Intermec Technologies Corporation

802UIAG

May 10, 2005

Report No. ITRM0065

Report Prepared By

NORTHWEST EMC

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

EMC Test Report

NORTHWEST EMC

22975 NW Evergreen Parkway
Suite 400
Hillsboro, Oregon 97124

Certificate of Test

Issue Date: May 10, 2005
Intermec Technologies Corporation
Model: 802UIAG

Emissions			
Specification	**Test Method**	**Pass**	**Fail**
FCC 15.207 AC Powerline Conducted Emissions:2004	ANSI C63.4:2003	☒	☐
FCC 15.247(a) Occupied Bandwidth:2004	ANSI C63.4:2003	☒	☐
FCC 15.247(b) Output Power:2004	ANSI C63.4:2003	☒	☐
FCC 15.247(d) Band Edge Compliance:2004	ANSI C63.4:2003	☒	☐
FCC 15.247(d) Spurious Conducted Emissions:2004	ANSI C63.4:2003	☒	☐
FCC 15.247(d) Simultaneous Transmit - Spurious Radiated Emissions:2004	ANSI C63.4:2003	☒	☐
FCC 15.247(d) Stand Alone - Spurious Radiated Emissions:2004	ANSI C63.4:2003	☒	☐
FCC 15.247(e) Power Spectral Density:2004	ANSI C63.4:2003	☒	☐

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.

Approved By:

Dean Ghizzone, President

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 recognized 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 89/336/EEC, ANSI C63.4, MIL-STD 461E, DO-160D and SAE J1113. 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.

200629-0
200630-0
200676-0

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 212, Issue 1 (Provisional) 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.

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

TÜV Product Service: Included in TUV Product Service Group's Listing of Recognized Laboratories. It qualifies in connection with the TUV Certification after Recognition of Agent's Testing Program for the product categories and/or standards shown in TUV's current Listing of CARAT Laboratories, available from TUV. A certificate was issued to represent that this laboratory continues to meet TUV's CARAT Program requirements. Certificate No. USA0401C.

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

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

Technology International: Assessed in accordance with ISO Guide 25 defining the general international requirements for the competence of calibration and testing laboratories and with ITI assessment criteria LACO196. Based upon that assessment, Interference Technology International, Ltd., has granted approval for specifications implementing the EU Directive on EMC (89/336/EEC and amendments). The scope of the approval was provided on a Schedule of Assessment supplied with the certificate and is available upon request.

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 and R-1025, Irvine: C-2094 and R-1943, Newberg: C-1877 and R-1760, Sultan: R-871, C-1784 and R-1761).*

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. 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

SCOPE

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

What is measurement uncertainty?

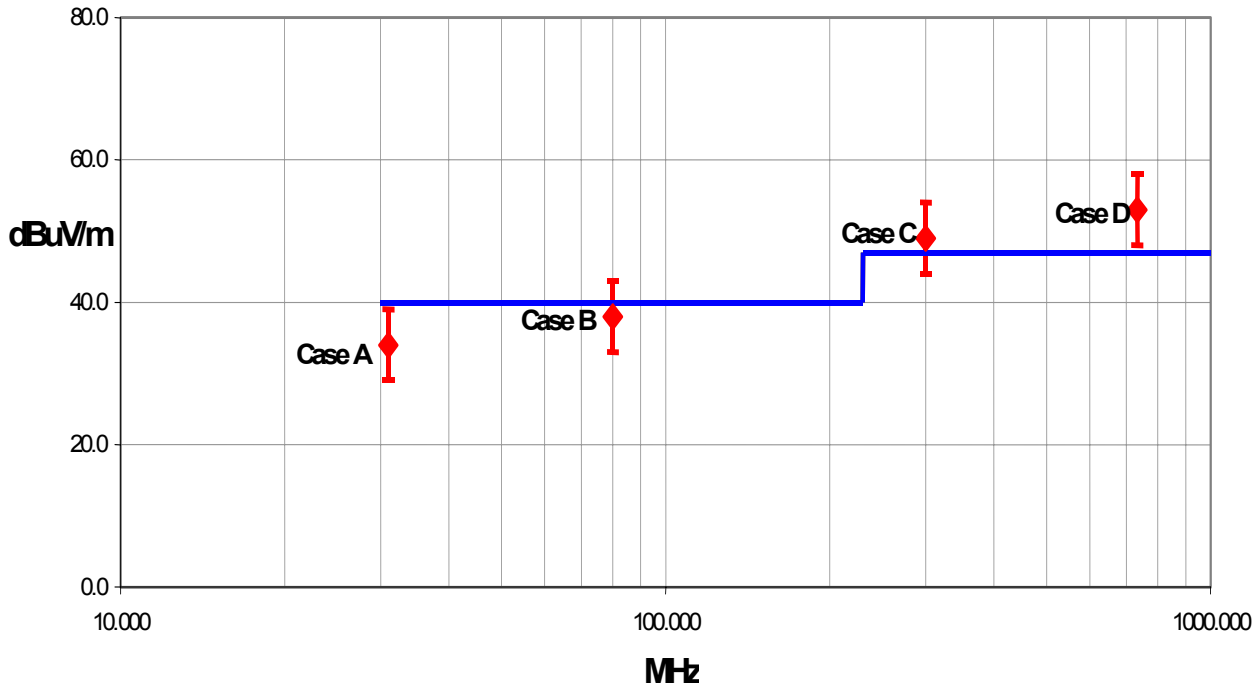
When a measurement is made, the result will be different from the true or theoretically correct value. The difference is the result of tolerances in the measurement system that cannot be completely eliminated. To the extent that technology allows us, it has been our aim to minimize this error. The following statement of measurement uncertainty is used to reflect the accuracy of the measured result as compared with its "true" value. In the case of transient tests (ESD, EFT, Surge, Voltage Dips and Interruptions), the test equipment has been demonstrated by calibration to provide at least a 95% confidence that it complies with the test specification requirements.

The following documents were the basis for determining the uncertainty levels of our measurements:

- "ISO Guide to the Expression of Uncertainty in Measurements", October 1993
- "NIS81: The Treatment of Uncertainty in EMC Measurements", May 1994
- "IEC CISPR 16-3 A1 f1 Ed.1: Radio-interference measurements and statistical techniques", December 2000

How might measurement uncertainty be applied to test results?

If the diamond marks the measured value for the test and the vertical bars bracket the range of + and – measurement uncertainty, then test results can be interpreted from the diagram below.



Test Result Scenarios:
Case A: Product complies.
Case B: Product conditionally complies. It is not possible to say with 95% confidence that the product complies.
Case C: Product conditionally does not comply. It is not possible to say with 95% confidence that the product does not comply.
Case D: Product does not comply.

Radiated Emissions ≤ 1 GHz		Value (dB)					
	Probability Distribution	Biconical Antenna		Log Periodic Antenna		Dipole Antenna	
Test Distance		3m	10m	3m	10m	3m	10m
Combined standard uncertainty $u_c(y)$	normal	+ 1.86 - 1.88	+ 1.82 - 1.87	+ 2.23 - 1.41	+ 1.29 - 1.26	+ 1.31 - 1.27	+ 1.25 - 1.25
Expanded uncertainty ***U*** (level of confidence ≈ 95%)	normal (k=2)	+ 3.72 - 3.77	+ 3.64 - 3.73	+ 4.46 -2.81	+ 2.59 - 2.52	+ 2.61 - 2.55	+ 2.49 - 2.49

Radiated Emissions > 1 GHz	Value (dB)		
	Probability Distribution	Without High Pass Filter	With High Pass Filter
Combined standard uncertainty $u_c(y)$	normal	+ 1.29 - 1.25	+ 1.38 - 1.35
Expanded uncertainty ***U*** (level of confidence ≈ 95%)	normal (k=2)	+ 2.57 - 2.51	+ 2.76 - -2.70

Conducted Emissions		
	Probability Distribution	Value (+/- dB)
Combined standard uncertainty ***uc(y)***	normal	1.48
Expanded uncertainty ***U*** (level of confidence ≈ 95 %)	normal (k = 2)	2.97

Radiated Immunity		
	Probability Distribution	Value (+/- dB)
Combined standard uncertainty ***uc(y)***	normal	1.05
Expanded uncertainty ***U*** (level of confidence ≈ 95 %)	normal (k = 2)	2.11

Conducted Immunity		
	Probability Distribution	Value (+/- dB)
Combined standard uncertainty ***uc(y)***	normal	1.05
Expanded uncertainty ***U*** (level of confidence ≈ 95 %)	normal (k = 2)	2.10

Legend

$u_c(y)$ = square root of the sum of squares of the individual standard uncertainties

U = combined standard uncertainty multiplied by the coverage factor: **k**. This defines an interval about the measured result that will encompass the true value with a confidence level of approximately 95%. If a higher level of confidence is required, then k=3 (CL of 99.7%) can be used. Please note that with a coverage factor of one, uc(y) yields a confidence level of only 68%.

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 – EV10

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

Oregon

Trails End Facility

Labs TE01 – TE03

30475 NE Trails End Lane
Newberg, OR 97132
(503) 844-4066
FAX (503) 537-0735

Washington

Sultan Facility

Labs SU01 – SU07

14128 339th Ave. SE
Sultan, WA 98294
(888) 364-2378
FAX (360) 793-2536

Party Requesting the Test	
Company Name:	Intermec Technologies Corporation
Address:	550 Second St. SE
City, State, Zip:	Cedar Rapids, IA 52401-2023
Test Requested By:	Scott Holub
Model:	802UIAG
First Date of Test:	3-07-2005
Last Date of Test:	3-29-2005
Receipt Date of Samples:	3-07-2005
Equipment Design Stage:	Production
Equipment Condition:	No visual damage.

Information Provided by the Party Requesting the Test

Clocks/Oscillators:	Not provided.
I/O Ports:	Not Provided.

Functional Description of the EUT (Equipment Under Test):
802.11(a)/(b)/(g) radio in CK60 hand-held computer.

Client Justification for EUT Selection:
Not Provided

Client Justification for Test Selection:
Testing was performed to demonstrate compliance with the FCC Part rules for an intentional radiator. This test also demonstrated compliance with FCC Part 15.247 emissions limits while the co-located radios were transmitting simultaneously. Testing was performed with the EUT collocated with an Intermec Technologies, Bluetooth enabled PB42 Printer. Each radio transmits through its own antenna.

EUT Photo

Equipment modifications					
Item	Test	Date	Modification	Note	Disposition of EUT
1	Occupied Bandwidth	03/07/2005	No EMI suppression devices were added or modified during this test.	Same configuration as delivered.	EUT remained at Northwest EMC.
2	Stand Alone Spurious Radiated Emissions	03/07/2005	No EMI suppression devices were added or modified during this test.	Same configuration as in previous test.	EUT remained at Northwest EMC.
3	Power Spectral Density	03/10/2005	No EMI suppression devices were added or modified during this test.	Same configuration as in previous test.	EUT remained at Northwest EMC.
4	Spurious Conducted Emissions	03/10/2005	No EMI suppression devices were added or modified during this test.	Same configuration as in previous test.	EUT remained at Northwest EMC.
5	Band-edge Compliance	03/11/2005	No EMI suppression devices were added or modified during this test.	Same configuration as in previous test.	EUT remained at Northwest EMC.
6	Output Power	03/14/2005	No EMI suppression devices were added or modified during this test.	Same configuration as in previous test.	EUT remained at Northwest EMC.
7	AC Powerline Conducted Emissions	03/29/2005	No EMI suppression devices were added or modified during this test.	Same configuration as in previous test.	EUT remained at Northwest EMC.
8	Simultaneous Transmit Spurious Radiated Emissions	03/29/2005	No EMI suppression devices were added or modified during this test.	Same configuration as in previous test.	EUT remained at Northwest EMC.

Justification

The individuals and/or the organization requesting the test provided the modes, configurations and settings available to evaluate. While scanning the radiated emissions, all of the EUT parameters listed below were investigated. This includes, but may not be limited to, antennas, tuned transmit frequency ranges, operating modes, and data rates.

Channels in Specified Band Investigated:
Low
Mid
High

Operating Modes Investigated:
Continuous transmit

Data Rates Investigated:
1 Mbps (802.11b)
11 Mbps (802.11b)
6 Mbps (802.11g)
36 Mbps (802.11g)
54 Mbps (802.11g)

Output Power Setting(s) Investigated:
Maximum default

Power Input Settings Investigated:
120 VAC, 60 Hz.

Software\Firmware Applied During Test			
Exercise software	cTxRx Win CE	**Version**	0.1.2.1
Description			
The system was tested using special software developed to test all functions of the device during the test.			

EUT and Peripherals			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
EUT - 802UIAG	Intermec Technologies Corporation	802UIAG	None
Host Device	Intermec Technologies Corporation	CK61	33390400093
AC Power Adapter	Intermec Technologies Corporation	851-061-002	335174

Cables					
Cable Type	**Shield**	**Length (m)**	**Ferrite**	**Connection 1**	**Connection 2**
DC Leads	Yes	1.9	PA	AC Power Adapter	Host Device
AC Power	No	2.0	No	AC Power Adapter	AC Mains
PA = Cable is permanently attached to the device. Shielding and/or presence of ferrite may be unknown.					

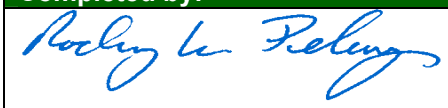
Measurement Equipment					
Description	**Manufacturer**	**Model**	**Identifier**	**Last Cal**	**Interval**
Spectrum Analyzer	Tektronix	2784	AAO	01/02/2005	12 mo

Test Description

Requirement: Per 47 CFR 15.247(a)(2), the 6 dB bandwidth of a direct sequence channel must be at least 500kHz. The measurement is made with the spectrum analyzer's resolution bandwidth set to 100kHz, and the video bandwidth set to greater than or equal to the resolution bandwidth.

Configuration: The occupied bandwidth was measured with the EUT set to low, medium, and high transmit frequencies. The measurement was made using a direct connection between the RF output of the EUT and the spectrum analyzer. The EUT was transmitting at its maximum data rate using direct sequence modulation.

Completed by:



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/08/05
Customer:	Intermec Technologies Corporation			Temperature:	22°C
Attendees:	Scott Holub	Tested by:	Rod Peloquin	Humidity:	39%
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(a)(2)	Year: 2003	Method:	FCC 97-114, ANSI C63.4	Year: 1992

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at 1 Mbps data rate, 802.11(b) modulation scheme

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

The minimum 6dB bandwidth is 500KHz

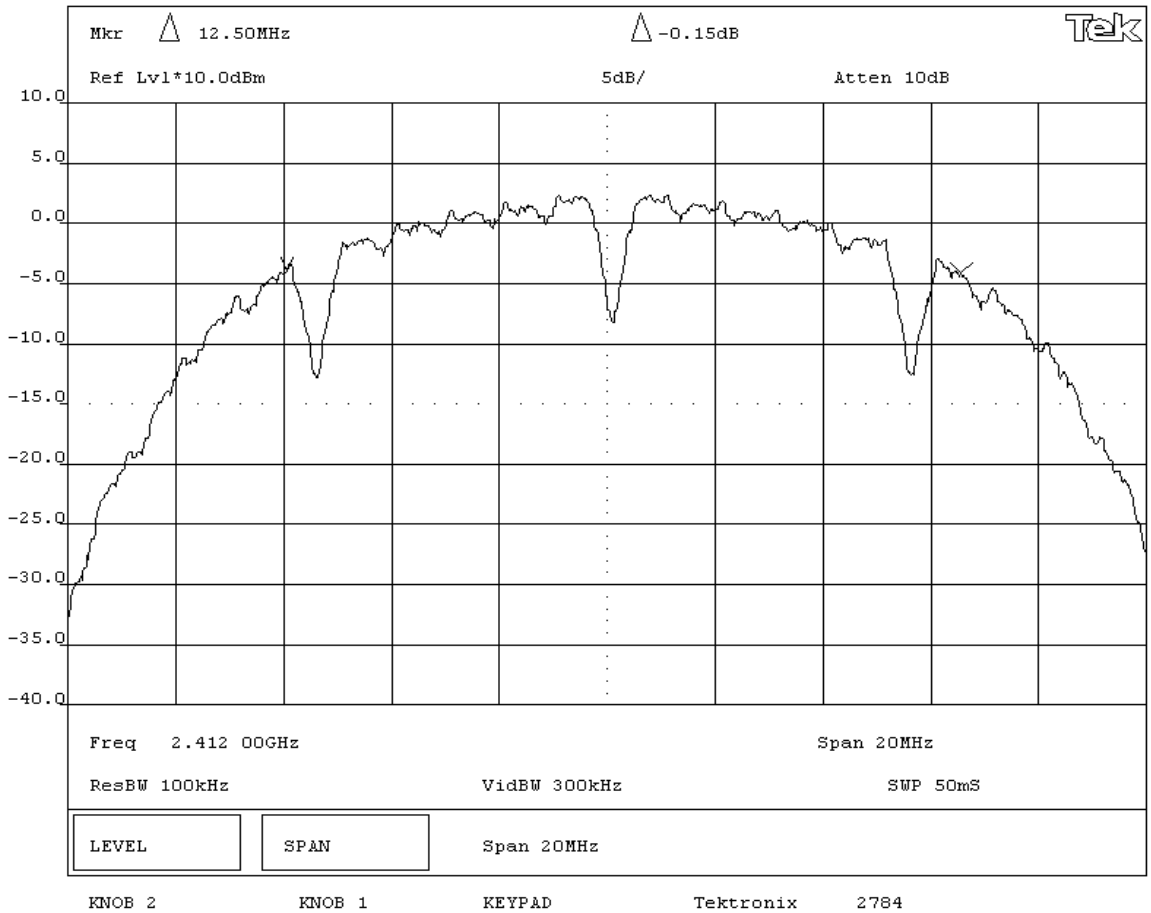
RESULTS	BANDWIDTH
Pass	12.5 MHz

SIGNATURE

Tested By: _____

DESCRIPTION OF TEST

Occupied Bandwidth - Low Channel - 802.11(b) 1 Mbps



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/08/05
Customer:	Intermec Technologies Corporation			Temperature:	22°C
Attendees:	Scott Holub	Tested by:	Rod Peloquin	Humidity:	39%
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(a)(2)	Year: 2003	Method:	FCC 97-114, ANSI C63.4	Year: 1992

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at 1 Mbps data rate, 802.11(b) modulation scheme

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

The minimum 6dB bandwidth is 500KHz

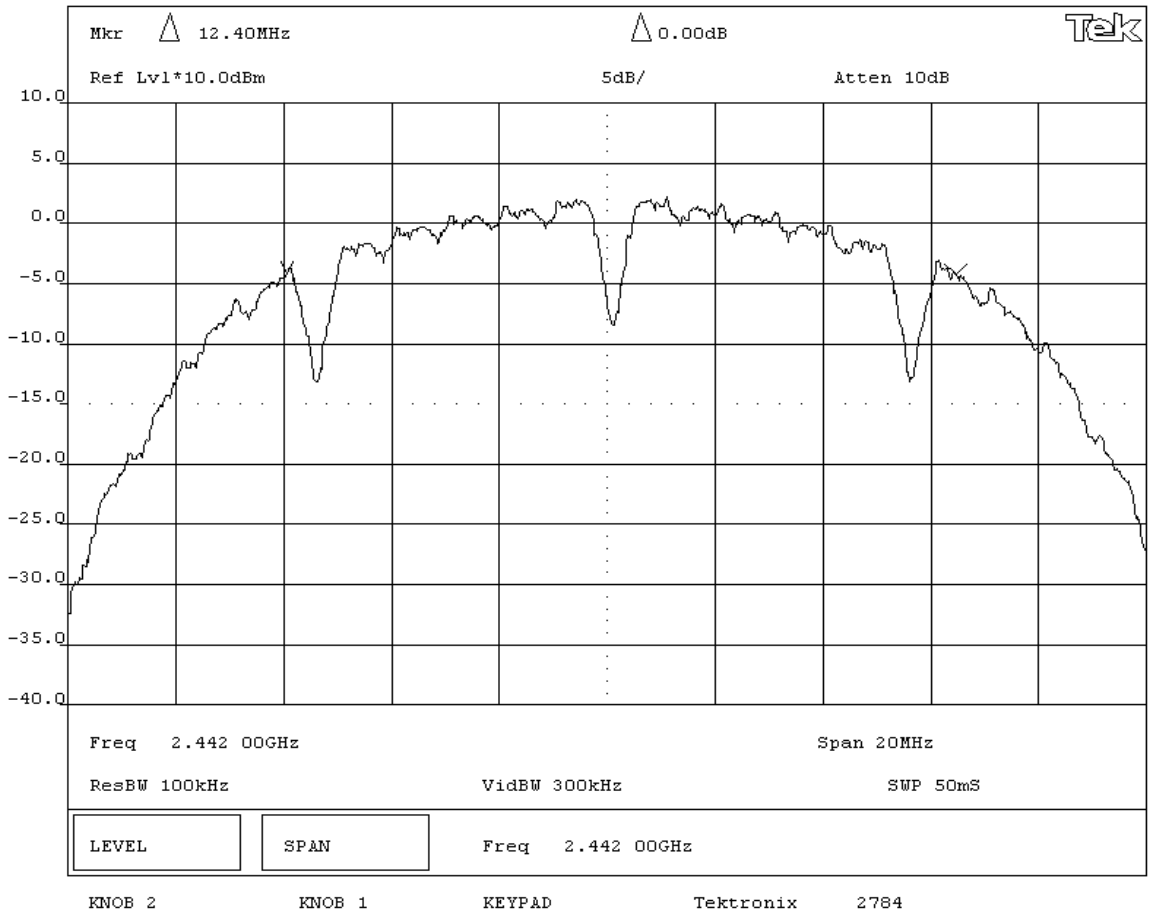
RESULTS	BANDWIDTH
Pass	12.4 MHz

SIGNATURE

Tested By: _____

DESCRIPTION OF TEST

Occupied Bandwidth - Mid Channel - 802.11(b) 1 Mbps



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/08/05
Customer:	Intermec Technologies Corporation			Temperature:	22°C
Attendees:	Scott Holub	Tested by:	Rod Peloquin	Humidity:	39%
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(a)(2)	Year: 2003	Method:	FCC 97-114, ANSI C63.4	Year: 1992

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at 1 Mbps data rate, 802.11(b) modulation scheme

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

The minimum 6dB bandwidth is 500KHz

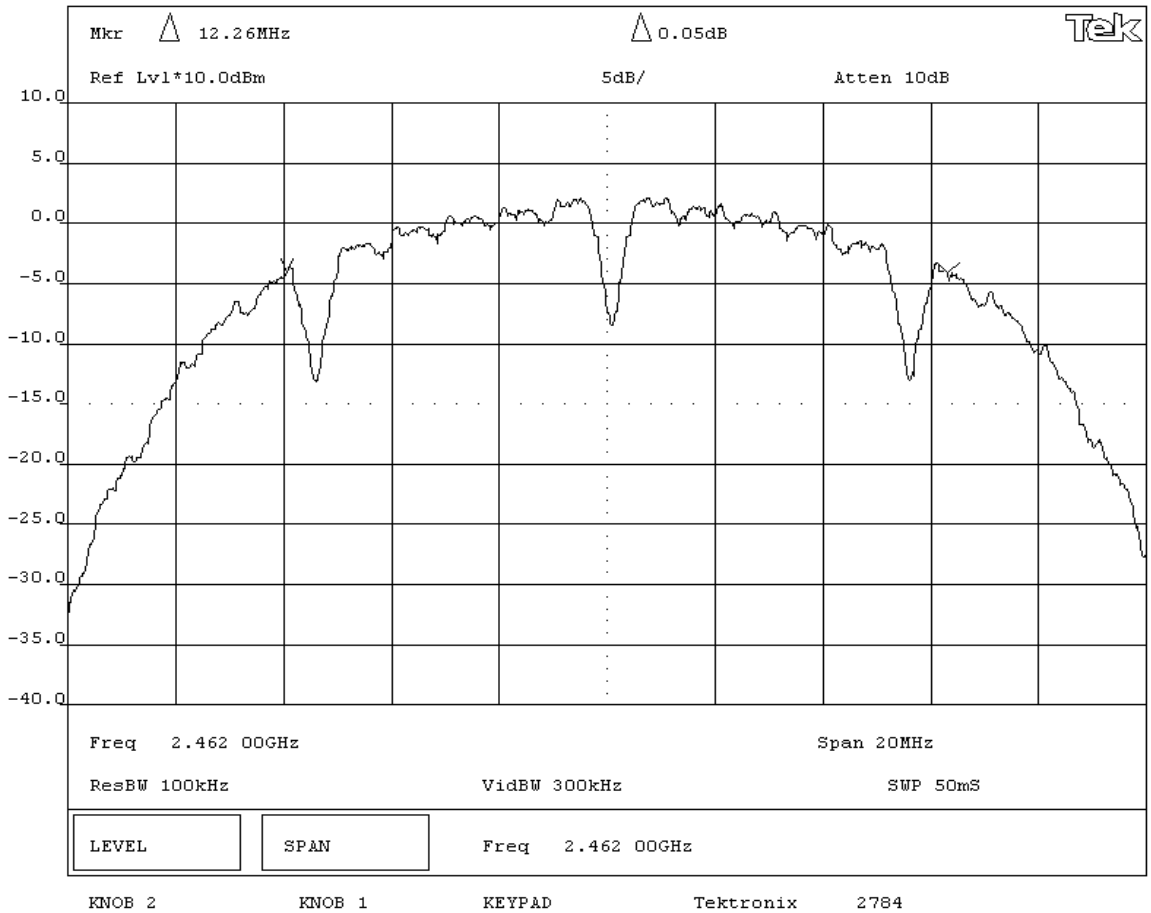
RESULTS	BANDWIDTH
Pass	12.26 MHz

SIGNATURE

Tested By: _____

DESCRIPTION OF TEST

Occupied Bandwidth - High Channel - 802.11(b) 1 Mbps



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/08/05
Customer:	Intermec Technologies Corporation			Temperature:	22°C
Attendees:	Scott Holub	Tested by:	Rod Peloquin	Humidity:	39%
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(a)(2)	Year: 2003	Method:	FCC 97-114, ANSI C63.4	Year: 1992

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at maximum data rate, 802.11(b) modulation scheme

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

The minimum 6dB bandwidth is 500KHz

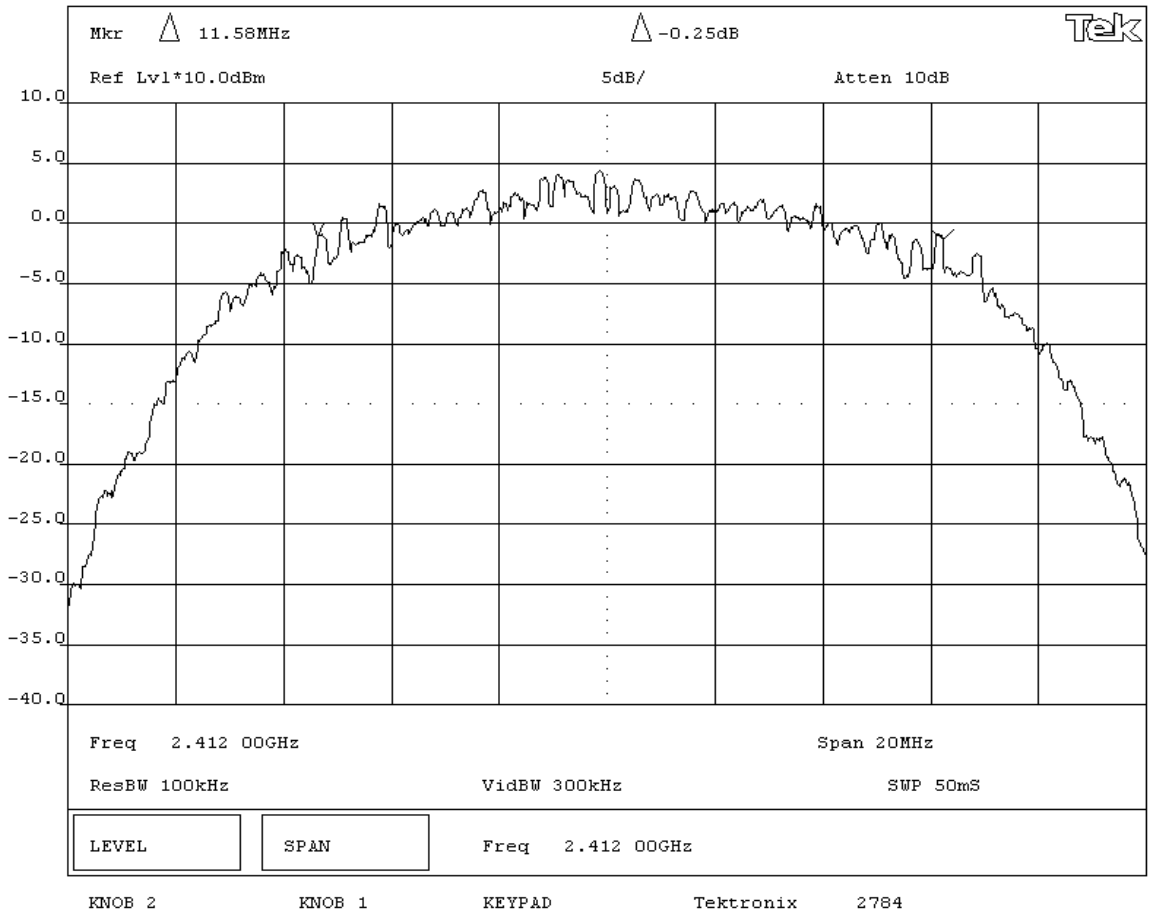
RESULTS	BANDWIDTH
Pass	11.58 MHz

SIGNATURE

Tested By: _____

DESCRIPTION OF TEST

Occupied Bandwidth - Low Channel - 802.11(b) 11 Mbps



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/08/05
Customer:	Intermec Technologies Corporation			Temperature:	22°C
Attendees:	Scott Holub	Tested by:	Rod Peloquin	Humidity:	39%
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(a)(2)	Year: 2003	Method:	FCC 97-114, ANSI C63.4	Year: 1992

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at maximum data rate, 802.11(b) modulation scheme

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

The minimum 6dB bandwidth is 500KHz

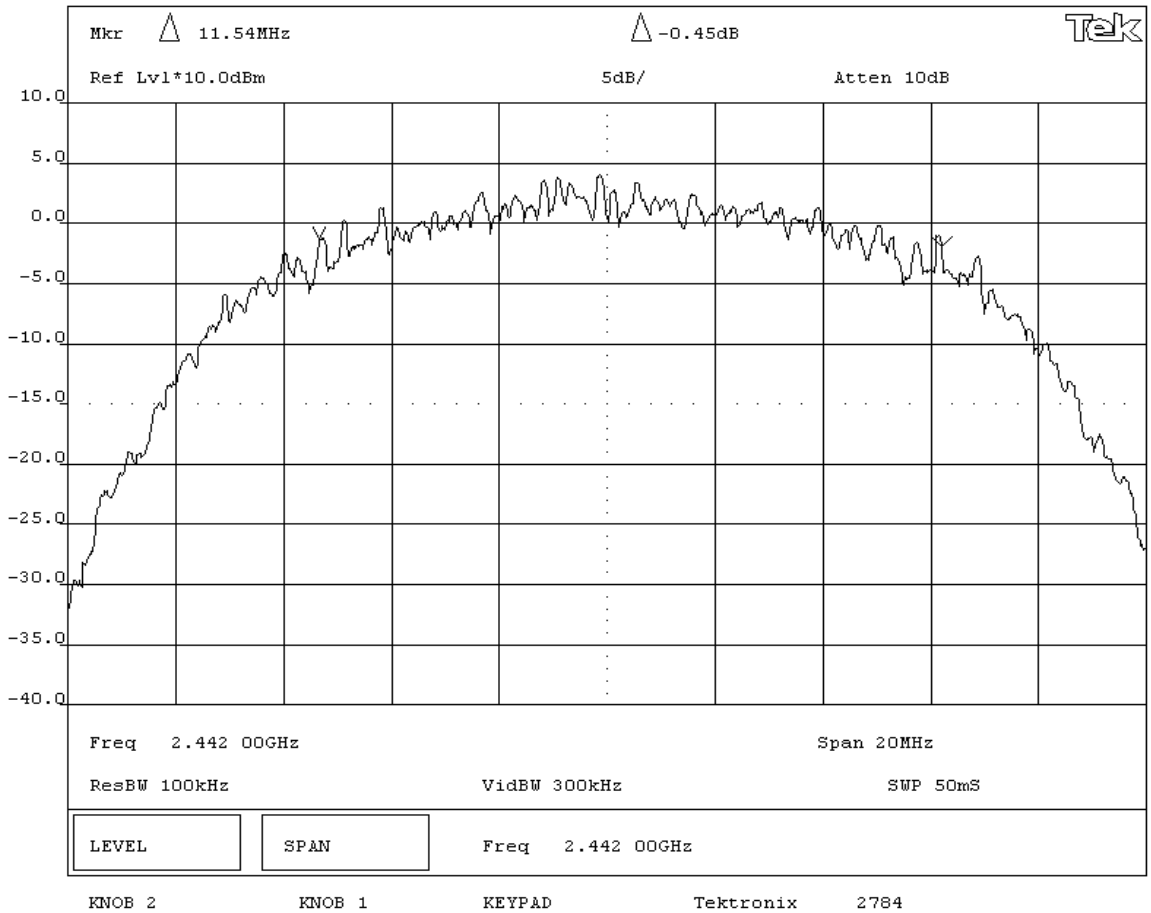
RESULTS	BANDWIDTH
Pass	11.54 MHz

SIGNATURE

Tested By: _____

DESCRIPTION OF TEST

Occupied Bandwidth - Mid Channel - 802.11(b) 11 Mbps



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/08/05
Customer:	Intermec Technologies Corporation			Temperature:	22°C
Attendees:	Scott Holub	Tested by:	Rod Peloquin	Humidity:	39%
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(a)(2)	Year: 2003	Method:	FCC 97-114, ANSI C63.4	Year: 1992

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at maximum data rate, 802.11(b) modulation scheme

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

The minimum 6dB bandwidth is 500KHz

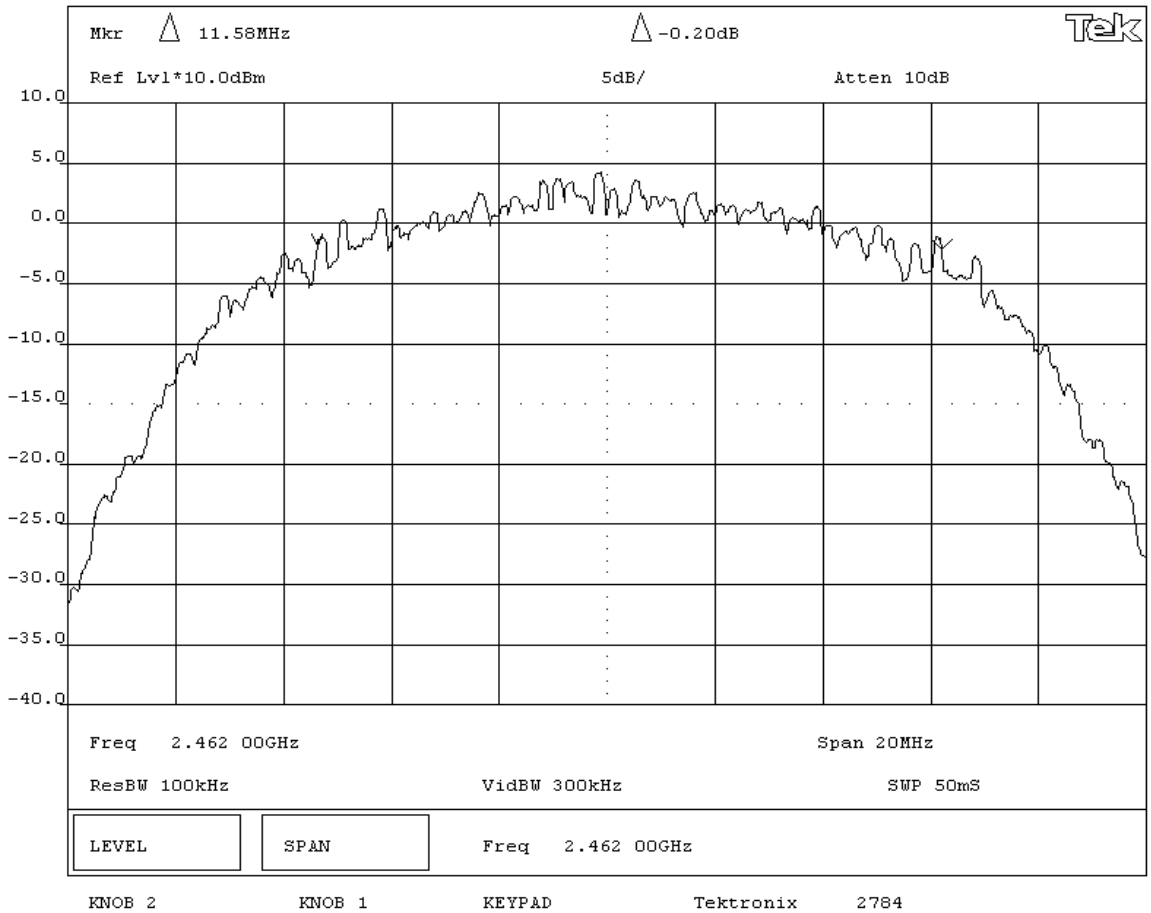
RESULTS	BANDWIDTH
Pass	11.58 MHz

SIGNATURE

Tested By: _____

DESCRIPTION OF TEST

Occupied Bandwidth - High Channel - 802.11(b) 11 Mbps



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/08/05
Customer:	Intermec Technologies Corporation			Temperature:	22°C
Attendees:	Scott Holub	Tested by:	Rod Peloquin	Humidity:	39%
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(a)(2)	Year: 2003	Method:	FCC 97-114, ANSI C63.4	Year: 1992

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at indicated data rate, 802.11(g) modulation scheme.

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

The minimum 6dB bandwidth is 500KHz

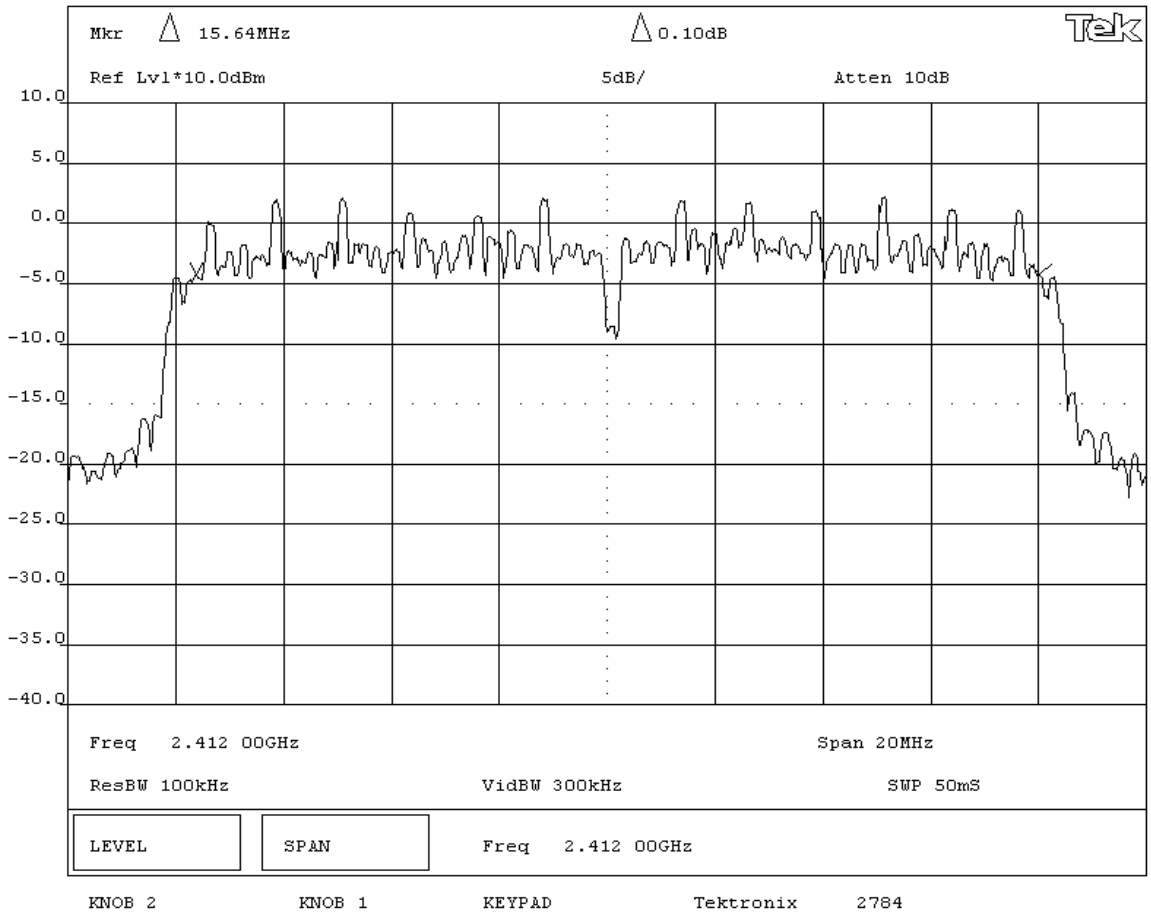
RESULTS	BANDWIDTH
Pass	15.64 MHz

SIGNATURE

Tested By: _____

DESCRIPTION OF TEST

Occupied Bandwidth - Low Channel - 802.11(g) 6 Mbit



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/08/05
Customer:	Intermec Technologies Corporation			Temperature:	22°C
Attendees:	Scott Holub	Tested by:	Rod Peloquin	Humidity:	39%
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(a)(2)	Year: 2003	Method:	FCC 97-114, ANSI C63.4	Year: 1992

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at indicated data rate, 802.11(g) modulation scheme.

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

The minimum 6dB bandwidth is 500KHz

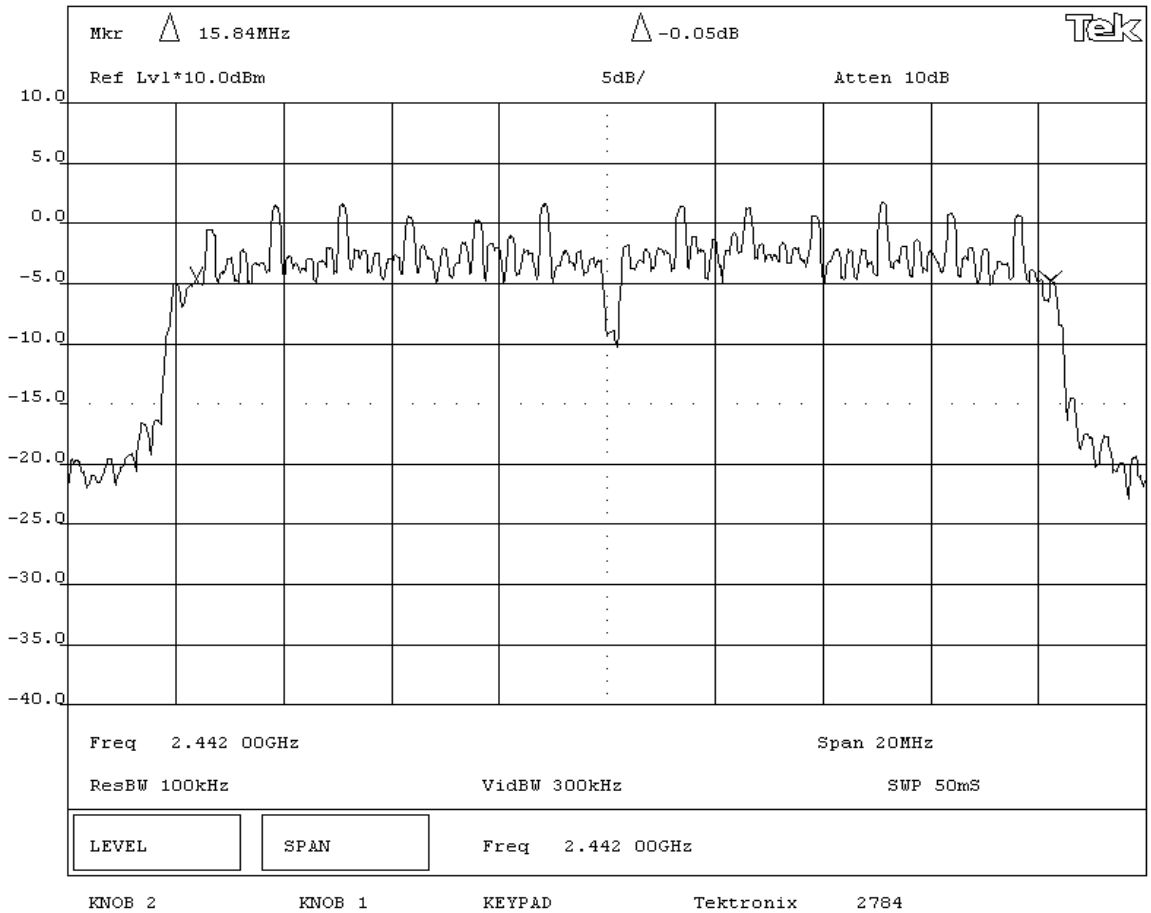
RESULTS	BANDWIDTH
Pass	15.84 MHz

SIGNATURE

Tested By: _____

DESCRIPTION OF TEST

Occupied Bandwidth - Mid Channel - 802.11(g) 6 Mbit



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/08/05
Customer:	Intermec Technologies Corporation			Temperature:	22°C
Attendees:	Scott Holub	Tested by:	Rod Peloquin	Humidity:	39%
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(a)(2)	Year:	2003	Method:	FCC 97-114, ANSI C63.4	Year:	1992

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at indicated data rate, 802.11(g) modulation scheme.

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

The minimum 6dB bandwidth is 500KHz

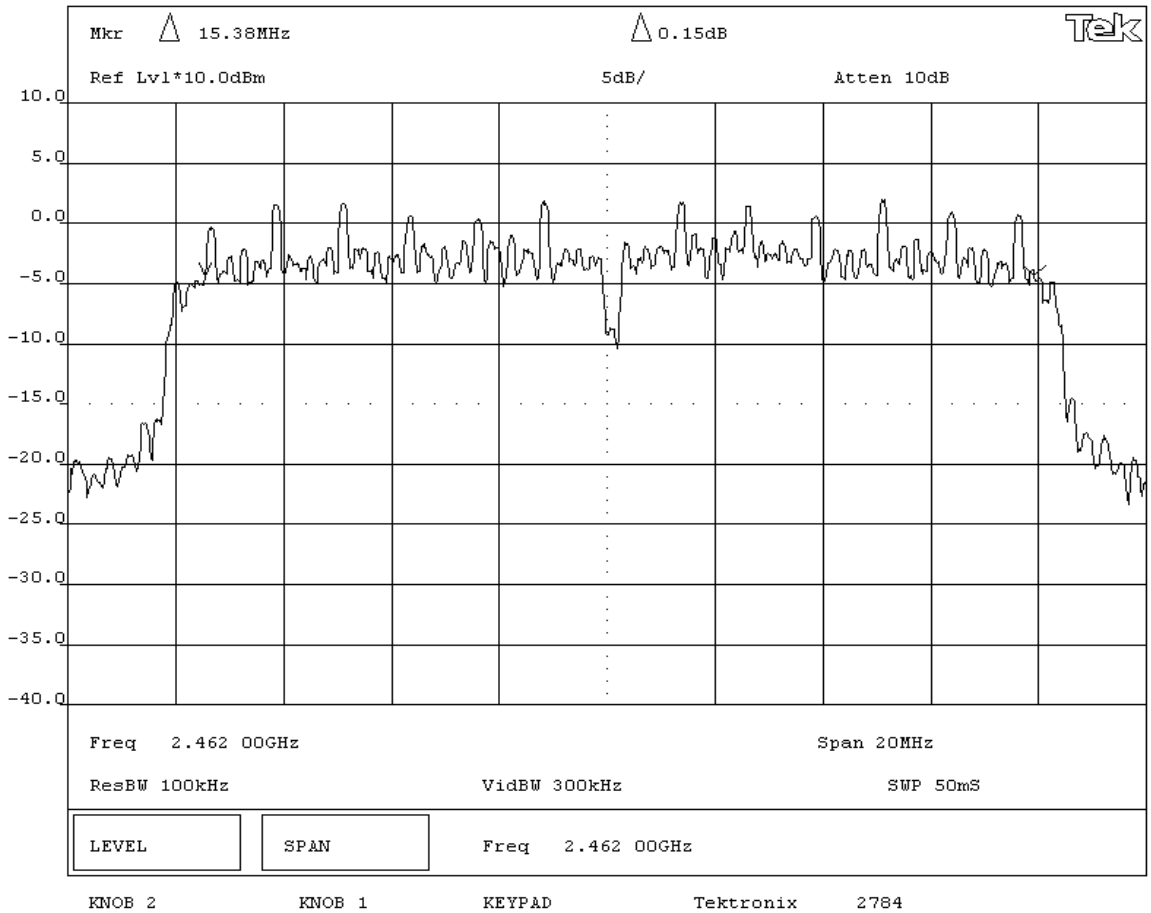
RESULTS	BANDWIDTH
Pass	15.38 MHz

SIGNATURE

Tested By: _____

DESCRIPTION OF TEST

Occupied Bandwidth - High Channel - 802.11(g) 6 Mbit



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/08/05
Customer:	Intermec Technologies Corporation			Temperature:	22°C
Attendees:	Scott Holub	Tested by:	Rod Peloquin	Humidity:	39%
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(a)(2)	Year: 2003	Method:	FCC 97-114, ANSI C63.4	Year: 1992

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at indicated data rate, 802.11(g) modulation scheme.

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

The minimum 6dB bandwidth is 500KHz

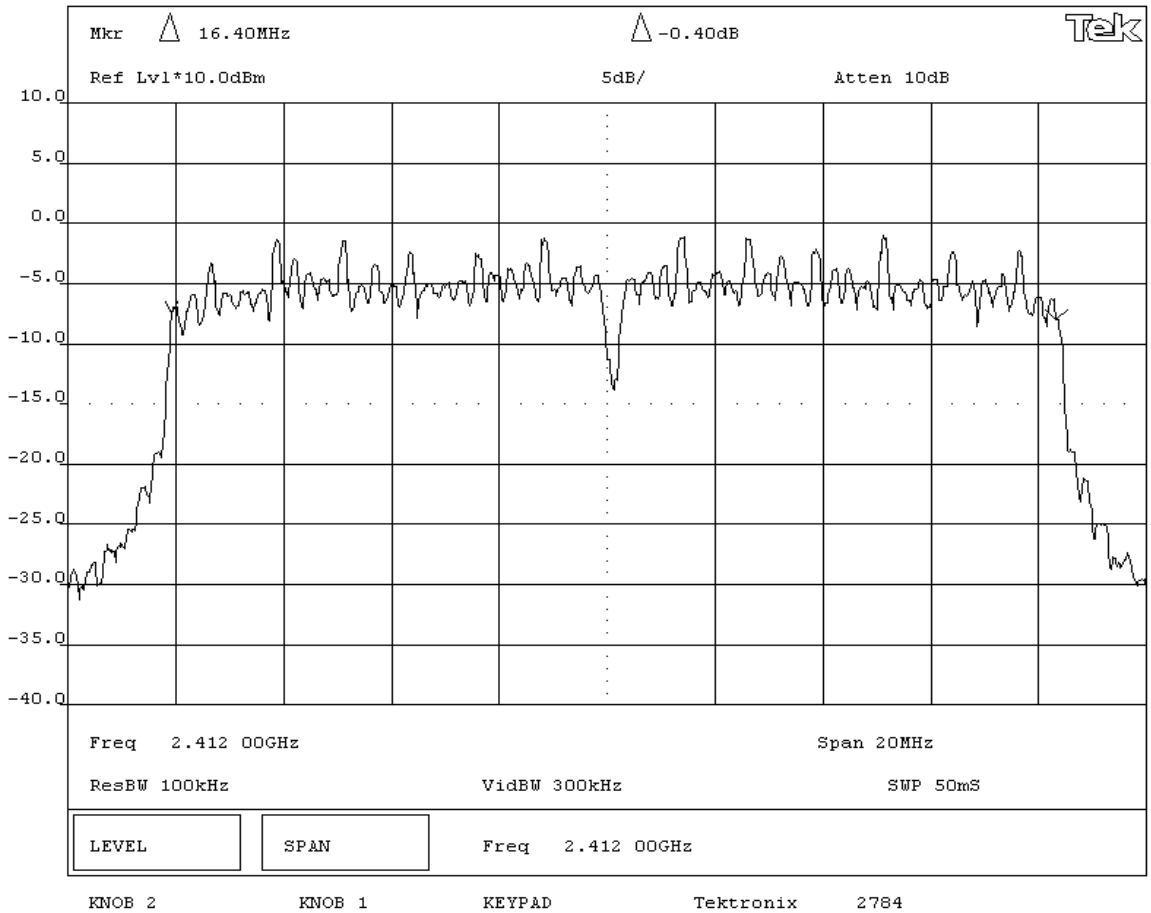
RESULTS	BANDWIDTH
Pass	16.4 MHz

SIGNATURE

Tested By: _____

DESCRIPTION OF TEST

Occupied Bandwidth - Low Channel - 802.11(g) 36 Mbit



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/08/05
Customer:	Intermec Technologies Corporation			Temperature:	22°C
Attendees:	Scott Holub	Tested by:	Rod Peloquin	Humidity:	39%
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(a)(2)	Year: 2003	Method:	FCC 97-114, ANSI C63.4	Year: 1992

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at indicated data rate, 802.11(g) modulation scheme.

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

The minimum 6dB bandwidth is 500KHz

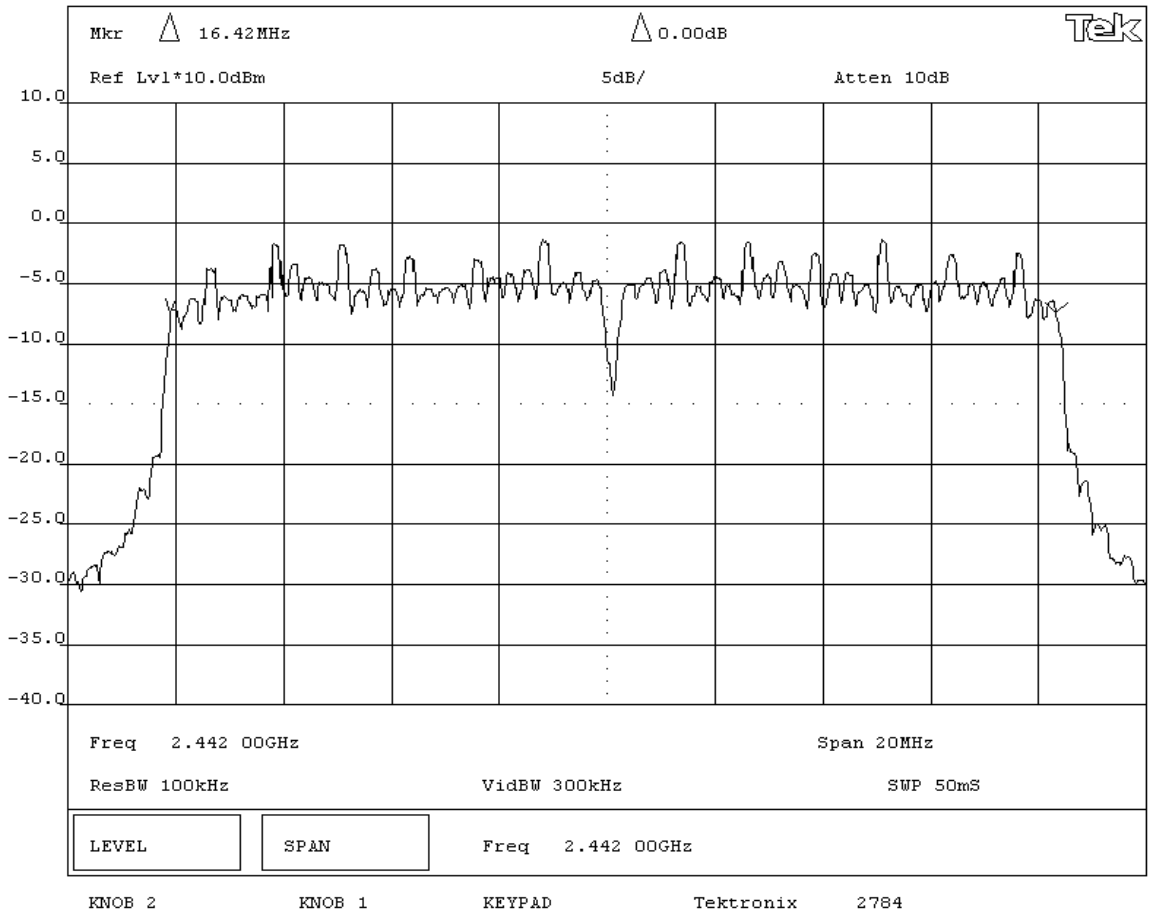
RESULTS	BANDWIDTH
Pass	16.42 MHz

SIGNATURE

Tested By: _____

DESCRIPTION OF TEST

Occupied Bandwidth - Mid Channel - 802.11(g) 36 Mbit



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/08/05
Customer:	Intermec Technologies Corporation			Temperature:	22°C
Attendees:	Scott Holub	Tested by:	Rod Peloquin	Humidity:	39%
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(a)(2)	Year:	2003	Method:	FCC 97-114, ANSI C63.4	Year:	1992

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at indicated data rate, 802.11(g) modulation scheme.

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

The minimum 6dB bandwidth is 500KHz

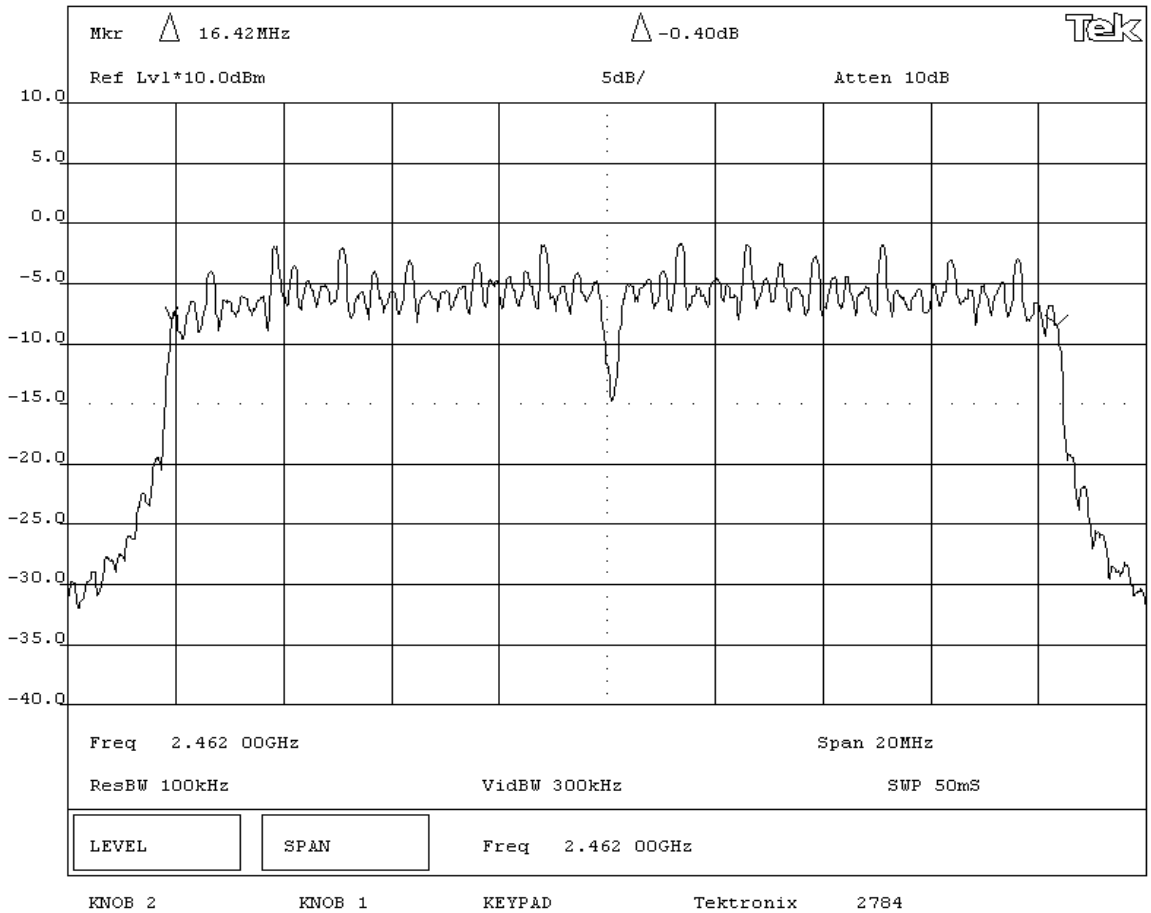
RESULTS	BANDWIDTH
Pass	16.42 MHz

SIGNATURE

Tested By: _____

DESCRIPTION OF TEST

Occupied Bandwidth - High Channel - 802.11(g) 36 Mbit



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/08/05
Customer:	Intermec Technologies Corporation			Temperature:	22°C
Attendees:	Scott Holub	Tested by:	Rod Peloquin	Humidity:	39%
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(a)(2)	Year: 2003	Method:	FCC 97-114, ANSI C63.4	Year: 1992

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at indicated data rate, 802.11(g) modulation scheme.

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

The minimum 6dB bandwidth is 500KHz

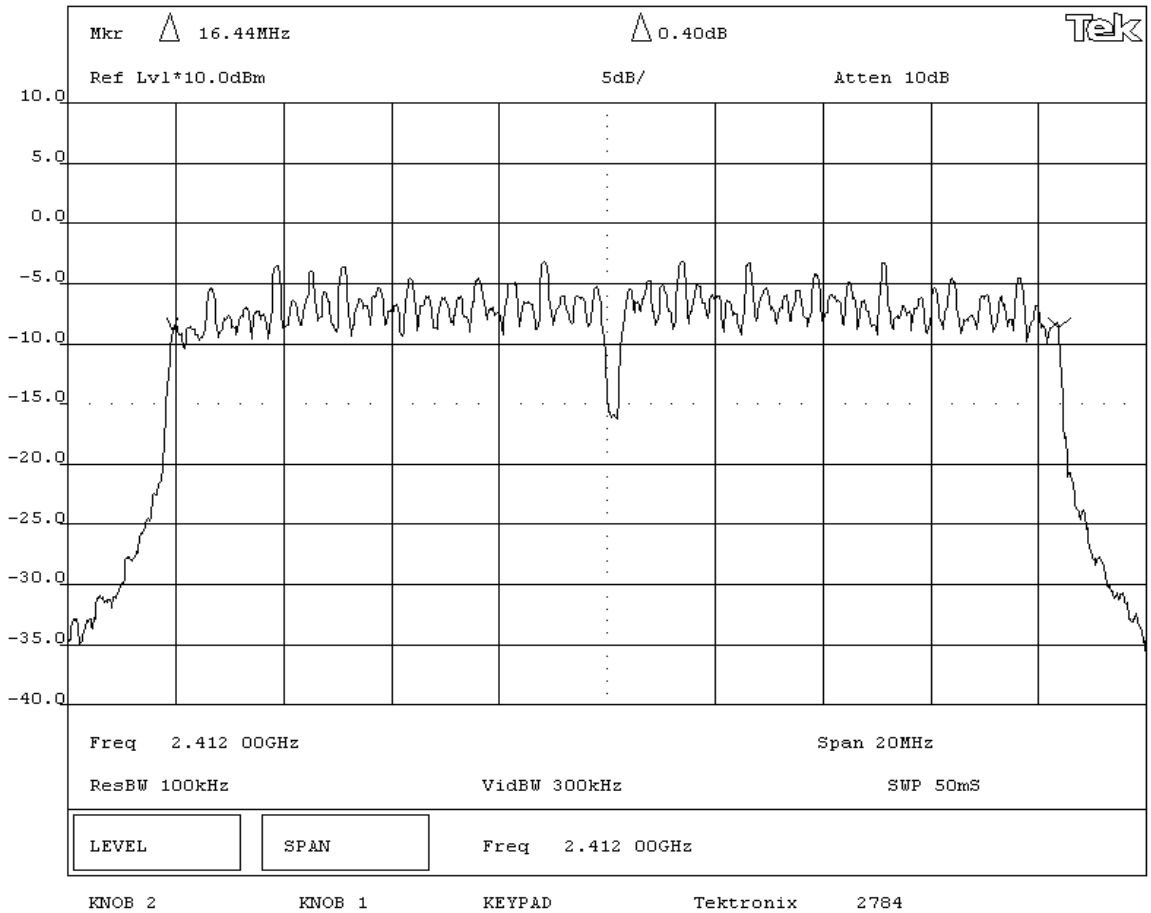
RESULTS	BANDWIDTH
Pass	16.44 MHz

SIGNATURE

Tested By: _____

DESCRIPTION OF TEST

Occupied Bandwidth - Low Channel - 802.11(g) 54 Mbit



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/08/05
Customer:	Intermec Technologies Corporation			Temperature:	22°C
Attendees:	Scott Holub	Tested by:	Rod Peloquin	Humidity:	39%
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(a)(2)	Year: 2003	Method:	FCC 97-114, ANSI C63.4	Year: 1992

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at indicated data rate, 802.11(g) modulation scheme.

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

The minimum 6dB bandwidth is 500KHz

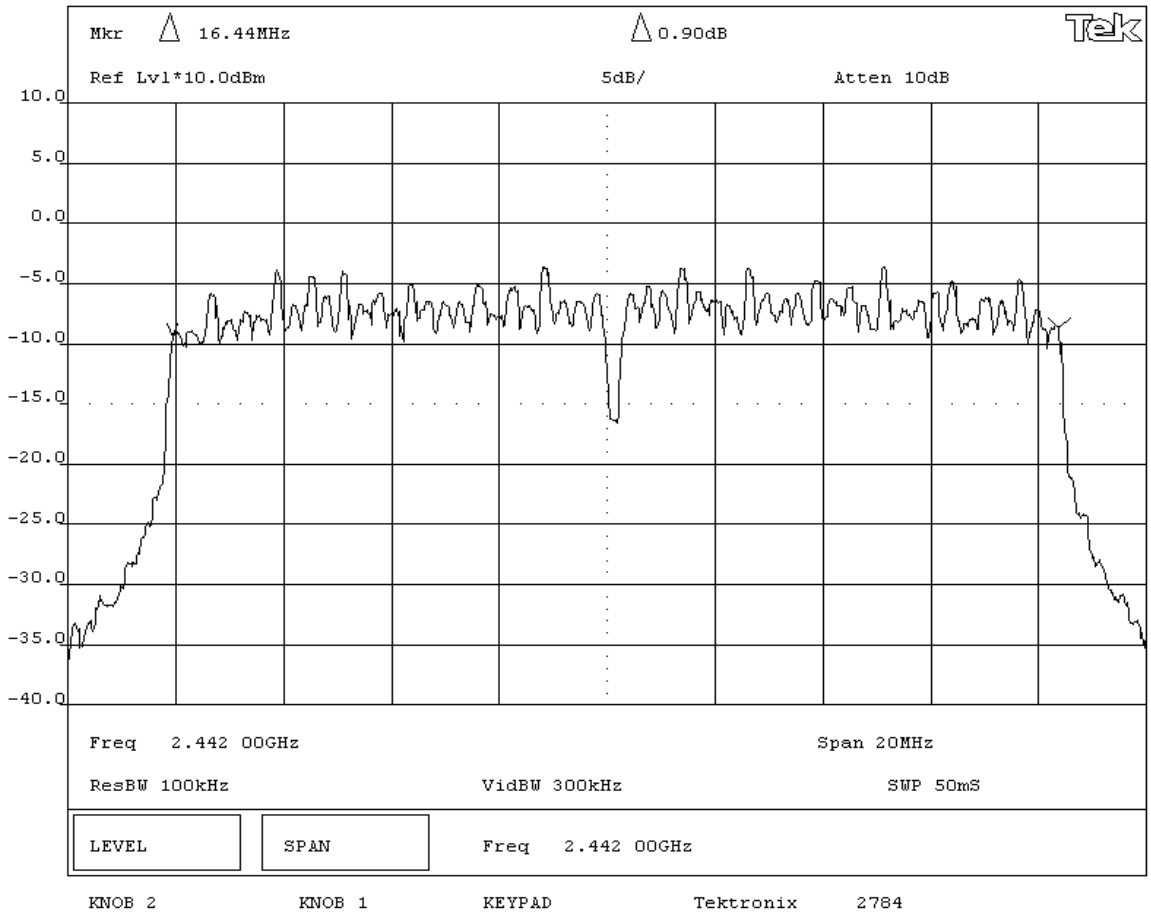
RESULTS	BANDWIDTH
Pass	16.44 MHz

SIGNATURE

Tested By: _____

DESCRIPTION OF TEST

Occupied Bandwidth - Mid Channel - 802.11(g) 54 Mbit



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/08/05
Customer:	Intermec Technologies Corporation			Temperature:	22°C
Attendees:	Scott Holub	Tested by:	Rod Peloquin	Humidity:	39%
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(a)(2)	Year:	2003	Method:	FCC 97-114, ANSI C63.4	Year:	1992

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at indicated data rate, 802.11(g) modulation scheme.

