A Test Lab Techno Corp.

No.140-1, Chang-an St., Bade City, Tao-Yuan County 334, Taiwan (R.O.C.)
Tel：+886-3-2710188 / Fax：+886-3-2710190

Part 15 C Measurement Report

Report No.	：	**1006FR16**
Applicant	：	**Atheros Communications, Inc.**
Product Type	：	**802.11N 1x1 PCIe Minicard transceiver**
Trade Name	：	**ATHEROS**
Model No.	：	**AR5B95**
FCC ID	：	**PPD-AR5B95**
IC ID	：	**4104A-AR5B95**
Serial No.	：	**ZE90SK01C19391A23B2500**
Dates of Test	：	**Nov. 25 ~ Dec. 02, 2009**
Test Specification	：	**FCC CFR Title 47 Part 15 Subpart C (15.247) (2008-10)**
		Canada RSS-210 Issue 7(June 2007)
		Canada RSS-Gen Issue 2(June 2007)
		ANSI C63.4-2003
Location of Test Lab.	：	**Chang-an Lab.**

1. The test operations have to be performed with cautious behavior, the test results are as attached.
2. The test results are under chamber environment of A Test Lab Techno Corp. A Test Lab Techno Corp. does not assume responsibility for any conclusions and generalizations drawn from the test results with regard to other specimens or samples.
3. The measurement report has to be written approval of A Test Lab Techno Corp. It may only be reproduced or published in full. This report shall not be reproduced except in full, without the written approval of A Test Lab Techno Corp.
4. This document may be altered or revised by A Test Lab Techno. Corp. personnel only, and shall be noted in the revision section of the document.

Miller Lee **20100615**
Approve Signer

Gary Wu **20100615**
Testing Engineer

CERTIFICATION

We hereby verify that:

The test data, data evaluation, test procedures and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.4:2003. All test were conducted by *A Test Lab Techno Corp. No.140-1, Chang-an St., Bade City, Tao-Yuan County 334, Taiwan (R.O.C.)* Also, we attest to the accuracy of each.

We further submit that the energy emitted by the sample EUT tested as described in the report is in compliance of FCC Rules Part 15 Subpart C (15.247).

Product Type	:	**802.11N 1x1 PCIe Minicard transceiver**
Applicant	:	**Atheros Communications, Inc.**
Applicant Address	:	**5480 Great America Parkway, Santa Clara, CA 95054.**
Manufacturer	:	**Atheros Communications, Inc.**
Manufacturer Address	:	**5480 Great America Parkway, Santa Clara, CA 95054.**
Trade Name	:	**ATHEROS**
Model No.	:	**AR5B95**
FCC ID	:	**PPD-AR5B95**
IC ID	:	**4104A-AR5B95**
Serial No.	:	**ZE90SK01C19391A23B2500**
EUT Rated Voltage	:	**100-240Vac, 1A, 50/60Hz**
Test Voltage	:	**120Vac, 60Hz**
Applicable Standard	:	**FCC CFR Title 47 Part 15 Subpart C (15.247) (2008-10)** **Canada RSS-210 Issue 7 (June 2007)** **Canada RSS-Gen Issue 2 (June 2007)** **ASNI C63.4-2003**
Test Result	:	**Complied**

Approved by : Miller Lee **Miller Lee 2010/06/15**

Prepared by : Gary Wu **Gary Wu 2010/06/15**

A Test Lab Techno Corp.

No.140-1, Chang-an St., Bade City, Tao-Yuan County 334, Taiwan (R.O.C.)
Tel：03-2710188 / Fax：03-2710190

Contents

1. GENERAL

1.1 Description of Equipment under Test (EUT)

Applicant	:	Atheros Communications, Inc.
Applicant Address	:	5480 Great America Parkway, Santa Clara, CA 95054
Manufacturer	:	Atheros Communications, Inc.
Manufacturer Address	:	5480 Great America Parkway, Santa Clara, CA 95054
Product Type	:	802.11N 1x1 PCIe Minicard transceiver
Trade Name	:	ATHEROS
Model No.	:	AR5B95
FCC ID	:	PPD-AR5B95
IC ID	:	4104A-AR5B95
Serial No.	:	ZE90SK01C19391A23B2500
Frequency Range	:	IEEE 802.11b / IEEE 802.11g: 2412MHz~2462MHz draft 802.11n Standard-20MHz: 2412MHz~2462MHz draft 802.11n Wide-40MHz: 2422MHz~2452MHz
Type of Modulation	:	IEEE 802.11b:DSSS(CCK, DQPSK, DBPSK) IEEE 802.11g:DSSS(CCK, DQPSK, DBPSK)+ OFDM(QPSK, BPSK, 16-QAM, 64-QAM) draft 802.11n Standard-20MHz channel mode: OFDM(6.5,7.2, 13,14.4, 14.44, 19.5,217,26,28.89,28.9,39.43.3,43.33,52,57.78, 57.8, 58.5, 65.0, 72.2, 78, 86.67,104,115.56,117,130 and 144.44 Mbps) draft 802.11n Wide-40MHz channel mode: OFDM(13.5,15,27,30,40.5,45, 54, 60,81,90,108,120,121.5,135,150,162,180,216,240,243, 270 and 300 Mbps)
Hardware Version	:	D2A
Software Version	:	V0.2103
Component		
Power Adapter	:	HIPRO , HP-A0301R3 Input:100-240Vac, 50/60Hz, 1A Output: 19Vdc, 1.58A, 30W Cable in: Non-Shielded, 1.46 m Cable out: Non-Shielded, 1.78 m

1.2 Configuration of System under Test

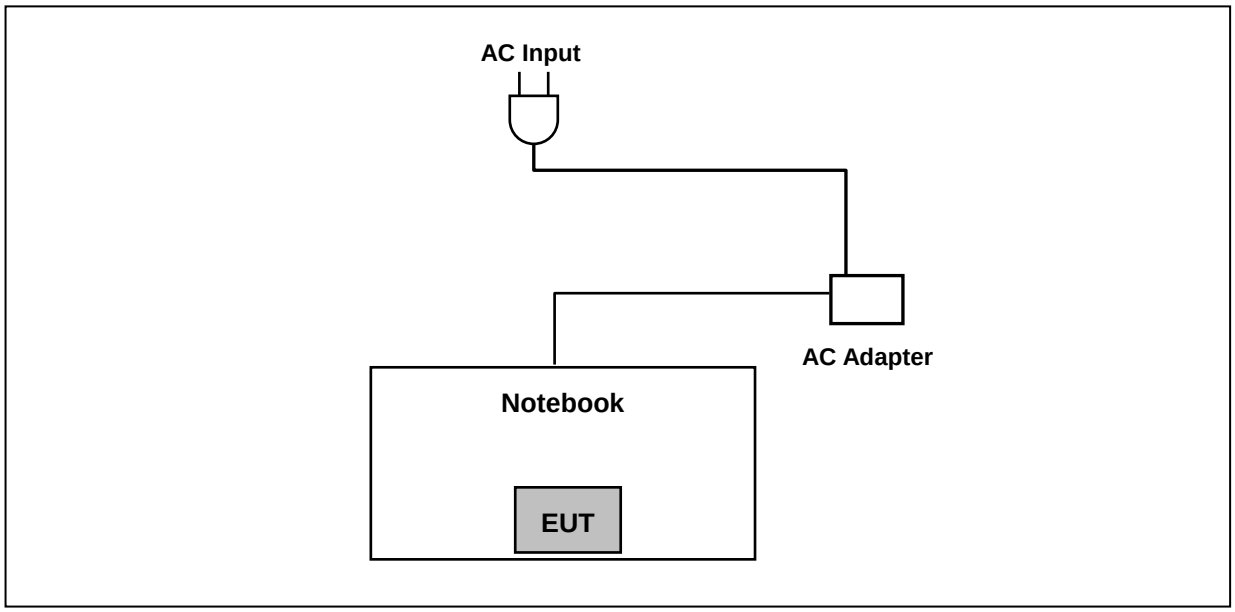


Figure 1. Configuration of System Under Test

During testing the EUT installed inside a notebook and Notebook's Power port was connected to AC Adapter.

1.3 Test Facility

Ambient conditions in the laboratory:

Items	Test Item	Required (IEC 68-1)	Actual
Temperature (°C)	ANSI C63.4 CE	15-35	25
Humidity (%RH)		30-60	50
Barometric pressure (mbar)		860-1060	950-1000
Temperature (°C)	ANSI C63.4 RE	15-35	25
Humidity (%RH)		30-60	50
Barometric pressure (mbar)		860-1060	950-1000

Registration Number：854525

Designation Number：TW1330

Test Site Name: A Test Lab Techno Corp.

Test Site Location: No. 140 -1, Changan Street, Bade City, Taoyuan County, Taiwan R.O.C.

TEL: 886-3-271-0188 FAX: 886-3-271-0190

The chamber meets the characteristics of ANSI C63.4-2003. This site is on file with the FCC.

2. Maximum Conducted Output Power Requirements

2.1 Test Procedure

The tests below are run with the EUT's transmitter set at high power in TX mode. The EUT is needed to force selection of output power level and channel number. While testing, EUT was set to transmit continuously. Remove the Subjective device's antenna and connect the RF output port to spectrum analyzer. The maximum peak output power shall not exceed 1 watt.

For antennas with gains of 6 dBi or less, maximum allowed transmitter output is 1 watt (+30 dBm). For antennas with gains greater than 6 dBi, transmitter output level must be decreased by an amount equal to (GAIN - 6)/3 dBm.

The antenna port of the EUT was connected to the input of a power sensor. Power was read directly and cable loss correction was added to the reading to obtain power at the EUT antenna terminals.

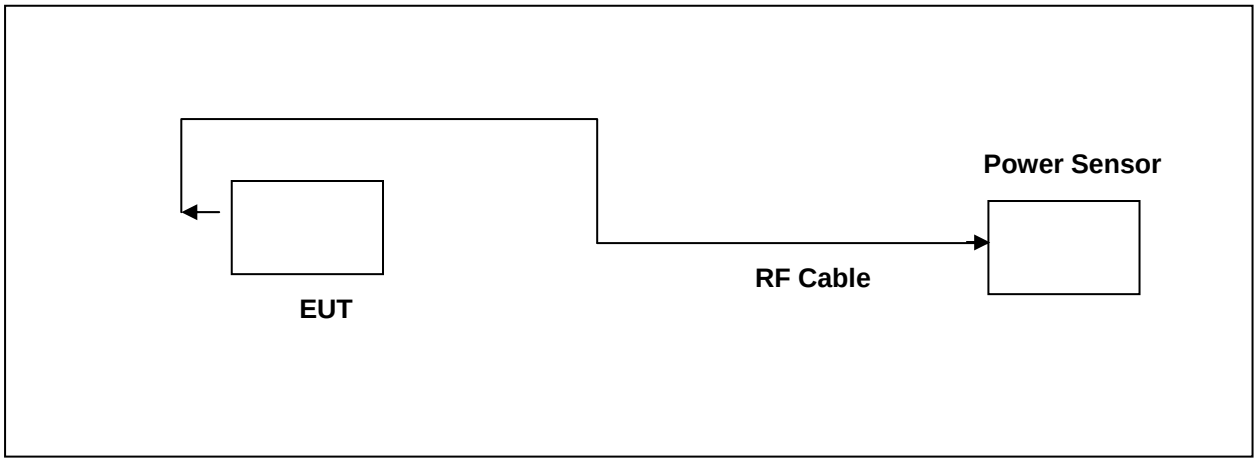
2.2 Limits

For systems using digital modulation in the 2400 - 2483.5 MHz bands: 1 Watt.

