



**ANCHOR AUDIO, INC. TEST REPORT**

**FOR THE**  
**WIRELESS INTERCOM, BPW-900**

**FCC PART 15 SUBPART B SECTIONS 15.107 & 15.109 CLASS B  
AND PART 74 H**

**TESTING**

**DATE OF ISSUE: AUGUST 6, 2007**

**PREPARED FOR:**

Anchor Audio, Inc.  
2565 West 237th Street  
Torrance, CA 95050

W.O. No.: 86749

**PREPARED BY:**

Mary Ellen Clayton  
CKC Laboratories, Inc.  
5046 Sierra Pines Drive  
Mariposa, CA 95338

Date of test: July 3-27, 2007

**Report No.: FC07-057**

This report contains a total of 42 pages and may be reproduced in full only. Partial reproduction may only be done with the written consent of CKC Laboratories, Inc. The results in this report apply only to the items tested, as identified herein.

## TABLE OF CONTENTS

Administrative Information .....	3
Approvals.....	3
Conditions During Testing.....	3
Equipment Under Test (EUT) Description .....	4
Equipment Under Test .....	4
Peripheral Devices .....	4
Temperature and Humidity During Testing.....	5
FCC 2.1033(c)(3) User's Manual .....	5
FCC 2.1033(c)(4) Type of Emissions.....	5
FCC 2.1033(c)(5) Frequency Range.....	5
FCC 2.1033(c)(6) Operating Power.....	5
FCC 2.1033(c)(7) Maximum Power Rating .....	5
FCC 2.1033(c)(8) DC Voltages .....	5
FCC 2.1033(c)(9) Tune-Up Procedure .....	5
FCC 2.1033(c)(10) Schematics and Circuitry Description.....	5
FCC 2.1033(c)(11) Label and Placement .....	5
FCC 2.1033(c)(12) Submittal Photos .....	5
FCC 2.1033(c)(13) Modulation Information .....	5
FCC 15.107 – AC Conducted Emissions.....	6
FCC 15.109 – Radiated Emissions .....	15
FCC 2.1033(c)(14)/2.1046/74.861(d)(1) - RF Power Output.....	22
FCC 2.1033(c)(14)/2.1047(a) - Audio Frequency Response.....	24
FCC 2.1033(c)(14)/2.1047(b) - Modulation Limiting Response.....	26
FCC 2.1033(c)(14)/2.1049(e)(3)/74.861(d)(3) - Occupied Bandwidth .....	28
FCC 2.1033(c)(14)/2.1049(i)/74.861(d)(3) - Bandedge .....	30
FCC 2.1033(c)(14)/2.1051/74.861(d)(3) - Spurious Emissions at Antenna Terminal .....	32
FCC 2.1033(c)(14)/2.1053/74.861(d)(3) - Field Strength of Spurious Radiation .....	36
FCC 2.1033(c)(14)/2.1055 - Frequency Stability .....	41



## ADMINISTRATIVE INFORMATION

**DATE OF TEST:** July 3-27, 2007

**DATE OF RECEIPT:** July 3, 2007

**REPRESENTATIVE:** Jon Watkins

**MANUFACTURER:**

Anchor Audio, Inc.  
2565 West 237th Street  
Torrance, CA 95050

**TEST LOCATION:**

CKC Laboratories, Inc.  
110 Olinda Place  
Brea, CA 92823

**FREQUENCY RANGE TESTED:** 10 kHz-10 GHz

**TEST METHOD:** ANSI C63.4 (2003) and FCC Part 74

**PURPOSE OF TEST:** To perform the testing of the Wireless Intercom, BPW-900 with the requirements for FCC Part 15 Subpart B Sections 15.107 & 15.109 Class B and Part 74 H devices.

## APPROVALS

Steve Behm, Director of Engineering Services

**QUALITY ASSURANCE:**



\_\_\_\_\_  
Joyce Walker, Quality Assurance Administrative  
Manager

**TEST PERSONNEL:**



\_\_\_\_\_  
Eddie Wong, EMC Engineer

## CONDITIONS DURING TESTING

No modifications to the EUT were necessary during testing.



## EQUIPMENT UNDER TEST (EUT) DESCRIPTION

The customer declares the EUT tested by CKC Laboratories was representative of a production unit.

## EQUIPMENT UNDER TEST

### Wireless Intercom

Manuf: Anchor Audio, Inc.  
Model: BPW-900  
Serial: NA  
FCC ID: pending

### Power Supply

Manuf: CUI Inc  
Model: EPAS-10W-09  
Serial: NA  
FCC ID: NA

## PERIPHERAL DEVICES

The EUT was tested with the following peripheral device(s):

### Function Generator

Manuf: HP  
Model: 3312A  
Serial: US36023090  
FCC ID: NA

**TEMPERATURE AND HUMIDITY DURING TESTING**

The temperature during testing was within +15°C and + 35°C.  
The relative humidity was between 20% and 75%.

**FCC 2.1033(c)(3) USER'S MANUAL**

The necessary information is contained in a separate document.

**FCC 2.1033 (c)(4) TYPE OF EMISSIONS**

F3E

**FCC 2.1033 (c)(5) FREQUENCY RANGE**

945-951MHz

**FCC 2.1033 (c)(6) OPERATING POWER**

0.055 Watts

**FCC 2.1033 (c)(7) MAXIMUM POWER RATING**

1 Watt

**FCC 2.1033 (c)(8) DC VOLTAGES**

The necessary information is contained in a separate document.

**FCC 2.1033 (c)(9) TUNE-UP PROCEDURE**

The necessary information is contained in a separate document.

**FCC 2.1033(c)(10) SCHEMATICS AND CIRCUITRY DESCRIPTION**

The necessary information is contained in a separate document.

**FCC 2.1033(c)(11) LABEL AND PLACEMENT**

The necessary information is contained in a separate document.

**FCC 2.1033(c)(12) SUBMITTAL PHOTOS**

The necessary information is contained in a separate document.

**FCC 2.1033 (c)(13) MODULATION INFORMATION**

Frequency

**FCC 15.107 – AC CONDUCTED EMISSIONS**

<b>ANALYZER BANDWIDTH SETTINGS PER FREQUENCY RANGE</b>			
TEST	BEGINNING FREQUENCY	ENDING FREQUENCY	BANDWIDTH SETTING
CONDUCTED EMISSIONS	150 kHz	30 MHz	9 kHz

**Test Setup Photos**



## Test Data Sheets

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

Customer: **Anchor Audio, Inc.**  
 Specification: **FCC 15.107 Class B COND [AVE]**  
 Work Order #: **84749** Date: **7/25/2007**  
 Test Type: **Conducted Emissions** Time: **15:26:29**  
 Equipment: **Wireless Intercom** Sequence #: **5**  
 Manufacturer: Anchor Audio, Inc. Tested By: **E. Wong**  
 Model: **BPW-900** **110V 60Hz**  
 S/N: **NA**

### Test Equipment:

Function	S/N	Calibration Date	Cal Due Date	Asset #
Spectrum Analyzer	US44300438	01/03/2007	01/03/2009	02672
LISN	1104	11/10/2006	11/10/2008	00847
6dB Attenuator	None	11/21/2006	11/21/2008	P05611
150kHz HPF	G7755	01/30/2006	01/30/2008	02610
Conducted Emission Cable	#21	05/09/2006	05/09/2008	P04358
Cable				

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

Function	Manufacturer	Model #	S/N
Wireless Intercom*	Anchor Audio, Inc.	BPW-900	NA
Power Supply	CUI Inc	EPAS-10W-09	NA

### Support Devices:

Function	Manufacturer	Model #	S/N
Function Generator	HP	3312A	US36023090

### Test Conditions / Notes:

The EUT is placed upright, on the wooden table with a 5 cm Styrofoam pad. Headset with microphone is connected to the XLR connector, the EUT is put in receiving mode. Channel = Mid, 948MHz. Transmit antenna is held vertically. DC power source is plugged in to 110Vac/60Hz. The power supply is also charging a depleted battery. 22°C, 48% relative humidity.

### Transducer Legend:

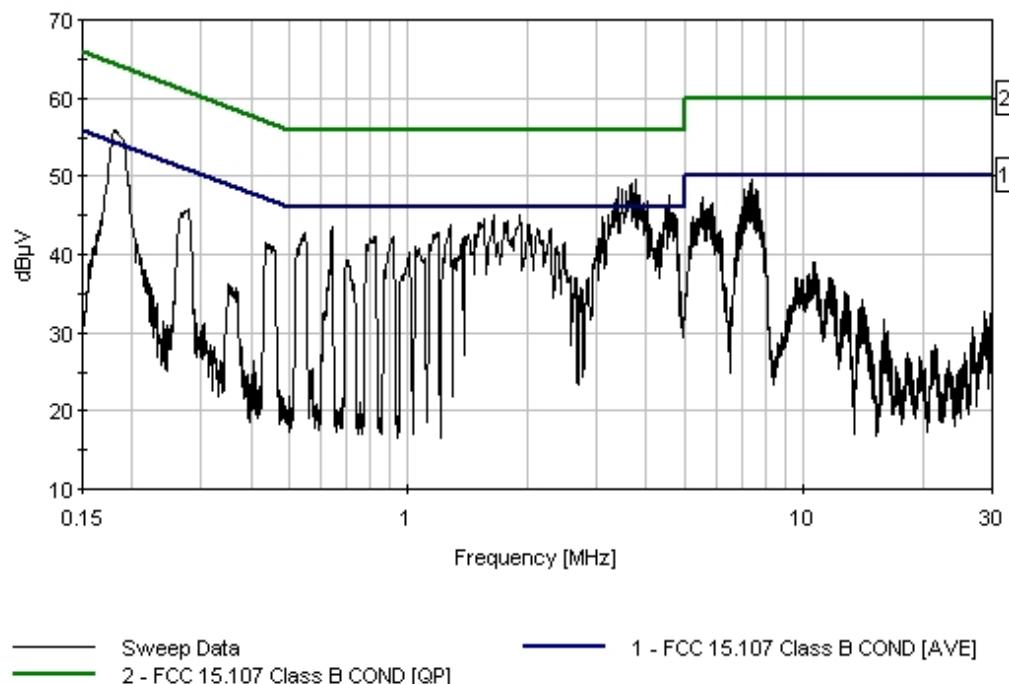
T1=150kHz HPF Asset 02610	T2=6dB Attenuator P05611
T3=Cable #21 Conducted Site A 050908	T4=(L1) Insertion Loss 00847 EMCO 3816/2NM

