

# 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>Taiwan, R.O.C. |
| Equipment  | IEEE802.11g Wireless PC Card                                    |
| Model No.  | CB801AS                                                         |
| FCC ID     | P27CB801AS                                                      |
| 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

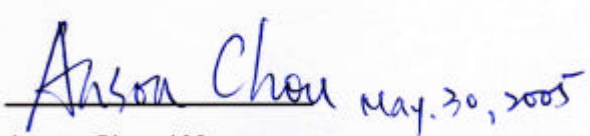
### Part 15 Subpart C

|           |                                                                 |
|-----------|-----------------------------------------------------------------|
| Applicant | SerComm Corporation                                             |
| Address   | 8F, No. 3-1, YuanQu St., NanKang, Taipei 115,<br>Taiwan, R.O.C. |
| Equipment | IEEE802.11g Wireless PC Card                                    |
| Model No. | CB801AS                                                         |
| FCC ID    | P27CB801AS                                                      |

#### 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 May. 10, 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. RF Module Specifications

|                        |                                                                                                                                               |
|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| Standards:             | IEEE 802.11b, IEEE 802.11g                                                                                                                    |
| Computer slot type:    | CardBus                                                                                                                                       |
| Chipset                | Atheros AR2414(CB801AS)/AR2413(CB801A)                                                                                                        |
| Receive Sensitivity:   |                                                                                                                                               |
| 802.11g                | 54Mbps: -70dBm, 10% PER                                                                                                                       |
|                        | 48Mbps: -72dBm, 10% PER                                                                                                                       |
|                        | 36Mbps: -75dBm, 10% PER                                                                                                                       |
|                        | 24Mbps: -80dBm, 10% PER                                                                                                                       |
|                        | 18Mbps: -82dBm, 10% PER                                                                                                                       |
|                        | 12Mbps: -84dBm, 10% PER                                                                                                                       |
|                        | 9Mbps: -87dBm, 10% PER                                                                                                                        |
|                        | 6Mbps: -88dBm, 10% PER                                                                                                                        |
| 802.11b                | 11Mbps: -86dBm, 8% PER                                                                                                                        |
|                        | 5.5Mbps: -88dBm, 8% PER                                                                                                                       |
|                        | 2Mbps: -89dBm, 8% PER                                                                                                                         |
|                        | 1Mbps: -91dBm, 8% PER                                                                                                                         |
| 802.11 Super G         | 108Mbps: -73.dBm                                                                                                                              |
| Data Rates:            |                                                                                                                                               |
| 802.11g:               | 54, 48, 36, 24, 18, 12, 9 and 6 Mbps                                                                                                          |
| 802.11b:               | 11, 5.5, 2 and 1 Mbps                                                                                                                         |
| Frequency Band:        |                                                                                                                                               |
| 802.11b/11g:           | 2.4 ~ 2.4835 GHz                                                                                                                              |
| Modulation Technique:  |                                                                                                                                               |
| 802.11g:               | OFDM and DSSS                                                                                                                                 |
| 802.11b:               | DSSS                                                                                                                                          |
| Media Access Protocol: | CSMA/CA                                                                                                                                       |
| Operating Voltage:     | 3.3V +/- 5%                                                                                                                                   |
| Transmit Power:        |                                                                                                                                               |
| 802.11g:               | 14+/- 2 dBm                                                                                                                                   |
| 802.11b:               | 16 +/- 2 dBm                                                                                                                                  |
| Security:              | WPA; 128-bit AES encryption, 40/64-, 128-, and 152-bit WEP shared-key encryption<br>MD5, 802.1x, and EAP-MD5,EAP-TLS, and PEAP authentication |

## 2.2. Feature of Equipment under Test

|                        |                                                                                                                                                                                                                                                    |
|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Chipset:               | Atheros AR2414                                                                                                                                                                                                                                     |
| Bus Type:              | CardBus                                                                                                                                                                                                                                            |
| Data Rates :           | 54, 48, 36, 24, 18, 12, 9, and 6 Mbps (802.11g)<br>11, 5.5, 2, 1 Mbps (802.11b)                                                                                                                                                                    |
| Frequency Band :       | 2.412GHz to 2.462GHz                                                                                                                                                                                                                               |
| Wireless Medium :      | DSSS and OFDM                                                                                                                                                                                                                                      |
| Media Access Protocol: | CSMA/CA                                                                                                                                                                                                                                            |
| Operating Channels:    | FCC:1-11、ETSI:1-13、Japan:1-13                                                                                                                                                                                                                      |
| Operating Range:       | Indoors: Up to 328 ft (100 meters)<br>Outdoors: Up to 1312 ft (400 meters)                                                                                                                                                                         |
| Receive Sensitivity :  | 802.11g (54 Mbps: -70 dBm, 48 Mbps: -72 dBm, 36 Mbps: -77 dBm,<br>24 Mbps: -80 dBm, 18 Mbps: -82 dBm, 12 Mbps: -85 dBm,<br>9 Mbps: -86 dBm, 6 Mbps: -88 dBm)<br>802.11b (11 Mbps: -86 dBm, 5.5 Mbps: -89 dBm, 2 Mbps: -91 dBm,<br>1 Mbps: -91 dBm) |
| Media Access Protocol: | CSMA/CA                                                                                                                                                                                                                                            |
| Transmit Power:        | 802.11g: 14±2 dBm, 802.11b: 16±2 dBm                                                                                                                                                                                                               |
| Security :             | 64/128-bit WEP, WPA—Wi-Fi Protected Access                                                                                                                                                                                                         |
| Standards Conformance: | WPA certified, IEEE 802.11g, IEEE 802.11b                                                                                                                                                                                                          |
| Environmental Range:   | Operating temperature: 0° to 40° C (32° to 104° F)<br>Operating humidity: 0 to 90% non-condensing                                                                                                                                                  |
| System Requirements:   | Notebook PC must be running Windows 98SE/ME/XP/ 2000                                                                                                                                                                                               |

### 2.3. Test Mode and Test Software

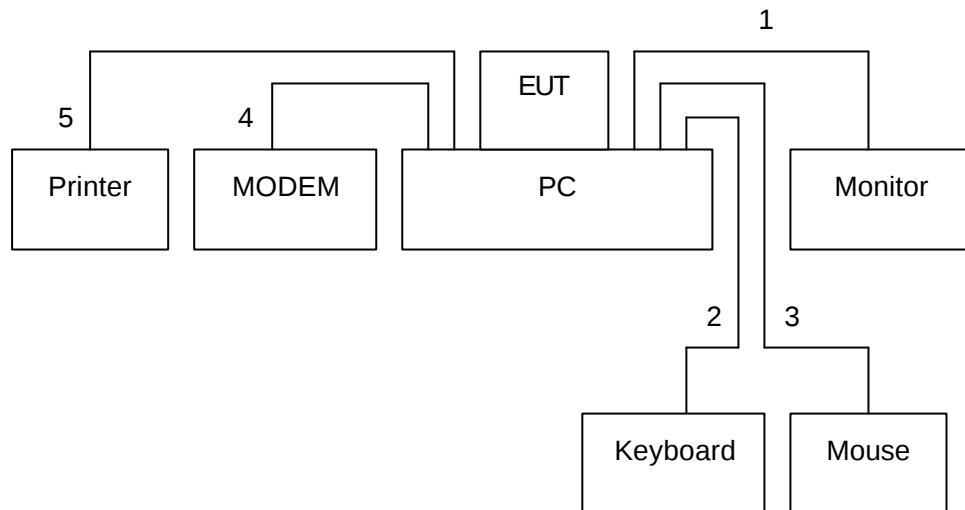
The following test mode and test software was performed for conduction and radiation test:

- 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)
- 802.11 super g (CH 6: 2437MHz)
- An executive programs, "DUTAPIDLL.EXE" Application under WIN XP.

### 2.4. Description of Test System

| Device   | Manufacturer | Model No.   | Description                                                                    |
|----------|--------------|-------------|--------------------------------------------------------------------------------|
| PC       | IBM          | IGV         | Power Cable, Unshielding 1.8 m                                                 |
| Monitor  | SlimAGE      | 510A        | Power Cable, Adapter Unshielding 1.8 m<br>Data Cable, VGA shielding 1.35 m     |
| Keyboard | IBM          | KB-0225     | Data Cable, PS2 shielding 1.85 m                                               |
| Mouse    | IBM          | MO28VO      | Data Cable, USB shielding 1.85 m                                               |
| Modem    | ACEXX        | DM-1414     | Power Cable, Adapter Unshielding 1.8 m<br>Data Cable, RS232 Unshielding 1.35 m |
| Printer  | HP           | Desk Jet400 | Power Cable, Adapter Unshielding 1.8 m<br>Data Cable, PRINT Shielding 1.6 m    |

## 2.5. Connection Diagram of Test System



1. The I/O cable is connected from PC to the Monitor.
2. The I/O cable is connected from PC to the Keyboard.
3. The I/O cable is connected from PC to the Mouse.
4. The I/O cable is connected from PC to the MODEM
5. The I/O cable is connected from PC to the Printer.

