

Justification

The EUT is a CDMA radio module (FCC ID: EHAEM3420). The CDMA radio is installed in an Intermec Handheld Computer, Model 700C. The 700C contains three co-located radio modules (CDMA, 802.11(b) and Bluetooth). The 802.11(b) and Bluetooth radios have been previously certified for portable, co-located use in the 700C (FCC ID: HN22011B-2, FCC ID: EHABTS080). The EUT was tested in standalone mode, and it was tested with these co-located radios in the 700C. In addition to these configurations, the 700C can be installed in an Intermec Printer, Model 6820, or a Handheld Pistol Grip, IP3. The EUT can transmit simultaneously with Bluetooth when the 700C is installed in the printer (FCC ID: EHABTS080-1), or the EUT can transmit simultaneously with RFID when the 700C is installed in the pistol grip (FCC ID: EHARFID915PCC-6).

All possible combinations of harmonic emissions from the CDMA, 802.11(b), and Bluetooth radios were compared numerically. It was determined that there were no possible coincidental harmonics below 1 GHz. All the radios were configured for simultaneous transmission, and the CDMA radio was tested in standalone mode at the channels specified below:

Channels in Specified Band Investigated:	
802.11(b):	1, 5, 8, 11
CDMA (Cellular):	54, 55, 310, 395, 467, 477, 602, 727 Low, Mid, High
CDMA (PCS):	1, 35, 41, 932, 1117, 1153, 1175 Low, Mid, High
Bluetooth:	5, 11, 62, 68, 79
RFID:	7, 8, 12, 47, 50, 62, 69, 71, 73

Operating Modes Investigated:**Standalone Mode**

Standalone transmission of CDMA (PCS) Low Channel
 Standalone transmission of CDMA (PCS) Mid Channel
 Standalone transmission of CDMA (PCS) High Channel
 Standalone transmission of CDMA (Cellular) Low Channel
 Standalone transmission of CDMA (Cellular) Mid Channel
 Standalone transmission of CDMA (Cellular) High Channel

Simultaneous transmission of CDMA (cellular), Bluetooth, and 802.11(b) in 700C and Bluetooth in 6820 Printer

Simultaneous transmission of CDMA (cellular) Ch. 467, Bluetooth Ch. 11, and 802.11(b) Ch. 1
 Simultaneous transmission of CDMA (cellular) Ch. 395, Bluetooth Ch. 5, and 802.11(b) Ch. 1
 Simultaneous transmission of CDMA (cellular) Ch. 55, Bluetooth Ch. 79, and 802.11(b) Ch. 11
 Simultaneous transmission of CDMA (cellular) Ch. 54, Bluetooth Ch. 79, and 802.11(b) Ch. 11

Simultaneous transmission of CDMA (PCS), Bluetooth, and 802.11(b) in 700C and Bluetooth in 6820 Printer

Simultaneous transmission of CDMA (PCS) Ch. 1, Bluetooth Ch. 11, and 802.11(b) Ch. 1
 Simultaneous transmission of CDMA (PCS) Ch. 1153, Bluetooth Ch. 11, and 802.11(b) Ch. 1
 Simultaneous transmission of CDMA (PCS) Ch. 35, Bluetooth Ch. 68, and 802.11(b) Ch. 11
 Simultaneous transmission of CDMA (PCS) Ch. 1153, Bluetooth Ch. 62, and 802.11(b) Ch. 11

Simultaneous transmission of CDMA (PCS) and 802.11(b) in 700C and RFID in IP3 Pistol Grip
Simultaneous transmission of CDMA (PCS) Ch. 41, 802.11(b) Ch. 11, and RFID Ch. 69
Simultaneous transmission of CDMA (PCS) Ch. 1175, 802.11(b) Ch. 1, and RFID Ch. 12
Simultaneous transmission of CDMA (PCS) Ch. 1117, 802.11(b) Ch. 11, and RFID Ch. 7
Simultaneous transmission of CDMA (PCS) Ch. 932, 802.11(b) Ch. 11, and RFID Ch. 8
Simultaneous transmission of CDMA (PCS) Ch. 1117, 802.11(b) Ch. 1, and RFID Ch. 50
Simultaneous transmission of CDMA (PCS) Ch. 1117, 802.11(b) Ch. 1, and RFID Ch. 62
Simultaneous transmission of CDMA (PCS) Ch. 1175, 802.11(b) Ch. 11, and RFID Ch. 7
Simultaneous transmission of CDMA (cellular) and 802.11(b) in 700C and RFID in IP3 Pistol Grip
Simultaneous transmission of CDMA (Cellular) Ch. 477, 802.11(b) Ch. 1, and RFID Ch. 12
Simultaneous transmission of CDMA (Cellular) Ch. 727, 802.11(b) Ch. 8, and RFID Ch. 47
Simultaneous transmission of CDMA (Cellular) Ch. 602, 802.11(b) Ch. 1, and RFID Ch. 73
Simultaneous transmission of CDMA (Cellular) Ch. 310, 802.11(b) Ch. 5, and RFID Ch. 71
Simultaneous transmission of CDMA (Cellular) Ch. 310, 802.11(b) Ch. 11, and RFID Ch. 71
Simultaneous transmission of CDMA (cellular), Bluetooth, and 802.11(b) in 700C
Simultaneous transmission of CDMA (Cellular) Ch. 467, Bluetooth Ch. 11, and 802.11(b) Ch. 1
Simultaneous transmission of CDMA (Cellular) Ch. 395, Bluetooth Ch. 5, and 802.11(b) Ch. 1
Simultaneous transmission of CDMA (Cellular) Ch. 55, Bluetooth Ch. 79, and 802.11(b) Ch. 11
Simultaneous transmission of CDMA (Cellular) Ch. 54, Bluetooth Ch. 79, and 802.11(b) Ch. 11
Simultaneous transmission of CDMA (PCS), Bluetooth, and 802.11(b) in 700C
Simultaneous transmission of CDMA (PCS) Ch. 1, Bluetooth Ch. 11, and 802.11(b) Ch. 1
Simultaneous transmission of CDMA (PCS) Ch. 1153, Bluetooth Ch. 11, and 802.11(b) Ch. 1
Simultaneous transmission of CDMA (PCS) Ch. 35, Bluetooth Ch. 68, and 802.11(b) Ch. 11
Simultaneous transmission of CDMA (PCS) Ch. 1153, Bluetooth Ch. 62, and 802.11(b) Ch. 11

Data Rates Investigated:
Maximum

Output Power Setting(s) Investigated:
Maximum

Power Input Settings Investigated:
120 VAC, 60 Hz.

Antennas Investigated:	
802.11(b):	Custom internal to 700C
CDMA (Cellular):	805-606-102 Dual Band CDMA 900/1900MHz Antenna (SB555)
CDMA (PCS):	805-666-204 Single Band CDMA 1900MHz Antenna (SB555)
Bluetooth:	Integral PCB trace
RFID:	IP3 integral antenna (internal to IP3)

Software\Firmware Applied During Test					
Exercise software	Version				
Blue Test CDMA FCC Test PrismTestCe IP3FCC2		Unknown 6/7/04 6/1/04 11/17/03			
Description					
The system was tested using special test software to exercise the functions of the device during the testing including channel, band, and operating mode.					

EUT and Peripherals			
Description	Manufacturer	Model/Part Number	Serial Number
AC Adapter	Elpac Power Systems	FW1812	014869
Bluetooth Radio in Printer	Intermec Technologies Corporation	8520-0080	Unknown
Printer	Intermec Technologies Corporation	6820	N/A
AC Adapter	Intermec Technologies Corporation	851-064-001	0001771
Handheld Computer	Intermec Technologies Corporation	700C	13790400008
802.11(b) Radio	Intermec Technologies Corporation	2011B	N/A
CDMA Radio	Intermec Technologies Corporation	EM3420	Unknown
Bluetooth Radio in Handheld Computer	Intermec Technologies Corporation	8520-0080	Unknown
RFID Radio in Pistol Grip	Intermec Technologies Corporation	IP3	N/A

Cables					
Cable Type	Shield	Length (m)	Ferrite	Connection 1	Connection 2
DC Leads	PA	1.4	No	Handheld Computer	AC Adapter
AC Power	No	2.0	No	AC Adapter	AC Mains
AC Power	No	2.0	No	AC Adapter	AC Mains
DC Leads	PA	1.8	PA	Printer	AC Adapter
Serial	Yes	4.0	No	Printer	Remote laptop

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

Remote Equipment Outside of Test Setup Boundary			
Description	Manufacturer	Model/Part Number	Serial Number
Remote laptop	Dell	TS30G	7247346BYK0204A
Equipment isolated from the EUT so as not to contribute to the measurement result is considered to be outside the test setup boundary			

Measurement Equipment					
Description	Manufacturer	Model	Identifier	Last Cal	Interval
Antenna, Horn	EMCO	3160-09	AHG	NCR	NA
Pre-Amplifier	Miteq	JSD4-18002600-26-8P	APU	10/08/2003	12 mo
Antenna, Horn	EMCO	3160-08	AHK	NCR	NA
Pre-Amplifier	Miteq	AMF-4D-005180-24-10P	APC	10/08/2003	12 mo
Antenna, Horn	EMCO	3115	AHC	09/18/2003	12 mo
Pre-Amplifier	Miteq	AMF-4D-005180-24-10P	APJ	01/05/2004	13 mo
Antenna, Biconilog	EMCO	3141	AXE	12/03/2003	24 mo
Pre-Amplifier	Amplifier Research	LN1000A	APS	02/05/2004	13 mo
High Pass Filter	Micro-Tronics	HPM50111	HFO	04/13/2004	13 mo
Attenuator	Pasternack	PE7001-10	ATD	02/03/2004	13 mo
Attenuator		2082-6148-20	ATE	02/03/2004	13 mo
Antenna, Horn	EMCO	3115	AHF	03/18/2004	24 mo
Signal Generator	Hewlett Packard	8341B	TGN	01/23/2004	13 mo
Antenna, Dipole (ADAA included)	Roberts	Roberts	ADA	12/27/2002	24 mo
Spectrum Analyzer	Hewlett-Packard	8566B	AAL	12/23/2003	13 mo
Quasi-Peak Adapter	Hewlett-Packard	85650A	AQF	12/23/2003	13 mo
Spectrum Analyzer	Tektronix	2784	AAO	02/26/2003	24 mo

Test Description

Requirement: Per 2.1053, the field strength of spurious radiation was measured in the far-field at an FCC Listed semi-anechoic chamber up to 25 GHZ. The applicable limits are 22.917(e) for the cellular band, and 24.238(a) for the PCS band.

Per 22.917(e), the mean power of out of band emissions must be attenuated below the mean power of the unmodulated carrier (P) on any frequency twice or more than twice the fundamental frequency by at least $43 + 10 \log (P)$ dB. (-13 dBm).

Per 24.238(a), on any frequency outside a licensee's frequency block, the power of any emission shall be attenuated below the transmitter power (P) by at least $43 + 10 \log (P)$ dB. (-13 dBm).

Configuration: The EUT is a CDMA radio module (FCC ID: EHAEM3420). The CDMA radio is installed in an Intermec Handheld Computer, Model 700C. The 700C contains three co-located radio modules (CDMA, 802.11(b) and Bluetooth). The 802.11(b) and Bluetooth radios have been previously certified for portable, co-located use in the 700C (FCC ID: HN22011B-2, FCC ID: EHABTS080). The EUT was tested in standalone mode, and it was tested with these co-located radios in the 700C. In addition to these configurations, the 700C can be installed in an Intermec Printer, Model 6820, or a Handheld Pistol Grip, IP3. The EUT can transmit simultaneously with Bluetooth when the 700C is installed in the printer (FCC ID: EHABTS080-1), or the EUT can transmit simultaneously with RFID when the 700C is installed in the pistol grip (FCC ID: EHARFID915PCC-6).

Spectrum analyzer, signal generator, and linearly polarized antennas were used to measure radiated harmonics and spurious emissions. The orientation of the EUT and measurement antenna were manipulated to maximize the level of emissions. The EUT was configured to transmit at the highest output at low, mid, and high channels. The EUT was tested with each antenna. Only one antenna can be used at a time.

The substitution method as described in TIA/EIA-603 Section 2.2.12 was used for the highest spurious emissions. The EUT was tested individually, then while simultaneously transmitting with a co-located radio.

Test Methodology: 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 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 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 emissions. 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 dipole antenna and its gain; the power (ERP or e.i.r.p) is determined for each radiated 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 final measurements must be made utilizing the substitution method described above. The 3 meter limit was calculated to be 84.3 dBuV/m at 3 meters. This was based upon an output power of 0.224 W.

Simultaneous Transmission: The EUT will be co-located with several other radios. The CDMA radio is installed in an Intermec Handheld Computer, Model 700C. The 700C contains three co-located radio modules (CDMA, 802.11(b) and Bluetooth). The 802.11(b) and Bluetooth radios have been previously certified for portable, co-located use in the 700C (FCC ID: HN22011B-2, FCC ID: EHABTS080). The EUT was tested in standalone mode, and it was tested with these co-located radios in the 700C. In addition to these configurations, the 700C can be installed in an Intermec Printer, Model 6820, or a Handheld Pistol Grip, IP3. The EUT can transmit simultaneously with Bluetooth when the 700C is installed in the printer (FCC ID: EHABTS080-1), or the EUT can transmit simultaneously with RFID when the 700C is installed in the pistol grip (FCC ID: EHARFID915PCC-6).

The following is an excerpt from the FCC / TCB Training Q & A, October 2002, Day 2, Question 7:

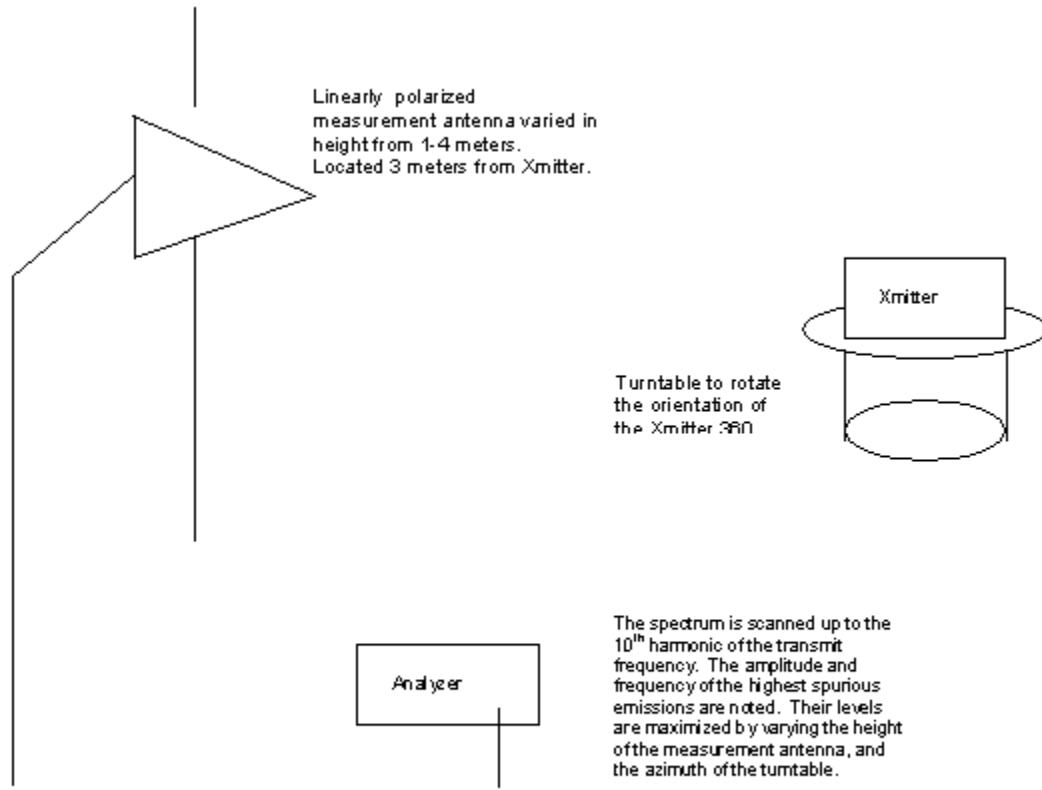
Assuming that the radios do not share an antenna, only radiated tests for simultaneous transmission is required. If the radios share an antenna, antenna conducted measurements would also be required. Only one set of worst case simultaneous transmission data is going to be requested to be submitted at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

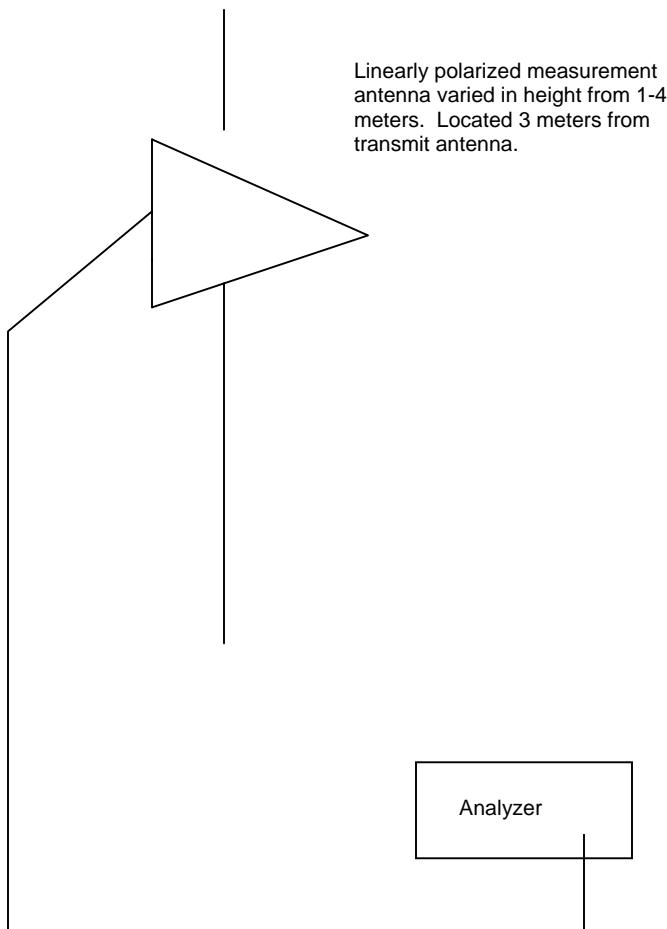
All possible combinations of harmonic emissions from the CDMA, 802.11(b), and Bluetooth radios were compared numerically. It was determined that there were no possible coincidental harmonics below 1 GHz. The frequency range from 1 GHz to 26 GHz was investigated for channel combinations that would produce coincidental harmonics. Compliance with the restricted band at 2483.5 – 2500 MHz was also measured.

All the radios were configured for simultaneous transmission at the channels specified in the previous pages. The highest gain antennas to be used with the radios were tested. The spectrum was scanned throughout the specified range. While scanning, emissions from the radios were maximized by rotating the EUT on a turntable, adjusting the position of the EUT and EUT antennas in three orthogonal axes, and adjusting the measurement antenna height and polarization (per ANSI C63.4:2001). A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

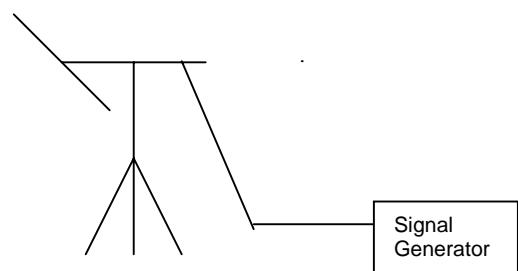
Bandwidths Used for Measurements			
Frequency Range (MHz)	Peak Data (kHz)	Quasi-Peak Data (kHz)	Average Data (kHz)
0.01 – 0.15	1.0	0.2	0.2
0.15 – 30.0	10.0	9.0	9.0
30.0 – 1000	100.0	120.0	120.0
Above 1000	1000.0	N/A	1000.0

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

Test Setup Diagram**Test Setup for Field Strength Measurements**

**Test Setup for Power Measurements
Utilizing the Antenna Substitution Method**

During field strength measurements, the amplitude and frequency of the highest emissions are noted. The transmitter is then replaced with a $\frac{1}{2}$ wave dipole (at the same height) that is successively tuned to each of the highest spurious emissions. 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.

**Completed by:**

NORTHWEST
EMC

Apparent Power Data Sheet

REV
df4.13
05/06/2004

EUT: CDMA in 700C with 802.11(b), Bluetooth in 700C

Work Order: ITRM0030

Serial Number:

Date: 06/29/04

Customer: Intermec Technologies Corporation

Temperature: 75

Attendees: none

Humidity: 42%

Cust. Ref. No.:

Barometric Pressure: 29.9

Tested by: Holly Ashkannejhad

Power: 120VAC, 60Hz

Job Site: EV01

TEST SPECIFICATIONS

Specification: FCC 22.917(e)

Year: 2003

Method: TIA/EIA-603

Year: 2001

SAMPLE CALCULATIONS

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

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

COMMENTS

Simultaneous transmission of 700C (CDMA(cellular)/802.11b/Bluetooth)

EUT OPERATING MODES

Transmitting channel 467 CDMA cellular, 802.11b channel 1, Bluetooth channel 11

DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS

Run #

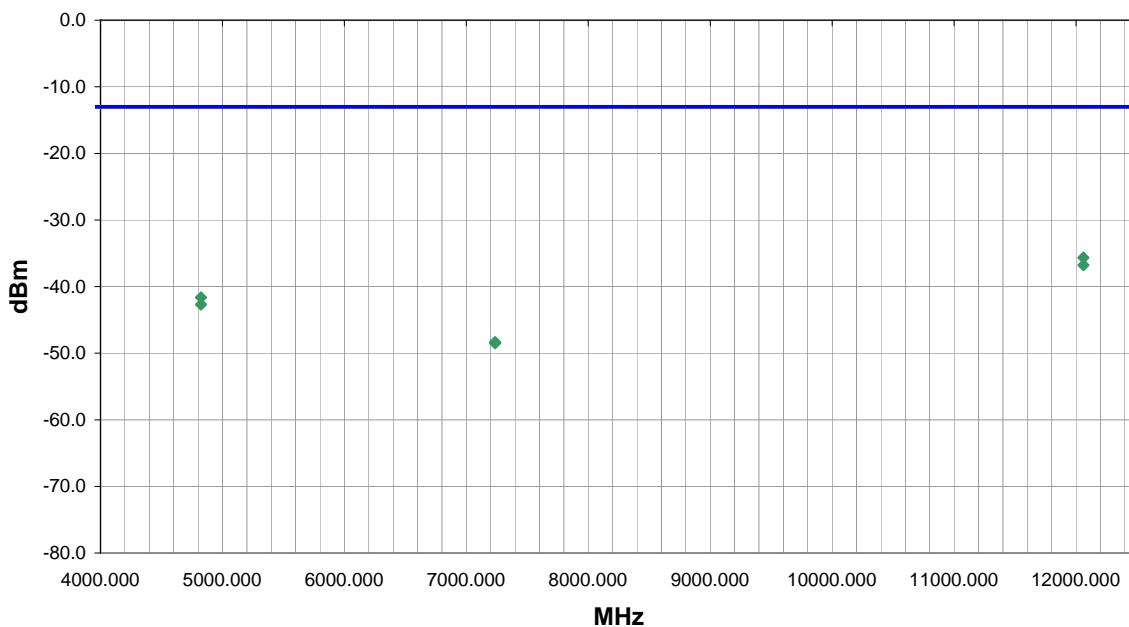
Pass

39

Other

Holly Ashkannejhad

Tested By:



Freq (MHz)			Azimuth (degrees)	Height (meters)			Polarity	Detector		EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)
12060.000			256.0	1.0			H-Horn	PK		-35.7	-13.0	-22.7
12060.000			8.0	1.2			V-Horn	PK		-36.8	-13.0	-23.8
4824.000			251.0	1.0			V-Horn	PK		-41.6	-13.0	-28.6
4824.000			274.0	1.0			H-Horn	PK		-42.7	-13.0	-29.7
7236.000			19.0	1.0			H-Horn	PK		-48.3	-13.0	-35.3
7236.000			277.0	1.3			V-Horn	PK		-48.5	-13.0	-35.5

NORTHWEST
EMC

Apparent Power Data Sheet

REV
df4.13
05/06/2004

EUT:	CDMA in 700C with 802.11(b), Bluetooth in 700C	Work Order:	ITRM0030
Serial Number:		Date:	06/29/04
Customer:	Intermec Technologies Corporation	Temperature:	75
Attendees:	none	Humidity:	45%
Cust. Ref. No.:		Barometric Pressure:	30.16
Tested by:	Holly Ashkannejhad	Job Site:	EV01

TEST SPECIFICATIONS

Specification:	FCC 22.917(e)	Year:	2003
Method:	TIA/EIA-603	Year:	2001

SAMPLE CALCULATIONS

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

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

COMMENTS

Simultaneous transmission of 700C (CDMA(cellular)/802.11b/Bluetooth)

EUT OPERATING MODES

Transmitting channel 55 CDMA cellular, 802.11b channel 11, Bluetooth channel 79

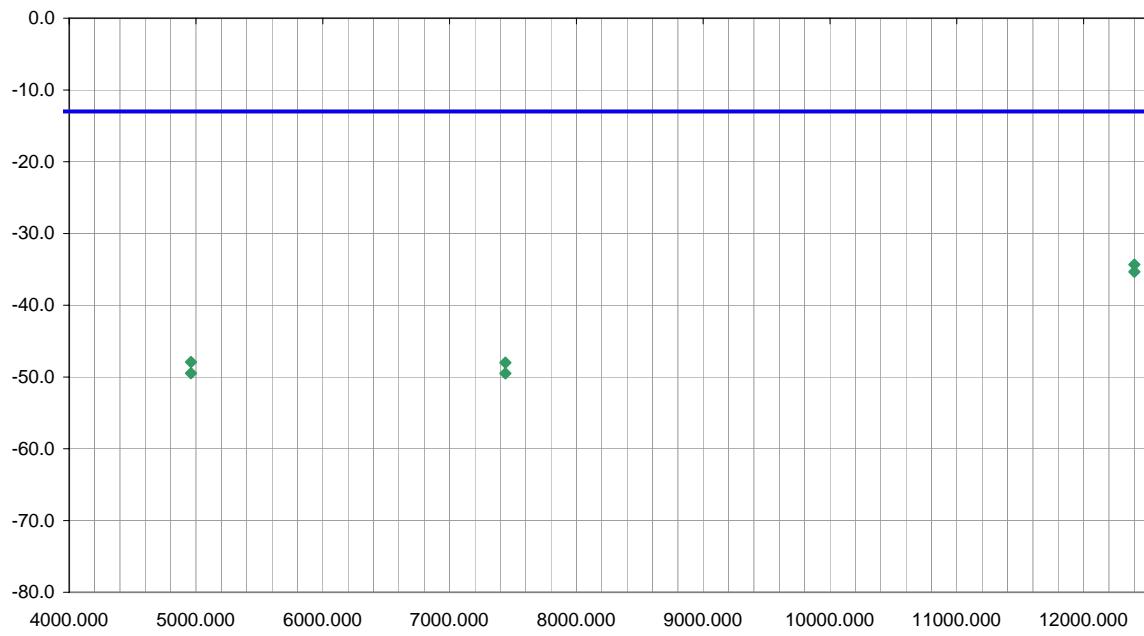
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS

Pass	Run #
	40

Other	
	Tested By: <hr/>



Freq (MHz)			Azimuth (degrees)	Height (meters)			Polarity	Detector		EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)
12400.000			133.0	3.4			H-Horn	PK		-34.3	-13.0	-21.3
12400.000			114.0	2.4			V-Horn	PK		-35.3	-13.0	-22.3
4960.000			241.0	1.2			V-Horn	PK		-47.9	-13.0	-34.9
7440.000			313.0	1.3			H-Horn	PK		-48.0	-13.0	-35.0
4960.000			263.0	1.3			H-Horn	PK		-49.5	-13.0	-36.5
7440.000			307.0	1.2			V-Horn	PK		-49.5	-13.0	-36.5

NORTHWEST
EMC

Apparent Power Data Sheet

REV
df4.13
05/06/2004

EUT:	CDMA in 700C with 802.11(b), Bluetooth in 700C	Work Order:	ITRM0030
Serial Number:		Date:	06/29/04
Customer:	Intermec Technologies Corporation	Temperature:	75
Attendees:	none	Humidity:	45%
Cust. Ref. No.:		Barometric Pressure:	30.16
Tested by:	Holly Ashkannejhad	Job Site:	EV01

TEST SPECIFICATIONS

Specification:	FCC 24.238(a)	Year:	2003
Method:	TIA/EIA-603	Year:	2001

SAMPLE CALCULATIONS

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

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

COMMENTS

Simultaneous transmission of 700C (CDMA(PCS)/802.11b/Bluetooth)

EUT OPERATING MODES

Transmitting channel 1 CDMA PCS, 802.11b channel 1, Bluetooth channel 11

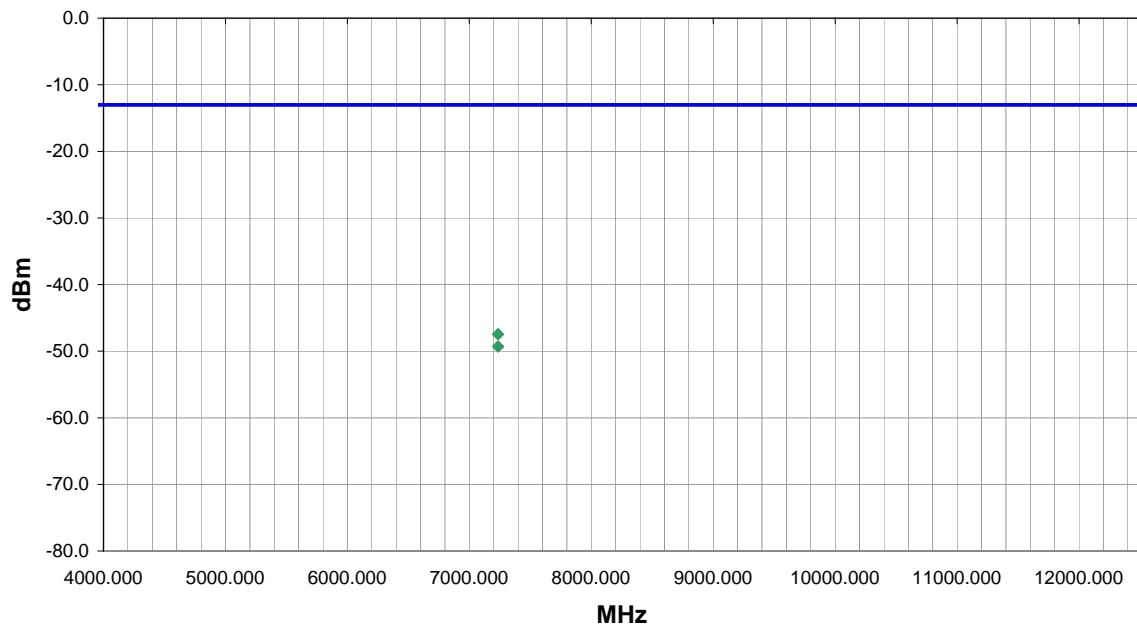
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS

