

Intermec Technologies Corporation

**1000CP01S
1000CP02S
1001CP01S**

Report No. ITRM0250.1

Report Prepared By



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

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EMC Test Report

Certificate of Test

Last Date of Test: September 9, 2011
Intermec Technologies Corporation
Model: 1000CP01S, 1000CP02S, 1001CP01S

Emissions			
Test Description	Specification	Test Method	Pass/Fail
Effective Radiated Power (ERP)	FCC 22H:2011	ANSI/TIA/EIA-603-C-2004	Pass
Effective Radiated Power (EIRP)	FCC 24E:2011	ANSI/TIA/EIA-603-C-2004	Pass
Out of Band Emissions	FCC 22H:2011	ANSI/TIA/EIA-603-C-2004	Pass
Out of Band Emissions	FCC 24E:2011	ANSI/TIA/EIA-603-C-2004	Pass

Modifications made to the product

See the Modifications section of this report

Test Facility

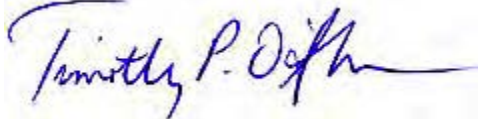
The measurement facility used to collect the data is located at:

Northwest EMC, Inc.
9349 W Broadway Ave
Brooklyn Park, MN 55445

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

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

Approved By:



Tim O'Shea, Operations Manager



NVLAP Lab Code: 200676-0

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

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

Revision Number	Description	Date	Page Number
00	None		

Barometric Pressure

The recorded barometric pressure has been normalized to sea level.



Accreditations and Authorizations

FCC

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

NVLAP

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

Industry Canada

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

CAB

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

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).



Accreditations and Authorizations

VCCI

Accepted as an Associate Member to the VCCI, Acceptance No. 564. Conducted and radiated measurement facilities have been registered in accordance with Regulations for Voluntary Control Measures, Article 8. (*Registration Numbers. - Hillsboro: C-1071, R-1025, G-84, C-2687, T-1658, and R-2318, Irvine: R-1943, G-85, C-2766, and T-1659, Sultan: R-871, G-83, C-3265, and T-1511, Brooklyn Park: R-3125, G-86, G-141, C-3464, and T-1634.*)

BSMI

Northwest EMC has been designated by NIST and validated by C-Taipei (BSMI) as a CAB to conduct tests as described in the APEC Mutual Recognition Agreement (US0017).

GOST

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

KCC

Northwest EMC, Inc is a CAB designated by MRA partners and recognized by Korea. (*Assigned Lab Numbers: Hillsboro: US0017, Irvine: US0158, Sultan: US0157, Brooklyn Park: US0175*)

VIETNAM

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

SCOPE

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

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



Northwest EMC Locations



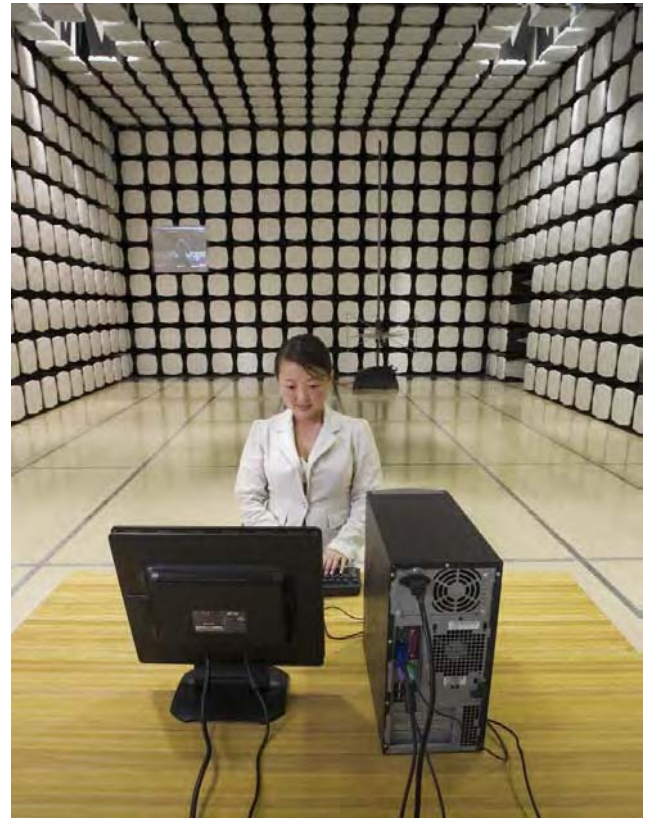
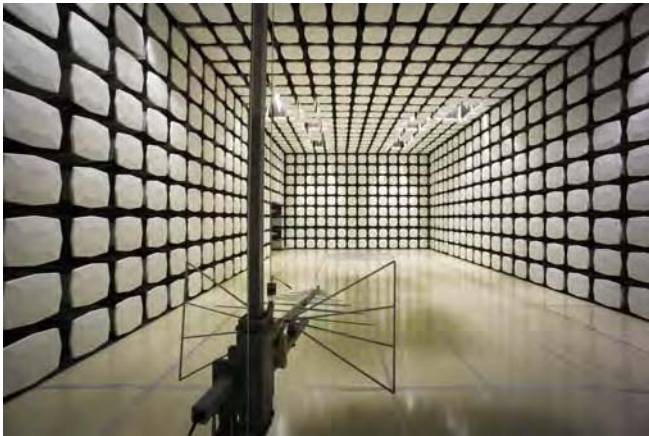
Oregon
Labs EV01-EV12
22975 NW Evergreen Pkwy
Suite 400
Hillsboro, OR 97124
(503) 844-4066

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

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

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

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



Party Requesting the Test

Company Name:	Intermec Technologies Corporation
Address:	6001 36 th Avenue West
City, State, Zip:	Everett, WA 98203-1264
Test Requested By:	Wayne Rieger
Model:	1000CP01S, 1000CP02S, 1001CP01S
First Date of Test:	8/26/2011
Last Date of Test:	9/9/2011
Receipt Date of Samples:	8/26/2011
Equipment Design Stage:	Production
Equipment Condition:	No Damage

Information Provided by the Party Requesting the Test

Functional Description of the EUT (Equipment Under Test):

Handheld computers containing the two radio modules, the Intermec Model RC12 and the Sierra Wireless MC8355, each with their own integral antenna.

The Sierra Wireless MC8355 is a CDMA radio operating in the Cellular and PCS bands.

The Intermec Model RC12 radio module is an 802.11a/b/g/n – Bluetooth radio.

Testing Objective:

To demonstrate compliance of the CDMA radio with the radiated power and radiated out of band emissions requirements of FCC 22H and FCC 24E. The antenna port direct-connect measurements are documented in a separate report.

FCC compliance of the RC12 radio module is documented in separate reports.

CONFIGURATION 1 ITRM0250

EUT			
Description	Manufacturer	Model/Part Number	Serial Number
Handheld Computer, Gobi	Intermec Technologies Corp	1000CP01S	178U1191024

Peripherals in test setup boundary			
Description	Manufacturer	Model/Part Number	Serial Number
Power Supply	Intermec Technologies Corp	9001AE02/851-094-002	36161000647

Cables					
Cable Type	Shield	Length (m)	Ferrite	Connection 1	Connection 2
AC Cable	No	1.8 m	No	Power Supply	AC Mains
DC Cable	No	1.8 m	No	Handheld Computer, Gobi	Power Supply
PA = Cable is permanently attached to the device. Shielding and/or presence of ferrite may be unknown.					

CONFIGURATION 2 ITRM0250

EUT			
Description	Manufacturer	Model/Part Number	Serial Number
Handheld Computer, Gobi	Intermec Technologies Corp	1000CP02S	178U1191039

Peripherals in test setup boundary			
Description	Manufacturer	Model/Part Number	Serial Number
Power Supply	Intermec Technologies Corp	9001AE02/851-094-002	36161000647

Cables					
Cable Type	Shield	Length (m)	Ferrite	Connection 1	Connection 2
AC Cable	No	1.8 m	No	Power Supply	AC Mains
DC Cable	No	1.8 m	No	Handheld Computer, Gobi	Power Supply
PA = Cable is permanently attached to the device. Shielding and/or presence of ferrite may be unknown.					

CONFIGURATION 3 ITRM0250

EUT			
Description	Manufacturer	Model/Part Number	Serial Number
Handheld Computer, Gobi	Intermec Technologies Corp	1001CP01S	178U1191002

Peripherals in test setup boundary			
Description	Manufacturer	Model/Part Number	Serial Number
Power Supply	Intermec Technologies Corp	9001AE02/851-094-002	36161000647

Cables					
Cable Type	Shield	Length (m)	Ferrite	Connection 1	Connection 2
AC Cable	No	1.8 m	No	Power Supply	AC Mains
DC Cable	No	1.8 m	No	Handheld Computer, Gobi	Power Supply

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

CONFIGURATION 6 ITRM0250

Software/Firmware Running during test	
Description	Version
Windows Mobile	6.5

EUT			
Description	Manufacturer	Model/Part Number	Serial Number
Handheld Computer, A1	Intermec Technologies Corp	1000CP01S	178U1191031

Peripherals in test setup boundary			
Description	Manufacturer	Model/Part Number	Serial Number
USB SNAPON	Intermec Technologies Corp	225-773-001	HDIP D-SUB, A3
Power Supply	Intermec Technologies Corp	AE39	14861000109
Battery Pack	Intermec Technologies Corp	1000AB01	24561000347

Cables					
Cable Type	Shield	Length (m)	Ferrite	Connection 1	Connection 2
AC Cable	No	1.8 m	No	Power Supply	AC Mains
DC Leads	PA	1.0m	PA	SNAPON	Power Supply
USB/DB-15 adapter	Yes	0.25m	Yes	SNAPON	USB-Mini USB cable
USB-Mini USB cable	Yes	0.30m	No	USB/DB-15 adapter cable	Unterminated

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

CONFIGURATION 7 ITRM0250**Software/Firmware Running during test**

Description	Version
Windows Mobile	6.5

EUT

Description	Manufacturer	Model/Part Number	Serial Number
Handheld Computer, B1	Intermec Technologies Corp	1000CP02S	178U1191045

Peripherals in test setup boundary

Description	Manufacturer	Model/Part Number	Serial Number
USB SNAPON	Intermec Technologies Corp	225-773-001	HDIP D-SUB, A3
Power Supply	Intermec Technologies Corp	AE39	14861000109
Battery Pack	Intermec Technologies Corp	1000AB01	24561000347

Cables

Cable Type	Shield	Length (m)	Ferrite	Connection 1	Connection 2
AC Cable	No	1.8 m	No	Power Supply	AC Mains
DC Leads	PA	1.0m	PA	SNAPON	Power Supply
USB/DB-15 adapter	Yes	0.25m	Yes	SNAPON	USB-Mini USB cable
USB-Mini USB cable	Yes	0.30m	No	USB/DB-15 adapter cable	Unterminated

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

CONFIGURATION 8 ITRM0250**Software/Firmware Running during test**

Description	Version
Windows Mobile	6.5

EUT

Description	Manufacturer	Model/Part Number	Serial Number
Handheld Computer, C1	Intermec Technologies Corp	1001CP01S	178U1191010

Peripherals in test setup boundary

Description	Manufacturer	Model/Part Number	Serial Number
USB SNAPON	Intermec Technologies Corp	225-773-001	HDIP D-SUB, A3
Power Supply	Intermec Technologies Corp	AE39	14861000109
Battery Pack	Intermec Technologies Corp	1001AB01	07461104937

Cables

Cable Type	Shield	Length (m)	Ferrite	Connection 1	Connection 2
AC Cable	No	1.8 m	No	Power Supply	AC Mains
DC Leads	PA	1.0m	PA	SNAPON	Power Supply
USB/DB-15 adapter	Yes	0.25m	Yes	SNAPON	USB-Mini USB cable
USB-Mini USB cable	Yes	0.30m	No	USB/DB-15 adapter cable	Unterminated

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

Equipment modifications					
Item	Date	Test	Modification	Note	Disposition of EUT
1	8/26/2011	Out of Band Emissions	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Northwest EMC following the test.
2	9/7/2011	Effective Radiated Power (EIRP)	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	9/8/2011	Effective Radiated Power (ERP)	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	Scheduled testing was completed.

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

MODES OF OPERATION

Transmitting Cell Band, All up bits, CDMA EV-DO Rel A
Transmitting Cell Band, All up bits, CDMA 1xRTT RC3 SO55

CHANNELS TESTED

Low = Ch.1013, 824.7MHz
Mid = Ch. 384, 836.52MHz
High = Ch. 777, 848.31MHz

POWER SETTINGS INVESTIGATED

120VAC/60Hz

FREQUENCY RANGE INVESTIGATED

Start Frequency	824 MHz	Stop Frequency	849 MHz
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SAMPLE CALCULATIONS

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

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval
Spectrum Analyzer	Agilent	E4446A	AAQ	6/24/2011	12
Antenna, Bilog	Teseq	CBL 6141B	AXR	11/29/2010	12
EV01 Cables	N/A	Bilog Cables	EVA	6/28/2011	12
Antenna, Dipole	ETS	3121C-DB4	ADH	3/6/2009	36
Attenuator, 6dB	S.M. Electronics	18N-06	AWN	5/5/2011	12
Wireless Communication Test Set	Agilent	E5515C	BSV	NCR	0
Power Meter	Gigatronics	8651A	SPM	1/7/2010	24
Power Sensor	Gigatronics	80701A	SPL	7/8/2011	24
MXG Vector Signal Generator	Agilent	N5182A	TIF	NCR	0

MEASUREMENT BANDWIDTHS

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

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

MEASUREMENT UNCERTAINTY

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

TEST DESCRIPTION

The fundamental emissions from the EUT were maximized by rotating the EUT, adjusting the measurement antenna height (1-4 meters) and polarization. The amplitude and frequency of the highest emission were noted. The EUT was then replaced with a ½ wave dipole that was successively tuned to the highest emission. A signal generator was connected to the dipole, and its output was adjusted to match the level previously noted for each frequency. The output of the signal generator was recorded. The signal generator, amplifier, and cable were then connected to an analyzer and the power output was recorded. By factoring in the dipole antenna gain (dBi), the effective radiated power for the maximum fundamental emission was determined. The ERP value was obtained from taking the value in EIRP – 2.15.

