

# FCC TEST REPORT

according to

## FCC Rules and Regulations

### Part 15 Subpart C

|            |   |
|------------|---|
| Applicant  | SerComm Corporation                                     |
| Address    | 8F, No. 3-1, YuanQu St., NanKang, Taipei 115,<br>R.O.C. |
| Equipment  | HomePlug 802.11g Access Point                           |
| Model No.  | IP822LM   |
| FCC ID     | P27IP822LM  |
| Trade Name | SerComm   |

Laboratory accreditation



1332

- The test result refers exclusively to the test presented test model / sample.,
- Without written approval of **Exclusive Certification Corp.** the test report shall not be reproduced except in full.
- The EUT is also considered as a kind of computer peripheral, because the connection to computer is necessary for typical use. It has been verified to comply with the requirements of FCC Part 15, Subpart B, Class B (DoC). The test report has been issued separately.

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# CERTIFICATE OF COMPLIANCE

according to

## FCC Rules and Regulations

### Part 15 Subpart C

|           |   |
|-----------|---|
| Applicant | SerComm Corporation                                     |
| Address   | 8F, No. 3-1, YuanQu St., NanKang, Taipei 115,<br>R.O.C. |
| Equipment | HomePlug 802.11g Access Point                           |
| Model No. | IP822LM   |
| FCC ID    | P27IP822LM  |

#### I HEREBY CERTIFY THAT :

The measurements shown in this test report were made in accordance with the procedures given in **ANSI C63.4**. The equipment was **passed** the test performed according to **FCC Rules and Regulations Part 15 Subpart C (2003)**. The test was carried out on Apr. 26, 2005 at *Exclusive Certification Corp.*

Signature

  
Anson Chou / Manager

## 1. Report of Measurements and Examinations

### 1.1. List of Measurements and Examinations

| FCC Rule                             | Description of Test                        | Result |
|--------------------------------------|--|--------|
| 15.203                               | . Antenna Requirement                      | Pass   |
| 15.207                               | . Conducted Emission                       | Pass   |
| 15.209                               | . Radiated Emission                        | Pass   |
| 15.247(a)(2)                         | . 6dB Bandwidth                            | Pass   |
| 15.247(b)                            | . Maximum Peak Output Power                | Pass   |
| 15.247(c)                            | . 100kHz Bandwidth of Frequency Band Edges | Pass   |
| 15.247(d)                            | . Power Spectral Density                   | Pass   |
| 1.1307<br>1.1310<br>2.1091<br>2.1093 | . RF Exposure Compliance                   | Pass   |

Test engineer: Jerry

## 2. Test Configuration of Equipment under Test

### 2.1. Feature of Equipment under Test

- Model HomePlug 802.11g Access Point
- Dimensions 141mm(W) \* 100mm(D) \* 27mm(H)
- Operating Temperature 0° C to 40° C
- Storage Temperature -10° C to 70° C
- Network Protocol: TCP/IP
- Network Interface: 802.11b / 802.11g Wireless Ethernet
- HomePlug interface
- LEDs 3
- Power 100VAC - 240VAC auto-sensing

### 2.2. RF Module Specifications

- Standards IEEE802.11g WLAN, JEIDA 4.2, roaming support
- Frequency 2.4 to 2.4835GHz (Industrial Scientific Medical Band )
- Channels Maximum 14 Channels, depending on regulatory authorities
- Modulation DSSS BPSK/QPSK/CCK, OFDM/CCK
- Data Rate Up to 54 Mbps
- Coverage Area Indoors : 15m @54Mbps, 120m @6Mbps or lower  
Outdoors : 40m @54Mbps, 300m @6Mbps or lower
- Security WEP (64Bit/128Bit), WPA-PSK (TKIP)
- Output Power 13dBm (typical)
- Receiver Sensitivity -80dBm Min.

### 2.3. Test Mode and Test Software

The following test mode and test software was performed for conduction and radiation test:

- 802.11b (CH LO: 2412MHz) • 802.11b (CH MID: 2437MHz) • 802.11b (CH HI: 2462MHz)
- 802.11g (CH LO: 2412MHz) • 802.11g (CH MID: 2437MHz) • 802.11g (CH HI: 2462MHz)
- An executive programs, "Dutapidll.exe" Application under WIN XP.

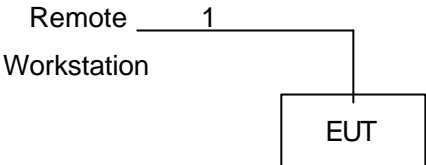
## 2.4. Description of Test System

| Device                    | Manufacturer | Model No. | Description  |
|---------------------------|--------------|-----------|--|
| PC<br>(Remote Site)       | IBM          | IGV       | Power Cable, Unshielding 1.8 m   |
| Monitor<br>(Remote Site)  | SlimAGE      | 510A      | Power Cable, Adapter Unshielding 1.8 m<br>Data Cable, VGA shielding 1.35 m |
| Keyboard<br>(Remote Site) | IBM          | KB-0225   | Data Cable, PS2 shielding 1.85 m   |
| Mouse<br>(Remote Site)    | IBM          | MO28VO    | Data Cable, USB shielding 1.85 m   |

Use Cable:

| Cable | Description      |
|-------|------------------|
| RJ-45 | Unshielding,3.0m |

2.5. Connection Diagram of Test System



- 1. The I/O cable is connected form remote workstation to the EUT



## 2.6. General Information of Test

|                                |  |
|--------------------------------|--|
| Test Site:                     | Exclusive Certification Corp.<br>4F-2, No. 28, Lane 78, Xing-Ai Rd. Nei-hu, Taipei City 114<br>Taiwan R.O.C. |
| Test Site Location (OATS1-SD): | No.68-1, Shihbachongsi, shihding Township,<br>Taipei County 223, Taiwan, R.O.C.                              |
| Test Voltage:                  | AC 110V/ 60Hz  |
| Test in Compliance with:       | ANSI C63.4-2003<br>FCC Part 15 Subpart C   |
| Frequency Range Investigated:  | Conducted: from 150kHz to 30 MHz<br>Radiation: from 30 MHz to 24620MHz                                       |
| Test Distance:                 | The test distance of radiated emission from antenna to EUT is<br>3 M.  |

## 2.7. History of this test report

ORIGINAL.

### **3. Antenna Requirements**

#### **3.1. 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.

#### **3.2. Antenna Construction and Directional Gain**

The antenna is designed to be permanently mounted on PCB. No consideration of replacement. Please see construction Photos Of Exhibit B for details.