Pass	Run #
Pass	41

Other	
	Tested By: <u>Holly Ashkannejhad</u>

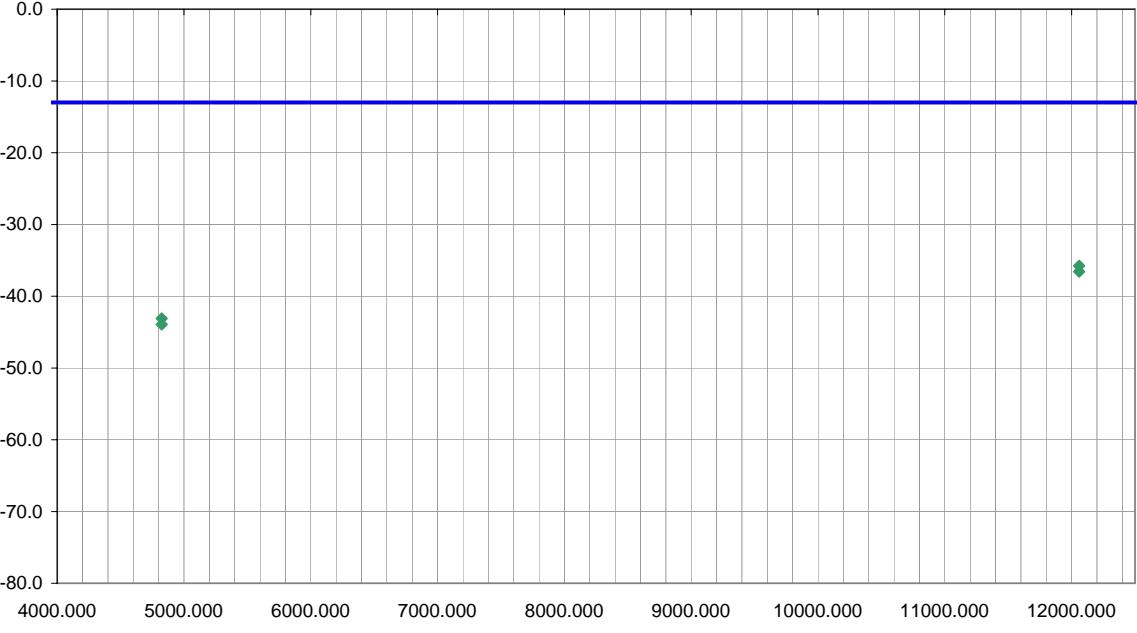


Freq (MHz)			Azimuth (degrees)	Height (meters)			Polarity	Detector		EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)
7236.000			299.0	1.8			H-Horn	PK		-47.4	-13.0	-34.4
7236.000			24.0	1.2			V-Horn	PK		-49.3	-13.0	-36.3

NORTHWEST
EMC

Apparent Power Data Sheet

REV
df4.13
05/06/2004

EUT: CDMA in 700C with 802.11(b), Bluetooth in 700C		Work Order: ITRM0030										
Serial Number:		Date: 06/29/04										
Customer: Intermec Technologies Corporation		Temperature: 75										
Attendees: none		Humidity: 45%										
Cust. Ref. No.:		Barometric Pressure: 30.16										
Tested by: Holly Ashkannejhad		Job Site: EV01										
TEST SPECIFICATIONS												
Specification: FCC 24.238(a)		Year: 2003										
Method: TIA/EIA-603		Year: 2001										
SAMPLE CALCULATIONS												
Radiated Emissions: Field Strength = Measured Level + Antenna Factor + Cable Factor - Amplifier Gain + Distance Adjustment Factor + External Attenuation												
Conducted Emissions: Adjusted Level = Measured Level + Transducer Factor + Cable Attenuation Factor + External Attenuator												
COMMENTS												
Simultaneous transmission of 700C (CDMA(PCS)/802.11b/Bluetooth)												
EUT OPERATING MODES												
Transmitting channel 1153 CDMA PCS, 802.11b channel 1, Bluetooth channel 11												
DEVIATIONS FROM TEST STANDARD												
No deviations.												
RESULTS		Run #										
Pass		42										
Other		 Tested By:										
												
Freq (MHz)			Azimuth (degrees)	Height (meters)			Polarity	Detector		EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)
12060.000			241.0	1.3			H-Horn	PK		-35.8	-13.0	-22.8
12060.000			190.0	2.4			V-Horn	PK		-36.6	-13.0	-23.6
4824.000			313.0	1.3			H-Horn	PK		-43.1	-13.0	-30.1
4824.000			250.0	1.3			V-Horn	PK		-43.9	-13.0	-30.9

NORTHWEST
EMC

Apparent Power Data Sheet

REV
df4.13
05/06/2004

EUT: CDMA in 700C with 802.11(b), Bluetooth in 700C

Work Order: ITRM0030

Serial Number:

Date: 06/29/04

Customer: Intermec Technologies Corporation

Temperature: 75

Attendees: none

Humidity: 45%

Cust. Ref. No.:

Barometric Pressure: 30.16

Tested by: Holly Ashkannejhad

Power: 120VAC, 60Hz

Job Site: EV01

TEST SPECIFICATIONS

Specification: FCC 24.238(a)

Year: 2003

Method: TIA/EIA-603

Year: 2001

SAMPLE CALCULATIONS

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

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

COMMENTS

Simultaneous transmission of 700C (CDMA(PCS)/802.11b/Bluetooth)

EUT OPERATING MODES

Transmitting channel 35 CDMA PCS, 802.11b channel 11, Bluetooth channel 68

DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS

Run #

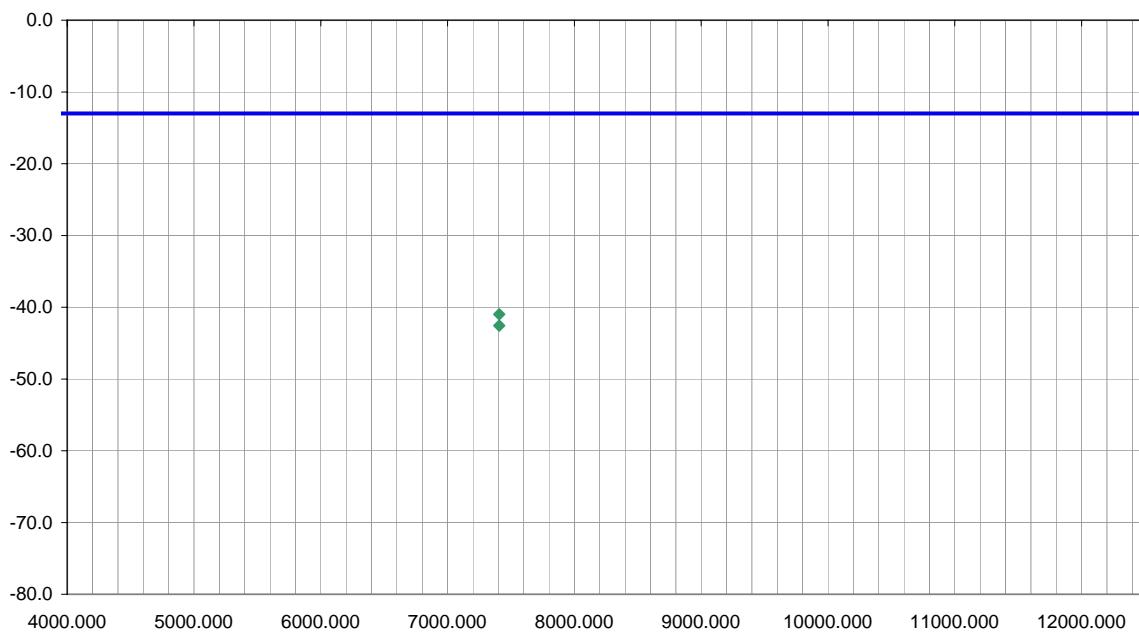
Pass

43

Other

Holly Ashkannejhad

Tested By:

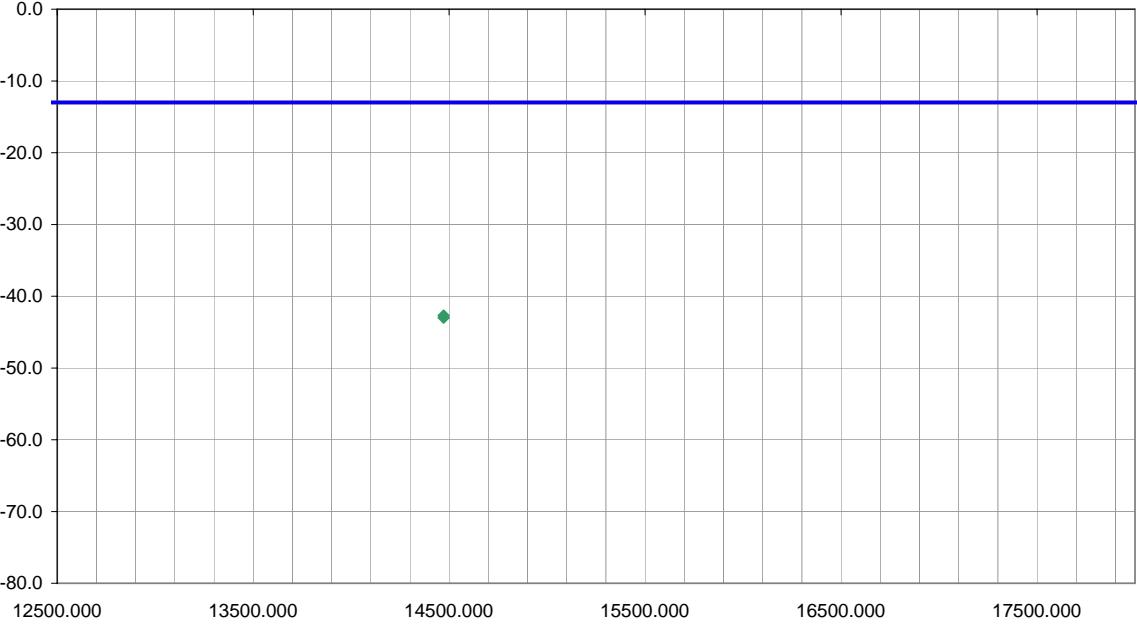


Freq (MHz)			Azimuth (degrees)	Height (meters)			Polarity	Detector		EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)
7407.000			29.0	1.3			H-Horn	PK		-41.0	-13.0	-28.0
7407.000			48.0	1.2			V-Horn	PK		-42.6	-13.0	-29.6

NORTHWEST
EMC

Apparent Power Data Sheet

REV
df4.13
05/06/2004

EUT:	CDMA in 700C with 802.11(b), Bluetooth in 700C			Work Order:	ITRM0030					
Serial Number:				Date:	06/29/04					
Customer:	Intermec Technologies Corporation			Temperature:	75					
Attendees:	none			Humidity:	45%					
Cust. Ref. No.:				Barometric Pressure:	30.16					
Tested by:	Holly Ashkannejhad	Power:	120VAC, 60Hz		Job Site:	EV01				
TEST SPECIFICATIONS										
Specification:	FCC 24.238(a)			Year:	2003					
Method:	TIA/EIA-603			Year:	2001					
SAMPLE CALCULATIONS										
Radiated Emissions: Field Strength = Measured Level + Antenna Factor + Cable Factor - Amplifier Gain + Distance Adjustment Factor + External Attenuation										
Conducted Emissions: Adjusted Level = Measured Level + Transducer Factor + Cable Attenuation Factor + External Attenuator										
COMMENTS										
Simultaneous transmission of 700C (CDMA(PCS)/802.11b/Bluetooth)										
EUT OPERATING MODES										
Transmitting channel 1 CDMA PCS, 802.11b channel 1, Bluetooth channel 11										
DEVIATIONS FROM TEST STANDARD										
No deviations.										
RESULTS										
Pass				Run #	44					
Other				 Tested By:						
										
Freq (MHz)			Azimuth (degrees)	Height (meters)	Polarity	Detector		EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)
14472.000			84.0	2.6	V-Horn	PK		-42.7	-13.0	-29.7
14472.000			138.0	2.8	H-Horn	PK		-43.0	-13.0	-30.0

NORTHWEST
EMC

Apparent Power Data Sheet

REV
df4.13
05/06/2004

EUT: CDMA in 700C with 802.11(b), Bluetooth in 700C

Work Order: ITRM0030

Serial Number:

Date: 06/29/04

Customer: Intermec Technologies Corporation

Temperature: 75

Attendees: none

Humidity: 45%

Cust. Ref. No.:

Barometric Pressure: 30.16

Tested by: Holly Ashkannejhad

Power: 120VAC, 60Hz

Job Site: EV01

TEST SPECIFICATIONS

Specification: FCC 24.238(a)

Year: 2003

Method: TIA/EIA-603

Year: 2001

SAMPLE CALCULATIONS

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

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

COMMENTS

Simultaneous transmission of 700C (CDMA(cellular)/802.11b/Bluetooth)

EUT OPERATING MODES

Transmitting channel 467 CDMA cellular, 802.11b channel 1, Bluetooth channel 11

DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS

Run #

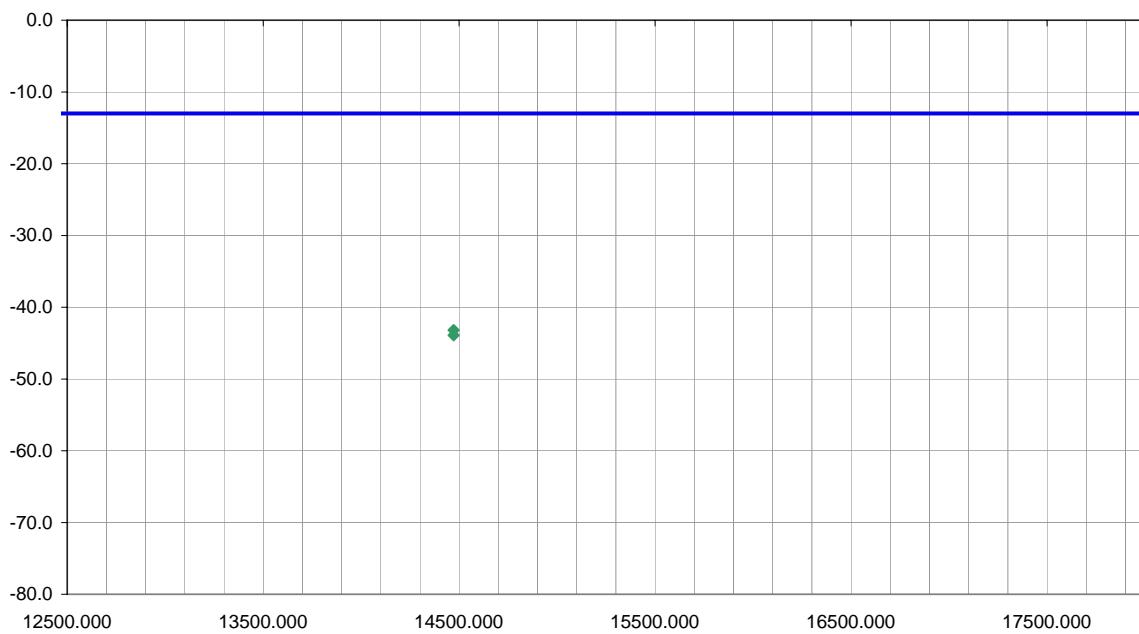
Pass

45

Other

Holly Ashkannejhad

Tested By:



Freq (MHz)			Azimuth (degrees)	Height (meters)		Polarity	Detector		EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)
14472.000			84.0	1.3		H-Horn	PK		-43.2	-13.0	-30.2
14472.000			47.0	1.2		V-Horn	PK		-43.9	-13.0	-30.9

NORTHWEST
EMC

Apparent Power Data Sheet

REV
df4.13
05/06/2004

EUT: CDMA in 700C with 802.11(b), Bluetooth in 700C

Work Order: ITRM0030

Serial Number:

Date: 06/29/04

Customer: Intermec Technologies Corporation

Temperature: 75

Attendees: none

Humidity: 45%

Cust. Ref. No.:

Barometric Pressure: 30.16

Tested by: Holly Ashkannejhad

Power: 120VAC, 60Hz

Job Site: EV01

TEST SPECIFICATIONS

Specification: FCC 22.917(e)

Year: 2003

Method: TIA/EIA-603

Year: 2001

SAMPLE CALCULATIONS

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

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

COMMENTS

Simultaneous transmission of 700C (CDMA(cellular)/802.11b/Bluetooth)

EUT OPERATING MODES

Transmitting channel 467 CDMA cellular, 802.11b channel 1, Bluetooth channel 11

DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS

Run #

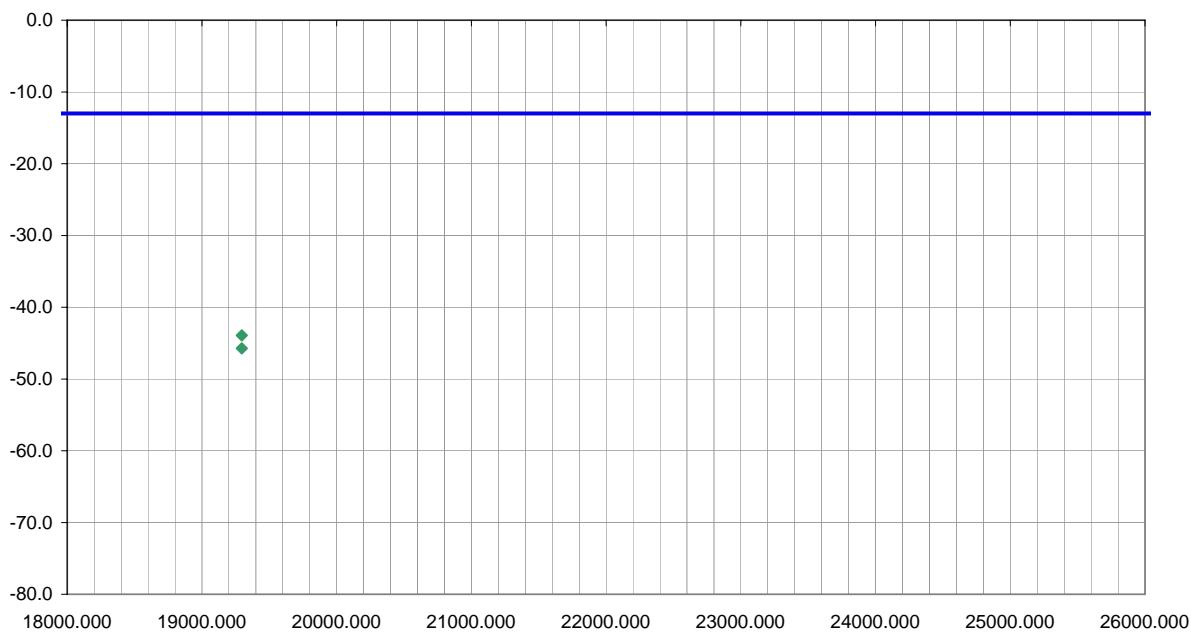
Pass

47

Other

Holly Ashkannejhad

Tested By:



Freq (MHz)			Azimuth (degrees)	Height (meters)		Polarity	Detector		EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)
19296.000			-1.0	1.0		V-High Horr	PK		-43.9	-13.0	-30.9
19296.000			360.0	1.0		H-High Horr	PK		-45.7	-13.0	-32.7

NORTHWEST
EMC

Apparent Power Data Sheet

REV
df4.13
05/06/2004

EUT: CDMA in 700C with 802.11(b), Bluetooth in 700C

Work Order: ITRM0030

Serial Number:

Date: 06/29/04

Customer: Intermec Technologies Corporation

Temperature: 75

Attendees: none

Humidity: 45%

Cust. Ref. No.:

Barometric Pressure: 30.16

Tested by: Holly Ashkannejhad

Power: 120VAC, 60Hz

Job Site: EV01

TEST SPECIFICATIONS

Specification: FCC 22.917(e)

Year: 2003

Method: TIA/EIA-603

Year: 2001

SAMPLE CALCULATIONS

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

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

COMMENTS

Simultaneous transmission of 700C (CDMA(cellular)/802.11b/Bluetooth)

EUT OPERATING MODES

Transmitting channel 395 CDMA cellular, 802.11b channel 1, Bluetooth channel 5

DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS

Run #

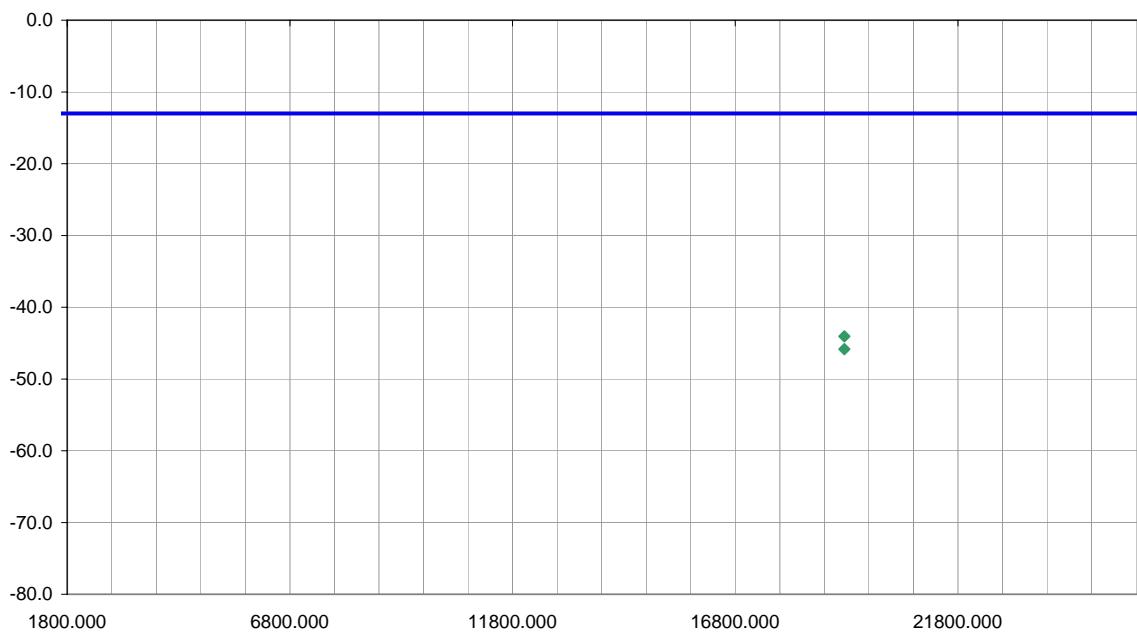
Pass

48

Other

Holly Ashkannejhad

Tested By:



Freq (MHz)			Azimuth (degrees)	Height (meters)		Polarity	Detector		EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)
19248.000			-1.0	1.0		V-High Horr	PK		-44.0	-13.0	-31.0
19248.000			360.0	1.0		H-High Horr	PK		-45.8	-13.0	-32.8

NORTHWEST
EMC

Apparent Power Data Sheet

REV
df4.13
05/06/2004

EUT: CDMA in 700C with 802.11(b), Bluetooth in 700C

Work Order: ITRM0030

Serial Number:

Date: 06/29/04

Customer: Intermec Technologies Corporation

Temperature: 75

Attendees: none

Humidity: 45%

Cust. Ref. No.:

Barometric Pressure: 30.16

Tested by: Holly Ashkannnejhad

Power: 120VAC, 60Hz

Job Site: EV01

TEST SPECIFICATIONS

Specification: FCC 22.917(e)

Year: 2003

Method: TIA/EIA-603

Year: 2001

SAMPLE CALCULATIONS

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

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

COMMENTS

Simultaneous transmission of 700C (CDMA(cellular)/802.11b/Bluetooth)

EUT OPERATING MODES

Transmitting channel 55 CDMA cellular, 802.11b channel 11, Bluetooth channel 79

DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS

Run #

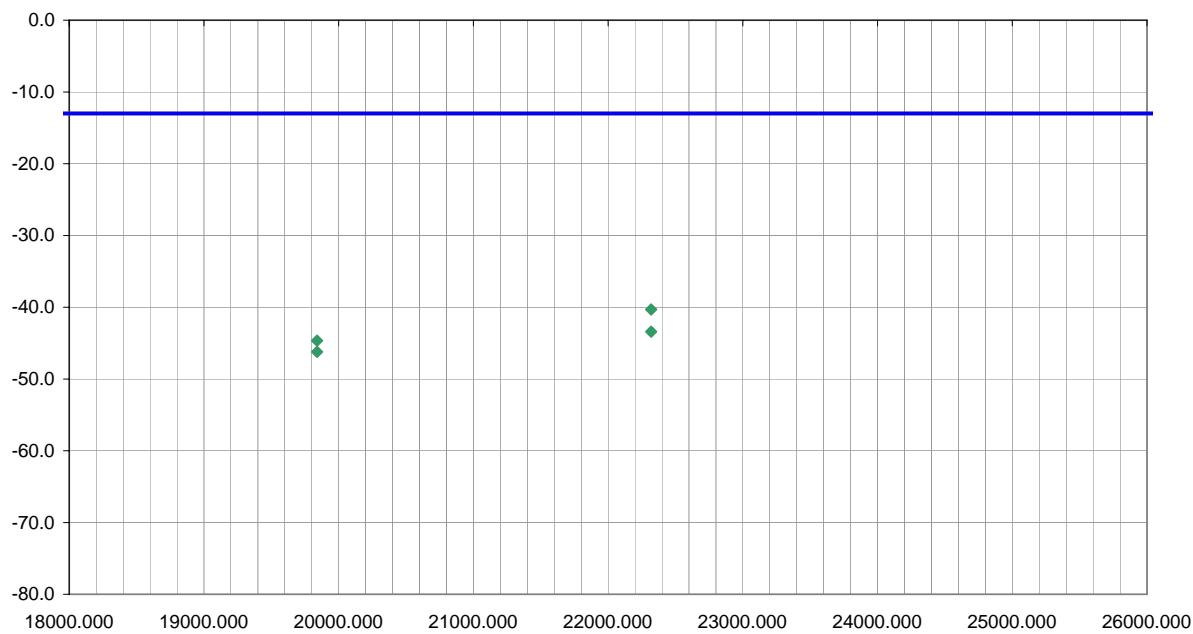
Pass

49

Other

Holly Ashkannnejhad

Tested By:



Freq (MHz)			Azimuth (degrees)	Height (meters)		Polarity	Detector		EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)
22320.000			-1.0	1.0		V-High Horr	PK		-40.3	-13.0	-27.3
22320.000			360.0	1.0		H-High Horr	PK		-43.4	-13.0	-30.4
19840.000			-1.0	1.0		V-High Horr	PK		-44.7	-13.0	-31.7
19840.000			360.0	1.0		H-High Horr	PK		-46.2	-13.0	-33.2

NORTHWEST
EMC

Apparent Power Data Sheet

REV
df4.13
05/06/2004

EUT: CDMA in 700C with 802.11(b), Bluetooth in 700C

Work Order: ITRM0030

Serial Number:

Date: 06/29/04

Customer: Intermec Technologies Corporation

Temperature: 75

Attendees: none

Humidity: 45%

Cust. Ref. No.:

Barometric Pressure: 30.16

Tested by: Holly Ashkannejhad

Power: 120VAC, 60Hz

Job Site: EV01

TEST SPECIFICATIONS

Specification: FCC 24.238(a)

Year: 2003

Method: TIA/EIA-603

Year: 2001

SAMPLE CALCULATIONS

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

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

COMMENTS

Simultaneous transmission of 700C (CDMA(PCS)/802.11b/Bluetooth)

EUT OPERATING MODES

Transmitting channel 1153 CDMA PCS, 802.11b channel 1, Bluetooth channel 11

DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS

Run #

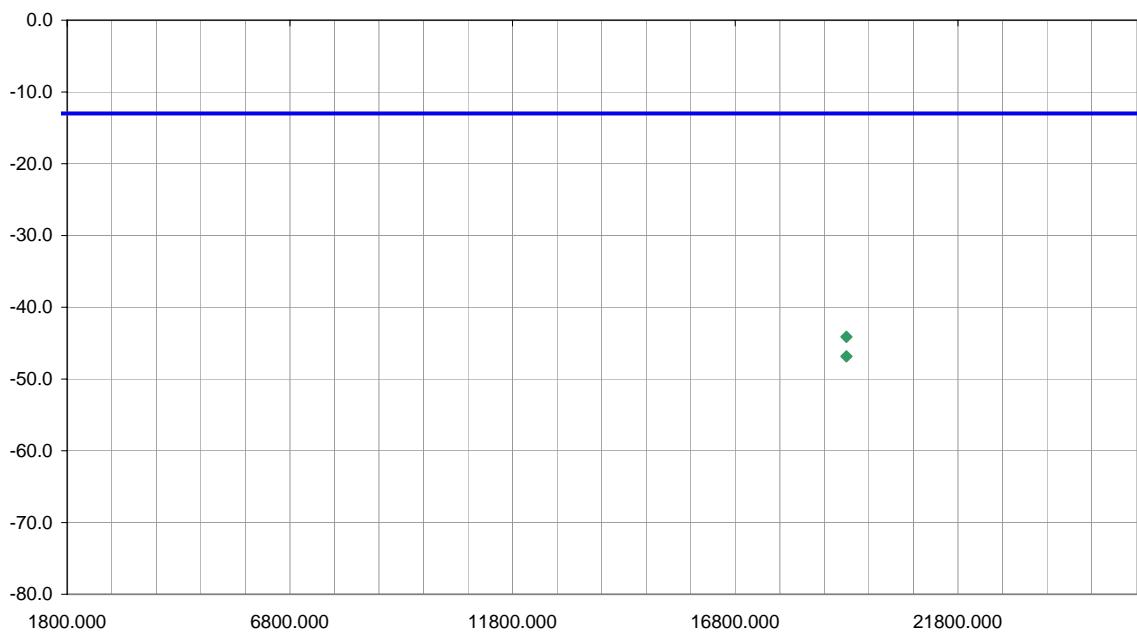
Pass

50

Other

Holly Ashkannejhad

Tested By:



Freq (MHz)			Azimuth (degrees)	Height (meters)			Polarity	Detector		EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)
19296.000			-1.0	1.0			V-High Horr	PK		-44.1	-13.0	-31.1
19296.000			360.0	1.0			H-High Horr	PK		-46.8	-13.0	-33.8

NORTHWEST
EMC

Apparent Power Data Sheet

REV
df4.13
05/06/2004

EUT: CDMA in 700C with 802.11(b), Bluetooth in 700C

Work Order: ITRM0030

Serial Number:

Date: 06/29/04

Customer: Intermec Technologies Corporation

Temperature: 75

Attendees: none

Humidity: 45%

Cust. Ref. No.:

Barometric Pressure: 30.16

Tested by: Holly Ashkannejhad

Power: 120VAC, 60Hz

Job Site: EV01

TEST SPECIFICATIONS

Specification: FCC 24.238(a)

Year: 2003

Method: TIA/EIA-603

Year: 2001

SAMPLE CALCULATIONS

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

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

COMMENTS

Simultaneous transmission of 700C (CDMA(PCS)/802.11b/Bluetooth)