## 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

Antenna type : The antenna is designed to be permanently on PCB, No

Consideration of replacement

Antenna Gain: 0 dBi

## 4. Test of Conducted Emission

### 4.1. Test Limit

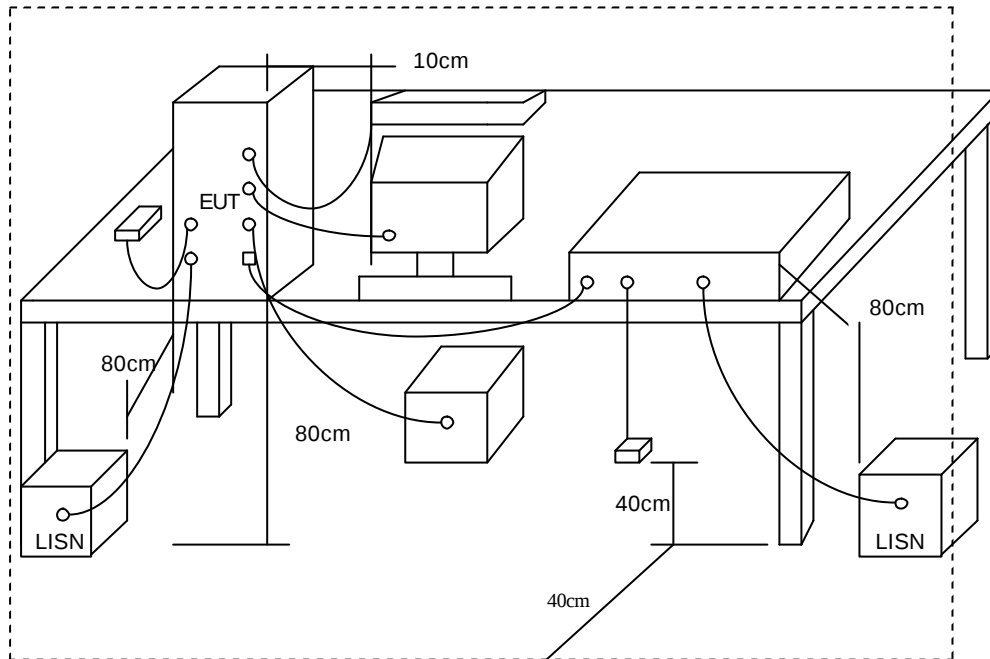
Conducted Emissions were measured from 150 kHz to 30 MHz with a bandwidth of 9 KHz on the 115 VAC power and return leads of the EUT according to the methods defined in ANSI C63.4-1992 Section 3.1. The EUT was placed on a nonmetallic stand in a shielded room 0.8 meters above the ground plane as shown 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<br>(MHz) | Quasi Peak<br>(dB $\mu$ V) | Average<br>(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

- 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.
- Connect EUT to the power mains through a line impedance stabilization network (LISN).
- All the support units are connecting to the other LISN.
- The LISN provides 50 ohm coupling impedance for the measuring instrument.
- The FCC states that a 50 ohm, 50 micro-henry LISN should be used.
- Both sides of AC line were checked for maximum conducted interference.
- The frequency range from 150 kHz to 30 MHz was searched.
- Set the test-receiver system to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

### 4.3. Typical Test Setup



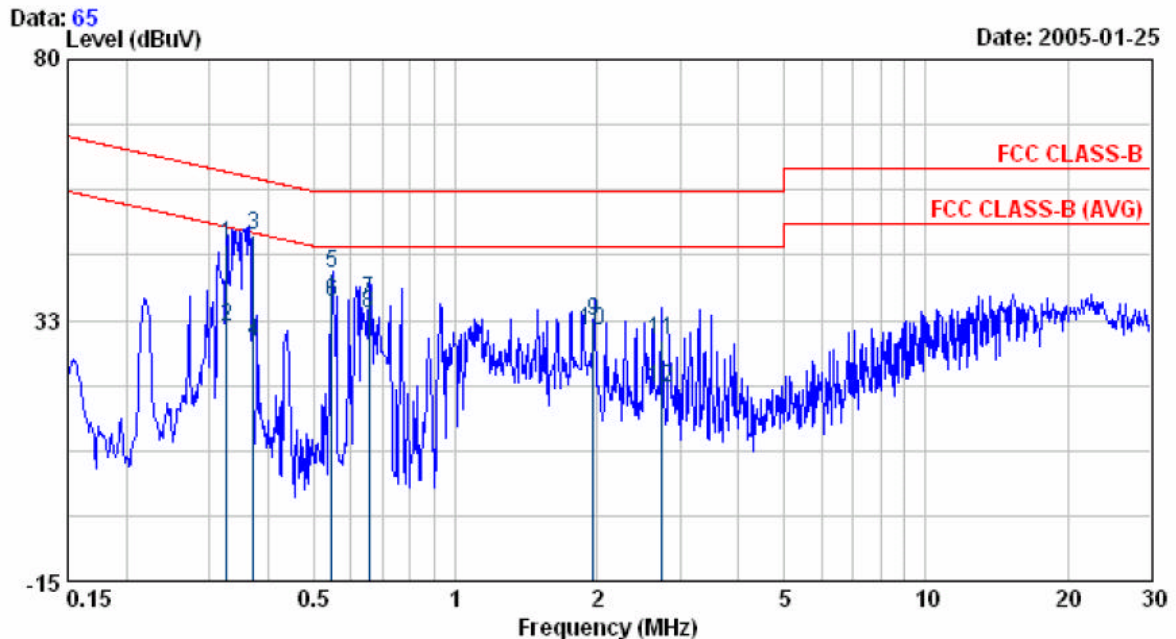
### 4.4. Measurement equipment

| 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  |
| ISN                  | FCC       | FCC-TLISN-T4-02 | 2005/06/10  |

## 4.5. Test Result and Data

EUT : CB801AS  
 Power : 110V 60Hz  
 Test Mode : 802.11b CH L0  
 Memo :

Pol/Phase : NEUTRAL  
 Temperature : 26 °C  
 Humidity : 63 %



| Freq  | Read  | Factor | Level | Limit | Over   | Remark  |
|-------|-------|--------|-------|-------|--------|---------|
| MHz   | dBuV  | dB     | dBuV  | dBuV  | Limit  |         |
| 0.327 | 45.94 | 0.45   | 46.39 | 59.52 | -13.14 | QP      |
| 0.327 | 30.80 | 0.45   | 31.25 | 49.52 | -18.28 | AVERAGE |
| 0.373 | 47.38 | 0.45   | 47.83 | 58.44 | -10.61 | QP      |
| 0.373 | 27.97 | 0.45   | 28.42 | 48.44 | -20.02 | AVERAGE |
| 0.545 | 40.60 | 0.48   | 41.08 | 56.00 | -14.92 | QP      |
| 0.545 | 35.34 | 0.48   | 35.82 | 46.00 | -10.18 | AVERAGE |
| 0.656 | 35.51 | 0.49   | 36.00 | 56.00 | -20.00 | QP      |
| 0.656 | 33.25 | 0.49   | 33.74 | 46.00 | -12.26 | AVERAGE |
| 1.967 | 31.65 | 0.54   | 32.19 | 56.00 | -23.81 | QP      |
| 1.967 | 30.18 | 0.54   | 30.72 | 46.00 | -15.28 | AVERAGE |
| 2.732 | 28.21 | 0.56   | 28.77 | 56.00 | -27.23 | QP      |
| 2.732 | 19.74 | 0.56   | 20.30 | 46.00 | -25.70 | AVERAGE |