## 4. Test of Conducted Emission

### 4.1. Test Limit

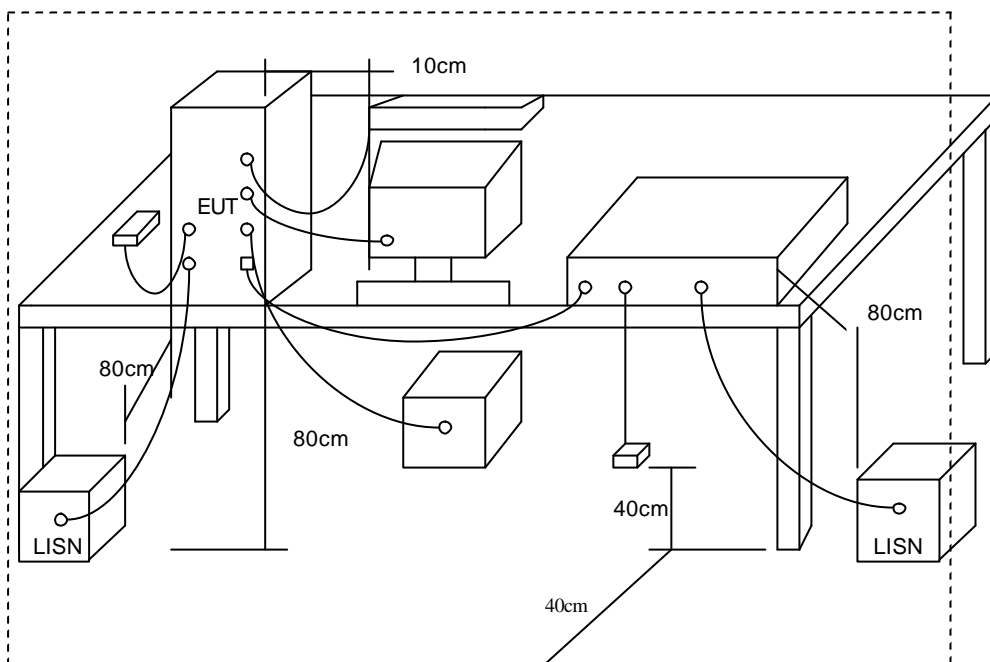
Conducted Emissions were measured from 150 kHz to 30 MHz with a bandwidth of 9 KHz on the 115 VAC power and return leads of the EUT according to the methods defined in ANSI C63.4-1992 Section 3.1. The EUT was placed on a nonmetallic stand in a shielded room 0.8 meters above the ground plane as shown in section 2.2. The interface cables and equipment positioning were varied within limits of reasonable applications to determine the position produced maximum conducted emissions.

| Frequency (MHz) | Quasi Peak (dB $\mu$ V) | Average (dB $\mu$ V) |
|-----------------|-------------------------|----------------------|
| 0.15 – 0.5      | 66-56*                  | 56-46*               |
| 0.5 – 5.0       | 56                      | 46                   |
| 5.0 – 30.0      | 60                      | 50                   |

### 4.2. Test Procedures

- a. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
- b. Connect EUT to the power mains through a line impedance stabilization network (LISN).
- c. All the support units are connecting to the other LISN.
- d. The LISN provides 50 ohm coupling impedance for the measuring instrument.
- e. The FCC states that a 50 ohm, 50 micro-henry LISN should be used.
- f. Both sides of AC line were checked for maximum conducted interference.
- g. The frequency range from 150 kHz to 30 MHz was searched.
- h. Set the test-receiver system to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

### 4.3. Typical Test Setup



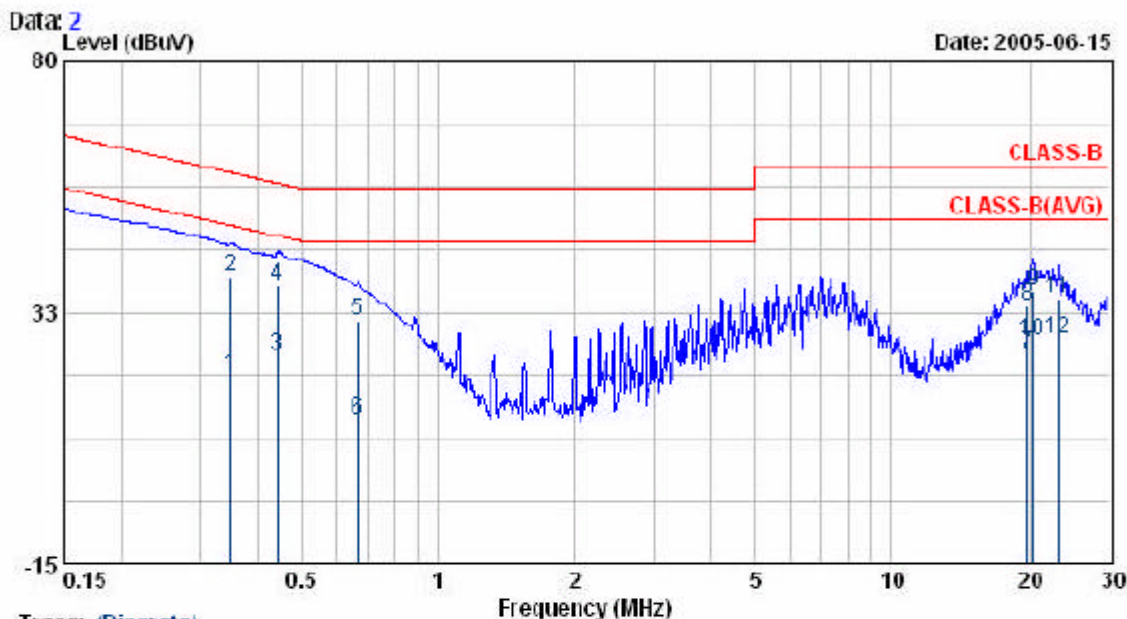
### 4.4. Measurement equipment

| Instrument/Ancillary | Type      | Manufacturer | Valid Date. |
|----------------------|-----------|--------------|-------------|
| Receiver             | SCR3501   | Schaffner    | 2005/11/03  |
| LISN                 | NNB-2/16Z | MESS TEC     | 2006/03/30  |
| LISN                 | NNB-2/16Z | ROLF HEINE   | 2006/05/01  |

4.5. Test Result and Data

EVT : IP822LN  
 Power : AC 110V  
 Test Mode : 802.11b CH1  
 Memo :

Pol/Phase : NEUTRAL  
 Temperature : 25 °C  
 Humidity : 60 %



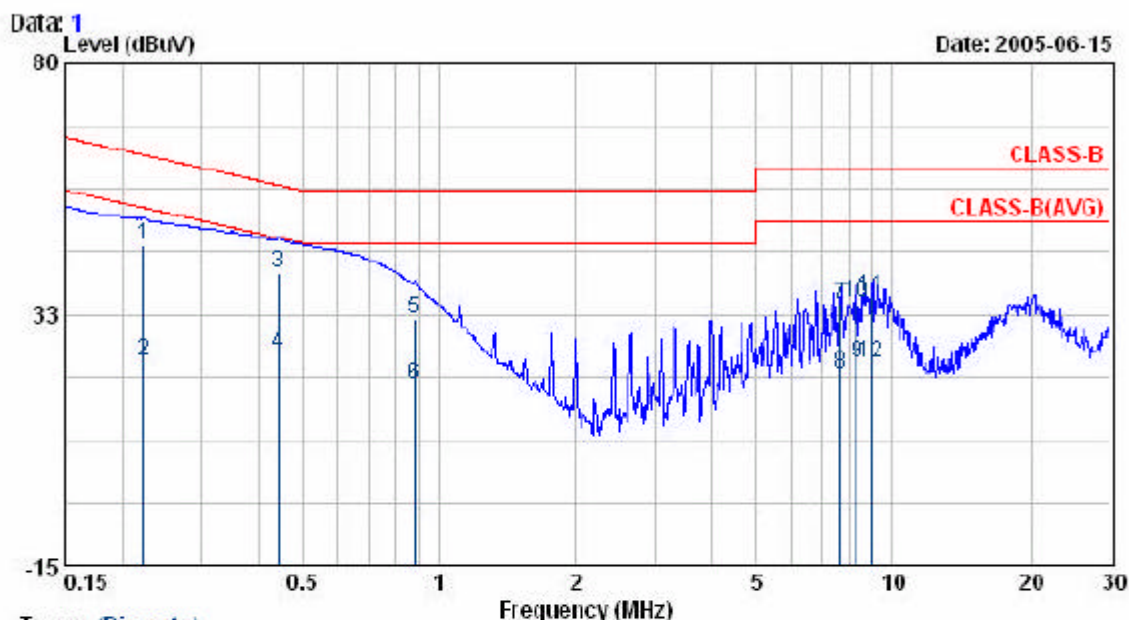
Trace: (Discrete)