EUT: 1000CP01S	Work Order: ITRM0250
Serial Number: 178U1191031	Date: 09/08/11
Customer: Intermec Technologies Corporation	Temperature: 24
Attendees: none	Humidity: 46%
Project: None	Barometric Pres.: 30.1
Tested by: Rod Peloquin	Power: 120VAC/60Hz
	Job Site: EV01

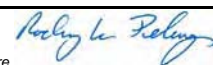
TEST SPECIFICATIONS	
FCC 22H:2011	Test Method: ANSI/TIA/EIA-603-C-2004

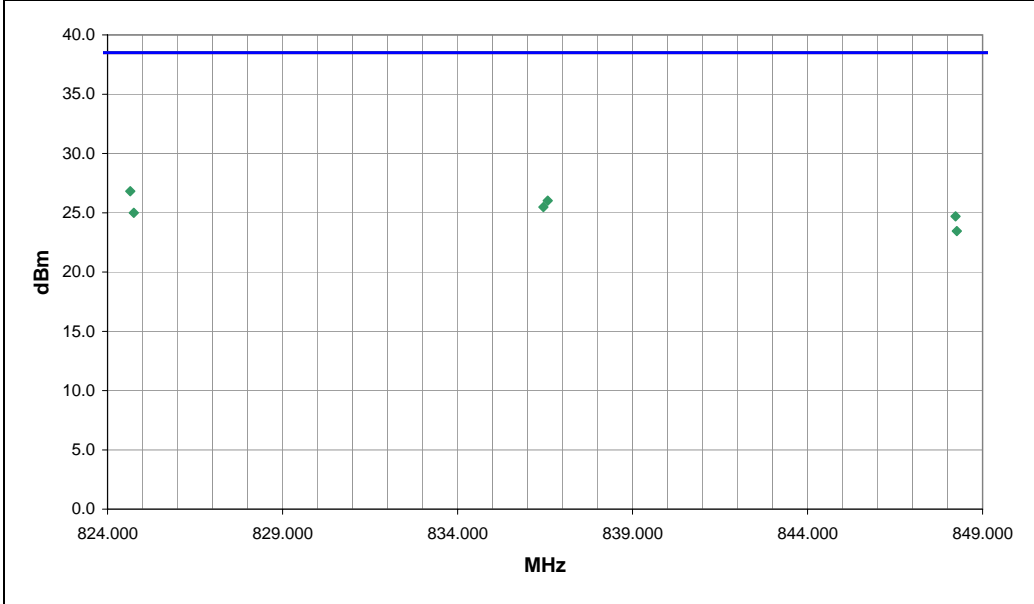
TEST PARAMETERS			
Antenna Height(s) (m)	1 - 4	Test Distance (m)	3

COMMENTS
CN70

EUT OPERATING MODES
Transmitting Cell Band, All bits up, CDMA EV-DO Rel A

DEVIATIONS FROM TEST STANDARD
No deviations.

Run #	1	 Signature
Configuration #	6	
Results	Pass	



Freq (MHz)	Azimuth (degrees)	Height (meters)	Polarity	Detector	ERP (Watts)	ERP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)	Comments
824.650	125.0	1.0	H-Bilog	PK	4.81E-01	26.8	38.5	-11.7	Low channel, EUT horizontal
836.575	217.0	1.0	H-Bilog	PK	4.00E-01	26.0	38.5	-12.5	Mid channel, EUT horizontal
836.454	179.0	1.3	V-Bilog	PK	3.53E-01	25.5	38.5	-13.0	Mid channel, EUT on side
824.750	174.0	1.3	V-Bilog	PK	3.16E-01	25.0	38.5	-13.5	Low channel, EUT on side
848.229	241.0	1.0	H-Bilog	PK	2.95E-01	24.7	38.5	-13.8	High channel, EUT horizontal
848.262	174.0	1.3	V-Bilog	PK	2.22E-01	23.5	38.5	-15.0	High channel, EUT on side

EUT: 1000CP01S	Work Order: ITRM0250
Serial Number: 178U1191031	Date: 09/09/11
Customer: Intermec Technologies Corporation	Temperature: 23
Attendees: none	Humidity: 49%
Project: None	Barometric Pres.: 30.12
Tested by: Rod Peloquin	Power: 120VAC/60Hz
	Job Site: EV01

TEST SPECIFICATIONS	
FCC 22H:2011	Test Method: ANSI/TIA/EIA-603-C-2004

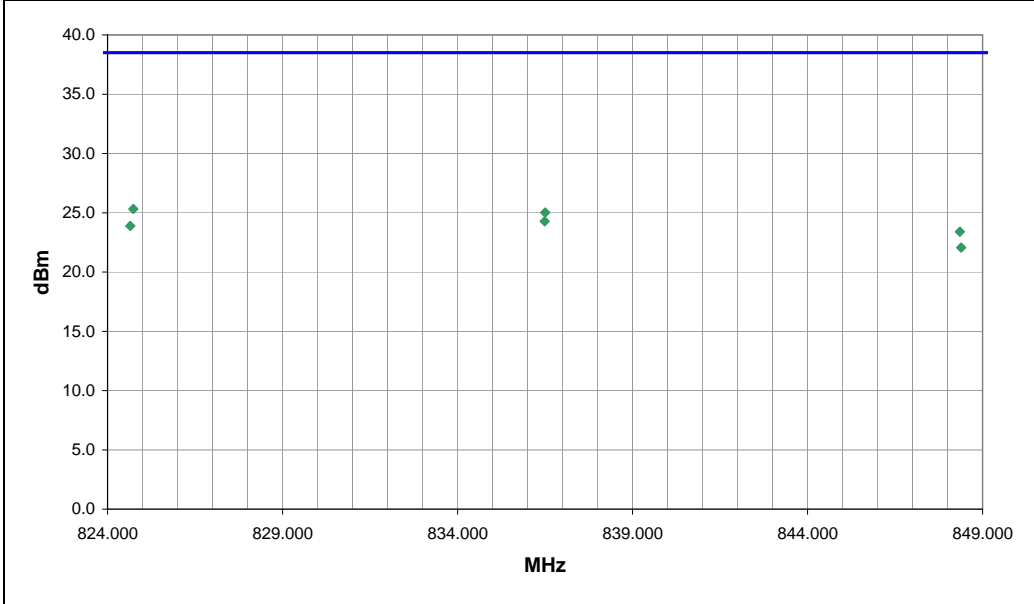
TEST PARAMETERS			
Antenna Height(s) (m)	1 - 4	Test Distance (m)	3

COMMENTS
CN70

EUT OPERATING MODES
Transmitting Cell Band, All up bits, CDMA 1xRTT RC3 SO55

DEVIATIONS FROM TEST STANDARD
No deviations.

Run #	2	 Signature
Configuration #	6	
Results	Pass	



Freq (MHz)	Azimuth (degrees)	Height (meters)	Polarity	Detector	ERP (Watts)	ERP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)	Comments
824.738	148.0	1.1	H-Bilog	PK	3.40E-01	25.3	38.5	-13.2	Low channel, EUT horizontal
836.504	144.0	1.1	H-Bilog	PK	3.18E-01	25.0	38.5	-13.5	Mid channel, EUT horizontal
836.488	189.0	1.3	V-Bilog	PK	2.68E-01	24.3	38.5	-14.2	Mid channel, EUT on side
824.650	194.0	1.3	V-Bilog	PK	2.45E-01	23.9	38.5	-14.6	Low channel, EUT on side
848.350	145.0	1.1	H-Bilog	PK	2.19E-01	23.4	38.5	-15.1	High channel, EUT horizontal
848.388	189.0	1.3	V-Bilog	PK	1.61E-01	22.1	38.5	-16.4	High channel, EUT on side

EUT: 1000CP02S	Work Order: ITRM0250
Serial Number: 178U1191045	Date: 09/09/11
Customer: Intermec Technologies Corporation	Temperature: 23
Attendees: none	Humidity: 49%
Project: None	Barometric Pres.: 30.12
Tested by: Rod Peloquin	Power: 120VAC/60Hz
	Job Site: EV01

TEST SPECIFICATIONS	
FCC 22H:2011	Test Method: ANSI/TIA/EIA-603-C-2004

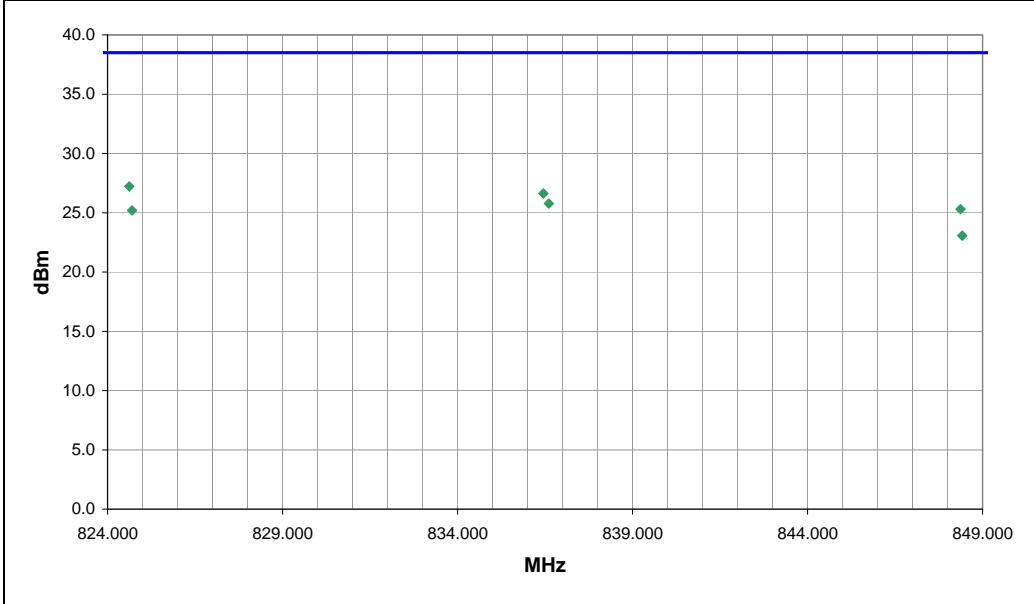
TEST PARAMETERS			
Antenna Height(s) (m)	1 - 4	Test Distance (m)	3

COMMENTS
CN70e

EUT OPERATING MODES
Transmitting Cell Band, All up bits, CDMA EV-DO Rel A

DEVIATIONS FROM TEST STANDARD
No deviations.

Run #	3	 Signature
Configuration #	7	
Results	Pass	



Freq (MHz)	Azimuth (degrees)	Height (meters)	Polarity	Detector	ERP (Watts)	ERP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)	Comments
824.621	245.0	1.0	H-Bilog	PK	5.27E-01	27.2	38.5	-11.3	Low channel, EUT horizontal
836.450	245.0	1.0	H-Bilog	PK	4.59E-01	26.6	38.5	-11.9	Mid channel, EUT horizontal
836.608	191.0	1.3	V-Bilog	PK	3.78E-01	25.8	38.5	-12.7	Mid channel, EUT on side
848.371	240.0	1.0	H-Bilog	PK	3.39E-01	25.3	38.5	-13.2	High channel, EUT horizontal
824.700	189.0	1.4	V-Bilog	PK	3.30E-01	25.2	38.5	-13.3	Low channel, EUT on side
848.421	184.0	1.3	V-Bilog	PK	2.02E-01	23.1	38.5	-15.4	High channel, EUT on side

EUT: 1000CP02S	Work Order: ITRM0250
Serial Number: 178U1191045	Date: 09/09/11
Customer: Intermec Technologies Corporation	Temperature: 23
Attendees: none	Humidity: 49%
Project: None	Barometric Pres.: 30.12
Tested by: Rod Peloquin	Power: 120VAC/60Hz
	Job Site: EV01

TEST SPECIFICATIONS	
FCC 22H:2011	Test Method: ANSI/TIA/EIA-603-C-2004

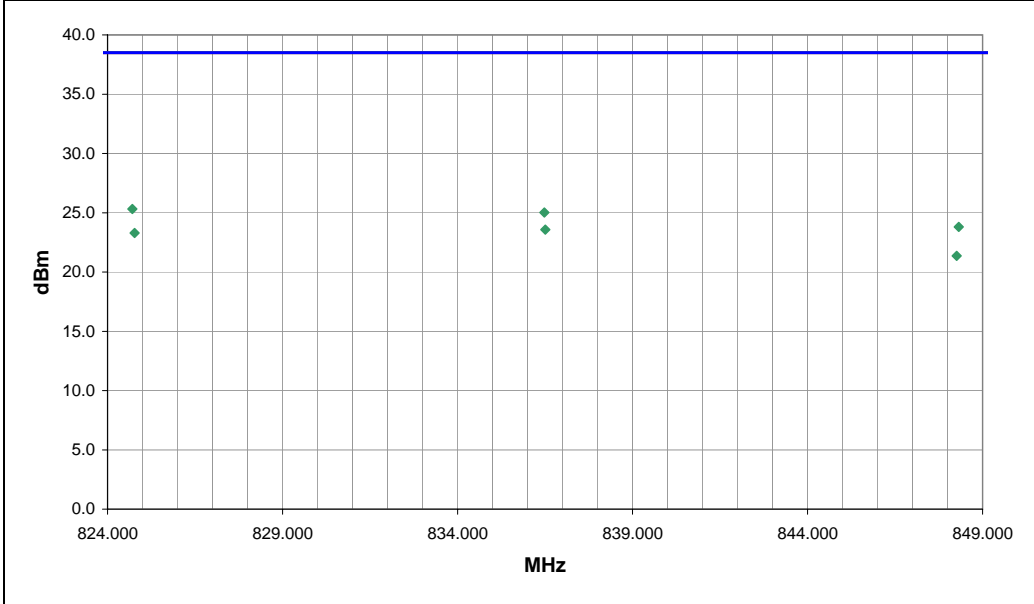
TEST PARAMETERS			
Antenna Height(s) (m)	1 - 4	Test Distance (m)	3

COMMENTS
CN70e

EUT OPERATING MODES
Transmitting Cell Band, All up bits, CDMA 1xRTT RC3 SO55

DEVIATIONS FROM TEST STANDARD
No deviations.