2.3 Test Equipment List

Describe	Manufacturer	Model	Serial Number	Calibration	
				Cal. Date	Due Date
WIDE BAND SENSOR	R&S	NRP-Z81	100017	May 17, 2009	May 17, 2010

2.4 Test Instruments Configuration



2.5 Test Result

IEEE 802.11b_2.4GHz Rate 1M

Frequency (MHz)	Average		Peak	
	dBm	W	dBm	W
2412	17.25	0.053	20.32	0.108
2437	17.90	0.062	20.89	0.123
2462	18.23	0.067	21.29	0.135

IEEE 802.11g_2.4GHz Rate 6M

Frequency (MHz)	Average		Peak	
	dBm	W	dBm	W
2412	13.86	0.024	22.08	0.161
2437	16.94	0.049	25.01	0.317
2462	14.93	0.031	23.07	0.203

draft 802.11n Standard-20MHz_2.4GHz Rate 6.5M

Frequency (MHz)	Average		Peak	
	dBm	W	dBm	W
2412	12.71	0.019	20.96	0.125
2437	17.05	0.051	25.23	0.333
2462	13.75	0.024	21.89	0.155

draft 802.11n Wide-40MHz_2.4GHz Rate 13.5M

Frequency (MHz)	Average		Peak	
	dBm	W	dBm	W
2422	9.87	0.010	17.72	0.059
2437	13.57	0.023	21.85	0.153
2452	9.41	0.009	17.77	0.060

Note: Average powers measured in above table are derived with a power meter and are ONLY for comparing the average powers measured in original application (Original ID: PPD-AR5B95) with a power meter.

3. Radiated Emissions Requirements

3.1 Test Procedure

The EUT and its simulators are placed on a turn table which is 0.8 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level.

The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level.

Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.4:2003 on radiated measurement.

The EUT was positioned such that the distance from antenna to the EUT was 3 meters for the frequency under 1GHz and 3 meters for the frequency above 1GHz.

The bandwidth below 1GHz setting on the field strength meter (R&S Test Receiver ESCI) is 120 kHz and above 1GHz is 1MHz.

3.2 Radiated Emissions Limits

Frequency range (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009 to 0.490	2400/F(kHz)	300
0.490 to 1.705	24000/F(kHz)	30
1.705 to 30.0	30	30
30 to 88	100**	3
88 to 216	150**	3
216 to 960	200**	3
Above 960	500**	3

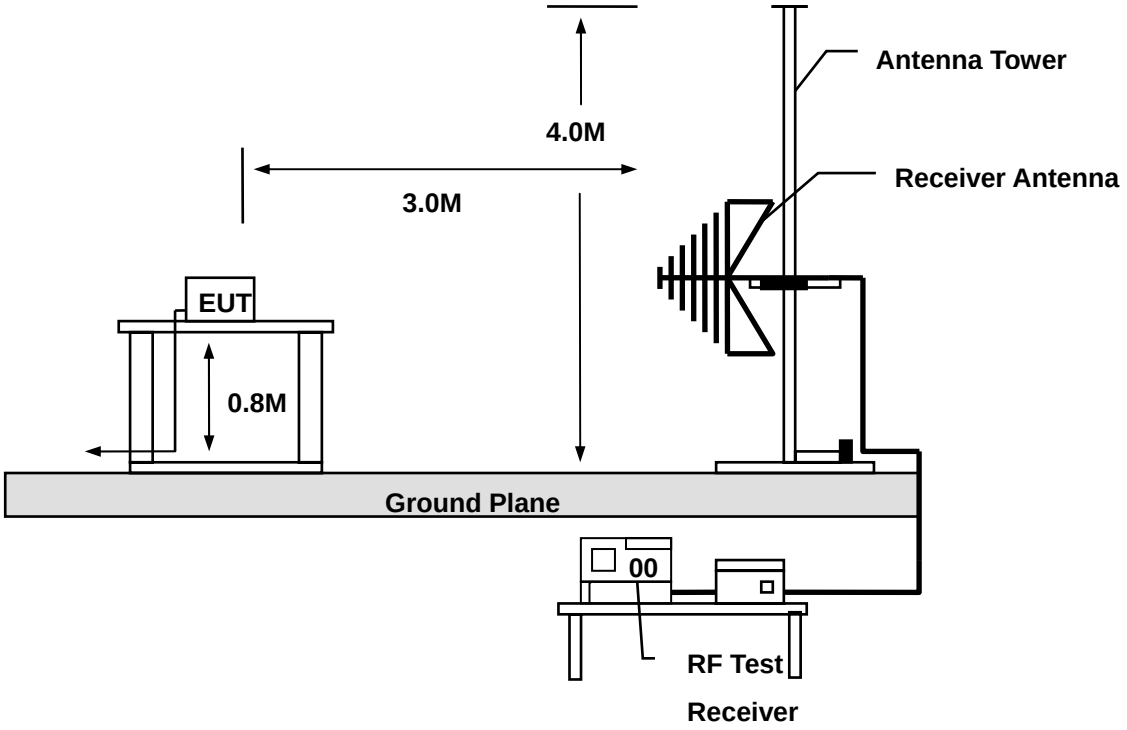
**Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this section shall not be located in the frequency bands 54–72 MHz, 76– 88 MHz, 174–216 MHz or 470–806 MHz. However, operation within these frequency bands is permitted under other sections of this part, e.g., §§15.231 and 15.241.

3.3 Test Equipment List

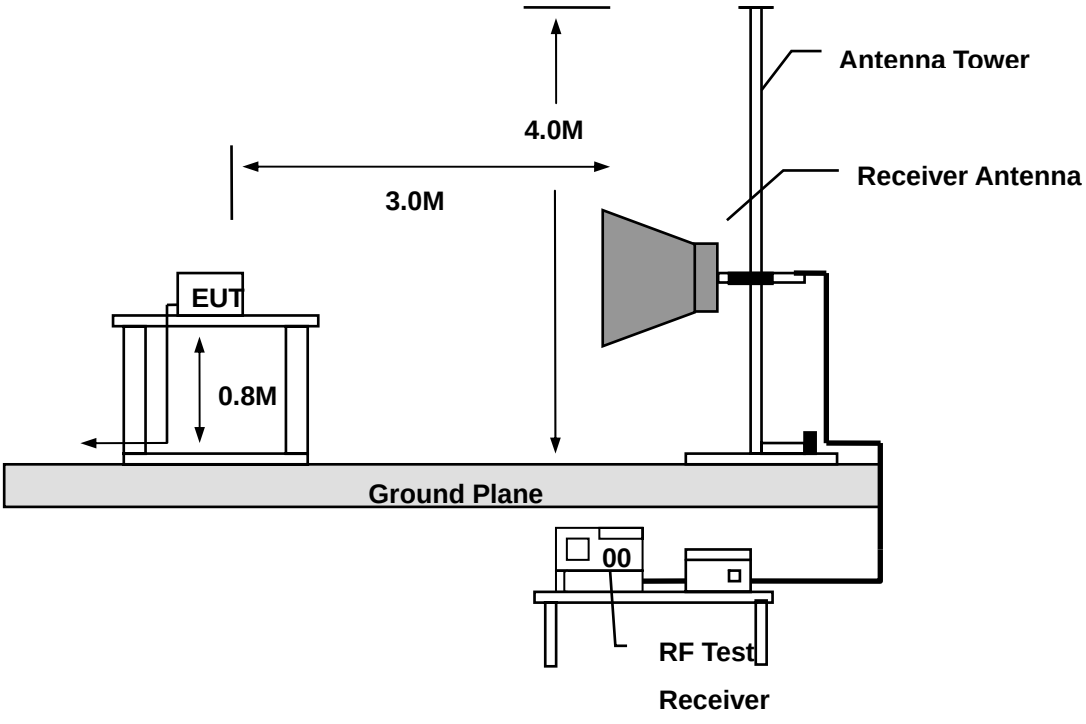
Describe	Manufacturer	Model	Serial Number	Calibration	
				Cal. Date	Due Date
Spectrum Analyzer	Agilent	E4408B	MY46181421	Mar. 13, 2009	Mar. 13, 2010
Spectrum Analyzer	Agilent	E4408A	MY46180578	Jan. 20, 2009	Jan. 20, 2010
Pre Amplifier	Agilent	8449B	3008A02457	Mar. 04, 2009	Mar. 04, 2010
Pre Amplifier	Agilent	8447D	2944A11119	Jan. 19, 2009	Jan. 19, 2010
Test Receiver	R&S	ESCI	100367	Jun. 05, 2009	Jun. 05, 2010
Biconilog Antenna	SCHWARZBECK MESS-ELEKTRONIK	VULB9163	9163-270	Jun. 23, 2009	Jun. 23, 2010
Horn Antenna	SCHWARZBECK MESS-ELEKTRONIK	BBHA9120D	9120D-550	Jul. 01, 2009	Jul. 01, 2010
Horn Antenna	SCHWARZBECK MESS-ELEKTRONIK	BBHA9170	9170-320	Jun. 30, 2009	Jun. 30, 2010
Horn Antenna	SCHWARZBECK MESS-ELEKTRONIK	BBHA9120E	0899	Jun. 23, 2009	Jun. 23, 2010

3.4 Test Instruments Configuration

30 MHz ~ 1 GHz



1GHz ~ 26.5 GHz



3.5 Test Results

3.5.1 Below 1GHz

Test Mode:	Normal Link Mode
Model No:	AR5B95
Test Date:	12/02/2009
Tested by:	Gary Wu

Freq	Polarization (V/H)	Rd_level(dBuV)	Factor	Level(dBuV)	Limit(dBuV)	Over	detector
30.00	V	37.41	-13.32	24.09	40.00	-15.91	QP
52.95	V	33.14	-12.19	20.95	40.00	-19.05	QP
83.73	V	42.47	-15.19	27.28	40.00	-12.72	QP
108.30	V	38.44	-12.37	26.07	43.50	-17.43	QP
170.94	V	48.41	-15.27	33.14	43.50	-10.36	QP
272.73	V	44.21	-10.86	33.35	46.00	-12.65	QP
431.60	V	37.45	-8.03	29.42	46.00	-16.58	QP
479.90	V	33.85	-7.53	26.32	46.00	-19.68	QP
624.10	V	30.41	-4.60	25.81	46.00	-20.19	QP
672.40	V	28.98	-4.28	24.70	46.00	-21.30	QP
796.30	V	30.47	-2.35	28.12	46.00	-17.88	QP
973.40	V	27.24	0.68	27.92	54.00	-26.08	QP
30.00	H	32.14	-13.32	18.82	40.00	-21.18	QP
54.57	H	26.85	-12.21	14.64	40.00	-25.36	QP
85.35	H	33.58	-14.62	18.96	40.00	-21.04	QP
111.00	H	34.65	-12.68	21.97	43.50	-21.53	QP
170.67	H	43.45	-15.31	28.14	43.50	-15.36	QP
272.73	H	48.41	-10.86	37.55	46.00	-8.45	QP
341.30	H	40.24	-8.98	31.26	46.00	-14.74	QP
528.20	H	31.14	-6.34	24.80	46.00	-21.20	QP
647.90	H	28.24	-4.28	23.96	46.00	-22.04	QP
710.90	H	26.87	-3.86	23.01	46.00	-22.99	QP
799.10	H	36.44	-2.32	34.12	46.00	-11.88	QP
960.10	H	28.67	0.43	29.10	54.00	-24.90	QP

