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.	：	**0910FR13**
Applicant	：	**Acer Incorporated**
Product Name	：	**WLAN Module**
Trade Name	：	**acer**
Model No.	：	**512AN_HMW**
FCC ID	：	**HLZ512ANH**
Dates of Test	：	**Oct. 13 ~ Oct. 30, 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 **20091031**
Approve Signer

John Cheng **20091031**
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 Name	:	**WLAN Module**
Applicant	:	**Acer Incorporated**
Applicant Address	:	**8F, 88, Sec.1, Hsin Tai Wu Rd. Hsichih, Taipei Hsien 221 Taiwan, R.O.C.**
Manufacturer	:	**Quanta Computer Inc.**
Manufacturer Address	:	**No.211, Wen Hwa 2nd Rd., Kuei Shan Hsiang, Tao Yuan Shien, Taiwan, R.O.C**
Trade Name	:	**acer**
Model No.	:	**512AN_HMW**
FCC ID	:	**HLZ512ANH**
Host Laptop PC		**Brade Name: acer ,Gateway, Packard Bell** **Model Name: ZE8**
Test Rated Voltage	:	**120Vac, 60Hz**
EUT Voltage	:	**100-240Vac, 50/60Hz**
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 2009/10/31**

Prepared by : John Cheng **John Cheng 2009/10/31**

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	:	Acer Incorporated
Applicant Address	:	8F, 88, Sec.1, Hsin Tai Wu Rd. Hsichih, Taipei Hsien 221 Taiwan, R.O.C
Manufacturer	:	Quanta Computer Inc.
Manufacturer Address	:	No.211, Wen Hwa 2nd Rd., Kuei Shan Hsiang, Tao Yuan Shien, Taiwan, R.O.C.
Product Name	:	WLAN Module
Trade Name	:	acer
Model No.	:	512AN_HMW
Frequency Range	:	IEEE 802.11b / IEEE 802.11g: 2412MHz~2462MHz draft 802.11n Standard-20MHz: 2412MHz~2462MHz draft 802.11n Wide-40MHz: 2422MHz~2452MHz IEEE 802.11a : 5745MHz~5825MHz draft 802.11n Standard-20MHz: 5745MHz~5825MHz draft 802.11n Wide-40MHz: 5755MHz~5795MHz
Type of Modulation	:	IEEE 802.11b:DSSS(CCK, DQPSK, DBPSK) IEEE 802.11g:DSSS(CCK, DQPSK, DBPSK)+ OFDM(QPSK, BPSK, 16-QAM, 64-QAM) IEEE 802.11a mode: 54, 48, 36, 24, 18, 12, 9, 6 Mbps 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 Cable in: Non-Shielded, 1.46 m Cable out: Non-Shielded, 1.78 m

1.2 Configuration of System under Test

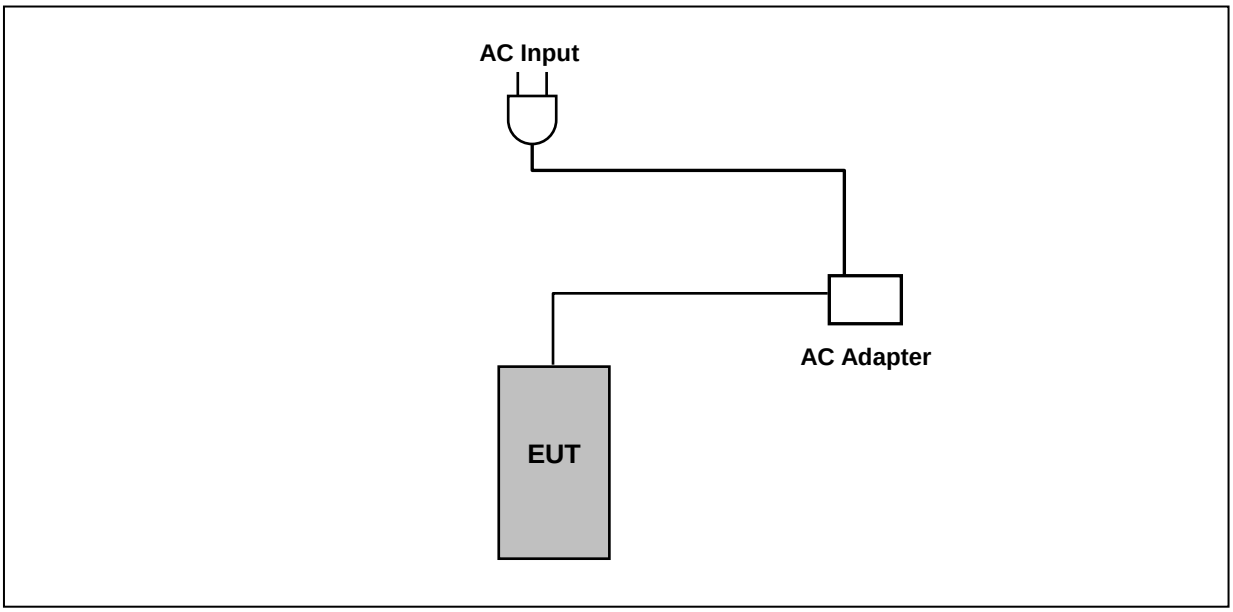


Figure 1. Configuration of System Under Test

During testing (LINK) the EUT'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.

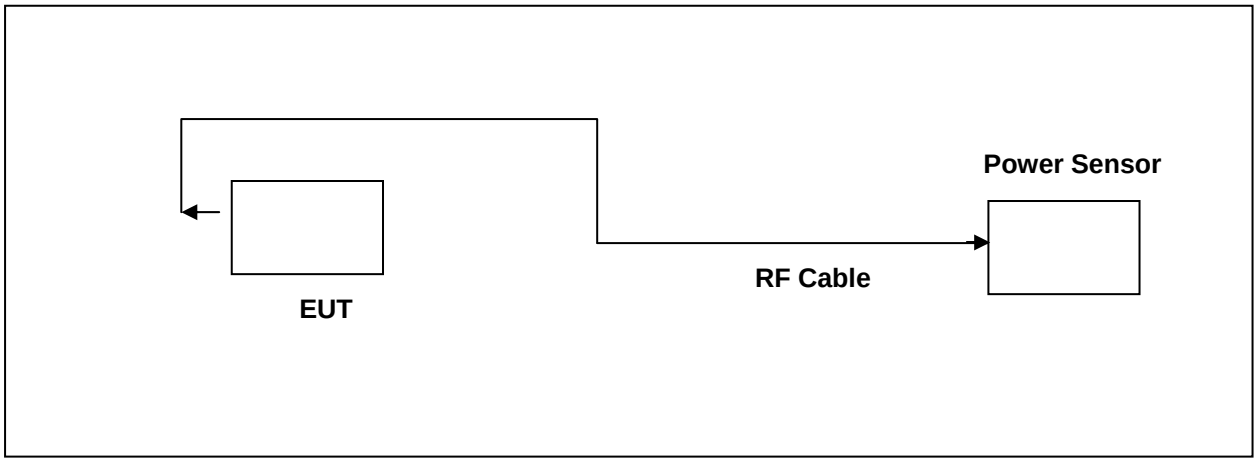
2.2 Limits

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

Frequency (MHz)	Average	
	dBm	W
2412	16.79	0.048
2437	18.20	0.066
2462	16.75	0.047

IEEE 802.11g_2.4GHz

Frequency (MHz)	Average	
	dBm	W
2412	13.94	0.025
2437	17.93	0.062
2462	15.51	0.036

draft 802.11n Standard-20MHz_2.4GHz

Frequency (MHz)	Average	
	dBm	W
2412	14.26	0.027
2437	16.52	0.045
2462	14.38	0.027

draft 802.11n Wide-40MHz_2.4GHz

Frequency (MHz)	Average	
	dBm	W
2422	8.91	0.008
2437	16.70	0.047
2452	9.96	0.010

Note: 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: PD9512ANH) with a power meter.

IEEE 802.11a_5GHz

Frequency (MHz)	Average	
	dBm	W
5745	17.58	0.057
5785	17.82	0.061
5825	17.33	0.054

draft 802.11n Standard-20MHz_5GHz

Frequency (MHz)	Average	
	dBm	W
5745	16.51	0.045
5785	16.52	0.045
5825	16.53	0.045

draft 802.11n Wide-40MHz_5GHz

Frequency (MHz)	Average	
	dBm	W
5755	16.54	0.045
5795	16.66	0.046

Note: 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: PD9512ANH) 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)	Measure-ment dis-tance (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

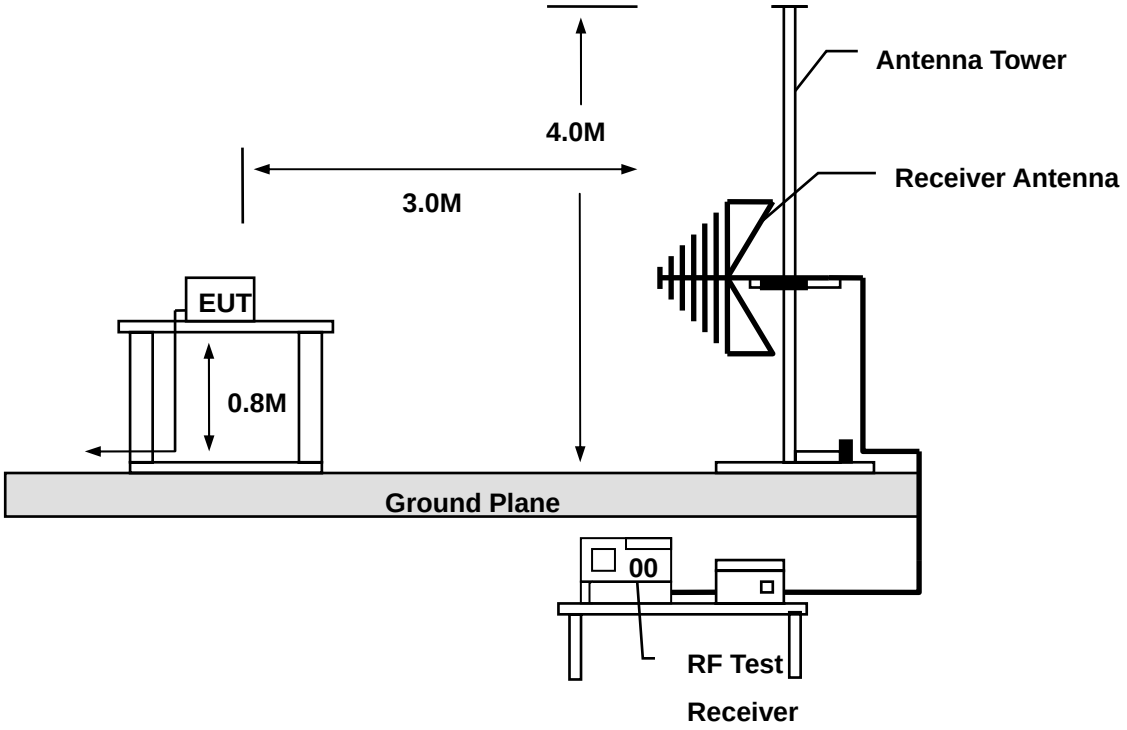
**Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this section shall not be located in the frequency bands 54–72 MHz, 76– 88 MHz, 174–216 MHz or 470–806 MHz. However, operation within these frequency bands is permitted under other sections of this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

3.3 Test Equipment List

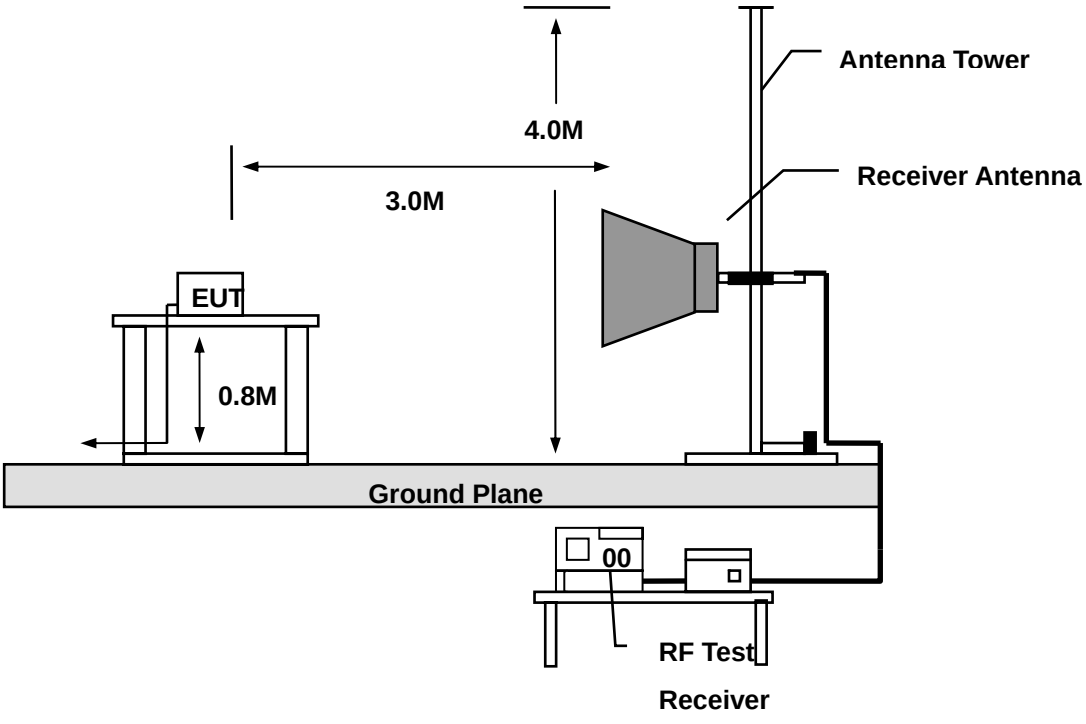
Describe	Manufacturer	Model	Serial Number	Calibration	
				Cal. Date	Due Date
Spectrum Analyzer	Agilent	E4408B	MY46181421	Mar. 13, 2009	Mar. 13, 2010
Spectrum Analyzer	Agilent	E4408A	MY46180578	Jan. 20, 2009	Jan. 20, 2010
Pre Amplifier	Agilent	8449B	3008A02457	Mar. 04, 2009	Mar. 04, 2010
Pre Amplifier	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

EUT : Notebook

Model No. : ZE8

Test Mode : Normal operation

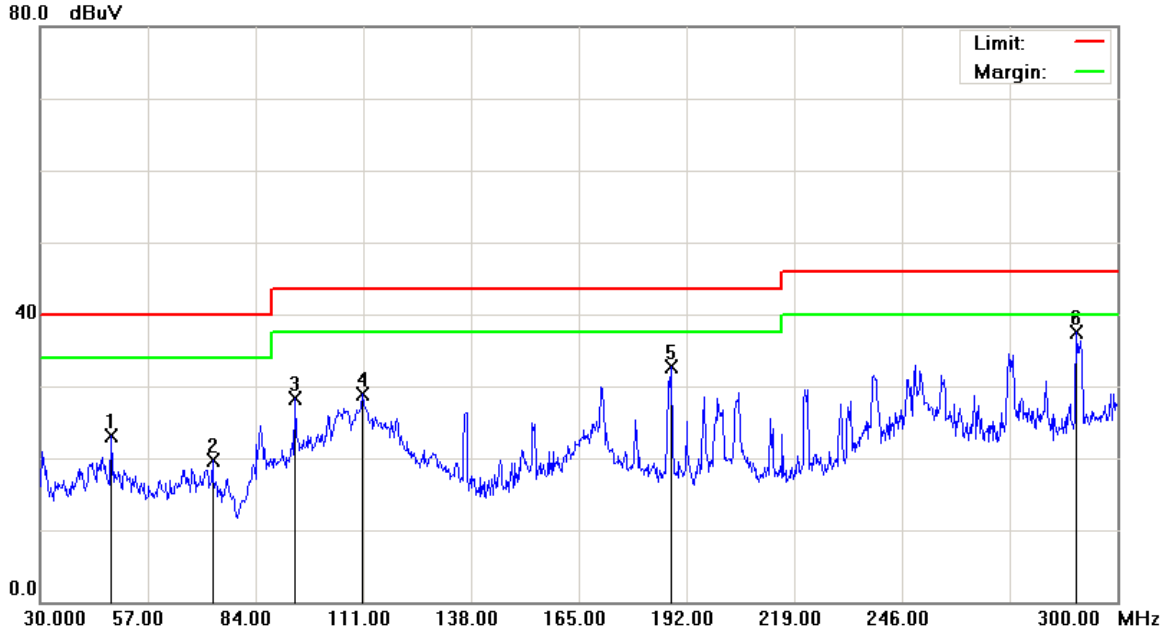
Test Date : 10/15/2009

Please refer to next page of detail testing data.

Notes:

1. Margin= Amplitude - Limits
2. Distance of Measurement: 3 Meter (30MHz-40GHz)
3. Height of table for EUT placed: 0.8 Meter.
4. ANT= Antenna height.
5. Amplitude= Reading Amplitude – Amplifier gain + Cable loss + Antenna factor
   (Auto calculate in spectrum analyzer)
6. All frequencies from 30MHz to 40GHz have been tested

File :ZE8(WIFI) Data :#1 Date: 2009/10/15 Time: 上午 09:49:48



Site: site #1
Limit: FCC Class B 3M Radiation
EUT:
M/N: 09-0255-SEO
Mode: Normal operation
Note:

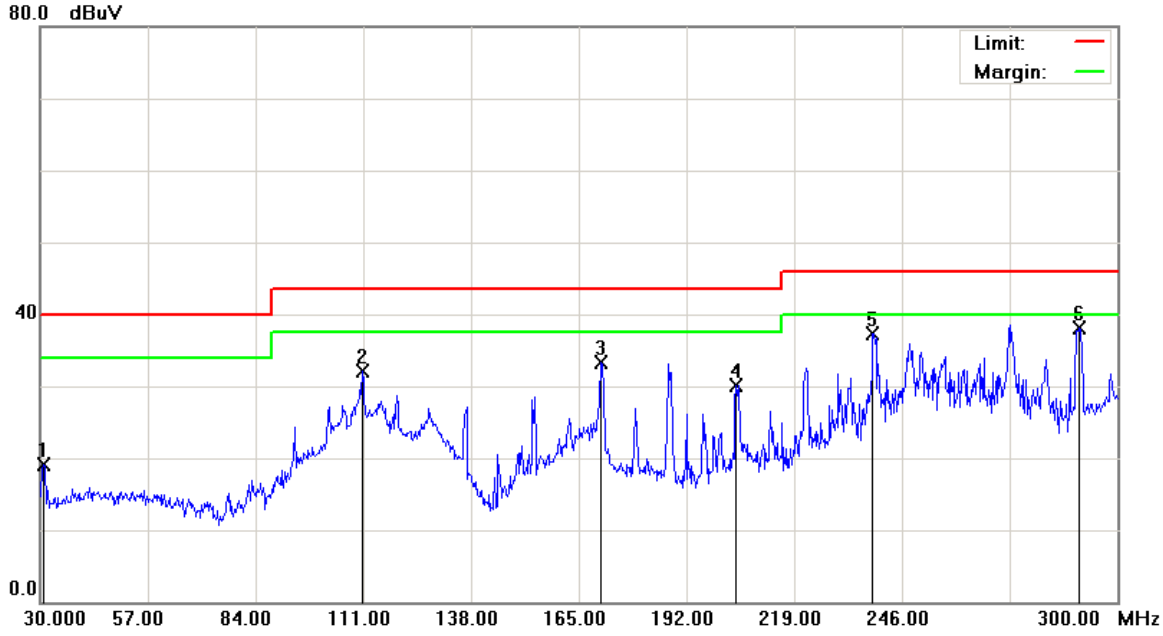
Polarization: ***Vertical***
Power:
Distance: 3m

Temperature: 22 ℃
Humidity: 60 %
RBW: 120 KHz VBW: 100 KH

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1		47.8200	35.19	-12.02	23.17	40.00	-16.83	peak			
2		73.2000	36.63	-16.95	19.68	40.00	-20.32	peak			
3		93.9900	40.49	-12.27	28.22	43.50	-15.28	peak			
4		110.7300	41.48	-12.63	28.85	43.50	-14.65	peak			
5		188.2200	46.19	-13.53	32.66	43.50	-10.84	peak			
6	*	289.7400	47.62	-10.03	37.59	46.00	-8.41	peak			