EUT OPERATING MODES

Transmitting channel 35 CDMA PCS, 802.11b channel 11, Bluetooth channel 35

DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS

Run #

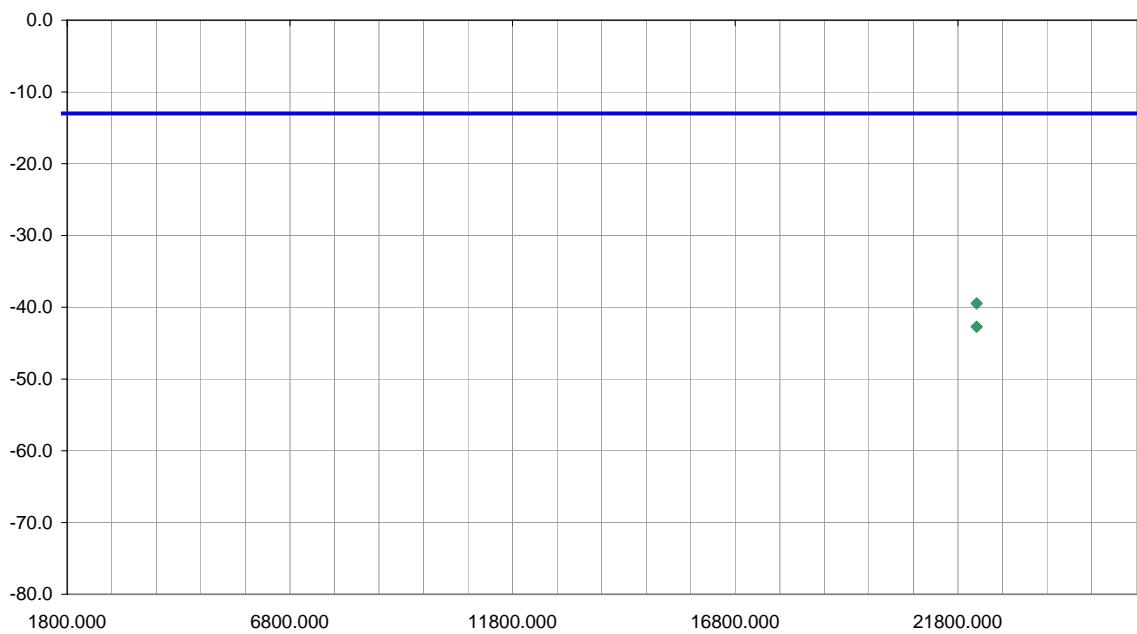
Pass

51

Other

Holly Ashkannejhad

Tested By:

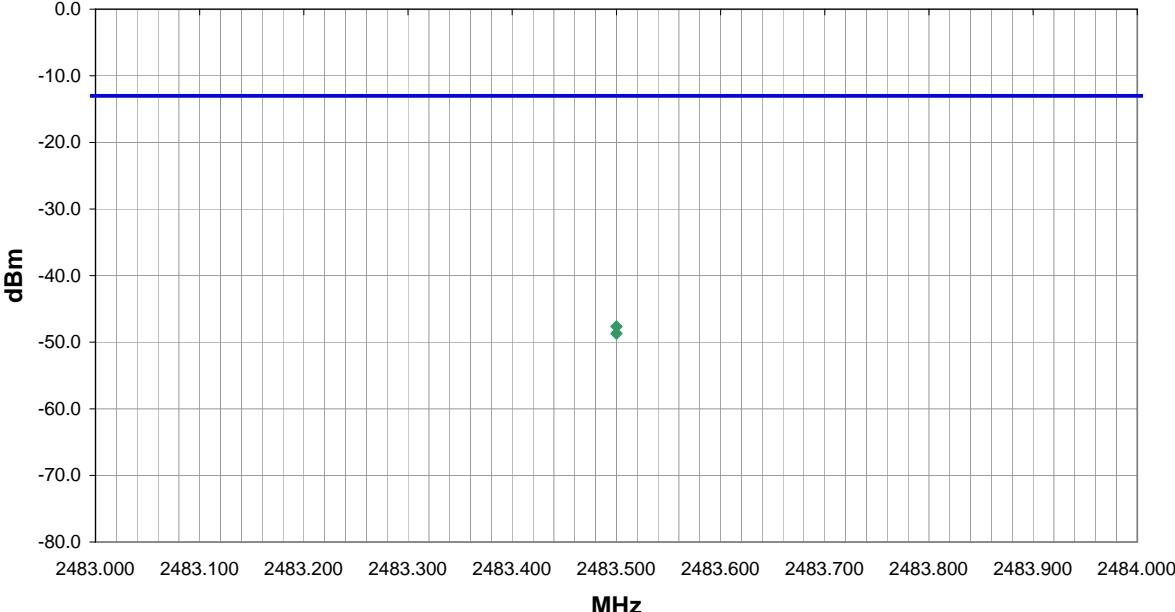


Freq (MHz)			Azimuth (degrees)	Height (meters)			Polarity	Detector		EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)
22221.000			-1.0	1.0			V-High Horr	PK		-39.5	-13.0	-26.5
22221.000			360.0	1.0			H-High Horr	PK		-42.7	-13.0	-29.7

NORTHWEST
EMC

Apparent Power Data Sheet

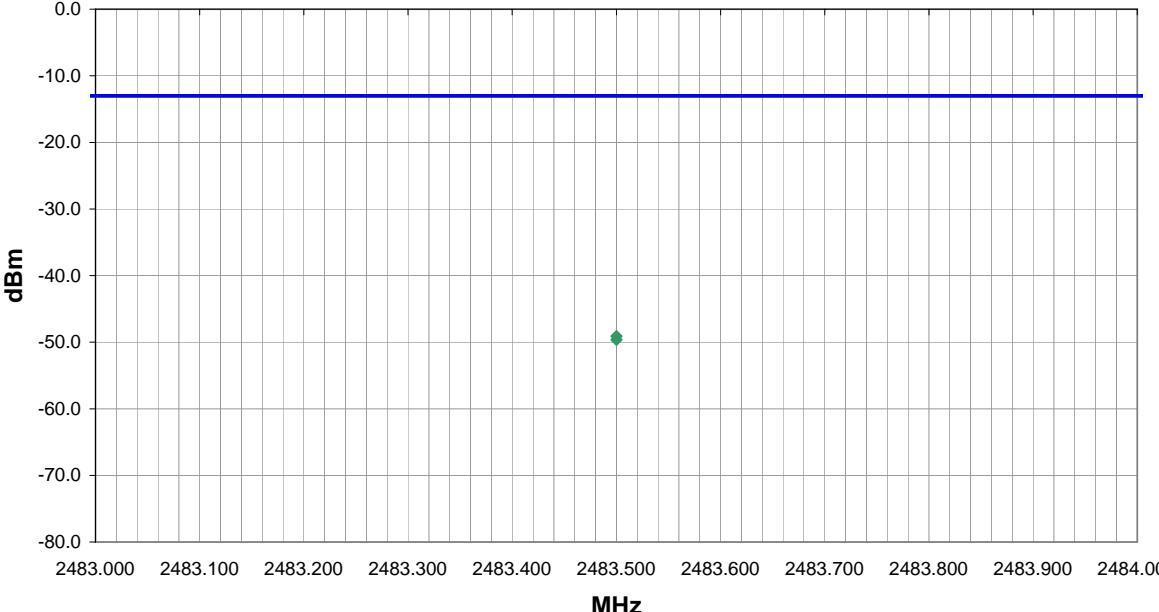
REV
df4.13
05/06/2004

EUT: CDMA in 700C with 802.11(b), Bluetooth in 700C		Work Order: ITRM0030								
Serial Number:		Date: 06/29/04								
Customer: Intermec Technologies Corporation		Temperature: 75								
Attendees: none		Humidity: 45%								
Cust. Ref. No.:		Barometric Pressure: 30.16								
Tested by: Holly Ashkannejhad		Job Site: EV01								
TEST SPECIFICATIONS										
Specification: FCC 24.238(a)		Year: 2003								
Method: TIA/EIA-603		Year: 2001								
SAMPLE CALCULATIONS										
Radiated Emissions: Field Strength = Measured Level + Antenna Factor + Cable Factor - Amplifier Gain + Distance Adjustment Factor + External Attenuation										
Conducted Emissions: Adjusted Level = Measured Level + Transducer Factor + Cable Attenuation Factor + External Attenuator										
COMMENTS										
Simultaneous transmission of 700C (CDMA(PCS)/802.11b/Bluetooth)										
EUT OPERATING MODES										
Transmitting channel 1153 CDMA PCS, 802.11b channel 11, Bluetooth channel 62										
DEVIATIONS FROM TEST STANDARD										
No deviations.										
RESULTS		Run #								
Pass		52								
Other		 Tested By: _____								
										
Freq (MHz)		Azimuth (degrees)	Height (meters)		Polarity	Detector		EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)
2483.500		206.0	1.5		H-Horn	PK		-47.6	-13.0	-34.6
2483.500		147.0	1.0		V-Horn	PK		-48.7	-13.0	-35.7

NORTHWEST
EMC

Apparent Power Data Sheet

REV
df4.13
05/06/2004

EUT: CDMA in 700C with 802.11(b), Bluetooth in 700C		Work Order: ITRM0030								
Serial Number:		Date: 06/30/04								
Customer: Intermec Technologies Corporation		Temperature: 75								
Attendees: none		Humidity: 45%								
Cust. Ref. No.:		Barometric Pressure: 30.16								
Tested by: Holly Ashkannejhad	Power: 120VAC, 60Hz	Job Site: EV01								
TEST SPECIFICATIONS										
Specification: FCC 22.917(e)		Year: 2003								
Method: TIA/EIA-603		Year: 2001								
SAMPLE CALCULATIONS										
Radiated Emissions: Field Strength = Measured Level + Antenna Factor + Cable Factor - Amplifier Gain + Distance Adjustment Factor + External Attenuation										
Conducted Emissions: Adjusted Level = Measured Level + Transducer Factor + Cable Attenuation Factor + External Attenuator										
COMMENTS										
Simultaneous transmission of 700C (CDMA(cellular)/802.11b/Bluetooth)										
EUT OPERATING MODES										
Transmitting channel 54 CDMA cellular, 802.11b channel 11, Bluetooth channel 79										
DEVIATIONS FROM TEST STANDARD										
No deviations.										
RESULTS		Run #								
Pass		53								
Other	 Tested By:									
										
Freq (MHz)		Azimuth (degrees)	Height (meters)		Polarity	Detector		EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)
2483.500		316.0	1.0		V-Horn	PK		-49.1	-13.0	-36.1
2483.500		281.0	1.4		H-Horn	PK		-49.6	-13.0	-36.6

NORTHWEST
EMC

Apparent Power Data Sheet

REV
df4.13
05/06/2004

EUT: CDMA in 700C with 802.11b in 700C and RFID in IP3

Work Order: ITRM0030

Serial Number: Date: 07/01/04

Customer: Intermec Technologies Corporation

Temperature: 79

Attendees: none

Humidity: 43%

Cust. Ref. No.:

Barometric Pressure: 29.93

Tested by: Holly Ashkannejhad

Power: 120VAC, 60Hz

Job Site: EV01

TEST SPECIFICATIONS

Specification: FCC 22.917(e) Year: 2003

Method: TIA/EIA-603 Year: 2001

SAMPLE CALCULATIONS

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

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

COMMENTS

CDMA(cellular) and 802.11(b) in 700C. RFID in IP3.

EUT OPERATING MODES

Transmitting CDMA (cellular) 477 and 802.11b 1 in 700C, and RFID 12 in IP3

DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS

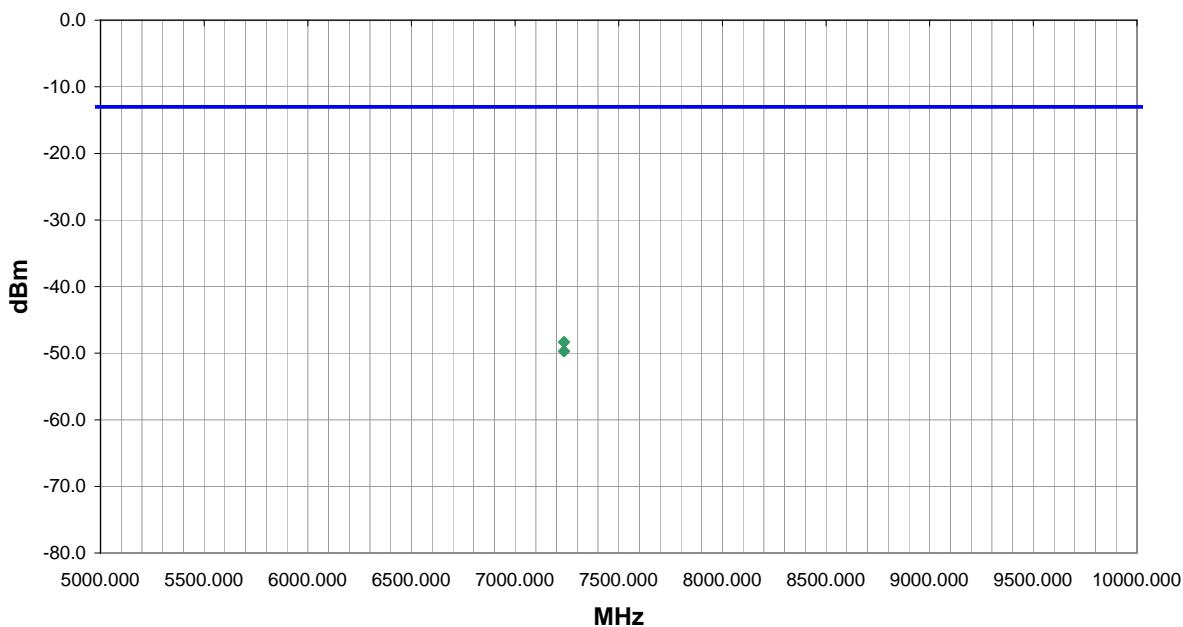
Run #

Pass 54

Other

Holly Ashkannejhad

Tested By:



Freq (MHz)			Azimuth (degrees)	Height (meters)			Polarity	Detector		EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)
7236.000			354.0	1.5			H-Horn	PK		-48.3	-13.0	-35.3
7236.000			9.0	1.2			V-Horn	PK		-49.7	-13.0	-36.7

NORTHWEST
EMC

Apparent Power Data Sheet

REV
df4.13
05/06/2004

EUT:	CDMA in 700C with 802.11b in 700C and RFID in IP3	Work Order:	ITRM0030
Serial Number:		Date:	07/01/04
Customer:	Intermec Technologies Corporation	Temperature:	79
Attendees:	none	Humidity:	43%
Cust. Ref. No.:		Barometric Pressure:	29.93
Tested by:	Holly Ashkannejhad	Job Site:	EV01

TEST SPECIFICATIONS

Specification:	FCC 22.917(e)	Year:	2003
Method:	TIA/EIA-603	Year:	2001

SAMPLE CALCULATIONS

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

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

COMMENTS

CDMA(cellular) and 802.11(b) in 700C. RFID in IP3.

EUT OPERATING MODES

Transmitting CDMA (cellular) 602 and 802.11b 1 in 700C, and RFID 73 in IP3

DEVIATIONS FROM TEST STANDARD

No deviations.

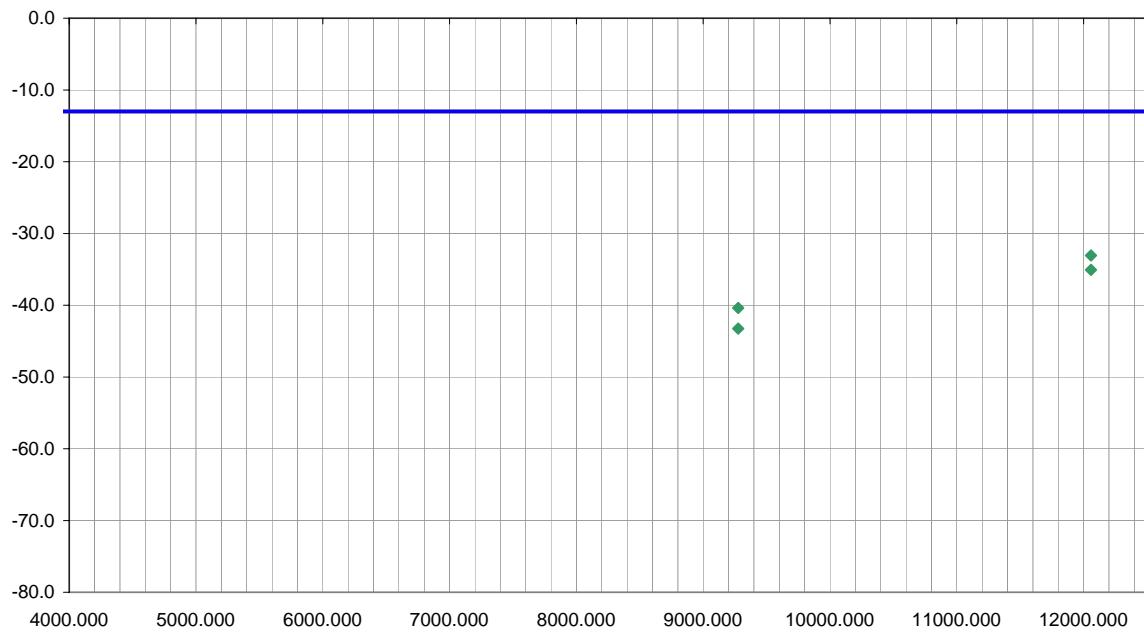
RESULTS

Pass	Run #
	55

Other

Holly Ashkannejhad

Tested By:



Freq (MHz)			Azimuth (degrees)	Height (meters)			Polarity	Detector		EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)
12057.940				349.0	1.0		H-Horn	PK		-33.1	-13.0	-20.1
12057.940				21.0	1.0		V-Horn	PK		-35.1	-13.0	-22.1
9275.500				73.0	1.1		H-Horn	PK		-40.4	-13.0	-27.4
9275.500				340.0	1.1		V-Horn	PK		-43.3	-13.0	-30.3

NORTHWEST
EMC

Apparent Power Data Sheet

REV
df4.13
05/06/2004

EUT:	CDMA in 700C with 802.11b in 700C and RFID in IP3	Work Order:	ITRM0030
Serial Number:		Date:	07/01/04
Customer:	Intermec Technologies Corporation	Temperature:	79
Attendees:	none	Humidity:	43%
Cust. Ref. No.:		Barometric Pressure:	29.93
Tested by:	Holly Ashkannejhad	Job Site:	EV01

TEST SPECIFICATIONS

Specification:	FCC 22.917(e)	Year:	2003
Method:	TIA/EIA-603	Year:	2001

SAMPLE CALCULATIONS

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

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

COMMENTS

CDMA(cellular) and 802.11(b) in 700C. RFID in IP3.

EUT OPERATING MODES

Transmitting CDMA (cellular) 310 and 802.11b 5 in 700C, and RFID 71 in IP3

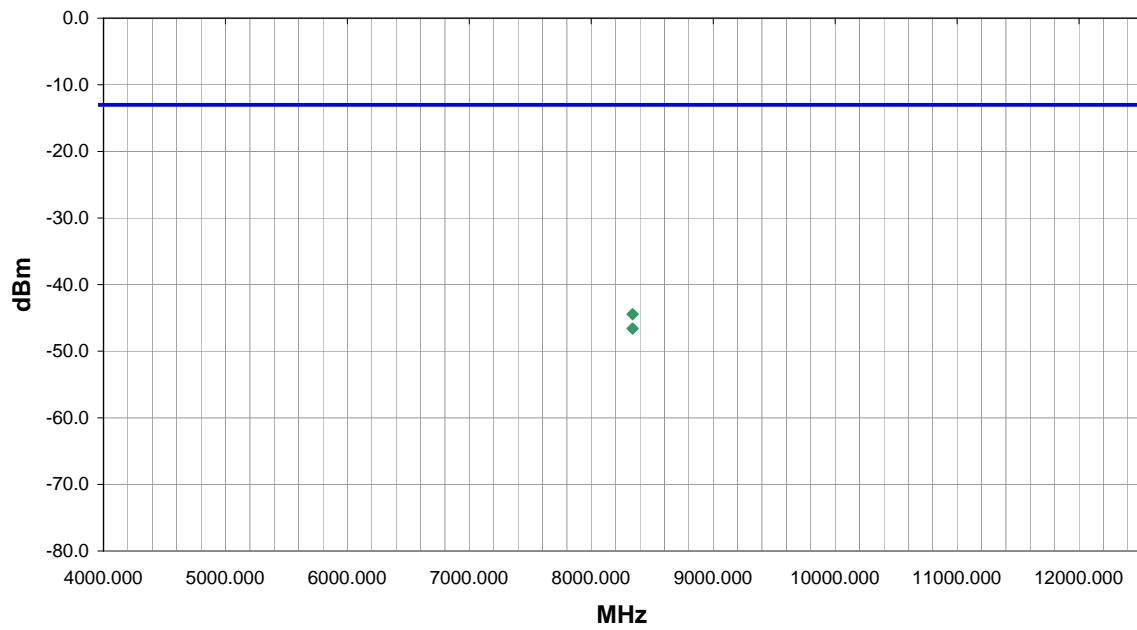
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS

Pass	Run #
Pass	56

Other	
	Tested By: <u>Holly Ashkannejhad</u>



Freq (MHz)			Azimuth (degrees)	Height (meters)			Polarity	Detector		EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)
8339.813			345.0	1.1			H-Horn	PK		-44.5	-13.0	-31.5
8339.813			21.0	1.0			V-Horn	PK		-46.6	-13.0	-33.6

NORTHWEST
EMC

Apparent Power Data Sheet

REV
df4.13
05/06/2004

EUT: CDMA in 700C with 802.11b in 700C and RFID in IP3

Work Order: ITRM0030

Serial Number: Date: 07/01/04

Customer: Intermec Technologies Corporation

Temperature: 79

Attendees: none

Humidity: 43%

Cust. Ref. No.:

Barometric Pressure 29.93

Tested by: Holly Ashkannejhad

Power: 120VAC, 60Hz

Job Site: EV01

TEST SPECIFICATIONS

Specification: FCC 24.238(a) Year: 2003

Method: TIA/EIA-603 Year: 2001

SAMPLE CALCULATIONS

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

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

COMMENTS

CDMA(PCS) and 802.11(b) in 700C. RFID in IP3.

EUT OPERATING MODES

Transmitting CDMA (PCS) 41 and 802.11b 11 in 700C, and RFID 69 in IP3

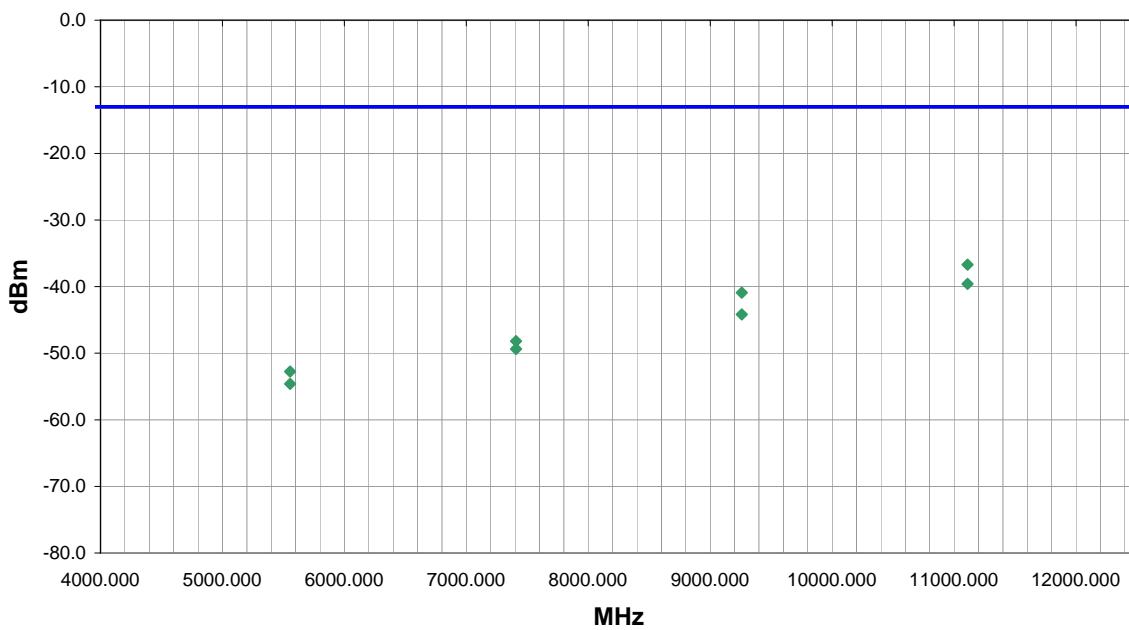
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS

Pass Run # 57

Other	
	Tested By:



Freq (MHz)			Azimuth (degrees)	Height (meters)			Polarity	Detector		EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)
11110.500				47.0	2.5		H-Horn	PK		-36.7	-13.0	-23.7
11110.500				108.0	3.8		V-Horn	PK		-39.6	-13.0	-26.6
9258.750				28.0	1.8		H-Horn	PK		-40.9	-13.0	-27.9
9258.750				33.0	1.2		V-Horn	PK		-44.2	-13.0	-31.2
7407.000				154.0	1.3		H-Horn	PK		-48.2	-13.0	-35.2
7407.000				247.0	1.8		V-Horn	PK		-49.4	-13.0	-36.4
5555.250				48.0	1.6		V-Horn	PK		-52.8	-13.0	-39.8
5555.250				46.0	1.3		H-Horn	PK		-54.6	-13.0	-41.6
3703.500				17.0	1.2		V-Horn	PK		-55.1	-13.0	-42.1
3703.500				48.0	1.3		H-Horn	PK		-57.5	-13.0	-44.5

NORTHWEST
EMC

Apparent Power Data Sheet

REV
df4.13
05/06/2004

EUT:	CDMA in 700C with 802.11b in 700C and RFID in IP3	Work Order:	ITRM0030
Serial Number:		Date:	07/02/04
Customer:	Intermec Technologies Corporation	Temperature:	79
Attendees:	none	Humidity:	43%
Cust. Ref. No.:		Barometric Pressure:	29.93
Tested by:	Holly Ashkannejhad	Job Site:	EV01

TEST SPECIFICATIONS

Specification:	FCC 24.238(a)	Year:	2003
Method:	TIA/EIA-603	Year:	2001

SAMPLE CALCULATIONS

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

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

COMMENTS

CDMA(PCS) and 802.11(b) in 700C. RFID in IP3.

EUT OPERATING MODES

Transmitting CDMA (PCS) 1182 and 802.11b 1 in 700C, and RFID 12 in IP3

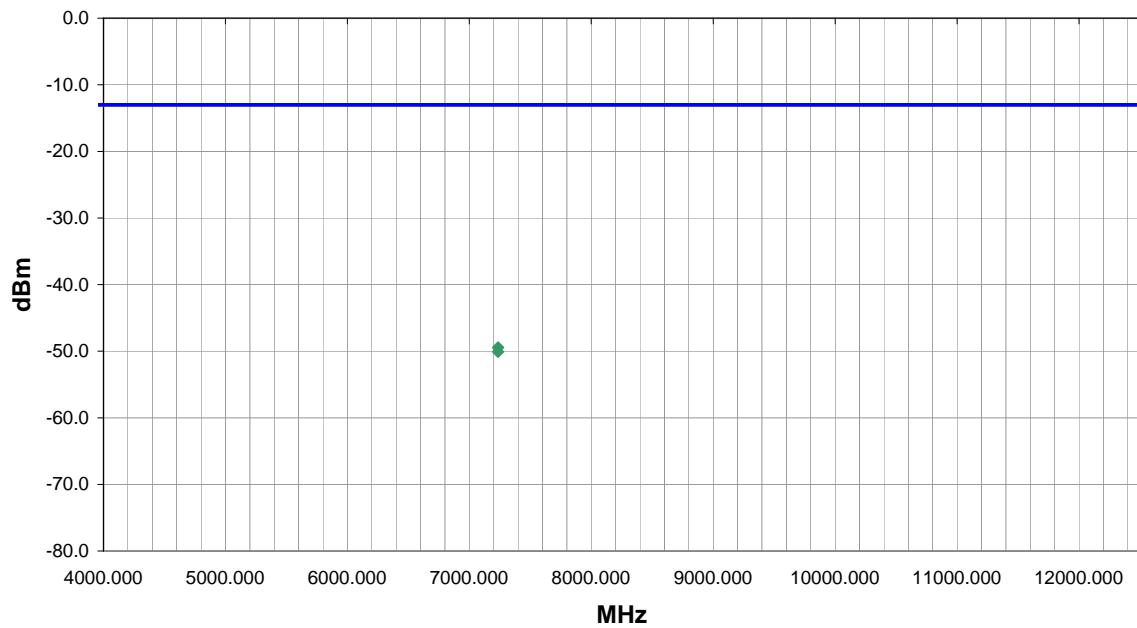
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS

Pass	Run #
	58

Other	
	Tested By: <u>Holly Ashkannejhad</u>



Freq (MHz)			Azimuth (degrees)	Height (meters)			Polarity	Detector		EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)
7236.000			159.0	1.3			H-Horn	PK		-49.4	-13.0	-36.4
7236.000			305.0	1.2			V-Horn	PK		-50.1	-13.0	-37.1

NORTHWEST
EMC

Apparent Power Data Sheet

REV
df4.13
05/06/2004

EUT: CDMA in 700C with 802.11b in 700C and RFID in IP3

Work Order: ITRM0030

Serial Number: Date: 07/02/04

Customer: Intermec Technologies Corporation

Temperature: 79

Attendees: none

Humidity: 43%

Cust. Ref. No.:

Barometric Pressure: 29.93

Tested by: Holly Ashkannejhad

Power: 120VAC, 60Hz

Job Site: EV01

TEST SPECIFICATIONS

Specification: FCC 24.238(a) Year: 2003

Method: TIA/EIA-603 Year: 2001

SAMPLE CALCULATIONS

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

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

COMMENTS

CDMA(PCS) and 802.11(b) in 700C. RFID in IP3.

EUT OPERATING MODES

Transmitting CDMA (PCS) 41 and 802.11b 11 in 700C, and RFID 69 in IP3

DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS

Run #

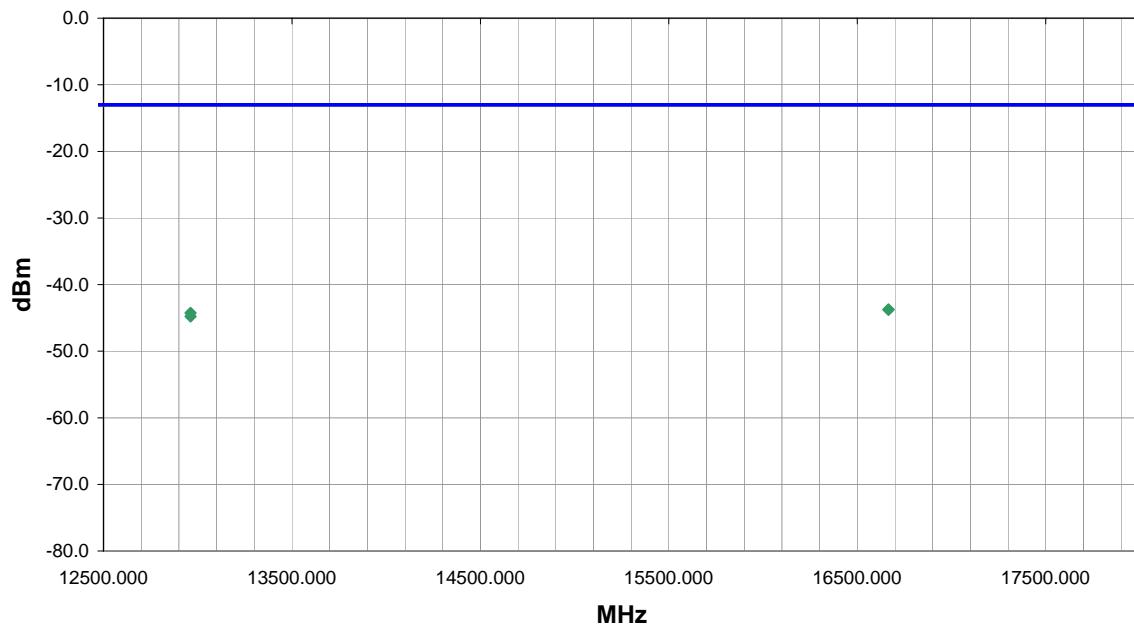
Pass

59

Other

Holly Ashkannejhad

Tested By:



Freq (MHz)			Azimuth (degrees)	Height (meters)			Polarity	Detector		EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)
16665.750			54.0	1.2			V-Horn	PK		-43.7	-13.0	-30.7
16665.750			347.0	1.3			H-Horn	PK		-43.8	-13.0	-30.8
12962.250			48.0	1.5			H-Horn	PK		-44.3	-13.0	-31.3
12962.250			116.0	1.2			V-Horn	PK		-44.8	-13.0	-31.8

NORTHWEST
EMC

Apparent Power Data Sheet

REV
df4.13
05/06/2004

EUT: CDMA in 700C with 802.11b in 700C and RFID in IP3

Work Order: ITRM0030

Serial Number: Date: 07/02/04

Customer: Intermec Technologies Corporation

Temperature: 79

Attendees: none

Humidity: 43%

Cust. Ref. No.:

Barometric Pressure: 29.93

Tested by: Holly Ashkannejhad

Power: 120VAC, 60Hz

Job Site: EV01

TEST SPECIFICATIONS

Specification: FCC 24.238(a) Year: 2003

Method: TIA/EIA-603 Year: 2001

SAMPLE CALCULATIONS

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

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

COMMENTS

CDMA(PCS) and 802.11(b) in 700C. RFID in IP3.

