

DECLARATION OF COMPLIANCE FCC PARTS 24(E) & 22(H) EMC MEASUREMENTS

Test Lab

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Applicant Information

ITRONIX CORPORATION
801 South Stevens Street
Spokane, WA 99204
United States

FCC IDENTIFIER: KBCIX100XA555WLBT
IC IDENTIFIER: 1943A-IX100Xb
Model(s): IX100XA555WLBT

FCC Rule Part(s): 47 CFR §24(E), §22(H), §2
IC Rule Part(s): RSS-133 Issue 2, RSS-132 Issue 1
Test Procedure(s): FCC 47 CFR §24(E), §22(H), §2; ANSI TIA/EIA-603-A-2001
IC RSS-133 Issue 2, RSS-132 Issue 1
FCC Device Classification: PCS Licensed Transmitter worn on body (PCT)
IC Device Classification: 2GHz Personal Communication Services (RSS-133 Issue 2)
800 MHz Cellular Telephones Employing New Technologies (RSS-132 Issue 1)
Device Description: Rugged Handheld PC with Sierra Wireless AirCard 555/550 PCS/Cellular CDMA Modem
(co-located with USI WM-BB-AG-01 802.11b and Bluetooth Combo Transmitter)
Class II Permissive Change(s):
1. Add Itronix IX100X Vehicle Cradle (P/N: 50-0107-001)
2. Add MaxRad 3 dBi Gain Vehicle-Mount Antenna (P/N: WMLPVDB800/1900)

Tx Frequency Range(s): 1851.25 - 1908.75 MHz (PCS CDMA)
824.70 - 848.31 MHz (Cellular CDMA)
Max. ERP/EIRP Measured: 0.078 Watts (18.93 dBm) EIRP - PCS CDMA (MaxRad Vehicle-Mount Antenna)
0.080 Watts (19.05 dBm) ERP - Cellular CDMA (MaxRad Vehicle-Mount Antenna)
Conducted Power Tested: 23.0 dBm (PCS CDMA)
23.0 dBm (Cellular CDMA)
Emission Designator(s): 1M25F9W
Frequency Tolerance(s): 150 Hz (PCS CDMA)
300 Hz (Cellular CDMA)
Antenna Type(s) Tested: MaxRad 3 dBi Gain Vehicle-Mount (P/N: WMLPVDB800/1900)
Power Source(s) Tested: 12V AC Adapter (Magic Power Model: MPE-C045-12-R-1)

This wireless device has demonstrated compliance with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in FCC 47 CFR §24(E), §22(H), §2, Industry Canada RSS-133 Issue 2, RSS-132 Issue 1, and ANSI TIA/EIA-603-A-2001.

I attest to the accuracy of data. All measurements reported herein were performed by me or were made under my supervision and are correct to the best of my knowledge and belief. I assume full responsibility for the completeness of these measurements and vouch for the qualifications of all persons taking them.

This test report shall not be reproduced partially, or in full, without the prior written approval of Celltech Labs Inc. The results and statements contained in this report pertain only to the device(s) evaluated.



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FCC PART 24(E) & 22(H) EMC MEASUREMENT REPORT

1.1 SCOPE

This report describes the measurements made and results collected during the Electromagnetic emissions testing of the Itronix Corporation IX100X Rugged Handheld PC incorporating the internal Sierra Wireless AirCard 555/550 Dual-Band PCS/Cellular CDMA PCMCIA Modem (co-located with USI WM-BB-AG-01 802.11b / Bluetooth Combo Transmitter and internal antennas), with the Class II Permissive Change(s) adding the Itronix IX100X Vehicle Cradle and MaxRad 3 dBi Gain Vehicle-Mount Antenna. The measurement results were applied against the EMC requirements and limits outlined in the technical rules and regulations set forth in the Federal Communication Commission Code of Federal Regulations Title 47 Parts 24(E), 22(H), 2; and RSS-133 Issue 2, RSS-132 Issue 1 (Provisional) of Industry Canada.