3.5.2 Abobe 1GHz

Test Mode:	RX Mode
Model No:	AR5B95
Test Date:	12/01/2009
Tested by:	Gary Wu

Freq	Polarization (V/H)	Rd_level(dBuV)	Factor	Level(dBuV)	Limit(dBuV)	Over	detector
1241.25	V	56.32	-4.24	52.08	74.00	-21.92	peak
1241.25	V	34.88	-4.24	30.64	54.00	-23.36	AVG
2700.00	V	40.00	22.58	62.58	74.00	-11.42	peak
2700.00	V	21.24	22.58	43.82	54.00	-10.18	AVG
9814.00	V	38.01	17.75	55.76	74.00	-18.24	peak
9814.00	V	27.48	17.75	45.23	54.00	-8.77	AVG
14093.50	V	37.05	18.90	55.95	74.00	-18.05	peak
14093.50	V	27.03	18.90	45.93	54.00	-8.07	AVG
17995.00	V	36.05	25.57	61.62	74.00	-12.38	peak
17995.00	V	17.42	25.57	42.99	54.00	-11.01	AVG
18176.25	V	37.41	23.22	60.63	74.00	-13.37	peak
18176.25	V	20.14	23.22	43.36	54.00	-10.64	AVG
21888.75	V	38.03	21.18	59.21	74.00	-14.79	peak
21888.75	V	19.65	21.18	40.83	54.00	-13.17	AVG
25193.75	V	40.00	19.18	59.18	74.00	-14.82	peak
25193.75	V	20.79	19.18	39.97	54.00	-14.03	AVG
2126.95	H	50.82	-0.21	50.61	74.00	-23.39	peak
2700.00	H	39.95	22.58	62.53	74.00	-11.47	peak
2700.00	H	21.23	22.58	43.81	54.00	-10.19	AVG
9741.00	H	38.93	17.69	56.62	74.00	-17.38	peak
9741.00	H	27.07	17.69	44.76	54.00	-9.24	AVG
14173.50	H	37.27	18.85	56.12	74.00	-17.88	peak
14173.50	H	27.23	18.85	46.08	54.00	-7.92	AVG
18000.00	H	36.35	25.57	61.92	74.00	-12.08	peak
18000.00	H	17.30	25.57	42.87	54.00	-11.13	AVG
18133.75	H	36.57	23.22	59.79	74.00	-14.21	peak
18133.75	H	19.01	23.22	42.23	54.00	-11.77	AVG
21490.75	H	37.40	21.35	58.75	74.00	-15.25	peak
21490.75	H	19.51	21.35	40.86	54.00	-13.14	AVG
25257.50	H	38.93	19.13	58.06	74.00	-15.94	peak
25257.50	H	21.25	19.13	40.38	54.00	-13.62	AVG

Test Mode:	IEEE 802.11b _ TX Mode _ CH2412
Model No:	AR5B95
Test Date:	12/01/2009
Tested by:	Gary Wu

Freq	Polarization (V/H)	Rd_level(dBuV)	Factor	Level(dBuV)	Limit(dBuV)	Over	detector
1244.80	V	57.81	-4.26	53.55	74.00	-20.45	peak
1244.80	V	35.03	-4.26	30.77	54.00	-23.23	AVG
2700.00	V	40.56	22.58	63.14	74.00	-10.86	peak
2700.00	V	21.14	22.58	43.72	54.00	-10.28	AVG
4999.50	V	42.85	8.04	50.89	74.00	-23.11	peak
9306.50	V	38.88	16.89	55.77	74.00	-18.23	peak
9306.50	V	27.86	16.89	44.75	54.00	-9.25	AVG
13980.00	V	38.32	18.62	56.94	74.00	-17.06	peak
13980.00	V	27.30	18.62	45.92	54.00	-8.08	AVG
18000.00	V	37.26	25.57	62.83	74.00	-11.17	peak
18000.00	V	17.03	25.57	42.60	54.00	-11.40	AVG
18297.50	V	37.91	23.20	61.11	74.00	-12.89	peak
18297.50	V	19.23	23.20	42.43	54.00	-11.57	AVG
21527.50	V	37.50	21.35	58.85	74.00	-15.15	peak
21527.50	V	19.54	21.35	40.89	54.00	-13.11	AVG
25501.25	V	38.88	18.98	57.86	74.00	-16.14	peak
25501.25	V	21.73	18.98	40.71	54.00	-13.29	AVG
2273.30	H	50.32	0.43	50.75	74.00	-23.25	peak
2700.00	H	40.67	22.58	63.25	74.00	-10.75	peak
2700.00	H	21.45	22.58	44.03	54.00	-9.97	AVG
4824.00	H	39.05	7.48	46.53	74.00	-27.47	peak
9306.50	H	39.63	16.89	56.52	74.00	-17.48	peak
9306.50	H	27.69	16.89	44.58	54.00	-9.42	AVG
14160.00	H	38.69	18.83	57.52	74.00	-16.48	peak
14160.00	H	27.36	18.83	46.19	54.00	-7.81	AVG
18000.00	H	37.60	25.57	63.17	74.00	-10.83	peak
18000.00	H	17.07	25.57	42.64	54.00	-11.36	AVG
18233.75	H	37.73	23.21	60.94	74.00	-13.06	peak
18233.75	H	19.12	23.21	42.33	54.00	-11.67	AVG
21867.50	H	38.05	21.19	59.24	74.00	-14.76	peak
21867.50	H	19.92	21.19	41.11	54.00	-12.89	AVG
24375.00	H	38.70	19.74	58.44	74.00	-15.56	peak
24375.00	H	21.26	19.74	41.00	54.00	-13.00	AVG

Test Mode:	IEEE 802.11b _ TX Mode _ CH2437
Model No:	AR5B95
Test Date:	12/01/2009
Tested by:	Gary Wu

Freq	Polarization (V/H)	Rd_level(dBuV)	Factor	Level(dBuV)	Limit(dBuV)	Over	detector
1244.80	V	57.76	-4.26	53.50	74.00	-20.50	peak
1244.80	V	35.09	-4.26	30.83	54.00	-23.17	AVG
2700.00	V	41.36	22.58	63.94	74.00	-10.06	peak
2700.00	V	21.61	22.58	44.19	54.00	-9.81	AVG
4999.50	V	43.06	8.04	51.10	74.00	-22.90	peak
4999.50	V	28.72	8.04	36.76	54.00	-17.24	AVG
9799.25	V	38.60	17.67	56.27	74.00	-17.73	peak
9799.25	V	27.44	17.67	45.11	54.00	-8.89	AVG
14140.00	V	38.26	18.84	57.10	74.00	-16.90	peak
14140.00	V	27.05	18.84	45.89	54.00	-8.11	AVG
18000.00	V	37.42	25.57	62.99	74.00	-11.01	peak
18000.00	V	17.08	25.57	42.65	54.00	-11.35	AVG
18212.50	V	37.33	23.22	60.55	74.00	-13.45	peak
18212.50	V	19.10	23.22	42.32	54.00	-11.68	AVG
21846.25	V	37.24	21.20	58.44	74.00	-15.56	peak
21846.25	V	19.72	21.20	40.92	54.00	-13.08	AVG
23631.25	V	38.27	20.42	58.69	74.00	-15.31	peak
23631.25	V	20.54	20.42	40.96	54.00	-13.04	AVG
2190.00	H	50.81	0.44	51.25	74.00	-22.75	peak
2190.00	H	34.69	0.44	35.13	54.00	-18.87	AVG
2700.00	H	41.26	22.58	63.84	74.00	-10.16	peak
2700.00	H	21.34	22.58	43.92	54.00	-10.08	AVG
4874.00	H	37.97	7.72	45.69	74.00	-28.31	peak
9963.50	H	38.44	17.82	56.26	74.00	-17.74	peak
9963.50	H	27.69	17.82	45.51	54.00	-8.49	AVG
14180.00	H	38.45	18.85	57.30	74.00	-16.70	peak
14180.00	H	27.14	18.85	45.99	54.00	-8.01	AVG
17900.00	H	38.03	24.96	62.99	74.00	-11.01	peak
17900.00	H	17.54	24.96	42.50	54.00	-11.50	AVG
18191.25	H	37.01	23.22	60.23	74.00	-13.77	peak
18191.25	H	19.10	23.22	42.32	54.00	-11.68	AVG
21506.25	H	37.25	21.35	58.60	74.00	-15.40	peak
21506.25	H	19.60	21.35	40.95	54.00	-13.05	AVG
24417.50	H	39.42	19.71	59.13	74.00	-14.87	peak
24417.50	H	20.90	19.71	40.61	54.00	-13.39	AVG

Test Mode:	IEEE 802.11b _ TX Mode _ CH2462
Model No:	AR5B95
Test Date:	12/01/2009
Tested by:	Gary Wu

Freq	Polarization (V/H)	Rd_level(dBuV)	Factor	Level(dBuV)	Limit(dBuV)	Over	detector
2150.90	V	50.87	0.11	50.98	74.00	-23.02	peak
2700.00	V	40.92	22.58	63.50	74.00	-10.50	peak
2700.00	V	21.65	22.58	44.23	54.00	-9.77	AVG
4999.50	V	43.59	8.04	51.63	74.00	-22.37	peak
4999.50	V	28.25	8.04	36.29	54.00	-17.71	AVG
9963.50	V	38.27	17.82	56.09	74.00	-17.91	peak
9963.50	V	27.45	17.82	45.27	54.00	-8.73	AVG
14180.00	V	38.05	18.85	56.90	74.00	-17.10	peak
14180.00	V	27.41	18.85	46.26	54.00	-7.74	AVG
18000.00	V	36.96	25.57	62.53	74.00	-11.47	peak
18000.00	V	17.56	25.57	43.13	54.00	-10.87	AVG
18170.00	V	37.21	23.23	60.44	74.00	-13.56	peak
18170.00	V	18.96	23.23	42.19	54.00	-11.81	AVG
21527.50	V	36.90	21.35	58.25	74.00	-15.75	peak
21527.50	V	19.84	21.35	41.19	54.00	-12.81	AVG
25990.00	V	39.88	18.56	58.44	74.00	-15.56	peak
25990.00	V	22.26	18.56	40.82	54.00	-13.18	AVG
2276.70	H	50.30	0.45	50.75	74.00	-23.25	peak
2700.00	H	40.77	22.58	63.35	74.00	-10.65	peak
2700.00	H	21.36	22.58	43.94	54.00	-10.06	AVG
4924.00	H	38.00	7.65	45.65	54.00	-8.35	AVG
9835.75	H	38.21	17.83	56.04	74.00	-17.96	peak
9835.75	H	27.14	17.83	44.97	74.00	-29.03	peak
14160.00	H	38.19	18.83	57.02	74.00	-16.98	peak
14160.00	H	27.36	18.83	46.19	54.00	-7.81	AVG
18000.00	H	37.19	25.57	62.76	74.00	-11.24	peak
18000.00	H	17.14	25.57	42.71	54.00	-11.29	AVG
18106.25	H	37.64	23.23	60.87	74.00	-13.13	peak
18106.25	H	19.11	23.23	42.34	54.00	-11.66	AVG
21888.75	H	37.95	21.18	59.13	74.00	-14.87	peak
21888.75	H	19.84	21.18	41.02	54.00	-12.98	AVG
25458.75	H	38.99	19.01	58.00	74.00	-16.00	peak
25458.75	H	21.64	19.01	40.65	54.00	-13.35	AVG

Test Mode:	IEEE 802.11g _ TX Mode _ CH2412
Model No:	AR5B95
Test Date:	12/01/2009
Tested by:	Gary Wu

