Intermec Technologies Corporation

DDIB

Report No. INMC0500

Report Prepared By

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

EMC Test Report

NORTHWEST EMC

22975 NW Evergreen Parkway
Suite 400
Hillsboro, Oregon 97124

Certificate of Test

Last Date of Test: December 19, 2008
Intermec Technologies Corporation
Model: DDIB

Emissions			
Test Description	**Specification**	**Test Method**	**Pass/Fail**
Spurious Radiated Emissions	FCC 15.407:2008	ANSI C63.4:2003 DA 02-2138:2002	**Pass**
Spurious Radiated Emissions	FCC 15.209:2008	ANSI C63.4:2003	**Pass**
Peak Power Spectral Density	FCC 15.407:2008	ANSI C63.4:2003 DA 02-2138:2002	**Pass**
Emission Bandwidth	FCC 15.407:2008	ANSI C63.4:2003 DA 02-2138:2002	**Pass**
Peak Excursion	FCC 15.407:2008	ANSI C63.4:2003 DA 02-2138:2002	**Pass**
AC Powerline Conducted Emissions	FCC 15.407:2008	ANSI C63.4:2003 DA 02-2138:2002	**Pass**
Frequency Stability	FCC 15.407:2008	ANSI C63.4:2003 DA 02-2138:2002	**Pass**
Peak Transmit Power	FCC 15.407:2008	ANSI C63.4:2003 DA 02-2138:2002	**Pass**

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

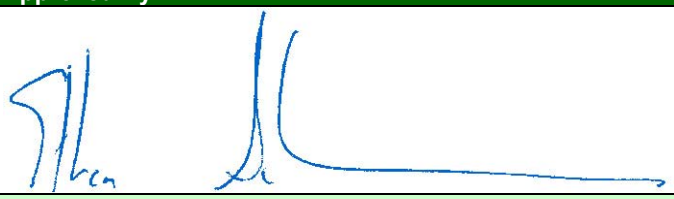
Test Facility

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.

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).*

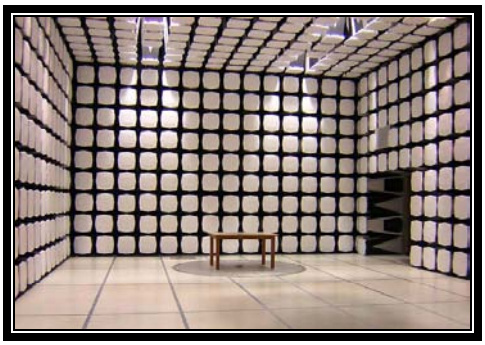
BSMI: Northwest EMC has been designated by NIST and validated by C-Taipei (BSMI) as a CAB to conduct tests as described in the APEC Mutual Recognition Agreement (US0017). License No.SL2-IN-E-1017.

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

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

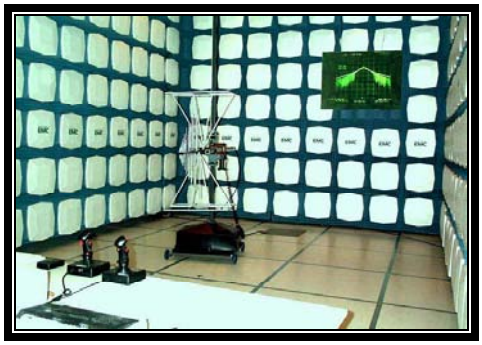
SCOPE

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:	Intermec Technologies Corporation
Address:	6001 36th Avenue West
City, State, Zip:	Everett, WA 98203-1264
Test Requested By:	Sean MacKellar
Model:	DDIB
First Date of Test:	December 8, 2008
Last Date of Test:	December 13, 2008
Receipt Date of Samples:	November 14, 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 combination 802.11a/b/g - Bluetooth radio module installed in an industrial handheld computer.

Testing Objective:
Seeking to demonstrate compliance under FCC 15.407 for operation in the 5.2, 5.3, and 5.6 bands.

CONFIGURATION 1 INMC0500

Software/Firmware Running during test	
Description	**Version**
Intermec Radio Test Software, 'radio_with reset.vi'	Version 1.0 Oct 2008

EUT			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
EUT - 802.11 / Bluetooth radio	Intermec	DDIB	Proto 13

Peripherals in test setup boundary			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
Host Extender Card	None	None	None
Host Computer	Dell	Latitude D600	None
External Dipole Antenna	Laird Technologies	WTS2450-RPSMA	None

Cables					
Cable Type	**Shield**	**Length (m)**	**Ferrite**	**Connection 1**	**Connection 2**
Power	PA	1.6m	PA	Host Computer	Power Adapter
PA = Cable is permanently attached to the device. Shielding and/or presence of ferrite may be unknown.					

CONFIGURATION 4 INMC0500

Software/Firmware Running during test	
Description	**Version**
Intermec Radio Test Software, 'radio_with reset.vi'	Version 1.0 Oct 2008

EUT			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
EUT - 802.11 / Bluetooth radio	Intermec	DDIB	Proto 13

Peripherals in test setup boundary			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
Host Extender Card	None	None	None
Host Computer	Dell	Latitude D600	None

Cables					
Cable Type	**Shield**	**Length (m)**	**Ferrite**	**Connection 1**	**Connection 2**
Power	PA	1.6m	PA	Host Computer	Power Adapter
PA = Cable is permanently attached to the device. Shielding and/or presence of ferrite may be unknown.					

CONFIGURATION 5 INMC0500

Software/Firmware Running during test	
Description	**Version**
FCC Test Utility	1.01

EUT			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
EUT - 802.11 radio	Intermec	DDIB	000B6B8D347E

Peripherals in test setup boundary			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
Battery Replacer module	Intermec	None	None
CK3 Hand Held Computer	Intermec	CK3	20310858031

Cables					
Cable Type	**Shield**	**Length (m)**	**Ferrite**	**Connection 1**	**Connection 2**
DC Power	No	1.0m	PA	Battery Replacer module	DC Power Supply (test equipment)
PA = Cable is permanently attached to the device. Shielding and/or presence of ferrite may be unknown.					

CONFIGURATION 6 INMC0500

Software/Firmware Running during test	
Description	**Version**
FCC Test Utility	1.01

EUT			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
EUT - 802.11 radio	Intermec	DDIB	000B6B8D3470

Peripherals in test setup boundary			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
Battery Replacer module	Intermec	None	None
CK3 Hand Held Computer	Intermec	CK3	20310858065
DC Power Supply (test equipment)	Topward Electric	TPS-2000	TDP

Cables					
Cable Type	**Shield**	**Length (m)**	**Ferrite**	**Connection 1**	**Connection 2**
DC Power	No	1.0m	PA	Battery Replacer module	DC Power Supply (test equipment)
AC Power	No	1.0m	No	AC Mains	DC Power Supply (test equipment)
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	12/8/2008	Emission Bandwidth	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Northwest EMC following the test.
2	12/9/2008	Peak 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.
3	12/9/2008	Peak Transmit 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	12/10/2008	Peak Excursion	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	12/12/2008	Frequency Stability	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	12/13/2008	AC Powerline 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.
7	12/19/2008	Spurious Radiated Emissions	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	Scheduled testing was complete.

SPURIOUS RADIATED EMISSIONS

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

MODES OF OPERATION

Continuous Tx 802.11(a),

CHANNELS USED FOR FINAL DATA

36, 5180MHz
48, 5240MHz
52, 5260MHz
64, 5320MHz
100, 5500MHz
116, 5580MHz
140, 5700MHz

DATA RATES USED FOR FINAL DATA

6 Mbps
36 Mbps
54 Mbps

POWER SETTINGS INVESTIGATED

3.3Vdc via host

POWER SETTINGS USED FOR FINAL DATA

3.3Vdc via host

FREQUENCY RANGE INVESTIGATED

Start Frequency	30MHz	Stop Frequency	40GHz

CLOCKS AND OSCILLATORS

See channels above.

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	AAT	12/12/2008	13
Spectrum Analyzer	Agilent	E4446A	AAY	12/11/2008	13
Antenna, Biconilog	EMCO	3141	AXG	11/4/2008	13
Antenna, Horn	ETS	3115	AIB	8/25/2008	24
Antenna, Horn	ETS	3160.07	AHZ	10/14/2008	24
Antenna, Horn	ETS	3160-08	AIA	NCR	0
Antenna, Horn	EMCO	3160-09	AHG	NCR	0
Antenna, Horn	EMCO	3160-10	AHI	NCR	0
Pre-Amplifier	Miteq	AM-1616-1000	AVM	6/17/2008	13
Pre-Amplifier	Miteq	AMF-3D00100800-32-13P	AVF	6/17/2008	13
Pre-Amplifier	Miteq	AMF-6F-08001200-30-10P	AVH	5/14/2008	13
Pre-Amplifier	Miteq	AMF-6F-12001800-30-10P	AVI	5/14/2008	13
Pre-Amplifier	Miteq	JSD4-18002600-26-8P	APU	12/2/2008	13
Pre-Amplifier	Miteq	JS4-26004000-40-8P	APV	7/14/2008	13
EV12 Cables		Bilog Cables	EVS	6/17/2008	13
EV12 Cables		Double Ridge Horn Cables	EVT	6/17/2008	13
EV12 Cables		Standard Gain Horn Cables	EVU	5/14/2008	13
EV01 Cables		18-26GHz Standard Gain Horn Cable	EVD	12/2/2008	13
EV01 Cables		26-40GHz Standard Gain Horn Cable	EVE	7/14/2008	13

MEASUREMENT BANDWIDTHS

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

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

MEASUREMENT UNCERTAINTY

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 highest gain antenna of each type to be used with the EUT were tested. The EUT was configured for the lowest, a middle, and the highest transmit frequency in each operational band. For each configuration, the spectrum was scanned throughout the specified range. Measurements were made to satisfy the three requirements of 47 CFR 15.407: Field strength under 1GHz, Restricted Bands of 47 CFR 15.205, and EIRP of 47 CFR 15.407. While scanning, emissions from the EUT were maximized by rotating the EUT on a turntable, adjusting the position of the EUT and EUT antenna in three orthogonal axis, and adjusting the measurement antenna height and polarization (per ANSI C63.4:2003). A preamp and high pass filter (and notch filter) were used for this test in order to provide sufficient measurement sensitivity.

The amplitude and frequency of the highest emissions were noted. The EUT was then replaced with a ½ wave dipole that was successively tuned to each of the highest spurious emissions. A signal generator was connected to the dipole (horn antenna for frequencies above 1GHz), and its output was adjusted to match the level previously noted for each frequency. The output of the signal generator was recorded, and by factoring in the cable loss to the dipole antenna (or horn) and its gain (dBi); the effective radiated power for each radiated spurious emission was determined.

NORTHWEST EMC

SPURIOUS RADIATED EMISSIONS DATA SHEET

PSA 2007.07.21
EMI 2008.7.3

EUT:	DDIB	Work Order:	INMC0500
Serial Number:	Proto 13	Date:	12/19/08
Customer:	Intermec Technologies Corporation	Temperature:	20.6° C
Attendees:	None	Humidity:	25%
Project:	None	Barometric Pres.:	1020.5mb
Tested by:	Dan Haas	Power: 3.3Vdc via host	Job Site: EV12

TEST SPECIFICATIONS	Test Method
FCC 15.209:2008	ANSI C63.4:2003

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

COMMENTS

See notes for EUT orientation and channel.

EUT OPERATING MODES

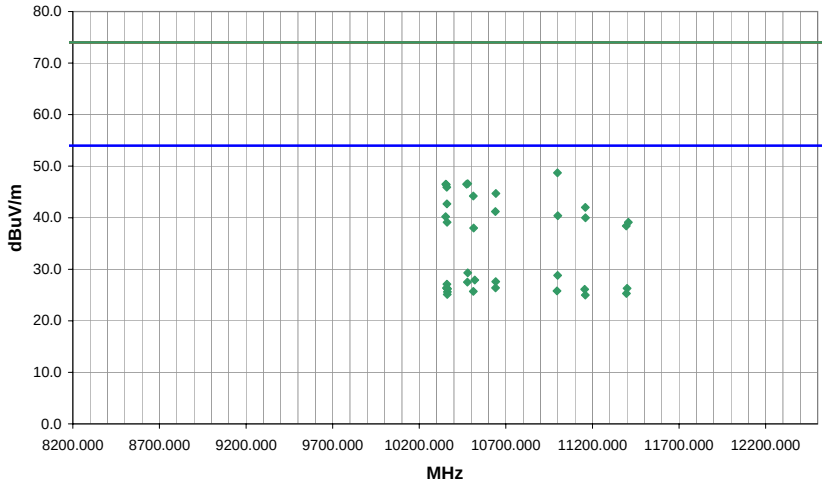
Transmitting 802.11(a)

DEVIATIONS FROM TEST STANDARD

No deviations.

Run #	10
Configuration #	1
Results	Pass

Signature



Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Azimuth (degrees)	Height (meters)	Distance (meters)	External Attenuation (dB)	Polarity	Detector	Distance Adjustment (dB)	Adjusted dBuV/m	Spec. Limit dBuV/m	Compared to Spec. (dB)	Comments
10479.800	39.7	-10.4	51.0	1.0	3.0	0.0	H-Horn	AV	0.0	29.3	54.0	-24.7	Laptop vertical (screen down), channel 48, 6Mbps.
10999.330	40.4	-11.6	10.0	1.0	3.0	0.0	V-Horn	AV	0.0	28.8	54.0	-25.2	Laptop vertical (screen down), channel 100, 6Mbps.
10998.130	60.3	-11.6	10.0	1.0	3.0	0.0	V-Horn	PK	0.0	48.7	74.0	-25.3	Laptop vertical (screen down), channel 100, 6Mbps.
10520.730	38.3	-10.4	133.0	1.0	3.0	0.0	V-Horn	AV	0.0	27.9	54.0	-26.1	Laptop vertical (screen down), channel 52, 6Mbps.
10641.470	38.4	-10.8	135.0	1.0	3.0	0.0	V-Horn	AV	0.0	27.6	54.0	-26.4	Laptop vertical (screen down), channel 64, 6Mbps.
10477.730	37.9	-10.4	19.0	1.0	3.0	0.0	V-Horn	AV	0.0	27.5	54.0	-26.5	Laptop vertical (screen down), channel 48, 6Mbps.
10359.600	37.7	-10.6	29.0	1.2	3.0	0.0	H-Horn	AV	0.0	27.1	54.0	-26.9	Laptop vertical (screen down), channel 36, 6Mbps.
10479.930	57.0	-10.4	19.0	1.0	3.0	0.0	V-Horn	PK	0.0	46.6	74.0	-27.4	Laptop vertical (screen down), channel 48, 6Mbps.
10473.030	56.9	-10.4	51.0	1.0	3.0	0.0	H-Horn	PK	0.0	46.5	74.0	-27.5	Laptop vertical (screen down), channel 48, 6Mbps.
10353.300	57.1	-10.6	29.0	1.2	3.0	0.0	H-Horn	PK	0.0	46.5	74.0	-27.5	Laptop vertical (screen down), channel 36, 6Mbps.
10357.970	37.0	-10.6	167.0	1.0	3.0	0.0	V-Horn	AV	0.0	26.4	54.0	-27.6	Laptop on side, channel 36, 6Mbps.
10640.070	37.1	-10.7	220.0	1.0	3.0	0.0	H-Horn	AV	0.0	26.4	54.0	-27.6	Laptop vertical (screen down), channel 64, 6Mbps.
10356.370	57.0	-10.6	167.0	1.0	3.0	0.0	V-Horn	PK	0.0	46.4	74.0	-27.6	Laptop on side, channel 36, 6Mbps.
10358.970	36.9	-10.6	38.0	1.0	3.0	0.0	V-Horn	AV	0.0	26.3	54.0	-27.7	Laptop vertical (screen down), channel 36, 6Mbps.
11400.230	38.3	-12.0	131.0	1.0	3.0	0.0	V-Horn	AV	0.0	26.3	54.0	-27.7	Laptop vertical (screen down), channel 140, 6Mbps.
10363.000	36.8	-10.6	239.0	1.0	3.0	0.0	V-Horn	AV	0.0	26.2	54.0	-27.8	Laptop horizontal, channel 36, 6Mbps.
11155.170	37.9	-11.8	208.0	1.0	3.0	0.0	H-Horn	AV	0.0	26.1	54.0	-27.9	Laptop vertical (screen down), channel 116, 6Mbps.
10358.730	56.5	-10.6	239.0	1.0	3.0	0.0	V-Horn	PK	0.0	45.9	74.0	-28.1	Laptop horizontal, channel 36, 6Mbps.
10995.000	37.4	-11.6	334.0	1.0	3.0	0.0	H-Horn	AV	0.0	25.8	54.0	-28.2	Laptop vertical (screen down), channel 100, 6Mbps.
10511.670	36.1	-10.4	218.0	1.0	3.0	0.0	H-Horn	AV	0.0	25.7	54.0	-28.3	Laptop vertical (screen down), channel 52, 6Mbps.

NORTHWEST EMC

SPURIOUS RADIATED EMISSIONS DATA SHEET

PSA 2007.07.21
EMI 2008.7.3

EUT:	DDIB	Work Order:	INMC0500
Serial Number:	Proto 13	Date:	12/19/08
Customer:	Intermec Technologies Corporation	Temperature:	20.6° C
Attendees:	None	Humidity:	25%
Project:	None	Barometric Pres.:	1020.5mb
Tested by:	Dan Haas	Power: 3.3Vdc via host	Job Site: EV12

TEST SPECIFICATIONS	Test Method
FCC 15.407:2008	ANSI C63.4:2003 DA 02-2138:2002

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

COMMENTS

See notes for EUT orientation and channel.

EUT OPERATING MODES

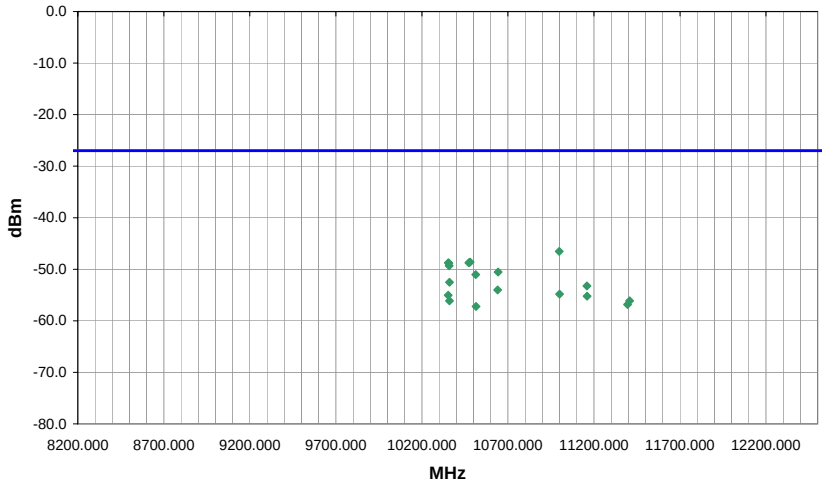
Transmitting 802.11(a)

DEVIATIONS FROM TEST STANDARD

No deviations.

Run #	10
Configuration #	1
Results	Pass

Signature



Freq (MHz)			Azimuth (degrees)	Height (meters)			Polarity	Detector	EIRP (Watts)	EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)	Comments
10998.130			10.0	1.0			V-Horn	PK	2.22E-08	-46.5	-27.0	-19.5	Laptop vertical (screen down), channel 100, 6Mbps.
10479.930			19.0	1.0			V-Horn	PK	1.37E-08	-48.6	-27.0	-21.6	Laptop vertical (screen down), channel 48, 6Mbps.
10473.030			51.0	1.0			H-Horn	PK	1.34E-08	-48.7	-27.0	-21.7	Laptop vertical (screen down), channel 48, 6Mbps.
10353.300			29.0	1.2			H-Horn	PK	1.34E-08	-48.7	-27.0	-21.7	Laptop vertical (screen down), channel 36, 6Mbps.
10356.370			167.0	1.0			V-Horn	PK	1.31E-08	-48.8	-27.0	-21.8	Laptop on side, channel 36, 6Mbps.
10358.730			239.0	1.0			V-Horn	PK	1.17E-08	-49.3	-27.0	-22.3	Laptop horizontal, channel 36, 6Mbps.
10642.470			135.0	1.0			V-Horn	PK	8.85E-09	-50.5	-27.0	-23.5	Laptop vertical (screen down), channel 64, 6Mbps.
10512.430			133.0	1.0			V-Horn	PK	7.89E-09	-51.0	-27.0	-24.0	Laptop vertical (screen down), channel 52, 6Mbps.
10359.870			38.0	1.0			V-Horn	PK	5.59E-09	-52.5	-27.0	-25.5	Laptop vertical (screen down), channel 36, 6Mbps.
11159.100			208.0	1.0			H-Horn	PK	4.75E-09	-53.2	-27.0	-26.2	Laptop vertical (screen down), channel 116, 6Mbps.
10639.830			220.0	1.0			H-Horn	PK	3.95E-09	-54.0	-27.0	-27.0	Laptop vertical (screen down), channel 64, 6Mbps.
10999.870			334.0	1.0			H-Horn	PK	3.29E-09	-54.8	-27.0	-27.8	Laptop vertical (screen down), channel 100, 6Mbps.
10352.770			360.0	1.0			H-Horn	PK	3.14E-09	-55.0	-27.0	-28.0	Laptop on side, channel 36, 6Mbps.
11160.070			116.0	1.0			V-Horn	PK	3.00E-09	-55.2	-27.0	-28.2	Laptop vertical (screen down), channel 116, 6Mbps.
10360.200			170.0	1.2			H-Horn	PK	2.44E-09	-56.1	-27.0	-29.1	Laptop horizontal, channel 36, 6Mbps.
11407.130			312.0	1.0			H-Horn	PK	2.44E-09	-56.1	-27.0	-29.1	Laptop vertical (screen down), channel 140, 6Mbps.
11395.270			131.0	1.0			V-Horn	PK	2.08E-09	-56.8	-27.0	-29.8	Laptop vertical (screen down), channel 140, 6Mbps.
10514.170			218.0	1.0			H-Horn	PK	1.89E-09	-57.2	-27.0	-30.2	Laptop vertical (screen down), channel 52, 6Mbps.

NORTHWEST EMC

SPURIOUS RADIATED EMISSIONS DATA SHEET

PSA 2007.07.21
EMI 2008.7.3

EUT:	DDIB	Work Order:	INMC0500
Serial Number:	Proto 13	Date:	12/19/08
Customer:	Intermec Technologies Corporation	Temperature:	20.6° C
Attendees:	None	Humidity:	25%
Project:	None	Barometric Pres.:	1020.5mb
Tested by:	Dan Haas	Power: 3.3Vdc via host	Job Site: EV12

TEST SPECIFICATIONS	Test Method
FCC 15.209:2008	ANSI C63.4:2003

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

COMMENTS

See notes for EUT orientation, channel, and data rate.

EUT OPERATING MODES

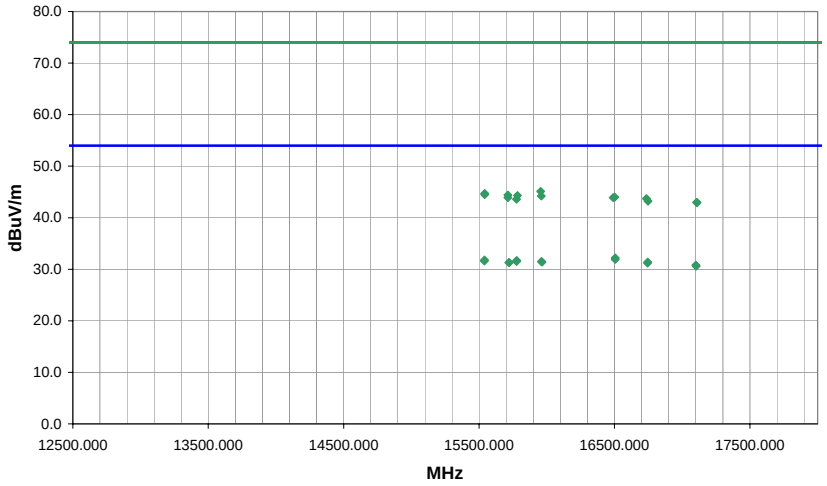
Transmitting 802.11(a)

DEVIATIONS FROM TEST STANDARD

No deviations.

Run #	11
Configuration #	1
Results	Pass

Signature



Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Azimuth (degrees)	Height (meters)	Distance (meters)	External Attenuation (dB)	Polarity	Detector	Distance Adjustment (dB)	Adjusted dBuV/m	Spec. Limit dBuV/m	Compared to Spec. (dB)	Comments
16505.770	30.8	1.4	14.0	1.0	3.0	0.0	H-Horn	AV	0.0	32.2	54.0	-21.8	Laptop vertical (screen down), channel 100, 6Mbps.
16505.430	30.4	1.5	57.0	1.0	3.0	0.0	V-Horn	AV	0.0	31.9	54.0	-22.1	Laptop vertical (screen down), channel 100, 6Mbps.
15540.600	30.4	1.4	110.0	1.0	3.0	0.0	H-Horn	AV	0.0	31.8	54.0	-22.2	Laptop vertical (screen down), channel 36, 6Mbps.
15777.600	30.2	1.5	158.0	1.0	3.0	0.0	H-Horn	AV	0.0	31.7	54.0	-22.3	Laptop vertical (screen down), channel 52, 6Mbps.
15538.770	30.2	1.4	3.0	1.2	3.0	0.0	V-Horn	AV	0.0	31.6	54.0	-22.4	Laptop vertical (screen down), channel 36, 6Mbps.
15776.170	30.0	1.5	64.0	1.0	3.0	0.0	V-Horn	AV	0.0	31.5	54.0	-22.5	Laptop vertical (screen down), channel 52, 6Mbps.
15960.700	29.9	1.6	29.0	1.0	3.0	0.0	V-Horn	AV	0.0	31.5	54.0	-22.5	Laptop vertical (screen down), channel 64, 6Mbps.
15963.870	29.8	1.6	316.0	1.0	3.0	0.0	H-Horn	AV	0.0	31.4	54.0	-22.6	Laptop vertical (screen down), channel 64, 6Mbps.
16744.700	30.0	1.4	62.0	1.0	3.0	0.0	H-Horn	AV	0.0	31.4	54.0	-22.6	Laptop vertical (screen down), channel 116, 6Mbps.
15720.900	29.8	1.5	147.0	1.0	3.0	0.0	H-Horn	AV	0.0	31.3	54.0	-22.7	Laptop vertical (screen down), channel 48, 6Mbps.
15721.370	29.8	1.5	291.0	1.0	3.0	0.0	V-Horn	AV	0.0	31.3	54.0	-22.7	Laptop vertical (screen down), channel 48, 6Mbps.
16744.500	29.8	1.4	12.0	1.0	3.0	0.0	V-Horn	AV	0.0	31.2	54.0	-22.8	Laptop vertical (screen down), channel 116, 6Mbps.
17101.030	29.7	1.1	27.0	1.0	3.0	0.0	H-Horn	AV	0.0	30.8	54.0	-23.2	Laptop vertical (screen down), channel 140, 6Mbps.
17103.770	29.5	1.1	46.0	1.0	3.0	0.0	V-Horn	AV	0.0	30.6	54.0	-23.4	Laptop vertical (screen down), channel 140, 6Mbps.
15955.200	43.5	1.6	316.0	1.0	3.0	0.0	H-Horn	PK	0.0	45.1	74.0	-28.9	Laptop vertical (screen down), channel 64, 6Mbps.
15541.630	43.3	1.4	3.0	1.2	3.0	0.0	V-Horn	PK	0.0	44.7	74.0	-29.3	Laptop vertical (screen down), channel 36, 6Mbps.
15540.830	43.1	1.4	110.0	1.0	3.0	0.0	H-Horn	PK	0.0	44.5	74.0	-29.5	Laptop vertical (screen down), channel 36, 6Mbps.
15712.430	42.9	1.5	147.0	1.0	3.0	0.0	H-Horn	PK	0.0	44.4	74.0	-29.6	Laptop vertical (screen down), channel 48, 6Mbps.
15783.200	42.8	1.5	64.0	1.0	3.0	0.0	V-Horn	PK	0.0	44.3	74.0	-29.7	Laptop vertical (screen down), channel 52, 6Mbps.
15959.130	42.6	1.6	29.0	1.0	3.0	0.0	V-Horn	PK	0.0	44.2	74.0	-29.8	Laptop vertical (screen down), channel 64, 6Mbps.

NORTHWEST EMC

SPURIOUS RADIATED EMISSIONS DATA SHEET

PSA 2007.07.21
EMI 2008.7.3

EUT:	DDIB	Work Order:	INMC0500
Serial Number:	Proto 13	Date:	12/19/08
Customer:	Intermec Technologies Corporation	Temperature:	20.6° C
Attendees:	None	Humidity:	25%
Project:	None	Barometric Pres.:	1020.5mb
Tested by:	Dan Haas	Power: 3.3Vdc via host	Job Site: EV12

TEST SPECIFICATIONS	Test Method
FCC 15.407:2008	ANSI C63.4:2003 DA 02-2138:2002

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

COMMENTS

See notes for EUT orientation, channel, and data rate.

EUT OPERATING MODES

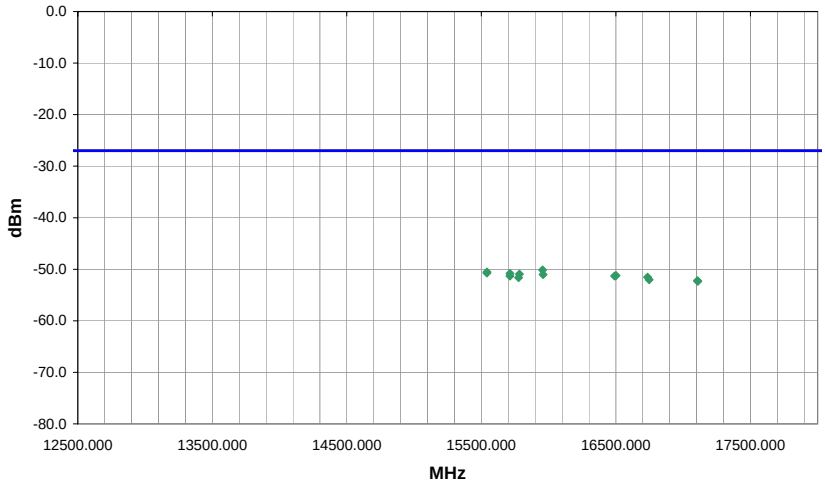
Transmitting 802.11(a)

DEVIATIONS FROM TEST STANDARD

No deviations.

Run #	11
Configuration #	1
Results	Pass

Signature



Freq (MHz)			Azimuth (degrees)	Height (meters)			Polarity	Detector	EIRP (Watts)	EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)	Comments
15955.200			316.0	1.0			H-Horn	PK	9.71E-09	-50.1	-27.0	-23.1	Laptop vertical (screen down), channel 64, 6Mbps.
15541.630			3.0	1.2			V-Horn	PK	8.85E-09	-50.5	-27.0	-23.5	Laptop vertical (screen down), channel 36, 6Mbps.
15540.830			110.0	1.0			H-Horn	PK	8.46E-09	-50.7	-27.0	-23.7	Laptop vertical (screen down), channel 36, 6Mbps.
15712.430			147.0	1.0			H-Horn	PK	8.26E-09	-50.8	-27.0	-23.8	Laptop vertical (screen down), channel 48, 6Mbps.
15783.200			64.0	1.0			V-Horn	PK	8.07E-09	-50.9	-27.0	-23.9	Laptop vertical (screen down), channel 52, 6Mbps.
15959.130			29.0	1.0			V-Horn	PK	7.89E-09	-51.0	-27.0	-24.0	Laptop vertical (screen down), channel 64, 6Mbps.

NORTHWEST EMC

SPURIOUS RADIATED EMISSIONS DATA SHEET

PSA 2007.07.21
EMI 2008.7.3

EUT:	DDIB	Work Order:	INMC0500
Serial Number:	Proto 13	Date:	12/10/08
Customer:	Intermec Technologies Corporation	Temperature:	20.3°C
Attendees:	None	Humidity:	37%
Project:	None	Barometric Pres.:	1028.8mb
Tested by:	Dan Haas	Power: 3.3Vdc via host	Job Site: EV01

TEST SPECIFICATIONS	Test Method
FCC 15.407:2008	ANSI C63.4:2003 DA 02-2138:2002

TEST PARAMETERS			
Antenna Height(s) (m)	1 - 2	Test Distance (m)	3

COMMENTS

See notes for EUT orientation, channel, and data rate.

EUT OPERATING MODES

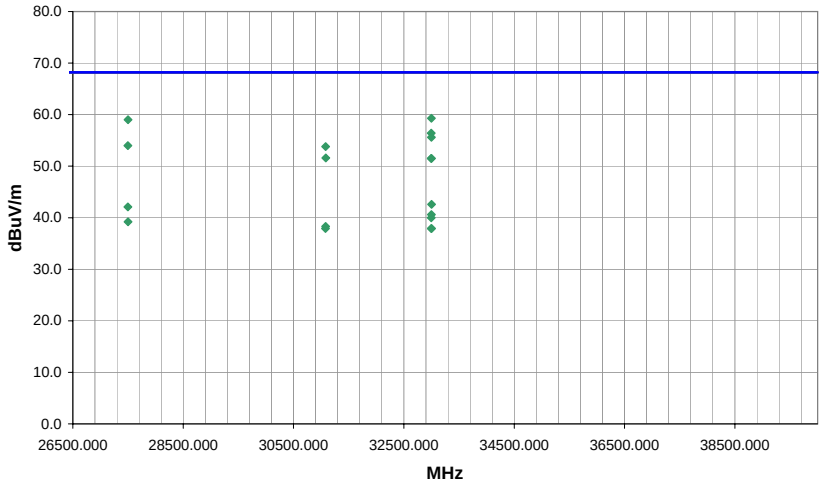
Continuous Tx 802.11(a),

DEVIATIONS FROM TEST STANDARD

No deviations.

Run #	4
Configuration #	1
Results	Pass

Signature



Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Azimuth (degrees)	Height (meters)	Distance (meters)	External Attenuation (dB)	Polarity	Detector	Distance Adjustment (dB)	Adjusted dBuV/m	Spec. Limit dBuV/m	Compared to Spec. (dB)	Comments
33000.400	72.3	-13.0	215.0	1.2	3.0	0.0	√-High Horı	PK	0.0	59.3	68.2	-8.9	Laptop horizontal, channel 100, 6Mbps.
27499.670	68.3	-9.3	360.0	1.3	3.0	0.0	√-High Horı	PK	0.0	59.0	68.2	-9.2	Laptop horizontal, channel 100, 6Mbps.
32996.400	69.5	-13.1	158.0	1.6	3.0	0.0	-I-High Horı	PK	0.0	56.4	68.2	-11.8	Laptop on side, channel 100, 6Mbps.
33000.330	68.6	-13.0	321.0	1.2	3.0	0.0	√-High Horı	PK	0.0	55.6	68.2	-12.6	Laptop vertical (screen down), channel 100, 6Mbps.
27498.970	63.3	-9.3	279.0	1.0	3.0	0.0	-I-High Horı	PK	0.0	54.0	68.2	-14.2	Laptop horizontal, channel 100, 6Mbps.
31081.680	66.4	-12.6	218.0	1.0	3.0	0.0	√-High Horı	PK	0.0	53.8	68.2	-14.4	Laptop horizontal, channel 36, 6Mbps.
31085.870	64.2	-12.6	289.0	1.0	3.0	0.0	-I-High Horı	PK	0.0	51.6	68.2	-16.6	Laptop horizontal, channel 36, 6Mbps.
32997.480	64.5	-13.0	235.0	1.0	3.0	0.0	-I-High Horı	PK	0.0	51.5	68.2	-16.7	Laptop horizontal, channel 100, 6Mbps.
32999.520	64.6	-13.1	317.0	1.0	3.0	0.0	√-High Horı	PK	0.0	51.5	68.2	-16.7	Laptop on side, channel 100, 6Mbps.
33001.550	55.6	-13.0	215.0	1.2	3.0	0.0	√-High Horı	AV	0.0	42.6	68.2	-25.6	Laptop horizontal, channel 100, 6Mbps.
27498.620	51.5	-9.4	360.0	1.3	3.0	0.0	√-High Horı	AV	0.0	42.1	68.2	-26.1	Laptop horizontal, channel 100, 6Mbps.
33000.300	53.6	-13.0	321.0	1.2	3.0	0.0	√-High Horı	AV	0.0	40.6	68.2	-27.6	Laptop vertical (screen down), channel 100, 6Mbps.
32996.530	53.1	-13.1	158.0	1.6	3.0	0.0	-I-High Horı	AV	0.0	40.0	68.2	-28.2	Laptop on side, channel 100, 6Mbps.
27500.000	48.5	-9.3	279.0	1.0	3.0	0.0	-I-High Horı	AV	0.0	39.2	68.2	-29.0	Laptop horizontal, channel 100, 6Mbps.
31081.700	50.9	-12.6	218.0	1.0	3.0	0.0	√-High Horı	AV	0.0	38.3	68.2	-29.9	Laptop horizontal, channel 36, 6Mbps.
33000.000	50.9	-13.0	235.0	1.0	3.0	0.0	-I-High Horı	AV	0.0	37.9	68.2	-30.3	Laptop horizontal, channel 100, 6Mbps.
33000.220	50.9	-13.0	317.0	1.0	3.0	0.0	√-High Horı	AV	0.0	37.9	68.2	-30.3	Laptop on side, channel 100, 6Mbps.
31079.620	50.5	-12.6	289.0	1.0	3.0	0.0	-I-High Horı	AV	0.0	37.9	68.2	-30.3	Laptop horizontal, channel 36, 6Mbps.

NORTHWEST EMC

SPURIOUS RADIATED EMISSIONS DATA SHEET

PSA 2007.07.21
EMI 2008.7.3

EUT:	DDIB	Work Order:	INMC0500
Serial Number:	Proto 13	Date:	12/10/08
Customer:	Intermec Technologies Corporation	Temperature:	20.3°C
Attendees:	None	Humidity:	37%
Project:	None	Barometric Pres.:	1028.8mb
Tested by:	Dan Haas	Power: 3.3Vdc via host	Job Site: EV01

TEST SPECIFICATIONS	Test Method
FCC 15.407:2008	ANSI C63.4:2003 DA 02-2138:2002

TEST PARAMETERS			
Antenna Height(s) (m)	1 - 2	Test Distance (m)	3

COMMENTS

See notes for EUT orientation, channel, and data rate.

EUT OPERATING MODES

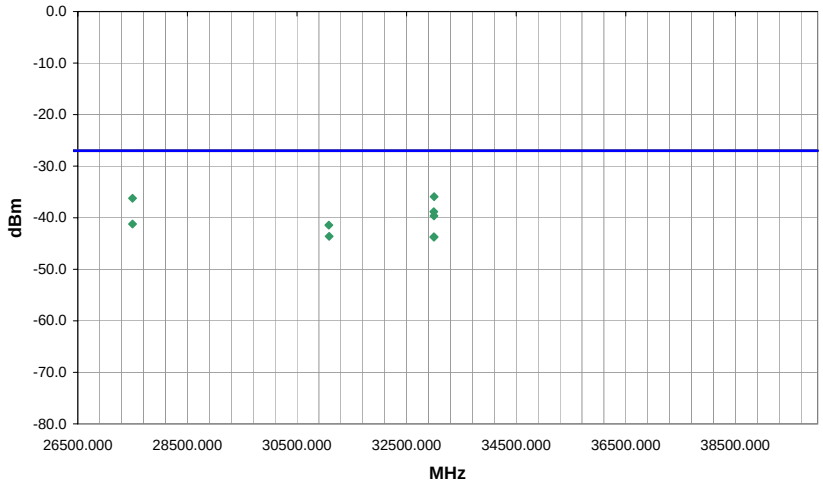
Continuous Tx 802.11(a),

DEVIATIONS FROM TEST STANDARD

No deviations.

Run #	4
Configuration #	1
Results	Pass

Signature



Freq (MHz)			Azimuth (degrees)	Height (meters)			Polarity	Detector	EIRP (Watts)	EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)	Comments
33000.400			215.0	1.2			V-High Horı	PK	2.55E-07	-35.9	-27.0	-8.9	Laptop horizontal, channel 100, 6Mbps.
27499.670			360.0	1.3			V-High Horı	PK	2.38E-07	-36.2	-27.0	-9.2	Laptop horizontal, channel 100, 6Mbps.
32996.400			158.0	1.6			H-High Horı	PK	1.31E-07	-38.8	-27.0	-11.8	Laptop on side, channel 100, 6Mbps.
33000.330			321.0	1.2			V-High Horı	PK	1.09E-07	-39.6	-27.0	-12.6	Laptop vertical (screen down), channel 100, 6Mbps.
27498.970			279.0	1.0			H-High Horı	PK	7.54E-08	-41.2	-27.0	-14.2	Laptop horizontal, channel 100, 6Mbps.
31081.680			218.0	1.0			V-High Horı	PK	7.20E-08	-41.4	-27.0	-14.4	Laptop horizontal, channel 36, 6Mbps.
31085.870			289.0	1.0			H-High Horı	PK	4.34E-08	-43.6	-27.0	-16.6	Laptop horizontal, channel 36, 6Mbps.
32997.480			235.0	1.0			H-High Horı	PK	4.24E-08	-43.7	-27.0	-16.7	Laptop horizontal, channel 100, 6Mbps.
32999.520			317.0	1.0			V-High Horı	PK	4.24E-08	-43.7	-27.0	-16.7	Laptop on side, channel 100, 6Mbps.

NORTHWEST EMC

SPURIOUS RADIATED EMISSIONS DATA SHEET

PSA 2007.07.21
EMI 2008.7.3

EUT:	DDIB	Work Order:	INMC0500
Serial Number:	Proto 13	Date:	12/11/08
Customer:	Intermec Technologies Corporation	Temperature:	20.3°C
Attendees:	None	Humidity:	37%
Project:	None	Barometric Pres.:	1028.8mb
Tested by:	Dan Haas	Power: 3.3Vdc via host	Job Site: EV01

TEST SPECIFICATIONS	Test Method
FCC 15.407:2008	ANSI C63.4:2003 DA 02-2138:2002

TEST PARAMETERS			
Antenna Height(s) (m)	1 - 2	Test Distance (m)	3

COMMENTS

See notes for EUT orientation, channel, and data rate.

EUT OPERATING MODES

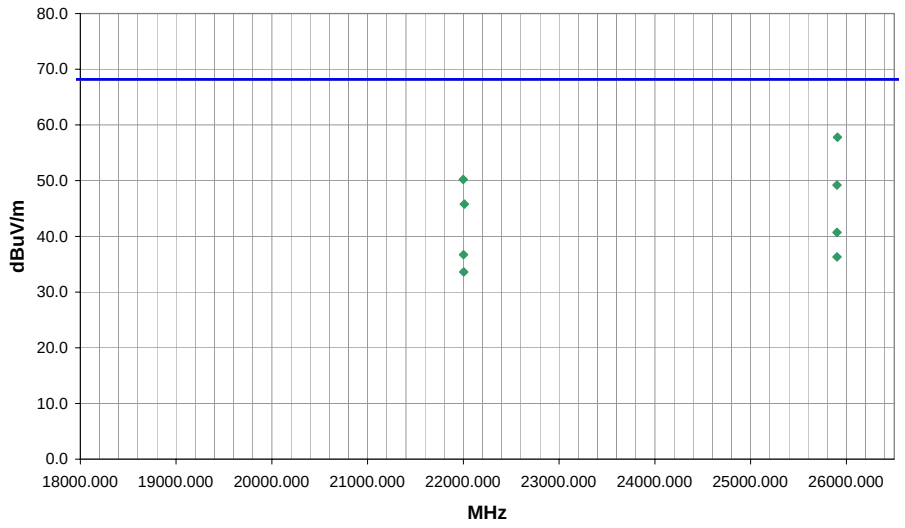
Continuous Tx 802.11(a),

DEVIATIONS FROM TEST STANDARD

No deviations.

Run #	5
Configuration #	1
Results	Pass

Signature



Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Azimuth (degrees)	Height (meters)	Distance (meters)	External Attenuation (dB)	Polarity	Detector	Distance Adjustment (dB)	Adjusted dBuV/m	Spec. Limit dBuV/m	Compared to Spec. (dB)	Comments
25907.000	51.0	6.8	176.0	1.3	3.0	0.0	√-High Horr	PK	0.0	57.8	68.2	-10.4	Laptop horizontal, channel 36, 6Mbps.
21998.170	44.4	5.8	155.0	1.3	3.0	0.0	√-High Horr	PK	0.0	50.2	68.2	-18.0	Laptop horizontal, channel 100, 6Mbps.
25902.300	42.4	6.8	80.0	1.0	3.0	0.0	-I-High Horr	PK	0.0	49.2	68.2	-19.0	Laptop horizontal, channel 36, 6Mbps.
22010.170	40.0	5.8	182.0	1.1	3.0	0.0	-I-High Horr	PK	0.0	45.8	68.2	-22.4	Laptop horizontal, channel 100, 6Mbps.
25901.750	33.9	6.8	176.0	1.3	3.0	0.0	√-High Horr	AV	0.0	40.7	68.2	-27.5	Laptop horizontal, channel 36, 6Mbps.
22001.580	30.9	5.8	155.0	1.3	3.0	0.0	√-High Horr	AV	0.0	36.7	68.2	-31.5	Laptop horizontal, channel 100, 6Mbps.
25902.420	29.5	6.8	80.0	1.0	3.0	0.0	-I-High Horr	AV	0.0	36.3	68.2	-31.9	Laptop horizontal, channel 36, 6Mbps.
22003.330	27.8	5.8	182.0	1.1	3.0	0.0	-I-High Horr	AV	0.0	33.6	68.2	-34.6	Laptop horizontal, channel 100, 6Mbps.