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

File :ZE8(WIFI) Data :#3 Date: 2009/10/15 Time: 上午 09:57:14



Site: site #1
Limit: FCC Class B 3M Radiation
EUT:
M/N: 09-0255-SEO
Mode: Normal operation
Note:

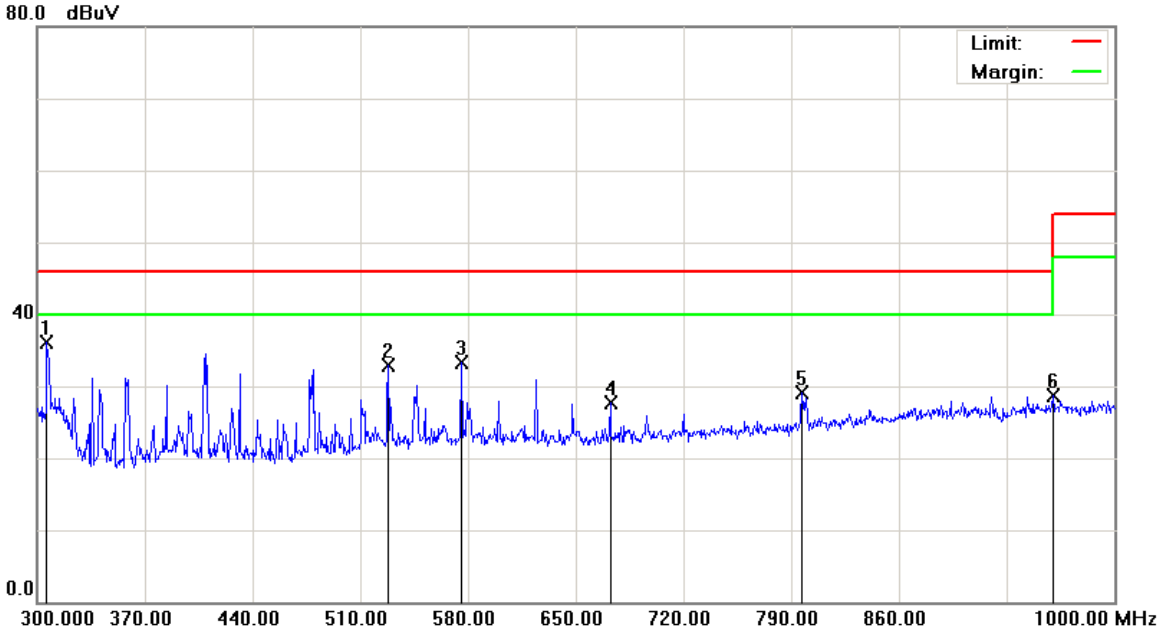
Polarization: ***Horizontal***
Power:
Distance: 3m

Temperature: 22 ℃
Humidity: 60 %
RBW: 120 KHz VBW: 300 KH

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1		30.8100	32.37	-13.30	19.07	40.00	-20.93	peak			
2		110.7300	44.78	-12.63	32.15	43.50	-11.35	peak			
3		170.4000	48.74	-15.36	33.38	43.50	-10.12	peak			
4		204.4200	43.16	-13.07	30.09	43.50	-13.41	peak			
5		238.7100	48.84	-11.51	37.33	46.00	-8.67	peak			
6	*	290.5500	48.11	-10.03	38.08	46.00	-7.92	peak			

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

File :ZE8(WIFI) Data :#2 Date: 2009/10/15 Time: 上午 09:54:01



Site: site #1
Limit: FCC Class B 3M Radiation
EUT:
M/N: 09-0255-SEO
Mode: Normal operation
Note:

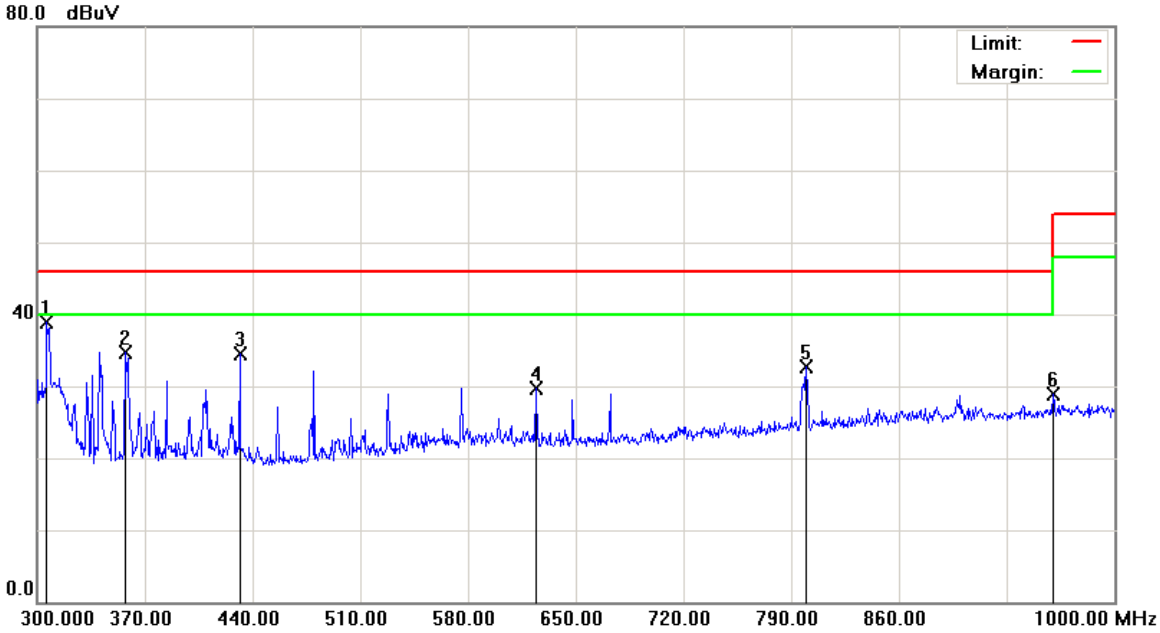
Polarization: ***Vertical***
Power:
Distance: 3m

Temperature: 22 ℃
Humidity: 60 %
RBW: 120 KHz VBW: 100 KH

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1	*	306.3000	46.08	-10.05	36.03	46.00	-9.97	peak			
2		528.2000	39.27	-6.34	32.93	46.00	-13.07	peak			
3		575.8000	38.63	-5.34	33.29	46.00	-12.71	peak			
4		672.4000	31.90	-4.28	27.62	46.00	-18.38	peak			
5		797.0000	31.50	-2.34	29.16	46.00	-16.84	peak			
6		960.1000	28.29	0.43	28.72	54.00	-25.28	peak			

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

File :ZE8(WIFI) Data :#4 Date: 2009/10/15 Time: 上午 10:00:00



Site: site #1
Limit: FCC Class B 3M Radiation
EUT:
M/N: 09-0255-SEO
Mode: Normal operation
Note:

Polarization: ***Horizontal***
Power:
Distance: 3m

Temperature: 22 ℃
Humidity: 60 %
RBW: 120 KHz VBW: 300 KH

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1	*	306.3000	48.87	-10.05	38.82	46.00	-7.18	peak			
2		357.4000	43.59	-8.90	34.69	46.00	-11.31	peak			
3		431.6000	42.53	-8.03	34.50	46.00	-11.50	peak			
4		624.1000	34.38	-4.60	29.78	46.00	-16.22	peak			
5		799.8000	35.12	-2.32	32.80	46.00	-13.20	peak			
6		960.1000	28.54	0.43	28.97	54.00	-25.03	peak			

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

3.5.2 Abobe 1GHz

Test Mode:	RX Mode
Model No:	ZE8
Test Date:	10/30/2009
Tested by:	John Cheng

Freq	Polarization (V/H)	Rd_level(dBuV)	Factor	Level(dBuV)	Limit(dBuV)	Over	detector
2005.30	H	46.77	-1.77	45.00	74.00	-29.00	peak
2700.00	H	39.98	22.58	62.56	74.00	-11.44	peak
2700.00	H	21.40	22.58	43.98	54.00	-10.02	AVG
9310.00	H	39.69	16.89	56.58	74.00	-17.42	peak
9310.00	H	27.66	16.89	44.55	54.00	-9.45	AVG
14252.00	H	29.41	28.25	57.66	74.00	-16.34	peak
14252.00	H	17.94	28.25	46.19	54.00	-7.81	AVG
18000.00	H	28.23	35.11	63.34	74.00	-10.66	peak
18000.00	H	7.47	35.11	42.58	54.00	-11.42	AVG
18322.25	H	38.12	23.19	61.31	74.00	-12.69	peak
18322.25	H	20.64	23.19	43.83	54.00	-10.17	AVG
21904.00	H	38.01	21.18	59.19	74.00	-14.81	peak
21904.00	H	20.45	21.18	41.63	54.00	-12.37	AVG
25617.75	H	39.90	18.90	58.80	74.00	-15.20	peak
25617.75	H	21.33	18.90	40.23	54.00	-13.77	AVG
1996.65	V	51.01	-1.60	49.41	74.00	-24.59	peak
2700.00	V	40.28	22.58	62.86	74.00	-11.14	peak
2700.00	V	21.34	22.58	43.92	54.00	-10.08	AVG
3190.25	V	51.90	2.68	54.58	74.00	-19.42	peak
3190.25	V	30.40	2.68	33.08	54.00	-20.92	AVG
9919.00	V	38.05	17.78	55.83	74.00	-18.17	peak
9919.00	V	27.72	17.78	45.50	54.00	-8.50	AVG
14195.00	V	28.65	28.40	57.05	74.00	-16.95	peak
14195.00	V	18.28	28.40	46.68	54.00	-7.32	AVG
18000.00	V	28.25	35.11	63.36	74.00	-10.64	peak
18000.00	V	7.48	35.11	42.59	54.00	-11.41	AVG
18859.25	V	37.21	23.15	60.36	74.00	-13.64	peak
18859.25	V	17.92	23.15	41.07	54.00	-12.93	AVG
21905.00	V	36.90	21.16	58.06	74.00	-15.94	peak
21905.00	V	18.87	21.16	40.03	54.00	-13.97	AVG
25730.00	V	39.84	18.79	58.63	74.00	-15.37	peak
25730.00	V	20.33	18.79	39.12	54.00	-14.88	AVG

Test Mode:	IEEE 802.11b _ TX Mode _ CH2412
Model No:	ZE8
Test Date:	10/30/2009
Tested by:	John Cheng

Freq	Polarization (V/H)	Rd_level(dBuV)	Factor	Level(dBuV)	Limit(dBuV)	Over	detector
2487.15	H	62.55	0.26	62.81	74.00	-11.19	peak
2487.15	H	46.24	0.26	46.50	54.00	-7.50	AVG
2700.00	H	41.76	22.58	64.34	74.00	-9.66	peak
2700.00	H	21.32	22.58	43.90	54.00	-10.10	AVG
4824.00	H	38.94	7.48	46.42	74.00	-27.58	peak
9369.00	H	40.42	17.03	57.45	74.00	-16.55	peak
9369.00	H	27.84	17.03	44.87	54.00	-9.13	AVG
14055.00	H	38.36	18.90	57.26	74.00	-16.74	peak
14055.00	H	27.36	18.90	46.26	54.00	-7.74	AVG
17965.00	H	38.61	25.21	63.82	74.00	-10.18	peak
17965.00	H	18.37	25.21	43.58	54.00	-10.42	AVG
18285.00	H	39.08	23.20	62.28	74.00	-11.72	peak
18285.00	H	21.22	23.20	44.42	54.00	-9.58	AVG
21730.00	H	38.65	21.27	59.92	74.00	-14.08	peak
21730.00	H	20.17	21.27	41.44	54.00	-12.56	AVG
24529.75	H	40.88	19.65	60.53	74.00	-13.47	peak
24529.75	H	20.86	19.65	40.51	54.00	-13.49	AVG
2493.30	V	58.07	0.26	58.33	74.00	-15.67	peak
2493.30	V	46.20	0.26	46.46	54.00	-7.54	AVG
2700.00	V	41.73	22.58	64.31	74.00	-9.69	peak
2700.00	V	21.20	22.58	43.78	54.00	-10.22	AVG
3189.25	V	50.08	2.68	52.76	74.00	-21.24	peak
3189.25	V	30.37	2.68	33.05	54.00	-20.95	AVG
4824.00	V	37.85	7.48	45.33	74.00	-28.67	peak
9742.25	V	38.65	17.69	56.34	74.00	-17.66	peak
9742.25	V	27.37	17.69	45.06	54.00	-8.94	AVG
14405.00	V	38.18	18.00	56.18	74.00	-17.82	peak
14405.00	V	27.11	18.00	45.11	54.00	-8.89	AVG
18000.00	V	36.98	25.57	62.55	74.00	-11.45	peak
18000.00	V	17.23	25.57	42.80	54.00	-11.20	AVG
18805.00	V	37.50	23.16	60.66	74.00	-13.34	peak
18805.00	V	19.13	23.16	42.29	54.00	-11.71	AVG
21715.25	V	37.58	21.23	58.81	74.00	-15.19	peak
21715.25	V	19.52	21.23	40.75	54.00	-13.25	AVG
25436.25	V	40.15	19.02	59.17	74.00	-14.83	peak
25436.25	V	21.19	19.02	40.21	54.00	-13.79	AVG

Test Mode:	IEEE 802.11b _ TX Mode _ CH2437
Model No:	ZE8
Test Date:	10/30/2009
Tested by:	John Cheng

Freq	Polarization (V/H)	Rd_level(dBuV)	Factor	Level(dBuV)	Limit(dBuV)	Over	detector
1999.10	V	53.65	-1.60	52.05	74.00	-21.95	peak
2501.60	V	59.49	0.25	59.74	74.00	-14.26	peak
2501.60	V	41.59	0.25	41.84	54.00	-12.16	AVG
2700.00	V	42.00	22.58	64.58	74.00	-9.42	peak
2700.00	V	21.53	22.58	44.11	54.00	-9.89	AVG
3195.15	V	50.07	2.68	52.75	74.00	-21.25	peak
3195.15	V	30.54	2.68	33.22	54.00	-20.78	AVG
4874.00	V	38.62	7.72	46.34	74.00	-27.66	peak
9344.80	V	40.02	16.93	56.95	74.00	-17.05	peak
9344.80	V	27.70	16.93	44.63	54.00	-9.37	AVG
14205.00	V	39.27	18.86	58.13	74.00	-15.87	peak
14205.00	V	27.69	18.86	46.55	54.00	-7.45	AVG
17950.00	V	38.48	24.71	63.19	74.00	-10.81	peak
17950.00	V	17.66	24.71	42.37	54.00	-11.63	AVG
18746.00	V	38.45	23.13	61.58	74.00	-12.42	peak
18746.00	V	19.45	23.13	42.58	54.00	-11.42	AVG
21552.00	V	38.26	21.33	59.59	74.00	-14.41	peak
21552.00	V	19.73	21.33	41.06	54.00	-12.94	AVG
23739.75	V	39.38	20.30	59.68	74.00	-14.32	peak
23739.75	V	20.11	20.30	40.41	54.00	-13.59	AVG
2223.50	H	48.55	0.36	48.91	74.00	-25.09	peak
2700.00	H	42.53	22.58	65.11	74.00	-8.89	peak
2700.00	H	21.20	22.58	43.78	54.00	-10.22	AVG
4874.00	H	38.82	7.72	46.54	74.00	-27.46	peak
9984.00	H	38.31	17.88	56.19	74.00	-17.81	peak
9984.00	H	27.72	17.88	45.60	54.00	-8.40	AVG
14145.00	H	38.30	18.84	57.14	74.00	-16.86	peak
14145.00	H	27.28	18.84	46.12	54.00	-7.88	AVG
17964.00	H	38.13	24.84	62.97	74.00	-11.03	peak
17964.00	H	17.49	24.84	42.33	54.00	-11.67	AVG
18151.25	H	38.28	23.22	61.50	74.00	-12.50	peak
18151.25	H	21.11	23.22	44.33	54.00	-9.67	AVG
21870.75	H	39.20	21.19	60.39	74.00	-13.61	peak
21870.75	H	20.16	21.19	41.35	54.00	-12.65	AVG
25992.00	H	41.15	18.56	59.71	74.00	-14.29	peak
25992.00	H	21.88	18.56	40.44	54.00	-13.56	AVG

Test Mode:	IEEE 802.11b _ TX Mode _ CH2462
Model No:	ZE8
Test Date:	10/30/2009
Tested by:	John Cheng

Freq	Polarization (V/H)	Rd_level(dBuV)	Factor	Level(dBuV)	Limit(dBuV)	Over	detector
1997.40	V	51.66	-1.66	50.00	74.00	-24.00	peak
2700.00	V	41.78	22.58	64.36	74.00	-9.64	peak
2700.00	V	21.36	22.58	43.94	54.00	-10.06	AVG
4924.00	V	38.50	7.65	46.15	74.00	-27.85	peak
9363.50	V	39.67	16.98	56.65	74.00	-17.35	peak
9363.50	V	27.21	16.98	44.19	54.00	-9.81	AVG
13965.00	V	38.29	18.57	56.86	74.00	-17.14	peak
13965.00	V	27.74	18.57	46.31	54.00	-7.69	AVG
18004.00	V	38.39	25.57	63.96	74.00	-10.04	peak
18004.00	V	17.12	25.57	42.69	54.00	-11.31	AVG
18193.75	V	38.37	23.22	61.59	74.00	-12.41	peak
18193.75	V	20.85	23.22	44.07	54.00	-9.93	AVG
21870.75	V	38.11	21.19	59.30	74.00	-14.70	peak
21870.75	V	20.18	21.19	41.37	54.00	-12.63	AVG
25864.50	V	41.31	18.67	59.98	74.00	-14.02	peak
25864.50	V	21.69	18.67	40.36	54.00	-13.64	AVG
2281.30	H	49.28	0.46	49.74	74.00	-24.26	peak
2700.00	H	41.81	22.58	64.39	74.00	-9.61	peak
2700.00	H	21.53	22.58	44.11	54.00	-9.89	AVG
4924.00	H	39.20	7.65	46.85	74.00	-27.15	peak
10002.25	H	38.52	17.94	56.46	74.00	-17.54	peak
10002.25	H	27.24	17.94	45.18	54.00	-8.82	AVG
14245.00	H	38.59	18.71	57.30	74.00	-16.70	peak
14245.00	H	27.40	18.71	46.11	54.00	-7.89	AVG
17924.00	H	38.23	24.84	63.07	74.00	-10.93	peak
17924.00	H	17.54	24.84	42.38	54.00	-11.62	AVG
18852.50	H	38.97	23.15	62.12	74.00	-11.88	peak
18852.50	H	19.60	23.15	42.75	54.00	-11.25	AVG
21552.00	H	38.26	21.33	59.59	74.00	-14.41	peak
21552.00	H	19.85	21.33	41.18	54.00	-12.82	AVG
24419.50	H	40.20	19.71	59.91	74.00	-14.09	peak
24419.50	H	21.17	19.71	40.88	54.00	-13.12	AVG

Test Mode:	IEEE 802.11g _ TX Mode _ CH2412
Model No:	ZE8
Test Date:	10/30/2009
Tested by:	John Cheng