Freq	Polarization (V/H)	Rd_level(dBuV)	Factor	Level(dBuV)	Limit(dBuV)	Over	detector
1246.50	V	57.42	-4.24	53.18	74.00	-20.82	peak
1246.50	V	35.09	-4.24	30.85	54.00	-23.15	AVG
2700.00	V	41.00	22.58	63.58	74.00	-10.42	peak
2700.00	V	21.34	22.58	43.92	54.00	-10.08	AVG
4981.25	V	42.88	7.89	50.77	74.00	-23.23	peak
9817.50	V	38.81	17.75	56.56	74.00	-17.44	peak
9817.50	V	27.56	17.75	45.31	54.00	-8.69	AVG
14100.00	V	38.15	18.90	57.05	74.00	-16.95	peak
14100.00	V	27.14	18.90	46.04	54.00	-7.96	AVG
18000.00	V	36.95	25.57	62.52	74.00	-11.48	peak
18000.00	V	17.54	25.57	43.11	54.00	-10.89	AVG
18191.25	V	38.51	23.22	61.73	74.00	-12.27	peak
18191.25	V	20.20	23.22	43.42	54.00	-10.58	AVG
21888.75	V	38.33	21.18	59.51	74.00	-14.49	peak
21888.75	V	19.70	21.18	40.88	54.00	-13.12	AVG
25203.75	V	40.20	19.18	59.38	74.00	-14.62	peak
25203.75	V	20.84	19.18	40.02	54.00	-13.98	AVG
2222.30	H	50.65	0.36	51.01	74.00	-22.99	peak
2700.00	H	41.25	22.58	63.83	74.00	-10.17	peak
2700.00	H	21.24	22.58	43.82	54.00	-10.18	AVG
4824.00	H	38.76	7.48	46.24	74.00	-27.76	peak
9653.25	H	39.34	16.95	56.29	74.00	-17.71	peak
9653.25	H	27.36	16.95	44.31	54.00	-9.69	AVG
14340.00	H	38.16	18.54	56.70	74.00	-17.30	peak
14340.00	H	27.65	18.54	46.19	54.00	-7.81	AVG
18000.00	H	37.55	25.57	63.12	74.00	-10.88	peak
18000.00	H	17.24	25.57	42.81	54.00	-11.19	AVG
18977.50	H	38.42	23.10	61.52	74.00	-12.48	peak
18977.50	H	18.34	23.10	41.44	54.00	-12.56	AVG
21527.50	H	37.80	21.35	59.15	74.00	-14.85	peak
21527.50	H	19.20	21.35	40.55	54.00	-13.45	AVG
25650.00	H	40.36	18.87	59.23	74.00	-14.77	peak
25650.00	H	20.90	18.87	39.77	54.00	-14.23	AVG

Test Mode:	IEEE 802.11g _ TX Mode _ CH2437
Model No:	AR5B95
Test Date:	12/01/2009
Tested by:	Gary Wu

Freq	Polarization (V/H)	Rd_level(dBuV)	Factor	Level(dBuV)	Limit(dBuV)	Over	detector
2196.80	V	49.30	0.50	49.80	74.00	-24.20	peak
2700.00	V	40.75	22.58	63.33	74.00	-10.67	peak
2700.00	V	21.48	22.58	44.06	54.00	-9.94	AVG
4999.50	V	42.25	8.04	50.29	74.00	-23.71	peak
9744.50	V	39.43	17.69	57.12	74.00	-16.88	peak
9744.50	V	27.31	17.69	45.00	54.00	-9.00	AVG
14200.00	V	38.18	18.86	57.04	74.00	-16.96	peak
14200.00	V	27.65	18.86	46.51	54.00	-7.49	AVG
18000.00	V	37.40	25.57	62.97	74.00	-11.03	peak
18000.00	V	17.36	25.57	42.93	54.00	-11.07	AVG
18170.00	V	37.24	23.23	60.47	74.00	-13.53	peak
18170.00	V	18.92	23.23	42.15	54.00	-11.85	AVG
21846.25	V	37.27	21.20	58.47	74.00	-15.53	peak
21846.25	V	19.68	21.20	40.88	54.00	-13.12	AVG
23610.00	V	38.22	20.44	58.66	74.00	-15.34	peak
23610.00	V	20.60	20.44	41.04	54.00	-12.96	AVG
2132.20	H	51.03	-0.21	50.82	74.00	-23.18	peak
2700.00	H	40.95	22.58	63.53	74.00	-10.47	peak
2700.00	H	21.33	22.58	43.91	54.00	-10.09	AVG
4871.75	H	41.66	7.72	49.38	74.00	-24.62	peak
9744.50	H	39.73	17.69	57.42	74.00	-16.58	peak
9744.50	H	27.15	17.69	44.84	54.00	-9.16	AVG
14180.00	H	38.37	18.85	57.22	74.00	-16.78	peak
14180.00	H	27.34	18.85	46.19	54.00	-7.81	AVG
18000.00	H	37.25	25.57	62.82	74.00	-11.18	peak
18000.00	H	17.42	25.57	42.99	54.00	-11.01	AVG
18148.75	H	37.67	23.22	60.89	74.00	-13.11	peak
18148.75	H	19.07	23.22	42.29	54.00	-11.71	AVG
21506.25	H	37.70	21.35	59.05	74.00	-14.95	peak
21506.25	H	19.56	21.35	40.91	54.00	-13.09	AVG
25267.50	H	39.13	19.13	58.26	74.00	-15.74	peak
25267.50	H	21.30	19.13	40.43	54.00	-13.57	AVG

Test Mode:	IEEE 802.11g _ TX Mode _ CH2462
Model No:	AR5B95
Test Date:	12/01/2009
Tested by:	Gary Wu

Freq	Polarization (V/H)	Rd_level(dBuV)	Factor	Level(dBuV)	Limit(dBuV)	Over	detector
1248.20	V	59.71	-4.22	55.49	74.00	-18.51	peak
1248.20	V	35.09	-4.22	30.87	54.00	-23.13	AVG
2700.00	V	41.37	22.58	63.95	74.00	-10.05	peak
2700.00	V	21.21	22.58	43.79	54.00	-10.21	AVG
4999.50	V	42.70	8.04	50.74	74.00	-23.26	peak
9854.00	V	41.35	17.89	59.24	74.00	-14.76	peak
9854.00	V	27.46	17.89	45.35	54.00	-8.65	AVG
14240.00	V	38.57	18.71	57.28	74.00	-16.72	peak
14240.00	V	27.15	18.71	45.86	54.00	-8.14	AVG
18000.00	V	37.11	25.57	62.68	74.00	-11.32	peak
18000.00	V	17.65	25.57	43.22	54.00	-10.78	AVG
18063.75	V	37.38	23.26	60.64	74.00	-13.36	peak
18063.75	V	19.23	23.26	42.49	54.00	-11.51	AVG
21506.25	V	36.95	21.35	58.30	74.00	-15.70	peak
21506.25	V	19.58	21.35	40.93	54.00	-13.07	AVG
25628.75	V	39.08	18.89	57.97	74.00	-16.03	peak
25628.75	V	22.02	18.89	40.91	54.00	-13.09	AVG
2208.70	H	50.68	0.43	51.11	74.00	-22.89	peak
2208.70	H	50.68	0.43	51.11	54.00	-2.89	AVG
2700.00	H	40.67	22.58	63.25	74.00	-10.75	peak
2700.00	H	21.67	22.58	44.25	54.00	-9.75	AVG
4924.00	H	38.13	7.65	45.78	74.00	-28.22	peak
9324.75	H	39.38	16.91	56.29	74.00	-17.71	peak
9324.75	H	27.64	16.91	44.55	54.00	-9.45	AVG
14140.00	H	38.41	18.84	57.25	74.00	-16.75	peak
14140.00	H	27.69	18.84	46.53	54.00	-7.47	AVG
18000.00	H	37.11	25.57	62.68	74.00	-11.32	peak
18000.00	H	17.46	25.57	43.03	54.00	-10.97	AVG
18106.25	H	37.82	23.23	61.05	74.00	-12.95	peak
18106.25	H	19.06	23.23	42.29	54.00	-11.71	AVG
21506.25	H	36.99	21.35	58.34	74.00	-15.66	peak
21506.25	H	19.39	21.35	40.74	54.00	-13.26	AVG
24375.00	H	39.29	19.74	59.03	74.00	-14.97	peak
24375.00	H	20.82	19.74	40.56	54.00	-13.44	AVG

Test Mode:	draft 802.11n Standard-20MHz _ TX Mode _ CH2412
Model No:	AR5B95
Test Date:	12/01/2009
Tested by:	Gary Wu

Freq	Polarization (V/H)	Rd_level(dBuV)	Factor	Level(dBuV)	Limit(dBuV)	Over	detector
2162.80	V	51.10	0.04	51.14	74.00	-22.86	peak
2162.80	V	34.50	0.04	34.54	54.00	-19.46	AVG
2700.00	V	41.32	22.58	63.90	74.00	-10.10	peak
2700.00	V	21.24	22.58	43.82	54.00	-10.18	AVG
4824.00	V	38.47	7.48	45.95	74.00	-28.05	peak
9708.00	V	39.41	17.49	56.90	74.00	-17.10	peak
9708.00	V	27.12	17.49	44.61	54.00	-9.39	AVG
13980.00	V	38.33	18.62	56.95	74.00	-17.05	peak
13980.00	V	27.36	18.62	45.98	54.00	-8.02	AVG
18000.00	V	37.79	25.57	63.36	74.00	-10.64	peak
18000.00	V	17.24	25.57	42.81	54.00	-11.19	AVG
18148.75	V	37.77	23.22	60.99	74.00	-13.01	peak
18148.75	V	18.99	23.22	42.21	54.00	-11.79	AVG
21548.75	V	36.63	21.33	57.96	74.00	-16.04	peak
21548.75	V	19.57	21.33	40.90	54.00	-13.10	AVG
25458.75	V	39.60	19.01	58.61	74.00	-15.39	peak
25458.75	V	21.52	19.01	40.53	54.00	-13.47	AVG
2280.10	H	50.69	0.46	51.15	74.00	-22.85	peak
2280.10	H	34.25	0.46	34.71	54.00	-19.29	AVG
2700.00	H	40.97	22.58	63.55	74.00	-10.45	peak
2700.00	H	21.34	22.58	43.92	54.00	-10.08	AVG
4999.50	H	42.84	8.04	50.88	74.00	-23.12	peak
9343.00	H	39.34	16.93	56.27	74.00	-17.73	peak
9343.00	H	27.35	16.93	44.28	54.00	-9.72	AVG
14200.00	H	38.29	18.86	57.15	74.00	-16.85	peak
14200.00	H	27.36	18.86	46.22	54.00	-7.78	AVG
18000.00	H	38.06	25.57	63.63	74.00	-10.37	peak
18000.00	H	17.24	25.57	42.81	54.00	-11.19	AVG
18233.75	H	37.27	23.21	60.48	74.00	-13.52	peak
18233.75	H	18.97	23.21	42.18	54.00	-11.82	AVG
21506.25	H	37.48	21.35	58.83	74.00	-15.17	peak
21506.25	H	19.77	21.35	41.12	54.00	-12.88	AVG
24417.50	H	39.16	19.71	58.87	74.00	-15.13	peak
24417.50	H	21.34	19.71	41.05	54.00	-12.95	AVG

Test Mode:	draft 802.11n Standard-20MHz _ TX Mode _ CH2437
Model No:	AR5B95
Test Date:	12/01/2009
Tested by:	Gary Wu

Freq	Polarization (V/H)	Rd_level(dBuV)	Factor	Level(dBuV)	Limit(dBuV)	Over	detector
2280.10	V	50.69	0.46	51.15	74.00	-22.85	peak
2280.10	V	34.25	0.46	34.71	54.00	-19.29	AVG
2700.00	V	40.97	22.58	63.55	74.00	-10.45	peak
2700.00	V	21.34	22.58	43.92	54.00	-10.08	AVG
4999.50	V	42.84	8.04	50.88	74.00	-23.12	peak
9343.00	V	39.34	16.93	56.27	74.00	-17.73	peak
9343.00	V	27.35	16.93	44.28	54.00	-9.72	AVG
14200.00	V	38.29	18.86	57.15	74.00	-16.85	peak
14200.00	V	27.36	18.86	46.22	54.00	-7.78	AVG
18000.00	V	38.06	25.57	63.63	74.00	-10.37	peak
18000.00	V	17.24	25.57	42.81	54.00	-11.19	AVG
18233.75	V	37.27	23.21	60.48	74.00	-13.52	peak
18233.75	V	18.97	23.21	42.18	54.00	-11.82	AVG
21506.25	V	37.48	21.35	58.83	74.00	-15.17	peak
21506.25	V	19.77	21.35	41.12	54.00	-12.88	AVG
24417.50	V	39.16	19.71	58.87	74.00	-15.13	peak
2249.50	H	50.18	0.49	50.67	74.00	-23.33	peak
2700.00	H	40.91	22.58	63.49	74.00	-10.51	peak
2700.00	H	21.21	22.58	43.79	54.00	-10.21	AVG
4874.00	H	38.13	7.72	45.85	74.00	-28.15	peak
9324.75	H	39.56	16.91	56.47	74.00	-17.53	peak
9324.75	H	27.30	16.91	44.21	54.00	-9.79	AVG
14060.00	H	38.88	18.72	57.60	74.00	-16.40	peak
14060.00	H	27.63	18.72	46.35	54.00	-7.65	AVG
17980.00	H	37.69	25.21	62.90	74.00	-11.10	peak
17980.00	H	17.36	25.21	42.57	54.00	-11.43	AVG
18148.75	H	37.39	23.22	60.61	74.00	-13.39	peak
18148.75	H	19.12	23.22	42.34	54.00	-11.66	AVG
21527.50	H	39.26	21.35	60.61	74.00	-13.39	peak
21527.50	H	19.45	21.35	40.80	54.00	-13.20	AVG
25288.75	H	39.18	19.11	58.29	74.00	-15.71	peak
25288.75	H	21.66	19.11	40.77	54.00	-13.23	AVG
2249.50	H	50.18	0.49	50.67	74.00	-23.33	peak

