



**ADDENDUM TO DICE ELECTRONCIS TEST REPORT FC08-043**

**FOR THE**

**VEHICULAR FM TRANSMITTER, FM RDS**

**FCC PART 15 SUBPART C SECTION 15.239,**

**SUBPART B SECTION 15.109 CLASS B**

**AND RSS-210 ISSUE 7**

**TESTING**

**DATE OF ISSUE: JUNE 6, 2008**

**PREPARED FOR:**

Dice Electroncis  
3720 Industry Ave. #108  
Lakewood, CA 90712

W.O. No.: 87804

**PREPARED BY:**

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

Date of test: April 15 - May 30, 2008

**Report No.: FC08-043A**

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## ADMINISTRATIVE INFORMATION

**DATE OF TEST:** April 15 - May 30, 2008

**DATE OF RECEIPT:** April 15, 2008

**REPRESENTATIVE:** Laszlo Barabas

**MANUFACTURER:**

Dice Electroncis  
3720 Industry Ave. #108  
Lakewood, CA 90712

**TEST LOCATION:**

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

**TEST METHOD:** ANSI C63.4 (2003), RSS-210 Issue 7 and RSS GEN Issue 2

**PURPOSE OF TEST:**

**Original Report:** To perform the testing of the Vehicular FM Transmitter, FM RDS with the requirements for FCC Part 15 Subpart C Section 15.239, Subpart B Section 15.109 Class B and RSS-210 devices.

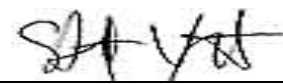
**Addendum A:** To revise the report with new testing of the RF Power Output.

## APPROVALS

Steve Behm, Director of Engineering Services

**QUALITY ASSURANCE:**

**TEST PERSONNEL:**

A handwritten signature in black ink, appearing to read "Stuart Yamamoto".

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Stuart Yamamoto, EMC Engineer

### SUMMARY OF RESULTS

Test	Specification/Method	Results
Radiated Emissions	FCC 15.109 Class B/ANSI C63.4(2003)	Pass
Occupied Bandwidth	FCC 15.239(a) /ANSI C63.4(2003)	Pass
RF Power Output	FCC 15.239(b) / ANSI C63.4(2003)	Pass
Field Strength of Spurious Emissions	FCC 15.239(c) / ANSI C63.4(2003)	Pass
99% Bandwidth	RSS-210 Issue 7/RSS GEN Issue 2	Pass
Site File No.	FCC 90473 & IC 3172A	

### CONDITIONS DURING TESTING

No modifications to the EUT were necessary during testing.

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

15.109 Radiated Emissions: 30 MHz – 1000 MHz

15.239 Radiated Emissions: 9 kHz – 1.1GHz

**FCC 15.203 Antenna Requirements**

The antenna is an integral part of the EUT and is non-removable; therefore the EUT complies with Section 15.203 of the FCC rules.

**EUT Operating Frequency**

The EUT was operating at EUT is 88.1MHz to 107.9MHz.

**Temperature And Humidity During Testing**

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

The relative humidity was between 20% and 75%.

## **EQUIPMENT UNDER TEST (EUT) DESCRIPTION**

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

## **EQUIPMENT UNDER TEST**

### **Vehicular FM Transmitter**

Manuf: Dice Electronics, LLC  
Model: FM RDS  
Serial: NA  
FCC ID: pending

## **PERIPHERAL DEVICES**

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

### **DC Power Supply**

Manuf: Topward Electric Instruments Co. Ltd.  
Model: 6306D  
Serial: 988614

### **Audio Player**

Manuf: Apple  
Model: A1199  
Serial: 7K63673FVQT

## REPORT OF EMISSIONS MEASUREMENTS

### 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.

SAMPLE CALCULATIONS		
	Meter reading	( $\text{dB}\mu\text{V}$ )
+	Antenna Factor	(dB)
+	Cable Loss	(dB)
-	Distance Correction	(dB)
-	Preamplifier Gain	(dB)
=	Corrected Reading	( $\text{dB}\mu\text{V}/\text{m}$ )

