

# Anchor Audio, Inc.

## TEST REPORT FOR

### Wireless Pier to Pier Intercom, ProLink

#### Tested To The Following Standards:

FCC Part 15 Subpart C Sections: 15.209 and 15.247

Report No.: 90319-7

Date of issue: March 16, 2010

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.



TESTING  
CERT #803.01, 803.02,  
803.05, 803.06

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.

## TABLE OF CONTENTS

Administrative Information .....	3
Test Report Information .....	3
Report Authorization .....	3
Test Facility Information .....	4
Site Registration & Accreditation Information .....	4
Summary of Results .....	5
Conditions During Testing .....	5
Equipment Under Test .....	5
Peripheral Devices .....	5
FCC Part 15 Subpart C .....	6
Temperature And Humidity During Testing .....	6
15.31(e) Voltage Variation .....	6
15.31(m) Number Of Channels .....	6
15.33(a) Frequency Ranges Tested .....	6
15.203 Antenna Requirements .....	6
EUT Operating Frequency .....	6
15.247(a)(2) -6dB Bandwidth .....	7
15.247(b)(2) - RF Power Output .....	9
15.247(d) Conducted Spurious Emissions .....	12
15.247(d) / 15.209/15.205 Radiated Spurious Emissions .....	16
15.247(e) Power Spectral Density .....	30
Band Edge .....	32
Supplemental Information .....	35
Measurement Uncertainty .....	35
Emissions Test Details .....	35

## ADMINISTRATIVE INFORMATION

### Test Report Information

**REPORT PREPARED FOR:**

Anchor Audio, Inc.  
2565 West 237th ST  
Torrance, CA 90505

Representative: Rohini Minapalli  
Customer Reference Number: 0012528

**REPORT PREPARED BY:**

Dianne Dudley  
CKC Laboratories, Inc.  
5046 Sierra Pines Drive  
Mariposa, CA 95338

Project Number: 90319

**DATE OF EQUIPMENT RECEIPT:**

January 25, 2010

**DATE(S) OF TESTING:**

January 25 - March 8, 2010

### 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.  
110 Olinda Place  
Brea, CA 92823

## Site Registration & Accreditation Information

Location	Japan	Canada	FCC
Brea A	R-301, C-314 & T-1572	3082D-1	90473

## SUMMARY OF RESULTS

### Standard / Specification: FCC Part 15 Subpart C

Description	Test Procedure/Method	Results
Bandwidth -6dB	FCC Part 15 Subpart C Section 15.247(a)(2)	Pass
RF Power Output	FCC Part 15 Subpart C Section 15.247(b)(2)	Pass
Conducted Spurious Emissions	FCC Part 15 Subpart C Section 15.247(d)	Pass
Radiated Spurious Emissions	FCC Part 15 Subpart C Section 15.247 (d) 15.209/15.205	Pass
Power Spectral Density	FCC Part 15 Subpart C Section 15.247(e)	Pass
Band Edge	ITU-R 55/1	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
None

## EQUIPMENT UNDER TEST (EUT)

### EQUIPMENT UNDER TEST

#### Wireless Pier to Pier Intercom

Manuf: Anchor Audio, Inc.

Model: ProLink

Serial: NA

### PERIPHERAL DEVICES

The EUT was not tested with peripheral devices.

## FCC PART 15 SUBPART C

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

### **Temperature And Humidity During Testing**

The temperature during testing was within +15°C and + 35°C.

The relative humidity was between 20% and 75%.

### **15.31(e) Voltage Variations**

Fresh batteries were installed.

### **15.31(m) Number Of Channels**

This device operates on two channels.

### **15.33(a) Frequency Ranges Tested**

15.205/15.209/15.247 Radiated Emissions: 9 kHz – 10GHz

### **15.203 Antenna Requirements**

The antenna is removable, reversed SMA connector.

### **EUT Operating Frequency**

The EUT was operating at 903.5 - 926.0MHz

## 15.247(a)(2) -6dB Bandwidth

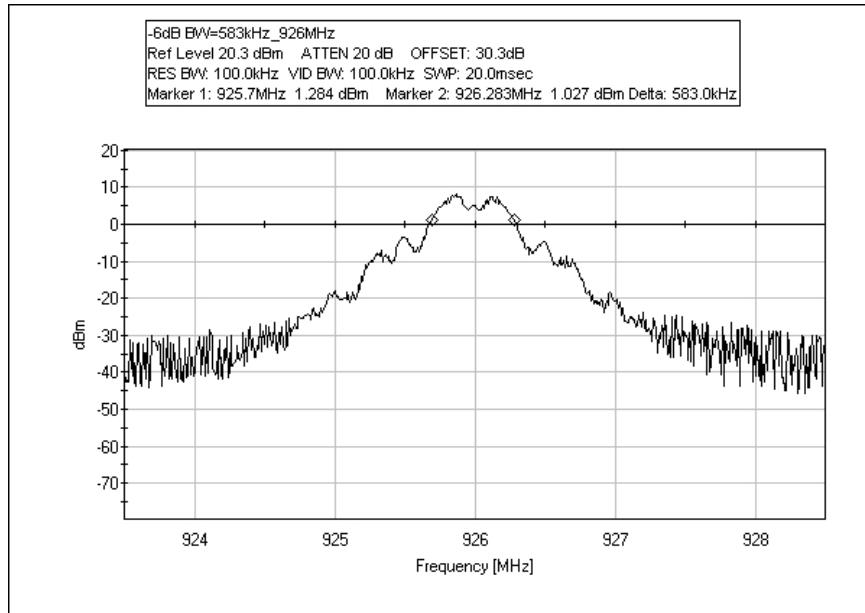
**Test Set up:** The EUT is placed on the test bench. The device is set in continuous transmit and receive mode, the -6dB Bandwidth is measured at the transmit antenna port.

Engineer Name: E. Wong

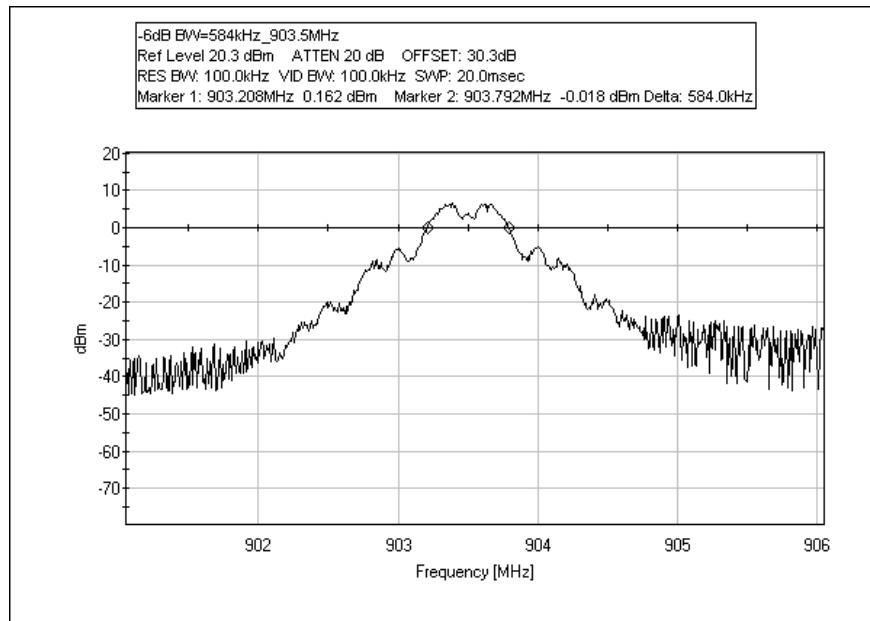
Test Equipment				
Equipment	Serial	Cal Date	Cal Due	Asset
Spectrum Analyzer	US44300438	07/23/2008	07/23/2010	02672
3'-40GHz cable	NA	09/14/2009	09/14/2011	P02946

### Test Plots

**-6dB Bandwidth = 583kHz\_926MHz**



**-6dB Bandwidth = 584kHz\_903.5MHz**



**Test Setup Photos**



## 15.247(b)(2) - RF Power Output

**Test Set up:** The EUT is placed on the test bench. The device is set in continuous transmit and receive mode, the RF output power is measure at the transmit antenna port in accordance with KDB Publication No. 558074.

