



M. Flom Associates, Inc.

International Compliance Testing Laboratory

3356 N. San Marcos Place, Suite 107
Chandler, AZ 85225

toll-free: (866) 311-3268
fax: (480) 926-3598

<http://www.mflom.com>
info@mflom.com

Date of Report: November 18, 2004
Date of Submission: November 29, 2004

Applicant: Unigen Corporation
45388 Warm Springs Blvd.
Fremont, CA 94539

Attention of: Mark Morrissey, Director of Business Development
(800) 826-0808; (510) 668-2088 ext 2087
Email: mmorrissey@unigen.com

Equipment: WirelessUSB LS
Model UGWM1USHN33A

P.O. Number: 27172
Specification: RSS-210, Issue 5 (2001)

Gentlemen:

Enclosed please find your copies of the Application Form, covering letter to the department and Engineering Test Report, the whole for certification of the reference equipment as indicated.

As you know, after the TCB issues the Certificate, you must wait until Indust4ry Canada has posted the submission to the REL List on their website before you can sell this product in Canada.

Our invoice for services has been directed to your Accounts Payable Department.

Should you need any clarification, just fax or phone. Thank you again for this order - it has been a pleasure to be of service.

Sincerely yours,

Michael Schafer,
General Manager

enclosure(s)
MS/del



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Industry Canada

Certification & Engineering Bureau
3701 Carling Avenue, Bldg. 94
P.O. Box 11490, Station "H"
Ottawa, Ontario, Canada K2H 8S2

Attention: Certification Section

Applicant: Unigen Corporation
Equipment: WirelessUSB LS
Specification: RSS-210, Issue 5 (2001)

Gentlemen:

On behalf of the Applicant, enclosed please find Application Form, Engineering Test Report and all pertinent documentation, the whole for certification of the referenced equipment as shown.

The Canadian Maintenance Facility is listed. Filing fees are attached.

After the Department's evaluation and acceptance of the attached, it would be appreciated if a copy of the certificate and/or letter of notification to the Applicant were forwarded to the undersigned.

Should you need any further information, kindly contact the writer who is authorized to act as agent.

Sincerely yours,

Michael Schafer,
General Manager

enclosure(s)
cc: Applicant
MS/del

Appendix I

Application and Agreement for Certification Services

Applicant & Address: Unigen Corporation 45388 Warm Springs Blvd. Fremont, CA 94539	Contact Name: Mark Morrissey, Director of Business Development Email Address: mmorrissey@unigen.com	Telephone No: (800) 826-0808 Facsimile No:
--	---	--

Canadian Representative & Address: Component Distributor Incorporated 1938 Fairbanks Avenue Ottawa, ON K1H 5Y3	Contact Name: Bordy Semchyshyn (GM) Email Address: bordy@cdiweb.com	Telephone No: (800) 884-9042 Facsimile No: (613) 523-1313
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Company Number And UPN: 5125A-UGWM1US
Model Number: UGWM1USHN33A
Specification Standard: RSS-210
Type Of Service: Single

Agreement:

The Applicant Agrees To:

- (i) Accept responsibility for all Departmental changes arising from this application.
- (ii) Meet all requirements in accordance with Radio Standards Procedure 100 and other applicable procedures.
- (iii) Warrant that the test results submitted are a true and representation of the characteristics of the radio equipment type for which certification is requested.
- (iv) Inform the Bureau of any changes to the information submitted.

Name And Title Of Applicant (Please Print Or Type):

Michael Schafer, General Manager, Agent for Applicant

Signature Of Applicant:



Date:

November 18, 2004

Appendix II
Test Report Cover Sheet

Company Number: 5125A
Model Number: UGWM1USHN33A
Manufacturer: Unigen Corporation
Specification Tested To: RSS-210
IC O.A.T.S. Number: IC 2044
Frequency Range: 2402 – 2479 GHz
R.F. Power In Watts: 0.00133
Field Strength Distance: 3m
Occupied Bandwidth (6dB BW): 900kHz
Type Of Modulation: GFSK
Emission Designator: DSSS
Transmitter Spurious: 559.76µV/m @ 9760.05MHz
Receiver Spurious: 164.44µV/m @ 4804.01MHz

Attestation: I attest that the testing was performed or supervised by me, that the test measurements were made in accordance with the above-mentioned departmental standards and all the requirements of the standards have been met.

Signature:



Date:

November 18, 2004

Name And Title (Please Print Or Type):

David E. Lee, Compliance Test Manager, Agent For Applicant

Checklist - RSP 100, Issue 7, APP. VI

Applicant: Unigen Corporation

Equipment: UGWM1USHN33A

Specification: RSS-210, Issue 5 (2001)

- ? BUSINESS LETTER _V _
- ? TECHNICAL ASSESSMENT FEE _V _
- ? CERTIFICATION FEE(S) _V _
- ? TESTING FEE N/A
- ? APPLICATION FORM _V _
- ? POINT OF CONTACT IN CANADA _V _
- ? ADVERTISING LITERATURE PROVIDED _V _
- ? PHOTOGRAPHS _V _
- ? SCHEMATIC DIAGRAMS _V _
- ? USER/MAINTENANCE MANUAL _V _
- ? PHOTOCOPY/FAX QUALITY _V _
- ? TEST SAMPLE(S) N/A
- ? MODEL IDENTIFICATION _V _
- ? STANDARDS REQUIREMENTS _V _
- ? MEASUREMENTS _V _
- ? SCALES CLEARLY VISIBLE ON GRAPHS/FIGURES _V _
- ? OCCUPIED BANDWIDTH LIMITS SHOWN _V _
- ? DESIGNATION OF EMISSIONS _V _
- ? TEST REPORT SAME AS ANOTHER COUNTRY Yes: ___ No: _V _
- ? TELECOMMUNICATIONS NETWORK CONNECTION Yes: ___ No: _V _
- ? ENGINEER'S DECLARATION OF COMPLIANCE _V _
- ? RF SAFETY EVALUATION _V _



