



Product Name : Wireless N 150 Home Router

Model No. : W150NR

FCC ID. : YC3W150NR

Applicant : KEEBOX, Inc.

Address : P.O. Box 2290, Gardena, CA 90247 U.S.A.

Date of Receipt : 2009/03/24

Issued Date : 2010/06/10

Report No. : 104234R-RFUSP05V01

Report Version : V1.0

The test results relate only to the samples tested.

The test report shall not be reproduced except in full without the written approval of QuieTek Corporation.



# Test Report Certification

Issued Date : 2010/06/10

Report No. : 104234R-RFUSP05V01

		QuieTek
Product Name	:	Wireless N 150 Home Router
Applicant	:	KEEBOX, Inc.
Address	:	P.O. Box 2290, Gardena, CA 90247 U.S.A.
Manufacturer	:	Alpha Networks Inc.
Model No.	:	W150NR
FCC ID.	:	YC3W150NR
Rated Voltage	:	AC 120 V / 60 Hz
EUT Voltage	:	AC 100~240 V, 50 / 60 Hz
Trade Name	:	KEEBOX
Applicable Standard	:	FCC CFR Title 47 Part 15 Subpart C Section 15.247:2009
Test Result	:	Complied
The test results relate only to the fine test report shall not be repro		amples tested.  ed except in full without the written approval of QuieTek Corporation.
Documented By	:	Demi Chang
		( Demi Chang / Engineering Adm. Specialist )
Reviewed By	:	Ruta Hsu.

( Demi Chang / Engineering Adm. Specialist )

Reviewed By : (Rita Hsu / Assistant Engineer )

Approved By : (Roy Wang / Manager )



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## 1. General Information

# 1.1. EUT Description

B 1	
Product Name	Wireless N 150 Home Router
Product Type	WLAN (1TX, 1RX)
Trade Name	KEEBOX
Model No.	W150NR
Frequency Range-IEEE 802.11b/g	2412~2462MHz
& IEEE 802.11n (20MHz)	
Frequency Range-	2422~2452MHz
IEEE 802.11n (40MHz)	
Channel Number (IEEE 802.11b/g	11
& IEEE 802.11n (20MHz))	
Channel Number-	7
IEEE 802.11n (40MHz)	
Type of Modulation (IEEE 802.11b)	Direct Sequence Spread Spectrum (DSSS)
Type of Modulation (IEEE 802.11g)	Orthogonal Frequency Division Multiplexing (OFDM)
Data Speed (IEEE 802.11b)	1Mbps, 2Mbps, 5.5Mbps, 11Mbps
Data Speed (IEEE 802.11g)	6Mbps, 9Mbps, 12Mbps, 18Mbps, 24Mbps, 36Mbps, 48Mbps,
	54Mbps
Data Speed (IEEE 802.11n)	Support a subset of the combination of GI, MCS 0~MCS 7 and
	bandwidth defined in 802.11n
Antenna	ANT A (TX/RX): 1.8dBi
Channel Control	Manual
Antenna Type	Connector (R-SMA)

Component	
Pedestal	1 Set
LAN Cable	Non-Shielded, 1.5m
Power Adapter	AMIGO, AMS1-0501200FU
	I/P: 100-240V 50/60Hz 0.2A
	O/P: 5V 1.2A
	Cable Out: Non-Shielded, 1.5m

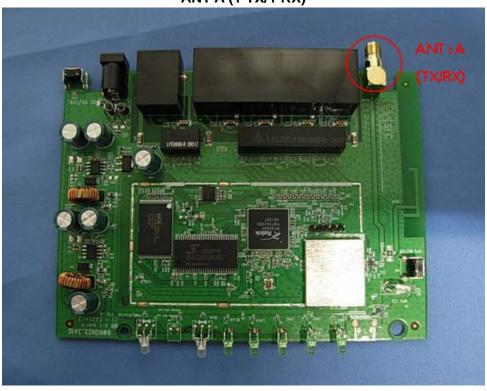
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## ANT-TX / RX & Bandwidth

ANT-TX / RX	TX		RX	
Mode/ Channel Bandwidth	20MHz	40MHz	20MHz	40MHz
IEEE802.11b	<b>√</b>		<b>V</b>	
IEEE802.11g	<b>√</b>		<b>√</b>	
Draft 11n	<b>√</b>	✓	<b>√</b>	<b>✓</b>

ANT A (1 TX/1 RX)





# 11n Spec.

MCS	Nss	Modulation	R	R NBPSC NCBPS NDBPS Data rate (Mbp 800nsGI		NDBPS				
Index					20MHz	40MHz	20MHz	40MHz	20MHz	40MHz
0	1	BPSK	1/2	1	52	108	26	54	6.5	13.5
1	1	QPSK	1/2	2	104	216	52	108	13.0	27.0
2	1	QPSK	<sup>3</sup> / <sub>4</sub>	2	104	216	78	162	19.5	40.5
3	1	16-QAM	1/2	4	208	432	104	216	26.0	54.0
4	1	16-QAM	<sup>3</sup> / <sub>4</sub>	4	208	432	156	324	39.0	81.0
5	1	64-QAM	<sup>2</sup> / <sub>3</sub>	6	312	648	208	432	52.0	108.0
6	1	64-QAM	<sup>3</sup> / <sub>4</sub>	6	312	648	234	486	58.5	121.5
7	1	64-QAM	<sup>5</sup> / <sub>6</sub>	6	312	648	260	540	65.0	135.0

Symbol	Explanation
NSS	Number of spatial streams
R	Code rate
NBPSC	Number of coded bits per single carrier
NCBPS	Number of coded bits per symbol
NDBPS	Number of data bits per symbol
GI	Guard interval

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### IEEE 802.11b/g & IEEE 802.11n (20MHz)

Working Frequency of Each Channel									
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency		
001	2412 MHz	002	2417 MHz	003	2422 MHz	004	2427 MHz		
005	2432 MHz	006	2437 MHz	007	2442 MHz	800	2447 MHz		
009	2452 MHz	010	2457 MHz	011	2462 MHz				

## IEEE 802.11n (40MHz)

Working Frequency of Each Channel									
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency		
003	2422 MHz	004	2427 MHz	005	2432 MHz	006	2437 MHz		
007	2442 MHz	008	2447 MHz	009	2452 MHz				

- 1. This device is a Wireless N 150 Home Router, which including 2.4GHz b/g and 11n (1x1) transmitting and receiving function.
- 2. These test results on a sample of the device are for the purpose of demonstrating compliance with Part 15 Subpart C Paragraph 15.247.
- 3. Regards to the frequency band operation; the lowest \ middle and highest frequency of channel were selected to perform the test, and then shown on this report.
- 4. This device is a composite device in accordance with Part 15 regulations. The receiving function receiving was tested and its test report number is 104234R-RFUSP01V02 under Declaration of Conformity.



## 1.3. Test Mode

QuieTek has verified the construction and function in typical operation. The preliminary tests were performed in different data rate, and to find the worst condition, which was shown in this test report. The following table is the final test mode.

Tx	Mode 1: Transmit
• • •	

Test Items	Mode	Channel	Antenna	Result
Conducted Emission	b/g/11n(20MHz)/11n(40MHz)	6	Α	Complies
Peak Power Output	b/g	1 /6/ 11	А	Complies
	11n-MCS0(20MHz)	1 /6/ 11	Α	Complies
	11n-MCS1 (40MHz)	3 /6/ 9	Α	Complies
Radiated Emission	b/g	1 /6/ 11	Α	Complies
	11n-MCS0(20MHz)	1 /6/ 11	Α	Complies
	11n-MCS1 (40MHz)	3 /6/ 9	Α	Complies
RF antenna conducted test	b/g	1 /11	Α	Complies
	11n-MSC0 (20MHz)	1 /11	Α	Complies
	11n-MSC0 (40MHz)	3 /9	Α	Complies
Radiated Emission	b/g	1 /11	Α	Complies
Band Edge	11n-MSC0 (20MHz)	1 /11	Α	Complies
ŭ	11n-MSC0 (40MHz)	3 /9	Α	Complies
Occupied Bandwidth	b/g	1 /6/ 11	Α	Complies
	11n-MCS0 (20MHz)	1 /6/ 11	Α	Complies
	11n-MCS1 (40MHz)	3 /6/ 9	Α	Complies
Power Density	b/g	1 /6/ 11	Α	Complies
	11n-MCS0 (20MHz)	1 /6/ 11	А	Complies
	11n-MCS1 (40MHz)	3 /6/ 9	А	Complies