Engineer Name: E. Wong

Test Equipment				
Equipment	Serial	Cal Date	Cal Due	Asset
Spectrum Analyzer	US44300438	07/23/2008	07/23/2010	02672
3'-40GHz cable	NA	09/14/2009	09/14/2011	P02946
Power Supply	988614	10/14/2009	10/14/2010	1438

### Test Data

Power Option 2, Method 2.

RBW=VBW: 8MHz

Detector: Sample

Average: 100 Trace average

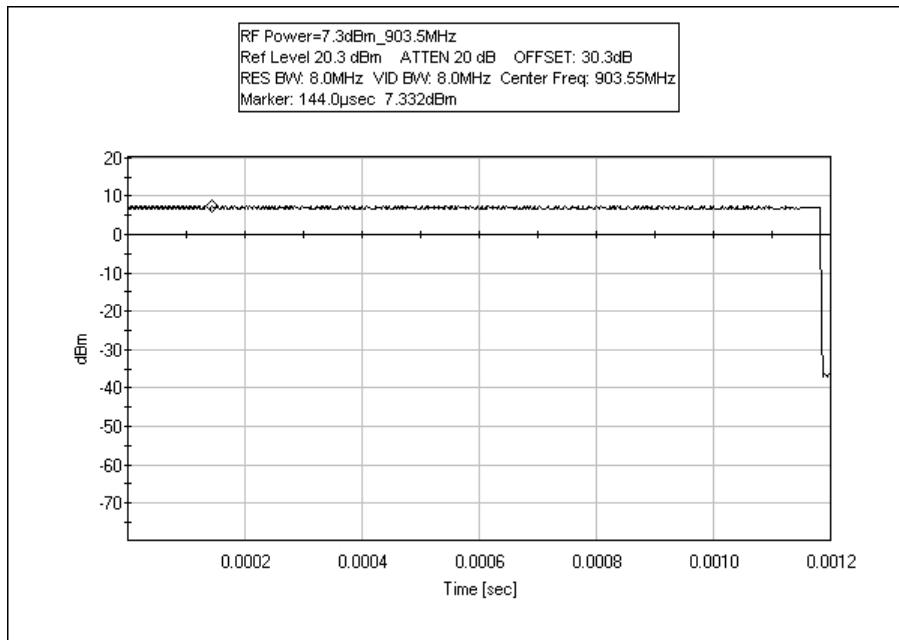
Trigger: RF Burst.

Sweep time: 1.2mS

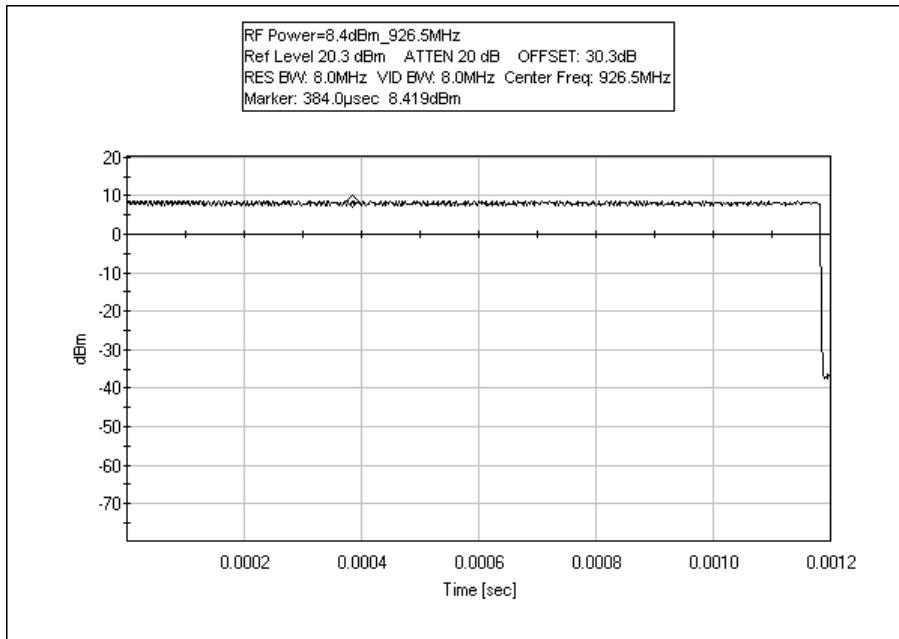
Frequency (MHz)	Power (dBm)	Power ( W)
903.5	7.3	0.005
926.5	8.4	0.007

### Test Plots

#### RF Power Output - 7.3dBm\_903.5MHz



#### RF Power Output - 8.4dBm\_926.5MHz



**Test Setup Photos**



## 15.247(d) Conducted Spurious Emissions

### Test Data Sheets

Test Location: CKC Laboratories, Inc. • 110. N. Olinda Place. • Brea, CA 92821 • (714) 993-6112

Customer: **Anchor Audio, Inc.**  
 Specification: **15.247(d) Conducted Spurious Emissions**  
 Work Order #: **90319** Date: **3/8/2010**  
 Test Type: **Conducted Emissions** Time: **15:19:31**  
 Equipment: **Wireless Pier to Pier Intercom** Sequence#: **3**  
 Manufacturer: **Anchor Audio, Inc.** Tested By: **E. Wong**  
 Model: **ProLink** **110V 60Hz**  
 S/N: **NA**

***Test Equipment:***

Function	S/N	Calibration Date	Cal Due Date	Asset #
Spectrum Analyzer	US44300438	07/23/2008	07/23/2010	02672
3'-40GHz cable	NA	10/28/2009	10/28/2011	P03174

***Equipment Under Test (\* = EUT):***

Function	Manufacturer	Model #	S/N
Wireless Pier to Pier Intercom*	Anchor Audio, Inc.	ProLink	NA

***Support Devices:***

Function	Manufacturer	Model #	S/N

**Test Conditions / Notes:**

The battery operated EUT is placed on the test bench, a microphone and headphone assembly is connected to the Audio port

Only one of the two radio module has transmit capability, while both have receiving function.

The transmit radio is set in constant transmit and receive mode, 1.2mSec pulse. Audio controls are set at the highest gain. Any detected audio noise is digitized and transmitted.

Emission profile is evaluated at the transmit antenna port.

903.5-926 MHz

Freq: 903.5 - 926.0MHz

Power = 7.3dBm (0.005W), 8.4dBm (0.007W)

Modulation: GFSK

18°C, 40% Relative Humidity

15.31(e) Fresh batteries are installed.

Frequency range of measurement = 9 kHz- 10 GHz.

Frequency 9 kHz - 150 kHz RBW=200 Hz, VBW=200 Hz; 150 kHz- 30 MHz RBW=9 kHz, VBW=9 kHz; 30 MHz- 1000 MHz RBW=120 kHz, VBW=120 kHz; 1000 MHz-10000 MHz RBW=1 MHz, VBW=1 MHz

RBW=VBW=100kHz.

Limit line 1: 7.3dBm+107=114.3dBuV, 114.3dBuV -20dB = 94.3dBuV.

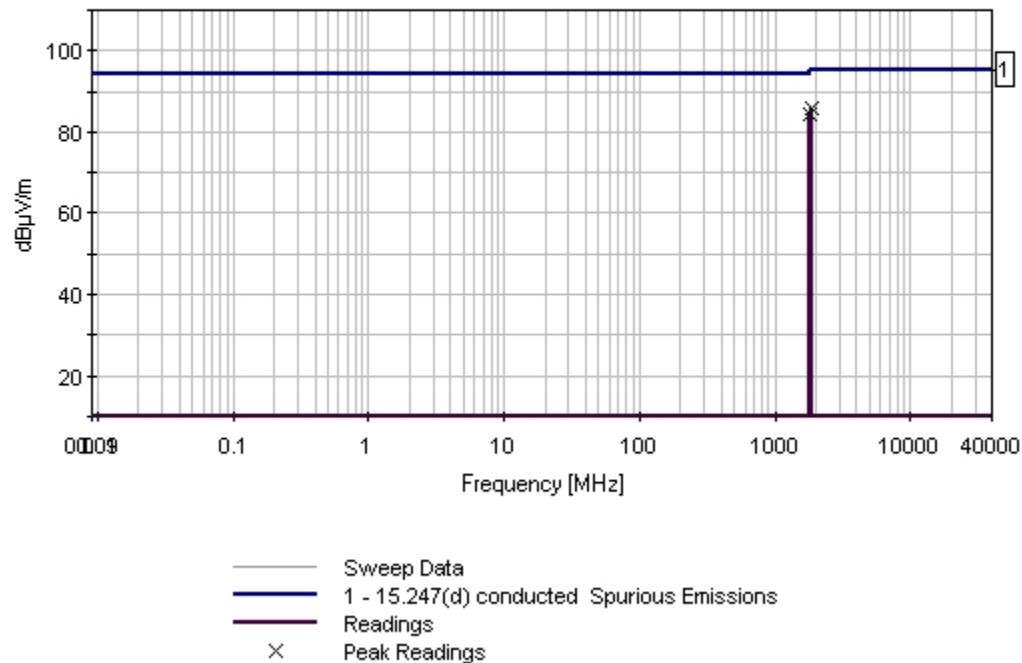
Limit line 2: 8.4dBm+107=115.4dBuV, 115.4dBuV-20dB = 95.4dBuV.

