**APPLICANT:** WAVE WIRELESS NETWORKING

**FCC ID:** NCBSL9102A

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8/8/2003

Federal Communications Commission
Authorization and Evaluation Division
7435 Oakland Mills Road
Columbia, MD 21046

SUBJECT: WAVE WIRELESS NETWORKING

FCC ID: NCBSL9102A

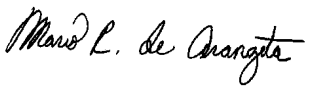
To Whom It May Concern:

The attached application is for a direct sequence spread spectrum assembly, made up of the Bridge/Radio mini PCI card (FCC ID: MXF-M900821),a custom case , power supply, a lightning arrestor, and a parabolic antenna.

This system uses the same components except for the mini PCI as the NCBSL9102. It uses only one type of antenna, a parabolic grill type that has a gain of 24dBi.

WAVE WIRELESS NETWORKING purchases standard antennas from the manufacturer. The antenna is intended to be used outside. The NCBSL9102A radio uses a unique connector (reverse TNC).

Sincerely,



Mario R. de Aranzeta C.E.T.

MRD/sh
Encl.

# EMC Equipment List

| | DEVICE | MFGR | MODEL | SERNO | CAL/CHAR DATE | DUE DATE or STATUS |
|---|---|---|---|---|---|---|
| X | 3-Meter OATS | TEI | N/A | N/A | Listed 12/22/99 | 12/22/02 |
| | 3/10-Meter OATS | TEI | N/A | N/A | Listed 3/26/01 | 3/26/04 |
| | Receiver, Beige Tower | | | | | |
| | Spectrum Analyzer (Tan) | HP | 8566B Opt 462 | 3138A07786<br>3144A20661 | CAL 8/31/01 | 8/31/03 |
| | RF Preselector (Tan) | HP | 85685A | 3221A01400 | CAL 8/31/01 | 8/31/03 |
| | Quasi-Peak Adapter (Tan) | HP | 85650A | 3303A01690 | CAL 8/31/01 | 8/31/03 |
| X | Receiver, Blue Tower | | | | | |
| X | Spectrum Analyzer (Blue) | HP | 8568B | 2928A04729<br>2848A18049 | CHAR 10/22/01 | 10/22/03 |
| X | RF Preselector (Blue) | HP | 85685A | 2926A00983 | CHAR 10/22/01 | 10/22/03 |
| X | Quasi-Peak Adapter (Blue) | HP | 85650A | 2811A01279 | CHAR 10/22/01 | 10/22/03 |
| X | Biconnical Antenna | Electro-Metrics | BIA-25 | 1171 | CAL 4/26/01 | 4/26/03 |
| | Biconnical Antenna | Eaton | 94455-1 | 1096 | CAL 10/1/01 | 10/1/03 |
| | Biconnical Antenna | Eaton | 94455-1 | 1057 | CHAR 3/15/00 | 3/15/02 |
| | BiconiLog Antenna | EMCO | 3143 | 9409-1043 | | |
| X | Log-Periodic Antenna | Electro-Metrics | LPA-25 | 1122 | CAL 10/2/01 | 10/2/03 |
| | Log-Periodic Antenna | Electro-Metrics | EM-6950 | 632 | CHAR 10/15/01 | 10/15/03 |
| | Log-Periodic Antenna | Electro-Metrics | LPA-30 | 409 | CHAR 10/16/01 | 10/16/03 |
| | Dipole Antenna Kit | Electro-Metrics | TDA-30/1-4 | 152 | CAL 3/21/01 | 3/21/04 |
| | Dipole Antenna Kit | Electro-Metrics | TDA-30/1-4 | 153 | CHAR 11/24/00 | 11/24/03 |
| | Double-Ridged Horn Antenna | Electro-Metrics | RGA-180 | 2319 | CAL 12/19/01 | 12/19/03 |
| | Horn Antenna | Electro-Metrics | EM-6961 | 6246 | CAL 3/21/01 | 3/21/03 |
| | Horn Antenna | ATM | 19-443-6R | None | No Cal Required | |
| | Passive Loop Antenna | EMC Test Systems | EMCO 6512 | 9706-1211 | CHAR 7/10/01 | 7/10/03 |
| | Line Impedance Stabilization . . . | Electro-Metrics | ANS-25/2 | 2604 | CAL 10/9/01 | 10/9/03 |

