

# ***FCC Part 15 Subpart C***

## ***TEST REPORT***

*of*

E.U.T. : 10.2" Overhead LCD TV With  
DVD Player

FCC ID. : ATI9R3VOD102

MODEL : VOD102

Working Frequency : 88.3, 88.7, 89.1, 89.5, 89.9  
MHz

*for*

APPLICANT : ACTION ELECTRONICS CO., LTD.

ADDRESS : 198, CHUNG YUAN ROAD, CHUNG LI IND.  
ZONE, CHUNG LI, TAWIWAN, R.O.C.

Test Performed by

**ELECTRONICS TESTING CENTER, TAIWAN**

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Report Number : 06-01-RBF-034-02

## TEST REPORT CERTIFICATION

Applicant : ACTION ELECTRONICS CO., LTD.  
198, CHUNG YUAN ROAD, CHUNG LI IND. ZONE,  
CHUNG LI, TAWIWAN, R.O.C.

Manufacturer : ACTION INDUSTRIES (M) SDN. BHD.  
2480, TINGKAT PERUSAHAAN ENAM, PRAI FREE  
TRADE ZONE, 13600 PERAI, PENANG, MALAYSIA

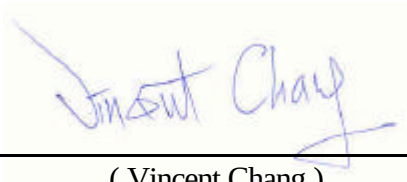
Description of EUT :

- a) Type of EUT : 10.2" Overhead LCD TV With DVD Player
- b) Trade Name : AUDIOVOX, ADVENT
- c) Model No. : VOD102
- d) The data also apply to : ADV35
- e) Power Supply : DC 12V

Regulation Applied : FCC Rules and Regulations Part 15 Subpart C (2005)

I HEREBY CERTIFY THAT; The data shown in this report were made in accordance with the procedures given in ANSI C63.4 and the energy emitted by the device was founded to be within the limits applicable. I assume full responsibility for accuracy and completeness of these data.

Issued Date : Feb. 17, 2006

Test Engineer :   
( Vincent Chang )

Approve & Authorized Signer :   
Will Yauo, Manager  
EMC Dept. II of ELECTRONICS  
TESTING CENTER, TAIWAN

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## 1. GENERAL INFORMATION

### 1.1 Product Description

|                           |                                         |
|---------------------------|-----------------------------------------|
| a) Type of EUT            | : 10.2" Overhead LCD TV With DVD Player |
| b) Trade Name             | : AUDIOVOX, ADVENT                      |
| c) Model No               | : VOD102                                |
| d) The data also apply to | : ADV35                                 |
| e) Frequency Modulation   | : 88.3, 88.7, 89.1, 89.5, 89.9 MHz      |
| f) Power Supply           | : DC 12 V                               |

### 1.2 Characteristics of Device:

The EUT is a 5-channel FM transmitter designed to transmit audio signals over the FM frequency band to enable users to listen to audio from an independent video system over the existing car audio system via the radio. The frequencies are 88.3, 88.7, 89.1, 89.5 and 89.9MHz.

### 1.3 Test Methodology

Both conducted and radiated testing was performed according to the procedures in chapter 13 of ANSI C63.4 (2003)

The equipment under test was operated in its normal operating mode for the purpose of the measurements. The test signal is 1kHz standard test audio signal.

The receiving antenna polarized horizontally was varied from 1 to 4 meters and the wooden turntable was rotated through 360 degrees to obtain the highest reading on the field strength meter or on the display of the spectrum analyzer. And also, each emission was to be maximized by changing the orientation of the equipment under test.

### 1.4 Test Facility

The open area test site and conducted measurement facility used to collect the radiated data is located on the roof top of Building at No.34, Lin 5, Ding Fu Tsun, Linkou Hsiang, Taipei Hsien, Taiwan, R.O.C.

This site has been fully described in a report submitted to your office, and accepted in a letter dated Oct. 20, 2005.

## 2. DEFINITION AND LIMITS

### 2.1 Definition

Intentional radiator:

A device that intentionally generates and emits radio frequency energy by radiation or induction.