NORTHWEST EMC

SPURIOUS RADIATED EMISSIONS DATA SHEET

PSA 2007.07.21
EMI 2008.7.3

EUT:	DDIB			Work Order:	INMC0500
Serial Number:	Proto 13			Date:	12/11/08
Customer:	Intermec Technologies Corporation			Temperature:	20.3°C
Attendees:	None			Humidity:	37%
Project:	None			Barometric Pres.:	1028.8mb
Tested by:	Dan Haas	Power:	3.3Vdc via host	Job Site:	EV01

TEST SPECIFICATIONS	Test Method
FCC 15.407:2008	ANSI C63.4:2003 DA 02-2138:2002

TEST PARAMETERS			
Antenna Height(s) (m)	1 - 2	Test Distance (m)	3

COMMENTS

See notes for EUT orientation, channel, and data rate.

EUT OPERATING MODES

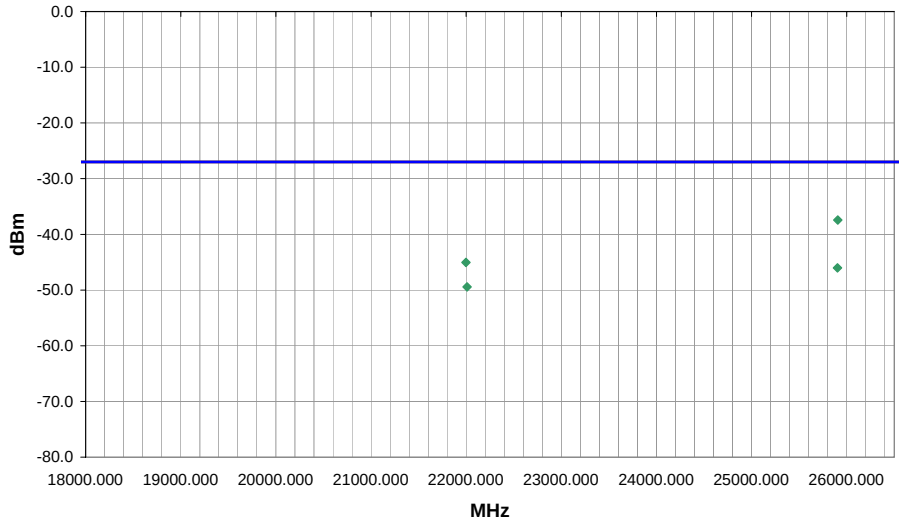
Continuous Tx 802.11(a),

DEVIATIONS FROM TEST STANDARD

No deviations.

Run #	5
Configuration #	1
Results	Pass

Signature



Freq (MHz)			Azimuth (degrees)	Height (meters)			Polarity	Detector	EIRP (Watts)	EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)	Comments
25907.000			176.0	1.3			V-High Horr	PK	1.81E-07	-37.4	-27.0	-10.4	Laptop horizontal, channel 36, 6Mbps.
21998.170			155.0	1.3			V-High Horr	PK	3.14E-08	-45.0	-27.0	-18.0	Laptop horizontal, channel 100, 6Mbps.
25902.300			80.0	1.0			H-High Horr	PK	2.50E-08	-46.0	-27.0	-19.0	Laptop horizontal, channel 36, 6Mbps.
22010.170			182.0	1.1			H-High Horr	PK	1.14E-08	-49.4	-27.0	-22.4	Laptop horizontal, channel 100, 6Mbps.

NORTHWEST EMC

SPURIOUS RADIATED EMISSIONS DATA SHEET

PSA 2007.07.21
EMI 2008.7.3

EUT:	DDIB	Work Order:	INMC0500
Serial Number:	Proto 13	Date:	12/19/08
Customer:	Intermec Technologies Corporation	Temperature:	20.6° C
Attendees:	None	Humidity:	25%
Project:	None	Barometric Pres.:	1020.5mb
Tested by:	Dan Haas	Power: 3.3Vdc via host	Job Site: EV12

TEST SPECIFICATIONS	Test Method
FCC 15.209:2008	ANSI C63.4:2003

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

COMMENTS

See notes for EUT orientation, channel, and data rate.

EUT OPERATING MODES

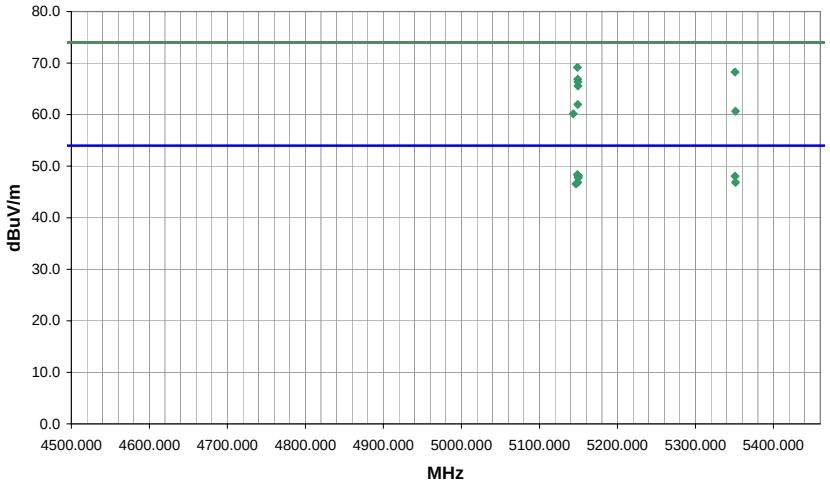
Transmitting 802.11(a)

DEVIATIONS FROM TEST STANDARD

No deviations.

Run #	13
Configuration #	1
Results	Pass

Signature



Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Azimuth (degrees)	Height (meters)	Distance (meters)	External Attenuation (dB)	Polarity	Detector	Distance Adjustment (dB)	Adjusted dBuV/m	Spec. Limit dBuV/m	Compared to Spec. (dB)	Comments
5148.683	42.2	36.5	167.0	1.4	1.0	0.0	V-Horn	PK	-9.5	69.2	74.0	-4.8	Laptop on side, channel 36, 6Mbps.
5148.683	21.4	36.5	167.0	1.4	1.0	0.0	V-Horn	AV	-9.5	48.4	54.0	-5.6	Laptop on side, channel 36, 6Mbps.
5350.765	40.9	36.9	3.0	1.4	1.0	0.0	V-Horn	PK	-9.5	68.3	74.0	-5.7	Laptop on side, channel 64, 6Mbps.
5149.410	21.2	36.5	360.0	1.1	1.0	0.0	H-Horn	AV	-9.5	48.2	54.0	-5.8	Laptop vertical (screen down), channel 36, 6Mbps.
5150.000	21.1	36.5	84.0	1.4	1.0	0.0	V-Horn	AV	-9.5	48.1	54.0	-5.9	Laptop horizontal, channel 36, 6Mbps.
5350.765	20.7	36.9	3.0	1.4	1.0	0.0	V-Horn	AV	-9.5	48.1	54.0	-5.9	Laptop on side, channel 64, 6Mbps.
5149.717	20.8	36.5	356.0	1.0	1.0	0.0	H-Horn	AV	-9.5	47.8	54.0	-6.2	Laptop horizontal, channel 36, 6Mbps.
5149.188	19.9	36.5	31.0	1.3	1.0	0.0	H-Horn	AV	-9.5	46.9	54.0	-7.1	Laptop on side, channel 36, 6Mbps.
5351.403	19.5	36.9	360.0	1.4	1.0	0.0	H-Horn	AV	-9.5	46.9	54.0	-7.1	Laptop on side, channel 64, 6Mbps.
5149.082	39.9	36.5	360.0	1.1	1.0	0.0	H-Horn	PK	-9.5	66.9	74.0	-7.1	Laptop vertical (screen down), channel 36, 6Mbps.
5146.917	19.6	36.5	48.0	1.2	1.0	0.0	V-Horn	AV	-9.5	46.6	54.0	-7.4	Laptop vertical (screen down), channel 36, 6Mbps.
5149.398	39.4	36.5	84.0	1.4	1.0	0.0	V-Horn	PK	-9.5	66.4	74.0	-7.6	Laptop horizontal, channel 36, 6Mbps.
5149.200	38.6	36.5	356.0	1.0	1.0	0.0	H-Horn	PK	-9.5	65.6	74.0	-8.4	Laptop horizontal, channel 36, 6Mbps.
5149.130	35.0	36.5	31.0	1.3	1.0	0.0	H-Horn	PK	-9.5	62.0	74.0	-12.0	Laptop on side, channel 36, 6Mbps.
5351.403	33.3	36.9	360.0	1.4	1.0	0.0	H-Horn	PK	-9.5	60.7	74.0	-13.3	Laptop on side, channel 64, 6Mbps.
5143.433	33.2	36.5	48.0	1.2	1.0	0.0	V-Horn	PK	-9.5	60.2	74.0	-13.8	Laptop vertical (screen down), channel 36, 6Mbps.

NORTHWEST EMC

SPURIOUS RADIATED EMISSIONS DATA SHEET

PSA 2007.07.21
EMI 2008.7.3

EUT:	DDIB	Work Order:	INMC0500
Serial Number:	Proto 13	Date:	12/19/08
Customer:	Intermec Technologies Corporation	Temperature:	20.6° C
Attendees:	None	Humidity:	25%
Project:	None	Barometric Pres.:	1020.5mb
Tested by:	Dan Haas	Power: 3.3Vdc via host	Job Site: EV12

TEST SPECIFICATIONS	Test Method
FCC 15.407:2008	ANSI C63.4:2003 DA 02-2138:2002

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

COMMENTS

See notes for EUT orientation, channel, and data rate.

EUT OPERATING MODES

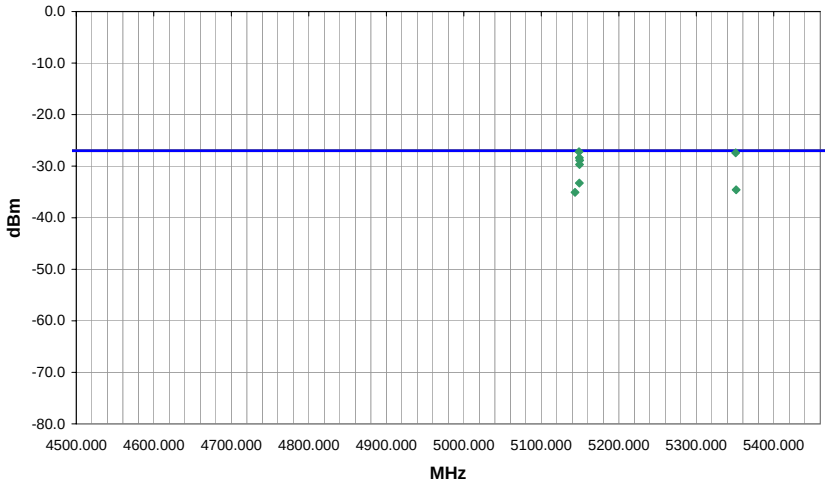
Transmitting 802.11(a)

DEVIATIONS FROM TEST STANDARD

No deviations.

Run #	13
Configuration #	1
Results	Pass

Signature



Freq (MHz)			Azimuth (degrees)	Height (meters)			Polarity	Detector	EIRP (Watts)	EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)	Comments
5148.683			167.0	1.4			V-Horn	PK	1.91E-06	-27.2	-27.0	-0.2	Laptop on side, channel 36, 6Mbps.
5350.765			3.0	1.4			V-Horn	PK	1.82E-06	-27.4	-27.0	-0.4	Laptop on side, channel 64, 6Mbps.
5149.082			360.0	1.1			H-Horn	PK	1.46E-06	-28.4	-27.0	-1.4	Laptop vertical (screen down), channel 36, 6Mbps.
5149.398			84.0	1.4			V-Horn	PK	1.30E-06	-28.9	-27.0	-1.9	Laptop horizontal, channel 36, 6Mbps.
5149.200			356.0	1.0			H-Horn	PK	1.08E-06	-29.7	-27.0	-2.7	Laptop horizontal, channel 36, 6Mbps.
5149.130			31.0	1.3			H-Horn	PK	4.71E-07	-33.3	-27.0	-6.3	Laptop on side, channel 36, 6Mbps.
5351.403			360.0	1.4			H-Horn	PK	3.49E-07	-34.6	-27.0	-7.6	Laptop on side, channel 64, 6Mbps.
5143.433			48.0	1.2			V-Horn	PK	3.11E-07	-35.1	-27.0	-8.1	Laptop vertical (screen down), channel 36, 6Mbps.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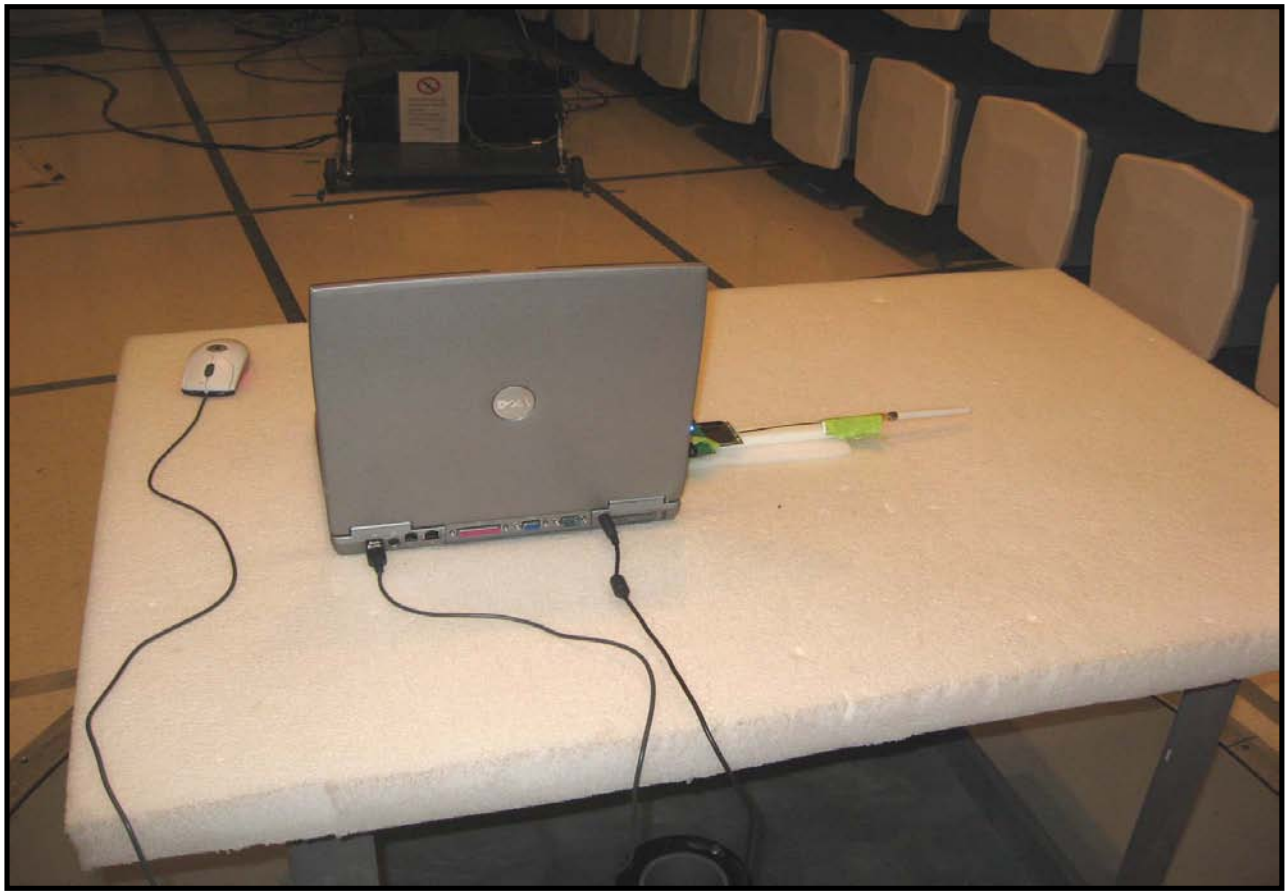
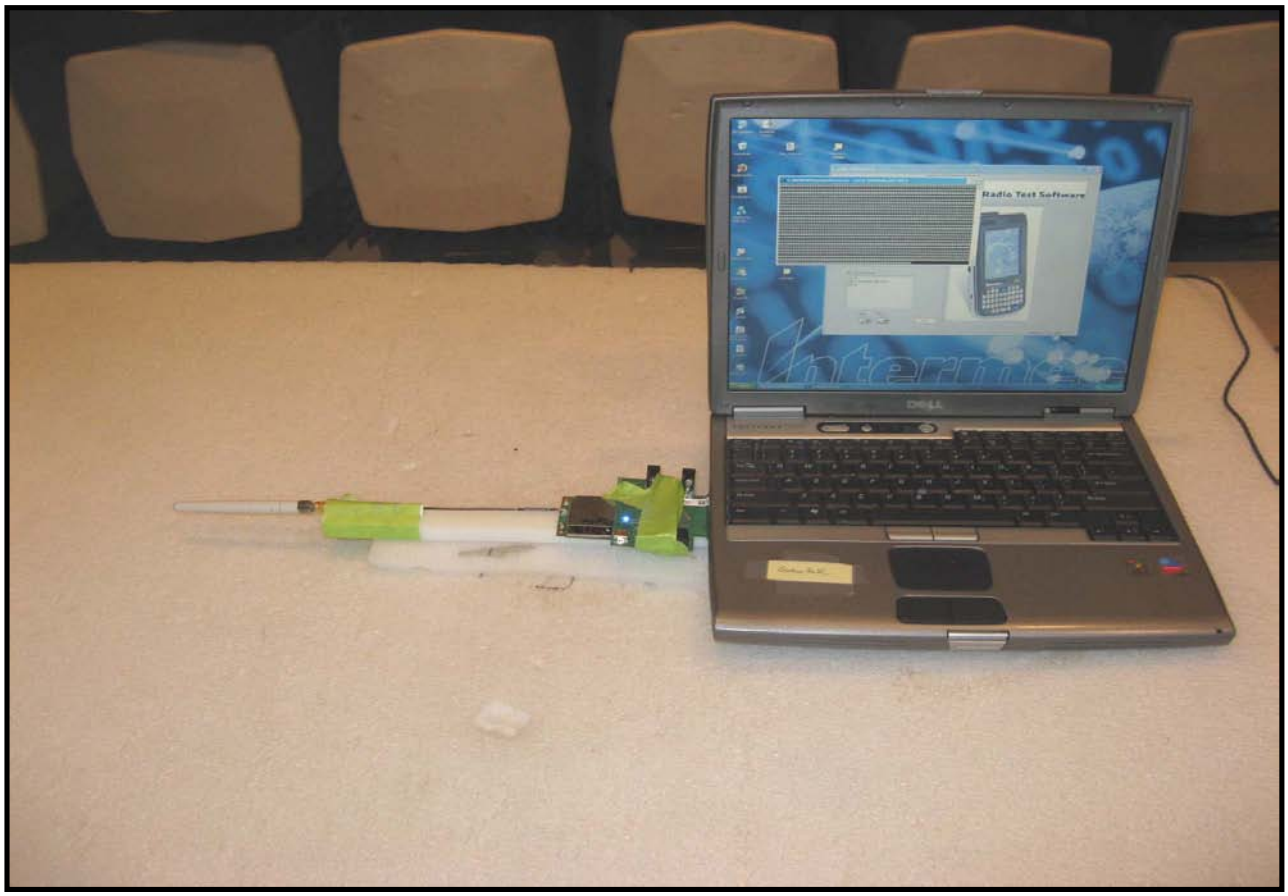
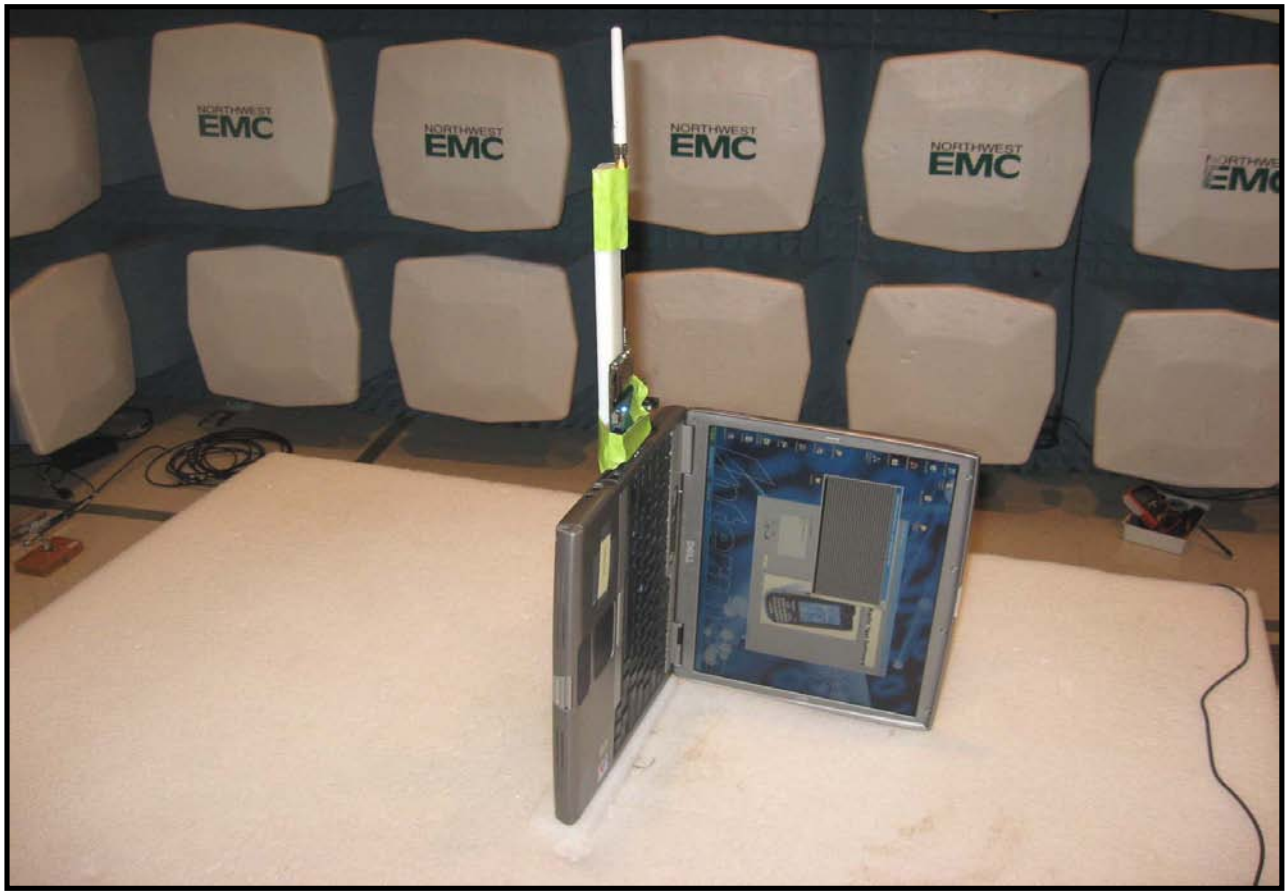
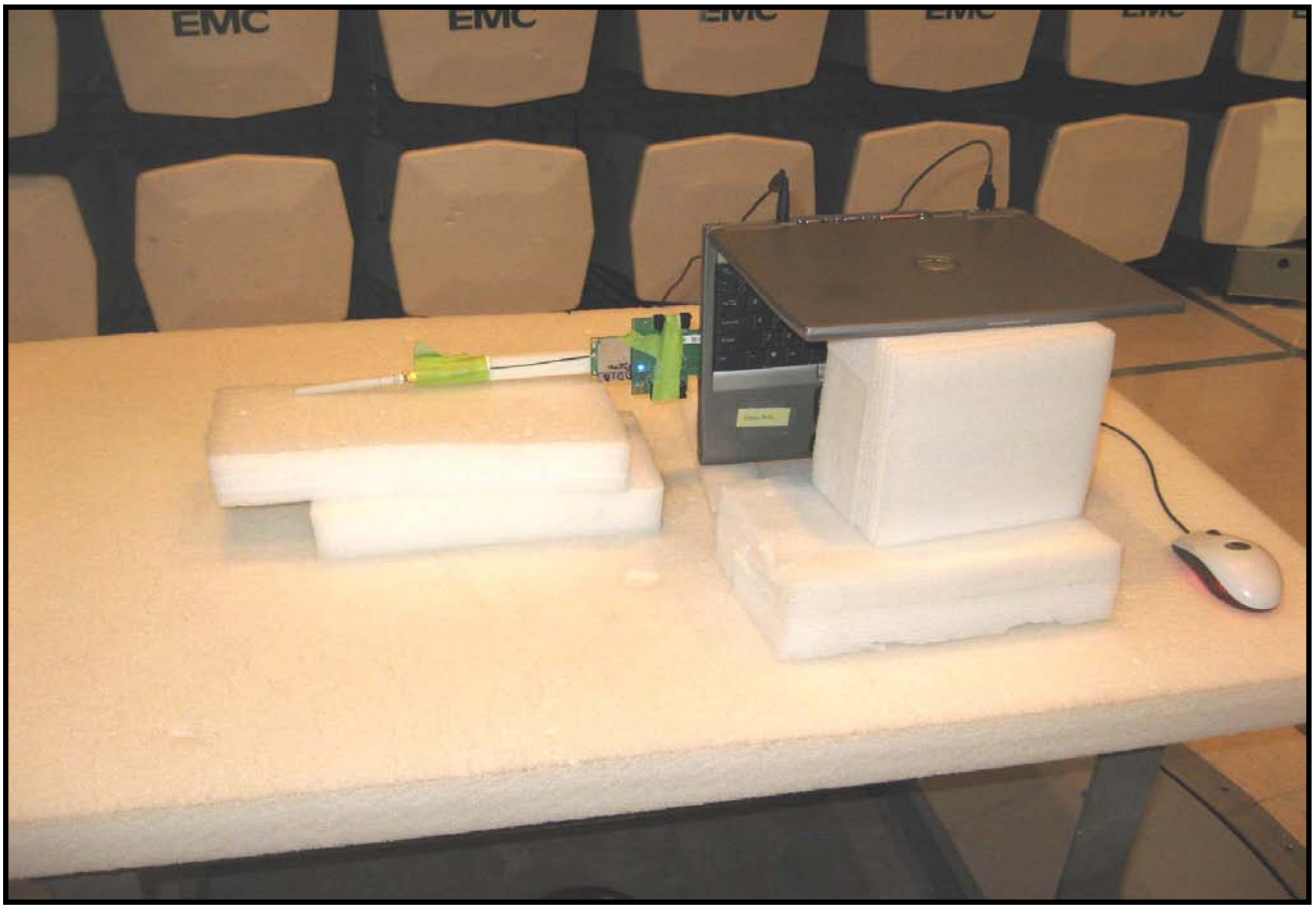



Radio Test Software


NORTHWEST
EMC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AC POWERLINE CONDUCTED EMISSIONS

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

MODES OF OPERATION
Transmitting 802.11(a), 6 Mbps, high channel, 5470 MHz - 5725 MHz band
Transmitting 802.11(a), 6 Mbps, mid channel, 5470 MHz - 5725 MHz band
Transmitting 802.11(a), 6 Mbps, low channel, 5470 MHz - 5725 MHz band
Transmitting 802.11(a), 6 Mbps, high channel, 5250 MHz - 5350 MHz band
Transmitting 802.11(a), 6 Mbps, low channel, 5250 MHz - 5350 MHz band
Transmitting 802.11(a), 6 Mbps, high channel, 5150 MHz - 5250 MHz band
Transmitting 802.11(a), 6 Mbps, low channel, 5150 MHz - 5250 MHz band

POWER SETTINGS INVESTIGATED
3.7 VDC via 120V/60Hz

CONFIGURATIONS INVESTIGATED
INMC0500 - 6

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

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval
Receiver	Rohde & Schwarz	ESCI	ARH	8/28/2008	12 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
LISN	Solar	9252-50-R-24-BNC	LIR	1/4/2008	13 mo
EV07 Cables		Conducted Cables	EVG	5/2/2008	13 mo

MEASUREMENT BANDWIDTHS

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

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

MEASUREMENT UNCERTAINTY

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.

NORTHWEST

EMC

AC POWERLINE CONDUCTED EMISSIONS

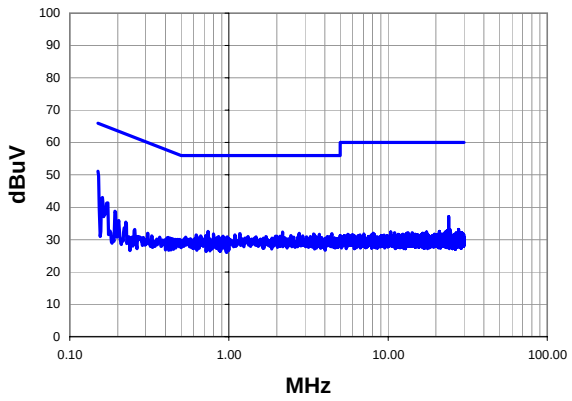
PSA-ESCI 2008.12.10
Version 2008.3.31

Work Order:	INMC0500	**Date:**	12/13/08		
Project:	None	**Temperature:**	20.3°C		
Job Site:	EV07	**Humidity:**	33.3		
Serial Number:	000B6B8D3470	**Barometric Pres.:**	1000.9mb	**Tested by:**	Rod Peloquin
EUT:	DDIB				
Configuration:	6 - AC Powerline Conducted Emissions				
Customer:	Intermec Technologies Corporation				
Attendees:	None				
EUT Power:	3.7 VDC via 120V/60Hz				
Operating Mode:	Transmitting 802.11(a), 6 Mbps, low channel, 5150 MHz - 5250 MHz band				
Deviations:	No deviations.				
Comments:	Radio module in host hand held computer powered via linear power supply.				

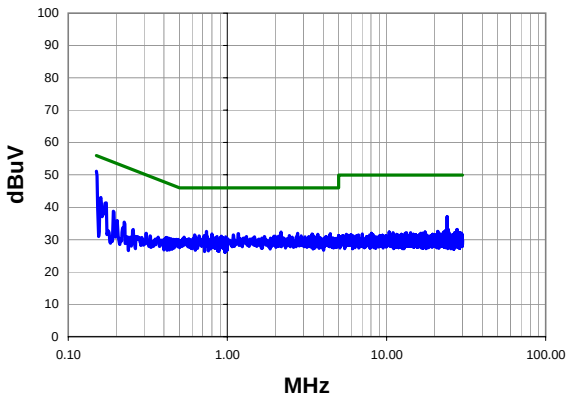
Test Specifications	**Test Method**
FCC 15.407:2008	ANSI C63.4:2003

Run #	15	**Line:**	High Line	**Ext. Attenuation:**	20	**Results**	Pass

Peak Data - vs - Quasi Peak Limit



Peak Data - vs - Average Limit



Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.150	29.1	22.1	51.2	66.0	-14.8
0.160	21.2	21.9	43.1	65.5	-22.4
24.020	16.3	20.8	37.1	60.0	-22.9
0.174	19.8	21.6	41.4	64.8	-23.4
0.740	11.8	20.7	32.5	56.0	-23.5
2.176	11.7	20.6	32.3	56.0	-23.7
2.760	11.3	20.6	31.9	56.0	-24.1
1.168	11.3	20.6	31.9	56.0	-24.1
4.424	11.2	20.6	31.8	56.0	-24.2
3.400	11.1	20.6	31.7	56.0	-24.3
0.801	11.0	20.7	31.7	56.0	-24.3
3.696	11.0	20.6	31.6	56.0	-24.4
1.088	10.9	20.6	31.5	56.0	-24.5
0.623	10.6	20.8	31.4	56.0	-24.6
0.714	10.5	20.8	31.3	56.0	-24.7
5.000	10.6	20.7	31.3	56.0	-24.7
2.456	10.6	20.6	31.2	56.0	-24.8
0.665	10.4	20.8	31.2	56.0	-24.8
2.904	10.5	20.6	31.1	56.0	-24.9
1.960	10.5	20.6	31.1	56.0	-24.9

Peak Data - vs - Average Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.150	29.1	22.1	51.2	56.0	-4.8
0.160	21.2	21.9	43.1	55.5	-12.4
24.020	16.3	20.8	37.1	50.0	-12.9
0.174	19.8	21.6	41.4	54.8	-13.4
0.740	11.8	20.7	32.5	46.0	-13.5
2.176	11.7	20.6	32.3	46.0	-13.7
2.760	11.3	20.6	31.9	46.0	-14.1
1.168	11.3	20.6	31.9	46.0	-14.1
4.424	11.2	20.6	31.8	46.0	-14.2
3.400	11.1	20.6	31.7	46.0	-14.3
0.801	11.0	20.7	31.7	46.0	-14.3
3.696	11.0	20.6	31.6	46.0	-14.4
1.088	10.9	20.6	31.5	46.0	-14.5
0.623	10.6	20.8	31.4	46.0	-14.6
0.714	10.5	20.8	31.3	46.0	-14.7
5.000	10.6	20.7	31.3	46.0	-14.7
2.456	10.6	20.6	31.2	46.0	-14.8
0.665	10.4	20.8	31.2	46.0	-14.8
2.904	10.5	20.6	31.1	46.0	-14.9
1.960	10.5	20.6	31.1	46.0	-14.9

NORTHWEST

EMC

AC POWERLINE CONDUCTED EMISSIONS

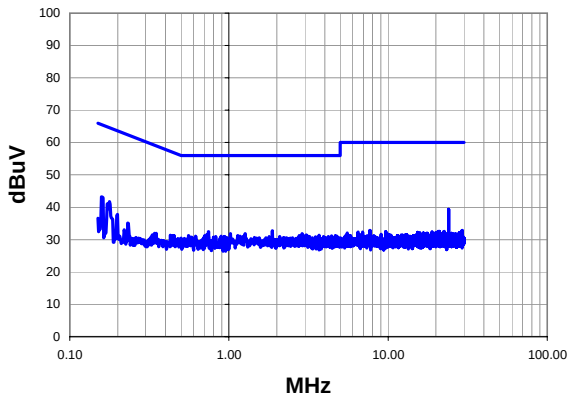
PSA-ESCI 2008.12.10
Version 2008.3.31

Work Order:	INMC0500	**Date:**	12/13/08		
Project:	None	**Temperature:**	20.3°C		
Job Site:	EV07	**Humidity:**	33.3		
Serial Number:	000B6B8D3470	**Barometric Pres.:**	1000.9mb	**Tested by:**	Rod Peloquin
EUT:	DDIB				
Configuration:	6 - AC Powerline Conducted Emissions				
Customer:	Intermec Technologies Corporation				
Attendees:	None				
EUT Power:	3.7 VDC via 120V/60Hz				
Operating Mode:	Transmitting 802.11(a), 6 Mbps, low channel, 5150 MHz - 5250 MHz band				
Deviations:	No deviations.				
Comments:	Radio module in host hand held computer powered via linear power supply.				

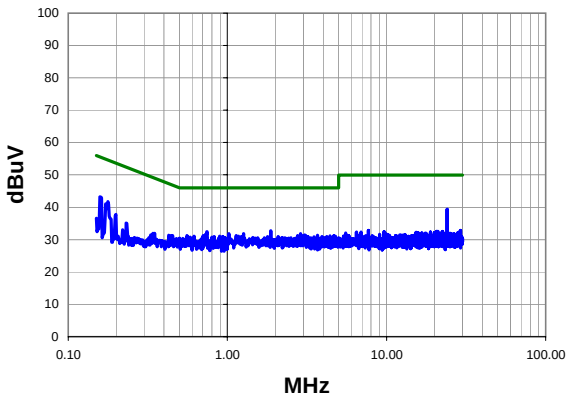
Test Specifications	**Test Method**
FCC 15.407:2008	ANSI C63.4:2003

Run #	16	**Line:**	Neutral	**Ext. Attenuation:**	20	**Results**	Pass

Peak Data - vs - Quasi Peak Limit



Peak Data - vs - Average Limit



Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
24.020	18.5	20.8	39.3	60.0	-20.7
0.159	21.3	21.9	43.2	65.5	-22.4
0.177	20.2	21.5	41.7	64.6	-22.9
1.872	12.1	20.6	32.7	56.0	-23.3
0.743	11.7	20.7	32.4	56.0	-23.6
1.264	11.3	20.6	31.9	56.0	-24.1
1.024	11.3	20.6	31.9	56.0	-24.1
2.888	11.2	20.6	31.8	56.0	-24.2
3.064	10.8	20.6	31.4	56.0	-24.6
3.680	10.7	20.6	31.3	56.0	-24.7
1.136	10.7	20.6	31.3	56.0	-24.7
0.704	10.5	20.8	31.3	56.0	-24.7
0.558	10.4	20.9	31.3	56.0	-24.7
2.760	10.6	20.6	31.2	56.0	-24.8
4.664	10.5	20.6	31.1	56.0	-24.9
4.416	10.5	20.6	31.1	56.0	-24.9
0.895	10.4	20.6	31.0	56.0	-25.0
4.768	10.4	20.6	31.0	56.0	-25.0
0.618	10.2	20.8	31.0	56.0	-25.0
2.080	10.4	20.6	31.0	56.0	-25.0

Peak Data - vs - Average Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
24.020	18.5	20.8	39.3	50.0	-10.7
0.159	21.3	21.9	43.2	55.5	-12.4
0.177	20.2	21.5	41.7	54.6	-12.9
1.872	12.1	20.6	32.7	46.0	-13.3
0.743	11.7	20.7	32.4	46.0	-13.6
1.264	11.3	20.6	31.9	46.0	-14.1
1.024	11.3	20.6	31.9	46.0	-14.1
2.888	11.2	20.6	31.8	46.0	-14.2
3.064	10.8	20.6	31.4	46.0	-14.6
3.680	10.7	20.6	31.3	46.0	-14.7
1.136	10.7	20.6	31.3	46.0	-14.7
0.704	10.5	20.8	31.3	46.0	-14.7
0.558	10.4	20.9	31.3	46.0	-14.7
2.760	10.6	20.6	31.2	46.0	-14.8
4.664	10.5	20.6	31.1	46.0	-14.9
4.416	10.5	20.6	31.1	46.0	-14.9
0.895	10.4	20.6	31.0	46.0	-15.0
4.768	10.4	20.6	31.0	46.0	-15.0
0.618	10.2	20.8	31.0	46.0	-15.0
2.080	10.4	20.6	31.0	46.0	-15.0

NORTHWEST

EMC

AC POWERLINE CONDUCTED EMISSIONS

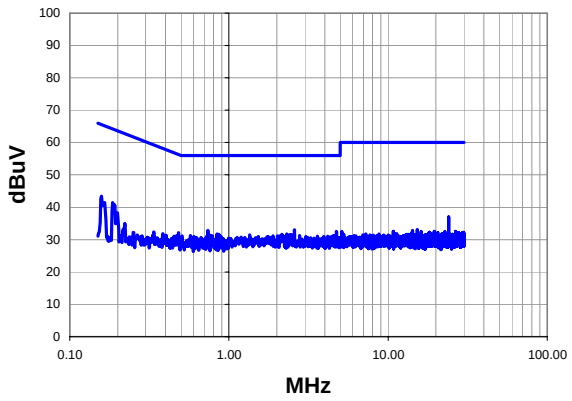
PSA-ESCI 2008.12.10
Version 2008.3.31

Work Order:	INMC0500	**Date:**	12/13/08		
Project:	None	**Temperature:**	20.3°C		
Job Site:	EV07	**Humidity:**	33.3		
Serial Number:	000B6B8D3470	**Barometric Pres.:**	1000.9mb	**Tested by:**	Rod Peloquin
EUT:	DDIB				
Configuration:	6 - AC Powerline Conducted Emissions				
Customer:	Intermec Technologies Corporation				
Attendees:	None				
EUT Power:	3.7 VDC via 120V/60Hz				
Operating Mode:	Transmitting 802.11(a), 6 Mbps, high channel, 5150 MHz - 5250 MHz band				
Deviations:	No deviations.				
Comments:	Radio module in host hand held computer powered via linear power supply.				

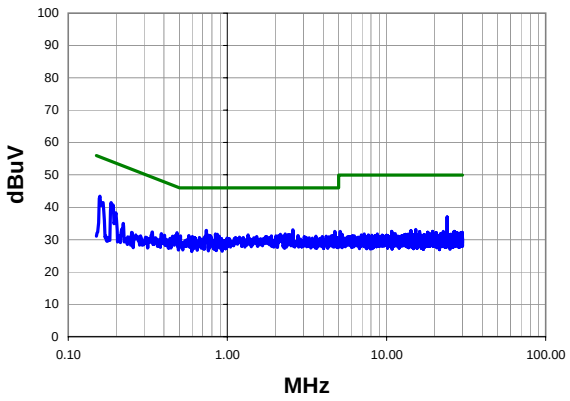
Test Specifications	**Test Method**
FCC 15.407:2008	ANSI C63.4:2003

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

Peak Data - vs - Quasi Peak Limit



Peak Data - vs - Average Limit



Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.159	21.5	21.9	43.4	65.5	-22.2
0.186	20.1	21.3	41.4	64.2	-22.8
24.020	16.2	20.8	37.0	60.0	-23.0
2.584	12.4	20.6	33.0	56.0	-23.0
0.736	12.1	20.7	32.8	56.0	-23.2
4.736	11.9	20.6	32.5	56.0	-23.5
0.483	11.3	20.9	32.2	56.3	-24.1
0.842	11.1	20.7	31.8	56.0	-24.2
2.304	11.1	20.6	31.7	56.0	-24.3
2.152	11.1	20.6	31.7	56.0	-24.3
0.864	11.0	20.7	31.7	56.0	-24.3
2.408	10.9	20.6	31.5	56.0	-24.5
1.352	10.9	20.6	31.5	56.0	-24.5
0.764	10.6	20.7	31.3	56.0	-24.7
0.572	10.4	20.8	31.2	56.0	-24.8
4.624	10.6	20.6	31.2	56.0	-24.8
2.784	10.6	20.6	31.2	56.0	-24.8
1.888	10.6	20.6	31.2	56.0	-24.8
2.016	10.6	20.6	31.2	56.0	-24.8
0.507	10.3	20.9	31.2	56.0	-24.8

Peak Data - vs - Average Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.159	21.5	21.9	43.4	55.5	-12.2
0.186	20.1	21.3	41.4	54.2	-12.8
24.020	16.2	20.8	37.0	50.0	-13.0
2.584	12.4	20.6	33.0	46.0	-13.0
0.736	12.1	20.7	32.8	46.0	-13.2
4.736	11.9	20.6	32.5	46.0	-13.5
0.483	11.3	20.9	32.2	46.3	-14.1
0.842	11.1	20.7	31.8	46.0	-14.2
2.304	11.1	20.6	31.7	46.0	-14.3
2.152	11.1	20.6	31.7	46.0	-14.3
0.864	11.0	20.7	31.7	46.0	-14.3
2.408	10.9	20.6	31.5	46.0	-14.5
1.352	10.9	20.6	31.5	46.0	-14.5
0.764	10.6	20.7	31.3	46.0	-14.7
0.572	10.4	20.8	31.2	46.0	-14.8
4.624	10.6	20.6	31.2	46.0	-14.8
2.784	10.6	20.6	31.2	46.0	-14.8
1.888	10.6	20.6	31.2	46.0	-14.8
2.016	10.6	20.6	31.2	46.0	-14.8
0.507	10.3	20.9	31.2	46.0	-14.8

NORTHWEST

EMC

AC POWERLINE CONDUCTED EMISSIONS

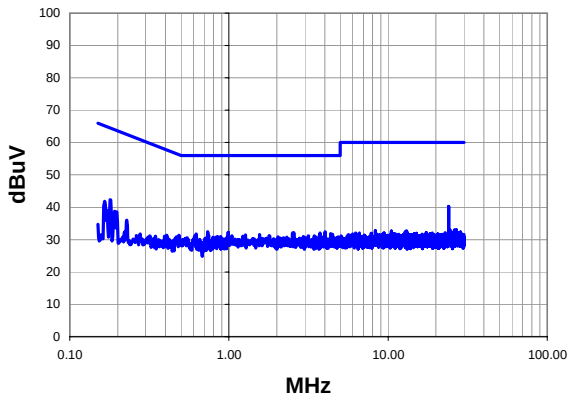
PSA-ESCI 2008.12.10
Version 2008.3.31

Work Order:	INMC0500	**Date:**	12/13/08		
Project:	None	**Temperature:**	20.3°C		
Job Site:	EV07	**Humidity:**	33.3		
Serial Number:	000B6B8D3470	**Barometric Pres.:**	1000.9mb	**Tested by:**	Rod Peloquin
EUT:	DDIB				
Configuration:	6 - AC Powerline Conducted Emissions				
Customer:	Intermec Technologies Corporation				
Attendees:	None				
EUT Power:	3.7 VDC via 120V/60Hz				
Operating Mode:	Transmitting 802.11(a), 6 Mbps, high channel, 5150 MHz - 5250 MHz band				
Deviations:	No deviations.				
Comments:	Radio module in host hand held computer powered via linear power supply.				

