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: EHABTS0080). 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: EHABTS0080), 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	Blue Test CDMA FCC Test PrismTestCe IP3FCC2	**Version**	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: EHABTS0080). 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: EHABTS0080), 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 place 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: EHABTS0080). 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: EHABTS0080), 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.**

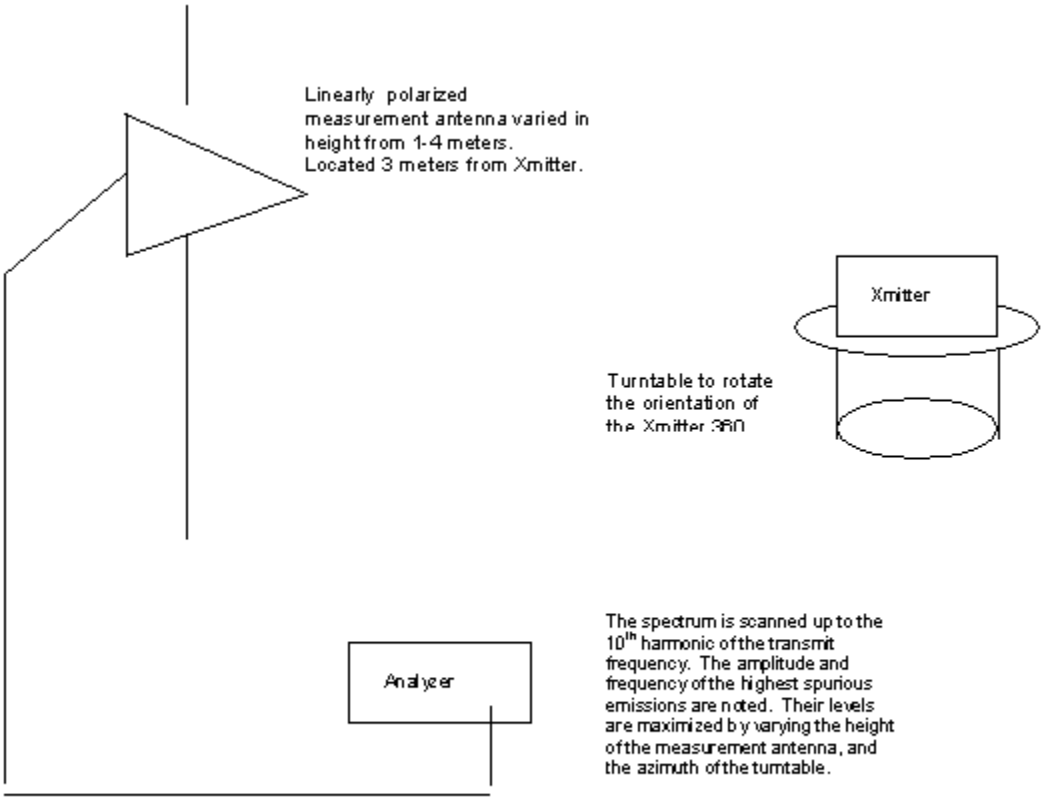
All possible combinations of harmonic emissions from the CDMA, 802.11(b), and Bluetooth radios were compared numerically. It was determined that there were no possible coincidental harmonics below 1 GHz. The frequency range from 1 GHz to 26 GHz was investigated for channel combinations that would produce 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 C63.4:1992). A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

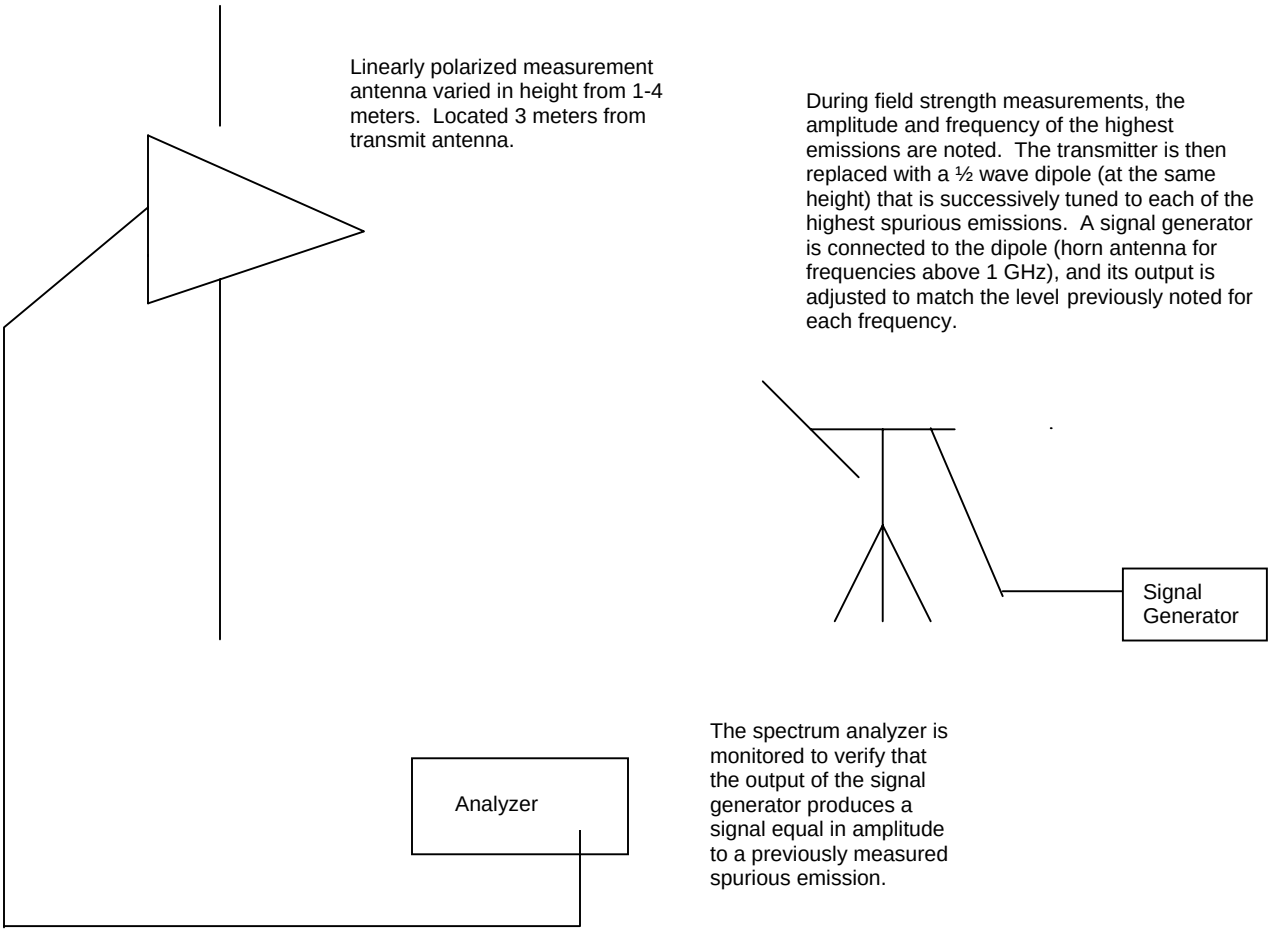
Bandwidths Used for Measurements			
Frequency Range (MHz)	**Peak Data (kHz)**	**Quasi-Peak Data (kHz)**	**Average Data (kHz)**
0.01 – 0.15	1.0	0.2	0.2
0.15 – 30.0	10.0	9.0	9.0
30.0 – 1000	100.0	120.0	120.0
Above 1000	1000.0	N/A	1000.0
Measurements were made using the bandwidths and detectors specified. No video filter was used.			

Test Setup Diagram

Test Setup for Field Strength Measurements



Test Setup for Power Measurements Utilizing the Antenna Substitution Method



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

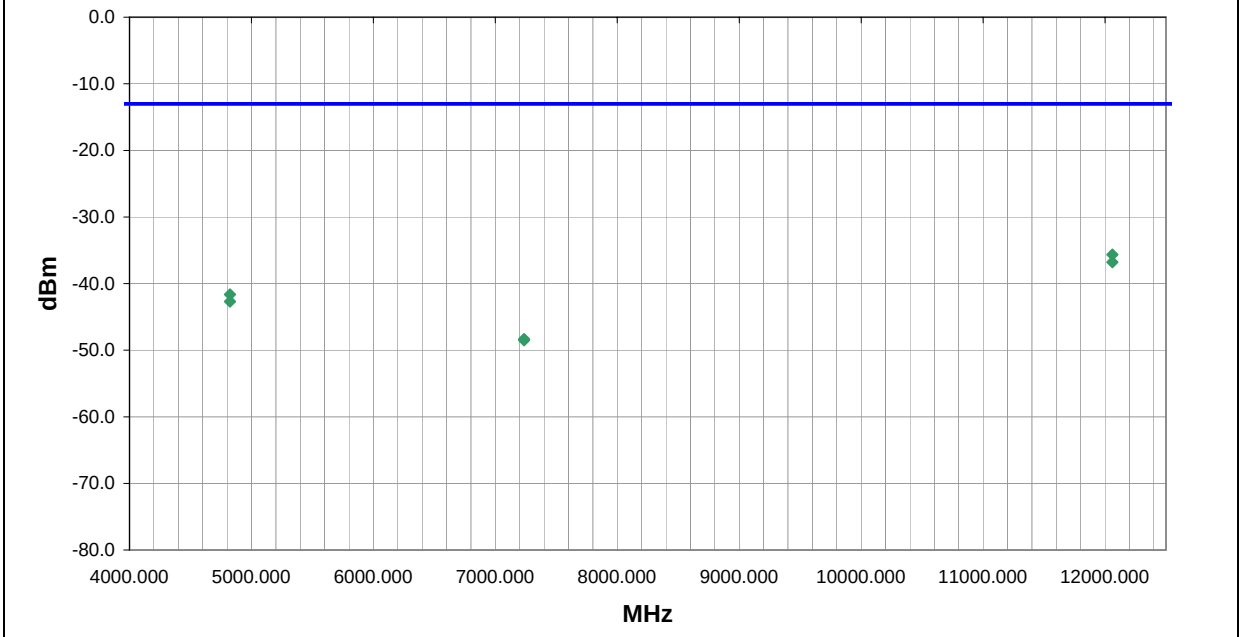
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS	Run #
Pass	39

Other

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	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

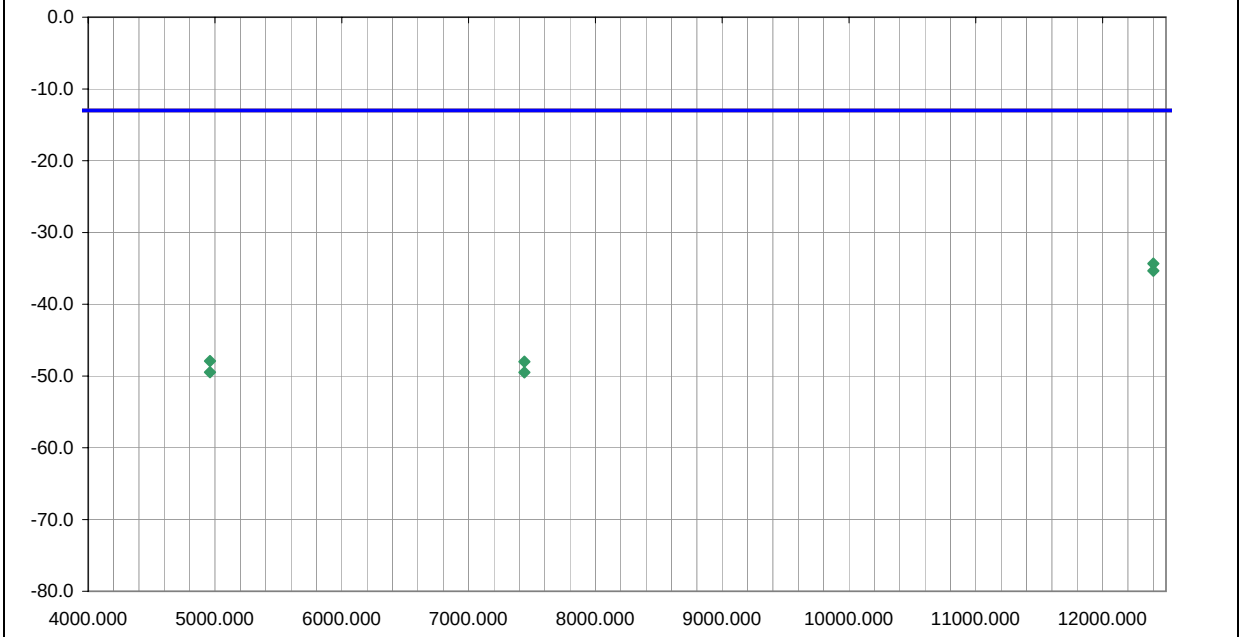
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS	Run #
Pass	40

Other

Tested By:



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	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

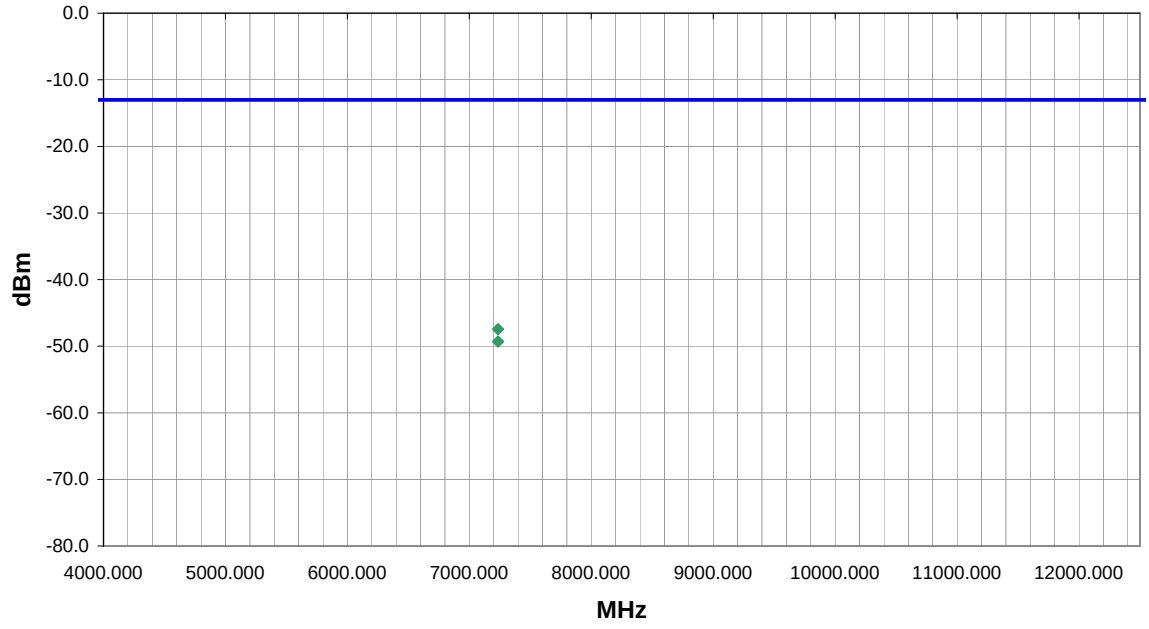
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS	Run #
Pass	41

Other

Tested By: Holly Ashkannejhad



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	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

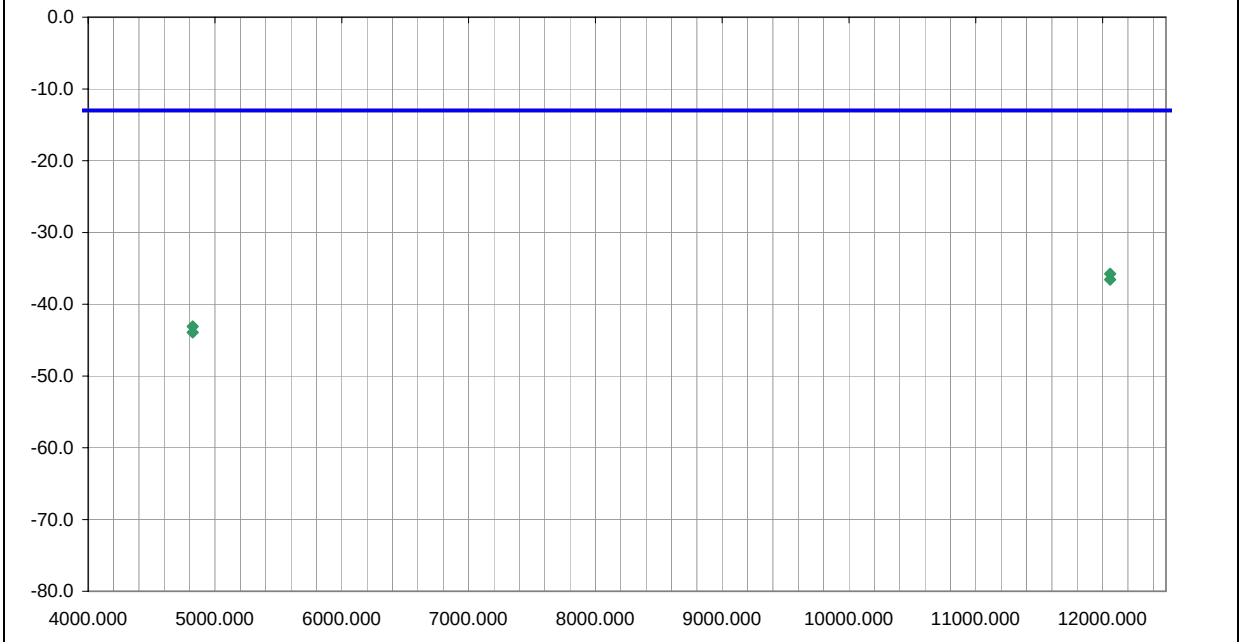
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS	Run #
Pass	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

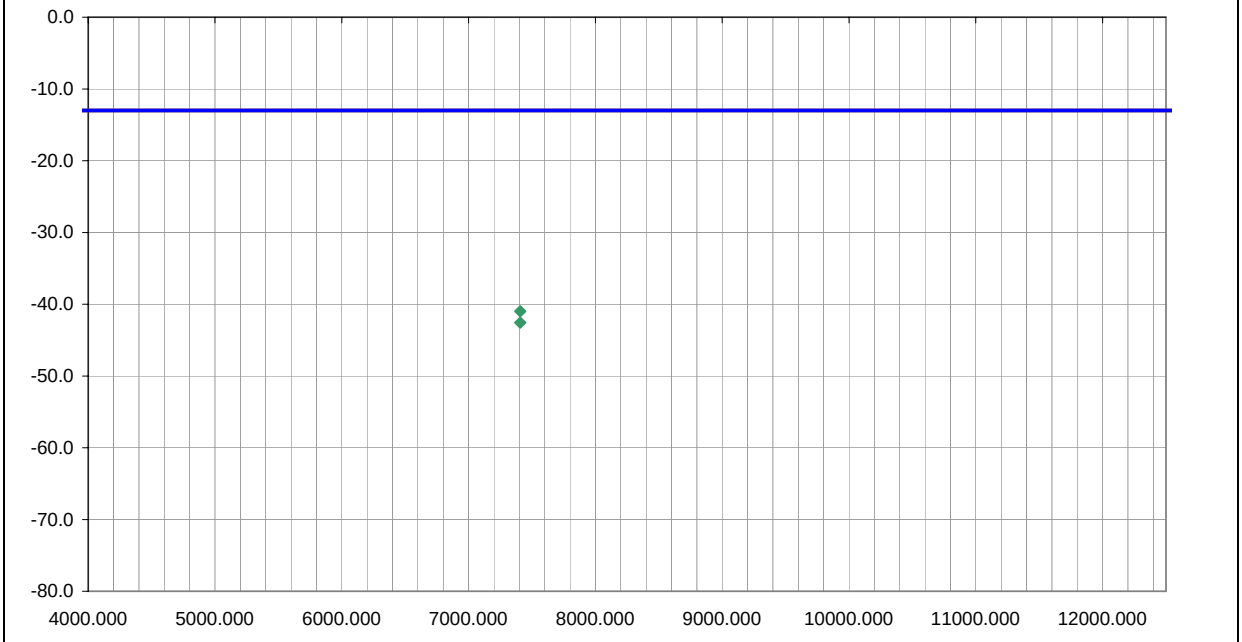
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS	Run #
Pass	43