**Transducer Legend:**

T1=Hi Freq\_40GHz\_3ft\_CAB-AN3174-102811

Measurement Data:				Reading listed by margin.				Test Lead: Antenna Terminal				
#	Freq MHz	Rdng dB $\mu$ V	T1 dB					Dist Table	Corr dB $\mu$ V/m	Spec dB $\mu$ V/m	Margin dB	Polar Ant
1	1851.667M	85.3	+0.4					+0.0	85.7	95.4	-9.7	Anten
2	1807.242M	84.2	+0.4					+0.0	84.6	94.3	-9.7	Anten

CKC Laboratories, Inc. Date: 3/8/2010 Time: 15:19:31 Anchor Audio, Inc. WO#: 90319  
15.247(d) conducted Spurious Emissions Test Lead: Antenna Terminal 110V 60Hz Sequence#: 3  
ProLink



**Test Setup Photos**



## 15.247(d) / 15.209/15.205 Radiated Spurious Emissions

### Test Data Sheets

Test Location: CKC Laboratories, Inc. • 110. N. Olinda Place. • Brea, CA 92821 • (714) 993-6112

Customer: **Anchor Audio, Inc.**  
 Specification: **FCC 15.247 (d) (FCC 15.205 restricted band) (15.209)**  
 Work Order #: **90319** Date: **3/8/2010**  
 Test Type: **Radiated Scan** Time: **13:40:59**  
 Equipment: **Wireless Pier to Pier Intercom** Sequence#: **2**  
 Manufacturer: **Anchor Audio, Inc.** Tested By: **E. Wong**  
 Model: **ProLink**  
 S/N: **NA**

***Test Equipment:***

Function	S/N	Calibration Date	Cal Due Date	Asset #
Spectrum Analyzer	US44300438	07/23/2008	07/23/2010	02672
Pre amp to SA Cable	Cable #10	04/16/2009	04/16/2011	P05050
Cable	Cable15	01/05/2009	01/05/2011	P05198
Pre Amp	1937A02548	05/02/2008	05/02/2010	00309
Bicon Antenna	220	10/22/2009	10/22/2011	306
Log Antenna	331	10/22/2009	10/22/2011	300
Horn Antenna	6246	06/06/2008	06/06/2010	00849
Microwave Pre-amp	3123A00281	07/28/2008	07/28/2010	00786
Heliax Antenna Cable	P5565	09/04/2008	09/04/2010	P05565
2'-40GHz cable	NA	09/21/2009	09/21/2011	P2948
1.0 GHz HPF	002	09/14/2009	09/14/2011	03169
Loop Antenna	2014	06/16/2008	06/16/2010	00314

***Equipment Under Test (\* = EUT):***

Function	Manufacturer	Model #	S/N
Wireless Pier to Pier Intercom*	Anchor Audio, Inc.	ProLink	NA

***Support Devices:***

Function	Manufacturer	Model #	S/N

**Test Conditions / Notes:**

The battery operated EUT is strapped on a PVC structure and placed on a wooden table lined with Styrofoam of 5 cm thickness. A microphone and headphone assembly is connected to the Audio port

Only one of the two radio module has transmit capability, while both have receiving function.

The transmit radio is set in constant transmit and receive mode, 1.2mSec pulse. Audio controls are set at the highest gain. Any detected audio noise is digitized and transmitted.

903.5-926 MHz

Freq: 903.5 - 926.0MHz

Power = 7.3dBm (0.005W), 8.4dBm (0.007W)

Modulation: GFSK

18°C, 40% Relative Humidity

15.31(e) Fresh batteries are installed.

Emission profile of the EUT rotated along its three orthogonal axis was evaluated.

Frequency range of measurement = 9 kHz- 10 GHz.

Frequency 9 kHz - 150 kHz RBW=200 Hz, VBW=200 Hz; 150 kHz- 30 MHz RBW=9 kHz, VBW=9 kHz; 30 MHz- 1000 MHz RBW=120 kHz, VBW=120 kHz; 1000 MHz-10000 MHz RBW=1 MHz, VBW=1 MHz

In the non restricted band, emission limits at 1807 and 1851 MHz are calculated from measured peak emission of the fundamental frequency at that particular orientation. -20dBc for measured peak reading, -30dBc for measured average reading.

**Transducer Legend:**

T1=Bico AN00306_102211	T2=Log AN00300_102211
T3=Cable #10 ANP05050 041611	T4=Cable #15_05198_Site A, 010511
T5=Pre_amp_HP8447D-AN00309-050210	T6=Heliax Cable 54' ANP05565 090410
T7=HF_pre AMP-1-26GHz_AN00786-072810.TRN	T8=Hi Freq_40GHz_2ft-AN02948-092111
T9=Horn Ant AN00849 060610	T10=HPF_1GHz_AN03169-091411.TRN

**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 $\mu$ V/m	dB $\mu$ V/m		
			T9	T10							
	MHz	dB $\mu$ V	dB	dB	dB	dB	Table	dB $\mu$ V/m	dB $\mu$ V/m		
1	352.263M	51.3	+0.0	+18.8	+0.3	+3.3	+0.0	45.9	46.0	-0.1	Horiz
	QP		-27.8	+0.0	+0.0	+0.0			Z		
			+0.0	+0.0							
^	352.263M	52.8	+0.0	+18.8	+0.3	+3.3	+0.0	47.4	46.0	+1.4	Horiz
			-27.8	+0.0	+0.0	+0.0			Z		
			+0.0	+0.0							
^	352.220M	48.8	+0.0	+18.8	+0.3	+3.3	+0.0	43.4	46.0	-2.6	Horiz
			-27.8	+0.0	+0.0	+0.0					
			+0.0	+0.0							
^	352.250M	46.0	+0.0	+18.8	+0.3	+3.3	+0.0	40.6	46.0	-5.4	Horiz
			-27.8	+0.0	+0.0	+0.0					
			+0.0	+0.0							