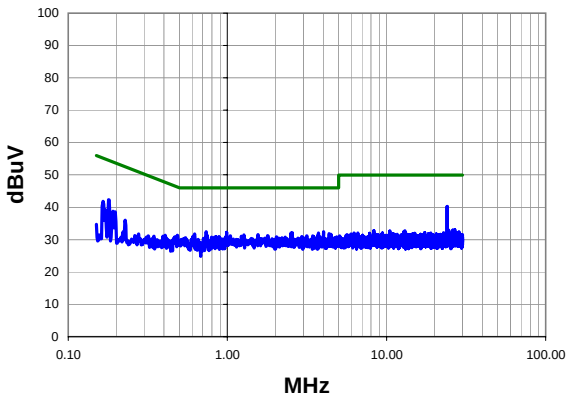
Test Specifications	**Test Method**
FCC 15.407:2008	ANSI C63.4:2003

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

Peak Data - vs - Quasi Peak Limit



Peak Data - vs - Average Limit



Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
24.020	19.4	20.8	40.2	60.0	-19.8
0.179	20.9	21.5	42.4	64.5	-22.2
0.165	20.1	21.8	41.9	65.2	-23.3
0.735	11.7	20.7	32.4	56.0	-23.6
4.016	11.8	20.6	32.4	56.0	-23.6
0.990	11.6	20.6	32.2	56.0	-23.8
2.560	11.5	20.6	32.1	56.0	-23.9
3.744	11.4	20.6	32.0	56.0	-24.0
2.504	11.4	20.6	32.0	56.0	-24.0
4.360	11.2	20.6	31.8	56.0	-24.2
0.623	10.9	20.8	31.7	56.0	-24.3
4.480	11.0	20.6	31.6	56.0	-24.4
1.560	11.0	20.6	31.6	56.0	-24.4
1.272	10.9	20.6	31.5	56.0	-24.5
1.792	10.6	20.6	31.2	56.0	-24.8
0.485	10.5	20.9	31.4	56.3	-24.9
3.152	10.5	20.6	31.1	56.0	-24.9
3.440	10.5	20.6	31.1	56.0	-24.9
0.607	10.2	20.8	31.0	56.0	-25.0
0.886	10.3	20.7	31.0	56.0	-25.0

Peak Data - vs - Average Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
24.020	19.4	20.8	40.2	50.0	-9.8
0.179	20.9	21.5	42.4	54.5	-12.2
0.165	20.1	21.8	41.9	55.2	-13.3
0.735	11.7	20.7	32.4	46.0	-13.6
4.016	11.8	20.6	32.4	46.0	-13.6
0.990	11.6	20.6	32.2	46.0	-13.8
2.560	11.5	20.6	32.1	46.0	-13.9
3.744	11.4	20.6	32.0	46.0	-14.0
2.504	11.4	20.6	32.0	46.0	-14.0
4.360	11.2	20.6	31.8	46.0	-14.2
0.623	10.9	20.8	31.7	46.0	-14.3
4.480	11.0	20.6	31.6	46.0	-14.4
1.560	11.0	20.6	31.6	46.0	-14.4
1.272	10.9	20.6	31.5	46.0	-14.5
1.792	10.6	20.6	31.2	46.0	-14.8
0.485	10.5	20.9	31.4	46.3	-14.9
3.152	10.5	20.6	31.1	46.0	-14.9
3.440	10.5	20.6	31.1	46.0	-14.9
0.607	10.2	20.8	31.0	46.0	-15.0
0.886	10.3	20.7	31.0	46.0	-15.0

NORTHWEST

EMC

AC POWERLINE CONDUCTED EMISSIONS

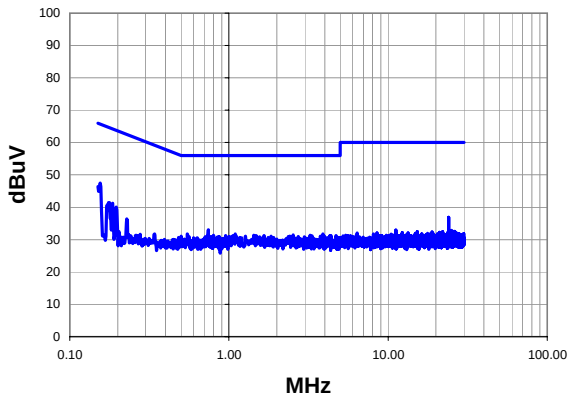
PSA-ESCI 2008.12.10
Version 2008.3.31

Work Order:	INMC0500	**Date:**	12/13/08		
Project:	None	**Temperature:**	20.3°C		
Job Site:	EV07	**Humidity:**	33.3		
Serial Number:	000B6B8D3470	**Barometric Pres.:**	1000.9mb	**Tested by:**	Rod Peloquin
EUT:	DDIB				
Configuration:	6 - AC Powerline Conducted Emissions				
Customer:	Intermec Technologies Corporation				
Attendees:	None				
EUT Power:	3.7 VDC via 120V/60Hz				
Operating Mode:	Transmitting 802.11(a), 6 Mbps, low channel, 5250 MHz - 5350 MHz band				
Deviations:	No deviations.				
Comments:	Radio module in host hand held computer powered via linear power supply.				

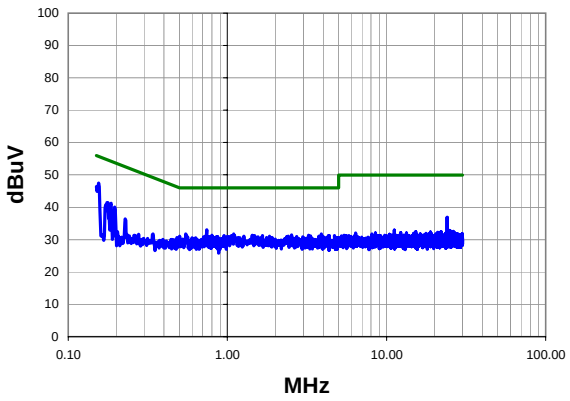
Test Specifications	**Test Method**
FCC 15.407:2008	ANSI C63.4:2003

Run #	19	**Line:**	High Line	**Ext. Attenuation:**	20	**Results**	Pass

Peak Data - vs - Quasi Peak Limit



Peak Data - vs - Average Limit



Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.155	25.5	22.0	47.5	65.7	-18.3
0.742	12.3	20.7	33.0	56.0	-23.0
0.186	19.9	21.3	41.2	64.2	-23.0
24.020	16.1	20.8	36.9	60.0	-23.1
0.176	19.9	21.6	41.5	64.7	-23.2
0.196	18.9	21.1	40.0	63.8	-23.7
1.096	11.2	20.6	31.8	56.0	-24.2
0.548	10.9	20.9	31.8	56.0	-24.2
3.888	11.1	20.6	31.7	56.0	-24.3
2.528	10.8	20.6	31.4	56.0	-24.6
0.801	10.7	20.7	31.4	56.0	-24.6
1.432	10.8	20.6	31.4	56.0	-24.6
3.232	10.7	20.6	31.3	56.0	-24.7
1.664	10.7	20.6	31.3	56.0	-24.7
1.480	10.7	20.6	31.3	56.0	-24.7
4.712	10.6	20.6	31.2	56.0	-24.8
4.376	10.6	20.6	31.2	56.0	-24.8
4.320	10.6	20.6	31.2	56.0	-24.8
0.952	10.6	20.6	31.2	56.0	-24.8
3.328	10.5	20.6	31.1	56.0	-24.9

Peak Data - vs - Average Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.155	25.5	22.0	47.5	55.7	-8.3
0.742	12.3	20.7	33.0	46.0	-13.0
0.186	19.9	21.3	41.2	54.2	-13.0
24.020	16.1	20.8	36.9	50.0	-13.1
0.176	19.9	21.6	41.5	54.7	-13.2
0.196	18.9	21.1	40.0	53.8	-13.7
1.096	11.2	20.6	31.8	46.0	-14.2
0.548	10.9	20.9	31.8	46.0	-14.2
3.888	11.1	20.6	31.7	46.0	-14.3
2.528	10.8	20.6	31.4	46.0	-14.6
0.801	10.7	20.7	31.4	46.0	-14.6
1.432	10.8	20.6	31.4	46.0	-14.6
3.232	10.7	20.6	31.3	46.0	-14.7
1.664	10.7	20.6	31.3	46.0	-14.7
1.480	10.7	20.6	31.3	46.0	-14.7
4.712	10.6	20.6	31.2	46.0	-14.8
4.376	10.6	20.6	31.2	46.0	-14.8
4.320	10.6	20.6	31.2	46.0	-14.8
0.952	10.6	20.6	31.2	46.0	-14.8
3.328	10.5	20.6	31.1	46.0	-14.9

NORTHWEST

EMC

AC POWERLINE CONDUCTED EMISSIONS

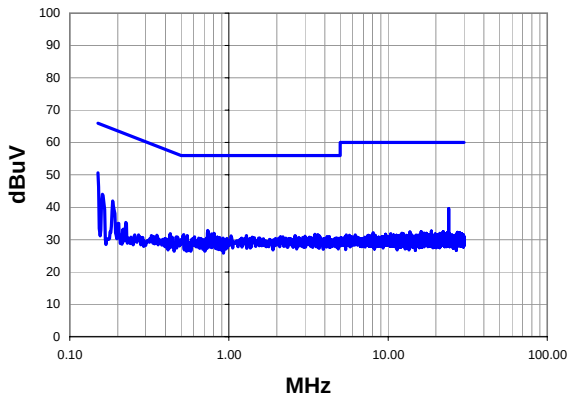
PSA-ESCI 2008.12.10
Version 2008.3.31

Work Order:	INMC0500	**Date:**	12/13/08		
Project:	None	**Temperature:**	20.3°C		
Job Site:	EV07	**Humidity:**	33.3		
Serial Number:	000B6B8D3470	**Barometric Pres.:**	1000.9mb	**Tested by:**	Rod Peloquin
EUT:	DDIB				
Configuration:	6 - AC Powerline Conducted Emissions				
Customer:	Intermec Technologies Corporation				
Attendees:	None				
EUT Power:	3.7 VDC via 120V/60Hz				
Operating Mode:	Transmitting 802.11(a), 6 Mbps, low channel, 5250 MHz - 5350 MHz band				
Deviations:	No deviations.				
Comments:	Radio module in host hand held computer powered via linear power supply.				

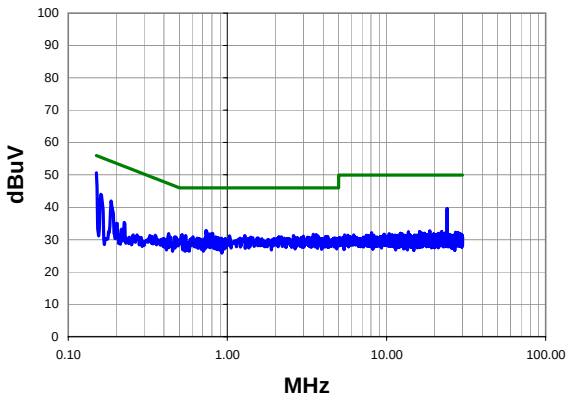
Test Specifications	**Test Method**
FCC 15.407:2008	ANSI C63.4:2003

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

Peak Data - vs - Quasi Peak Limit



Peak Data - vs - Average Limit



Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.150	28.6	22.1	50.7	66.0	-15.3
24.020	18.7	20.8	39.5	60.0	-20.5
0.160	22.2	21.9	44.1	65.5	-21.4
0.186	20.6	21.3	41.9	64.2	-22.3
0.735	12.1	20.7	32.8	56.0	-23.2
0.808	11.2	20.7	31.9	56.0	-24.1
0.779	11.0	20.7	31.7	56.0	-24.3
3.464	11.0	20.6	31.6	56.0	-24.4
0.519	10.7	20.9	31.6	56.0	-24.4
3.624	10.9	20.6	31.5	56.0	-24.5
1.288	10.7	20.6	31.3	56.0	-24.7
0.548	10.4	20.9	31.3	56.0	-24.7
2.608	10.6	20.6	31.2	56.0	-24.8
1.032	10.6	20.6	31.2	56.0	-24.8
3.704	10.5	20.6	31.1	56.0	-24.9
3.008	10.4	20.6	31.0	56.0	-25.0
4.144	10.3	20.6	30.9	56.0	-25.1
4.280	10.3	20.6	30.9	56.0	-25.1
2.112	10.3	20.6	30.9	56.0	-25.1
0.607	10.0	20.8	30.8	56.0	-25.2

Peak Data - vs - Average Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.150	28.6	22.1	50.7	56.0	-5.3
24.020	18.7	20.8	39.5	50.0	-10.5
0.160	22.2	21.9	44.1	55.5	-11.4
0.186	20.6	21.3	41.9	54.2	-12.3
0.735	12.1	20.7	32.8	46.0	-13.2
0.808	11.2	20.7	31.9	46.0	-14.1
0.779	11.0	20.7	31.7	46.0	-14.3
3.464	11.0	20.6	31.6	46.0	-14.4
0.519	10.7	20.9	31.6	46.0	-14.4
3.624	10.9	20.6	31.5	46.0	-14.5
1.288	10.7	20.6	31.3	46.0	-14.7
0.548	10.4	20.9	31.3	46.0	-14.7
2.608	10.6	20.6	31.2	46.0	-14.8
1.032	10.6	20.6	31.2	46.0	-14.8
3.704	10.5	20.6	31.1	46.0	-14.9
3.008	10.4	20.6	31.0	46.0	-15.0
4.144	10.3	20.6	30.9	46.0	-15.1
4.280	10.3	20.6	30.9	46.0	-15.1
2.112	10.3	20.6	30.9	46.0	-15.1
0.607	10.0	20.8	30.8	46.0	-15.2

NORTHWEST

EMC

AC POWERLINE CONDUCTED EMISSIONS

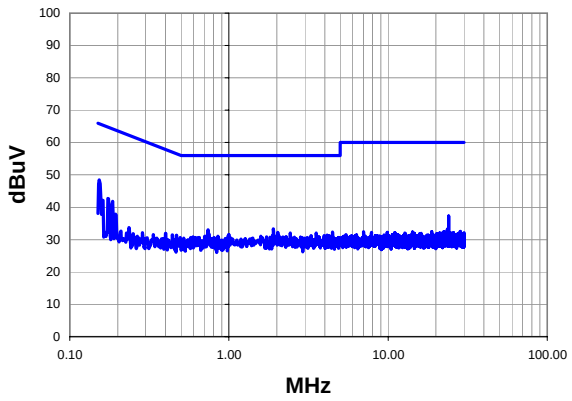
PSA-ESCI 2008.12.10
Version 2008.3.31

Work Order:	INMC0500	**Date:**	12/13/08		
Project:	None	**Temperature:**	20.3°C		
Job Site:	EV07	**Humidity:**	33.3		
Serial Number:	000B6B8D3470	**Barometric Pres.:**	1000.9mb	**Tested by:**	Rod Peloquin
EUT:	DDIB				
Configuration:	6 - AC Powerline Conducted Emissions				
Customer:	Intermec Technologies Corporation				
Attendees:	None				
EUT Power:	3.7 VDC via 120V/60Hz				
Operating Mode:	Transmitting 802.11(a), 6 Mbps, high channel, 5250 MHz - 5350 MHz band				
Deviations:	No deviations.				
Comments:	Radio module in host hand held computer powered via linear power supply.				

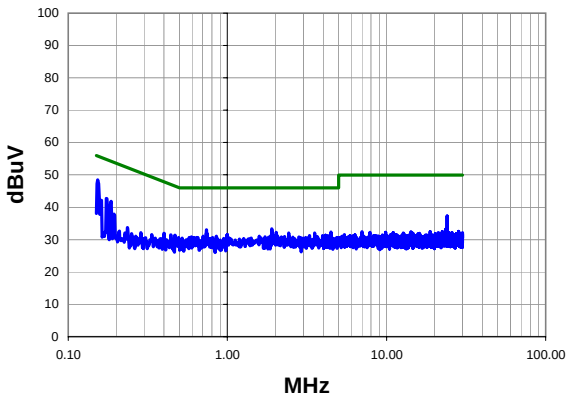
Test Specifications	**Test Method**
FCC 15.407:2008	ANSI C63.4:2003

Run #	21	**Line:**	High Line	**Ext. Attenuation:**	20	**Results**	Pass

Peak Data - vs - Quasi Peak Limit



Peak Data - vs - Average Limit



Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.153	26.5	22.0	48.5	65.8	-17.3
0.174	21.1	21.6	42.7	64.8	-22.1
0.186	20.5	21.3	41.8	64.2	-22.4
24.020	16.5	20.8	37.3	60.0	-22.7
1.904	12.7	20.6	33.3	56.0	-22.7
0.740	12.3	20.7	33.0	56.0	-23.0
0.160	20.3	21.9	42.2	65.5	-23.3
4.480	11.7	20.6	32.3	56.0	-23.7
2.032	11.6	20.6	32.2	56.0	-23.8
3.536	11.4	20.6	32.0	56.0	-24.0
2.432	11.4	20.6	32.0	56.0	-24.0
1.000	11.0	20.6	31.6	56.0	-24.4
1.880	10.8	20.6	31.4	56.0	-24.6
4.136	10.7	20.6	31.3	56.0	-24.7
4.264	10.6	20.6	31.2	56.0	-24.8
3.960	10.6	20.6	31.2	56.0	-24.8
3.288	10.6	20.6	31.2	56.0	-24.8
1.584	10.5	20.6	31.1	56.0	-24.9
0.852	10.4	20.7	31.1	56.0	-24.9
0.704	10.3	20.8	31.1	56.0	-24.9

Peak Data - vs - Average Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.153	26.5	22.0	48.5	55.8	-7.3
0.174	21.1	21.6	42.7	54.8	-12.1
0.186	20.5	21.3	41.8	54.2	-12.4
24.020	16.5	20.8	37.3	50.0	-12.7
1.904	12.7	20.6	33.3	46.0	-12.7
0.740	12.3	20.7	33.0	46.0	-13.0
0.160	20.3	21.9	42.2	55.5	-13.3
4.480	11.7	20.6	32.3	46.0	-13.7
2.032	11.6	20.6	32.2	46.0	-13.8
3.536	11.4	20.6	32.0	46.0	-14.0
2.432	11.4	20.6	32.0	46.0	-14.0
1.000	11.0	20.6	31.6	46.0	-14.4
1.880	10.8	20.6	31.4	46.0	-14.6
4.136	10.7	20.6	31.3	46.0	-14.7
4.264	10.6	20.6	31.2	46.0	-14.8
3.960	10.6	20.6	31.2	46.0	-14.8
3.288	10.6	20.6	31.2	46.0	-14.8
1.584	10.5	20.6	31.1	46.0	-14.9
0.852	10.4	20.7	31.1	46.0	-14.9
0.704	10.3	20.8	31.1	46.0	-14.9

NORTHWEST

EMC

AC POWERLINE CONDUCTED EMISSIONS

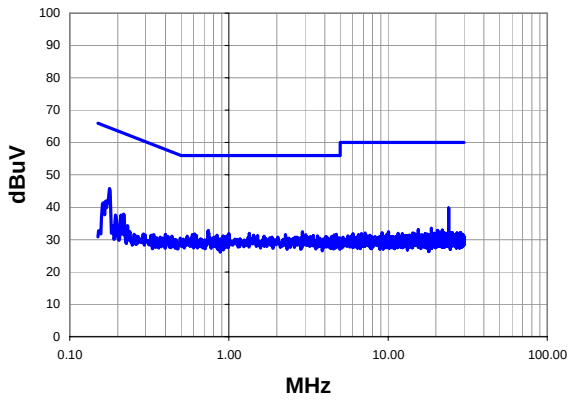
PSA-ESCI 2008.12.10
Version 2008.3.31

Work Order:	INMC0500	**Date:**	12/13/08		
Project:	None	**Temperature:**	20.3°C		
Job Site:	EV07	**Humidity:**	33.3		
Serial Number:	000B6B8D3470	**Barometric Pres.:**	1000.9mb	**Tested by:**	Rod Peloquin
EUT:	DDIB				
Configuration:	6 - AC Powerline Conducted Emissions				
Customer:	Intermec Technologies Corporation				
Attendees:	None				
EUT Power:	3.7 VDC via 120V/60Hz				
Operating Mode:	Transmitting 802.11(a), 6 Mbps, high channel, 5250 MHz - 5350 MHz band				
Deviations:	No deviations.				
Comments:	Radio module in host hand held computer powered via linear power supply.				

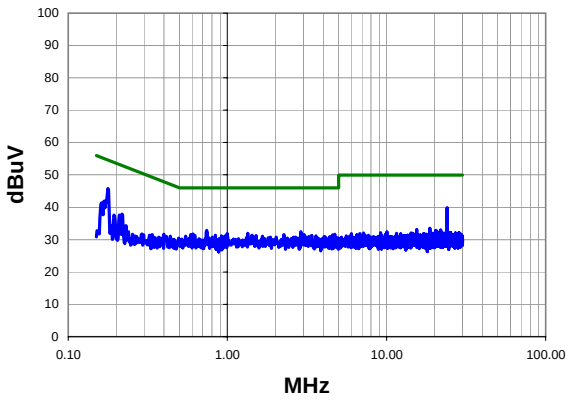
Test Specifications	**Test Method**
FCC 15.407:2008	ANSI C63.4:2003

Run #	22	**Line:**	Neutral	**Ext. Attenuation:**	20	**Results**	Pass

Peak Data - vs - Quasi Peak Limit



Peak Data - vs - Average Limit



Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.177	24.3	21.5	45.8	64.6	-18.8
24.020	18.9	20.8	39.7	60.0	-20.3
0.742	12.1	20.7	32.8	56.0	-23.2
2.896	11.8	20.6	32.4	56.0	-23.6
0.164	19.6	21.8	41.4	65.3	-23.9
1.344	11.4	20.6	32.0	56.0	-24.0
1.000	11.3	20.6	31.9	56.0	-24.1
0.609	10.9	20.8	31.7	56.0	-24.3
4.720	11.0	20.6	31.6	56.0	-24.4
2.264	11.0	20.6	31.6	56.0	-24.4
0.590	10.7	20.8	31.5	56.0	-24.5
3.032	10.9	20.6	31.5	56.0	-24.5
4.576	10.8	20.6	31.4	56.0	-24.6
1.424	10.8	20.6	31.4	56.0	-24.6
0.840	10.7	20.7	31.4	56.0	-24.6
1.512	10.7	20.6	31.3	56.0	-24.7
3.392	10.6	20.6	31.2	56.0	-24.8
0.624	10.4	20.8	31.2	56.0	-24.8
0.969	10.6	20.6	31.2	56.0	-24.8
0.917	10.5	20.6	31.1	56.0	-24.9

Peak Data - vs - Average Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.177	24.3	21.5	45.8	54.6	-8.8
24.020	18.9	20.8	39.7	50.0	-10.3
0.742	12.1	20.7	32.8	46.0	-13.2
2.896	11.8	20.6	32.4	46.0	-13.6
0.164	19.6	21.8	41.4	55.3	-13.9
1.344	11.4	20.6	32.0	46.0	-14.0
1.000	11.3	20.6	31.9	46.0	-14.1
0.609	10.9	20.8	31.7	46.0	-14.3
4.720	11.0	20.6	31.6	46.0	-14.4
2.264	11.0	20.6	31.6	46.0	-14.4
0.590	10.7	20.8	31.5	46.0	-14.5
3.032	10.9	20.6	31.5	46.0	-14.5
4.576	10.8	20.6	31.4	46.0	-14.6
1.424	10.8	20.6	31.4	46.0	-14.6
0.840	10.7	20.7	31.4	46.0	-14.6
1.512	10.7	20.6	31.3	46.0	-14.7
3.392	10.6	20.6	31.2	46.0	-14.8
0.624	10.4	20.8	31.2	46.0	-14.8
0.969	10.6	20.6	31.2	46.0	-14.8
0.917	10.5	20.6	31.1	46.0	-14.9

NORTHWEST

EMC

AC POWERLINE CONDUCTED EMISSIONS

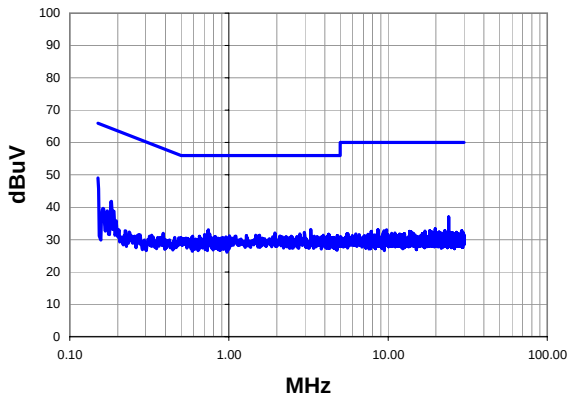
PSA-ESCI 2008.12.10
Version 2008.3.31

Work Order:	INMC0500	**Date:**	12/13/08		
Project:	None	**Temperature:**	20.3°C		
Job Site:	EV07	**Humidity:**	33.3		
Serial Number:	000B6B8D3470	**Barometric Pres.:**	1000.9mb	**Tested by:**	Rod Peloquin
EUT:	DDIB				
Configuration:	6 - AC Powerline Conducted Emissions				
Customer:	Intermec Technologies Corporation				
Attendees:	None				
EUT Power:	3.7 VDC via 120V/60Hz				
Operating Mode:	Transmitting 802.11(a), 6 Mbps, low channel, 5470 MHz - 5725 MHz band				
Deviations:	No deviations.				
Comments:	Radio module in host hand held computer powered via linear power supply.				

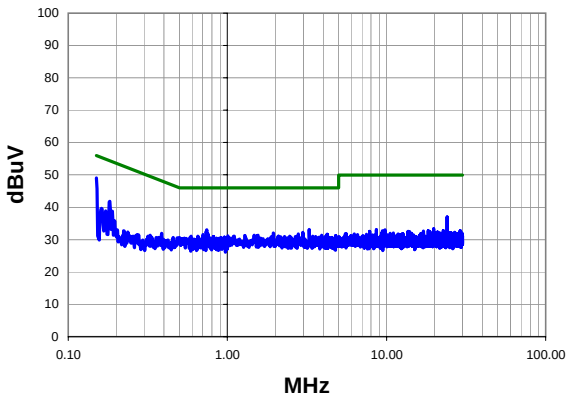
Test Specifications	**Test Method**
FCC 15.407:2008	ANSI C63.4:2003

Run #	23	**Line:**	High Line	**Ext. Attenuation:**	20	**Results**	Pass

Peak Data - vs - Quasi Peak Limit



Peak Data - vs - Average Limit



Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.150	27.0	22.1	49.1	66.0	-16.9
0.182	20.4	21.4	41.8	64.4	-22.6
3.272	12.5	20.6	33.1	56.0	-22.9
0.742	12.3	20.7	33.0	56.0	-23.0
24.020	16.2	20.8	37.0	60.0	-23.0
2.984	11.6	20.6	32.2	56.0	-23.8
1.944	11.4	20.6	32.0	56.0	-24.0
0.757	11.0	20.7	31.7	56.0	-24.3
2.792	11.1	20.6	31.7	56.0	-24.3
4.232	11.0	20.6	31.6	56.0	-24.4
0.703	10.8	20.8	31.6	56.0	-24.4
1.472	10.8	20.6	31.4	56.0	-24.6
1.560	10.8	20.6	31.4	56.0	-24.6
3.904	10.7	20.6	31.3	56.0	-24.7
1.288	10.7	20.6	31.3	56.0	-24.7
4.800	10.6	20.6	31.2	56.0	-24.8
1.008	10.6	20.6	31.2	56.0	-24.8
2.464	10.5	20.6	31.1	56.0	-24.9
2.080	10.5	20.6	31.1	56.0	-24.9
0.653	10.3	20.8	31.1	56.0	-24.9

Peak Data - vs - Average Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.150	27.0	22.1	49.1	56.0	-6.9
0.182	20.4	21.4	41.8	54.4	-12.6
3.272	12.5	20.6	33.1	46.0	-12.9
0.742	12.3	20.7	33.0	46.0	-13.0
24.020	16.2	20.8	37.0	50.0	-13.0
2.984	11.6	20.6	32.2	46.0	-13.8
1.944	11.4	20.6	32.0	46.0	-14.0
0.757	11.0	20.7	31.7	46.0	-14.3
2.792	11.1	20.6	31.7	46.0	-14.3
4.232	11.0	20.6	31.6	46.0	-14.4
0.703	10.8	20.8	31.6	46.0	-14.4
1.472	10.8	20.6	31.4	46.0	-14.6
1.560	10.8	20.6	31.4	46.0	-14.6
3.904	10.7	20.6	31.3	46.0	-14.7
1.288	10.7	20.6	31.3	46.0	-14.7
4.800	10.6	20.6	31.2	46.0	-14.8
1.008	10.6	20.6	31.2	46.0	-14.8
2.464	10.5	20.6	31.1	46.0	-14.9
2.080	10.5	20.6	31.1	46.0	-14.9
0.653	10.3	20.8	31.1	46.0	-14.9

NORTHWEST

EMC

AC POWERLINE CONDUCTED EMISSIONS

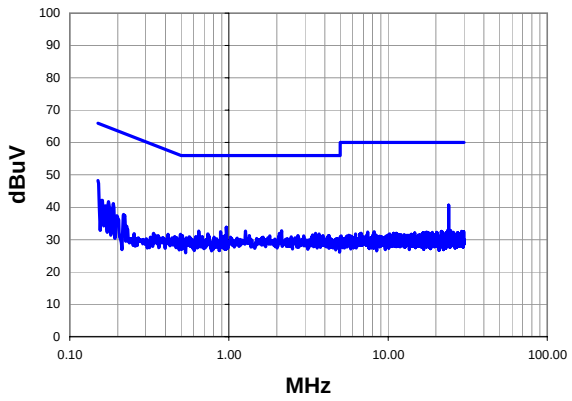
PSA-ESCI 2008.12.10
Version 2008.3.31

Work Order:	INMC0500	**Date:**	12/13/08		
Project:	None	**Temperature:**	20.3°C		
Job Site:	EV07	**Humidity:**	33.3		
Serial Number:	000B6B8D3470	**Barometric Pres.:**	1000.9mb	**Tested by:**	Rod Peloquin
EUT:	DDIB				
Configuration:	6 - AC Powerline Conducted Emissions				
Customer:	Intermec Technologies Corporation				
Attendees:	None				
EUT Power:	3.7 VDC via 120V/60Hz				
Operating Mode:	Transmitting 802.11(a), 6 Mbps, low channel, 5470 MHz - 5725 MHz band				
Deviations:	No deviations.				
Comments:	Radio module in host hand held computer powered via linear power supply.				

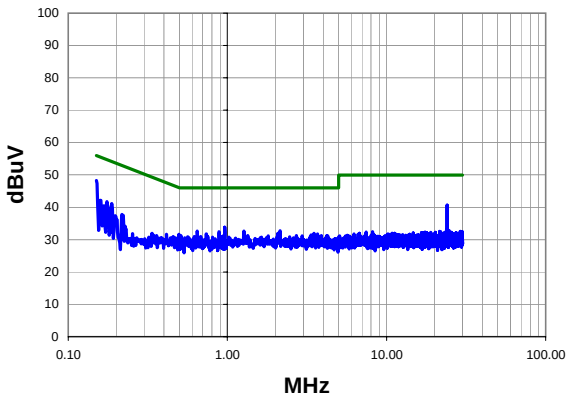
Test Specifications	**Test Method**
FCC 15.407:2008	ANSI C63.4:2003

Run #	24	**Line:**	Neutral	**Ext. Attenuation:**	20	**Results**	Pass

Peak Data - vs - Quasi Peak Limit



Peak Data - vs - Average Limit



Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.150	26.2	22.1	48.3	66.0	-17.7
24.020	19.8	20.8	40.6	60.0	-19.4
0.963	13.2	20.6	33.8	56.0	-22.2
0.176	20.2	21.6	41.8	64.7	-22.9
0.187	19.8	21.3	41.1	64.2	-23.0
0.160	20.3	21.9	42.2	65.5	-23.3
2.144	12.1	20.6	32.7	56.0	-23.3
1.272	12.1	20.6	32.7	56.0	-23.3
0.646	11.8	20.8	32.6	56.0	-23.4
0.886	11.8	20.7	32.5	56.0	-23.5
2.072	11.4	20.6	32.0	56.0	-24.0
3.496	11.3	20.6	31.9	56.0	-24.1
0.736	11.0	20.7	31.7	56.0	-24.3
3.688	11.1	20.6	31.7	56.0	-24.3
0.497	10.8	20.9	31.7	56.1	-24.4
3.360	10.8	20.6	31.4	56.0	-24.6
0.167	18.7	21.7	40.4	65.1	-24.7
0.510	10.4	20.9	31.3	56.0	-24.7
4.216	10.6	20.6	31.2	56.0	-24.8
3.896	10.6	20.6	31.2	56.0	-24.8

Peak Data - vs - Average Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.150	26.2	22.1	48.3	56.0	-7.7
24.020	19.8	20.8	40.6	50.0	-9.4
0.963	13.2	20.6	33.8	46.0	-12.2
0.176	20.2	21.6	41.8	54.7	-12.9
0.187	19.8	21.3	41.1	54.2	-13.0
0.160	20.3	21.9	42.2	55.5	-13.3
2.144	12.1	20.6	32.7	46.0	-13.3
1.272	12.1	20.6	32.7	46.0	-13.3
0.646	11.8	20.8	32.6	46.0	-13.4
0.886	11.8	20.7	32.5	46.0	-13.5
2.072	11.4	20.6	32.0	46.0	-14.0
3.496	11.3	20.6	31.9	46.0	-14.1
0.736	11.0	20.7	31.7	46.0	-14.3
3.688	11.1	20.6	31.7	46.0	-14.3
0.497	10.8	20.9	31.7	46.1	-14.4
3.360	10.8	20.6	31.4	46.0	-14.6
0.167	18.7	21.7	40.4	55.1	-14.7
0.510	10.4	20.9	31.3	46.0	-14.7
4.216	10.6	20.6	31.2	46.0	-14.8
3.896	10.6	20.6	31.2	46.0	-14.8

NORTHWEST

EMC

AC POWERLINE CONDUCTED EMISSIONS

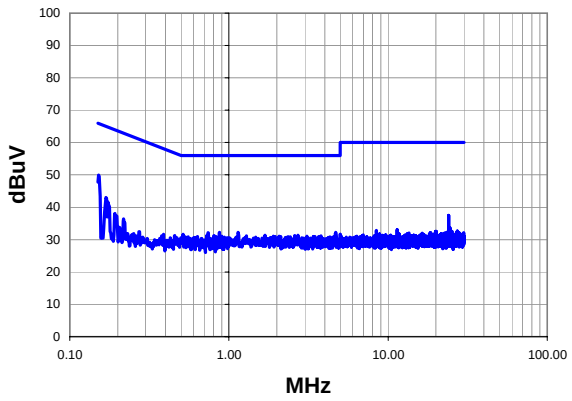
PSA-ESCI 2008.12.10
Version 2008.3.31

Work Order:	INMC0500	**Date:**	12/13/08		
Project:	None	**Temperature:**	20.3°C		
Job Site:	EV07	**Humidity:**	33.3		
Serial Number:	000B6B8D3470	**Barometric Pres.:**	1000.9mb	**Tested by:**	Rod Peloquin
EUT:	DDIB				
Configuration:	6 - AC Powerline Conducted Emissions				
Customer:	Intermec Technologies Corporation				
Attendees:	None				
EUT Power:	3.7 VDC via 120V/60Hz				
Operating Mode:	Transmitting 802.11(a), 6 Mbps, mid channel, 5470 MHz - 5725 MHz band				
Deviations:	No deviations.				
Comments:	Radio module in host hand held computer powered via linear power supply.				

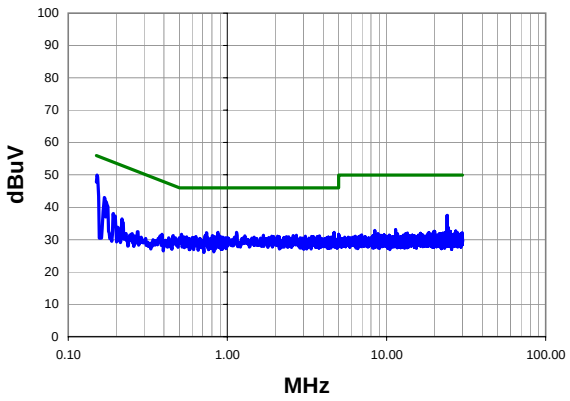
Test Specifications	**Test Method**
FCC 15.407:2008	ANSI C63.4:2003

Run #	25	**Line:**	High Line	**Ext. Attenuation:**	20	**Results**	Pass

Peak Data - vs - Quasi Peak Limit



Peak Data - vs - Average Limit



Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.152	27.9	22.0	49.9	65.9	-16.0
0.169	21.3	21.7	43.0	65.0	-22.0
24.020	16.7	20.8	37.5	60.0	-22.5
0.174	20.1	21.6	41.7	64.8	-23.1
1.144	11.7	20.6	32.3	56.0	-23.7
0.872	11.6	20.7	32.3	56.0	-23.7
4.696	11.6	20.6	32.2	56.0	-23.8
0.740	11.4	20.7	32.1	56.0	-23.9
0.514	10.8	20.9	31.7	56.0	-24.3
4.992	11.0	20.7	31.7	56.0	-24.3
1.688	10.8	20.6	31.4	56.0	-24.6
2.712	10.7	20.6	31.3	56.0	-24.7
0.806	10.6	20.7	31.3	56.0	-24.7
1.288	10.6	20.6	31.2	56.0	-24.8
3.784	10.5	20.6	31.1	56.0	-24.9
1.896	10.5	20.6	31.1	56.0	-24.9
2.064	10.5	20.6	31.1	56.0	-24.9
0.900	10.4	20.6	31.0	56.0	-25.0
3.096	10.4	20.6	31.0	56.0	-25.0
0.635	10.2	20.8	31.0	56.0	-25.0

Peak Data - vs - Average Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.152	27.9	22.0	49.9	55.9	-6.0
0.169	21.3	21.7	43.0	55.0	-12.0
24.020	16.7	20.8	37.5	50.0	-12.5
0.174	20.1	21.6	41.7	54.8	-13.1
1.144	11.7	20.6	32.3	46.0	-13.7
0.872	11.6	20.7	32.3	46.0	-13.7
4.696	11.6	20.6	32.2	46.0	-13.8
0.740	11.4	20.7	32.1	46.0	-13.9
0.514	10.8	20.9	31.7	46.0	-14.3
4.992	11.0	20.7	31.7	46.0	-14.3
1.688	10.8	20.6	31.4	46.0	-14.6
2.712	10.7	20.6	31.3	46.0	-14.7
0.806	10.6	20.7	31.3	46.0	-14.7
1.288	10.6	20.6	31.2	46.0	-14.8
3.784	10.5	20.6	31.1	46.0	-14.9
1.896	10.5	20.6	31.1	46.0	-14.9
2.064	10.5	20.6	31.1	46.0	-14.9
0.900	10.4	20.6	31.0	46.0	-15.0
3.096	10.4	20.6	31.0	46.0	-15.0
0.635	10.2	20.8	31.0	46.0	-15.0

NORTHWEST

EMC

AC POWERLINE CONDUCTED EMISSIONS

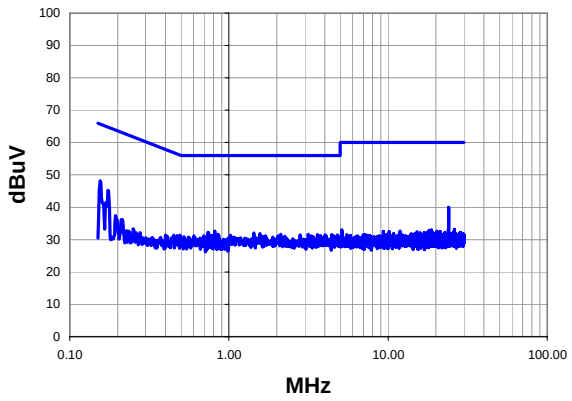
PSA-ESCI 2008.12.10
Version 2008.3.31

Work Order:	INMC0500	**Date:**	12/13/08		
Project:	None	**Temperature:**	20.3°C		
Job Site:	EV07	**Humidity:**	33.3		
Serial Number:	000B6B8D3470	**Barometric Pres.:**	1000.9mb	**Tested by:**	Rod Peloquin
EUT:	DDIB				
Configuration:	6 - AC Powerline Conducted Emissions				
Customer:	Intermec Technologies Corporation				
Attendees:	None				
EUT Power:	3.7 VDC via 120V/60Hz				
Operating Mode:	Transmitting 802.11(a), 6 Mbps, mid channel, 5470 MHz - 5725 MHz band				
Deviations:	No deviations.				
Comments:	Radio module in host hand held computer powered via linear power supply.				

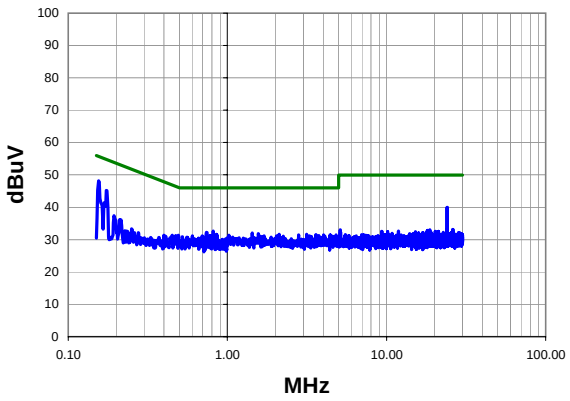
Test Specifications	**Test Method**
FCC 15.407:2008	ANSI C63.4:2003

Run #	26	**Line:**	Neutral	**Ext. Attenuation:**	20	**Results**	Pass

Peak Data - vs - Quasi Peak Limit



Peak Data - vs - Average Limit



Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.155	26.2	22.0	48.2	65.7	-17.6
0.174	23.6	21.6	45.2	64.8	-19.6
24.020	19.1	20.8	39.9	60.0	-20.1
0.815	11.9	20.7	32.6	56.0	-23.4
0.738	11.5	20.7	32.2	56.0	-23.8
1.432	11.5	20.6	32.1	56.0	-23.9
1.568	11.3	20.6	31.9	56.0	-24.1
2.112	11.1	20.6	31.7	56.0	-24.3
0.852	11.0	20.7	31.7	56.0	-24.3
3.152	11.0	20.6	31.6	56.0	-24.4
3.592	10.9	20.6	31.5	56.0	-24.5
4.816	10.8	20.6	31.4	56.0	-24.6
4.416	10.8	20.6	31.4	56.0	-24.6
4.016	10.8	20.6	31.4	56.0	-24.6
2.800	10.8	20.6	31.4	56.0	-24.6
1.024	10.8	20.6	31.4	56.0	-24.6
4.456	10.7	20.6	31.3	56.0	-24.7
0.492	10.5	20.9	31.4	56.1	-24.8
3.760	10.6	20.6	31.2	56.0	-24.8
0.782	10.5	20.7	31.2	56.0	-24.8

Peak Data - vs - Average Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.155	26.2	22.0	48.2	55.7	-7.6
0.174	23.6	21.6	45.2	54.8	-9.6
24.020	19.1	20.8	39.9	50.0	-10.1
0.815	11.9	20.7	32.6	46.0	-13.4
0.738	11.5	20.7	32.2	46.0	-13.8
1.432	11.5	20.6	32.1	46.0	-13.9
1.568	11.3	20.6	31.9	46.0	-14.1
2.112	11.1	20.6	31.7	46.0	-14.3
0.852	11.0	20.7	31.7	46.0	-14.3
3.152	11.0	20.6	31.6	46.0	-14.4
3.592	10.9	20.6	31.5	46.0	-14.5
4.816	10.8	20.6	31.4	46.0	-14.6
4.416	10.8	20.6	31.4	46.0	-14.6
4.016	10.8	20.6	31.4	46.0	-14.6
2.800	10.8	20.6	31.4	46.0	-14.6
1.024	10.8	20.6	31.4	46.0	-14.6
4.456	10.7	20.6	31.3	46.0	-14.7
0.492	10.5	20.9	31.4	46.1	-14.8
3.760	10.6	20.6	31.2	46.0	-14.8
0.782	10.5	20.7	31.2	46.0	-14.8

NORTHWEST

EMC

AC POWERLINE CONDUCTED EMISSIONS

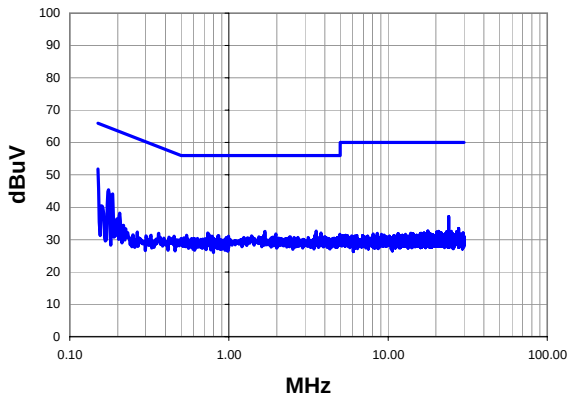
PSA-ESCI 2008.12.10
Version 2008.3.31

Work Order:	INMC0500	**Date:**	12/13/08		
Project:	None	**Temperature:**	20.3°C		
Job Site:	EV07	**Humidity:**	33.3		
Serial Number:	000B6B8D3470	**Barometric Pres.:**	1000.9mb	**Tested by:**	Rod Peloquin
EUT:	DDIB				
Configuration:	6 - AC Powerline Conducted Emissions				
Customer:	Intermec Technologies Corporation				
Attendees:	None				
EUT Power:	3.7 VDC via 120V/60Hz				
Operating Mode:	Transmitting 802.11(a), 6 Mbps, high channel, 5470 MHz - 5725 MHz band				
Deviations:	No deviations.				
Comments:	Radio module in host hand held computer powered via linear power supply.				

