APPLICATION FOR CERTIFICATION
On Behalf of

Action Electronics Co Ltd

DVD Player with 8.5" LCD Monitor

Brand Name	Model Number
Audiovox	VOD86
Advent	ADV26
Jensen	JMV85
Axion	ODM78501

FCC ID. : ATI9R3VOD86

Prepared for : Action Electronics Co Ltd
No. 198, Chung Yuan Road Chung Li Ind Zone, Taiwan

Prepared By : Audix Technology (Shenzhen) Co., Ltd.
No. 6, Ke Feng Rd., 52 Block,
Shenzhen Science & Industrial Park,
Nantou, Shenzhen, Guangdong, China

Tel: (0755) 26639496

Report Number : ACS-F08309
Date of Test : Jun.21~25, 2008
Date of Report : Jun.30, 2008

TABLE OF CONTENTS

Description Page

1. SUMMARY OF STANDARDS AND RESULTS....4
1.1. Description of Standards and Results....4
2. GENERAL INFORMATION....2-1
2.1. Description of Device (EUT)....2-1
2.2. Test Facility....2-2
2.3. Test Uncertainty....2-2
3. POWER LINE CONDUCTED EMISSION TEST....3-1
4. RADIATED EMISSION TEST....4-2
4.1. Test Equipment....4-2
4.2. Block Diagram of Test Setup....4-2
4.3. Radiated Emission Limit 30~1000MHz....4-3
4.4. EUT Configuration on Test....4-3
4.5. Operating Condition of EUT....4-3
4.6. Test Procedure....4-3
4.7. Radiated Emission Test Results....4-4
5. BANDWIDTH TEST....5-1
5.1. Test Equipment....5-1
5.2. Block Diagram of Test Setup....5-1
5.3. Test Standard....5-1
5.4. Limit....5-1
5.5. Test Signal....5-1
5.6. Test Results....5-1
6. DEVIATION TO TEST SPECIFICATIONS....6-1
7. PHOTOGRAPH OF TEST....7-1
7.1. Photo of Radiated Emission Test (In Anechoic Chamber)....7-1

TEST REPORT CERTIFICATION

Applicant	:	Action Electronics Co Ltd
Manufacturer	:	Action Industries (M) SDN BHD
EUT Description	:	DVD Player with 8.5" LCD Monitor
FCC ID	:	ATI9R3VOD86

(A) MODEL NO. & BRAND NAME :

Brand Name	Model Number
Audiovox	VOD86
Advent	ADV26
Jensen	JMV85
Axion	ODM78501

(B) SERIAL NO. : N/A

(C) POWER SUPPLY : DC 12V, 1.5A

(C) TEST VOLTAGE : DC 12V

Test Procedure Used:
FCC Rules and Regulations Part 15 Subpart C 2007

The device described above is tested by Audix Technology (Shenzhen) Co., Ltd. to determine the maximum emission levels emanating from the device. The maximum emission levels are compared to the FCC Part 15 Subpart C limits for radiated and conducted emissions.
The test results are contained in this test report and Audix Technology (Shenzhen) Co., Ltd. is assumed full responsibility for the accuracy and completeness of tests. Also, this report shows that EUT is technically compliant with FCC requirements.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of Audix Technology (Shenzhen) Co., Ltd.

Date of Test : Jun.21~25, 2008

Prepared by : YoYo Wang
YoYo Wang / Assistant

Reviewer : Jamy Yu
Jamy Yu / Senior Engineer

Approved & Authorized Signer :
Ken Lu / Deputy Manager

1. SUMMARY OF STANDARDS AND RESULTS

1.1. Description of Standards and Results

The EUT have been tested according to the applicable standards as referenced below.

EMISSION			
Description of Test Item	**Standard**	**Limits**	**Results**
Conducted Emission Test	FCC Part 15: 15.207 ANSI C63.4: 2003	Part C Limit	N/A
Radiated Emission Test	FCC Part 15: 15.239 ANSI C63.4: 2003	Part C Limit	PASS
Bandwidth Test	FCC Part 15: 15.239	Part C Limit	PASS
N/A is an abbreviation for Not Applicable.			

2. GENERAL INFORMATION

2.1. Description of Device (EUT)

Description	:	DVD Player with 8.5" LCD Monitor
Model Number & Brand Name	:	Brand Name: Audiovox, Model Number: VOD86 Brand Name: Advent, Model Number: ADV26 Brand Name: Jensen, Model Number: JMV85 Brand Name: Axion, Model Number: ODM78501
		Only the Brand Name and Model Number are different.
FCC ID	:	ATI9R3VOD86
Operating Frequency	:	88.1MHz to 91.1MHz
Applicant	:	Action Electronics Co Ltd
		No. 198, Chung Yuan Road Chung Li Ind Zone, Taiwan
Manufacturer	:	Action Industries (M) SDN BHD
		2480, Tingkat Perusahaan Enam, Prai Free Trade Zone, 13600, Perai, Penang, Malaysia.
Date of Test	:	Jun.21~25, 2008
Date of Receipt	:	Jun.18, 2008
Sample Type	:	Prototype production

2.2. Test Facility

Site Description

Name of Firm	:	Audix Technology (Shenzhen) Co., Ltd. No. 6, Ke Feng Rd., 52 Block, Shenzhen Science & Industrial Park, Nantou, Shenzhen, Guangdong, China
3m Anechoic Chamber	:	Jun. 13, 2006 File on Federal Communication Commission Registration Number: 90454
3m & 10m Anechoic Chamber	:	Jan. 31, 2007 File on Federal Communication Commission Registration Number: 794232
EMC Lab.	:	Accredited by DATech, German Registration Number: DAT-P-091/99-01 Dec. 20, 2007 Accredited by NVLAP, USA NVLAP Code: 200372-0 Apr.01, 2007