Other

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

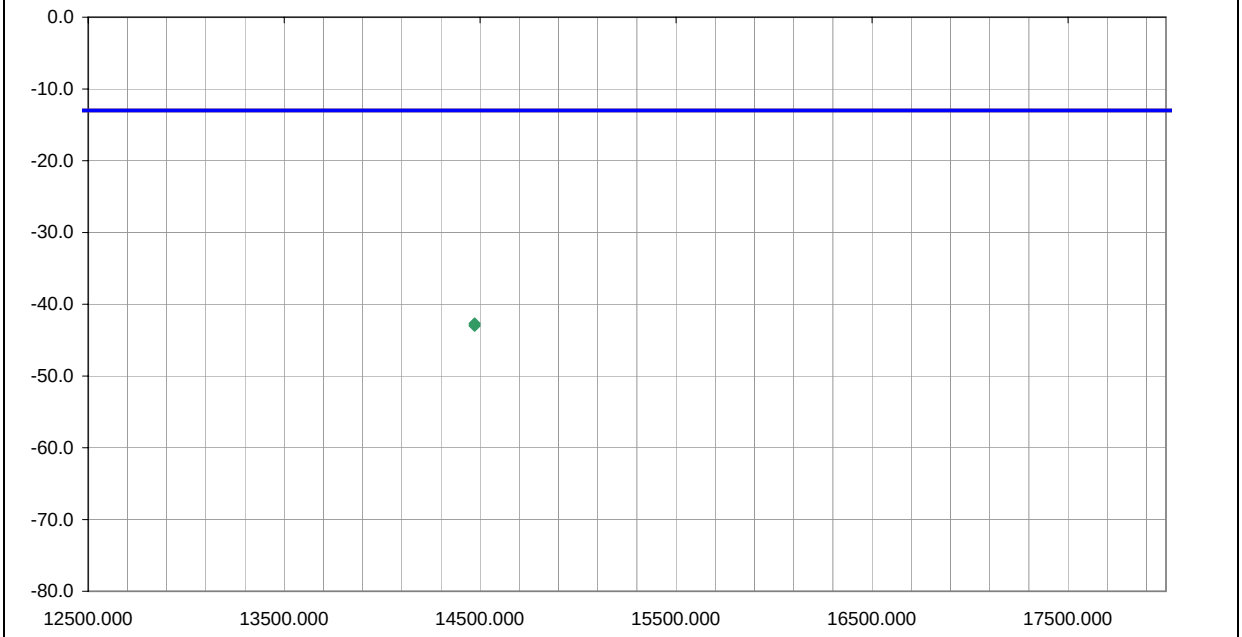
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS	Run #
Pass	44

Other

Tested By: Holly Ashkannejhad



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

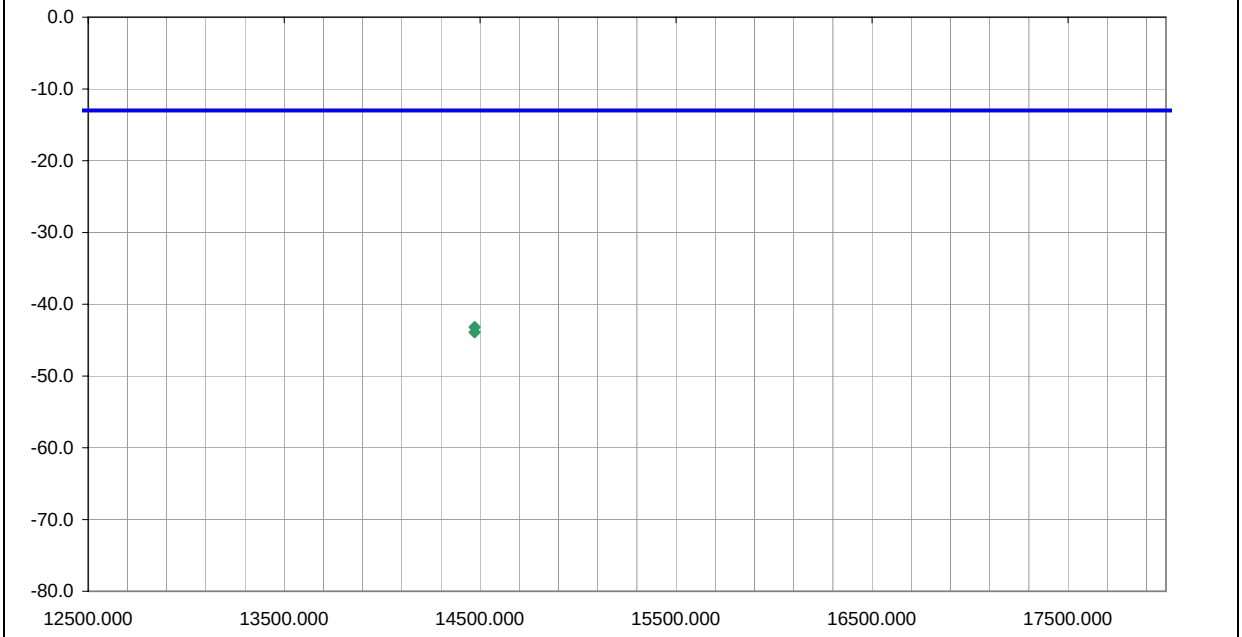
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS	Run #
Pass	45

Other

Tested By: Holly Ashkannejhad



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

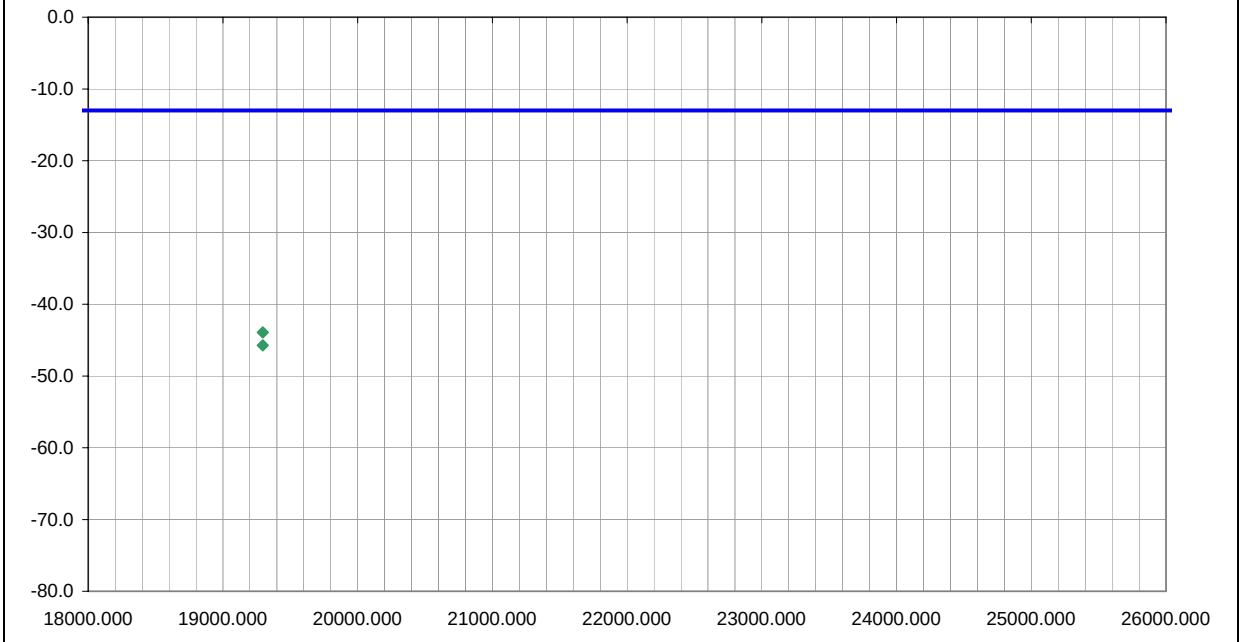
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS	Run #
Pass	47

Other

Tested By: Holly Ashkannejhad



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

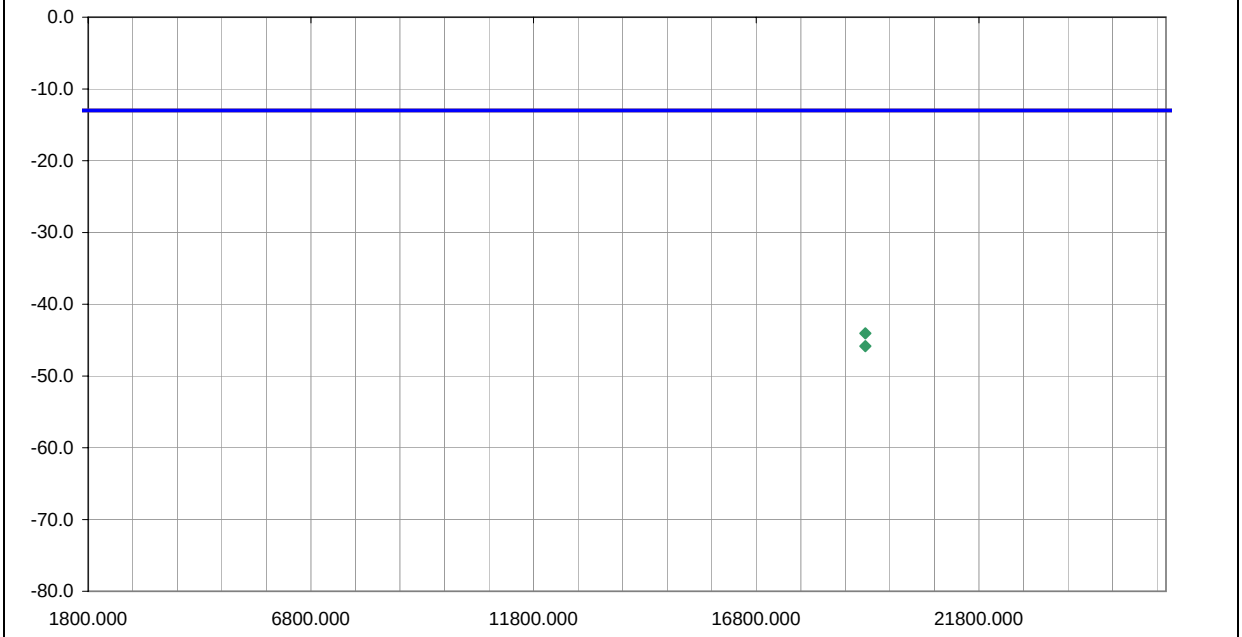
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS	Run #
Pass	48

Other

Tested By: Holly Ashkannejhad



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

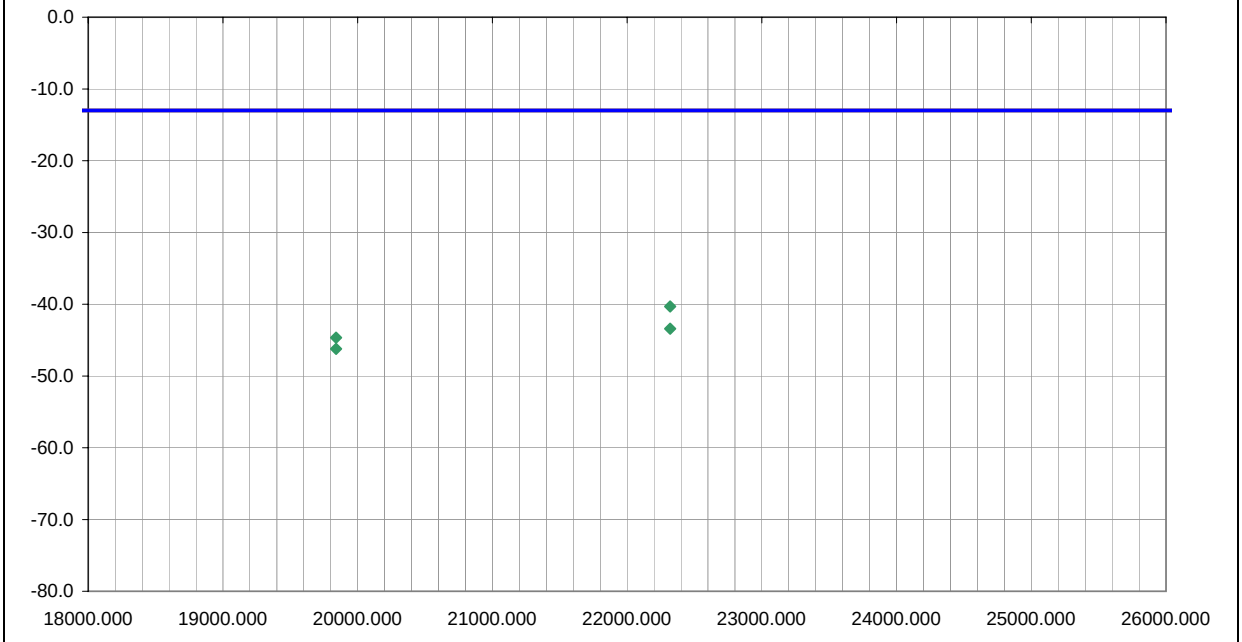
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS	Run #
Pass	49

Other

Tested By: Holly Ashkannejhad



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

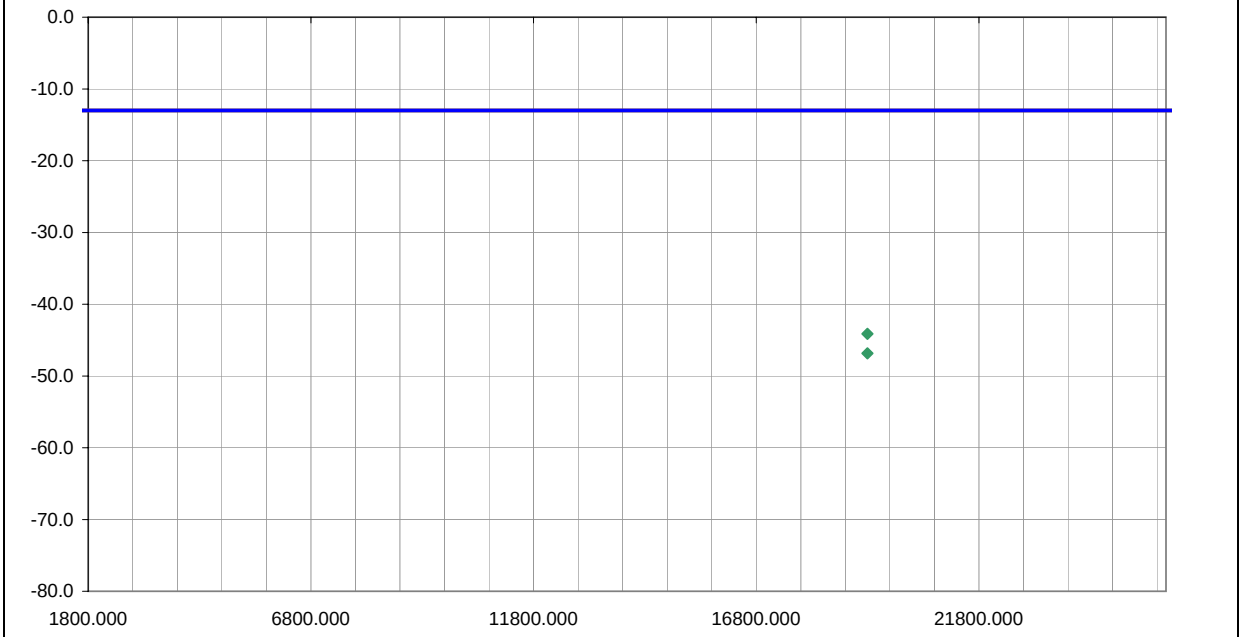
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS	Run #
Pass	50

Other

Tested By: Holly Ashkannejhad



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

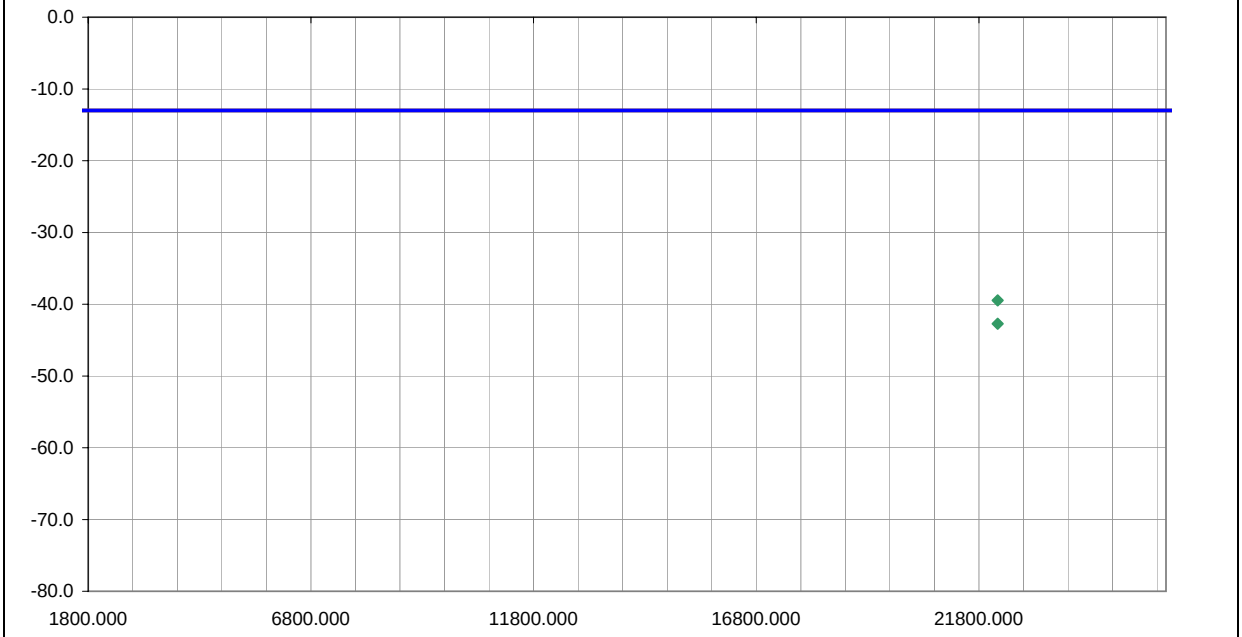
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS	Run #
Pass	51

Other

Tested By: Holly Ashkannejhad



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	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 11, Bluetooth channel 62

