Intermec Technologies Corporation

IM5

December 05, 2006

Report No. ITRM0138

Report Prepared By



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

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22975 NW Evergreen Parkway Suite 400 Hillsboro, Oregon 97124

Certificate of Test

Issue Date: December 05, 2006
Intermec Technologies Corporation
Model: IM5

Emissions					
Test Description	Specification	Test Method	Pass	Fail	
Occupied Bandwidth	FCC 15.247:2006 FHSS	ANSI C63.4:2003, DA 00-705:2000	\boxtimes		
Output Power	FCC 15.247:2006 FHSS	ANSI C63.4:2003, DA 00-705:2000	\boxtimes		
Band Edge compliance	FCC 15.247:2006 FHSS	ANSI C63.4:2003, DA 00-705:2000	\boxtimes		
Spurious Conducted Emissions	FCC 15.247:2006 FHSS	ANSI C63.4:2003, DA 00-705:2000	\boxtimes		
Spurious Radiated Emissions	FCC 15.247:2006 FHSS	ANSI C63.4:2003, DA 00-705:2000	\boxtimes		

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:

Greg Kiemel, Director of Engineering

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 History

Revision 05/05/03

Revision Number	Description	Date	Page Number
00	None		

Accreditations and Authorizations

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





NVLAP: Northwest EMC, Inc. is accredited under the United States Department of Commerce, National Institute of Standards and Technology, and National Voluntary Laboratory Accreditation Program for satisfactory compliance with the requirements of ISO/IEC 17025 for Testing Laboratories. The NVLAP accreditation encompasses Electromagnetic Compatibility Testing in accordance with the European Union EMC Directive 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.



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.



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



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



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



VCCI: Accepted as an Associate Member to the VCCI, Acceptance No. 564. Conducted and radiated measurement facilities have been registered in accordance with Regulations for Voluntary Control Measures, Article 8. (Registration Numbers. - Hillsboro: C-1071, R-1025, C-2687, T-289, and R-2318, Irvine: C-2094 and R-1943, 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.



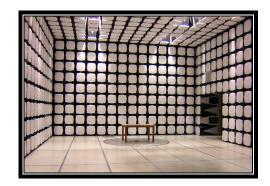
GOST: Northwest EMC, Inc. has been assessed and accredited by the Russian Certification bodies Certinform VNIINMASH, CERTINFO, SAMTES, and Federal CHEC, to perform EMC and Hygienic testing for Information Technology Products. As a result of their laboratory assessment, they will accept test results from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



SCOPE

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





California – Orange County Facility Labs OC01 – OC13

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





Oregon – Evergreen Facility Labs EV01 – EV11

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





Washington – Sultan Facility Labs SU01 – SU07

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

Party Requesting the Test

Company Name:	Intermec Technologies Corporation
Address:	550 Second St. SE
City, State, Zip:	Cedar Rapids, IA 52401-2023
Test Requested By:	Dave Fry
Model:	IM5
First Date of Test:	October 9, 2006
Last Date of Test:	October 10, 2006
Receipt Date of Samples:	October 9, 2006
Equipment Design Stage:	Production
Equipment Condition:	No Damage

Information Provided by the Party Requesting the Test

Functional Description of the EUT (Equipment Under Test):

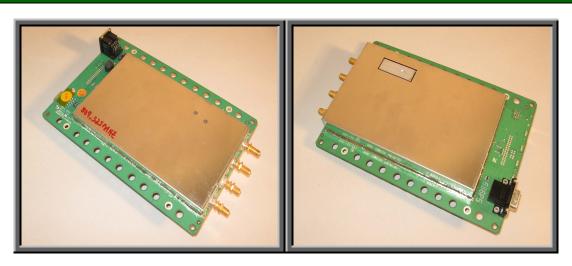
Previously certified RFID radio module. The following changes have been made that require retesting:

- The radio transmitter printed circuit board has a component change from a circulator to a RF switch in the transmitter circuit.
- The DSP controlling the transmitter is reprogrammed to make the radio compatible to Generation 2 RFID specification by adding PRASK modulation and elimination of one channel in the hopping sequence.

Testing Objective:

Only those tests that might be affected by the changes were performed. The tests demonstrate continuing compliance to FCC 15.247 requirements. The highest gain antenna sold with the module was used for spurious radiated emissions.

EUT Photo



Configurations

Revision 9/21/05

CONFIGURATION 1 ITRM0138

Software/Firmware Running during test		
Description Version		
Hyperterminal	5.1	

EUT			
Description	Manufacturer	Model/Part Number	Serial Number
EUT - FCC 915 RFID	Intermec Technologies Corporation	IM5	NL 915 4

Peripherals in test setup boundary				
Description	Manufacturer	Model/Part Number	Serial Number	
Switching Power Supply	Intermec Technologies Corporation	SPU24-104	02798281 0537	
DC Power Switch	Intermec Technologies Corporation	None	None	

Remote Equipment Outside of Test Setup Boundary				
Description Manufacturer Model/Part Number Serial Number				
Remote PC	Dell	PP01L	FR8Z411	

Cables					
Cable Type	Shield	Length (m)	Ferrite	Connection 1	Connection 2
Serial	Yes	3.0 m	No	EUT - FCC 915 RFID	Remote PC
DC Leads	PA	2.0 m	PA	EUT - FCC 915 RFID	Switching Power Supply
AC Power	No	1.8 m	No	Switching Power Supply	AC Mains
PA = Cable is permanently attached to the device. Shielding and/or presence of ferrite may be unknown.					



CONFIGURATION 2 ITRM0138

Software/Firmware Running during test		
Description	Version	
Hyperterminal	5.1	

EUT			
Description	Manufacturer	Model/Part Number	Serial Number
EUT - FCC 915 RFID	Intermec Technologies Corporation	IM5	NL 915 8

Peripherals in test setup boundary				
Description	Manufacturer	Model/Part Number	Serial Number	
Switching Power Supply	Intermec Technologies Corporation	SPU24-104	02798281 0537	
DC Power Switch	Intermec Technologies Corporation	None	None	
Mobile Mark Patch Antenna	Intermec Technologies Corporation	805-629-001		

Remote Equipment Outside of Test Setup Boundary				
Description Manufacturer Model/Part Number Serial Number				
Remote PC	Dell	PP01L	7SCQ411	

Cables							
Cable Type	Shield	Length (m)	Ferrite	Connection 1	Connection 2		
Serial	Yes	3.0 m	No	EUT - FCC 915 RFID	Remote PC		
DC Leads	PA	2.0 m	PA	EUT - FCC 915 RFID	Switching Power Supply		
AC Power	No	1.8 m	No	Switching Power Supply	AC Mains		
Antenna cable 236- 021-001	Yes	4.0m	No	EUT - FCC 915 RFID	Mobile Mark Patch Antenna		
PA = Cable is perm	anently atta	ached to the de	vice. Shield	ding and/or presence of ferr	ite may be unknown.		