2.3. Test Uncertainty

No.	Item	MU	Remark
1.	Uncertainty for Conducted Emission Test	2.02dB	
2.	Uncertainty for Radiation Emission test in 3m chamber	3.44 dB	Polarize: V
		3.96 dB	Polarize: H
3.	Uncertainty for Radiation Emission test in 10m chamber	3.46 dB	Distance: 10m Polarize: V
		3.82 dB	Distance: 10m Polarize: H
		3.64 dB	Distance: 3m Polarize: V
		4.02 dB	Distance: 3m Polarize: H

3. POWER LINE CONDUCTED EMISSION TEST

According to Paragraph (f) of FCC Part 15C 15.207, Tests to demonstrate compliance with the conducted limits are not required for devices which only employ battery power for operation and which do not operate from the AC power lines or contain provisions for operation while connected to the AC power lines.

4. RADIATED EMISSION TEST

4.1. Test Equipment

The following test equipments are used during the radiated emission Test：

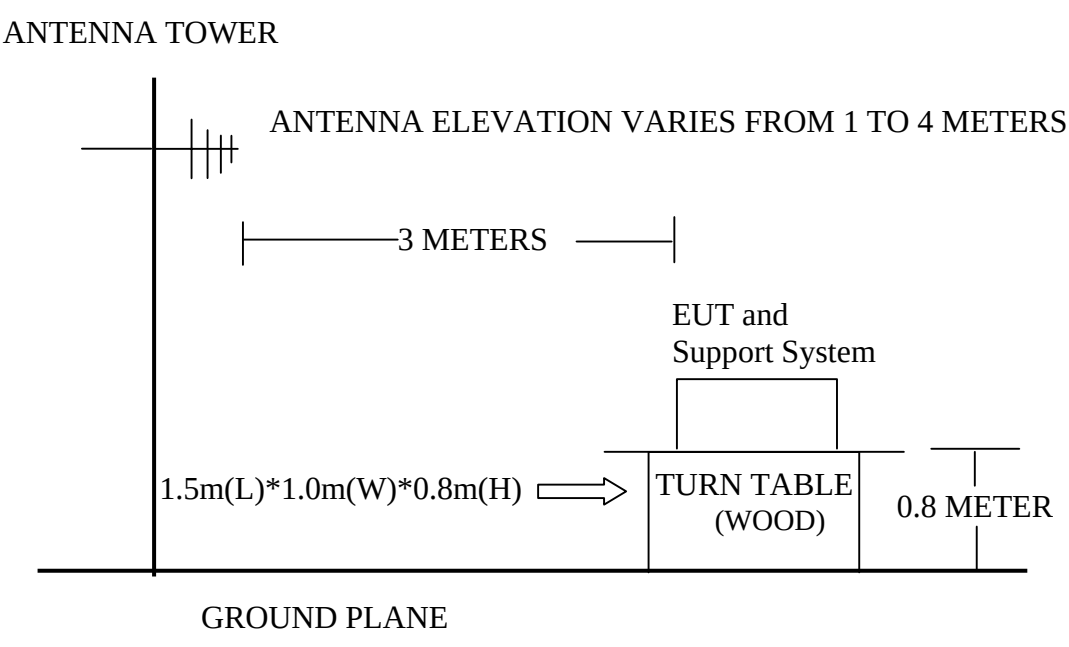
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	3#Chamber	AUDIX	N/A	N/A	Jun 09,08	1/2 Year
2.	EMI Spectrum	Agilent	E7403A	MY42000106	May 10, 08	1 Year
3.	Test Receiver	Rohde & Schwarz	ESVS20	830350/005	May 10, 08	1 Year
4.	Amplifier	HP	8447D	2648A04738	Jan 09, 08	1/2 Year
5.	Bilog Antenna	Schaffner	CBL6112D	25237	Feb 21, 08	1 Year
6.	RF Cable	JINGCHENG	KLMR400	3# Chamber No.1	Jan 09, 08	1/2 Year
7.	RF Cable	JINGCHENG	JBY400	3# Chamber No.2	Jan 09, 08	1/2 Year
8.	RF Cable	JINGCHENG	JBY400	3# Chamber No.3	Jan 09, 08	1/2 Year
9.	RF Cable	JINGCHENG	JBY400	3# Chamber No.4	Jan 09, 08	1/2 Year
10.	Coaxial Switch	Anritsu	MP59B	M73989	Jan 09, 08	1/2 Year

4.2. Block Diagram of Test Setup

4.2.1. Block Diagram of connection between EUT and simulators

(EUT: DVD Player with 8.5" LCD Monitor)

4.2.2. In Anechoic Chamber Test Setup Diagram



4.3. Radiated Emission Limit 30~1000MHz

FREQUENCY MHz	DISTANCE Meters	FIELD STRENGTHS LIMIT	
		μV/m	dB(μV)/m
30 ~ 88	3	100	40.0
88 ~ 108	3	250(Av), 2500(Peak)	48.0(Av), 68.0(Peak)
108 ~ 216	3	150	43.5
216 ~ 960	3	200	46.0
960 ~ 1000	3	500	54.0

Remark： (1) Emission level dBμV = 20 log Emission level μV/m

(2) The smaller limit shall apply at the cross point between two frequency bands.

(3) Distance is the distance in meters between the measuring instrument, antenna and the closest point of any part of the device or system.