EUT OPERATING MODES

Transmitting CDMA (PCS) 1175 and 802.11b 1 in 700C, and RFID 12 in IP3

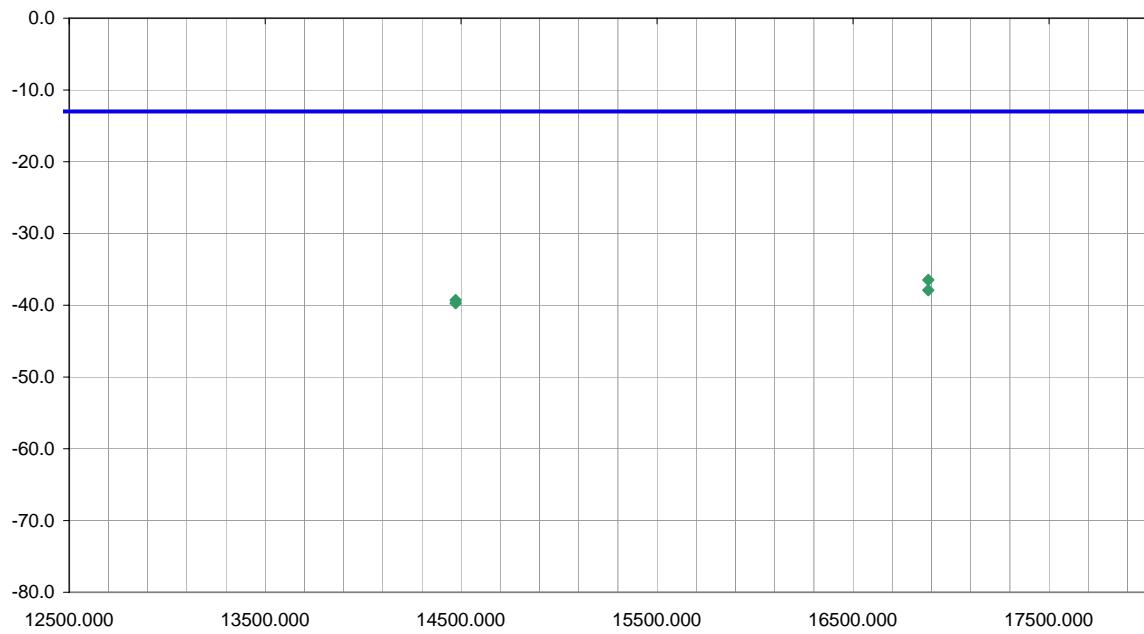
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS

Pass Run # 60

Other	
	Tested By:



Freq (MHz)			Azimuth (degrees)	Height (meters)			Polarity	Detector		EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)
16884.000			20.0	1.2			V-Horn	PK		-36.5	-13.0	-23.5
16884.000			141.0	1.3			H-Horn	PK		-37.9	-13.0	-24.9
14472.000			89.0	1.3			H-Horn	PK		-39.3	-13.0	-26.3
14472.000			117.0	2.2			V-Horn	PK		-39.7	-13.0	-26.7

NORTHWEST
EMC

Apparent Power Data Sheet

REV
df4.13
05/06/2004

EUT: CDMA in 700C with 802.11b in 700C and RFID in IP3

Work Order: ITRM0030

Serial Number:

Date: 07/02/04

Customer: Intermec Technologies Corporation

Temperature: 79

Attendees: none

Humidity: 43%

Cust. Ref. No.:

Barometric Pressure: 29.93

Tested by: Holly Ashkannejhad

Power: 120VAC, 60Hz

Job Site: EV01

TEST SPECIFICATIONS

Specification: FCC 24.238(a)

Year: 2003

Method: TIA/EIA-603

Year: 2001

SAMPLE CALCULATIONS

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

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

COMMENTS

CDMA(PCS) and 802.11(b) in 700C. RFID in IP3.

EUT OPERATING MODES

Transmitting CDMA (PCS) 1117 and 802.11b 11 in 700C, and RFID 7 in IP3

DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS

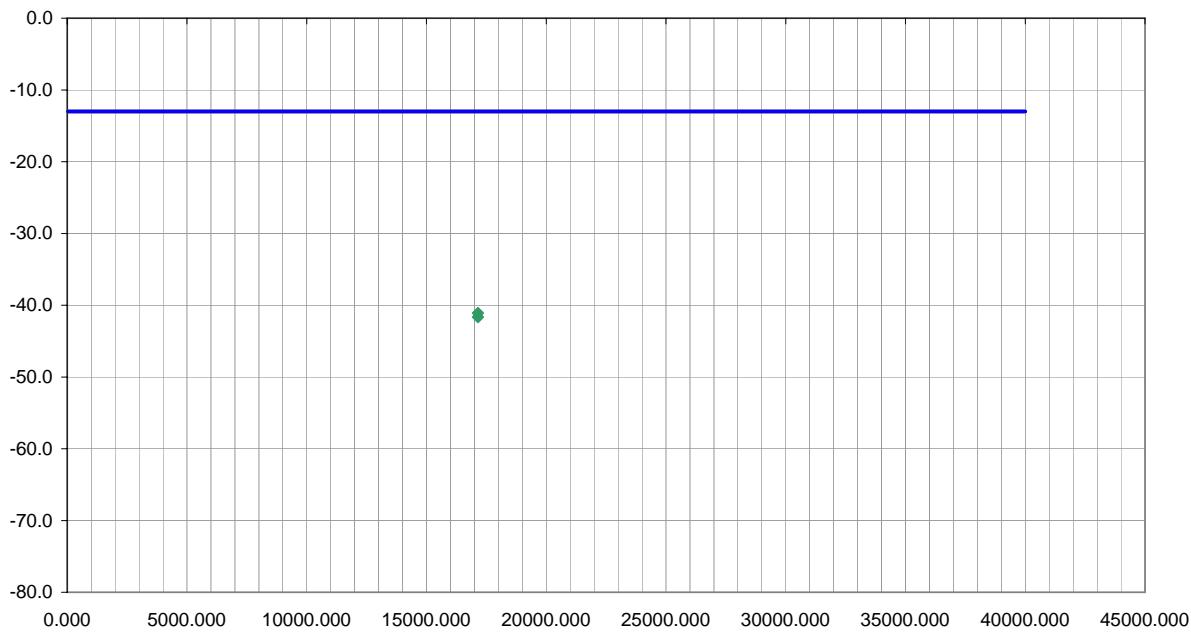
Run #

Pass

61

Other

Tested By:



Freq (MHz)			Azimuth (degrees)	Height (meters)			Polarity	Detector		EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)
17149.910			121.0	1.2			V-Horn	PK		-41.1	-13.0	-28.1
17149.910			2.0	3.5			H-Horn	PK		-41.6	-13.0	-28.6

NORTHWEST
EMC

Apparent Power Data Sheet

REV
df4.13
05/06/2004

EUT: CDMA in 700C with 802.11b in 700C and RFID in IP3

Work Order: ITRM0030

Serial Number: Date: 07/02/04

Customer: Intermec Technologies Corporation

Temperature: 79

Attendees: none

Humidity: 43%

Cust. Ref. No.:

Barometric Pressure: 29.93

Tested by: Holly Ashkannejhad

Power: 120VAC, 60Hz

Job Site: EV01

TEST SPECIFICATIONS

Specification: FCC 22.917(e) Year: 2003

Method: TIA/EIA-603 Year: 2001

SAMPLE CALCULATIONS

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

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

COMMENTS

CDMA(cellular) and 802.11(b) in 700C. RFID in IP3.

EUT OPERATING MODES

Transmitting CDMA (cellular) 477 and 802.11b 1 in 700C, and RFID 12 in IP3

DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS

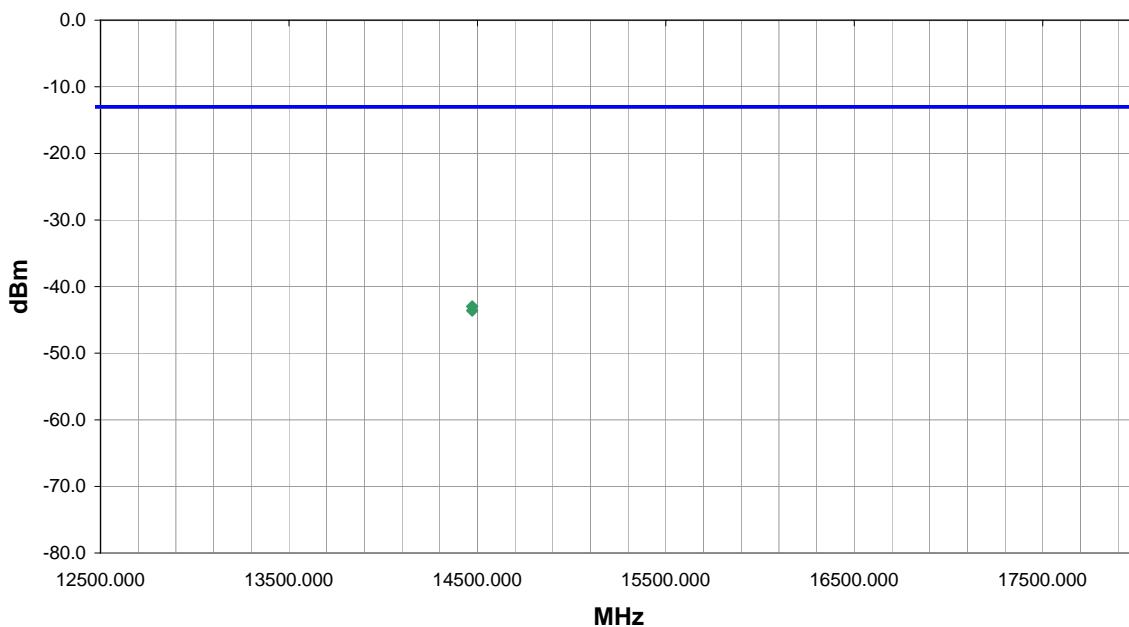
Run #

Pass 62

Other

Holly Ashkannejhad

Tested By:



Freq (MHz)			Azimuth (degrees)	Height (meters)			Polarity	Detector		EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)
14472.000			144.0	1.3			H-Horn	PK		-43.0	-13.0	-30.0
14472.000			228.0	1.6			V-Horn	PK		-43.6	-13.0	-30.6

NORTHWEST
EMC

Apparent Power Data Sheet

REV
df4.13
05/06/2004

EUT: CDMA in 700C with 802.11b in 700C and RFID in IP3

Work Order: ITRM0030

Serial Number:

Date: 07/02/04

Customer: Intermec Technologies Corporation

Temperature: 79

Attendees: none

Humidity: 43%

Cust. Ref. No.:

Barometric Pressure: 29.93

Tested by: Holly Ashkannejhad

Power: 120VAC, 60Hz

Job Site: EV01

TEST SPECIFICATIONS

Specification: FCC 24.238

Year: 2003

Method: TIA/EIA-603

Year: 2001

SAMPLE CALCULATIONS

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

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

COMMENTS

CDMA(cellular) and 802.11(b) in 700C. RFID in IP3.

EUT OPERATING MODES

Transmitting CDMA (cellular) 477 and 802.11b 1 in 700C, and RFID 12 in IP3

DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS

Run #

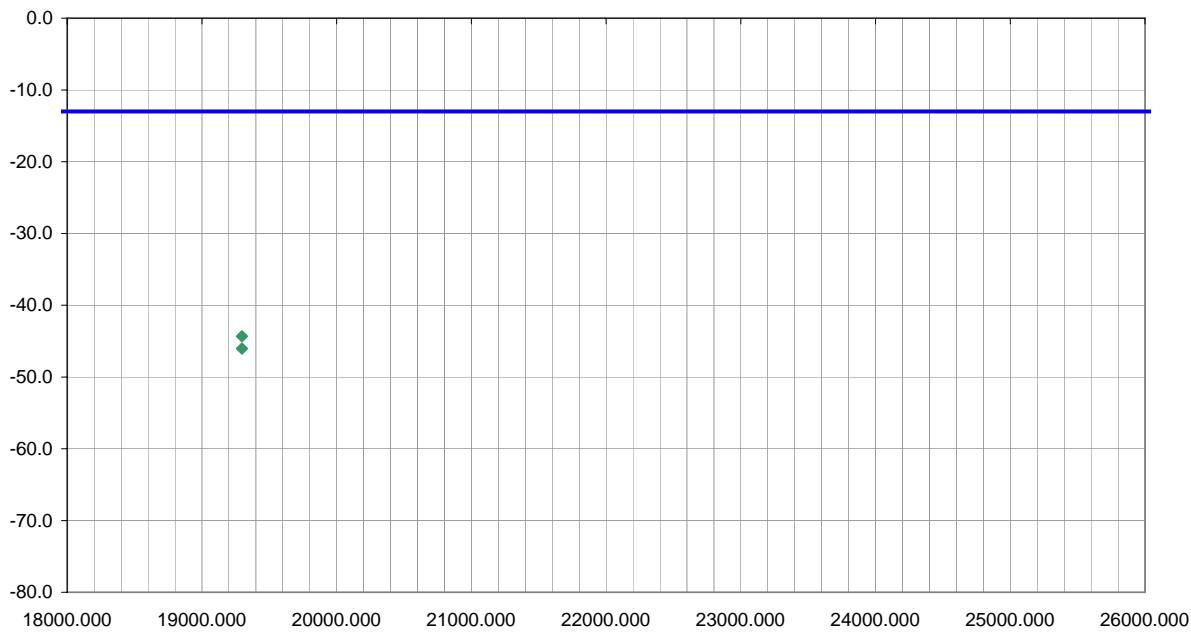
Pass

63

Other

Holly Ashkannejhad

Tested By:



Freq (MHz)			Azimuth (degrees)	Height (meters)		Polarity	Detector		EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)
19297.500			-3.0	1.0		V-High Horr	PK		-44.3	-13.0	-31.3
19297.500			362.0	1.0		H-High Horr	PK		-46.0	-13.0	-33.0

NORTHWEST
EMC

Apparent Power Data Sheet

REV
df4.13
05/06/2004

EUT: CDMA in 700C with 802.11b in 700C and RFID in IP3

Work Order: ITRM0030

Serial Number:

Date: 07/02/04

Customer: Intermec Technologies Corporation

Temperature: 79

Attendees: none

Humidity: 43%

Cust. Ref. No.:

Barometric Pressure: 29.93

Tested by: Holly Ashkannejhad

Power: 120VAC, 60Hz

Job Site: EV01

TEST SPECIFICATIONS

Specification: FCC 22.917(e)

Year: 2003

Method: TIA/EIA-603

Year: 2001

SAMPLE CALCULATIONS

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

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

COMMENTS

CDMA(cellular) and 802.11(b) in 700C. RFID in IP3.

EUT OPERATING MODES

Transmitting CDMA (cellular) 727 and 802.11b 8 in 700C, and RFID 47 in IP3

DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS

Run #

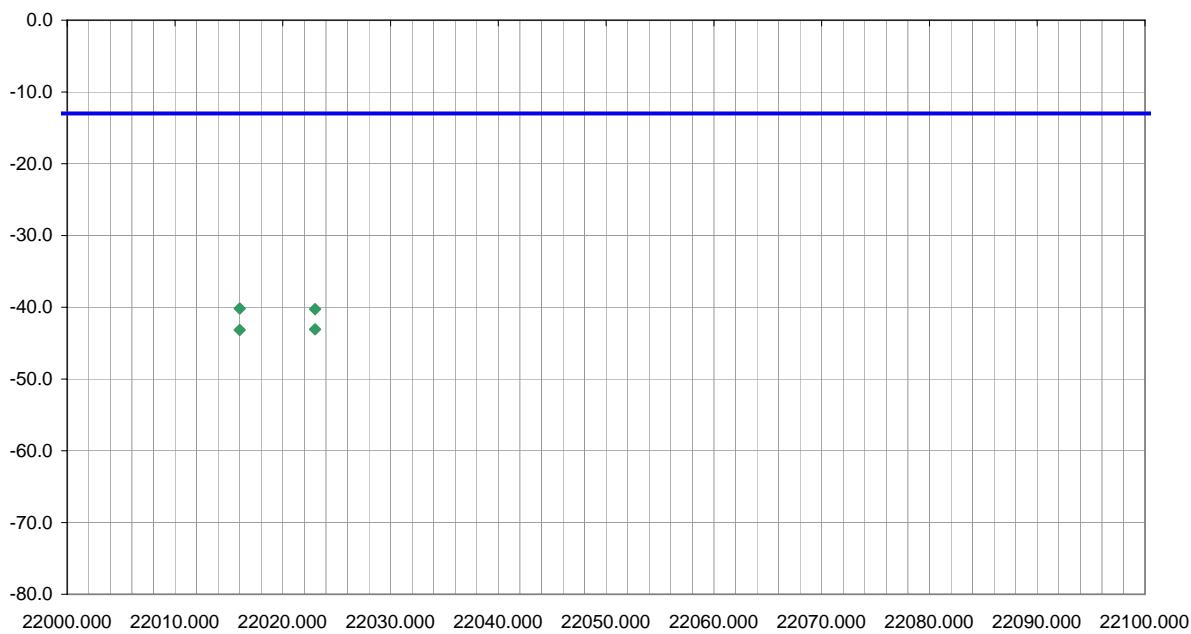
Pass

64

Other

Holly Ashkannejhad

Tested By:



Freq (MHz)			Azimuth (degrees)	Height (meters)		Polarity	Detector		EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)
22016.000			-2.0	1.0		V-High Horr	PK		-40.2	-13.0	-27.2
22023.000			362.0	1.0		V-High Horr	PK		-40.3	-13.0	-27.3
22023.000			361.0	1.0		H-High Horr	PK		-43.1	-13.0	-30.1
22016.000			-2.0	1.0		H-High Horr	PK		-43.2	-13.0	-30.2

NORTHWEST
EMC

Apparent Power Data Sheet

REV
df4.13
05/06/2004

EUT: CDMA in 700C with 802.11b in 700C and RFID in IP3

Work Order: ITRM0030

Serial Number:

Date: 07/02/04

Customer: Intermec Technologies Corporation

Temperature: 79

Attendees: none

Humidity: 43%

Cust. Ref. No.:

Barometric Pressure: 29.93

Tested by: Holly Ashkannejhad

Power: 120VAC, 60Hz

Job Site: EV01

TEST SPECIFICATIONS

Specification: FCC 22.917(e)

Year: 2003

Method: TIA/EIA-603

Year: 2001

SAMPLE CALCULATIONS

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

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

COMMENTS

CDMA(cellular) and 802.11(b) in 700C. RFID in IP3.

EUT OPERATING MODES

Transmitting CDMA (cellular) 310 and 802.11b 5 in 700C, and RFID 71 in IP3

DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS

Run #

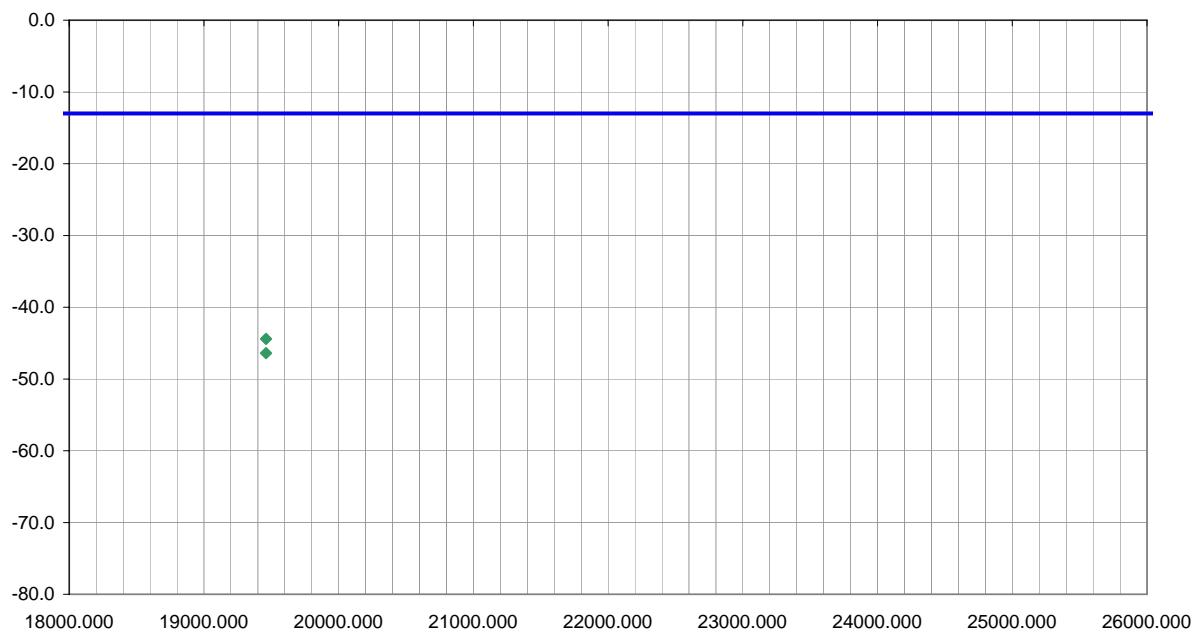
Pass

65

Other

Holly Ashkannejhad

Tested By:



Freq (MHz)			Azimuth (degrees)	Height (meters)		Polarity	Detector		EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)
19460.690			-2.0	1.0		V-High Horr	PK		-44.4	-13.0	-31.4
19460.690			361.0	1.0		H-High Horr	PK		-46.4	-13.0	-33.4

NORTHWEST
EMC

Apparent Power Data Sheet

REV
df4.13
05/06/2004

EUT: CDMA in 700C with 802.11b in 700C and RFID in IP3

Work Order: ITRM0030

Serial Number: Date: 07/02/04

Customer: Intermec Technologies Corporation

Temperature: 79

Attendees: none

Humidity: 43%

Cust. Ref. No.:

Barometric Pressure: 29.93

Tested by: Holly Ashkannejhad

Power: 120VAC, 60Hz

Job Site: EV01

TEST SPECIFICATIONS

Specification: FCC 24.238(a) Year: 2003

Method: TIA/EIA-603 Year: 2001

SAMPLE CALCULATIONS

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

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

COMMENTS

CDMA(PCS) and 802.11(b) in 700C. RFID in IP3.

EUT OPERATING MODES

Transmitting CDMA (PCS) 41 and 802.11b 11 in 700C, and RFID 69 in IP3

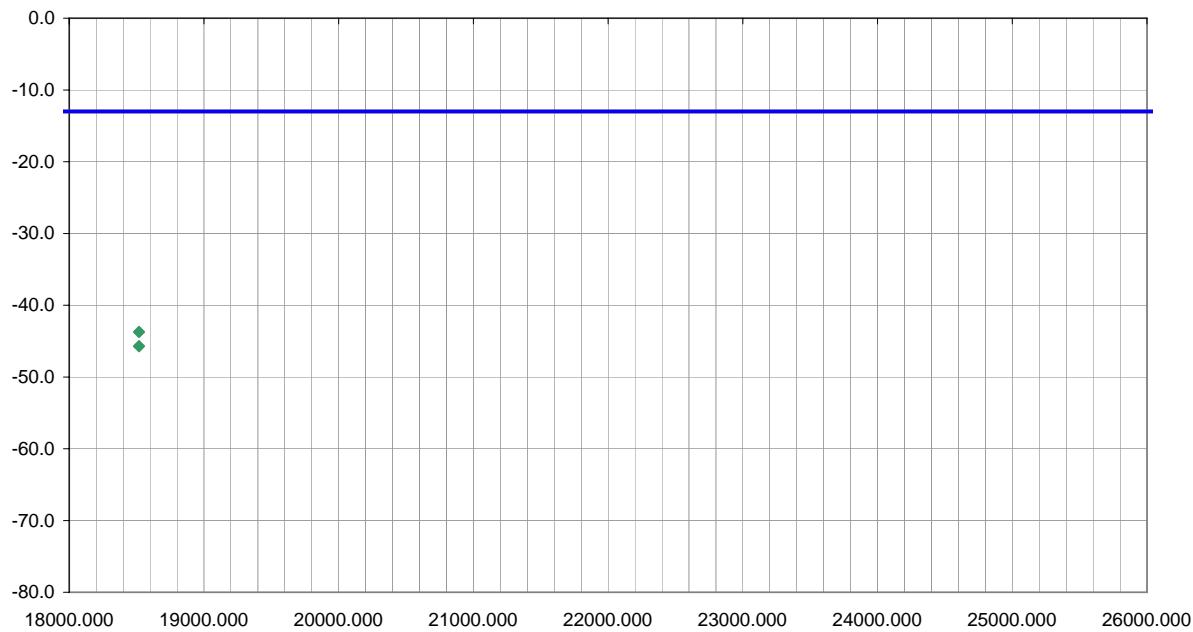
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS

Pass Run # 66

Other	
	Tested By:

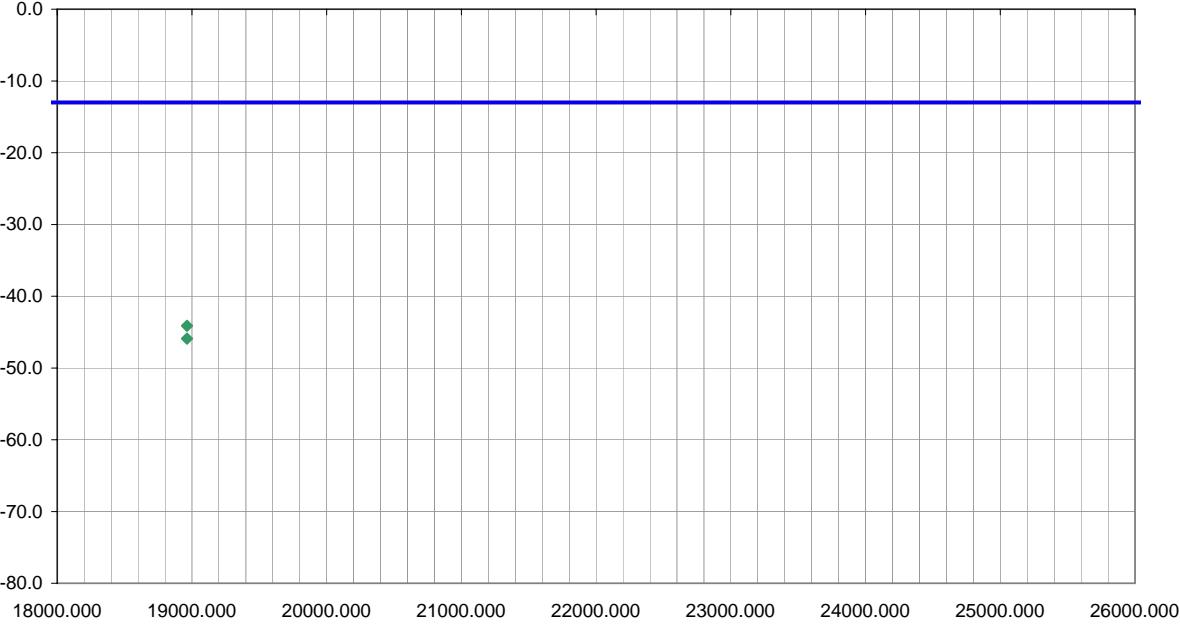


Freq (MHz)			Azimuth (degrees)	Height (meters)		Polarity	Detector		EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)
18517.500			303.0	1.1		V-High Horr	PK		-43.7	-13.0	-30.7
18517.500			121.0	1.0		H-High Horr	PK		-45.7	-13.0	-32.7

NORTHWEST
EMC

Apparent Power Data Sheet

REV
df4.13
05/06/2004

EUT: CDMA in 700C with 802.11b in 700C and RFID in IP3		Work Order: ITRM0030									
Serial Number:		Date: 07/02/04									
Customer: Intermec Technologies Corporation		Temperature: 79									
Attendees: none		Humidity: 43%									
Cust. Ref. No.:		Barometric Pressure: 29.93									
Tested by: Holly Ashkannejhad		Job Site: EV01									
TEST SPECIFICATIONS											
Specification: FCC 24.238(a)		Year: 2003									
Method: TIA/EIA-603		Year: 2001									
SAMPLE CALCULATIONS											
Radiated Emissions: Field Strength = Measured Level + Antenna Factor + Cable Factor - Amplifier Gain + Distance Adjustment Factor + External Attenuation											
Conducted Emissions: Adjusted Level = Measured Level + Transducer Factor + Cable Attenuation Factor + External Attenuator											
COMMENTS											
CDMA(PCS) and 802.11(b) in 700C. RFID in IP3.											
EUT OPERATING MODES											
Transmitting CDMA (PCS) 932 and 802.11b 11 in 700C, and RFID 8 in IP3											
DEVIATIONS FROM TEST STANDARD											
No deviations.											
RESULTS											
Pass		Run # 67									
Other		 Tested By:									
											
Freq (MHz)			Azimuth (degrees)	Height (meters)		Polarity	Detector		EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)
18963.000			248.0	1.0		V-High Horr	PK		-44.1	-13.0	-31.1
18963.000			117.0	1.1		H-High Horr	PK		-45.9	-13.0	-32.9

NORTHWEST
EMC

Apparent Power Data Sheet

REV
df4.13
05/06/2004

EUT: CDMA in 700C with 802.11b in 700C and RFID in IP3		Work Order: ITRM0030									
Serial Number:		Date: 07/02/04									
Customer: Intermec Technologies Corporation		Temperature: 79									
Attendees: none		Humidity: 43%									
Cust. Ref. No.:		Barometric Pressure: 29.93									
Tested by: Holly Ashkannejhad		Job Site: EV01									
TEST SPECIFICATIONS											
Specification: FCC 24.238(a)		Year: 2003									
Method: TIA/EIA-603		Year: 2001									
SAMPLE CALCULATIONS											
Radiated Emissions: Field Strength = Measured Level + Antenna Factor + Cable Factor - Amplifier Gain + Distance Adjustment Factor + External Attenuation											
Conducted Emissions: Adjusted Level = Measured Level + Transducer Factor + Cable Attenuation Factor + External Attenuator											
COMMENTS											
CDMA(PCS) and 802.11(b) in 700C. RFID in IP3.											
EUT OPERATING MODES											
Transmitting CDMA (PCS) 1117 and 802.11b 1 in 700C, and RFID 50 in IP3											
DEVIATIONS FROM TEST STANDARD											
No deviations.											
RESULTS		Run #									
Pass		68									
Other		Holly Ashkannejhad Tested By:									
Freq (MHz)			Azimuth (degrees)	Height (meters)		Polarity	Detector		EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)
19294.880			118.0	1.1		V-High Horr	PK		-44.2	-13.0	-31.2
19294.880			309.0	1.0		H-High Horr	PK		-46.1	-13.0	-33.1

NORTHWEST
EMC

Apparent Power Data Sheet

REV
df4.13
05/06/2004

EUT: CDMA in 700C with 802.11b in 700C and RFID in IP3

Work Order: ITRM0030

Serial Number: Date: 07/03/04

Customer: Intermec Technologies Corporation

Temperature: 79

Attendees: none

Humidity: 43%

Cust. Ref. No.:

Barometric Pressure: 29.93

Tested by: Holly Ashkannejhad

Power: 120VAC, 60Hz

Job Site: EV01

TEST SPECIFICATIONS

Specification: FCC 24.238(a) Year: 2003

Method: TIA/EIA-603 Year: 2001

SAMPLE CALCULATIONS

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

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

COMMENTS

CDMA(PCS) and 802.11(b) in 700C. RFID in IP3.