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Engineering Test Report

for

Model: UGWM1USHN33A

to

Industry Canada

Guide: RSS-210, Issue 5 (2001)

Date Of Report: November 18, 2004

On The Behalf Of The Applicant:

Unigen Corporation

At The Request Of:

P.O. 27172

Unigen Corporation
45388 Warm Springs Blvd.
Fremont, CA 94539

Attention Of:

Mark Morrissey, Director of Business Development
(800) 826-0808; (510) 668-2088 ext 2087
Email: mmorrissey@unigen.com


Canadian Maintenance Facility:

Component Distributor Incorporated

Supervised By:

David E. Lee,
Compliance Test Manager

Required information per ISO/IEC Guide 25-1990, paragraph 13.2:

- a) **Test Report**
- b) Laboratory: M. Flom Associates, Inc.
(FCC: 31040/SIT) 3356 N. San Marcos Place, Suite 107
(Canada: IC 2044) Chandler, AZ 85225
- c) Report Number: d0490055
- d) Client: Unigen Corporation
45388 Warm Springs Blvd.
Fremont, CA 94539
- e) Identification: UGWM1USHN33A
Description: Wireless USB
- f) EUT Condition: Not required unless specified in individual tests.
- g) Report Date: November 18, 2004
EUT Received: September 7, 2004
- h, j, k): As indicated in individual tests.
- i) Sampling method: No sampling procedure used.
- l) Uncertainty: In accordance with MFA internal quality manual.
- m) Supervised by: 
- n) Results: The results presented in this report relate only to the item tested.
- o) Reproduction: This report must not be reproduced, except in full, without written permission from this laboratory.

David E. Lee,
Compliance Test Manager

In accordance with ANSI C63.4-1992/2001, section 6.1.9, and unless otherwise indicated in the specific measurement results, the ambient temperature of the actual EUT was maintained within the range of 10° to 40°C (50° to 104 °F) unless the particular equipment requirements specify testing over a different temperature range. Also, unless otherwise indicated, the humidity levels were in the range of 10% to 90% relative humidity.

Page Number 2 of 26.

Type Of Equipment: Wireless USB

Manufacturer: Unigen Corporation

Model Number: UGWM1USHN33A

Serial Number: Prototype

Associated Equipment Development Board

Specification: Procedure 100, Issue 7

Guide: RSS-210, Issue 5 (2001)

Test Performed By: Staff at M. Flom Associates, Inc.

Approved By: David E. Lee, Compliance Test Manager

Documentation: As Per List Attached at End of Report

Notes:

1. Number Of Channels = 80
2. Frequency Range, MHz = 2402 – 2479
3. Test Frequencies, MHz = 2440, 2402, 2479
4. I.F., MHz = 0
5. Power Output, Watts, $\mu\text{V}/\text{m}$ @3m = 0.00133W, 66527.32 $\mu\text{V}/\text{m}$
 Switchable Variable N/A
6. Voltage Input, = 4.5vdc
7. Emission Designator = DSSS
8. 99% (20 dB) Bandwidth, kHz = 1500
9. Standard Input & Output Terminations = 50 Ω Resistive
10. Date Of Tests = September 2004
11. Identification Label Drawing = Attached
12. Worst Case Data Presented

Name Of Test: Transmitter Characteristics and Tests
Specification: IC: RSS-210, Section 6 & 8

Applicable Sections:**Category I Equipment**

<input type="checkbox"/>	6.1.1	Types of Momentary Signals
<input type="checkbox"/>	6.1.2	26.99-27.20 MHz (Remote Control)
<input type="checkbox"/>	6.1.3	72-73 MHz (Model Aircraft)
<input type="checkbox"/>	6.1.4	75.4-76 MHz (Remote Control)
<input type="checkbox"/>	6.2.2(a)	160-190 kHz
<input type="checkbox"/>	6.2.2(b)	510-1,705 kHz
<input type="checkbox"/>	6.2.2(c)	1.705-10 MHz
<input type="checkbox"/>	6.2.2(c1)	1.705-37 MHz Swept Frequency
<input type="checkbox"/>	6.2.2(d)	6.765-6.795 MHz
<input type="checkbox"/>	6.2.2(e)	13.553-13.567 MHz
<input type="checkbox"/>	6.2.2(g)	40.66-40.70 MHz
<input type="checkbox"/>	6.2.2(g1)	44-49 MHz (Cordless Telephones)
<input type="checkbox"/>	6.2.2(h)	72-73 MHz, 74.6-74.8 MHz and 75.2-76.0 MHz (Auditory Assistance and Wireless Microphone)
<input type="checkbox"/>	6.2.2(k)	88-108 MHz
<input type="checkbox"/>	6.2.2(l1)	174-216 MHz (Medical Telemetry)
<input type="checkbox"/>	6.2.2(l2)	216-217 MHz (Auditory Assistance, Medical Telemetry, Goods Tracking and Law Enforcement)
<input type="checkbox"/>	6.2.2(l2.1)	462 and 467 Family Radio Service (FRS) Telephones
<input type="checkbox"/>	6.2.2(l3)	608-614 MHz (Medical Telemetry)
<input type="checkbox"/>	6.2.2(m1)	902-902.1/927.9-928 MHz (Rural Radiophones)
<input type="checkbox"/>	6.2.2(m2)	902-928, 2400-2483.5 and 5725-5875 MHz
<input type="checkbox"/>	6.2.2(n)	902-928 MHz, 2435-2465 MHz, 5785-5815 MHz, 10.5-10.55 GHz and 24.075-24.175 GHz (Field Disturbance Sensors)
<input checked="" type="checkbox"/>	6.2.2(o)	902-928, 2400-2483.5 MHz and 5725-5850 MHz (Spread Spectrum)
<input type="checkbox"/>	6.2.2(q)	2900-3260 MHz, 3267-3332 MHz, 3339-3345.8 MHz and 3358-3600 MHz (Vehicle Identification)
<input type="checkbox"/>	6.2.2(q1)	5150-5350 MHz and 5725-2825 MHz (Local Area Network Devices)
<input type="checkbox"/>	6.2.2(r)	8.5-10.55 GHz Swept Frequency
<input type="checkbox"/>	6.2.2(r1)	Other Devices Totally Enclosed in Metal Containers (for non-restricted Frequencies)
<input type="checkbox"/>	6.2.2(s)	17.15 GHz and 94 GHz
<input type="checkbox"/>	6.2.2(t1)	Vehicular-Mounted Field Disturbance Sensors
<input type="checkbox"/>	6.2.2(t2)	Devices in the 59-64 GHz band
<input type="checkbox"/>	6.2.3	Other License-exempt Bands