^	352.233M	45.9	+0.0	+18.8	+0.3	+3.3	+0.0	40.5	46.0	-5.5	Horiz
			-27.8	+0.0	+0.0	+0.0				Y	
			+0.0	+0.0							
6	352.233M	49.2	+0.0	+18.8	+0.3	+3.3	+0.0	43.8	46.0	-2.2	Vert
	QP		-27.8	+0.0	+0.0	+0.0					
			+0.0	+0.0							
^	352.233M	50.9	+0.0	+18.8	+0.3	+3.3	+0.0	45.5	46.0	-0.5	Vert
			-27.8	+0.0	+0.0	+0.0					
			+0.0	+0.0							
^	352.262M	50.3	+0.0	+18.8	+0.3	+3.3	+0.0	44.9	46.0	-1.1	Vert
			-27.8	+0.0	+0.0	+0.0					
			+0.0	+0.0							
^	352.233M	45.5	+0.0	+18.8	+0.3	+3.3	+0.0	40.1	46.0	-5.9	Vert
			-27.8	+0.0	+0.0	+0.0				Y	
			+0.0	+0.0							
^	352.263M	43.3	+0.0	+18.8	+0.3	+3.3	+0.0	37.9	46.0	-8.1	Vert
			-27.8	+0.0	+0.0	+0.0				Z	
			+0.0	+0.0							
11	352.262M	48.9	+0.0	+18.8	+0.3	+3.3	+0.0	43.5	46.0	-2.5	Vert
	QP		-27.8	+0.0	+0.0	+0.0					
			+0.0	+0.0							
12	368.600M	49.3	+0.0	+17.7	+0.3	+3.4	+0.0	42.9	46.0	-3.1	Horiz
	QP		-27.8	+0.0	+0.0	+0.0				Z	
			+0.0	+0.0							
^	368.600M	52.4	+0.0	+17.7	+0.3	+3.4	+0.0	46.0	46.0	+0.0	Horiz
			-27.8	+0.0	+0.0	+0.0				Z	
			+0.0	+0.0							
^	368.632M	48.5	+0.0	+17.7	+0.3	+3.4	+0.0	42.1	46.0	-3.9	Horiz
			-27.8	+0.0	+0.0	+0.0				Y	
			+0.0	+0.0							
^	368.637M	48.3	+0.0	+17.7	+0.3	+3.4	+0.0	41.9	46.0	-4.1	Horiz
			-27.8	+0.0	+0.0	+0.0					
			+0.0	+0.0							
16	368.629M	49.2	+0.0	+17.7	+0.3	+3.4	+0.0	42.8	46.0	-3.2	Vert
	QP		-27.8	+0.0	+0.0	+0.0					
			+0.0	+0.0							
^	368.629M	51.4	+0.0	+17.7	+0.3	+3.4	+0.0	45.0	46.0	-1.0	Vert
			-27.8	+0.0	+0.0	+0.0					
			+0.0	+0.0							
^	368.632M	45.9	+0.0	+17.7	+0.3	+3.4	+0.0	39.5	46.0	-6.5	Vert
			-27.8	+0.0	+0.0	+0.0				Y	
			+0.0	+0.0							
^	368.633M	43.6	+0.0	+17.7	+0.3	+3.4	+0.0	37.2	46.0	-8.8	Vert
			-27.8	+0.0	+0.0	+0.0				Z	
			+0.0	+0.0							
20	840.003M	40.2	+0.0	+23.0	+0.6	+5.5	+0.0	42.3	46.0	-3.7	Horiz
			-27.0	+0.0	+0.0	+0.0					
			+0.0	+0.0							
21	335.862M	46.2	+0.0	+20.0	+0.3	+3.2	+0.0	41.9	46.0	-4.1	Vert
	QP		-27.8	+0.0	+0.0	+0.0					
			+0.0	+0.0							

22	2776.983M	53.2	+0.0	+0.0	+0.0	+0.0	+0.0	49.8	54.0	-4.2	Horiz
			+0.0	+4.1	-37.7	+0.5			Y_926MHz		
			+29.4	+0.3							
23	352.220M	45.1	+0.0	+18.8	+0.3	+3.3	+0.0	39.7	46.0	-6.3	Horiz
	QP		-27.8	+0.0	+0.0	+0.0					
			+0.0	+0.0							
24	2777.033M	50.7	+0.0	+0.0	+0.0	+0.0	+0.0	47.3	54.0	-6.7	Horiz
			+0.0	+4.1	-37.7	+0.5			X_926MHz		
			+29.4	+0.3							
25	3614.717M	47.7	+0.0	+0.0	+0.0	+0.0	+0.0	47.3	54.0	-6.7	Horiz
			+0.0	+4.8	-37.5	+0.6			X_903MHz		
			+31.5	+0.2							
26	335.900M	43.7	+0.0	+19.9	+0.3	+3.2	+0.0	39.3	46.0	-6.7	Vert
	QP		-27.8	+0.0	+0.0	+0.0					
			+0.0	+0.0							
^	335.900M	47.6	+0.0	+19.9	+0.3	+3.2	+0.0	43.2	46.0	-2.8	Vert
			-27.8	+0.0	+0.0	+0.0					
			+0.0	+0.0							
^	335.862M	46.9	+0.0	+20.0	+0.3	+3.2	+0.0	42.6	46.0	-3.4	Vert
			-27.8	+0.0	+0.0	+0.0					
			+0.0	+0.0							
29	3703.233M	46.9	+0.0	+0.0	+0.0	+0.0	+0.0	47.1	54.0	-6.9	Vert
			+0.0	+4.8	-37.2	+0.6			X_926MHz		
			+31.8	+0.2							
30	335.910M	43.5	+0.0	+19.9	+0.3	+3.2	+0.0	39.1	46.0	-6.9	Horiz
			-27.8	+0.0	+0.0	+0.0					
			+0.0	+0.0							
31	3614.208M	47.4	+0.0	+0.0	+0.0	+0.0	+0.0	47.0	54.0	-7.0	Vert
			+0.0	+4.8	-37.5	+0.6			Z_903MHz		
			+31.5	+0.2							
32	385.009M	46.2	+0.0	+16.6	+0.4	+3.5	+0.0	38.9	46.0	-7.1	Vert
			-27.8	+0.0	+0.0	+0.0					
			+0.0	+0.0							
33	385.009M	46.2	+0.0	+16.6	+0.4	+3.5	+0.0	38.9	46.0	-7.1	Vert
			-27.8	+0.0	+0.0	+0.0					
			+0.0	+0.0							
34	3703.600M	46.5	+0.0	+0.0	+0.0	+0.0	+0.0	46.7	54.0	-7.3	Vert
			+0.0	+4.8	-37.2	+0.6			Z_926MHz		
			+31.8	+0.2							
35	3614.425M	46.5	+0.0	+0.0	+0.0	+0.0	+0.0	46.1	54.0	-7.9	Horiz
			+0.0	+4.8	-37.5	+0.6			Z_903MHz		
			+31.5	+0.2							
36	5418.875M	41.6	+0.0	+0.0	+0.0	+0.0	+0.0	45.8	54.0	-8.2	Vert
	Ave		+0.0	+6.2	-36.6	+0.7			Z_903MHz		
			+33.8	+0.1							
^	5418.875M	50.7	+0.0	+0.0	+0.0	+0.0	+0.0	54.9	54.0	+0.9	Vert
			+0.0	+6.2	-36.6	+0.7			Z_903MHz		
			+33.8	+0.1							
38	3614.420M	46.2	+0.0	+0.0	+0.0	+0.0	+0.0	45.8	54.0	-8.2	Vert
			+0.0	+4.8	-37.5	+0.6			Y_903MHz		
			+31.5	+0.2							

39	360.928M	43.2	+0.0	+18.2	+0.3	+3.4	+0.0	37.3	46.0	-8.7	Vert
			-27.8	+0.0	+0.0	+0.0					
			+0.0	+0.0							
40	319.427M	39.8	+0.0	+21.2	+0.3	+3.1	+0.0	36.6	46.0	-9.4	Horiz
			-27.8	+0.0	+0.0	+0.0					
			+0.0	+0.0							
41	3614.000M	44.7	+0.0	+0.0	+0.0	+0.0	+0.0	44.3	54.0	-9.7	Horiz
			+0.0	+4.8	-37.5	+0.6					
			+31.5	+0.2							
42	401.385M	44.4	+0.0	+15.7	+0.4	+3.6	+0.0	36.3	46.0	-9.7	Vert
			-27.8	+0.0	+0.0	+0.0					
			+0.0	+0.0							
43	5553.950M	39.8	+0.0	+0.0	+0.0	+0.0	+0.0	44.0	54.0	-10.0	Vert
Ave			+0.0	+6.2	-36.6	+0.7					
			+33.8	+0.1							
^	5553.950M	51.9	+0.0	+0.0	+0.0	+0.0	+0.0	56.1	54.0	+2.1	Vert
			+0.0	+6.2	-36.6	+0.7					
			+33.8	+0.1							
^	5553.950M	47.4	+0.0	+0.0	+0.0	+0.0	+0.0	51.6	54.0	-2.4	Vert
			+0.0	+6.2	-36.6	+0.7					
			+33.8	+0.1							
46	5553.733M	39.4	+0.0	+0.0	+0.0	+0.0	+0.0	43.6	54.0	-10.4	Vert
Ave			+0.0	+6.2	-36.6	+0.7					
			+33.8	+0.1							
^	5553.733M	51.1	+0.0	+0.0	+0.0	+0.0	+0.0	55.3	54.0	+1.3	Vert
			+0.0	+6.2	-36.6	+0.7					
			+33.8	+0.1							
48	5553.900M	39.0	+0.0	+0.0	+0.0	+0.0	+0.0	43.2	54.0	-10.8	Horiz
Ave			+0.0	+6.2	-36.6	+0.7					
			+33.8	+0.1							
49	1807.108M	67.7	+0.0	+0.0	+0.0	+0.0	+0.0	60.2	71.0	-10.8	Horiz
Ave			+0.0	+3.2	-38.0	+0.4					
			+26.6	+0.3							
^	1807.108M	86.7	+0.0	+0.0	+0.0	+0.0	+0.0	79.2	81.0	-1.8	Horiz
			+0.0	+3.2	-38.0	+0.4					
			+26.6	+0.3							
51	385.017M	42.5	+0.0	+16.6	+0.4	+3.5	+0.0	35.2	46.0	-10.8	Vert
			-27.8	+0.0	+0.0	+0.0					
			+0.0	+0.0							
52	5418.770M	38.8	+0.0	+0.0	+0.0	+0.0	+0.0	43.0	54.0	-11.0	Vert
Ave			+0.0	+6.2	-36.6	+0.7					
			+33.8	+0.1							
^	5418.770M	51.1	+0.0	+0.0	+0.0	+0.0	+0.0	55.3	54.0	+1.3	Vert
			+0.0	+6.2	-36.6	+0.7					
			+33.8	+0.1							
54	262.147M	39.6	+19.8	+0.0	+0.3	+2.8	+0.0	34.8	46.0	-11.2	Horiz
			-27.7	+0.0	+0.0	+0.0					
			+0.0	+0.0							
55	377.283M	41.5	+0.0	+17.1	+0.4	+3.5	+0.0	34.7	46.0	-11.3	Vert
			-27.8	+0.0	+0.0	+0.0					
			+0.0	+0.0							

