



## TEST REPORT

**Product Name** : 802.11g WLAN Mini PCI

**Model Number** : AV802G

**Brand Name** : ViewSonic

**FCC ID** : GSSAV802G

**Applicant** : ViewSonic Corporation.

**Address** : 381 Brea Canyon Rd. Walnut, CA.91709 USA

**Received Date** : June 18, 2004

**Tested Date** : July 29, 2003; June 10 ~ 24, 2004

Notes :

1. This report will be invalid if duplicated or photocopied in part.
2. This report refers only to the specimen(s) submitted to testing, and be invalid as separately used.
3. This report is invalid without examination stamp and signature of this institute.
4. The tested specimen(s) will be preserved for thirty days from the data issued.
5. The report must not be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government.
6. **This report is modified from ER03-07-064.**





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FCC ID : GSSAV802G

Report No. : ER04-06-034FRF

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## Test Report Certification

**Product Name** : 802.11g WLAN Mini PCI  
**Model Number** : AV802G  
**Brand Name** : ViewSonic  
**FCC ID** : GSSAV802G  
**Applicant** : ViewSonic Corporation.

### Measurement Standard :

FCC 47 C.F.R. Part 15, Subpart B and Subpart C (2003)  
ANSI C63.4 (2001)

**Tested By** : Ken Tu, **Date** : June 24, 2004  
(Ken Tu)

**Reviewed By** : Chieh-De Tsai, **Date** : June 24, 2004  
(Roger Sheng)

**Approved By** : Chieh-De Tsai, **Date** : June 24, 2004  
(Chieh-De Tsai, Manager)



WE HEREBY CERTIFY THAT: The measurements shown in the attachment were made in accordance with the procedures indicated, and the energy emitted by the equipment was found to be within the limits applicable. We assume full responsibility for the accuracy and completeness of these measurements and vouch for the qualifications of all persons taking them.



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## 1. GENERAL INFORMATION

### 1.1 General Statement

MEASUREMENT DEVIATION : Comply with standard in full

TRACEABILITY : This test result is traceable to National or International std.

### 1.2 General Description of EUT & Power

SAMPLE NAME : 802.11g WLAN Mini PCI  
MODEL NO : AV802G  
FREQUENCY RANGE : 2400MHz to 2483.5MHz  
FREQUENCY CHANNEL : 2412MHz + 5×n (MHz), n=0, 1, 2,.....10  
CHANNEL NUMBER : 11  
CHANNEL SPACING : 5MHz  
MAX AIR DATA RATE : 54Mbps (802.11g Mode), 11Mbps(802.11b Mode)  
TYPE OF MODULATION : 802.11b : DSSS (CCK, DQPSK, DBPSK)  
802.11g : OFDM (64QAM, 16AQM, QPSK, BPSK)  
FREQUENCY SELECTION : by software / firmware  
EUT DESCRIPTION : 2.4GHz (Orthogonal Frequency Division Multiplex  
and Direct Sequence Spread Spectrum) data transceiver for  
WLAN application  
ANTENNA TYPE : Two pair of antennas are used for EUT.  
The antenna specification is listed in the table below:

A pair of Dipole Antenna :

|              | Model No. | Manufacturer                 | Antenna Type | Cable Length | Gain dBi |
|--------------|-----------|------------------------------|--------------|--------------|----------|
| Main antenna | WSL002    | WANSHIH ELECTRONIC CO., LTD. | Dipole       | 150±5mm      | 2.71     |
| Aux antenna  | WSL002    | WANSHIH ELECTRONIC CO., LTD. | Dipole       | 150±5mm      | 2.71     |

One Dipole and one PIFA Antenna :

|              | Model No. | Manufacturer                 | Antenna Type | Cable Length | Gain dBi |
|--------------|-----------|------------------------------|--------------|--------------|----------|
| Main antenna | WSL002    | WANSHIH ELECTRONIC CO., LTD. | Dipole       | 150±5mm      | 2.71     |
| Aux antenna  | WPF001    | WANSHIH ELECTRONIC CO., LTD. | PIFA         | 120±5mm      | 0.41     |

POWER SOURCE : 3.3VDC (From Notebook)



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### **1.3 Description of Peripherals**

#### **(1) Notebook PC**

MANUFACTURER : IBM CORP.

MODEL NUMBER : 08N1180

INPUT POWER : 16V, 3.5A

##### **Adapter**

MANUFACTURER : IBM CORP.

MODEL NUMBER : 02K6809

INPUT POWER : 100-240V, 50/60Hz, 1.5A

OUTPUT POWER : 16V, 3.5A

#### **(2) Printer**

MANUFACTURER : HP CORP.

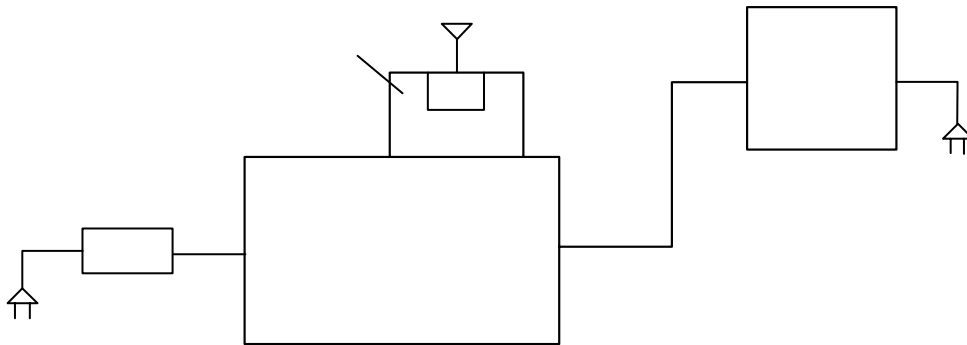
MODEL NUMBER : C8952D

SERIAL NUMBER : CN29B181H7

INPUT POWER : 100-240VAC, 50/60Hz, 0.7A

SIGNAL CABLE : Shielded, Undetachable, 1.8m

## 1.4 EUT & Peripherals Setup Diagram



The indicated numbers (1)(2), please refer to item 1.3

## 1.5 EUT Operating Condition

1. Run Intersil cTxRx v2.0.0
2. Start test :
  - (a) Tx mode test
    - Data Rate : 6Mbps for 802.11g
    - 11Mbps for 802.11b
    - Channel set : 1, 6, 11
    - Press START Transmitting, start Tx test.
  - (b) Rx mode test :
    - Select Receive continues
    - Channel set : 1, 6, 11
    - Press START RECEIVING , start Rx test.

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## 1.6 Description of Laboratory

### SITE DESCRIPTION

FCC Certificate NO. : 90585  
BSMI Certificate NO. : SL2-IN-E-0002  
NVLAP Lab Code : 200118-0  
CNLA Certificate NO. : CNLA-ZL97018  
VCCI Certificate NO. : R-1189, C-1250  
TÜV Rheinland Certificate NO. : 10008375

NAME OF SITE : Ecom Sertech Corp. Hsin-Chu Lab.  
(Spin-off from ITRI / ERSO on Apr. 01, 2003)  
SITE LOCATION : Rm.258, Bldg.17, NO.195, Sec. 4, Chung Hsing Rd.,  
Chu-Tung Chen. Hsin-Chu, Taiwan 310 R.O.C.

## 1.7 Summary of Test Results

The EUT has been tested according to the following specifications :

**APPLIED STANDARD : FCC 47 C.F.R. Part 15, Subpart B and Subpart C**

| Standard Section           | Test Item and Limit                                                                                                                                          | Result | REMARK                        |
|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-------------------------------|
| 15.107<br>15.207           | AC Power Conducted Emission<br>Limit : 15.107                                                                                                                | PASS   | Meet the requirement of limit |
| 15.247(a)(2)               | Spectrum Bandwidth of a<br>Orthogonal Frequency Division<br>Multiplex System<br>Limit : 6dB bandwidth > 500KHz                                               | PASS   | Meet the requirement of limit |
| 15.247(b)                  | Maximum Peak Output Power<br>Limit : max. 30dBm                                                                                                              | PASS   | Meet the requirement of limit |
| 15.109<br>15.205<br>15.209 | Transmitter Radiated Emissions<br>Limit : Table 15.209                                                                                                       | PASS   | Meet the requirement of limit |
| 15.247(d)                  | Power Spectral Density<br>Limit : max. 8dBm                                                                                                                  | PASS   | Meet the requirement of limit |
| 15.247(c)                  | Out of Band Emission and<br>Restricted Band Radiation<br>Limit: 20dB less than peak value of<br>fundamental frequency<br>Restricted band Limit: Table 15.209 | PASS   | Meet the requirement of limit |



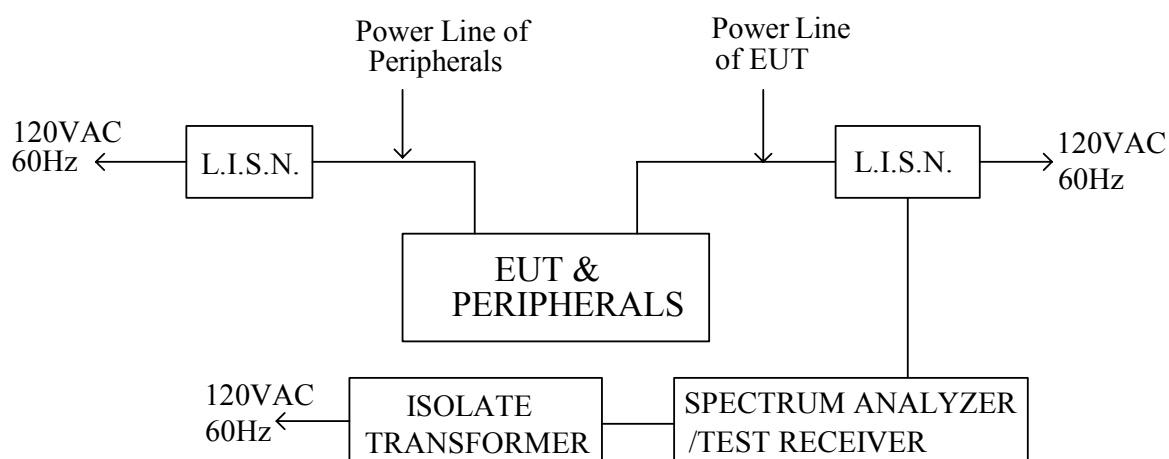
## 2. CONDUCTED POWERLINE TEST

### 2.1 Test Equipments

The following test equipments are used during the conducted powerline tests :

| Manufacturer or Type           | Model No. | Serial No.             | Date of Calibration                                                                    | Calibration Period | Remark  |
|--------------------------------|-----------|------------------------|----------------------------------------------------------------------------------------|--------------------|---------|
| HP SPECTRUM ANALYZER & DISPLAY | 8568A     | 2235A02320             | November 14, 2003                                                                      | 1 Year             | PRETEST |
| HP QUASI-PEAK ADAPTER          | 85650 A   | 2341A00672             | November 14, 2003                                                                      | 1 Year             | PRETEST |
| SOLAR ISOLATION TRANSFORMER    | 7032-1    | N/A                    | N/A                                                                                    | N/A                | FINAL   |
| EMCO L.I.S.N.                  | 3850/2    | 9311-1025<br>9401-1028 | January 08, 2004<br>For Characteristic impedance<br>May 18, 2004<br>For Insertion loss | 1 Year             | FINAL   |
| R & S TEST RECEIVER            | ESHS 30   | 838550/003             | February 11, 2004                                                                      | 1 Year             | FINAL   |
| KEENE SHIELDED ROOM            | 5983      | No.1                   | N/A                                                                                    | N/A                | FINAL   |
| R & S PULSE LIMIT              | EHS3Z2    | 357.8810.52            | July 10, 2003                                                                          | 1 Year             | FINAL   |
| N TYPE COAXIAL CABLE           | -----     | -----                  | July 10, 2003                                                                          | 1 Year             | FINAL   |
| 50Ω TERMINATOR                 | -----     | -----                  | July 10, 2003                                                                          | 1 Year             | FINAL   |

### 2.2 Test Setup



## 2.3 Conducted Power Line Emission Limit

For unintentional device, according to § 15.107(a) Line Conducted Emission Limits is as following :

| Frequency<br>(MHz) | Maximum RF Line Voltage (dB $\mu$ v) |      |         |       |
|--------------------|--------------------------------------|------|---------|-------|
|                    | CLASS A                              |      | CLASS B |       |
|                    | Q.P.                                 | Ave. | Q.P.    | Ave.  |
| 0.15 - 0.50        | 79                                   | 66   | 66-56   | 56-46 |
| 0.50 - 5.00        | 73                                   | 60   | 56      | 46    |
| 5.00 - 30.0        | 73                                   | 60   | 60      | 50    |

For intentional device, according to § 15.207(a) Line Conducted Emission Limit is same as above table.

## 2.4 Test Procedure

The test procedure is performed in a 12ft×12ft×8ft(L×W×H) shielded room. The EUT along with its peripherals were placed on a 1.0m(W)× 1.5m(L) and 0.8m in height wooden table and the EUT was adjusted to maintain a 0.4 meter space from a vertical reference plane. The EUT was connected to power mains through a line impedance stabilization network (LISN) which provides 50 ohm coupling impedance for measuring instrument and the chasis ground was bounded to the horizontal ground plane of shielded room. All peripherals were connected to the second LISN and the chasis ground also bounded to the horizontal ground plane of shielded room. The excess power cable between the EUT and the LISN was bundled. The power cables of peripherals were unbundled. All connecting cables of EUT and peripherals were moved to find the maximum emission.

## 2.5 Uncertainty of Conducted Emission

The uncertainty of conducted emission is  $\pm 1.36$ dB.

## 2.6 Conducted Power Line Emission

The frequency spectrum from 0.15 MHz to 30 MHz was investigated. All emissions not reported are much lower than the prescribed limits..

Temperature : 26 °C

Humidity : 65 % RH

| Frequency<br>(MHz) | Loss(dB) |      | Measurement |      |          |      | L1 Emission<br>(dBμV) |      | L2 Emission<br>(dBμV) |      | Limits<br>(dBμV) |       |
|--------------------|----------|------|-------------|------|----------|------|-----------------------|------|-----------------------|------|------------------|-------|
|                    |          |      | L1(dBμV)    |      | L2(dBμV) |      |                       |      |                       |      |                  |       |
|                    | L1       | L2   | Q.P.        | A.V. | Q.P.     | A.V. | Q.P.                  | A.V. | Q.P.                  | A.V. | Q.P.             | A.V.  |
| 0.150              | 0.1      | 0.2  | *           | *    | *        | *    | *                     | *    | *                     | *    | 66.00            | 56.00 |
| 0.264              | 0.10     | 0.20 | 39.90       | *    | *        | *    | 40.00                 | *    | *                     | *    | 61.30            | 51.30 |
| 0.267              | 0.10     | 0.20 | *           | *    | 38.00    | *    | *                     | *    | 38.20                 | *    | 61.21            | 51.21 |
| 0.531              | 0.10     | 0.20 | *           | *    | 36.50    | *    | *                     | *    | 36.70                 | *    | 56.00            | 46.00 |
| 0.597              | 0.10     | 0.20 | 28.70       | *    | *        | *    | 28.80                 | *    | *                     | *    | 56.00            | 46.00 |
| 0.729              | 0.10     | 0.20 | *           | *    | 28.00    | *    | *                     | *    | 28.20                 | *    | 56.00            | 46.00 |
| 1.944              | 0.10     | 0.20 | *           | *    | 16.60    | *    | *                     | *    | 16.80                 | *    | 56.00            | 46.00 |
| 1.992              | 0.10     | 0.20 | 27.00       | *    | *        | *    | 27.10                 | *    | *                     | *    | 56.00            | 46.00 |
| 2.931              | 0.19     | 0.20 | *           | *    | 21.70    | *    | *                     | *    | 21.90                 | *    | 56.00            | 46.00 |
| 4.050              | 0.20     | 0.20 | 27.60       | *    | *        | *    | 27.80                 | *    | *                     | *    | 56.00            | 46.00 |
| 4.782              | 0.20     | 0.20 | *           | *    | 27.00    | *    | *                     | *    | 27.20                 | *    | 60.00            | 50.00 |
| 7.173              | 0.32     | 0.30 | 30.00       | *    | *        | *    | 30.32                 | *    | *                     | *    | 60.00            | 50.00 |
| 9.000              | 0.40     | 0.40 | 39.20       | *    | *        | *    | 39.60                 | *    | *                     | *    | 60.00            | 50.00 |
| 12.783             | 0.50     | 0.50 | 24.00       | *    | *        | *    | 24.50                 | *    | *                     | *    | 60.00            | 50.00 |
| 13.149             | 0.50     | 0.51 | *           | *    | 32.10    | *    | *                     | *    | 32.61                 | *    | 61.00            | 51.00 |
| 15.477             | 0.65     | 0.65 | *           | *    | 30.70    | *    | *                     | *    | 31.35                 | *    | 60.00            | 50.00 |
| 15.492             | 0.65     | 0.65 | 23.40       | *    | *        | *    | 24.05                 | *    | *                     | *    | 60.00            | 50.00 |
| 30.000             | 1.4      | 1.8  | *           | *    | *        | *    | *                     | *    | *                     | *    | 60.00            | 50.00 |

### REMARKS :

- \* Undetectable or the Q.P.values is lower than the limits of Ave.
- The RF-Chip combined with 802.11b&g mode. It will auto-detect the situation then switch the mode. The 802.11g mode is the worse case than the 802.11b mode. So only the 802.11g mode data are recorded in final test report..
- After a preliminary scan and technical experiences, the power line emission of two pair of antenna are almost the same. Only one test results of power line emission are shown in the report as representative.

## 2.7 Photos of Conduction Test



### 3. RADIATED EMISSION TEST

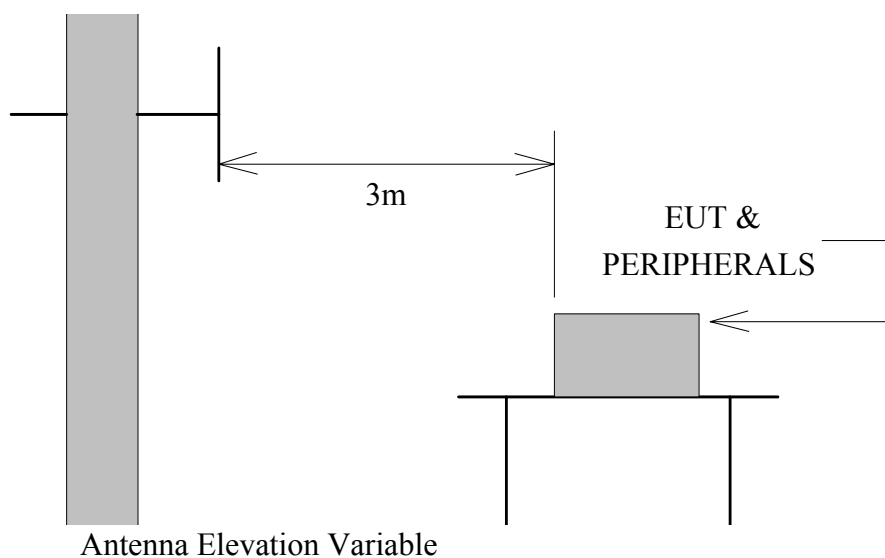
#### 3.1 Test Equipments

The following test equipments are utilized in making the measurements contained in this report.

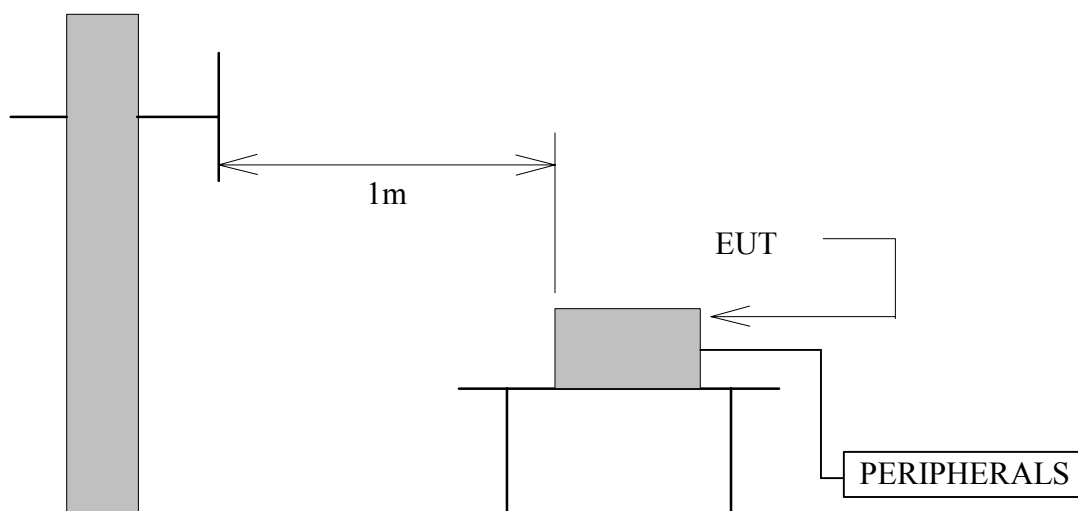
| Manufacturer or Type  | Model No    | Serial No  | Date of Calibration | Calibration Period | Remark |
|-----------------------|-------------|------------|---------------------|--------------------|--------|
| CHASE BI-LOG ANTENNA  | CBL6112B    | 2421       | May 07, 2004        | 1 Year             | FINAL  |
| R/S SPECTRUM ANALYZER | FSEK30      | 835253/002 | June 17, 2004       | 1 Year             | FINAL  |
| OPEN SITE             | -----       | No.2       | May 07, 2004        | 1 Year             | FINAL  |
| N TYPE COAXIAL CABLE  | CHA9525     | 4          | July 13, 2003       | 1 Year             | FINAL  |
| Horn Antenna          | AH-118      | 10089      | February 25, 2004   | 1 Year             | FINAL  |
| HP Pre-amplifier      | 8449B       | 3008A01471 | October 11, 2003    | 1 Year             | FINAL  |
| HP High pass filter   | 84300/80038 | 011        | CAL. ON USE         | 1 Year             | FINAL  |
| Horn Antenna          | AH-840      | 03077      | February 25, 2004   | 1 Year             | FINAL  |

#### 3.2 Test Setup

The diagram below shows the test setup that is utilized to make the measurements for emission from 30 to 1GHz.



The diagram below shows the test setup that is utilized to make the measurements for emission above 1GHz.



Antenna Elevation Variable

### 3.3 Radiation Limit

For unintentional device, according to § 15.109(a), except for Class A digital devices, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values :

| Frequency<br>(MHz) | Distance<br>(Meters) | Radiated<br>(dBμV/M) | Radiated<br>(μV/M) |
|--------------------|----------------------|----------------------|--------------------|
| 30-88              | 3                    | 40.0                 | 100                |
| 88-216             | 3                    | 43.5                 | 150                |
| 216-960            | 3                    | 46.0                 | 200                |
| Above 960          | 3                    | 54.0                 | 500                |

For intentional device, according to § 15.209(a), the general requirement of field strength of radiated emissions from intentional radiators at a distance of 3 meters shall not exceed the above table. According to § 15.247(c), in any 100kHz bandwidth outside the frequency band in which the EUT is operating, the radiofrequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of desired power.



### 3.4 Test Procedures

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 10 meter open area test site. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. During performing radiated emission below 1GHz, the EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. During performing radiated emission above 1GHz, the EUT was set 1 meters away from the interference-receiving antenna
- c. The antenna is a broadband antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarization of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. If the emission level of the EUT in peak mode was 10 dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10 dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

NOTE :

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 KHz for Peak detection (PK) and Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1 MHz for Peak detection and frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 10 Hz for Average detection (AV) at frequency above 1GHz.

### 3.5 Uncertainty of Radiated Emission

The uncertainty of radiated emission is  $\pm 2.72\text{dB}$ .



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### 3.6 Radiated Rf Noise Measurement

The frequency spectrum from 30 MHz to 1000 MHz was investigated. All emissions not reported are much lower than the prescribed limits.

All readings are quasi-peak values.

Temperature : 31 °C

Humidity : 53 % RH

| Frequency<br>(MHz) | Antenna<br>Factor<br>(dB) | Cable<br>Loss<br>(dB) | Meter Reading<br>at 3m(dB $\mu$ V/M) |          | Limits<br>at 3m<br>(dB $\mu$ V/M) | Emission Level<br>at 3m(dB $\mu$ V/M) |          |
|--------------------|---------------------------|-----------------------|--------------------------------------|----------|-----------------------------------|---------------------------------------|----------|
|                    |                           |                       | Horizontal                           | Vertical |                                   | Horizontal                            | Vertical |
| 30.00              | 21.39                     | 0.90                  | *                                    | *        | 40.00                             | *                                     | *        |
| 266.22             | 13.22                     | 3.33                  | 22.10                                | 15.80    | 46.00                             | 38.65                                 | 32.35    |
| 279.99             | 13.34                     | 3.44                  | 23.10                                | 17.50    | 46.00                             | 39.88                                 | 34.28    |
| 319.99             | 14.25                     | 3.72                  | 20.10                                | 16.70    | 46.00                             | 38.07                                 | 34.67    |
| 439.99             | 17.67                     | 4.48                  | 18.50                                | 17.20    | 46.00                             | 40.65                                 | 39.35    |
| 701.98             | 19.45                     | 5.91                  | 18.60                                | 18.50    | 46.00                             | 43.96                                 | 43.86    |
| 798.90             | 20.52                     | 6.39                  | 15.80                                | 16.10    | 46.00                             | 42.71                                 | 43.01    |
| 1000.00            | 21.58                     | 7.00                  | *                                    | *        | 54.00                             | *                                     | *        |

#### REMARKS :

1. \* Undetectable
2. Emission level (dB $\mu$ V/m) = Antenna Factor (dB/m) + Cable loss (dB) + Meter Reading (dB $\mu$ V).
3. According to technical experiences, all spurious emission at channel 1,6,11 are almost the same below 1GHz, so that the channel 1 was chosen as representative in final test.
4. Mode : Wireless 802.11b Transmitting test (11Mbps).
5. Antenna type : A pair of Dipole Antenna.



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The frequency spectrum from 30 MHz to 1000 MHz was investigated. All emissions not reported are much lower than the prescribed limits.

All readings are quasi-peak values.

Temperature : 31 °CHumidity : 53 % RH

| Frequency<br>(MHz) | Antenna<br>Factor<br>(dB) | Cable<br>Loss<br>(dB) | Meter Reading<br>at 3m(dB $\mu$ V/M) |          | Limits<br>at 3m<br>(dB $\mu$ V/M) | Emission Level<br>at 3m(dB $\mu$ V/M) |          |
|--------------------|---------------------------|-----------------------|--------------------------------------|----------|-----------------------------------|---------------------------------------|----------|
|                    |                           |                       | Horizontal                           | Vertical |                                   | Horizontal                            | Vertical |
| 30.00              | 21.39                     | 0.90                  | *                                    | *        | 40.00                             | *                                     | *        |
| 266.22             | 13.22                     | 3.33                  | 17.90                                | 14.80    | 46.00                             | 34.45                                 | 31.35    |
| 279.99             | 13.34                     | 3.44                  | 23.30                                | 16.90    | 46.00                             | 40.08                                 | 33.68    |
| 319.99             | 14.25                     | 3.72                  | 24.20                                | 18.70    | 46.00                             | 42.17                                 | 36.67    |
| 439.99             | 17.67                     | 4.48                  | 15.50                                | 16.70    | 46.00                             | 37.65                                 | 38.85    |
| 701.98             | 19.45                     | 5.91                  | 15.50                                | 15.30    | 46.00                             | 40.86                                 | 40.66    |
| 798.90             | 20.52                     | 6.39                  | 14.80                                | 14.90    | 46.00                             | 41.71                                 | 41.81    |
| 1000.00            | 21.58                     | 7.00                  | *                                    | *        | 54.00                             | *                                     | *        |

## REMARKS :

1. \* Undetectable
2. Emission level (dB $\mu$ V/m) = Antenna Factor (dB/m) + Cable loss (dB)  
+ Meter Reading (dB $\mu$ V).
3. According to technical experiences, all spurious emission at channel 1,6,11 are almost the same below 1GHz, so that the channel 1 was chosen as representative in final test.
4. Mode : Wireless 802.11g Transmitting test (6Mbps).
5. Antenna type : A pair of Dipole Antenna.

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The frequency spectrum from 30 MHz to 1000 MHz was investigated. All emissions not reported are much lower than the prescribed limits.

All readings are quasi-peak values.

Temperature : 31 °C

Humidity : 53 % RH

| Frequency<br>(MHz) | Antenna<br>Factor<br>(dB) | Cable<br>Loss<br>(dB) | Meter Reading<br>at 3m(dB $\mu$ V/M) |          | Limits<br>at 3m<br>(dB $\mu$ V/M) | Emission Level<br>at 3m(dB $\mu$ V/M) |          |
|--------------------|---------------------------|-----------------------|--------------------------------------|----------|-----------------------------------|---------------------------------------|----------|
|                    |                           |                       | Horizontal                           | Vertical |                                   | Horizontal                            | Vertical |
| 30.00              | 21.39                     | 0.90                  | *                                    | *        | 40.00                             | *                                     | *        |
| 165.89             | 10.97                     | 2.54                  | 24.20                                | 17.60    | 43.50                             | 37.71                                 | 31.11    |
| 199.99             | 10.39                     | 2.80                  | 27.10                                | 20.00    | 43.50                             | 40.29                                 | 33.19    |
| 239.90             | 12.54                     | 3.12                  | 23.00                                | 15.70    | 46.00                             | 38.66                                 | 31.36    |
| 279.99             | 13.34                     | 3.44                  | 23.40                                | 15.60    | 46.00                             | 40.18                                 | 32.38    |
| 319.99             | 14.25                     | 3.72                  | 15.60                                | 7.40     | 46.00                             | 33.57                                 | 25.37    |
| 359.99             | 15.74                     | 3.96                  | 21.40                                | 11.30    | 46.00                             | 41.10                                 | 31.00    |
| 399.99             | 17.24                     | 4.20                  | 21.00                                | 13.10    | 46.00                             | 42.44                                 | 34.54    |
| 479.98             | 18.10                     | 4.76                  | 12.60                                | 7.40     | 46.00                             | 35.46                                 | 30.26    |
| 1000.000           | 21.58                     | 7.00                  | *                                    | *        | 54.00                             | *                                     | *        |

## REMARKS :

1. \* Undetectable
2. Emission level (dB $\mu$ V/m) = Antenna Factor (dB/m) + Cable loss (dB)  
+ Meter Reading (dB $\mu$ V).
3. According to technical experiences, all spurious emission at channel 1,6,11 are almost the same below 1GHz, so that the channel 1 was chosen as representative in final test.
4. Mode : Wireless 802.11b Transmitting test (11Mbps).
5. Antenna type : One Dipole and one PIFA Antenna.