4.4. EUT Configuration on Test

The following equipment are installed on Radiated Emission Test to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

4.4.1. DVD Player with 8.5" LCD Monitor (EUT)

Model Number : VOD86
Serial Number : N/A

4.5. Operating Condition of EUT

4.5.1. Setup the EUT as shown in Section 4.2..

4.5.2. Let the EUT work in test modes (Tx Mode) and test it.

4.6. Test Procedure

The EUT and its simulators are placed on a turn table, which is 0.8 meter high above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT is set 3 meters away from the receiving antenna, which is mounted on a antenna tower. The antenna can be moved up and down between 1 meter and 4 meters to find out the maximum emission level. Broadband antenna (calibrated bilog antenna) is used as receiving antenna. Both horizontal and vertical polarization of the antenna is set on Test. In order to find the maximum emission levels, all of the interface cables must be manipulated according to ANSI C63.4-2003 on radiated emission Test.

The bandwidth of the EMI test receiver (R&S ESVS20) is set at 120kHz for frequency range from 30MHz to 1000 MHz.

The frequency range from 30MHz to 1000MHz are checked.

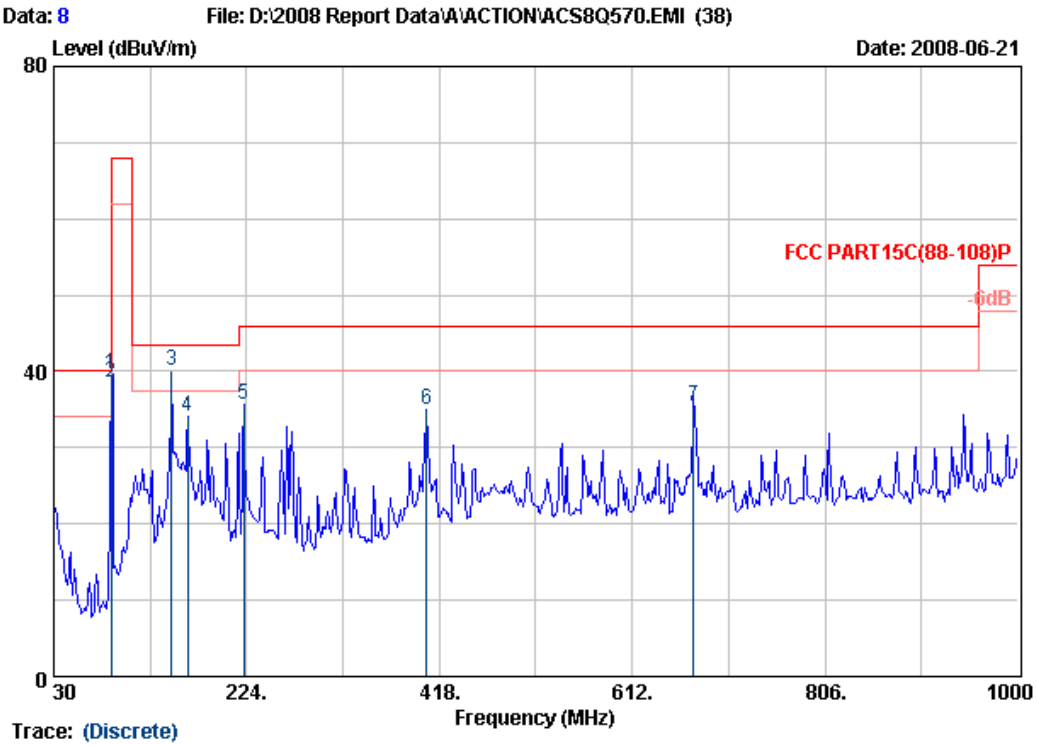
The test modes (TX Mode) is tested in Anechoic Chamber and all the scanning waveforms are reported on Section 4.7.

4.7. Radiated Emission Test Results

PASS.

For all the fundamental emission 88.1MHz, 89.5MHz and 91.1MHz are peak measured and comply with average limit, So, Average levels are deemed to comply with average limit.

No.6 Ke Feng Road,B1;ck 52,
ShenZhen Science & Industry Park
Noutou,ShenZhen,GuangDong,China
Tel:+86-755-26639495
Fax:+86-755-26632877
Postcode:518057

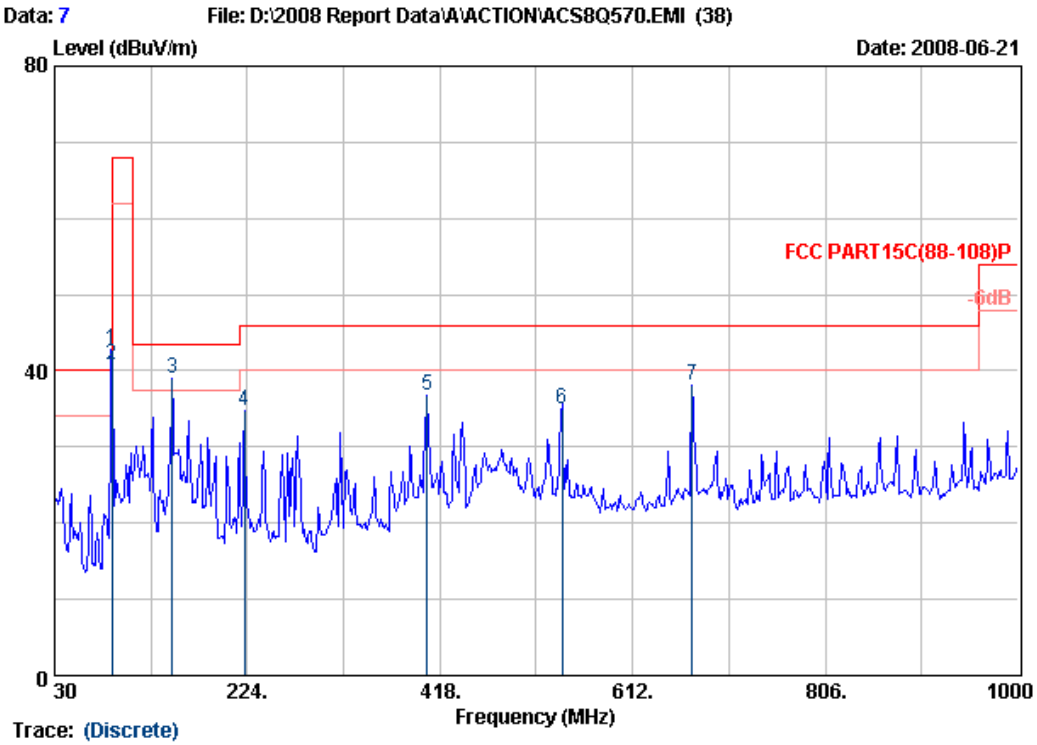



```
Site no.      : 3# Chamber Radiation        Data no.   : 8
Dis. / Ant.   : 3m   CBL6112D               Ant. pol.  : HORIZONTAL
Limit         : FCC PART15C(88-108)P
Env. / Ins.   : 24*C/56%   ESVS20           Engineer   :  Power
EUT           : DVD Player with 8.5'' LCD Monitor
Power Rating  : DC 12V
Test Mode     : Tx 88.1MHz
Memo          : M/N:VOD 86
```