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# 1.4. Tested System Details

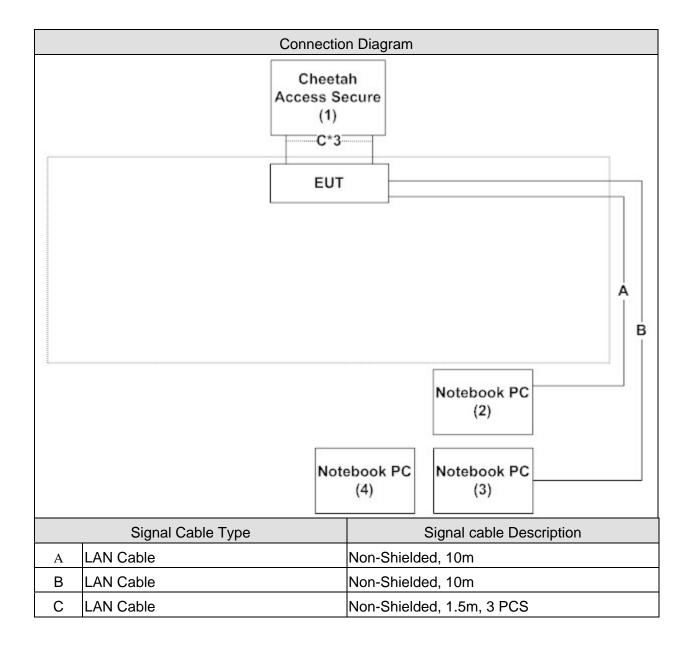
The types for all equipments, plus descriptions of all cables used in the tested system (including inserted cards) are:

Product		Manufacturer	Model No.	Serial No.	FCC ID	Power Cord
1	Cheetah	Accton	AC-IG1104	N/A	DoC	Non-shielded, 1.8m
	Access Secure					
2	Notebook PC	DELL	LATITUDE D400	GK43D1S	DoC	Non-shielded, 1.7m,
						a ferrite core bonded
3	Notebook PC	DELL	LATITUDE D400	HK43D1S	DoC	Non-shielded, 1.7m,
						a ferrite core bonded
4	Notebook PC	DELL	Latitude 610	N/A	DoC	Non-shielded, 1.7m,
						a ferrite core bonded

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## 1.5. Configuration of tested System





## 1.6. EUT Exercise Software

1	Setup the EUT and simulators as shown on 1.5.
2	Turn on the power of all equipment.
3	Boot the Notebook PC from Hard Disk.
4	Data will communicate by connecting to LAN port of Notebook PC.
5	The Notebook PC 's monitor will show the transmitting and receiving characteristics when the
	communication is success.
6	Repeat the above procedure (4) to (5).

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## 1.7. Test Facility

Ambient conditions in the laboratory:

Items	Test Item	Required (IEC 68-1)	Actual
Temperature (°C)	FCC PART 15 C 15.207	15 - 35	20
Humidity (%RH)	Conducted Emission	25 - 75	50
Barometric pressure (mbar)	Conducted Emission	860 - 1060	950-1000
Temperature (°C)	FCC DADT 15 C 15 247	15 - 35	23.5
Humidity (%RH)	FCC PART 15 C 15.247 Peak Power Output (DSSS)	25 - 75	53
Barometric pressure (mbar)	reak rowel Output (D333)	860 - 1060	950-1000
Temperature (°C)	FCC PART 15 C 15.247	15 - 35	25
Humidity (%RH)	Radiated Emission (DSSS)	25 - 75	65
Barometric pressure (mbar)	Radiated Effission (D333)	860 - 1060	950-1000
Temperature (°C)	FCC PART 15 C 15.247	15 - 35	26
Humidity (%RH)	Band Edge (DSSS)	25 - 75	65
Barometric pressure (mbar)	Dand Edge (D555)	860 - 1060	950-1000
Temperature (°C)	FCC PART 15 C 15.247	15 - 35	26
Humidity (%RH)	Occupied Bandwidth (DSSS)	25 - 75	52.8
Barometric pressure (mbar)	Occupied Bandwidth (D333)	860 - 1060	950-1000
Temperature (°C)	FCC DADT 15 C 15 247	15 - 35	26
Humidity (%RH)	FCC PART 15 C 15.247 Power Density (DSSS)	25 - 75	52.8
Barometric pressure (mbar)	Tower Density (D000)	860 - 1060	950-1000

Site Description:

January 24, 2005 File on

Federal Communications Commission

Laboratory Division 7435 Oakland Mills Road Columbia, MD 21046

Registration Number: 365520

Accredited by TAF

Accreditation Number: 1313

Effective through: December 27, 2010

Accredited by NVLAP

NVLAP Lab Code: 200347-0

Effective through: September 30, 2009

Site Name: Quietek Corporation

Site Address: No.75-1, Wang-Yeh Valley, Yung-Hsing,

Chiung-Lin, Hsin-Chu County,

Taiwan, R.O.C.

TEL: 886-3-592-8858 / FAX: 886-3-592-8859

E-Mail: service@quietek.com











## 2. Conducted Emission

## 2.1. Test Equipment

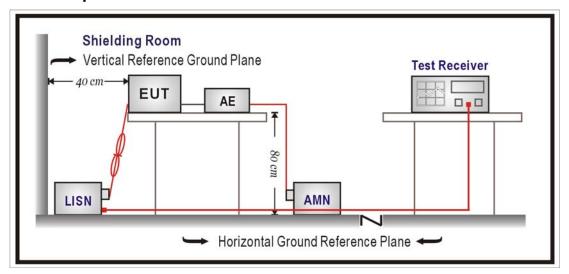
The following test equipments are used during the test:

Conducted Emission / SR2

Instrument	Manufacturer	Type No.	Serial No	Cal. Date
4-Wire ISN	R&S	ENY 41	837032/001	2008/04/15
Artificial Mains Network	R&S	ENV4200	848411/010	2009/03/13
Double 2-Wire ISN	R&S	ENY 22	835354/008	2008/04/15
LISN	R&S	ESH3-Z5	825562/002	2008/03/31
Pulse Limiter	R&S	ZSH3Z2	357.8810.54	2008/07/19
Test Receiver	R&S	ESCS 30	100122	2009/02/21

Note: 1. All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

# 2.2. Test Setup





#### 2.3. Limits

FCC Part 15 Subpart C Paragraph 15.207 Limits (dBuV)			
Frequency MHz	QP	AV	
0.15 - 0.50	66-56	56-46	
0.50-5.0	56	46	
5.0 - 30	60	50	

Remarks: In the above table, the tighter limit applies at the band edges.

#### 2.4. Test Procedure

The EUT was setup and tested according to ANSI C63.4, 2003.

The EUT and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refers to the block diagram of the test setup and photographs.)

Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.4: 2003 on conducted measurement.

Conducted emissions were invested over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9kHz.

## 2.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.207: 2009

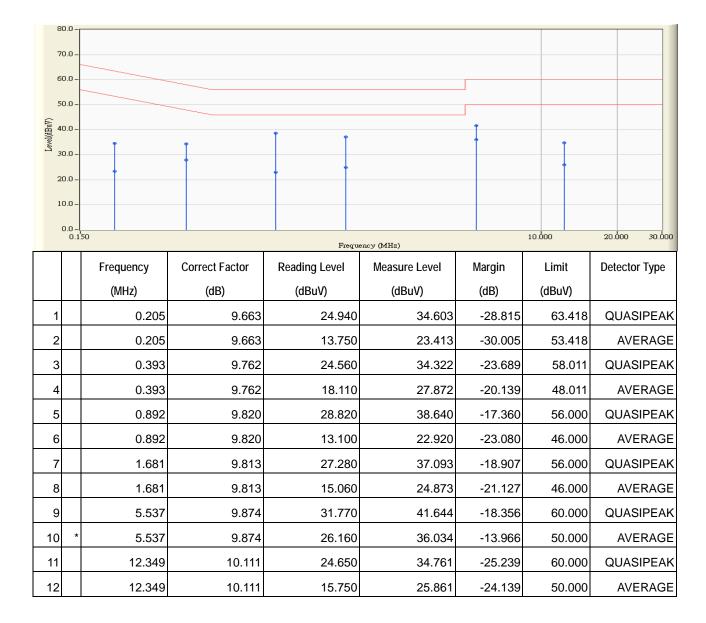
## 2.6. Uncertainty

The measurement uncertainty is defined as  $\pm$  2.26 dB.