Test Mode:	draft 802.11n Standard-20MHz _ TX Mode _ CH2462
Model No:	AR5B95
Test Date:	12/01/2009
Tested by:	Gary Wu

Freq	Polarization (V/H)	Rd_level(dBuV)	Factor	Level(dBuV)	Limit(dBuV)	Over	detector
1246.50	V	58.24	-4.24	54.00	74.00	-20.00	peak
1246.50	V	35.01	-4.24	30.77	54.00	-23.23	AVG
2700.00	V	40.48	22.58	63.06	74.00	-10.94	peak
2700.00	V	21.06	22.58	43.64	54.00	-10.36	AVG
4999.50	V	42.55	8.04	50.59	74.00	-23.41	peak
9361.25	V	39.29	16.98	56.27	74.00	-17.73	peak
9361.25	V	27.25	16.98	44.23	54.00	-9.77	AVG
14080.00	V	37.89	18.81	56.70	74.00	-17.30	peak
14080.00	V	27.63	18.81	46.44	54.00	-7.56	AVG
17980.00	V	37.78	25.21	62.99	74.00	-11.01	peak
17980.00	V	17.14	25.21	42.35	54.00	-11.65	AVG
18212.50	V	37.28	23.22	60.50	74.00	-13.50	peak
18212.50	V	19.13	23.22	42.35	54.00	-11.65	AVG
21527.50	V	37.28	21.35	58.63	74.00	-15.37	peak
21527.50	V	19.74	21.35	41.09	54.00	-12.91	AVG
24417.50	V	39.21	19.71	58.92	74.00	-15.08	peak
24417.50	V	20.76	19.71	40.47	54.00	-13.53	AVG
2303.90	H	50.08	0.49	50.57	74.00	-23.43	peak
2700.00	H	41.30	22.58	63.88	74.00	-10.12	peak
2700.00	H	21.32	22.58	43.90	54.00	-10.10	AVG
4924.00	H	37.87	7.65	45.52	74.00	-28.48	peak
9708.00	H	38.81	17.49	56.30	74.00	-17.70	peak
9708.00	H	27.24	17.49	44.73	54.00	-9.27	AVG
14560.00	H	39.40	17.79	57.19	74.00	-16.81	peak
14560.00	H	27.24	17.79	45.03	54.00	-8.97	AVG
18000.00	H	37.62	25.57	63.19	74.00	-10.81	peak
18000.00	H	17.31	25.57	42.88	54.00	-11.12	AVG
18170.00	H	37.43	23.23	60.66	74.00	-13.34	peak
18170.00	H	18.69	23.23	41.92	54.00	-12.08	AVG
21825.00	H	37.95	21.20	59.15	74.00	-14.85	peak
21825.00	H	19.43	21.20	40.63	54.00	-13.37	AVG
23950.00	H	38.05	20.09	58.14	74.00	-15.86	peak
23950.00	H	20.58	20.09	40.67	54.00	-13.33	AVG

Test Mode:	draft 802.11n Wide-40MHz _ TX Mode _ CH2422
Model No:	AR5B95
Test Date:	12/01/2009
Tested by:	Gary Wu

Freq	Polarization (V/H)	Rd_level(dBuV)	Factor	Level(dBuV)	Limit(dBuV)	Over	detector
1248.20	V	56.76	-4.22	52.54	74.00	-21.46	peak
1248.20	V	35.09	-4.22	30.87	54.00	-23.13	AVG
2700.00	V	42.68	22.58	65.26	74.00	-8.74	peak
2700.00	V	19.33	22.58	41.91	54.00	-12.09	AVG
4999.50	V	42.50	8.04	50.54	74.00	-23.46	peak
9781.00	V	38.65	17.69	56.34	74.00	-17.66	peak
9781.00	V	23.28	17.69	40.97	54.00	-13.03	AVG
14180.00	V	38.76	18.85	57.61	74.00	-16.39	peak
14180.00	V	27.12	18.85	45.97	54.00	-8.03	AVG
17900.00	V	38.78	24.96	63.74	74.00	-10.26	peak
17900.00	V	17.01	24.96	41.97	54.00	-12.03	AVG
18127.50	V	37.15	23.23	60.38	74.00	-13.62	peak
18127.50	V	19.36	23.23	42.59	54.00	-11.41	AVG
21527.50	V	37.31	21.35	58.66	74.00	-15.34	peak
21527.50	V	19.68	21.35	41.03	54.00	-12.97	AVG
24396.25	V	38.55	19.72	58.27	74.00	-15.73	peak
24396.25	V	20.99	19.72	40.71	54.00	-13.29	AVG
2188.30	H	50.63	0.40	51.03	74.00	-22.97	peak
2188.30	H	34.44	0.40	34.84	54.00	-19.16	AVG
2700.00	H	41.55	22.58	64.13	74.00	-9.87	peak
2700.00	H	21.60	22.58	44.18	54.00	-9.82	AVG
4844.00	H	38.27	7.67	45.94	74.00	-28.06	peak
9288.25	H	39.17	16.78	55.95	74.00	-18.05	peak
9288.25	H	27.91	16.78	44.69	54.00	-9.31	AVG
14200.00	H	38.88	18.86	57.74	74.00	-16.26	peak
14200.00	H	27.39	18.86	46.25	54.00	-7.75	AVG
18000.00	H	37.80	25.57	63.37	74.00	-10.63	peak
18000.00	H	17.34	25.57	42.91	54.00	-11.09	AVG
18212.50	H	37.60	23.22	60.82	74.00	-13.18	peak
18212.50	H	19.08	23.22	42.30	74.00	-31.70	QP
21527.50	H	37.24	21.35	58.59	74.00	-15.41	peak
21527.50	H	19.68	21.35	41.03	74.00	-32.97	QP
25990.00	H	39.92	18.56	58.48	74.00	-15.52	peak
25990.00	H	21.94	18.56	40.50	74.00	-33.50	QP

Test Mode:	draft 802.11n Wide-40MHz _ TX Mode _ CH2437
Model No:	AR5B95
Test Date:	12/01/2009
Tested by:	Gary Wu

Freq	Polarization (V/H)	Rd_level(dBuV)	Factor	Level(dBuV)	Limit(dBuV)	Over	detector
2203.60	V	50.28	0.49	50.77	74.00	-23.23	peak
2700.00	V	40.37	22.58	62.95	74.00	-11.05	peak
2700.00	V	21.07	22.58	43.65	54.00	-10.35	AVG
4999.50	V	43.30	8.04	51.34	74.00	-22.66	peak
4999.50	V	28.72	8.04	36.76	54.00	-17.24	AVG
9799.25	V	38.58	17.67	56.25	74.00	-17.75	peak
9799.25	V	27.39	17.67	45.06	54.00	-8.94	AVG
13980.00	V	38.24	18.62	56.86	74.00	-17.14	peak
13980.00	V	27.24	18.62	45.86	54.00	-8.14	AVG
18000.00	V	37.52	25.57	63.09	74.00	-10.91	peak
18000.00	V	17.25	25.57	42.82	54.00	-11.18	AVG
18191.25	V	37.15	23.22	60.37	74.00	-13.63	peak
18191.25	V	19.22	23.22	42.44	54.00	-11.56	AVG
21867.50	V	37.91	21.19	59.10	74.00	-14.90	peak
21867.50	V	19.75	21.19	40.94	54.00	-13.06	AVG
23482.50	V	37.90	20.61	58.51	74.00	-15.49	peak
23482.50	V	20.45	20.61	41.06	54.00	-12.94	AVG
2208.70	H	50.71	0.43	51.14	74.00	-22.86	peak
2208.70	H	34.56	0.43	34.99	54.00	-19.01	AVG
2700.00	H	40.73	22.58	63.31	74.00	-10.69	peak
2700.00	H	21.06	22.58	43.64	54.00	-10.36	AVG
4874.00	H	36.61	7.72	44.33	74.00	-29.67	peak
9635.00	H	38.16	17.06	55.22	74.00	-18.78	peak
9635.00	H	27.50	17.06	44.56	54.00	-9.44	AVG
14300.00	H	38.35	18.61	56.96	74.00	-17.04	peak
14300.00	H	27.31	18.61	45.92	54.00	-8.08	AVG
18000.00	H	37.57	25.57	63.14	74.00	-10.86	peak
18000.00	H	17.35	25.57	42.92	54.00	-11.08	AVG
18233.75	H	36.88	23.21	60.09	74.00	-13.91	peak
18233.75	H	19.49	23.21	42.70	54.00	-11.30	AVG
21548.75	H	37.93	21.33	59.26	74.00	-14.74	peak
21548.75	H	19.52	21.33	40.85	54.00	-13.15	AVG
24375.00	H	39.01	19.74	58.75	74.00	-15.25	peak
24375.00	H	21.12	19.74	40.86	54.00	-13.14	AVG

Test Mode:	draft 802.11n Wide-40MHz _ TX Mode _ CH2452
Model No:	AR5B95
Test Date:	12/01/2009
Tested by:	Gary Wu

Freq	Polarization (V/H)	Rd_level(dBuV)	Factor	Level(dBuV)	Limit(dBuV)	Over	detector
1992.80	V	54.54	-1.77	52.77	74.00	-21.23	peak
1992.80	V	36.24	-1.77	34.47	54.00	-19.53	AVG
2700.00	V	41.15	22.58	63.73	74.00	-10.27	peak
2700.00	V	21.24	22.58	43.82	54.00	-10.18	AVG
4999.50	V	42.81	8.04	50.85	74.00	-23.15	peak
9981.75	V	38.21	17.88	56.09	74.00	-17.91	peak
9981.75	V	27.48	17.88	45.36	54.00	-8.64	AVG
14080.00	V	38.74	18.81	57.55	74.00	-16.45	peak
14080.00	V	27.36	18.81	46.17	54.00	-7.83	AVG
18000.00	V	37.59	25.57	63.16	74.00	-10.84	peak
18000.00	V	17.25	25.57	42.82	54.00	-11.18	AVG
18127.50	V	36.99	23.23	60.22	74.00	-13.78	peak
18127.50	V	18.99	23.23	42.22	54.00	-11.78	AVG
21782.50	V	37.25	21.22	58.47	74.00	-15.53	peak
21782.50	V	19.89	21.22	41.11	54.00	-12.89	AVG
23801.25	V	38.15	20.25	58.40	74.00	-15.60	peak
23801.25	V	20.52	20.25	40.77	54.00	-13.23	AVG
2210.40	H	51.06	0.41	51.47	74.00	-22.53	peak
2210.40	H	34.45	0.41	34.86	54.00	-19.14	AVG
2700.00	H	42.17	22.58	64.75	74.00	-9.25	peak
2700.00	H	21.12	22.58	43.70	54.00	-10.30	AVG
4904.00	H	38.32	7.71	46.03	74.00	-27.97	peak
9671.50	H	39.05	17.15	56.20	74.00	-17.80	peak
9671.50	H	27.12	17.15	44.27	54.00	-9.73	AVG
14240.00	H	38.21	18.71	56.92	74.00	-17.08	peak
14240.00	H	27.87	18.71	46.58	54.00	-7.42	AVG
17880.00	H	38.79	24.36	63.15	74.00	-10.85	peak
17880.00	H	17.36	24.36	41.72	54.00	-12.28	AVG
18233.75	H	37.40	23.21	60.61	74.00	-13.39	peak
18233.75	H	19.13	23.21	42.34	54.00	-11.66	AVG
21803.75	H	37.65	21.21	58.86	74.00	-15.14	peak
21803.75	H	19.54	21.21	40.75	54.00	-13.25	AVG
23100.00	H	37.56	20.84	58.40	74.00	-15.60	peak
23100.00	H	19.90	20.84	40.74	54.00	-13.26	AVG

4. Band Edges Requirements

4.1 Test Procedure

The EUT was setup to ANSI C63.4, 2003; tested to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.

