Exhibit U: Spurious Radiated Emissions

FCC ID: HN2SB555

Spurious Radiated Emissions

Revision 11/14/02

Justification

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

Channels in Specified Band Investigated:
Low
Mid
High

Operating Modes Investigated:
PSC Mode
Cellular Mode
PSC Mode simultaneously transmitting with co-located 802.11(b) radio
Cellular Mode simultaneously transmitting with co-located 802.11(b) radio

Antennas Investigated:	
PSTGO-1900SCI	
PSTGO-900 / 1900SCI	

Data Rates Investigated:	
Maximum	

Power Input Settings Investigated:
Battery

Frequency Range Investigated						
Start Frequency	30 MHz	Stop Frequency	25 GHz			

Software\Firmware Applied During Test									
Exercise software	Sierra SMART	Version	V.046						
Description									
The system was tested u	The system was tested using special software developed to test all functions of the device during the test								

Equipment Modifications

No EMI suppression devices were added or modified. The EUT was tested as delivered.

EUT and Peripherals

Description	Manufacturer	Model/Part Number	Serial Number
EUT-Radio Intermec		SB555	6301FEOC
Host Device	Intermec	700C	E02093050443010
Antenna	Mobile Mark	PSTGO-1900SCI	N/A
Antenna	Mobile Mark	PSTGO-900 / 1900SCI	N/A

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Cables

Cable Type	Shield	d Length (m) Ferrite Cor		Connection 1	Connection 2	
N/A	N/A	N/A	N/A	N/A	N/A	

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

Measurement Equipment

Description	Manufacturer	Model	Identifier	Last Cal	Interval
Spectrum Analyzer	Hewlett-Packard	Hewlett-Packard 8566B		03/19/2002	12 mo
Pre-Amplifier	Amplifier Research	LN1000A	APS	12/03/2001	14 mo
Antenna, Biconilog	EMCO	3141	AXE	12/31/2001	36 mo
Antenna, Horn			AHJ	05/23/2002	12 mo
Pre-Amplifier	Miteq	AMF-4D-010120-30-10P	AOP	07/09/2002	12 mo
Spectrum Analyzer	Tektronix	2784	AAO	03/08/2001	24 mo
Pre-Amplifier	Miteq	JSD4-18002600-26-8P	APU	01/17/2000	36 mo
Antenna, Horn	EMCO	3160-09	AHG	01/15/2000	36 mo
DC Power Supply	Topward	TPS-2000	TPD	NCR	N/A
Signal Generator	Hewlett-Packard	8341B	TGM	01/09/02	12 mo
Antenna, Horn	EMCO	3115	AHF	03/03/02	12 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).

<u>Configuration:</u> 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 spurious 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

Spurious Radiated Emissions

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spurious emissions. The height of the measurement antenna is also varied from 1 to 4 meters. The amplitude and frequency of the highest emissions are noted. The transmitter is then replaced with a $\frac{1}{2}$ wave dipole that is successively tuned to each of the highest spurious emissions. A signal generator is connected to the dipole (horn antenna for frequencies above 1 GHz), and its output is adjusted to match the level previously noted for each frequency. The output of the signal generator is recorded, and by factoring in the cable loss to the dipole antenna and its gain; the power (dBm) into an ideal $\frac{1}{2}$ wave dipole antenna is determined for each radiated spurious emission.

For the purposes of preliminary measurements, the field strength of the spurious emissions can be measured and compared with a 3 meter limit. The 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 two other radios: FCC ID:HN22011B (802.11(b) radio), and FCC ID:HN2ABTM3-2 (Bluetooth radio). Any two of the three radios can transmit simultaneously. All three radios cannot transmit simultaneously. Each radio transmits through its own antenna.

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.

Since the Bluetooth radio has such a low EIRP (.001W) and is a frequency hopper, the worst case simultaneous transmission mode was determined to be the EUT transmitting simultaneously with the 802.11(b) radio (EIRP = 0.056 W & single channel operation). The EUT was tested in both cellular and PCS modes while simultaneously transmitting with the 802.11(b) radio. Simultaneous low, mid, and high transmit frequencies were investigated from 30 MHz to 25 GHz.