### 2.7. Test Result

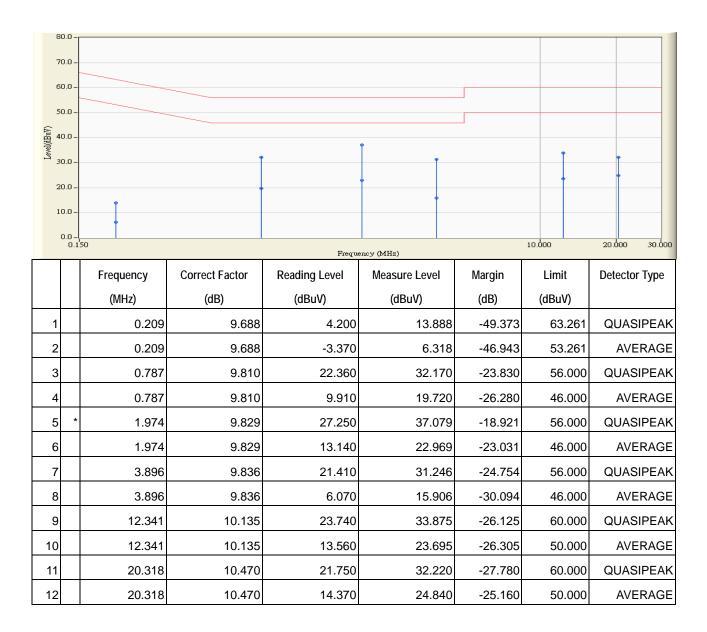
Site : SR2	Time : 2009/03/25 - 10:44
Limit : CISPR_B_00M_QP	Margin : 10
Probe : SR2-LISN(16A) - Line1	Power : AC 120V/60Hz
EUT : Wireless N 150 Home Router	Note : Mode 1: Transmit-802.11b



- 1. All Reading Levels are Quasi-Peak and average value.
- 2. " \* ", means this data is the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor.



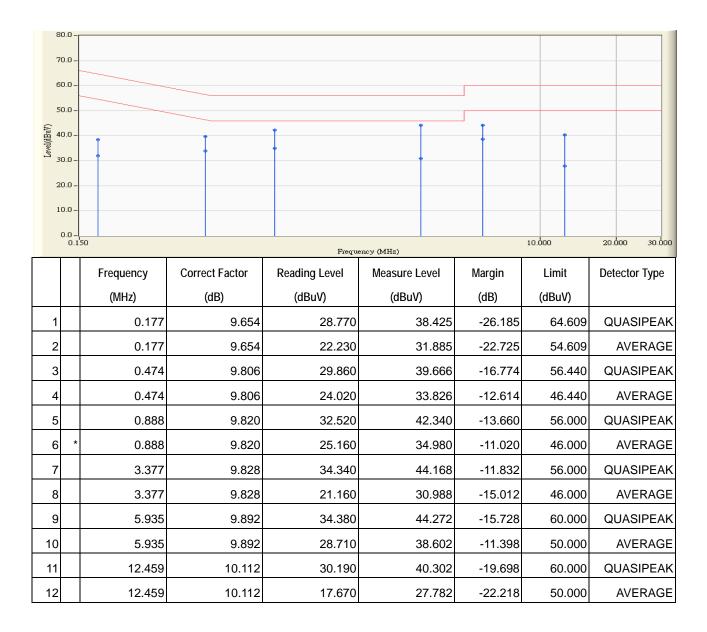
Site : SR2	Time : 2009/03/25 - 10:51
Limit : CISPR_B_00M_QP	Margin : 10
Probe : SR2-LISN(16A) - Line2	Power : AC 120V/60Hz
EUT : Wireless N 150 Home Router	Note : Mode 1: Transmit-802.11b



- 1. All Reading Levels are Quasi-Peak and average value.
- 2. " \* ", means this data is the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor.



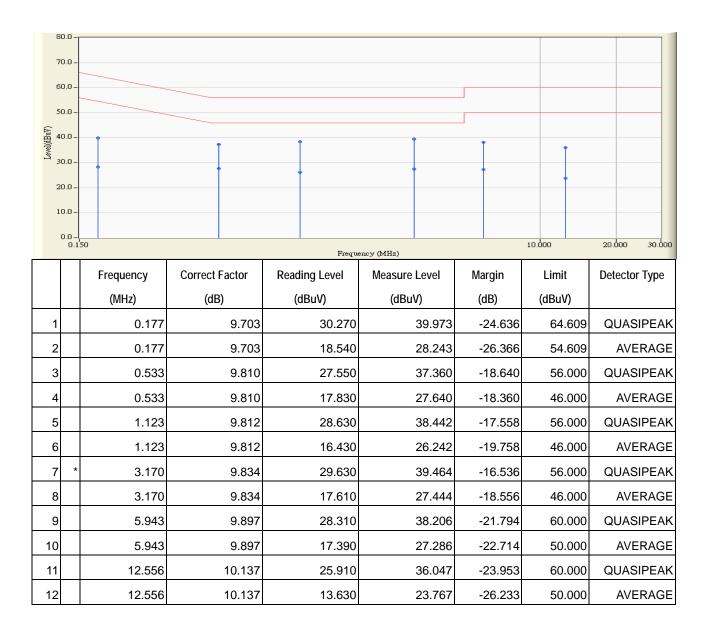
Site : SR2	Time : 2009/03/25 - 11:02
Limit : CISPR_B_00M_QP	Margin : 10
Probe : SR2-LISN(16A) - Line1	Power : AC 120V/60Hz
EUT : Wireless N 150 Home Router	Note : Mode 1: Transmit-802.11g



- 1. All Reading Levels are Quasi-Peak and average value.
- 2. " \* ", means this data is the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor.



Site : SR2	Time : 2009/03/25 - 11:09
Limit : CISPR_B_00M_QP	Margin : 10
Probe : SR2-LISN(16A) - Line2	Power : AC 120V/60Hz
EUT : Wireless N 150 Home Router	Note : Mode 1: Transmit-802.11g



- 1. All Reading Levels are Quasi-Peak and average value.
- 2. " \* ", means this data is the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor.



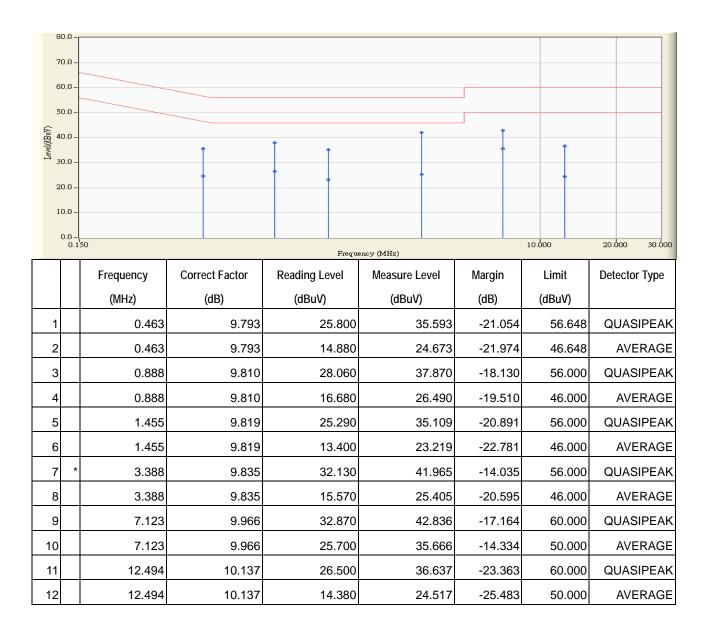
Site : SR2	Time : 2009/03/25 - 11:14
Limit : CISPR_B_00M_QP	Margin : 10
Probe : SR2-LISN(16A) - Line1	Power : AC 120V/60Hz
EUT : Wireless N 150 Home Router	Note : Mode 1: Transmit-802.11n(20M)



- 1. All Reading Levels are Quasi-Peak and average value.
- 2. " \* ", means this data is the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor.



