



AUDIX Technology (Shenzhen) Co., Ltd.

FCC ID: ATI9R3HRD00701

APPLICATION FOR CERTIFICATION
On Behalf of

Action Electronics Co., Ltd.

7" DIGITAL AUDIO VIDEO PLAYER

Model No.	Brand Name
HRD00701	ACTION
AVXMTGHR1D	Audiovox, Audiovox MTG
JS00701HRD	Jensen

FCC ID: ATI9R3HRD00701

Prepared for : Action Electronics Co., Ltd.
2480, TINGKAT PERUSAHAAN ENAM, PRAI FREE
TRADE ZONE, 13600, PERAI, PENANG, MALAYSIA

Prepared By : Audix Technology (Shenzhen) Co., Ltd.
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Report Number : ACS-F11047
Date of Test : Feb.23,2011
Date of Report : Mar.02,2011

ECC ID:ATI9R3HRD00701

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FCC ID:ATI9R3HRD00701

TEST REPORT CERTIFICATION

Applicant : Action Electronics Co., Ltd.

Manufacturer : Action Electronics Co., Ltd.

EUT Description : 7" DIGITAL AUDIO VIDEO PLAYER

FCC ID : ATI9R3HRD00701

(A) MODEL NO.	Model No.	Brand Name
	HRD00701	ACTION
	AVXMTGHR1D	Audiovox Audiovox MTG
	JS00701HRD	Jensen

(B) SERIAL NO. : N/A

(C) POWER SUPPLY : DC 12V

(D) TEST VOLTAGE : DC 12V

Test Standard and Procedure Used:

FCC Rules and Regulations Part 15 Subpart C 2008, ANSI C63.10:2009

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 : Feb.23,2011 Report of date: Mar.02,2011

Prepared by :

Vicky Huang

Vicky Huang / Assistant

Reviewer by:

Jamy Yu

Jamy Yu / Supervisor

EMC 部門 報告 專用 章

Stamp only for EMC Dept. Report

Signature: Ken Lu 3/6/11

Ken Lu / Manager

Approved & Authorized Signer :

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	Results
Conducted Emission Test	FCC Part 15: 15.207 ANSI C63.10: 2009	N/A
Radiated Emission Test	FCC Part 15: 15.239 FCC Part 15:15.209 ANSI C63.10: 2009	PASS
Bandwidth Test	FCC Part 15: 15.239 ANSI C63.10:2009	PASS
Antenna requirement	FCC Part 15: 15.203	PASS

N/A is an abbreviation for Not Applicable.

2. GENERAL INFORMATION

2.1. Description of Device (EUT)

Description : 7" DIGITAL AUDIO VIDEO PLAYER

Model Number	Model No.	Brand Name
HRD00701		ACTION
AVXMTGHR1D		Audiovox
JS00701HRD		Audiovox MTG

Note: This device have three model number and the difference are only brand name.

FCC ID : ATI9R3HRD00701

Operating Frequency : (88.5,88.9, 106.7 ,107.1 107.5,107.9)MHz

Applicant : Action Electronics Co., Ltd.
2480, TINGKAT PERUSAHAAN ENAM, PRAI FREE
TRADE ZONE, 13600, PERAI, PENANG,
MALAYSIA

Manufacturer : Action Electronics Co., Ltd.
2480, TINGKAT PERUSAHAAN ENAM, PRAI FREE
TRADE ZONE, 13600, PERAI, PENANG,
MALAYSIA

Date of Test : Feb.23,2011

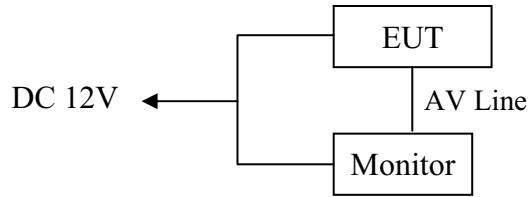
Date of Receipt : Feb.22,2011

Sample Type : Prototype production

2.2. Tested Supporting System Details

Name	Model number
7''Headrest LCD monitor	HRM00702

2.3. Block Diagram of connection between EUT and simulators



Note: A LCD monitor normally will work with EUT, so in radiated emissions test a typical LCD monitor was connected to EUT and display video signal from EUT.

(EUT: 7" DIGITAL AUDIO VIDEO PLAYER)

2.4. 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

: Mar.31, 2009 File on
Federal Communication Commission
Registration Number: 90454

3m & 10m Anechoic Chamber

: Dec. 30, 2009 File on
Federal Communication Commission
Registration Number: 794232

EMC Lab.

: Accredited by DATech, German
Registration Number: DAT-P-091/99-01
Feb. 02, 2009

Accredited by NVLAP, USA
NVLAP Code: 200372-0
Apr. 01, 2010

2.5. Measurement Uncertainty (95% confidence levels, k=2)

Test Item	Uncertainty
Uncertainty for Radiation Emission test in 3m chamber	3.82 dB (Polarize: V)
	4.32 dB (Polarize: H)
Uncertainty for Temperature and humidity test	2%
	1°C
Uncertainty for Bandwidth test	1x10 ⁻⁹
Uncertainty for DC power test	0.038 %
Uncertainty for test site temperature and humidity	0.6°C
	3%

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

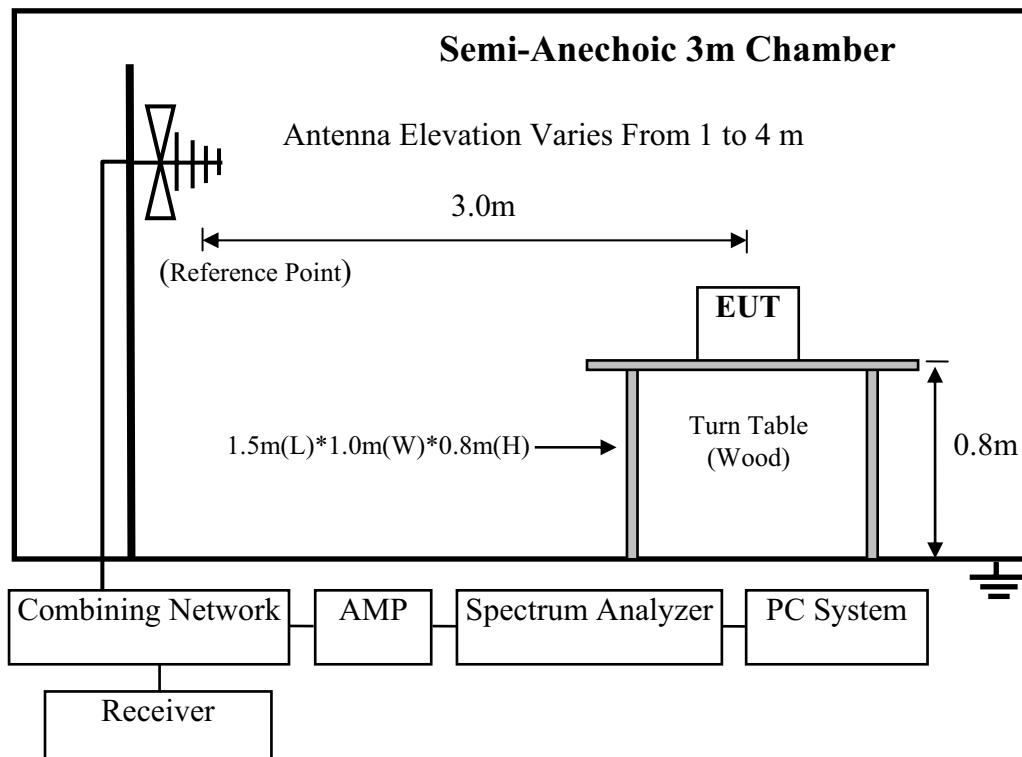
4.1.1. For frequency range 30MHz~1000MHz

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	3#Chamber	AUDIX	N/A	N/A	Dec.05,10	1 Year
2	EMI Spectrum	Agilent	E4407B	MY41440292	May.08, 10	1 Year
3	Test Receiver	Rohde & Schwarz	ESVS10	834468/011	May.08, 10	1 Year
4	Amplifier	HP	8447D	2648A04738	May.08, 10	1 Year
5	Bilog Antenna	Schaffner	CBL6111C	2598	Dec.14, 09	1 Year
6	RF Cable	MIYAZAKI	8D-FB	3# Chamber No.1	May.08, 10	1 Year
7	Coaxial Switch	Anritsu	MP59B	M73989	May.08, 10	1 Year