Run #	4	 Signature
Configuration #	7	
Results	Pass	



Freq (MHz)	Azimuth (degrees)	Height (meters)	Polarity	Detector	ERP (Watts)	ERP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)	Comments
824.708	244.0	1.0	H-Bilog	PK	3.40E-01	25.3	38.5	-13.2	Low channel, EUT horizontal
836.479	249.0	1.1	H-Bilog	PK	3.18E-01	25.0	38.5	-13.5	Mid channel, EUT horizontal
848.317	246.0	1.0	H-Bilog	PK	2.40E-01	23.8	38.5	-14.7	High channel, EUT horizontal
836.508	180.0	1.3	V-Bilog	PK	2.28E-01	23.6	38.5	-14.9	Mid channel, EUT on side
824.771	178.0	1.4	V-Bilog	PK	2.13E-01	23.3	38.5	-15.2	Low channel, EUT on side
848.258	184.0	1.3	V-Bilog	PK	1.37E-01	21.4	38.5	-17.1	High channel, EUT on side

EUT: 1001CP01S	Work Order: ITRM0250
Serial Number: 178U1191010	Date: 09/09/11
Customer: Intermec Technologies Corporation	Temperature: 23
Attendees: none	Humidity: 49%
Project: None	Barometric Pres.: 30.12
Tested by: Rod Peloquin	Power: 120VAC/60Hz
	Job Site: EV01

TEST SPECIFICATIONS	
FCC 22H:2011	Test Method: ANSI/TIA/EIA-603-C-2004

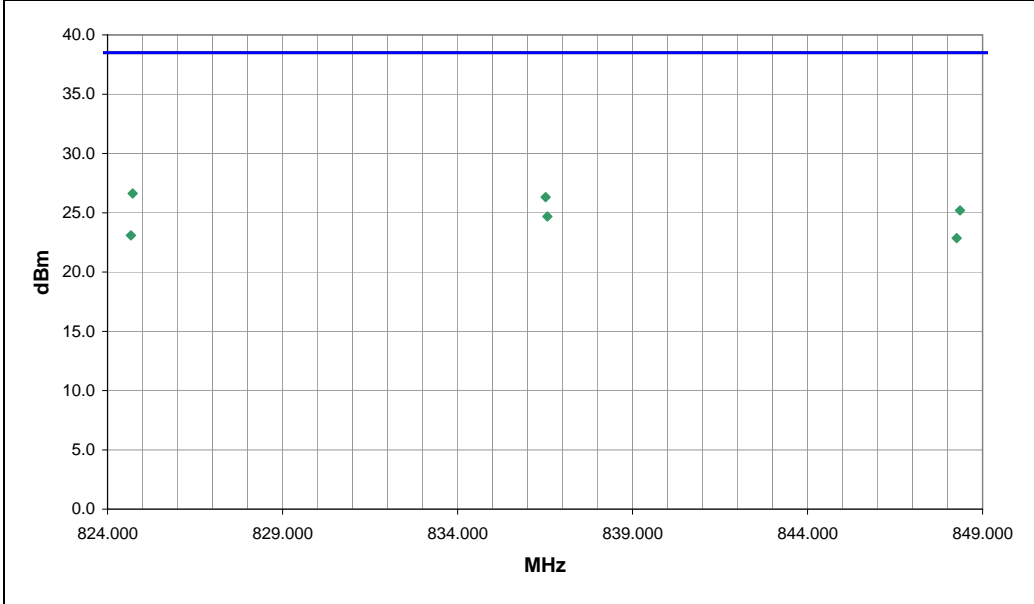
TEST PARAMETERS			
Antenna Height(s) (m)	1 - 4	Test Distance (m)	3

COMMENTS
CK70

EUT OPERATING MODES
Transmitting Cell Band, All up bits, CDMA EV-DO Rel A

DEVIATIONS FROM TEST STANDARD
No deviations.

Run #	5	 Signature
Configuration #	8	
Results	Pass	



Freq (MHz)		Azimuth (degrees)	Height (meters)		Polarity	Detector	ERP (Watts)	ERP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)	Comments
824.717		233.0	1.1		H-Bilog	PK	4.59E-01	26.6	38.5	-11.9	Low channel, EUT horizontal
836.517		234.0	1.1		H-Bilog	PK	4.29E-01	26.3	38.5	-12.2	Mid channel, EUT horizontal
848.354		235.0	1.0		H-Bilog	PK	3.31E-01	25.2	38.5	-13.3	High channel, EUT horizontal
836.567		169.0	1.4		V-Bilog	PK	2.94E-01	24.7	38.5	-13.8	Mid channel, EUT on side
824.667		164.0	1.4		V-Bilog	PK	2.04E-01	23.1	38.5	-15.4	Low channel, EUT on side
848.258		169.0	1.4		V-Bilog	PK	1.93E-01	22.9	38.5	-15.6	High channel, EUT on side

EUT: 1001CP01S	Work Order: ITRM0250
Serial Number: 178U1191010	Date: 09/09/11
Customer: Intermec Technologies Corporation	Temperature: 23
Attendees: none	Humidity: 49%
Project: None	Barometric Pres.: 30.12
Tested by: Rod Peloquin	Power: 120VAC/60Hz
	Job Site: EV01

TEST SPECIFICATIONS	
FCC 22H:2011	Test Method: ANSI/TIA/EIA-603-C-2004

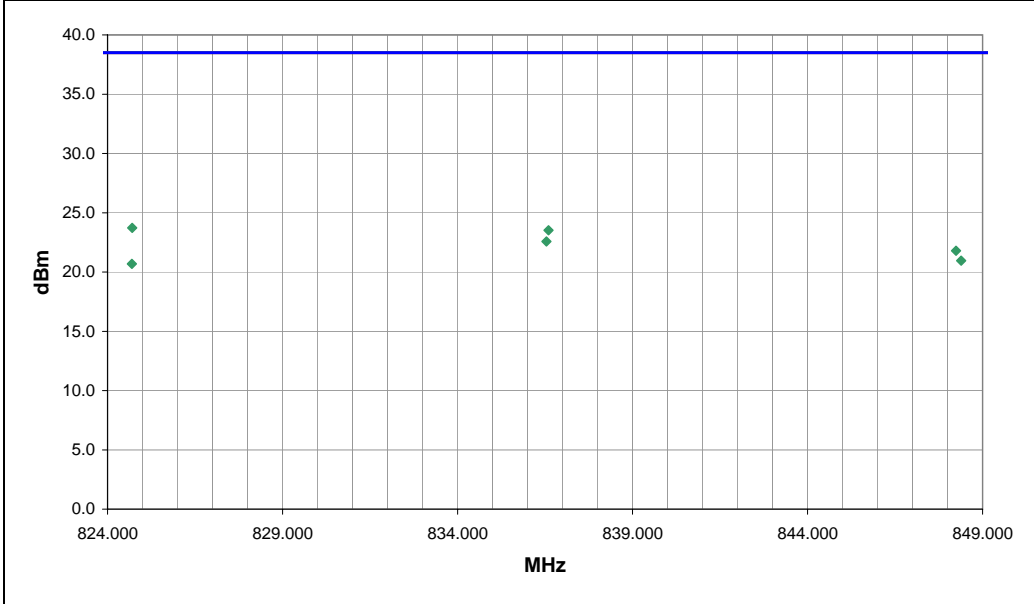
TEST PARAMETERS			
Antenna Height(s) (m)	1 - 4	Test Distance (m)	3

COMMENTS
CK70

EUT OPERATING MODES
Transmitting Cell Band, All up bits, CDMA 1xRTT RCX3 SO55

DEVIATIONS FROM TEST STANDARD
No deviations.

Run #	6	 Signature
Configuration #	8	
Results	Pass	



Freq (MHz)	Azimuth (degrees)	Height (meters)	Polarity	Detector	ERP (Watts)	ERP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)	Comments
824.704	239.0	1.1	H-Bilog	PK	2.36E-01	23.7	38.5	-14.8	Low channel, EUT horizontal
836.600	239.0	1.1	H-Bilog	PK	2.25E-01	23.5	38.5	-15.0	Mid channel, EUT horizontal
836.538	90.0	1.5	V-Bilog	PK	1.81E-01	22.6	38.5	-15.9	Mid channel, EUT on side
848.242	232.0	1.0	H-Bilog	PK	1.51E-01	21.8	38.5	-16.7	High channel, EUT horizontal
848.387	91.0	1.5	V-Bilog	PK	1.25E-01	21.0	38.5	-17.5	High channel, EUT on side
824.696	144.0	1.4	V-Bilog	PK	1.17E-01	20.7	38.5	-17.8	Low channel, EUT on side

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

MODES OF OPERATION

Transmitting PCS Band, All up bits, CDMA EV-DO Rel A
 Transmitting PCS Band, All up bits, CDMA 1xRTT, RC3 SO55

CHANNELS TESTED

Low = Ch. 25, 1851.25 MHz
 Mid = Ch. 600, 1880 MHz
 High = Ch. 1175, 1908.75 MHz

POWER SETTINGS INVESTIGATED

120VAC/60Hz

FREQUENCY RANGE INVESTIGATED

Start Frequency 1850 MHz Stop Frequency 1910 MHz

SAMPLE CALCULATIONS

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

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval
Spectrum Analyzer	Agilent	E4440A	AAW	4/19/2011	12
Antenna, Horn	ETS	3115	AIB	9/8/2010	24
Antenna, Horn	EMCO	3115	AHE	10/22/2009	24
Power Meter	Gigatronics	8651A	SPM	1/7/2010	24
Power Sensor	Gigatronics	80701A	SPL	7/8/2011	24
Wireless Communication Test Set	Agilent	E5515C	BSV	NCR	0
MXG Vector Signal Generator	Agilent	N5182A	TIF	NCR	0
EV12 Cables	N/A	Double Ridge Horn Cables	EVT	11/22/2010	12

MEASUREMENT BANDWIDTHS

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

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

MEASUREMENT UNCERTAINTY

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

TEST DESCRIPTION

The fundamental emissions from the EUT were maximized by rotating the EUT, adjusting the measurement antenna height (1-4 meters) and polarization and manipulating the EUT antenna in 3 orthogonal planes. The antennas to be used with the EUT were tested. The EUT was transmitting while set at the lowest channel, a middle channel, and the highest channel available. The amplitude and frequency were noted. The EUT was then replaced with a horn antenna. A signal generator was connected to the horn antenna and its output was adjusted to match the level previously noted for each frequency. The output of the signal generator was recorded, and by factoring in the gain (dBi) of the horn antenna the effective radiated power for each emission was determined.

EUT: 1000CP01S	Work Order: ITRM0250
Serial Number: 178U1191031	Date: 09/07/11
Customer: Intermecc Technologies Corporation	Temperature: 23
Attendees: none	Humidity: 42%
Project: None	Barometric Pres.: 30.15
Tested by: Rod Peloquin	Power: 120VAC/60Hz
	Job Site: EV12

TEST SPECIFICATIONS		Test Method	
FCC 24E:2011		ANSI/TIA/EIA-603-C-2004	

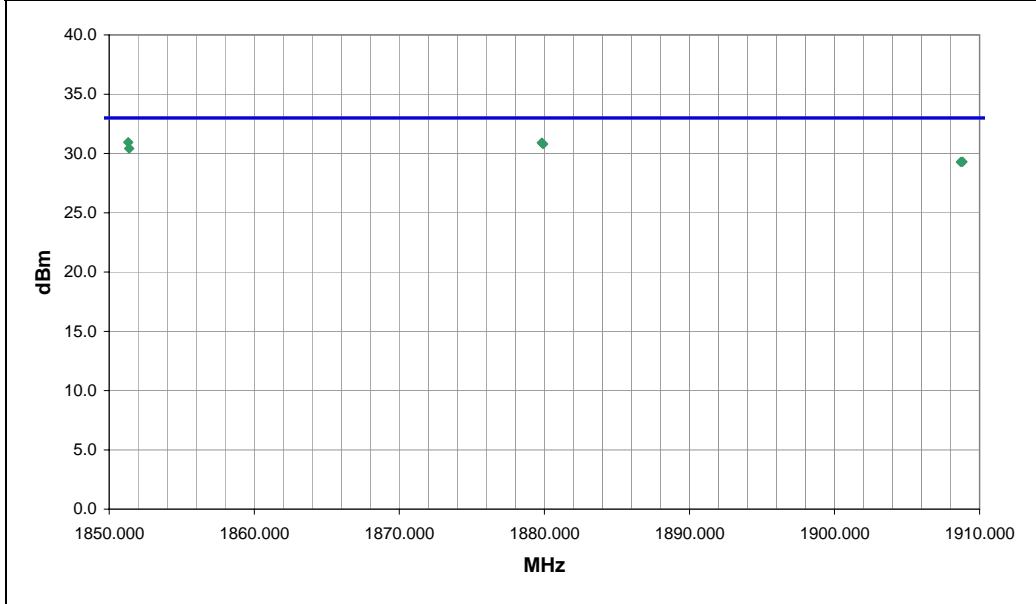
TEST PARAMETERS			
Antenna Height(s) (m)	1 - 4	Test Distance (m)	3

COMMENTS
CN70

EUT OPERATING MODES
Transmitting PCS Band, All up bits, EV-DO Rel A

DEVIATIONS FROM TEST STANDARD
No deviations.