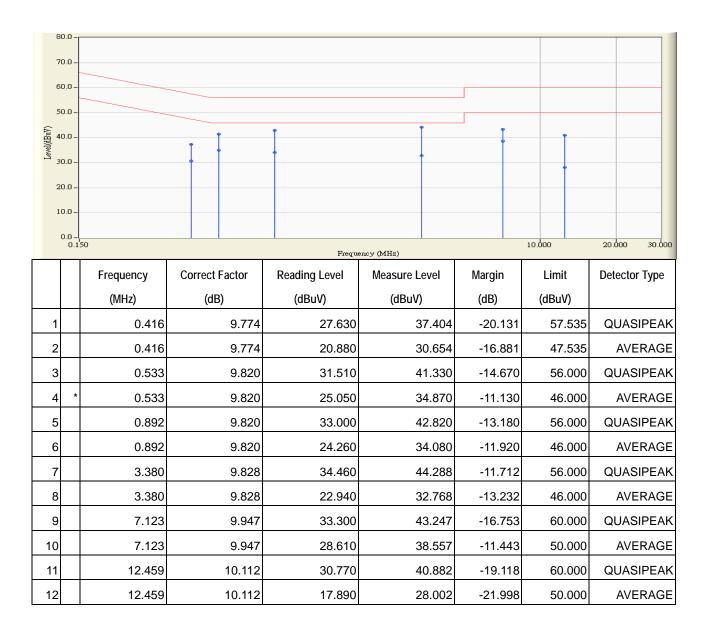
Site : SR2	Time : 2009/03/25 - 11:17
Limit : CISPR_B_00M_QP	Margin : 10
Probe : SR2-LISN(16A) - Line2	Power : AC 120V/60Hz
EUT : Wireless N 150 Home Router	Note : Mode 1: Transmit-802.11n(20M)



- 1. All Reading Levels are Quasi-Peak and average value.
- 2. " \* ", means this data is the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor.



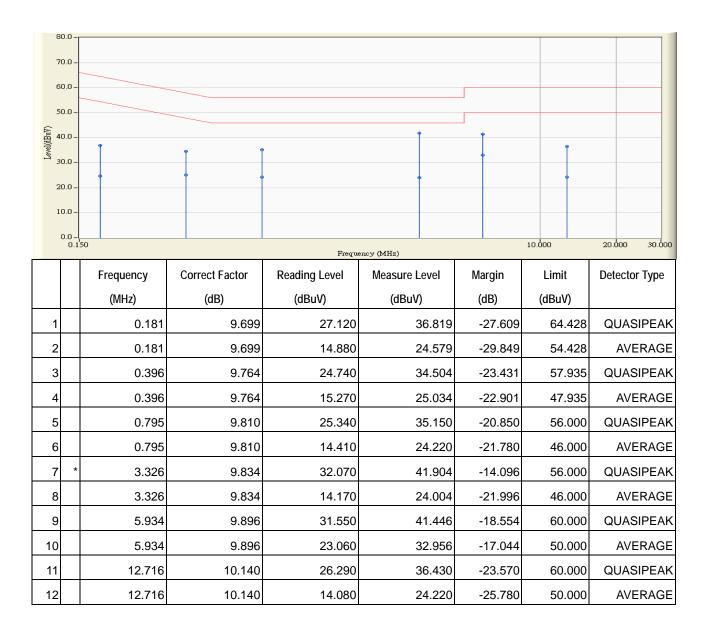
Site : SR2	Time : 2009/03/25 - 11:22
Limit : CISPR_B_00M_QP	Margin : 10
Probe : SR2-LISN(16A) - Line1	Power : AC 120V/60Hz
EUT : Wireless N 150 Home Router	Note : Mode 1: Transmit-802.11n(40M)



- 1. All Reading Levels are Quasi-Peak and average value.
- 2. " \* ", means this data is the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor.



Site : SR2	Time : 2009/03/25 - 11:25
Limit : CISPR_B_00M_QP	Margin: 10
Probe : SR2-LISN(16A) - Line2	Power : AC 120V/60Hz
EUT : Wireless N 150 Home Router	Note: Mode 1: Transmit-802.11n(40M)



- 1. All Reading Levels are Quasi-Peak and average value.
- 2. " \* ", means this data is the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor.



## 3. Peak Power Output

## 3.1. Test Equipment

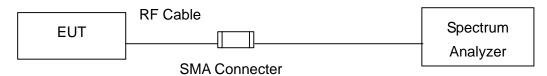
The following test equipments are used during the test:

Item	Equipment	Manufacturer	Model No. / Serial No.	Last Cal.
1	Spectrum Analyzer	R&S	FSP / 100561	Mar., 2009
2	No.1 OATS			Sep., 2008

Note: 1. All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

## 3.2. Test Setup

IEEE 802.11 b / g / n (20M / 40M) MODE



## 3.3. Test procedures

The EUT was tested according to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.

## 3.4. Limits

The maximum peak power shall be less 1 Watt.

## 3.5. Uncertainty

The measurement uncertainty is defined as  $\pm$  1.27 dB.



## 3.6. Test Result

Product	Wireless N 150 Home Router				
Test Item	Peak Power Output				
Test Mode	Transmit				
Date of Test	2009/03/30	Test Site	No.1 OATS		

IEEE 802.11b							
Channel No.	Frequency	Measure Level	Limit	Dogult			
Channel No.	(MHz)	Hz) (dBm) (dBm)		Result			
1	2412	18.82	1Watt= 30 dBm	Pass			
6	2437	18.84	1Watt= 30 dBm	Pass			
11	2462	18.94	1Watt= 30 dBm	Pass			

	Peak Power Output Value (dBm)							
Channal Na			D					
Channel No.	Channel No. Frequency (MHz)		2Mbps	5.5Mbps	11Mbps	Required Limit		
1	2412.00	18.71	18.74	18.80	18.82	1Watt= 30 dBm		
6	2437.00	18.73	18.77	18.81	18.84	1Watt= 30 dBm		
11	2462.00	18.75	18.79	18.83	18.94	1Watt= 30 dBm		

Note: Measure Level =Reading value + cable loss



Product	Wireless N 150 Home Router		
Test Item	Peak Power Output		
Test Mode	Transmit		
Date of Test	2009/03/30	Test Site	No.1 OATS

IEEE 802.11g							
Channel No.	Frequency	Measure Level	Limit	Dooult			
Channel No.	(MHz)	(dBm) (dBm)		Result			
1	2412	23.70	1Watt= 30 dBm	Pass			
6	2437	23.72	1Watt= 30 dBm	Pass			
11	2462	24.16	1Watt= 30 dBm	Pass			

	Peak Power Output Value(dBm)									
			Data Rate (Mbps)							
Channel No.	Frequency (MHz)	6	9	12	18	24	36	48	54	Required Limit
		Mbps	Mbps	Mbps	Mbps	Mbps	Mbps	Mbps	Mbps	
1	2412.00	23.32	23.41	23.44	23.49	23.52	23.57	23.65	23.70	1Watt= 30 dBm
6	2437.00	23.36	23.42	23.49	23.53	23.57	23.61	23.69	23.72	1Watt= 30 dBm
11	2462.00	23.47	23.52	23.55	23.67	23.79	23.84	23.91	24.16	1Watt= 30 dBm

Note: Measure Level =Reading value + cable loss



Product	Wireless N 150 Home Router		
Test Item	Peak Power Output		
Test Mode	Transmit		
Date of Test	2009/03/30	Test Site	No.1 OATS

# IEEE 802.11n 20MHz\_Tx

The worst emission of data rate is 6.5Mbps.