Measurement Data:		Reading listed by margin.					Test Lead: Black				
#	Freq MHz	Rdng dB $\mu$ V	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dB $\mu$ V	Spec dB $\mu$ V	Margin dB	Polar Ant
1	1.281M	37.5	+0.1	+6.1	+0.0	+0.1	+0.0	43.8	46.0	-2.2	Black
2	2.017M	37.4	+0.1	+6.1	+0.1	+0.1	+0.0	43.8	46.0	-2.2	Black
3	4.097M	37.1	+0.1	+6.2	+0.2	+0.2	+0.0	43.8	46.0	-2.2	Black

4	640.137k	37.0	+0.2	+6.1	+0.1	+0.1	+0.0	43.5	46.0	-2.5	Black
5	2.128M	36.9	+0.1	+6.1	+0.1	+0.1	+0.0	43.3	46.0	-2.7	Black
6	2.289M	36.7	+0.1	+6.2	+0.1	+0.2	+0.0	43.3	46.0	-2.7	Black
7	5.580M	40.6	+0.1	+6.2	+0.2	+0.2	+0.0	47.3	50.0	-2.7	Black
8	7.139M	40.4	+0.1	+6.2	+0.3	+0.3	+0.0	47.3	50.0	-2.7	Black
9	548.509k	36.3	+0.2	+6.1	+0.1	+0.1	+0.0	42.8	46.0	-3.2	Black
10	1.188M	36.5	+0.1	+6.1	+0.0	+0.1	+0.0	42.8	46.0	-3.2	Black
11	5.860M	39.9	+0.1	+6.2	+0.2	+0.2	+0.0	46.6	50.0	-3.4	Black
12	915.480k	36.0	+0.1	+6.1	+0.0	+0.1	+0.0	42.3	46.0	-3.7	Black
13	181.270k Ave	35.8	+0.3	+6.1	+0.1	+0.1	+0.0	42.4	54.4	-12.0	Black
^	181.270k	49.2	+0.3	+6.1	+0.1	+0.1	+0.0	55.8	54.4	+1.4	Black
15	3.663M Ave	24.8	+0.1	+6.2	+0.2	+0.2	+0.0	31.5	46.0	-14.5	Black
^	3.663M	42.4	+0.1	+6.2	+0.2	+0.2	+0.0	49.1	46.0	+3.1	Black
17	3.752M Ave	24.2	+0.1	+6.2	+0.2	+0.2	+0.0	30.9	46.0	-15.1	Black
^	3.752M	42.8	+0.1	+6.2	+0.2	+0.2	+0.0	49.5	46.0	+3.5	Black
19	3.480M Ave	24.0	+0.1	+6.2	+0.2	+0.2	+0.0	30.7	46.0	-15.3	Black
^	3.480M	41.6	+0.1	+6.2	+0.2	+0.2	+0.0	48.3	46.0	+2.3	Black
21	3.386M Ave	22.6	+0.1	+6.2	+0.2	+0.2	+0.0	29.3	46.0	-16.7	Black
^	3.386M	41.8	+0.1	+6.2	+0.2	+0.2	+0.0	48.5	46.0	+2.5	Black
23	4.581M Ave	21.8	+0.1	+6.2	+0.2	+0.2	+0.0	28.5	46.0	-17.5	Black
^	4.577M	40.8	+0.1	+6.2	+0.2	+0.2	+0.0	47.5	46.0	+1.5	Black
25	4.484M Ave	21.6	+0.1	+6.2	+0.2	+0.2	+0.0	28.3	46.0	-17.7	Black
^	4.484M	39.7	+0.1	+6.2	+0.2	+0.2	+0.0	46.4	46.0	+0.4	Black
27	7.418M Ave	24.4	+0.1	+6.2	+0.3	+0.3	+0.0	31.3	50.0	-18.7	Black
^	7.418M	42.6	+0.1	+6.2	+0.3	+0.3	+0.0	49.5	50.0	-0.5	Black

29	1.919M	20.7	+0.1	+6.1	+0.1	+0.1	+0.0	27.1	46.0	-18.9	Black
Ave											
^	1.919M	38.6	+0.1	+6.1	+0.1	+0.1	+0.0	45.0	46.0	-1.0	Black
31	3.110M	20.4	+0.1	+6.2	+0.1	+0.2	+0.0	27.0	46.0	-19.0	Black
Ave											
^	3.110M	38.3	+0.1	+6.2	+0.1	+0.2	+0.0	44.9	46.0	-1.1	Black
33	1.647M	20.6	+0.1	+6.1	+0.1	+0.1	+0.0	27.0	46.0	-19.0	Black
Ave											
^	1.647M	38.7	+0.1	+6.1	+0.1	+0.1	+0.0	45.1	46.0	-0.9	Black
35	7.058M	24.1	+0.1	+6.2	+0.2	+0.3	+0.0	30.9	50.0	-19.1	Black
Ave											
^	7.058M	41.4	+0.1	+6.2	+0.2	+0.3	+0.0	48.2	50.0	-1.8	Black
37	1.558M	20.1	+0.1	+6.1	+0.1	+0.1	+0.0	26.5	46.0	-19.5	Black
Ave											
^	1.558M	38.1	+0.1	+6.1	+0.1	+0.1	+0.0	44.5	46.0	-1.5	Black
39	3.829M	19.6	+0.1	+6.2	+0.2	+0.2	+0.0	26.3	46.0	-19.7	Black
Ave											
^	3.829M	40.8	+0.1	+6.2	+0.2	+0.2	+0.0	47.5	46.0	+1.5	Black
41	7.598M	21.7	+0.1	+6.2	+0.3	+0.3	+0.0	28.6	50.0	-21.4	Black
Ave											
^	7.598M	41.4	+0.1	+6.2	+0.3	+0.3	+0.0	48.3	50.0	-1.7	Black
43	4.611M	17.2	+0.1	+6.2	+0.2	+0.2	+0.0	23.9	46.0	-22.1	Black
Ave											
^	4.611M	38.7	+0.1	+6.2	+0.2	+0.2	+0.0	45.4	46.0	-0.6	Black
45	4.760M	16.0	+0.1	+6.2	+0.2	+0.2	+0.0	22.7	46.0	-23.3	Black
Ave											
^	4.760M	38.3	+0.1	+6.2	+0.2	+0.2	+0.0	45.0	46.0	-1.0	Black
47	7.688M	19.3	+0.1	+6.2	+0.3	+0.3	+0.0	26.2	50.0	-23.8	Black
Ave											
^	7.688M	41.2	+0.1	+6.2	+0.3	+0.3	+0.0	48.1	50.0	-1.9	Black

CKC Laboratories, Inc. Date: 7/25/2007 Time: 15:26:29 Anchor Audio, Inc. WO#: 84749  
FCC 15.107 Class B COND [AVE] Test Lead: Black 110V 60Hz Sequence#: 5





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

Customer: **Anchor Audio, Inc.**  
 Specification: **FCC 15.107 Class B COND [AVE]**  
 Work Order #: **84749** Date: **7/25/2007**  
 Test Type: **Conducted Emissions** Time: **15:38:10**  
 Equipment: **Wireless Intercom** Sequence #: **6**  
 Manufacturer: Anchor Audio, Inc. Tested By: **E. Wong**  
 Model: **BPW-900** **110V 60Hz**  
 S/N: **NA**

**Test Equipment:**

Function	S/N	Calibration Date	Cal Due Date	Asset #
Spectrum Analyzer	US44300438	01/03/2007	01/03/2009	02672
LISN	1104	11/10/2006	11/10/2008	00847
6dB Attenuator	None	11/21/2006	11/21/2008	P05611
150kHz HPF	G7755	01/30/2006	01/30/2008	02610
Conducted Emission Cable	#21	05/09/2006	05/09/2008	P04358
Cable				

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

Function	Manufacturer	Model #	S/N
Wireless Intercom*	Anchor Audio, Inc.	BPW-900	NA
Power Supply	CUI Inc	EPAS-10W-09	NA

**Support Devices:**

Function	Manufacturer	Model #	S/N
Function Generator	HP	3312A	US36023090

**Test Conditions / Notes:**

The EUT is placed upright, on the wooden table with a 5 cm Styrofoam pad. Headset with microphone is connected to the XLR connector, the EUT is put in receiving mode. Channel = Mid, 948MHz. Transmit antenna is held vertically. DC power source is plugged in to 110Vac/60Hz. The power supply is also charging a depleted battery. 22°C, 48% relative humidity.

**Transducer Legend:**

T1=150kHz HPF Asset 02610	T2=6dB Attenuator P05611
T3=Cable #21 Conducted Site A 050908	T4=(L2) Insertion Loss 00847 EMCO 3816/2NM

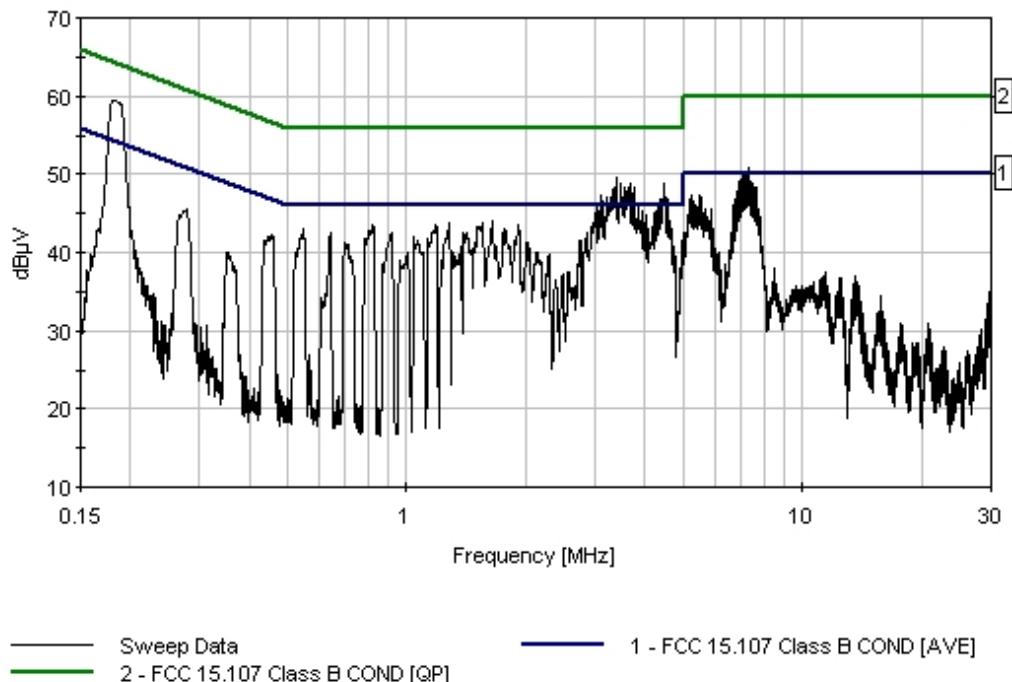
**Measurement Data:**

#	Freq MHz	Reading listed by margin.					Test Lead: White				
		Rdng dB $\mu$ V	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dB $\mu$ V	Spec dB $\mu$ V	Margin dB	Polar Ant
1	1.651M	37.6	+0.1	+6.1	+0.1	+0.1	+0.0	44.0	46.0	-2.0	White
2	1.558M	37.5	+0.1	+6.1	+0.1	+0.1	+0.0	43.9	46.0	-2.1	White
3	1.281M	37.5	+0.1	+6.1	+0.0	+0.1	+0.0	43.8	46.0	-2.2	White
4	822.666k	37.1	+0.1	+6.1	+0.1	+0.1	+0.0	43.5	46.0	-2.5	White
5	1.188M	37.2	+0.1	+6.1	+0.0	+0.1	+0.0	43.5	46.0	-2.5	White