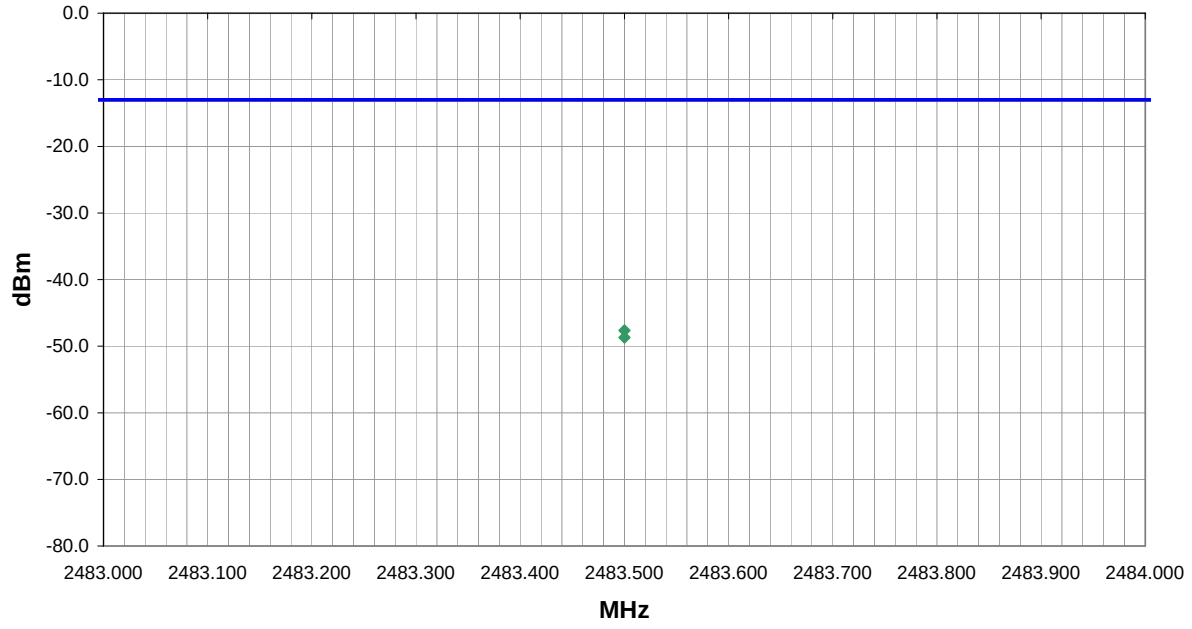
DEVIATIONS FROM TEST STANDARD

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

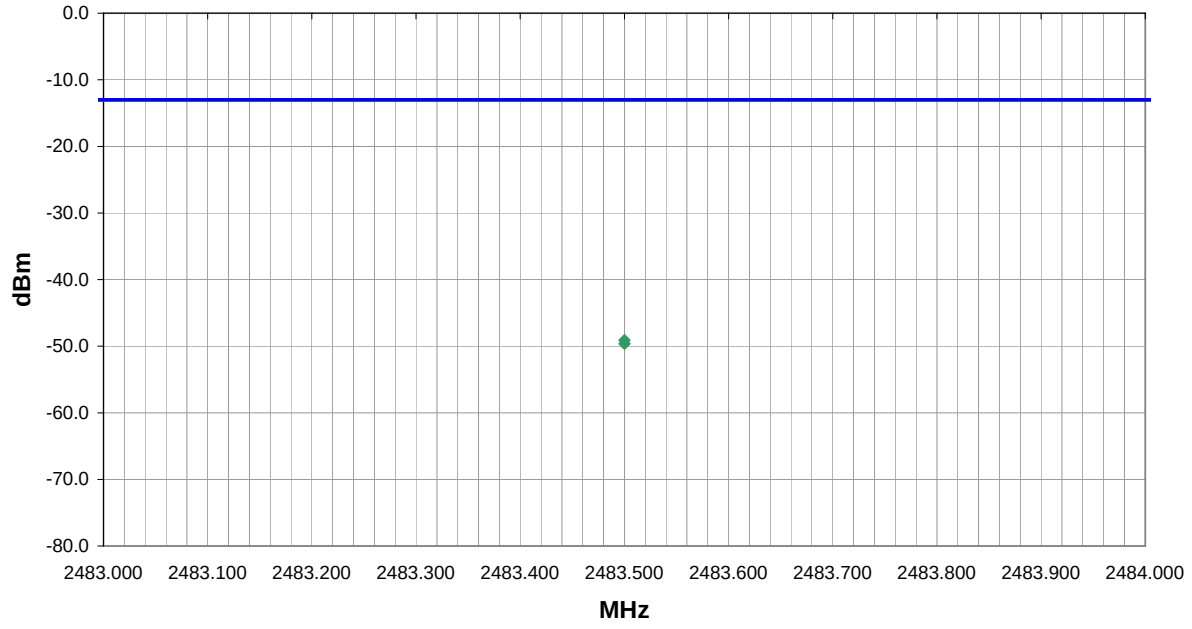
DEVIATIONS FROM TEST STANDARD

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

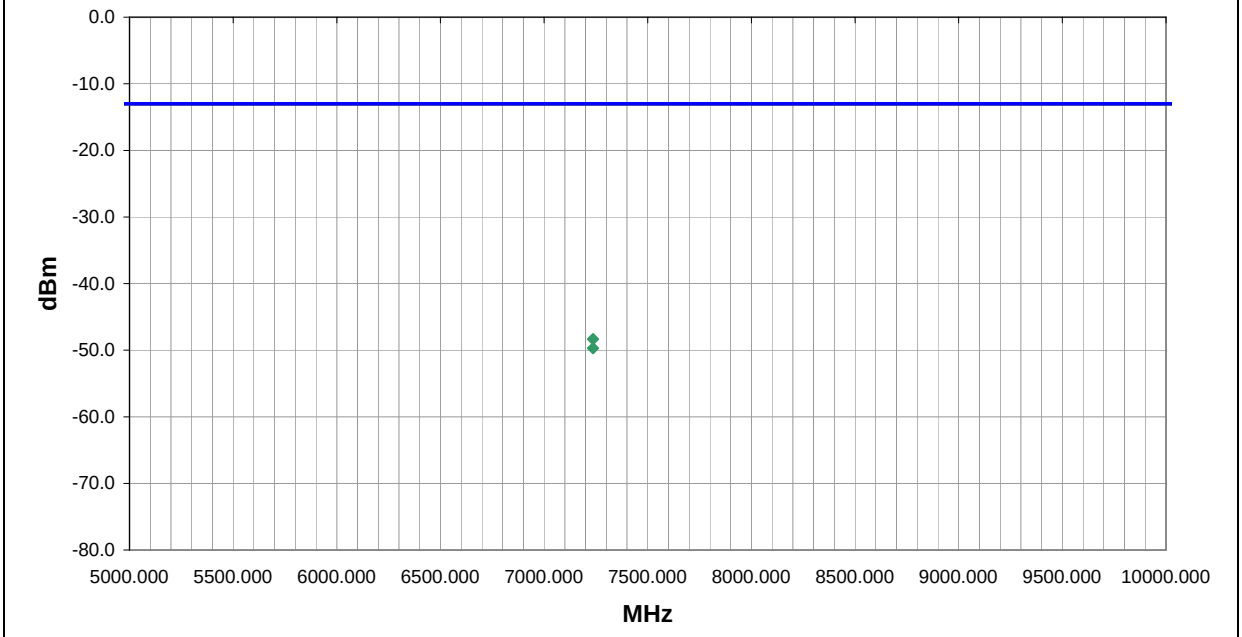
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS	Run #
Pass	54

Other

Tested By: Holly Ashkannejhad



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	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) 602 and 802.11b 1 in 700C, and RFID 73 in IP3

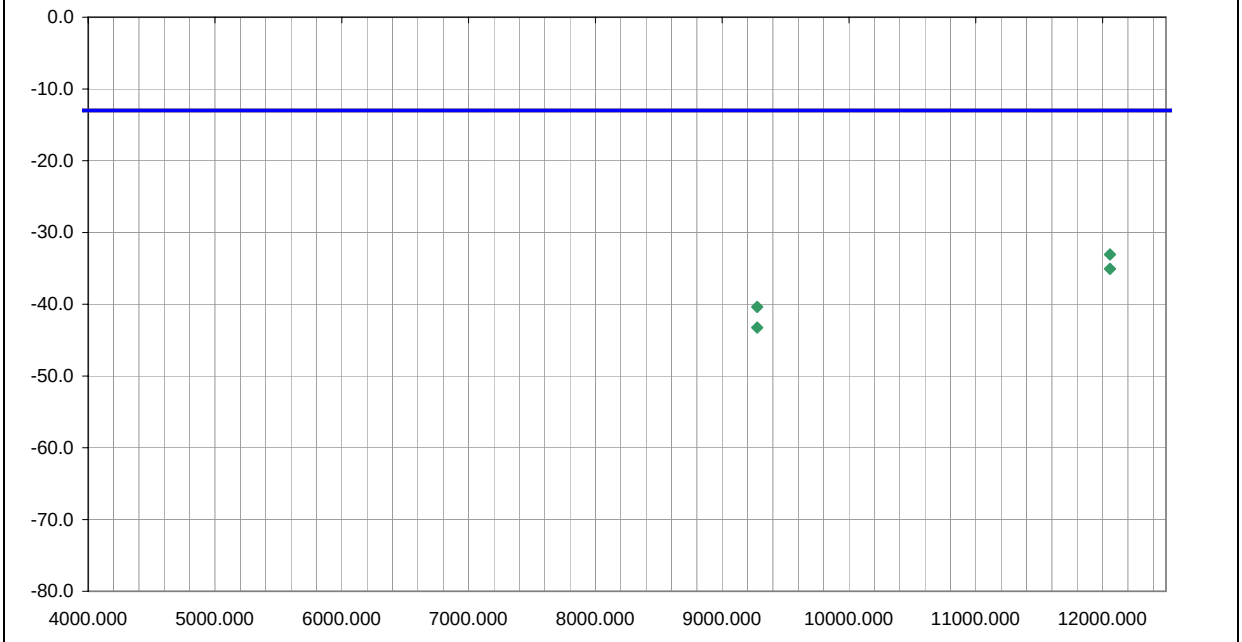
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS	Run #
Pass	55

Other

Tested By: Holly Ashkannejhad



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	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

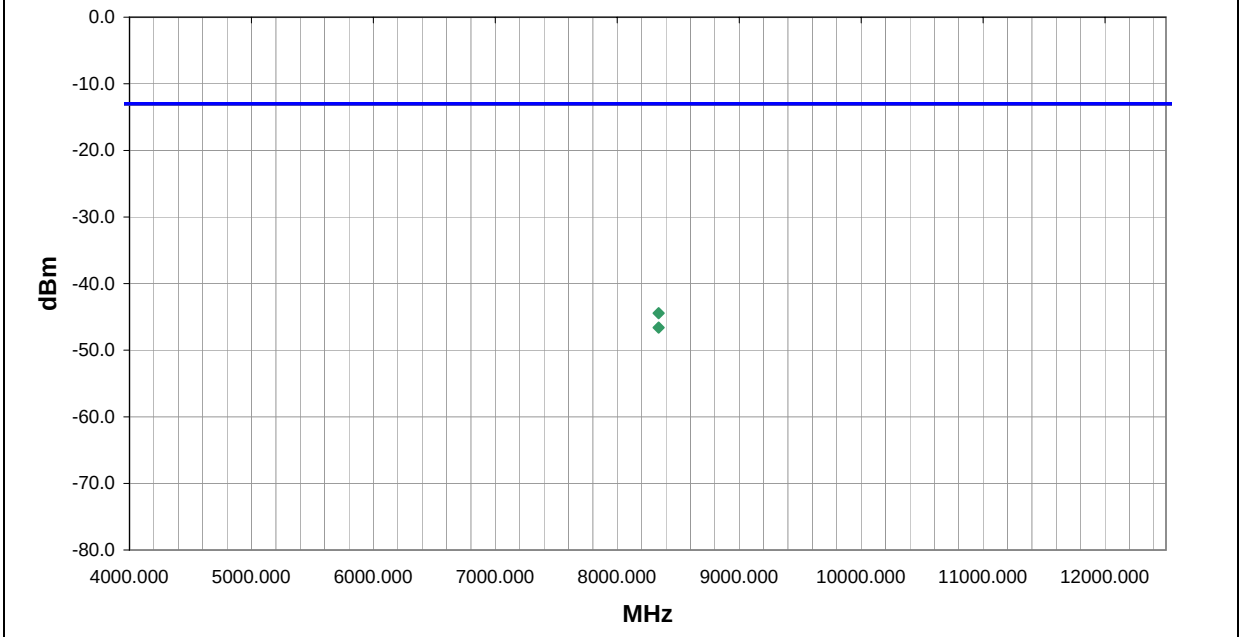
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS	Run #
Pass	56

Other

Tested By: Holly Ashkannejhad



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

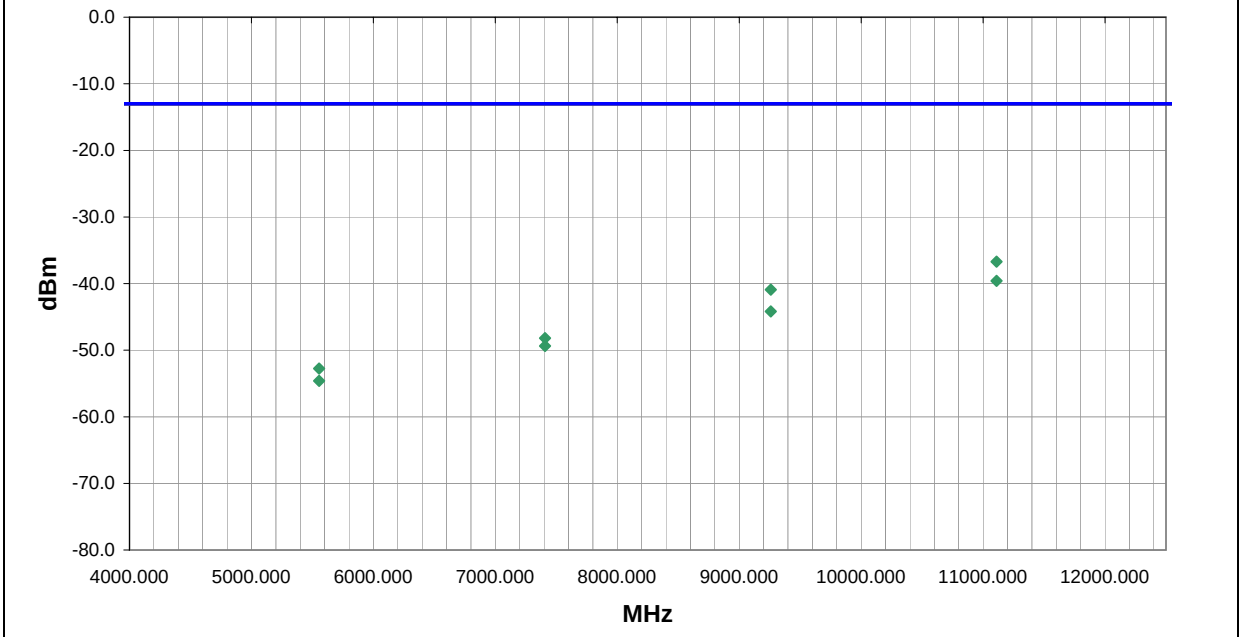
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS	Run #
Pass	57

Other

Tested By: Holly Ashkannejhad



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	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) 1182 and 802.11b 1 in 700C, and RFID 12 in IP3

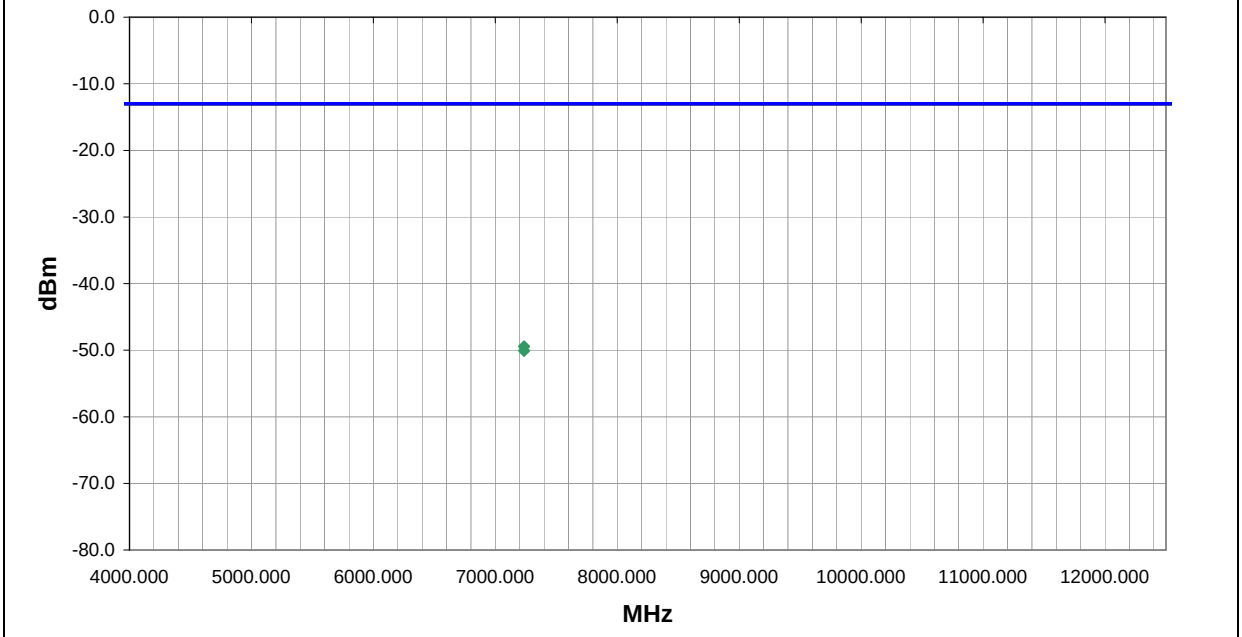
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS	Run #
Pass	58

Other

Tested By:



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

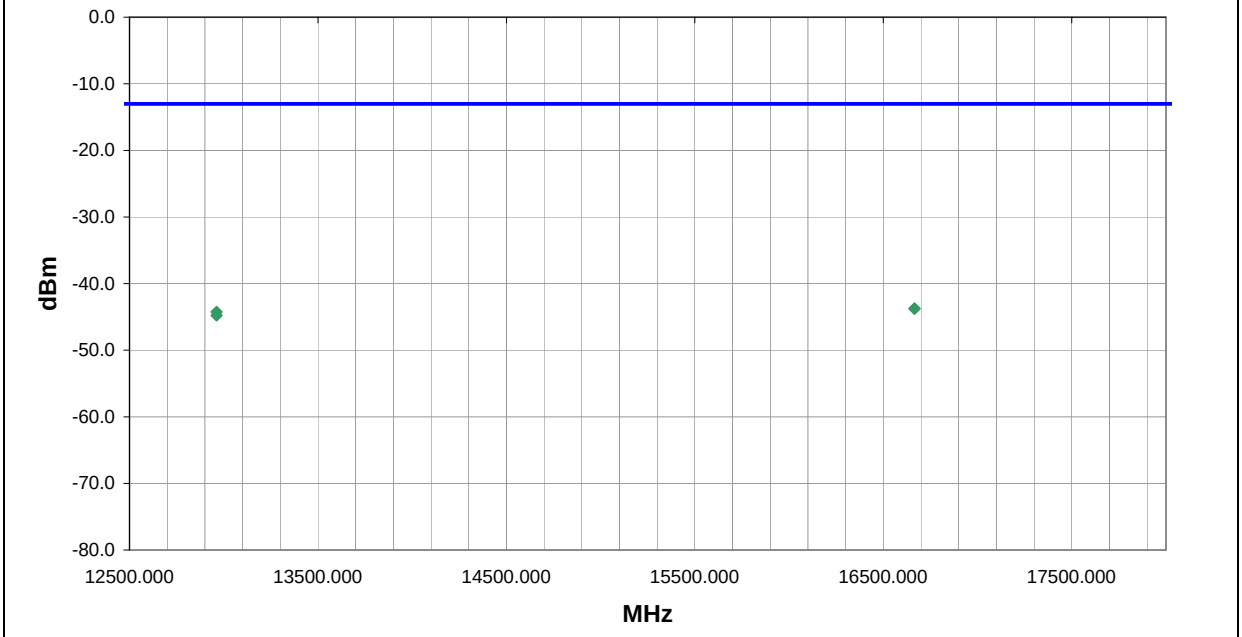
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS	Run #
Pass	59

Other

Tested By: Holly Ashkannejhad



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

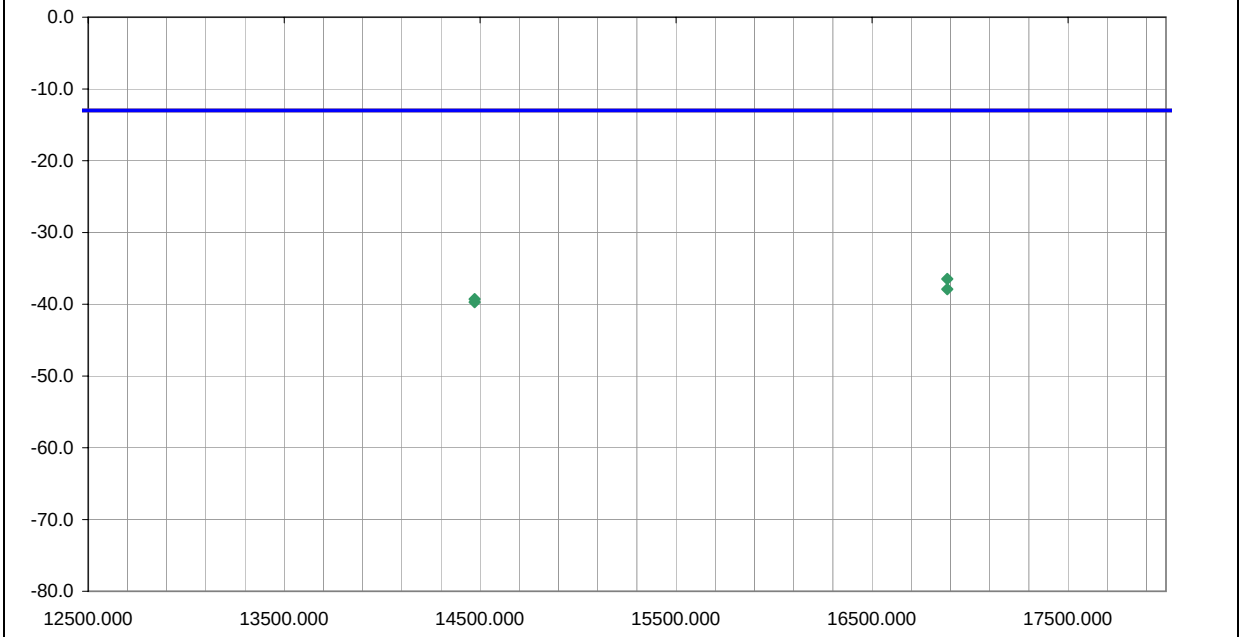
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS	Run #
Pass	60

