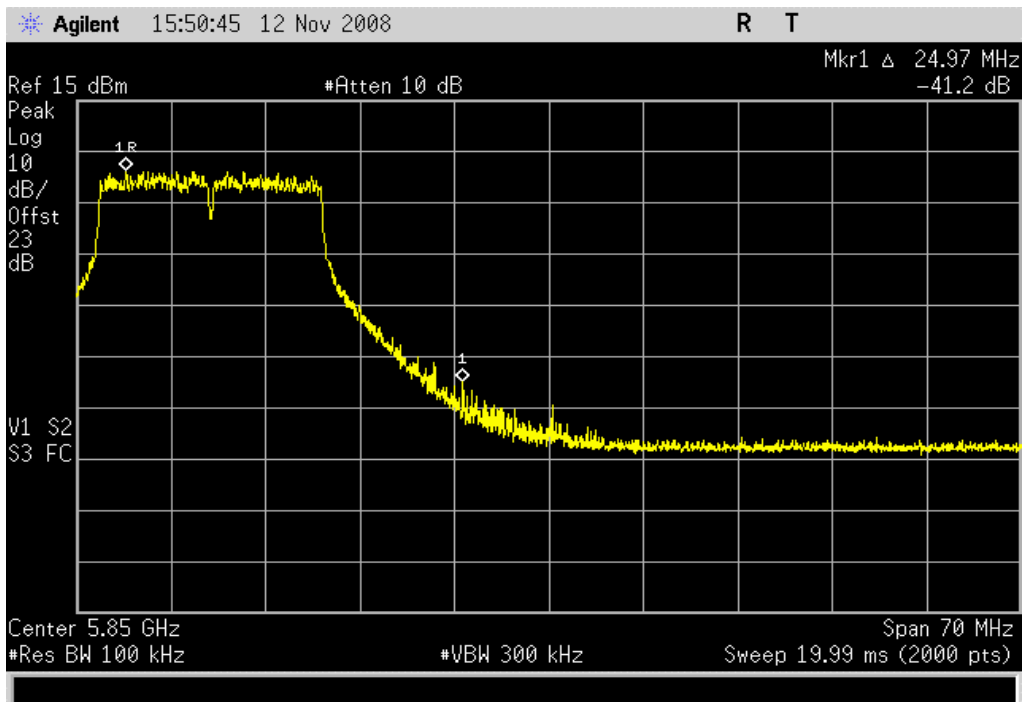


802.11(a) 54 Mbps, High Channel

Result: Pass

Value: -41.2 dBc

Limit: ≤ -20 dBc





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	E4446A	AAY	12/18/2007	12
Attenuator 20 dB, SMA M/F 26GHz	S.M. Electronics	SA26B-20	AUY	6/27/2008	13

MEASUREMENT UNCERTAINTY

Measurement uncertainty is used to reflect the accuracy of the measured result as compared with its "true" or theoretically correct value. Our measurement data meets or exceeds the measurement uncertainty requirements of CISPR 16-4. In the case of transient tests our test equipment has been demonstrated by calibration to provide at least a 95% confidence that it complies with the test specification requirements. The measurement uncertainty for any test is 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.

EMC **SPURIOUS CONDUCTED EMISSIONS** XM6 2007.06.13

EUT: Ultraviolet SL Wireless Option		Work Order: SPAC0447	
Serial Number: Various, see config page		Date: 11/14/08	
Customer: Spacelabs Healthcare		Temperature: 22°C	
Attendees: None		Humidity: 55%	
Project: None		Barometric Press: 30.05	
Tested by: Rod Peloquin	Power: 120VAC/60Hz	Job Site: EV12	

TEST SPECIFICATIONS		Test Method
FCC 15.247 (DTS):2008	ANSI C63.4-2003 KDB No. 558074	

COMMENTS
None

DEVIATIONS FROM TEST STANDARD
No Deviations

Configuration #	1	Signature <i>Rod Peloquin</i>
-----------------	---	-------------------------------

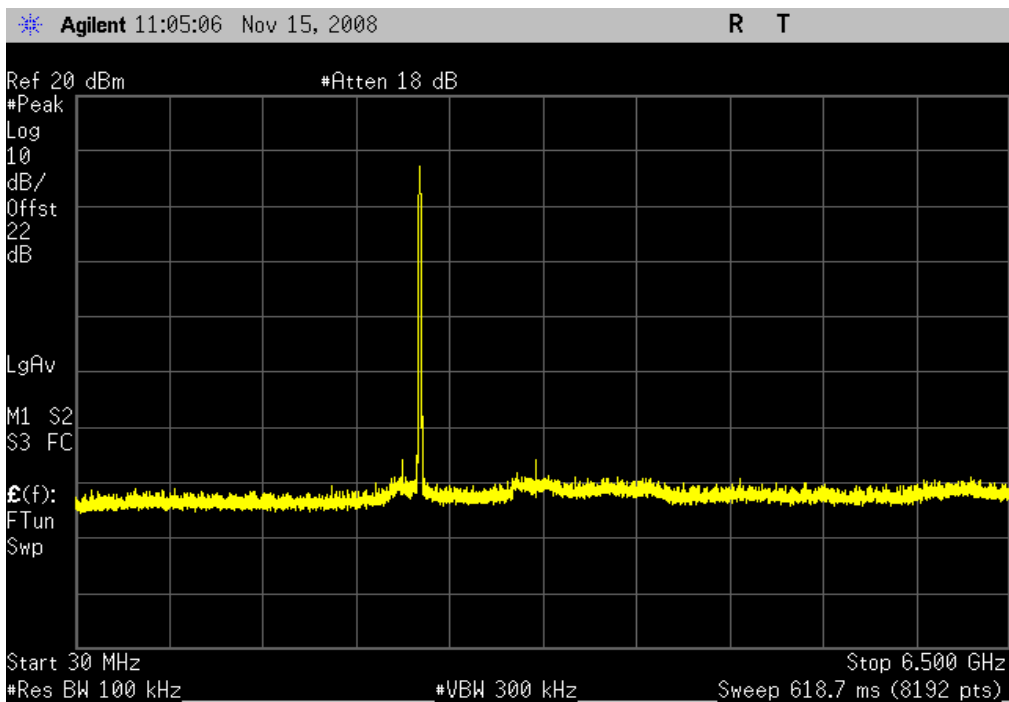
		Value	Limit	Results		
802.11(b) 1 Mbps	Low Channel	30 MHz - 6.5 GHz	< -40 dBc	< -20 dBc	Pass	
		6.5 GHz - 12.5 GHz	< -40 dBc	< -20 dBc	Pass	
		12.5 GHz - 25 GHz	< -40 dBc	< -20 dBc	Pass	
	Mid Channel	30 MHz - 6.5 GHz	< -40 dBc	< -20 dBc	Pass	
		6.5 GHz - 12.5 GHz	< -40 dBc	< -20 dBc	Pass	
		12.5 GHz - 25 GHz	< -40 dBc	< -20 dBc	Pass	
	High Channel	30 MHz - 6.5 GHz	< -40 dBc	< -20 dBc	Pass	
		6.5 GHz - 12.5 GHz	< -40 dBc	< -20 dBc	Pass	
		12.5 GHz - 25 GHz	< -40 dBc	< -20 dBc	Pass	
	802.11(b) 11 Mbps	Low Channel	30 MHz - 6.5 GHz	< -40 dBc	< -20 dBc	Pass
			6.5 GHz - 12.5 GHz	< -40 dBc	< -20 dBc	Pass
			12.5 GHz - 25 GHz	< -40 dBc	< -20 dBc	Pass
Mid Channel		30 MHz - 6.5 GHz	< -40 dBc	< -20 dBc	Pass	
		6.5 GHz - 12.5 GHz	< -40 dBc	< -20 dBc	Pass	
		12.5 GHz - 25 GHz	< -40 dBc	< -20 dBc	Pass	
High Channel		30 MHz - 6.5 GHz	< -40 dBc	< -20 dBc	Pass	
		6.5 GHz - 12.5 GHz	< -40 dBc	< -20 dBc	Pass	
		12.5 GHz - 25 GHz	< -40 dBc	< -20 dBc	Pass	
802.11(g) 6 Mbps		Low Channel	30 MHz - 6.5 GHz	< -40 dBc	< -20 dBc	Pass
			6.5 GHz - 12.5 GHz	< -40 dBc	< -20 dBc	Pass
			12.5 GHz - 25 GHz	< -40 dBc	< -20 dBc	Pass
	Mid Channel	30 MHz - 6.5 GHz	< -40 dBc	< -20 dBc	Pass	
		6.5 GHz - 12.5 GHz	< -40 dBc	< -20 dBc	Pass	
		12.5 GHz - 25 GHz	< -40 dBc	< -20 dBc	Pass	
	High Channel	30 MHz - 6.5 GHz	< -40 dBc	< -20 dBc	Pass	
		6.5 GHz - 12.5 GHz	< -40 dBc	< -20 dBc	Pass	
		12.5 GHz - 25 GHz	< -40 dBc	< -20 dBc	Pass	
	802.11(g) 36 Mbps	Low Channel	30 MHz - 6.5 GHz	< -40 dBc	< -20 dBc	Pass
			6.5 GHz - 12.5 GHz	< -40 dBc	< -20 dBc	Pass
			12.5 GHz - 25 GHz	< -40 dBc	< -20 dBc	Pass
Mid Channel		30 MHz - 6.5 GHz	< -40 dBc	< -20 dBc	Pass	
		6.5 GHz - 12.5 GHz	< -40 dBc	< -20 dBc	Pass	
		12.5 GHz - 25 GHz	< -40 dBc	< -20 dBc	Pass	
High Channel		30 MHz - 6.5 GHz	< -40 dBc	< -20 dBc	Pass	
		6.5 GHz - 12.5 GHz	< -40 dBc	< -20 dBc	Pass	
		12.5 GHz - 25 GHz	< -40 dBc	< -20 dBc	Pass	
802.11(g) 54 Mbps		Low Channel	30 MHz - 6.5 GHz	< -40 dBc	< -20 dBc	Pass
			6.5 GHz - 12.5 GHz	< -40 dBc	< -20 dBc	Pass
			12.5 GHz - 25 GHz	< -40 dBc	< -20 dBc	Pass
	Mid Channel	30 MHz - 6.5 GHz	< -40 dBc	< -20 dBc	Pass	
		6.5 GHz - 12.5 GHz	< -40 dBc	< -20 dBc	Pass	
		12.5 GHz - 25 GHz	< -40 dBc	< -20 dBc	Pass	
	High Channel	30 MHz - 6.5 GHz	< -40 dBc	< -20 dBc	Pass	
		6.5 GHz - 12.5 GHz	< -40 dBc	< -20 dBc	Pass	
		12.5 GHz - 25 GHz	< -40 dBc	< -20 dBc	Pass	
	802.11(a) 6 Mbps	Low Channel	30 MHz - 6.5 GHz	< -40 dBc	< -20 dBc	Pass
			6.5 GHz - 12.5 GHz	< -40 dBc	< -20 dBc	Pass
			12.5 GHz - 26.5 GHz	< -40 dBc	< -20 dBc	Pass
26.5 GHz - 31 GHz			< -40 dBc	< -20 dBc	Pass	
31 GHz - 40 GHz			< -40 dBc	< -20 dBc	Pass	
Mid Channel		30 MHz - 6.5 GHz	< -40 dBc	< -20 dBc	Pass	
		6.5 GHz - 12.5 GHz	< -40 dBc	< -20 dBc	Pass	
		12.5 GHz - 26.5 GHz	< -40 dBc	< -20 dBc	Pass	
		26.5 GHz - 31 GHz	< -40 dBc	< -20 dBc	Pass	
		31 GHz - 40 GHz	< -40 dBc	< -20 dBc	Pass	
High Channel		30 MHz - 6.5 GHz	< -40 dBc	< -20 dBc	Pass	
		6.5 GHz - 12.5 GHz	< -40 dBc	< -20 dBc	Pass	
802.11(a) 36 Mbps	Low Channel	30 MHz - 6.5 GHz	< -40 dBc	< -20 dBc	Pass	
		6.5 GHz - 12.5 GHz	< -40 dBc	< -20 dBc	Pass	
		12.5 GHz - 26.5 GHz	< -40 dBc	< -20 dBc	Pass	
		26.5 GHz - 31 GHz	< -40 dBc	< -20 dBc	Pass	
		31 GHz - 40 GHz	< -40 dBc	< -20 dBc	Pass	
	Mid Channel	30 MHz - 6.5 GHz	< -40 dBc	< -20 dBc	Pass	
		6.5 GHz - 12.5 GHz	< -40 dBc	< -20 dBc	Pass	
		12.5 GHz - 26.5 GHz	< -40 dBc	< -20 dBc	Pass	
		26.5 GHz - 31 GHz	< -40 dBc	< -20 dBc	Pass	
		31 GHz - 40 GHz	< -40 dBc	< -20 dBc	Pass	
	High Channel	30 MHz - 6.5 GHz	< -40 dBc	< -20 dBc	Pass	
		6.5 GHz - 12.5 GHz	< -40 dBc	< -20 dBc	Pass	
802.11(a) 54 Mbps	Low Channel	30 MHz - 6.5 GHz	< -40 dBc	< -20 dBc	Pass	
		6.5 GHz - 12.5 GHz	< -40 dBc	< -20 dBc	Pass	
		12.5 GHz - 26.5 GHz	< -40 dBc	< -20 dBc	Pass	
		26.5 GHz - 31 GHz	< -40 dBc	< -20 dBc	Pass	
		31 GHz - 40 GHz	< -40 dBc	< -20 dBc	Pass	
	Mid Channel	30 MHz - 6.5 GHz	< -40 dBc	< -20 dBc	Pass	
		6.5 GHz - 12.5 GHz	< -40 dBc	< -20 dBc	Pass	
		12.5 GHz - 26.5 GHz	< -40 dBc	< -20 dBc	Pass	
		26.5 GHz - 31 GHz	< -40 dBc	< -20 dBc	Pass	
		31 GHz - 40 GHz	< -40 dBc	< -20 dBc	Pass	
	High Channel	30 MHz - 6.5 GHz	< -40 dBc	< -20 dBc	Pass	
		6.5 GHz - 12.5 GHz	< -40 dBc	< -20 dBc	Pass	

802.11(b) 1 Mbps, Low Channel, 30 MHz - 6.5 GHz

Result: Pass

Value: < -40 dBc

Limit: < -20 dBc

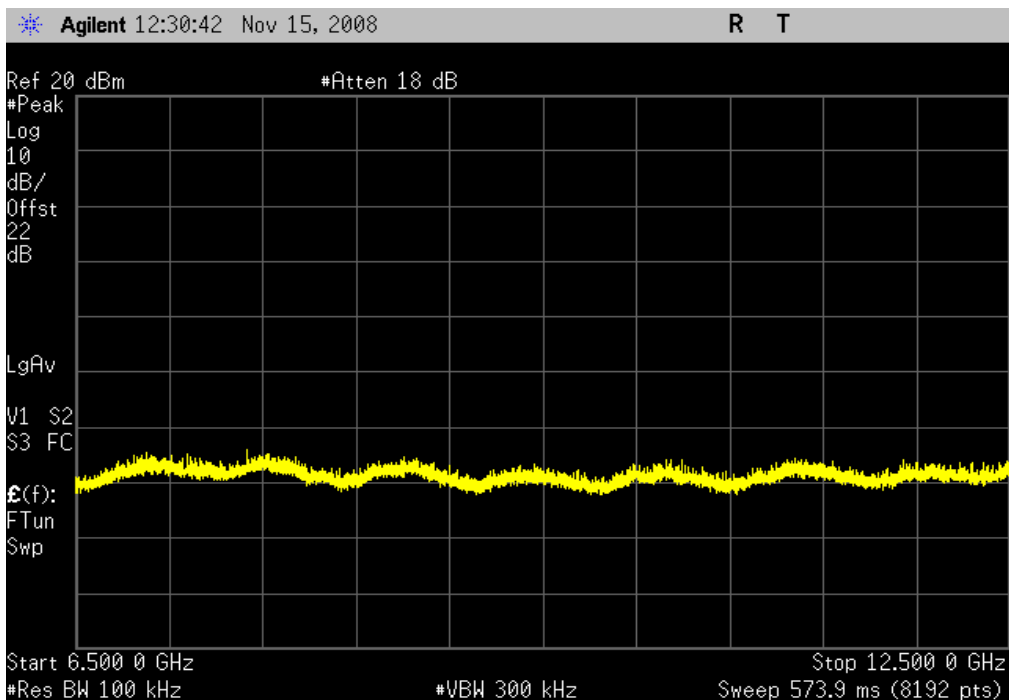


802.11(b) 1 Mbps, Low Channel, 6.5 GHz - 12.5 GHz

Result: Pass

Value: < -40 dBc

Limit: < -20 dBc

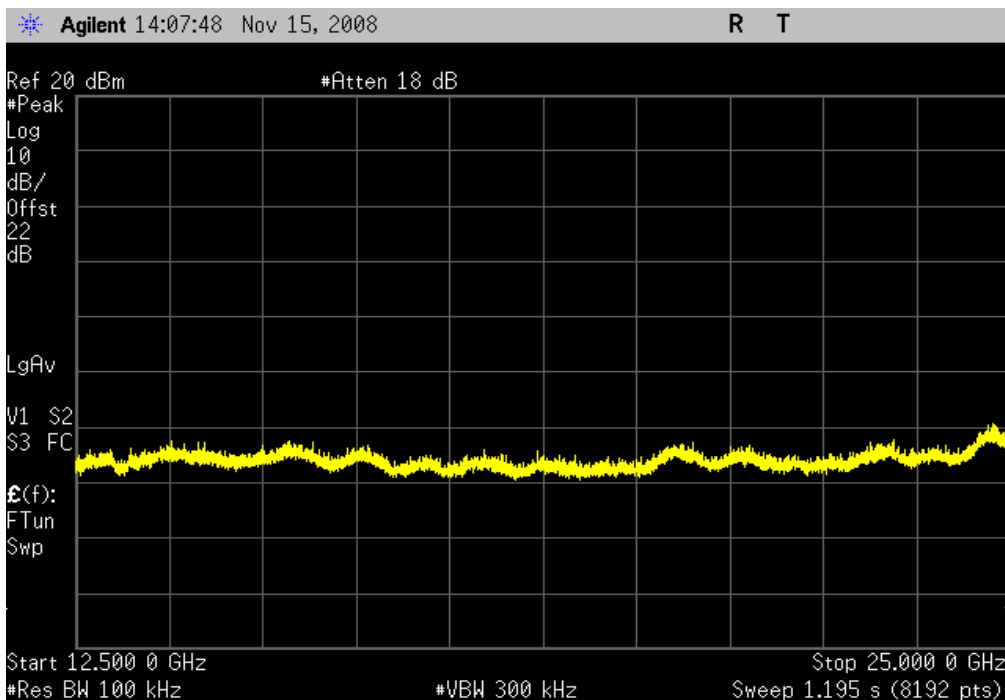


802.11(b) 1 Mbps, Low Channel, 12.5 GHz - 25 GHz

Result: Pass

Value: < -40 dBc

Limit: < -20 dBc

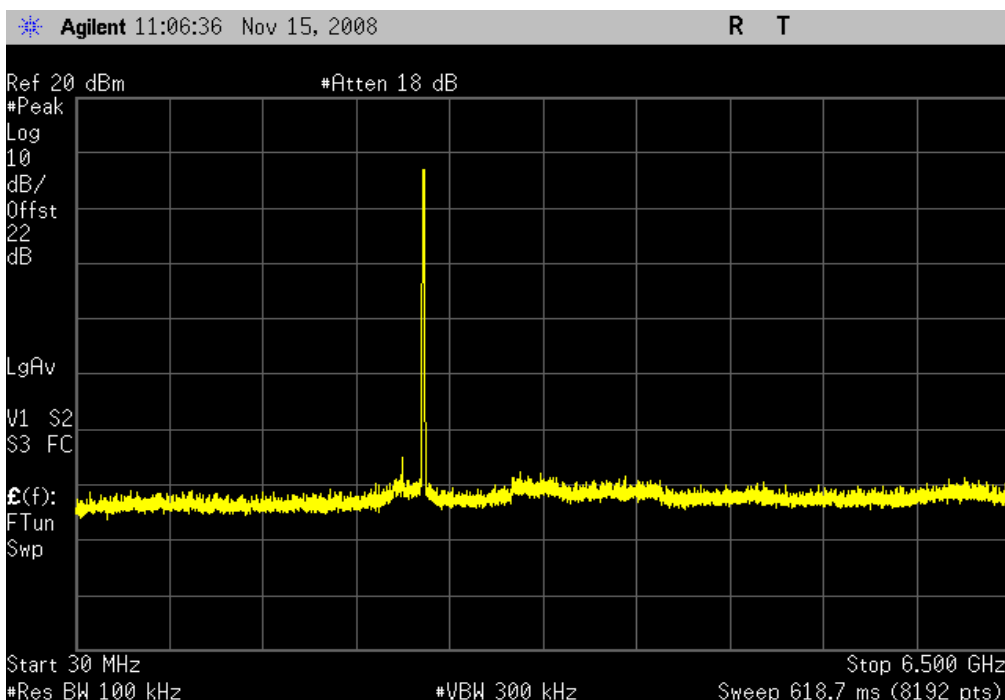


802.11(b) 1 Mbps, Mid Channel, 30 MHz - 6.5 GHz

Result: Pass

Value: < -40 dBc

Limit: < -20 dBc



EMC

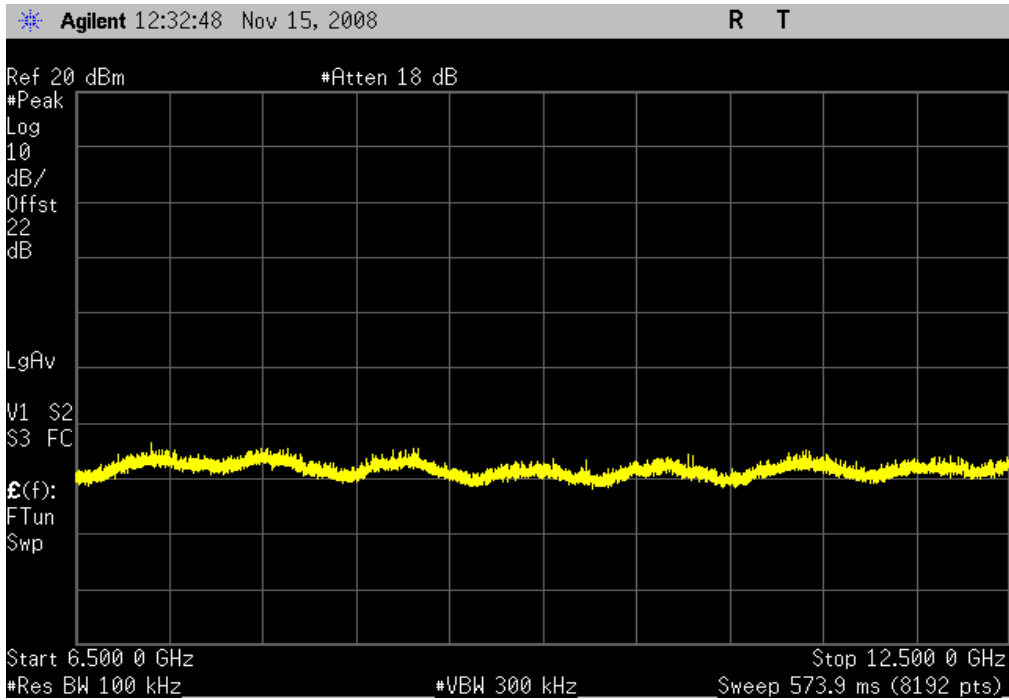
SPURIOUS CONDUCTED EMISSIONS

802.11(b) 1 Mbps, Mid Channel, 6.5 GHz - 12.5 GHz

Result: Pass

Value: < -40 dBc

Limit: < -20 dBc

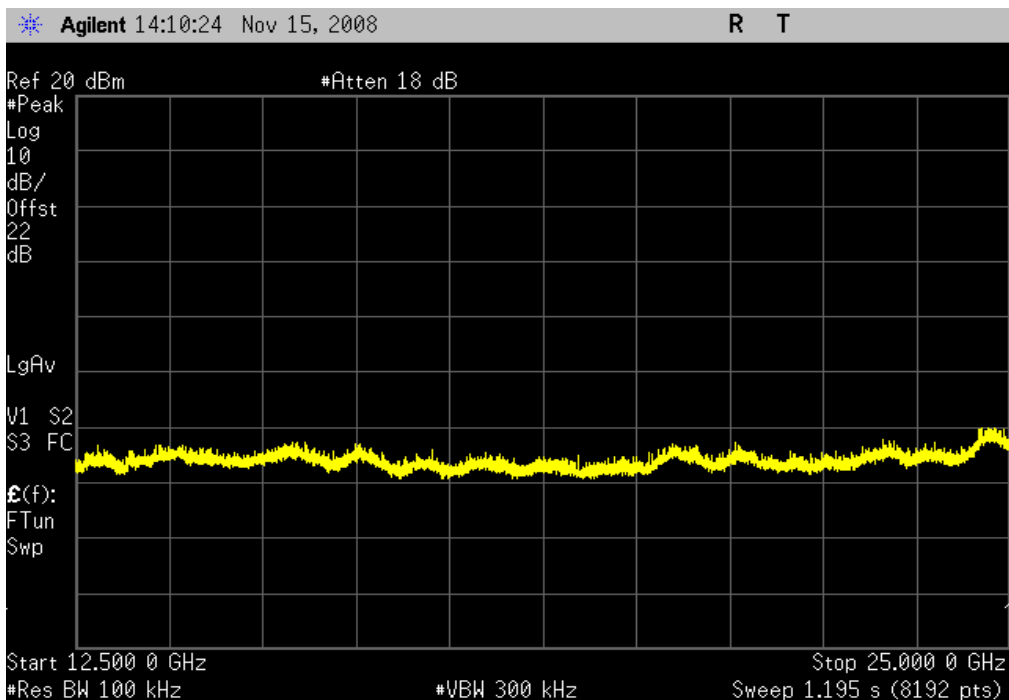


802.11(b) 1 Mbps, Mid Channel, 12.5 GHz - 25 GHz

Result: Pass

Value: < -40 dBc

Limit: < -20 dBc

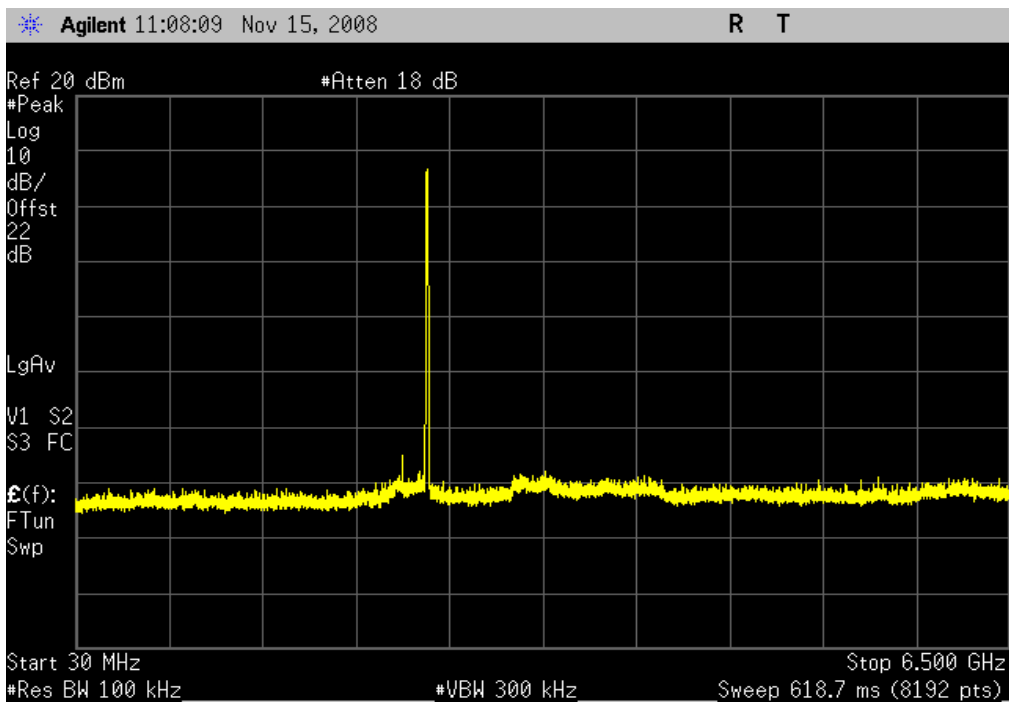


802.11(b) 1 Mbps, High Channel, 30 MHz - 6.5 GHz

Result: Pass

Value: < -40 dBc

Limit: < -20 dBc

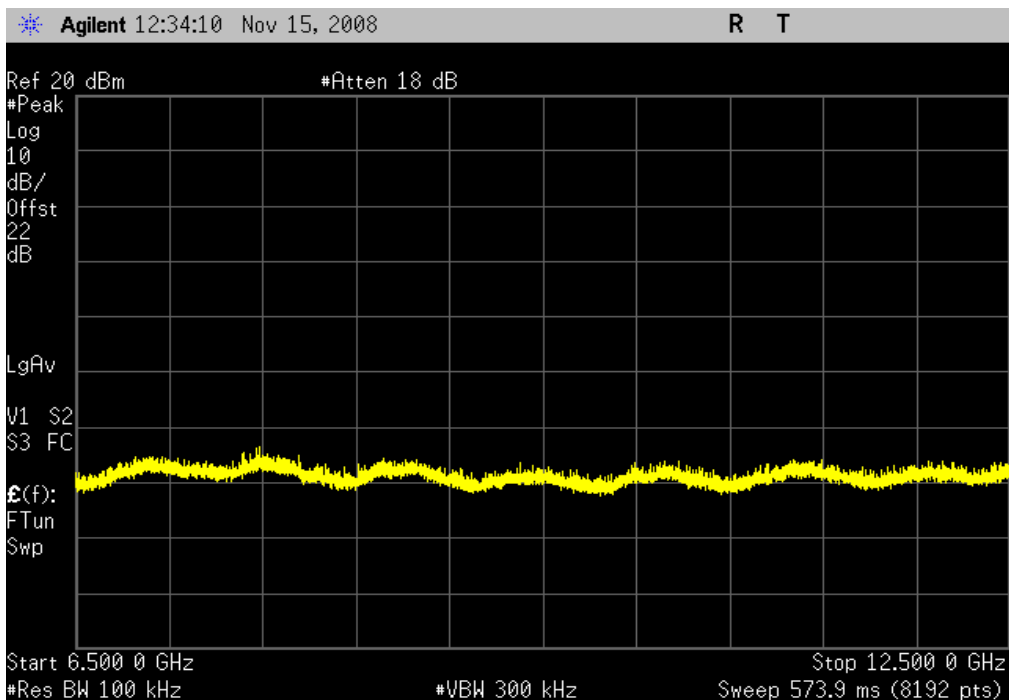


802.11(b) 1 Mbps, High Channel, 6.5 GHz - 12.5 GHz

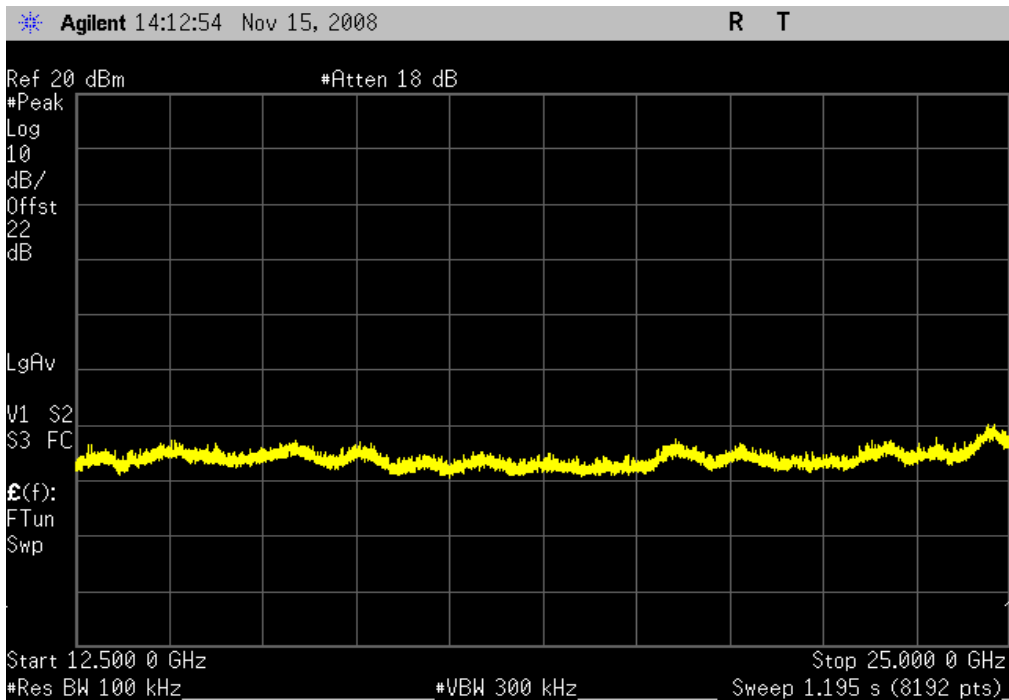
Result: Pass

Value: < -40 dBc

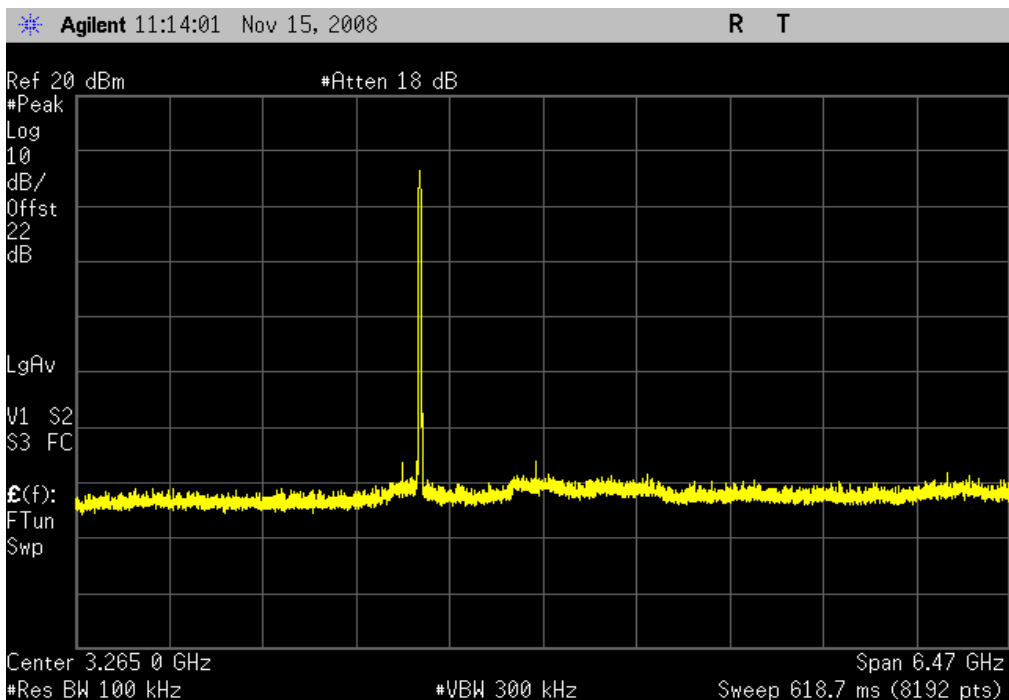
Limit: < -20 dBc



802.11(b) 1 Mbps, High Channel, 12.5 GHz - 25 GHz
Result: Pass **Value:** < -40 dBc **Limit:** < -20 dBc



802.11(b) 11 Mbps, Low Channel, 30 MHz - 6.5 GHz
Result: Pass **Value:** < -40 dBc **Limit:** < -20 dBc

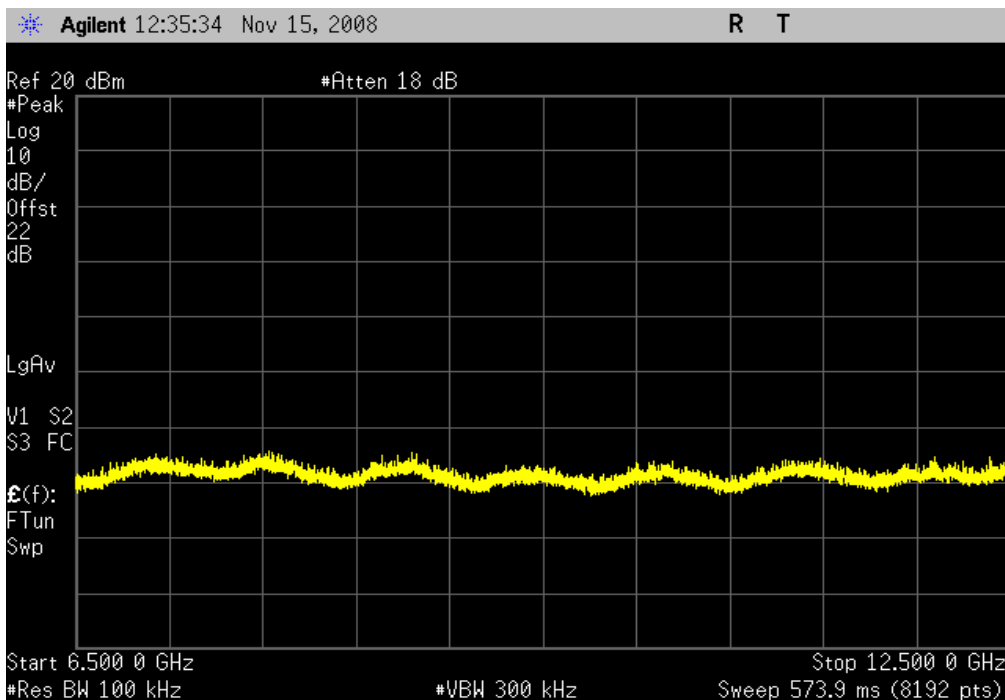


802.11(b) 11 Mbps, Low Channel, 6.5 GHz - 12.5 GHz

Result: Pass

Value: < -40 dBc

Limit: < -20 dBc

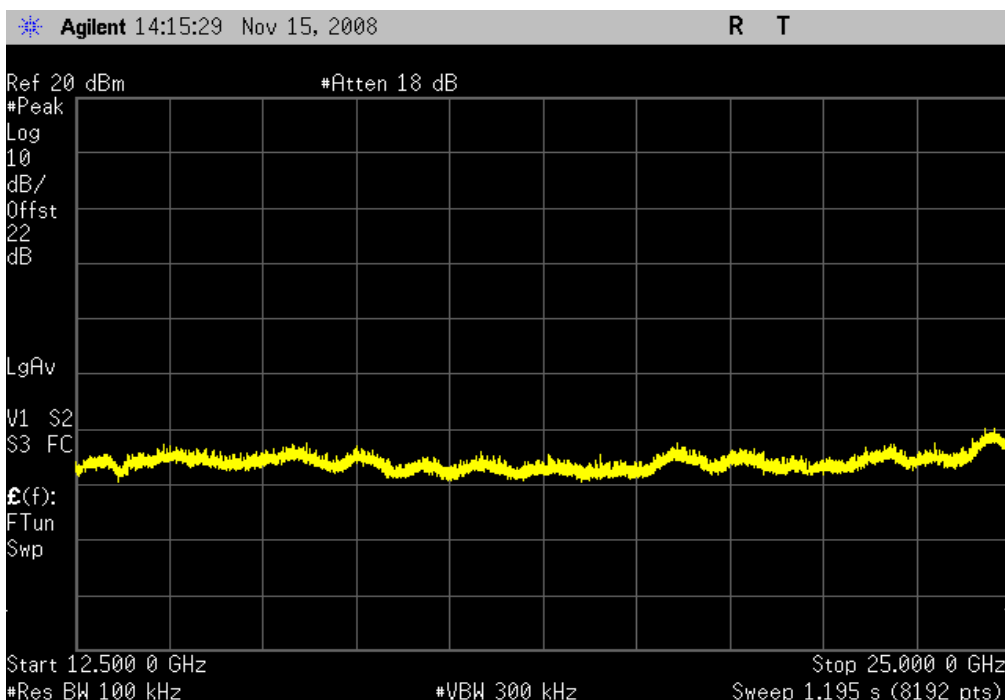


802.11(b) 11 Mbps, Low Channel, 12.5 GHz - 25 GHz

Result: Pass

Value: < -40 dBc

Limit: < -20 dBc

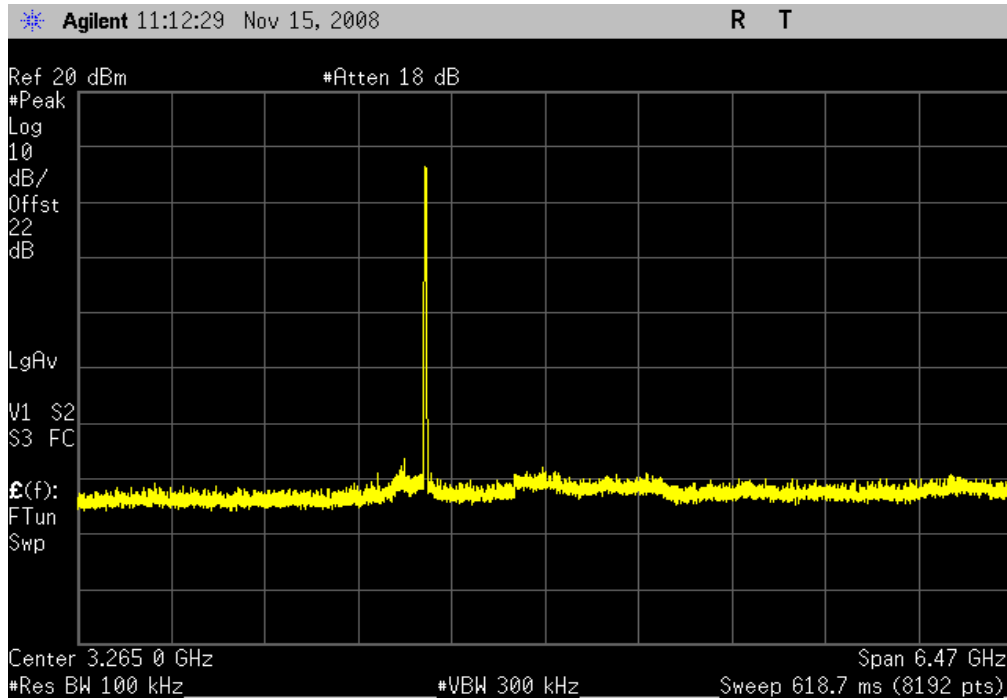


802.11(b) 11 Mbps, Mid Channel, 30 MHz - 6.5 GHz

Result: Pass

Value: < -40 dBc

Limit: < -20 dBc

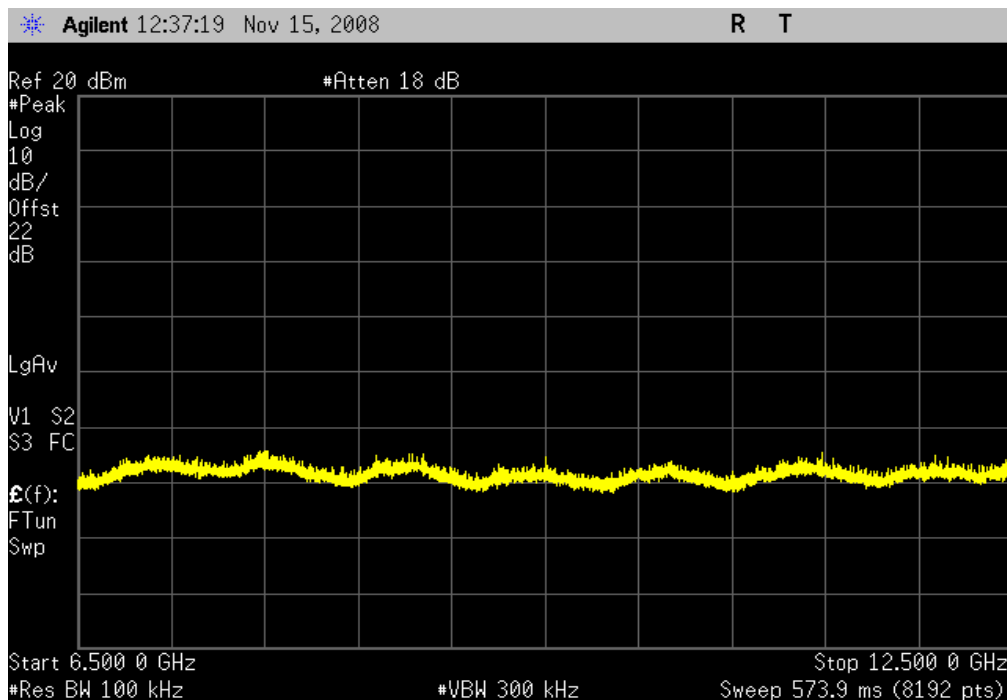


802.11(b) 11 Mbps, Mid Channel, 6.5 GHz - 12.5 GHz

Result: Pass

Value: < -40 dBc

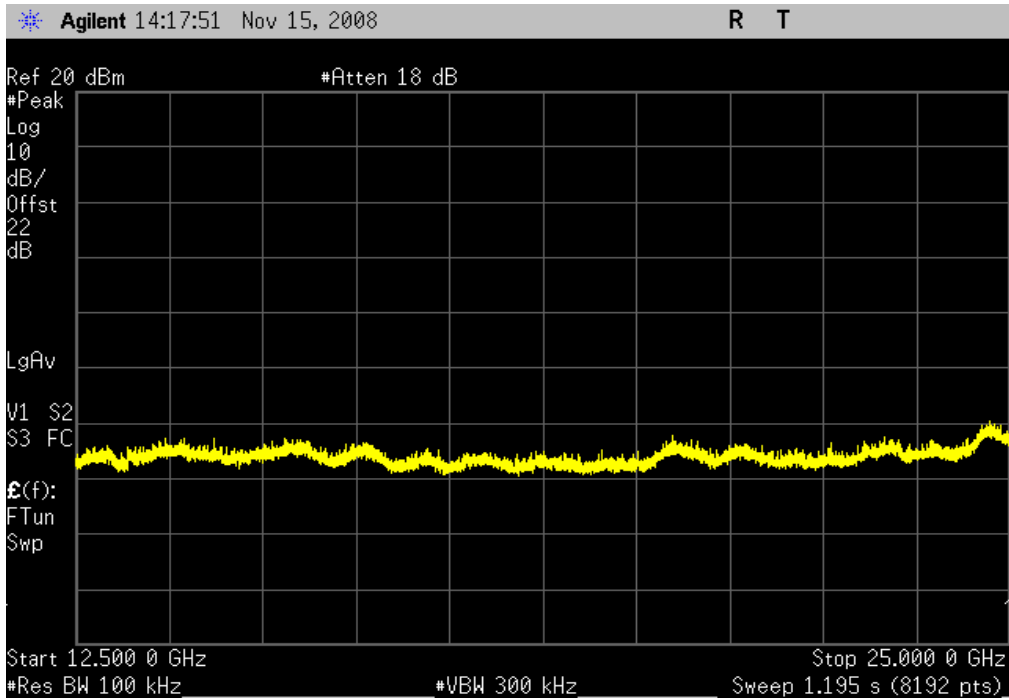
Limit: < -20 dBc



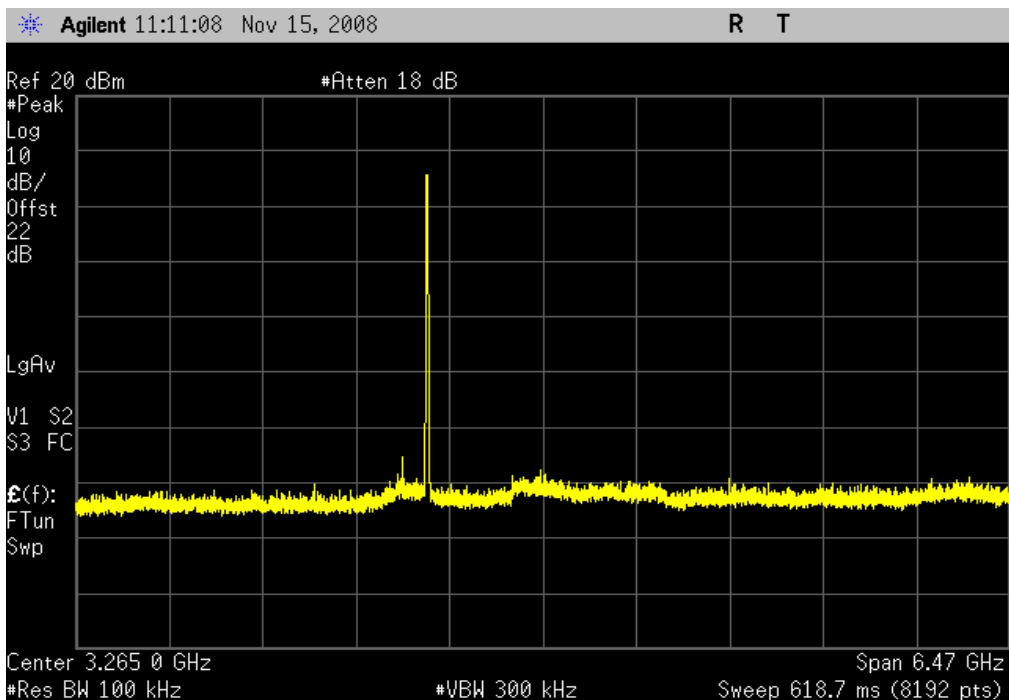
EMC

SPURIOUS CONDUCTED EMISSIONS

802.11(b) 11 Mbps, Mid Channel, 12.5 GHz - 25 GHz
Result: Pass **Value:** < -40 dBc **Limit:** < -20 dBc