2.1 GENERAL INFORMATION / DEVICE DESCRIPTION

APPLICANT		ITRONIX CORPORATION		801 South Stevens Street, Spokane, WA 99210				
FCC IDENTIFIER		KBCIX100XA555WLBT						
Model(s)		IX100XA555WLBT						
Serial No.(s)		E03020400906015	AirCard 555		Production Unit			
		510495001-U5103-0025	IX100X		Identical Prototype			
		05	Vehicle Cradle		Identical Prototype			
Device Description		Rugged Handheld PC with Sierra Wireless AirCard 555/550 Dual-Band CDMA PCMCIA Modem						
Co-located Transmitter(s)		Universal Scientific Industrial WM-BB-AG-01 802.11b & Bluetooth Combo Module						
Class II Permissive Change(s)		1. Add Vehicle Cradle	Itronix IX100X		P/N: 50-0107-001			
		2. Add Vehicle-Mount Antenna	MaxRad 3 dBi Gain		P/N: WMLPVDB800/1900			
Transmitter Operating Configuration(s)		CDMA & 802.11b co-located transmitters do not transmit simultaneously						
		Vehicle Cradle and Vehicle-Mount Antenna for use with CDMA Transmitter Only						
FCC	Rule Part(s)	§24(E)	§22(H)		§2			
	Classification(s)	PCS Licensed Transmitter worn on body (PCT)						
IC	Rule Part(s)	RSS-133 Issue 2		RSS-132 Issue 1 (Provisional)				
	Classification(s)	2GHz Personal Communication Services		800MHz CDMA Cellular Transmitter				
Tx Frequency Range(s)		1851.25 - 1908.75 MHz		PCS CDMA				
		824.70 - 848.31 MHz		Cellular CDMA				
RF Conducted Output Power Level(s) Tested		23.0 dBm		PCS CDMA				
		23.0 dBm		Cellular CDMA				
Frequency Tolerance(s)		150 Hz		PCS CDMA				
		300 Hz		Cellular CDMA				
Emission Designator(s)		1M25F9W						
Power Source(s) Tested		Magic Power AC Adapter		12 V		Model: MPE-C045-12-R-1		
Antenna Type(s) Tested		Description		Max. RF Output Power Measured (EIRP/ERP)				Height
		MaxRad 3 dBi Gain Vehicle-Mount		0.078	W	18.93	dBm	
				0.080	W	19.05	dBm	ERP

FCC PART 24(E) & 22(H) EMC MEASUREMENT REPORT (Continued)

3.1 TEST EQUIPMENT LIST

Equipment Type	Model	Serial No.	Calibration Due Date
HP Signal Generator	8648D (9kHz-4.0GHz)	3847A00611	April 2005
Rohde & Schwarz Signal Generator	SMR 20 (10MHz-40GHz)	100104	April 2005
Gigatronics Power Meter	8651A	8650137	April 2005
Gigatronics Power Meter	8652A	1835267	April 2005
Gigatronics Power Sensor	80701A (0.05-18GHz)	1833535	April 2005
Gigatronics Power Sensor	80701A (0.05-18GHz)	1833542	April 2005
Gigatronics Power Sensor	80701A (0.05-18GHz)	1834350	April 2005
Amplifier Research Power Amp.	5S1G4 (5W, 800MHz-4.2GHz)	26235	N/A
Amplifier Research Power Amp.	10W1000C (0.5 – 1 GHz)	27887	N/A
Microwave System Amplifier	HP 83017A (0.5-26.5GHz)	3123A00587	N/A
Network Analyzer	HP 8753E (30kHz-3GHz)	US38433013	April 2005
Frequency Counter	HP 53181A (3GHz)	3736A05175	April 2005
DC Power Supply	HP E3611A	KR83015294	N/A
Multi-Device Controller	EMCO 2090	9912-1484	N/A
Mini Mast	EMCO 2075	0001-2277	N/A
Turntable	EMCO 2080-1.2/1.5	0002-1002	N/A
Double Ridged Horn Antenna	ETS 3115 (1-18GHz) TX Substitution Antenna (Horn SN6267)	6267	Oct 2004
Double Ridged Horn Antenna	ETS 3115 (1-18GHz)	6276	Oct 2004
Standard Gain Horn Antenna	ETS 3160-09 TX Substitution Antenna (3160-09)	9810-1123	N/A
Standard Gain Horn Antenna	ETS 3160-09	1263	N/A
Bilog Antenna	Schaffner CBL6111A	1607	Jan 2005
Roberts Dipole Antenna	3121C-DB4 TX Substitution Antenna (B_3121C)	0003-1494	Dec 2004
Roberts Dipole Antenna	3121C-DB4	0003-1498	Dec 2004
Spectrum Analyzer	HP 8594E	3543A02721	April 2005
Spectrum Analyzer	HP E4408B	US39240170	Dec 2004
Shielded Screen Room	Lindgren R.F. 18W-2/2-0	16297	N/A
Environmental Chamber	ESPEC ECT-2 (Temperature/Humidity)	0510154-B	Feb 2005
Directional Coupler	Amplifier Research DC7154 (0.8-4.2 GHz)	26197	N/A
Directional Coupler	Pasternack PE2214-20	00078	N/A
High Pass Filter	Microwave Circuits HIG318G1	0001DC0020	N/A
High Pass Filter	Microwave Circuits H02G18G1	0001DC0020	N/A
30 dB Attenuator	Pasternack PE7019-30	00065	N/A
Itronix Laptop PC	IX260+	ZZGEG4112ZZ9777	N/A