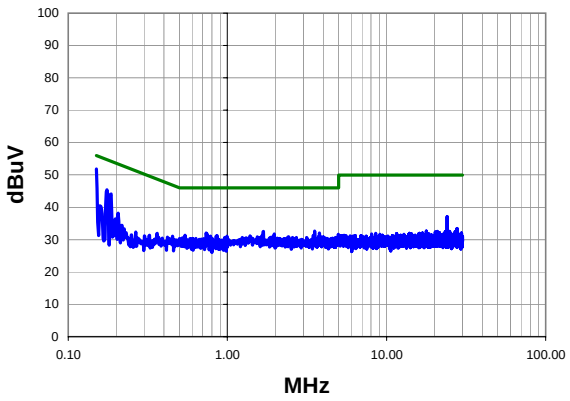
Test Specifications	**Test Method**
FCC 15.407:2008	ANSI C63.4:2003

Run #	27	**Line:**	High Line	**Ext. Attenuation:**	20	**Results**	Pass

Peak Data - vs - Quasi Peak Limit



Peak Data - vs - Average Limit



Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.150	29.8	22.1	51.9	66.0	-14.1
0.176	23.9	21.6	45.5	64.7	-19.2
0.186	22.8	21.3	44.1	64.2	-20.1
24.020	16.3	20.8	37.1	60.0	-22.9
3.536	12.0	20.6	32.6	56.0	-23.4
1.688	11.9	20.6	32.5	56.0	-23.5
0.736	11.3	20.7	32.0	56.0	-24.0
3.792	11.4	20.6	32.0	56.0	-24.0
1.968	11.2	20.6	31.8	56.0	-24.2
4.984	11.0	20.7	31.7	56.0	-24.3
1.656	10.8	20.6	31.4	56.0	-24.6
0.543	10.5	20.9	31.4	56.0	-24.6
3.464	10.7	20.6	31.3	56.0	-24.7
0.861	10.6	20.7	31.3	56.0	-24.7
1.384	10.6	20.6	31.2	56.0	-24.8
0.993	10.5	20.6	31.1	56.0	-24.9
0.850	10.4	20.7	31.1	56.0	-24.9
0.782	10.3	20.7	31.0	56.0	-25.0
0.159	18.6	21.9	40.5	65.5	-25.1
2.432	10.3	20.6	30.9	56.0	-25.1

Peak Data - vs - Average Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.150	29.8	22.1	51.9	56.0	-4.1
0.176	23.9	21.6	45.5	54.7	-9.2
0.186	22.8	21.3	44.1	54.2	-10.1
24.020	16.3	20.8	37.1	50.0	-12.9
3.536	12.0	20.6	32.6	46.0	-13.4
1.688	11.9	20.6	32.5	46.0	-13.5
0.736	11.3	20.7	32.0	46.0	-14.0
3.792	11.4	20.6	32.0	46.0	-14.0
1.968	11.2	20.6	31.8	46.0	-14.2
4.984	11.0	20.7	31.7	46.0	-14.3
1.656	10.8	20.6	31.4	46.0	-14.6
0.543	10.5	20.9	31.4	46.0	-14.6
3.464	10.7	20.6	31.3	46.0	-14.7
0.861	10.6	20.7	31.3	46.0	-14.7
1.384	10.6	20.6	31.2	46.0	-14.8
0.993	10.5	20.6	31.1	46.0	-14.9
0.850	10.4	20.7	31.1	46.0	-14.9
0.782	10.3	20.7	31.0	46.0	-15.0
0.159	18.6	21.9	40.5	55.5	-15.1
2.432	10.3	20.6	30.9	46.0	-15.1

NORTHWEST

EMC

AC POWERLINE CONDUCTED EMISSIONS

PSA-ESCI 2008.12.10
Version 2008.3.31

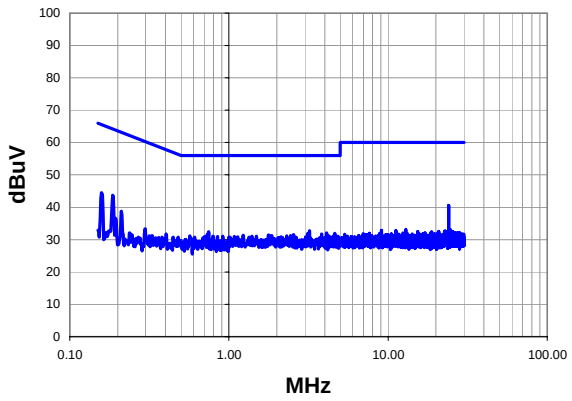
Work Order:	INMC0500	**Date:**	12/13/08		
Project:	None	**Temperature:**	20.3°C		
Job Site:	EV07	**Humidity:**	33.3		
Serial Number:	000B6B8D3470	**Barometric Pres.:**	1000.9mb	**Tested by:**	Rod Peloquin

EUT:	DDIB
Configuration:	6 - AC Powerline Conducted Emissions
Customer:	Intermec Technologies Corporation
Attendees:	None
EUT Power:	3.7 VDC via 120V/60Hz
Operating Mode:	Transmitting 802.11(a), 6 Mbps, high channel, 5470 MHz - 5725 MHz band
Deviations:	No deviations.
Comments:	Radio module in host hand held computer powered via linear power supply.

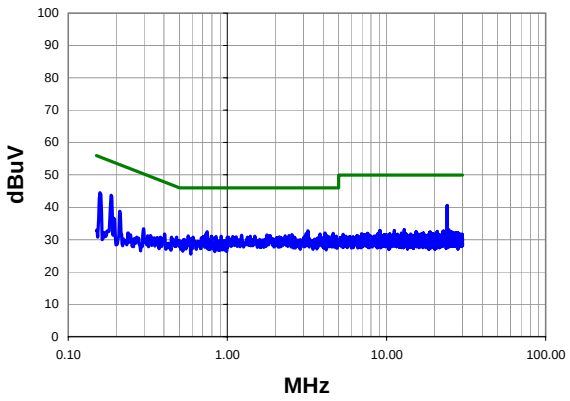
Test Specifications	**Test Method**
FCC 15.407:2008	ANSI C63.4:2003

Run #	28	**Line:**	Neutral	**Ext. Attenuation:**	20	**Results**	Pass

Peak Data - vs - Quasi Peak Limit



Peak Data - vs - Average Limit

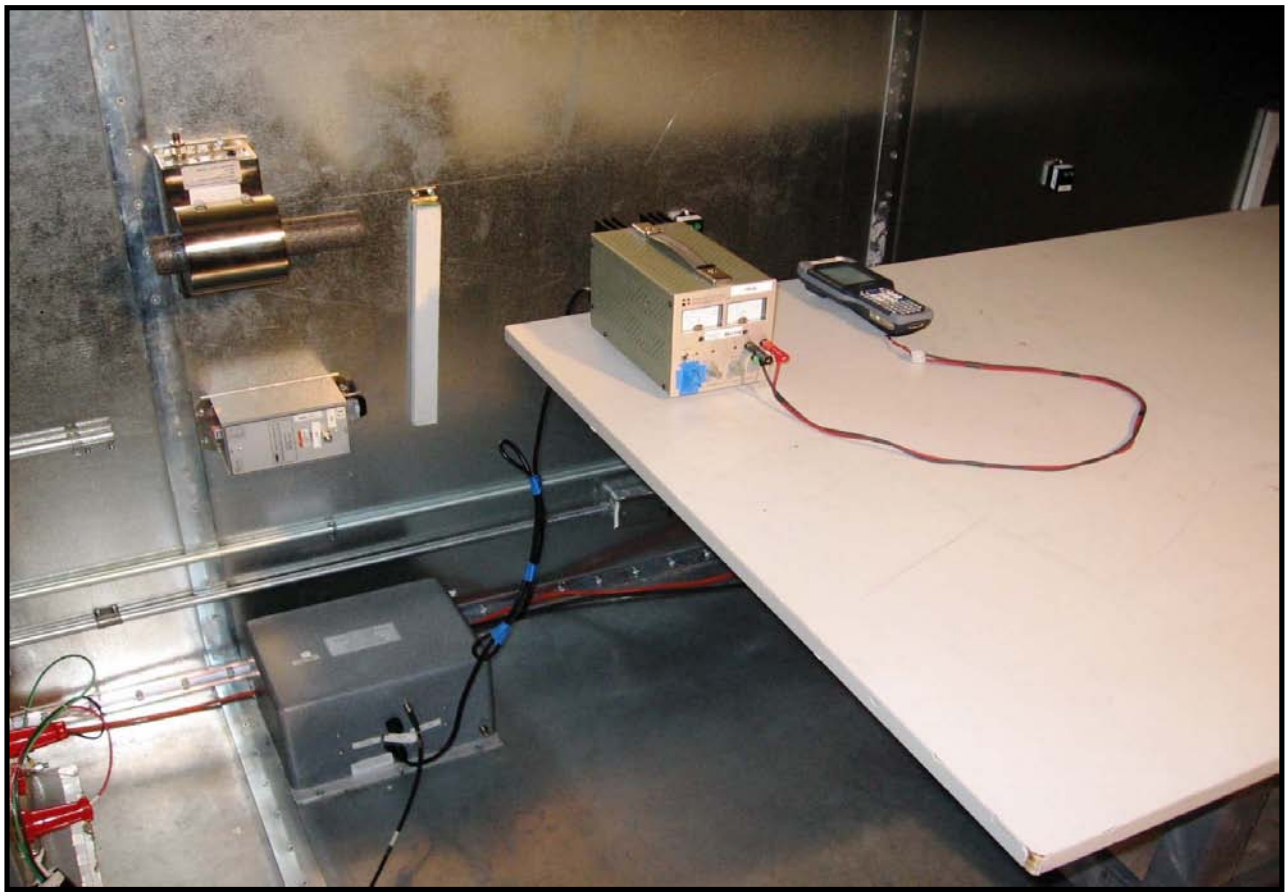


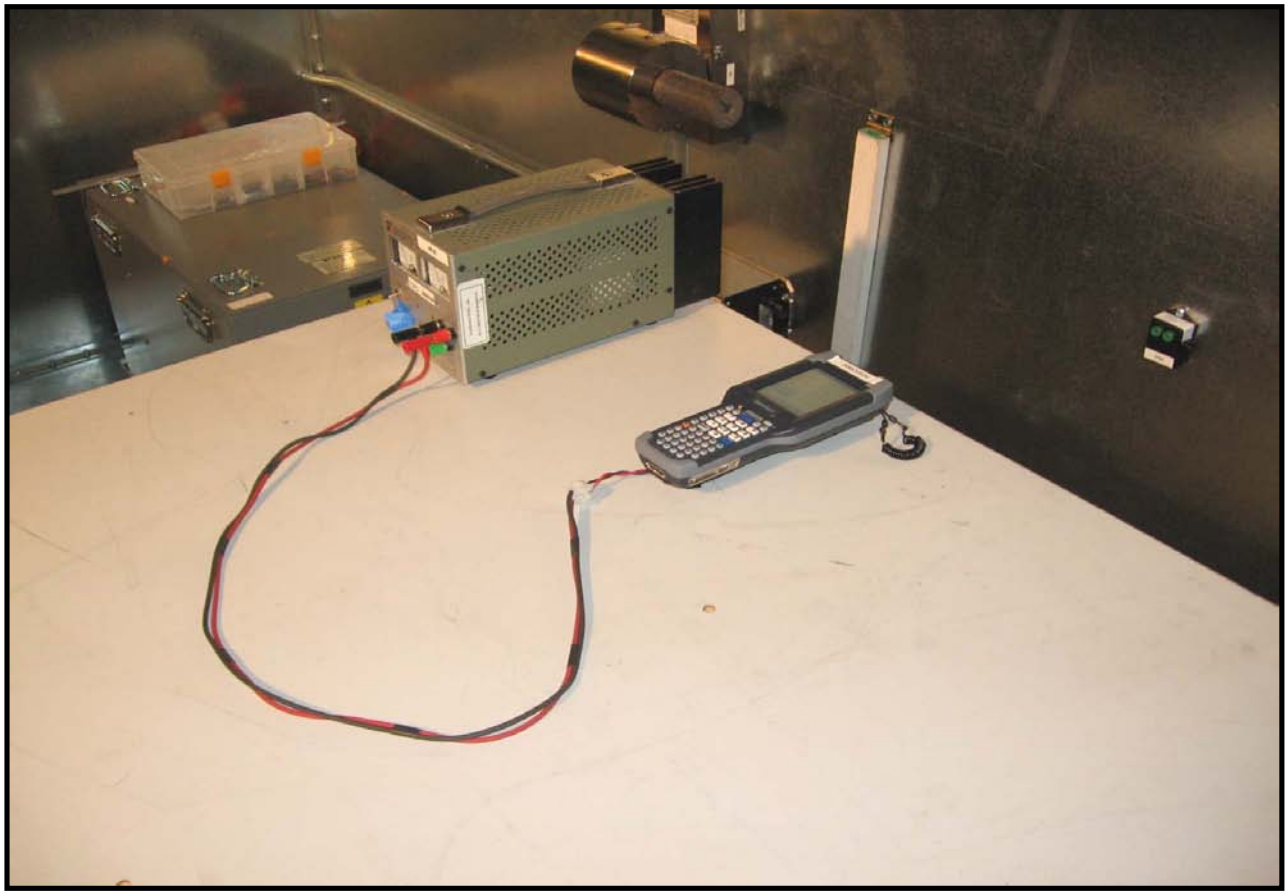
Peak Data - vs - Quasi Peak Limit

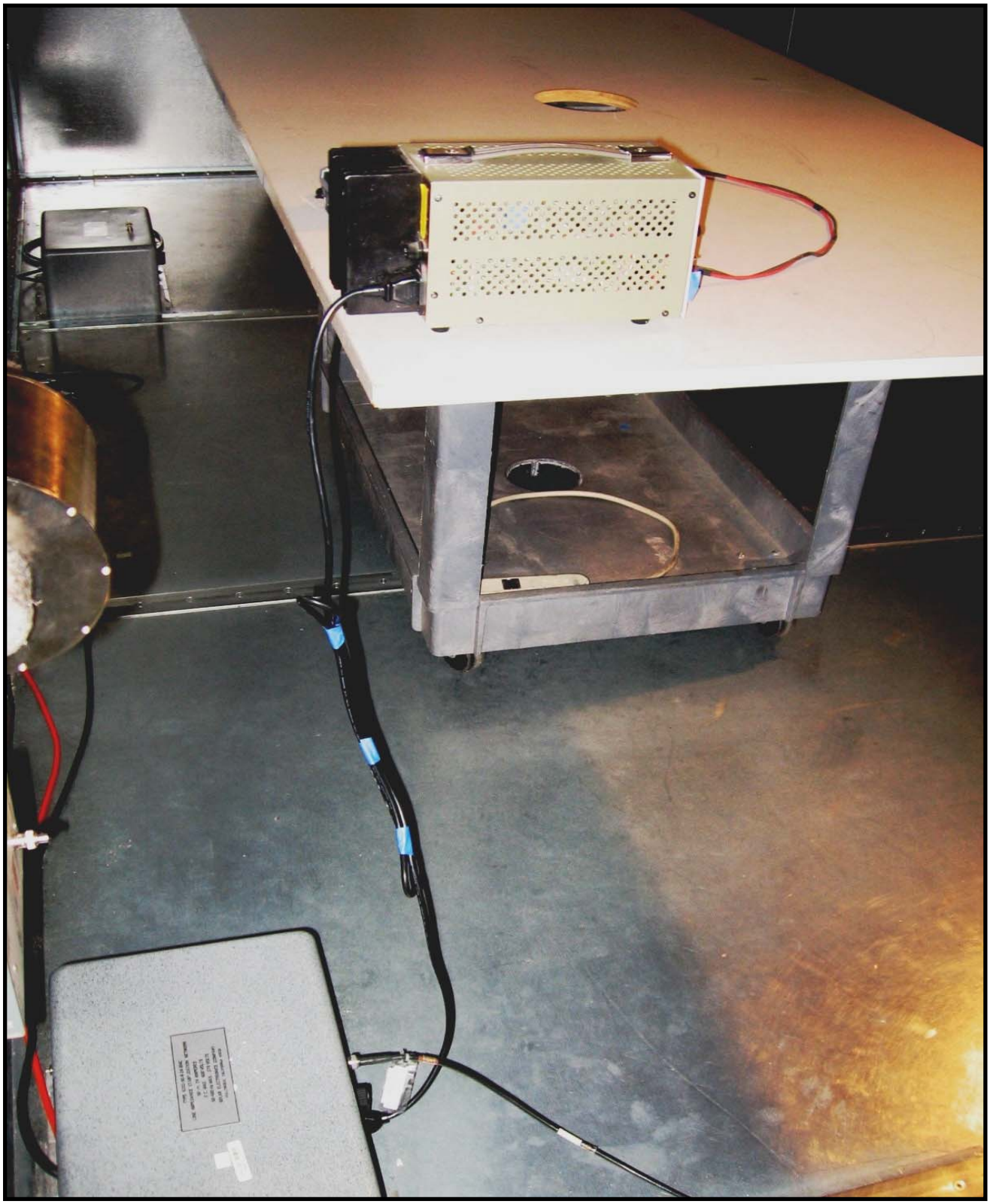
Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
24.020	19.7	20.8	40.5	60.0	-19.5
0.186	22.4	21.3	43.7	64.2	-20.5
0.159	22.6	21.9	44.5	65.5	-21.1
3.208	12.1	20.6	32.7	56.0	-23.3
0.745	11.7	20.7	32.4	56.0	-23.6
4.104	11.4	20.6	32.0	56.0	-24.0
4.632	11.3	20.6	31.9	56.0	-24.1
3.120	11.2	20.6	31.8	56.0	-24.2
3.816	11.1	20.6	31.7	56.0	-24.3
0.211	17.7	21.1	38.8	63.2	-24.4
2.544	10.9	20.6	31.5	56.0	-24.5
1.776	10.9	20.6	31.5	56.0	-24.5
1.232	10.8	20.6	31.4	56.0	-24.6
4.552	10.6	20.6	31.2	56.0	-24.8
4.208	10.6	20.6	31.2	56.0	-24.8
2.440	10.6	20.6	31.2	56.0	-24.8
2.304	10.6	20.6	31.2	56.0	-24.8
0.567	10.3	20.9	31.2	56.0	-24.8
1.392	10.5	20.6	31.1	56.0	-24.9
4.848	10.4	20.6	31.0	56.0	-25.0

Peak Data - vs - Average Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
24.020	19.7	20.8	40.5	50.0	-9.5
0.186	22.4	21.3	43.7	54.2	-10.5
0.159	22.6	21.9	44.5	55.5	-11.1
3.208	12.1	20.6	32.7	46.0	-13.3
0.745	11.7	20.7	32.4	46.0	-13.6
4.104	11.4	20.6	32.0	46.0	-14.0
4.632	11.3	20.6	31.9	46.0	-14.1
3.120	11.2	20.6	31.8	46.0	-14.2
3.816	11.1	20.6	31.7	46.0	-14.3
0.211	17.7	21.1	38.8	53.2	-14.4
2.544	10.9	20.6	31.5	46.0	-14.5
1.776	10.9	20.6	31.5	46.0	-14.5
1.232	10.8	20.6	31.4	46.0	-14.6
4.552	10.6	20.6	31.2	46.0	-14.8
4.208	10.6	20.6	31.2	46.0	-14.8
2.440	10.6	20.6	31.2	46.0	-14.8
2.304	10.6	20.6	31.2	46.0	-14.8
0.567	10.3	20.9	31.2	46.0	-14.8
1.392	10.5	20.6	31.1	46.0	-14.9
4.848	10.4	20.6	31.0	46.0	-15.0







EMISSION BANDWIDTH

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	E44440A	AFA	11/14/2008	12
Power Meter	Gigatronics	8651A	SPM	12/7/2007	13
Power Sensor	Gigatronics	80701A	SPL	12/7/2007	13
Signal Generator	Agilent	E8257D	TGX	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

FCC Public Notice DA 02-2138 was followed. The transmit frequency was set to the lowest, a medium, and the highest chann each band. The transmit power was set to its default maximum. The lowest, a medium, and the highest data rates were meas A direct connection was made between the RF output of the EUT and a spectrum analyzer. Attenuation and a DC block were The reference level offset on the spectrum analyzer was adjusted to compensate for cable loss and the external attenuation us between the RF output and the spectrum analyzer input.

The spectrum analyzer settings were as follows:

- Span = approximately 1.5 to 2 times the emission bandwidth, centered on the transmit channel.
- RBW = Approx. 1% of the emission bandwidth (B). This was an iterative process where an exact match of 1% may not achieved. The largest value of RBW that came close to 1% of the emission bandwidth was used.
- A peak detector was used.
- The marker-delta function was then used to measure 26 dB emission bandwidth.

NORTHWEST EMC

EMISSION BANDWIDTH

XMit 2007.06.13

EUT:	DDIB			Work Order:	INMC0500
Serial Number:	Proto 13			Date:	12/08/08
Customer:	Intermec Technologies Corporation			Temperature:	22°C
Attendees:	None			Humidity:	34%
Project:	None			Barometric Pres.:	30.22
Tested by:	Rod Peloquin	Power:	3.3Vdc via Host	Job Site:	EV06

TEST SPECIFICATIONS	Test Method
FCC 15.407:2008	ANSI C63.4:2003 DA 02-2138:2002

COMMENTS

None

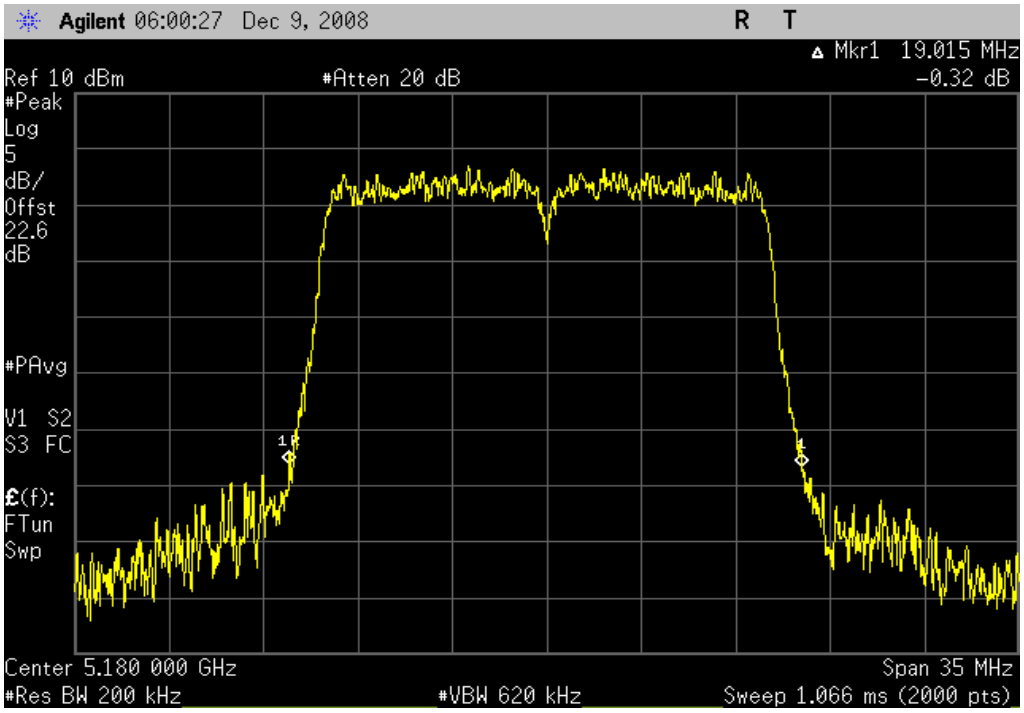
DEVIATIONS FROM TEST STANDARD

No Deviations

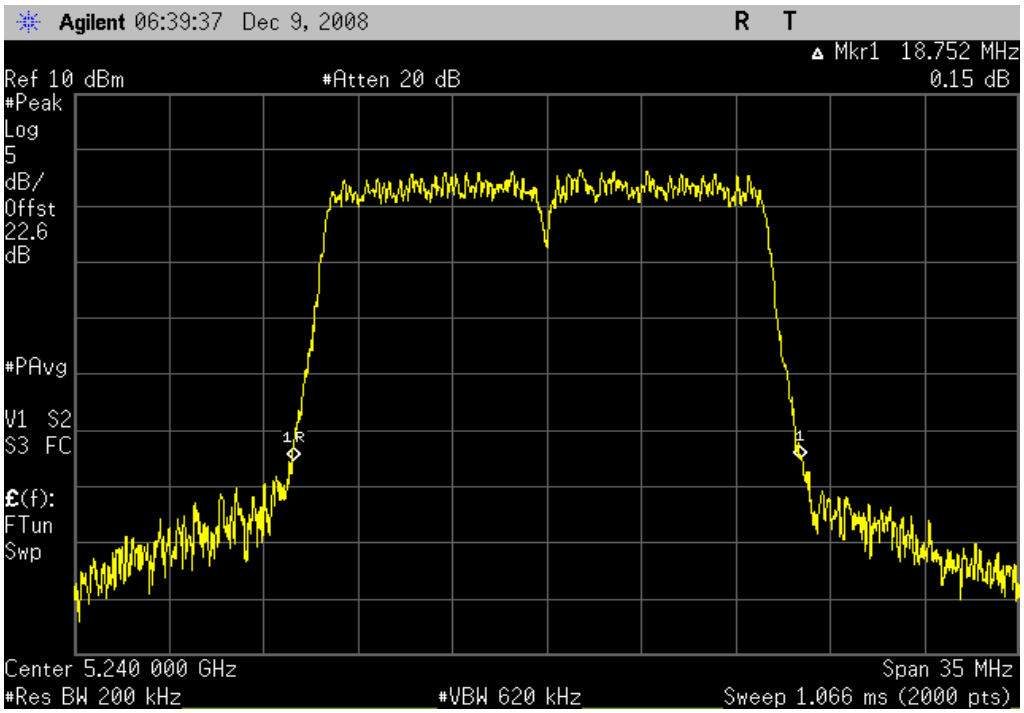
Configuration #	4	Signature

		Value	Limit	Results
802.11(a) 6 Mbps				
	5150 - 5250 MHz Band			
	Channel 36, Low Channel	19.015 MHz	N/A	N/A
	Channel 48, High Channel	18.752 MHz	N/A	N/A
	5250 - 5350 MHz Band			
	Channel 52, Low Channel	18.752 MHz	N/A	N/A
	Channel 64, High Channel	19.085 MHz	N/A	N/A
	5470 - 5725 MHz Band			
	Channel 100, Low Channel	21.588 MHz	N/A	N/A
	Channel 120, Mid Channel	20.188 MHz	N/A	N/A
	Channel 140, High Channel	21.448 MHz	N/A	N/A
802.11(a) 36 Mbps				
	5150 - 5250 MHz Band			
	Channel 36, Low Channel	18.839 MHz	N/A	N/A
	Channel 48, High Channel	18.752 MHz	N/A	N/A
	5250 - 5350 MHz Band			
	Channel 52, Low Channel	18.629 MHz	N/A	N/A
	Channel 64, High Channel	18.857 MHz	N/A	N/A
	5470 - 5725 MHz Band			
	Channel 100, Low Channel	18.979 MHz	N/A	N/A
	Channel 120, Mid Channel	18.822 MHz	N/A	N/A
	Channel 140, High Channel	18.979 MHz	N/A	N/A
802.11(a) 54 Mbps				
	5150 - 5250 MHz Band			
	Channel 36, Low Channel	18.892 MHz	N/A	N/A
	Channel 48, High Channel	18.962 MHz	N/A	N/A
	5250 - 5350 MHz Band			
	Channel 52, Low Channel	18.664 MHz	N/A	N/A
	Channel 64, High Channel	18.857 MHz	N/A	N/A
	5470 - 5725 MHz Band			
	Channel 100, Low Channel	19.190 MHz	N/A	N/A
	Channel 120, Mid Channel	18.874 MHz	N/A	N/A
	Channel 140, High Channel	19.225 MHz	N/A	N/A

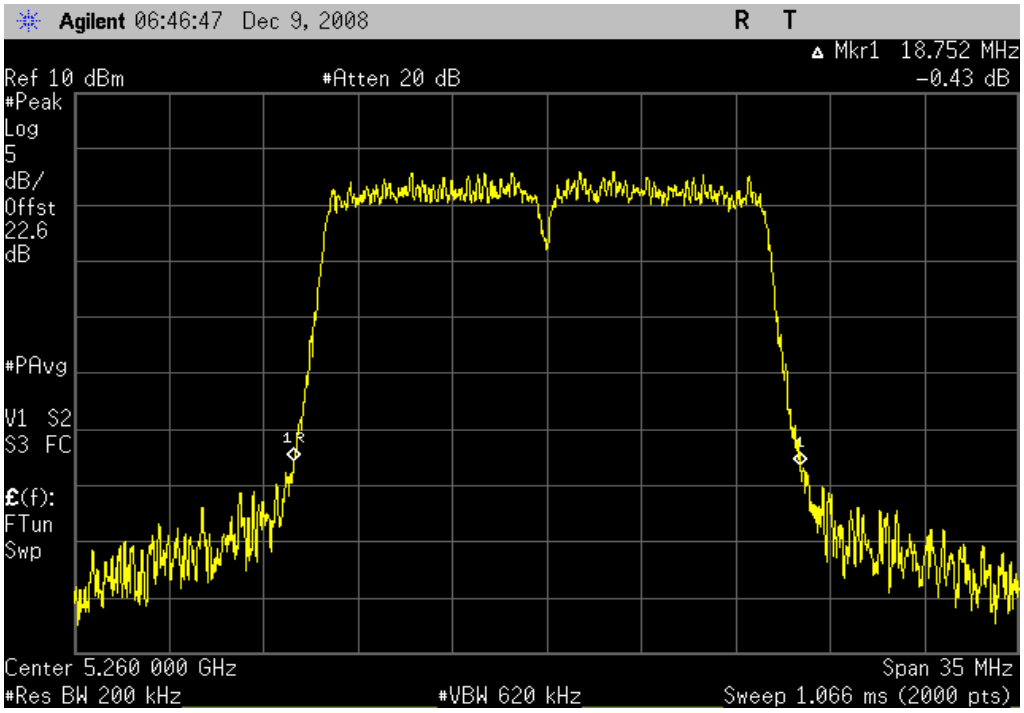
802.11(a) 6 Mbps, 5150 - 5250 MHz Band, Channel 36, Low Channel					
Result:	N/A	**Value:**	19.015 MHz	**Limit:**	N/A



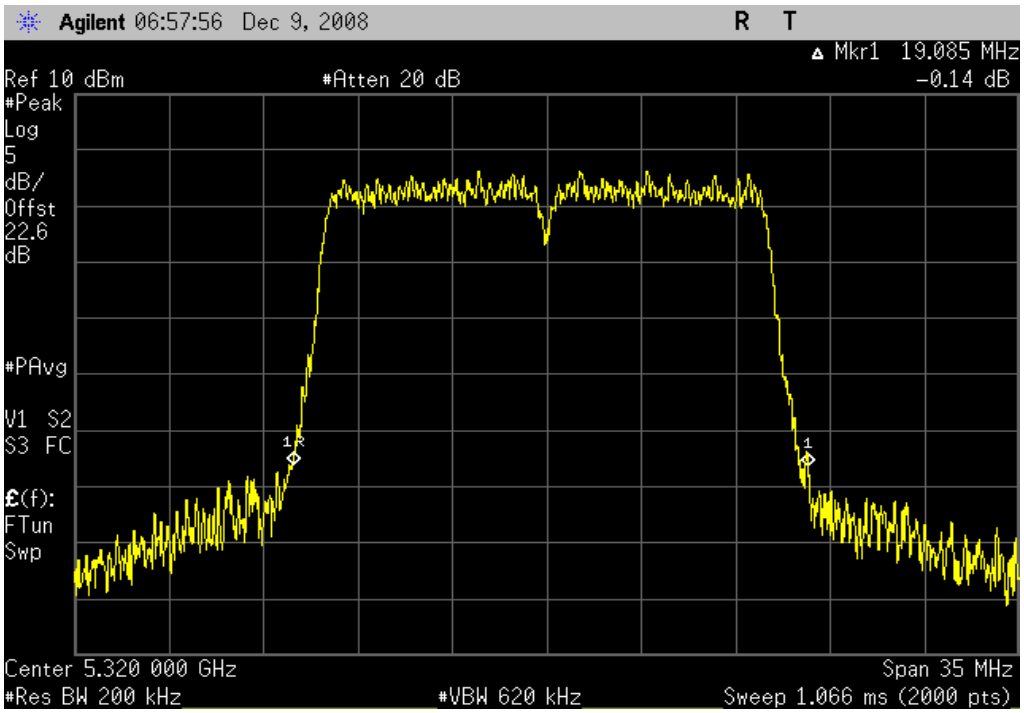
802.11(a) 6 Mbps, 5150 - 5250 MHz Band, Channel 48, High Channel					
Result:	N/A	**Value:**	18.752 MHz	**Limit:**	N/A



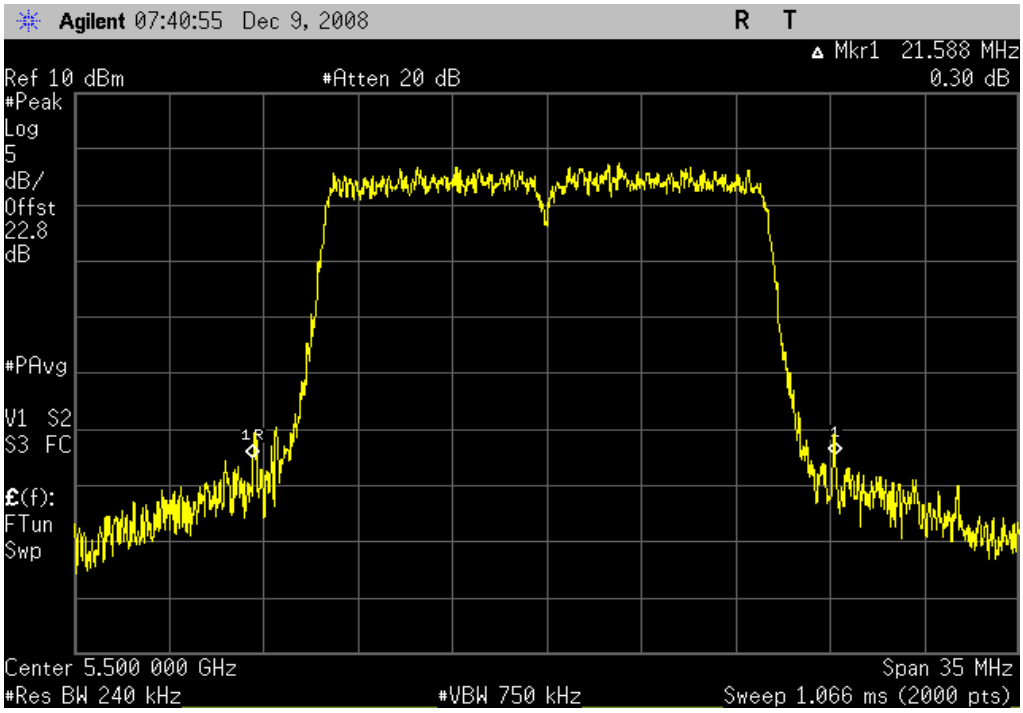
802.11(a) 6 Mbps, 5250 - 5350 MHz Band, Channel 52, Low Channel					
Result:	N/A	**Value:**	18.752 MHz	**Limit:**	N/A



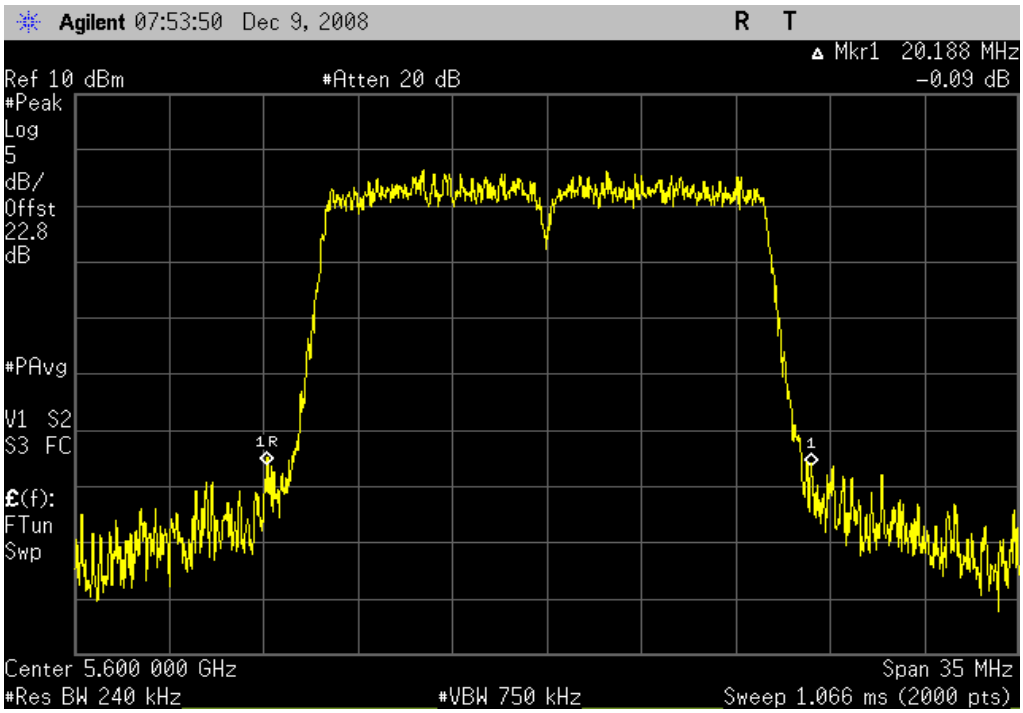
802.11(a) 6 Mbps, 5250 - 5350 MHz Band, Channel 64, High Channel					
Result:	N/A	**Value:**	19.085 MHz	**Limit:**	N/A



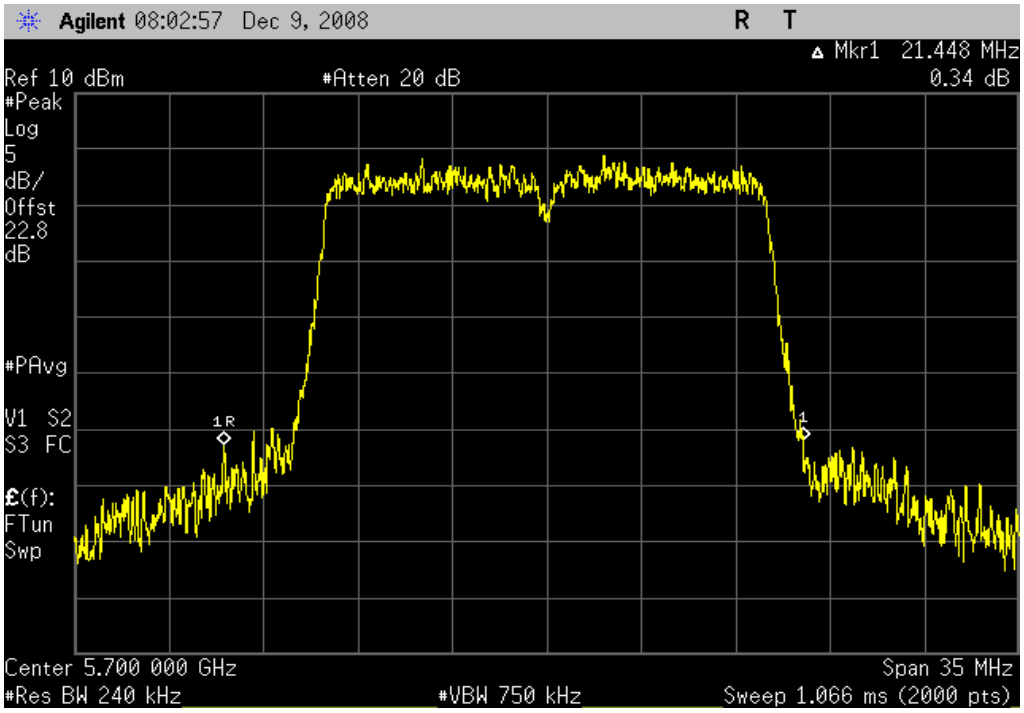
802.11(a) 6 Mbps, 5470 - 5725 MHz Band, Channel 100, Low Channel					
Result:	N/A	**Value:**	21.588 MHz	**Limit:**	N/A



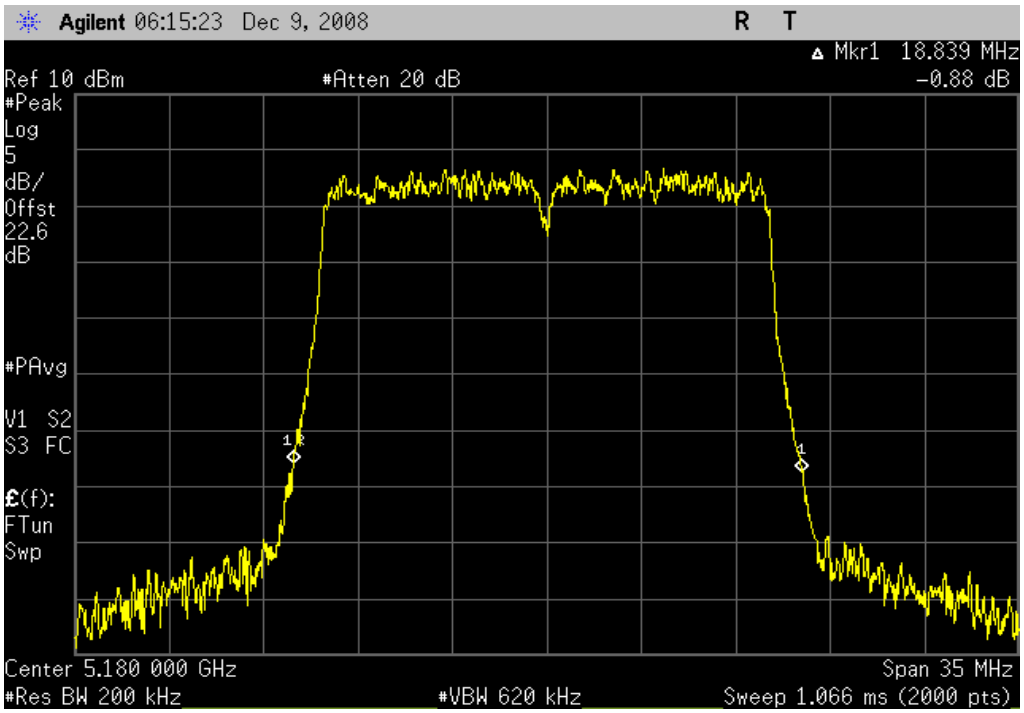
802.11(a) 6 Mbps, 5470 - 5725 MHz Band, Channel 120, Mid Channel					
Result:	N/A	**Value:**	20.188 MHz	**Limit:**	N/A



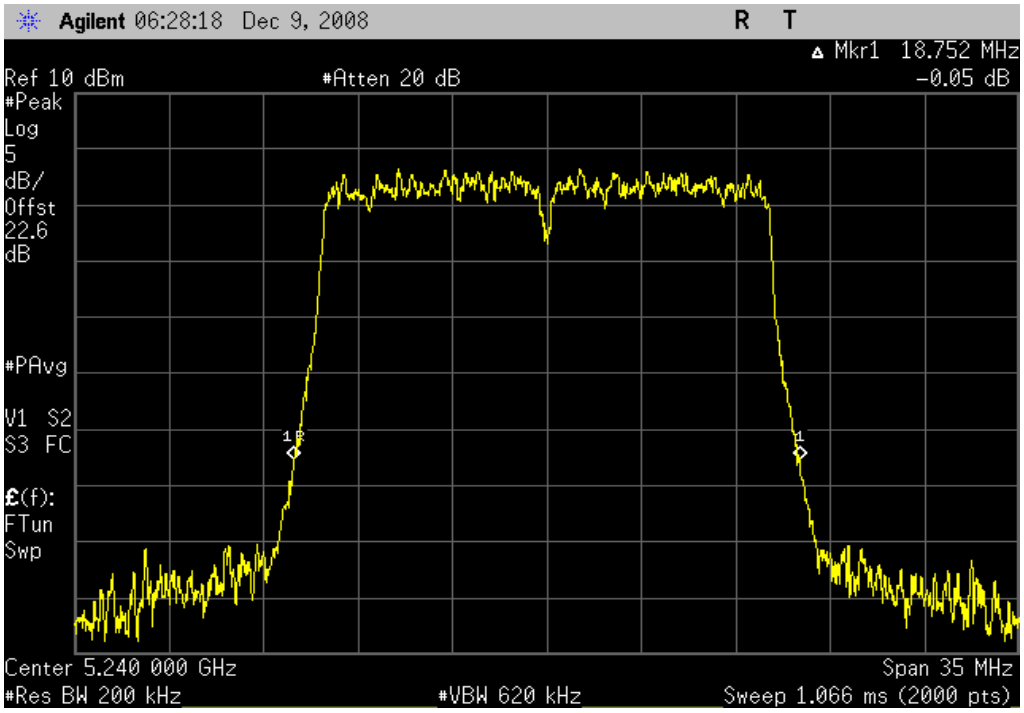
802.11(a) 6 Mbps, 5470 - 5725 MHz Band, Channel 140, High Channel					
Result:	N/A	**Value:**	21.448 MHz	**Limit:**	N/A



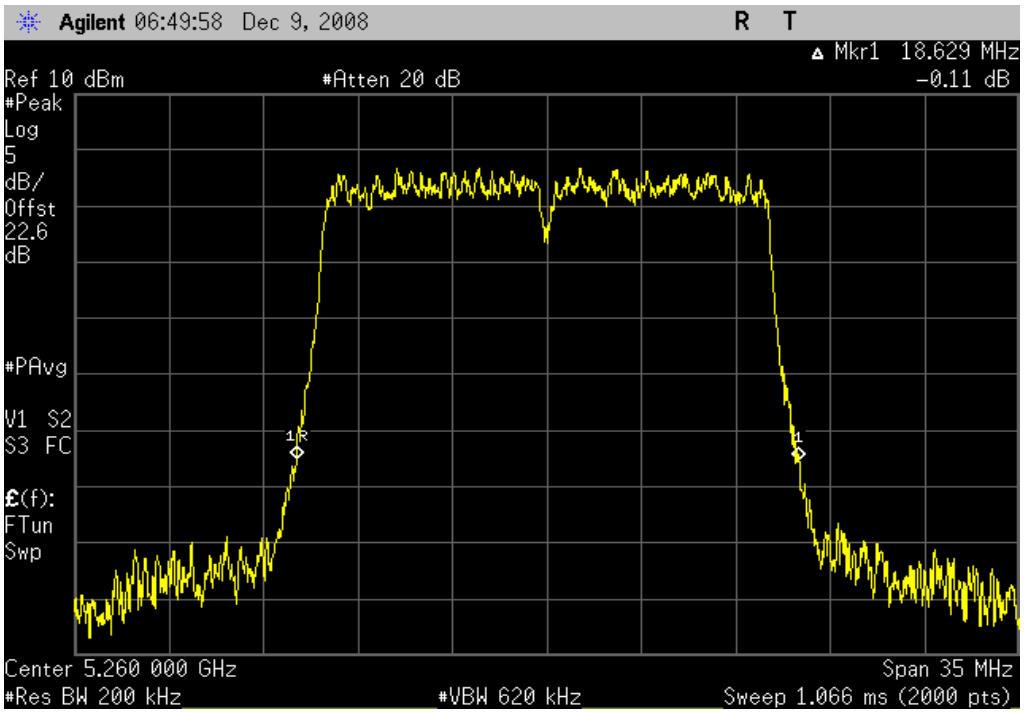
802.11(a) 36 Mbps, 5150 - 5250 MHz Band, Channel 36, Low Channel					
Result:	N/A	**Value:**	18.839 MHz	**Limit:**	N/A