56	401.383M	42.4	+0.0	+15.7	+0.4	+3.6	+0.0	34.3	46.0	-11.7	Vert
			-27.8	+0.0	+0.0	+0.0					
			+0.0	+0.0							
57	5553.833M	37.3	+0.0	+0.0	+0.0	+0.0	+0.0	41.5	54.0	-12.5	Horiz
	Ave		+0.0	+6.2	-36.6	+0.7			Z_926MHz		
			+33.8	+0.1							
^	5553.900M	50.1	+0.0	+0.0	+0.0	+0.0	+0.0	54.3	54.0	+0.3	Horiz
			+0.0	+6.2	-36.6	+0.7			X_926MHz		
			+33.8	+0.1							
^	5553.833M	48.2	+0.0	+0.0	+0.0	+0.0	+0.0	52.4	54.0	-1.6	Horiz
			+0.0	+6.2	-36.6	+0.7			Z_926MHz		
			+33.8	+0.1							
^	5553.767M	47.5	+0.0	+0.0	+0.0	+0.0	+0.0	51.7	54.0	-2.3	Horiz
			+0.0	+6.2	-36.6	+0.7			Y_926MHz		
			+33.8	+0.1							
61	5418.633M	37.2	+0.0	+0.0	+0.0	+0.0	+0.0	41.4	54.0	-12.6	Horiz
	Ave		+0.0	+6.2	-36.6	+0.7			X_903MHz		
			+33.8	+0.1							
^	5418.633M	49.8	+0.0	+0.0	+0.0	+0.0	+0.0	54.0	54.0	+0.0	Horiz
			+0.0	+6.2	-36.6	+0.7			X_903MHz		
			+33.8	+0.1							
63	480.017M	39.4	+0.0	+17.1	+0.4	+4.0	+0.0	33.1	46.0	-12.9	Vert
			-27.8	+0.0	+0.0	+0.0					
			+0.0	+0.0							
64	417.767M	40.4	+0.0	+16.0	+0.4	+3.7	+0.0	32.7	46.0	-13.3	Vert
			-27.8	+0.0	+0.0	+0.0					
			+0.0	+0.0							
65	952.550M	28.9	+0.0	+24.2	+0.7	+5.9	+0.0	32.5	46.0	-13.5	Vert
			-27.2	+0.0	+0.0	+0.0					
			+0.0	+0.0							
66	1806.870M	67.7	+0.0	+0.0	+0.0	+0.0	+0.0	60.2	73.8	-13.6	Horiz
	Ave		+0.0	+3.2	-38.0	+0.4			Y_903MHz		
			+26.6	+0.3							
^	1806.870M	86.8	+0.0	+0.0	+0.0	+0.0	+0.0	79.3	83.5	-4.2	Horiz
			+0.0	+3.2	-38.0	+0.4			Y_903MHz		
			+26.6	+0.3							
68	5418.667M	36.2	+0.0	+0.0	+0.0	+0.0	+0.0	40.4	54.0	-13.6	Vert
	Ave		+0.0	+6.2	-36.6	+0.7			X_903MHz		
			+33.8	+0.1							
^	5418.667M	48.7	+0.0	+0.0	+0.0	+0.0	+0.0	52.9	54.0	-1.1	Vert
			+0.0	+6.2	-36.6	+0.7			X_903MHz		
			+33.8	+0.1							
70	375.020M	38.4	+0.0	+17.3	+0.4	+3.5	+0.0	31.8	46.0	-14.2	Horiz
			-27.8	+0.0	+0.0	+0.0					
			+0.0	+0.0							
71	5418.767M	35.5	+0.0	+0.0	+0.0	+0.0	+0.0	39.7	54.0	-14.3	Horiz
	Ave		+0.0	+6.2	-36.6	+0.7			Z_903MHz		
			+33.8	+0.1							
^	5418.742M	48.1	+0.0	+0.0	+0.0	+0.0	+0.0	52.3	54.0	-1.7	Horiz
			+0.0	+6.2	-36.6	+0.7			Y_903MHz		
			+33.8	+0.1							