6	1.923M	37.1	+0.1	+6.1	+0.1	+0.1	+0.0	43.5	46.0	-2.5	White
7	5.499M	40.6	+0.1	+6.2	+0.2	+0.2	+0.0	47.3	50.0	-2.7	White
8	5.220M	40.5	+0.1	+6.2	+0.2	+0.2	+0.0	47.2	50.0	-2.8	White
9	5.589M	40.3	+0.1	+6.2	+0.2	+0.2	+0.0	47.0	50.0	-3.0	White
10	549.963k	36.4	+0.2	+6.1	+0.1	+0.1	+0.0	42.9	46.0	-3.1	White
11	1.775M	36.5	+0.1	+6.1	+0.1	+0.1	+0.0	42.9	46.0	-3.1	White
12	6.779M	40.1	+0.1	+6.2	+0.2	+0.3	+0.0	46.9	50.0	-3.1	White
13	915.480k	36.3	+0.1	+6.1	+0.0	+0.1	+0.0	42.6	46.0	-3.4	White
14	1.392M	36.3	+0.1	+6.1	+0.0	+0.1	+0.0	42.6	46.0	-3.4	White
15	5.310M	39.9	+0.1	+6.2	+0.2	+0.2	+0.0	46.6	50.0	-3.4	White
16	181.270k Ave	40.6	+0.3	+6.1	+0.1	+0.2	+0.0	47.3	54.4	-7.1	White
^	181.270k	52.8	+0.3	+6.1	+0.1	+0.2	+0.0	59.5	54.4	+5.1	White
18	3.756M Ave	22.2	+0.1	+6.2	+0.2	+0.2	+0.0	28.9	46.0	-17.1	White
^	3.756M	41.6	+0.1	+6.2	+0.2	+0.2	+0.0	48.3	46.0	+2.3	White
20	3.391M Ave	21.9	+0.1	+6.2	+0.2	+0.2	+0.0	28.6	46.0	-17.4	White
^	3.391M	42.9	+0.1	+6.2	+0.2	+0.2	+0.0	49.6	46.0	+3.6	White
22	3.114M Ave	21.5	+0.1	+6.2	+0.1	+0.2	+0.0	28.1	46.0	-17.9	White
^	3.114M	40.8	+0.1	+6.2	+0.1	+0.2	+0.0	47.4	46.0	+1.4	White
24	4.488M Ave	21.1	+0.1	+6.2	+0.2	+0.2	+0.0	27.8	46.0	-18.2	White
^	4.488M	42.2	+0.1	+6.2	+0.2	+0.2	+0.0	48.9	46.0	+2.9	White
26	7.148M Ave	23.5	+0.1	+6.2	+0.3	+0.3	+0.0	30.4	50.0	-19.6	White
^	7.148M	43.4	+0.1	+6.2	+0.3	+0.3	+0.0	50.3	50.0	+0.3	White
28	4.211M Ave	19.6	+0.1	+6.2	+0.2	+0.2	+0.0	26.3	46.0	-19.7	White
^	4.211M	38.3	+0.1	+6.2	+0.2	+0.2	+0.0	45.0	46.0	-1.0	White

30	7.049M	23.1	+0.1	+6.2	+0.2	+0.3	+0.0	29.9	50.0	-20.1	White
Ave											
^	7.049M	43.6	+0.1	+6.2	+0.2	+0.3	+0.0	50.4	50.0	+0.4	White
32	7.328M	22.8	+0.1	+6.2	+0.3	+0.3	+0.0	29.7	50.0	-20.3	White
Ave											
^	7.328M	43.9	+0.1	+6.2	+0.3	+0.3	+0.0	50.8	50.0	+0.8	White
34	4.033M	18.6	+0.1	+6.2	+0.2	+0.2	+0.0	25.3	46.0	-20.7	White
Ave											
^	4.033M	38.0	+0.1	+6.2	+0.2	+0.2	+0.0	44.7	46.0	-1.3	White
36	7.418M	22.1	+0.1	+6.2	+0.3	+0.3	+0.0	29.0	50.0	-21.0	White
Ave											
^	7.418M	42.1	+0.1	+6.2	+0.3	+0.3	+0.0	49.0	50.0	-1.0	White
38	7.517M	22.0	+0.1	+6.2	+0.3	+0.3	+0.0	28.9	50.0	-21.1	White
Ave											
^	7.517M	42.0	+0.1	+6.2	+0.3	+0.3	+0.0	48.9	50.0	-1.1	White
40	7.598M	20.2	+0.1	+6.2	+0.3	+0.3	+0.0	27.1	50.0	-22.9	White
Ave											
^	7.598M	41.3	+0.1	+6.2	+0.3	+0.3	+0.0	48.2	50.0	-1.8	White
42	4.530M	16.0	+0.1	+6.2	+0.2	+0.2	+0.0	22.7	46.0	-23.3	White
Ave											
^	4.530M	40.4	+0.1	+6.2	+0.2	+0.2	+0.0	47.1	46.0	+1.1	White
44	7.688M	18.6	+0.1	+6.2	+0.3	+0.3	+0.0	25.5	50.0	-24.5	White
Ave											
^	7.688M	41.4	+0.1	+6.2	+0.3	+0.3	+0.0	48.3	50.0	-1.7	White

CKC Laboratories, Inc. Date: 7/25/2007 Time: 15:38:10 Anchor Audio, Inc. WO#: 84749  
FCC 15.107 Class B COND [AVE] Test Lead: White 110V 60Hz Sequence#: 6



**FCC 15.109 – RADIATED EMISSIONS**

**Test Setup Photos**



## Test Data Sheets

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

Customer: **Anchor Audio, Inc.**  
 Specification: **FCC 15.109 Class B**  
 Work Order #: **84749** Date: **7/25/2007**  
 Test Type: **Radiated Scan** Time: **11:52:14**  
 Equipment: **Wireless Intercom** Sequence#: **4**  
 Manufacturer: Anchor Audio, Inc.  
 Model: BPW-900  
 S/N: NA  
 Tested By: E. Wong

### **Test Equipment:**

Function	S/N	Calibration Date	Cal Due Date	Asset #
Spectrum Analyzer	US44300438	01/03/2007	01/03/2009	02672
Bilog Antenna	2451	02/02/2006	02/02/2008	01995
Pre amp to SA Cable	Cable #10	05/16/2007	05/16/2009	P05050
Cable	Cable15	01/05/2007	01/05/2009	P05198
Pre Amp	1937A02548	06/01/2006	06/01/2008	00309
Horn Antenna	6246	06/29/2006	06/29/2008	00849
24" SMA Cable	1-26GHz_white	01/11/2007	01/11/2009	P05205
Microwave Pre-amp	3123A00281	07/19/2006	07/19/2008	00786
Heliax Antenna Cable	P5565	09/18/2006	09/18/2008	P05565
1.5 GHz HPF	3643A00027	06/09/2007	06/09/2009	02116

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

Function	Manufacturer	Model #	S/N
Wireless Intercom*	Anchor Audio, Inc.	BPW-900	NA
Power Supply	CUI Inc	EPAS-10W-09	NA

### **Support Devices:**

Function	Manufacturer	Model #	S/N
Function Generator	HP	3312A	US36023090

### **Test Conditions / Notes:**

The EUT is placed upright, on the wooden table with a 5 cm Styrofoam pad. Headset with microphone is connected to the XLR connector, the EUT is put in receiving mode. Channel = Mid, 948MHz. Transmit antenna is held vertically. DC power source is plugged in to 110Vac/60Hz. The power supply is also charging a depleted battery. Frequency range of measurement = 30 MHz - 10 GHz. 30 MHz - 1000 MHz RBW=120 kHz, VBW=120 kHz; 1000 MHz - 10,000 MHz RBW=1 MHz, VBW=1 MHz. 22°C, 48% relative humidity.

**Transducer Legend:**

T1=Preamp 8447D 060108	T2=Bilog AN01995 020208 Chase
T3=Cable #10 051609	T4=Cable #15, Site A, 010509
T5=Pre amp 1- 26GHz 071908	T6=54' Heliax Cable 091808 P05565
T7=Horn 00849_062908	T8=SMA-cable_W_05205-011109-26GHz