Category II Equipment

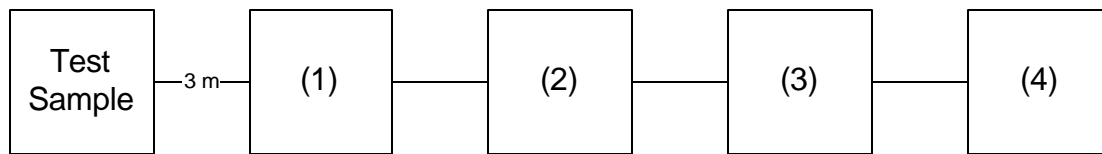
<input type="checkbox"/>	8.1	Underground and Tunnel Radios
<input type="checkbox"/>	8.2	Cable Locating Equipment (9-490 kHz)
<input type="checkbox"/>	8.3.1	AC Wire Carrier Current Devices (0-535 kHz, 535kHz-30 MHz)
<input type="checkbox"/>	8.3.2	Power Line Carrier Systems (9-490 kHz)
<input type="checkbox"/>	8.4	Transmitter or input power 6 nanowatts or less
<input type="checkbox"/>	8.5	0-9 kHz, and infra-red frequencies
<input type="checkbox"/>	8.6.1	26.96-27.28 MHz
<input type="checkbox"/>	8.6.2	49.82-49.90 MHz
<input type="checkbox"/>	8.6.3	24.0-24.25 GHz

Page Number 4 of 26.
Name Of Test: Transmitter Fundamental Emissions
Specification: IC: RSS-210, Section 10, 11, 12, & 13
Test Equipment: As per following page

Measurement Details

Site Reference Number = IC2044
Frequency Of Carrier, MHz = As per Page 2.
Measurement Results = Attached

Transmitter Radiated Measurements



Transmitter Radiated Measurements

Asset	Description (as applicable)	s/n	Cycle	Last Cal	
<small>Per ANSI C63.4 - 1992, 10.1.4</small>					
(1) Transducer					
	i00088	EMCO 3109-B 25MHz-300MHz	2336	24 mo.	Sep-03
	i00089	Apral 2001 200MHz-1GHz	001500	24 mo.	Sep-03
X	i00103	EMCO 3115 1GHz-18GHz	9208-3925	24 mo.	Sep-03
(2) Coaxial Attenuator					
	i00122	NARDA 766-10	7802	NCR	
	i00123	NARDA 766-10	7802A	NCR	
(3) Preamp					
X	i00028	HP 8449A (+30 dB)	2749A00121	12 mo.	Mar-04
(4) Spectrum Analyzer					
	i00029	HP 8563E	3213A00104	12 mo.	Mar-04
X	i00033	HP 85462A	3625A00357	12 mo.	Sep-04
	i00048	HP 8566B	2511AD1467	12 mo.	Aug-04

Name Of Test: Field Strength of Fundamental Radiation

g0490033: 2004-Sep-07 Tue 10:56:00

State: 2:High Power

Frequency Tuned, MHz	Frequency Emission, MHz	Meter, dBuV	CF, dB	uV/m @ 3m	EIRP, dBm	EIRP, W
2440.000000	2439.613000	39.41	48.32	24350.06	-7.5	0.00018
2440.000000	2439.638000	42.06	48.32	33036.95	-4.8	0.00033
2440.000000	2439.700000	43.30	48.33	38150.48	-3.6	0.00044
2440.000000	2439.725000	44.81	48.33	45394.16	-2.1	0.00062
2440.000000	2440.238000	39.78	48.33	25439.00	-7.1	0.00020
2440.000000	2440.275000	48.13	48.33	66527.32	1.2	0.00133
2440.000000	2440.288000	45.18	48.33	47369.63	-1.7	0.00068
2440.000000	2440.400000	39.25	48.33	23933.16	-7.6	0.00017

Name Of Test: Field Strength of Fundamental Radiation

g0490034: 2004-Sep-07 Tue 11:03:00

State: 2:High Power

Frequency Tuned, MHz	Frequency Emission, MHz	Meter, dBuV	CF, dB	uV/m @ 3m	EIRP, dBm	EIRP, W
2402.000000	2401.663000	40.66	48.01	27133.14	-6.6	0.00022
2402.000000	2401.663000	45.60	48.01	47918.15	-1.6	0.00069
2402.000000	2401.688000	44.24	48.01	40973.21	-3.0	0.00050
2402.000000	2401.688000	38.19	48.01	20417.38	-9.0	0.00013
2402.000000	2401.725000	45.24	48.01	45972.70	-2.0	0.00063
2402.000000	2402.275000	47.64	48.02	60673.63	0.4	0.00110
2402.000000	2402.313000	39.47	48.02	23686.45	-7.7	0.00017
2402.000000	2402.350000	40.75	48.02	27447.32	-6.5	0.00022