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

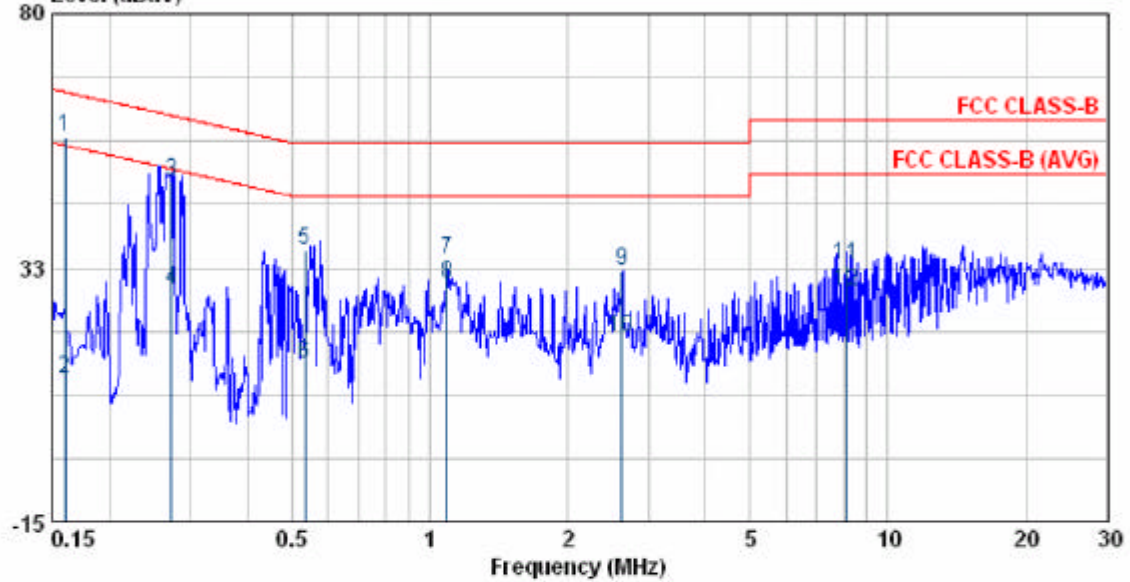
EUT : CB801AS  
 Power : 110V 60Hz  
 Test Mode : 802.11b CH L0  
 Memo :

Pol/Phase : LINE  
 Temperature : 26 °C  
 Humidity : 63 %

Data: 64

Level (dBuV)

Date: 2005-01-25

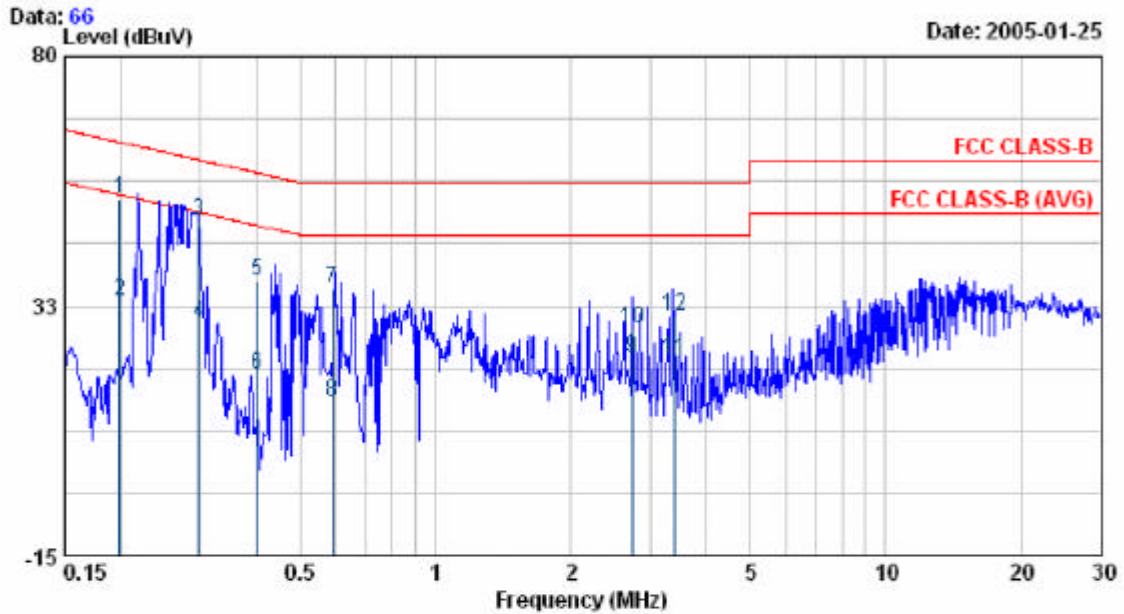


| Freq  | Read  | Factor | Level | Limit | Over   | Remark  |
|-------|-------|--------|-------|-------|--------|---------|
| MHz   | dBuV  | dB     | dBuV  | dBuV  | dBuV   |         |
| 0.160 | 56.80 | 0.40   | 57.20 | 65.47 | -8.27  | QP      |
| 0.160 | 11.48 | 0.40   | 11.88 | 55.47 | -43.59 | AVERAGE |
| 0.274 | 48.39 | 0.44   | 48.83 | 61.00 | -12.17 | QP      |
| 0.274 | 27.90 | 0.44   | 28.34 | 51.00 | -22.66 | AVERAGE |
| 0.532 | 35.45 | 0.48   | 35.93 | 56.00 | -20.07 | QP      |
| 0.532 | 14.24 | 0.48   | 14.72 | 46.00 | -31.28 | AVERAGE |
| 1.093 | 33.42 | 0.51   | 33.93 | 56.00 | -22.07 | QP      |
| 1.093 | 29.08 | 0.51   | 29.59 | 46.00 | -16.41 | AVERAGE |
| 2.618 | 31.30 | 0.55   | 31.85 | 56.00 | -24.15 | QP      |
| 2.618 | 18.89 | 0.55   | 19.44 | 46.00 | -26.56 | AVERAGE |
| 8.088 | 32.55 | 0.61   | 33.16 | 60.00 | -26.84 | QP      |
| 8.088 | 27.40 | 0.61   | 28.01 | 50.00 | -21.99 | AVERAGE |

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

EUT : CB801AS  
 Power : 110V 60Hz  
 Test Mode : 802.11b CH MID  
 Memo :