| Freq  | Read Level | Factor | Level | Limit | Over Limit | Remark  |
|-------|------------|--------|-------|-------|------------|---------|
| MHz   | dBuV       | dB     | dBuV  | dBuV  | dBuV       |         |
| 0.35  | 20.10      | 0.34   | 20.44 | 49.00 | -28.56     | AVERAGE |
| 0.35  | 39.02      | 0.34   | 39.36 | 59.00 | -19.64     | QP      |
| 0.44  | 24.06      | 0.39   | 24.45 | 47.01 | -22.56     | AVERAGE |
| 0.44  | 37.00      | 0.39   | 37.39 | 57.01 | -19.62     | QP      |
| 0.67  | 30.49      | 0.34   | 30.83 | 56.00 | -25.17     | QP      |
| 0.67  | 11.66      | 0.34   | 12.00 | 46.00 | -34.00     | AVERAGE |
| 19.76 | 24.31      | 0.41   | 24.72 | 50.00 | -25.28     | AVERAGE |
| 19.76 | 33.15      | 0.41   | 33.56 | 60.00 | -26.44     | QP      |
| 20.32 | 36.01      | 0.40   | 36.41 | 60.00 | -23.59     | QP      |
| 20.32 | 26.73      | 0.40   | 27.13 | 50.00 | -22.87     | AVERAGE |
| 23.19 | 34.70      | 0.40   | 35.10 | 60.00 | -24.90     | QP      |
| 23.19 | 26.89      | 0.40   | 27.29 | 50.00 | -22.71     | AVERAGE |

Remarks: 1. Level = Read Level + Factor  
 2. Factor = LISN(ISN) Factor + Cable Loss

EVT : IP022LN  
 Power : AC 110V  
 Test Mode : 802.11b CH1  
 Memo :

Pol/Phase : LINE  
 Temperature : 25 ℃  
 Humidity : 60 %



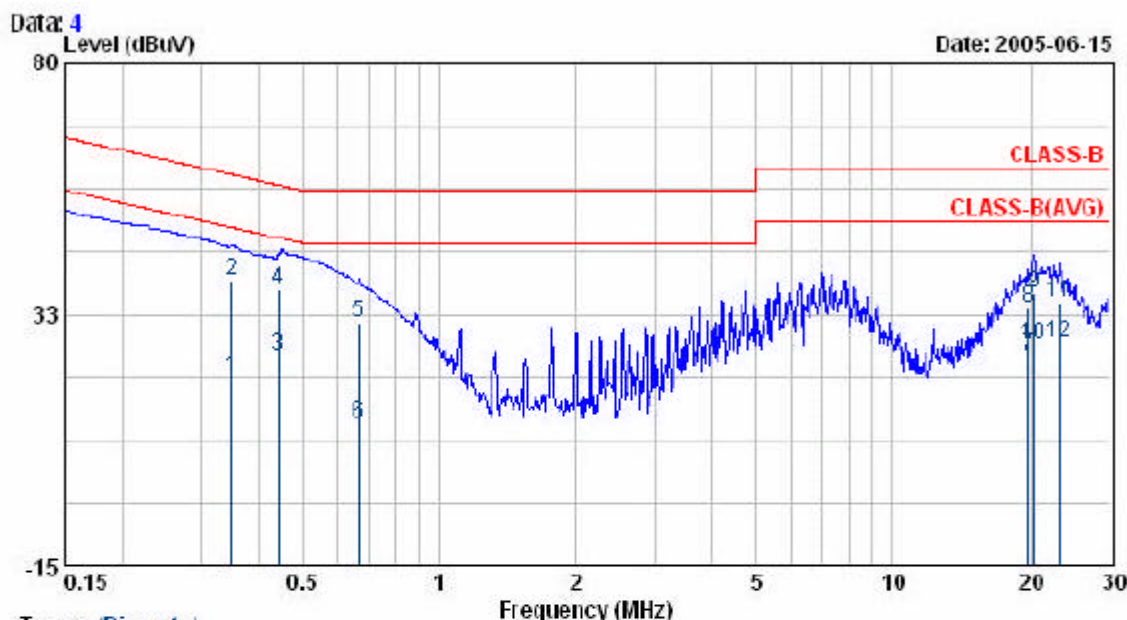
Trace: (Discrete)

| Freq | Read Level | Factor | Level | Limit | Over Limit | Remark  |
|------|------------|--------|-------|-------|------------|---------|
| MHz  | dBuV       | dB     | dBuV  | dBuV  | dBuV       |         |
| 0.22 | 45.03      | 0.35   | 45.38 | 62.71 | -17.33     | QP      |
| 0.22 | 23.45      | 0.35   | 23.80 | 52.71 | -28.91     | AVERAGE |
| 0.44 | 39.76      | 0.59   | 40.35 | 57.04 | -16.69     | QP      |
| 0.44 | 24.27      | 0.59   | 24.86 | 47.04 | -22.18     | AVERAGE |
| 0.88 | 31.24      | 0.51   | 31.75 | 56.00 | -24.25     | QP      |
| 0.88 | 18.51      | 0.51   | 19.12 | 46.00 | -26.88     | AVERAGE |
| 7.70 | 33.82      | 0.63   | 34.45 | 60.00 | -25.55     | QP      |
| 7.70 | 20.51      | 0.63   | 21.24 | 50.00 | -28.76     | AVERAGE |
| 8.36 | 22.74      | 0.62   | 23.36 | 50.00 | -26.64     | AVERAGE |
| 8.36 | 34.26      | 0.62   | 34.88 | 60.00 | -25.12     | QP      |
| 9.02 | 35.31      | 0.61   | 35.92 | 60.00 | -24.08     | QP      |
| 9.02 | 22.58      | 0.61   | 23.29 | 50.00 | -26.71     | AVERAGE |

Remarks: 1. Level = Read Level + Factor  
 2. Factor = LISN(ISN) Factor + Cable Loss

EVT : IP022LN  
 Power : AC 110V  
 Test Mode : 802.11b CH6  
 Memo :

Pol/Phase : NEUTRAL  
 Temperature : 25 °C  
 Humidity : 60 %



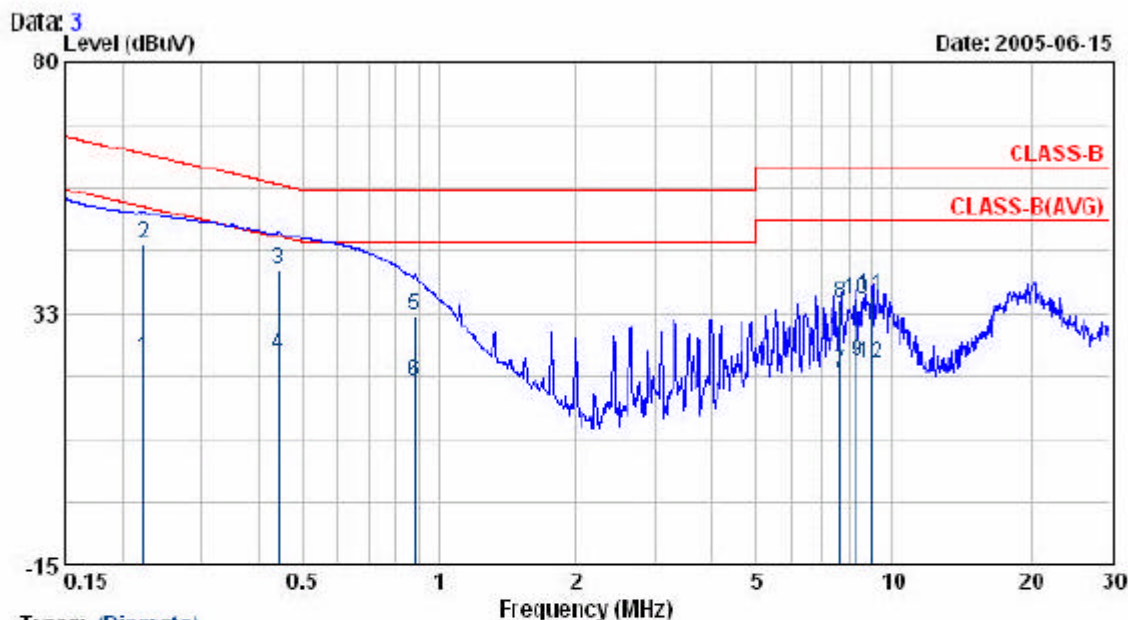
Trace: (Discrete)