The emissions on the harmonics frequencies, the limits, and the margin of compliance are presented. These tests were made when the transmitter was in full radiated power. The additional test was performed to show compliance with the requirement at the lower and upper band-edges of the emission.

EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emission and PEAK set RBW=VBW=1MHz and AVERAGE set RBW=1MHz / VBW=10Hz

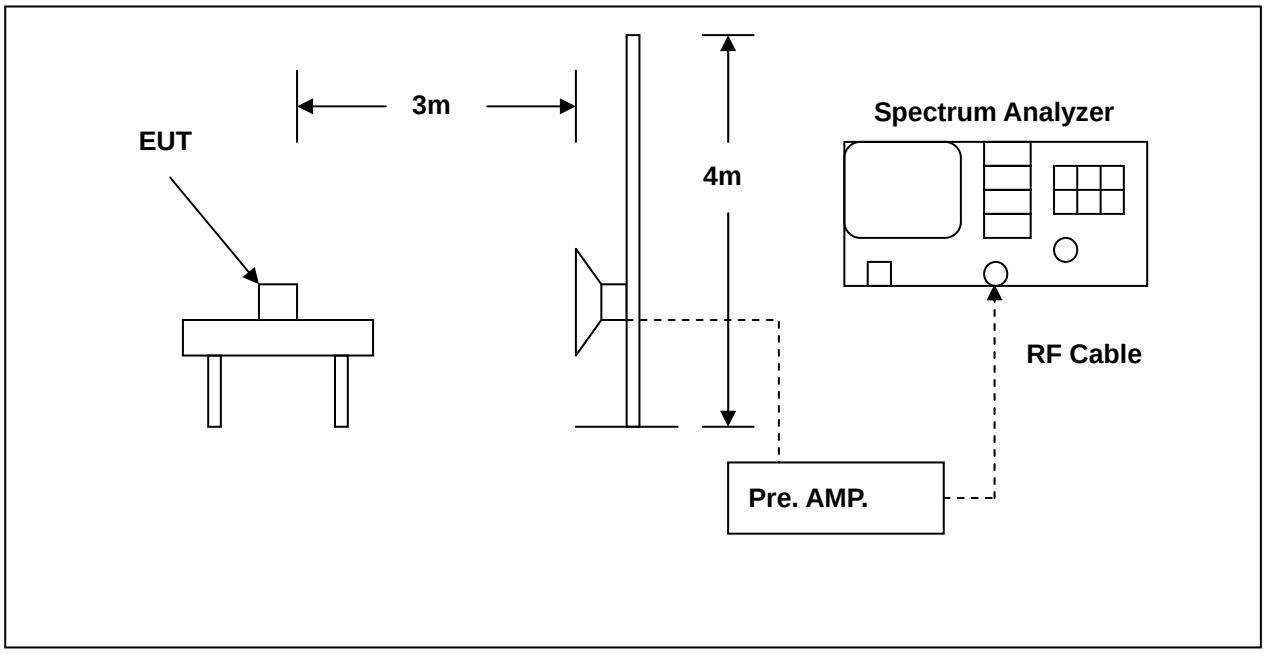
4.2 Limits

The provisions of Section 15.205 of this part apply to intentional radiators operating under this section.In addition, radiated emissions which fall in the restricted bands must also comply with the radiated emission limits.

4.3 Test Equipment List

Describe	Manufacturer	Model	Serial Number	Calibration	
				Cal. Date	Due Date
Spectrum Analyzer	Agilent	E4408B	MY45107753	Jun. 08, 2009	Jun. 08, 2010
Spectrum Analyzer	Agilent	E4408A	MY46180578	Jan. 20, 2009	Jan. 20, 2010
Pre Amplifier	Agilent	8449B	3008A02237	Jun. 08, 2009	Jun. 08, 2010
Horn Antenna	SCHWARZBECK MESS-ELEKTRONI	BBHA9120D	9120D-550	Jul. 01, 2009	Jul. 01, 2010

4.4 Test Instruments Configuration



4.5 Test Result

EUT : 802.11N 1x1 PCIe Minicard transceiver

Model No. : AR5B95

Test Mode : IEEE 802.11b_2.4GHz Link Mode Low CH & High CH

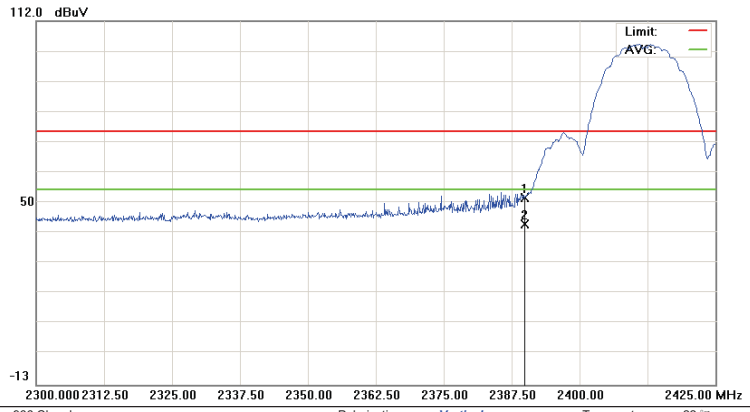
Test Date : 11/25/2009

Please refer to next page of detail testing data.

Notes:

1. Margin= Amplitude - Limits
2. Height of table for EUT placed: 0.8 Meter.
3. ANT= Antenna height.
4. Duty= Duty cycle correction factor.
5. Dis= Distance extrapolation factor.
6. Amplitude= Reading Amplitude – Amplifier gain + Cable loss + Antenna factor
   (Auto calculate in spectrum analyzer)
7. Actual Amp= Amplitude – Duty – Dis.

File :AR5B95(Band Edge) Data :#1 Date: 2009/11/25 Time: 上午 03:01:08



Site: : 966 Chamber
Limit: FCC part 15 (PK)
EUT: 802.11N 1x1 PCIe Minicard transceiver
M/N: AR5B95
Mode: IEEE 802.11b
Note: 2412MHz

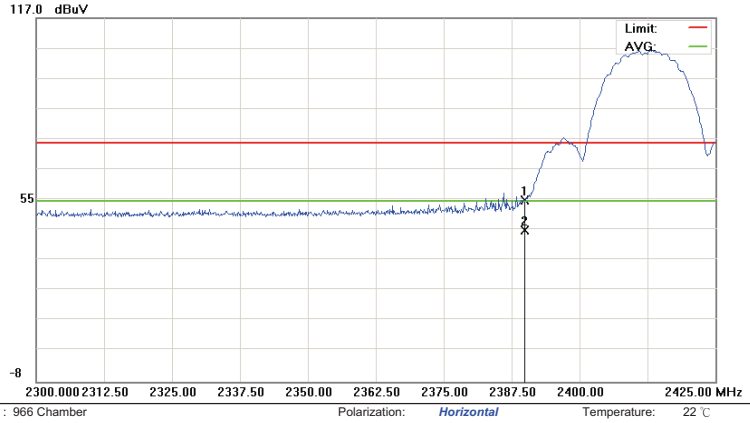
Polarization: *Vertical*
Power:
Distance: 3m

Temperature: 22 ℃
Humidity: 60 %
RBW: 1000 KHz VBW: 1000 KHz

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		2389.800	51.11	0.19	51.30	74.00	-22.70	peak			
2	*	2389.800	41.82	0.19	42.01	54.00	-11.99	AVG			

*:Maximum data x:Over limit !:over margin

File :AR5B95(Band Edge) Data :#5 Date: 2009/11/25 Time: 上午 02:55:02



Site: : 966 Chamber
Limit: FCC part 15 (PK)
EUT: 802.11N 1x1 PCe Minicard transceiver
M/N: AR5B95
Mode: IEEE 802.11b
Note: 2412MHz

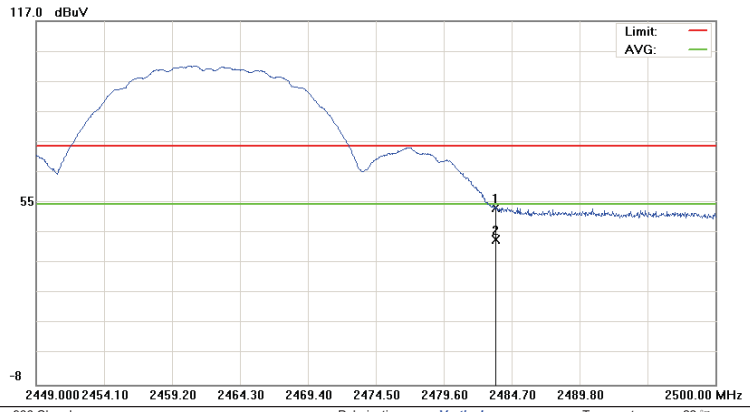
Polarization: *Horizontal*
Power:
Distance: 3m

Temperature: 22 ℃
Humidity: 60 %
RBW: 1000 KHz VBW: 1000 KHz

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		2389.800	54.09	0.16	54.25	74.00	-19.75	peak			
2	*	2389.800	43.74	0.16	43.90	54.00	-10.10	AVG			

*:Maximum data x:Over limit !:over margin

File :AR5B95(Band Edge) Data :#3 Date: 2009/11/25 Time: 上午 03:08:20



Site: : 966 Chamber
Limit: FCC part 15 (PK)
EUT: 802.11N 1x1 PCe Minicard transceiver
M/N: AR5B95
Mode: IEEE 802.11b
Note: 2462MHz

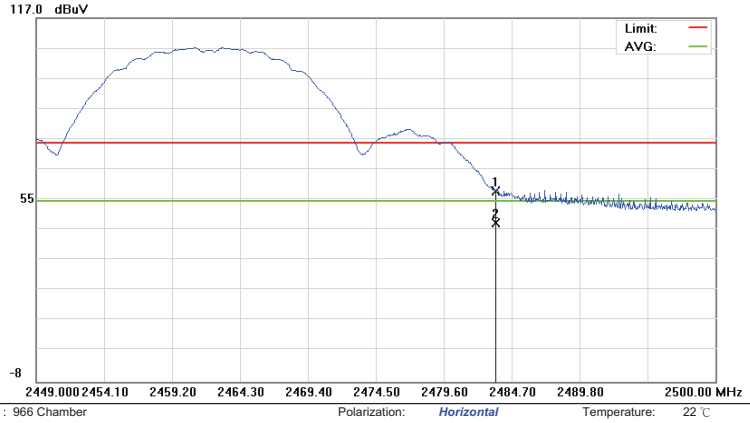
Polarization: *Vertical*
Power:
Distance: 3m

Temperature: 22 ℃
Humidity: 60 %
RBW: 1000 KHz VBW: 1000 KHz

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		2483.510	52.59	0.25	52.84	74.00	-21.16	peak			
2	*	2483.510	41.57	0.25	41.82	54.00	-12.18	AVG			