Pol/Phase : NEUTRAL  
 Temperature : 26 °C  
 Humidity : 63 %

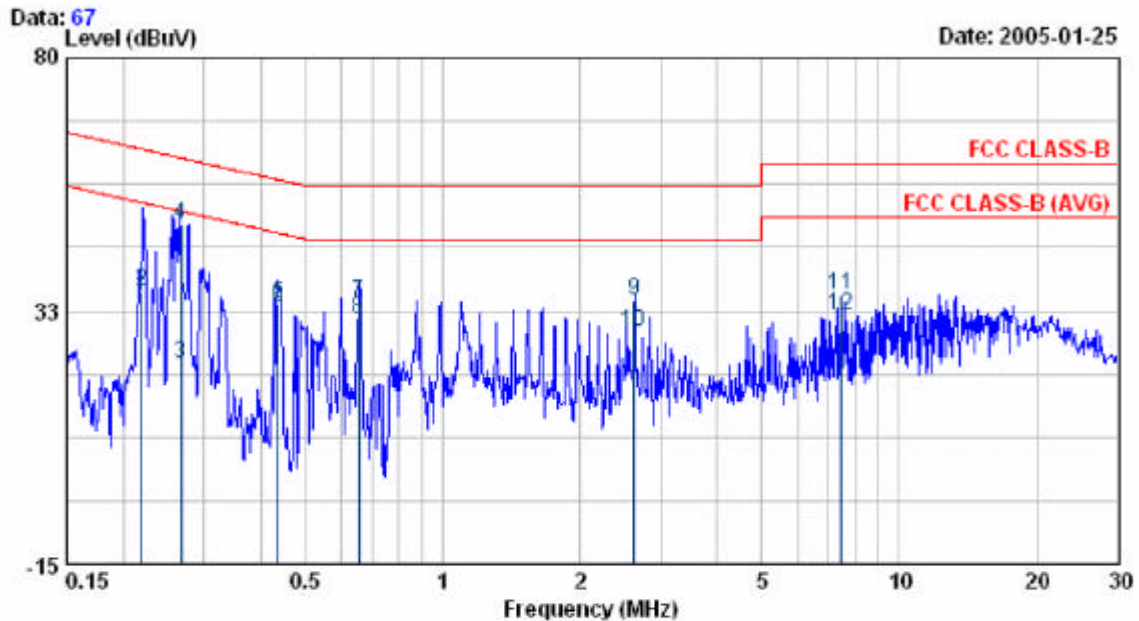


| Freq  | Read Level | Factor | Level | Limit | Over Limit | Remark  |
|-------|------------|--------|-------|-------|------------|---------|
| MHz   | dBuV       | dB     | dBuV  | dBuV  | dBuV       |         |
| 0.199 | 52.53      | 0.42   | 52.95 | 63.66 | -10.71     | QP      |
| 0.199 | 33.07      | 0.42   | 33.49 | 53.66 | -20.17     | AVERAGE |
| 0.298 | 48.37      | 0.44   | 48.81 | 60.30 | -11.48     | QP      |
| 0.298 | 28.80      | 0.44   | 29.24 | 50.30 | -21.05     | AVERAGE |
| 0.401 | 36.67      | 0.46   | 37.13 | 57.84 | -20.71     | QP      |
| 0.401 | 19.02      | 0.46   | 19.48 | 47.84 | -28.36     | AVERAGE |
| 0.592 | 35.39      | 0.48   | 35.87 | 56.00 | -20.13     | QP      |
| 0.592 | 13.64      | 0.48   | 14.12 | 46.00 | -31.88     | AVERAGE |
| 2.734 | 22.12      | 0.56   | 22.68 | 46.00 | -23.32     | AVERAGE |
| 2.734 | 27.64      | 0.56   | 28.20 | 56.00 | -27.80     | QP      |
| 3.393 | 21.78      | 0.57   | 22.35 | 46.00 | -23.65     | AVERAGE |
| 3.393 | 30.16      | 0.57   | 30.73 | 56.00 | -25.27     | QP      |

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

EUT : CB801AS  
 Power : 110V 60Hz  
 Test Mode : 802.11b CH MID  
 Memo :

Pol/Phase : LINE  
 Temperature : 26 °C  
 Humidity : 63 %



| Freq  | Read Level | Factor | Level | Limit | Over Limit | Remark  |
|-------|------------|--------|-------|-------|------------|---------|
| MHz   | dBuV       | dB     | dBuV  | dBuV  | dBuV       |         |
| 0.218 | 34.77      | 0.42   | 35.19 | 52.89 | -17.69     | AVERAGE |
| 0.218 | 35.69      | 0.42   | 36.11 | 62.89 | -26.77     | QP      |
| 0.267 | 22.27      | 0.43   | 22.70 | 51.20 | -28.50     | AVERAGE |
| 0.267 | 48.38      | 0.43   | 48.81 | 61.20 | -12.39     | QP      |
| 0.436 | 33.09      | 0.46   | 33.55 | 57.13 | -23.58     | QP      |
| 0.436 | 32.73      | 0.46   | 33.19 | 47.13 | -13.94     | AVERAGE |
| 0.656 | 33.74      | 0.49   | 34.23 | 56.00 | -21.77     | QP      |
| 0.656 | 30.47      | 0.49   | 30.96 | 46.00 | -15.04     | AVERAGE |
| 2.625 | 33.74      | 0.55   | 34.29 | 56.00 | -21.71     | QP      |
| 2.625 | 27.90      | 0.55   | 28.45 | 46.00 | -17.55     | AVERAGE |
| 7.432 | 34.83      | 0.60   | 35.43 | 60.00 | -24.57     | QP      |
| 7.432 | 31.16      | 0.60   | 31.76 | 50.00 | -18.24     | AVERAGE |

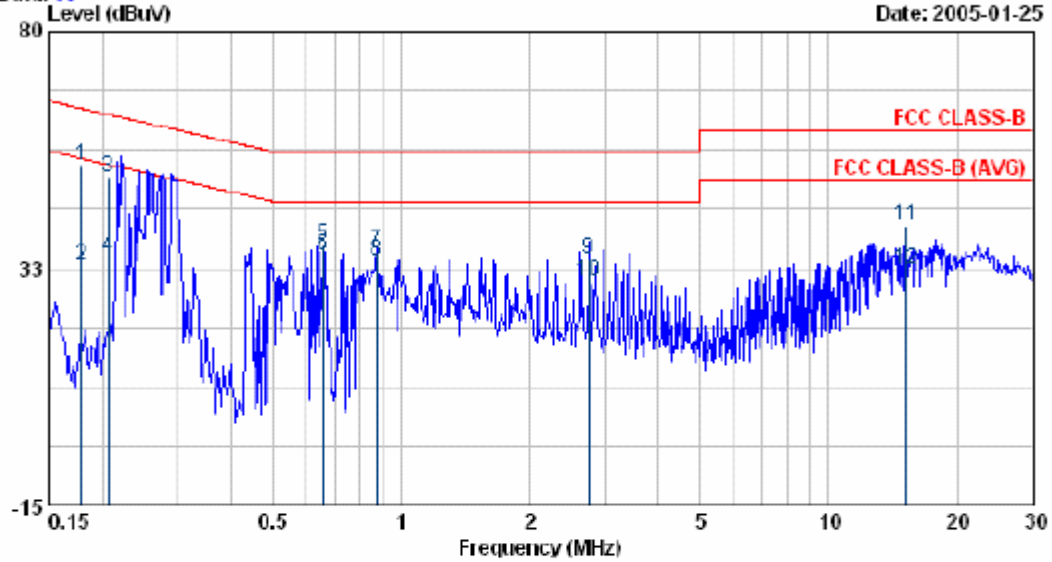
Remarks: 1. Level = Read Level + Factor  
 2. Factor = LISN(ISN) Factor + Cable Loss

EUT : C6601A3  
Power : 110V 50Hz  
Test Mode : 602.11b CH HI  
Memo :

Pol/Phase : NEUTRAL  
Temperature : 25 °C  
Humidity : 63 %

Data: 69

Date: 2005-01-25



| Freq   | Read Level | Factor | Level | Limit | Over Limit | Remark  |
|--------|------------|--------|-------|-------|------------|---------|
| MHz    | dBuV       | dB     | dBuV  | dBuV  | dBuV       |         |
| 0.178  | 52.95      | 0.41   | 53.36 | 64.60 | -11.24     | QP      |
| 0.178  | 32.65      | 0.41   | 33.06 | 54.60 | -21.54     | AVERAGE |
| 0.206  | 50.49      | 0.42   | 50.90 | 63.39 | -12.49     | QP      |
| 0.206  | 34.50      | 0.42   | 34.92 | 53.39 | -18.47     | AVERAGE |
| 0.656  | 36.81      | 0.49   | 37.30 | 56.00 | -18.70     | QP      |
| 0.656  | 34.63      | 0.49   | 35.12 | 46.00 | -10.88     | AVERAGE |
| 0.876  | 35.20      | 0.50   | 35.70 | 56.00 | -20.30     | QP      |
| 0.876  | 33.40      | 0.50   | 33.90 | 46.00 | -12.10     | AVERAGE |
| 2.734  | 33.72      | 0.56   | 34.28 | 56.00 | -21.72     | QP      |
| 2.734  | 29.26      | 0.56   | 29.82 | 46.00 | -16.18     | AVERAGE |
| 15.196 | 40.22      | 0.76   | 40.98 | 60.00 | -19.02     | QP      |
| 15.196 | 31.47      | 0.76   | 32.23 | 50.00 | -17.77     | AVERAGE |

Remarks: 1. Level = Read Level + Factor  
2. Factor = LISN(15N) Factor + Cable Loss

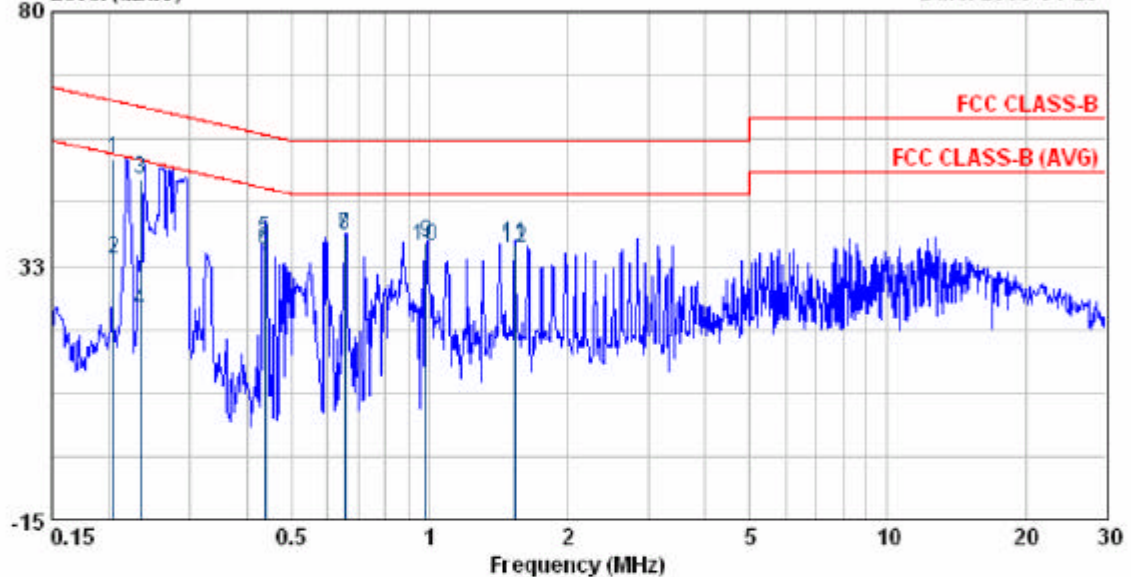
EUT : C8801AS  
 Power : 110V 60Hz  
 Test Mode : 802.11b CH HI  
 Memo :