Run #	1	 Signature
Configuration #	6	
Results	Pass	



Freq (MHz)	Azimuth (degrees)	Height (meters)	Polarity	Detector	EIRP (Watts)	EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)	Comments
1851.317	33.0	1.3	H-Horn	PK	1.24E+00	30.9	33.0	-2.1	Low channel, EUT vertical
1879.821	21.0	1.0	H-Horn	PK	1.23E+00	30.9	33.0	-2.1	Mid channel, EUT vertical
1879.912	281.0	1.4	V-Horn	PK	1.20E+00	30.8	33.0	-2.2	Mid channel, EUT on side
1851.375	278.0	1.4	V-Horn	PK	1.10E+00	30.4	33.0	-2.6	Low channel, EUT on side
1908.825	26.0	1.3	H-Horn	PK	8.51E-01	29.3	33.0	-3.7	High channel, EUT vertical
1908.708	296.0	1.0	V-Horn	PK	8.47E-01	29.3	33.0	-3.7	High channel, EUT on side

EUT: 1000CP01S	Work Order: ITRM0250
Serial Number: 178U1191031	Date: 09/07/11
Customer: Intermecc Technologies Corporation	Temperature: 23
Attendees: none	Humidity: 42%
Project: None	Barometric Pres.: 30.15
Tested by: Rod Peloquin	Power: 120VAC/60Hz
	Job Site: EV12

TEST SPECIFICATIONS		Test Method	
FCC 24E:2011		ANSI/TIA/EIA-603-C-2004	

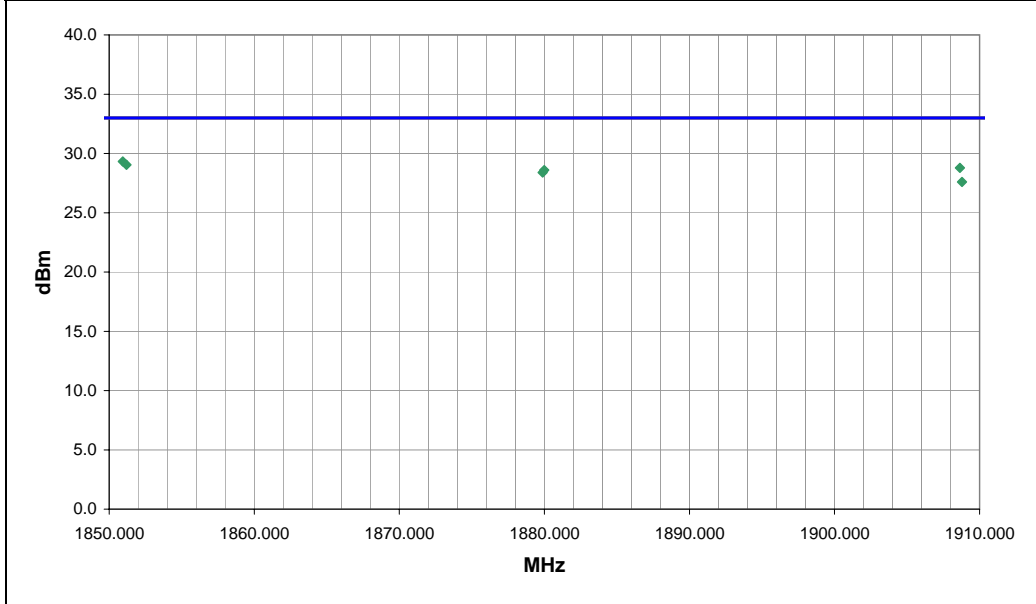
TEST PARAMETERS			
Antenna Height(s) (m)	1 - 4	Test Distance (m)	3

COMMENTS
CN70

EUT OPERATING MODES
Transmitting PCS Band, All up bits, CDMA 1xRTT, RC3 SO55

DEVIATIONS FROM TEST STANDARD
No deviations.

Run #	2	<i>Rodry Le Pellego</i> Signature
Configuration #	6	
Results	Pass	



Freq (MHz)	Azimuth (degrees)	Height (meters)	Polarity	Detector	EIRP (Watts)	EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)	Comments
1850.933	322.0	1.4	V-Horn	PK	8.55E-01	29.3	33.0	-3.7	Low channel, EUT on side
1851.196	42.0	1.3	H-Horn	PK	8.02E-01	29.0	33.0	-4.0	Low channel, EUT vertical
1908.642	310.0	1.0	V-Horn	PK	7.55E-01	28.8	33.0	-4.2	High channel, EUT on side
1879.987	40.0	1.3	H-Horn	PK	7.24E-01	28.6	33.0	-4.4	Mid channel, EUT vertical
1879.879	313.0	1.0	V-Horn	PK	6.92E-01	28.4	33.0	-4.6	Mid channel, EUT on side
1908.787	41.0	1.3	H-Horn	PK	5.75E-01	27.6	33.0	-5.4	High channel, EUT vertical

EUT: 1000CP02S	Work Order: ITRM0250
Serial Number: 178U1191045	Date: 09/08/11
Customer: Intermec Technologies Corporation	Temperature: 23
Attendees: none	Humidity: 42%
Project: None	Barometric Pres.: 30.15
Tested by: Rod Peloquin	Power: 120VAC/60Hz
	Job Site: EV12

TEST SPECIFICATIONS	Test Method
FCC 24E:2011	ANSI/TIA/EIA-603-C-2004

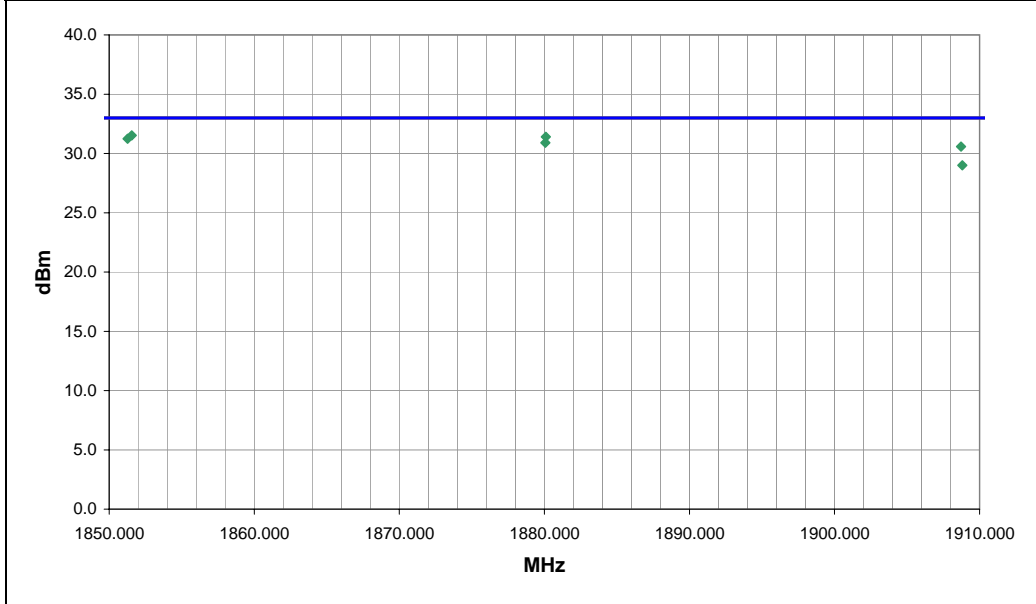
TEST PARAMETERS	
Antenna Height(s) (m) 1 - 4	Test Distance (m) 3

COMMENTS
CN70e

EUT OPERATING MODES
Transmitting PCS Band, All up bits, CDMA EV-DO Rel A

DEVIATIONS FROM TEST STANDARD
No deviations.

Run #	3	 Signature
Configuration #	7	
Results	Pass	



Freq (MHz)	Azimuth (degrees)	Height (meters)	Polarity	Detector	EIRP (Watts)	EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)	Comments
1851.550	306.0	1.4	V-Horn	PK	1.42E+00	31.5	33.0	-1.5	Low channel, EUT on side
1880.104	29.0	1.3	H-Horn	PK	1.38E+00	31.4	33.0	-1.6	Mid channel, EUT vertical
1851.271	31.0	1.3	H-Horn	PK	1.33E+00	31.2	33.0	-1.8	Low channel, EUT vertical
1880.071	310.0	1.4	V-Horn	PK	1.23E+00	30.9	33.0	-2.1	Mid channel, EUT on side
1908.725	325.0	1.0	V-Horn	PK	1.14E+00	30.6	33.0	-2.4	High channel, EUT on side
1908.812	351.0	1.0	H-Horn	PK	7.94E-01	29.0	33.0	-4.0	High channel, EUT vertical

EUT: 1000CP02S	Work Order: ITRM0250
Serial Number: 178U1191045	Date: 09/08/11
Customer: Intermec Technologies Corporation	Temperature: 23
Attendees: none	Humidity: 42%
Project: None	Barometric Pres.: 30.15
Tested by: Rod Peloquin	Power: 120VAC/60Hz
	Job Site: EV12

TEST SPECIFICATIONS		Test Method
FCC 24E:2011		ANSI/TIA/EIA-603-C-2004

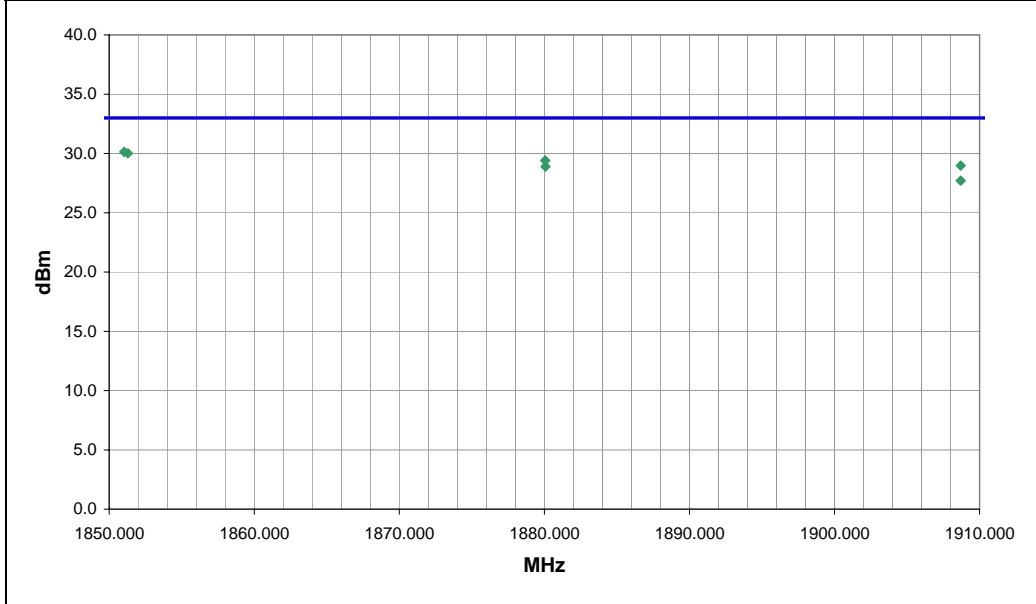
TEST PARAMETERS			
Antenna Height(s) (m)	1 - 4	Test Distance (m)	3

COMMENTS
CN70e

EUT OPERATING MODES
Transmitting PCS Band, All up bits, CDMA 1xRTT, RC3 SO55

DEVIATIONS FROM TEST STANDARC
No deviations.

Run #	4	 Signature
Configuration #	7	
Results	Pass	



Freq (MHz)	Azimuth (degrees)	Height (meters)	Polarity	Detector	EIRP (Watts)	EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)	Comments
1851.042	29.0	1.3	H-Horn	PK	1.03E+00	30.1	33.0	-2.9	Low channel, EUT vertical
1851.287	262.0	1.0	V-Horn	PK	1.00E+00	30.0	33.0	-3.0	Low channel, EUT on side
1880.058	31.0	1.3	H-Horn	PK	8.71E-01	29.4	33.0	-3.6	Mid channel, EUT vertical
1908.696	262.0	1.0	V-Horn	PK	7.91E-01	29.0	33.0	-4.0	High channel, EUT on side
1880.079	294.0	1.0	V-Horn	PK	7.76E-01	28.9	33.0	-4.1	Mid channel, EUT on side
1908.696	352.0	1.0	H-Horn	PK	5.89E-01	27.7	33.0	-5.3	High channel, EUT vertical

EUT: 1001CP01S	Work Order: ITRM0250
Serial Number: 178U1191010	Date: 09/08/11
Customer: Intermecc Technologies Corporation	Temperature: 23
Attendees: none	Humidity: 42%
Project: None	Barometric Pres.: 30.15
Tested by: Rod Peloquin	Power: 120VAC/60Hz
	Job Site: EV12

TEST SPECIFICATIONS		Test Method	
FCC 24E:2011		ANSI/TIA/EIA-603-C-2004	

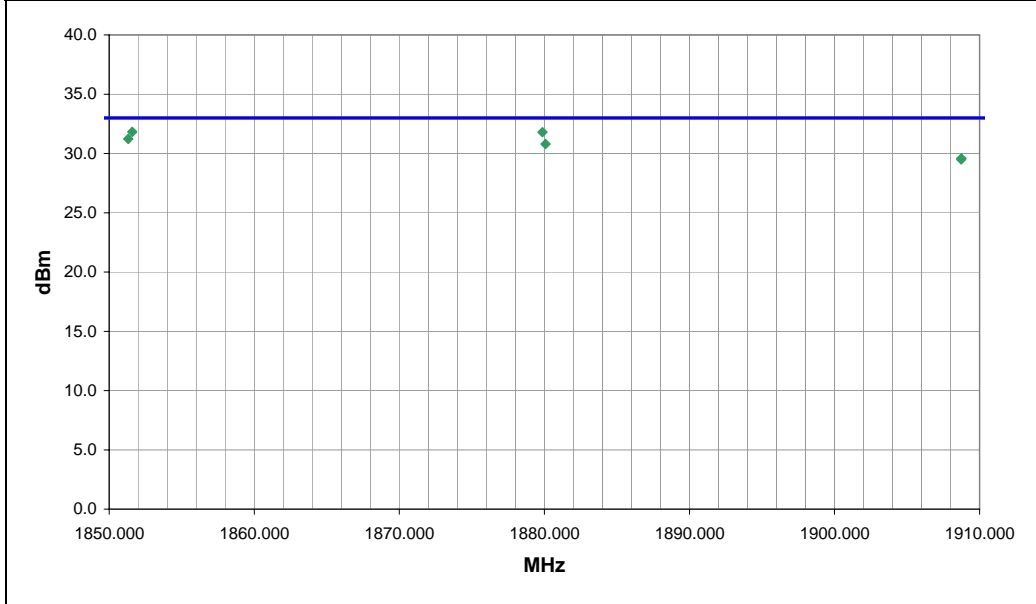
TEST PARAMETERS			
Antenna Height(s) (m)	1 - 4	Test Distance (m)	3

COMMENTS
CK70

EUT OPERATING MODES
Transmitting PCS Band, All up bits, CDMA EV-DO Rel A

DEVIATIONS FROM TEST STANDARD
No deviations.