## **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. 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.

## **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 were 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.

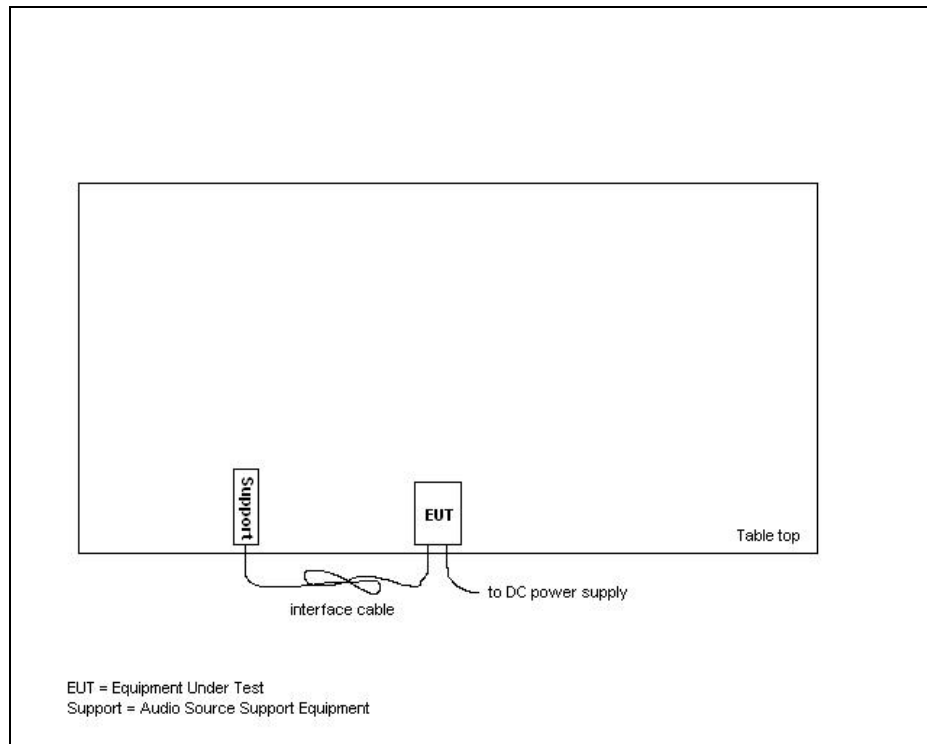
### **Average**

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.



## FCC 15.109 RADIATED EMISSIONS

### Test Setup Diagram



## Test Data Sheets

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

Customer: **Dice Electronics**  
 Specification: **FCC 15.109 (2007) Radiated Class B**  
 Work Order #: **87804** Date: 4/24/2008  
 Test Type: **Maximized Emissions** Time: 13:49:59  
 Equipment: **Vehicular FM Transmitter** Sequence#: 5  
 Manufacturer: Dice Electronics, LLC Tested By: Stuart Yamamoto  
 Model: fmrds  
 S/N: (none)

### Test Equipment:

Function	S/N	Calibration Date	Cal Due Date	Asset #
Antenna Cable	Cable #9	01/09/2008	01/09/2010	P01911
Bilog Antenna	2629	01/21/2008	01/21/2010	00851
Preamplifier	2727A05392	06/06/2006	06/06/2008	00010
Preamplifier Cable	Cable #22	08/10/2006	08/10/2008	P05555
10m Position Cable	Cable #17	09/19/2006	09/19/2008	P04382
Quasi Peak Adapter	3303A01884	09/14/2006	09/14/2008	01437
Spectrum Analyzer	3001A18430	09/14/2006	09/14/2008	02472
Display Section				
Spectrum Analyzer	2928A04874	09/14/2006	09/14/2008	02462
RF Section				

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

Function	Manufacturer	Model #	S/N
Vehicular FM Transmitter*	Dice Electronics, LLC	fmrds	(none)

### Support Devices:

Function	Manufacturer	Model #	S/N
DC Power Supply	Topward Electric	6306D	988614
	Instruments Co. Ltd.		
Audio Player	Apple	A1199	7K63673FVQT

### Test Conditions / Notes:

The equipment under test (EUT) is placed on a 5cm thick sheet of styrofoam which is on top of the wooden table. The power to the EUT is supplied from a DC power supply. The audio to the EUT is provided by an external audio source. The EUT is transmitting a signal containing the audio from the external audio source. The frequency range tested for this data sheet is 30MHz to 1.0GHz. The operating range of the EUT is 88.1MHz to 107.9MHz. The actual operating frequencies of the EUT used on this data sheet is 88.7MHz, 93.3MHz, and 107.7MHz. Temperature: 20°C, Humidity: 45%, Pressure: 100kPa. Frequency 30 MHz - 1000 MHz RBW=120 kHz, VBW=120 kHz;

**Transducer Legend:**

T1=ANT-AN00851 BILOG	T2=84' Helix Cable P04382
T3=Cable #22 Preamp to SA 081008	T4=Preamp 8447D Asset 00010
T5=Cable #9 P01911 41ft RG214 010910	

**Measurement Data:**

Reading listed by margin.