### 2.2 Restricted Bands of Operation

Only spurious emissions are permitted in any of the frequency bands listed below:

| MHz               | MHz                   | MHz           | GHz         |
|-------------------|-----------------------|---------------|-------------|
| 0.090 - 0.110     | 16.42-16.423          | 399.9-410     | 4.5-5.15    |
| 0.495 - 0.505 **  | 16.69475 - 16.69525   | 608-614       | 5.35-5.46   |
| 2.1735 - 2.1905   | 16.80425 - 16.80475   | 960-1240      | 7.25-7.75   |
| 4.125-4.128       | 25.5-25.67            | 1300-1427     | 8.025-8.5   |
| 4.17725-4.17775   | 37.5-38.25            | 1435-1626.5   | 9.0-9.2     |
| 4.20725-4.20775   | 73-74.6               | 1645.5-1646.5 | 9.3-9.5     |
| 6.215-6.218       | 74.8-75.2             | 1660-1710     | 10.6-12.7   |
| 6.26775-6.26825   | 108-121.94            | 1718.8-1722.2 | 13.25-13.4  |
| 6.31175-6.31225   | 123-138               | 2200-2300     | 14.47-14.5  |
| 8.291-8.294       | 149.9-150.05          | 2310-2390     | 15.35-16.2  |
| 8.362-8.366       | 156.52475 - 156.52525 | 2483.5-2500   | 17.7-21.4   |
| 8.37625-8.38675   | 156.7-156.9           | 2655-2900     | 22.01-23.12 |
| 8.41425-8.41475   | 162.0125-167.17       | 3260-3267     | 23.6-24.0   |
| 12.29-12.293      | 167.72-173.2          | 3332-3339     | 31.2-31.8   |
| 12.51975-12.52025 | 240-285               | 3345.8-3358   | 36.43-36.5  |
| 12.57675-12.57725 | 322-335.4             | 3360-4400     | Above 38.6  |
| 13.36-13.41       |                       |               |             |

Remark “\*\*” : Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz

### 2.3 Limitation

#### (1) Conducted Emission Limits :

Except for Class A digital devices, for equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150kHz to 30MHz shall not exceed the limits in the following table, as measured using a 50μH/50 ohms line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the band edges.

| Frequency<br>MHz | Quasi Peak<br>dB μ V | Average<br>dB μ V |
|------------------|----------------------|-------------------|
| 0.15 - 0.5       | 66-56*               | 56-46*            |
| 0.5 - 5.0        | 56                   | 46                |
| 5.0 - 30.0       | 60                   | 50                |

\* Decreases with the logarithm of the frequency

**(2) Radiated Emission Limits :**

According to 15.239 the field strength of emissions from intentional radiators operated under these frequency bands shall not exceed the following:

| Fundamental Frequency<br>(MHz) | Field Strength of Fundamental |                                     |
|--------------------------------|-------------------------------|-------------------------------------|
|                                | $\mu\text{V}/\text{meter}$    | $\text{dB}\mu\text{V}/\text{meter}$ |
| 88-108                         | 250                           | 48                                  |

Field strength limits are at the distance of 3 meters, emissions radiated outside of the specified bands, shall be according to the general radiated limits in 15.209, as following table:

| Other Frequencies<br>(MHz) | Field Strength of Fundamental |                                     |
|----------------------------|-------------------------------|-------------------------------------|
|                            | $\mu\text{V}/\text{meter}$    | $\text{dB}\mu\text{V}/\text{meter}$ |
| 30 - 88                    | 100                           | 40.0                                |
| 88 - 216                   | 150                           | 43.5                                |
| 216 - 960                  | 200                           | 46.0                                |
| Above 960                  | 500                           | 54.0                                |

As shown in 15.35(b), for frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20 dB under any condition of modulation.

**(3) Antenna Requirement :**

For intentional device, according to §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.

**(4) Emissions Band Limits :**

According to 15.239(a), emissions from the intentional radiator shall be confined within a band 200kHz wide centered on the operating frequency. The 200 kHz band shall lie wholly within the frequency range of 88-108 MHz.

