

Itron, Inc.

ADDENDUM TEST REPORT TO 92467-6A

Hand Held AMR, FC300

Tested To The Following Standards:

FCC Part 15 Subpart C Sections 15.207, 15.247
and
RSS 210 Issue 8

Report No.: 92467-6B

Date of issue: January 9, 2012



This test report bears the accreditation symbol indicating that the testing performed herein meets the test and reporting requirements of ISO/IEC 17025 under the applicable scope of EMC testing for CKC Laboratories, Inc.

We strive to create long-term, trust based relationships by providing sound, adaptive, customer first testing services. We embrace each of our customers' unique EMC challenges, not as an interruption to set processes, but rather as the reason we are in business.

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ADMINISTRATIVE INFORMATION

Test Report Information

REPORT PREPARED FOR:

Ittron, Inc.
2111 N. Molter Rd.
Liberty Lake, WA 99019

Representative: Jay Holcomb
Customer Reference Number: 34448

REPORT PREPARED BY:

Joyce Walker
CKC Laboratories, Inc.
5046 Sierra Pines Drive
Mariposa, CA 95338

Project Number: 92467

DATE OF EQUIPMENT RECEIPT:
DATE(S) OF TESTING:

October 26, 2011
October 26, 2011 - December 23, 2011

Revision History

Original: Testing of the Hand Held AMR, FC300SRW to FCC Part 15 Subpart C Sections 15.207, 15.247 and RSS-210 Issue 8.
Addendum A: Testing was repeated with EUT connected to peripheral devices. Old test data was replaced with new test data.
Addendum B: To clarify measurement instrument bandwidth settings.

Report Authorization

The test data contained in this report documents the observed testing parameters pertaining to and are relevant for only the sample equipment tested in the agreed upon operational mode(s) and configuration(s) as identified herein. Compliance assessment remains the client's responsibility. This report may not be used to claim product endorsement by A2LA or any government agencies. This test report has been authorized for release under quality control from CKC Laboratories, Inc.



Steve Behm
Director of Quality Assurance & Engineering Services
CKC Laboratories, Inc.

Test Facility Information



Our laboratories are configured to effectively test a wide variety of product types. CKC utilizes first class test equipment, anechoic chambers, data acquisition and information services to create accurate, repeatable and affordable test results.

TEST LOCATION(S):
CKC Laboratories, Inc.
22116 23rd Drive S.E., Suite A
Bothell, WA 98021-4413

Site Registration & Accreditation Information

Location	CB #	Japan	Canada	FCC
Bothell	US0081	R-2296, C-2506, T-1489 & G-284	3082C-1	318736

SUMMARY OF RESULTS

Standard / Specification: FCC Part 15 Subpart C 15.207, 15.247 and RSS 210 Issue 8

Description	Test Procedure/Method	Results
Radiated Spurious Emissions	FCC Part 15 Subpart C Section 15.247(d)	Pass
Bandedge	FCC Part 15 Subpart C Section 15.247(d)	Pass
Radiated Spurious Emissions	RSS 210 Issue 8	Pass

Conditions During Testing

This list is a summary of the conditions noted for or modifications made to the equipment during testing.

Summary of Conditions
Ferrite number 0443164251 was added to the USB cable at the EUT. ISM transmitter power was set to EE03.

EQUIPMENT UNDER TEST (EUT)

The following model has been tested by CKC Laboratories: **FC300SRW**

Since the time of testing the manufacturer has chosen to use the following model name in its place. Any differences between the names does not affect their EMC characteristics and therefore meets the level of testing equivalent to the tested model name shown on the data sheets: **FC300**

EQUIPMENT UNDER TEST

Hand Held AMR

Manuf: Itron, Inc.
Model: FC300SRW
Serial: FC30011242858

Optical Probe

Manuf: uData Net Corp.
Model: PM-500-124
Serial: 092559

Power Supply

Manuf: GlobTek, Inc.
Model: GT-81081-6015-T3
Serial: ROHS100187103109

PERIPHERAL DEVICES

The EUT was tested with following peripheral device.

Support Laptop

Manuf: Dell
Model: PP27L
Serial: 917Q5M

Power Supply

Manuf: SI Tech
Model: 02E03
Serial: 20120-0014829

Power Supply

Manuf: SI Tech
Model: 02E03
Serial: 20120-0014905

USB Converter

Manuf: SI Tech
Model: 2173
Serial: 079536

USB Converter

Manuf: SI Tech
Model: 2172
Serial: 079535

Support Power Supply

Manuf: Dell
Model: FA90PE1-00
Serial: CN-OCM889-73245-9CI-5497-A01

FCC PART 15 SUBPART C

This report contains EMC emissions test results under United States Federal Communications Commission (FCC) 47 CFR 15C requirements for Unlicensed Radio Frequency Devices, Subpart C - Intentional Radiators.

15.207 AC Conducted Emissions

Test Data Sheets

Test Location: CKC Laboratories, Inc. • 22116 23rd Drive SE, Suite A • Bothell, WA 98021 • (425) 402-1717

Customer: **Itron, Inc.**
 Specification: **15.207 AC Mains - Average**
 Work Order #: **92467** Date: **12/23/2011**
 Test Type: **Conducted Emissions** Time: **15:52:07**
 Equipment: **Hand Held AMR** Sequence#: **28**
 Manufacturer: Itron, Inc. Tested By: Randal Clark
 Model: FC300SRW 120V 60Hz
 S/N: FC30011242858

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02872	Spectrum Analyzer	E4440A	7/23/2011	7/23/2013
T1	ANP05435	Attenuator	PE7015-10	9/8/2010	9/8/2012
T2	AN03227	Cable	32026-29080-29080-84	5/2/2011	5/2/2013
T3	ANP05547	Cable	Heliax	7/26/2011	7/26/2013
T4	AN02611	High Pass Filter	HE9615-150K-50-720B	5/26/2010	5/26/2012
T5	AN01492	50uH LISN-Line	3816/2NM	6/14/2011	6/14/2013
	AN01492	50uH LISN-Neutral	3816/2NM	6/14/2011	6/14/2013

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Hand Held AMR*	Itron, Inc.	FC300SRW	FC30011242858
Optical Probe	uData Net Corp.	PM-500-124	092559
Power Supply	GlobTek, Inc.	GT-81081-6015-T3	ROHS100187103109

Support Devices:

Function	Manufacturer	Model #	S/N
Support Laptop	Dell	PP27L	917Q5M

Test Conditions / Notes:

EUT is located on the test table.

Screen is facing sideways. This orientation was determined to be worst case from preliminary measurements.

Support laptop is located on test table.

EUT transmitting at high power ISM High channel (923.8MHz), continuous transmit with modulation enabled.

Manufacturer declares this operational mode represents worst case of all operational modes.

Power is set to EE03.

Temp: 24°C

Humidity: 30%

Pressure: 102.8kPa

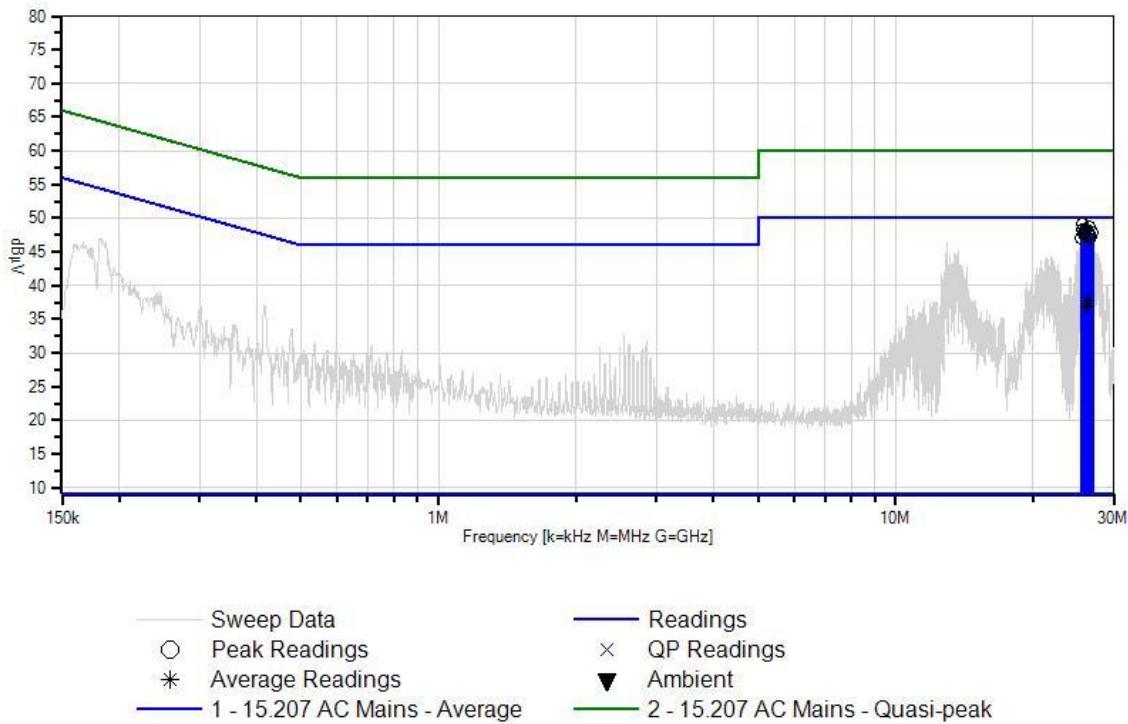
Frequency Range Investigated: 150kHz to 30MHz

Ext Attn: 0 dB

#	Freq MHz	Rdng dB μ V	Reading listed by margin.				Test Lead: Line				
			T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dB μ V	Spec dB μ V	Margin dB	
			T5 dB							Ant	
1	25.676M	38.2	+9.7 -0.7	+0.1	+0.2	+0.2	+0.0	49.1	50.0	-0.9	Line
2	26.464M	37.8	+9.7 -0.7	+0.1	+0.2	+0.2	+0.0	48.7	50.0	-1.3	Line
3	25.574M	37.4	+9.7 -0.7	+0.1	+0.2	+0.2	+0.0	48.3	50.0	-1.7	Line
4	26.067M	37.4	+9.7 -0.7	+0.1	+0.2	+0.2	+0.0	48.3	50.0	-1.7	Line
5	26.163M	37.3	+9.7 -0.7	+0.1	+0.2	+0.2	+0.0	48.2	50.0	-1.8	Line
6	25.971M	37.2	+9.7 -0.7	+0.1	+0.2	+0.2	+0.0	48.1	50.0	-1.9	Line
7	26.944M	36.9	+9.7 -0.7	+0.1	+0.2	+0.2	+0.0	47.8	50.0	-2.2	Line
8	25.772M	36.9	+9.7 -0.7	+0.1	+0.2	+0.2	+0.0	47.8	50.0	-2.2	Line
9	25.868M	36.8	+9.7 -0.7	+0.1	+0.2	+0.2	+0.0	47.7	50.0	-2.3	Line
10	26.560M	36.7	+9.7 -0.7	+0.1	+0.2	+0.2	+0.0	47.6	50.0	-2.4	Line
11	26.752M	36.4	+9.7 -0.7	+0.1	+0.2	+0.2	+0.0	47.3	50.0	-2.7	Line
12	25.471M	36.2	+9.7 -0.7	+0.1	+0.2	+0.2	+0.0	47.1	50.0	-2.9	Line
13	26.649M	36.2	+9.7 -0.7	+0.1	+0.2	+0.2	+0.0	47.1	50.0	-2.9	Line
14	26.355M Ave	26.8	+9.7 -0.7	+0.1	+0.2	+0.2	+0.0	37.7	50.0	-12.3	Line
^	26.355M	38.5	+9.7 -0.7	+0.1	+0.2	+0.2	+0.0	49.4	50.0	-0.6	Line
16	26.264M Ave	26.0	+9.7 -0.7	+0.1	+0.2	+0.2	+0.0	36.9	50.0	-13.1	Line
^	26.264M	38.6	+9.7 -0.7	+0.1	+0.2	+0.2	+0.0	49.5	50.0	-0.5	Line

^	26.259M	38.5	+9.7	+0.1	+0.2	+0.2	+0.0	49.4	50.0	-0.6	Line
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CKC Laboratories, Inc. Date: 12/23/2011 Time: 15:52:07 Itron, Inc. WO#: 92467
 15.207 AC Mains - Average Test Lead: Line Line Sequence#: 28 Ext ATTN: 0 dB



Test Location: CKC Laboratories, Inc. • 22116 23rd Drive SE, Suite A • Bothell, WA 98021 • (425) 402-1717

Customer: **Itron, Inc.**
 Specification: **15.207 AC Mains - Average**
 Work Order #: **92467** Date: 12/23/2011
 Test Type: **Conducted Emissions** Time: 3:40:11 PM
 Equipment: **Hand Held AMR** Sequence#: 27
 Manufacturer: Itron, Inc. Tested By: Randal Clark
 Model: FC300SRW 120V 60Hz
 S/N: FC30011242858

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02872	Spectrum Analyzer	E4440A	7/23/2011	7/23/2013
T1	ANP05435	Attenuator	PE7015-10	9/8/2010	9/8/2012
T2	AN03227	Cable	32026-29080-29080-84	5/2/2011	5/2/2013
T3	ANP05547	Cable	Heliax	7/26/2011	7/26/2013
T4	AN02611	High Pass Filter	HE9615-150K-50-720B	5/26/2010	5/26/2012
	AN01492	50uH LISN-Line	3816/2NM	6/14/2011	6/14/2013
T5	AN01492	50uH LISN-Neutral	3816/2NM	6/14/2011	6/14/2013

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Hand Held AMR*	Itron, Inc.	FC300SRW	FC30011242858
Optical Probe	uData Net Corp.	PM-500-124	092559
Power Supply	GlobTek, Inc.	GT-81081-6015-T3	ROHS100187103109

Support Devices:

Function	Manufacturer	Model #	S/N
Support Laptop	Dell	PP27L	917Q5M

Test Conditions / Notes:

EUT is located on the test table.
 Screen is facing sideways. This orientation was determined to be worst case from preliminary measurements.
 Support laptop is located on test table.
 EUT transmitting at high power ISM High channel (923.8MHz), continuous transmit with modulation enabled.
 Manufacturer declares this operational mode represents worst case of all operational modes.
 Power is set to EE03.

Temp: 24°C
 Humidity: 30%
 Pressure: 102.8kPa
 Frequency Range Investigated: 150kHz to 30MHz

Ext Attn: 0 dB

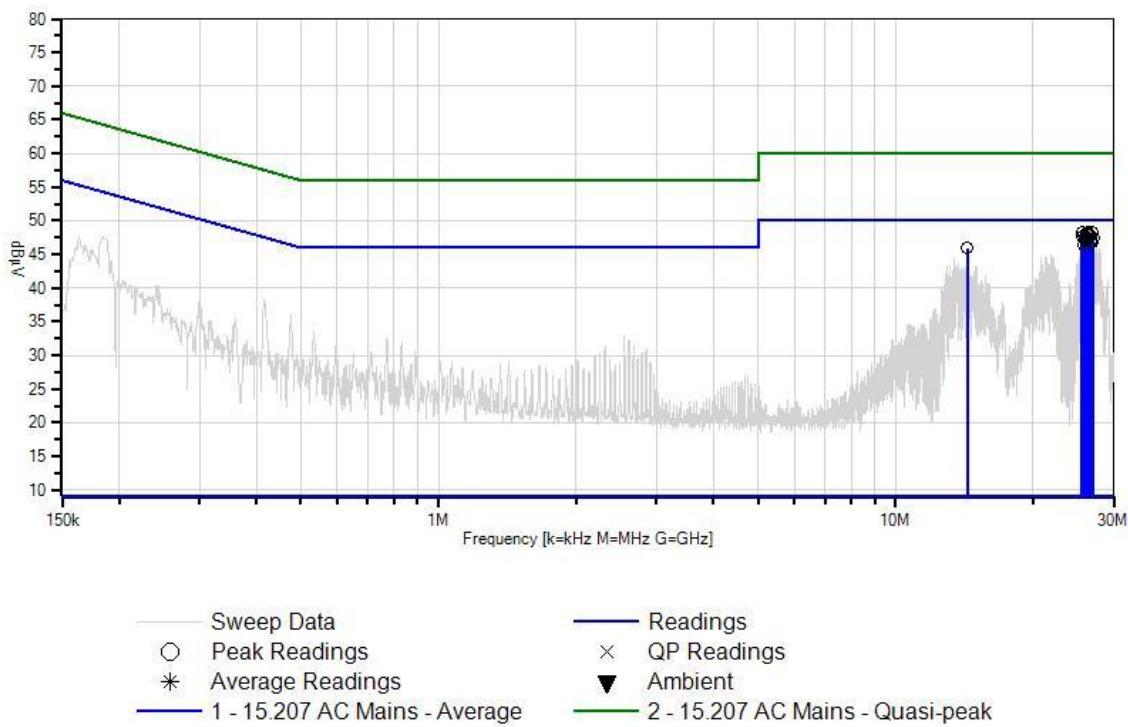
Measurement Data:

Reading listed by margin.