Run #	5	 Signature
Configuration #	8	
Results	Pass	



Freq (MHz)	Azimuth (degrees)	Height (meters)	Polarity	Detector	EIRP (Watts)	EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)	Comments
1851.592	289.0	1.4	V-Horn	PK	1.52E+00	31.8	33.0	-1.2	Low channel, EUT on side
1879.867	265.0	1.4	V-Horn	PK	1.51E+00	31.8	33.0	-1.2	Mid channel, EUT on side
1851.312	74.0	1.2	H-Horn	PK	1.33E+00	31.2	33.0	-1.8	Low channel, EUT vertical
1880.079	70.0	1.6	H-Horn	PK	1.20E+00	30.8	33.0	-2.2	Mid channel, EUT vertical
1908.742	305.0	1.0	V-Horn	PK	9.08E-01	29.6	33.0	-3.4	High channel, EUT on side
1908.733	66.0	1.5	H-Horn	PK	8.91E-01	29.5	33.0	-3.5	High channel, EUT vertical

EUT: 1001CP01S	Work Order: ITRM0250
Serial Number: 178U1191010	Date: 09/08/11
Customer: Intermec Technologies Corporation	Temperature: 23
Attendees: none	Humidity: 42%
Project: None	Barometric Pres.: 30.15
Tested by: Rod Peloquin	Power: 120VAC/60Hz
	Job Site: EV12

TEST SPECIFICATIONS		Test Method	
FCC 24E:2011		ANSI/TIA/EIA-603-C-2004	

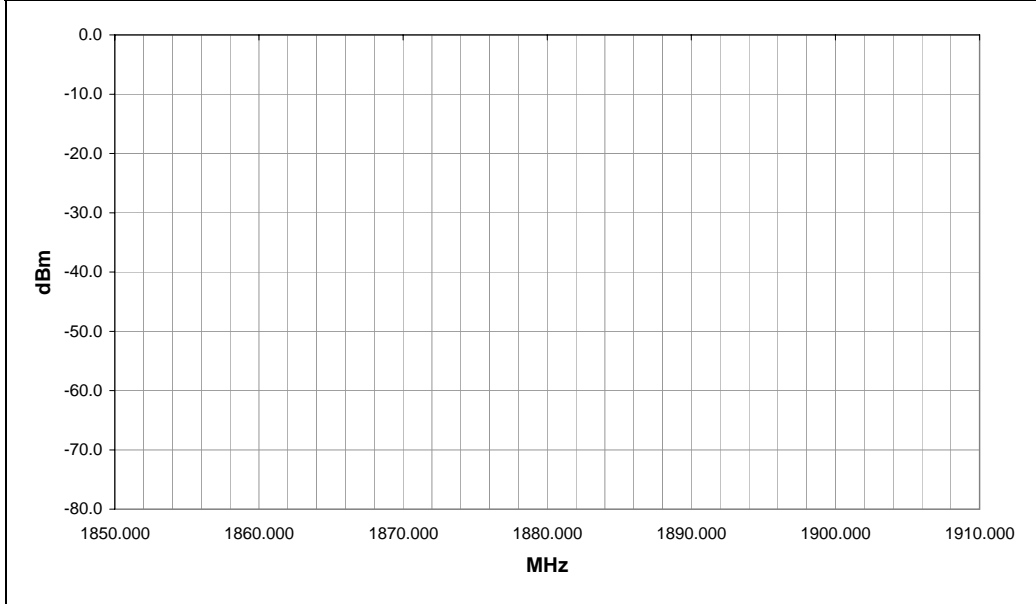
TEST PARAMETERS			
Antenna Height(s) (m)	1 - 4	Test Distance (m)	3

COMMENTS
CK70

EUT OPERATING MODES
Transmitting PCS Band, All up bits, CDMA 1xRTT, RC3 SO55

DEVIATIONS FROM TEST STANDARC
No deviations.

Run #	6	 Signature
Configuration #	8	
Results	Pass	



Freq (MHz)		Azimuth (degrees)	Height (meters)		Polarity	Detector	EIRP (Watts)	EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)	Comments
1850.867		275.0	1.0		V-Horn	PK	1.18E+00	30.7	33.0	-2.3	Low channel, EUT on side
1851.162		40.0	1.2		H-Horn	PK	9.86E-01	29.9	33.0	-3.1	Low channel, EUT vertical
1880.062		42.0	1.6		H-Horn	PK	8.71E-01	29.4	33.0	-3.6	Mid channel, EUT vertical
1879.837		288.0	1.4		V-Horn	PK	8.51E-01	29.3	33.0	-3.7	Mid channel, EUT on side
1908.829		315.0	1.0		V-Horn	PK	8.28E-01	29.2	33.0	-3.8	High channel, EUT on side
1908.725		40.0	1.6		H-Horn	PK	5.50E-01	27.4	33.0	-5.6	High channel, EUT vertical

EMC**Out of Band Emissions - Part 22H**

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. The test data represents the configuration / operating mode/ model that produced the highest emission levels as compared to the specification limit.

MODES OF OPERATION

Transmitting, All Bits Up, EV-DO Rev A or CDMA 1xRTT RC3 SO55 (See Comments).

POWER SETTINGS INVESTIGATED

110VAC/60Hz

CONFIGURATIONS INVESTIGATED

ITRM0250 - 3

ITRM0250 - 2

ITRM0250 - 1

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
Spectrum Analyzer	Agilent	E4446A	AAT	2/15/2011	12 mo
Power Meter	Agilent	N1913A	SQL	9/23/2010	24 mo
Power Sensor	Agilent	N8481A	SQN	9/23/2010	24 mo
Antenna, Horn	ETS	3115	AJA	5/13/2011	24 mo
Signal Generator	Agilent	N5183A	TIA	1/18/2011	12 mo
High Pass Filter	Micro-Tronics	HPM50108	HGP	7/9/2010	24 mo
Low Pass Filter 0-425 MHz	Micro-Tronics	LPM50003	HGO	7/9/2010	24 mo
.5-1 GHz Notch Filter	K&L Microwave	3TNF-500/1000-N/N	HGS	11/1/2010	24 mo
Attenuator, 20 dB, 'SMA'	SM Electronics	SA6-20	REO	7/1/2011	12 mo
Pre-Amplifier	Miteq	AMF-6F-12001800-30-10P	AVW	7/1/2011	12 mo
Antenna, Horn	ETS Lindgren	3160-08	AIQ	NCR	0 mo
MN05 Cables	ESM Cable Corp.	Standard Gain Horn Cables	MNJ	7/1/2011	12 mo
Pre-Amplifier	Miteq	AMF-6F-08001200-30-10P	AVV	7/1/2011	12 mo
Antenna, Horn	ETS	3160-07	AXP	NCR	0 mo
Pre-Amplifier	Miteq	AMF-3D-00100800-32-13P	AVX	7/1/2011	12 mo
MN05 Cables	ESM Cable Corp.	uble Ridge Guide Horn Cab	MNI	7/1/2011	12 mo
Antenna, Horn (DRG)	ETS Lindgren	3115	AIP	6/29/2011	24 mo
Pre-Amplifier	Miteq	AM-1616-1000	AVY	7/1/2011	12 mo
MN05 Cables	ESM Cable Corp.	Bilog Cables	MNH	2/2/2011	12 mo
Antenna, Biconilog	ETS Lindgren	3142D	AXN	12/30/2009	24 mo
Universal Radio Communication Tester	Rhode & Schwarz	CMU200	BSU	NCR	0 mo

MEASUREMENT BANDWIDTHS

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

Measurements were made using the IF bandwidths and detectors specified. No video filter was used, except in the case of the FCC Average Measurements above 1GHz. In that case, a peak detector with a 10Hz video bandwidth was used.

MEASUREMENT UNCERTAINTY

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

TEST DESCRIPTION

The highest gain antenna to be used with the EUT was tested for final measurements. The EUT was configured for the lowest, a middle, and the highest transmit frequency in each operational band. For each configuration, the spectrum was scanned throughout the specified range. 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 C63.10.2009). A preamp and high pass filter (and notch filter) were used for this test in order to provide sufficient measurement sensitivity.

For licensed transmitters, the FCC references TIA/EIA-603 as the measurement procedure standard. TIA/EIA-603 Section 2.2.12 describes a method for measuring radiated spurious emissions that utilizes an antenna substitution method:

At an approved test site, the transmitter is placed on a remotely controlled turntable, and the measurement antenna is placed 3 meters from the transmitter. The turntable azimuth is varied to maximize the level of spurious emissions. The height of the measurement antenna is also varied from 1 to 4 meters. The amplitude and frequency of the highest emissions are noted. The transmitter is then replaced with a 1/2 wave dipole that is successively tuned to each of the highest spurious emissions below 1 GHz, and a horn antenna for emissions above 1 GHz. A signal generator is connected to the dipole (horn antenna for frequencies above 1 GHz), and its output is adjusted to match the level previously noted for each frequency. The output of the signal generator is recorded, and by factoring in the cable loss to the antenna and its gain, the power (dBm) into an ideal 1/2 wave dipole antenna is determined for each radiated spurious emission.

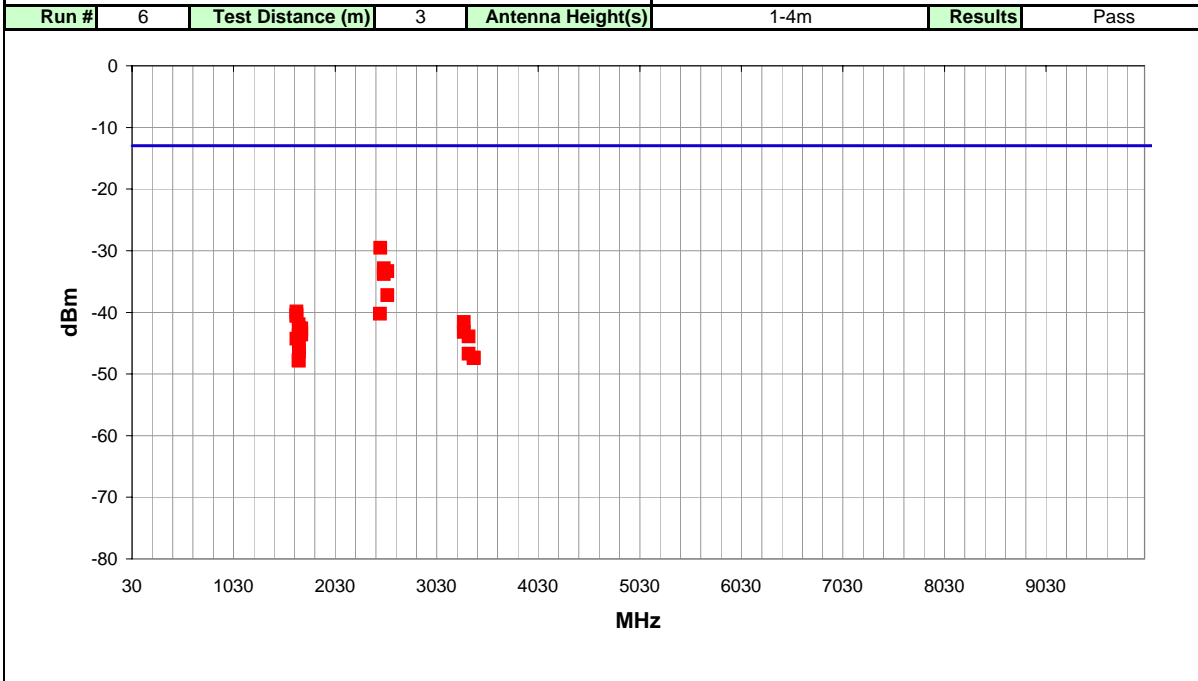
For the purposes of preliminary measurements, the field strength of the spurious emissions can be measured and compared with a 3 meter limit. The 3 meter limit was calculated to be 82.5 dBuV/m at 3 meters. The final measurements must be made utilizing the substitution method described above.