**2.4 Labeling Requirement**

The device shall bear the following statement in a conspicuous location on the device :

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

**2.5 User Information**

The users manual or instruction manual for an intentional or unintentional radiator shall caution the user that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

### 3. SYSTEM TEST CONFIGURATION

#### 3.1 Justification

For both radiated and conducted emissions, the system was tested in a stand-alone configuration. The peripherals other than EUT were connected in normally standing by situation.

All measurement were intentional to maximum the emissions from EUT by varying the connection cables, therefore, the test result is sure to meet the applicable requirement.

#### 3.2 Devices for Tested System

| Device                                     | Manufacture                       | Model / FCC ID.      | Description                   |
|--------------------------------------------|-----------------------------------|----------------------|-------------------------------|
| 10.2" Overhead LCD TV<br>With DVD Player * | ACTION INDUSTRIES(M)<br>SDN. BHD. | VOD102/ ATI9R3VOD102 | ----                          |
| DC Power Supply                            | GW                                | GPC-3030D            | 1.5m Unshielded AC Power Cord |
| LCD TV                                     | KOLIN                             | CT-056LC             | 1.8m Unshielded AC Adaptor    |
| DVD Player                                 | SONY                              | DVP-NS530            | 2.0m Unshielded AC Power Cord |
| Earphone                                   | ----                              | ----                 | 1.0m Unshielded Signal Line   |

Remark “\*” means equipment under test.

## 4 RADIATED EMISSION MEASUREMENT

### 4.1 Applicable Standard

For intentional radiators operation in the band 88 – 108 MHz, the radiated emission shall comply with §15.239(b) & 15.239(c).

### 4.2 Measurement Procedure

1. Setup the configuration per figure 1 and 2 for frequencies measured below and above 1 GHz respectively.
2. For emission frequencies measured below 1 GHz, a pre-scan is performed in a shielded chamber to determine the accurate frequencies of higher emissions will be checked on a open test site. As the same purpose, for emission frequencies measured above 1 GHz, a pre-scan also be performed with a 1 meter measuring distance before final test.
3. For emission frequencies measured below and above 1 GHz, set the spectrum analyzer on a 100 kHz and 1 MHz resolution bandwidth respectively for each frequency measured in step 2.
4. The search antenna is to be raised and lowered over a range from 1 to 4 meters in horizontally polarized orientation. Position the highness when the highest value is indicated on spectrum analyzer, then change the orientation of EUT on test table over a range from 0° to 360° with a speed as slow as possible, and keep the azimuth that highest emission is indicated on the spectrum analyzer. Vary the antenna position again and record the highest value as a final reading. A RF test receiver is also used to confirm emissions measured.
5. Repeat step 4 until all frequencies need to be measured were complete.
6. Repeat step 5 with search antenna in vertical polarized orientations.
7. Check the three frequencies of highest emission with varying the placement of cables associated with EUT to obtain the worse case and record the result.