802.11(b) 11 Mbps, High Channel, 30 MHz - 6.5 GHz
Result: Pass **Value:** < -40 dBc **Limit:** < -20 dBc

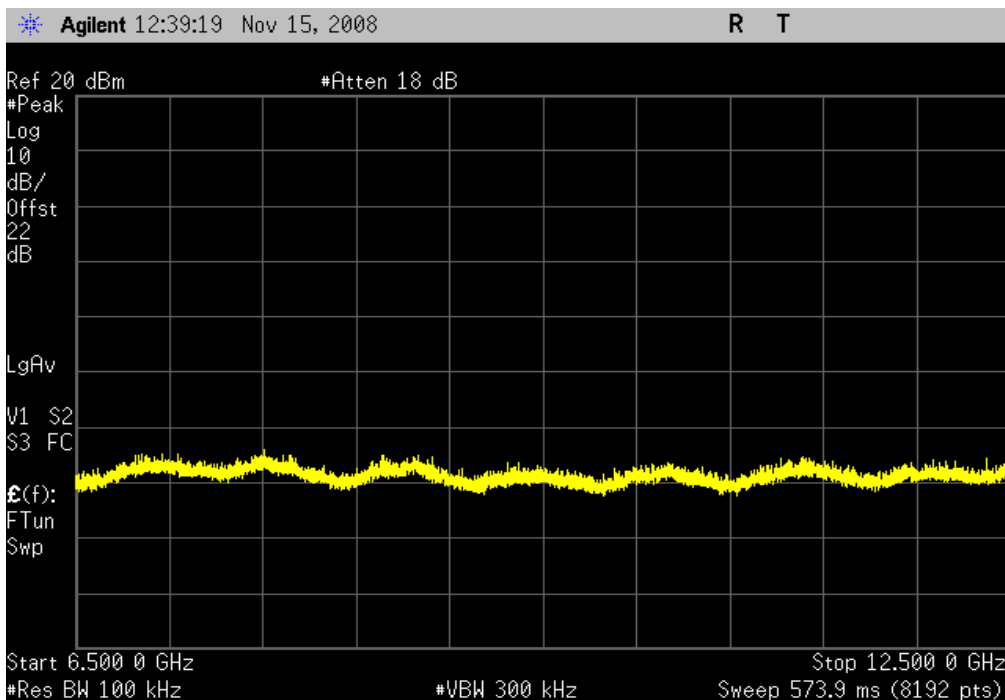


802.11(b) 11 Mbps, High Channel, 6.5 GHz - 12.5 GHz

Result: Pass

Value: < -40 dBc

Limit: < -20 dBc

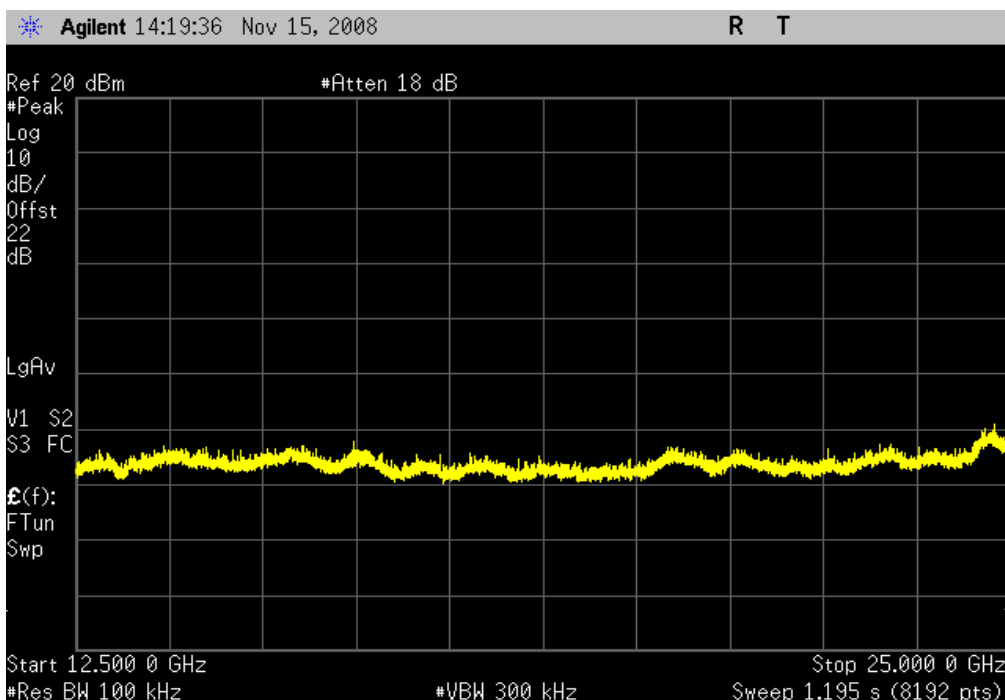


802.11(b) 11 Mbps, High Channel, 12.5 GHz - 25 GHz

Result: Pass

Value: < -40 dBc

Limit: < -20 dBc

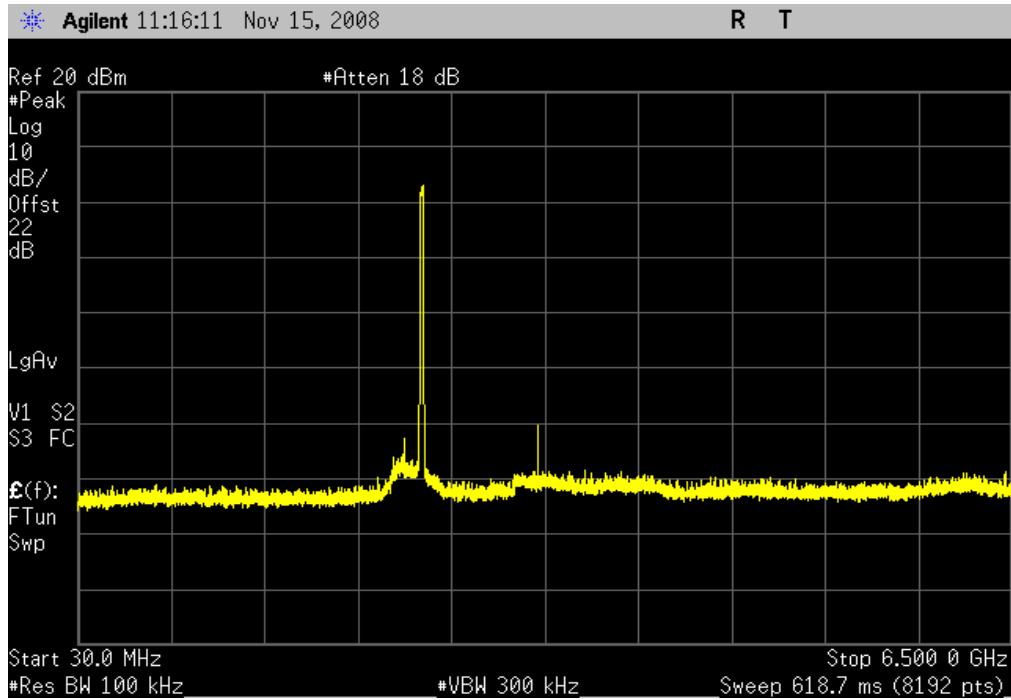


802.11(g) 6 Mbps, Low Channel, 30 MHz - 6.5 GHz

Result: Pass

Value: < -40 dBc

Limit: < -20 dBc

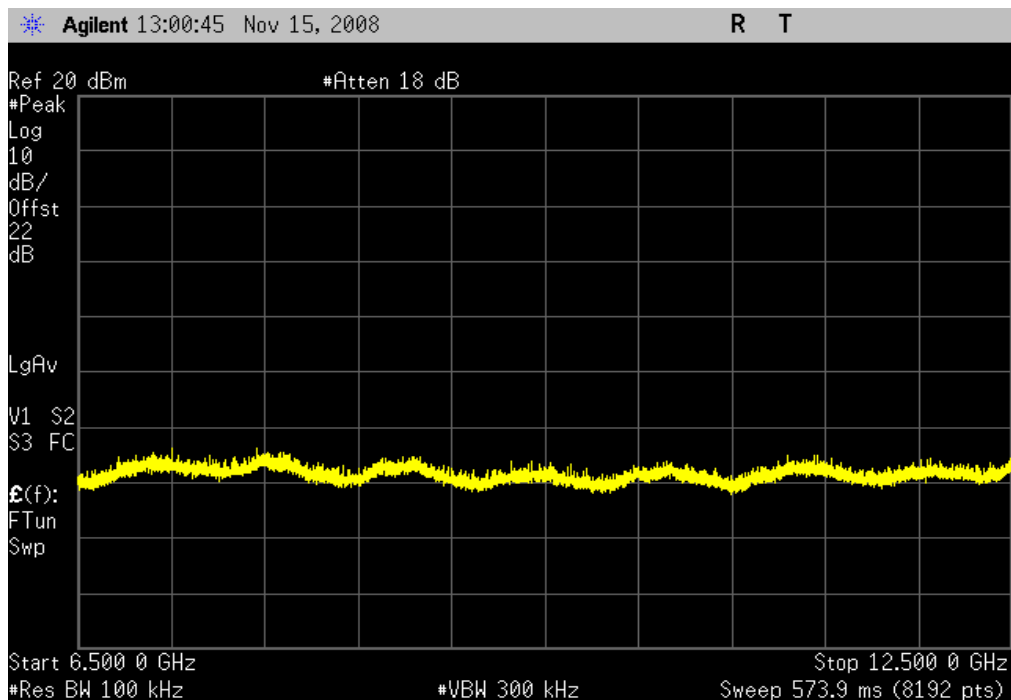


802.11(g) 6 Mbps, Low Channel, 6.5 GHz - 12.5 GHz

Result: Pass

Value: < -40 dBc

Limit: < -20 dBc

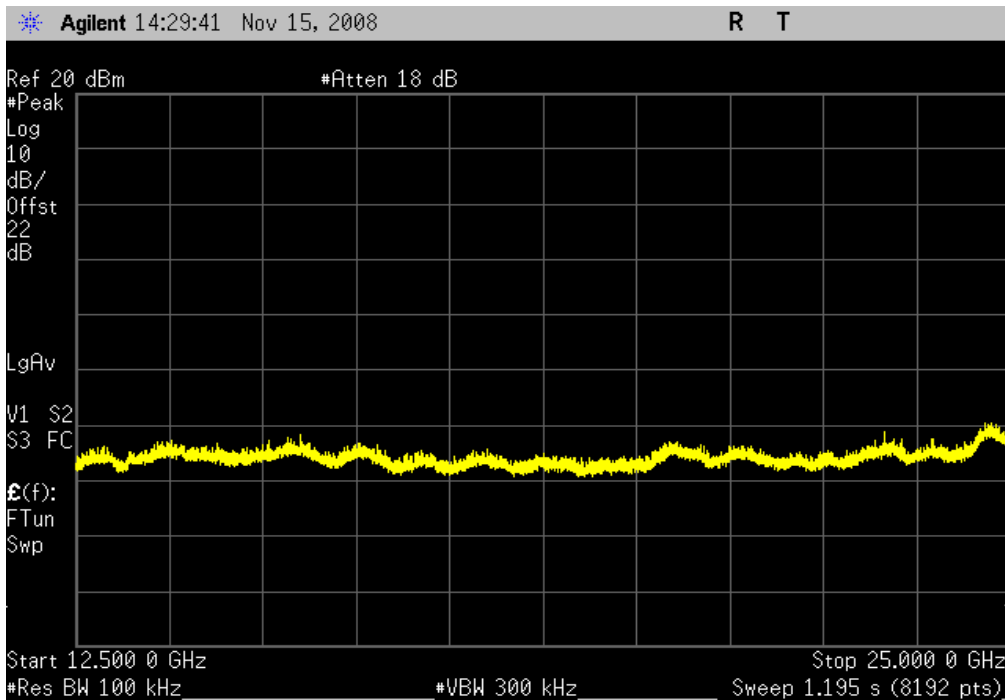


802.11(g) 6 Mbps, Low Channel, 12.5 GHz - 25 GHz

Result: Pass

Value: < -40 dBc

Limit: < -20 dBc

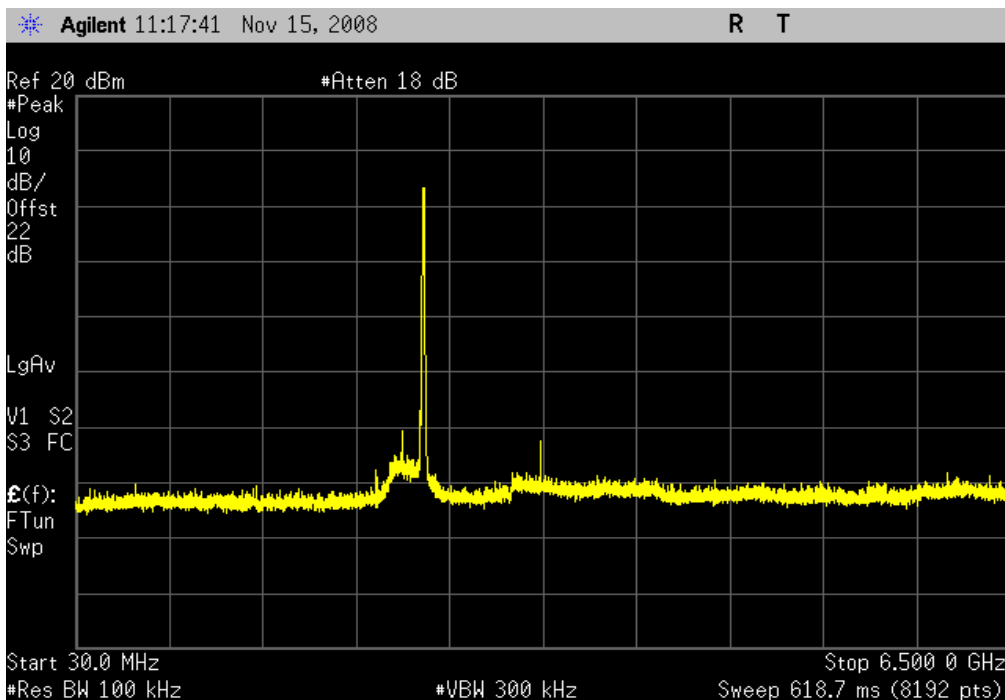


802.11(g) 6 Mbps, Mid Channel, 30 MHz - 6.5 GHz

Result: Pass

Value: < -40 dBc

Limit: < -20 dBc

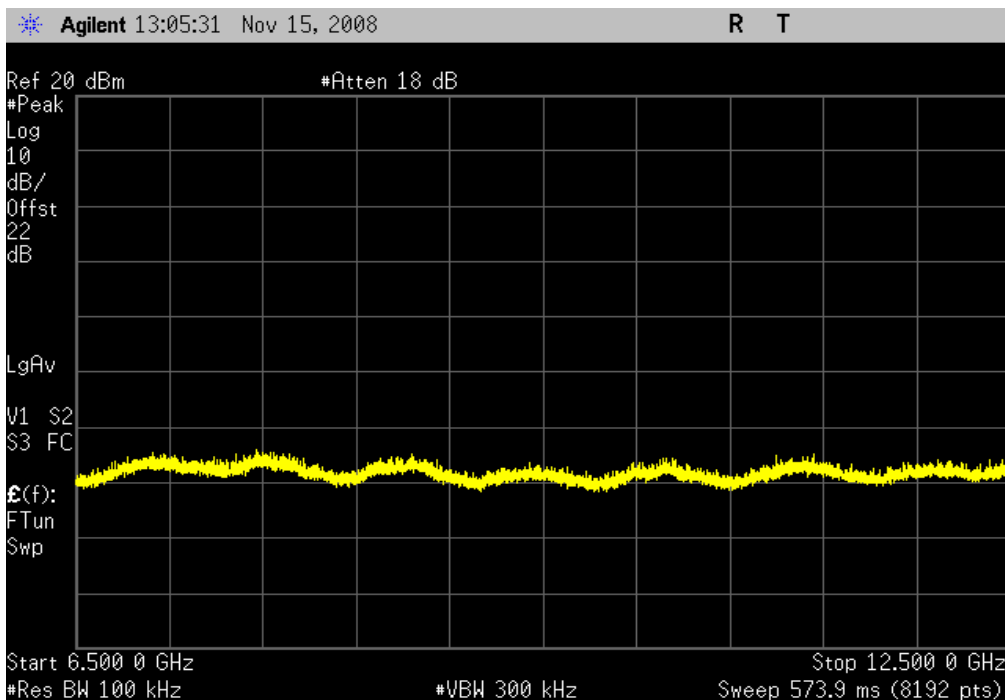


802.11(g) 6 Mbps, Mid Channel, 6.5 GHz - 12.5 GHz

Result: Pass

Value: < -40 dBc

Limit: < -20 dBc

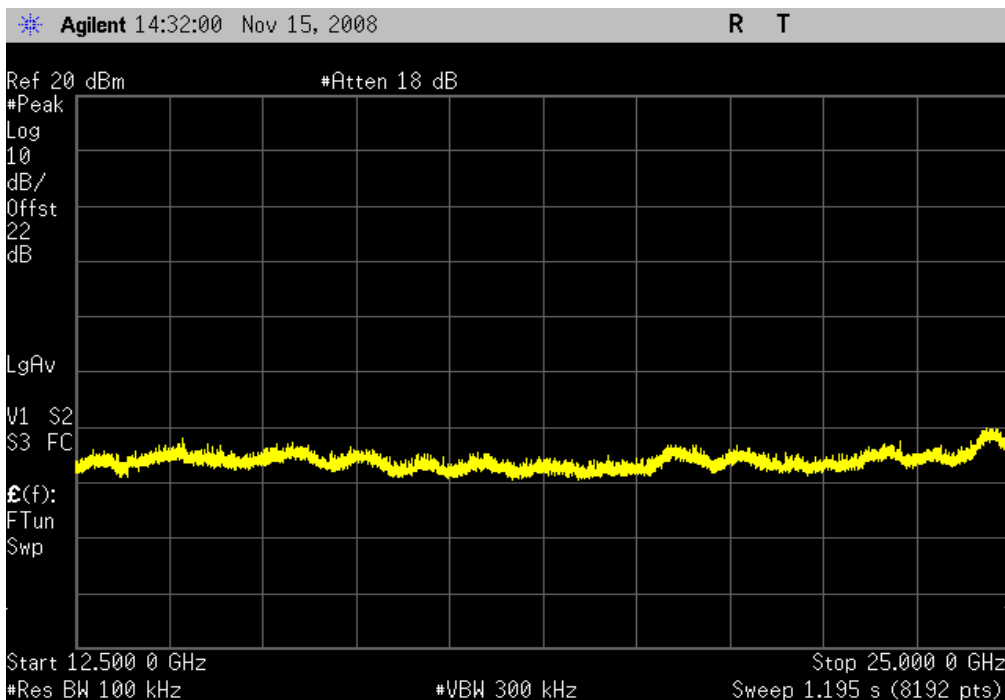


802.11(g) 6 Mbps, Mid Channel, 12.5 GHz - 25 GHz

Result: Pass

Value: < -40 dBc

Limit: < -20 dBc

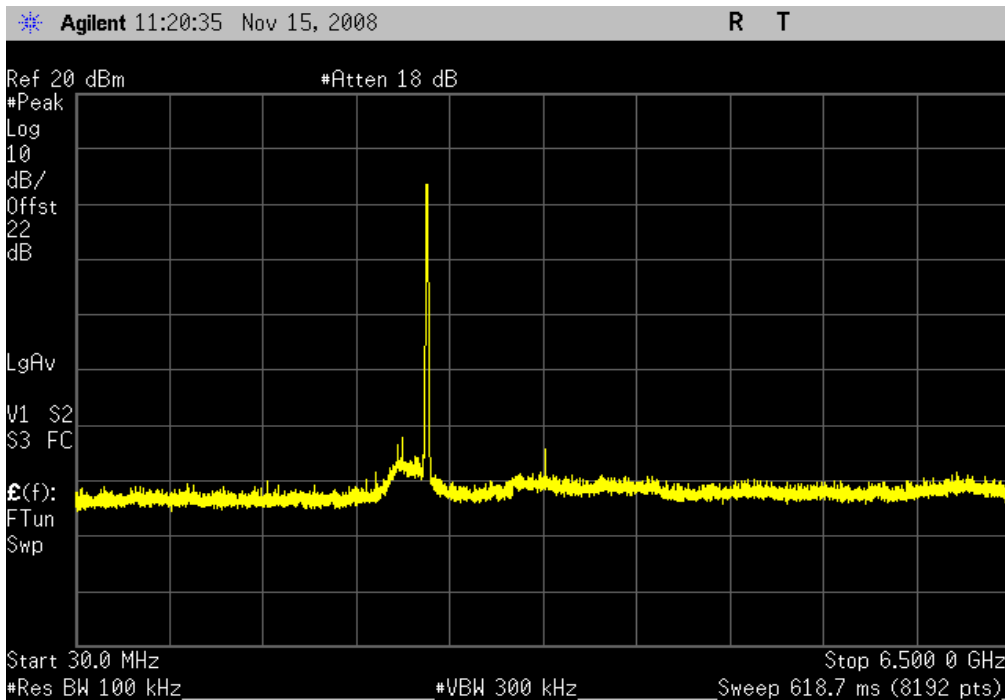


802.11(g) 6 Mbps, High Channel, 30 MHz - 6.5 GHz

Result: Pass

Value: < -40 dBc

Limit: < -20 dBc

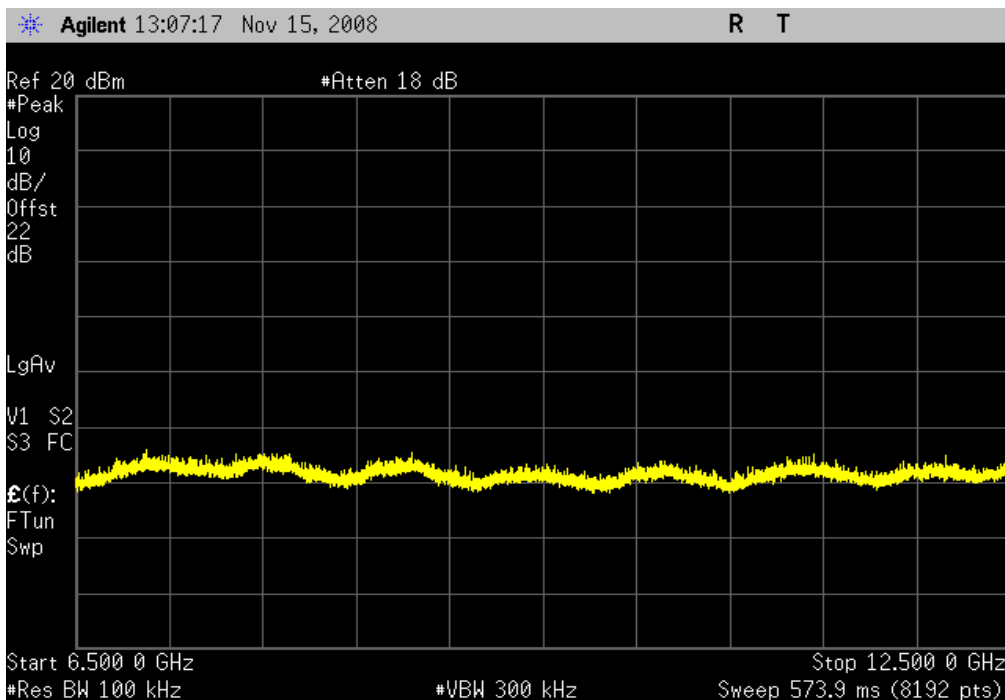


802.11(g) 6 Mbps, High Channel, 6.5 GHz - 12.5 GHz

Result: Pass

Value: < -40 dBc

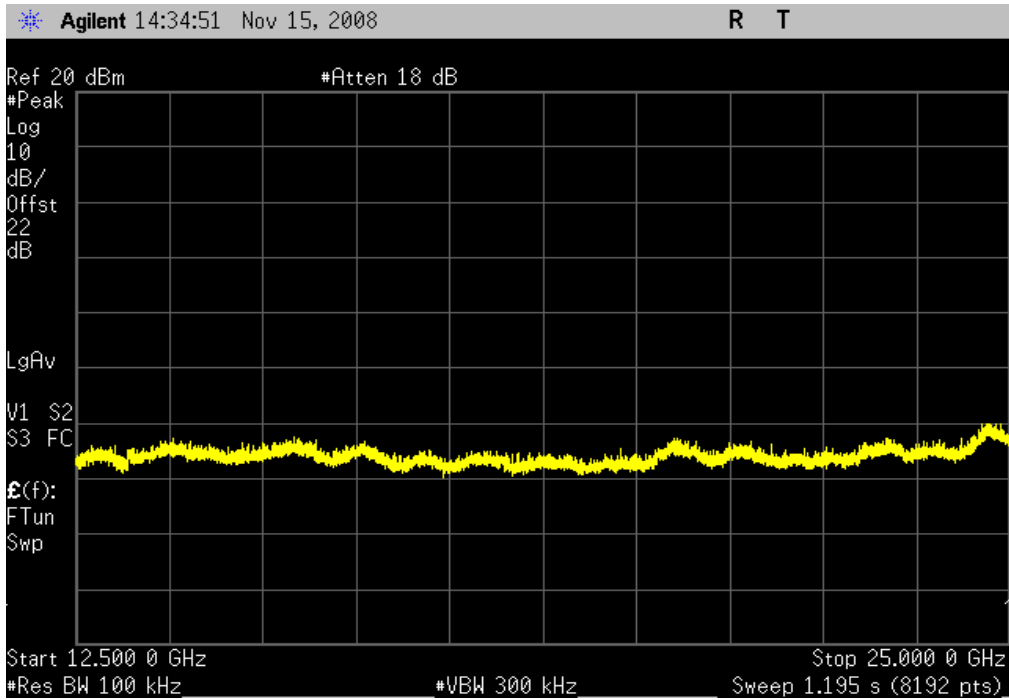
Limit: < -20 dBc



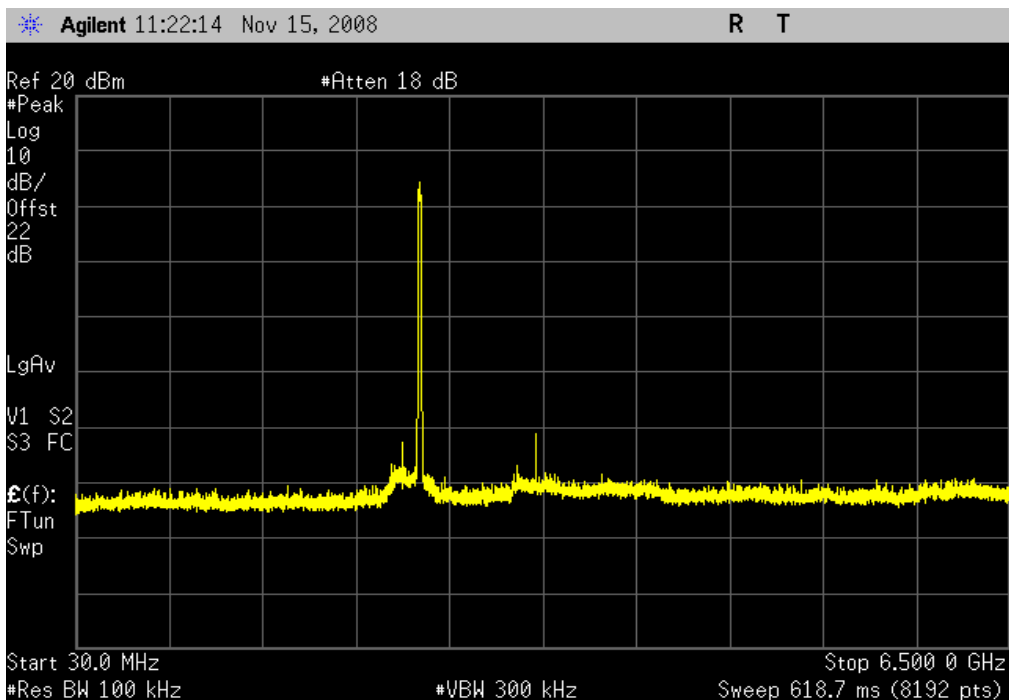
EMC

SPURIOUS CONDUCTED EMISSIONS

802.11(g) 6 Mbps, High Channel, 12.5 GHz - 25 GHz
Result: Pass **Value:** < -40 dBc **Limit:** < -20 dBc



802.11(g) 36 Mbps, Low Channel, 30 MHz - 6.5 GHz
Result: Pass **Value:** < -40 dBc **Limit:** < -20 dBc