Name Of Test: Field Strength of Fundamental Radiation

g0490035: 2004-Sep-07 Tue 11:15:00

State: 2:High Power

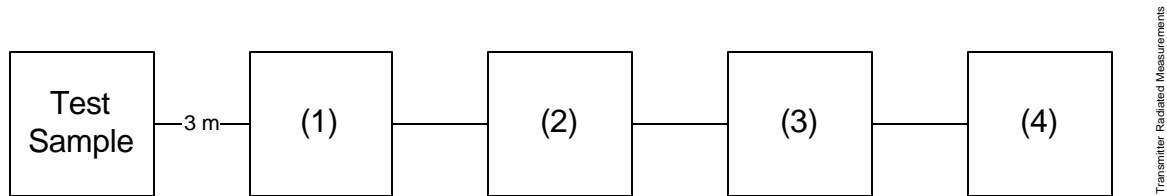
Frequency Tuned, MHz	Frequency Emission, MHz	Meter, dBuV	CF, dB	uV/m @ 3m	EIRP, dBm	EIRP, W
2479.000000	2478.613000	39.57	48.63	25703.96	-7.0	0.00020
2479.000000	2478.625000	45.42	48.63	50408.06	-1.2	0.00076
2479.000000	2478.688000	44.45	48.63	45081.67	-2.1	0.00062
2479.000000	2479.213000	42.88	48.64	37670.38	-3.7	0.00043
2479.000000	2479.225000	38.62	48.64	23067.47	-8.0	0.00016
2479.000000	2479.300000	39.75	48.64	26272.42	-6.8	0.00021
2479.000000	2479.313000	41.93	48.64	33767.58	-4.7	0.00034
2479.000000	2479.313000	46.29	48.64	55782.76	-0.3	0.00093

Page Number 7 of 26.
Name Of Test: Transmitter Spurious Emissions
Specification: IC: RSS-210, Section 10, 11, 12, & 13
Test Equipment: As per following page

Measurement Details

Site Reference Number = IC2044
Frequency Of Carrier, MHz = As per Page 2.
Measurement Results = Attached

Transmitter Radiated Measurements



Asset	Description (as applicable)	s/n	Cycle	Last Cal	
<small>Per ANSI C63.4 - 1992, 10.1.4</small>					
(1) Transducer					
	i00088	EMCO 3109-B 25MHz-300MHz	2336	24 mo.	Sep-03
	i00089	Aprel 2001 200MHz-1GHz	001500	24 mo.	Sep-03
X	i00103	EMCO 3115 1GHz-18GHz	9208-3925	24 mo.	Sep-03
(2) Coaxial Attenuator					
	i00122	NARDA 766-10	7802	NCR	
	i00123	NARDA 766-10	7802A	NCR	
(3) Preamp					
X	i00028	HP 8449A (+30 dB)	2749A00121	12 mo.	Mar-04
(4) Spectrum Analyzer					
	i00029	HP 8563E	3213A00104	12 mo.	Mar-04
X	i00033	HP 85462A	3625A00357	12 mo.	Sep-04
	i00048	HP 8566B	2511AD1467	12 mo.	Aug-04

Name Of Test: Field Strength of Spurious Radiation
g0490036: 2004-Sep-08 Wed 08:32:00
State: 2:High Power

Frequency Tuned, MHz	Frequency Emission, MHz	Meter, dBuV	CF, dB	uV/m @ 3m	Peak / Ave.	Margin, dB
2440.000000	4880.000000	31.00	15.14	202.77	P	-36.1
2440.000000	7320.000000	31.67	17.81	297.85	P	-32.7
2440.000000	9760.050000	32.00	22.96	559.76	P	-27.2
2440.000000	12200.050000	28.83	17.98	219.03	P	-35.4
2440.000000	14640.050000	29.50	15.93	186.85	P	-36.8
2440.000000	17080.050000	31.17	10.36	119.26	P	-40.7

Page Number 10 of 26.

Name Of Test: Emission Masks (Occupied Bandwidth)

Specification: IC: RSS-210 5.9

Test Equipment: As per following page

Measurement Details

5.9.1 Emission Bandwidth

Where indicated, the 6 dB (or 20 dB) bandwidth is measured at the points when the spectral density of the signal is 6 dB (or 20 dB) down from the inband spectral density of the modulated signal, with the transmitter modulated by a representative signal. Spectral density (power per unit bandwidth) is to be measured with a meter of 300 Hz resolution bandwidth or alternatively equal to approximately 1.0% of the emission bandwidth. An alternative to the 20 dB bandwidth is the 99% emission bandwidth. This bandwidth is determined such that below the lower and above the upper frequency limits, the mean powers emitted are each equal to 0.5 % of the total mean power of the emission.

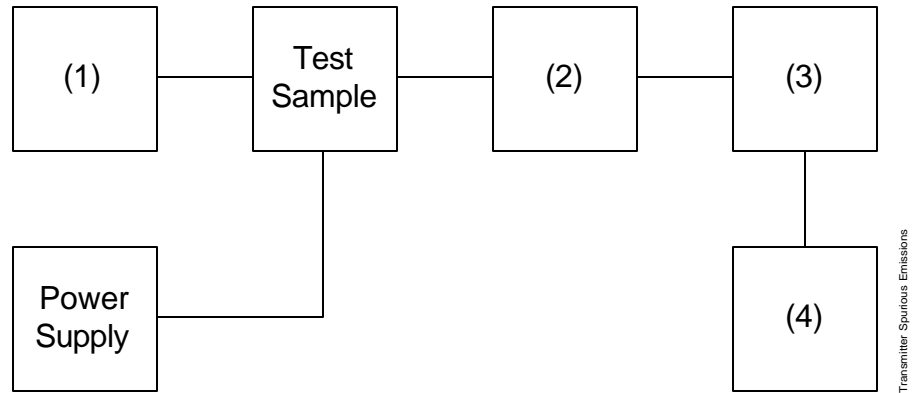
The bandwidth of the transmitted signal and the type of meter (CISPR quasi-peak or averaging) used in the measurement shall always be stated when submitting information or test report to Industry Canada for equipment certification. However, where a bandwidth value is not specified in this Standard, the transmitted signal bandwidth to be reported is to be its 20 dB or 99% emission bandwidth, as calculated or measured. This is also known as the emission bandwidth, or the occupied bandwidth (for the purpose of Annex A), or the necessary bandwidth (for the purpose of designation of emissions in section 5.9.2 and in Annex A) or the fundamental emission bandwidth.