Pol/Phase : LINE  
 Temperature : 26 °C  
 Humidity : 63 %

Data: 68

Level (dBuV)

Date: 2005-01-25



| Freq  | Read  | Factor | Level | Limit | Over   | Remark  |
|-------|-------|--------|-------|-------|--------|---------|
| MHz   | dBuV  | dB     | dBuV  | dBuV  | Limit  |         |
| 0.205 | 52.11 | 0.42   | 52.53 | 63.42 | -10.89 | QP      |
| 0.205 | 33.39 | 0.42   | 33.81 | 53.42 | -19.61 | AVERAGE |
| 0.234 | 48.33 | 0.43   | 48.76 | 62.30 | -13.55 | QP      |
| 0.234 | 23.57 | 0.43   | 24.00 | 52.30 | -28.31 | AVERAGE |
| 0.437 | 37.22 | 0.46   | 37.68 | 57.11 | -19.43 | QP      |
| 0.437 | 34.96 | 0.46   | 35.42 | 47.11 | -11.69 | AVERAGE |
| 0.656 | 37.84 | 0.49   | 38.33 | 56.00 | -17.67 | QP      |
| 0.656 | 37.61 | 0.49   | 38.10 | 46.00 | -7.90  | AVERAGE |
| 0.983 | 36.23 | 0.51   | 36.74 | 56.00 | -19.26 | QP      |
| 0.983 | 35.50 | 0.51   | 36.01 | 46.00 | -9.99  | AVERAGE |
| 1.531 | 35.94 | 0.53   | 36.47 | 56.00 | -19.53 | QP      |
| 1.531 | 35.27 | 0.53   | 35.80 | 46.00 | -10.20 | AVERAGE |

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

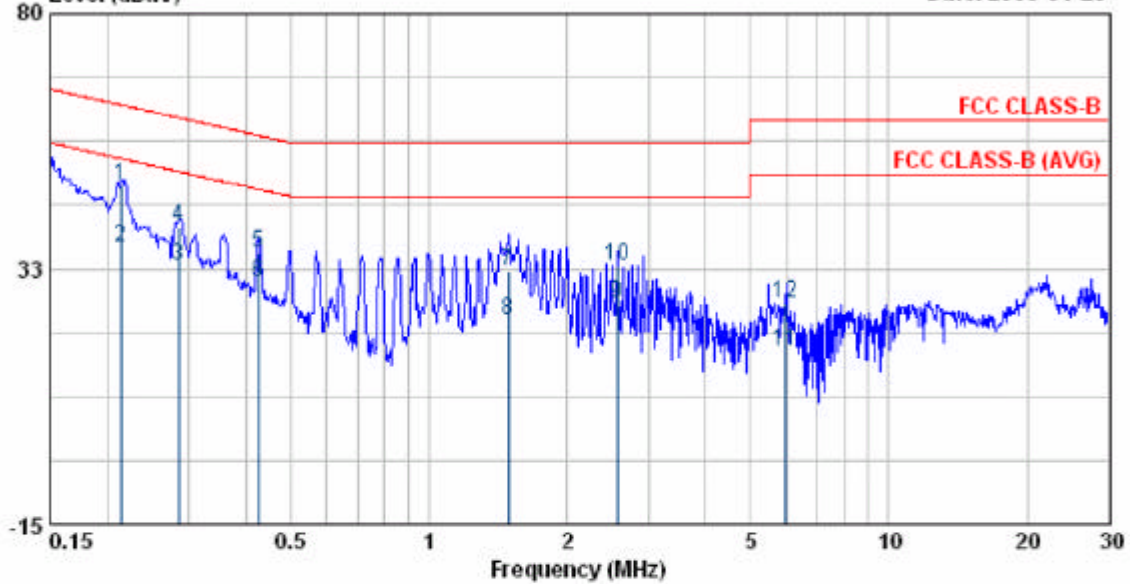
EUT : CB801AS  
 Power : 110V 60Hz  
 Test Mode : 802.11g CH L0  
 Memo :

Pol/Phase : NEUTRAL  
 Temperature : 26 °C  
 Humidity : 63 %

Data: 77

Level (dBuV)

Date: 2005-01-25



| Freq  | Read  | Factor | Level | Limit | Over   | Remark  |
|-------|-------|--------|-------|-------|--------|---------|
| MHz   | dBuV  | dB     | dBuV  | dBuV  | dBuV   |         |
| 0.213 | 47.58 | 0.42   | 48.00 | 63.08 | -15.07 | QP      |
| 0.213 | 36.20 | 0.42   | 36.62 | 53.08 | -16.45 | AVERAGE |
| 0.285 | 32.50 | 0.44   | 32.94 | 50.67 | -17.74 | AVERAGE |
| 0.285 | 39.91 | 0.44   | 40.35 | 60.67 | -20.33 | QP      |
| 0.426 | 34.85 | 0.46   | 35.31 | 57.33 | -22.01 | QP      |
| 0.426 | 29.30 | 0.46   | 29.76 | 47.33 | -17.56 | AVERAGE |
| 1.487 | 31.43 | 0.53   | 31.96 | 56.00 | -24.04 | QP      |
| 1.487 | 22.47 | 0.53   | 23.00 | 46.00 | -23.00 | AVERAGE |
| 2.559 | 25.49 | 0.55   | 26.04 | 46.00 | -19.96 | AVERAGE |
| 2.559 | 32.43 | 0.55   | 32.98 | 56.00 | -23.02 | QP      |
| 5.977 | 16.29 | 0.64   | 16.93 | 50.00 | -33.07 | AVERAGE |
| 5.977 | 25.57 | 0.64   | 26.21 | 60.00 | -33.79 | QP      |

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

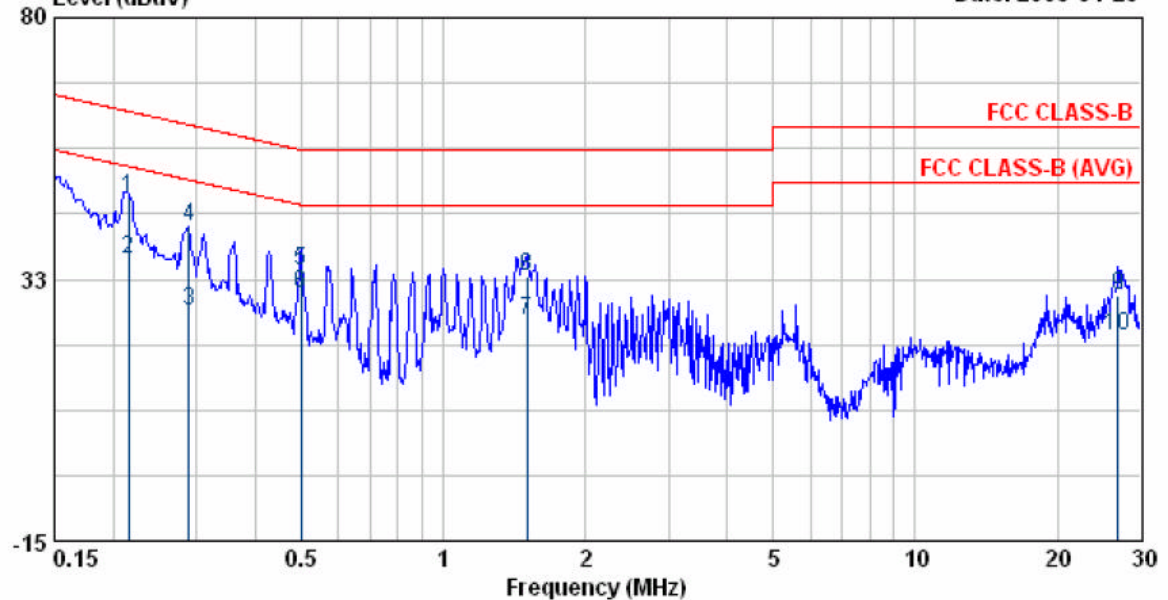
EUT : CB801AS  
 Power : 110V 60Hz  
 Test Mode : 802.11g CH LO  
 Memo :