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	dB		Ant		
				MHz	dB $\mu$ V	dB	dB	dB							
1	38.079M	47.5	QP	-27.8 +0.0	+15.1 +0.0	+0.1 +0.0	+1.1 +0.0	+0.0	36.0	40.0	-4.0		Vert		
^	38.079M	52.3		-27.8 +0.0	+15.1 +0.0	+0.1 +0.0	+1.1 +0.0	+0.0	40.8	40.0	+0.8		Vert		
3	108.684M	53.7		-27.7 +0.0	+10.6 +0.0	+0.2 +0.0	+1.9 +0.0	+0.0	38.7	43.5	-4.8		Vert		
4	103.272M	54.1		-27.7 +0.0	+10.3 +0.0	+0.2 +0.0	+1.8 +0.0	+0.0	38.7	43.5	-4.8		Vert		
5	35.079M	45.2	QP	-27.8 +0.0	+16.7 +0.0	+0.1 +0.0	+1.0 +0.0	+0.0	35.2	40.0	-4.8		Vert		
^	35.079M	48.9		-27.8 +0.0	+16.7 +0.0	+0.1 +0.0	+1.0 +0.0	+0.0	38.9	40.0	-1.1		Vert		
7	105.776M	53.5		-27.7 +0.0	+10.5 +0.0	+0.2 +0.0	+1.9 +0.0	+0.0	38.4	43.5	-5.1		Vert		
8	31.378M	43.4	QP	-27.8 +0.0	+18.3 +0.0	+0.1 +0.0	+0.9 +0.0	+0.0	34.9	40.0	-5.1		Vert		
^	31.378M	50.2		-27.8 +0.0	+18.3 +0.0	+0.1 +0.0	+0.9 +0.0	+0.0	41.7	40.0	+1.7		Vert		
10	102.077M	53.0		-27.7 +0.0	+10.2 +0.0	+0.2 +0.0	+1.8 +0.0	+0.0	37.5	43.5	-6.0		Vert		
11	65.829M	54.2		-27.7 +0.0	+6.1 +0.0	+0.0 +0.0	+1.4 +0.0	+0.0	34.0	40.0	-6.0		Vert		
12	94.944M	53.8	QP	-27.7 +0.0	+9.3 +0.0	+0.2 +0.0	+1.8 +0.0	+0.0	37.4	43.5	-6.1		Vert		
^	94.944M	60.3		-27.7 +0.0	+9.3 +0.0	+0.2 +0.0	+1.8 +0.0	+0.0	43.9	43.5	+0.4		Vert		
14	549.235M	41.6		-27.4 +0.0	+19.7 +0.0	+0.5 +0.0	+4.5 +0.0	+0.0	38.9	46.0	-7.1		Vert		
15	107.102M	51.4	QP	-27.7 +0.0	+10.6 +0.0	+0.2 +0.0	+1.9 +0.0	+0.0	36.4	43.5	-7.1		Vert		
^	107.102M	55.1		-27.7 +0.0	+10.6 +0.0	+0.2 +0.0	+1.9 +0.0	+0.0	40.1	43.5	-3.4		Vert		
17	3398.258M	47.6		+0.0 -38.3	+0.0 +4.2	+0.0 +31.3	+0.0 +1.8	+0.0	46.6	54.0	-7.4		Horiz		
18	3463.300M	46.8		+0.0 -38.2	+0.0 +4.5	+0.0 +31.4	+0.0 +1.9	+0.0	46.4	54.0	-7.6		Horiz		
19	110.442M	50.5		-27.7 +0.0	+10.8 +0.0	+0.2 +0.0	+1.9 +0.0	+0.0	35.7	43.5	-7.8		Horiz		
20	113.708M	50.0		-27.6 +0.0	+10.9 +0.0	+0.3 +0.0	+1.9 +0.0	+0.0	35.5	43.5	-8.0		Horiz		

21	98.105M	51.3	-27.7	+9.8	+0.2	+1.8	+0.0	35.4	43.5	-8.1	Vert
	QP		+0.0	+0.0	+0.0	+0.0					
^	98.105M	56.3	-27.7	+9.8	+0.2	+1.8	+0.0	40.4	43.5	-3.1	Vert
			+0.0	+0.0	+0.0	+0.0					
23	3528.300M	45.8	+0.0	+0.0	+0.0	+0.0	+0.0	45.8	54.0	-8.2	Horiz
			-38.2	+4.6	+31.6	+2.0					
24	101.575M	50.3	-27.7	+10.2	+0.2	+1.8	+0.0	34.8	43.5	-8.7	Horiz
			+0.0	+0.0	+0.0	+0.0					
25	68.079M	51.3	-27.7	+6.0	+0.0	+1.5	+0.0	31.1	40.0	-8.9	Vert
			+0.0	+0.0	+0.0	+0.0					
26	170.467M	49.9	-27.7	+9.6	+0.3	+2.4	+0.0	34.5	43.5	-9.0	Horiz
			+0.0	+0.0	+0.0	+0.0					
27	112.210M	48.6	-27.6	+10.9	+0.3	+1.9	+0.0	34.1	43.5	-9.4	Vert
			+0.0	+0.0	+0.0	+0.0					
28	117.335M	48.0	-27.6	+11.2	+0.3	+1.9	+0.0	33.8	43.5	-9.7	Vert
			+0.0	+0.0	+0.0	+0.0					
29	917.893M	32.9	-27.2	+23.7	+0.5	+6.0	+0.0	35.9	46.0	-10.1	Vert
			+0.0	+0.0	+0.0	+0.0					
30	342.833M	45.3	-27.6	+14.3	+0.3	+3.5	+0.0	35.8	46.0	-10.2	Horiz
			+0.0	+0.0	+0.0	+0.0					
31	523.725M	39.6	-27.5	+18.9	+0.4	+4.3	+0.0	35.7	46.0	-10.3	Horiz
			+0.0	+0.0	+0.0	+0.0					
32	167.408M	47.9	-27.7	+9.8	+0.3	+2.3	+0.0	32.6	43.5	-10.9	Horiz
			+0.0	+0.0	+0.0	+0.0					
33	91.855M	49.8	-27.8	+8.7	+0.1	+1.7	+0.0	32.5	43.5	-11.0	Vert
			+0.0	+0.0	+0.0	+0.0					
34	3398.258M	43.6	+0.0	+0.0	+0.0	+0.0	+0.0	42.6	54.0	-11.4	Vert
	Ave		-38.3	+4.2	+31.3	+1.8					
^	3398.258M	48.2	+0.0	+0.0	+0.0	+0.0	+0.0	47.2	54.0	-6.8	Vert
			-38.3	+4.2	+31.3	+1.8					
36	298.608M	45.5	-27.6	+13.2	+0.2	+3.2	+0.0	34.5	46.0	-11.5	Horiz
			+0.0	+0.0	+0.0	+0.0					
37	276.500M	46.0	-27.7	+12.9	+0.3	+3.0	+0.0	34.5	46.0	-11.5	Horiz
			+0.0	+0.0	+0.0	+0.0					
38	163.900M	47.0	-27.7	+10.0	+0.3	+2.3	+0.0	31.9	43.5	-11.6	Horiz
			+0.0	+0.0	+0.0	+0.0					
39	174.467M	47.4	-27.7	+9.4	+0.3	+2.4	+0.0	31.8	43.5	-11.7	Horiz
			+0.0	+0.0	+0.0	+0.0					
40	586.160M	36.8	-27.4	+19.8	+0.5	+4.6	+0.0	34.3	46.0	-11.7	Vert
			+0.0	+0.0	+0.0	+0.0					
41	320.700M	44.4	-27.6	+13.8	+0.2	+3.3	+0.0	34.1	46.0	-11.9	Horiz
			+0.0	+0.0	+0.0	+0.0					
42	807.317M	32.6	-27.1	+22.1	+0.6	+5.5	+0.0	33.7	46.0	-12.3	Horiz
			+0.0	+0.0	+0.0	+0.0					
43	448.058M	39.8	-27.6	+17.1	+0.4	+4.0	+0.0	33.7	46.0	-12.3	Horiz
			+0.0	+0.0	+0.0	+0.0					
44	840.527M	31.2	-27.1	+23.0	+0.6	+5.7	+0.0	33.4	46.0	-12.6	Vert
			+0.0	+0.0	+0.0	+0.0					

45	475.552M	39.0	-27.6 +0.0	+17.6 +0.0	+0.3 +0.0	+4.1 +0.0	+0.0 +0.0	33.4	46.0	-12.6	Vert
46	193.260M	46.7	-27.6 +0.0	+8.9 +0.0	+0.2 +0.0	+2.5 +0.0	+0.0 +0.0	30.7	43.5	-12.8	Vert
47	480.058M	38.5	-27.6 +0.0	+17.7 +0.0	+0.3 +0.0	+4.1 +0.0	+0.0 +0.0	33.0	46.0	-13.0	Horiz
48	205.477M	46.1	-27.6 +0.0	+9.2 +0.0	+0.2 +0.0	+2.6 +0.0	+0.0 +0.0	30.5	43.5	-13.0	Vert
49	91.307M	47.9	-27.8 +0.0	+8.6 +0.0	+0.1 +0.0	+1.7 +0.0	+0.0 +0.0	30.5	43.5	-13.0	Vert
50	851.625M	30.3	-27.1 +0.0	+23.3 +0.0	+0.6 +0.0	+5.7 +0.0	+0.0 +0.0	32.8	46.0	-13.2	Horiz
51	169.335M	45.6	-27.7 +0.0	+9.7 +0.0	+0.3 +0.0	+2.4 +0.0	+0.0 +0.0	30.3	43.5	-13.2	Vert
52	177.335M	46.0	-27.7 +0.0	+9.2 +0.0	+0.3 +0.0	+2.4 +0.0	+0.0 +0.0	30.2	43.5	-13.3	Vert
53	117.708M	44.3	-27.6 +0.0	+11.2 +0.0	+0.3 +0.0	+1.9 +0.0	+0.0 +0.0	30.1	43.5	-13.4	Horiz
54	364.967M	41.4	-27.7 +0.0	+14.9 +0.0	+0.3 +0.0	+3.6 +0.0	+0.0 +0.0	32.5	46.0	-13.5	Horiz
55	928.042M	28.8	-27.1 +0.0	+24.1 +0.0	+0.6 +0.0	+6.0 +0.0	+0.0 +0.0	32.4	46.0	-13.6	Horiz
56	202.408M	45.7	-27.6 +0.0	+9.0 +0.0	+0.2 +0.0	+2.6 +0.0	+0.0 +0.0	29.9	43.5	-13.6	Horiz
57	320.735M	42.6	-27.6 +0.0	+13.8 +0.0	+0.2 +0.0	+3.3 +0.0	+0.0 +0.0	32.3	46.0	-13.7	Vert
58	83.057M	44.1	-27.8 +0.0	+7.9 +0.0	+0.1 +0.0	+1.6 +0.0	+0.0 +0.0	25.9	40.0	-14.1	Vert
59	541.902M	34.7	-27.4 +0.0	+19.5 +0.0	+0.5 +0.0	+4.5 +0.0	+0.0 +0.0	31.8	46.0	-14.2	Vert
60	900.043M	29.4	-27.2 +0.0	+23.2 +0.0	+0.4 +0.0	+5.9 +0.0	+0.0 +0.0	31.7	46.0	-14.3	Vert
61	519.777M	35.7	-27.5 +0.0	+18.8 +0.0	+0.4 +0.0	+4.3 +0.0	+0.0 +0.0	31.7	46.0	-14.3	Vert
62	173.335M	44.6	-27.7 +0.0	+9.5 +0.0	+0.3 +0.0	+2.4 +0.0	+0.0 +0.0	29.1	43.5	-14.4	Vert
63	213.477M	43.8	-27.6 +0.0	+9.9 +0.0	+0.2 +0.0	+2.7 +0.0	+0.0 +0.0	29.0	43.5	-14.5	Vert
64	139.692M	43.0	-27.7 +0.0	+11.3 +0.0	+0.2 +0.0	+2.1 +0.0	+0.0 +0.0	28.9	43.5	-14.6	Horiz
65	409.185M	38.9	-27.8 +0.0	+16.1 +0.0	+0.4 +0.0	+3.8 +0.0	+0.0 +0.0	31.4	46.0	-14.6	Vert
66	159.000M	43.7	-27.7 +0.0	+10.3 +0.0	+0.2 +0.0	+2.3 +0.0	+0.0 +0.0	28.8	43.5	-14.7	Horiz
67	196.017M	44.5	-27.6 +0.0	+8.8 +0.0	+0.2 +0.0	+2.6 +0.0	+0.0 +0.0	28.5	43.5	-15.0	Horiz
68	155.000M	43.2	-27.7 +0.0	+10.6 +0.0	+0.2 +0.0	+2.2 +0.0	+0.0 +0.0	28.5	43.5	-15.0	Horiz