Test Lead: Neutral

#	Freq	Rdng	T1	T2	T3	T4	Dist	Corr	Spec	Margin	Polar
			T5				Table	dB μ V	dB μ V		
			MHz	dB μ V	dB	dB	dB				
1	25.676M	37.5	+9.7 -0.7	+0.1	+0.2	+0.2	+0.0	48.4	50.0	-1.6	Neutr
2	26.951M	37.4	+9.7 -0.7	+0.1	+0.2	+0.2	+0.0	48.3	50.0	-1.7	Neutr
3	26.457M	37.3	+9.7 -0.7	+0.1	+0.2	+0.2	+0.0	48.2	50.0	-1.8	Neutr
4	26.266M	37.1	+9.7 -0.7	+0.1	+0.2	+0.2	+0.0	48.0	50.0	-2.0	Neutr
5	26.355M	37.1	+9.7 -0.7	+0.1	+0.2	+0.2	+0.0	48.0	50.0	-2.0	Neutr
6	26.553M	36.9	+9.7 -0.7	+0.1	+0.2	+0.2	+0.0	47.8	50.0	-2.2	Neutr
7	25.574M	36.8	+9.7 -0.7	+0.1	+0.2	+0.2	+0.0	47.7	50.0	-2.3	Neutr
8	25.971M	36.7	+9.7 -0.7	+0.1	+0.2	+0.2	+0.0	47.6	50.0	-2.4	Neutr
9	27.054M	36.6	+9.7 -0.7	+0.1	+0.2	+0.2	+0.0	47.5	50.0	-2.5	Neutr
10	26.156M	36.4	+9.7 -0.7	+0.1	+0.2	+0.2	+0.0	47.3	50.0	-2.7	Neutr
11	26.074M	36.2	+9.7 -0.7	+0.1	+0.2	+0.2	+0.0	47.1	50.0	-2.9	Neutr
12	26.656M	36.0	+9.7 -0.7	+0.1	+0.2	+0.2	+0.0	46.9	50.0	-3.1	Neutr
13	26.855M	36.0	+9.7 -0.7	+0.1	+0.2	+0.2	+0.0	46.9	50.0	-3.1	Neutr
14	25.772M	35.5	+9.7 -0.7	+0.1	+0.2	+0.2	+0.0	46.4	50.0	-3.6	Neutr
15	14.364M	35.4	+9.7 -0.4	+0.1	+0.2	+0.1	+0.0	45.9	50.0	-4.1	Neutr

CKC Laboratories, Inc. Date: 12/23/2011 Time: 3:40:11 PM Itron, Inc. WO#: 92467
 15.207 AC Mains - Average Test Lead: Neutral Neutral Sequence#: 27 Ext ATTN: 0 dB



Test Setup Photos



15.247(d) Radiated Spurious Emissions

Test Data Sheets

Test Location: CKC Laboratories, Inc. • 22116 23rd Drive SE, Suite A • Bothell, WA 98021 • (425) 402-1717

Customer: **Itron, Inc.**
 Specification: **15.247(d) / 15.209 Radiated Spurious Emissions**
 Work Order #: **92467** Date: **12/23/2011**
 Test Type: **Maximized Emissions** Time: **2:24:32 PM**
 Equipment: **Hand Held AMR** Sequence#: **23**
 Manufacturer: Itron, Inc. Tested By: Randal Clark
 Model: FC300SRW
 S/N: FC30011242858

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02871	Spectrum Analyzer	E4440A	4/22/2011	4/22/2013
T1	AN03227	Cable	32026-29080-29080-84	5/2/2011	5/2/2013
T2	ANP05360	Cable	RG214	11/8/2010	11/8/2012
T3	ANP05366	Cable	RG-214	10/14/2011	10/14/2013
T4	AN00052	Loop Antenna	6502	6/8/2010	6/8/2012

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Hand Held AMR*	Itron, Inc.	FC300SRW	FC30011242858
Power Supply	GlobTek, Inc.	GT-81081-6015-T3	ROHS100187103109
Optical Probe	uData Net Corp.	PM-500-124	092559

Support Devices:

Function	Manufacturer	Model #	S/N
Support Power Supply	Dell	FA90PE1-00	CN-OCM889-73245-9CI-5497-A01
Support Laptop	Dell	PP27L	917Q5M
Power Supply	SI Tech	02E03	20120-0014829
Power Supply	SI Tech	02E03	20120-0014905
USB Converter	SI Tech	2173	079536
USB Converter	SI Tech	2172	079535

Test Conditions / Notes:

EUT is located on the test table.

Screen is facing sideways. This orientation was determined to be worst case from preliminary measurements.

Support laptop is located outside the testing area via USB-fiber extension.

EUT is transmitting at 908MHz (Low), 916MHz (Mid), and 923.8MHz (High).

Power is set to EE03.

Temp: 24°C

Humidity: 30%

Pressure: 102.8kPa

Frequency: 9kHz - 30MHz

Bandwidths: CISPR bandwidths used inside restricted bands, otherwise RBW=100kHz, VBW=3xRBW

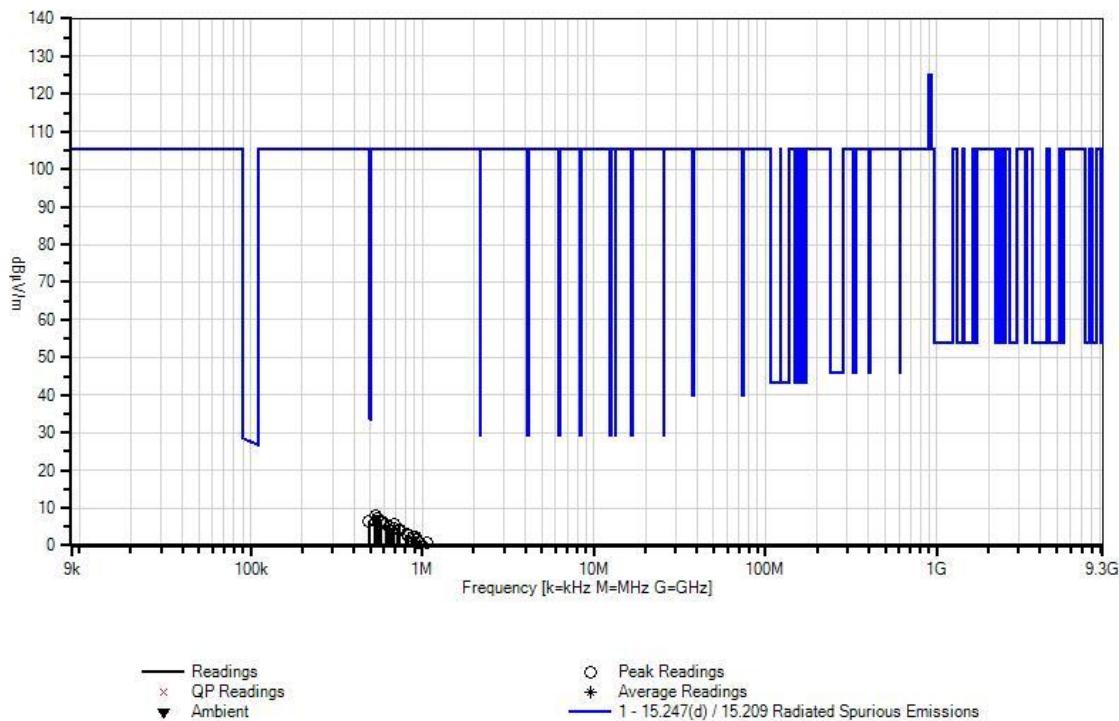
Ext Attn: 0 dB

Measurement Data: Reading listed by margin. **Test Distance: 3 Meters**

#	Freq MHz	Rdng dB μ V	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dB μ V/m	Spec dB μ V/m	Margin dB	Polar Ant
1	532.598k	38.5	+0.0	+0.0	+0.1	+9.4	-40.0	8.0	105.2	-97.2	Horiz 99
2	549.324k	37.7	+0.0	+0.0	+0.1	+9.4	-40.0 -16	7.2	105.2	-98.0	Vert 99
3	490.784k	37.1	+0.0	+0.0	+0.1	+9.4	-40.0 -16	6.6	105.2	-98.6	Vert 99
4	540.961k	37.1	+0.0	+0.0	+0.1	+9.4	-40.0	6.6	105.2	-98.6	Horiz 99
5	568.140k	37.1	+0.0	+0.0	+0.1	+9.4	-40.0	6.6	105.2	-98.6	Horiz 99
6	574.413k	36.8	+0.0	+0.0	+0.1	+9.4	-40.0	6.3	105.2	-98.9	Horiz 99
7	616.227k	36.1	+0.0	+0.0	+0.1	+9.4	-40.0	5.6	105.2	-99.6	Horiz 99
8	681.038k	35.8	+0.0	+0.0	+0.1	+9.6	-40.0	5.5	105.2	-99.7	Horiz 99
9	647.587k	35.5	+0.0	+0.0	+0.1	+9.5	-40.0 -16	5.1	105.2	-100.1	Vert 99
10	649.678k	35.3	+0.0	+0.0	+0.1	+9.5	-40.0	4.9	105.2	-100.3	Horiz 99
11	683.129k	34.7	+0.0	+0.0	+0.1	+9.6	-40.0 -16	4.4	105.2	-100.8	Vert 99
12	737.487k	34.5	+0.0	+0.0	+0.1	+9.6	-40.0	4.2	105.2	-101.0	Horiz 99
13	722.852k	34.5	+0.0	+0.0	+0.1	+9.6	-40.0	4.2	105.2	-101.0	Horiz 99
14	808.571k	33.3	+0.0	+0.0	+0.1	+9.5	-40.0 -16	2.9	105.2	-102.3	Vert 99
15	831.569k	33.1	+0.0	+0.0	+0.1	+9.5	-40.0 -16	2.7	105.2	-102.5	Vert 99
16	877.564k	32.7	+0.0	+0.0	+0.1	+9.6	-40.0	2.4	105.2	-102.8	Horiz 99
17	919.378k	32.7	+0.0	+0.0	+0.1	+9.6	-40.0 -16	2.4	105.2	-102.8	Vert 99

18	931.923k	31.7	+0.0	+0.0	+0.1	+9.6	-40.0	1.4	105.2	-103.8	Horiz 99
19	959.102k	31.2	+0.0	+0.0	+0.1	+9.6	-40.0	0.9	105.2	-104.3	Horiz 99
20	1.057M	31.2	+0.0	+0.0	+0.1	+9.6	-40.0	0.9	105.2	-104.3	Vert 99
21	977.918k	31.1	+0.0	+0.0	+0.1	+9.6	-40.0	0.8	105.2	-104.4	Horiz 99
22	1.039M	30.1	+0.0	+0.0	+0.1	+9.6	-40.0	-0.2	105.2	-105.4	Vert 99
23	1.062M	29.8	+0.0	+0.0	+0.1	+9.6	-40.0	-0.5	105.2	-105.7	Vert 99
24	1.126M	29.5	+0.0	+0.0	+0.1	+9.6	-40.0	-0.8	105.2	-106.0	Horiz 99
25	1.126M	29.4	+0.0	+0.0	+0.1	+9.6	-40.0	-0.9	105.2	-106.1	Vert 99
26	1.204M	28.9	+0.0	+0.0	+0.1	+9.6	-40.0	-1.4	105.2	-106.6	Vert 99
27	1.254M	28.5	+0.0	+0.0	+0.1	+9.6	-40.0	-1.8	105.2	-107.0	Vert 99
28	1.354M	28.0	+0.0	+0.0	+0.1	+9.6	-40.0	-2.3	105.2	-107.5	Horiz 99
29	1.446M	27.5	+0.0	+0.0	+0.1	+9.6	-40.0	-2.8	105.2	-108.0	Vert 99
30	1.603M	26.6	+0.0	+0.0	+0.1	+9.6	-40.0	-3.7	105.2	-108.9	Vert 99

CKC Laboratories, Inc. Date: 12/23/2011 Time: 2:24:32 PM Itron, Inc. WO#: 92467
15.247(d) / 15.209 Radiated Spurious Emissions Test Distance: 3 Meters Horiz Sequence#: 23 Ext ATTN: 0 dB



Test Location: CKC Laboratories, Inc. • 22116 23rd Drive SE, Suite A • Bothell, WA 98021 • (425) 402-1717

Customer: **Itron, Inc.**
 Specification: **15.247(d) / 15.209 Radiated Spurious Emissions**
 Work Order #: **92467** Date: 12/23/2011
 Test Type: **Maximized Emissions** Time: 11:02:13
 Equipment: **Hand Held AMR** Sequence#: 13
 Manufacturer: Itron, Inc. Tested By: Randal Clark
 Model: FC300SRW
 S/N: FC30011242858

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
T1	AN02871	Spectrum Analyzer	E4440A	4/22/2011	4/22/2013
T2	AN01316	Preamp	8447D	5/21/2010	5/21/2012
T3	AN01994	Biconilog Antenna	CBL6111C	3/8/2010	3/8/2012
T4	AN03227	Cable	32026-29080-29080-84	5/2/2011	5/2/2013
T5	ANP05360	Cable	RG214	11/8/2010	11/8/2012
T6	ANP05366	Cable	RG-214	10/14/2011	10/14/2013
T7	ANC00058*	Band Reject Filter		1/2/2012	1/2/2014

*Calibration was performed after testing and data was recalculated to validate proper test results.

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Hand Held AMR*	Itron, Inc.	FC300SRW	FC30011242858
Optical Probe	uData Net Corp.	PM-500-124	092559
Power Supply	GlobTek, Inc.	GT-81081-6015-T3	ROHS100187103109

Support Devices:

Function	Manufacturer	Model #	S/N
Power Supply	SI Tech	02E03	20120-0014829
Power Supply	SI Tech	02E03	20120-0014905
USB Converter	SI Tech	2173	079536
USB Converter	SI Tech	2172	079535
Support Power Supply	Dell	FA90PE1-00	CN-OCM889-73245-9CI-5497-A01
Support Laptop	Dell	PP27L	917Q5M

Test Conditions / Notes:

EUT is located on the test table.
 Screen is facing sideways. This orientation was determined to be worst case from preliminary measurements.
 Support laptop is located outside the testing area via USB-fiber extension.
 EUT is transmitting at 908MHz (Low), 916MHz (Mid), and 923.8MHz (High).
 Power is set to EE03.

Temp: 24°C
 Humidity: 30%
 Pressure: 102.8kPa
 Frequency: 30-1000MHz

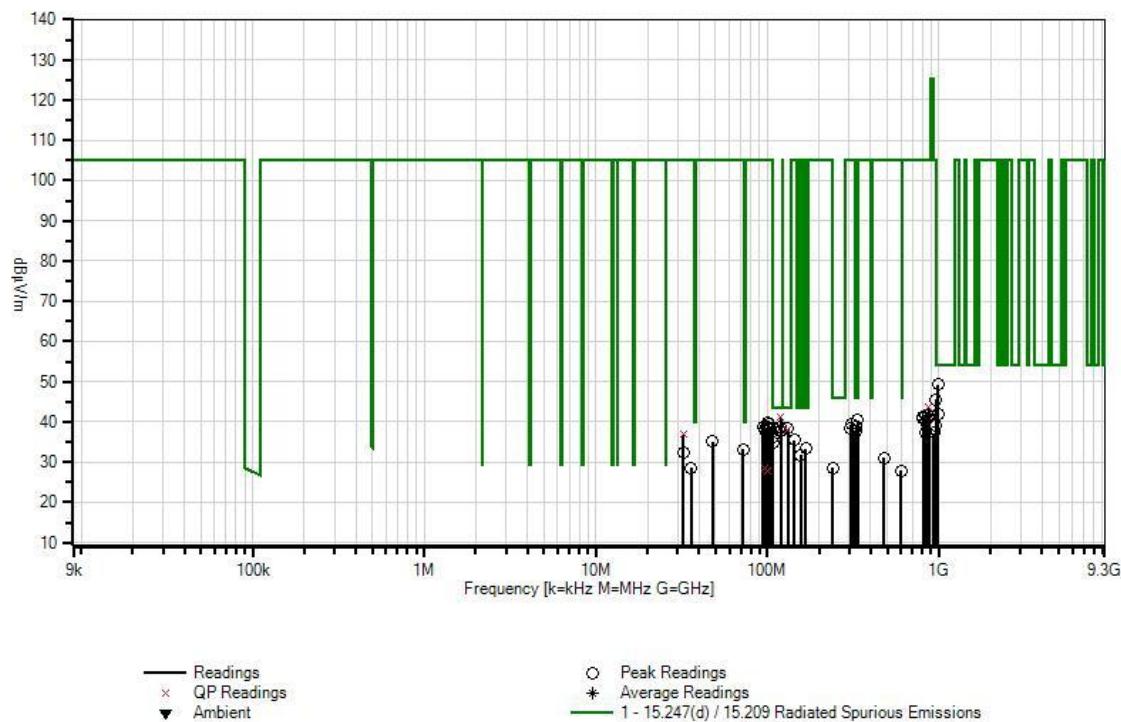
Bandwidths: CISPR bandwidths used inside restricted bands, otherwise RBW=100kHz, VBW=3xRBW