| | DEVICE | MFGR | MODEL | SERNO | CAL/CHAR DATE | DUE DATE or STATUS |
|---|---|---|---|---|---|---|
| | Line Impedance Stabilization . . . | Electro-Metrics | EM-7820 | 2682 | CAL 3/16/01 | 3/16/03 |
| | Termaline Wattmeter | Bird Electronic Corporation | 611 | 16405 | CAL 5/25/99 | 5/25/01 |
| | Termaline Wattmeter | Bird Electronic Corporation | 6104 | 1926 | CAL 12/12/01 | 12/12/03 |
| | Oscilloscope | Tektronix | 2230 | 300572 | CHAR 2/1/01 | 2/1/03 |
| | Temperature Chamber | Tenney Engineering | TTRC | 11717-7 | CHAR 1/22/02 | 1/22/04 |
| | AC Voltmeter | HP | 400FL | 2213A14499 | CAL 10/9/01 | 10/9/03 |
| | AC Voltmeter | HP | 400FL | 2213A14261 | CHAR 10/15/01 | 10/15/03 |
| | AC Voltmeter | HP | 400FL | 2213A14728 | CHAR 10/15/01 | 10/15/03 |
| X | Digital Multimeter | Fluke | 77 | 35053830 | CHAR 1/8/02 | 1/8/04 |
| | Digital Multimeter | Fluke | 77 | 43850817 | CHAR 1/8/02 | 1/8/04 |
| | Digital Multimeter | HP | E2377A | 2927J05849 | CHAR 1/8/02 | 1/8/04 |
| | Multimeter | Fluke | FLUKE-77-3 | 79510405 | CAL 9/26/01 | 9/26/03 |
| | Peak Power Meter | HP | 8900C | 2131A00545 | CHAR 1/26/01 | 1/26/03 |
| | Digital Thermometer | Fluke | 2166A | 42032 | CAL 1/16/02 | 1/16/04 |
| | Thermometer | Traulsen | SK-128 | | CHAR 1/22/02 | 1/22/04 |
| X | Temp/Humidity gauge | EXTech | 44577F | E000901 | CHAR 1/22/02 | 1/22/04 |
| | Frequency Counter | HP | 5352B | 2632A00165 | CAL 11/28/01 | 11/28/03 |
| | Power Sensor | Agilent Technologies | 84811A | 2551A02705 | CAL 1/26/01 | 1/26/03 |
| | Service Monitor | IFR | FM/AM 500A | 5182 | CAL 11/22/00 | 11/22/02 |
| | Comm. Serv. Monitor | IFR | FM/AM 1200S | 6593 | CAL 5/12/02 | 5/12/04 |
| | Signal Generator | HP | 8640B | 2308A21464 | CAL 11/15/01 | 11/15/03 |
| | Modulation Analyzer | HP | 8901A | 3435A06868 | CAL 9/5/01 | 9/5/03 |
| | Near Field Probe | HP | HP11940A | 2650A02748 | CHAR 2/1/01 | 2/1/03 |

| | DEVICE | MFGR | MODEL | SERNO | CAL/CHAR DATE | DUE DATE or STATUS |
|---|---|---|---|---|---|---|
| | BandReject Filter | Lorch Microwave | 5BR4-2400/ 60-N | Z1 | CHAR 3/2/01 | 3/2/03 |
| | BandReject Filter | Lorch Microwave | 6BR6-2442/ 300-N | Z1 | CHAR 3/2/01 | 3/2/03 |
| | BandReject Filter | Lorch Microwave | 5BR4-10525/ 900-S | Z1 | CHAR 3/2/01 | 3/2/03 |
| | High Pas Filter | Microlab | HA-10N | | CHAR 10/4/01 | 10/4/03 |
| | Audio Oscillator | HP | 653A | 832-00260 | CHAR 3/1/01 | 3/1/03 |
| | Frequency Counter | HP | 5382A | 1620A03535 | CHAR 3/2/01 | 3/2/03 |
| | Frequency Counter | HP | 5385A | 3242A07460 | CHAR 12/11/01 | 12/11/03 |
| | Preamplifier | HP | 8449B-H02 | 3008A00372 | CHAR 3/4/01 | 3/4/03 |
| | Amplifier | HP | 11975A | 2738A01969 | CHAR 3/1/01 | 3/1/03 |
| | Egg Timer | Unk | | | CHAR 8/31/01 | 8/31/03 |
| | Measuring Tape, 20M | Kraftixx | 0631-20 | | CHAR 2/1/02 | 2/1/04 |
| | Measuring Tape, 7.5M | Kraftixx | 7.5M PROFI | | 2/1/02 | 2/1/04 |
| | Coaxial Cable #51 | Insulated Wire Inc. | NPS 2251-2880 | Timco #51 | CHAR 1/23/02 | 1/23/04 |
| | Coaxial Cable #64 | Semflex Inc. | 60637 | Timco #64 | CHAR 1/24/02 | 1/24/04 |
| | Coaxial Cable #65 | General Cable Co. | E9917 RG233/U | Timco #65 | CHAR 1/23/02 | 1/23/04 |
| | Coaxial Cable #106 | Unknown | Unknown | Timco #106 | CHAR 1/23/02 | 1/23/04 |

## TEST PROCEDURE

**GENERAL:** This report shall NOT be reproduced except in full without the written approval of TIMCO ENGINEERING, INC. Shielded interface cables were used in all cases except for cables connecting to the telephone line and the power cords. A test program was run which simulated a normal data transmission on a network.

**POWER LINE CONDUCTED INTERFERENCE:** The procedure used was ANSI STANDARD C63.4-1992 using a 50uH LISN. Both lines were observed with the UUT transmitting. The bandwidth of the spectrum analyzer was 10 kHz with an appropriate sweep speed. The ambient temperature of the UUT was 76°F with a humidity of 55%.

**BANDWIDTH 6.0dB:** The measurements were made with the spectrum analyzer's resolution bandwidth(RBW)=1.0 MHz and the video bandwidth(VBW) =3.0 MHz and the span set as shown on plot.

**POWER OUTPUT:** The RF power output was measured at the antenna feed point using a peak power meter.

**ANTENNA CONDUCTED EMISSIONS:** The RBW=100 kHz, VBW=300 kHz and the span set to 10 MHz and the spectrum was scanned from 30 MHz to the $10^{th}$ Harmonic of the fundamental. Above 1 GHz the resolution bandwidth was 1 MHz and the VBW = 3 MHz and the span to 50 MHz.