Freq	Polarization (V/H)	Rd_level(dBuV)	Factor	Level(dBuV)	Limit(dBuV)	Over	detector
1998.70	V	50.15	-1.66	48.49	74.00	-25.51	peak
2498.20	V	56.59	0.25	56.84	74.00	-17.16	peak
2498.20	V	42.41	0.25	42.66	54.00	-11.34	AVG
2700.00	V	40.83	22.58	63.41	74.00	-10.59	peak
2700.00	V	21.02	22.58	43.60	54.00	-10.40	AVG
3197.25	V	48.67	2.68	51.35	74.00	-22.65	peak
3197.25	V	30.23	2.68	32.91	54.00	-21.09	AVG
4924.00	V	37.38	7.65	45.03	74.00	-28.97	peak
9731.25	V	37.89	17.60	55.49	74.00	-18.51	peak
9731.25	V	26.95	17.60	44.55	54.00	-9.45	AVG
14128.00	V	36.75	18.87	55.62	74.00	-18.38	peak
14128.00	V	27.03	18.87	45.90	54.00	-8.10	AVG
17930.00	V	37.80	24.84	62.64	74.00	-11.36	peak
17930.00	V	17.44	24.84	42.28	54.00	-11.72	AVG
18564.50	V	37.74	23.08	60.82	74.00	-13.18	peak
18564.50	V	18.97	23.08	42.05	54.00	-11.95	AVG
21603.75	V	37.23	21.33	58.56	74.00	-15.44	peak
21603.75	V	19.45	21.33	40.78	54.00	-13.22	AVG
23652.25	V	38.33	20.42	58.75	74.00	-15.25	peak
23652.25	V	19.78	20.42	40.20	54.00	-13.80	AVG
1999.50	H	44.19	-1.71	42.48	74.00	-31.52	peak
2495.30	H	57.48	0.26	57.74	74.00	-16.26	peak
2495.30	H	44.45	0.26	44.71	54.00	-9.29	AVG
2700.00	H	39.29	22.58	61.87	74.00	-12.13	peak
2700.00	H	20.53	22.58	43.11	54.00	-10.89	AVG
4924.00	H	36.78	7.65	44.43	74.00	-29.57	peak
9316.50	H	37.13	16.89	54.02	74.00	-19.98	peak
9316.50	H	26.82	16.89	43.71	54.00	-10.29	AVG
14276.00	H	36.21	18.66	54.87	74.00	-19.13	peak
14276.00	H	27.05	18.66	45.71	54.00	-8.29	AVG
18000.00	H	37.10	25.21	62.31	74.00	-11.69	peak
18000.00	H	17.28	25.21	42.49	54.00	-11.51	AVG
18746.50	H	37.59	23.12	60.71	74.00	-13.29	peak
18746.50	H	19.54	23.12	42.66	54.00	-11.34	AVG
21977.50	H	35.86	21.19	57.05	74.00	-16.95	peak
21977.50	H	19.91	21.19	41.10	54.00	-12.90	AVG
25862.00	H	38.81	18.71	57.52	74.00	-16.48	peak
25862.00	H	21.69	18.71	40.40	54.00	-13.60	AVG

Test Mode:	IEEE 802.11g _ TX Mode _ CH2437
Model No:	ZE8
Test Date:	10/30/2009
Tested by:	John Cheng

Freq	Polarization (V/H)	Rd_level(dBuV)	Factor	Level(dBuV)	Limit(dBuV)	Over	detector
1992.00	V	51.19	-1.71	49.48	74.00	-24.52	peak
2488.70	V	56.71	0.26	56.97	74.00	-17.03	peak
2488.70	V	42.72	0.26	42.98	54.00	-11.02	AVG
2700.00	V	40.61	22.58	63.19	74.00	-10.81	peak
2700.00	V	20.92	22.58	43.50	54.00	-10.50	AVG
3188.25	V	46.72	2.68	49.40	74.00	-24.60	peak
3188.25	V	30.29	2.68	32.97	54.00	-21.03	AVG
4874.00	V	37.16	7.72	44.88	74.00	-29.12	peak
9776.00	V	37.85	17.69	55.54	74.00	-18.46	peak
9776.00	V	27.52	17.69	45.21	54.00	-8.79	AVG
14052.00	V	36.98	18.72	55.70	74.00	-18.30	peak
14052.00	V	27.12	18.72	45.84	54.00	-8.16	AVG
17990.00	V	37.49	25.57	63.06	74.00	-10.94	peak
17990.00	V	17.14	25.57	42.71	54.00	-11.29	AVG
18923.00	V	37.66	23.13	60.79	74.00	-13.21	peak
18923.00	V	18.78	23.13	41.91	54.00	-12.09	AVG
21812.50	V	37.30	21.19	58.49	74.00	-15.51	peak
21812.50	V	19.91	21.19	41.10	54.00	-12.90	AVG
24545.25	V	38.85	19.63	58.48	74.00	-15.52	peak
24545.25	V	20.13	19.63	39.76	54.00	-14.24	AVG
1248.70	H	54.45	-4.24	50.21	74.00	-23.79	peak
1248.70	H	34.57	-4.24	30.33	54.00	-23.67	AVG
2497.70	H	60.49	0.25	60.74	74.00	-13.26	peak
2497.70	H	44.83	0.25	45.08	54.00	-8.92	AVG
2704.50	H	39.81	22.58	62.39	74.00	-11.61	peak
2704.50	H	20.93	22.58	43.51	54.00	-10.49	AVG
4874.00	H	37.17	7.72	44.89	74.00	-29.11	peak
9603.50	H	37.59	17.41	55.00	74.00	-19.00	peak
9603.50	H	27.62	17.41	45.03	54.00	-8.97	AVG
14108.00	H	36.93	18.90	55.83	74.00	-18.17	peak
14108.00	H	27.02	18.90	45.92	54.00	-8.08	AVG
18010.00	H	37.12	25.57	62.69	74.00	-11.31	peak
18010.00	H	17.17	25.57	42.74	54.00	-11.26	AVG
19180.75	H	37.94	22.95	60.89	74.00	-13.11	peak
19180.75	H	19.32	22.95	42.27	54.00	-11.73	AVG
21901.25	H	37.27	21.20	58.47	74.00	-15.53	peak
21901.25	H	19.99	21.20	41.19	54.00	-12.81	AVG
26011.00	H	39.51	18.56	58.07	74.00	-15.93	peak
26011.00	H	21.58	18.56	40.14	54.00	-13.86	AVG

Test Mode:	IEEE 802.11g _ TX Mode _ CH2462
Model No:	ZE8
Test Date:	10/30/2009
Tested by:	John Cheng

Freq	Polarization (V/H)	Rd_level(dBuV)	Factor	Level(dBuV)	Limit(dBuV)	Over	detector
1993.30	V	51.84	-1.84	50.00	74.00	-24.00	peak
1993.30	V	35.02	-1.84	33.18	54.00	-20.82	AVG
2700.00	V	40.14	22.58	62.72	74.00	-11.28	peak
2700.00	V	20.84	22.58	43.42	54.00	-10.58	AVG
3197.25	V	49.53	2.68	52.21	74.00	-21.79	peak
3197.25	V	30.44	2.68	33.12	54.00	-20.88	AVG
4924.00	V	37.16	7.65	44.81	74.00	-29.19	peak
9786.00	V	37.32	17.69	55.01	74.00	-18.99	peak
9786.00	V	27.57	17.69	45.26	54.00	-8.74	AVG
14148.00	V	37.44	18.84	56.28	74.00	-17.72	peak
14148.00	V	27.11	18.84	45.95	74.00	-28.05	peak
17990.00	V	37.45	25.21	62.66	74.00	-11.34	peak
17990.00	V	17.41	25.21	42.62	74.00	-31.38	peak
19180.75	V	37.93	22.95	60.88	74.00	-13.12	peak
19180.75	V	19.05	22.95	42.00	54.00	-12.00	AVG
22135.00	V	37.51	21.07	58.58	74.00	-15.42	peak
22135.00	V	19.25	21.07	40.32	54.00	-13.68	AVG
26138.50	V	39.39	18.47	57.86	74.00	-16.14	peak
26138.50	V	21.07	18.47	39.54	54.00	-14.46	AVG
2300.00	H	47.23	0.52	47.75	74.00	-26.25	peak
2700.00	H	39.73	22.58	62.31	74.00	-11.69	peak
2700.00	H	20.82	22.58	43.40	54.00	-10.60	AVG
4924.00	H	37.65	7.65	45.30	74.00	-28.70	peak
9721.25	H	38.00	17.60	55.60	74.00	-18.40	peak
9721.25	H	27.64	17.60	45.24	54.00	-8.76	AVG
14292.00	H	37.23	18.61	55.84	74.00	-18.16	peak
14292.00	H	27.19	18.61	45.80	54.00	-8.20	AVG
17970.00	H	37.27	25.21	62.48	74.00	-11.52	peak
17970.00	H	17.34	25.21	42.55	54.00	-11.45	AVG
18285.50	H	38.19	23.20	61.39	74.00	-12.61	peak
18285.50	H	20.19	23.20	43.39	54.00	-10.61	AVG
21727.50	H	36.96	21.22	58.18	74.00	-15.82	peak
21727.50	H	19.28	21.22	40.50	54.00	-13.50	AVG
24460.25	H	38.35	19.67	58.02	74.00	-15.98	peak
24460.25	H	20.46	19.67	40.13	54.00	-13.87	AVG

Test Mode:	draft 802.11n Standard-20MHz _ TX Mode _ CH2412
Model No:	ZE8
Test Date:	10/30/2009
Tested by:	John Cheng

Freq	Polarization (V/H)	Rd_level(dBuV)	Factor	Level(dBuV)	Limit(dBuV)	Over	detector
1988.90	V	51.68	-1.84	49.84	74.00	-24.16	peak
1988.90	V	35.05	-1.84	33.21	54.00	-20.79	AVG
2493.80	V	56.40	0.25	56.65	74.00	-17.35	peak
2493.80	V	42.36	0.25	42.61	54.00	-11.39	AVG
2700.00	V	39.86	22.58	62.44	74.00	-11.56	peak
2700.00	V	20.94	22.58	43.52	54.00	-10.48	AVG
3188.25	V	47.93	2.68	50.61	74.00	-23.39	peak
3188.25	V	30.16	2.68	32.84	54.00	-21.16	AVG
4824.00	V	37.75	7.48	45.23	74.00	-28.77	peak
9849.00	V	37.32	17.89	55.21	74.00	-18.79	peak
9849.00	V	27.13	17.89	45.02	54.00	-8.98	AVG
14092.00	V	36.92	18.90	55.82	74.00	-18.18	peak
14092.00	V	27.01	18.90	45.91	54.00	-8.09	AVG
17950.00	V	37.80	24.84	62.64	74.00	-11.36	peak
17950.00	V	17.08	24.84	41.92	54.00	-12.08	AVG
18328.00	V	37.44	23.18	60.62	74.00	-13.38	peak
18328.00	V	20.17	23.18	43.35	54.00	-10.65	AVG
21748.75	V	37.24	21.21	58.45	74.00	-15.55	peak
21748.75	V	19.37	21.21	40.58	54.00	-13.42	AVG
25947.75	V	39.54	18.58	58.12	74.00	-15.88	peak
25947.75	V	21.49	18.58	40.07	54.00	-13.93	AVG
2492.10	H	59.46	0.26	59.72	74.00	-14.28	peak
2492.10	H	45.15	0.26	45.41	54.00	-8.59	AVG
2700.00	H	40.12	22.58	62.70	74.00	-11.30	peak
2700.00	H	20.86	22.58	43.44	54.00	-10.56	AVG
4824.00	H	37.78	7.48	45.26	74.00	-28.74	peak
9593.50	H	37.82	17.41	55.23	74.00	-18.77	peak
9593.50	H	27.49	17.41	44.90	54.00	-9.10	AVG
14212.00	H	37.37	18.78	56.15	74.00	-17.85	peak
14212.00	H	27.05	18.78	45.83	54.00	-8.17	AVG
17990.00	H	37.05	25.57	62.62	74.00	-11.38	peak
17990.00	H	17.06	25.57	42.63	54.00	-11.37	AVG
18115.50	H	37.63	23.23	60.86	74.00	-13.14	peak
18115.50	H	20.46	23.23	43.69	54.00	-10.31	AVG
21451.25	H	36.76	21.35	58.11	74.00	-15.89	peak
21451.25	H	19.59	21.35	40.94	54.00	-13.06	AVG
25799.00	H	39.55	18.71	58.26	74.00	-15.74	peak
25799.00	H	21.48	18.71	40.19	54.00	-13.81	AVG

Test Mode:	draft 802.11n Standard-20MHz _ TX Mode _ CH2437
Model No:	ZE8
Test Date:	10/30/2009
Tested by:	John Cheng

Freq	Polarization (V/H)	Rd_level(dBuV)	Factor	Level(dBuV)	Limit(dBuV)	Over	detector
2495.50	V	57.49	0.25	57.74	74.00	-16.26	peak
2495.50	V	41.94	0.25	42.19	54.00	-11.81	AVG
2700.00	V	40.36	22.58	62.94	74.00	-11.06	peak
2700.00	V	20.12	22.58	42.70	54.00	-11.30	AVG
4874.00	V	37.42	7.72	45.14	74.00	-28.86	peak
9301.50	V	38.39	16.89	55.28	74.00	-18.72	peak
9301.50	V	27.94	16.89	44.83	54.00	-9.17	AVG
14292.00	V	37.51	18.61	56.12	74.00	-17.88	peak
14292.00	V	27.00	18.61	45.61	54.00	-8.39	AVG
17990.00	V	37.43	25.57	63.00	74.00	-11.00	peak
17990.00	V	16.93	25.57	42.50	54.00	-11.50	AVG
18306.75	V	37.97	23.19	61.16	74.00	-12.84	peak
18306.75	V	19.92	23.19	43.11	54.00	-10.89	AVG
21600.00	V	37.64	21.27	58.91	74.00	-15.09	peak
21600.00	V	19.62	21.27	40.89	54.00	-13.11	AVG
25246.50	V	39.36	19.13	58.49	74.00	-15.51	peak
25246.50	V	21.05	19.13	40.18	54.00	-13.82	AVG
2495.50	H	59.95	0.25	60.20	74.00	-13.80	peak
2495.50	H	44.59	0.25	44.84	54.00	-9.16	AVG
2700.00	H	40.95	22.58	63.53	74.00	-10.47	peak
2700.00	H	20.07	22.58	42.65	54.00	-11.35	AVG
4874.00	H	37.34	7.72	45.06	74.00	-28.94	peak
9958.50	H	37.34	17.82	55.16	74.00	-18.84	peak
9958.50	H	27.56	17.82	45.38	54.00	-8.62	AVG
14092.00	H	37.25	18.90	56.15	74.00	-17.85	peak
14092.00	H	26.80	18.90	45.70	54.00	-8.30	AVG
17990.00	H	37.24	25.57	62.81	74.00	-11.19	peak
17990.00	H	17.06	25.57	42.63	54.00	-11.37	AVG
18073.00	H	37.83	23.25	61.08	74.00	-12.92	peak
18073.00	H	20.16	23.25	43.41	54.00	-10.59	AVG
21855.00	H	36.78	21.16	57.94	74.00	-16.06	peak
21855.00	H	19.52	21.16	40.68	54.00	-13.32	AVG
24354.00	H	38.51	19.74	58.25	74.00	-15.75	peak
24354.00	H	20.52	19.74	40.26	54.00	-13.74	AVG

Test Mode:	draft 802.11n Standard-20MHz _ TX Mode _ CH2462
Model No:	ZE8
Test Date:	10/30/2009
Tested by:	John Cheng

Freq	Polarization (V/H)	Rd_level(dBuV)	Factor	Level(dBuV)	Limit(dBuV)	Over	detector
1992.00	V	51.33	-1.71	49.62	74.00	-24.38	peak
2700.00	V	40.05	22.58	62.63	74.00	-11.37	peak
2700.00	V	20.83	22.58	43.41	54.00	-10.59	AVG
3188.25	V	48.25	2.68	50.93	74.00	-23.07	peak
3188.25	V	30.16	2.68	32.84	54.00	-21.16	AVG
4924.00	V	37.38	7.65	45.03	74.00	-28.97	peak
9319.75	V	38.04	16.91	54.95	74.00	-19.05	peak
9319.75	V	27.88	16.91	44.79	54.00	-9.21	AVG
14072.00	V	37.15	18.81	55.96	74.00	-18.04	peak
14072.00	V	27.01	18.81	45.82	54.00	-8.18	AVG
17990.00	V	37.01	25.57	62.58	74.00	-11.42	peak
17990.00	V	17.11	25.57	42.68	54.00	-11.32	AVG
19135.50	V	37.85	22.97	60.82	74.00	-13.18	peak
19135.50	V	18.61	22.97	41.58	54.00	-12.42	AVG
21472.50	V	37.12	21.35	58.47	74.00	-15.53	peak
21472.50	V	19.15	21.35	40.50	54.00	-13.50	AVG
25480.25	V	38.96	18.98	57.94	74.00	-16.06	peak
25480.25	V	21.11	18.98	40.09	54.00	-13.91	AVG
2252.10	H	47.20	0.48	47.68	74.00	-26.32	peak
2700.00	H	39.66	22.58	62.24	74.00	-11.76	peak
2700.00	H	20.68	22.58	43.26	54.00	-10.74	AVG
4924.00	H	38.07	7.65	45.72	74.00	-28.28	peak
9356.25	H	37.72	16.98	54.70	74.00	-19.30	peak
9356.25	H	27.54	16.98	44.52	54.00	-9.48	AVG
14112.00	H	36.99	18.87	55.86	74.00	-18.14	peak
14112.00	H	27.00	18.87	45.87	54.00	-8.13	AVG
17990.00	H	37.18	25.57	62.75	74.00	-11.25	peak
17990.00	H	16.81	25.57	42.38	54.00	-11.62	AVG
18731.75	H	37.73	23.13	60.86	74.00	-13.14	peak
18731.75	H	19.45	23.13	42.58	54.00	-11.42	AVG
21876.25	H	37.59	21.15	58.74	74.00	-15.26	peak
21876.25	H	19.45	21.15	40.60	54.00	-13.40	AVG
25437.75	H	39.18	19.01	58.19	74.00	-15.81	peak
25437.75	H	21.14	19.01	40.15	54.00	-13.85	AVG

Test Mode:	draft 802.11n Wide-40MHz _ TX Mode _ CH2422
Model No:	ZE8
Test Date:	10/30/2009
Tested by:	John Cheng

Freq	Polarization (V/H)	Rd_level(dBuV)	Factor	Level(dBuV)	Limit(dBuV)	Over	detector
2493.10	V	57.40	0.26	57.66	74.00	-16.34	peak
2493.10	V	42.22	0.26	42.48	54.00	-11.52	AVG
2700.00	V	39.85	22.58	62.43	74.00	-11.57	peak
2700.00	V	21.43	22.58	44.01	54.00	-9.99	AVG
3197.25	V	49.33	2.68	52.01	74.00	-21.99	peak
3197.25	V	30.16	2.68	32.84	54.00	-21.16	AVG
4844.00	V	37.37	7.67	45.04	74.00	-28.96	peak
9731.25	V	37.90	17.60	55.50	74.00	-18.50	peak
9731.25	V	27.18	17.60	44.78	54.00	-9.22	AVG
14228.00	V	36.91	18.78	55.69	74.00	-18.31	peak
14228.00	V	27.03	18.78	45.81	54.00	-8.19	AVG
17990.00	V	37.77	25.21	62.98	74.00	-11.02	peak
17990.00	V	17.07	25.21	42.28	54.00	-11.72	AVG
18160.75	V	37.75	23.22	60.97	74.00	-13.03	peak
18160.75	V	19.98	23.22	43.20	54.00	-10.80	AVG
21901.25	V	37.69	21.20	58.89	74.00	-15.11	peak
21901.25	V	20.00	21.20	41.20	54.00	-12.80	AVG
26096.00	V	39.01	18.51	57.52	74.00	-16.48	peak
26096.00	V	20.93	18.51	39.44	54.00	-14.56	AVG
2492.10	H	57.44	0.26	57.70	74.00	-16.30	peak
2492.10	H	43.01	0.26	43.27	54.00	-10.73	AVG
2700.00	H	40.24	22.58	62.82	74.00	-11.18	peak
2700.00	H	20.79	22.58	43.37	54.00	-10.63	AVG
4844.00	H	37.15	7.67	44.82	74.00	-29.18	peak
9630.00	H	37.97	17.06	55.03	74.00	-18.97	peak
9630.00	H	27.51	17.06	44.57	54.00	-9.43	AVG
14112.00	H	37.20	18.87	56.07	74.00	-17.93	peak
14112.00	H	27.00	18.87	45.87	54.00	-8.13	AVG
17990.00	H	37.11	25.57	62.68	74.00	-11.32	peak
17990.00	H	16.81	25.57	42.38	54.00	-11.62	AVG
18349.25	H	37.87	23.16	61.03	74.00	-12.97	peak
18349.25	H	20.18	23.16	43.34	54.00	-10.66	AVG
21748.75	H	36.77	21.21	57.98	74.00	-16.02	peak
21748.75	H	19.47	21.21	40.68	54.00	-13.32	AVG
25544.00	H	39.11	18.94	58.05	74.00	-15.95	peak
25544.00	H	21.23	18.94	40.17	54.00	-13.83	AVG