Ext Attn: 0 dB

Measurement Data:			Reading listed by margin.				Test Distance: 3 Meters				
#	Freq	Rdng	T1	T2	T3	T4	Dist	Corr	Spec	Margin	Polar
			T5	T6	T7		Table	dB μ V/m	dB μ V/m		
			MHz	dB μ V	dB	dB	dB				
1	120.003M	57.2	+0.0	-29.2	+11.7	+0.3	+0.0	41.2	43.5	-2.3	Horiz
	QP		+0.6	+0.6	+0.0			97			295
^	120.006M	61.6	+0.0	-29.2	+11.7	+0.3	+0.0	45.6	43.5	+2.1	Horiz
			+0.6	+0.6	+0.0			97			295
3	990.018M	48.0	+0.0	-28.9	+24.4	+0.9	+0.0	49.3	54.0	-4.7	Vert
			+2.1	+2.5	+0.3			224			110
4	120.005M	54.6	+0.0	-29.2	+11.7	+0.3	+0.0	38.6	43.5	-4.9	Vert
			+0.6	+0.6	+0.0			360			116
5	108.005M	55.7	+0.0	-29.3	+10.7	+0.3	+0.0	38.5	43.5	-5.0	Vert
			+0.5	+0.6	+0.0			83			126
6	131.997M	54.2	+0.0	-29.2	+11.7	+0.3	+0.0	38.3	43.5	-5.2	Vert
			+0.6	+0.7	+0.0			168			116
7	132.005M	54.1	+0.0	-29.2	+11.7	+0.3	+0.0	38.2	43.5	-5.3	Horiz
	QP		+0.6	+0.7	+0.0			111			178
^	132.003M	57.3	+0.0	-29.2	+11.7	+0.3	+0.0	41.4	43.5	-2.1	Horiz
			+0.6	+0.7	+0.0			111			178
9	334.867M	51.8	+0.0	-28.6	+14.5	+0.5	+0.0	40.4	46.0	-5.6	Horiz
			+1.0	+1.2	+0.0			360			132
10	119.972M	53.8	+0.0	-29.2	+11.7	+0.3	+0.0	37.8	43.5	-5.7	Vert
			+0.6	+0.6	+0.0						129
11	328.741M	50.5	+0.0	-28.6	+14.3	+0.5	+0.0	38.9	46.0	-7.1	Horiz
			+1.0	+1.2	+0.0			360			132
12	108.030M	53.6	+0.0	-29.3	+10.7	+0.3	+0.0	36.4	43.5	-7.1	Horiz
			+0.5	+0.6	+0.0			360			103
13	326.218M	49.5	+0.0	-28.6	+14.2	+0.5	+0.0	37.8	46.0	-8.2	Horiz
			+1.0	+1.2	+0.0			360			132
14	960.009M	45.3	+0.0	-29.1	+24.1	+0.9	+0.0	45.6	54.0	-8.4	Vert
			+2.0	+2.4	+0.0			199			99
15	167.993M	50.6	+0.0	-29.0	+9.8	+0.4	+0.0	33.4	43.5	-10.1	Vert
			+0.7	+0.8	+0.1						116
16	990.021M	41.0	+0.0	-28.9	+24.4	+0.9	+0.0	42.0	54.0	-12.0	Horiz
			+2.1	+2.5	+0.0			360			295
17	870.000M	44.8	+0.0	-29.3	+23.2	+0.9	+0.0	43.7	105.2	-61.5	Vert
	QP		+1.9	+2.2	+0.0			198			122
^	870.010M	46.6	+0.0	-29.3	+23.2	+0.9	+0.0	45.5	105.2	-59.7	Vert
			+1.9	+2.2	+0.0			198			122
19	870.002M	42.8	+0.0	-29.3	+23.2	+0.9	+0.0	41.7	105.2	-63.5	Horiz
			+1.9	+2.2	+0.0			360			132
20	840.001M	42.6	+0.0	-29.3	+22.9	+0.9	+0.0	41.4	105.2	-63.8	Vert
			+1.9	+2.2	+0.2			353			112
21	810.062M	43.4	+0.0	-29.4	+22.6	+0.8	+0.0	41.3	105.2	-63.9	Horiz
			+1.8	+2.1	+0.0			360			132
22	809.942M	42.8	+0.0	-29.4	+22.6	+0.8	+0.0	40.7	105.2	-64.5	Vert
			+1.8	+2.1	+0.0						129
23	839.972M	41.6	+0.0	-29.3	+22.9	+0.9	+0.0	40.2	105.2	-65.0	Vert
			+1.9	+2.2	+0.0						129

24	100.513M	57.8	+0.0 +0.5	-29.3 +0.5	+10.0 +0.0	+0.3	+0.0	39.8	105.2	-65.4	Vert 129
25	101.714M	57.5	+0.0 +0.5	-29.3 +0.5	+10.1 +0.0	+0.3	+0.0	39.6	105.2	-65.6	Vert 129
26	312.044M	51.4	+0.0 +1.0	-28.5 +1.2	+13.8 +0.0	+0.5	+0.0	39.4	105.2	-65.8	Horiz 132
27	959.992M	38.7	+0.0 +2.0	-29.1 +2.4	+24.1 +0.0	+0.9	+0.0	39.0	105.2	-66.2	Horiz 132
28	100.010M	56.8	+0.0 +0.5	-29.3 +0.5	+9.9 +0.0	+0.3	+0.0	38.7	105.2	-66.5	Vert 99
29	97.630M	57.0	+0.0 +0.5	-29.3 +0.5	+9.7 +0.0	+0.3	+0.0	38.7	105.2	-66.5	Vert 129
30	94.686M	57.3	+0.0 +0.5	-29.3 +0.5	+9.4 +0.0	+0.3	+0.0	38.7	105.2	-66.5	Vert 129
31	306.158M	50.7	+0.0 +0.9	-28.5 +1.2	+13.6 +0.0	+0.5	+0.0	38.4	105.2	-66.8	Horiz 132
32	102.315M	56.0	+0.0 +0.5	-29.3 +0.5	+10.2 +0.0	+0.3	+0.0	38.2	105.2	-67.0	Vert 129
33	102.795M	55.7	+0.0 +0.5	-29.3 +0.5	+10.2 +0.0	+0.3	+0.0	37.9	105.2	-67.3	Vert 129
34	97.029M	56.2	+0.0 +0.5	-29.3 +0.5	+9.7 +0.0	+0.3	+0.0	37.9	105.2	-67.3	Vert 129
35	839.972M	38.6	+0.0 +1.9	-29.3 +2.2	+22.9 +0.0	+0.9	+0.0	37.2	105.2	-68.0	Horiz 132
36	930.062M	37.3	+0.0 +2.0	-29.1 +2.3	+23.8 +0.0	+0.9	+0.0	37.2	105.2	-68.0	Horiz 132
37	32.367M QP	47.5	+0.0 +0.2	-29.4 +0.2	+18.1 +0.0	+0.2	+0.0	36.8	105.2	-68.4	Vert 152
^	32.367M	49.6	+0.0 +0.2	-29.4 +0.2	+18.1 +0.0	+0.2	+0.0	38.9	105.2	-66.3	Vert 152
39	143.996M	51.6	+0.0 +0.6	-29.1 +0.7	+11.3 +0.0	+0.4	+0.0	35.5	105.2	-69.7	Horiz 132
40	47.968M	54.1	+0.0 +0.3	-29.4 +0.3	+9.6 +0.0	+0.2	+0.0	35.1	105.2	-70.1	Vert 129
41	107.960M	52.2	+0.0 +0.5	-29.3 +0.6	+10.7 +0.0	+0.3	+0.0	35.0	105.2	-70.2	Horiz 132
42	72.007M	55.1	+0.0 +0.4	-29.3 +0.4	+6.3 +0.0	+0.3	+0.0	33.2	105.2	-72.0	Vert 145
43	32.462M	43.2	+0.0 +0.2	-29.4 +0.2	+18.1 +0.0	+0.2	+0.0	32.5	105.2	-72.7	Horiz 132
44	155.997M	48.2	+0.0 +0.7	-29.0 +0.8	+10.7 +0.0	+0.4	+0.0	31.8	105.2	-73.4	Vert 116
45	480.003M	39.4	+0.0 +1.3	-29.6 +1.5	+17.6 +0.1	+0.7	+0.0	31.0	105.2	-74.2	Vert 99
46	239.999M	42.8	+0.0 +0.9	-28.6 +1.0	+12.0 +0.0	+0.5	+0.0	28.6	105.2	-76.6	Vert 116
47	96.703M QP	47.0	+0.0 +0.5	-29.3 +0.5	+9.6 +0.0	+0.3	+0.0	28.6	105.2	-76.6	Vert 154
^	96.703M	61.0	+0.0 +0.5	-29.3 +0.5	+9.6 +0.0	+0.3	+0.0	42.6	105.2	-62.6	Vert 154
49	35.998M	40.6	+0.0 +0.3	-29.4 +0.2	+16.6 +0.0	+0.2	+0.0	28.5	105.2	-76.7	Vert 99

50	600.001M	33.4	+0.0	-29.8	+20.2	+0.7	+0.0	27.8	105.2	-77.4	Vert
			+1.5	+1.7	+0.1		40				112
51	99.882M	45.8	+0.0	-29.3	+9.9	+0.3	+0.0	27.7	105.2	-77.5	Vert
	QP		+0.5	+0.5	+0.0		128				99
^	99.902M	60.9	+0.0	-29.3	+9.9	+0.3	+0.0	42.8	105.2	-62.4	Vert
			+0.5	+0.5	+0.0		128				99

CKC Laboratories, Inc. Date: 12/23/2011 Time: 11:02:13 Itron, Inc. WO#: 92467
15.247(d) / 15.209 Radiated Spurious Emissions Test Distance: 3 Meters Vert Sequence#: 13 Ext ATTN: 0 dB


Test Location: CKC Laboratories, Inc. • 22116 23rd Drive SE, Suite A • Bothell, WA 98021 • (425) 402-1717

Customer: **Itron, Inc.**
 Specification: **15.247(d) / 15.209 Radiated Spurious Emissions**
 Work Order #: **92467** Date: 12/22/2011
 Test Type: **Maximized Emissions** Time: 12:32:29
 Equipment: **Hand Held AMR** Sequence#: 3
 Manufacturer: Itron, Inc. Tested By: Randal Clark
 Model: FC300SRW
 S/N: FC30011242858

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
T1	AN02871	Spectrum Analyzer	E4440A	4/22/2011	4/22/2013
T2	AN01271	Preamp	83017A	8/18/2011	8/18/2013
T3	AN01467	Horn Antenna-ANSI	3115	5/7/2010	5/7/2012
		C63.5 Calibration			
T4	AN03227	Cable	32026-29080- 29080-84	5/2/2011	5/2/2013
T5	ANP05547	Cable	Heliax	7/26/2011	7/26/2013
T6	AN02750	High Pass Filter	9SH10- 1000/T10000- O/O	3/15/2010	3/15/2012
T7	AN03116	High Pass Filter	11SH10-00313	1/26/2011	1/26/2013
T8	ANWO92467	Duty Cycle Correction Factor		10/27/2011	10/27/2013
	AN03170	High Pass Filter	HM1155-11SS	9/6/2011	9/6/2013

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Hand Held AMR*	Itron, Inc.	FC300SRW	FC30011242858
Power Supply	GlobTek, Inc.	GT-81081-6015-T3	ROHS100187103109
Optical Probe	uData Net Corp.	PM-500-124	092559

Support Devices:

Function	Manufacturer	Model #	S/N
Support Power Supply	Dell	FA90PE1-00	CN-OCM889-73245-9CI- 5497-A01
Support Laptop	Dell	PP27L	917Q5M
Power Supply	SI Tech	02E03	20120-0014829
Power Supply	SI Tech	02E03	20120-0014905
USB Converter	SI Tech	2173	079536
USB Converter	SI Tech	2172	079535

Test Conditions / Notes:

EUT is located on the test table.

Screen is facing sideways. This orientation was determined to be worst case from preliminary measurements.

Support laptop is located outside the testing area via USB-fiber extension.

EUT is transmitting at 908MHz (Low), 916MHz (Mid), and 923.8MHz (High).

Power is set to EE03.

Temp: 24°C

Humidity: 30%

Pressure: 102.8kPa

Frequency: 1 - 9.238GHz

Bandwidths: CISPR bandwidths used inside restricted bands, otherwise RBW=100kHz, VBW=3xRBW
 100kHz outside of 15.205 frequency bands

Duty Cycle Correction Factor Applied in accordance with KDB 558074, 18.18ms per 100ms.

Ext Attn: 0 dB

Measurement Data:			Reading listed by margin.				Test Distance: 3 Meters				
#	Freq	Rdng	T1	T2	T3	T4	Dist	Corr	Spec	Margin	Polar
			T5	T6	T7	T8	Table	dB μ V/m	dB μ V/m		
	MHz	dB μ V	dB	dB	dB	dB	Table	dB μ V/m	dB μ V/m		Ant
1	4199.900M	43.7	+0.0	-33.4	+32.1	+2.0	+0.0	48.4	54.0	-5.6	Vert
			+3.3	+0.0	+0.7	+0.0	360				99
2	4800.055M	41.7	+0.0	-33.3	+32.9	+2.2	+0.0	47.9	54.0	-6.1	Vert
			+3.7	+0.0	+0.7	+0.0					99
3	4619.011M	41.8	+0.0	-33.4	+32.7	+2.1	+0.0	47.6	54.0	-6.4	Vert
Ave			+3.6	+0.0	+0.8	+0.0	78				127
^	4619.011M	45.8	+0.0	-33.4	+32.7	+2.1	+0.0	36.8	54.0	-17.2	Vert
			+3.6	+0.0	+0.8	-14.8	78				127
5	4540.000M	41.8	+0.0	-33.4	+32.6	+2.1	+0.0	47.4	54.0	-6.6	Horiz
Ave			+3.5	+0.0	+0.8	+0.0	19				108
^	4540.000M	45.0	+0.0	-33.4	+32.6	+2.1	+0.0	35.8	54.0	-18.2	Horiz
			+3.5	+0.0	+0.8	-14.8	19				108
7	3695.489M	43.3	+0.0	-33.6	+30.9	+1.9	+0.0	47.0	54.0	-7.0	Vert
			+2.9	+0.0	+1.6	+0.0					127
8	3632.100M	43.3	+0.0	-33.6	+30.7	+1.9	+0.0	46.9	54.0	-7.1	Vert
			+2.9	+0.0	+1.7	+0.0	360				99
9	3664.232M	43.1	+0.0	-33.6	+30.8	+1.9	+0.0	46.8	54.0	-7.2	Vert
			+2.9	+0.0	+1.7	+0.0					105
10	4580.010M	41.1	+0.0	-33.4	+32.6	+2.1	+0.0	46.8	54.0	-7.2	Vert
Ave			+3.6	+0.0	+0.8	+0.0	120				105
^	4580.010M	45.0	+0.0	-33.4	+32.6	+2.1	+0.0	35.9	54.0	-18.1	Vert
			+3.6	+0.0	+0.8	-14.8	120				105
12	3631.996M	43.0	+0.0	-33.6	+30.7	+1.9	+0.0	46.6	54.0	-7.4	Horiz
Ave			+2.9	+0.0	+1.7	+0.0	197				108
^	3631.996M	46.5	+0.0	-33.6	+30.7	+1.9	+0.0	35.3	54.0	-18.7	Horiz
			+2.9	+0.0	+1.7	-14.8	197				108
14	3695.239M	42.8	+0.0	-33.6	+30.9	+1.9	+0.0	46.5	54.0	-7.5	Horiz
Ave			+2.9	+0.0	+1.6	+0.0	360				102
^	3695.239M	44.8	+0.0	-33.6	+30.9	+1.9	+0.0	48.5	54.0	-5.5	Horiz
			+2.9	+0.0	+1.6	+0.0	360				102