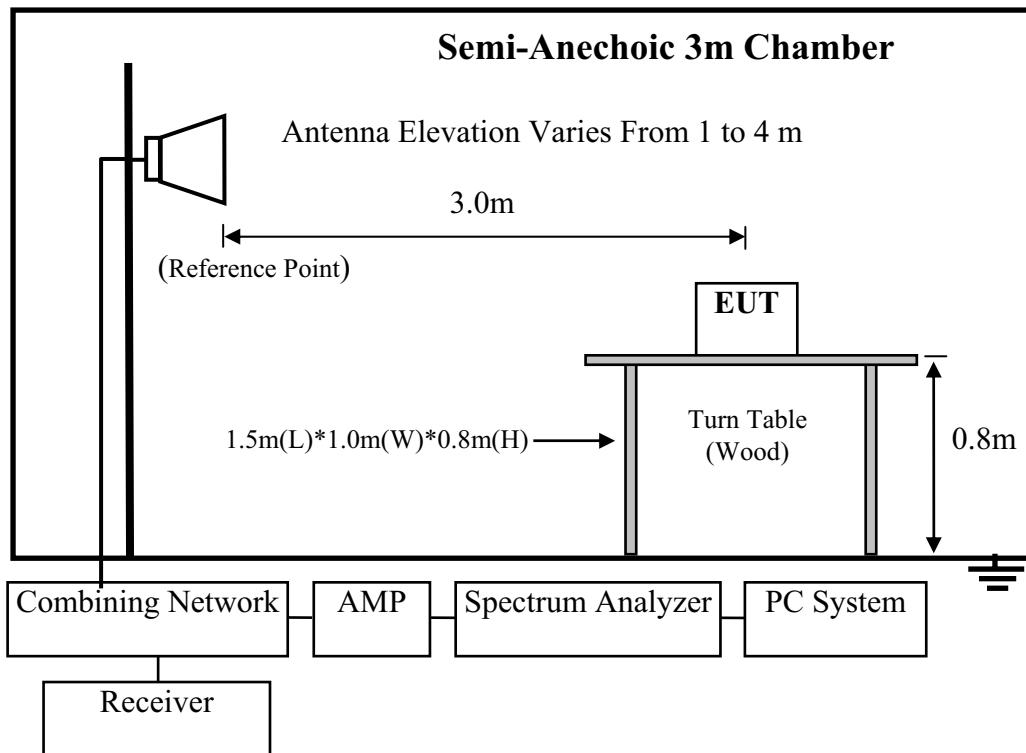
4.1.2. For frequency range 1GHz~2GHz

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	Spectrum Analyzer	Agilent	E7405A	MY45116588	May.08, 10	1 Year
2	Horn Antenna	EMCO	3115	9607-4877	Nov.25, 09	1.5 Year
3	Amplifier	Agilent	8449B	3008A00863	May.08, 10	1 Year
4	RF Cable	Hubersuhner	SUCOFLEX102	28620/2	May.08, 10	1 Year
5	RF Cable	Hubersuhner	SUCOFLEX102	29091/2	May.08, 10	1 Year

4.2. Block Diagram of Test Setup



For frequency range 1GHz-2GHz



4.3. Radiated Emission Limit

FREQUENCY MHz	DISTANCE Meters	FIELD STRENGTHS LIMIT	
		$\mu\text{V/m}$	$\text{dB}(\mu\text{V})/\text{m}$
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
Above 1000	3	74.0 dB(μV)/m (Peak) 54.0 dB(μV)/m (Average)	

- Remark :
- (1) Emission level $\text{dB}\mu\text{V} = 20 \log \text{Emission level } \mu\text{V/m}$
 $\text{Emission level} = \text{Antenna Factor} - \text{Amp Factor} + \text{Cable Loss} + \text{Reading}$
 (above 1000MHz)
 - (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. 7" DIGITAL AUDIO VIDEO PLAYER (EUT)

Model Number	:	HRD00701
Serial Number	:	N/A
Manufacturer	:	Action Electronics Co., Ltd.

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 (FM 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 C63.4-2009 on radiated emission Test.

The bandwidth of the EMI test receiver (R&S ESVS10) is set at 120kHz for frequency range from 30MHz to 1000 MHz.

The bandwidth of the Spectrum's RBW is set at 1MHz and VBW is set at 3MHz for peak emissions measurement above 1GHz and 1MHz RBW, 10Hz VBW for average emissions measure above 1GHz.

The frequency range from 30MHz to 2000MHz are checked.

4.7. Radiated Emission Test Results

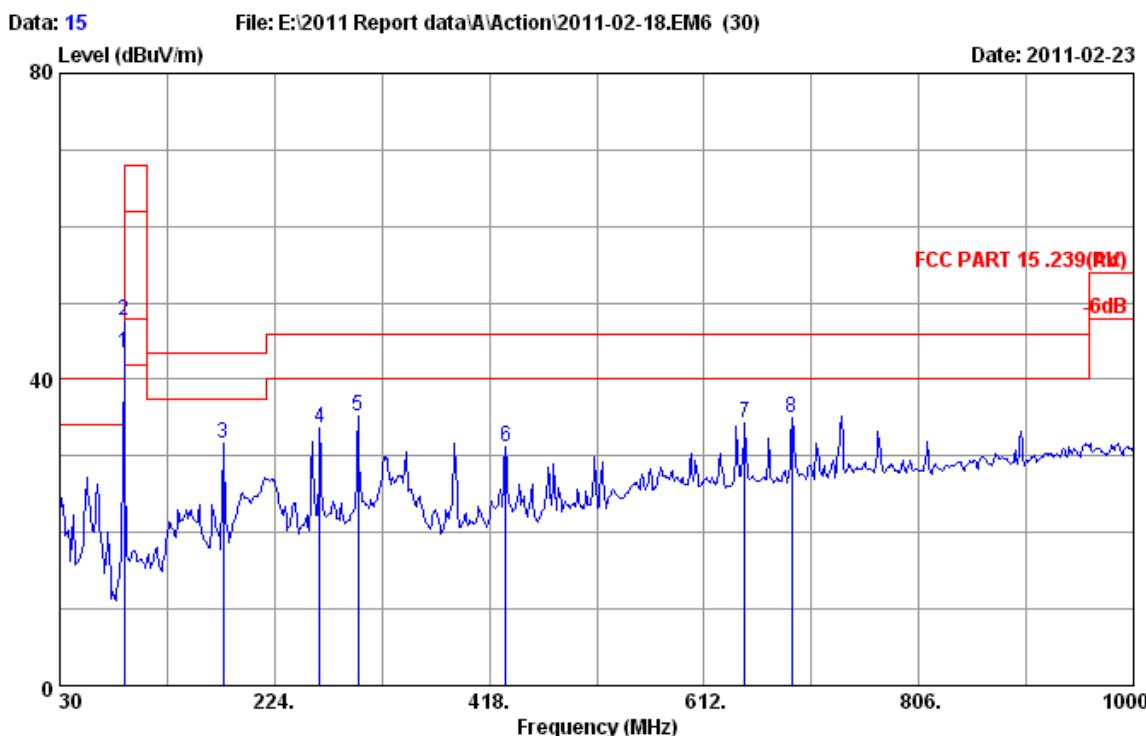
PASS.

Note: For emissions above 1GHz, if peak measured levels comply with average limit, the average levels were deemed to comply with average limit.