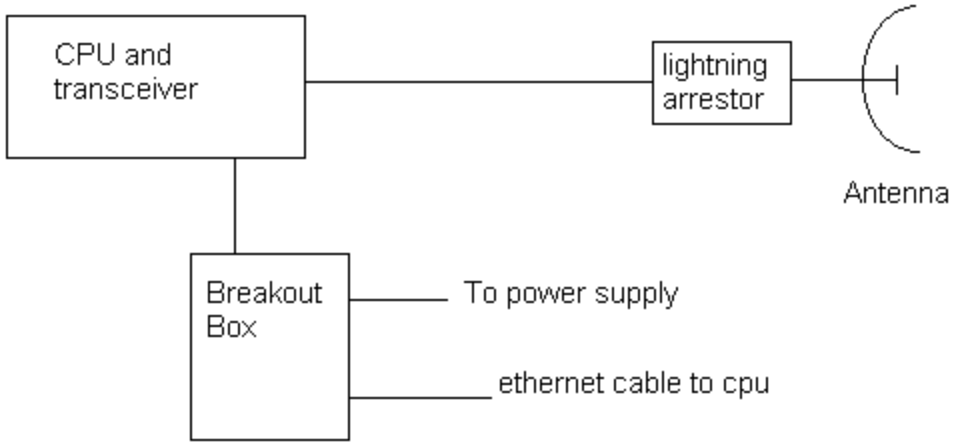
**RADIATION INTERFERENCE:** The test procedure used was ANSI STANDARD C63.4-1992 using a HEWLETT PACKARD spectrum analyzer with a preselector. The bandwidth (RBW) of the spectrum analyzer was 100 kHz up to 1 GHz and 1.0 MHz above 1 GHz with an appropriate sweep speed. The VBW above 1.0 GHz was = 3.0 MHz. The analyzer was calibrated in dB above a microvolt at the output of the antenna. The ambient temperature of the UUT was 85°F with a humidity of 45%.

**PRODUCT DESCRIPTION:**

The NCBSL9102A is a (WLAN) direct sequence spread spectrum radio that operated in the 2412 (Channel 1) to 2462 MHz (Channel 11) frequency band.

The channels are selected via software that the end user does not have access to.

EUT



**APPLICANT**: WAVE WIRELESS NETWORKING

**FCC ID:** NCBSL9102A

**NAME OF TEST:** POWER LINE CONDUCTED INTERFERENCE

**RULES PART NO.**: 15.107(a)

**REQUIREMENTS:**

| | **QUASI-PEAK** | **AVERAGE** |
|---|---|---|
| 0.15– 0.5 MHz | 66-56 dBuV | 56-46 dBuV |
| 0.5 – 5.0 | 56 | 46 |
| 5.0 – 30. | 60 | 50 |

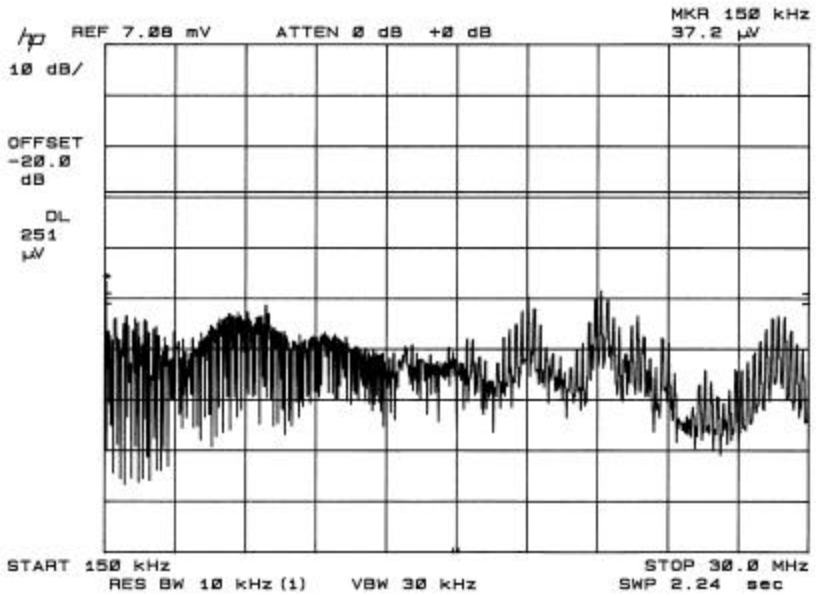
**TEST PROCEDURE:** ANSI STANDARD C63.4-1992. The spectrum was scanned from 0.15 to 30 MHz.

**TEST DATA:**

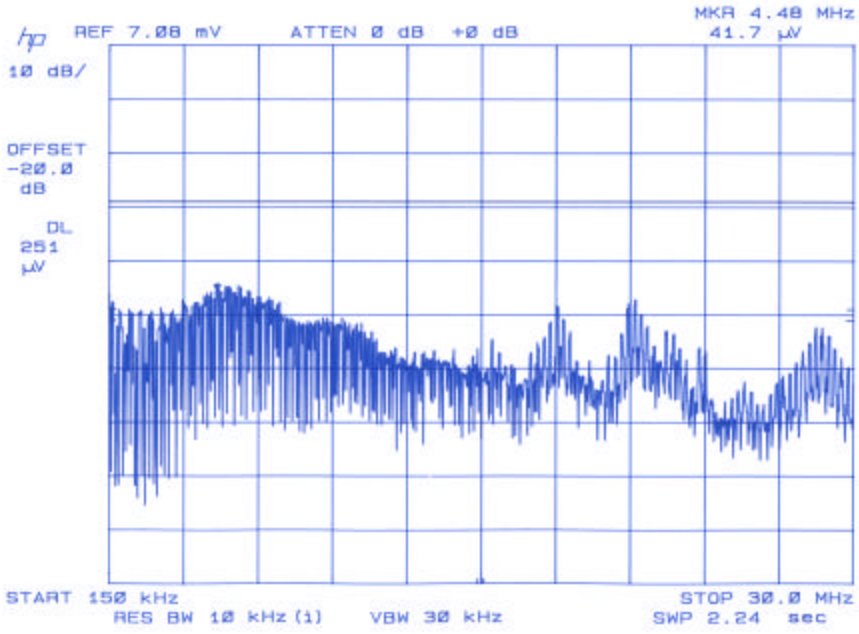
THE PLOTS ON THE FOLLOWING PAGE REPRESENT THE EMISSIONS TAKEN FOR THIS DEVICE.

**TEST RESULTS**: Both lines were observed. The measurements indicate that the unit DOES meet the FCC requirements for this class of equipment.