Test Report S/N:	073004KBC-T545-E24C	Test Date(s):	August 18-27, 2004
Test Type:	FCC Part 24E/22H EMC Measurements (Class II Permissive Change)		

FCC PART 24(E) & 22(H) EMC MEASUREMENT REPORT (Continued)

4.1 SUMMARY

The data in this measurement report demonstrates that the ITRONIX CORPORATION Model: IX100XA555WLBT FCC ID: KBCIX100XA555WLBT Rugged Handheld PC with Sierra Wireless AirCard 555/550 Dual-Band PCS/Cellular CDMA PCMCIA Modem (co-located with USI WM-BB-AG-01 802.11b / Bluetooth Combo Transmitter and internal antennas), with the Class II Permissive Change adding Itronix IX100X Vehicle Cradle and MaxRad 3 dBi Gain Vehicle-Mount Antenna, complies with the requirements of FCC Rule Parts §24(E), §22(H), §2; and RSS-133 Issue 2, RSS-132 Issue 1 (Provisional) of Industry Canada.

APPENDIX A - RF OUTPUT POWER MEASUREMENT - §2.1046

A.1. MEASUREMENT PROCEDURE

The average conducted power levels were measured with a Gigatronics 8652A Universal Power Meter using modulated average power mode. An offset was entered into the power meter to correct for the losses of the attenuator and cable installed before the sensor input. The transmitter terminal was coupled to the power meter and the DUT was placed into test mode via internal software. All subsequent tests were performed using the same tune-up procedures.

A.2. MEASUREMENT DATA


Conducted Power Measurements	
Frequency (MHz)	Average Power (dBm)
824.70	23.0
835.89	23.0
848.31	23.0
1851.25	23.0
1880.00	23.0
1908.75	23.0

APPENDIX B - EFFECTIVE ISOTROPIC RADIATED POWER OUTPUT - §24.232(b)

B.1. MEASUREMENT PROCEDURE

EIRP measurements were performed on a 3-meter open area test site using the Signal Substitution Method in accordance with ANSI TIA/EIA-603-A-2001. The Sierra Wireless AirCard 555 test software installed in the IX100X Handheld PC was used to control the DUT in the CDMA “always up” power control mode. The DUT was placed in the vehicle cradle and positioned on the turntable. The vehicle-mount antenna was fixed on a 50 cm x 50 cm ground plane placed on a Styrofoam support at a distance of 3 meters from the receive antenna. The vehicle-mount antenna was connected to the vehicle cradle via a 17-foot LMR-195 cable representing a typical vehicle-mount installation. The maximum field intensity was determined by rotating the DUT approximately 360 degrees and changing the height of the receive antenna from 1 to 4 meters. Once the maximum emission was found, the spectrum analyzer was set to peak hold and the uncorrected emission value recorded for each of the low, mid and high channels tested. The DUT was then substituted with a horn antenna. A signal, simulating the DUT emission was generated, amplified, and fed through a directional coupler to the substitution antenna. The height and direction of the receive antenna as well as the direction of the substitution horn was adjusted for a maximum received signal. The power applied to the horn was then adjusted to give the same field strength reading as previously recorded for the DUT and the power at the forward coupler port recorded. The substitution antenna was then replaced with a calibrated power sensor, the forward coupler port power level confirmed and the power applied to the horn antenna recorded. The EIRP level was determined by correcting the applied feed point power with the addition of the horn gain.