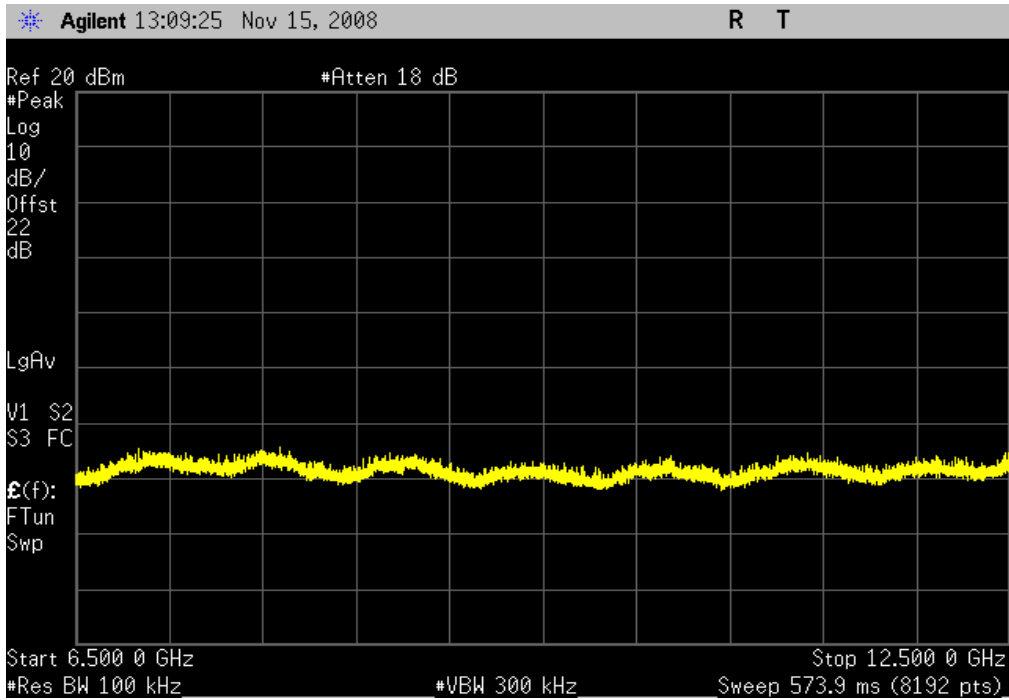


802.11(g) 36 Mbps, Low Channel, 6.5 GHz - 12.5 GHz

Result: Pass

Value: < -40 dBc

Limit: < -20 dBc

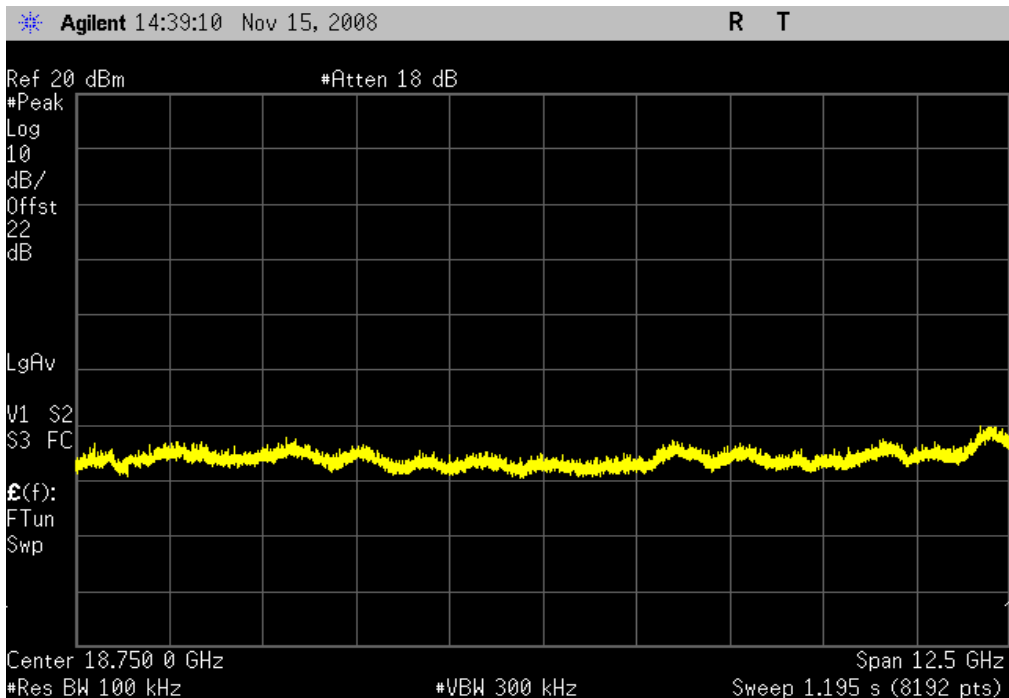


802.11(g) 36 Mbps, Low Channel, 12.5 GHz - 25 GHz

Result: Pass

Value: < -40 dBc

Limit: < -20 dBc

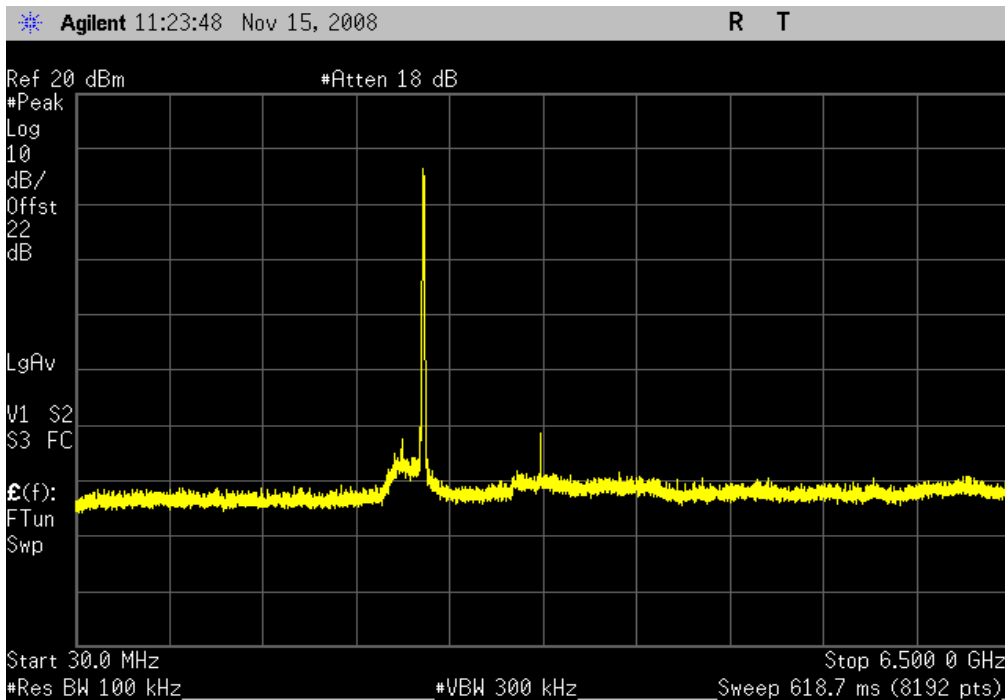


802.11(g) 36 Mbps, Mid Channel, 30 MHz - 6.5 GHz

Result: Pass

Value: < -40 dBc

Limit: < -20 dBc

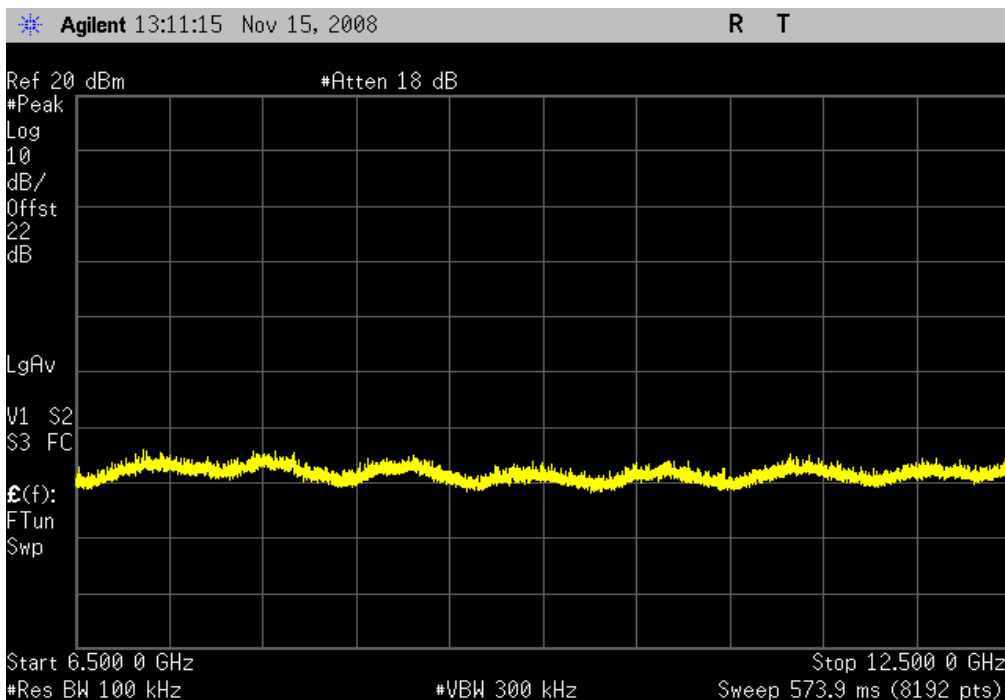


802.11(g) 36 Mbps, Mid Channel, 6.5 GHz - 12.5 GHz

Result: Pass

Value: < -40 dBc

Limit: < -20 dBc

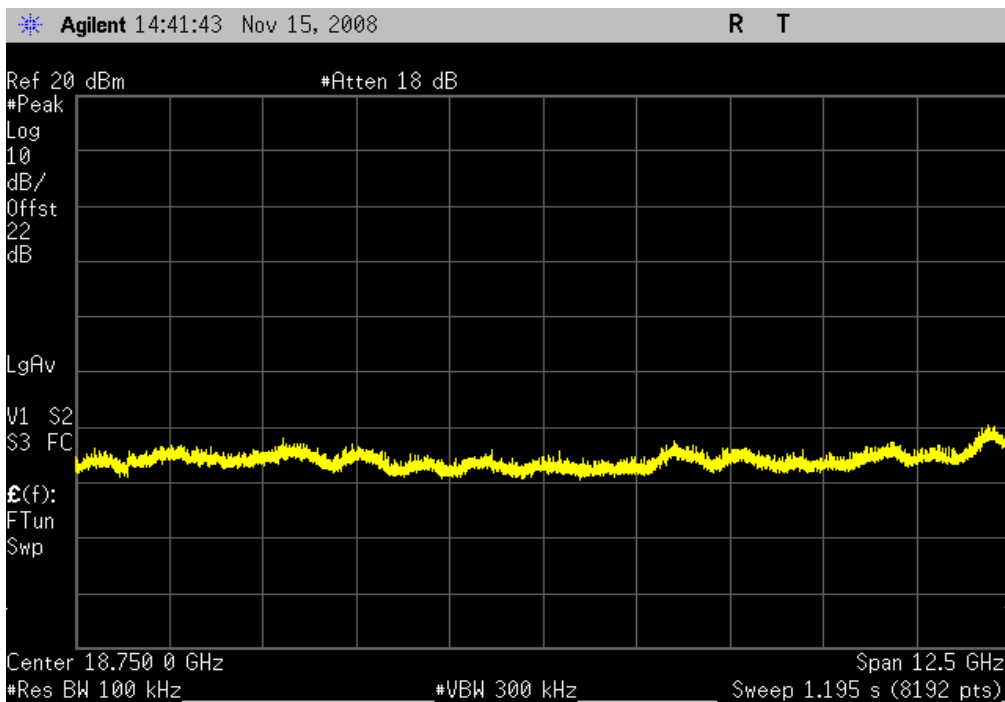


802.11(g) 36 Mbps, Mid Channel, 12.5 GHz - 25 GHz

Result: Pass

Value: < -40 dBc

Limit: < -20 dBc

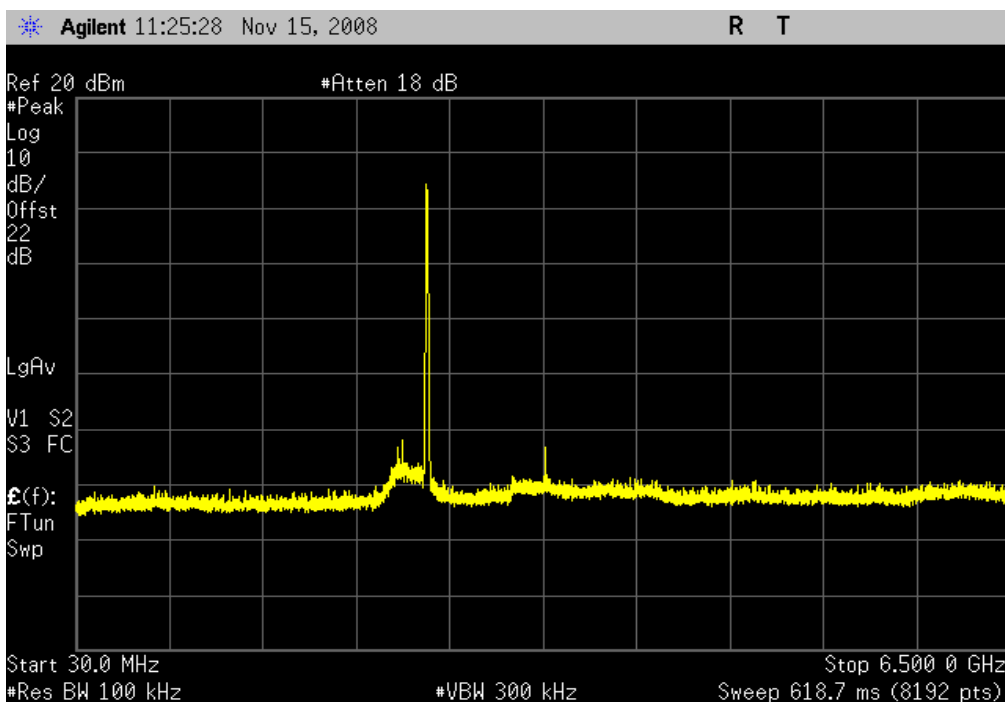


802.11(g) 36 Mbps, High Channel, 30 MHz - 6.5 GHz

Result: Pass

Value: < -40 dBc

Limit: < -20 dBc

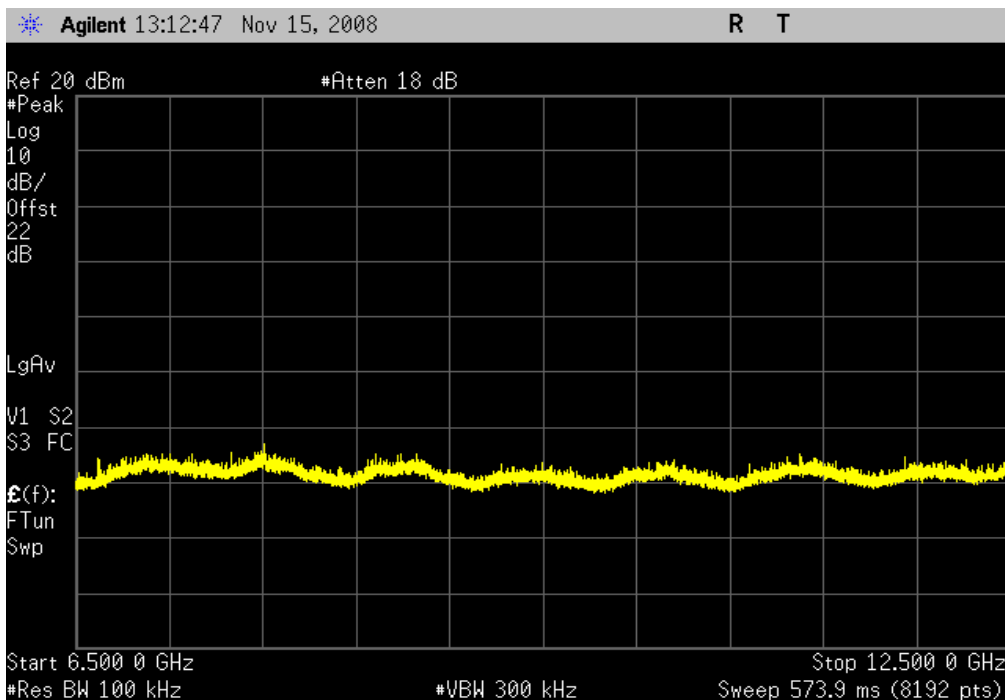


802.11(g) 36 Mbps, High Channel, 6.5 GHz - 12.5 GHz

Result: Pass

Value: < -40 dBc

Limit: < -20 dBc

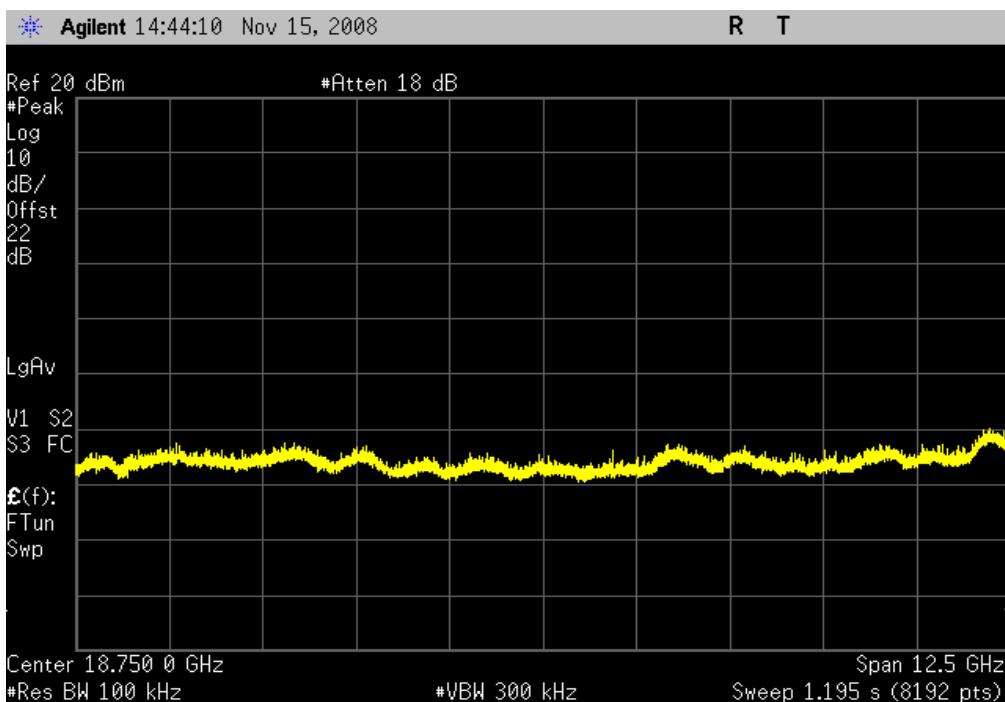


802.11(g) 36 Mbps, High Channel, 12.5 GHz - 25 GHz

Result: Pass

Value: < -40 dBc

Limit: < -20 dBc

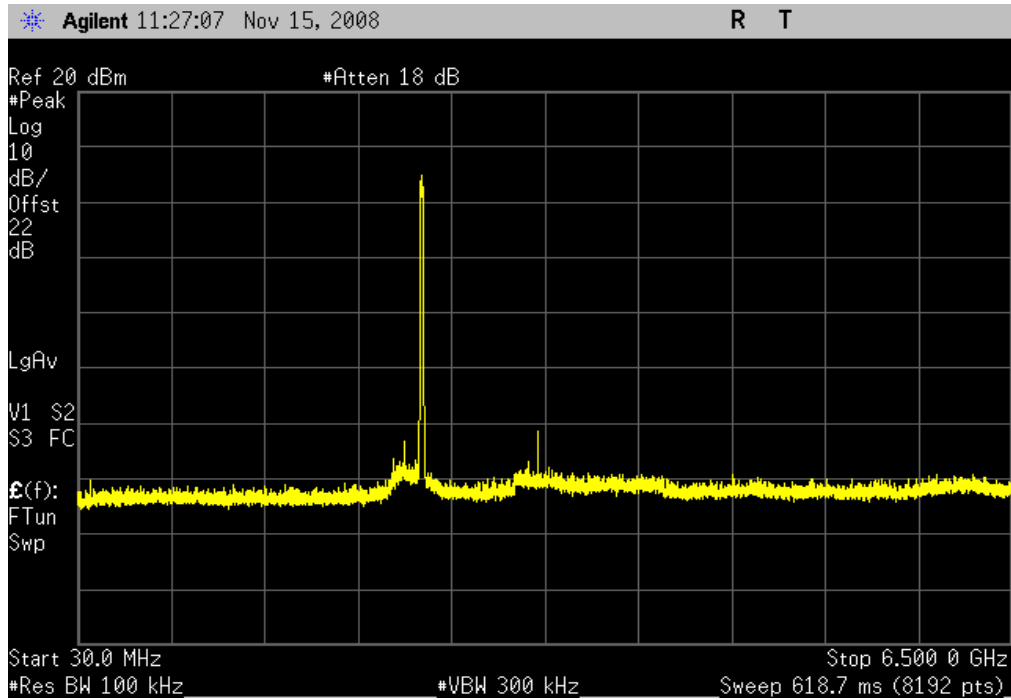


802.11(g) 54 Mbps, Low Channel, 30 MHz - 6.5 GHz

Result: Pass

Value: < -40 dBc

Limit: < -20 dBc

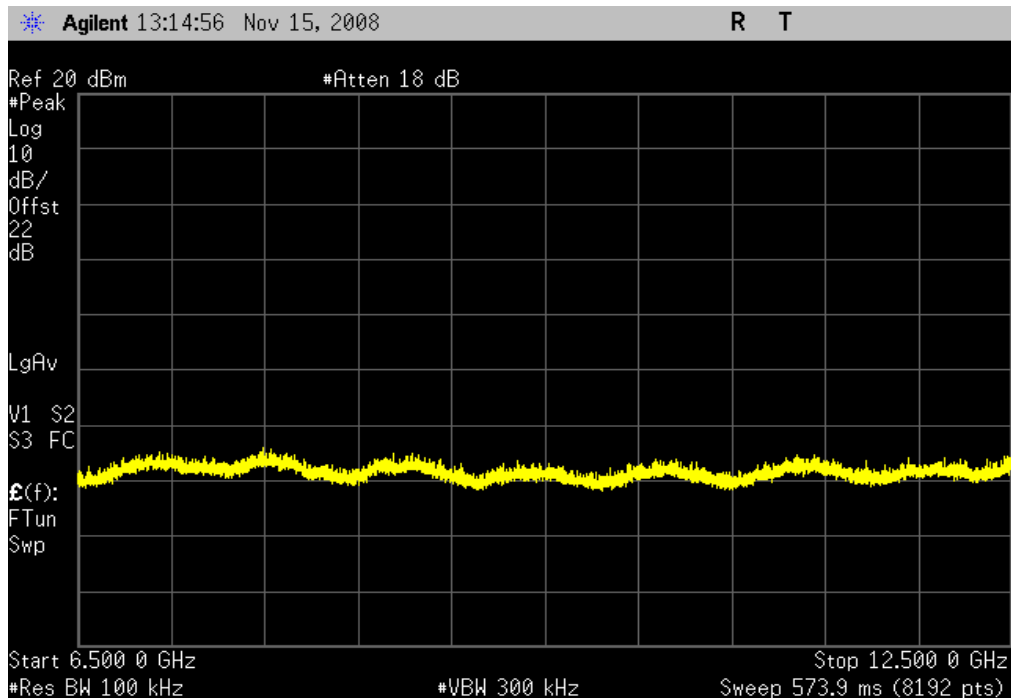


802.11(g) 54 Mbps, Low Channel, 6.5 GHz - 12.5 GHz

Result: Pass

Value: < -40 dBc

Limit: < -20 dBc

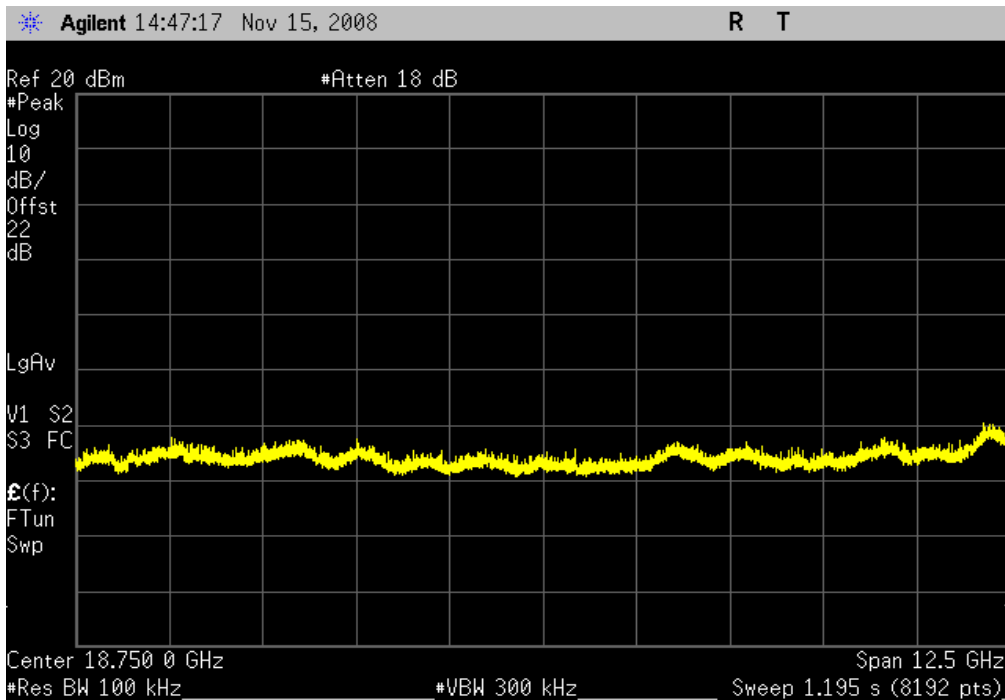


802.11(g) 54 Mbps, Low Channel, 12.5 GHz - 25 GHz

Result: Pass

Value: < -40 dBc

Limit: < -20 dBc

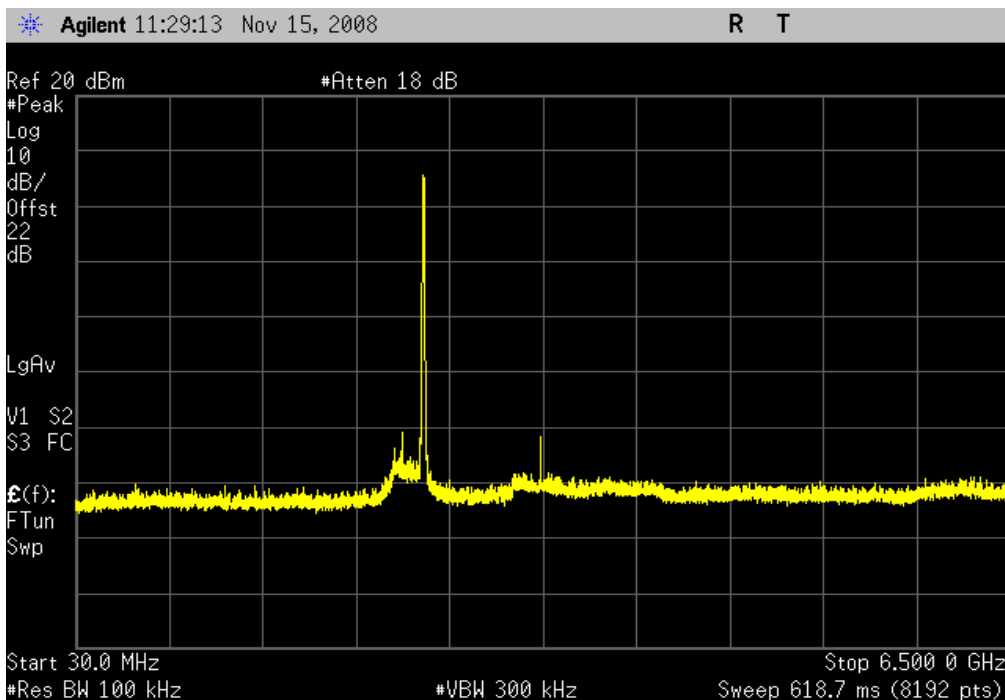


802.11(g) 54 Mbps, Mid Channel, 30 MHz - 6.5 GHz

Result: Pass

Value: < -40 dBc

Limit: < -20 dBc



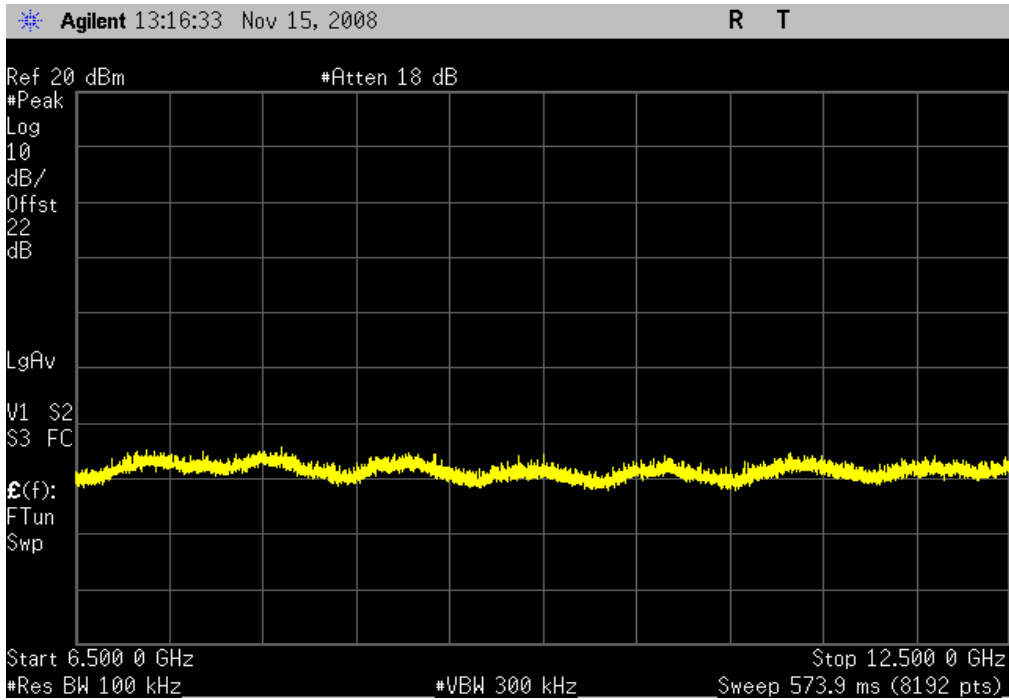
SPURIOUS CONDUCTED EMISSIONS

802.11(g) 54 Mbps, Mid Channel, 6.5 GHz - 12.5 GHz

Result: Pass

Value: < -40 dBc

Limit: < -20 dBc

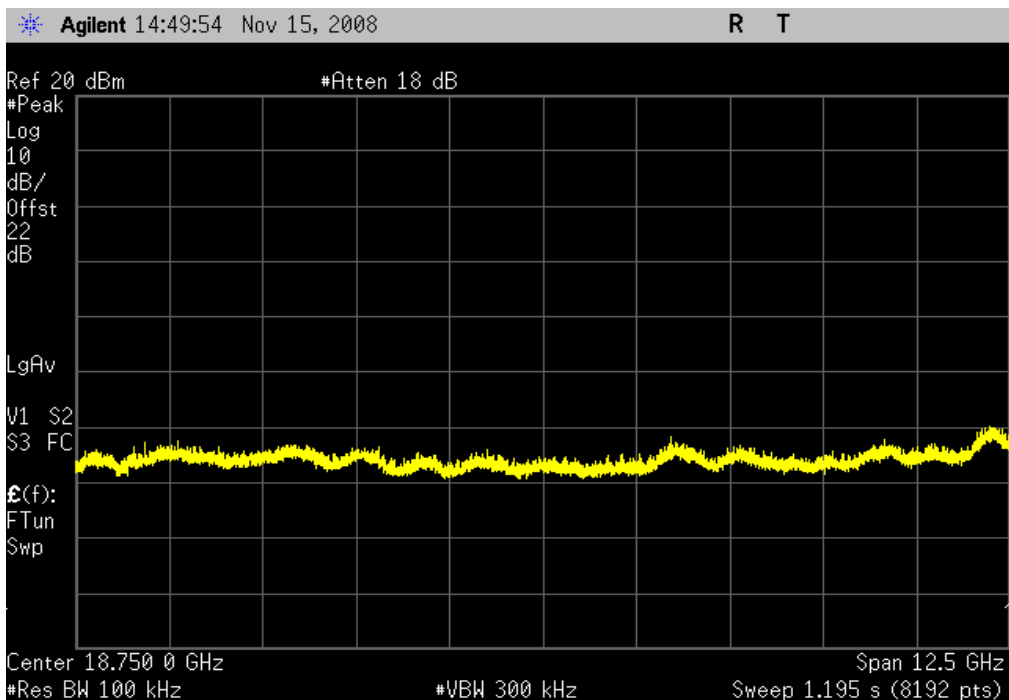


802.11(g) 54 Mbps, Mid Channel, 12.5 GHz - 25 GHz

Result: Pass

Value: < -40 dBc

Limit: < -20 dBc



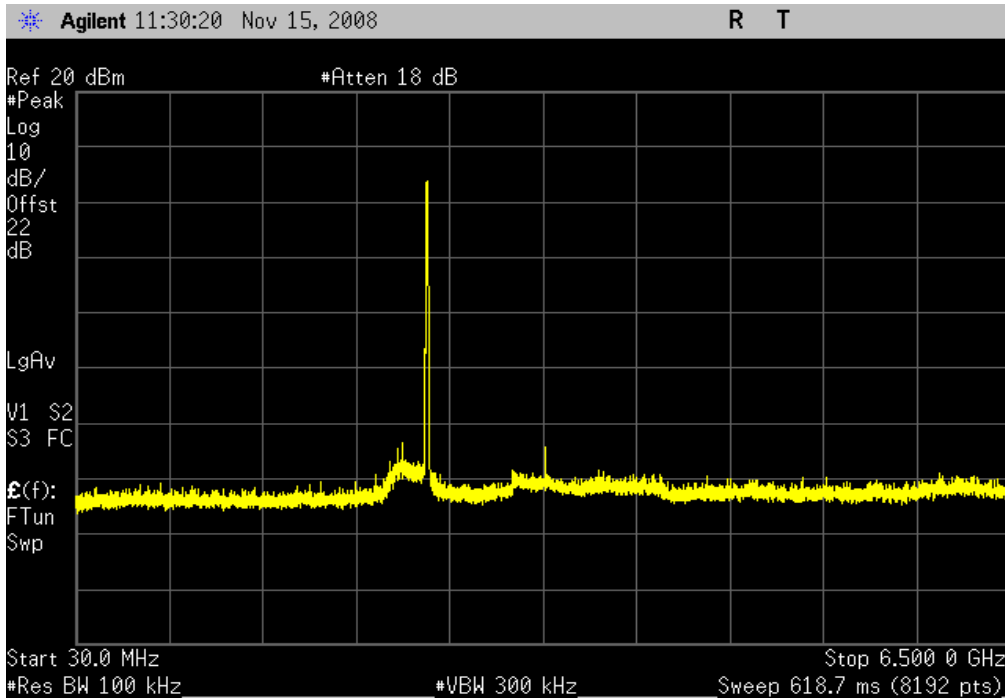
SPURIOUS CONDUCTED EMISSIONS

802.11(g) 54 Mbps, High Channel, 30 MHz - 6.5 GHz

Result: Pass

Value: < -40 dBc

Limit: < -20 dBc

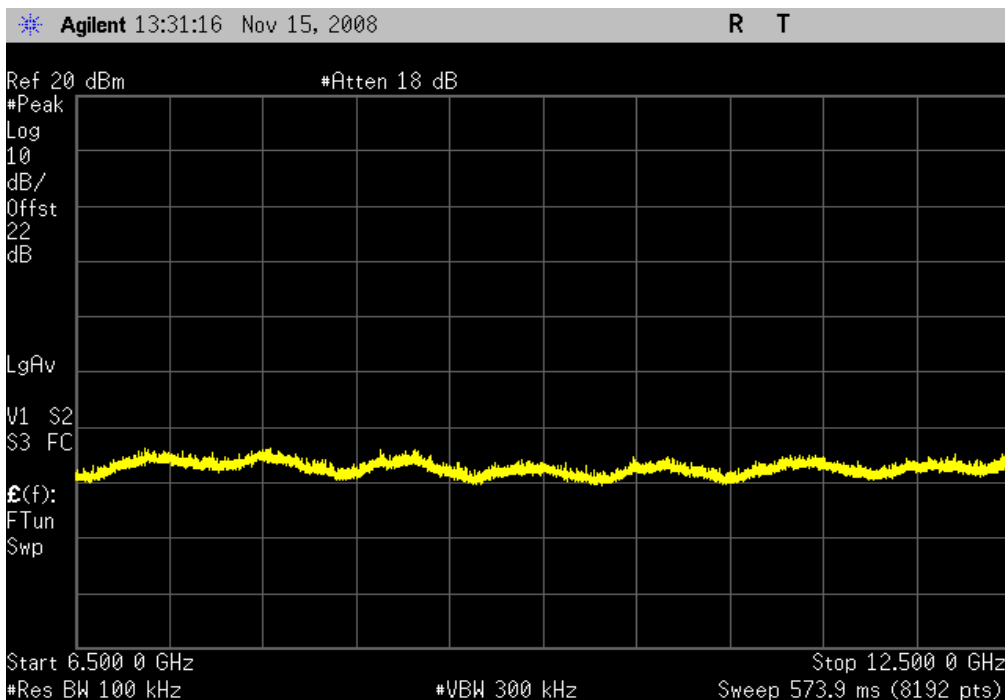


802.11(g) 54 Mbps, High Channel, 6.5 GHz - 12.5 GHz

Result: Pass

Value: < -40 dBc

Limit: < -20 dBc

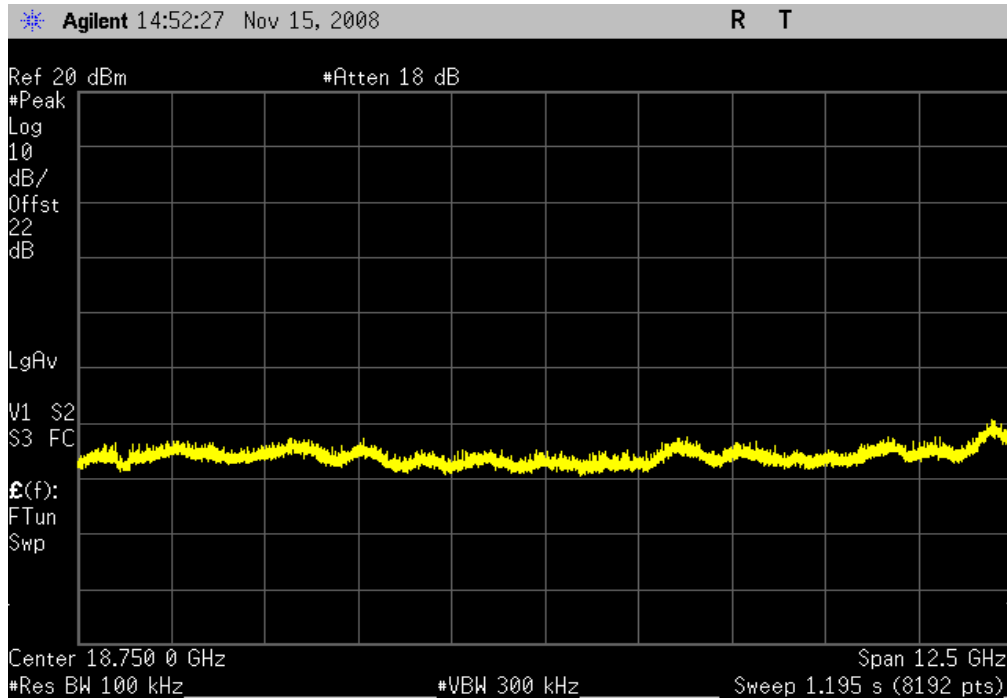


802.11(g) 54 Mbps, High Channel, 12.5 GHz - 25 GHz

Result: Pass

Value: < -40 dBc

Limit: < -20 dBc

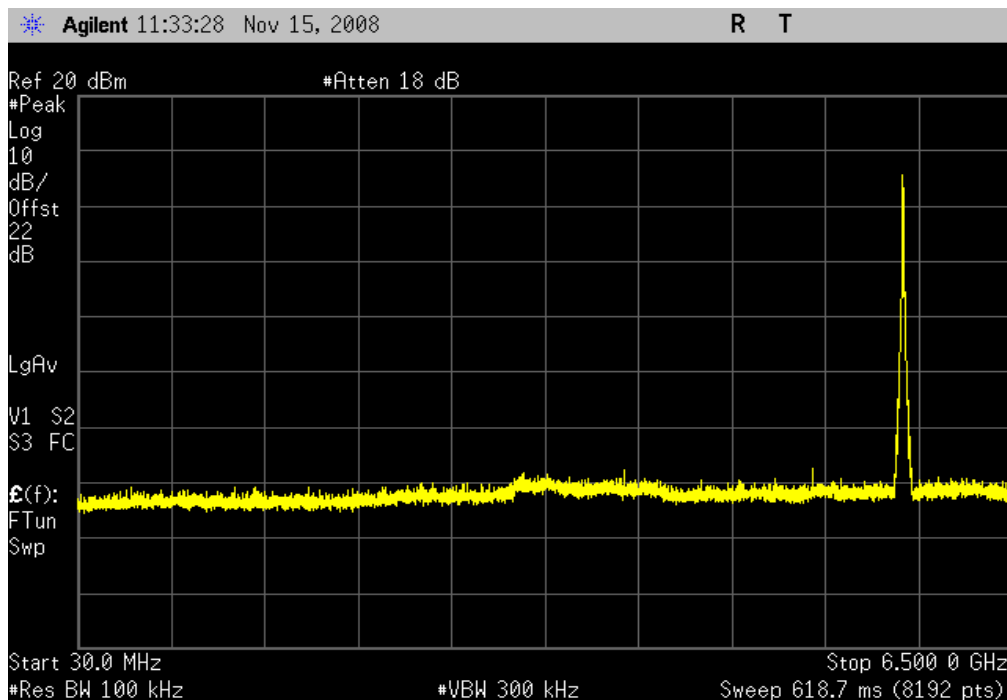


802.11(a) 6 Mbps, Low Channel, 30 MHz - 6.5 GHz

Result: Pass

Value: < -40 dBc

Limit: < -20 dBc

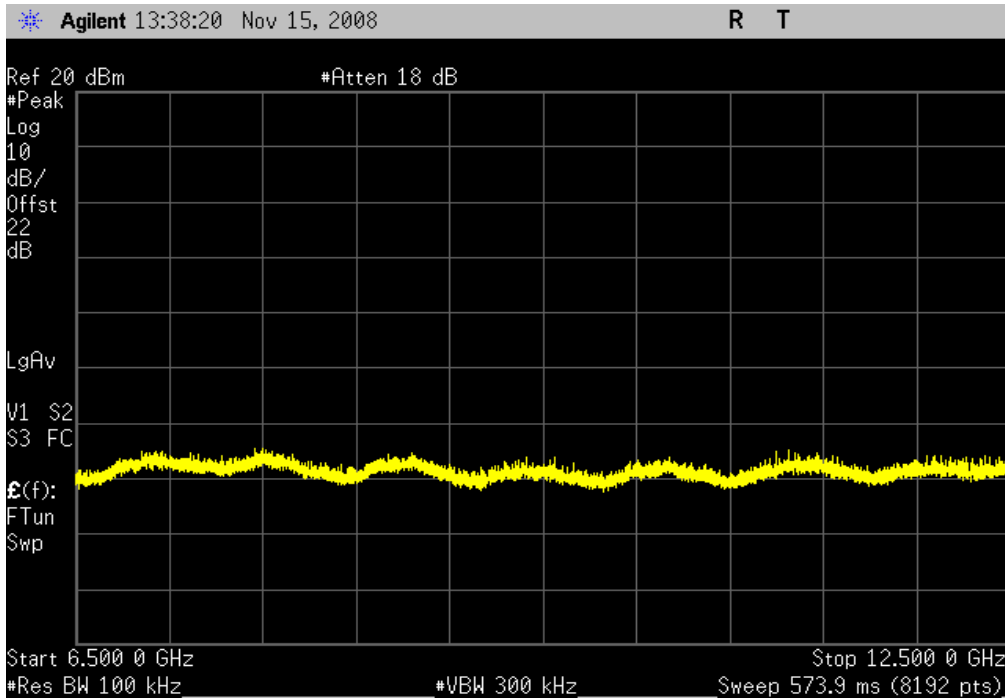


802.11(a) 6 Mbps, Low Channel, 6.5 GHz - 12.5 GHz

Result: Pass

Value: < -40 dBc

Limit: < -20 dBc

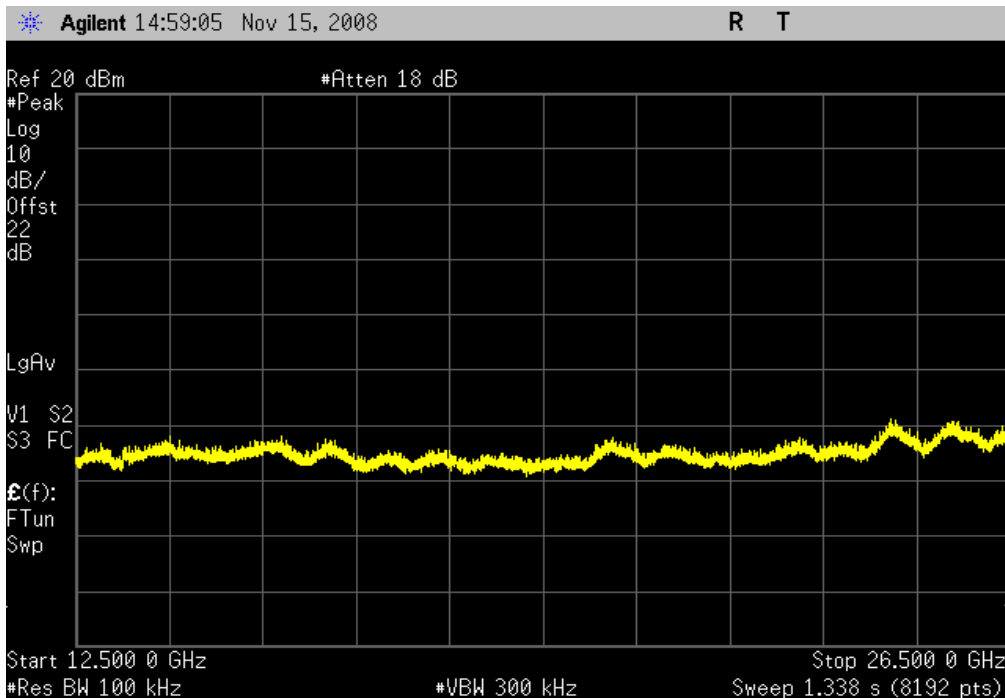


802.11(a) 6 Mbps, Low Channel, 12.5 GHz - 26.5 GHz

Result: Pass

Value: < -40 dBc

Limit: < -20 dBc

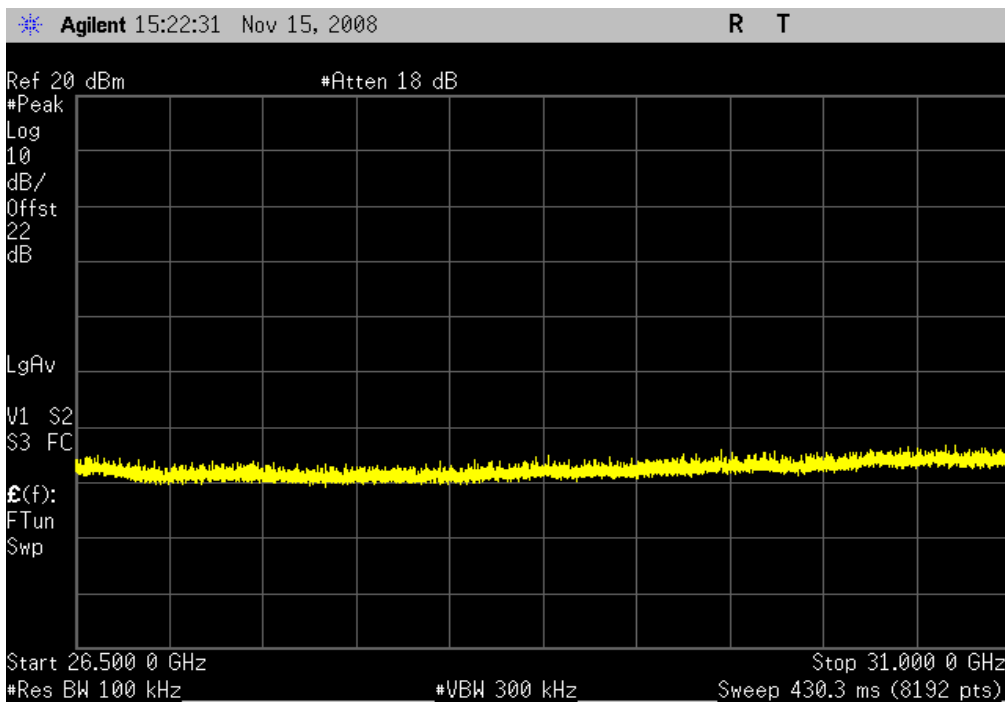


802.11(a) 6 Mbps, Low Channel, 26.5 GHz - 31 GHz