**LINE 1**


REF 7.08 mV
ATTEN 0 dB +0 dB
MKR 150 kHz
37.2 µV
10 dB/
OFFSET
-20.0
dB
DL
251
µV
START 150 kHz
RES BW 10 kHz (i)
VBW 30 kHz
STOP 30.0 MHz
SWP 2.24 sec

**LINE 2**


REF 7.08 mV
ATTEN 0 dB +0 dB
MKR 4.48 MHz
41.7 µV
10 dB/
OFFSET
-20.0
dB
DL
251
µV
START 150 kHz
RES BW 10 kHz (i)
VBW 30 kHz
STOP 30.0 MHz
SWP 2.24 sec

**APPLICANT:** WAVE WIRELESS NETWORKING

**FCC ID:** NCBSL9102A

**NAME OF TEST:** 6.0dB BANDWIDTH

**RULES PART NO.:** 15.247(a)(2)

**REQUIREMENTS:** The 6.0dB bandwidth must be greater than 500 kHz.

**MEASUREMENT:** The 6.0dB bandwidth measured @ 2437.00MHz was 11.10 MHz. Three channels were tested and the worst case is presented here.

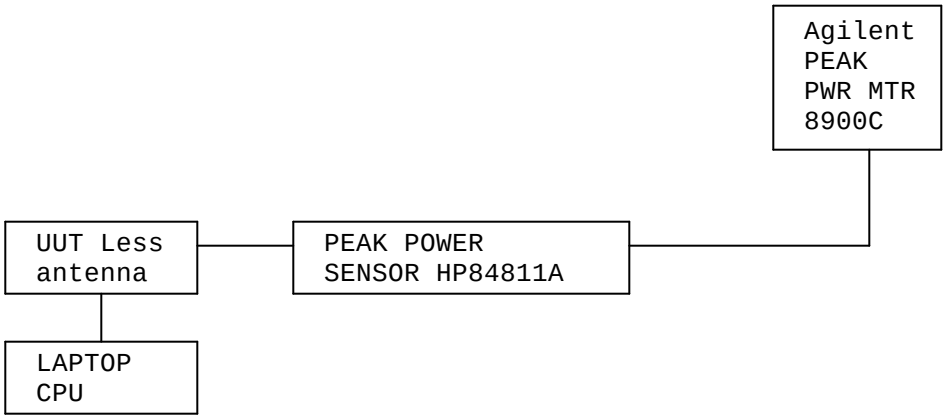
**DATA:** See plot on next page.

**NAME OF TEST:** POWER OUTPUT

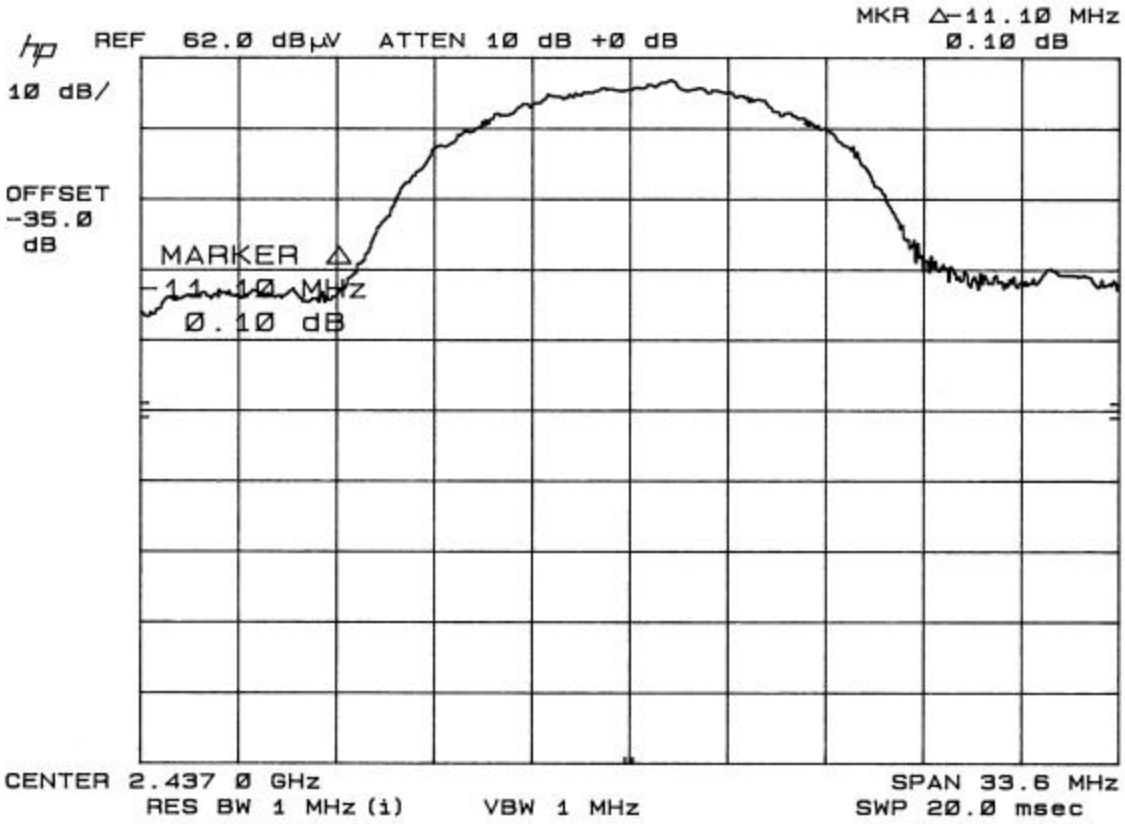
**RULES PART NO.:** 15.247(b) 1.0Watt or +30dBm
250mW Watts or 24dBm for 24dBi Gain Ant