B.2. MEASUREMENT DATA

		Project Number:	073004-547KBC		Standard:	FCC24 232b	
		Company:	Itronix		Test Start Date:	18-Aug-04	
		Product:	IX100 with AC555		Test End Date:	27-Aug-04	

Polarity	Distance	Substitution Antenna Type	Channel	Frequency	Corrected Field Strength	Substituted SA Signal Level (uncorrected)	Power Applied to Antenna	Antenna Gain	Carrier EIRP Level		EIRP Limit		Margin	Pass/Fail
				MHz	dBuV/m	dBuV	dBm	dB	dBm	Watts	dBm	Watts		
H	3	Horn SN6276	25	1851.25	110.69	78.69	2.77	6.67	9.44	0.009	33.01	2.00	23.57	PASS
H	3	Horn SN6276	600	1880.00	108.32	76.21	2.96	6.68	9.64	0.009	33.01	2.00	23.37	PASS
H	3	Horn SN6276	1175	1908.75	107.74	75.51	3.61	6.68	10.29	0.011	33.01	2.00	22.72	PASS
V	3	Horn SN6276	25	1851.25	117.22	85.22	10.34	6.67	17.01	0.050	33.01	2.00	16.00	PASS
V	3	Horn SN6276	600	1880.00	118.19	86.08	10.94	6.68	17.62	0.058	33.01	2.00	15.39	PASS
V	3	Horn SN6276	1175	1908.75	119.33	87.10	12.25	6.68	18.93	0.078	33.01	2.00	14.08	PASS

Note:	Horn Antenna used for substitution
Formulae:	EIRP Level (dBm) = Power applied to Antenna (dBm) + Antenna Gain (dB)
	Margin (dB) = Limit (dBm) - Level (dBm)


PCS CDMA - DUT with IX100X Vehicle Cradle & MaxRad 3 dBi Gain Vehicle-Mount Antenna

APPENDIX C - EFFECTIVE RADIATED POWER OUTPUT - §22.913

C.1. MEASUREMENT PROCEDURE

ERP measurements were performed on a 3-meter open area test site using the Signal Substitution Method in accordance with ANSI TIA/EIA-603-A-2001. The Sierra Wireless AirCard 555 test software installed in the IX100X Handheld PC was used to control the DUT in the CDMA “always up” power control mode. The DUT was placed in the vehicle cradle and positioned on the turntable. The vehicle-mount antenna was fixed on a 50 cm x 50 cm ground plane placed on a Styrofoam support at a distance of 3 meters from the receive antenna. The vehicle-mount antenna was connected to the vehicle cradle via a 17-foot LMR-195 cable representing a typical vehicle-mount installation. The maximum field intensity was determined by rotating the DUT approximately 360 degrees and changing the height of the receive antenna from 1 to 4 meters. Once the maximum emission was found, the spectrum analyzer was set to peak hold and the uncorrected emission value recorded for each of the low, mid and high channels tested. The DUT was then substituted with a dipole antenna. A signal, simulating the DUT emission was generated, amplified, and fed through a directional coupler to the substitution antenna. The height and direction of the receive antenna as well as the direction of the substitution dipole was adjusted for a maximum received signal. The power applied to the dipole was then adjusted to give the same field strength reading as previously recorded for the DUT and the power at the forward coupler port recorded. The substitution antenna was then replaced with a calibrated power sensor, the forward coupler port power level confirmed and the power applied to the dipole antenna recorded. The ERP level was determined by correcting the applied feed point power with the addition of the dipole gain.