Test Mode:	draft 802.11n Wide-40MHz _ TX Mode _ CH2437
Model No:	ZE8
Test Date:	10/30/2009
Tested by:	John Cheng

Freq	Polarization (V/H)	Rd_level(dBuV)	Factor	Level(dBuV)	Limit(dBuV)	Over	detector
1988.90	V	51.88	-1.84	50.04	74.00	-23.96	peak
1988.90	V	35.03	-1.84	33.19	54.00	-20.81	AVG
2488.40	V	56.83	0.26	57.09	74.00	-16.91	peak
2488.40	V	43.01	0.26	43.27	54.00	-10.73	AVG
2700.00	V	40.06	22.58	62.64	74.00	-11.36	peak
2700.00	V	20.81	22.58	43.39	54.00	-10.61	AVG
3188.25	V	47.83	2.68	50.51	74.00	-23.49	peak
3188.25	V	30.09	2.68	32.77	54.00	-21.23	AVG
4874.00	V	38.46	7.72	46.18	74.00	-27.82	peak
9776.00	V	37.17	17.69	54.86	74.00	-19.14	peak
9776.00	V	27.07	17.69	44.76	54.00	-9.24	AVG
13872.00	V	37.74	18.38	56.12	74.00	-17.88	peak
13872.00	V	27.02	18.38	45.40	54.00	-8.60	AVG
17990.00	V	37.79	25.57	63.36	74.00	-10.64	peak
17990.00	V	17.04	25.57	42.61	54.00	-11.39	AVG
18731.75	V	38.36	23.13	61.49	74.00	-12.51	peak
18731.75	V	18.73	23.13	41.86	54.00	-12.14	AVG
21536.25	V	37.05	21.30	58.35	74.00	-15.65	peak
21536.25	V	19.24	21.30	40.54	54.00	-13.46	AVG
25990.25	V	40.03	18.54	58.57	74.00	-15.43	peak
25990.25	V	21.12	18.54	39.66	54.00	-14.34	AVG
2498.20	H	60.31	0.25	60.56	74.00	-13.44	peak
2498.20	H	45.43	0.25	45.68	54.00	-8.32	AVG
2700.00	H	39.76	22.58	62.34	74.00	-11.66	peak
2700.00	H	20.79	22.58	43.37	54.00	-10.63	AVG
4874.00	H	37.43	7.72	45.15	74.00	-28.85	peak
9840.75	H	37.59	17.83	55.42	74.00	-18.58	peak
9840.75	H	27.15	17.83	44.98	54.00	-9.02	AVG
14248.00	H	37.06	18.71	55.77	74.00	-18.23	peak
14248.00	H	27.02	18.71	45.73	54.00	-8.27	AVG
17990.00	H	37.57	25.21	62.78	74.00	-11.22	peak
17990.00	H	17.04	25.21	42.25	54.00	-11.75	AVG
18755.75	H	37.90	23.13	61.03	74.00	-12.97	peak
18755.75	H	19.30	23.13	42.43	54.00	-11.57	AVG
21943.75	H	36.99	21.18	58.17	74.00	-15.83	peak
21943.75	H	19.73	21.18	40.91	54.00	-13.09	AVG
25309.75	H	39.00	19.11	58.11	74.00	-15.89	peak
25309.75	H	21.16	19.11	40.27	54.00	-13.73	AVG

Test Mode:	draft 802.11n Wide-40MHz _ TX Mode _ CH2452
Model No:	ZE8
Test Date:	10/30/2009
Tested by:	John Cheng

Freq	Polarization (V/H)	Rd_level(dBuV)	Factor	Level(dBuV)	Limit(dBuV)	Over	detector
1990.60	V	51.40	-1.77	49.63	74.00	-24.37	peak
1990.60	V	35.71	-1.77	33.94	54.00	-20.06	AVG
2700.00	V	39.80	22.58	62.38	74.00	-11.62	peak
2700.00	V	20.80	22.58	43.38	54.00	-10.62	AVG
3188.25	V	50.21	2.68	52.89	74.00	-21.11	peak
3188.25	V	30.06	2.68	32.74	54.00	-21.26	AVG
4904.00	V	37.15	7.71	44.86	74.00	-29.14	peak
9849.00	V	36.83	17.89	54.72	74.00	-19.28	peak
9849.00	V	27.13	17.89	45.02	54.00	-8.98	AVG
14132.00	V	38.22	18.84	57.06	74.00	-16.94	peak
14132.00	V	27.00	18.84	45.84	54.00	-8.16	AVG
17990.00	V	36.84	25.57	62.41	74.00	-11.59	peak
17990.00	V	17.05	25.57	42.62	54.00	-11.38	AVG
19241.75	V	38.19	22.92	61.11	74.00	-12.89	peak
19241.75	V	19.04	22.92	41.96	54.00	-12.04	AVG
21791.25	V	36.92	21.20	58.12	74.00	-15.88	peak
21791.25	V	19.55	21.20	40.75	54.00	-13.25	AVG
25289.00	V	38.89	19.10	57.99	74.00	-16.01	peak
25289.00	V	21.04	19.10	40.14	54.00	-13.86	AVG
2220.50	H	46.90	0.36	47.26	74.00	-26.74	peak
2700.00	H	40.42	22.58	63.00	74.00	-11.00	peak
2700.00	H	20.83	22.58	43.41	54.00	-10.59	AVG
4904.00	H	37.20	7.71	44.91	74.00	-29.09	peak
9319.75	H	38.33	16.91	55.24	74.00	-18.76	peak
9319.75	H	27.94	16.91	44.85	54.00	-9.15	AVG
14092.00	H	37.12	18.90	56.02	74.00	-17.98	peak
14092.00	H	26.86	18.90	45.76	54.00	-8.24	AVG
18000.00	H	36.98	25.57	62.55	74.00	-11.45	peak
18000.00	H	17.06	25.57	42.63	54.00	-11.37	AVG
18200.50	H	37.93	23.22	61.15	74.00	-12.85	peak
18200.50	H	20.54	23.22	43.76	54.00	-10.24	AVG
21621.25	H	37.26	21.25	58.51	74.00	-15.49	peak
21621.25	H	19.65	21.25	40.90	54.00	-13.10	AVG
25777.75	H	39.17	18.72	57.89	74.00	-16.11	peak
25777.75	H	21.69	18.72	40.41	54.00	-13.59	AVG

Test Mode:	IEEE 802.11a _ TX Mode _ CH5745
Model No:	ZE8
Test Date:	10/30/2009
Tested by:	John Cheng

Freq	Polarization (V/H)	Rd_level(dBuV)	Factor	Level(dBuV)	Limit(dBuV)	Over	detector
1241.40	V	52.09	-4.24	47.85	74.00	-26.15	peak
1241.40	V	30.47	-4.24	26.23	54.00	-27.77	AVG
2700.00	V	40.70	22.58	63.28	74.00	-10.72	peak
2700.00	V	20.71	22.58	43.29	54.00	-10.71	AVG
11495.20	V	38.21	13.10	51.31	74.00	-22.69	peak
11495.20	V	31.42	13.10	44.52	54.00	-9.48	AVG
14305.00	V	37.04	18.57	55.61	74.00	-18.39	peak
14305.00	V	26.96	18.57	45.53	54.00	-8.47	AVG
19310.25	V	36.65	22.89	59.54	74.00	-14.46	peak
19310.25	V	15.38	22.89	38.27	54.00	-15.73	AVG
23223.00	V	37.60	20.80	58.40	74.00	-15.60	peak
23223.00	V	17.56	20.80	38.36	54.00	-15.64	AVG
2388.90	H	43.43	0.15	43.58	74.00	-30.42	peak
2700.00	H	40.35	22.58	62.93	74.00	-11.07	peak
2700.00	H	20.78	22.58	43.36	54.00	-10.64	AVG
9319.95	H	38.78	16.91	55.69	74.00	-18.31	peak
9319.95	H	27.60	16.91	44.51	54.00	-9.49	AVG
14445.00	H	38.20	17.97	56.17	74.00	-17.83	peak
14445.00	H	26.96	17.97	44.93	54.00	-9.07	AVG
19246.50	H	37.09	22.92	60.01	74.00	-13.99	peak
19246.50	H	17.22	22.92	40.14	54.00	-13.86	AVG
23733.00	H	38.61	20.30	58.91	74.00	-15.09	peak
23733.00	H	19.27	20.30	39.57	54.00	-14.43	AVG

Test Mode:	IEEE 802.11a _ TX Mode _ CH5785
Model No:	ZE8
Test Date:	10/30/2009
Tested by:	John Cheng

Freq	Polarization (V/H)	Rd_level(dBuV)	Factor	Level(dBuV)	Limit(dBuV)	Over	detector
1992.80	V	51.32	-1.60	49.72	74.00	-24.28	peak
1992.80	V	31.07	-1.60	29.47	54.00	-24.53	AVG
2700.00	V	40.25	22.58	62.83	74.00	-11.17	peak
2700.00	V	20.78	22.58	43.36	54.00	-10.64	AVG
11555.20	V	42.36	13.08	55.44	74.00	-18.56	peak
11555.20	V	30.97	13.08	44.05	54.00	-9.95	AVG
17985.00	V	37.02	25.57	62.59	74.00	-11.41	peak
17985.00	V	17.01	25.57	42.58	54.00	-11.42	AVG
21860.25	V	37.25	21.19	58.44	74.00	-15.56	peak
21860.25	V	17.26	21.19	38.45	54.00	-15.55	AVG
24073.00	V	38.48	19.94	58.42	74.00	-15.58	peak
24073.00	V	18.39	19.94	38.33	54.00	-15.67	AVG
1239.70	H	50.21	-4.26	45.95	74.00	-28.05	peak
2700.00	H	40.15	22.58	62.73	74.00	-11.27	peak
2700.00	H	20.81	22.58	43.39	54.00	-10.61	AVG
11575.20	H	40.18	12.88	53.06	74.00	-20.94	peak
11575.20	H	29.82	12.88	42.70	54.00	-11.30	AVG
17985.00	H	36.34	25.57	61.91	74.00	-12.09	peak
17985.00	H	17.02	25.57	42.59	54.00	-11.41	AVG
18205.25	H	36.68	23.22	59.90	74.00	-14.10	peak
18205.25	H	16.25	23.22	39.47	54.00	-14.53	AVG
23074.25	H	37.93	20.84	58.77	74.00	-15.23	peak
23074.25	H	18.86	20.84	39.70	54.00	-14.30	AVG

Test Mode:	IEEE 802.11a _ TX Mode _ CH5825
Model No:	ZE8
Test Date:	10/30/2009
Tested by:	John Cheng

Freq	Polarization (V/H)	Rd_level(dBuV)	Factor	Level(dBuV)	Limit(dBuV)	Over	detector
1989.40	V	51.19	-1.71	49.48	74.00	-24.52	peak
1989.40	V	31.07	-1.71	29.36	54.00	-24.64	AVG
3192.75	V	47.55	2.68	50.23	74.00	-23.77	peak
3192.75	V	29.85	2.68	32.53	54.00	-21.47	AVG
11655.20	V	45.13	12.66	57.79	74.00	-16.21	peak
11655.20	V	33.11	12.66	45.77	54.00	-8.23	AVG
14105.00	V	37.30	18.87	56.17	74.00	-17.83	peak
14105.00	V	26.89	18.87	45.76	54.00	-8.24	AVG
18077.75	V	36.53	23.25	59.78	74.00	-14.22	peak
18077.75	V	18.11	23.25	41.36	54.00	-12.64	AVG
25815.50	V	39.44	18.71	58.15	74.00	-15.85	peak
25815.50	V	19.98	18.71	38.69	54.00	-15.31	AVG
1987.70	H	47.13	-1.77	45.36	74.00	-28.64	peak
2700.00	H	40.46	22.58	63.04	74.00	-10.96	peak
2700.00	H	20.71	22.58	43.29	54.00	-10.71	AVG
11635.20	H	43.42	12.67	56.09	74.00	-17.91	peak
11635.20	H	30.72	12.67	43.39	54.00	-10.61	AVG
18580.00	H	37.10	23.07	60.17	74.00	-13.83	peak
18580.00	H	17.66	23.07	40.73	54.00	-13.27	AVG
21924.00	H	37.27	21.15	58.42	74.00	-15.58	peak
21924.00	H	21.30	21.15	42.45	54.00	-11.55	AVG
25603.00	H	39.47	18.90	58.37	74.00	-15.63	peak
25603.00	H	24.04	18.90	42.94	54.00	-11.06	AVG

Test Mode:	draft 802.11n Standard-20MHz _ TX Mode _ CH5745
Model No:	ZE8
Test Date:	10/30/2009
Tested by:	John Cheng

Freq	Polarization (V/H)	Rd_level(dBuV)	Factor	Level(dBuV)	Limit(dBuV)	Over	detector
1992.80	V	50.33	-1.60	48.73	74.00	-25.27	peak
1992.80	V	31.14	-1.60	29.54	54.00	-24.46	AVG
2494.50	V	48.08	0.25	48.33	74.00	-25.67	peak
2494.50	V	30.78	0.25	31.03	54.00	-22.97	AVG
9776.20	V	38.46	17.69	56.15	74.00	-17.85	peak
9776.20	V	27.63	17.69	45.32	54.00	-8.68	AVG
14165.00	V	37.49	18.85	56.34	74.00	-17.66	peak
14165.00	V	26.83	18.85	45.68	54.00	-8.32	AVG
21541.50	V	36.92	21.33	58.25	74.00	-15.75	peak
21541.50	V	18.11	21.33	39.44	54.00	-14.56	AVG
25284.25	V	39.30	19.11	58.41	74.00	-15.59	peak
25284.25	V	20.49	19.11	39.60	54.00	-14.40	AVG
1243.10	H	55.31	-4.22	51.09	74.00	-22.91	peak
1243.10	H	31.17	-4.22	26.95	54.00	-27.05	AVG
9907.25	H	37.58	17.78	55.36	74.00	-18.64	peak
9907.25	H	27.19	17.78	44.97	54.00	-9.03	AVG
11495.20	H	44.03	13.10	57.13	74.00	-16.87	peak
11495.20	H	31.46	13.10	44.56	54.00	-9.44	AVG
18048.75	H	37.05	23.26	60.31	74.00	-13.69	peak
18048.75	H	16.51	23.26	39.77	54.00	-14.23	AVG
21541.50	H	37.09	21.33	58.42	74.00	-15.58	peak
21541.50	H	14.57	21.33	35.90	54.00	-18.10	AVG
25305.50	H	39.69	19.10	58.79	74.00	-15.21	peak
25305.50	H	16.00	19.10	35.10	54.00	-18.90	AVG

Test Mode:	draft 802.11n Standard-20MHz _ TX Mode _ CH5785
Model No:	ZE8
Test Date:	10/30/2009
Tested by:	John Cheng

Freq	Polarization (V/H)	Rd_level(dBuV)	Factor	Level(dBuV)	Limit(dBuV)	Over	detector
1239.70	V	51.69	-4.26	47.43	74.00	-26.57	peak
1239.70	V	31.14	-4.26	26.88	54.00	-27.12	AVG
3191.25	V	47.38	2.68	50.06	74.00	-23.94	peak
3191.25	V	30.09	2.68	32.77	54.00	-21.23	AVG
11555.20	V	47.01	13.08	60.09	74.00	-13.91	peak
11555.20	V	33.97	13.08	47.05	54.00	-6.95	AVG
19430.00	V	37.99	22.76	60.75	74.00	-13.25	peak
19430.00	V	17.95	22.76	40.71	54.00	-13.29	AVG
21817.75	V	37.31	21.20	58.51	74.00	-15.49	peak
21817.75	V	17.89	21.20	39.09	54.00	-14.91	AVG
23988.00	V	38.57	20.03	58.60	74.00	-15.40	peak
23988.00	V	18.43	20.03	38.46	54.00	-15.54	AVG
2387.20	H	43.59	0.15	43.74	74.00	-30.26	peak
9306.50	H	39.05	16.89	55.94	74.00	-18.06	peak
9306.50	H	27.19	16.89	44.08	54.00	-9.92	AVG
11555.20	H	43.45	13.08	56.53	74.00	-17.47	peak
11555.20	H	31.28	13.08	44.36	54.00	-9.64	AVG
14265.00	H	36.99	18.63	55.62	74.00	-18.38	peak
14265.00	H	16.60	18.63	35.23	54.00	-18.77	AVG
18736.50	H	36.80	23.13	59.93	74.00	-14.07	peak
18736.50	H	17.40	23.13	40.53	54.00	-13.47	AVG
23244.25	H	38.22	20.78	59.00	74.00	-15.00	peak
23244.25	H	18.92	20.78	39.70	54.00	-14.30	AVG

Test Mode:	draft 802.11n Standard-20MHz _ TX Mode _ CH5825
Model No:	ZE8
Test Date:	10/30/2009
Tested by:	John Cheng

Freq	Polarization (V/H)	Rd_level(dBuV)	Factor	Level(dBuV)	Limit(dBuV)	Over	detector
1994.50	V	50.71	-1.53	49.18	74.00	-24.82	peak
1994.50	V	31.41	-1.53	29.88	54.00	-24.12	AVG
3191.25	V	45.53	2.68	48.21	74.00	-25.79	peak
3191.25	V	30.11	2.68	32.79	54.00	-21.21	AVG
11655.20	V	50.27	12.66	62.93	74.00	-11.07	peak
11655.20	V	36.09	12.66	48.75	54.00	-5.25	AVG
17965.00	V	36.63	25.21	61.84	74.00	-12.16	peak
17965.00	V	16.97	25.21	42.18	54.00	-11.82	AVG
21945.25	V	37.32	21.15	58.47	74.00	-15.53	peak
21945.25	V	18.22	21.15	39.37	54.00	-14.63	AVG
25964.25	V	40.36	18.58	58.94	74.00	-15.06	peak
25964.25	V	21.59	18.58	40.17	54.00	-13.83	AVG
2492.60	H	44.16	0.25	44.41	74.00	-29.59	peak
9908.75	H	38.02	17.78	55.80	74.00	-18.20	peak
9908.75	H	27.34	17.78	45.12	54.00	-8.88	AVG
14095.20	H	37.00	18.90	55.90	74.00	-18.10	peak
14095.20	H	26.98	18.90	45.88	54.00	-8.12	AVG
17985.00	H	36.31	25.57	61.88	74.00	-12.12	peak
17985.00	H	16.97	25.57	42.54	54.00	-11.46	AVG
19416.50	H	36.90	22.79	59.69	74.00	-14.31	peak
19416.50	H	16.07	22.79	38.86	54.00	-15.14	AVG
24646.75	H	39.45	19.59	59.04	74.00	-14.96	peak
24646.75	H	17.81	19.59	37.40	54.00	-16.60	AVG

Test Mode:	draft 802.11n Wide-40MHz _ TX Mode _ CH5755
Model No:	ZE8
Test Date:	10/30/2009
Tested by:	John Cheng

Freq	Polarization (V/H)	Rd_level(dBuV)	Factor	Level(dBuV)	Limit(dBuV)	Over	detector
1994.50	V	49.14	-1.53	47.61	74.00	-26.39	peak
1994.50	V	31.14	-1.53	29.61	54.00	-24.39	AVG
2497.90	V	50.32	0.25	50.57	74.00	-23.43	peak
2497.90	V	30.74	0.25	30.99	54.00	-23.01	AVG
3187.95	V	46.25	2.68	48.93	74.00	-25.07	peak
3187.95	V	30.13	2.68	32.81	54.00	-21.19	AVG
9711.25	V	37.92	17.60	55.52	74.00	-18.48	peak
9711.25	V	27.32	17.60	44.92	54.00	-9.08	AVG
13952.75	V	37.22	18.57	55.79	74.00	-18.21	peak
13952.75	V	26.82	18.57	45.39	54.00	-8.61	AVG
24561.75	V	39.00	19.63	58.63	74.00	-15.37	peak
24561.75	V	20.67	19.63	40.30	54.00	-13.70	AVG
2292.00	H	42.95	0.51	43.46	74.00	-30.54	peak
9852.90	H	37.37	17.89	55.26	74.00	-18.74	peak
9852.90	H	26.92	17.89	44.81	54.00	-9.19	AVG
13935.20	H	38.08	18.54	56.62	74.00	-17.38	peak
13935.20	H	27.01	18.54	45.55	54.00	-8.45	AVG
19238.75	H	37.60	22.92	60.52	74.00	-13.48	peak
19238.75	H	17.09	22.92	40.01	54.00	-13.99	AVG
21541.50	H	37.57	21.33	58.90	74.00	-15.10	peak
21541.50	H	17.85	21.33	39.18	54.00	-14.82	AVG
23031.75	H	37.90	20.87	58.77	74.00	-15.23	peak
23031.75	H	18.85	20.87	39.72	54.00	-14.28	AVG