Revision 4/28/03

	Equipment modifications							
Item	Date	Test	Modification	Note	Disposition of EUT			
1	10/9/2006	Occupied Bandwidth	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Northwest EMC following the test.			
2	10/9/2006	Output Power	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Northwest EMC following the test.			
3	10/9/2006	Band Edge Compliance	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Northwest EMC following the test.			
4	10/9/2006	Spurious Conducted Emissions	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Northwest EMC following the test.			
5	10/10/2006	Spurious Radiated Emissions	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	Scheduled testing was completed.			

PSA 2006.09.0

EMC

SPURIOUS RADIATED EMISSIONS

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

MODES OF OPERATION

Transmit Low channel, no hop.
Transmit Mid channel, no hop
Transmit High channel no hon

POWER SETTINGS INVESTIGATED

120VAC/60Hz

FREQUENCY RANGE INVESTIGATED					
Start Frequency	30 MHz	Stop Frequency	10 GHz		

SAMPLE CALCULATIONS

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

TEST EQUIPMENT					
Description	Manufacturer	Model	ID	Last Cal.	Interval
.5-1 GHz Notch Filter	K&L Microwave	3TNF-500/1000-N/N	HFT	8/29/2006	13
EV01 cables c,g, h			EVA	7/6/2006	13
EV01 cables g,h,j			EVB	7/6/2006	13
Antenna, Horn	ETS	3117	AHQ	6/29/2006	24
High Pass Filter 1.2 - 18 GHz	Micro-Tronics	HPM50108	HFV	9/28/2005	13
Pre-Amplifier	Miteq	AMF-4D-010100-24-10P	APW	7/6/2006	13
Pre-Amplifier	Miteq	AM-1616-1000	AOL	7/6/2006	13
Spectrum Analyzer	Agilent	E4446A	AAT	4/4/2006	12

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

MEASUREMENT UNCERTAINTY

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

TEST DESCRIPTION

The highest gain of each type of antenna to be used with the EUT was tested. The EUT was configured for low, mid, and high band transmit frequencies. For each configuration, the spectrum was scanned throughout the specified range. In addition, measurements were made in the restricted bands to verify compliance. While scanning, emissions from the EUT were maximized by rotating the EUT on a turntable, adjusting the position of the EUT and the EUT antenna in three orthogonal axis, and adjusting measurement antenna height and polarization, and manipulating the EUT antenna in 3 orthogonal planes (per ANSI C63.4:2003). A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

SPURIOUS RADIATED EMISSIONS EMC Work Order: ITRM0138 Date: 10/10/06 Serial Number: NL 915 8 **Customer: Intermec Technologies Corporation** Temperature: 21°C Attendees: None **Humidity: 33%** Project: None Barometric Pres.: 30.2 Tested by: Dan Haas Power: 120VAC/60Hz Job Site: EV01 TEST SPECIFICATIONS ANSI C63.4:2003 DA 00-705:2000 FCC 15.247:2006 FHSS TEST PARAMETERS Antenna Height(s) (m) Test Distance (m) Mobile Mark Patch Antenna. Intermec Part # 805-629-001 Antenna cable 236-021-001. X axis. **EUT OPERATING MODES** Transmit Low channel, no hop DEVIATIONS FROM TEST STANDARD No deviations. Signature Sand glan Run# Configuration # 2 Results Pass NVLAP Lab Code 200630-0 80.0 70.0 60.0 50.0 \$ dBuV/m 40.0 \$. 30.0 20.0 10.0 0.0 1000.000 10000.000 MHz Frea Amplitude Factor Azimuth Height Distance Polarity Adjustment Adjusted Spec. Limit Attenuation Detector Spec. (dBuV) (dB) (degrees) (meters) (dB) (dB) dBuV/m dBuV/m (dB) (MHz) (meters) 54.0 39.4 2708.292 32.9 6.5 81.0 1.0 3.0 0.0 V-Horn ΑV 0.0 -14.6 5416.491 25.2 13.3 319.0 1.0 3.0 0.0 V-Horn ΑV 0.0 38.5 54.0 -15.5 5416.581 23.6 H-Horn 37.0 -17.0 13.4 -1.0 1.9 3.0 0.0 ΑV 0.0 54.0 2708.270 29.0 6.5 174.0 1.0 3.0 0.0 H-Horn ΑV 0.0 35.5 54.0 -18.5 23.6 0.0 4513.780 10.7 331.0 1.4 3.0 V-Horn ΑV 0.0 34.3 54.0 -19.7 4513.706 23.5 10.7 313.0 1.0 3.0 0.0 H-Horn ΑV 0.0 34.2 54.0 -19.8 3611.011 24.1 8.6 97.0 1.0 3.0 0.0 H-Horn ΑV 0.0 32.7 54.0 -21.3 3611.103 23.6 8.6 296.0 1.0 3.0 0.0 V-Horn ΑV 0.0 32.2 54.0 -21.8 5416.549 37.5 13.3 319.0 1.0 3.0 0.0 V-Horn PΚ 0.0 50.8 74.0 -23.2 PΚ 5416.778 35.5 0.0 H-Horn 48.8 -25.2 13.3 -1.0 1.9 3.0 0.0 74.0 V-Horn PΚ 74.0 2708.164 41.8 6.5 81.0 1.0 3.0 0.0 0.0 48.3 -25.7 4513.434 36.6 10.7 331.0 1.4 3.0 0.0 V-Horn PK 0.0 47.3 74.0 -26.7 4513.538 35.7 10.7 313.0 1.0 3.0 0.0 H-Horn PΚ 0.0 46.4 74.0 -27.6 2708.101 39.1 H-Horn PΚ 6.5 174.0 1.0 3.0 0.0 0.0 45.6 74.0 -28.4 3611.050 36.1 8.6 296.0 V-Horn PΚ -29.3 1.0 3.0 0.0 0.0 44.7 74.0