C.2. MEASUREMENT DATA

		Project Number:		073004-547KBC		Standard:		FCC22.913						
		Company:		Itronix		Test Start Date:		18-Aug-04						
		Product:		IX100 with AC555		Test End Date:		27-Aug-04						
Polarity	Distance	Substitution Antenna Type	Channel	Frequency	Corrected Field Strength	Substituted SA Signal Level (uncorrected)	Power Applied to Antenna	Antenna Gain	Carrier ERP Level		ERP Limit		Margin	Pass/Fail
				MHz	dBuV/m	dBuV	dBm	dBi	dBm	Watts	dBm	Watts		
H	3	B_3121C	1013	824.70	106.63	81.46	9.92	1.30	9.08	0.008	38.45	7.00	29.37	PASS
H	3	B_3121C	363	835.89	104.72	79.26	8.39	1.43	7.68	0.006	38.45	7.00	30.77	PASS
H	3	B_3121C	777	848.31	105.86	80.28	9.35	1.58	8.79	0.008	38.45	7.00	29.66	PASS
V	3	B_3121C	1013	824.70	112.95	87.78	19.89	1.30	19.05	0.080	38.45	7.00	19.40	PASS
V	3	B_3121C	363	835.89	113.14	87.68	18.47	1.43	17.76	0.060	38.45	7.00	20.69	PASS
V	3	B_3121C	777	848.31	112.83	87.25	18.48	1.58	17.92	0.062	38.45	7.00	20.53	PASS
Note: Dipole Antenna used for substitution														
Formulae: ERP Level (dBm) = Power applied to Antenna (dBm) + Antenna Gain (dBi) - 2.14 Margin (dB) = Limit (dBm) - Level (dBm)														
Cellular CDMA - DUT with IX100X Vehicle Cradle & MaxRad 3 dBi Gain Vehicle-Mount Antenna														

APPENDIX D - FIELD STRENGTH OF SPURIOUS RADIATION - §2.1053, §24.238, §22.917

D.1. MEASUREMENT PROCEDURE

EIRP measurements were performed on a 3-meter open area test site using the Signal Substitution Method in accordance with ANSI TIA/EIA-603-A-2001. The Sierra Wireless AirCard 555 test software installed in the IX100X Handheld PC was used to control the DUT in the CDMA “always up” power control mode. The DUT was placed in the vehicle cradle and positioned on the turntable. The vehicle-mount antenna was fixed on a 50 cm x 50 cm ground plane placed on a Styrofoam support at a distance of 3 meters from the receive antenna. The vehicle-mount antenna was connected to the vehicle cradle via a 17-foot LMR-195 cable representing a typical vehicle-mount installation. A frequency band from just above the highest transmitted frequency to just above the 10th harmonic of the highest transmitted frequency was divided into smaller bands corresponding to measurement equipment setups and capabilities. The measurement equipment including carrier blocking filters, was optimized for maximum sensitivity for each band while ensuring no saturation occurred in any gain stages that may be present. It was also necessary to measure the bands above 10 GHz at a distance of 1 meter versus the 3-meter measurement distance used for the lower bands. The applicable bands were chosen from: 800 MHz to 1 GHz, 1 GHz to 5 GHz, 5 GHz to 10 GHz, 10 GHz to 18 GHz and 18 GHz to 20 GHz. The maximum field intensity in each of these bands were determined by rotating the DUT approximately 360 degrees and changing the height of the receive antenna from 1 to 4 meters while maintaining the spectrum analyzer trace in max hold. The stored trace was then evaluated to determine any significant emissions that should be evaluated by substitution. The frequency and uncorrected field strength level for each significant emission was recorded. To describe the noise floor, the maximum level associated with a number of frequencies within the band were also recorded. The DUT was then substituted with a transmit antenna. A signal simulating the DUT emission was generated for each of the signals recorded; it was amplified and fed through a directional coupler to the substitution antenna. The height and direction of the receive antenna as well as the direction of the substitution horn was adjusted for a maximum received signal. The power applied to the transmit antenna was then adjusted to give the same field strength reading as previously recorded for the DUT and the power at the forward coupler port recorded. The substitution antenna was then replaced with a calibrated power sensor, the forward coupler port power level confirmed and the power applied to the horn antenna recorded. The radiated power level was determined by correcting the applied feed point power with the addition of the antenna gain.