*:Maximum data x:Over limit !:over margin

File :AR5B95(Band Edge) Data :#7 Date: 2009/11/25 Time: 上午 03:13:27



Site: : 966 Chamber
Limit: FCC part 15 (PK)
EUT: 802.11N 1x1 PCe Minicard transceiver
M/N: AR5B95
Mode: IEEE 802.11b
Note: 2462MHz

Polarization: *Horizontal*
Power:
Distance: 3m

Temperature: 22 ℃
Humidity: 60 %
RBW: 1000 KHz VBW: 1000 KHz

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		2483.510	57.20	0.25	57.45	74.00	-16.55	peak			
2	*	2483.510	46.42	0.25	46.67	54.00	-7.33	AVG			

*:Maximum data x:Over limit !:over margin

EUT : 802.11N 1x1 PCIe Minicard transceiver

Model No. : AR5B95

Test Mode : IEEE 802.11g _2.4GHz Link Mode Low CH & High CH

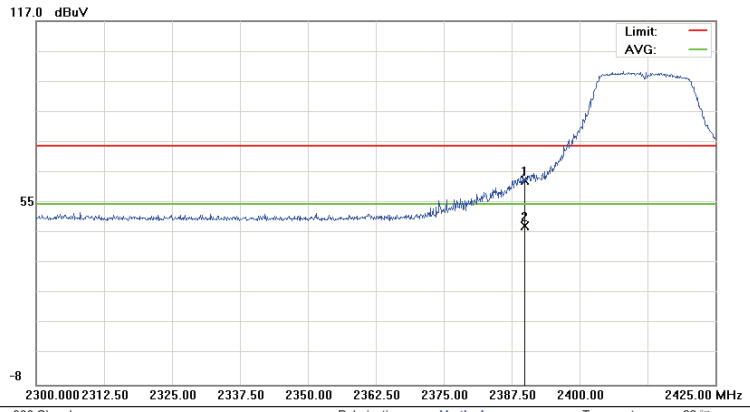
Test Date : 11/25/2009

Please refer to next page of detail testing data.

Notes:

1. Margin= Amplitude - Limits
2. Height of table for EUT placed: 0.8 Meter.
3. ANT= Antenna height.
4. Duty= Duty cycle correction factor.
5. Dis= Distance extrapolation factor.
6. Amplitude= Reading Amplitude – Amplifier gain + Cable loss + Antenna factor
   (Auto calculate in spectrum analyzer)
7. Actual Amp= Amplitude – Duty – Dis.

File :AR5B95(Band Edge) Data :#1 Date: 2009/11/25 Time: 上午 03:42:23



Site: : 966 Chamber
Limit: FCC part 15 (PK)
EUT: 802.11N 1x1 PCe Minicard transceiver
M/N: AR5B95
Mode: drat 802.11n Standard-20MHz
Note: 2412MHz

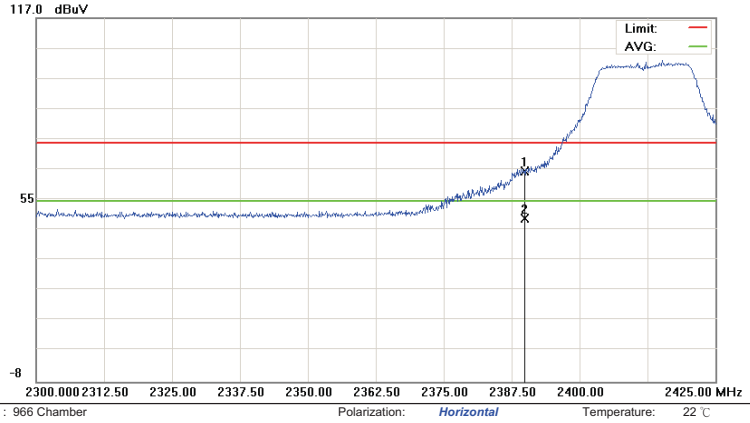
Polarization: *Vertical*
Power:
Distance: 3m

Temperature: 22 ℃
Humidity: 60 %
RBW: 1000 KHz VBW: 1000 KHz

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		2389.800	61.86	0.16	62.02	74.00	-11.98	peak			
2	*	2389.800	46.31	0.16	46.47	54.00	-7.53	AVG			

*:Maximum data x:Over limit !:over margin

File :AR5B95(Band Edge) Data :#5 Date: 2009/11/25 Time: 上午 03:46:53



Site: : 966 Chamber
Limit: FCC part 15 (PK)
EUT: 802.11N 1x1 PCe Minicard transceiver
M/N: AR5B95
Mode: drat 802.11n Standard-20MHz
Note: 2412MHz

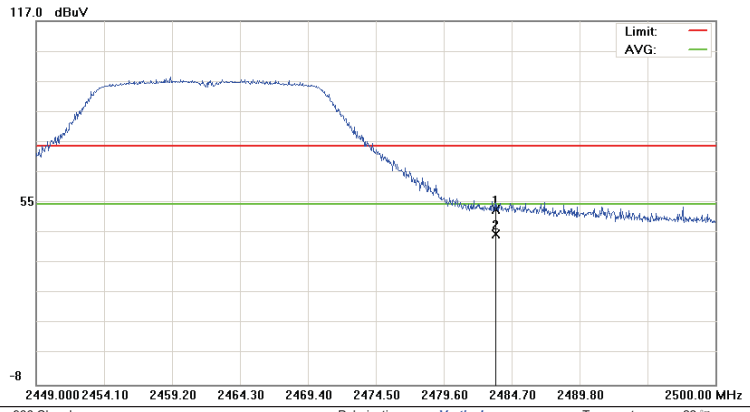
Polarization: *Horizontal*
Power:
Distance: 3m

Temperature: 22 ℃
Humidity: 60 %
RBW: 1000 KHz VBW: 1000 KHz

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		2389.800	64.15	0.16	64.31	74.00	-9.69	peak			
2	*	2389.800	47.82	0.16	47.98	54.00	-6.02	AVG			

*:Maximum data x:Over limit !:over margin

File :AR5B95(Band Edge) Data :#3 Date: 2009/11/25 Time: 上午 03:52:27



Site: : 966 Chamber
Limit: FCC part 15 (PK)
EUT: 802.11N 1x1 PCe Minicard transceiver
M/N: AR5B95
Mode: drat 802.11n Standard-20MHz
Note: 2462MHz

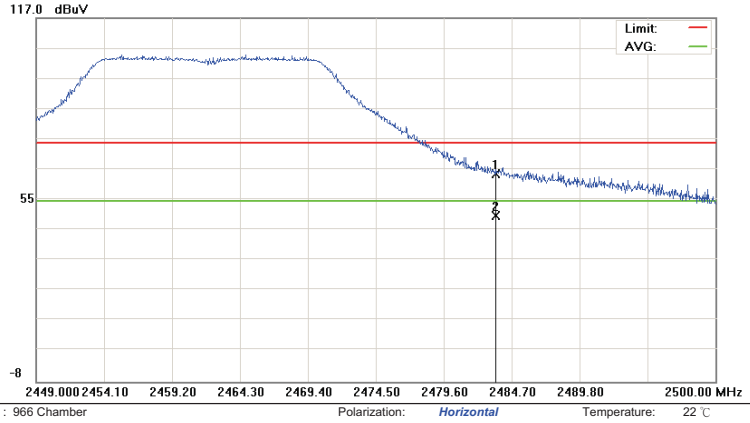
Polarization: *Vertical*
Power:
Distance: 3m

Temperature: 22 ℃
Humidity: 60 %
RBW: 1000 KHz VBW: 1000 KHz

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		2483.510	51.87	0.25	52.12	74.00	-21.88	peak			
2	*	2483.510	43.43	0.25	43.68	54.00	-10.32	AVG			

*:Maximum data x:Over limit !:over margin

File :AR5B95(Band Edge) Data :#7 Date: 2009/11/25 Time: 上午 03:57:57



Site: : 966 Chamber
Limit: FCC part 15 (PK)
EUT: 802.11N 1x1 PCe Minicard transceiver
M/N: AR5B95
Mode: drat 802.11n Standard-20MHz
Note: 2462MHz

Polarization: *Horizontal*
Power:
Distance: 3m

Temperature: 22 ℃
Humidity: 60 %
RBW: 1000 KHz VBW: 1000 KHz

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		2483.510	63.25	0.25	63.50	74.00	-10.50	peak			
2	*	2483.510	48.93	0.25	49.18	54.00	-4.82	AVG			

*:Maximum data x:Over limit !:over margin

EUT : 802.11N 1x1 PCIe Minicard transceiver

Model No. : AR5B95

Test Mode : draft 802.11n Standard-20MHz_2.4GHz Link Mode Low CH & High CH

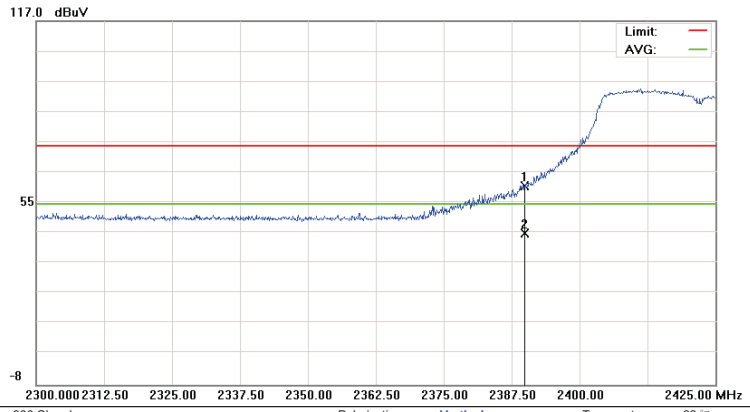
Test Date : 11/25/2009

Please refer to next page of detail testing data.

Notes:

1. Margin= Amplitude - Limits
2. Height of table for EUT placed: 0.8 Meter.
3. ANT= Antenna height.
4. Duty= Duty cycle correction factor.
5. Dis= Distance extrapolation factor.
6. Amplitude= Reading Amplitude – Amplifier gain + Cable loss + Antenna factor
   (Auto calculate in spectrum analyzer)
7. Actual Amp= Amplitude – Duty – Dis.

File :AR5B95(Band Edge) Data :#1 Date: 2009/11/25 Time: 上午 04:04:18



Site: : 966 Chamber
Limit: FCC part 15 (PK)
EUT: 802.11N 1x1 PCe Minicard transceiver
M/N: AR5B95
Mode: drat 802.11n Wide-40MHz
Note: 2422MHz

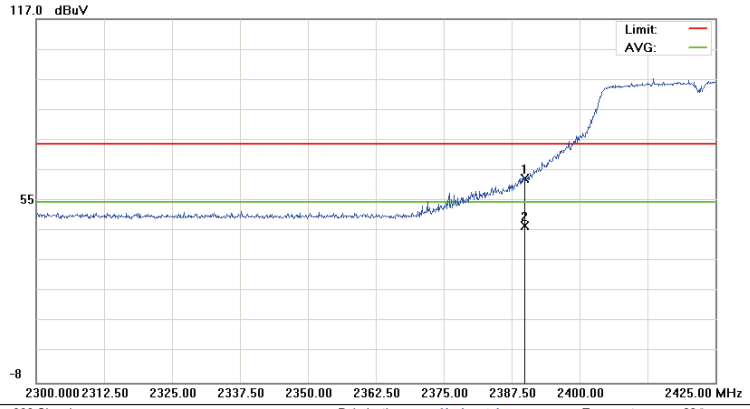
Polarization: *Vertical*
Power:
Distance: 3m

Temperature: 22 ℃
Humidity: 60 %
RBW: 1000 KHz VBW: 1000 KHz

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		2389.800	60.08	0.16	60.24	74.00	-13.76	peak			
2	*	2389.800	43.99	0.16	44.15	54.00	-9.85	AVG			