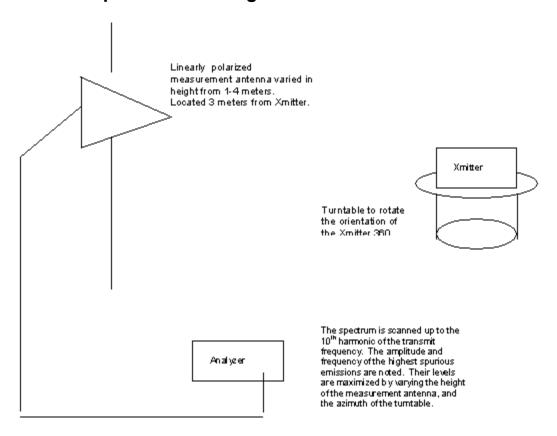
In addition, all the possible combinations of harmonic emissions from the EUT and the 802.11(b) radio were compared numerically. It was determined that only channels 526 (1876 MHz) and 930 (1896 MHz) in PCS mode could have harmonic emissions that coincide with the center frequency of harmonic emissions from the 802.11(b) radio (tuned to channels 1 (2412 MHz) and 6 (2437 MHz) respectively). The frequency range from 10 to 18 GHz was investigated for these channel combinations.

Bandwidths Used for Measurements

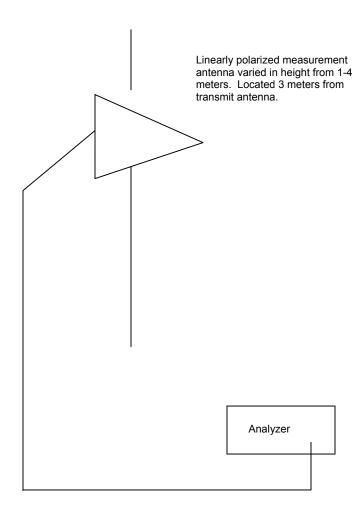
Frequency Range (MHz)	Peak Data (kHz)	Average Data (kHz)					
0.01 – 0.15	1.0	0.2	0.2				
0.15 – 30.0	10.0	9.0	9.0				
30.0 – 1000	100.0	120.0	120.0				
Above 1000	1000.0	N/A	1000.0				
Measurements were made using the bandwidths and detectors specified. No video filter was used.							

Test Setup Diagram

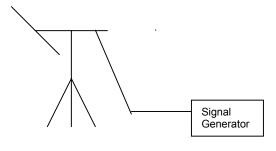
Test Setup for Field Strength Measurements



Test Setup for Power Measurements Utilizing the Antenna Substitution Method



During field strength measurements, the amplitude and frequency of the highest emissions are noted. The transmitter is then replaced with a ½ wave dipole (at the same height) that is successively tuned to each of the highest spurious emissions. A signal generator is connected to the dipole (horn antenna for frequencies above 1 GHz), and its output is adjusted to match the level previously noted for each frequency.



The spectrum analyzer is monitored to verify that the output of the signal generator produces a signal equal in amplitude to a previously measured spurious emission.

Completed by:

NORTHWEST **Apparent Power Data Sheet EMC** EUT: SB555 Radio used in Model 700C Work Order: INMC0044 Serial Number: 6301FEOC Date: 12/24/02 Customer: INTERMEC Corporation Temperature: 70 Humidity: 32% Attendees: None Cust. Ref. No.: Barometric Pressure 29.75 Tested by: Rod Peloquin TEST SPECIFICATIONS Power: Battery Job Site: EV01 Specification: FCC Part 24E Year: 2002 Method: TIA/EIA-603 Year: 1998 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 Antenna PSTGO-900 / 1900SCI **EUT OPERATING MODES** Transmitting - PCS Band DEVIATIONS FROM TEST STANDARD RESULTS Test Distance (m) Pass Tested By 0.0 -10.0 -20.0 -30.0 dBm -40.0 -50.0 -60.0 -70.0