	Peak Power Output (dBm)									
МС	MCS Index 0 1 2 3 4 5 6 7									
Channel	Channel Frequency Data Rate						Required			
No	(MHz)	6.5	13	19.5	26	39	52	58.5	65	Limit
1	2412	22.54	22.47	22.41	22.34	22.31	22.27	22.22	22.14	30dBm
6	2437	22.56	22.52	22.43	22.37	22.41	22.30	22.27	22.18	30dBm
11	2462	22.78	22.73	22.63	22.56	22.50	22.49	22.35	22.24	30dBm

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Product	Wireless N 150 Home Router		
Test Item	Peak Power Output		
Test Mode	Transmit		
Date of Test	2009/03/30	Test Site	No.1 OATS

IEEE 802.11n MCS0 20MHz_Tx ; ANT A							
Channel No.	Frequency			Result			
Grianner No.	(MHz)	(dBm)	(dBm)	resuit			
1	2412	22.54	1Watt= 30 dBm	Pass			
6	2437	22.56	1Watt= 30 dBm	Pass			
11	2462	22.78	1Watt= 30 dBm	Pass			

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Product	Wireless N 150 Home Router		
Test Item	Peak Power Output		
Test Mode	Transmit		
Date of Test	2009/03/30	Test Site	No.1 OATS

## IEEE802.11n 40MHz\_Tx

The worst emission of data rate is 13Mbps

	Peak Power Output (dBm)									
МС	S Index	0	1	2	3	4	5	6	7	Daniinad
Channel	nannel Frequency Data Rate					Required				
No	(MHz)	6.5	13	19.5	26	39	52	58.5	65	Limit
1	2412	22.67	22.71	22.64	22.58	22.49	22.43	22.36	22.30	30dBm
6	2437	22.69	22.74	22.67	22.63	22.52	22.50	22.40	22.36	30dBm
11	2462	22.91	22.94	22.85	22.81	22.64	22.62	22.53	22.47	30dBm

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Product	Wireless N 150 Home Router		
Test Item	Peak Power Output		
Test Mode	Transmit		
Date of Test	2009/03/30	Test Site	No.1 OATS

IEEE802.11n ;MCS1 40MHz_Tx ; ANT A						
Channel No	Frequency	Measure Level	ure Level Limit			
Channel No.	(MHz)	(dBm)	(dBm)	Result		
3	2422	22.71	1Watt= 30 dBm	Pass		
6	2437	22.74	1Watt= 30 dBm	Pass		
9	2452	22.94	1Watt= 30 dBm	Pass		

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## 4. Radiated Emission

## 4.1. Test Equipment

The following test equipments are used during the test:

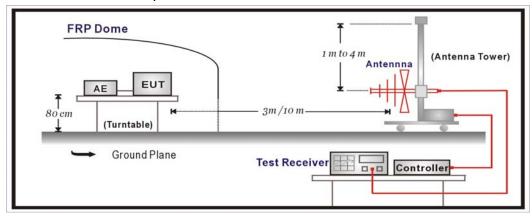
Item		Equipment	Manufacturer	Model No. / Serial No.	Last Cal.
1	Χ	Test Receiver	R&S	ESCS 30 / 836858/023	Apr., 2008
2	Χ	Spectrum Analyzer	R&S	FSP40 / 100005	Aug., 2008
3	Χ	Pre-Amplifier	HP	8449B / 3008A01123	Nov., 2008
4	Χ	Bilog Antenna	Schaffner	CBL6112B / 2708	Sep., 2008
5	Χ	Spectrum Analyzer	Advantest	R3162 / 121200166	Feb., 2009
6	Χ	Pre-Amplifier	QuieTek	AP-025C / 002	N/A
7	Х	Horn Antenna	Electro Metrics	EM-6961 / 103325	Mar., 2009
8	No.2 OATS				Sep., 2008

Note: 1. All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

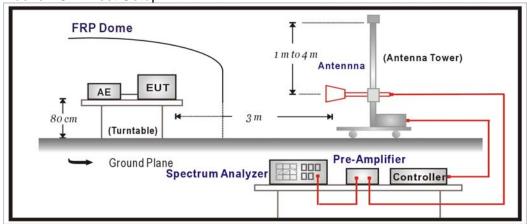
2. Last Cal showing "N/A" means it is used to Pre-test, not for final test.

## 4.2. Test Setup

Under 1GHz Test Setup:



Above 1GHz Test Setup:





#### 4.3. Limits

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 20dB below the level of the fundamental or to the general radiated emission limits in paragraph 15.209, whichever is the lesser attenuation.

FCC Part 15 Subpart C Paragraph 15.209 Limits					
Frequency MHz	dBuV/m	dBuV/m			
30-88	100	40			
88-216	150	43.5			
216-960	200	46			
Above 960	500	54			

Remarks: E field strength (dBuV/m) = 20 log E field strength (uV/m)

#### 4.4. Test Procedure

The EUT was setup according to ANSI C63.4, 2003 and tested according to FHSS test procedure of FCC Public Notice DA 00-705 for compliance to FCC 47CFR 15.247 requirements.

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.

On any frequency or frequencies below or equal to 1000 MHz, the limits shown are based on measuring equipment employing a quasi-peak detector function and on any frequency or frequencies above 1000 MHz the radiated limits shown are based upon the use of measurement instrumentation employing an average detector function. When average radiated emission measurement are included emission measurement below 1000 MHz, there also is a limit on the radio frequency emissions, as measured using instrumentation with a peak detector function, corresponding to 20 dB above the maximum permitted average limit. The bandwidth below 1GHz setting on the field strength meter is 120 kHz and above 1GHz is 1MHz.

#### 4.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.207: 2009

#### 4.6. Uncertainty

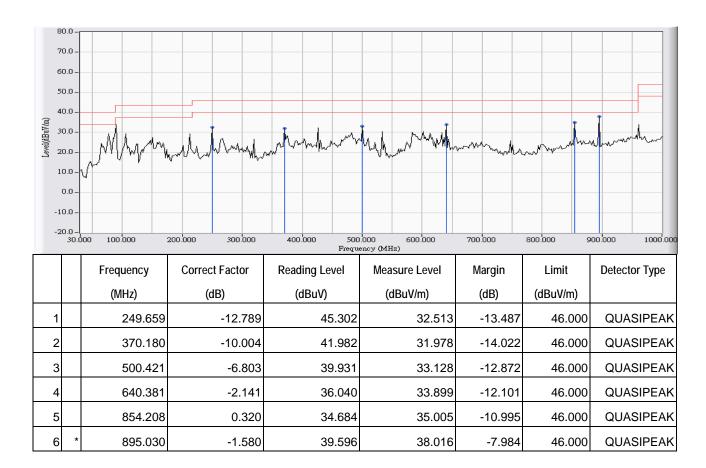
The measurement uncertainty 30MHz~1GHz as ±3.19dB 1GHz~26.5Ghz as ±3.9dB



#### 4.7. Test Result

#### 30MHz-1GHz Spurious

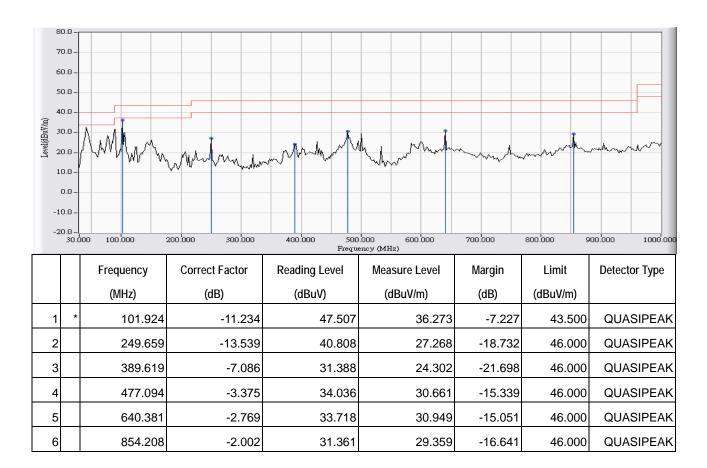
Site : Site 2	Time : 2009/04/16 - 08:53
Limit : FCC_CLASS_B_03M_QP	Margin: 6
Probe : Site 2_FCC_30-1G(2008-9) - HORIZONTAL	Power : AC 120V / 60Hz
EUT : Wireless N 150 Home Router	Note : Mode 1: Transmit-802.11b-2437



- 1. All Reading Levels are Quasi-Peak value.
- 2. " \* ", means this data is the worst emission level.
- Measurement Level = Reading Level + Correct Factor.