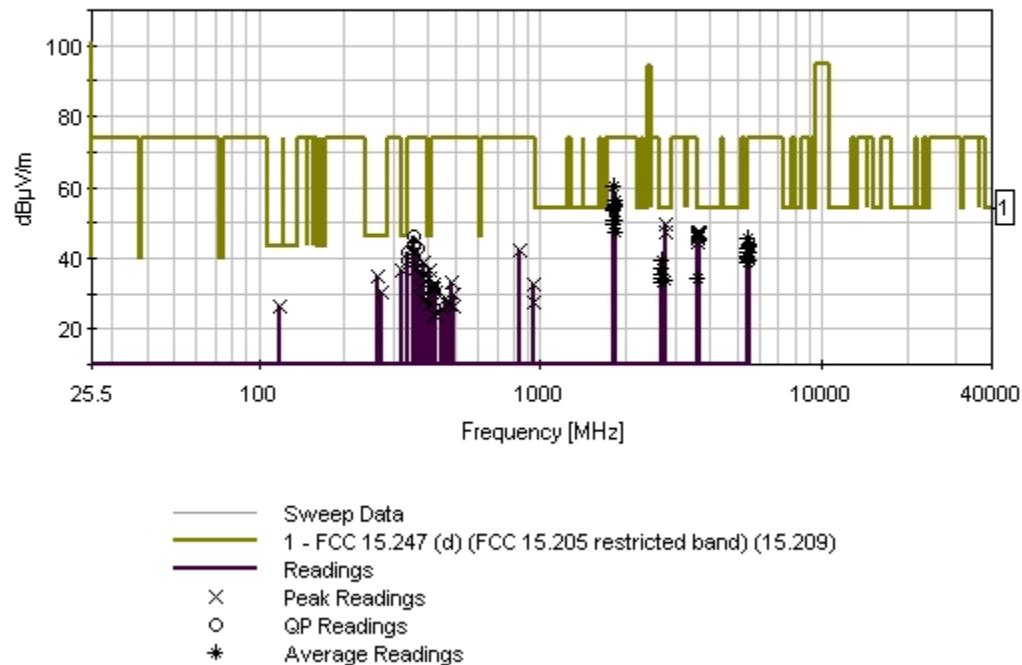
^	5418.767M	47.8	+0.0	+0.0	+0.0	+0.0	+0.0	52.0	54.0	-2.0	Horiz
			+0.0	+6.2	-36.6	+0.7			Z_903MHz		
			+33.8	+0.1							
74	5553.767M	35.4	+0.0	+0.0	+0.0	+0.0	+0.0	39.6	54.0	-14.4	Horiz
	Ave		+0.0	+6.2	-36.6	+0.7			Y_926MHz		
			+33.8	+0.1							
75	2710.167M	43.2	+0.0	+0.0	+0.0	+0.0	+0.0	39.4	54.0	-14.6	Horiz
	Ave		+0.0	+4.1	-37.8	+0.5			Y_903MHz		
			+29.1	+0.3							
^	2710.167M	62.2	+0.0	+0.0	+0.0	+0.0	+0.0	58.4	54.0	+4.4	Horiz
			+0.0	+4.1	-37.8	+0.5			Y_903MHz		
			+29.1	+0.3							
77	5553.950M	35.1	+0.0	+0.0	+0.0	+0.0	+0.0	39.3	54.0	-14.7	Vert
	Ave		+0.0	+6.2	-36.6	+0.7			X_926MHz		
			+33.8	+0.1							
78	410.117M	39.1	+0.0	+15.9	+0.4	+3.6	+0.0	31.2	46.0	-14.8	Vert
			-27.8	+0.0	+0.0	+0.0					
			+0.0	+0.0							
79	417.769M	38.9	+0.0	+16.0	+0.4	+3.7	+0.0	31.2	46.0	-14.8	Vert
			-27.8	+0.0	+0.0	+0.0					
			+0.0	+0.0							
80	1807.258M	61.8	+0.0	+0.0	+0.0	+0.0	+0.0	54.3	69.3	-15.0	Vert
	Ave		+0.0	+3.2	-38.0	+0.4			Z_903MHz		
			+26.6	+0.3							
^	1807.258M	81.4	+0.0	+0.0	+0.0	+0.0	+0.0	73.9	79.3	-5.4	Vert
			+0.0	+3.2	-38.0	+0.4			Z_903MHz		
			+26.6	+0.3							
82	5418.742M	34.6	+0.0	+0.0	+0.0	+0.0	+0.0	38.8	54.0	-15.2	Horiz
	Ave		+0.0	+6.2	-36.6	+0.7			Y_903MHz		
			+33.8	+0.1							
83	1851.250M	62.6	+0.0	+0.0	+0.0	+0.0	+0.0	55.3	70.8	-15.5	Vert
	Ave		+0.0	+3.2	-38.0	+0.4			Z_926MHz		
			+26.8	+0.3							
^	1851.250M	87.3	+0.0	+0.0	+0.0	+0.0	+0.0	80.0	80.8	-0.8	Vert
			+0.0	+3.2	-38.0	+0.4			Z_926MHz		
			+26.8	+0.3							
^	1851.250M	82.4	+0.0	+0.0	+0.0	+0.0	+0.0	75.1	77.8	-2.7	Vert
			+0.0	+3.2	-38.0	+0.4			Y_926MHz		
			+26.8	+0.3							
^	1851.233M	88.2	+0.0	+0.0	+0.0	+0.0	+0.0	80.9	85.1	-4.2	Vert
			+0.0	+3.2	-38.0	+0.4			X_926MHz		
			+26.8	+0.3							
87	425.967M	38.1	+0.0	+16.2	+0.3	+3.7	+0.0	30.5	46.0	-15.5	Vert
			-27.8	+0.0	+0.0	+0.0					
			+0.0	+0.0							
88	410.102M	38.4	+0.0	+15.9	+0.4	+3.6	+0.0	30.5	46.0	-15.5	Vert
			-27.8	+0.0	+0.0	+0.0					
			+0.0	+0.0							
89	271.997M	34.1	+20.8	+0.0	+0.3	+2.9	+0.0	30.3	46.0	-15.7	Horiz
			-27.8	+0.0	+0.0	+0.0					
			+0.0	+0.0							

90	491.479M	35.7	+0.0	+17.3	+0.4	+4.1	+0.0	29.7	46.0	-16.3	Vert
			-27.8	+0.0	+0.0	+0.0					
			+0.0	+0.0							
91	2710.583M	40.9	+0.0	+0.0	+0.0	+0.0	+0.0	37.1	54.0	-16.9	Vert
	Ave		+0.0	+4.1	-37.8	+0.5			X_903MHz		
			+29.1	+0.3							
^	2710.583M	59.3	+0.0	+0.0	+0.0	+0.0	+0.0	55.5	54.0	+1.5	Vert
			+0.0	+4.1	-37.8	+0.5			X_903MHz		
			+29.1	+0.3							
^	2710.587M	51.4	+0.0	+0.0	+0.0	+0.0	+0.0	47.6	54.0	-6.4	Vert
			+0.0	+4.1	-37.8	+0.5			Y_903MHz		
			+29.1	+0.3							
94	117.725M	37.7	+14.7	+0.0	+0.2	+1.7	+0.0	26.4	43.5	-17.1	Vert
			-27.9	+0.0	+0.0	+0.0					
			+0.0	+0.0							
95	1851.250M	57.9	+0.0	+0.0	+0.0	+0.0	+0.0	50.6	67.8	-17.2	Vert
	Ave		+0.0	+3.2	-38.0	+0.4			Y_926MHz		
			+26.8	+0.3							
96	462.817M	35.6	+0.0	+16.8	+0.3	+3.9	+0.0	28.8	46.0	-17.2	Horiz
			-27.8	+0.0	+0.0	+0.0					
			+0.0	+0.0							
97	393.203M	36.4	+0.0	+16.1	+0.4	+3.6	+0.0	28.7	46.0	-17.3	Horiz
			-27.8	+0.0	+0.0	+0.0					
			+0.0	+0.0							
98	385.067M	35.5	+0.0	+16.6	+0.4	+3.5	+0.0	28.2	46.0	-17.8	Horiz
			-27.8	+0.0	+0.0	+0.0					
			+0.0	+0.0							
99	2710.942M	39.3	+0.0	+0.0	+0.0	+0.0	+0.0	35.5	54.0	-18.5	Horiz
	Ave		+0.0	+4.1	-37.8	+0.5			Z_903MHz		
			+29.1	+0.3							
^	2710.942M	57.7	+0.0	+0.0	+0.0	+0.0	+0.0	53.9	54.0	-0.1	Horiz
			+0.0	+4.1	-37.8	+0.5			Z_903MHz		
			+29.1	+0.3							
101	942.692M	23.7	+0.0	+24.2	+0.7	+5.9	+0.0	27.3	46.0	-18.7	Vert
			-27.2	+0.0	+0.0	+0.0					
			+0.0	+0.0							
102	1851.233M	63.5	+0.0	+0.0	+0.0	+0.0	+0.0	56.2	75.1	-18.9	Vert
	Ave		+0.0	+3.2	-38.0	+0.4			X_926MHz		
			+26.8	+0.3							
103	475.067M	33.4	+0.0	+17.0	+0.4	+4.0	+0.0	27.0	46.0	-19.0	Vert
			-27.8	+0.0	+0.0	+0.0					
			+0.0	+0.0							
104	401.433M	35.0	+0.0	+15.7	+0.4	+3.6	+0.0	26.9	46.0	-19.1	Horiz
			-27.8	+0.0	+0.0	+0.0					
			+0.0	+0.0							
105	491.450M	32.4	+0.0	+17.3	+0.4	+4.1	+0.0	26.4	46.0	-19.6	Vert
			-27.8	+0.0	+0.0	+0.0					
			+0.0	+0.0							
106	1851.167M	62.1	+0.0	+0.0	+0.0	+0.0	+0.0	54.8	74.6	-19.8	Horiz
	Ave		+0.0	+3.2	-38.0	+0.4			Y_926MHz		
			+26.8	+0.3							