MHz

5000.000

-80.0 1000.000

2000.000

3000.000

4000.000

	Freq (MHz)	Azimuth (degrees)	Height (meters)	Polarity	Detector	EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)	Comments
ŀ	\ /	, ,	` ′	1	DIC	, ,			
	3699.354	307.0	1.1	H-Horn	PK	-15.7	-13.0	-2.7	Low Channel
	3699.360	7.0	1.5	V-Horn	PK	-16.1	-13.0	-3.1	Low Channel
	3819.400	156.0	1.2	V-Horn	PK	-17.6	-13.0	-4.6	High Channel
	3819.400	69.0	1.3	H-Horn	PK	-17.6	-13.0	-4.6	High Channel
	3759.400	347.0	1.2	V-Horn	PK	-18.0	-13.0	-5.0	Mid Channel
	3759.400	107.0	1.3	H-Horn	PK	-18.2	-13.0	-5.2	Mid Channel

6000.000

7000.000

8000.000

9000.000

NORTHWEST **Apparent Power Data Sheet EMC** EUT: SB555 Radio used in Model 700C Work Order: INMC0044 Serial Number: 6301FEOC Date: 12/24/02 Customer: INTERMEC Corporation Temperature: 72 Attendees: None Humidity: 32% Cust. Ref. No.: Barometric Pressure 29.75 Tested by: Rod Peloquin Power: Battery Job Site: EV01 TEST SPECIFICATIONS Specification: FCC Part 24E Year: 2002 Method: TIA/EIA-603 Year: 1998 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 Antenna PSTGO-1900SCI EUT OPERATING MODES Transmitting - PCS Band DEVIATIONS FROM TEST STANDARD No deviations. RESULTS Test Distance (m) Pass Tested By 0.0 -10.0 -20.0 -30.0 -40.0 -50.0 -60.0 -70.0 -80.0 1000.000 2000.000 3000.000 4000.000 5000.000 6000.000 7000.000 8000.000 9000.000 10000.000 Compared to Azimuth Height Polarity EIRP Spec. Limit (degrees) (meters) (dBm) (dBm) (dB) Comments (MHz) -4.2 High Channel 3819.400 118.0 V-Horn -17.2 1.2 -13.0 3699.400 102.0 1.2 V-Horn PΚ -17.6 -13.0-4.6 Low Channel -4.7 Mid Channel 3759.400 141.0 1.2 V-Horn PΚ -17.7 -13.0 3759.400 324.0 1.3 H-Horn -18.5 -13.0 -5.5 Mid Channel -6.3 High Channel 3819.400 99.0 1.3 H-Horn PΚ -19.3 -13.0

H-Horn

PΚ

-19.6

-13.0

-6.6 Low Channel

3699.400

301.0

NORTHWEST **Apparent Power Data Sheet EMC** EUT: SB555 Radio used in Model 700C Work Order: INMC0044 Serial Number: 6301FEOC Date: 12/24/02 Customer: INTERMEC Corporation Temperature: 66 Attendees: None Humidity: 33% Cust. Ref. No.: Barometric Pressure 30.2 Tested by: Rod Peloquin Power: Battery Job Site: EV01 TEST SPECIFICATIONS Specification: FCC Part 22.901(d) Year: 2002 Method: TIA/EIA-603 Year: 1998 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 Antenna PSTGO-900 / 1900SCI **EUT OPERATING MODES DEVIATIONS FROM TEST STANDARD** No deviations. RESULTS Test Distance (m) Pass 10 3 Tested By 0.0 -10.0 -20.0 -30.0 -40.0 -50.0 -60.0 -70.0 1000.000 2000.000 3000.000 4000.000 5000.000 6000.000 7000.000 8000.000 9000.000 10000.000 Compared to Azimuth Polarity Detector EIRP Spec. Limit (degrees) (meters) (dBm) (dBm) (dB) Comments (MHz) -34.2 High Channel 1697.400 184.0 H-Horn -47.2 1.5 -13.0 V-Horn PΚ -37.5 High Channel 1697.400 275.0 1.2 -50.5-13.0