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

The minimum 6dB bandwidth is 500KHz

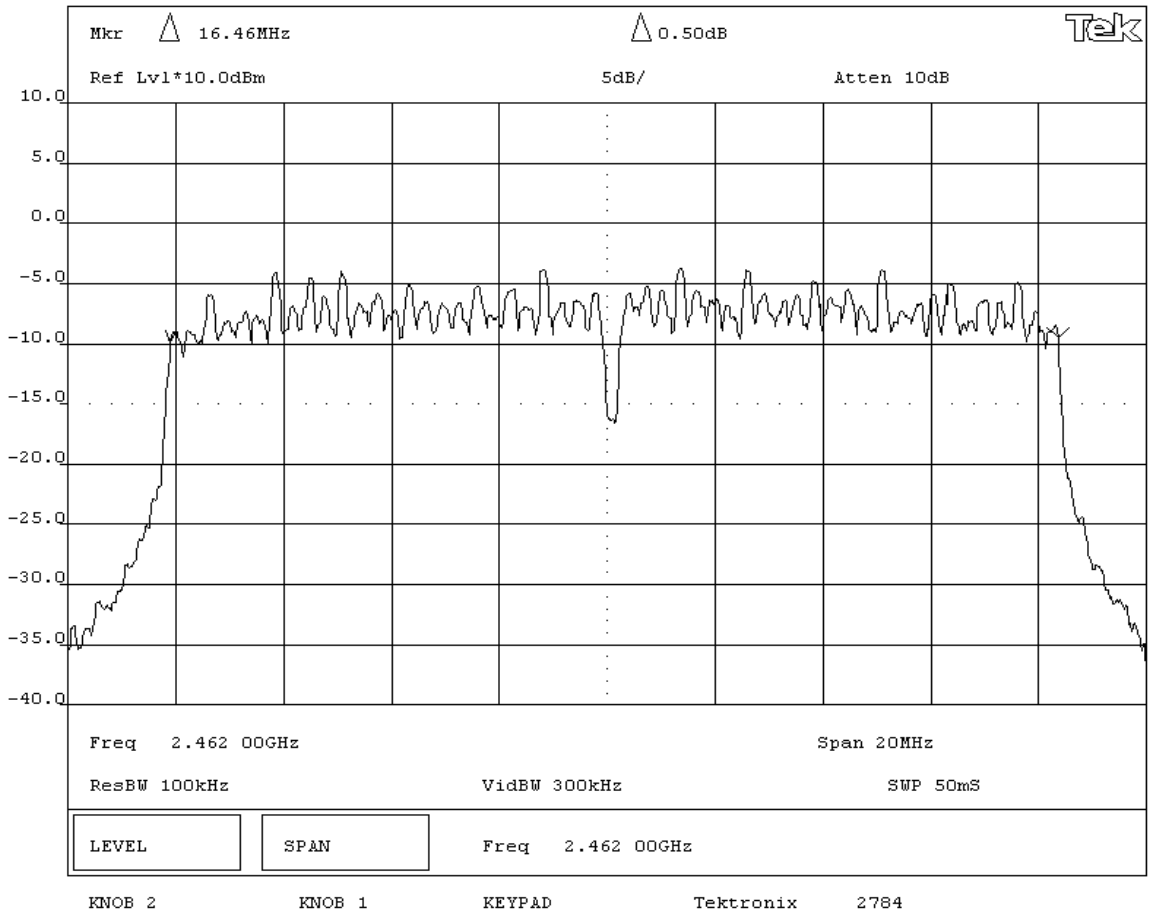
RESULTS	BANDWIDTH
Pass	16.46 MHz

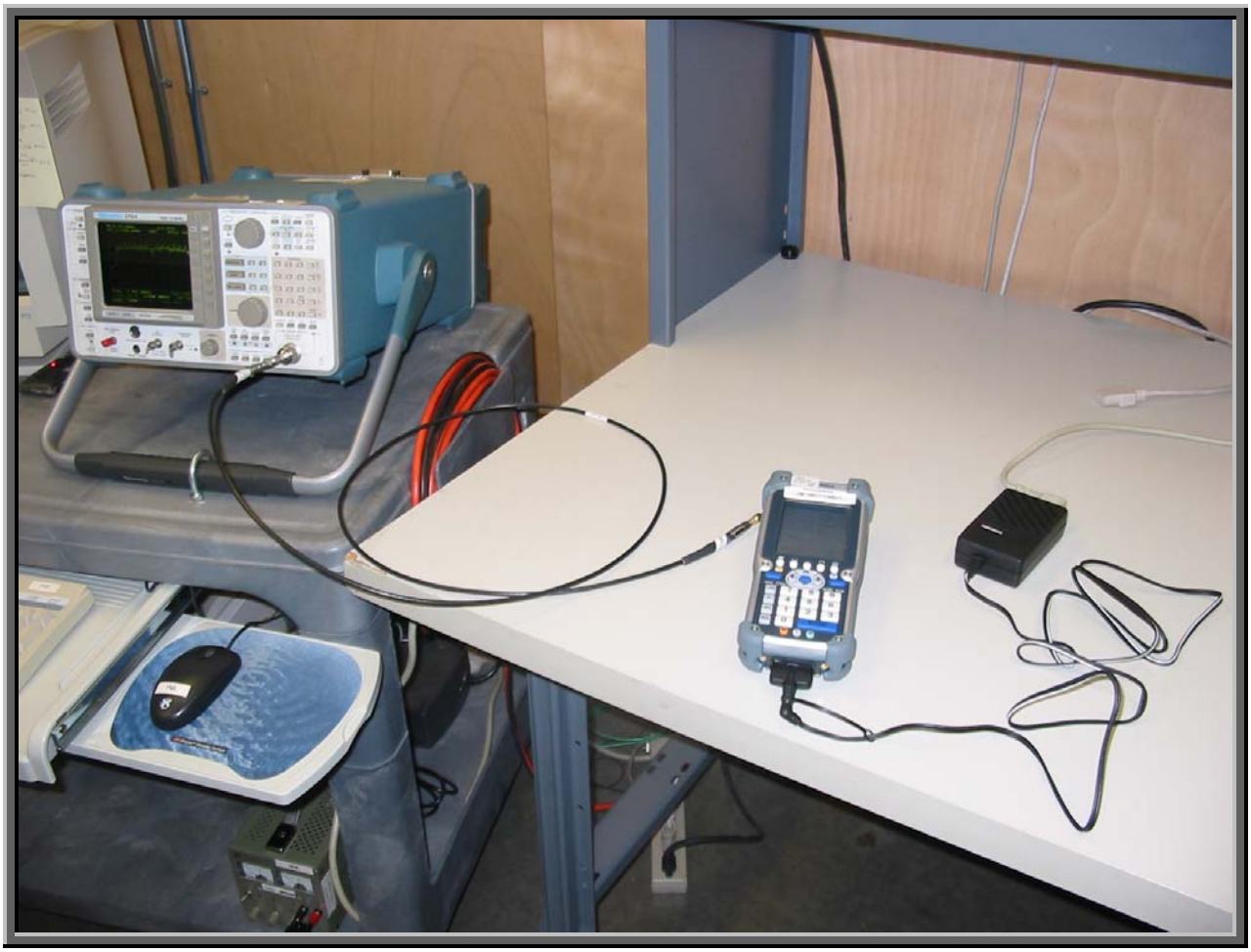
SIGNATURE

Tested By: _____

DESCRIPTION OF TEST

Occupied Bandwidth - High Channel - 802.11(g) 54 Mbit





Justification

The individuals and/or the organization requesting the test provided the modes, configurations and settings available to evaluate. While scanning the radiated emissions, all of the EUT parameters listed below were investigated. This includes, but may not be limited to, antennas, tuned transmit frequency ranges, operating modes, and data rates.

Channels in Specified Band Investigated:
Low
Mid
High

Operating Modes Investigated:
Continuous transmit

Data Rates Investigated:
1 Mbps (802.11b)
11 Mbps (802.11b)
6 Mbps (802.11g)
36 Mbps (802.11g)
54 Mbps (802.11g)

Output Power Setting(s) Investigated:
Maximum default

Power Input Settings Investigated:
120 VAC, 60 Hz.

Software\Firmware Applied During Test			
Exercise software	cTxRx Win CE	**Version**	0.1.2.1
Description			
The system was tested using special software developed to test all functions of the device during the test.			

EUT and Peripherals			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
EUT - 802UIAG	Intermec Technologies Corporation	802UIAG	Unknown
Host Device	Intermec Technologies Corporation	CK61	33390400093
AC Power Adapter	Intermec Technologies Corporation	851-061-002	335174

Cables					
Cable Type	**Shield**	**Length (m)**	**Ferrite**	**Connection 1**	**Connection 2**
DC Leads	Yes	1.9	PA	AC Power Adapter	Host Device
AC Power	No	2.0	No	AC Power Adapter	AC Mains
PA = Cable is permanently attached to the device. Shielding and/or presence of ferrite may be unknown.					

Measurement Equipment					
Description	**Manufacturer**	**Model**	**Identifier**	**Last Cal**	**Interval**
Oscilloscope	Tektronix	TDS 3052	TOF	12/02/2004	13 mo
Power Meter	Hewlett Packard	E4418A	SPA	07/23/2004	24 mo
Power Sensor	Hewlett-Packard	8481H	SPB	07/23/2004	24 mo
Signal Generator	Hewlett Packard	8341B	TGN	02/07/2005	13 mo
RF Detector	RLC Electronics	CR-133-R	ZZA	NCR	NA
Attenuator		2082-6148-20	ATE	03/07/2005	13 mo
Attenuator	Pasternack	PE7005-6	ATF	02/25/2005	13 mo

Test Description

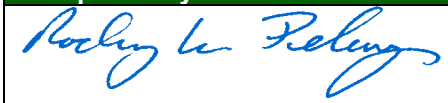
Requirement: Per 47 CFR 15.247(b)(3), the maximum peak output power must not exceed 1 Watt.

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

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

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

Completed by:



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/14/05
Customer:	Intermec Technologies Corporation			Temperature:	20°C
Attendees:	None	Tested by:	Rod Peloquin	Humidity:	38% RH
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	47 CFR 15.247(b)(3)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at indicated data rate, at maximum output power. 802.11(b) modulation scheme.

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum peak conducted output power does not exceed 1 Watt

RESULTS	AMPLITUDE
Pass	45.2 mW

SIGNATURE

Tested By: _____

DESCRIPTION OF TEST

Output Power - Low, Mid, & High Channels

Data Rate = 1 Mbit

Frequency (MHz)	Power (mW)
2412	44.7
2442	43.9
2462	41.5

Data Rate = 11 Mbit

Frequency (MHz)	Power (mW)
2412	45.2
2442	43.9
2462	42.0

NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/14/05
Customer:	Intermec Technologies Corporation			Temperature:	20°C
Attendees:	None	Tested by:	Rod Peloquin	Humidity:	38% RH
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	47 CFR 15.247(b)(3)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at indicated data rate, at maximum output power. 802.11(g) modulation scheme.

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum peak conducted output power does not exceed 1 Watt

RESULTS	AMPLITUDE
Pass	44.8 mW

SIGNATURE

Tested By: _____

DESCRIPTION OF TEST

Output Power - Low, Mid, & High Channels

Data Rate = 6 Mbit

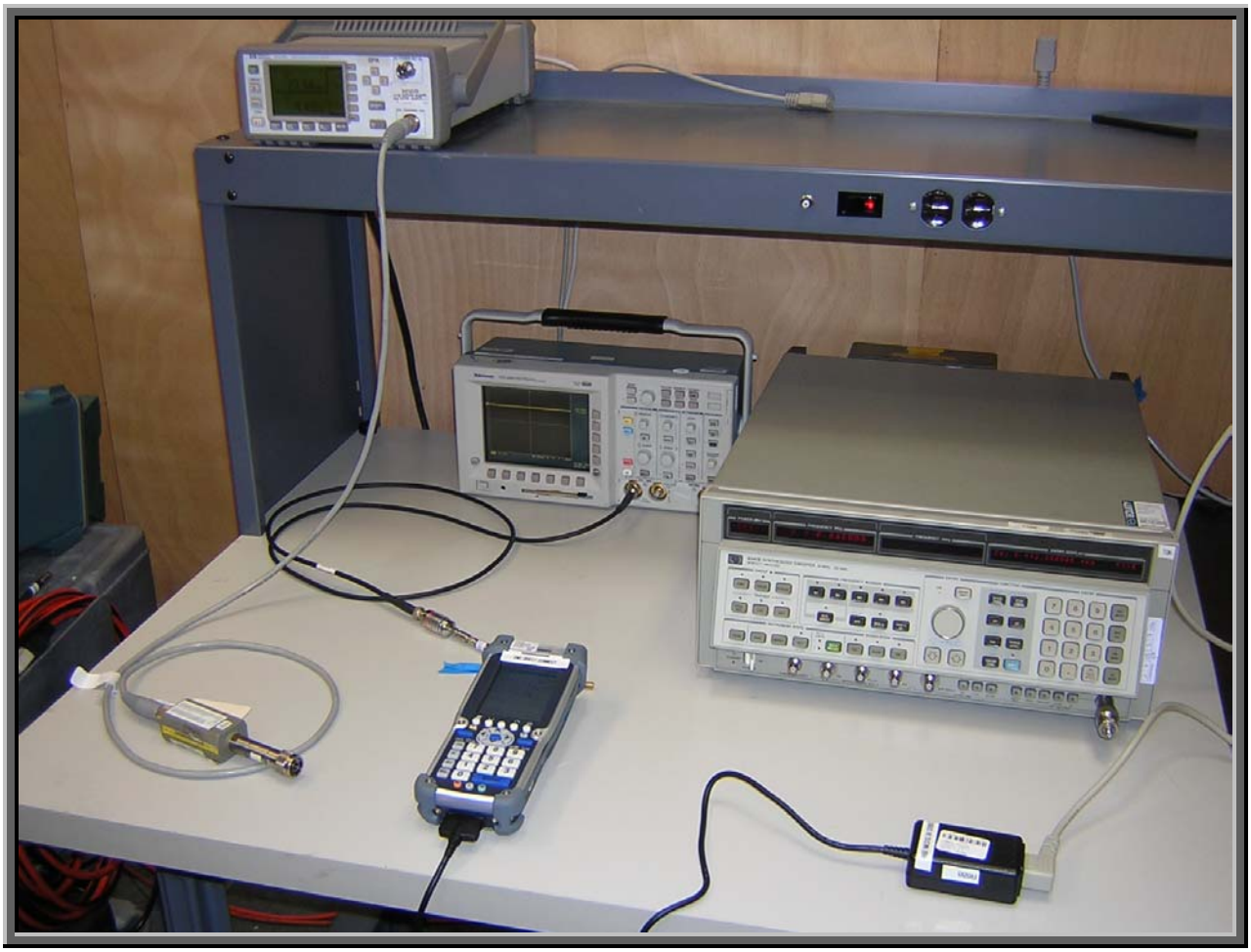
Frequency (MHz)	Power (mW)
2412	44.8
2442	42.5
2462	42.0

Data Rate = 36 Mbit

Frequency (MHz)	Power (mW)
2412	26.9
2442	26.2
2462	24.5

Data Rate = 54 Mbit

Frequency (MHz)	Power (mW)
2412	19.0
2442	18.0
2462	16.8



Justification

The individuals and/or the organization requesting the test provided the modes, configurations and settings available to evaluate. While scanning the radiated emissions, all of the EUT parameters listed below were investigated. This includes, but may not be limited to, antennas, tuned transmit frequency ranges, operating modes, and data rates.

Channels in Specified Band Investigated:
Low
High

Operating Modes Investigated:
Continuous transmit

Data Rates Investigated:
1 Mbps (802.11b)
11 Mbps (802.11b)
6 Mbps (802.11g)
36 Mbps (802.11g)
54 Mbps (802.11g)

Output Power Setting(s) Investigated:
Maximum default

Power Input Settings Investigated:
120 VAC, 60 Hz.

Software\Firmware Applied During Test			
Exercise software	cTxRx Win CE	**Version**	0.1.2.1
Description			
The system was tested using special software developed to test all functions of the device during the test.			

EUT and Peripherals			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
EUT - 802UIAG	Intermec Technologies Corporation	802UIAG	Unknown
Host Device	Intermec Technologies Corporation	CK61	33390400093
AC Power Adapter	Intermec Technologies Corporation	851-061-002	335174

Cables					
Cable Type	**Shield**	**Length (m)**	**Ferrite**	**Connection 1**	**Connection 2**
DC Leads	Yes	1.9	PA	AC Power Adapter	Host Device
AC Power	No	2.0	No	AC Power Adapter	AC Mains
PA = Cable is permanently attached to the device. Shielding and/or presence of ferrite may be unknown.					

Measurement Equipment					
Description	**Manufacturer**	**Model**	**Identifier**	**Last Cal**	**Interval**
Spectrum Analyzer	Tektronix	2784	AAO	01/02/2005	12 mo

Test Description

Requirement: Per 47 CFR 15.247(d), in any 100 kHz bandwidth outside the authorized band, the maximum level of radio frequency power must be at least 20dB down from the highest emission level within the authorized band. The measurement is made with the spectrum analyzer's resolution bandwidth set to 100 kHz, and the video bandwidth set to greater than or equal to the resolution bandwidth.

Configuration: The spurious RF conducted emissions at the edges of the authorized band were measured with the EUT set to low and high transmit frequencies. The measurement was made using a direct connection between the RF output of the EUT and the spectrum analyzer. The EUT was transmitting at various data rates. The channels closest to the band edges were selected. The spectrum was scanned across each band edge from 25 MHz below the band edge to 25 MHz above the band edge.

Completed by:

NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/11/05
Customer:	Intermec Technologies Corporation			Temperature:	21°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42%
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(d)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at 1 Mbps data rate, 802.11(b) modulation scheme

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum level of any spurious emission at the edge of the authorized band is 20 dB down from the fundamental.

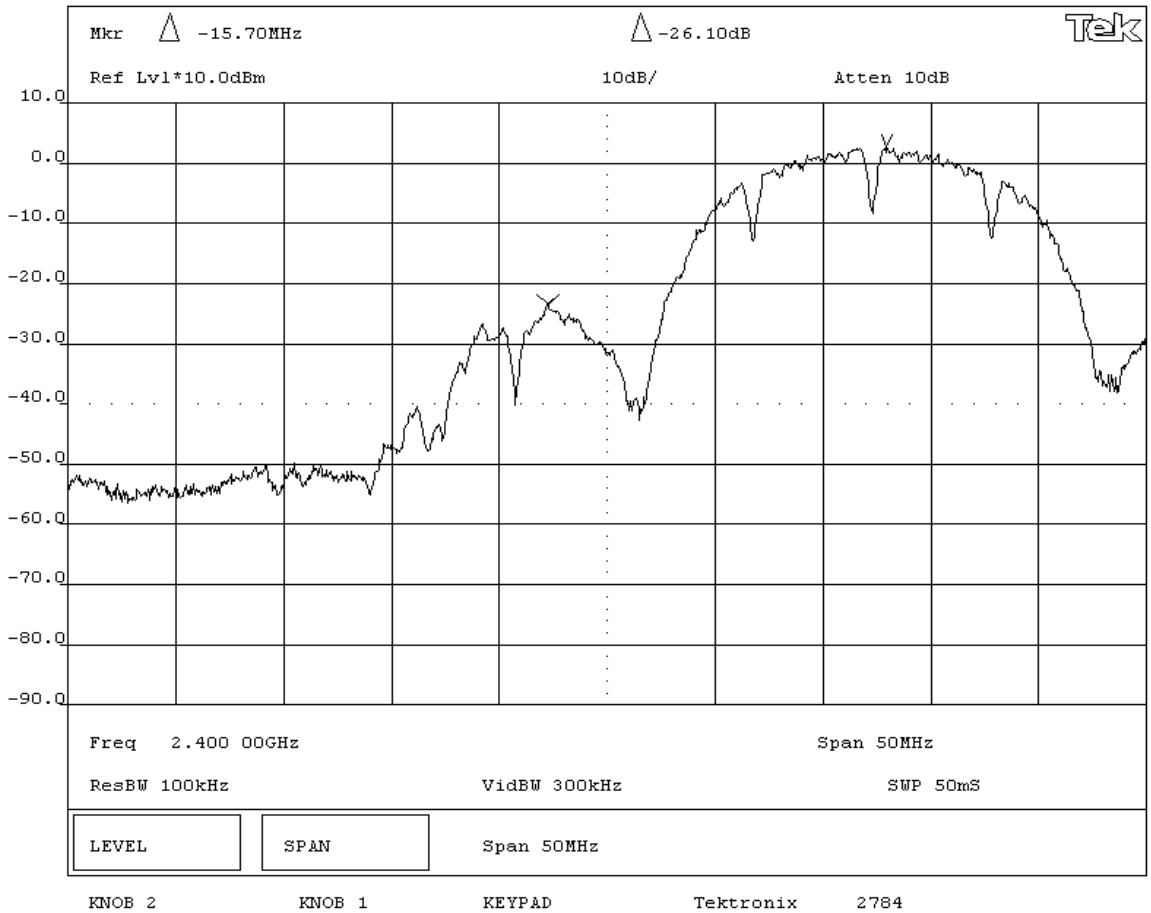
RESULTS	AMPLITUDE
Pass	-26.10 dB

SIGNATURE

Tested By: A.U.K.

DESCRIPTION OF TEST

Band Edge Compliance - Low Channel - 802.11(b) 1 Mbps



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/11/05
Customer:	Intermec Technologies Corporation			Temperature:	21°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42%
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(d)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at 1 Mbps data rate, 802.11(b) modulation scheme

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum level of any spurious emission at the edge of the authorized band is 20 dB down from the fundamental.

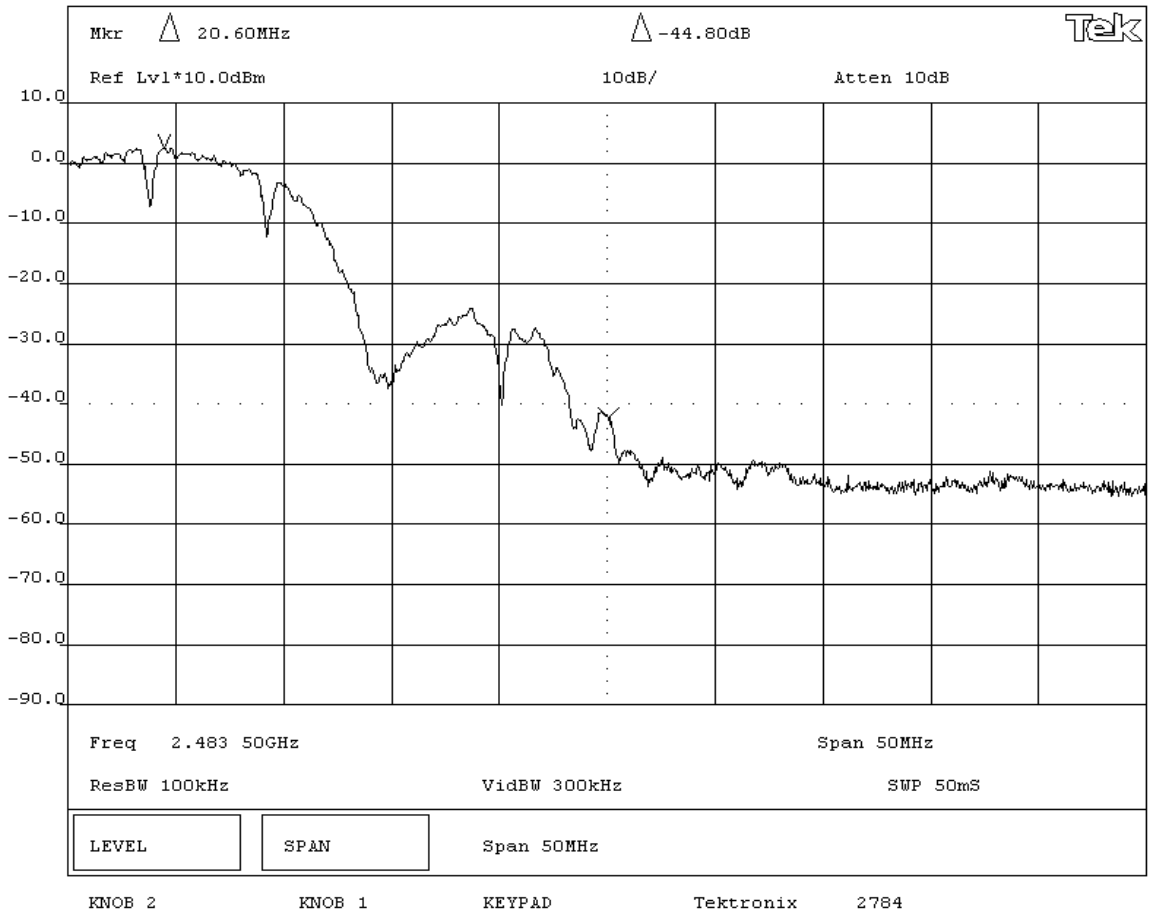
RESULTS	AMPLITUDE
Pass	-44.80 dB

SIGNATURE

Tested By: A.J. U. Kiemel

DESCRIPTION OF TEST

Band Edge Compliance - High Channel - 802.11(b) 1 Mbps



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/11/05
Customer:	Intermec Technologies Corporation			Temperature:	21°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42%
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(d)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at maximum data rate, 802.11(b) modulation scheme

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum level of any spurious emission at the edge of the authorized band is 20 dB down from the fundamental.

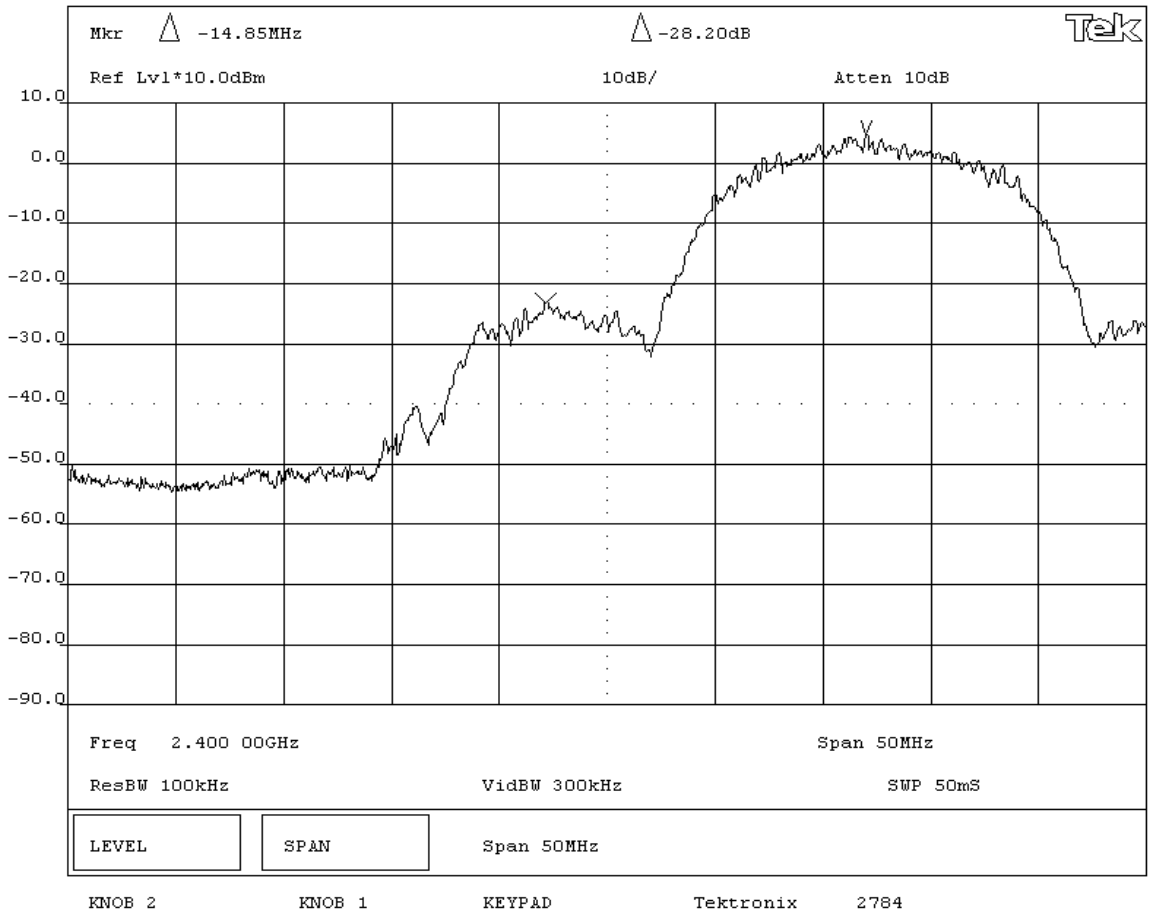
RESULTS	AMPLITUDE
Pass	-28.2 dB

SIGNATURE

Tested By: A.U.K.

DESCRIPTION OF TEST

Band Edge Compliance - Low Channel - 802.11(b) 11 Mbps



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/11/05
Customer:	Intermec Technologies Corporation			Temperature:	21°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42%
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(d)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at maximum data rate, 802.11(b) modulation scheme

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum level of any spurious emission at the edge of the authorized band is 20 dB down from the fundamental.

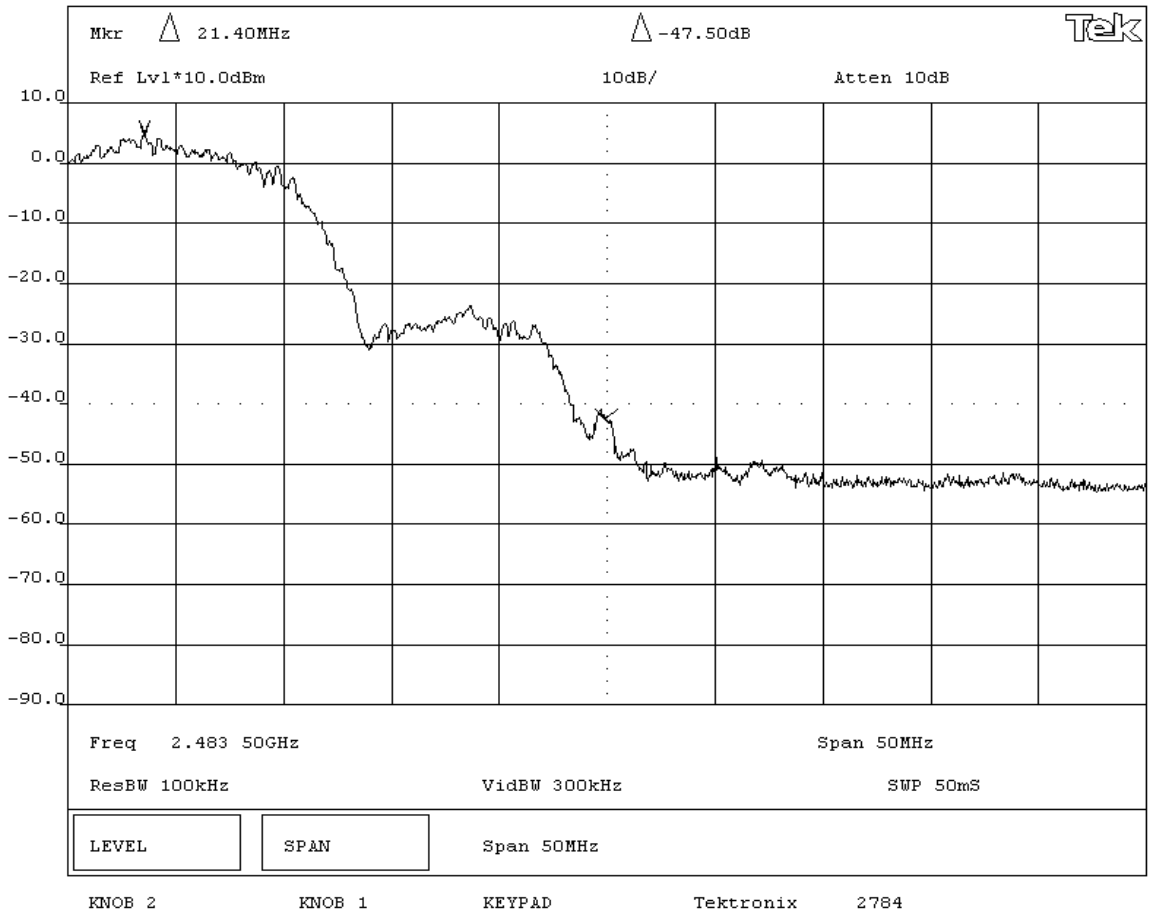
RESULTS	AMPLITUDE
Pass	-47.5 dB

SIGNATURE

Tested By: A.U.K.

DESCRIPTION OF TEST

Band Edge Compliance - High Channel - 802.11(b) 11 Mbps



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/11/05
Customer:	Intermec Technologies Corporation			Temperature:	21°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42%
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(d)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at 6 Mbps data rate, 802.11(g) modulation scheme.

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum level of any spurious emission at the edge of the authorized band is 20 dB down from the fundamental.

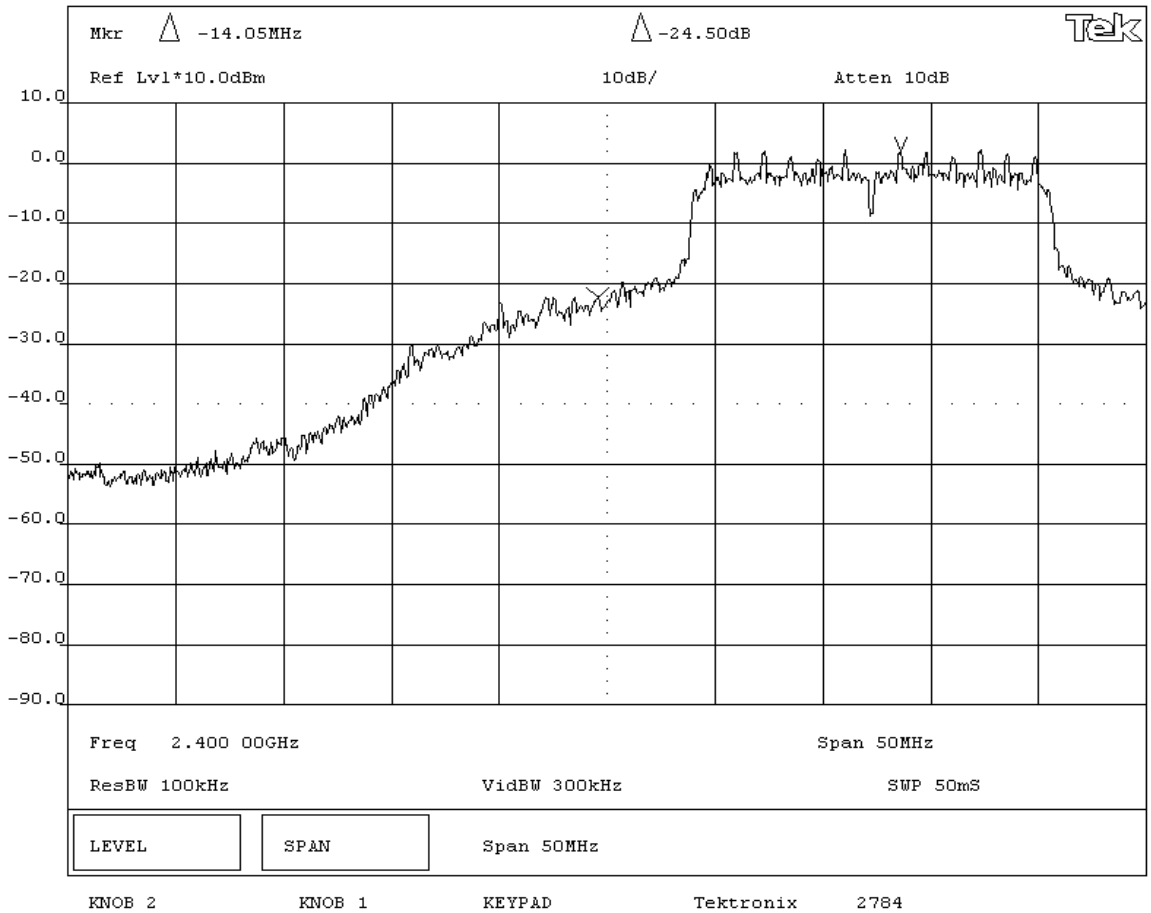
RESULTS	AMPLITUDE
Pass	-24.5 dB

SIGNATURE

Tested By: A.U.K.

DESCRIPTION OF TEST

Band Edge Compliance - Low Channel - 802.11(g) 6 Mbit



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/11/05
Customer:	Intermec Technologies Corporation			Temperature:	21°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42%
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(d)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at 6 Mbps data rate, 802.11(g) modulation scheme.

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum level of any spurious emission at the edge of the authorized band is 20 dB down from the fundamental.

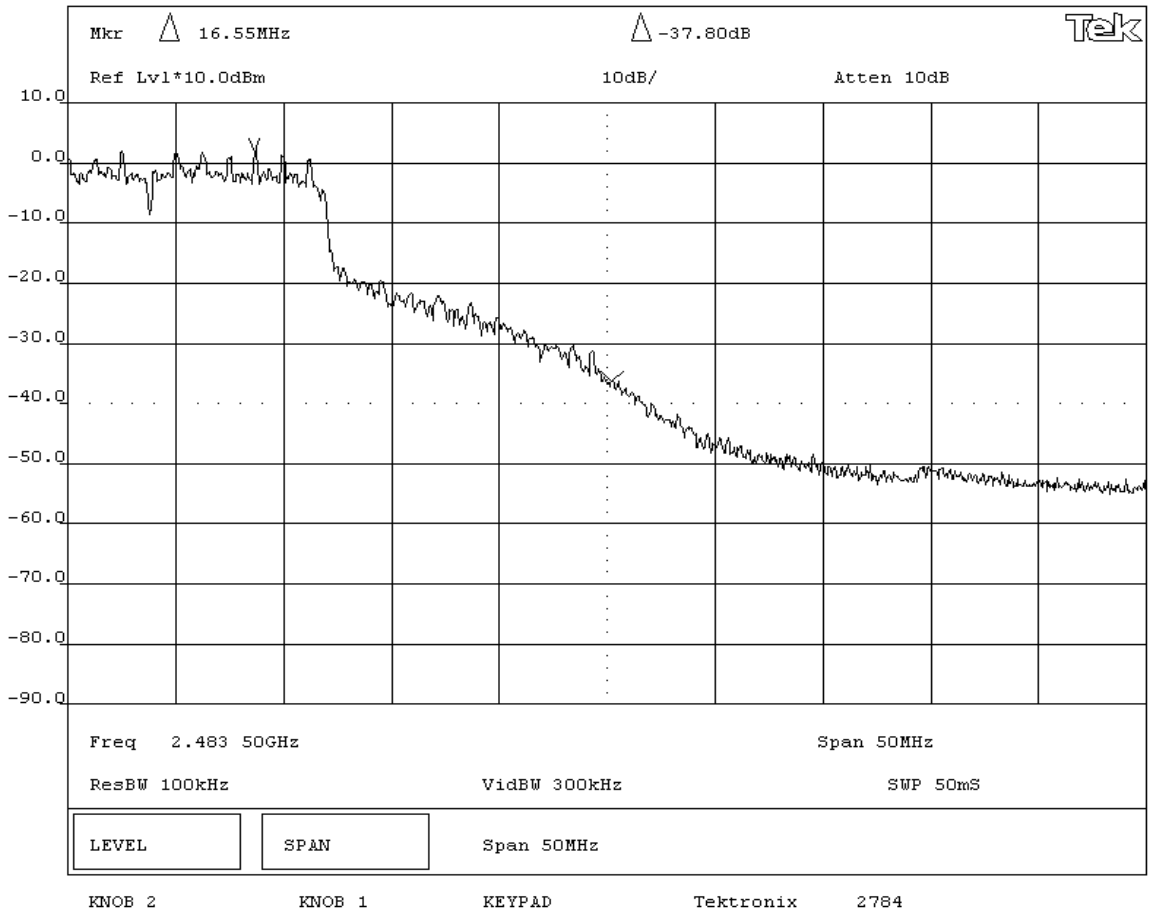
RESULTS	AMPLITUDE
Pass	-37.8 dB

SIGNATURE

Tested By: _____

DESCRIPTION OF TEST

Band Edge Compliance - High Channel - 802.11(g) 6 Mbit



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/11/05
Customer:	Intermec Technologies Corporation			Temperature:	21°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42%
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(d)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at 36 Mbps data rate, 802.11(g) modulation scheme.

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum level of any spurious emission at the edge of the authorized band is 20 dB down from the fundamental.

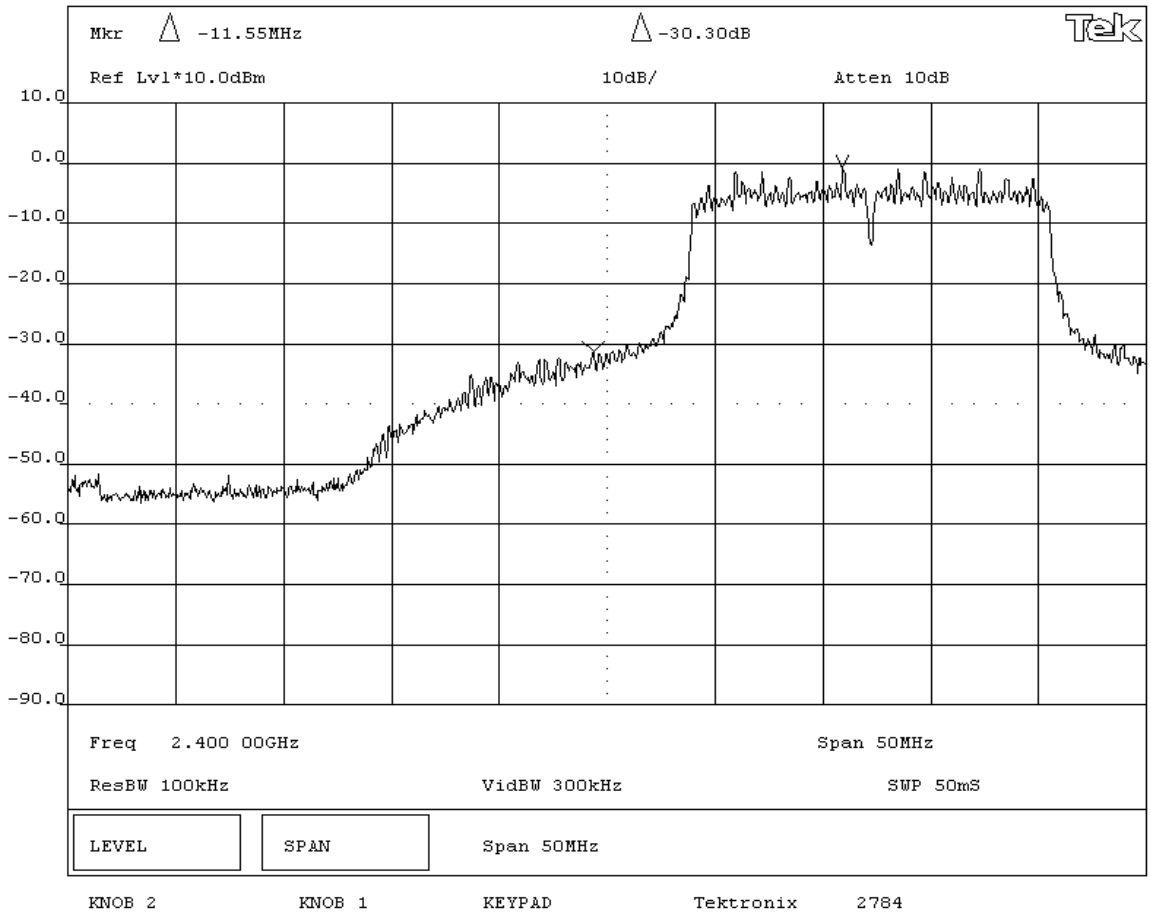
RESULTS	AMPLITUDE
Pass	-30.3 dB

SIGNATURE

Tested By: A.U.K.

DESCRIPTION OF TEST

Band Edge Compliance - Low Channel - 802.11(g) 36 Mbit



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/11/05
Customer:	Intermec Technologies Corporation			Temperature:	21°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42%
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(d)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at 36 Mbps data rate, 802.11(g) modulation scheme.

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum level of any spurious emission at the edge of the authorized band is 20 dB down from the fundamental.

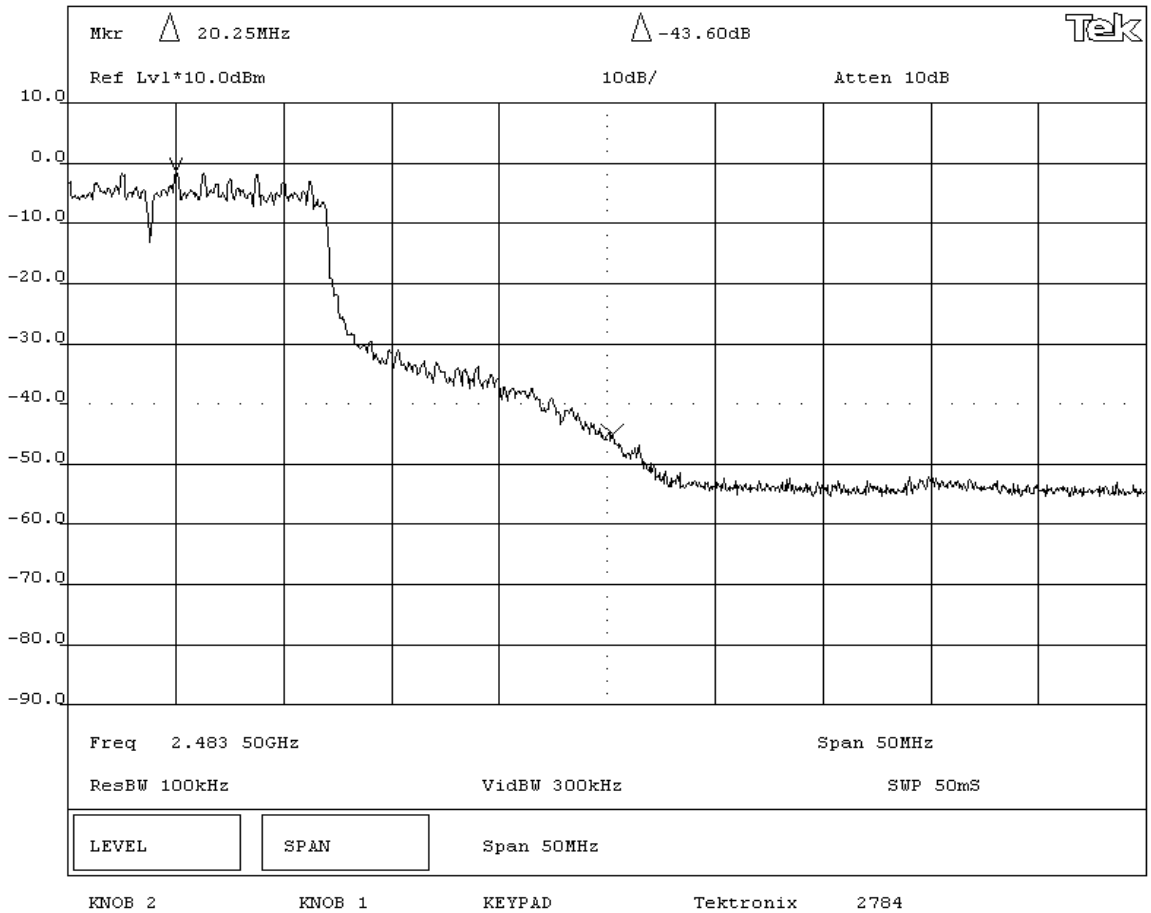
RESULTS	AMPLITUDE
Pass	-43.6 dB

SIGNATURE

Tested By: A.U.K.

DESCRIPTION OF TEST

Band Edge Compliance - High Channel - 802.11(g) 36 Mbit



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/11/05
Customer:	Intermec Technologies Corporation			Temperature:	21°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42%
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(d)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at maximum data rate, 802.11(g) modulation scheme.

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum level of any spurious emission at the edge of the authorized band is 20 dB down from the fundamental.

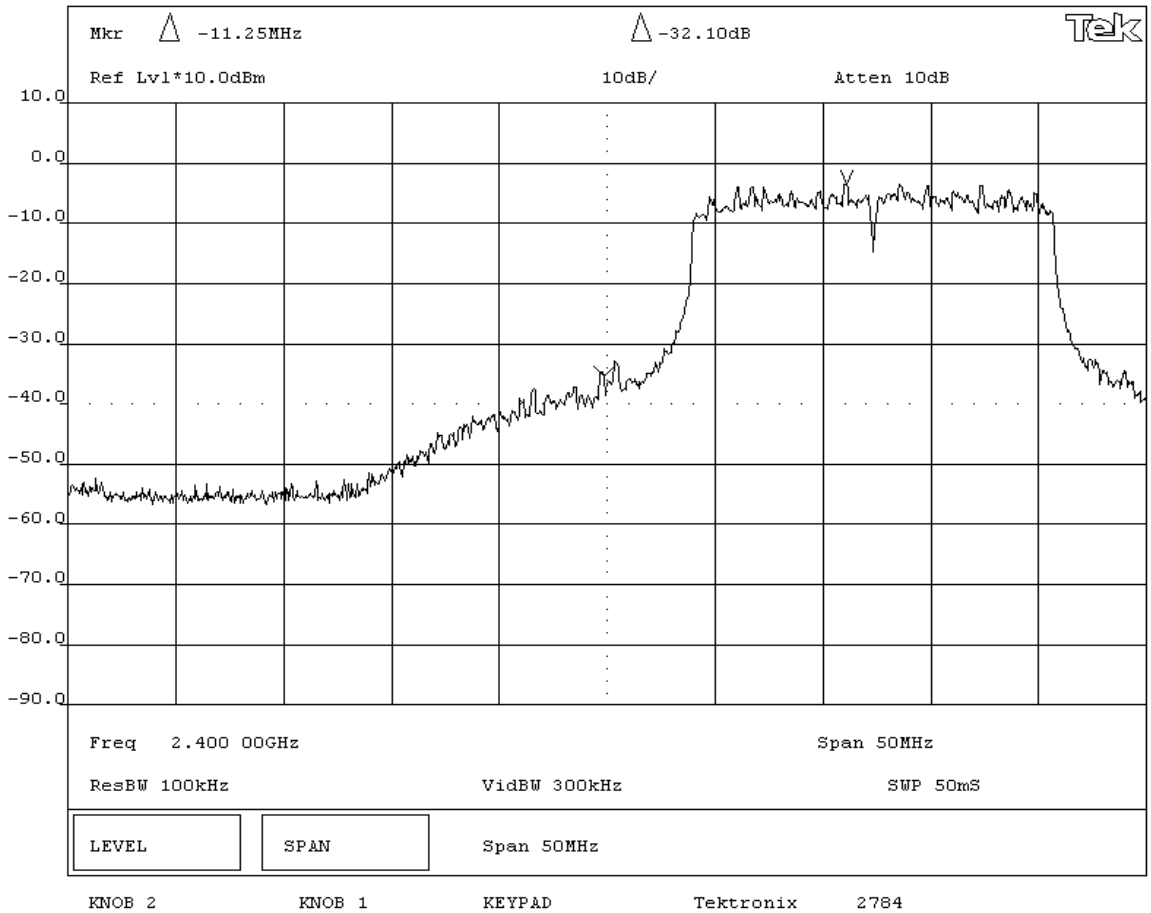
RESULTS	AMPLITUDE
Pass	-32.1 dB

SIGNATURE

Tested By: A.J. U.K.P

DESCRIPTION OF TEST

Band Edge Compliance - Low Channel - 802.11(g) 54 Mbit



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/11/05
Customer:	Intermec Technologies Corporation			Temperature:	21°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42%
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(d)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at maximum data rate, 802.11(g) modulation scheme.

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum level of any spurious emission at the edge of the authorized band is 20 dB down from the fundamental.

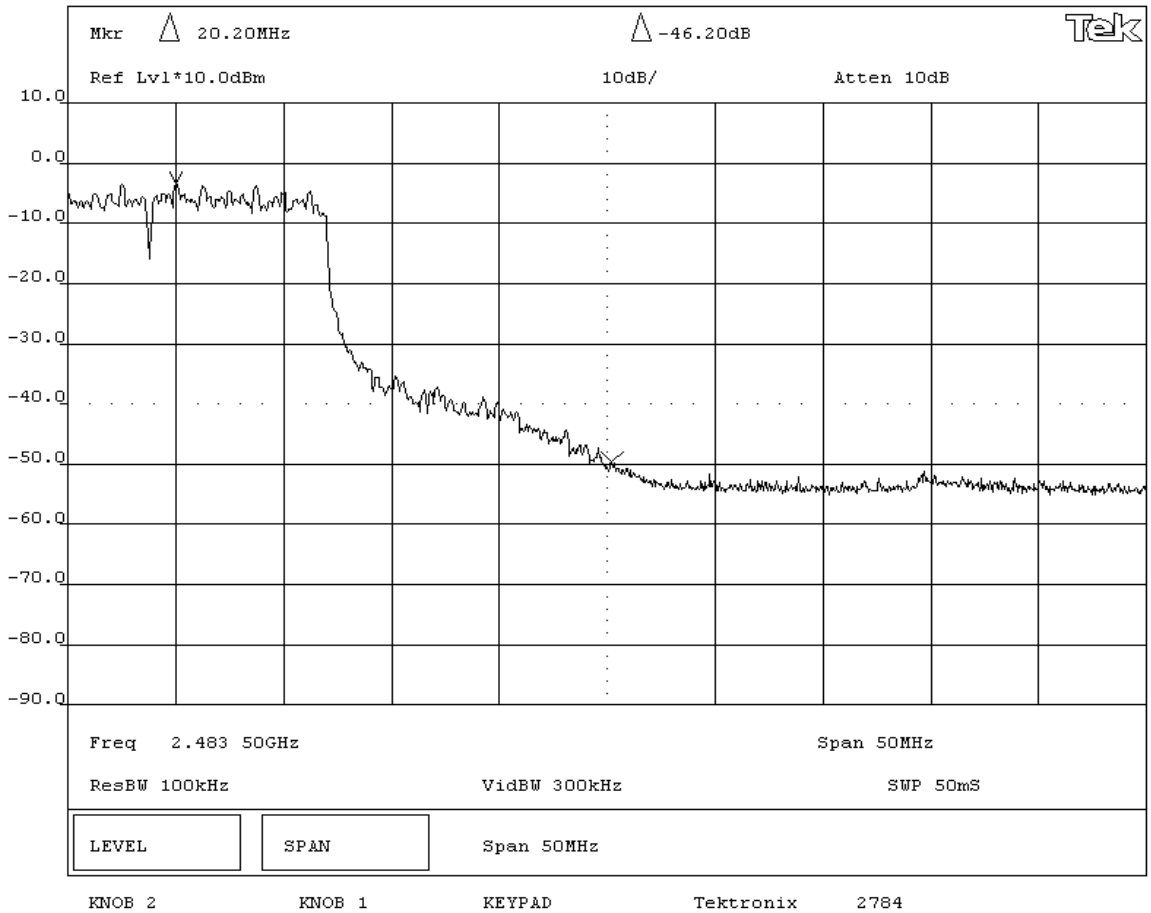
RESULTS	AMPLITUDE
Pass	-46.2 dB

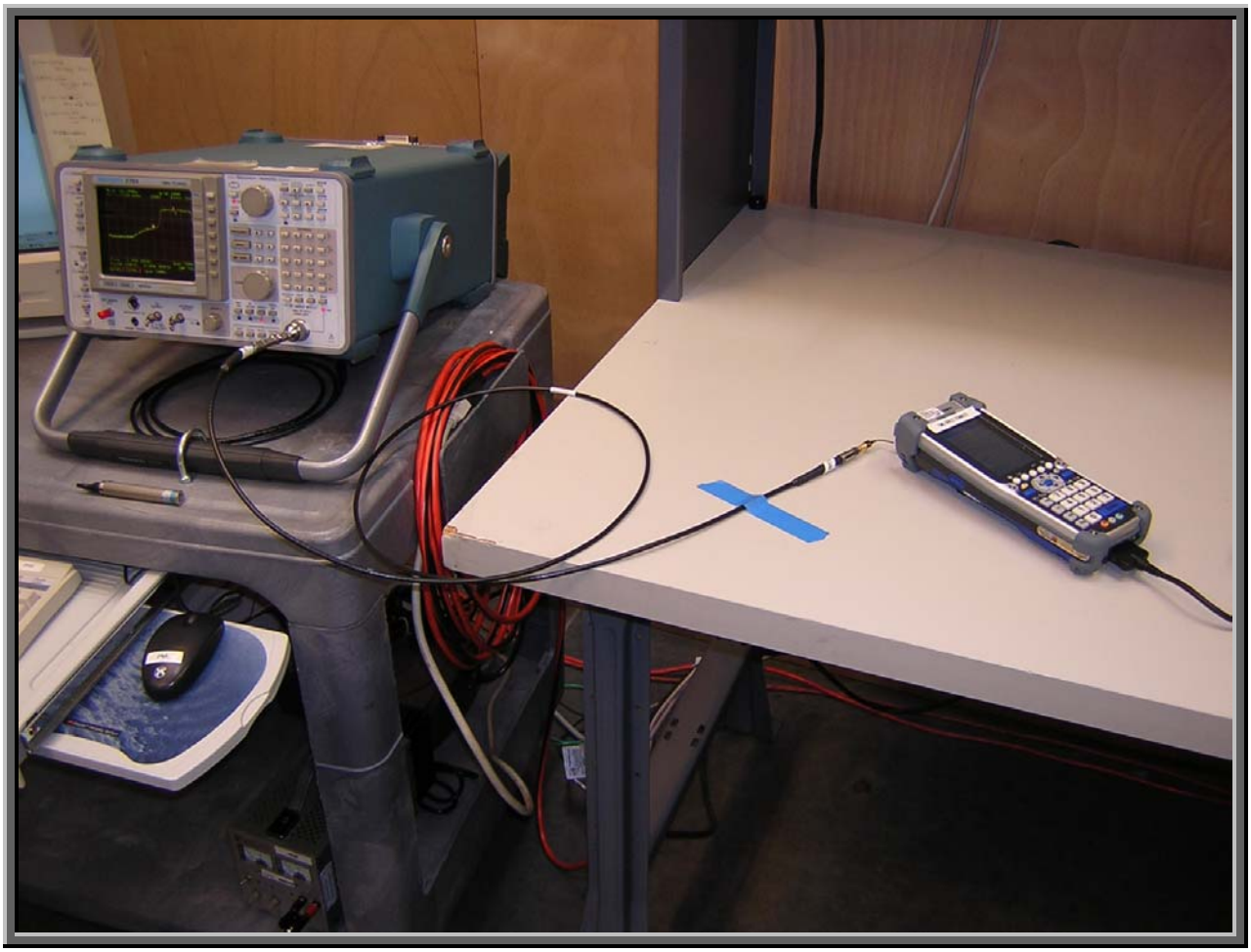
SIGNATURE

Tested By: A.U.K.

DESCRIPTION OF TEST

Band Edge Compliance - High Channel - 802.11(g) 54 Mbit





Justification

The individuals and/or the organization requesting the test provided the modes, configurations and settings available to evaluate. While scanning the radiated emissions, all of the EUT parameters listed below were investigated. This includes, but may not be limited to, antennas, tuned transmit frequency ranges, operating modes, and data rates.

Channels in Specified Band Investigated:
Low
Mid
High

Operating Modes Investigated:
Continuous transmit

Data Rates Investigated:
1 Mbps (802.11b)
11 Mbps (802.11b)
6 Mbps (802.11g)
36 Mbps (802.11g)
54 Mbps (802.11g)

Output Power Setting(s) Investigated:
Maximum default

Power Input Settings Investigated:
120 VAC, 60 Hz.

Software\Firmware Applied During Test			
Exercise software	cTxRx Win CE	**Version**	0.1.2.1
Description			
The system was tested using special software developed to test all functions of the device during the test.			

EUT and Peripherals			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
EUT - 802UIAG	Intermec Technologies Corporation	802UIAG	Unknown
Host Device	Intermec Technologies Corporation	CK61	33390400093
AC Power Adapter	Intermec Technologies Corporation	851-061-002	335174

Cables					
Cable Type	**Shield**	**Length (m)**	**Ferrite**	**Connection 1**	**Connection 2**
DC Leads	Yes	1.9	PA	AC Power Adapter	Host Device
AC Power	No	2.0	No	AC Power Adapter	AC Mains
PA = Cable is permanently attached to the device. Shielding and/or presence of ferrite may be unknown.					

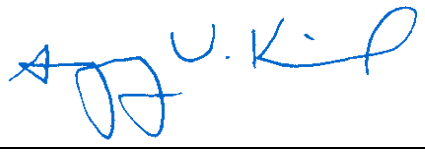
Measurement Equipment					
Description	**Manufacturer**	**Model**	**Identifier**	**Last Cal**	**Interval**
Spectrum Analyzer	Tektronix	2784	AAO	01/02/2005	12 mo

Test Description

Requirement: Per 47 CFR 15.247(d), in any 100 kHz bandwidth outside the authorized band, the maximum level of radio frequency power must be at least 20dB down from the highest emission level within the authorized band. The measurement is made with the spectrum analyzer's resolution bandwidth set to 100 kHz, and the video bandwidth set to greater than or equal to the resolution bandwidth.

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

Completed by:



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/10/05
Customer:	Intermec Technologies Corporation			Temperature:	20°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42% RH
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(d)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at 6 Mbps data rate, 802.11(g) modulation scheme

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum level of any spurious emission outside of the authorized band is 20 dB down from the fundamental.

RESULTS

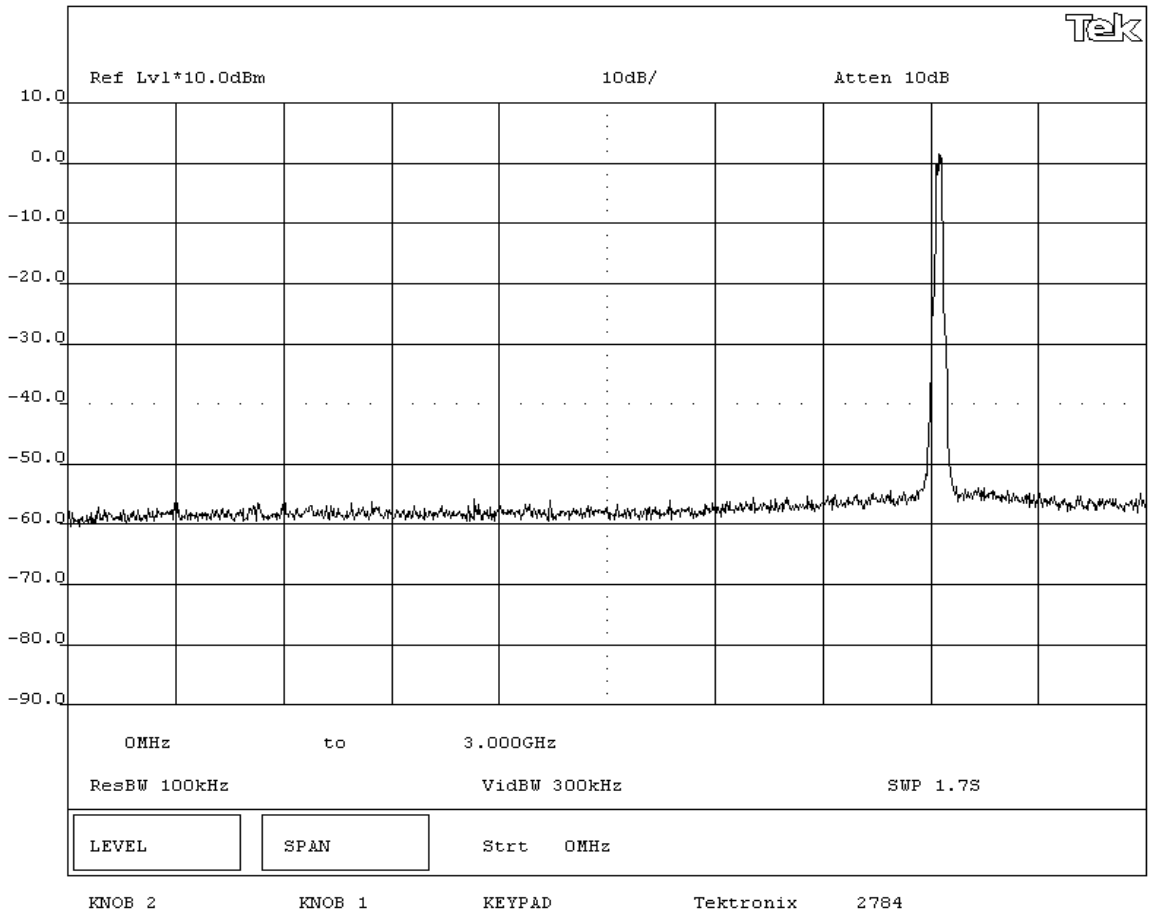
Pass

SIGNATURE

Tested By: A.U.K.P

DESCRIPTION OF TEST

Antenna Conducted Spurious Emissions 0MHz-3GHz - Low Channel - 802.11(g) 6 Mbps



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/10/05
Customer:	Intermec Technologies Corporation			Temperature:	20°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42% RH
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(d)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at 6 Mbps data rate, 802.11(g) modulation scheme

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum level of any spurious emission outside of the authorized band is 20 dB down from the fundamental.

RESULTS

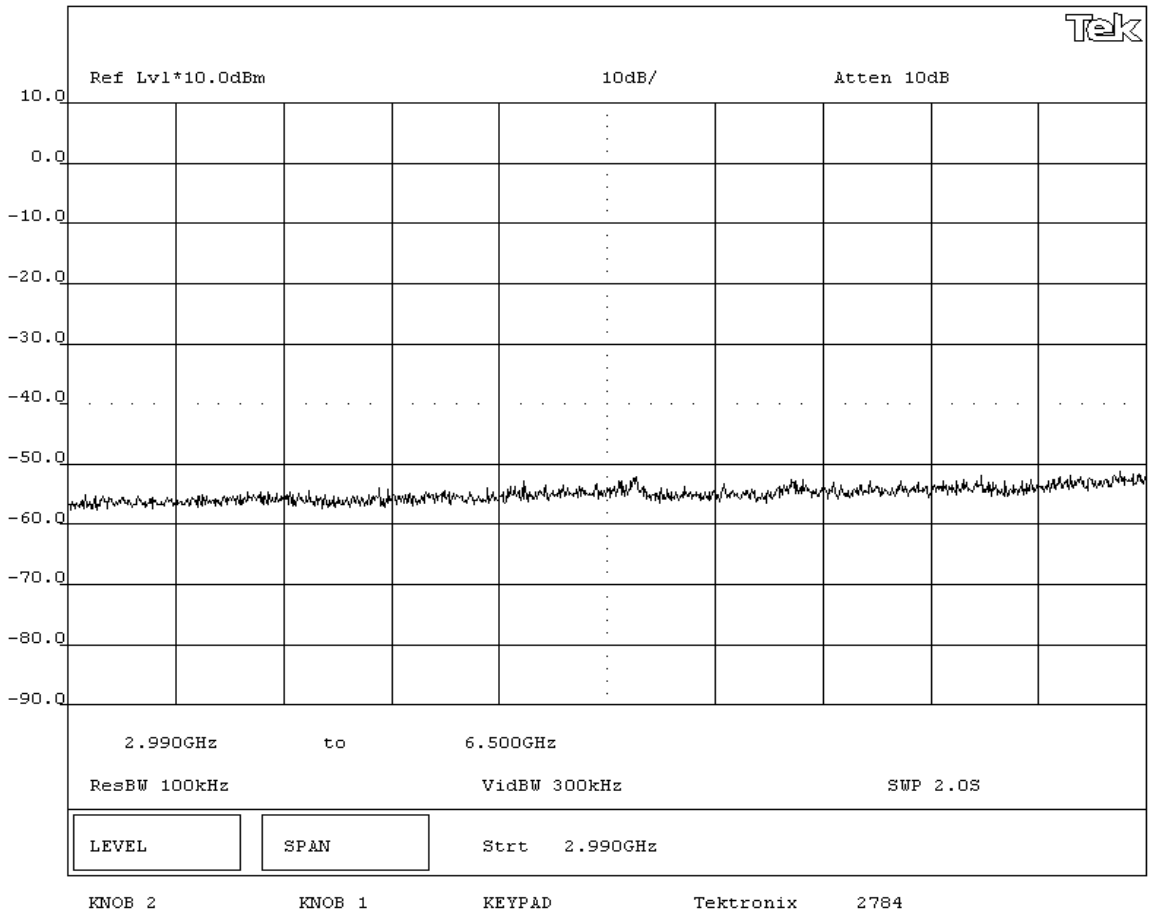
Pass

SIGNATURE

Tested By: A.U.K.P

DESCRIPTION OF TEST

Antenna Conducted Spurious Emissions 3GHz-6.5GHz - Low Channel - 802.11(g) 6 Mbps



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/10/05
Customer:	Intermec Technologies Corporation			Temperature:	20°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42% RH
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(d)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at 6 Mbps data rate, 802.11(g) modulation scheme

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum level of any spurious emission outside of the authorized band is 20 dB down from the fundamental.