EMC

Out of Band Emissions - Part 22H

Work Order:	ITRM0250	Date:	08/26/11	<i>Trevor Bults</i> Tested by: Nick Blake
Project:	None	Temperature:	23.55 °C	
Job Site:	MN05	Humidity:	54.52% RH	
Serial Number:	178U1191024	Barometric Pres.:	1013.3 mbar	
EUT:	1000CP01S			
Configuration:	1			
Customer:	Intermec Technologies Corporation			
Attendees:	None			
EUT Power:	110VAC/60Hz			
Operating Mode:	Transmitting, All Bits Up. EV-DO Rev A or CDMA 1xRTT RC3 SO55 (See Comments).			
Deviations:	None			
Comments:	None			

Test Specifications FCC 22H:2011	Test Method ANSI/TIA/EIA-603-C:2004						
Run #	6	Test Distance (m)	3	Antenna Height(s)	1-4m	Results	Pass



Freq (MHz)	Antenna Height (meters)	Azimuth (degrees)	Polarity/ Transducer Type	Detector	EIRP (Watts)	EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)	Comments
2474.250	1.0	207.0	Vert	PK	1.11E-06	-29.5	-13.0	-16.5	LOW Ch, EUT Horizontal, CDMA
2509.775	1.0	205.0	Vert	PK	5.15E-07	-32.9	-13.0	-19.9	MID Ch, EUT Horizontal, CDMA
2544.817	1.3	198.0	Vert	PK	4.66E-07	-33.3	-13.0	-20.3	HIGH Ch, EUT Horizontal, CDMA
2509.367	1.1	142.0	Horz	PK	4.18E-07	-33.8	-13.0	-20.8	MID Ch, EUT Vertical, CDMA
2544.875	1.6	121.0	Horz	PK	1.90E-07	-37.2	-13.0	-24.2	HIGH Ch, EUT Vertical, CDMA
1649.992	1.2	203.0	Vert	PK	1.02E-07	-39.9	-13.0	-26.9	LOW Ch, EUT Horizontal, CDMA
2473.217	1.1	86.0	Horz	PK	9.46E-08	-40.2	-13.0	-27.2	LOW Ch, EUT Vertical, CDMA
1648.642	1.2	109.0	Vert	PK	9.13E-08	-40.4	-13.0	-27.4	LOW Ch, EUT Horizontal, EVDO
1649.417	1.0	86.0	Horz	PK	8.72E-08	-40.6	-13.0	-27.6	LOW Ch, EUT Vertical, CDMA
3298.700	1.0	143.0	Horz	PK	6.94E-08	-41.6	-13.0	-28.6	LOW Ch, EUT Vertical, CDMA
1672.375	1.2	105.0	Vert	PK	6.38E-08	-42.0	-13.0	-29.0	MID Ch, EUT Horizontal, CDMA
1673.667	1.2	101.0	Vert	PK	5.56E-08	-42.5	-13.0	-29.5	MID Ch, EUT Horizontal, EVDO
1673.467	1.3	118.0	Horz	PK	5.56E-08	-42.5	-13.0	-29.5	MID Ch, EUT Vertical, EVDO
1697.250	1.3	118.0	Horz	PK	5.49E-08	-42.6	-13.0	-29.6	HIGH Ch, EUT Vertical, EVDO
1697.275	1.4	146.0	Horz	PK	5.12E-08	-42.9	-13.0	-29.9	HIGH Ch, EUT Vertical, CDMA
3297.500	1.2	157.0	Vert	PK	4.80E-08	-43.2	-13.0	-30.2	LOW Ch, EUT Horizontal, CDMA
1697.142	1.2	110.0	Vert	PK	4.46E-08	-43.5	-13.0	-30.5	HIGH Ch, EUT Horizontal, EVDO
1697.342	1.2	106.0	Vert	PK	4.36E-08	-43.6	-13.0	-30.6	HIGH Ch, EUT Horizontal, CDMA
1672.200	1.1	340.0	Vert	PK	4.22E-08	-43.8	-13.0	-30.8	MID Ch, EUT on Side, CDMA
3345.733	1.3	168.0	Horz	PK	4.06E-08	-43.9	-13.0	-30.9	MID Ch, EUT Vertical, CDMA

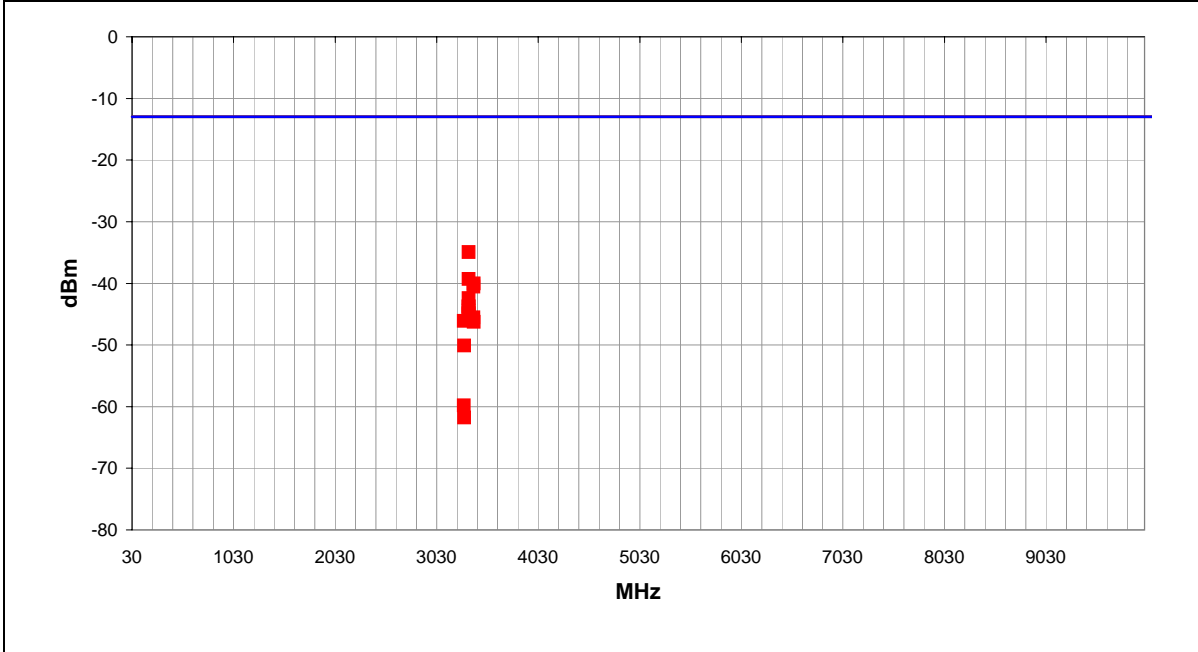
EMC

Out of Band Emissions - Part 22H

Work Order:	ITRM0250	Date:	09/01/11	<i>Trevor Bults</i> Tested by: Nick Blake
Project:	None	Temperature:	24.46 °C	
Job Site:	MN05	Humidity:	57.61% RH	
Serial Number:	178U1191039	Barometric Pres.:	1012.3 mbar	
EUT:	1000CP02S			
Configuration:	2			
Customer:	Intermec Technologies Corporation			
Attendees:	None			
EUT Power:	110VAC/60Hz			
Operating Mode:	Transmitting, All Bits Up. EV-DO Rev A or CDMA 1xRTT RC3 SO55 (See Comments).			
Deviations:	None			
Comments:	None			

Test Specifications FCC 22H:2011	Test Method ANSI/TIA/EIA-603-C:2004
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Run #	77	Test Distance (m)	3	Antenna Height(s)	1-4m	Results	Pass
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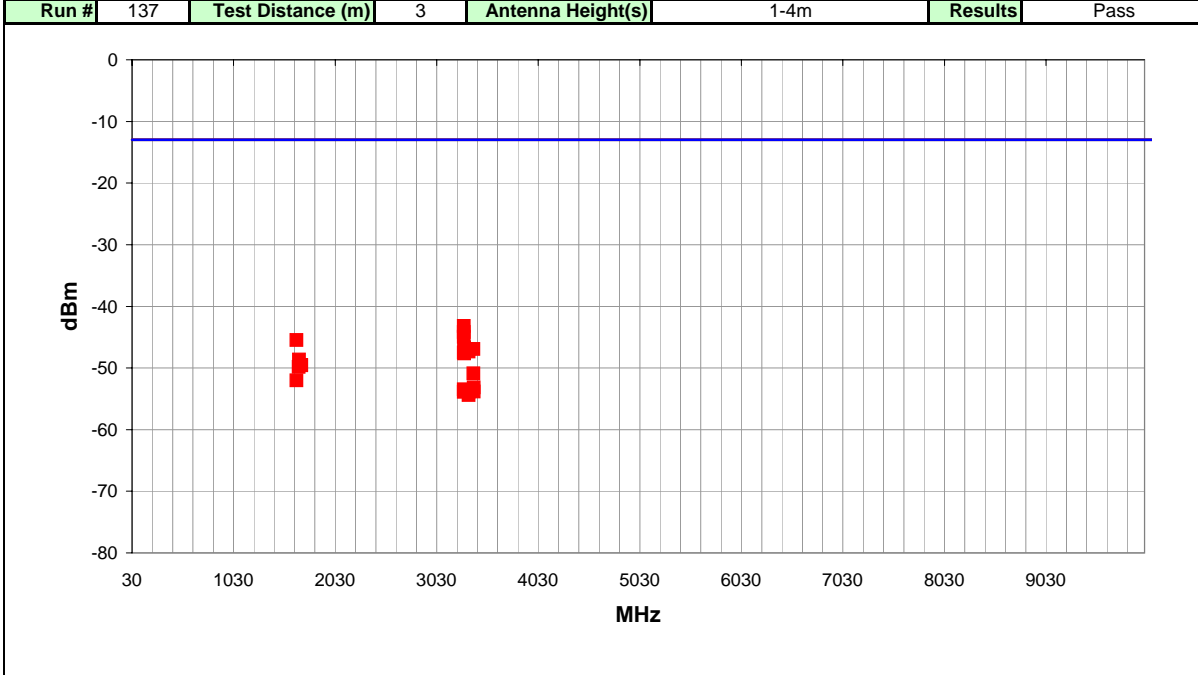
Freq (MHz)	Antenna Height (meters)	Azimuth (degrees)	Polarity/ Transducer Type	Detector	EIRP (Watts)	EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)	Comments
3346.208	1.0	238.0	Horz	PK	3.22E-07	-34.9	-13.0	-21.9	MID Ch, EUT on Side, EVDO
3346.083	1.0	236.0	Horz	PK	1.17E-07	-39.3	-13.0	-26.3	MID Ch, EUT on Side, CDMA
3394.483	1.0	244.0	Horz	PK	9.89E-08	-40.0	-13.0	-27.0	HIGH Ch, EUT on Side, EVDO
3393.100	1.0	228.0	Horz	PK	8.80E-08	-40.6	-13.0	-27.6	HIGH Ch, EUT on Side, CDMA
3345.867	1.2	222.0	Horz	PK	5.73E-08	-42.4	-13.0	-29.4	MID Ch, EUT Vertical, CDMA
3345.942	1.5	23.0	Horz	PK	4.25E-08	-43.7	-13.0	-30.7	MID Ch, EUT Horizontal, CDMA
3344.925	1.2	202.0	Vert	PK	4.15E-08	-43.8	-13.0	-30.8	MID Ch, EUT Vertical, EVDO
3346.225	2.2	186.0	Vert	PK	3.62E-08	-44.4	-13.0	-31.4	MID Ch, EUT Vertical, CDMA
3346.117	1.0	226.0	Vert	PK	3.30E-08	-44.8	-13.0	-31.8	MID Ch, EUT on Side, CDMA
3346.008	1.0	82.0	Vert	PK	3.15E-08	-45.0	-13.0	-32.0	MID Ch, EUT Horizontal, CDMA
3393.525	1.0	202.0	Vert	PK	2.79E-08	-45.6	-13.0	-32.6	HIGH Ch, EUT Vertical, CDMA
3298.842	1.3	247.0	Horz	PK	2.46E-08	-46.1	-13.0	-33.1	LOW Ch, EUT on Side, CDMA
3394.458	1.4	209.0	Vert	PK	2.37E-08	-46.2	-13.0	-33.2	HIGH Ch, EUT Vertical, EVDO
3300.283	1.0	183.0	Vert	PK	9.82E-09	-50.1	-13.0	-37.1	LOW Ch, EUT Vertical, CDMA
3297.800	2.7	238.0	Vert	PK	1.05E-09	-59.8	-13.0	-46.8	LOW Ch, EUT Vertical, EVDO
3300.550	1.3	142.0	Horz	PK	6.64E-10	-61.8	-13.0	-48.8	LOW Ch, EUT on Side, EVDO

EMC

Out of Band Emissions - Part 22H

Work Order:	ITRM0250	Date:	09/01/11	<i>Trevor Buls</i> Tested by: Elaine Reeves
Project:	None	Temperature:	24.46 °C	
Job Site:	MN05	Humidity:	57.61% RH	
Serial Number:	178U1191002	Barometric Pres.:	1012.3 mbar	
EUT:	1001CP01S			
Configuration:	3			
Customer:	Intermec Technologies Corporation			
Attendees:	None			
EUT Power:	110VAC/60Hz			
Operating Mode:	Transmitting, All Bits Up. EV-DO Rev A or CDMA 1xRTT RC3 SO55 (See Comments).			
Deviations:	None			
Comments:	None			

Test Specifications FCC 22H:2011	Test Method ANSI/TIA/EIA-603-C:2004						
Run #	137	Test Distance (m)	3	Antenna Height(s)	1-4m	Results	Pass