**MEASUREMENT:** 40 mWATTS or 16.0 dBm @ 2433.0MHz

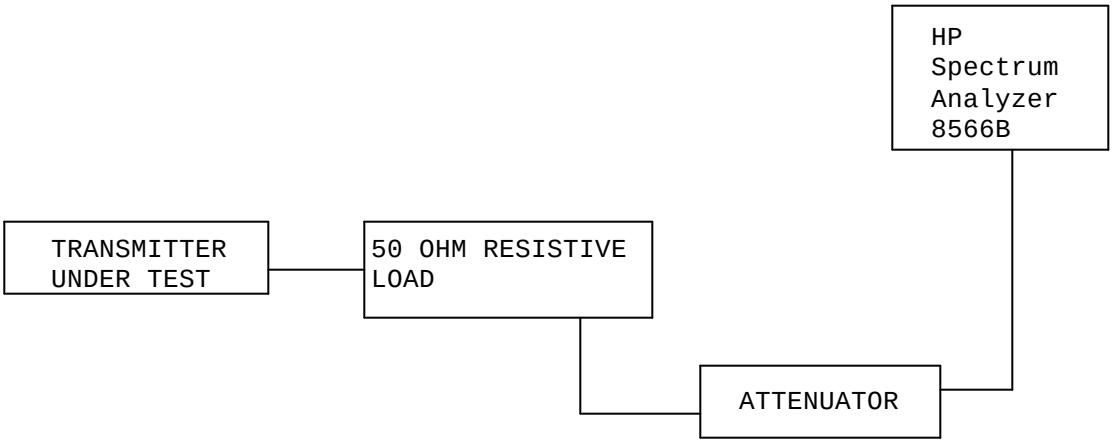
15.247(c) Method of Measuring RF Power output: The Peak power Sensor was connected in place of the antenna.



**6 dB BANDWIDTH PLOT**



15.247(c) Method of Measuring RF Conducted Spurious Emissions




NAME OF TEST: SPURIOUS EMISSIONS AT ANTENNA TERMINALS

REQUIREMENTS: Emissions must be at least 20dB down from the highest emission level within the authorized band as measured with a 100 kHz RBW.

| TF | EF | dB BELOW CARRIER |
|---|---|---|
| 2457.00 | 2457.00 | 0 |
| | 4914.00 | 51.8 |
| | 7371.00 | 57.8 |
| | 9828.0 | 69.4 |

TF: Tuned Frequency
EF: Emission Frequency

NOTE: Three channels were measured and the worst case data is presented. The spectrum was scanned to the 10$^{th}$ harmonic.

15.247(c),15.205 &15.209(b) Field_strength_of_spurious_emissions:

**REQUIREMENTS:**

| FIELD STRENGTH of Fundamental: | FIELD STRENGTH of Harmonics | S15.209 |
|---|---|---|
| 902-928 MHz | | 30 - 88 MHz 40 dBuV/m @3M |
| 2.4-2.4835 Hz | | 88 -216 MHz 43.5 |
| 127.38 dBuV/m @3m | 54 dBuV/m @3m | 216 -960 MHz 46 |
| | | ABOVE 960 MHz 54dBuV/m |

EMISSIONS RADIATED OUTSIDE OF THE SPECIFIED FREQUENCY BANDS, EXCEPT FOR HARMONICS, SHALL BE ATTENUATED BY AT LEAST 50 dB BELOW THE LEVEL OF THE FUNDAMENTAL OR TO THE GENERAL RADIATED EMISSION LIMITS IN 15.209, WHICHEVER IS THE LESSER ATTENUATION.

REQUIREMENTS: Emissions that fall in the restricted bands (15.205) must be less than 54 dBuV/m otherwise the spurious and harmonics must be attenuated by at least 20 dB.

**TEST DATA: PEAK**

| Tuned Frequency MHz | Emission Frequency MHz | Meter Reading dBuV | ANT. POLARITY | Coax Loss dB | Correction Factor dB | Field Strength dBuV/m | Margin dB |
|---|---|---|---|---|---|---|---|
| 2,412.0 | 2,412.00 | 80.0 | V | 3.33 | 30.67 | 114.00 | 13.38 |
| 2,418.0 | 2,418.00 | 90.1 | V | 3.33 | 29.27 | 122.70 | 4.68 |
| 2,418.00 | 4,834.00 | 13.0 | V | 5.97 | 34.17 | 53.14 | 0.86 |
| 2,418.00 | 7,253.00 | NF | | | | | |
| 2,437.0 | 2,437.00 | 79.6 | V | 3.35 | 29.30 | 112.25 | 15.13 |
| 2,437.0 | 2,438.30 | 90.8 | H | 3.35 | 29.30 | 123.45 | 3.93 |
| 2,437.0 | 4,874.00 | 13.0 | V | 6.02 | 34.30 | 53.32 | 0.68 |
| 2,457.00 | 2,458.30 | 91.5 | V | 3.37 | 29.33 | 124.20 | 3.18 |
| 2,457.00 | 4,914.00 | 13.4 | V | 6.08 | 34.42 | 53.90 | 0.10 |
| 2,463.00 | 2,463.00 | 80.5 | V | 3.37 | 30.80 | 114.67 | 12.71 |
| 2,462.0 | 4,938.00 | 9.6 | V | 6.11 | 34.50 | 48.41 | 5.59 |

**TEST DATA: AVERAGE**

| Tuned Frequency MHz | Emission Frequency MHz | Meter Reading dBuV | ANT. POLARITY | Coax Loss dB | Correction Factor dB | Field Strength dBuV/m | Margin dB |
|---|---|---|---|---|---|---|---|
| 2,418.0 | 4,834.00 | 0.3 | V | 5.97 | 34.17 | 40.44 | 13.56 |
| 2,418.0 | 7,253.00 | NF | | | | | |
| 2,437.0 | 4,874.00 | -1.8 | V | 6.02 | 34.30 | 38.52 | 15.48 |
| 2,457.0 | 4,914.00 | -0.8 | V | 6.08 | 34.42 | 39.70 | 14.30 |

The spectrum was scanned to the $10^{th}$ harmonic. Three places in the band were tested and the worst case is presented above.