Test Distance: 3 Meters

#	Freq MHz	Rdng dBμV	T1 T5 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dBμV/m	Spec dBμV/m	Margin dB	Polar Ant
1	400.005M	35.2	+15.7 +2.0	+2.1	+0.4	-27.1	+0.0	28.3	46.0	-17.7	Vert
2	80.001M	38.6	+7.4 +0.9	+1.0	+0.1	-27.1	+0.0	20.9	40.0	-19.1	Horiz
3	400.000M	33.5	+15.7 +2.0	+2.1	+0.4	-27.1	+0.0	26.6	46.0	-19.4	Horiz
4	48.000M	36.7	+9.3 +0.7	+0.8	+0.1	-27.2	+0.0	20.4	40.0	-19.6	Vert
5	191.981M	38.8	+8.8 +1.4	+1.3	+0.2	-26.7	+0.0	23.8	43.5	-19.7	Horiz
6	128.001M	36.8	+11.5 +1.1	+1.1	+0.2	-27.0	+0.0	23.7	43.5	-19.8	Vert
7	199.989M	37.9	+8.8 +1.4	+1.4	+0.2	-26.7	+0.0	23.0	43.5	-20.5	Vert
8	64.008M	37.7	+6.7 +0.8	+0.8	+0.1	-27.2	+0.0	18.9	40.0	-21.1	Vert
9	72.003M	37.1	+6.5 +0.8	+0.9	+0.1	-27.1	+0.0	18.3	40.0	-21.7	Horiz
10	80.000M	34.9	+7.4 +0.9	+1.0	+0.1	-27.1	+0.0	17.2	40.0	-22.8	Vert
11	63.999M	35.7	+6.7 +0.8	+0.8	+0.1	-27.2	+0.0	16.9	40.0	-23.1	Horiz
12	160.001M	34.1	+10.3 +1.3	+1.1	+0.2	-26.9	+0.0	20.1	43.5	-23.4	Vert
13	192.001M	35.0	+8.8 +1.4	+1.3	+0.2	-26.7	+0.0	20.0	43.5	-23.5	Vert
14	287.979M	31.8	+12.9 +1.8	+1.7	+0.3	-26.5	+0.0	22.0	46.0	-24.0	Vert
15	72.001M	34.7	+6.5 +0.8	+0.9	+0.1	-27.1	+0.0	15.9	40.0	-24.1	Vert
16	319.963M	29.7	+13.7 +1.8	+1.8	+0.3	-26.6	+0.0	20.7	46.0	-25.3	Vert
17	288.007M	30.0	+12.9 +1.8	+1.7	+0.3	-26.5	+0.0	20.2	46.0	-25.8	Horiz
18	255.984M	29.0	+12.4 +1.7	+1.7	+0.3	-26.7	+0.0	18.4	46.0	-27.6	Horiz

## **FCC 15.239(b) RF POWER OUTPUT**

### **Test Setup Photos**



## Test Data Sheets

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

Customer: **Dice Electronics**  
 Specification: **FCC 15.239(b) (2007) Fundamental Emisison**  
 Work Order #: **87804** Date: 5/30/2008  
 Test Type: **Maximized Emissions** Time: 14:08:30  
 Equipment: **Vehicular FM Transmitter** Sequence#: 4  
 Manufacturer: Dice Electronics, LLC Tested By: Stuart Yamamoto  
 Model: fmrds  
 S/N: (none)

### Test Equipment:

Function	S/N	Calibration Date	Cal Due Date	Asset #
BiLog Antenna	2451	01/21/2008	01/21/2010	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
Spectrum Analyzer	MY46186290	02/12/2007	02/12/2009	02869

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

Function	Manufacturer	Model #	S/N
Vehicular FM Transmitter*	Dice Electronics, LLC	fmrds	(none)

### Support Devices:

Function	Manufacturer	Model #	S/N
Audio Player	Apple	A1199	7K63673FVQT
DC Power Supply	Topward Electric Instruments Co. Ltd.	6306D	988614

### Test Conditions / Notes:

The equipment under test (EUT) is placed on a 5cm thick sheet of styrofoam which is on top of the wooden table. The power to the EUT is supplied from a DC power supply. The audio to the EUT is provided by an external audio source. The EUT is transmitting a signal containing the audio from the external audio source. The frequency range tested for this data sheet is 88.7MHz to 107.7MHz. The operating range of the EUT is 88.1MHz to 107.9MHz. The actual operating frequencies of the EUT used on this data sheet is 88.7MHz, 93.3MHz, and 107.7MHz. 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- 1 100 MHz RBW=1 MHz, VBW=1 MHz.

### Transducer Legend:

T1=Preamp 8447D_AN00309_060108	T2=BiLog-AN01995 BILOG_012110
T3=Cable #10_P05050_051609	T4=Cable #15_P05198_Site A, 010509

### Measurement Data:

Reading listed by margin.