Result: Pass

Value: < -40 dBc

Limit: < -20 dBc

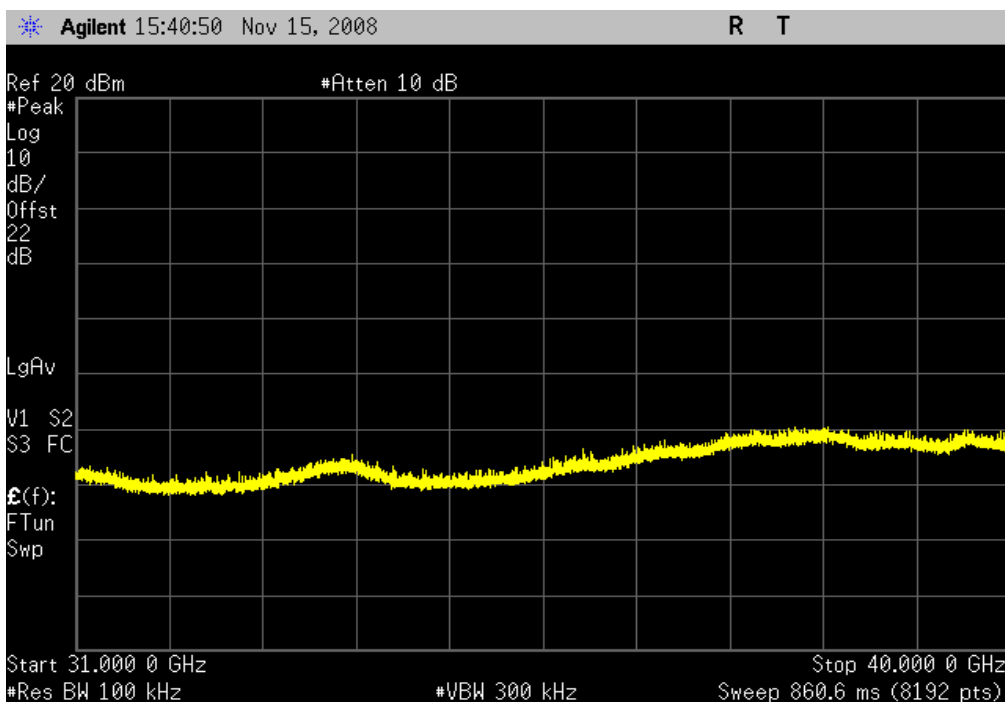


802.11(a) 6 Mbps, Low Channel, 31 GHz - 40 GHz

Result: Pass

Value: < -40 dBc

Limit: < -20 dBc

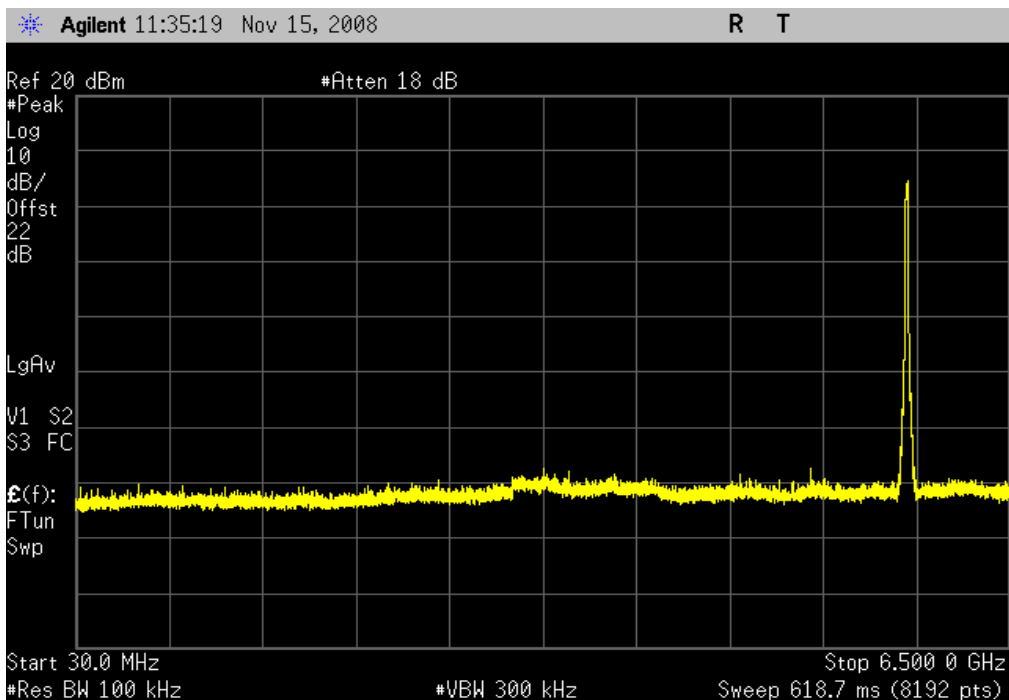


802.11(a) 6 Mbps, Mid Channel, 30 MHz - 6.5 GHz

Result: Pass

Value: < -40 dBc

Limit: < -20 dBc

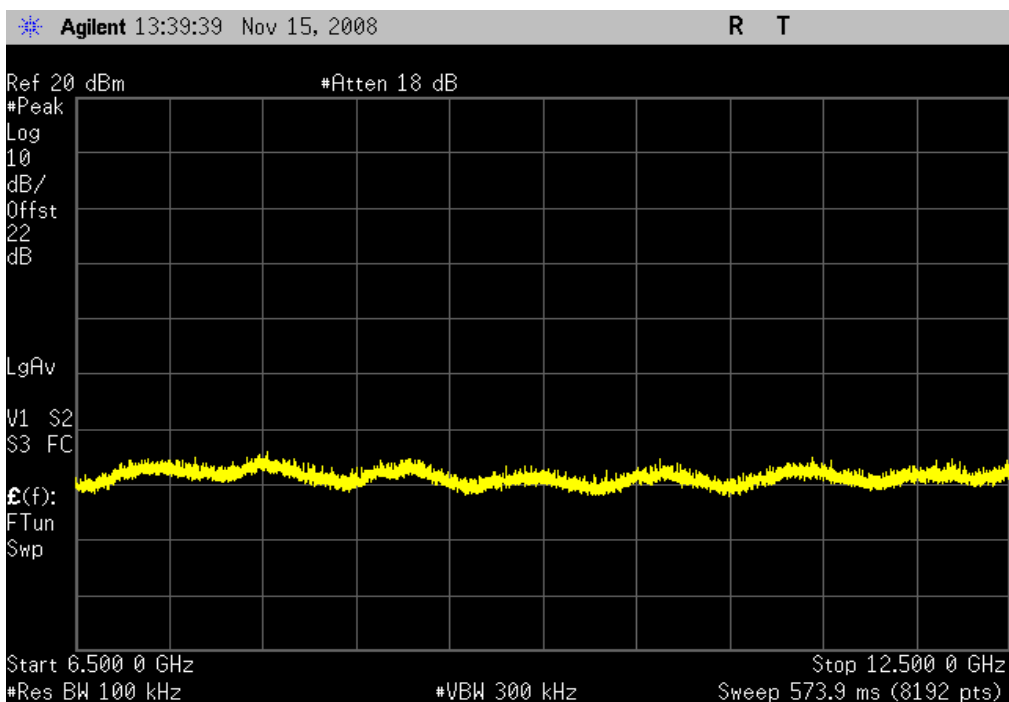


802.11(a) 6 Mbps, Mid Channel, 6.5 GHz - 12.5 GHz

Result: Pass

Value: < -40 dBc

Limit: < -20 dBc

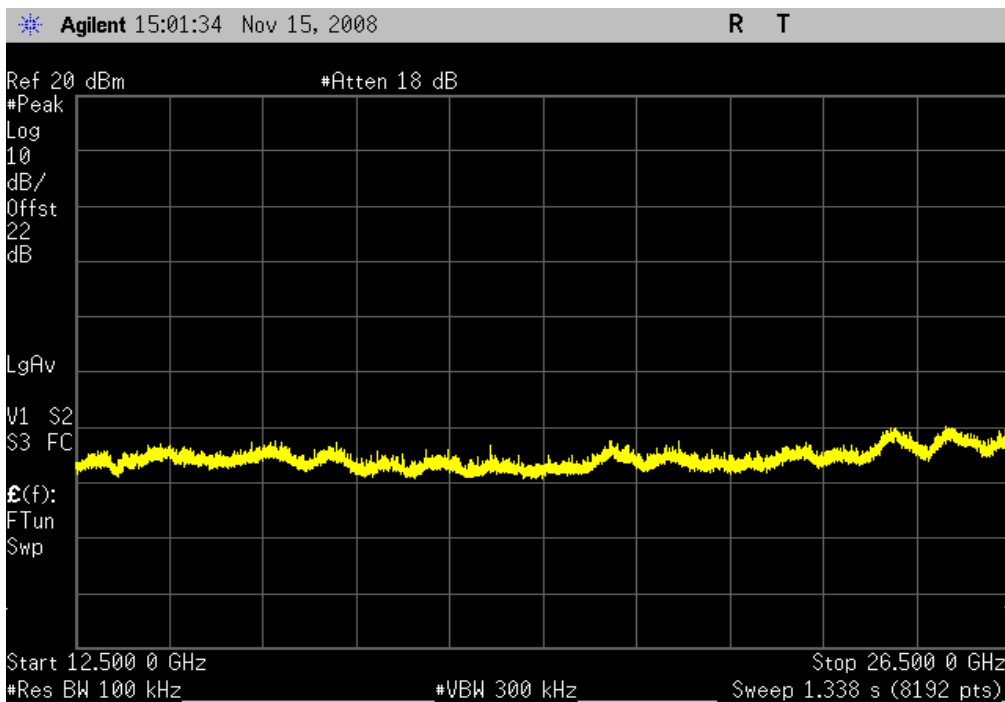


802.11(a) 6 Mbps, Mid Channel, 12.5 GHz - 26.5 GHz

Result: Pass

Value: < -40 dBc

Limit: < -20 dBc

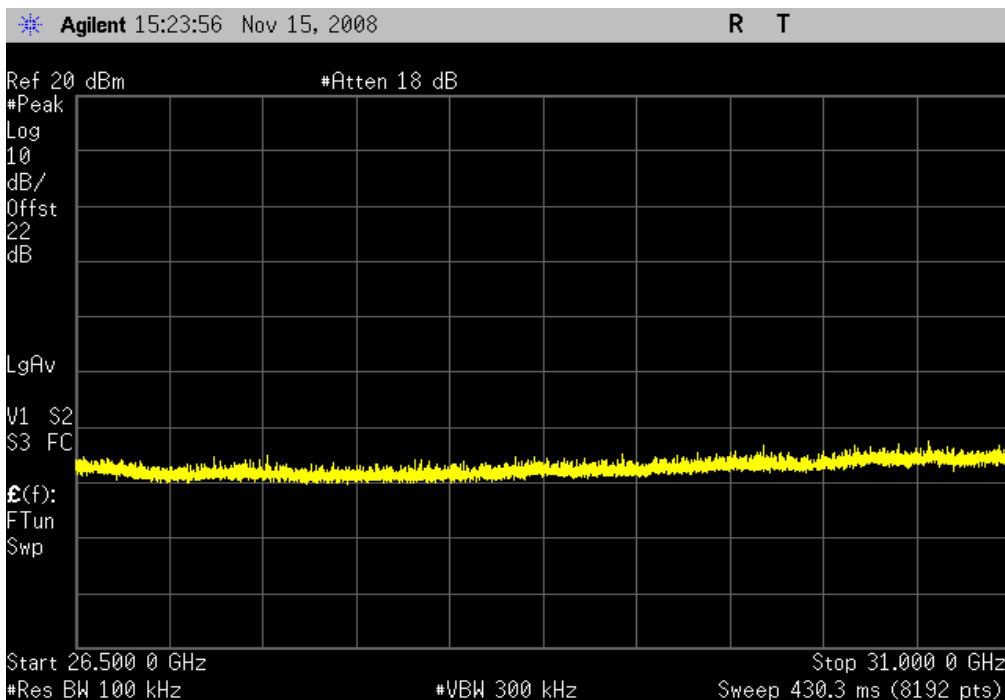


802.11(a) 6 Mbps, Mid Channel, 26.5 GHz - 31 GHz

Result: Pass

Value: < -40 dBc

Limit: < -20 dBc

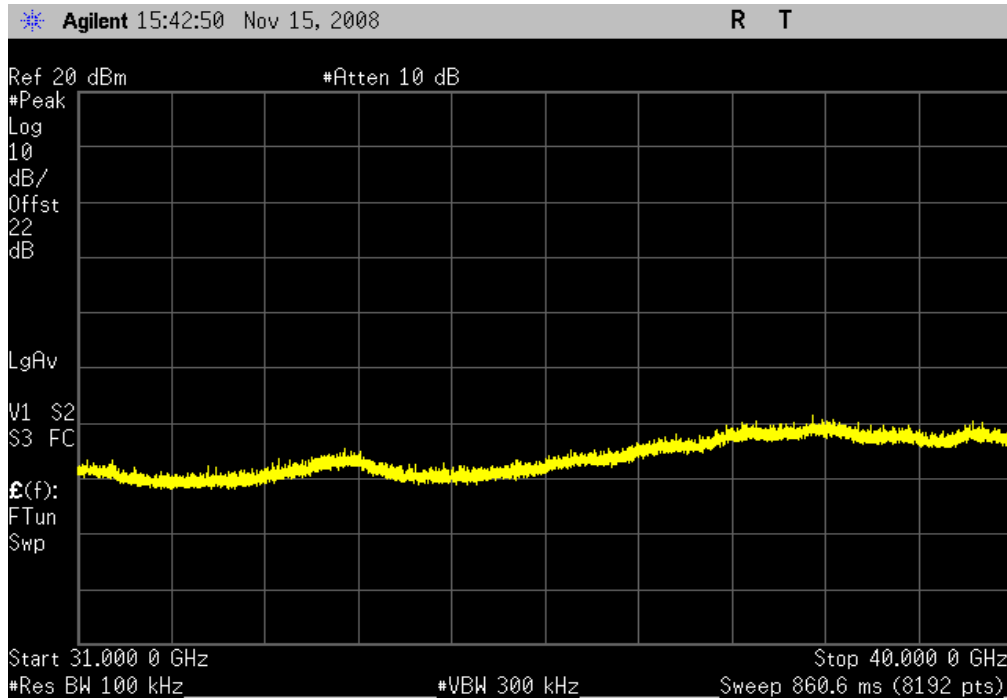


802.11(a) 6 Mbps, Mid Channel, 31 GHz - 40 GHz

Result: Pass

Value: < -40 dBc

Limit: < -20 dBc

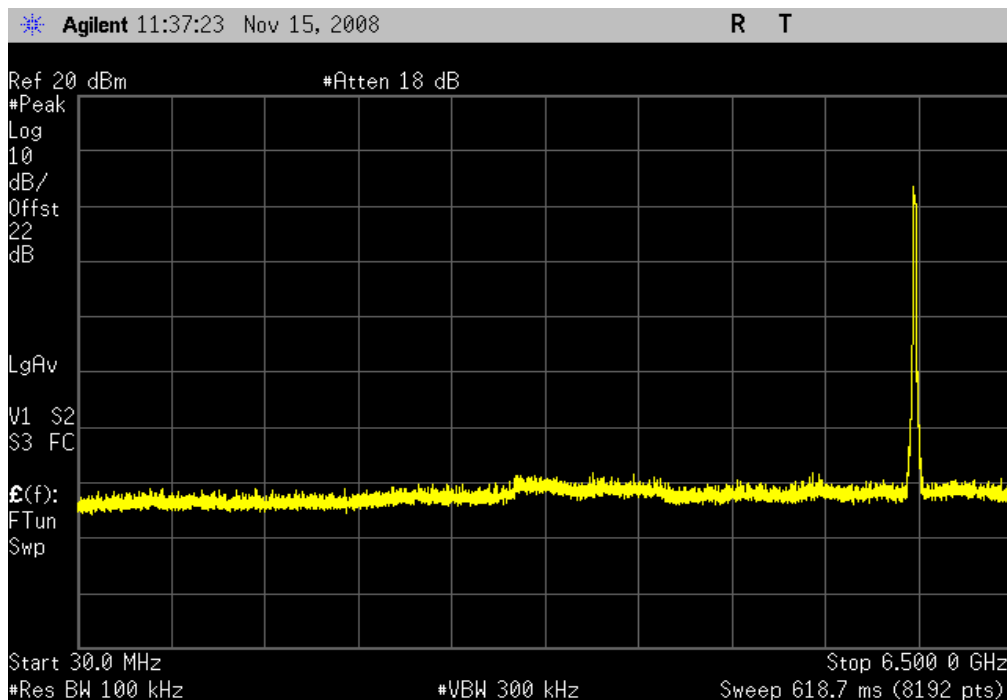


802.11(a) 6 Mbps, High Channel, 30 MHz - 6.5 GHz

Result: Pass

Value: < -40 dBc

Limit: < -20 dBc

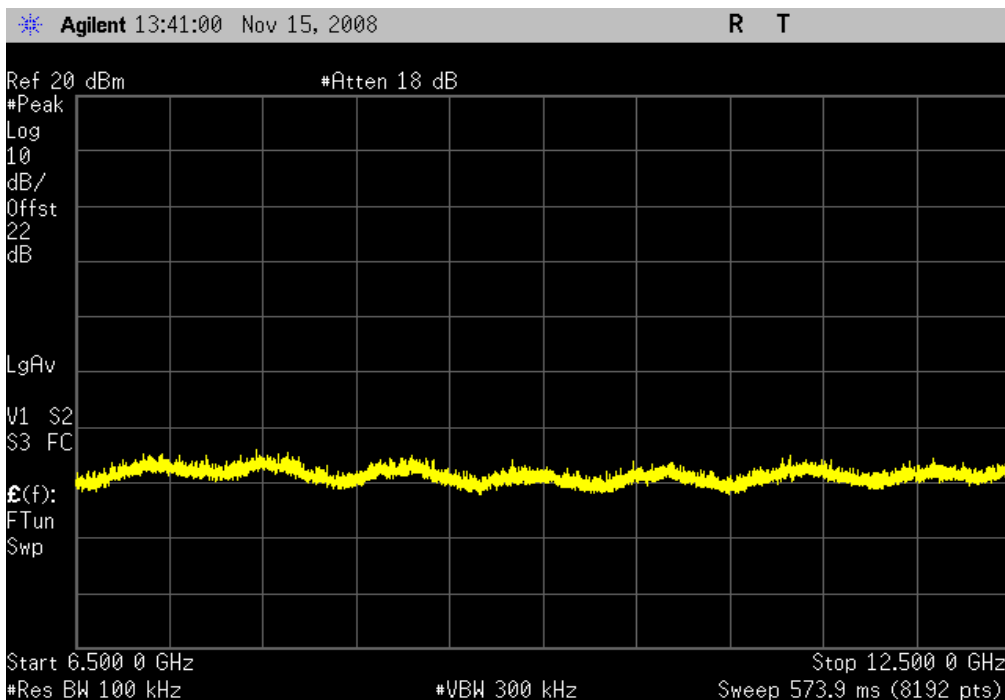


802.11(a) 6 Mbps, High Channel, 6.5 GHz - 12.5 GHz

Result: Pass

Value: < -40 dBc

Limit: < -20 dBc

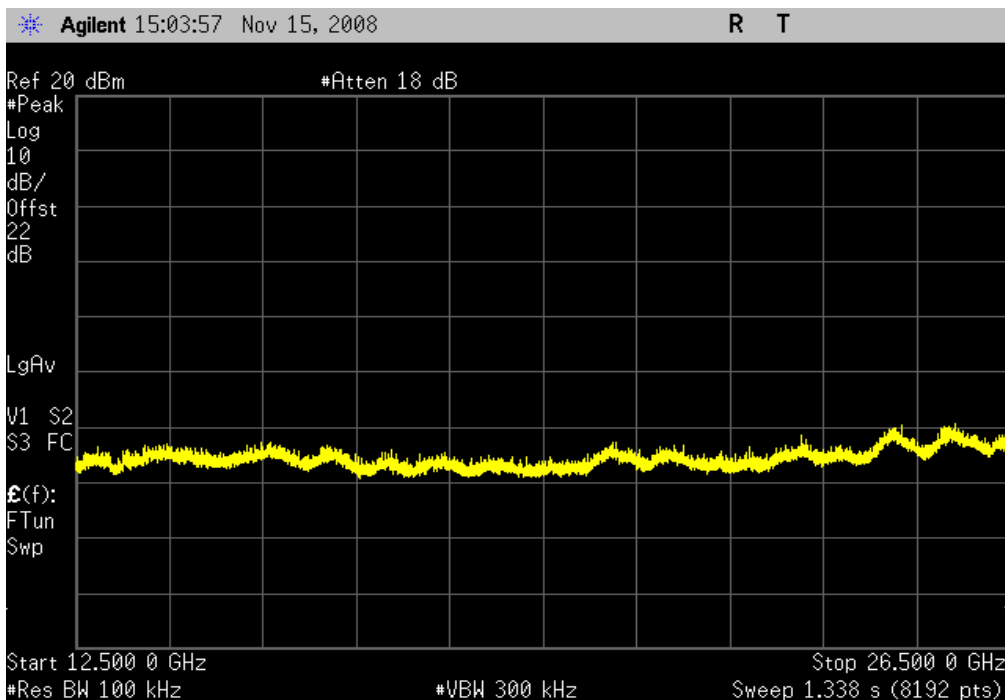


802.11(a) 6 Mbps, High Channel, 12.5 GHz - 26.5 GHz

Result: Pass

Value: < -40 dBc

Limit: < -20 dBc

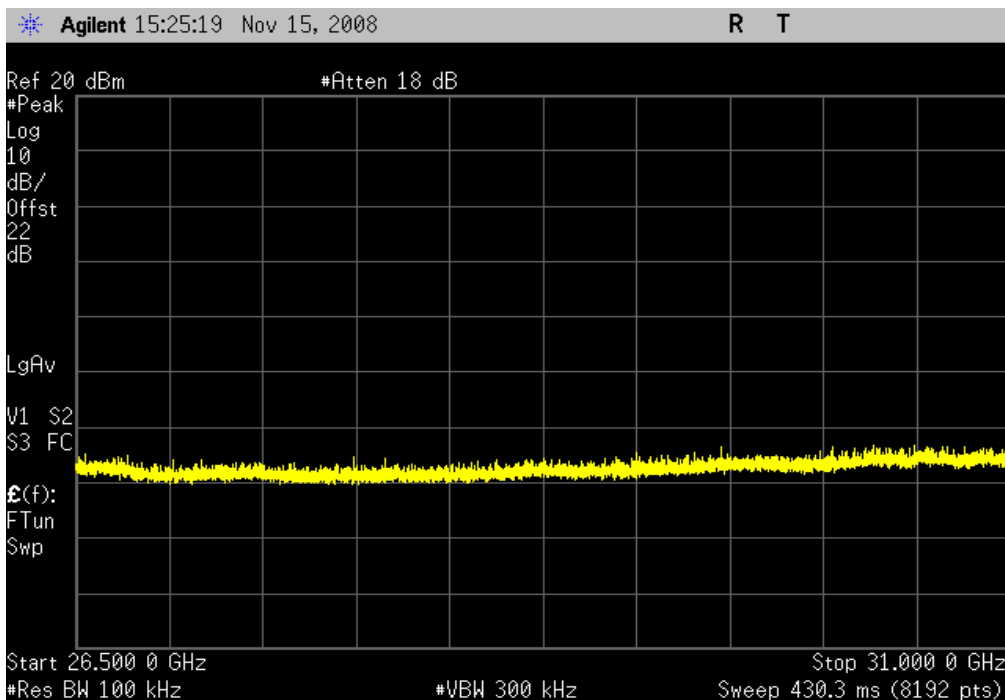


802.11(a) 6 Mbps, High Channel, 26.5 GHz - 31 GHz

Result: Pass

Value: < -40 dBc

Limit: < -20 dBc

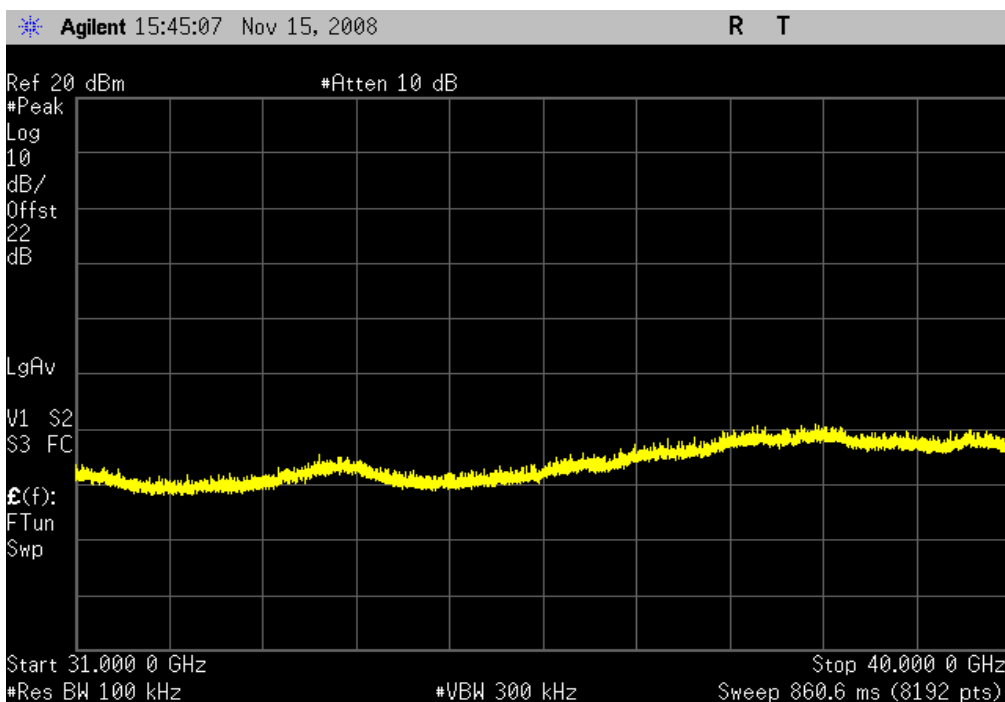


802.11(a) 6 Mbps, High Channel, 31 GHz - 40 GHz

Result: Pass

Value: < -40 dBc

Limit: < -20 dBc

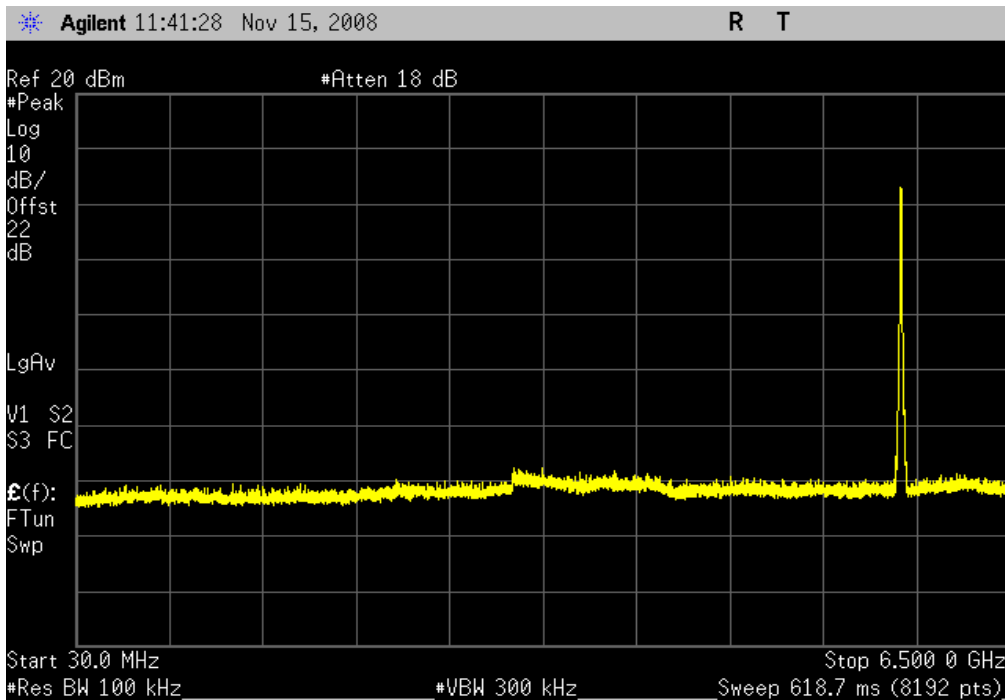


802.11(a) 36 Mbps, Low Channel, 30 MHz - 6.5 GHz

Result: Pass

Value: < -40 dBc

Limit: < -20 dBc

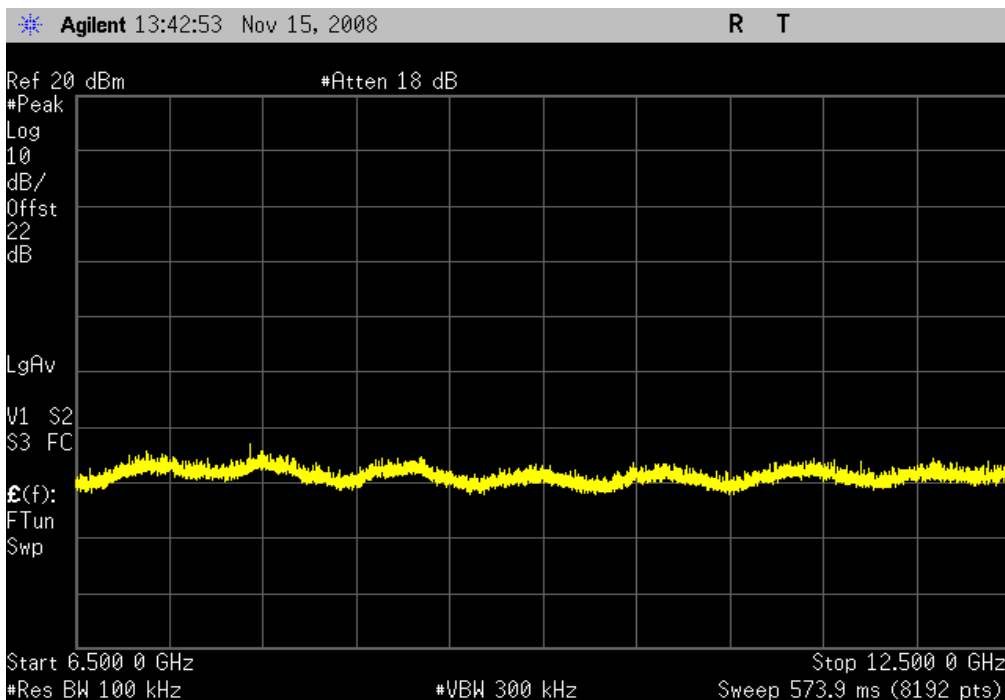


802.11(a) 36 Mbps, Low Channel, 6.5 GHz - 12.5 GHz

Result: Pass

Value: < -40 dBc

Limit: < -20 dBc

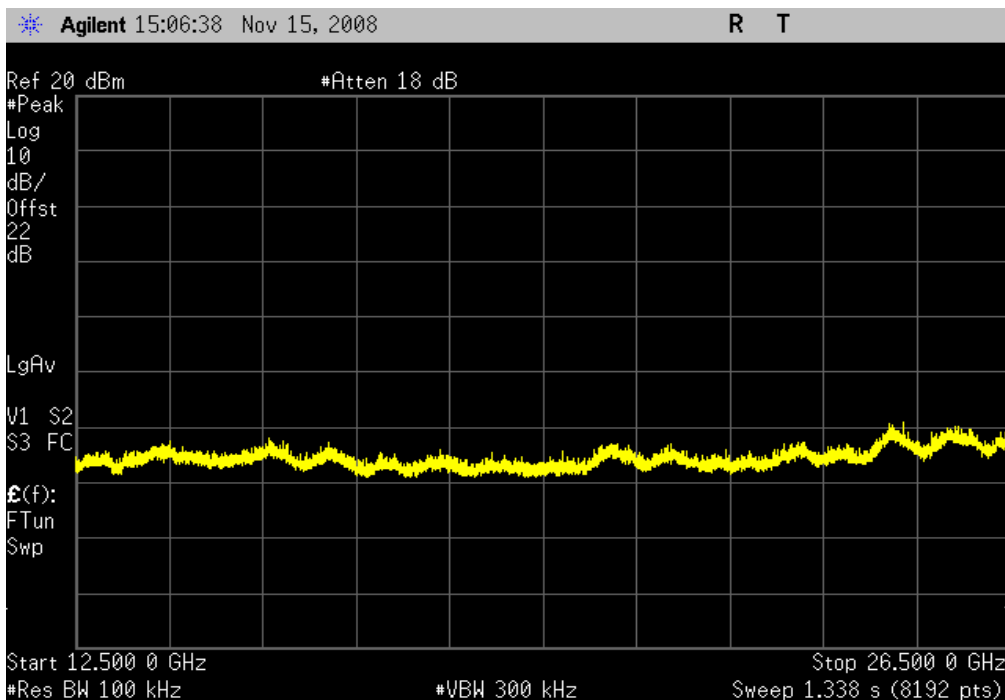


802.11(a) 36 Mbps, Low Channel, 12.5 GHz - 26.5 GHz

Result: Pass

Value: < -40 dBc

Limit: < -20 dBc

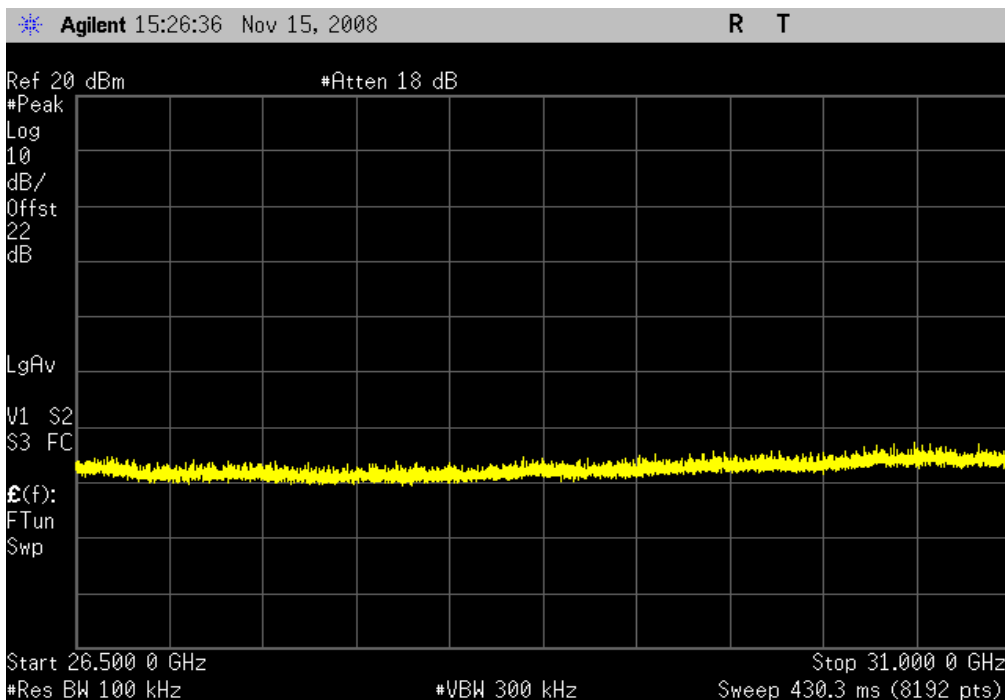


802.11(a) 36 Mbps, Low Channel, 26.5 GHz - 31 GHz

Result: Pass

Value: < -40 dBc

Limit: < -20 dBc

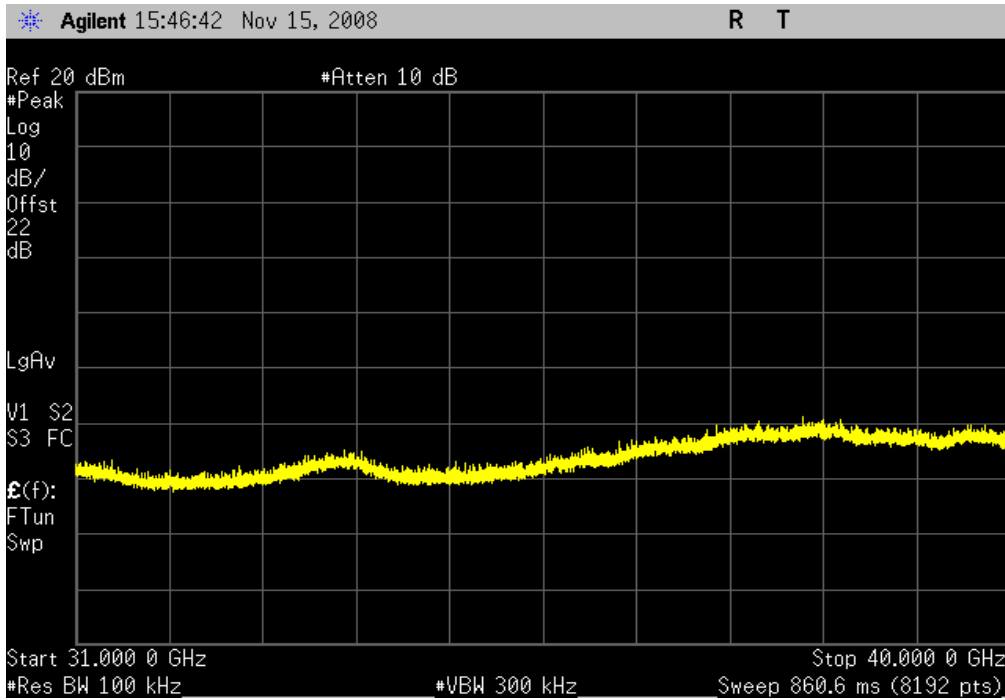


802.11(a) 36 Mbps, Low Channel, 31 GHz - 40 GHz

Result: Pass

Value: < -40 dBc

Limit: < -20 dBc

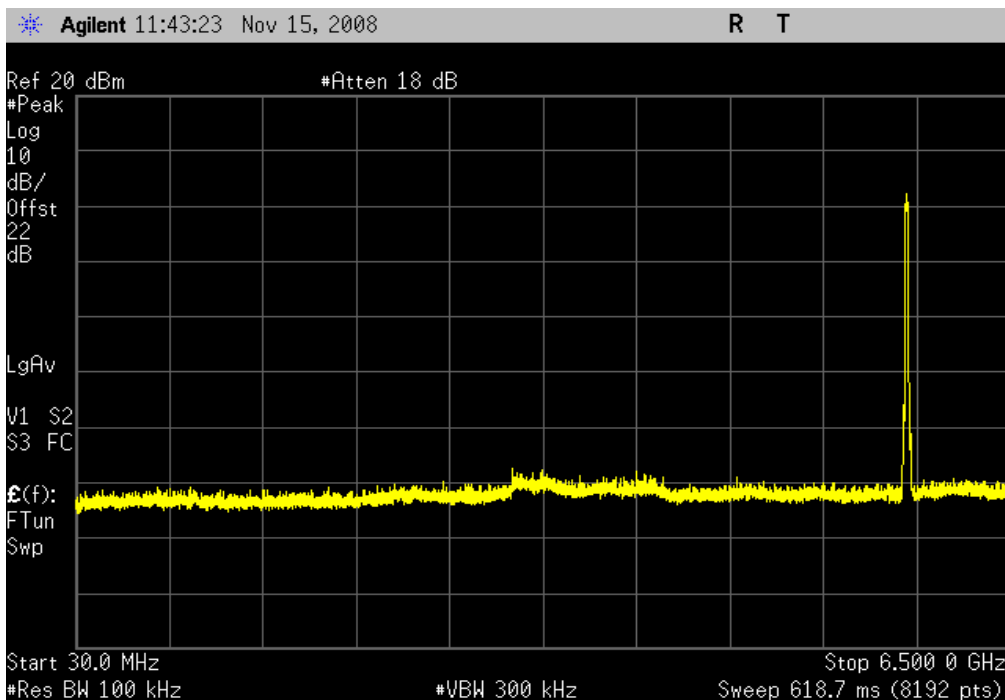


802.11(a) 36 Mbps, Mid Channel, 30 MHz - 6.5 GHz

Result: Pass

Value: < -40 dBc

Limit: < -20 dBc

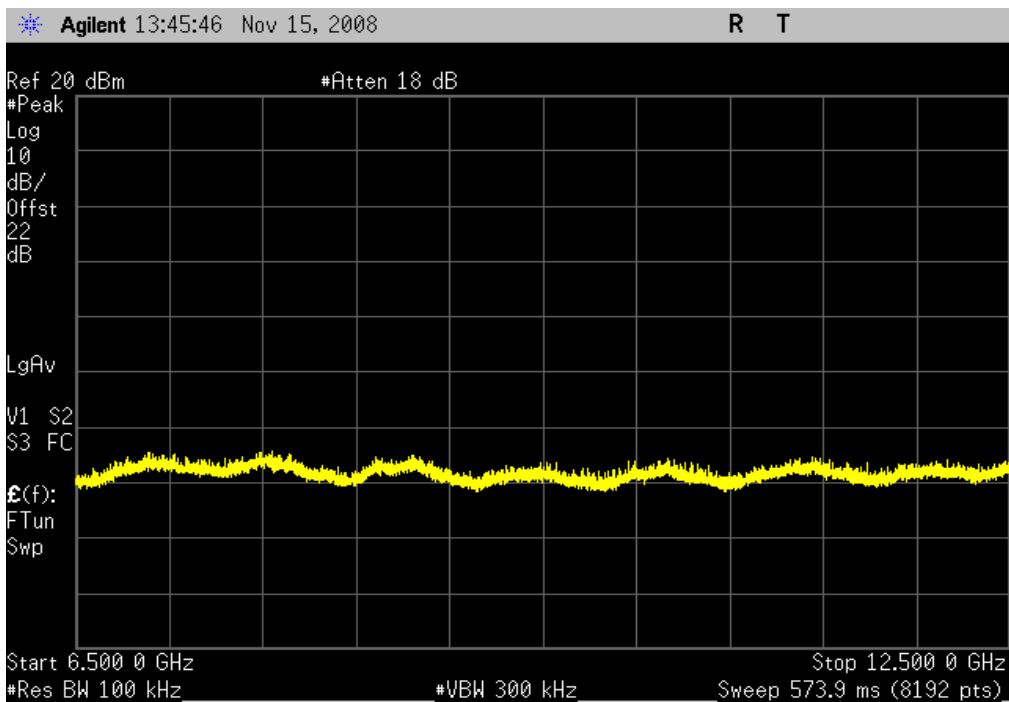


802.11(a) 36 Mbps, Mid Channel, 6.5 GHz - 12.5 GHz

Result: Pass

Value: < -40 dBc

Limit: < -20 dBc

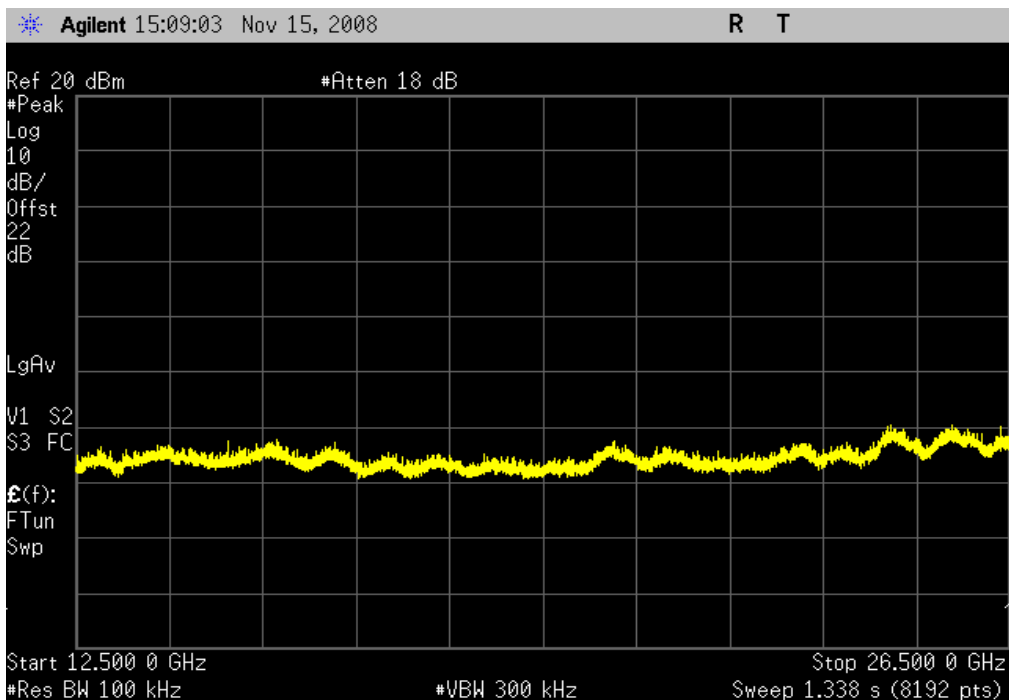


802.11(a) 36 Mbps, Mid Channel, 12.5 GHz - 26.5 GHz

Result: Pass

Value: < -40 dBc

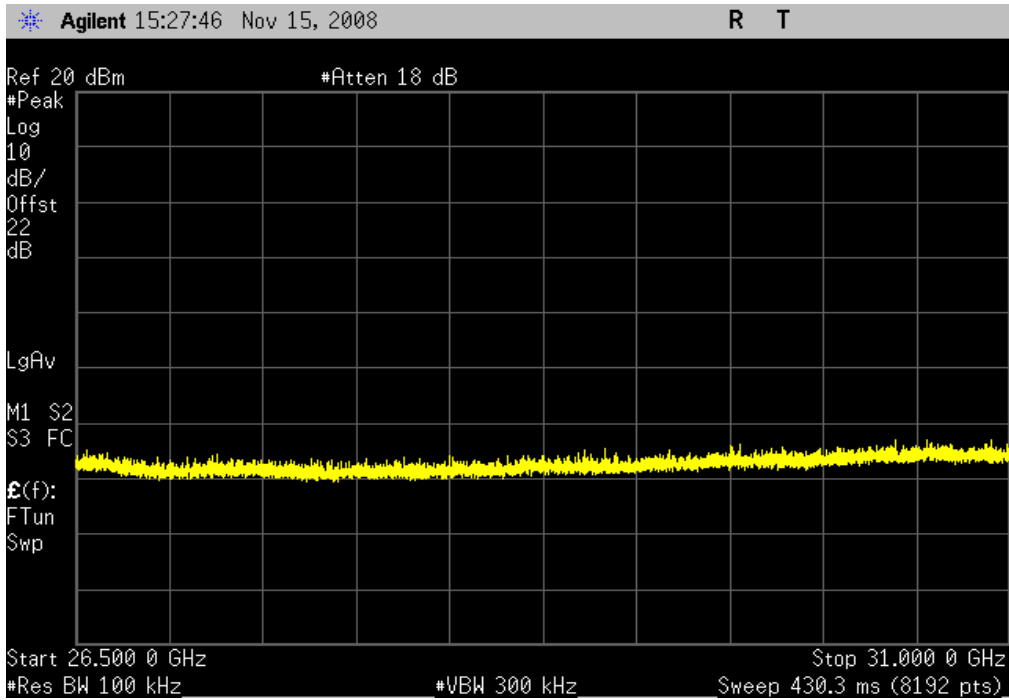
Limit: < -20 dBc



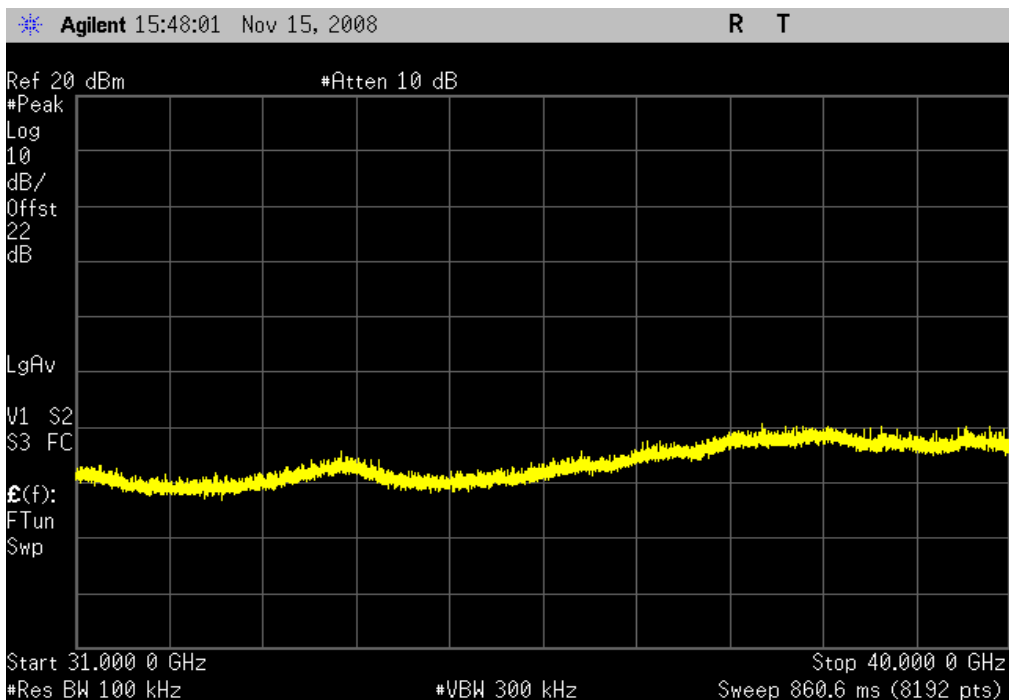
EMC

SPURIOUS CONDUCTED EMISSIONS

802.11(a) 36 Mbps, Mid Channel, 26.5 GHz - 31 GHz
Result: Pass **Value:** < -40 dBc **Limit:** < -20 dBc