EUT OPERATING MODES

Transmitting CDMA (PCS) 1117 and 802.11b 1 in 700C, and RFID 62 in IP3

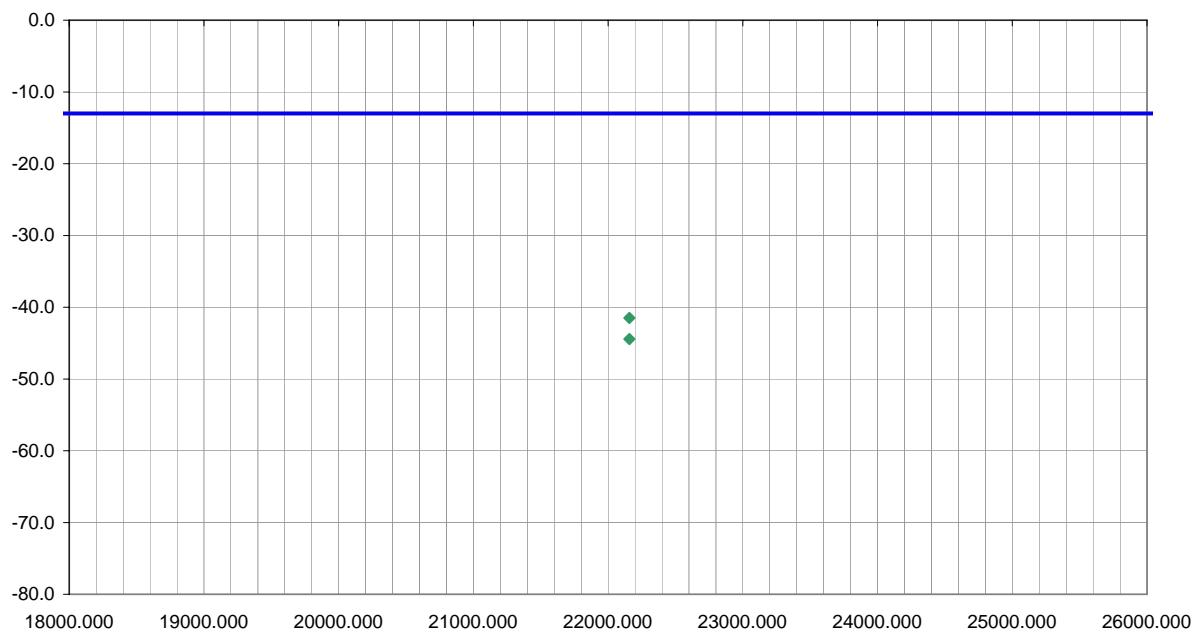
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS Run #

Pass 69

Other	
	Tested By:



Freq (MHz)			Azimuth (degrees)	Height (meters)		Polarity	Detector		EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)
22158.000			361.0	1.0		V-High Horr	PK		-41.5	-13.0	-28.5
22158.000			-1.0	1.0		H-High Horr	PK		-44.4	-13.0	-31.4

NORTHWEST
EMC

Apparent Power Data Sheet

REV
df4.13
05/06/2004

EUT: CDMA in 700C with 802.11b in 700C and RFID in IP3

Work Order: ITRM0030

Serial Number:

Date: 07/03/04

Customer: Intermec Technologies Corporation

Temperature: 79

Attendees: none

Humidity: 43%

Cust. Ref. No.:

Barometric Pressure: 29.93

Tested by: Holly Ashkannejhad

Power: 120VAC, 60Hz

Job Site: EV01

TEST SPECIFICATIONS

Specification: FCC 24.238(a)

Year: 2003

Method: TIA/EIA-603

Year: 2001

SAMPLE CALCULATIONS

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

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

COMMENTS

CDMA(PCS) and 802.11(b) in 700C. RFID in IP3.

EUT OPERATING MODES

Transmitting CDMA (PCS) 1175 and 802.11b 11 in 700C, and RFID 7 in IP3

DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS

Run #

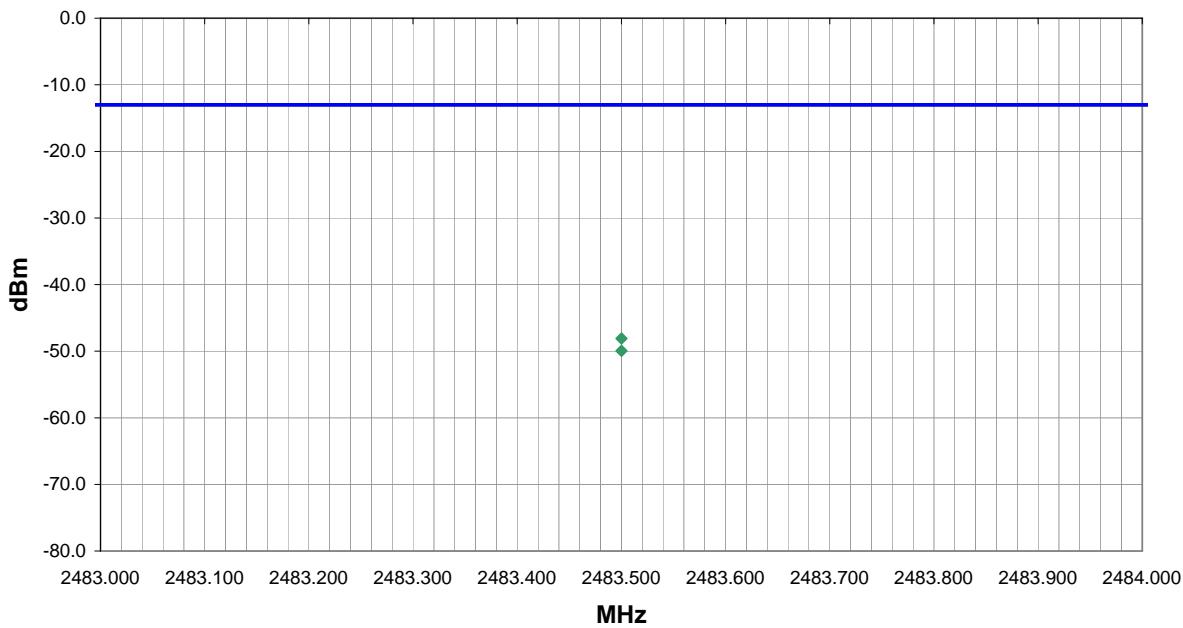
Pass

70

Other

Holly Ashkannejhad

Tested By:



Freq (MHz)			Azimuth (degrees)	Height (meters)			Polarity	Detector		EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)
2483.500			285.0	1.0			V-Horn	PK		-48.1	-13.0	-35.1
2483.500			331.0	1.1			H-Horn	PK		-49.9	-13.0	-36.9

NORTHWEST
EMC

Apparent Power Data Sheet

REV
df4.13
05/06/2004

EUT: CDMA in 700C with 802.11b in 700C and RFID in IP3

Work Order: ITRM0030

Serial Number:

Date: 07/03/04

Customer: Intermec Technologies Corporation

Temperature: 79

Attendees: none

Humidity: 43%

Cust. Ref. No.:

Barometric Pressure: 29.93

Tested by: Holly Ashkannejhad

Power: 120VAC, 60Hz

Job Site: EV01

TEST SPECIFICATIONS

Specification: FCC 22.917(e)

Year: 2003

Method: TIA/EIA-603

Year: 2001

SAMPLE CALCULATIONS

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

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

COMMENTS

CDMA(cellular) and 802.11(b) in 700C. RFID in IP3.

EUT OPERATING MODES

Transmitting CDMA (cellular) 310 and 802.11b 11 in 700C, and RFID 71 in IP3

DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS

Run #

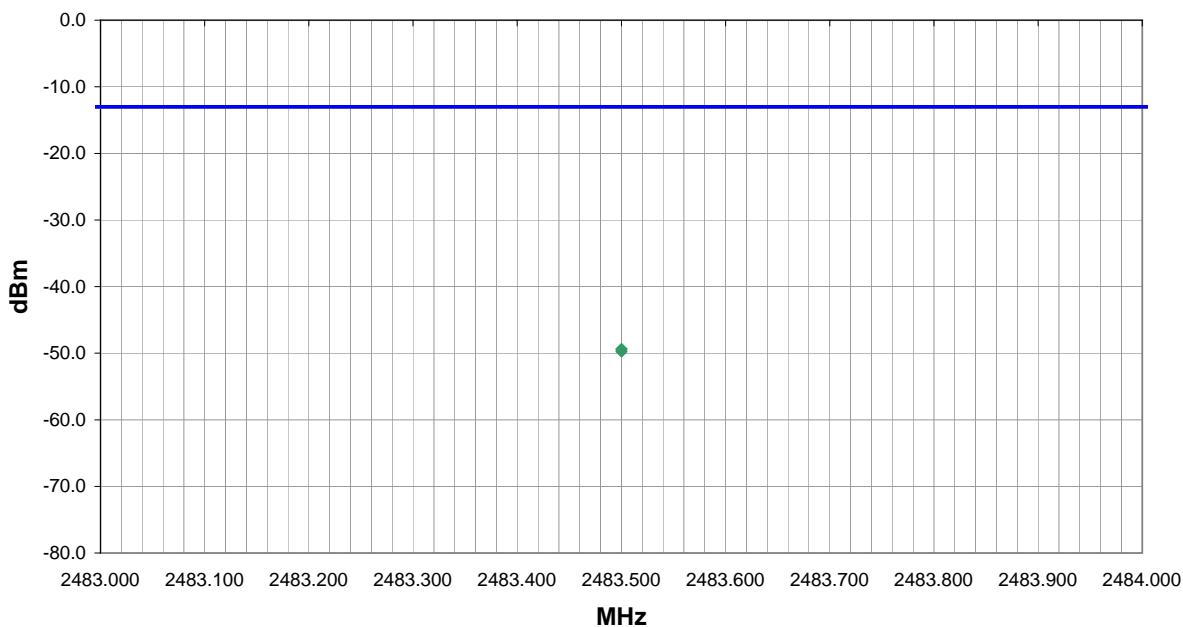
Pass

71

Other

Holly Ashkannejhad

Tested By:



Freq (MHz)			Azimuth (degrees)	Height (meters)			Polarity	Detector		EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)
2483.500			118.0	1.0			V-Horn	PK		-49.4	-13.0	-36.4
2483.500			337.0	1.0			H-Horn	PK		-49.7	-13.0	-36.7

NORTHWEST
EMC

Apparent Power Data Sheet

REV
df4.13
05/06/2004

EUT: Bluetooth in 6820 with CDMA, Bluetooth, and 802.11

Work Order: ITRM0030

Serial Number: Date: 07/07/04

Customer: Intermec Technologies Corporation

Temperature: 73

Attendees: none

Humidity: 41%

Cust. Ref. No.:

Barometric Pressure: 30.09

Tested by: Holly Ashkannejhad

Power: 120VAC, 60Hz

Job Site: EV01

TEST SPECIFICATIONS

Specification: FCC 24.238(a) Year: 2003

Method: TIA/EIA-603 Year: 2001

SAMPLE CALCULATIONS

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

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

COMMENTS

Simultaneous transmission of 6820 printer (Bluetooth) with 700C (CDMA(PCS)/802.11b/Bluetooth)

EUT OPERATING MODES

Transmitting channel 35 CDMA PCS, 802.11b channel 11, Bluetooth channel 68

DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS

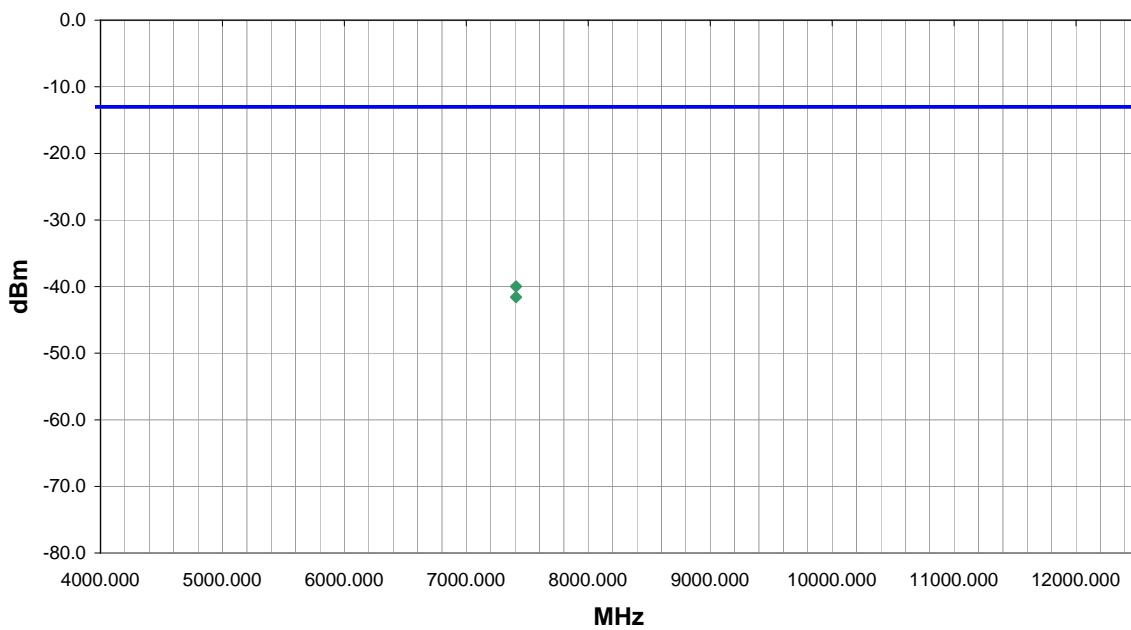
Run #

Pass 24

Other

Holly Ashkannejhad

Tested By:



Freq (MHz)			Azimuth (degrees)	Height (meters)			Polarity	Detector		EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)
7407.031				309.0	1.6		V-Horn	PK		-40.0	-13.0	-27.0
7407.031				297.0	1.3		H-Horn	PK		-41.6	-13.0	-28.6

NORTHWEST
EMC

Apparent Power Data Sheet

REV
df4.13
05/06/2004

EUT: Bluetooth in 6820 with CDMA, Bluetooth, and 802.11

Work Order: ITRM0030

Serial Number: Date: 07/07/04

Customer: Intermec Technologies Corporation

Temperature: 73

Attendees: none

Humidity: 41%

Cust. Ref. No.:

Barometric Pressure: 30.09

Tested by: Holly Ashkannejhad

Power: 120VAC, 60Hz

Job Site: EV01

TEST SPECIFICATIONS

Specification: FCC 24.238(a) Year: 2003

Method: TIA/EIA-603 Year: 2001

SAMPLE CALCULATIONS

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

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

COMMENTS

Simultaneous transmission of 6820 printer (Bluetooth) with 700C (CDMA(PCS)/802.11b/Bluetooth)

EUT OPERATING MODES

Transmitting channel 1153 CDMA PCS, Channel 1 802.11b, Bluetooth channel 11

DEVIATIONS FROM TEST STANDARD

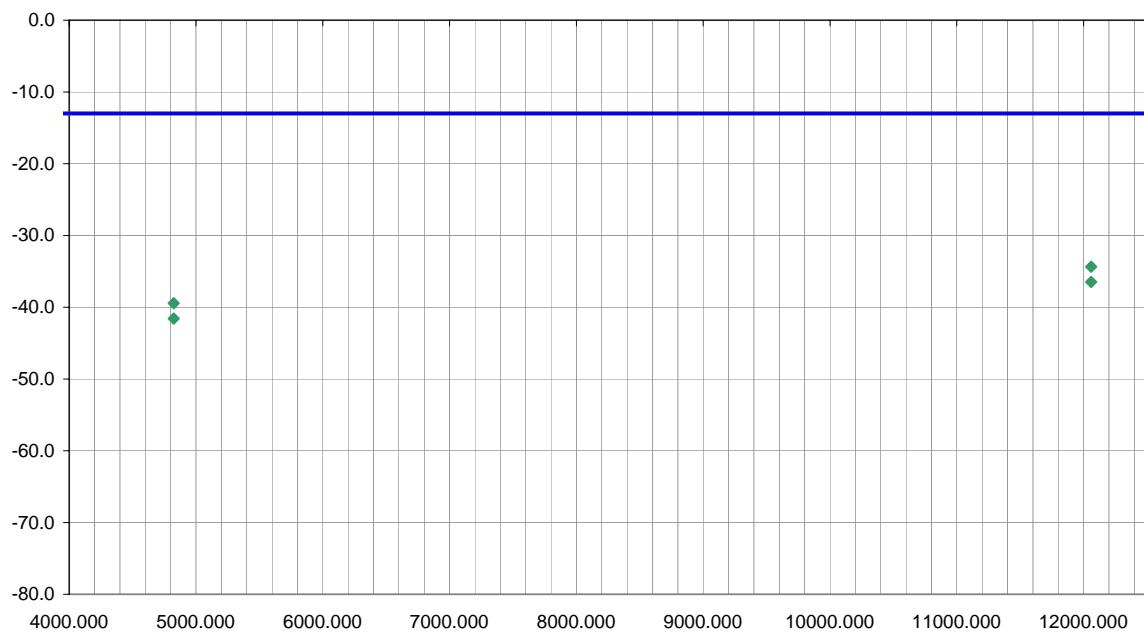
No deviations.

RESULTS

Run #

Pass 25

Other	
	Tested By:



Freq (MHz)			Azimuth (degrees)	Height (meters)			Polarity	Detector		EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)
12060.000			-1.0	1.0			H-Horn	PK		-34.4	-13.0	-21.4
12060.000			360.0	1.0			V-Horn	PK		-36.5	-13.0	-23.5
4823.956			261.0	1.5			V-Horn	PK		-39.4	-13.0	-26.4
4823.956			80.0	1.3			H-Horn	PK		-41.6	-13.0	-28.6

NORTHWEST
EMC

Apparent Power Data Sheet

REV
df4.13
05/06/2004

EUT: CDMA in 700C with 802.11(b), Bluetooth in 700C

Work Order: ITRM0030

Serial Number:

Date: 07/07/04

Customer: Intermec Technologies Corporation

Temperature: 73

Attendees: none

Humidity: 41%

Cust. Ref. No.:

Barometric Pressure: 30.09

Tested by: Holly Ashkannejhad

Power: 120VAC, 60Hz

Job Site: EV01

TEST SPECIFICATIONS

Specification: FCC 24.238(a)

Year: 2003

Method: TIA/EIA-603

Year: 2001

SAMPLE CALCULATIONS

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

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

COMMENTS

Simultaneous transmission of 6820 printer (Bluetooth) with 700C (CDMA(PCS)/802.11b/Bluetooth)

EUT OPERATING MODES

Transmitting Channel 1 CDMA PCS, Channel 1 802.11b, Bluetooth channel 11

DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS

Run #

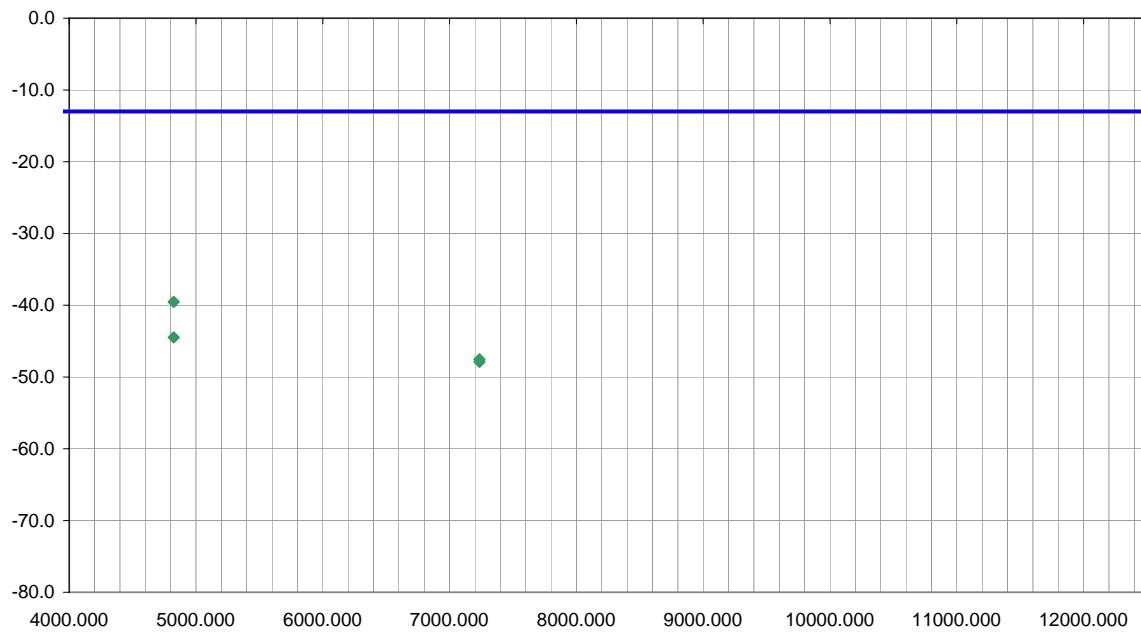
Pass

26

Other

Holly Ashkannejhad

Tested By:



Freq (MHz)			Azimuth (degrees)	Height (meters)			Polarity	Detector		EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)
4824.010			18.0	1.0			V-Horn	PK		-39.5	-13.0	-26.5
4824.010			325.0	1.0			H-Horn	PK		-44.5	-13.0	-31.5
7236.000			338.0	1.3			H-Horn	PK		-47.5	-13.0	-34.5
7236.000			82.0	1.3			V-Horn	PK		-47.9	-13.0	-34.9

NORTHWEST
EMC

Apparent Power Data Sheet

REV
df4.13
05/06/2004

EUT: CDMA in 700C with 802.11(b), Bluetooth in 700C

Work Order: ITRM0030

Serial Number:

Date: 07/07/04

Customer: Intermec Technologies Corporation

Temperature: 73

Attendees: none

Humidity: 41%

Cust. Ref. No.:

Barometric Pressure: 30.09

Tested by: Holly Ashkannejhad

Power: 120VAC, 60Hz

Job Site: EV01

TEST SPECIFICATIONS

Specification: FCC 24.238(a)

Year: 2003

Method: TIA/EIA-603

Year: 2001

SAMPLE CALCULATIONS

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

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

COMMENTS

Simultaneous transmission of 6820 printer (Bluetooth) with 700C (CDMA(PCS)/802.11b/Bluetooth)

EUT OPERATING MODES

Transmitting Channel 1 CDMA PCS, Channel 1 802.11b, Bluetooth channel 11

DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS

Run #

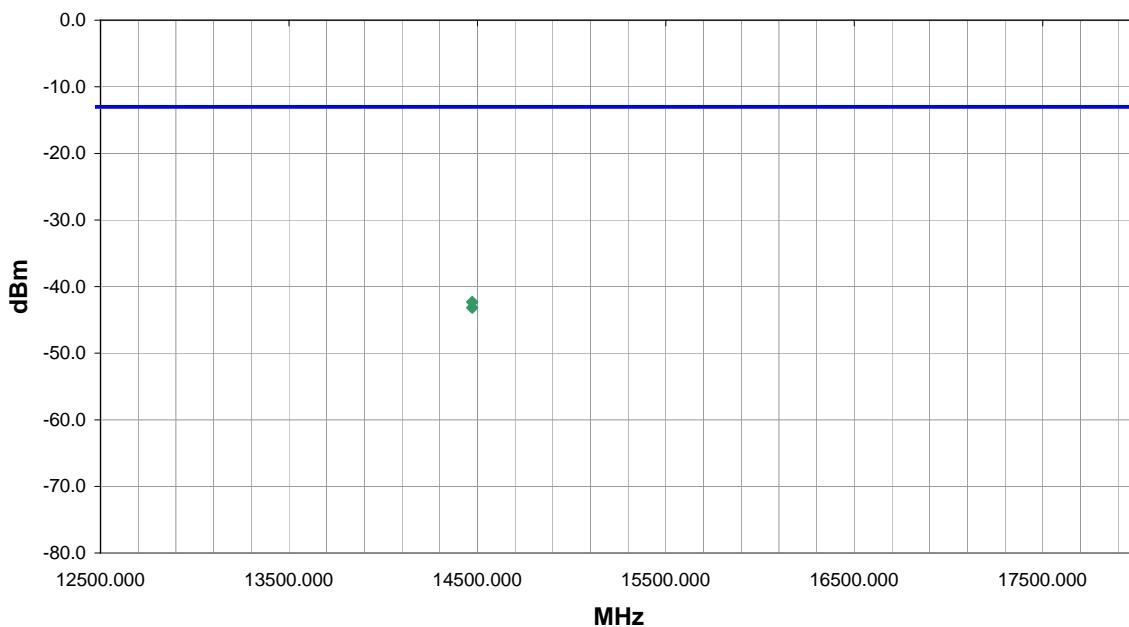
Pass

27

Other

Holly Ashkannejhad

Tested By:



Freq (MHz)			Azimuth (degrees)	Height (meters)			Polarity	Detector		EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)
14472.000			-1.0	1.2			V-Horn	PK		-42.3	-13.0	-29.3
14472.000			323.0	1.0			H-Horn	PK		-43.2	-13.0	-30.2

NORTHWEST
EMC

Apparent Power Data Sheet

REV
df4.13
05/06/2004

EUT:	CDMA in 700C with 802.11(b), Bluetooth in 700C	Work Order:	ITRM0030
Serial Number:		Date:	06/28/04
Customer:	Intermec Technologies Corporation	Temperature:	75
Attendees:	none	Humidity:	45%
Cust. Ref. No.:		Barometric Pressure:	30.16
Tested by:	Holly Ashkannejhad	Job Site:	EV01

TEST SPECIFICATIONS

Specification:	FCC 24.238(a)	Year:	2003
Method:	TIA/EIA-603	Year:	2001

SAMPLE CALCULATIONS

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

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

COMMENTS

Simultaneous transmission of 6820 printer (Bluetooth) with 700C (CDMA(PCS)/802.11b/Bluetooth)

EUT OPERATING MODES

Transmitting channel 35 CDMA PCS, 802.11b channel 11, Bluetooth channel 68

DEVIATIONS FROM TEST STANDARD

No deviations.