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Frequency: 30MHz~1GHz



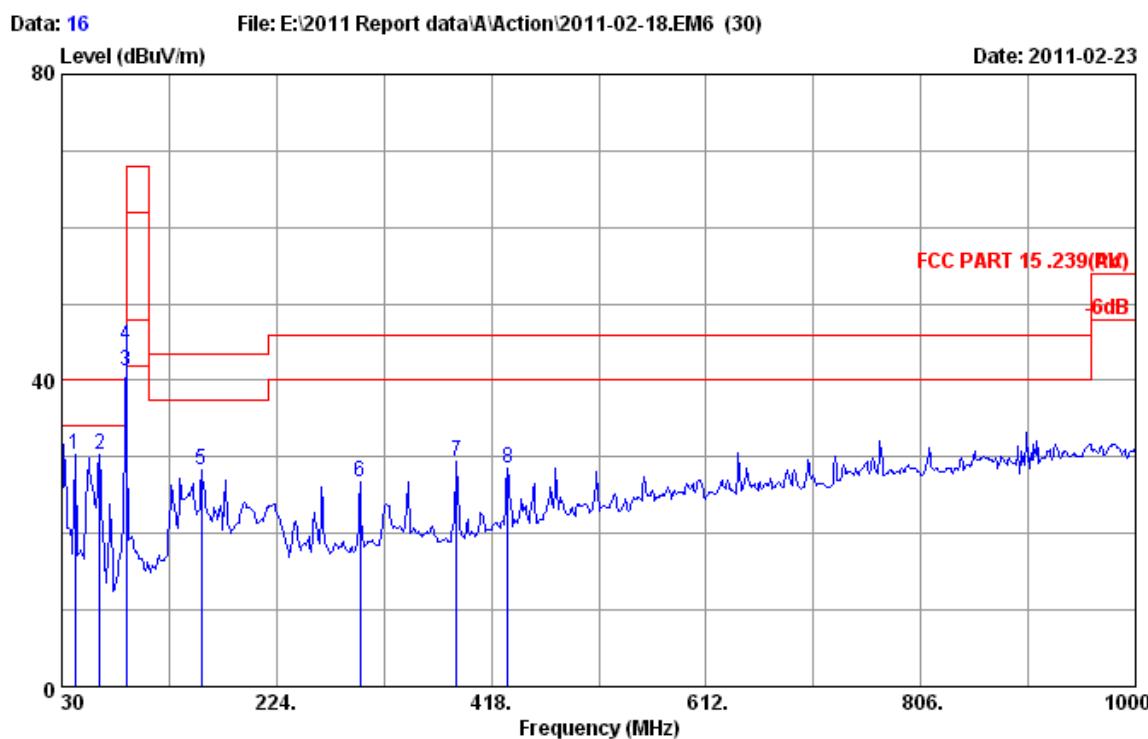
Site no. : 3m Chamber Data no. : 15
 Dis. / Ant. : 3m 2010 CBL6111C Ant. pol. : HORIZONTAL
 Limit : FCC PART 15 .239(PK)
 Env. / Ins. : 24°C/56% Engineer : Paul Tian
 EUT : 7"DIGITAL AUDIO VIDEO PLAYER
 Power rating : DC 12V
 Test Mode : FM 88.5MHz
 M/N:HRD00701

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Emission			
				Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)
1	88.500	8.82	1.04	33.50	43.36	48.00	4.64
2	88.500	8.82	1.04	37.80	47.66	68.00	20.34
3	177.440	9.55	1.46	20.70	31.71	43.50	11.79
4	264.740	13.80	2.26	17.57	33.63	46.00	12.37
5	299.660	13.70	2.48	18.93	35.11	46.00	10.89
6	432.550	17.42	3.12	10.59	31.13	46.00	14.87
7	648.860	20.41	4.30	9.56	34.27	46.00	11.73
8	691.540	20.80	4.47	9.78	35.05	46.00	10.95

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

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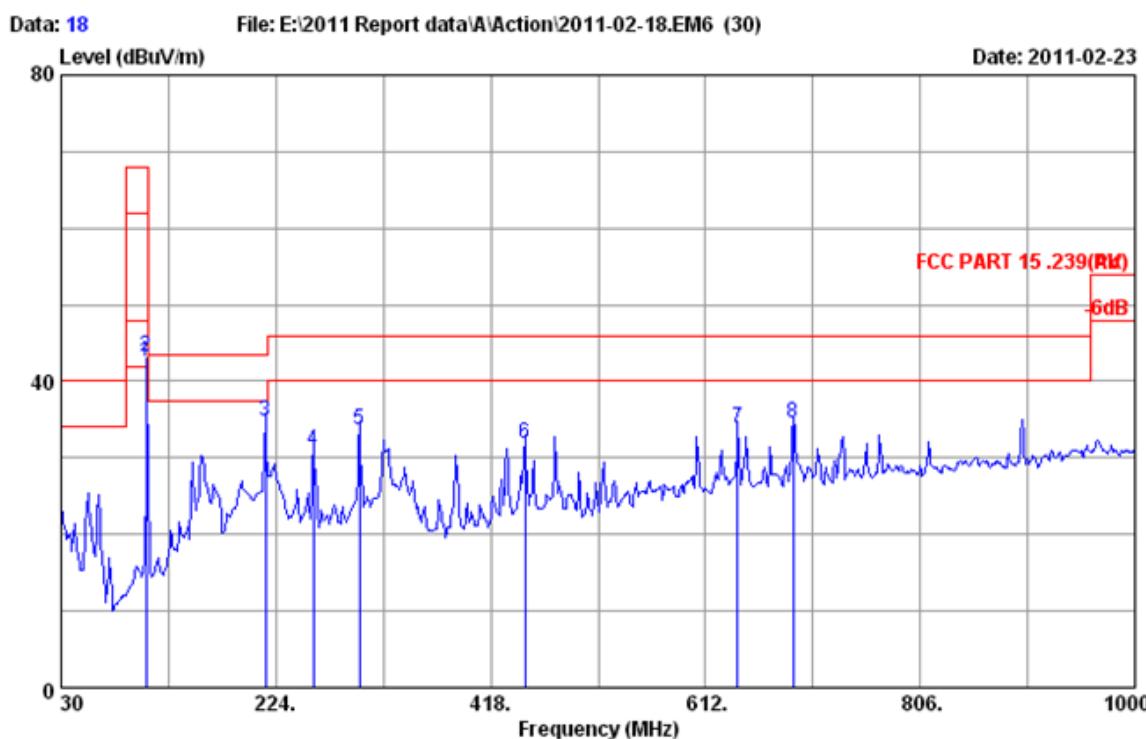
Site no. : 3m Chamber Data no. : 16
 Dis. / Ant. : 3m 2010 CBL6111C Ant. pol. : VERTICAL
 Limit : FCC PART 15 .239(PK)
 Env. / Ins. : 24°C/56% Engineer : Paul Tian
 EUT : 7"DIGITAL AUDIO VIDEO PLAYER
 Power rating : DC 12V
 Test Mode : FM 88.5MHz
 M/N:HRD00701

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission			
					Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	41.640	13.42	0.71	16.27	30.40	40.00	9.60	QP
2	63.950	6.00	0.88	23.47	30.35	40.00	9.65	QP
3	88.500	8.82	1.04	31.30	41.16	48.00	6.84	Average
4	88.500	8.82	1.04	34.80	44.66	68.00	23.34	Peak
5	156.100	11.26	1.21	15.82	28.29	43.50	15.21	QP
6	299.660	13.70	2.48	10.46	26.64	46.00	19.36	QP
7	386.960	16.12	2.86	10.42	29.40	46.00	16.60	QP
8	432.550	17.42	3.12	8.08	28.62	46.00	17.38	QP

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

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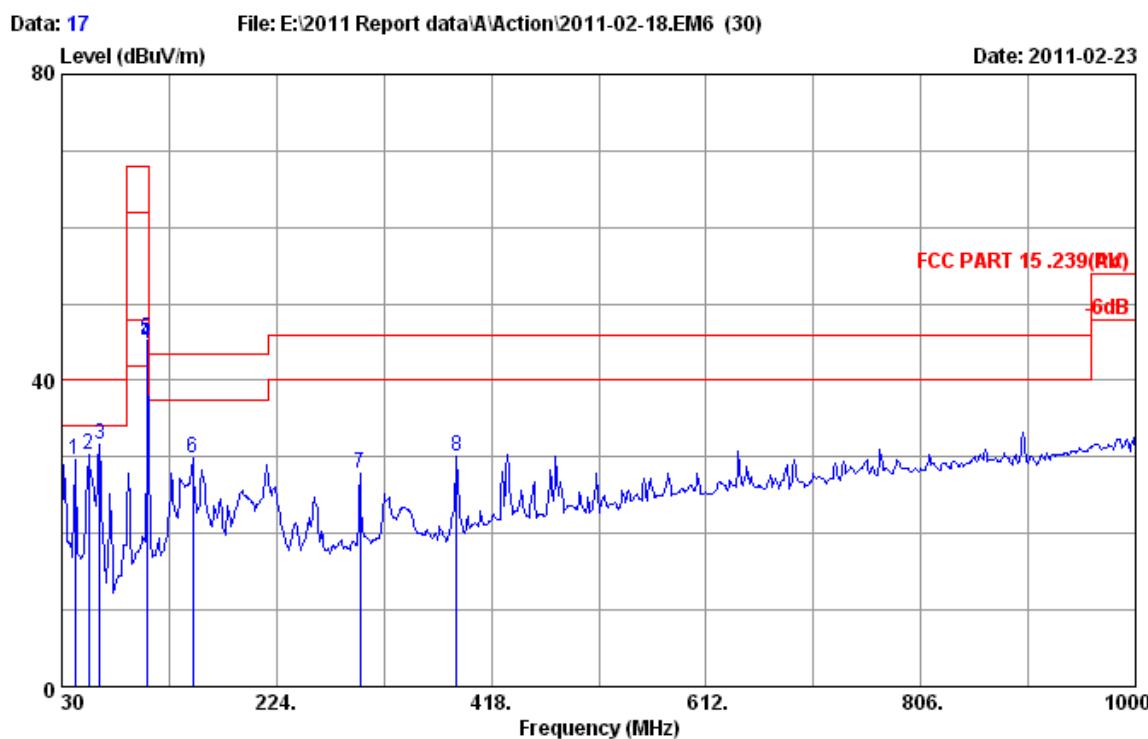
Site no. : 3m Chamber Data no. : 18
 Dis. / Ant. : 3m 2010 CBL6111C Ant. pol. : HORIZONTAL
 Limit : FCC PART 15 .239(PK)
 Env. / Ins. : 24°C/56% Engineer : Paul Tian
 EUT : 7" DIGITAL AUDIO VIDEO PLAYER
 Power rating : DC 12V
 Test Mode : FM 106.7MHz
 M/N:HRD00701