H-Horn

PK

0.0

44.4

74.0

-29.6

3610.790

35.8

97.0

1.0

3.0

0.0

SPURIOUS RADIATED EMISSIONS EMC Work Order: ITRM0138 Date: 10/10/06 Serial Number: NL 915 8 **Customer: Intermec Technologies Corporation** Temperature: 21°C Attendees: None **Humidity: 33%** Project: None Barometric Pres.: 30.2 Tested by: Dan Haas Power: 120VAC/60Hz Job Site: EV01 TEST SPECIFICATIONS ANSI C63.4:2003 DA 00-705:2000 FCC 15.247:2006 FHSS TEST PARAMETERS Antenna Height(s) (m) Test Distance (m) Mobile Mark Patch Antenna. Intermec Part # 805-629-001 Antenna cable 236-021-001. X axis. **EUT OPERATING MODES** Transmit Mid channel, no hop DEVIATIONS FROM TEST STANDARD No deviations. Signature Sand glan Run# 2 Configuration # 2 Results Pass NVLAP Lab Code 200630-0 80.0 70.0 60.0 50.0 • dBuV/m 40.0 \$ \$ 30.0 20.0 10.0 0.0 1000.000 10000.000 MHz Frea Amplitude Factor Azimuth Height Distance Polarity Detector Adjustment Adjusted Spec. Limit Attenuation Spec. (dBuV) (dB) (degrees) (meters) (dB) (dB) dBuV/m dBuV/m (dB) (MHz) (meters) 54.0 36.9 2745.771 30.4 6.5 255.0 1.0 3.0 0.0 V-Horn 0.0 -17.1 4576.276 23.2 10.9 271.0 1.0 3.0 0.0 V-Horn ΑV 0.0 34.1 54.0 -19.9 4576.248 22.4 152.0 3.0 H-Horn 0.0 33.3 -20.7 10.9 1.1 0.0 ΑV 54.0 3660.978 23.7 8.7 181.0 1.0 3.0 0.0 H-Horn ΑV 0.0 32.4 54.0 -21.6 3660.863 0.0 22.8 8.7 276.0 1.0 3.0 V-Horn ΑV 0.0 31.5 54.0 -22.5 2745.801 23.3 6.5 357.0 1.0 3.0 0.0 H-Horn ΑV 0.0 29.8 54.0 -24.2 2745.599 40.8 6.5 255.0 1.0 3.0 0.0 V-Horn PK 0.0 47.3 74.0 -26.7 4576.543 35.1 10.9 271.0 1.0 3.0 0.0 V-Horn PΚ 0.0 46.0 74.0 -28.0 PΚ 4575.690 34.9 10.9 152.0 1.1 3.0 0.0 H-Horn 0.0 45.8 74.0 -28.2 36.1 PΚ 3661.091 8.7 181.0 3.0 0.0 H-Horn 0.0 44.8 74.0 -29.2 1.0 3661.848 8.7 V-Horn PK 44 4 74.0 -29.6 35.7 276.0 1.0 3.0 0.0 0.0

2745.595

35.6

6.5

357.0

1.0

3.0

0.0

H-Horn

0.0

42.1

74.0

-31.9

SPURIOUS RADIATED EMISSIONS EMC Work Order: ITRM0138 Date: 10/10/06 Serial Number: NL 915 8 **Customer: Intermec Technologies Corporation** Temperature: 21°C Attendees: None **Humidity: 33%** Project: None Barometric Pres.: 30.2 Tested by: Dan Haas Power: 120VAC/60Hz Job Site: EV01 TEST SPECIFICATIONS ANSI C63.4:2003 DA 00-705:2000 FCC 15.247:2006 FHSS TEST PARAMETERS Antenna Height(s) (m) Test Distance (m) Mobile Mark Patch Antenna. Intermec Part # 805-629-001 Antenna cable 236-021-001. X axis. **EUT OPERATING MODES** Transmit High channel, no hop DEVIATIONS FROM TEST STANDARD No deviations. Signature Sand glan Run# 3 Configuration # 2 Results Pass NVLAP Lab Code 200630-0 80.0 70.0 60.0 50.0 dBuV/m \$ • 40.0 * 30.0 20.0 10.0 0.0 1000.000 10000.000 MHz Frea Amplitude Factor Azimuth Height Distance Polarity Detector Adjustment Adjusted Spec. Limit Attenuation Spec. (dBuV) (dB) (degrees) (meters) (dB) (dB) dBuV/m dBuV/m (dB) (MHz) (meters) 54.0 35.0 2781.785 28.3 6.7 88.0 1.0 3.0 0.0 V-Horn 0.0 -19.0 4636.232 23.2 11.0 227.0 1.0 3.0 0.0 V-Horn ΑV 0.0 34.2 54.0 -19.8 4636.105 22.5 3.0 H-Horn 0.0 33.5 -20.5 11.0 49.0 1.0 0.0 ΑV 54.0 3709.087 23.0 8.7 45.0 1.6 3.0 0.0 H-Horn ΑV 0.0 31.7 54.0 -22.3 2781.782 0.0 24.8 6.7 -1.0 1.5 3.0 H-Horn ΑV 0.0 31.5 54.0 -22.5 3710.995 22.5 8.7 53.0 1.3 3.0 0.0 V-Horn ΑV 0.0 31.2 54.0 -22.8 4635.725 35.5 11.0 227.0 1.0 3.0 0.0 V-Horn PK 0.0 46.5 74.0 -27.5 4635.785 35.2 11.0 49.0 1.0 3.0 0.0 H-Horn PΚ 0.0 46.2 74.0 -27.8 88.0 PΚ 2781.784 39.3 6.7 1.0 3.0 0.0 V-Horn 0.0 46.0 74.0 -28.0 35.8 45.0 PΚ 3709.261 3.0 0.0 H-Horn 0.0 44.5 74.0 -29.5 8.7 1.6