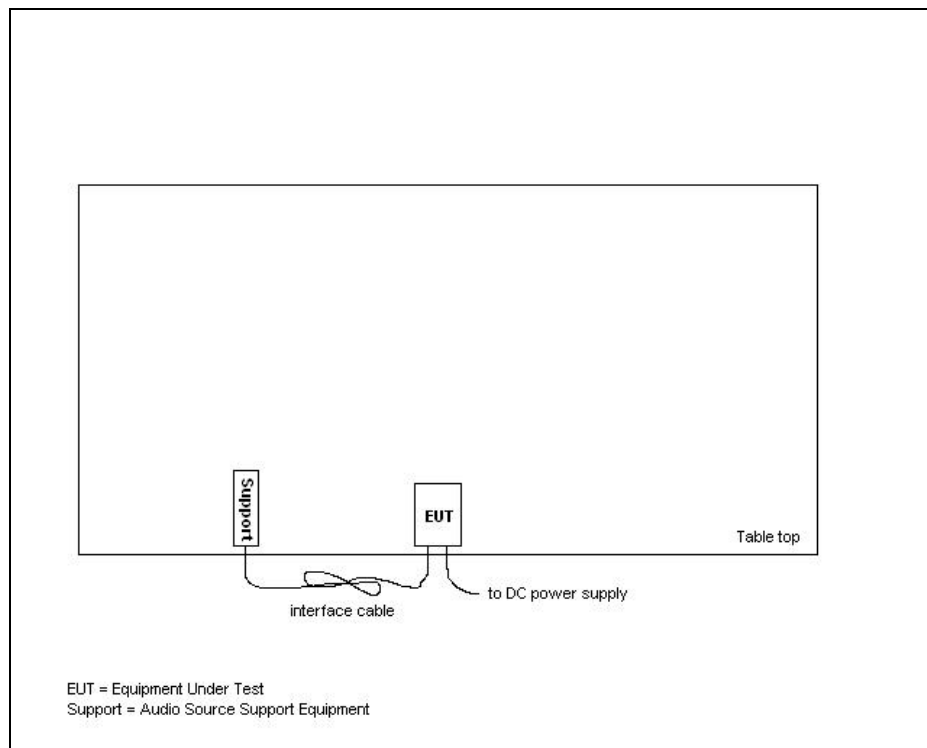
Test Distance: 3 Meters

#	Freq MHz	Rdng dBμV	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dBμV/m	Spec dBμV/m	Margin dB	Polar Ant
1	93.279M	63.5	-27.8	+9.3	+0.1	+1.7	+0.0	46.8	48.0	-1.2	Vert
Ave											
2	93.298M	63.2	-27.8	+9.3	+0.1	+1.7	+0.0	46.5	48.0	-1.5	Horiz
Ave											

3	88.674M Ave	63.0	-27.8	+8.6	+0.1	+1.7	+0.0	45.6	48.0	-2.4	Vert
4	107.668M Ave	60.0	-27.7	+10.8	+0.2	+1.9	+0.0	45.2	48.0	-2.8	Horiz
5	88.718M Ave	59.8	-27.8	+8.7	+0.1	+1.7	+0.0	42.5	48.0	-5.5	Horiz
6	107.699M Ave	56.7	-27.7	+10.8	+0.2	+1.9	+0.0	41.9	48.0	-6.1	Vert

## FCC 15.239(c) FIELD STRENGTH OF SPURIOUS EMISSIONS

### Test Setup Diagram



## Test Data Sheets

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

Customer: **Dice Electronics**  
 Specification: **FCC 15.239 (c) (2007) (15.209 limit)**  
 Work Order #: **87804** Date: 4/24/2008  
 Test Type: **Maximized Emissions** Time: 10:03:51  
 Equipment: **Vehicular FM Transmitter** Sequence#: 3  
 Manufacturer: Dice Electronics, LLC Tested By: Stuart Yamamoto  
 Model: fmrds  
 S/N: (none)

### Test Equipment:

Function	S/N	Calibration Date	Cal Due Date	Asset #
Antenna Cable	Cable #9	01/09/2008	01/09/2010	P01911
Bilog Antenna	2629	01/21/2008	01/21/2010	00851
Loop Antenna	2014	06/14/2006	06/14/2008	00314
Preamplifier	2727A05392	06/06/2006	06/06/2008	00010
Preamplifier Cable	Cable #22	08/10/2006	08/10/2008	P05555
10m Position Cable	Cable #17	09/19/2006	09/19/2008	P04382
Quasi Peak Adapter	3303A01884	09/14/2006	09/14/2008	01437
Spectrum Analyzer	3001A18430	09/14/2006	09/14/2008	02472
Display Section				
Spectrum Analyzer	2928A04874	09/14/2006	09/14/2008	02462
RF Section				
Horn Antenna	9603-4683	06/29/2006	06/29/2008	01646
40GHz cable		09/18/2007	09/18/2009	02946
Microwave	3123A00282	06/05/2007	06/05/2009	00787
Preamplifier				
Antenna Cable	L1-PNMMN-48	09/18/2006	09/18/2008	P05563

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

Function	Manufacturer	Model #	S/N
Vehicular FM Transmitter*	Dice Electronics, LLC	fmrds	(none)

### Support Devices:

Function	Manufacturer	Model #	S/N
DC Power Supply	Topward Electric	6306D	988614
	Instruments Co. Ltd.		
Audio Player	Apple	A1199	7K63673FVQT

### Test Conditions / Notes:

The equipment under test (EUT) is placed on a 5cm thick sheet of styrofoam which is on top of the wooden table. The power to the EUT is supplied from a DC power supply. The audio to the EUT is provided by an external audio source. The EUT is transmitting a signal containing the audio from the external audio source. The frequency range tested for this data sheet is 9kHz to 1.1GHz. The operating range of the EUT is 88.1MHz to 107.9MHz. The actual operating frequencies of the EUT used on this data sheet is 88.7MHz, 93.3MHz, and 107.7MHz. 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-1100 MHz. RBW=1 MHz, VBW=1 MHz.