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission			
					Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	106.700	11.10	1.12	30.40	42.62	48.00	5.38	Average
2	106.700	11.10	1.12	31.10	43.32	68.00	24.68	Peak
3	214.300	10.02	1.85	22.95	34.82	43.50	8.68	QP
4	257.950	13.60	2.22	15.25	31.07	46.00	14.93	QP
5	299.660	13.70	2.48	17.51	33.69	46.00	12.31	QP
6	449.040	17.02	3.22	11.73	31.97	46.00	14.03	QP
7	641.100	20.49	4.27	9.05	33.81	46.00	12.19	QP
8	691.540	20.80	4.47	9.20	34.47	46.00	11.53	QP

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

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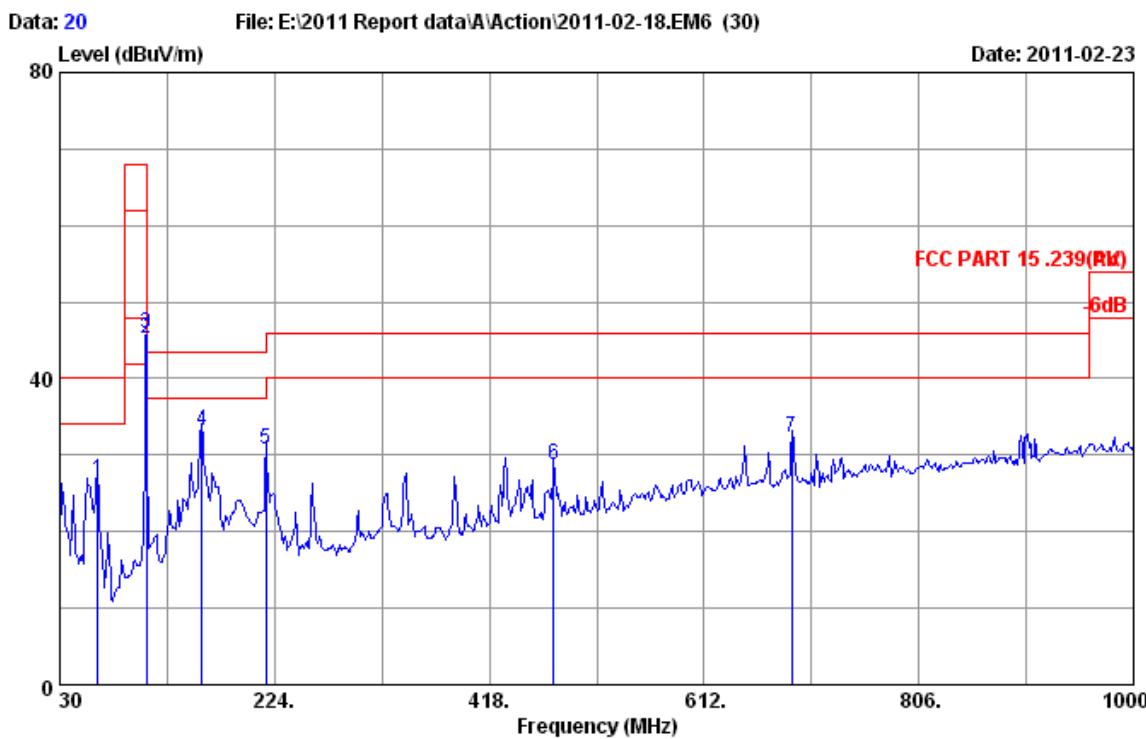
Site no. : 3m Chamber Data no. : 17
 Dis. / Ant. : 3m 2010 CBL6111C Ant. pol. : VERTICAL
 Limit : FCC PART 15 .239(PK)
 Env. / Ins. : 24°C/56% Engineer : Paul Tian
 EUT : 7"DIGITAL AUDIO VIDEO PLAYER
 Power rating : DC 12V
 Test Mode : FM 106.7MHz
 M/N:HRD00701

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission			
					Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	41.640	13.42	0.71	15.54	29.67	40.00	10.33	QP
2	54.250	7.54	0.81	22.04	30.39	40.00	9.61	QP
3	63.950	6.00	0.88	24.86	31.74	40.00	8.26	QP
4	106.700	11.10	1.12	32.50	44.72	48.00	3.28	Average
5	106.700	11.10	1.12	33.20	45.42	68.00	22.58	Peak
6	148.340	11.72	1.14	17.05	29.91	43.50	13.59	QP
7	299.660	13.70	2.48	11.72	27.90	46.00	18.10	QP
8	386.960	16.12	2.86	11.01	29.99	46.00	16.01	QP

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

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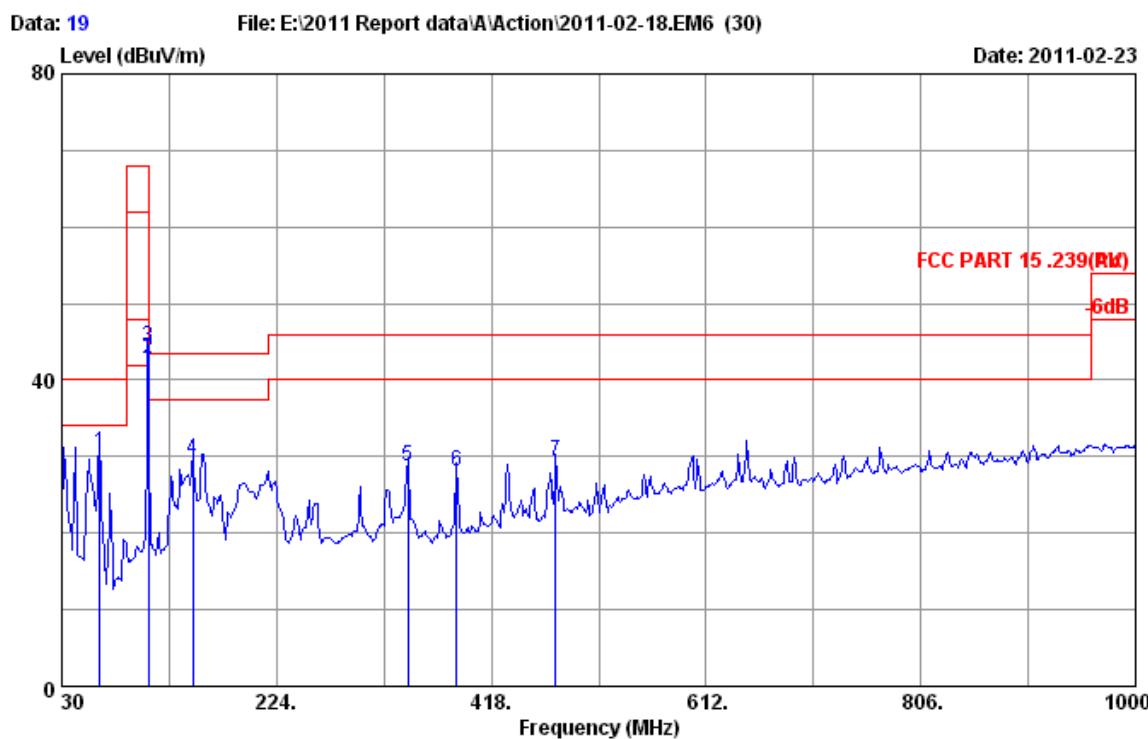
Site no. : 3m Chamber Data no. : 20
 Dis. / Ant. : 3m 2010 CBL6111C Ant. pol. : HORIZONTAL
 Limit : FCC PART 15 .239(PK)
 Env. / Ins. : 24*C/56% Engineer : Paul Tian
 EUT : 7" DIGITAL AUDIO VIDEO PLAYER
 Power rating : DC 12V
 Test Mode : FM 107.9MHz
 M/N:HRD00701