5.9.2 Designation Of Emissions = DSSS

Transmitter Spurious Emission

Test A. Occupied Bandwidth (In-Band Spurious)

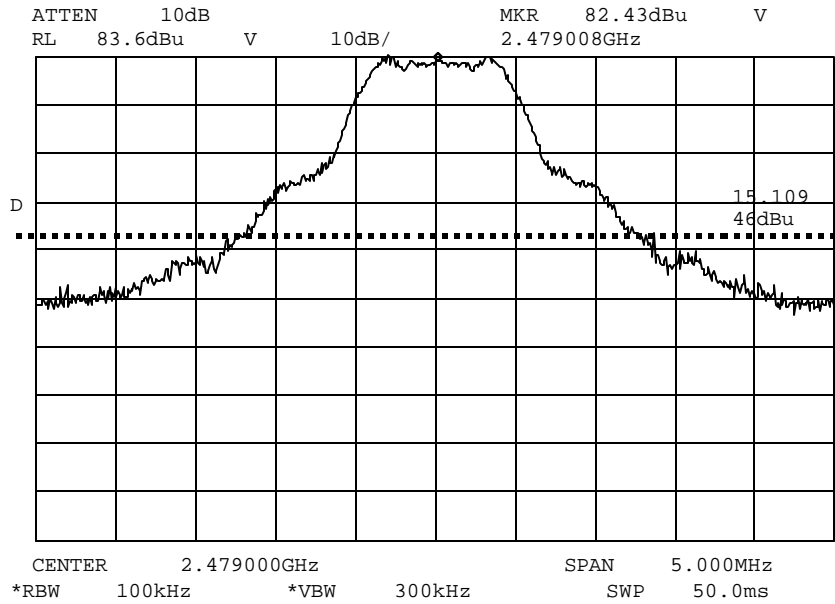
Test B. Out-Of-Band Spurious



Asset (as applicable)	Description	s/n	Cycle	Last Cal
(1)	Audio Oscillator/Generator i00017 HP 8903A	2216A01753		
(2)	Coaxial Attenuator i00223 Pasternak 30dB	223		
(3)	Filters; Notch, HP, LP, BP (if applicable)			
(4)	Spectrum Analyzer i00029 HP 8563E	3213A00104	12 mo.	Mar-04
X	i00033 HP 85462A	3625A00357	12 mo.	Sep-04

Name of Test: Emissions At Band Edge (Conducted)


g0490041: 2004-Sep-08 Wed 09:42:00
State: 2:High Power (in line attenuation 23dB)



Power:
Modulation:

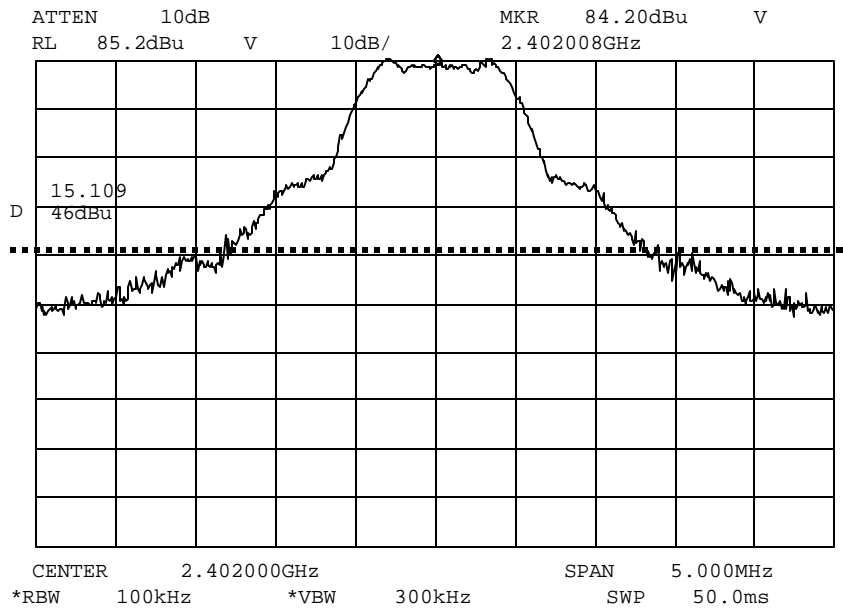
HIGH
DSSS – High Channel
Below 46dBuV above 2.480500GHz
(Band Edge 2.483500GHz)

Supervised By:


David E. Lee,
Compliance Test Manager

Name of Test: Emission at Band Edges (Conducted)


g0490040: 2004-Sep-08 Wed 09:40:00
State: 2:High Power (in line attenuation 23dB)



Power:
Modulation:

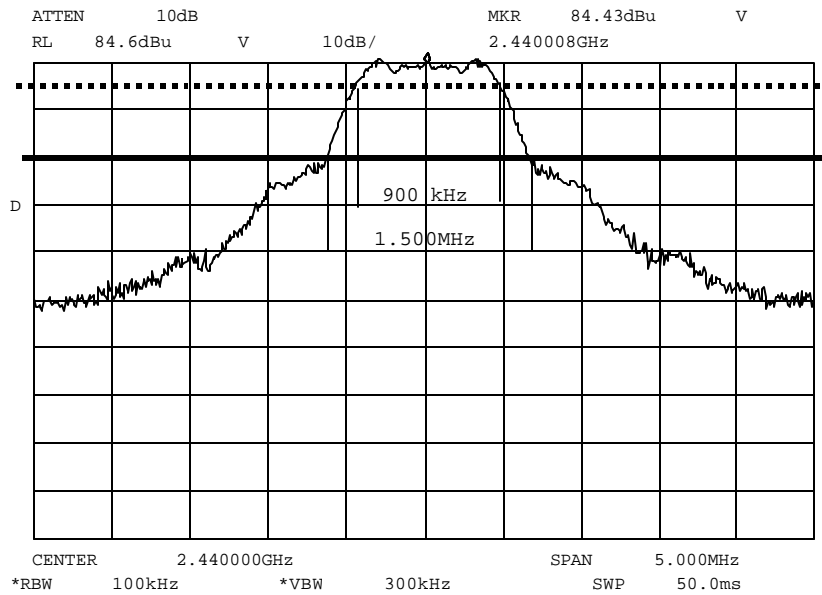
HIGH
DSSS – Low Channel
Below 46dBuV below 2.400500GHz
(Band Edge 2.400000GHz)