PΚ

PΚ

PΚ

-51.8

-52.9

-54.9

-56.2

-13.0

-13.0

-13.0

-13.0

-38.8 Mid Channel

-39.9 Mid Channel -41.9 Low Channel

-43.2 Low Channel

H-Horn

V-Horn

H-Horn

V-Horn

1673.400

1673.400

1649.400

1649.400

161.0

69.0

176.0

74.0

1.2

1.2

1.2

NORTHWEST **OATS DATA SHEET EMC** EUT: SB555 Radio used in Model 700C Work Order: INMC0044 Serial Number: 6301FEOC Date: 12/24/02 Customer: INTERMEC Corporation Temperature: 72 Humidity: 32% Barometric Pressure 29.75 Attendees: None Cust. Ref. No.: Tested by: Rod Peloquin Power: Battery Job Site: EV01 TEST SPECIFICATIONS Specification: FCC Part 15 Class B Year: 2000 Method: ANSI C63.4 SAMPLE CALCULATIONS Year: 1992 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 Antenna PSTGO-900 / 1900SCI **EUT OPERATING MODES** Receive Mode - Cellular Band DEVIATIONS FROM TEST STANDARD No deviations. RESULTS Test Distance (m) 12 Pass Other Tested By: 80.0 70.0 60.0 50.0 dBuV/m 40.0 30.0

						MHz							
Freq	Amplitude (dBuV)	Factor (dB)	Azimuth (degrees)	Height (meters)	Distance (meters)	External Attenuation (dB)	Polarity	Detector	Distance Adjustment (dB)	Adjusted dBuV/m	Spec. Limit	Compared to Spec.	
(MHz) 2107.230	31.8	-0.3	172.0	1.6	3.0	0.0	V-Horn	AV	0.0	31.5		` '	Comments Low Channel
2131.200	30.5	-0.3	77.0	1.3	3.0	0.0	H-Horn	AV	0.0	30.2	54.0		Mid Channel
2131.200	30.5	-0.3	155.0	1.6	3.0	0.0	V-Horn	AV	0.0	30.2	54.0		Mid Channel
2107.230	30.0	-0.3	147.0	1.3	3.0	0.0	H-Horn	AV	0.0	29.7	54.0	-24.3	Low Channel
2155.150	30.0	-0.3	255.0	1.3	3.0	0.0	H-Horn	AV	0.0	29.7	54.0	-24.3	High Channel
2155.150	29.6	-0.3	157.0	1.2	3.0	0.0	V-Horn	AV	0.0	29.3	54.0	-24.7	High Channel
2155.150	40.5	-0.3	255.0	1.3	3.0	0.0	H-Horn	PK	0.0	40.2	74.0	-33.8	High Channel
2155.150	40.4	-0.3	157.0	1.2	3.0	0.0	V-Horn	PK	0.0	40.1	74.0	-33.9	High Channel
2107.230	40.2	-0.3	172.0	1.6	3.0	0.0	V-Horn	PK	0.0	39.9	74.0	-34.1	Low Channel
2131.200	40.0	-0.3	155.0	1.6	3.0	0.0	V-Horn	PK	0.0	39.7	74.0	-34.3	Mid Channel
2131.200	39.9	-0.3	77.0	1.3	3.0	0.0	H-Horn	PK	0.0	39.6	74.0	-34.4	Mid Channel
2107.230	39.6	-0.3	147.0	1.3	3.0	0.0	H-Horn	PK	0.0	39.3	74.0	-34.7	Low Channel

3500.000

4000.000

4500.000

5000.000

3000.000

20.0

10.0

0.0 1000.000

1500.000

2000.000

2500.000

NORTHWEST **Apparent Power Data Sheet EMC** EUT: SB555 Radio used in Model 700C Work Order: INMC0044 Serial Number: 6301FEOC Date: 12/31/02 Customer: INTERMEC Corporation Temperature: 73 Attendees: None Humidity: 34% Cust. Ref. No.: Barometric Pressure 29.75 Tested by: Rod Peloquin Power: Battery Job Site: EV01 TEST SPECIFICATIONS Specification: FCC Part 24E Year: 2002 Method: TIA/EIA-603 Year: 1998 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 Antenna PSTGO-900 / 1900SCI EUT OPERATING MODES Transmitting in PCS mode and 802.11(b) mode **DEVIATIONS FROM TEST STANDARD** No deviations. RESULTS Test Distance (m) 14 Pass 3 Tested By 0.0 -10.0 -20.0 -30.0 -40.0 -50.0 -60.0 -70.0 -80.0 1000.000 2000.000 3000.000 4000.000 5000.000 6000.000 7000.000 8000.000 9000.000 10000.000 Compared to Azimuth Height Polarity EIRP Spec. Limit (MHz) (degrees) (meters) (dBm) (dBm) (dB) Comments 3699.356 71.0 -17.1 -4.1 Low Channel 2.0 H-Horn -13.0 -4.9 Mid Channel 3759.348 49.0 1.9 H-Horn PΚ -17.9-13.03819.360 20.0 1.9 H-Horn PΚ -19.2 -13.0 -6.2 High Channel