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Emission				Remark
				Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	
1	63.950	6.00	0.88	19.89	26.77	40.00	13.23	QP
2	107.900	11.20	1.12	33.00	45.32	48.00	2.68	Average
3	107.900	11.20	1.12	33.60	45.92	68.00	22.08	Peak
4	158.040	11.18	1.23	20.77	33.18	43.50	10.32	QP
5	216.240	10.04	1.87	18.94	30.85	46.00	15.15	QP
6	476.200	17.90	3.40	7.43	28.73	46.00	17.27	QP
7	691.540	20.80	4.47	7.00	32.27	46.00	13.73	QP

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

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Site no. : 3m Chamber Data no. : 19
 Dis. / Ant. : 3m 2010 CBL6111C Ant. pol. : VERTICAL
 Limit : FCC PART 15 .239(PK)
 Env. / Ins. : 24°C/56% Engineer : Paul Tian
 EUT : 7"DIGITAL AUDIO VIDEO PLAYER
 Power rating : DC 12V
 Test Mode : FM 107.9MHz
 M/N:HRD00701

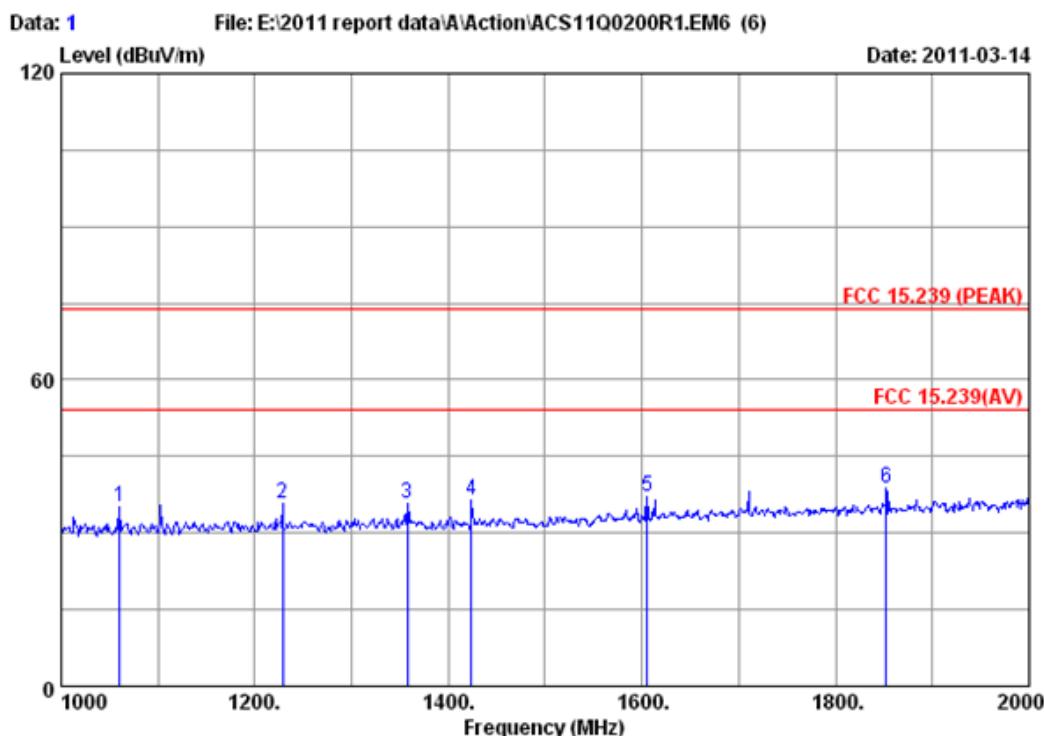
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission			
					Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	63.950	6.00	0.88	23.71	30.59	40.00	9.41	QP
2	107.900	11.20	1.12	30.50	42.82	48.00	5.18	Average
3	107.900	11.20	1.12	32.00	44.32	68.00	23.68	Peak
4	148.340	11.72	1.14	16.73	29.59	43.50	13.91	QP
5	342.340	14.86	2.66	11.28	28.80	46.00	17.20	QP
6	386.960	16.12	2.86	9.17	28.15	46.00	17.85	QP
7	476.200	17.90	3.40	8.03	29.33	46.00	16.67	QP

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

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Frequency: 1GHz~2GHz



Site no. : 3# Chamber Data no. : 1
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL
 Limit : FCC 15.239 (PEAK)
 Env. / Ins. : 24°C/66% Engineer : Leo-Li
 EUT : 7" DIGITAL AUDIO VIDEO PLAYER
 Power : DC 12V
 Test mode : FM 107.9MHz
 M/N : HRD00701

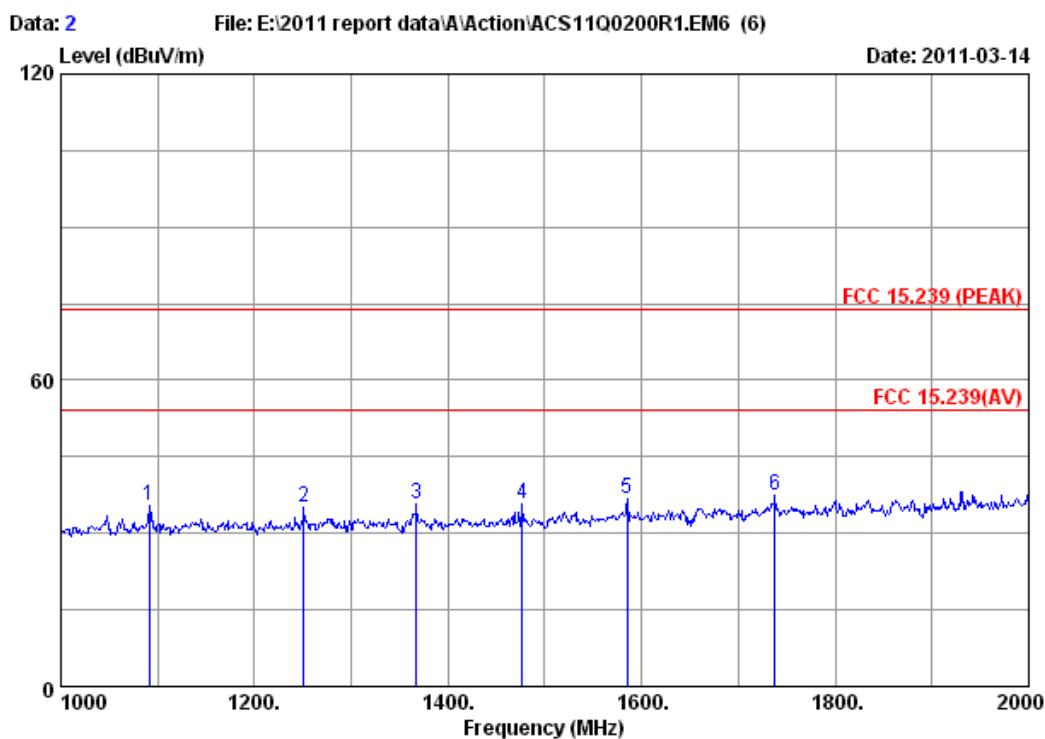
	Ant.	Cable	Amp.	Emission				
Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark
(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	1060.000	25.54	4.89	37.26	41.94	35.11	74.00	38.89 Peak
2	1229.000	25.85	5.20	36.83	41.54	35.76	74.00	38.24 Peak
3	1358.000	26.12	5.42	36.54	40.69	35.69	74.00	38.31 Peak
4	1424.000	26.26	5.57	36.63	41.32	36.52	74.00	37.48 Peak
5	1605.000	27.05	5.91	36.35	40.59	37.20	74.00	36.80 Peak
6	1852.000	28.36	6.37	36.23	40.27	38.77	74.00	35.23 Peak

Remarks:

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

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Site no. : 3# Chamber Data no. : 2
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL
 Limit : FCC 15.239 (PEAK)
 Env. / Ins. : 24°C/66% Engineer : Leo-Li
 EUT : 7" DIGITAL AUDIO VIDEO PLAYER
 Power : DC 12V
 Test mode : FM 107.9MHz
 M/N : HRD00701