Figure 1 : Frequencies measured at 30MHz to 1 GHz configuration

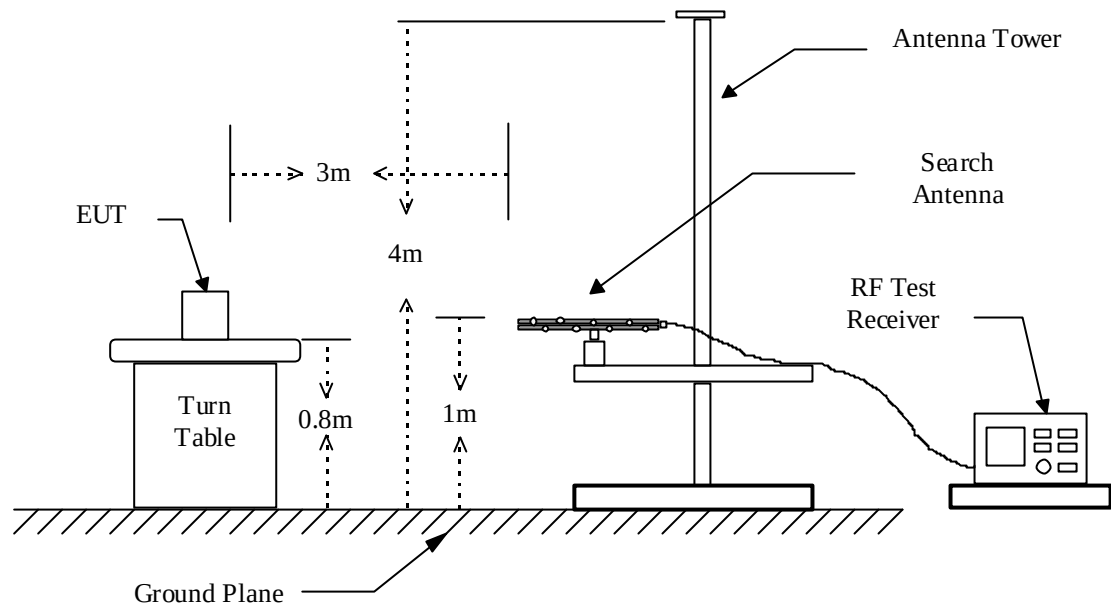
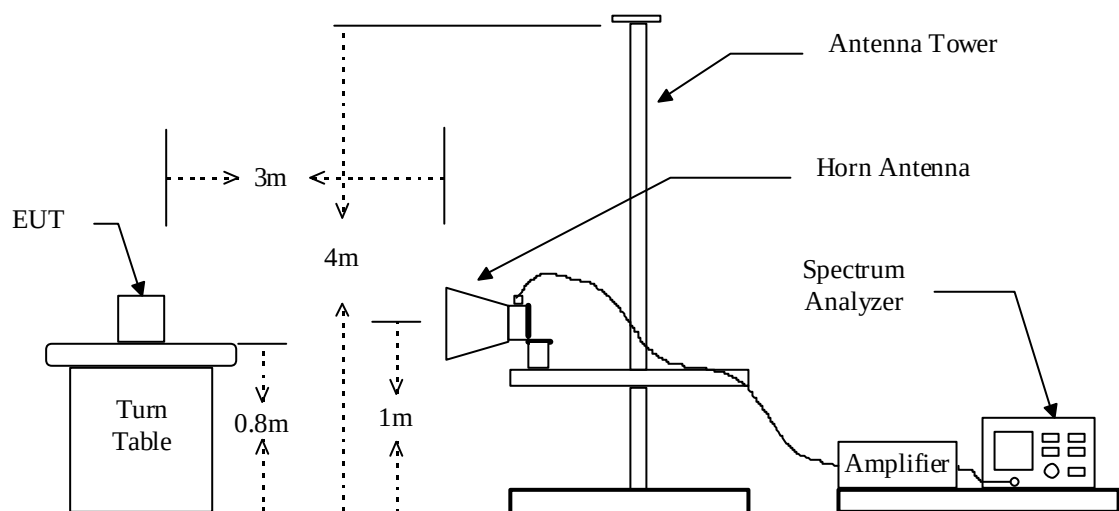


Figure 2 : Frequencies measured above 1 GHz configuration



### 4.3 Measuring Instrument

The following instrument are used for radiated emissions measurement:

| Equipment             | Manufacturer    | Model No. | Next Cal. Date |
|-----------------------|-----------------|-----------|----------------|
| EMI Test Receiver     | Rohde & Schwarz | ESCS 30   | 2006/12/22     |
| Amplifier             | HP              | 8447D     | 2006/10/17     |
| Spectrum              | R&S             | FSP3      | 2006/12/25     |
| Log-periodic Antenna  | EMCO            | 3146      | 2006/07/31     |
| Biconical Antenna     | EMCO            | 3110B     | 2006/10/05     |
| Double Ridged Antenna | EMCO            | 3115      | 2006/08/18     |
| Amplifier             | HP              | 8449B     | 2006/09/13     |
| Amplifier             | HP              | 83051A    | 2006/04/18     |
| Spectrum              | R&S             | FSP40     | 2006/07/05     |
| Spectrum              | HP              | 8564E     | 2006/08/08     |