Supervised By:


David E. Lee,
Compliance Test Manager


Name of Test: Emission Masks (Occupied Bandwidth)
Indicating 6/20 dB Bandwidth

g0490041: 2004-Sep-08 Wed 09:42:00
State: 2: High Power (in line attenuation 23dB)



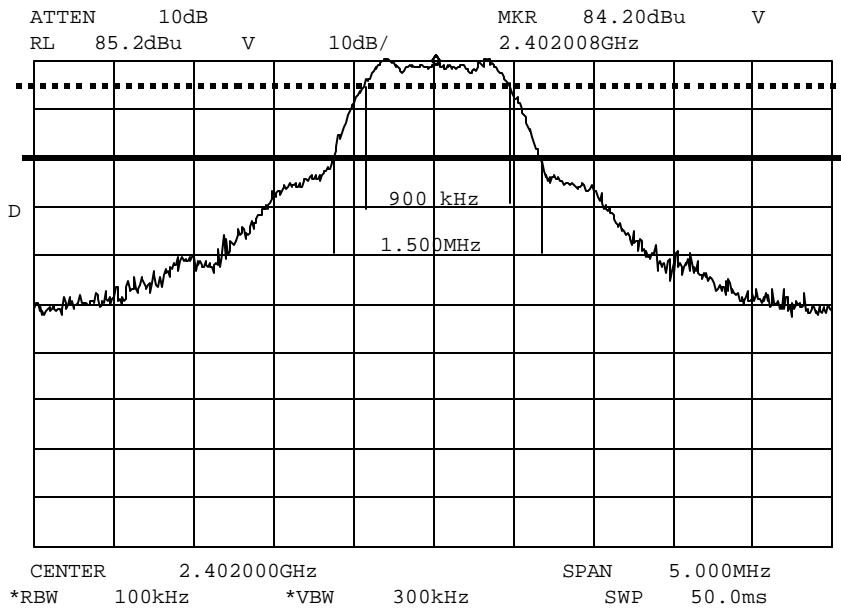
Power: HIGH
Modulation: DSSS – Mid Channel
6dB Bandwidth = 900kHz
20db Bandwidth = 1.5MHz

Supervised By:


David E. Lee,
Compliance Test Manager

Name of Test: Emission Masks (Occupied Bandwidth)
Indicating 6/20 dB Bandwidth


g0490040: 2004-Sep-08 Wed 09:40:00
State: 2:High Power (in line attenuation 23dB)



Power:
Modulation:

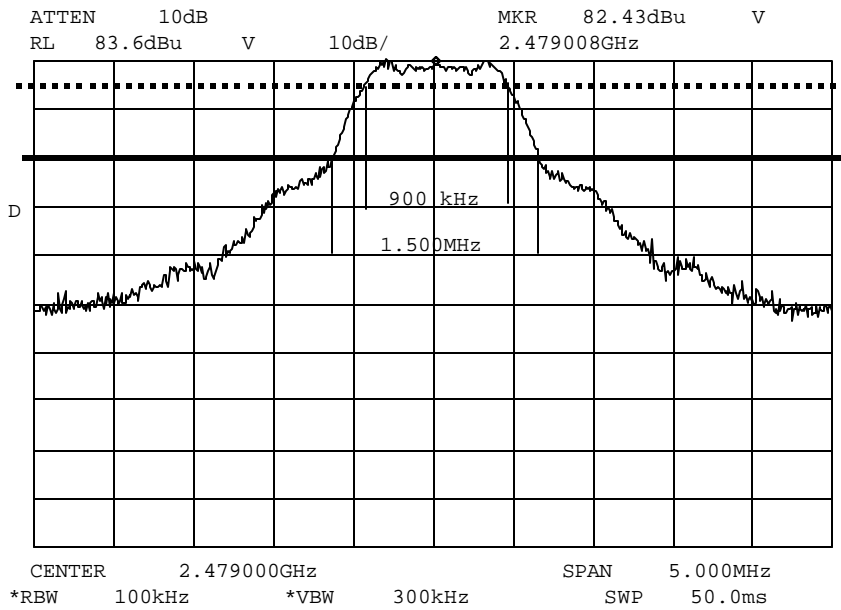
HIGH
DSSS – Low Channel
6dB Bandwidth = 900kHz
20db Bandwidth = 1.5MHz

Supervised By:


David E. Lee,
Compliance Test Manager


Name of Test: Emission Masks (Occupied Bandwidth)
Indicating 6/20 dB Bandwidth

g0490041: 2004-Sep-08 Wed 09:42:00
State: 2:High Power (in line attenuation 23dB)



Power: HIGH
Modulation: DSSS – High Channel
6dB Bandwidth = 900kHz
20db Bandwidth = 1.5MHz

Supervised By:


David E. Lee,
Compliance Test Manager

Page Number 17 of 26.

Name Of Test: Restricted Bands and Unwanted Emission Frequencies

Specification: IC: RSS-210, Section 6.3

Summary Of Requirements

- (a) Fundamental components of modulation of this equipment do not fail in the restricted bands of Table 2 (See tables at end of report).
- (b) Unwanted emissions in this report include out-of-band products or modulation, carrier harmonics and spurious emissions.
- (c) Except as provided in 6.2.2(o) (if applicable), unwanted emissions falling into restricted bands meet Tables 3 and 7 limits. The measurement instrumentation employed a CISPR quasi-peak detector for frequencies 490 kHz to 1000 MHz. Above 1000 MHz, compliance is based on the average value or measured emissions. Below 490 kHz, either a CISPR quasi-peak or an average meter was used.