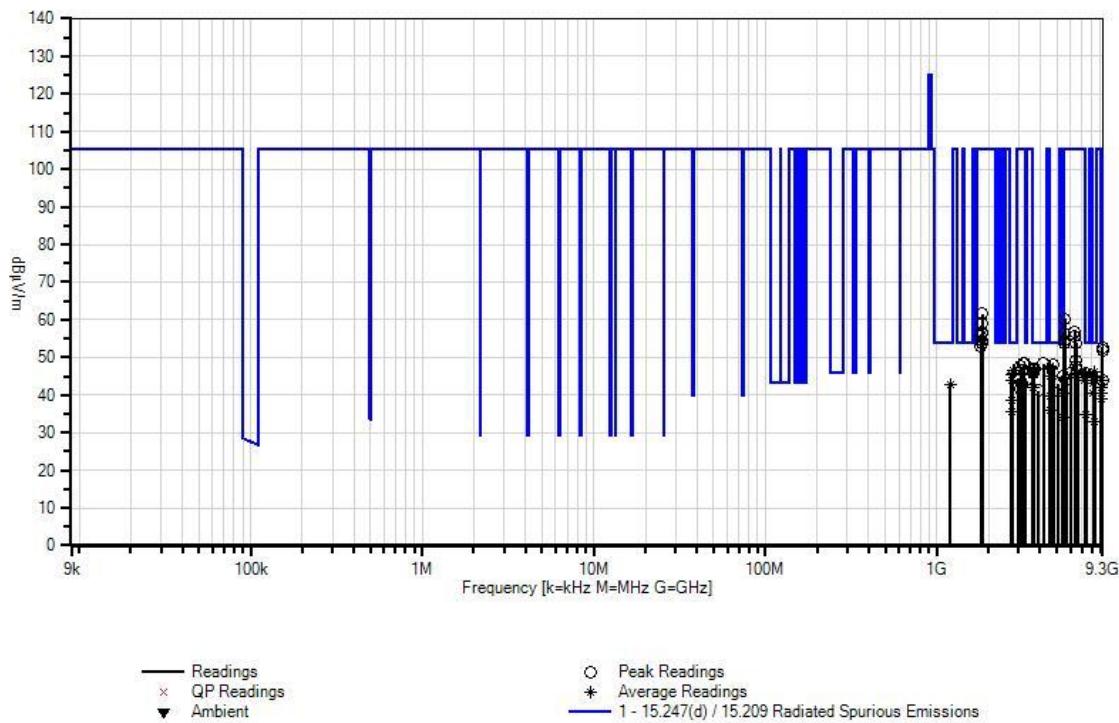
16	2771.391M	39.5	+0.0	-33.9	+28.6	+1.6	+0.0	46.5	54.0	-7.5	Vert
	Ave		+1.3	+0.0	+9.4	+0.0	155		High Channel		124
^	2771.391M	45.1	+0.0	-33.9	+28.6	+1.6	+0.0	52.1	54.0	-1.9	Vert
			+1.3	+0.0	+9.4	+0.0	155		High Channel		124
18	8243.588M	34.9	+0.0	-34.6	+36.0	+4.0	+0.0	46.3	54.0	-7.7	Horiz
	Ave		+4.9	+0.0	+1.1	+0.0	285		Mid Channel		101
^	8243.588M	43.0	+0.0	-34.6	+36.0	+4.0	+0.0	54.4	54.0	+0.4	Horiz
			+4.9	+0.0	+1.1	+0.0	285		Mid Channel		101
20	7390.445M	35.6	+0.0	-34.5	+36.1	+3.3	+0.0	45.9	54.0	-8.1	Vert
	Ave		+4.5	+0.0	+0.9	+0.0	147		High Channel		109
^	7390.445M	43.4	+0.0	-34.5	+36.1	+3.3	+0.0	53.7	54.0	-0.3	Vert
			+4.5	+0.0	+0.9	+0.0	147		High Channel		109
22	3660.200M	42.2	+0.0	-33.6	+30.8	+1.9	+0.0	45.9	54.0	-8.1	Vert
			+2.9	+0.0	+1.7	+0.0	360				99
23	3664.000M	42.1	+0.0	-33.6	+30.8	+1.9	+0.0	45.8	54.0	-8.2	Horiz
	Ave		+2.9	+0.0	+1.7	+0.0	336		Mid Channel		106
^	3663.928M	46.6	+0.0	-33.6	+30.8	+1.9	+0.0	50.3	54.0	-3.7	Horiz
			+2.9	+0.0	+1.7	+0.0	336		Mid Channel		106
25	2771.401M	53.5	+0.0	-33.9	+28.6	+1.6	+0.0	45.7	54.0	-8.3	Horiz
	Ave		+1.3	+0.0	+9.4	-14.8			High Channel		101
^	2771.439M	55.4	+0.0	-33.9	+28.6	+1.6	+0.0	62.4	54.0	+8.4	Horiz
			+1.3	+0.0	+9.4	+0.0			High Channel		101
27	7328.454M	35.6	+0.0	-34.6	+36.1	+3.2	+0.0	45.6	54.0	-8.4	Horiz
			+4.4	+0.0	+0.9	+0.0	127		Mid Channel		136
28	2723.964M	34.0	+0.0	-33.9	+28.4	+1.6	+0.0	45.4	54.0	-8.6	Horiz
	Ave		+1.2	+0.0	+14.1	+0.0	349		Low Channel		126
^	2724.008M	41.0	+0.0	-33.9	+28.4	+1.6	+0.0	52.4	54.0	-1.6	Horiz
			+1.2	+0.0	+14.1	+0.0	349		Low Channel		126
30	3600.014M	41.8	+0.0	-33.6	+30.6	+1.9	+0.0	45.3	54.0	-8.7	Vert
	Ave		+2.8	+0.0	+1.8	+0.0	330				99
^	3600.014M	47.5	+0.0	-33.6	+30.6	+1.9	+0.0	36.2	54.0	-17.8	Vert
			+2.8	+0.0	+1.8	-14.8	330				99
32	7263.830M	35.1	+0.0	-34.5	+36.1	+3.2	+0.0	45.2	54.0	-8.8	Vert
	Ave		+4.4	+0.0	+0.9	+0.0	48		Low Channel		137
^	7263.830M	42.5	+0.0	-34.5	+36.1	+3.2	+0.0	52.6	54.0	-1.4	Vert
			+4.4	+0.0	+0.9	+0.0	48		Low Channel		137
34	5400.175M	37.6	+0.0	-33.5	+33.9	+2.3	+0.0	45.1	54.0	-8.9	Vert
			+3.8	+0.0	+1.0	+0.0					99
35	4540.012M	39.4	+0.0	-33.4	+32.6	+2.1	+0.0	45.0	54.0	-9.0	Vert
	Ave		+3.5	+0.0	+0.8	+0.0	164		Low Channel		99
^	4540.012M	43.5	+0.0	-33.4	+32.6	+2.1	+0.0	34.3	54.0	-19.7	Vert
			+3.5	+0.0	+0.8	-14.8	164		Low Channel		99
37	8244.412M	33.5	+0.0	-34.6	+36.0	+4.0	+0.0	44.9	54.0	-9.1	Vert
	Ave		+4.9	+0.0	+1.1	+0.0	295		Mid Channel		118
^	8244.412M	41.9	+0.0	-34.6	+36.0	+4.0	+0.0	53.3	54.0	-0.7	Vert
			+4.9	+0.0	+1.1	+0.0	295		Mid Channel		118
39	7390.779M	34.5	+0.0	-34.5	+36.1	+3.3	+0.0	44.8	54.0	-9.2	Horiz
	Ave		+4.5	+0.0	+0.9	+0.0	64		High Channel		126
^	7390.779M	42.4	+0.0	-34.5	+36.1	+3.3	+0.0	52.7	54.0	-1.3	Horiz
			+4.5	+0.0	+0.9	+0.0	64		High Channel		126
41	8314.543M	33.0	+0.0	-34.5	+36.0	+4.1	+0.0	44.7	54.0	-9.3	Vert
	Ave		+5.0	+0.0	+1.1	+0.0	343		High Channel		116

^ 8314.637M	41.6	+0.0	-34.5	+36.0	+4.1	+0.0	53.3	54.0	-0.7	Vert
		+5.0	+0.0	+1.1	+0.0	343		High Channel		116
43 2748.022M	34.8	+0.0	-33.9	+28.5	+1.6	+0.0	43.9	54.0	-10.1	Vert
Ave		+1.2	+0.0	+11.7	+0.0	138		Mid Channel		131
^ 2748.044M	40.8	+0.0	-33.9	+28.5	+1.6	+0.0	49.9	54.0	-4.1	Vert
		+1.2	+0.0	+11.7	+0.0	138		Mid Channel		131
^ 2748.044M	40.8	+0.0	-33.9	+28.5	+1.6	+0.0	49.9	54.0	-4.1	Vert
		+1.2	+0.0	+11.7	+0.0	360		Mid Channel		105
46 7263.796M	33.8	+0.0	-34.5	+36.1	+3.2	+0.0	43.9	54.0	-10.1	Horiz
Ave		+4.4	+0.0	+0.9	+0.0	155		Low Channel		123
^ 7263.796M	41.9	+0.0	-34.5	+36.1	+3.2	+0.0	37.2	54.0	-16.8	Horiz
		+4.4	+0.0	+0.9	-14.8	155		Low Channel		123
48 9160.490M	30.3	+0.0	-34.1	+36.5	+4.6	+0.0	43.7	54.0	-10.3	Horiz
Ave		+5.2	+0.0	+1.2	+0.0	244		Mid Channel		117
^ 9160.490M	39.3	+0.0	-34.1	+36.5	+4.6	+0.0	52.7	54.0	-1.3	Horiz
		+5.2	+0.0	+1.2	+0.0	244		Mid Channel		117
50 8172.402M	31.6	+0.0	-34.6	+36.1	+4.0	+0.0	43.0	54.0	-11.0	Vert
Ave		+4.9	+0.0	+1.0	+0.0	342		Low Channel		139
^ 8172.402M	40.6	+0.0	-34.6	+36.1	+4.0	+0.0	37.2	54.0	-16.8	Vert
		+4.9	+0.0	+1.0	-14.8	342		Low Channel		139
52 5099.955M	36.2	+0.0	-33.4	+33.3	+2.2	+0.0	42.9	54.0	-11.1	Vert
		+3.8	+0.0	+0.8	+0.0	360				99
53 1200.009M	15.2	+0.0	+0.0	+24.2	+1.0	+0.0	42.7	54.0	-11.3	Horiz
Ave		+1.5	+0.8	+0.0	+0.0	319				111
^ 1200.030M	23.3	+0.0	+0.0	+24.2	+1.0	+0.0	50.8	54.0	-3.2	Horiz
		+1.5	+0.8	+0.0	+0.0	360				99
55 3631.992M	38.6	+0.0	-33.6	+30.7	+1.9	+0.0	42.2	54.0	-11.8	Vert
Ave		+2.9	+0.0	+1.7	+0.0	158		Low Channel		111
^ 3631.992M	44.9	+0.0	-33.6	+30.7	+1.9	+0.0	33.7	54.0	-20.3	Vert
		+2.9	+0.0	+1.7	-14.8	158		Low Channel		111
57 9080.480M	28.5	+0.0	-34.1	+36.5	+4.6	+0.0	41.9	54.0	-12.1	Vert
Ave		+5.2	+0.0	+1.2	+0.0	51		Low Channel		139
^ 9080.476M	37.5	+0.0	-34.1	+36.5	+4.6	+0.0	50.9	54.0	-3.1	Vert
		+5.2	+0.0	+1.2	+0.0	51		Low Channel		139
59 3900.040M	37.3	+0.0	-33.5	+31.5	+2.0	+0.0	41.2	54.0	-12.8	Vert
		+3.1	+0.0	+0.8	+0.0	-9				99
60 9080.476M	27.1	+0.0	-34.1	+36.5	+4.6	+0.0	40.5	54.0	-13.5	Horiz
Ave		+5.2	+0.0	+1.2	+0.0	13		Low Channel		137
^ 9080.454M	38.0	+0.0	-34.1	+36.5	+4.6	+0.0	51.4	54.0	-2.6	Horiz
		+5.2	+0.0	+1.2	+0.0	13		Low Channel		137
62 8172.432M	29.0	+0.0	-34.6	+36.1	+4.0	+0.0	40.4	54.0	-13.6	Horiz
Ave		+4.9	+0.0	+1.0	+0.0	290		Low Channel		121
^ 8172.454M	38.5	+0.0	-34.6	+36.1	+4.0	+0.0	49.9	54.0	-4.1	Horiz
		+4.9	+0.0	+1.0	+0.0	290		Low Channel		121
64 5448.370M	47.5	+0.0	-33.5	+34.0	+2.3	+0.0	40.3	54.0	-13.7	Horiz
Ave		+3.8	+0.0	+1.0	-14.8	336		Low Channel		108
^ 5448.370M	51.2	+0.0	-33.5	+34.0	+2.3	+0.0	58.8	54.0	+4.8	Horiz
		+3.8	+0.0	+1.0	+0.0	336		Low Channel		108
66 4619.265M	48.7	+0.0	-33.4	+32.7	+2.1	+0.0	39.7	54.0	-14.3	Horiz
Ave		+3.6	+0.0	+0.8	-14.8	78		High Channel		99
^ 4619.349M	49.6	+0.0	-33.4	+32.7	+2.1	+0.0	55.4	54.0	+1.4	Horiz
		+3.6	+0.0	+0.8	+0.0	78		High Channel		99

68	9160.488M	25.6	+0.0	-34.1	+36.5	+4.6	+0.0	39.0	54.0	-15.0	Vert
	Ave		+5.2	+0.0	+1.2	+0.0	271		Mid Channel		117
^	9160.488M	37.7	+0.0	-34.1	+36.5	+4.6	+0.0	36.3	54.0	-17.7	Vert
			+5.2	+0.0	+1.2	-14.8	271		Mid Channel		117
70	2723.976M	27.3	+0.0	-33.9	+28.4	+1.6	+0.0	38.7	54.0	-15.3	Vert
	Ave		+1.2	+0.0	+14.1	+0.0	48		Low Channel		107
^	2724.014M	38.4	+0.0	-33.9	+28.4	+1.6	+0.0	49.8	54.0	-4.2	Vert
			+1.2	+0.0	+14.1	+0.0	41		Low Channel		107
72	4580.214M	45.0	+0.0	-33.4	+32.6	+2.1	+0.0	35.9	54.0	-18.1	Horiz
	Ave		+3.6	+0.0	+0.8	-14.8	39		Mid Channel		102
^	4580.214M	49.0	+0.0	-33.4	+32.6	+2.1	+0.0	54.7	54.0	+0.7	Horiz
			+3.6	+0.0	+0.8	+0.0	39		Mid Channel		102
74	2748.206M	41.2	+0.0	-33.9	+28.5	+1.6	+0.0	35.5	54.0	-18.5	Horiz
	Ave		+1.2	+0.0	+11.7	-14.8	329		Mid Channel		99
^	2748.206M	46.0	+0.0	-33.9	+28.5	+1.6	+0.0	55.1	54.0	+1.1	Horiz
			+1.2	+0.0	+11.7	+0.0	376		Mid Channel		99
76	7328.364M	24.8	+0.0	-34.6	+36.1	+3.2	+0.0	34.8	54.0	-19.2	Vert
	Ave		+4.4	+0.0	+0.9	+0.0	137		Mid Channel		140
^	7328.386M	37.3	+0.0	-34.6	+36.1	+3.2	+0.0	47.3	54.0	-6.7	Vert
			+4.4	+0.0	+0.9	+0.0	137		Mid Channel		140
78	5448.244M	41.1	+0.0	-33.5	+34.0	+2.3	+0.0	33.9	54.0	-20.1	Vert
	Ave		+3.8	+0.0	+1.0	-14.8	239		Low Channel		99
^	5448.244M	45.8	+0.0	-33.5	+34.0	+2.3	+0.0	53.4	54.0	-0.6	Vert
			+3.8	+0.0	+1.0	+0.0	239		Low Channel		99
80	8313.839M	36.1	+0.0	-34.5	+36.0	+4.1	+0.0	33.0	54.0	-21.0	Horiz
	Ave		+5.0	+0.0	+1.1	-14.8	295		High Channel		126
^	8313.765M	44.4	+0.0	-34.5	+36.0	+4.1	+0.0	56.1	54.0	+2.1	Horiz
			+5.0	+0.0	+1.1	+0.0	295		High Channel		126
82	1847.670M	30.6	+0.0	+0.0	+27.4	+1.3	+0.0	61.6	105.2	-43.6	Horiz
			+1.9	+0.4	+0.0	+0.0	315		High Channel		112
83	5543.101M	52.4	+0.0	-33.6	+34.2	+2.4	+0.0	60.2	105.2	-45.0	Horiz
			+3.8	+0.0	+1.0	+0.0	340		High Channel		125
84	1831.820M	28.2	+0.0	+0.0	+27.3	+1.3	+0.0	59.0	105.2	-46.2	Horiz
			+1.9	+0.3	+0.0	+0.0	293		Mid Channel		111
85	1847.620M	25.9	+0.0	+0.0	+27.4	+1.3	+0.0	56.9	105.2	-48.3	Vert
			+1.9	+0.4	+0.0	+0.0			High Channel		102
86	6355.650M	47.4	+0.0	-33.9	+34.9	+2.8	+0.0	56.8	105.2	-48.4	Vert
			+4.1	+0.0	+1.5	+0.0			Low Channel		99
87	5496.304M	48.7	+0.0	-33.5	+34.1	+2.4	+0.0	56.5	105.2	-48.7	Horiz
			+3.8	+0.0	+1.0	+0.0	349		Mid Channel		99
88	1816.030M	25.7	+0.0	+0.0	+27.2	+1.3	+0.0	56.4	105.2	-48.8	Horiz
			+1.9	+0.3	+0.0	+0.0	35		Low Channel		104
89	1800.005M	25.1	+0.0	+0.0	+27.1	+1.3	+0.0	55.8	105.2	-49.4	Vert
			+2.0	+0.3	+0.0	+0.0	360				99
90	6356.344M	46.3	+0.0	-33.9	+34.9	+2.8	+0.0	55.7	105.2	-49.5	Horiz
			+4.1	+0.0	+1.5	+0.0			Low Channel		123
91	1831.920M	23.6	+0.0	+0.0	+27.3	+1.3	+0.0	54.4	105.2	-50.8	Vert
			+1.9	+0.3	+0.0	+0.0	360		Mid Channel		100
92	5542.507M	46.5	+0.0	-33.6	+34.2	+2.4	+0.0	54.3	105.2	-50.9	Vert
			+3.8	+0.0	+1.0	+0.0			High Channel		108
93	1816.005M	23.2	+0.0	+0.0	+27.2	+1.3	+0.0	53.9	105.2	-51.3	Vert
			+1.9	+0.3	+0.0	+0.0	54		Low Channel		104