V-Horn

V-Horn

V-Horn

PΚ

PΚ

-18.2

-18.3

-20.6

-13.0

-13.0

-13.0

-5.2 High Channel -5.3 Low Channel

-7.6 Mid Channel

3819.360

3699.356

3759.400

344.0

153.0

355.0

1.0

1.0

NORTHWEST **Apparent Power Data Sheet EMC** EUT: SB555 Radio used in Model 700C Work Order: INMC0044 Serial Number: 6301FEOC Date: 12/31/02 Customer: INTERMEC Corporation Temperature: 73 Humidity: 34% Attendees: None Cust. Ref. No.: Barometric Pressure 29.75 Tested by: Rod Peloquin TEST SPECIFICATIONS Power: Battery Job Site: EV01 Specification: FCC Part 22.901(d) Year: 2002 Method: TIA/EIA-603 Year: 1998 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 Antenna PSTGO-900 / 1900SCI **EUT OPERATING MODES** Transmitting in Cellular mode and 802.11(b) mode **DEVIATIONS FROM TEST STANDARD** No deviations. Test Distance (m) RESULTS 16 Pass Other Tested By 0.0 -10.0 -20.0 -30.0 -40.0 -50.0 -60.0 -70.0 -80.0 1000.000 2000.000 3000.000 4000.000 5000.000 6000.000 7000.000 8000.000 9000.000 10000.000 Compared to Azimuth Polarity Detector EIRP Spec. Limit (degrees) (meters) (dBm) (dBm) Comments (MHz) 1673.360 319.0 V-Horn -21.7 -8.7 Mid Channel -13.0 1.2 1697.360 -12.0 High Channel 113.0 H-Horn PΚ