Pol/Phase : LINE  
 Temperature : 26 °C  
 Humidity : 63 %

Data: 76

Level (dBuV)

Date: 2005-01-25



| Freq   | Read Level | Factor | Level | Limit | Over Limit | Remark  |
|--------|------------|--------|-------|-------|------------|---------|
| MHz    | dBuV       | dB     | dBuV  | dBuV  | dBuV       |         |
| 0.216  | 46.80      | 0.42   | 47.22 | 62.98 | -15.75     | QP      |
| 0.216  | 35.70      | 0.42   | 36.12 | 52.98 | -16.85     | AVERAGE |
| 0.289  | 26.20      | 0.44   | 26.64 | 50.54 | -23.91     | AVERAGE |
| 0.289  | 41.70      | 0.44   | 42.14 | 60.54 | -18.41     | QP      |
| 0.499  | 33.60      | 0.47   | 34.07 | 56.01 | -21.94     | QP      |
| 0.499  | 29.31      | 0.47   | 29.78 | 46.01 | -16.23     | AVERAGE |
| 1.503  | 24.39      | 0.53   | 24.92 | 46.00 | -21.08     | AVERAGE |
| 1.503  | 32.50      | 0.53   | 33.03 | 56.00 | -22.97     | QP      |
| 26.837 | 28.35      | 1.25   | 29.60 | 60.00 | -30.40     | QP      |
| 26.837 | 21.00      | 1.25   | 22.25 | 50.00 | -27.75     | AVERAGE |

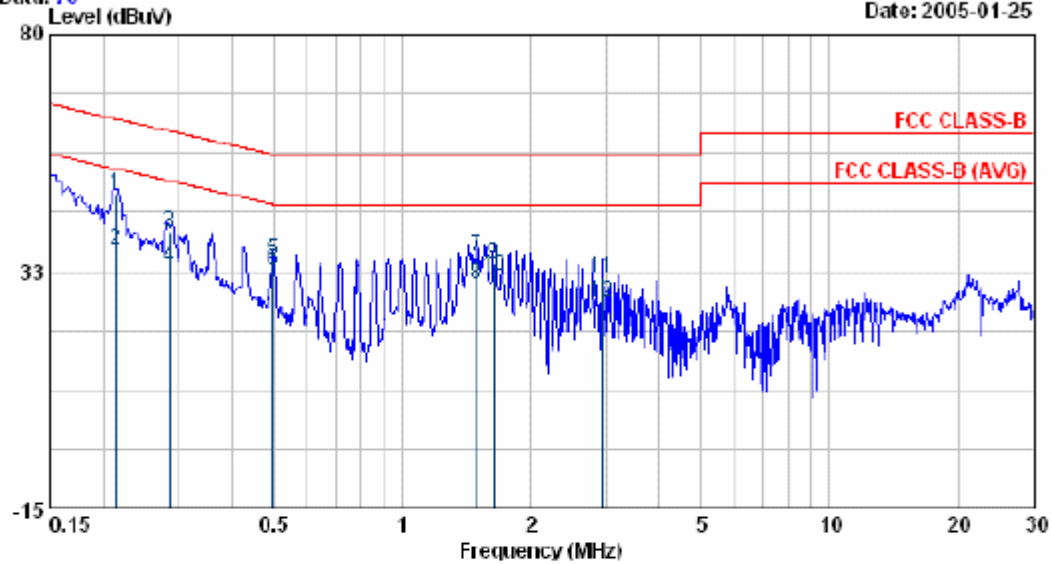
Remarks: 1. Level = Read Level + Factor  
 2. Factor = LISN(ISN) Factor + Cable Loss

EUT : CE801AS  
 Power : 110V 60Hz  
 Test Mode : 802.11g CH N10  
 Memo :

Pol/Phase : NEUTRAL  
 Temperature : 26 °C  
 Humidity : 63 %

Data: 78

Date: 2005-01-25



| Freq  | Read Level | Factor | Level | Limit | Over Limit | Remark  |
|-------|------------|--------|-------|-------|------------|---------|
| MHz   | dBuV       | dB     | dBuV  | dBuV  | dBuV       |         |
| 0.214 | 47.59      | 0.42   | 48.01 | 63.07 | -15.06     | QP      |
| 0.214 | 36.57      | 0.42   | 36.99 | 53.07 | -16.08     | AVERAGE |
| 0.285 | 39.84      | 0.44   | 40.28 | 60.67 | -20.39     | QP      |
| 0.285 | 32.90      | 0.44   | 33.34 | 50.67 | -17.33     | AVERAGE |
| 0.497 | 34.18      | 0.47   | 34.65 | 56.04 | -21.39     | QP      |
| 0.497 | 32.19      | 0.47   | 32.66 | 46.04 | -13.38     | AVERAGE |
| 1.493 | 34.85      | 0.53   | 35.38 | 56.00 | -20.62     | QP      |
| 1.493 | 29.52      | 0.53   | 30.05 | 46.00 | -15.95     | AVERAGE |
| 1.635 | 33.37      | 0.53   | 33.90 | 56.00 | -22.10     | QP      |
| 1.635 | 31.09      | 0.53   | 31.62 | 46.00 | -14.38     | AVERAGE |
| 2.915 | 30.58      | 0.56   | 31.14 | 56.00 | -24.86     | QP      |
| 2.915 | 25.79      | 0.56   | 26.35 | 46.00 | -19.65     | AVERAGE |

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

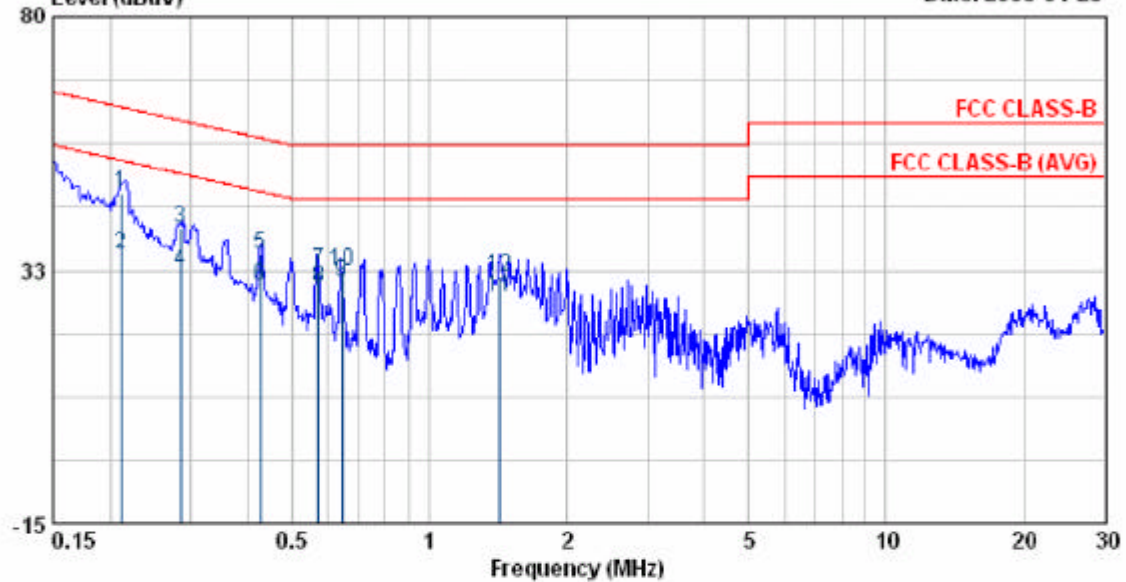
EUT : CB801AS  
 Power : 110V 60Hz  
 Test Mode : B02.11g CH MID  
 Memo :

Pol/Phase : LINE  
 Temperature : 26 °C  
 Humidity : 63 %

Data: 80

Level (dBuV)