94	6466.263M	44.5	+0.0	-34.0	+34.9	+2.8	+0.0	53.9	105.2	-51.3	Vert
			+4.2	+0.0	+1.5	+0.0	242		High Channel		108
95	6466.247M	44.4	+0.0	-34.0	+34.9	+2.8	+0.0	53.8	105.2	-51.4	Horiz
			+4.2	+0.0	+1.5	+0.0	360		High Channel		125
96	5496.306M	45.8	+0.0	-33.5	+34.1	+2.4	+0.0	53.6	105.2	-51.6	Vert
			+3.8	+0.0	+1.0	+0.0	360		Mid Channel		118
97	1800.030M	22.4	+0.0	+0.0	+27.1	+1.3	+0.0	53.1	105.2	-52.1	Horiz
			+2.0	+0.3	+0.0	+0.0	266				111
98	9237.495M	39.4	+0.0	-34.1	+36.4	+4.5	+0.0	52.7	105.2	-52.5	Horiz
			+5.2	+0.0	+1.3	+0.0	242		High Channel		108
99	9237.481M	38.7	+0.0	-34.1	+36.4	+4.5	+0.0	52.0	105.2	-53.2	Horiz
			+5.2	+0.0	+1.3	+0.0			High Channel		126
100	1200.011M	22.2	+0.0	-35.9	+24.2	+1.0	+0.0	-1.8	54.0	-55.8	Vert
	Ave		+1.5	+0.0	+0.0	-14.8	165				99
^	1200.105M	28.1	+0.0	+0.0	+24.2	+1.0	+0.0	55.6	54.0	+1.6	Vert
			+1.5	+0.8	+0.0	+0.0	165				99
102	6412.348M	40.1	+0.0	-34.0	+34.9	+2.8	+0.0	49.4	105.2	-55.8	Horiz
			+4.1	+0.0	+1.5	+0.0	360		Mid Channel		99
103	3210.000M	46.1	+0.0	-33.8	+29.6	+1.8	+0.0	48.4	105.2	-56.8	Vert
			+2.6	+0.0	+2.1	+0.0					99
104	3240.000M	45.9	+0.0	-33.9	+29.7	+1.8	+0.0	48.3	105.2	-56.9	Vert
			+2.7	+0.0	+2.1	+0.0					99
105	6411.652M	38.3	+0.0	-34.0	+34.9	+2.8	+0.0	47.6	105.2	-57.6	Vert
			+4.1	+0.0	+1.5	+0.0	360		Mid Channel		140
106	3089.990M	45.9	+0.0	-33.9	+29.3	+1.8	+0.0	47.5	105.2	-57.7	Vert
			+2.4	+0.0	+2.0	+0.0	360				99
107	3149.900M	44.7	+0.0	-33.8	+29.5	+1.8	+0.0	46.7	105.2	-58.5	Vert
			+2.5	+0.0	+2.0	+0.0					99
108	6600.050M	36.9	+0.0	-34.0	+35.1	+2.9	+0.0	46.6	105.2	-58.6	Vert
			+4.2	+0.0	+1.5	+0.0	360				99
109	6000.210M	37.3	+0.0	-33.8	+34.9	+2.5	+0.0	45.8	105.2	-59.4	Vert
			+3.8	+0.0	+1.1	+0.0					99
110	3000.000M	42.9	+0.0	-33.8	+29.1	+1.7	+0.0	44.3	105.2	-60.9	Vert
			+2.2	+0.0	+2.2	+0.0					99
111	5699.795M	36.5	+0.0	-33.8	+34.4	+2.4	+0.0	44.1	105.2	-61.1	Vert
			+3.8	+0.0	+0.8	+0.0	360				99
112	3299.930M	41.6	+0.0	-34.0	+29.8	+1.8	+0.0	44.0	105.2	-61.2	Vert
			+2.7	+0.0	+2.1	+0.0	23				101
113	9237.495M	30.6	+0.0	-34.1	+36.4	+4.5	+0.0	43.9	105.2	-61.3	Vert
			+5.2	+0.0	+1.3	+0.0	-15		High Channel		108
114	3120.100M	41.4	+0.0	-33.9	+29.4	+1.8	+0.0	43.1	105.2	-62.1	Vert
			+2.4	+0.0	+2.0	+0.0	360				99
115	3059.800M	40.3	+0.0	-33.8	+29.2	+1.7	+0.0	41.8	105.2	-63.4	Vert
			+2.3	+0.0	+2.1	+0.0	360				99

CKC Laboratories, Inc. Date: 12/22/2011 Time: 12:32:29 Itron, Inc. WO#: 92467
15.247(d) / 15.209 Radiated Spurious Emissions Test Distance: 3 Meters Vert Sequence#: 3 Ext ATTN: 0 dB



Test Setup Photos



Bandedge

Test Conditions / Setup

EUT is located on the test table. Screen is facing sideways. This orientation was determined to be worst case from preliminary measurements. Support laptop is located outside the testing area via USB-fiber extension. EUT is transmitting at 908MHz (Low), 916MHz (Mid), and 923.8MHz (High). Power is set to EE03.

Temp: 24°C

Humidity: 30%

Pressure: 102.8kPa

Frequency: 30-1000MHz

Bandwidths: CISPR

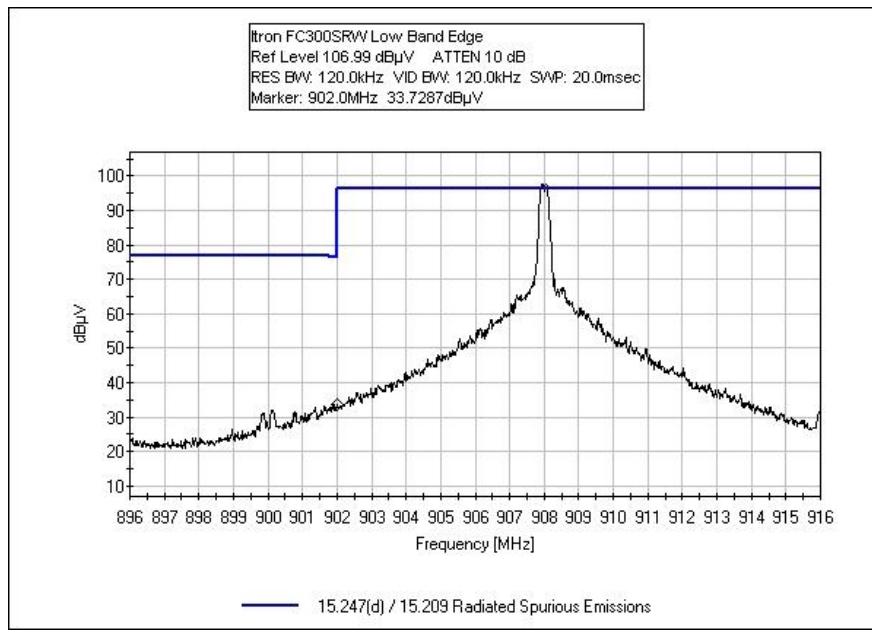
Engineer Name: R. Clark

Test Equipment

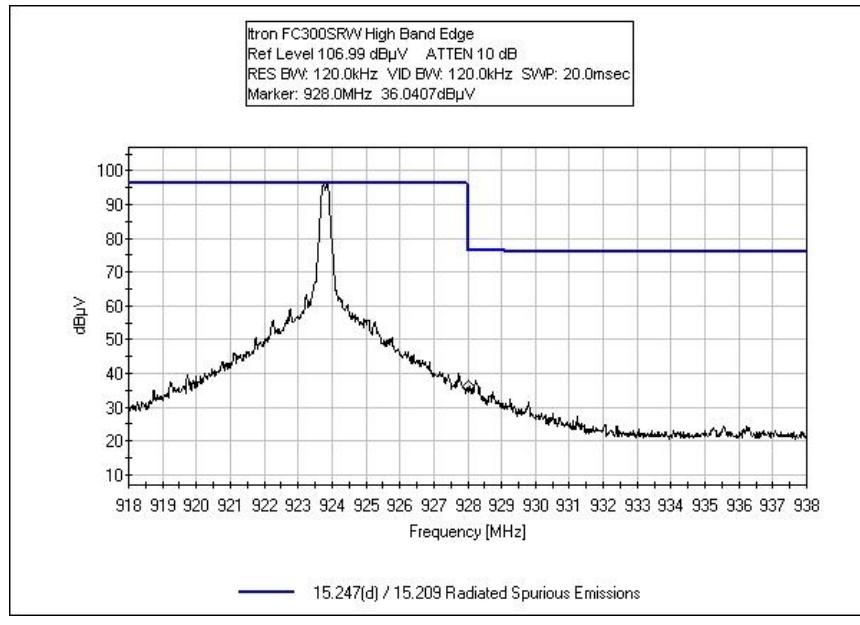
Asset/Serial #	Description	Model	Manufacturer	Cal Date	Cal Due
AN02871	Spectrum Analyzer	E4440A	Agilent	4/22/2011	4/22/2013
AN01316	Preamp	8447D	HP	5/21/2010	5/21/2012
AN01994	Biconilog Antenna	CBL6111C	Chase	3/8/2010	3/8/2012
AN03227	Cable	32026-29080-29080-84	Astrolab	5/2/2011	5/2/2013
ANP05360	Cable	RG214	Belden	11/8/2010	11/8/2012
ANP05366	Cable	RG-214	Belden	10/14/2011	10/14/2013
ANC00058*	Band Reject Filter	N03916M1	Microwave Circuits	1/2/2012	1/2/2014

*Calibration was performed after testing and data was recalculated to validate proper test results.

Test Data



Low



High

Test Setup Photos



RSS-210

Radiated Spurious Emissions

Test Data

Test Location: CKC Laboratories, Inc. • 22116 23rd Drive SE, Suite A • Bothell, WA 98021 • (425) 402-1717

Customer: **Itron, Inc.**
 Specification: **RSS-210 Issue 8**
 Work Order #: **92467** Date: 12/23/2011
 Test Type: **Maximized Emissions** Time: 2:24:32 PM
 Equipment: **Hand Held AMR** Sequence#: 23
 Manufacturer: Itron, Inc. Tested By: Randal Clark
 Model: FC300SRW
 S/N: FC30011242858

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02871	Spectrum Analyzer	E4440A	4/22/2011	4/22/2013
T1	AN03227	Cable	32026-29080-29080-84	5/2/2011	5/2/2013
T2	ANP05360	Cable	RG214	11/8/2010	11/8/2012
T3	ANP05366	Cable	RG-214	10/14/2011	10/14/2013
T4	AN00052	Loop Antenna	6502	6/8/2010	6/8/2012

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Hand Held AMR*	Itron, Inc.	FC300SRW	FC30011242858
Power Supply	GlobTek, Inc.	GT-81081-6015-T3	ROHS100187103109
Optical Probe	uData Net Corp.	PM-500-124	092559

Support Devices:

Function	Manufacturer	Model #	S/N
Support Power Supply	Dell	FA90PE1-00	CN-OCM889-73245-9CI-5497-A01
Support Laptop	Dell	PP27L	917Q5M
Power Supply	SI Tech	02E03	20120-0014829
Power Supply	SI Tech	02E03	20120-0014905
USB Converter	SI Tech	2173	079536
USB Converter	SI Tech	2172	079535

Test Conditions / Notes:

EUT is located on the test table.

Screen is facing sideways. This orientation was determined to be worst case from preliminary measurements.

Support laptop is located outside the testing area via USB-fiber extension.

EUT is transmitting at 908MHz (Low), 916MHz (Mid), and 923.8MHz (High).

Power is set to EE03.

Temp: 24°C

Humidity: 30%

Pressure: 102.8kPa

Frequency: 9kHz - 30MHz

Bandwidths: CISPR bandwidths used inside restricted bands, otherwise RBW=100kHz, VBW=3xRBW

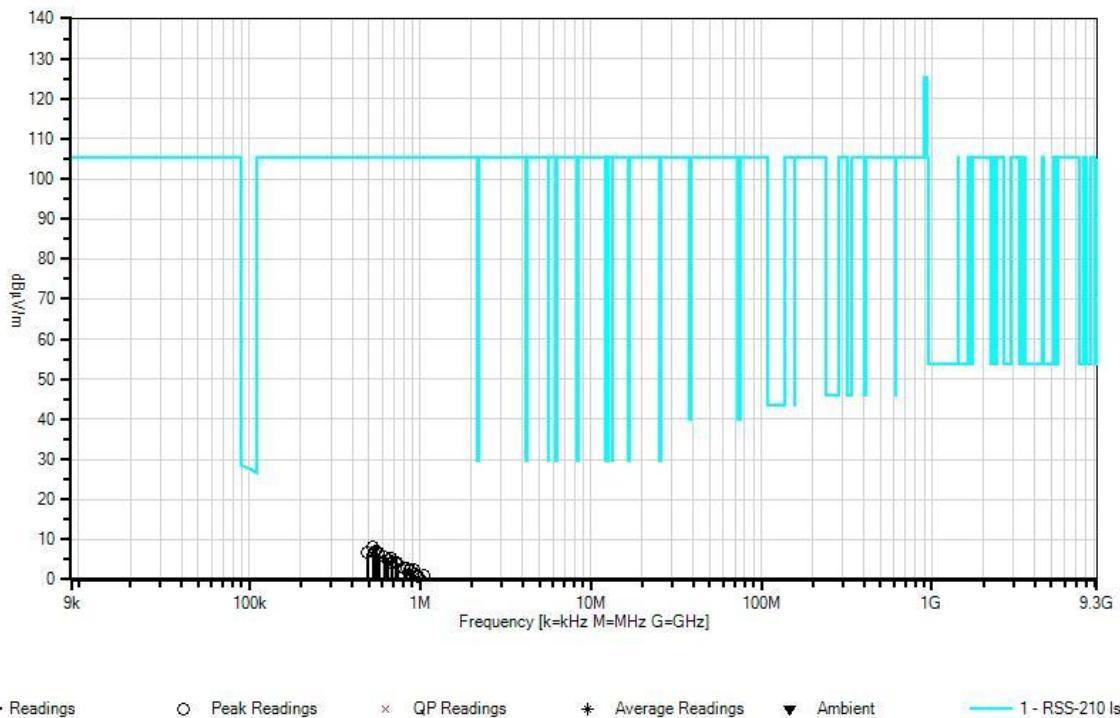
Ext Attn: 0 dB

Measurement Data: Reading listed by margin. **Test Distance: 3 Meters**

#	Freq MHz	Rdng dB μ V	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dB μ V/m	Spec dB μ V/m	Margin dB	Polar Ant
1	532.598k	38.5	+0.0	+0.0	+0.1	+9.4	-40.0	8.0	105.2	-97.2	Horiz 99
2	549.324k	37.7	+0.0	+0.0	+0.1	+9.4	-40.0 -16	7.2	105.2	-98.0	Vert 99
3	490.784k	37.1	+0.0	+0.0	+0.1	+9.4	-40.0 -16	6.6	105.2	-98.6	Vert 99
4	540.961k	37.1	+0.0	+0.0	+0.1	+9.4	-40.0	6.6	105.2	-98.6	Horiz 99
5	568.140k	37.1	+0.0	+0.0	+0.1	+9.4	-40.0	6.6	105.2	-98.6	Horiz 99
6	574.413k	36.8	+0.0	+0.0	+0.1	+9.4	-40.0	6.3	105.2	-98.9	Horiz 99
7	616.227k	36.1	+0.0	+0.0	+0.1	+9.4	-40.0	5.6	105.2	-99.6	Horiz 99
8	681.038k	35.8	+0.0	+0.0	+0.1	+9.6	-40.0	5.5	105.2	-99.7	Horiz 99
9	647.587k	35.5	+0.0	+0.0	+0.1	+9.5	-40.0 -16	5.1	105.2	-100.1	Vert 99
10	649.678k	35.3	+0.0	+0.0	+0.1	+9.5	-40.0	4.9	105.2	-100.3	Horiz 99
11	683.129k	34.7	+0.0	+0.0	+0.1	+9.6	-40.0 -16	4.4	105.2	-100.8	Vert 99
12	737.487k	34.5	+0.0	+0.0	+0.1	+9.6	-40.0	4.2	105.2	-101.0	Horiz 99
13	722.852k	34.5	+0.0	+0.0	+0.1	+9.6	-40.0	4.2	105.2	-101.0	Horiz 99
14	808.571k	33.3	+0.0	+0.0	+0.1	+9.5	-40.0 -16	2.9	105.2	-102.3	Vert 99
15	831.569k	33.1	+0.0	+0.0	+0.1	+9.5	-40.0 -16	2.7	105.2	-102.5	Vert 99
16	877.564k	32.7	+0.0	+0.0	+0.1	+9.6	-40.0	2.4	105.2	-102.8	Horiz 99
17	919.378k	32.7	+0.0	+0.0	+0.1	+9.6	-40.0 -16	2.4	105.2	-102.8	Vert 99