V-Horn

H-Horn

V-Horn

H-Horn

PΚ

PΚ

PΚ

PΚ

-25.0

-22.5

-25.2

-22.8

-13.0

-13.0

-13.0

-13.0

-13.0

-9.5 High Channel

-12.2 Low Channel -9.8 Low Channel

-12.5 Mid Channel

1.3

1.2

1.3

1.2

1.3

19.0

78.0

116.0

176.0

1697.360

1649.360

1649.360

NORTHWEST **OATS DATA SHEET EMC** 10/23/200 Work Order: INMC0044 EUT: SB555 Radio used in Model 700C Serial Number: 6301FEOC Date: 01/02/03 Customer: INTERMEC Corporation Temperature: 72 Humidity: 35% Attendees: None Cust. Ref. No.: Barometric Pressure 29.92 Tested by: Rod Peloquin Power: Battery Job Site: EV01 TEST SPECIFICATIONS Specification: FCC Part 15.247(c) Year: 2001 Method: ANSI C63.4 Year: 1992 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 Antenna PSTGO-900 / 1900SCI **EUT OPERATING MODES** Transmitting in Cellular mode and 802.11(b) mode **DEVIATIONS FROM TEST STANDARD** No deviations. RESULTS Test Distance (m) 18 Pass 3 Other Tested By 80.0 70.0 60.0 50.0 40.0 30.0 20.0 10.0 0.0 1000.000 2000.000 3000.000 4000.000 5000.000 6000.000 7000.000 8000.000 9000.000 10000.000 External Distance Compared to Amplitude Factor Azimuth Height Distance Attenuation Polarity Adjustment Adjusted Spec. Limit Detector (dBuV) (dB) (degrees) (meters) (meters) (dB) (dB) dBuV/m dBuV/m (dB) Comments (MHz) 4176.000 54.0 -1.1 High Channel 47.0 16.0 1.3 3.0 0.0 H-Horn 0.0 52.9 5.9 -1.4 Mid Channel 4126,000 46.6 6.0 360.0 1.7 3.0 0.0 H-Horn ΑV 0.0 52.6 54.0 4076.000 46.3 6.0 86.0 1.3 3.0 0.0 V-Horn ΑV 0.0 52.3 54.0 -1.7 Low Channel 4076.000 45.3 6.0 66.0 1.8 3.0 0.0 H-Horn ΑV 0.0 51.3 54.0 -2.7 Low Channel 4126.000 41.4 6.0 348.0 1.3 3.0 0.0 V-Horn ΑV 0.0 47.4 54.0 -6.6 Mid Channel 4176.000 41.3 342.0 V-Horn 47.2 54.0 -6.8 High Channel 5.9 1.1 3.0 0.0 ΑV 0.0 4176.000 49.0 5.9 16.0 1.3 3.0 0.0 H-Horn PΚ 0.0 54.9 74.0 -19.1 High Channel 4076.000 48.6 6.0 86.0 1.3 3.0 0.0 V-Horn PΚ 0.0 54.6 74.0 -19.4 Low Channel 4126.000 48.4 6.0 360.0 1.7 3.0 0.0 H-Horn PΚ 0.0 54.4 74.0 -19.6 Mid Channel 4076 000 66.0 H-Horn PΚ -19.8 Low Channel 48 2 6.0 18 3.0 0.0 0.0 54 2 74 0 4126.000 44.8 6.0 348.0 1.3 3.0 0.0 V-Horn PK 0.0 50.8 74.0 -23.2 Mid Channel

V-Horn

PΚ

50.0

74.0

-24.0 High Channel

4176.000

44.1

NORTHWEST **OATS DATA SHEET EMC** Work Order: INMC0044 EUT: SB555 Radio used in Model 700C Serial Number: 6301FEOC Date: 01/02/03 Customer: INTERMEC Corporation Temperature: 73 Humidity: 34% Attendees: None Cust. Ref. No.: Barometric Pressure 29.75 Tested by: Rod Peloquin TEST SPECIFICATIONS Power: Battery Job Site: EV01 Specification: FCC Part 15.247(c) Year: 2001 Method: ANSI C63.4 Year: 1992 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

Antenna PSTGO-900 / 1900SCI

EUT OPERATING MODES

4176.000

5.9

145.0

1.2

Transmitting in PCS mode and 802.11(b) mode

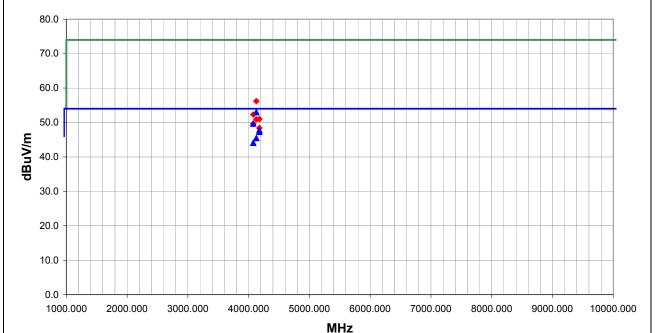
DEVIATIONS FROM TEST STANDARD

No deviations.