METHOD OF MEASUREMENT: The procedure used was ANSI STANDARD C63.4-1992 & the FCC/OET Guidance on Measurements for Direct Sequence Spread Spectrum Systems – Public Notice 54797 Dated July 12, 1995. Measurements were made at the open field test site of TIMCO ENGINEERING INC. located at 849 N.W. State Road 45, Newberry, FL 32669.

**NAME OF TEST:** RADIATED SPURIOUS EMISSIONS

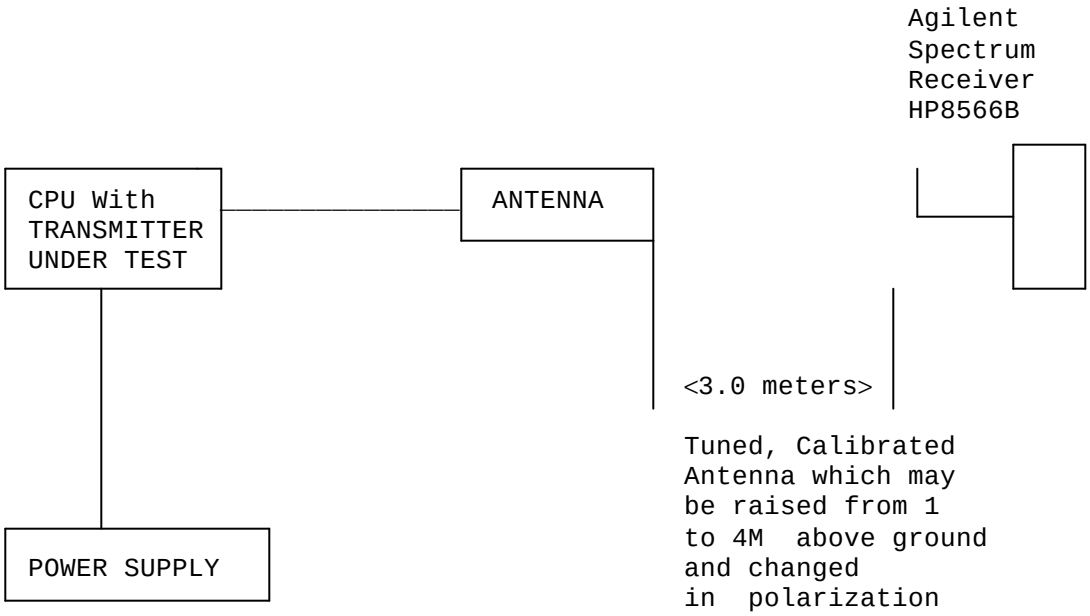
**RULES PART NO.:** 15.109(a) - Class B Computing Device

**REQUIREMENTS:**
30-88 MHz 40.0 dBuV/m measured at 3 meters
88-216 MHz 43.5 dbuV/m
216-960 MHz 46.0 dbuV/m
ABOVE 960 MHz 54.0 dbuV/m

**TEST DATA:**

| Tuned Frequency MHz | Emission Frequency MHz | Meter Reading dBuv | Ant. Polarity | Coax Loss dB | Correction Factor dB | Field Strength dBuv/m |
|---|---|---|---|---|---|---|
| 2,462.0 | 32.02 | 18.9 | V | 0.53 | 10.33 | 29.76 |
| 2,462.0 | 37.80 | 21.2 | V | 0.68 | 10.55 | 32.43 |
| 2,462.0 | 43.80 | 21.7 | V | 0.74 | 10.77 | 33.21 |
| 2,462.0 | 48.00 | 25.3 | V | 0.78 | 10.92 | 37.00 |
| 2,462.0 | 51.30 | 25.8 | V | 0.81 | 10.58 | 37.19 |
| 2,462.0 | 51.90 | 27.7 | V | 0.82 | 10.38 | 38.90 |
| 2,462.0 | 52.40 | 26.1 | V | 0.82 | 10.22 | 37.14 |
| 2,462.0 | 52.70 | 27.2 | V | 0.83 | 10.12 | 38.15 |
| 2,462.0 | 52.98 | 25.8 | V | 0.83 | 10.03 | 36.66 |
| 2,462.0 | 53.56 | 27.2 | V | 0.84 | 9.84 | 37.88 |
| 2,462.0 | 53.80 | 27.9 | V | 0.84 | 9.77 | 38.51 |
| 2,462.0 | 54.06 | 28.5 | V | 0.84 | 9.68 | 39.02 |
| 2,462.0 | 56.60 | 27.2 | H | 0.87 | 8.86 | 36.93 |
| 2,462.0 | 71.80 | 26.6 | H | 1.01 | 7.70 | 35.31 |
| 2,462.0 | 75.00 | 25.9 | V | 1.03 | 9.38 | 36.31 |
| 2,462.0 | 125.02 | 24.7 | H | 1.30 | 11.35 | 37.35 |
| 2,462.0 | 128.00 | 26.5 | H | 1.31 | 12.02 | 39.83 |
| 2,462.0 | 132.00 | 24.2 | H | 1.33 | 12.90 | 38.43 |
| 2,462.0 | 134.70 | 22.2 | V | 1.34 | 13.50 | 37.04 |
| 2,462.0 | 136.00 | 22.5 | H | 1.34 | 13.79 | 37.63 |
| 2,462.0 | 139.90 | 22.2 | H | 1.36 | 14.66 | 38.22 |
| 2,462.0 | 141.30 | 25.5 | H | 1.37 | 14.97 | 39.84 |
| 2,462.0 | 146.70 | 20.3 | H | 1.39 | 16.17 | 37.86 |
| 2,462.0 | 148.00 | 18.9 | H | 1.39 | 16.46 | 36.75 |
| 2,462.0 | 160.00 | 21.0 | H | 1.48 | 16.81 | 39.29 |
| 2,462.0 | 173.40 | 21.5 | H | 1.59 | 16.68 | 39.77 |
| 2,462.0 | 178.70 | 19.1 | H | 1.63 | 16.07 | 36.80 |
| 2,462.0 | 192.00 | 17.4 | H | 1.74 | 13.90 | 33.04 |
| 2,462.0 | 198.60 | 14.7 | H | 1.79 | 12.83 | 29.32 |
| 2,462.0 | 204.00 | 17.1 | H | 1.82 | 12.82 | 31.74 |
| 2,462.0 | 205.30 | 21.4 | H | 1.82 | 12.79 | 36.01 |
| 2,462.0 | 224.00 | 25.4 | H | 1.90 | 12.42 | 39.72 |
| 2,462.0 | 250.00 | 19.8 | H | 2.00 | 14.40 | 36.20 |
| 2,462.0 | 256.00 | 24.4 | H | 2.02 | 14.62 | 41.04 |
| 2,462.0 | 352.00 | 19.7 | H | 2.51 | 16.84 | 39.05 |
| 2,462.0 | 384.00 | 14.1 | V | 2.70 | 16.27 | 33.07 |