For Category II equipment, either a CISPR quasi-peak or an averaging meter was used, as per section 8.

- (d) Unwanted emissions not falling within restricted frequencies may have used the limits specified in section 6.1 to 6.2.2(f).
- (e) The search for unwanted emissions (from the transmitter) was from the lowest frequency internally generated or used in the device (local oscillator, intermediate or carrier frequency), used, without exceeding 23 GHz. Section 5.8 was referenced for the resolution bandwidth to be used.
- (f) If the device contained digital circuitry, section 5.16 was complied with.

Page Number 18 of 26.

Name Of Test: Frequency Stability

Specification: IC: RSS-210, Section 6.4

Test Conditions

Supply Voltage, 4.5vdc

Temperature, 23 °C

Not Applicable

Frequency Stability is not required by the manufacturer.

And

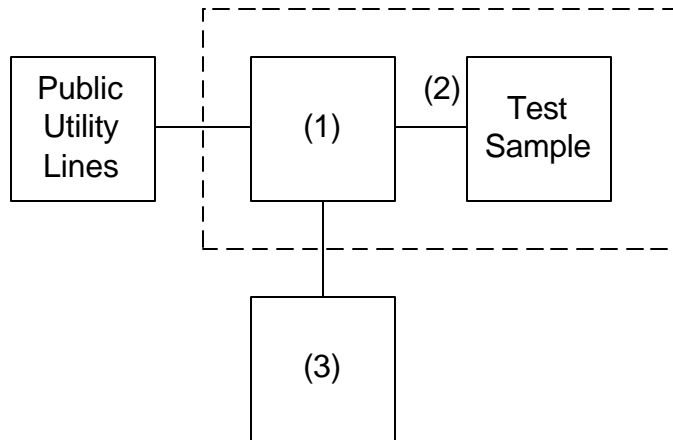
The equipment does not operate in the restricted bands.

Page Number 19 of 26.
Name Of Test: A/C Wireline Conducted Emissions
Specification: RSS-210, Sections 6.6, 7.4, 9.0
Minimum Standard: = 250 μ V across 50 Ω (5 μ A)
Test Equipment: As per attached page

Measurement Procedure

Measurement Method = To Pare. 9.0
Spectrum Searched, MHz = 0.15 to 30
Measurement Results = Attached

AC Powerline Conducted Measurements



Asset	Description	s/n	Cycle	Last Cal
<small>Per ANSI C63.4 - 1992/2000 Draft, 10.1.4</small>				
(1) Line Impedance Stabilization Network				
i00244	Fischer 50-20-2-01	2047	NCR	
(2) Screen Room				
X i00170	Lindgren LG170	4999	NCR	
(3) Spectrum Analyzer				
X i00033	HP 85462A	3625A00357	12 mo.	Sep-04
i00048	HP 8566B	2511AD1467	12 mo.	Jul-04

Test Setup:

A/C Powerline Conducted Emissions



Name of Test: A/C Powerline Conducted Emissions

g0490042: 2004-Sep-13 Mon 15:59:00
State: 0:Neutral

Frequency Tuned, MHz	Frequency Emission, MHz	Level, dBuV	C.F., dB	μ V/m
2440.000000	1.041833	38.83	0.58	93.43
2440.000000	1.725500	38.83	0.59	93.54
2440.000000	2.360333	39.67	0.59	103.04
2440.000000	2.946333	33.83	0.61	52.72
2440.000000	25.751500	34.83	1.6	66.3
2440.000000	28.486167	37.33	1.66	89.02

g0490043: 2004-Sep-13 Mon 16:03:00
State: 0:Line

Frequency Tuned, MHz	Frequency Emission, MHz	Level, dBuV	C.F., dB	μ V/m
2440.000000	0.944167	46	0.53	212.08
2440.000000	1.286000	43.17	0.51	152.76
2440.000000	2.653333	38.67	0.56	91.52
2440.000000	3.678833	34.83	0.63	59.29
2440.000000	25.946833	33.17	1.82	56.17
2440.000000	28.974500	35.17	1.95	71.78

Supervised By:



David E. Lee,
Compliance Test Manager

Page Number 23 of 26.
Name Of Test: Receiver Tests and Certification
Specification: IC: RSS-210, Section 7.0 to 7.5
Test Equipment: As for "Occupied Bandwidth" Measurements

Measurement Results

- 7.1 **Receiver Categories**
 Category I, Capable of tuning 30-960 MHz
 Category II, Only tunes below 30 or above 960 MHz
- 7.2, 7.3 **Spurious Emissions**
 See antenna conducted results attached
 See radiated results attached
- 7.4 **AC Wireline Conducted Emissions**
 See results elsewhere in this report
 Not Applicable
- 7.5 **Scanning Receiver**
 The equipment is a scanning receiver
 The equipment is not a scanning receiver

Page Number 24 of 26.

Name Of Test: Receiver Spurious Emissions (Radiated)

Specification: IC: RSS-210, Section 7.0, 11.0

Minimum Standard: See table below

Test Equipment: As per previous page

Minimum Standard

<u>Frequency, MHz</u>	<u>Field strength, $\mu\text{V/m}$ @ 3m</u>
30 to 88	100
88 to 216	150
216 to 960	200
Above 960	500