802.11(a) 36 Mbps, Mid Channel, 31 GHz - 40 GHz
Result: Pass **Value:** < -40 dBc **Limit:** < -20 dBc

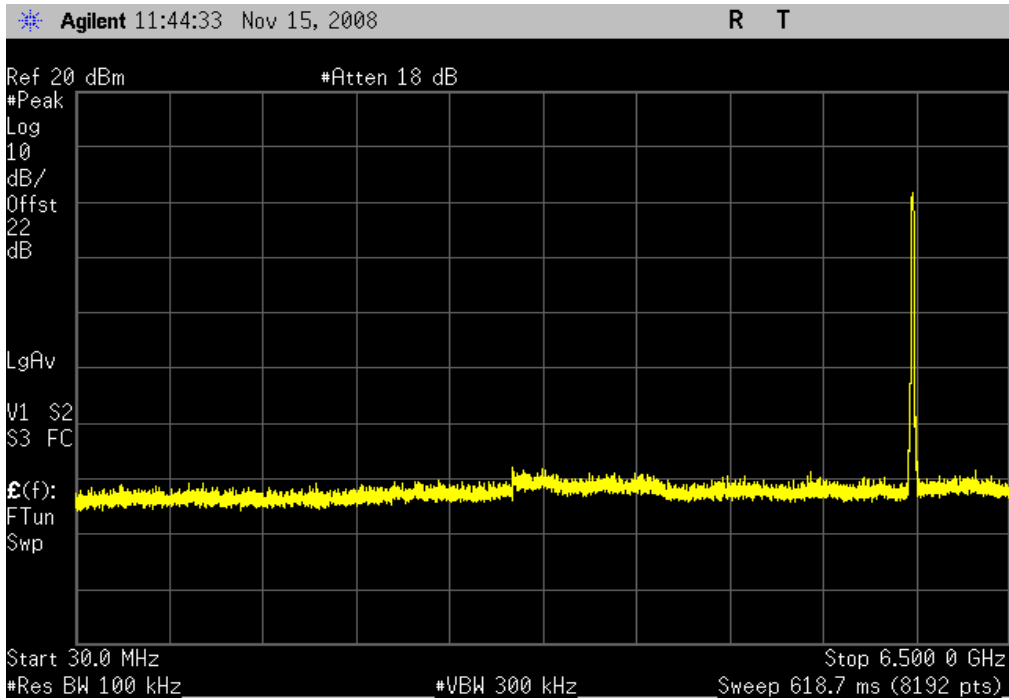


802.11(a) 36 Mbps, High Channel, 30 MHz - 6.5 GHz

Result: Pass

Value: < -40 dBc

Limit: < -20 dBc

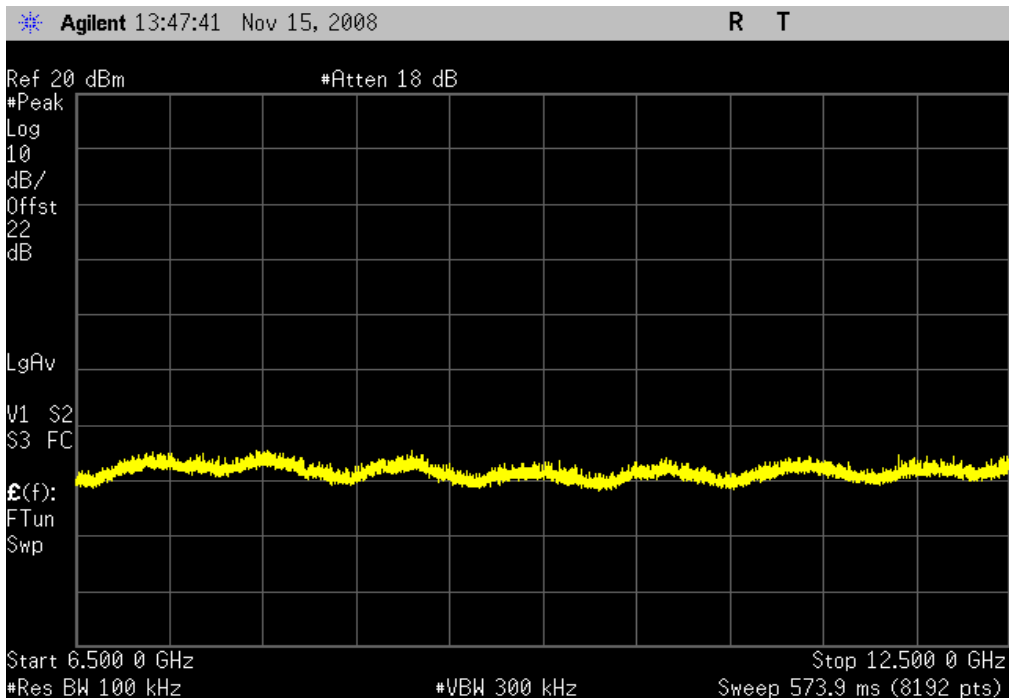


802.11(a) 36 Mbps, High Channel, 6.5 GHz - 12.5 GHz

Result: Pass

Value: < -40 dBc

Limit: < -20 dBc



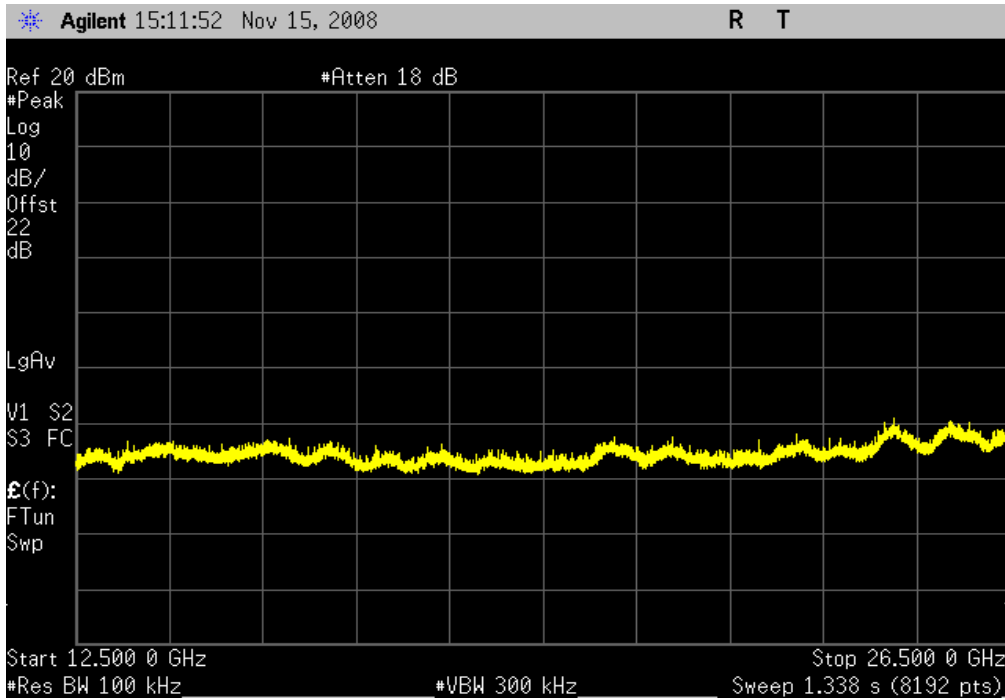
SPURIOUS CONDUCTED EMISSIONS

802.11(a) 36 Mbps, High Channel, 12.5 GHz - 26.5 GHz

Result: Pass

Value: < -40 dBc

Limit: < -20 dBc

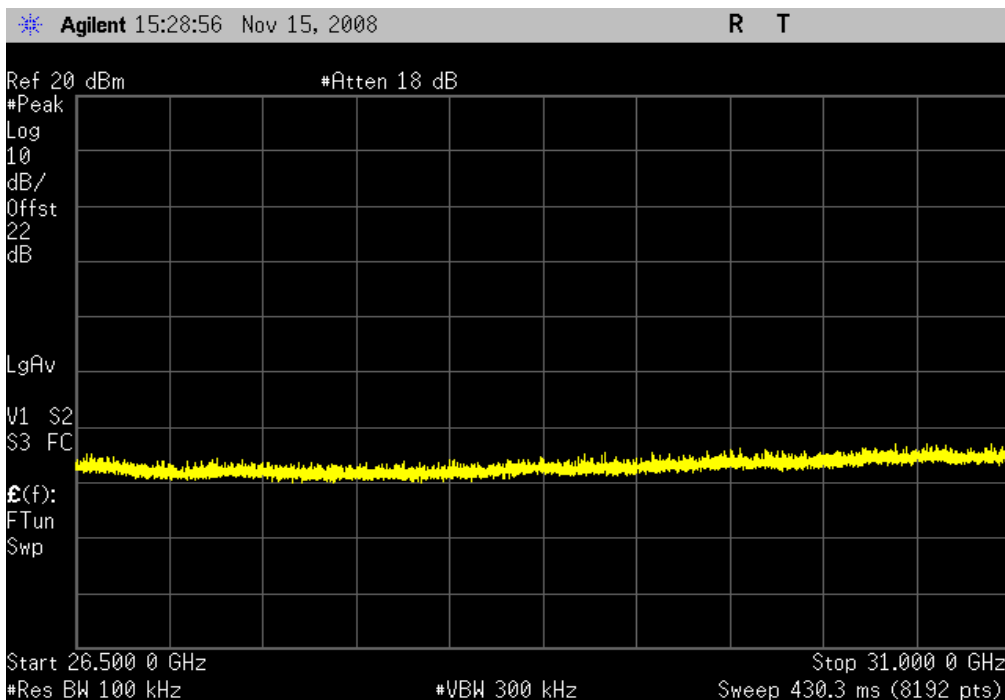


802.11(a) 36 Mbps, High Channel, 26.5 GHz - 31 GHz

Result: Pass

Value: < -40 dBc

Limit: < -20 dBc

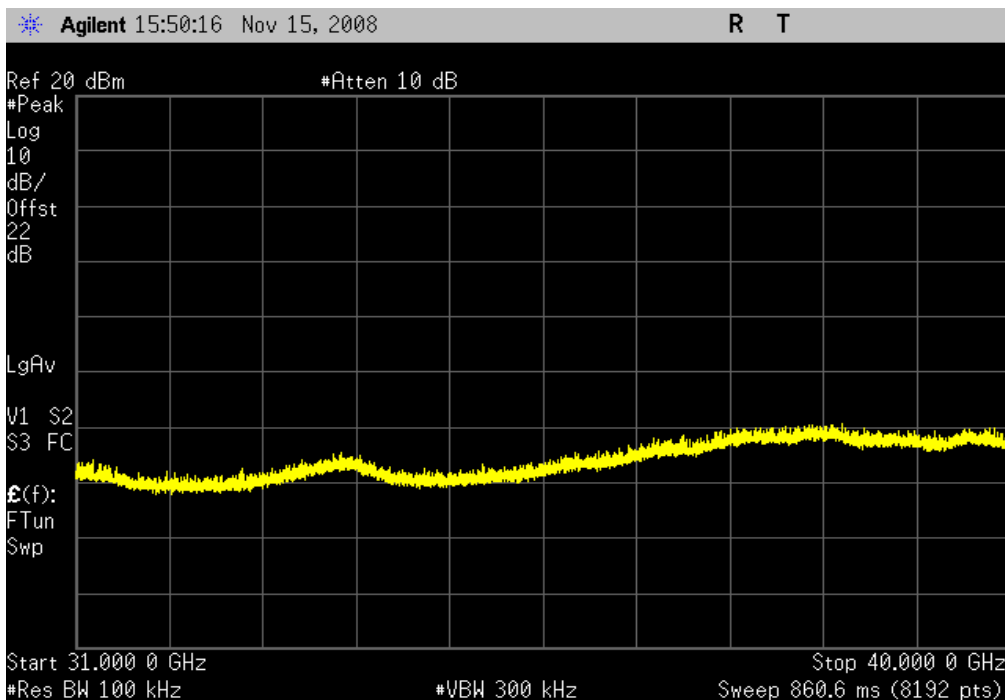


802.11(a) 36 Mbps, High Channel, 31 GHz - 40 GHz

Result: Pass

Value: < -40 dBc

Limit: < -20 dBc

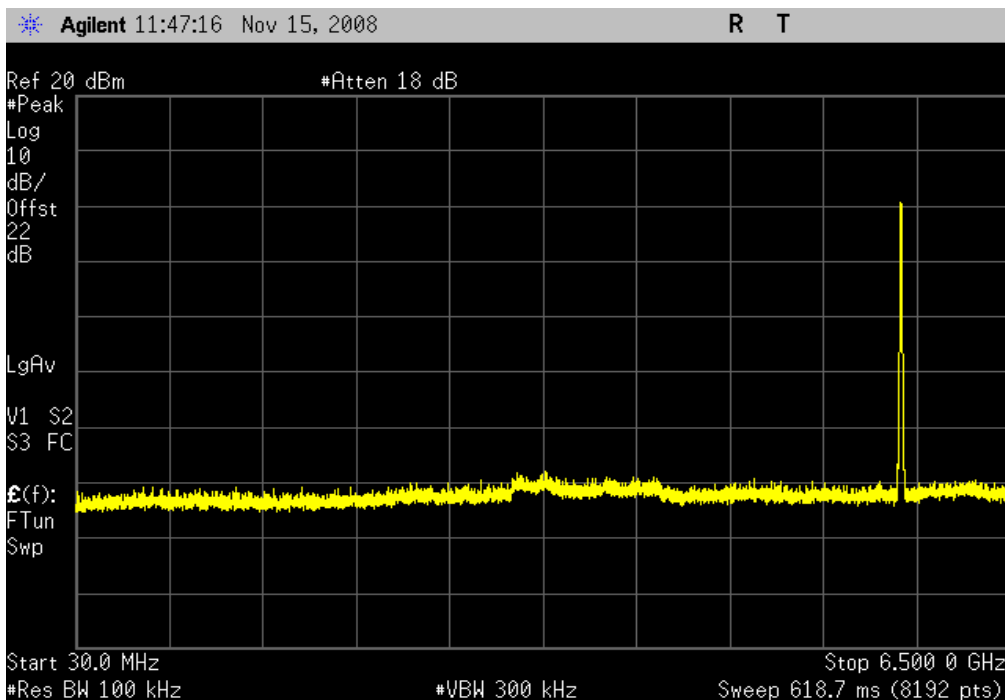


802.11(a) 54 Mbps, Low Channel, 30 MHz - 6.5 GHz

Result: Pass

Value: < -40 dBc

Limit: < -20 dBc

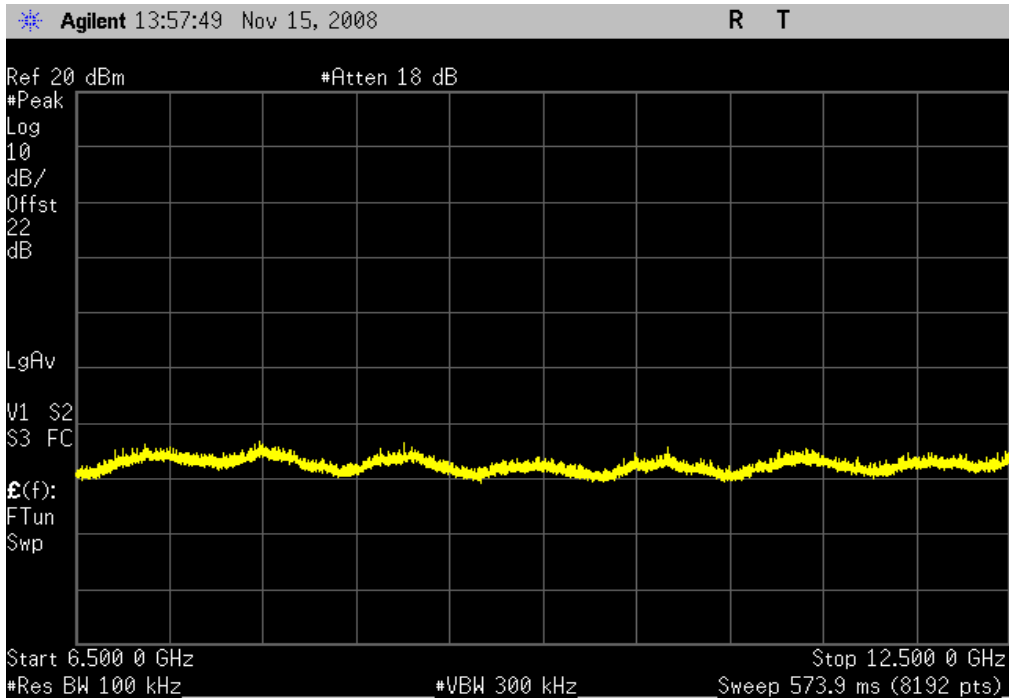


802.11(a) 54 Mbps, Low Channel, 6.5 GHz - 12.5 GHz

Result: Pass

Value: < -40 dBc

Limit: < -20 dBc

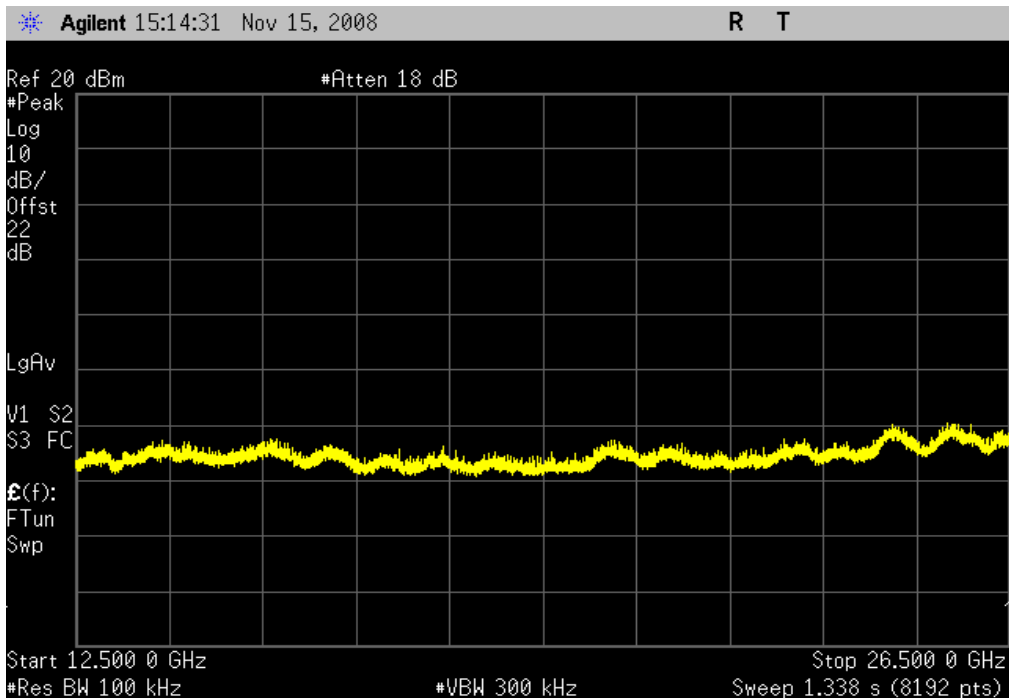


802.11(a) 54 Mbps, Low Channel, 12.5 GHz - 26.5 GHz

Result: Pass

Value: < -40 dBc

Limit: < -20 dBc

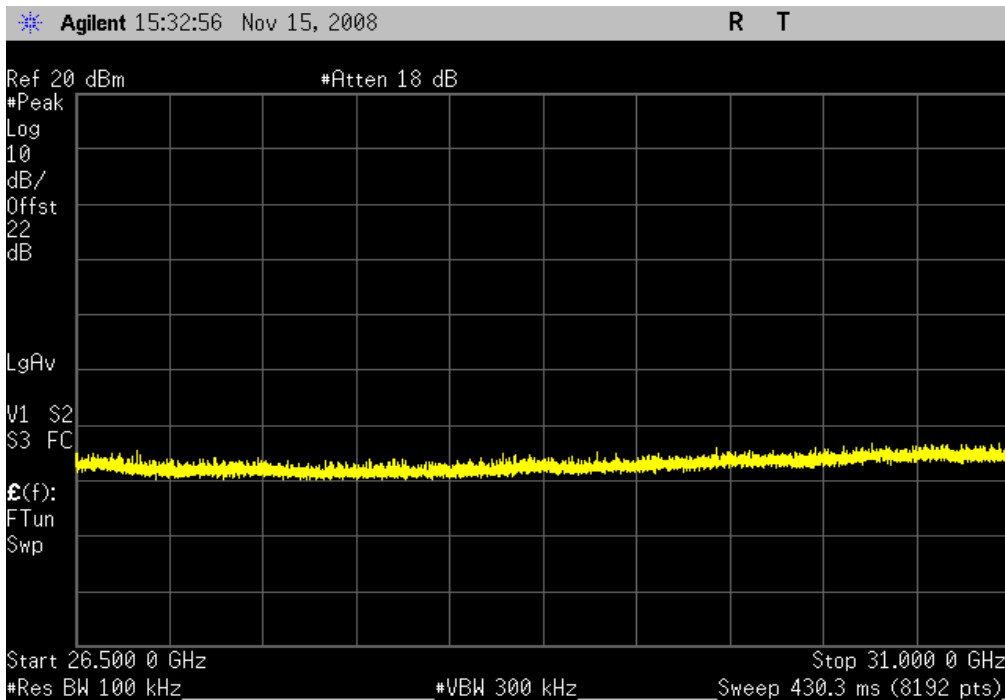


802.11(a) 54 Mbps, Low Channel, 26.5 GHz - 31 GHz

Result: Pass

Value: < -40 dBc

Limit: < -20 dBc

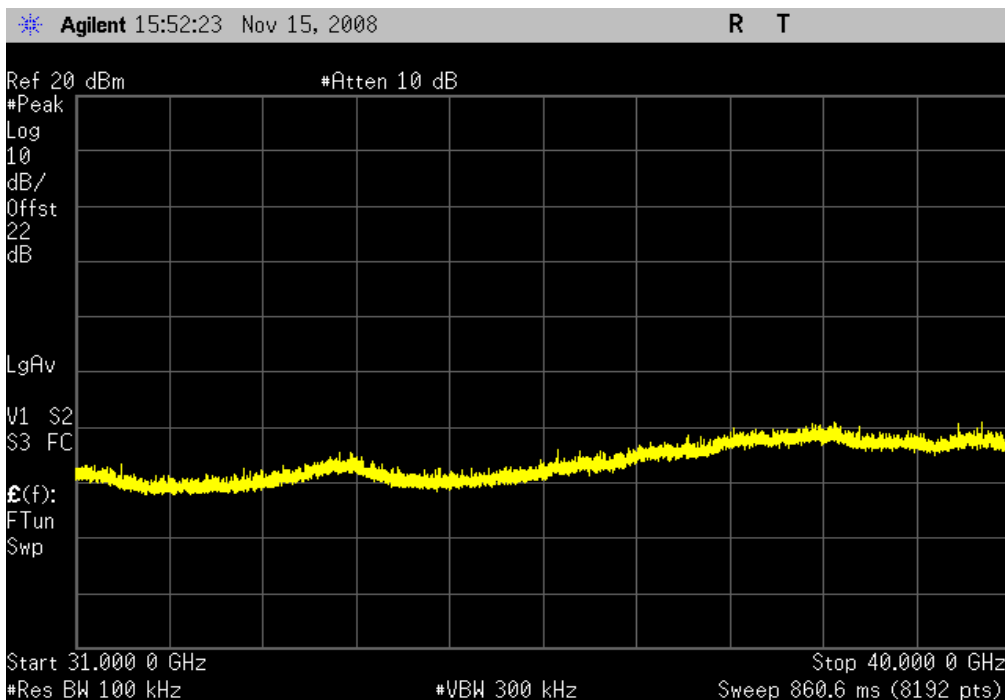


802.11(a) 54 Mbps, Low Channel, 31 GHz - 40 GHz

Result: Pass

Value: < -40 dBc

Limit: < -20 dBc

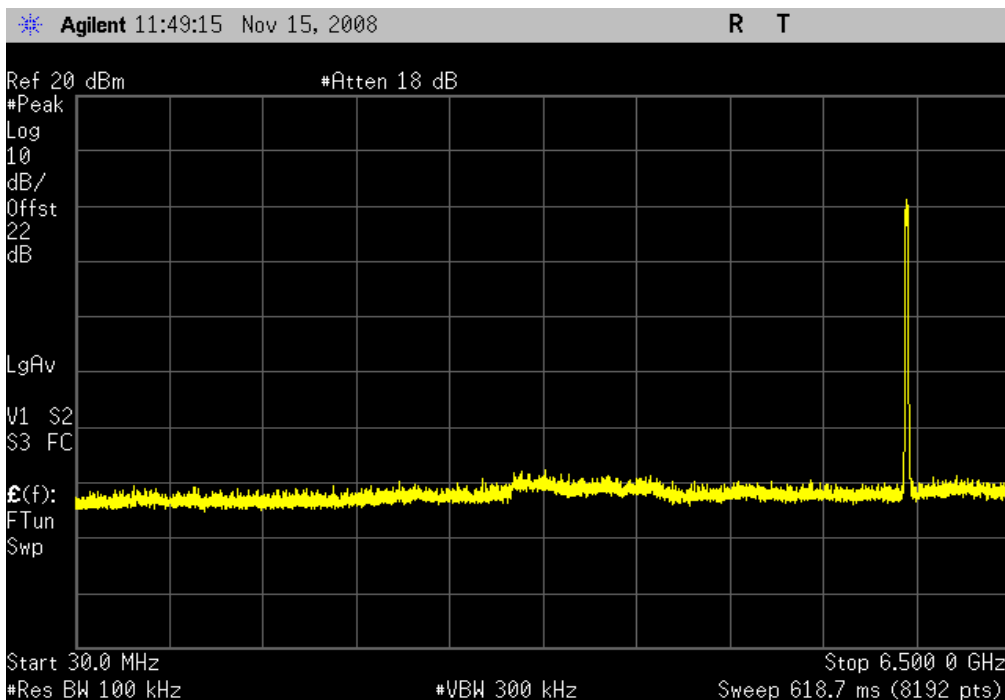


802.11(a) 54 Mbps, Mid Channel, 30 MHz - 6.5 GHz

Result: Pass

Value: < -40 dBc

Limit: < -20 dBc

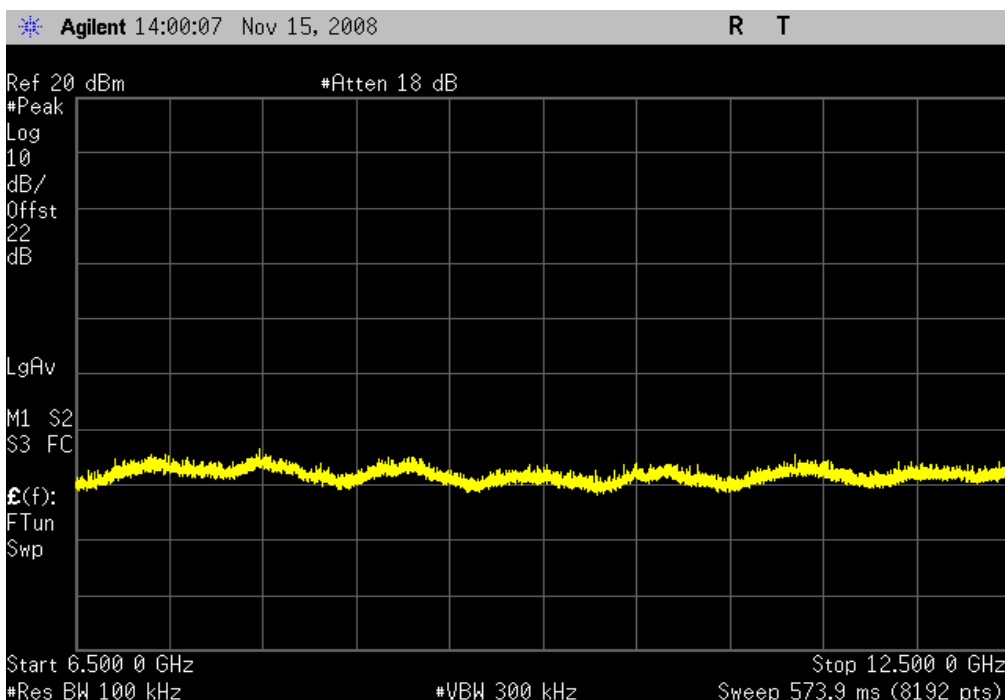


802.11(a) 54 Mbps, Mid Channel, 6.5 GHz - 12.5 GHz

Result: Pass

Value: < -40 dBc

Limit: < -20 dBc

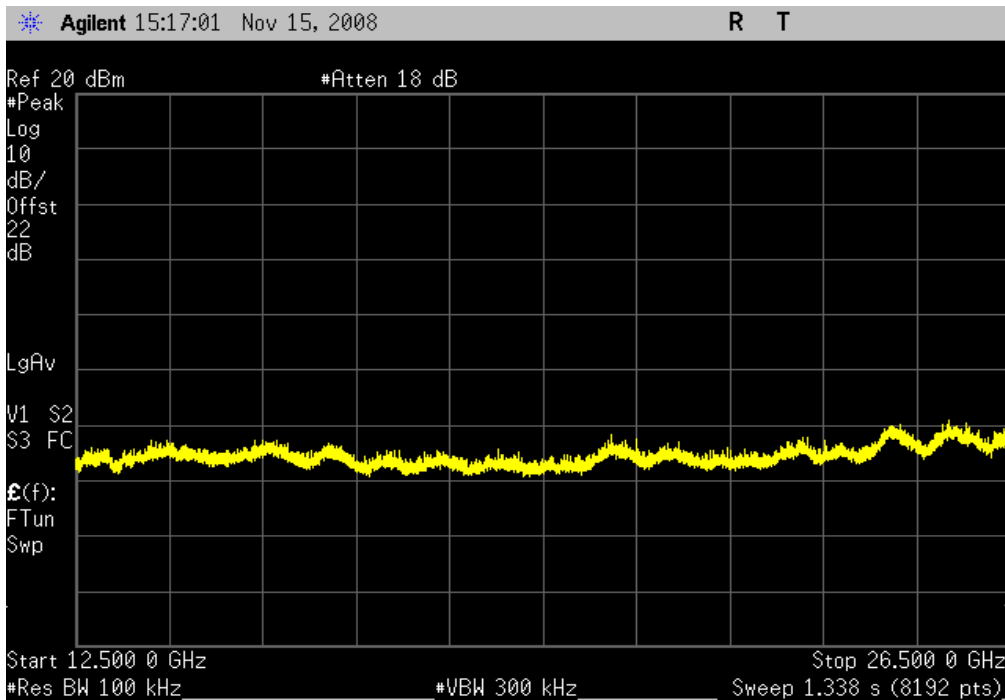


802.11(a) 54 Mbps, Mid Channel, 12.5 GHz - 26.5 GHz

Result: Pass

Value: < -40 dBc

Limit: < -20 dBc

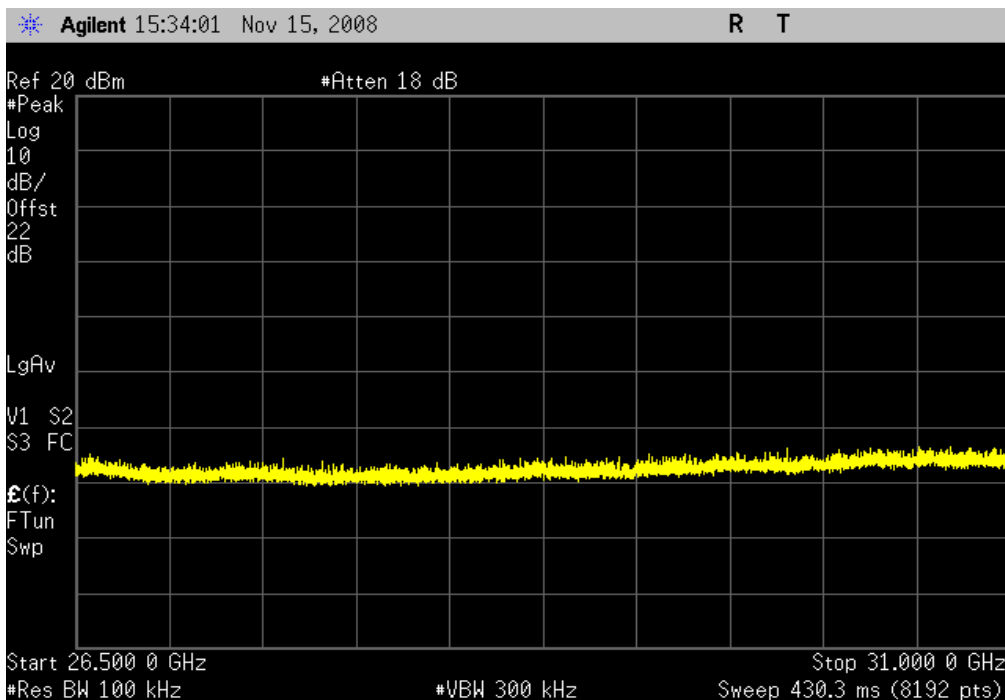


802.11(a) 54 Mbps, Mid Channel, 26.5 GHz - 31 GHz

Result: Pass

Value: < -40 dBc

Limit: < -20 dBc

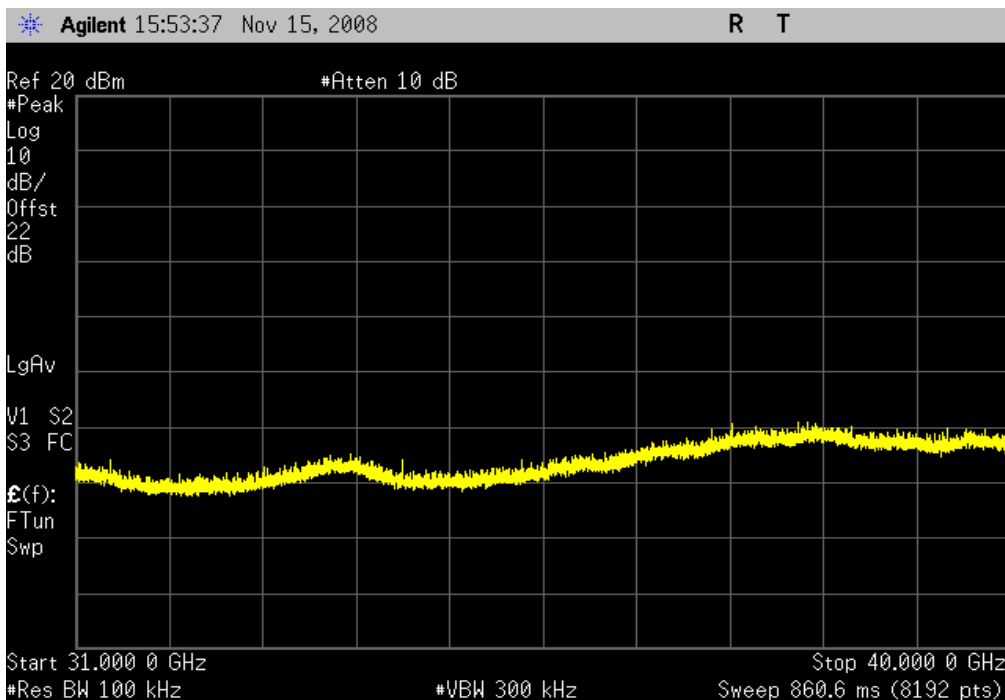


802.11(a) 54 Mbps, Mid Channel, 31 GHz - 40 GHz

Result: Pass

Value: < -40 dBc

Limit: < -20 dBc

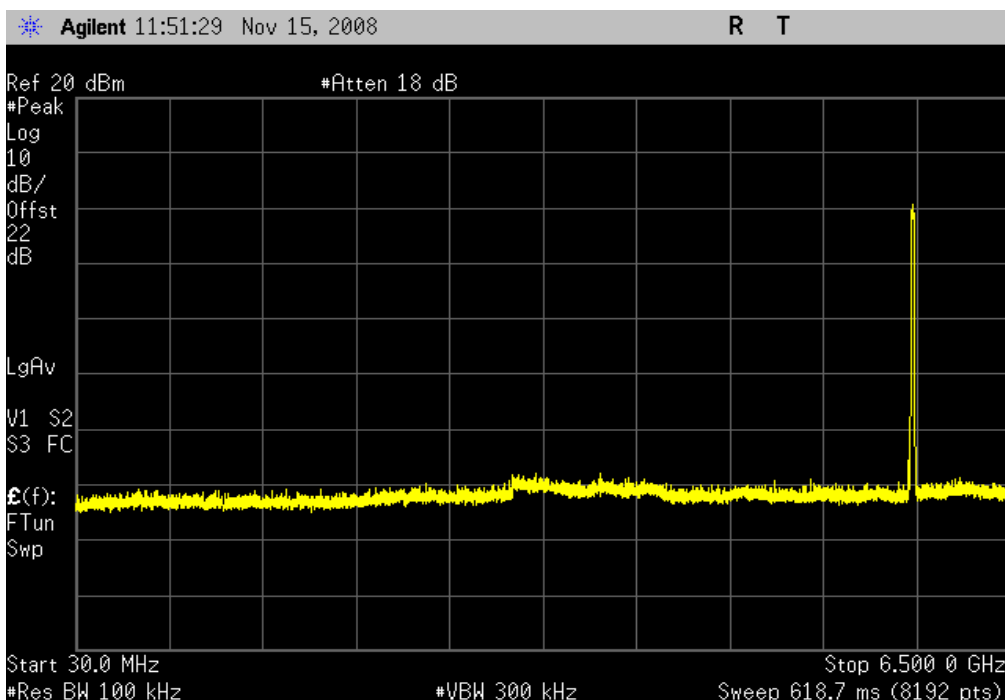


802.11(a) 54 Mbps, High Channel, 30 MHz - 6.5 GHz

Result: Pass

Value: < -40 dBc

Limit: < -20 dBc

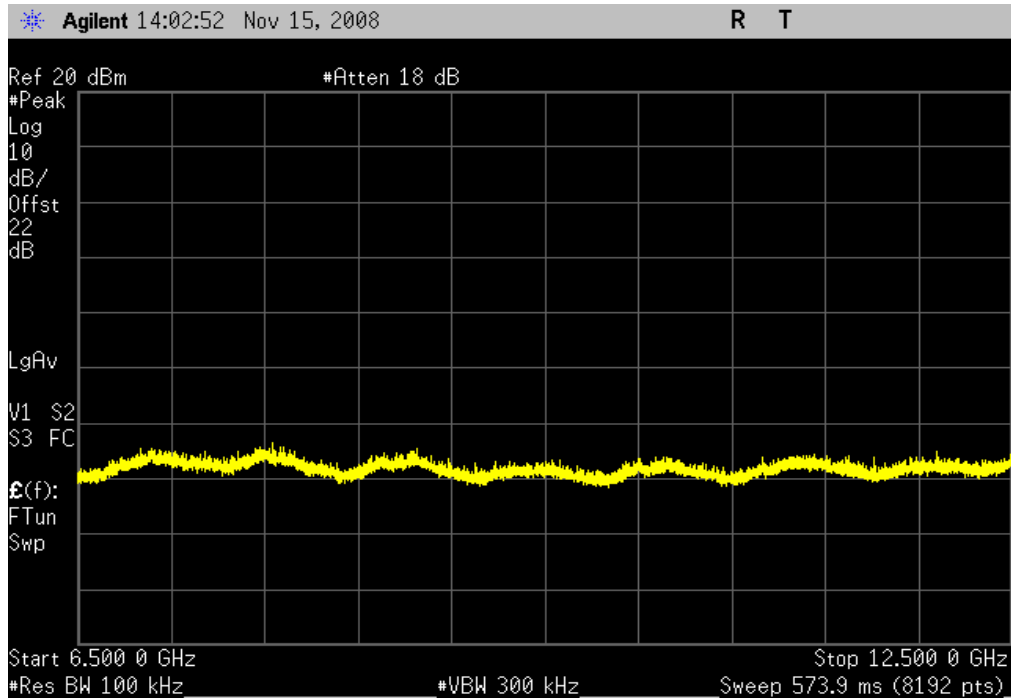


802.11(a) 54 Mbps, High Channel, 6.5 GHz - 12.5 GHz

Result: Pass

Value: < -40 dBc

Limit: < -20 dBc

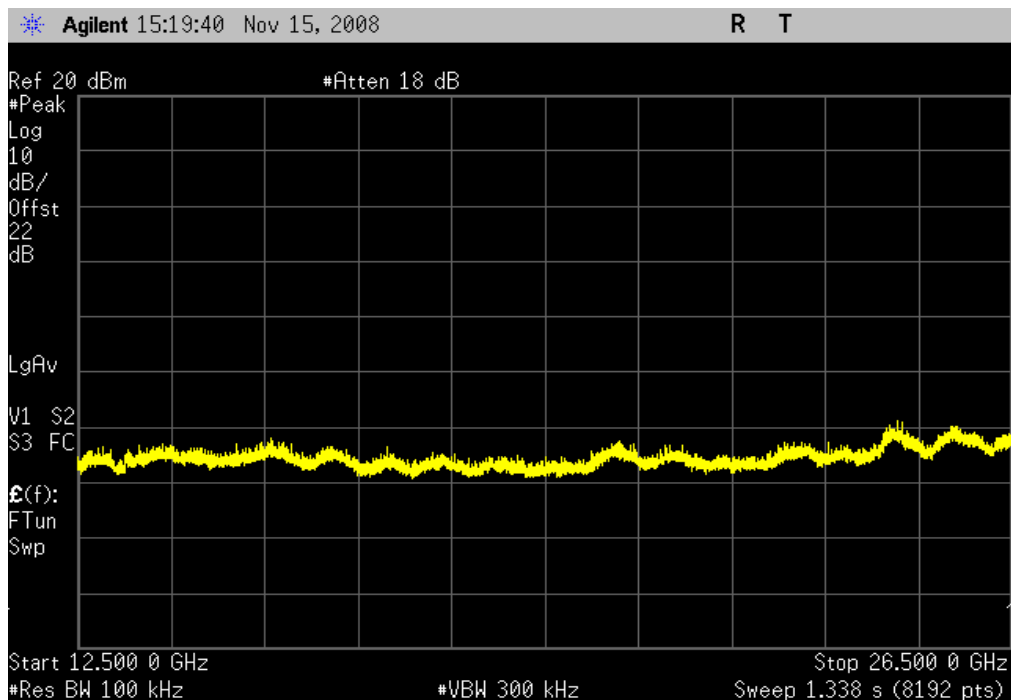


802.11(a) 54 Mbps, High Channel, 12.5 GHz - 26.5 GHz

Result: Pass

Value: < -40 dBc

Limit: < -20 dBc

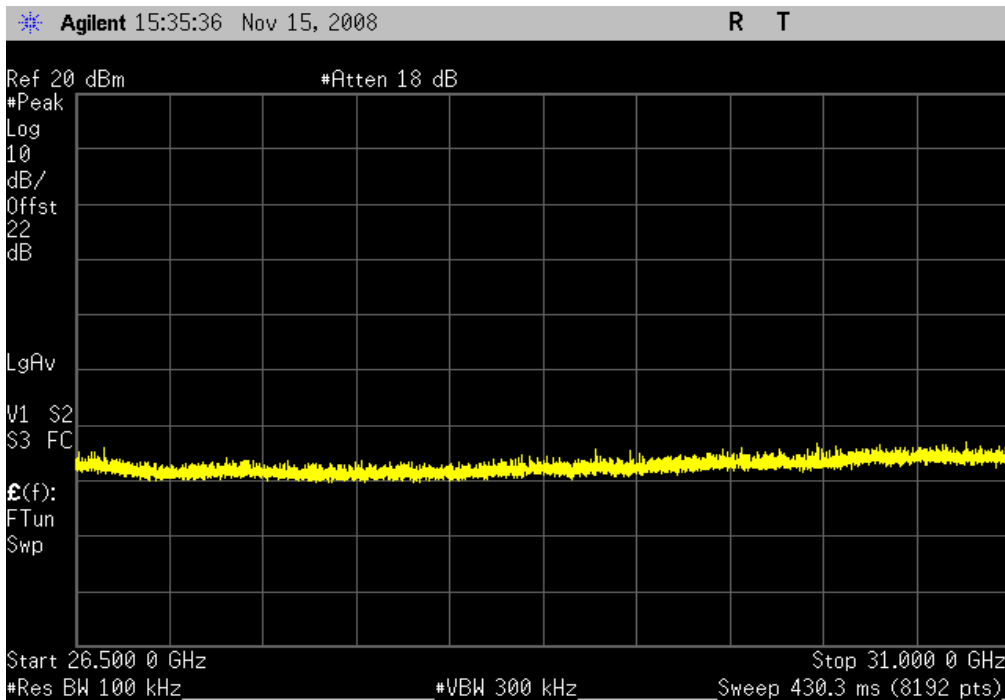


802.11(a) 54 Mbps, High Channel, 26.5 GHz - 31 GHz

Result: Pass

Value: < -40 dBc

Limit: < -20 dBc

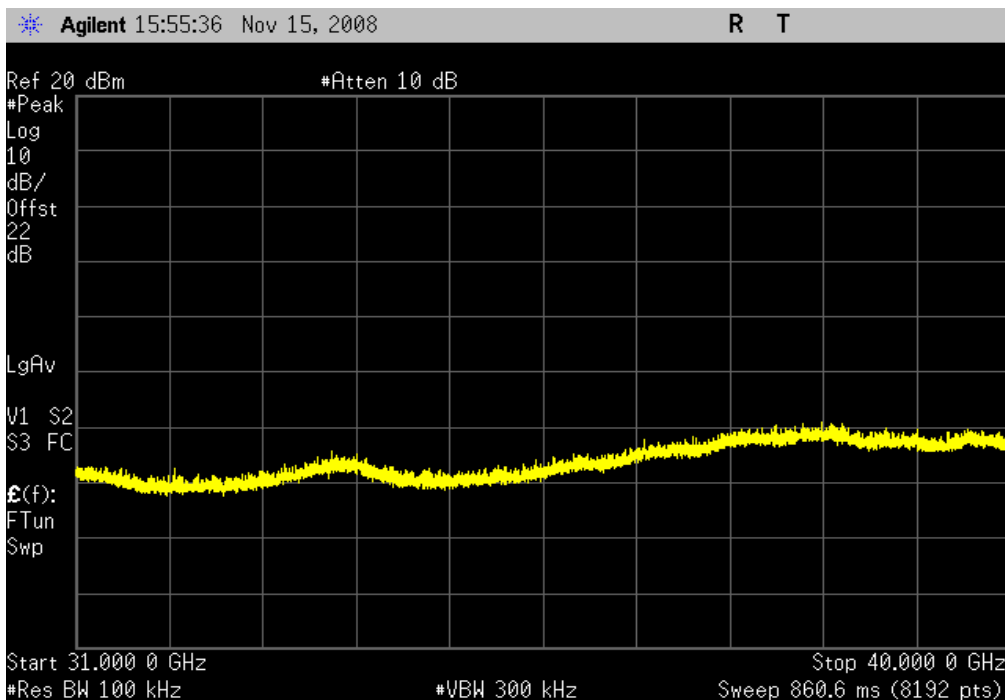


802.11(a) 54 Mbps, High Channel, 31 GHz - 40 GHz

Result: Pass

Value: < -40 dBc

Limit: < -20 dBc





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	12/7/2007	13
Attenuator 20 dB, SMA M/F 26GHz	S.M. Electronics	SA26B-20	AUY	6/27/2008	13
Pre-Amplifier (FOR REFERENCE ONLY)	Hewlett-Packard	83017A	APL	NCR	0
Signal Generator	Agilent	E8257D	TGX	12/7/2007	13

MEASUREMENT UNCERTAINTY

Measurement uncertainty is used to reflect the accuracy of the measured result as compared with its "true" or theoretically correct value. Our measurement data meets or exceeds the measurement uncertainty requirements of CISPR 16-4. In the case of transient tests our test equipment has been demonstrated by calibration to provide at least a 95% confidence that it complies with the test specification requirements. The measurement uncertainty for any test is available upon request.