107	3614.667M	34.6	+0.0	+0.0	+0.0	+0.0	+0.0	34.2	54.0	-19.8	Vert
	Ave		+0.0	+4.8	-37.5	+0.6			X_903MHz		
		+31.5	+0.2								
^	3614.667M	51.5	+0.0	+0.0	+0.0	+0.0	+0.0	51.1	54.0	-2.9	Vert
		+0.0	+4.8	-37.5	+0.6			X_903MHz			
		+31.5	+0.2								
109	1851.250M	62.0	+0.0	+0.0	+0.0	+0.0	+0.0	54.7	74.6	-19.9	Horiz
	Ave		+0.0	+3.2	-38.0	+0.4			Z_926MHz		
		+26.8	+0.3								
^	1851.167M	87.9	+0.0	+0.0	+0.0	+0.0	+0.0	80.6	84.6	-4.0	Horiz
		+0.0	+3.2	-38.0	+0.4			Y_926MHz			
		+26.8	+0.3								
^	1851.250M	86.6	+0.0	+0.0	+0.0	+0.0	+0.0	79.3	84.6	-5.3	Horiz
		+0.0	+3.2	-38.0	+0.4			Z_926MHz			
		+26.8	+0.3								
112	2777.200M	37.2	+0.0	+0.0	+0.0	+0.0	+0.0	33.8	54.0	-20.2	Horiz
	Ave		+0.0	+4.1	-37.7	+0.5			Z_926MHz		
		+29.4	+0.3								
^	2777.200M	55.9	+0.0	+0.0	+0.0	+0.0	+0.0	52.5	54.0	-1.5	Horiz
		+0.0	+4.1	-37.7	+0.5			Z_926MHz			
		+29.4	+0.3								
114	2777.783M	37.2	+0.0	+0.0	+0.0	+0.0	+0.0	33.8	54.0	-20.2	Vert
	Ave		+0.0	+4.1	-37.7	+0.5			Z_926MHz		
		+29.4	+0.3								
^	2777.783M	54.9	+0.0	+0.0	+0.0	+0.0	+0.0	51.5	54.0	-2.5	Vert
		+0.0	+4.1	-37.7	+0.5			Z_926MHz			
		+29.4	+0.3								
^	2777.733M	48.5	+0.0	+0.0	+0.0	+0.0	+0.0	45.1	54.0	-8.9	Vert
		+0.0	+4.1	-37.7	+0.5			Y_926MHz			
		+29.4	+0.3								
117	2777.617M	37.2	+0.0	+0.0	+0.0	+0.0	+0.0	33.8	54.0	-20.2	Vert
	Ave		+0.0	+4.1	-37.7	+0.5			X_926MHz		
		+29.4	+0.3								
^	2777.617M	54.4	+0.0	+0.0	+0.0	+0.0	+0.0	51.0	54.0	-3.0	Vert
		+0.0	+4.1	-37.7	+0.5			X_926MHz			
		+29.4	+0.3								
119	444.917M	33.0	+0.0	+16.5	+0.3	+3.8	+0.0	25.8	46.0	-20.2	Vert
		-27.8	+0.0	+0.0	+0.0						
		+0.0	+0.0								
120	1807.720M	61.2	+0.0	+0.0	+0.0	+0.0	+0.0	53.7	74.1	-20.4	Vert
	Ave		+0.0	+3.2	-38.0	+0.4			X_903MHz		
		+26.6	+0.3								
121	2711.092M	37.2	+0.0	+0.0	+0.0	+0.0	+0.0	33.4	54.0	-20.6	Vert
	Ave		+0.0	+4.1	-37.8	+0.5			Z_903MHz		
		+29.1	+0.3								
^	2711.092M	55.5	+0.0	+0.0	+0.0	+0.0	+0.0	51.7	54.0	-2.3	Vert
		+0.0	+4.1	-37.8	+0.5			Z_903MHz			
		+29.1	+0.3								
123	1807.653M	56.8	+0.0	+0.0	+0.0	+0.0	+0.0	49.3	70.5	-21.2	Vert
	Ave		+0.0	+3.2	-38.0	+0.4			Y_903MHz		
		+26.6	+0.3								

^	1807.720M	85.8	+0.0	+0.0	+0.0	+0.0	+0.0	78.3	84.1	-5.8	Vert
			+0.0	+3.2	-38.0	+0.4			X_903MHz		
			+26.6	+0.3							
^	1807.653M	79.9	+0.0	+0.0	+0.0	+0.0	+0.0	72.4	80.5	-8.1	Vert
			+0.0	+3.2	-38.0	+0.4			Y_903MHz		
			+26.6	+0.3							
126	1851.417M	54.8	+0.0	+0.0	+0.0	+0.0	+0.0	47.5	69.4	-21.9	Horiz
	Ave		+0.0	+3.2	-38.0	+0.4			X_926MHz		
			+26.8	+0.3							
^	1851.417M	76.7	+0.0	+0.0	+0.0	+0.0	+0.0	69.4	79.4	-10.0	Horiz
			+0.0	+3.2	-38.0	+0.4			X_926MHz		
			+26.8	+0.3							
128	420.303M	31.6	+0.0	+16.1	+0.4	+3.7	+0.0	24.0	46.0	-22.0	Horiz
			-27.8	+0.0	+0.0	+0.0					
			+0.0	+0.0							
129	425.933M	31.1	+0.0	+16.2	+0.3	+3.7	+0.0	23.5	46.0	-22.5	Horiz
			-27.8	+0.0	+0.0	+0.0					
			+0.0	+0.0							
130	1807.633M	58.2	+0.0	+0.0	+0.0	+0.0	+0.0	50.7	74.1	-23.4	Horiz
	Ave		+0.0	+3.2	-38.0	+0.4			X_903MHz		
			+26.6	+0.3							
^	1807.633M	81.3	+0.0	+0.0	+0.0	+0.0	+0.0	73.8	84.1	-10.3	Horiz
			+0.0	+3.2	-38.0	+0.4			X_903MHz		
			+26.6	+0.3							
132	2710.633M	38.1	+0.0	+0.0	+0.0	+0.0	+0.0	34.3	69.7	-35.4	Horiz
	Ave		+0.0	+4.1	-37.8	+0.5			X_903MHz		
			+29.1	+0.3							
^	2710.633M	55.7	+0.0	+0.0	+0.0	+0.0	+0.0	51.9	79.7	-27.8	Horiz
			+0.0	+4.1	-37.8	+0.5			X_903MHz		
			+29.1	+0.3							

CKC Laboratories, Inc. Date: 3/8/2010 Time: 13:40:59 Anchor Audio, Inc. WO#: 90319  
FCC 15.247 (d) (FCC 15.205 restricted band) (15.209) Test Distance: 3 Meters Sequence#: 2  
ProLink



**Test Setup Photos**







## 15.247(e) Power Spectral Density

**Test Set up:** The EUT is placed on the test bench. The device is set in continuous transmit and receive mode, the Power Spectral Density is measured at the transmit antenna port in accordance with KDB Publication No. 558074.

PSD, Option 2

RBW: 3kHz

VBW: 100kHz

Detector: Peak

Average: 100 Trace average

Trigger: RF Burst.