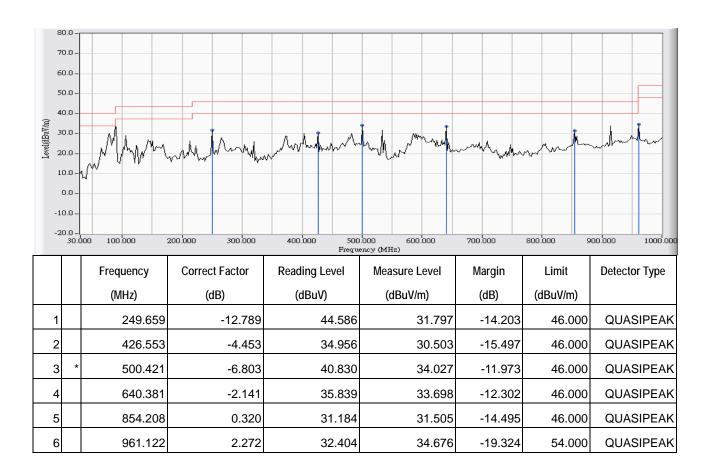
Site : Site 2	Time : 2009/04/16 - 08:57
Limit : FCC_CLASS_B_03M_QP	Margin : 6
Probe : Site 2_FCC_30-1G(2008-9) - VERTICAL	Power : AC 120V / 60Hz
EUT : Wireless N 150 Home Router	Note : Mode 1: Transmit-802.11b-2437



- 1. All Reading Levels are Quasi-Peak value.
- 2. "\*", means this data is the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor.



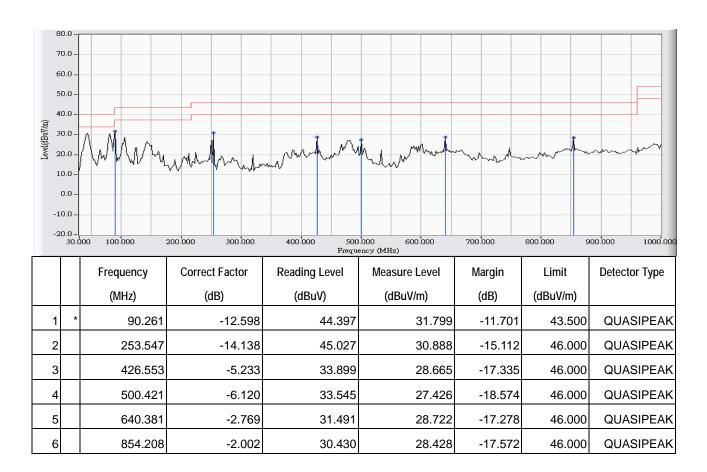
Site : Site 2	Time : 2009/04/16 - 09:05
Limit : FCC_CLASS_B_03M_QP	Margin : 6
Probe : Site 2_FCC_30-1G(2008-9) - HORIZONTAL	Power : AC 120V / 60Hz
EUT : Wireless N 150 Home Router	Note : Mode 1: Transmit-802.11g-2437



- 1. All Reading Levels are Quasi-Peak value.
- 2. "\*", means this data is the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor.



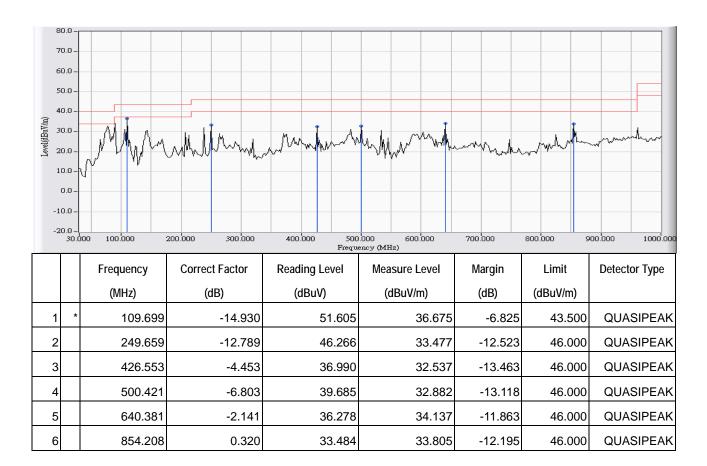
Site : Site 2	Time : 2009/04/16 - 09:09
Limit : FCC_CLASS_B_03M_QP	Margin : 6
Probe : Site 2_FCC_30-1G(2008-9) - VERTICAL	Power : AC 120V / 60Hz
EUT : Wireless N 150 Home Router	Note : Mode 1: Transmit-802.11g-2437



- 1. All Reading Levels are Quasi-Peak value.
- 2. "\*", means this data is the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor.



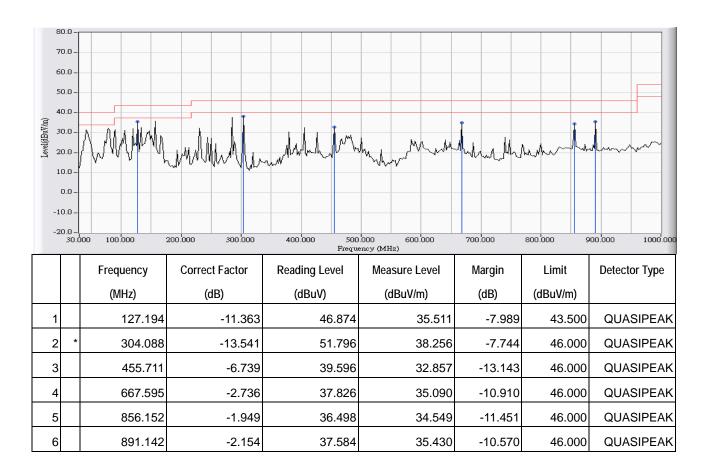
Site : Site 2	Time : 2009/04/16 - 09:19
Limit : FCC_CLASS_B_03M_QP	Margin : 6
Probe : Site 2_FCC_30-1G(2008-9) - HORIZONTAL	Power : AC 120V / 60Hz
EUT : Wireless N 150 Home Router	Note : Mode 1: Transmit-802.11g-20M-2437



- 1. All Reading Levels are Quasi-Peak value.
- 2. "\*", means this data is the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor.



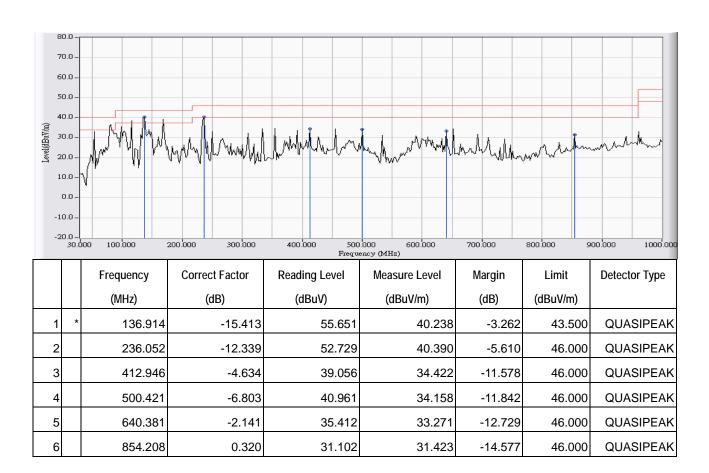
Site : Site 2	Time : 2009/04/16 - 09:23
Limit : FCC_CLASS_B_03M_QP	Margin : 6
Probe : Site 2_FCC_30-1G(2008-9) - VERTICAL	Power : AC 120V / 60Hz
EUT : Wireless N 150 Home Router	Note : Mode 1: Transmit-802.11g-20M-2437



- 1. All Reading Levels are Quasi-Peak value.
- 2. "\*", means this data is the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor.