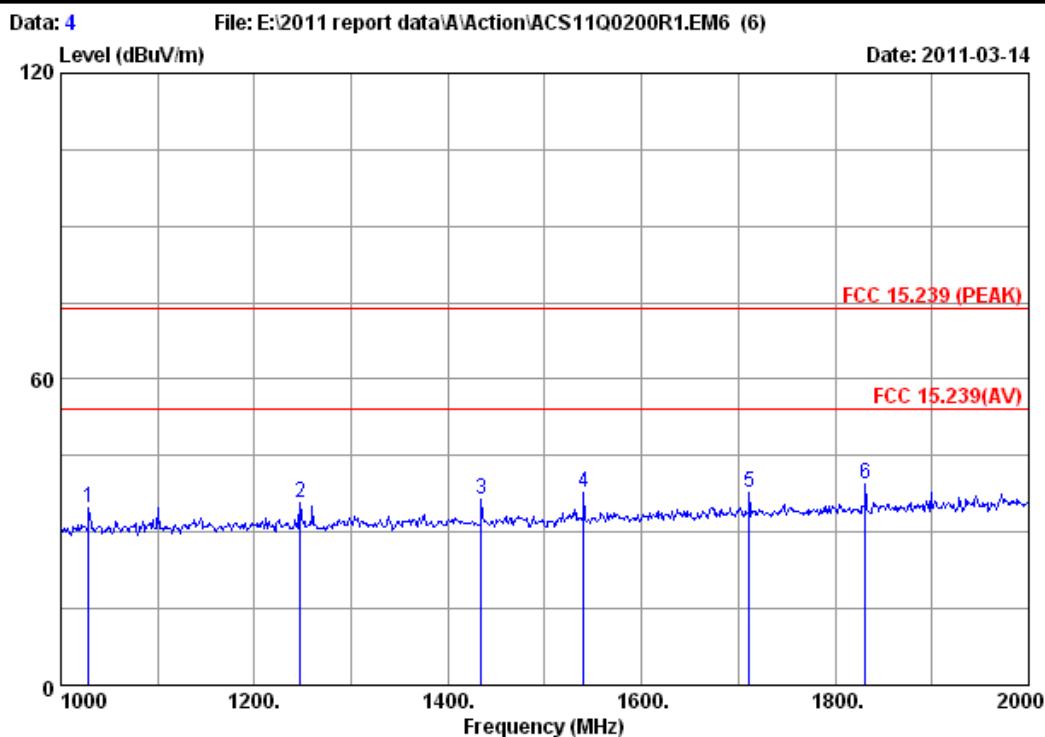
	Ant.	Cable	Amp.	Emission				
	Freq. Factor	loss	Factor	Reading	Level	Limits	Margin	Remark
	(MHz)	(dB/m)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	1091.000	25.57	4.93	37.18	42.24	35.56	74.00	38.44 Peak
2	1251.000	25.92	5.23	36.86	40.96	35.25	74.00	38.75 Peak
3	1367.000	26.16	5.46	36.40	40.63	35.85	74.00	38.15 Peak
4	1477.000	26.37	5.65	36.53	40.39	35.88	74.00	38.12 Peak
5	1585.000	26.87	5.88	36.43	40.42	36.74	74.00	37.26 Peak
6	1738.000	27.71	6.14	36.36	40.02	37.51	74.00	36.49 Peak

Remarks:

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

FCC ID:ATI9R3HRD00701

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Site no. : 3# Chamber Data no. : 4
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL
 Limit : FCC 15.239 (PEAK)
 Env. / Ins. : 24°C/66% Engineer : Leo-Li
 EUT : 7" DIGITAL AUDIO VIDEO PLAYER
 Power : DC 12V
 Test mode : FM 88.5MHz
 M/N : HRD00701

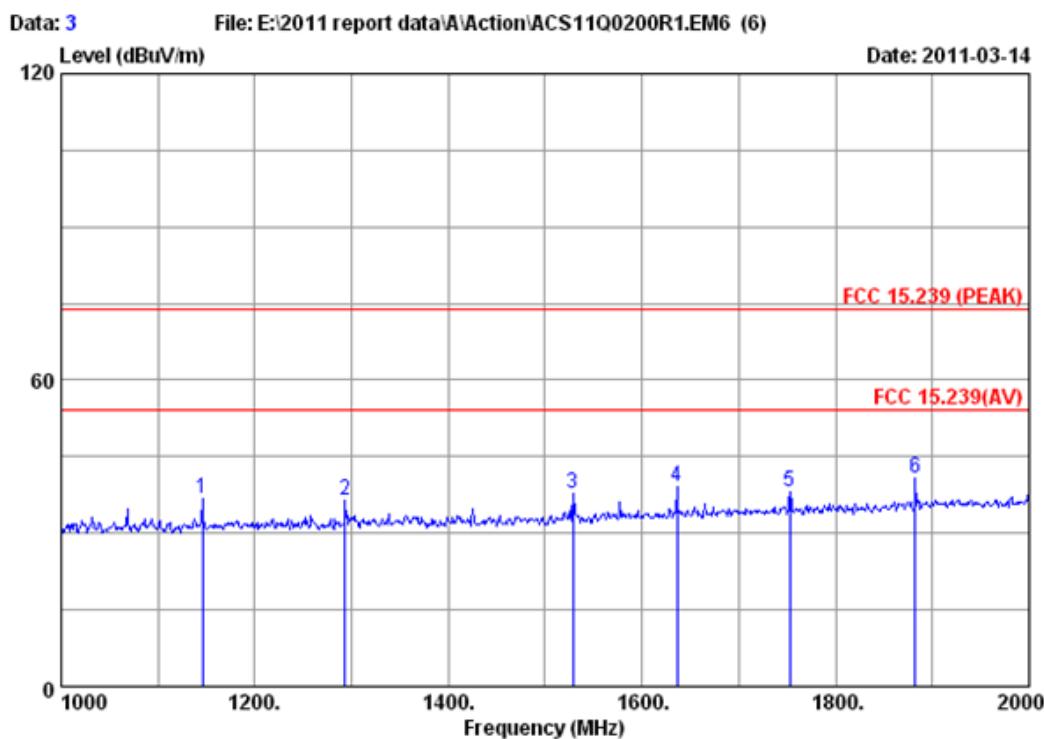
Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Emission				
				Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 1029.000	25.47	4.82	37.33	41.80	34.76	74.00	39.24	Peak
2 1247.000	25.92	5.23	36.86	41.33	35.62	74.00	38.38	Peak
3 1434.000	26.30	5.57	36.53	41.00	36.34	74.00	37.66	Peak
4 1540.000	26.68	5.80	36.30	41.46	37.64	74.00	36.36	Peak
5 1711.000	27.61	6.10	36.30	40.47	37.88	74.00	36.12	Peak
6 1831.000	28.27	6.33	36.28	41.27	39.59	74.00	34.41	Peak

Remarks:

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

ECC ID:ATI9R3HRD00701

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Site no. : 3# Chamber Data no. : 3
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL
Limit : FCC 15.239 (PEAK)
Env. / Ins. : 24°C/66% Engineer : Leo-Li
EUT : 7" DIGITAL AUDIO VIDEO PLAYER
Power : DC 12V
Test mode : FM 88.5MHz
M/N : HRD00701