Test Mode:	draft 802.11n Wide-40MHz _ TX Mode _ CH5795
Model No:	ZE8
Test Date:	10/30/2009
Tested by:	John Cheng

Freq	Polarization (V/H)	Rd_level(dBuV)	Factor	Level(dBuV)	Limit(dBuV)	Over	detector
1989.40	V	49.91	-1.71	48.20	74.00	-25.80	peak
1989.40	V	31.40	-1.71	29.69	54.00	-24.31	AVG
3191.25	V	47.75	2.68	50.43	74.00	-23.57	peak
3191.25	V	29.96	2.68	32.64	54.00	-21.36	AVG
9374.70	V	39.04	17.03	56.07	74.00	-17.93	peak
9374.70	V	27.50	17.03	44.53	54.00	-9.47	AVG
18728.75	V	37.45	23.13	60.58	74.00	-13.42	peak
18728.75	V	17.11	23.13	40.24	54.00	-13.76	AVG
21881.50	V	36.99	21.18	58.17	74.00	-15.83	peak
21881.50	V	18.24	21.18	39.42	54.00	-14.58	AVG
23159.25	V	37.72	20.82	58.54	74.00	-15.46	peak
23159.25	V	18.52	20.82	39.34	54.00	-14.66	AVG
1991.10	H	44.36	-1.66	42.70	74.00	-31.30	peak
2698.90	H	40.90	22.58	63.48	74.00	-10.52	peak
2698.90	H	20.77	22.58	43.35	54.00	-10.65	AVG
9283.45	H	39.02	16.78	55.80	74.00	-18.20	peak
9283.45	H	27.70	16.78	44.48	54.00	-9.52	AVG
14265.00	H	37.47	18.63	56.10	74.00	-17.90	peak
14265.00	H	27.12	18.63	45.75	54.00	-8.25	AVG
18715.25	H	36.73	23.12	59.85	74.00	-14.15	peak
18715.25	H	17.16	23.12	40.28	54.00	-13.72	AVG
23138.00	H	37.66	20.83	58.49	74.00	-15.51	peak
23138.00	H	17.56	20.83	38.39	54.00	-15.61	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

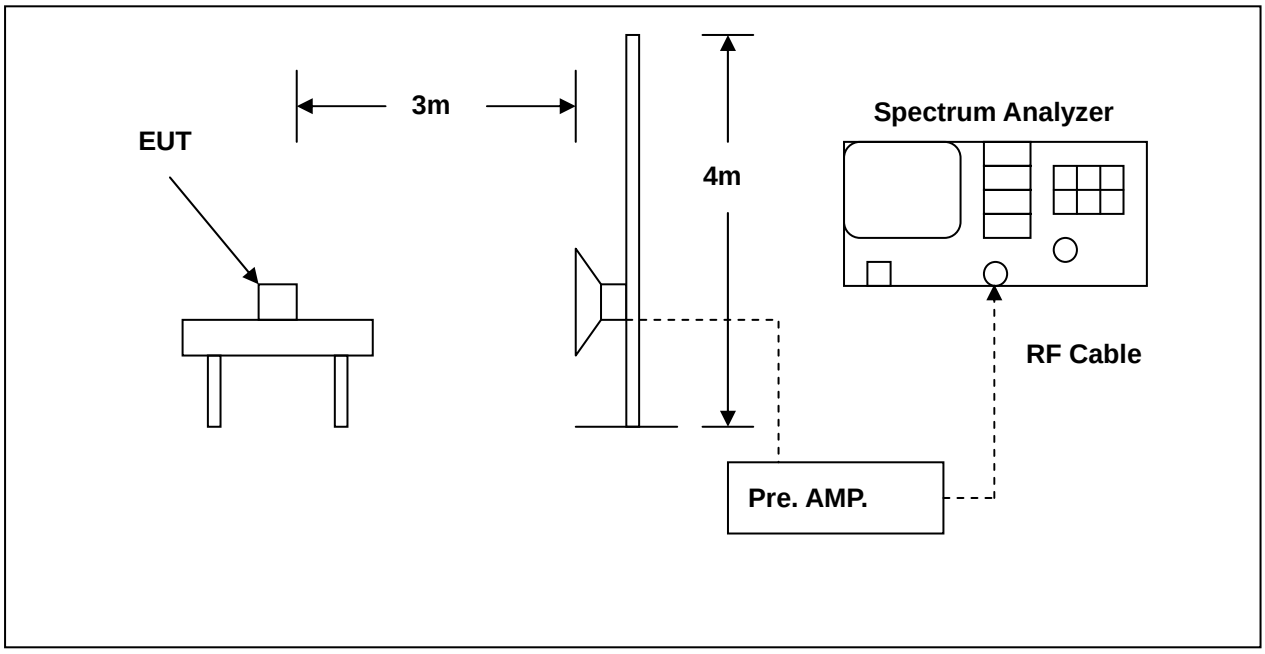
4.2 Limits

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-ELEKTRONIK	BBHA9120D	9120D-550	Jul. 01, 2009	Jul. 01, 2010

4.4 Test Instruments Configuration



4.5 Test Result

EUT : WLAN Module

Model No. : ZE8

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

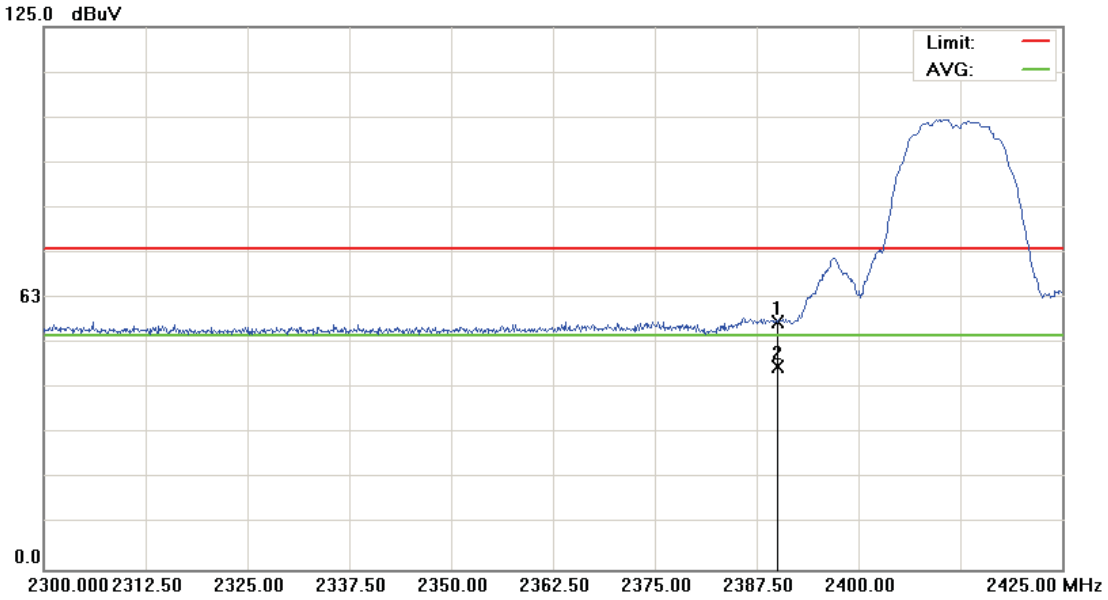
Test Date : 10/30/2009

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 :ZE8(BAND EDGE) Data :#1 Date: 2009/10/30 Time:



Site:
Limit: FCC part 15 (PK)
EUT:
M/N: 09-0255-SEO
Mode: IEEE 802.11b_2.4GHz Link Mode
Note: 2412MHz

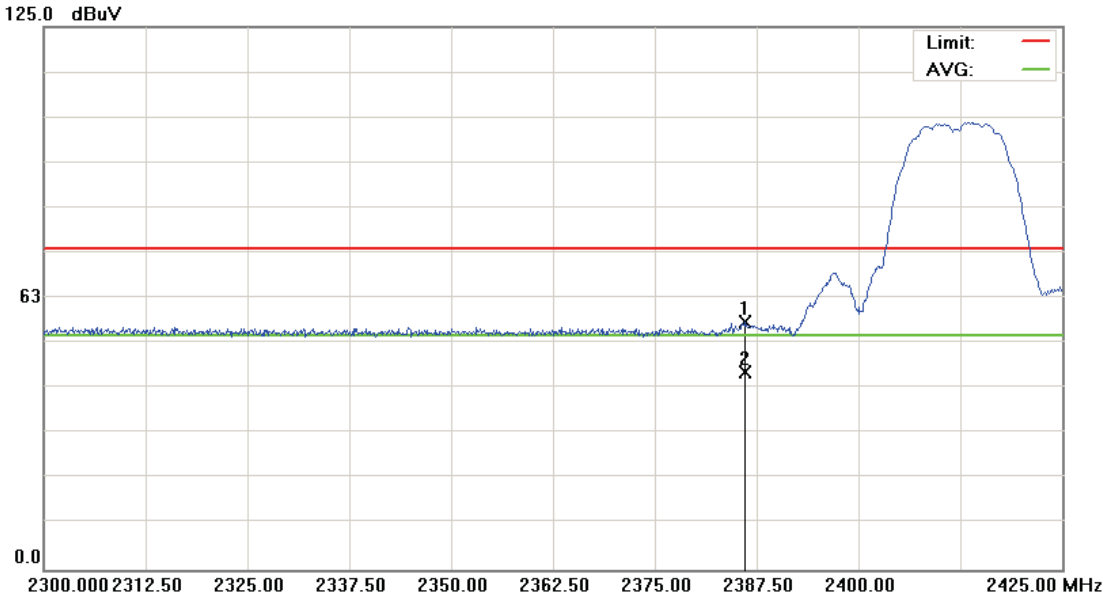
Polarization: *Vertical*
Power:
Distance: 3m

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

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1		2390.000	56.83	0.16	56.99	74.00	-17.01	peak			
2	*	2390.000	46.53	0.16	46.69	54.00	-7.31	AVG			

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

File :ZE8(BAND EDGE) Data :#5 Date: 2009/10/30 Time:



Site:
Limit: FCC part 15 (PK)
EUT:
M/N: 09-0255-SEO
Mode: IEEE 802.11b_2.4GHz Link Mode
Note: 2412MHz

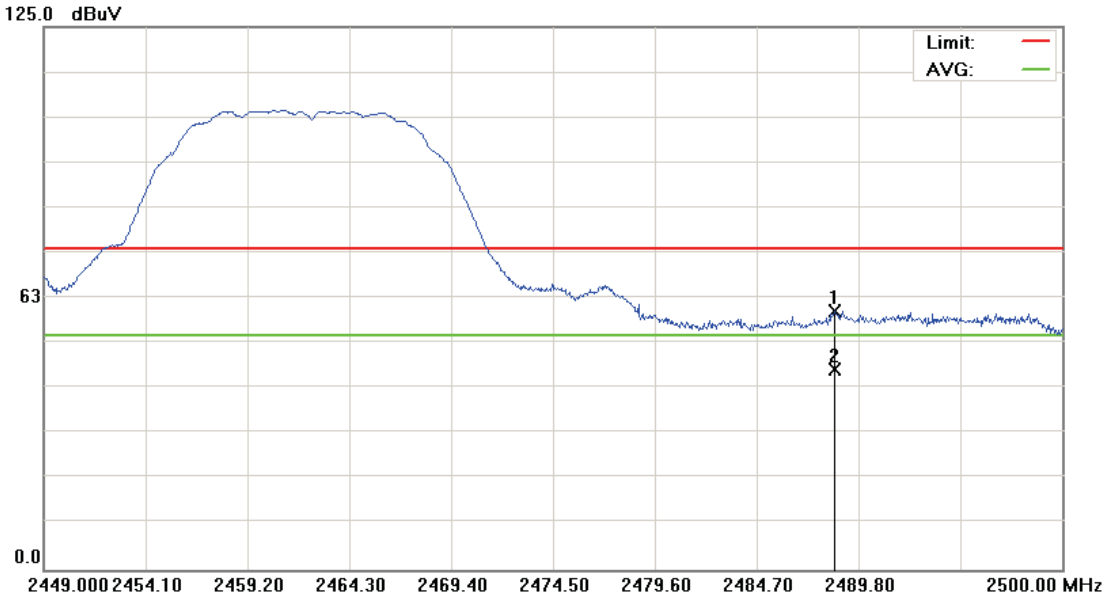
Polarization: *Horizontal*
Power:
Distance: 3m

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

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1	*	2386.125	56.98	0.15	57.13	74.00	-16.87	peak			
2		2386.125	45.21	0.15	45.36	74.00	-28.64	peak			

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

File :ZE8(BAND EDGE) Data :#3 Date: 2009/10/30 Time:



Site:
Limit: FCC part 15 (PK)
EUT:
M/N: 09-0255-SEO
Mode: IEEE 802.11b_2.4GHz Link Mode
Note: 2462MHz

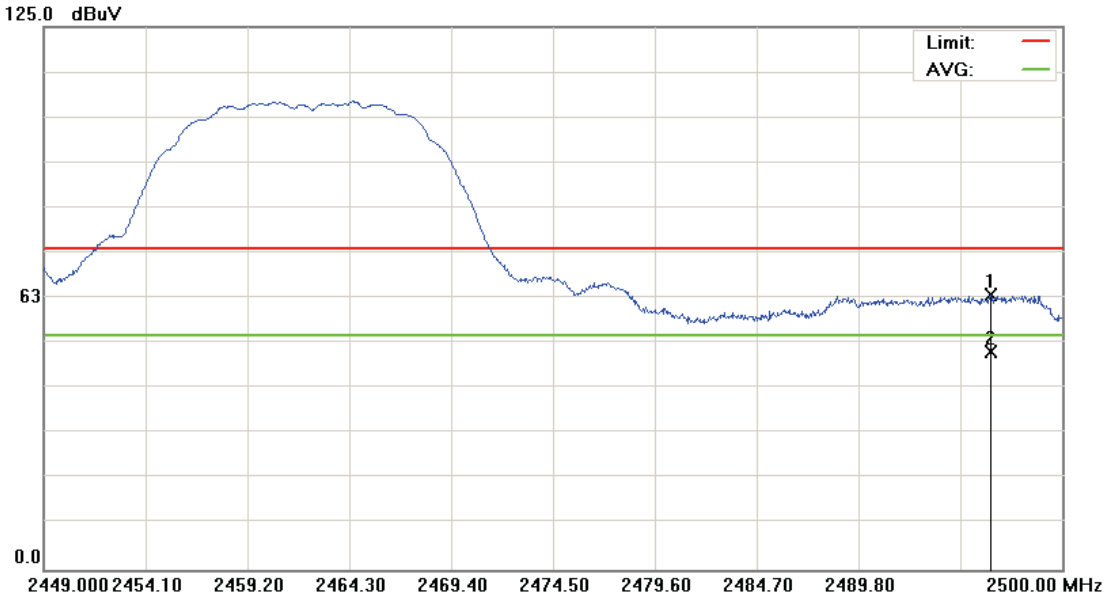
Polarization: *Vertical*
Power:
Distance: 3m

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

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1		2488.627	59.41	0.25	59.66	74.00	-14.34	peak			
2	*	2488.627	45.73	0.25	45.98	54.00	-8.02	AVG			

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

File :ZE8(BAND EDGE) Data :#7 Date: 2009/10/30 Time:



Site:
Limit: FCC part 15 (PK)
EUT:
M/N: 09-0255-SEO
Mode: IEEE 802.11b_2.4GHz Link Mode
Note: 2462MHz

Polarization: *Horizontal*
Power:
Distance: 3m

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

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1		2496.430	62.93	0.25	63.18	74.00	-10.82	peak			
2	*	2496.430	49.94	0.25	50.19	54.00	-3.81	AVG			

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

EUT : WLAN Module

Model No. : ZE8

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

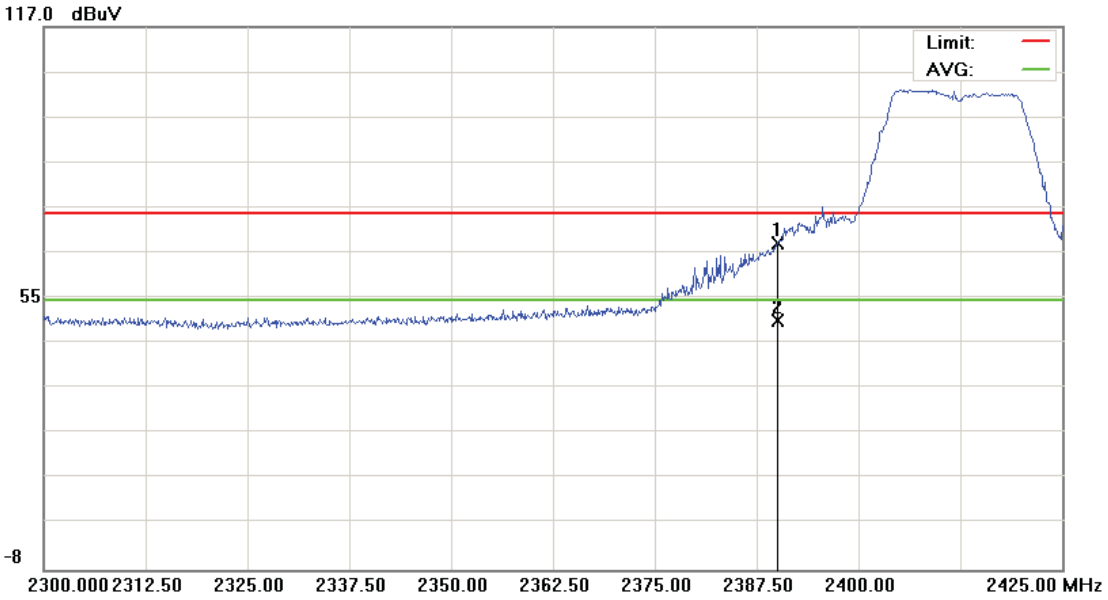
Test Date : 10/30/2009

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 :ZE8(BAND EDGE) Data :#1 Date: 2009/10/30 Time:



Site:
Limit: FCC part 15 (PK)
EUT:
M/N: 09-0255-SEO
Mode: IEEE 802.11g_2.4GHz Link Mode
Note: 2412MHz

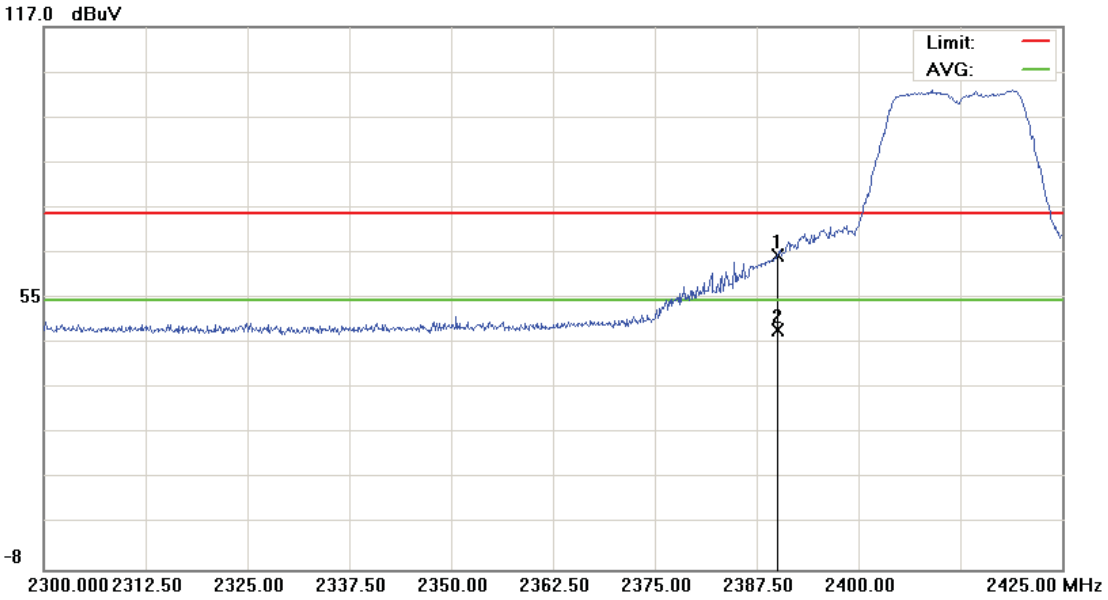
Polarization: *Vertical*
Power:
Distance: 3m