Measuring instrument setup in measured frequency band when specified detector function is used :

| Frequency Band (MHz) | Instrument        | Function   | Resolution bandwidth | Video Bandwidth |
|----------------------|-------------------|------------|----------------------|-----------------|
| 30 to 1000           | RF Test Receiver  | Quasi-Peak | 120 kHz              | N/A             |
|                      | Spectrum Analyzer | Peak       | 100 kHz              | 100 kHz         |
| Above 1000           | Spectrum Analyzer | Peak       | 1 MHz                | 1 MHz           |
|                      | Spectrum Analyzer | Average    | 1 MHz                | 10Hz            |

## 4.4 Test Data

### 4.4.1 Fundamental and Harmonics

#### A. Fundamental

Fundamental Frequency : 88.3 MHz      Audio Modulation : 1 kHz  
 Test Date : Jan. 18, 2006      Temperature : 15 °C      Humidity : 65 %

| Frequency<br><br>(MHz) | Reading (dBUV) |     |      |     | Factor<br>(dB)<br><br>Corr. | Result @3m<br>(dBUV/m) |     | Limit @3m<br>(dBUV/m) |      | Margin<br>(dB) | Table<br>Deg.<br>(Deg.) | Ant.<br>High<br>(m) |
|------------------------|----------------|-----|------|-----|-----------------------------|------------------------|-----|-----------------------|------|----------------|-------------------------|---------------------|
|                        | H              |     | V    |     |                             | Peak                   | Ave | Peak                  | Ave  |                |                         |                     |
|                        | Peak           | Ave | Peak | Ave |                             |                        |     |                       |      |                |                         |                     |
| 88.300                 | 46.1           | *** | 49.2 | *** | -14.2                       | 35.0                   | *** | 68.0                  | 48.0 | -13.0          | 177                     | 1.5                 |

Fundamental Frequency : 89.9 MHz      Audio Modulation : 1 kHz  
 Test Date : Jan. 18, 2006      Temperature : 15 °C      Humidity : 65 %

| Frequency<br><br>(MHz) | Reading (dBuV) |     |      |     | Factor<br>(dB)<br><br>Corr. | Result @3m<br>(dBuV/m) |     | Limit @3m<br>(dBuV/m) |      | Margin<br>(dB) | Table<br>Deg.<br>(Deg.) | Ant.<br>High<br>(m) |
|------------------------|----------------|-----|------|-----|-----------------------------|------------------------|-----|-----------------------|------|----------------|-------------------------|---------------------|
|                        | H              |     | V    |     |                             | Peak                   | Ave | Peak                  | Ave  |                |                         |                     |
|                        | Peak           | Ave | Peak | Ave |                             |                        |     |                       |      |                |                         |                     |
| 89.900                 | 46.1           | *** | 50.5 | *** | -14.0                       | 36.5                   | *** | 68.0                  | 48.0 | -11.5          | 182                     | 1.5                 |

Note :

1. Item of margin shown in above table refer to average limit.
2. It is considered that the results of average comply with average limit when measuring data with a peak function detector meet the average limit. Mark “\*\*\*” means that Peak result is meet average limit.
3. Remark “---” means that the emissions level is too low to be measured.
4. Item “Margin” referred to Average limit while there is only peak result.
5. The expanded uncertainty of the radiated emission tests is 3.53 dB.

**B. Harmonics**

Frequency : 88.3 MHz Audio Modulation : 1 kHz  
 Test Date : Jan. 18, 2006 Temperature : 15 °C Humidity : 65 %