V-Horn

H-Horn

PK

0.0

0.0

43.3

42.8

74.0

74.0

-30.7

-31.2

34.6

36.1

3709.918

2782.028

8.7

6.7

53.0

-1.0

1.3

1.5

3.0

3.0

0.0

SPURIOUS RADIATED EMISSIONS EMI 2006.7.1 **EMC** EUT: IM5 Work Order: ITRM0138 Serial Number: NL 915 8 Date: 10/10/06 Customer: Intermec Technologies Corporation Temperature: 21°C Humidity: 33% Attendees: None Barometric Pres.: 30.2 Project: None Tested by: Dan Haas Power: 120VAC/60Hz Job Site: EV01 ANSI C63.4:2003 DA 00-705:2000 FCC 15.247:2006 FHSS TEST PARAMETERS Test Distance (m) Antenna Height(s) (m) 1 - 4 COMMENTS Mobile Mark Patch Antenna. Intermec Part # 805-629-001 Antenna cable 236-021-001. EUT OPERATING MODES Transmit Low channel, no hop. DEVIATIONS FROM TEST STANDARD No deviations David affar Run# Configuration # Signature C Results Pass NVLAP Lab Code 200630-0 80.0 70.0 60.0 50.0 \$ dBuV/m : 40.0 30.0 20.0 10.0 0.0 1000.000 10000.000 MHz External Distance ompared to Distance Amplitude Factor Azimuth Height Polarity Adjusted Spec. Limit Frea Attenuation Detector Adjustmen Spec. (dBuV) (dB) (meters) (dB) (dB) dBuV/m dBuV/m (dB) Comments (MHz) (degrees) (meters) 39.4 6.5 214.0 H-Horn ΑV 45.9 54.0 Z axis 2708.304 1.1 3.0 0.0 0.0 -8.1 Y axis 2708.274 36.2 6.5 113.0 3.0 0.0 V-Horn ΑV 0.0 42.7 54.0 -11.3 1.1 3610.997 32.2 8.6 295.0 3.0 0.0 V-Horn ΑV 0.0 40.8 54.0 -13.2 Z axis 1.1 4513.784 30.0 10.7 273.0 H-Horn 40.7 54.0 -13.3 Z axis 3.0 0.0 ΑV 0.0 1.1 5416.489 26.7 13.3 137.0 3.0 0.0 V-Horn ΑV 0.0 40.0 54.0 -14.0 Z axis 1.1 V-Horn 2708.292 32.9 6.5 81.0 0.0 ΑV 0.0 39.4 54.0 -14.6 X axis 1.0 3.0 5416.484 25.2 13.4 51.0 3.0 0.0 H-Horn ΑV 0.0 38.6 54.0 -15.4 Z axis 1.7 V-Horn 5416.491 25.2 13.3 319.0 1.0 3.0 0.0 ΑV 0.0 38.5 54.0 -15.5 X axis 262.0 V-Horn 4513.804 27.2 10.7 3.0 0.0 ΑV 0.0 37.9 54.0 -16.1 Z axis 1.1 H-Horn 54.0 5416.581 23.6 13.4 -1.0 1.9 3.0 0.0 ΑV 0.0 37.0 -17.0 X axis 3611.007 230.0 H-Horn 54.0 27.8 8.6 1.0 3.0 0.0 ΑV 0.0 36.4 -17.6 Z axis 2708.274 29.5 6.5 8.0 1.1 3.0 0.0 H-Horn ΑV 0.0 36.0 54.0 -18.0 Y axis 2708.270 29.0 6.5 174.0 1.0 3.0 0.0 H-Horn ΑV 0.0 35.5 54.0 -18.5 X axis 4513.780 10.7 331.0 V-Horn 54.0 23.6 1.4 3.0 0.0 ΑV 0.0 34.3 -19.7 X axis 4513.706 23.5 10.7 313.0 H-Horn 0.0 54.0 -19.8 X axis 1.0 3.0 0.0 2708.294 214.0 H-Horn 74.0 -21.0 6.5 1.1 3.0 0.0 0.0 53.0 Z axis 2708.254 26.2 6.5 97.0 3.0 V-Horn ΑV 0.0 32.7 54.0 -21.3 Z axis 1.1 0.0 3611.011 24.1 97.0 H-Horn 32.7 54.0 -21.3 8.6 1.0 3.0 0.0 0.0 X axis 3611.103 23.6 8.6 296.0 3.0 0.0 V-Horn ΑV 0.0 32.2 54.0 -21.8 X axis

H-Horn

1.1

3.0

Z axis

SPURIOUS RADIATED EMISSIONS EMC Work Order: ITRM0138 Date: 10/10/06 Serial Number: NL 915 8 **Customer: Intermec Technologies Corporation** Temperature: 21°C Attendees: None **Humidity: 33%** Project: None Barometric Pres.: 30.2 Tested by: Dan Haas Power: 120VAC/60Hz Job Site: EV01 TEST SPECIFICATIONS ANSI C63.4:2003 DA 00-705:2000 FCC 15.247:2006 FHSS TEST PARAMETERS Antenna Height(s) (m) Test Distance (m) Mobile Mark Patch Antenna. Intermec Part # 805-629-001 Antenna cable 236-021-001. Z axis. **EUT OPERATING MODES** Transmit Low channel, no hop. DEVIATIONS FROM TEST STANDARD No deviations. Signature Sand glan Run# Configuration # 2 Results Pass NVLAP Lab Code 200630-0 80.0 70.0 60.0 2 50.0 dBuV/m \$ 40.0 30.0 20.0 10.0 0.0 1000.000 10000.000 MHz Frea Amplitude Factor Azimuth Height Distance Polarity Adjustment Adjusted Spec. Limit Attenuation Detector Spec. (dBuV) (dB) (degrees) (meters) (dB) (dB) dBuV/m dBuV/m (dB) (MHz) (meters) 54.0 2708.304 39.4 6.5 214.0 3.0 0.0 H-Horn ΑV 0.0 45.9 -8.1 3610.997 32.2 8.6 295.0 1.1 3.0 0.0 V-Horn ΑV 0.0 40.8 54.0 -13.2 4513.784 30.0 273.0 H-Horn 10.7 1.1 3.0 0.0 ΑV 0.0 40.7 54.0 -13.3 5416.489 26.7 13.3 137.0 1.1 3.0 0.0 V-Horn ΑV 0.0 40.0 54.0 -14.0 5416.484 25.2 51.0 3.0 0.0 13.4 1.7 H-Horn ΑV 0.0 38.6 54.0 -15.4 4513.804 27.2 10.7 262.0 1.1 3.0 0.0 V-Horn ΑV 0.0 37.9 54.0 -16.1 3611.007 27.8 8.6 230.0 1.0 3.0 0.0 H-Horn ΑV 0.0 36.4 54.0 -17.6 2708.294 46.5 6.5 214.0 1.1 3.0 0.0 H-Horn PΚ 0.0 53.0 74.0 -21.0 2708.254 26.2 6.5 97.0 1.1 3.0 0.0 V-Horn ΑV 0.0 32.7 54.0 -21.3 273.0 4513.488 40.9 10.7 0.0 H-Horn PK 51.6 74.0 1.1 3.0 0.0 -22.4V-Horn 3611.020 295.0 PΚ 74.0 42.2 8.6 1.1 3.0 0.0 0.0 50.8 -23.2 5416.572 37.1 13.3 137.0 1.1 3.0 0.0 V-Horn PK 0.0 50.4 74.0 -23.6 4513.788 39.2 10.7 262.0 1.1 3.0 0.0 V-Horn PΚ 0.0 49.9 74.0 -24.1