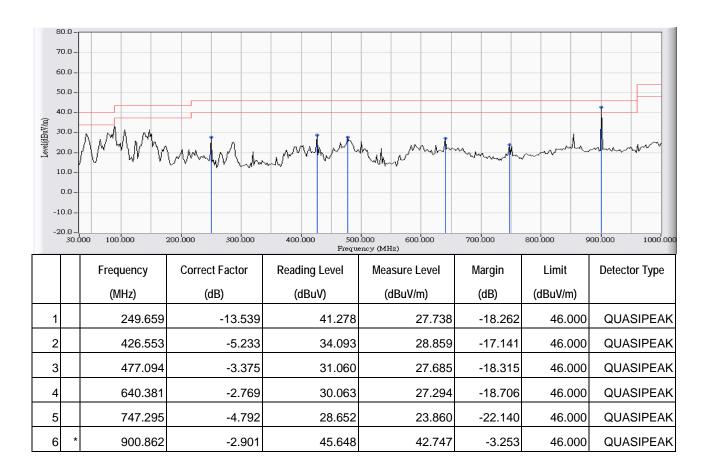
Site : Site 2	Time : 2009/04/16 - 09:32
Limit : FCC_CLASS_B_03M_QP	Margin : 6
Probe : Site 2_FCC_30-1G(2008-9) - HORIZONTAL	Power : AC 120V / 60Hz
EUT : Wireless N 150 Home Router	Note : Mode 1: Transmit-802.11g-40M-2437



- 1. All Reading Levels are Quasi-Peak value.
- 2. "\*", means this data is the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor.



Site : Site 2	Time : 2009/04/16 - 09:47
Limit : FCC_CLASS_B_03M_QP	Margin : 6
Probe : Site 2_FCC_30-1G(2008-9) - VERTICAL	Power : AC 120V / 60Hz
EUT : Wireless N 150 Home Router	Note : Mode 1: Transmit-802.11g-40M-2437



- 1. All Reading Levels are Quasi-Peak value.
- 2. "\*", means this data is the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor.



# **Harmonic & Spurious:**

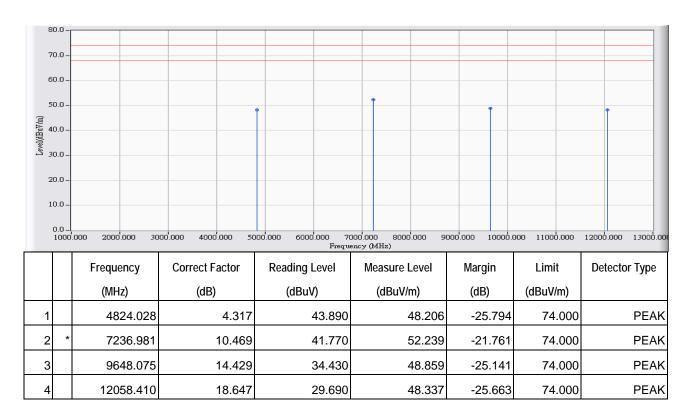
Site : Site 2	Time : 2009/04/05 - 13:40
Limit : FCC_SpartC_15.247_H_03M_PK	Margin : 6
Probe : Site 2_FCC_1-18G(2009-01) - HORIZONTAL	Power : AC 120V / 60Hz
EUT : Wireless N 150 Home Router	Note : TX-802.11b-2412



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "\*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



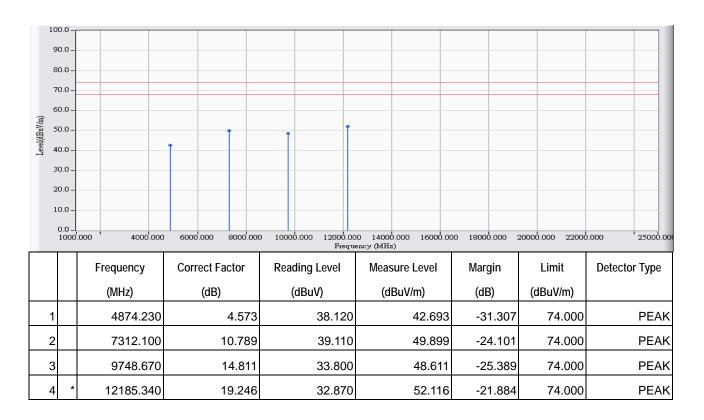
Site : Site 2	Time : 2009/04/05 - 14:10
Limit : FCC_SpartC_15.247_H_03M_PK	Margin : 6
Probe : Site 2_FCC_1-18G(2009-01) - VERTICAL	Power : AC 120V / 60Hz
EUT : Wireless N 150 Home Router	Note : TX-802.11b-2412



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. " \* ", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



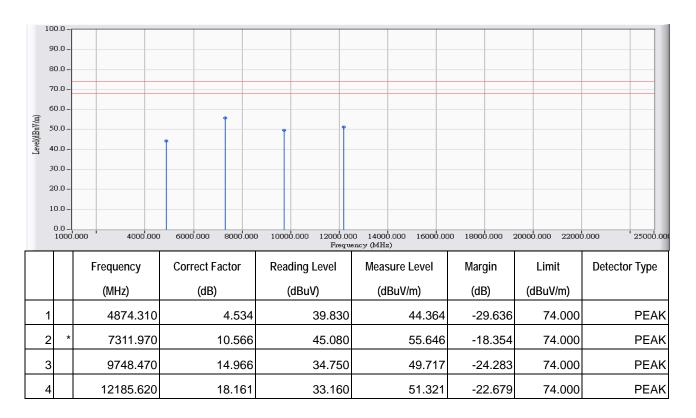
Site : Site 2	Time : 2009/03/25 - 13:28
Limit : FCC_SpartC_15.247_H_03M_PK	Margin : 6
Probe : Site 2_FCC_1-18G(2009-01) - HORIZONTAL	Power : AC 120V / 60Hz
EUT : Wireless N 150 Home Router	Note : TX-802.11b-2437



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. " \* ", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



Site : Site 2	Time : 2009/03/25 - 13:29
Limit : FCC_SpartC_15.247_H_03M_PK	Margin : 6
Probe : Site 2_FCC_1-18G(2009-01) - VERTICAL	Power : AC 120V / 60Hz
EUT : Wireless N 150 Home Router	Note: TX-802.11b-2437



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. " \* ", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



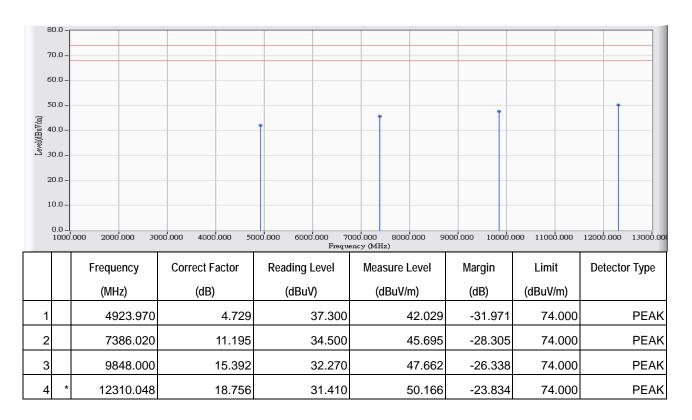
Site : Site 2	Time : 2009/03/25 - 13:36
Limit : FCC_SpartC_15.247_H_03M_AV	Margin : 6
Probe : Site 2_FCC_1-18G(2009-01) - VERTICAL	Power : AC 120V / 60Hz
EUT : Wireless N 150 Home Router	Note : TX-802.11b-2437



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. " \* ", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



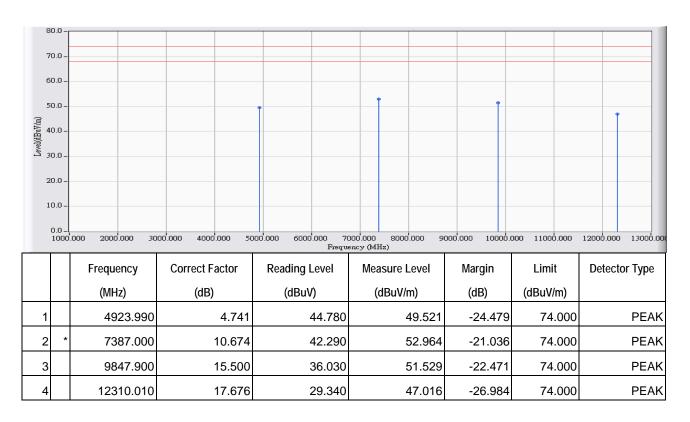
Site : Site 2	Time : 2009/04/05 - 14:40
Limit : FCC_SpartC_15.247_H_03M_PK	Margin : 6
Probe : Site 2_FCC_1-18G(2009-01) - HORIZONTAL	Power : AC 120V / 60Hz
EUT : Wireless N 150 Home Router	Note : TX-802.11b-2462