(See next pages for measurement data)

D.2. MEASUREMENT SETUP

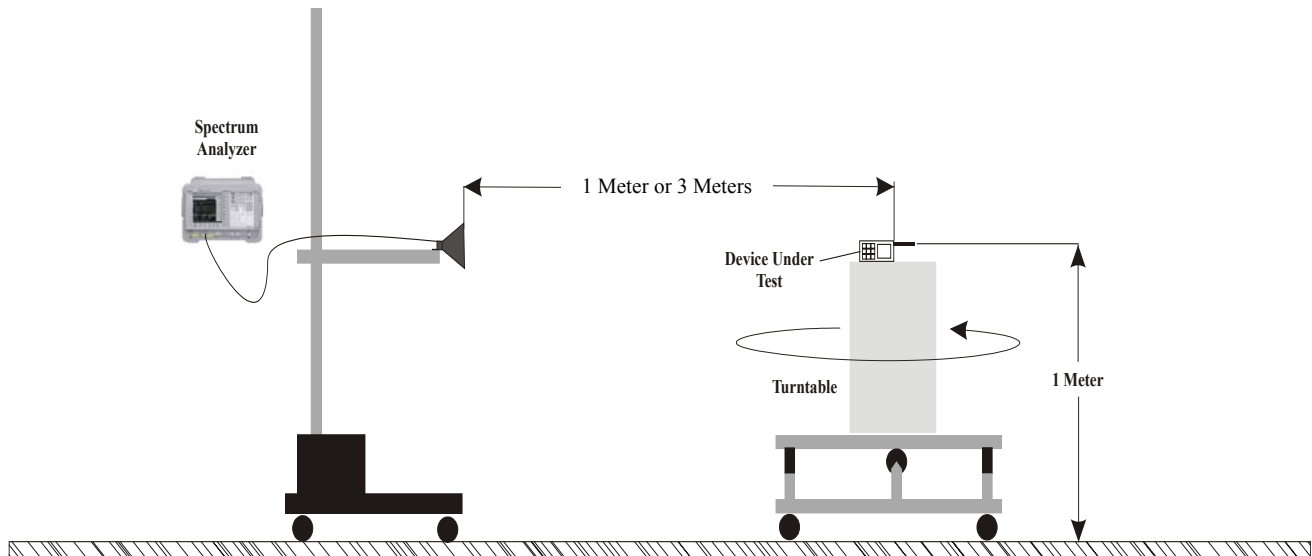


Figure 1. Radiated Spurious Measurement Test Setup Diagram
(3 Meters for Frequencies < 10 GHz - 1 Meter for Frequencies ≥ 10 GHz)

FIELD STRENGTH OF SPURIOUS RADIATION - §2.1053, §24.238

D.3. MEASUREMENT DATA

DUT with Itronix IX100X Vehicle Cradle & MaxRad 3 dBi Gain Vehicle-Mount Antenna - PCS CDMA

		Project Number:		073004-547KBC				Standard:		FCC24.238		
		Company:		Itronix				Test Start Date:		18-Aug-04		
		Product:		IX100 with AC555				Test End Date:		27-Aug-04		