| Frequency<br>(MHz) | Ant-Pol<br>H/V | Meter<br>Reading<br>(dBuV) | Corrected<br>Factor<br>(dB) | Result<br>@3m<br>(dBuV/m) | Limit<br>@3m<br>(dBuV/m) | Margin<br>(dB) | Table<br>Degree<br>(Deg.) | Ant. High<br>(m) |
|--------------------|----------------|----------------------------|-----------------------------|---------------------------|--------------------------|----------------|---------------------------|------------------|
| 176.600            | V              | 45.9                       | -9.1                        | 36.8                      | 43.5                     | -6.7           | 92                        | 1.5              |
| 264.900            | H              | 42.5                       | -3.8                        | 38.7                      | 46.0                     | -7.3           | 74                        | 1.5              |
| 353.200            | V              | 36.9                       | -9.9                        | 27.0                      | 46.0                     | -19.0          | 184                       | 1.0              |
| 441.500            | V              | 36.6                       | -5.6                        | 31.0                      | 46.0                     | -15.0          | 198                       | 1.0              |
| 529.800            | H              | 36.5                       | -5.0                        | 31.5                      | 46.0                     | -14.5          | 175                       | 1.0              |
| 618.100            | H              | 35.4                       | -3.6                        | 31.8                      | 46.0                     | -14.2          | 78                        | 1.5              |
| 706.400            | H              | ---                        | -0.9                        | ---                       | 46.0                     | ---            | ---                       | ---              |
| 794.700            | H/V            | ---                        | 0.5                         | ---                       | 46.0                     | ---            | ---                       | ---              |
| 883.000            | H/V            | ---                        | 2.3                         | ---                       | 46.0                     | ---            | ---                       | ---              |

Frequency : 89.9 MHz Audio Modulation : 1 kHz  
 Test Date : Jan. 18, 2006 Temperature : 15 °C Humidity : 65 %

| Frequency<br>(MHz) | Ant-Pol<br>H/V | Meter<br>Reading<br>(dBuV) | Corrected<br>Factor<br>(dB) | Result<br>@3m<br>(dBuV/m) | Limit<br>@3m<br>(dBuV/m) | Margin<br>(dB) | Table<br>Degree<br>(Deg.) | Ant. High<br>(m) |
|--------------------|----------------|----------------------------|-----------------------------|---------------------------|--------------------------|----------------|---------------------------|------------------|
| 179.800            | H              | 46.9                       | -9.1                        | 37.8                      | 43.5                     | -5.7           | 45                        | 1.5              |
| 269.700            | H              | 41.5                       | -3.6                        | 37.9                      | 46.0                     | -8.1           | 48                        | 1.5              |
| 359.600            | V              | 37.5                       | -8.7                        | 28.8                      | 46.0                     | -17.2          | 179                       | 1.0              |
| 449.500            | H              | 35.2                       | -5.6                        | 29.6                      | 46.0                     | -16.4          | 89                        | 1.5              |
| 539.400            | H              | 35.6                       | -5.1                        | 30.5                      | 46.0                     | -15.5          | 74                        | 1.5              |
| 629.300            | H              | 35.2                       | -3.2                        | 32.0                      | 46.0                     | -14.0          | 179                       | 1.5              |
| 719.200            | H/V            | ---                        | -0.8                        | ---                       | 46.0                     | ---            | ---                       | ---              |
| 809.100            | H/V            | ---                        | 1.0                         | ---                       | 46.0                     | ---            | ---                       | ---              |
| 899.000            | H/V            | ---                        | 2.1                         | ---                       | 46.0                     | ---            | ---                       | ---              |

Note :

1. Item of margin shown in above table refer to average limit.
2. It is considered that the results of average comply with average limit when measuring data with a peak function detector meet the average limit. Mark “\*\*\*” means that Peak result is meet average limit.
3. Remark “---” means that the emissions level is too low to be measured.
4. Item “Margin” referred to Average limit while there is only peak result.
5. The expanded uncertainty of the radiated emission tests is 3.53 dB.