18	931.923k	31.7	+0.0	+0.0	+0.1	+9.6	-40.0	1.4	105.2	-103.8	Horiz 99
19	959.102k	31.2	+0.0	+0.0	+0.1	+9.6	-40.0	0.9	105.2	-104.3	Horiz 99
20	1.057M	31.2	+0.0	+0.0	+0.1	+9.6	-40.0	0.9	105.2	-104.3	Vert 99
21	977.918k	31.1	+0.0	+0.0	+0.1	+9.6	-40.0	0.8	105.2	-104.4	Horiz 99
22	1.039M	30.1	+0.0	+0.0	+0.1	+9.6	-40.0	-0.2	105.2	-105.4	Vert 99
23	1.062M	29.8	+0.0	+0.0	+0.1	+9.6	-40.0	-0.5	105.2	-105.7	Vert 99
24	1.126M	29.5	+0.0	+0.0	+0.1	+9.6	-40.0	-0.8	105.2	-106.0	Horiz 99
25	1.126M	29.4	+0.0	+0.0	+0.1	+9.6	-40.0	-0.9	105.2	-106.1	Vert 99
26	1.204M	28.9	+0.0	+0.0	+0.1	+9.6	-40.0	-1.4	105.2	-106.6	Vert 99
27	1.254M	28.5	+0.0	+0.0	+0.1	+9.6	-40.0	-1.8	105.2	-107.0	Vert 99
28	1.354M	28.0	+0.0	+0.0	+0.1	+9.6	-40.0	-2.3	105.2	-107.5	Horiz 99
29	1.446M	27.5	+0.0	+0.0	+0.1	+9.6	-40.0	-2.8	105.2	-108.0	Vert 99
30	1.603M	26.6	+0.0	+0.0	+0.1	+9.6	-40.0	-3.7	105.2	-108.9	Vert 99

CKC Laboratories, Inc. Date: 12/23/2011 Time: 2:24:32 PM Itron, Inc. WO#: 92467
RSS-210 Issue 8 Test Distance: 3 Meters Horiz Sequence#: 23 Ext ATTN: 0 dB



Test Location: CKC Laboratories, Inc. • 22116 23rd Drive SE, Suite A • Bothell, WA 98021 • (425) 402-1717

Customer: **Itron, Inc.**
 Specification: **RSS-210 Issue 8**
 Work Order #: **92467** Date: 12/23/2011
 Test Type: **Maximized Emissions** Time: 11:02:13
 Equipment: **Hand Held AMR** Sequence#: 13
 Manufacturer: Itron, Inc. Tested By: Randal Clark
 Model: FC300SRW
 S/N: FC30011242858

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
T1	AN02871	Spectrum Analyzer	E4440A	4/22/2011	4/22/2013
T2	AN01316	Preamp	8447D	5/21/2010	5/21/2012
T3	AN01994	Biconilog Antenna	CBL6111C	3/8/2010	3/8/2012
T4	AN03227	Cable	32026-29080-29080-84	5/2/2011	5/2/2013
T5	ANP05360	Cable	RG214	11/8/2010	11/8/2012
T6	ANP05366	Cable	RG-214	10/14/2011	10/14/2013
T7	ANC00058*	Band Reject Filter		1/2/2012	1/2/2014

*Calibration was performed after testing and data was recalculated to validate proper test results.

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Hand Held AMR*	Itron, Inc.	FC300SRW	FC30011242858
Optical Probe	uData Net Corp.	PM-500-124	092559
Power Supply	GlobTek, Inc.	GT-81081-6015-T3	ROHS100187103109

Support Devices:

Function	Manufacturer	Model #	S/N
Power Supply	SI Tech	02E03	20120-0014829
Power Supply	SI Tech	02E03	20120-0014905
USB Converter	SI Tech	2173	079536
USB Converter	SI Tech	2172	079535
Support Power Supply	Dell	FA90PE1-00	CN-OCM889-73245-9CI-5497-A01
Support Laptop	Dell	PP27L	917Q5M

Test Conditions / Notes:

EUT is located on the test table.
 Screen is facing sideways. This orientation was determined to be worst case from preliminary measurements.
 Support laptop is located outside the testing area via USB-fiber extension.
 EUT is transmitting at 908MHz (Low), 916MHz (Mid), and 923.8MHz (High).
 Power is set to EE03.

Temp: 24°C
 Humidity: 30%
 Pressure: 102.8kPa
 Frequency: 30-1000MHz

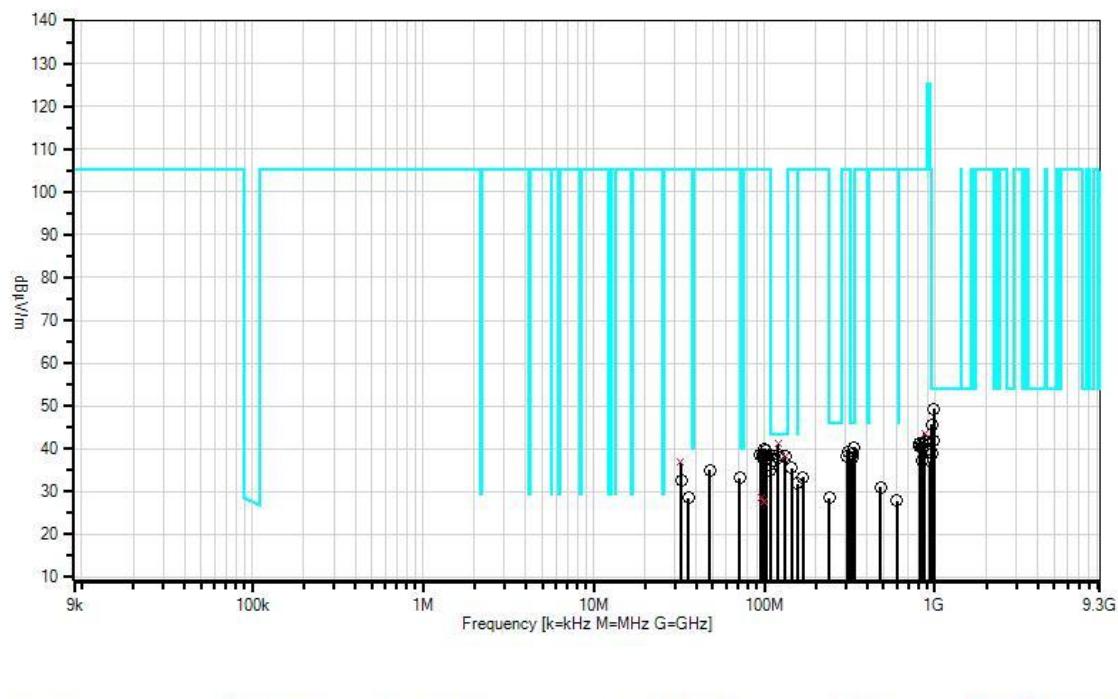
Bandwidths: CISPR bandwidths used inside restricted bands, otherwise RBW=100kHz, VBW=3xRBW

Ext Attn: 0 dB

Measurement Data:			Reading listed by margin.				Test Distance: 3 Meters				
#	Freq	Rdng	T1	T2	T3	T4	Dist	Corr	Spec	Margin	Polar
			T5	T6	T7		Table	dB μ V/m	dB μ V/m		
			MHz	dB μ V	dB	dB	dB				
1	120.003M	57.2	+0.0	-29.2	+11.7	+0.3	+0.0	41.2	43.5	-2.3	Horiz
			+0.6	+0.6	+0.0		97				295
^	120.006M	61.6	+0.0	-29.2	+11.7	+0.3	+0.0	45.6	43.5	+2.1	Horiz
			+0.6	+0.6	+0.0		97				295
3	990.018M	48.0	+0.0	-28.9	+24.4	+0.9	+0.0	49.3	54.0	-4.7	Vert
			+2.1	+2.5	+0.3		224				110
4	120.005M	54.6	+0.0	-29.2	+11.7	+0.3	+0.0	38.6	43.5	-4.9	Vert
			+0.6	+0.6	+0.0		360				116
5	108.005M	55.7	+0.0	-29.3	+10.7	+0.3	+0.0	38.5	43.5	-5.0	Vert
			+0.5	+0.6	+0.0		83				126
6	131.997M	54.2	+0.0	-29.2	+11.7	+0.3	+0.0	38.3	43.5	-5.2	Vert
			+0.6	+0.7	+0.0		168				116
7	132.005M	54.1	+0.0	-29.2	+11.7	+0.3	+0.0	38.2	43.5	-5.3	Horiz
			+0.6	+0.7	+0.0		111				178
^	132.003M	57.3	+0.0	-29.2	+11.7	+0.3	+0.0	41.4	43.5	-2.1	Horiz
			+0.6	+0.7	+0.0		111				178
9	334.867M	51.8	+0.0	-28.6	+14.5	+0.5	+0.0	40.4	46.0	-5.6	Horiz
			+1.0	+1.2	+0.0		360				132
10	119.972M	53.8	+0.0	-29.2	+11.7	+0.3	+0.0	37.8	43.5	-5.7	Vert
			+0.6	+0.6	+0.0						129
11	328.741M	50.5	+0.0	-28.6	+14.3	+0.5	+0.0	38.9	46.0	-7.1	Horiz
			+1.0	+1.2	+0.0		360				132
12	108.030M	53.6	+0.0	-29.3	+10.7	+0.3	+0.0	36.4	43.5	-7.1	Horiz
			+0.5	+0.6	+0.0		360				103
13	326.218M	49.5	+0.0	-28.6	+14.2	+0.5	+0.0	37.8	46.0	-8.2	Horiz
			+1.0	+1.2	+0.0		360				132
14	960.009M	45.3	+0.0	-29.1	+24.1	+0.9	+0.0	45.6	54.0	-8.4	Vert
			+2.0	+2.4	+0.0		199				99
15	990.021M	41.0	+0.0	-28.9	+24.4	+0.9	+0.0	42.0	54.0	-12.0	Horiz
			+2.1	+2.5	+0.0		360				295
16	870.000M	44.8	+0.0	-29.3	+23.2	+0.9	+0.0	43.7	105.2	-61.5	Vert
			+1.9	+2.2	+0.0		198				122
^	870.010M	46.6	+0.0	-29.3	+23.2	+0.9	+0.0	45.5	105.2	-59.7	Vert
			+1.9	+2.2	+0.0		198				122
18	870.002M	42.8	+0.0	-29.3	+23.2	+0.9	+0.0	41.7	105.2	-63.5	Horiz
			+1.9	+2.2	+0.0		360				132
19	840.001M	42.6	+0.0	-29.3	+22.9	+0.9	+0.0	41.4	105.2	-63.8	Vert
			+1.9	+2.2	+0.2		353				112
20	810.062M	43.4	+0.0	-29.4	+22.6	+0.8	+0.0	41.3	105.2	-63.9	Horiz
			+1.8	+2.1	+0.0		360				132
21	809.942M	42.8	+0.0	-29.4	+22.6	+0.8	+0.0	40.7	105.2	-64.5	Vert
			+1.8	+2.1	+0.0						129
22	839.972M	41.6	+0.0	-29.3	+22.9	+0.9	+0.0	40.2	105.2	-65.0	Vert
			+1.9	+2.2	+0.0						129
23	100.513M	57.8	+0.0	-29.3	+10.0	+0.3	+0.0	39.8	105.2	-65.4	Vert
			+0.5	+0.5	+0.0						129

24	101.714M	57.5	+0.0 +0.5	-29.3 +0.5	+10.1 +0.0	+0.3	+0.0	39.6	105.2	-65.6	Vert 129
25	312.044M	51.4	+0.0 +1.0	-28.5 +1.2	+13.8 +0.0	+0.5	+0.0	39.4	105.2	-65.8	Horiz 132
26	959.992M	38.7	+0.0 +2.0	-29.1 +2.4	+24.1 +0.0	+0.9	+0.0	39.0	105.2	-66.2	Horiz 132
27	94.686M	57.3	+0.0 +0.5	-29.3 +0.5	+9.4 +0.0	+0.3	+0.0	38.7	105.2	-66.5	Vert 129
28	97.630M	57.0	+0.0 +0.5	-29.3 +0.5	+9.7 +0.0	+0.3	+0.0	38.7	105.2	-66.5	Vert 129
29	100.010M	56.8	+0.0 +0.5	-29.3 +0.5	+9.9 +0.0	+0.3	+0.0	38.7	105.2	-66.5	Vert 99
30	306.158M	50.7	+0.0 +0.9	-28.5 +1.2	+13.6 +0.0	+0.5	+0.0	38.4	105.2	-66.8	Horiz 132
31	102.315M	56.0	+0.0 +0.5	-29.3 +0.5	+10.2 +0.0	+0.3	+0.0	38.2	105.2	-67.0	Vert 129
32	102.795M	55.7	+0.0 +0.5	-29.3 +0.5	+10.2 +0.0	+0.3	+0.0	37.9	105.2	-67.3	Vert 129
33	97.029M	56.2	+0.0 +0.5	-29.3 +0.5	+9.7 +0.0	+0.3	+0.0	37.9	105.2	-67.3	Vert 129
34	839.972M	38.6	+0.0 +1.9	-29.3 +2.2	+22.9 +0.0	+0.9	+0.0	37.2	105.2	-68.0	Horiz 132
35	930.062M	37.3	+0.0 +2.0	-29.1 +2.3	+23.8 +0.0	+0.9	+0.0	37.2	105.2	-68.0	Horiz 132
36	32.367M QP	47.5	+0.0 +0.2	-29.4 +0.2	+18.1 +0.0	+0.2	+0.0	36.8	105.2	-68.4	Vert 152
^	32.367M	49.6	+0.0 +0.2	-29.4 +0.2	+18.1 +0.0	+0.2	+0.0	38.9	105.2	-66.3	Vert 152
38	143.996M	51.6	+0.0 +0.6	-29.1 +0.7	+11.3 +0.0	+0.4	+0.0	35.5	105.2	-69.7	Horiz 132
39	47.968M	54.1	+0.0 +0.3	-29.4 +0.3	+9.6 +0.0	+0.2	+0.0	35.1	105.2	-70.1	Vert 129
40	107.960M	52.2	+0.0 +0.5	-29.3 +0.6	+10.7 +0.0	+0.3	+0.0	35.0	105.2	-70.2	Horiz 132
41	167.993M	50.6	+0.0 +0.7	-29.0 +0.8	+9.8 +0.1	+0.4	+0.0	33.4	105.2	-71.8	Vert 116
42	72.007M	55.1	+0.0 +0.4	-29.3 +0.4	+6.3 +0.0	+0.3	+0.0	33.2	105.2	-72.0	Vert 145
43	32.462M	43.2	+0.0 +0.2	-29.4 +0.2	+18.1 +0.0	+0.2	+0.0	32.5	105.2	-72.7	Horiz 132
44	155.997M	48.2	+0.0 +0.7	-29.0 +0.8	+10.7 +0.0	+0.4	+0.0	31.8	105.2	-73.4	Vert 116
45	480.003M	39.4	+0.0 +1.3	-29.6 +1.5	+17.6 +0.1	+0.7	+0.0	31.0	105.2	-74.2	Vert 99
46	96.703M QP	47.0	+0.0 +0.5	-29.3 +0.5	+9.6 +0.0	+0.3	+0.0	28.6	105.2	-76.6	Vert 154
^	96.703M	61.0	+0.0 +0.5	-29.3 +0.5	+9.6 +0.0	+0.3	+0.0	42.6	105.2	-62.6	Vert 154
48	239.999M	42.8	+0.0 +0.9	-28.6 +1.0	+12.0 +0.0	+0.5	+0.0	28.6	105.2	-76.6	Vert 116
49	35.998M	40.6	+0.0 +0.3	-29.4 +0.2	+16.6 +0.0	+0.2	+0.0	28.5	105.2	-76.7	Vert 99

50	600.001M	33.4	+0.0	-29.8	+20.2	+0.7	+0.0	27.8	105.2	-77.4	Vert
			+1.5	+1.7	+0.1		40				112
51	99.882M	45.8	+0.0	-29.3	+9.9	+0.3	+0.0	27.7	105.2	-77.5	Vert
	QP		+0.5	+0.5	+0.0		128				99
^	99.902M	60.9	+0.0	-29.3	+9.9	+0.3	+0.0	42.8	105.2	-62.4	Vert
			+0.5	+0.5	+0.0		128				99

CKC Laboratories, Inc. Date: 12/23/2011 Time: 11:02:13 Itron, Inc. WO#: 92467
RSS-210 Issue 8 Test Distance: 3 Meters Vert Sequence#: 13 Ext ATTN: 0 dB


Test Location: CKC Laboratories, Inc. • 22116 23rd Drive SE, Suite A • Bothell, WA 98021 • (425) 402-1717

Customer: **Itron, Inc.**
 Specification: **RSS-210 Issue 8**
 Work Order #: **92467** Date: 12/22/2011
 Test Type: **Maximized Emissions** Time: 12:32:29
 Equipment: **Hand Held AMR** Sequence#: 3
 Manufacturer: Itron, Inc. Tested By: Randal Clark
 Model: FC300SRW
 S/N: FC30011242858

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
T1	AN02871	Spectrum Analyzer	E4440A	4/22/2011	4/22/2013
T2	AN01271	Preamp	83017A	8/18/2011	8/18/2013
T3	AN01467	Horn Antenna-ANSI	3115	5/7/2010	5/7/2012
		C63.5 Calibration			
T4	AN03227	Cable	32026-29080- 29080-84	5/2/2011	5/2/2013
T5	ANP05547	Cable	Heliax	7/26/2011	7/26/2013
T6	AN02750	High Pass Filter	9SH10- 1000/T10000- O/O	3/15/2010	3/15/2012
T7	AN03116	High Pass Filter	11SH10-00313	1/26/2011	1/26/2013
T8	ANWO92467	Duty Cycle Correction Factor		10/27/2011	10/27/2013
	AN03170	High Pass Filter	HM1155-11SS	9/6/2011	9/6/2013

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Hand Held AMR*	Itron, Inc.	FC300SRW	FC30011242858
Power Supply	GlobTek, Inc.	GT-81081-6015-T3	ROHS100187103109
Optical Probe	uData Net Corp.	PM-500-124	092559

Support Devices:

Function	Manufacturer	Model #	S/N
Support Power Supply	Dell	FA90PE1-00	CN-OCM889-73245-9CI- 5497-A01
Support Laptop	Dell	PP27L	917Q5M
Power Supply	SI Tech	02E03	20120-0014829
Power Supply	SI Tech	02E03	20120-0014905
USB Converter	SI Tech	2173	079536
USB Converter	SI Tech	2172	079535

Test Conditions / Notes:

EUT is located on the test table.