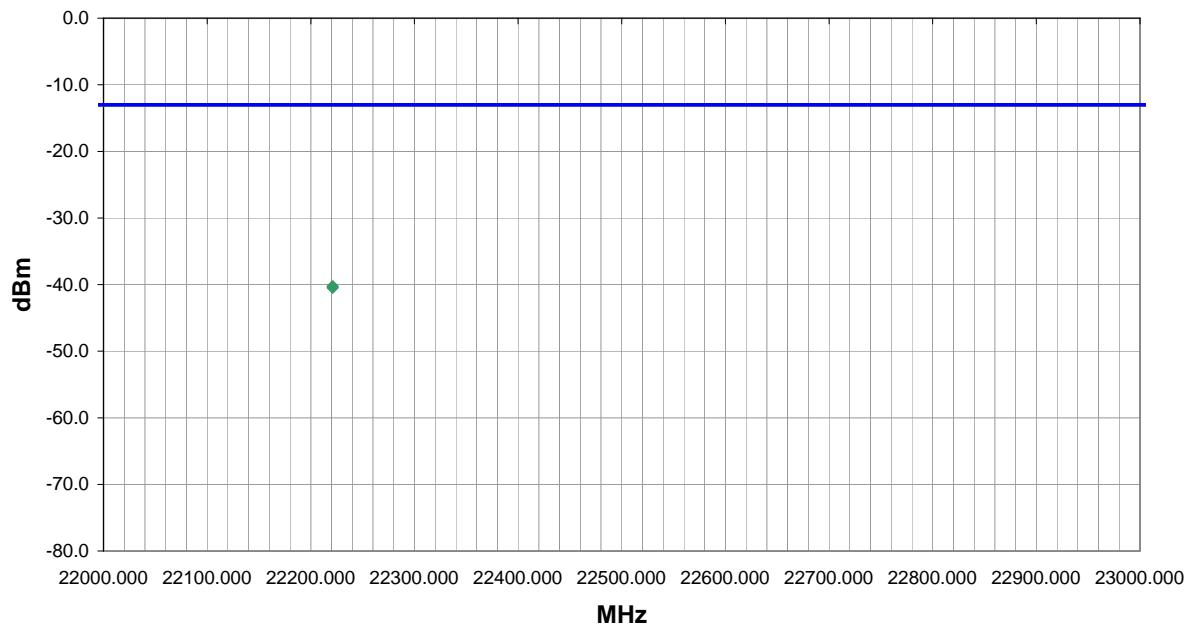
RESULTS

Pass	Run #
Pass	28

Other

Holly Ashkannejhad

Tested By:



Freq (MHz)			Azimuth (degrees)	Height (meters)			Polarity	Detector		EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)
22221.000			362.0	1.0			V-High Horr	PK		-40.3	-13.0	-27.3
22221.000			-3.0	1.0			V-High Horr	PK		-40.5	-13.0	-27.5

NORTHWEST
EMC

Apparent Power Data Sheet

REV
df4.13
05/06/2004

EUT: CDMA in 700C with 802.11(b), Bluetooth in 700C

Work Order: ITRM0030

Serial Number:

Date: 06/28/04

Customer: Intermec Technologies Corporation

Temperature: 75

Attendees: none

Humidity: 45%

Cust. Ref. No.:

Barometric Pressure: 30.16

Tested by: Holly Ashkannejhad

Power: 120VAC, 60Hz

Job Site: EV01

TEST SPECIFICATIONS

Specification: FCC 24.238(a)

Year: 2003

Method: TIA/EIA-603

Year: 2001

SAMPLE CALCULATIONS

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

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

COMMENTS

Simultaneous transmission of 6820 printer (Bluetooth) with 700C (CDMA(PCS)/802.11b/Bluetooth)

EUT OPERATING MODES

Transmitting channel 1153 CDMA PCS, 802.11b channel 1, Bluetooth channel 11

DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS

Run #

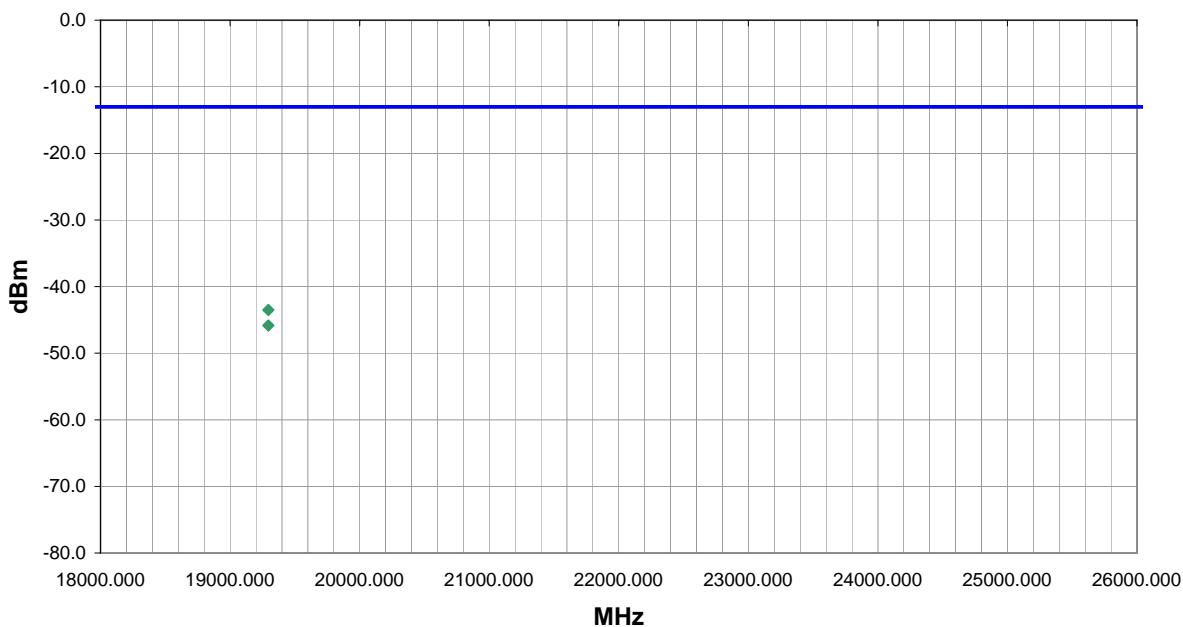
Pass

29

Other

Holly Ashkannejhad

Tested By:



Freq (MHz)			Azimuth (degrees)	Height (meters)			Polarity	Detector		EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)
19296.000			-2.0	1.0			V-High Horr	PK		-43.5	-13.0	-30.5
19296.000			361.0	1.0			H-High Horr	PK		-45.8	-13.0	-32.8

NORTHWEST
EMC

Apparent Power Data Sheet

REV
df4.13
05/06/2004

EUT:	CDMA in 700C with 802.11(b), Bluetooth in 700C	Work Order:	ITRM0030
Serial Number:		Date:	06/28/04
Customer:	Intermec Technologies Corporation	Temperature:	75
Attendees:	none	Humidity:	45%
Cust. Ref. No.:		Barometric Pressure:	30.16
Tested by:	Holly Ashkannejhad	Job Site:	EV01

TEST SPECIFICATIONS

Specification:	FCC 24.238(a)	Year:	2003
Method:	TIA/EIA-603	Year:	2001

SAMPLE CALCULATIONS

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

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

COMMENTS

Simultaneous transmission of 6820 printer (Bluetooth) with 700C (CDMA(PCS)/802.11b/Bluetooth)

EUT OPERATING MODES

Transmitting channel 1153 CDMA PCS, 802.11b channel 11, Bluetooth channel 62

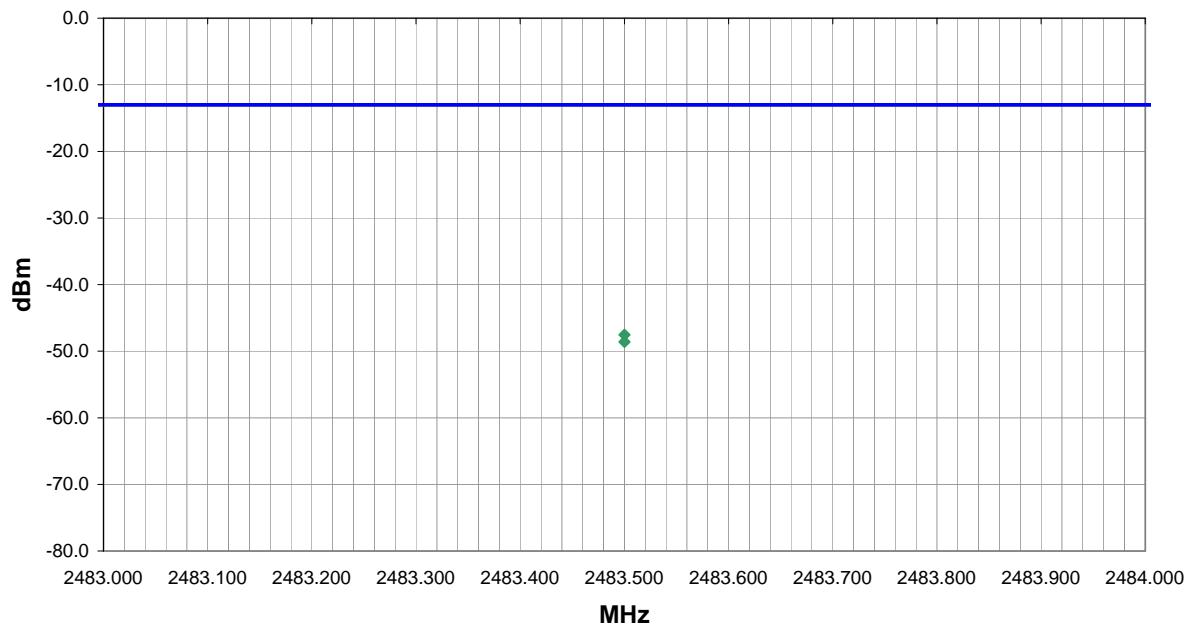
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS

Pass	Run #
	30

Other	
	Tested By: <u>Holly Ashkannejhad</u>



Freq (MHz)			Azimuth (degrees)	Height (meters)			Polarity	Detector		EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)
2483.500			61.0	1.3			H-Horn	PK		-47.5	-13.0	-34.5
2483.500			49.0	1.1			V-Horn	PK		-48.6	-13.0	-35.6

NORTHWEST
EMC

Apparent Power Data Sheet

REV
df4.13
05/06/2004

EUT: CDMA in 700C with 802.11(b), Bluetooth in 700C		Work Order: ITRM0030								
Serial Number:		Date: 06/28/04								
Customer: Intermec Technologies Corporation		Temperature: 75								
Attendees: none		Humidity: 45%								
Cust. Ref. No.:		Barometric Pressure: 30.16								
Tested by: Holly Ashkannejhad	Power: 120VAC, 60Hz	Job Site: EV01								
TEST SPECIFICATIONS										
Specification: FCC 22.917(e)		Year: 2003								
Method: TIA/EIA-603		Year: 2001								
SAMPLE CALCULATIONS										
Radiated Emissions: Field Strength = Measured Level + Antenna Factor + Cable Factor - Amplifier Gain + Distance Adjustment Factor + External Attenuation										
Conducted Emissions: Adjusted Level = Measured Level + Transducer Factor + Cable Attenuation Factor + External Attenuator										
COMMENTS										
Simultaneous transmission of 6820 printer (Bluetooth) with 700C (CDMA(cellular)/802.11b/Bluetooth)										
EUT OPERATING MODES										
Transmitting channel 54 CDMA cellular, 802.11b channel 11, Bluetooth channel 79										
DEVIATIONS FROM TEST STANDARD										
No deviations.										
RESULTS		Run #								
Pass		31								
Other		Holly Ashkannejhad Tested By:								
<p>dBm</p> <p>MHz</p>										
Freq (MHz)		Azimuth (degrees)	Height (meters)		Polarity	Detector		EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)
2483.500		61.0	1.3		H-Horn	PK		-47.6	-13.0	-34.6
2483.500		55.0	1.1		V-Horn	PK		-48.3	-13.0	-35.3

NORTHWEST
EMC

Apparent Power Data Sheet

REV
df4.13
05/06/2004

EUT: CDMA in 700C with 802.11(b), Bluetooth in 700C

Work Order: ITRM0030

Serial Number:

Date: 06/28/04

Customer: Intermec Technologies Corporation

Temperature: 75

Attendees: none

Humidity: 45%

Cust. Ref. No.:

Barometric Pressure: 30.16

Tested by: Holly Ashkannnejhad

Power: 120VAC, 60Hz

Job Site: EV01

TEST SPECIFICATIONS

Specification: FCC 22.917(e)

Year: 2003

Method: TIA/EIA-603

Year: 2001

SAMPLE CALCULATIONS

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

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

COMMENTS

Simultaneous transmission of 6820 printer (Bluetooth) with 700C (CDMA(cellular)/802.11b/Bluetooth)

EUT OPERATING MODES

Transmitting channel 467 CDMA cellular, 802.11b channel 1, Bluetooth channel 11

DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS

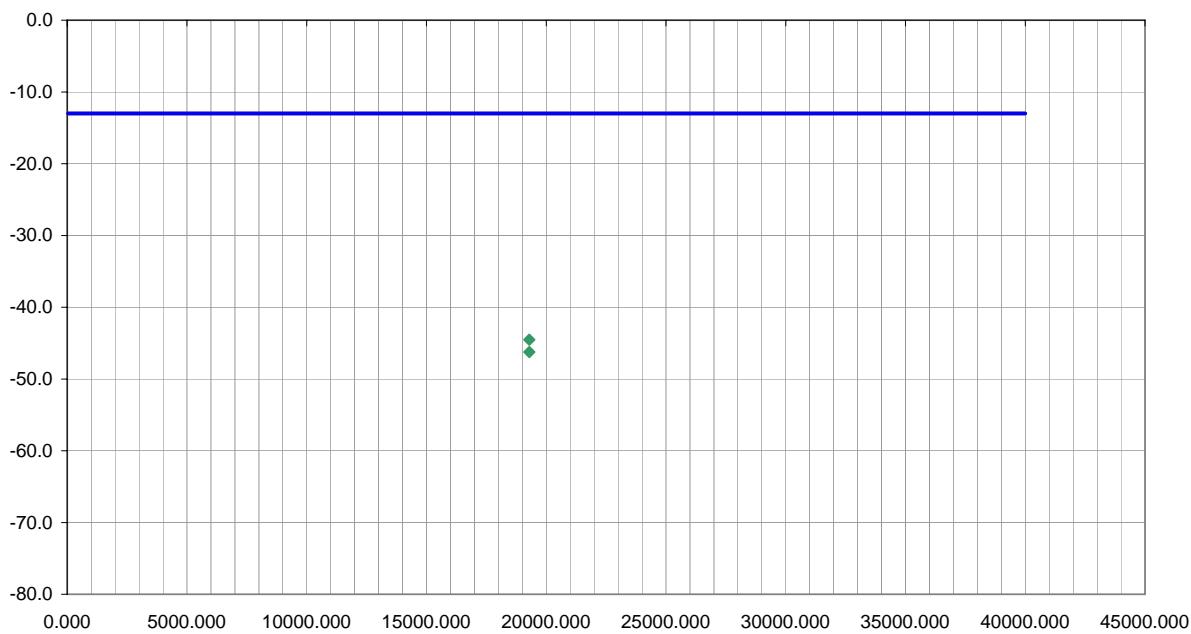
Run #

Pass

32

Other

Tested By:



Freq (MHz)			Azimuth (degrees)	Height (meters)		Polarity	Detector		EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)
19296.000			-3.0	1.0		V-High Horr	PK		-44.5	-13.0	-31.5
19296.000			362.0	1.0		H-High Horr	PK		-46.2	-13.0	-33.2

NORTHWEST
EMC

Apparent Power Data Sheet

REV
df4.13
05/06/2004

EUT:	CDMA in 700C with 802.11(b), Bluetooth in 700C	Work Order:	ITRM0030
Serial Number:		Date:	06/28/04
Customer:	Intermec Technologies Corporation	Temperature:	75
Attendees:	none	Humidity:	45%
Cust. Ref. No.:		Barometric Pressure:	30.16
Tested by:	Holly Ashkannnejhad	Job Site:	EV01

TEST SPECIFICATIONS

Specification:	FCC 22.917(e)	Year:	2003
Method:	TIA/EIA-603	Year:	2001

SAMPLE CALCULATIONS

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

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

COMMENTS

Simultaneous transmission of 6820 printer (Bluetooth) with 700C (CDMA(cellular)/802.11b/Bluetooth)

EUT OPERATING MODES

Transmitting channel 55 CDMA cellular, 802.11b channel 11, Bluetooth channel 79

DEVIATIONS FROM TEST STANDARD

No deviations.

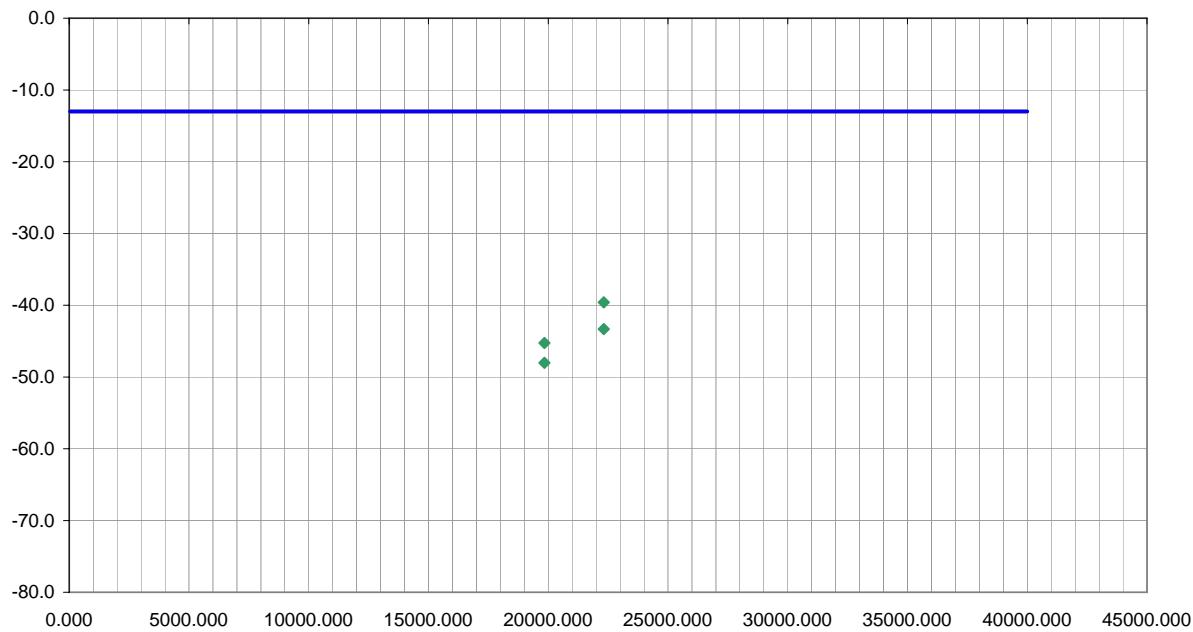
RESULTS

Pass	Run #
	33

Other

Holly Ashkannnejhad

Tested By:



Freq (MHz)			Azimuth (degrees)	Height (meters)			Polarity	Detector		EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)
22320.000				361.0	1.0		V-High Horr	PK		-39.6	-13.0	-26.6
22320.000				-3.0	1.0		H-High Horr	PK		-43.3	-13.0	-30.3
19840.000				361.0	1.0		V-High Horr	PK		-45.3	-13.0	-32.3
19840.000				-3.0	1.0		H-High Horr	PK		-48.0	-13.0	-35.0

NORTHWEST
EMC

Apparent Power Data Sheet

REV
df4.13
05/06/2004

EUT: CDMA in 700C with 802.11(b), Bluetooth in 700C

Work Order: ITRM0030

Serial Number:

Date: 06/28/04

Customer: Intermec Technologies Corporation

Temperature: 75

Attendees: none

Humidity: 45%

Cust. Ref. No.:

Barometric Pressure: 30.16

Tested by: Holly Ashkannnejhad

Power: 120VAC, 60Hz

Job Site: EV01

TEST SPECIFICATIONS

Specification: FCC 22.917(e)

Year: 2003

Method: TIA/EIA-603

Year: 2001

SAMPLE CALCULATIONS

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

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

COMMENTS

Simultaneous transmission of 6820 printer (Bluetooth) with 700C (CDMA(cellular)/802.11b/Bluetooth)

EUT OPERATING MODES

Transmitting channel 395 CDMA cellular, 802.11b channel 1, Bluetooth channel 5

DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS

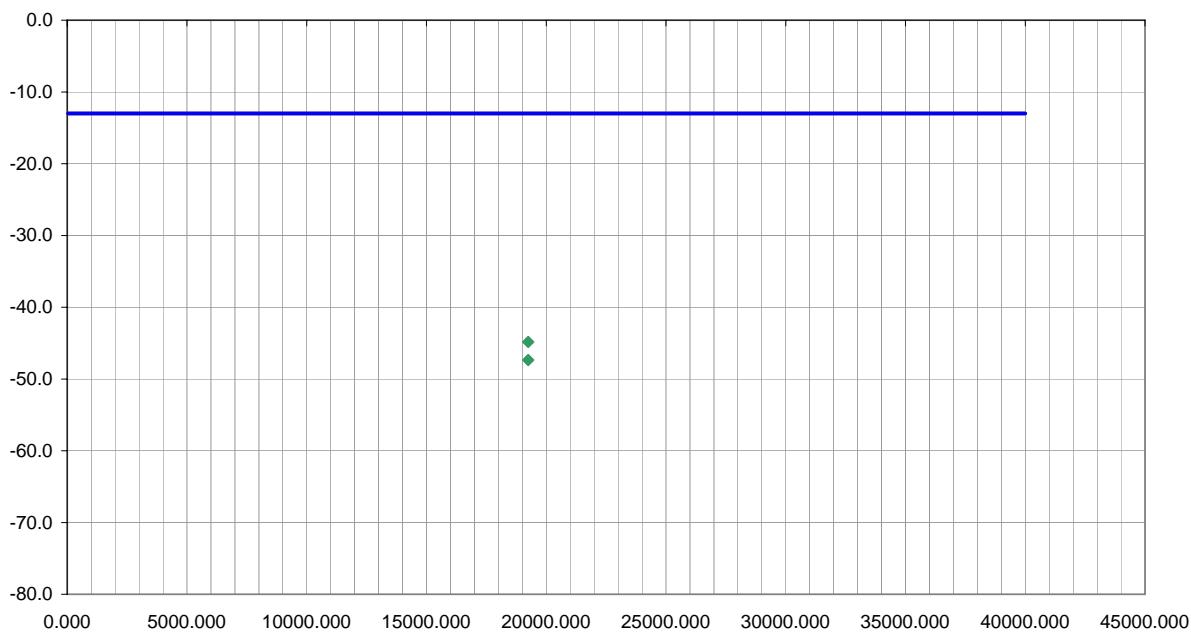
Run #

Pass

34

Other

Tested By:



Freq (MHz)			Azimuth (degrees)	Height (meters)			Polarity	Detector		EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)
19248.000				361.0	1.0		V-High Horr	PK		-44.8	-13.0	-31.8
19248.000				-2.0	1.0		H-High Horr	PK		-47.3	-13.0	-34.3

NORTHWEST
EMC

Apparent Power Data Sheet

REV
df4.13
05/06/2004

EUT: CDMA in 700C with 802.11(b), Bluetooth in 700C

Work Order: ITRM0030

Serial Number:

Date: 06/28/04

Customer: Intermec Technologies Corporation

Temperature: 75

Attendees: none

Humidity: 45%

Cust. Ref. No.:

Barometric Pressure: 30.16

Tested by: Holly Ashkannejhad

Power: 120VAC, 60Hz

Job Site: EV01

TEST SPECIFICATIONS

Specification: FCC 22.917(e)

Year: 2003

Method: TIA/EIA-603

Year: 2001

SAMPLE CALCULATIONS

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

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

COMMENTS

Simultaneous transmission of 6820 printer (Bluetooth) with 700C (CDMA(cellular)/802.11b/Bluetooth)

EUT OPERATING MODES

Transmitting channel 395 CDMA cellular, 802.11b channel 1, Bluetooth channel 5

DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS

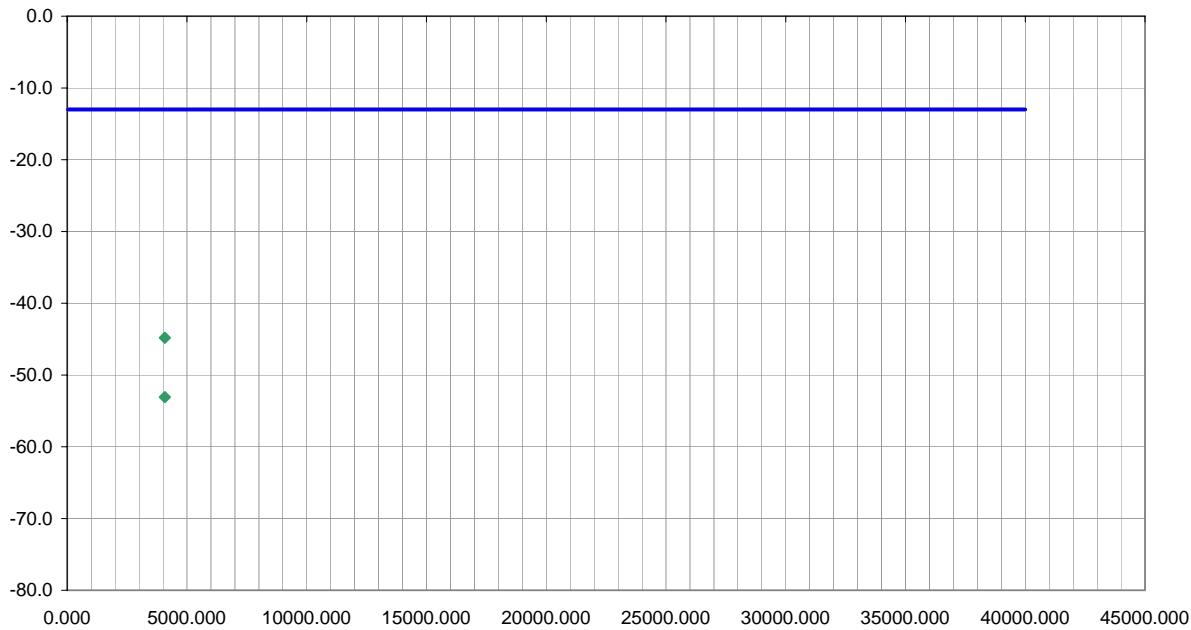
Run #

Pass

35

Other

Tested By:



Freq (MHz)			Azimuth (degrees)	Height (meters)			Polarity	Detector		EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)
4075.971			172.0	1.2			V-Horn	PK		-44.8	-13.0	-31.8
4075.971			262.0	1.3			H-Horn	PK		-53.1	-13.0	-40.1

NORTHWEST
EMC

Apparent Power Data Sheet

REV
df4.13
05/06/2004

EUT:	CDMA in 700C with 802.11(b), Bluetooth in 700C	Work Order:	ITRM0030
Serial Number:		Date:	06/28/04
Customer:	Intermec Technologies Corporation	Temperature:	75
Attendees:	none	Humidity:	45%
Cust. Ref. No.:		Barometric Pressure:	30.16
Tested by:	Holly Ashkannejhad	Job Site:	EV01

TEST SPECIFICATIONS

Specification:	FCC 22.917(e)	Year:	2003
Method:	TIA/EIA-603	Year:	2001

SAMPLE CALCULATIONS

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

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

COMMENTS

Simultaneous transmission of 6820 printer (Bluetooth) with 700C (CDMA(cellular)/802.11b/Bluetooth)

EUT OPERATING MODES

Transmitting channel 467 CDMA cellular, 802.11b channel 1, Bluetooth channel 11

DEVIATIONS FROM TEST STANDARD

No deviations.

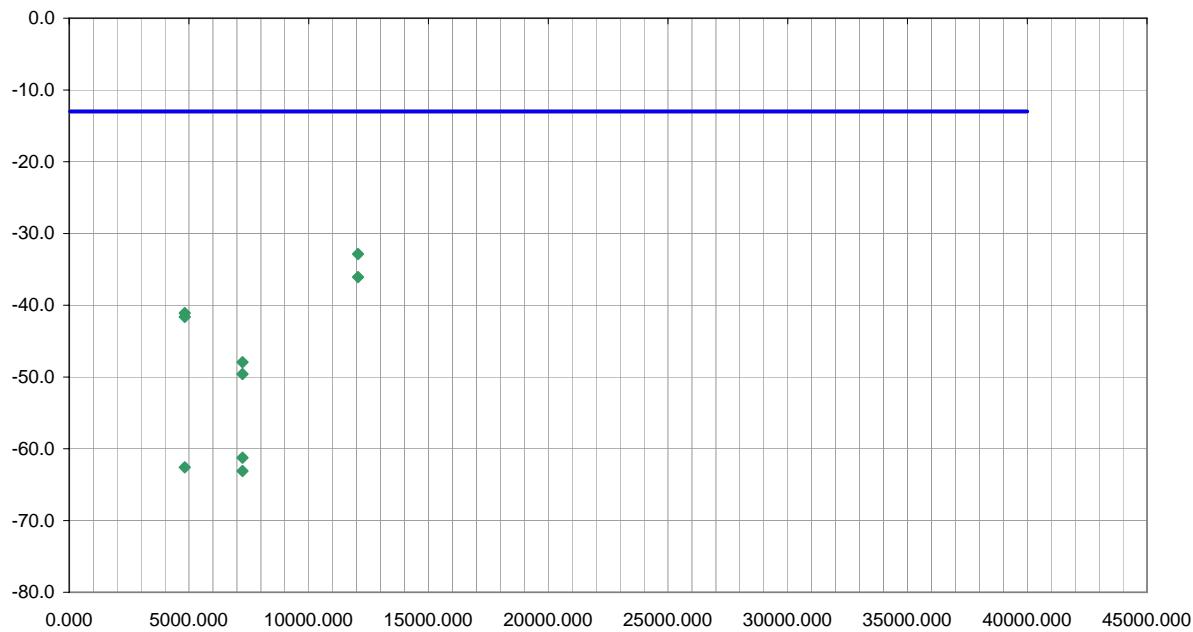
RESULTS

Pass	Run #
Pass	36

Other

Holly Ashkannejhad

Tested By:

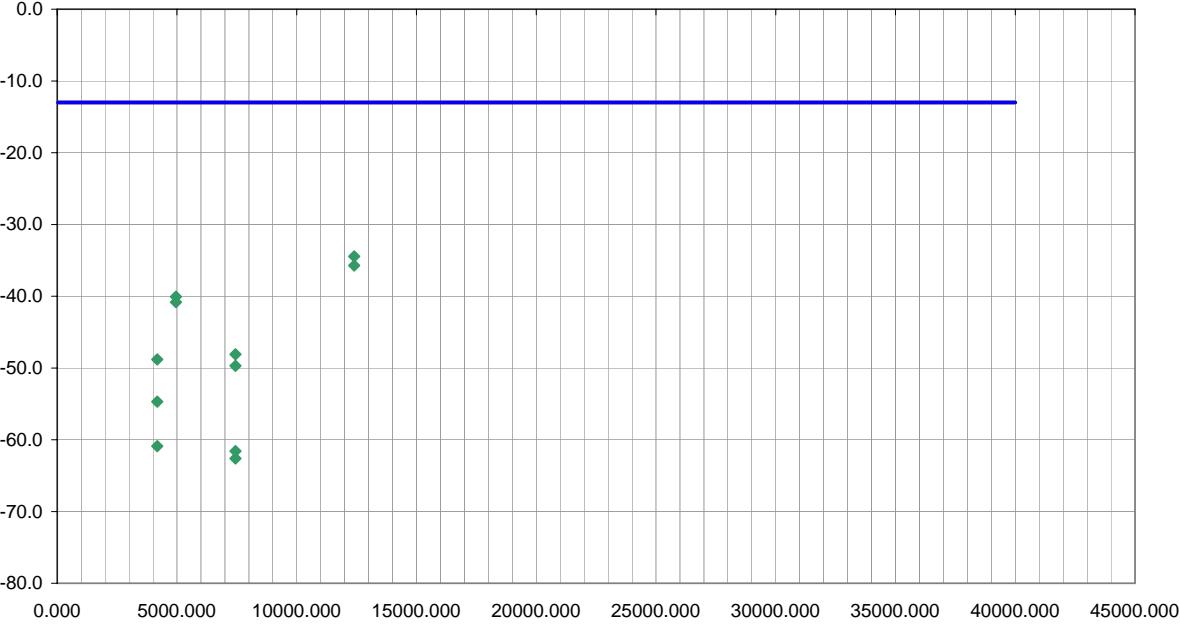


Freq (MHz)			Azimuth (degrees)	Height (meters)		Polarity	Detector		EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)
12060.000			54.0	1.3		H-Horn	PK		-32.9	-13.0	-19.9
12060.000			62.0	1.2		V-Horn	PK		-36.1	-13.0	-23.1
4824.000			222.0	1.3		H-Horn	PK		-41.1	-13.0	-28.1
4824.000			204.0	1.2		V-Horn	PK		-41.6	-13.0	-28.6
7236.000			149.0	1.8		H-Horn	PK		-47.9	-13.0	-34.9
7236.000			121.0	1.2		V-Horn	PK		-49.6	-13.0	-36.6
7236.000			149.0	1.8		H-Horn	AV		-61.2	-13.0	-48.2
4824.000			222.0	1.3		H-Horn	AV		-62.6	-13.0	-49.6
7236.000			121.0	1.2		V-Horn	AV		-63.1	-13.0	-50.1

NORTHWEST
EMC

Apparent Power Data Sheet

REV
df4.13
05/06/2004

EUT: CDMA in 700C with 802.11(b), Bluetooth in 700C		Work Order: ITRM0030										
Serial Number:		Date: 06/28/04										
Customer: Intermec Technologies Corporation		Temperature: 75										
Attendees: none		Humidity: 45%										
Cust. Ref. No.:		Barometric Pressure: 30.16										
Tested by: Holly Ashkannejhad		Job Site: EV01										
TEST SPECIFICATIONS												
Specification: FCC 22.917(e)		Year: 2003										
Method: TIA/EIA-603		Year: 2001										
SAMPLE CALCULATIONS												
Radiated Emissions: Field Strength = Measured Level + Antenna Factor + Cable Factor - Amplifier Gain + Distance Adjustment Factor + External Attenuation												
Conducted Emissions: Adjusted Level = Measured Level + Transducer Factor + Cable Attenuation Factor + External Attenuator												
COMMENTS												
Simultaneous transmission of 6820 printer (Bluetooth) with 700C (CDMA(cellular)/802.11b/Bluetooth)												
EUT OPERATING MODES												
Transmitting channel 55 CDMA cellular, 802.11b channel 11, Bluetooth channel 79												
DEVIATIONS FROM TEST STANDARD												
No deviations.												
RESULTS		Run #										
Pass		37										
Other		 Tested By:										
												
Freq (MHz)			Azimuth (degrees)	Height (meters)			Polarity	Detector		EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)
12400.000				217.0	1.3		H-Horn	PK		-34.4	-13.0	-21.4
12400.000				202.0	1.2		V-Horn	PK		-35.7	-13.0	-22.7
4960.016				140.0	1.2		H-Horn	PK		-40.1	-13.0	-27.1
4960.016				179.0	1.2		V-Horn	PK		-40.8	-13.0	-27.8
7440.000				51.0	1.3		H-Horn	PK		-48.1	-13.0	-35.1
4176.016				178.0	1.1		V-Horn	PK		-48.8	-13.0	-35.8
7440.000				212.0	1.2		V-Horn	PK		-49.7	-13.0	-36.7
4176.016				149.0	1.3		H-Horn	PK		-54.7	-13.0	-41.7
4176.016				149.0	1.3		H-Horn	AV		-60.9	-13.0	-47.9
7440.000				51.0	1.3		H-Horn	AV		-61.6	-13.0	-48.6
7440.000				212.0	1.2		V-Horn	AV		-62.6	-13.0	-49.6