**Transducer Legend:**

T1=ANT-AN00851 BILOG	T2=84' Heliac Cable P04382
T3=Cable #22 Preamp to SA 081008	T4=Preamp 8447D Asset 00010
T5=Cable #9 P01911 41ft RG214 010910	

**Measurement Data:**

Reading listed by margin.

Test Distance: 3 Meters

#	Freq MHz	Rdng dBμV	T1 T5 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dBμV/m	Spec dBμV/m	Margin dB	Polar Ant
1	354.803M	35.8	+14.6 +1.9	+2.0	+0.3	-26.8	+0.0	27.8	46.0	-18.2	Vert
2	323.185M	36.1	+13.8 +1.8	+1.8	+0.3	-26.6	+0.0	27.2	46.0	-18.8	Horiz
3	430.790M	33.0	+16.5 +2.1	+2.2	+0.4	-27.2	+0.0	27.0	46.0	-19.0	Vert
4	186.606M	39.6	+8.8 +1.3	+1.3	+0.2	-26.8	+0.0	24.4	43.5	-19.1	Vert
5	186.599M	39.4	+8.8 +1.3	+1.3	+0.2	-26.8	+0.0	24.2	43.5	-19.3	Horiz
6	354.790M	34.2	+14.6 +1.9	+2.0	+0.3	-26.8	+0.0	26.2	46.0	-19.8	Horiz
7	177.404M	38.3	+9.0 +1.3	+1.2	+0.2	-26.8	+0.0	23.2	43.5	-20.3	Vert
8	266.102M	35.8	+12.6 +1.7	+1.7	+0.3	-26.6	+0.0	25.5	46.0	-20.5	Vert
9	430.724M	31.2	+16.5 +2.1	+2.2	+0.4	-27.2	+0.0	25.2	46.0	-20.8	Horiz
10	215.410M	36.1	+10.0 +1.5	+1.5	+0.2	-26.6	+0.0	22.7	43.5	-20.8	Horiz
11	266.082M	35.3	+12.6 +1.7	+1.7	+0.3	-26.6	+0.0	25.0	46.0	-21.0	Horiz
12	323.112M	33.8	+13.8 +1.8	+1.8	+0.3	-26.6	+0.0	24.9	46.0	-21.1	Vert
13	215.409M	35.5	+10.0 +1.5	+1.5	+0.2	-26.6	+0.0	22.1	43.5	-21.4	Vert
14	279.903M	33.7	+12.8 +1.8	+1.7	+0.3	-26.5	+0.0	23.8	46.0	-22.2	Horiz
15	373.194M	31.4	+15.1 +1.9	+2.0	+0.3	-26.9	+0.0	23.8	46.0	-22.2	Vert
16	177.406M	36.2	+9.0 +1.3	+1.2	+0.2	-26.8	+0.0	21.1	43.5	-22.4	Horiz
17	373.266M	30.1	+15.1 +1.9	+2.0	+0.3	-26.9	+0.0	22.5	46.0	-23.5	Horiz
18	279.910M	31.9	+12.8 +1.8	+1.7	+0.3	-26.5	+0.0	22.0	46.0	-24.0	Vert