Other

Tested By: Holly Ashkannejhad



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

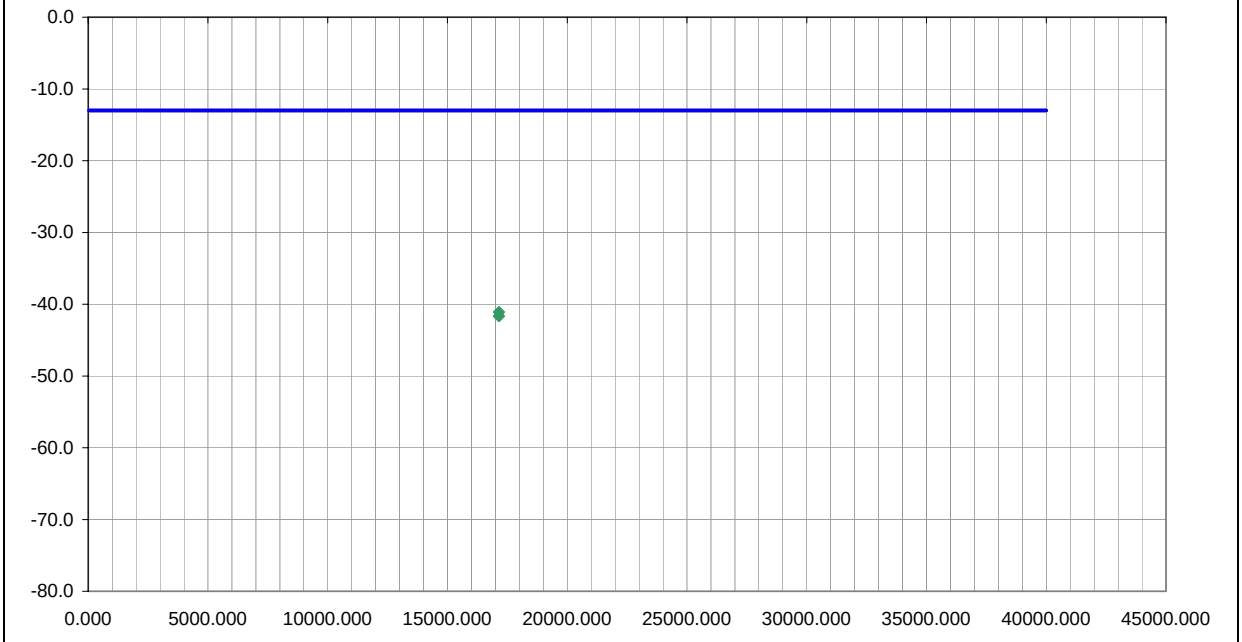
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS	Run #
Pass	61

Other

Tested By: Holly Ashkannejhad



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

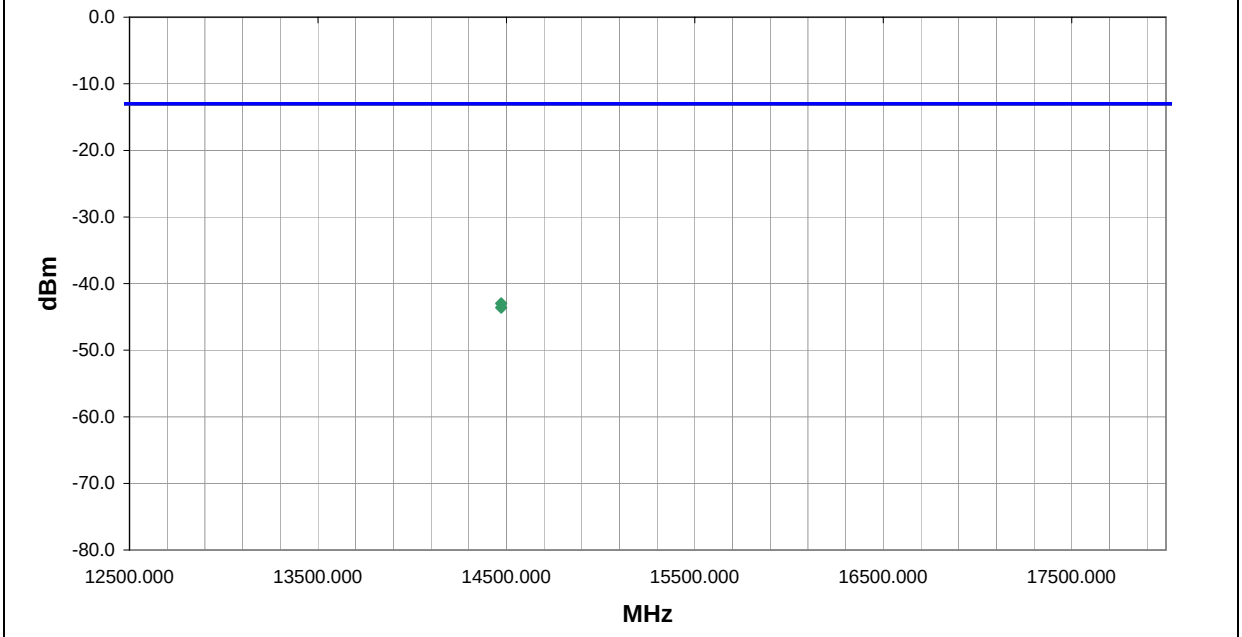
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS	Run #
Pass	62

Other

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

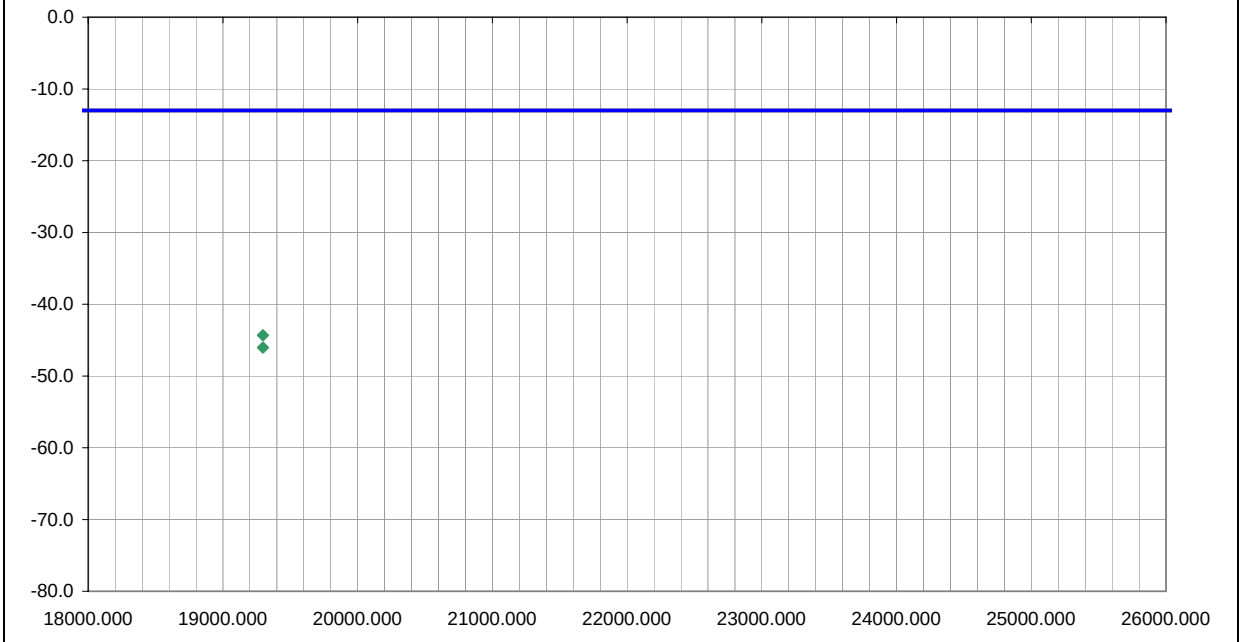
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS	Run #
Pass	63

Other

Tested By: Holly Ashkannejhad



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

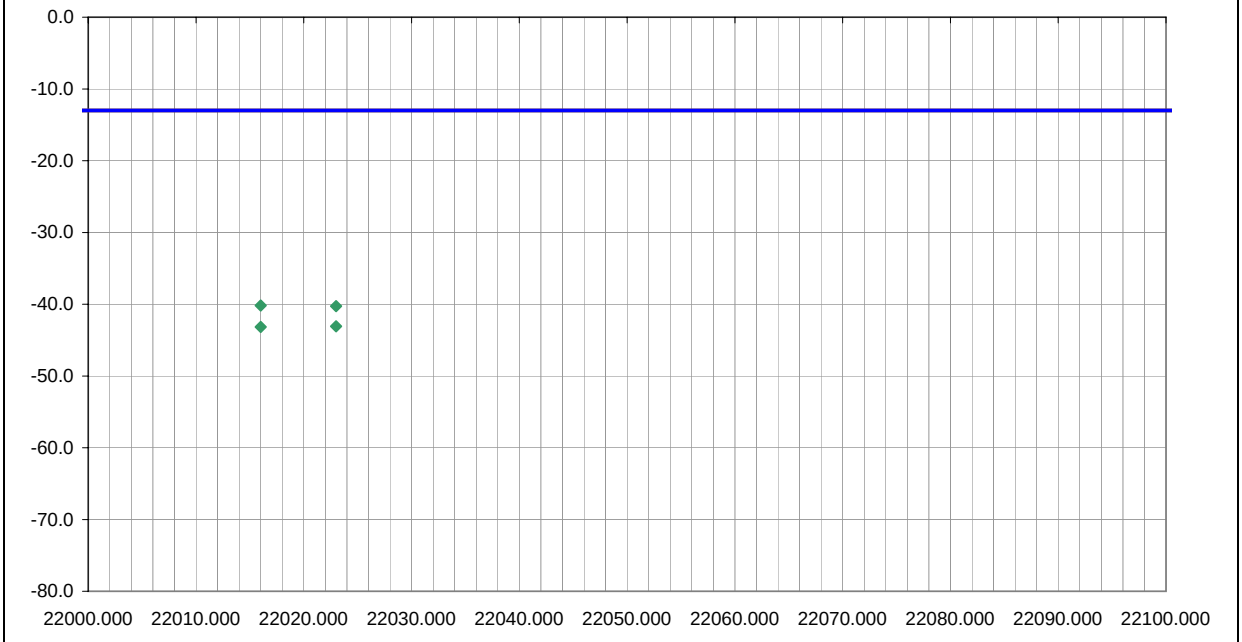
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS	Run #
Pass	64

Other

Tested By: Holly Ashkannejhad



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

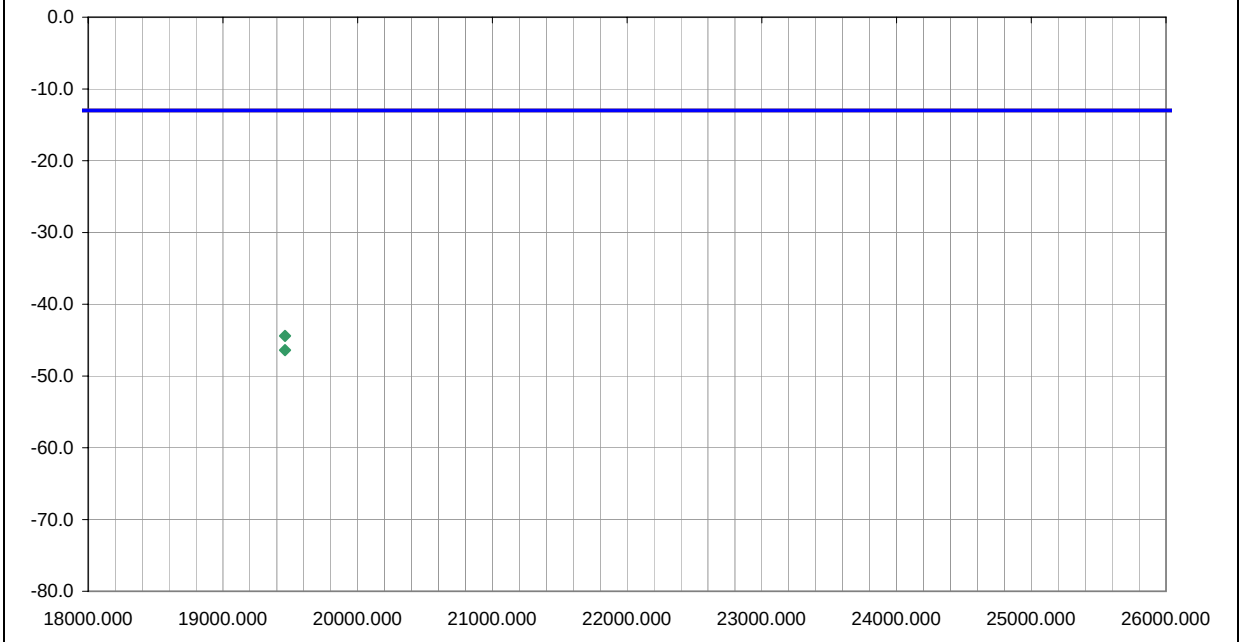
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS	Run #
Pass	65

Other

Tested By: Holly Ashkannejhad



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

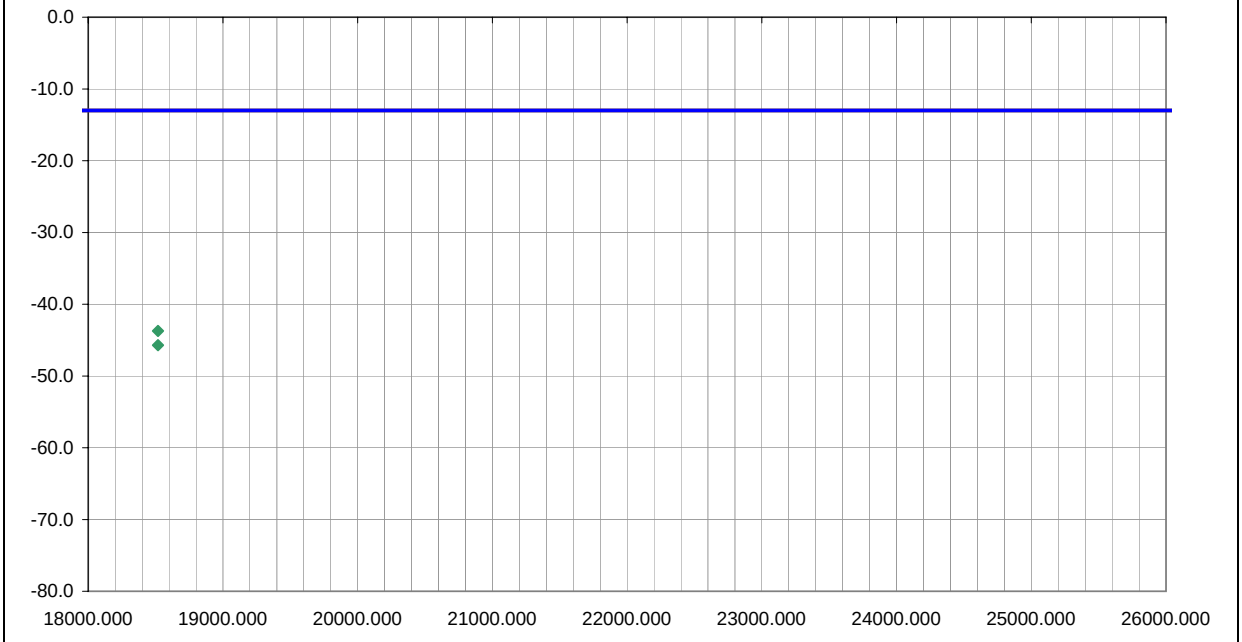
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS	Run #
Pass	66

Other

Tested By: Holly Ashkannejhad



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	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) 932 and 802.11b 11 in 700C, and RFID 8 in IP3

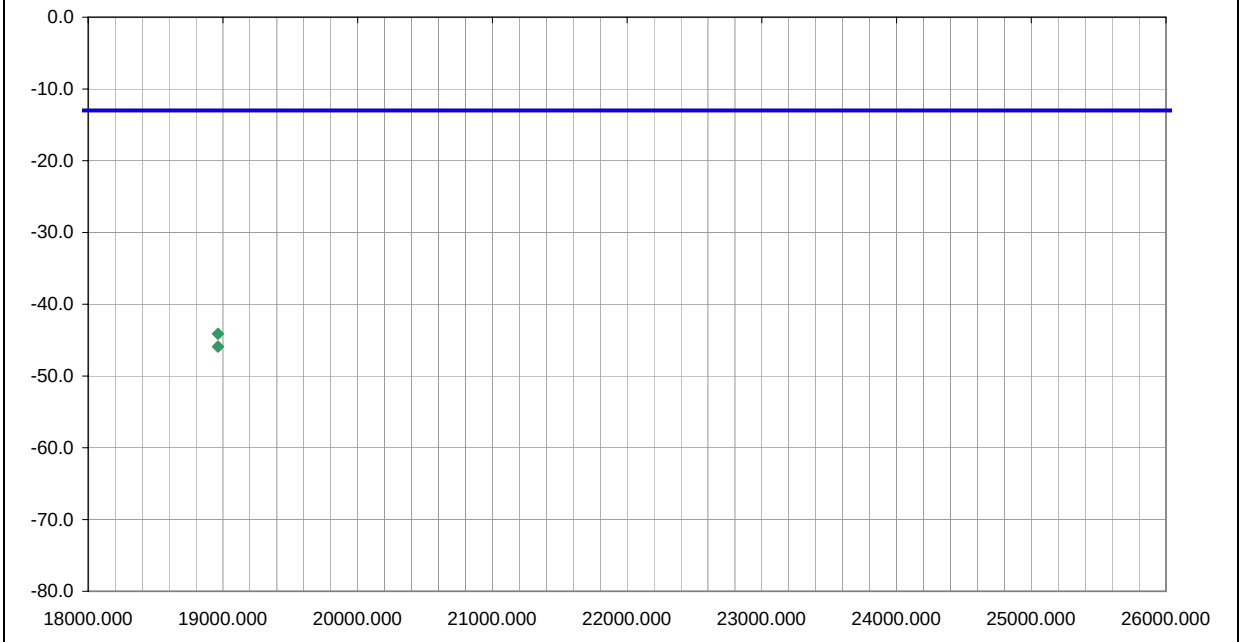
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS	Run #
Pass	67

Other

Tested By: Holly Ashkannejhad



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	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 50 in IP3

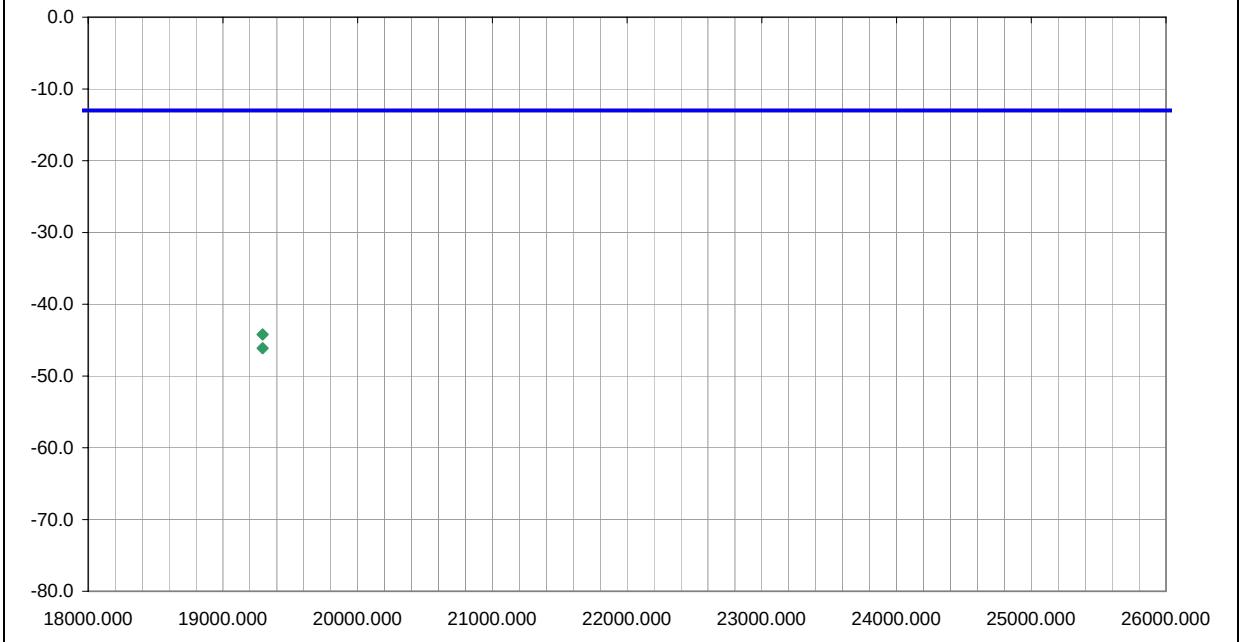
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS	Run #
Pass	68