RESULTS

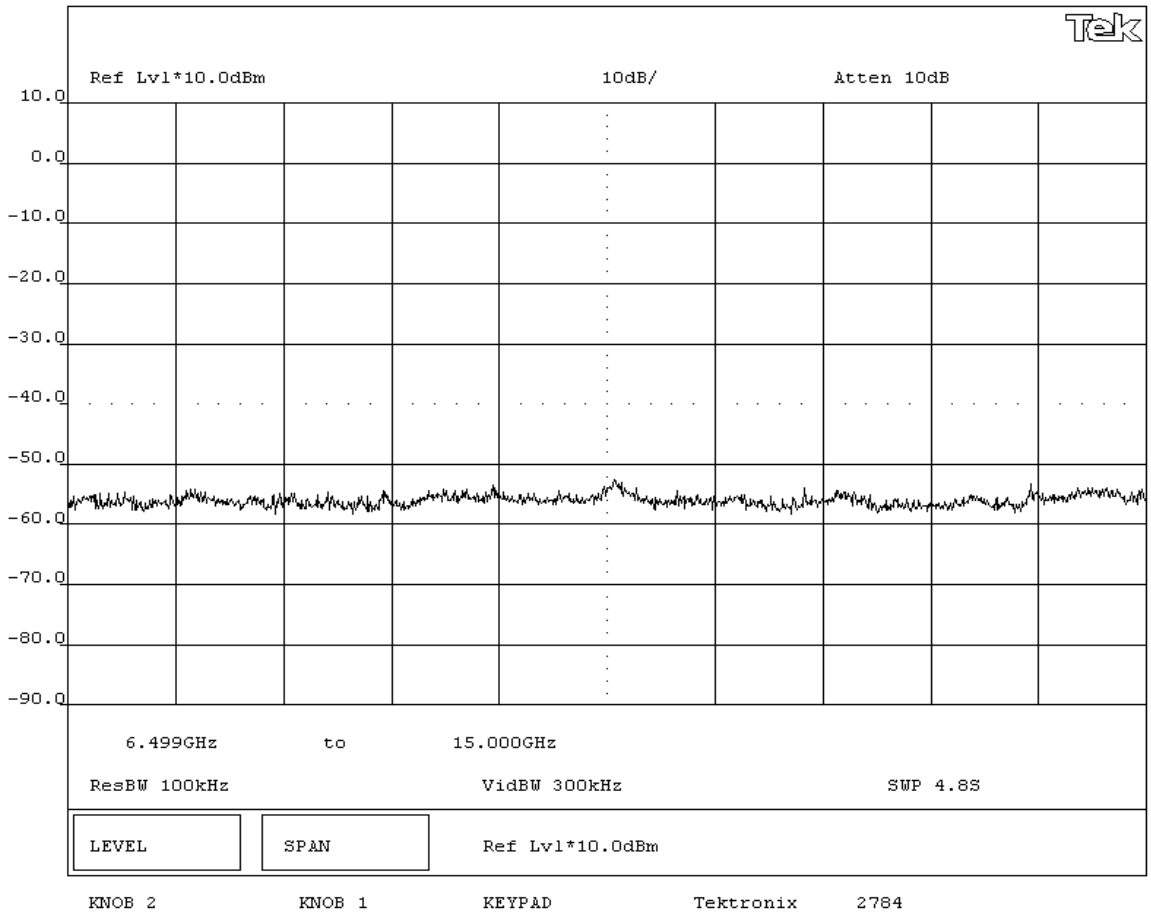
Pass

SIGNATURE

Tested By: _____

DESCRIPTION OF TEST

Antenna Conducted Spurious Emissions 6.5GHz-15GHz - Low Channel - 802.11(g) 6 Mbps



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/10/05
Customer:	Intermec Technologies Corporation			Temperature:	20°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42% RH
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(d)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at 6 Mbps data rate, 802.11(g) modulation scheme

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum level of any spurious emission outside of the authorized band is 20 dB down from the fundamental.

RESULTS

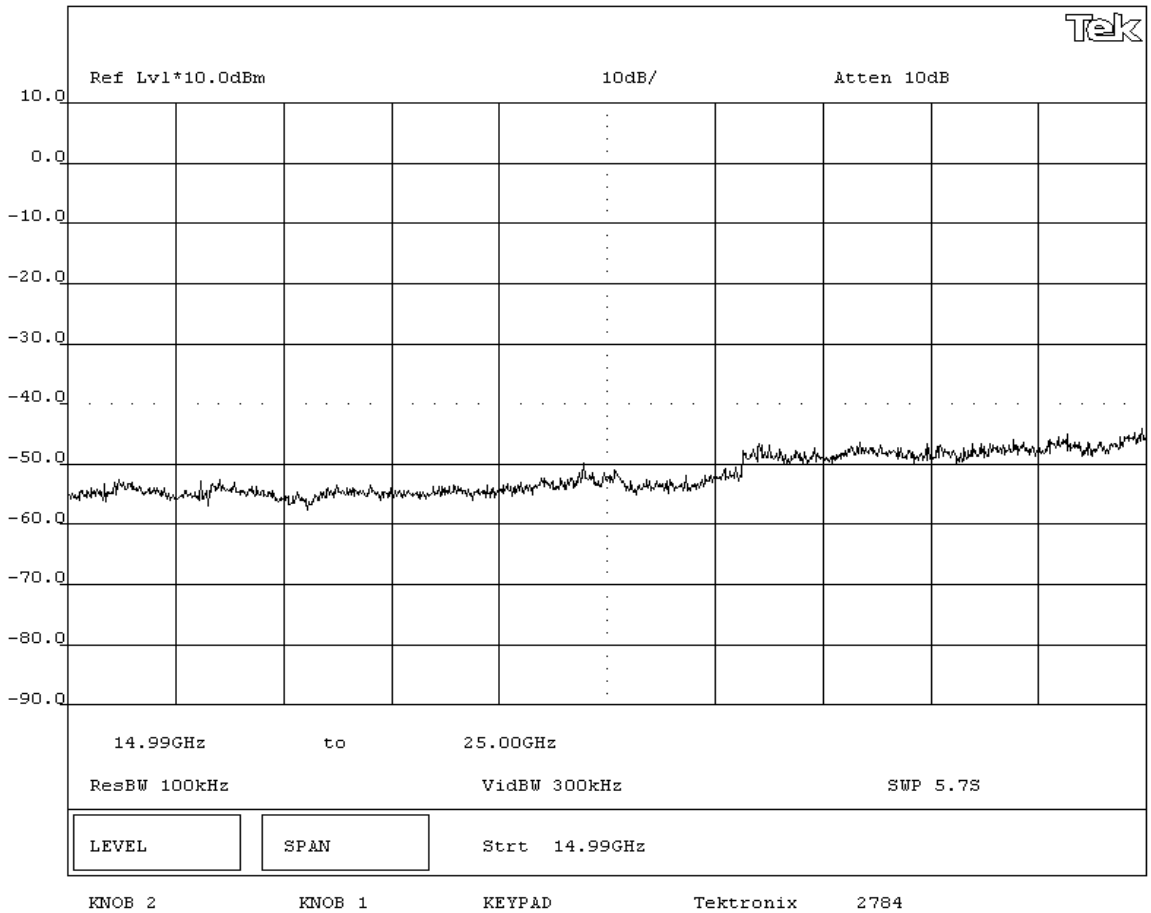
Pass

SIGNATURE

Tested By: A.U.K.P

DESCRIPTION OF TEST

Antenna Conducted Spurious Emissions 15GHz - 25GHz - Low Channel - 802.11(g) 6 Mbps



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/10/05
Customer:	Intermec Technologies Corporation			Temperature:	20°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42% RH
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(d)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at 6 Mbps data rate, 802.11(g) modulation scheme

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum level of any spurious emission outside of the authorized band is 20 dB down from the fundamental.

RESULTS

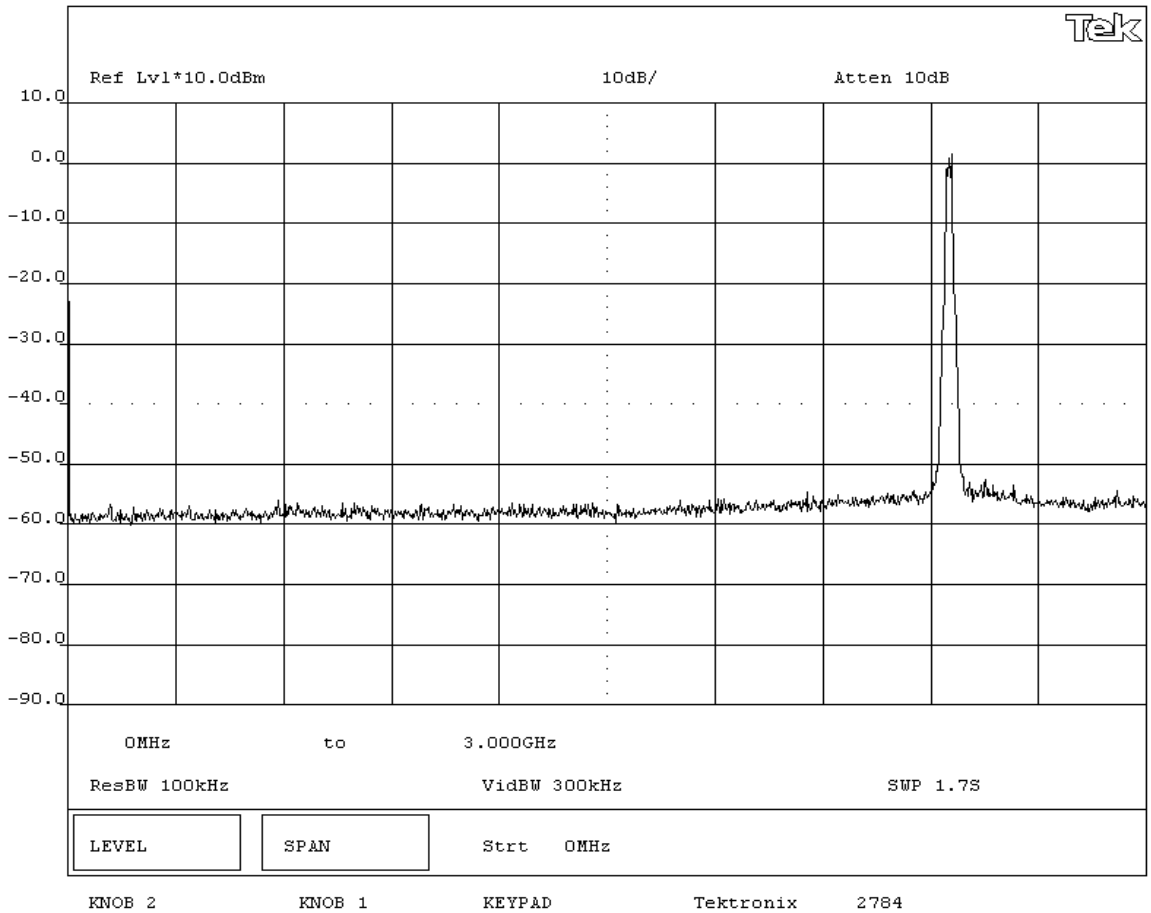
Pass

SIGNATURE

Tested By: A.U.K.P

DESCRIPTION OF TEST

Antenna Conducted Spurious Emissions 0MHz-3GHz - Mid Channel - 802.11(g) 6 Mbps



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/10/05
Customer:	Intermec Technologies Corporation			Temperature:	20°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42% RH
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(d)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at 6 Mbps data rate, 802.11(g) modulation scheme

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum level of any spurious emission outside of the authorized band is 20 dB down from the fundamental.

RESULTS

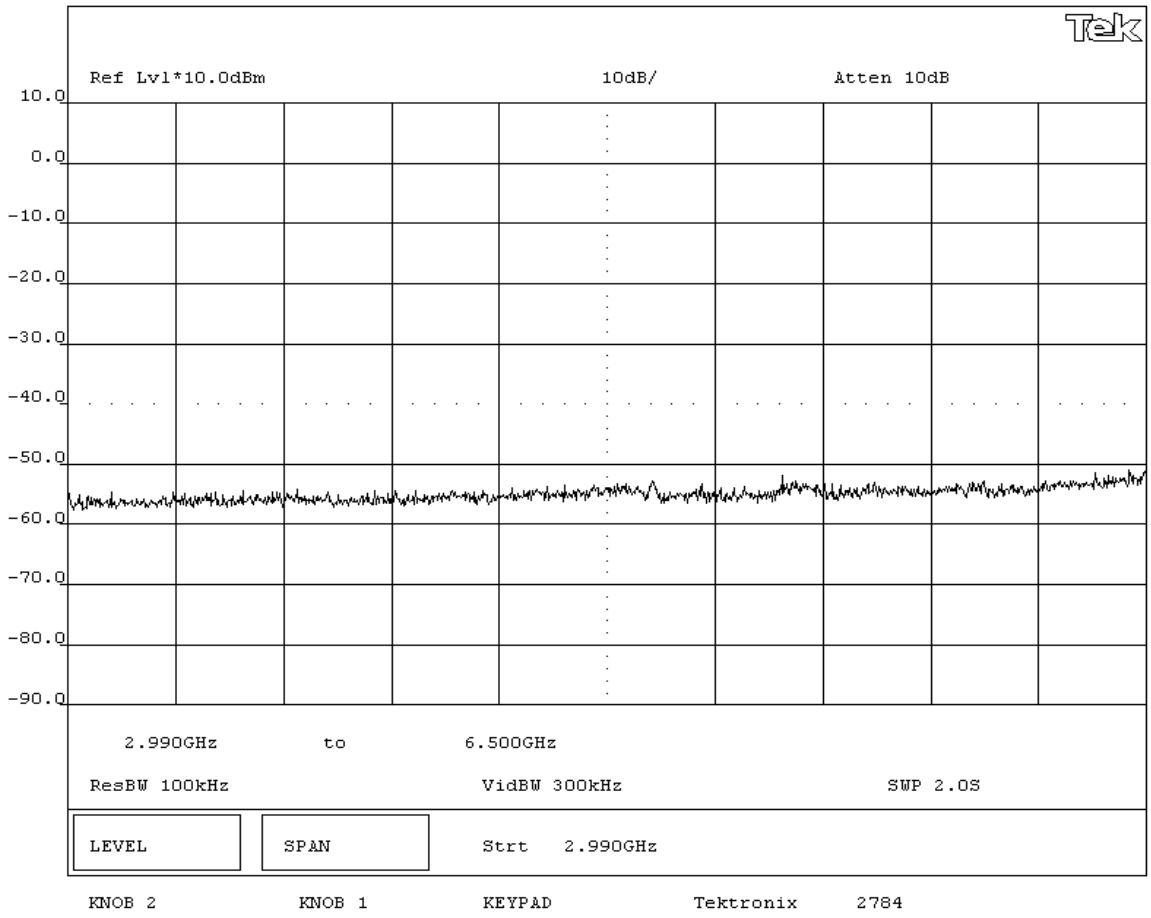
Pass

SIGNATURE

Tested By: A.U.K.P

DESCRIPTION OF TEST

Antenna Conducted Spurious Emissions 3GHz-6.5GHz - Mid Channel - 802.11(g) 6 Mbps



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/10/05
Customer:	Intermec Technologies Corporation			Temperature:	20°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42% RH
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(d)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at 6 Mbps data rate, 802.11(g) modulation scheme

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum level of any spurious emission outside of the authorized band is 20 dB down from the fundamental.

RESULTS

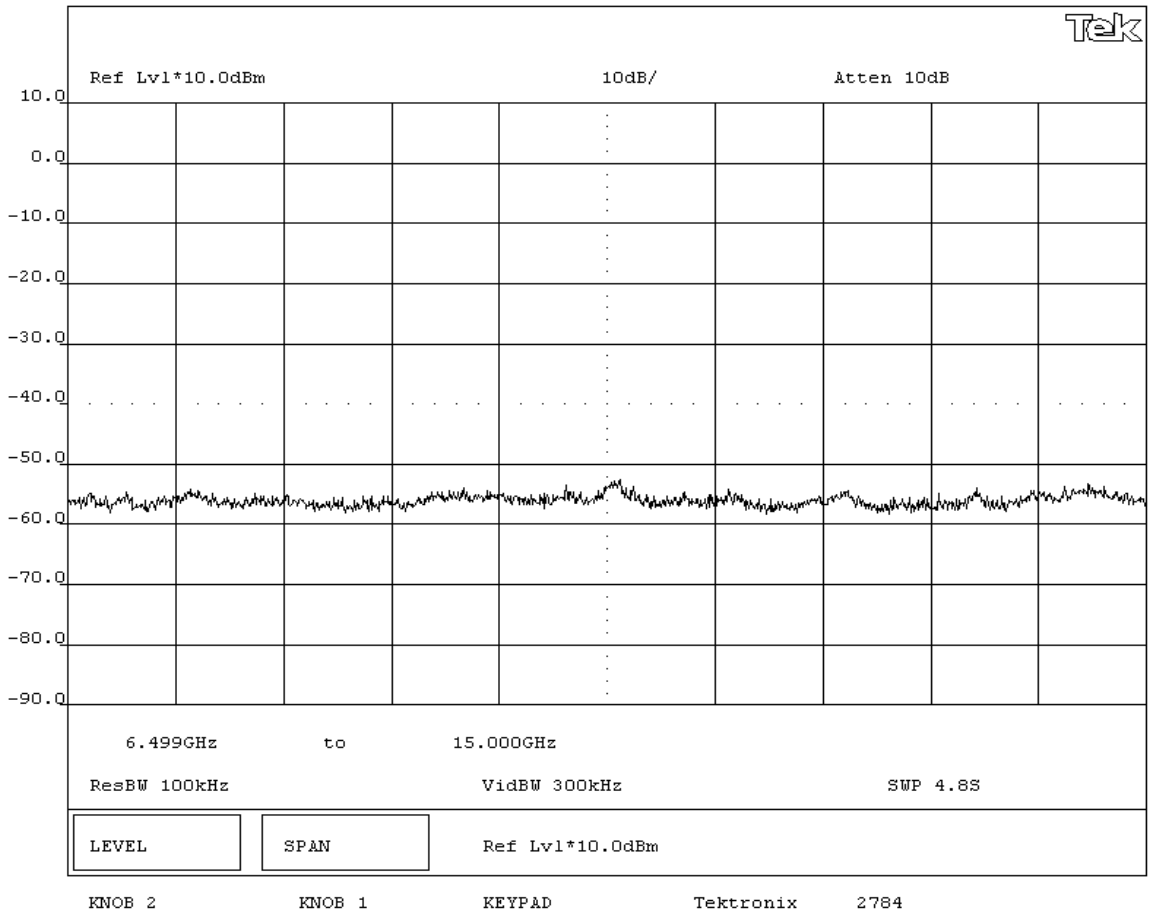
Pass

SIGNATURE

Tested By: A.U.K.P

DESCRIPTION OF TEST

Antenna Conducted Spurious Emissions 6.5GHz-15GHz - Mid Channel - 802.11(g) 6 Mbps



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/10/05
Customer:	Intermec Technologies Corporation			Temperature:	20°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42% RH
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(d)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at 6 Mbps data rate, 802.11(g) modulation scheme

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum level of any spurious emission outside of the authorized band is 20 dB down from the fundamental.

RESULTS

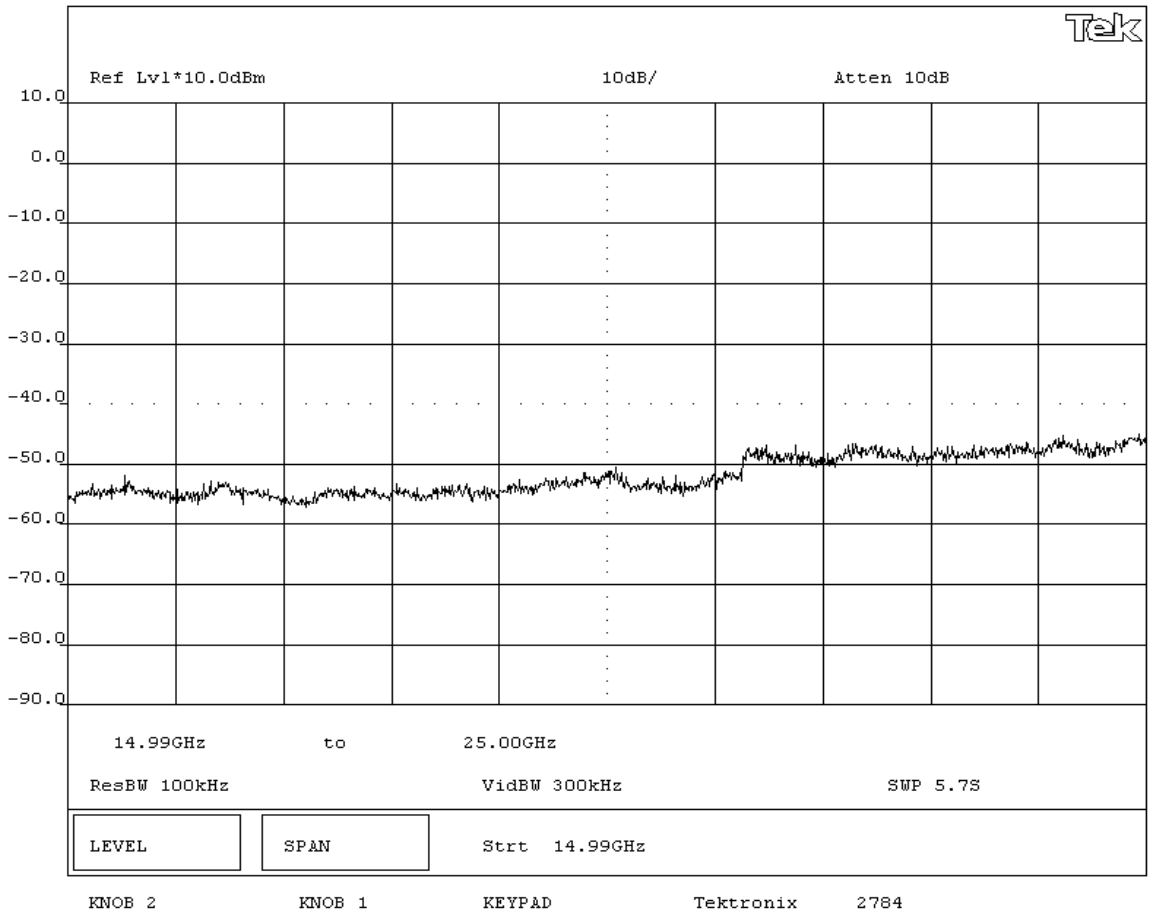
Pass

SIGNATURE

Tested By: A.U.K.P

DESCRIPTION OF TEST

Antenna Conducted Spurious Emissions 15GHz - 25GHz - Mid Channel - 802.11(g) 6 Mbps



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/10/05
Customer:	Intermec Technologies Corporation			Temperature:	20°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42% RH
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(d)	Year: 2004	Method: FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at 6 Mbps data rate, 802.11(g) modulation scheme

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum level of any spurious emission outside of the authorized band is 20 dB down from the fundamental.

RESULTS

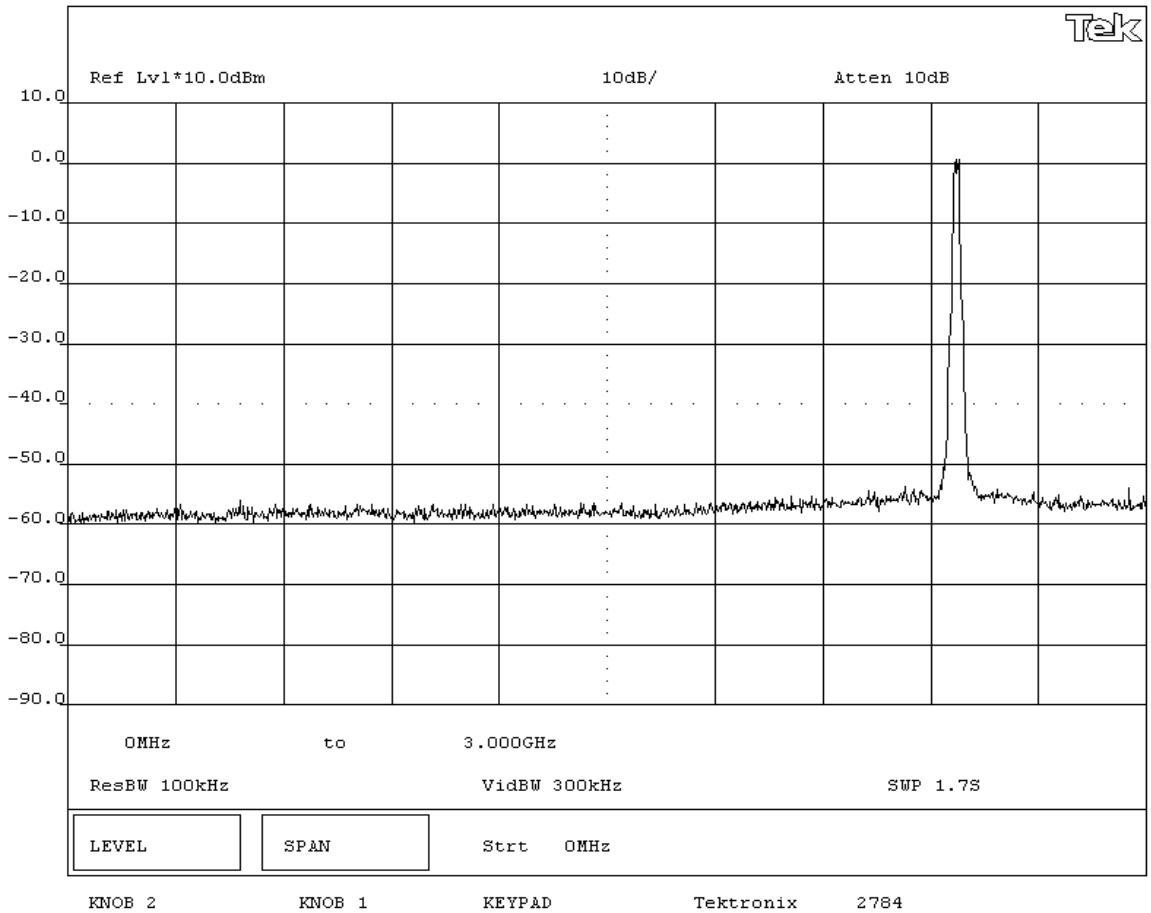
Pass

SIGNATURE

Tested By: A.U.K.P

DESCRIPTION OF TEST

Antenna Conducted Spurious Emissions 0MHz-3GHz - High Channel - 802.11(g) 6 Mbps



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/10/05
Customer:	Intermec Technologies Corporation			Temperature:	20°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42% RH
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(d)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at 6 Mbps data rate, 802.11(g) modulation scheme

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum level of any spurious emission outside of the authorized band is 20 dB down from the fundamental.

RESULTS

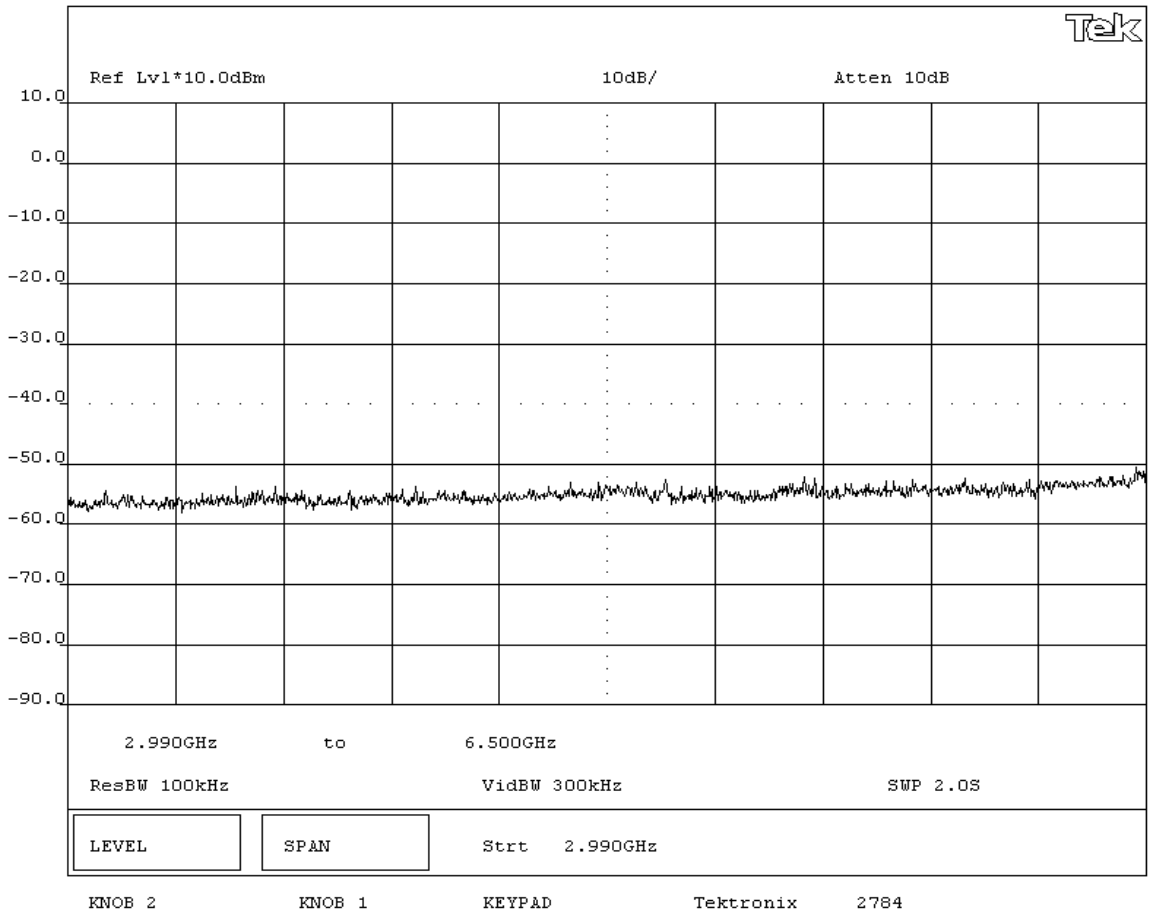
Pass

SIGNATURE

Tested By: A.U.K.P

DESCRIPTION OF TEST

Antenna Conducted Spurious Emissions 3GHz-6.5GHz - High Channel - 802.11(g) 6 Mbps



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/10/05
Customer:	Intermec Technologies Corporation			Temperature:	20°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42% RH
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(d)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at 6 Mbps data rate, 802.11(g) modulation scheme

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum level of any spurious emission outside of the authorized band is 20 dB down from the fundamental.

RESULTS

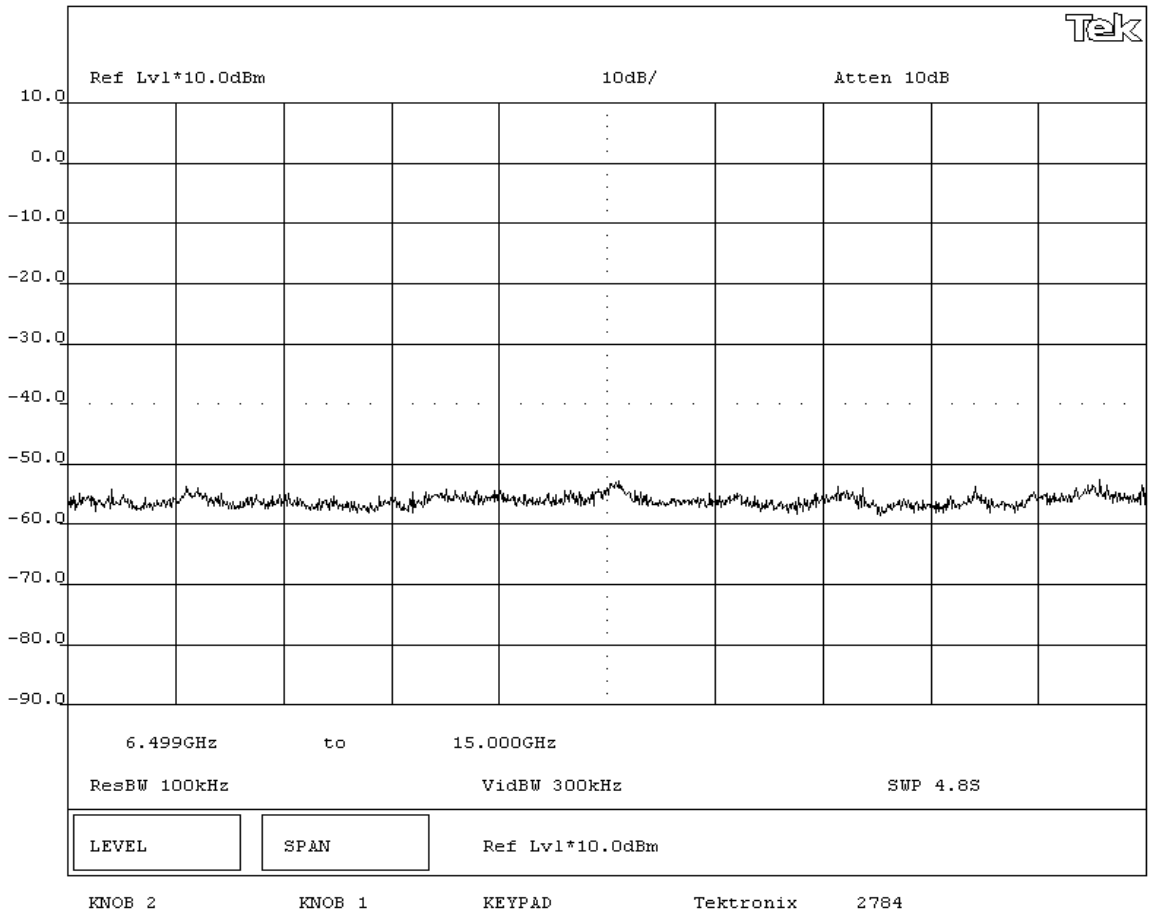
Pass

SIGNATURE

Tested By: _____

DESCRIPTION OF TEST

Antenna Conducted Spurious Emissions 6.5GHz-15GHz - High Channel - 802.11(g) 6 Mbps



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/10/05
Customer:	Intermec Technologies Corporation			Temperature:	20°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42% RH
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(d)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at 6 Mbps data rate, 802.11(g) modulation scheme

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum level of any spurious emission outside of the authorized band is 20 dB down from the fundamental.

RESULTS

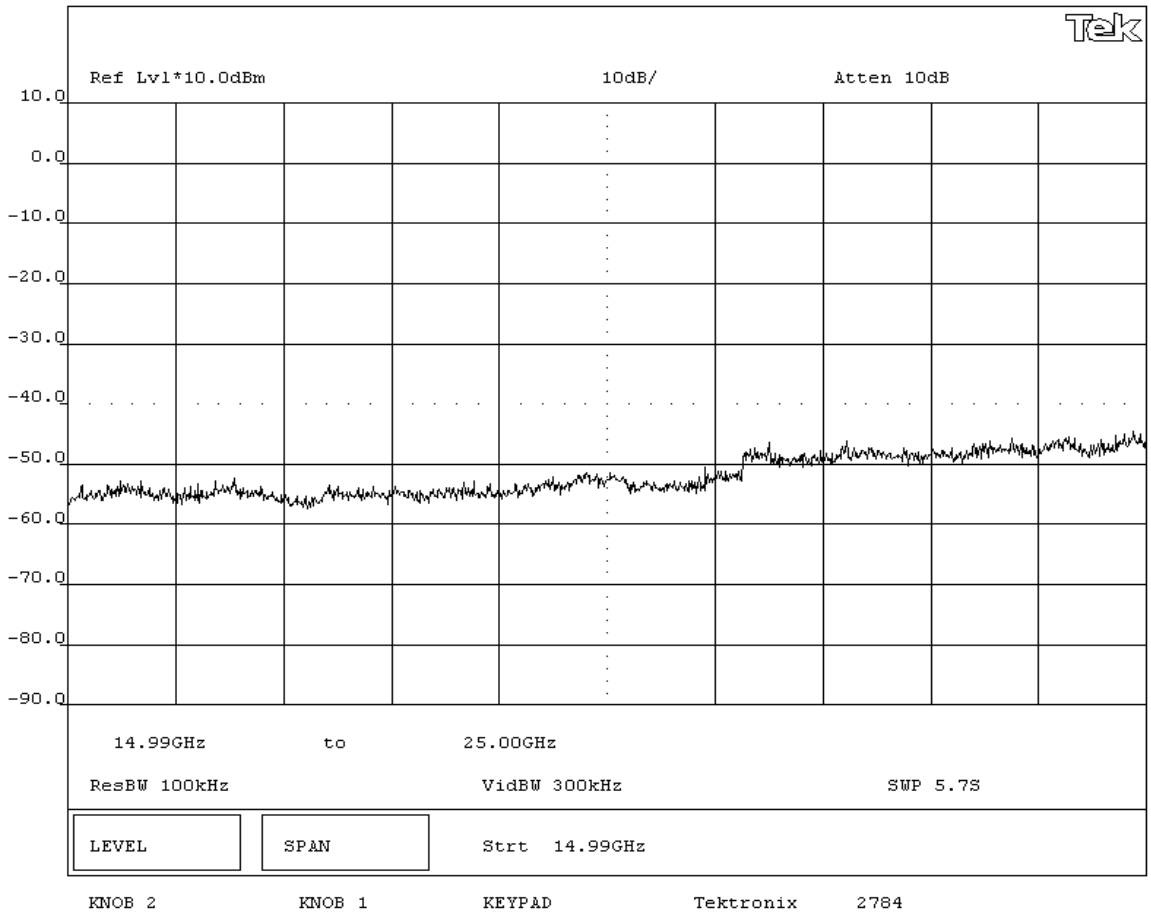
Pass

SIGNATURE

Tested By: A.U.K.P

DESCRIPTION OF TEST

Antenna Conducted Spurious Emissions 15GHz - 25GHz - High Channel - 802.11(g) 6 Mbps



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/10/05
Customer:	Intermec Technologies Corporation			Temperature:	20°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42% RH
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(d)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at 36 Mbps data rate, 802.11(g) modulation scheme

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum level of any spurious emission outside of the authorized band is 20 dB down from the fundamental.

RESULTS

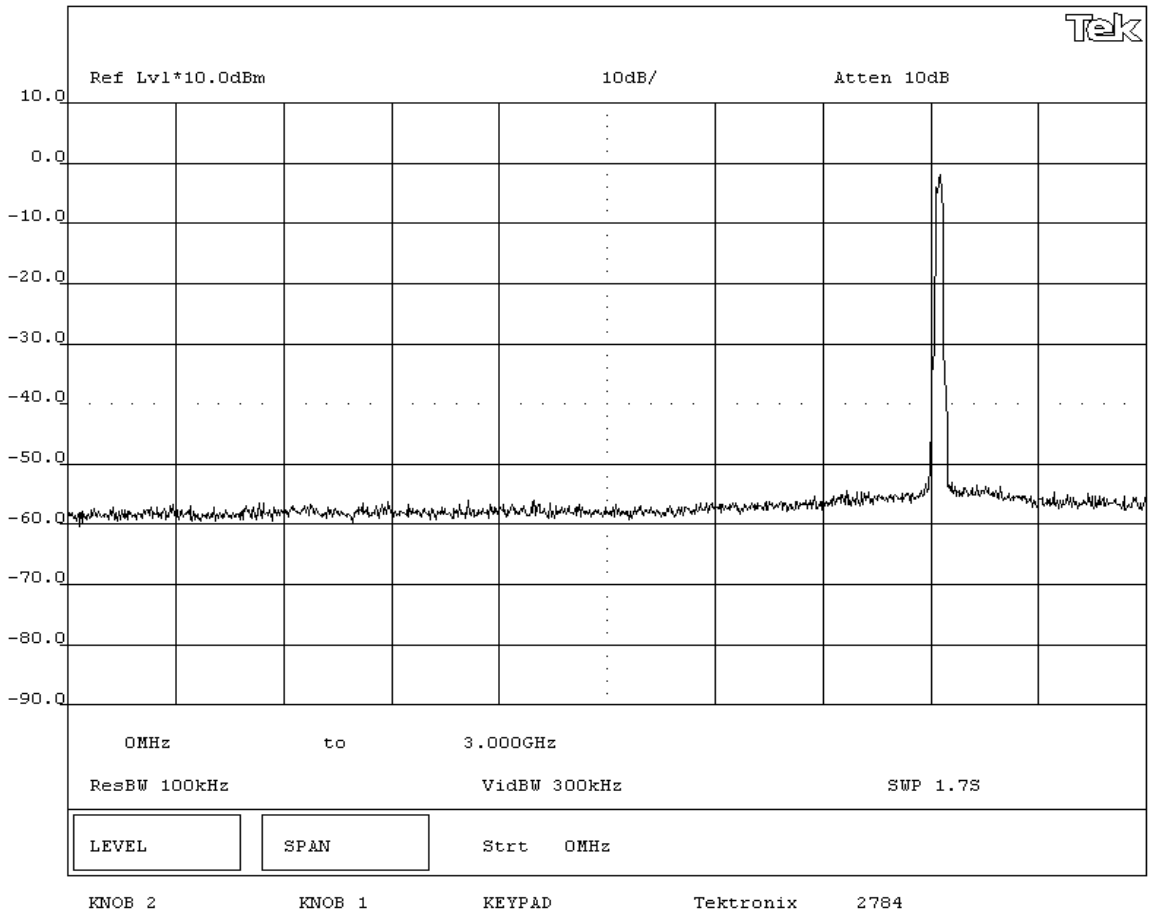
Pass

SIGNATURE

Tested By: _____

DESCRIPTION OF TEST

Antenna Conducted Spurious Emissions 0MHz-3GHz - Low Channel - 802.11(g) 36 Mbps



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/10/05
Customer:	Intermec Technologies Corporation			Temperature:	20°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42% RH
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(d)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at 36 Mbps data rate, 802.11(g) modulation scheme

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum level of any spurious emission outside of the authorized band is 20 dB down from the fundamental.

RESULTS

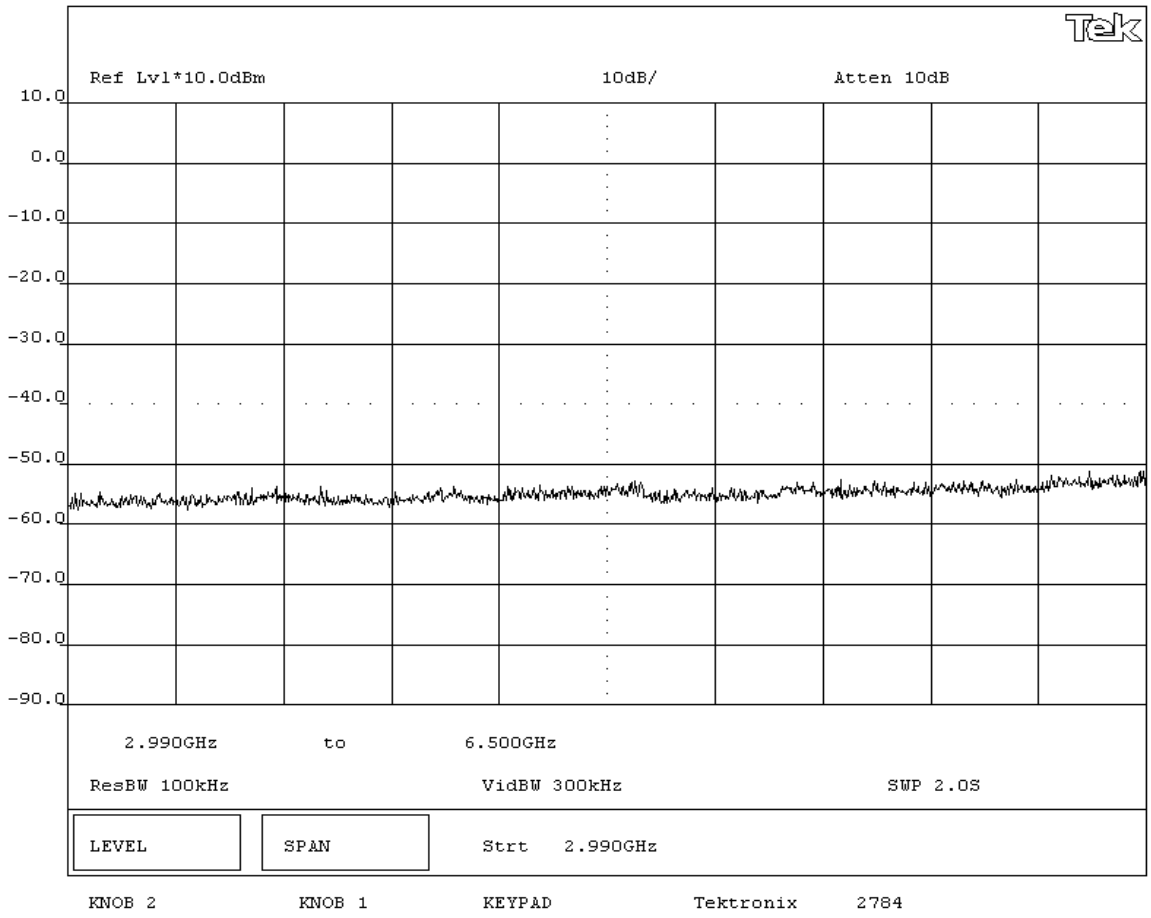
Pass

SIGNATURE

Tested By: A.U.K.P

DESCRIPTION OF TEST

Antenna Conducted Spurious Emissions 3GHz-6.5GHz - Low Channel - 802.11(g) 36 Mbps



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/10/05
Customer:	Intermec Technologies Corporation			Temperature:	20°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42% RH
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(d)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at 36 Mbps data rate, 802.11(g) modulation scheme

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum level of any spurious emission outside of the authorized band is 20 dB down from the fundamental.

RESULTS

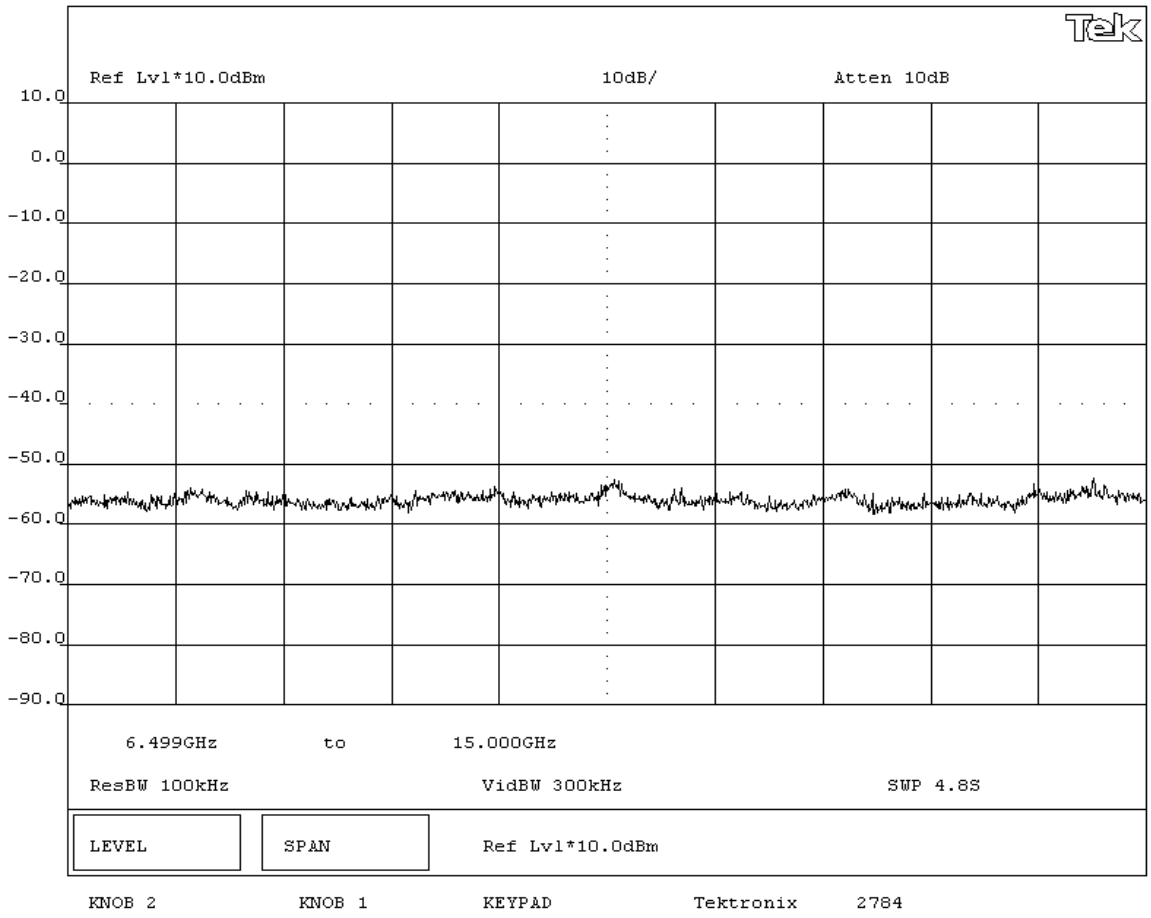
Pass

SIGNATURE

Tested By: A.U.K.P

DESCRIPTION OF TEST

Antenna Conducted Spurious Emissions 6.5GHz-15GHz - Low Channel - 802.11(g) 36 Mbps



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/10/05
Customer:	Intermec Technologies Corporation			Temperature:	20°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42% RH
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(d)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at 36 Mbps data rate, 802.11(g) modulation scheme

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum level of any spurious emission outside of the authorized band is 20 dB down from the fundamental.

RESULTS

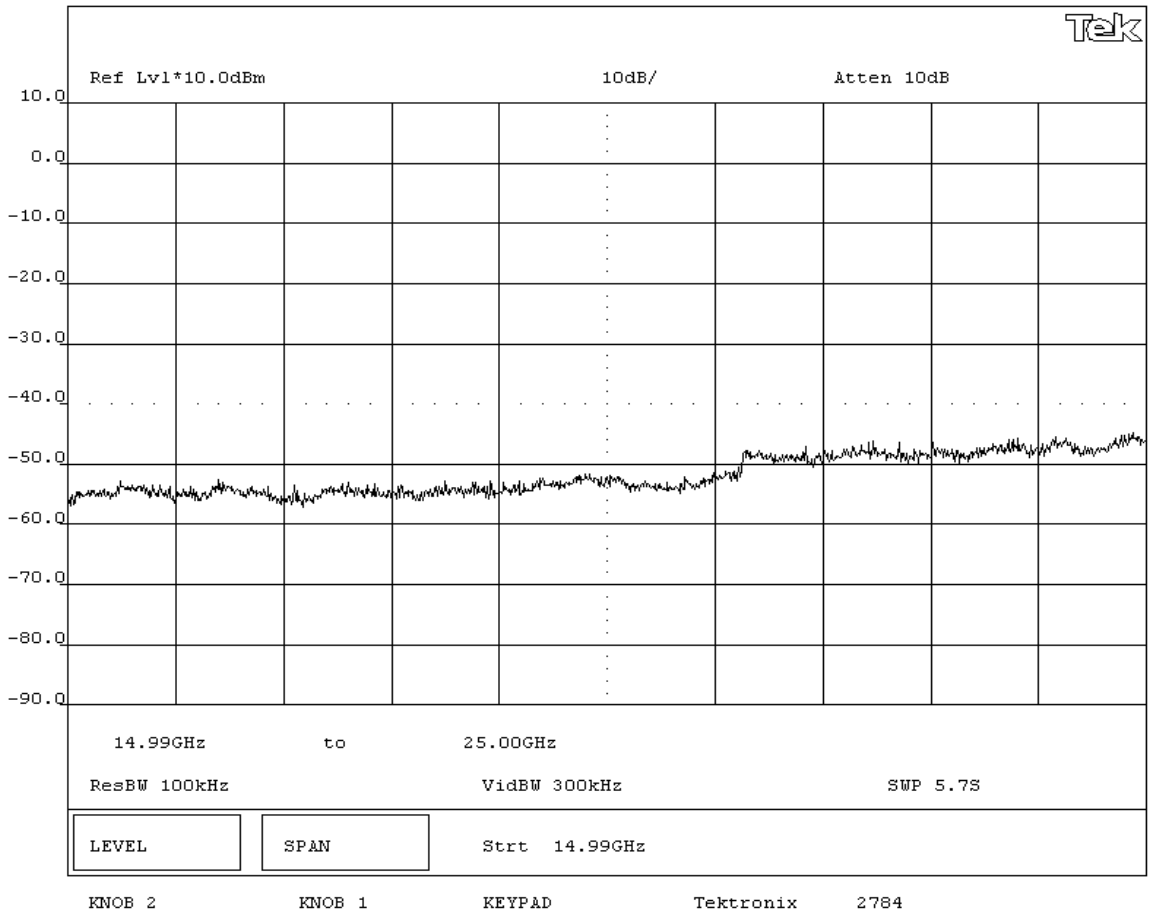
Pass

SIGNATURE

Tested By: A.U.K.P

DESCRIPTION OF TEST

Antenna Conducted Spurious Emissions 15GHz - 25GHz - Low Channel - 802.11(g) 36 Mbps



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/10/05
Customer:	Intermec Technologies Corporation			Temperature:	20°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42% RH
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(d)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at 36 Mbps data rate, 802.11(g) modulation scheme

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum level of any spurious emission outside of the authorized band is 20 dB down from the fundamental.

RESULTS

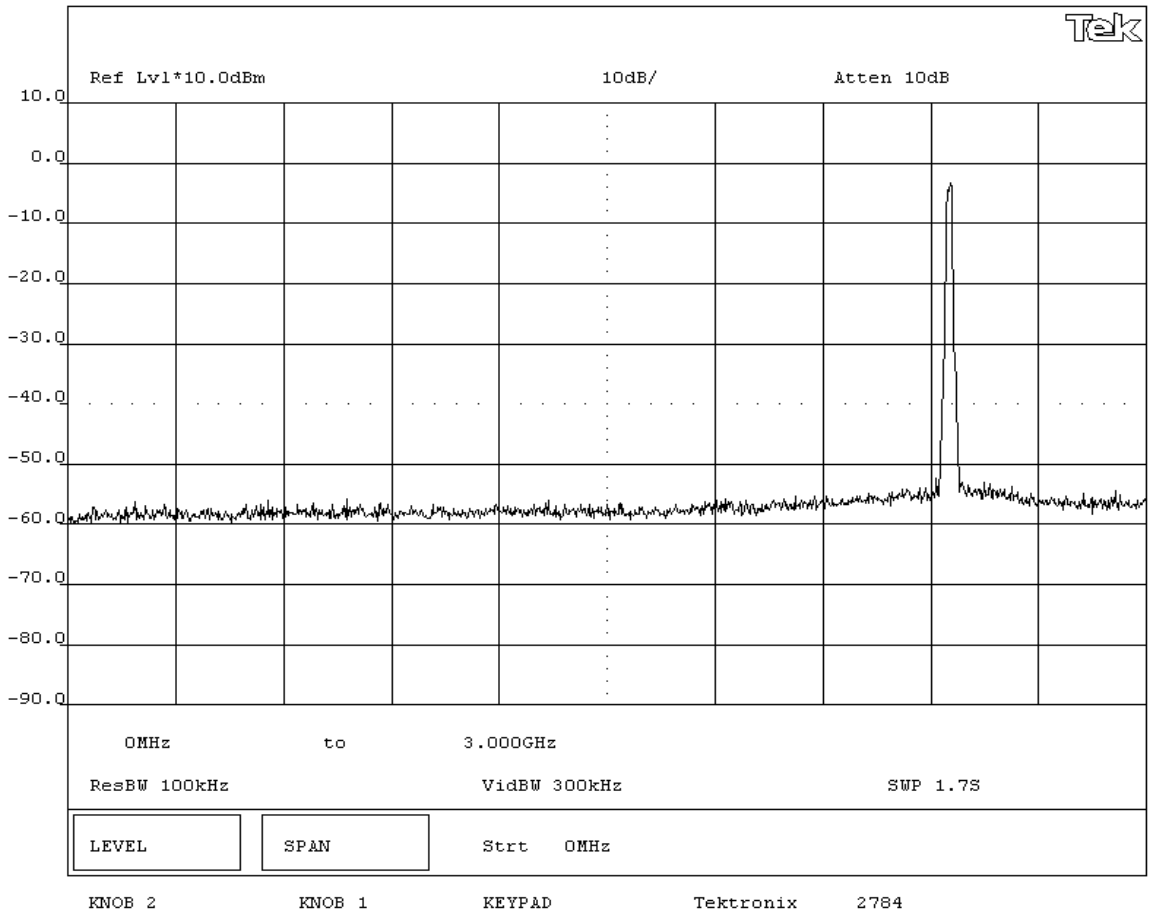
Pass

SIGNATURE

Tested By: _____

DESCRIPTION OF TEST

Antenna Conducted Spurious Emissions 0MHz-3GHz - Mid Channel - 802.11(g) 36 Mbps



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/10/05
Customer:	Intermec Technologies Corporation			Temperature:	20°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42% RH
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(d)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at 36 Mbps data rate, 802.11(g) modulation scheme

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum level of any spurious emission outside of the authorized band is 20 dB down from the fundamental.

RESULTS

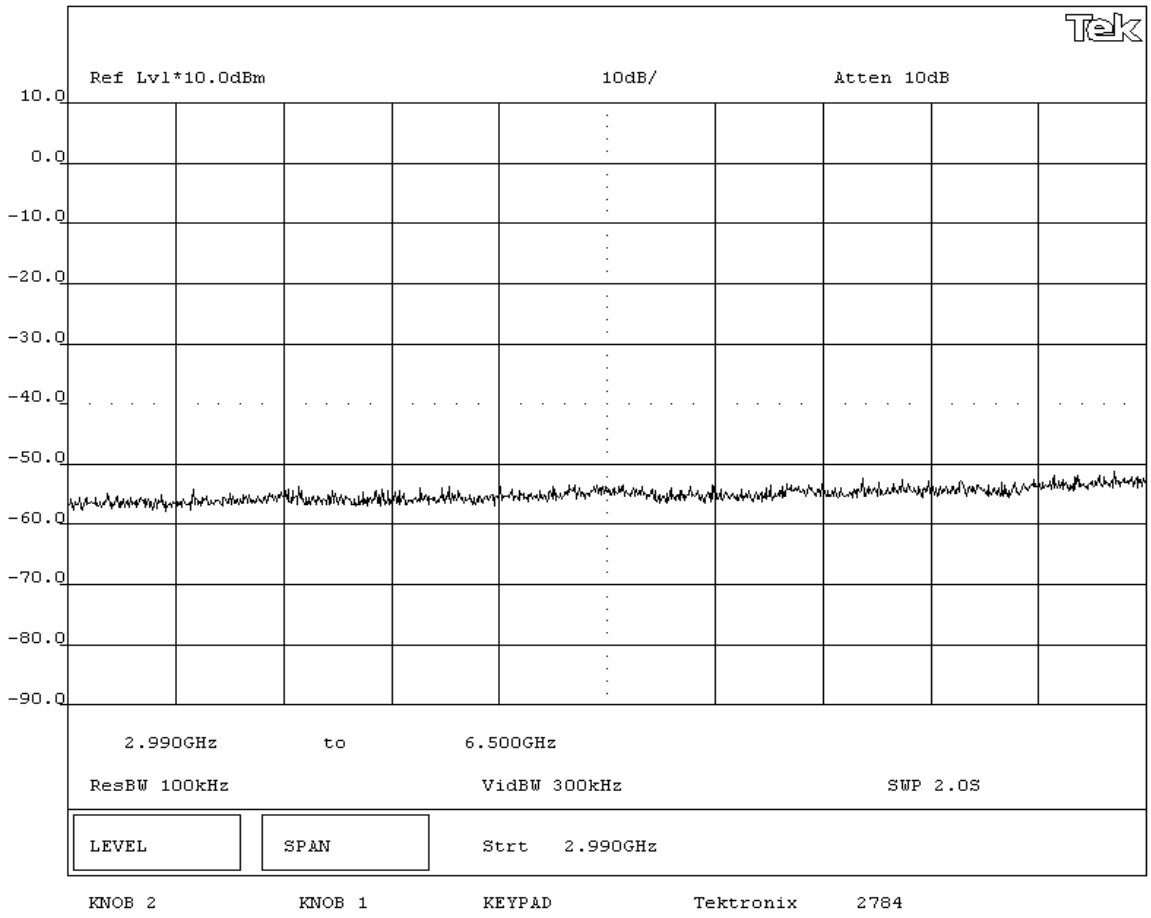
Pass

SIGNATURE

Tested By: A.U.K.P

DESCRIPTION OF TEST

Antenna Conducted Spurious Emissions 3GHz-6.5GHz - Mid Channel - 802.11(g) 36 Mbps



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/10/05
Customer:	Intermec Technologies Corporation			Temperature:	20°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42% RH
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(d)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at 36 Mbps data rate, 802.11(g) modulation scheme

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum level of any spurious emission outside of the authorized band is 20 dB down from the fundamental.

RESULTS

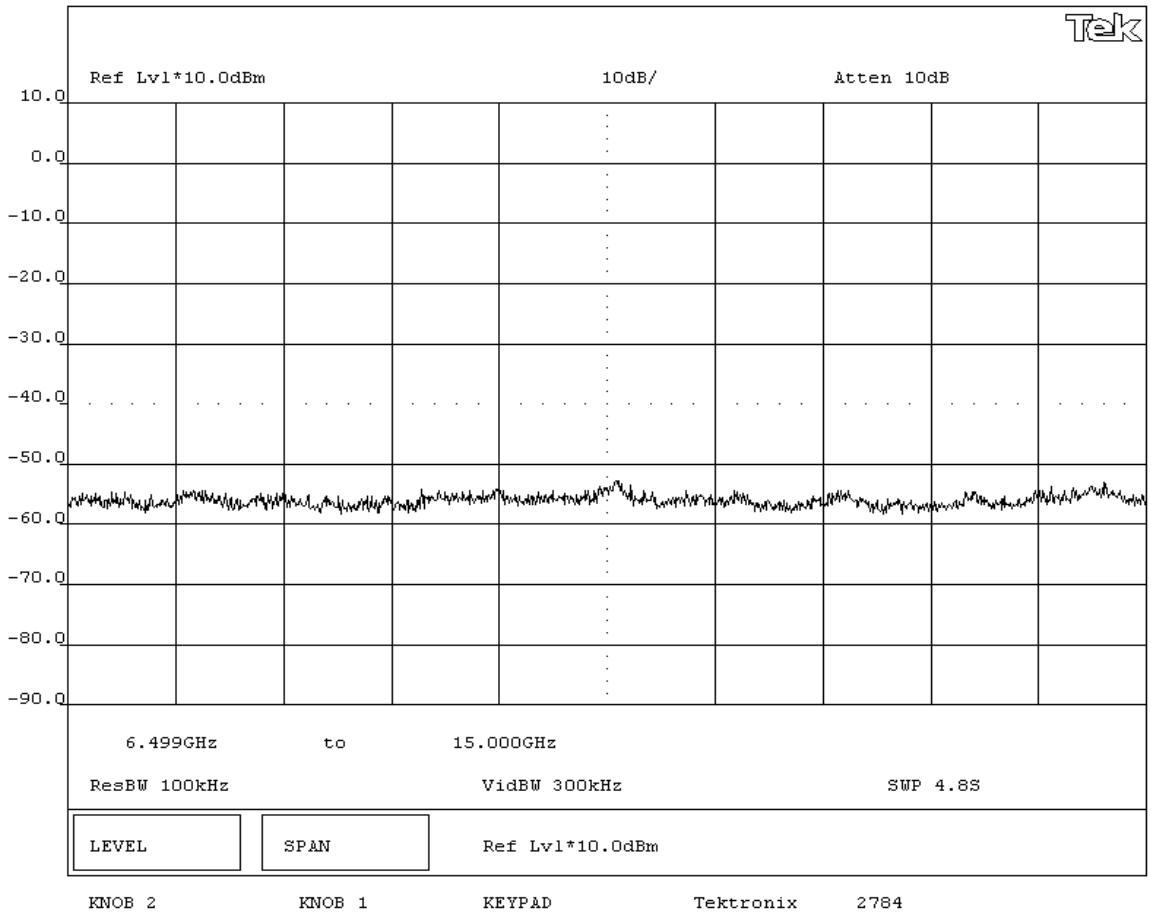
Pass

SIGNATURE

Tested By: A.U.K.P

DESCRIPTION OF TEST

Antenna Conducted Spurious Emissions 6.5GHz-15GHz - Mid Channel - 802.11(g) 36 Mbps



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/10/05
Customer:	Intermec Technologies Corporation			Temperature:	20°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42% RH
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(d)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at 36 Mbps data rate, 802.11(g) modulation scheme

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum level of any spurious emission outside of the authorized band is 20 dB down from the fundamental.

RESULTS

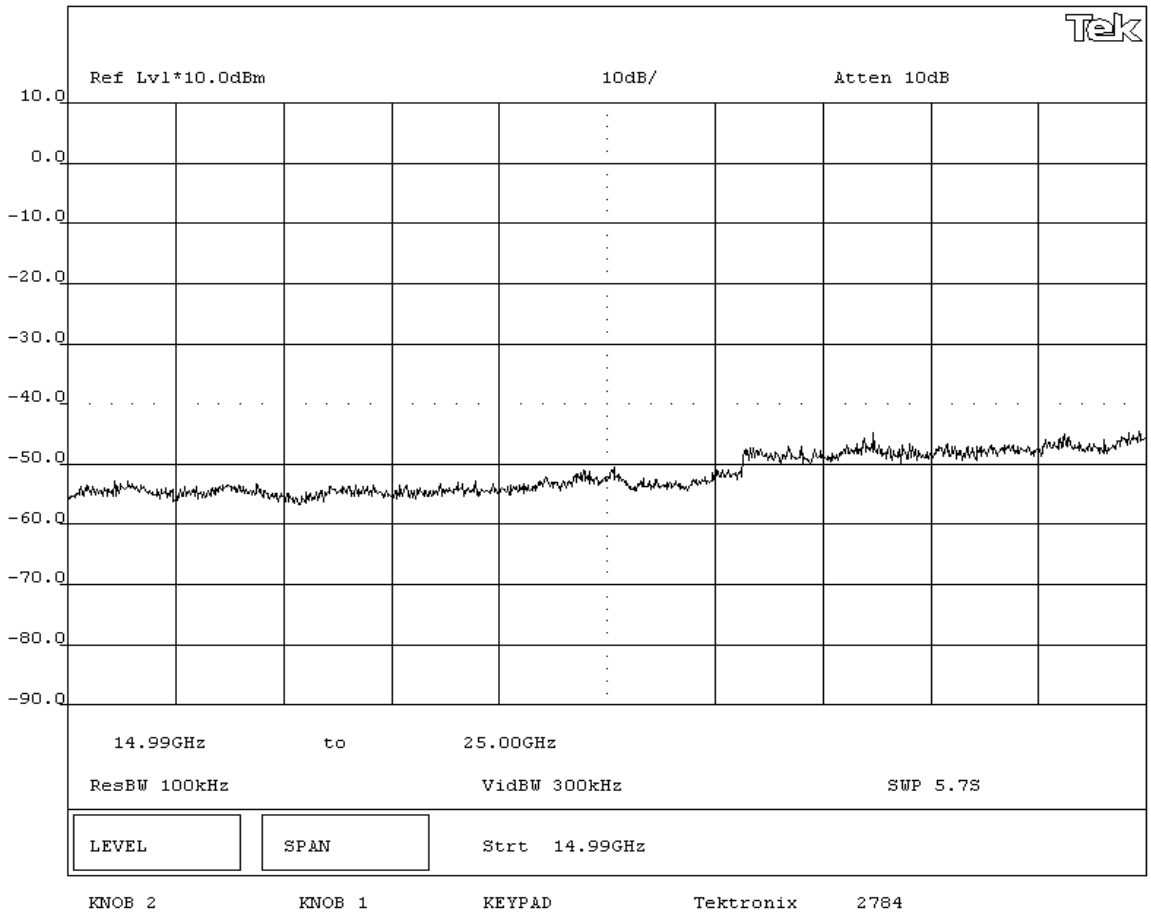
Pass

SIGNATURE

Tested By: A.U.K.P

DESCRIPTION OF TEST

Antenna Conducted Spurious Emissions 15GHz - 25GHz - Mid Channel - 802.11(g) 36 Mbps



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/10/05
Customer:	Intermec Technologies Corporation			Temperature:	20°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42% RH
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(d)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at 36 Mbps data rate, 802.11(g) modulation scheme

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum level of any spurious emission outside of the authorized band is 20 dB down from the fundamental.