H-Horn

H-Horn

V-Horn

PΚ

PΚ

PK

0.0

0.0

0.0

49.8

47.1

44.1

74.0

74.0

74.0

-24.2

-26.9

-29.9

36.5

38.5

37.6

13.3

8.6

6.5

51.0

230.0

97.0

1.7

1.0

1.1

3.0

3.0

3.0

0.0

0.0

0.0

5416.801

3611.103

SPURIOUS RADIATED EMISSIONS EMC Work Order: ITRM0138 Date: 10/10/06 Serial Number: NL 915 8 **Customer: Intermec Technologies Corporation** Temperature: 22°C Attendees: None Humidity: 32% Project: None Barometric Pres.: 30.2 Tested by: Dan Haas Power: 120VAC/60Hz Job Site: EV01 TEST SPECIFICATIONS ANSI C63.4:2003 DA 00-705:2000 FCC 15.247:2006 FHSS TEST PARAMETERS Antenna Height(s) (m) Test Distance (m) Mobile Mark Patch Antenna. Intermec Part # 805-629-001 Antenna cable 236-021-001. Z axis **EUT OPERATING MODES** Transmit Mid channel, no hop. DEVIATIONS FROM TEST STANDARD No deviations. Signature Sand glan Run# 6 Configuration # 2 Results Pass NVLAP Lab Code 200630-0 80.0 70.0 60.0 50.0 : • dBuV/m • 40.0 • • • 30.0 20.0 10.0 0.0 1000.000 10000.000 MHz Frea Amplitude Factor Azimuth Height Distance Polarity Detector Adjustment Adjusted Spec. Limit Attenuation Spec. (dBuV) (dB) (degrees) (meters) (dB) (dB) dBuV/m dBuV/m (dB) (MHz) (meters) 38.3 54.0 27.4 4576.293 10.9 272.0 3.0 0.0 H-Horn 0.0 -15.7 3661.009 28.6 8.7 309.0 1.0 3.0 0.0 V-Horn ΑV 0.0 37.3 54.0 -16.7 2745.803 29.4 6.5 257.0 3.0 H-Horn 0.0 1.4 0.0 ΑV 35.9 54.0 -18.1 3661.015 26.9 8.7 313.0 1.0 3.0 0.0 H-Horn ΑV 0.0 35.6 54.0 -18.4 0.0 4576,290 22.7 10.9 218.0 1.0 3.0 V-Horn ΑV 0.0 33.6 54.0 -20.42745.807 24.0 6.5 92.0 1.1 3.0 0.0 V-Horn ΑV 0.0 30.5 54.0 -23.54576.287 38.1 10.9 272.0 1.2 3.0 0.0 H-Horn PK 0.0 49.0 74.0 -25.0 3661.051 39.7 8.7 309.0 1.0 3.0 0.0 V-Horn PΚ 0.0 48.4 74.0 -25.6 PΚ 2745.519 40.6 6.5 257.0 1.4 3.0 0.0 H-Horn 0.0 47.1 74.0 -26.9 PΚ 3660.968 37.9 313.0 1.0 3.0 0.0 H-Horn 0.0 46.6 74.0 -27.4 8.7 34.6 10.9 V-Horn PK 74.0

4576.893

2745.615

35.8

6.5

218.0

92.0

1.0

1.1

3.0

3.0

0.0

0.0

V-Horn

0.0

0.0

45.5

42.3

74.0

-28.5

-31.7

SPURIOUS RADIATED EMISSIONS EMC Work Order: ITRM0138 Date: 10/10/06 Serial Number: NL 915 8 **Customer: Intermec Technologies Corporation** Temperature: 22°C Attendees: None Humidity: 32% Project: None Barometric Pres.: 30.2 Tested by: Dan Haas Power: 120VAC/60Hz Job Site: EV01 TEST SPECIFICATIONS ANSI C63.4:2003 DA 00-705:2000 FCC 15.247:2006 FHSS TEST PARAMETERS Antenna Height(s) (m) Test Distance (m) Mobile Mark Patch Antenna. Intermec Part # 805-629-001 Antenna cable 236-021-001. Z axis. **EUT OPERATING MODES** Transmit High channel, no hop DEVIATIONS FROM TEST STANDARD No deviations. Signature Sand glan Run# Configuration # 2 Results Pass NVLAP Lab Code 200630-0 80.0 70.0 60.0 50.0 \$ \$ dBuV/m ٠ 40.0 \$ 30.0 20.0 10.0 0.0 1000.000 10000.000 MHz Frea Amplitude Factor Azimuth Height Distance Polarity Detector Adjustment Adjusted Spec. Limit Attenuation Spec. (dBuV) (dB) (degrees) (meters) (dB) (dB) dBuV/m dBuV/m (dB) (MHz) (meters) 54.0 35.6 4636.215 24.6 11.0 277.0 1.0 3.0 0.0 H-Horn 0.0 -18.4 2781.775 27.8 6.7 226.0 1.0 3.0 0.0 H-Horn ΑV 0.0 34.5 54.0 -19.5 3709.045 24.7 8.7 247.0 1.3 3.0 H-Horn 0.0 33.4 -20.6 0.0 ΑV 54.0 4635.149 22.4 11.0 342.0 2.5 3.0 0.0 V-Horn ΑV 0.0 33.4 54.0 -20.6 301.0 0.0 3709.038 23.3 8.7 1.0 3.0 V-Horn ΑV 0.0 32.0 54.0 -22.0 2781.792 23.0 6.7 293.0 1.0 3.0 0.0 V-Horn ΑV 0.0 29.7 54.0 -24.3 4636.589 36.6 11.0 277.0 1.0 3.0 0.0 H-Horn PK 0.0 47.6 74.0 -26.4 4635.785 35.3 11.0 342.0 2.5 3.0 0.0 V-Horn PΚ 0.0 46.3 74.0 -27.7 247.0 PΚ 3708.758 37.4 8.7 1.3 3.0 0.0 H-Horn 0.0 46.1 74.0 -27.9 226.0 PΚ 2781.624 38.6 1.0 3.0 0.0 H-Horn 0.0 45.3 74.0 6.7 -28.7 8.7 V-Horn PΚ 74.0

3708.668

2781.798

36.1

35.7

6.7

301.0

293.0

1.0

1.0

3.0

3.0

0.0

0.0

V-Horn

0.0

0.0

44.8

42.4

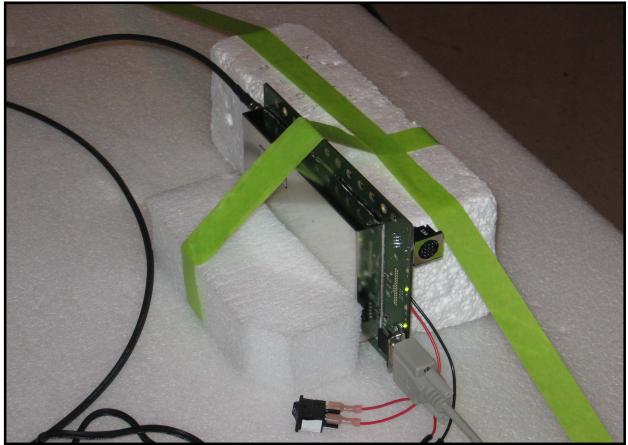
74.0

-29.2

-31.6

SPURIOUS RADIATED EMISSIONS



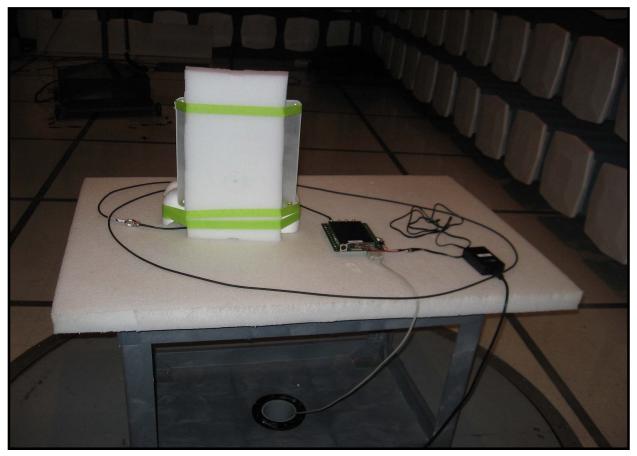


SPURIOUS RADIATED EMISSIONS





SPURIOUS RADIATED EMISSIONS





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

TEST EQUIPMENT					
Description	Manufacturer	Model	ID	Last Cal.	Interval
Spectrum Analyzer	Agilent	E4407B	AAU	9/20/2006	12
Signal Generator	Hewlett-Packard	8648D	TGC	1/27/2006	13
Power Sensor	Gigatronics	80701A	SPL	9/19/2006	12
Power Meter	Gigatronics	8651A	SPM	9/19/2006	12