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The frequency spectrum from 30 MHz to 1000 MHz was investigated. All emissions not reported are much lower than the prescribed limits.

All readings are quasi-peak values.

Temperature : 31 °C

Humidity : 53 % RH

| Frequency<br>(MHz) | Antenna<br>Factor<br>(dB) | Cable<br>Loss<br>(dB) | Meter Reading<br>at 3m(dB $\mu$ V/M) |          | Limits<br>at 3m<br>(dB $\mu$ V/M) | Emission Level<br>at 3m(dB $\mu$ V/M) |          |
|--------------------|---------------------------|-----------------------|--------------------------------------|----------|-----------------------------------|---------------------------------------|----------|
|                    |                           |                       | Horizontal                           | Vertical |                                   | Horizontal                            | Vertical |
| 30.00              | 21.39                     | 0.90                  | *                                    | *        | 40.00                             | *                                     | *        |
| 165.89             | 10.97                     | 2.54                  | 24.50                                | 17.50    | 43.50                             | 38.01                                 | 31.01    |
| 199.99             | 10.39                     | 2.80                  | 27.30                                | 20.50    | 43.50                             | 40.49                                 | 33.69    |
| 239.90             | 12.54                     | 3.12                  | 23.20                                | 15.60    | 46.00                             | 38.86                                 | 31.26    |
| 279.99             | 13.34                     | 3.44                  | 23.50                                | 15.70    | 46.00                             | 40.28                                 | 32.48    |
| 319.99             | 14.25                     | 3.72                  | 15.70                                | 7.20     | 46.00                             | 33.67                                 | 25.17    |
| 359.99             | 15.74                     | 3.96                  | 21.60                                | 11.50    | 46.00                             | 41.30                                 | 31.20    |
| 399.99             | 17.24                     | 4.20                  | 21.20                                | 13.00    | 46.00                             | 42.64                                 | 34.44    |
| 479.98             | 18.10                     | 4.76                  | 12.90                                | 7.20     | 46.00                             | 35.76                                 | 30.06    |
| 1000.00            | 21.58                     | 7.00                  | *                                    | *        | 54.00                             | *                                     | *        |

## REMARKS :

1. \* Undetectable
2. Emission level (dB $\mu$ V/m) = Antenna Factor (dB/m) + Cable loss (dB)  
+ Meter Reading (dB $\mu$ V).
3. According to technical experiences, all spurious emission at channel 1,6,11 are almost the same below 1GHz, so that the channel 1 was chosen as representative in final test.
4. Mode : Wireless 802.11g Transmitting test (6Mbps).
5. Antenna type : One Dipole and one PIFA Antenna.

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The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

|              |                        |                 |              |
|--------------|------------------------|-----------------|--------------|
| Company      | ViewSonic Corporation. | Test Date :     | 2004/6/16    |
| Product Name | 802.11g WLAN Mini PCI  | Test By:        | Ken Tu       |
| Model Name   | AV802G                 | TEMP&Humidity : | 24.3°C , 49% |

| CH1 RX  |         |        |       | Measurement Distance at 1m Horizontal polarized |      |        |          |          |        |         |         |
|---------|---------|--------|-------|-------------------------------------------------|------|--------|----------|----------|--------|---------|---------|
| Freq.   | Reading | AF     | Cable | Pre-amp                                         | Dist | Filter | Level    | Limit    | Margin | Mark    | Height  |
| (MHz)   | (dBuV)  | (dBuV) | (dB)  | (dB)                                            | dB   | dB     | (dBuV/m) | (dBuV/m) | (dB)   | (P/Q/A) | (Meter) |
| 4823.90 | 48.45   | 34.44  | 2.82  | 35.16                                           | 9.50 | 0.00   | 41.05    | 74       | -32.95 | P       | 1.14    |
| 4823.90 | 43.57   | 34.44  | 2.82  | 35.16                                           | 9.50 | 0.00   | 36.17    | 54       | -17.83 | A       | 1.14    |
| 7236.00 | 42.38   | 39.81  | 4.79  | 35.65                                           | 9.50 | 0.00   | 41.83    | 74       | -32.17 | P       | 1.00    |
| 7236.00 | 32.18   | 39.81  | 4.79  | 35.65                                           | 9.50 | 0.00   | 31.63    | 54       | -22.37 | A       | 1.00    |
| 9648.00 | 44.98   | 38.54  | 5.90  | 36.44                                           | 9.50 | 0.00   | 43.48    | 74       | -30.52 | P       | 1.00    |
| 9648.00 | 36.08   | 38.54  | 5.90  | 36.44                                           | 9.50 | 0.00   | 34.58    | 54       | -19.42 | A       | 1.00    |

|                                                                                                                                       |
|---------------------------------------------------------------------------------------------------------------------------------------|
| 1. Measurement was up to 18GHz harmonic, "----" means that the emissions level is too low to be measured.                             |
| 2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)                |
| 3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz                                                       |
| 4. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB                             |
| 5. The result basic equation calculation as follow :<br>Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit |
| 6. The other emission levels were very low against the limit.                                                                         |
| 7. The test limit distance is 3M limit.                                                                                               |
| 8. For Wireless 802.11b mode.                                                                                                         |
| 9. Antenna type : A pair of Dipole Antenna.                                                                                           |



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The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

|              |                        |                 |              |
|--------------|------------------------|-----------------|--------------|
| Company      | ViewSonic Corporation. | Test Date :     | 2004/6/16    |
| Product Name | 802.11g WLAN Mini PCI  | Test By:        | Ken Tu       |
| Model Name   | AV802G                 | TEMP&Humidity : | 24.3°C , 49% |

| CH1 RX  |         |        |       | Measurement Distance at 1m Vertical polarized |      |        |          |          |        |         |         |
|---------|---------|--------|-------|-----------------------------------------------|------|--------|----------|----------|--------|---------|---------|
| Freq.   | Reading | AF     | Cable | Pre-amp                                       | Dist | Filter | Level    | Limit    | Margin | Mark    | Height  |
| (MHz)   | (dBuV)  | (dBuV) | (dB)  | (dB)                                          | dB   | dB     | (dBuV/m) | (dBuV/m) | (dB)   | (P/Q/A) | (Meter) |
| 4823.84 | 50.22   | 34.44  | 2.82  | 35.16                                         | 9.50 | 0.00   | 42.82    | 74       | -31.18 | P       | 1.04    |
| 4823.84 | 46.34   | 34.44  | 2.82  | 35.16                                         | 9.50 | 0.00   | 38.94    | 54       | -15.06 | A       | 1.04    |
| 7236.00 | 43.89   | 39.81  | 4.79  | 35.65                                         | 9.50 | 0.00   | 43.34    | 74       | -30.66 | P       | 1.00    |
| 7236.00 | 33.45   | 39.81  | 4.79  | 35.65                                         | 9.50 | 0.00   | 32.90    | 54       | -21.10 | A       | 1.00    |
| 9647.91 | 46.92   | 38.54  | 5.90  | 36.44                                         | 9.50 | 0.00   | 45.42    | 74       | -28.58 | P       | 1.00    |
| 9647.91 | 38.19   | 38.54  | 5.90  | 36.44                                         | 9.50 | 0.00   | 36.69    | 54       | -17.31 | A       | 1.00    |

|                                                                                                                                       |
|---------------------------------------------------------------------------------------------------------------------------------------|
| 1. Measurement was up to 18GHz harmonic, "----" means that the emissions level is too low to be measured.                             |
| 2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)                |
| 3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz                                                       |
| 4. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB                             |
| 5. The result basic equation calculation as follow :<br>Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit |
| 6. The other emission levels were very low against the limit.                                                                         |
| 7. The test limit distance is 3M limit.                                                                                               |
| 8. For Wireless 802.11b mode.                                                                                                         |
| 9. Antenna type : A pair of Dipole Antenna.                                                                                           |

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The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

|              |                        |                 |              |
|--------------|------------------------|-----------------|--------------|
| Company      | ViewSonic Corporation. | Test Date :     | 2004/6/16    |
| Product Name | 802.11g WLAN Mini PCI  | Test By:        | Ken Tu       |
| Model Name   | AV802G                 | TEMP&Humidity : | 24.3°C , 49% |

| CH6 RX  |         |        |       | Measurement Distance at 1m Horizontal polarized |      |        |          |          |        |         |         |
|---------|---------|--------|-------|-------------------------------------------------|------|--------|----------|----------|--------|---------|---------|
| Freq.   | Reading | AF     | Cable | Pre-amp                                         | Dist | Filter | Level    | Limit    | Margin | Mark    | Height  |
| (MHz)   | (dBuV)  | (dBuV) | (dB)  | (dB)                                            | dB   | dB     | (dBuV/m) | (dBuV/m) | (dB)   | (P/Q/A) | (Meter) |
| 4873.94 | 48.71   | 34.77  | 2.73  | 35.20                                           | 9.50 | 0.00   | 41.51    | 74       | -32.49 | P       | 1.11    |
| 4873.94 | 44.22   | 34.77  | 2.73  | 35.20                                           | 9.50 | 0.00   | 37.02    | 54       | -16.98 | A       | 1.11    |
| 7311.10 | 42.54   | 39.78  | 4.82  | 35.64                                           | 9.50 | 0.00   | 42.00    | 74       | -32.00 | P       | 1.00    |
| 7311.10 | 32.32   | 39.78  | 4.82  | 35.64                                           | 9.50 | 0.00   | 31.78    | 54       | -22.22 | A       | 1.00    |
| 9748.00 | 46.46   | 38.53  | 5.90  | 36.60                                           | 9.50 | 0.00   | 44.79    | 74       | -29.21 | P       | 1.00    |
| 9748.00 | 38.70   | 38.53  | 5.90  | 36.60                                           | 9.50 | 0.00   | 37.03    | 54       | -16.97 | A       | 1.00    |

1. Measurement was up to 18GHz harmonic, "----" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
5. The result basic equation calculation as follow :  
Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
6. The other emission levels were very low against the limit.
7. The test limit distance is 3M limit.
8. For Wireless 802.11b mode.
9. Antenna type : A pair of Dipole Antenna.

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The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

|              |                        |                 |              |
|--------------|------------------------|-----------------|--------------|
| Company      | ViewSonic Corporation. | Test Date :     | 2004/6/16    |
| Product Name | 802.11g WLAN Mini PCI  | Test By:        | Ken Tu       |
| Model Name   | AV802G                 | TEMP&Humidity : | 24.3°C , 49% |

| CH6 RX  |         |        |       | Measurement Distance at 1m Vertical polarized |      |        |          |          |        |         |         |
|---------|---------|--------|-------|-----------------------------------------------|------|--------|----------|----------|--------|---------|---------|
| Freq.   | Reading | AF     | Cable | Pre-amp                                       | Dist | Filter | Level    | Limit    | Margin | Mark    | Height  |
| (MHz)   | (dBuV)  | (dBuV) | (dB)  | (dB)                                          | dB   | dB     | (dBuV/m) | (dBuV/m) | (dB)   | (P/Q/A) | (Meter) |
| 4873.91 | 52.48   | 34.77  | 2.73  | 35.20                                         | 9.50 | 0.00   | 45.28    | 74       | -28.72 | P       | 1.05    |
| 4873.91 | 49.24   | 34.77  | 2.73  | 35.20                                         | 9.50 | 0.00   | 42.04    | 54       | -11.96 | A       | 1.05    |
| 7311.10 | 42.81   | 39.78  | 4.82  | 35.64                                         | 9.50 | 0.00   | 42.27    | 74       | -31.73 | P       | 1.00    |
| 7311.10 | 32.41   | 39.78  | 4.82  | 35.64                                         | 9.50 | 0.00   | 31.87    | 54       | -22.13 | A       | 1.00    |
| 9747.91 | 46.58   | 38.53  | 5.90  | 36.60                                         | 9.50 | 0.00   | 44.91    | 74       | -29.09 | P       | 1.00    |
| 9747.91 | 38.85   | 38.53  | 5.90  | 36.60                                         | 9.50 | 0.00   | 37.18    | 54       | -16.82 | A       | 1.00    |

1. Measurement was up to 18GHz harmonic, "----" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
5. The result basic equation calculation as follow :  
Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
6. The other emission levels were very low against the limit.
7. The test limit distance is 3M limit.
8. For Wireless 802.11b mode.
9. Antenna type : A pair of Dipole Antenna.

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The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

|              |                        |                 |              |
|--------------|------------------------|-----------------|--------------|
| Company      | ViewSonic Corporation. | Test Date :     | 2004/6/16    |
| Product Name | 802.11g WLAN Mini PCI  | Test By:        | Ken Tu       |
| Model Name   | AV802G                 | TEMP&Humidity : | 24.3°C , 49% |

| CH11 RX |         |        |       | Measurement Distance at 1m Horizontal polarized |      |        |          |          |        |         |         |
|---------|---------|--------|-------|-------------------------------------------------|------|--------|----------|----------|--------|---------|---------|
| Freq.   | Reading | AF     | Cable | Pre-amp                                         | Dist | Filter | Level    | Limit    | Margin | Mark    | Height  |
| (MHz)   | (dBuV)  | (dBuV) | (dB)  | (dB)                                            | dB   | dB     | (dBuV/m) | (dBuV/m) | (dB)   | (P/Q/A) | (Meter) |
| 4923.98 | 50.59   | 35.10  | 2.64  | 35.24                                           | 9.50 | 0.00   | 43.59    | 74       | -30.41 | P       | 1.10    |
| 4923.98 | 46.89   | 35.10  | 2.64  | 35.24                                           | 9.50 | 0.00   | 39.89    | 54       | -14.11 | A       | 1.10    |
| 7386.00 | 43.18   | 39.75  | 4.85  | 35.62                                           | 9.50 | 0.00   | 42.66    | 74       | -31.34 | P       | 1.00    |
| 7386.00 | 32.34   | 39.75  | 4.85  | 35.62                                           | 9.50 | 0.00   | 31.82    | 54       | -22.18 | A       | 1.00    |
| 9847.97 | 46.34   | 38.52  | 5.90  | 36.76                                           | 9.50 | 0.00   | 44.50    | 74       | -29.50 | P       | 1.00    |
| 9847.97 | 36.41   | 38.52  | 5.90  | 36.76                                           | 9.50 | 0.00   | 34.57    | 54       | -19.43 | A       | 1.00    |

|                                                                                                                                       |
|---------------------------------------------------------------------------------------------------------------------------------------|
| 1. Measurement was up to 18GHz harmonic, "----" means that the emissions level is too low to be measured.                             |
| 2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)                |
| 3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz                                                       |
| 4. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB                             |
| 5. The result basic equation calculation as follow :<br>Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit |
| 6. The other emission levels were very low against the limit.                                                                         |
| 7. The test limit distance is 3M limit.                                                                                               |
| 8. For Wireless 802.11b mode.                                                                                                         |
| 9. Antenna type : A pair of Dipole Antenna.                                                                                           |



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The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

|              |                        |                 |              |
|--------------|------------------------|-----------------|--------------|
| Company      | ViewSonic Corporation. | Test Date :     | 2004/6/16    |
| Product Name | 802.11g WLAN Mini PCI  | Test By:        | Ken Tu       |
| Model Name   | AV802G                 | TEMP&Humidity : | 24.3°C , 49% |

| CH11 RX |         |        |       | Measurement Distance at 1m Vertical polarized |      |        |          |          |        |         |         |
|---------|---------|--------|-------|-----------------------------------------------|------|--------|----------|----------|--------|---------|---------|
| Freq.   | Reading | AF     | Cable | Pre-amp                                       | Dist | Filter | Level    | Limit    | Margin | Mark    | Height  |
| (MHz)   | (dBuV)  | (dBuV) | (dB)  | (dB)                                          | dB   | dB     | (dBuV/m) | (dBuV/m) | (dB)   | (P/Q/A) | (Meter) |
| 4923.96 | 52.73   | 35.10  | 2.64  | 35.24                                         | 9.50 | 0.00   | 45.73    | 74       | -28.27 | P       | 1.08    |
| 4923.96 | 49.73   | 35.10  | 2.64  | 35.24                                         | 9.50 | 0.00   | 42.73    | 54       | -11.27 | A       | 1.08    |
| 7386.00 | 43.25   | 39.75  | 4.85  | 35.62                                         | 9.50 | 0.00   | 42.73    | 74       | -31.27 | P       | 1.00    |
| 7386.00 | 32.49   | 39.75  | 4.85  | 35.62                                         | 9.50 | 0.00   | 31.97    | 54       | -22.03 | A       | 1.00    |
| 9847.97 | 47.25   | 38.52  | 5.90  | 36.76                                         | 9.50 | 0.00   | 45.41    | 74       | -28.59 | P       | 1.00    |
| 9847.97 | 39.00   | 38.52  | 5.90  | 36.76                                         | 9.50 | 0.00   | 37.16    | 54       | -16.84 | A       | 1.00    |

|                                                                                                                                       |
|---------------------------------------------------------------------------------------------------------------------------------------|
| 1. Measurement was up to 18GHz harmonic, "----" means that the emissions level is too low to be measured.                             |
| 2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)                |
| 3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz                                                       |
| 4. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB                             |
| 5. The result basic equation calculation as follow :<br>Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit |
| 6. The other emission levels were very low against the limit.                                                                         |
| 7. The test limit distance is 3M limit.                                                                                               |
| 8. For Wireless 802.11b mode.                                                                                                         |
| 9. Antenna type : A pair of Dipole Antenna.                                                                                           |

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The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

|              |                        |                 |              |
|--------------|------------------------|-----------------|--------------|
| Company      | ViewSonic Corporation. | Test Date :     | 2004/6/16    |
| Product Name | 802.11g WLAN Mini PCI  | Test By:        | Ken Tu       |
| Model Name   | AV802G                 | TEMP&Humidity : | 24.3°C , 49% |

| CH1 RX  |         |        |       | Measurement Distance at 1m Horizontal polarized |      |        |          |          |        |         |         |
|---------|---------|--------|-------|-------------------------------------------------|------|--------|----------|----------|--------|---------|---------|
| Freq.   | Reading | AF     | Cable | Pre-amp                                         | Dist | Filter | Level    | Limit    | Margin | Mark    | Height  |
| (MHz)   | (dBuV)  | (dBuV) | (dB)  | (dB)                                            | dB   | dB     | (dBuV/m) | (dBuV/m) | (dB)   | (P/Q/A) | (Meter) |
| 4823.92 | 47.75   | 34.44  | 2.82  | 35.16                                           | 9.50 | 0.00   | 40.35    | 74       | -33.65 | P       | 1.18    |
| 4823.92 | 41.96   | 34.44  | 2.82  | 35.16                                           | 9.50 | 0.00   | 34.56    | 54       | -19.44 | A       | 1.18    |
| 7236.00 | 42.94   | 39.81  | 4.79  | 35.65                                           | 9.50 | 0.00   | 42.39    | 74       | -31.61 | P       | 1.00    |
| 7236.00 | 32.44   | 39.81  | 4.79  | 35.65                                           | 9.50 | 0.00   | 31.89    | 54       | -22.11 | A       | 1.00    |
| 9647.83 | 47.55   | 38.54  | 5.90  | 36.44                                           | 9.50 | 0.00   | 46.05    | 74       | -27.95 | P       | 1.00    |
| 9647.83 | 40.21   | 38.54  | 5.90  | 36.44                                           | 9.50 | 0.00   | 38.71    | 54       | -15.29 | A       | 1.00    |

|                                                                                                                                       |
|---------------------------------------------------------------------------------------------------------------------------------------|
| 1. Measurement was up to 18GHz harmonic, "----" means that the emissions level is too low to be measured.                             |
| 2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)                |
| 3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz                                                       |
| 4. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB                             |
| 5. The result basic equation calculation as follow :<br>Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit |
| 6. The other emission levels were very low against the limit.                                                                         |
| 7. The test limit distance is 3M limit.                                                                                               |
| 8. For Wireless 802.11g mode.                                                                                                         |
| 9. Antenna type : A pair of Dipole Antenna.                                                                                           |

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The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

|              |                        |                 |              |
|--------------|------------------------|-----------------|--------------|
| Company      | ViewSonic Corporation. | Test Date :     | 2004/6/16    |
| Product Name | 802.11g WLAN Mini PCI  | Test By:        | Ken Tu       |
| Model Name   | AV802G                 | TEMP&Humidity : | 24.3°C , 49% |

| CH1 RX  |         |        |       | Measurement Distance at 1m Vertical polarized |      |        |          |          |        |         |         |
|---------|---------|--------|-------|-----------------------------------------------|------|--------|----------|----------|--------|---------|---------|
| Freq.   | Reading | AF     | Cable | Pre-amp                                       | Dist | Filter | Level    | Limit    | Margin | Mark    | Height  |
| (MHz)   | (dBuV)  | (dBuV) | (dB)  | (dB)                                          | dB   | dB     | (dBuV/m) | (dBuV/m) | (dB)   | (P/Q/A) | (Meter) |
| 4823.97 | 51.31   | 34.44  | 2.82  | 35.16                                         | 9.50 | 0.00   | 43.91    | 74       | -30.09 | P       | 1.08    |
| 4823.97 | 48.14   | 34.44  | 2.82  | 35.16                                         | 9.50 | 0.00   | 40.74    | 54       | -13.26 | A       | 1.08    |
| 7236.00 | 42.49   | 39.81  | 4.79  | 35.65                                         | 9.50 | 0.00   | 41.94    | 74       | -32.06 | P       | 1.00    |
| 7236.00 | 32.12   | 39.81  | 4.79  | 35.65                                         | 9.50 | 0.00   | 31.57    | 54       | -22.43 | A       | 1.00    |
| 9647.89 | 47.75   | 38.54  | 5.90  | 36.44                                         | 9.50 | 0.00   | 46.25    | 74       | -27.75 | P       | 1.00    |
| 9647.89 | 40.53   | 38.54  | 5.90  | 36.44                                         | 9.50 | 0.00   | 39.03    | 54       | -14.97 | A       | 1.00    |

|                                                                                                                                       |
|---------------------------------------------------------------------------------------------------------------------------------------|
| 1. Measurement was up to 18GHz harmonic, "----" means that the emissions level is too low to be measured.                             |
| 2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)                |
| 3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz                                                       |
| 4. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB                             |
| 5. The result basic equation calculation as follow :<br>Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit |
| 6. The other emission levels were very low against the limit.                                                                         |
| 7. The test limit distance is 3M limit.                                                                                               |
| 8. For Wireless 802.11g mode.                                                                                                         |
| 9. Antenna type : A pair of Dipole Antenna.                                                                                           |

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The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

|              |                        |                 |              |
|--------------|------------------------|-----------------|--------------|
| Company      | ViewSonic Corporation. | Test Date :     | 2004/6/16    |
| Product Name | 802.11g WLAN Mini PCI  | Test By:        | Ken Tu       |
| Model Name   | AV802G                 | TEMP&Humidity : | 24.3°C , 49% |

| CH6 RX  |         |        |       | Measurement Distance at 1m Horizontal polarized |      |        |          |          |        |         |         |
|---------|---------|--------|-------|-------------------------------------------------|------|--------|----------|----------|--------|---------|---------|
| Freq.   | Reading | AF     | Cable | Pre-amp                                         | Dist | Filter | Level    | Limit    | Margin | Mark    | Height  |
| (MHz)   | (dBuV)  | (dBuV) | (dB)  | (dB)                                            | dB   | dB     | (dBuV/m) | (dBuV/m) | (dB)   | (P/Q/A) | (Meter) |
| 4873.93 | 48.75   | 34.77  | 2.73  | 35.20                                           | 9.50 | 0.00   | 41.55    | 74       | -32.45 | P       | 1.17    |
| 4873.93 | 44.54   | 34.77  | 2.73  | 35.20                                           | 9.50 | 0.00   | 37.34    | 54       | -16.66 | A       | 1.17    |
| 7311.10 | 43.12   | 39.78  | 4.82  | 35.64                                           | 9.50 | 0.00   | 42.58    | 74       | -31.42 | P       | 1.00    |
| 7311.10 | 33.02   | 39.78  | 4.82  | 35.64                                           | 9.50 | 0.00   | 32.48    | 54       | -21.52 | A       | 1.00    |
| 9748.05 | 46.13   | 38.53  | 5.90  | 36.60                                           | 9.50 | 0.00   | 44.46    | 74       | -29.54 | P       | 1.00    |
| 9748.05 | 37.21   | 38.53  | 5.90  | 36.60                                           | 9.50 | 0.00   | 35.54    | 54       | -18.46 | A       | 1.00    |

|                                                                                                                                       |
|---------------------------------------------------------------------------------------------------------------------------------------|
| 1. Measurement was up to 18GHz harmonic, "----" means that the emissions level is too low to be measured.                             |
| 2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)                |
| 3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz                                                       |
| 4. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB                             |
| 5. The result basic equation calculation as follow :<br>Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit |
| 6. The other emission levels were very low against the limit.                                                                         |
| 7. The test limit distance is 3M limit.                                                                                               |
| 8. For Wireless 802.11g mode.                                                                                                         |
| 9. Antenna type : A pair of Dipole Antenna.                                                                                           |

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The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

|              |                        |                 |              |
|--------------|------------------------|-----------------|--------------|
| Company      | ViewSonic Corporation. | Test Date :     | 2004/6/16    |
| Product Name | 802.11g WLAN Mini PCI  | Test By:        | Ken Tu       |
| Model Name   | AV802G                 | TEMP&Humidity : | 24.3°C , 49% |

| CH6 RX  |         |        |       | Measurement Distance at 1m Vertical polarized |      |        |          |          |        |         |         |
|---------|---------|--------|-------|-----------------------------------------------|------|--------|----------|----------|--------|---------|---------|
| Freq.   | Reading | AF     | Cable | Pre-amp                                       | Dist | Filter | Level    | Limit    | Margin | Mark    | Height  |
| (MHz)   | (dBuV)  | (dBuV) | (dB)  | (dB)                                          | dB   | dB     | (dBuV/m) | (dBuV/m) | (dB)   | (P/Q/A) | (Meter) |
| 4873.94 | 52.78   | 34.77  | 2.73  | 35.20                                         | 9.50 | 0.00   | 45.58    | 74       | -28.42 | P       | 1.03    |
| 4873.94 | 49.10   | 34.77  | 2.73  | 35.20                                         | 9.50 | 0.00   | 41.90    | 54       | -12.10 | A       | 1.03    |
| 7311.10 | 43.58   | 39.78  | 4.82  | 35.64                                         | 9.50 | 0.00   | 43.04    | 74       | -30.96 | P       | 1.00    |
| 7311.10 | 33.64   | 39.78  | 4.82  | 35.64                                         | 9.50 | 0.00   | 33.10    | 54       | -20.90 | A       | 1.00    |
| 9748.01 | 47.00   | 38.53  | 5.90  | 36.60                                         | 9.50 | 0.00   | 45.33    | 74       | -28.67 | P       | 1.00    |
| 9748.01 | 39.32   | 38.53  | 5.90  | 36.60                                         | 9.50 | 0.00   | 37.65    | 54       | -16.35 | A       | 1.00    |

|                                                                                                                                       |
|---------------------------------------------------------------------------------------------------------------------------------------|
| 1. Measurement was up to 18GHz harmonic, "----" means that the emissions level is too low to be measured.                             |
| 2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)                |
| 3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz                                                       |
| 4. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB                             |
| 5. The result basic equation calculation as follow :<br>Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit |
| 6. The other emission levels were very low against the limit.                                                                         |
| 7. The test limit distance is 3M limit.                                                                                               |
| 8. For Wireless 802.11g mode.                                                                                                         |
| 9. Antenna type : A pair of Dipole Antenna.                                                                                           |

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The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

|              |                        |                 |              |
|--------------|------------------------|-----------------|--------------|
| Company      | ViewSonic Corporation. | Test Date :     | 2004/6/16    |
| Product Name | 802.11g WLAN Mini PCI  | Test By:        | Ken Tu       |
| Model Name   | AV802G                 | TEMP&Humidity : | 24.3°C , 49% |

| CH11 RX |         |        |       | Measurement Distance at 1m Horizontal polarized |      |        |          |          |        |         |         |
|---------|---------|--------|-------|-------------------------------------------------|------|--------|----------|----------|--------|---------|---------|
| Freq.   | Reading | AF     | Cable | Pre-amp                                         | Dist | Filter | Level    | Limit    | Margin | Mark    | Height  |
| (MHz)   | (dBuV)  | (dBuV) | (dB)  | (dB)                                            | dB   | dB     | (dBuV/m) | (dBuV/m) | (dB)   | (P/Q/A) | (Meter) |
| 4924.01 | 48.65   | 35.10  | 2.64  | 35.24                                           | 9.50 | 0.00   | 41.65    | 74       | -32.35 | P       | 1.17    |
| 4924.01 | 45.00   | 35.10  | 2.64  | 35.24                                           | 9.50 | 0.00   | 38.00    | 54       | -16.00 | A       | 1.17    |
| 7386.00 | 43.58   | 39.75  | 4.85  | 35.62                                           | 9.50 | 0.00   | 43.06    | 74       | -30.94 | P       | 1.00    |
| 7386.00 | 32.54   | 39.75  | 4.85  | 35.62                                           | 9.50 | 0.00   | 32.02    | 54       | -21.98 | A       | 1.00    |
| 9847.97 | 46.77   | 38.52  | 5.90  | 36.76                                           | 9.50 | 0.00   | 44.93    | 74       | -29.07 | P       | 1.00    |
| 9847.97 | 37.06   | 38.52  | 5.90  | 36.76                                           | 9.50 | 0.00   | 35.22    | 54       | -18.78 | A       | 1.00    |

|                                                                                                                                       |
|---------------------------------------------------------------------------------------------------------------------------------------|
| 1. Measurement was up to 18GHz harmonic, "----" means that the emissions level is too low to be measured.                             |
| 2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)                |
| 3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz                                                       |
| 4. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB                             |
| 5. The result basic equation calculation as follow :<br>Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit |
| 6. The other emission levels were very low against the limit.                                                                         |
| 7. The test limit distance is 3M limit.                                                                                               |
| 8. For Wireless 802.11g mode.                                                                                                         |
| 9. Antenna type : A pair of Dipole Antenna.                                                                                           |

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The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

|              |                        |                 |              |
|--------------|------------------------|-----------------|--------------|
| Company      | ViewSonic Corporation. | Test Date :     | 2004/6/16    |
| Product Name | 802.11g WLAN Mini PCI  | Test By:        | Ken Tu       |
| Model Name   | AV802G                 | TEMP&Humidity : | 24.3°C , 49% |

| CH11 RX |         |        |       | Measurement Distance at 1m Vertical polarized |      |        |          |          |        |         |         |
|---------|---------|--------|-------|-----------------------------------------------|------|--------|----------|----------|--------|---------|---------|
| Freq.   | Reading | AF     | Cable | Pre-amp                                       | Dist | Filter | Level    | Limit    | Margin | Mark    | Height  |
| (MHz)   | (dBuV)  | (dBuV) | (dB)  | (dB)                                          | dB   | dB     | (dBuV/m) | (dBuV/m) | (dB)   | (P/Q/A) | (Meter) |
| 4923.95 | 52.94   | 35.10  | 2.64  | 35.24                                         | 9.50 | 0.00   | 45.94    | 74       | -28.06 | P       | 1.08    |
| 4923.95 | 50.11   | 35.10  | 2.64  | 35.24                                         | 9.50 | 0.00   | 43.11    | 54       | -10.89 | A       | 1.08    |
| 7386.00 | 42.30   | 39.75  | 4.85  | 35.62                                         | 9.50 | 0.00   | 41.78    | 74       | -32.22 | P       | 1.00    |
| 7386.00 | 32.79   | 39.75  | 4.85  | 35.62                                         | 9.50 | 0.00   | 32.27    | 54       | -21.73 | A       | 1.00    |
| 9847.86 | 47.22   | 38.52  | 5.90  | 36.76                                         | 9.50 | 0.00   | 45.38    | 74       | -28.62 | P       | 1.00    |
| 9847.86 | 39.89   | 38.52  | 5.90  | 36.76                                         | 9.50 | 0.00   | 38.05    | 54       | -15.95 | A       | 1.00    |

1. Measurement was up to 18GHz harmonic, "----" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
5. The result basic equation calculation as follow :  
Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
6. The other emission levels were very low against the limit.
7. The test limit distance is 3M limit.
8. For Wireless 802.11g mode.
9. Antenna type : A pair of Dipole Antenna.