Screen is facing sideways. This orientation was determined to be worst case from preliminary measurements.

Support laptop is located outside the testing area via USB-fiber extension.

EUT is transmitting at 908MHz (Low), 916MHz (Mid), and 923.8MHz (High).

Power is set to EE03.

Temp: 24°C

Humidity: 30%

Pressure: 102.8kPa

Frequency: 1- 9.238GHz

Bandwidths: CISPR bandwidths used inside restricted bands, otherwise RBW=100kHz, VBW=3xRBW 100kHz outside of 15.205 frequency bands

Duty Cycle Correction Factor Applied in accordance with KDB 558074, 18.18ms per 100ms.

Ext Attn: 0 dB

Measurement Data:			Reading listed by margin.				Test Distance: 3 Meters				
#	Freq	Rdng	T1	T2	T3	T4	Dist	Corr	Spec	Margin	Polar
			T5	T6	T7	T8	Table	dB μ V/m	dB μ V/m		
	MHz	dB μ V	dB	dB	dB	dB	Table	dB μ V/m	dB μ V/m		Ant
1	4199.900M	43.7	+0.0	-33.4	+32.1	+2.0	+0.0	48.4	54.0	-5.6	Vert
			+3.3	+0.0	+0.7	+0.0	360				99
2	4800.055M	41.7	+0.0	-33.3	+32.9	+2.2	+0.0	47.9	54.0	-6.1	Vert
			+3.7	+0.0	+0.7	+0.0					99
3	4619.011M	41.8	+0.0	-33.4	+32.7	+2.1	+0.0	47.6	54.0	-6.4	Vert
Ave			+3.6	+0.0	+0.8	+0.0	78				127
^	4619.011M	45.8	+0.0	-33.4	+32.7	+2.1	+0.0	36.8	54.0	-17.2	Vert
			+3.6	+0.0	+0.8	-14.8	78				127
5	4540.000M	41.8	+0.0	-33.4	+32.6	+2.1	+0.0	47.4	54.0	-6.6	Horiz
Ave			+3.5	+0.0	+0.8	+0.0	19				108
^	4540.000M	45.0	+0.0	-33.4	+32.6	+2.1	+0.0	35.8	54.0	-18.2	Horiz
			+3.5	+0.0	+0.8	-14.8	19				108
7	3695.489M	43.3	+0.0	-33.6	+30.9	+1.9	+0.0	47.0	54.0	-7.0	Vert
			+2.9	+0.0	+1.6	+0.0					127
8	3632.100M	43.3	+0.0	-33.6	+30.7	+1.9	+0.0	46.9	54.0	-7.1	Vert
			+2.9	+0.0	+1.7	+0.0	360				99
9	3664.232M	43.1	+0.0	-33.6	+30.8	+1.9	+0.0	46.8	54.0	-7.2	Vert
			+2.9	+0.0	+1.7	+0.0					105
10	4580.010M	41.1	+0.0	-33.4	+32.6	+2.1	+0.0	46.8	54.0	-7.2	Vert
Ave			+3.6	+0.0	+0.8	+0.0	120				105
^	4580.010M	45.0	+0.0	-33.4	+32.6	+2.1	+0.0	35.9	54.0	-18.1	Vert
			+3.6	+0.0	+0.8	-14.8	120				105
12	3631.996M	43.0	+0.0	-33.6	+30.7	+1.9	+0.0	46.6	54.0	-7.4	Horiz
Ave			+2.9	+0.0	+1.7	+0.0	197				108
^	3631.996M	46.5	+0.0	-33.6	+30.7	+1.9	+0.0	35.3	54.0	-18.7	Horiz
			+2.9	+0.0	+1.7	-14.8	197				108
14	3695.239M	42.8	+0.0	-33.6	+30.9	+1.9	+0.0	46.5	54.0	-7.5	Horiz
Ave			+2.9	+0.0	+1.6	+0.0	360				102
^	3695.239M	44.8	+0.0	-33.6	+30.9	+1.9	+0.0	48.5	54.0	-5.5	Horiz
			+2.9	+0.0	+1.6	+0.0	360				102

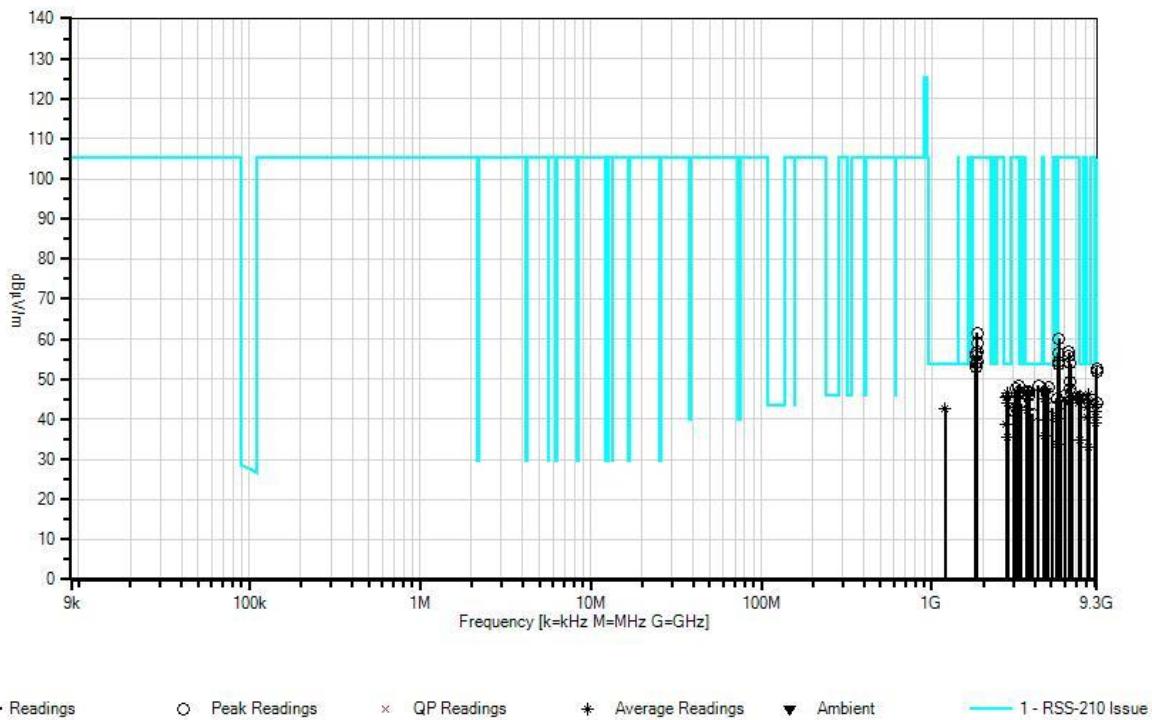
16	2771.391M	39.5	+0.0	-33.9	+28.6	+1.6	+0.0	46.5	54.0	-7.5	Vert
	Ave		+1.3	+0.0	+9.4	+0.0	155		High Channel		124
^	2771.391M	45.1	+0.0	-33.9	+28.6	+1.6	+0.0	52.1	54.0	-1.9	Vert
			+1.3	+0.0	+9.4	+0.0	155		High Channel		124
18	8243.588M	34.9	+0.0	-34.6	+36.0	+4.0	+0.0	46.3	54.0	-7.7	Horiz
	Ave		+4.9	+0.0	+1.1	+0.0	285		Mid Channel		101
^	8243.588M	43.0	+0.0	-34.6	+36.0	+4.0	+0.0	54.4	54.0	+0.4	Horiz
			+4.9	+0.0	+1.1	+0.0	285		Mid Channel		101
20	7390.445M	35.6	+0.0	-34.5	+36.1	+3.3	+0.0	45.9	54.0	-8.1	Vert
	Ave		+4.5	+0.0	+0.9	+0.0	147		High Channel		109
^	7390.445M	43.4	+0.0	-34.5	+36.1	+3.3	+0.0	53.7	54.0	-0.3	Vert
			+4.5	+0.0	+0.9	+0.0	147		High Channel		109
22	3660.200M	42.2	+0.0	-33.6	+30.8	+1.9	+0.0	45.9	54.0	-8.1	Vert
			+2.9	+0.0	+1.7	+0.0	360				99
23	3664.000M	42.1	+0.0	-33.6	+30.8	+1.9	+0.0	45.8	54.0	-8.2	Horiz
	Ave		+2.9	+0.0	+1.7	+0.0	336		Mid Channel		106
^	3663.928M	46.6	+0.0	-33.6	+30.8	+1.9	+0.0	50.3	54.0	-3.7	Horiz
			+2.9	+0.0	+1.7	+0.0	336		Mid Channel		106
25	2771.401M	53.5	+0.0	-33.9	+28.6	+1.6	+0.0	45.7	54.0	-8.3	Horiz
	Ave		+1.3	+0.0	+9.4	-14.8			High Channel		101
^	2771.439M	55.4	+0.0	-33.9	+28.6	+1.6	+0.0	62.4	54.0	+8.4	Horiz
			+1.3	+0.0	+9.4	+0.0			High Channel		101
27	7328.454M	35.6	+0.0	-34.6	+36.1	+3.2	+0.0	45.6	54.0	-8.4	Horiz
			+4.4	+0.0	+0.9	+0.0	127		Mid Channel		136
28	2723.964M	34.0	+0.0	-33.9	+28.4	+1.6	+0.0	45.4	54.0	-8.6	Horiz
	Ave		+1.2	+0.0	+14.1	+0.0	349		Low Channel		126
^	2724.008M	41.0	+0.0	-33.9	+28.4	+1.6	+0.0	52.4	54.0	-1.6	Horiz
			+1.2	+0.0	+14.1	+0.0	349		Low Channel		126
30	3600.014M	41.8	+0.0	-33.6	+30.6	+1.9	+0.0	45.3	54.0	-8.7	Vert
	Ave		+2.8	+0.0	+1.8	+0.0	330				99
^	3600.014M	47.5	+0.0	-33.6	+30.6	+1.9	+0.0	36.2	54.0	-17.8	Vert
			+2.8	+0.0	+1.8	-14.8	330				99
32	7263.830M	35.1	+0.0	-34.5	+36.1	+3.2	+0.0	45.2	54.0	-8.8	Vert
	Ave		+4.4	+0.0	+0.9	+0.0	48		Low Channel		137
^	7263.830M	42.5	+0.0	-34.5	+36.1	+3.2	+0.0	52.6	54.0	-1.4	Vert
			+4.4	+0.0	+0.9	+0.0	48		Low Channel		137
34	5400.175M	37.6	+0.0	-33.5	+33.9	+2.3	+0.0	45.1	54.0	-8.9	Vert
			+3.8	+0.0	+1.0	+0.0					99
35	4540.012M	39.4	+0.0	-33.4	+32.6	+2.1	+0.0	45.0	54.0	-9.0	Vert
	Ave		+3.5	+0.0	+0.8	+0.0	164		Low Channel		99
^	4540.012M	43.5	+0.0	-33.4	+32.6	+2.1	+0.0	34.3	54.0	-19.7	Vert
			+3.5	+0.0	+0.8	-14.8	164		Low Channel		99
37	8244.412M	33.5	+0.0	-34.6	+36.0	+4.0	+0.0	44.9	54.0	-9.1	Vert
	Ave		+4.9	+0.0	+1.1	+0.0	295		Mid Channel		118
^	8244.412M	41.9	+0.0	-34.6	+36.0	+4.0	+0.0	53.3	54.0	-0.7	Vert
			+4.9	+0.0	+1.1	+0.0	295		Mid Channel		118
39	7390.779M	34.5	+0.0	-34.5	+36.1	+3.3	+0.0	44.8	54.0	-9.2	Horiz
	Ave		+4.5	+0.0	+0.9	+0.0	64		High Channel		126
^	7390.779M	42.4	+0.0	-34.5	+36.1	+3.3	+0.0	52.7	54.0	-1.3	Horiz
			+4.5	+0.0	+0.9	+0.0	64		High Channel		126
41	8314.543M	33.0	+0.0	-34.5	+36.0	+4.1	+0.0	44.7	54.0	-9.3	Vert
	Ave		+5.0	+0.0	+1.1	+0.0	343		High Channel		116

^ 8314.637M	41.6	+0.0	-34.5	+36.0	+4.1	+0.0	53.3	54.0	-0.7	Vert
		+5.0	+0.0	+1.1	+0.0	343		High Channel		116
43 2748.022M	34.8	+0.0	-33.9	+28.5	+1.6	+0.0	43.9	54.0	-10.1	Vert
Ave		+1.2	+0.0	+11.7	+0.0	138		Mid Channel		131
^ 2748.044M	40.8	+0.0	-33.9	+28.5	+1.6	+0.0	49.9	54.0	-4.1	Vert
		+1.2	+0.0	+11.7	+0.0	138		Mid Channel		131
^ 2748.044M	40.8	+0.0	-33.9	+28.5	+1.6	+0.0	49.9	54.0	-4.1	Vert
		+1.2	+0.0	+11.7	+0.0	360		Mid Channel		105
46 7263.796M	33.8	+0.0	-34.5	+36.1	+3.2	+0.0	43.9	54.0	-10.1	Horiz
Ave		+4.4	+0.0	+0.9	+0.0	155		Low Channel		123
^ 7263.796M	41.9	+0.0	-34.5	+36.1	+3.2	+0.0	37.2	54.0	-16.8	Horiz
		+4.4	+0.0	+0.9	-14.8	155		Low Channel		123
48 9160.490M	30.3	+0.0	-34.1	+36.5	+4.6	+0.0	43.7	54.0	-10.3	Horiz
Ave		+5.2	+0.0	+1.2	+0.0	244		Mid Channel		117
^ 9160.490M	39.3	+0.0	-34.1	+36.5	+4.6	+0.0	52.7	54.0	-1.3	Horiz
		+5.2	+0.0	+1.2	+0.0	244		Mid Channel		117
50 8172.402M	31.6	+0.0	-34.6	+36.1	+4.0	+0.0	43.0	54.0	-11.0	Vert
Ave		+4.9	+0.0	+1.0	+0.0	342		Low Channel		139
^ 8172.402M	40.6	+0.0	-34.6	+36.1	+4.0	+0.0	37.2	54.0	-16.8	Vert
		+4.9	+0.0	+1.0	-14.8	342		Low Channel		139
52 5099.955M	36.2	+0.0	-33.4	+33.3	+2.2	+0.0	42.9	54.0	-11.1	Vert
		+3.8	+0.0	+0.8	+0.0	360				99
53 1200.009M	15.2	+0.0	+0.0	+24.2	+1.0	+0.0	42.7	54.0	-11.3	Horiz
Ave		+1.5	+0.8	+0.0	+0.0	319				111
^ 1200.030M	23.3	+0.0	+0.0	+24.2	+1.0	+0.0	50.8	54.0	-3.2	Horiz
		+1.5	+0.8	+0.0	+0.0	360				99
55 3631.992M	38.6	+0.0	-33.6	+30.7	+1.9	+0.0	42.2	54.0	-11.8	Vert
Ave		+2.9	+0.0	+1.7	+0.0	158		Low Channel		111
^ 3631.992M	44.9	+0.0	-33.6	+30.7	+1.9	+0.0	33.7	54.0	-20.3	Vert
		+2.9	+0.0	+1.7	-14.8	158		Low Channel		111
57 9080.480M	28.5	+0.0	-34.1	+36.5	+4.6	+0.0	41.9	54.0	-12.1	Vert
Ave		+5.2	+0.0	+1.2	+0.0	51		Low Channel		139
^ 9080.476M	37.5	+0.0	-34.1	+36.5	+4.6	+0.0	50.9	54.0	-3.1	Vert
		+5.2	+0.0	+1.2	+0.0	51		Low Channel		139
59 3900.040M	37.3	+0.0	-33.5	+31.5	+2.0	+0.0	41.2	54.0	-12.8	Vert
		+3.1	+0.0	+0.8	+0.0	-9				99
60 9080.476M	27.1	+0.0	-34.1	+36.5	+4.6	+0.0	40.5	54.0	-13.5	Horiz
Ave		+5.2	+0.0	+1.2	+0.0	13		Low Channel		137
^ 9080.454M	38.0	+0.0	-34.1	+36.5	+4.6	+0.0	51.4	54.0	-2.6	Horiz
		+5.2	+0.0	+1.2	+0.0	13		Low Channel		137
62 8172.432M	29.0	+0.0	-34.6	+36.1	+4.0	+0.0	40.4	54.0	-13.6	Horiz
Ave		+4.9	+0.0	+1.0	+0.0	290		Low Channel		121
^ 8172.454M	38.5	+0.0	-34.6	+36.1	+4.0	+0.0	49.9	54.0	-4.1	Horiz
		+4.9	+0.0	+1.0	+0.0	290		Low Channel		121
64 5448.370M	47.5	+0.0	-33.5	+34.0	+2.3	+0.0	40.3	54.0	-13.7	Horiz
Ave		+3.8	+0.0	+1.0	-14.8	336		Low Channel		108
^ 5448.370M	51.2	+0.0	-33.5	+34.0	+2.3	+0.0	58.8	54.0	+4.8	Horiz
		+3.8	+0.0	+1.0	+0.0	336		Low Channel		108
66 4619.265M	48.7	+0.0	-33.4	+32.7	+2.1	+0.0	39.7	54.0	-14.3	Horiz
Ave		+3.6	+0.0	+0.8	-14.8	78		High Channel		99
^ 4619.349M	49.6	+0.0	-33.4	+32.7	+2.1	+0.0	55.4	54.0	+1.4	Horiz
		+3.6	+0.0	+0.8	+0.0	78		High Channel		99