Polarity	Distance	Substitution Antenna Type	Channel	Frequency	Corrected Field Strength	Substituted SA Signal Level (uncorrected)	Power Applied to Antenna	Antenna Gain	Emission EIRP Level	EIRP Limit	Margin	Pass/Fail
				MHz	dBuV/m	dBuV	dBm	dBi	dBm	dBm*	dB	
H	3	Horn SN6267	25	2000.00	67.38	34.70	-41.84	6.70	-35.14	-13.00	22.14	PASS
H	3	Horn SN6267	25	3701.88	49.71	47.57	-52.69	8.06	-44.63	-13.00	31.63	PASS
H	3	Horn SN6267	25	4952.50	49.25	44.10	-52.10	8.61	-43.49	-13.00	30.49	PASS
H	3	Horn SN6267	25	7129.37	54.08	45.30	-48.00	9.20	-38.80	-13.00	25.80	PASS
H	1	Horn SN6267	25	14740.00	60.53	44.90	-52.80	11.05	-41.76	-13.00	28.76	PASS
H	1	Horn SN6267	25	17960.00	67.29	45.50	-43.41	8.08	-35.33	-13.00	22.33	PASS
H	1	3160-09	25	19800.00	61.16	45.70	-42.12	15.92	-26.20	-13.00	13.20	PASS
V	3	Horn SN6267	25	1871.00	67.18	35.10	-41.39	6.57	-34.82	-13.00	21.82	PASS
V	3	Horn SN6267	25	2116.00	42.63	46.90	-49.67	6.96	-42.71	-13.00	29.71	PASS
V	3	Horn SN6267	25	3703.75	56.14	54.00	-42.26	8.06	-34.20	-13.00	21.20	PASS
V	3	Horn SN6267	25	4840.38	48.39	43.50	-53.19	8.63	-44.56	-13.00	31.56	PASS
V	3	Horn SN6267	25	8372.50	55.35	44.70	-50.16	9.30	-40.86	-13.00	27.86	PASS
V	1	Horn SN6267	25	11108.00	64.43	52.10	-54.38	10.45	-43.93	-13.00	30.93	PASS
V	1	Horn SN6267	25	17994.00	67.01	44.90	-40.52	7.93	-32.59	-13.00	19.59	PASS
V	1	3160-09	25	19902.00	60.41	44.70	-40.28	15.96	-24.32	-13.00	11.32	PASS
H	3	Horn SN6267	600	1098.00	67.17	34.50	-41.93	6.70	-35.24	-13.00	22.24	PASS
H	3	Horn SN6267	600	5616.25	53.48	47.10	-46.63	8.74	-37.89	-13.00	24.89	PASS
H	1	Horn SN6267	600	17930.00	66.90	45.30	-42.08	8.21	-33.87	-13.00	20.87	PASS
H	1	3160-09	600	19892.00	60.97	45.30	-39.34	15.96	-23.38	-13.00	10.38	PASS
V	3	Horn SN6267	600	1999.00	67.38	34.70	-41.39	6.70	-34.69	-13.00	21.69	PASS
V	3	Horn SN6267	600	3761.88	57.19	54.90	-41.14	8.05	-33.09	-13.00	20.09	PASS
V	1	Horn SN6267	600	17976.00	67.04	45.10	-39.75	8.01	-31.74	-13.00	18.74	PASS
V	1	3160-09	600	19706.00	60.68	45.30	-38.94	15.88	-23.06	-13.00	10.06	PASS
H	3	Horn SN6267	1175	1984.00	66.90	34.30	-41.80	6.68	-35.11	-13.00	22.11	PASS
H	3	Horn SN6267	1175	5618.13	51.88	45.50	-48.69	8.74	-39.95	-13.00	26.95	PASS
H	3	Horn SN6267	1175	9295.00	55.84	43.70	-51.35	9.10	-42.26	-13.00	29.26	PASS
H	1	Horn SN6267	1175	17990.00	67.17	45.10	-43.20	7.94	-35.26	-13.00	22.26	PASS
H	1	3160-09	1175	19882.00	61.52	45.90	-38.54	15.95	-22.59	-13.00	9.59	PASS
V	3	Horn SN6267	1175	1891.00	66.46	34.30	-42.36	6.59	-35.77	-13.00	22.77	PASS
V	3	Horn SN6267	1175	8113.75	53.79	43.50	-52.53	9.30	-43.23	-13.00	30.23	PASS
V	1	Horn SN6267	1175	17978.00	66.86	44.90	-39.39	8.00	-31.40	-13.00	18.40	PASS
V	1	3160-09	1175	19974.00	60.68	44.90	-40.95	15.99	-24.96	-13.00	11.96	PASS

<p>Note: Horn Antenna used for substitution All applicable frequency ranges were investigated up to the carrier tenth harmonic and any significant emissions or noise floor level reported for each range.</p> <p>Formulae: Limit = 43 + 10*log(Fundamental Power Level, in watts) below the Fundamental peak power gives -13 dBm EIRP Level (dBm) = Power applied to Antenna (dBm) + Antenna Gain (dBi) Margin (dB) = Limit (dBm) - Level (dBm)</p>												
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FIELD STRENGTH OF SPURIOUS RADIATION - §2.1053, §22.917

MEASUREMENT DATA (Cont.)