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The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

|              |                        |                 |              |
|--------------|------------------------|-----------------|--------------|
| Company      | ViewSonic Corporation. | Test Date :     | 2004/6/16    |
| Product Name | 802.11g WLAN Mini PCI  | Test By:        | Ken Tu       |
| Model Name   | AV802G                 | TEMP&Humidity : | 24.3°C , 49% |

| CH1 RX  |         |        |       | Measurement Distance at 1m Horizontal polarized |      |        |          |          |        |         |         |
|---------|---------|--------|-------|-------------------------------------------------|------|--------|----------|----------|--------|---------|---------|
| Freq.   | Reading | AF     | Cable | Pre-amp                                         | Dist | Filter | Level    | Limit    | Margin | Mark    | Height  |
| (MHz)   | (dBuV)  | (dBuV) | (dB)  | (dB)                                            | dB   | dB     | (dBuV/m) | (dBuV/m) | (dB)   | (P/Q/A) | (Meter) |
| 4823.96 | 49.51   | 34.44  | 2.82  | 35.16                                           | 9.50 | 0.00   | 42.11    | 74       | -31.89 | P       | 1.14    |
| 4823.96 | 45.58   | 34.44  | 2.82  | 35.16                                           | 9.50 | 0.00   | 38.18    | 54       | -15.82 | A       | 1.14    |
| 7236.00 | 43.18   | 39.81  | 4.79  | 35.65                                           | 9.50 | 0.00   | 42.63    | 74       | -31.37 | P       | 1.00    |
| 7236.00 | 33.03   | 39.81  | 4.79  | 35.65                                           | 9.50 | 0.00   | 32.48    | 54       | -21.52 | A       | 1.00    |
| 9647.98 | 47.14   | 38.54  | 5.90  | 36.44                                           | 9.50 | 0.00   | 45.64    | 74       | -28.36 | P       | 1.00    |
| 9647.98 | 40.31   | 38.54  | 5.90  | 36.44                                           | 9.50 | 0.00   | 38.81    | 54       | -15.19 | A       | 1.00    |

|                                                                                                                                       |
|---------------------------------------------------------------------------------------------------------------------------------------|
| 1. Measurement was up to 18GHz harmonic, "----" means that the emissions level is too low to be measured.                             |
| 2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)                |
| 3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz                                                       |
| 4. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB                             |
| 5. The result basic equation calculation as follow :<br>Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit |
| 6. The other emission levels were very low against the limit.                                                                         |
| 7. The test limit distance is 3M limit.                                                                                               |
| 8. For Wireless 802.11b mode.                                                                                                         |
| 9. Antenna type : One Dipole and one PIFA Antenna.                                                                                    |



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The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

|              |                        |                 |              |
|--------------|------------------------|-----------------|--------------|
| Company      | ViewSonic Corporation. | Test Date :     | 2004/6/16    |
| Product Name | 802.11g WLAN Mini PCI  | Test By:        | Ken Tu       |
| Model Name   | AV802G                 | TEMP&Humidity : | 24.3°C , 49% |

| CH1 RX  |         |        |       | Measurement Distance at 1m Vertical polarized |      |        |          |          |        |         |         |
|---------|---------|--------|-------|-----------------------------------------------|------|--------|----------|----------|--------|---------|---------|
| Freq.   | Reading | AF     | Cable | Pre-amp                                       | Dist | Filter | Level    | Limit    | Margin | Mark    | Height  |
| (MHz)   | (dBuV)  | (dBuV) | (dB)  | (dB)                                          | dB   | dB     | (dBuV/m) | (dBuV/m) | (dB)   | (P/Q/A) | (Meter) |
| 4824.00 | 53.17   | 34.44  | 2.82  | 35.16                                         | 9.50 | 0.00   | 45.77    | 74       | -28.23 | P       | 1.04    |
| 4824.00 | 50.17   | 34.44  | 2.82  | 35.16                                         | 9.50 | 0.00   | 42.77    | 54       | -11.23 | A       | 1.04    |
| 7236.00 | 43.39   | 39.81  | 4.79  | 35.65                                         | 9.50 | 0.00   | 42.84    | 74       | -31.16 | P       | 1.00    |
| 7236.00 | 33.07   | 39.81  | 4.79  | 35.65                                         | 9.50 | 0.00   | 32.52    | 54       | -21.48 | A       | 1.00    |
| 9647.83 | 46.84   | 38.54  | 5.90  | 36.44                                         | 9.50 | 0.00   | 45.34    | 74       | -28.66 | P       | 1.00    |
| 9647.83 | 39.53   | 38.54  | 5.90  | 36.44                                         | 9.50 | 0.00   | 38.03    | 54       | -15.97 | A       | 1.00    |

1. Measurement was up to 18GHz harmonic, "----" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
5. The result basic equation calculation as follow :  
Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
6. The other emission levels were very low against the limit.
7. The test limit distance is 3M limit.
8. For Wireless 802.11b mode.
9. Antenna type : One Dipole and one PIFA Antenna.

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The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

|              |                        |                 |              |
|--------------|------------------------|-----------------|--------------|
| Company      | ViewSonic Corporation. | Test Date :     | 2004/6/16    |
| Product Name | 802.11g WLAN Mini PCI  | Test By:        | Ken Tu       |
| Model Name   | AV802G                 | TEMP&Humidity : | 24.3°C , 49% |

| CH6 RX  |         |        |       | Measurement Distance at 1m Horizontal polarized |      |        |          |          |        |         |         |
|---------|---------|--------|-------|-------------------------------------------------|------|--------|----------|----------|--------|---------|---------|
| Freq.   | Reading | AF     | Cable | Pre-amp                                         | Dist | Filter | Level    | Limit    | Margin | Mark    | Height  |
| (MHz)   | (dBuV)  | (dBuV) | (dB)  | (dB)                                            | dB   | dB     | (dBuV/m) | (dBuV/m) | (dB)   | (P/Q/A) | (Meter) |
| 4874.01 | 50.86   | 34.77  | 2.73  | 35.20                                           | 9.50 | 0.00   | 43.66    | 74       | -30.34 | P       | 1.11    |
| 4874.01 | 46.60   | 34.77  | 2.73  | 35.20                                           | 9.50 | 0.00   | 39.40    | 54       | -14.60 | A       | 1.11    |
| 7311.04 | 42.87   | 39.78  | 4.82  | 35.64                                           | 9.50 | 0.00   | 42.33    | 74       | -31.67 | P       | 1.00    |
| 7311.04 | 32.68   | 39.78  | 4.82  | 35.64                                           | 9.50 | 0.00   | 32.14    | 54       | -21.86 | A       | 1.00    |
| 9748.02 | 46.73   | 38.53  | 5.90  | 36.60                                           | 9.50 | 0.00   | 45.06    | 74       | -28.94 | P       | 1.00    |
| 9748.02 | 39.77   | 38.53  | 5.90  | 36.60                                           | 9.50 | 0.00   | 38.10    | 54       | -15.90 | A       | 1.00    |

|                                                                                                                                       |
|---------------------------------------------------------------------------------------------------------------------------------------|
| 1. Measurement was up to 18GHz harmonic, "----" means that the emissions level is too low to be measured.                             |
| 2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)                |
| 3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz                                                       |
| 4. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB                             |
| 5. The result basic equation calculation as follow :<br>Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit |
| 6. The other emission levels were very low against the limit.                                                                         |
| 7. The test limit distance is 3M limit.                                                                                               |
| 8. For Wireless 802.11b mode.                                                                                                         |
| 9. Antenna type : One Dipole and one PIFA Antenna.                                                                                    |

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The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

|              |                        |                 |              |
|--------------|------------------------|-----------------|--------------|
| Company      | ViewSonic Corporation. | Test Date :     | 2004/6/16    |
| Product Name | 802.11g WLAN Mini PCI  | Test By:        | Ken Tu       |
| Model Name   | AV802G                 | TEMP&Humidity : | 24.3°C , 49% |

| CH6 RX  |         |        |       | Measurement Distance at 1m Vertical polarized |      |        |          |          |        |         |         |
|---------|---------|--------|-------|-----------------------------------------------|------|--------|----------|----------|--------|---------|---------|
| Freq.   | Reading | AF     | Cable | Pre-amp                                       | Dist | Filter | Level    | Limit    | Margin | Mark    | Height  |
| (MHz)   | (dBuV)  | (dBuV) | (dB)  | (dB)                                          | dB   | dB     | (dBuV/m) | (dBuV/m) | (dB)   | (P/Q/A) | (Meter) |
| 4873.91 | 54.67   | 34.77  | 2.73  | 35.20                                         | 9.50 | 0.00   | 47.47    | 74       | -26.53 | P       | 1.05    |
| 4873.91 | 52.45   | 34.77  | 2.73  | 35.20                                         | 9.50 | 0.00   | 45.25    | 54       | -8.75  | A       | 1.05    |
| 7311.10 | 43.12   | 39.78  | 4.82  | 35.64                                         | 9.50 | 0.00   | 42.58    | 74       | -31.42 | P       | 1.00    |
| 7311.10 | 33.28   | 39.78  | 4.82  | 35.64                                         | 9.50 | 0.00   | 32.74    | 54       | -21.26 | A       | 1.00    |
| 9748.00 | 47.33   | 38.53  | 5.90  | 36.60                                         | 9.50 | 0.00   | 45.66    | 74       | -28.34 | P       | 1.00    |
| 9748.00 | 38.73   | 38.53  | 5.90  | 36.60                                         | 9.50 | 0.00   | 37.06    | 54       | -16.94 | A       | 1.00    |

|                                                                                                                                       |
|---------------------------------------------------------------------------------------------------------------------------------------|
| 1. Measurement was up to 18GHz harmonic, "----" means that the emissions level is too low to be measured.                             |
| 2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)                |
| 3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz                                                       |
| 4. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB                             |
| 5. The result basic equation calculation as follow :<br>Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit |
| 6. The other emission levels were very low against the limit.                                                                         |
| 7. The test limit distance is 3M limit.                                                                                               |
| 8. For Wireless 802.11b mode.                                                                                                         |
| 9. Antenna type : One Dipole and one PIFA Antenna.                                                                                    |

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The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

|              |                        |                 |              |
|--------------|------------------------|-----------------|--------------|
| Company      | ViewSonic Corporation. | Test Date :     | 2004/6/16    |
| Product Name | 802.11g WLAN Mini PCI  | Test By:        | Ken Tu       |
| Model Name   | AV802G                 | TEMP&Humidity : | 24.3°C , 49% |

| CH11 RX |         |        |       | Measurement Distance at 1m Horizontal polarized |      |        |          |          |        |         |         |
|---------|---------|--------|-------|-------------------------------------------------|------|--------|----------|----------|--------|---------|---------|
| Freq.   | Reading | AF     | Cable | Pre-amp                                         | Dist | Filter | Level    | Limit    | Margin | Mark    | Height  |
| (MHz)   | (dBuV)  | (dBuV) | (dB)  | (dB)                                            | dB   | dB     | (dBuV/m) | (dBuV/m) | (dB)   | (P/Q/A) | (Meter) |
| 4923.93 | 50.71   | 35.10  | 2.64  | 35.24                                           | 9.50 | 0.00   | 43.71    | 74       | -30.29 | P       | 1.10    |
| 4923.93 | 47.05   | 35.10  | 2.64  | 35.24                                           | 9.50 | 0.00   | 40.05    | 54       | -13.95 | A       | 1.10    |
| 7386.00 | 42.88   | 39.75  | 4.85  | 35.62                                           | 9.50 | 0.00   | 42.36    | 74       | -31.64 | P       | 1.00    |
| 7386.00 | 33.01   | 39.75  | 4.85  | 35.62                                           | 9.50 | 0.00   | 32.49    | 54       | -21.51 | A       | 1.00    |
| 9847.97 | 48.53   | 38.52  | 5.90  | 36.76                                           | 9.50 | 0.00   | 46.69    | 74       | -27.31 | P       | 1.00    |
| 9847.97 | 38.82   | 38.52  | 5.90  | 36.76                                           | 9.50 | 0.00   | 36.98    | 54       | -17.02 | A       | 1.00    |

|                                                                                                                                       |
|---------------------------------------------------------------------------------------------------------------------------------------|
| 1. Measurement was up to 18GHz harmonic, "----" means that the emissions level is too low to be measured.                             |
| 2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)                |
| 3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz                                                       |
| 4. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB                             |
| 5. The result basic equation calculation as follow :<br>Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit |
| 6. The other emission levels were very low against the limit.                                                                         |
| 7. The test limit distance is 3M limit.                                                                                               |
| 8. For Wireless 802.11b mode.                                                                                                         |
| 9. Antenna type : One Dipole and one PIFA Antenna.                                                                                    |

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The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

|              |                        |                 |              |
|--------------|------------------------|-----------------|--------------|
| Company      | ViewSonic Corporation. | Test Date :     | 2004/6/16    |
| Product Name | 802.11g WLAN Mini PCI  | Test By:        | Ken Tu       |
| Model Name   | AV802G                 | TEMP&Humidity : | 24.3°C , 49% |

| CH11 RX |         |        |       | Measurement Distance at 1m Vertical polarized |      |        |          |          |        |         |         |
|---------|---------|--------|-------|-----------------------------------------------|------|--------|----------|----------|--------|---------|---------|
| Freq.   | Reading | AF     | Cable | Pre-amp                                       | Dist | Filter | Level    | Limit    | Margin | Mark    | Height  |
| (MHz)   | (dBuV)  | (dBuV) | (dB)  | (dB)                                          | dB   | dB     | (dBuV/m) | (dBuV/m) | (dB)   | (P/Q/A) | (Meter) |
| 4924.00 | 54.78   | 35.10  | 2.64  | 35.24                                         | 9.50 | 0.00   | 47.78    | 74       | -26.22 | P       | 1.08    |
| 4924.00 | 52.23   | 35.10  | 2.64  | 35.24                                         | 9.50 | 0.00   | 45.23    | 54       | -8.77  | A       | 1.08    |
| 7386.00 | 43.79   | 39.75  | 4.85  | 35.62                                         | 9.50 | 0.00   | 43.27    | 74       | -30.73 | P       | 1.00    |
| 7386.00 | 33.41   | 39.75  | 4.85  | 35.62                                         | 9.50 | 0.00   | 32.89    | 54       | -21.11 | A       | 1.00    |
| 9848.00 | 48.20   | 38.52  | 5.90  | 36.76                                         | 9.50 | 0.00   | 46.36    | 74       | -27.64 | P       | 1.00    |
| 9848.00 | 41.04   | 38.52  | 5.90  | 36.76                                         | 9.50 | 0.00   | 39.20    | 54       | -14.80 | A       | 1.00    |

1. Measurement was up to 18GHz harmonic, "----" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
5. The result basic equation calculation as follow :  
Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
6. The other emission levels were very low against the limit.
7. The test limit distance is 3M limit.
8. For Wireless 802.11b mode.
9. Antenna type : One Dipole and one PIFA Antenna..

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The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

|              |                        |                 |              |
|--------------|------------------------|-----------------|--------------|
| Company      | ViewSonic Corporation. | Test Date :     | 2004/6/16    |
| Product Name | 802.11g WLAN Mini PCI  | Test By:        | Ken Tu       |
| Model Name   | AV802G                 | TEMP&Humidity : | 24.3°C , 49% |

| CH1 RX  |         |        |       | Measurement Distance at 1m Horizontal polarized |      |        |          |          |        |         |         |
|---------|---------|--------|-------|-------------------------------------------------|------|--------|----------|----------|--------|---------|---------|
| Freq.   | Reading | AF     | Cable | Pre-amp                                         | Dist | Filter | Level    | Limit    | Margin | Mark    | Height  |
| (MHz)   | (dBuV)  | (dBuV) | (dB)  | (dB)                                            | dB   | dB     | (dBuV/m) | (dBuV/m) | (dB)   | (P/Q/A) | (Meter) |
| 4823.93 | 50.01   | 34.44  | 2.82  | 35.16                                           | 9.50 | 0.00   | 42.61    | 74       | -31.39 | P       | 1.18    |
| 4823.93 | 45.40   | 34.44  | 2.82  | 35.16                                           | 9.50 | 0.00   | 38.00    | 54       | -16.00 | A       | 1.18    |
| 7236.00 | 43.08   | 39.81  | 4.79  | 35.65                                           | 9.50 | 0.00   | 42.53    | 74       | -31.47 | P       | 1.00    |
| 7236.00 | 33.25   | 39.81  | 4.79  | 35.65                                           | 9.50 | 0.00   | 32.70    | 54       | -21.30 | A       | 1.00    |
| 9647.87 | 46.80   | 38.54  | 5.90  | 36.44                                           | 9.50 | 0.00   | 45.30    | 74       | -28.70 | P       | 1.00    |
| 9647.87 | 39.57   | 38.54  | 5.90  | 36.44                                           | 9.50 | 0.00   | 38.07    | 54       | -15.93 | A       | 1.00    |

|                                                                                                                                       |
|---------------------------------------------------------------------------------------------------------------------------------------|
| 1. Measurement was up to 18GHz harmonic, "----" means that the emissions level is too low to be measured.                             |
| 2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)                |
| 3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz                                                       |
| 4. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB                             |
| 5. The result basic equation calculation as follow :<br>Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit |
| 6. The other emission levels were very low against the limit.                                                                         |
| 7. The test limit distance is 3M limit.                                                                                               |
| 8. For Wireless 802.11g mode.                                                                                                         |
| 9. Antenna type : One Dipole and one PIFA Antenna.                                                                                    |

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The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

|              |                        |                 |              |
|--------------|------------------------|-----------------|--------------|
| Company      | ViewSonic Corporation. | Test Date :     | 2004/6/16    |
| Product Name | 802.11g WLAN Mini PCI  | Test By:        | Ken Tu       |
| Model Name   | AV802G                 | TEMP&Humidity : | 24.3°C , 49% |

| CH1 RX  |         |        |       | Measurement Distance at 1m Vertical polarized |      |        |          |          |        |         |         |
|---------|---------|--------|-------|-----------------------------------------------|------|--------|----------|----------|--------|---------|---------|
| Freq.   | Reading | AF     | Cable | Pre-amp                                       | Dist | Filter | Level    | Limit    | Margin | Mark    | Height  |
| (MHz)   | (dBuV)  | (dBuV) | (dB)  | (dB)                                          | dB   | dB     | (dBuV/m) | (dBuV/m) | (dB)   | (P/Q/A) | (Meter) |
| 4823.91 | 51.46   | 34.44  | 2.82  | 35.16                                         | 9.50 | 0.00   | 44.06    | 74       | -29.94 | P       | 1.08    |
| 4823.91 | 48.23   | 34.44  | 2.82  | 35.16                                         | 9.50 | 0.00   | 40.83    | 54       | -13.17 | A       | 1.08    |
| 7236.00 | 43.84   | 39.81  | 4.79  | 35.65                                         | 9.50 | 0.00   | 43.29    | 74       | -30.71 | P       | 1.00    |
| 7236.00 | 32.68   | 39.81  | 4.79  | 35.65                                         | 9.50 | 0.00   | 32.13    | 54       | -21.87 | A       | 1.00    |
| 9647.84 | 47.67   | 38.54  | 5.90  | 36.44                                         | 9.50 | 0.00   | 46.17    | 74       | -27.83 | P       | 1.00    |
| 9647.84 | 39.58   | 38.54  | 5.90  | 36.44                                         | 9.50 | 0.00   | 38.08    | 54       | -15.92 | A       | 1.00    |

|                                                                                                                                       |
|---------------------------------------------------------------------------------------------------------------------------------------|
| 1. Measurement was up to 18GHz harmonic, "----" means that the emissions level is too low to be measured.                             |
| 2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)                |
| 3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz                                                       |
| 4. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB                             |
| 5. The result basic equation calculation as follow :<br>Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit |
| 6. The other emission levels were very low against the limit.                                                                         |
| 7. The test limit distance is 3M limit.                                                                                               |
| 8. For Wireless 802.11g mode.                                                                                                         |
| 9. Antenna type : One Dipole and one PIFA Antenna.                                                                                    |

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The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

|              |                        |                 |              |
|--------------|------------------------|-----------------|--------------|
| Company      | ViewSonic Corporation. | Test Date :     | 2004/6/16    |
| Product Name | 802.11g WLAN Mini PCI  | Test By:        | Ken Tu       |
| Model Name   | AV802G                 | TEMP&Humidity : | 24.3°C , 49% |

| CH6 RX  |         |        |       | Measurement Distance at 1m Horizontal polarized |      |        |          |          |        |         |         |
|---------|---------|--------|-------|-------------------------------------------------|------|--------|----------|----------|--------|---------|---------|
| Freq.   | Reading | AF     | Cable | Pre-amp                                         | Dist | Filter | Level    | Limit    | Margin | Mark    | Height  |
| (MHz)   | (dBuV)  | (dBuV) | (dB)  | (dB)                                            | dB   | dB     | (dBuV/m) | (dBuV/m) | (dB)   | (P/Q/A) | (Meter) |
| 4873.91 | 50.75   | 34.77  | 2.73  | 35.20                                           | 9.50 | 0.00   | 43.55    | 74       | -30.45 | P       | 1.17    |
| 4873.91 | 47.07   | 34.77  | 2.73  | 35.20                                           | 9.50 | 0.00   | 39.87    | 54       | -14.13 | A       | 1.17    |
| 7311.10 | 43.67   | 39.78  | 4.82  | 35.64                                           | 9.50 | 0.00   | 43.13    | 74       | -30.87 | P       | 1.00    |
| 7311.10 | 33.87   | 39.78  | 4.82  | 35.64                                           | 9.50 | 0.00   | 33.33    | 54       | -20.67 | A       | 1.00    |
| 9747.96 | 47.01   | 38.53  | 5.90  | 36.60                                           | 9.50 | 0.00   | 45.34    | 74       | -28.66 | P       | 1.00    |
| 9747.96 | 39.36   | 38.53  | 5.90  | 36.60                                           | 9.50 | 0.00   | 37.69    | 54       | -16.31 | A       | 1.00    |

|                                                                                                                                       |
|---------------------------------------------------------------------------------------------------------------------------------------|
| 1. Measurement was up to 18GHz harmonic, "----" means that the emissions level is too low to be measured.                             |
| 2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)                |
| 3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz                                                       |
| 4. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB                             |
| 5. The result basic equation calculation as follow :<br>Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit |
| 6. The other emission levels were very low against the limit.                                                                         |
| 7. The test limit distance is 3M limit.                                                                                               |
| 8. For Wireless 802.11g mode.                                                                                                         |
| 9. Antenna type : One Dipole and one PIFA Antenna.                                                                                    |





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The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

|              |                        |                 |              |
|--------------|------------------------|-----------------|--------------|
| Company      | ViewSonic Corporation. | Test Date :     | 2004/6/16    |
| Product Name | 802.11g WLAN Mini PCI  | Test By:        | Ken Tu       |
| Model Name   | AV802G                 | TEMP&Humidity : | 24.3°C , 49% |

| CH6 RX  |         |        |       | Measurement Distance at 1m Vertical polarized |      |        |          |          |        |         |         |
|---------|---------|--------|-------|-----------------------------------------------|------|--------|----------|----------|--------|---------|---------|
| Freq.   | Reading | AF     | Cable | Pre-amp                                       | Dist | Filter | Level    | Limit    | Margin | Mark    | Height  |
| (MHz)   | (dBuV)  | (dBuV) | (dB)  | (dB)                                          | dB   | dB     | (dBuV/m) | (dBuV/m) | (dB)   | (P/Q/A) | (Meter) |
| 4873.97 | 55.08   | 34.77  | 2.73  | 35.20                                         | 9.50 | 0.00   | 47.88    | 74       | -26.12 | P       | 1.03    |
| 4873.97 | 52.74   | 34.77  | 2.73  | 35.20                                         | 9.50 | 0.00   | 45.54    | 54       | -8.46  | A       | 1.03    |
| 7311.10 | 42.74   | 39.78  | 4.82  | 35.64                                         | 9.50 | 0.00   | 42.20    | 74       | -31.80 | P       | 1.00    |
| 7311.10 | 33.55   | 39.78  | 4.82  | 35.64                                         | 9.50 | 0.00   | 33.01    | 54       | -20.99 | A       | 1.00    |
| 9747.93 | 48.00   | 38.53  | 5.90  | 36.60                                         | 9.50 | 0.00   | 46.33    | 74       | -27.67 | P       | 1.00    |
| 9747.93 | 39.73   | 38.53  | 5.90  | 36.60                                         | 9.50 | 0.00   | 38.06    | 54       | -15.94 | A       | 1.00    |

|                                                                                                                                       |
|---------------------------------------------------------------------------------------------------------------------------------------|
| 1. Measurement was up to 18GHz harmonic, "----" means that the emissions level is too low to be measured.                             |
| 2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)                |
| 3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz                                                       |
| 4. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB                             |
| 5. The result basic equation calculation as follow :<br>Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit |
| 6. The other emission levels were very low against the limit.                                                                         |
| 7. The test limit distance is 3M limit.                                                                                               |
| 8. For Wireless 802.11g mode.                                                                                                         |
| 9. Antenna type : One Dipole and one PIFA Antenna.                                                                                    |

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The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

|              |                        |                 |              |
|--------------|------------------------|-----------------|--------------|
| Company      | ViewSonic Corporation. | Test Date :     | 2004/6/16    |
| Product Name | 802.11g WLAN Mini PCI  | Test By:        | Ken Tu       |
| Model Name   | AV802G                 | TEMP&Humidity : | 24.3°C , 49% |

| CH11 RX |         |        |       | Measurement Distance at 1m Horizontal polarized |      |        |          |          |        |         |         |
|---------|---------|--------|-------|-------------------------------------------------|------|--------|----------|----------|--------|---------|---------|
| Freq.   | Reading | AF     | Cable | Pre-amp                                         | Dist | Filter | Level    | Limit    | Margin | Mark    | Height  |
| (MHz)   | (dBuV)  | (dBuV) | (dB)  | (dB)                                            | dB   | dB     | (dBuV/m) | (dBuV/m) | (dB)   | (P/Q/A) | (Meter) |
| 4923.97 | 49.78   | 35.10  | 2.64  | 35.24                                           | 9.50 | 0.00   | 42.78    | 74       | -31.22 | P       | 1.17    |
| 4923.97 | 45.99   | 35.10  | 2.64  | 35.24                                           | 9.50 | 0.00   | 38.99    | 54       | -15.01 | A       | 1.17    |
| 7386.00 | 42.49   | 39.75  | 4.85  | 35.62                                           | 9.50 | 0.00   | 41.97    | 74       | -32.03 | P       | 1.00    |
| 7386.00 | 33.19   | 39.75  | 4.85  | 35.62                                           | 9.50 | 0.00   | 32.67    | 54       | -21.33 | A       | 1.00    |
| 9847.97 | 46.90   | 38.52  | 5.90  | 36.76                                           | 9.50 | 0.00   | 45.06    | 74       | -28.94 | P       | 1.00    |
| 9847.97 | 39.08   | 38.52  | 5.90  | 36.76                                           | 9.50 | 0.00   | 37.24    | 54       | -16.76 | A       | 1.00    |

|                                                                                                                                       |
|---------------------------------------------------------------------------------------------------------------------------------------|
| 1. Measurement was up to 18GHz harmonic, "----" means that the emissions level is too low to be measured.                             |
| 2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)                |
| 3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz                                                       |
| 4. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB                             |
| 5. The result basic equation calculation as follow :<br>Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit |
| 6. The other emission levels were very low against the limit.                                                                         |
| 7. The test limit distance is 3M limit.                                                                                               |
| 8. For Wireless 802.11g mode.                                                                                                         |
| 9. Antenna type : One Dipole and one PIFA Antenna.                                                                                    |

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The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

|              |                        |                 |              |
|--------------|------------------------|-----------------|--------------|
| Company      | ViewSonic Corporation. | Test Date :     | 2004/6/16    |
| Product Name | 802.11g WLAN Mini PCI  | Test By:        | Ken Tu       |
| Model Name   | AV802G                 | TEMP&Humidity : | 24.3°C , 49% |

| CH11 RX |         |        |       | Measurement Distance at 1m Vertical polarized |      |        |          |          |        |         |         |
|---------|---------|--------|-------|-----------------------------------------------|------|--------|----------|----------|--------|---------|---------|
| Freq.   | Reading | AF     | Cable | Pre-amp                                       | Dist | Filter | Level    | Limit    | Margin | Mark    | Height  |
| (MHz)   | (dBuV)  | (dBuV) | (dB)  | (dB)                                          | dB   | dB     | (dBuV/m) | (dBuV/m) | (dB)   | (P/Q/A) | (Meter) |
| 4923.93 | 55.33   | 35.10  | 2.64  | 35.24                                         | 9.50 | 0.00   | 48.33    | 74       | -25.67 | P       | 1.08    |
| 4923.93 | 53.51   | 35.10  | 2.64  | 35.24                                         | 9.50 | 0.00   | 46.51    | 54       | -7.49  | A       | 1.08    |
| 7386.00 | 43.36   | 39.75  | 4.85  | 35.62                                         | 9.50 | 0.00   | 42.84    | 74       | -31.16 | P       | 1.00    |
| 7386.00 | 33.03   | 39.75  | 4.85  | 35.62                                         | 9.50 | 0.00   | 32.51    | 54       | -21.49 | A       | 1.00    |
| 9847.91 | 48.26   | 38.52  | 5.90  | 36.76                                         | 9.50 | 0.00   | 46.42    | 74       | -27.58 | P       | 1.00    |
| 9847.91 | 40.11   | 38.52  | 5.90  | 36.76                                         | 9.50 | 0.00   | 38.27    | 54       | -15.73 | A       | 1.00    |

1. Measurement was up to 18GHz harmonic, "----" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
5. The result basic equation calculation as follow :  
Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
6. The other emission levels were very low against the limit.
7. The test limit distance is 3M limit.
8. For Wireless 802.11g mode.
9. Antenna type : One Dipole and one PIFA Antenna.