RESULTS

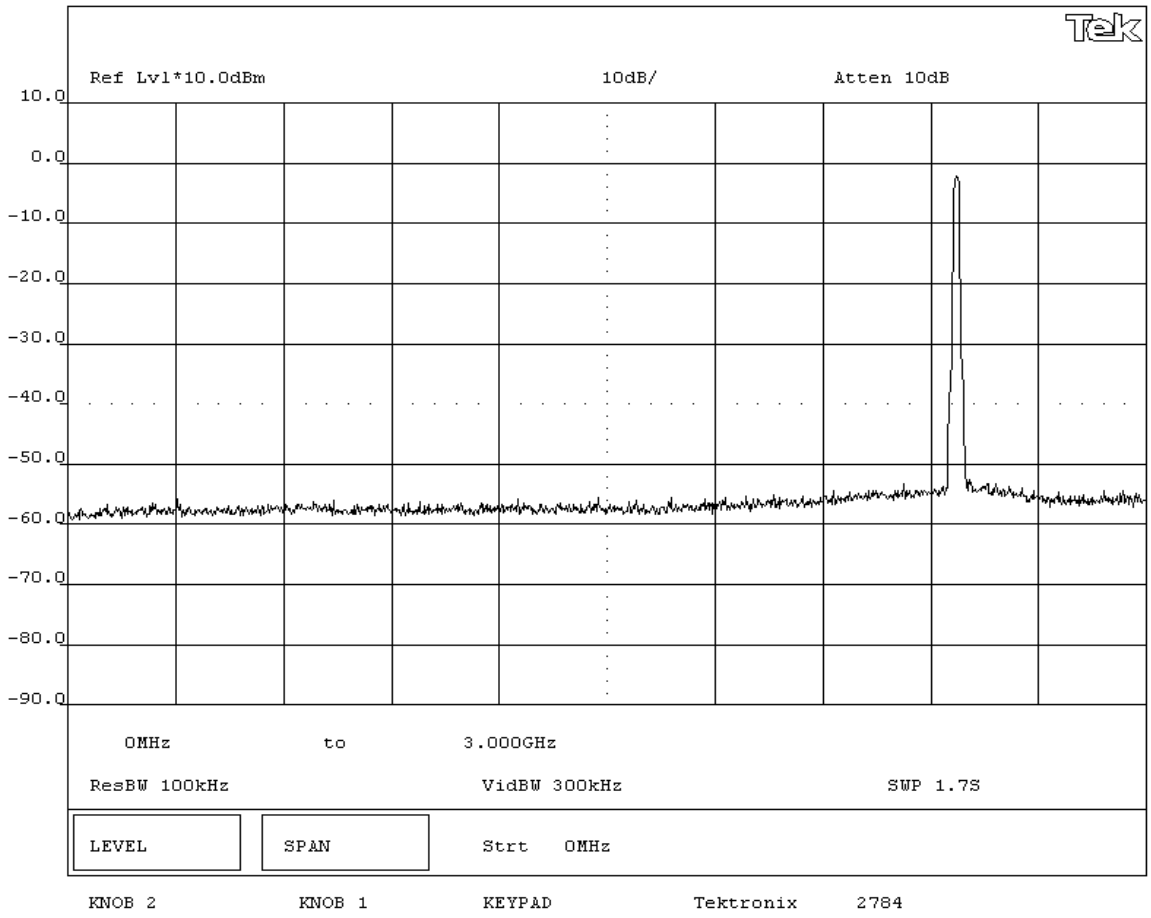
Pass

SIGNATURE

Tested By: A.U.K.P

DESCRIPTION OF TEST

Antenna Conducted Spurious Emissions 0MHz-3GHz - High Channel - 802.11(g) 36 Mbps



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/10/05
Customer:	Intermec Technologies Corporation			Temperature:	20°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42% RH
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(d)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at 36 Mbps data rate, 802.11(g) modulation scheme

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum level of any spurious emission outside of the authorized band is 20 dB down from the fundamental.

RESULTS

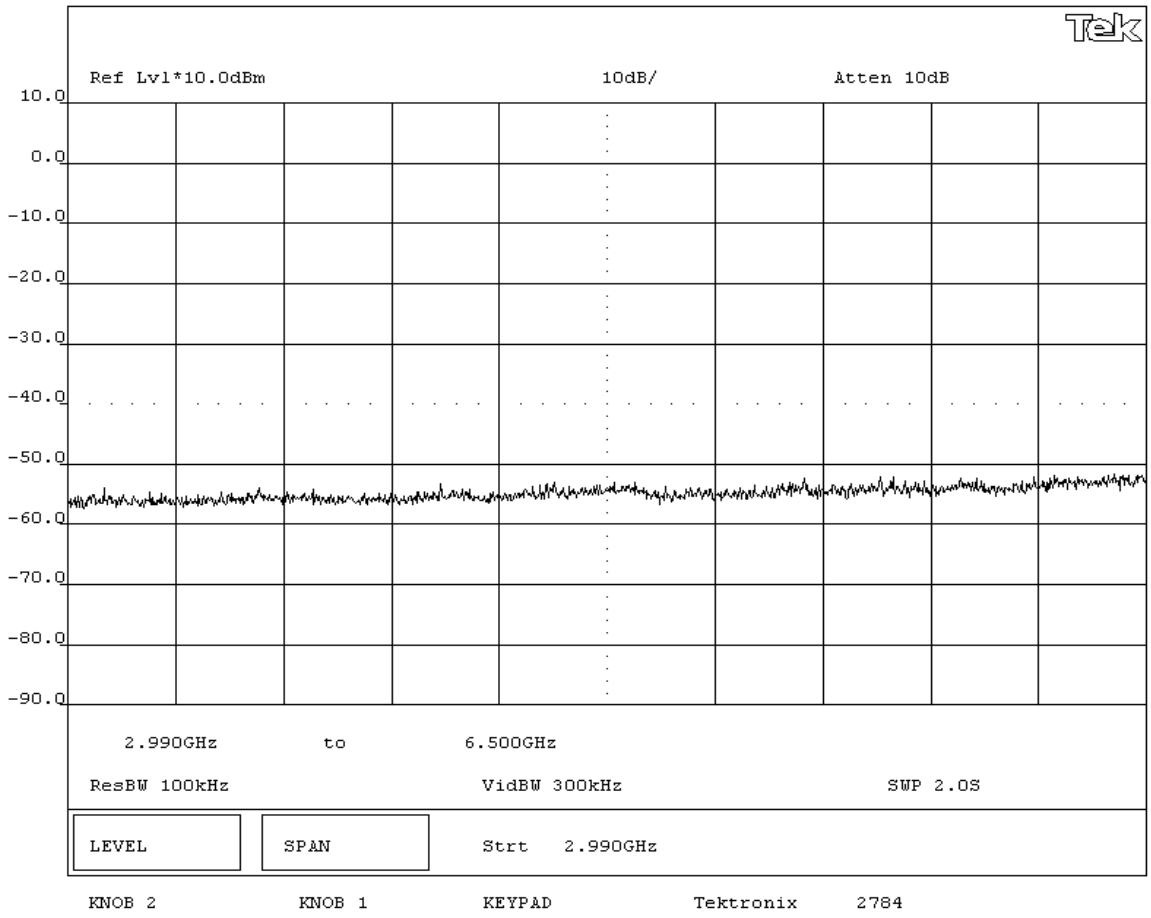
Pass

SIGNATURE

Tested By: _____

DESCRIPTION OF TEST

Antenna Conducted Spurious Emissions 3GHz-6.5GHz - High Channel - 802.11(g) 36 Mbps



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/10/05
Customer:	Intermec Technologies Corporation			Temperature:	20°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42% RH
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(d)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at 36 Mbps data rate, 802.11(g) modulation scheme

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum level of any spurious emission outside of the authorized band is 20 dB down from the fundamental.

RESULTS

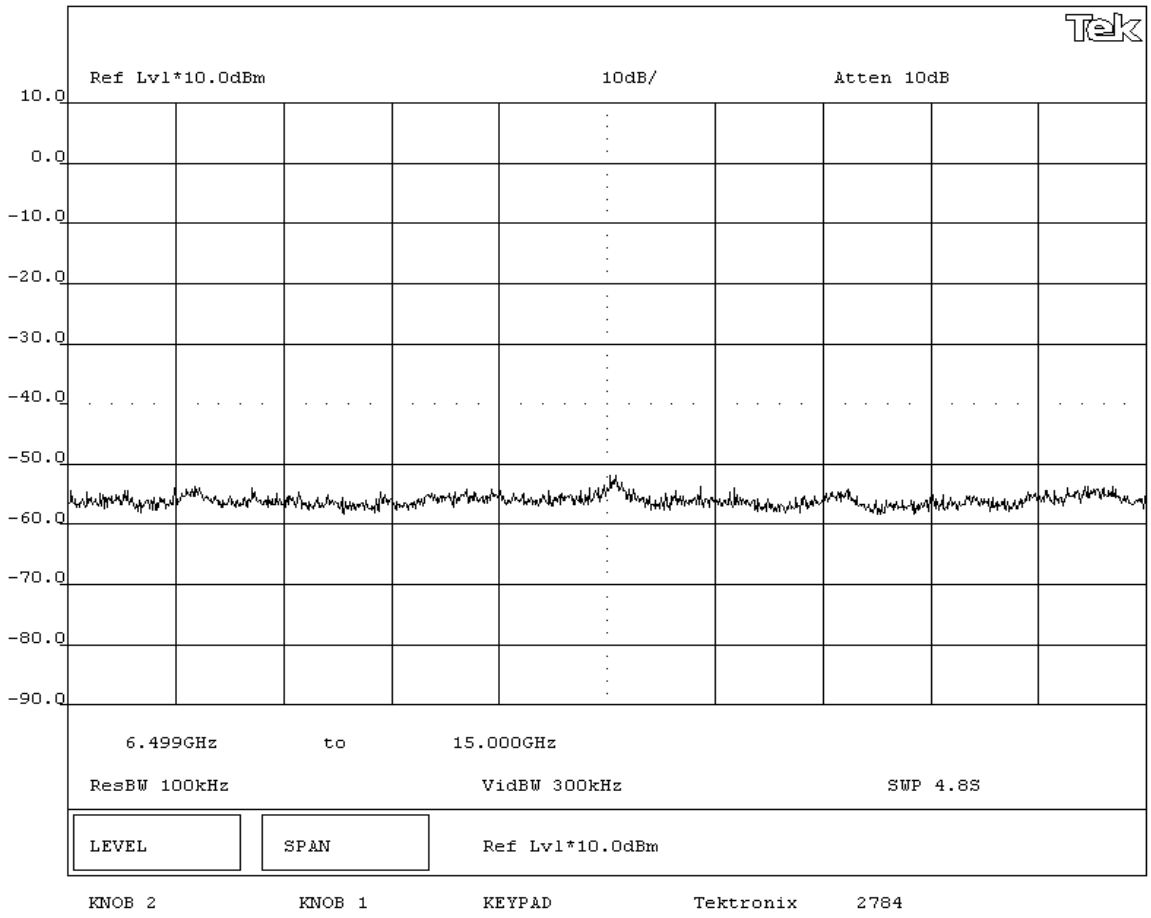
Pass

SIGNATURE

Tested By: A.U.K.P

DESCRIPTION OF TEST

Antenna Conducted Spurious Emissions 6.5GHz-15GHz - High Channel - 802.11(g) 36 Mbps



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/10/05
Customer:	Intermec Technologies Corporation			Temperature:	20°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42% RH
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(d)	Year: 2004	Method: FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at 36 Mbps data rate, 802.11(g) modulation scheme

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum level of any spurious emission outside of the authorized band is 20 dB down from the fundamental.

RESULTS

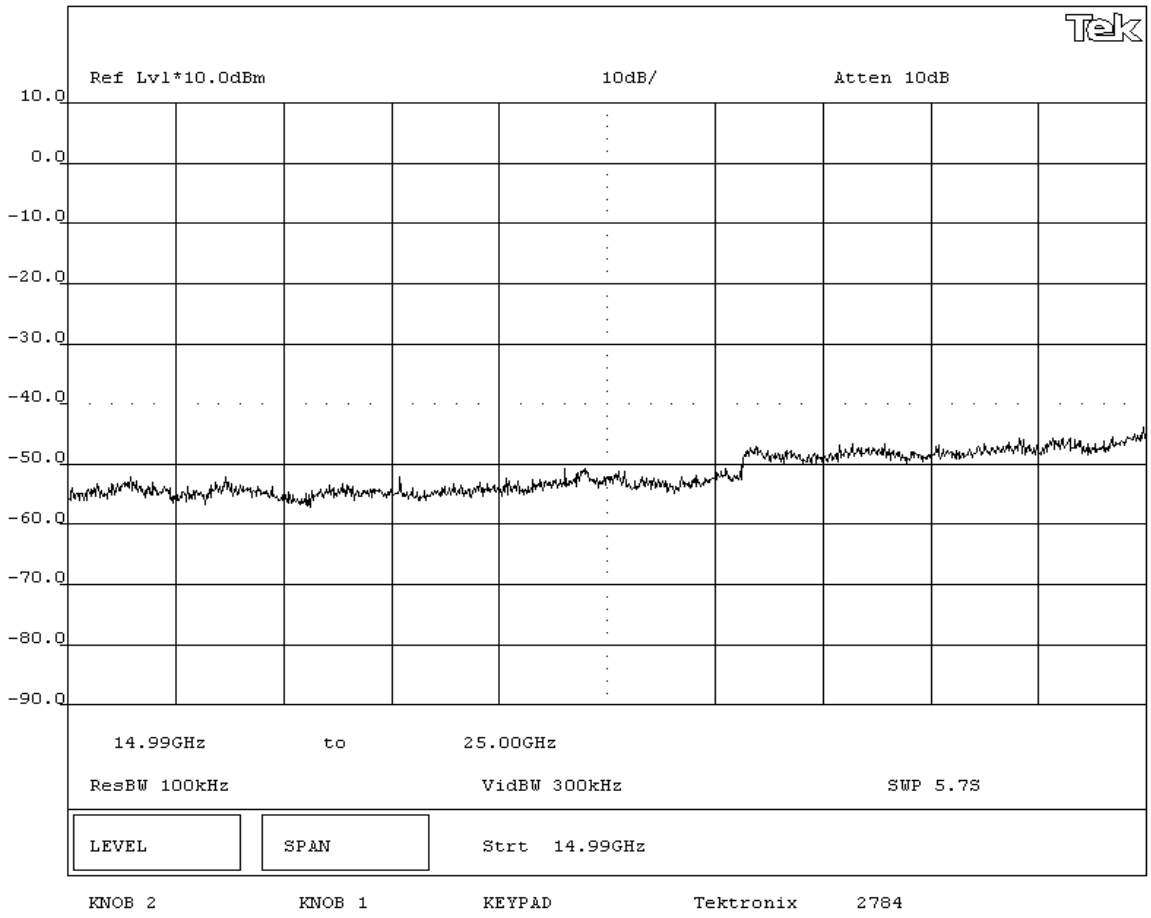
Pass

SIGNATURE

Tested By: A.U.K.P

DESCRIPTION OF TEST

Antenna Conducted Spurious Emissions 15GHz - 25GHz - High Channel - 802.11(g) 36 Mbps



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/10/05
Customer:	Intermec Technologies Corporation			Temperature:	20°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42% RH
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(d)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at maximum data rate, 802.11(g) modulation scheme

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum level of any spurious emission outside of the authorized band is 20 dB down from the fundamental.

RESULTS

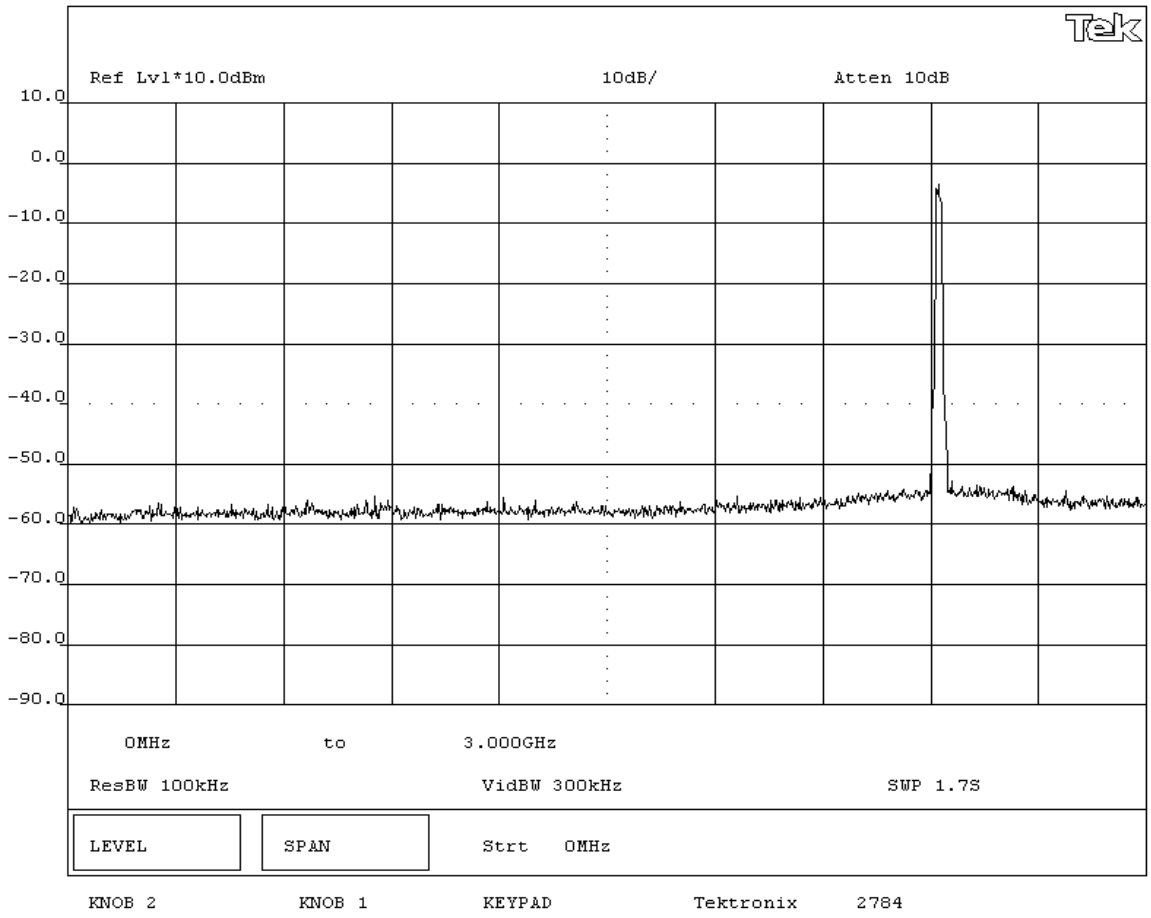
Pass

SIGNATURE

Tested By: A.U.K.P

DESCRIPTION OF TEST

Antenna Conducted Spurious Emissions 0MHz-3GHz - Low Channel - 802.11(g) 54 Mbps



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/10/05
Customer:	Intermec Technologies Corporation			Temperature:	20°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42% RH
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(d)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at maximum data rate, 802.11(g) modulation scheme

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum level of any spurious emission outside of the authorized band is 20 dB down from the fundamental.

RESULTS

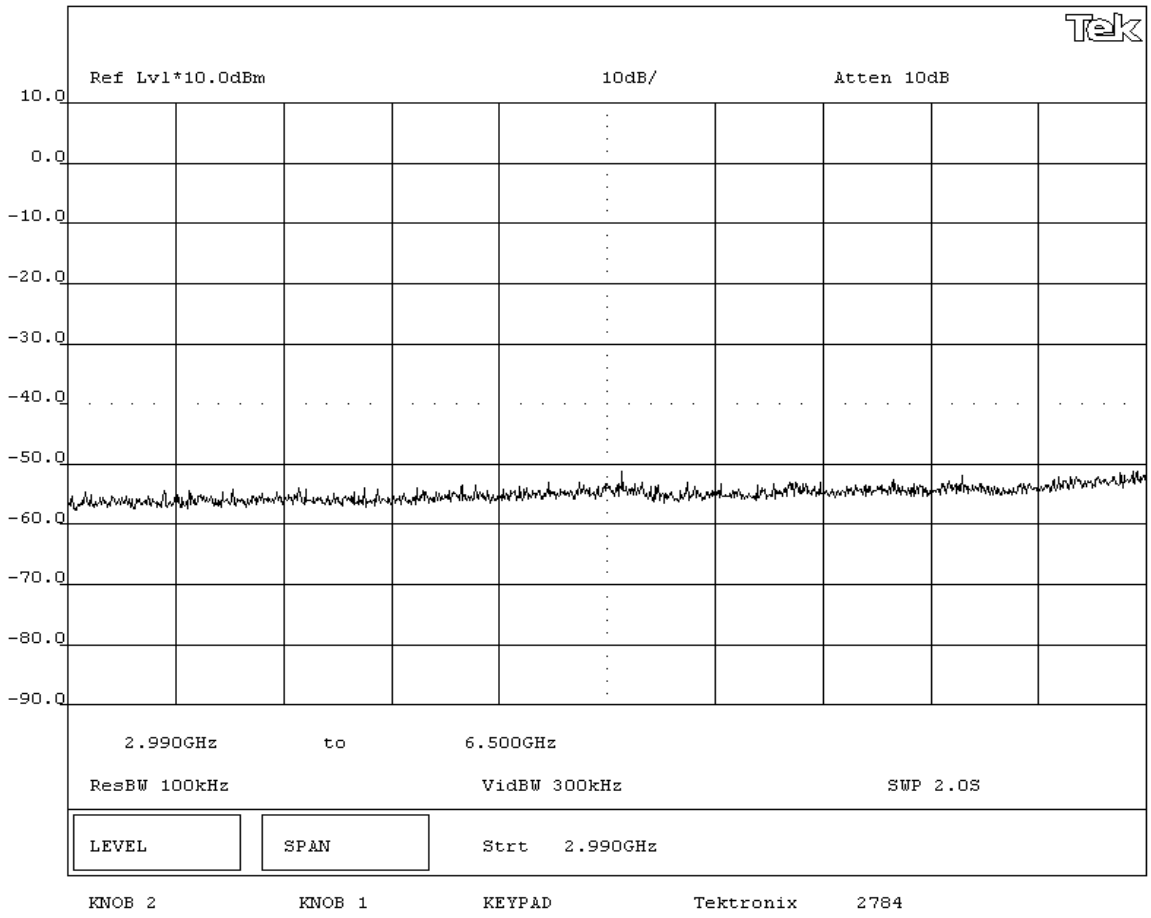
Pass

SIGNATURE

Tested By: _____

DESCRIPTION OF TEST

Antenna Conducted Spurious Emissions 3GHz-6.5GHz - Low Channel - 802.11(g) 54 Mbps



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/10/05
Customer:	Intermec Technologies Corporation			Temperature:	20°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42% RH
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(d)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at maximum data rate, 802.11(g) modulation scheme

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum level of any spurious emission outside of the authorized band is 20 dB down from the fundamental.

RESULTS

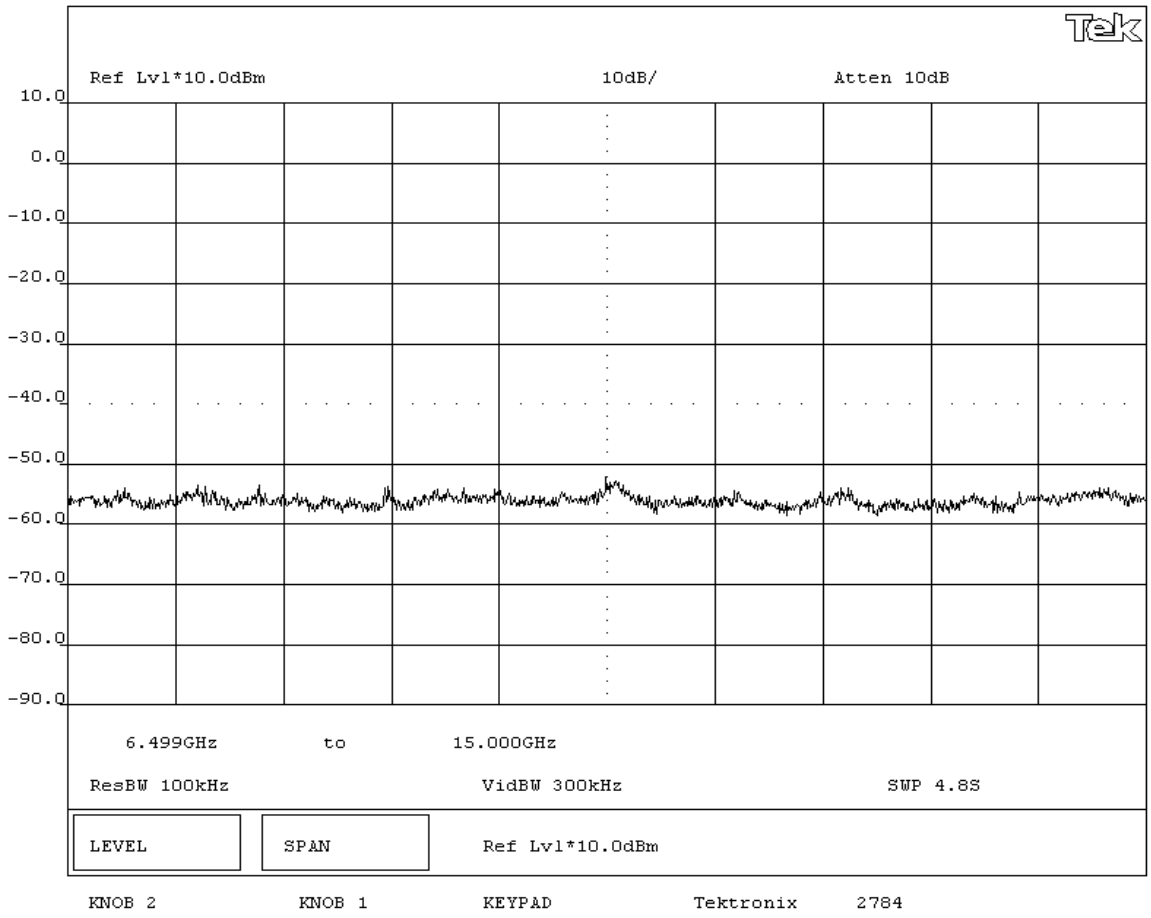
Pass

SIGNATURE

Tested By: A.U.K.P

DESCRIPTION OF TEST

Antenna Conducted Spurious Emissions 6.5GHz-15GHz - Low Channel - 802.11(g) 54 Mbps



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/10/05
Customer:	Intermec Technologies Corporation			Temperature:	20°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42% RH
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(d)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at maximum data rate, 802.11(g) modulation scheme

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum level of any spurious emission outside of the authorized band is 20 dB down from the fundamental.

RESULTS

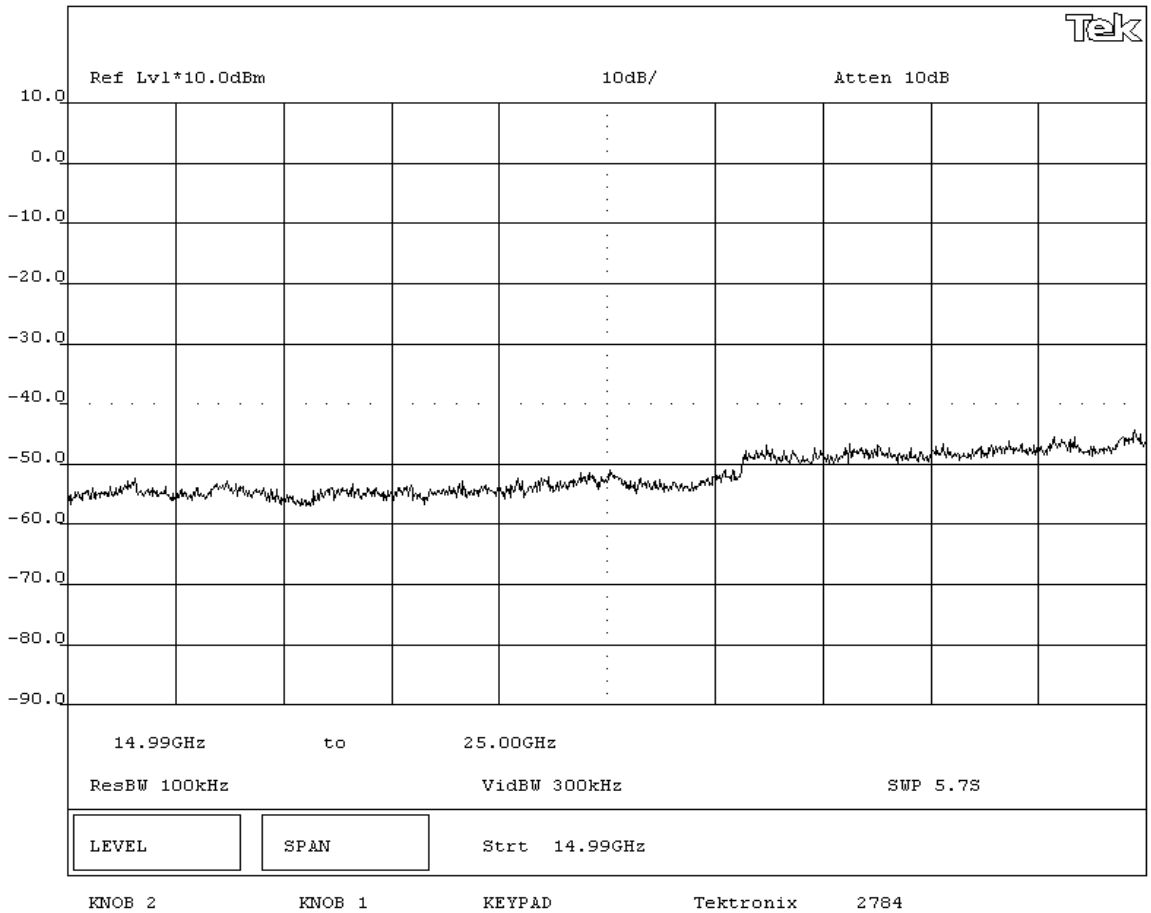
Pass

SIGNATURE

Tested By: A.U.K.P

DESCRIPTION OF TEST

Antenna Conducted Spurious Emissions 15GHz-25GHz - Low Channel - 802.11(g) 54 Mbps



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/10/05
Customer:	Intermec Technologies Corporation			Temperature:	20°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42% RH
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(d)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at maximum data rate, 802.11(g) modulation scheme

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum level of any spurious emission outside of the authorized band is 20 dB down from the fundamental.

RESULTS

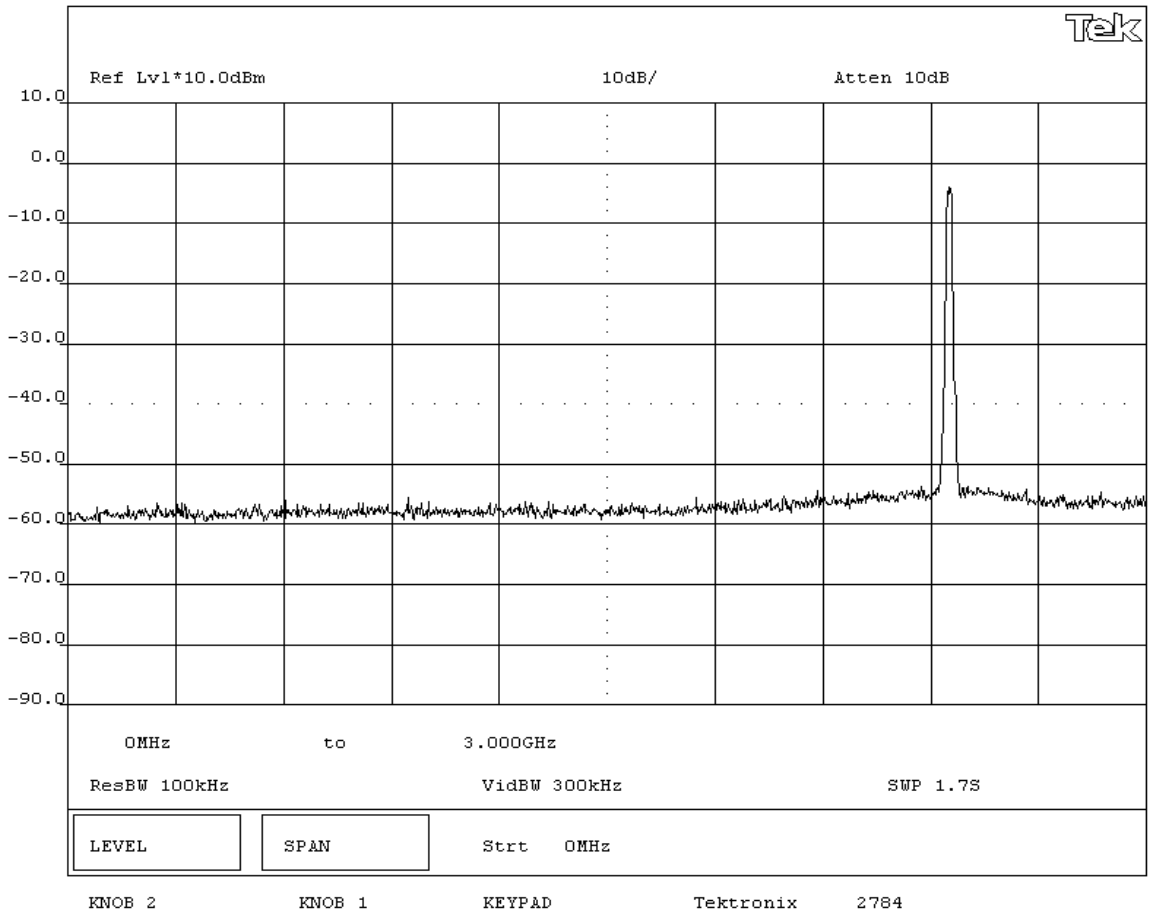
Pass

SIGNATURE

Tested By: A.U.K.P

DESCRIPTION OF TEST

Antenna Conducted Spurious Emissions 0MHz-3GHz - Mid Channel - 802.11(g) 54 Mbps



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/10/05
Customer:	Intermec Technologies Corporation			Temperature:	20°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42% RH
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(d)	Year: 2004	Method:	FCC 97-114, ANSI C63.4	Year: 2003

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at maximum data rate, 802.11(g) modulation scheme

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum level of any spurious emission outside of the authorized band is 20 dB down from the fundamental.

RESULTS

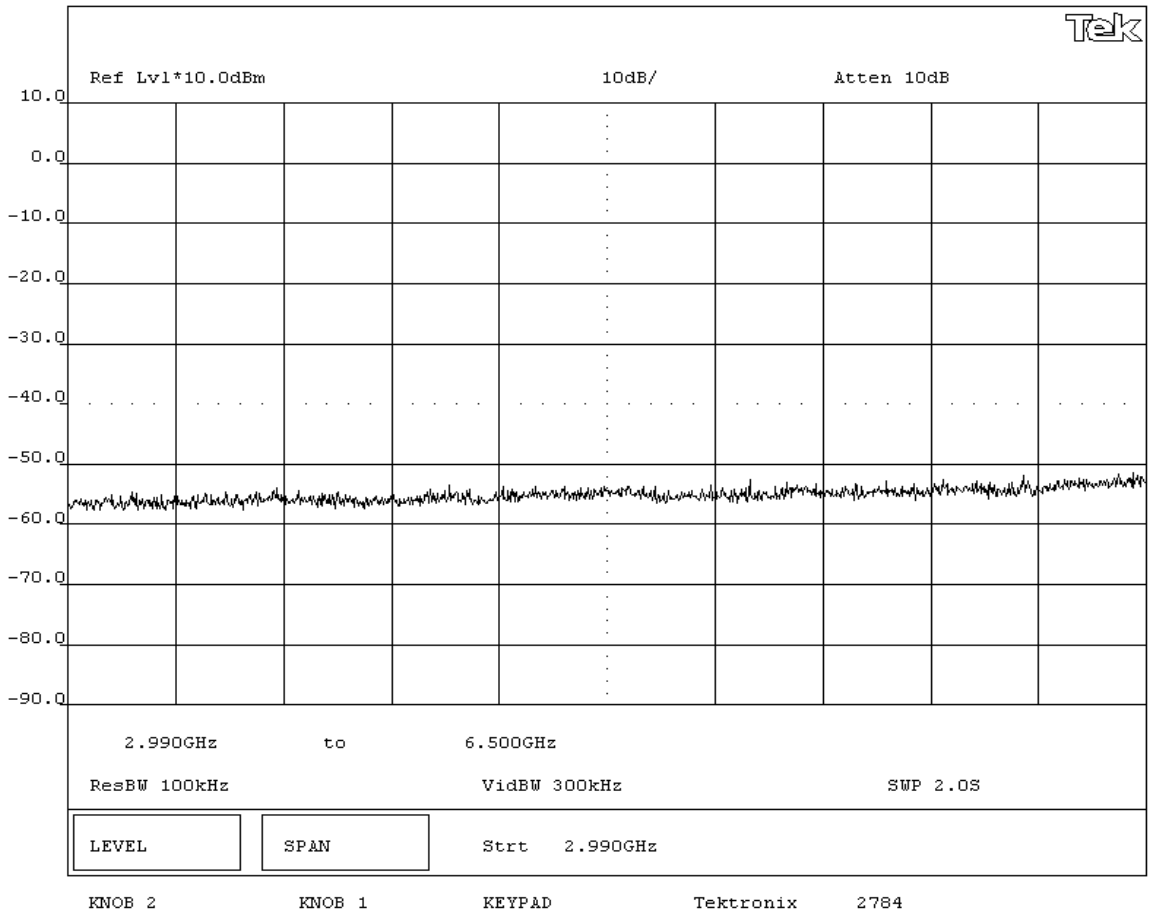
Pass

SIGNATURE

Tested By: A.U.K.P

DESCRIPTION OF TEST

Antenna Conducted Spurious Emissions 3GHz-6.5GHz - Mid Channel - 802.11(g) 54 Mbps



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/10/05
Customer:	Intermec Technologies Corporation			Temperature:	20°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42% RH
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(d)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at maximum data rate, 802.11(g) modulation scheme

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum level of any spurious emission outside of the authorized band is 20 dB down from the fundamental.

RESULTS

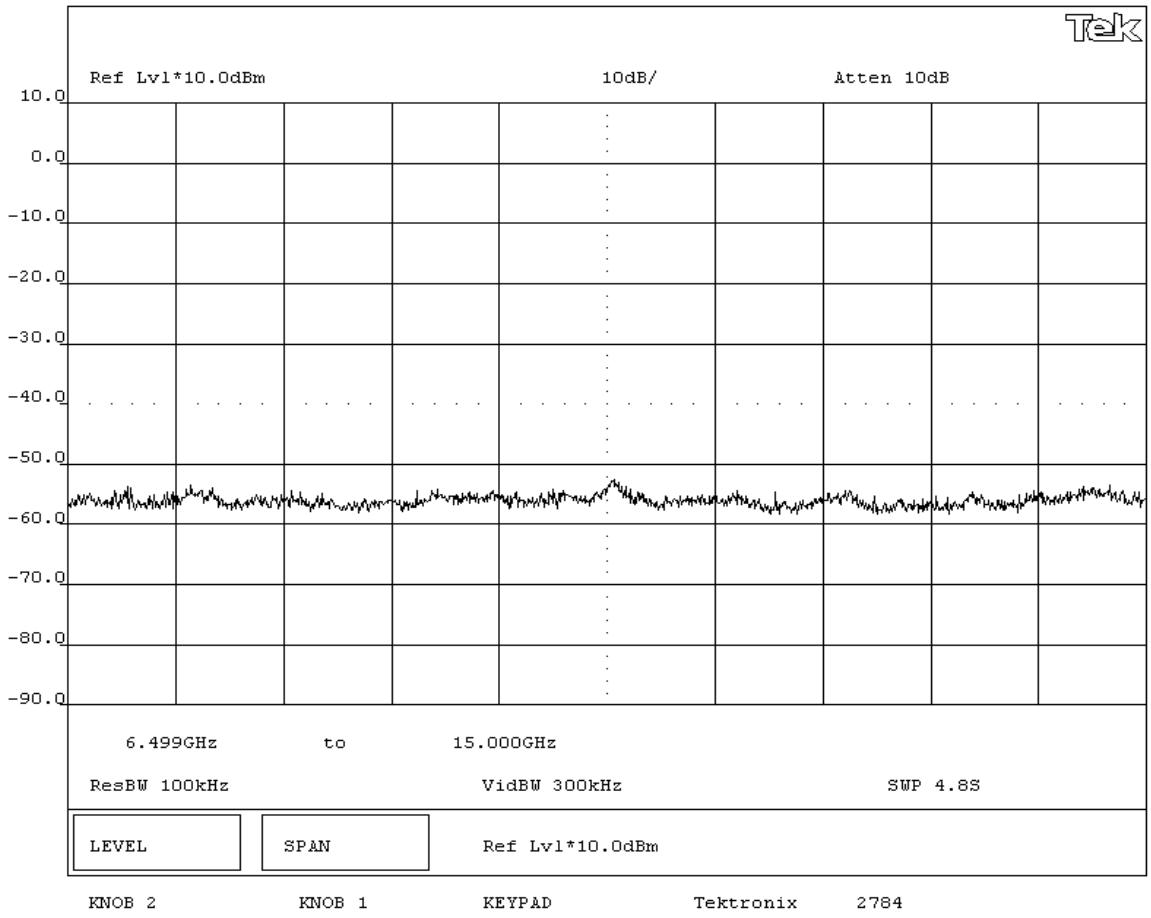
Pass

SIGNATURE

Tested By: A.U.K.P

DESCRIPTION OF TEST

Antenna Conducted Spurious Emissions 6.5GHz-15GHz - Mid Channel - 802.11(g) 54 Mbps



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/10/05
Customer:	Intermec Technologies Corporation			Temperature:	20°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42% RH
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(d)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at maximum data rate, 802.11(g) modulation scheme

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum level of any spurious emission outside of the authorized band is 20 dB down from the fundamental.

RESULTS

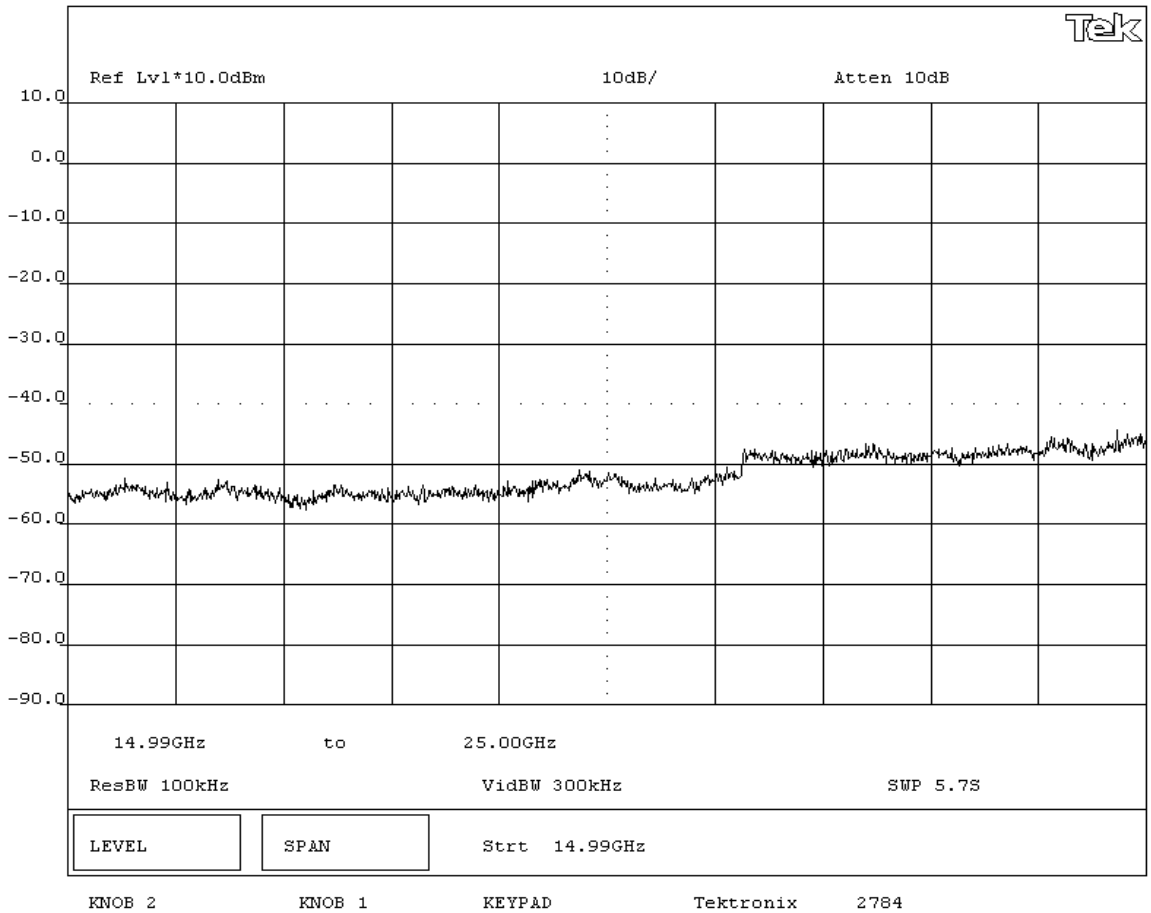
Pass

SIGNATURE

Tested By: A.U.K.P

DESCRIPTION OF TEST

Antenna Conducted Spurious Emissions 15GHz-25GHz - Mid Channel - 802.11(g) 54 Mbps



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/10/05
Customer:	Intermec Technologies Corporation			Temperature:	20°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42% RH
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(d)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at maximum data rate, 802.11(g) modulation scheme

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum level of any spurious emission outside of the authorized band is 20 dB down from the fundamental.

RESULTS

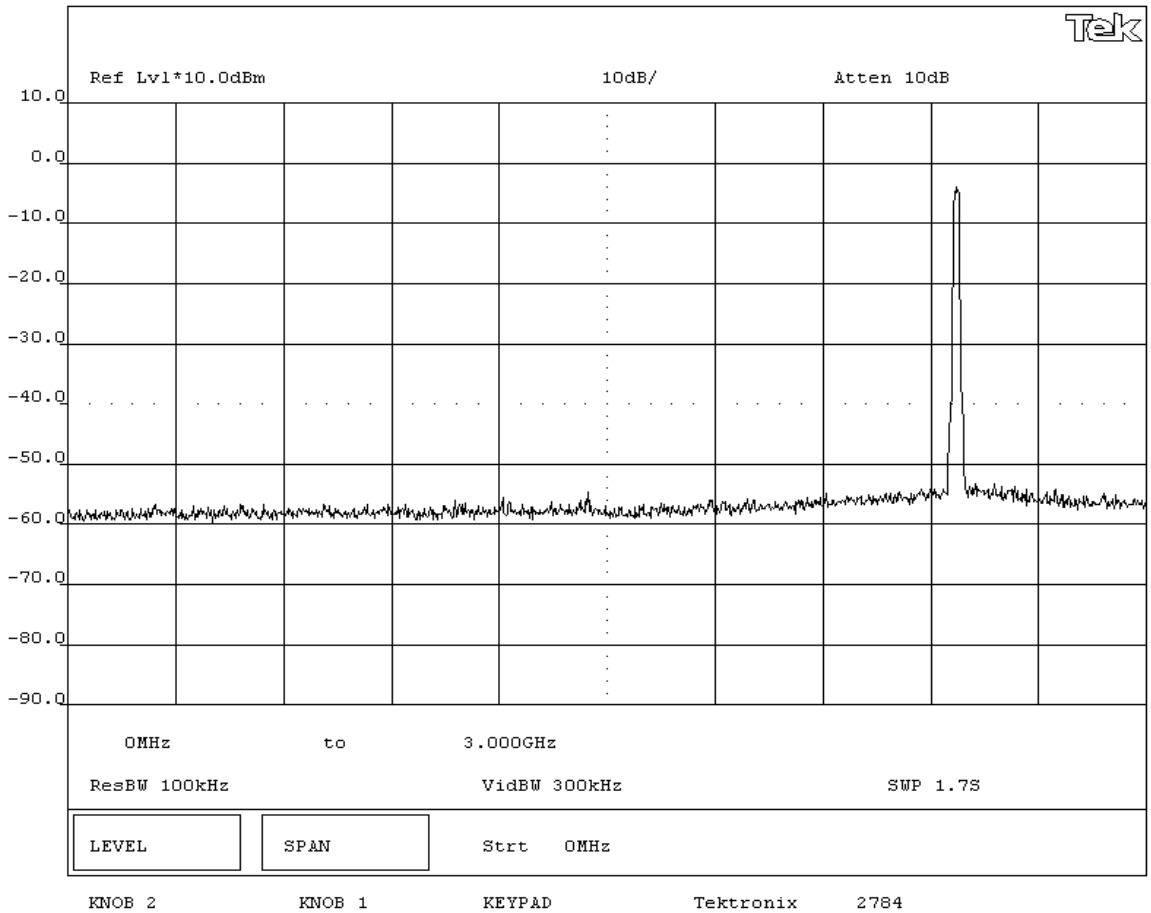
Pass

SIGNATURE

Tested By: A.U.K.P

DESCRIPTION OF TEST

Antenna Conducted Spurious Emissions 0MHz-3GHz - High Channel - 802.11(g) 54 Mbps



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/10/05
Customer:	Intermec Technologies Corporation			Temperature:	20°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42% RH
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(d)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at maximum data rate, 802.11(g) modulation scheme

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum level of any spurious emission outside of the authorized band is 20 dB down from the fundamental.

RESULTS

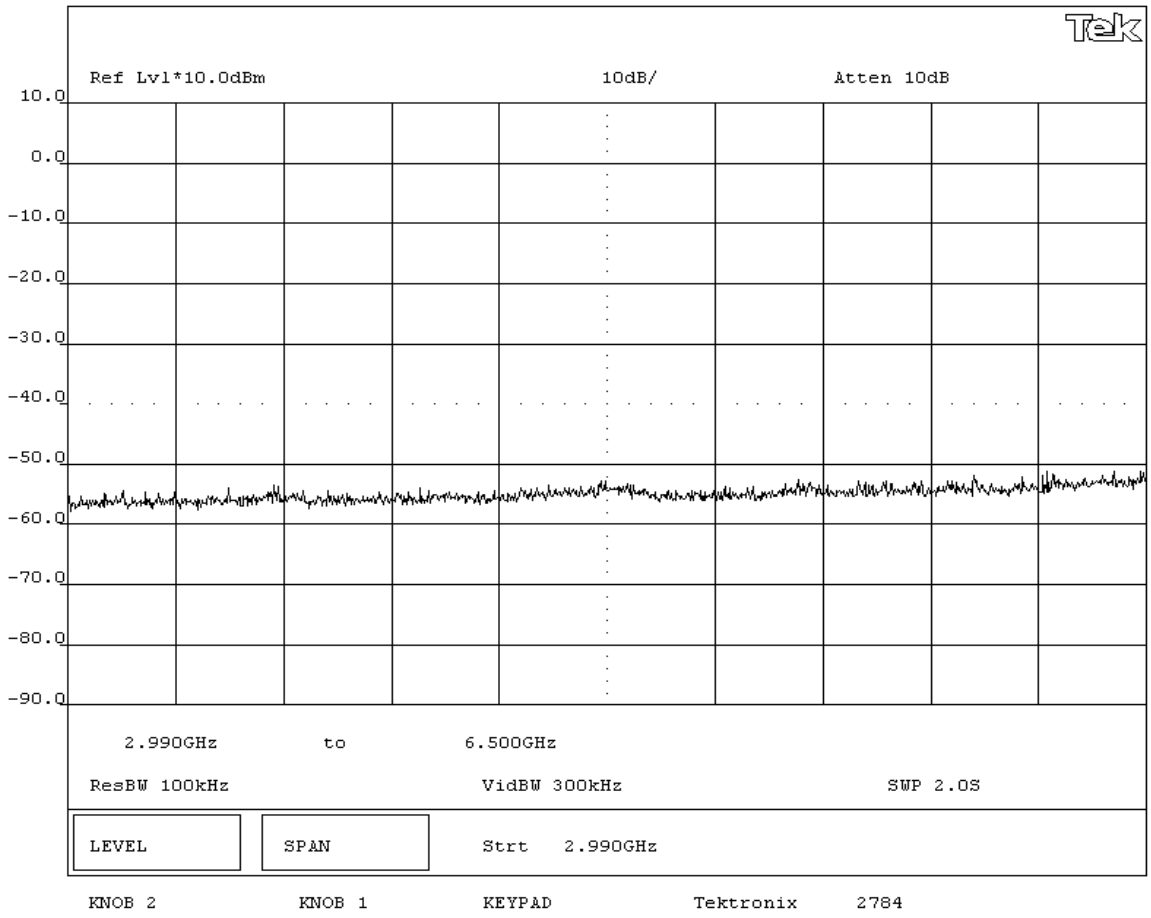
Pass

SIGNATURE

Tested By: A.U.K.P

DESCRIPTION OF TEST

Antenna Conducted Spurious Emissions 3GHz-6.5GHz - High Channel - 802.11(g) 54 Mbps



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/10/05
Customer:	Intermec Technologies Corporation			Temperature:	20°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42% RH
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(d)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at maximum data rate, 802.11(g) modulation scheme

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum level of any spurious emission outside of the authorized band is 20 dB down from the fundamental.

RESULTS

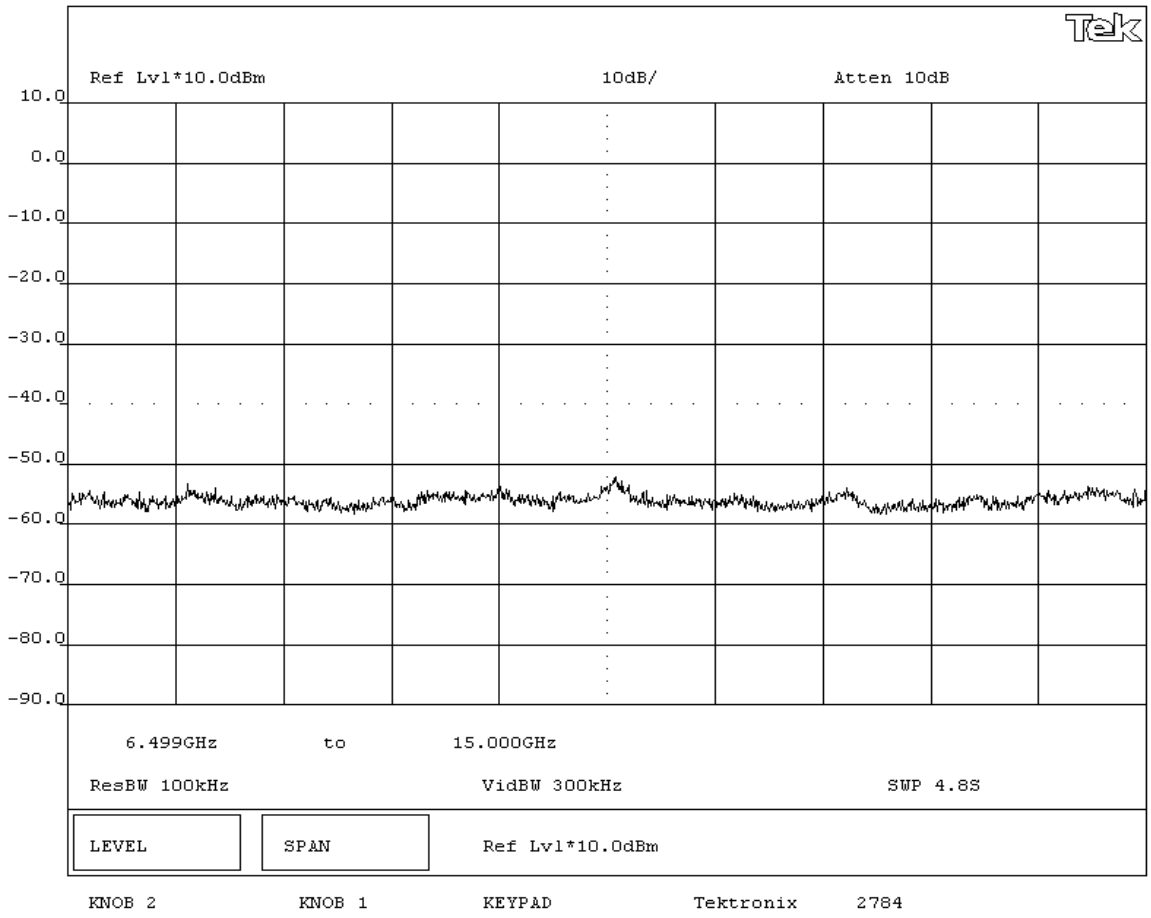
Pass

SIGNATURE

Tested By: A.U.K.P

DESCRIPTION OF TEST

Antenna Conducted Spurious Emissions 6.5GHz-15GHz - High Channel - 802.11(g) 54 Mbps



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/10/05
Customer:	Intermec Technologies Corporation			Temperature:	20°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42% RH
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(d)	Year: 2004	Method:	FCC 97-114, ANSI C63.4	Year: 2003

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at maximum data rate, 802.11(g) modulation scheme

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum level of any spurious emission outside of the authorized band is 20 dB down from the fundamental.

RESULTS

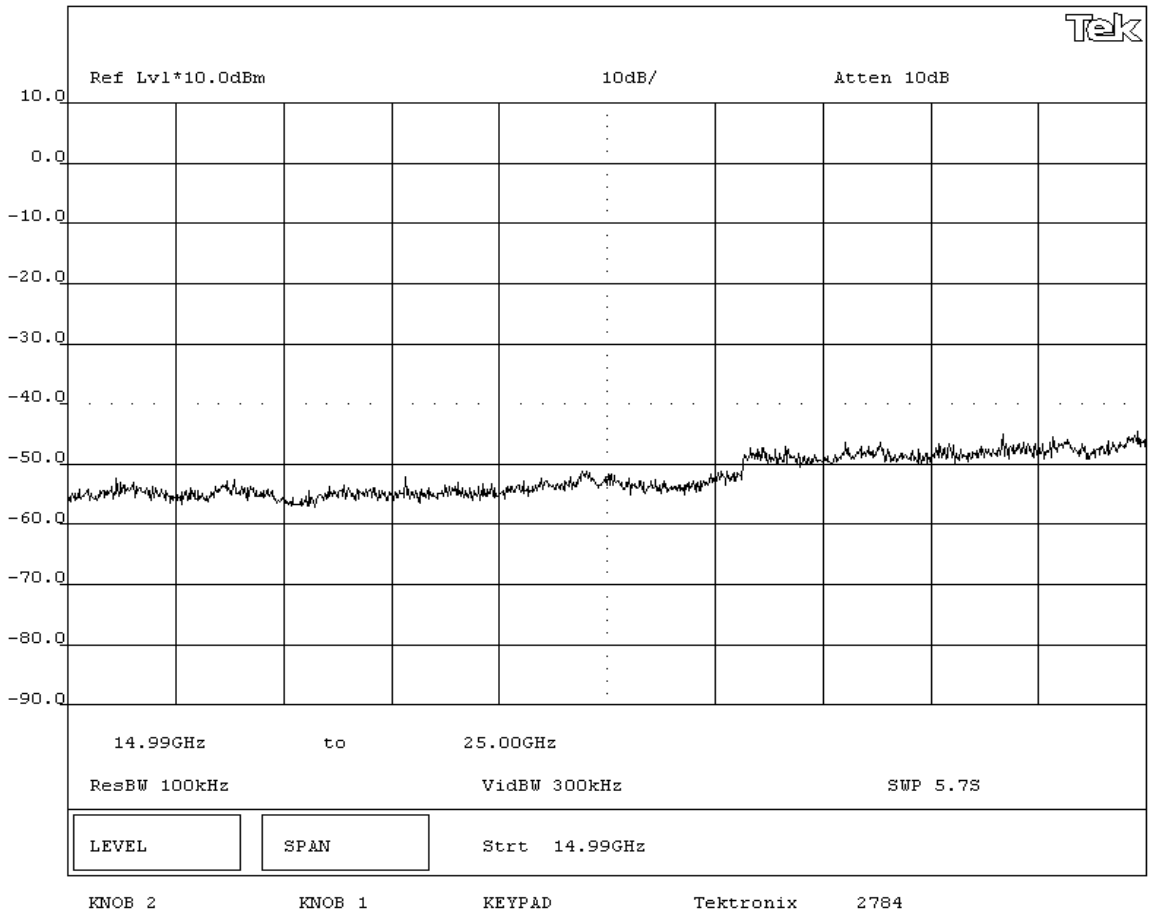
Pass

SIGNATURE

Tested By: A.U.K.P

DESCRIPTION OF TEST

Antenna Conducted Spurious Emissions 15GHz-25GHz - High Channel - 802.11(g) 54 Mbps



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/10/05
Customer:	Intermec Technologies Corporation			Temperature:	20°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42% RH
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(d)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at 1 Mbps data rate, 802.11(b) modulation scheme

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum level of any spurious emission outside of the authorized band is 20 dB down from the fundamental.

RESULTS

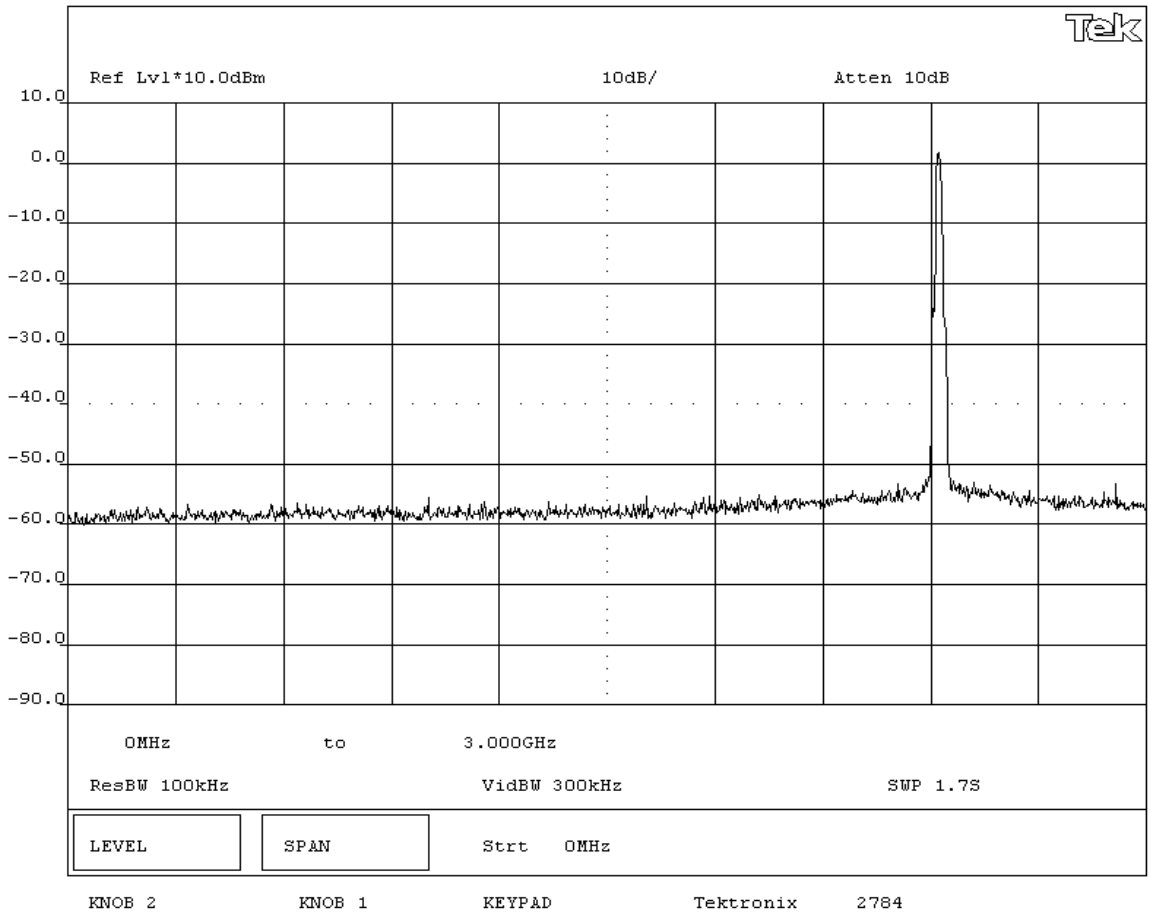
Pass

SIGNATURE

Tested By: _____

DESCRIPTION OF TEST

Antenna Conducted Spurious Emissions 0MHz-3GHz - Low Channel - 802.11(b) 1 Mbps



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/10/05
Customer:	Intermec Technologies Corporation			Temperature:	20°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42% RH
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(d)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at 1 Mbps data rate, 802.11(b) modulation scheme

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum level of any spurious emission outside of the authorized band is 20 dB down from the fundamental.

RESULTS

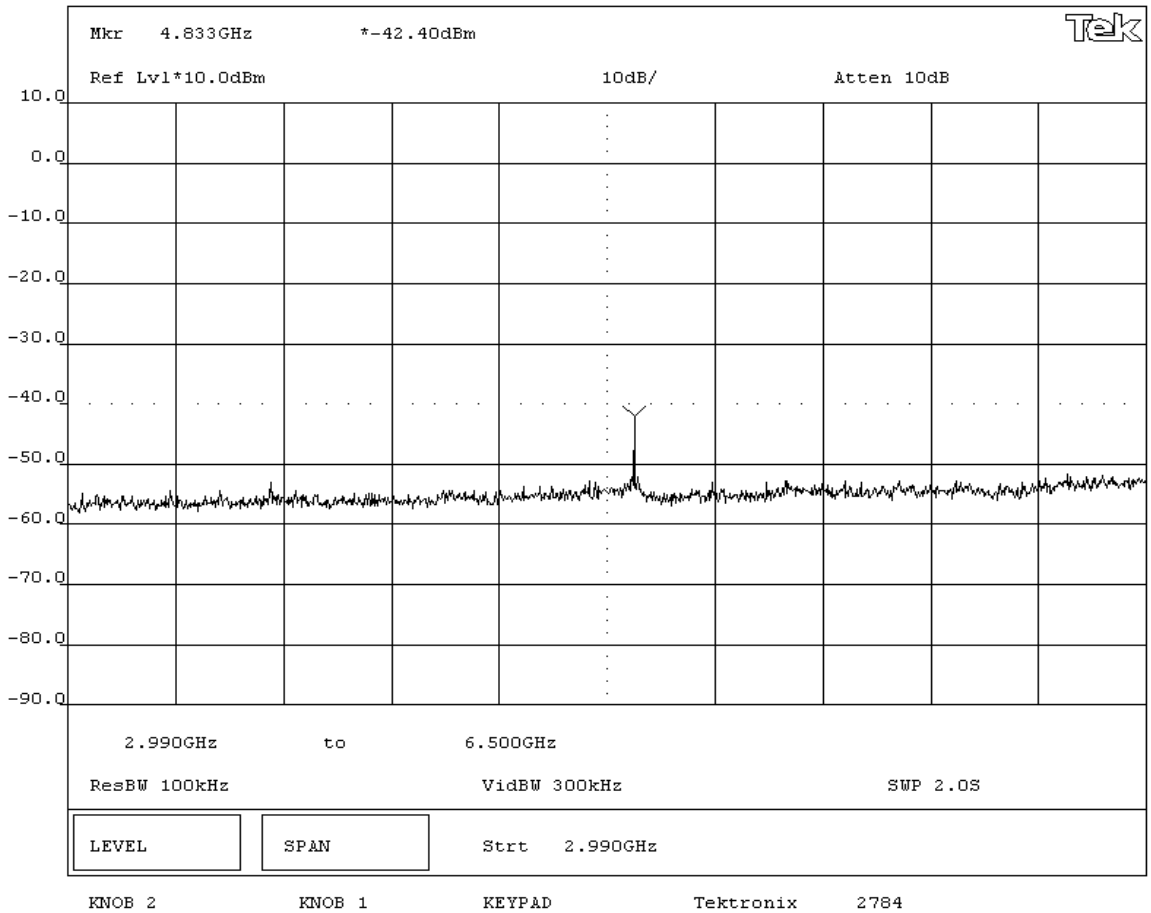
Pass

SIGNATURE

Tested By: _____

DESCRIPTION OF TEST

Antenna Conducted Spurious Emissions 3GHz-6.5GHz - Low Channel - 802.11(b) 1 Mbps



NORTHWEST
EMC

EMISSIONS DATA SHEET

Rev BETA
01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/10/05
Customer:	Intermec Technologies Corporation			Temperature:	20°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42% RH
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(d)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at 1 Mbps data rate, 802.11(b) modulation scheme

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum level of any spurious emission outside of the authorized band is 20 dB down from the fundamental.