**4.4.2 Other Emissions**1. Operation Mode : 88.3 MHzTest Date : Jan. 18, 2006 Temperature : 15 °C Humidity : 65 %

| Frequency<br>(MHz) | Ant-Pol<br>H/V | Meter<br>Reading<br>(dBuV) | Corrected<br>Factor<br>(dB) | Result @3m<br>(dBuV/m) | Limit @3m<br>(dBuV/m) | Margin<br>(dB) | Table<br>Degree<br>(Deg.) | Ant.<br>High<br>(m) |
|--------------------|----------------|----------------------------|-----------------------------|------------------------|-----------------------|----------------|---------------------------|---------------------|
| 188.910            | V              | 50.1                       | -8.5                        | 41.6                   | 43.5                  | -1.9           | 188                       | 1.0                 |
| 215.420            | V              | 47.1                       | -6.1                        | 41.0                   | 43.5                  | -2.5           | 192                       | 1.0                 |
| 317.428            | H              | 48.2                       | -6.8                        | 41.4                   | 46.0                  | -4.6           | 88                        | 1.5                 |
| 457.620            | H              | 42.3                       | -5.3                        | 37.0                   | 46.0                  | -9.0           | 94                        | 1.5                 |
| 551.250            | V              | 46.7                       | -5.2                        | 41.5                   | 46.0                  | -4.5           | 175                       | 1.0                 |
| 678.210            | V              | 41.2                       | -1.0                        | 40.2                   | 46.0                  | -5.8           | 192                       | 1.0                 |

2. Operation Mode : 89.9 MHzTest Date : Jan. 18, 2006 Temperature : 15 °C Humidity : 65 %

| Frequency<br>(MHz) | Ant-Pol<br>H/V | Meter<br>Reading<br>(dBuV) | Corrected<br>Factor<br>(dB) | Result @3m<br>(dBuV/m) | Limit @3m<br>(dBuV/m) | Margin<br>(dB) | Table<br>Degree<br>(Deg.) | Ant.<br>High<br>(m) |
|--------------------|----------------|----------------------------|-----------------------------|------------------------|-----------------------|----------------|---------------------------|---------------------|
| 187.170            | V              | 50.2                       | -8.6                        | 41.6                   | 43.5                  | -1.9           | 175                       | 1.0                 |
| 221.140            | V              | 47.6                       | -5.7                        | 41.9                   | 46.0                  | -4.1           | 188                       | 1.0                 |
| 398.120            | H              | 46.9                       | -6.4                        | 40.5                   | 46.0                  | -5.5           | 75                        | 1.5                 |
| 479.520            | V              | 42.4                       | -4.5                        | 37.9                   | 46.0                  | -8.1           | 189                       | 1.0                 |
| 551.190            | H              | 43.0                       | -5.2                        | 37.8                   | 46.0                  | -8.2           | 98                        | 1.5                 |
| 678.120            | V              | 43.3                       | -1.0                        | 42.3                   | 46.0                  | -3.7           | 188                       | 1.0                 |

Note :

1. Remark “---” means that the emissions level is too low to be measured.
2. The expanded uncertainty of the radiated emission tests is 3.53 dB.