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The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

|              |                        |                 |              |
|--------------|------------------------|-----------------|--------------|
| Company      | ViewSonic Corporation. | Test Date :     | 2004/6/16    |
| Product Name | 802.11g WLAN Mini PCI  | Test By:        | Ken Tu       |
| Model Name   | AV802G                 | TEMP&Humidity : | 24.3°C , 49% |

| CH1 TX     |         |        |       | Measurement Distance at 1m Horizontal polarity |      |        |          |                       |        |         |         |
|------------|---------|--------|-------|------------------------------------------------|------|--------|----------|-----------------------|--------|---------|---------|
| Freq.      | Reading | AF     | Cable | Pre-amp                                        | Dist | Filter | Level    | Limit                 | Margin | Mark    | Height  |
| (MHz)      | (dBuV)  | (dBuV) | (dB)  | (dB)                                           | dB   | dB     | (dBuV/m) | (dBuV/m)              | (dB)   | (P/Q/A) | (Meter) |
| * 2389.89  | 29.30   | 31.81  | 3.84  | 0.00                                           | 9.50 | 0.00   | 55.45    | 74                    | -18.55 | P       | 1.00    |
| * 2389.89  | 19.30   | 31.81  | 3.84  | 0.00                                           | 9.50 | 0.00   | 45.45    | 54                    | -8.55  | A       | 1.00    |
| 2399.90    | 43.30   | 31.80  | 3.76  | 0.00                                           | 9.50 | 0.00   | 69.36    | 82.40                 | -13.04 | P       | 1.00    |
| 2399.90    | 34.90   | 31.80  | 3.76  | 0.00                                           | 9.50 | 0.00   | 60.96    | 75.28                 | -14.32 | A       | 1.00    |
| 2413.22    | 76.45   | 31.79  | 3.66  | 0.00                                           | 9.50 | 0.00   | 102.40   | Fundamental Frequency |        | P       | 1.00    |
| 2413.22    | 69.33   | 31.79  | 3.66  | 0.00                                           | 9.50 | 0.00   | 95.28    |                       |        | A       | 1.00    |
| * 4823.89  | 48.78   | 34.44  | 2.82  | 35.16                                          | 9.50 | 2.00   | 43.38    | 74                    | -30.62 | P       | 1.04    |
| * 4823.89  | 37.37   | 34.44  | 2.82  | 35.16                                          | 9.50 | 2.00   | 31.97    | 54                    | -22.03 | A       | 1.04    |
| 7236.15    | 45.35   | 39.81  | 4.79  | 35.65                                          | 9.50 | 2.00   | 46.80    | 74                    | -27.20 | P       | 1.06    |
| 7236.15    | 35.62   | 39.81  | 4.79  | 35.65                                          | 9.50 | 2.00   | 37.07    | 54                    | -16.93 | A       | 1.06    |
| 9647.89    | 44.77   | 38.54  | 5.90  | 36.44                                          | 9.50 | 0.61   | 43.88    | 74                    | -30.12 | P       | 1.01    |
| 9647.89    | 36.26   | 38.54  | 5.90  | 36.44                                          | 9.50 | 0.61   | 35.37    | 54                    | -18.63 | A       | 1.01    |
| * 12066.10 | -----   | -----  | ----- | -----                                          | 9.50 | 0.80   | -----    | -----                 | -----  | -----   | 1.00    |
| * 14479.32 | -----   | -----  | ----- | -----                                          | 0.00 | 0.68   | -----    | -----                 | -----  | -----   | 1.00    |
| 16892.54   | -----   | -----  | ----- | -----                                          | 0.00 | 0.44   | -----    | -----                 | -----  | -----   | 1.00    |
| * 19305.76 | -----   | -----  | ----- | -----                                          | 0.00 | 1.97   | -----    | -----                 | -----  | -----   | 1.00    |
| 21718.98   | -----   | -----  | ----- | -----                                          | 0.00 | 0.81   | -----    | -----                 | -----  | -----   | 1.00    |
| 24132.20   | -----   | -----  | ----- | -----                                          | 0.00 | 2.89   | -----    | -----                 | -----  | -----   | 1.00    |

**Note :**

1. The measurement was searched to 10th harmonic, Remark "----" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz).
3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "\*" means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow:  
Level=Reading+AF+Cable-Preamp+Filter-Dist, Margin=Level-Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.
9. For Wireless 802.11b mode (11Mbps).
10. Antenna type : A pair of Dipole Antenna.

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The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

|              |                        |                 |              |
|--------------|------------------------|-----------------|--------------|
| Company      | ViewSonic Corporation. | Test Date :     | 2004/6/16    |
| Product Name | 802.11g WLAN Mini PCI  | Test By:        | Ken Tu       |
| Model Name   | AV802G                 | TEMP&Humidity : | 24.3°C , 49% |

| CH1 TX     |         |        |       | Measurement Distance at 1m |      |        |          | Vertical polarity     |        |         |         |
|------------|---------|--------|-------|----------------------------|------|--------|----------|-----------------------|--------|---------|---------|
| Freq.      | Reading | AF     | Cable | Pre-amp                    | Dist | Filter | Level    | Limit                 | Margin | Mark    | Height  |
| (MHz)      | (dBuV)  | (dBuV) | (dB)  | (dB)                       | dB   | dB     | (dBuV/m) | (dBuV/m)              | (dB)   | (P/Q/A) | (Meter) |
| * 2389.89  | 37.10   | 31.81  | 3.84  | 0.00                       | 9.50 | 0.00   | 63.25    | 74                    | -10.75 | P       | 1.00    |
| * 2389.89  | 25.00   | 31.81  | 3.84  | 0.00                       | 9.50 | 0.00   | 51.15    | 54                    | -2.85  | A       | 1.00    |
| 2399.90    | 55.10   | 31.80  | 3.76  | 0.00                       | 9.50 | 0.00   | 81.16    | 94.23                 | -13.07 | P       | 1.00    |
| 2399.90    | 47.40   | 31.80  | 3.76  | 0.00                       | 9.50 | 0.00   | 73.46    | 87.19                 | -13.73 | A       | 1.00    |
| 2413.22    | 88.28   | 31.79  | 3.66  | 0.00                       | 9.50 | 0.00   | 114.23   | Fundamental Frequency |        | P       | 1.00    |
| 2413.22    | 81.24   | 31.79  | 3.66  | 0.00                       | 9.50 | 0.00   | 107.19   |                       |        | A       | 1.00    |
| * 4823.89  | 56.84   | 34.44  | 2.82  | 35.16                      | 9.50 | 2.00   | 51.44    | 74                    | -22.56 | P       | 1.05    |
| * 4823.89  | 46.35   | 34.44  | 2.82  | 35.16                      | 9.50 | 2.00   | 40.95    | 54                    | -13.05 | A       | 1.05    |
| 7235.87    | 51.48   | 39.81  | 4.79  | 35.65                      | 9.50 | 2.00   | 52.93    | 74                    | -21.07 | P       | 1.01    |
| 7235.87    | 41.79   | 39.81  | 4.79  | 35.65                      | 9.50 | 2.00   | 43.24    | 54                    | -10.76 | A       | 1.01    |
| 9647.89    | 45.84   | 38.54  | 5.90  | 36.44                      | 9.50 | 0.61   | 44.95    | 74                    | -29.05 | P       | 1.02    |
| 9647.89    | 38.61   | 38.54  | 5.90  | 36.44                      | 9.50 | 0.61   | 37.72    | 54                    | -16.28 | A       | 1.02    |
| * 12066.10 | -----   | -----  | ----- | -----                      | 9.50 | 0.80   | -----    | -----                 | -----  | -----   | 1.00    |
| * 14479.32 | -----   | -----  | ----- | -----                      | 0.00 | 0.68   | -----    | -----                 | -----  | -----   | 1.00    |
| 16892.54   | -----   | -----  | ----- | -----                      | 0.00 | 0.44   | -----    | -----                 | -----  | -----   | 1.00    |
| * 19305.76 | -----   | -----  | ----- | -----                      | 0.00 | 1.97   | -----    | -----                 | -----  | -----   | 1.00    |
| 21718.98   | -----   | -----  | ----- | -----                      | 0.00 | 0.81   | -----    | -----                 | -----  | -----   | 1.00    |
| 24132.20   | -----   | -----  | ----- | -----                      | 0.00 | 2.89   | -----    | -----                 | -----  | -----   | 1.00    |

**Note :**

1. The measurement was searched to 10th harmonic, Remark "----" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz).
3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "\*" means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow:  
Level=Reading+AF+Cable-Preamp+Filter-Dist, Margin=Level-Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.
9. For Wireless 802.11b mode (11Mbps).
10. Antenna type : A pair of Dipole Antenna.

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The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

|              |                        |                 |              |
|--------------|------------------------|-----------------|--------------|
| Company      | ViewSonic Corporation. | Test Date :     | 2004/6/16    |
| Product Name | 802.11g WLAN Mini PCI  | Test By:        | Ken Tu       |
| Model Name   | AV802G                 | TEMP&Humidity : | 24.3°C , 49% |

| CH6 TX     |         |        |       | Measurement Distance at 1m Horizontal polarity |      |        |          |                       |        |         |         |
|------------|---------|--------|-------|------------------------------------------------|------|--------|----------|-----------------------|--------|---------|---------|
| Freq.      | Reading | AF     | Cable | Pre-amp                                        | Dist | Filter | Level    | Limit                 | Margin | Mark    | Height  |
| (MHz)      | (dBuV)  | (dBuV) | (dB)  | (dB)                                           | dB   | dB     | (dBuV/m) | (dBuV/m)              | (dB)   | (P/Q/A) | (Meter) |
| 2438.30    | 75.06   | 31.76  | 3.47  | 0.00                                           | 9.50 | 0.00   | 100.79   | Fundamental Frequency |        | P       | 1.00    |
| 2438.30    | 67.97   | 31.76  | 3.47  | 0.00                                           | 9.50 | 0.00   | 93.70    |                       |        | A       | 1.00    |
| * 4873.88  | 50.87   | 34.77  | 2.73  | 35.20                                          | 9.50 | 1.80   | 45.47    | 74                    | -28.53 | P       | 1.00    |
| * 4873.88  | 45.23   | 34.77  | 2.73  | 35.20                                          | 9.50 | 1.80   | 39.83    | 54                    | -14.17 | A       | 1.00    |
| * 7311.25  | 45.06   | 39.78  | 4.82  | 35.64                                          | 9.50 | 2.00   | 46.52    | 74                    | -27.48 | P       | 1.08    |
| * 7311.25  | 33.69   | 39.78  | 4.82  | 35.64                                          | 9.50 | 2.00   | 35.15    | 54                    | -18.85 | A       | 1.08    |
| 9747.89    | 47.61   | 38.53  | 5.90  | 36.60                                          | 9.50 | 0.55   | 46.49    | 74                    | -27.51 | P       | 1.00    |
| 9747.89    | 40.06   | 38.53  | 5.90  | 36.60                                          | 9.50 | 0.55   | 38.94    | 54                    | -15.06 | A       | 1.00    |
| * 12191.50 | -----   | -----  | ----- | -----                                          | 9.50 | 0.80   | -----    | -----                 | -----  | -----   | 1.00    |
| 14629.80   | -----   | -----  | ----- | -----                                          | 0.00 | 0.60   | -----    | -----                 | -----  | -----   | 1.00    |
| 17068.10   | -----   | -----  | ----- | -----                                          | 0.00 | 0.53   | -----    | -----                 | -----  | -----   | 1.00    |
| * 19506.40 | -----   | -----  | ----- | -----                                          | 0.00 | 2.21   | -----    | -----                 | -----  | -----   | 1.00    |
| 21944.70   | -----   | -----  | ----- | -----                                          | 0.00 | 0.72   | -----    | -----                 | -----  | -----   | 1.00    |
| 24383.00   | -----   | -----  | ----- | -----                                          | 0.00 | 2.49   | -----    | -----                 | -----  | -----   | 1.00    |

**Note :**

- The measurement was searched to 10th harmonic, Remark “---” means that the emissions level is too low to be measured.
- AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz).
- Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
- Remark “\*” means that Restricted band.
- Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
- The result basic equation calculation is as follow:  
Level=Reading+AF+Cable-Preamp+Filter-Dist, Margin=Level-Limit
- The other emission levels were very low against the limit
- The test limit distance is 3M limit.
- For Wireless 802.11b mode (11Mbps).
- Antenna type : A pair of Dipole Antenna.

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The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

|              |                        |                 |              |
|--------------|------------------------|-----------------|--------------|
| Company      | ViewSonic Corporation. | Test Date :     | 2004/6/16    |
| Product Name | 802.11g WLAN Mini PCI  | Test By:        | Ken Tu       |
| Model Name   | AV802G                 | TEMP&Humidity : | 24.3°C , 49% |

| CH6 TX     |         |        |       | Measurement Distance at 1m |      |        |          | Vertical polarity     |        |         |         |
|------------|---------|--------|-------|----------------------------|------|--------|----------|-----------------------|--------|---------|---------|
| Freq.      | Reading | AF     | Cable | Pre-amp                    | Dist | Filter | Level    | Limit                 | Margin | Mark    | Height  |
| (MHz)      | (dBuV)  | (dBuV) | (dB)  | (dB)                       | dB   | dB     | (dBuV/m) | (dBuV/m)              | (dB)   | (P/Q/A) | (Meter) |
| 2438.20    | 87.67   | 31.76  | 3.47  | 0.00                       | 9.50 | 0.00   | 113.40   | Fundamental Frequency |        | P       | 1.00    |
| 2438.20    | 80.60   | 31.76  | 3.47  | 0.00                       | 9.50 | 0.00   | 106.33   |                       |        | A       | 1.00    |
| * 4873.93  | 56.65   | 34.77  | 2.73  | 35.20                      | 9.50 | 1.80   | 51.25    | 74                    | -22.75 | P       | 1.13    |
| * 4873.93  | 46.96   | 34.77  | 2.73  | 35.20                      | 9.50 | 1.80   | 41.56    | 54                    | -12.44 | A       | 1.13    |
| * 7311.30  | 50.12   | 39.78  | 4.82  | 35.64                      | 9.50 | 2.00   | 51.58    | 74                    | -22.42 | P       | 1.03    |
| * 7311.30  | 39.89   | 39.78  | 4.82  | 35.64                      | 9.50 | 2.00   | 41.35    | 54                    | -12.65 | A       | 1.03    |
| 9747.89    | 46.84   | 38.53  | 5.90  | 36.60                      | 9.50 | 0.55   | 45.72    | 74                    | -28.28 | P       | 1.05    |
| 9747.89    | 39.54   | 38.53  | 5.90  | 36.60                      | 9.50 | 0.55   | 38.42    | 54                    | -15.58 | A       | 1.05    |
| * 12191.00 | -----   | -----  | ----- | -----                      | 9.50 | 0.80   | -----    | -----                 | -----  | -----   | 1.00    |
| 14629.20   | -----   | -----  | ----- | -----                      | 0.00 | 0.60   | -----    | -----                 | -----  | -----   | 1.00    |
| 17067.40   | -----   | -----  | ----- | -----                      | 0.00 | 0.53   | -----    | -----                 | -----  | -----   | 1.00    |
| * 19505.60 | -----   | -----  | ----- | -----                      | 0.00 | 2.21   | -----    | -----                 | -----  | -----   | 1.00    |
| 21943.80   | -----   | -----  | ----- | -----                      | 0.00 | 0.72   | -----    | -----                 | -----  | -----   | 1.00    |
| 24382.00   | -----   | -----  | ----- | -----                      | 0.00 | 2.49   | -----    | -----                 | -----  | -----   | 1.00    |

**Note :**

1. The measurement was searched to 10th harmonic, Remark “---” means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz).
3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark “\*” means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow:  
Level=Reading+AF+Cable-Preamp+Filter-Dist, Margin=Level-Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.
9. For Wireless 802.11b mode (11Mbps).
10. Antenna type : A pair of Dipole Antenna.



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The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

|              |                        |                 |              |
|--------------|------------------------|-----------------|--------------|
| Company      | ViewSonic Corporation. | Test Date :     | 2004/6/16    |
| Product Name | 802.11g WLAN Mini PCI  | Test By:        | Ken Tu       |
| Model Name   | AV802G                 | TEMP&Humidity : | 24.3°C , 49% |

| CH11 TX    |         |        |       | Measurement Distance at 1m |      |        |          | Horizontal polarity   |        |         |         |
|------------|---------|--------|-------|----------------------------|------|--------|----------|-----------------------|--------|---------|---------|
| Freq.      | Reading | AF     | Cable | Pre-amp                    | Dist | Filter | Level    | Limit                 | Margin | Mark    | Height  |
| (MHz)      | (dBuV)  | (dBuV) | (dB)  | (dB)                       | dB   | dB     | (dBuV/m) | (dBuV/m)              | (dB)   | (P/Q/A) | (Meter) |
| 2463.25    | 73.89   | 31.74  | 3.28  | 0.00                       | 9.50 | 0.00   | 99.41    | Fundamental Frequency |        | P       | 1.00    |
| 2463.25    | 66.85   | 31.74  | 3.28  | 0.00                       | 9.50 | 0.00   | 92.37    |                       |        | A       | 1.00    |
| * 2483.50  | 31.20   | 31.72  | 3.13  | 0.00                       | 9.50 | 0.00   | 56.54    | 74                    | -17.46 | P       | 1.18    |
| * 2483.50  | 19.10   | 31.72  | 3.13  | 0.00                       | 9.50 | 0.00   | 44.44    | 54                    | -9.56  | A       | 1.18    |
| * 2483.95  | 29.70   | 31.72  | 3.12  | 0.00                       | 9.50 | 0.00   | 55.04    | 74                    | -18.96 | P       | 1.18    |
| * 2483.95  | 19.10   | 31.72  | 3.12  | 0.00                       | 9.50 | 0.00   | 44.44    | 54                    | -9.56  | A       | 1.18    |
| * 4923.99  | 51.66   | 35.10  | 2.64  | 35.24                      | 9.50 | 1.60   | 46.26    | 74                    | -27.74 | P       | 1.04    |
| * 4923.99  | 47.21   | 35.10  | 2.64  | 35.24                      | 9.50 | 1.60   | 41.81    | 54                    | -12.19 | A       | 1.04    |
| * 7386.00  | 43.85   | 39.75  | 4.85  | 35.62                      | 9.50 | 2.00   | 45.33    | 74                    | -28.67 | P       | 1.12    |
| * 7386.00  | 33.29   | 39.75  | 4.85  | 35.62                      | 9.50 | 2.00   | 34.77    | 54                    | -19.23 | A       | 1.12    |
| 9847.86    | 45.41   | 38.52  | 5.90  | 36.76                      | 9.50 | 0.49   | 44.06    | 74                    | -29.94 | P       | 1.00    |
| 9847.86    | 37.75   | 38.52  | 5.90  | 36.76                      | 9.50 | 0.49   | 36.40    | 54                    | -17.60 | A       | 1.00    |
| * 12316.25 | -----   | -----  | ----- | -----                      | 9.50 | 0.80   | -----    | -----                 | -----  | -----   | 1.00    |
| 14779.50   | -----   | -----  | ----- | -----                      | 0.00 | 0.48   | -----    | -----                 | -----  | -----   | 1.00    |
| 17242.75   | -----   | -----  | ----- | -----                      | 0.00 | 0.60   | -----    | -----                 | -----  | -----   | 1.00    |
| * 19706.00 | -----   | -----  | ----- | -----                      | 0.00 | 2.41   | -----    | -----                 | -----  | -----   | 1.00    |
| * 22169.25 | -----   | -----  | ----- | -----                      | 0.00 | 0.70   | -----    | -----                 | -----  | -----   | 1.00    |
| 24632.50   | -----   | -----  | ----- | -----                      | 0.00 | 2.11   | -----    | -----                 | -----  | -----   | 1.00    |

### Note :

1. The measurement was searched to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz).
3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "\*" means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow:  
Level=Reading+AF+Cable-Preamp+Filter-Dist, Margin=Level-Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.
9. For Wireless 802.11b mode (11Mbps).
10. Antenna type : A pair of Dipole Antenna.





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The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

|              |                        |                 |              |
|--------------|------------------------|-----------------|--------------|
| Company      | ViewSonic Corporation. | Test Date :     | 2004/6/16    |
| Product Name | 802.11g WLAN Mini PCI  | Test By:        | Ken Tu       |
| Model Name   | AV802G                 | TEMP&Humidity : | 24.3°C , 49% |

| CH11 TX    |         |        |       | Measurement Distance at 1m |      |        |          | Vertical polarity     |        |         |         |
|------------|---------|--------|-------|----------------------------|------|--------|----------|-----------------------|--------|---------|---------|
| Freq.      | Reading | AF     | Cable | Pre-amp                    | Dist | Filter | Level    | Limit                 | Margin | Mark    | Height  |
| (MHz)      | (dBuV)  | (dBuV) | (dB)  | (dB)                       | dB   | dB     | (dBuV/m) | (dBuV/m)              | (dB)   | (P/Q/A) | (Meter) |
| 2463.30    | 87.52   | 31.74  | 3.28  | 0.00                       | 9.50 | 0.00   | 113.04   | Fundamental Frequency |        | P       | 1.00    |
| 2463.30    | 80.45   | 31.74  | 3.28  | 0.00                       | 9.50 | 0.00   | 105.97   |                       |        | A       | 1.00    |
| * 2483.50  | 34.70   | 31.72  | 3.13  | 0.00                       | 9.50 | 0.00   | 60.04    | 74                    | -13.96 | P       | 1.01    |
| * 2483.50  | 21.90   | 31.72  | 3.13  | 0.00                       | 9.50 | 0.00   | 47.24    | 54                    | -6.76  | A       | 1.01    |
| * 2483.95  | 35.50   | 31.72  | 3.12  | 0.00                       | 9.50 | 0.00   | 60.84    | 74                    | -13.16 | P       | 1.01    |
| * 2483.95  | 20.80   | 31.72  | 3.12  | 0.00                       | 9.50 | 0.00   | 46.14    | 54                    | -7.86  | A       | 1.01    |
| * 4923.94  | 55.99   | 35.10  | 2.64  | 35.24                      | 9.50 | 1.60   | 50.59    | 74                    | -23.41 | P       | 1.00    |
| * 4923.94  | 46.54   | 35.10  | 2.64  | 35.24                      | 9.50 | 1.60   | 41.14    | 54                    | -12.86 | A       | 1.00    |
| * 7384.84  | 45.85   | 39.75  | 4.85  | 35.62                      | 9.50 | 2.00   | 47.33    | 74                    | -26.67 | P       | 1.00    |
| * 7384.84  | 35.38   | 39.75  | 4.85  | 35.62                      | 9.50 | 2.00   | 36.86    | 54                    | -17.14 | A       | 1.00    |
| 9848.16    | 46.39   | 38.52  | 5.90  | 36.76                      | 9.50 | 0.49   | 45.04    | 74                    | -28.96 | P       | 1.00    |
| 9848.16    | 37.75   | 38.52  | 5.90  | 36.76                      | 9.50 | 0.49   | 36.40    | 54                    | -17.60 | A       | 1.00    |
| * 12316.50 | -----   | -----  | ----- | -----                      | 9.50 | 0.80   | -----    | -----                 | -----  | -----   | 1.00    |
| 14779.80   | -----   | -----  | ----- | -----                      | 0.00 | 0.48   | -----    | -----                 | -----  | -----   | 1.00    |
| 17243.10   | -----   | -----  | ----- | -----                      | 0.00 | 0.60   | -----    | -----                 | -----  | -----   | 1.00    |
| * 19706.40 | -----   | -----  | ----- | -----                      | 0.00 | 2.41   | -----    | -----                 | -----  | -----   | 1.00    |
| * 22169.70 | -----   | -----  | ----- | -----                      | 0.00 | 0.70   | -----    | -----                 | -----  | -----   | 1.00    |
| 24633.00   | -----   | -----  | ----- | -----                      | 0.00 | 2.11   | -----    | -----                 | -----  | -----   | 1.00    |

### Note :

1. The measurement was searched to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz).
3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "\*" means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow:  
Level=Reading+AF+Cable-Preamp+Filter-Dist, Margin=Level-Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.
9. For Wireless 802.11b mode (11Mbps).
10. Antenna type : A pair of Dipole Antenna.

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The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

|              |                        |                 |              |
|--------------|------------------------|-----------------|--------------|
| Company      | ViewSonic Corporation. | Test Date :     | 2004/6/16    |
| Product Name | 802.11g WLAN Mini PCI  | Test By:        | Ken Tu       |
| Model Name   | AV802G                 | TEMP&Humidity : | 24.3°C , 49% |

| CH1 TX     |         |        |       | Measurement Distance at 1m |      |        |          | Horizontal polarity   |        |         |         |
|------------|---------|--------|-------|----------------------------|------|--------|----------|-----------------------|--------|---------|---------|
| Freq.      | Reading | AF     | Cable | Pre-amp                    | Dist | Filter | Level    | Limit                 | Margin | Mark    | Height  |
| (MHz)      | (dBuV)  | (dBuV) | (dB)  | (dB)                       | dB   | dB     | (dBuV/m) | (dBuV/m)              | (dB)   | (P/Q/A) | (Meter) |
| * 2389.93  | 29.40   | 31.81  | 3.84  | 0.00                       | 9.50 | 0.00   | 55.55    | 74                    | -18.45 | P       | 1.23    |
| * 2389.93  | 18.70   | 31.81  | 3.84  | 0.00                       | 9.50 | 0.00   | 44.85    | 54                    | -9.15  | A       | 1.23    |
| 2399.90    | 42.70   | 31.80  | 3.76  | 0.00                       | 9.50 | 0.00   | 68.76    | 74.74                 | -5.98  | P       | 1.22    |
| 2399.90    | 27.88   | 31.80  | 3.76  | 0.00                       | 9.50 | 0.00   | 53.94    | 66.57                 | -12.63 | A       | 1.22    |
| 2410.47    | 68.77   | 31.79  | 3.68  | 0.00                       | 9.50 | 0.00   | 94.74    | Fundamental Frequency |        | P       | 1.00    |
| 2410.47    | 60.60   | 31.79  | 3.68  | 0.00                       | 9.50 | 0.00   | 86.57    |                       |        | A       | 1.00    |
| * 4824.02  | 50.31   | 34.44  | 2.82  | 35.16                      | 9.50 | 2.00   | 44.91    | 74                    | -29.09 | P       | 1.00    |
| * 4824.02  | 43.48   | 34.44  | 2.82  | 35.16                      | 9.50 | 2.00   | 38.08    | 54                    | -15.92 | A       | 1.00    |
| 7235.39    | 44.37   | 39.81  | 4.79  | 35.65                      | 9.50 | 2.00   | 45.82    | 74                    | -28.18 | P       | 1.00    |
| 7235.39    | 33.94   | 39.81  | 4.79  | 35.65                      | 9.50 | 2.00   | 35.39    | 54                    | -18.61 | A       | 1.00    |
| 9647.89    | 45.29   | 38.54  | 5.90  | 36.44                      | 9.50 | 0.61   | 44.40    | 74                    | -29.60 | P       | 1.00    |
| 9647.89    | 37.09   | 38.54  | 5.90  | 36.44                      | 9.50 | 0.61   | 36.20    | 54                    | -17.80 | A       | 1.00    |
| * 12052.35 | -----   | -----  | ----- | -----                      | 9.50 | 0.80   | -----    | -----                 | -----  | -----   | 1.00    |
| 14462.82   | -----   | -----  | ----- | -----                      | 0.00 | 0.66   | -----    | -----                 | -----  | -----   | 1.00    |
| 16873.29   | -----   | -----  | ----- | -----                      | 0.00 | 0.42   | -----    | -----                 | -----  | -----   | 1.00    |
| * 19283.76 | -----   | -----  | ----- | -----                      | 0.00 | 1.94   | -----    | -----                 | -----  | -----   | 1.00    |
| 21694.23   | -----   | -----  | ----- | -----                      | 0.00 | 0.82   | -----    | -----                 | -----  | -----   | 1.00    |
| 24104.70   | -----   | -----  | ----- | -----                      | 0.00 | 2.93   | -----    | -----                 | -----  | -----   | 1.00    |

**Note :**

1. The measurement was searched to 10th harmonic, Remark "----" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz).
3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "\*" means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow:  
Level=Reading+AF+Cable-Preamp+Filter-Dist, Margin=Level-Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.
9. For Wireless 802.11g mode (6Mbps).
10. Antenna type : A pair of Dipole Antenna.