## Method of Measuring Radiated Spurious Emissions




Equipment placed 80cm above ground on a rotatable platform.

**APPLICANT:** WAVE WIRELESS NETWORKING

**FCC ID:** NCBSL9102A

**NAME OF TEST:** RADIATED SPURIOUS EMISSIONS INTO ADJACENT RESTRICTED BAND

**REQUIREMENTS**: Emissions that fall in the restricted bands (15.205). These emissions must be less than or equal to 500 uV/m (54 dBuV/m).

**TEST PROCEDURE**: An in band field strength measurement of the fundamental Emission using the RBW and detector function required by C63.4-2000 and FCC Rules. The procedure was repeated with an average detector and a plot made. The calculated field strength in the adjacent restricted band is presented below.

Average
CHANNEL 1
FREQUENCY: 2387.13 MHz

| | | |
|---|---|---|
| - 0.80 | dBuV | from plot |
| +29.22 | dB | ACF |
| + 3.31 | dB | Coax Loss |
| +20.00 | dB | Attn. Pad |
| +51.73 | dbuV | |

Average
CHANNEL 11
FREQUENCY: 2483.56 MHz

| | | |
|---|---|---|
| - 0.40 | dBuV | from plot |
| +29.37 | dB | ACF |
| + 3.39 | dB | Coax Loss |
| +20.00 | dB | Attn. Pad |
| +52.36 | dBuV | |

Peak

CHANNEL 1
FREQUENCY: 2369.70 MHz

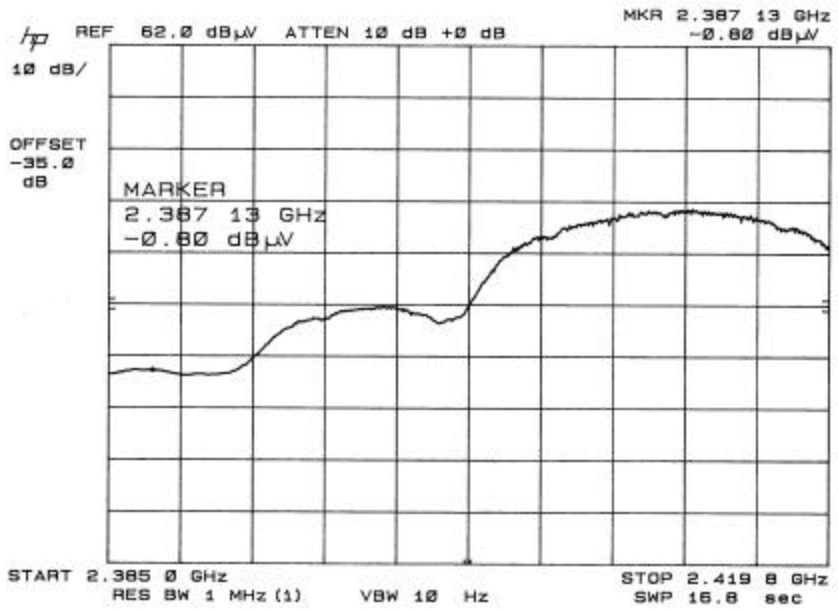
| | | |
|---|---|---|
| +37.00 | dBuV | from plot |
| +29.22 | dB | ACF |
| + 3.31 | dB | Coax Loss |
| +69.53 | dbuV | |