Freq (MHz)	Antenna Height (meters)	Azimuth (degrees)	Polarity/ Transducer Type	Detector	EIRP (Watts)	EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)	Comments
3298.875	1.0	273.0	Horz	PK	4.81E-08	-43.2	-13.0	-30.2	EUT Vertical, Low Channel, CDMA
3299.167	1.0	170.0	Vert	PK	3.82E-08	-44.2	-13.0	-31.2	EUT Z-Axis, Low Channel, CDMA
3298.858	1.1	150.0	Horz	PK	3.17E-08	-45.0	-13.0	-32.0	EUT Z-Axis, Low Channel, CDMA
1649.370	1.2	175.0	Horz	PK	2.82E-08	-45.5	-13.0	-32.5	EUT Vertical, Low Channel, CDMA
3300.317	1.2	84.0	Vert	PK	2.15E-08	-46.7	-13.0	-33.7	EUT Horizontal, Low Channel, CDMA
3344.699	1.0	11.0	Vert	PK	2.03E-08	-46.9	-13.0	-33.9	EUT Vertical, Mid Channel, CDMA
3392.804	1.0	67.0	Horz	PK	2.02E-08	-47.0	-13.0	-34.0	EUT Vertical, High Channel, CDMA
3345.174	1.2	312.0	Horz	PK	1.85E-08	-47.3	-13.0	-34.3	EUT Vertical, Mid Channel, CDMA
3299.100	1.2	88.0	Horz	PK	1.79E-08	-47.5	-13.0	-34.5	EUT Horizontal, Low Channel, CDMA
3299.333	1.2	164.0	Vert	PK	1.71E-08	-47.7	-13.0	-34.7	EUT Vertical, Low Channel, CDMA
1673.778	1.1	57.0	Vert	PK	1.37E-08	-48.6	-13.0	-35.6	EUT Vertical, Mid Channel, CDMA
1697.287	1.0	44.0	Vert	PK	1.12E-08	-49.5	-13.0	-36.5	EUT Vertical, High Channel, CDMA
1697.325	1.2	118.0	Horz	PK	1.10E-08	-49.6	-13.0	-36.6	EUT Vertical, High Channel, CDMA
1672.745	1.2	321.0	Horz	PK	1.04E-08	-49.9	-13.0	-36.9	EUT Vertical, Mid Channel, CDMA
3392.975	1.4	23.0	Vert	PK	8.22E-09	-50.9	-13.0	-37.9	EUT Vertical, High Channel, CDMA
1649.916	1.2	331.0	Vert	PK	6.32E-09	-52.0	-13.0	-39.0	EUT Vertical, Low Channel, CDMA
3394.558	1.0	240.0	Horz	PK	4.84E-09	-53.1	-13.0	-40.1	EUT Vertical, High Channel EVDO
3296.750	1.0	15.0	Vert	PK	4.48E-09	-53.5	-13.0	-40.5	EUT Vertical, Low Channel EVDO
3346.608	1.0	198.0	Vert	PK	4.15E-09	-53.8	-13.0	-40.8	EUT Vertical, Mid Channel EVDO
3394.533	1.5	269.0	Vert	PK	4.12E-09	-53.8	-13.0	-40.8	EUT Vertical, High Channel EVDO

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. The test data represents the configuration / operating mode/ model that produced the highest emission levels as compared to the specification limit.

MODES OF OPERATION

Transmitting, All Bits Up. EV-DO Rev A or CDMA 1xRTT RC3 SO55 (See Comments).

POWER SETTINGS INVESTIGATED

110VAC/60Hz

CONFIGURATIONS INVESTIGATED

ITRM0250 - 3

ITRM0250 - 2

ITRM0250 - 1

FREQUENCY RANGE INVESTIGATED

Start Frequency	30 MHz	Stop Frequency	20 GHz
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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
Universal Radio Communication Tester	Rhode & Schwarz	CMU200	BSU	NCR	0 mo
Power Sensor	Agilent	N8481A	SQN	9/23/2010	24 mo
Power Meter	Agilent	N1913A	SQL	9/23/2010	24 mo
Antenna, Horn	ETS	3115	AJA	5/13/2011	24 mo
1-2 GHz Notch Filter	K&L Microwave	3TNF-1000/2000-N/N	HGT	11/1/2010	24 mo
High Pass Filter	Micro-Tronics	HPM50111	HGQ	7/9/2010	24 mo
Low Pass Filter	Micro-Tronics	LPM50004	HGK	7/9/2010	24 mo
Attenuator, 20 dB, 'SMA'	SM Electronics	SA6-20	REO	7/1/2011	12 mo
Pre-Amplifier	Miteq	JSD4-18002600-26-8P	APU	4/15/2011	12 mo
MN05 Cables	N/A	5GHz Standard Gain Horn C	EVD	4/15/2011	12 mo
Antenna, Horn	ETS	3160-09	AHG	NCR	0 mo
Pre-Amplifier	Miteq	AMF-6F-12001800-30-10P	AVW	7/1/2011	12 mo
Antenna, Horn	ETS Lindgren	3160-08	AIQ	NCR	0 mo
MN05 Cables	ESM Cable Corp.	Standard Gain Horn Cables	MNJ	7/1/2011	12 mo
Pre-Amplifier	Miteq	AMF-6F-08001200-30-10P	AVV	7/1/2011	12 mo
Antenna, Horn	ETS	3160-07	AXP	NCR	0 mo
Pre-Amplifier	Miteq	AMF-3D-00100800-32-13P	AVX	7/1/2011	12 mo
MN05 Cables	ESM Cable Corp.	uble Ridge Guide Horn Cab	MNI	7/1/2011	12 mo
Antenna, Horn (DRG)	ETS Lindgren	3115	AIP	6/29/2011	24 mo
Pre-Amplifier	Miteq	AM-1616-1000	AVY	7/1/2011	12 mo
MN05 Cables	ESM Cable Corp.	Bilog Cables	MNH	2/2/2011	12 mo
Antenna, Biconilog	ETS Lindgren	3142D	AXN	12/30/2009	24 mo
Spectrum Analyzer	Agilent	E4446A	AAT	2/15/2011	12 mo

MEASUREMENT BANDWIDTHS

Frequency Range (MHz)	Peak Data (kHz)	Quasi-Peak Data (kHz)	Average Data (kHz)
	0.01 - 0.15	1.0	0.2
0.15 - 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 IF bandwidths and detectors specified. No video filter was used, except in the case of the FCC Average Measurements above 1GHz. In that case, a peak detector with a 10Hz video bandwidth was used.

MEASUREMENT UNCERTAINTY

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

TEST DESCRIPTION

The highest gain antenna to be used with the EUT was tested for final measurements. The EUT was configured for the lowest, a middle, and the highest transmit frequency in each operational band. For each configuration, the spectrum was scanned throughout the specified range. 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 C63.10:2009). A preamp and high pass filter (and notch filter) were used for this test in order to provide sufficient measurement sensitivity.

For licensed transmitters, the FCC references TIA/EIA-603 as the measurement procedure standard. TIA/EIA-603 Section 2.2.12 describes a method for measuring radiated spurious emissions that utilizes an antenna substitution method:

At an approved test site, the transmitter is placed on a remotely controlled turntable, and the measurement antenna is placed 3 meters from the transmitter. The turntable azimuth is varied to maximize the level of spurious emissions. The height of the measurement antenna is also varied from 1 to 4 meters. The amplitude and frequency of the highest emissions are noted. The transmitter is then replaced with a ½ wave dipole that is successively tuned to each of the highest spurious emissions for emissions below 1 GHz, and a horn antenna for emissions above 1 GHz. A signal generator is connected to the dipole (horn antenna for frequencies above 1 GHz), and its output is adjusted to match the level previously noted for each frequency. The output of the signal generator is recorded, and by factoring in the cable loss to the antenna and its gain, the power (dBm) into an ideal ½ wave dipole antenna is determined for each radiated spurious emission.

For the purposes of preliminary measurements, the field strength of the spurious emissions can be measured and compared with a 3 meter limit. The 3 meter limit was calculated to be 82.5 dBuV/m at 3 meters. The final measurements must be made utilizing the substitution method described above.

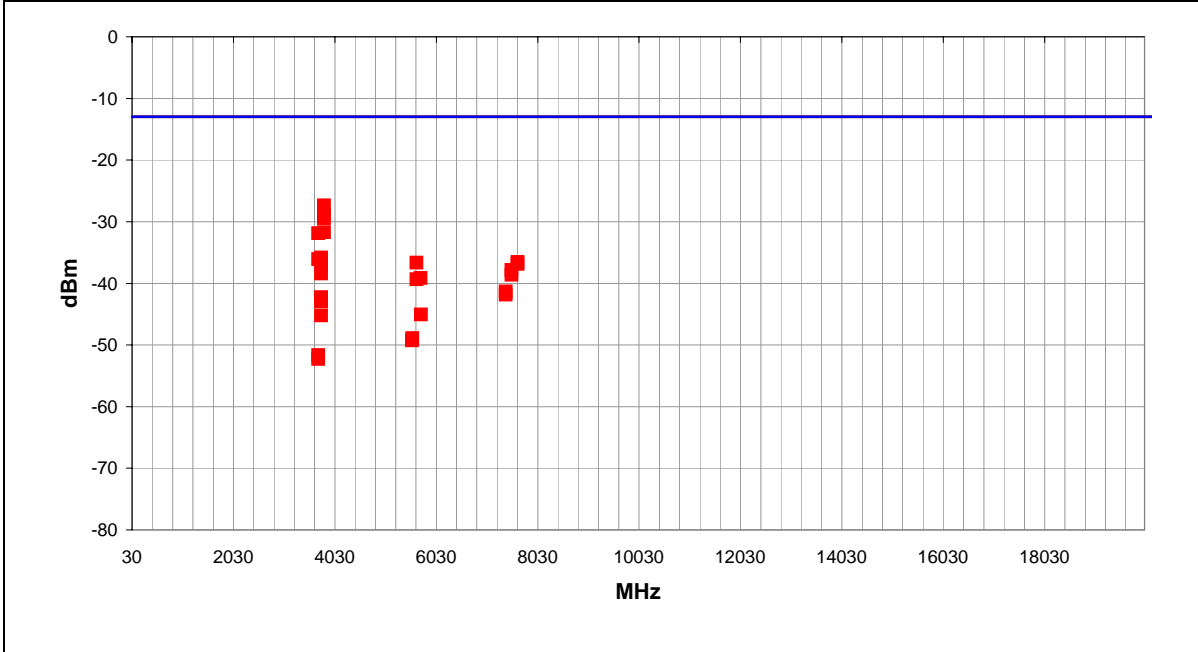
EMC

Out of Band Emissions - Part 24E

Work Order:	ITRM0250	Date:	08/26/11	<i>Trevor Bults</i> Tested by: Nick Blake
Project:	None	Temperature:	23.55 °C	
Job Site:	MN05	Humidity:	54.52% RH	
Serial Number:	178U1191024	Barometric Pres.:	1013.3 mbar	
EUT:	1000CP01S			
Configuration:	1			
Customer:	Intermec Technologies Corporation			
Attendees:	None			
EUT Power:	110VAC/60Hz			
Operating Mode:	Transmitting, All Bits Up. EV-DO Rev A or CDMA 1xRTT RC3 SO55 (See Comments).			
Deviations:	None			
Comments:	None			

Test Specifications FCC 24E:2011	Test Method ANSI/TIA/EIA-603-C:2004
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Run #	17	Test Distance (m)	3	Antenna Height(s)	1-4m	Results	Pass
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Freq (MHz)	Antenna Height (meters)	Azimuth (degrees)	Polarity/Transducer Type	Detector	EIRP (Watts)	EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)	Comments
3816.967	1.0	305.0	Vert	PK	1.85E-06	-27.3	-13.0	-14.3	HIGH Ch, EUT on Side, CDMA
3816.683	1.5	164.0	Vert	PK	1.34E-06	-28.7	-13.0	-15.7	HIGH Ch, EUT on Side, EVDO
3816.425	1.0	167.0	Horz	PK	1.14E-06	-29.4	-13.0	-16.4	HIGH Ch, EUT Vertical, EVDO
3816.825	1.1	40.0	Horz	PK	6.70E-07	-31.7	-13.0	-18.7	HIGH Ch, EUT Vertical, CDMA
3701.958	1.0	169.0	Horz	PK	6.51E-07	-31.9	-13.0	-18.9	LOW Ch, EUT Vertical, EVDO
3759.400	1.4	271.0	Vert	PK	2.61E-07	-35.8	-13.0	-22.8	MID Ch, EUT on Side, CDMA
3702.292	1.0	2.0	Vert	PK	2.48E-07	-36.1	-13.0	-23.1	LOW Ch, EUT on Side, EVDO
7634.967	1.0	183.0	Horz	PK	2.22E-07	-36.5	-13.0	-23.5	HIGH Ch, EUT Vertical, CDMA
3759.467	1.0	176.0	Horz	PK	2.17E-07	-36.6	-13.0	-23.6	MID Ch, EUT Vertical, EVDO
5639.158	1.0	211.0	Horz	PK	2.15E-07	-36.7	-13.0	-23.7	MID Ch, EUT Vertical, CDMA
7633.892	1.0	223.0	Vert	PK	2.07E-07	-36.8	-13.0	-23.8	HIGH Ch, EUT on Side, CDMA
3759.675	1.1	172.0	Horz	PK	2.03E-07	-36.9	-13.0	-23.9	MID Ch, EUT Vertical, CDMA
7518.467	1.0	112.0	Horz	PK	1.64E-07	-37.8	-13.0	-24.8	MID Ch, EUT Vertical, CDMA
3759.550	1.1	273.0	Vert	PK	1.43E-07	-38.4	-13.0	-25.4	MID Ch, EUT on Side, EVDO
7518.008	1.0	243.0	Vert	PK	1.37E-07	-38.6	-13.0	-25.6	MID Ch, EUT on Side, CDMA
5724.967	1.5	62.0	Horz	PK	1.22E-07	-39.1	-13.0	-26.1	HIGH Ch, EUT Vertical, CDMA
5641.017	1.6	250.0	Vert	PK	1.16E-07	-39.4	-13.0	-26.4	MID Ch, EUT on Side, CDMA
7402.558	3.5	42.0	Horz	PK	7.35E-08	-41.3	-13.0	-28.3	LOW Ch, EUT Vertical, CDMA
7404.042	1.2	275.0	Vert	PK	6.56E-08	-41.8	-13.0	-28.8	LOW Ch, EUT on Side, CDMA
3759.250	1.0	132.0	Horz	PK	5.98E-08	-42.2	-13.0	-29.2	MID Ch, EUT Horizontal, CDMA