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	88.10	8.97	0.74	30.03	44.74	68.00	28.26	Peak
2	88.10	8.97	0.74	28.77	42.48	48.00	9.52	Average
3	148.34	9.99	0.87	29.19	40.05	43.50	3.45	QP
4	164.83	9.83	0.99	23.33	34.15	43.50	9.35	QP
5	221.09	9.11	1.16	25.43	35.70	46.00	10.30	QP
6	405.39	15.72	1.54	17.65	34.91	46.00	11.09	QP
7	674.08	18.88	2.13	14.32	35.33	46.00	10.67	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

No.6 Ke Feng Road,B1;ck 52,
ShenZhen Science & Industry Park
Noutou,ShenZhen,GuangDong,China
Tel:+86-755-26639495
Fax:+86-755-26632877
Postcode:518057

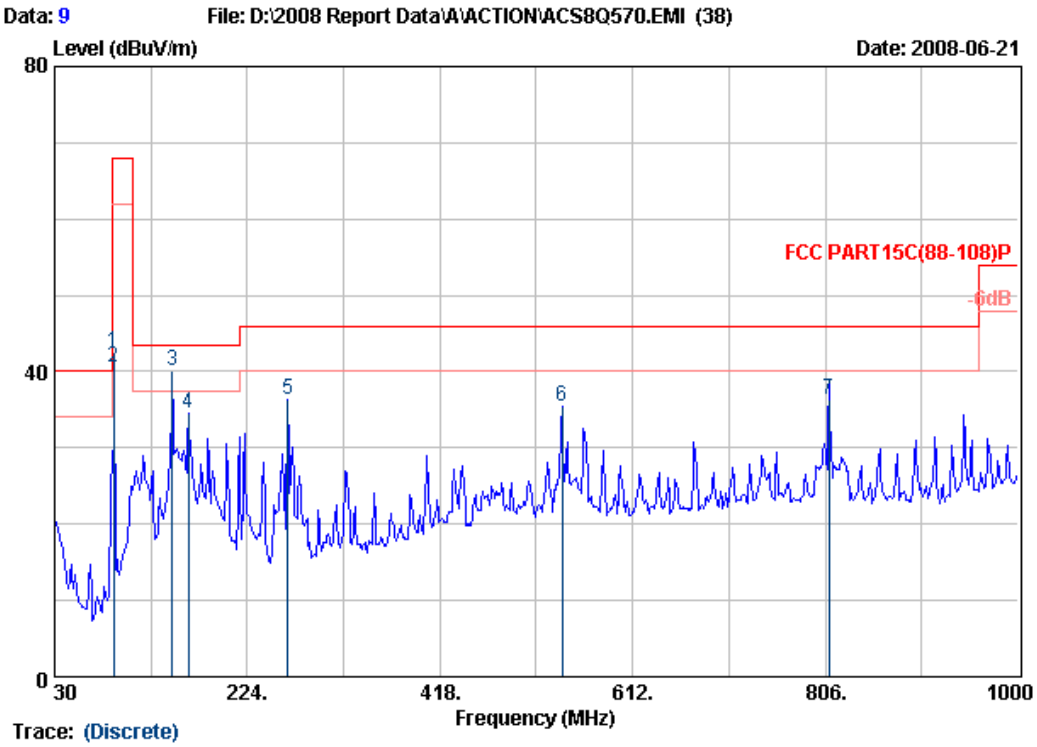



```
Site no.      : 3# Chamber Radiation        Data no.   : 7
Dis. / Ant.   : 3m   CBL6112D               Ant. pol.  : VERTICAL
Limit         : FCC PART15C(88-108)P
Env. / Ins.   : 24*C/56%   ESVS20           Engineer   :  Power
EUT           : DVD Player with 8.5'' LCD Monitor
Power Rating  : DC 12V
Test Mode     : Tx 88.1MHz
Memo          : M/N:VOD 86
```

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	88.10	8.97	0.74	33.18	42.89	68.00	25.11	Peak
2	88.10	8.97	0.74	31.04	40.75	48.00	7.25	Average
3	148.34	9.99	0.87	28.24	39.10	43.50	4.40	QP
4	221.09	9.11	1.16	24.40	34.67	46.00	11.33	QP
5	405.39	15.72	1.54	19.54	36.80	46.00	9.20	QP
6	541.19	18.09	1.85	15.01	34.95	46.00	11.05	QP
7	672.14	18.91	2.14	17.00	38.05	46.00	7.95	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