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The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

|              |                        |                 |              |
|--------------|------------------------|-----------------|--------------|
| Company      | ViewSonic Corporation. | Test Date :     | 2004/6/16    |
| Product Name | 802.11g WLAN Mini PCI  | Test By:        | Ken Tu       |
| Model Name   | AV802G                 | TEMP&Humidity : | 24.3°C , 49% |

| CH1 TX     |         |        |       | Measurement Distance at 1m |      |        |          | Vertical polarity     |        |         |         |
|------------|---------|--------|-------|----------------------------|------|--------|----------|-----------------------|--------|---------|---------|
| Freq.      | Reading | AF     | Cable | Pre-amp                    | Dist | Filter | Level    | Limit                 | Margin | Mark    | Height  |
| (MHz)      | (dBuV)  | (dBuV) | (dB)  | (dB)                       | dB   | dB     | (dBuV/m) | (dBuV/m)              | (dB)   | (P/Q/A) | (Meter) |
| * 2389.93  | 38.30   | 31.81  | 3.84  | 0.00                       | 9.50 | 0.00   | 64.45    | 74                    | -9.55  | P       | 1.20    |
| * 2389.93  | 25.10   | 31.81  | 3.84  | 0.00                       | 9.50 | 0.00   | 51.25    | 54                    | -2.75  | A       | 1.20    |
| 2399.90    | 54.40   | 31.80  | 3.76  | 0.00                       | 9.50 | 0.00   | 80.46    | 89.12                 | -8.66  | P       | 1.23    |
| 2399.90    | 42.70   | 31.80  | 3.76  | 0.00                       | 9.50 | 0.00   | 68.76    | 80.88                 | -12.12 | A       | 1.23    |
| 2410.29    | 83.15   | 31.79  | 3.68  | 0.00                       | 9.50 | 0.00   | 109.12   | Fundamental Frequency |        | P       | 1.00    |
| 2410.29    | 74.91   | 31.79  | 3.68  | 0.00                       | 9.50 | 0.00   | 100.88   |                       |        | A       | 1.00    |
| * 4824.05  | 56.41   | 34.44  | 2.82  | 35.16                      | 9.50 | 2.00   | 51.01    | 74                    | -22.99 | P       | 1.00    |
| * 4824.05  | 47.16   | 34.44  | 2.82  | 35.16                      | 9.50 | 2.00   | 41.76    | 54                    | -12.24 | A       | 1.00    |
| 7231.09    | 56.61   | 39.81  | 4.79  | 35.65                      | 9.50 | 2.00   | 58.06    | 74                    | -15.94 | P       | 1.00    |
| 7231.09    | 44.69   | 39.81  | 4.79  | 35.65                      | 9.50 | 2.00   | 46.14    | 54                    | -7.86  | A       | 1.00    |
| 9647.89    | 45.05   | 38.54  | 5.90  | 36.44                      | 9.50 | 0.61   | 44.16    | 74                    | -29.84 | P       | 1.00    |
| 9647.89    | 37.00   | 38.54  | 5.90  | 36.44                      | 9.50 | 0.61   | 36.11    | 54                    | -17.89 | A       | 1.00    |
| * 12051.45 | -----   | -----  | ----- | -----                      | 9.50 | 0.80   | -----    | -----                 | -----  | -----   | 1.00    |
| 14461.74   | -----   | -----  | ----- | -----                      | 0.00 | 0.65   | -----    | -----                 | -----  | -----   | 1.00    |
| 16872.03   | -----   | -----  | ----- | -----                      | 0.00 | 0.42   | -----    | -----                 | -----  | -----   | 1.00    |
| * 19282.32 | -----   | -----  | ----- | -----                      | 0.00 | 1.94   | -----    | -----                 | -----  | -----   | 1.00    |
| 21692.61   | -----   | -----  | ----- | -----                      | 0.00 | 0.82   | -----    | -----                 | -----  | -----   | 1.00    |
| 24102.90   | -----   | -----  | ----- | -----                      | 0.00 | 2.94   | -----    | -----                 | -----  | -----   | 1.00    |

**Note :**

1. The measurement was searched to 10th harmonic, Remark “---” means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz).
3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark “\*” means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow:  
Level=Reading+AF+Cable-Preamp+Filter-Dist, Margin=Level-Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.
9. For Wireless 802.11g mode (6Mbps).
10. Antenna type : A pair of Dipole Antenna.

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The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

|              |                        |                 |              |
|--------------|------------------------|-----------------|--------------|
| Company      | ViewSonic Corporation. | Test Date :     | 2004/6/16    |
| Product Name | 802.11g WLAN Mini PCI  | Test By:        | Ken Tu       |
| Model Name   | AV802G                 | TEMP&Humidity : | 24.3°C , 49% |

| CH6 TX     |         |        |       | Measurement Distance at 1m |      |        |          | Horizontal polarity   |        |         |         |
|------------|---------|--------|-------|----------------------------|------|--------|----------|-----------------------|--------|---------|---------|
| Freq.      | Reading | AF     | Cable | Pre-amp                    | Dist | Filter | Level    | Limit                 | Margin | Mark    | Height  |
| (MHz)      | (dBuV)  | (dBuV) | (dB)  | (dB)                       | dB   | dB     | (dBuV/m) | (dBuV/m)              | (dB)   | (P/Q/A) | (Meter) |
| 2431.56    | 68.71   | 31.77  | 3.52  | 0.00                       | 9.50 | 0.00   | 94.50    | Fundamental Frequency |        | P       | 1.00    |
| 2431.56    | 60.60   | 31.77  | 3.52  | 0.00                       | 9.50 | 0.00   | 86.39    |                       |        | A       | 1.00    |
| * 4873.94  | 51.58   | 34.77  | 2.73  | 35.20                      | 9.50 | 1.80   | 46.18    | 74                    | -27.82 | P       | 1.00    |
| * 4873.94  | 45.83   | 34.77  | 2.73  | 35.20                      | 9.50 | 1.80   | 40.43    | 54                    | -13.57 | A       | 1.00    |
| * 7311.00  | 46.01   | 39.78  | 4.82  | 35.64                      | 9.50 | 2.00   | 47.47    | 74                    | -26.53 | P       | 1.00    |
| * 7311.00  | 36.50   | 39.78  | 4.82  | 35.64                      | 9.50 | 2.00   | 37.96    | 54                    | -16.04 | A       | 1.00    |
| 9747.85    | 46.05   | 38.53  | 5.90  | 36.60                      | 9.50 | 0.55   | 44.93    | 74                    | -29.07 | P       | 1.00    |
| 9747.85    | 38.42   | 38.53  | 5.90  | 36.60                      | 9.50 | 0.55   | 37.30    | 54                    | -16.70 | A       | 1.00    |
| * 12157.80 | -----   | -----  | ----- | -----                      | 9.50 | 0.80   | -----    | -----                 | -----  | -----   | 1.00    |
| 14589.36   | -----   | -----  | ----- | -----                      | 0.00 | 0.63   | -----    | -----                 | -----  | -----   | 1.00    |
| 17020.92   | -----   | -----  | ----- | -----                      | 0.00 | 0.51   | -----    | -----                 | -----  | -----   | 1.00    |
| * 19452.48 | -----   | -----  | ----- | -----                      | 0.00 | 2.14   | -----    | -----                 | -----  | -----   | 1.00    |
| 21884.04   | -----   | -----  | ----- | -----                      | 0.00 | 0.75   | -----    | -----                 | -----  | -----   | 1.00    |
| 24315.60   | -----   | -----  | ----- | -----                      | 0.00 | 2.60   | -----    | -----                 | -----  | -----   | 1.00    |

**Note :**

1. The measurement was searched to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz).
3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "\*" means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow:  
Level=Reading+AF+Cable-Preamp+Filter-Dist, Margin=Level-Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.
9. For Wireless 802.11g mode (6Mbps).
10. Antenna type : A pair of Dipole Antenna.



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The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

|              |                        |                 |              |
|--------------|------------------------|-----------------|--------------|
| Company      | ViewSonic Corporation. | Test Date :     | 2004/6/16    |
| Product Name | 802.11g WLAN Mini PCI  | Test By:        | Ken Tu       |
| Model Name   | AV802G                 | TEMP&Humidity : | 24.3°C , 49% |

| CH6 TX     |         |        |       | Measurement Distance at 1m |      |        |          | Vertical polarity     |        |         |         |
|------------|---------|--------|-------|----------------------------|------|--------|----------|-----------------------|--------|---------|---------|
| Freq.      | Reading | AF     | Cable | Pre-amp                    | Dist | Filter | Level    | Limit                 | Margin | Mark    | Height  |
| (MHz)      | (dBuV)  | (dBuV) | (dB)  | (dB)                       | dB   | dB     | (dBuV/m) | (dBuV/m)              | (dB)   | (P/Q/A) | (Meter) |
| 2431.48    | 82.74   | 31.77  | 3.52  | 0.00                       | 9.50 | 0.00   | 108.53   | Fundamental Frequency |        | P       | 1.00    |
| 2431.48    | 74.56   | 31.77  | 3.52  | 0.00                       | 9.50 | 0.00   | 100.35   |                       |        | A       | 1.00    |
| * 4873.99  | 56.42   | 34.77  | 2.73  | 35.20                      | 9.50 | 1.80   | 51.02    | 74                    | -22.98 | P       | 1.00    |
| * 4873.99  | 48.18   | 34.77  | 2.73  | 35.20                      | 9.50 | 1.80   | 42.78    | 54                    | -11.22 | A       | 1.00    |
| * 7305.83  | 54.20   | 39.78  | 4.82  | 35.64                      | 9.50 | 2.00   | 55.66    | 74                    | -18.34 | P       | 1.00    |
| * 7305.83  | 43.46   | 39.78  | 4.82  | 35.64                      | 9.50 | 2.00   | 44.92    | 54                    | -9.08  | A       | 1.00    |
| 9747.89    | 45.31   | 38.53  | 5.90  | 36.60                      | 9.50 | 0.55   | 44.19    | 74                    | -29.81 | P       | 1.00    |
| 9747.89    | 38.58   | 38.53  | 5.90  | 36.60                      | 9.50 | 0.55   | 37.46    | 54                    | -16.54 | A       | 1.00    |
| * 12157.40 | -----   | -----  | ----- | -----                      | 9.50 | 0.80   | -----    | -----                 | -----  | -----   | 1.00    |
| 14588.88   | -----   | -----  | ----- | -----                      | 0.00 | 0.63   | -----    | -----                 | -----  | -----   | 1.00    |
| 17020.36   | -----   | -----  | ----- | -----                      | 0.00 | 0.51   | -----    | -----                 | -----  | -----   | 1.00    |
| * 19451.84 | -----   | -----  | ----- | -----                      | 0.00 | 2.14   | -----    | -----                 | -----  | -----   | 1.00    |
| 21883.32   | -----   | -----  | ----- | -----                      | 0.00 | 0.75   | -----    | -----                 | -----  | -----   | 1.00    |
| 24314.80   | -----   | -----  | ----- | -----                      | 0.00 | 2.60   | -----    | -----                 | -----  | -----   | 1.00    |

### Note :

1. The measurement was searched to 10th harmonic, Remark “---” means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz).
3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark “\*” means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow:  
Level=Reading+AF+Cable-Preamp+Filter-Dist, Margin=Level-Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.
9. For Wireless 802.11g mode (6Mbps).
10. Antenna type : A pair of Dipole Antenna.

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The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

|              |                        |                 |              |
|--------------|------------------------|-----------------|--------------|
| Company      | ViewSonic Corporation. | Test Date :     | 2004/6/16    |
| Product Name | 802.11g WLAN Mini PCI  | Test By:        | Ken Tu       |
| Model Name   | AV802G                 | TEMP&Humidity : | 24.3°C , 49% |

| CH11 TX    |         |        |       | Measurement Distance at 1m |      |        |          | Horizontal polarity   |        |         |         |
|------------|---------|--------|-------|----------------------------|------|--------|----------|-----------------------|--------|---------|---------|
| Freq.      | Reading | AF     | Cable | Pre-amp                    | Dist | Filter | Level    | Limit                 | Margin | Mark    | Height  |
| (MHz)      | (dBuV)  | (dBuV) | (dB)  | (dB)                       | dB   | dB     | (dBuV/m) | (dBuV/m)              | (dB)   | (P/Q/A) | (Meter) |
| 2464.26    | 69.41   | 31.74  | 3.27  | 0.00                       | 9.50 | 0.00   | 94.92    | Fundamental Frequency |        | P       | 1.00    |
| 2464.26    | 60.92   | 31.74  | 3.27  | 0.00                       | 9.50 | 0.00   | 86.43    |                       |        | A       | 1.00    |
| * 2483.50  | 30.60   | 31.72  | 3.13  | 0.00                       | 9.50 | 0.00   | 55.94    | 74                    | -18.06 | P       | 1.18    |
| * 2483.50  | 19.50   | 31.72  | 3.13  | 0.00                       | 9.50 | 0.00   | 44.84    | 54                    | -9.16  | A       | 1.18    |
| * 2483.95  | 30.20   | 31.72  | 3.12  | 0.00                       | 9.50 | 0.00   | 55.54    | 74                    | -18.46 | P       | 1.20    |
| * 2483.95  | 19.30   | 31.72  | 3.12  | 0.00                       | 9.50 | 0.00   | 44.64    | 54                    | -9.36  | A       | 1.20    |
| * 4923.96  | 51.87   | 35.10  | 2.64  | 35.24                      | 9.50 | 1.60   | 46.47    | 74                    | -27.53 | P       | 1.00    |
| * 4923.96  | 46.77   | 35.10  | 2.64  | 35.24                      | 9.50 | 1.60   | 41.37    | 54                    | -12.63 | A       | 1.00    |
| * 7385.84  | 44.77   | 39.75  | 4.85  | 35.62                      | 9.50 | 2.00   | 46.25    | 74                    | -27.75 | P       | 1.00    |
| * 7385.84  | 33.70   | 39.75  | 4.85  | 35.62                      | 9.50 | 2.00   | 35.18    | 54                    | -18.82 | A       | 1.00    |
| 9847.81    | 46.38   | 38.52  | 5.90  | 36.76                      | 9.50 | 0.49   | 45.03    | 74                    | -28.97 | P       | 1.00    |
| 9847.81    | 38.40   | 38.52  | 5.90  | 36.76                      | 9.50 | 0.49   | 37.05    | 54                    | -16.95 | A       | 1.00    |
| * 12321.30 | -----   | -----  | ----- | -----                      | 9.50 | 0.80   | -----    | -----                 | -----  | -----   | 1.00    |
| 14785.56   | -----   | -----  | ----- | -----                      | 0.00 | 0.47   | -----    | -----                 | -----  | -----   | 1.00    |
| 17249.82   | -----   | -----  | ----- | -----                      | 0.00 | 0.60   | -----    | -----                 | -----  | -----   | 1.00    |
| * 19714.08 | -----   | -----  | ----- | -----                      | 0.00 | 2.41   | -----    | -----                 | -----  | -----   | 1.00    |
| * 22178.34 | -----   | -----  | ----- | -----                      | 0.00 | 0.70   | -----    | -----                 | -----  | -----   | 1.00    |
| 24642.60   | -----   | -----  | ----- | -----                      | 0.00 | 2.10   | -----    | -----                 | -----  | -----   | 1.00    |

**Note :**

1. The measurement was searched to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz).
3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "\*" means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow:  
Level=Reading+AF+Cable-Preamp+Filter-Dist, Margin=Level-Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.
9. For Wireless 802.11g mode (6Mbps).
10. Antenna type : A pair of Dipole Antenna.

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The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

|              |                        |                 |              |
|--------------|------------------------|-----------------|--------------|
| Company      | ViewSonic Corporation. | Test Date :     | 2004/6/16    |
| Product Name | 802.11g WLAN Mini PCI  | Test By:        | Ken Tu       |
| Model Name   | AV802G                 | TEMP&Humidity : | 24.3°C , 49% |

| CH11 TX    |         |        |       | Measurement Distance at 1m |      |        |          | Vertical polarity     |        |         |         |
|------------|---------|--------|-------|----------------------------|------|--------|----------|-----------------------|--------|---------|---------|
| Freq.      | Reading | AF     | Cable | Pre-amp                    | Dist | Filter | Level    | Limit                 | Margin | Mark    | Height  |
| (MHz)      | (dBuV)  | (dBuV) | (dB)  | (dB)                       | dB   | dB     | (dBuV/m) | (dBuV/m)              | (dB)   | (P/Q/A) | (Meter) |
| 2464.25    | 84.37   | 31.74  | 3.27  | 0.00                       | 9.50 | 0.00   | 109.88   | Fundamental Frequency |        | P       | 1.00    |
| 2464.25    | 76.29   | 31.74  | 3.27  | 0.00                       | 9.50 | 0.00   | 101.80   |                       |        | A       | 1.00    |
| * 2483.50  | 41.00   | 31.72  | 3.13  | 0.00                       | 9.50 | 0.00   | 66.34    | 74                    | -7.66  | P       | 1.01    |
| * 2483.50  | 27.60   | 31.72  | 3.13  | 0.00                       | 9.50 | 0.00   | 52.94    | 54                    | -1.06  | A       | 1.01    |
| * 2483.95  | 40.00   | 31.72  | 3.12  | 0.00                       | 9.50 | 0.00   | 65.34    | 74                    | -8.66  | P       | 1.14    |
| * 2483.95  | 26.40   | 31.72  | 3.12  | 0.00                       | 9.50 | 0.00   | 51.74    | 54                    | -2.26  | A       | 1.14    |
| * 4924.00  | 57.08   | 35.10  | 2.64  | 35.24                      | 9.50 | 1.60   | 51.68    | 74                    | -22.32 | P       | 1.00    |
| * 4924.00  | 53.25   | 35.10  | 2.64  | 35.24                      | 9.50 | 1.60   | 47.85    | 54                    | -6.15  | A       | 1.00    |
| * 7392.31  | 50.32   | 39.74  | 4.86  | 35.62                      | 9.50 | 2.00   | 51.80    | 74                    | -22.20 | P       | 1.00    |
| * 7392.31  | 40.04   | 39.74  | 4.86  | 35.62                      | 9.50 | 2.00   | 41.52    | 54                    | -12.48 | A       | 1.00    |
| 9847.93    | 45.02   | 38.52  | 5.90  | 36.76                      | 9.50 | 0.49   | 43.67    | 74                    | -30.33 | P       | 1.00    |
| 9847.93    | 36.43   | 38.52  | 5.90  | 36.76                      | 9.50 | 0.49   | 35.08    | 54                    | -18.92 | A       | 1.00    |
| * 12321.25 | -----   | -----  | ----- | -----                      | 9.50 | 0.80   | -----    | -----                 | -----  | -----   | 1.00    |
| 14785.50   | -----   | -----  | ----- | -----                      | 0.00 | 0.47   | -----    | -----                 | -----  | -----   | 1.00    |
| 17249.75   | -----   | -----  | ----- | -----                      | 0.00 | 0.60   | -----    | -----                 | -----  | -----   | 1.00    |
| * 19714.00 | -----   | -----  | ----- | -----                      | 0.00 | 2.41   | -----    | -----                 | -----  | -----   | 1.00    |
| * 22178.25 | -----   | -----  | ----- | -----                      | 0.00 | 0.70   | -----    | -----                 | -----  | -----   | 1.00    |
| 24642.50   | -----   | -----  | ----- | -----                      | 0.00 | 2.10   | -----    | -----                 | -----  | -----   | 1.00    |

**Note :**

1. The measurement was searched to 10th harmonic, Remark "----" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz).
3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "\*" means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow:  
Level=Reading+AF+Cable-Preamp+Filter-Dist, Margin=Level-Limit
7. The other emission levels were very low against the limit
8. The test data marked in gray background means the EUT emission data is located in the margin uncertainty range of emission limits.
9. The test limit distance is 3M limit.
10. For Wireless 802.11g mode (6Mbps).
11. Antenna type : A pair of Dipole Antenna.



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The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

|              |                        |                 |              |
|--------------|------------------------|-----------------|--------------|
| Company      | ViewSonic Corporation. | Test Date :     | 2004/6/16    |
| Product Name | 802.11g WLAN Mini PCI  | Test By:        | Ken Tu       |
| Model Name   | AV802G                 | TEMP&Humidity : | 24.3°C , 49% |

| CH1 TX     |         |        |       | Measurement Distance at 1m Horizontal polarity |      |        |          |                       |        |         |         |
|------------|---------|--------|-------|------------------------------------------------|------|--------|----------|-----------------------|--------|---------|---------|
| Freq.      | Reading | AF     | Cable | Pre-amp                                        | Dist | Filter | Level    | Limit                 | Margin | Mark    | Height  |
| (MHz)      | (dBuV)  | (dBuV) | (dB)  | (dB)                                           | dB   | dB     | (dBuV/m) | (dBuV/m)              | (dB)   | (P/Q/A) | (Meter) |
| * 2389.89  | 29.00   | 31.81  | 3.84  | 0.00                                           | 9.50 | 0.00   | 55.15    | 74                    | -18.85 | P       | 1.00    |
| * 2389.89  | 19.10   | 31.81  | 3.84  | 0.00                                           | 9.50 | 0.00   | 45.25    | 54                    | -8.75  | A       | 1.00    |
| 2399.90    | 40.90   | 31.80  | 3.76  | 0.00                                           | 9.50 | 0.00   | 66.96    | 79.98                 | -13.01 | P       | 1.00    |
| 2399.90    | 32.30   | 31.80  | 3.76  | 0.00                                           | 9.50 | 0.00   | 58.36    | 73.39                 | -15.02 | A       | 1.00    |
| 2413.30    | 74.03   | 31.79  | 3.66  | 0.00                                           | 9.50 | 0.00   | 99.98    | Fundamental Frequency |        | P       | 1.00    |
| 2413.30    | 67.44   | 31.79  | 3.66  | 0.00                                           | 9.50 | 0.00   | 93.39    |                       |        | A       | 1.00    |
| * 4823.95  | 50.51   | 34.44  | 2.82  | 35.16                                          | 9.50 | 2.00   | 45.11    | 74                    | -28.89 | P       | 1.04    |
| * 4823.95  | 44.76   | 34.44  | 2.82  | 35.16                                          | 9.50 | 2.00   | 39.36    | 54                    | -14.64 | A       | 1.04    |
| 7235.72    | 46.25   | 39.81  | 4.79  | 35.65                                          | 9.50 | 2.00   | 47.70    | 74                    | -26.30 | P       | 1.06    |
| 7235.72    | 36.20   | 39.81  | 4.79  | 35.65                                          | 9.50 | 2.00   | 37.65    | 54                    | -16.35 | A       | 1.06    |
| 9674.83    | 45.07   | 38.53  | 5.90  | 36.48                                          | 9.50 | 0.60   | 44.12    | 74                    | -29.88 | P       | 1.01    |
| 9674.83    | 36.53   | 38.53  | 5.90  | 36.48                                          | 9.50 | 0.60   | 35.58    | 54                    | -18.42 | A       | 1.01    |
| * 12066.50 | -----   | -----  | ----- | -----                                          | 9.50 | 0.80   | -----    | -----                 | -----  | -----   | 1.00    |
| * 14479.80 | -----   | -----  | ----- | -----                                          | 0.00 | 0.68   | -----    | -----                 | -----  | -----   | 1.00    |
| 16893.10   | -----   | -----  | ----- | -----                                          | 0.00 | 0.44   | -----    | -----                 | -----  | -----   | 1.00    |
| * 19306.40 | -----   | -----  | ----- | -----                                          | 0.00 | 1.97   | -----    | -----                 | -----  | -----   | 1.00    |
| 21719.70   | -----   | -----  | ----- | -----                                          | 0.00 | 0.81   | -----    | -----                 | -----  | -----   | 1.00    |
| 24133.00   | -----   | -----  | ----- | -----                                          | 0.00 | 2.89   | -----    | -----                 | -----  | -----   | 1.00    |

**Note :**

1. The measurement was searched to 10th harmonic, Remark “---” means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz).
3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark “\*” means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow:  
Level=Reading+AF+Cable-Preamp+Filter-Dist, Margin=Level-Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.
9. For Wireless 802.11b mode (11Mbps).
10. Antenna type : One Dipole and one PIFA Antenna.



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The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

|              |                        |                 |              |
|--------------|------------------------|-----------------|--------------|
| Company      | ViewSonic Corporation. | Test Date :     | 2004/6/16    |
| Product Name | 802.11g WLAN Mini PCI  | Test By:        | Ken Tu       |
| Model Name   | AV802G                 | TEMP&Humidity : | 24.3°C , 49% |

| CH1 TX     |         |        |       | Measurement Distance at 1m |      |        |          |                       | Vertical polarity |         |         |
|------------|---------|--------|-------|----------------------------|------|--------|----------|-----------------------|-------------------|---------|---------|
| Freq.      | Reading | AF     | Cable | Pre-amp                    | Dist | Filter | Level    | Limit                 | Margin            | Mark    | Height  |
| (MHz)      | (dBuV)  | (dBuV) | (dB)  | (dB)                       | dB   | dB     | (dBuV/m) | (dBuV/m)              | (dB)              | (P/Q/A) | (Meter) |
| * 2389.89  | 36.30   | 31.81  | 3.84  | 0.00                       | 9.50 | 0.00   | 62.45    | 74                    | -11.55            | P       | 1.00    |
| * 2389.89  | 25.20   | 31.81  | 3.84  | 0.00                       | 9.50 | 0.00   | 51.35    | 54                    | -2.65             | A       | 1.00    |
| 2399.90    | 54.10   | 31.80  | 3.76  | 0.00                       | 9.50 | 0.00   | 80.16    | 92.51                 | -12.35            | P       | 1.00    |
| 2399.90    | 46.20   | 31.80  | 3.76  | 0.00                       | 9.50 | 0.00   | 72.26    | 85.38                 | -13.12            | A       | 1.00    |
| 2413.20    | 86.56   | 31.79  | 3.66  | 0.00                       | 9.50 | 0.00   | 112.51   | Fundamental Frequency |                   | P       | 1.00    |
| 2413.20    | 79.43   | 31.79  | 3.66  | 0.00                       | 9.50 | 0.00   | 105.38   |                       |                   | A       | 1.00    |
| * 4823.95  | 54.31   | 34.44  | 2.82  | 35.16                      | 9.50 | 2.00   | 48.91    | 74                    | -25.09            | P       | 1.05    |
| * 4823.95  | 43.28   | 34.44  | 2.82  | 35.16                      | 9.50 | 2.00   | 37.88    | 54                    | -16.12            | A       | 1.05    |
| 7236.94    | 50.36   | 39.81  | 4.79  | 35.65                      | 9.50 | 2.00   | 51.81    | 74                    | -22.19            | P       | 1.01    |
| 7236.94    | 40.86   | 39.81  | 4.79  | 35.65                      | 9.50 | 2.00   | 42.31    | 54                    | -11.69            | A       | 1.01    |
| 9647.83    | 45.85   | 38.54  | 5.90  | 36.44                      | 9.50 | 0.61   | 44.96    | 74                    | -29.04            | P       | 1.02    |
| 9647.83    | 38.65   | 38.54  | 5.90  | 36.44                      | 9.50 | 0.61   | 37.76    | 54                    | -16.24            | A       | 1.02    |
| * 12066.00 | -----   | -----  | ----- | -----                      | 9.50 | 0.80   | -----    | -----                 | -----             | -----   | 1.00    |
| * 14479.20 | -----   | -----  | ----- | -----                      | 0.00 | 0.68   | -----    | -----                 | -----             | -----   | 1.00    |
| 16892.40   | -----   | -----  | ----- | -----                      | 0.00 | 0.44   | -----    | -----                 | -----             | -----   | 1.00    |
| * 19305.60 | -----   | -----  | ----- | -----                      | 0.00 | 1.97   | -----    | -----                 | -----             | -----   | 1.00    |
| 21718.80   | -----   | -----  | ----- | -----                      | 0.00 | 0.81   | -----    | -----                 | -----             | -----   | 1.00    |
| 24132.00   | -----   | -----  | ----- | -----                      | 0.00 | 2.89   | -----    | -----                 | -----             | -----   | 1.00    |

**Note :**

1. The measurement was searched to 10th harmonic, Remark "----" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz).
3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "\*" means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow:  
Level=Reading+AF+Cable-Preamp+Filter-Dist, Margin=Level-Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.
9. For Wireless 802.11b mode (11Mbps).
10. Antenna type : One Dipole and one PIFA Antenna.

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FCC ID : GSSAV802G

Report No. : ER04-06-034FRF

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The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

|              |                        |                 |              |
|--------------|------------------------|-----------------|--------------|
| Company      | ViewSonic Corporation. | Test Date :     | 2004/6/16    |
| Product Name | 802.11g WLAN Mini PCI  | Test By:        | Ken Tu       |
| Model Name   | AV802G                 | TEMP&Humidity : | 24.3°C , 49% |

| CH6 TX     |         |        |       | Measurement Distance at 1m Horizontal polarity |      |        |          |                       |        |         |         |
|------------|---------|--------|-------|------------------------------------------------|------|--------|----------|-----------------------|--------|---------|---------|
| Freq.      | Reading | AF     | Cable | Pre-amp                                        | Dist | Filter | Level    | Limit                 | Margin | Mark    | Height  |
| (MHz)      | (dBuV)  | (dBuV) | (dB)  | (dB)                                           | dB   | dB     | (dBuV/m) | (dBuV/m)              | (dB)   | (P/Q/A) | (Meter) |
| 2437.55    | 76.32   | 31.76  | 3.47  | 0.00                                           | 9.50 | 0.00   | 102.06   | Fundamental Frequency |        | P       | 1.00    |
| 2437.55    | 68.02   | 31.76  | 3.47  | 0.00                                           | 9.50 | 0.00   | 93.76    |                       |        | A       | 1.00    |
| * 4873.84  | 50.97   | 34.77  | 2.73  | 35.20                                          | 9.50 | 1.80   | 45.57    | 74                    | -28.43 | P       | 1.00    |
| * 4873.84  | 45.35   | 34.77  | 2.73  | 35.20                                          | 9.50 | 1.80   | 39.95    | 54                    | -14.05 | A       | 1.00    |
| * 7312.51  | 46.25   | 39.77  | 4.83  | 35.64                                          | 9.50 | 2.00   | 47.71    | 74                    | -26.29 | P       | 1.08    |
| * 7312.51  | 34.25   | 39.77  | 4.83  | 35.64                                          | 9.50 | 2.00   | 35.71    | 54                    | -18.29 | A       | 1.08    |
| 9747.89    | 48.12   | 38.53  | 5.90  | 36.60                                          | 9.50 | 0.55   | 47.00    | 74                    | -27.00 | P       | 1.00    |
| 9747.89    | 40.65   | 38.53  | 5.90  | 36.60                                          | 9.50 | 0.55   | 39.53    | 54                    | -14.47 | A       | 1.00    |
| * 12187.75 | -----   | -----  | ----- | -----                                          | 9.50 | 0.80   | -----    | -----                 | -----  | -----   | 1.00    |
| 14625.30   | -----   | -----  | ----- | -----                                          | 0.00 | 0.60   | -----    | -----                 | -----  | -----   | 1.00    |
| 17062.85   | -----   | -----  | ----- | -----                                          | 0.00 | 0.53   | -----    | -----                 | -----  | -----   | 1.00    |
| * 19500.40 | -----   | -----  | ----- | -----                                          | 0.00 | 2.20   | -----    | -----                 | -----  | -----   | 1.00    |
| 21937.95   | -----   | -----  | ----- | -----                                          | 0.00 | 0.72   | -----    | -----                 | -----  | -----   | 1.00    |
| 24375.50   | -----   | -----  | ----- | -----                                          | 0.00 | 2.50   | -----    | -----                 | -----  | -----   | 1.00    |

**Note :**

1. The measurement was searched to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz).
3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "\*" means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow:  
Level=Reading+AF+Cable-Preamp+Filter-Dist, Margin=Level-Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.
9. For Wireless 802.11b mode (11Mbps).
10. Antenna type : One Dipole and one PIFA Antenna.