TEST DESCRIPTION

The peak power spectral density measurements were measured with the EUT set the required transmit frequencies in each band. 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 lowest, middle, and maximum data rate for each modulation type available. Per the procedure outlined in FCC KDB 558074, March 23, 2005, the spectrum analyzer was used as follows:

The emission peak(s) were located and zoom in on within the passband. The resolution bandwidth was set to 3 kHz, the video bandwidth was set to greater than or equal to the resolution bandwidth. The sweep speed was set equal to the span divided by 3 kHz (sweep = (SPAN/3 kHz)). For example, given a span of 1.5 MHz, the sweep should be $1.5 \times 10^6 \div 3 \times 10^3 = 500$ seconds. External attenuation was used and added to the reading. The following FCC procedure was used for modifying the power spectral density measurements:

"If the spectrum line spacing cannot be resolved on the available spectrum analyzer, the noise density function on most modern conventional spectrum analyzers will directly measure the noise power density normalized to a 1 Hz noise power bandwidth. Add 34.8 dB for correction to 3 kHz."

EMC

POWER SPECTRAL DENSITY

EUT: Ultraviolet SL Wireless Option	Work Order: SPAC0447
Serial Number: Various, see config page	Date: 11/13/08
Customer: Spacelabs Healthcare	Temperature: 22°C
Attendees: None	Humidity: 53%
Project: None	Barometric Pres.: 30.05
Tested by: Rod Peloquin	Power: 120VAC/60Hz
	Job Site: EV06

TEST SPECIFICATIONS		Test Method
FCC 15.247 (DTS):2008		ANSI C63.4:2003 KDB No. 558074

COMMENTS
None

DEVIATIONS FROM TEST STANDARD
No Deviations

Configuration #	2	Signature 
-----------------	---	---

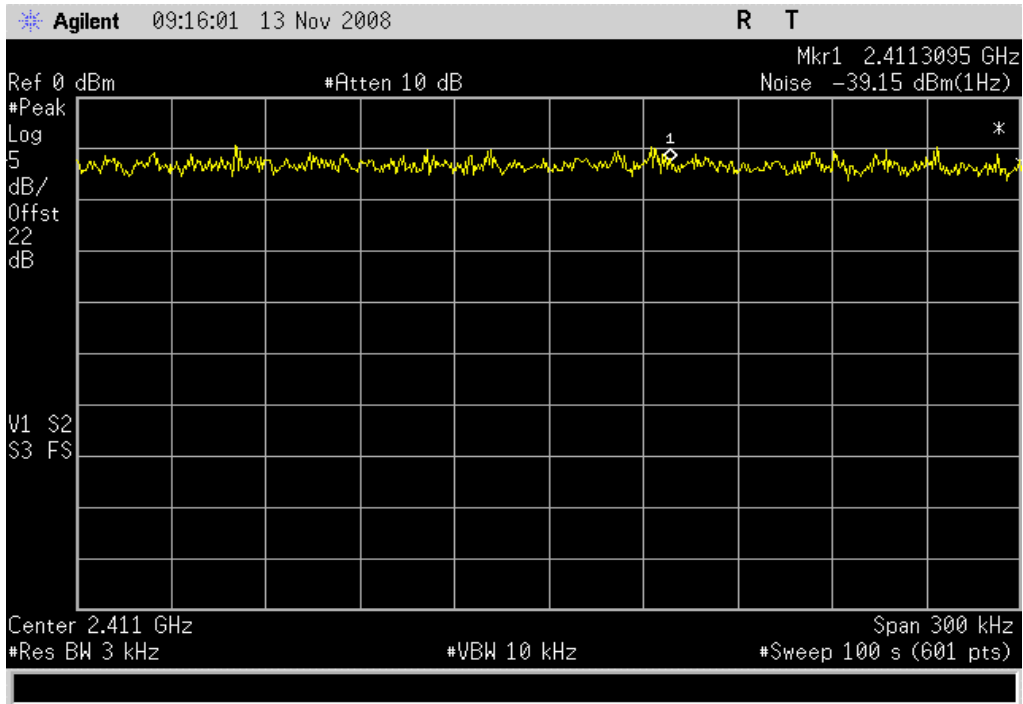
		Value	Limit	Results
802.11(b) 1 Mbps	Low Channel	-4.35 dBm / 3 kHz	8 dBm / kHz	Pass
	Mid Channel	-4.18 dBm / 3 kHz	8 dBm / kHz	Pass
	High Channel	-5.19 dBm / 3 kHz	8 dBm / kHz	Pass
802.11(b) 11 Mbps	Low Channel	-5.62 dBm / 3 kHz	8 dBm / kHz	Pass
	Mid Channel	-5.58 dBm / 3 kHz	8 dBm / kHz	Pass
	High Channel	-6.17 dBm / 3 kHz	8 dBm / kHz	Pass
802.11(g) 6 Mbps	Low Channel	-7.24 dBm / 3 kHz	8 dBm / kHz	Pass
	Mid Channel	-5.88 dBm / 3 kHz	8 dBm / kHz	Pass
	High Channel	-7.58 dBm / 3 kHz	8 dBm / kHz	Pass
802.11(g) 36 Mbps	Low Channel	-8.48 dBm / 3 kHz	8 dBm / kHz	Pass
	Mid Channel	-7.64 dBm / 3 kHz	8 dBm / kHz	Pass
	High Channel	-9.32 dBm / 3 kHz	8 dBm / kHz	Pass
802.11(g) 54 Mbps	Low Channel	-8.93 dBm / 3 kHz	8 dBm / kHz	Pass
	Mid Channel	-7.61 dBm / 3 kHz	8 dBm / kHz	Pass
	High Channel	-9.15 dBm / 3 kHz	8 dBm / kHz	Pass
802.11(a) 6 Mbps	Low Channel	-4.97 dBm / 3 kHz	8 dBm / kHz	Pass
	Mid Channel	-5.64 dBm / 3 kHz	8 dBm / kHz	Pass
	High Channel	-6.10 dBm / 3 kHz	8 dBm / kHz	Pass
802.11(a) 36 Mbps	Low Channel	-8.70 dBm / 3 kHz	8 dBm / kHz	Pass
	Mid Channel	-9.29 dBm / 3 kHz	8 dBm / kHz	Pass
	High Channel	-8.93 dBm / 3 kHz	8 dBm / kHz	Pass
802.11(a) 54 Mbps	Low Channel	-10.53 dBm / 3 kHz	8 dBm / kHz	Pass
	Mid Channel	-10.56 dBm / 3 kHz	8 dBm / kHz	Pass
	High Channel	-10.57 dBm / 3 kHz	8 dBm / kHz	Pass

802.11(b) 1 Mbps, Low Channel

Result: Pass

Value: -4.35 dBm / 3 kHz

Limit: 8 dBm / kHz

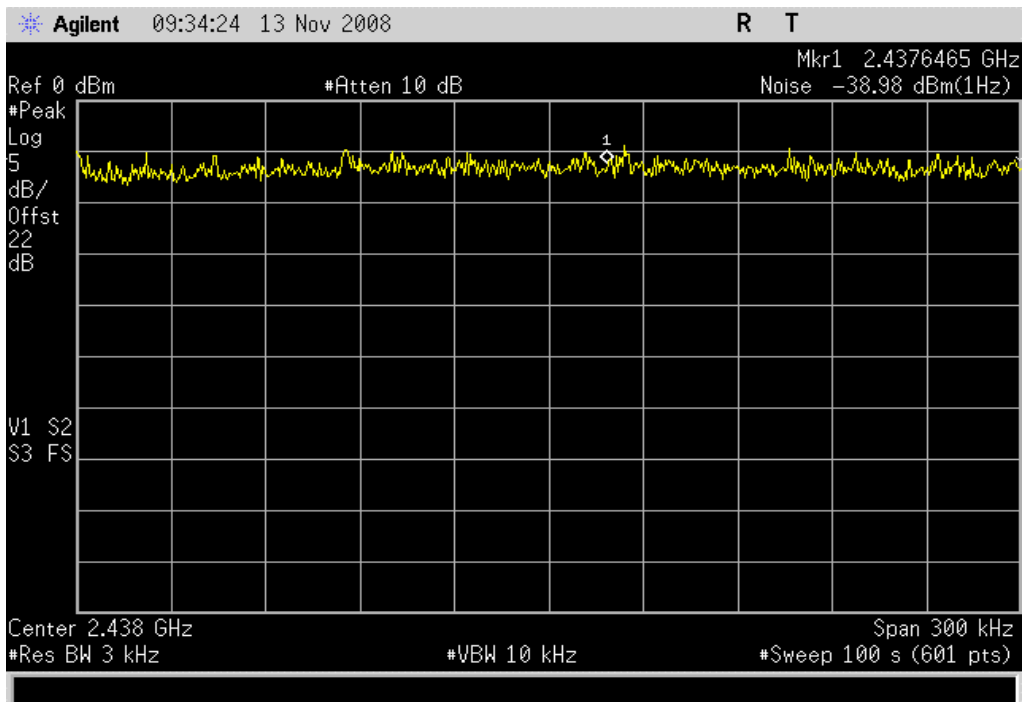


802.11(b) 1 Mbps, Mid Channel

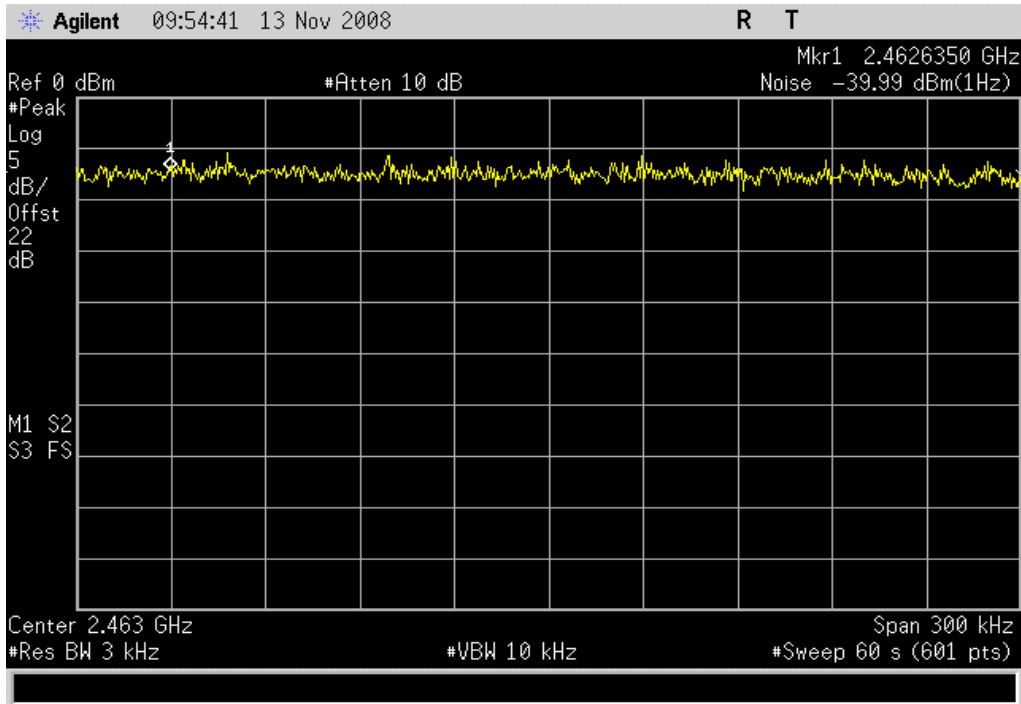
Result: Pass

Value: -4.18 dBm / 3 kHz

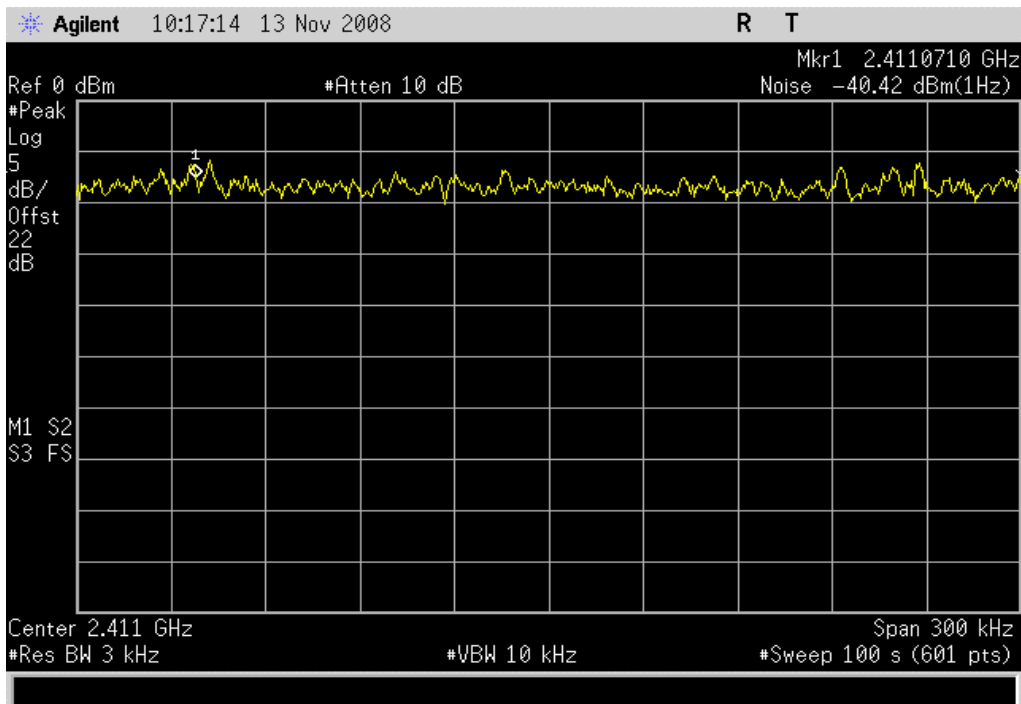
Limit: 8 dBm / kHz



802.11(b) 1 Mbps, High Channel
Result: Pass **Value:** -5.19 dBm / 3 kHz **Limit:** 8 dBm / kHz



802.11(b) 11 Mbps, Low Channel
Result: Pass **Value:** -5.62 dBm / 3 kHz **Limit:** 8 dBm / kHz

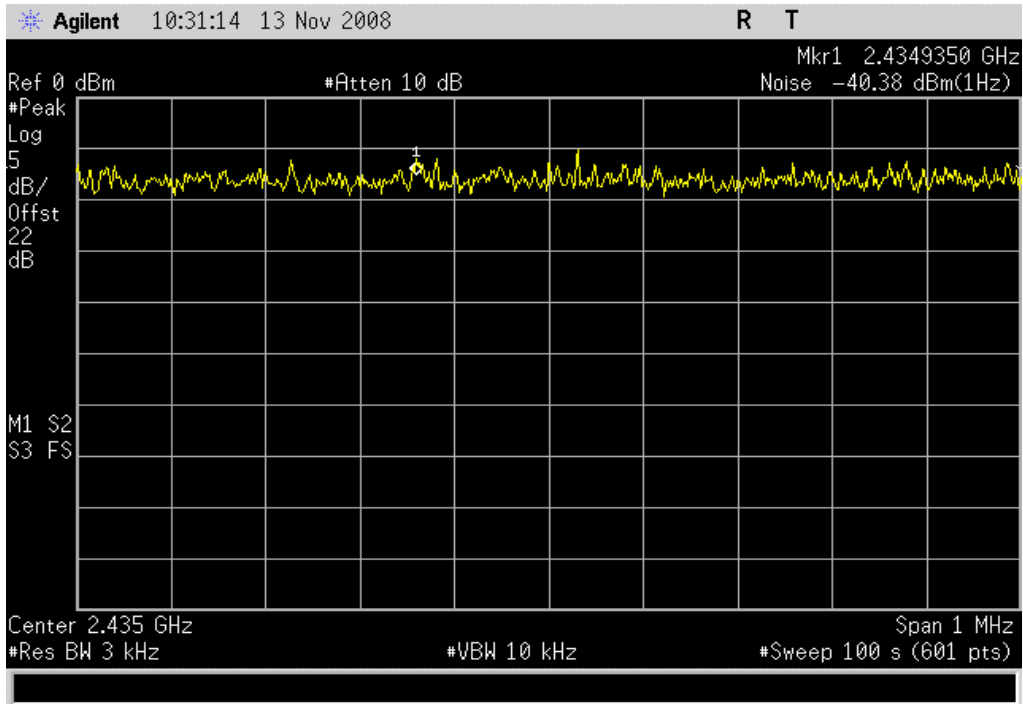


802.11(b) 11 Mbps, Mid Channel

Result: Pass

Value: -5.58 dBm / 3 kHz

Limit: 8 dBm / kHz

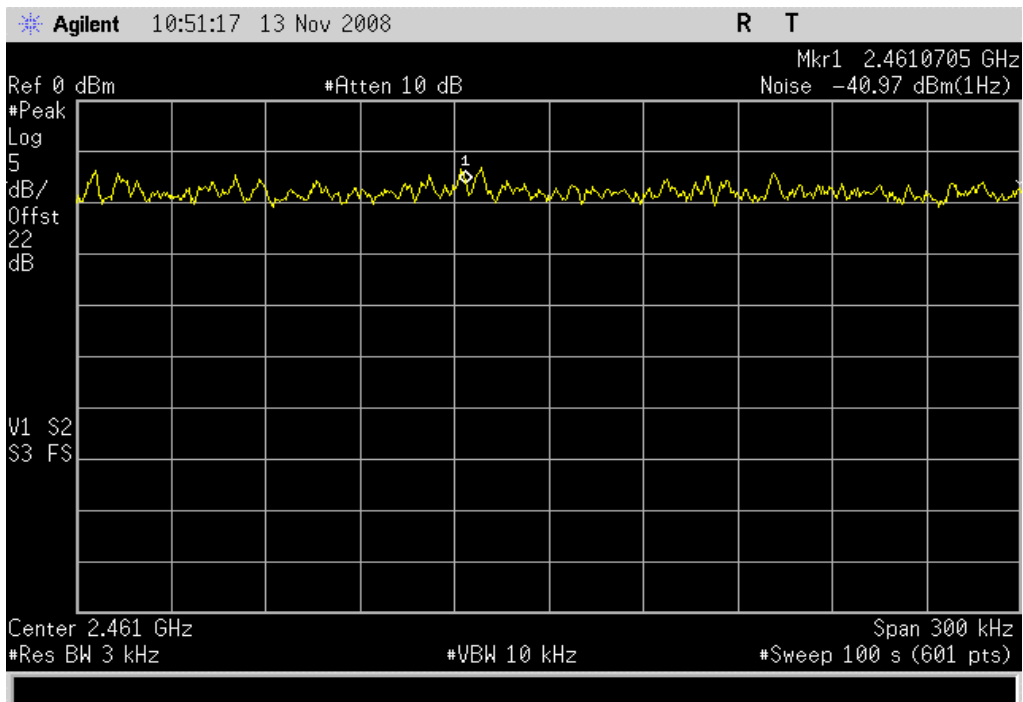


802.11(b) 11 Mbps, High Channel

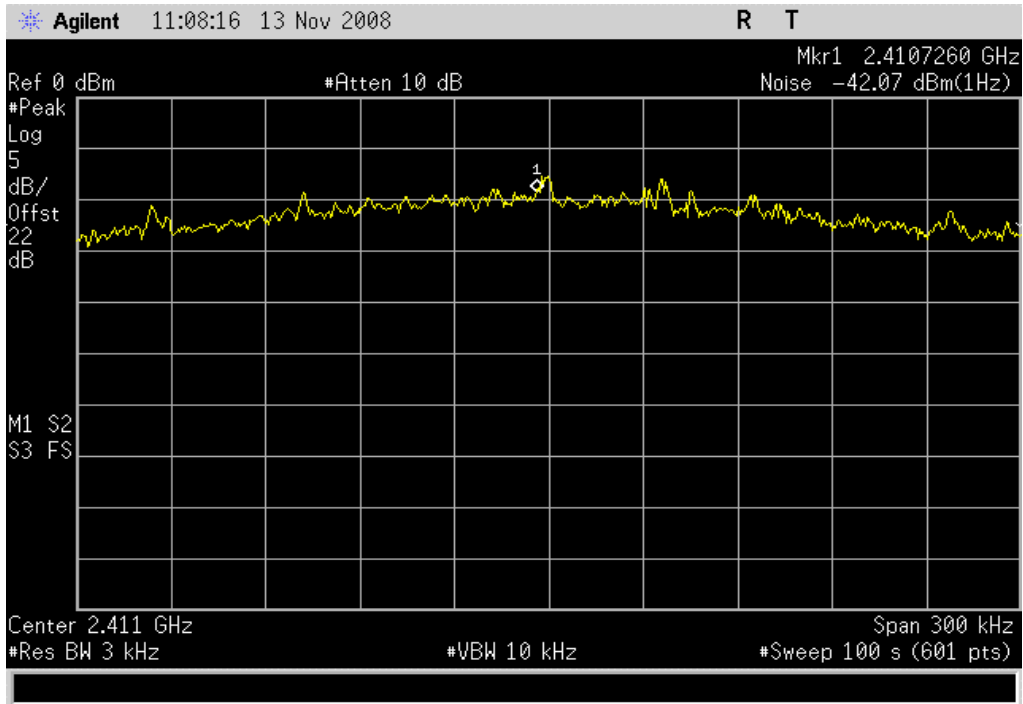
Result: Pass

Value: -6.17 dBm / 3 kHz

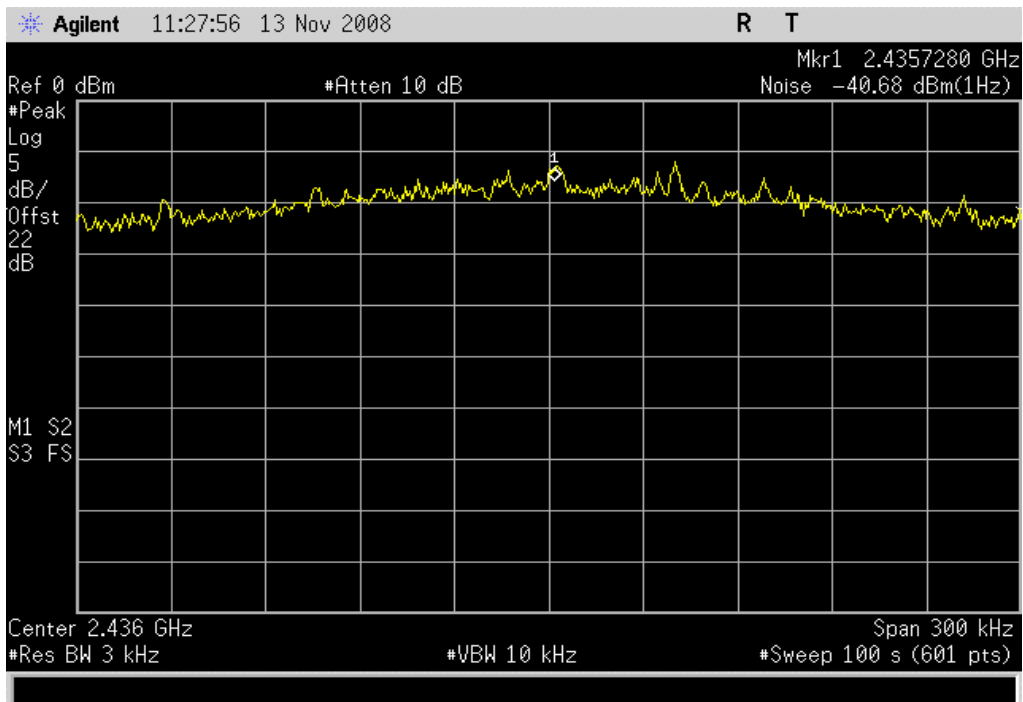
Limit: 8 dBm / kHz



802.11(g) 6 Mbps, Low Channel
Result: Pass **Value:** -7.24 dBm / 3 kHz **Limit:** 8 dBm / kHz



802.11(g) 6 Mbps, Mid Channel
Result: Pass **Value:** -5.88 dBm / 3 kHz **Limit:** 8 dBm / kHz