68	9160.488M	25.6	+0.0	-34.1	+36.5	+4.6	+0.0	39.0	54.0	-15.0	Vert
	Ave		+5.2	+0.0	+1.2	+0.0	271		Mid Channel		117
^	9160.488M	37.7	+0.0	-34.1	+36.5	+4.6	+0.0	36.3	54.0	-17.7	Vert
			+5.2	+0.0	+1.2	-14.8	271		Mid Channel		117
70	2723.976M	27.3	+0.0	-33.9	+28.4	+1.6	+0.0	38.7	54.0	-15.3	Vert
	Ave		+1.2	+0.0	+14.1	+0.0	48		Low Channel		107
^	2724.014M	38.4	+0.0	-33.9	+28.4	+1.6	+0.0	49.8	54.0	-4.2	Vert
			+1.2	+0.0	+14.1	+0.0	41		Low Channel		107
72	4580.214M	45.0	+0.0	-33.4	+32.6	+2.1	+0.0	35.9	54.0	-18.1	Horiz
	Ave		+3.6	+0.0	+0.8	-14.8	39		Mid Channel		102
^	4580.214M	49.0	+0.0	-33.4	+32.6	+2.1	+0.0	54.7	54.0	+0.7	Horiz
			+3.6	+0.0	+0.8	+0.0	39		Mid Channel		102
74	2748.206M	41.2	+0.0	-33.9	+28.5	+1.6	+0.0	35.5	54.0	-18.5	Horiz
	Ave		+1.2	+0.0	+11.7	-14.8	329		Mid Channel		99
^	2748.206M	46.0	+0.0	-33.9	+28.5	+1.6	+0.0	55.1	54.0	+1.1	Horiz
			+1.2	+0.0	+11.7	+0.0	376		Mid Channel		99
76	7328.364M	24.8	+0.0	-34.6	+36.1	+3.2	+0.0	34.8	54.0	-19.2	Vert
	Ave		+4.4	+0.0	+0.9	+0.0	137		Mid Channel		140
^	7328.386M	37.3	+0.0	-34.6	+36.1	+3.2	+0.0	47.3	54.0	-6.7	Vert
			+4.4	+0.0	+0.9	+0.0	137		Mid Channel		140
78	5448.244M	41.1	+0.0	-33.5	+34.0	+2.3	+0.0	33.9	54.0	-20.1	Vert
	Ave		+3.8	+0.0	+1.0	-14.8	239		Low Channel		99
^	5448.244M	45.8	+0.0	-33.5	+34.0	+2.3	+0.0	53.4	54.0	-0.6	Vert
			+3.8	+0.0	+1.0	+0.0	239		Low Channel		99
80	8313.839M	36.1	+0.0	-34.5	+36.0	+4.1	+0.0	33.0	54.0	-21.0	Horiz
	Ave		+5.0	+0.0	+1.1	-14.8	295		High Channel		126
^	8313.765M	44.4	+0.0	-34.5	+36.0	+4.1	+0.0	56.1	54.0	+2.1	Horiz
			+5.0	+0.0	+1.1	+0.0	295		High Channel		126
82	1847.670M	30.6	+0.0	+0.0	+27.4	+1.3	+0.0	61.6	105.2	-43.6	Horiz
			+1.9	+0.4	+0.0	+0.0	315		High Channel		112
83	5543.101M	52.4	+0.0	-33.6	+34.2	+2.4	+0.0	60.2	105.2	-45.0	Horiz
			+3.8	+0.0	+1.0	+0.0	340		High Channel		125
84	1831.820M	28.2	+0.0	+0.0	+27.3	+1.3	+0.0	59.0	105.2	-46.2	Horiz
			+1.9	+0.3	+0.0	+0.0	293		Mid Channel		111
85	1847.620M	25.9	+0.0	+0.0	+27.4	+1.3	+0.0	56.9	105.2	-48.3	Vert
			+1.9	+0.4	+0.0	+0.0			High Channel		102
86	6355.650M	47.4	+0.0	-33.9	+34.9	+2.8	+0.0	56.8	105.2	-48.4	Vert
			+4.1	+0.0	+1.5	+0.0			Low Channel		99
87	5496.304M	48.7	+0.0	-33.5	+34.1	+2.4	+0.0	56.5	105.2	-48.7	Horiz
			+3.8	+0.0	+1.0	+0.0	349		Mid Channel		99
88	1816.030M	25.7	+0.0	+0.0	+27.2	+1.3	+0.0	56.4	105.2	-48.8	Horiz
			+1.9	+0.3	+0.0	+0.0	35		Low Channel		104
89	1800.005M	25.1	+0.0	+0.0	+27.1	+1.3	+0.0	55.8	105.2	-49.4	Vert
			+2.0	+0.3	+0.0	+0.0	360				99
90	6356.344M	46.3	+0.0	-33.9	+34.9	+2.8	+0.0	55.7	105.2	-49.5	Horiz
			+4.1	+0.0	+1.5	+0.0			Low Channel		123
91	1831.920M	23.6	+0.0	+0.0	+27.3	+1.3	+0.0	54.4	105.2	-50.8	Vert
			+1.9	+0.3	+0.0	+0.0	360		Mid Channel		100
92	5542.507M	46.5	+0.0	-33.6	+34.2	+2.4	+0.0	54.3	105.2	-50.9	Vert
			+3.8	+0.0	+1.0	+0.0			High Channel		108
93	1816.005M	23.2	+0.0	+0.0	+27.2	+1.3	+0.0	53.9	105.2	-51.3	Vert
			+1.9	+0.3	+0.0	+0.0	54		Low Channel		104

94	6466.263M	44.5	+0.0	-34.0	+34.9	+2.8	+0.0	53.9	105.2	-51.3	Vert
			+4.2	+0.0	+1.5	+0.0	242		High Channel		108
95	6466.247M	44.4	+0.0	-34.0	+34.9	+2.8	+0.0	53.8	105.2	-51.4	Horiz
			+4.2	+0.0	+1.5	+0.0	360		High Channel		125
96	5496.306M	45.8	+0.0	-33.5	+34.1	+2.4	+0.0	53.6	105.2	-51.6	Vert
			+3.8	+0.0	+1.0	+0.0	360		Mid Channel		118
97	1800.030M	22.4	+0.0	+0.0	+27.1	+1.3	+0.0	53.1	105.2	-52.1	Horiz
			+2.0	+0.3	+0.0	+0.0	266				111
98	9237.495M	39.4	+0.0	-34.1	+36.4	+4.5	+0.0	52.7	105.2	-52.5	Horiz
			+5.2	+0.0	+1.3	+0.0	242		High Channel		108
99	9237.481M	38.7	+0.0	-34.1	+36.4	+4.5	+0.0	52.0	105.2	-53.2	Horiz
			+5.2	+0.0	+1.3	+0.0			High Channel		126
100	1200.011M	22.2	+0.0	-35.9	+24.2	+1.0	+0.0	-1.8	54.0	-55.8	Vert
	Ave		+1.5	+0.0	+0.0	-14.8	165				99
^	1200.105M	28.1	+0.0	+0.0	+24.2	+1.0	+0.0	55.6	54.0	+1.6	Vert
			+1.5	+0.8	+0.0	+0.0	165				99
102	6412.348M	40.1	+0.0	-34.0	+34.9	+2.8	+0.0	49.4	105.2	-55.8	Horiz
			+4.1	+0.0	+1.5	+0.0	360		Mid Channel		99
103	3210.000M	46.1	+0.0	-33.8	+29.6	+1.8	+0.0	48.4	105.2	-56.8	Vert
			+2.6	+0.0	+2.1	+0.0					99
104	3240.000M	45.9	+0.0	-33.9	+29.7	+1.8	+0.0	48.3	105.2	-56.9	Vert
			+2.7	+0.0	+2.1	+0.0					99
105	6411.652M	38.3	+0.0	-34.0	+34.9	+2.8	+0.0	47.6	105.2	-57.6	Vert
			+4.1	+0.0	+1.5	+0.0	360		Mid Channel		140
106	3089.990M	45.9	+0.0	-33.9	+29.3	+1.8	+0.0	47.5	105.2	-57.7	Vert
			+2.4	+0.0	+2.0	+0.0	360				99
107	3149.900M	44.7	+0.0	-33.8	+29.5	+1.8	+0.0	46.7	105.2	-58.5	Vert
			+2.5	+0.0	+2.0	+0.0					99
108	6600.050M	36.9	+0.0	-34.0	+35.1	+2.9	+0.0	46.6	105.2	-58.6	Vert
			+4.2	+0.0	+1.5	+0.0	360				99
109	6000.210M	37.3	+0.0	-33.8	+34.9	+2.5	+0.0	45.8	105.2	-59.4	Vert
			+3.8	+0.0	+1.1	+0.0					99
110	3000.000M	42.9	+0.0	-33.8	+29.1	+1.7	+0.0	44.3	105.2	-60.9	Vert
			+2.2	+0.0	+2.2	+0.0					99
111	5699.795M	36.5	+0.0	-33.8	+34.4	+2.4	+0.0	44.1	105.2	-61.1	Vert
			+3.8	+0.0	+0.8	+0.0	360				99
112	3299.930M	41.6	+0.0	-34.0	+29.8	+1.8	+0.0	44.0	105.2	-61.2	Vert
			+2.7	+0.0	+2.1	+0.0	23				101
113	9237.495M	30.6	+0.0	-34.1	+36.4	+4.5	+0.0	43.9	105.2	-61.3	Vert
			+5.2	+0.0	+1.3	+0.0	-15		High Channel		108
114	3120.100M	41.4	+0.0	-33.9	+29.4	+1.8	+0.0	43.1	105.2	-62.1	Vert
			+2.4	+0.0	+2.0	+0.0	360				99
115	3059.800M	40.3	+0.0	-33.8	+29.2	+1.7	+0.0	41.8	105.2	-63.4	Vert
			+2.3	+0.0	+2.1	+0.0	360				99

CKC Laboratories, Inc. Date: 12/22/2011 Time: 12:32:29 Itron, Inc. WO#: 92467
RSS-210 Issue 8 Test Distance: 3 Meters Vert Sequence#: 3 Ext ATTN: 0 dB



Test Setup Photos



SUPPLEMENTAL INFORMATION

Measurement Uncertainty

Uncertainty Value	Parameter
4.73 dB	Radiated Emissions
3.34 dB	Mains Conducted Emissions
3.30 dB	Disturbance Power

The reported measurement uncertainties are calculated based on the worst case of all laboratory environments from CKC Laboratories, Inc. test sites. Only those parameters which require estimation of measurement uncertainty are reported. The reported worst case measurement uncertainty is less than the maximum values derived in CISPR 16-4-2. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of $k=2$. Compliance is deemed to occur provided measurements are below the specified limits.

Emissions Test Details

TESTING PARAMETERS

Unless otherwise indicated, the following configuration parameters are used for equipment setup: The cables were routed consistent with the typical application by varying the configuration of the test sample. Interface cables were connected to the available ports of the test unit. The effect of varying the position of the cables was investigated to find the configuration that produced maximum emissions. Cables were of the type and length specified in the individual requirements. The length of cable that produced maximum emissions was selected.

The equipment under test (EUT) was set up in a manner that represented its normal use, as shown in the setup photographs. Any special conditions required for the EUT to operate normally are identified in the comments that accompany the emissions tables.

The emissions data was taken with a spectrum analyzer or receiver. Incorporating the applicable correction factors for distance, antenna, cable loss and amplifier gain, the data was reduced as shown in the table below. The corrected data was then compared to the applicable emission limits. Preliminary and final measurements were taken in order to ensure that all emissions from the EUT were found and maximized.

CORRECTION FACTORS

The basic spectrum analyzer reading was converted using correction factors as shown in the highest emissions readings in the tables. For radiated emissions in $\text{dB}\mu\text{V}/\text{m}$, the spectrum analyzer reading in $\text{dB}\mu\text{V}$ was corrected by using the following formula. This reading was then compared to the applicable specification limit.

SAMPLE CALCULATIONS	
Meter reading	(dB μ V)
+ Antenna Factor	(dB)
+ Cable Loss	(dB)
- Distance Correction	(dB)
- Preamplifier Gain	(dB)
= Corrected Reading	(dB μ V/m)

TEST INSTRUMENTATION AND ANALYZER SETTINGS

The test instrumentation and equipment listed were used to collect the emissions data. A spectrum analyzer or receiver was used for all measurements. Unless otherwise specified, the following table shows the measuring equipment bandwidth settings that were used in designated frequency bands. For testing emissions, an appropriate reference level and a vertical scale size of 10 dB per division were used.

MEASURING EQUIPMENT BANDWIDTH SETTINGS PER FREQUENCY RANGE			
TEST	BEGINNING FREQUENCY	ENDING FREQUENCY	BANDWIDTH SETTING
CONDUCTED EMISSIONS	150 kHz	30 MHz	9 kHz
RADIATED EMISSIONS	30 MHz	1000 MHz	120 kHz
RADIATED EMISSIONS	1000 MHz	>1 GHz	1 MHz

SPECTRUM ANALYZER/RECEIVER DETECTOR FUNCTIONS

The notes that accompany the measurements contained in the emissions tables indicate the type of detector function used to obtain the given readings. Unless otherwise noted, all readings were made in the "positive peak" detector mode. Whenever a "quasi-peak" or "average" reading was recorded, the measurement was annotated with a "QP" or an "Ave" on the appropriate rows of the data sheets. In cases where quasi-peak or average limits were employed and data exists for multiple measurement types for the same frequency then the peak measurement was retained in the report for reference, however the numbering for the affected row was removed and an arrow or carrot ("^") was placed in the far left-hand column indicating that the row above takes precedence for comparison to the limit. The following paragraphs describe in more detail the detector functions and when they were used to obtain the emissions data.

Peak

In this mode, the spectrum analyzer or receiver recorded all emissions at their peak value as the frequency band selected was scanned. By combining this function with another feature called "peak hold," the measurement device had the ability to measure intermittent or low duty cycle transient emission peak levels. In this mode the measuring device made a slow scan across the frequency band selected and measured the peak emission value found at each frequency across the band.

Quasi-Peak

Quasi-peak measurements were taken using the quasi-peak detector when the true peak values exceeded or were within 2 dB of a quasi-peak specification limit. Additional QP measurements may have been taken at the discretion of the operator.

Average

Average measurements were taken using the average detector when the true peak values exceeded or were within 2 dB of an average specification limit. Additional average measurements may have been taken at the discretion of the operator. If the specification or test procedure requires trace averaging, then the averaging was performed using 100 samples or as required by the specification. All other average measurements are performed using video bandwidth averaging. To make these measurements, the test engineer reduces the video bandwidth on the measuring device until the modulation of the signal is filtered out. At this point the measuring device is set into the linear mode and the scan time is reduced.