| Freq  | Read Level | Factor | Level | Limit | Over Limit | Remark  |
|-------|------------|--------|-------|-------|------------|---------|
| MHz   | dBuV       | dB     | dBuV  | dBuV  | dBuV       |         |
| 0.35  | 20.29      | 0.34   | 20.63 | 49.00 | -28.37     | AVERAGE |
| 0.35  | 38.75      | 0.34   | 39.09 | 59.00 | -19.91     | QP      |
| 0.44  | 24.41      | 0.39   | 24.80 | 47.01 | -22.21     | AVERAGE |
| 0.44  | 36.87      | 0.39   | 37.26 | 57.01 | -19.75     | QP      |
| 0.67  | 30.53      | 0.34   | 30.87 | 56.00 | -25.13     | QP      |
| 0.67  | 11.49      | 0.34   | 11.83 | 46.00 | -34.17     | AVERAGE |
| 19.76 | 24.31      | 0.41   | 24.72 | 50.00 | -25.28     | AVERAGE |
| 19.76 | 33.15      | 0.41   | 33.56 | 60.00 | -26.44     | QP      |
| 20.32 | 36.25      | 0.40   | 36.65 | 60.00 | -23.35     | QP      |
| 20.32 | 26.35      | 0.40   | 26.75 | 50.00 | -23.25     | AVERAGE |
| 23.19 | 34.46      | 0.40   | 34.86 | 60.00 | -25.14     | QP      |
| 23.19 | 26.76      | 0.40   | 27.16 | 50.00 | -22.84     | AVERAGE |

Remarks: 1. Level = Read Level + Factor  
 2. Factor = LISN(ISN) Factor + Cable Loss

EVT : IP822LN  
 Power : AC 110V  
 Test Mode : 802.11b CH6  
 Memo :

Pol/Phase : LINE  
 Temperature : 25 °C  
 Humidity : 60 %



Trace: (Discrete)

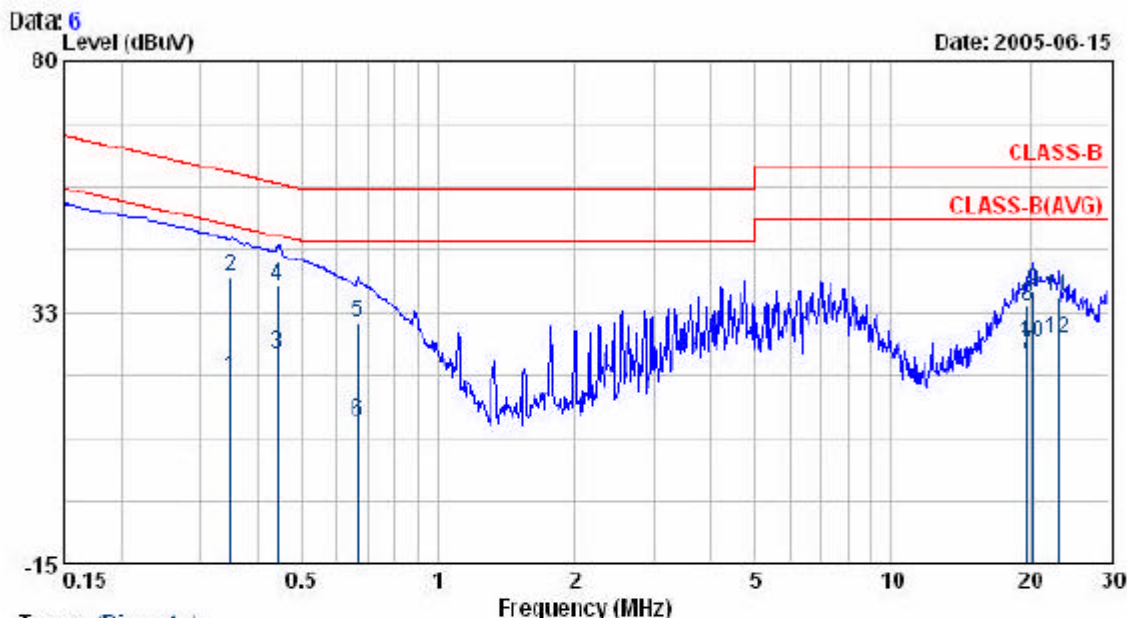
| Freq | Read Level | Factor | Level | Limit | Over Limit | Remark  |
|------|------------|--------|-------|-------|------------|---------|
| MHz  | dBuV       | dB     | dBuV  | dBuV  | dBuV       |         |
| 0.22 | 23.56      | 0.35   | 23.91 | 52.71 | -28.80     | AVERAGE |
| 0.22 | 45.29      | 0.35   | 45.64 | 62.71 | -17.07     | QP      |
| 0.44 | 39.99      | 0.59   | 40.58 | 57.04 | -16.46     | QP      |
| 0.44 | 24.13      | 0.59   | 24.72 | 47.04 | -22.32     | AVERAGE |
| 0.88 | 31.50      | 0.51   | 32.01 | 56.00 | -23.99     | QP      |
| 0.88 | 18.89      | 0.51   | 19.40 | 46.00 | -26.60     | AVERAGE |
| 7.70 | 20.70      | 0.63   | 21.33 | 50.00 | -28.67     | AVERAGE |
| 7.70 | 33.63      | 0.63   | 34.26 | 60.00 | -25.74     | QP      |
| 8.36 | 22.83      | 0.62   | 23.45 | 50.00 | -26.55     | AVERAGE |
| 8.36 | 34.43      | 0.62   | 35.05 | 60.00 | -24.95     | QP      |
| 9.02 | 35.13      | 0.61   | 35.74 | 60.00 | -24.26     | QP      |
| 9.02 | 22.49      | 0.61   | 23.10 | 50.00 | -26.90     | AVERAGE |

Remarks: 1. Level = Read Level + Factor  
 2. Factor = LISN(ISN) Factor + Cable Loss



EVT : IP822LN  
 Power : AC 110V  
 Test Mode : 802.11b CH11  
 Memo :