69	189.910M	44.5	-27.6 +0.0	+8.9 +0.0	+0.2 +0.0	+2.5 +0.0	+0.0 +0.0	28.5	43.5	-15.0	Vert
70	202.027M	44.1	-27.6 +0.0	+9.0 +0.0	+0.2 +0.0	+2.6 +0.0	+0.0 +0.0	28.3	43.5	-15.2	Vert
71	387.075M	38.9	-27.8 +0.0	+15.5 +0.0	+0.4 +0.0	+3.7 +0.0	+0.0 +0.0	30.7	46.0	-15.3	Horiz
72	298.602M	41.7	-27.6 +0.0	+13.2 +0.0	+0.2 +0.0	+3.2 +0.0	+0.0 +0.0	30.7	46.0	-15.3	Vert
73	198.027M	44.2	-27.6 +0.0	+8.8 +0.0	+0.2 +0.0	+2.6 +0.0	+0.0 +0.0	28.2	43.5	-15.3	Vert
74	198.408M	44.1	-27.6 +0.0	+8.8 +0.0	+0.2 +0.0	+2.6 +0.0	+0.0 +0.0	28.1	43.5	-15.4	Horiz
75	586.117M	32.9	-27.4 +0.0	+19.8 +0.0	+0.5 +0.0	+4.6 +0.0	+0.0 +0.0	30.4	46.0	-15.6	Horiz
76	181.335M	43.8	-27.7 +0.0	+9.0 +0.0	+0.3 +0.0	+2.5 +0.0	+0.0 +0.0	27.9	43.5	-15.6	Vert
77	165.335M	43.0	-27.7 +0.0	+9.9 +0.0	+0.3 +0.0	+2.3 +0.0	+0.0 +0.0	27.8	43.5	-15.7	Vert
78	86.807M	42.1	-27.8 +0.0	+8.2 +0.0	+0.1 +0.0	+1.7 +0.0	+0.0 +0.0	24.3	40.0	-15.7	Vert
79	206.683M	43.2	-27.6 +0.0	+9.3 +0.0	+0.2 +0.0	+2.6 +0.0	+0.0 +0.0	27.7	43.5	-15.8	Horiz
80	342.843M	39.7	-27.6 +0.0	+14.3 +0.0	+0.3 +0.0	+3.5 +0.0	+0.0 +0.0	30.2	46.0	-15.8	Vert
81	143.000M	41.8	-27.7 +0.0	+11.2 +0.0	+0.2 +0.0	+2.1 +0.0	+0.0 +0.0	27.6	43.5	-15.9	Horiz
82	65.575M	44.2	-27.7 +0.0	+6.1 +0.0	+0.0 +0.0	+1.4 +0.0	+0.0 +0.0	24.0	40.0	-16.0	Horiz
83	214.425M	42.1	-27.6 +0.0	+10.0 +0.0	+0.2 +0.0	+2.7 +0.0	+0.0 +0.0	27.4	43.5	-16.1	Horiz
84	191.158M	43.2	-27.6 +0.0	+8.9 +0.0	+0.2 +0.0	+2.5 +0.0	+0.0 +0.0	27.2	43.5	-16.3	Horiz
85	399.975M	37.1	-27.8 +0.0	+15.8 +0.0	+0.4 +0.0	+3.7 +0.0	+0.0 +0.0	29.2	46.0	-16.8	Horiz
86	276.485M	40.7	-27.7 +0.0	+12.9 +0.0	+0.3 +0.0	+3.0 +0.0	+0.0 +0.0	29.2	46.0	-16.8	Vert
87	178.467M	42.4	-27.7 +0.0	+9.1 +0.0	+0.3 +0.0	+2.4 +0.0	+0.0 +0.0	26.5	43.5	-17.0	Horiz
88	210.683M	41.5	-27.6 +0.0	+9.7 +0.0	+0.2 +0.0	+2.6 +0.0	+0.0 +0.0	26.4	43.5	-17.1	Horiz
89	962.177M	32.5	-27.1 +0.0	+24.7 +0.0	+0.7 +0.0	+6.1 +0.0	+0.0 +0.0	36.9	54.0	-17.1	Vert
90	364.927M	37.6	-27.7 +0.0	+14.9 +0.0	+0.3 +0.0	+3.6 +0.0	+0.0 +0.0	28.7	46.0	-17.3	Vert
91	349.992M	37.9	-27.6 +0.0	+14.5 +0.0	+0.3 +0.0	+3.5 +0.0	+0.0 +0.0	28.6	46.0	-17.4	Horiz
92	147.000M	40.2	-27.7 +0.0	+11.1 +0.0	+0.2 +0.0	+2.2 +0.0	+0.0 +0.0	26.0	43.5	-17.5	Horiz

93	185.335M	41.9	-27.7 +0.0	+8.9 +0.0	+0.3 +0.0	+2.5 +0.0	+0.0 +0.0	25.9	43.5	-17.6	Vert
94	125.975M	39.4	-27.6 +0.0	+11.5 +0.0	+0.3 +0.0	+2.0 +0.0	+0.0 +0.0	25.6	43.5	-17.9	Horiz
95	69.575M	42.3	-27.7 +0.0	+6.0 +0.0	+0.0 +0.0	+1.5 +0.0	+0.0 +0.0	22.1	40.0	-17.9	Horiz
96	234.425M	40.5	-27.6 +0.0	+11.4 +0.0	+0.2 +0.0	+2.8 +0.0	+0.0 +0.0	27.3	46.0	-18.7	Horiz
97	962.183M	30.8	-27.1 +0.0	+24.7 +0.0	+0.7 +0.0	+6.1 +0.0	+0.0 +0.0	35.2	54.0	-18.8	Horiz
98	406.460M	34.9	-27.8 +0.0	+16.0 +0.0	+0.4 +0.0	+3.7 +0.0	+0.0 +0.0	27.2	46.0	-18.8	Vert
99	336.010M	36.8	-27.6 +0.0	+14.2 +0.0	+0.3 +0.0	+3.4 +0.0	+0.0 +0.0	27.1	46.0	-18.9	Vert
100	409.175M	34.5	-27.8 +0.0	+16.1 +0.0	+0.4 +0.0	+3.8 +0.0	+0.0 +0.0	27.0	46.0	-19.0	Horiz
101	254.425M	38.9	-27.7 +0.0	+12.6 +0.0	+0.3 +0.0	+2.9 +0.0	+0.0 +0.0	27.0	46.0	-19.0	Horiz
102	157.335M	38.9	-27.7 +0.0	+10.4 +0.0	+0.2 +0.0	+2.3 +0.0	+0.0 +0.0	24.1	43.5	-19.4	Vert
103	992.033M	30.0	-27.2 +0.0	+24.6 +0.0	+0.7 +0.0	+6.3 +0.0	+0.0 +0.0	34.4	54.0	-19.6	Horiz
104	183.158M	39.3	-27.7 +0.0	+9.0 +0.0	+0.3 +0.0	+2.5 +0.0	+0.0 +0.0	23.4	43.5	-20.1	Horiz
105	350.085M	34.8	-27.6 +0.0	+14.5 +0.0	+0.3 +0.0	+3.5 +0.0	+0.0 +0.0	25.5	46.0	-20.5	Vert
106	226.425M	38.8	-27.6 +0.0	+10.9 +0.0	+0.2 +0.0	+2.7 +0.0	+0.0 +0.0	25.0	46.0	-21.0	Horiz
107	225.477M	37.5	-27.6 +0.0	+10.8 +0.0	+0.2 +0.0	+2.7 +0.0	+0.0 +0.0	23.6	46.0	-22.4	Vert
108	221.477M	36.8	-27.6 +0.0	+10.5 +0.0	+0.2 +0.0	+2.7 +0.0	+0.0 +0.0	22.6	46.0	-23.4	Vert
109	314.602M	31.7	-27.6 +0.0	+13.6 +0.0	+0.2 +0.0	+3.3 +0.0	+0.0 +0.0	21.2	46.0	-24.8	Vert
110	318.608M	29.6	-27.6 +0.0	+13.7 +0.0	+0.2 +0.0	+3.3 +0.0	+0.0 +0.0	19.2	46.0	-26.8	Horiz

## FCC 2.1033(c)(14)/2.1046/75.861(d)(1) - RF POWER OUTPUT

### Test Equipment

Equipment	Asset #	Manufacturer	Model #	Serial #	Cal Date	Cal Due
RF Power meter	02778	HP	EPM-441A	GB37170458	012706	012708
Power Sensor	02777	HP	E4412A	MY41499662	012706	012708
Programmable Power Source	01695/ 01696	Pacific Power	345AMX / UPC32	250 / 245	051507	051509
DC Power Source	1438	Topward	6306	988614	112206	112208

### Test Setup Photos



### 2.1046 RF Output power

### 74.861 Technical requirements.

(d) For low power auxiliary stations operating in the bands other than those allocated for TV broadcasting, the following technical requirements are imposed:

(1) The maximum transmitter power which will be authorized is 1 watt. Licensees may accept the manufacturer's power rating; however, it is the licensee's responsibility to observe specified power limits.

### Test Conditions

The EUT is placed on the wooden table. Differential input is connected to a support audio generator. The EUT is put in operational mode, transmitting in FM. Input audio frequency = 1kHz, 50mV. Evaluation performed at the RF Antenna port, with variations in AC and DC voltage. varied. The EUT has AC and DC mode of operation. For DC Battery power, the maximum declared operational DC voltage is 4.8 volt and the batter end point is 3.6 volt.