RESULTS

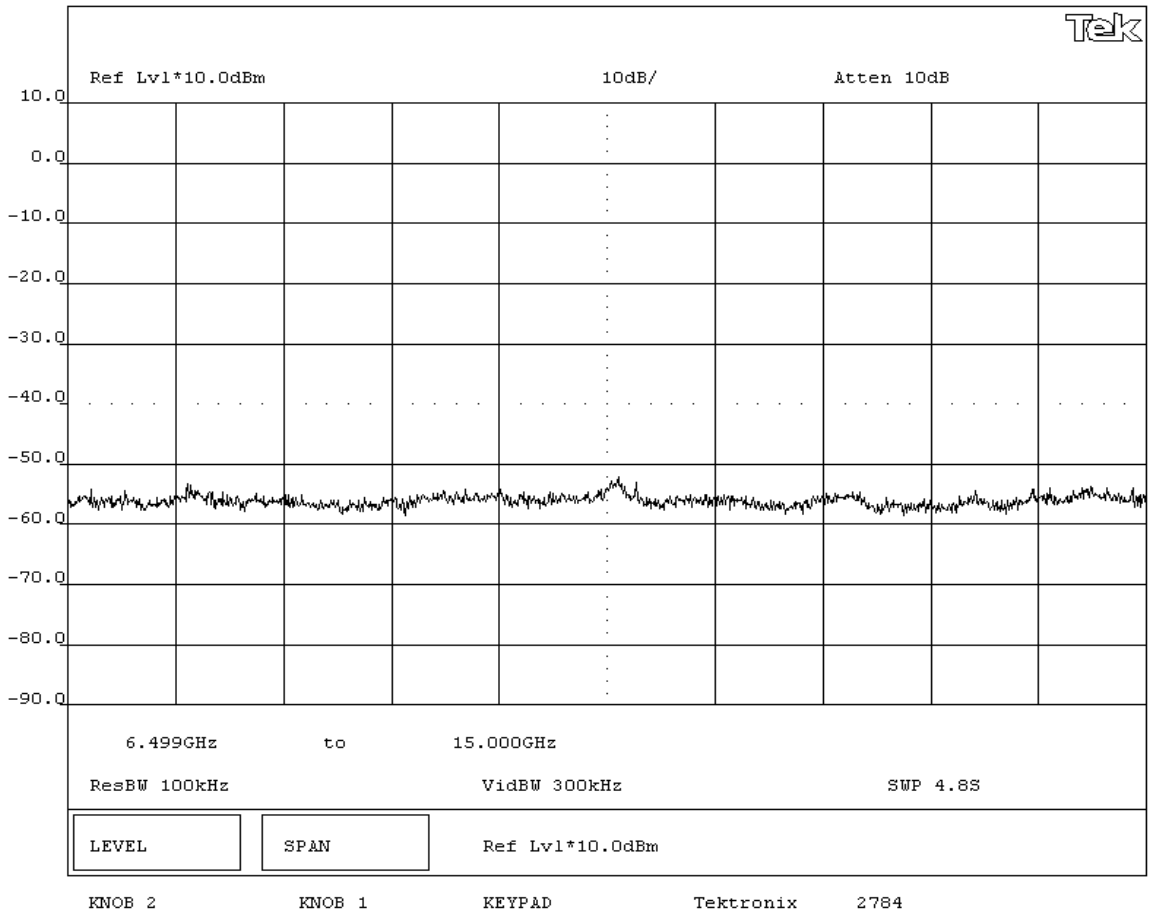
Pass

SIGNATURE

Tested By: _____

DESCRIPTION OF TEST

Antenna Conducted Spurious Emissions 6.5GHz-15GHz - Low Channel - 802.11(b) 1 Mbps



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/10/05
Customer:	Intermec Technologies Corporation			Temperature:	20°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42% RH
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(d)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at 1 Mbps data rate, 802.11(b) modulation scheme

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum level of any spurious emission outside of the authorized band is 20 dB down from the fundamental.

RESULTS

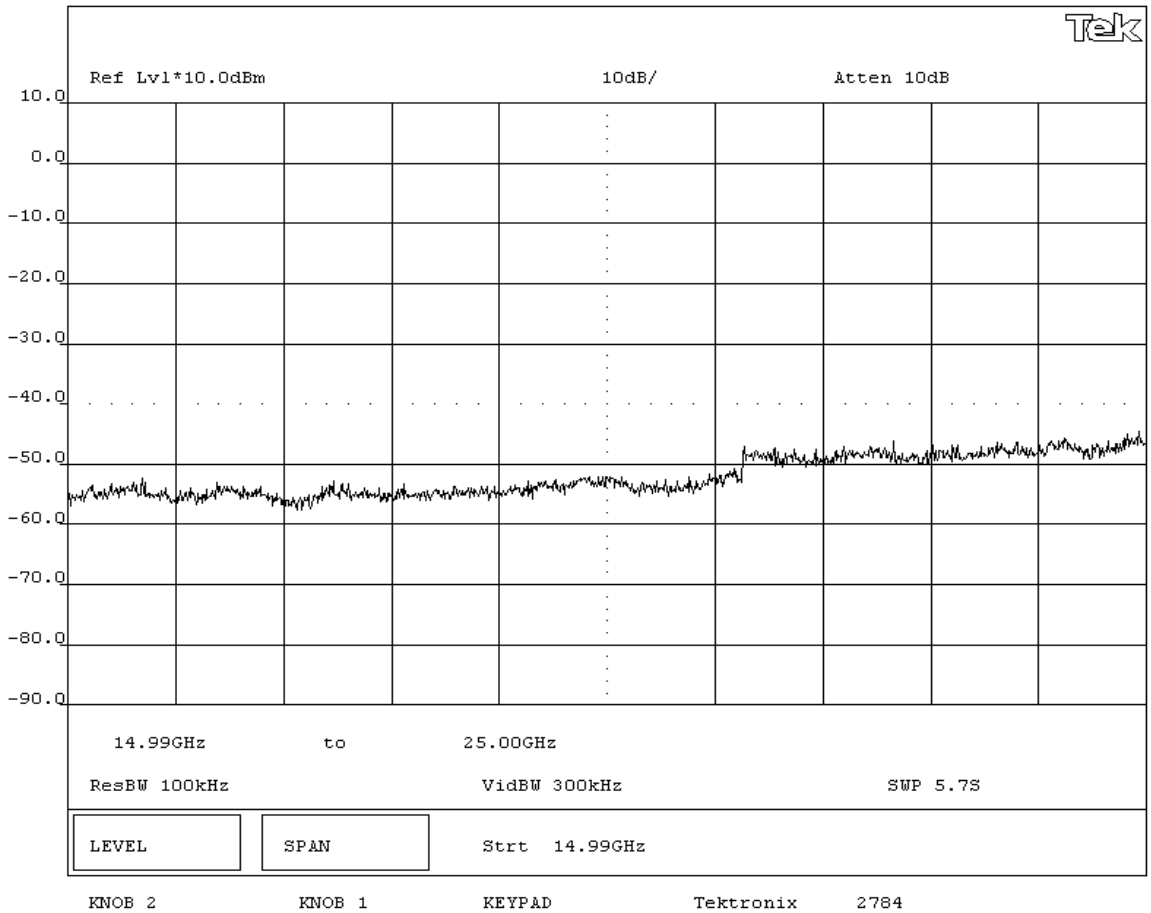
Pass

SIGNATURE

Tested By: _____

DESCRIPTION OF TEST

Antenna Conducted Spurious Emissions 15GHz - 25GHz - Low Channel - 802.11(b) 1 Mbps



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/10/05
Customer:	Intermec Technologies Corporation			Temperature:	20°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42% RH
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(d)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at 1 Mbps data rate, 802.11(b) modulation scheme

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum level of any spurious emission outside of the authorized band is 20 dB down from the fundamental.

RESULTS

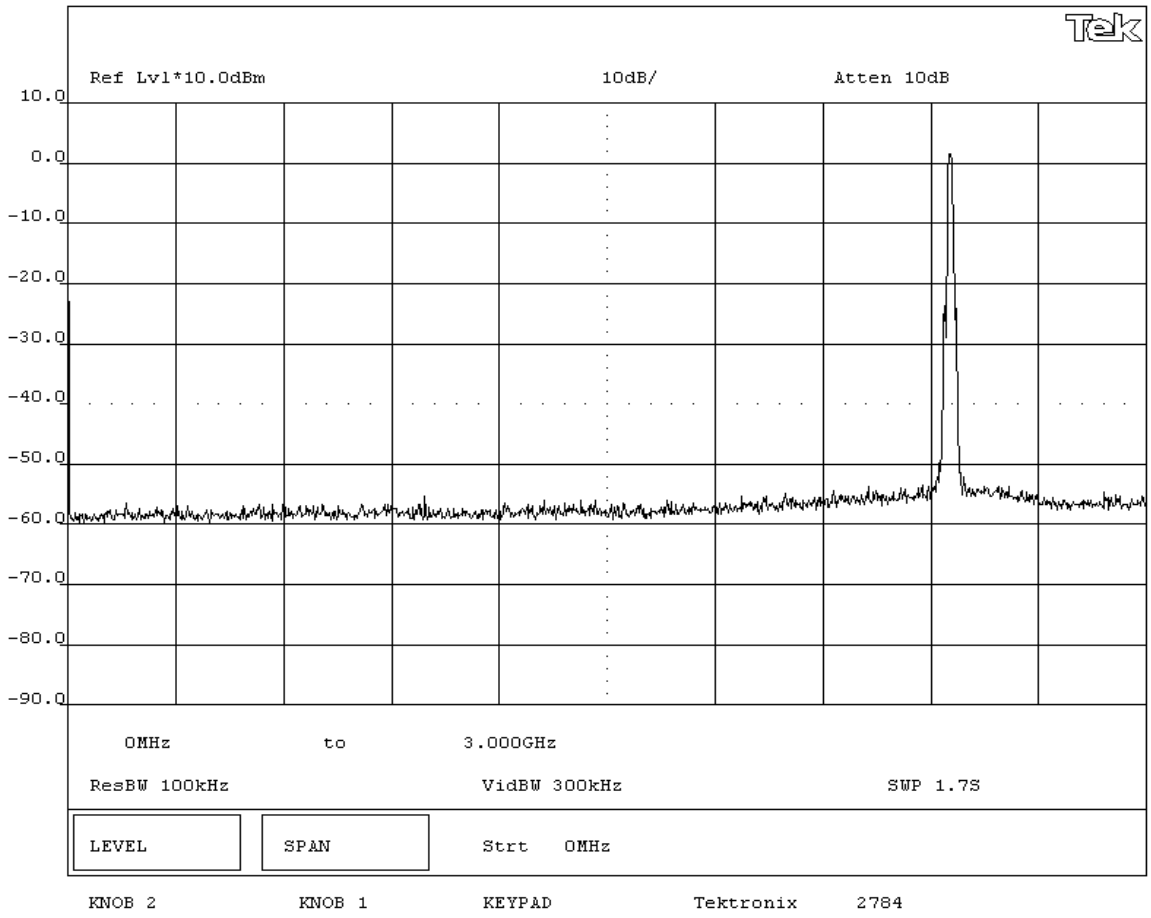
Pass

SIGNATURE

Tested By: _____

DESCRIPTION OF TEST

Antenna Conducted Spurious Emissions 0MHz-3GHz - Mid Channel - 802.11(b) 1 Mbps



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/10/05
Customer:	Intermec Technologies Corporation			Temperature:	20°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42% RH
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(d)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at 1 Mbps data rate, 802.11(b) modulation scheme

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum level of any spurious emission outside of the authorized band is 20 dB down from the fundamental.

RESULTS

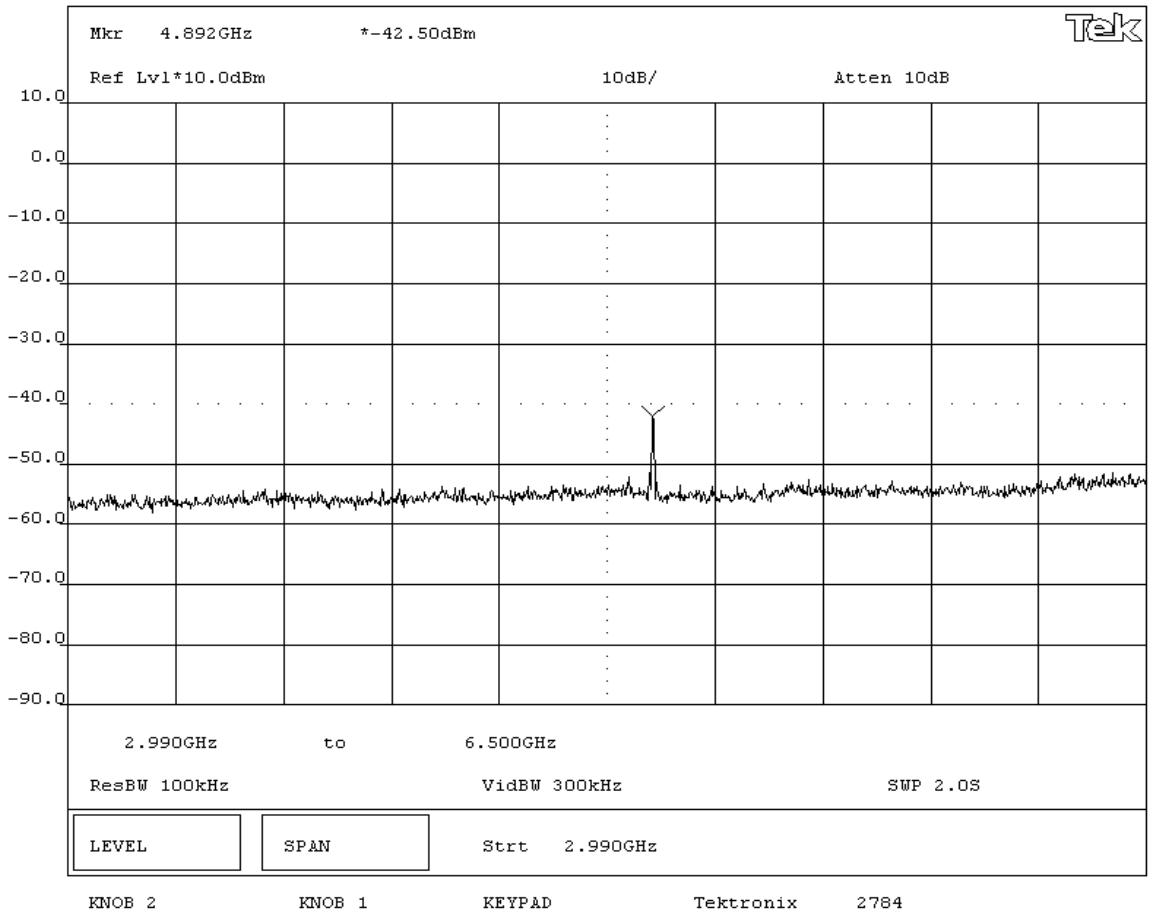
Pass

SIGNATURE

Tested By: _____

DESCRIPTION OF TEST

Antenna Conducted Spurious Emissions 3GHz-6.5GHz - Mid Channel - 802.11(b) 1 Mbps



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/10/05
Customer:	Intermec Technologies Corporation			Temperature:	20°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42% RH
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(d)	Year: 2004	Method:	FCC 97-114, ANSI C63.4	Year: 2003

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at 1 Mbps data rate, 802.11(b) modulation scheme

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum level of any spurious emission outside of the authorized band is 20 dB down from the fundamental.

RESULTS

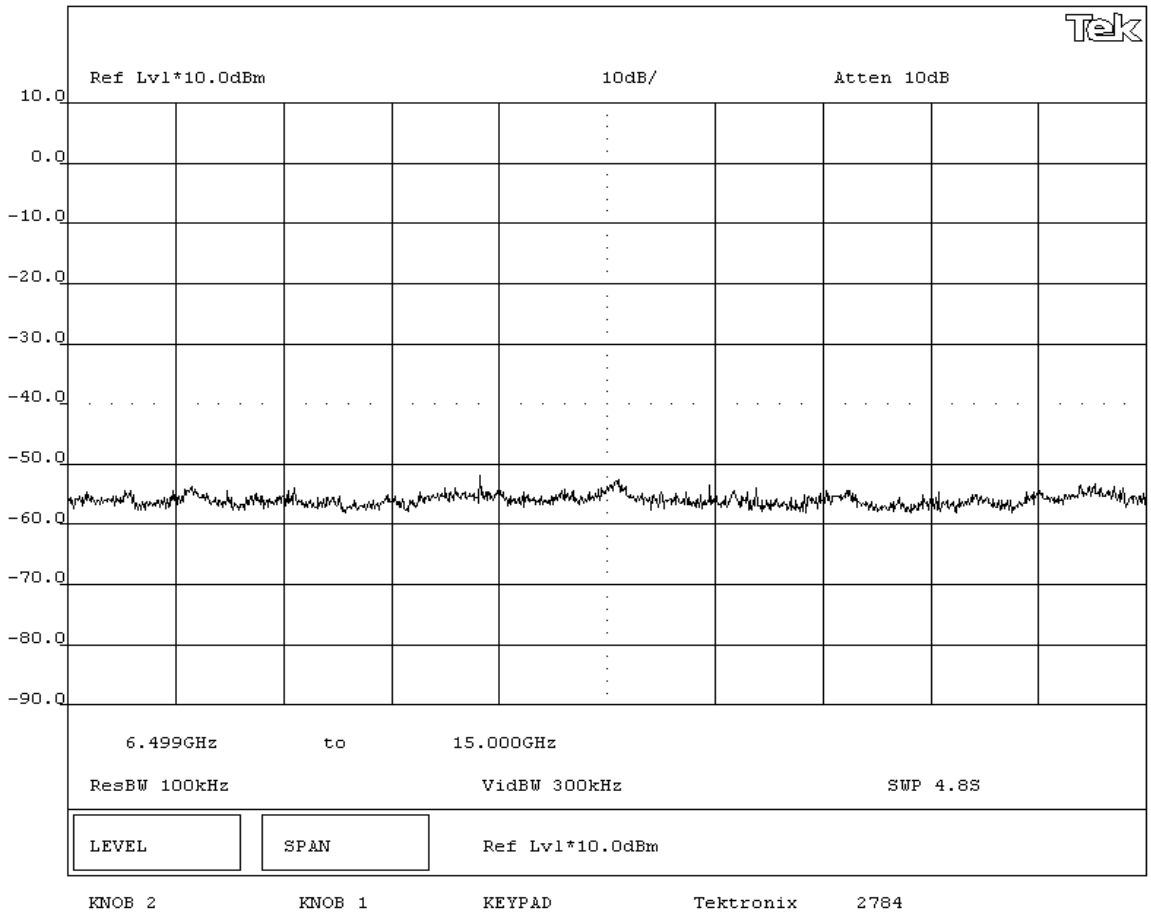
Pass

SIGNATURE

Tested By: _____

DESCRIPTION OF TEST

Antenna Conducted Spurious Emissions 6.5GHz-15GHz - Mid Channel - 802.11(b) 1 Mbps



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/10/05
Customer:	Intermec Technologies Corporation			Temperature:	20°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42% RH
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(d)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at 1 Mbps data rate, 802.11(b) modulation scheme

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum level of any spurious emission outside of the authorized band is 20 dB down from the fundamental.

RESULTS

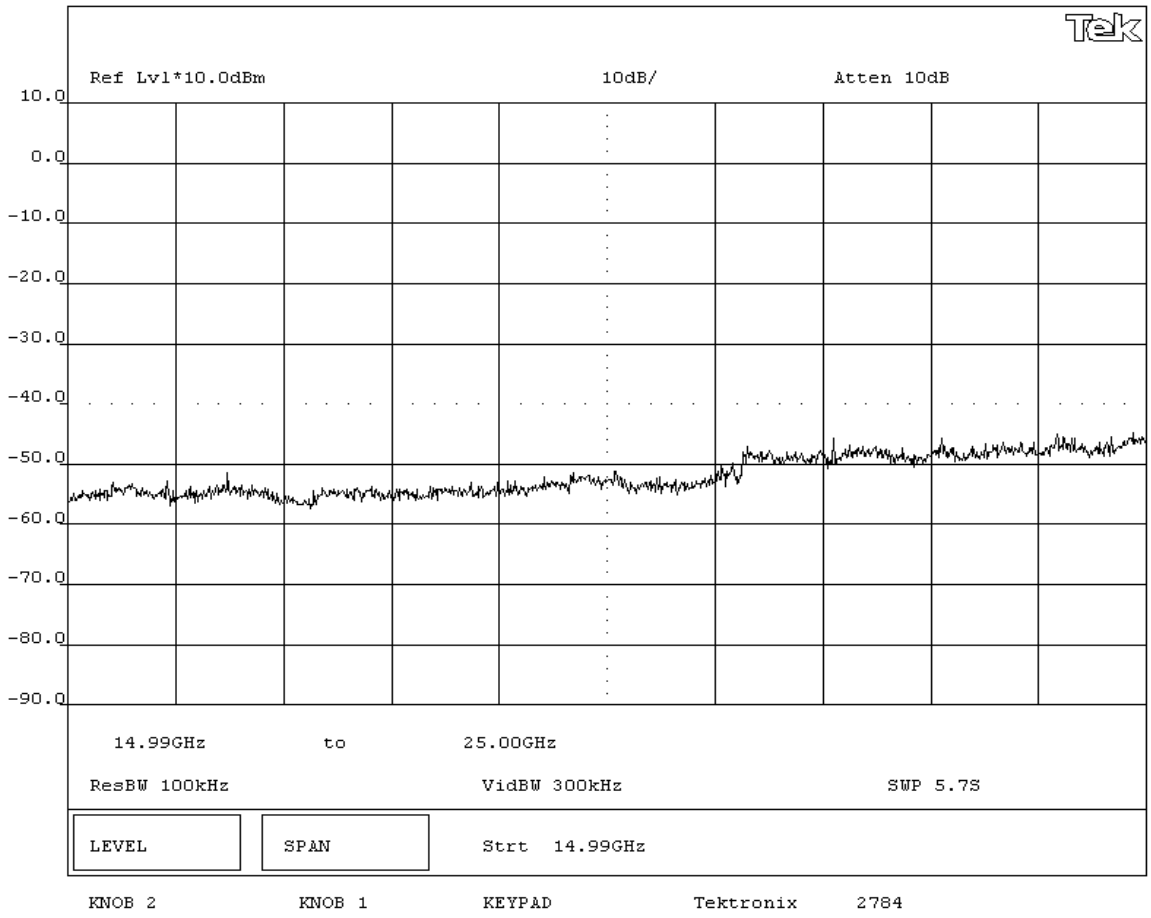
Pass

SIGNATURE

Tested By: _____

DESCRIPTION OF TEST

Antenna Conducted Spurious Emissions 15GHz - 25GHz - Mid Channel - 802.11(b) 1 Mbps



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/10/05
Customer:	Intermec Technologies Corporation			Temperature:	20°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42% RH
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(d)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at 1 Mbps data rate, 802.11(b) modulation scheme

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum level of any spurious emission outside of the authorized band is 20 dB down from the fundamental.

RESULTS

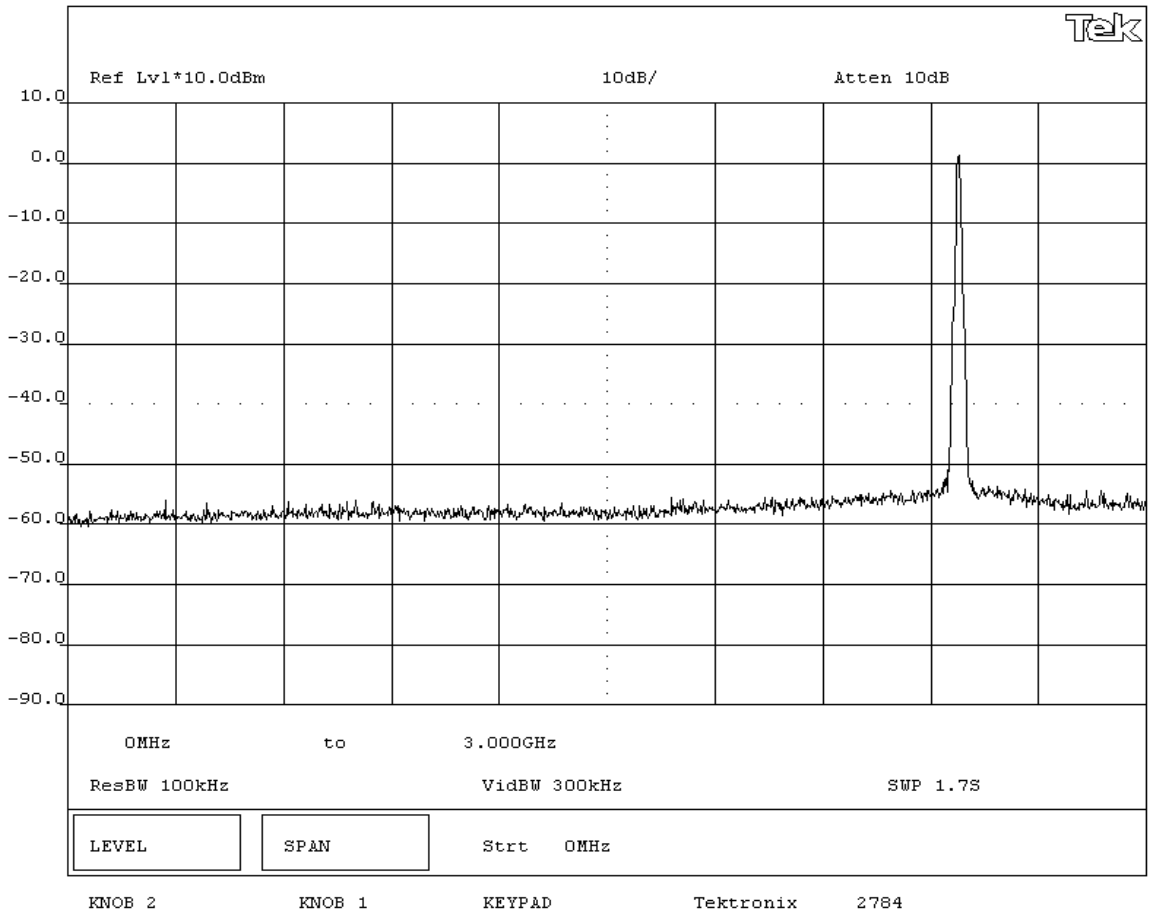
Pass

SIGNATURE

Tested By: _____

DESCRIPTION OF TEST

Antenna Conducted Spurious Emissions 0MHz-3GHz - High Channel - 802.11(b) 1 Mbps



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/10/05
Customer:	Intermec Technologies Corporation			Temperature:	20°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42% RH
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(d)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at 1 Mbps data rate, 802.11(b) modulation scheme

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum level of any spurious emission outside of the authorized band is 20 dB down from the fundamental.

RESULTS

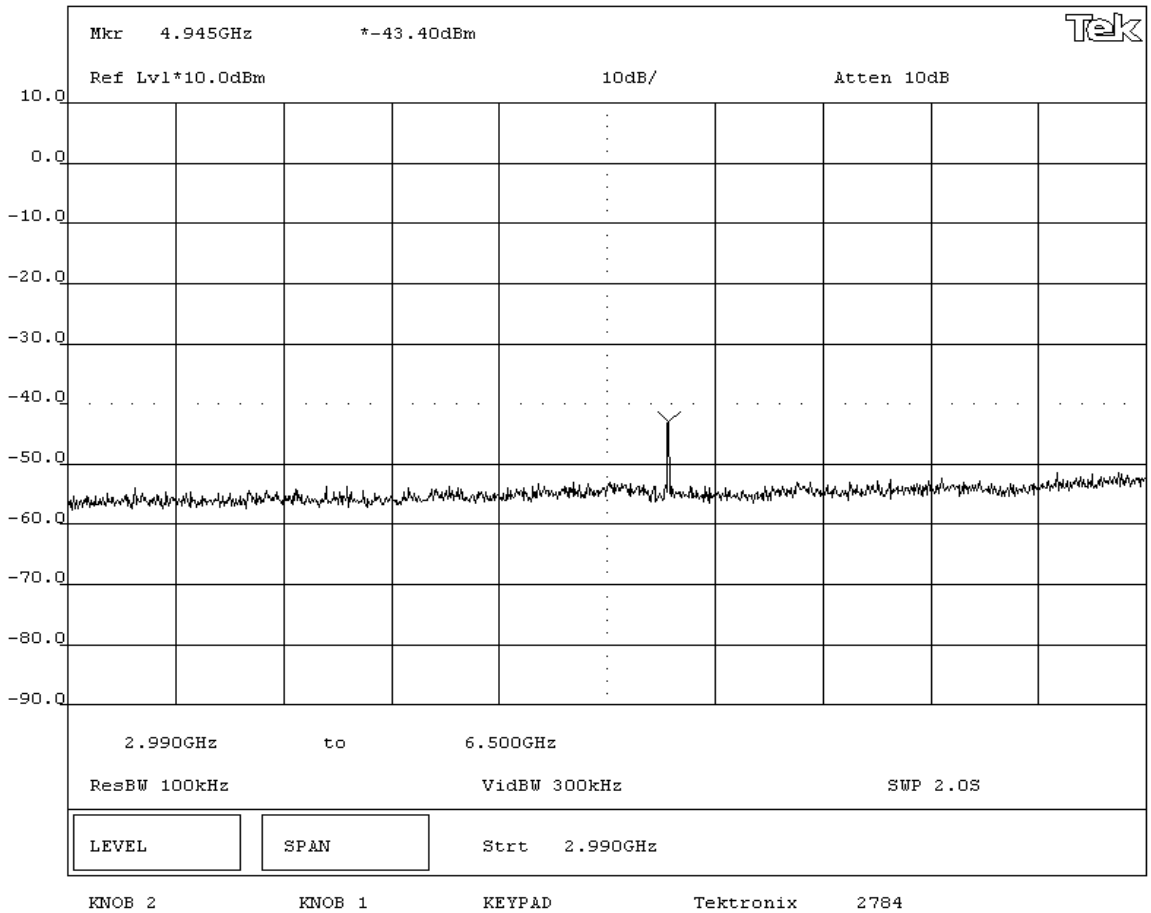
Pass

SIGNATURE

Tested By: _____

DESCRIPTION OF TEST

Antenna Conducted Spurious Emissions 3GHz-6.5GHz - High Channel - 802.11(b) 1 Mbps



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/10/05
Customer:	Intermec Technologies Corporation			Temperature:	20°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42% RH
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(d)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at 1 Mbps data rate, 802.11(b) modulation scheme

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum level of any spurious emission outside of the authorized band is 20 dB down from the fundamental.

RESULTS

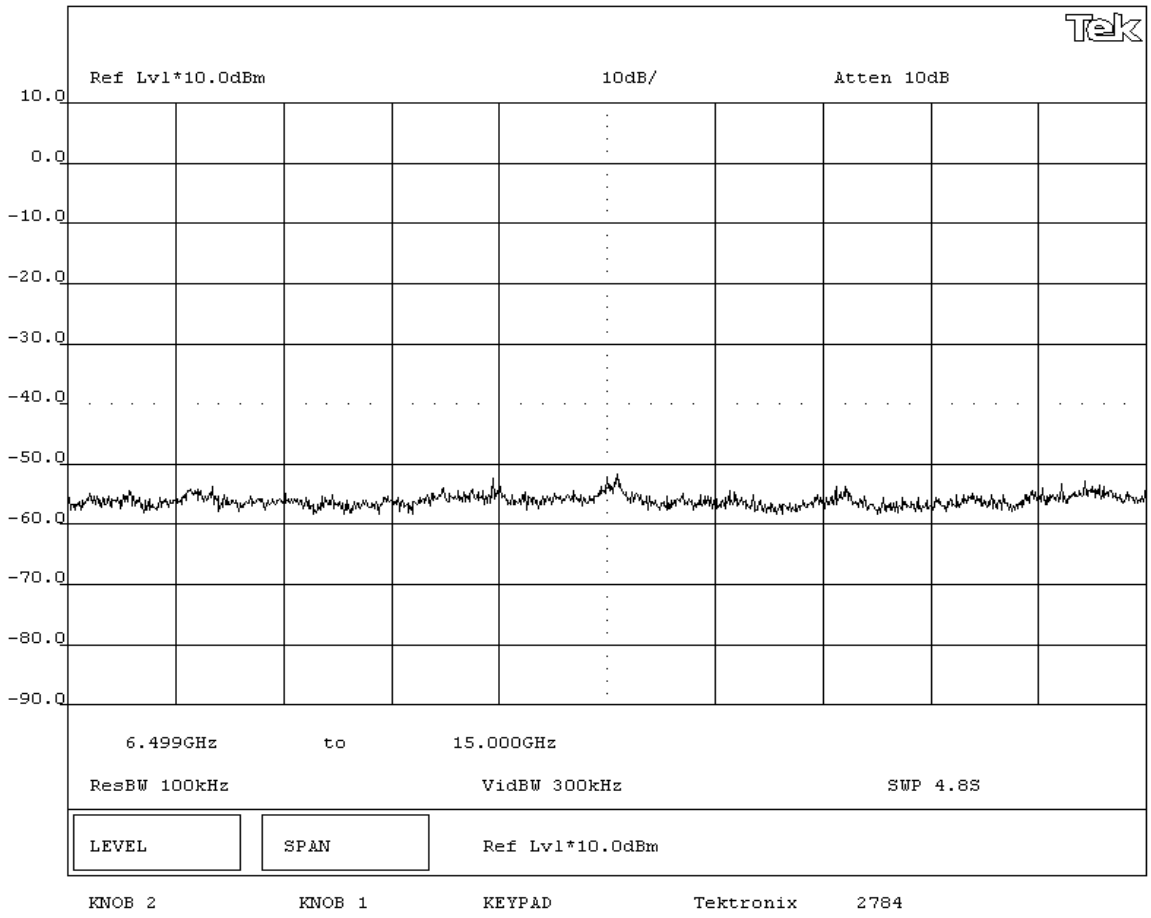
Pass

SIGNATURE

Tested By: _____

DESCRIPTION OF TEST

Antenna Conducted Spurious Emissions 6.5GHz-15GHz - High Channel - 802.11(b) 1 Mbps



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/10/05
Customer:	Intermec Technologies Corporation			Temperature:	20°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42% RH
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(d)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at 1 Mbps data rate, 802.11(b) modulation scheme

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum level of any spurious emission outside of the authorized band is 20 dB down from the fundamental.

RESULTS

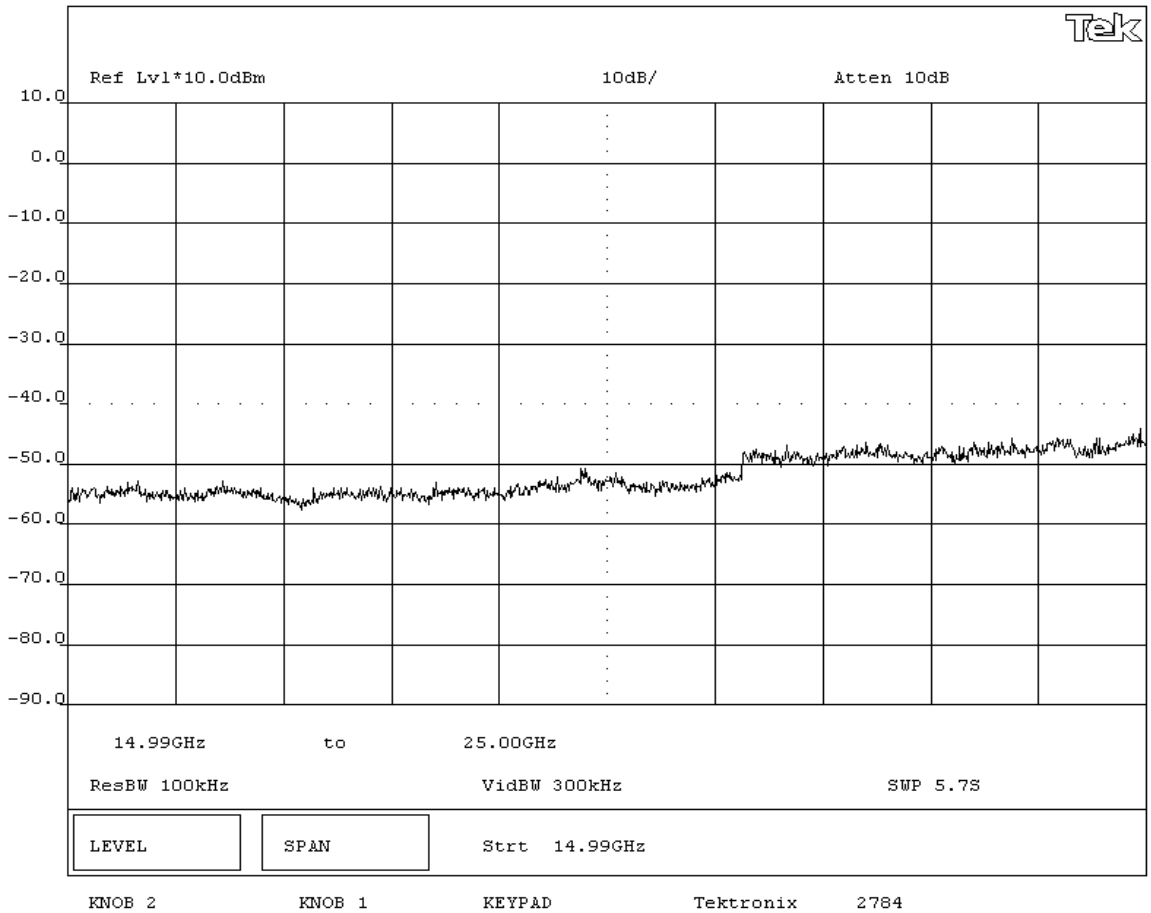
Pass

SIGNATURE

Tested By: _____

DESCRIPTION OF TEST

Antenna Conducted Spurious Emissions 15GHz - 25GHz - High Channel - 802.11(b) 1 Mbps



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/10/05
Customer:	Intermec Technologies Corporation			Temperature:	20°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42% RH
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(d)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at maximum data rate, 802.11(b) modulation scheme

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum level of any spurious emission outside of the authorized band is 20 dB down from the fundamental.

RESULTS

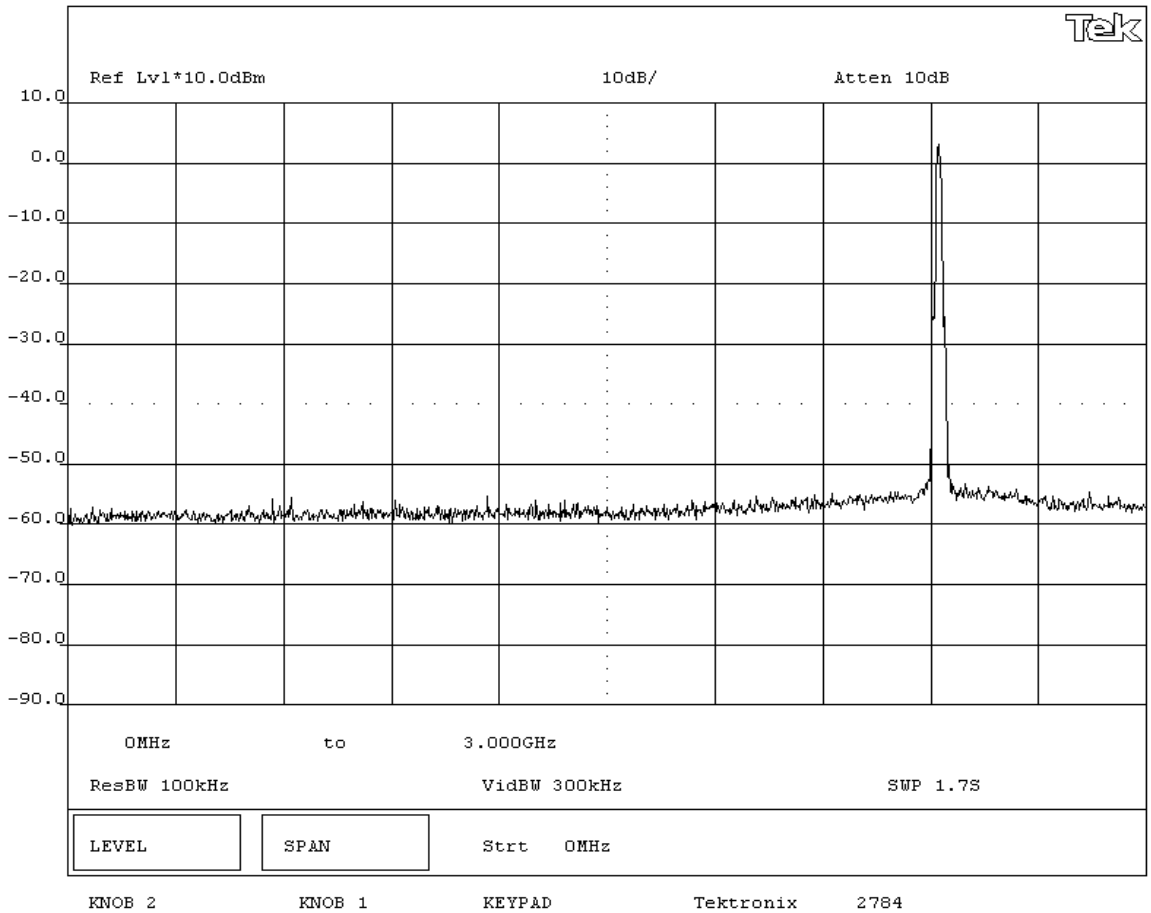
Pass

SIGNATURE

Tested By: _____

DESCRIPTION OF TEST

Antenna Conducted Spurious Emissions 0MHz-3GHz - Low Channel - 802.11(b) 11 Mbps



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/10/05
Customer:	Intermec Technologies Corporation			Temperature:	20°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42% RH
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(d)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at maximum data rate, 802.11(b) modulation scheme

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum level of any spurious emission outside of the authorized band is 20 dB down from the fundamental.

RESULTS

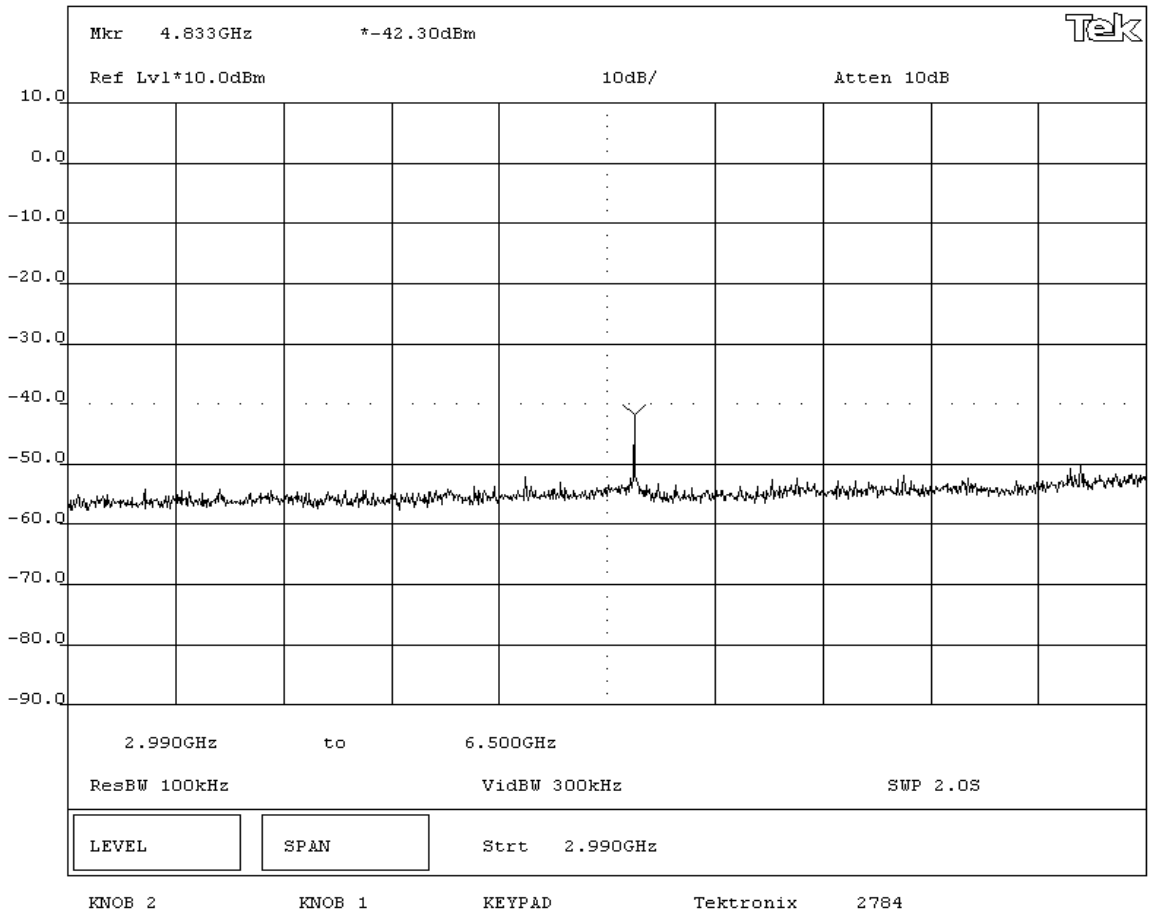
Pass

SIGNATURE

Tested By: _____

DESCRIPTION OF TEST

Antenna Conducted Spurious Emissions 3GHz-6.5GHz - Low Channel - 802.11(b) 11 Mbps



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/10/05
Customer:	Intermec Technologies Corporation			Temperature:	20°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42% RH
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(d)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at maximum data rate, 802.11(b) modulation scheme

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum level of any spurious emission outside of the authorized band is 20 dB down from the fundamental.

RESULTS

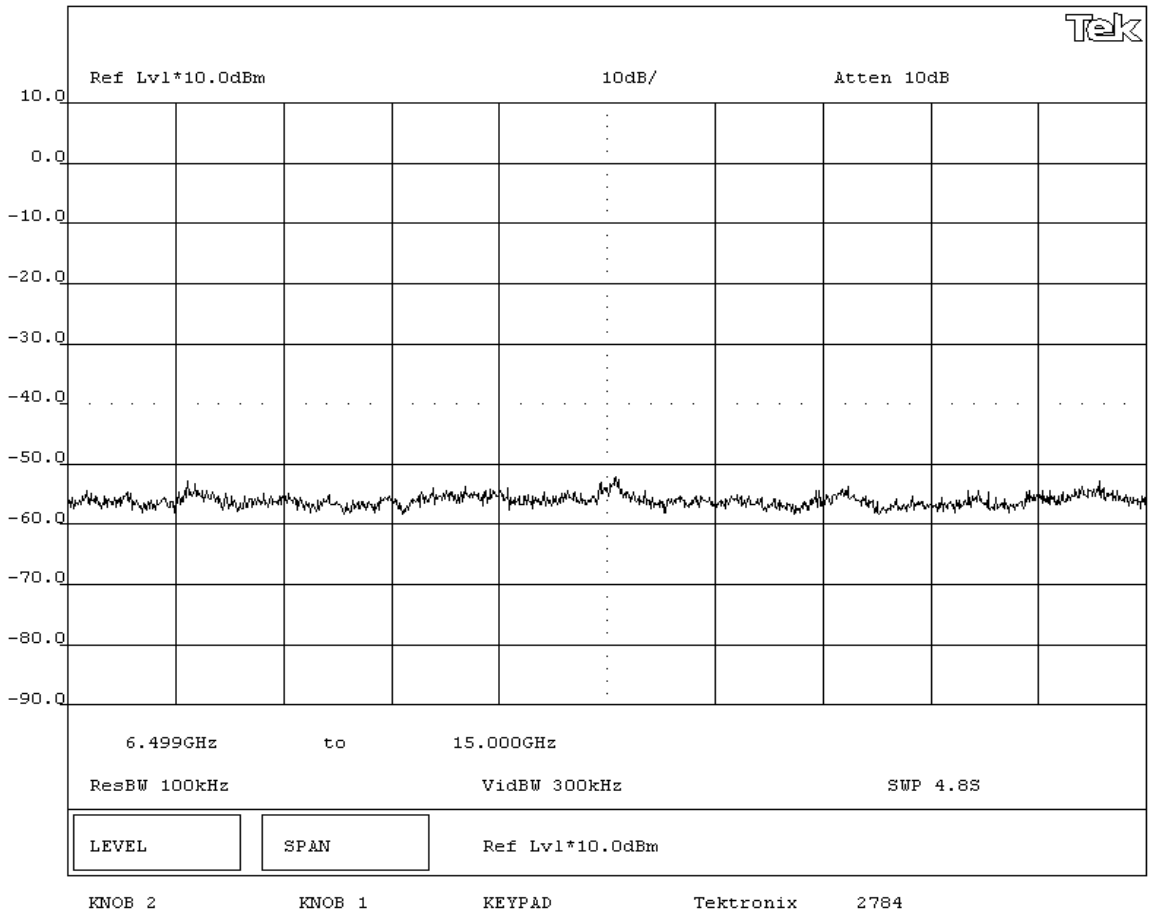
Pass

SIGNATURE

Tested By: _____

DESCRIPTION OF TEST

Antenna Conducted Spurious Emissions 6.5GHz-15GHz - Low Channel - 802.11(b) 11 Mbps



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/10/05
Customer:	Intermec Technologies Corporation			Temperature:	20°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42% RH
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(d)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at maximum data rate, 802.11(b) modulation scheme

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum level of any spurious emission outside of the authorized band is 20 dB down from the fundamental.

RESULTS

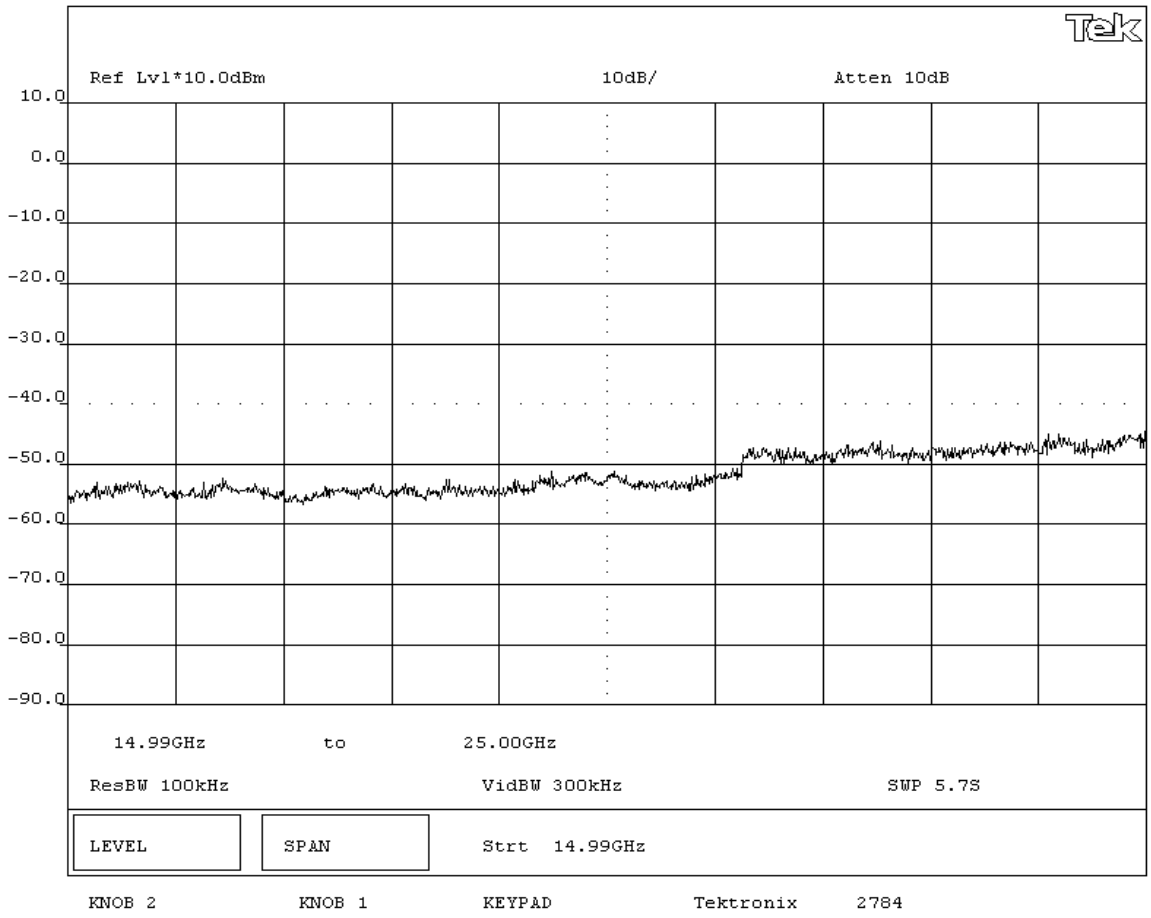
Pass

SIGNATURE

Tested By: _____

DESCRIPTION OF TEST

Antenna Conducted Spurious Emissions 15GHz - 25GHz - Low Channel - 802.11(b) 11 Mbps



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/10/05
Customer:	Intermec Technologies Corporation			Temperature:	20°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42% RH
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(d)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at maximum data rate, 802.11(b) modulation scheme

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum level of any spurious emission outside of the authorized band is 20 dB down from the fundamental.

RESULTS

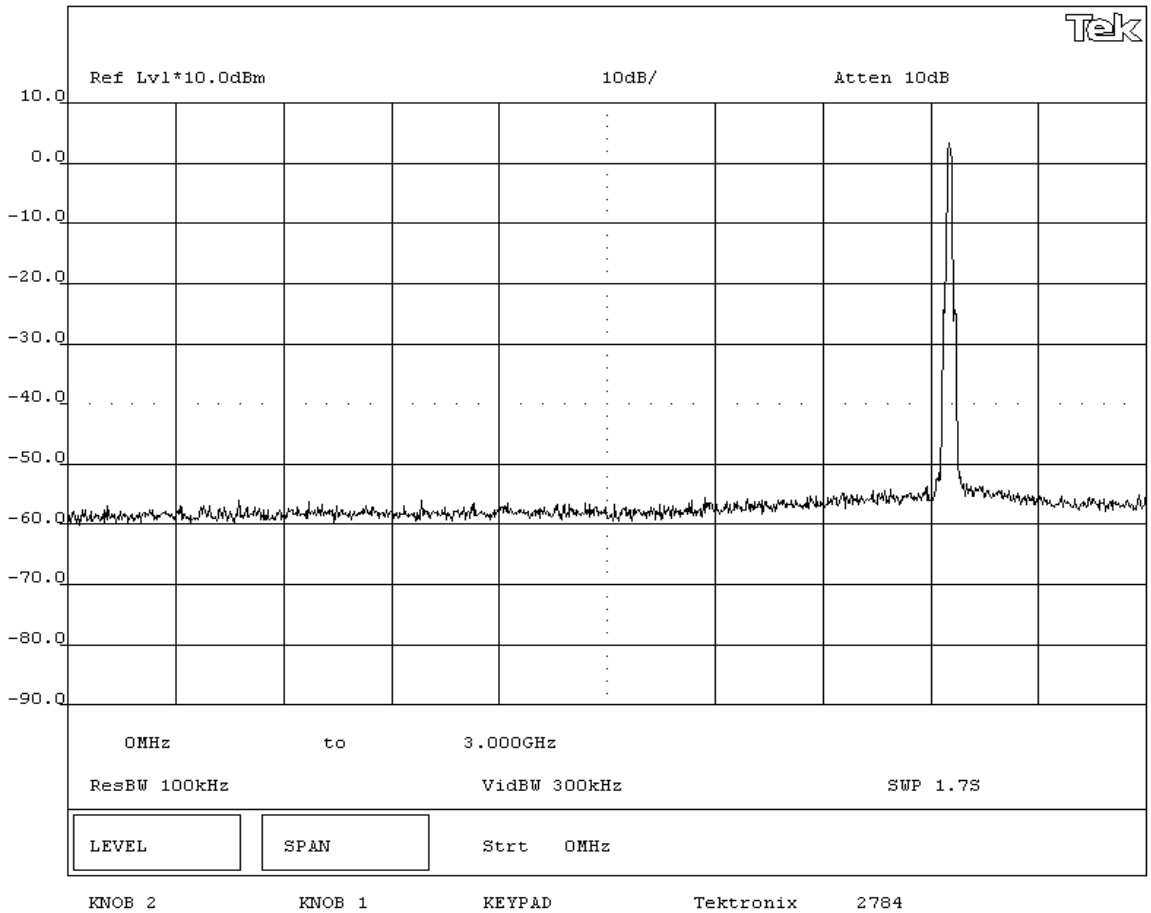
Pass

SIGNATURE

Tested By: _____

DESCRIPTION OF TEST

Antenna Conducted Spurious Emissions 0MHz-3GHz - Mid Channel - 802.11(b) 11 Mbps



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/10/05
Customer:	Intermec Technologies Corporation			Temperature:	20°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42% RH
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(d)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at maximum data rate, 802.11(b) modulation scheme

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum level of any spurious emission outside of the authorized band is 20 dB down from the fundamental.

RESULTS

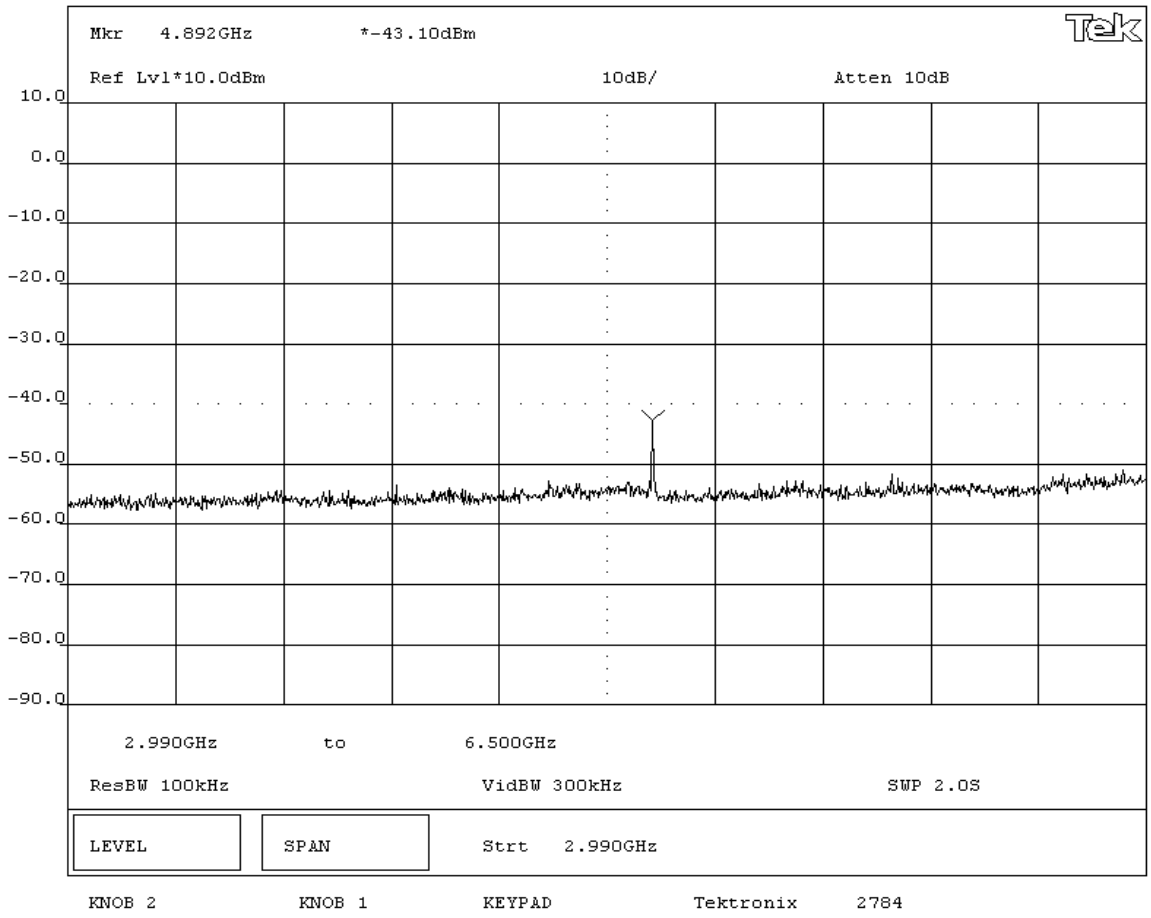
Pass

SIGNATURE

Tested By: _____

DESCRIPTION OF TEST

Antenna Conducted Spurious Emissions 3GHz-6.5GHz - Mid Channel - 802.11(b) 11 Mbps



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/10/05
Customer:	Intermec Technologies Corporation			Temperature:	20°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42% RH
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(d)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at maximum data rate, 802.11(b) modulation scheme

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum level of any spurious emission outside of the authorized band is 20 dB down from the fundamental.

RESULTS

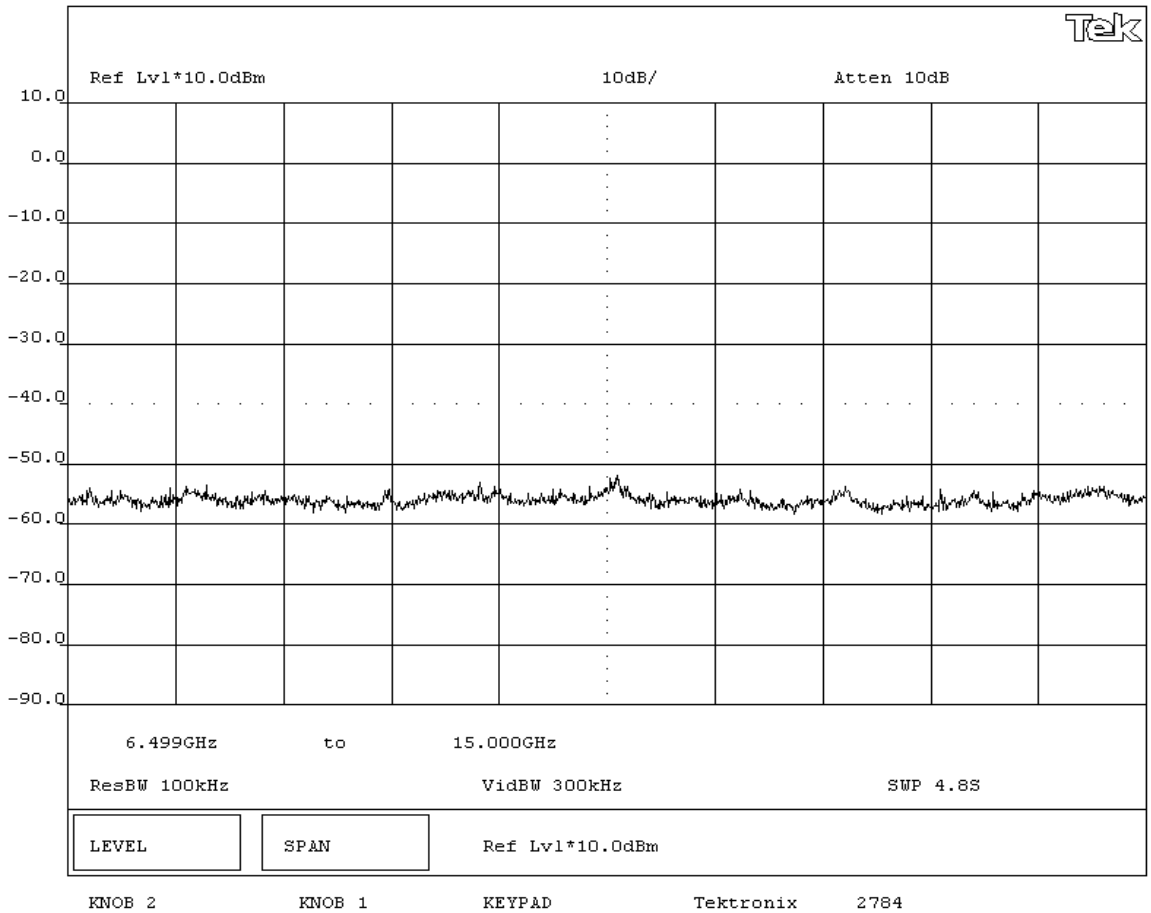
Pass

SIGNATURE

Tested By: _____

DESCRIPTION OF TEST

Antenna Conducted Spurious Emissions 6.5GHz-15GHz - Mid Channel - 802.11(b) 11 Mbps



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/10/05
Customer:	Intermec Technologies Corporation			Temperature:	20°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42% RH
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(d)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at maximum data rate, 802.11(b) modulation scheme

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum level of any spurious emission outside of the authorized band is 20 dB down from the fundamental.

RESULTS

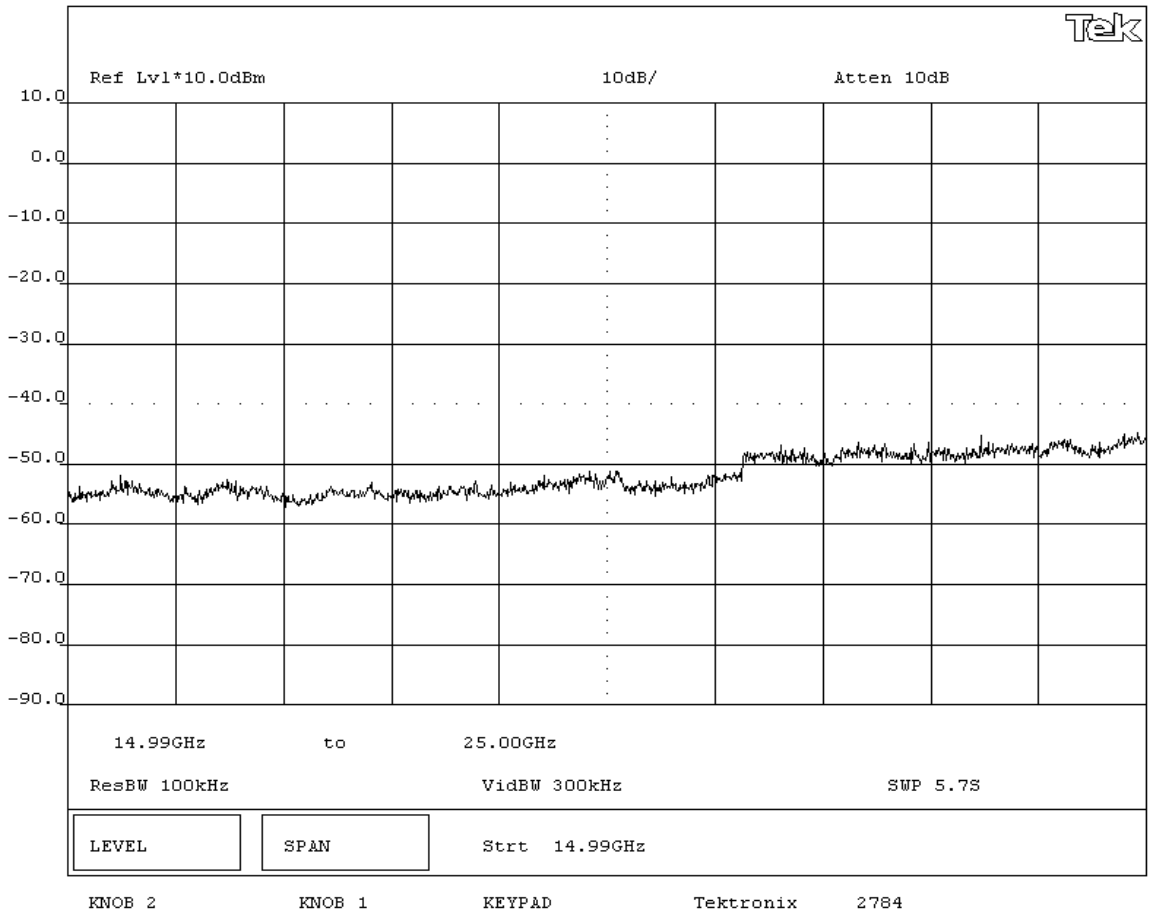
Pass

SIGNATURE

Tested By: _____

DESCRIPTION OF TEST

Antenna Conducted Spurious Emissions 15GHz - 25GHz - Mid Channel - 802.11(b) 11 Mbps



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/10/05
Customer:	Intermec Technologies Corporation			Temperature:	20°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42% RH
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(d)	Year: 2004	Method:	FCC 97-114, ANSI C63.4	Year: 2003

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at maximum data rate, 802.11(b) modulation scheme

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum level of any spurious emission outside of the authorized band is 20 dB down from the fundamental.