MEASUREMENT UNCERTAINTY

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

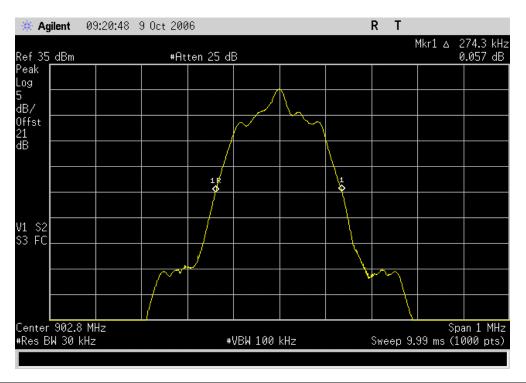
TEST DESCRIPTION

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 in a no hop mode.

NORTHWEST		OCCUPIED	BANDWIDTH		XMit 2006.08.25
EMC		OCCOI ILD I			
EUT:	IM5			Work Order:	ITRM0138
Serial Number:	NL 915 4			Date:	10/09/06
Customer:	Intermec Technologies Corporation			Temperature:	
Attendees:				Humidity:	
Project:				Barometric Pres.:	
	Rod Peloquin		Power: 120VAC/60Hz	Job Site:	EV06
TEST SPECIFICATI			Test Method		
FCC 15.247:2006 FI	HSS		ANSI C63.4:2003, DA 0	0-705:2000	
COMMENTS					
Modulated PR9 at d	default rate				
DEVIATIONS FROM	M TEST STANDARD				
		Robert.	Poli		
Configuration #	1	Rocky le Signature	- Stating		
		Gignature			
			\	/alue Li	mit Results
Low Channel			27-	4.3 kHz ≤ 50	0 kHz Pass
Mid Channel			273	2.3 kHz ≤ 50	0 kHz Pass
High Channel			272	2.3 kHz ≤ 50	0 kHz Pass

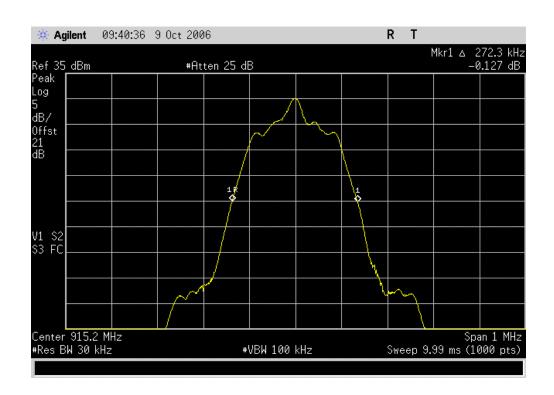
 Low Channel

 Result: Pass
 Value: 274.3 kHz
 Limit: ≤ 500 kHz



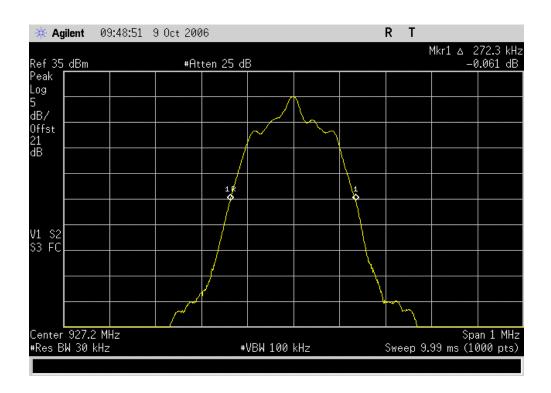
 Mid Channel

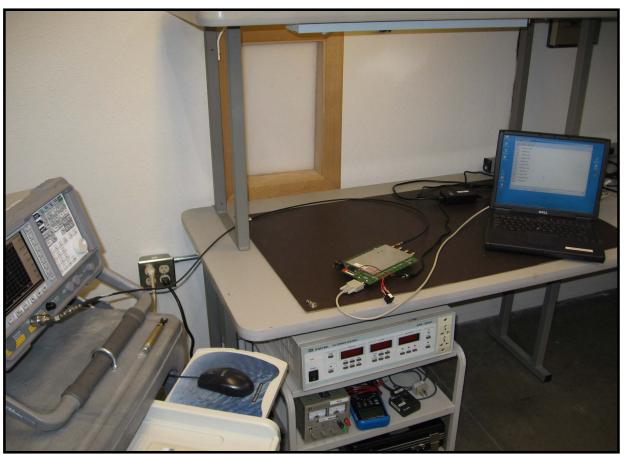
 Result: Pass
 Value: 272.3 kHz
 Limit: ≤ 500 kHz

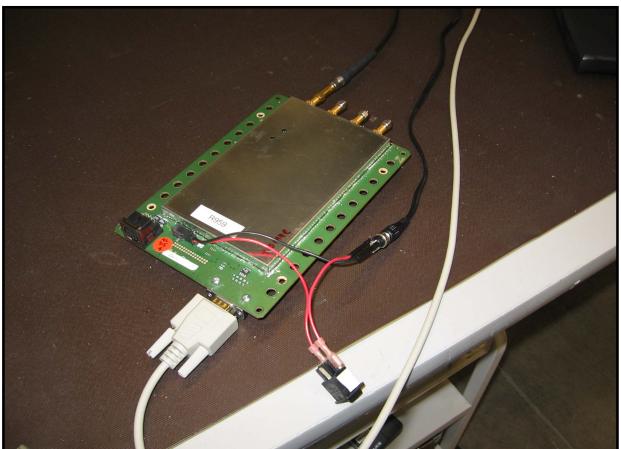


High Channel

Result: Pass Value: 272.3 kHz Limit: ≤ 500 kHz







OUTPUT POWER

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

TEST EQUIPMENT					
Description	Manufacturer	Model	ID	Last Cal.	Interval
RF Detector	RLC Electronics	CR-133-R	ZZA	NCR	0
Oscilloscope	Tektronix	TDS 3052	TOF	12/8/2005	13
Power Sensor	Gigatronics	80701A	SPL	9/19/2006	12
Power Meter	Gigatronics	8651A	SPM	9/19/2006	12
Signal Generator	Hewlett-Packard	8648D	TGC	1/27/2006	13