Other

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

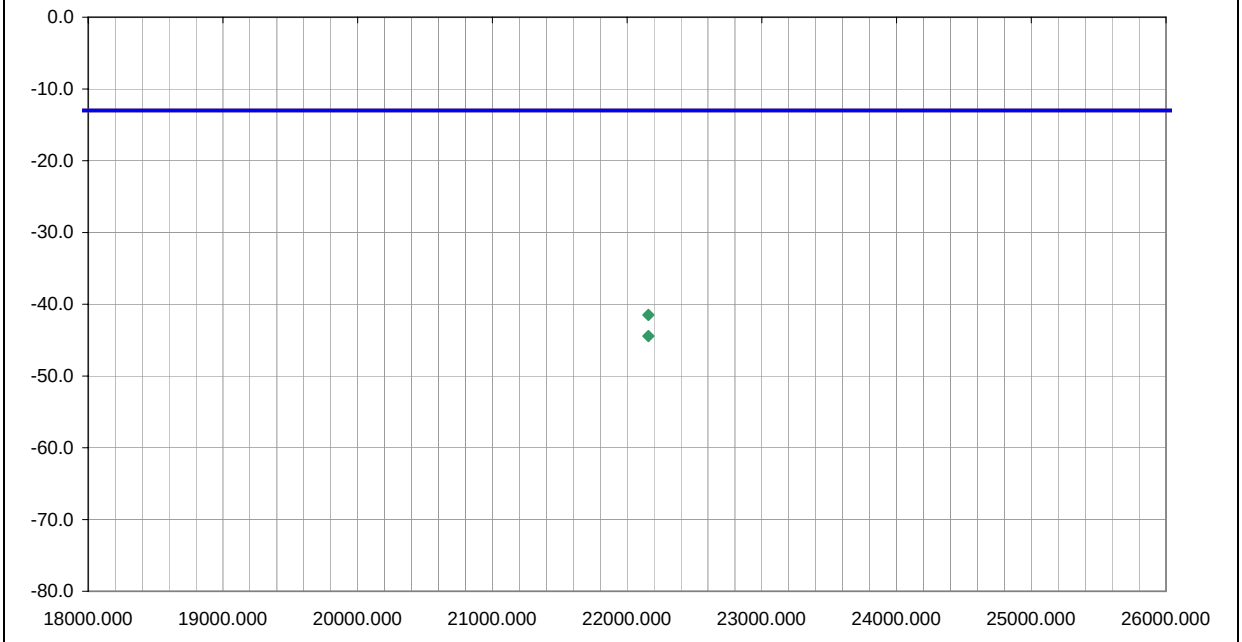
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS	Run #
Pass	69

Other

Tested By: Holly Ashkannejhad



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

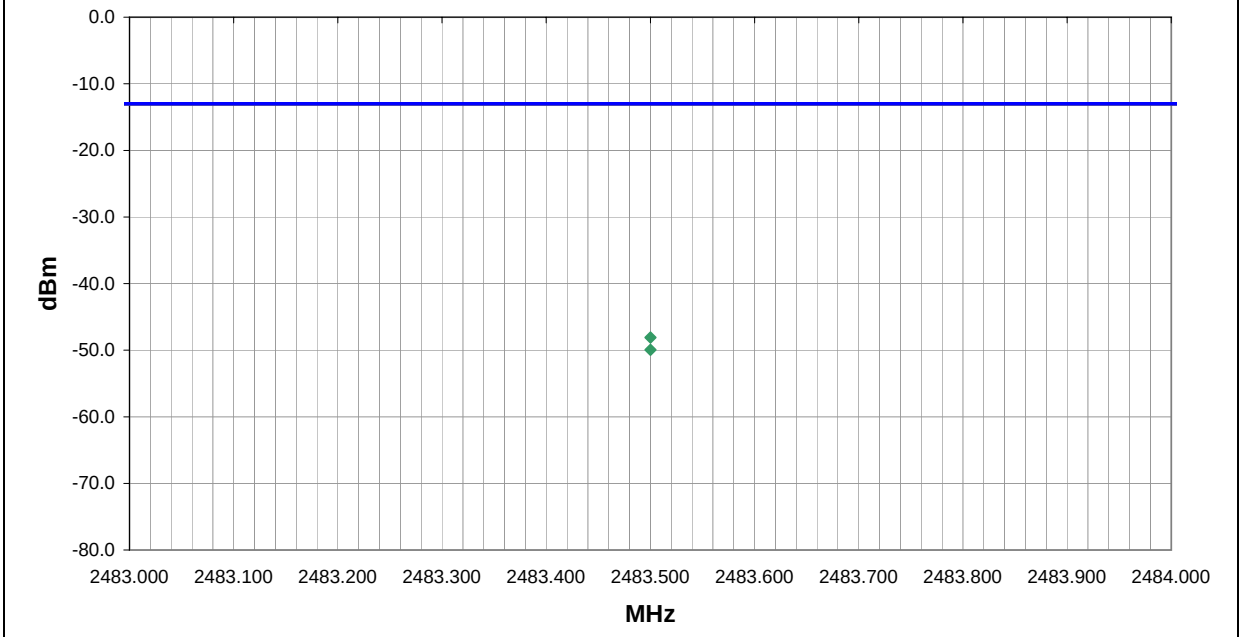
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS	Run #
Pass	70

Other

Tested By: Holly Ashkannejhad



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

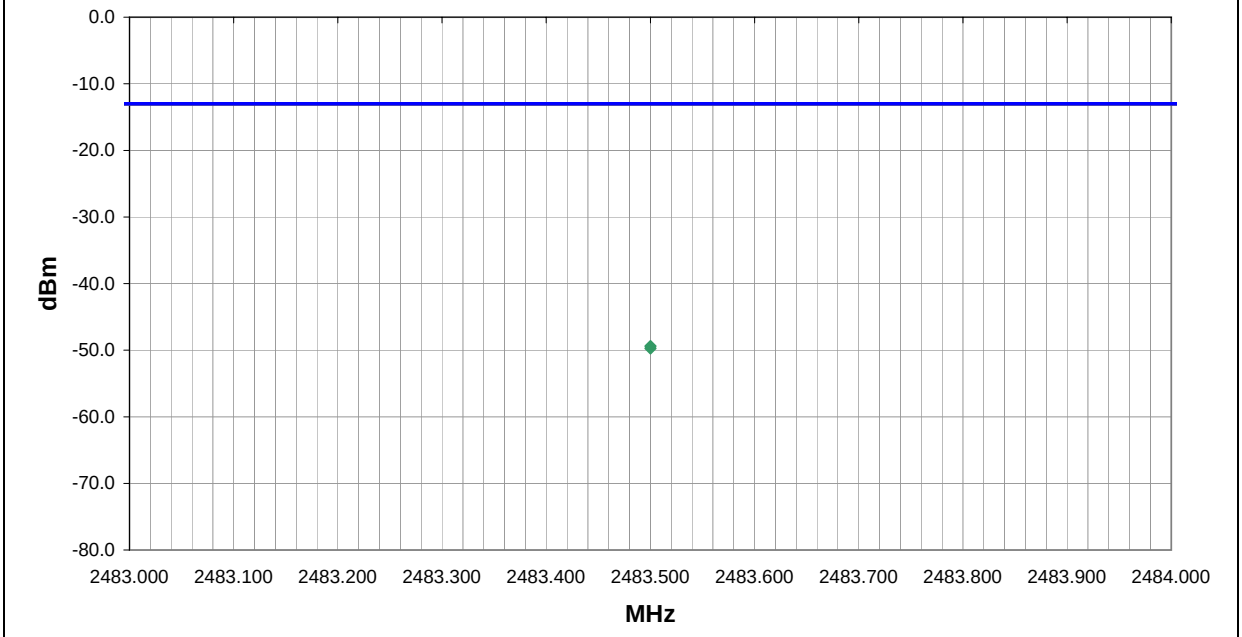
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS	Run #
Pass	71

Other

Tested By: Holly Ashkannejhad



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

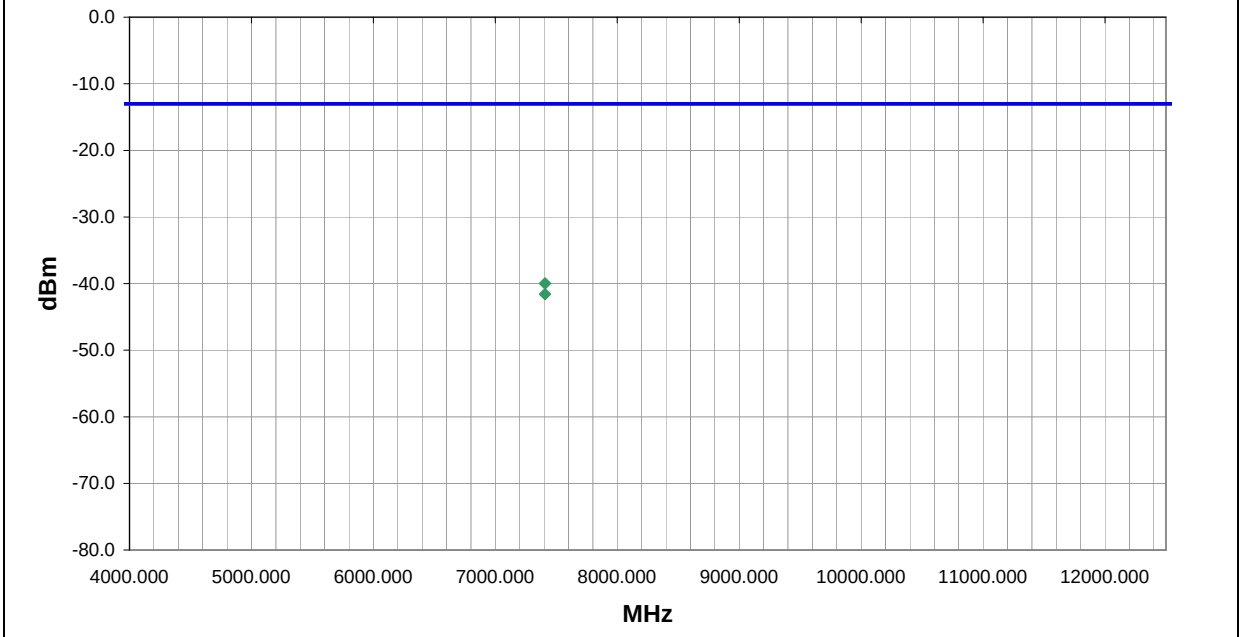
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS	Run #
Pass	24

Other

Tested By: Holly Ashkannejhad



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

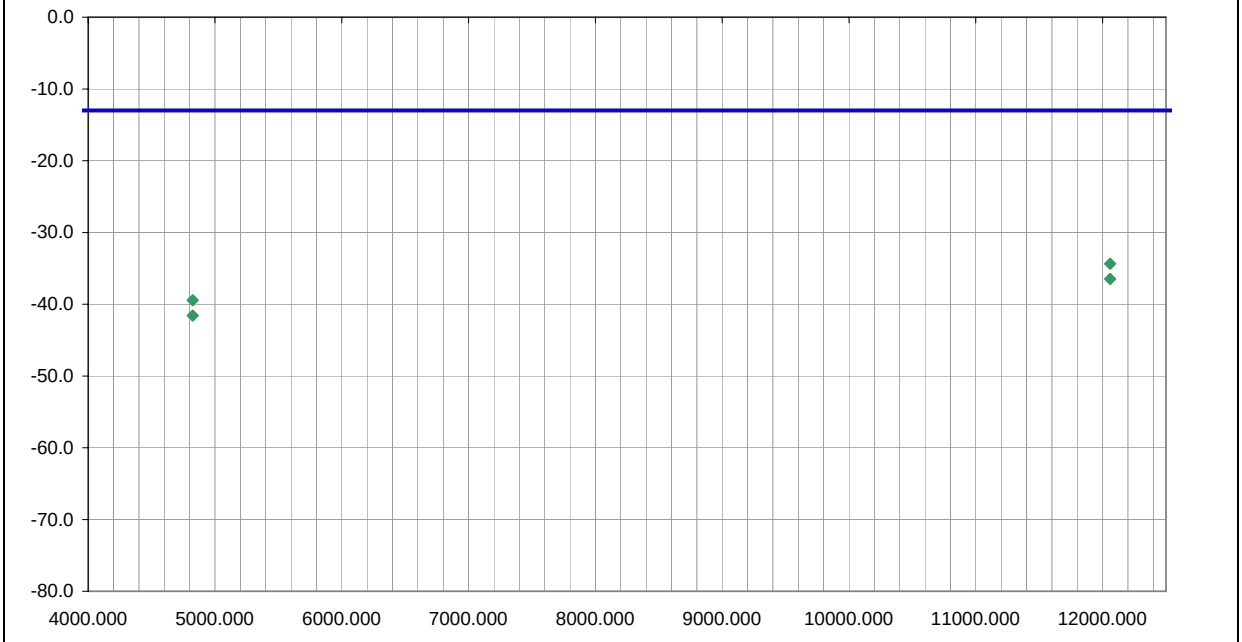
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS	Run #
Pass	25

Other

Tested By: Holly Ashkannejhad



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

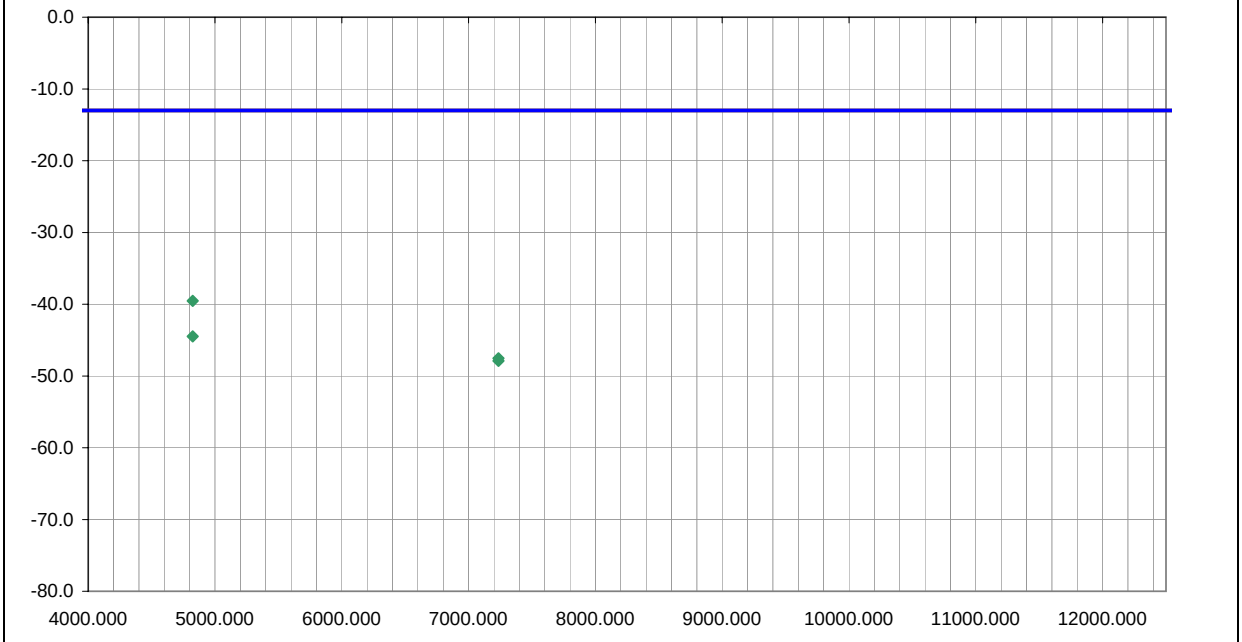
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS	Run #
Pass	26

Other

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

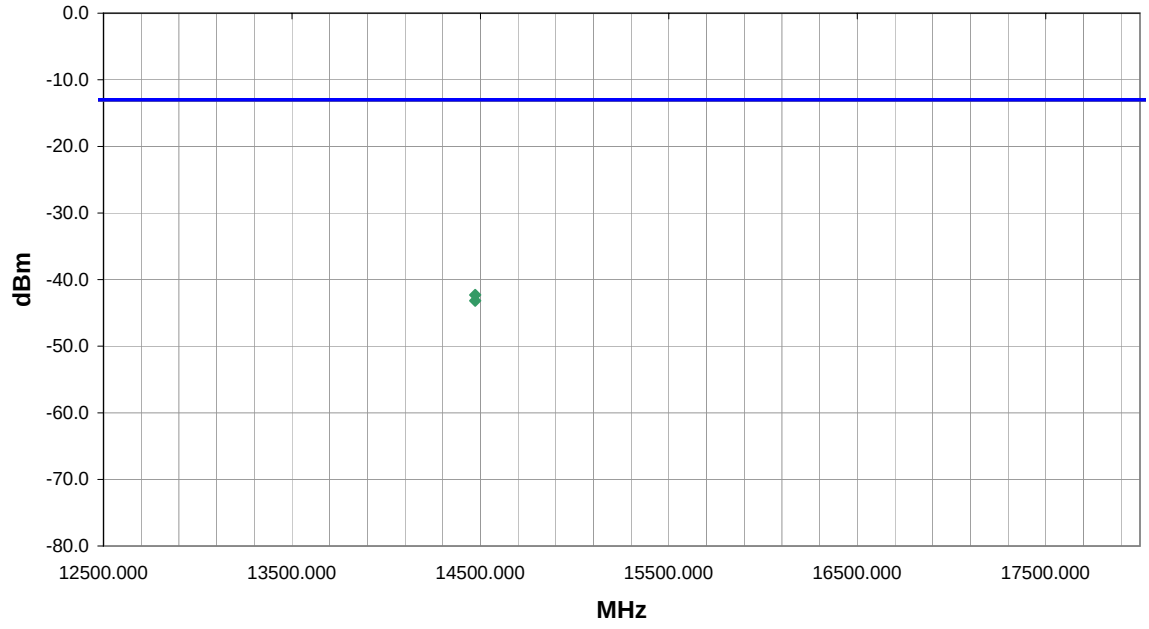
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS	Run #
Pass	27

Other

Tested By: Holly Ashkannejhad



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	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

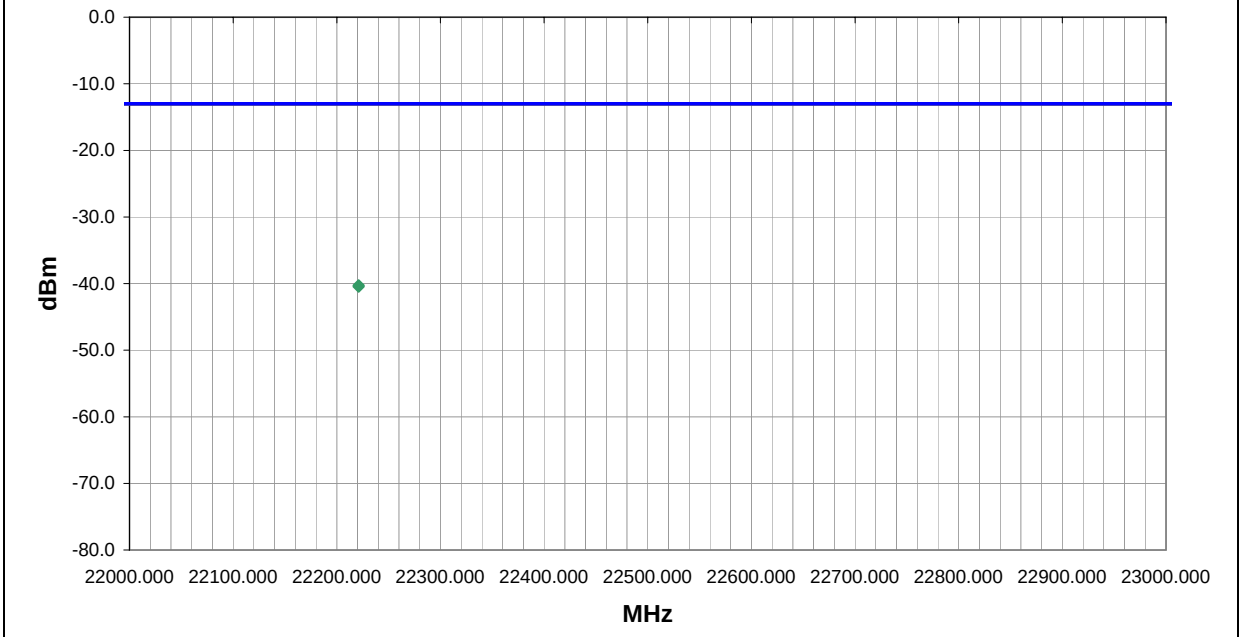
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS	Run #
Pass	28

Other

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

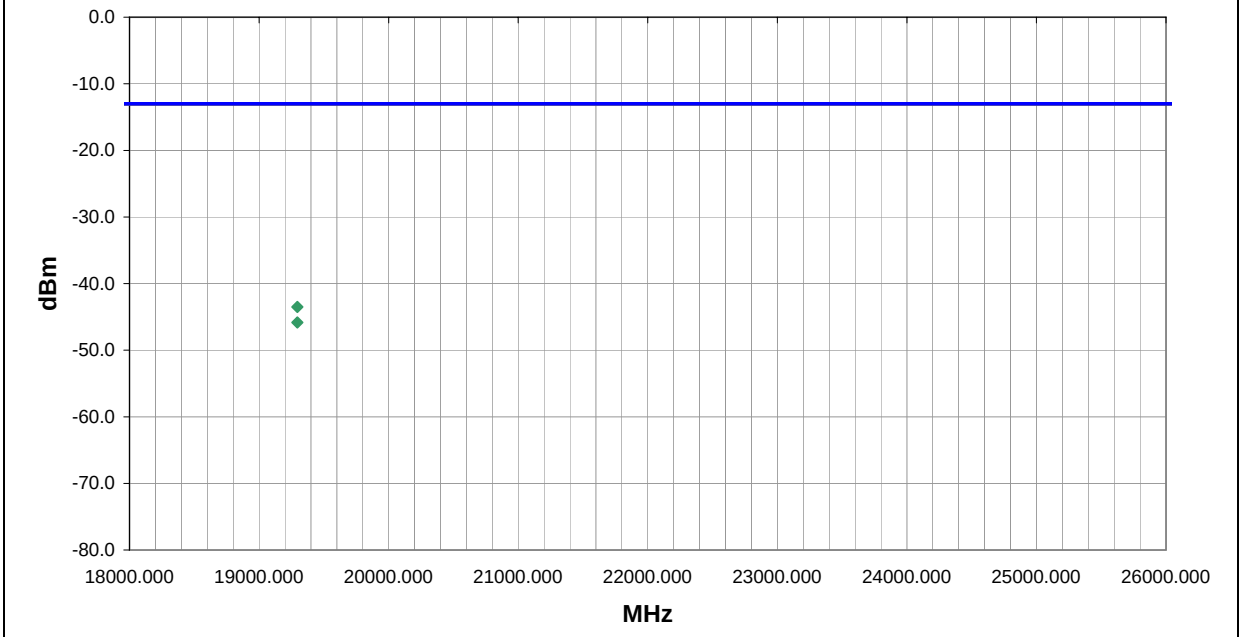
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS	Run #
Pass	29