Measured RF Output power

	<b>110 Vac/ 4.8 Vdc</b>	<b>93.5 Vac (-15%)</b>	<b>126.5Vac (+15%)</b>	<b>4.8 Vdc</b>	<b>3.6Vdc</b>
945MHz	0.055 W	0.055 W	0.055 W	0.055 W	0.055 W
951MHz	0.051 W	0.051 W	0.051 W	0.051 W	0.051 W

**FCC 2.1033(c)(14)/2.1047(a) - MODULATION CHARACTERISTICS - AUDIO FREQUENCY RESPONSE**

**Test Equipment**

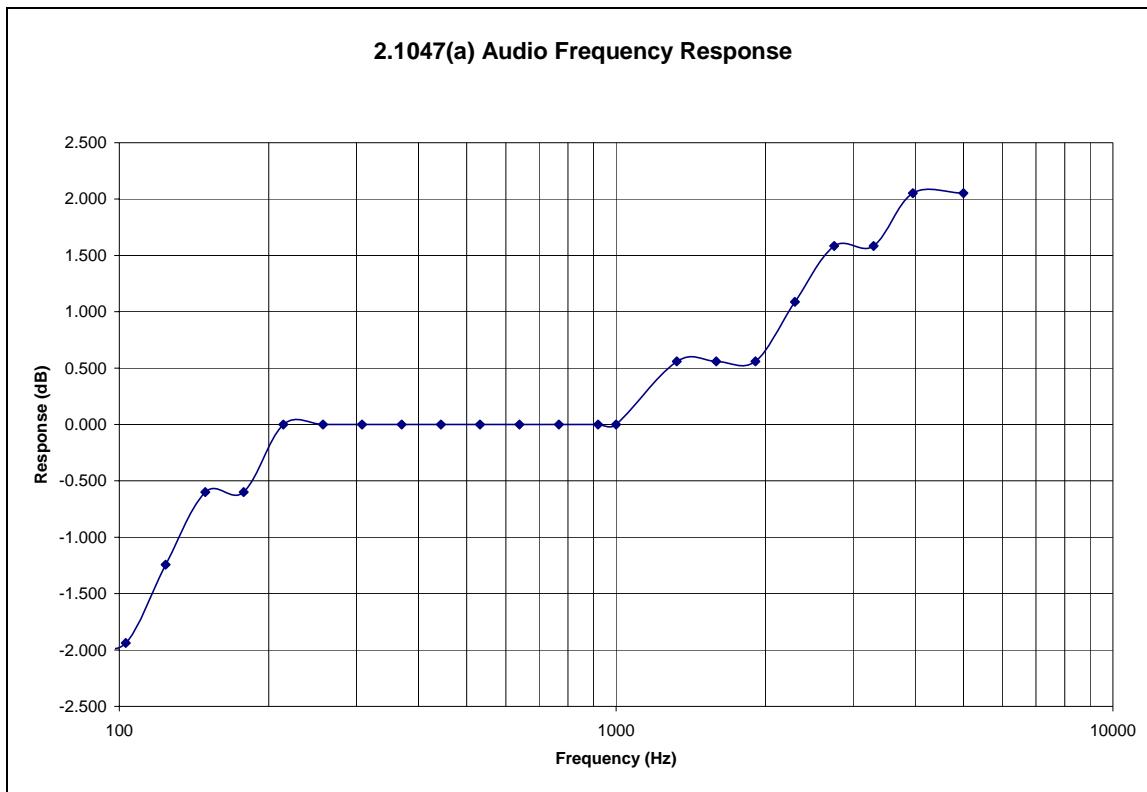
Equipment	Asset #	Manufacturer	Model #	Serial #	Cal Date	Cal Due
Oscilloscope	02713	HP	54616C	US37340242	072007	072009
Function Generator	00838	HP	33120A	US36023090	030107	030109
Analyzer, Modulation	02072	HP	8901A	2751A05181	110906	110908

**Test Setup Photos**



**2.1047(a) Audio Frequency Response Setup**

The test setup is in accordance with TIA/EIA 603 2.2.6.2.2 Constant Input Method. The EUT is functioning normally. EUT is powered by an external DC power source for consistency. The Audio Frequency response curve is plotted from 100 Hz to 5000Hz.



Tested By: E. Wong

**FCC 2.1033(c)(14)/2.1047(b) MODULATION CHARACTERISTICS– Modulation Limiting Response**

**Test Equipment**

Equipment	Asset #	Manufacturer	Model #	Serial #	Cal Date	Cal Due
Oscilloscope	02713	HP	54616C	US37340242	072007	072009
Function Generator	00838	HP	33120A	US36023090	030107	030109
Analyzer, Modulation	02072	HP	8901A	2751A05181	110906	110908

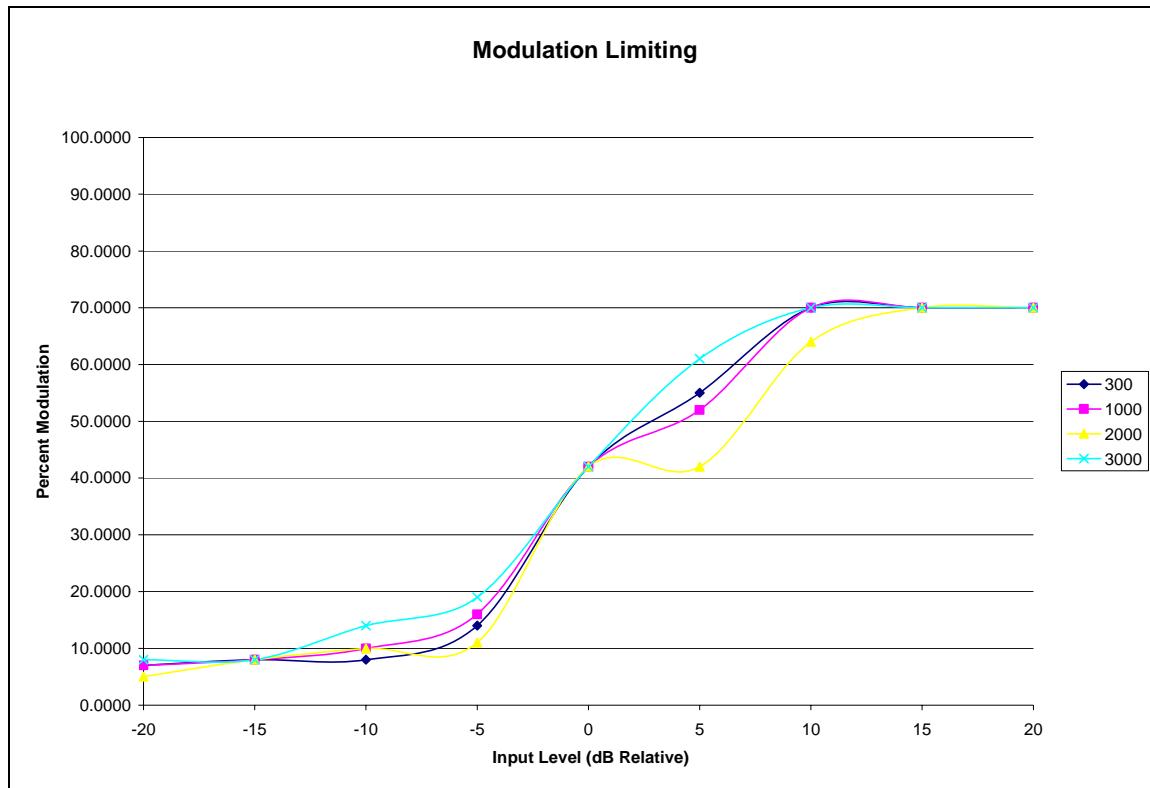
**Test Setup Photos**



**Test Data Sheets**

**2.1047(b) Modulation Limiting Setup**

The test setup is in accordance with TIA/EIA 603. The EUT is functioning normally. EUT is powered by an external DC power source for consistency. A family of curves is plotted as a function of input modulation relative to 60% of the manufacturer's declared maximum system deviation. The frequencies chosen are 500Hz, 1kHz, 2kHz and 3kHz.



Tested By: E. Wong

**FCC 2.1033(c)(14)/2.1049(e)(3)/74.861(d)(3)- OCCUPIED BANDWIDTH**

**Test Equipment**

Equipment	Asset #	Manufacturer	Model #	Serial #	Cal Date	Cal Date
Spectrum Analyzer	02672	Agilent	E4446A	US44300438	010307	010309

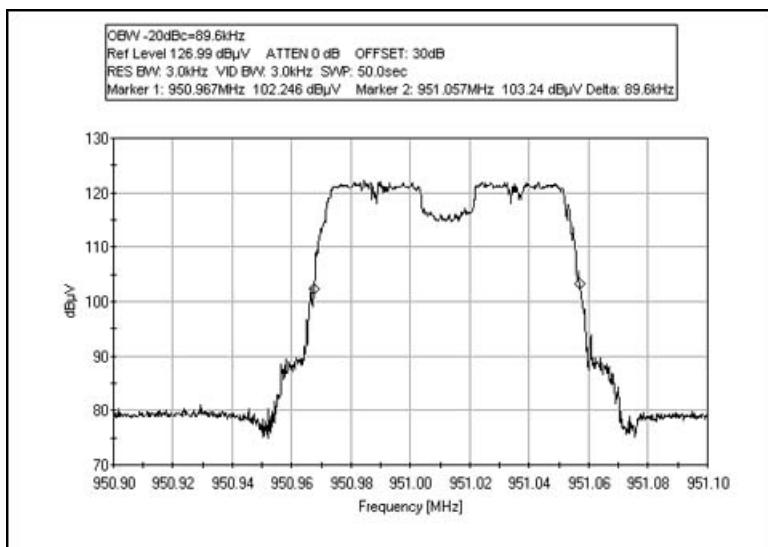
**Test Conditions** The EUT is placed on the wooden table. Differential input is connected to a support audio generator. The EUT is put in operational mode, transmitting in FM. Input audio frequency = 1kHz, 50mV. Evaluation performed at the RF Antenna port.

**Test Setup Photos**



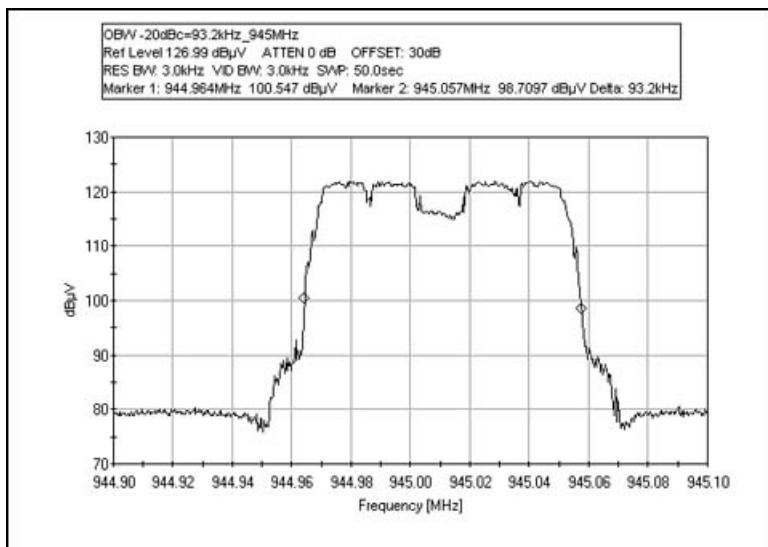
## Test Plots

### OCCUPIED BANDWIDTH -20dBc 89.6kHz - 951MHz



Tested By: E. Wong

### OCCUPIED BANDWIDTH -20dBc 93.2kHz - 945MHz



Tested By: E. Wong

**FCC 2.1033(c)(14)/2.1049(i)/74.861(d)(3)- BANDEDGE**

**Test Equipment**

Equipment	Asset #	Manufacturer	Model #	Serial #	Cal Date	Cal Date
Spectrum Analyzer	02672	Agilent	E4446A	US44300438	010307	010309