RESULTS

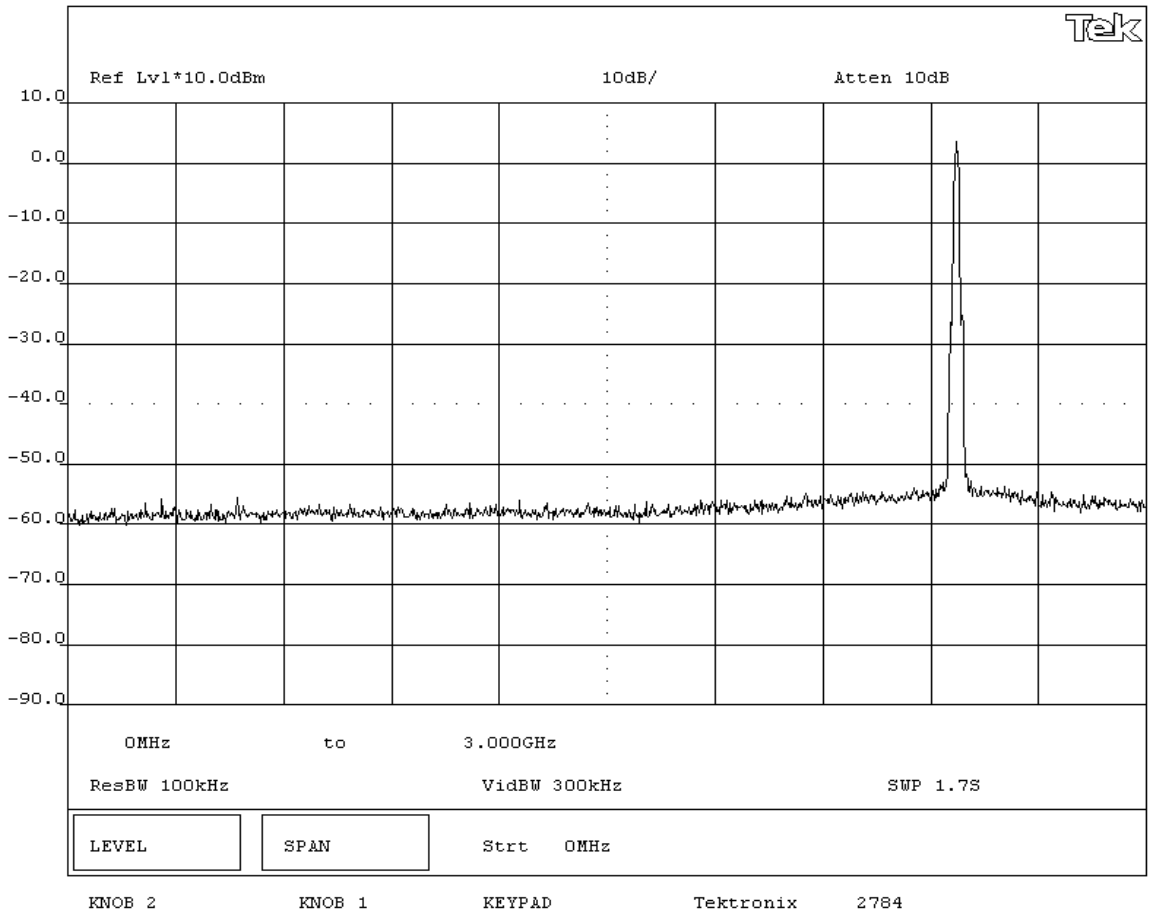
Pass

SIGNATURE

Tested By: _____

DESCRIPTION OF TEST

Antenna Conducted Spurious Emissions 0MHz-3GHz - High Channel - 802.11(b) 11 Mbps



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/10/05
Customer:	Intermec Technologies Corporation			Temperature:	20°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42% RH
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(d)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at maximum data rate, 802.11(b) modulation scheme

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum level of any spurious emission outside of the authorized band is 20 dB down from the fundamental.

RESULTS

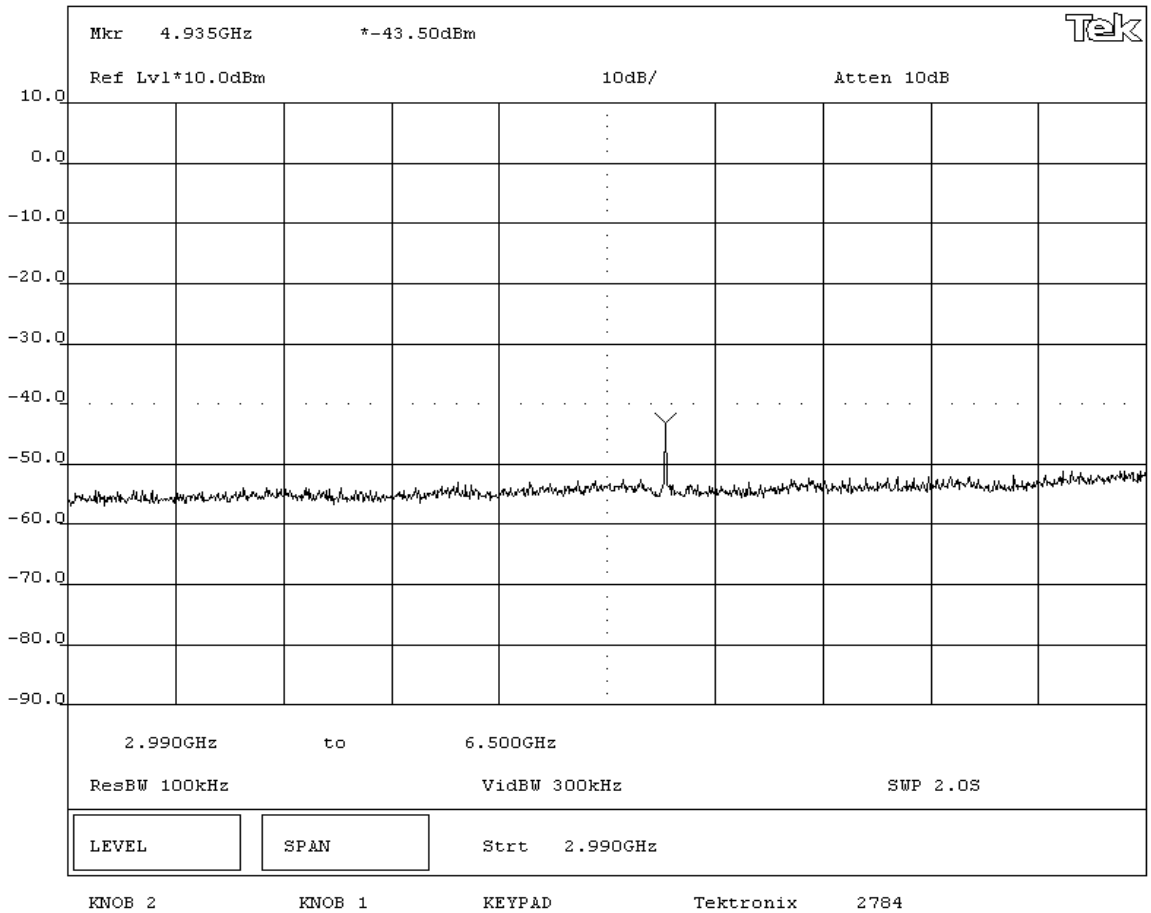
Pass

SIGNATURE

Tested By: _____

DESCRIPTION OF TEST

Antenna Conducted Spurious Emissions 3GHz-6.5GHz - High Channel - 802.11(b) 11 Mbps



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/10/05
Customer:	Intermec Technologies Corporation			Temperature:	20°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42% RH
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(d)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at maximum data rate, 802.11(b) modulation scheme

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum level of any spurious emission outside of the authorized band is 20 dB down from the fundamental.

RESULTS

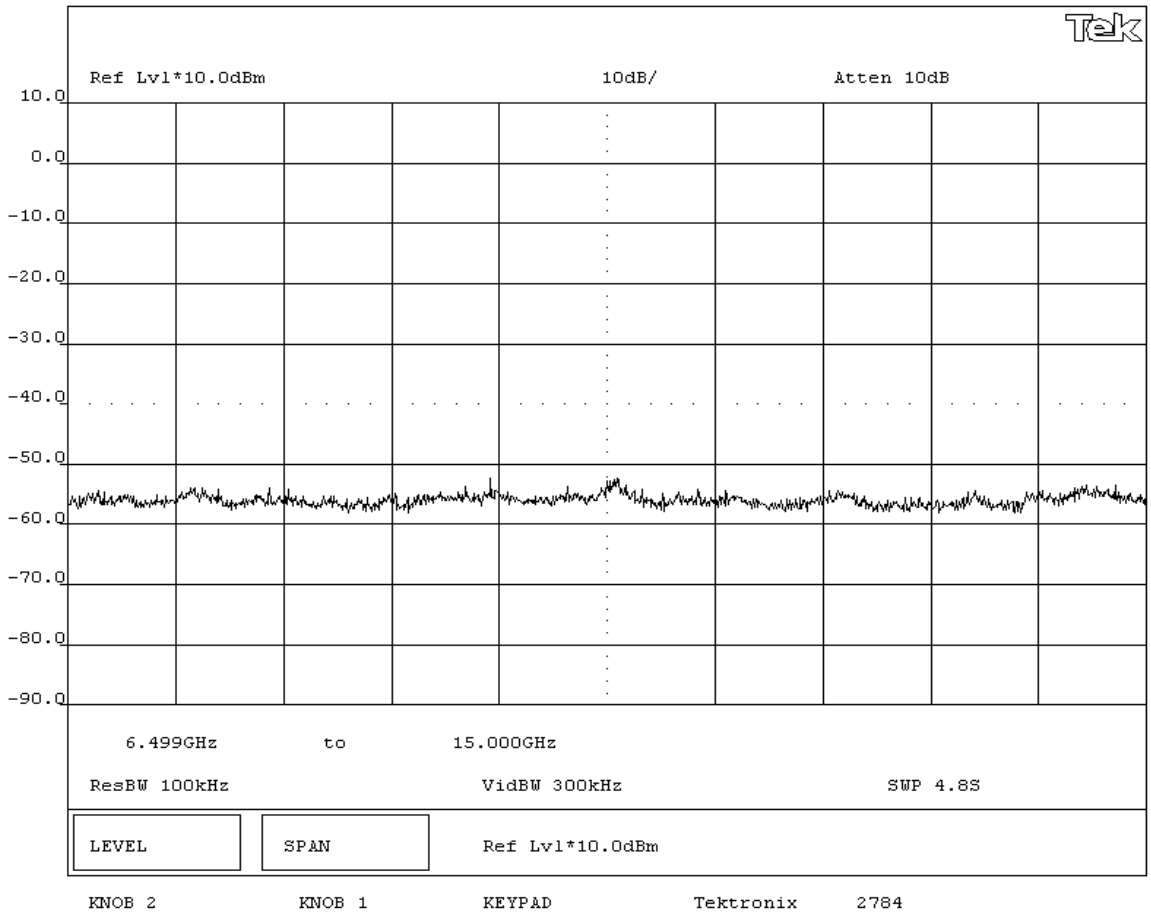
Pass

SIGNATURE

Tested By: _____

DESCRIPTION OF TEST

Antenna Conducted Spurious Emissions 6.5GHz-15GHz - High Channel - 802.11(b) 11 Mbps



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/10/05
Customer:	Intermec Technologies Corporation			Temperature:	20°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42% RH
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(d)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at maximum data rate, 802.11(b) modulation scheme

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum level of any spurious emission outside of the authorized band is 20 dB down from the fundamental.

RESULTS

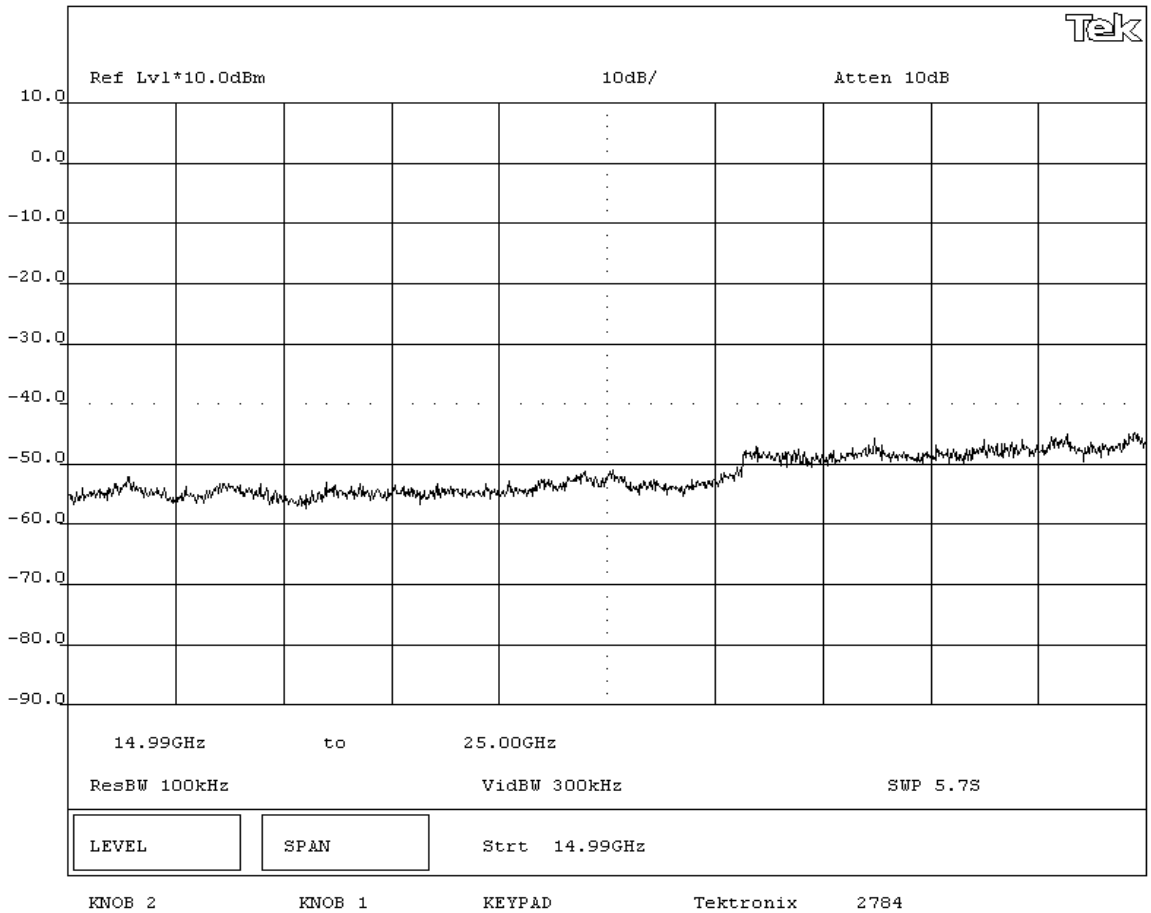
Pass

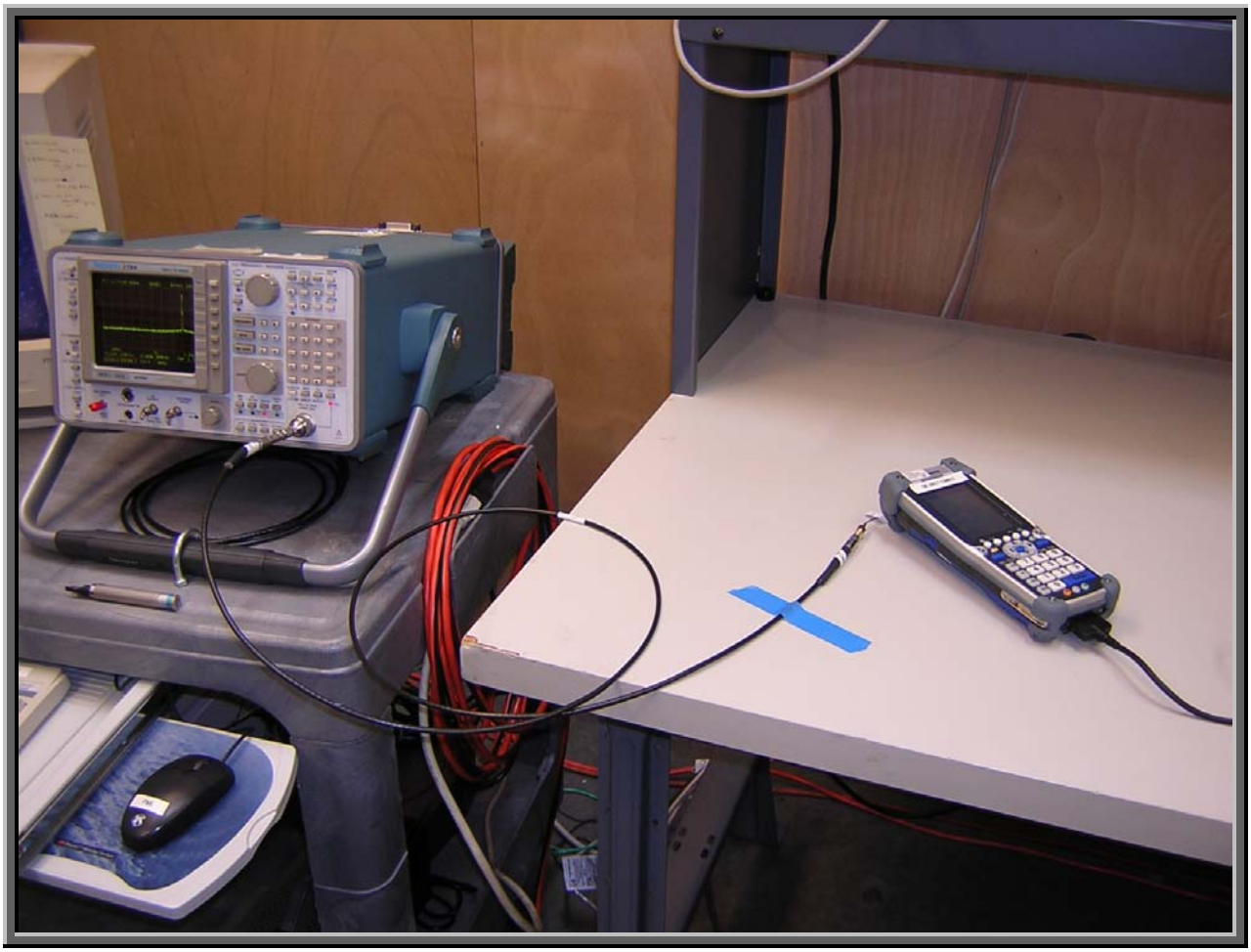
SIGNATURE

Tested By: _____

DESCRIPTION OF TEST

Antenna Conducted Spurious Emissions 15GHz - 25GHz - High Channel - 802.11(b) 11 Mbps





Justification

The individuals and/or the organization requesting the test provided the modes, configurations and settings available to evaluate. While scanning the radiated emissions, all of the EUT parameters listed below were investigated. This includes, but may not be limited to, antennas, tuned transmit frequency ranges, operating modes, and data rates.

Channels in Specified Band Investigated:
Low
Mid
High

Operating Modes Investigated:
Continuous transmit

Data Rates Investigated:
1 Mbps (802.11b)
11 Mbps (802.11b)
6 Mbps (802.11g)
36 Mbps (802.11g)
54 Mbps (802.11g)

Output Power Setting(s) Investigated:
Maximum default

Power Input Settings Investigated:
120 VAC, 60 Hz.

Software\Firmware Applied During Test			
Exercise software	cTxRx Win CE	**Version**	0.1.2.1
Description			
The system was tested using special software developed to test all functions of the device during the test.			

EUT and Peripherals			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
EUT - 802UIAG	Intermec Technologies Corporation	802UIAG	None
Host Device	Intermec Technologies Corporation	CK61	33390400093
AC Power Adapter	Intermec Technologies Corporation	851-061-002	335174

Power Spectral Density

Cables					
Cable Type	**Shield**	**Length (m)**	**Ferrite**	**Connection 1**	**Connection 2**
DC Leads	Yes	1.9	PA	AC Power Adapter	Host Device
AC Power	No	2.0	No	AC Power Adapter	AC Mains
PA = Cable is permanently attached to the device. Shielding and/or presence of ferrite may be unknown.					

Measurement Equipment					
Description	**Manufacturer**	**Model**	**Identifier**	**Last Cal**	**Interval**
Spectrum Analyzer	Tektronix	2784	AAO	01/02/2005	12 mo

Test Description

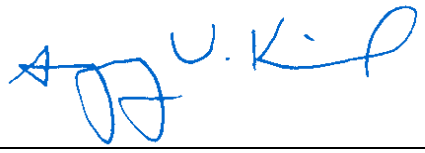
Requirement: Per 47 CFR 15.247(e), the peak power spectral density conducted from the antenna port of a direct sequence transmitter must not be greater than +8 dBm in any 3 kHz band during any time interval of continuous transmission.

Configuration: The peak power spectral density measurements were measured with the EUT set to low, mid, and high transmit frequencies. The measurement was made using a direct connection between the RF output of the EUT and the spectrum analyzer. Per the procedure outlined in FCC 97-114, the spectrum analyzer was used as follows:

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

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

Completed by:



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/10/05
Customer:	Intermec Technologies Corporation			Temperature:	20°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42% RH
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(e)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

Meter reading on spectrum analyzer is internally compensated for cable loss and external attenuation.
Power Spectral Density per 3kHz bandwidth = Power Spectral Density per 1 Hz bandwidth + Bandwidth Correction Factor.
Bandwidth Correction Factor = 10*log(3 kHz / 1 Hz) = 34.8 dB

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at 1 Mbps data rate, 802.11(b) modulation scheme

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum peak power spectral density conducted from a DSSS transmitter does not exceed 8 dBm in any 3 kHz band

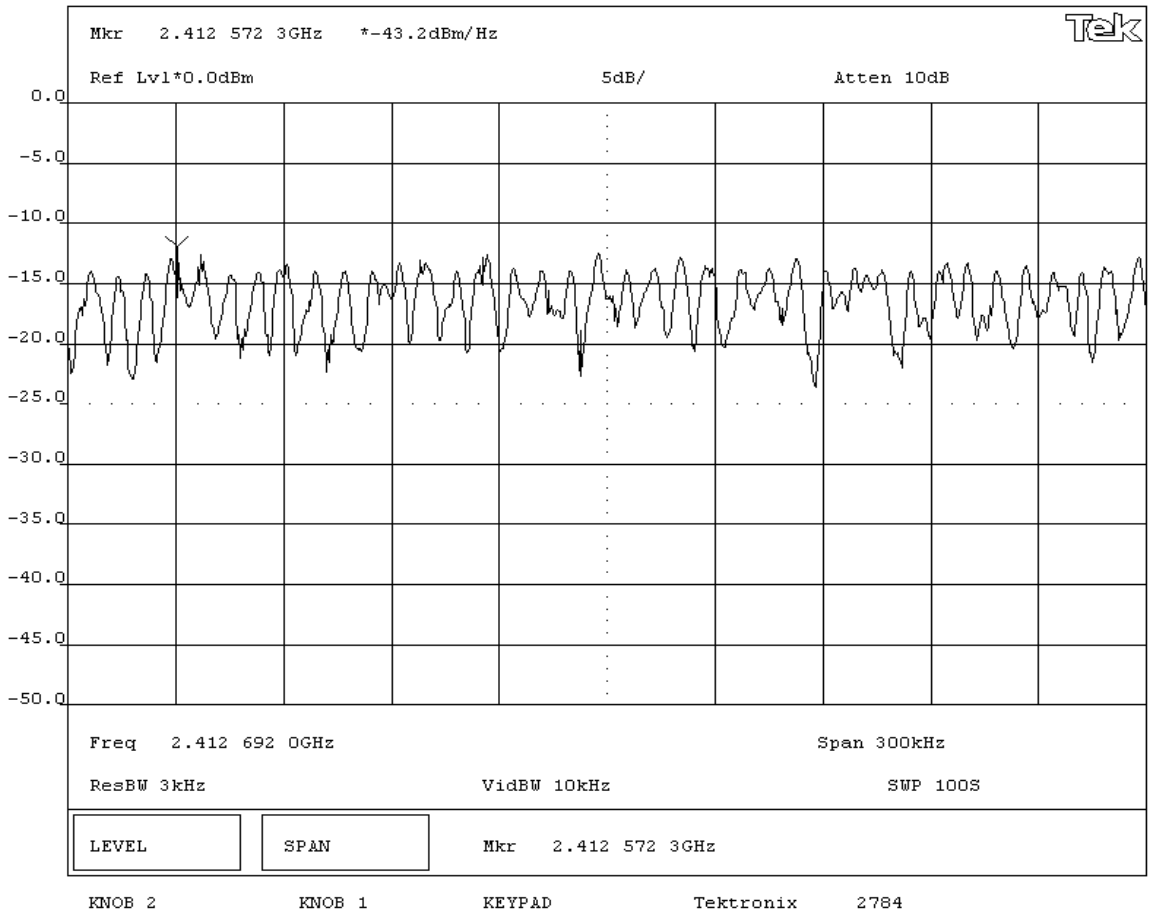
RESULTS	Amplitude
Pass	Power Spectral Density = -8.4 dBm / 3kHz

SIGNATURE

Tested By: _____

DESCRIPTION OF TEST

Power Spectral Density - Low Channel - 802.11(b) 1 Mbps



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/10/05
Customer:	Intermec Technologies Corporation			Temperature:	20°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42% RH
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(e)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

Meter reading on spectrum analyzer is internally compensated for cable loss and external attenuation.
Power Spectral Density per 3kHz bandwidth = Power Spectral Density per 1 Hz bandwidth + Bandwidth Correction Factor.
Bandwidth Correction Factor = 10*log(3 kHz / 1 Hz) = 34.8 dB

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at 1 Mbps data rate, 802.11(b) modulation scheme

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum peak power spectral density conducted from a DSSS transmitter does not exceed 8 dBm in any 3 kHz band

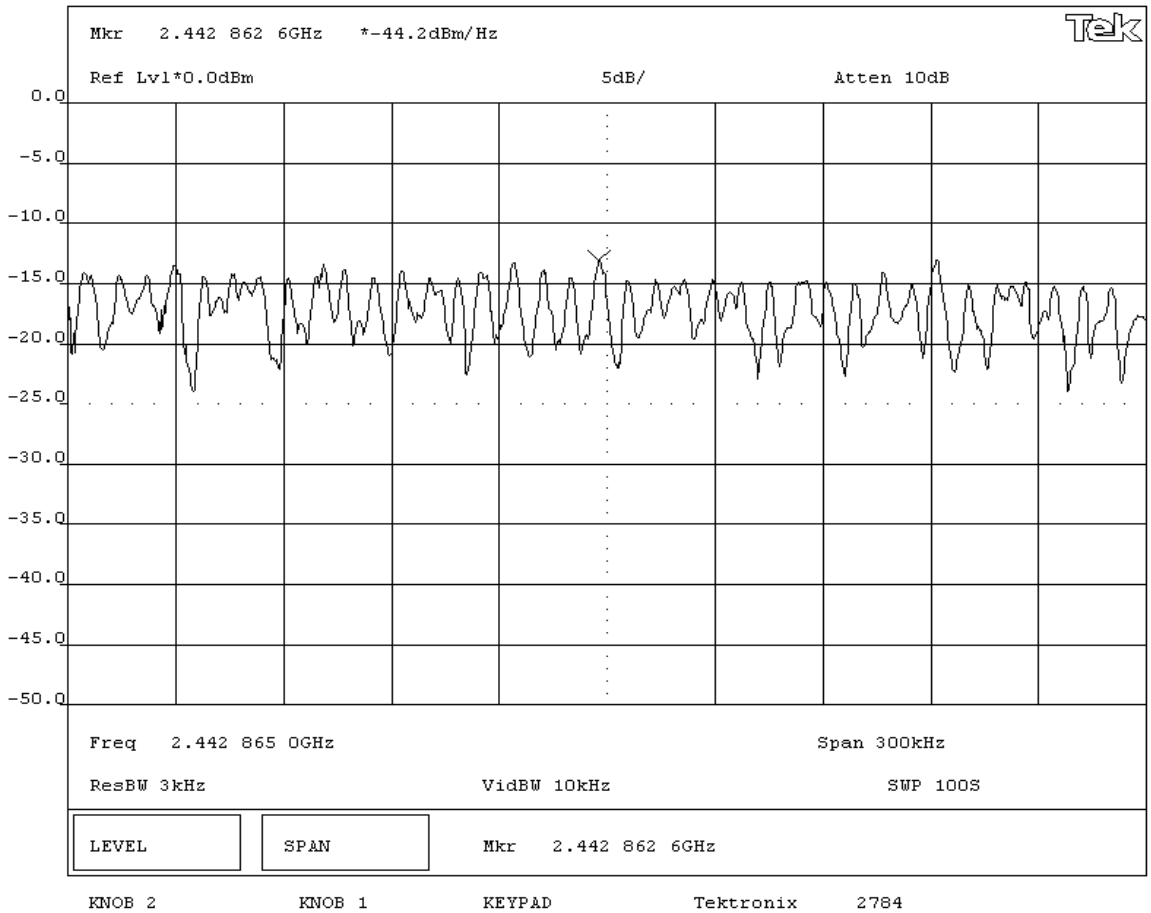
RESULTS	Amplitude
Pass	Power Spectral Density = -9.4 dBm / 3kHz

SIGNATURE

Tested By: _____

DESCRIPTION OF TEST

Power Spectral Density - Mid Channel - 802.11(b) 1 Mbps



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/10/05
Customer:	Intermec Technologies Corporation			Temperature:	20°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42% RH
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(e)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

Meter reading on spectrum analyzer is internally compensated for cable loss and external attenuation.
Power Spectral Density per 3kHz bandwidth = Power Spectral Density per 1 Hz bandwidth + Bandwidth Correction Factor.
Bandwidth Correction Factor = 10*log(3 kHz / 1 Hz) = 34.8 dB

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at 1 Mbps data rate, 802.11(b) modulation scheme

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum peak power spectral density conducted from a DSSS transmitter does not exceed 8 dBm in any 3 kHz band

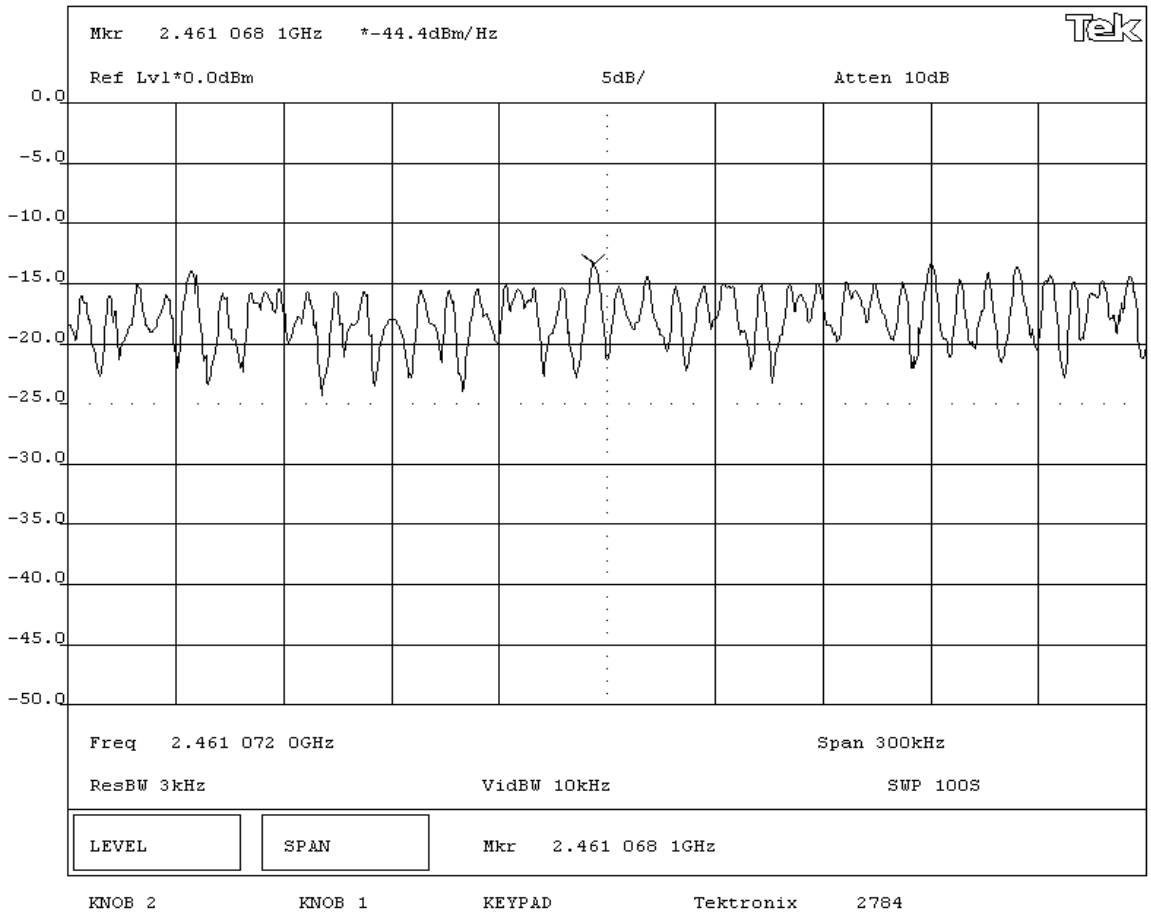
RESULTS	Amplitude
Pass	Power Spectral Density = -9.6 dBm / 3kHz

SIGNATURE

Tested By: _____

DESCRIPTION OF TEST

Power Spectral Density - High Channel - 802.11(b) 1 Mbps



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/10/05
Customer:	Intermec Technologies Corporation			Temperature:	20°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42% RH
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(e)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

Meter reading on spectrum analyzer is internally compensated for cable loss and external attenuation.
Power Spectral Density per 3kHz bandwidth = Power Spectral Density per 1 Hz bandwidth + Bandwidth Correction Factor.
Bandwidth Correction Factor = 10*log(3 kHz / 1 Hz) = 34.8 dB

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at maximum data rate, 802.11(b) modulation scheme

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum peak power spectral density conducted from a DSSS transmitter does not exceed 8 dBm in any 3 kHz band

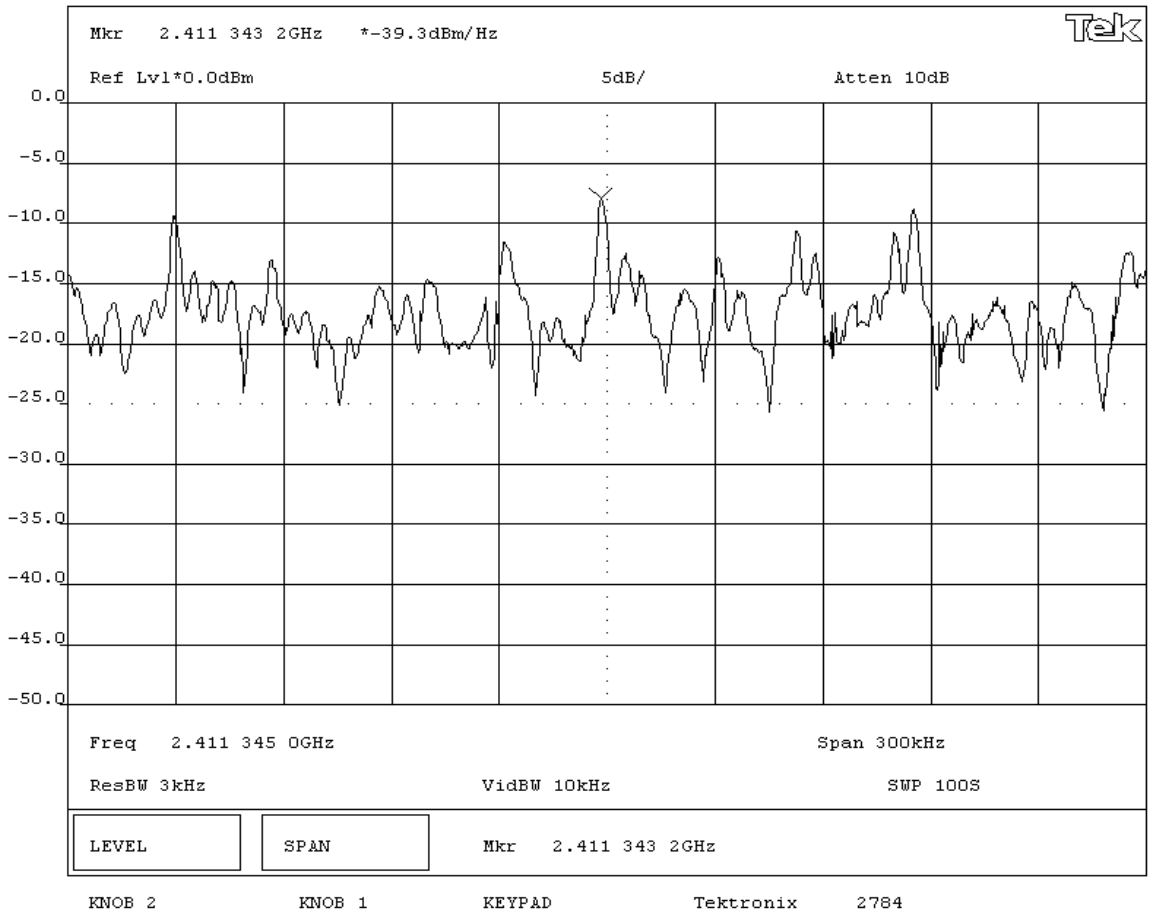
RESULTS	Amplitude
Pass	Power Spectral Density = -4.5 dBm / 3kHz

SIGNATURE

Tested By: _____

DESCRIPTION OF TEST

Power Spectral Density - Low Channel - 802.11(b) 11 Mbps



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/10/05
Customer:	Intermec Technologies Corporation			Temperature:	20°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42% RH
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(e)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

Meter reading on spectrum analyzer is internally compensated for cable loss and external attenuation.
Power Spectral Density per 3kHz bandwidth = Power Spectral Density per 1 Hz bandwidth + Bandwidth Correction Factor.
Bandwidth Correction Factor = 10*log(3 kHz / 1 Hz) = 34.8 dB

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at maximum data rate, 802.11(b) modulation scheme

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum peak power spectral density conducted from a DSSS transmitter does not exceed 8 dBm in any 3 kHz band

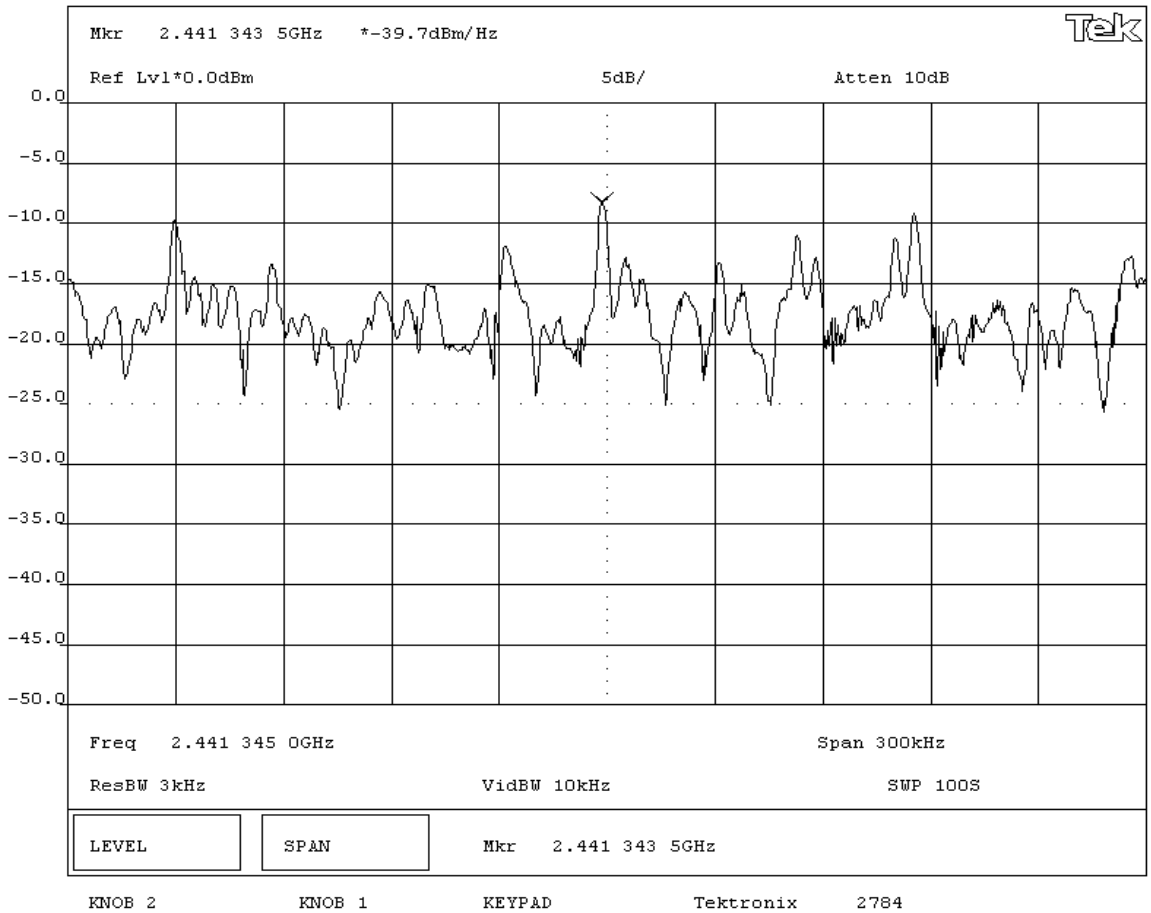
RESULTS	Amplitude
Pass	Power Spectral Density = -4.9 dBm / 3kHz

SIGNATURE

Tested By: _____

DESCRIPTION OF TEST

Power Spectral Density - Mid Channel - 802.11(b) 11 Mbps



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/10/05
Customer:	Intermec Technologies Corporation			Temperature:	20°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42% RH
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(e)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

Meter reading on spectrum analyzer is internally compensated for cable loss and external attenuation.
Power Spectral Density per 3kHz bandwidth = Power Spectral Density per 1 Hz bandwidth + Bandwidth Correction Factor.
Bandwidth Correction Factor = 10*log(3 kHz / 1 Hz) = 34.8 dB

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at maximum data rate, 802.11(b) modulation scheme

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum peak power spectral density conducted from a DSSS transmitter does not exceed 8 dBm in any 3 kHz band

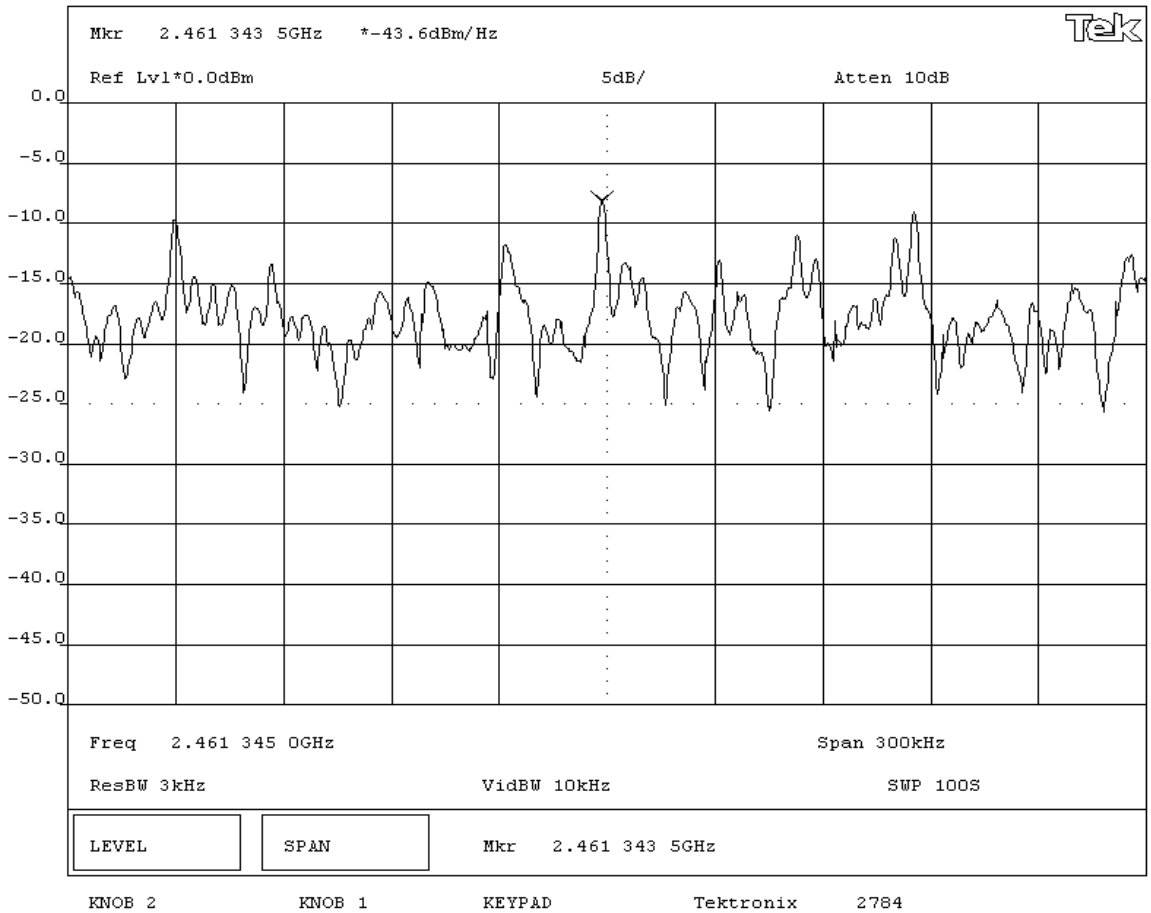
RESULTS	Amplitude
Pass	Power Spectral Density = -8.8 dBm / 3kHz

SIGNATURE

Tested By: _____

DESCRIPTION OF TEST

Power Spectral Density - High Channel - 802.11(b) 11 Mbps



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/10/05
Customer:	Intermec Technologies Corporation			Temperature:	20°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42% RH
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(e)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

Meter reading on spectrum analyzer is internally compensated for cable loss and external attenuation.
Power Spectral Density per 3kHz bandwidth = Power Spectral Density per 1 Hz bandwidth + Bandwidth Correction Factor.
Bandwidth Correction Factor = 10*log(3 kHz / 1 Hz) = 34.8 dB

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at 6 Mbps data rate, 802.11(g) modulation scheme.

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum peak power spectral density conducted from a DSSS transmitter does not exceed 8 dBm in any 3 kHz band

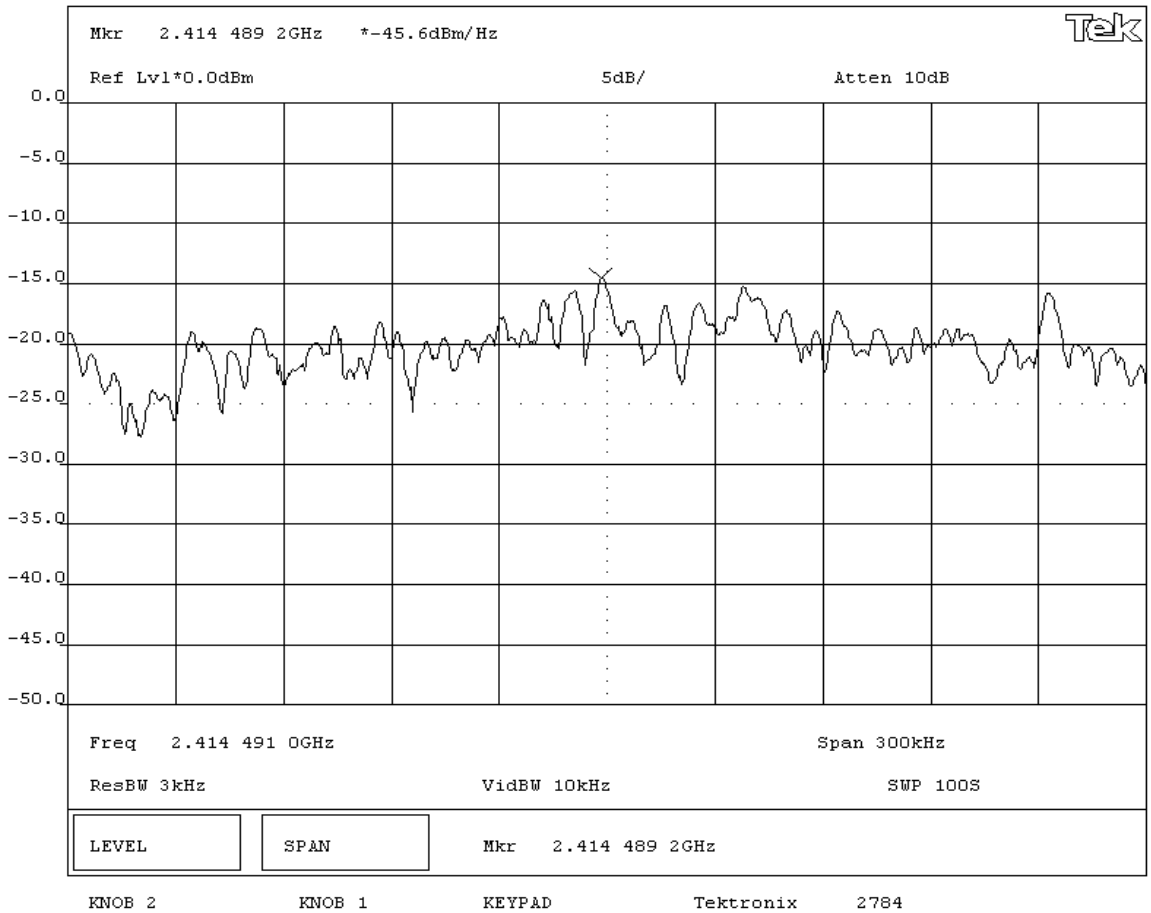
RESULTS	Amplitude
Pass	Power Spectral Density = -10.8 dBm / 3kHz

SIGNATURE

Tested By: _____

DESCRIPTION OF TEST

Power Spectral Density - Low Channel - 802.11(g) 6 Mbit



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/10/05
Customer:	Intermec Technologies Corporation			Temperature:	20°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42% RH
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(e)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

Meter reading on spectrum analyzer is internally compensated for cable loss and external attenuation.
Power Spectral Density per 3kHz bandwidth = Power Spectral Density per 1 Hz bandwidth + Bandwidth Correction Factor.
Bandwidth Correction Factor = 10*log(3 kHz / 1 Hz) = 34.8 dB

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at 6 Mbps data rate, 802.11(g) modulation scheme.

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum peak power spectral density conducted from a DSSS transmitter does not exceed 8 dBm in any 3 kHz band

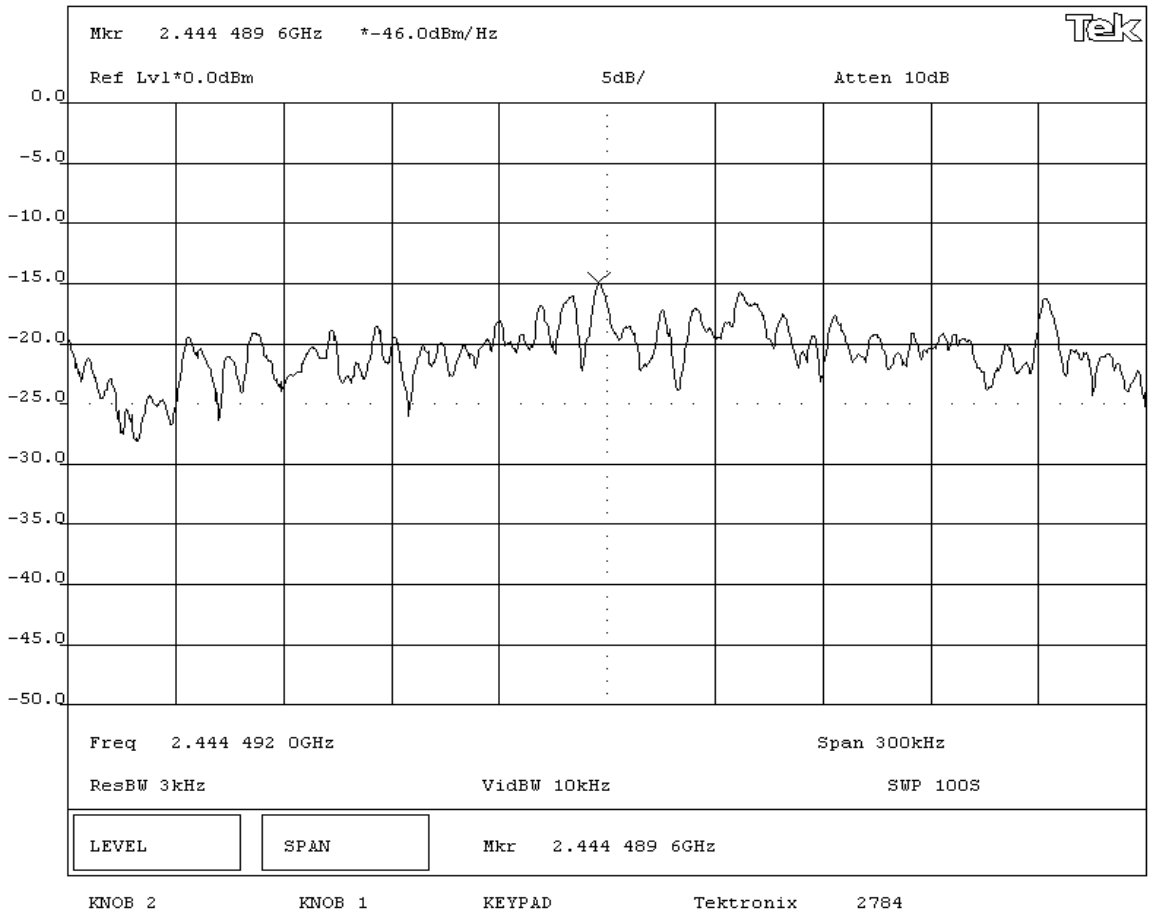
RESULTS	Amplitude
Pass	Power Spectral Density = -11.2 dBm / 3kHz

SIGNATURE

Tested By: _____

DESCRIPTION OF TEST

Power Spectral Density- Mid Channel - 802.11(g) 6 Mbit



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/10/05
Customer:	Intermec Technologies Corporation			Temperature:	20°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42% RH
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(e)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

Meter reading on spectrum analyzer is internally compensated for cable loss and external attenuation.
Power Spectral Density per 3kHz bandwidth = Power Spectral Density per 1 Hz bandwidth + Bandwidth Correction Factor.
Bandwidth Correction Factor = 10*log(3 kHz / 1 Hz) = 34.8 dB

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at 6 Mbps data rate, 802.11(g) modulation scheme.

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum peak power spectral density conducted from a DSSS transmitter does not exceed 8 dBm in any 3 kHz band

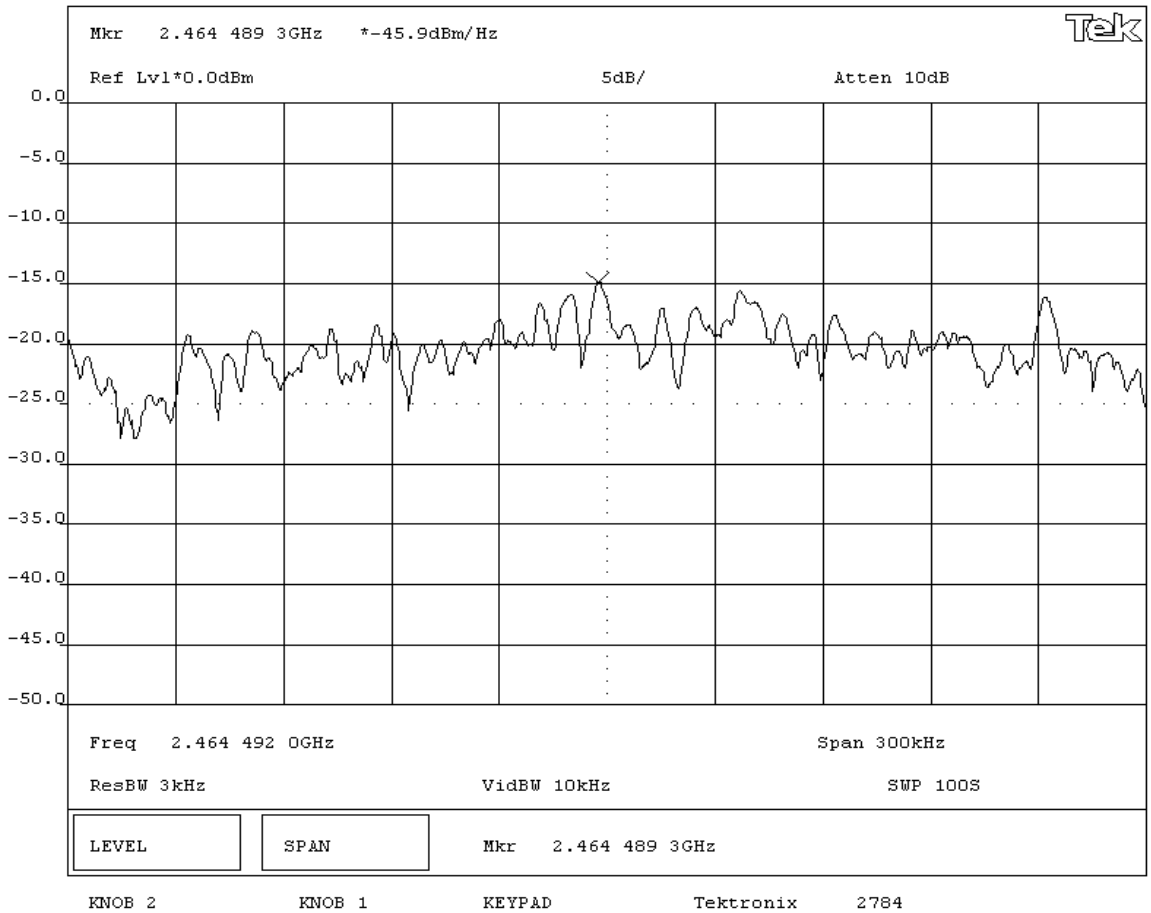
RESULTS	Amplitude
Pass	Power Spectral Density = -11.1 dBm / 3kHz

SIGNATURE

Tested By: _____

DESCRIPTION OF TEST

Power Spectral Density - High Channel - 802.11(g) 6 Mbit



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/10/05
Customer:	Intermec Technologies Corporation			Temperature:	20°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42% RH
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(e)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

Meter reading on spectrum analyzer is internally compensated for cable loss and external attenuation.
Power Spectral Density per 3kHz bandwidth = Power Spectral Density per 1 Hz bandwidth + Bandwidth Correction Factor.
Bandwidth Correction Factor = 10*log(3 kHz / 1 Hz) = 34.8 dB

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at 36 Mbps data rate, 802.11(g) modulation scheme.

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum peak power spectral density conducted from a DSSS transmitter does not exceed 8 dBm in any 3 kHz band

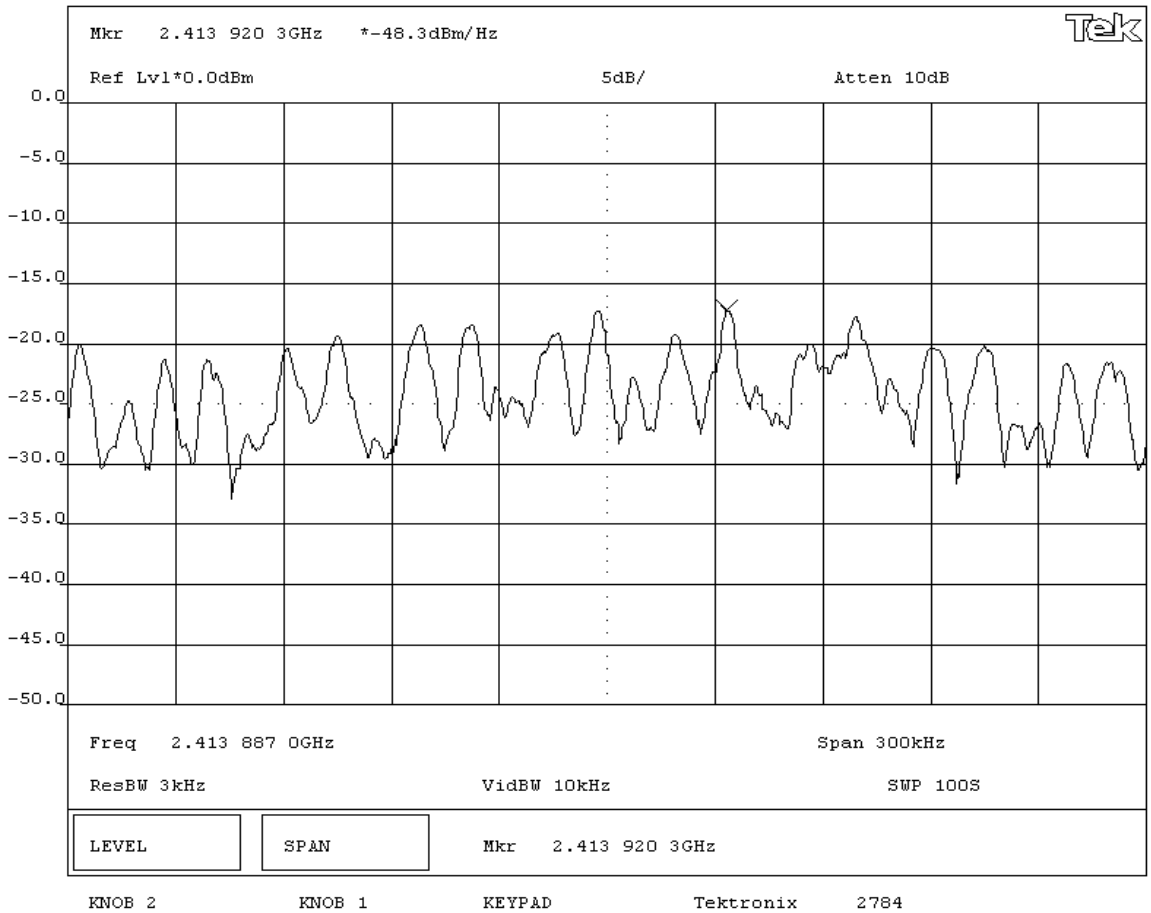
RESULTS	Amplitude
Pass	Power Spectral Density = -13.5 dBm / 3kHz

SIGNATURE

Tested By: _____

DESCRIPTION OF TEST

Power Spectral Density - Low Channel - 802.11(g) 36 Mbit



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/10/05
Customer:	Intermec Technologies Corporation			Temperature:	20°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42% RH
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(e)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

Meter reading on spectrum analyzer is internally compensated for cable loss and external attenuation.
Power Spectral Density per 3kHz bandwidth = Power Spectral Density per 1 Hz bandwidth + Bandwidth Correction Factor.
Bandwidth Correction Factor = 10*log(3 kHz / 1 Hz) = 34.8 dB

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at 36 Mbps data rate, 802.11(g) modulation scheme.

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum peak power spectral density conducted from a DSSS transmitter does not exceed 8 dBm in any 3 kHz band

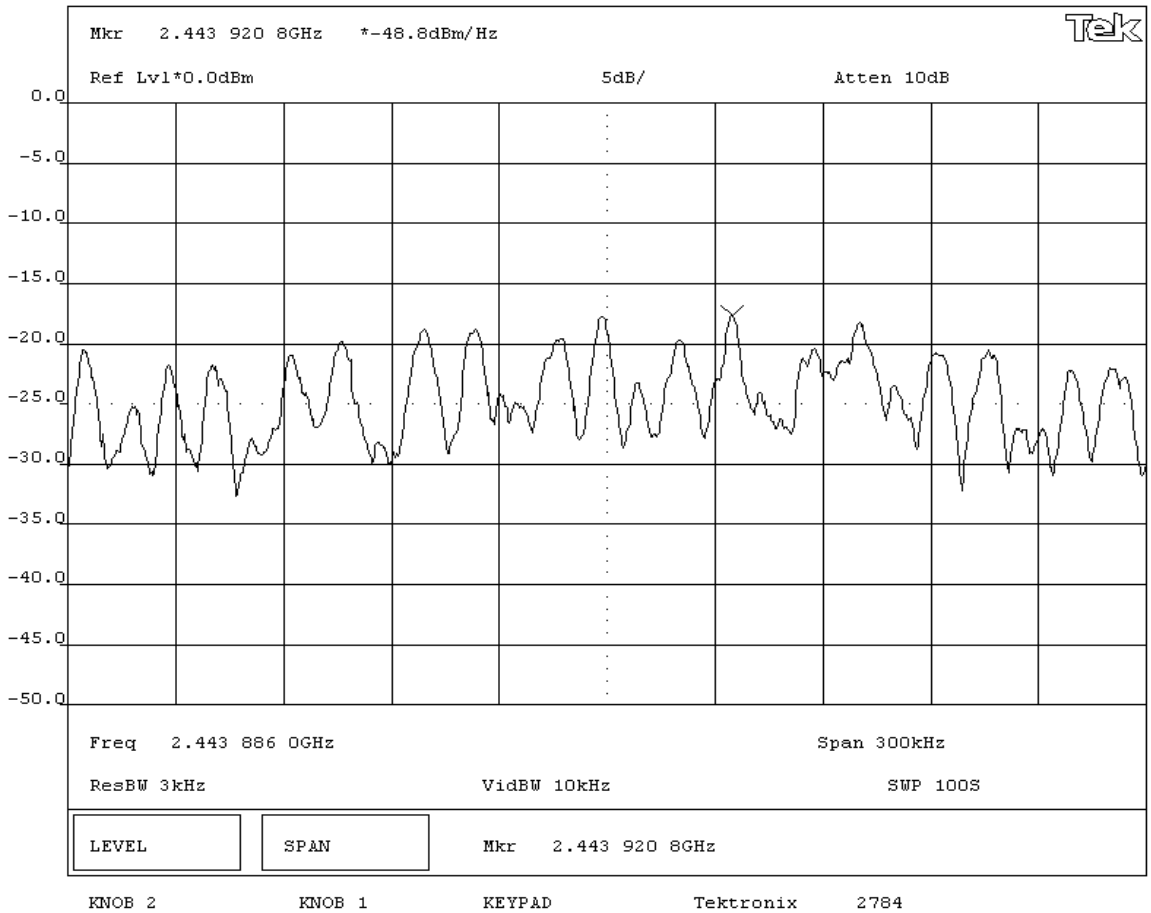
RESULTS	Amplitude
Pass	Power Spectral Density = -14.0 dBm / 3kHz

SIGNATURE

Tested By: _____

DESCRIPTION OF TEST

Power Spectral Density - Mid Channel - 802.11(g) 36 Mbit



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/10/05
Customer:	Intermec Technologies Corporation			Temperature:	20°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42% RH
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(e)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

Meter reading on spectrum analyzer is internally compensated for cable loss and external attenuation.
Power Spectral Density per 3kHz bandwidth = Power Spectral Density per 1 Hz bandwidth + Bandwidth Correction Factor.
Bandwidth Correction Factor = 10*log(3 kHz / 1 Hz) = 34.8 dB

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at 36 Mbps data rate, 802.11(g) modulation scheme.