## FCC 15.239(a) OCCUPIED BANDWIDTH

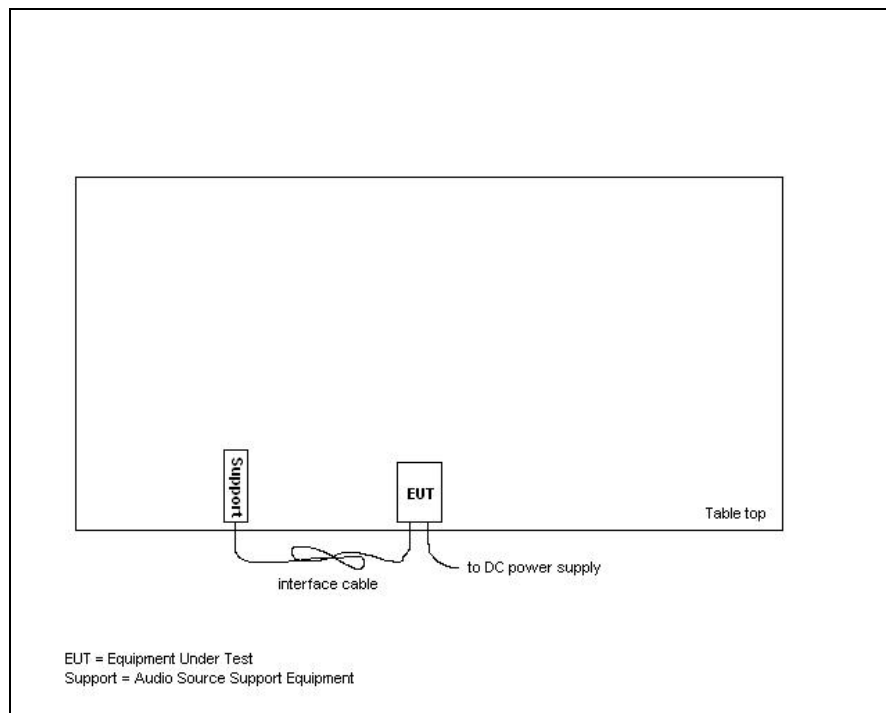
### Test Equipment

Equipment	Asset #	Manufacturer	Model #	Serial #	Cal Date	Cal Due
Spectrum Analyzer RF Section	02462	HP	8568B	2928A04874	091406	091408
Spectrum Analyzer Display Section	02472	HP	85662A	3001A18430	091406	091408
QP Adapter	01437	HP	85650A	3303A01884	091406	091408
Bilog Antenna	00851	Schaffner- Chase EMC	CBL6111C	2629	012108	012110
Antenna cable (10 meter site D)	P04382	Andrew	LDF1-50	Cable#17	091906	091908
Antenna cable from bulkhead to antenna	P01911	Pasternack	RG-214/U	Cable #9	010908	010910
Preamplifier to SA Cable (3 feet)	P05555	Pasternack	E100316-I	Cable #22	081006	081008
Pre-amp	00010	HP	8447D	2727A05392	060606	060608

### Test Conditions

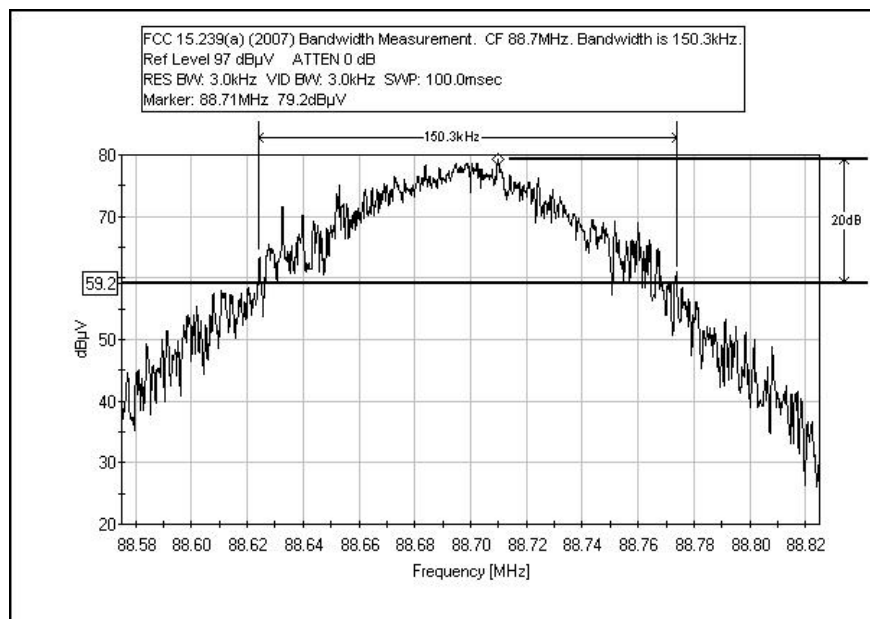
The equipment under test (EUT) is placed on a 5cm thick sheet of styrofoam which is on top of the wooden table. The power to the EUT is supplied from a DC power supply. The audio to the EUT is provided by an external audio source. The EUT is transmitting a signal containing the audio from the external audio source. The frequency range tested was 88.7MHz to 107.7MHz. The operating range of the EUT is 88.1MHz to 107.9MHz. The actual operating frequencies of the EUT tested were 88.7MHz, 93.3MHz, and 107.7MHz. RBW=3kHz, VBW=3kHz.