Pol/Phase : NEUTRAL  
 Temperature : 25 °C  
 Humidity : 60 %



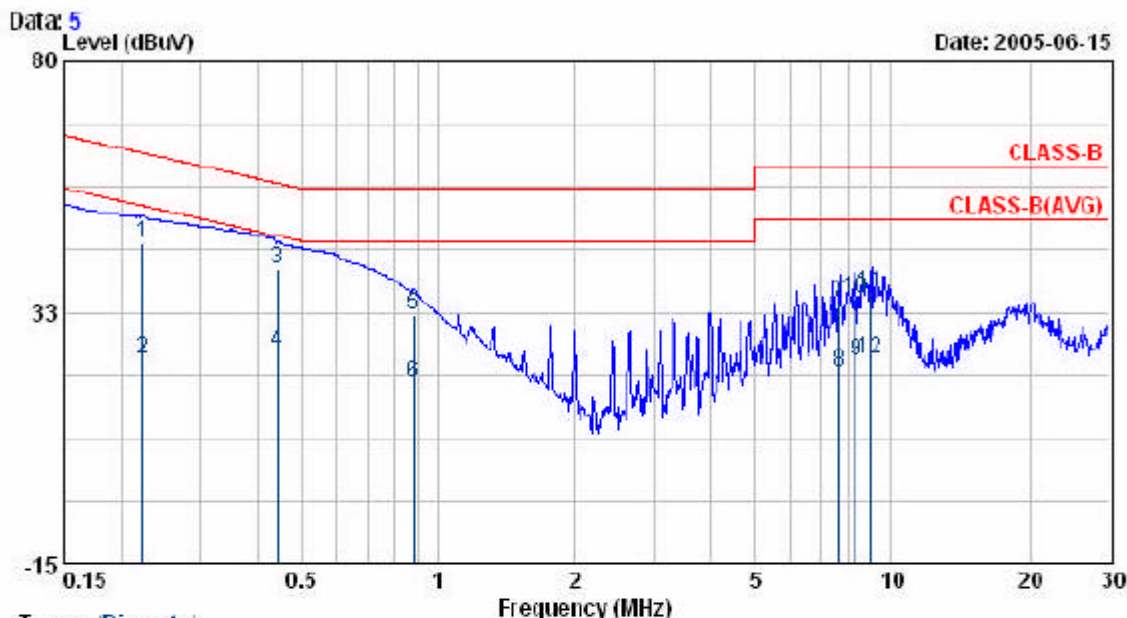
Trace: (Discrete)

| Freq  | Read Level | Factor | Level | Limit | Over Limit | Remark  |
|-------|------------|--------|-------|-------|------------|---------|
| MHz   | dBuV       | dB     | dBuV  | dBuV  | dBuV       |         |
| 0.35  | 19.88      | 0.34   | 20.22 | 49.00 | -28.78     | AVERAGE |
| 0.35  | 38.89      | 0.34   | 39.23 | 59.00 | -19.77     | QP      |
| 0.44  | 24.26      | 0.39   | 24.65 | 47.01 | -22.36     | AVERAGE |
| 0.44  | 37.30      | 0.39   | 37.69 | 57.01 | -19.32     | QP      |
| 0.67  | 30.31      | 0.34   | 30.65 | 56.00 | -25.35     | QP      |
| 0.67  | 11.50      | 0.34   | 11.84 | 46.00 | -34.16     | AVERAGE |
| 19.76 | 24.31      | 0.41   | 24.72 | 50.00 | -25.28     | AVERAGE |
| 19.76 | 33.15      | 0.41   | 33.56 | 60.00 | -26.44     | QP      |
| 20.32 | 36.16      | 0.40   | 36.56 | 60.00 | -23.44     | QP      |
| 20.32 | 26.49      | 0.40   | 26.89 | 50.00 | -23.11     | AVERAGE |
| 23.19 | 34.99      | 0.40   | 35.39 | 60.00 | -24.61     | QP      |
| 23.19 | 27.05      | 0.40   | 27.45 | 50.00 | -22.55     | AVERAGE |

Remarks: 1. Level = Read Level + Factor  
 2. Factor = LISN(ISN) Factor + Cable Loss

EVT : IP022LN  
 Power : AC 110V  
 Test Mode : 802.11b CH11  
 Memo :

Pol/Phase : LINE  
 Temperature : 25 °C  
 Humidity : 60 %



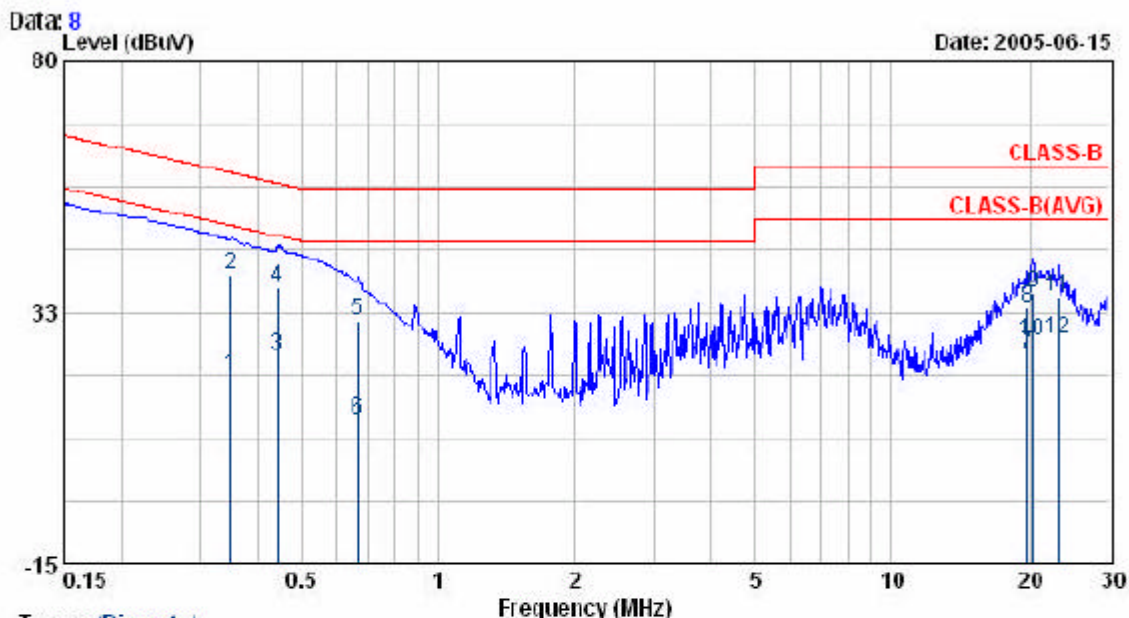
Trace: (Discrete)

| Freq<br>MHz | Read<br>Level<br>dBuV | Factor<br>dB | Level<br>dBuV | Limit<br>dBuV | Over<br>Limit<br>dBuV | Remark  |
|-------------|-----------------------|--------------|---------------|---------------|-----------------------|---------|
| 0.22        | 45.13                 | 0.35         | 45.48         | 62.71         | -17.23                | QP      |
| 0.22        | 23.33                 | 0.35         | 23.68         | 52.71         | -29.03                | AVERAGE |
| 0.44        | 40.00                 | 0.59         | 40.59         | 57.04         | -16.45                | QP      |
| 0.44        | 24.33                 | 0.59         | 24.92         | 47.04         | -22.12                | AVERAGE |
| 0.88        | 31.36                 | 0.51         | 31.87         | 56.00         | -24.13                | QP      |
| 0.88        | 18.61                 | 0.51         | 19.12         | 46.00         | -26.88                | AVERAGE |
| 7.70        | 33.71                 | 0.63         | 34.34         | 60.00         | -25.66                | QP      |
| 7.70        | 20.57                 | 0.63         | 21.20         | 50.00         | -28.80                | AVERAGE |
| 8.36        | 22.74                 | 0.62         | 23.36         | 50.00         | -26.64                | AVERAGE |
| 8.36        | 34.40                 | 0.62         | 35.02         | 60.00         | -24.98                | QP      |
| 9.02        | 35.49                 | 0.61         | 36.10         | 60.00         | -23.90                | QP      |
| 9.02        | 22.97                 | 0.61         | 23.58         | 50.00         | -26.42                | AVERAGE |

Remarks: 1. Level = Read Level + Factor  
 2. Factor = LISN(ISN) Factor + Cable Loss

EVT : IP822LM  
 Power : AC 110V  
 Test Mode : 802.11g CH1  
 Memo :