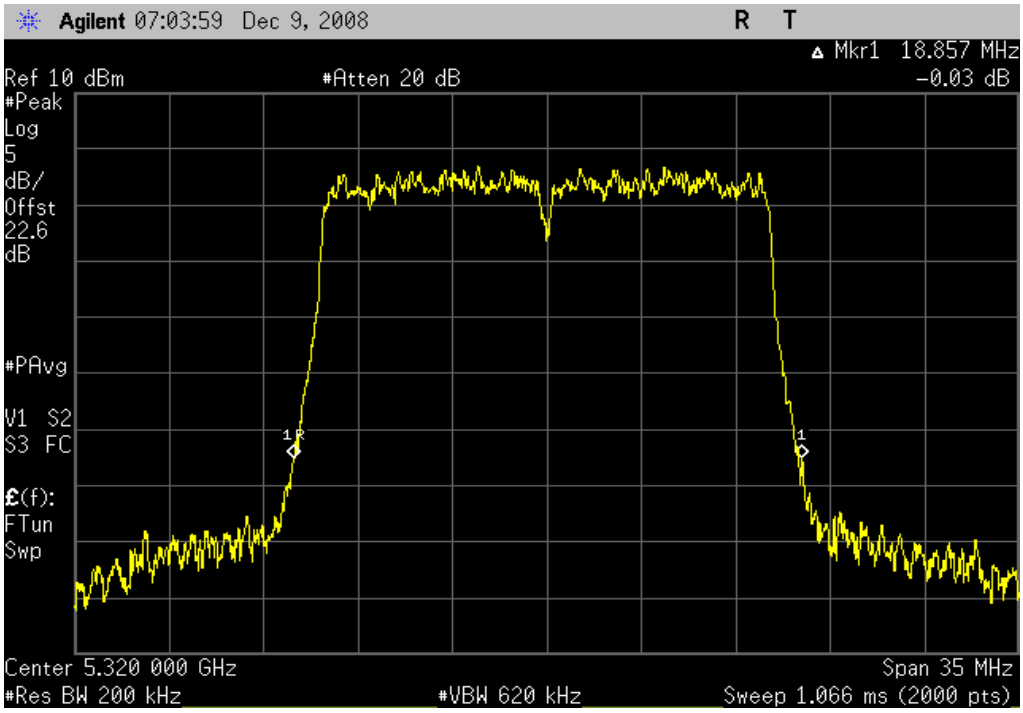
802.11(a) 36 Mbps, 5150 - 5250 MHz Band, Channel 48, High Channel					
Result:	N/A	**Value:**	18.752 MHz	**Limit:**	N/A



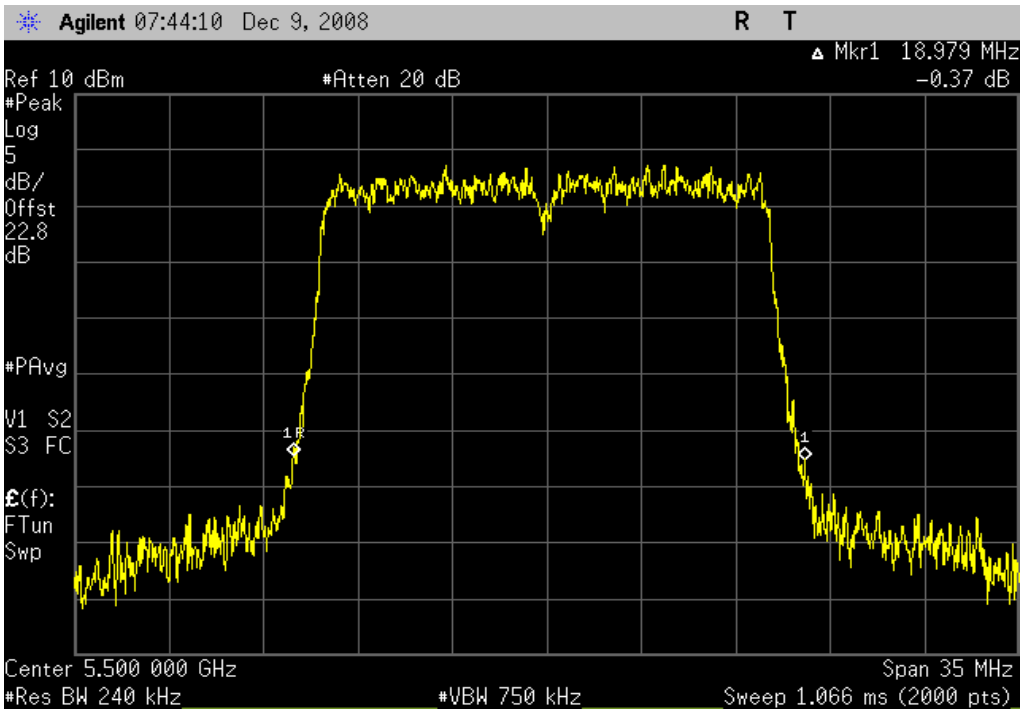
802.11(a) 36 Mbps, 5250 - 5350 MHz Band, Channel 52, Low Channel					
Result:	N/A	**Value:**	18.629 MHz	**Limit:**	N/A



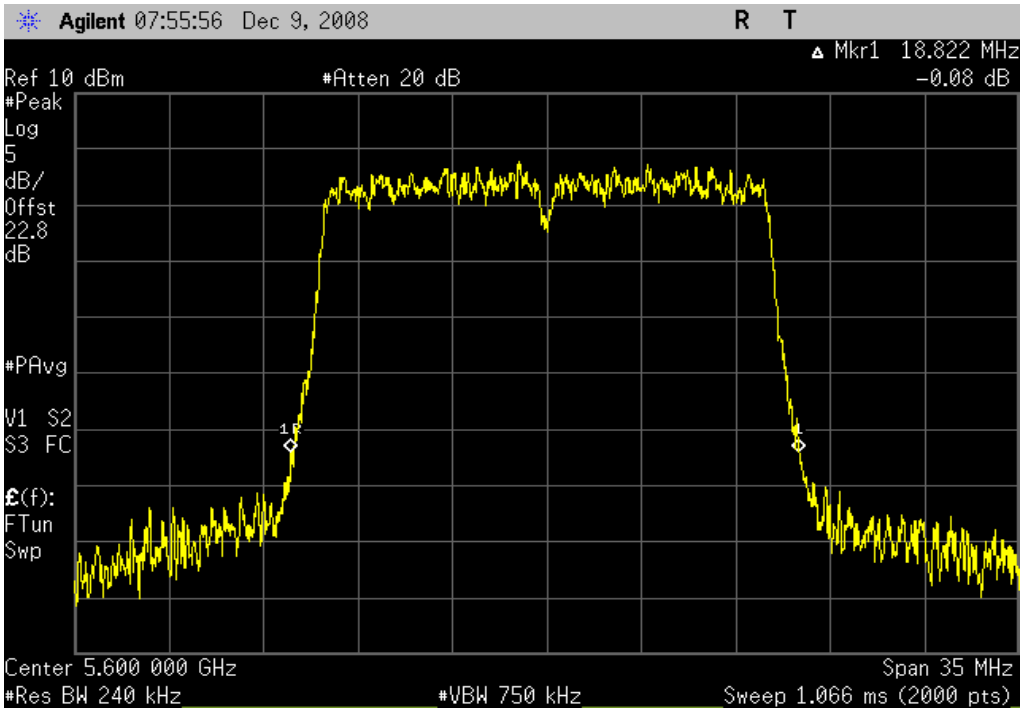
802.11(a) 36 Mbps, 5250 - 5350 MHz Band, Channel 64, High Channel					
Result:	N/A	**Value:**	18.857 MHz	**Limit:**	N/A



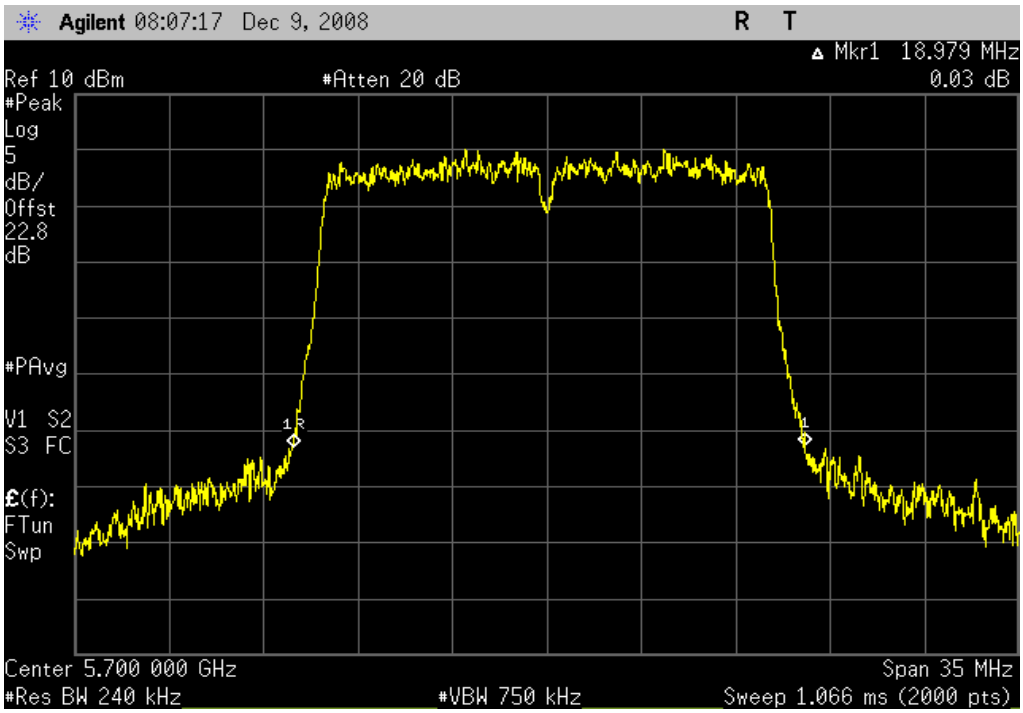
802.11(a) 36 Mbps, 5470 - 5725 MHz Band, Channel 100, Low Channel					
Result:	N/A	**Value:**	18.979 MHz	**Limit:**	N/A



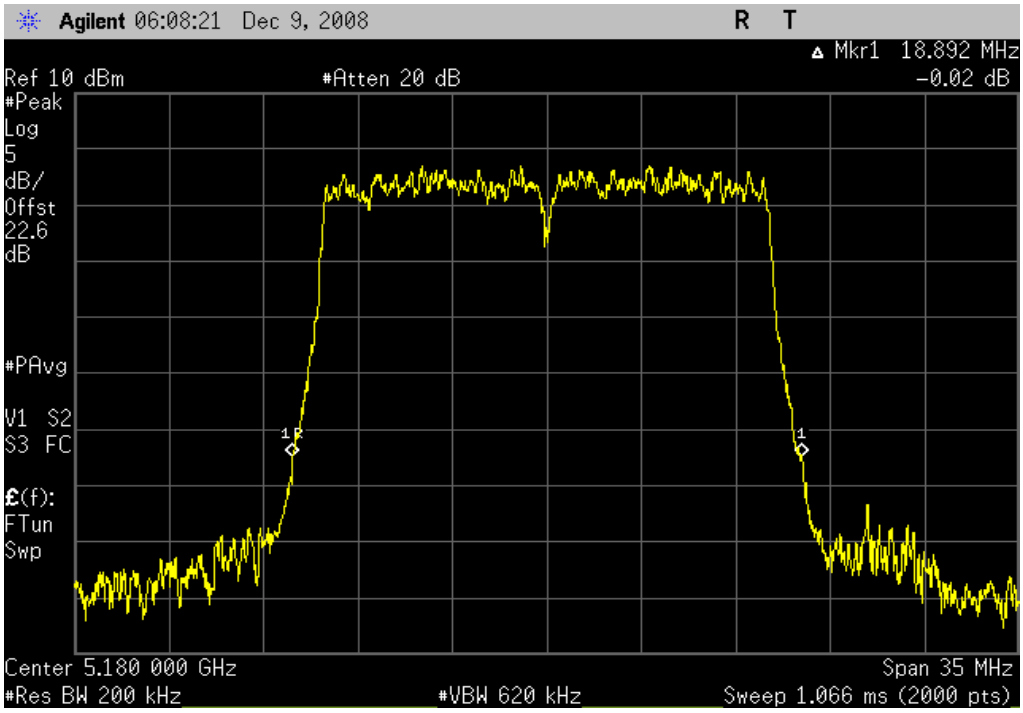
802.11(a) 36 Mbps, 5470 - 5725 MHz Band, Channel 120, Mid Channel					
Result:	N/A	**Value:**	18.822 MHz	**Limit:**	N/A



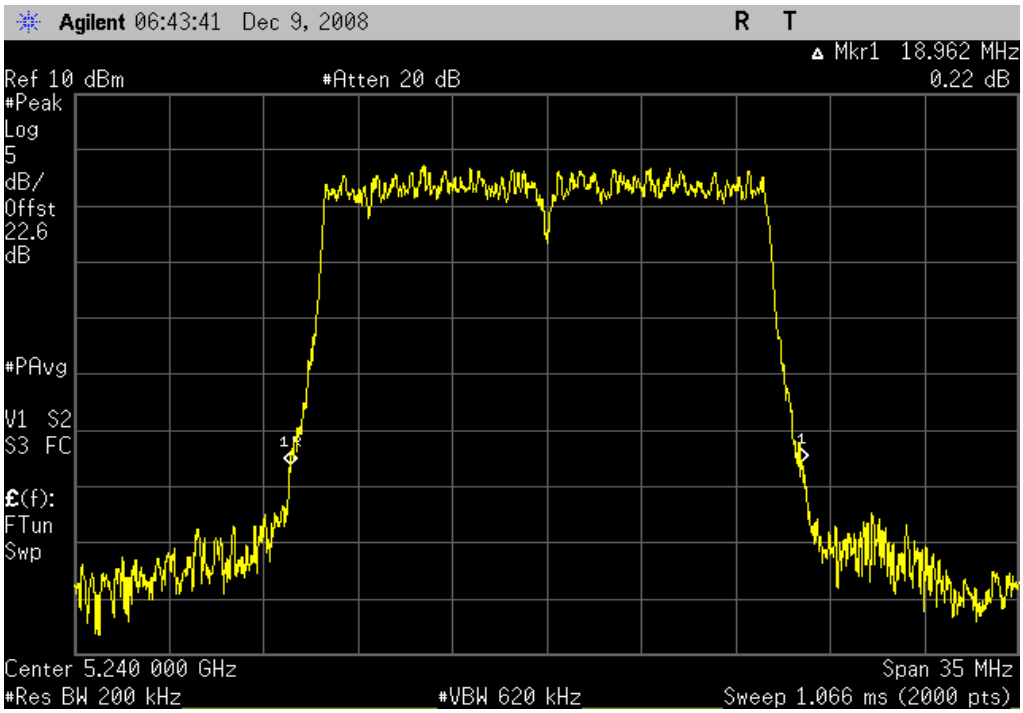
802.11(a) 36 Mbps, 5470 - 5725 MHz Band, Channel 140, High Channel					
Result:	N/A	**Value:**	18.979 MHz	**Limit:**	N/A



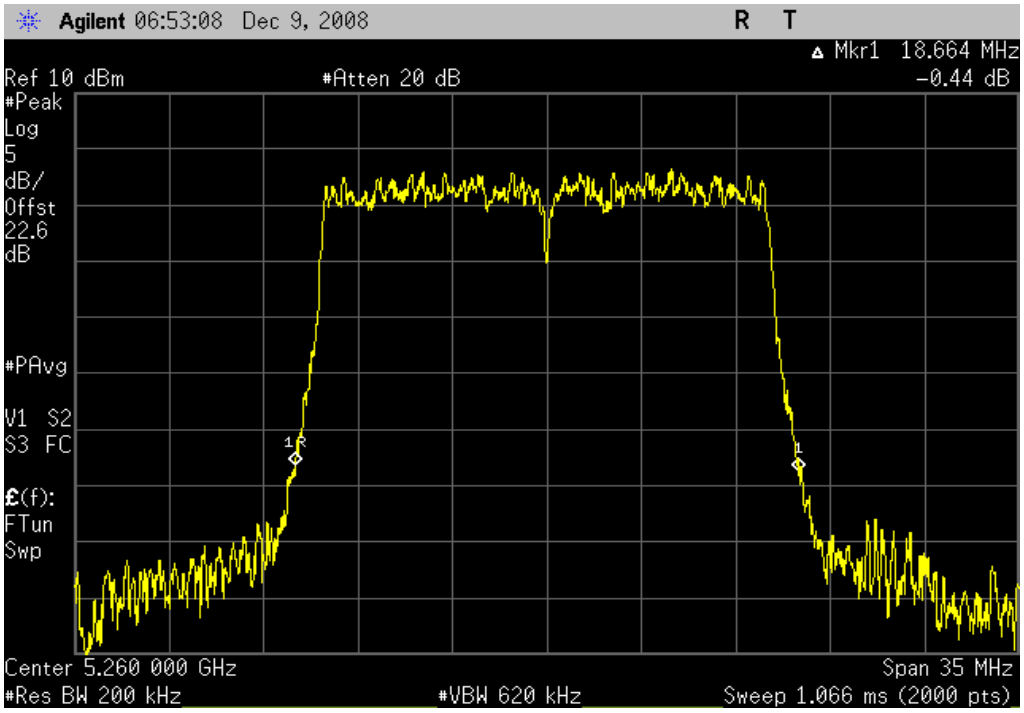
802.11(a) 54 Mbps, 5150 - 5250 MHz Band, Channel 36, Low Channel					
Result:	N/A	**Value:**	18.892 MHz	**Limit:**	N/A



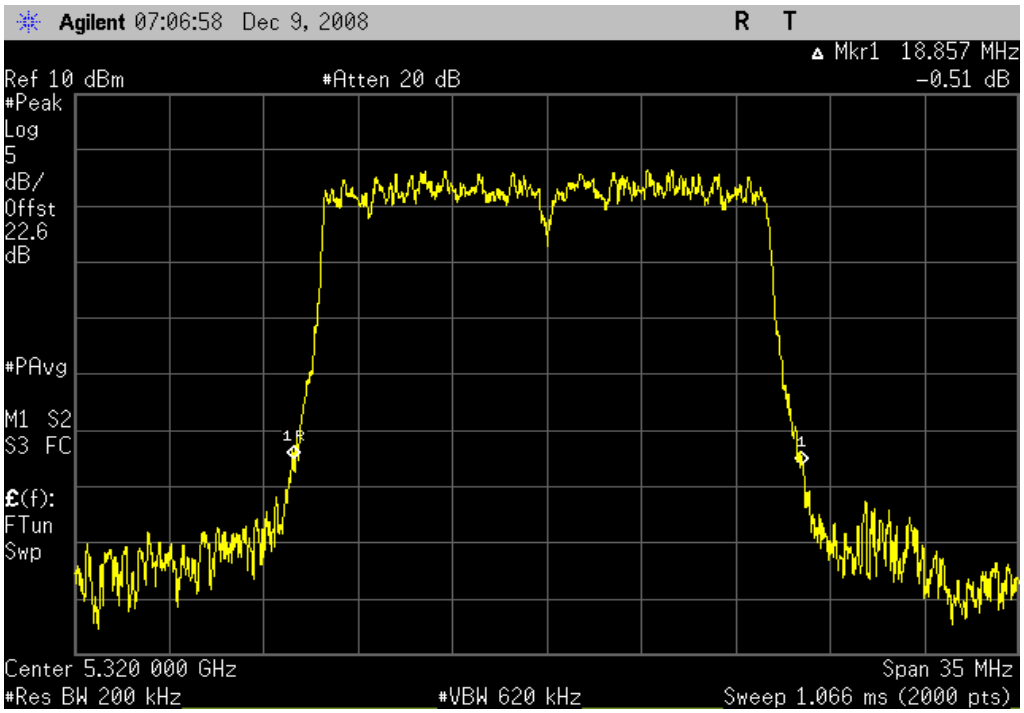
802.11(a) 54 Mbps, 5150 - 5250 MHz Band, Channel 48, High Channel					
Result:	N/A	**Value:**	18.962 MHz	**Limit:**	N/A



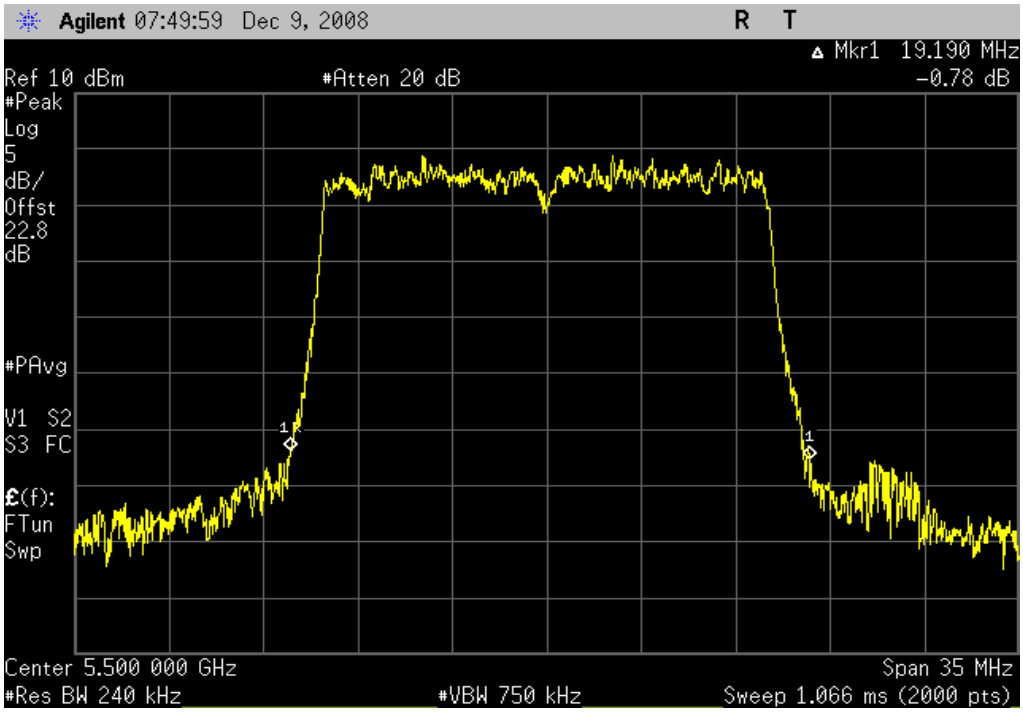
802.11(a) 54 Mbps, 5250 - 5350 MHz Band, Channel 52, Low Channel					
Result:	N/A	**Value:**	18.664 MHz	**Limit:**	N/A



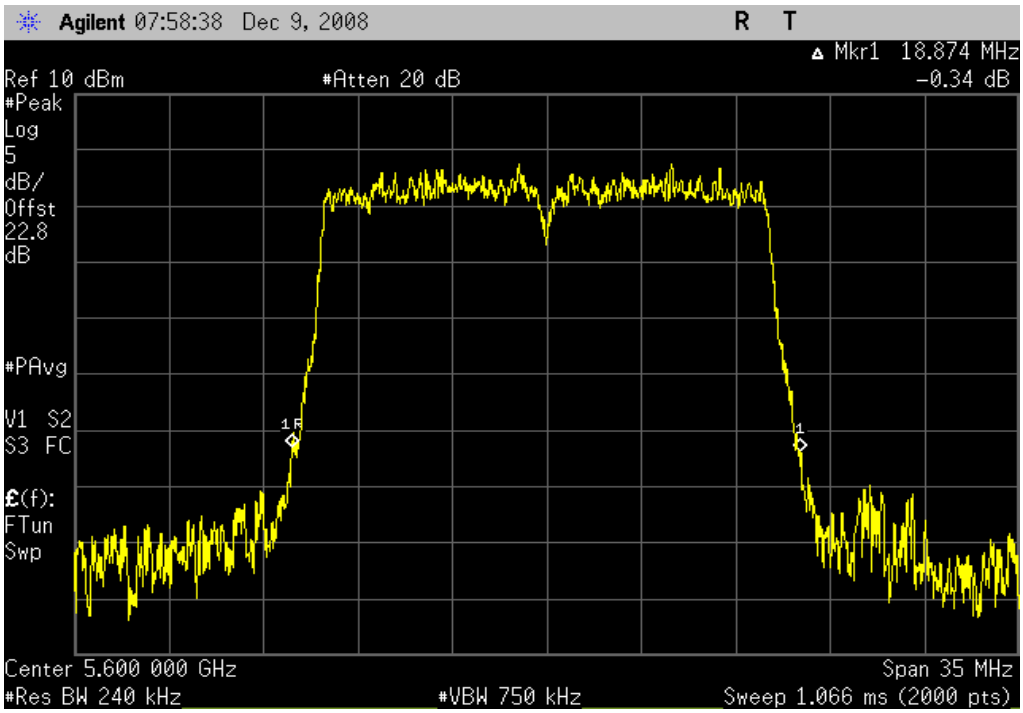
802.11(a) 54 Mbps, 5250 - 5350 MHz Band, Channel 64, High Channel					
Result:	N/A	**Value:**	18.857 MHz	**Limit:**	N/A



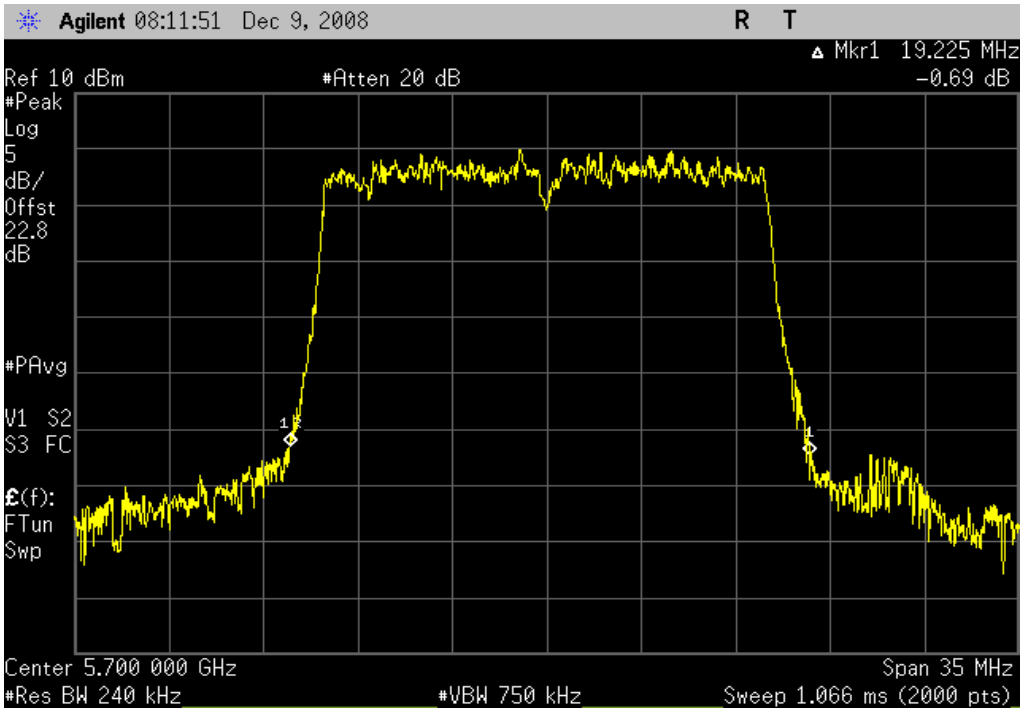
802.11(a) 54 Mbps, 5470 - 5725 MHz Band, Channel 100, Low Channel					
Result:	N/A	**Value:**	19.190 MHz	**Limit:**	N/A



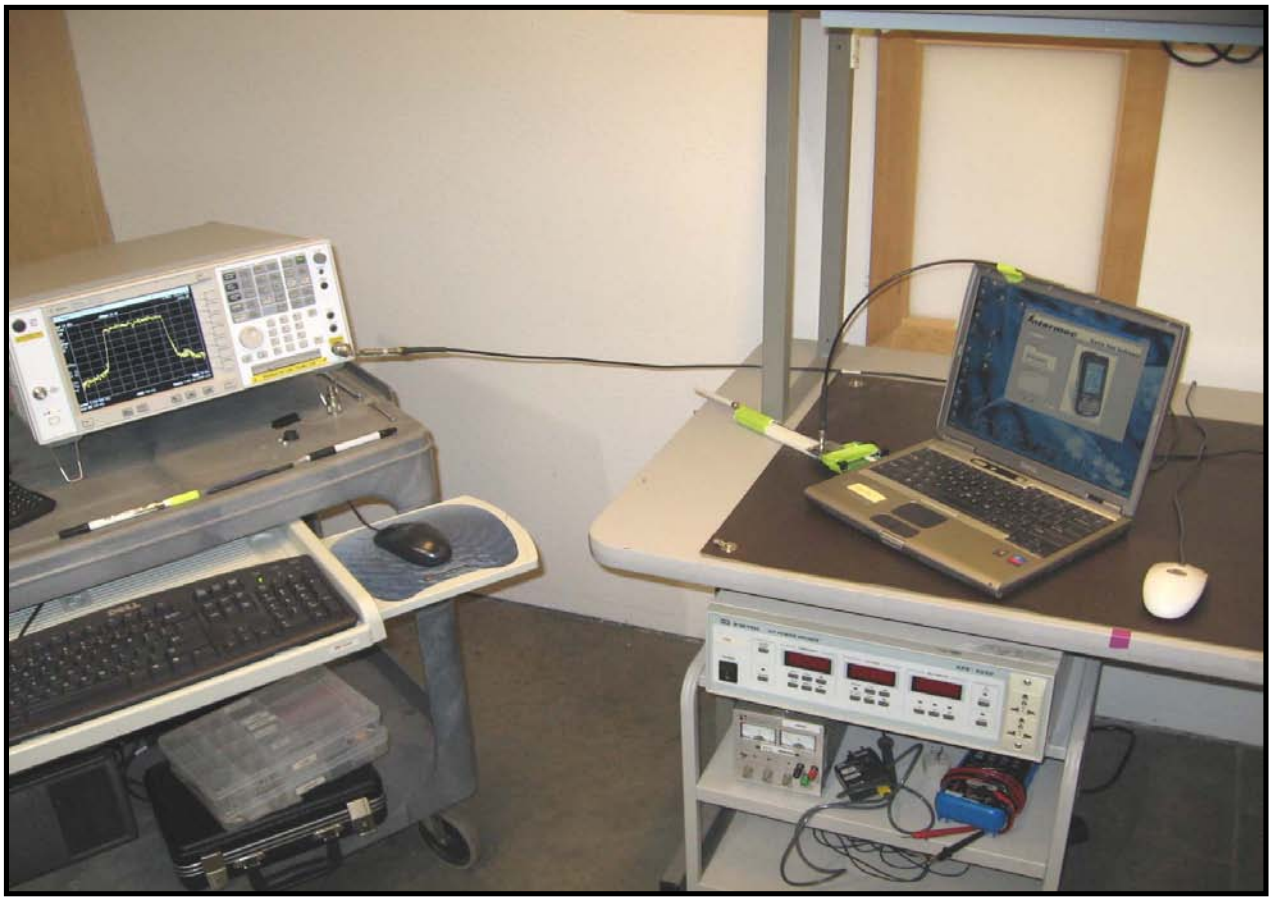
802.11(a) 54 Mbps, 5470 - 5725 MHz Band, Channel 120, Mid Channel					
Result:	N/A	**Value:**	18.874 MHz	**Limit:**	N/A



802.11(a) 54 Mbps, 5470 - 5725 MHz Band, Channel 140, High Channel					
Result:	N/A	**Value:**	19.225 MHz	**Limit:**	N/A



EMISSION BANDWIDTH



PEAK POWER SPECTRAL DENSITY

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

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval
Spectrum Analyzer	Agilent	E4407B	AAU	12/12/2008	13
Attenuator 20 dB, SMA M/F 26GHz	S.M. Electronics	SA26B-20	AUY	6/27/2008	13
Power Meter	Gigatronics	8651A	SPM	12/7/2007	13
Power Sensor	Gigatronics	80701A	SPL	12/7/2007	13
Signal Generator	Hewlett-Packard	8648D	TGC	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

FCC Public Notice DA 02-2138 was followed. The transmit frequency was set to the required channels in each band. The transmit power was set to its default maximum. The lowest data rate was measured as it provided the highest output power. A direct connection was made between the RF output of the EUT and a spectrum analyzer. Attenuation and a DC block were used. The reference level offset on the spectrum analyzer was adjusted to compensate for cable loss and the external attenuation used between the RF output and the spectrum analyzer input. The amplitude accuracy of the spectrum analyzer was further enhanced by calibrating the setup using the power meter and synthesized signal generator.

Prior to measuring peak power spectral density, the emission bandwidth (B) and the transmission pulse duration (T) were measured. Both are required to determine the method of measuring peak power spectral density. The method of measuring the emission bandwidth and the associated data are found elsewhere in this test report. The transmission pulse duration (T) was measured across a constant amplitude pulse using an RF detector diode and an oscilloscope. The scope photos are found with the peak power measurement data elsewhere in this report.

Method #2 found in FCC Public Notice DA02-2138 was used because the analyzer sweep time was less than or equal to T.

The spectrum analyzer settings were as follows:

- The span was set to encompass entire emission bandwidth (B), centered on the transmit channel.
- RBW = 1 MHz, VBW >= 3 MHz because the emission bandwidth (B) is greater than 1 MHz
- Sample detector mode because the bin width (span / number of spectral points) < 0.5 RBW.
- Trace average 100 traces in power averaging mode (not video averaging).

The peak power spectral density (PPSD) was determined to be the highest level found across the emission in any 1 MHz band after 100 sweeps of power averaging (not video averaging).

NORTHWEST EMC

PEAK POWER SPECTRAL DENSITY

XMit 2007.06.13

EUT:	DDIB			Work Order:	INMC0500
Serial Number:	Proto 13			Date:	12/09/08
Customer:	Intermec Technologies Corporation			Temperature:	22°C
Attendees:	None			Humidity:	34%
Project:	None			Barometric Pres.:	30.22
Tested by:	Rod Peloquin	Power:	3.3Vdc via Host	Job Site:	EV06

TEST SPECIFICATIONS	Test Method
FCC 15.407:2008	ANSI C63.4:2003 DA 02-2138:2002

COMMENTS

None

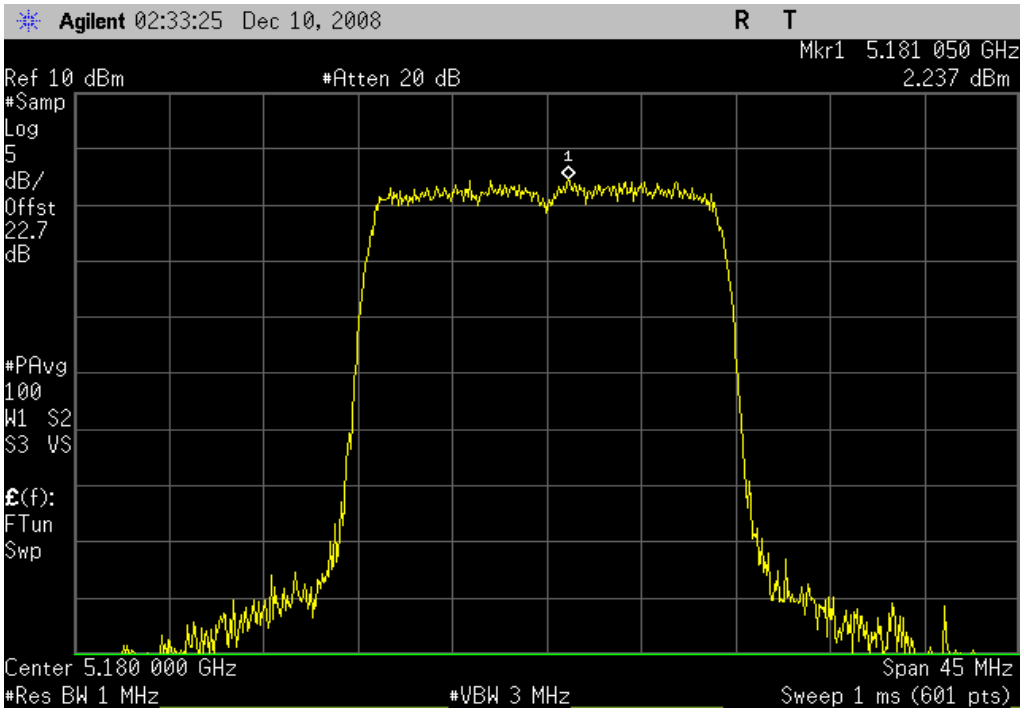
DEVIATIONS FROM TEST STANDARD

No Deviations

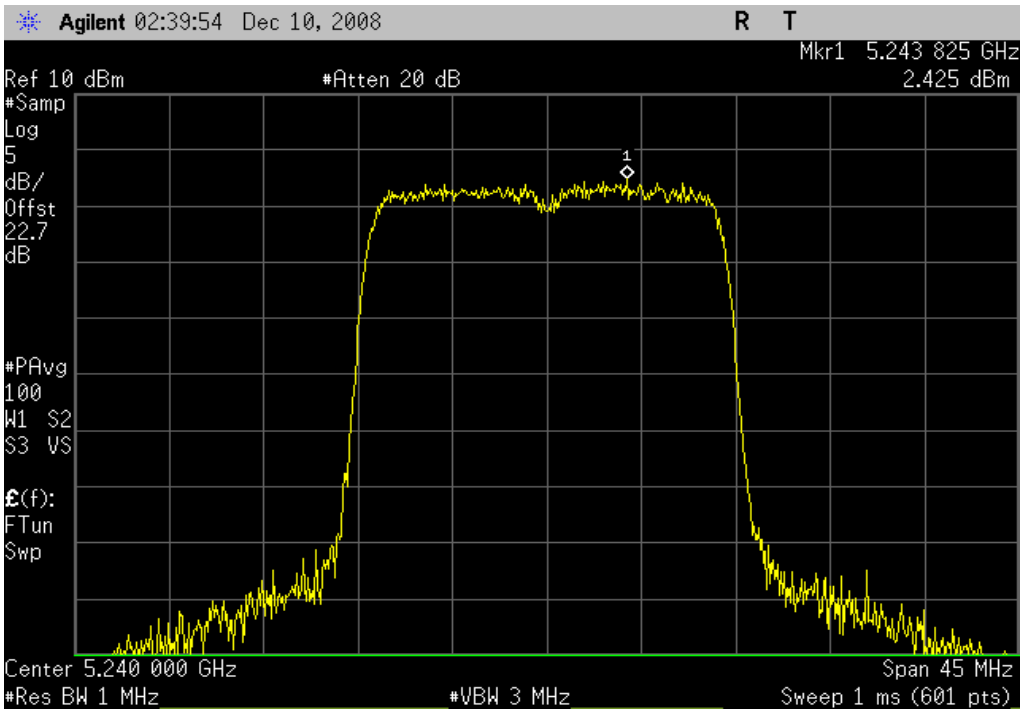
Configuration #	4	Signature

	Value	Limit	Results
802.11(a) 6 Mbps			
5150 - 5250 MHz Band			
Channel 36, Low Channel	2.2 dBm	4 dBm	Pass
Channel 48, High Channel	2.4 dBm	4 dBm	Pass
5250 - 5350 MHz Band			
Channel 52, Low Channel	1.9 dBm	11 dBm	Pass
Channel 64, High Channel	2.3 dBm	11 dBm	Pass
5470 - 5725 MHz Band			
Channel 100, Low Channel	1.4 dBm	11 dBm	Pass
Channel 120, Mid Channel	1.0 dBm	11 dBm	Pass
Channel 140, High Channel	1.5 dBm	11 dBm	Pass

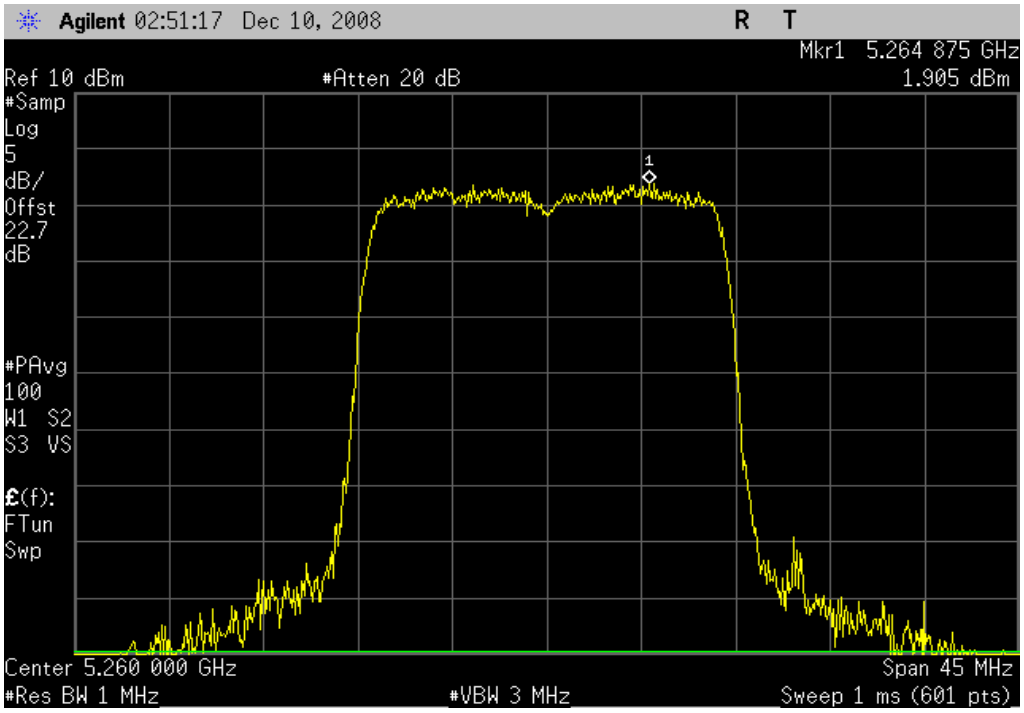
802.11(a) 6 Mbps, 5150 - 5250 MHz Band, Channel 36, Low Channel					
Result:	Pass	**Value:**	2.2 dBm	**Limit:**	4 dBm



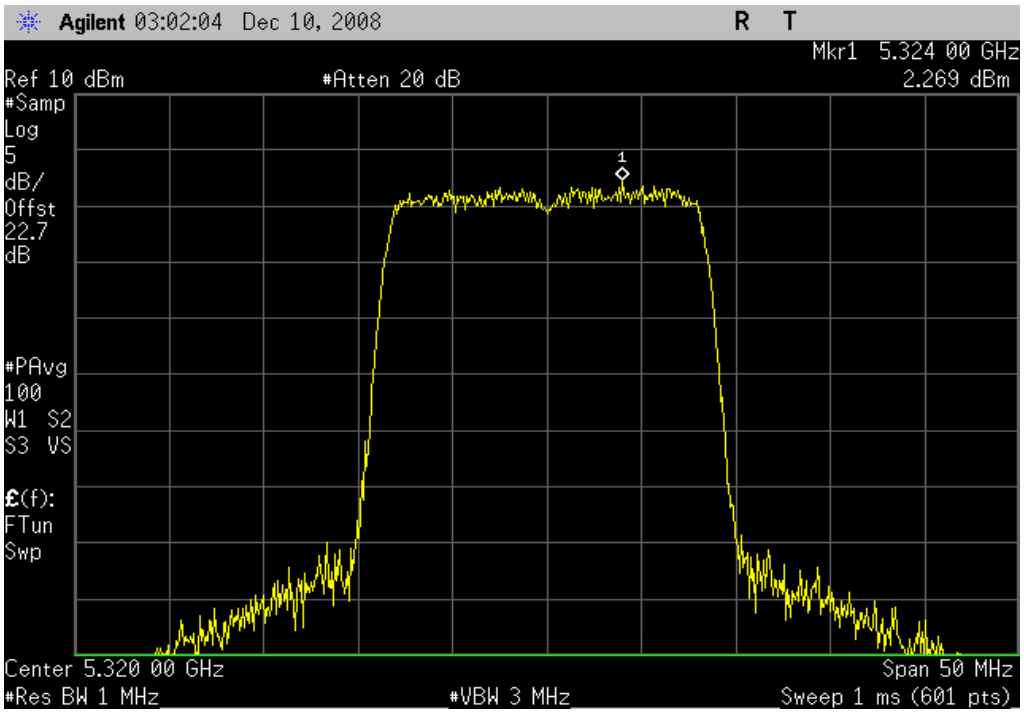
802.11(a) 6 Mbps, 5150 - 5250 MHz Band, Channel 48, High Channel					
Result:	Pass	**Value:**	2.4 dBm	**Limit:**	4 dBm