## Test Setup Diagram

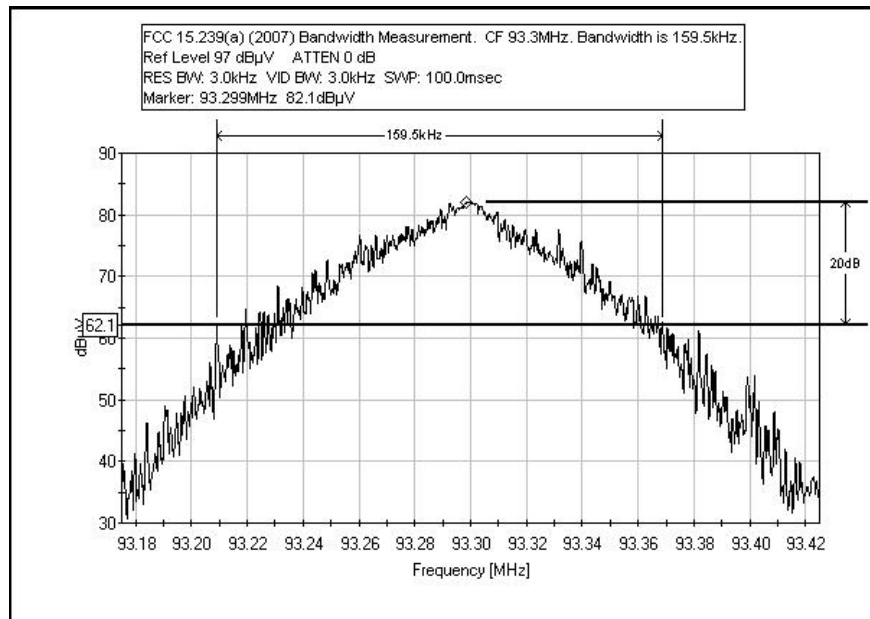


## Plots

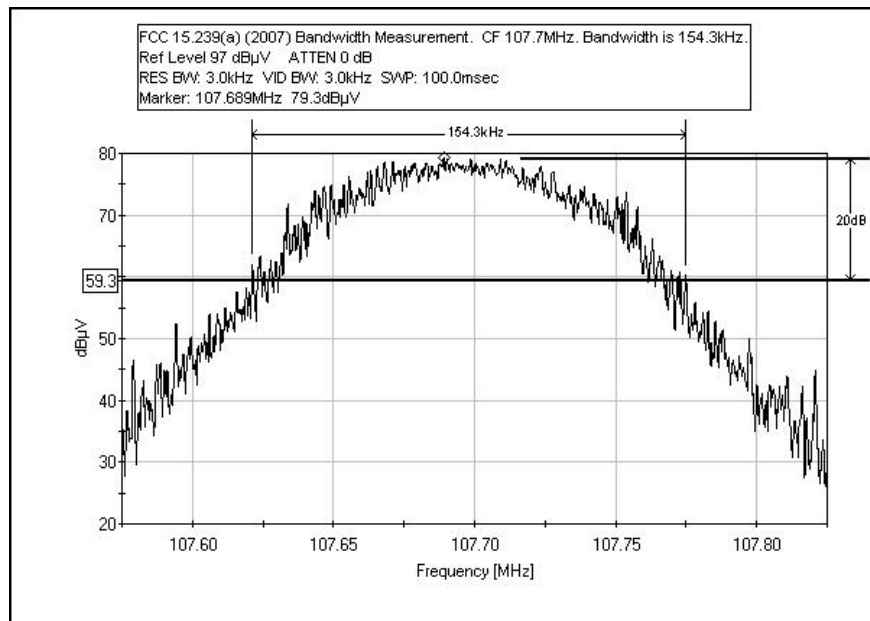
### FCC 15.239(a) OCCUPIED BANDWIDTH - LOW CHANNEL



## FCC 15.239(a) OCCUPIED BANDWIDTH - MIDDLE CHANNEL



## FCC 15.239(a) OCCUPIED BANDWIDTH - HIGH CHANNEL



## RSS-210 99% BANDWIDTH

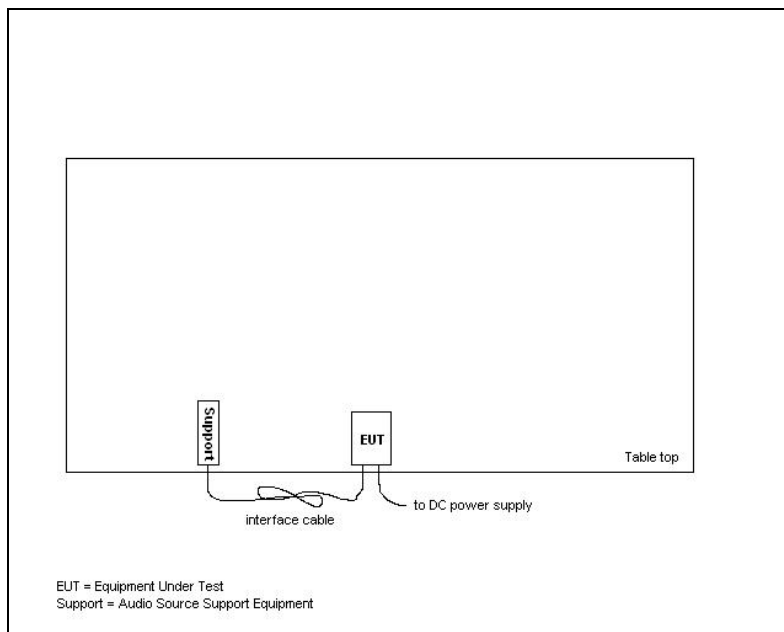
### Test Equipment

Equipment	Asset #	Manufacturer	Model #	Serial #	Cal Date	Cal Due
Spectrum Analyzer RF Section	02462	HP	8568B	2928A04874	091406	091408
Spectrum Analyzer Display Section	02472	HP	85662A	3001A18430	091406	091408
QP Adapter	01437	HP	85650A	3303A01884	091406	091408
Bilog Antenna	00851	Schaffner- Chase EMC	CBL6111C	2629	012108	012110
Antenna cable (10 meter site D)	P04382	Andrew	LDF1-50	Cable#17	091906	091908
Antenna cable from bulkhead to antenna	P01911	Pasternack	RG-214/U	Cable #9	010908	010910
Preamp to SA Cable (3 feet)	P05555	Pasternack	E100316-I	Cable #22	081006	081008
Pre-amp	00010	HP	8447D	2727A05392	060606	060608