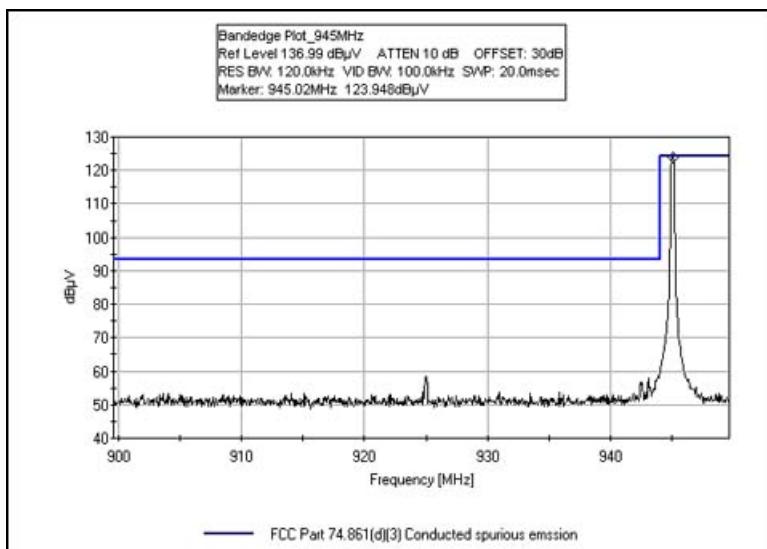
**Test Conditions:** The EUT is placed on the wooden table. Differential input is connected to a support audio generator. The EUT is put in operational mode, transmitting in FM. Input audio frequency = 1kHz, 50mV. Evaluation performed at the RF Antenna port.

**Test Setup Photos**



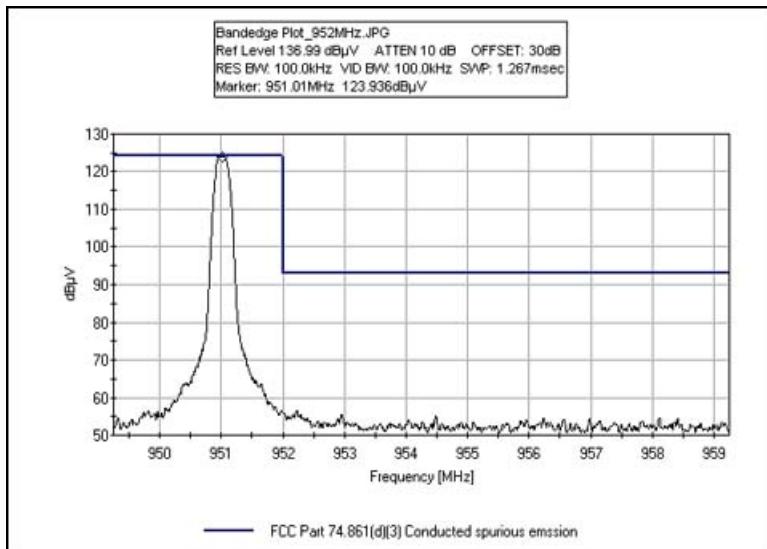
## Test Plots

### BANDEDGE PLOT 949MHz



Tested By: E. Wong

### BANDEDGE PLOT 952MHz



Tested By: E. Wong

**FCC 2.1033(c)(14)/2.1051/74.861(d)(3) - SPURIOUS EMISSIONS AT ANTENNA TERMINAL**

**Test Setup Photos**



**Test Data Sheets**

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

Customer: **Anchor Audio, Inc.**  
 Specification: **FCC Part 74.861(d)(3) Conducted spurious emission**  
 Work Order #: **84749** Date: **7/26/2007**  
 Test Type: **Conducted Emissions** Time: **10:06:51**  
 Equipment: **Wireless Intercom** Sequence#: **9**  
 Manufacturer: **Anchor Audio, Inc.** Tested By: **E. Wong**  
 Model: **BPW-900** **110V 60Hz**  
 S/N: **NA**

**Test Equipment:**

Function	S/N	Calibration Date	Cal Due Date	Asset #
Spectrum Analyzer	US44300438	01/03/2007	01/03/2009	02672
1.0 GHz HPF	1	03/07/2006	03/07/2008	02749
Cable Big Blue	12237/4A	11/28/2005	11/28/2007	P05421

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

Function	Manufacturer	Model #	S/N
Wireless Intercom*	Anchor Audio, Inc.	BPW-900	NA
Power Supply	CUI Inc	EPAS-10W-09	NA

**Support Devices:**

Function	Manufacturer	Model #	S/N
Function Generator	HP	3312A	US36023090

**Test Conditions / Notes:**

The EUT is placed on the wooden table. Differential input is connected to a support audio generator. The EUT is put in operational mode, transmitting in FM. Input audio frequency = 1kHz, 50mV Evaluation performed at the RF Antenna port. DC power source is plugged in to 110Vac/60Hz Frequency = 945MHz. 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 - 10,000 MHz RBW=1 MHz, VBW=1 MHz. 22°C, 48% relative humidity.

**Transducer Legend:**

T1=CABLE\_bigblue\_ANP5421 112807

T2=Filter 1GHz HP AN02749

#	Freq MHz	Reading listed by margin.				Dist Table	Test Lead: Antenna Terminal			
		Rdng dB $\mu$ V	T1 dB	T2 dB	dB		Corr dB $\mu$ V	Spec dB $\mu$ V	Margin dB	Polar Ant
1	1317.700M	71.9	+1.0	+0.5		+0.0	73.4	94.0	-20.6	Anten
2	1316.700M	71.6	+1.0	+0.5		+0.0	73.1	94.0	-20.9	Anten
3	1181.200M	71.5	+0.9	+0.6		+0.0	73.0	94.0	-21.0	Anten
4	1085.000M	68.9	+0.9	+0.8		+0.0	70.6	94.0	-23.4	Anten
5	1145.000M	68.9	+0.9	+0.7		+0.0	70.5	94.0	-23.5	Anten
6	3780.200M	51.9	+1.7	+0.5		+0.0	54.1	94.0	-39.9	Anten
7	7560.000M	49.4	+2.7	+0.2		+0.0	52.3	94.0	-41.7	Anten
8	5670.700M	49.3	+2.1	+0.3		+0.0	51.7	94.0	-42.3	Anten
9	4724.800M	48.1	+1.9	+0.2		+0.0	50.2	94.0	-43.8	Anten



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

Customer: **Anchor Audio, Inc.**  
 Specification: **FCC Part 74.861(d)(3) Conducted spurious emission**  
 Work Order #: **84749** Date: **7/26/2007**  
 Test Type: **Conducted Emissions** Time: **10:16:02**  
 Equipment: **Wireless Intercom** Sequence #: **10**  
 Manufacturer: **Anchor Audio, Inc.** Tested By: **E. Wong**  
 Model: **BPW-900** **110V 60Hz**  
 S/N: **NA**

**Test Equipment:**

Function	S/N	Calibration Date	Cal Due Date	Asset #
Spectrum Analyzer	US44300438	01/03/2007	01/03/2009	02672
1.0 GHz HPF	1	03/07/2006	03/07/2008	02749
Cable Big Blue	12237/4A	11/28/2005	11/28/2007	P05421

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

Function	Manufacturer	Model #	S/N
Wireless Intercom*	Anchor Audio, Inc.	BPW-900	NA
Power Supply	CUI Inc	EPAS-10W-09	NA

**Support Devices:**

Function	Manufacturer	Model #	S/N
Function Generator	HP	3312A	US36023090

**Test Conditions / Notes:**

The EUT is placed on the wooden table. Differential input is connected to a support audio generator. The EUT is put in operational mode, transmitting in FM. Input audio frequency = 1kHz, 50mV Evaluation performed at the RF Antenna port. DC power source is plugged in to 110Vac/60Hz Frequency = 951MHz. 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 - 10,000 MHz RBW=1 MHz, VBW=1 MHz. 22°C, 48% relative humidity.

**Transducer Legend:**

T1=CABLE_bigblue_ANP5421 112807	T2=Filter 1GHz HP AN02749
---------------------------------	---------------------------

Measurement Data:				Reading listed by margin.								Test Lead: Antenna Terminal			
#	Freq MHz	Rdng dB $\mu$ V	T1 dB	T2 dB	dB	Dist Table	Corr dB $\mu$ V	Spec dB $\mu$ V	Margin dB	Polar Ant					
1	1188.800M	69.9	+0.9	+0.6		+0.0	71.4	94.0	-22.6	Anten					
2	1091.200M	69.7	+0.9	+0.8		+0.0	71.4	94.0	-22.6	Anten					
3	1030.800M	58.2	+0.8	+1.1		+0.0	60.1	94.0	-33.9	Anten					
4	1011.500M	54.1	+0.9	+1.2		+0.0	56.2	94.0	-37.8	Anten					
5	5705.800M	51.8	+2.2	+0.3		+0.0	54.3	94.0	-39.7	Anten					
6	3804.000M	52.0	+1.7	+0.5		+0.0	54.2	94.0	-39.8	Anten					

7	1902.000M	52.6	+1.2	+0.3	+0.0	54.1	94.0	-39.9	Anten
8	7608.200M	49.5	+2.7	+0.2	+0.0	52.4	94.0	-41.6	Anten
9	3378.000M	49.2	+1.7	+0.4	+0.0	51.3	94.0	-42.7	Anten
10	1817.000M	47.1	+1.2	+0.3	+0.0	48.6	94.0	-45.4	Anten

**FCC 2.1033(c)(14)/2.1053/74.861(d)(3) - FIELD STRENGTH OF SPURIOUS RADIATION**

**Test Setup Photos**



## Test Data Sheets

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

Customer: **Anchor Audio, Inc.**  
 Specification: **FCC Part 74.861(d)(3) Radiated Spurious Emission**  
 Work Order #: **84749** Date: **7/25/2007**  
 Test Type: **Radiated Scan** Time: **14:20:28**  
 Equipment: **Wireless Intercom** Sequence#: **2**  
 Manufacturer: **Anchor Audio, Inc.** Tested By: **E. Wong**  
 Model: **BPW-900**  
 S/N: **NA**

### Test Equipment:

Function	S/N	Calibration Date	Cal Due Date	Asset #
Spectrum Analyzer	US44300438	01/03/2007	01/03/2009	02672
Bilog Antenna	2451	02/02/2006	02/02/2008	01995
Pre amp to SA Cable	Cable #10	05/16/2007	05/16/2009	P05050
Cable	Cable15	01/05/2007	01/05/2009	P05198
Pre Amp	1937A02548	06/01/2006	06/01/2008	00309
Horn Antenna	6246	06/29/2006	06/29/2008	00849
24" SMA Cable	1-26GHz_white	01/11/2007	01/11/2009	P05205
Microwave Pre-amp	3123A00281	07/19/2006	07/19/2008	00786
Heliax Antenna Cable	P5565	09/18/2006	09/18/2008	P05565
1.5 GHz HPF	3643A00027	06/09/2007	06/09/2009	02116

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

Function	Manufacturer	Model #	S/N
Wireless Intercom*	Anchor Audio, Inc.	BPW-900	NA
Power Supply	CUI Inc	EPAS-10W-09	NA

### Support Devices:

Function	Manufacturer	Model #	S/N
Function Generator	HP	3312A	US36023090

### Test Conditions / Notes:

The EUT is placed upright, on the wooden table with a 5 cm Styrofoam pad. Differential input is connected to a support audio generator. The EUT is put in operational mode, transmitting in FM. Input audio frequency = 1kHz, 50mV. Transmit antenna is held vertically, pointing down. DC power source is plugged in to 110Vac/60Hz. Frequency = 945MHz. 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 - 10,000 MHz RBW=1 MHz, VBW=1 MHz. 22°C, 48% relative humidity.