Other

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	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 11, Bluetooth channel 62

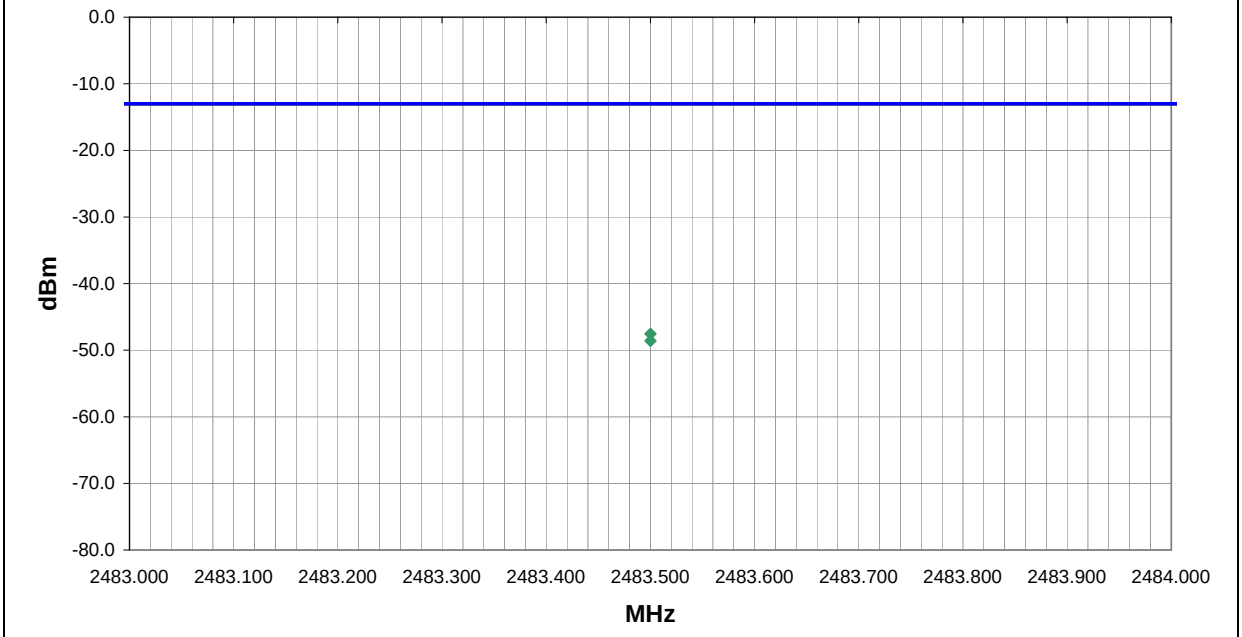
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS	Run #
Pass	30

Other

Tested By:



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

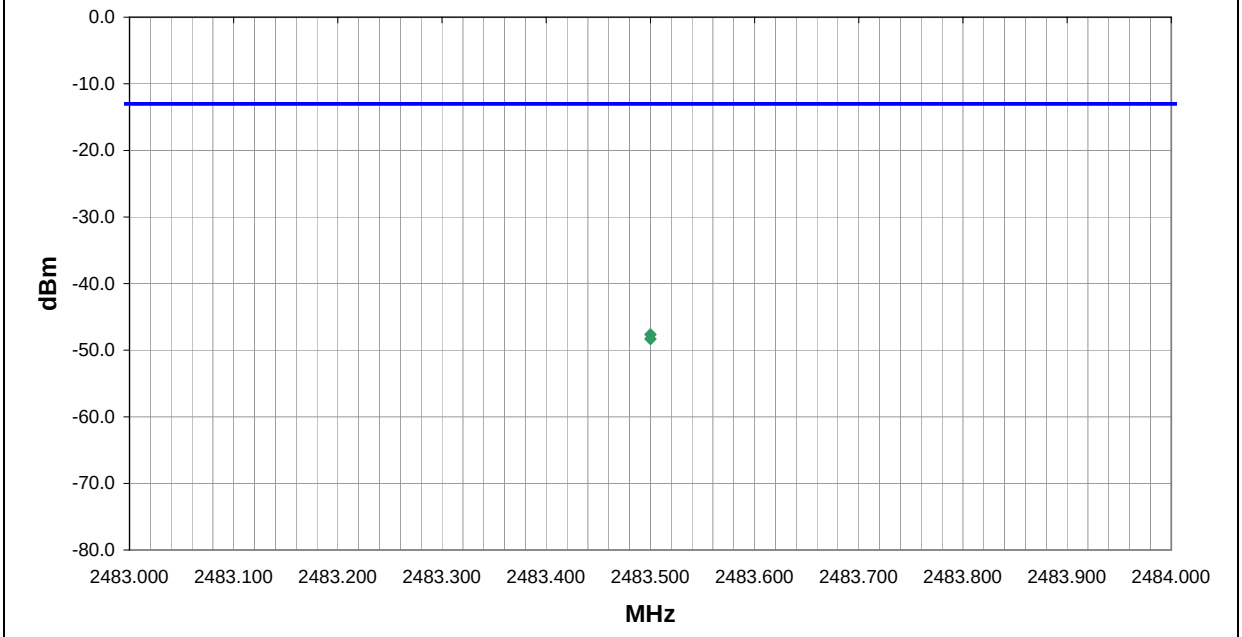
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS	Run #
Pass	31

Other

Tested By:



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 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

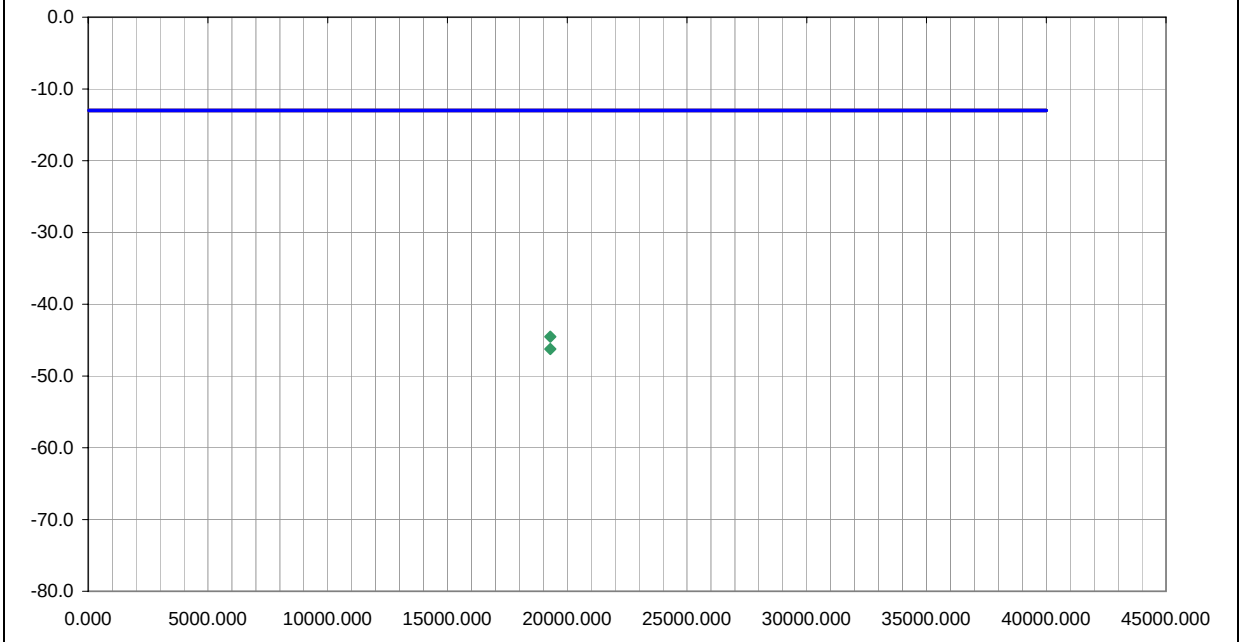
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS	Run #
Pass	32

Other

Tested By: Holly Ashkannejhad



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

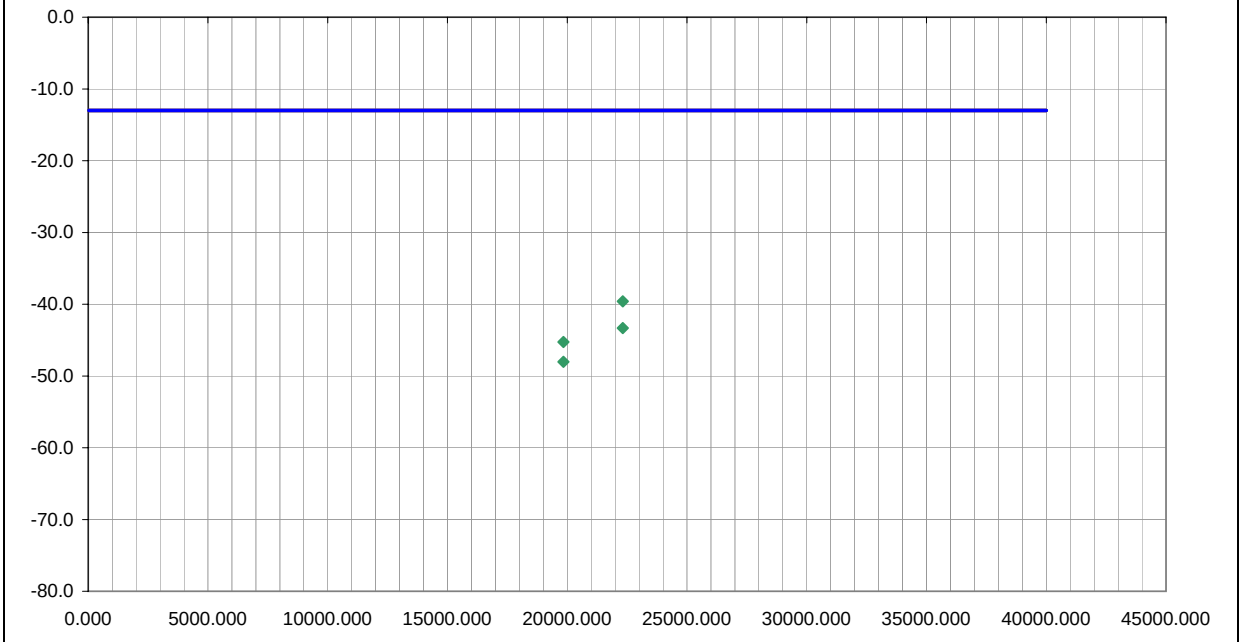
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS	Run #
Pass	33

Other

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 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

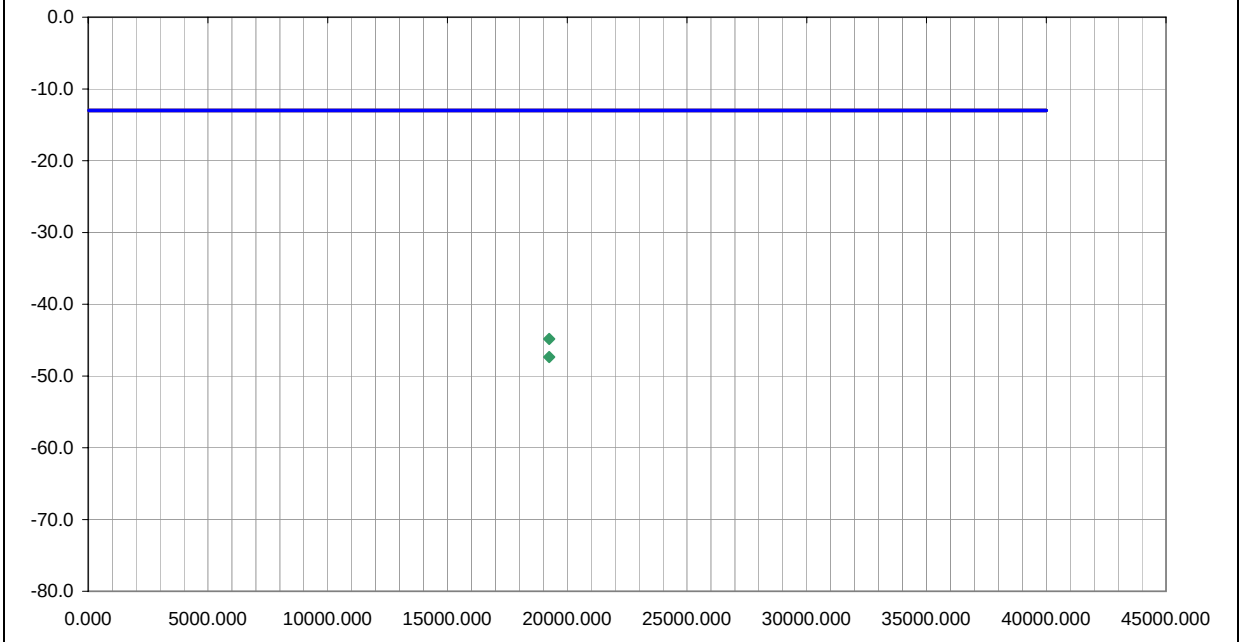
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS	Run #
Pass	34

Other

Tested By: Holly Ashkannejhad



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

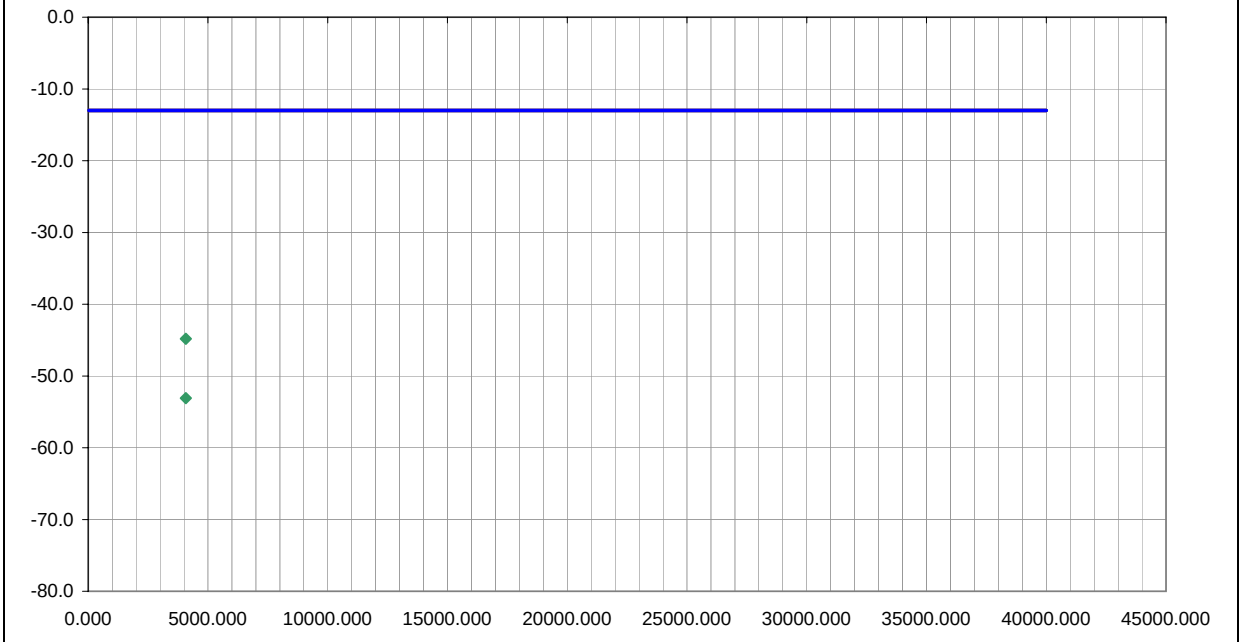
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS	Run #
Pass	35

Other

Tested By: Holly Ashkannejhad



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 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

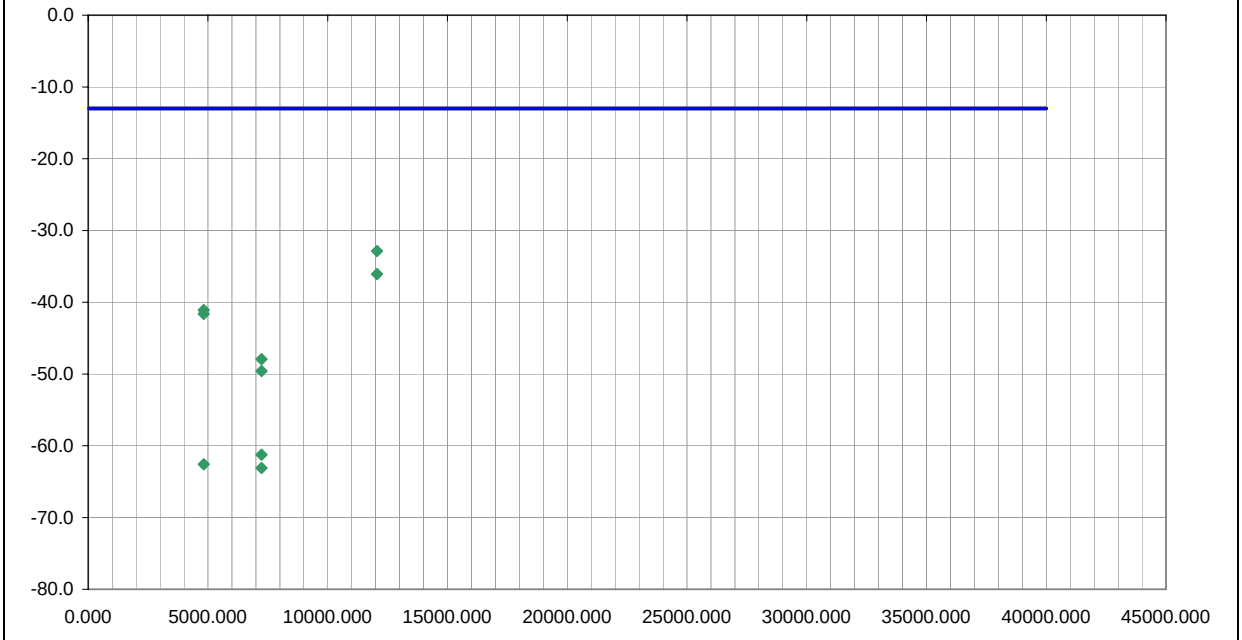
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS	Run #
Pass	36

Other

Tested By: Holly Ashkannejhad



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

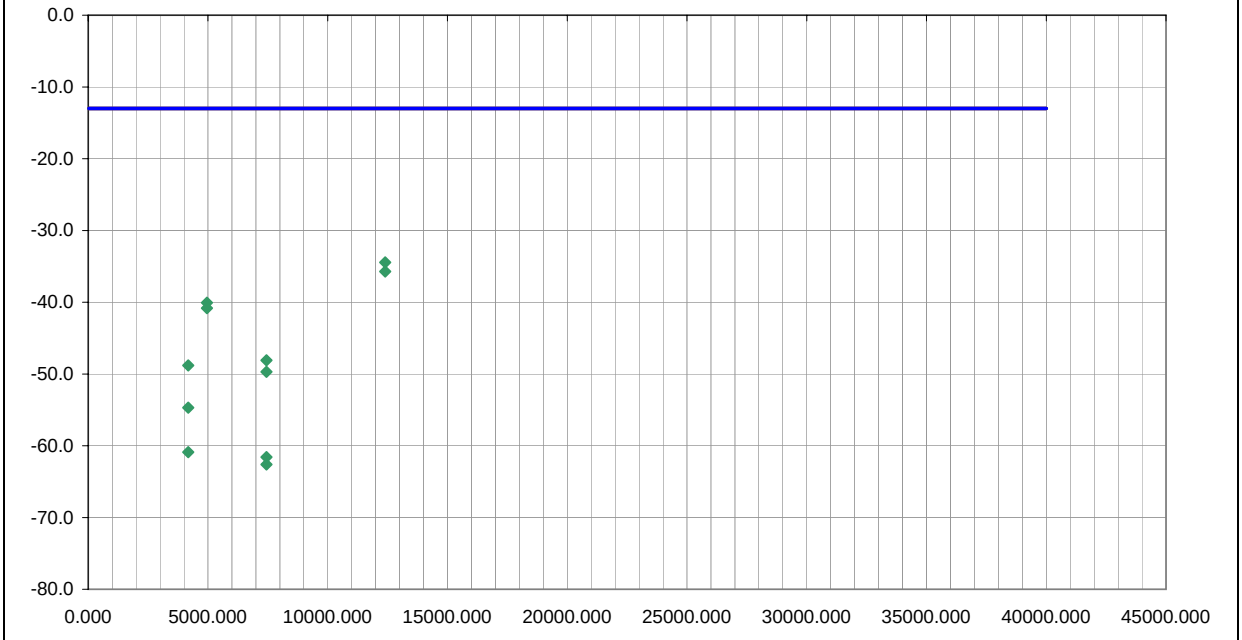
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS	Run #
Pass	37