### Test Conditions

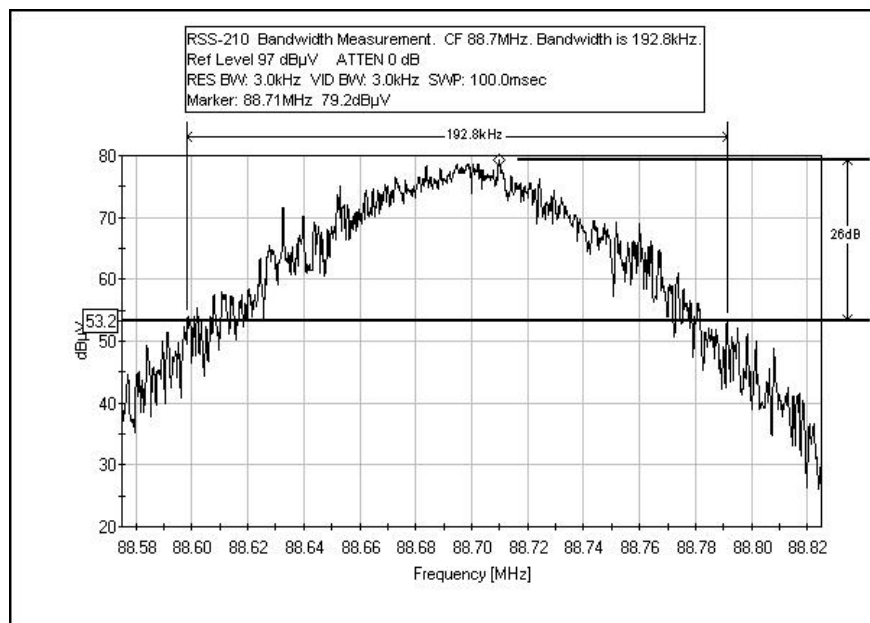
The equipment under test (EUT) is placed on a 5cm thick sheet of styrofoam which is on top of the wooden table. The power to the EUT is supplied from a DC power supply. The audio to the EUT is provided by an external audio source. The EUT is transmitting a signal containing the audio from the external audio source. The frequency range tested was 88.7MHz to 107.7MHz. The operating range of the EUT is 88.1MHz to 107.9MHz. The actual operating frequencies of the EUT tested were 88.7MHz, 93.3MHz, and 107.7MHz. RBW=3kHz, VBW=3kHz.

### Test Setup Diagram

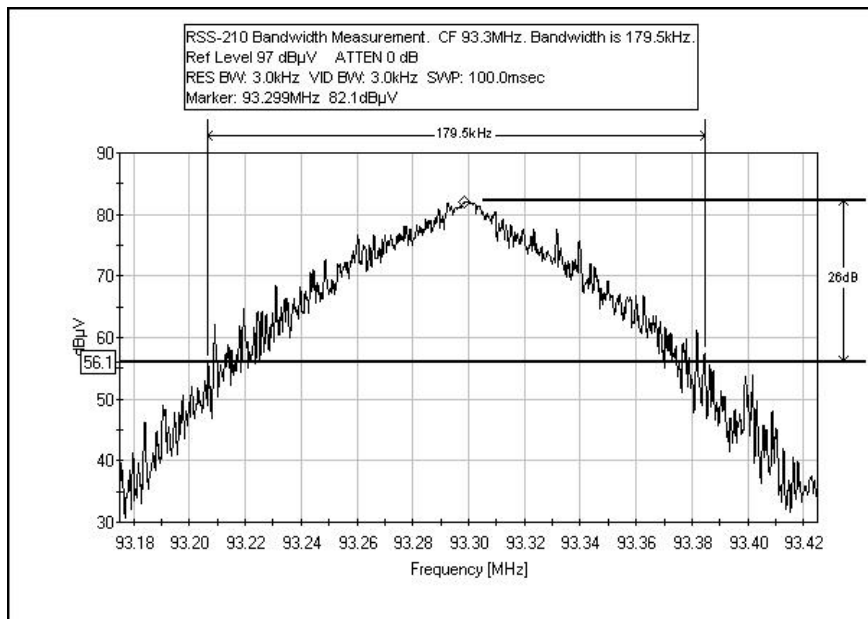


## Plots

### RSS-210 99% BANDWIDTH - LOW CHANNEL



## RSS-210 99% BANDWIDTH - MIDDLE CHANNEL



## RSS-210 99% BANDWIDTH - HIGH CHANNEL