Sweep time: Auto

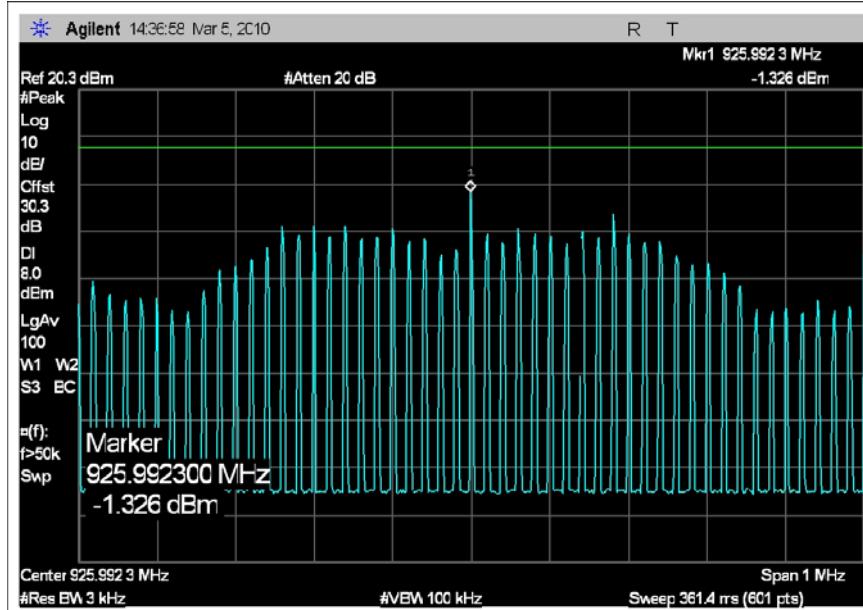
Engineer Name: E. Wong

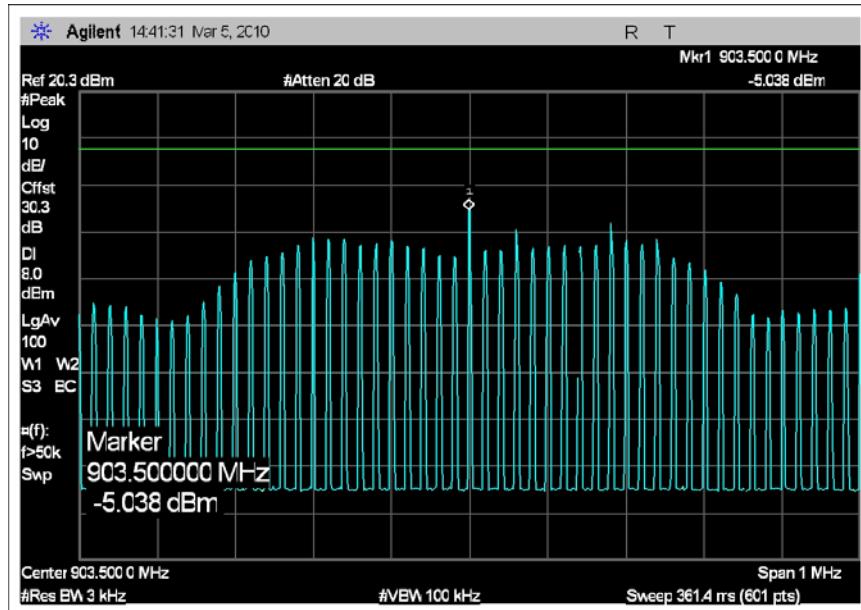
### Test Equipment

Name	Serial	Cal Date	Cal Due	Asset
Spectrum Analyzer	07/23/2008	07/23/2010	02672	US44300438
3'-40GHz cable	09/14/2009	09/14/2011	P02946	NA

### Test Plots

**Power Spectral Density =-1.3dBm\_926MHz**



**Power Spectral Density =-5.0dBm\_903MHz**

**Test Setup Photos**


## Band Edge

**Test Set up:** The battery operated EUT is strapped on a PVC structure and placed on a wooden table lined with Styrofoam of 5 cm thickness. A microphone and headphone assembly is connected to the Audio port. Only one of the two radio module has transmit capability, while both have receiving function. The transmit radio is set in constant transmit and receive mode, 1.2mSec pulse. Audio controls are set at the highest gain. Any detected audio noise is digitized and transmitted. Emissions profile of the EUT rotated along its three orthogonal axis was evaluated.

903.5-926 MHz.

Freq: 903.5 - 926.0MHz

Power = 7.3dBm (0.005W), 8.4dBm (0.007W)

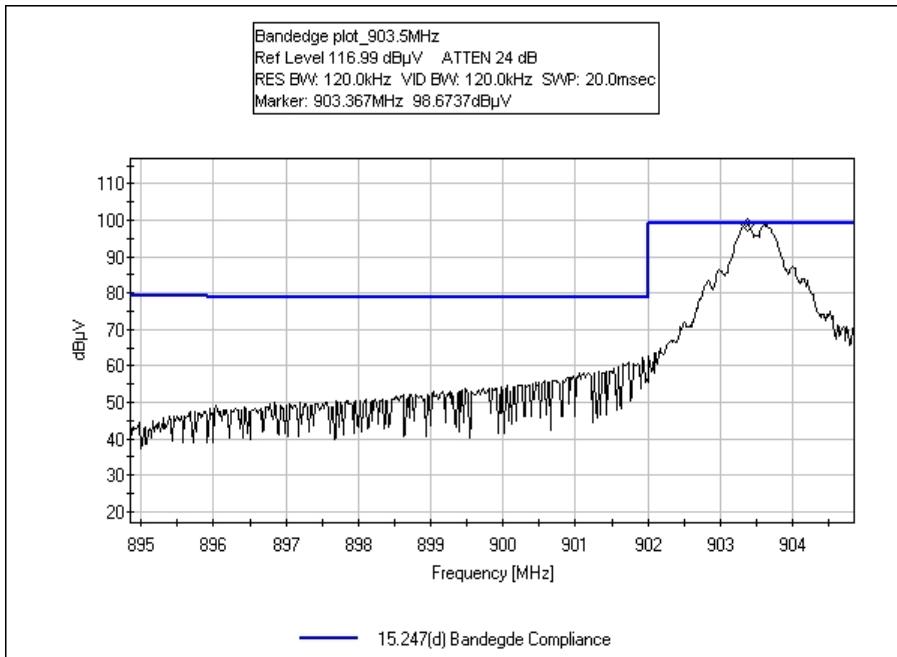
Modulation: GFSK

Engineer Name: E. Wong

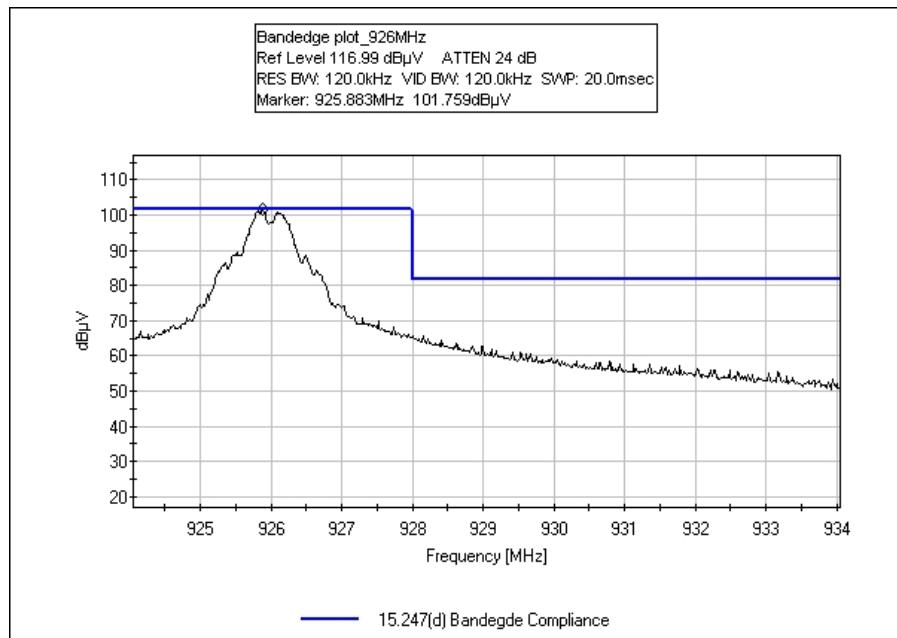
Test Equipment				
Equipment	Serial	Cal Date	Cal Due	Asset
Spectrum Analyzer	US44300438	07/23/2008	07/23/2010	02672
Pre amp to SA Cable	Cable #10	04/16/2009	04/16/2011	P05050
Cable	Cable15	01/05/2009	01/05/2011	P05198
Pre Amp	1937A02548	05/02/2008	05/02/2010	00309
Log Antenna	331	10/22/2009	10/22/2011	300

**Test Data**

**Band Edge Plot\_903.5MHz**



**Band Edge Plot\_926MHz**



**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

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.

<b>SAMPLE CALCULATIONS</b>	
Meter reading	(dB $\mu$ V)
+ Antenna Factor	(dB)
+ Cable Loss	(dB)
- Distance Correction	(dB)
- Preamplifier Gain	(dB)
= Corrected Reading	(dB $\mu$ 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. For testing emissions, an appropriate reference level and a vertical scale size of 10 dB per division were used. When conducted emissions testing was performed, a 10 dB external attenuator was used with internal offset correction in the analyzer.

#### 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 "Peak" mode. Whenever a "Quasi-Peak" or "Average" reading is listed as one of the highest readings, this is indicated as a "QP" or an "Ave" on the appropriate rows of the data sheets. 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/receiver readings recorded all emissions at their peak value as the frequency band selected was scanned. By combining this function with another feature of the measuring device called "peak hold," the measuring device had the ability to measure transients 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**

When the true peak values exceeded or were within 2 dB of the specification limit, quasi-peak measurements were taken using the quasi-peak detector.

##### **Average**

For certain frequencies, average measurements may be made using the spectrum analyzer/receiver. 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.