Date: 2005-01-25

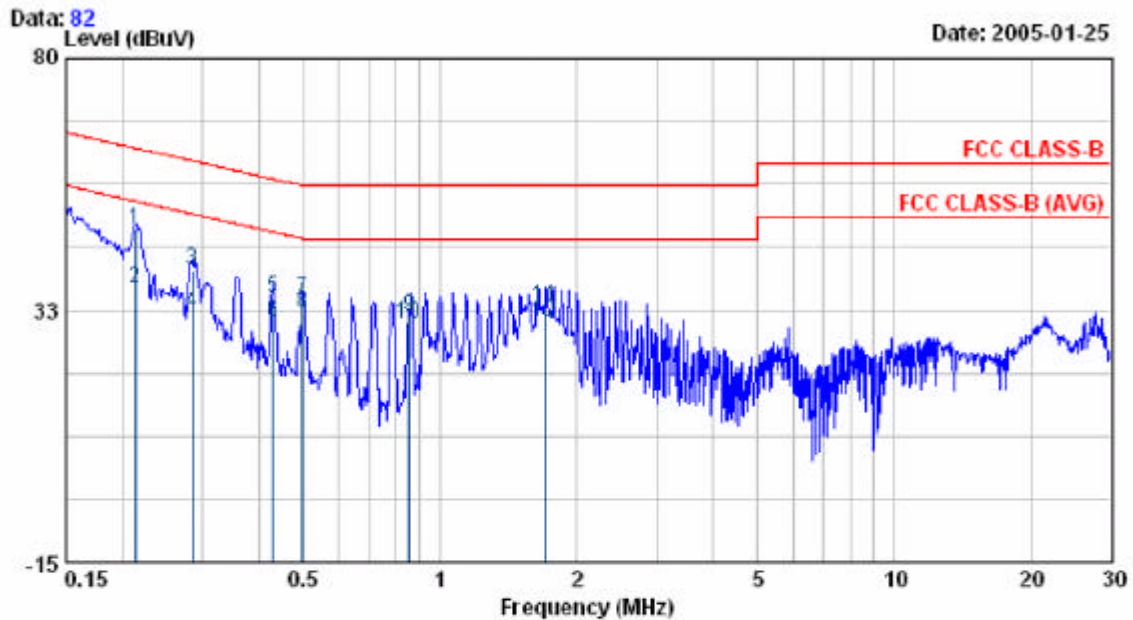


| Freq  | Read Level | Factor | Level | Limit | Over Limit | Remark  |
|-------|------------|--------|-------|-------|------------|---------|
| MHz   | dBuV       | dB     | dBuV  | dBuV  | dBuV       |         |
| 0.212 | 46.67      | 0.42   | 47.09 | 63.13 | -16.04     | QP      |
| 0.212 | 35.13      | 0.42   | 35.55 | 53.13 | -17.58     | AVERAGE |
| 0.285 | 39.80      | 0.44   | 40.24 | 60.68 | -20.44     | QP      |
| 0.285 | 31.94      | 0.44   | 32.38 | 50.68 | -18.30     | AVERAGE |
| 0.426 | 35.01      | 0.46   | 35.47 | 57.32 | -21.85     | QP      |
| 0.426 | 29.04      | 0.46   | 29.50 | 47.32 | -17.82     | AVERAGE |
| 0.572 | 31.86      | 0.48   | 32.34 | 56.00 | -23.66     | QP      |
| 0.572 | 28.76      | 0.48   | 29.24 | 46.00 | -16.76     | AVERAGE |
| 0.642 | 29.66      | 0.49   | 30.15 | 46.00 | -15.85     | AVERAGE |
| 0.642 | 31.78      | 0.49   | 32.27 | 56.00 | -23.73     | QP      |
| 1.425 | 26.97      | 0.53   | 27.50 | 46.00 | -18.50     | AVERAGE |
| 1.425 | 30.90      | 0.53   | 31.43 | 56.00 | -24.57     | QP      |

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

EUT : CB801AS  
 Power : 110V 60Hz  
 Test Mode : 802.11g CH HI  
 Memo :

Pol/Phase : NEUTRAL  
 Temperature : 26 °C  
 Humidity : 63 %



| Freq  | Read Level | Factor | Level | Limit | Over Limit | Remark  |
|-------|------------|--------|-------|-------|------------|---------|
| MHz   | dBuV       | dB     | dBuV  | dBuV  | dBuV       |         |
| 0.214 | 47.13      | 0.42   | 47.55 | 63.05 | -15.50     | QP      |
| 0.214 | 36.00      | 0.42   | 36.42 | 53.05 | -16.63     | AVERAGE |
| 0.285 | 39.49      | 0.44   | 39.93 | 60.66 | -20.73     | QP      |
| 0.285 | 31.52      | 0.44   | 31.96 | 50.66 | -18.70     | AVERAGE |
| 0.428 | 34.35      | 0.46   | 34.81 | 57.30 | -22.48     | QP      |
| 0.428 | 29.73      | 0.46   | 30.19 | 47.30 | -17.10     | AVERAGE |
| 0.498 | 34.03      | 0.47   | 34.50 | 56.03 | -21.53     | QP      |
| 0.498 | 31.68      | 0.47   | 32.15 | 46.03 | -13.88     | AVERAGE |
| 0.856 | 30.81      | 0.50   | 31.31 | 56.00 | -24.69     | QP      |
| 0.856 | 29.37      | 0.50   | 29.87 | 46.00 | -16.13     | AVERAGE |
| 1.709 | 32.48      | 0.53   | 33.02 | 56.00 | -22.99     | QP      |
| 1.709 | 29.85      | 0.53   | 30.39 | 46.00 | -15.62     | AVERAGE |

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

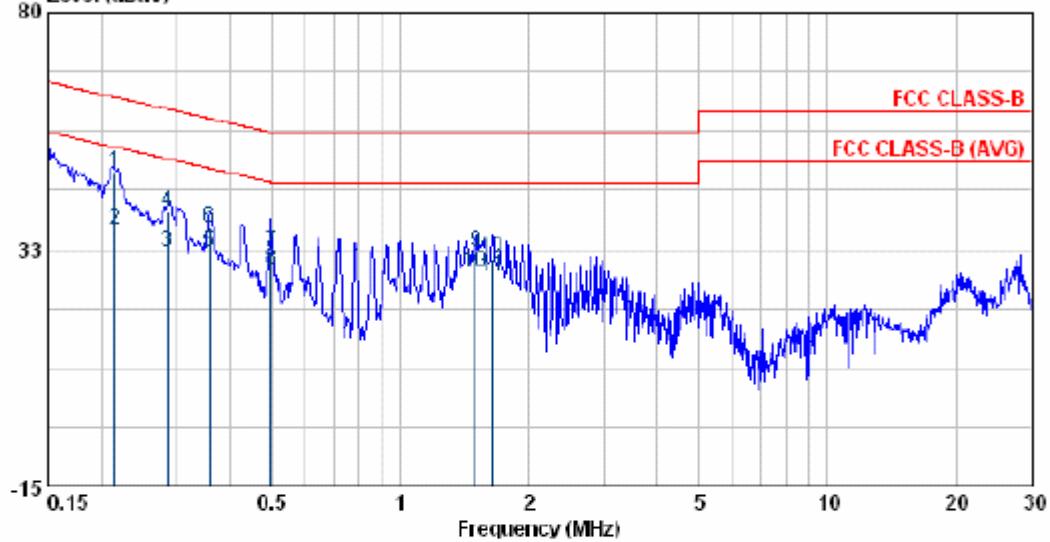
EUT : CE801AS  
 Power : 110V 60Hz  
 Test Mode : 802.11g CH HI  
 Memo :

Pol/Phase : LINE  
 Temperature : 26 ℃  
 Humidity : 63 %

Data: 81

Level (dBuV)