No.6 Ke Feng Road,B1;ck 52,
ShenZhen Science & Industry Park
Noutou,ShenZhen,GuangDong,China
Tel:+86-755-26639495
Fax:+86-755-26632877
Postcode:518057

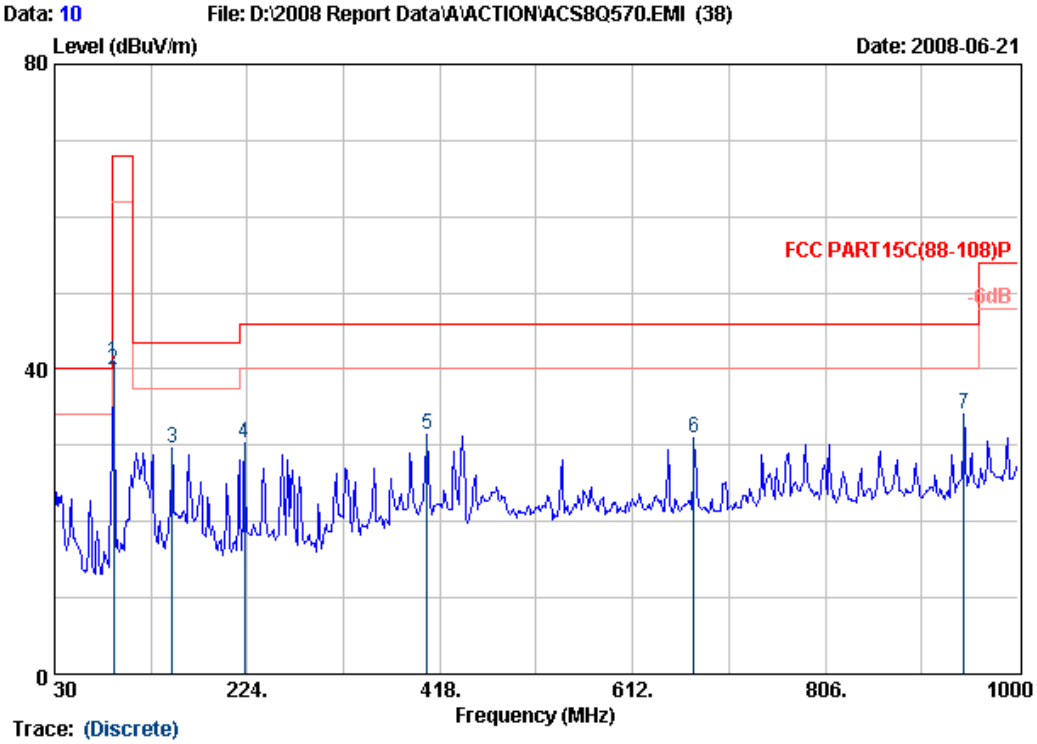


Site no. : 3# Chamber Radiation Data no. : 9
Dis. / Ant. : 3m CBL6112D Ant. pol. : HORIZONTAL
Limit : FCC PART15C(88-108)P
Env. / Ins. : 24*C/56% ESVS20 Engineer : Power
EUT : DVD Player with 8.5'' LCD Monitor
Power Rating : DC 12V
Test Mode : Tx 89.5MHz
Memo : M/N:VOD 86

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	89.50	9.30	0.74	32.49	42.53	68.00	25.47	Peak
2	89.50	9.30	0.74	30.58	40.62	48.00	7.38	Average
3	148.34	9.99	0.87	29.20	40.06	43.50	3.44	QP
4	164.83	9.83	0.99	23.65	34.47	43.50	9.03	QP
5	264.74	12.92	1.27	22.16	36.35	46.00	9.65	QP
6	541.19	18.09	1.85	15.57	35.51	46.00	10.49	QP
7	809.88	19.50	2.42	14.51	36.43	46.00	9.57	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

No.6 Ke Feng Road,B1;ck 52,
ShenZhen Science & Industry Park
Noutou,ShenZhen,GuangDong,China
Tel:+86-755-26639495
Fax:+86-755-26632877
Postcode:518057