DUT with Itronix IX100X Vehicle Cradle & MaxRad 3 dBi Gain Vehicle-Mount Antenna - Cellular CDMA

		Project Number:	073004-547KBC		Standard:	FCC22.917	
		Company:	Itronix		Test Start Date:	18-Aug-04	
		Product:	IX100 with AC555		Test End Date:	27-Aug-04	

Polarity	Distance m	Substitution Antenna Type	Channel	Frequency	Corrected Field Strength	Substituted SA Signal Level (uncorrected)	Power Applied to Antenna	Antenna Gain	Emission ERP Level	ERP Limit	Margin	Pass/Fail
				MHz	dBuV/m	dBuV	dBm	dBi	dBm	dBm*	dB	
H	3	B_3121C	1013	854.00	68.35	42.80	-27.94	1.66	-26.27	-13.00	13.27	PASS
H	3	Horn SN6267	1013	1078.00	67.15	56.90	-46.68	4.09	-42.59	-13.00	29.59	PASS
H	3	Horn SN6267	1013	5792.50	55.34	48.80	-45.62	8.95	-36.67	-13.00	23.67	PASS
V	3	B_3121C	1013	839.00	68.35	42.80	-25.09	1.47	-23.62	-13.00	10.62	PASS
V	3	Horn SN6267	1013	1001.50	62.40	44.50	-45.51	3.71	-41.80	-13.00	28.80	PASS
V	3	Horn SN6267	1013	8421.25	54.60	43.90	-51.31	9.30	-42.01	-13.00	29.01	PASS
H	3	B_3121C	363	810.40	66.84	42.00	-27.74	1.07	-26.67	-13.00	13.67	PASS
H	3	Horn SN6267	363	1127.50	60.60	55.30	-54.26	4.34	-49.92	-13.00	36.92	PASS
H	3	Horn SN6267	363	8100.00	55.15	44.90	-51.60	9.30	-42.30	-13.00	29.30	PASS
V	3	B_3121C	363	859.00	67.91	42.40	-24.56	1.74	-22.82	-13.00	9.82	PASS
V	3	Horn SN6267	363	1073.50	60.40	49.70	-52.15	4.07	-48.08	-13.00	35.08	PASS
V	3	Horn SN6267	363	7570.00	54.11	44.30	-50.38	8.96	-41.42	-13.00	28.42	PASS
H	3	B_3121C	777	854.20	67.25	41.70	-26.95	1.67	-25.28	-13.00	12.28	PASS
H	3	Horn SN6267	777	1000.00	60.55	42.50	-48.34	3.70	-44.64	-13.00	31.64	PASS
H	3	Horn SN6267	777	5783.13	55.37	48.80	-51.35	8.94	-42.41	-13.00	29.41	PASS
H	3	Horn SN6267	777	8698.75	55.76	44.70	-57.07	9.10	-47.97	-13.00	34.97	PASS
V	3	B_3121C	777	920.80	64.22	37.60	-29.52	2.05	-27.47	-13.00	14.47	PASS
V	3	Horn SN6267	777	1129.00	64.85	59.70	-51.56	4.35	-47.22	-13.00	34.22	PASS
V	3	Horn SN6267	777	8785.00	55.17	43.90	-56.73	9.01	-47.72	-13.00	34.72	PASS

<p>Note: Dipole Antenna used for substitution for 1000 MHz and below. Horn Antenna used above 1000 MHz All applicable frequency ranges were investigated up to the carrier tenth harmonic and any significant emissions or noise floor level reported for each range.</p> <p>Formulae: Limit = 43 + 10*log(Fundamental Power Level, in watts) below the Fundamental peak power gives -13 dBm ERP Level (dBm) = Power applied to Antenna (dBm) + Antenna Gain (dBi) - 2.14 Margin (dB) = Limit (dBm) - Level (dBm)</p>												
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