* Linear interpolation

Measurement Data

Site Reference = IC2044

Measurement Method = To Para. 11.0

Measurement Distance, m = 3

Standard Test Voltage = As per Page 2

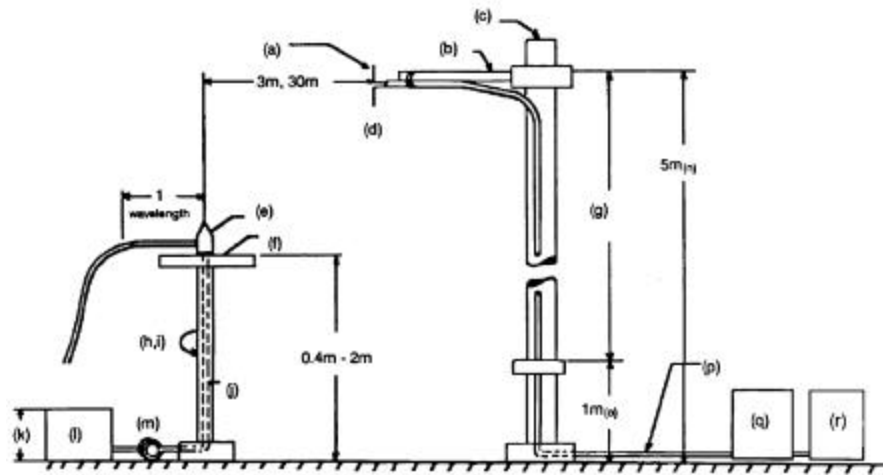
Spectrum Searched, GHz = 0 to 1 or $2x F_R$

All Other Emissions = 20 dB or More Below Limit

Measurement Results = Attached

Note: Worst Case Of Scan And Non-Scan Modes Reported.

Radiated Test Setup



NOTES:

- (a) Search Antenna - Rotatable on boom
- (b) Non-metallic boom
- (c) Non-metallic mast
- (d) Adjustable horizontally
- (e) Equipment Under Test
- (f) Turntable
- (g) Boom adjustable in height.
- (h) External control cables routed horizontally at least one wavelength.
- (i) Rotatable
- (j) Cables routed through hollow turntable center
- (k) 30 cm or less
- (l) External power source
- (m) 10 cm diameter coil of excess cable
- (n) 25 cm (V), 1 m-7 m (V, H)
- (o) 25 cm from bottom end of 'V', 1m normally
- (p) Calibrated Cable at least 10m in length
- (q) Amplifier (optional)
- (r) Spectrum Analyzer

Asset (as applicable)	Description	s/n	Cycle	Last Cal
Transducer				
	i00088	EMCO 3109-B 25MHz- 300MHz	2336	24 mo. Sep-03
	i00089	April 2001 200MHz-1GHz	001500	24 mo. Sep-03
X	i00103	EMCO 3115 1GHz-18GHz	9208-3925	24 mo. Sep-03
Amplifier				
X	i00028	HP 8449A	2749A00121	12 mo. Mar-04
Spectrum Analyzer				
	i00029	HP 8563E	3213A00104	12 mo. Mar-04
X	i00033	HP 85462A	3625A00357	12 mo. Sep-04
	i00048	HP 8566B	2511AD1467	6 mo. Aug-04

Name Of Test: Receiver Spurious Emissions (Radiated)
g0490037: 2004-Sep-08 Wed 09:01:00
State: 0:General

All other emissions in the required measurement range were more that 20 dB below the required limits.

Frequency Tuned, MHz	Frequency Emission, MHz	Level, dBuV	@ m	C.F., dB	μ V/m	@ m
2402.000000	2402.008333	32.5	3	8.08	106.91	3
2402.000000	4804.011666	29.17	3	15.15	164.44	3
2402.000000	7206.019999	19.50	3	17.29	69.10	3
2402.000000	9608.025832	23.17	3	17.03	102.33	3
2402.000000	12010.034165	16.83	3	13.80	34 00	3

Annex A
Summary of test results

Equipment model:

Test report page or
reference

Transmitter tested to RSS-210 section		Page 2
Field strength	<u>66527.32</u> $\mu\text{V/m}$ at <u>3</u> meters	
Conditions:		
	<u>X</u> Radiated (sections 11 & 13)	
	<u> </u> At antenna (section 10)	
	<u> </u> DC input power (sections 12)	
Transmitter Frequency	<u>2402 - 2479</u> MHz	Page 2
Bandwidth	<u>900kHz</u> (6dB)	Page 2
Frequency stability	N/A%	N/A
Transmitter spurious (worst case)		
Field strength	<u>559.76</u> $\mu\text{V/m}$ at <u>3</u> meters	Page 9
Frequency	<u>9760.050000</u> MHz	Page 9
Transmitter/receiver AC Wireline conducted emissions (worst case)		
Transmitter/Receiver: As indicated		Page 22
Receiver spurious (worst case)		
Field strength	<u>164.44</u> $\mu\text{V/m}$ at <u>3</u> meters	Page 26
Frequency	<u>4804.011666</u> MHz	

Attestation:

The radio device identified in this application has been subject to all the applicable test conditions specified in RSS-210 and all of the requirements of the Standard have been met.



November 18, 2004

David E. Lee,
Compliance Test Manager

**Testimonial
And
Statement Of Certification**

This Is To Certify That:

1. **That** the application was prepared either by, or under the direct supervision of, the undersigned.
2. **That** the technical data supplied with the application was taken under my direction and supervision.
3. **That** the data was obtained on representative units, randomly selected.
4. **That**, to the best of my knowledge and belief, the facts set forth in the application and accompanying technical data are true and correct.

Certifying Engineer:



David E. Lee,
Compliance Test Manager

List Of Attached Documentation

(Industry Canada - Revised 3/24/97)

Applicant: Unigen Corporation

Equipment: WirelessUSB
Model UGWM1USHN33A

By Applicant:

1. Letter Of Authorization
2. Identification Drawings
 - Label
 - Location Of Label
 - Compliance Statement
 - Location Of Compliance Statement
3. Photographs
4. Advertising Literature/Specification Sheet
5. Attestation (Applicable)
6. Documentation:
 - (A) Block Diagram
 - (B) List Of Active Devices
 - (C) Schematic Diagram
 - (D) Manual
 - (E) Tune-Up/Alignment Procedure
 - (F) Circuit Description
 - (G) Parts List

By M.F.A. Inc.

Testimonial & Statement Of Certification