Pol/Phase : NEUTRAL  
 Temperature : 25 °C  
 Humidity : 60 %



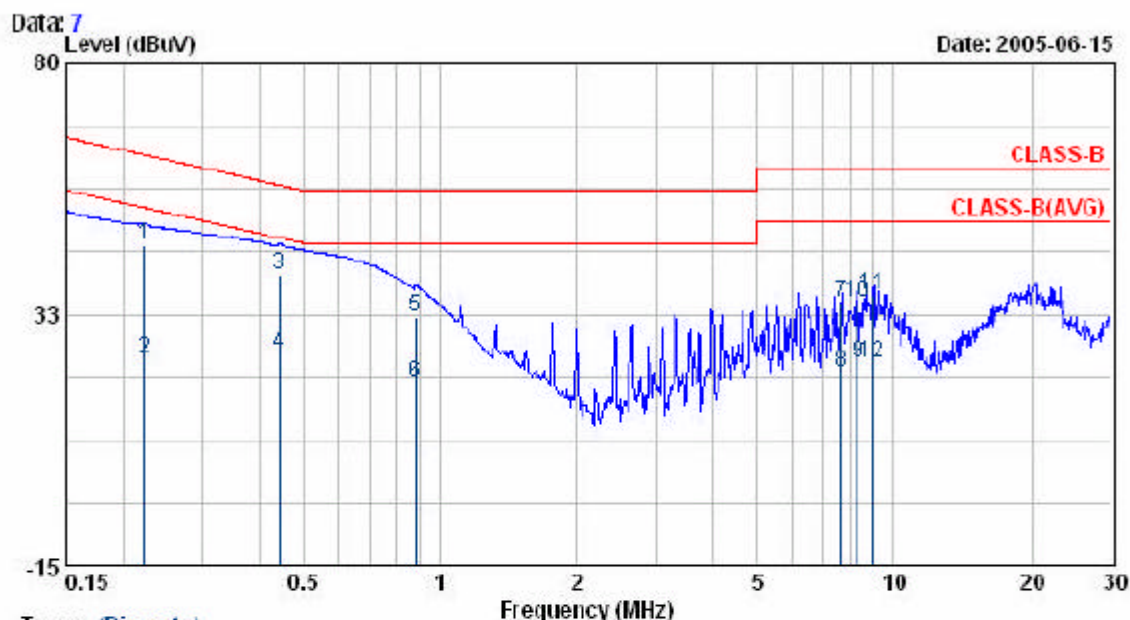
Trace: (Discrete)

| Freq  | Read  | Factor | Level | Limit | Over   | Remark  |
|-------|-------|--------|-------|-------|--------|---------|
| MHz   | dBuV  | dB     | dBuV  | dBuV  | dBuV   |         |
| 0.35  | 20.30 | 0.34   | 20.64 | 49.00 | -28.36 | AVERAGE |
| 0.35  | 39.22 | 0.34   | 39.56 | 59.00 | -19.44 | QP      |
| 0.44  | 23.90 | 0.39   | 24.29 | 47.01 | -22.72 | AVERAGE |
| 0.44  | 36.88 | 0.39   | 37.27 | 57.01 | -19.74 | QP      |
| 0.67  | 30.49 | 0.34   | 30.83 | 56.00 | -25.17 | QP      |
| 0.67  | 11.66 | 0.34   | 12.00 | 46.00 | -34.00 | AVERAGE |
| 19.76 | 24.29 | 0.41   | 24.70 | 50.00 | -25.30 | AVERAGE |
| 19.76 | 33.01 | 0.41   | 33.42 | 60.00 | -26.58 | QP      |
| 20.32 | 35.70 | 0.40   | 36.10 | 60.00 | -23.90 | QP      |
| 20.32 | 26.60 | 0.40   | 27.00 | 50.00 | -23.00 | AVERAGE |
| 23.19 | 34.89 | 0.40   | 35.29 | 60.00 | -24.71 | QP      |
| 23.19 | 26.89 | 0.40   | 27.29 | 50.00 | -22.71 | AVERAGE |

Remarks: 1. Level = Read Level + Factor  
 2. Factor = LISN(ISW) Factor + Cable Loss

EVT : IP822LN  
 Power : AC 110V  
 Test Mode : 802.11g CH1  
 Memo :

Pol/Phase : LINE  
 Temperature : 25 °C  
 Humidity : 60 %



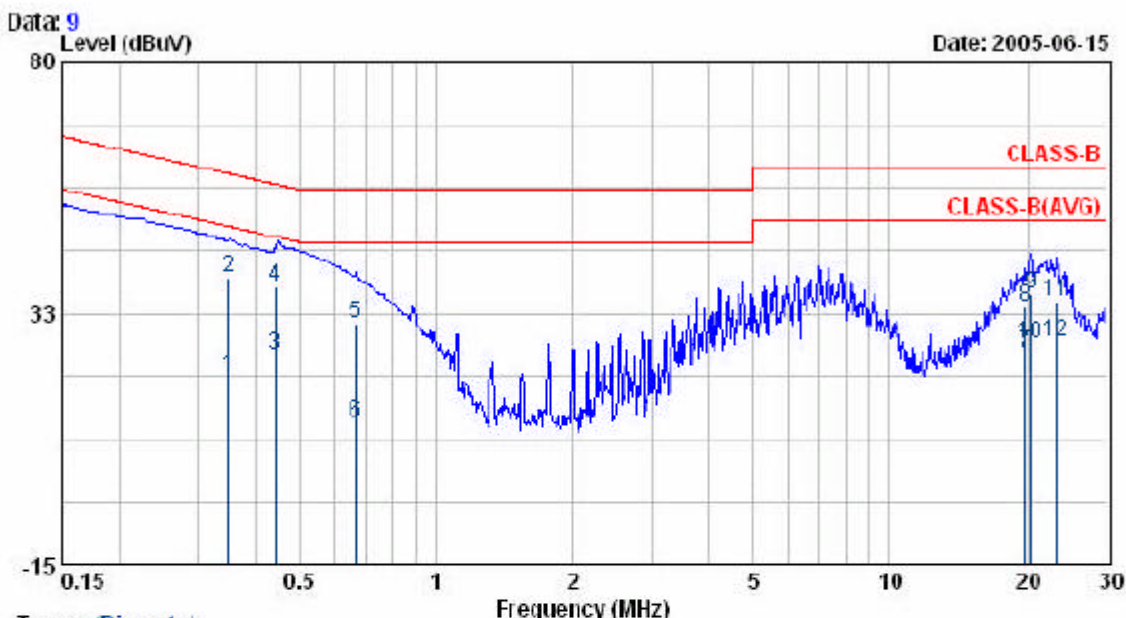
Trace: (Discrete)

| Freq | Read Level | Factor | Level | Limit | Over Limit | Remark  |
|------|------------|--------|-------|-------|------------|---------|
| MHz  | dBuV       | dB     | dBuV  | dBuV  | dBuV       |         |
| 0.22 | 45.34      | 0.35   | 45.69 | 62.71 | -17.02     | QP      |
| 0.22 | 23.55      | 0.35   | 23.90 | 52.71 | -28.81     | AVERAGE |
| 0.44 | 39.55      | 0.59   | 40.14 | 57.04 | -16.90     | QP      |
| 0.44 | 24.27      | 0.59   | 24.86 | 47.04 | -22.18     | AVERAGE |
| 0.88 | 31.33      | 0.51   | 31.84 | 56.00 | -24.16     | QP      |
| 0.88 | 18.89      | 0.51   | 19.40 | 46.00 | -26.60     | AVERAGE |
| 7.70 | 34.00      | 0.63   | 34.63 | 60.00 | -25.37     | QP      |
| 7.70 | 20.80      | 0.63   | 21.43 | 50.00 | -28.57     | AVERAGE |
| 8.36 | 22.59      | 0.62   | 23.21 | 50.00 | -26.79     | AVERAGE |
| 8.36 | 34.26      | 0.62   | 34.88 | 60.00 | -25.12     | QP      |
| 9.02 | 35.44      | 0.61   | 36.05 | 60.00 | -23.95     | QP      |
| 9.02 | 22.68      | 0.61   | 23.29 | 50.00 | -26.71     | AVERAGE |