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The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

|              |                        |                 |              |
|--------------|------------------------|-----------------|--------------|
| Company      | ViewSonic Corporation. | Test Date :     | 2004/6/16    |
| Product Name | 802.11g WLAN Mini PCI  | Test By:        | Ken Tu       |
| Model Name   | AV802G                 | TEMP&Humidity : | 24.3°C , 49% |

| CH6 TX     |         |        |       | Measurement Distance at 1m |      |        |          | Vertical polarity     |        |         |         |
|------------|---------|--------|-------|----------------------------|------|--------|----------|-----------------------|--------|---------|---------|
| Freq.      | Reading | AF     | Cable | Pre-amp                    | Dist | Filter | Level    | Limit                 | Margin | Mark    | Height  |
| (MHz)      | (dBuV)  | (dBuV) | (dB)  | (dB)                       | dB   | dB     | (dBuV/m) | (dBuV/m)              | (dB)   | (P/Q/A) | (Meter) |
| 2438.20    | 87.68   | 31.76  | 3.47  | 0.00                       | 9.50 | 0.00   | 113.41   | Fundamental Frequency |        | P       | 1.00    |
| 2438.20    | 80.65   | 31.76  | 3.47  | 0.00                       | 9.50 | 0.00   | 106.38   |                       |        | A       | 1.00    |
| * 4873.93  | 57.02   | 34.77  | 2.73  | 35.20                      | 9.50 | 1.80   | 51.62    | 74                    | -22.38 | P       | 1.13    |
| * 4873.93  | 47.25   | 34.77  | 2.73  | 35.20                      | 9.50 | 1.80   | 41.85    | 54                    | -12.15 | A       | 1.13    |
| * 7311.00  | 50.36   | 39.78  | 4.82  | 35.64                      | 9.50 | 2.00   | 51.82    | 74                    | -22.18 | P       | 1.03    |
| * 7311.00  | 39.46   | 39.78  | 4.82  | 35.64                      | 9.50 | 2.00   | 40.92    | 54                    | -13.08 | A       | 1.03    |
| 9747.90    | 47.23   | 38.53  | 5.90  | 36.60                      | 9.50 | 0.55   | 46.11    | 74                    | -27.89 | P       | 1.05    |
| 9747.90    | 39.65   | 38.53  | 5.90  | 36.60                      | 9.50 | 0.55   | 38.53    | 54                    | -15.47 | A       | 1.05    |
| * 12191.00 | -----   | -----  | ----- | -----                      | 9.50 | 0.80   | -----    | -----                 | -----  | -----   | 1.00    |
| 14629.20   | -----   | -----  | ----- | -----                      | 0.00 | 0.60   | -----    | -----                 | -----  | -----   | 1.00    |
| 17067.40   | -----   | -----  | ----- | -----                      | 0.00 | 0.53   | -----    | -----                 | -----  | -----   | 1.00    |
| * 19505.60 | -----   | -----  | ----- | -----                      | 0.00 | 2.21   | -----    | -----                 | -----  | -----   | 1.00    |
| 21943.80   | -----   | -----  | ----- | -----                      | 0.00 | 0.72   | -----    | -----                 | -----  | -----   | 1.00    |
| 24382.00   | -----   | -----  | ----- | -----                      | 0.00 | 2.49   | -----    | -----                 | -----  | -----   | 1.00    |

**Note :**

1. The measurement was searched to 10th harmonic, Remark “---” means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz).
3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark “\*” means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow:  
Level=Reading+AF+Cable-Preamp+Filter-Dist, Margin=Level-Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.
9. For Wireless 802.11b mode (11Mbps).
10. Antenna type : One Dipole and one PIFA Antenna.



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The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

|              |                        |                 |              |
|--------------|------------------------|-----------------|--------------|
| Company      | ViewSonic Corporation. | Test Date :     | 2004/6/16    |
| Product Name | 802.11g WLAN Mini PCI  | Test By:        | Ken Tu       |
| Model Name   | AV802G                 | TEMP&Humidity : | 24.3°C , 49% |

| CH11 TX    |         |        |       | Measurement Distance at 1m |      |        |          | Horizontal polarity   |        |         |         |
|------------|---------|--------|-------|----------------------------|------|--------|----------|-----------------------|--------|---------|---------|
| Freq.      | Reading | AF     | Cable | Pre-amp                    | Dist | Filter | Level    | Limit                 | Margin | Mark    | Height  |
| (MHz)      | (dBuV)  | (dBuV) | (dB)  | (dB)                       | dB   | dB     | (dBuV/m) | (dBuV/m)              | (dB)   | (P/Q/A) | (Meter) |
| 2463.25    | 75.12   | 31.74  | 3.28  | 0.00                       | 9.50 | 0.00   | 100.64   | Fundamental Frequency |        | P       | 1.00    |
| 2463.25    | 67.86   | 31.74  | 3.28  | 0.00                       | 9.50 | 0.00   | 93.38    |                       |        | A       | 1.00    |
| * 2483.50  | 29.70   | 31.72  | 3.13  | 0.00                       | 9.50 | 0.00   | 55.04    | 74                    | -18.96 | P       | 1.18    |
| * 2483.50  | 19.20   | 31.72  | 3.13  | 0.00                       | 9.50 | 0.00   | 44.54    | 54                    | -9.46  | A       | 1.18    |
| * 2483.95  | 30.30   | 31.72  | 3.12  | 0.00                       | 9.50 | 0.00   | 55.64    | 74                    | -18.36 | P       | 1.18    |
| * 2483.95  | 19.10   | 31.72  | 3.12  | 0.00                       | 9.50 | 0.00   | 44.44    | 54                    | -9.56  | A       | 1.18    |
| * 4923.88  | 51.93   | 35.10  | 2.64  | 35.24                      | 9.50 | 1.60   | 46.53    | 74                    | -27.47 | P       | 1.04    |
| * 4923.88  | 47.38   | 35.10  | 2.64  | 35.24                      | 9.50 | 1.60   | 41.98    | 54                    | -12.02 | A       | 1.04    |
| * 7386.68  | 44.65   | 39.75  | 4.85  | 35.62                      | 9.50 | 2.00   | 46.13    | 74                    | -27.87 | P       | 1.12    |
| * 7386.68  | 34.02   | 39.75  | 4.85  | 35.62                      | 9.50 | 2.00   | 35.50    | 54                    | -18.50 | A       | 1.12    |
| 9848.01    | 46.31   | 38.52  | 5.90  | 36.76                      | 9.50 | 0.49   | 44.96    | 74                    | -29.04 | P       | 1.00    |
| 9848.01    | 37.59   | 38.52  | 5.90  | 36.76                      | 9.50 | 0.49   | 36.24    | 54                    | -17.76 | A       | 1.00    |
| * 12316.25 | -----   | -----  | ----- | -----                      | 9.50 | 0.80   | -----    | -----                 | -----  | -----   | 1.00    |
| 14779.50   | -----   | -----  | ----- | -----                      | 0.00 | 0.48   | -----    | -----                 | -----  | -----   | 1.00    |
| 17242.75   | -----   | -----  | ----- | -----                      | 0.00 | 0.60   | -----    | -----                 | -----  | -----   | 1.00    |
| * 19706.00 | -----   | -----  | ----- | -----                      | 0.00 | 2.41   | -----    | -----                 | -----  | -----   | 1.00    |
| * 22169.25 | -----   | -----  | ----- | -----                      | 0.00 | 0.70   | -----    | -----                 | -----  | -----   | 1.00    |
| 24632.50   | -----   | -----  | ----- | -----                      | 0.00 | 2.11   | -----    | -----                 | -----  | -----   | 1.00    |

### Note :

1. The measurement was searched to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz).
3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "\*" means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow:  
Level=Reading+AF+Cable-Preamp+Filter-Dist, Margin=Level-Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.
9. For Wireless 802.11b mode (11Mbps).
10. Antenna type : One Dipole and one PIFA Antenna.



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The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

|              |                        |                 |              |
|--------------|------------------------|-----------------|--------------|
| Company      | ViewSonic Corporation. | Test Date :     | 2004/6/16    |
| Product Name | 802.11g WLAN Mini PCI  | Test By:        | Ken Tu       |
| Model Name   | AV802G                 | TEMP&Humidity : | 24.3°C , 49% |

| CH11 TX    |         |        |       | Measurement Distance at 1m |      |        |          | Vertical polarity     |        |         |         |
|------------|---------|--------|-------|----------------------------|------|--------|----------|-----------------------|--------|---------|---------|
| Freq.      | Reading | AF     | Cable | Pre-amp                    | Dist | Filter | Level    | Limit                 | Margin | Mark    | Height  |
| (MHz)      | (dBuV)  | (dBuV) | (dB)  | (dB)                       | dB   | dB     | (dBuV/m) | (dBuV/m)              | (dB)   | (P/Q/A) | (Meter) |
| 2463.28    | 87.66   | 31.74  | 3.28  | 0.00                       | 9.50 | 0.00   | 113.18   | Fundamental Frequency |        | P       | 1.00    |
| 2463.28    | 80.56   | 31.74  | 3.28  | 0.00                       | 9.50 | 0.00   | 106.08   |                       |        | A       | 1.00    |
| * 2483.50  | 35.70   | 31.72  | 3.13  | 0.00                       | 9.50 | 0.00   | 61.04    | 74                    | -12.96 | P       | 1.01    |
| * 2483.50  | 22.60   | 31.72  | 3.13  | 0.00                       | 9.50 | 0.00   | 47.94    | 54                    | -6.06  | A       | 1.01    |
| * 2483.95  | 33.90   | 31.72  | 3.12  | 0.00                       | 9.50 | 0.00   | 59.24    | 74                    | -14.76 | P       | 1.01    |
| * 2483.95  | 21.30   | 31.72  | 3.12  | 0.00                       | 9.50 | 0.00   | 46.64    | 54                    | -7.36  | A       | 1.01    |
| * 4923.84  | 55.22   | 35.10  | 2.64  | 35.24                      | 9.50 | 1.60   | 49.82    | 74                    | -24.18 | P       | 1.00    |
| * 4923.84  | 48.20   | 35.10  | 2.64  | 35.24                      | 9.50 | 1.60   | 42.80    | 54                    | -11.20 | A       | 1.00    |
| * 7386.16  | 46.05   | 39.75  | 4.85  | 35.62                      | 9.50 | 2.00   | 47.53    | 74                    | -26.47 | P       | 1.00    |
| * 7386.16  | 35.89   | 39.75  | 4.85  | 35.62                      | 9.50 | 2.00   | 37.37    | 54                    | -16.63 | A       | 1.00    |
| 9847.88    | 46.85   | 38.52  | 5.90  | 36.76                      | 9.50 | 0.49   | 45.50    | 74                    | -28.50 | P       | 1.00    |
| 9847.88    | 38.02   | 38.52  | 5.90  | 36.76                      | 9.50 | 0.49   | 36.67    | 54                    | -17.33 | A       | 1.00    |
| * 12316.40 | -----   | -----  | ----- | -----                      | 9.50 | 0.80   | -----    | -----                 | -----  | -----   | 1.00    |
| 14779.68   | -----   | -----  | ----- | -----                      | 0.00 | 0.48   | -----    | -----                 | -----  | -----   | 1.00    |
| 17242.96   | -----   | -----  | ----- | -----                      | 0.00 | 0.60   | -----    | -----                 | -----  | -----   | 1.00    |
| * 19706.24 | -----   | -----  | ----- | -----                      | 0.00 | 2.41   | -----    | -----                 | -----  | -----   | 1.00    |
| * 22169.52 | -----   | -----  | ----- | -----                      | 0.00 | 0.70   | -----    | -----                 | -----  | -----   | 1.00    |
| 24632.80   | -----   | -----  | ----- | -----                      | 0.00 | 2.11   | -----    | -----                 | -----  | -----   | 1.00    |

### Note :

1. The measurement was searched to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz).
3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "\*" means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow:  
Level=Reading+AF+Cable-Preamp+Filter-Dist, Margin=Level-Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.
9. For Wireless 802.11b mode (11Mbps).
10. Antenna type : One Dipole and one PIFA Antenna.

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The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

|              |                        |                 |              |
|--------------|------------------------|-----------------|--------------|
| Company      | ViewSonic Corporation. | Test Date :     | 2004/6/16    |
| Product Name | 802.11g WLAN Mini PCI  | Test By:        | Ken Tu       |
| Model Name   | AV802G                 | TEMP&Humidity : | 24.3°C , 49% |

| CH1 TX     |         |        |       | Measurement Distance at 1m |      |        |          | Horizontal polarity   |        |         |         |
|------------|---------|--------|-------|----------------------------|------|--------|----------|-----------------------|--------|---------|---------|
| Freq.      | Reading | AF     | Cable | Pre-amp                    | Dist | Filter | Level    | Limit                 | Margin | Mark    | Height  |
| (MHz)      | (dBuV)  | (dBuV) | (dB)  | (dB)                       | dB   | dB     | (dBuV/m) | (dBuV/m)              | (dB)   | (P/Q/A) | (Meter) |
| * 2389.93  | 29.10   | 31.81  | 3.84  | 0.00                       | 9.50 | 0.00   | 55.25    | 74                    | -18.75 | P       | 1.23    |
| * 2389.93  | 19.00   | 31.81  | 3.84  | 0.00                       | 9.50 | 0.00   | 45.15    | 54                    | -8.85  | A       | 1.23    |
| 2399.90    | 38.70   | 31.80  | 3.76  | 0.00                       | 9.50 | 0.00   | 64.76    | 74.85                 | -10.09 | P       | 1.22    |
| 2399.90    | 27.10   | 31.80  | 3.76  | 0.00                       | 9.50 | 0.00   | 53.16    | 66.64                 | -13.48 | A       | 1.22    |
| 2406.58    | 68.85   | 31.79  | 3.71  | 0.00                       | 9.50 | 0.00   | 94.85    | Fundamental Frequency |        | P       | 1.00    |
| 2406.58    | 60.64   | 31.79  | 3.71  | 0.00                       | 9.50 | 0.00   | 86.64    |                       |        | A       | 1.00    |
| * 4823.95  | 50.11   | 34.44  | 2.82  | 35.16                      | 9.50 | 2.00   | 44.71    | 74                    | -29.29 | P       | 1.00    |
| * 4823.95  | 45.25   | 34.44  | 2.82  | 35.16                      | 9.50 | 2.00   | 39.85    | 54                    | -14.15 | A       | 1.00    |
| 7236.13    | 45.37   | 39.81  | 4.79  | 35.65                      | 9.50 | 2.00   | 46.82    | 74                    | -27.18 | P       | 1.00    |
| 7236.13    | 33.64   | 39.81  | 4.79  | 35.65                      | 9.50 | 2.00   | 35.09    | 54                    | -18.91 | A       | 1.00    |
| 9647.87    | 45.69   | 38.54  | 5.90  | 36.44                      | 9.50 | 0.61   | 44.80    | 74                    | -29.20 | P       | 1.00    |
| 9647.87    | 36.09   | 38.54  | 5.90  | 36.44                      | 9.50 | 0.61   | 35.20    | 54                    | -18.80 | A       | 1.00    |
| * 12032.90 | -----   | -----  | ----- | -----                      | 9.50 | 0.80   | -----    | -----                 | -----  | -----   | 1.00    |
| 14439.48   | -----   | -----  | ----- | -----                      | 0.00 | 0.63   | -----    | -----                 | -----  | -----   | 1.00    |
| 16846.06   | -----   | -----  | ----- | -----                      | 0.00 | 0.41   | -----    | -----                 | -----  | -----   | 1.00    |
| * 19252.64 | -----   | -----  | ----- | -----                      | 0.00 | 1.90   | -----    | -----                 | -----  | -----   | 1.00    |
| 21659.22   | -----   | -----  | ----- | -----                      | 0.00 | 0.84   | -----    | -----                 | -----  | -----   | 1.00    |
| 24065.80   | -----   | -----  | ----- | -----                      | 0.00 | 2.99   | -----    | -----                 | -----  | -----   | 1.00    |

**Note :**

1. The measurement was searched to 10th harmonic, Remark “---” means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz).
3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark “\*” means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow:  
Level=Reading+AF+Cable-Preamp+Filter-Dist, Margin=Level-Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.
9. For Wireless 802.11g mode (6Mbps).
10. Antenna type : One Dipole and one PIFA Antenna.

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The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

|              |                        |                 |              |
|--------------|------------------------|-----------------|--------------|
| Company      | ViewSonic Corporation. | Test Date :     | 2004/6/16    |
| Product Name | 802.11g WLAN Mini PCI  | Test By:        | Ken Tu       |
| Model Name   | AV802G                 | TEMP&Humidity : | 24.3°C , 49% |

| CH1 TX     |         |        |       | Measurement Distance at 1m |      |        |          | Vertical polarity     |        |         |         |
|------------|---------|--------|-------|----------------------------|------|--------|----------|-----------------------|--------|---------|---------|
| Freq.      | Reading | AF     | Cable | Pre-amp                    | Dist | Filter | Level    | Limit                 | Margin | Mark    | Height  |
| (MHz)      | (dBuV)  | (dBuV) | (dB)  | (dB)                       | dB   | dB     | (dBuV/m) | (dBuV/m)              | (dB)   | (P/Q/A) | (Meter) |
| * 2389.93  | 37.30   | 31.81  | 3.84  | 0.00                       | 9.50 | 0.00   | 63.45    | 74                    | -10.55 | P       | 1.20    |
| * 2389.93  | 26.00   | 31.81  | 3.84  | 0.00                       | 9.50 | 0.00   | 52.15    | 54                    | -1.85  | A       | 1.20    |
| 2399.90    | 53.00   | 31.80  | 3.76  | 0.00                       | 9.50 | 0.00   | 79.06    | 87.88                 | -8.82  | P       | 1.23    |
| 2399.90    | 41.00   | 31.80  | 3.76  | 0.00                       | 9.50 | 0.00   | 67.06    | 79.56                 | -12.50 | A       | 1.23    |
| 2414.20    | 81.94   | 31.79  | 3.65  | 0.00                       | 9.50 | 0.00   | 107.88   | Fundamental Frequency |        | P       | 1.00    |
| 2414.20    | 73.62   | 31.79  | 3.65  | 0.00                       | 9.50 | 0.00   | 99.56    |                       |        | A       | 1.00    |
| * 4823.95  | 51.04   | 34.44  | 2.82  | 35.16                      | 9.50 | 2.00   | 45.64    | 74                    | -28.36 | P       | 1.00    |
| * 4823.95  | 47.01   | 34.44  | 2.82  | 35.16                      | 9.50 | 2.00   | 41.61    | 54                    | -12.39 | A       | 1.00    |
| 7236.29    | 56.23   | 39.81  | 4.79  | 35.65                      | 9.50 | 2.00   | 57.68    | 74                    | -16.32 | P       | 1.00    |
| 7236.29    | 45.77   | 39.81  | 4.79  | 35.65                      | 9.50 | 2.00   | 47.22    | 54                    | -6.78  | A       | 1.00    |
| 9647.87    | 44.47   | 38.54  | 5.90  | 36.44                      | 9.50 | 0.61   | 43.58    | 74                    | -30.42 | P       | 1.00    |
| 9647.87    | 37.23   | 38.54  | 5.90  | 36.44                      | 9.50 | 0.61   | 36.34    | 54                    | -17.66 | A       | 1.00    |
| * 12071.00 | -----   | -----  | ----- | -----                      | 9.50 | 0.80   | -----    | -----                 | -----  | -----   | 1.00    |
| * 14485.20 | -----   | -----  | ----- | -----                      | 0.00 | 0.68   | -----    | -----                 | -----  | -----   | 1.00    |
| 16899.40   | -----   | -----  | ----- | -----                      | 0.00 | 0.44   | -----    | -----                 | -----  | -----   | 1.00    |
| * 19313.60 | -----   | -----  | ----- | -----                      | 0.00 | 1.98   | -----    | -----                 | -----  | -----   | 1.00    |
| 21727.80   | -----   | -----  | ----- | -----                      | 0.00 | 0.81   | -----    | -----                 | -----  | -----   | 1.00    |
| 24142.00   | -----   | -----  | ----- | -----                      | 0.00 | 2.87   | -----    | -----                 | -----  | -----   | 1.00    |

**Note :**

1. The measurement was searched to 10th harmonic, Remark "----" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz).
3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "\*" means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow:  
Level=Reading+AF+Cable-Preamp+Filter-Dist, Margin=Level-Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.
9. For Wireless 802.11g mode (6Mbps).
10. Antenna type : One Dipole and one PIFA Antenna.



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The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

|              |                        |                 |              |
|--------------|------------------------|-----------------|--------------|
| Company      | ViewSonic Corporation. | Test Date :     | 2004/6/16    |
| Product Name | 802.11g WLAN Mini PCI  | Test By:        | Ken Tu       |
| Model Name   | AV802G                 | TEMP&Humidity : | 24.3°C , 49% |

| CH6 TX     |         |        |       | Measurement Distance at 1m |      |        |          | Horizontal polarity   |        |         |         |
|------------|---------|--------|-------|----------------------------|------|--------|----------|-----------------------|--------|---------|---------|
| Freq.      | Reading | AF     | Cable | Pre-amp                    | Dist | Filter | Level    | Limit                 | Margin | Mark    | Height  |
| (MHz)      | (dBuV)  | (dBuV) | (dB)  | (dB)                       | dB   | dB     | (dBuV/m) | (dBuV/m)              | (dB)   | (P/Q/A) | (Meter) |
| 2439.30    | 68.35   | 31.76  | 3.46  | 0.00                       | 9.50 | 0.00   | 94.07    | Fundamental Frequency |        | P       | 1.00    |
| 2439.30    | 62.35   | 31.76  | 3.46  | 0.00                       | 9.50 | 0.00   | 88.07    |                       |        | A       | 1.00    |
| * 4873.76  | 55.32   | 34.77  | 2.73  | 35.20                      | 9.50 | 1.80   | 49.92    | 74                    | -24.08 | P       | 1.00    |
| * 4873.76  | 46.35   | 34.77  | 2.73  | 35.20                      | 9.50 | 1.80   | 40.95    | 54                    | -13.05 | A       | 1.00    |
| * 7311.82  | 47.53   | 39.78  | 4.82  | 35.64                      | 9.50 | 2.00   | 48.99    | 74                    | -25.01 | P       | 1.00    |
| * 7311.82  | 36.02   | 39.78  | 4.82  | 35.64                      | 9.50 | 2.00   | 37.48    | 54                    | -16.52 | A       | 1.00    |
| 9747.87    | 47.25   | 38.53  | 5.90  | 36.60                      | 9.50 | 0.55   | 46.13    | 74                    | -27.87 | P       | 1.00    |
| 9747.87    | 38.02   | 38.53  | 5.90  | 36.60                      | 9.50 | 0.55   | 36.90    | 54                    | -17.10 | A       | 1.00    |
| * 12196.50 | -----   | -----  | ----- | -----                      | 9.50 | 0.80   | -----    | -----                 | -----  | -----   | 1.00    |
| 14635.80   | -----   | -----  | ----- | -----                      | 0.00 | 0.59   | -----    | -----                 | -----  | -----   | 1.00    |
| 17075.10   | -----   | -----  | ----- | -----                      | 0.00 | 0.53   | -----    | -----                 | -----  | -----   | 1.00    |
| * 19514.40 | -----   | -----  | ----- | -----                      | 0.00 | 2.21   | -----    | -----                 | -----  | -----   | 1.00    |
| 21953.70   | -----   | -----  | ----- | -----                      | 0.00 | 0.72   | -----    | -----                 | -----  | -----   | 1.00    |
| 24393.00   | -----   | -----  | ----- | -----                      | 0.00 | 2.47   | -----    | -----                 | -----  | -----   | 1.00    |

**Note :**

1. The measurement was searched to 10th harmonic, Remark “---” means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz).
3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark “\*” means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow:  
Level=Reading+AF+Cable-Preamp+Filter-Dist, Margin=Level-Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.
9. For Wireless 802.11g mode (6Mbps).
10. Antenna type : One Dipole and one PIFA Antenna.





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The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

|              |                        |                 |              |
|--------------|------------------------|-----------------|--------------|
| Company      | ViewSonic Corporation. | Test Date :     | 2004/6/16    |
| Product Name | 802.11g WLAN Mini PCI  | Test By:        | Ken Tu       |
| Model Name   | AV802G                 | TEMP&Humidity : | 24.3°C , 49% |

| CH6 TX     |         |        |       | Measurement Distance at 1m |      |        |          | Vertical polarity     |        |         |         |
|------------|---------|--------|-------|----------------------------|------|--------|----------|-----------------------|--------|---------|---------|
| Freq.      | Reading | AF     | Cable | Pre-amp                    | Dist | Filter | Level    | Limit                 | Margin | Mark    | Height  |
| (MHz)      | (dBuV)  | (dBuV) | (dB)  | (dB)                       | dB   | dB     | (dBuV/m) | (dBuV/m)              | (dB)   | (P/Q/A) | (Meter) |
| 2431.56    | 82.74   | 31.77  | 3.52  | 0.00                       | 9.50 | 0.00   | 108.53   | Fundamental Frequency |        | P       | 1.00    |
| 2431.56    | 74.56   | 31.77  | 3.52  | 0.00                       | 9.50 | 0.00   | 100.35   |                       |        | A       | 1.00    |
| * 4874.08  | 55.71   | 34.77  | 2.73  | 35.20                      | 9.50 | 1.80   | 50.31    | 74                    | -23.69 | P       | 1.00    |
| * 4874.08  | 46.30   | 34.77  | 2.73  | 35.20                      | 9.50 | 1.80   | 40.90    | 54                    | -13.10 | A       | 1.00    |
| * 7311.39  | 55.01   | 39.78  | 4.82  | 35.64                      | 9.50 | 2.00   | 56.47    | 74                    | -17.53 | P       | 1.00    |
| * 7311.39  | 44.62   | 39.78  | 4.82  | 35.64                      | 9.50 | 2.00   | 46.08    | 54                    | -7.92  | A       | 1.00    |
| 9747.87    | 46.23   | 38.53  | 5.90  | 36.60                      | 9.50 | 0.55   | 45.11    | 74                    | -28.89 | P       | 1.00    |
| 9747.87    | 39.65   | 38.53  | 5.90  | 36.60                      | 9.50 | 0.55   | 38.53    | 54                    | -15.47 | A       | 1.00    |
| * 12157.80 | -----   | -----  | ----- | -----                      | 9.50 | 0.80   | -----    | -----                 | -----  | -----   | 1.00    |
| 14589.36   | -----   | -----  | ----- | -----                      | 0.00 | 0.63   | -----    | -----                 | -----  | -----   | 1.00    |
| 17020.92   | -----   | -----  | ----- | -----                      | 0.00 | 0.51   | -----    | -----                 | -----  | -----   | 1.00    |
| * 19452.48 | -----   | -----  | ----- | -----                      | 0.00 | 2.14   | -----    | -----                 | -----  | -----   | 1.00    |
| 21884.04   | -----   | -----  | ----- | -----                      | 0.00 | 0.75   | -----    | -----                 | -----  | -----   | 1.00    |
| 24315.60   | -----   | -----  | ----- | -----                      | 0.00 | 2.60   | -----    | -----                 | -----  | -----   | 1.00    |

### Note :

1. The measurement was searched to 10th harmonic, Remark “---” means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz).
3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark “\*” means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow:  
Level=Reading+AF+Cable-Preamp+Filter-Dist, Margin=Level-Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.
9. For Wireless 802.11g mode (6Mbps).
10. Antenna type : One Dipole and one PIFA Antenna.

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The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

|              |                        |                 |              |
|--------------|------------------------|-----------------|--------------|
| Company      | ViewSonic Corporation. | Test Date :     | 2004/6/16    |
| Product Name | 802.11g WLAN Mini PCI  | Test By:        | Ken Tu       |
| Model Name   | AV802G                 | TEMP&Humidity : | 24.3°C , 49% |

| CH11 TX    |         |        |       | Measurement Distance at 1m |      |        |          | Horizontal polarity   |        |         |         |
|------------|---------|--------|-------|----------------------------|------|--------|----------|-----------------------|--------|---------|---------|
| Freq.      | Reading | AF     | Cable | Pre-amp                    | Dist | Filter | Level    | Limit                 | Margin | Mark    | Height  |
| (MHz)      | (dBuV)  | (dBuV) | (dB)  | (dB)                       | dB   | dB     | (dBuV/m) | (dBuV/m)              | (dB)   | (P/Q/A) | (Meter) |
| 2464.20    | 71.33   | 31.74  | 3.27  | 0.00                       | 9.50 | 0.00   | 96.84    | Fundamental Frequency |        | P       | 1.00    |
| 2464.20    | 63.07   | 31.74  | 3.27  | 0.00                       | 9.50 | 0.00   | 88.58    |                       |        | A       | 1.00    |
| * 2483.50  | 30.30   | 31.72  | 3.13  | 0.00                       | 9.50 | 0.00   | 55.64    | 74                    | -18.36 | P       | 1.18    |
| * 2483.50  | 19.80   | 31.72  | 3.13  | 0.00                       | 9.50 | 0.00   | 45.14    | 54                    | -8.86  | A       | 1.18    |
| * 2483.95  | 30.10   | 31.72  | 3.12  | 0.00                       | 9.50 | 0.00   | 55.44    | 74                    | -18.56 | P       | 1.20    |
| * 2483.95  | 19.60   | 31.72  | 3.12  | 0.00                       | 9.50 | 0.00   | 44.94    | 54                    | -9.06  | A       | 1.20    |
| * 4923.88  | 50.90   | 35.10  | 2.64  | 35.24                      | 9.50 | 1.60   | 45.50    | 74                    | -28.50 | P       | 1.00    |
| * 4923.88  | 47.17   | 35.10  | 2.64  | 35.24                      | 9.50 | 1.60   | 41.77    | 54                    | -12.23 | A       | 1.00    |
| * 7386.22  | 44.68   | 39.75  | 4.85  | 35.62                      | 9.50 | 2.00   | 46.16    | 74                    | -27.84 | P       | 1.00    |
| * 7386.22  | 34.80   | 39.75  | 4.85  | 35.62                      | 9.50 | 2.00   | 36.28    | 54                    | -17.72 | A       | 1.00    |
| 9847.82    | 46.35   | 38.52  | 5.90  | 36.76                      | 9.50 | 0.49   | 45.00    | 74                    | -29.00 | P       | 1.00    |
| 9847.82    | 39.02   | 38.52  | 5.90  | 36.76                      | 9.50 | 0.49   | 37.67    | 54                    | -16.33 | A       | 1.00    |
| * 12321.00 | -----   | -----  | ----- | -----                      | 9.50 | 0.80   | -----    | -----                 | -----  | -----   | 1.00    |
| 14785.20   | -----   | -----  | ----- | -----                      | 0.00 | 0.47   | -----    | -----                 | -----  | -----   | 1.00    |
| 17249.40   | -----   | -----  | ----- | -----                      | 0.00 | 0.60   | -----    | -----                 | -----  | -----   | 1.00    |
| * 19713.60 | -----   | -----  | ----- | -----                      | 0.00 | 2.41   | -----    | -----                 | -----  | -----   | 1.00    |
| * 22177.80 | -----   | -----  | ----- | -----                      | 0.00 | 0.70   | -----    | -----                 | -----  | -----   | 1.00    |
| 24642.00   | -----   | -----  | ----- | -----                      | 0.00 | 2.10   | -----    | -----                 | -----  | -----   | 1.00    |

## Note :

1. The measurement was searched to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz).
3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "\*" means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow:  
Level=Reading+AF+Cable-Preamp+Filter-Dist, Margin=Level-Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.
9. For Wireless 802.11g mode (6Mbps).
10. Antenna type : One Dipole and one PIFA Antenna.