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum peak power spectral density conducted from a DSSS transmitter does not exceed 8 dBm in any 3 kHz band

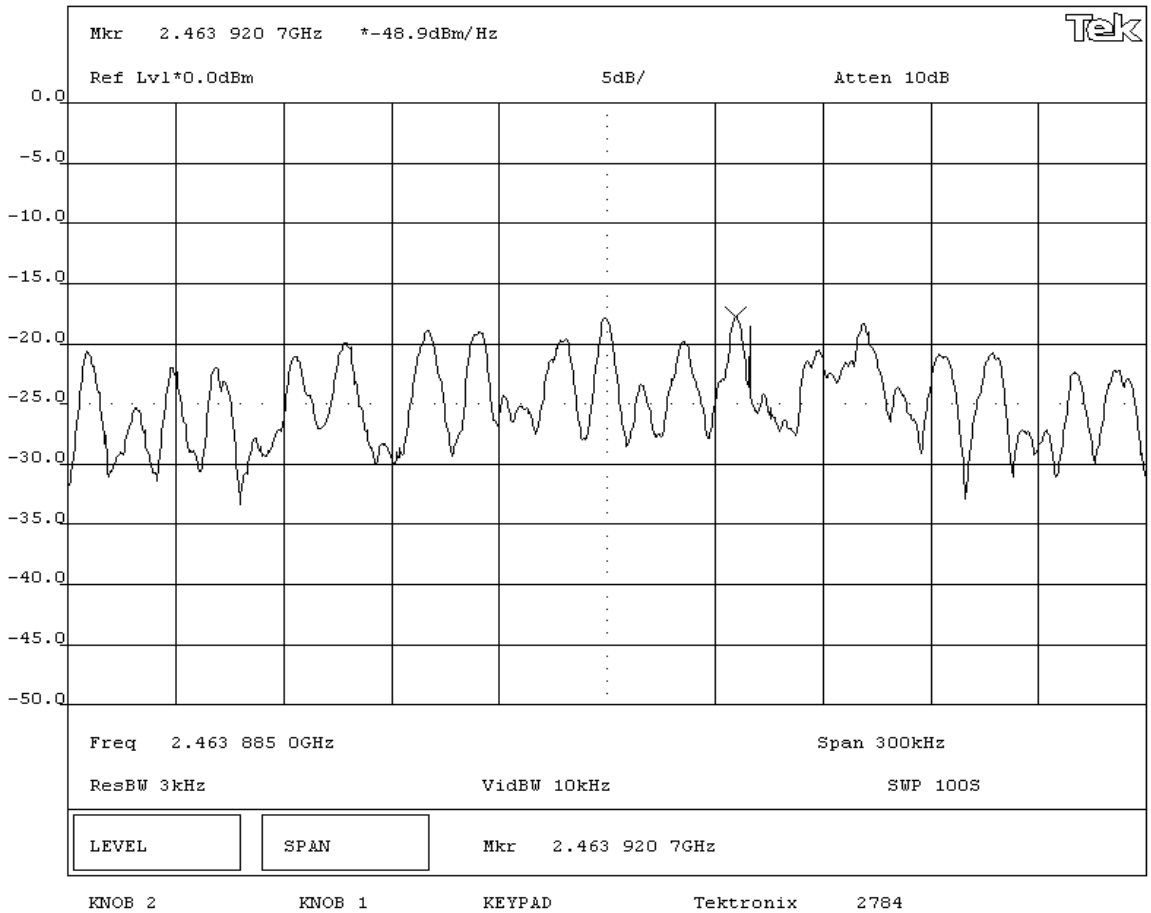
RESULTS	Amplitude
Pass	Power Spectral Density = -14.1 dBm / 3kHz

SIGNATURE

Tested By: _____

DESCRIPTION OF TEST

Power Spectral Density - High Channel - 802.11(g) 36 Mbit



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/10/05
Customer:	Intermec Technologies Corporation			Temperature:	20°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42% RH
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(e)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

Meter reading on spectrum analyzer is internally compensated for cable loss and external attenuation.
Power Spectral Density per 3kHz bandwidth = Power Spectral Density per 1 Hz bandwidth + Bandwidth Correction Factor.
Bandwidth Correction Factor = 10*log(3 kHz / 1 Hz) = 34.8 dB

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at indicated data rate, 802.11(g) modulation scheme.

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum peak power spectral density conducted from a DSSS transmitter does not exceed 8 dBm in any 3 kHz band

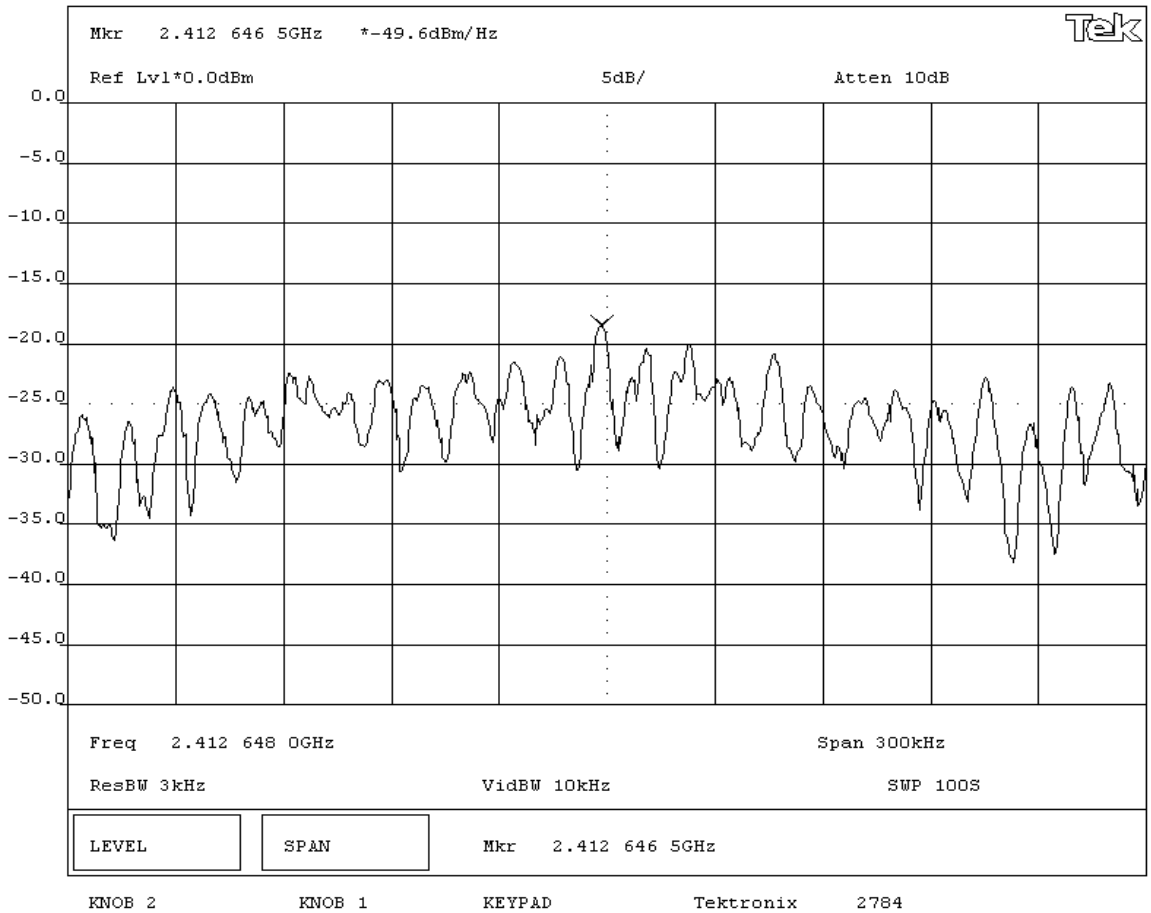
RESULTS	Amplitude
Pass	Power Spectral Density = -14.8 dBm / 3kHz

SIGNATURE

Tested By: _____

DESCRIPTION OF TEST

Power Spectral Density - Low Channel - 802.11(g) 54 Mbit



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/10/05
Customer:	Intermec Technologies Corporation			Temperature:	20°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42% RH
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(e)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

Meter reading on spectrum analyzer is internally compensated for cable loss and external attenuation.
Power Spectral Density per 3kHz bandwidth = Power Spectral Density per 1 Hz bandwidth + Bandwidth Correction Factor.
Bandwidth Correction Factor = 10*log(3 kHz / 1 Hz) = 34.8 dB

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at indicated data rate, 802.11(g) modulation scheme.

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum peak power spectral density conducted from a DSSS transmitter does not exceed 8 dBm in any 3 kHz band

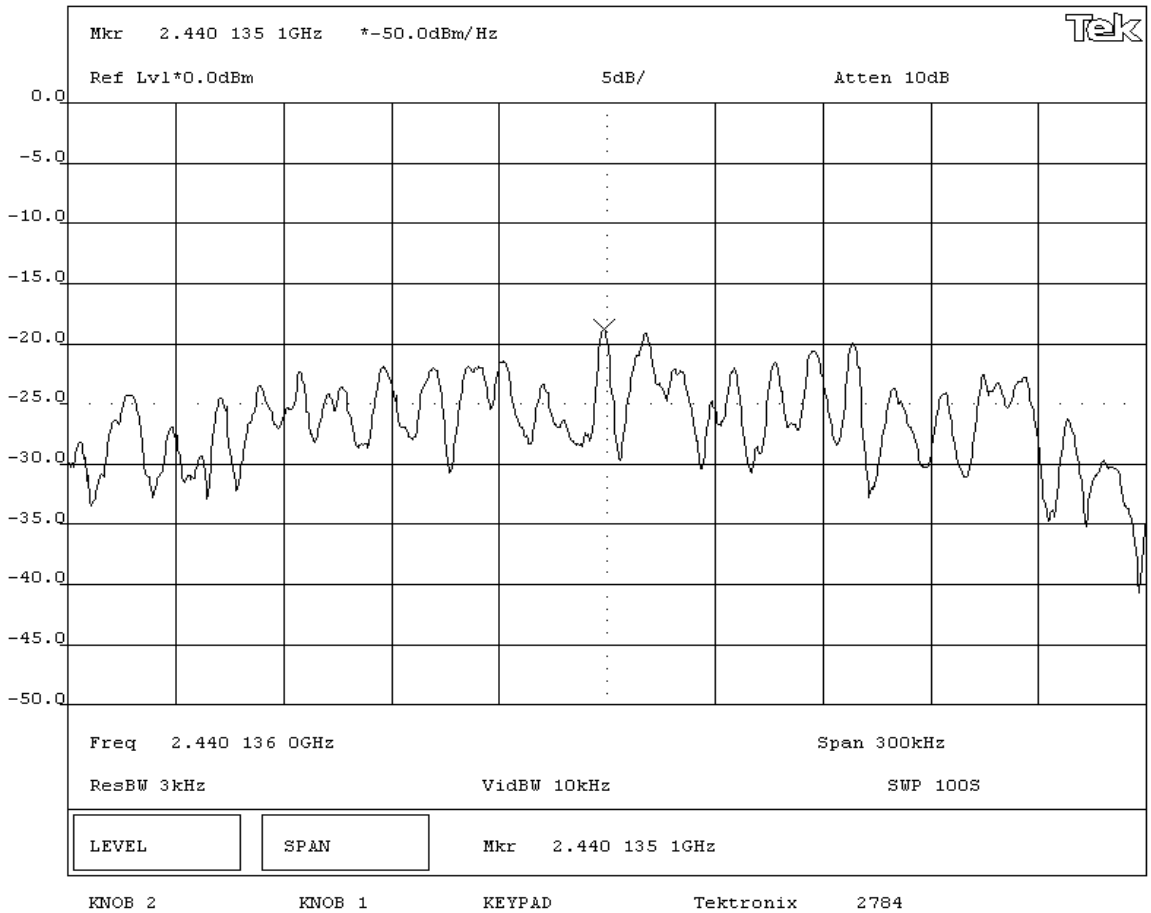
RESULTS	Amplitude
Pass	Power Spectral Density = -15.2 dBm / 3kHz

SIGNATURE

Tested By: _____

DESCRIPTION OF TEST

Power Spectral Density - Mid Channel - 802.11(g) 54 Mbit



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/10/05
Customer:	Intermec Technologies Corporation			Temperature:	20°C
Attendees:	None	Tested by:	Greg Kiemel	Humidity:	42% RH
Customer Ref. No.:		Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS

Specification:	FCC Part 15.247(e)	Year:	2004	Method:	FCC 97-114, ANSI C63.4	Year:	2003

SAMPLE CALCULATIONS

Meter reading on spectrum analyzer is internally compensated for cable loss and external attenuation.
Power Spectral Density per 3kHz bandwidth = Power Spectral Density per 1 Hz bandwidth + Bandwidth Correction Factor.
Bandwidth Correction Factor = 10*log(3 kHz / 1 Hz) = 34.8 dB

COMMENTS

EUT OPERATING MODES

Modulated by PRBS at indicated data rate, 802.11(g) modulation scheme.

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum peak power spectral density conducted from a DSSS transmitter does not exceed 8 dBm in any 3 kHz band

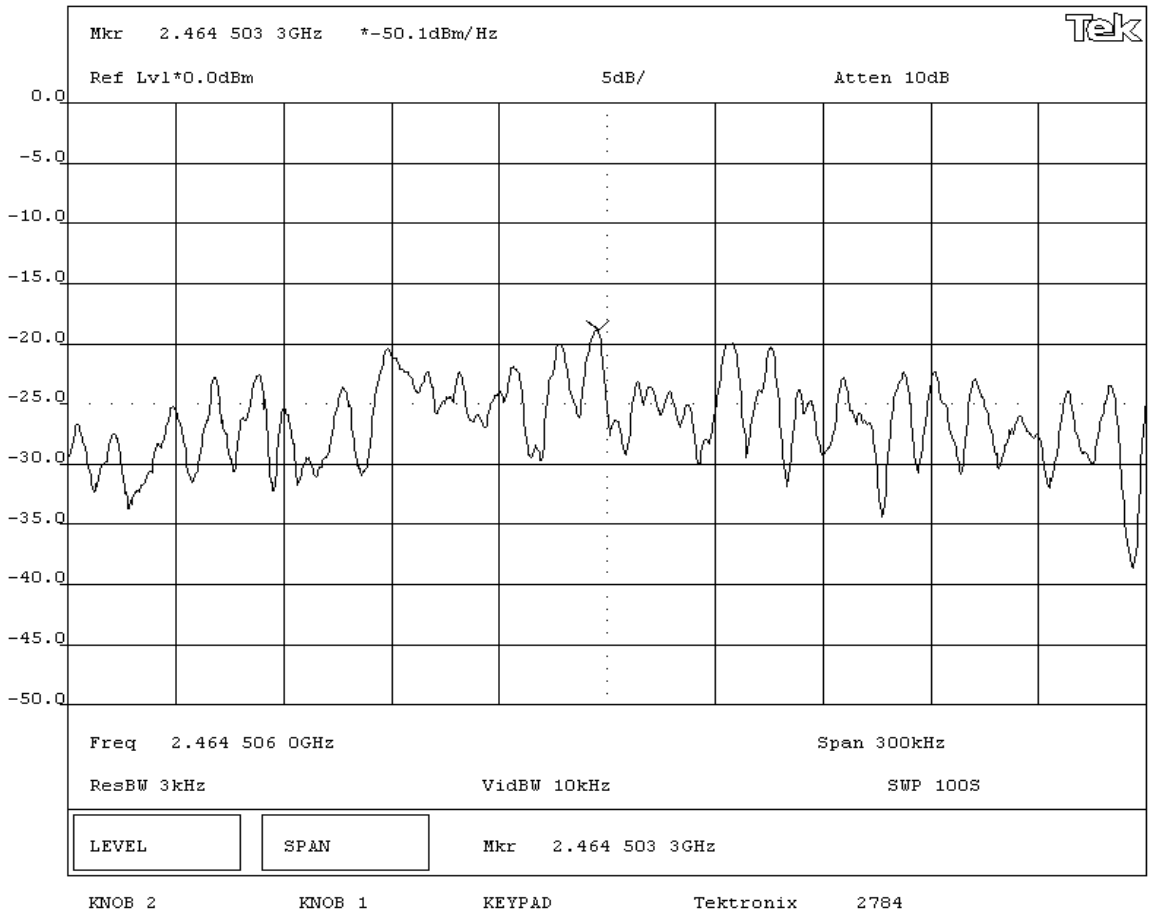
RESULTS	Amplitude
Pass	Power Spectral Density = -15.3 dBm / 3kHz

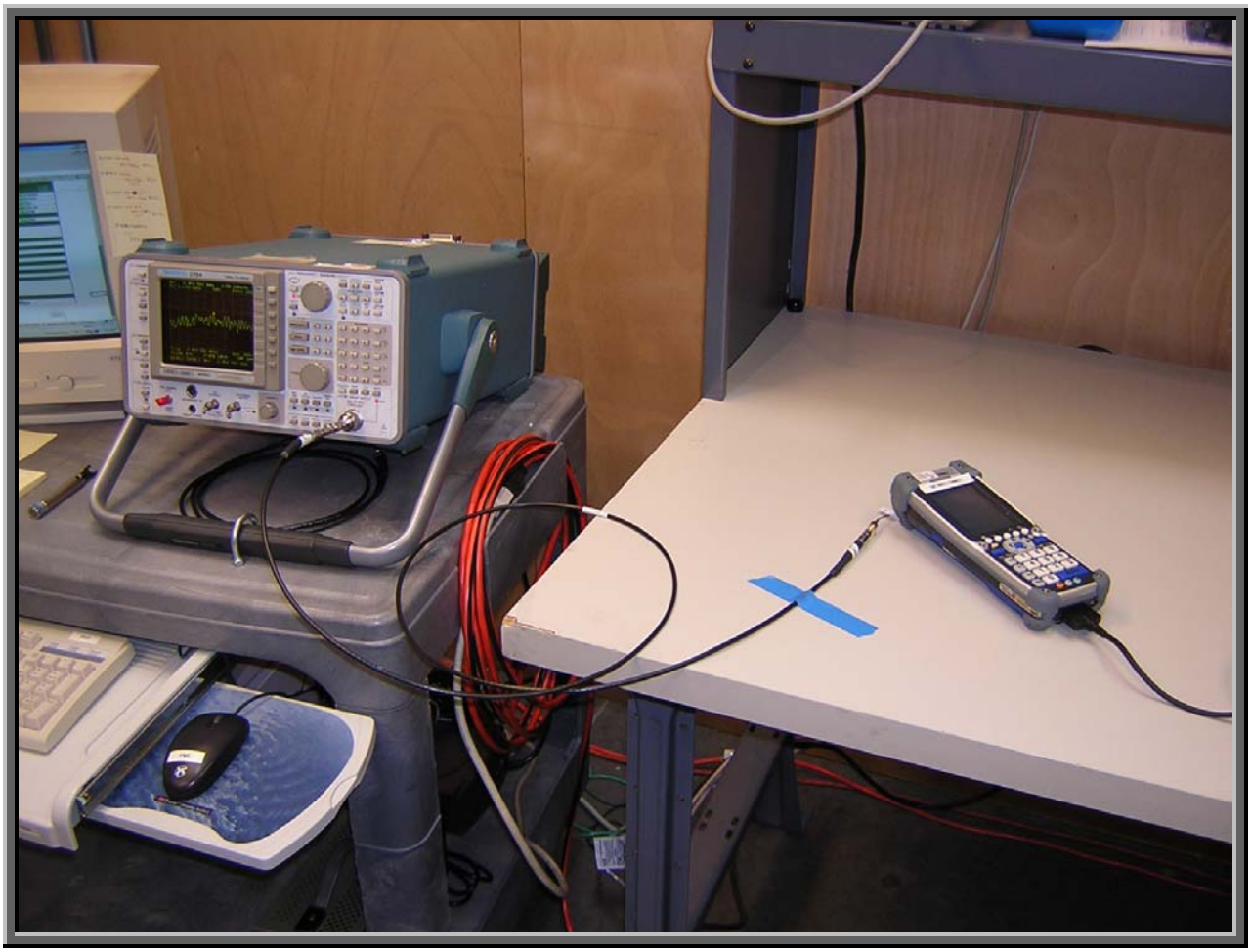
SIGNATURE

Tested By: _____

DESCRIPTION OF TEST

Power Spectral Density - High Channel - 802.11(g) 54 Mbit





Justification

The individuals and/or the organization requesting the test provided the modes, configurations and settings available to evaluate. While scanning the radiated emissions, all of the EUT parameters listed below were investigated. This includes, but may not be limited to, antennas, tuned transmit frequency ranges, operating modes, and data rates.

Channels in Specified Band Investigated:
Low
Mid
High

Operating Modes Investigated:
Continuous transmit in a collocated configuration

Data Rates Investigated:
1 Mbps (802.11b)
6 Mbps (802.11g)
Bluetooth default

Output Power Setting(s) Investigated:
Maximum default

Power Input Settings Investigated:
120 VAC, 60 Hz.

Frequency Range Investigated			
Start Frequency	30 MHz	**Stop Frequency**	25 GHz

Software\Firmware Applied During Test			
Exercise software	cTxRx Win CE	**Version**	0.1.2.1
	CSR Bluetest		Unknown
Description			
The system was tested using special software developed to test all functions of the device during the test.			

EUT and Peripherals			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
EUT - 802UIAG	Intermec Technologies Corporation	802UIAG	Unknown
Host Device	Intermec Technologies Corporation	CK61	33390400093
Bluetooth enabled printer	Intermec Technologies Corporation	PB42	SAC001
AC Power Adapter	Intermec Technologies Corporation	073573-003	6079450
AC Power Adapter	Intermec Technologies Corporation	851-061-002	038962

Cables					
Cable Type	**Shield**	**Length (m)**	**Ferrite**	**Connection 1**	**Connection 2**
DC Leads	Yes	1.9	PA	AC Power Adapter	Host Device
AC Power	No	2.0	No	AC Power Adapter	AC Mains
DC Leads	No	1.8	Yes	Bluetooth enabled printer	AC Power Adapter
AC Power	No	2.0	No	Bluetooth enabled printer	AC Mains
PA = Cable is permanently attached to the device. Shielding and/or presence of ferrite may be unknown.					

Measurement Equipment					
Description	**Manufacturer**	**Model**	**Identifier**	**Last Cal**	**Interval**
Spectrum Analyzer	Hewlett-Packard	8566B	AAL	12/02/2004	13 mo
Pre-Amplifier	Miteq	AMF-4D-005180-24-10P	APJ	01/05/2004	16 mo
Antenna, Horn	EMCO	3115	AHC	09/07/2004	12 mo
Pre-Amplifier	Miteq	AMF-4D-005180-24-10P	APC	02/17/2005	13 mo
Antenna, Horn	EMCO	3160-09	AHG	NCR	NA
Pre-Amplifier	Miteq	JSD4-18002600-26-8P	APU	02/15/2005	13 mo
Spectrum Analyzer	Tektronix	2784	AAO	01/02/2005	12 mo
Attenuator	Coaxicom	66702 5910-20	RBJ	02/25/2005	13 mo
High Pass Filter	Micro-Tronics	HPM50111	HFO	03/09/2005	13 mo

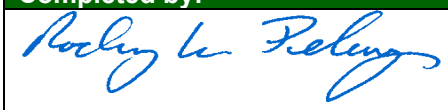
Test Description

Requirement: The field strength of any spurious emissions or modulation products that fall in a restricted band, as defined in 47 CFR 15.205, is measured. The peak level must comply with the limits specified in 47 CFR 15.35(b). The average level (taken with a 10Hz VBW) must comply with the limits specified in 15.209.

Configuration: The highest gain of each type of antenna to be used with the EUT was tested. The EUT was configured for low, mid, and high band transmit frequencies. For each configuration, the spectrum was scanned throughout the specified range. In addition, measurements were made in the restricted bands to verify compliance. While scanning, emissions from the EUT were maximized by rotating the EUT on a turntable, adjusting the position of the EUT and EUT antenna in three orthogonal axis, and adjusting the measurement antenna height and polarization (per ANSI C63.4:1992). A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

Bandwidths Used for Measurements			
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.			

Completed by:



NORTHWEST EMC

RADIATED EMISSIONS DATA SHEET

ACQ 2005.1.3
EMI A2.13

EUT:	802UIAG	Work Order:	ITRM0065
Serial Number:		Date:	03/07/05
Customer:	Intermec Technologies Corporation	Temperature:	23
Attendees:	None	Humidity:	39%
Cust. Ref. No.:		Barometric Pressure	30.22
Tested by:	Holly Ashkannejhad	Power: 120VAC, 60Hz	Job Site: EV01

TEST SPECIFICATIONS

Specification:	FCC 15.247(d) Spurious Radiated Emissions:2004	Method:	ANSI C63.4:2003

SAMPLE CALCULATIONS

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

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

COMMENTS

EUT OPERATING MODES

Transmitting 802.11, Low Channel, see comments for configuration

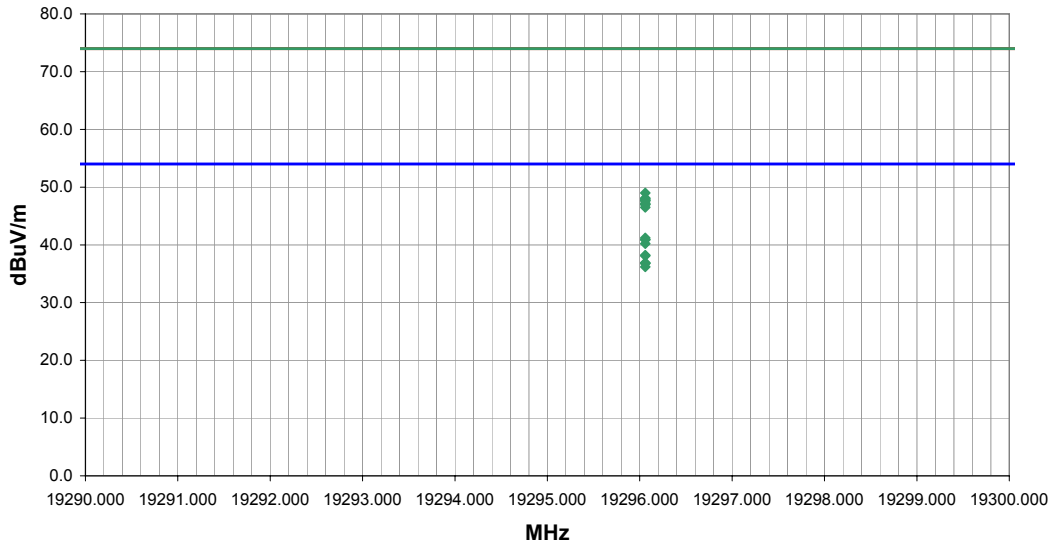
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS	Run #
Pass	1

Other

Tested By:



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
19296.060	33.2	8.0	22.0	1.1	3.0	0.0	-High Horr	AV	0.0	41.2	54.0	-12.8	802.11(g) 6Mbps
19296.060	32.9	8.0	100.0	1.0	3.0	0.0	-High Horr	AV	0.0	40.9	54.0	-13.1	802.11(g) 36Mbps
19296.060	32.9	8.0	356.0	1.1	3.0	0.0	-High Horr	AV	0.0	40.9	54.0	-13.1	802.11(g) 36Mbps
19296.060	32.2	8.0	291.0	1.0	3.0	0.0	-High Horr	AV	0.0	40.2	54.0	-13.8	802.11(g) 6Mbps
19296.060	30.2	8.0	17.0	1.1	3.0	0.0	-High Horr	AV	0.0	38.2	54.0	-15.8	802.11(g) 54Mbps
19296.060	30.1	8.0	97.0	1.1	3.0	0.0	-High Horr	AV	0.0	38.1	54.0	-15.9	802.11(g) 54Mbps
19296.060	28.9	8.0	226.0	1.1	3.0	0.0	-High Horr	AV	0.0	36.9	54.0	-17.1	802.11(b) 11Mbps
19296.060	28.8	8.0	67.0	1.1	3.0	0.0	-High Horr	AV	0.0	36.8	54.0	-17.2	802.11(b) 1Mbps
19296.060	28.8	8.0	116.0	1.1	3.0	0.0	-High Horr	AV	0.0	36.8	54.0	-17.2	802.11(b) 1Mbps
19296.060	28.2	8.0	95.0	1.1	3.0	0.0	-High Horr	AV	0.0	36.2	54.0	-17.8	802.11(b) 11Mbps
19296.060	41.0	8.0	22.0	1.1	3.0	0.0	-High Horr	PK	0.0	49.0	74.0	-25.0	802.11(g) 6Mbps
19296.060	40.1	8.0	356.0	1.1	3.0	0.0	-High Horr	PK	0.0	48.1	74.0	-25.9	802.11(g) 36Mbps
19296.060	40.0	8.0	17.0	1.1	3.0	0.0	-High Horr	PK	0.0	48.0	74.0	-26.0	802.11(g) 54Mbps
19296.060	39.8	8.0	100.0	1.0	3.0	0.0	-High Horr	PK	0.0	47.8	74.0	-26.2	802.11(g) 36Mbps
19296.060	39.7	8.0	97.0	1.1	3.0	0.0	-High Horr	PK	0.0	47.7	74.0	-26.3	802.11(g) 54Mbps
19296.060	39.6	8.0	291.0	1.0	3.0	0.0	-High Horr	PK	0.0	47.6	74.0	-26.4	802.11(g) 6Mbps
19296.060	39.2	8.0	226.0	1.1	3.0	0.0	-High Horr	PK	0.0	47.2	74.0	-26.8	802.11(b) 11Mbps
19296.060	39.0	8.0	67.0	1.1	3.0	0.0	-High Horr	PK	0.0	47.0	74.0	-27.0	802.11(b) 1Mbps
19296.060	39.0	8.0	95.0	1.1	3.0	0.0	-High Horr	PK	0.0	47.0	74.0	-27.0	802.11(b) 11Mbps
19296.060	38.5	8.0	116.0	1.1	3.0	0.0	-High Horr	PK	0.0	46.5	74.0	-27.5	802.11(b) 1Mbps

NORTHWEST EMC

RADIATED EMISSIONS DATA SHEET

ACQ 2005.1.3
EMI A2.13

EUT:	802UIAG	Work Order:	ITRM0065
Serial Number:		Date:	03/07/05
Customer:	Intermec Technologies Corporation	Temperature:	23
Attendees:	None	Humidity:	39%
Cust. Ref. No.:		Barometric Pressure	30.22
Tested by:	Holly Ashkannejhad	Power: 120VAC, 60Hz	Job Site: EV01

TEST SPECIFICATIONS

Specification:	FCC 15.247(d) Spurious Radiated Emissions:2004	Method:	ANSI C63.4:2003

SAMPLE CALCULATIONS

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

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

COMMENTS

EUT OPERATING MODES

Transmitting 802.11, Mid Channel, see comments for configuration

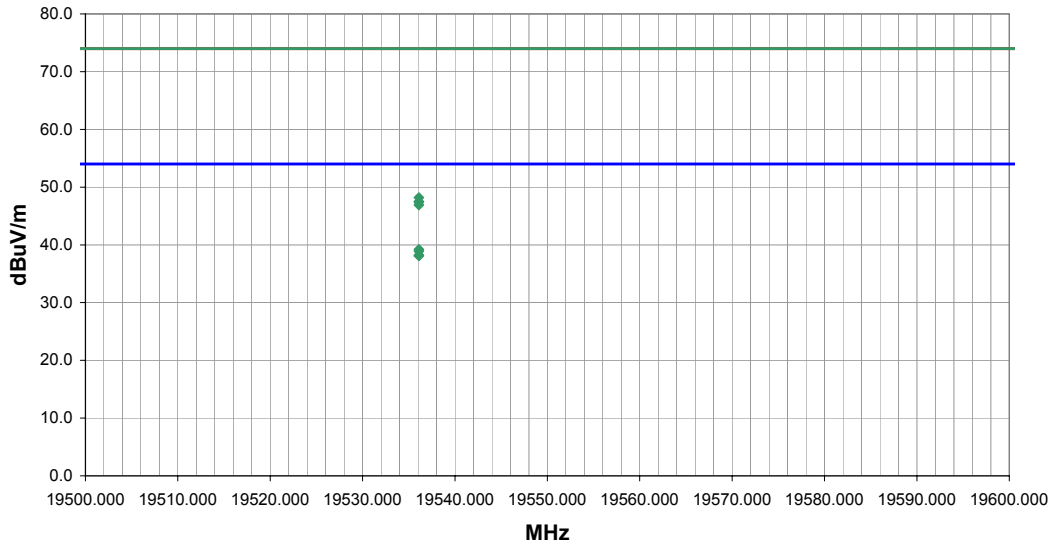
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS	Run #
Pass	2

Other

Tested By:



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
19536.090	30.8	8.4	177.0	1.0	3.0	0.0	√-High Horr	AV	0.0	39.2	54.0	-14.8	802.11(g) 6Mbps
19536.090	30.5	8.4	264.0	1.1	3.0	0.0	√-High Horr	AV	0.0	38.9	54.0	-15.1	802.11(b) 11Mbps
19536.090	29.8	8.4	77.0	1.1	3.0	0.0	-High Horr	AV	0.0	38.2	54.0	-15.8	802.11(b) 11Mbps
19536.090	29.7	8.4	266.0	1.1	3.0	0.0	-High Horr	AV	0.0	38.1	54.0	-15.9	802.11(g) 6Mbps
19536.090	39.8	8.4	177.0	1.0	3.0	0.0	√-High Horr	PK	0.0	48.2	74.0	-25.8	802.11(g) 6Mbps
19536.090	39.1	8.4	266.0	1.1	3.0	0.0	-High Horr	PK	0.0	47.5	74.0	-26.5	802.11(g) 6Mbps
19536.090	39.0	8.4	264.0	1.1	3.0	0.0	√-High Horr	PK	0.0	47.4	74.0	-26.6	802.11(b) 11Mbps
19536.090	38.5	8.4	77.0	1.1	3.0	0.0	-High Horr	PK	0.0	46.9	74.0	-27.1	802.11(b) 11Mbps

NORTHWEST EMC

RADIATED EMISSIONS DATA SHEET

ACQ 2005.1.3
EMI A2.13

EUT:	802UIAG	Work Order:	ITRM0065
Serial Number:		Date:	03/07/05
Customer:	Intermec Technologies Corporation	Temperature:	23
Attendees:	None	Humidity:	39%
Cust. Ref. No.:		Barometric Pressure	30.22
Tested by:	Holly Ashkannejhad	Power: 120VAC, 60Hz	Job Site: EV01

TEST SPECIFICATIONS

Specification:	FCC 15.247(d) Spurious Radiated Emissions:2004	Method:	ANSI C63.4:2003

SAMPLE CALCULATIONS

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

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

COMMENTS

EUT OPERATING MODES

Transmitting 802.11, High Channel, see comments for configuration

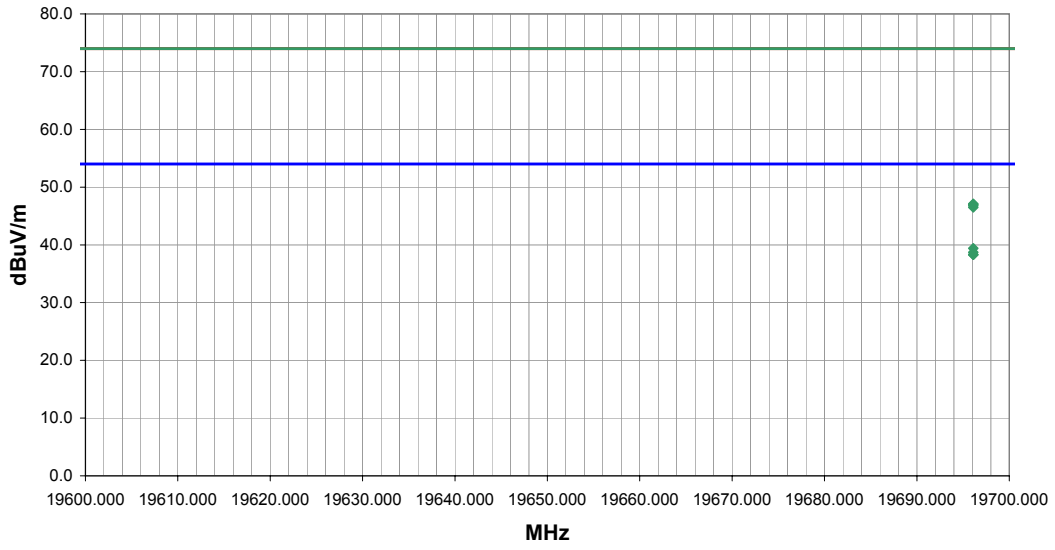
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS	Run #
Pass	3

Other

Tested By:



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
19696.100	30.8	8.6	271.0	1.1	3.0	0.0	-High Horr	AV	0.0	39.4	54.0	-14.6	802.11(b) 11Mbps
19696.100	30.1	8.6	113.0	1.1	3.0	0.0	-High Horr	AV	0.0	38.7	54.0	-15.3	802.11(b) 11Mbps
19696.100	29.7	8.6	257.0	1.1	3.0	0.0	-High Horr	AV	0.0	38.3	54.0	-15.7	802.11(g) 6Mbps
19696.100	29.7	8.6	97.0	1.1	3.0	0.0	-High Horr	AV	0.0	38.3	54.0	-15.7	802.11(g) 6Mbps
19696.100	38.5	8.6	271.0	1.1	3.0	0.0	-High Horr	PK	0.0	47.1	74.0	-26.9	802.11(b) 11Mbps
19696.100	38.4	8.6	257.0	1.1	3.0	0.0	-High Horr	PK	0.0	47.0	74.0	-27.0	802.11(g) 6Mbps
19696.100	38.2	8.6	113.0	1.1	3.0	0.0	-High Horr	PK	0.0	46.8	74.0	-27.2	802.11(b) 11Mbps
19696.100	37.9	8.6	97.0	1.1	3.0	0.0	-High Horr	PK	0.0	46.5	74.0	-27.5	802.11(g) 6Mbps

NORTHWEST EMC

RADIATED EMISSIONS DATA SHEET

ACQ 2005.1.3
EMI A2.13

EUT:	802UIAG	Work Order:	ITRM0065
Serial Number:		Date:	03/07/05
Customer:	Intermec Technologies Corporation	Temperature:	23
Attendees:	None	Humidity:	39%
Cust. Ref. No.:		Barometric Pressure	30.22
Tested by:	Holly Ashkannejhad	Power: 120VAC, 60Hz	Job Site: EV01

TEST SPECIFICATIONS

Specification:	FCC 15.247(d) Spurious Radiated Emissions:2004	Method:	ANSI C63.4:2003

SAMPLE CALCULATIONS

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

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

COMMENTS

EUT OPERATING MODES

Transmitting 802.11, High Channel, see comments for configuration

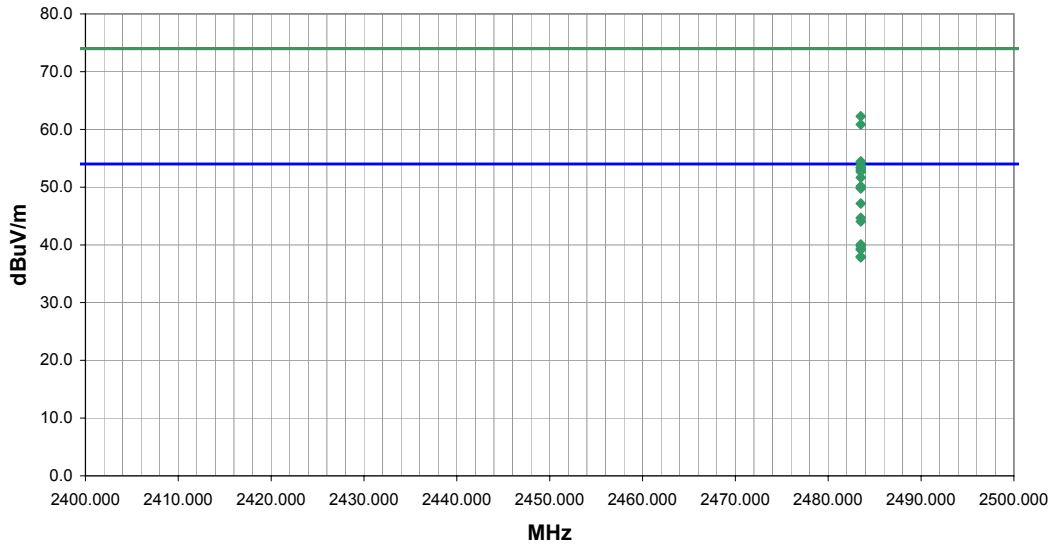
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS	Run #
Pass	4

Other

Tested By: Holly Ashkannejhad



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
2483.500	28.9	30.4	215.0	1.2	1.0	0.0	V-Horn	AV	-9.5	49.8	54.0	-4.2	802.11(g) 6Mbps
2483.500	26.3	30.4	144.0	1.1	1.0	0.0	H-Horn	AV	-9.5	47.2	54.0	-6.8	802.11(g) 6Mbps
2483.500	23.8	30.4	289.0	1.1	1.0	0.0	H-Horn	AV	-9.5	44.7	54.0	-9.3	802.11(b) 1Mbps
2483.500	23.2	30.4	155.0	1.1	1.0	0.0	V-Horn	AV	-9.5	44.1	54.0	-9.9	802.11(b) 1Mbps
2483.500	41.4	30.4	215.0	1.2	1.0	0.0	V-Horn	PK	-9.5	62.3	74.0	-11.7	802.11(g) 6Mbps
2483.500	40.0	30.4	144.0	1.1	1.0	0.0	H-Horn	PK	-9.5	60.9	74.0	-13.1	802.11(g) 6Mbps
2483.500	19.2	30.4	305.0	1.1	1.0	0.0	H-Horn	AV	-9.5	40.1	54.0	-13.9	802.11(g) 36Mbps
2483.500	18.9	30.4	123.0	1.1	1.0	0.0	V-Horn	AV	-9.5	39.8	54.0	-14.2	802.11(g) 36Mbps
2483.500	18.4	30.4	288.0	1.1	1.0	0.0	H-Horn	AV	-9.5	39.3	54.0	-14.7	802.11(b) 11Mbps
2483.500	18.3	30.4	143.0	1.0	1.0	0.0	V-Horn	AV	-9.5	39.2	54.0	-14.8	802.11(b) 11Mbps
2483.500	17.1	30.4	127.0	1.1	1.0	0.0	H-Horn	AV	-9.5	38.0	54.0	-16.0	802.11(g) 54Mbps
2483.500	17.0	30.4	212.0	1.1	1.0	0.0	V-Horn	AV	-9.5	37.9	54.0	-16.1	802.11(g) 54Mbps
2483.500	33.6	30.4	305.0	1.0	1.0	0.0	H-Horn	PK	-9.5	54.5	74.0	-19.5	802.11(g) 36Mbps
2483.500	33.0	30.4	289.0	1.1	1.0	0.0	H-Horn	PK	-9.5	53.9	74.0	-20.1	802.11(b) 1Mbps
2483.500	32.5	30.4	123.0	1.0	1.0	0.0	V-Horn	PK	-9.5	53.4	74.0	-20.6	802.11(g) 36Mbps
2483.500	32.5	30.4	155.0	1.1	1.0	0.0	V-Horn	PK	-9.5	53.4	74.0	-20.6	802.11(b) 1Mbps
2483.500	32.1	30.4	212.0	1.1	1.0	0.0	V-Horn	PK	-9.5	53.0	74.0	-21.0	802.11(g) 54Mbps
2483.500	31.8	30.4	127.0	1.1	1.0	0.0	H-Horn	PK	-9.5	52.7	74.0	-21.3	802.11(g) 54Mbps
2483.500	30.8	30.4	288.0	1.1	1.0	0.0	H-Horn	PK	-9.5	51.7	74.0	-22.3	802.11(b) 11Mbps
2483.500	29.3	30.4	143.0	1.0	1.0	0.0	V-Horn	PK	-9.5	50.2	74.0	-23.8	802.11(b) 11Mbps

NORTHWEST EMC

RADIATED EMISSIONS DATA SHEET

ACQ 2005.1.3
EMI 2005.1.3

EUT:	802UIAG	Work Order:	ITRM0065
Serial Number:		Date:	03/07/05
Customer:	Intermec Technologies Corporation	Temperature:	22
Attendees:	None	Humidity:	42%
Cust. Ref. No.:		Barometric Pressure	30.27
Tested by:	Holly Ashkannejhad	Power: 120VAC, 60Hz	Job Site: EV01

TEST SPECIFICATIONS

Specification:	FCC 15.247(d) Spurious Radiated Emissions:2004	Method:	ANSI C63.4:2003

SAMPLE CALCULATIONS

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

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

COMMENTS

EUT OPERATING MODES

Transmitting 802.11, High Channel, see comments for configuration

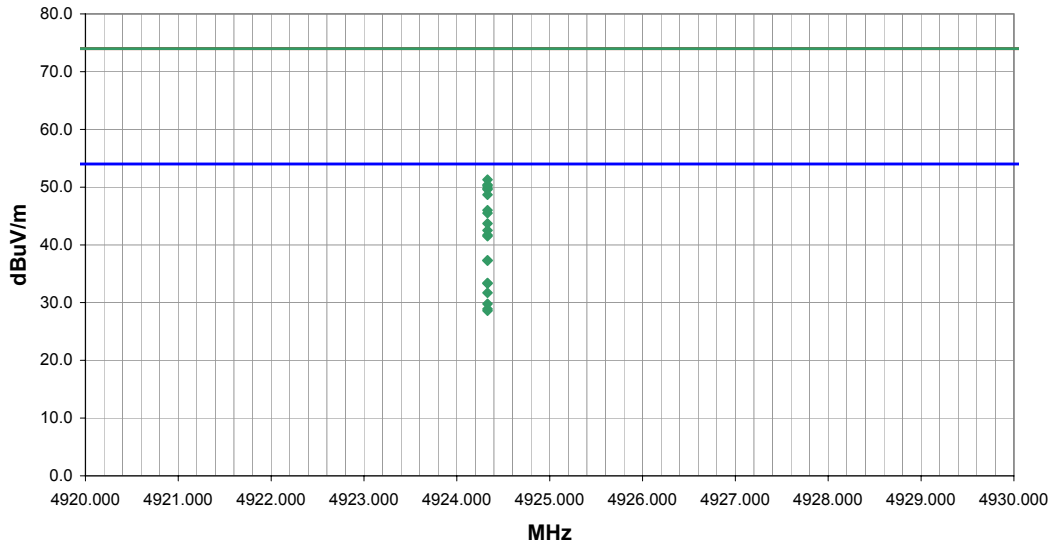
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS	Run #
Pass	5

Other

Tested By:



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
4924.330	46.7	3.5	10.0	1.1	3.0	0.0	V-Horn	AV	0.0	50.2	54.0	-3.8	802.11(b) 1Mbps
4924.330	45.2	3.5	340.0	1.1	3.0	0.0	V-Horn	AV	0.0	48.7	54.0	-5.3	802.11(b) 1Mbps
4924.330	33.8	3.5	77.0	1.1	3.0	0.0	V-Horn	AV	0.0	37.3	54.0	-16.7	802.11(b) 11Mbps
4924.330	33.8	3.5	53.0	1.3	3.0	0.0	H-Horn	AV	0.0	37.3	54.0	-16.7	802.11(b) 11Mbps
4924.330	29.9	3.5	74.0	1.2	3.0	0.0	V-Horn	AV	0.0	33.4	54.0	-20.6	802.11(g) 6Mbps
4924.330	29.8	3.5	352.0	1.1	3.0	0.0	H-Horn	AV	0.0	33.3	54.0	-20.7	802.11(g) 6Mbps
4924.330	28.2	3.5	18.0	1.4	3.0	0.0	V-Horn	AV	0.0	31.7	54.0	-22.3	802.11(g) 36Mbps
4924.330	47.8	3.5	10.0	1.1	3.0	0.0	V-Horn	PK	0.0	51.3	74.0	-22.7	802.11(b) 1Mbps
4924.330	46.9	3.5	340.0	1.1	3.0	0.0	V-Horn	PK	0.0	50.4	74.0	-23.6	802.11(b) 1Mbps
4924.330	26.3	3.5	350.0	1.3	3.0	0.0	V-Horn	AV	0.0	29.8	54.0	-24.2	802.11(g) 54Mbps
4924.330	46.3	3.5	53.0	1.3	3.0	0.0	H-Horn	PK	0.0	49.8	74.0	-24.2	802.11(b) 11Mbps
4924.330	46.1	3.5	77.0	1.1	3.0	0.0	V-Horn	PK	0.0	49.6	74.0	-24.4	802.11(b) 11Mbps
4924.330	25.4	3.5	54.0	1.3	3.0	0.0	H-Horn	AV	0.0	28.9	54.0	-25.1	802.11(g) 36Mbps
4924.330	25.1	3.5	343.0	1.3	3.0	0.0	H-Horn	AV	0.0	28.6	54.0	-25.4	802.11(g) 54Mbps
4924.330	42.5	3.5	74.0	1.2	3.0	0.0	V-Horn	PK	0.0	46.0	74.0	-28.0	802.11(g) 6Mbps
4924.330	42.0	3.5	352.0	1.1	3.0	0.0	H-Horn	PK	0.0	45.5	74.0	-28.5	802.11(g) 6Mbps
4924.330	40.2	3.5	18.0	1.4	3.0	0.0	V-Horn	PK	0.0	43.7	74.0	-30.3	802.11(g) 36Mbps
4924.330	39.0	3.5	54.0	1.3	3.0	0.0	H-Horn	PK	0.0	42.5	74.0	-31.5	802.11(g) 36Mbps
4924.330	38.2	3.5	350.0	1.3	3.0	0.0	V-Horn	PK	0.0	41.7	74.0	-32.3	802.11(g) 54Mbps
4924.330	38.0	3.5	343.0	1.3	3.0	0.0	H-Horn	PK	0.0	41.5	74.0	-32.5	802.11(g) 54Mbps

NORTHWEST EMC

RADIATED EMISSIONS DATA SHEET

ACQ 2005.1.3
EMI 2005.1.3

EUT:	802UIAG	Work Order:	ITRM0065
Serial Number:		Date:	03/08/05
Customer:	Intermec Technologies Corporation	Temperature:	23
Attendees:	None	Humidity:	39%
Cust. Ref. No.:		Barometric Pressure	30.22
Tested by:	Holly Ashkannejhad	Power: 120VAC, 60Hz	Job Site: EV01

TEST SPECIFICATIONS

Specification:	FCC 15.247(d) Spurious Radiated Emissions:2004	Method:	ANSI C63.4:2003

SAMPLE CALCULATIONS

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

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

COMMENTS

EUT OPERATING MODES

Transmitting 802.11, Low Channel

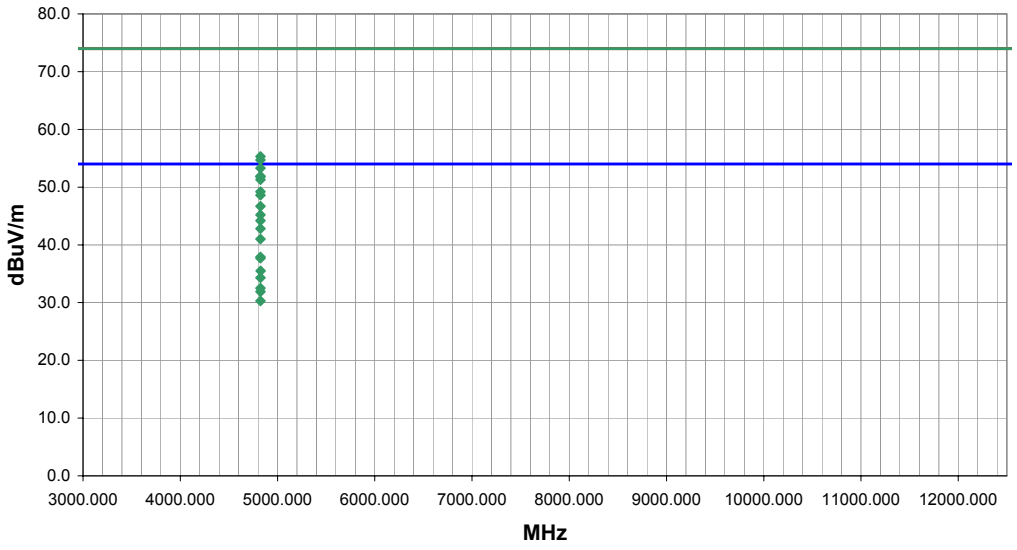
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS	Run #
Pass	6

Other

Tested By:



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
4824.030	50.0	3.3	199.0	1.1	3.0	0.0	V-Horn	AV	0.0	53.3	54.0	-0.7	802.11(b), 1Mbps
4824.000	45.9	3.3	77.0	1.3	3.0	0.0	H-Horn	AV	0.0	49.2	54.0	-4.8	802.11(b), 1Mbps
4824.000	37.7	3.3	199.0	1.1	3.0	0.0	V-Horn	AV	0.0	41.0	54.0	-13.0	802.11(b), 11Mbps
4824.310	34.6	3.3	205.0	1.2	3.0	0.0	V-Horn	AV	0.0	37.9	54.0	-16.1	802.11(g), 6Mbps
4824.000	34.4	3.3	72.0	1.3	3.0	0.0	H-Horn	AV	0.0	37.7	54.0	-16.3	802.11(b), 11Mbps
4825.970	32.2	3.3	0.0	1.3	3.0	0.0	H-Horn	AV	0.0	35.5	54.0	-18.5	802.11(g), 6Mbps
4824.030	52.0	3.3	199.0	1.1	3.0	0.0	V-Horn	PK	0.0	55.3	74.0	-18.7	802.11(b), 1Mbps
4824.000	51.4	3.3	199.0	1.1	3.0	0.0	V-Horn	PK	0.0	54.7	74.0	-19.3	802.11(b), 11Mbps
4824.000	31.0	3.3	207.0	1.2	3.0	0.0	V-Horn	AV	0.0	34.3	54.0	-19.7	802.11(g), 36Mbps
4824.000	29.2	3.3	68.0	1.4	3.0	0.0	H-Horn	AV	0.0	32.5	54.0	-21.5	802.11(g), 36Mbps
4824.000	28.6	3.3	199.0	1.2	3.0	0.0	V-Horn	AV	0.0	31.9	54.0	-22.1	802.11(g), 54Mbps
4824.310	48.6	3.3	205.0	1.2	3.0	0.0	V-Horn	PK	0.0	51.9	74.0	-22.1	802.11(g), 6Mbps
4824.000	48.5	3.3	77.0	1.3	3.0	0.0	H-Horn	PK	0.0	51.8	74.0	-22.2	802.11(b), 1Mbps
4824.000	48.0	3.3	72.0	1.3	3.0	0.0	H-Horn	PK	0.0	51.3	74.0	-22.7	802.11(b), 11Mbps
4824.000	27.0	3.3	74.0	1.3	3.0	0.0	H-Horn	AV	0.0	30.3	54.0	-23.7	802.11(g), 54Mbps
4824.310	45.3	3.3	0.0	1.3	3.0	0.0	H-Horn	PK	0.0	48.6	74.0	-25.4	802.11(g), 6Mbps
4824.000	43.4	3.3	207.0	1.2	3.0	0.0	V-Horn	PK	0.0	46.7	74.0	-27.3	802.11(g), 36Mbps
4824.000	41.9	3.3	199.0	1.2	3.0	0.0	V-Horn	PK	0.0	45.2	74.0	-28.8	802.11(g), 54Mbps
4824.000	40.9	3.3	68.0	1.4	3.0	0.0	H-Horn	PK	0.0	44.2	74.0	-29.8	802.11(g), 36Mbps
4824.000	39.5	3.3	74.0	1.3	3.0	0.0	H-Horn	PK	0.0	42.8	74.0	-31.2	802.11(g), 54Mbps

NORTHWEST EMC

RADIATED EMISSIONS DATA SHEET

ACQ 2005.1.3
EMI 2005.1.3

EUT:	802UIAG	Work Order:	ITRM0065
Serial Number:		Date:	03/08/05
Customer:	Intermec Technologies Corporation	Temperature:	23
Attendees:	None	Humidity:	39%
Cust. Ref. No.:		Barometric Pressure	30.22
Tested by:	Rod Peloquin	Power: 120VAC, 60Hz	Job Site: EV01

TEST SPECIFICATIONS

Specification:	FCC 15.247(d) Spurious Radiated Emissions:2004	Method:	ANSI C63.4:2003

SAMPLE CALCULATIONS

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

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

COMMENTS

EUT OPERATING MODES

Transmitting 802.11, Mid Channel

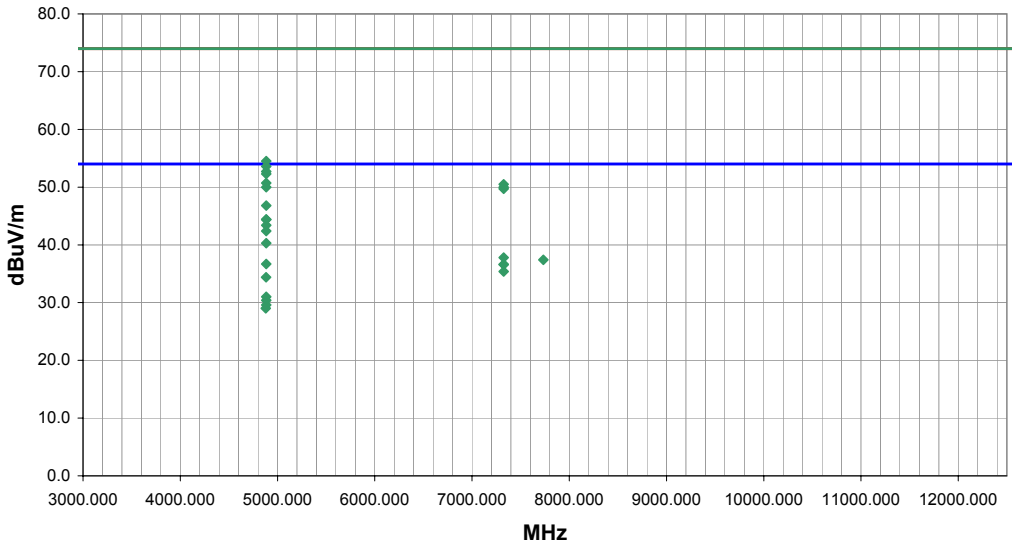
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS	Run #
Pass	7

Other

Tested By:



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
4884.000	49.1	3.6	197.0	1.1	3.0	0.0	V-Horn	AV	0.0	52.7	54.0	-1.3	802.11(b), 1Mbps
4884.000	47.1	3.6	18.0	1.1	3.0	0.0	H-Horn	AV	0.0	50.7	54.0	-3.3	802.11(b), 1Mbps
4884.000	36.7	3.6	197.0	1.1	3.0	0.0	V-Horn	AV	0.0	40.3	54.0	-13.7	802.11(b), 11Mbps
7326.000	27.3	10.5	183.0	2.1	3.0	0.0	V-Horn	AV	0.0	37.8	54.0	-16.2	802.11(b), 1Mbps
7734.194	24.9	12.5	216.0	1.3	3.0	0.0	H-Horn	AV	0.0	37.4	54.0	-16.6	802.11(b), 1Mbps
4884.000	33.1	3.6	200.0	1.2	3.0	0.0	V-Horn	AV	0.0	36.7	54.0	-17.3	802.11(g), 6Mbps
7326.000	26.1	10.5	186.0	1.9	3.0	0.0	V-Horn	AV	0.0	36.6	54.0	-17.4	802.11(g), 6Mbps
7326.000	26.1	10.5	198.0	1.9	3.0	0.0	V-Horn	AV	0.0	36.6	54.0	-17.4	802.11(b), 11Mbps
7326.000	24.9	10.5	-1.0	2.3	3.0	0.0	H-Horn	AV	0.0	35.4	54.0	-18.6	802.11(b), 11Mbps
4884.000	50.9	3.6	197.0	1.1	3.0	0.0	V-Horn	PK	0.0	54.5	74.0	-19.5	802.11(b), 1Mbps
4881.720	30.8	3.6	11.0	1.2	3.0	0.0	H-Horn	AV	0.0	34.4	54.0	-19.6	802.11(g), 6Mbps
4884.000	50.0	3.6	197.0	1.1	3.0	0.0	V-Horn	PK	0.0	53.6	74.0	-20.4	802.11(b), 11Mbps
4884.000	48.7	3.6	18.0	1.1	3.0	0.0	H-Horn	PK	0.0	52.3	74.0	-21.7	802.11(b), 1Mbps
4884.000	27.4	3.6	217.0	1.6	3.0	0.0	V-Horn	AV	0.0	31.0	54.0	-23.0	802.11(g), 36Mbps
7326.000	40.0	10.5	183.0	2.1	3.0	0.0	V-Horn	PK	0.0	50.5	74.0	-23.5	802.11(b), 1Mbps
4884.000	26.8	3.6	16.0	1.3	3.0	0.0	H-Horn	AV	0.0	30.4	54.0	-23.6	802.11(g), 36Mbps
4884.000	46.4	3.6	200.0	1.2	3.0	0.0	V-Horn	PK	0.0	50.0	74.0	-24.0	802.11(g), 6Mbps
7326.000	39.5	10.5	198.0	1.9	3.0	0.0	V-Horn	PK	0.0	50.0	74.0	-24.0	802.11(b), 11Mbps
7326.000	39.2	10.5	186.0	1.9	3.0	0.0	V-Horn	PK	0.0	49.7	74.0	-24.3	802.11(g), 6Mbps
4884.000	26.0	3.6	10.0	1.2	3.0	0.0	H-Horn	AV	0.0	29.6	54.0	-24.4	802.11(g), 54Mbps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Justification

The individuals and/or the organization requesting the test provided the modes, configurations and settings available to evaluate. While scanning the radiated emissions, all of the EUT parameters listed below were investigated. This includes, but may not be limited to, antennas, tuned transmit frequency ranges, operating modes, and data rates.

Channels in Specified Band Investigated:
Low
Mid
High

Operating Modes Investigated:
Continuous transmit

Data Rates Investigated:
6 Mbps (802.11g), worst case mode

Output Power Setting(s) Investigated:
Maximum default

Power Input Settings Investigated:
120 VAC, 60 Hz.

Software\Firmware Applied During Test			
Exercise software	cTxRx Win CE	**Version**	0.1.2.1
Description			
The system was tested using special software developed to test all functions of the device during the test.			

EUT and Peripherals			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
EUT- 802UIAG	Intermec Technologies Corporation	Unknown	Unknown
AC Adapter	Intermec Technologies Corporation	851-061-002	3335174
Host Device	Intermec Technologies Corporation	CK61	33390400093

Cables					
Cable Type	**Shield**	**Length (m)**	**Ferrite**	**Connection 1**	**Connection 2**
DC Leads	Yes	1.9	PA	AC Power Adapter	Host Device
AC Power	No	2.0	No	AC Power Adapter	AC Mains
PA = Cable is permanently attached to the device. Shielding and/or presence of ferrite may be unknown.					

AC Powerline Conducted Emissions

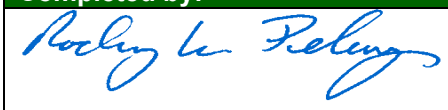
Measurement Equipment					
Description	**Manufacturer**	**Model**	**Identifier**	**Last Cal**	**Interval**
Spectrum Analyzer	Hewlett-Packard	8566B	AAL	12/02/2004	13 mo
Quasi-Peak Adapter	Hewlett-Packard	85650A	AQF	12/02/2004	13 mo
High Pass Filter	TTE	H97-100k-50-720B	HFC	12/29/2004	13 mo
LISN	Solar	9252-50-R-24-BNC	LIN	12/29/2004	13 mo

Test Description

Requirement: Per 47 15.207(d), if the EUT is connected to the AC power line indirectly, obtaining its power from another device that is connected to the AC power line, then it should be tested to demonstrate compliance with the conducted limits of 15.207.

Configuration: The EUT will be powered from a device that could be connected to the AC power line. Therefore, the measurements were made on the device used to power the EUT. The AC power line conducted emissions were measured with the EUT operating at the lowest, the highest, and a middle channel in the operational band. The EUT was transmitting at its maximum data rate. For each mode, the spectrum was scanned from 150 kHz to 30 MHz. The test setup and procedures were in accordance with ANSI C63.4-1992.