Date: 2005-01-25

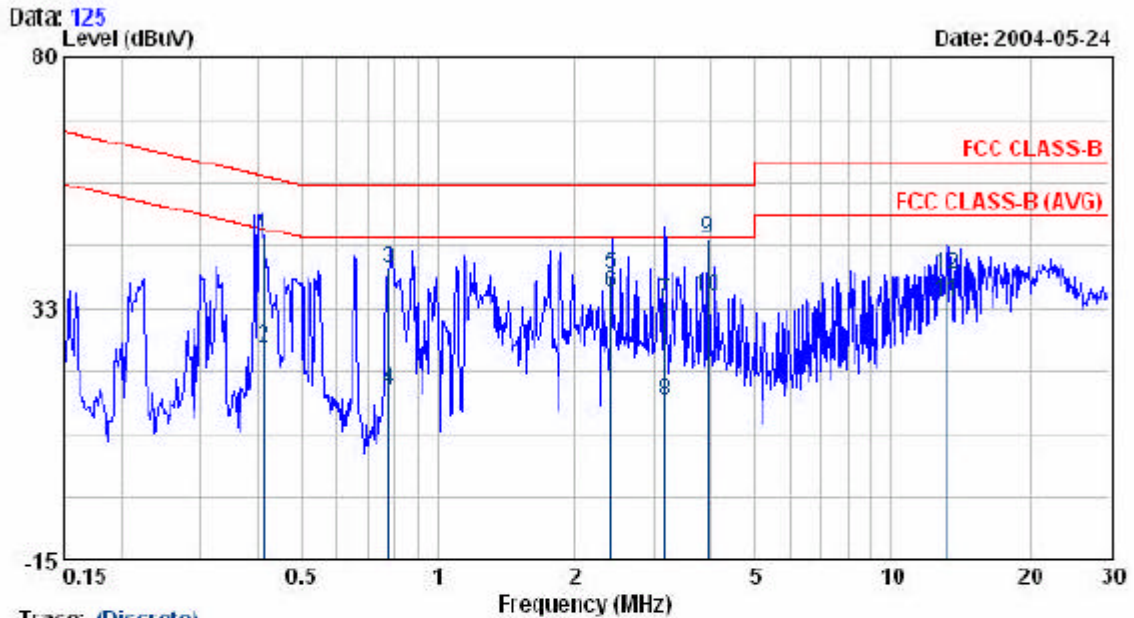


| Freq  | Read Level | Factor | Level | Limit | Over Limit | Remark  |
|-------|------------|--------|-------|-------|------------|---------|
| MHz   | dBuV       | dB     | dBuV  | dBuV  | dBuV       |         |
| 0.214 | 47.48      | 0.42   | 47.90 | 63.04 | -15.14     | QP      |
| 0.214 | 36.02      | 0.42   | 36.44 | 53.04 | -16.60     | AVERAGE |
| 0.286 | 31.52      | 0.44   | 31.96 | 50.65 | -18.69     | AVERAGE |
| 0.286 | 39.54      | 0.44   | 39.98 | 60.65 | -20.67     | QP      |
| 0.356 | 31.47      | 0.45   | 31.92 | 48.82 | -16.90     | AVERAGE |
| 0.356 | 36.37      | 0.45   | 36.82 | 58.82 | -22.00     | QP      |
| 0.498 | 31.59      | 0.47   | 32.06 | 56.04 | -23.98     | QP      |
| 0.498 | 28.08      | 0.47   | 28.55 | 46.04 | -17.49     | AVERAGE |
| 1.497 | 31.29      | 0.53   | 31.82 | 56.00 | -24.18     | QP      |
| 1.497 | 27.31      | 0.53   | 27.84 | 46.00 | -18.16     | AVERAGE |
| 1.639 | 25.47      | 0.53   | 26.00 | 46.00 | -19.00     | AVERAGE |
| 1.639 | 30.11      | 0.53   | 30.64 | 56.00 | -25.36     | QP      |

Remarks: 1. Level = Read Level + Factor  
 2. Factor = LISN(15N) Factor + Cable Loss

EUT : CB801AS  
 Power : 1107 60Hz  
 Test Mode : 802.11SUPER G CH6  
 Memo :

Pol/Phase : NEUTRAL  
 Temperature : 26 ℃  
 Humidity : 63 %



Trace: (Discrete)

| Freq  | Read Level | Factor | Level | Limit | Over Limit | Remark  |
|-------|------------|--------|-------|-------|------------|---------|
| MHz   | dBuV       | dB     | dBuV  | dBuV  | dBuV       |         |
| 0.42  | 45.39      | 0.40   | 45.79 | 57.54 | -11.76     | QP      |
| 0.42  | 24.50      | 0.40   | 24.90 | 47.54 | -22.65     | AVERAGE |
| 0.78  | 39.75      | 0.33   | 40.08 | 56.00 | -15.92     | QP      |
| 0.78  | 16.85      | 0.33   | 17.18 | 46.00 | -28.82     | AVERAGE |
| 2.41  | 38.38      | 0.40   | 38.78 | 56.00 | -17.22     | QP      |
| 2.41  | 35.09      | 0.40   | 35.49 | 46.00 | -10.51     | AVERAGE |
| 3.16  | 33.30      | 0.40   | 33.70 | 56.00 | -22.30     | QP      |
| 3.16  | 14.47      | 0.40   | 14.87 | 46.00 | -31.13     | AVERAGE |
| 3.94  | 45.30      | 0.40   | 45.70 | 56.00 | -10.30     | QP      |
| 3.94  | 34.50      | 0.40   | 34.90 | 46.00 | -11.10     | Average |
| 13.15 | 33.30      | 0.50   | 33.80 | 50.00 | -16.20     | Average |
| 13.15 | 38.60      | 0.50   | 39.10 | 60.00 | -20.90     | QP      |

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

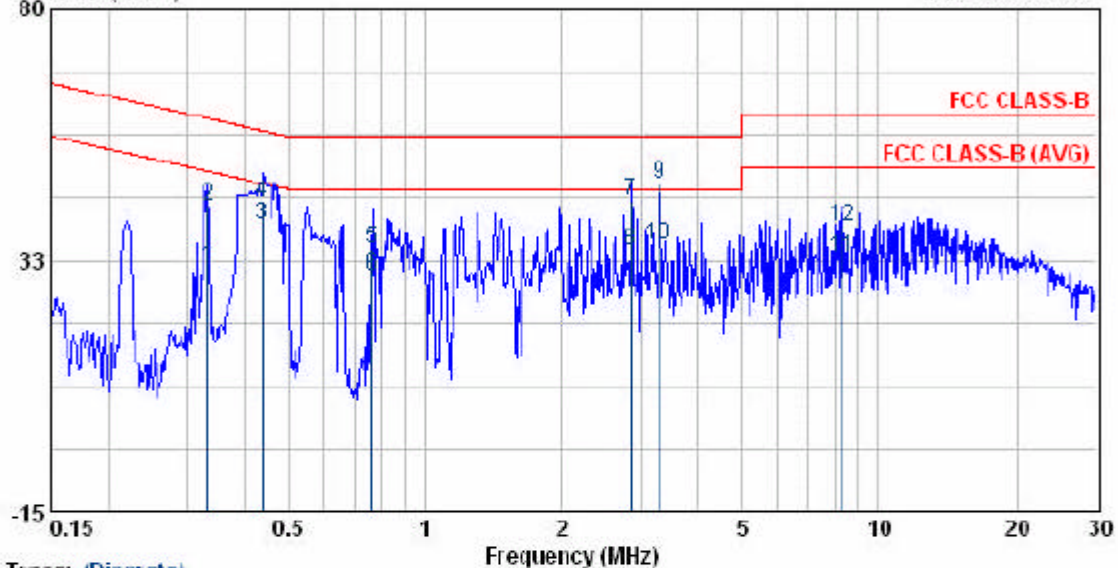
EVT : CB801AS  
 Power : 110V 60Hz  
 Test Mode : 802.11 SUPER G CH6  
 Memo :

Pol/Phase : LINE  
 Temperature : 26 ℃  
 Humidity : 63 %

Data: 124

Level (dBuV)

Date: 2004-05-24



Trace: (Discrete)

| Freq | Read Level | Factor | Level | Limit | Over Limit | Remark  |
|------|------------|--------|-------|-------|------------|---------|
| MHz  | dBuV       | dB     | dBuV  | dBuV  | dBuV       |         |
| 0.33 | 30.86      | 0.52   | 31.38 | 49.37 | -17.99     | AVERAGE |
| 0.33 | 42.10      | 0.52   | 42.62 | 59.37 | -16.75     | QP      |
| 0.44 | 38.65      | 0.59   | 39.24 | 47.11 | -7.87      | AVERAGE |
| 0.44 | 42.85      | 0.59   | 43.44 | 57.11 | -13.67     | QP      |
| 0.77 | 34.32      | 0.53   | 34.85 | 56.00 | -21.15     | QP      |
| 0.77 | 28.89      | 0.53   | 29.42 | 46.00 | -16.58     | AVERAGE |
| 2.85 | 43.00      | 0.70   | 43.70 | 56.00 | -12.30     | QP      |
| 2.85 | 33.79      | 0.70   | 34.49 | 46.00 | -11.51     | AVERAGE |
| 3.28 | 46.32      | 0.70   | 47.02 | 56.00 | -8.98      | QP      |
| 3.28 | 34.92      | 0.70   | 35.62 | 46.00 | -10.38     | AVERAGE |
| 8.32 | 32.53      | 0.62   | 33.15 | 50.00 | -16.85     | AVERAGE |
| 8.32 | 38.43      | 0.62   | 39.05 | 60.00 | -20.95     | QP      |

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

Test engineer:

#### 4.5.1. Test Photographs

Front View



Rear View