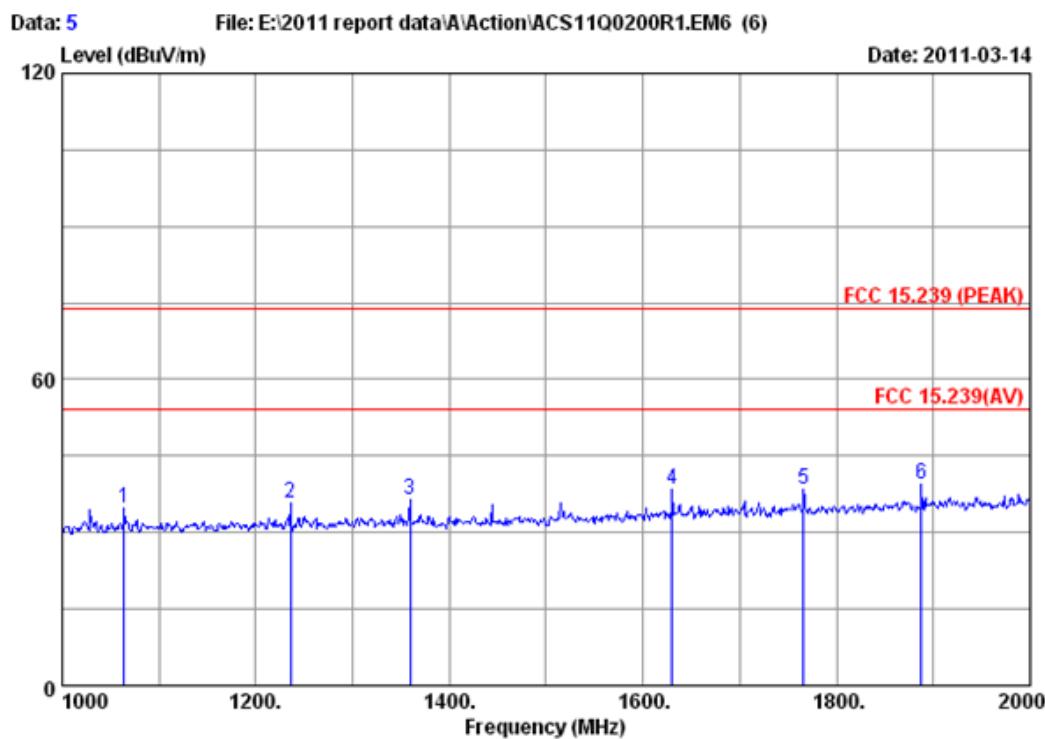
	Ant.	Cable	Amp.	Emission				
Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark
(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	1146.000	25.71	5.04	36.96	43.14	36.93	74.00	37.07 Peak
2	1293.000	25.99	5.31	36.77	41.80	36.33	74.00	37.67 Peak
3	1529.000	26.59	5.76	36.45	41.97	37.87	74.00	36.13 Peak
4	1636.000	27.15	5.95	36.26	42.19	39.03	74.00	34.97 Peak
5	1753.000	27.80	6.18	36.29	40.38	38.07	74.00	35.93 Peak
6	1882.000	28.55	6.44	36.20	42.07	40.86	74.00	33.14 Peak

Remarks:

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

FCC ID:ATI9R3HRD00701

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Site no. : 3# Chamber Data no. : 5
Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL
Limit : FCC 15.239 (PEAK)
Env. / Ins. : 24°C/66% Engineer : Leo-Li
EUT : 7" DIGITAL AUDIO VIDEO PLAYER
Power : DC 12V
Test mode : FM 106.7MHz
M/N : HRD00701

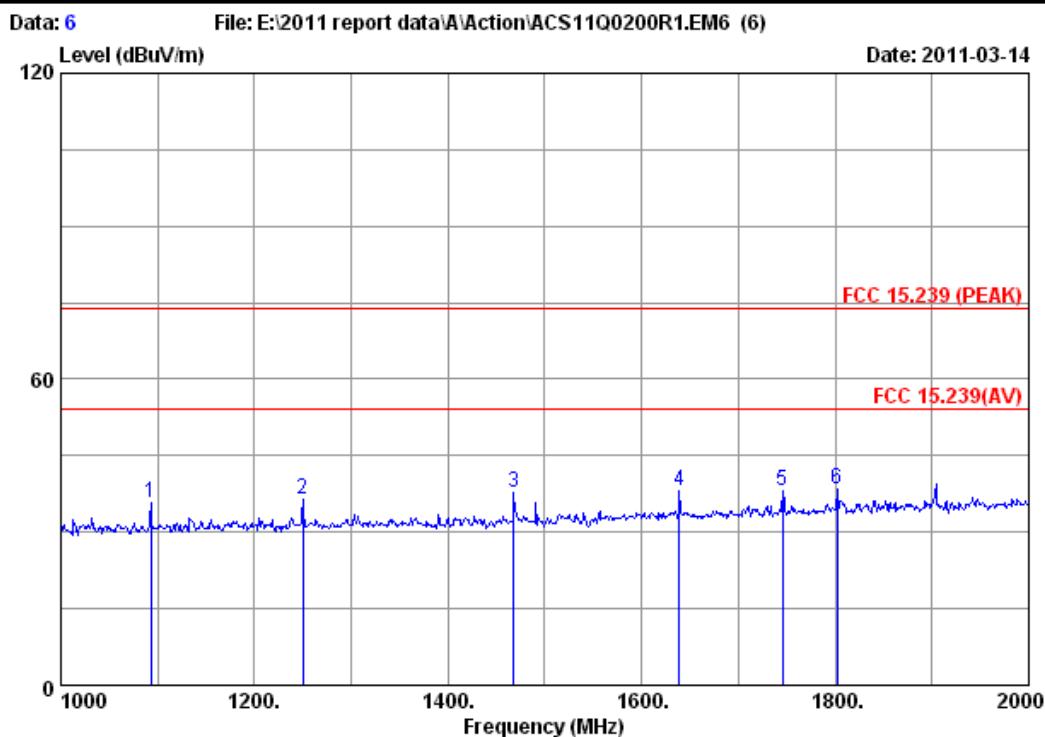
	Ant.	Cable	Amp.	Emission				
Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark
(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	1064.000	25.54	4.89	37.26	41.73	34.90	74.00	39.10 Peak
2	1236.000	25.88	5.20	36.84	41.43	35.67	74.00	38.33 Peak
3	1359.000	26.12	5.42	36.54	41.38	36.38	74.00	37.62 Peak
4	1630.000	27.15	5.95	36.26	41.47	38.31	74.00	35.69 Peak
5	1766.000	27.89	6.22	36.22	40.51	38.40	74.00	35.60 Peak
6	1888.000	28.55	6.44	36.20	40.53	39.32	74.00	34.68 Peak

Remarks:

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

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Site no. : 3# Chamber Data no. : 6
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL
 Limit : FCC 15.239 (PEAK)
 Env. / Ins. : 24°C/66% Engineer : Leo-Li
 EUT : 7" DIGITAL AUDIO VIDEO PLAYER
 Power : DC 12V
 Test mode : FM 106.7MHz
 M/N : HRD00701

Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Emission				
				Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 1093.000	25.57	4.93	37.18	42.30	35.62	74.00	38.38	Peak
2 1250.000	25.92	5.23	36.86	42.08	36.37	74.00	37.63	Peak
3 1468.000	26.37	5.65	36.53	42.28	37.77	74.00	36.23	Peak
4 1639.000	27.24	5.95	36.33	41.38	38.24	74.00	35.76	Peak
5 1746.000	27.80	6.18	36.29	40.40	38.09	74.00	35.91	Peak
6 1802.000	28.08	6.29	36.31	40.39	38.45	74.00	35.55	Peak

Remarks:

1. Emission Level = Antenna Factor + Cable Loss - Amp Factor + 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.08, 10	1 Year
2.	Attenuator	Agilent	8491B	MY39262165	May.08, 10	1 Year
3.	RF Cable	Hubersuhner	SUCOFLEX 102	28618/2	May.08, 10	1 Year