MEASUREMENT UNCERTAINTY

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

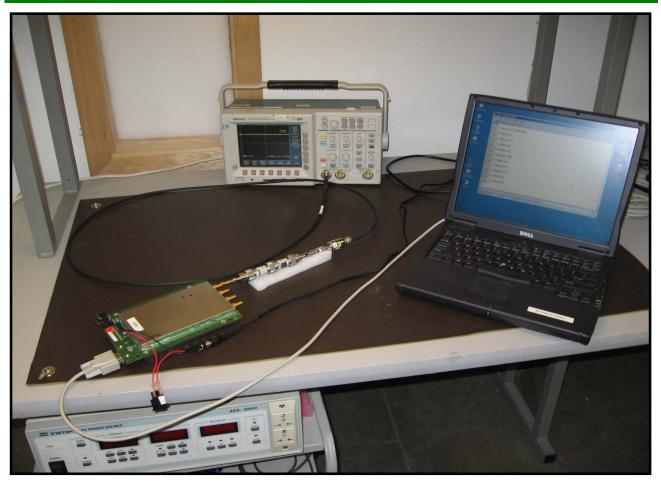
TEST DESCRIPTION

The peak output power was measured with the EUT set to low, medium, and high transmit frequencies. The EUT was transmitting at its maximum output power. The 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.

NORTHWEST		OUTPUT	DOW	ED				XMit 2006.08.25
EMC		OUTFUT	POVVI	⊏K .				
EUT:					,	Work Order:	ITRM0138	
Serial Number:							10/09/06	
	Intermec Technologies Corpora	ation			Te	emperature:		
Attendees:						Humidity:		
Project:					Baron	netric Pres.:		
	Rod Peloquin		Power:	120VAC/60Hz		Job Site:	EV06	
TEST SPECIFICATI				Test Method				
FCC 15.247:2006 FI	HSS			ANSI C63.4:2003, DA 00-	705:2000			
COMMENTS								
Modulated PR9 at n	ormal rate							
DEVIATIONS FROM	I TEST STANDARD							
Configuration #	1	Rocky le	Relevan					
Configuration #	'	Signature)				
	•	*			Val	ue		
					dBm	W	Limit	Results
Low Channel		_			29.73	0.939	1 W	Pass
Mid Channel					29.73	0.939	1 W	Pass
High Channel					29.78	0.950	1 W	Pass

OUTPUT POWER



BAND EDGE COMPLIANCE

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

TEST EQUIPMENT					
Description	Manufacturer	Model	ID	Last Cal.	Interval
Spectrum Analyzer	Agilent	E4407B	AAU	9/20/2006	12
Power Meter	Gigatronics	8651A	SPM	9/19/2006	12
Power Sensor	Gigatronics	80701A	SPL	9/19/2006	12
Signal Generator	Hewlett-Packard	8648D	TGC	1/27/2006	13

MEASUREMENT UNCERTAINTY

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

TEST DESCRIPTION

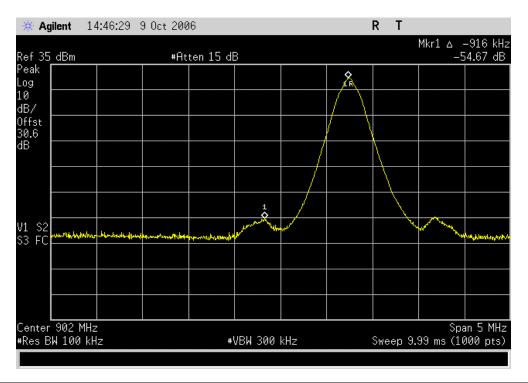
The spurious RF conducted emissions at the edges of the authorized band were measured with the EUT set to low and high transmit frequencies. The measurement was made using a direct connection between the RF output of the EUT and the spectrum analyzer. The EUT was transmitting at its maximum data rate in a no hop mode. The channels closest to the band edges were selected.

NORTHWEST EMC		BAND EDGE	COMP	LIANCE		XMit 2006.08.25
EUT:	IM5				Work Order:	ITRM0138
Serial Number:	NL 915 4				Date:	10/09/06
Customer:	Intermec Technologies Corpor	ation			Temperature:	21°C
Attendees:	None				Humidity:	
Project:	None				Barometric Pres.:	30.31
	Rod Peloquin		Power:	120VAC/60Hz	Job Site:	EV06
TEST SPECIFICATI	IONS			Test Method		
FCC 15.247:2006 FI	HSS			ANSI C63.4:2003, DA 00	-705:2000	
COMMENTS						
DEVIATIONS FROM	I TEST STANDARD					
Configuration #	1	Rocky le Signature	Reling	·		
						mit Results
Low Channel	·	·				0 dBc Pass
High Channel				-54	.9 dBc ≤ - 2	0 dBc Pass

BAND EDGE COMPLIANCE

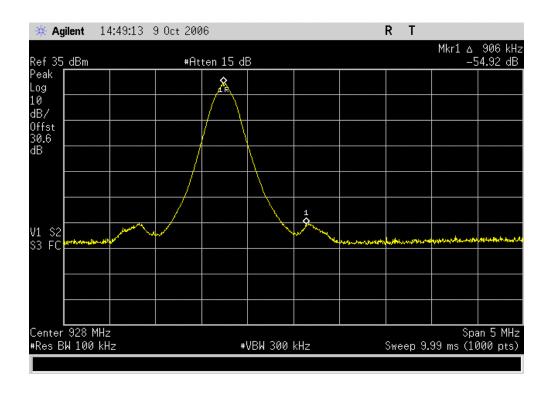
 Low Channel

 Result: Pass
 Value: -54.7 dBc
 Limit: ≤ - 20 dBc



 High Channel

 Result: Pass
 Value: -54.9 dBc
 Limit: ≤ - 20 dBc



BAND EDGE COMPLIANCE



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

TEST EQUIPMENT					
Description	Manufacturer	Model	ID	Last Cal.	Interval
Spectrum Analyzer	Agilent	E4407B	AAU	9/20/2006	12
Power Sensor	Gigatronics	80701A	SPL	9/19/2006	12
Power Meter	Gigatronics	8651A	SPM	9/19/2006	12
Signal Generator	Hewlett-Packard	8648D	TGC	1/27/2006	13

MEASUREMENT UNCERTAINTY

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

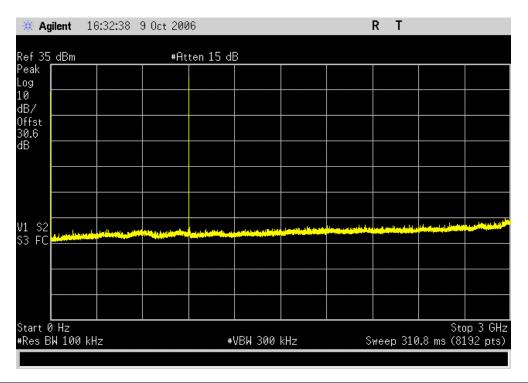
TEST DESCRIPTION

The spurious RF conducted emissions were measured with the EUT set to low, medium, and high transmit frequencies. The measurements were made using a direct connection between the RF output of the EUT and the spectrum analyzer. The EUT was transmitting at its maximum data rate in a no hop mode. For each transmit frequency, the spectrum was scanned throughout the specified frequency.