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The frequency spectrum above 1 GHz was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

|              |                        |                 |              |
|--------------|------------------------|-----------------|--------------|
| Company      | ViewSonic Corporation. | Test Date :     | 2004/6/16    |
| Product Name | 802.11g WLAN Mini PCI  | Test By:        | Ken Tu       |
| Model Name   | AV802G                 | TEMP&Humidity : | 24.3°C , 49% |

| CH11 TX    |         |        |       | Measurement Distance at 1m |      |        |          | Vertical polarity     |        |         |         |
|------------|---------|--------|-------|----------------------------|------|--------|----------|-----------------------|--------|---------|---------|
| Freq.      | Reading | AF     | Cable | Pre-amp                    | Dist | Filter | Level    | Limit                 | Margin | Mark    | Height  |
| (MHz)      | (dBuV)  | (dBuV) | (dB)  | (dB)                       | dB   | dB     | (dBuV/m) | (dBuV/m)              | (dB)   | (P/Q/A) | (Meter) |
| 2464.20    | 83.28   | 31.74  | 3.27  | 0.00                       | 9.50 | 0.00   | 108.79   | Fundamental Frequency |        | P       | 1.00    |
| 2464.20    | 75.00   | 31.74  | 3.27  | 0.00                       | 9.50 | 0.00   | 100.51   |                       |        | A       | 1.00    |
| * 2483.50  | 40.00   | 31.72  | 3.13  | 0.00                       | 9.50 | 0.00   | 65.34    | 74                    | -8.66  | P       | 1.01    |
| * 2483.50  | 25.80   | 31.72  | 3.13  | 0.00                       | 9.50 | 0.00   | 51.14    | 54                    | -2.86  | A       | 1.01    |
| * 2483.95  | 37.20   | 31.72  | 3.12  | 0.00                       | 9.50 | 0.00   | 62.54    | 74                    | -11.46 | P       | 1.14    |
| * 2483.95  | 25.70   | 31.72  | 3.12  | 0.00                       | 9.50 | 0.00   | 51.04    | 54                    | -2.96  | A       | 1.14    |
| * 4924.00  | 53.04   | 35.10  | 2.64  | 35.24                      | 9.50 | 1.60   | 47.64    | 74                    | -26.36 | P       | 1.00    |
| * 4924.00  | 49.67   | 35.10  | 2.64  | 35.24                      | 9.50 | 1.60   | 44.27    | 54                    | -9.73  | A       | 1.00    |
| * 7386.16  | 50.43   | 39.75  | 4.85  | 35.62                      | 9.50 | 2.00   | 51.91    | 74                    | -22.09 | P       | 1.00    |
| * 7386.16  | 40.26   | 39.75  | 4.85  | 35.62                      | 9.50 | 2.00   | 41.74    | 54                    | -12.26 | A       | 1.00    |
| 9847.82    | 46.38   | 38.52  | 5.90  | 36.76                      | 9.50 | 0.49   | 45.03    | 74                    | -28.97 | P       | 1.00    |
| 9847.82    | 36.52   | 38.52  | 5.90  | 36.76                      | 9.50 | 0.49   | 35.17    | 54                    | -18.83 | A       | 1.00    |
| * 12321.00 | -----   | -----  | ----- | -----                      | 9.50 | 0.80   | -----    | -----                 | -----  | -----   | 1.00    |
| 14785.20   | -----   | -----  | ----- | -----                      | 0.00 | 0.47   | -----    | -----                 | -----  | -----   | 1.00    |
| 17249.40   | -----   | -----  | ----- | -----                      | 0.00 | 0.60   | -----    | -----                 | -----  | -----   | 1.00    |
| * 19713.60 | -----   | -----  | ----- | -----                      | 0.00 | 2.41   | -----    | -----                 | -----  | -----   | 1.00    |
| * 22177.80 | -----   | -----  | ----- | -----                      | 0.00 | 0.70   | -----    | -----                 | -----  | -----   | 1.00    |
| 24642.00   | -----   | -----  | ----- | -----                      | 0.00 | 2.10   | -----    | -----                 | -----  | -----   | 1.00    |

**Note :**

1. The measurement was searched to 10th harmonic, Remark "----" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz).
3. Analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "\*" means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow:  
Level=Reading+AF+Cable-Preamp+Filter-Dist, Margin=Level-Limit
7. The other emission levels were very low against the limit
8. The test data marked in gray background means the EUT emission data is located in the margin uncertainty range of emission limits.
9. The test limit distance is 3M limit.
10. For Wireless 802.11g mode (6Mbps).
10. Antenna type : One Dipole and one PIFA Antenna.

### 3.7 Photos of Open Site

A pair of Dipole Antenna :



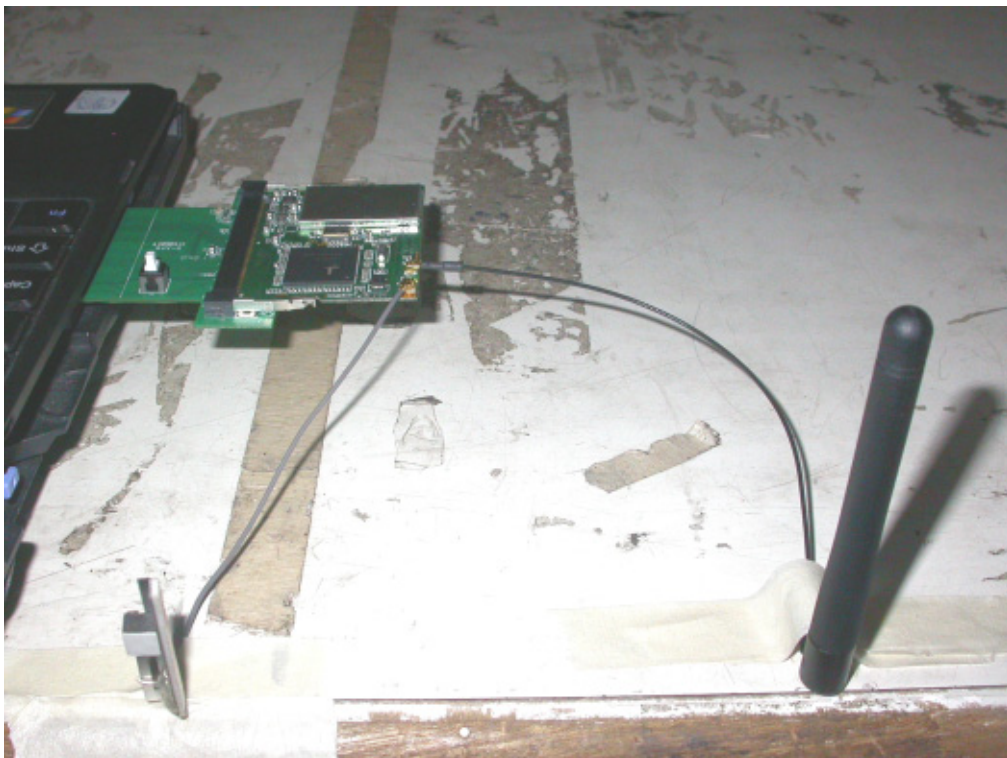




One Dipole and one PIFA Antenna :









## 4. 6dB BANDWIDTH MEASUREMENT

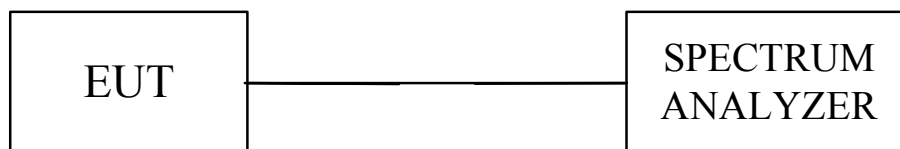
### 4.1 Test Equipments

| Description & Manufacturer           | Model No. | Serial No. | Date Of Calibration |
|--------------------------------------|-----------|------------|---------------------|
| ROHDE & SCHWARZ<br>SPECTRUM ANALYZER | FSEK30    | 835253/002 | June 17, 2004       |

Note : 1. The measurement uncertainty is less than +/- 2.6dB, which is calculated as per the NAMAS document NIS81.

2. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

### 4.2 Test Setup



### 4.3 Limits of 6dB Bandwidth Measurement

The minimum of 6dB Bandwidth Measurement is >500KHz

### 4.4 Test Procedure

The transmitter output was connected to the spectrum analyzer through an attenuator. The bandwidth of the fundamental frequency was measured by spectrum analyzer with 100 KHz RBW and 10MHz VBW. The 6dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 6dB.

### 4.5 Uncertainty of Conducted Emission

The uncertainty of conducted emission is  $\pm 200$ KHz.



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**4.6 Test Results**

|                             |                        |                                 |             |
|-----------------------------|------------------------|---------------------------------|-------------|
| <b>Input Power (System)</b> | 3.3VDC (From Notebook) | <b>Environmental Conditions</b> | 16°C, 84%RH |
| <b>Tested By</b>            | Ken Tu                 |                                 |             |

| Channel | Channel Frequency (MHz) | 6dB Bandwidth (MHz) | Minimum Limit (MHz) | Pass / Fail |
|---------|-------------------------|---------------------|---------------------|-------------|
| 1       | 2412                    | 11.58               | 0.5                 | PASS        |
| 6       | 2437                    | 11.86               | 0.5                 | PASS        |
| 11      | 2462                    | 11.58               | 0.5                 | PASS        |

Note : 1. For 802.11b Mode

| Channel | Channel Frequency (MHz) | 6dB Bandwidth (MHz) | Minimum Limit (MHz) | Pass / Fail |
|---------|-------------------------|---------------------|---------------------|-------------|
| 1       | 2412                    | 16.47               | 0.5                 | PASS        |
| 6       | 2437                    | 16.43               | 0.5                 | PASS        |
| 11      | 2462                    | 16.47               | 0.5                 | PASS        |

Note : 1. For 802.11g Mode



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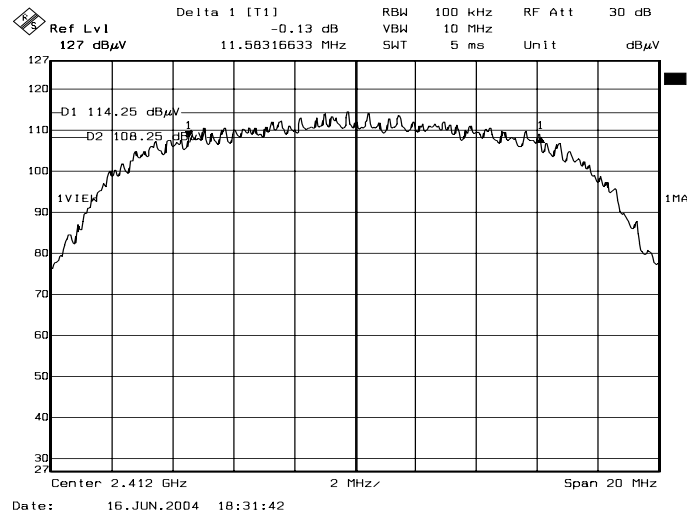
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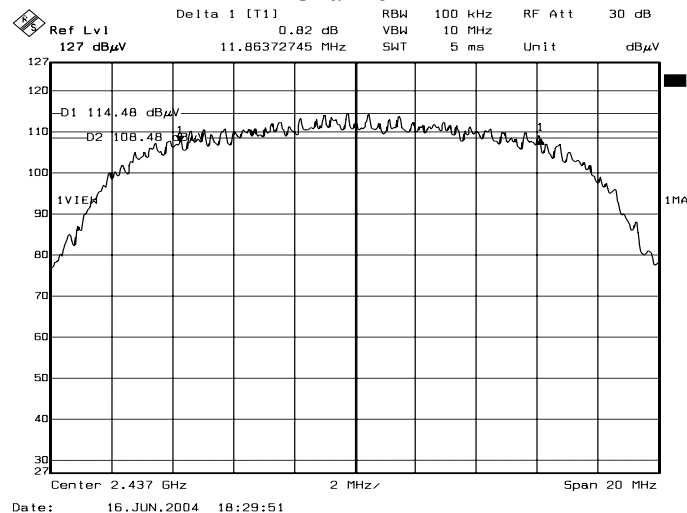
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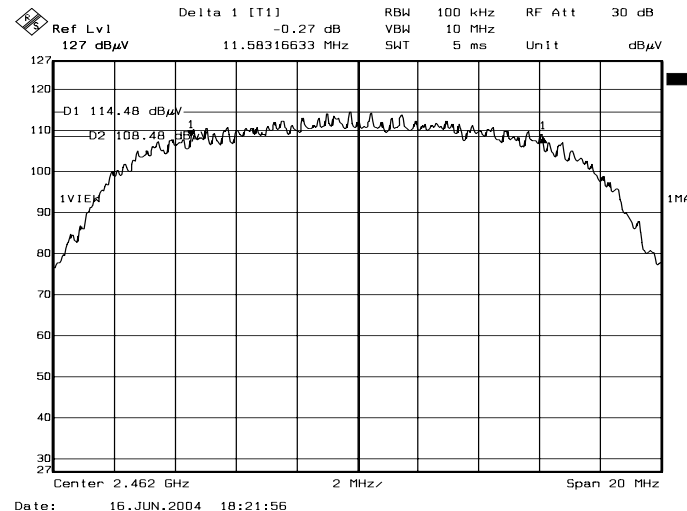
### 4.7 Photo of 6db Bandwidth Measurement



Channel 1



Channel 6



Channel 11

Note: For 802.11b Mode



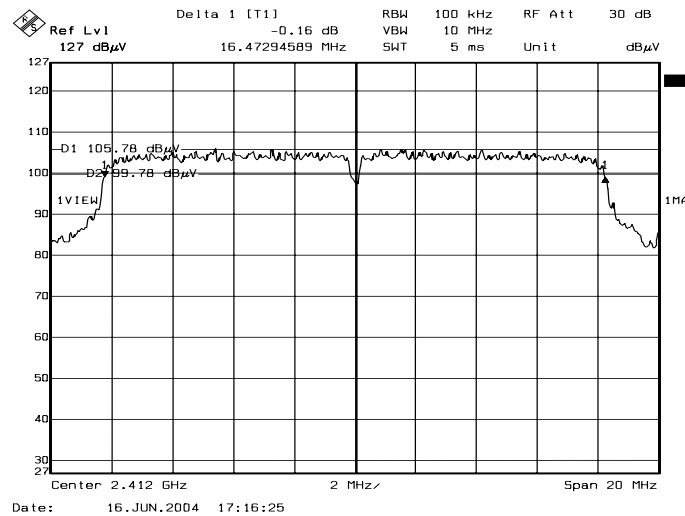
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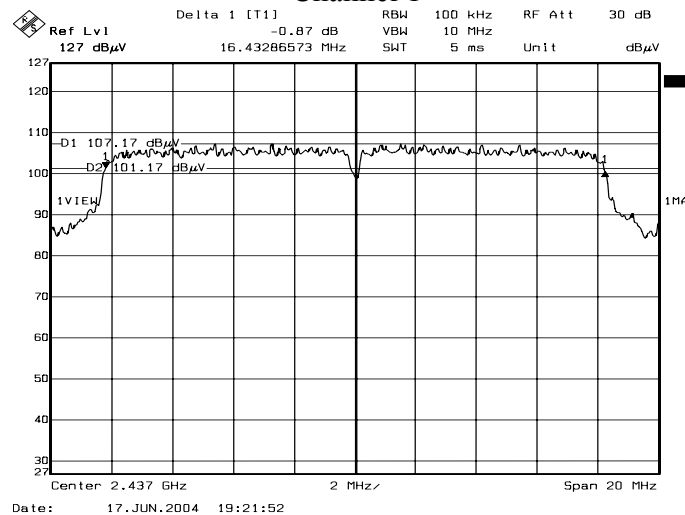
FCC ID : GSSAV802G

Report No. : ER04-06-034FRF

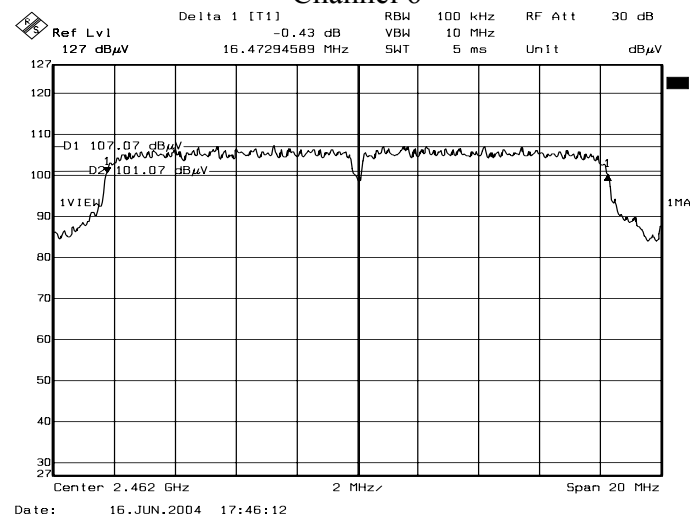
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Channel 1



Channel 6



Channel 11

Note: For 802.11g Mode



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## 5. MAXIMUM PEAK OUTPUT POWER

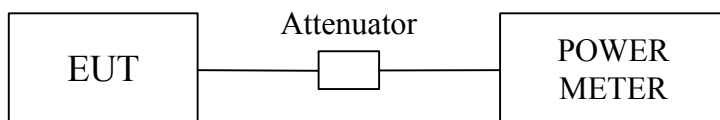
### 5.1 Test Equipments

| Description & Manufacturer        | Model No. | Serial No. | Date Of Calibration |
|-----------------------------------|-----------|------------|---------------------|
| ROHDE & SCHWARZ SPECTRUM ANALYZER | FSEK30    | 835253/002 | June 17, 2004       |
| Agilent ATTENUATOR                | 8491B     | 57321      | CAL. ON USE         |
| GIGASTRONICS POWER METER          | 8542      | 1828329    | September 19, 2003  |

Note : 1. The measurement uncertainty is less than  $\pm 2.6\text{dB}$ , which is calculated as per the NAMAS document NIS81.

2. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

### 5.2 Test Setup



### 5.3 Limits of Maximum Peak Output Power

The Maximum Peak Output Power Measurement is 30dBm.

## 5.4 Test Procedure

The RF power output was measured with a Power meter connected to the RF Antenna connector ( conducted measurement ) while EUT was operating in transmit mode at the appropriate center frequency.

## 5.5 Uncertainty of Conducted Emission

The uncertainty of conducted emission is  $\pm 1.82\text{dB}$ .

## 5.6 Test Results

|                             |                        |                                 |             |
|-----------------------------|------------------------|---------------------------------|-------------|
| <b>Input Power (System)</b> | 3.3VDC (From Notebook) | <b>Environmental Conditions</b> | 16°C, 84%RH |
| <b>Tested By</b>            | Ken Tu                 |                                 |             |

| Channel | Channel Frequency (MHz) | Average Power Output (dBm) | Peak Power Output (dBm) | Peak Power Limit (dBm) | Pass / Fail |
|---------|-------------------------|----------------------------|-------------------------|------------------------|-------------|
| 1       | 2412                    | 16.58                      | 18.64                   | 30                     | PASS        |
| 6       | 2437                    | 17.58                      | 19.61                   | 30                     | PASS        |
| 11      | 2462                    | 17.56                      | 19.60                   | 30                     | PASS        |

- Note : 1. For 802.11b mode.  
2. At final test to get the worst-case emission at 11Mbps.  
3. Cable loss = 0.5dB, Attenuator = 10dB.  
4. The results are calculated as the following equation :  
Peak Power Output = Peak Power Reading + Cable loss + Attenuator

| Channel | Channel Frequency (MHz) | Average Power Output (dBm) | Peak Power Output (dBm) | Peak Power Limit (dBm) | Pass / Fail |
|---------|-------------------------|----------------------------|-------------------------|------------------------|-------------|
| 1       | 2412                    | 13.07                      | 15.07                   | 30                     | PASS        |
| 6       | 2437                    | 14.58                      | 16.62                   | 30                     | PASS        |
| 11      | 2462                    | 14.20                      | 16.24                   | 30                     | PASS        |

- Note : 1. For 802.11g mode.  
2. At final test to get the worst-case emission at 6Mbps.  
3. Cable loss = 0.5dB, Attenuator = 10dB.  
4. The results are calculated as the following equation :  
Peak Power Output = Peak Power Reading + Cable loss + Attenuator

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## 6. POWER SPECTRAL DENSITY MEASUREMENT

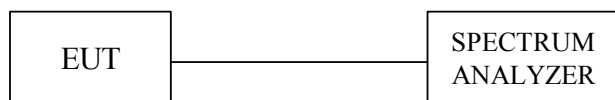
### 6.1 Test Equipments

| Description & Manufacturer        | Model No. | Serial No. | Date Of Calibration |
|-----------------------------------|-----------|------------|---------------------|
| ROHDE & SCHWARZ SPECTRUM ANALYZER | FSEK30    | 835253/002 | June 17, 2004       |

Note : 1. The measurement uncertainty is less than +/- 2.6dB, which is calculated as per the NAMAS document NIS81.

2. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

### 6.2 Test Setup



### 6.3 Limits of Power Spectral Density Measurement

The Maximum Power Spectral Density Measurement is 8dBm/3KHz.

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## 6.4 Test Procedure

The transmitter output was connected to the spectrum analyzer through an attenuator, the bandwidth of the fundamental frequency was measured with the spectrum analyzer using 3KHz RBW and 30KHz VBW, set sweep time=span / 3KHz.

The power spectral density was measured and recorded.

The sweep time is allowed to be longer than span / 3KHz for a full response of the mixer in the spectrum analyzer.

## 6.5 Uncertainty of Conducted Emission

The uncertainty of conducted emission is  $\pm 1.82\text{dB}$ .

## 6.6 Test Results

|                             |                        |                                 |             |
|-----------------------------|------------------------|---------------------------------|-------------|
| <b>Input Power (System)</b> | 3.3VDC (From Notebook) | <b>Environmental Conditions</b> | 16°C, 84%RH |
| <b>Tested By</b>            | Ken Tu                 |                                 |             |

| Channel | Channel Frequency (MHz) | Final RF Power Level in 3KHz BW (dBm) | Maximum Limit (dBm) | Pass / Fail |
|---------|-------------------------|---------------------------------------|---------------------|-------------|
| 1       | 2412                    | -7.72                                 | 8                   | PASS        |
| 6       | 2437                    | -7.41                                 | 8                   | PASS        |
| 11      | 2462                    | -7.28                                 | 8                   | PASS        |

Note: For 11Mbps (802.11b mode) at final test to get the worst-case emission at 11Mbps.

| Channel | Channel Frequency (MHz) | Final RF Power Level in 3KHz BW (dBm) | Maximum Limit (dBm) | Pass / Fail |
|---------|-------------------------|---------------------------------------|---------------------|-------------|
| 1       | 2412                    | -16.41                                | 8                   | PASS        |
| 6       | 2437                    | -14.94                                | 8                   | PASS        |
| 11      | 2462                    | -15.44                                | 8                   | PASS        |

Note: For 54Mbps (802.11g mode) at final test to get the worst-case emission at 6Mbps.





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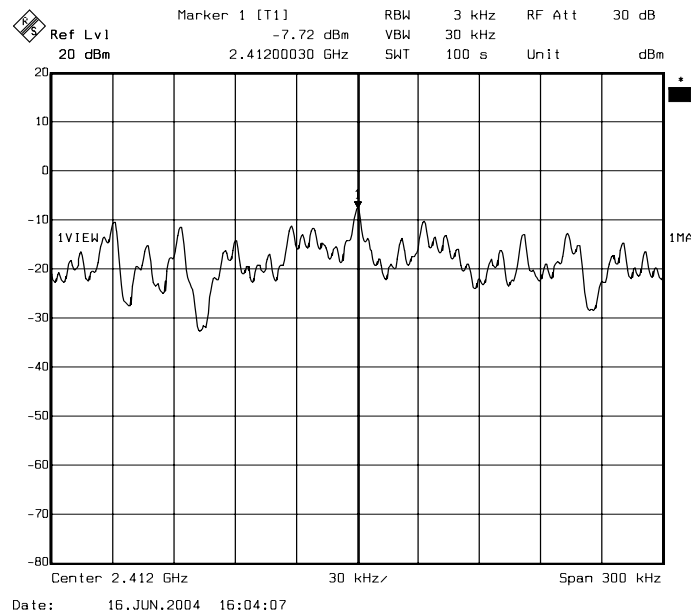
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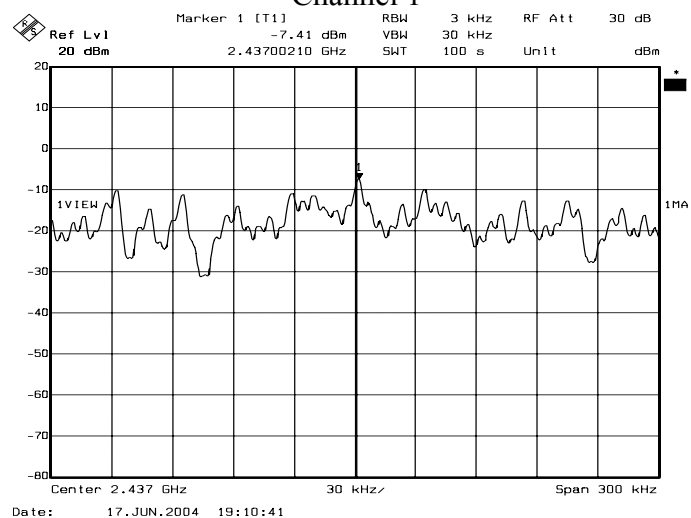
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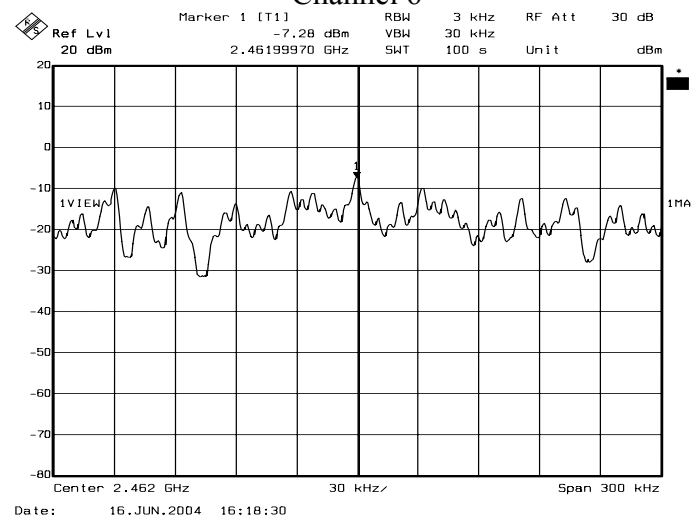
### 6.7 Photo of Power Spectral Density Measurement



Channel 1



Channel 6



Channel 11

Note: For 802.11b Mode



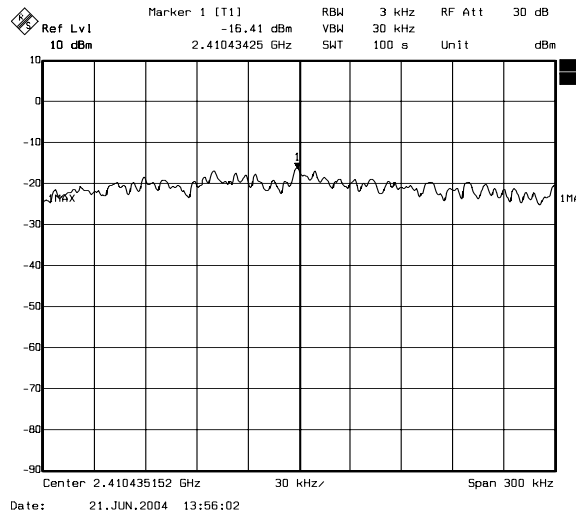
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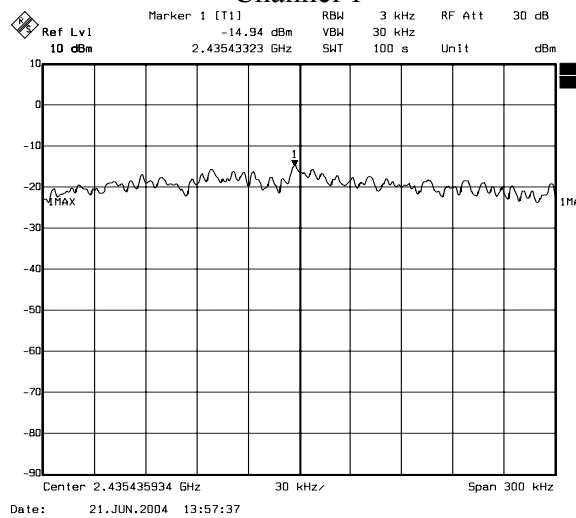
FCC ID : GSSAV802G

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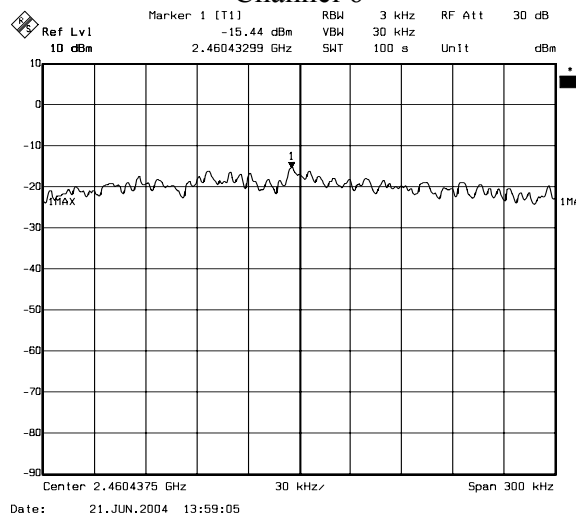
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### Channel 1



### Channel 6



### Channel 11

Note: For 802.11g Mode



## 7. BAND EDGE MEASUREMENT

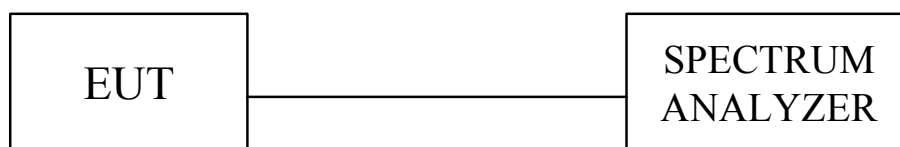
### 7.1 Test Equipments

| Description & Manufacturer           | Model No. | Serial No. | Date Of Calibration |
|--------------------------------------|-----------|------------|---------------------|
| ROHDE & SCHWARZ<br>SPECTRUM ANALYZER | FSEK30    | 835253/002 | June. 17, 2004      |

Note :

1. The measurement uncertainty is less than  $\pm 2.6\text{dB}$ , which is calculated as per the NAMAS document NIS81.
2. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

### 7.2 Test Setup



### 7.3 Limits of Band Edge Emissions Measurement

1. Below  $-20\text{dB}$  of the highest emission level in operating band.
2. Fall in the restricted bands listed in section 15.205. The maximum permitted average field strength is listed in section 15.209.