Other

Tested By: Holly Ashkannejhad



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

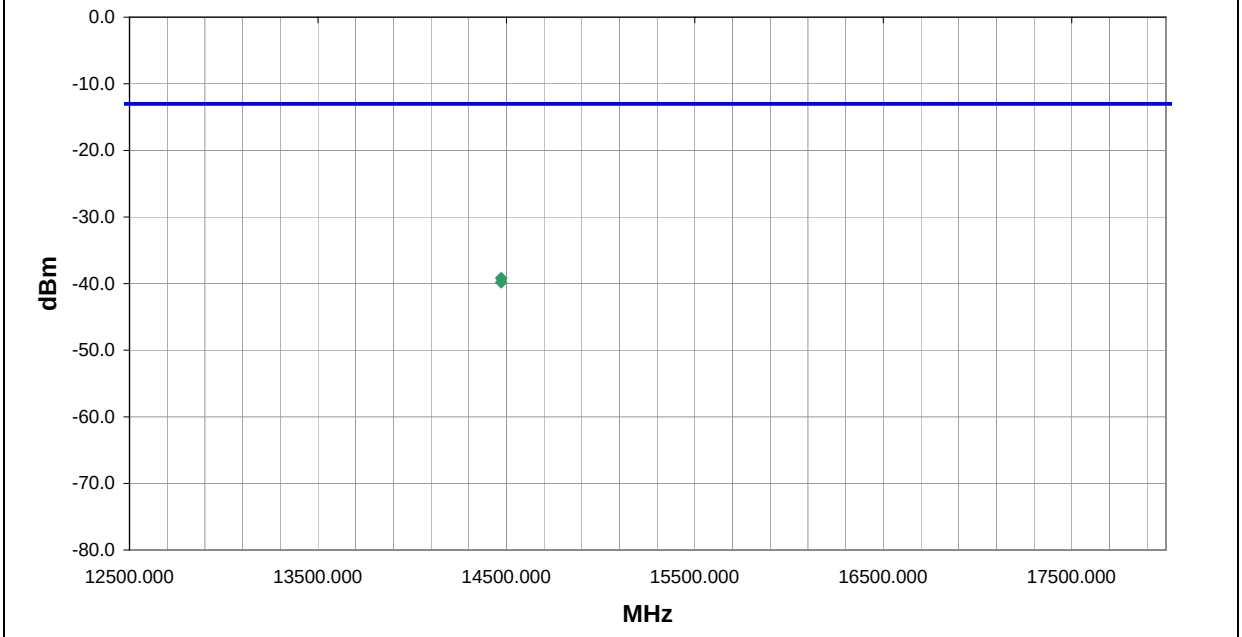
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS	Run #
Pass	38

Other

Tested By: Holly Ashkannejhad



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

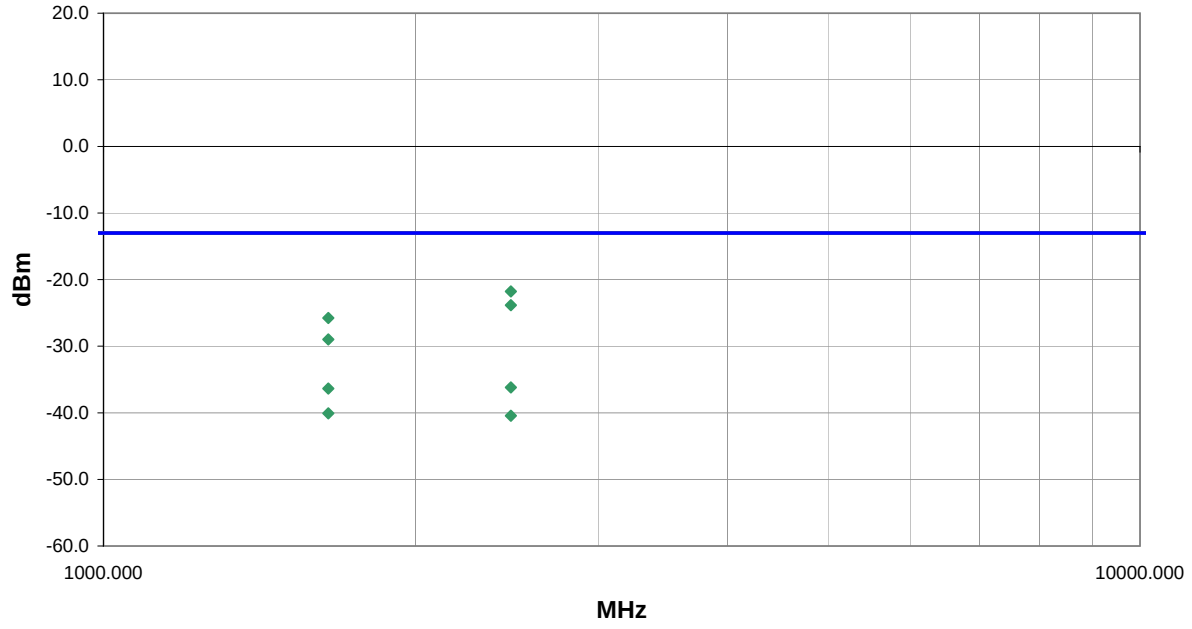
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS	Run #
Pass	9

Other

Tested By: Holly Ashkannejhad



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

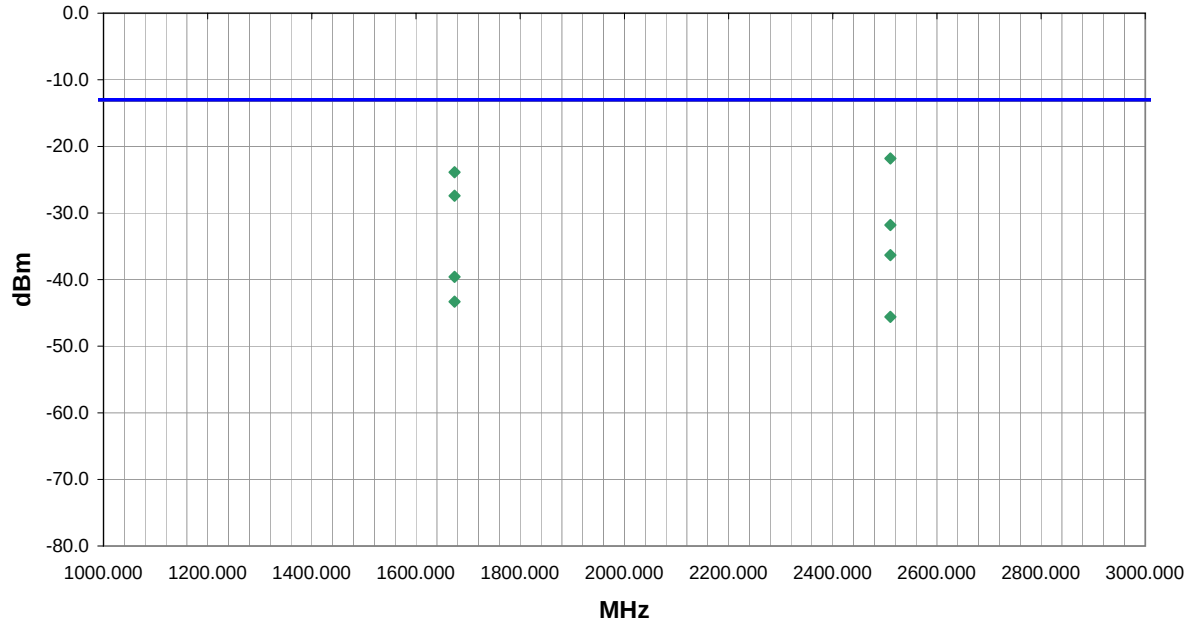
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS	Run #
Pass	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 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 High channel; CDMA Cellular Band, Stand-alone

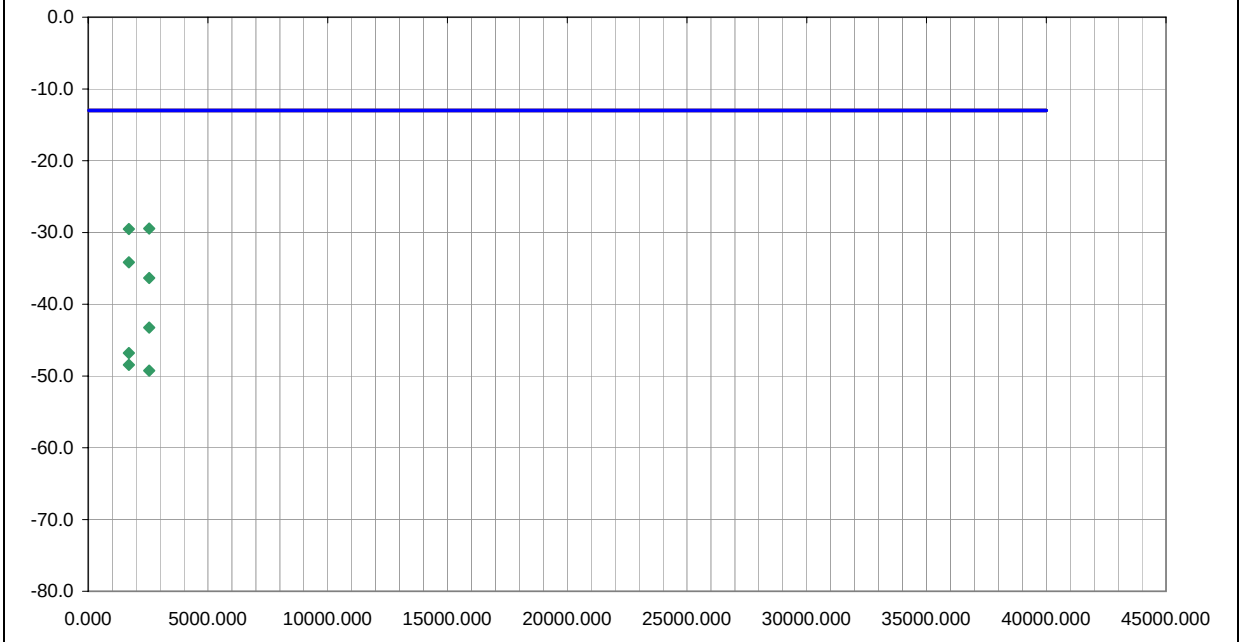
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS	Run #
Pass	11

Other

Tested By: Holly Ashkannejhad



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	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

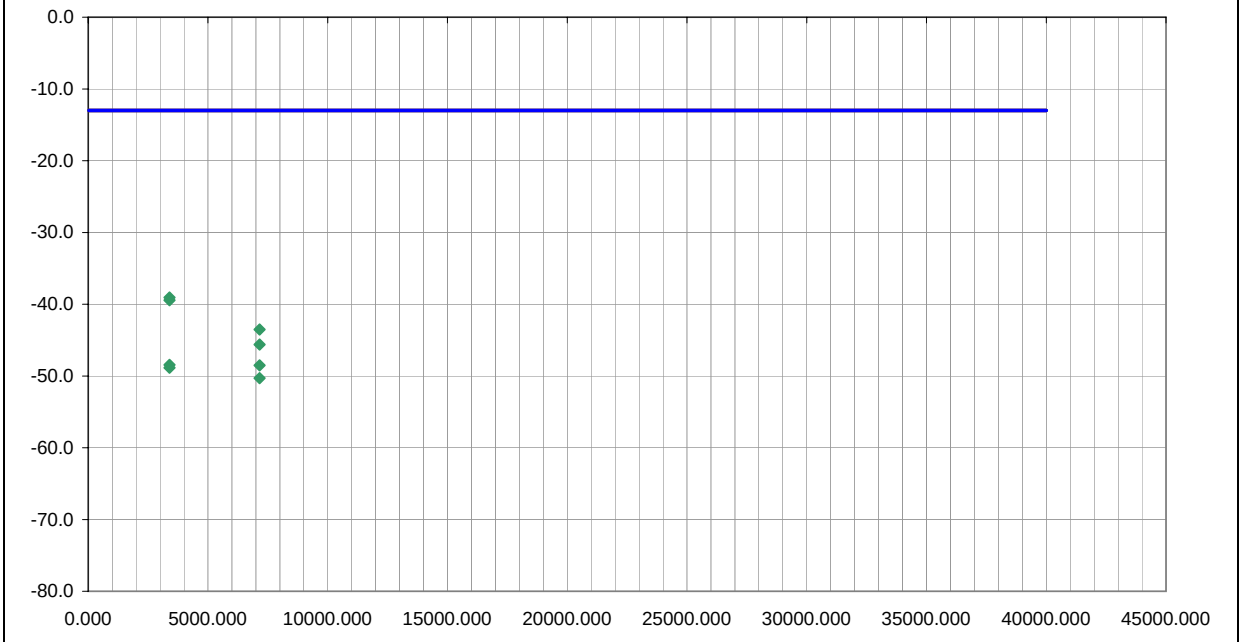
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS	Run #
Pass	12

Other

Tested By: Holly Ashkannejhad



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

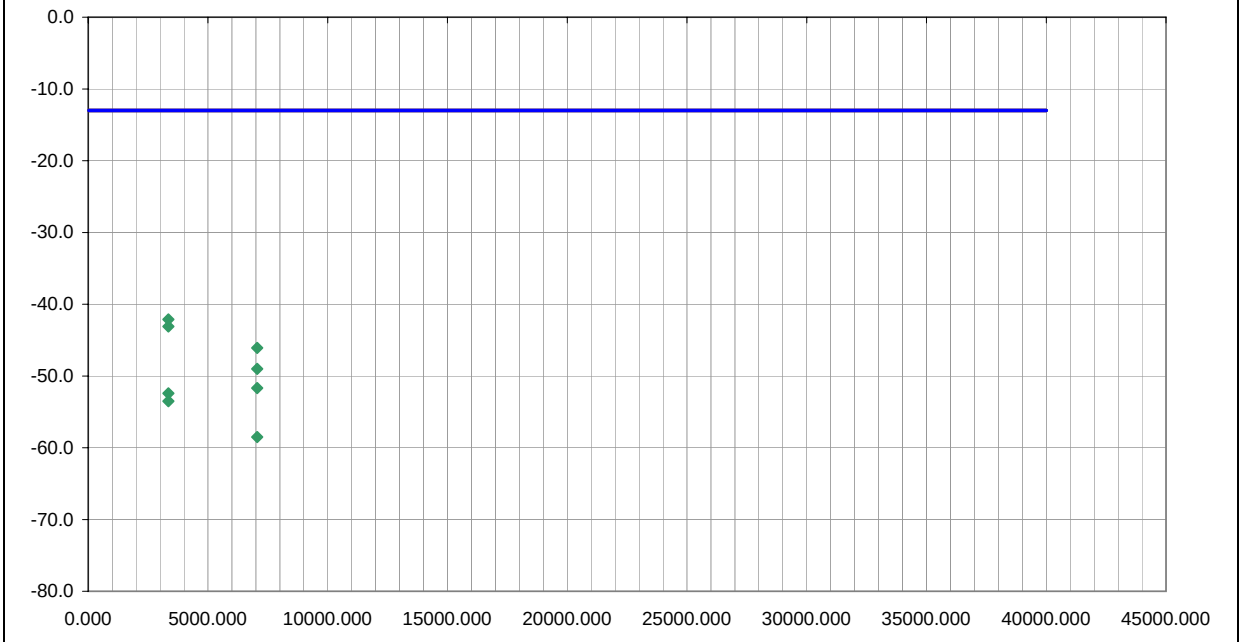
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS	Run #
Pass	13

Other

Tested By: Holly Ashkannejhad



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

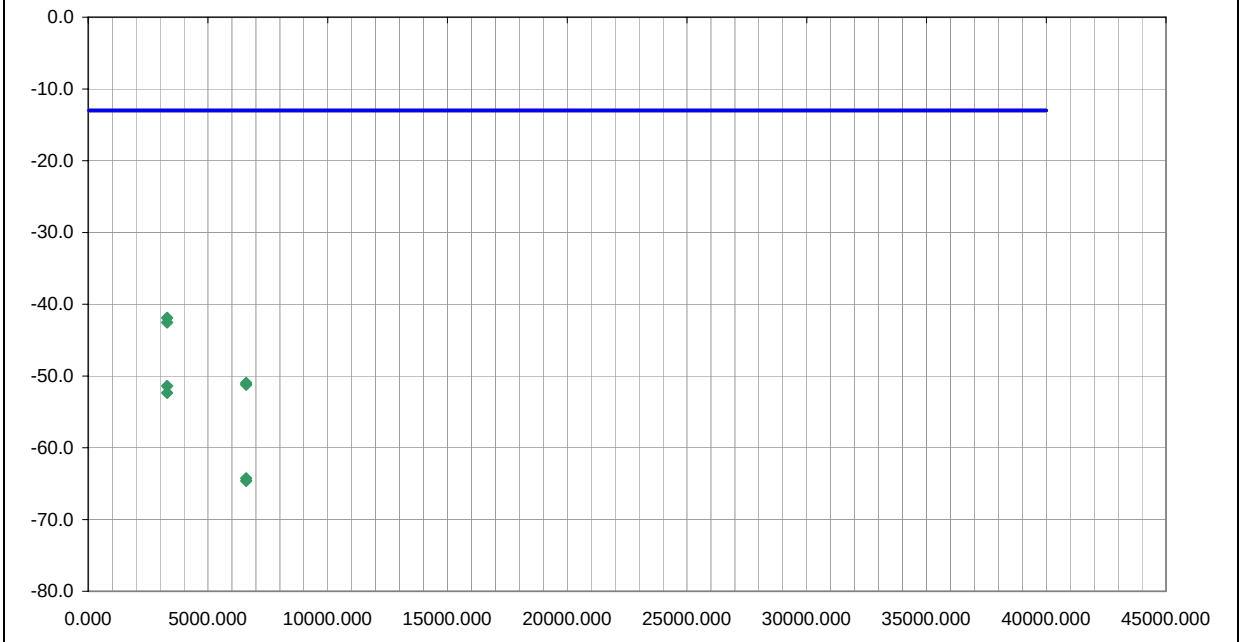
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS	Run #
Evaluation	14

Other

Tested By: Holly Ashkannejhad



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 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 Low channel; CDMA PCS Band, Stand-alone

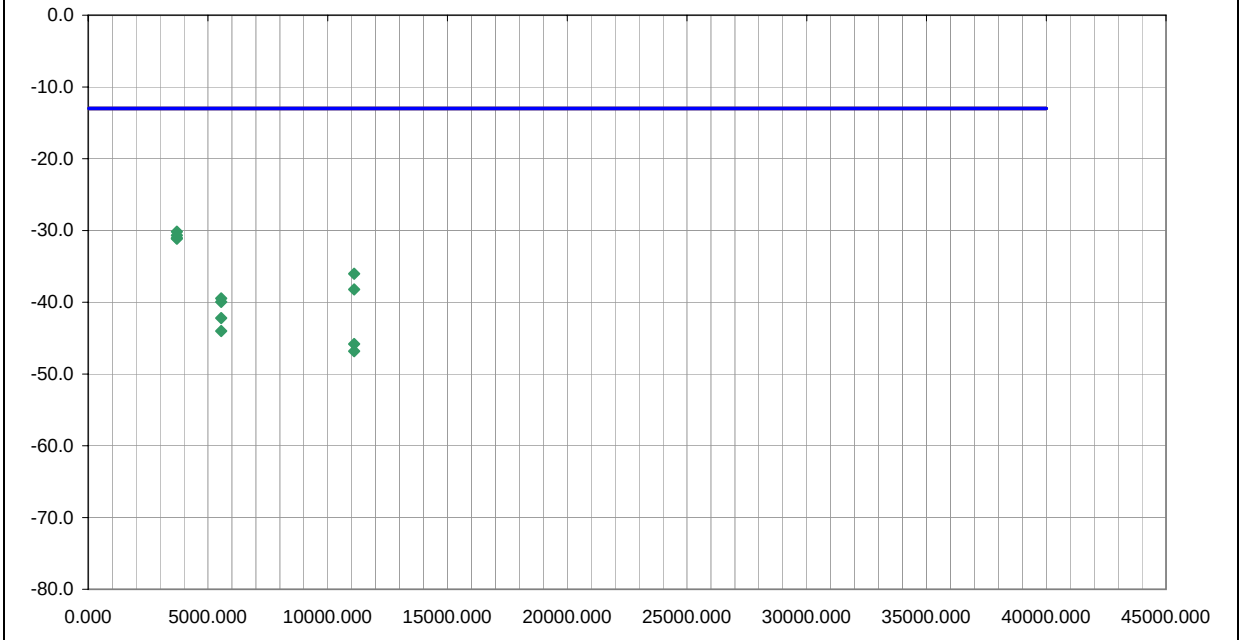
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS	Run #
Pass	15