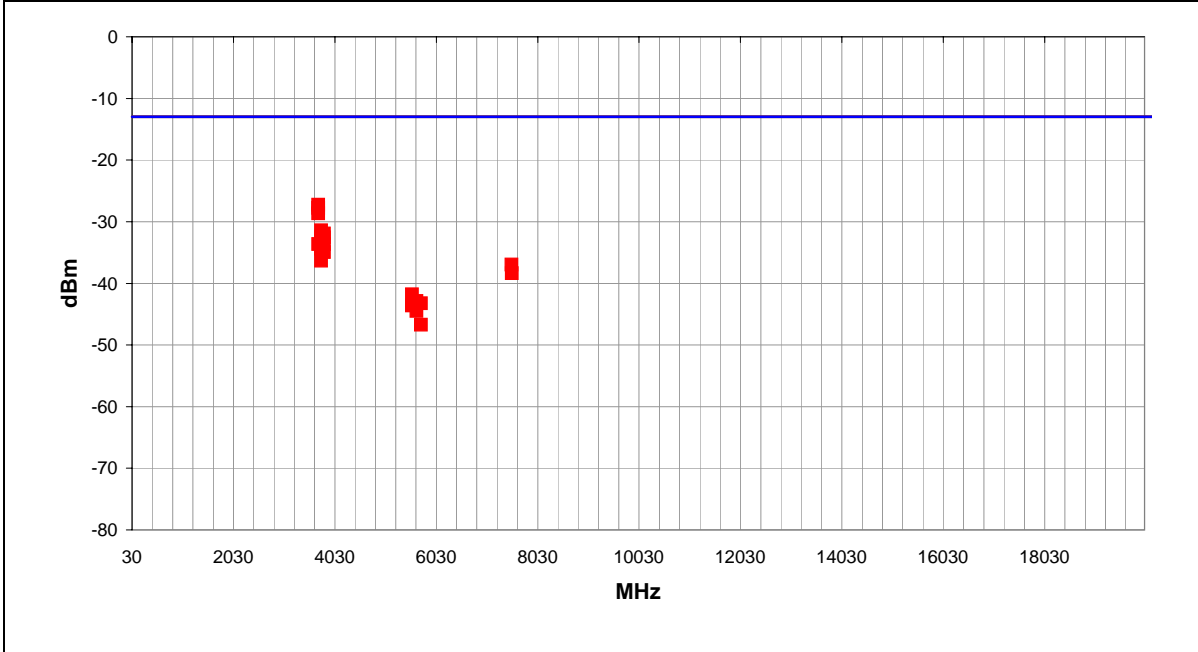
EMC

Out of Band Emissions - Part 24E

Work Order:	ITRM0250	Date:	09/01/11	<i>Trevor Bults</i> Tested by: Nick Blake
Project:	None	Temperature:	24.46 °C	
Job Site:	MN05	Humidity:	57.61% RH	
Serial Number:	178U1191039	Barometric Pres.:	1012.3 mbar	
EUT:	1000CP02S			
Configuration:	2			
Customer:	Intermec Technologies Corporation			
Attendees:	None			
EUT Power:	110VAC/60Hz			
Operating Mode:	Transmitting, All Bits Up. EV-DO Rev A or CDMA 1xRTT RC3 SO55 (See Comments).			
Deviations:	None			
Comments:	None			

Test Specifications FCC 24E:2011	Test Method ANSI/TIA/EIA-603-C:2004
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Run #	92	Test Distance (m)	3	Antenna Height(s)	1-4m	Results	Pass
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Freq (MHz)	Antenna Height (meters)	Azimuth (degrees)	Polarity/Transducer Type	Detector	EIRP (Watts)	EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)	Comments
3702.371	1.1	231.0	Horz	PK	1.88E-06	-27.3	-13.0	-14.3	LOW Ch, EUT Horizontal, EV-DO
3702.261	1.5	214.0	Vert	PK	1.67E-06	-27.8	-13.0	-14.8	LOW Ch, EUT Horizontal, EV-DO
3701.679	1.1	223.0	Horz	PK	1.36E-06	-28.7	-13.0	-15.7	LOW Ch, EUT Horizontal, CDMA
3760.357	1.0	36.0	Horz	PK	7.20E-07	-31.4	-13.0	-18.4	MID Ch, EUT Horizontal, EV-DO
3817.628	1.1	196.0	Vert	PK	6.41E-07	-31.9	-13.0	-18.9	HIGH Ch, EUT Horizontal, EV-DO
3759.375	1.0	144.0	Vert	PK	5.71E-07	-32.4	-13.0	-19.4	MID Ch, EUT Horizontal, CDMA
3817.413	1.0	92.0	Horz	PK	5.58E-07	-32.5	-13.0	-19.5	HIGH Ch, EUT Horizontal, EV-DO
3760.067	1.0	210.0	Horz	PK	5.46E-07	-32.6	-13.0	-19.6	MID Ch, EUT on Side, CDMA
3817.930	1.0	30.0	Horz	PK	4.33E-07	-33.6	-13.0	-20.6	HIGH Ch, EUT Horizontal, CDMA
3702.361	1.1	195.0	Vert	PK	4.30E-07	-33.7	-13.0	-20.7	LOW Ch, EUT Horizontal, CDMA
3760.735	1.2	216.0	Vert	PK	4.24E-07	-33.7	-13.0	-20.7	MID Ch, EUT Horizontal, EV-DO
3759.392	1.0	308.0	Vert	PK	4.23E-07	-33.7	-13.0	-20.7	MID Ch, EUT on Side, CDMA
3759.917	1.1	173.0	Horz	PK	3.86E-07	-34.1	-13.0	-21.1	MID Ch, EUT Vertical, CDMA
3759.883	1.0	135.0	Horz	PK	3.61E-07	-34.4	-13.0	-21.4	MID Ch, EUT Horizontal, CDMA
3817.736	1.3	210.0	Vert	PK	3.21E-07	-34.9	-13.0	-21.9	HIGH Ch, EUT Horizontal, CDMA
3759.842	2.1	164.0	Vert	PK	2.33E-07	-36.3	-13.0	-23.3	MID Ch, EUT Vertical, CDMA
7518.442	1.4	293.0	Horz	PK	2.02E-07	-36.9	-13.0	-23.9	MID Ch, EUT on Side, CDMA
7521.017	1.0	213.0	Vert	PK	1.47E-07	-38.3	-13.0	-25.3	MID Ch, EUT Horizontal, CDMA
5553.572	1.2	128.0	Vert	PK	6.62E-08	-41.8	-13.0	-28.8	LOW Ch, EUT Horizontal, CDMA
5640.725	1.1	224.0	Vert	PK	5.17E-08	-42.9	-13.0	-29.9	MID Ch, EUT Horizontal, CDMA

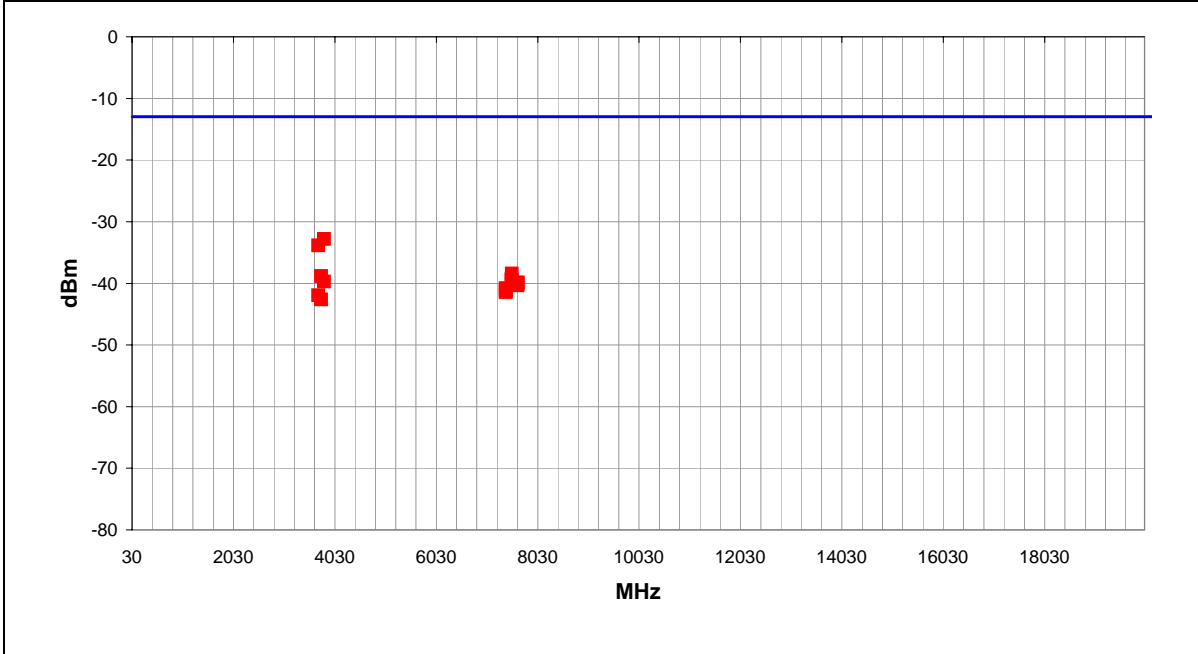
EMC

Out of Band Emissions - Part 24E

Work Order:	ITRM0250	Date:	09/01/11	<i>Trevor Bults</i> Tested by: Elaine Reeves
Project:	None	Temperature:	24.46 °C	
Job Site:	MN05	Humidity:	57.61% RH	
Serial Number:	178U1191002	Barometric Pres.:	1012.3 mbar	
EUT:	1001CP01S			
Configuration:	3			
Customer:	Intermec Technologies Corporation			
Attendees:	None			
EUT Power:	110VAC/60Hz			
Operating Mode:	Transmitting, All Bits Up. EV-DO Rev A or CDMA 1xRTT RC3 SO55 (See Comments).			
Deviations:	None			
Comments:	None			

Test Specifications FCC 24E:2011	Test Method ANSI/TIA/EIA-603-C:2004
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Run #	159	Test Distance (m)	3	Antenna Height(s)	1-4m	Results	Pass
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Freq (MHz)	Antenna Height (meters)	Azimuth (degrees)	Polarity/Transducer Type	Detector	EIRP (Watts)	EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)	Comments
3818.125	1.0	191.0	Horz	PK	5.21E-07	-32.8	-13.0	-19.8	EUT Vertical, High Channel, CDMA
3701.867	1.0	216.0	Horz	PK	4.11E-07	-33.9	-13.0	-20.9	EUT Vertical, Low Channel, CDMA
7521.442	1.0	180.0	Vert	PK	1.43E-07	-38.4	-13.0	-25.4	EUT Vertical, Mid Channel, EVDO
3759.650	1.0	192.0	Horz	PK	1.31E-07	-38.8	-13.0	-25.8	EUT Vertical, Mid Channel, CDMA
7518.617	1.0	177.0	Vert	PK	1.16E-07	-39.3	-13.0	-26.3	EUT Vertical, Mid Channel, CDMA
7521.542	1.4	224.0	Horz	PK	1.14E-07	-39.4	-13.0	-26.4	EUT Vertical, Mid Channel, CDMA
3818.283	1.2	143.0	Vert	PK	1.06E-07	-39.7	-13.0	-26.7	EUT Vertical, High Channel, CDMA
7635.317	1.0	59.0	Vert	PK	1.04E-07	-39.8	-13.0	-26.8	EUT Vertical, High Channel, CDMA
7632.850	2.7	107.0	Horz	PK	1.01E-07	-39.9	-13.0	-26.9	EUT Vertical, High Channel, EVDO
7519.083	1.9	224.0	Horz	PK	9.91E-08	-40.0	-13.0	-27.0	EUT Vertical, Mid Channel, EVDO
7633.142	2.1	182.0	Horz	PK	9.90E-08	-40.0	-13.0	-27.0	EUT Vertical, High Channel, CDMA
7633.950	1.0	304.0	Vert	PK	9.24E-08	-40.3	-13.0	-27.3	EUT Vertical, High Channel, EVDO
7403.892	1.0	217.0	Horz	PK	8.26E-08	-40.8	-13.0	-27.8	EUT Vertical, Low Channel, EVDO
7405.625	1.0	152.0	Vert	PK	7.55E-08	-41.2	-13.0	-28.2	EUT Vertical, Low Channel, EVDO
7404.108	3.6	152.0	Vert	PK	7.54E-08	-41.2	-13.0	-28.2	EUT Vertical, Low Channel, CDMA
7404.842	1.0	93.0	Horz	PK	7.21E-08	-41.4	-13.0	-28.4	EUT Vertical, Low Channel, CDMA
3701.958	1.1	70.0	Vert	PK	6.36E-08	-42.0	-13.0	-29.0	EUT Vertical, Low Channel, CDMA
3759.067	1.0	323.0	Vert	PK	5.45E-08	-42.6	-13.0	-29.6	EUT Vertical, Mid Channel, CDMA