NORTHWEST
EMC

Apparent Power Data Sheet

REV
df4.13
05/06/2004

EUT: CDMA in 700C with 802.11(b), Bluetooth in 700C

Work Order: ITRM0030

Serial Number:

Date: 06/29/04

Customer: Intermec Technologies Corporation

Temperature: 75

Attendees: none

Humidity: 45%

Cust. Ref. No.:

Barometric Pressure: 30.16

Tested by: Holly Ashkannejhad

Power: 120VAC, 60Hz

Job Site: EV01

TEST SPECIFICATIONS

Specification: FCC 22.917(e)

Year: 2003

Method: TIA/EIA-603

Year: 2001

SAMPLE CALCULATIONS

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

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

COMMENTS

Simultaneous transmission of 6820 printer (Bluetooth) with 700C (CDMA(cellular)/802.11b/Bluetooth)

EUT OPERATING MODES

Transmitting channel 467 CDMA cellular, 802.11b channel 1, Bluetooth channel 11

DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS

Run #

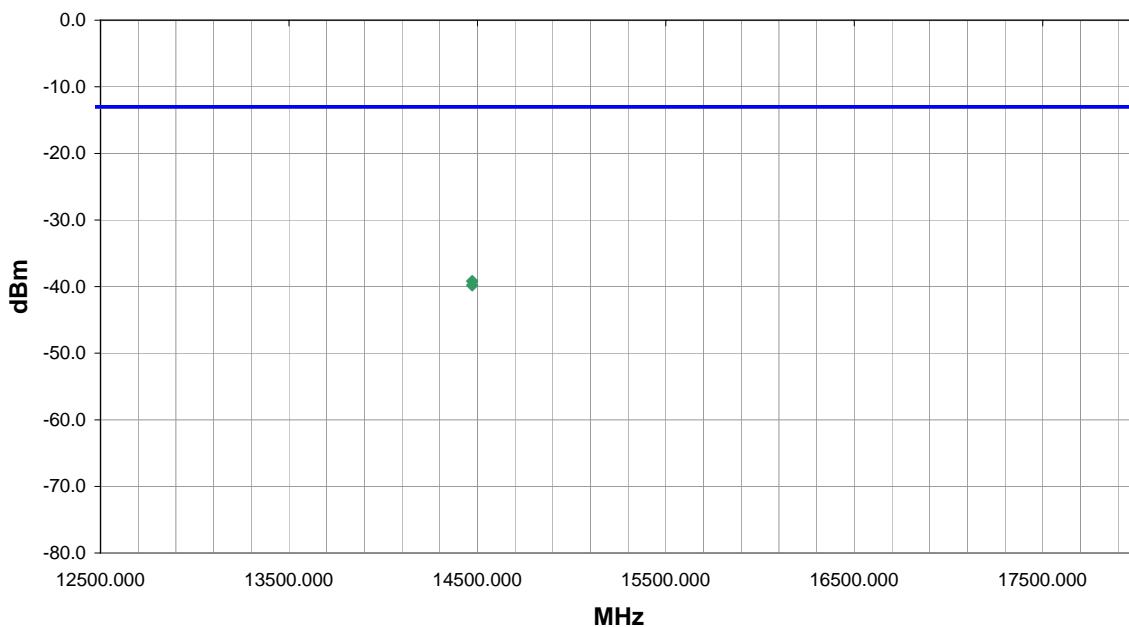
Pass

38

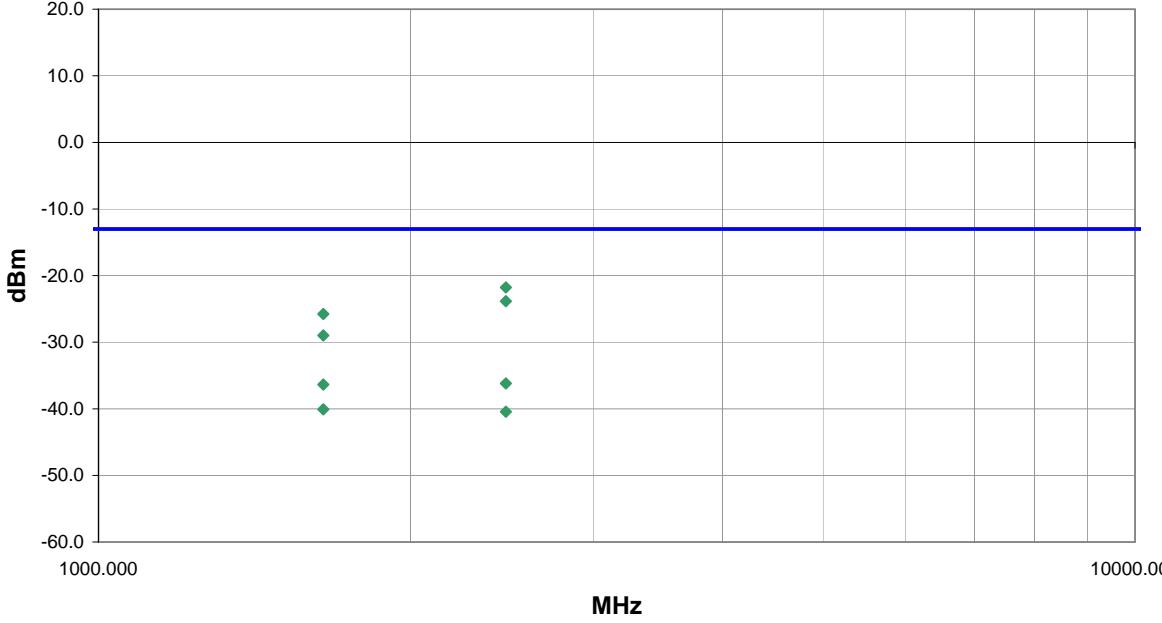
Other

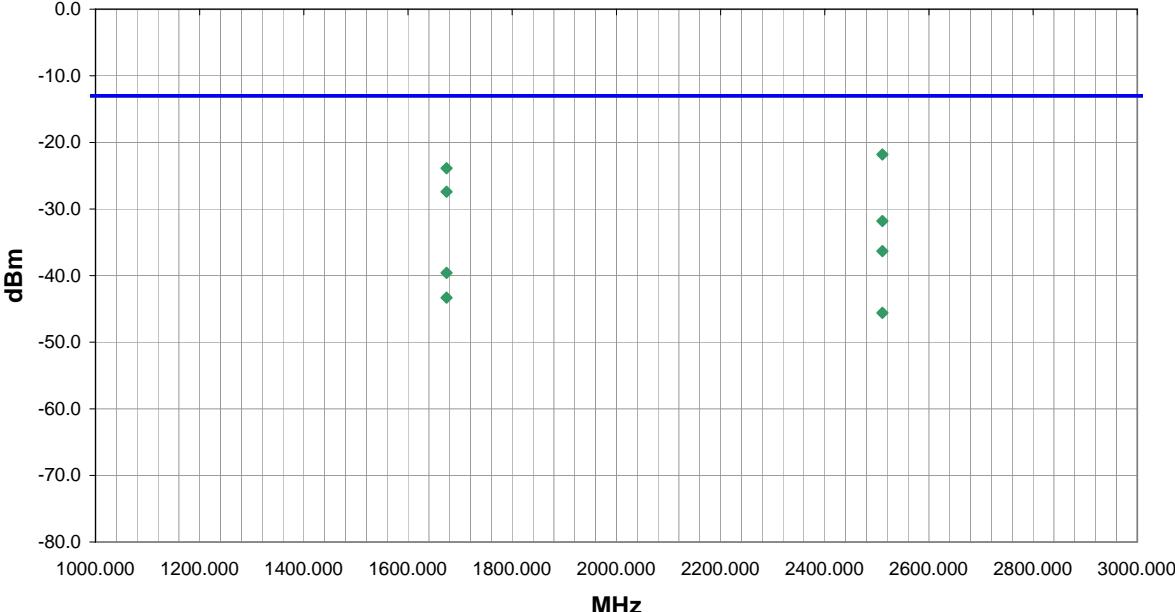
Holly Ashkannejhad

Tested By:



Freq (MHz)			Azimuth (degrees)	Height (meters)			Polarity	Detector		EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)
14472.000			17.0	3.2			H-Horn	PK		-39.2	-13.0	-26.2
14472.000			155.0	3.3			V-Horn	PK		-39.8	-13.0	-26.8

NORTHWEST EMC		Apparent Power Data Sheet								REV df4.13 05/06/2004		
EUT:	CDMA in 700C								Work Order:	ITRM0030		
Serial Number:									Date:	06/22/04		
Customer:	Intermec Technologies Corporation								Temperature:	75		
Attendees:	none								Humidity:	44%		
Cust. Ref. No.:									Barometric Pressure:	29.92		
Tested by:	Holly Ashkannejhad				Power:		120VAC, 60Hz		Job Site:	EV01		
TEST SPECIFICATIONS												
Specification:	FCC 22.917(e)								Year:	2003		
Method:	TIA/EIA-603								Year:	2001		
SAMPLE CALCULATIONS												
Radiated Emissions: Field Strength = Measured Level + Antenna Factor + Cable Factor - Amplifier Gain + Distance Adjustment Factor + External Attenuation												
Conducted Emissions: Adjusted Level = Measured Level + Transducer Factor + Cable Attenuation Factor + External Attenuator												
COMMENTS												
CDMA radio installed in 700C Handheld Computer												
EUT OPERATING MODES												
Transmitting Low channel; CDMA Cellular Band, Stand-alone												
DEVIATIONS FROM TEST STANDARD												
No deviations.												
RESULTS												
Pass									Run #	9		
Other												
									Tested By:			
												
Freq (MHz)			Azimuth (degrees)	Height (meters)			Polarity	Detector		EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)
2471.999			199.0	1.3			H-Horn	PK		-21.8	-13.0	-8.8
2471.999			138.0	1.3			V-Horn	PK		-23.8	-13.0	-10.8
1647.890			197.0	1.3			H-Horn	PK		-25.8	-13.0	-12.8
1647.890			316.0	1.8			V-Horn	PK		-29.0	-13.0	-16.0
2471.999			199.0	1.3			H-Horn	AV		-36.2	-13.0	-23.2
1647.890			197.0	1.3			H-Horn	AV		-36.4	-13.0	-23.4
1647.890			316.0	1.8			V-Horn	AV		-40.1	-13.0	-27.1
2471.999			138.0	1.3			V-Horn	AV		-40.4	-13.0	-27.4

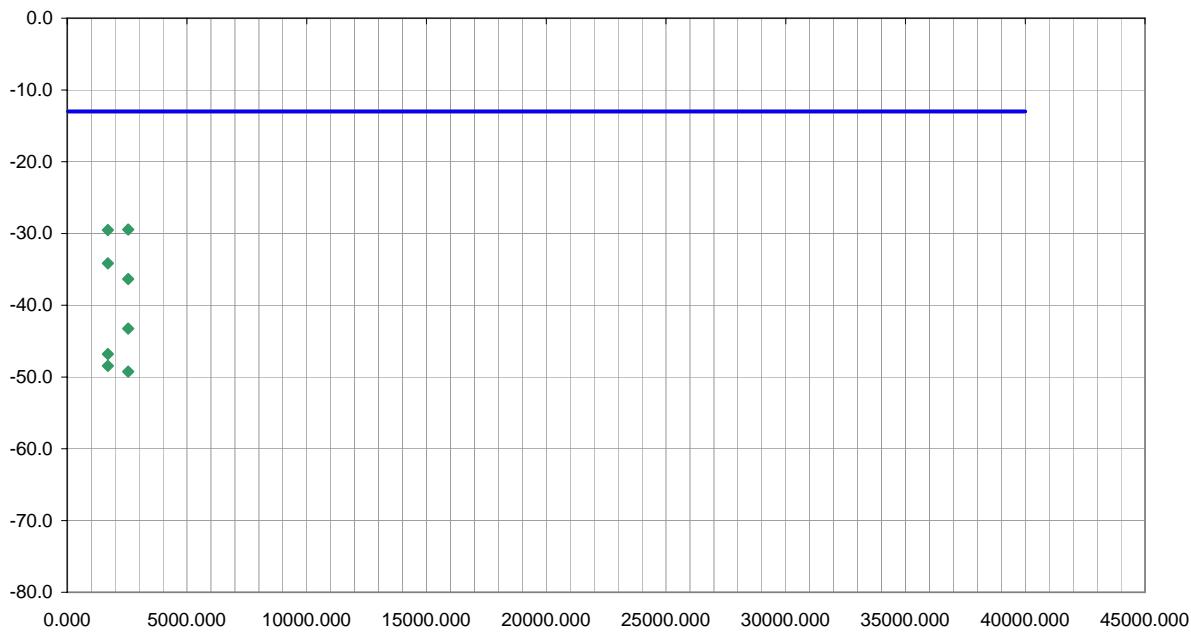
NORTHWEST EMC		Apparent Power Data Sheet								REV df4.13 05/06/2004		
EUT: CDMA in 700C								Work Order: ITRM0030				
Serial Number:								Date: 06/23/04				
Customer: Intermec Technologies Corporation								Temperature: 77				
Attendees: none								Humidity: 44%				
Cust. Ref. No.:								Barometric Pressure 29.92				
Tested by: Holly Ashkannejhad				Power: 120VAC, 60Hz				Job Site: EV01				
TEST SPECIFICATIONS												
Specification: FCC 22.917(e)								Year: 2003				
Method: TIA/EIA-603								Year: 2001				
SAMPLE CALCULATIONS												
Radiated Emissions: Field Strength = Measured Level + Antenna Factor + Cable Factor - Amplifier Gain + Distance Adjustment Factor + External Attenuation												
Conducted Emissions: Adjusted Level = Measured Level + Transducer Factor + Cable Attenuation Factor + External Attenuator												
COMMENTS												
CDMA radio installed in 700C Handheld Computer												
EUT OPERATING MODES												
Transmitting Mid channel; CDMA Cellular Band, Stand-alone												
DEVIATIONS FROM TEST STANDARD												
No deviations.												
RESULTS												
Pass								Run # 10				
Other								 Tested By:				
												
Freq (MHz)			Azimuth (degrees)	Height (meters)			Polarity	Detector		EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)
2510.700			57.0	1.3			H-Horn	PK		-21.8	-13.0	-8.8
1673.883			60.0	1.4			H-Horn	PK		-23.9	-13.0	-10.9
1673.883			321.0	1.2			V-Horn	PK		-27.4	-13.0	-14.4
2510.700			265.0	1.2			V-Horn	PK		-31.8	-13.0	-18.8
2510.700			57.0	1.3			H-Horn	AV		-36.3	-13.0	-23.3
1673.883			60.0	1.4			H-Horn	AV		-39.6	-13.0	-26.6
1673.883			321.0	1.2			V-Horn	AV		-43.3	-13.0	-30.3
2510.700			265.0	1.2			V-Horn	AV		-45.6	-13.0	-32.6

NORTHWEST
EMC

Apparent Power Data Sheet

REV
df4.13
05/06/2004

EUT:	CDMA in 700C	Work Order:	ITRM0030
Serial Number:		Date:	06/23/04
Customer:	Intermec Technologies Corporation	Temperature:	77
Attendees:	none	Humidity:	44%
Cust. Ref. No.:		Barometric Pressure:	29.92
Tested by:	Holly Ashkannnejhad	Power:	120VAC, 60Hz
		Job Site:	EV01
TEST SPECIFICATIONS			
Specification: FCC 22.917(e)		Year:	2003
Method: TIA/EIA-603		Year:	2001
SAMPLE CALCULATIONS			
Radiated Emissions: Field Strength = Measured Level + Antenna Factor + Cable Factor - Amplifier Gain + Distance Adjustment Factor + External Attenuation			
Conducted Emissions: Adjusted Level = Measured Level + Transducer Factor + Cable Attenuation Factor + External Attenuator			
COMMENTS			
CDMA radio installed in 700C Handheld Computer			
EUT OPERATING MODES			
Transmitting High channel; CDMA Cellular Band, Stand-alone			
DEVIATIONS FROM TEST STANDARD			
No deviations.			
RESULTS			
Pass	Run # 11		
Other	 Tested By:		



Freq (MHz)			Azimuth (degrees)	Height (meters)			Polarity	Detector		EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)
2546.840			18.0	1.4			H-Horn	PK		-29.5	-13.0	-16.5
1697.960			18.0	1.4			H-Horn	PK		-29.5	-13.0	-16.5
1697.960			323.0	1.3			V-Horn	PK		-34.2	-13.0	-21.2
2546.840			171.0	1.2			V-Horn	PK		-36.4	-13.0	-23.4
2546.840			18.0	1.4			H-Horn	AV		-43.3	-13.0	-30.3
1697.960			18.0	1.4			H-Horn	AV		-46.8	-13.0	-33.8
1697.960			323.0	1.3			V-Horn	AV		-48.5	-13.0	-35.5
2546.840			171.0	1.2			V-Horn	AV		-49.3	-13.0	-36.3

NORTHWEST
EMC

Apparent Power Data Sheet

REV
df4.13
05/06/2004

EUT:	CDMA in 700C	Work Order:	ITRM0030
Serial Number:		Date:	06/23/04
Customer:	Intermec Technologies Corporation	Temperature:	76
Attendees:	none	Humidity:	37%
Cust. Ref. No.:		Barometric Pressure:	29.81
Tested by:	Holly Ashkannejhad	Power:	120VAC, 60Hz
TEST SPECIFICATIONS		Job Site: EV01	
Specification:	FCC 22.917(e)	Year:	2003
Method:	TIA/EIA-603	Year:	2001

Method: TIA/EI

SAMPLE CALCULATIONS Predicted Emission Field Strength = Measured Level + Antenna Factor + Cable Factor + Amplifier Gain + Distance Adjustment Factor + External Attenuation

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

Conducted Er

CDMA radio installed in Z900C Handheld Computer

EUT OPERATING MODES

Transmitting High channel: CDMA Cellular Band Stand-alone

DEVIATIONS FROM TEST STANDARD

No deviations

NO deviation

Pass

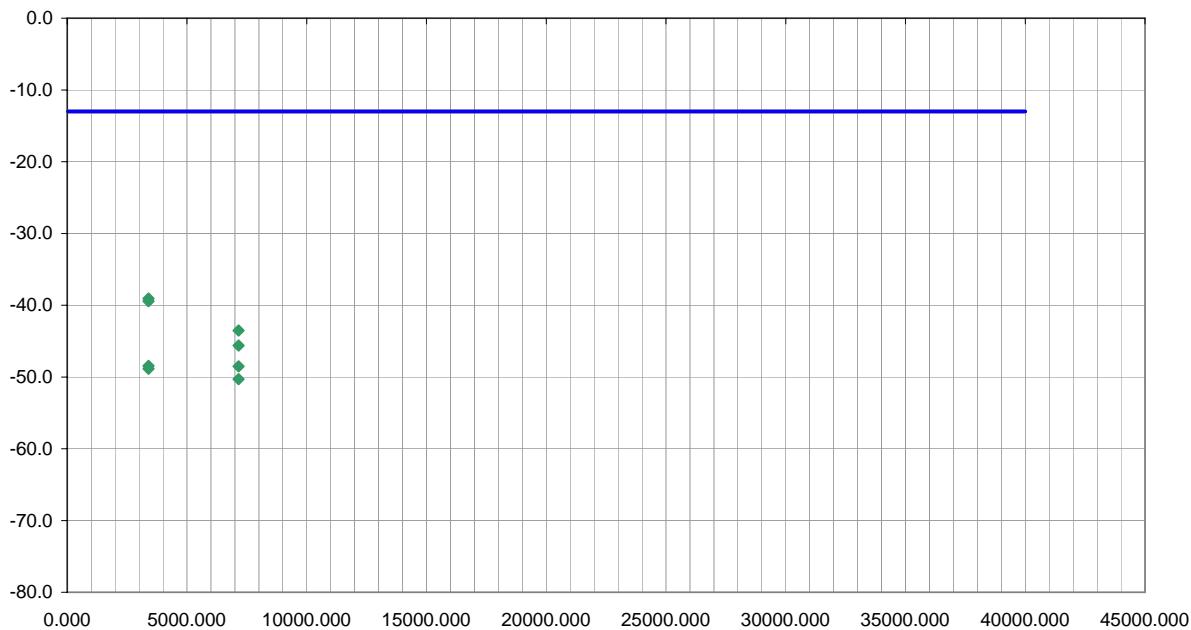
Run #

12

Other

Holly Brinkley

Tested By:



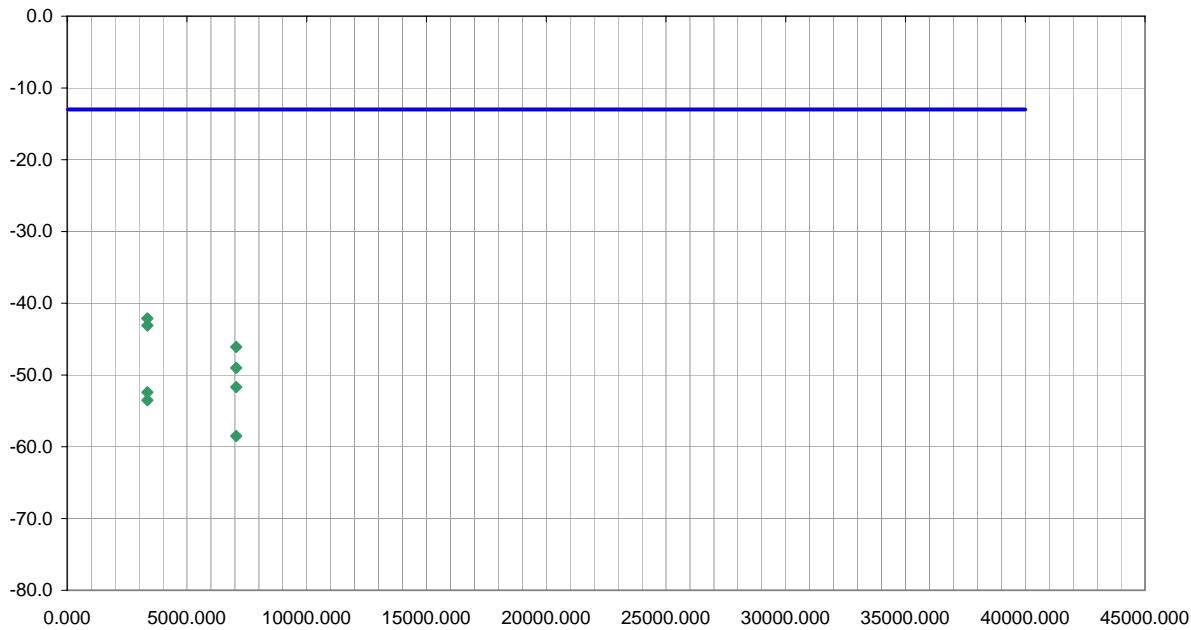
Freq (MHz)			Azimuth (degrees)	Height (meters)			Polarity	Detector		EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)
3395.879			118.0	1.3			H-Horn	PK		-39.1	-13.0	-26.1
3395.879			79.0	1.4			V-Horn	PK		-39.5	-13.0	-26.5
7151.742			214.0	1.2			H-Horn	PK		-43.5	-13.0	-30.5
7151.742			264.0	1.4			V-Horn	PK		-45.6	-13.0	-32.6
3395.879			79.0	1.4			V-Horn	AV		-48.5	-13.0	-35.5
7151.742			214.0	1.2			H-Horn	AV		-48.5	-13.0	-35.5
3395.879			118.0	1.3			H-Horn	AV		-48.9	-13.0	-35.9
7151.742			264.0	1.4			V-Horn	AV		-50.3	-13.0	-37.3

NORTHWEST
EMC

Apparent Power Data Sheet

REV
df4.13
05/06/2004

EUT:	CDMA in 700C	Work Order:	ITRM0030
Serial Number:		Date:	06/23/04
Customer:	Intermec Technologies Corporation	Temperature:	76
Attendees:	none	Humidity:	37%
Cust. Ref. No.:		Barometric Pressure:	29.81
Tested by:	Holly Ashkannejhad	Power:	120VAC, 60Hz
		Job Site:	EV01
TEST SPECIFICATIONS			
Specification: FCC 22.917(e)		Year:	2003
Method: TIA/EIA-603		Year:	2001
SAMPLE CALCULATIONS			
Radiated Emissions: Field Strength = Measured Level + Antenna Factor + Cable Factor - Amplifier Gain + Distance Adjustment Factor + External Attenuation			
Conducted Emissions: Adjusted Level = Measured Level + Transducer Factor + Cable Attenuation Factor + External Attenuator			
COMMENTS			
CDMA radio installed in 700C Handheld Computer.			
EUT OPERATING MODES			
Transmitting Mid channel; CDMA Cellular Band, Stand-alone			
DEVIATIONS FROM TEST STANDARD			
No deviations.			
RESULTS			
Pass	Run # 13		
Other	 Tested By:		



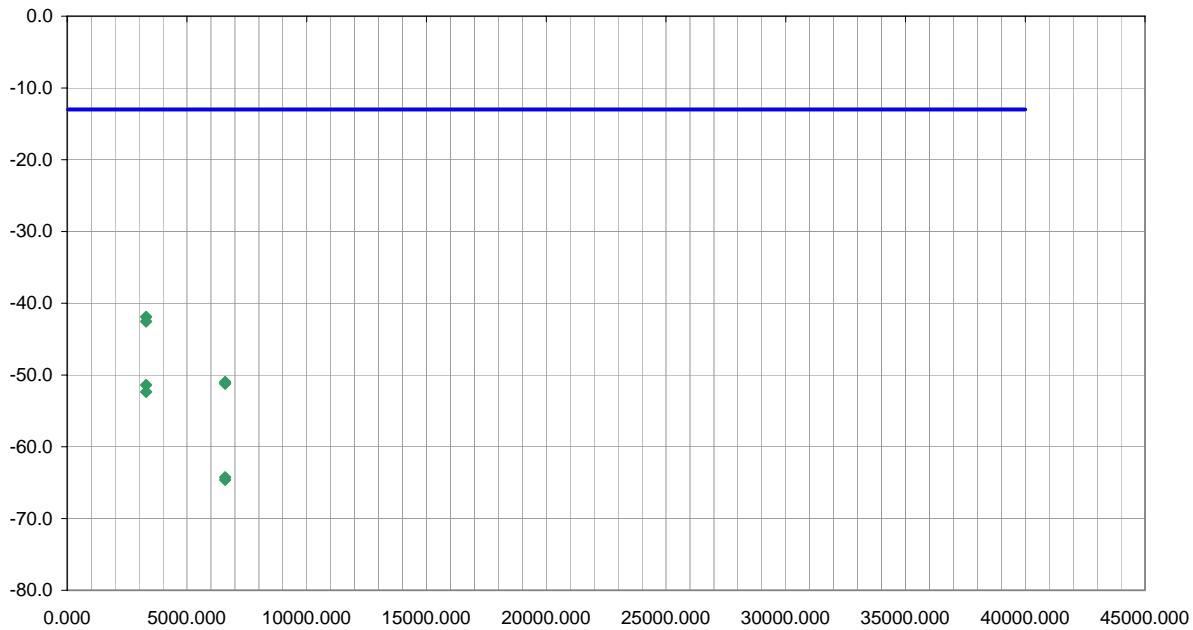
Freq (MHz)			Azimuth (degrees)	Height (meters)			Polarity	Detector		EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)
3347.760				153.0	1.3		H-Horn	PK		-42.1	-13.0	-29.1
3347.760				77.0	1.2		V-Horn	PK		-43.1	-13.0	-30.1
7055.510				195.0	1.3		H-Horn	PK		-46.1	-13.0	-33.1
7055.510				17.0	1.2		V-Horn	PK		-49.0	-13.0	-36.0
7055.510				195.0	1.3		H-Horn	AV		-51.7	-13.0	-38.7
3347.760				153.0	1.3		H-Horn	AV		-52.4	-13.0	-39.4
3347.760				77.0	1.2		V-Horn	AV		-53.5	-13.0	-40.5
7055.510				17.0	1.2		V-Horn	AV		-58.5	-13.0	-45.5

NORTHWEST
EMC

Apparent Power Data Sheet

REV
df4.13
05/06/2004

EUT:	CDMA in 700C	Work Order:	ITRM0030
Serial Number:		Date:	06/23/04
Customer:	Intermec Technologies Corporation	Temperature:	76
Attendees:	none	Humidity:	37%
Cust. Ref. No.:		Barometric Pressure:	29.81
Tested by:	Holly Ashkannejhad	Power:	120VAC, 60Hz
		Job Site:	EV01
TEST SPECIFICATIONS			
Specification: FCC 22.917(e)		Year:	2003
Method: TIA/EIA-603		Year:	2001
SAMPLE CALCULATIONS			
Radiated Emissions: Field Strength = Measured Level + Antenna Factor + Cable Factor - Amplifier Gain + Distance Adjustment Factor + External Attenuation			
Conducted Emissions: Adjusted Level = Measured Level + Transducer Factor + Cable Attenuation Factor + External Attenuator			
COMMENTS			
CDMA radio installed in 700C Handheld Computer.			
EUT OPERATING MODES			
Transmitting Low channel; CDMA Cellular Band, Stand-alone			
DEVIATIONS FROM TEST STANDARD			
No deviations.			
RESULTS			
Evaluation		Run #	14
Other	 Tested By:		

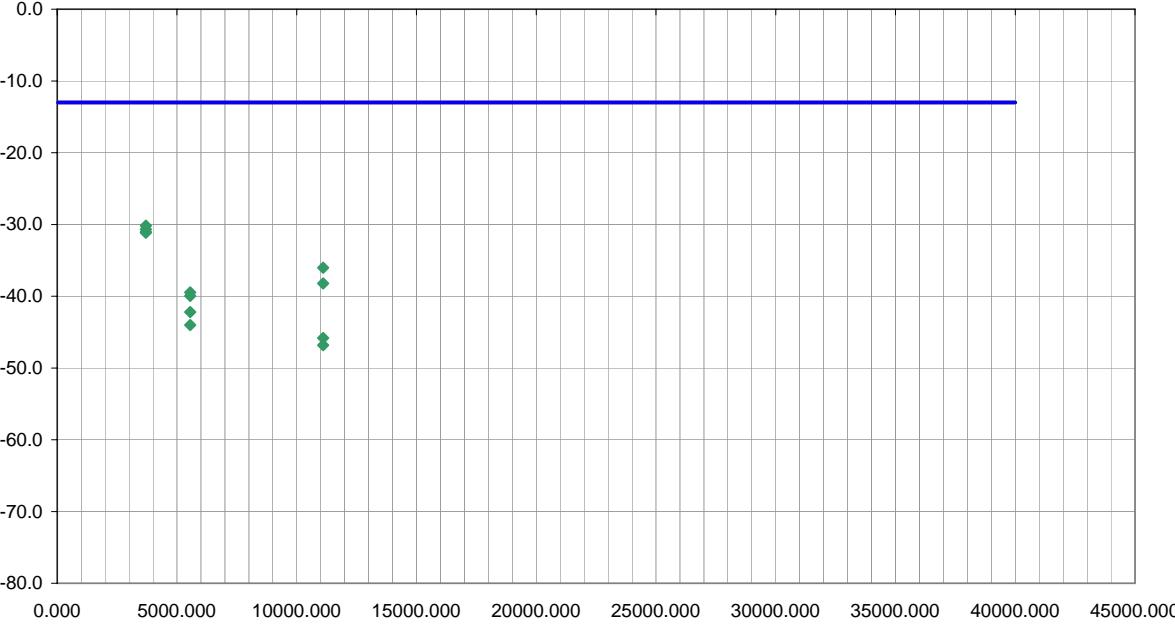


Freq (MHz)			Azimuth (degrees)	Height (meters)			Polarity	Detector		EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)
3296.220				149.0	1.3		H-Horn	PK		-41.9	-13.0	-28.9
3296.220				84.0	1.2		V-Horn	PK		-42.5	-13.0	-29.5
6592.344				186.0	1.3		H-Horn	PK		-51.0	-13.0	-38.0
6592.344				235.0	1.2		V-Horn	PK		-51.2	-13.0	-38.2
3296.220				149.0	1.3		H-Horn	AV		-51.4	-13.0	-38.4
3296.220				84.0	1.2		V-Horn	AV		-52.3	-13.0	-39.3
6592.344				186.0	1.3		H-Horn	AV		-64.3	-13.0	-51.3
6592.344				235.0	1.2		V-Horn	AV		-64.6	-13.0	-51.6