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

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1		2390.000	67.11	0.19	67.30	74.00	-6.70	peak			
2	*	2390.000	49.18	0.19	49.37	54.00	-4.63	AVG			

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

File :ZE8(BAND EDGE) Data :#5 Date: 2009/10/30 Time:



Site:
Limit: FCC part 15 (PK)
EUT:
M/N: 09-0255-SEO
Mode: IEEE 802.11g_2.4GHz Link Mode
Note: 2412MHz

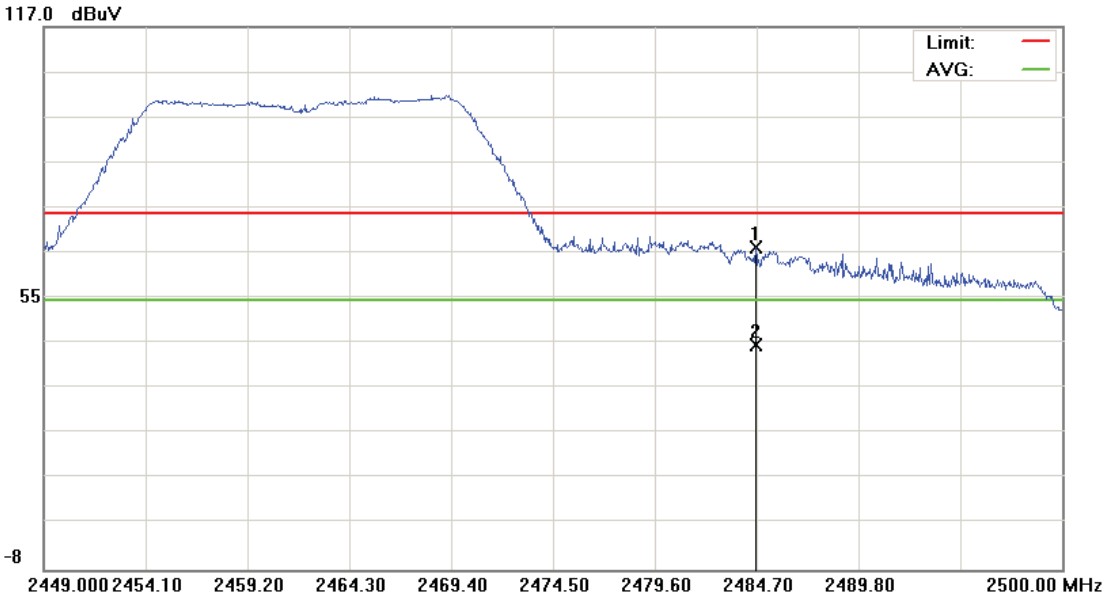
Polarization: *Horizontal*
Power:
Distance: 3m

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

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1		2390.000	64.17	0.19	64.36	74.00	-9.64	peak			
2	*	2390.000	47.01	0.19	47.20	54.00	-6.80	AVG			

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

File :ZE8(BAND EDGE) Data :#3 Date: 2009/10/30 Time:



Site:
Limit: FCC part 15 (PK)
EUT:
M/N: 09-0255-SEO
Mode: IEEE 802.11g_2.4GHz Link Mode
Note: 2462MHz

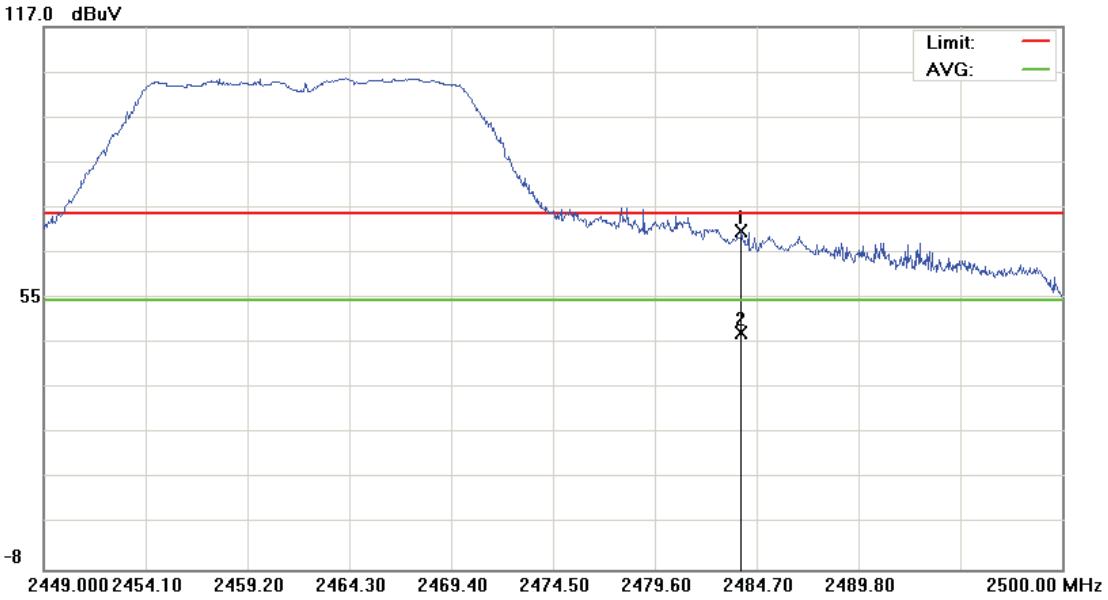
Polarization: *Vertical*
Power:
Distance: 3m

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

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1	*	2484.649	65.86	0.25	66.11	74.00	-7.89	peak			
2		2484.649	43.38	0.25	43.63	54.00	-10.37	AVG			

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

File :ZE8(BAND EDGE) Data :#7 Date: 2009/10/30 Time:



Site:
Limit: FCC part 15 (PK)
EUT:
M/N: 09-0255-SEO
Mode: IEEE 802.11g_2.4GHz Link Mode
Note: 2462MHz

Polarization: *Horizontal*
Power:
Distance: 3m

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

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1	*	2483.935	69.77	0.25	70.02	74.00	-3.98	peak			
2		2483.935	46.25	0.25	46.50	54.00	-7.50	AVG			

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

EUT : WLAN Module

Model No. : ZE8

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

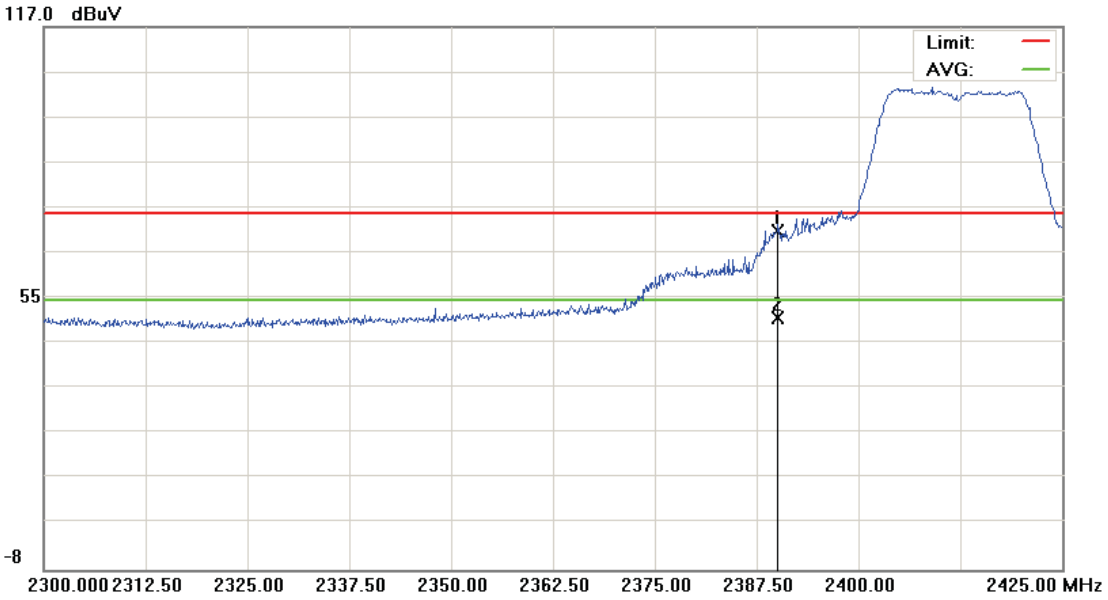
Test Date : 10/30/2009

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 :ZE8(BAND EDGE) Data :#1 Date: 2009/10/30 Time:



Site:
Limit: FCC part 15 (PK)
EUT:
M/N: 09-0255-SEO
Mode: draft 802.11n Standard-20MHz_2.4GHz Link Mode
Note: 2412MHz

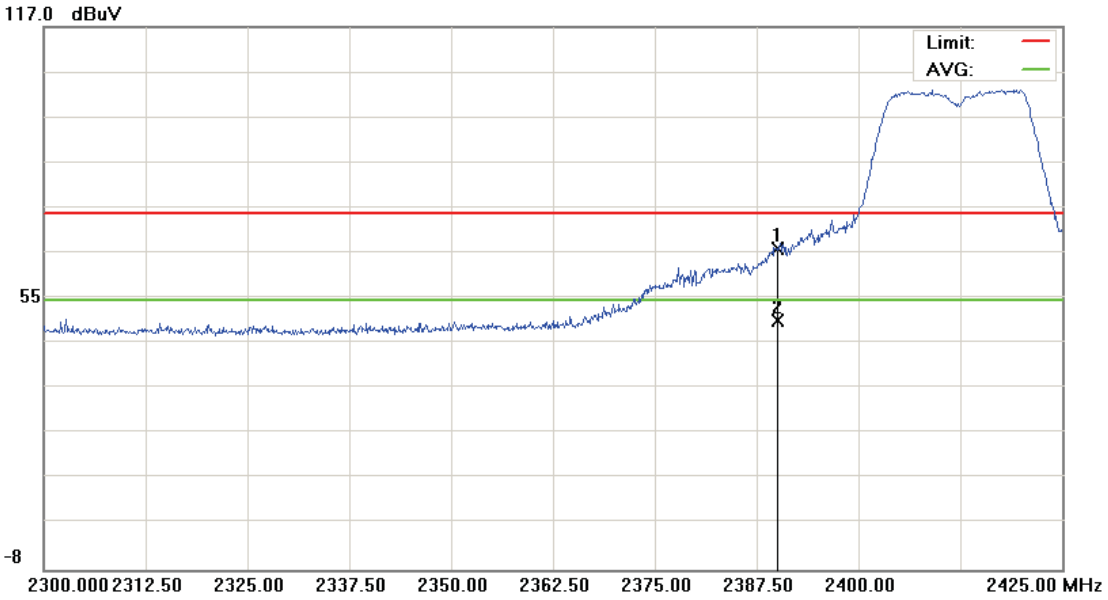
Polarization: *Vertical*
Power:
Distance: 3m

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

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1	*	2390.000	69.79	0.19	69.98	74.00	-4.02	peak			
2		2390.000	49.78	0.19	49.97	54.00	-4.03	AVG			

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

File :ZE8(BAND EDGE) Data :#5 Date: 2009/10/30 Time:



Site:
Limit: FCC part 15 (PK)
EUT:
M/N: 09-0255-SEO
Mode: draft 802.11n Standard-20MHz_2.4GHz Link Mode
Note: 2412MHz

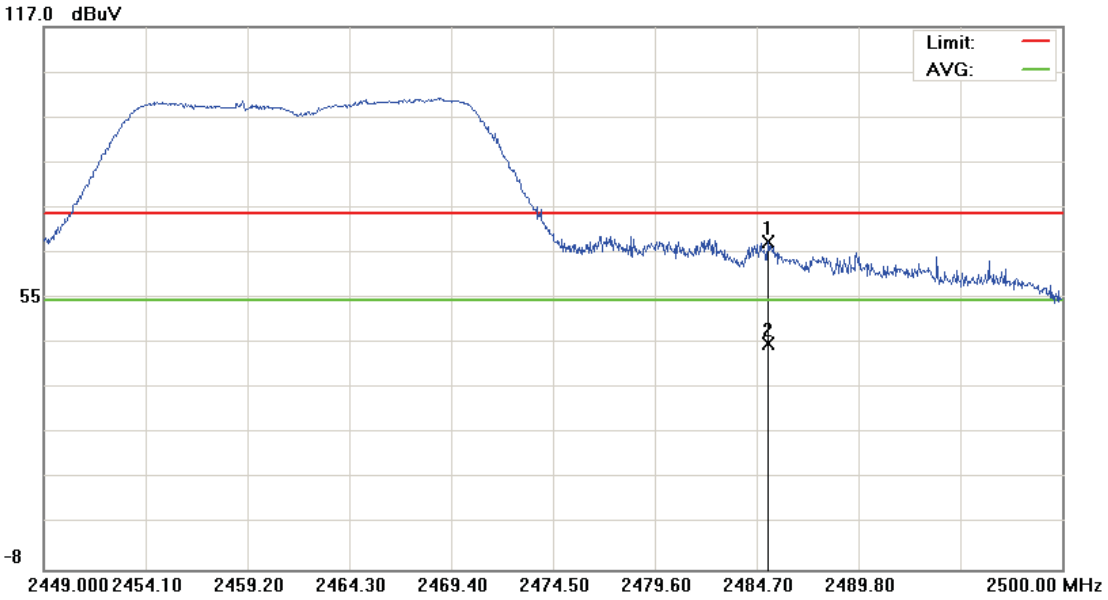
Polarization: *Horizontal*
Power:
Distance: 3m

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

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1		2390.000	65.70	0.19	65.89	74.00	-8.11	peak			
2	*	2390.000	49.12	0.19	49.31	54.00	-4.69	AVG			

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

File :ZE8(BAND EDGE) Data :#3 Date: 2009/10/30 Time:



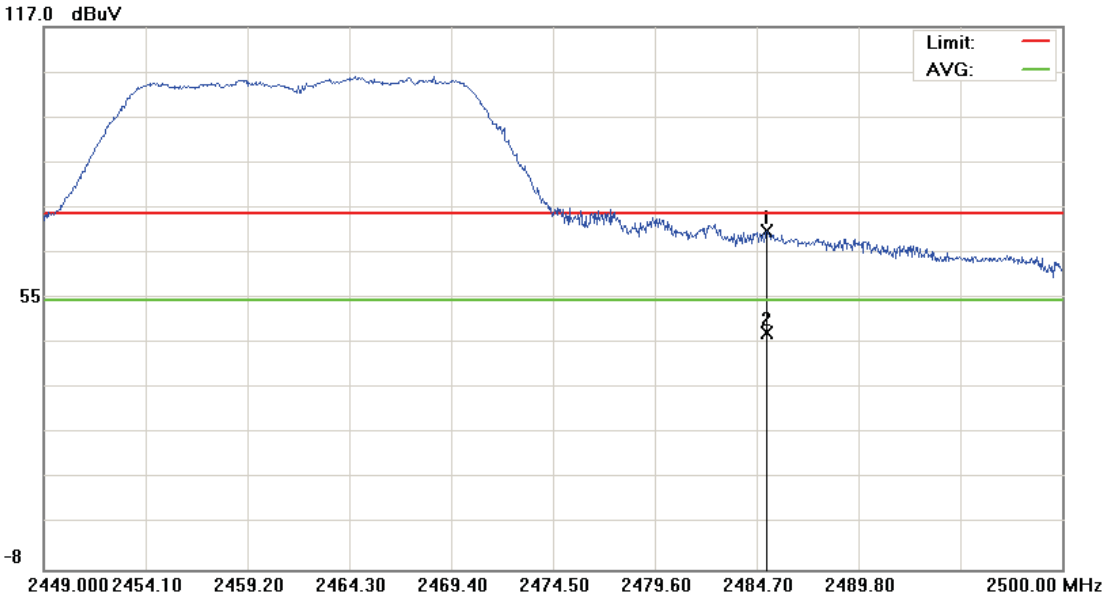
Site:		Polarization:	*Vertical*
Limit:	FCC part 15 (PK)	Power:	
EUT:		Distance:	3m
M/N:	09-0255-SEO		
Mode:	draft 802.11n Standard-20MHz_2.4GHz Link Mode		
Note:	2462MHz		

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

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1	*	2485.261	67.16	0.24	67.40	74.00	-6.60	peak			
2		2485.261	43.79	0.24	44.03	54.00	-9.97	AVG			

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

File :ZE8(BAND EDGE) Data :#7 Date: 2009/10/30 Time:



Site:
Limit: FCC part 15 (PK)
EUT:
M/N: 09-0255-SEO
Mode: draft 802.11n Standard-20MHz_2.4GHz Link Mode
Note: 2462MHz

Polarization: *Horizontal*
Power:
Distance: 3m

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

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1	*	2485.210	69.88	0.24	70.12	74.00	-3.88	peak			
2		2485.210	46.39	0.24	46.63	54.00	-7.37	AVG			

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

EUT : WLAN Module

Model No. : ZE8

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

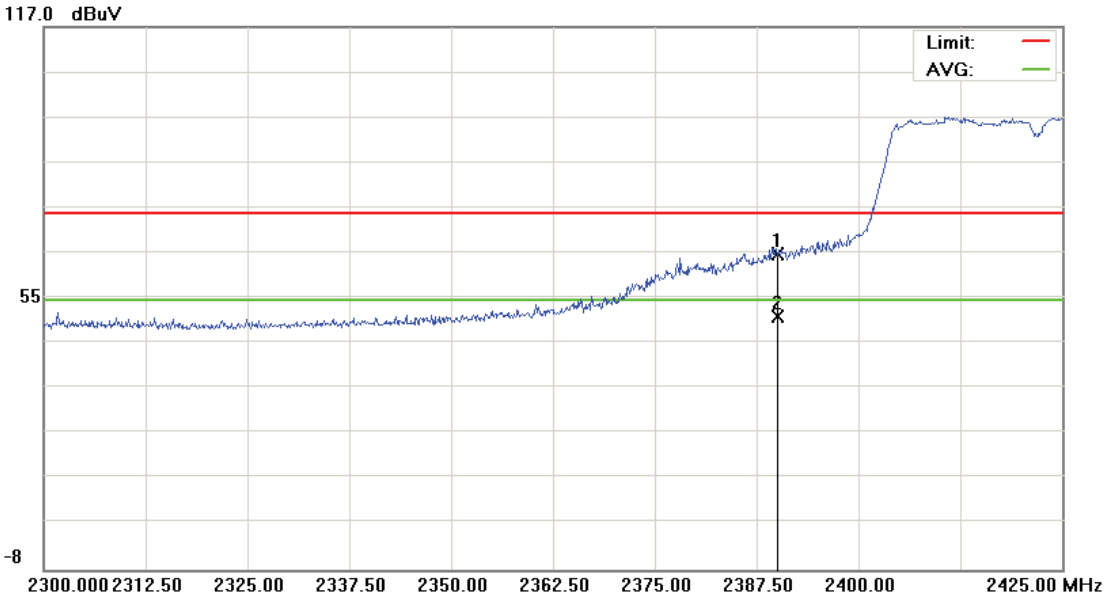
Test Date : 10/30/2009

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 :ZE8(BAND EDGE) Data :#1 Date: 2009/10/30 Time:



Site:
Limit: FCC part 15 (PK)
EUT:
M/N: 09-0255-SEO
Mode: draft 802.11n Wide-40MHz_2.4GHz Link Mode
Note: 2422MHz