Completed by:



NORTHWEST EMC

CONDUCTED EMISSIONS DATA SHEET

ACQ 2005.1.3
EMI 2005.1.3

EUT:	802UIAG	Work Order:	ITRM0065
Serial Number:		Date:	03/29/05
Customer:	Intermec Technologies Corporation	Temperature:	23
Attendees:	None	Humidity:	38%
Cust. Ref. No.:		Barometric Pressure	29.67
Tested by:	Rod Peloquin	Power: 120VAC/60Hz	Job Site: EV01

TEST SPECIFICATIONS

Specification:	FCC 15.207 AC Powerline Conducted Emissions:2004	Method:	ANSI C63.4:2003

SAMPLE CALCULATIONS

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

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

COMMENTS

EUT OPERATING MODES

Transmitting 802.11(g) low channel, 6Mbps data rate

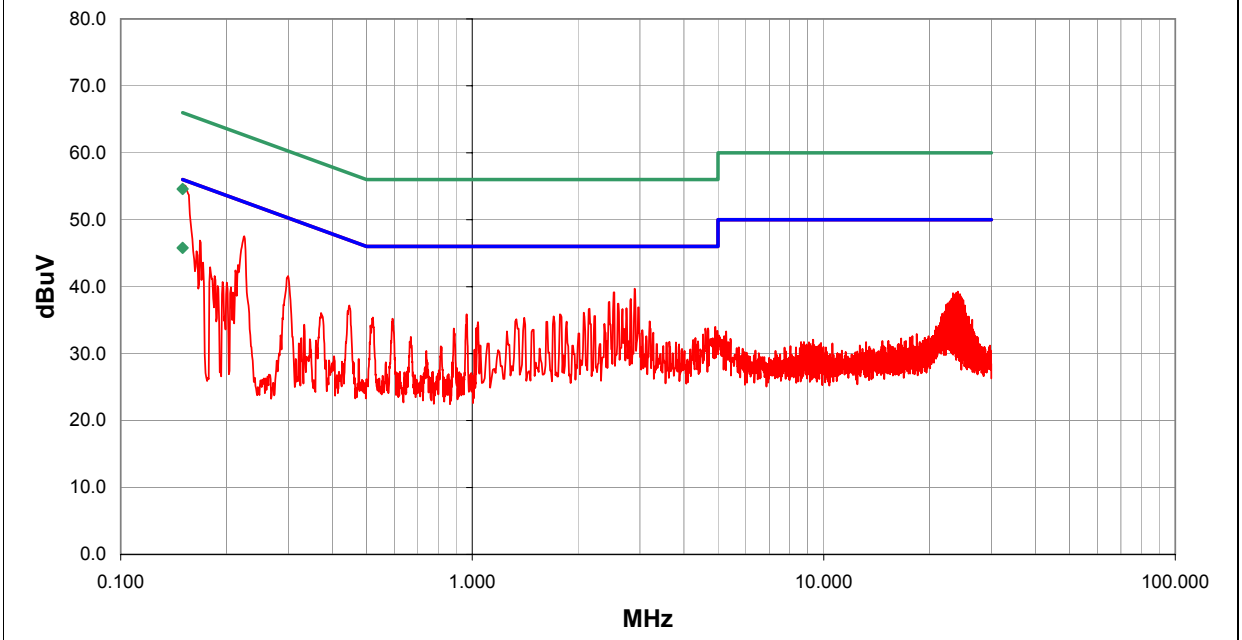
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS	Line	Run #
Pass	L1	1

Other

Tested By:



Freq (MHz)	Amplitude (dBuV)			Transducer (dB)	Cable (dB)	External Attenuation (dB)		Detector (blank equal peaks [PK] from scan)		Adjusted dBuV	Spec. Limit dBuV	Compared to Spec. (dB)
0.150	25.8			0.0	0.0	20.0		AV		45.8	56.0	-10.2
0.150	34.6			0.0	0.0	20.0		QP		54.6	66.0	-11.4
0.151	35.0			0.0	0.1	20.0				55.1	56.0	-0.9
0.225	27.4			0.0	0.1	20.0				47.5	52.6	-5.1
2.896	19.2			0.0	0.5	20.0				39.7	46.0	-6.3
2.536	18.7			0.0	0.5	20.0				39.2	46.0	-6.8
2.826	17.7			0.0	0.5	20.0				38.2	46.0	-7.8
0.168	26.8			0.0	0.1	20.0				46.9	55.1	-8.2
2.456	17.3			0.0	0.4	20.0				37.7	46.0	-8.3
2.606	17.0			0.0	0.5	20.0				37.5	46.0	-8.5
0.299	21.5			0.0	0.1	20.0				41.6	50.3	-8.7
2.976	16.4			0.0	0.5	20.0				36.9	46.0	-9.1
2.746	16.3			0.0	0.5	20.0				36.8	46.0	-9.2
2.156	16.3			0.0	0.4	20.0				36.7	46.0	-9.3
2.676	16.2			0.0	0.5	20.0				36.7	46.0	-9.3
0.447	17.0			0.0	0.2	20.0				37.2	46.9	-9.7
2.076	15.7			0.0	0.4	20.0				36.1	46.0	-9.9
0.164	25.2			0.0	0.1	20.0				45.3	55.2	-9.9
0.964	15.6			0.0	0.3	20.0				35.9	46.0	-10.1

NORTHWEST EMC

CONDUCTED EMISSIONS DATA SHEET

ACQ 2005.1.3
EMI 2005.1.3

EUT:	802UIAG	Work Order:	ITRM0065
Serial Number:		Date:	03/29/05
Customer:	Intermec Technologies Corporation	Temperature:	23
Attendees:	None	Humidity:	38%
Cust. Ref. No.:		Barometric Pressure	29.67
Tested by:	Rod Peloquin	Power: 120VAC/60Hz	Job Site: EV01

TEST SPECIFICATIONS

Specification:	FCC 15.207 AC Powerline Conducted Emissions:2004	Method:	ANSI C63.4:2003

SAMPLE CALCULATIONS

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

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

COMMENTS

EUT OPERATING MODES

Transmitting 802.11(g) low channel, 6Mbps data rate

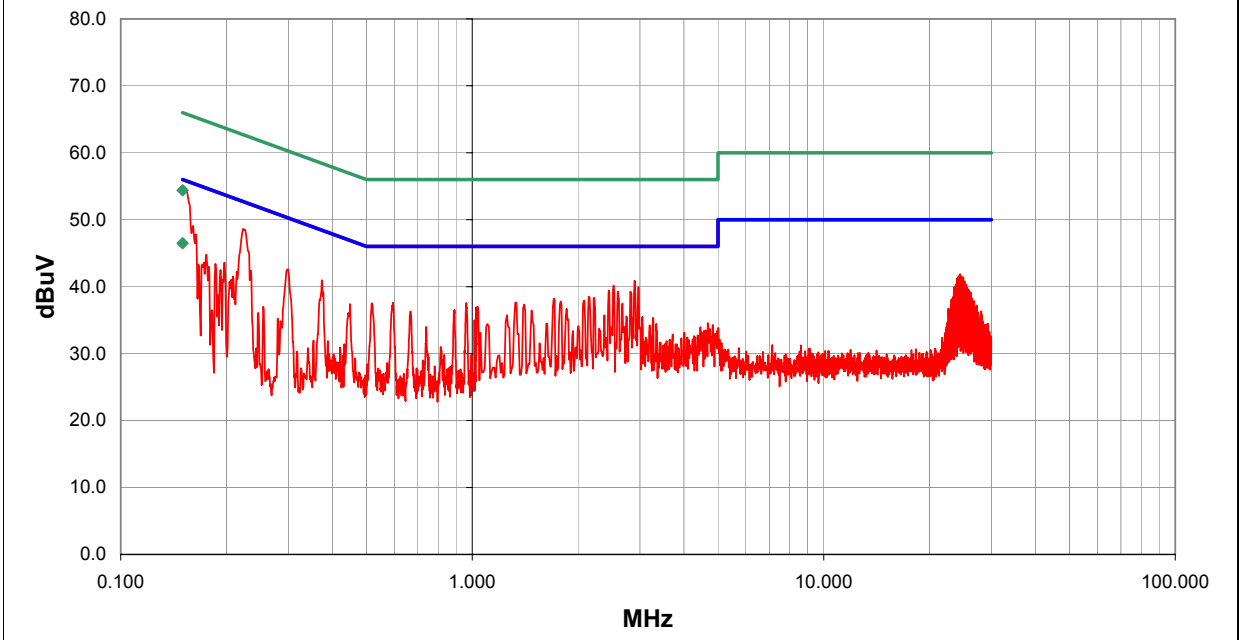
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS	Line	Run #
Pass	N	2

Other

Tested By:



Freq (MHz)	Amplitude (dBuV)			Transducer (dB)	Cable (dB)	External Attenuation (dB)		Detector (blank equal peaks [PK] from scan)		Adjusted dBuV	Spec. Limit dBuV	Compared to Spec. (dB)
0.150	26.5			0.0	0.0	20.0		AV		46.5	56.0	-9.5
0.150	34.4			0.0	0.0	20.0		QP		54.4	66.0	-11.6
0.150	34.8			0.0	0.1	20.0				54.9	56.0	-1.1
0.223	28.5			0.0	0.1	20.0				48.6	52.7	-4.1
2.896	20.4			0.0	0.5	20.0				40.9	46.0	-5.1
2.526	19.7			0.0	0.5	20.0				40.2	46.0	-5.8
2.976	19.4			0.0	0.5	20.0				39.9	46.0	-6.1
2.446	19.0			0.0	0.4	20.0				39.4	46.0	-6.6
2.816	18.8			0.0	0.5	20.0				39.3	46.0	-6.7
2.596	18.8			0.0	0.5	20.0				39.3	46.0	-6.7
0.373	20.8			0.0	0.2	20.0				41.0	48.4	-7.5
2.146	18.1			0.0	0.4	20.0				38.5	46.0	-7.5
2.226	17.9			0.0	0.4	20.0				38.3	46.0	-7.7
0.299	22.5			0.0	0.1	20.0				42.6	50.3	-7.7
1.715	17.8			0.0	0.4	20.0				38.2	46.0	-7.8
2.086	17.5			0.0	0.4	20.0				37.9	46.0	-8.1
24.412	20.4			0.0	1.5	20.0				41.9	50.0	-8.1
1.785	17.4			0.0	0.4	20.0				37.8	46.0	-8.2
1.335	17.3			0.0	0.3	20.0				37.6	46.0	-8.4

NORTHWEST EMC

CONDUCTED EMISSIONS DATA SHEET

ACQ 2005.1.3
EMI 2005.1.3

EUT:	802UIAG	Work Order:	ITRM0065
Serial Number:		Date:	03/29/05
Customer:	Intermec Technologies Corporation	Temperature:	23
Attendees:	None	Humidity:	38%
Cust. Ref. No.:		Barometric Pressure	29.67
Tested by:	Rod Peloquin	Power: 120VAC/60Hz	Job Site: EV01

TEST SPECIFICATIONS

Specification:	FCC 15.207 AC Powerline Conducted Emissions:2004	Method:	ANSI C63.4:2003

SAMPLE CALCULATIONS

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

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

COMMENTS

EUT OPERATING MODES

Transmitting 802.11(g) mid channel, 6Mbps data rate

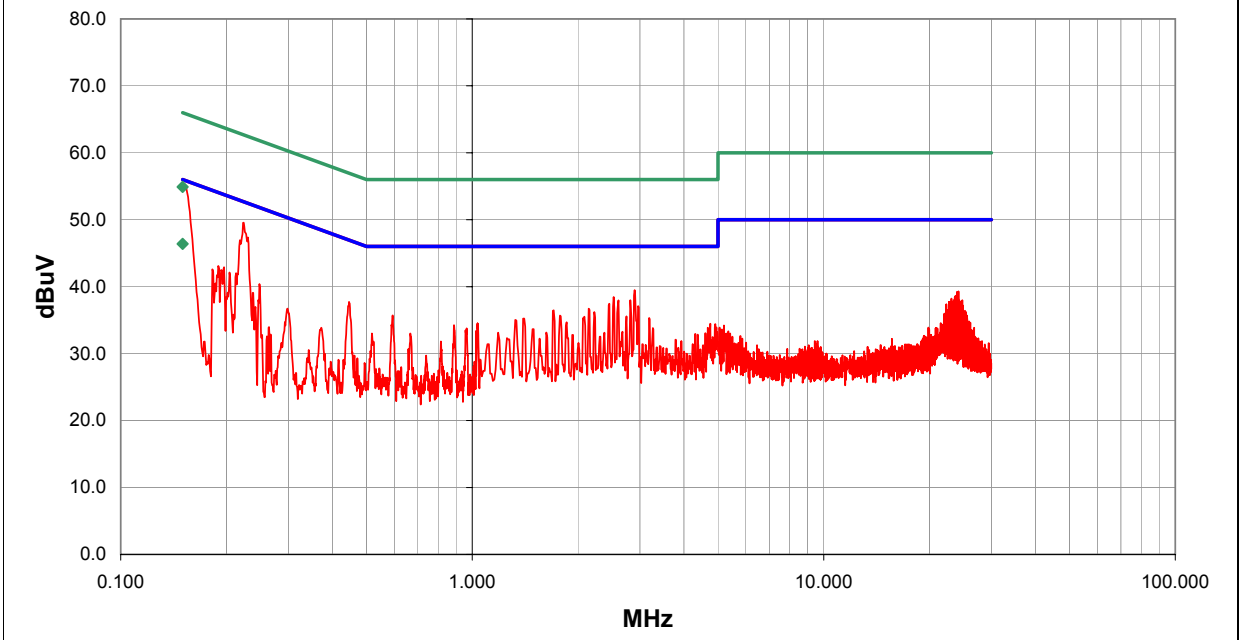
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS	Line	Run #
Pass	L1	3

Other

Tested By:



Freq (MHz)	Amplitude (dBuV)			Transducer (dB)	Cable (dB)	External Attenuation (dB)		Detector (blank equal peaks [PK] from scan)		Adjusted dBuV	Spec. Limit dBuV	Compared to Spec. (dB)
0.150	26.4			0.0	0.0	20.0		AV		46.4	56.0	-9.6
0.150	34.9			0.0	0.0	20.0		QP		54.9	66.0	-11.1
0.150	35.1			0.0	0.1	20.0				55.2	56.0	-0.8
0.224	29.4			0.0	0.1	20.0				49.5	52.7	-3.1
2.896	19.0			0.0	0.5	20.0				39.5	46.0	-6.5
2.526	18.0			0.0	0.5	20.0				38.5	46.0	-7.5
2.816	17.5			0.0	0.5	20.0				38.0	46.0	-8.0
2.606	17.5			0.0	0.5	20.0				38.0	46.0	-8.0
2.456	17.0			0.0	0.4	20.0				37.4	46.0	-8.6
2.966	16.6			0.0	0.5	20.0				37.1	46.0	-8.9
0.446	17.5			0.0	0.2	20.0				37.7	46.9	-9.2
2.146	16.3			0.0	0.4	20.0				36.7	46.0	-9.3
1.705	16.1			0.0	0.4	20.0				36.5	46.0	-9.5
2.226	15.8			0.0	0.4	20.0				36.2	46.0	-9.8
0.594	15.5			0.0	0.2	20.0				35.7	46.0	-10.3
1.775	15.3			0.0	0.4	20.0				35.7	46.0	-10.3
2.746	15.1			0.0	0.5	20.0				35.6	46.0	-10.4
2.086	15.1			0.0	0.4	20.0				35.5	46.0	-10.5
3.186	14.8			0.0	0.5	20.0				35.3	46.0	-10.7

NORTHWEST EMC

CONDUCTED EMISSIONS DATA SHEET

ACQ 2005.1.3
EMI 2005.1.3

EUT:	802UIAG	Work Order:	ITRM0065
Serial Number:		Date:	03/29/05
Customer:	Intermec Technologies Corporation	Temperature:	23
Attendees:	None	Humidity:	38%
Cust. Ref. No.:		Barometric Pressure	29.67
Tested by:	Rod Peloquin	Power: 120VAC/60Hz	Job Site: EV01

TEST SPECIFICATIONS

Specification:	FCC 15.207 AC Powerline Conducted Emissions:2004	Method:	ANSI C63.4:2003

SAMPLE CALCULATIONS

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

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

COMMENTS

EUT OPERATING MODES

Transmitting 802.11(g) mid channel, 6Mbps data rate

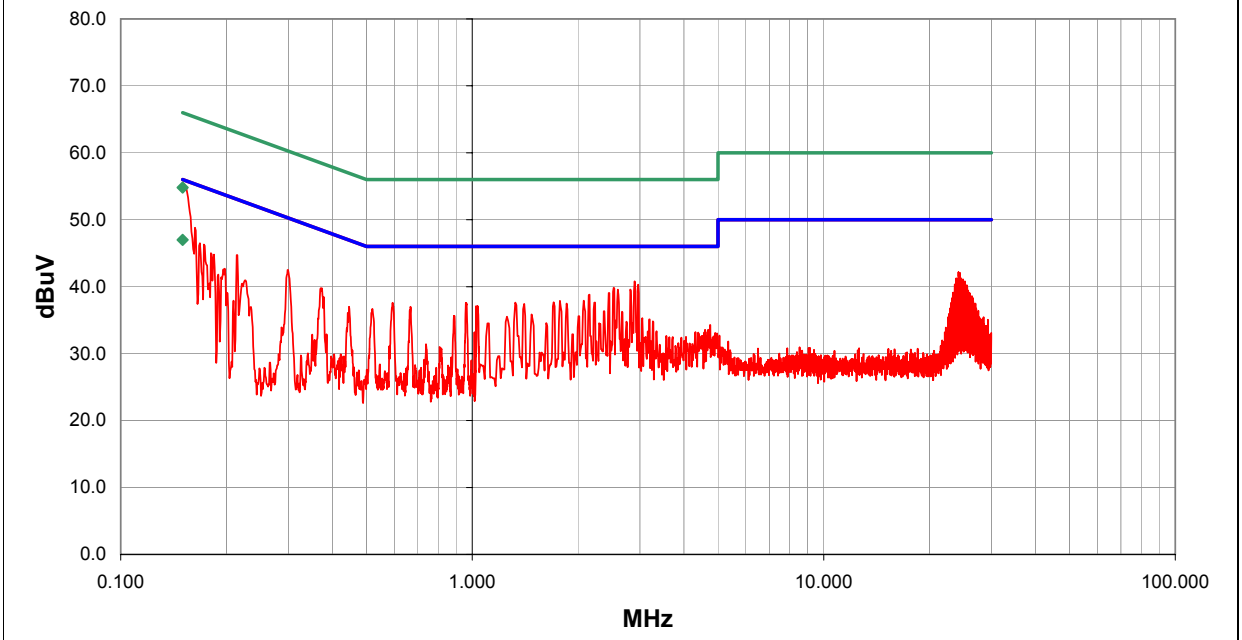
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS	Line	Run #
Pass	N	4

Other

Tested By:



Freq (MHz)	Amplitude (dBuV)			Transducer (dB)	Cable (dB)	External Attenuation (dB)		Detector (blank equal peaks [PK] from scan)		Adjusted dBuV	Spec. Limit dBuV	Compared to Spec. (dB)
0.150	27.0			0.0	0.0	20.0		AV		47.0	56.0	-9.0
0.150	34.8			0.0	0.0	20.0		QP		54.8	66.0	-11.2
0.151	35.2			0.0	0.1	20.0				55.3	56.0	-0.7
2.896	20.3			0.0	0.5	20.0				40.8	46.0	-5.2
2.966	19.8			0.0	0.5	20.0				40.3	46.0	-5.7
2.526	19.4			0.0	0.5	20.0				39.9	46.0	-6.1
2.816	19.1			0.0	0.5	20.0				39.6	46.0	-6.4
2.596	19.1			0.0	0.5	20.0				39.6	46.0	-6.4
0.163	28.7			0.0	0.1	20.0				48.8	55.3	-6.5
2.456	18.6			0.0	0.4	20.0				39.0	46.0	-7.0
2.156	18.4			0.0	0.4	20.0				38.8	46.0	-7.2
0.299	22.4			0.0	0.1	20.0				42.5	50.3	-7.8
24.170	20.7			0.0	1.5	20.0				42.2	50.0	-7.8
24.412	20.6			0.0	1.5	20.0				42.1	50.0	-7.9
2.076	17.5			0.0	0.4	20.0				37.9	46.0	-8.1
1.775	17.5			0.0	0.4	20.0				37.9	46.0	-8.1
0.215	24.6			0.0	0.1	20.0				44.7	53.0	-8.3
24.324	20.2			0.0	1.5	20.0				41.7	50.0	-8.3
1.705	17.3			0.0	0.4	20.0				37.7	46.0	-8.3

NORTHWEST EMC

CONDUCTED EMISSIONS DATA SHEET

ACQ 2005.1.3
EMI 2005.1.3

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/29/05
Customer:	Intermec Technologies Corporation			Temperature:	23
Attendees:	None			Humidity:	38%
Cust. Ref. No.:				Barometric Pressure	29.67
Tested by:	Rod Peloquin	Power:	120VAC/60Hz	Job Site:	EV01

TEST SPECIFICATIONS

Specification:	FCC 15.207 AC Powerline Conducted Emissions:2004	Method:	ANSI C63.4:2003

SAMPLE CALCULATIONS

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

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

COMMENTS

EUT OPERATING MODES

Transmitting 802.11(g) high channel, 6Mbps data rate

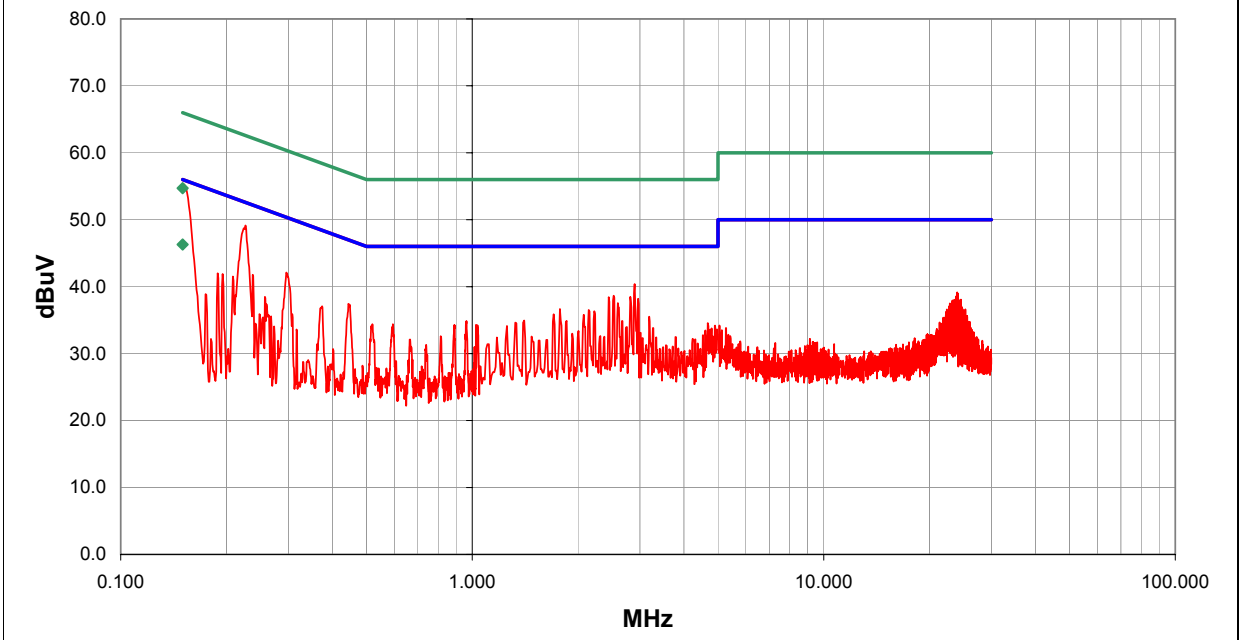
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS	Line	Run #
Pass	L1	5

Other

Tested By:



Freq (MHz)	Amplitude (dBuV)			Transducer (dB)	Cable (dB)	External Attenuation (dB)		Detector (blank equal peaks [PK] from scan)		Adjusted dBuV	Spec. Limit dBuV	Compared to Spec. (dB)
0.150	26.3			0.0	0.0	20.0		AV		46.3	56.0	-9.7
0.150	34.7			0.0	0.0	20.0		QP		54.7	66.0	-11.3
0.151	35.2			0.0	0.1	20.0				55.3	56.0	-0.7
0.227	29.0			0.0	0.2	20.0				49.2	52.6	-3.4
2.896	19.9			0.0	0.5	20.0				40.4	46.0	-5.6
2.526	18.2			0.0	0.5	20.0				38.7	46.0	-7.3
2.816	18.0			0.0	0.5	20.0				38.5	46.0	-7.5
2.446	18.0			0.0	0.4	20.0				38.4	46.0	-7.6
2.966	17.7			0.0	0.5	20.0				38.2	46.0	-7.8
0.296	22.0			0.0	0.1	20.0				42.1	50.4	-8.3
2.596	17.1			0.0	0.5	20.0				37.6	46.0	-8.4
1.775	16.3			0.0	0.4	20.0				36.7	46.0	-9.3
2.146	16.1			0.0	0.4	20.0				36.5	46.0	-9.5
0.444	17.2			0.0	0.2	20.0				37.4	47.0	-9.6
2.226	15.9			0.0	0.4	20.0				36.3	46.0	-9.7
1.705	15.5			0.0	0.4	20.0				35.9	46.0	-10.1
2.076	15.4			0.0	0.4	20.0				35.8	46.0	-10.2
0.237	21.6			0.0	0.2	20.0				41.8	52.2	-10.4
3.186	15.0			0.0	0.5	20.0				35.5	46.0	-10.5

NORTHWEST EMC

CONDUCTED EMISSIONS DATA SHEET

ACQ 2005.1.3
EMI 2005.1.3

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/29/05
Customer:	Intermec Technologies Corporation			Temperature:	23
Attendees:	None			Humidity:	38%
Cust. Ref. No.:				Barometric Pressure	29.67
Tested by:	Rod Peloquin	Power:	120VAC/60Hz	Job Site:	EV01

TEST SPECIFICATIONS

Specification:	FCC 15.207 AC Powerline Conducted Emissions:2004	Method:	ANSI C63.4:2003

SAMPLE CALCULATIONS

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

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

COMMENTS

EUT OPERATING MODES

Transmitting 802.11(g) high channel, 6Mbps data rate

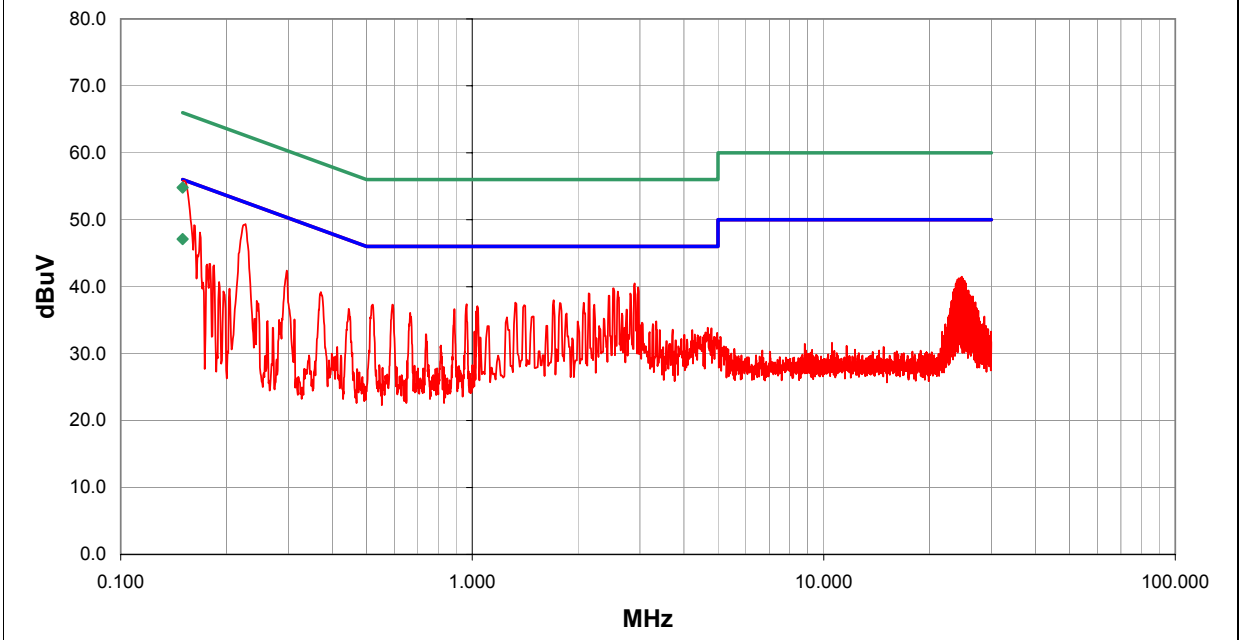
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS	Line	Run #
Pass	N	6

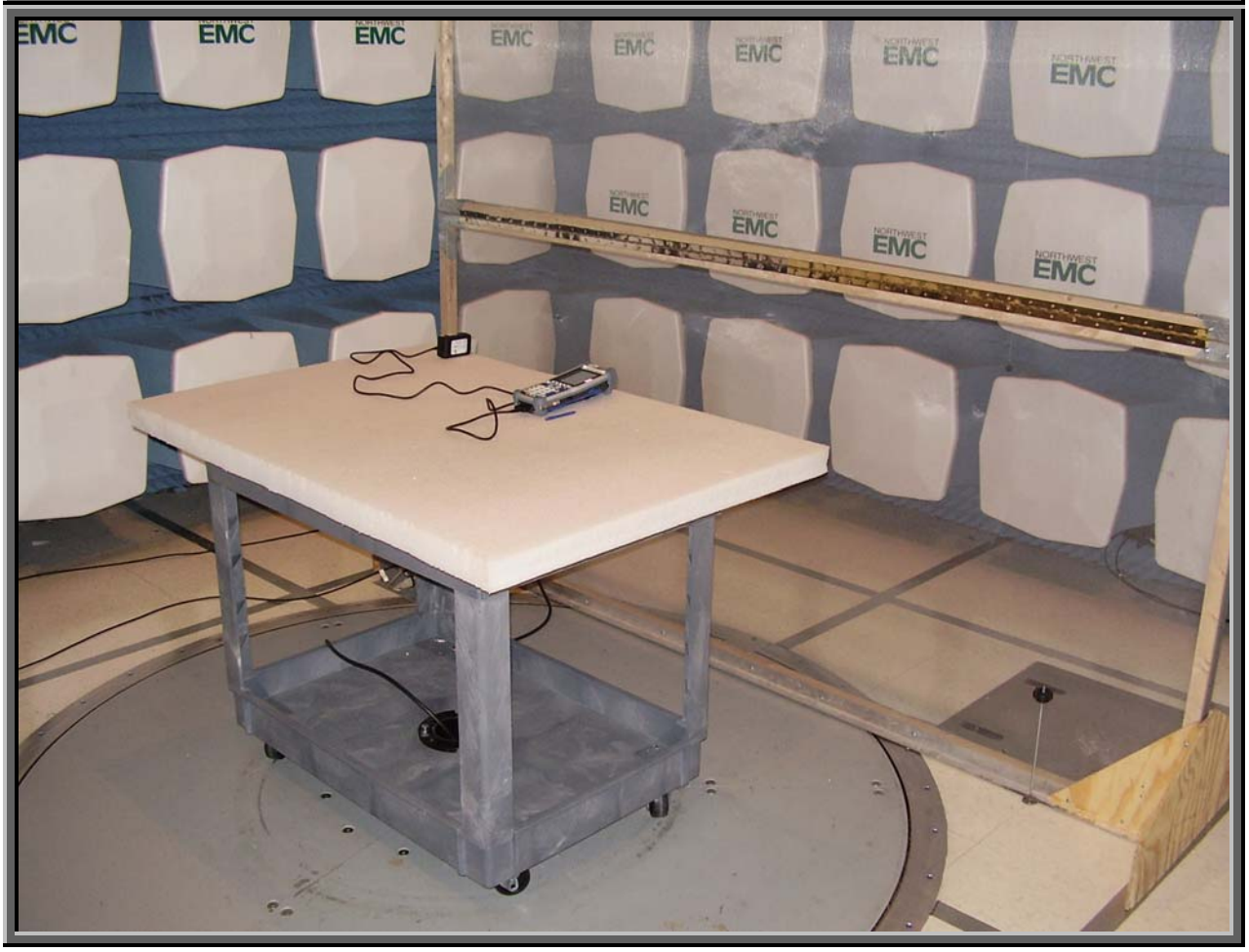
Other

Tested By:



Freq (MHz)	Amplitude (dBuV)			Transducer (dB)	Cable (dB)	External Attenuation (dB)		Detector (blank equal peaks [PK] from scan)		Adjusted dBuV	Spec. Limit dBuV	Compared to Spec. (dB)
0.150	27.1			0.0	0.0	20.0		AV		47.1	56.0	-8.9
0.150	34.8			0.0	0.0	20.0		QP		54.8	66.0	-11.2
0.150	35.7			0.0	0.1	20.0				55.8	56.0	-0.2
0.227	29.2			0.0	0.2	20.0				49.4	52.6	-3.2
2.896	20.0			0.0	0.5	20.0				40.5	46.0	-5.5
2.966	19.4			0.0	0.5	20.0				39.9	46.0	-6.1
0.162	29.1			0.0	0.1	20.0				49.2	55.4	-6.2
2.526	19.3			0.0	0.5	20.0				39.8	46.0	-6.2
2.596	18.8			0.0	0.5	20.0				39.3	46.0	-6.7
0.168	28.0			0.0	0.1	20.0				48.1	55.1	-7.0
2.146	18.6			0.0	0.4	20.0				39.0	46.0	-7.0
2.816	18.5			0.0	0.5	20.0				39.0	46.0	-7.0
2.456	18.2			0.0	0.4	20.0				38.6	46.0	-7.4
0.297	22.3			0.0	0.1	20.0				42.4	50.3	-7.9
1.705	17.6			0.0	0.4	20.0				38.0	46.0	-8.0
1.325	17.3			0.0	0.3	20.0				37.6	46.0	-8.4
2.076	17.2			0.0	0.4	20.0				37.6	46.0	-8.4
1.775	17.2			0.0	0.4	20.0				37.6	46.0	-8.4
24.698	20.0			0.0	1.5	20.0				41.5	50.0	-8.5


EMC
NORTHWEST EMC


EMC
NORTHWEST EMC


NORTHWEST
EMC

Justification

The individuals and/or the organization requesting the test provided the modes, configurations and settings available to evaluate. While scanning the radiated emissions, all of the EUT parameters listed below were investigated. This includes, but may not be limited to, antennas, tuned transmit frequency ranges, operating modes, and data rates.

Channels in Specified Band Investigated:
Low
Mid
High

Operating Modes Investigated:
Continuous transmit in a collocated configuration

Data Rates Investigated:
1 Mbps (802.11b)
6 Mbps (802.11g)
Bluetooth default

Channels in Specified Band Investigated:	
802.11(b):	11
Bluetooth:	9

Operating Modes Investigated:
Simultaneous Transmitting 802.11(g) High channel, Bluetooth High Channel on CK60 and Bluetooth High Channel on PB42 printer.

Output Power Setting(s) Investigated:
Maximum default

Power Input Settings Investigated:
120 VAC, 60 Hz.

Frequency Range Investigated			
Start Frequency	30 MHz	**Stop Frequency**	25 GHz

Software\Firmware Applied During Test			
Exercise software	cTxRx Win CE	**Version**	0.1.2.1
	CSR Bluetest		Unknown
Description			
The system was tested using special software developed to test all functions of the device during the test.			

EUT and Peripherals			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
EUT - 802.11 a/b/g radio card	Intermec Technologies Corporation	802UIAG	Unknown
Host Device - Handheld Computer	Intermec Technologies Corporation	CK61	33390400093
Bluetooth enabled printer	Intermec Technologies Corporation	PB42	SAC001
AC Power Adapter	Intermec Technologies Corporation	073573-003	6079450
AC Power Adapter	Intermec Technologies Corporation	851-061-002	038962

Cables					
Cable Type	**Shield**	**Length (m)**	**Ferrite**	**Connection 1**	**Connection 2**
DC Leads	Yes	1.9	PA	AC Power Adapter	Host Device
AC Power	No	2.0	No	AC Power Adapter	AC Mains
DC Leads	No	1.8	Yes	Bluetooth enabled printer	AC Power Adapter
AC Power	No	2.0	No	Bluetooth enabled printer	AC Mains
PA = Cable is permanently attached to the device. Shielding and/or presence of ferrite may be unknown.					

Measurement Equipment					
Description	**Manufacturer**	**Model**	**Identifier**	**Last Cal**	**Interval**
Spectrum Analyzer	Hewlett-Packard	8566B	AAL	12/02/2004	13 mo
Pre-Amplifier	Miteq	AMF-4D-005180-24-10P	APJ	01/05/2004	16 mo
Antenna, Horn	EMCO	3115	AHC	09/07/2004	12 mo
Pre-Amplifier	Miteq	AMF-4D-005180-24-10P	APC	02/17/2005	13 mo
Antenna, Horn	EMCO	3160-09	AHG	NCR	NA
Pre-Amplifier	Miteq	JSD4-18002600-26-8P	APU	02/15/2005	13 mo
Spectrum Analyzer	Tektronix	2784	AAO	01/02/2005	12 mo
Attenuator	Coaxicom	66702 5910-20	RBJ	02/25/2005	13 mo
High Pass Filter	Micro-Tronics	HPM50111	HFO	03/09/2005	13 mo

Test Description

Simultaneous Transmission: For co-located radios, it is necessary to measure the field strength of spurious emissions, while co-located radios are transmitting simultaneously. The following is an excerpt from the FCC/TCB training Q & A, October 2002, Day 2, Question 7:

> **Assuming that the radios do not share an antenna, only radiated tests for simultaneous transmission is required. If the radios share an antenna, antenna conducted measurements would also be required. Only one set of worst case simultaneous transmission data is going to be requested to be submitted at this time. The test engineer should indicate the worst case condition and provide justification as to why the worst case condition was chosen. The grantee should be reminded that even if the FCC requests one set of data, they are responsible for compliance for all modes of simultaneous transmission.**

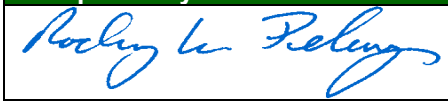
All possible combinations of harmonic emissions from the CDMA, 802.11(b), and Bluetooth radios were compared numerically. It was determined that there were no possible coincidental harmonics below 1 GHz. The frequency range from 1 GHZ to 25 GHz was investigated for channel combinations that would produce coincidental harmonics. Compliance with the restricted band at 2483.5 – 2500 MHz was also measured.

All the radios were configured for simultaneous transmission at the channels specified in the previous pages. The highest gain antennas to be used with the radios were tested. The spectrum was scanned throughout the specified range. While scanning, emissions from the radios were maximized by rotating the EUT on a turntable, adjusting the position of the EUT and EUT antennas in three orthogonal axes, and adjusting the measurement antenna height and polarization (per ANSI C63.4:2003). A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

Configuration: The highest gain of each type of antenna to be used with the EUT was tested. The EUT was configured for low, mid, and high band transmit frequencies. For each configuration, the spectrum was scanned throughout the specified range. In addition, measurements were made in the restricted bands to verify compliance. While scanning, emissions from the EUT were maximized by rotating the EUT on a turntable, adjusting the position of the EUT and EUT antenna in three orthogonal axis, and adjusting the measurement antenna height and polarization (per ANSI C63.4:1992). A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

Bandwidths Used for Measurements			
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.			

Completed by:



NORTHWEST EMC

RADIATED EMISSIONS DATA SHEET

ACQ 2005.1.3
EMI A2.13

EUT:	802UIAG	Work Order:	ITRM0065
Serial Number:		Date:	03/21/05
Customer:	Intermec Technologies Corporation	Temperature:	23
Attendees:	None	Humidity:	38%
Cust. Ref. No.:		Barometric Pressure	29.67
Tested by:	Holly Ashkannejhad	Power: 120VAC, 60Hz	Job Site: EV01

TEST SPECIFICATIONS

Specification:	FCC 15.247(d) Spurious Radiated Emissions:2004	Method:	ANSI C63.4:2003

SAMPLE CALCULATIONS

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

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

COMMENTS

Transmitting 802.11(g) High channel, Bluetooth High Channel on CK60 and Bluetooth High Channel on PB42 printer.

EUT OPERATING MODES

Simultaneous transmission of Bluetooth and 802.11(g) radios

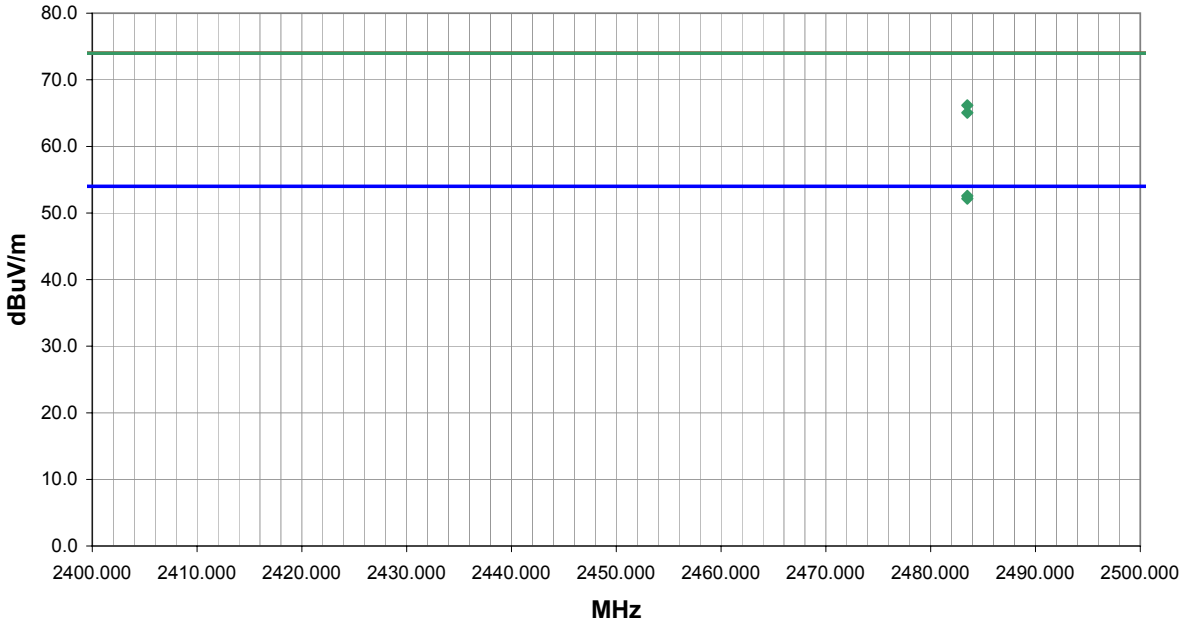
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS	Run #
Pass	8

Other

Tested By:



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)
2483.500	31.7	30.4	189.0	1.1	1.0	0.0	H-Horn	AV	-9.5	52.6	54.0	-1.4
2483.500	31.3	30.4	306.0	1.0	1.0	0.0	V-Horn	AV	-9.5	52.2	54.0	-1.8
2483.500	45.3	30.4	189.0	1.1	1.0	0.0	H-Horn	PK	-9.5	66.2	74.0	-7.8
2483.500	44.2	30.4	306.0	1.0	1.0	0.0	V-Horn	PK	-9.5	65.1	74.0	-8.9

NORTHWEST EMC

RADIATED EMISSIONS DATA SHEET

ACQ 2005.1.3
EMI A2.13

EUT:	802UIAG	Work Order:	ITRM0065
Serial Number:		Date:	03/21/05
Customer:	Intermec Technologies Corporation	Temperature:	23
Attendees:	None	Humidity:	38%
Cust. Ref. No.:		Barometric Pressure	29.67
Tested by:	Holly Ashkannejhad	Power: 120VAC, 60Hz	Job Site: EV01

TEST SPECIFICATIONS

Specification:	FCC 15.247(d) Spurious Radiated Emissions:2004	Method:	ANSI C63.4:2003

SAMPLE CALCULATIONS

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

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

COMMENTS

Transmitting 802.11(b) High channel, Bluetooth High Channel on CK60 and Bluetooth High Channel on PB42 printer.

EUT OPERATING MODES

Simultaneous transmission of Bluetooth and 802.11(b) radios

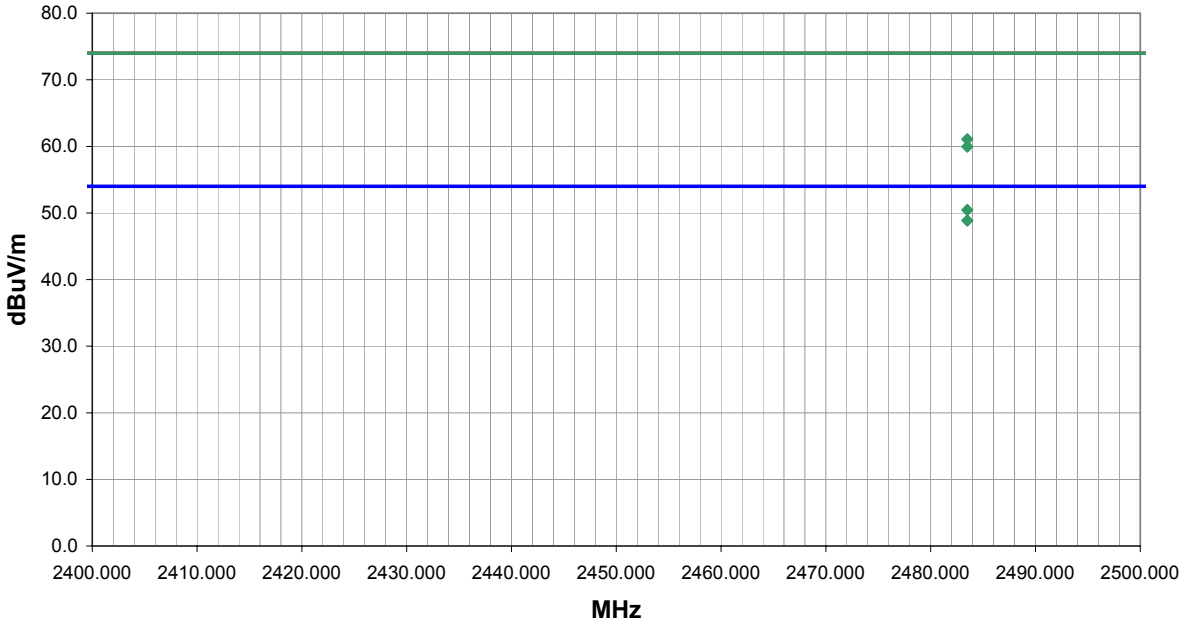
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS	Run #
Pass	9

Other

Tested By:



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)
2483.500	29.6	30.4	245.0	1.0	1.0	0.0	H-Horn	AV	-9.5	50.5	54.0	-3.5
2483.500	28.0	30.4	290.0	1.0	1.0	0.0	V-Horn	AV	-9.5	48.9	54.0	-5.1
2483.500	40.2	30.4	245.0	1.0	1.0	0.0	H-Horn	PK	-9.5	61.1	74.0	-12.9
2483.500	39.1	30.4	290.0	1.0	1.0	0.0	V-Horn	PK	-9.5	60.0	74.0	-14.0

NORTHWEST EMC

RADIATED EMISSIONS DATA SHEET

ACQ 2005.1.3
EMI 2005.1.3

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/29/05
Customer:	Intermec Technologies Corporation			Temperature:	23
Attendees:	None			Humidity:	38%
Cust. Ref. No.:				Barometric Pressure	29.67
Tested by:	Rod Peloquin	Power:	120VAC, 60Hz	Job Site:	EV01

TEST SPECIFICATIONS

Specification:	FCC 15.247(d) Spurious Radiated Emissions:2004	Method:	ANSI C63.4:2003

SAMPLE CALCULATIONS

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

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

COMMENTS

Transmitting 802.11(b) High channel, Bluetooth High Channel on CK60 and Bluetooth High Channel on PB42 printer.

EUT OPERATING MODES

Simultaneous transmission of Bluetooth and 802.11(b) radios

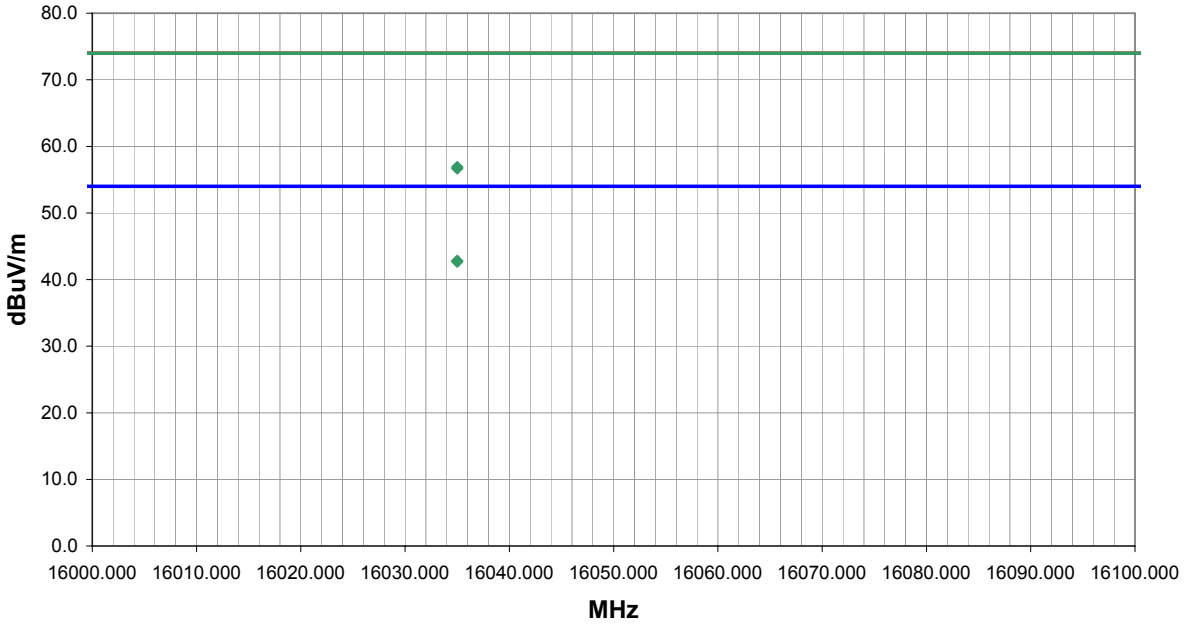
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS	Run #
Pass	10

Other

Tested By:



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)
16035.000	26.2	16.6	53.0	3.4	3.0	0.0	H-Horn	AV	0.0	42.8	54.0	-11.2
16035.000	26.1	16.6	333.0	2.2	3.0	0.0	V-Horn	AV	0.0	42.7	54.0	-11.3
16035.000	40.3	16.6	53.0	3.4	3.0	0.0	H-Horn	PK	0.0	56.9	74.0	-17.1
16035.000	40.1	16.6	333.0	2.2	3.0	0.0	V-Horn	PK	0.0	56.7	74.0	-17.3

NORTHWEST EMC

RADIATED EMISSIONS DATA SHEET

ACQ 2005.1.3
EMI 2005.1.3

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/29/05
Customer:	Intermec Technologies Corporation			Temperature:	23
Attendees:	None			Humidity:	38%
Cust. Ref. No.:				Barometric Pressure	29.67
Tested by:	Rod Peloquin	Power:	120VAC, 60Hz	Job Site:	EV01

TEST SPECIFICATIONS

Specification:	FCC 15.247(d) Spurious Radiated Emissions:2004	Method:	ANSI C63.4:2003

SAMPLE CALCULATIONS

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

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

COMMENTS

Transmitting 802.11(g) High channel, Bluetooth High Channel on CK60 and Bluetooth High Channel on PB42 printer.

EUT OPERATING MODES

Simultaneous transmission of Bluetooth and 802.11(g) radios

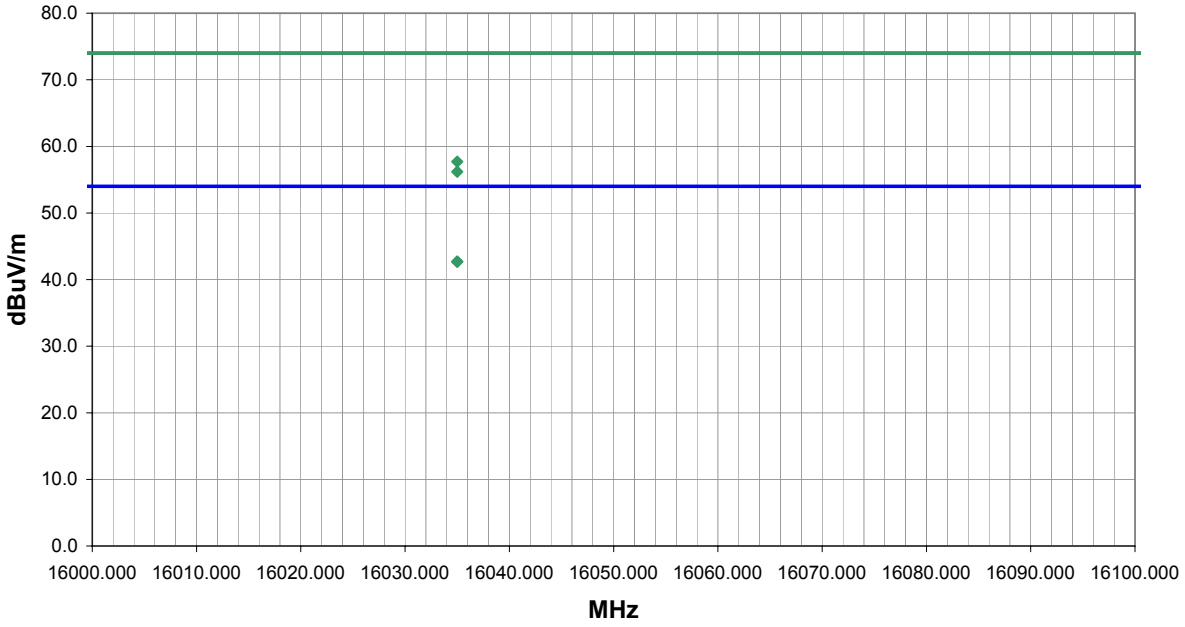
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS	Run #
Pass	11

Other

Tested By:



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)
16035.000	26.1	16.6	314.0	1.3	3.0	0.0	H-Horn	AV	0.0	42.7	54.0	-11.3
16035.000	26.1	16.6	249.0	2.0	3.0	0.0	V-Horn	AV	0.0	42.7	54.0	-11.3
16035.000	41.1	16.6	249.0	2.0	3.0	0.0	V-Horn	PK	0.0	57.7	74.0	-16.3
16035.000	39.6	16.6	314.0	1.3	3.0	0.0	H-Horn	PK	0.0	56.2	74.0	-17.8

NORTHWEST EMC

RADIATED EMISSIONS DATA SHEET

ACQ 2005.1.3
EMI 2005.1.3

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/29/05
Customer:	Intermec Technologies Corporation			Temperature:	23
Attendees:	None			Humidity:	38%
Cust. Ref. No.:				Barometric Pressure	29.67
Tested by:	Rod Peloquin	Power:	120VAC, 60Hz	Job Site:	EV01

TEST SPECIFICATIONS

Specification:	FCC 15.247(d) Spurious Radiated Emissions:2004	Method:	ANSI C63.4:2003

SAMPLE CALCULATIONS

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

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

COMMENTS

Transmitting 802.11(b) High channel, Bluetooth High Channel on CK60 and Bluetooth High Channel on PB42 printer.

EUT OPERATING MODES

Simultaneous transmission of Bluetooth and 802.11(b) radios

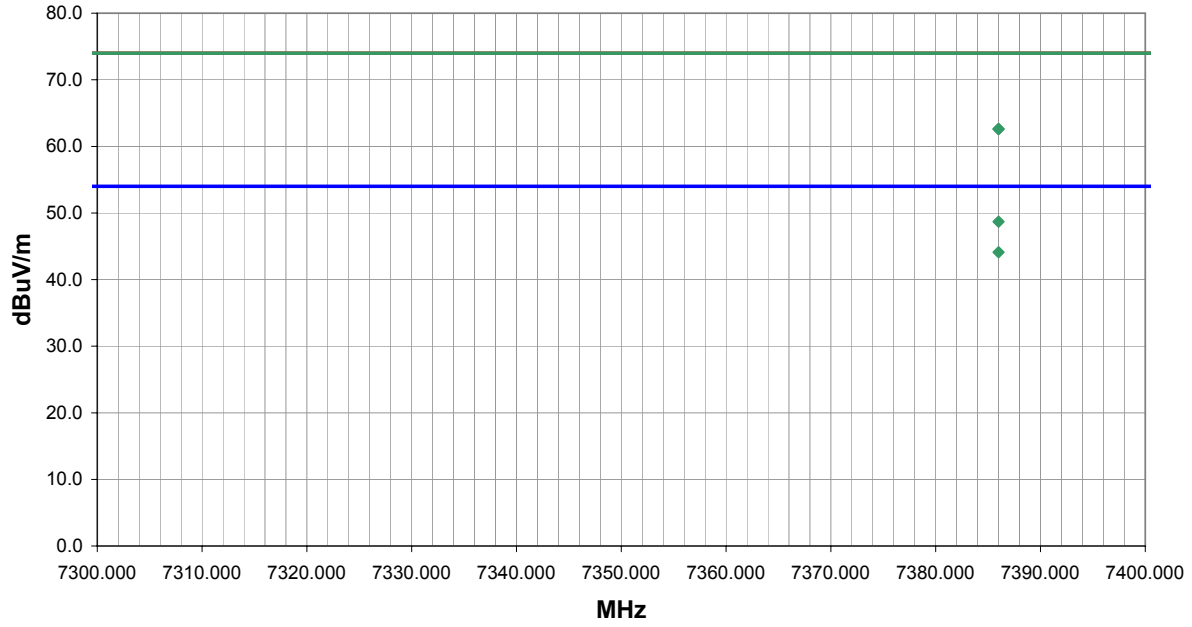
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS	Run #
Pass	12

Other

Tested By:



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)
7386.002	37.9	10.8	132.0	2.3	3.0	0.0	V-Horn	AV	0.0	48.7	54.0	-5.3
7386.002	33.3	10.8	128.0	1.3	3.0	0.0	H-Horn	AV	0.0	44.1	54.0	-9.9
7386.002	51.8	10.8	132.0	2.3	3.0	0.0	V-Horn	PK	0.0	62.6	74.0	-11.4
7386.002	51.8	10.8	128.0	1.3	3.0	0.0	H-Horn	PK	0.0	62.6	74.0	-11.4

NORTHWEST EMC

RADIATED EMISSIONS DATA SHEET

ACQ 2005.1.3
EMI 2005.1.3

EUT:	802UIAG			Work Order:	ITRM0065
Serial Number:				Date:	03/29/05
Customer:	Intermec Technologies Corporation			Temperature:	23
Attendees:	None			Humidity:	38%
Cust. Ref. No.:				Barometric Pressure	29.67
Tested by:	Rod Peloquin	Power:	120VAC, 60Hz	Job Site:	EV01

TEST SPECIFICATIONS

Specification:	FCC 15.247(d) Spurious Radiated Emissions:2004	Method:	ANSI C63.4:2003

SAMPLE CALCULATIONS

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

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

COMMENTS

Transmitting 802.11(g) High channel, Bluetooth High Channel on CK60 and Bluetooth High Channel on PB42 printer.

EUT OPERATING MODES

Simultaneous transmission of Bluetooth and 802.11(g) radios

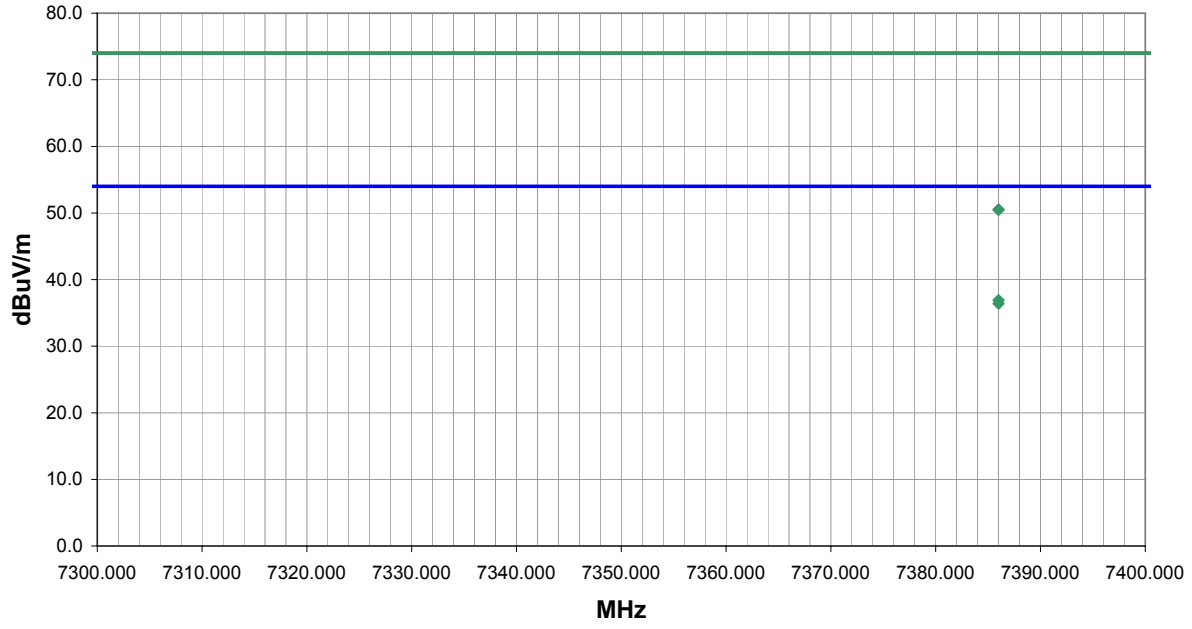
DEVIATIONS FROM TEST STANDARD

No deviations.

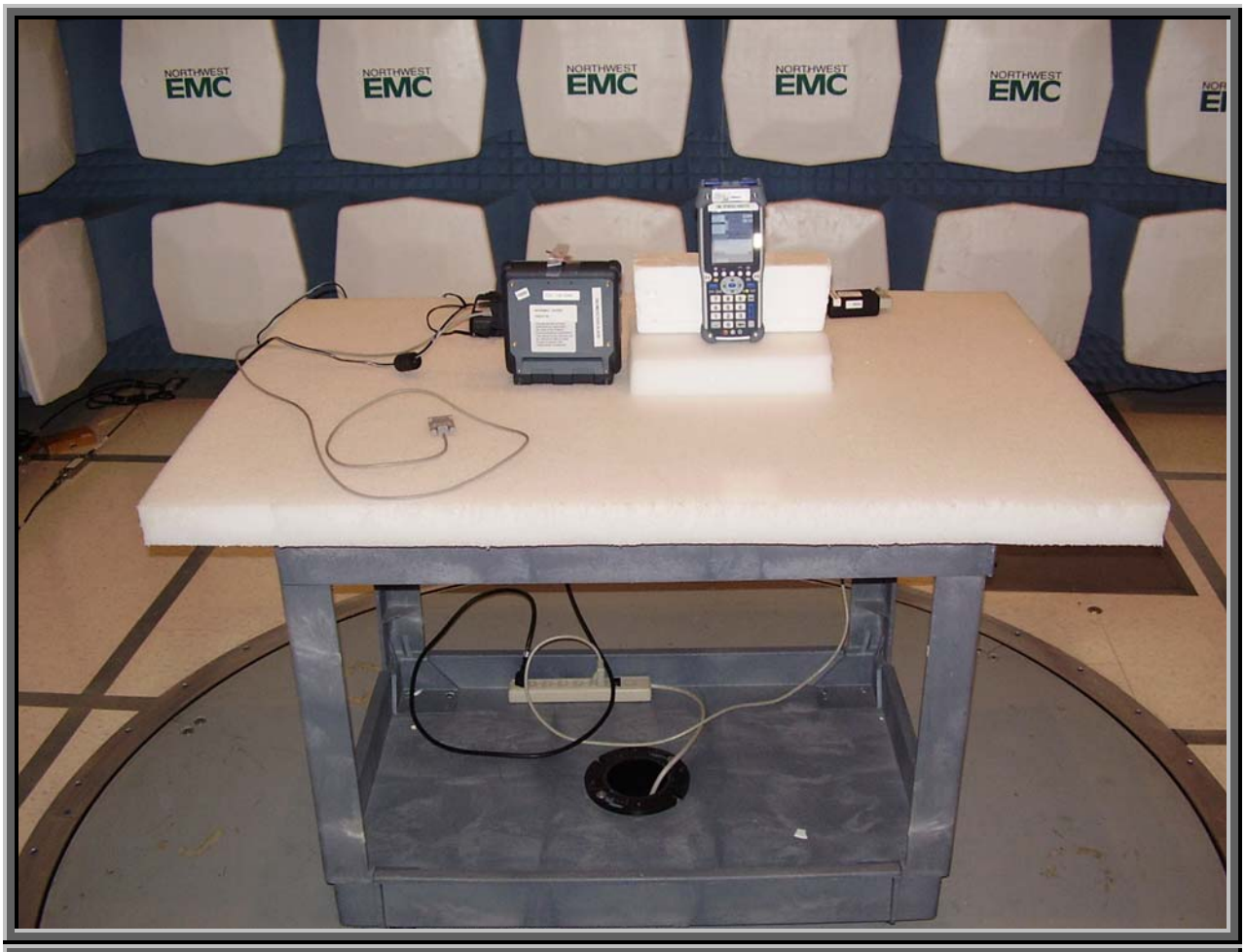
RESULTS	Run #
Pass	13

Other

Tested By:



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)
7386.002	26.1	10.8	180.0	2.4	3.0	0.0	V-Horn	AV	0.0	36.9	54.0	-17.1
7386.002	25.6	10.8	13.0	3.9	3.0	0.0	H-Horn	AV	0.0	36.4	54.0	-17.6
7386.002	39.7	10.8	180.0	2.4	3.0	0.0	V-Horn	PK	0.0	50.5	74.0	-23.5
7386.002	39.7	10.8	13.0	3.9	3.0	0.0	H-Horn	PK	0.0	50.5	74.0	-23.5


NORTHWEST
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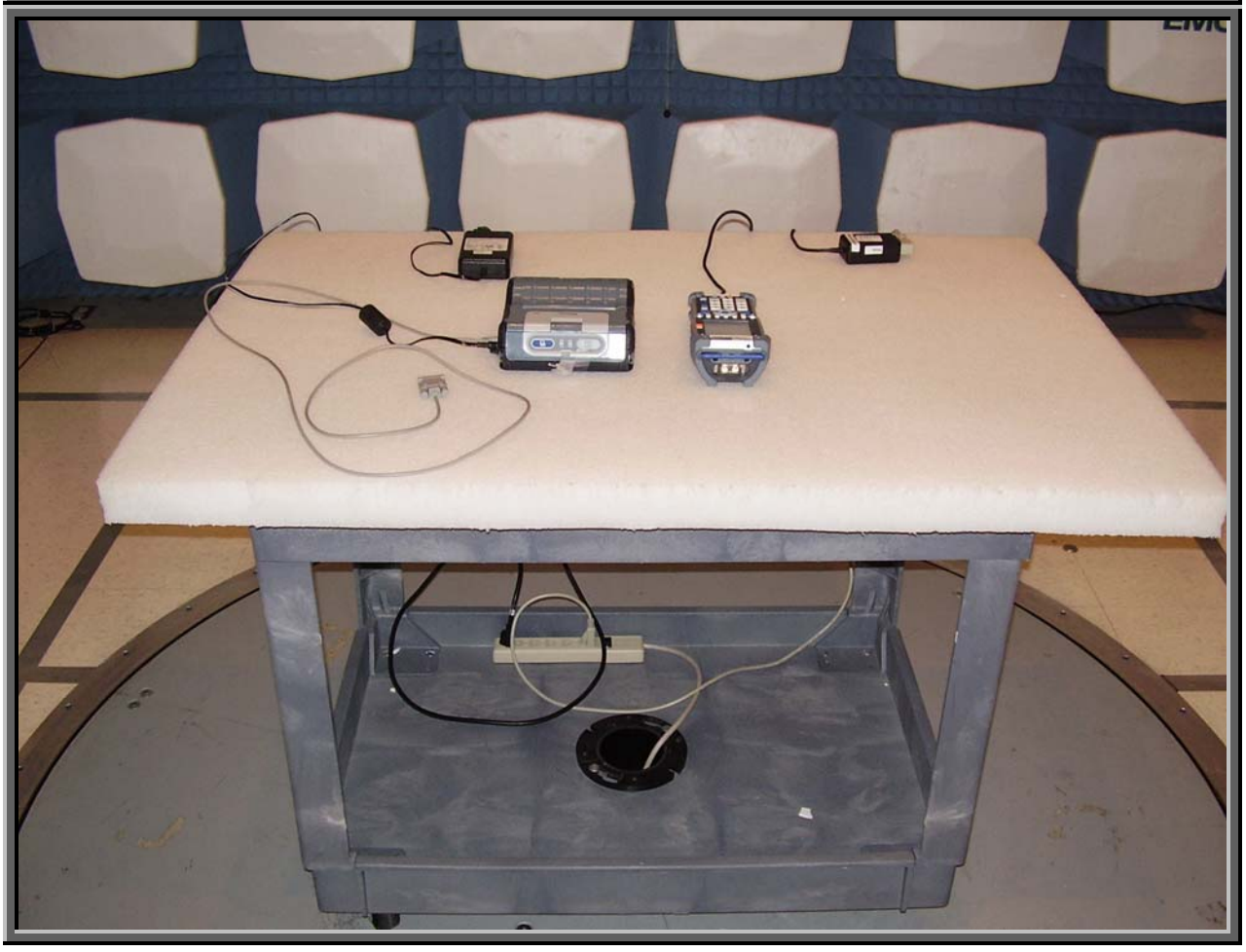

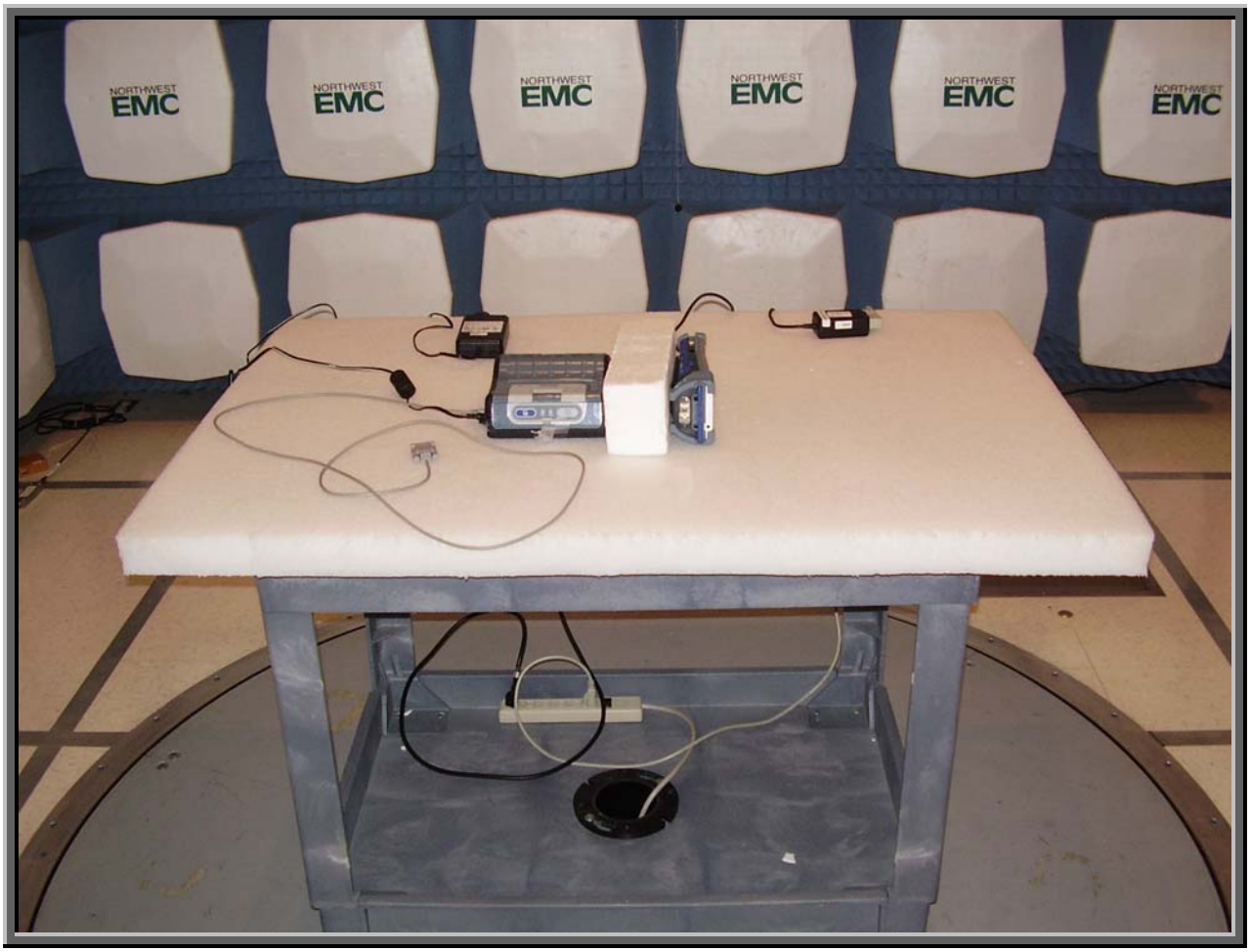
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