RESULTS Test Distance (m) 20 Pass 3

Other

Tested By



	Compared to			Distance			External						
	Spec.	Spec. Limit	Adjusted	Adjustment	Detector	Polarity	Attenuation	Distance	Height	Azimuth	Factor	Amplitude	Freq
Comments	(dB)	dBuV/m	dBuV/m	(dB)			(dB)	(meters)	(meters)	(degrees)	(dB)	(dBuV)	(MHz)
Mid Channel	-1.0	54.0	53.0	0.0	AV	H-Horn	0.0	3.0	1.5	31.0	6.0	47.0	4126.000
Low Channel	-4.3	54.0	49.7	0.0	AV	V-Horn	0.0	3.0	1.1	226.0	6.0	43.7	4076.000
High Channel	-6.2	54.0	47.8	0.0	AV	V-Horn	0.0	3.0	1.2	57.0	5.9	41.9	4176.000
High Channel	-6.7	54.0	47.3	0.0	AV	H-Horn	0.0	3.0	1.3	143.0	5.9	41.4	4176.000
Mid Channel	-8.5	54.0	45.5	0.0	AV	V-Horn	0.0	3.0	1.2	135.0	6.0	39.5	4126.000
Low Channel	-9.9	54.0	44.1	0.0	AV	H-Horn	0.0	3.0	1.3	221.0	6.0	38.1	4076.000
Mid Channel	-17.8	74.0	56.2	0.0	PK	H-Horn	0.0	3.0	1.5	31.0	6.0	50.2	4126.000
Low Channel	-21.7	74.0	52.3	0.0	PK	V-Horn	0.0	3.0	1.1	226.0	6.0	46.3	4076.000
High Channel	-23.0	74.0	51.0	0.0	PK	H-Horn	0.0	3.0	1.3	143.0	5.9	45.1	4176.000
Mid Channel	-23.1	74.0	50.9	0.0	PK	V-Horn	0.0	3.0	1.2	135.0	6.0	44.9	4126.000
Low Channel	-24.4	74.0	49.6	0.0	PK	H-Horn	0.0	3.0	1.3	221.0	6.0	43.6	4076.000
l					D14								44=0.000

V-Horn

0.0

0.0

48.4

74.0

-25.6 High Channel

NORTHWEST **Apparent Power Data Sheet EMC** EUT: SB555 Radio used in Model 700C Work Order: INMC0044 Serial Number: 6301FEOC Date: 12/31/02 Customer: INTERMEC Corporation Temperature: 75 Attendees: None Humidity: 33% Cust. Ref. No.: Barometric Pressure 29.75 Tested by: Rod Peloquin Power: Battery Job Site: EV01 TEST SPECIFICATIONS Specification: FCC Part 24E Method: TIA/EIA-603 Year: 2002 Year: 1998 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 Antenna PSTGO-900 / 1900SCI EUT OPERATING MODES Transmitting in Channel 526 (1876MHz) PCS mode and Channel 1 (2412MHz) 802.11(b) mode DEVIATIONS FROM TEST STANDARD No deviations. RESULTS Test Distance (m) Run # Pass Other Tested By: 0.0 -10.0 -20.0 -30.0 -40.0 -50.0 -60.0 -70.0 -80.0 10000.000 14000.000 18000.000 11000.000 12000.000 13000.000 15000.000 16000.000 17000.000 MHz

									Compared to
Freq		Azimuth	Height		Polarity	Detector	EIRP	Spec. Limit	Spec.
(MHz)		(degrees)	(meters)				(dBm)	(dBm)	(dB)
16844.000		135.0	1.2		H-Horn	PK	-40.4	-13.0	-27.4
16844.000		140.0	1.2		V-Horn	PK	-39.8	-13.0	-26.8

NORTHWEST **Apparent Power Data Sheet EMC** EUT: SB555 Radio used in Model 700C Work Order: INMC0044 Date: 12/31/02 Serial Number: 6301FEOC Customer: INTERMEC Corporation Temperature: 73 Attendees: None Humidity: 34% Cust. Ref. No.: Barometric Pressure 29.75 Tested by: Rod Peloquin Power: Battery Job Site: EV01 TEST SPECIFICATIONS Specification: FCC Part 24E Method: TIA/EIA-603 Year: 2002 Year: 1998 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 Antenna PSTGO-900 / 1900SCI **EUT OPERATING MODES** Transmitting in Channel 930 (1896MHz) PCS mode and Channel 6 (2437MHz) 802.11(b) mode DEVIATIONS FROM TEST STANDARD No deviations. RESULTS Test Distance (m) Run # Pass Other Tested By: 0.0 -10.0 -20.0 -30.0 -40.0 -50.0 -60.0 -70.0 -80.0 10000.000 14000.000 18000.000 11000.000 12000.000 13000.000 15000.000 16000.000 17000.000 MHz Compared to

Polarity

H-Horn

V-Horn

Detector

EIRP

(dBm)

-42.2

Spec. Limit

(dBm)

-13.0

Spec.

(dB)

-29.2

Height

(meters)

1.0

Azimuth

(degrees)

180.0

Freq

(MHz) 17066.000