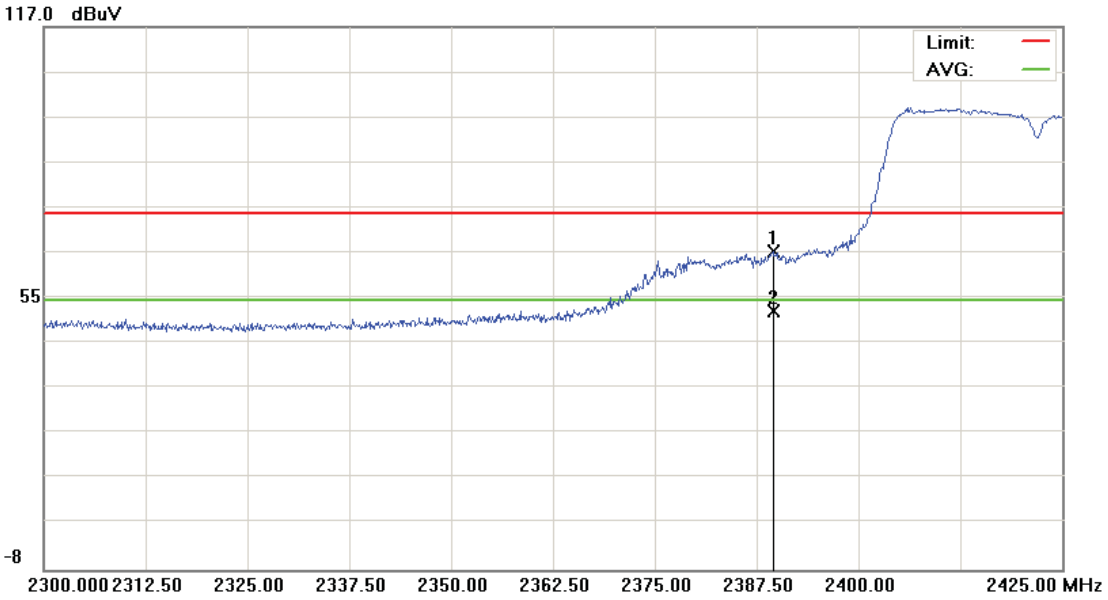
Polarization: *Vertical*
Power:
Distance: 3m

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

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1		2390.000	64.53	0.19	64.72	74.00	-9.28	peak			
2	*	2390.000	50.21	0.19	50.40	54.00	-3.60	AVG			

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

File :ZE8(BAND EDGE) Data :#5 Date: 2009/10/30 Time:



Site:
Limit: FCC part 15 (PK)
EUT:
M/N: 09-0255-SEO
Mode: draft 802.11n Wide-40MHz_2.4GHz Link Mode
Note: 2422MHz

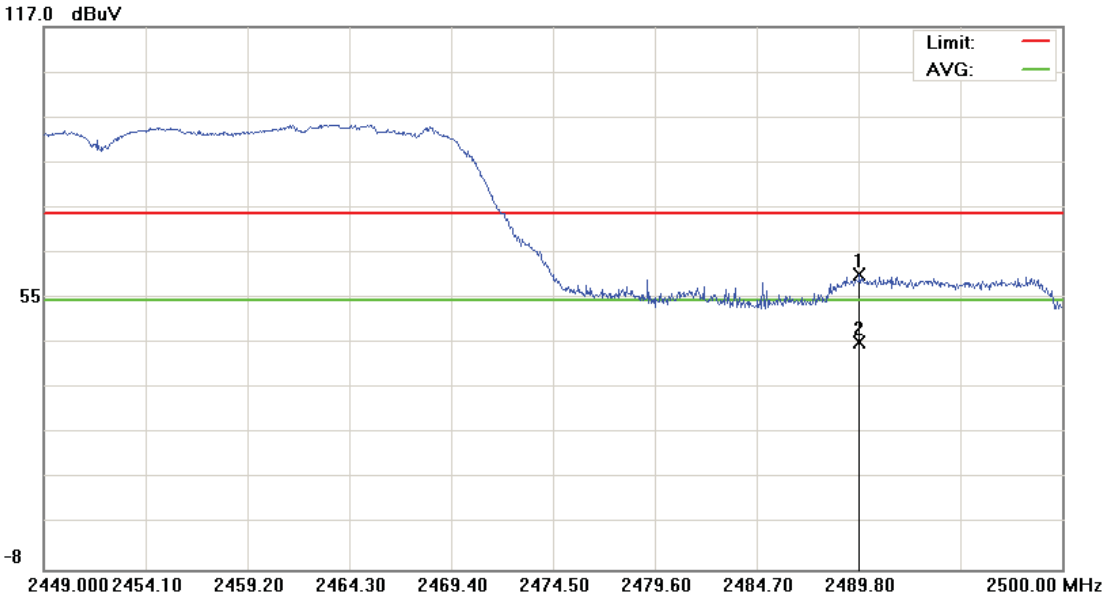
Polarization: *Horizontal*
Power:
Distance: 3m

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

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1		2389.500	65.02	0.19	65.21	74.00	-8.79	peak			
2	*	2389.500	51.38	0.19	51.57	54.00	-2.43	AVG			

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

File :ZE8(BAND EDGE) Data :#3 Date: 2009/10/30 Time:



Site:
Limit: FCC part 15 (PK)
EUT:
M/N: 09-0255-SEO
Mode: draft 802.11n Wide-40MHz_2.4GHz Link Mode
Note: 2422MHz

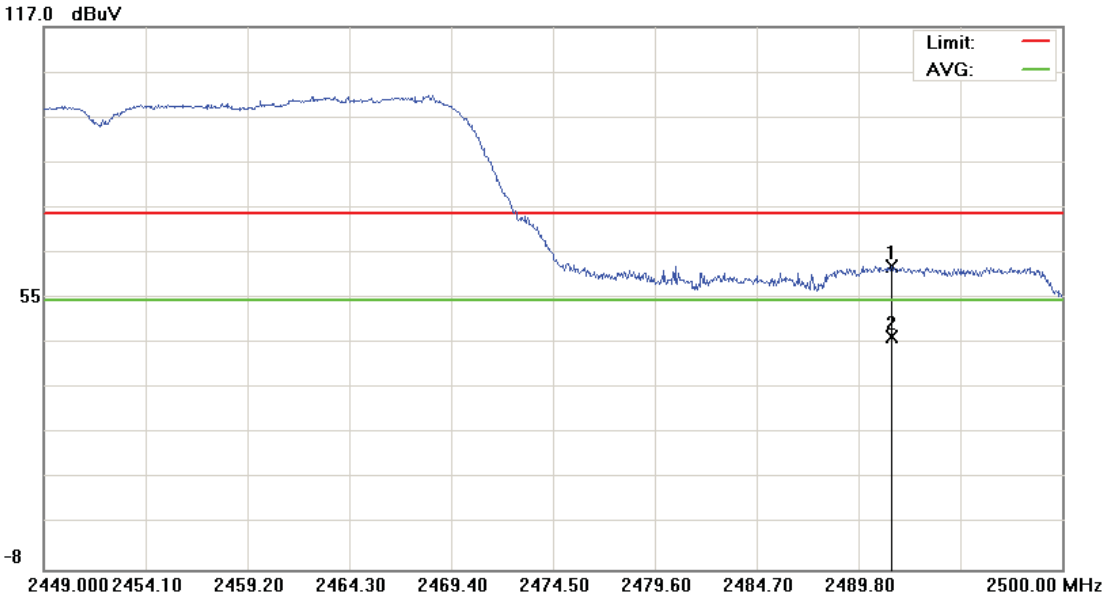
Polarization: *Vertical*
Power:
Distance: 3m

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

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1		2489.851	59.85	0.23	60.08	74.00	-13.92	peak			
2	*	2489.851	44.12	0.23	44.35	54.00	-9.65	AVG			

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

File :ZE8(BAND EDGE) Data :#7 Date: 2009/10/30 Time:



Site:
Limit: FCC part 15 (PK)
EUT:
M/N: 09-0255-SEO
Mode: draft 802.11n Wide-40MHz_2.4GHz Link Mode
Note: 2422MHz

Polarization: *Horizontal*
Power:
Distance: 3m

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

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1		2491.483	61.73	0.23	61.96	74.00	-12.04	peak			
2	*	2491.483	45.23	0.23	45.46	54.00	-8.54	AVG			

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

EUT : WLAN Module

Model No. : ZE8

Test Mode : IEEE 802.11a Link Mode_5GHz Link Mode Low CH & High CH

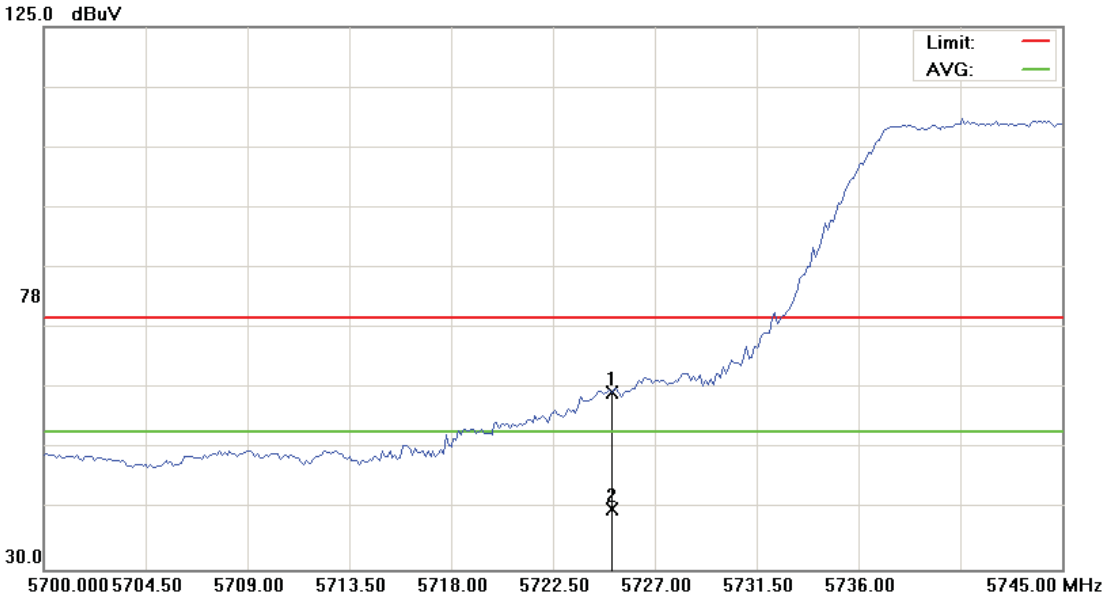
Test Date : 10/30/2009

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 :ZE8(5745) power 18 Data :#1 Date: 2009/10/30 Time:



Site:
Limit: FCC part 15 (PK)
EUT:
M/N:

Polarization: *Vertical*
Power:
Distance: 3m

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

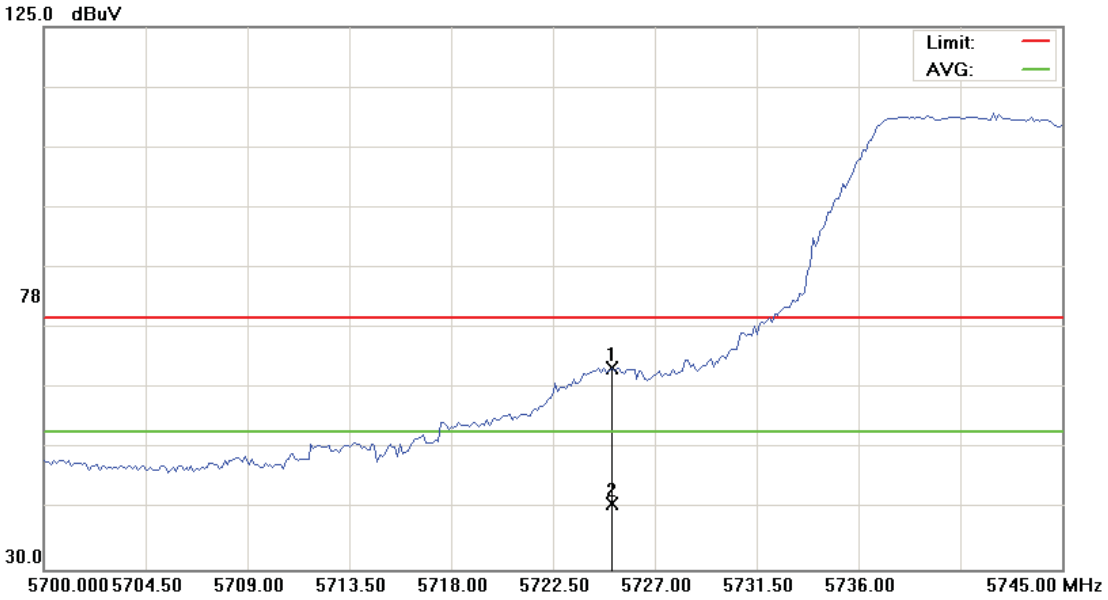
Mode: IEEE 802.11a Link Mode_5GHz Link Mode

Note: 5825MHz

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1	*	5725.000	51.92	9.07	60.99	74.00	-13.01	peak			
2		5725.000	31.52	9.07	40.59	54.00	-13.41	AVG			

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

File :ZE8(5745) power 18 Data :#2 Date: 2009/10/30 Time:



Site:
Limit: FCC part 15 (PK)
EUT:
M/N:

Polarization: *Horizontal*
Power:
Distance: 3m

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

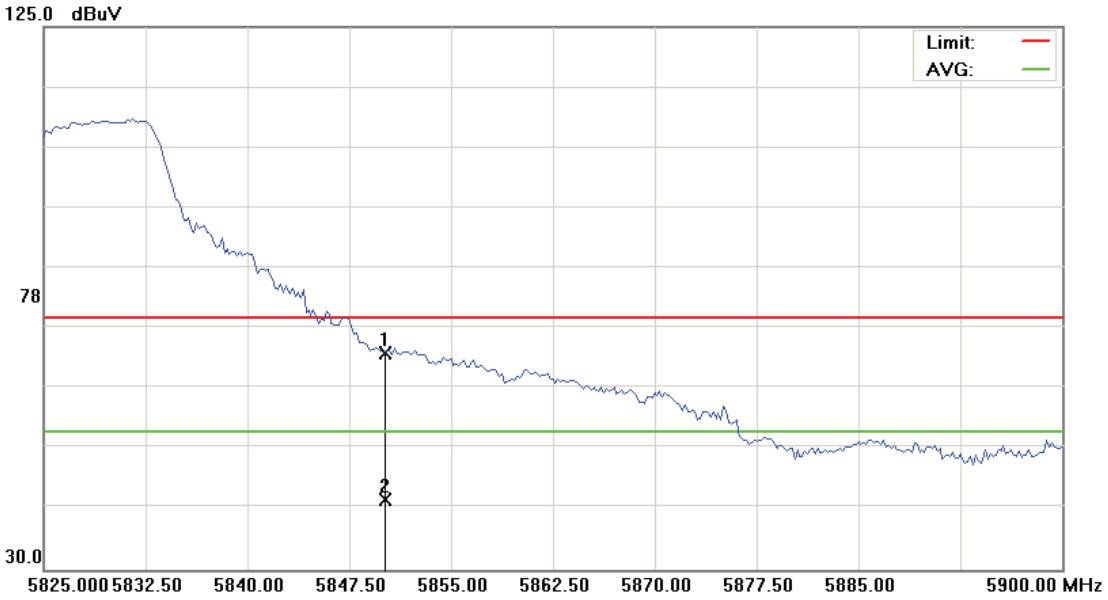
Mode: IEEE 802.11a Link Mode_5GHz Link Mode

Note: 5825MHz

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1	*	5725.000	56.10	9.07	65.17	74.00	-8.83	peak			
2		5725.000	32.48	9.07	41.55	54.00	-12.45	AVG			

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

File :ZE8(5745) power 18 Data :#3 Date: 2009/10/30 Time:



Site:
Limit: FCC part 15 (PK)
EUT:
M/N:

Polarization: *Horizontal*
Power:
Distance: 3m

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

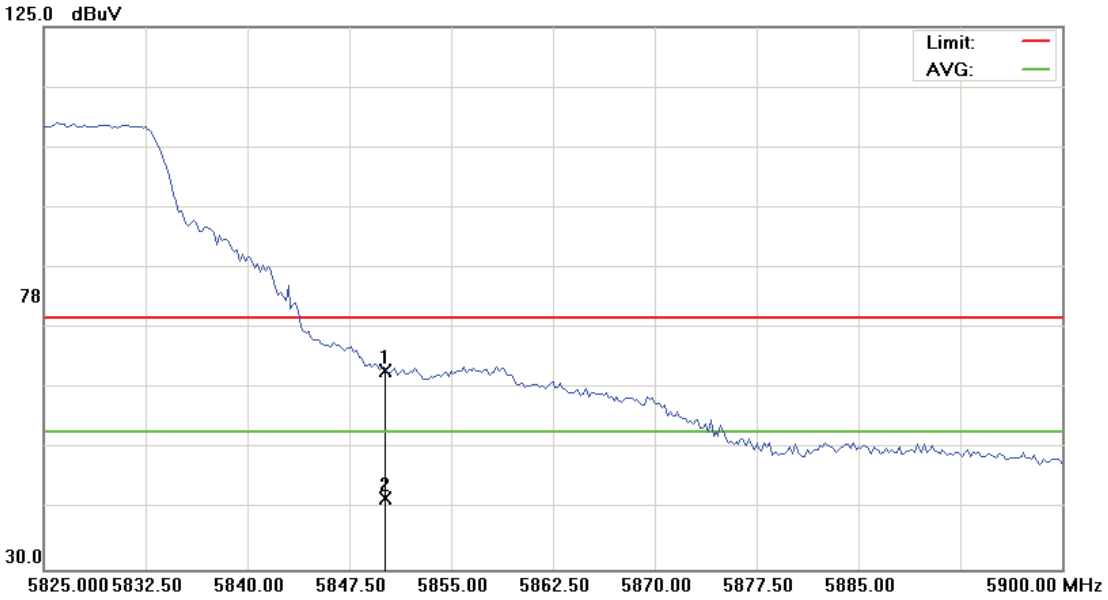
Mode: IEEE 802.11a Link Mode_5GHz Link Mode

Note: 5825MHz

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1	*	5850.000	58.61	9.37	67.98	74.00	-6.02	peak			
2		5850.000	32.93	9.37	42.30	54.00	-11.70	AVG			

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

File :ZE8(5745) power 18 Data :#4 Date: 2009/10/30 Time:



Site:
Limit: FCC part 15 (PK)
EUT:
M/N:

Polarization: *Vertical*
Power:
Distance: 3m

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

Mode: IEEE 802.11a Link Mode_5GHz Link Mode

Note: 5825MHz

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1	*	5850.000	55.49	9.37	64.86	74.00	-9.14	peak			
2		5850.000	33.18	9.37	42.55	54.00	-11.45	AVG			

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

EUT : WLAN Module

Model No. : ZE8

Test Mode : draft 802.11n Standard-20MHz_5GHz Link Mode Low CH & High CH

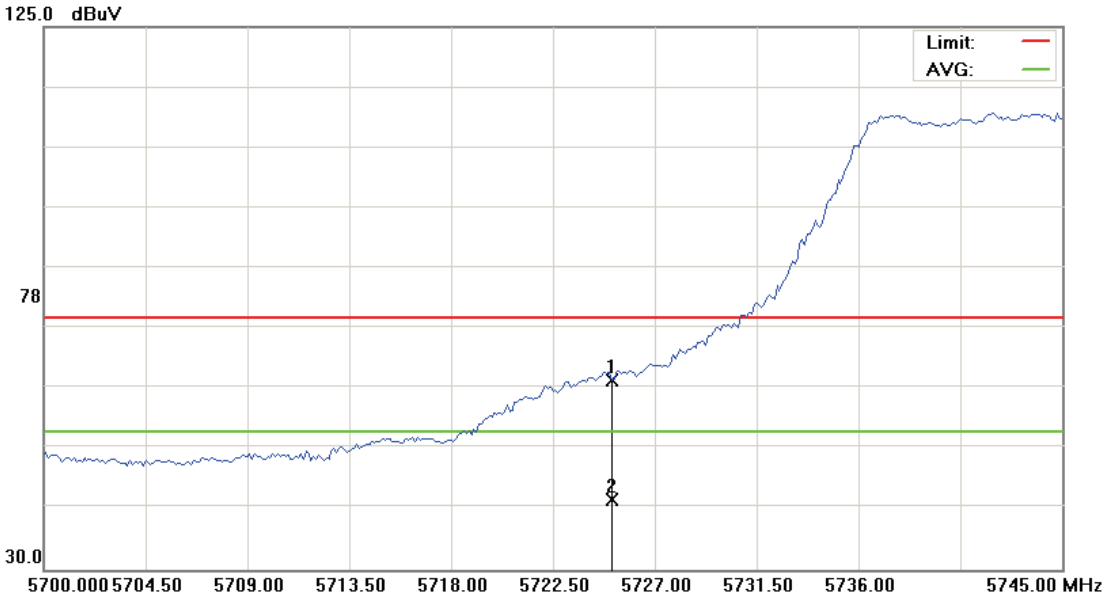
Test Date : 10/30/2009

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 :ZE8(5745) Data :#1 Date: 2009/10/30 Time:



Site:
Limit: FCC part 15 (PK)
EUT:
M/N:

Polarization: *Vertical*
Power:
Distance: 3m

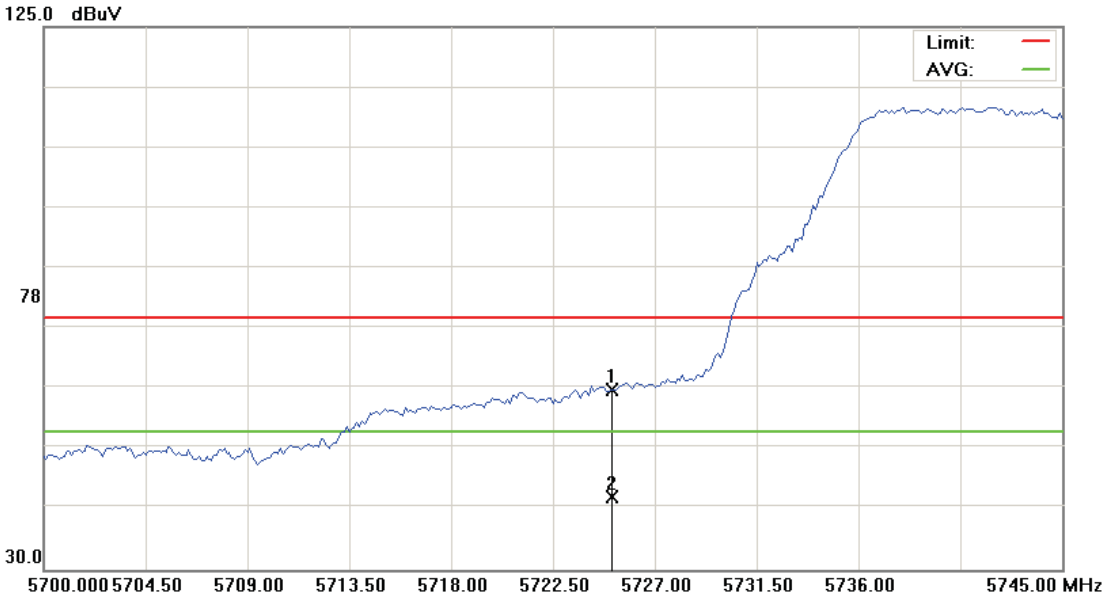
Temperature: 22 ℃
Humidity: 60 %
RBW: 1000 KHz
VBW: 1000 KHz

Mode: draft 802.11n Standard-20MHz_5GHz Link Mode
Note: 5745MHz

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1	*	5725.000	54.11	9.07	63.18	74.00	-10.82	peak			
2		5725.000	33.15	9.07	42.22	54.00	-11.78	AVG			

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

File :ZE8(5745) Data :#2 Date: 2009/10/30 Time:



Site:
Limit: FCC part 15 (PK)
EUT:
M/N:
Mode: draft 802.11n Standard-20MHz_5GHz Link Mode
Note: 5745MHz

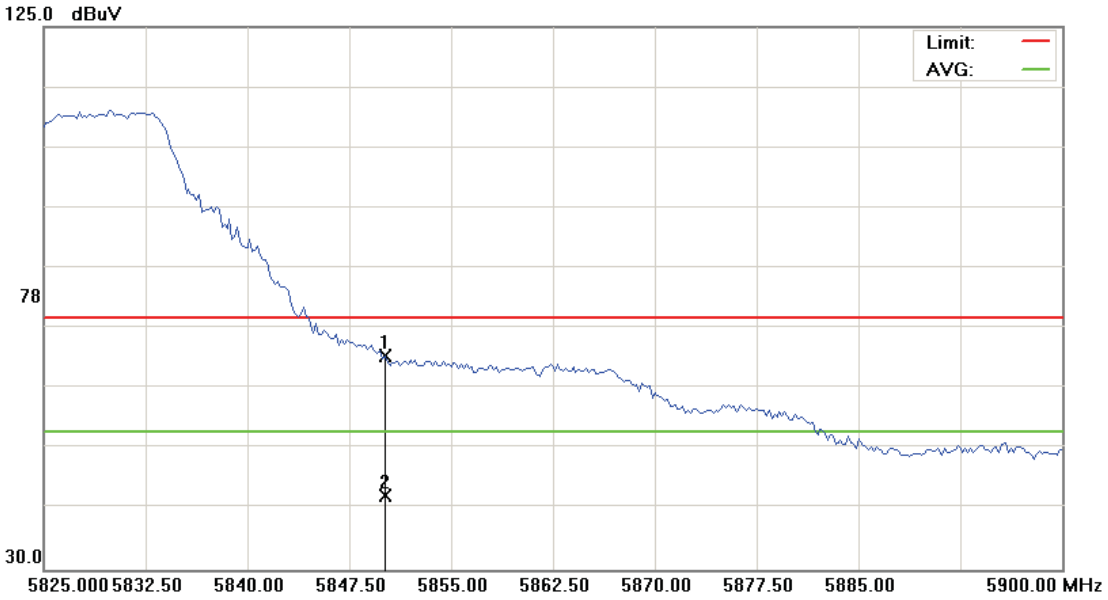
Polarization: *Horizontal*
Power:
Distance: 3m

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	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1		5725.000	52.51	9.07	61.58	74.00	-12.42	peak			
2	*	5725.000	33.69	9.07	42.76	54.00	-11.24	AVG			

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

File :ZE8(5745) Data :#3 Date: 2009/10/30 Time:



Site:
Limit: FCC part 15 (PK)
EUT:
M/N:
Mode: draft 802.11n Standard-20MHz_5GHz Link Mode
Note: 5825MHz

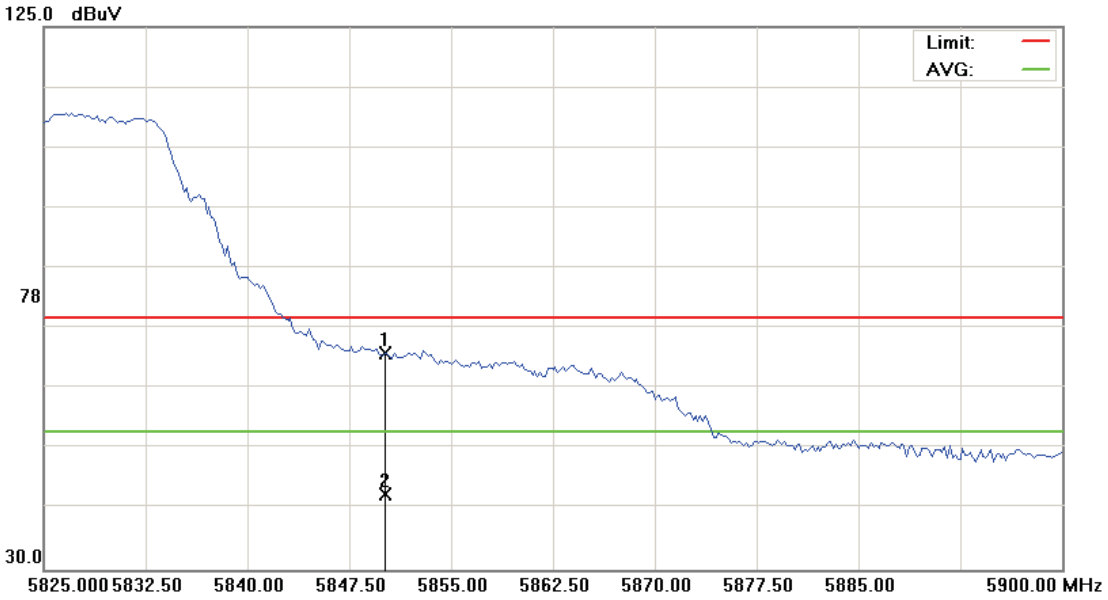
Polarization: *Horizontal*
Power:
Distance: 3m

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	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1	*	5850.000	58.00	9.37	67.37	74.00	-6.63	peak			
2		5850.000	33.67	9.37	43.04	54.00	-10.96	AVG			

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

File :ZE8(5745) Data :#4 Date: 2009/10/30 Time:



Site:
Limit: FCC part 15 (PK)
EUT:
M/N:
Mode: draft 802.11n Standard-20MHz_5GHz Link Mode
Note: 5825MHz

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	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1	*	5850.000	58.47	9.37	67.84	74.00	-6.16	peak			
2		5850.000	33.72	9.37	43.09	54.00	-10.91	AVG			

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

EUT : WLAN Module

Model No. : ZE8

Test Mode : draft 802.11n Wide-40MHz_5GHz Link Mode Low CH & High CH

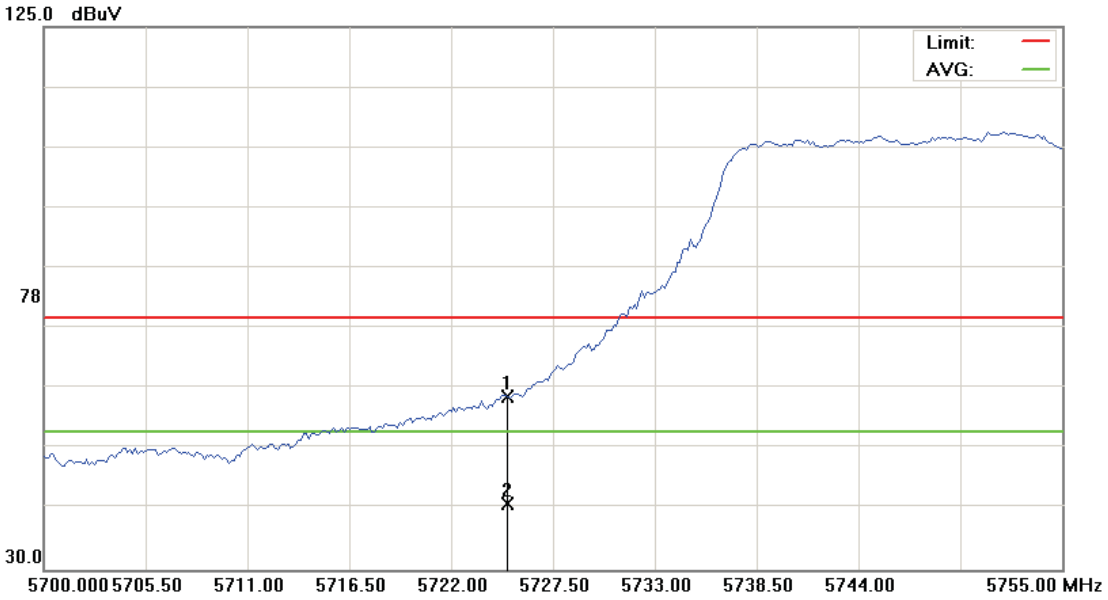
Test Date : 10/30/2009

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 :ZE8(5755) Data :#1 Date: 2009/10/30 Time:



Site:
Limit: FCC part 15 (PK)
EUT:
M/N:

Polarization: *Vertical*
Power:
Distance: 3m

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

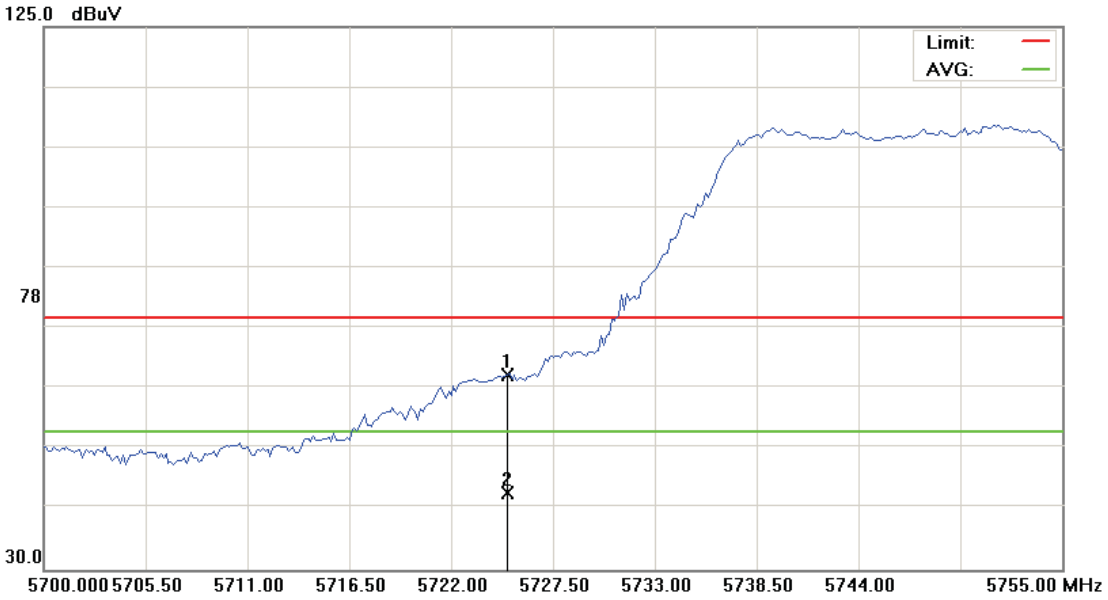
Mode: draft 802.11n Wide-40MHz_5GHz Link Mode

Note: 5755MHz

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1		5725.000	51.13	9.07	60.20	74.00	-13.80	peak			
2	*	5725.000	32.51	9.07	41.58	54.00	-12.42	AVG			

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

File :ZE8(5755) Data :#2 Date: 2009/10/30 Time:



Site:
Limit: FCC part 15 (PK)
EUT:
M/N:

Polarization: *Horizontal*
Power:
Distance: 3m

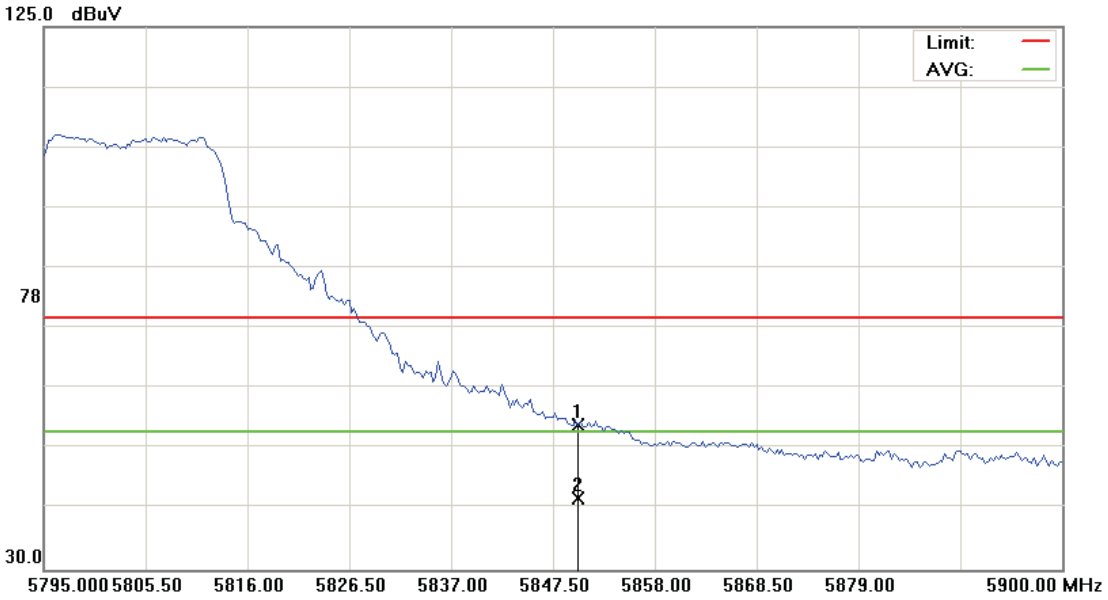
Temperature: 22 ℃
Humidity: 60 %
RBW: 1000 KHz
VBW: 1000 KHz

Mode: draft 802.11n Wide-40MHz_5GHz Link Mode
Note: 5755MHz

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1	*	5725.000	54.95	9.07	64.02	74.00	-9.98	peak			
2		5725.000	34.26	9.07	43.33	54.00	-10.67	AVG			

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

File :ZE8(5755) Data :#3 Date: 2009/10/30 Time:



Site:
Limit: FCC part 15 (PK)
EUT:
M/N:

Polarization: *Horizontal*
Power:
Distance: 3m

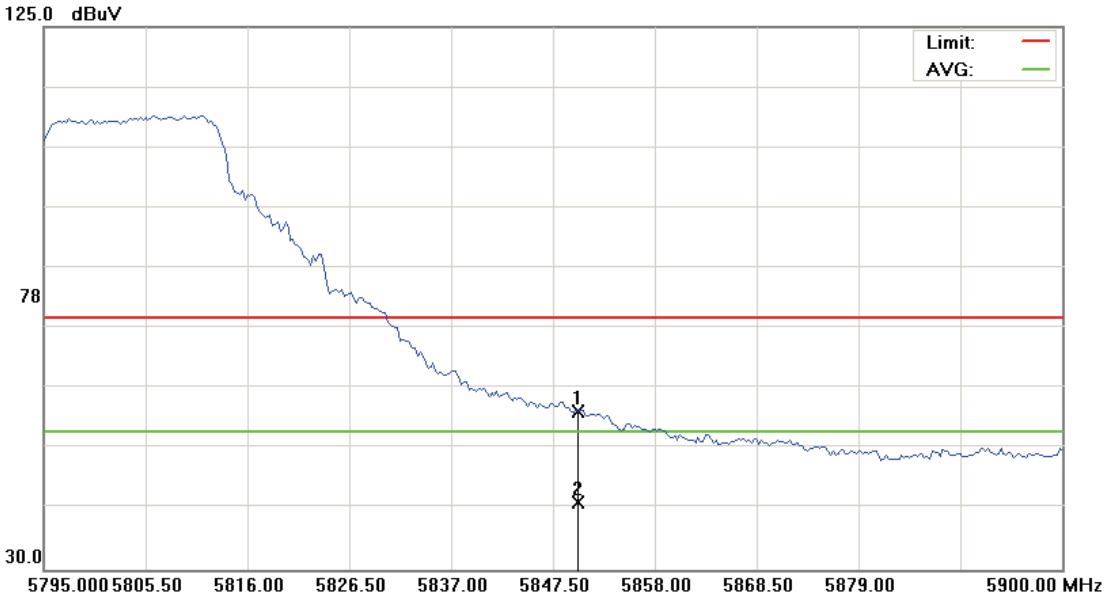
Temperature: 22 ℃
Humidity: 60 %
RBW: 1000 KHz
VBW: 1000 KHz

Mode: draft 802.11n Wide-40MHz_5GHz Link Mode
Note: 5755MHz

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1		5850.000	45.97	9.37	55.34	74.00	-18.66	peak			
2	*	5850.000	33.18	9.37	42.55	54.00	-11.45	AVG			

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

File :ZE8(5755) Data :#4 Date: 2009/10/30 Time:



Site:
Limit: FCC part 15 (PK)
EUT:
M/N:

Polarization: *Vertical*
Power:
Distance: 3m

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

Mode: draft 802.11n Wide-40MHz_5GHz Link Mode

Note: 5755MHz

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1		5850.000	48.26	9.37	57.63	74.00	-16.37	peak			
2	*	5850.000	32.48	9.37	41.85	54.00	-12.15	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 **3.56** dBi.