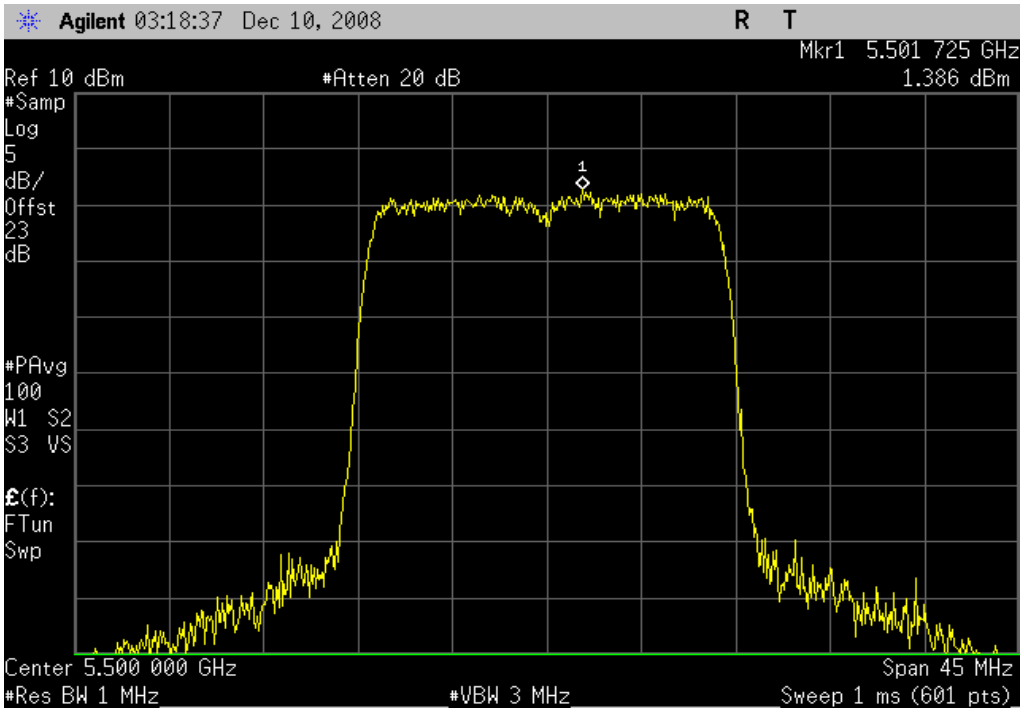
802.11(a) 6 Mbps, 5250 - 5350 MHz Band, Channel 52, Low Channel					
Result:	Pass	**Value:**	1.9 dBm	**Limit:**	11 dBm



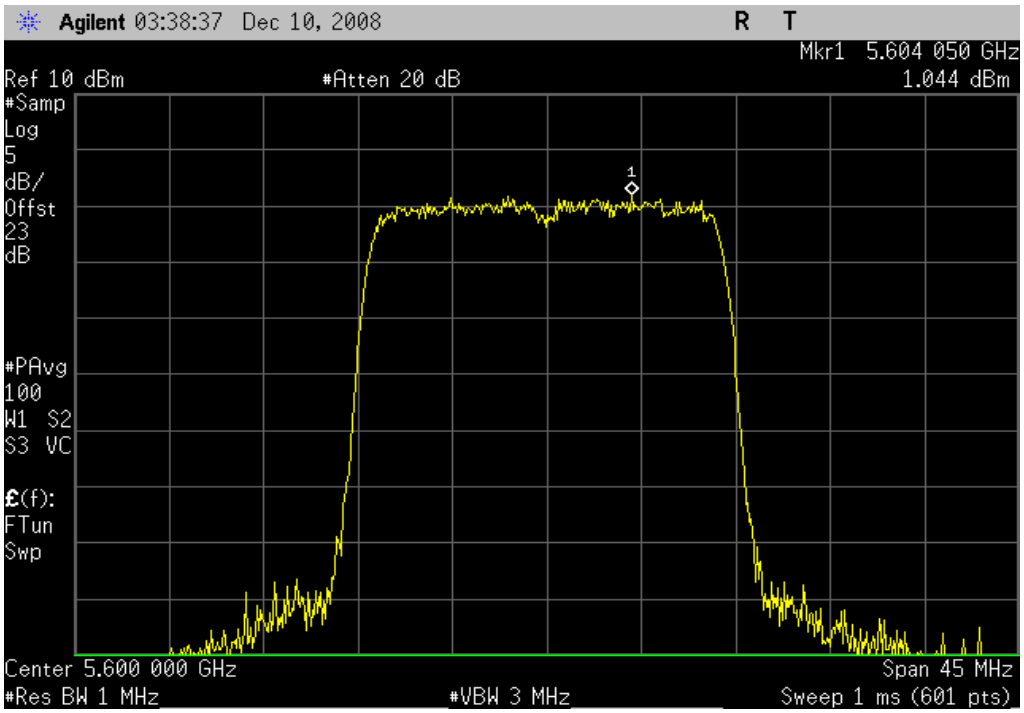
802.11(a) 6 Mbps, 5250 - 5350 MHz Band, Channel 64, High Channel					
Result:	Pass	**Value:**	2.3 dBm	**Limit:**	11 dBm



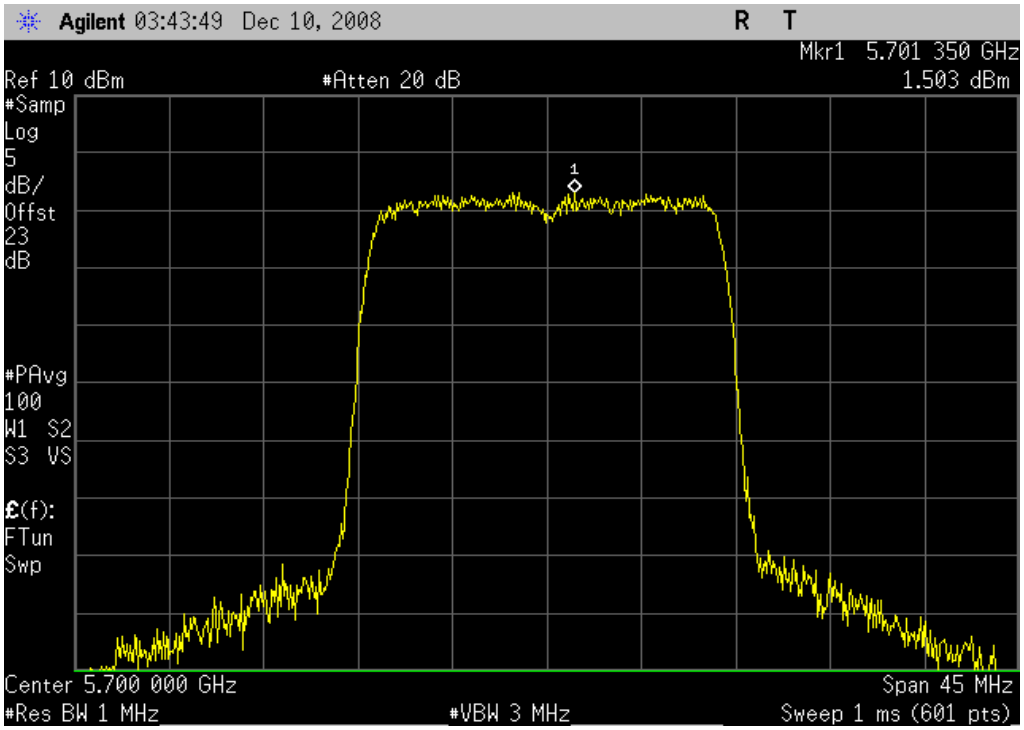
802.11(a) 6 Mbps, 5470 - 5725 MHz Band, Channel 100, Low Channel					
Result:	Pass	**Value:**	1.4 dBm	**Limit:**	11 dBm



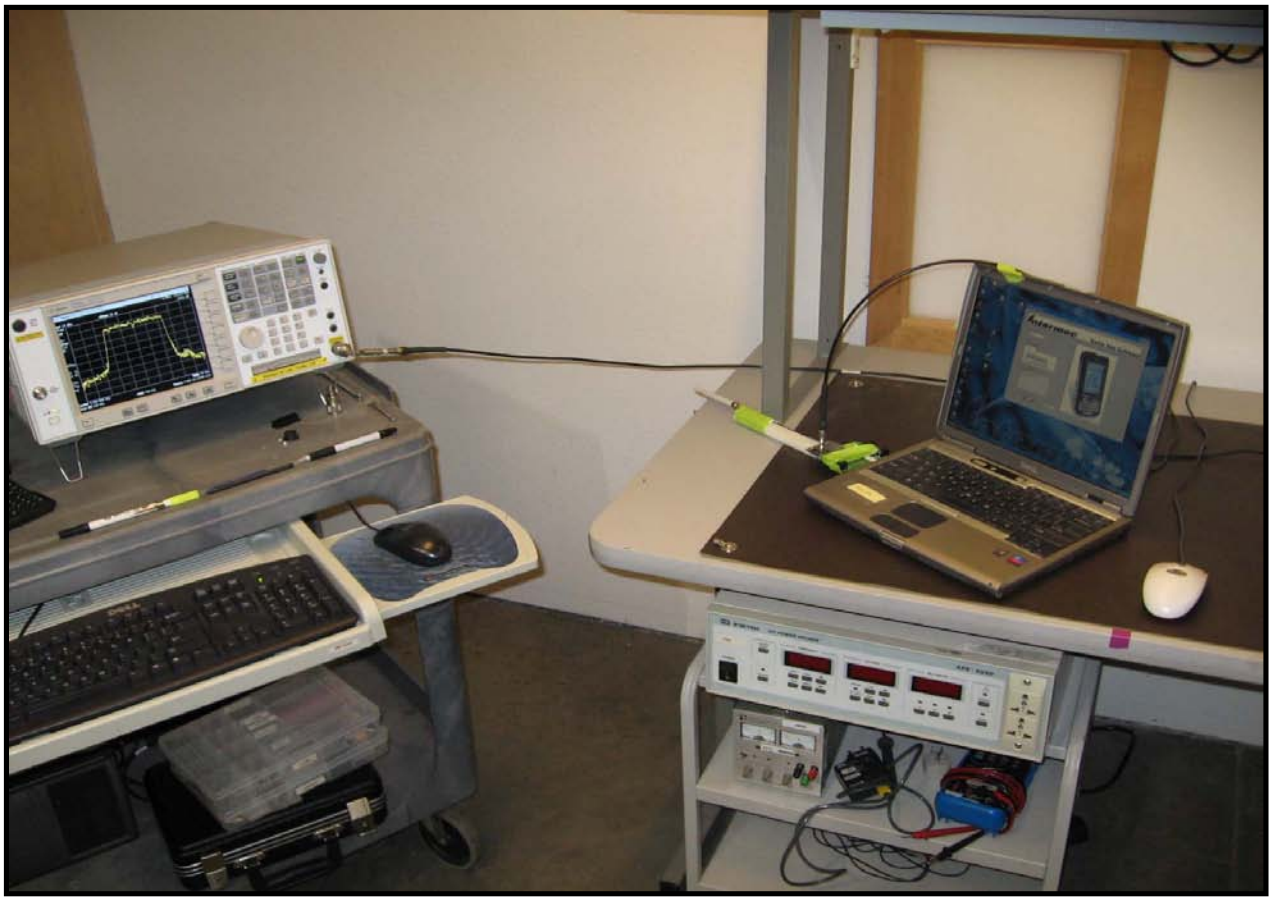
802.11(a) 6 Mbps, 5470 - 5725 MHz Band, Channel 120, Mid Channel					
Result:	Pass	**Value:**	1.0 dBm	**Limit:**	11 dBm



802.11(a) 6 Mbps, 5470 - 5725 MHz Band, Channel 140, High Channel		
Result: Pass	**Value:** 1.5 dBm	**Limit:** 11 dBm



PEAK POWER SPECTRAL DENSITY



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

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval
Spectrum Analyzer	Agilent	E4443A	AFB	11/17/2008	12
Attenuator 20 dB, SMA M/F 26GHz	S.M. Electronics	SA26B-20	AUY	6/27/2008	13
Power Meter	Gigatronics	8651A	SPM	12/7/2007	13
Power Sensor	Gigatronics	80701A	SPL	12/7/2007	13
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

FCC Public Notice DA 02-2138 was followed. The transmit frequency was set to the required channels in each band. The transmit power was set to its default maximum. The lowest, a medium, and the highest data rates were measured. A direct connection was made between the RF output of the EUT and a spectrum analyzer. Attenuation and a DC block were used. The reference level offset on the spectrum analyzer was adjusted to compensate for cable loss and the external attenuation used between the RF output and the spectrum analyzer input.

The spectrum analyzer settings were as follows:

- Span set to encompass the entire emission bandwidth (B), centered on the transmit channel.
- Using the marker delta function, the largest difference between the following two traces was measured:
  - 1st Trace: RBW = 1 MHz, VBW >= 3 MHz with peak detector and max-hold settings.
  - 2nd Trace: Use same settings as were used for peak conducted transmit power. The sample detector was used as well as the VBW being matched to that used on the peak conducted transmit power.

NORTHWEST EMC

PEAK EXCURSION

XMit 2007.06.13

EUT:	DDIB			Work Order:	INMC0500
Serial Number:	Proto 13			Date:	12/10/08
Customer:	Intermec Technologies Corporation			Temperature:	21°C
Attendees:	None			Humidity:	36%
Project:	None			Barometric Pres.:	30.22
Tested by:	Rod Peloquin	Power:	3.3Vdc via Host	Job Site:	EV06

TEST SPECIFICATIONS	Test Method
FCC 15.407:2008	ANSI C63.4:2003 DA 02-2138:2002

COMMENTS

None

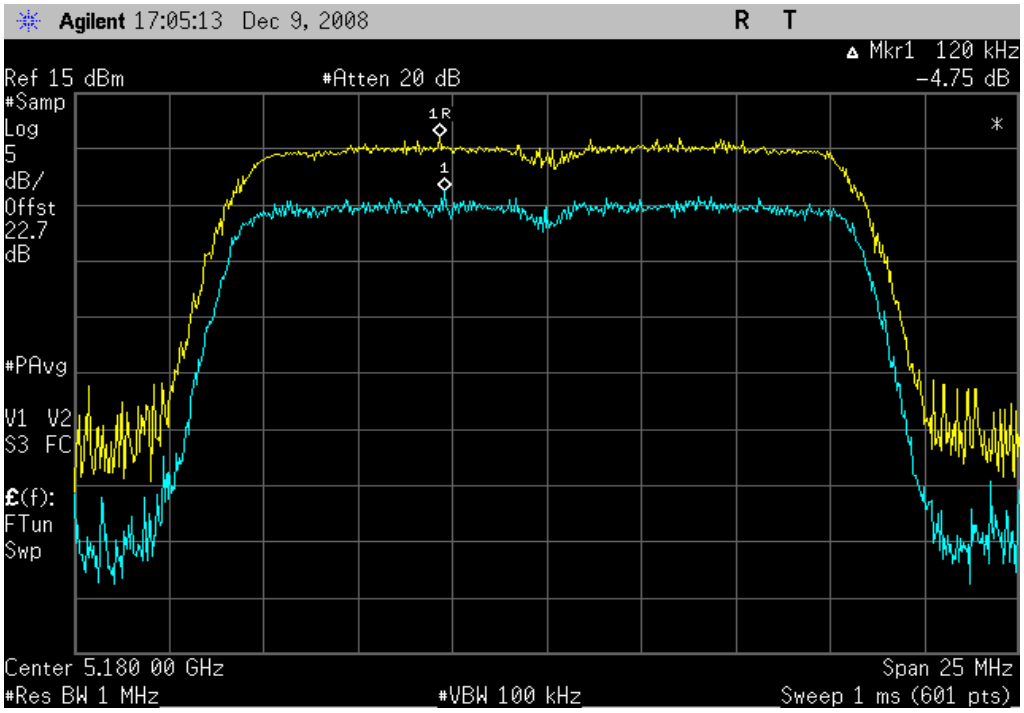
DEVIATIONS FROM TEST STANDARD

No Deviations

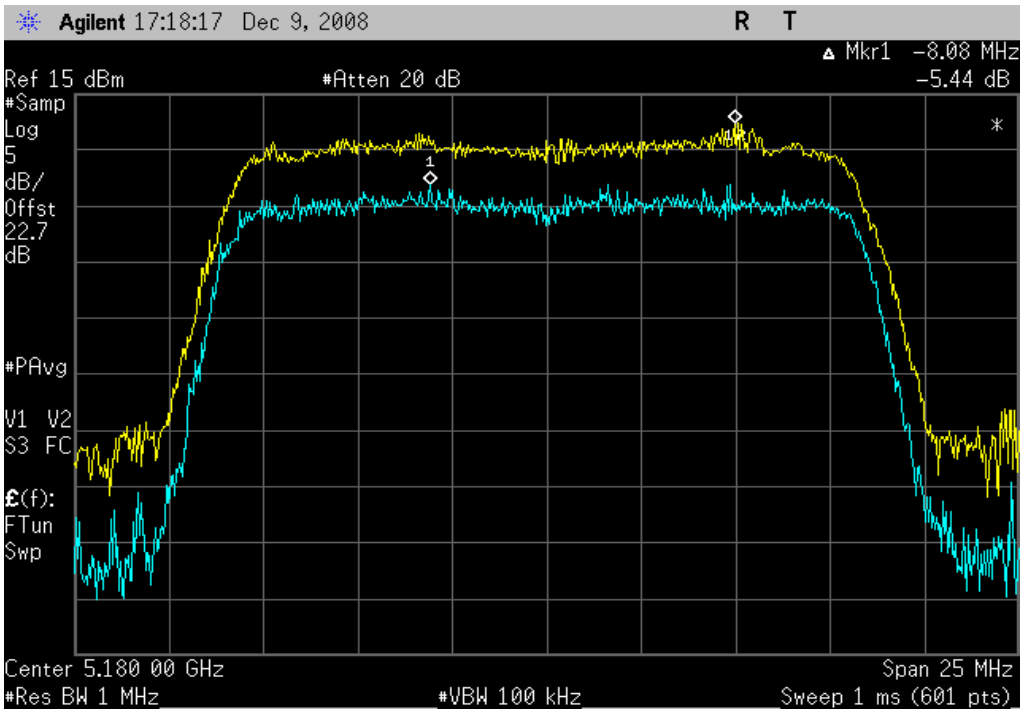
Configuration #	4	Signature

		Value	Limit	Results
802.11(a) 6 Mbps				
	5150 - 5250 MHz Band			
	Channel 36, Low Channel	4.8 dB	≤ 13 dB	Pass
	Channel 48, High Channel	5.4 dB	≤ 13 dB	Pass
	5250 - 5350 MHz Band			
	Channel 52, Low Channel	5.8 dB	≤ 13 dB	Pass
	Channel 64, High Channel	4.7 dB	≤ 13 dB	Pass
	5470 - 5725 MHz Band			
	Channel 100, Low Channel	6.4 dB	≤ 13 dB	Pass
	Channel 120, Mid Channel	6.7 dB	≤ 13 dB	Pass
	Channel 140, High Channel	6.5 dB	≤ 13 dB	Pass
802.11(a) 36 Mbps				
	5150 - 5250 MHz Band			
	Channel 36, Low Channel	4.6 dB	≤ 13 dB	Pass
	Channel 48, High Channel	4.3 dB	≤ 13 dB	Pass
	5250 - 5350 MHz Band			
	Channel 52, Low Channel	4.3 dB	≤ 13 dB	Pass
	Channel 64, High Channel	4.7 dB	≤ 13 dB	Pass
	5470 - 5725 MHz Band			
	Channel 100, Low Channel	6.7 dB	≤ 13 dB	Pass
	Channel 120, Mid Channel	5.8 dB	≤ 13 dB	Pass
	Channel 140, High Channel	6.3 dB	≤ 13 dB	Pass
802.11(a) 54 Mbps				
	5150 - 5250 MHz Band			
	Channel 36, Low Channel	5.4 dB	≤ 13 dB	Pass
	Channel 48, High Channel	5.3 dB	≤ 13 dB	Pass
	5250 - 5350 MHz Band			
	Channel 52, Low Channel	5.3 dB	≤ 13 dB	Pass
	Channel 64, High Channel	5.0 dB	≤ 13 dB	Pass
	5470 - 5725 MHz Band			
	Channel 100, Low Channel	6.1 dB	≤ 13 dB	Pass
	Channel 120, Mid Channel	6.7 dB	≤ 13 dB	Pass
	Channel 140, High Channel	6.7 dB	≤ 13 dB	Pass

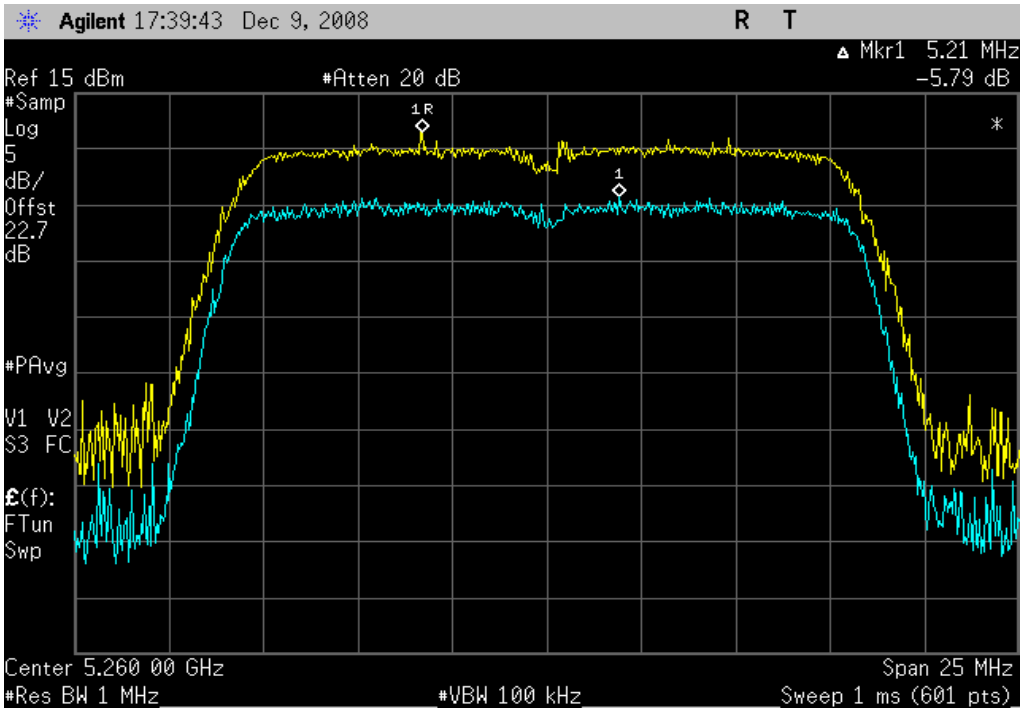
802.11(a) 6 Mbps, 5150 - 5250 MHz Band, Channel 36, Low Channel					
Result:	Pass	**Value:**	4.8 dB	**Limit:**	≤ 13 dB



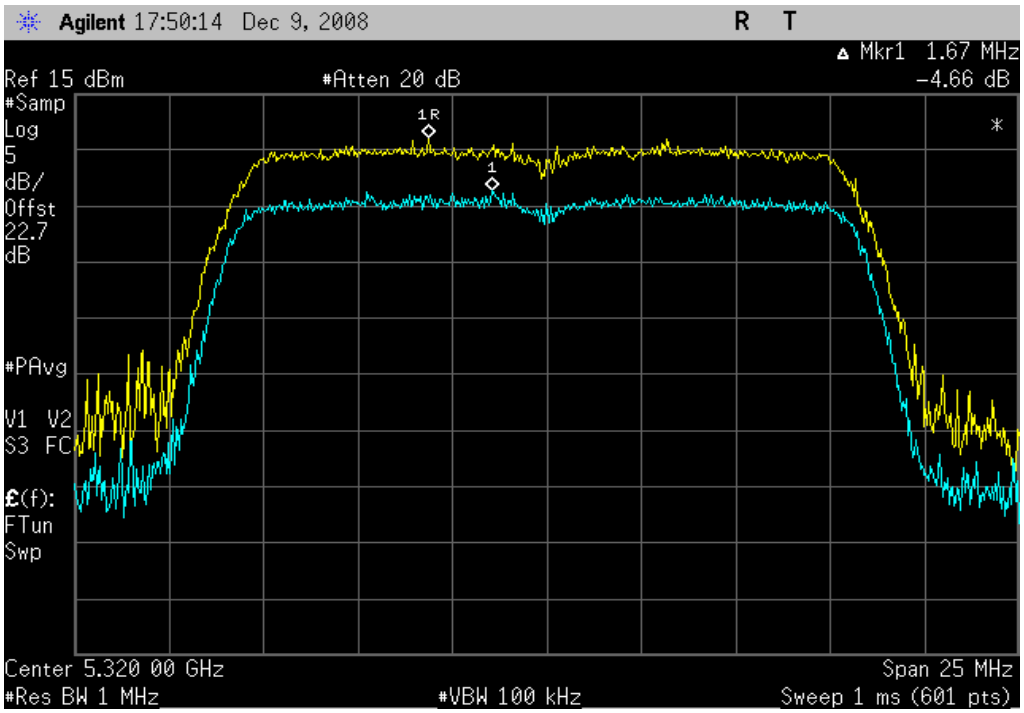
802.11(a) 6 Mbps, 5150 - 5250 MHz Band, Channel 48, High Channel					
Result:	Pass	**Value:**	5.4 dB	**Limit:**	≤ 13 dB



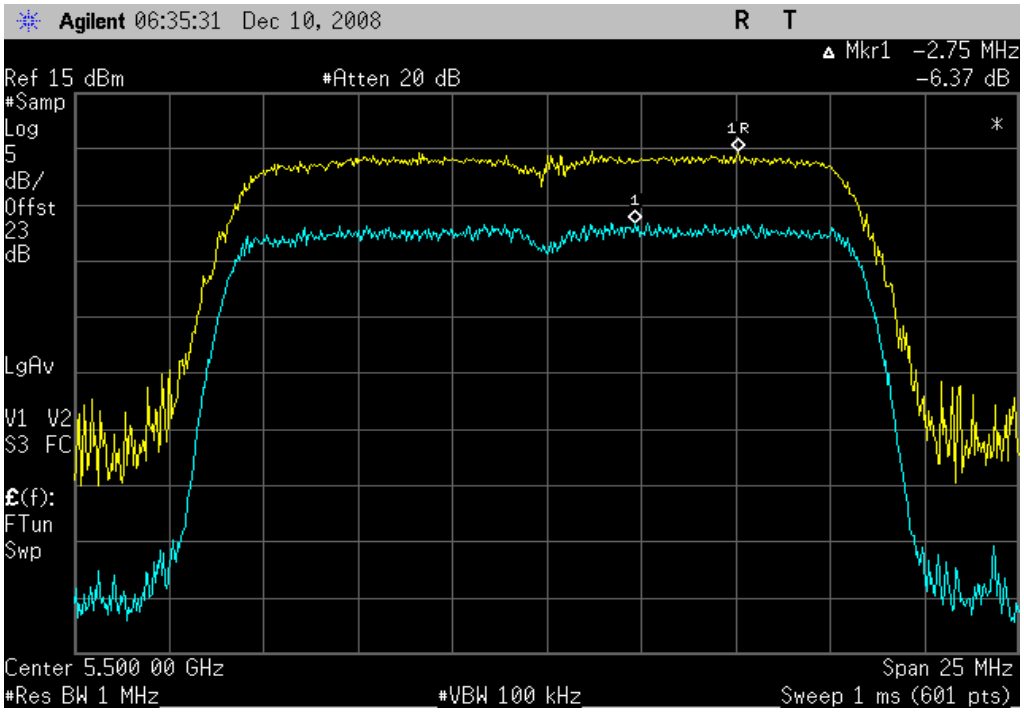
802.11(a) 6 Mbps, 5250 - 5350 MHz Band, Channel 52, Low Channel					
Result:	Pass	**Value:**	5.8 dB	**Limit:**	≤ 13 dB



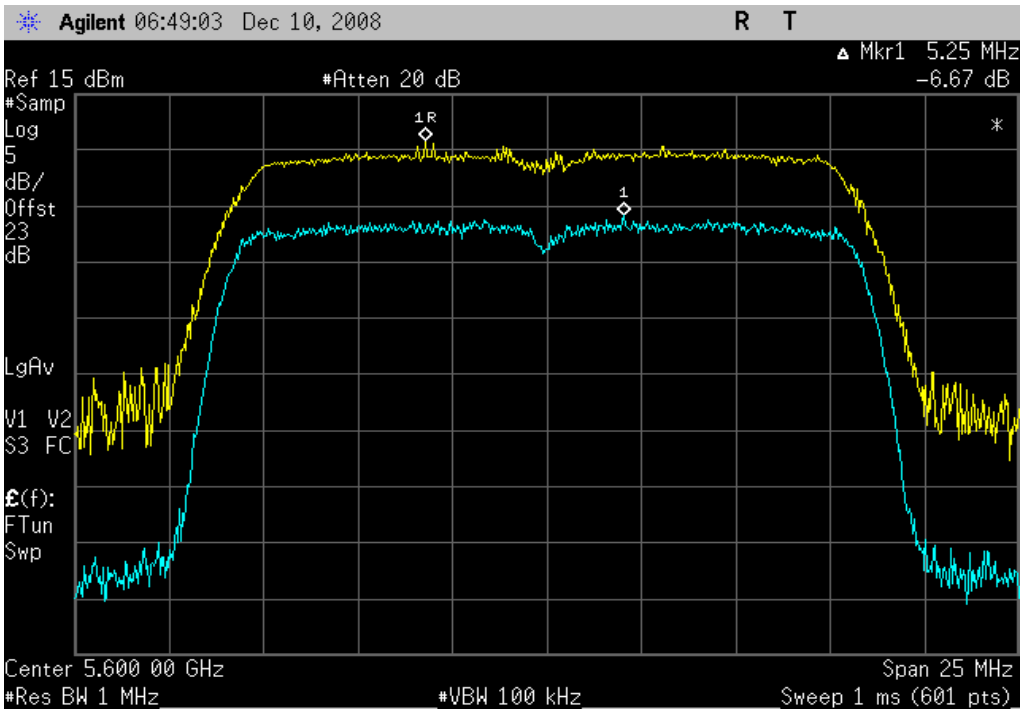
802.11(a) 6 Mbps, 5250 - 5350 MHz Band, Channel 64, High Channel					
Result:	Pass	**Value:**	4.7 dB	**Limit:**	≤ 13 dB



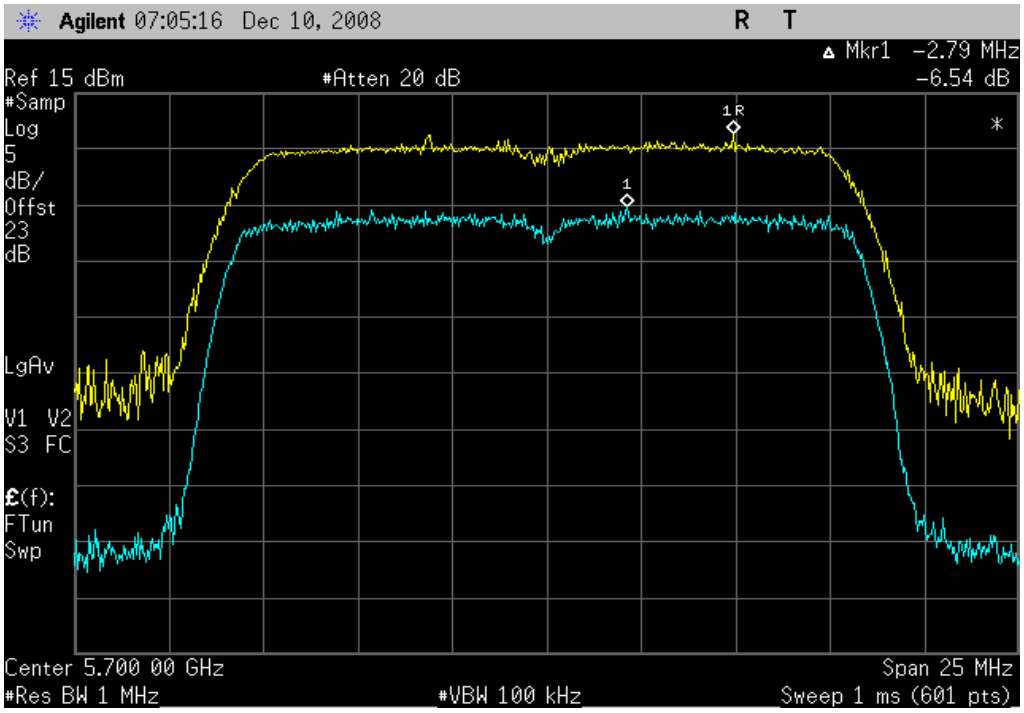
802.11(a) 6 Mbps, 5470 - 5725 MHz Band, Channel 100, Low Channel					
Result:	Pass	**Value:**	6.4 dB	**Limit:**	≤ 13 dB



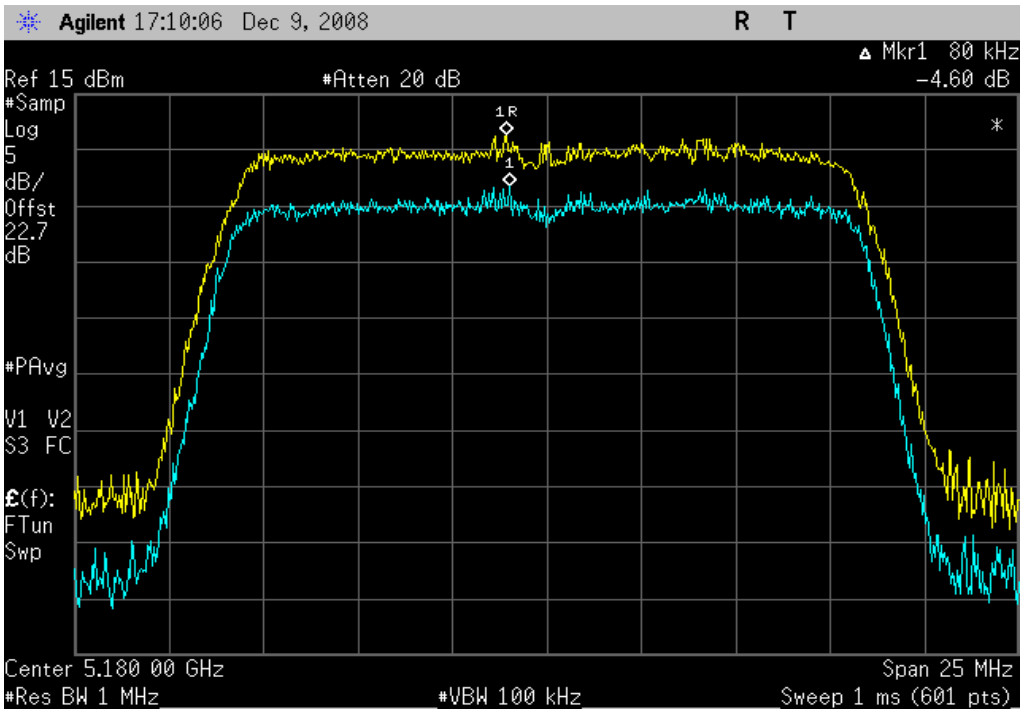
802.11(a) 6 Mbps, 5470 - 5725 MHz Band, Channel 120, Mid Channel					
Result:	Pass	**Value:**	6.7 dB	**Limit:**	≤ 13 dB



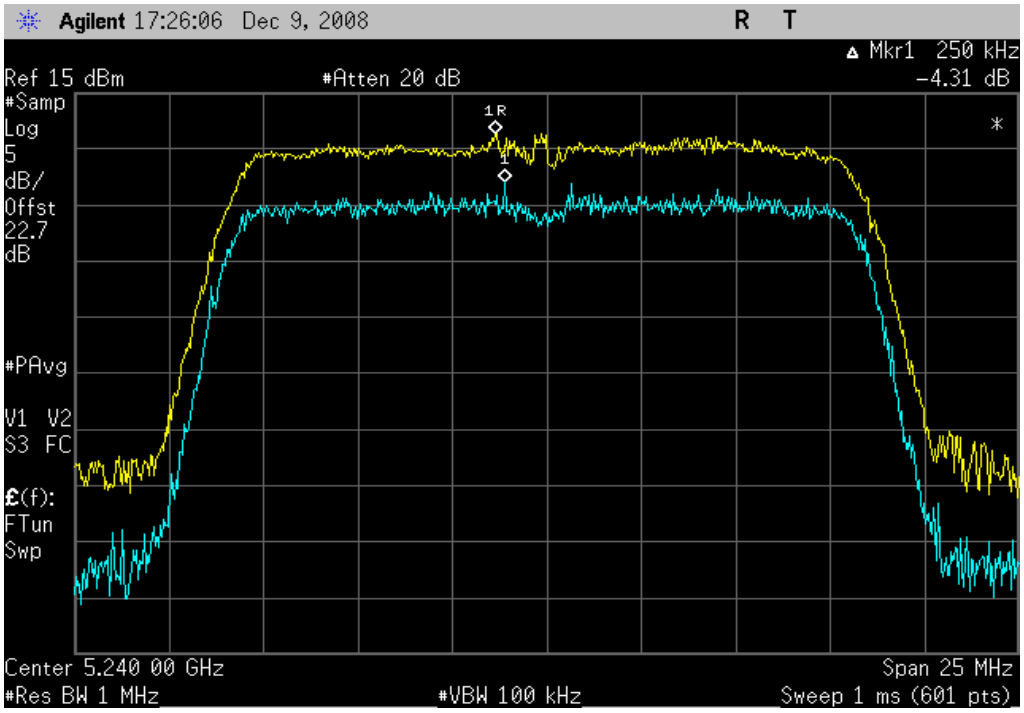
802.11(a) 6 Mbps, 5470 - 5725 MHz Band, Channel 140, High Channel					
Result:	Pass	**Value:**	6.5 dB	**Limit:**	≤ 13 dB



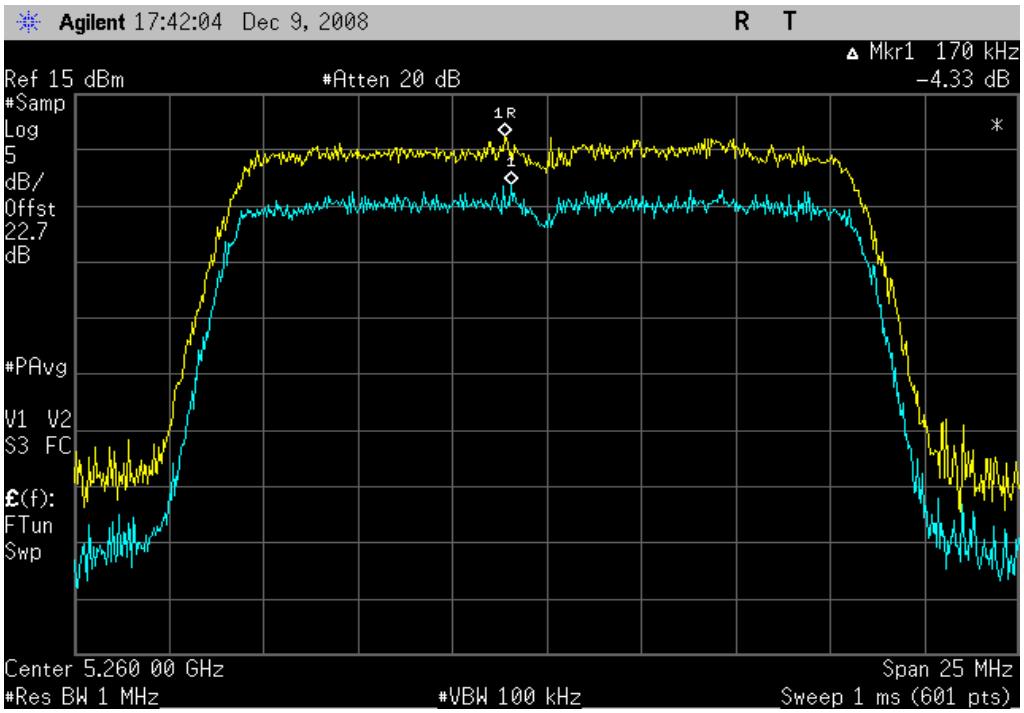
802.11(a) 36 Mbps, 5150 - 5250 MHz Band, Channel 36, Low Channel					
Result:	Pass	**Value:**	4.6 dB	**Limit:**	≤ 13 dB



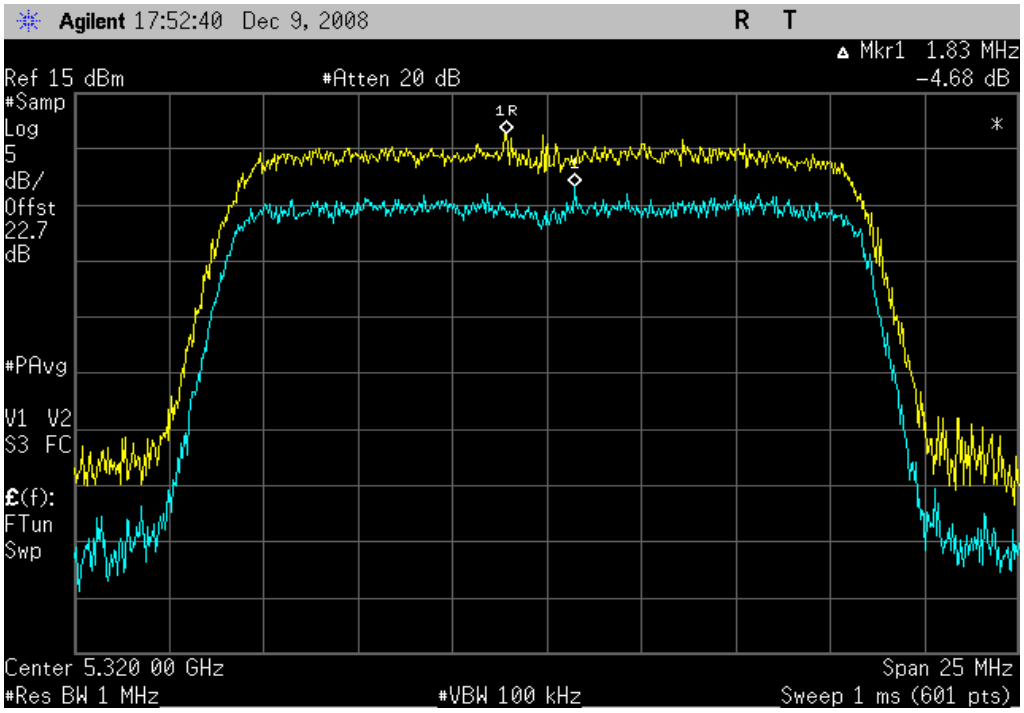
802.11(a) 36 Mbps, 5150 - 5250 MHz Band, Channel 48, High Channel					
Result:	Pass	**Value:**	4.3 dB	**Limit:**	≤ 13 dB



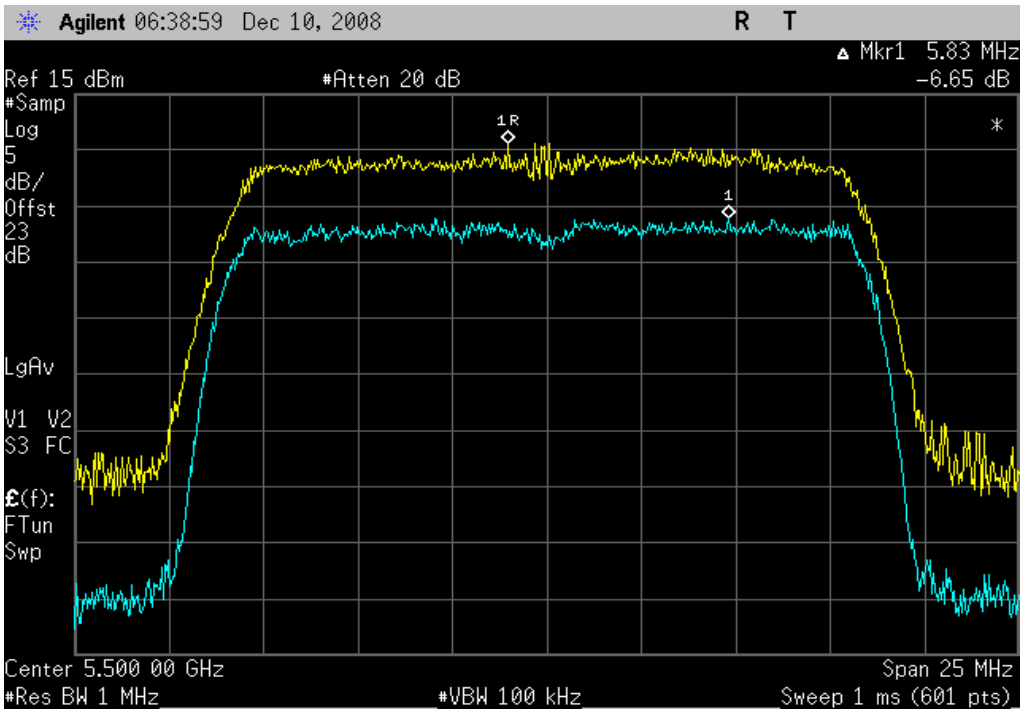
802.11(a) 36 Mbps, 5250 - 5350 MHz Band, Channel 52, Low Channel					
Result:	Pass	**Value:**	4.3 dB	**Limit:**	≤ 13 dB