NORTHWEST
EMC

Apparent Power Data Sheet

REV
df4.13
05/06/2004

EUT:	CDMA in 700C	Work Order:	ITRM0030									
Serial Number:		Date:	06/23/04									
Customer:	Intermec Technologies Corporation	Temperature:	76									
Attendees:	none	Humidity:	37%									
Cust. Ref. No.:		Barometric Pressure:	29.81									
Tested by:	Holly Ashkannnejhad	Power:	120VAC, 60Hz									
TEST SPECIFICATIONS												
Specification:	FCC 24.238(a)	Year:	2003									
Method:	TIA/EIA-603	Year:	2001									
SAMPLE CALCULATIONS												
Radiated Emissions: Field Strength = Measured Level + Antenna Factor + Cable Factor - Amplifier Gain + Distance Adjustment Factor + External Attenuation												
Conducted Emissions: Adjusted Level = Measured Level + Transducer Factor + Cable Attenuation Factor + External Attenuator												
COMMENTS												
CDMA radio installed in 700C Handheld Computer.												
EUT OPERATING MODES												
Transmitting Low channel; CDMA PCS Band, Stand-alone												
DEVIATIONS FROM TEST STANDARD												
No deviations.												
RESULTS												
Pass		Run #	15									
Other	 Tested By:											
												
Freq (MHz)			Azimuth (degrees)	Height (meters)			Polarity	Detector		EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)
3699.960				102.0	1.1		H-Horn	PK		-30.2	-13.0	-17.2
3699.960				102.0	1.1		H-Horn	AV		-30.7	-13.0	-17.7
3699.960				174.0	1.1		V-Horn	PK		-31.0	-13.0	-18.0
3699.960				174.0	1.1		V-Horn	AV		-31.1	-13.0	-18.1
11099.990				299.0	1.3		H-Horn	PK		-36.0	-13.0	-23.0
11099.990				287.0	1.2		V-Horn	PK		-38.2	-13.0	-25.2
5549.988				80.0	1.2		V-Horn	PK		-39.5	-13.0	-26.5
5549.988				80.0	1.2		V-Horn	AV		-40.0	-13.0	-27.0
5549.988				358.0	1.3		H-Horn	PK		-42.2	-13.0	-29.2
5549.988				358.0	1.3		H-Horn	AV		-44.0	-13.0	-31.0
11099.990				287.0	1.2		V-Horn	AV		-45.8	-13.0	-32.8
11099.990				299.0	1.3		H-Horn	AV		-46.8	-13.0	-33.8

NORTHWEST
EMC

Apparent Power Data Sheet

REV
df4.13
05/06/2004

EUT:	CDMA in 700C	Work Order:	ITRM0030
Serial Number:		Date:	06/23/04
Customer:	Intermec Technologies Corporation	Temperature:	76
Attendees:	none	Humidity:	37%
Cust. Ref. No.:		Barometric Pressure:	29.81
Tested by:	Holly Ashkannejhad	Power:	120VAC, 60Hz
TEST SPECIFICATIONS			Job Site: EV01
Specification:	FCC 24.238(a)	Year:	2003

Method: TIA/E

SAMPLE CALCULATIONS

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

Conducted Er

COMMENTS

EUT OPERATING MODES

EUI OPERATING MODES
Transmitting Mid-channel, CDMA PCS Band, Stand-alone

DEVIATIONS FROM TEST STANDARD

DEVIATION

RESULTS

REST
Basic

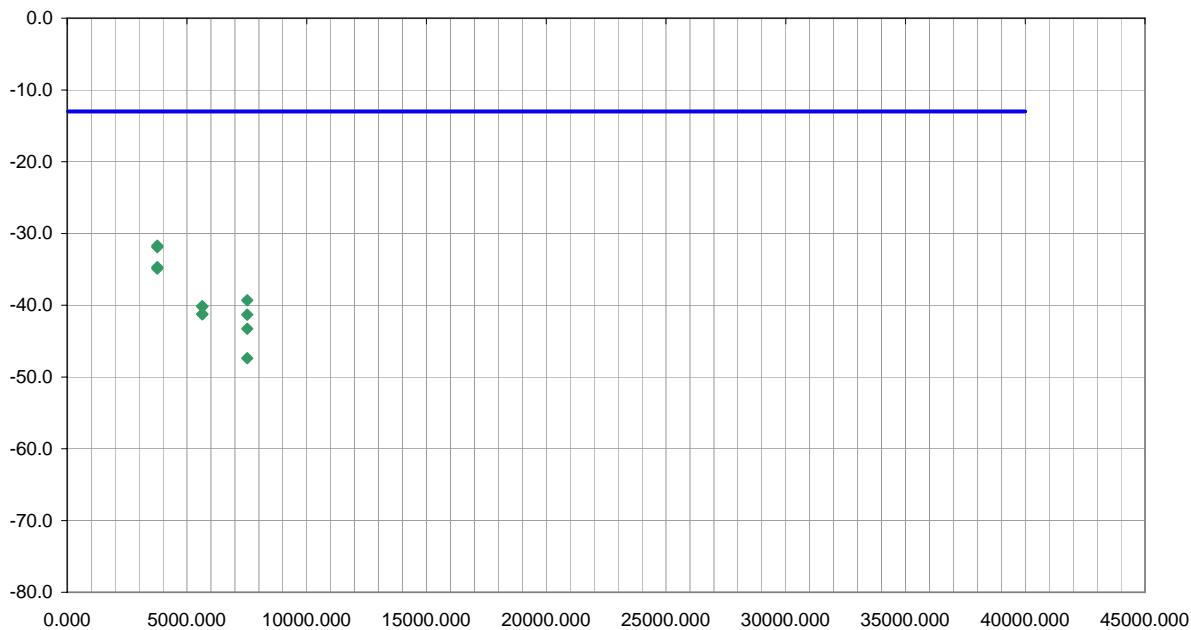
Bus 4

16

Other

Holly Brinkley

Tested By:

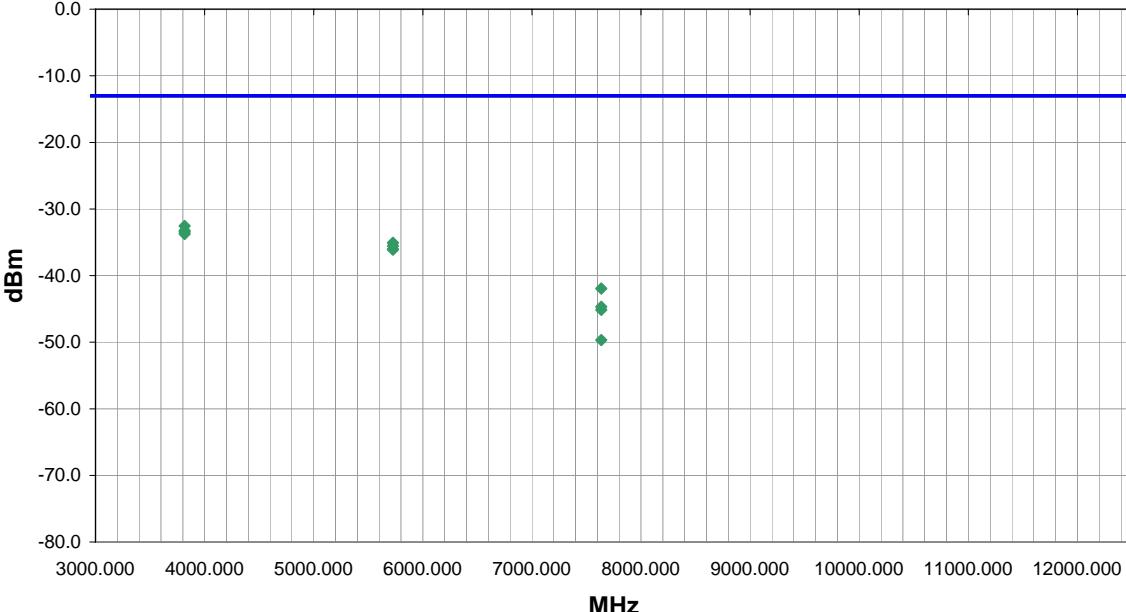


Freq (MHz)			Azimuth (degrees)	Height (meters)			Polarity	Detector		EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)
3758.294			81.0	1.1			H-Horn	PK		-31.7	-13.0	-18.7
3758.294			81.0	1.1			H-Horn	AV		-31.9	-13.0	-18.9
3758.294			48.0	1.2			V-Horn	PK		-34.7	-13.0	-21.7
3758.294			48.0	1.2			V-Horn	AV		-34.9	-13.0	-21.9
7516.591			213.0	1.2			H-Horn	PK		-39.3	-13.0	-26.3
5637.441			229.0	1.2			H-Horn	PK		-40.1	-13.0	-27.1
5637.441			69.0	1.3			V-Horn	PK		-40.2	-13.0	-27.2
5637.441			229.0	1.2			H-Horn	AV		-41.2	-13.0	-28.2
5637.441			69.0	1.3			V-Horn	AV		-41.3	-13.0	-28.3
7516.591			213.0	1.2			H-Horn	AV		-41.3	-13.0	-28.3
7516.591			270.0	1.2			V-Horn	PK		-43.3	-13.0	-30.3
7516.591			270.0	1.2			V-Horn	AV		-47.4	-13.0	-34.4

NORTHWEST
EMC

Apparent Power Data Sheet

REV
df4.13
05/06/2004

EUT:	CDMA in 700C	Work Order:	ITRM0030
Serial Number:		Date:	06/24/04
Customer:	Intermec Technologies Corporation	Temperature:	76
Attendees:	none	Humidity:	37%
Cust. Ref. No.:		Barometric Pressure:	29.81
Tested by:	Holly Ashkannejhad	Power:	120VAC, 60Hz
		Job Site:	EV01
TEST SPECIFICATIONS			
Specification: FCC 24.238(a)		Year:	2003
Method: TIA/EIA-603		Year:	2001
SAMPLE CALCULATIONS			
Radiated Emissions: Field Strength = Measured Level + Antenna Factor + Cable Factor - Amplifier Gain + Distance Adjustment Factor + External Attenuation			
Conducted Emissions: Adjusted Level = Measured Level + Transducer Factor + Cable Attenuation Factor + External Attenuator			
COMMENTS			
CDMA radio installed in 700C Handheld Computer.			
EUT OPERATING MODES			
Transmitting High channel; CDMA PCS Band, Stand-alone			
DEVIATIONS FROM TEST STANDARD			
No deviations.			
RESULTS		Run #	
Pass		17	
Other		 Tested By:	
			
Freq (MHz)			Azimuth (degrees) Height (meters) Polarity Detector EIRP (dBm) Spec. Limit (dBm) Compared to Spec. (dB)
3817.496			189.0 1.2 H-Horn PK -32.5 -13.0 -19.5
3817.496			73.0 1.4 V-Horn PK -33.3 -13.0 -20.3
3817.496			189.0 1.2 H-Horn AV -33.4 -13.0 -20.4
3817.496			73.0 1.4 V-Horn AV -33.8 -13.0 -20.8
5726.300			189.0 1.3 H-Horn PK -35.1 -13.0 -22.1
5726.300			269.0 1.2 V-Horn PK -35.6 -13.0 -22.6
5726.300			269.0 1.2 V-Horn AV -36.1 -13.0 -23.1
5726.300			189.0 1.3 H-Horn AV -36.1 -13.0 -23.1
7634.996			219.0 1.3 H-Horn PK -41.9 -13.0 -28.9
7634.996			261.0 1.3 V-Horn PK -44.7 -13.0 -31.7
7634.996			219.0 1.3 H-Horn AV -45.1 -13.0 -32.1
7634.996			261.0 1.3 V-Horn AV -49.7 -13.0 -36.7

NORTHWEST
EMC

Apparent Power Data Sheet

REV
df4.13
05/06/2004

EUT:	CDMA in 700C	Work Order:	ITRM0030
Serial Number:		Date:	06/25/04
Customer:	Intermec Technologies Corporation	Temperature:	75
Attendees:	none	Humidity:	45%
Cust. Ref. No.:		Barometric Pressure:	30.16
Tested by:	Holly Ashkannejhad	Job Site:	EV01

TEST SPECIFICATIONS

Specification:	FCC 24.238(a)	Year:	2003
Method:	TIA/EIA-603	Year:	2001

SAMPLE CALCULATIONS

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

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

COMMENTS

CDMA radio installed in 700C Handheld Computer.

EUT OPERATING MODES

Transmitting Low channel; CDMA PCS Band, Stand-alone

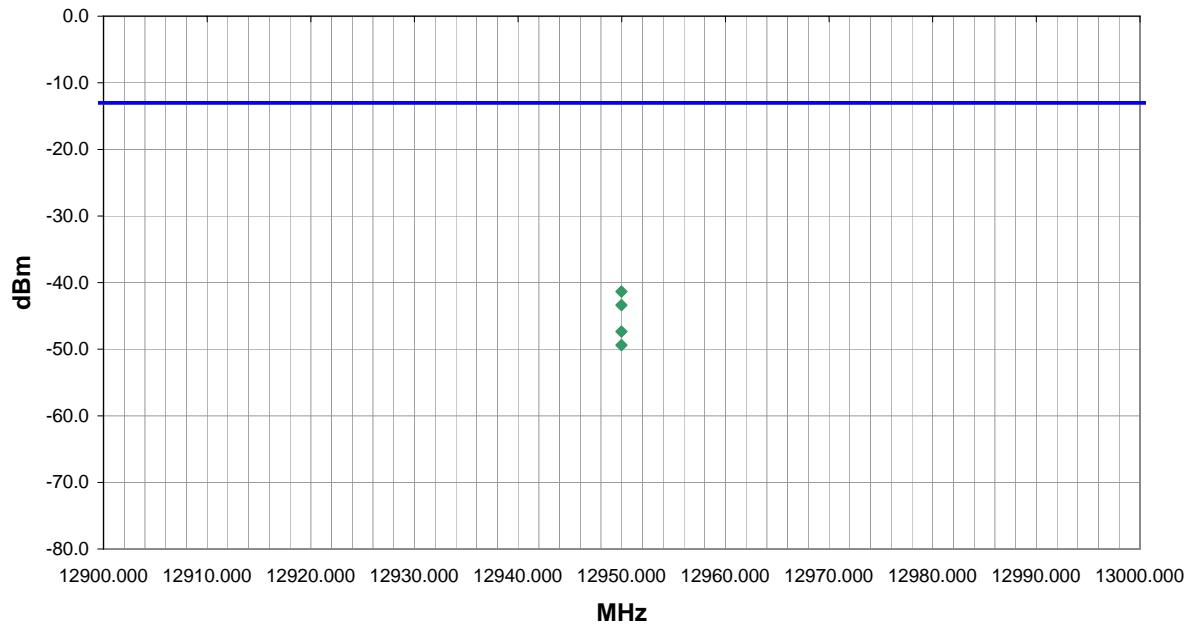
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS

Pass	Run #
	18

Other	
	Tested By: <u>Holly Ashkannejhad</u>



Freq (MHz)			Azimuth (degrees)	Height (meters)			Polarity	Detector		EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)
12949.970			97.0	2.0			H-Horn	PK		-41.4	-13.0	-28.4
12949.970			275.0	1.2			V-Horn	PK		-43.4	-13.0	-30.4
12949.970			97.0	2.0			H-Horn	AV		-47.4	-13.0	-34.4
12949.970			275.0	1.2			V-Horn	AV		-49.4	-13.0	-36.4

NORTHWEST
EMC

Apparent Power Data Sheet

REV
df4.13
05/06/2004

EUT:	CDMA in 700C	Work Order:	ITRM0030
Serial Number:		Date:	06/25/04
Customer:	Intermec Technologies Corporation	Temperature:	75
Attendees:	none	Humidity:	45%
Cust. Ref. No.:		Barometric Pressure:	30.16
Tested by:	Holly Ashkannejhad	Power:	120VAC, 60Hz

TEST SPECIFICATIONS

Specification:	FCC 24.238(a)	Year:	2003
Method:	TIA/EIA-603	Year:	2001

SAMPLE CALCULATIONS

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

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

COMMENTS

CDMA radio installed in 700C Handheld Computer.

EUT OPERATING MODES

Transmitting Mid channel; CDMA PCS Band, Stand-alone

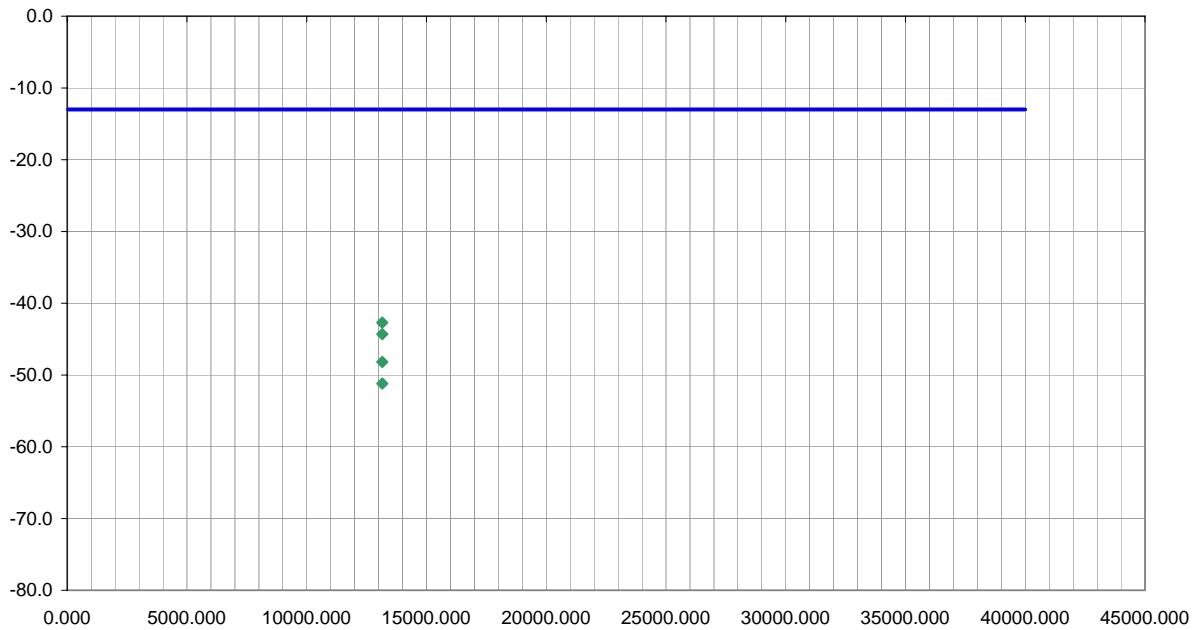
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS

Pass	Run #
	19

Other	
	Tested By: <hr/>



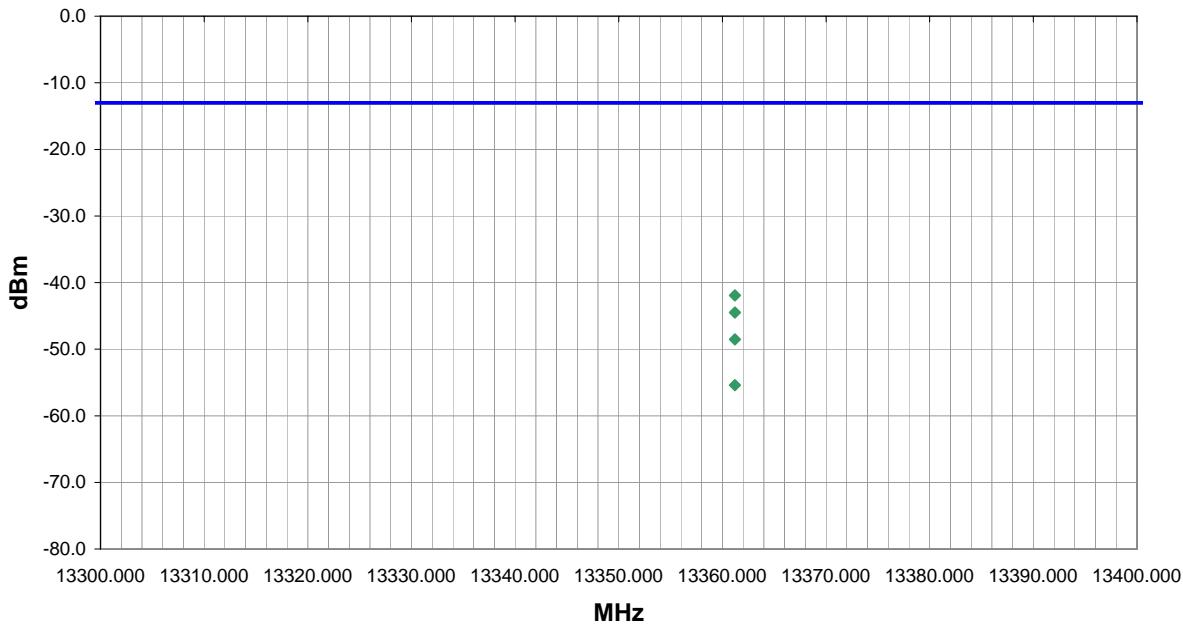
Freq (MHz)			Azimuth (degrees)	Height (meters)			Polarity	Detector		EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)
13154.010				129.0	1.3		H-Horn	PK		-42.7	-13.0	-29.7
13154.010				102.0	1.2		V-Horn	PK		-44.3	-13.0	-31.3
13154.010				129.0	1.3		H-Horn	AV		-48.2	-13.0	-35.2
13154.010				102.0	1.2		V-Horn	AV		-51.2	-13.0	-38.2

NORTHWEST
EMC

Apparent Power Data Sheet

REV
df4.13
05/06/2004

EUT:	CDMA in 700C	Work Order:	ITRM0030
Serial Number:		Date:	06/25/04
Customer:	Intermec Technologies Corporation	Temperature:	75
Attendees:	none	Humidity:	45%
Cust. Ref. No.:		Barometric Pressure:	30.16
Tested by:	Holly Ashkannejhad	Power:	120VAC, 60Hz
		Job Site:	EV01
TEST SPECIFICATIONS			
Specification: FCC 24.238(a)		Year:	2003
Method: TIA/EIA-603		Year:	2001
SAMPLE CALCULATIONS			
Radiated Emissions: Field Strength = Measured Level + Antenna Factor + Cable Factor - Amplifier Gain + Distance Adjustment Factor + External Attenuation			
Conducted Emissions: Adjusted Level = Measured Level + Transducer Factor + Cable Attenuation Factor + External Attenuator			
COMMENTS			
CDMA radio installed in 700C Handheld Computer.			
EUT OPERATING MODES			
Transmitting High channel; CDMA PCS Band, Stand-alone			
DEVIATIONS FROM TEST STANDARD			
No deviations.			
RESULTS			
Pass	Run # 20		
Other	 Tested By:		

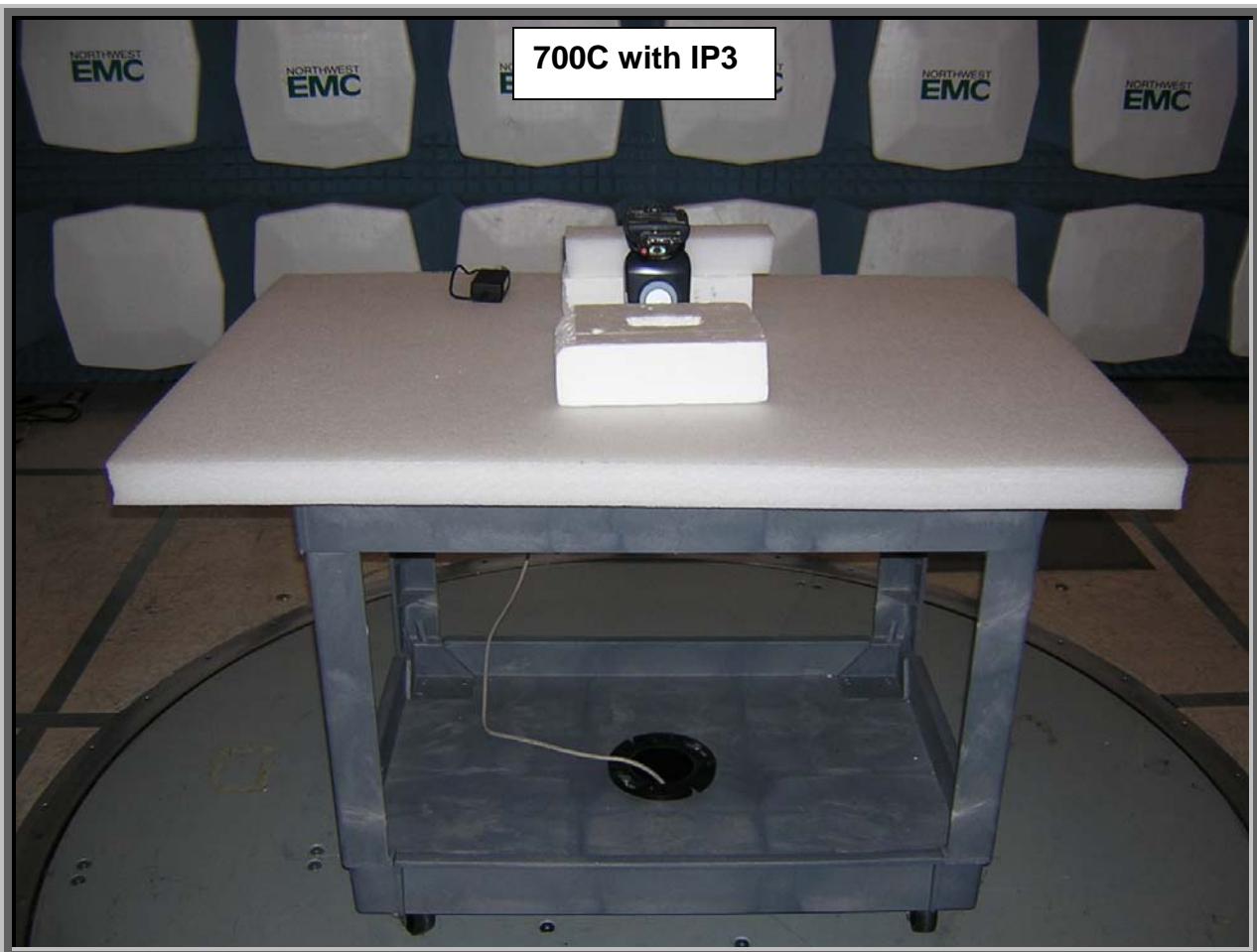


Freq (MHz)			Azimuth (degrees)	Height (meters)			Polarity	Detector		EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)
13361.210				133.0	1.2		H-Horn	PK		-41.9	-13.0	-28.9
13361.210				103.0	1.2		V-Horn	PK		-44.5	-13.0	-31.5
13361.210				133.0	1.2		H-Horn	AV		-48.5	-13.0	-35.5
13361.210				103.0	1.2		V-Horn	AV		-55.4	-13.0	-42.4

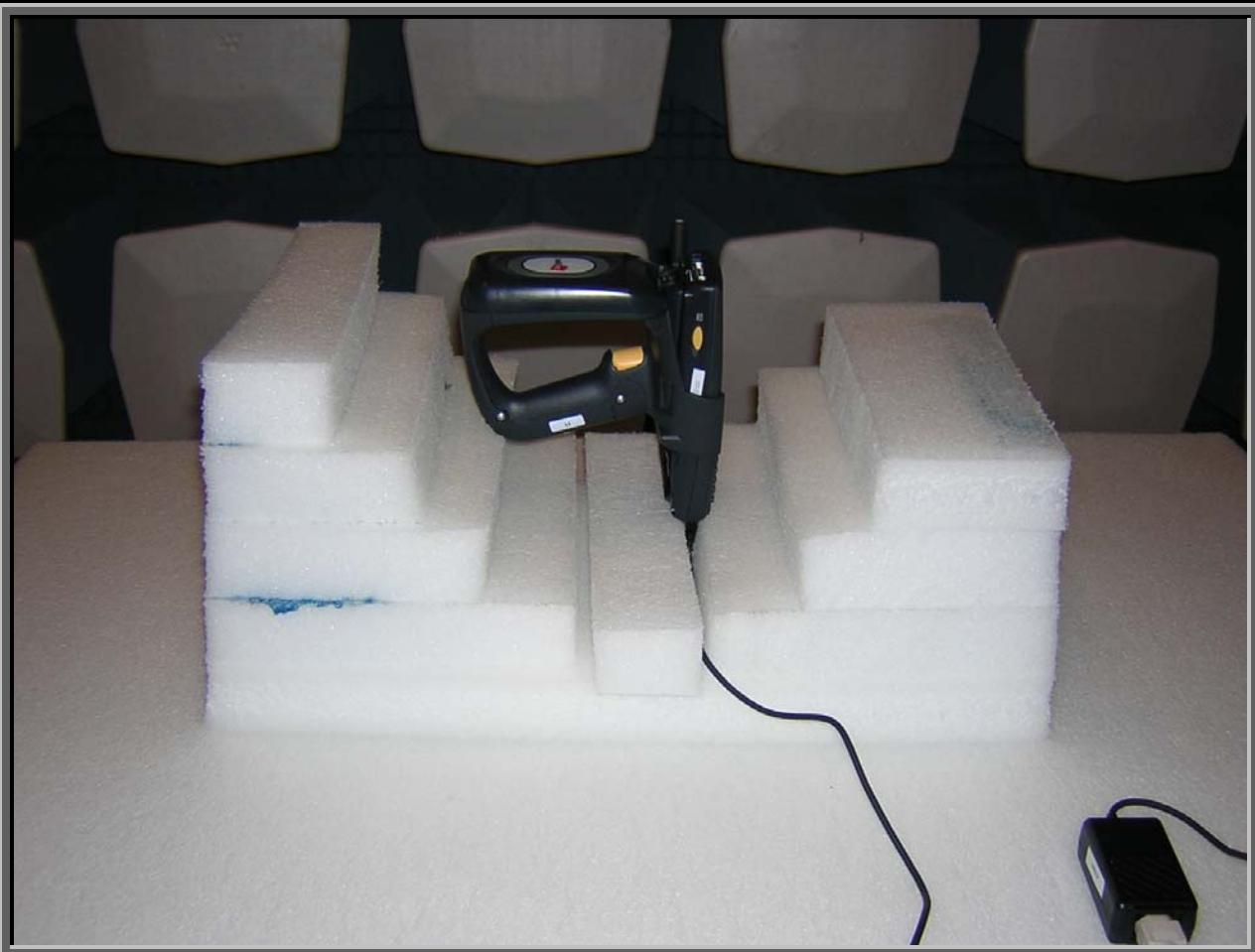














Intermec 6820 Printer with 700C



Intermec 6820 with 730 Photos