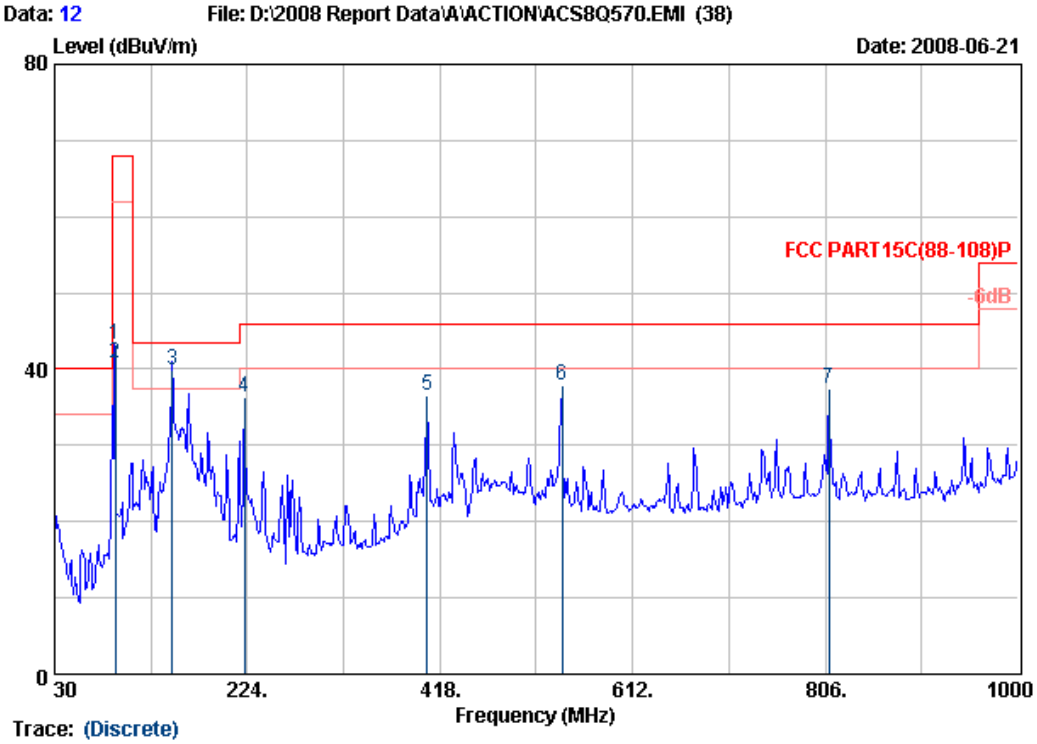


Site no. : 3# Chamber Radiation Data no. : 10
Dis. / Ant. : 3m CBL6112D Ant. pol. : VERTICAL
Limit : FCC PART15C(88-108)P
Env. / Ins. : 24*C/56% ESVS20 Engineer : Power
EUT : DVD Player with 8.5'' LCD Monitor
Power Rating : DC 12V
Test Mode : Tx 89.5MHz
Memo : M/N:VOD 86

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Emission Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	89.17	9.22	0.74	31.13	41.09	68.00	26.91	Peak
2	89.17	9.22	0.74	30.01	39.97	48.00	8.03	Average
3	148.34	9.99	0.87	18.82	29.68	43.50	13.82	QP
4	221.09	9.11	1.16	20.05	30.32	46.00	15.68	QP
5	405.39	15.72	1.54	14.18	31.44	46.00	14.56	QP
6	674.08	18.88	2.13	9.87	30.88	46.00	15.12	QP
7	945.68	21.02	2.62	10.41	34.05	46.00	11.95	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

No.6 Ke Feng Road,B1;ck 52,
ShenZhen Science & Industry Park
Noutou,ShenZhen,GuangDong,China
Tel:+86-755-26639495
Fax:+86-755-26632877
Postcode:518057

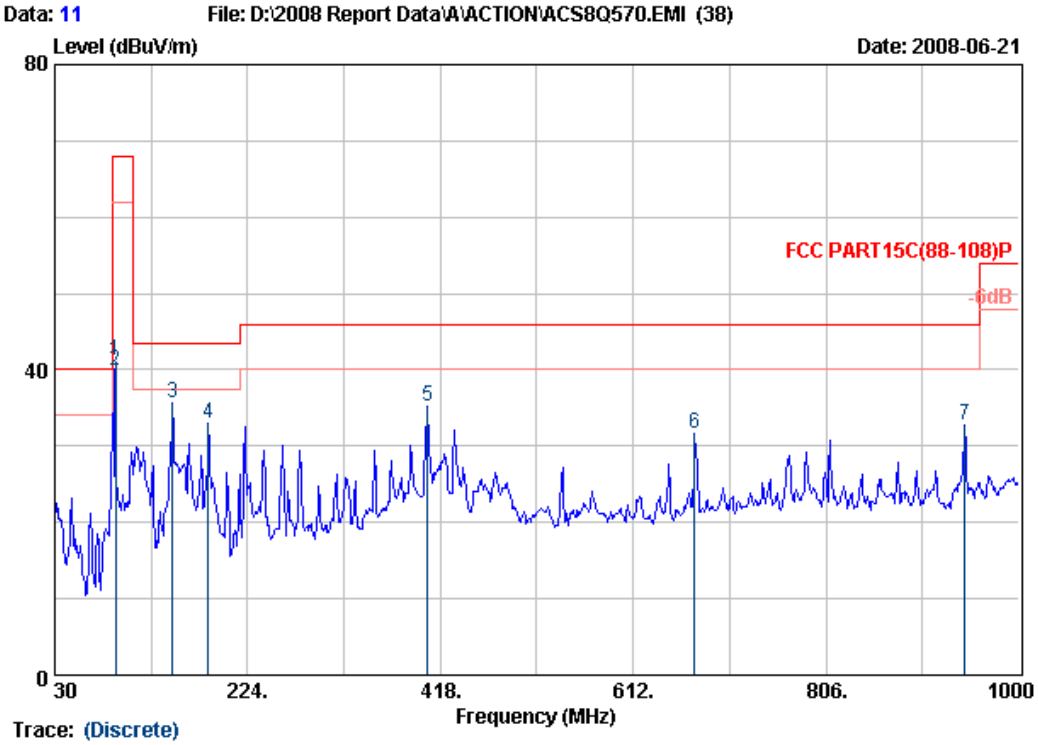



```
Site no.      : 3# Chamber Radiation        Data no.   : 12
Dis. / Ant.   : 3m   CBL6112D               Ant. pol.  : HORIZONTAL
Limit         : FCC PART15C(88-108)P
Env. / Ins.   : 24*C/56%   ESVS20           Engineer   :  Power
EUT           : DVD Player with 8.5'' LCD Monitor
Power Rating  : DC 12V
Test Mode     : Tx 91.1MHz
Memo          : M/N:VOD 86
```

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	91.10	9.53	0.73	32.88	43.14	68.00	24.86	Peak
2	91.10	9.53	0.73	30.58	40.84	48.00	7.16	Average
3	148.34	9.99	0.87	29.07	39.93	43.50	3.57	QP
4	221.09	9.11	1.16	25.98	36.25	46.00	9.75	QP
5	405.39	15.72	1.54	19.22	36.48	46.00	9.52	QP
6	541.19	18.09	1.85	18.03	37.97	46.00	8.03	QP
7	809.88	19.50	2.42	15.55	37.47	46.00	8.53	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