### 7.4 Test Procedure

The transmitter output was connected to the spectrum analyzer via a low loss cable. Set both RBW and VBW of spectrum analyzer with suitable frequency span including 100KHz bandwidth from band edge. The band edges were measured and recorded.

### 7.5 Uncertainty of Conducted Emission

The uncertainty of conducted emission is  $\pm 1.82\text{dB}$ .

## 7.6 Test Results

### A. Conducted

Refer to 7.7 photo of out band Emission measurement

### B. Radiated

|                             |                        |                                 |             |
|-----------------------------|------------------------|---------------------------------|-------------|
| <b>Input Power (System)</b> | 3.3VDC (From Notebook) | <b>Environmental Conditions</b> | 26°C, 48%RH |
| <b>Tested By</b>            | Ken Tu                 |                                 |             |

For 802.11b mode

Refer to the section 3.6, the measured radiated band edge emissions are listed below :

| Band edge Frequency (MHz) |    | Measured radiated band edge field strength (dBuV/m) |          | Radiated band edge field strength limit (dBuV/m) |          | Test result |
|---------------------------|----|-----------------------------------------------------|----------|--------------------------------------------------|----------|-------------|
|                           |    | Horizontal                                          | Vertical | Horizontal                                       | Vertical |             |
| 2399.90                   | PK | 69.36                                               | 81.16    | 82.40                                            | 94.23    | PASS        |
|                           | AV | 60.96                                               | 73.46    | 75.28                                            | 87.19    |             |
| 2483.50                   | PK | 56.54                                               | 60.04    | 74.00                                            | 74.00    | PASS        |
|                           | AV | 44.44                                               | 47.24    | 54.00                                            | 54.00    |             |

For 802.11g mode

Refer to the section 3.6, the measured radiated band edge emissions are listed below :

| Band edge Frequency (MHz) |    | Measured radiated band edge field strength (dBuV/m) |          | Radiated band edge field strength limit (dBuV/m) |          | Test result |
|---------------------------|----|-----------------------------------------------------|----------|--------------------------------------------------|----------|-------------|
|                           |    | Horizontal                                          | Vertical | Horizontal                                       | Vertical |             |
| 2399.90                   | PK | 68.76                                               | 80.46    | 74.74                                            | 89.12    | PASS        |
|                           | AV | 53.94                                               | 68.76    | 66.57                                            | 80.88    |             |
| 2483.50                   | PK | 55.94                                               | 66.34    | 74.00                                            | 74.00    | PASS        |
|                           | AV | 44.84                                               | 52.94    | 54.00                                            | 54.00    |             |

Note : 1. Radiated band edge field strength is measured with measurement procedure ANSI C63.4-2001.

2. Antenna type : A pair of Dipole Antenna.

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|                             |                        |                                 |             |
|-----------------------------|------------------------|---------------------------------|-------------|
| <b>Input Power (System)</b> | 3.3VDC (From Notebook) | <b>Environmental Conditions</b> | 26°C, 48%RH |
| <b>Tested By</b>            | Ken Tu                 |                                 |             |

For 802.11b mode

Refer to the section 3.6, the measured radiated band edge emissions are listed below :

| Band edge Frequency (MHz) |    | Measured radiated band edge field strength (dBuV/m) |          | Radiated band edge field strength limit (dBuV/m) |          | Test result |
|---------------------------|----|-----------------------------------------------------|----------|--------------------------------------------------|----------|-------------|
|                           |    | Horizontal                                          | Vertical | Horizontal                                       | Vertical |             |
| 2399.90                   | PK | 66.96                                               | 80.16    | 79.98                                            | 72.51    | PASS        |
|                           | AV | 58.36                                               | 72.26    | 73.39                                            | 85.38    |             |
| 2483.50                   | PK | 55.04                                               | 61.04    | 74.00                                            | 74.00    | PASS        |
|                           | AV | 44.54                                               | 47.94    | 54.00                                            | 54.00    |             |

For 802.11g mode

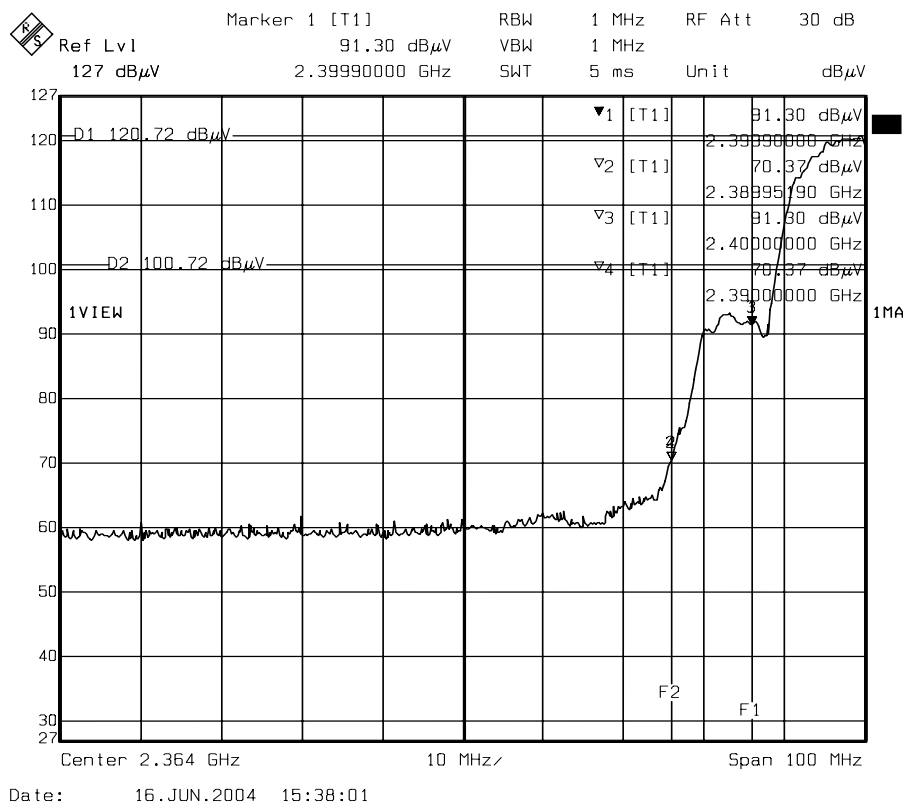
Refer to the section 3.6, the measured radiated band edge emissions are listed below :

| Band edge Frequency (MHz) |    | Measured radiated band edge field strength (dBuV/m) |          | Radiated band edge field strength limit (dBuV/m) |          | Test result |
|---------------------------|----|-----------------------------------------------------|----------|--------------------------------------------------|----------|-------------|
|                           |    | Horizontal                                          | Vertical | Horizontal                                       | Vertical |             |
| 2399.90                   | PK | 64.76                                               | 79.06    | 74.85                                            | 87.88    | PASS        |
|                           | AV | 53.16                                               | 67.06    | 66.54                                            | 79.56    |             |
| 2483.50                   | PK | 55.64                                               | 65.34    | 74.00                                            | 74.00    | PASS        |
|                           | AV | 45.14                                               | 51.14    | 54.00                                            | 54.00    |             |

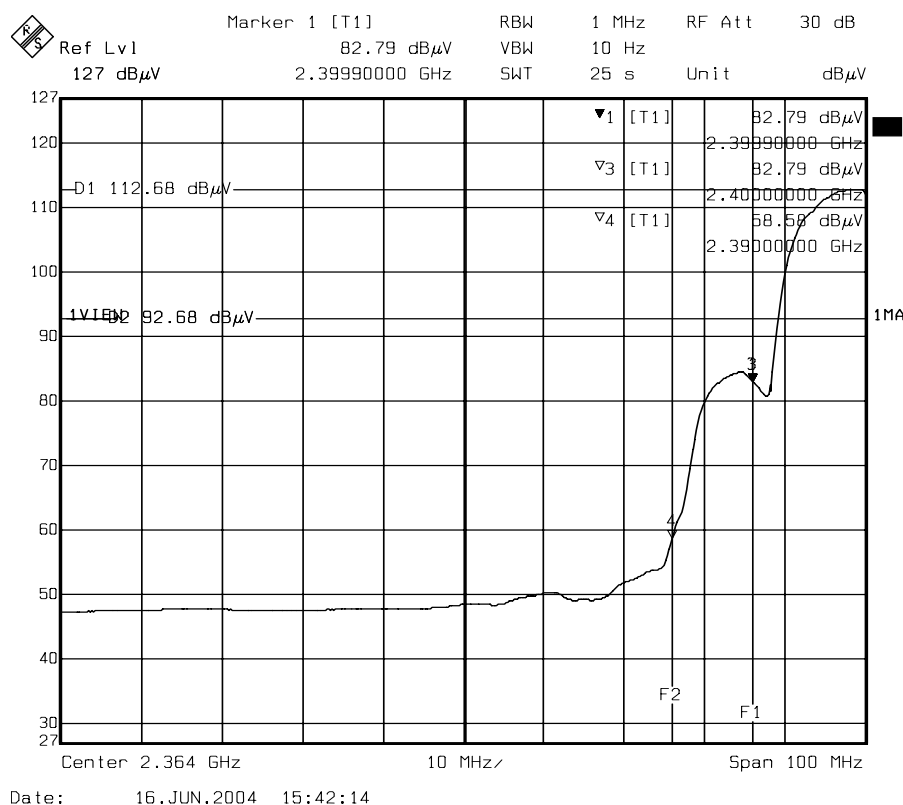
Note : 1. Radiated band edge field strength is measured with measurement procedure ANSI C63.4-2001.

2. Antenna type : One Dipole and one PIFA Antenna.

## 7.7 Photo of Band edge Measurement



Lower Band edge (Peak)



Lower Band edge (Average)

Note: For 802.11b Mode



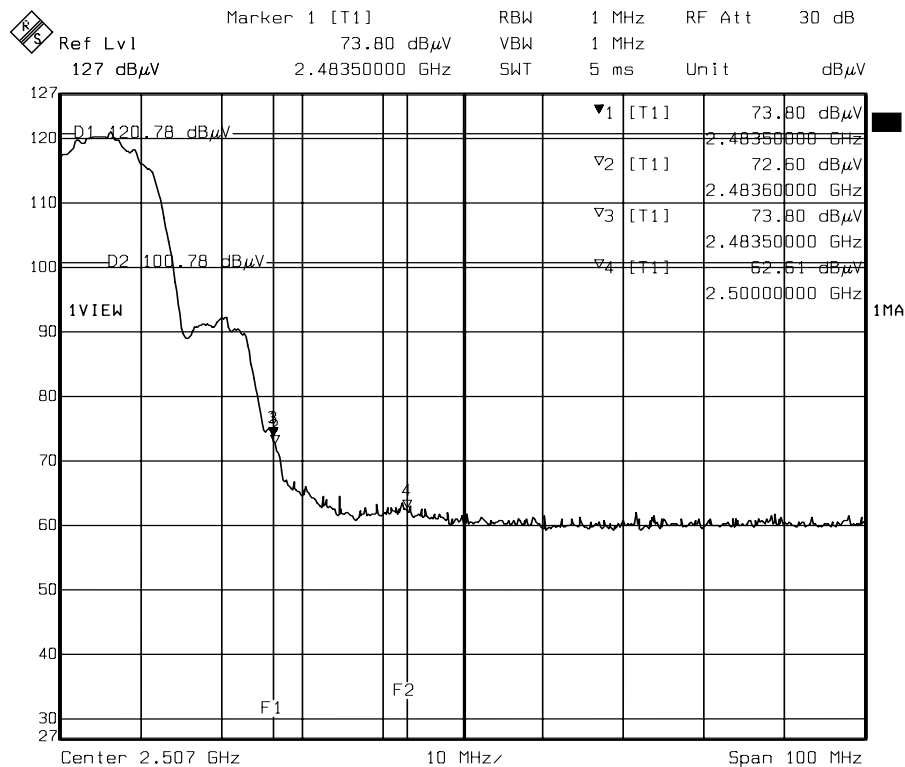
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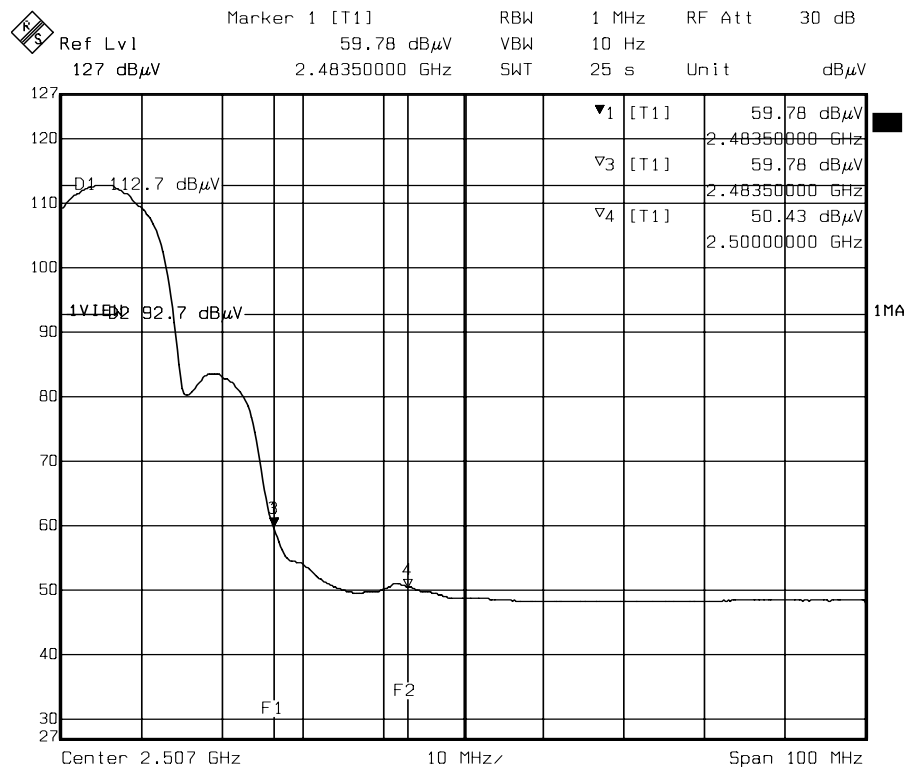
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Date: 16.JUN.2004 15:46:54

### Higher Band edge (Peak)



Date: 16.JUN.2004 15:49:40

### Higher Band edge (Average)

Note: For 802.11b Mode





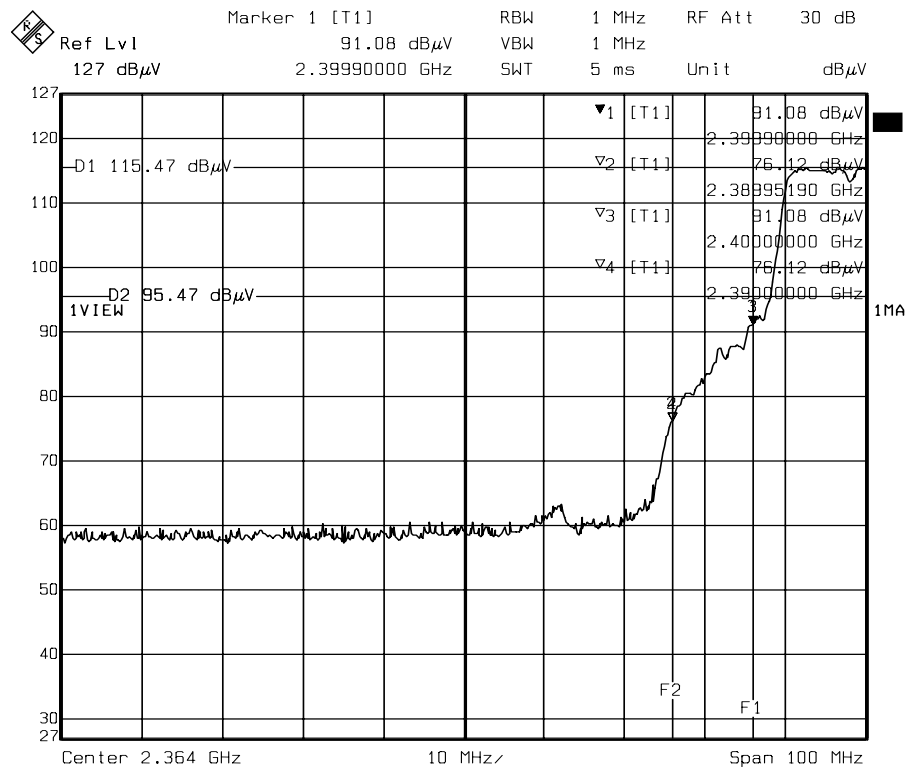
## Ecom Sertech Corp.

Rm. 258, Bldg. 17, NO.195, Sec. 4 Chung Hsing Rd., Chu Tung Chen, Hsinchu, Taiwan 310, R.O.C  
TEL: 886-3-5918012 FAX: 886-3-5825720

FCC ID : GSSAV802G

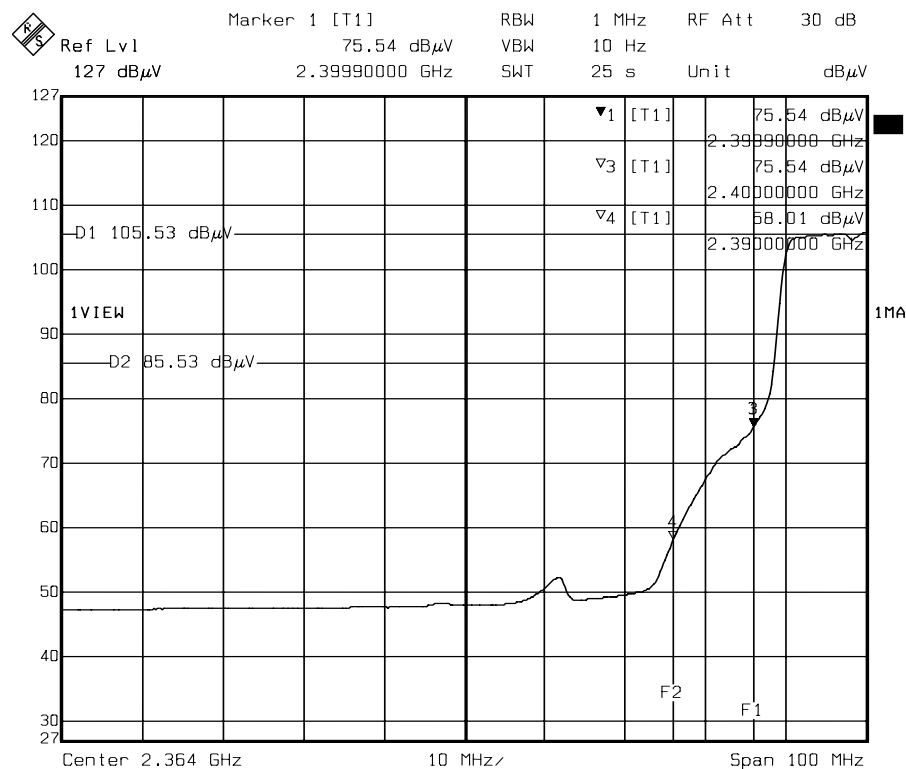
Report No. : ER04-06-034FRF

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Date: 18.JUN.2004 9:19:03

### Lower Band edge (Peak)



Date: 16.JUN.2004 15:14:52

### Lower Band edge (Average)

Note: For 802.11g Mode



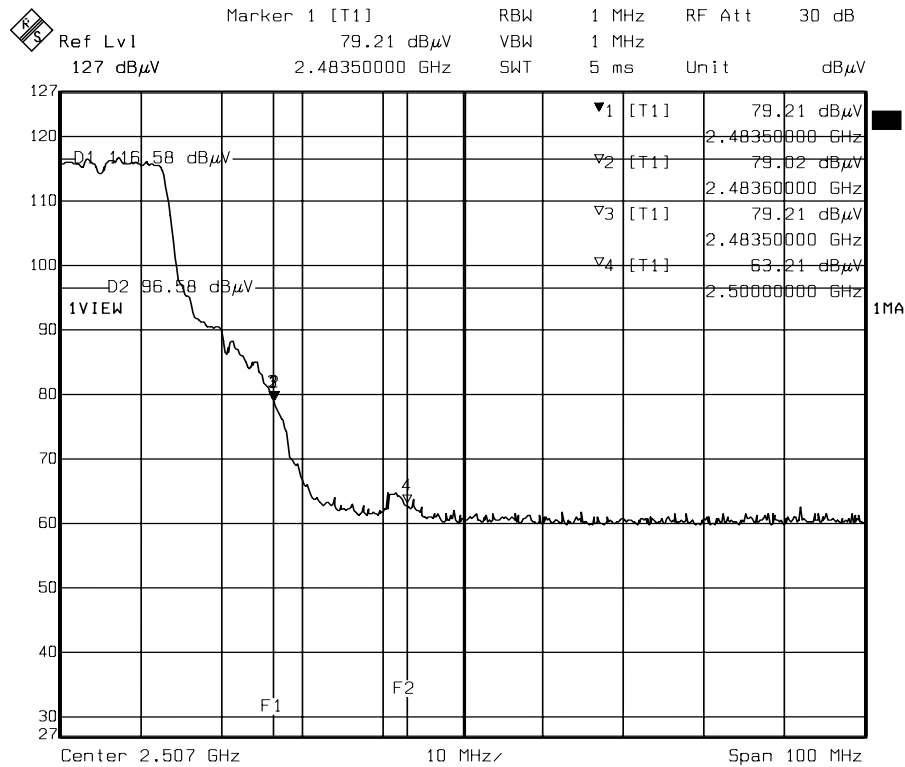
## Ecom Sertech Corp.

Rm. 258, Bldg. 17, NO.195, Sec. 4 Chung Hsing Rd., ChuTung Chen, Hsinchu, Taiwan 310, R.O.C  
TEL: 886-3-5918012 FAX: 886-3-5825720

FCC ID : GSSAV802G

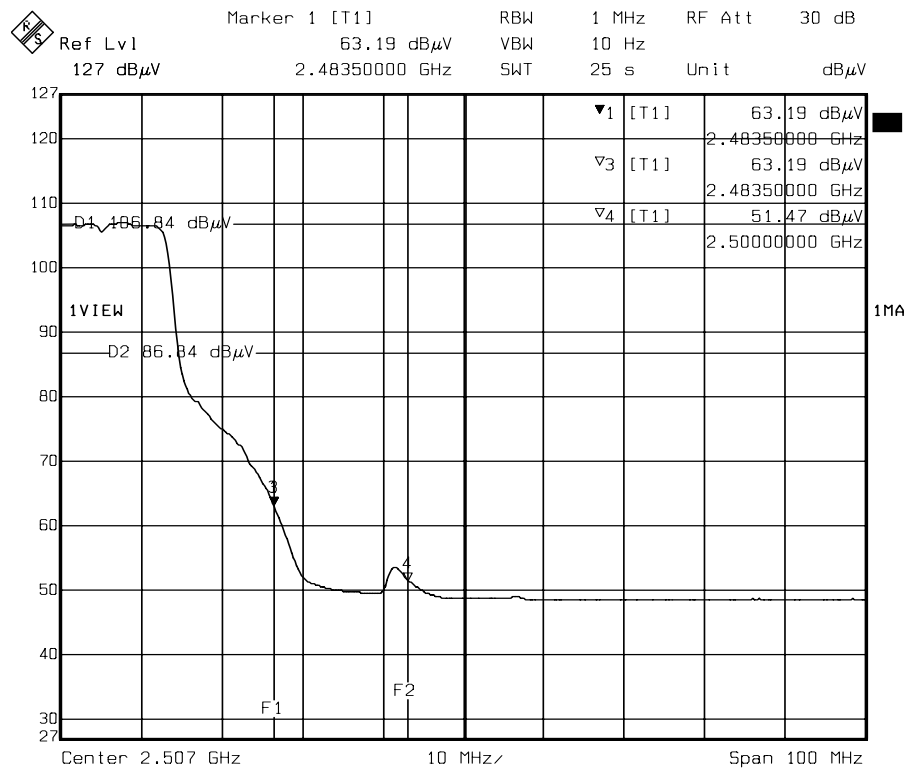
Report No. : ER04-06-034FRF

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Date: 16.JUN.2004 15:24:18

### Higher Band edge (Peak)



Date: 16.JUN.2004 15:28:52

### Higher Band edge (Average)

Note: For 802.11g Mode



## 8. ANTENNA REQUIREMENT

### 8.1 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.

And according to FCC 47 CFR Section 15.247 (b), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

### 8.2 Antenna Connected Construction

Two pair of antennas are used for EUT.

The data of antennas are shown on the table below.

A pair of Dipole Antenna :

|              | Model No. | Manufacturer                | Antenna Type | Cable Length | Gain dBi |
|--------------|-----------|-----------------------------|--------------|--------------|----------|
| Main antenna | WSL002    | WANSIH ELECTRONIC CO., LTD. | Dipole       | 150±5mm      | 2.71     |
| Aux antenna  | WSL002    | WANSIH ELECTRONIC CO., LTD. | Dipole       | 150±5mm      | 2.71     |

One Dipole and one PIFA Antenna :

|              | Model No. | Manufacturer                | Antenna Type | Cable Length | Gain dBi |
|--------------|-----------|-----------------------------|--------------|--------------|----------|
| Main antenna | WSL002    | WANSIH ELECTRONIC CO., LTD. | Dipole       | 150±5mm      | 2.71     |
| Aux antenna  | WPF001    | WANSIH ELECTRONIC CO., LTD. | PIFA         | 120±5mm      | 0.41     |



## 9. RF EXPOSURE EVALUATION

According to FCC 1.1310 : The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in 1.1307(b) LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

| Frequency Range<br>(MHz)                                | Electric Field<br>Strength (V/m) | Magnetic Field<br>Strength (A/m) | Power Density<br>(mW/cm <sup>2</sup> ) | Average Time |
|---------------------------------------------------------|----------------------------------|----------------------------------|----------------------------------------|--------------|
| (A) Limits for Occupational / Control Exposures         |                                  |                                  |                                        |              |
| 300-1,500                                               | --                               | --                               | F/300                                  | 6            |
| 1,500-100,000                                           | --                               | --                               | 5                                      | 6            |
| (B) Limits for General Population / Uncontrol Exposures |                                  |                                  |                                        |              |
| 300-1,500                                               | --                               | --                               | F/1500                                 | 6            |
| 1,500-100,000                                           | --                               | --                               | 1                                      | 30           |

### 9.1 Friis Formula

Friis transmission formula :  $P_d = (P_{out} * G) / (4 * \pi * r^2)$

Where

$P_d$  = power density in mW/cm<sup>2</sup>

$P_{out}$  = output power to antenna in mW

$G$  = gain of antenna in linear scale

$\pi$  = 3.1416

$R$  = distance between observation point and center of the radiator in cm

$P_d$  is the limit of MPE, 1 mW/cm<sup>2</sup>. If we know the maximum gain of the antenna and the total power input to the antenna, through the calculation, we will know the distance where the MPE limit is reached.

### 9.2 EUT Operating Condition

A software provided by client enabled the EUT to transmit and receive data at lowest, middle and highest channel individually.

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### 9.3 Test Result of RF Exposure Evaluation

Test Item : RF Exposure Evaluation Data

Test Mode : Normal Operation

#### 9.3.1 Antenna Gain

Two pair of antennas are used for EUT.

The antenna specification is listed in the table below :

A pair of Dipole Antenna :

|              | Model No. | Manufacturer                | Antenna Type | Cable Length | Gain dBi |
|--------------|-----------|-----------------------------|--------------|--------------|----------|
| Main antenna | WSL002    | WANSIH ELECTRONIC CO., LTD. | Dipole       | 150±5mm      | 2.71     |
| Aux antenna  | WSL002    | WANSIH ELECTRONIC CO., LTD. | Dipole       | 150±5mm      | 2.71     |

One Dipole and one PIFA Antenna :

|              | Model No. | Manufacturer                | Antenna Type | Cable Length | Gain dBi |
|--------------|-----------|-----------------------------|--------------|--------------|----------|
| Main antenna | WSL002    | WANSIH ELECTRONIC CO., LTD. | Dipole       | 150±5mm      | 2.71     |
| Aux antenna  | WPF001    | WANSIH ELECTRONIC CO., LTD. | PIFA         | 120±5mm      | 0.41     |



### 9.3.2 Output Power into Antenna & RF Exposure Evaluation Distance

The gain of main antenna of each pair of antenna is both 2.71dBi.

The radiated power from each pair of TX antenna are the same. The RF exposure evaluation results of these two pair of antenna are the same so only one RF exposure evaluation result of one pair of the antenna is shown in final test report.

| Channel | Channel Frequency (MHz) | Output Antenna Power to Antenna (dBm) e.i.r.p. | Power Density at 20cm (mW/cm <sup>2</sup> ) | LIMITS (mW/cm <sup>2</sup> ) |
|---------|-------------------------|------------------------------------------------|---------------------------------------------|------------------------------|
| CH1     | 2412.00                 | 19.79                                          | 0.018955                                    | 1                            |
| CH6     | 2437.00                 | 20.79                                          | 0.023863                                    | 1                            |
| CH11    | 2462.00                 | 20.77                                          | 0.023754                                    | 1                            |

Note : 1. For 802.11b mode (11Mbps).

2. The power density Pd (4th column) at a distance of 20cm calculated from the Friis transmission formula is far below the limit of 1 mW/cm<sup>2</sup>. The EUT is classified as mobile product. So, RF exposure limit warning or SAR test are not required.

| Channel | Channel Frequency (MHz) | Output Antenna Power to Antenna (dBm) e.i.r.p. | Power Density at 20cm (mW/cm <sup>2</sup> ) | LIMITS (mW/cm <sup>2</sup> ) |
|---------|-------------------------|------------------------------------------------|---------------------------------------------|------------------------------|
| CH1     | 2412.00                 | 16.28                                          | 0.008448                                    | 1                            |
| CH6     | 2437.00                 | 17.79                                          | 0.011960                                    | 1                            |
| CH11    | 2462.00                 | 17.41                                          | 0.010958                                    | 1                            |

Note : 1. For 802.11g mode (6Mbps).

2. The power density Pd (4th column) at a distance of 20cm calculated from the Friis transmission formula is far below the limit of 1 mW/cm<sup>2</sup>. The EUT is classified as mobile product. So, RF exposure limit warning or SAR test are not required.