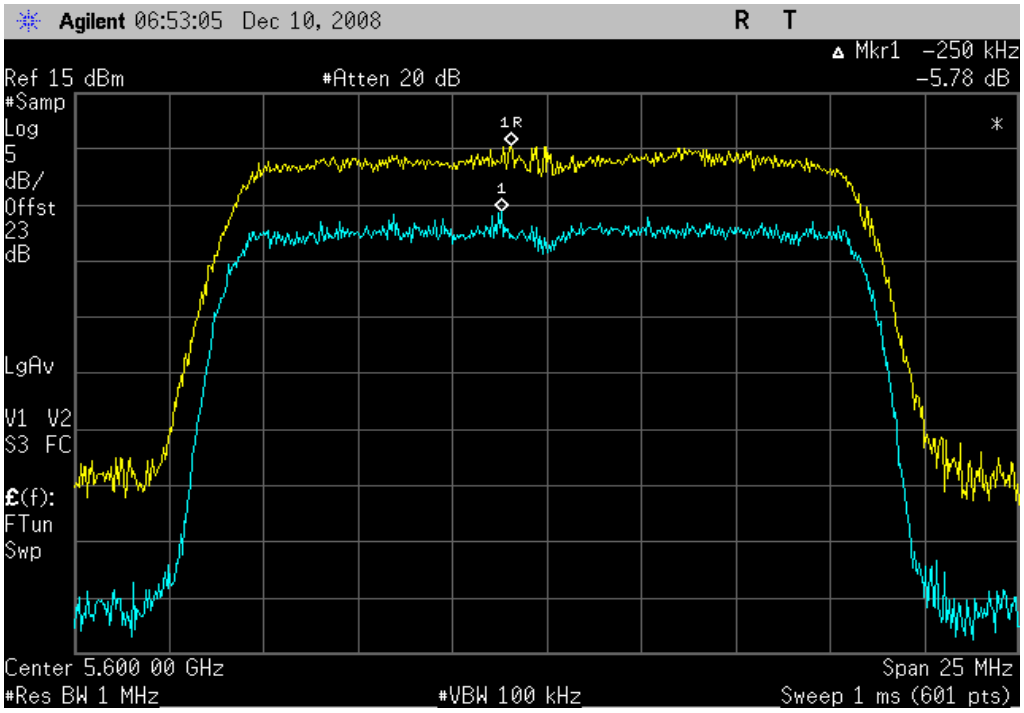
802.11(a) 36 Mbps, 5250 - 5350 MHz Band, Channel 64, High Channel					
Result:	Pass	**Value:**	4.7 dB	**Limit:**	≤ 13 dB



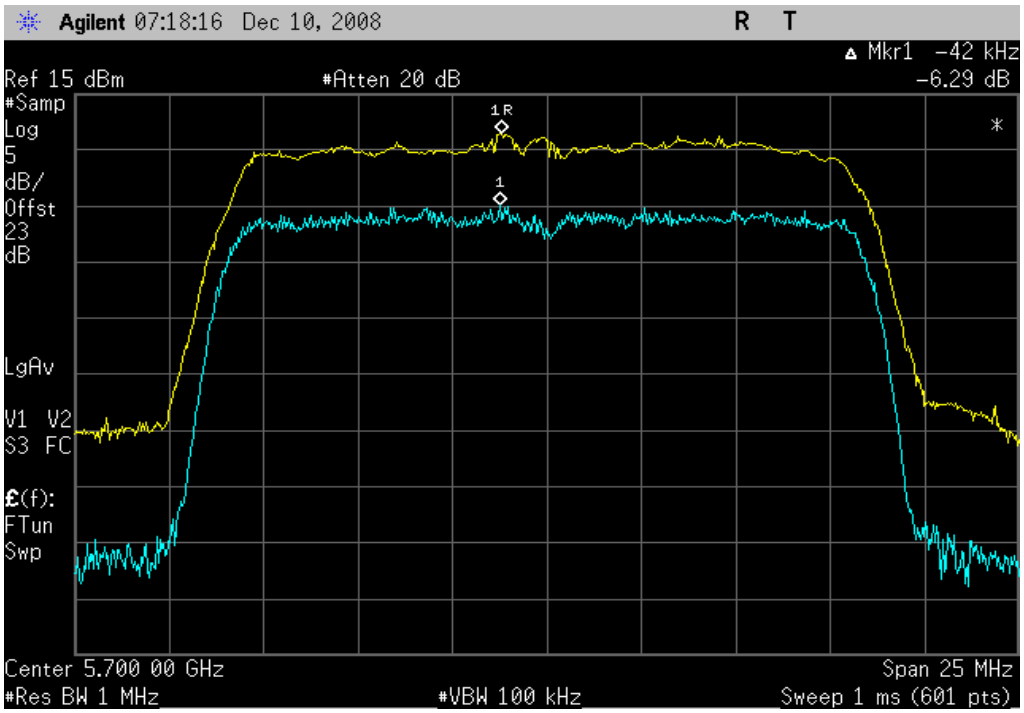
802.11(a) 36 Mbps, 5470 - 5725 MHz Band, Channel 100, Low Channel					
Result:	Pass	**Value:**	6.7 dB	**Limit:**	≤ 13 dB



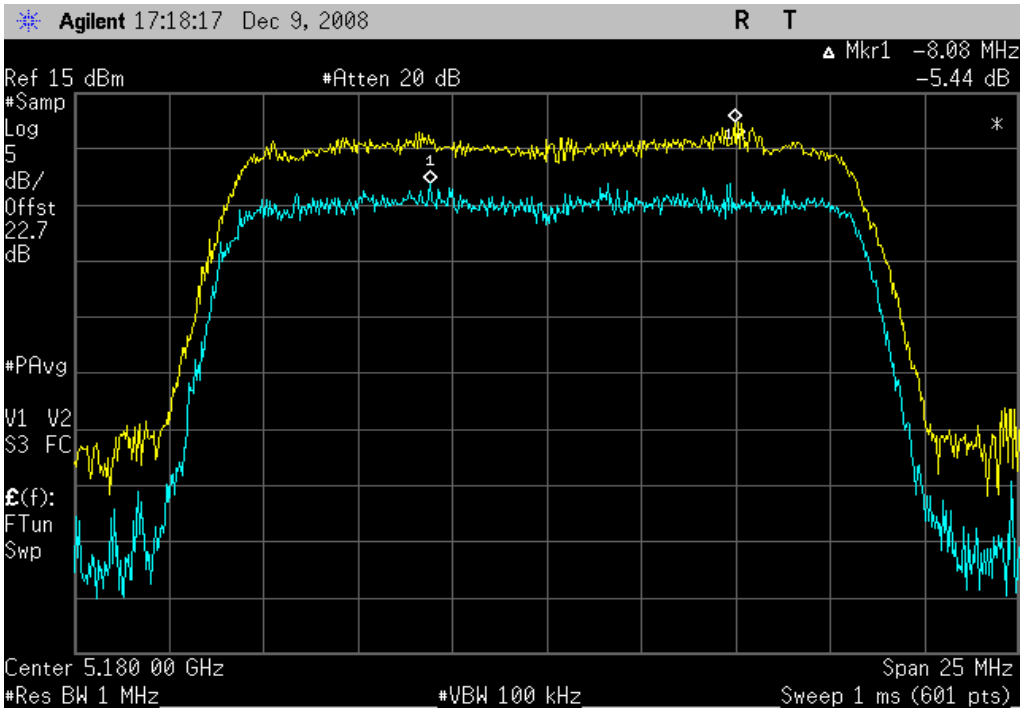
802.11(a) 36 Mbps, 5470 - 5725 MHz Band, Channel 120, Mid Channel					
Result:	Pass	**Value:**	5.8 dB	**Limit:**	≤ 13 dB



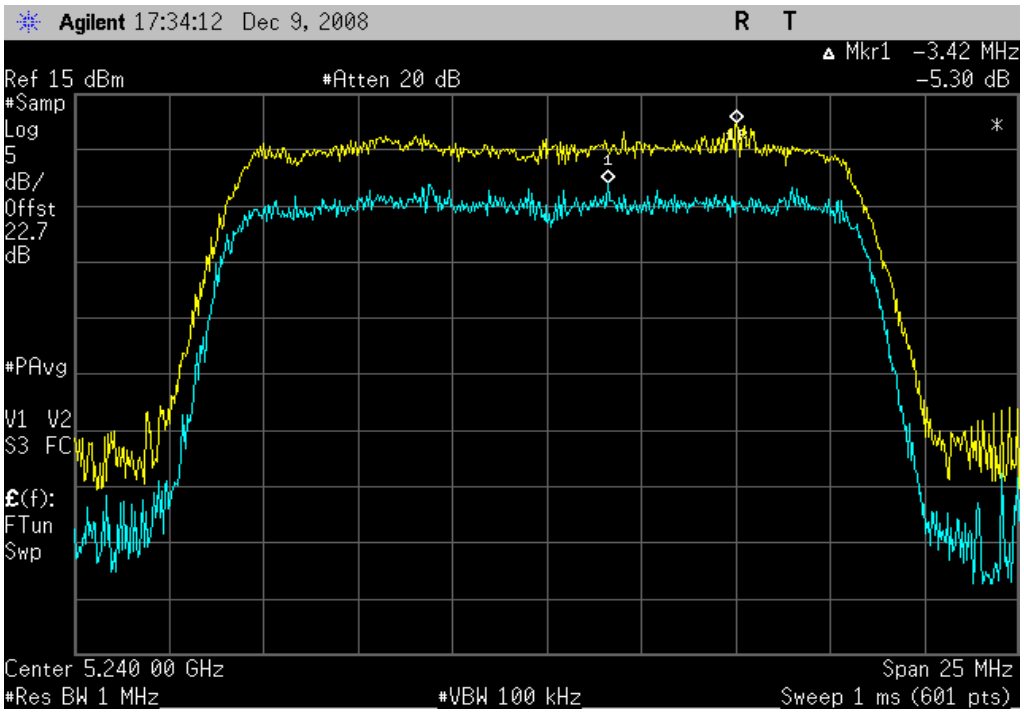
802.11(a) 36 Mbps, 5470 - 5725 MHz Band, Channel 140, High Channel					
Result:	Pass	**Value:**	6.3 dB	**Limit:**	≤ 13 dB



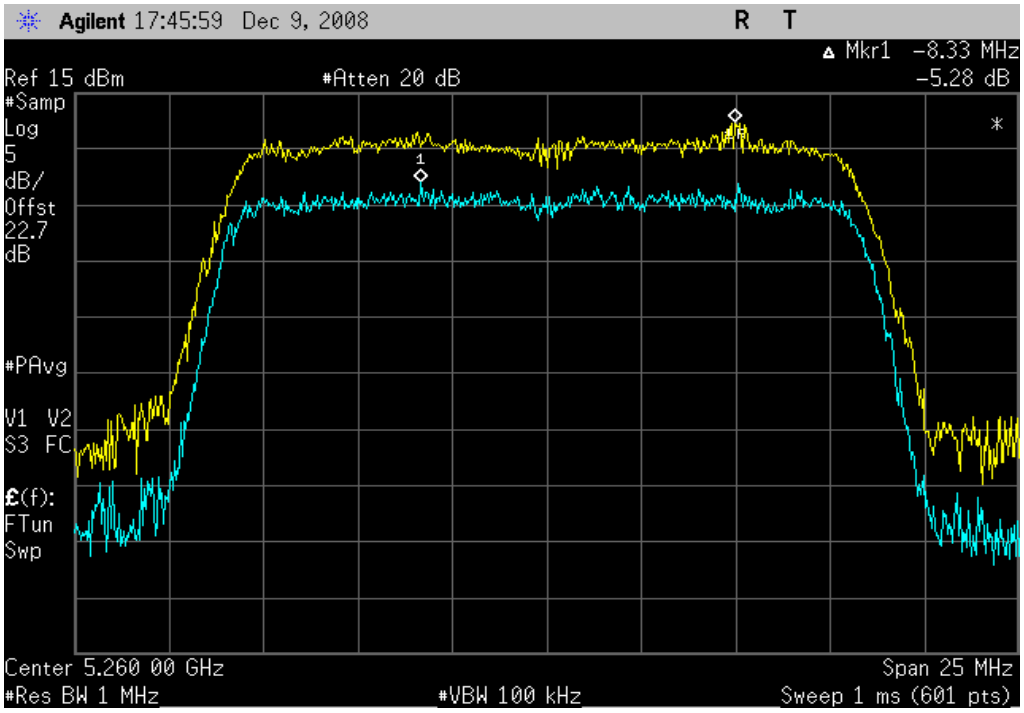
802.11(a) 54 Mbps, 5150 - 5250 MHz Band, Channel 36, Low Channel					
Result:	Pass	**Value:**	5.4 dB	**Limit:**	≤ 13 dB



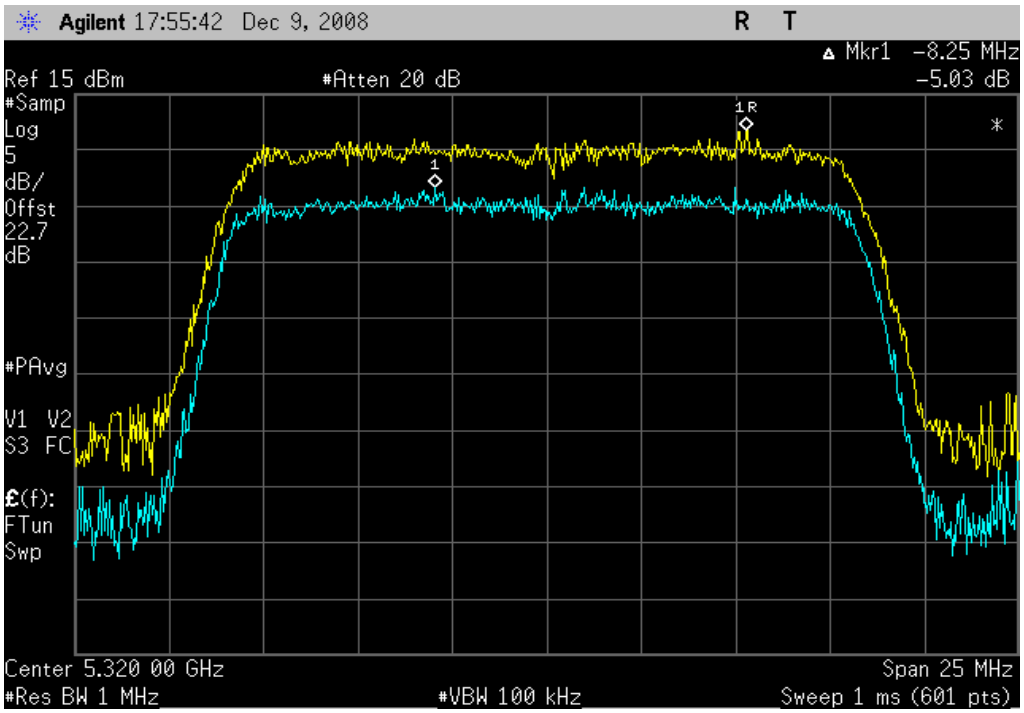
802.11(a) 54 Mbps, 5150 - 5250 MHz Band, Channel 48, High Channel					
Result:	Pass	**Value:**	5.3 dB	**Limit:**	≤ 13 dB



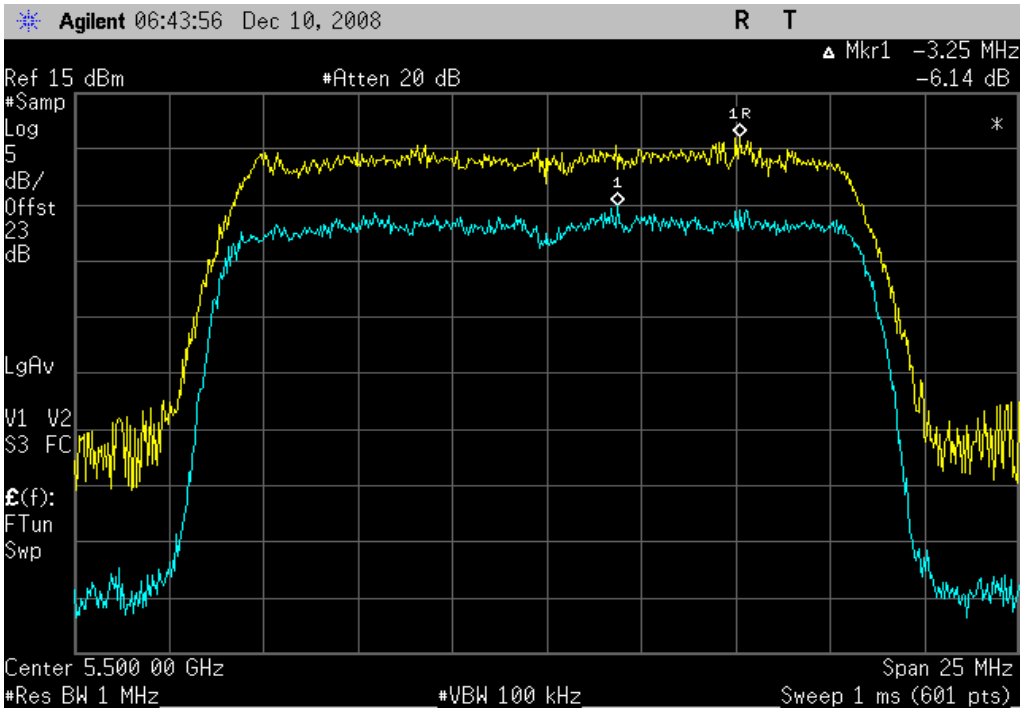
802.11(a) 54 Mbps, 5250 - 5350 MHz Band, Channel 52, Low Channel					
Result:	Pass	**Value:**	5.3 dB	**Limit:**	≤ 13 dB



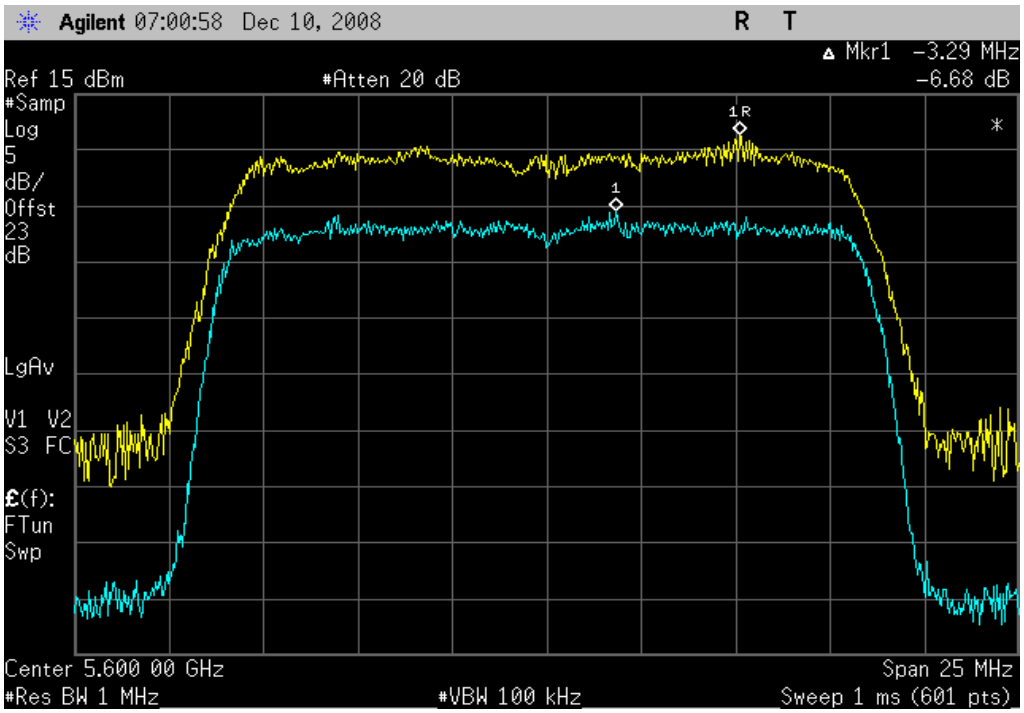
802.11(a) 54 Mbps, 5250 - 5350 MHz Band, Channel 64, High Channel					
Result:	Pass	**Value:**	5.0 dB	**Limit:**	≤ 13 dB



802.11(a) 54 Mbps, 5470 - 5725 MHz Band, Channel 100, Low Channel					
Result:	Pass	**Value:**	6.1 dB	**Limit:**	≤ 13 dB

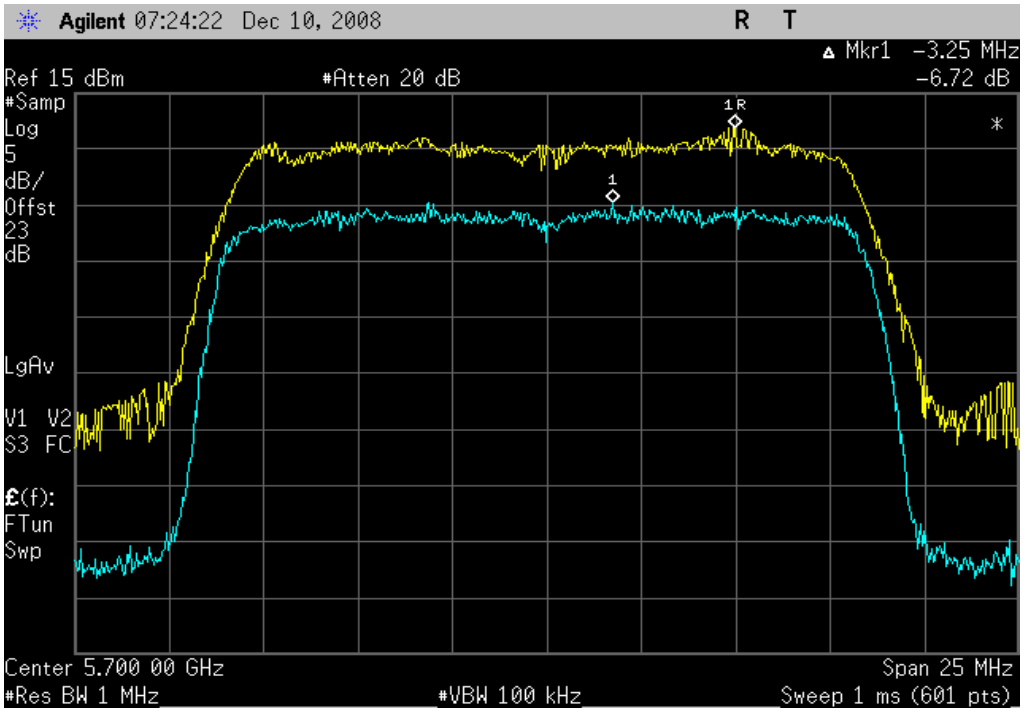


802.11(a) 54 Mbps, 5470 - 5725 MHz Band, Channel 120, Mid Channel					
Result:	Pass	**Value:**	6.7 dB	**Limit:**	≤ 13 dB



PEAK EXCURSION

802.11(a) 54 Mbps, 5470 - 5725 MHz Band, Channel 140, High Channel					
Result:	Pass	**Value:**	6.7 dB	**Limit:**	≤ 13 dB



PEAK EXCURSION

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	E4443A	AFB	11/17/2008	12
Attenuator 20 dB, SMA M/F 26GHz	S.M. Electronics	SA26B-20	AUY	6/27/2008	13
Power Meter	Gigatronics	8651A	SPM	12/7/2007	13
Power Sensor	Gigatronics	80701A	SPL	12/7/2007	13
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

FCC Public Notice DA 02-2138 was followed. The transmit frequency was set to the required channels in each band. The transmit power was set to its default maximum. A direct connection was made between the RF output of the EUT and a spectrum analyzer. Attenuation and a DC block were used. The reference level offset on the spectrum analyzer was adjusted to compensate for cable loss and the external attenuation used between the RF output and the spectrum analyzer input. The amplitude accuracy of the spectrum analyzer was further enhanced by calibrating the setup using the power meter and synthesized signal generator.

Prior to measuring peak transmit power; the emission bandwidth (B) and the transmission pulse duration (T) were measured. Both are required to determine the method of measuring Peak Transmit Power. The method of measuring the emission bandwidth and the associated data are found elsewhere in this test report. The transmission pulse duration (T) was measured using a zero span on the spectrum analyzer to see the pulses in the time domain.

Method #3 found in FCC Public Notice DA02-2138 was used because the analyzer sweep time was greater than T and the Emission Bandwidth was greater than the largest RBW on the analyzer.

The spectrum analyzer settings were as follows:

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

NORTHWEST EMC

PEAK TRANSMIT POWER

XMit 2007.06.13

EUT:	DDIB			**Work Order:**	INMC0500
Serial Number:	Proto 13			**Date:**	12/09/08
Customer:	Intermec Technologies Corporation			**Temperature:**	21°C
Attendees:	None			**Humidity:**	35%
Project:	None			**Barometric Pres.:**	30.34
Tested by:	Rod Peloquin	**Power:**	3.3Vdc via Host	**Job Site:**	EV06

TEST SPECIFICATIONS	Test Method
FCC 15.407:2008	ANSI C63.4:2003 DA 02-2138:2002

COMMENTS

None

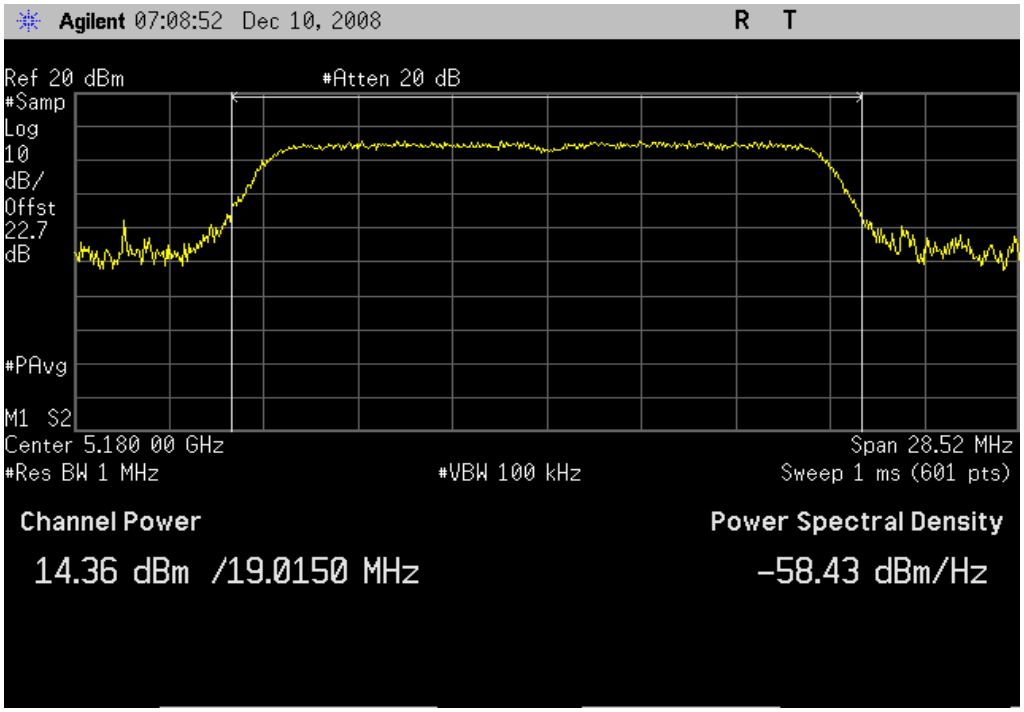
DEVIATIONS FROM TEST STANDARD

No Deviations

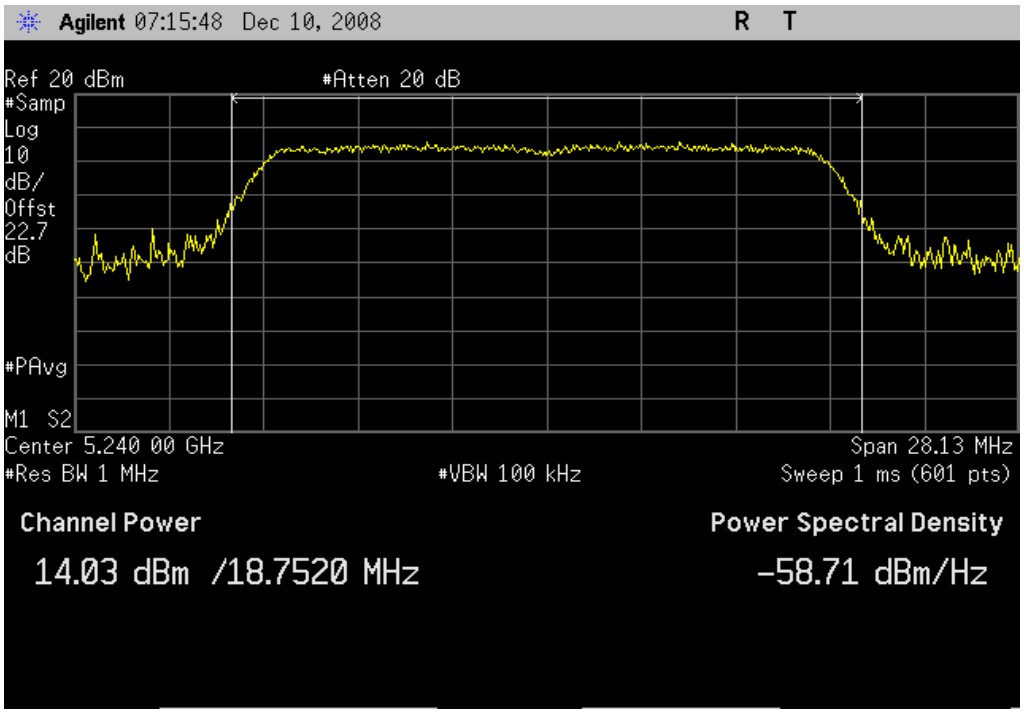
Configuration #	4	*Signature*

		Value	Limit	Results
802.11(a) 6 Mbps				
	5150 - 5250 MHz Band			
	Channel 36, Low Channel	14.4 dBm	17 dBm	Pass
	Channel 48, High Channel	14.0 dBm	17 dBm	Pass
	5250 - 5350 MHz Band			
	Channel 52, Low Channel	14.2 dBm	24 dBm	Pass
	Channel 64, High Channel	14.0 dBm	24 dBm	Pass
	5470 - 5725 MHz Band			
	Channel 100, Low Channel	13.4 dBm	24 dBm	Pass
	Channel 120, Mid Channel	13.4 dBm	24 dBm	Pass
	Channel 140, High Channel	13.8 dBm	24 dBm	Pass
802.11(a) 36 Mbps				
	5150 - 5250 MHz Band			
	Channel 36, Low Channel	12.4 dBm	17 dBm	Pass
	Channel 48, High Channel	12.3 dBm	17 dBm	Pass
	5250 - 5350 MHz Band			
	Channel 52, Low Channel	12.2 dBm	24 dBm	Pass
	Channel 64, High Channel	12.4 dBm	24 dBm	Pass
	5470 - 5725 MHz Band			
	Channel 100, Low Channel	11.8 dBm	24 dBm	Pass
	Channel 120, Mid Channel	11.5 dBm	24 dBm	Pass
	Channel 140, High Channel	11.9 dBm	24 dBm	Pass
802.11(a) 54 Mbps				
	5150 - 5250 MHz Band			
	Channel 36, Low Channel	10.5 dBm	17 dBm	Pass
	Channel 48, High Channel	10.5 dBm	17 dBm	Pass
	5250 - 5350 MHz Band			
	Channel 52, Low Channel	10.7 dBm	24 dBm	Pass
	Channel 64, High Channel	10.6 dBm	24 dBm	Pass
	5470 - 5725 MHz Band			
	Channel 100, Low Channel	10.0 dBm	24 dBm	Pass
	Channel 120, Mid Channel	9.4 dBm	24 dBm	Pass
	Channel 140, High Channel	10.0 dBm	24 dBm	Pass

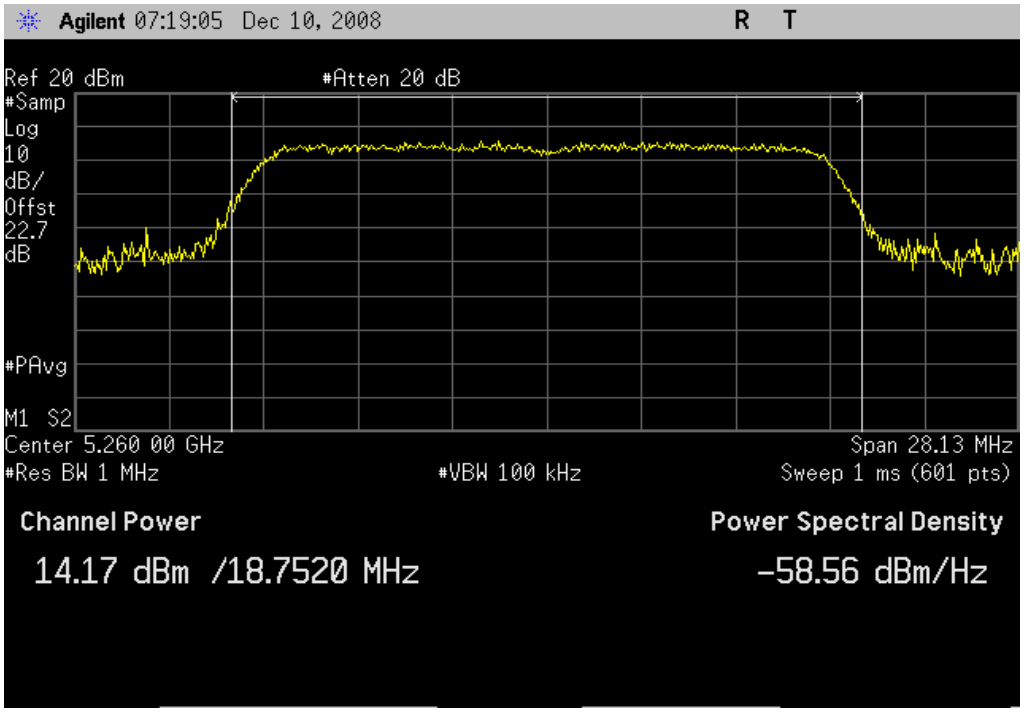
802.11(a) 6 Mbps, 5150 - 5250 MHz Band, Channel 36, Low Channel					
Result:	Pass	**Value:**	14.4 dBm	**Limit:**	17 dBm



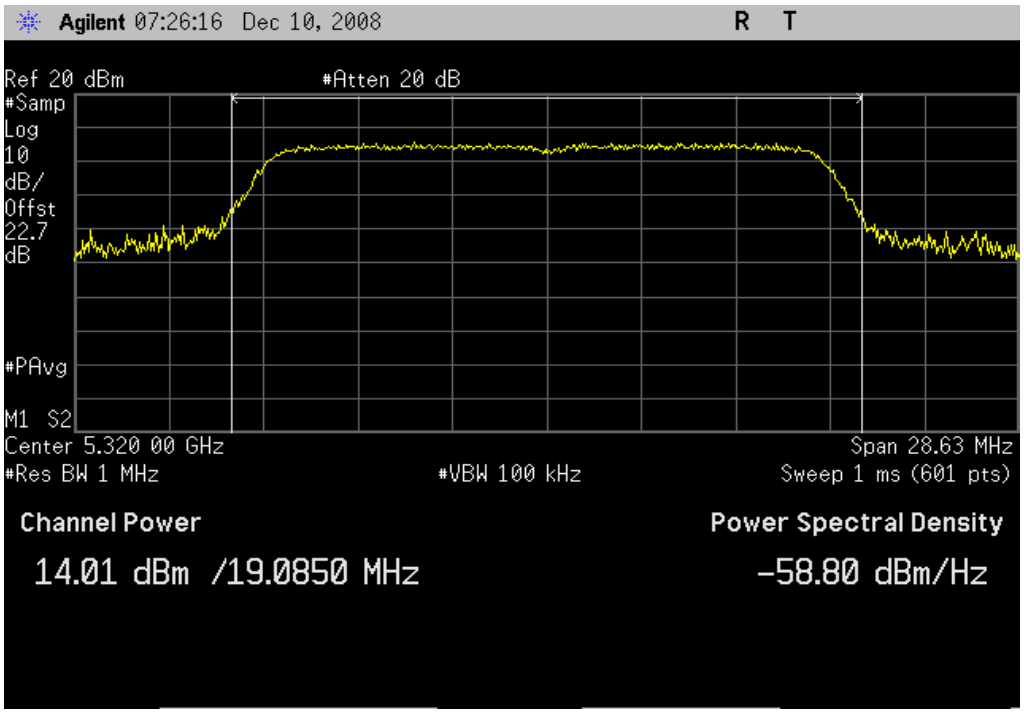
802.11(a) 6 Mbps, 5150 - 5250 MHz Band, Channel 48, High Channel					
Result:	Pass	**Value:**	14.0 dBm	**Limit:**	17 dBm



802.11(a) 6 Mbps, 5250 - 5350 MHz Band, Channel 52, Low Channel					
Result:	Pass	**Value:**	14.2 dBm	**Limit:**	24 dBm

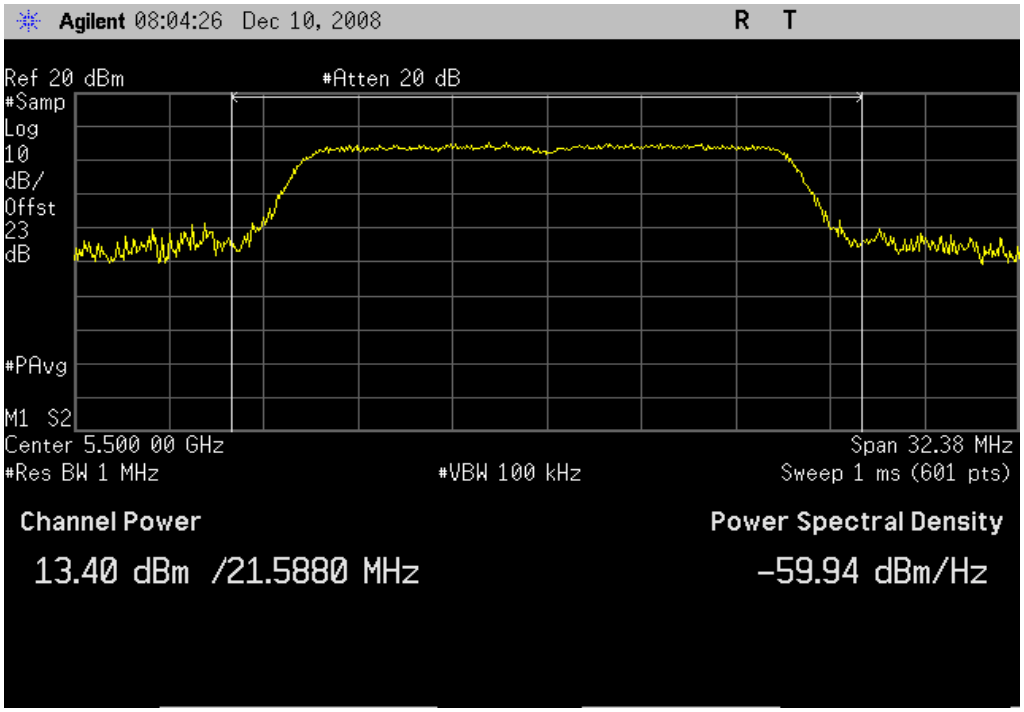


802.11(a) 6 Mbps, 5250 - 5350 MHz Band, Channel 64, High Channel					
Result:	Pass	**Value:**	14.0 dBm	**Limit:**	24 dBm

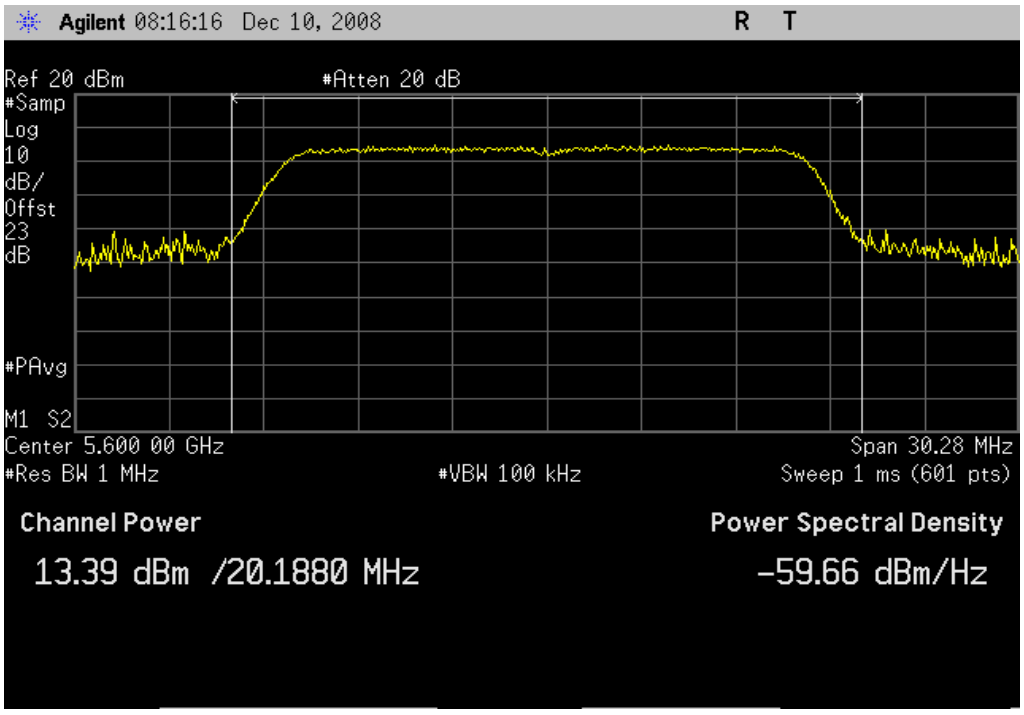


PEAK TRANSMIT POWER

802.11(a) 6 Mbps, 5470 - 5725 MHz Band, Channel 100, Low Channel					
Result:	Pass	**Value:**	13.4 dBm	**Limit:**	24 dBm

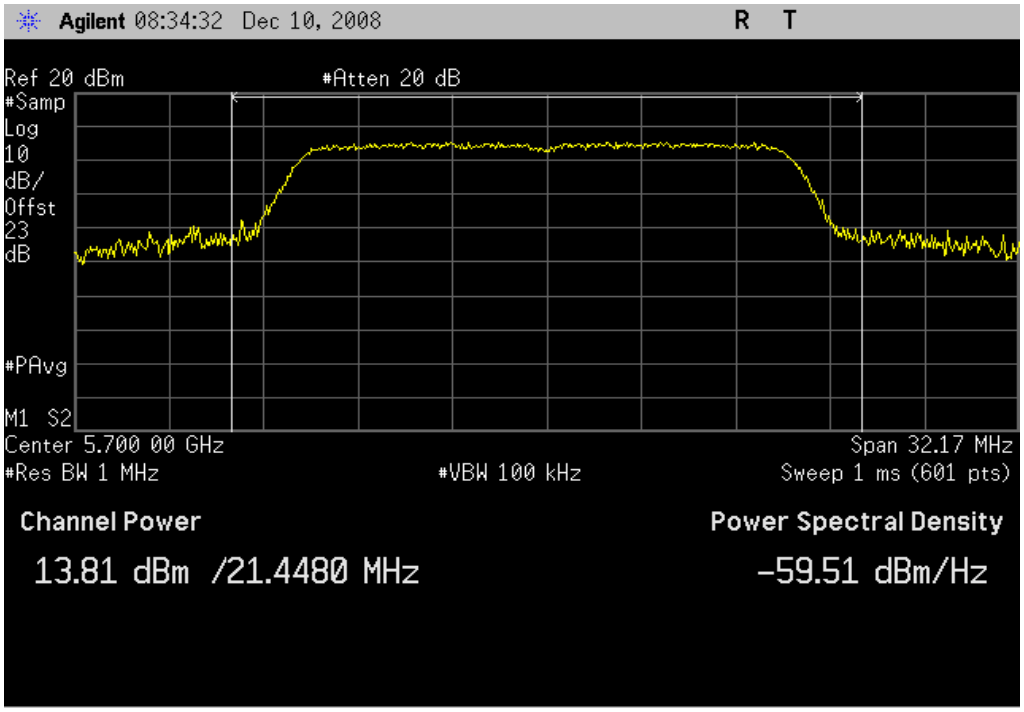


802.11(a) 6 Mbps, 5470 - 5725 MHz Band, Channel 120, Mid Channel					
Result:	Pass	**Value:**	13.4 dBm	**Limit:**	24 dBm