Peak

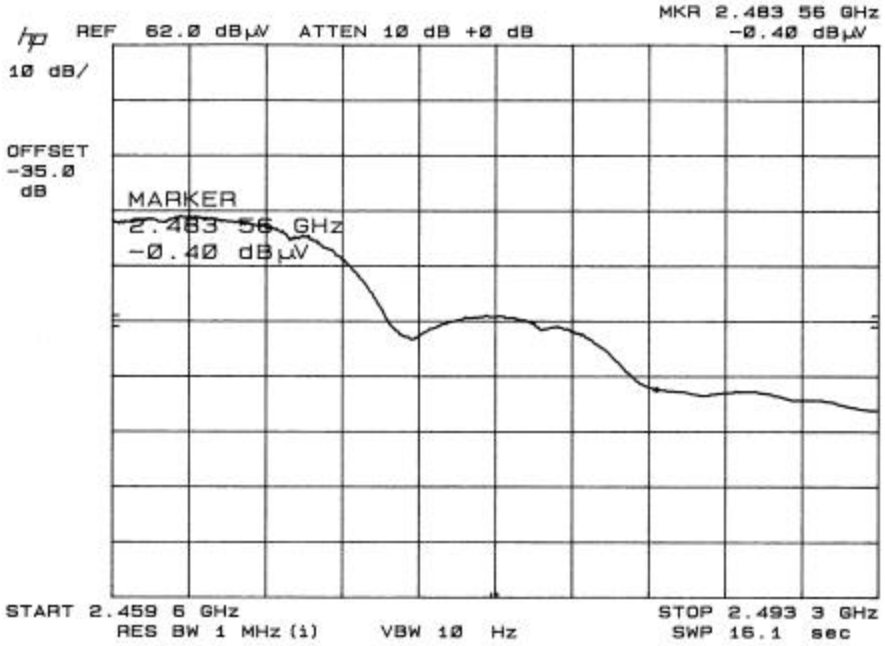
CHANNEL 11
FREQUENCY: 2478.40 MHz

| | | |
|---|---|---|
| +33.60 | dBuV | from plot |
| +29.37 | dB | ACF |
| + 3.39 | dB | Coax Loss |
| +66.36 | dBuV | |

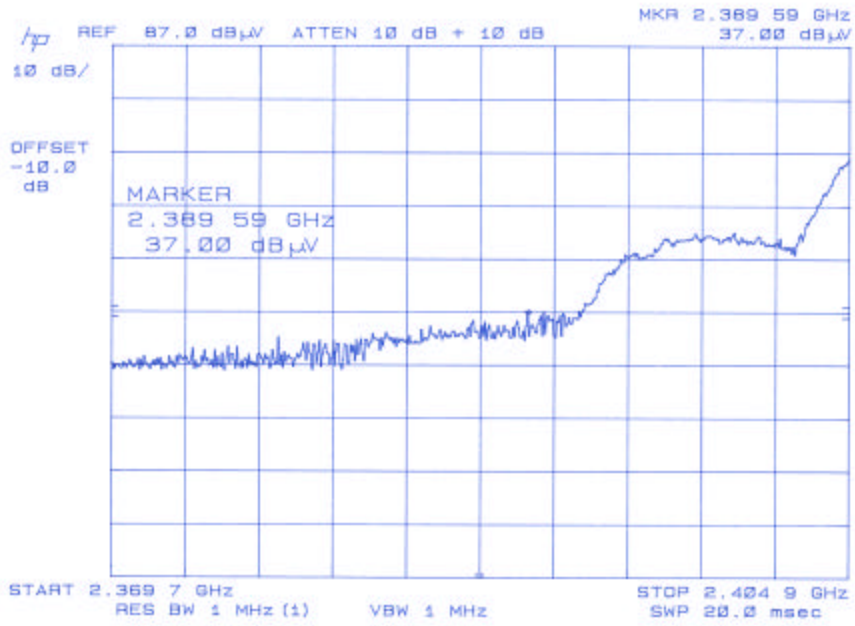
**BANDEDGE PLOT AVERAGE**



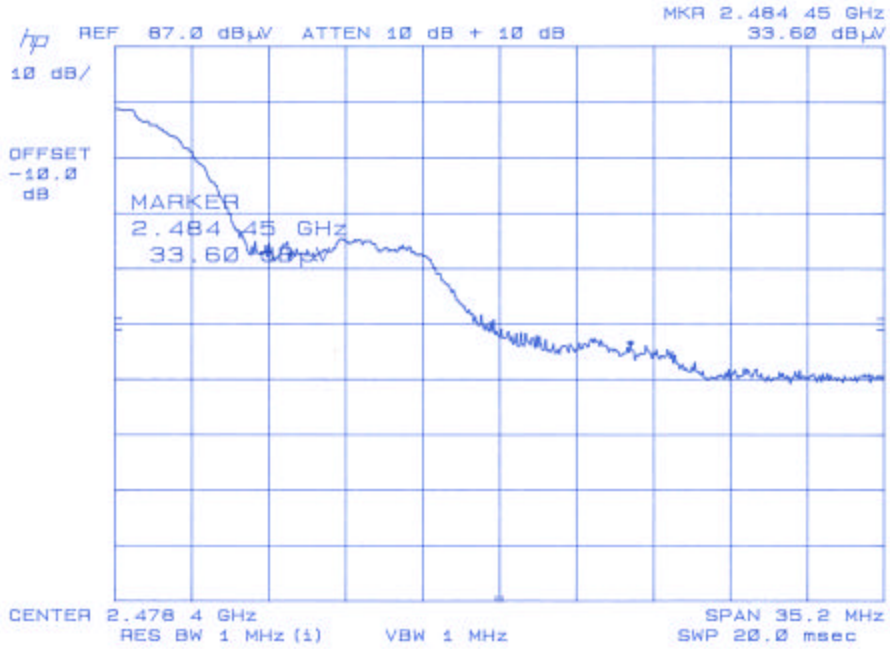

**BANDEDGE PLOT AVERAGE**



**BANDEDGE PLOT PEAK**




**BANDEDGE PLOT PEAK**



**APPLICANT:** WAVE WIRELESS NETWORKING

**FCC ID:** NCBSL9102A

**NAME OF TEST**: POWER SPECTRAL DENSITY

**RULES PART NO**.: 15.247(d)

**REQUIREMENTS:** The peak level measured must be no greater than +8.0dBm.

**DATA:** THE PLOT IS SHOWN IN EXHIBITS #8.

The level at 2413.04 MHz was 40.20 dBuV.

+40.20 dBuV
+ 6.00 dB Attn.
+35.00 dB Correction Factor
_____
+81.20 dBuV
-107.00
-25.8 dBm

3 Channels were tested, the worst case is presented.

**POWER SPECTRAL DENSITY PLOT**