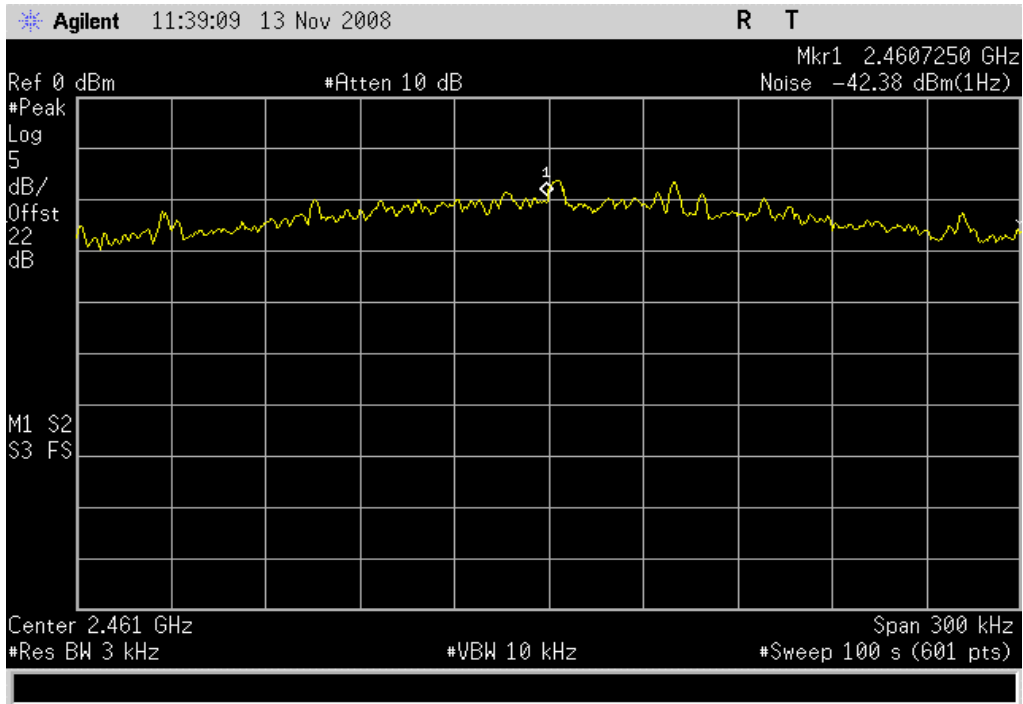


802.11(g) 6 Mbps, High Channel

Result: Pass

Value: -7.58 dBm / 3 kHz

Limit: 8 dBm / kHz

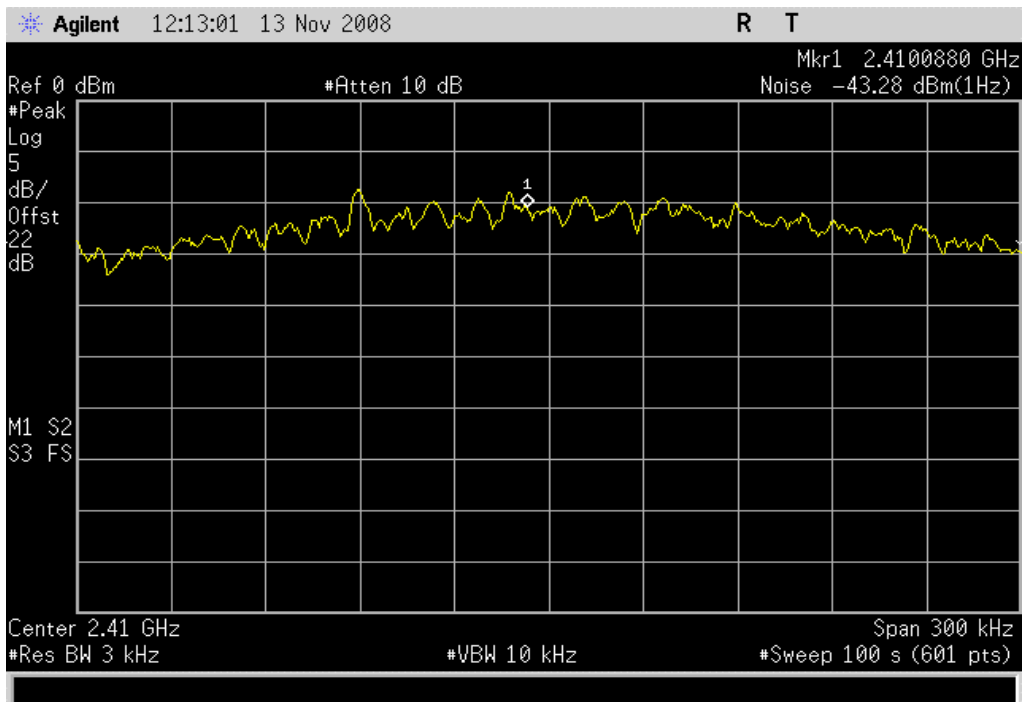


802.11(g) 36 Mbps, Low Channel

Result: Pass

Value: -8.48 dBm / 3 kHz

Limit: 8 dBm / kHz

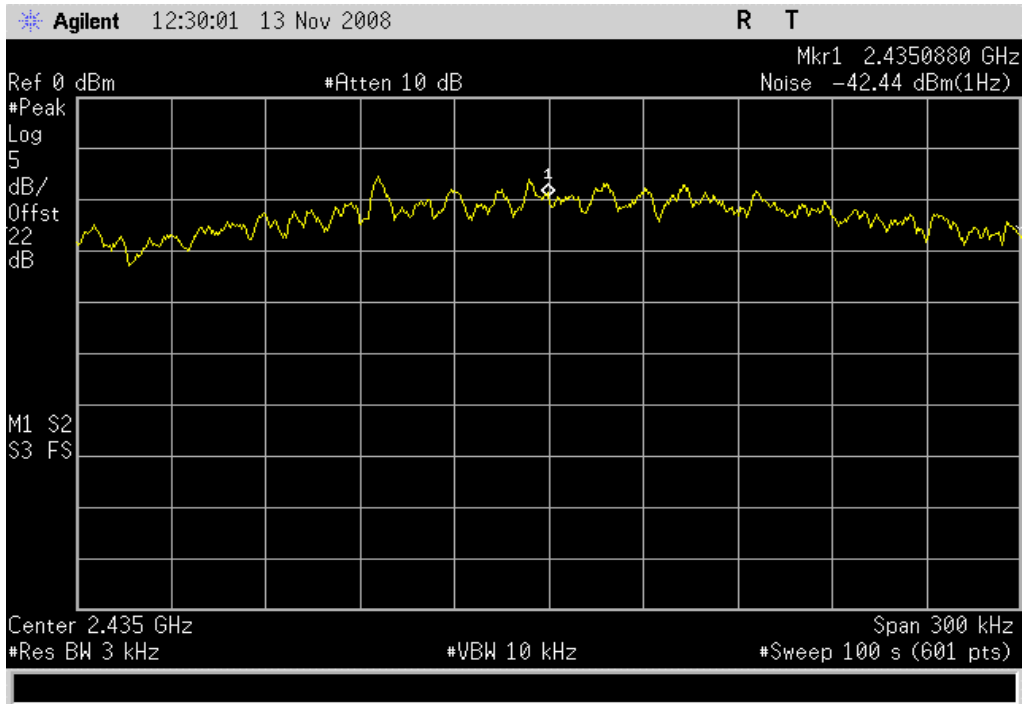


802.11(g) 36 Mbps, Mid Channel

Result: Pass

Value: -7.64 dBm / 3 kHz

Limit: 8 dBm / kHz

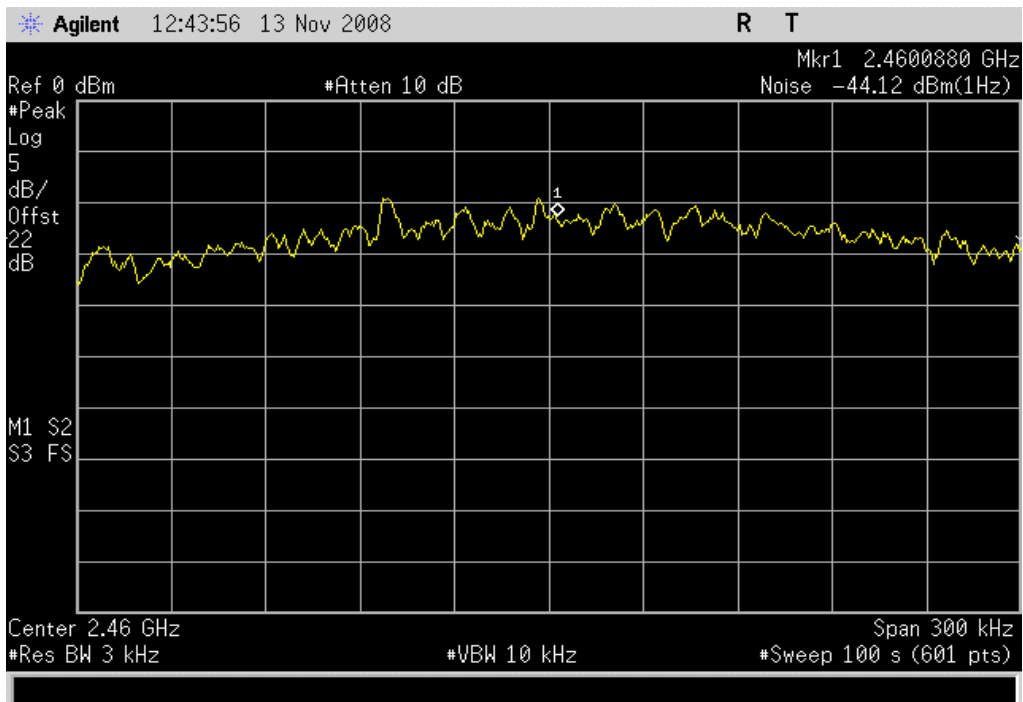


802.11(g) 36 Mbps, High Channel

Result: Pass

Value: -9.32 dBm / 3 kHz

Limit: 8 dBm / kHz

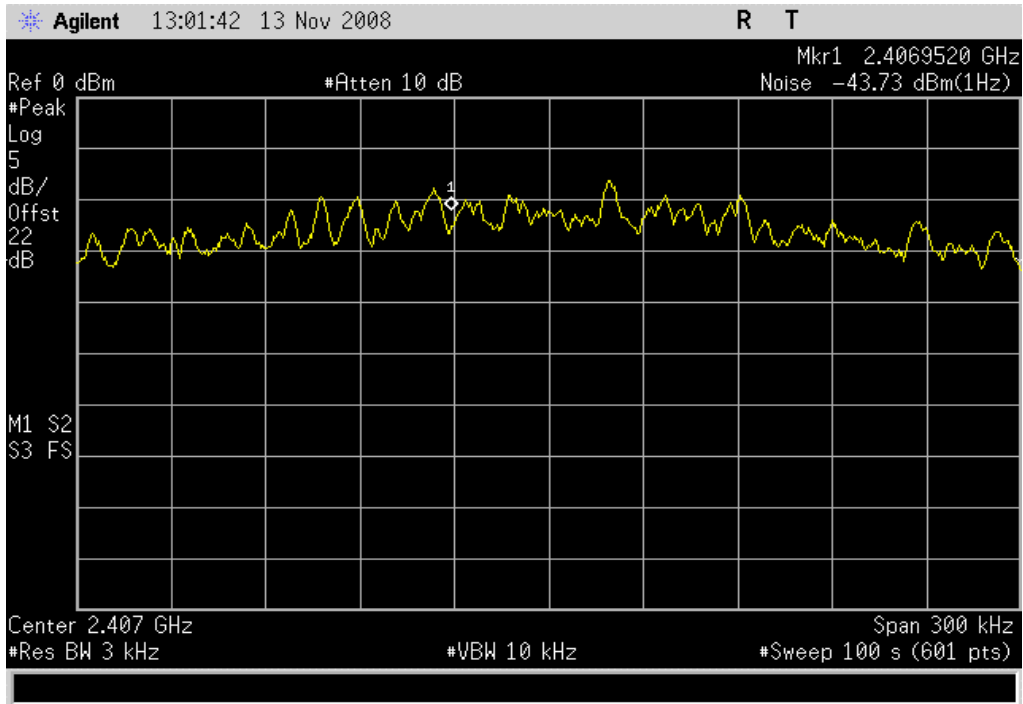


802.11(g) 54 Mbps, Low Channel

Result: Pass

Value: -8.93 dBm / 3 kHz

Limit: 8 dBm / kHz

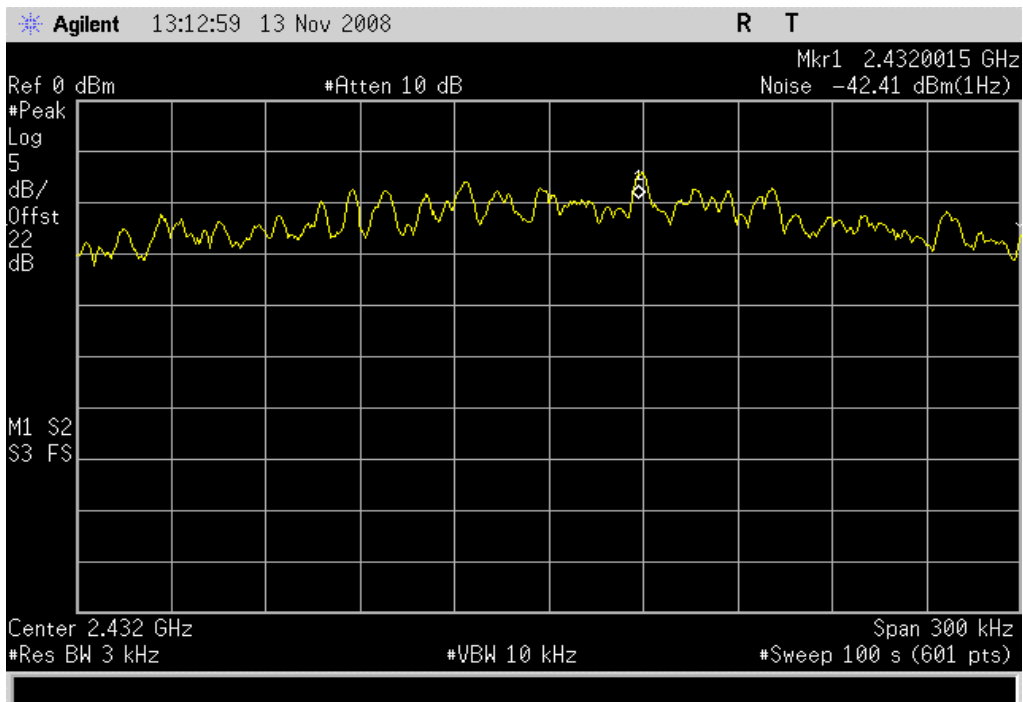


802.11(g) 54 Mbps, Mid Channel

Result: Pass

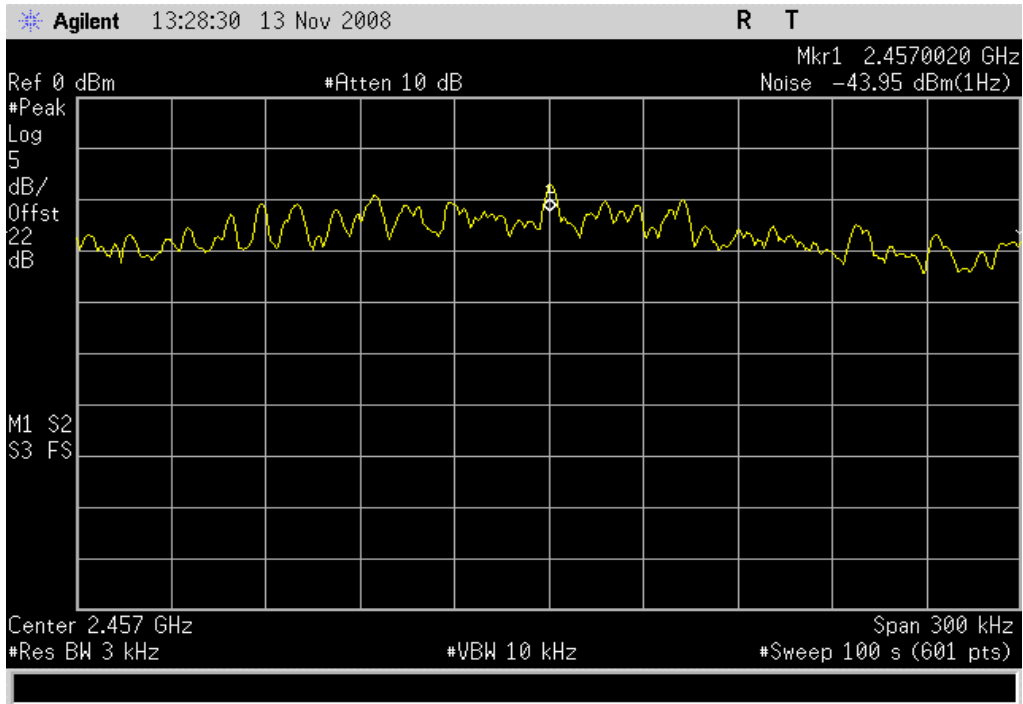
Value: -7.61 dBm / 3 kHz

Limit: 8 dBm / kHz

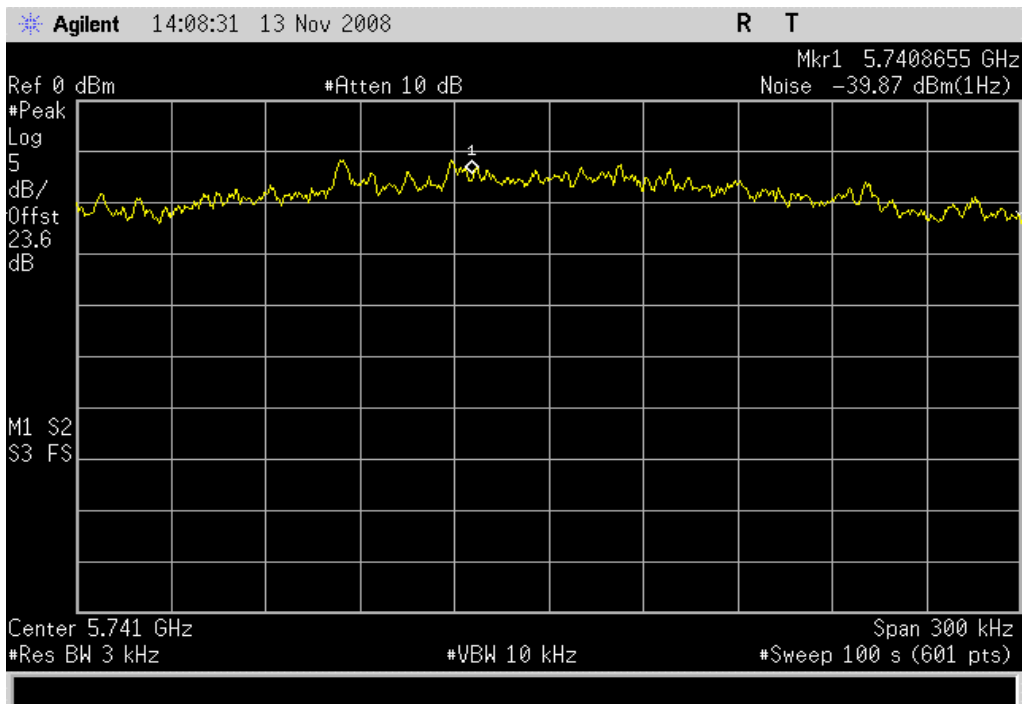


POWER SPECTRAL DENSITY

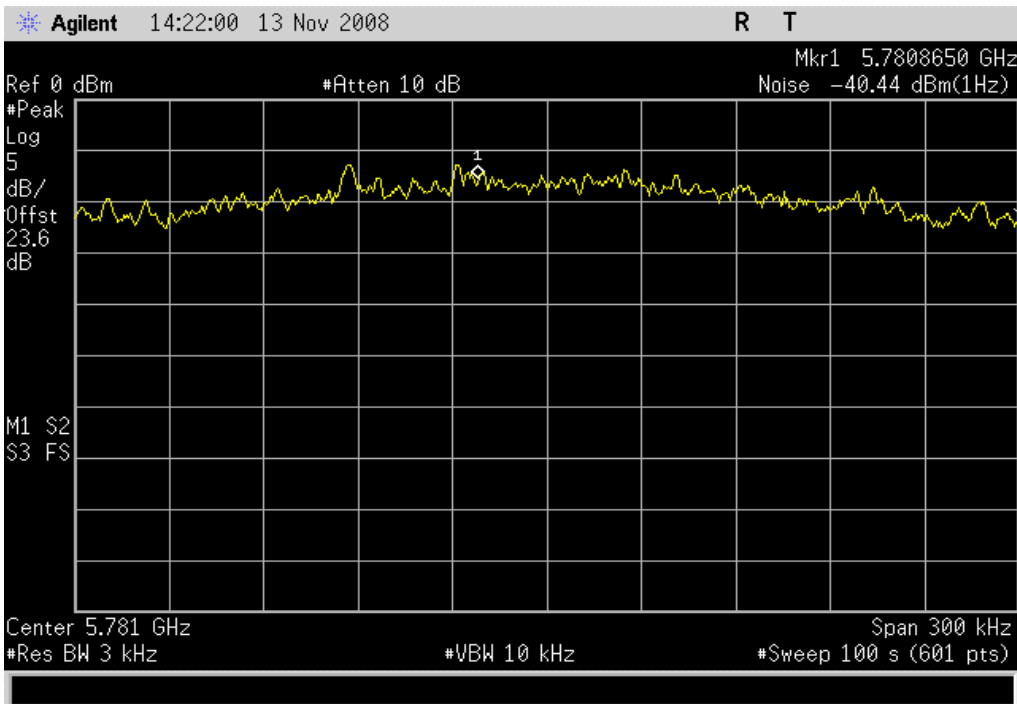
802.11(g) 54 Mbps, High Channel
Result: Pass **Value:** -9.15 dBm / 3 kHz **Limit:** 8 dBm / kHz



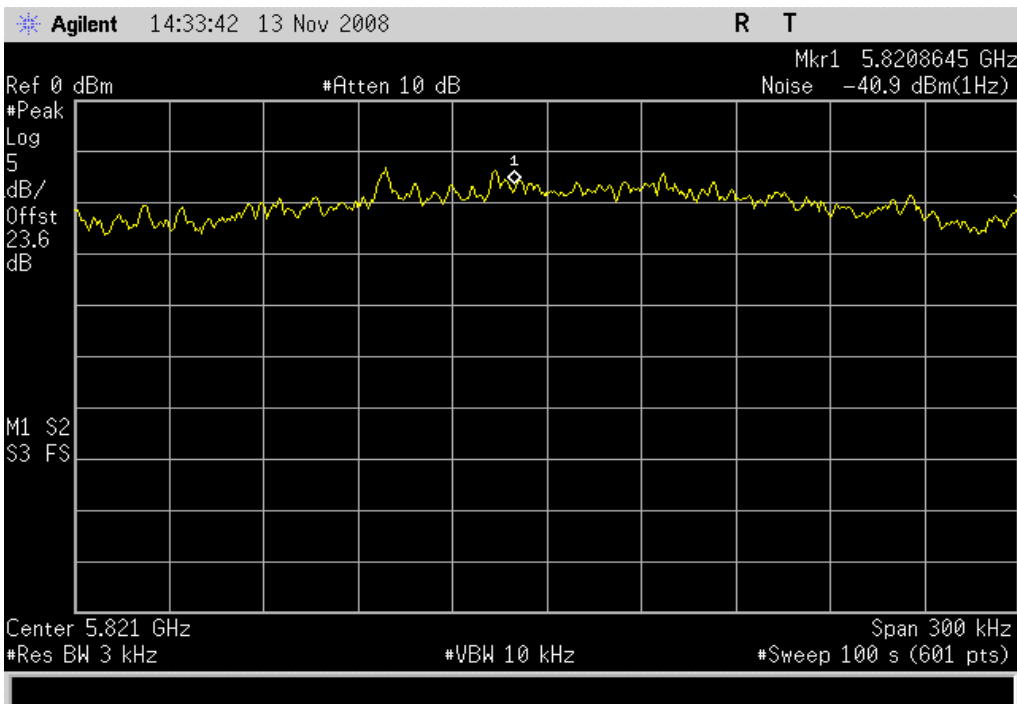
802.11(a) 6 Mbps, Low Channel
Result: Pass **Value:** -4.97 dBm / 3 kHz **Limit:** 8 dBm / kHz



802.11(a) 6 Mbps, Mid Channel
Result: Pass **Value:** -5.64 dBm / 3 kHz **Limit:** 8 dBm / kHz



802.11(a) 6 Mbps, High Channel
Result: Pass **Value:** -6.10 dBm / 3 kHz **Limit:** 8 dBm / kHz

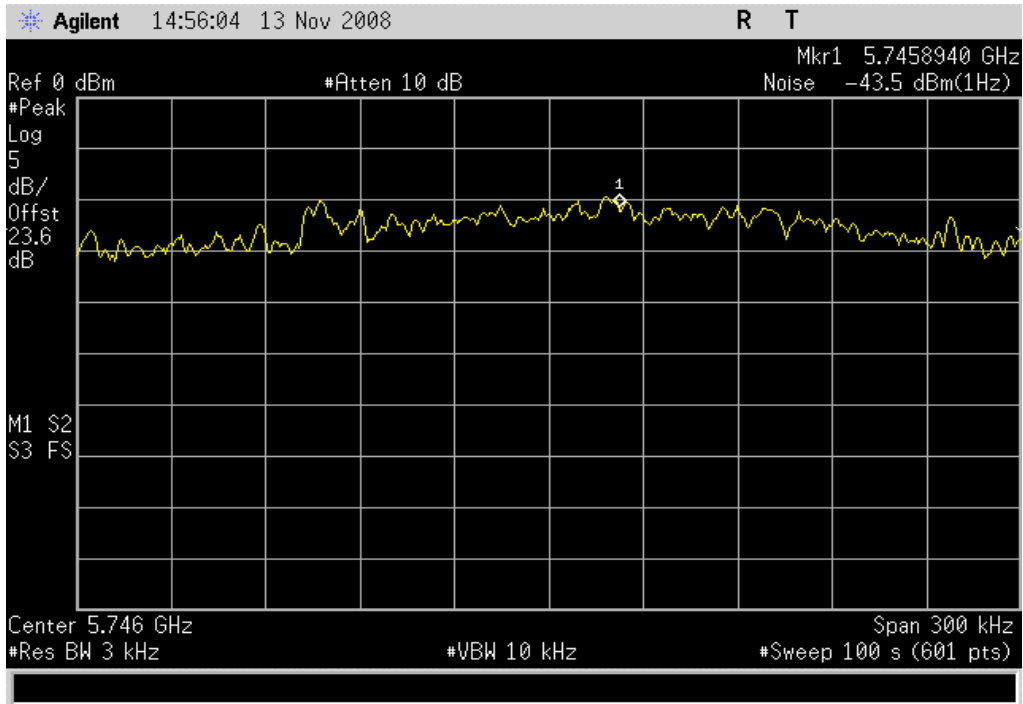


802.11(a) 36 Mbps, Low Channel

Result: Pass

Value: -8.70 dBm / 3 kHz

Limit: 8 dBm / kHz

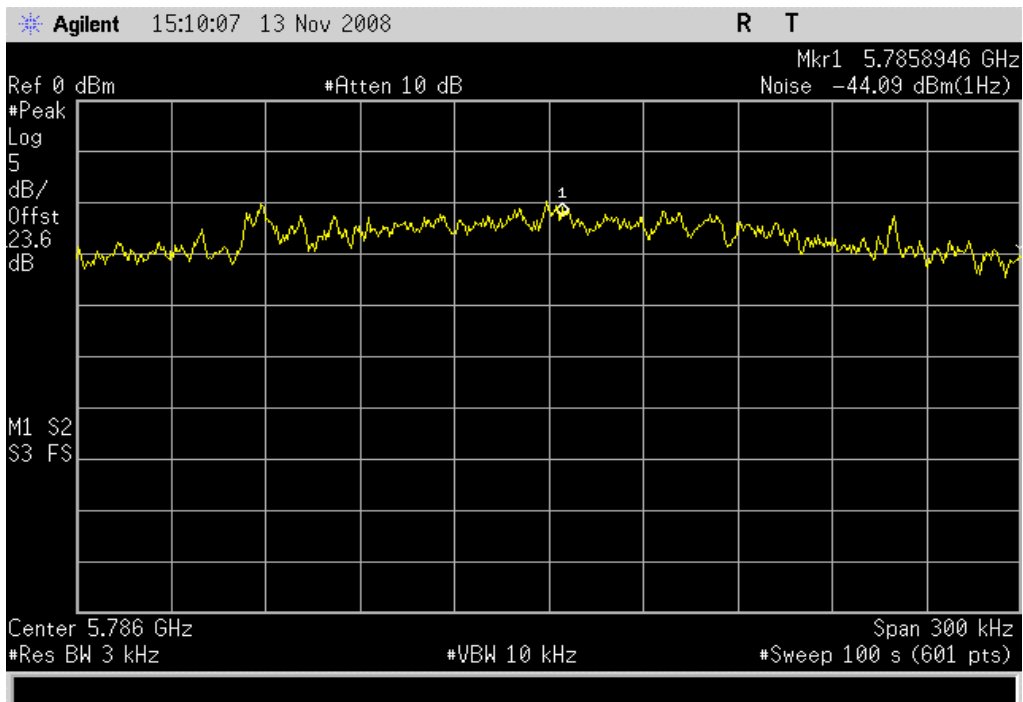


802.11(a) 36 Mbps, Mid Channel

Result: Pass

Value: -9.29 dBm / 3 kHz

Limit: 8 dBm / kHz

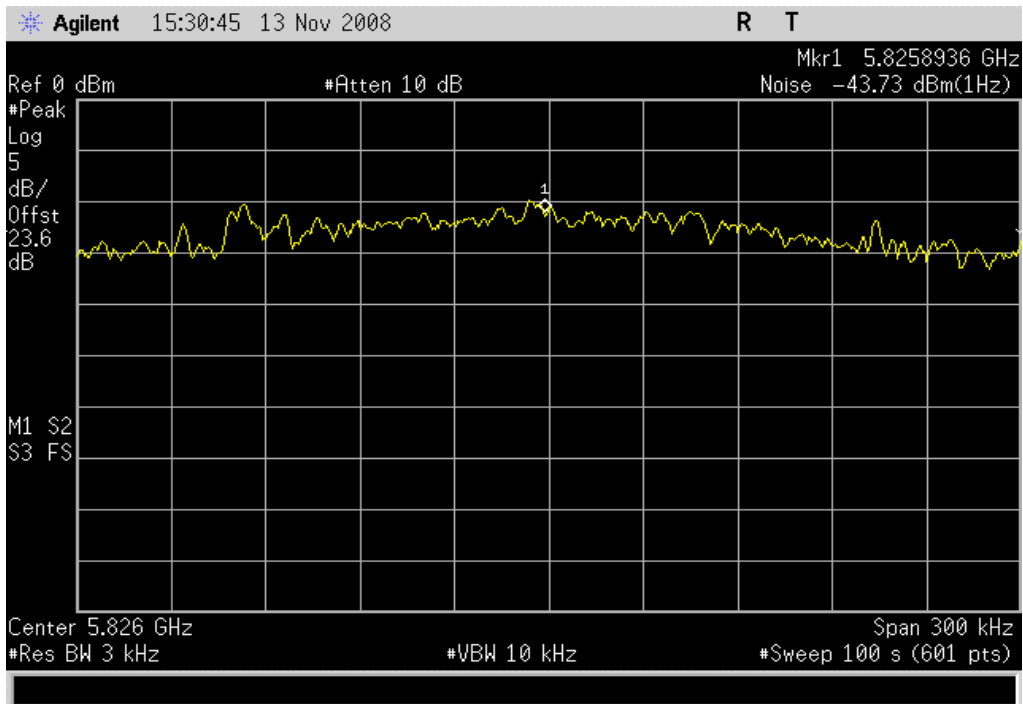


802.11(a) 36 Mbps, High Channel

Result: Pass

Value: -8.93 dBm / 3 kHz

Limit: 8 dBm / kHz

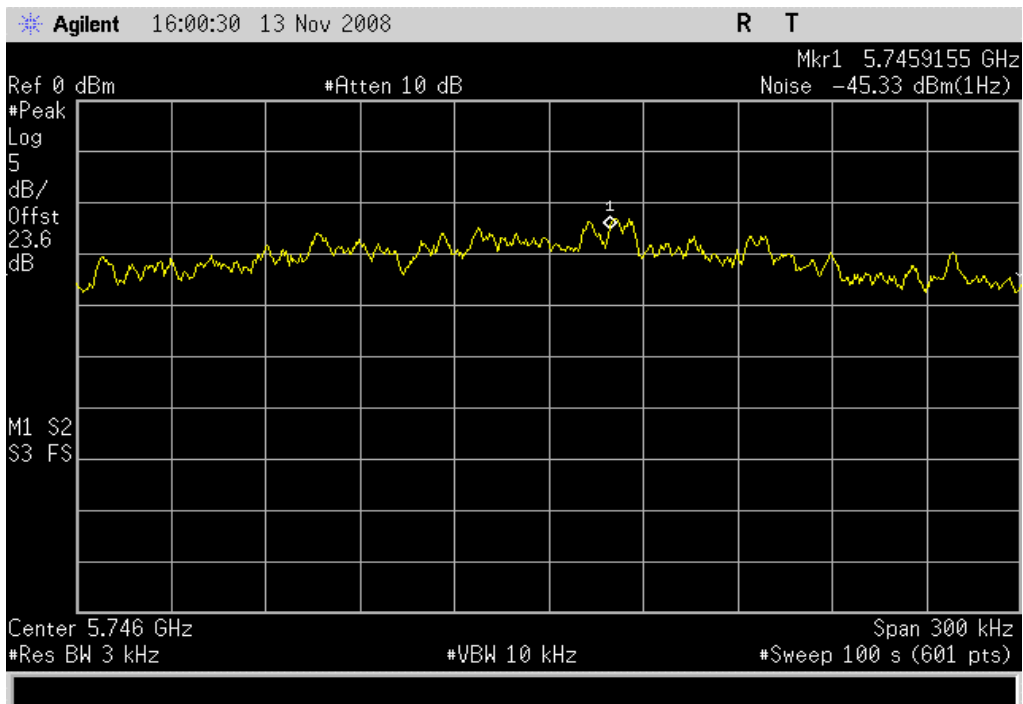


802.11(a) 54 Mbps, Low Channel

Result: Pass

Value: -10.53 dBm / 3 kHz

Limit: 8 dBm / kHz

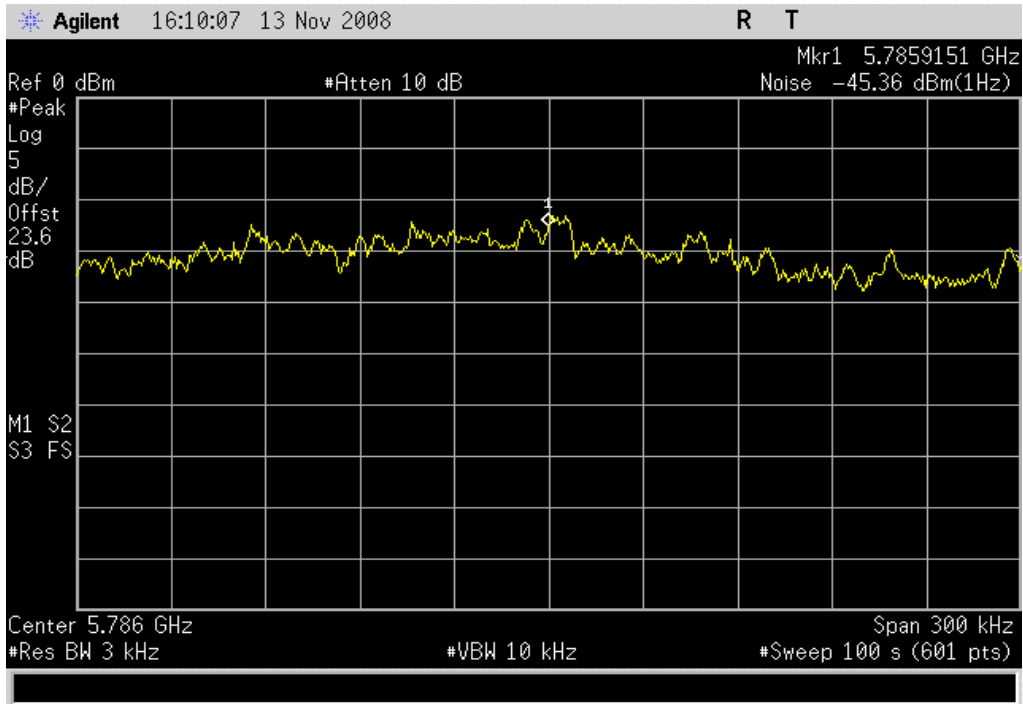


802.11(a) 54 Mbps, Mid Channel

Result: Pass

Value: -10.56 dBm / 3 kHz

Limit: 8 dBm / kHz

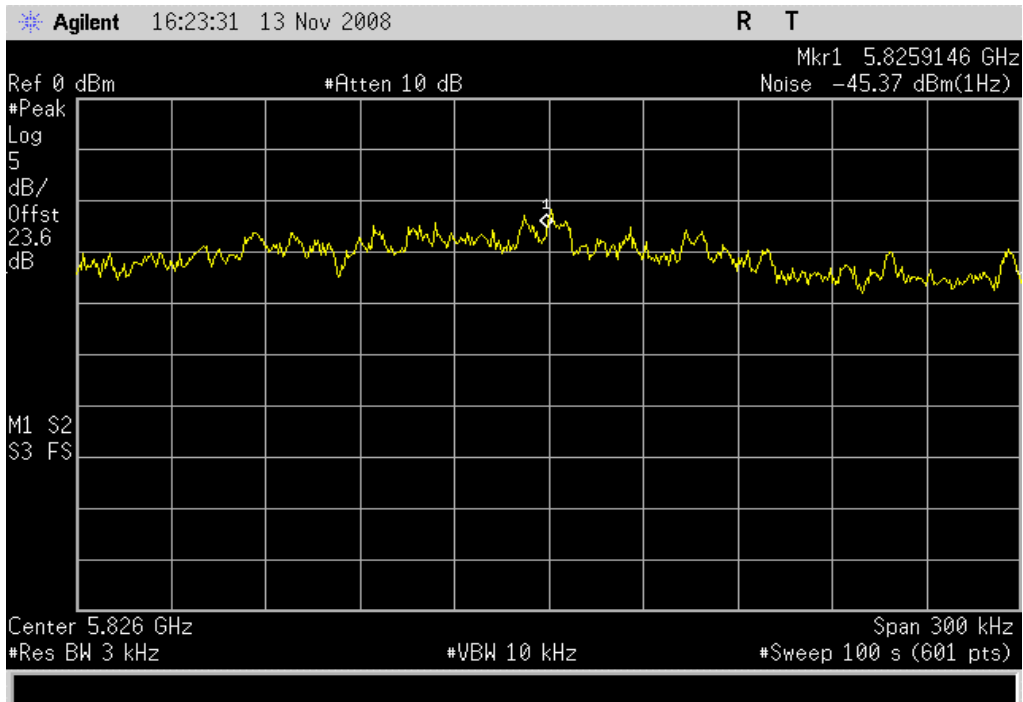


802.11(a) 54 Mbps, High Channel

Result: Pass

Value: -10.57 dBm / 3 kHz

Limit: 8 dBm / 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.

MODES OF OPERATION

Transmitting 802.11(a), 6 Mbps, High Channel 165
Transmitting 802.11(a), 6 Mbps, Mid Channel 157
Transmitting 802.11(a), 6 Mbps, Low Channel 149
Transmitting 802.11(g), 6 Mbps, Low Channel 1
Transmitting 802.11(g), 6 Mbps, Mid Channel 6
Transmitting 802.11(g), 6 Mbps, High Channel 11
Transmitting 802.11(b), 1 Mbps, High Channel 11
Transmitting 802.11(b), 1 Mbps, Mid Channel 6
Transmitting 802.11(b), 1 Mbps, Low Channel 1

POWER SETTINGS INVESTIGATED

120VAC/60Hz

CONFIGURATIONS INVESTIGATED

SPAC0447 - 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
LISN	Solar	9252-50-R-24-BNC	LIR	1/4/2008	13 mo
LISN	Solar	9252-50-R-24-BNC	LIP	1/4/2008	13 mo
EV07 Cables		Conducted Cables	EVG	5/2/2008	13 mo
High Pass Filter	T.T.E.	7766	HFG	2/5/2008	13 mo
Attenuator	Coaxicom	66702 2910-20	ATO	6/30/2008	13 mo
Receiver	Rohde & Schwarz	ESCI	ARH	8/28/2008	12 mo

MEASUREMENT BANDWIDTHS

Frequency Range	Peak Data	Quasi-Peak Data	Average Data
	(MHz)	(kHz)	(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

Measurement uncertainty is used to reflect the accuracy of the measured result as compared with its "true" or theoretically correct value. Our measurement data meets or exceeds the measurement uncertainty requirements of CISPR 16-4. In the case of transient tests our test equipment has been demonstrated by calibration to provide at least a 95% confidence that it complies with the test specification requirements. The measurement uncertainty for any test is 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.

EMC

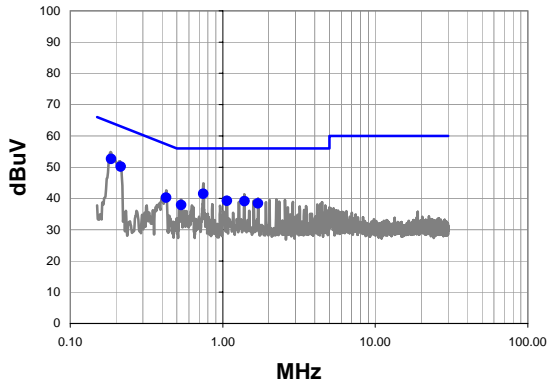
AC POWERLINE CONDUCTED EMISSIONS

Work Order:	SPAC0447	Date:	11/10/08	<i>David DiVergigelis</i>
Project:	None	Temperature:	24	
Job Site:	EV07	Humidity:	45	Tested by: David DiVergigelis
Serial Number:	Various, see config page	Barometric Pres.:	30.25	
EUT:	Ultraview SL Wireless Option			
Configuration:	3- AC Powerline Conducted Emissions			
Customer:	Spacelabs Healthcare			
Attendees:	None			
EUT Power:	120VAC/60Hz			
Operating Mode:	Transmitting 802.11(b), 1 Mbps, Low Channel 1			
Deviations:	No deviations.			
Comments:	None			

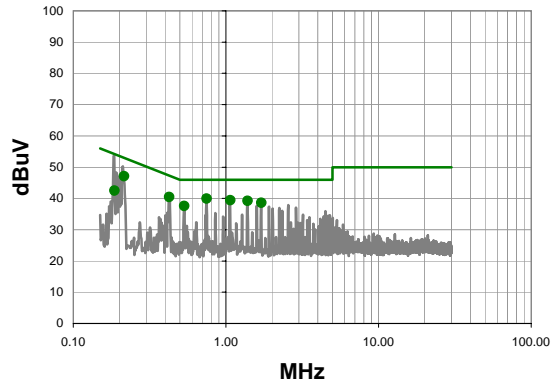
Test Specifications FCC 15.207:2008	Class B	Test Method ANSI C63.4:2003
---	----------------	---------------------------------------

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

Quasi Peak Data - vs - Quasi Peak Limit



Average Data - vs - Average Limit



Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.186	31.3	21.3	52.6	64.2	-11.6
0.215	29.1	21.1	50.2	63.0	-12.9
0.747	20.7	20.7	41.4	56.0	-14.6
1.068	18.6	20.6	39.2	56.0	-16.8
1.388	18.5	20.6	39.1	56.0	-16.9
0.425	19.3	20.9	40.2	57.3	-17.1
1.708	17.8	20.6	38.4	56.0	-17.6
0.534	17.0	20.9	37.9	56.0	-18.1

Average Data - vs - Average Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.215	26.0	21.1	47.1	53.0	-6.0
0.747	19.2	20.7	39.9	46.0	-6.1
1.068	18.8	20.6	39.4	46.0	-6.6
1.388	18.6	20.6	39.2	46.0	-6.8
0.425	19.5	20.9	40.4	47.3	-6.9
1.708	18.0	20.6	38.6	46.0	-7.4
0.534	16.7	20.9	37.6	46.0	-8.4
0.186	21.1	21.3	42.4	54.2	-11.8

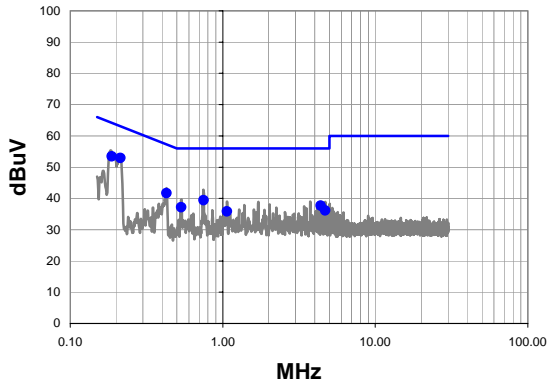
EMC

AC POWERLINE CONDUCTED EMISSIONS

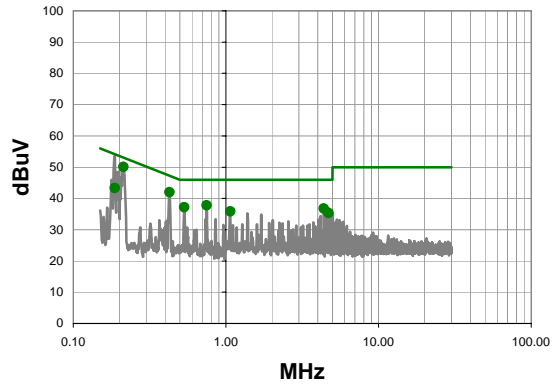
Work Order:	SPAC0447	Date:	11/10/08	<i>David DiVergigelis</i>
Project:	None	Temperature:	24	
Job Site:	EV07	Humidity:	45	Tested by: David DiVergigelis
Serial Number:	Various, see config page	Barometric Pres.:	30.25	
EUT:	Ultraview SL Wireless Option			
Configuration:	3- AC Powerline Conducted Emissions			
Customer:	Spacelabs Healthcare			
Attendees:	None			
EUT Power:	120VAC/60Hz			
Operating Mode:	Transmitting 802.11(b), 1 Mbps, Low Channel 1			
Deviations:	No deviations.			
Comments:	None			

Test Specifications FCC 15.207:2008	Class B	Test Method ANSI C63.4:2003			
Run #	2	Line: Neutral	Ext. Attenuation: 20	Results	Pass

Quasi Peak Data - vs - Quasi Peak Limit



Average Data - vs - Average Limit



Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.213	31.9	21.1	53.0	63.1	-10.1
0.187	32.1	21.3	53.4	64.2	-10.7
0.427	20.7	20.9	41.6	57.3	-15.7
0.748	18.7	20.7	39.4	56.0	-16.6
4.384	17.0	20.6	37.6	56.0	-18.4
0.534	16.3	20.9	37.2	56.0	-18.8
4.704	15.5	20.6	36.1	56.0	-19.9
1.068	15.2	20.6	35.8	56.0	-20.2

Average Data - vs - Average Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.213	29.0	21.1	50.1	53.1	-3.0
0.427	21.0	20.9	41.9	47.3	-5.4
0.748	17.0	20.7	37.7	46.0	-8.3
0.534	16.3	20.9	37.2	46.0	-8.8
4.384	16.1	20.6	36.7	46.0	-9.3
1.068	15.2	20.6	35.8	46.0	-10.2
4.704	14.7	20.6	35.3	46.0	-10.7
0.187	22.0	21.3	43.3	54.2	-10.8

EMC

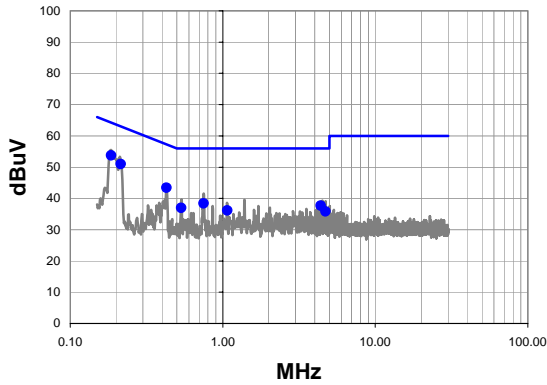
AC POWERLINE CONDUCTED EMISSIONS

Work Order:	SPAC0447	Date:	11/10/08	<i>David DiVergigelis</i>
Project:	None	Temperature:	24	
Job Site:	EV07	Humidity:	45	Tested by: David DiVergigelis
Serial Number:	Various, see config page	Barometric Pres.:	30.25	
EUT:	Ultraview SL Wireless Option			
Configuration:	3- AC Powerline Conducted Emissions			
Customer:	Spacelabs Healthcare			
Attendees:	None			
EUT Power:	120VAC/60Hz			
Operating Mode:	Transmitting 802.11(b), 1 Mbps, Mid Channel 6			
Deviations:	No deviations.			
Comments:	None			

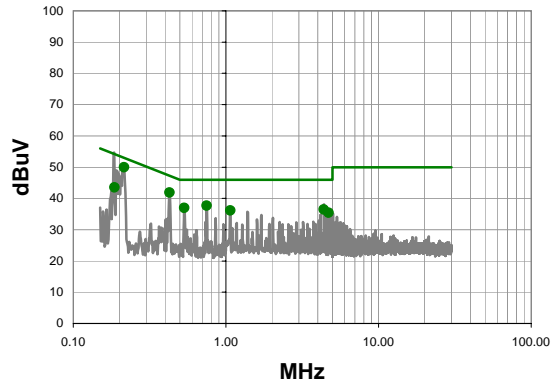
Test Specifications FCC 15.207:2008	Class B	Test Method ANSI C63.4:2003
---	----------------	---------------------------------------

Run #	3	Line:	Neutral	Ext. Attenuation:	20	Results	Pass
--------------	---	--------------	---------	--------------------------	----	----------------	------

Quasi Peak Data - vs - Quasi Peak Limit



Average Data - vs - Average Limit



Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.186	32.4	21.3	53.7	64.2	-10.5
0.215	29.9	21.1	51.0	63.0	-12.1
0.427	22.5	20.9	43.4	57.3	-13.9
0.750	17.6	20.7	38.3	56.0	-17.7
4.388	17.0	20.6	37.6	56.0	-18.4
0.534	16.1	20.9	37.0	56.0	-19.0
1.072	15.5	20.6	36.1	56.0	-19.9
4.712	15.2	20.6	35.8	56.0	-20.2

Average Data - vs - Average Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.215	28.9	21.1	50.0	53.0	-3.1
0.427	20.9	20.9	41.8	47.3	-5.5
0.750	16.9	20.7	37.6	46.0	-8.4
0.534	16.1	20.9	37.0	46.0	-9.0
4.388	15.8	20.6	36.4	46.0	-9.6
1.072	15.5	20.6	36.1	46.0	-9.9
4.712	14.8	20.6	35.4	46.0	-10.6
0.186	22.2	21.3	43.5	54.2	-10.7

EMC

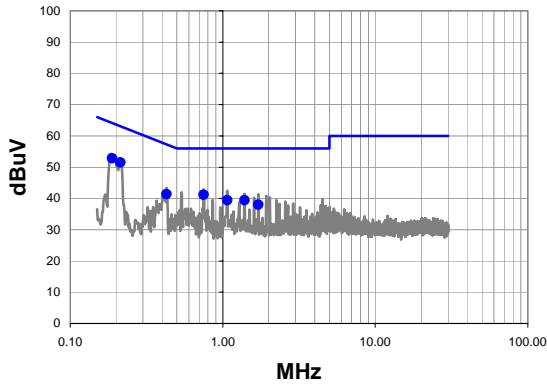
AC POWERLINE CONDUCTED EMISSIONS

Work Order:	SPAC0447	Date:	11/10/08	<i>David DiVergigelis</i>
Project:	None	Temperature:	24	
Job Site:	EV07	Humidity:	45	Tested by: David DiVergigelis
Serial Number:	Various, see config page	Barometric Pres.:	30.25	
EUT:	Ultraview SL Wireless Option			
Configuration:	3- AC Powerline Conducted Emissions			
Customer:	Spacelabs Healthcare			
Attendees:	None			
EUT Power:	120VAC/60Hz			
Operating Mode:	Transmitting 802.11(b), 1 Mbps, Mid Channel 6			
Deviations:	No deviations.			
Comments:	None			

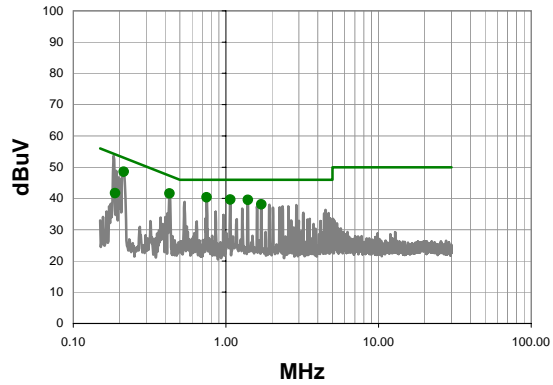
Test Specifications FCC 15.207:2008	Class B	Test Method ANSI C63.4:2003
---	----------------	---------------------------------------

Run #	4	Line:	High Line	Ext. Attenuation:	20	Results	Pass
--------------	---	--------------	-----------	--------------------------	----	----------------	------

Quasi Peak Data - vs - Quasi Peak Limit



Average Data - vs - Average Limit



Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.188	31.5	21.3	52.8	64.1	-11.3
0.214	30.4	21.1	51.5	63.0	-11.6
0.750	20.4	20.7	41.1	56.0	-14.9
0.427	20.4	20.9	41.3	57.3	-16.0
1.392	18.8	20.6	39.4	56.0	-16.6
1.072	18.8	20.6	39.4	56.0	-16.6
1.712	17.4	20.6	38.0	56.0	-18.0

Average Data - vs - Average Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.214	27.5	21.1	48.6	53.0	-4.5
0.750	19.6	20.7	40.3	46.0	-5.7
0.427	20.6	20.9	41.5	47.3	-5.8
1.072	19.0	20.6	39.6	46.0	-6.4
1.392	18.9	20.6	39.5	46.0	-6.5
1.712	17.5	20.6	38.1	46.0	-7.9
0.188	20.4	21.3	41.7	54.1	-12.4

EMC

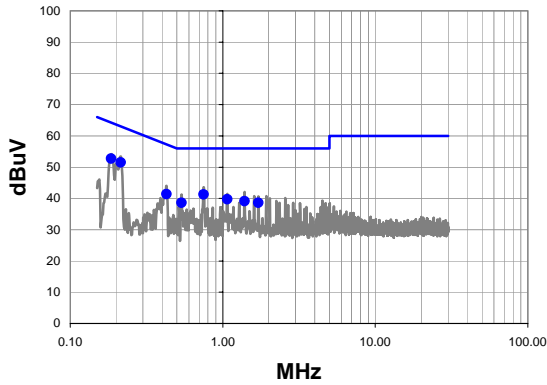
AC POWERLINE CONDUCTED EMISSIONS

Work Order:	SPAC0447	Date:	11/10/08	<i>David DiVergigelis</i>
Project:	None	Temperature:	24	
Job Site:	EV07	Humidity:	45	Tested by: David DiVergigelis
Serial Number:	Various, see config page	Barometric Pres.:	30.25	
EUT:	Ultraview SL Wireless Option			
Configuration:	3- AC Powerline Conducted Emissions			
Customer:	Spacelabs Healthcare			
Attendees:	None			
EUT Power:	120VAC/60Hz			
Operating Mode:	Transmitting 802.11(b), 1 Mbps, High Channel 11			
Deviations:	No deviations.			
Comments:	None			

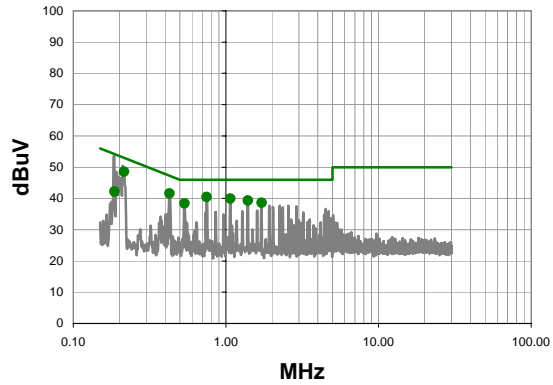
Test Specifications FCC 15.207:2008	Class B	Test Method ANSI C63.4:2003
---	----------------	---------------------------------------

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

Quasi Peak Data - vs - Quasi Peak Limit



Average Data - vs - Average Limit



Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.186	31.4	21.3	52.7	64.2	-11.5
0.215	30.4	21.1	51.5	63.0	-11.6
0.750	20.5	20.7	41.2	56.0	-14.8
0.427	20.4	20.9	41.3	57.3	-16.0
1.072	19.1	20.6	39.7	56.0	-16.3
1.392	18.5	20.6	39.1	56.0	-16.9
1.716	18.0	20.6	38.6	56.0	-17.4
0.536	17.7	20.9	38.6	56.0	-17.4

Average Data - vs - Average Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.215	27.5	21.1	48.6	53.0	-4.5
0.750	19.7	20.7	40.4	46.0	-5.6
0.427	20.6	20.9	41.5	47.3	-5.8
1.072	19.3	20.6	39.9	46.0	-6.1
1.392	18.7	20.6	39.3	46.0	-6.7
1.716	18.0	20.6	38.6	46.0	-7.4
0.536	17.5	20.9	38.4	46.0	-7.6
0.186	20.8	21.3	42.1	54.2	-12.1