No.6 Ke Feng Road,B1;ck 52,
ShenZhen Science & Industry Park
Noutou,ShenZhen,GuangDong,China
Tel:+86-755-26639495
Fax:+86-755-26632877
Postcode:518057



Site no. : 3# Chamber Radiation Data no. : 11
Dis. / Ant. : 3m CBL6112D Ant. pol. : VERTICAL
Limit : FCC PART15C(88-108)P
Env. / Ins. : 24*C/56% ESVS20 Engineer : Power
EUT : DVD Player with 8.5'' LCD Monitor
Power Rating : DC 12V
Test Mode : Tx 91.1MHz
Memo : M/N:VOD 86

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	91.10	9.53	0.73	31.01	41.27	68.00	26.73	Peak
2	91.10	9.53	0.73	29.58	39.84	48.00	8.16	Average
3	148.34	9.99	0.87	24.84	35.70	43.50	7.80	QP
4	184.23	9.48	1.05	22.35	32.88	43.50	10.62	QP
5	405.39	15.72	1.54	17.95	35.21	46.00	10.79	QP
6	674.08	18.88	2.13	10.71	31.72	46.00	14.28	QP
7	945.68	21.02	2.62	9.23	32.87	46.00	13.13	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

5. BANDWIDTH TEST

5.1. Test Equipment

The following test equipments are used during the bandwidth test:

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	Spectrum Analyzer	Agilent	E4446A	US44300459	May,10, 08	1 Year
2	Attenuator	Agilent	8491B	MY39262165	May,28, 08	1 Year
3	Bilog Antenna	Schaffner	CBL6112D	25238	Feb,21,08	1 Year
4	RF Cable	Hubersuhner	SUCOFLEX 102	2861812	May,28, 08	1Year
5	RF Cable	Hubersuhner	SUCOFLEX 102	28862212	May,28, 08	1 Year

5.2. Block Diagram of Test Setup

(EUT: DVD Player with 8.5" LCD Monitor)

5.3. Test Standard

The test completeness FCC 15C (15.239).

5.4. Limit

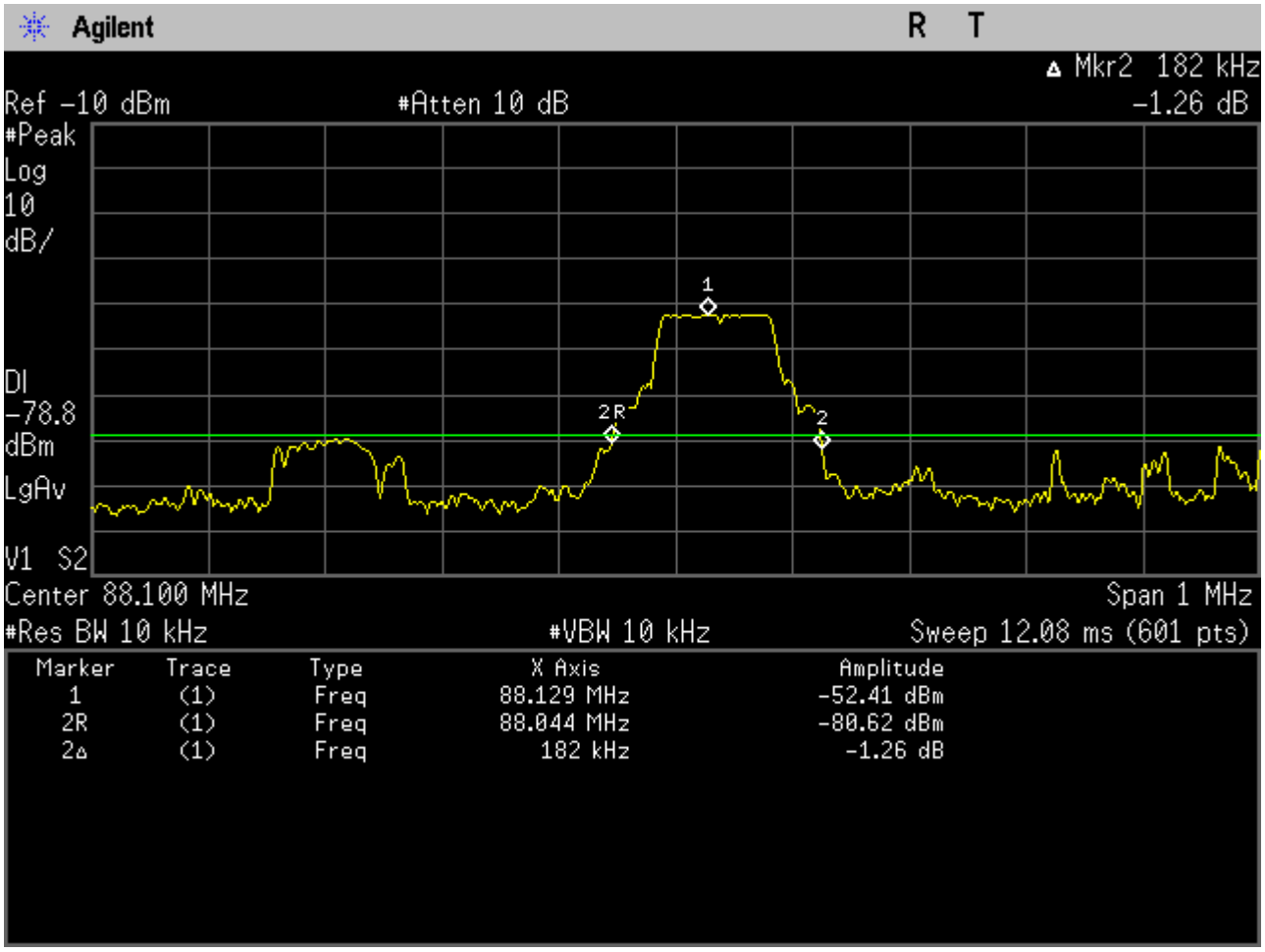
200kHz wide centered on the operation frequency.