### Transducer Legend:

T1=Pre amp 1- 26GHz 071908	T2=54' Heliax Cable 091808 P05565
T3=Horn 00849_062908	T4=SMA-cable_W_05205-011109-26GHz
T5=1.5GHz HPF 02116 060909	

### Measurement Data:

Reading listed by margin.

Test Distance: 3 Meters

#	Freq	Rdng	T1	T2	T3	T4	Dist	Corr	Spec	Margin	Polar
	MHz	dB $\mu$ V	dB	dB	dB	dB	Table	dB $\mu$ V/m	dB $\mu$ V/m	dB	Ant
1	1326.830M	82.9	-39.8	+2.3	+24.8	+1.1	+0.0	76.5	82.3	-5.8	Vert
				+5.2							

2	3779.850M	57.3	-38.1 +0.5	+4.7	+32.1	+2.2	+0.0	58.7	82.3	-23.6	Horiz
3	3780.000M	56.7	-38.1 +0.5	+4.7	+32.1	+2.2	+0.0	58.1	82.3	-24.2	Vert
4	4724.970M	53.2	-37.7 +0.6	+5.3	+32.9	+2.1	+0.0	56.4	82.3	-25.9	Horiz
5	2834.900M	57.1	-38.5 +0.5	+3.9	+29.9	+1.9	+0.0	54.8	82.3	-27.5	Horiz
6	1323.250M	58.8	-39.8 +5.6	+2.3	+24.8	+1.0	+0.0	52.7	82.3	-29.6	Vert
7	4724.970M	47.1	-37.7 +0.6	+5.3	+32.9	+2.1	+0.0	50.3	82.3	-32.0	Vert
8	1890.100M	57.6	-38.9 +0.7	+2.9	+26.1	+1.5	+0.0	49.9	82.3	-32.4	Horiz
9	2835.000M	50.0	-38.5 +0.5	+3.9	+29.9	+1.9	+0.0	47.7	82.3	-34.6	Vert
10	3402.100M	47.0	-38.3 +0.5	+4.2	+31.3	+1.8	+0.0	46.5	82.3	-35.8	Horiz
11	1890.030M	52.3	-38.9 +0.7	+2.9	+26.1	+1.5	+0.0	44.6	82.3	-37.7	Vert
12	5670.070M	36.7	-37.4 +0.9	+5.9	+34.2	+2.4	+0.0	42.7	82.3	-39.6	Vert
13	1319.720M	45.4	-39.8 +6.1	+2.3	+24.8	+1.0	+0.0	39.8	82.3	-42.5	Horiz

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

Customer: **Anchor Audio, Inc.**

Specification: **FCC Part 74.861(d)(3) Radiated Spurious Emission**

Work Order #: **84749**

Date: **7/25/2007**

Test Type: **Radiated Scan**

Time: **14:45:33**

Equipment: **Wireless Intercom**

Sequence#: **3**

Manufacturer: **Anchor Audio, Inc.**

Tested By: **E. Wong**

Model: **BPW-900**

S/N: **NA**

**Test Equipment:**

Function	S/N	Calibration Date	Cal Due Date	Asset #
Spectrum Analyzer	US44300438	01/03/2007	01/03/2009	02672
Bilog Antenna	2451	02/02/2006	02/02/2008	01995
Pre amp to SA Cable	Cable #10	05/16/2007	05/16/2009	P05050
Cable	Cable15	01/05/2007	01/05/2009	P05198
Pre Amp	1937A02548	06/01/2006	06/01/2008	00309
Horn Antenna	6246	06/29/2006	06/29/2008	00849
24" SMA Cable	1-26GHz_white	01/11/2007	01/11/2009	P05205
Microwave Pre-amp	3123A00281	07/19/2006	07/19/2008	00786
Heliax Antenna Cable	P5565	09/18/2006	09/18/2008	P05565
1.5 GHz HPF	3643A00027	06/09/2007	06/09/2009	02116

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

Function	Manufacturer	Model #	S/N
Wireless Intercom*	Anchor Audio, Inc.	BPW-900	NA
Power Supply	CUI Inc	EPAS-10W-09	NA

**Support Devices:**

Function	Manufacturer	Model #	S/N
Function Generator	HP	3312A	US36023090

**Test Conditions / Notes:**

The EUT is placed upright, on the wooden table with a 5 cm Styrofoam pad. Differential input is connected to a support audio generator. The EUT is put in operational mode, transmitting in FM. Input audio frequency = 1kHz, 50mV. Transmit antenna is held vertically, pointing down. DC power source is plugged in to 110Vac/60Hz Frequency = 951MHz. 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 - 10,000 MHz RBW=1 MHz, VBW=1 MHz. 22°C, 48% relative humidity.

**Transducer Legend:**

T1=Pre amp 1- 26GHz 071908	T2=54' Heliax Cable 091808 P05565
T3=Horn 00849_062908	T4=SMA-cable_W_05205-011109-26GHz
T5=1.5GHz HPF 02116 060909	

**Measurement Data:**

Reading listed by margin.

Test Distance: 3 Meters

#	Freq	Rdng	T1	T2	T3	T4	Dist	Corr	Spec	Margin	Polar
	MHz	dB $\mu$ V	dB	dB	dB	dB	Table	dB $\mu$ V/m	dB $\mu$ V/m	dB	Ant
1	3803.867M	63.0	-38.1 +0.5	+4.7	+32.2	+2.2	+0.0	64.5	82.3	-17.8	Horiz
2	4754.950M	52.9	-37.7 +0.5	+5.3	+33.0	+2.1	+0.0	56.1	82.3	-26.2	Horiz

3	3804.330M	54.4	-38.1 +0.5	+4.7	+32.2	+2.2	+0.0	55.9	82.3	-26.4	Vert
4	2853.033M	57.7	-38.5 +0.4	+3.9	+30.0	+1.9	+0.0	55.4	82.3	-26.9	Horiz
5	4755.170M	46.8	-37.7 +0.5	+5.3	+33.0	+2.1	+0.0	50.0	82.3	-32.3	Vert
6	2853.220M	51.5	-38.5 +0.4	+3.9	+30.0	+1.9	+0.0	49.2	82.3	-33.1	Vert
7	1328.300M	55.1	-39.8 +5.0	+2.3	+24.8	+1.1	+0.0	48.5	82.3	-33.8	Vert
8	1902.100M	53.6	-38.9 +0.7	+2.9	+26.1	+1.5	+0.0	45.9	82.3	-36.4	Horiz
9	1901.970M	51.4	-38.9 +0.7	+2.9	+26.1	+1.5	+0.0	43.7	82.3	-38.6	Vert
10	1333.300M	45.1	-39.8 +4.5	+2.3	+24.8	+1.1	+0.0	38.0	82.3	-44.3	Horiz

## FCC 2.1033(c)(14)/2.1055 - FREQUENCY STABILITY

### Test Equipment

Equipment	Asset #	Manufacturer	Model #	Serial #	Cal Date	Cal De
Temperature Chamber	01878	Thermaltron	S1.2	NA	060106	060108
Temperature Data logger	01620	HP	34970A	US70131892	052206	052208
20 Ch Thermalcouple module	01849	HP	34901A	US37603966	052206	052208

**Test Conditions:** The EUT is placed in the temperature chamber. RF signal is monitored from the antenna port. A spectrum analyzer is employed to measure the frequency stability of the EUT.

### Test Setup Photos



## Test Data

**Customer:** AnchorAudio  
**WO#:** 86749  
**Date:** 27-Jul-07  
**Test Engineer:** E. Wong

**Device Model #:** BPE900  
**Operating Voltage:** 110 VDC  
**Frequency Limit:** 3.6- 4.8 Vdc  
**0.05 %**

### Temperature Variations

Channel Frequency:		Channel 1 (MHz)	Dev. (MHz)	Channel 2 (MHz)	Dev. (MHz)
		944.996900		950.99818	
Temp (C)	Voltage				
-30	110	944.98640	0.01050	951.00753	0.00935
-20	110	945.005184	0.00828	951.007203	0.00902
-10	110	945.005175	0.00828	951.004100	0.00592
0	110	945.001120	0.00422	951.002230	0.00405
10	110	945.001570	0.00467	951.001400	0.00322
20	110	944.996900	0.00000	950.998180	0.00000
30	110	944.996730	0.00017	950.998070	0.00011
40	110	944.996480	0.00042	950.997900	0.00028
50	110	944.994420	0.00248	951.000600	0.00242

### Voltage Variations (Operational Battery power and Battery End point)

Temp (C)	Voltage	Channel 1 (MHz)	Dev. (MHz)	Channel 2 (MHz)	Dev. (MHz)
20	4.8	944.99672	0.00018	950.99823	0.00005
20	3.6	944.99697	0.00007	950.99832	0.00014

### Voltage Variations ( $\pm 15\%$ )

Temp (C)	Voltage	Channel 1 (MHz)	Dev. (MHz)	Channel 2 (MHz)	Dev. (MHz)
20	93.5	944.99648	0.00042	950.99847	0.00029
20	110.0	944.99690	0.00000	950.99818	0.00000
20	126.5	944.99638	0.00052	950.99798	0.00020

<b>Max Deviation (MHz)</b>	<b>0.01050</b>	<b>0.00935</b>
<b>Max Deviation (%)</b>	<b>0.00111</b>	<b>0.00098</b>
	<b>PASS</b>	<b>PASS</b>

Note: PASS, the EUT operates within 944- 952 MHz band.