*:Maximum data x:Over limit !:over margin

File :AR5B95(Band Edge) Data :#5 Date: 2009/11/25 Time: 上午 04:08:34



Site: : 966 Chamber
Limit: FCC part 15 (PK)
EUT: 802.11N 1x1 PCe Minicard transceiver
M/N: AR5B95
Mode: drat 802.11n Wide-40MHz
Note: 2422MHz

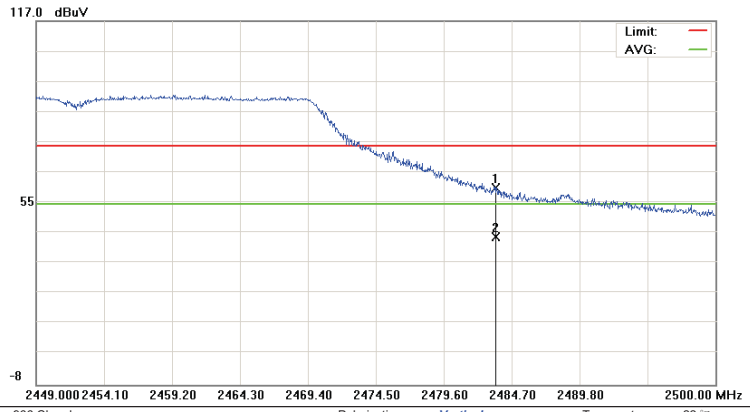
Polarization: *Horizontal*
Power:
Distance: 3m

Temperature: 22 ℃
Humidity: 60 %
RBW: 1000 KHz VBW: 1000 KHz

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		2389.800	62.11	0.16	62.27	74.00	-11.73	peak			
2	*	2389.800	45.73	0.16	45.89	54.00	-8.11	AVG			

*:Maximum data x:Over limit !:over margin

File :AR5B95(Band Edge) Data :#3 Date: 2009/11/25 Time: 上午 04:13:20



Site: : 966 Chamber
Limit: FCC part 15 (PK)
EUT: 802.11N 1x1 PCe Minicard transceiver
M/N: AR5B95
Mode: drat 802.11n Wide-40MHz
Note: 2452MHz

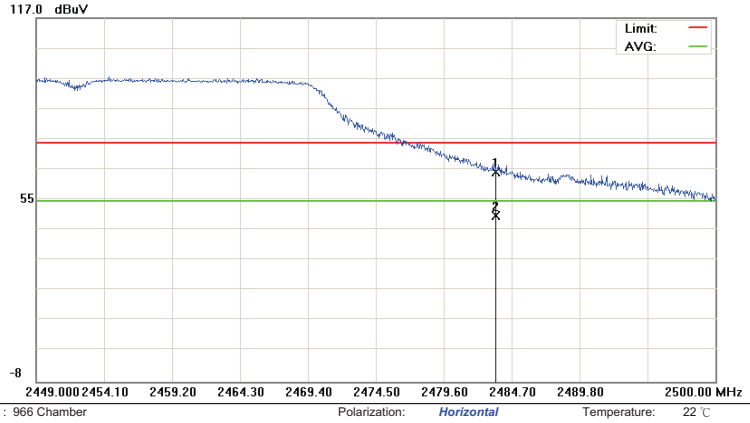
Polarization: *Vertical*
Power:
Distance: 3m

Temperature: 22 ℃
Humidity: 60 %
RBW: 1000 KHz VBW: 1000 KHz

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		2483.510	59.33	0.25	59.58	74.00	-14.42	peak			
2	*	2483.510	42.54	0.25	42.79	54.00	-11.21	AVG			

*:Maximum data x:Over limit !:over margin

File :AR5B95(Band Edge) Data :#7 Date: 2009/11/25 Time: 上午 04:18:30



Site: : 966 Chamber
Limit: FCC part 15 (PK)
EUT: 802.11N 1x1 PCe Minicard transceiver
M/N: AR5B95
Mode: drat 802.11n Wide-40MHz
Note: 2452MHz

Polarization: *Horizontal*
Power:
Distance: 3m

Temperature: 22 ℃
Humidity: 60 %
RBW: 1000 KHz VBW: 1000 KHz

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		2483.510	63.67	0.25	63.92	74.00	-10.08	peak			
2	*	2483.510	48.67	0.25	48.92	54.00	-5.08	AVG			

*:Maximum data x:Over limit !:over margin

EUT : 802.11N 1x1 PCIe Minicard transceiver

Model No. : AR5B95

Test Mode : draft 802.11n Wide-40MHz_2.4GHz Link Mode Low CH & High CH

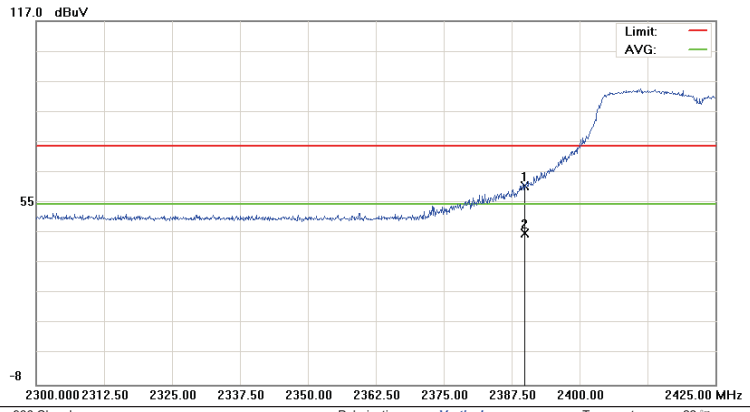
Test Date : 11/25/2009

Please refer to next page of detail testing data.

Notes:

1. Margin= Amplitude - Limits
2. Height of table for EUT placed: 0.8 Meter.
3. ANT= Antenna height.
4. Duty= Duty cycle correction factor.
5. Dis= Distance extrapolation factor.
6. Amplitude= Reading Amplitude – Amplifier gain + Cable loss + Antenna factor
   (Auto calculate in spectrum analyzer)
7. Actual Amp= Amplitude – Duty – Dis.

File :AR5B95(Band Edge) Data :#1 Date: 2009/11/25 Time: 上午 04:04:18



Site: : 966 Chamber
Limit: FCC part 15 (PK)
EUT: 802.11N 1x1 PCe Minicard transceiver
M/N: AR5B95
Mode: drat 802.11n Wide-40MHz
Note: 2422MHz

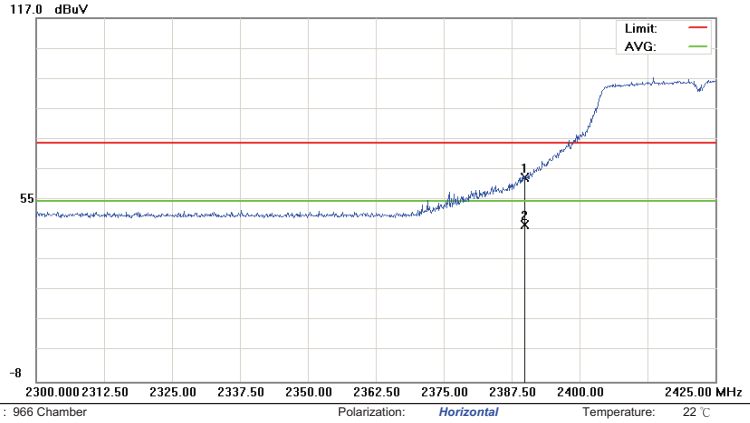
Polarization: *Vertical*
Power:
Distance: 3m

Temperature: 22 ℃
Humidity: 60 %
RBW: 1000 KHz VBW: 1000 KHz

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		2389.800	60.08	0.16	60.24	74.00	-13.76	peak			
2	*	2389.800	43.99	0.16	44.15	54.00	-9.85	AVG			

*:Maximum data x:Over limit !:over margin

File :AR5B95(Band Edge) Data :#5 Date: 2009/11/25 Time: 上午 04:08:34



Site: : 966 Chamber
Limit: FCC part 15 (PK)
EUT: 802.11N 1x1 PCe Minicard transceiver
M/N: AR5B95
Mode: drat 802.11n Wide-40MHz
Note: 2422MHz

Polarization: *Horizontal*
Power:
Distance: 3m

Temperature: 22 ℃
Humidity: 60 %
RBW: 1000 KHz VBW: 1000 KHz

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		2389.800	62.11	0.16	62.27	74.00	-11.73	peak			
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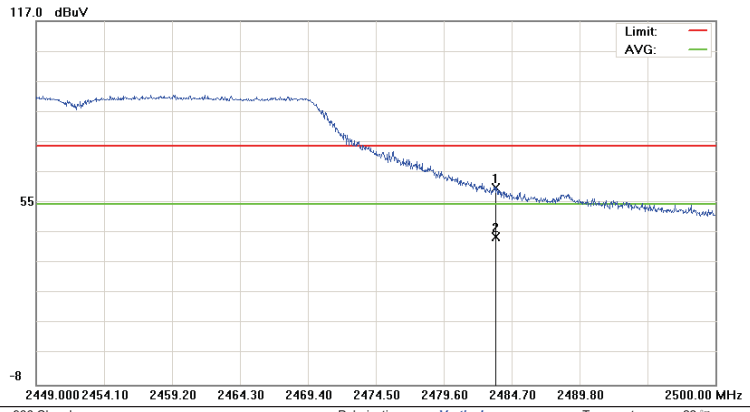
*:Maximum data x:Over limit !:over margin

File :AR5B95(Band Edge) Data :#3 Date: 2009/11/25 Time: 上午 04:13:20



Site: : 966 Chamber
Limit: FCC part 15 (PK)
EUT: 802.11N 1x1 PCe Minicard transceiver
M/N: AR5B95
Mode: drat 802.11n Wide-40MHz
Note: 2452MHz

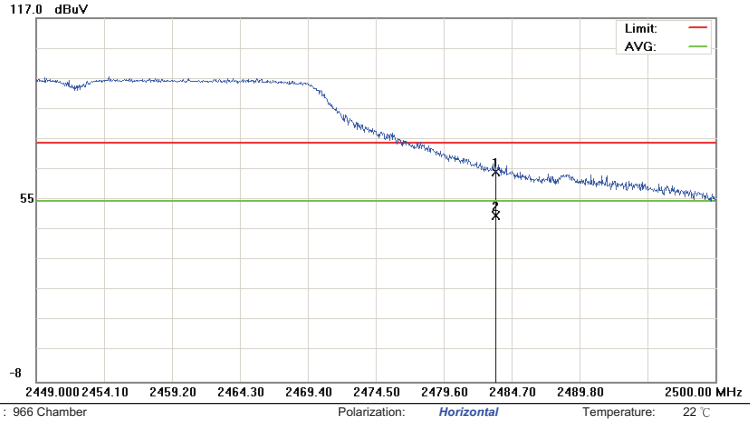
Polarization: *Vertical*
Power:
Distance: 3m

Temperature: 22 ℃
Humidity: 60 %
RBW: 1000 KHz VBW: 1000 KHz

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		2483.510	59.33	0.25	59.58	74.00	-14.42	peak			
2	*	2483.510	42.54	0.25	42.79	54.00	-11.21	AVG			

*:Maximum data x:Over limit !:over margin

File :AR5B95(Band Edge) Data :#7 Date: 2009/11/25 Time: 上午 04:18:30



Site: : 966 Chamber
Limit: FCC part 15 (PK)
EUT: 802.11N 1x1 PCe Minicard transceiver
M/N: AR5B95
Mode: drat 802.11n Wide-40MHz
Note: 2452MHz

Polarization: *Horizontal*
Power:
Distance: 3m

Temperature: 22 ℃
Humidity: 60 %
RBW: 1000 KHz VBW: 1000 KHz

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
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2	*	2483.510	48.67	0.25	48.92	54.00	-5.08	AVG			

*:Maximum data x:Over limit !:over margin

5. Antenna Requirements

5.1 Standard Applicable

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

5.2 Antenna Connector Construction

The antenna used in this product is **PIFA Antenna**. And the maximum Gain of this antenna is only **-1.77** dBi.