**4.5 Field Strength Calculation**

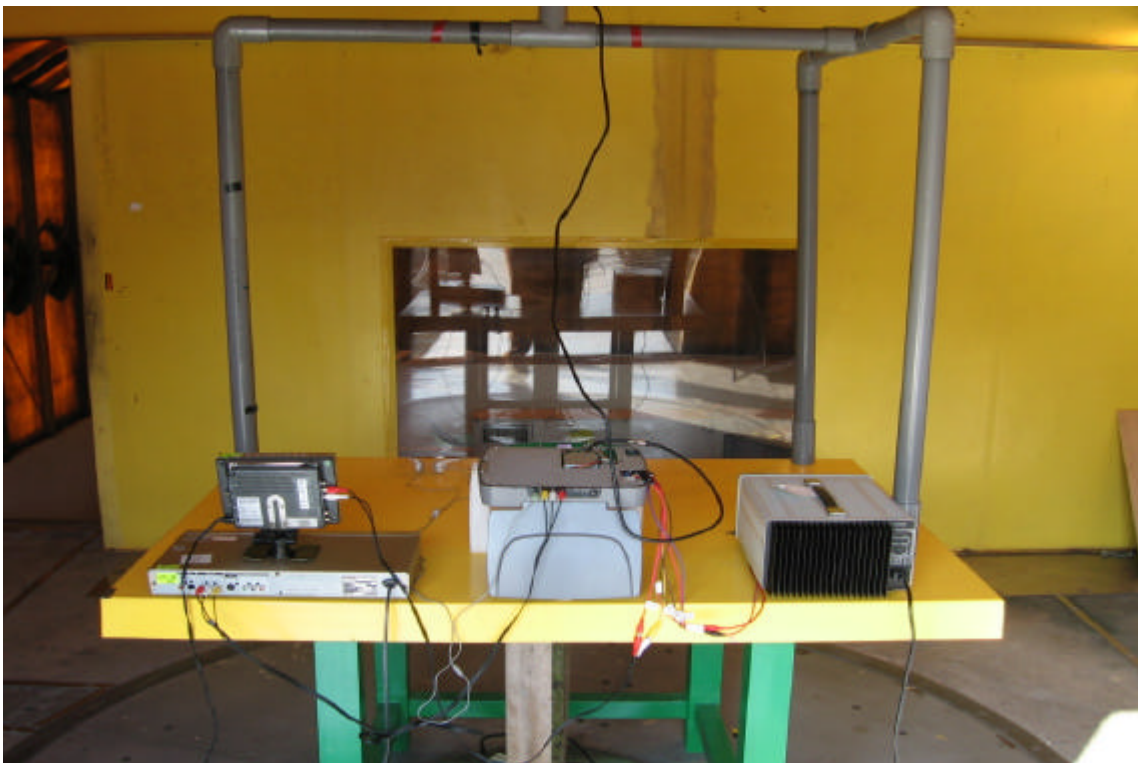
The field strength is calculated by adding the Antenna Factor and Cable Factor, and subtracting the Amplifier Gain (if any) from the measured reading. For the limit is employed average value, therefore the peak value can be transferred to average value by subtracting the duty factor. The basic equation with a sample calculation is as follows:

$$\text{Peak} = \text{Reading} + \text{Corrected Factor}$$

where

Corr. Factor = Antenna Factor + Cable Factor - Amplifier Gain (if any)

## 4.6 Radiated Measurement Photos



## 5 CONDUCTED EMISSION MEASUREMENT

### 5.1 Standard Applicable

This EUT is excused from investigation of conducted emission, for it is powered by DC 12V. According to §5.207 (c), measurements 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.

For intentional device, Line Conducted Emission Limits are in accordance to §5.207(a)

## **6 ANTENNA REQUIREMENT**

### **6.1 Standard Applicable**

According to §5.203, 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 Construction**

The antenna is permanently mounted on EUT, no consideration of replacement.

## 7 EMISSION BAND MEASUREMENT

### 7.1 Standard Applicable

According to 15.239(a), emissions from the intentional radiator shall be confined within a band 200kHz wide centered on the operating frequency. The 200 kHz band shall lie wholly within the frequency range of 88-108 MHz.

### 7.2 Measurement Procedure

1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
2. Position the EUT as shown in figure 1 and measurement the turn on the EUT. Then set it to any one measured frequency within its operating range and make sure the instrument is operated in its linear range.
3. Set both RBW and VBW of spectrum analyzer to 10 kHz and 100kHz respectively with a convenient frequency span including 200kHz bandwidth of the emission.
4. Mark the bandwidth of 200kHz points and plot the graph on spectrum analyzer.
5. Repeat above procedures until all measured frequencies were complete.

### 7.3 Measurement Equipment

| Equipment         | Manufacturer    | Model No. | Next Cal. Date |
|-------------------|-----------------|-----------|----------------|
| Spectrum Analyzer | Rohde & Schwarz | FSP40     | 07/05/2006     |

### 7.4 Measurement Data

Test Date : Jan. 18, 2006      Temperature : 15 °C      Humidity : 65%  
Audio Modulation : 1 kHz

**Test result:**

**The 26 dB bandwidth of 88.3 MHz = 156 kHz < 200 kHz.**

**The 26 dB bandwidth of 89.9 MHz = 158 kHz < 200 kHz.**

**The 200 Khz band lie wholly within the frequency range of 88-108 MHz.**

**Note :**

1. Bandwidth test was done with 1 kHz audio modulation input signal and the input level was adjusted to the maximum modulation. There is no user-controlled function.
2. Please see appendix 1 for Plotted Data.

## **Appendix 1 : Plotted Data For Emission Band Measurement**