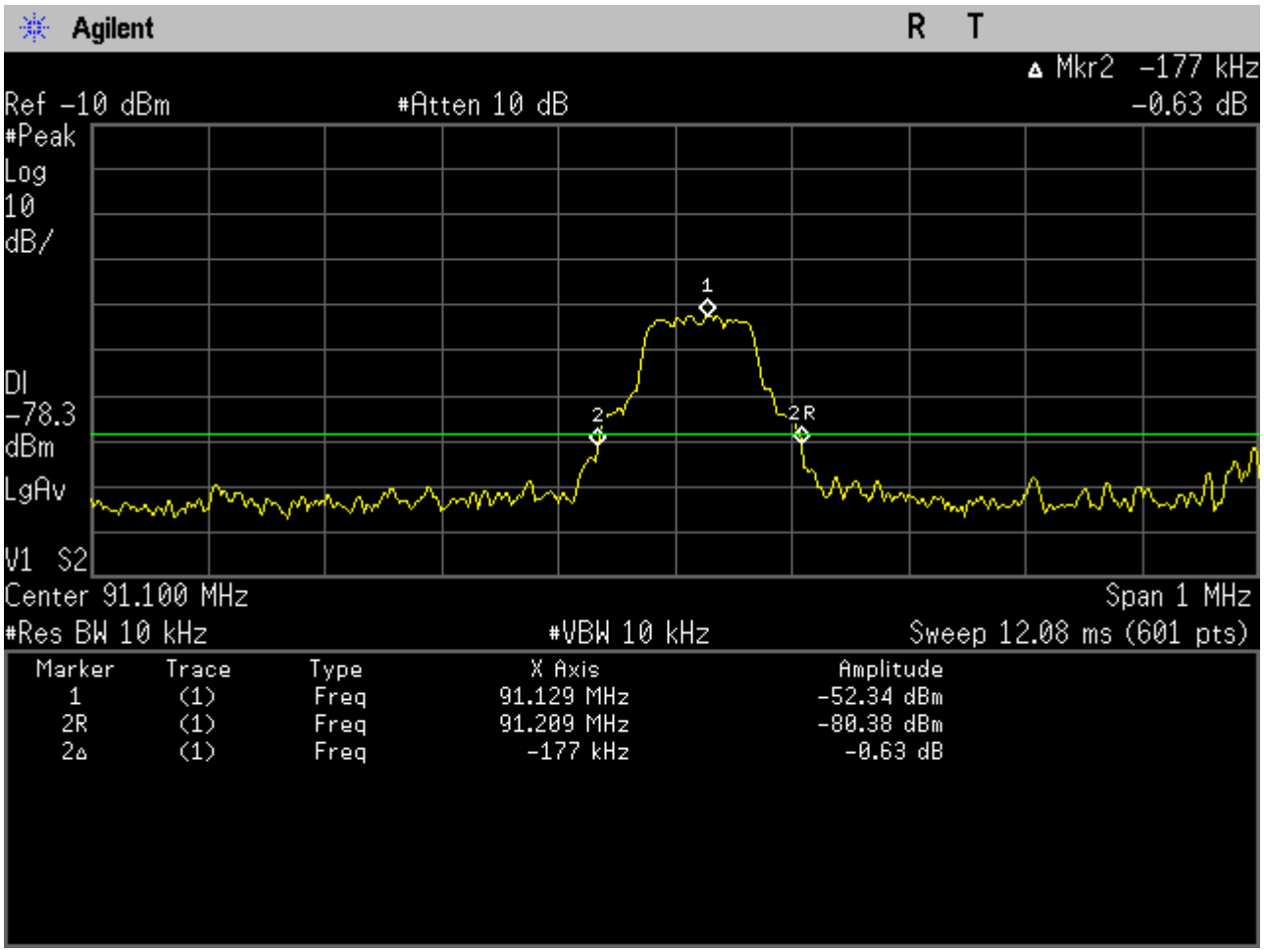
5.5. Test Signal

Jazz music played with EUT's DVD Player

5.6. Test Results

PASS. (The testing data please refer to the following page.)


Agilent
R T
Mkr2 182 kHz
Ref -10 dBm
#Atten 10 dB
-1.26 dB
#Peak
Log
10
dB/
Dl
-78.8
dBm
LgAv
V1 S2
Center 88.100 MHz
Span 1 MHz
#Res BW 10 kHz
#VBW 10 kHz
Sweep 12.08 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 88.129 MHz -52.41 dBm
2R (1) Freq 88.044 MHz -80.62 dBm
2Δ (1) Freq 182 kHz -1.26 dB


Agilent
R T
Mkr2 -177 kHz
Ref -10 dBm
#Atten 10 dB
-0.63 dB
#Peak
Log
10
dB/
Dl
-78.3
dBm
LgAv
V1 S2
Center 91.100 MHz
Span 1 MHz
#Res BW 10 kHz
#VBW 10 kHz
Sweep 12.08 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 91.129 MHz -52.34 dBm
2R (1) Freq 91.209 MHz -80.38 dBm
2Δ (1) Freq -177 kHz -0.63 dB

6. DEVIATION TO TEST SPECIFICATIONS

[NONE]