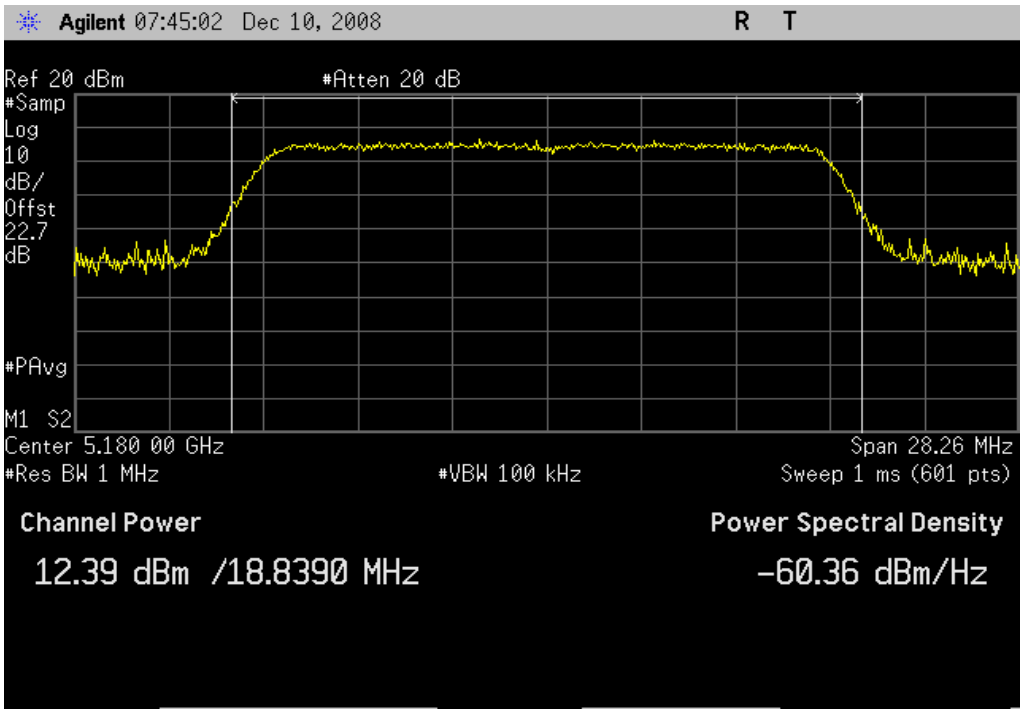


PEAK TRANSMIT POWER

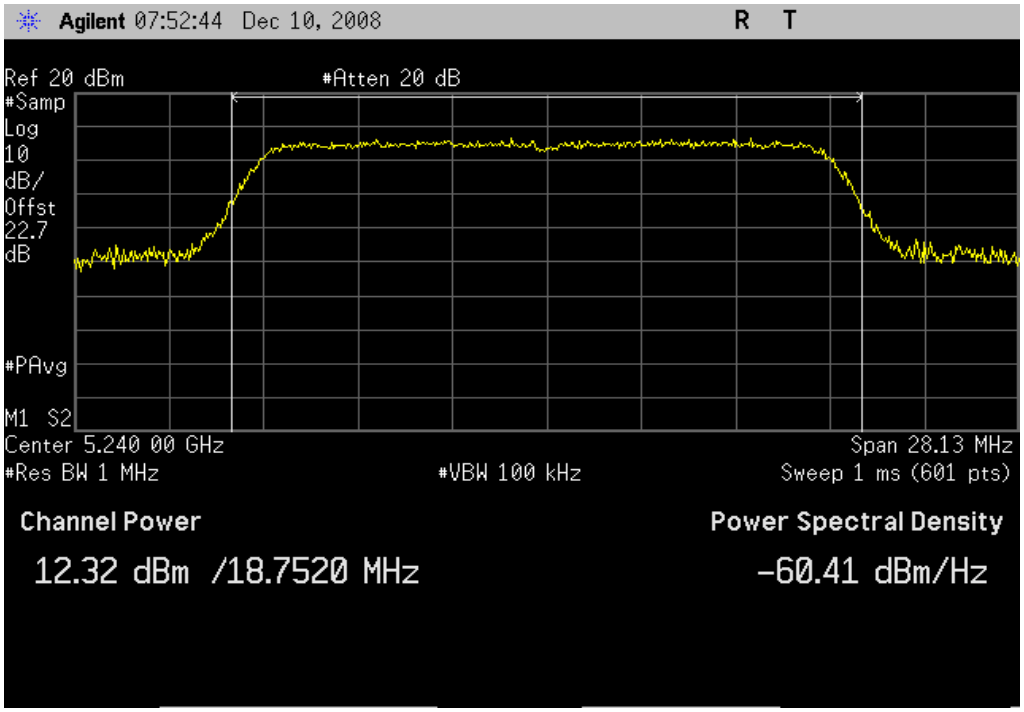
802.11(a) 6 Mbps, 5470 - 5725 MHz Band, Channel 140, High Channel					
Result:	Pass	**Value:**	13.8 dBm	**Limit:**	24 dBm



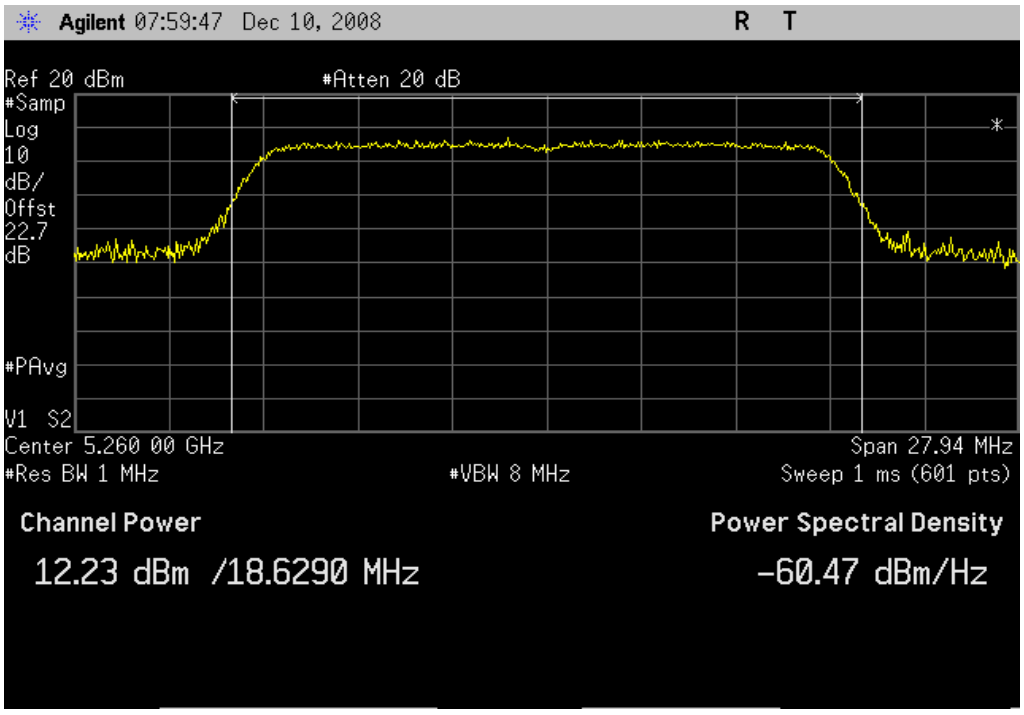
802.11(a) 36 Mbps, 5150 - 5250 MHz Band, Channel 36, Low Channel					
Result:	Pass	**Value:**	12.4 dBm	**Limit:**	17 dBm



802.11(a) 36 Mbps, 5150 - 5250 MHz Band, Channel 48, High Channel					
Result:	Pass	**Value:**	12.3 dBm	**Limit:**	17 dBm

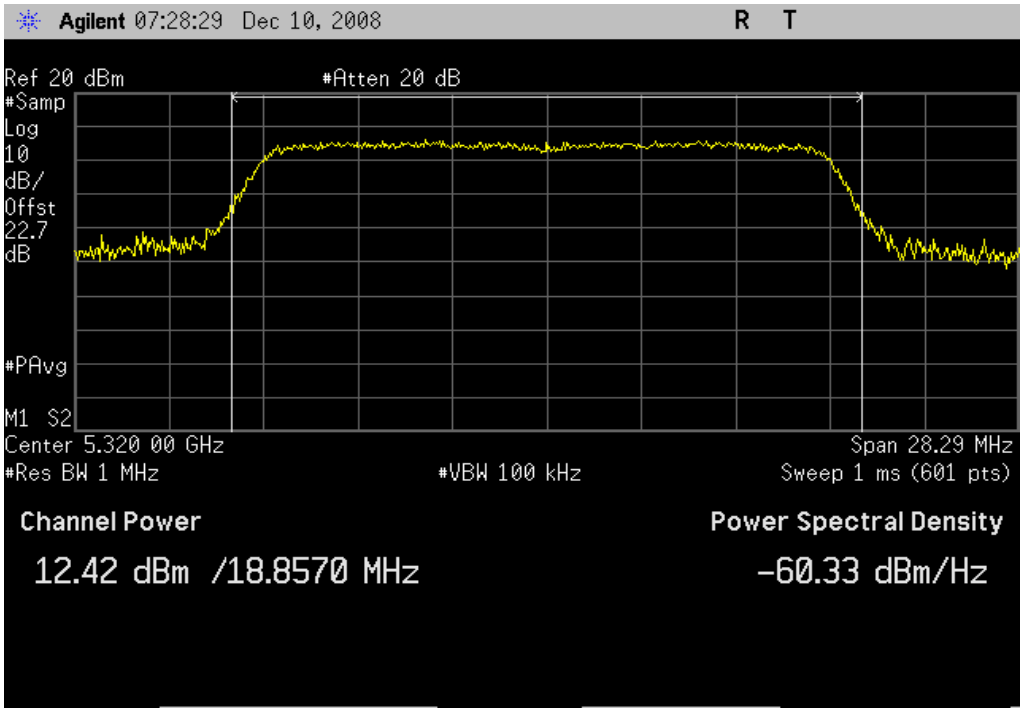


802.11(a) 36 Mbps, 5250 - 5350 MHz Band, Channel 52, Low Channel					
Result:	Pass	**Value:**	12.2 dBm	**Limit:**	24 dBm

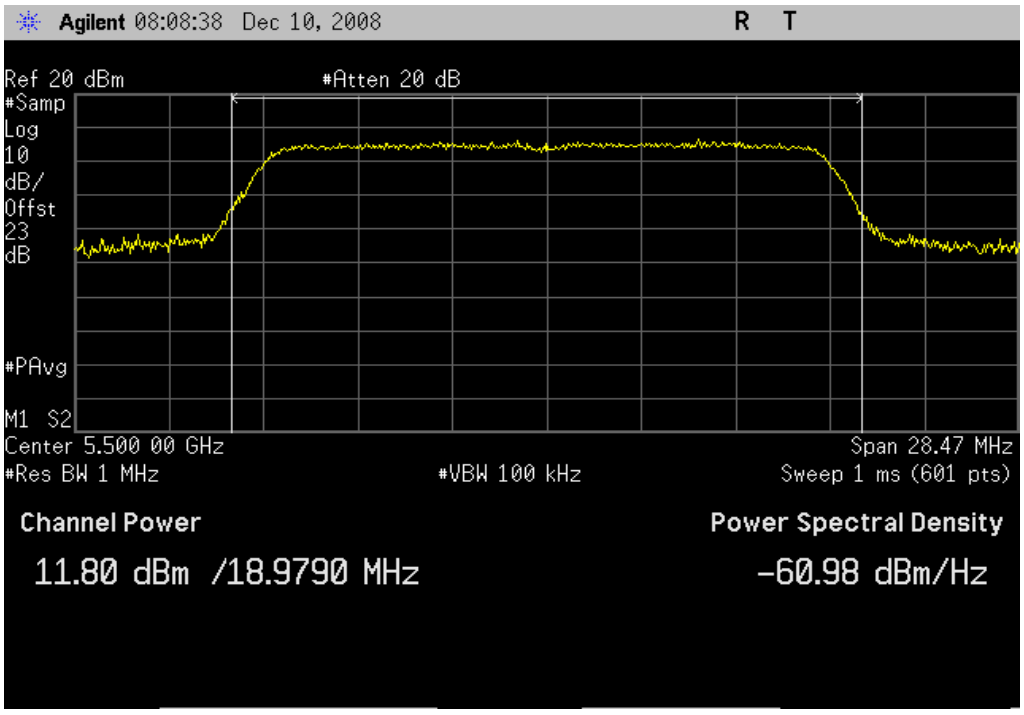


PEAK TRANSMIT POWER

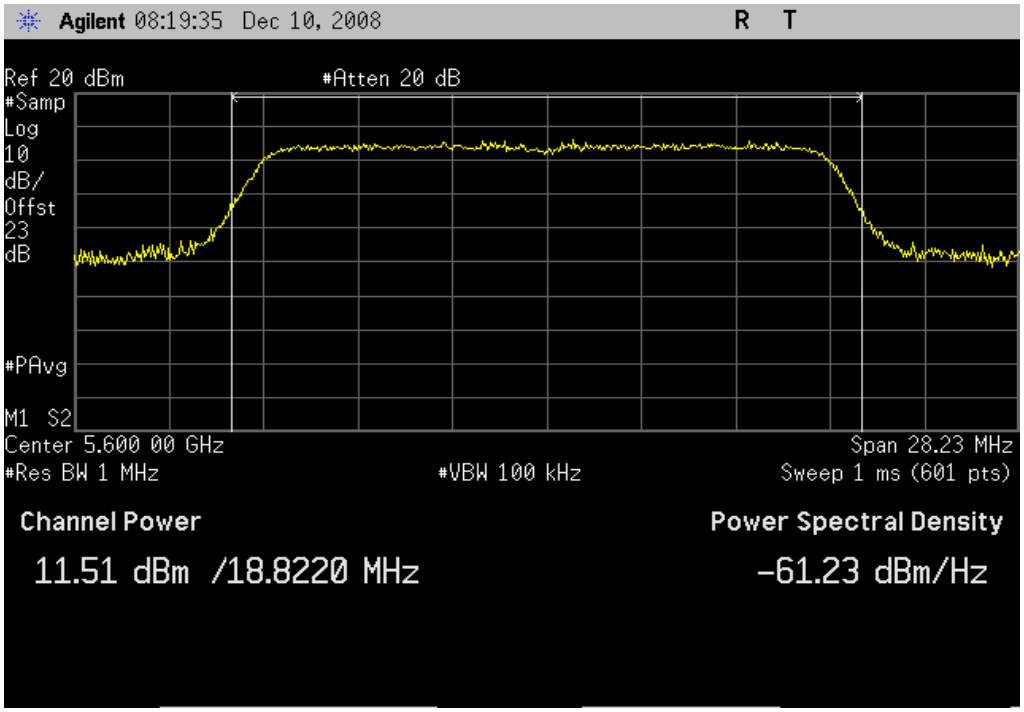
802.11(a) 36 Mbps, 5250 - 5350 MHz Band, Channel 64, High Channel					
Result:	Pass	**Value:**	12.4 dBm	**Limit:**	24 dBm



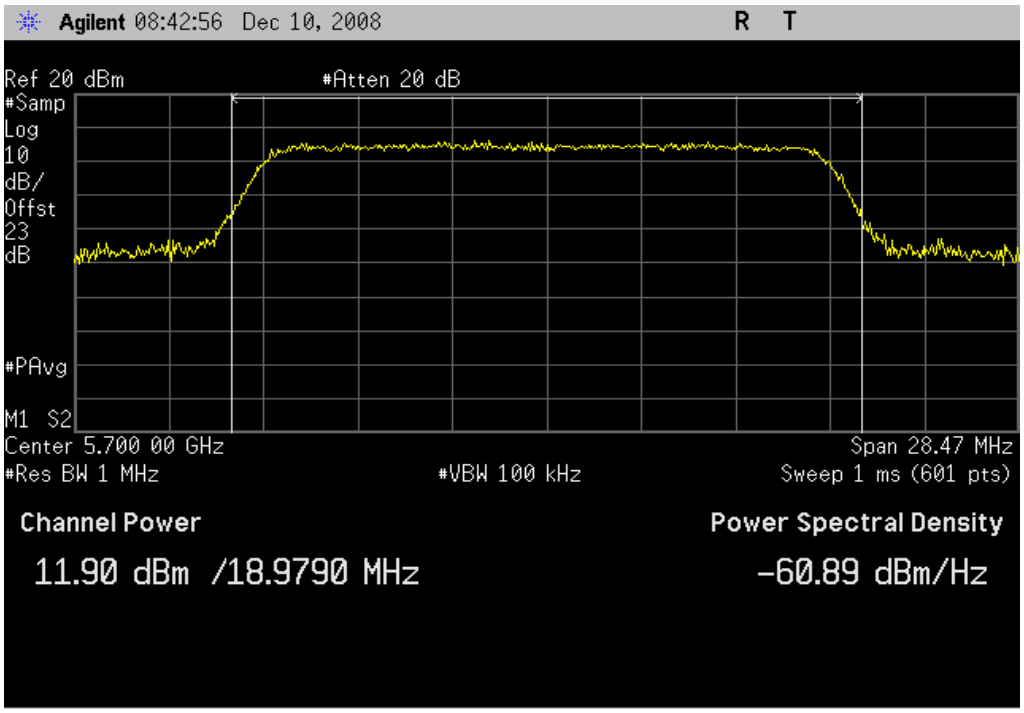
802.11(a) 36 Mbps, 5470 - 5725 MHz Band, Channel 100, Low Channel					
Result:	Pass	**Value:**	11.8 dBm	**Limit:**	24 dBm



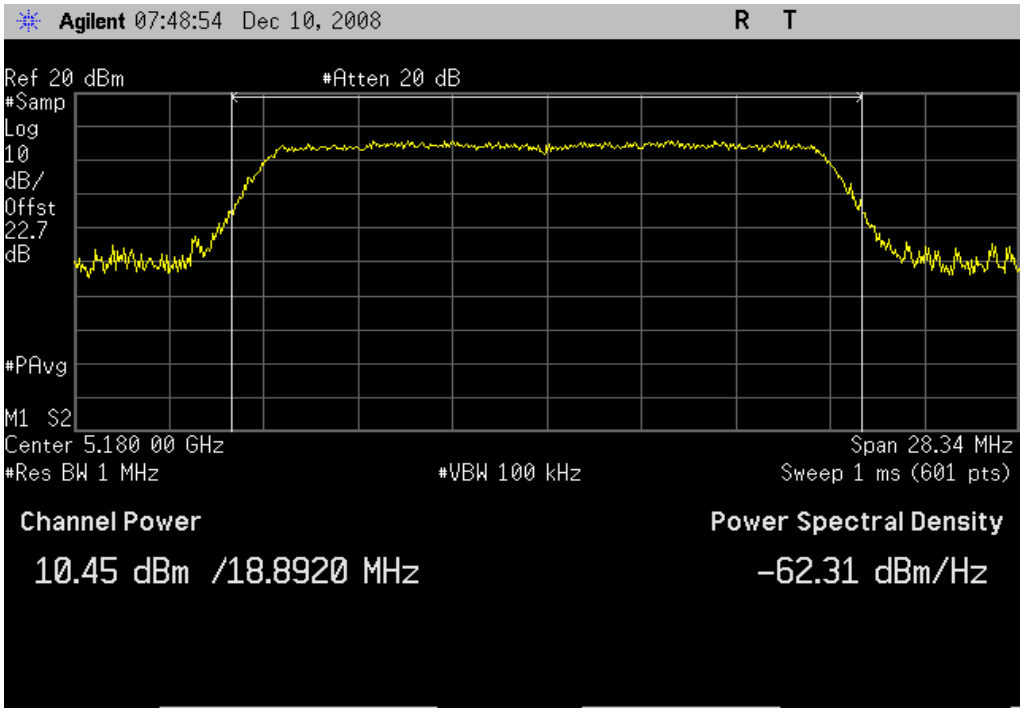
802.11(a) 36 Mbps, 5470 - 5725 MHz Band, Channel 120, Mid Channel					
Result:	Pass	**Value:**	11.5 dBm	**Limit:**	24 dBm



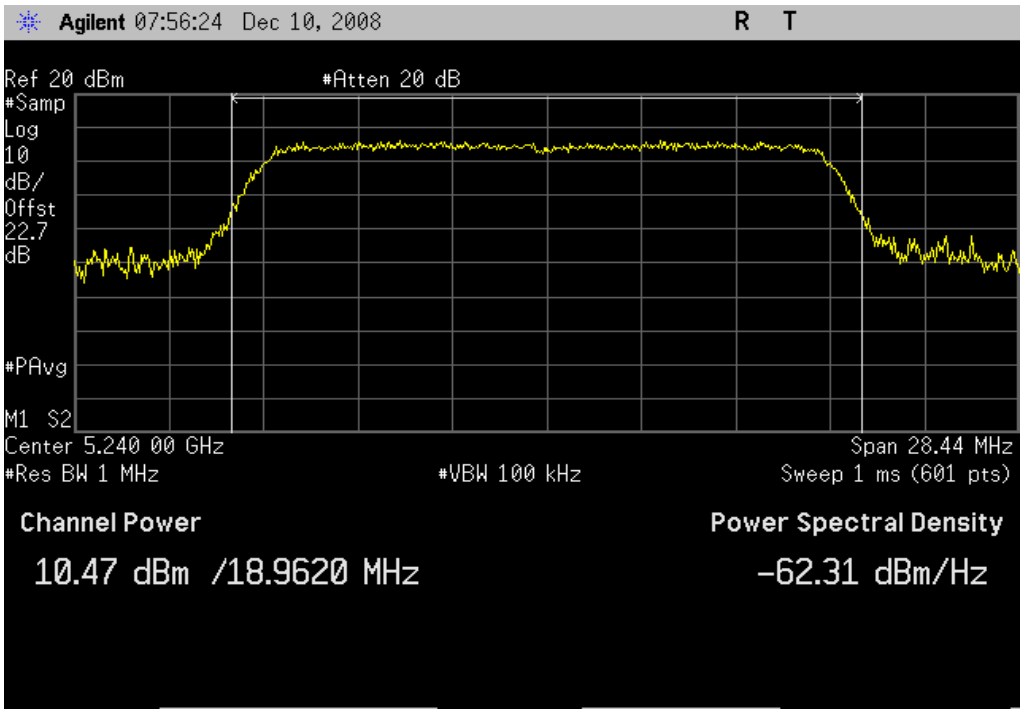
802.11(a) 36 Mbps, 5470 - 5725 MHz Band, Channel 140, High Channel					
Result:	Pass	**Value:**	11.9 dBm	**Limit:**	24 dBm



802.11(a) 54 Mbps, 5150 - 5250 MHz Band, Channel 36, Low Channel					
Result:	Pass	**Value:**	10.5 dBm	**Limit:**	17 dBm

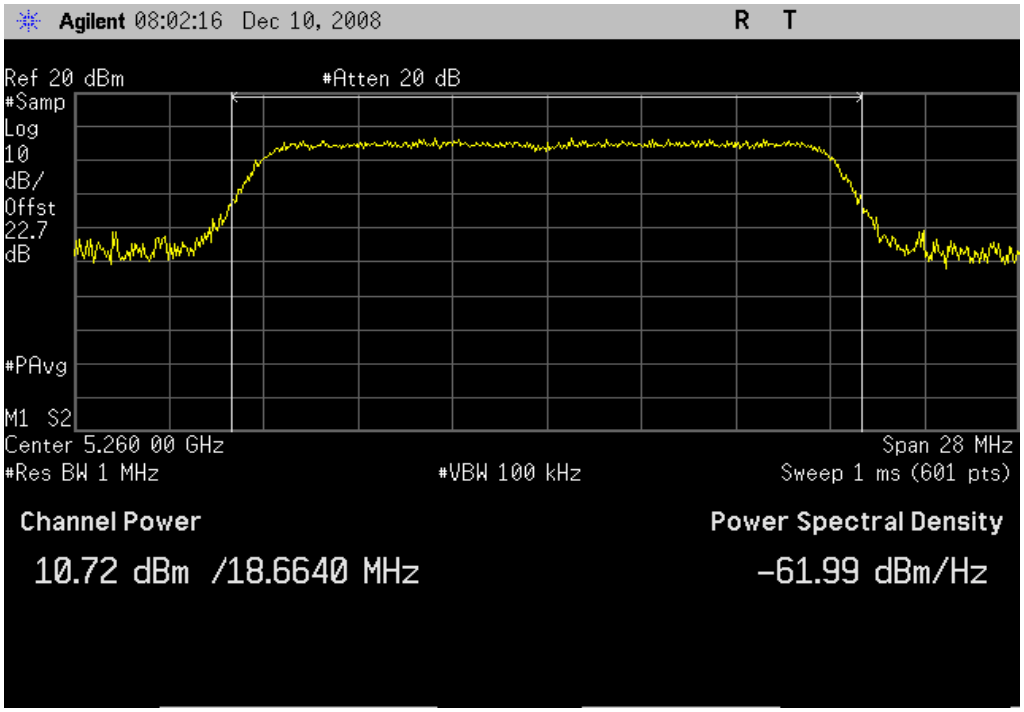


802.11(a) 54 Mbps, 5150 - 5250 MHz Band, Channel 48, High Channel					
Result:	Pass	**Value:**	10.5 dBm	**Limit:**	17 dBm

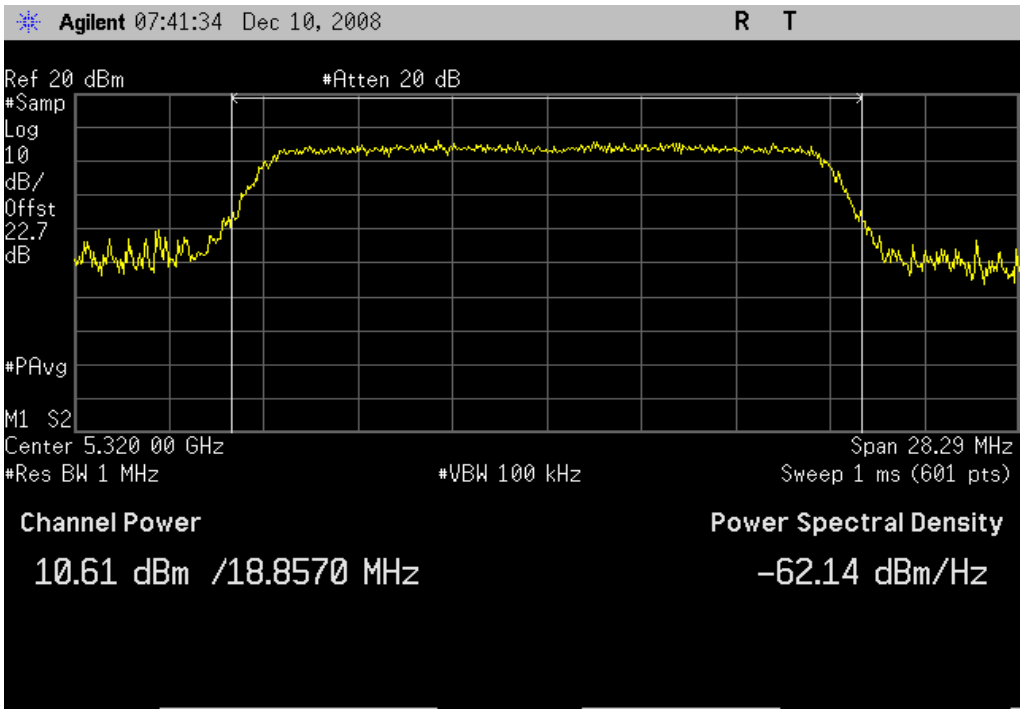


PEAK TRANSMIT POWER

802.11(a) 54 Mbps, 5250 - 5350 MHz Band, Channel 52, Low Channel					
Result:	Pass	**Value:**	10.7 dBm	**Limit:**	24 dBm

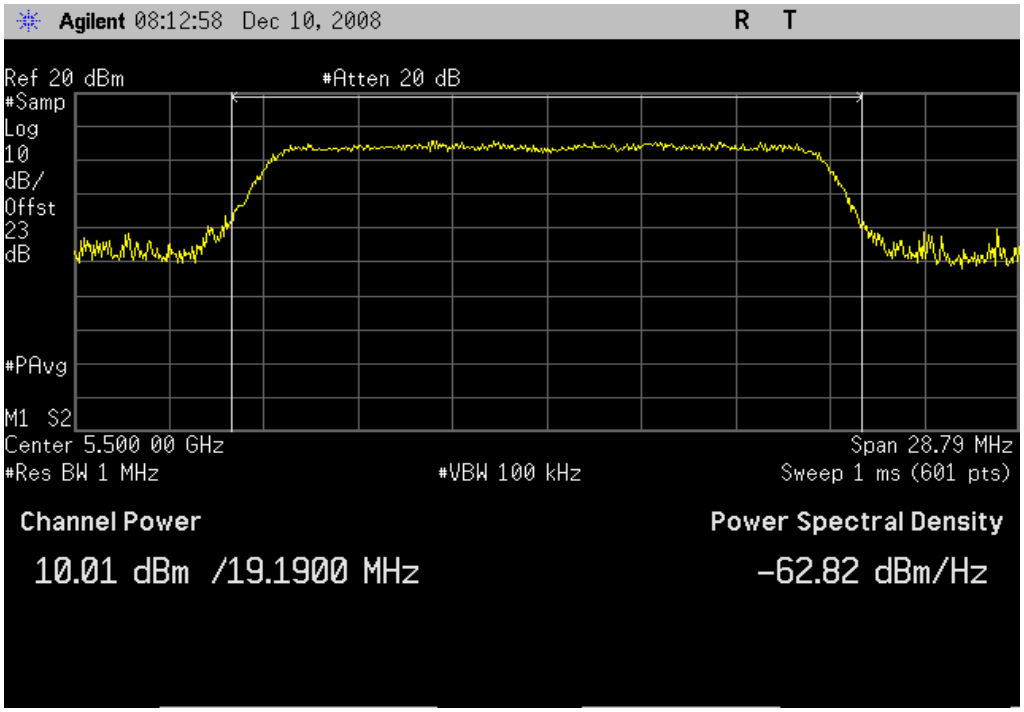


802.11(a) 54 Mbps, 5250 - 5350 MHz Band, Channel 64, High Channel					
Result:	Pass	**Value:**	10.6 dBm	**Limit:**	24 dBm

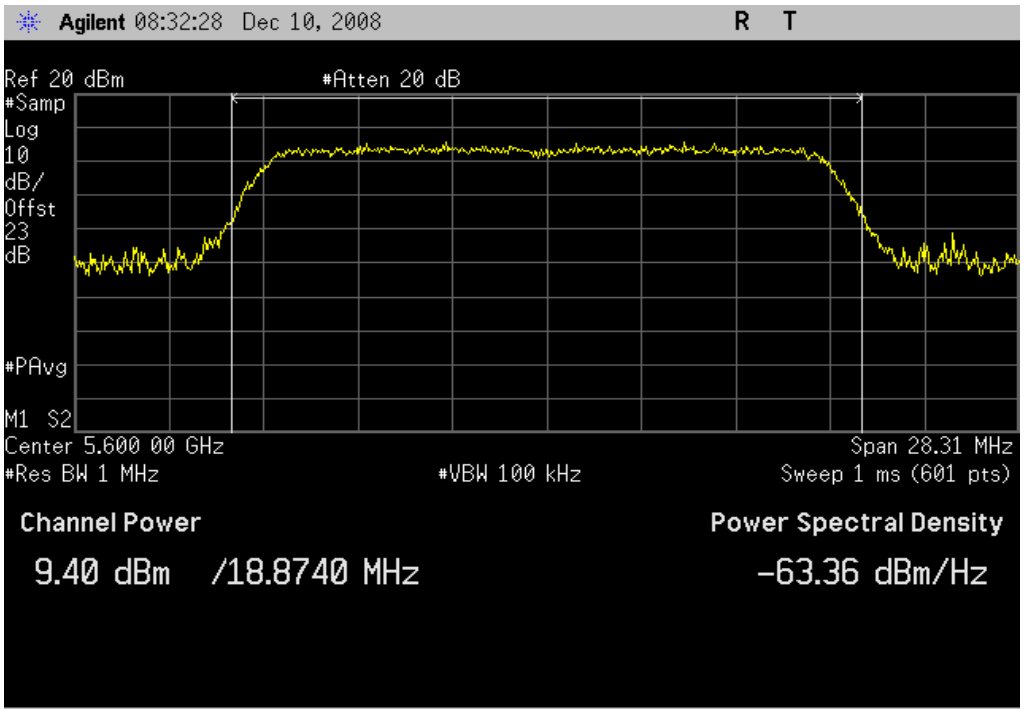


PEAK TRANSMIT POWER

802.11(a) 54 Mbps, 5470 - 5725 MHz Band, Channel 100, Low Channel					
Result:	Pass	**Value:**	10.0 dBm	**Limit:**	24 dBm

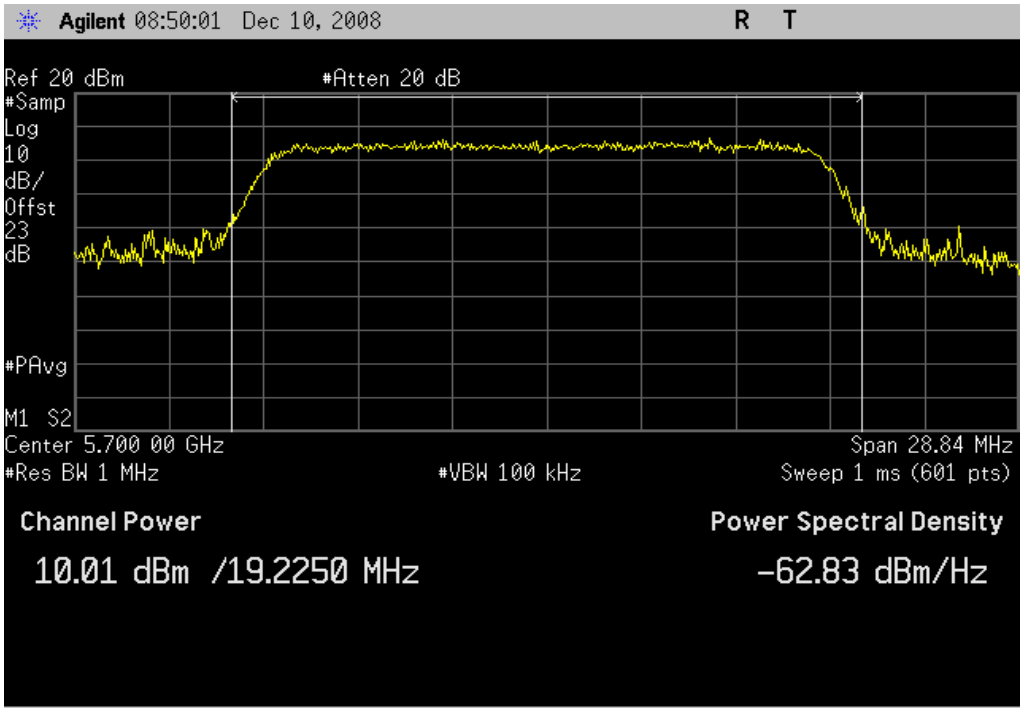


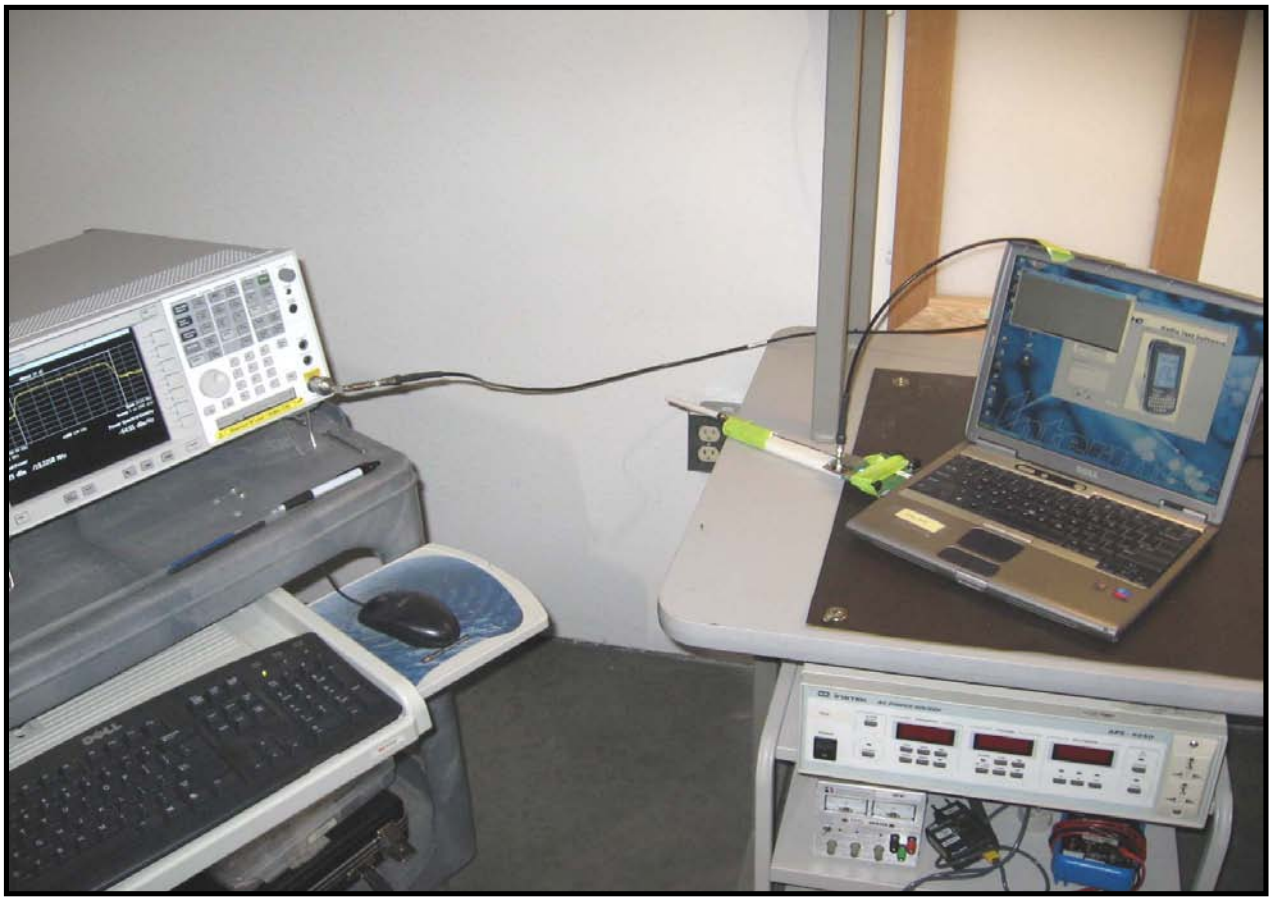
802.11(a) 54 Mbps, 5470 - 5725 MHz Band, Channel 120, Mid Channel					
Result:	Pass	**Value:**	9.4 dBm	**Limit:**	24 dBm



PEAK TRANSMIT POWER

802.11(a) 54 Mbps, 5470 - 5725 MHz Band, Channel 140, High Channel					
Result:	Pass	**Value:**	10.0 dBm	**Limit:**	24 dBm





FREQUENCY STABILITY

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
Multimeter	Tektronix	DMM912	MMH	12/8/2007	13
DC Power Supply	Topward	TPS-2000	TPD	NCR	0
Chamber, Temp./Humidity Chamber	Cincinnati Sub Zero (CSZ)	ZH-32-2-2-H/AC	TBA	7/23/2008	12
Chamber Temp. & Humidity Controller	ESZ / Eurotherm	Dimension II	TBC	7/23/2008	12

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

Variation of Supply Voltage

The primary supply voltage was varied over the range specified by the client. Per the client, the chip only works over this voltage range; it will shut off if the voltage is outside the specified range.

Variation of Ambient Temperature

Using a temperature chamber, the transmit frequency was recorded at the extremes of the specified temperature range (-30 ° to +50° C) and at 10°C intervals.

A direct connect measurement was made between the EUT's antenna cable and a spectrum analyzer. The spectrum analyzer is equipped with a precision frequency reference that exceeds the stability requirement of the EUT. Measurements were made at the mid channel of each band to determine frequency stability. If the frequency variation is less than 100 ppm, the EUT will meet the requirement of 15.407(g), that the emissions are maintained within the band of operation.

NORTHWEST EMC

FREQUENCY STABILITY

XMit 2007.06.13

EUT:	DDIB	Work Order:	INMC0500
Serial Number:	000B6B8D347E	Date:	12/12/08
Customer:	Intermec Technologies Corporation	Temperature:	22°C
Attendees:	None	Humidity:	33%
Project:	None	Barometric Pres.:	30.01
Tested by:	Rod Peloquin	Power: 3.3Vdc via Host	Job Site: EV06 & EV09

TEST SPECIFICATIONS	Test Method
FCC 15.407:2008	ANSI C63.4:2003 DA 02-2138:2002

COMMENTS

Radio operating in CK3 hand held computer

DEVIATIONS FROM TEST STANDARD

No Deviations

Configuration #	5	Signature

	Value	Limit	Results

Mid Channel, 5150 MHz - 5250 MHz Band

Frequency Stability with Variation of DC Voltage (Ambient Temperature = 20°C)

Voltage (VDC)	Assigned Frequency (MHz)	Measured Frequency (MHz)	Tolerance (ppm)	Specification (ppm)
4.2 (115%)	5200.000000	5199.957280	8.22	n/a
3.7 (100%)	5200.000000	5199.957560	8.16	n/a
3.2 (85%)	5200.000000	5199.956300	8.40	n/a

Frequency Stability with Variation of Ambient Temperature (Primary Supply = 3.7 VDC)

Temp (°C)	Assigned Frequency (MHz)	Measured Frequency (MHz)	Tolerance (ppm)	Specification (ppm)
50	5200.000000	5199.952660	9.10	n/a
40	5200.000000	5199.953110	9.02	n/a
30	5200.000000	5199.958370	8.01	n/a
20	5200.000000	5199.957560	8.16	n/a
10	5200.000000	5199.975350	4.74	n/a
0	5200.000000	5199.986000	2.69	n/a
-10	5200.000000	5199.991930	1.55	n/a
-20	5200.000000	5199.996910	0.59	n/a
-30	5200.000000	5199.993220	1.30	n/a

Mid Channel, 5250 MHz - 5350 MHz Band

Frequency Stability with Variation of DC Voltage (Ambient Temperature = 3.7 VDC)

Voltage (VDC)	Assigned Frequency (MHz)	Measured Frequency (MHz)	Tolerance (ppm)	Specification (ppm)
4.2 (115%)	5300.000000	5299.957440	8.03	n/a
3.7 (100%)	5300.000000	5299.957570	8.01	n/a
3.2 (85%)	5300.000000	5299.957220	8.07	n/a

Frequency Stability with Variation of Ambient Temperature (Primary Supply = 120 VAC)

Temp (°C)	Assigned Frequency (MHz)	Measured Frequency (MHz)	Tolerance (ppm)	Specification (ppm)
50	5300.000000	5299.951970	9.06	n/a
40	5300.000000	5299.952550	8.95	n/a
30	5300.000000	5299.957350	8.05	n/a
20	5300.000000	5299.957570	8.01	n/a
10	5300.000000	5299.973200	5.06	n/a
0	5300.000000	5299.987440	2.37	n/a
-10	5300.000000	5299.991680	1.57	n/a
-20	5300.000000	5299.997400	0.49	n/a
-30	5300.000000	5299.993530	1.22	n/a

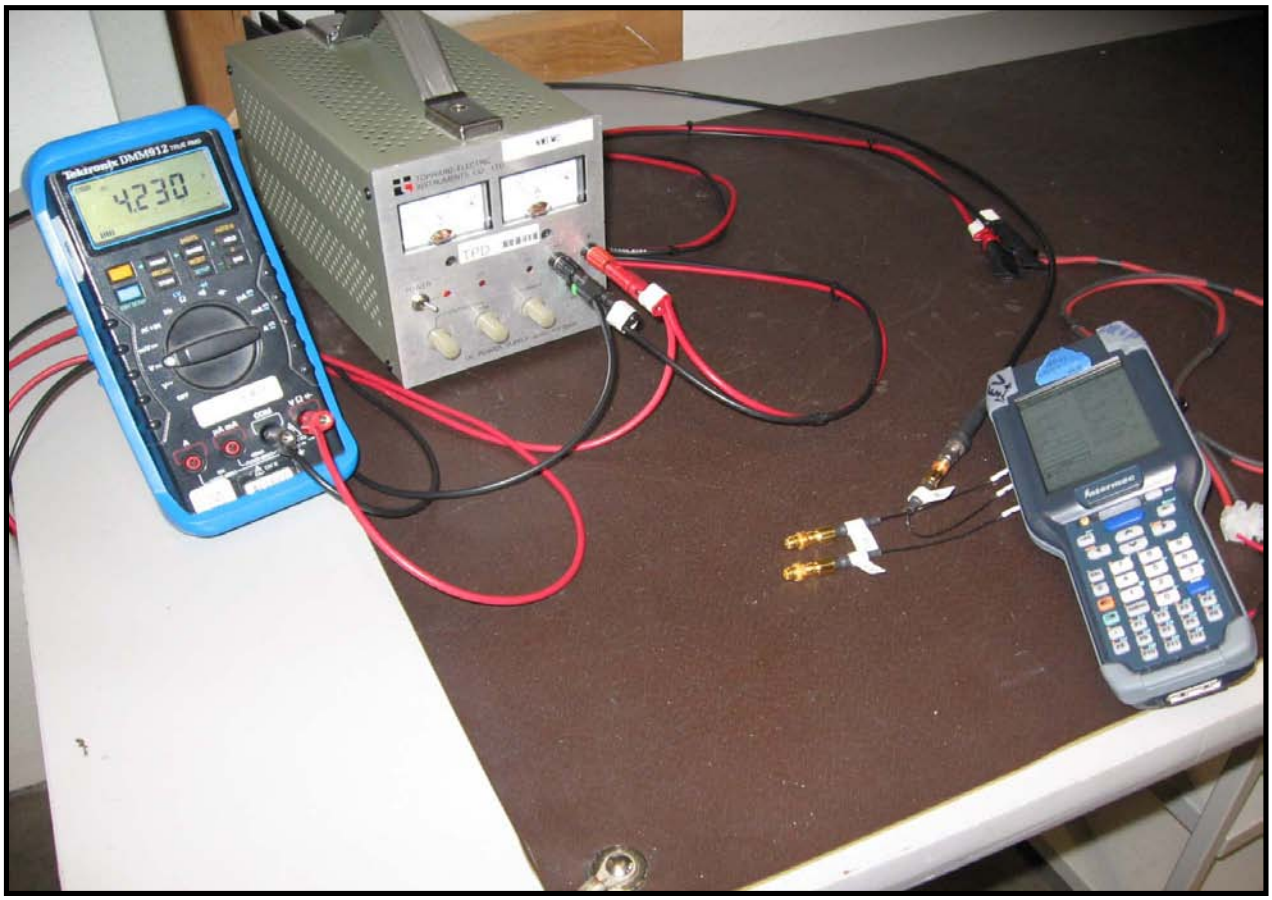
Mid Channel, 5470 MHz - 5725 MHz Band

Frequency Stability with Variation of DC Voltage (Ambient Temperature = 20°C)

Voltage (VDC)	Assigned Frequency (MHz)	Measured Frequency (MHz)	Tolerance (ppm)	Specification (ppm)
4.2 (115%)	5600.000000	5599.954780	8.07	n/a
3.7 (100%)	5600.000000	5599.955010	8.03	n/a
3.2 (85%)	5600.000000	5599.955700	7.91	n/a

Frequency Stability with Variation of Ambient Temperature (Primary Supply = 3.7 VDC)

Temp (°C)	Assigned Frequency (MHz)	Measured Frequency (MHz)	Tolerance (ppm)	Specification (ppm)
50	5600.000000	5599.949470	9.02	n/a
40	5600.000000	5599.950150	8.90	n/a
30	5600.000000	5599.954680	8.09	n/a
20	5600.000000	5599.955010	8.03	n/a
10	5600.000000	5599.973590	4.72	n/a
0	5600.000000	5599.998200	0.32	n/a
-10	5600.000000	5599.994260	1.02	n/a
-20	5600.000000	5599.997500	0.45	n/a
-30	5600.000000	5599.995860	0.74	n/a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