Remarks: 1. Level = Read Level + Factor  
 2. Factor = LISN(ISN) Factor + Cable Loss

EUT : IP822LM  
 Power : AC 110V  
 Test Mode : 802.11g CH6  
 Memo :

Pol/Phase : NEUTRAL  
 Temperature : 25 °C  
 Humidity : 60 %



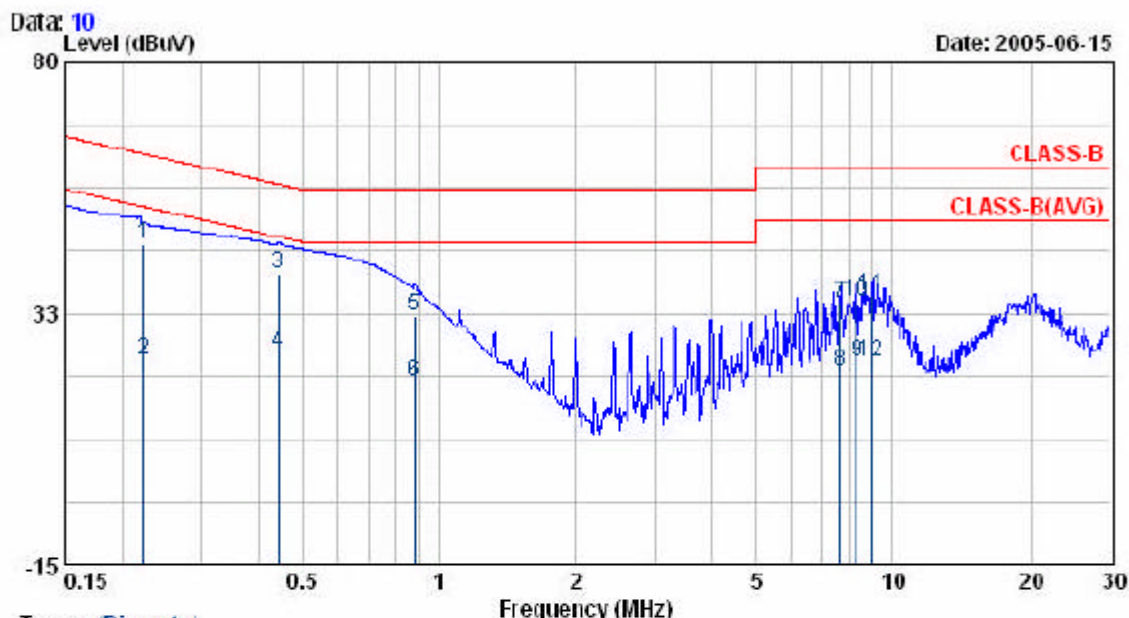
Trace: (Discrete)

| Freq  | Read Level | Factor | Level | Limit | Over Limit | Remark  |
|-------|------------|--------|-------|-------|------------|---------|
| MHz   | dBuV       | dB     | dBuV  | dBuV  | dBuV       |         |
| 0.35  | 20.16      | 0.34   | 20.50 | 49.00 | -28.50     | AVERAGE |
| 0.35  | 39.10      | 0.34   | 39.44 | 59.00 | -19.56     | QP      |
| 0.44  | 24.22      | 0.39   | 24.61 | 47.01 | -22.40     | AVERAGE |
| 0.44  | 37.00      | 0.39   | 37.39 | 57.01 | -19.62     | QP      |
| 0.67  | 30.30      | 0.34   | 30.64 | 56.00 | -25.36     | QP      |
| 0.67  | 11.44      | 0.34   | 11.78 | 46.00 | -34.22     | AVERAGE |
| 19.76 | 24.50      | 0.41   | 24.91 | 50.00 | -25.09     | AVERAGE |
| 19.76 | 33.29      | 0.41   | 33.70 | 60.00 | -26.30     | QP      |
| 20.32 | 35.88      | 0.40   | 36.28 | 60.00 | -23.72     | QP      |
| 20.32 | 26.50      | 0.40   | 26.90 | 50.00 | -23.10     | AVERAGE |
| 23.19 | 34.49      | 0.40   | 34.89 | 60.00 | -25.11     | QP      |
| 23.19 | 26.70      | 0.40   | 27.10 | 50.00 | -22.90     | AVERAGE |

Remarks: 1. Level = Read Level + Factor  
 2. Factor = LISN(ISN) Factor + Cable Loss

EUT : IP822LN  
 Power : AC 110V  
 Test Mode : 802.11g CH6  
 Memo :

Pol/Phase : LINE  
 Temperature : 25 °C  
 Humidity : 60 %



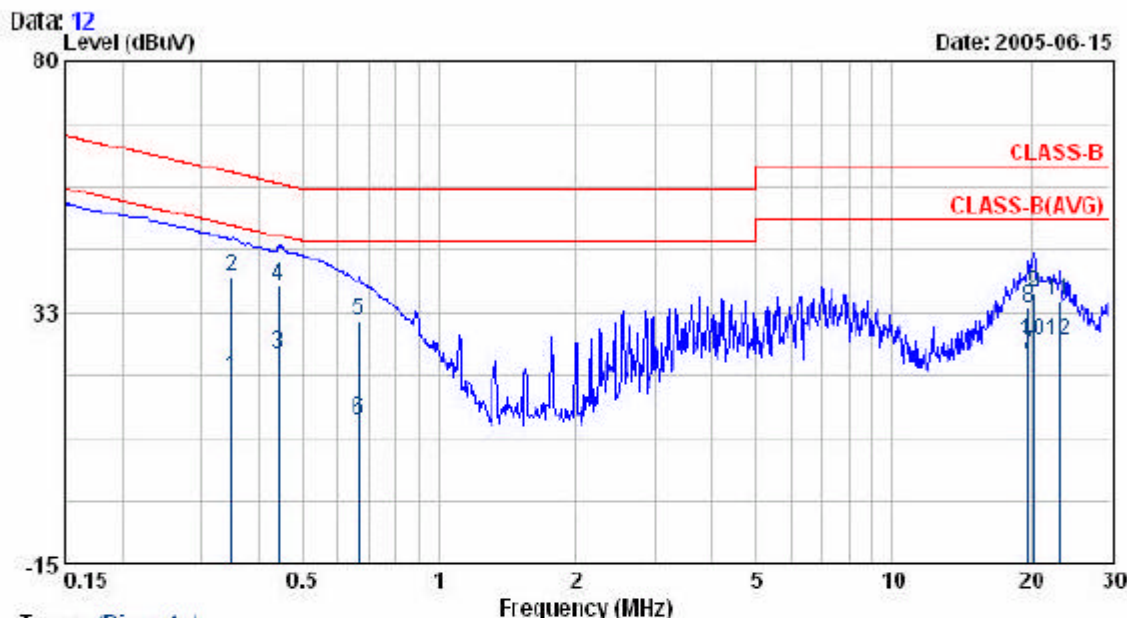
Trace: (Discrete)