EMC

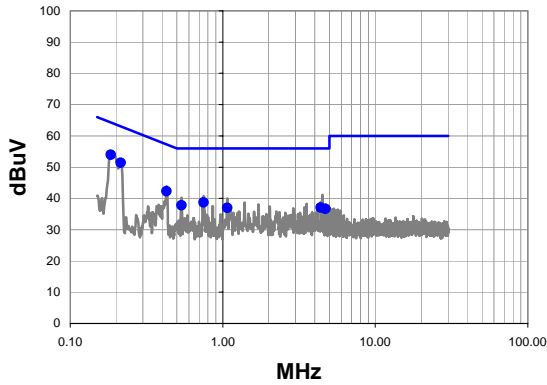
AC POWERLINE CONDUCTED EMISSIONS

Work Order:	SPAC0447	Date:	11/10/08	<i>David DiVergigelis</i>
Project:	None	Temperature:	24	
Job Site:	EV07	Humidity:	45	Tested by: David DiVergigelis
Serial Number:	Various, see config page	Barometric Pres.:	30.25	
EUT:	Ultraview SL Wireless Option			
Configuration:	3- AC Powerline Conducted Emissions			
Customer:	Spacelabs Healthcare			
Attendees:	None			
EUT Power:	120VAC/60Hz			
Operating Mode:	Transmitting 802.11(b), 1 Mbps, High Channel 11			
Deviations:	No deviations.			
Comments:	None			

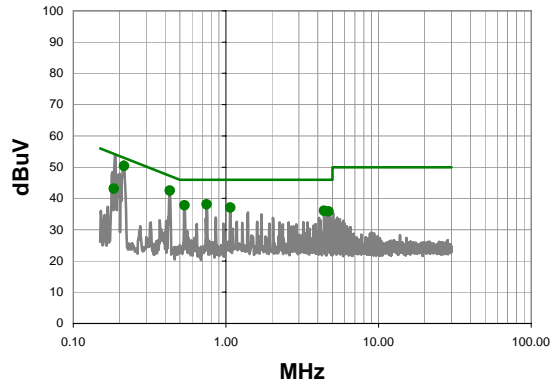
Test Specifications FCC 15.207:2008	Class B	Test Method ANSI C63.4:2003
---	----------------	---------------------------------------

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

Quasi Peak Data - vs - Quasi Peak Limit



Average Data - vs - Average Limit



Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.185	32.6	21.4	54.0	64.3	-10.3
0.215	30.3	21.1	51.4	63.0	-11.7
0.429	21.3	20.9	42.2	57.3	-15.0
0.750	18.0	20.7	38.7	56.0	-17.3
0.536	16.9	20.9	37.8	56.0	-18.2
4.396	16.4	20.6	37.0	56.0	-19.0
1.072	16.4	20.6	37.0	56.0	-19.0
4.716	16.0	20.6	36.6	56.0	-19.4

Average Data - vs - Average Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.215	29.3	21.1	50.4	53.0	-2.7
0.429	21.6	20.9	42.5	47.3	-4.7
0.750	17.3	20.7	38.0	46.0	-8.0
0.536	16.9	20.9	37.8	46.0	-8.2
1.072	16.5	20.6	37.1	46.0	-8.9
4.396	15.4	20.6	36.0	46.0	-10.0
4.716	15.2	20.6	35.8	46.0	-10.2
0.185	21.7	21.4	43.1	54.3	-11.2

EMC

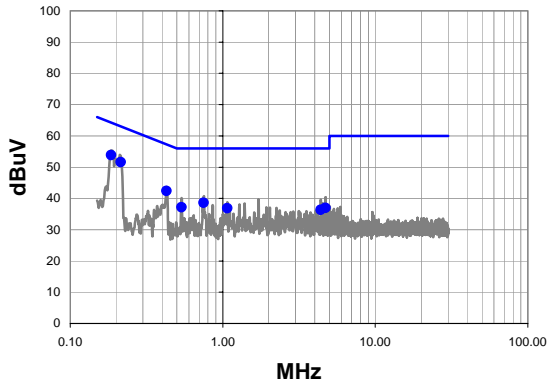
AC POWERLINE CONDUCTED EMISSIONS

Work Order:	SPAC0447	Date:	11/10/08	<i>David DiVergigelis</i>
Project:	None	Temperature:	24	
Job Site:	EV07	Humidity:	45	Tested by: David DiVergigelis
Serial Number:	Various, see config page	Barometric Pres.:	30.25	
EUT:	Ultraview SL Wireless Option			
Configuration:	3- AC Powerline Conducted Emissions			
Customer:	Spacelabs Healthcare			
Attendees:	None			
EUT Power:	120VAC/60Hz			
Operating Mode:	Transmitting 802.11(g), 6 Mbps, High Channel 11			
Deviations:	No deviations.			
Comments:	None			

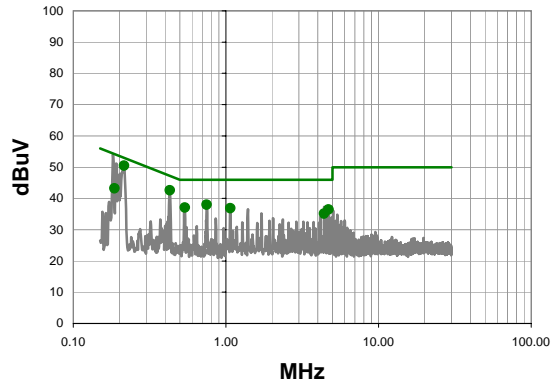
Test Specifications FCC 15.207:2008	Class B	Test Method ANSI C63.4:2003
---	----------------	---------------------------------------

Run #	7	Line:	Neutral	Ext. Attenuation:	20	Results	Pass
--------------	---	--------------	---------	--------------------------	----	----------------	------

Quasi Peak Data - vs - Quasi Peak Limit



Average Data - vs - Average Limit



Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.186	32.5	21.3	53.8	64.2	-10.4
0.215	30.5	21.1	51.6	63.0	-11.5
0.429	21.4	20.9	42.3	57.3	-14.9
0.750	17.9	20.7	38.6	56.0	-17.4
0.538	16.3	20.9	37.2	56.0	-18.8
4.720	16.3	20.6	36.9	56.0	-19.1
1.072	16.3	20.6	36.9	56.0	-19.1
4.400	15.7	20.6	36.3	56.0	-19.7

Average Data - vs - Average Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.215	29.4	21.1	50.5	53.0	-2.6
0.429	21.7	20.9	42.6	47.3	-4.6
0.750	17.2	20.7	37.9	46.0	-8.1
0.538	16.2	20.9	37.1	46.0	-8.9
1.072	16.3	20.6	36.9	46.0	-9.1
4.720	15.8	20.6	36.4	46.0	-9.6
4.400	14.5	20.6	35.1	46.0	-10.9
0.186	21.9	21.3	43.2	54.2	-11.0

EMC

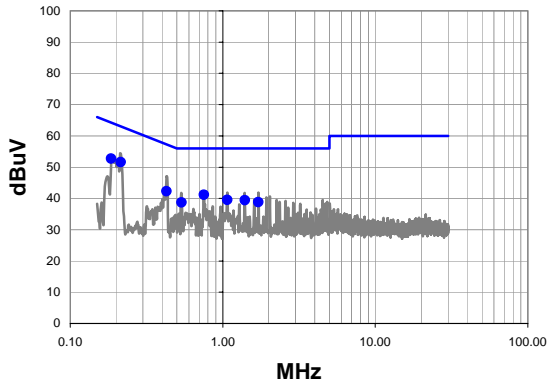
AC POWERLINE CONDUCTED EMISSIONS

Work Order:	SPAC0447	Date:	11/10/08	<i>David DiVergigelis</i>
Project:	None	Temperature:	24	
Job Site:	EV07	Humidity:	45	Tested by: David DiVergigelis
Serial Number:	Various, see config page	Barometric Pres.:	30.25	
EUT:	Ultraview SL Wireless Option			
Configuration:	3- AC Powerline Conducted Emissions			
Customer:	Spacelabs Healthcare			
Attendees:	None			
EUT Power:	120VAC/60Hz			
Operating Mode:	Transmitting 802.11(g), 6 Mbps, High Channel 11			
Deviations:	No deviations.			
Comments:	None			

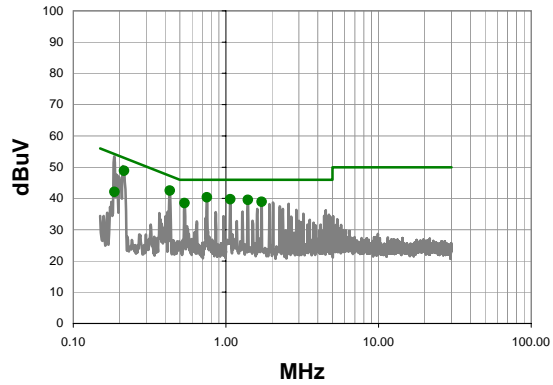
Test Specifications FCC 15.207:2008	Class B	Test Method ANSI C63.4:2003
---	----------------	---------------------------------------

Run #	8	Line:	High Line	Ext. Attenuation:	20	Results	Pass
--------------	---	--------------	-----------	--------------------------	----	----------------	------

Quasi Peak Data - vs - Quasi Peak Limit



Average Data - vs - Average Limit



Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.215	30.5	21.1	51.6	63.0	-11.5
0.186	31.4	21.3	52.7	64.2	-11.5
0.752	20.4	20.7	41.1	56.0	-14.9
0.429	21.3	20.9	42.2	57.3	-15.0
1.072	18.9	20.6	39.5	56.0	-16.5
1.396	18.8	20.6	39.4	56.0	-16.6
1.716	18.2	20.6	38.8	56.0	-17.2
0.536	17.8	20.9	38.7	56.0	-17.3

Average Data - vs - Average Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.215	27.8	21.1	48.9	53.0	-4.2
0.429	21.5	20.9	42.4	47.3	-4.8
0.752	19.6	20.7	40.3	46.0	-5.7
1.072	19.1	20.6	39.7	46.0	-6.3
1.396	18.9	20.6	39.5	46.0	-6.5
1.716	18.3	20.6	38.9	46.0	-7.1
0.536	17.6	20.9	38.5	46.0	-7.5
0.186	20.7	21.3	42.0	54.2	-12.2

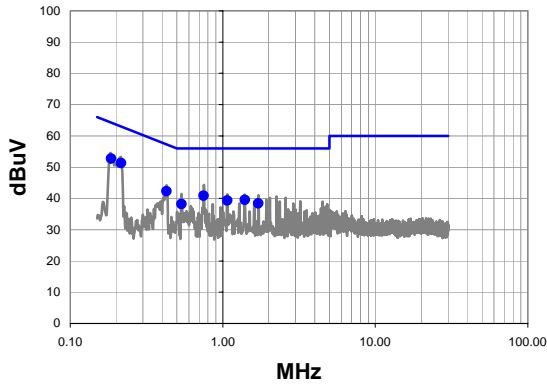
EMC

AC POWERLINE CONDUCTED EMISSIONS

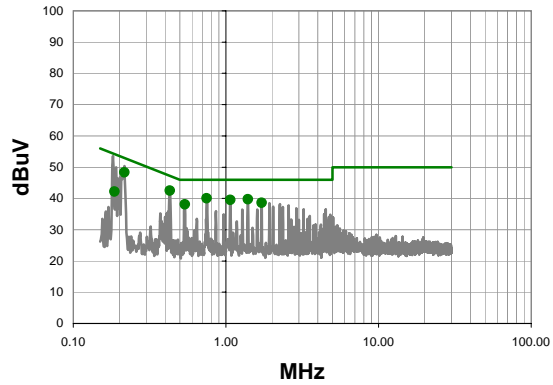
Work Order:	SPAC0447	Date:	11/10/08	<i>David DiVergigelis</i>
Project:	None	Temperature:	24	
Job Site:	EV07	Humidity:	45	Tested by: David DiVergigelis
Serial Number:	Various, see config page	Barometric Pres.:	30.25	
EUT:	Ultraview SL Wireless Option			
Configuration:	3- AC Powerline Conducted Emissions			
Customer:	Spacelabs Healthcare			
Attendees:	None			
EUT Power:	120VAC/60Hz			
Operating Mode:	Transmitting 802.11(g), 6 Mbps, Mid Channel 6			
Deviations:	No deviations.			
Comments:	None			

Test Specifications FCC 15.207:2008	Class B	Test Method ANSI C63.4:2003			
Run #	9	Line: High Line	Ext. Attenuation: 20	Results	Pass

Quasi Peak Data - vs - Quasi Peak Limit



Average Data - vs - Average Limit



Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.186	31.4	21.3	52.7	64.2	-11.5
0.216	30.2	21.1	51.3	63.0	-11.7
0.429	21.3	20.9	42.2	57.3	-15.0
0.750	20.1	20.7	40.8	56.0	-15.2
1.396	18.9	20.6	39.5	56.0	-16.5
1.072	18.7	20.6	39.3	56.0	-16.7
1.716	17.8	20.6	38.4	56.0	-17.6
0.538	17.3	20.9	38.2	56.0	-17.8

Average Data - vs - Average Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.216	27.3	21.1	48.4	53.0	-4.6
0.429	21.5	20.9	42.4	47.3	-4.8
0.750	19.3	20.7	40.0	46.0	-6.0
1.396	19.1	20.6	39.7	46.0	-6.3
1.072	18.9	20.6	39.5	46.0	-6.5
1.716	18.0	20.6	38.6	46.0	-7.4
0.538	17.2	20.9	38.1	46.0	-7.9
0.186	20.8	21.3	42.1	54.2	-12.1

EMC

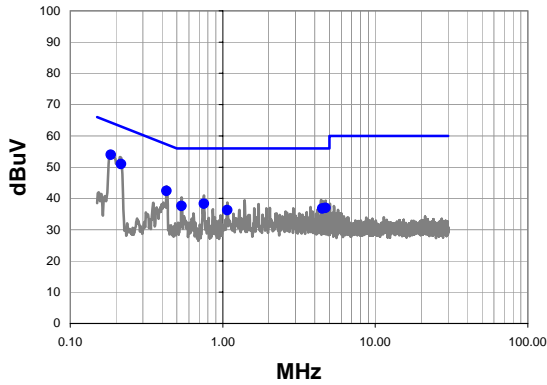
AC POWERLINE CONDUCTED EMISSIONS

Work Order:	SPAC0447	Date:	11/10/08	<i>David DiVergigelis</i>
Project:	None	Temperature:	24	
Job Site:	EV07	Humidity:	45	Tested by: David DiVergigelis
Serial Number:	Various, see config page	Barometric Pres.:	30.25	
EUT:	Ultraview SL Wireless Option			
Configuration:	3- AC Powerline Conducted Emissions			
Customer:	Spacelabs Healthcare			
Attendees:	None			
EUT Power:	120VAC/60Hz			
Operating Mode:	Transmitting 802.11(g), 6 Mbps, Mid Channel 6			
Deviations:	No deviations.			
Comments:	None			

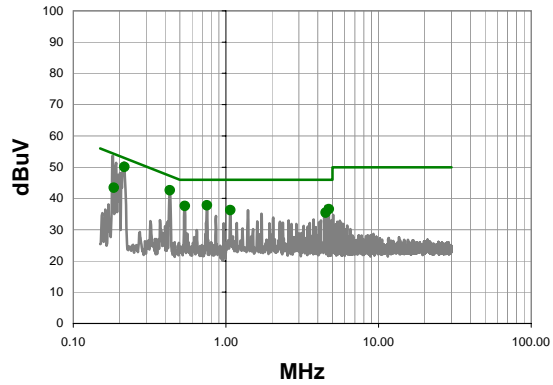
Test Specifications FCC 15.207:2008	Class B	Test Method ANSI C63.4:2003
---	----------------	---------------------------------------

Run #	10	Line:	Neutral	Ext. Attenuation:	20	Results	Pass
--------------	----	--------------	---------	--------------------------	----	----------------	------

Quasi Peak Data - vs - Quasi Peak Limit



Average Data - vs - Average Limit



Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.185	32.6	21.4	54.0	64.3	-10.3
0.216	29.9	21.1	51.0	63.0	-12.0
0.429	21.4	20.9	42.3	57.3	-14.9
0.753	17.5	20.7	38.2	56.0	-17.8
0.538	16.7	20.9	37.6	56.0	-18.4
4.724	16.3	20.6	36.9	56.0	-19.1
4.508	16.1	20.6	36.7	56.0	-19.3
1.072	15.6	20.6	36.2	56.0	-19.8

Average Data - vs - Average Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.216	29.0	21.1	50.1	53.0	-2.9
0.429	21.7	20.9	42.6	47.3	-4.6
0.753	17.0	20.7	37.7	46.0	-8.3
0.538	16.7	20.9	37.6	46.0	-8.4
4.724	15.9	20.6	36.5	46.0	-9.5
1.072	15.7	20.6	36.3	46.0	-9.7
4.508	14.8	20.6	35.4	46.0	-10.6
0.185	22.0	21.4	43.4	54.3	-10.9

EMC

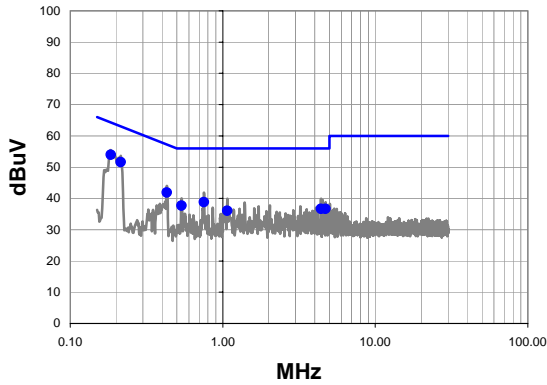
AC POWERLINE CONDUCTED EMISSIONS

Work Order:	SPAC0447	Date:	11/10/08	<i>David DiVergigelis</i>
Project:	None	Temperature:	24	
Job Site:	EV07	Humidity:	45	Tested by: David DiVergigelis
Serial Number:	Various, see config page	Barometric Pres.:	30.25	
EUT:	Ultraview SL Wireless Option			
Configuration:	3- AC Powerline Conducted Emissions			
Customer:	Spacelabs Healthcare			
Attendees:	None			
EUT Power:	120VAC/60Hz			
Operating Mode:	Transmitting 802.11(g), 6 Mbps, Low Channel 1			
Deviations:	No deviations.			
Comments:	None			

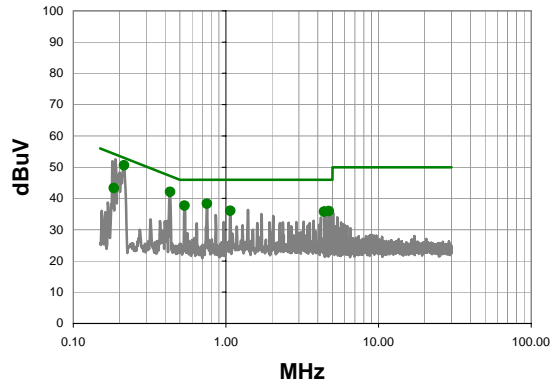
Test Specifications FCC 15.207:2008	Class B	Test Method ANSI C63.4:2003
---	----------------	---------------------------------------

Run #	11	Line:	Neutral	Ext. Attenuation:	20	Results	Pass
--------------	----	--------------	---------	--------------------------	----	----------------	------

Quasi Peak Data - vs - Quasi Peak Limit



Average Data - vs - Average Limit



Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.185	32.6	21.4	54.0	64.3	-10.3
0.215	30.5	21.1	51.6	63.0	-11.5
0.431	20.9	20.9	41.8	57.2	-15.4
0.752	18.1	20.7	38.8	56.0	-17.2
0.536	16.8	20.9	37.7	56.0	-18.3
4.724	16.0	20.6	36.6	56.0	-19.4
4.404	16.0	20.6	36.6	56.0	-19.4
1.072	15.4	20.6	36.0	56.0	-20.0

Average Data - vs - Average Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.215	29.5	21.1	50.6	53.0	-2.5
0.431	21.1	20.9	42.0	47.2	-5.2
0.752	17.5	20.7	38.2	46.0	-7.8
0.536	16.8	20.9	37.7	46.0	-8.3
1.072	15.4	20.6	36.0	46.0	-10.0
4.724	15.3	20.6	35.9	46.0	-10.1
4.404	15.1	20.6	35.7	46.0	-10.3
0.185	21.9	21.4	43.3	54.3	-11.0

EMC

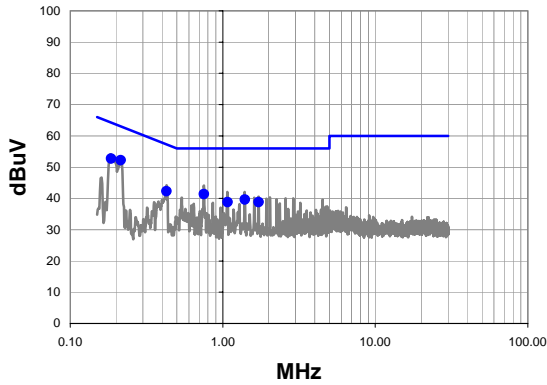
AC POWERLINE CONDUCTED EMISSIONS

Work Order:	SPAC0447	Date:	11/10/08	<i>David DiVergigelis</i>
Project:	None	Temperature:	24	
Job Site:	EV07	Humidity:	45	Tested by: David DiVergigelis
Serial Number:	Various, see config page	Barometric Pres.:	30.25	
EUT:	Ultraview SL Wireless Option			
Configuration:	3- AC Powerline Conducted Emissions			
Customer:	Spacelabs Healthcare			
Attendees:	None			
EUT Power:	120VAC/60Hz			
Operating Mode:	Transmitting 802.11(g), 6 Mbps, Low Channel 1			
Deviations:	No deviations.			
Comments:	None			

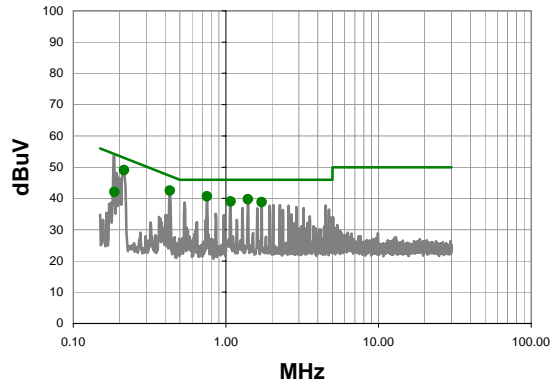
Test Specifications FCC 15.207:2008	Class B	Test Method ANSI C63.4:2003
---	----------------	---------------------------------------

Run #	12	Line:	High Line	Ext. Attenuation:	20	Results	Pass
--------------	----	--------------	-----------	--------------------------	----	----------------	------

Quasi Peak Data - vs - Quasi Peak Limit



Average Data - vs - Average Limit



Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.215	31.1	21.1	52.2	63.0	-10.9
0.186	31.4	21.3	52.7	64.2	-11.5
0.752	20.6	20.7	41.3	56.0	-14.7
0.429	21.3	20.9	42.2	57.3	-15.0
1.396	19.0	20.6	39.6	56.0	-16.4
1.720	18.2	20.6	38.8	56.0	-17.2
1.076	18.2	20.6	38.8	56.0	-17.2

Average Data - vs - Average Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.215	28.0	21.1	49.1	53.0	-4.0
0.429	21.5	20.9	42.4	47.3	-4.8
0.752	19.9	20.7	40.6	46.0	-5.4
1.396	19.1	20.6	39.7	46.0	-6.3
1.076	18.4	20.6	39.0	46.0	-7.0
1.720	18.2	20.6	38.8	46.0	-7.2
0.186	20.7	21.3	42.0	54.2	-12.2

EMC

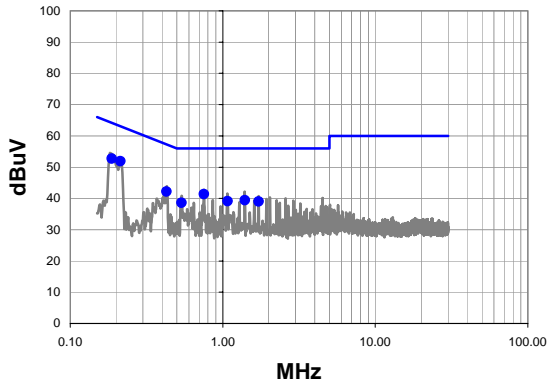
AC POWERLINE CONDUCTED EMISSIONS

Work Order:	SPAC0447	Date:	11/10/08	<i>David DiVergigelis</i>
Project:	None	Temperature:	24	
Job Site:	EV07	Humidity:	45	Tested by: David DiVergigelis
Serial Number:	Various, see config page	Barometric Pres.:	30.25	
EUT:	Ultraview SL Wireless Option			
Configuration:	3- AC Powerline Conducted Emissions			
Customer:	Spacelabs Healthcare			
Attendees:	None			
EUT Power:	120VAC/60Hz			
Operating Mode:	Transmitting 802.11(a), 6 Mbps, Low Channel 149			
Deviations:	No deviations.			
Comments:	None			

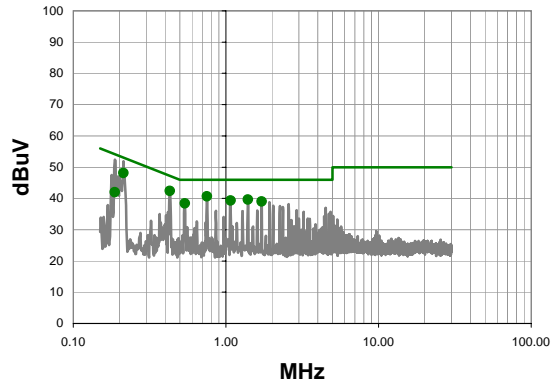
Test Specifications FCC 15.207:2008	Class B	Test Method ANSI C63.4:2003
---	----------------	---------------------------------------

Run #	13	Line:	High Line	Ext. Attenuation:	20	Results	Pass
--------------	----	--------------	-----------	--------------------------	----	----------------	------

Quasi Peak Data - vs - Quasi Peak Limit



Average Data - vs - Average Limit



Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.213	30.8	21.1	51.9	63.1	-11.2
0.187	31.4	21.3	52.7	64.2	-11.4
0.752	20.6	20.7	41.3	56.0	-14.7
0.429	21.2	20.9	42.1	57.3	-15.1
1.396	18.8	20.6	39.4	56.0	-16.6
1.076	18.5	20.6	39.1	56.0	-16.9
1.720	18.4	20.6	39.0	56.0	-17.0
0.538	17.7	20.9	38.6	56.0	-17.4

Average Data - vs - Average Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.213	27.1	21.1	48.2	53.1	-4.9
0.429	21.4	20.9	42.3	47.3	-4.9
0.752	19.9	20.7	40.6	46.0	-5.4
1.396	19.0	20.6	39.6	46.0	-6.4
1.076	18.7	20.6	39.3	46.0	-6.7
1.720	18.4	20.6	39.0	46.0	-7.0
0.538	17.5	20.9	38.4	46.0	-7.6
0.187	20.6	21.3	41.9	54.2	-12.2

EMC

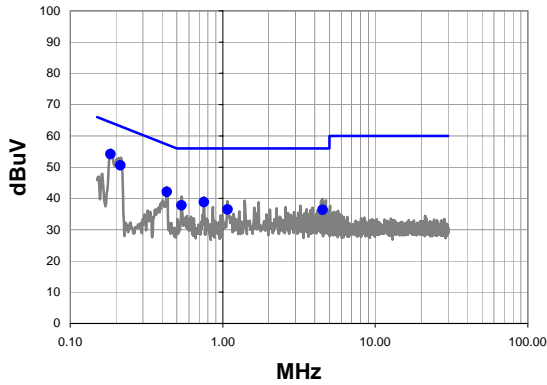
AC POWERLINE CONDUCTED EMISSIONS

Work Order:	SPAC0447	Date:	11/10/08	<i>David DiVergigelis</i>
Project:	None	Temperature:	24	
Job Site:	EV07	Humidity:	45	Tested by: David DiVergigelis
Serial Number:	Various, see config page	Barometric Pres.:	30.25	
EUT:	Ultraview SL Wireless Option			
Configuration:	3- AC Powerline Conducted Emissions			
Customer:	Spacelabs Healthcare			
Attendees:	None			
EUT Power:	120VAC/60Hz			
Operating Mode:	Transmitting 802.11(a), 6 Mbps, Low Channel 149			
Deviations:	No deviations.			
Comments:	None			

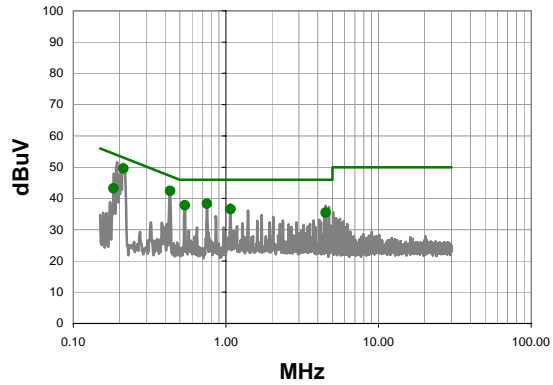
Test Specifications FCC 15.207:2008	Class B	Test Method ANSI C63.4:2003
---	----------------	---------------------------------------

Run #	14	Line:	Neutral	Ext. Attenuation:	20	Results	Pass
--------------	----	--------------	---------	--------------------------	----	----------------	------

Quasi Peak Data - vs - Quasi Peak Limit



Average Data - vs - Average Limit



Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.184	32.8	21.4	54.2	64.3	-10.1
0.213	29.5	21.1	50.6	63.1	-12.5
0.431	21.1	20.9	42.0	57.2	-15.2
0.752	18.1	20.7	38.8	56.0	-17.2
0.538	16.9	20.9	37.8	56.0	-18.2
1.076	15.9	20.6	36.5	56.0	-19.5
4.512	15.7	20.6	36.3	56.0	-19.7

Average Data - vs - Average Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.213	28.5	21.1	49.6	53.1	-3.5
0.431	21.4	20.9	42.3	47.2	-4.9
0.752	17.5	20.7	38.2	46.0	-7.8
0.538	16.9	20.9	37.8	46.0	-8.2
1.076	16.0	20.6	36.6	46.0	-9.4
4.512	14.8	20.6	35.4	46.0	-10.6
0.184	21.8	21.4	43.2	54.3	-11.1

EMC

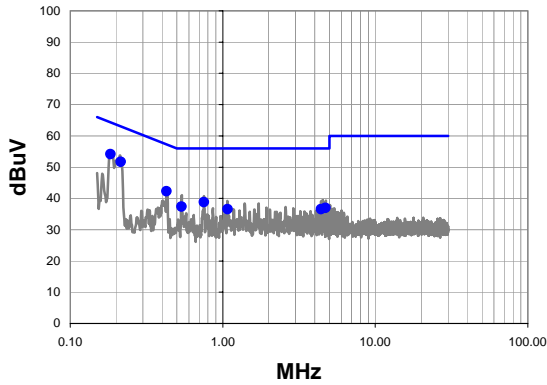
AC POWERLINE CONDUCTED EMISSIONS

Work Order:	SPAC0447	Date:	11/10/08	<i>David DiVergigelis</i>
Project:	None	Temperature:	24	
Job Site:	EV07	Humidity:	45	Tested by: David DiVergigelis
Serial Number:	Various, see config page	Barometric Pres.:	30.25	
EUT:	Ultraview SL Wireless Option			
Configuration:	3- AC Powerline Conducted Emissions			
Customer:	Spacelabs Healthcare			
Attendees:	None			
EUT Power:	120VAC/60Hz			
Operating Mode:	Transmitting 802.11(a), 6 Mbps, Mid Channel 157			
Deviations:	No deviations.			
Comments:	None			

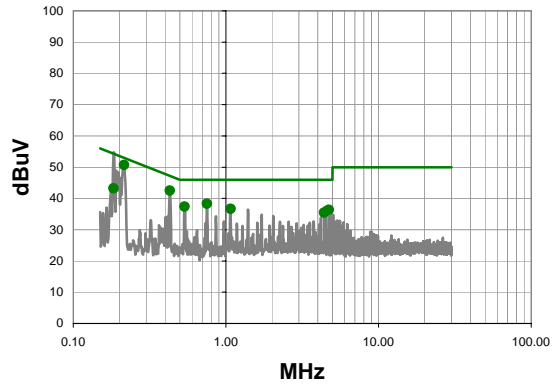
Test Specifications FCC 15.207:2008	Class B	Test Method ANSI C63.4:2003
---	----------------	---------------------------------------

Run #	15	Line:	Neutral	Ext. Attenuation:	20	Results	Pass
--------------	----	--------------	---------	--------------------------	----	----------------	------

Quasi Peak Data - vs - Quasi Peak Limit



Average Data - vs - Average Limit



Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.184	32.8	21.4	54.2	64.3	-10.1
0.215	30.6	21.1	51.7	63.0	-11.4
0.429	21.3	20.9	42.2	57.3	-15.0
0.752	18.1	20.7	38.8	56.0	-17.2
0.536	16.5	20.9	37.4	56.0	-18.6
4.728	16.3	20.6	36.9	56.0	-19.1
1.076	16.0	20.6	36.6	56.0	-19.4
4.408	15.9	20.6	36.5	56.0	-19.5

Average Data - vs - Average Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.215	29.6	21.1	50.7	53.0	-2.4
0.429	21.5	20.9	42.4	47.3	-4.8
0.752	17.5	20.7	38.2	46.0	-7.8
0.536	16.5	20.9	37.4	46.0	-8.6
1.076	16.1	20.6	36.7	46.0	-9.3
4.728	15.7	20.6	36.3	46.0	-9.7
4.408	14.8	20.6	35.4	46.0	-10.6
0.184	21.8	21.4	43.2	54.3	-11.1

EMC

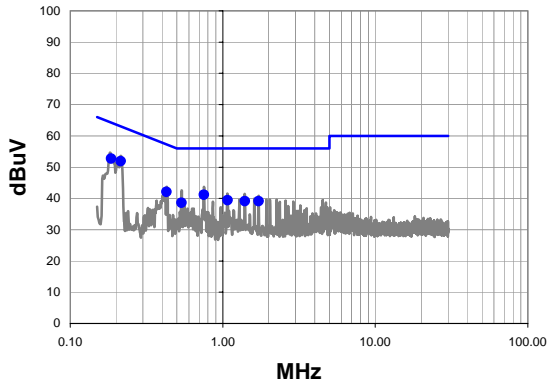
AC POWERLINE CONDUCTED EMISSIONS

Work Order:	SPAC0447	Date:	11/10/08	<i>David DiVergigelis</i>
Project:	None	Temperature:	24	
Job Site:	EV07	Humidity:	45	Tested by: David DiVergigelis
Serial Number:	Various, see config page	Barometric Pres.:	30.25	
EUT:	Ultraview SL Wireless Option			
Configuration:	3- AC Powerline Conducted Emissions			
Customer:	Spacelabs Healthcare			
Attendees:	None			
EUT Power:	120VAC/60Hz			
Operating Mode:	Transmitting 802.11(a), 6 Mbps, Mid Channel 157			
Deviations:	No deviations.			
Comments:	None			

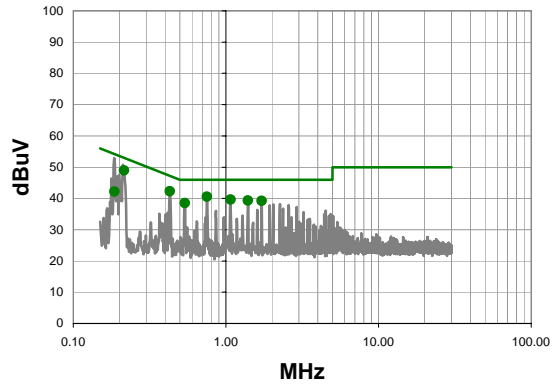
Test Specifications FCC 15.207:2008	Class B	Test Method ANSI C63.4:2003
---	----------------	---------------------------------------

Run #	16	Line:	High Line	Ext. Attenuation:	20	Results	Pass
--------------	----	--------------	-----------	--------------------------	----	----------------	------

Quasi Peak Data - vs - Quasi Peak Limit



Average Data - vs - Average Limit



Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.215	30.8	21.1	51.9	63.0	-11.2
0.186	31.4	21.3	52.7	64.2	-11.5
0.753	20.4	20.7	41.1	56.0	-14.9
0.429	21.1	20.9	42.0	57.3	-15.2
1.076	18.8	20.6	39.4	56.0	-16.6
1.720	18.5	20.6	39.1	56.0	-16.9
1.396	18.5	20.6	39.1	56.0	-16.9
0.538	17.7	20.9	38.6	56.0	-17.4

Average Data - vs - Average Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.215	27.9	21.1	49.0	53.0	-4.1
0.429	21.3	20.9	42.2	47.3	-5.0
0.753	19.8	20.7	40.5	46.0	-5.5
1.076	19.0	20.6	39.6	46.0	-6.4
1.396	18.7	20.6	39.3	46.0	-6.7
1.720	18.6	20.6	39.2	46.0	-6.8
0.538	17.6	20.9	38.5	46.0	-7.5
0.186	20.8	21.3	42.1	54.2	-12.1

EMC

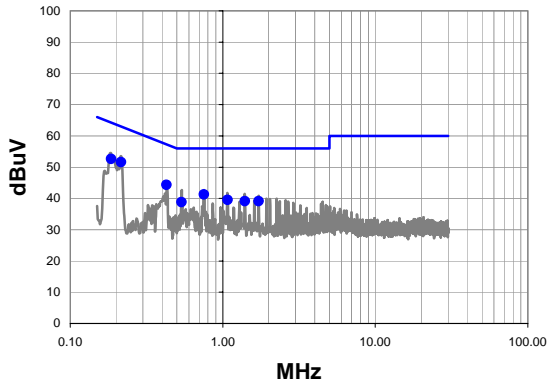
AC POWERLINE CONDUCTED EMISSIONS

Work Order:	SPAC0447	Date:	11/10/08	<i>David DiVergigelis</i>
Project:	None	Temperature:	24	
Job Site:	EV07	Humidity:	45	Tested by: David DiVergigelis
Serial Number:	Various, see config page	Barometric Pres.:	30.25	
EUT:	Ultraview SL Wireless Option			
Configuration:	3- AC Powerline Conducted Emissions			
Customer:	Spacelabs Healthcare			
Attendees:	None			
EUT Power:	120VAC/60Hz			
Operating Mode:	Transmitting 802.11(a), 6 Mbps, High Channel 165			
Deviations:	No deviations.			
Comments:	None			

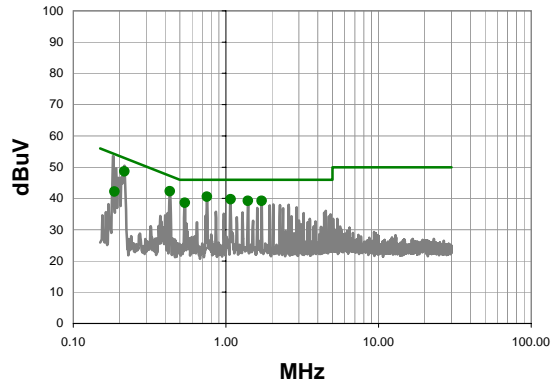
Test Specifications FCC 15.207:2008	Class B	Test Method ANSI C63.4:2003
---	----------------	---------------------------------------

Run #	17	Line:	High Line	Ext. Attenuation:	20	Results	Pass
--------------	----	--------------	-----------	--------------------------	----	----------------	------

Quasi Peak Data - vs - Quasi Peak Limit



Average Data - vs - Average Limit



Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.216	30.5	21.1	51.6	63.0	-11.4
0.186	31.3	21.3	52.6	64.2	-11.6
0.429	23.4	20.9	44.3	57.3	-12.9
0.752	20.5	20.7	41.2	56.0	-14.8
1.076	18.9	20.6	39.5	56.0	-16.5
1.720	18.5	20.6	39.1	56.0	-16.9
1.396	18.5	20.6	39.1	56.0	-16.9
0.538	17.9	20.9	38.8	56.0	-17.2

Average Data - vs - Average Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.216	27.6	21.1	48.7	53.0	-4.3
0.429	21.3	20.9	42.2	47.3	-5.0
0.752	19.8	20.7	40.5	46.0	-5.5
1.076	19.1	20.6	39.7	46.0	-6.3
1.720	18.6	20.6	39.2	46.0	-6.8
1.396	18.6	20.6	39.2	46.0	-6.8
0.538	17.7	20.9	38.6	46.0	-7.4
0.186	20.8	21.3	42.1	54.2	-12.1

EMC

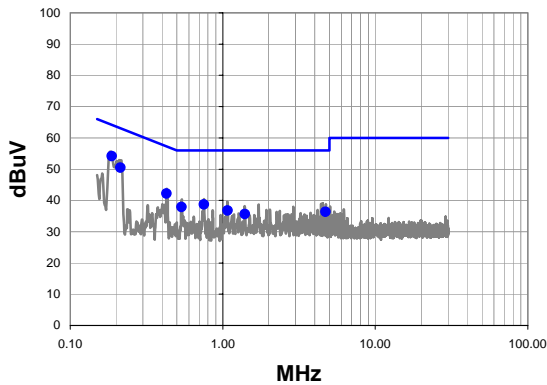
AC POWERLINE CONDUCTED EMISSIONS

Work Order:	SPAC0447	Date:	11/10/08	<i>David DiVergigelis</i>
Project:	None	Temperature:	24	
Job Site:	EV07	Humidity:	45	Tested by: David DiVergigelis
Serial Number:	Various, see config page	Barometric Pres.:	30.25	
EUT:	Ultraview SL Wireless Option			
Configuration:	3- AC Powerline Conducted Emissions			
Customer:	Spacelabs Healthcare			
Attendees:	None			
EUT Power:	120VAC/60Hz			
Operating Mode:	Transmitting 802.11(a), 6 Mbps, High Channel 165			
Deviations:	No deviations.			
Comments:	None			

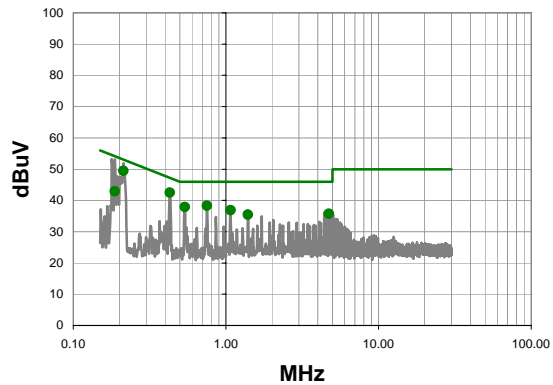
Test Specifications FCC 15.207:2008	Class B	Test Method ANSI C63.4:2003
---	----------------	---------------------------------------

Run #	18	Line:	Neutral	Ext. Attenuation:	20	Results	Pass
--------------	----	--------------	---------	--------------------------	----	----------------	------

Quasi Peak Data - vs - Quasi Peak Limit



Average Data - vs - Average Limit



Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.187	32.8	21.3	54.1	64.2	-10.0
0.213	29.4	21.1	50.5	63.1	-12.6
0.429	21.2	20.9	42.1	57.3	-15.1
0.753	18.0	20.7	38.7	56.0	-17.3
0.538	17.0	20.9	37.9	56.0	-18.1
1.076	16.2	20.6	36.8	56.0	-19.2
4.732	15.7	20.6	36.3	56.0	-19.7
1.396	15.0	20.6	35.6	56.0	-20.4

Average Data - vs - Average Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.213	28.4	21.1	49.5	53.1	-3.6
0.429	21.5	20.9	42.4	47.3	-4.8
0.753	17.5	20.7	38.2	46.0	-7.8
0.538	17.0	20.9	37.9	46.0	-8.1
1.076	16.3	20.6	36.9	46.0	-9.1
4.732	15.1	20.6	35.7	46.0	-10.3
1.396	14.8	20.6	35.4	46.0	-10.6
0.187	21.6	21.3	42.9	54.2	-11.2