NORTHWEST		CRUBICUS	2 2 2 1 2 1	LOTED !				XMit 2006.08
EMC		SPURIOUS	S CONDU	JC I ED E	EMISSIONS			
EUT	: IM5					Work Ord	ler: ITRM0138	3
Serial Number	r: NL 915 4					Da	ate: 10/09/06	
Customer	: Intermec Technologies	Corporation				Temperatu	ire: 23°C	
Attendees	: None						ity: 32%	
Project	t: None					Barometric Pre	es.: 30.21	
	/: Rod Peloquin				0VAC/60Hz	Job S	ite: EV06	
EST SPECIFICA	TIONS			Te	st Method			
CC 15.247:2006	FHSS			AN	NSI C63.4:2003, DA 00-7	'05:2000		
COMMENTS								
odulated PR9 at	maximum data rate							
iodulated i N3 at								
	OM TEST STANDARD							
DEVIATIONS FRO	OM TEST STANDARD	Signatu	Roely le	Reling				
EVIATIONS FRO		Signati		. Reling	Val	ue	Limit	Results
DEVIATIONS FRO		Signatu		Reling	Val	ue	Limit	Results
DEVIATIONS FRO	1 0 - 3 GHz	Signatu		Relug	Val < -50 dBc	ue ≤ -20 dBc		Results
eVIATIONS FRO	1	Signatu		. Feling			; ;	
Configuration #	1 0 - 3 GHz 2.99 GHz - 10 GHz	Signati		. Feling	< -50 dBc < -50 dBc	≤ -20 dBo ≤ -20 dBo		Pass Pass
Configuration #	1 0 - 3 GHz	Signatu		Reling	< -50 dBc	≤ -20 dBc		Pass
Configuration #	1 0 - 3 GHz 2.99 GHz - 10 GHz	Signatu		Reling	< -50 dBc < -50 dBc	≤ -20 dBo ≤ -20 dBo		Pass Pass
Configuration # .ow Channel	1 0 - 3 GHz 2.99 GHz - 10 GHz 0 - 3 GHz	Signatu		Religy	< -50 dBc < -50 dBc < -50 dBc	≤ -20 dBc ≤ -20 dBc ≤ -20 dBc		Pass Pass Pass
	1 0 - 3 GHz 2.99 GHz - 10 GHz 0 - 3 GHz	Signatu		Reling.	< -50 dBc < -50 dBc < -50 dBc	≤ -20 dBc ≤ -20 dBc ≤ -20 dBc		Pass Pass Pass

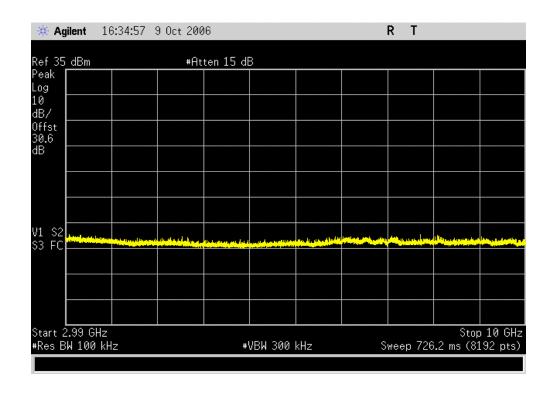
 Low Channel, 0 - 3 GHz

 Result: Pass
 Value: < -50 dBc</th>
 Limit: ≤ -20 dBc



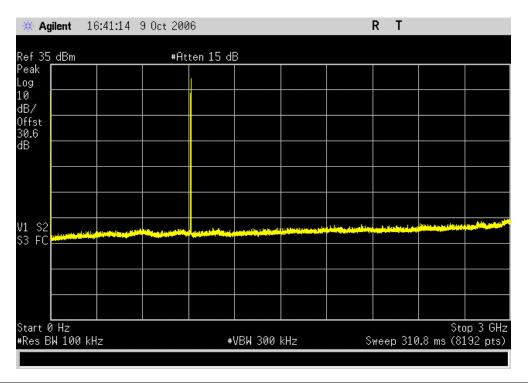
 Low Channel, 2.99 GHz - 10 GHz

 Result: Pass
 Value: < -50 dBc</th>
 Limit: ≤ -20 dBc



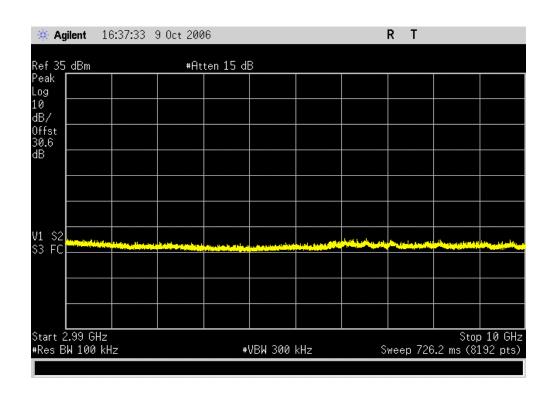
 Mid Channel, 0 - 3 GHz

 Result: Pass
 Value: < -50 dBc</th>
 Limit: ≤ -20 dBc



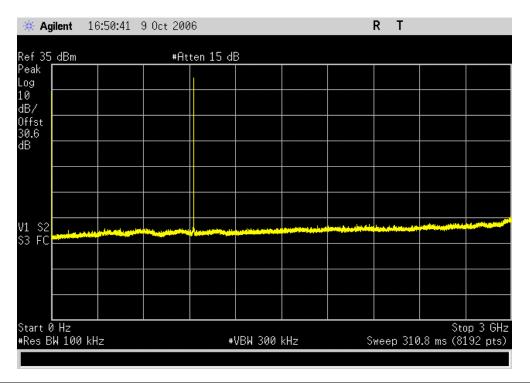
 Mid Channel, 2.99 GHz - 10 GHz

 Result: Pass
 Value: < -50 dBc</th>
 Limit: ≤ -20 dBc



 High Channel, 0 - 3 GHz

 Result:
 Pass
 Value:
 < -50 dBc</th>
 Limit:
 ≤ -20 dBc



 High Channel, 2.99 GHz - 10 GHz

 Result: Pass
 Value: < -50 dBc</th>
 Limit: ≤ -20 dBc