| Freq | Read Level | Factor | Level | Limit | Over Limit | Remark  |
|------|------------|--------|-------|-------|------------|---------|
| MHz  | dBuV       | dB     | dBuV  | dBuV  | dBuV       |         |
| 0.22 | 45.16      | 0.35   | 45.51 | 62.71 | -17.20     | QP      |
| 0.22 | 23.39      | 0.35   | 23.74 | 52.71 | -28.97     | AVERAGE |
| 0.44 | 39.49      | 0.59   | 40.08 | 57.04 | -16.96     | QP      |
| 0.44 | 24.50      | 0.59   | 25.09 | 47.04 | -21.95     | AVERAGE |
| 0.88 | 31.47      | 0.51   | 31.98 | 56.00 | -24.02     | QP      |
| 0.88 | 18.88      | 0.51   | 19.39 | 46.00 | -26.61     | AVERAGE |
| 7.70 | 33.66      | 0.63   | 34.29 | 60.00 | -25.71     | QP      |
| 7.70 | 20.79      | 0.63   | 21.42 | 50.00 | -28.58     | AVERAGE |
| 8.36 | 22.55      | 0.62   | 23.17 | 50.00 | -26.83     | AVERAGE |
| 8.36 | 34.11      | 0.62   | 34.73 | 60.00 | -25.27     | QP      |
| 9.02 | 35.22      | 0.61   | 35.83 | 60.00 | -24.17     | QP      |
| 9.02 | 22.68      | 0.61   | 23.29 | 50.00 | -26.71     | AVERAGE |

Remarks: 1. Level = Read Level + Factor  
 2. Factor = LISN(ISN) Factor + Cable Loss

EVT : IP022LN  
 Power : AC 110V  
 Test Mode : 802.11g CH11  
 Memo :

Pol/Phase : NEUTRAL  
 Temperature : 25 °C  
 Humidity : 60 %



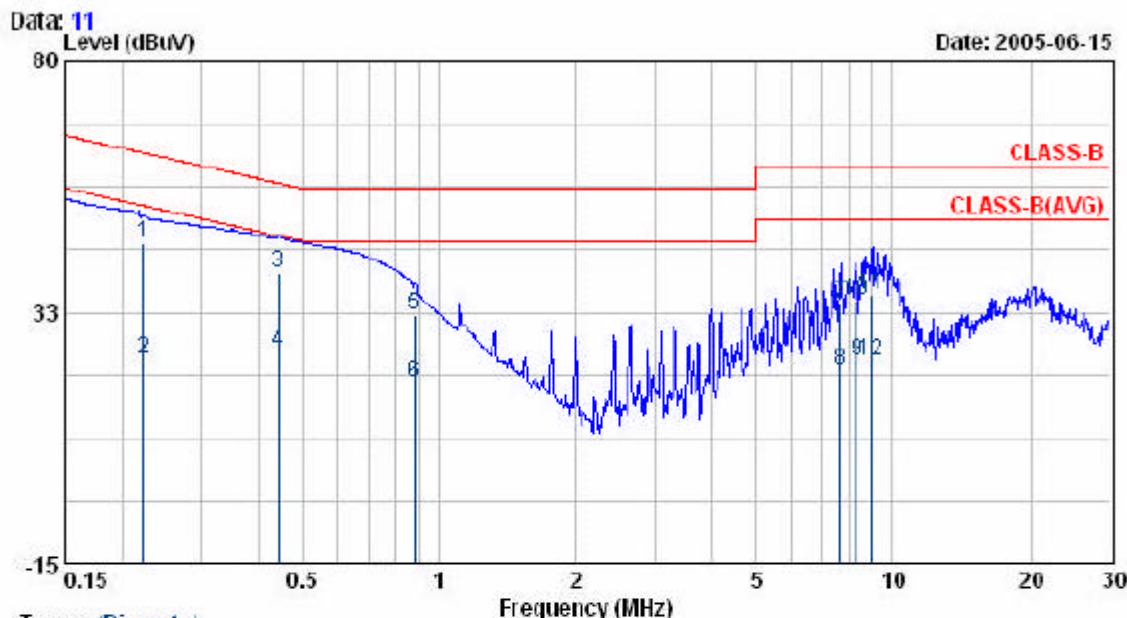
Trace: (Discrete)

| Freq<br>MHz | Read<br>Level<br>dBuV | Factor<br>dB | Level<br>dBuV | Limit<br>dBuV | Over<br>Limit<br>dBuV | Remark  |
|-------------|-----------------------|--------------|---------------|---------------|-----------------------|---------|
| 0.35        | 19.83                 | 0.34         | 20.17         | 49.00         | -28.83                | AVERAGE |
| 0.35        | 38.86                 | 0.34         | 39.20         | 59.00         | -19.80                | QP      |
| 0.44        | 24.20                 | 0.39         | 24.59         | 47.01         | -22.42                | AVERAGE |
| 0.44        | 37.16                 | 0.39         | 37.55         | 57.01         | -19.46                | QP      |
| 0.67        | 30.63                 | 0.34         | 30.97         | 56.00         | -25.03                | QP      |
| 0.67        | 11.84                 | 0.34         | 12.18         | 46.00         | -33.82                | AVERAGE |
| 19.76       | 24.11                 | 0.41         | 24.52         | 50.00         | -25.48                | AVERAGE |
| 19.76       | 33.03                 | 0.41         | 33.44         | 60.00         | -26.56                | QP      |
| 20.32       | 35.87                 | 0.40         | 36.27         | 60.00         | -23.73                | QP      |
| 20.32       | 26.55                 | 0.40         | 26.95         | 50.00         | -23.05                | AVERAGE |
| 23.19       | 34.44                 | 0.40         | 34.84         | 60.00         | -25.16                | QP      |
| 23.19       | 26.74                 | 0.40         | 27.14         | 50.00         | -22.86                | AVERAGE |

Remarks: 1. Level = Read Level + Factor  
 2. Factor = LISN(ISN) Factor + Cable Loss

EVT : IP822LN  
 Power : AC 110V  
 Test Mode : 802.11g CH11  
 Memo :

Pol/Phase : LINE  
 Temperature : 25 °C  
 Humidity : 60 %



Trace: (Discrete)

| Freq | Read Level | Factor | Level | Limit | Over Limit | Remark  |
|------|------------|--------|-------|-------|------------|---------|
| MHz  | dBuV       | dB     | dBuV  | dBuV  | dBuV       |         |
| 0.22 | 45.16      | 0.35   | 45.51 | 62.71 | -17.20     | QP      |
| 0.22 | 23.39      | 0.35   | 23.74 | 52.71 | -28.97     | AVERAGE |
| 0.44 | 39.49      | 0.59   | 40.08 | 57.04 | -16.96     | QP      |
| 0.44 | 24.50      | 0.59   | 25.09 | 47.04 | -21.95     | AVERAGE |
| 0.88 | 31.56      | 0.51   | 32.07 | 56.00 | -23.93     | QP      |
| 0.88 | 18.76      | 0.51   | 19.27 | 46.00 | -26.73     | AVERAGE |
| 7.70 | 33.46      | 0.63   | 34.09 | 60.00 | -25.91     | QP      |
| 7.70 | 20.76      | 0.63   | 21.39 | 50.00 | -28.61     | AVERAGE |
| 8.36 | 22.68      | 0.62   | 23.30 | 50.00 | -26.70     | AVERAGE |
| 8.36 | 34.30      | 0.62   | 34.92 | 60.00 | -25.08     | QP      |
| 9.02 | 35.36      | 0.61   | 35.97 | 60.00 | -24.03     | QP      |
| 9.02 | 22.77      | 0.61   | 23.38 | 50.00 | -26.62     | AVERAGE |

Remarks: 1. Level = Read Level + Factor  
 2. Factor = LISN(ISN) Factor + Cable Loss

Test engineer:



4.5.1. Test Photographs

REAR VIEW