5.2. Limit

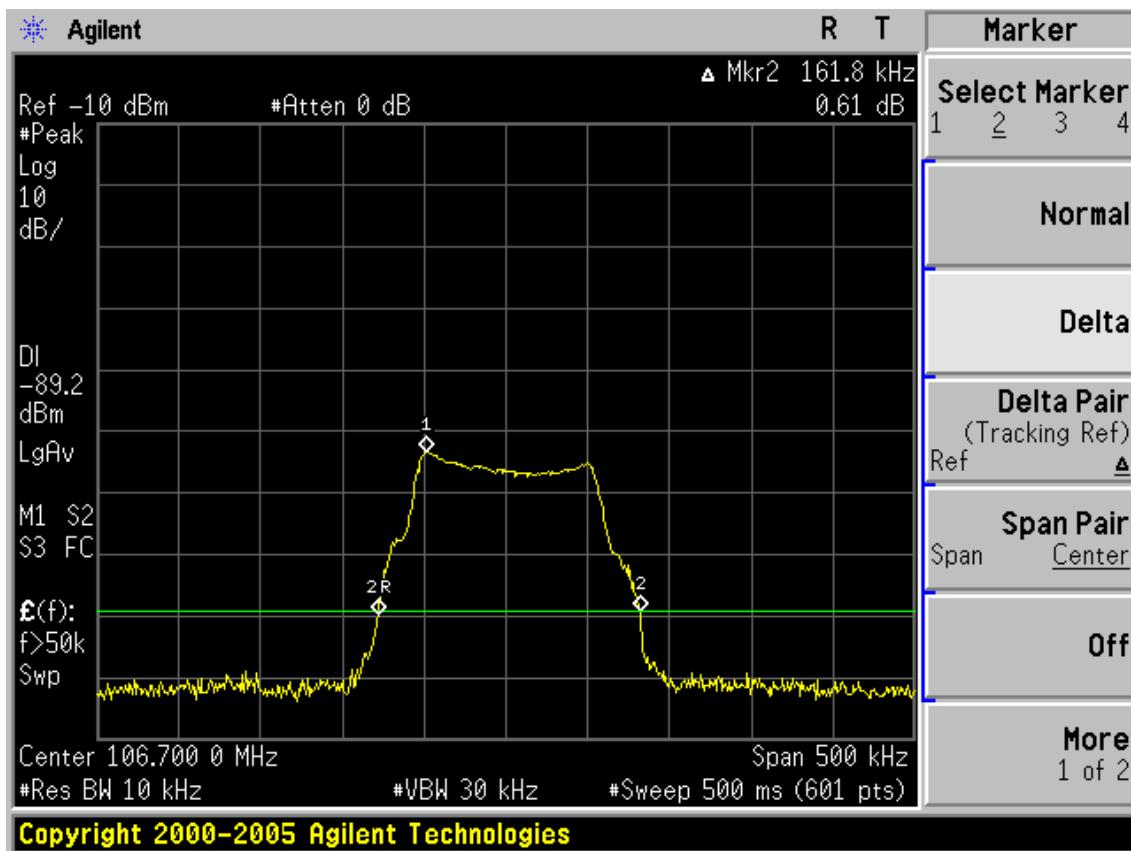
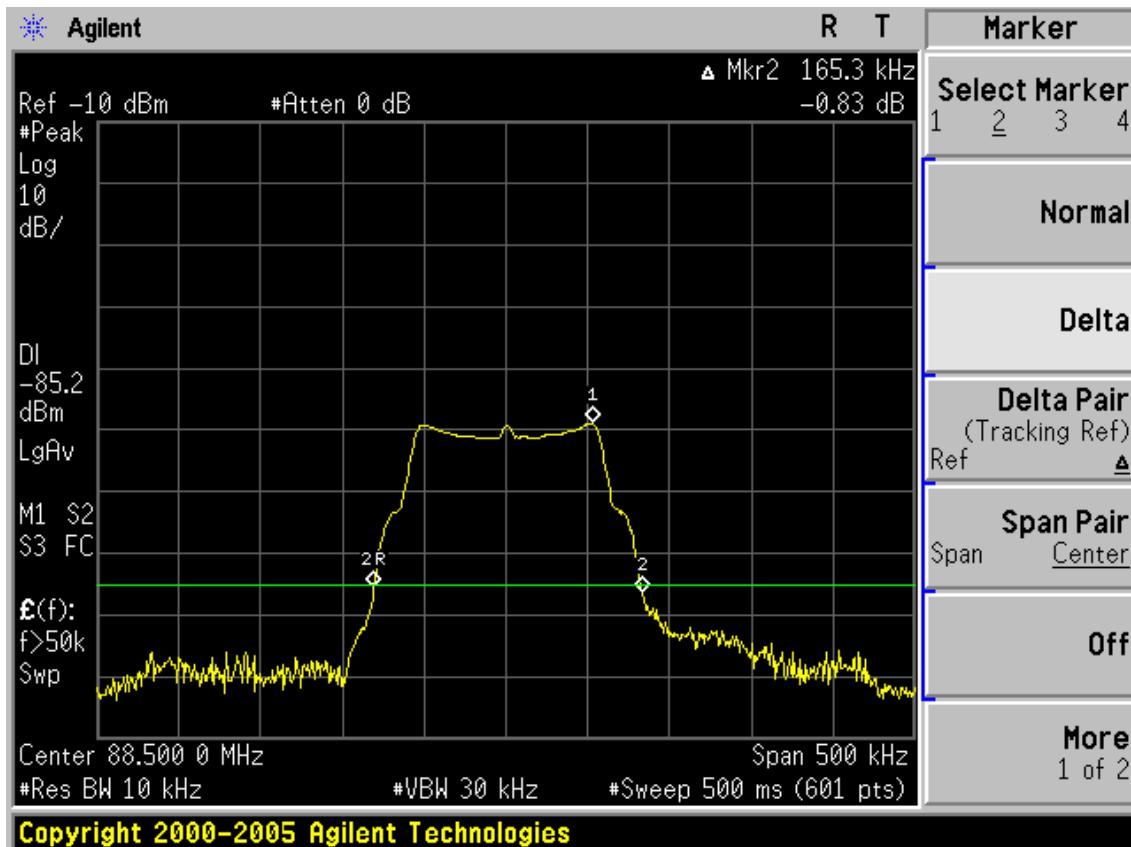
Intentional radiators operating under the alternative provisions to the general emission limits, as contained in §§ 15.217 through 15.257 and in Subpart E of this part, must be designed to ensure that the 20 dB bandwidth of the emission, or whatever bandwidth may otherwise be specified in the specific rule section under which the equipment operates, is contained within the frequency band designated in the rule section under which the equipment is operated.

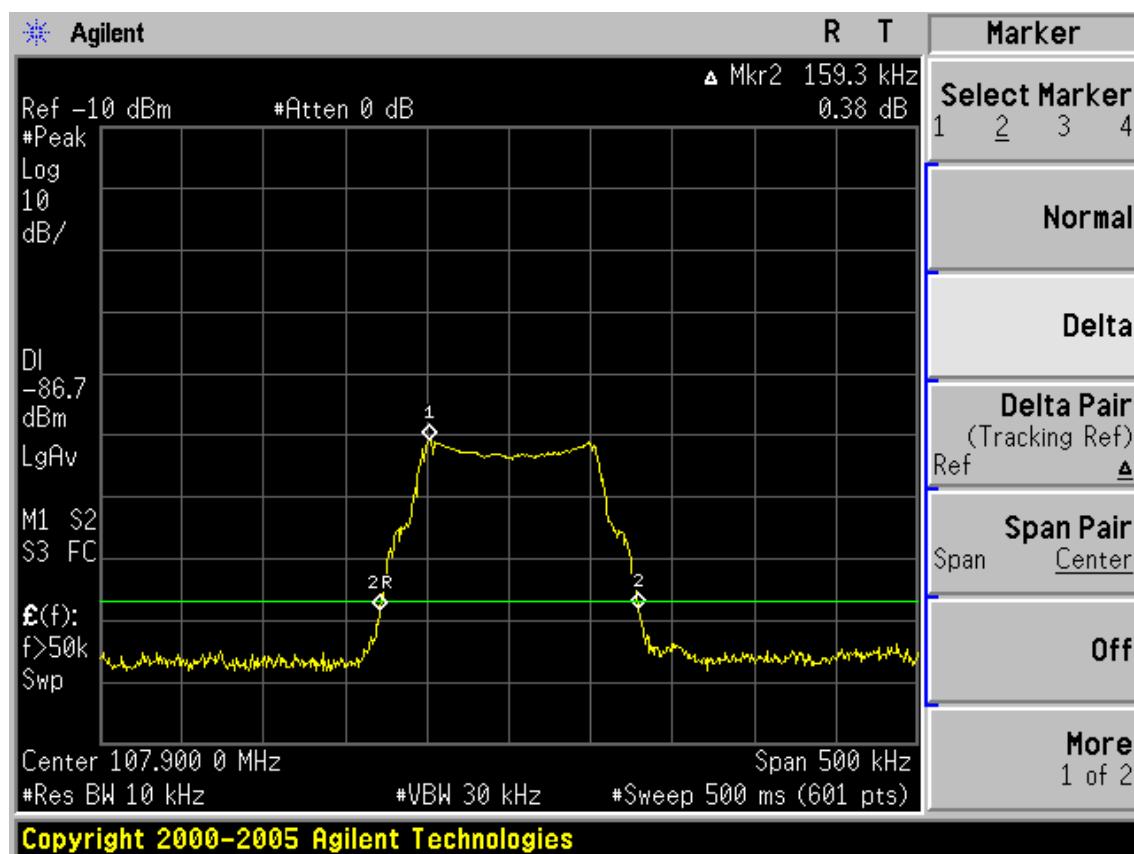
5.3. Test Signal

A typical music signal (Jazz music) which lead worse bandwidth was generated by EUT's DVD reader from DVD disc.

5.4. Test Results

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





6. ANTENNA REQUIREMENT

6.1. STANDARD APPLICABLE

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

6.2. ANTENNA CONNECTED CONSTRUCTION

The antennas used for this product are integrated antenna and that no antenna other than that furnished by the responsible party shall be used with the device, the maximum peak gain of the transmit antenna is 0dBi.



7. DEVIATION TO TEST SPECIFICATIONS

[NONE]