Other

Tested By: Holly Ashkannejhad



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	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 Mid channel; CDMA PCS Band, Stand-alone

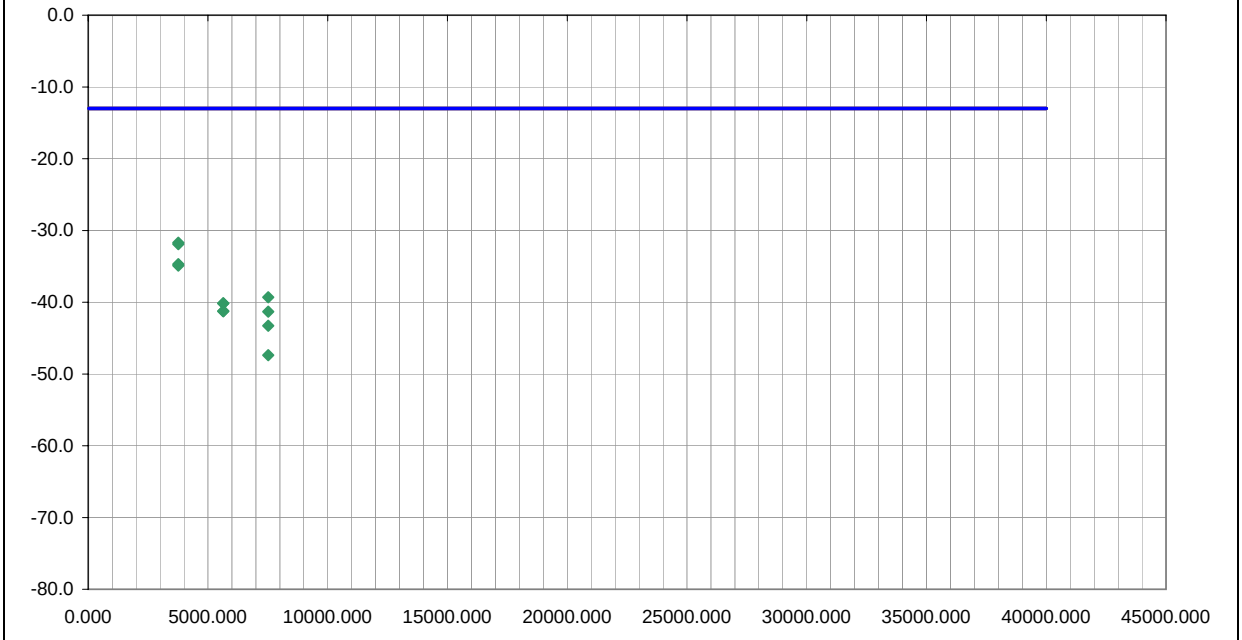
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS	Run #
Pass	16

Other

Tested By: Holly Ashkannejhad



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

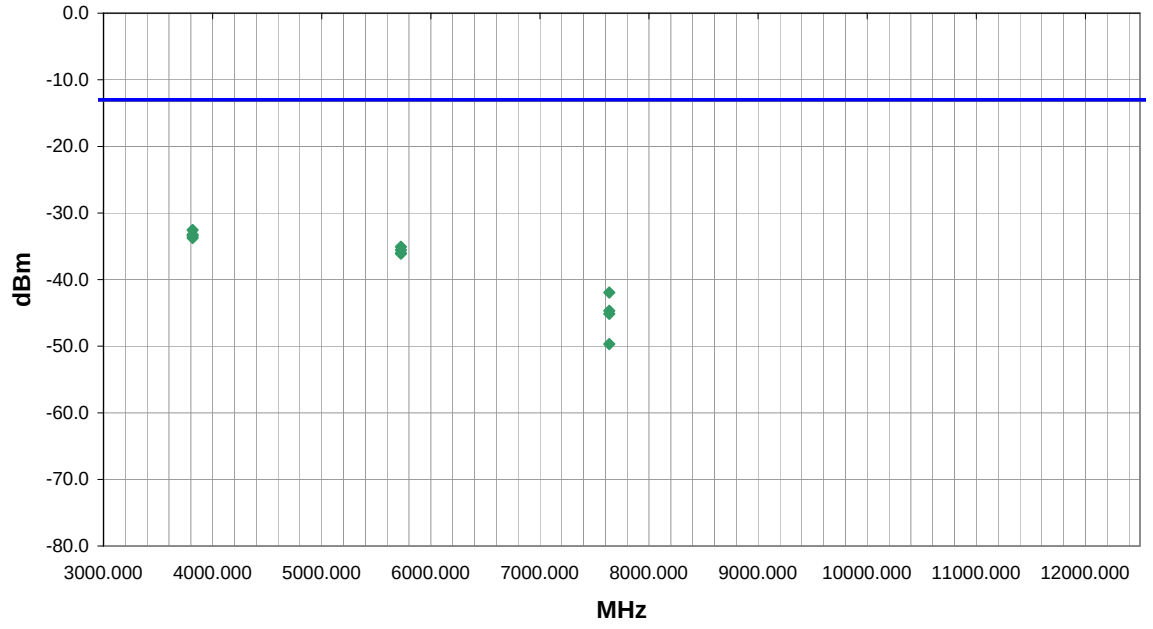
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS	Run #
Pass	17

Other

Tested By: Holly Ashkannejhad



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	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 Low channel; CDMA PCS Band, Stand-alone

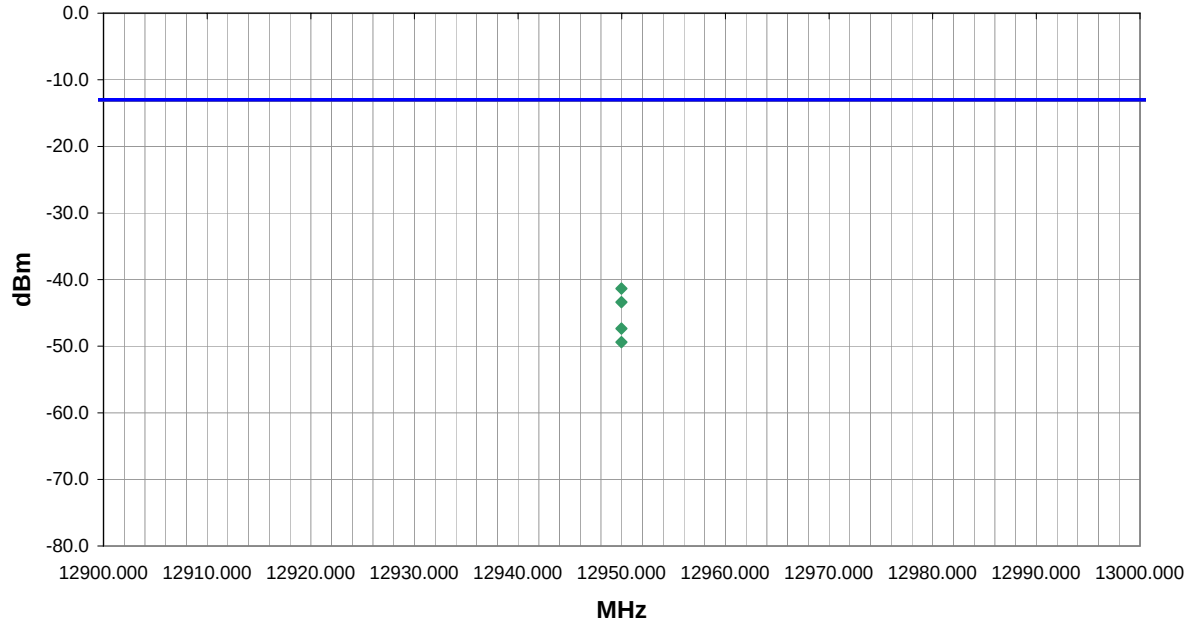
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS	Run #
Pass	18

Other

Tested By: Holly Ashkannejhad



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	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 Mid channel; CDMA PCS Band, Stand-alone

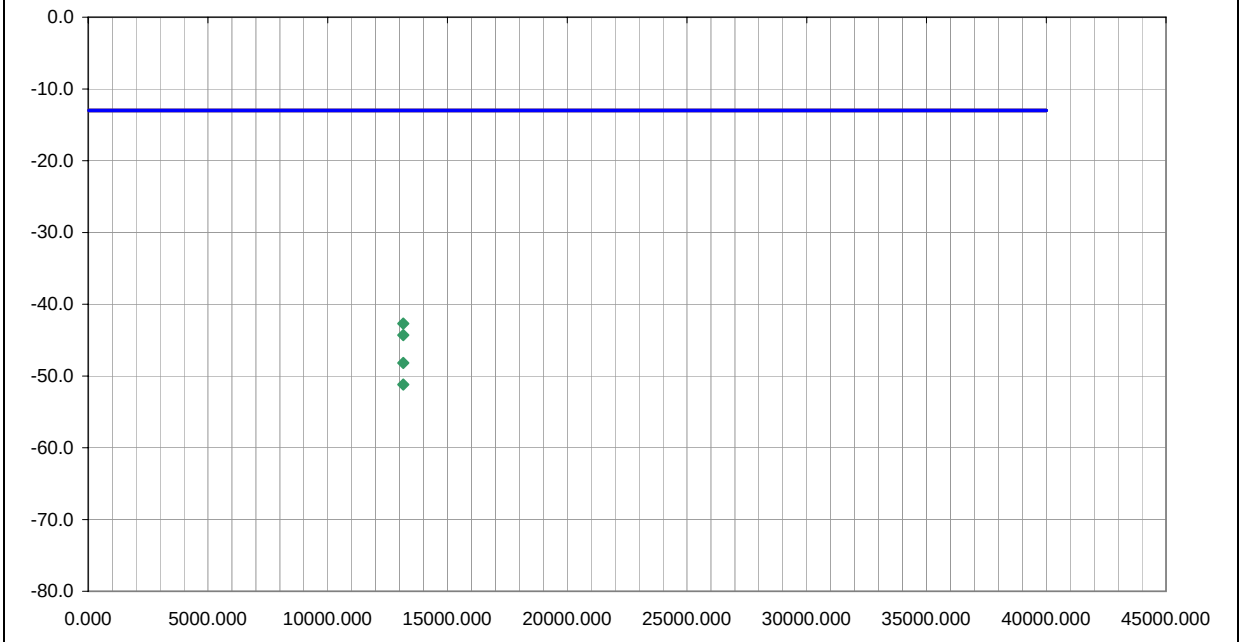
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS	Run #
Pass	19

Other

Tested By: Holly Ashkannejhad



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

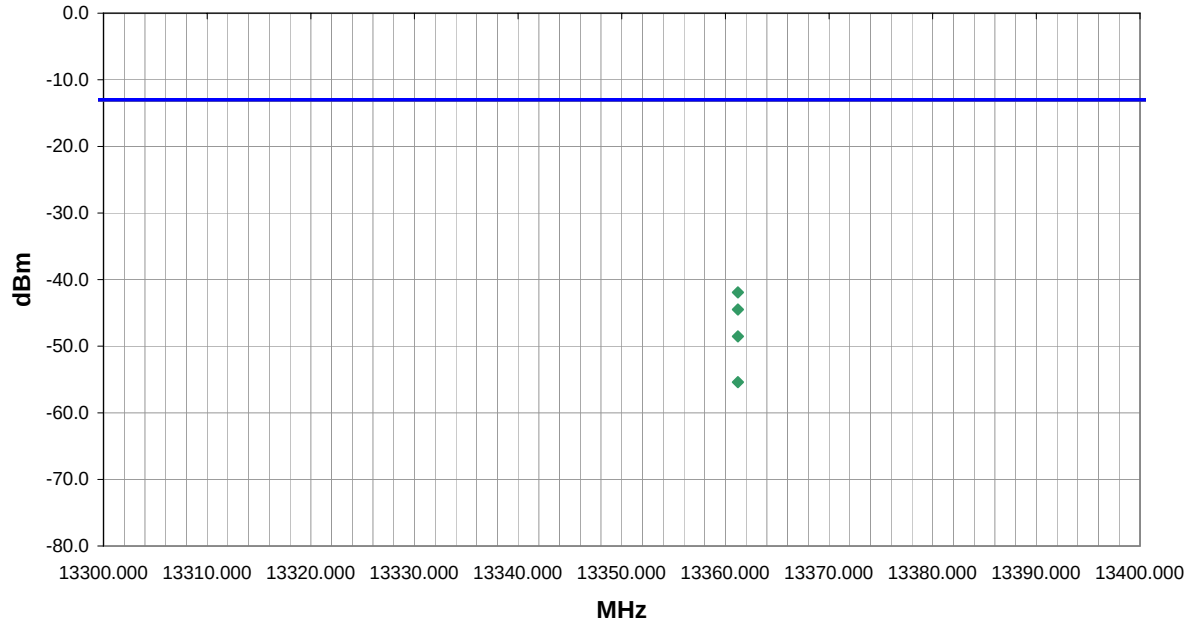
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS	Run #
Pass	20

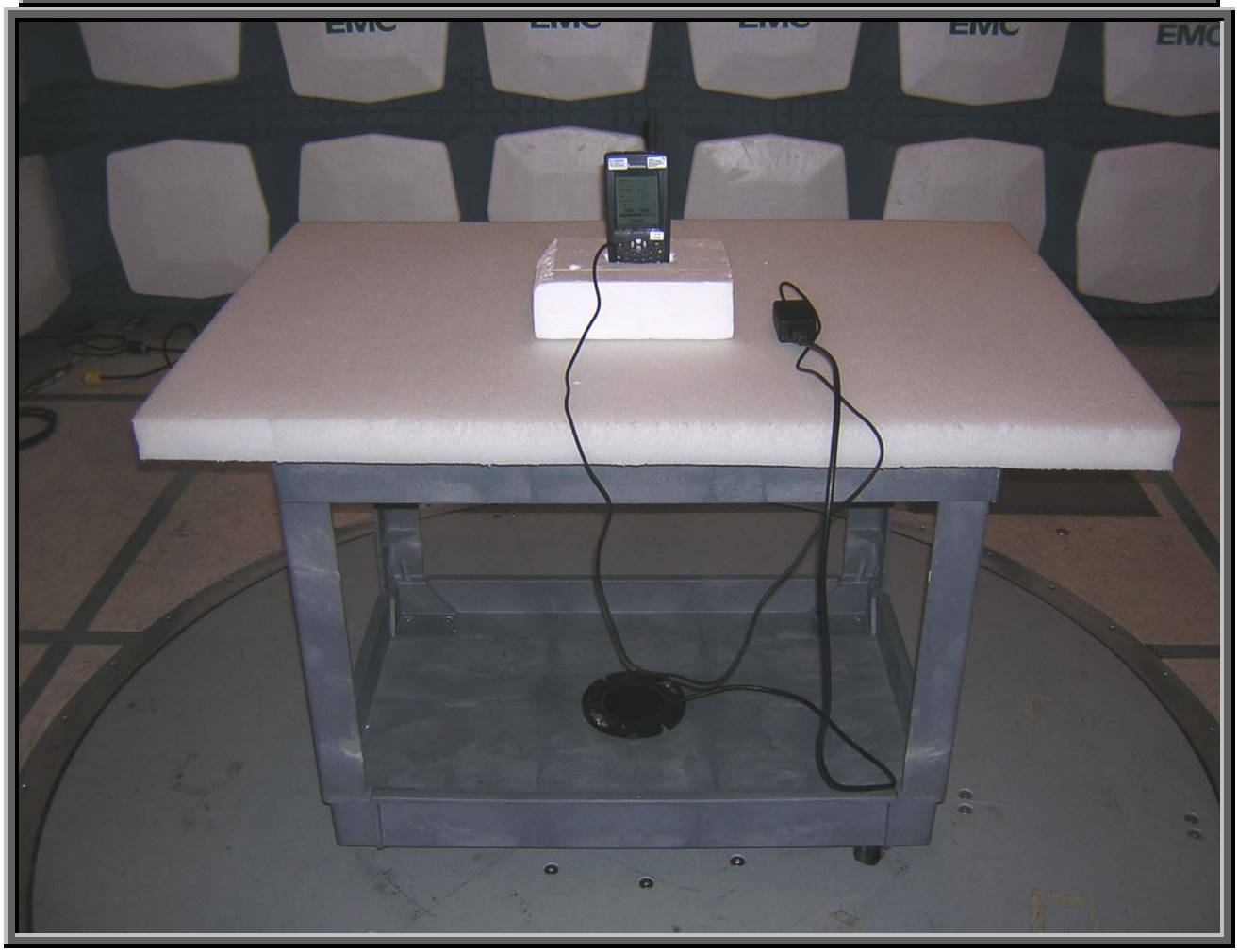
Other

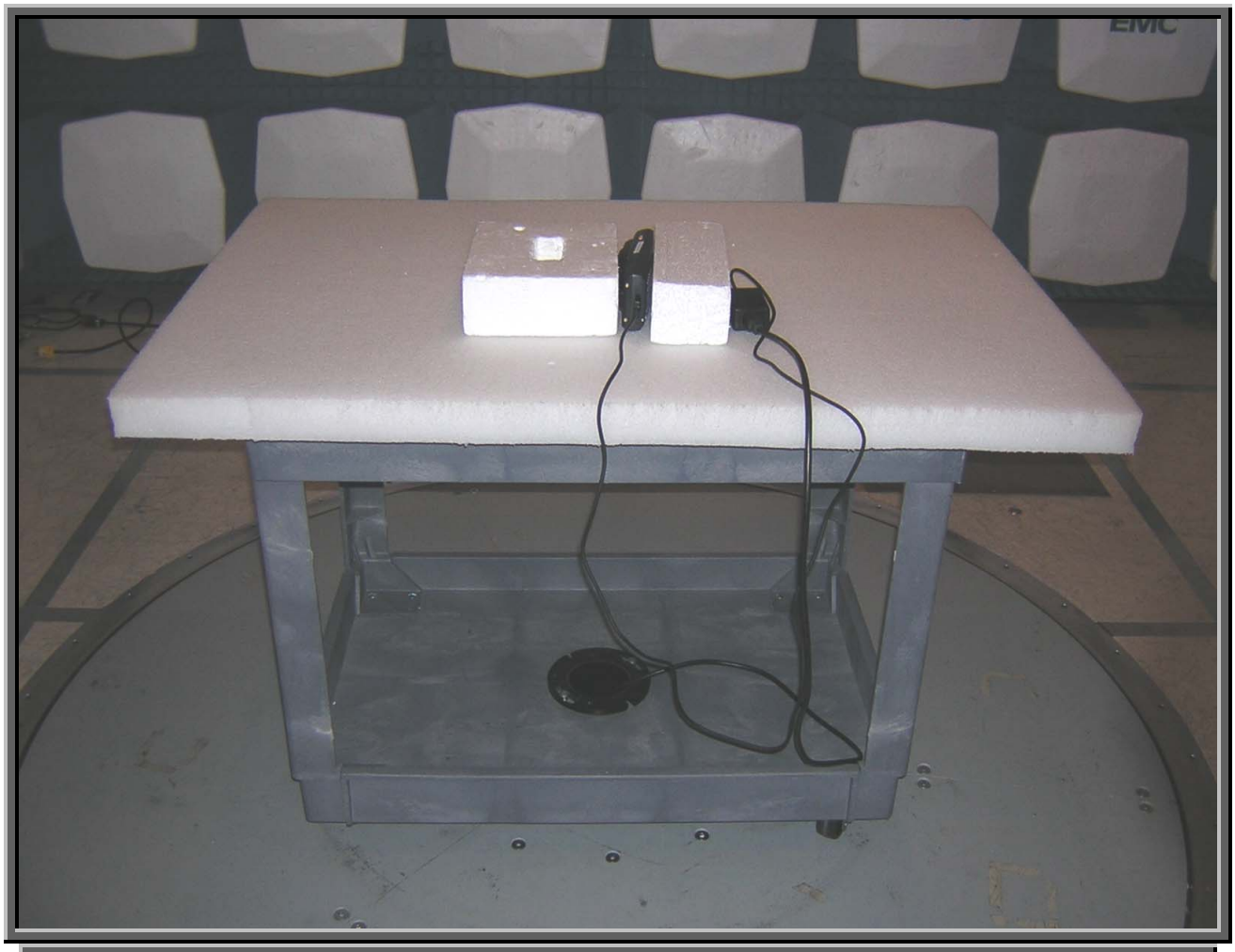
Tested By: Holly Ashkannejhad



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


EMC
NORTHWEST EMC


EMC




Intermec
Eval Unit


Eval
Unit