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. " \* ", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



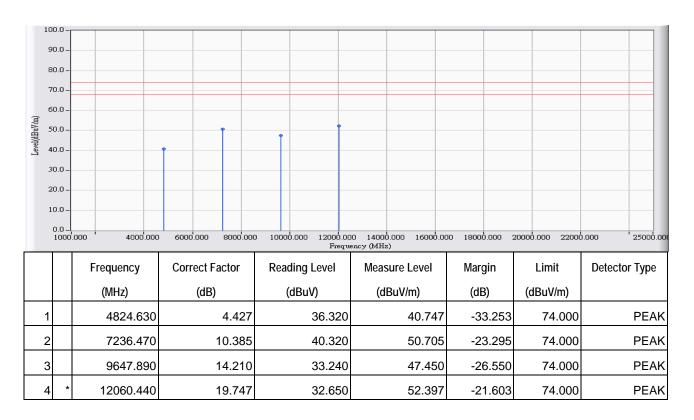
Site : Site 2	Time : 2009/04/05 - 15:10
Limit : FCC_SpartC_15.247_H_03M_PK	Margin : 6
Probe : Site 2_FCC_1-18G(2009-01) - VERTICAL	Power : AC 120V / 60Hz
EUT : Wireless N 150 Home Router	Note : TX-802.11b-2462



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. " \* ", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



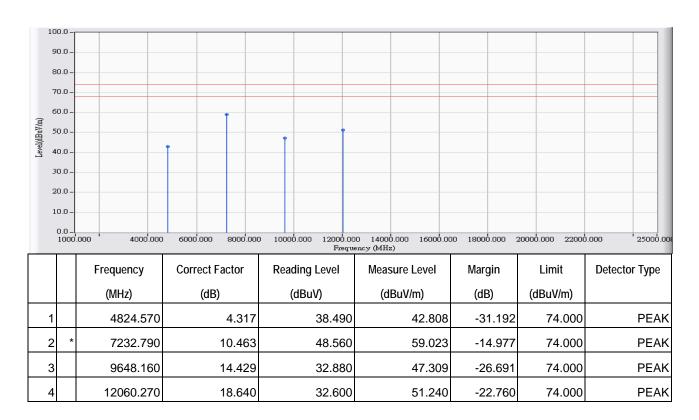
Site : Site 2	Time : 2009/03/25 - 13:38
Limit : FCC_SpartC_15.247_H_03M_PK	Margin : 6
Probe : Site 2_FCC_1-18G(2009-01) - HORIZONTAL	Power : AC 120V / 60Hz
EUT : Wireless N 150 Home Router	Note : TX-802.11g-2412



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. " \* ", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



Site : Site 2	Time : 2009/03/25 - 13:39
Limit : FCC_SpartC_15.247_H_03M_PK	Margin: 6
Probe : Site 2_FCC_1-18G(2009-01) - VERTICAL	Power : AC 120V / 60Hz
EUT : Wireless N 150 Home Router	Note: TX-802.11g-2412



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. " \* ", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



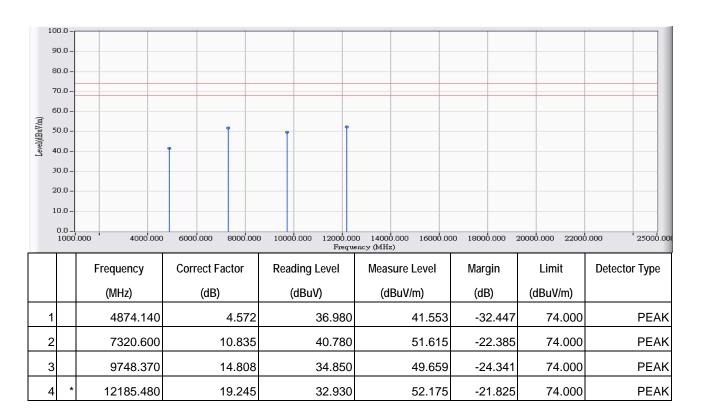
Site : Site 2	Time : 2009/03/25 - 13:46
Limit : FCC_SpartC_15.247_H_03M_AV	Margin: 6
Probe : Site 2_FCC_1-18G(2009-01) - VERTICAL	Power : AC 120V / 60Hz
EUT : Wireless N 150 Home Router	Note : TX-802.11g-2412



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. " \* ", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



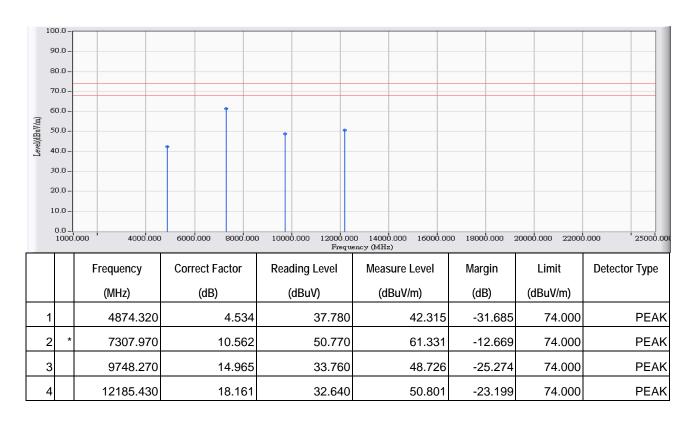
Site : Site 2	Time : 2009/03/25 - 13:48
Limit : FCC_SpartC_15.247_H_03M_PK	Margin : 6
Probe : Site 2_FCC_1-18G(2009-01) - HORIZONTAL	Power : AC 120V / 60Hz
EUT : Wireless N 150 Home Router	Note : TX-802.11g-2437



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. " \* ", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



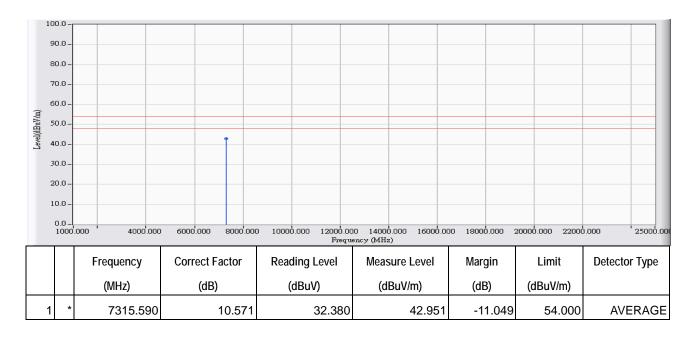
Site : Site 2	Time : 2009/03/25 - 14:02
Limit : FCC_SpartC_15.247_H_03M_PK	Margin : 6
Probe : Site 2_FCC_1-18G(2009-01) - VERTICAL	Power : AC 120V / 60Hz
EUT : Wireless N 150 Home Router	Note : TX-802.11g-2437



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. " \* ", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



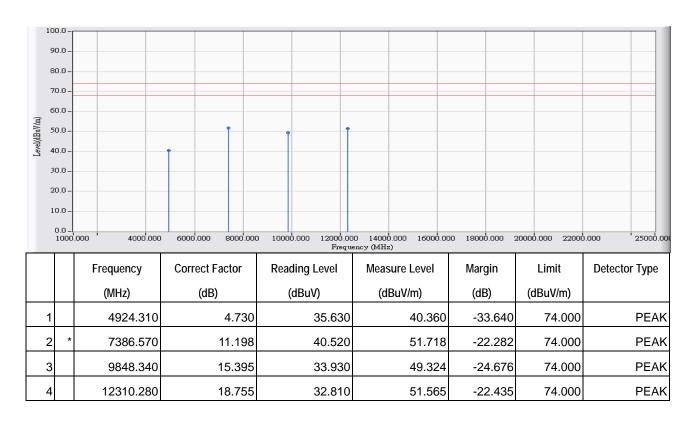
Site : Site 2	Time : 2009/03/25 - 14:03
Limit : FCC_SpartC_15.247_H_03M_AV	Margin : 6
Probe : Site 2_FCC_1-18G(2009-01) - VERTICAL	Power : AC 120V / 60Hz
EUT : Wireless N 150 Home Router	Note : TX-802.11g-2437



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. " \* ", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



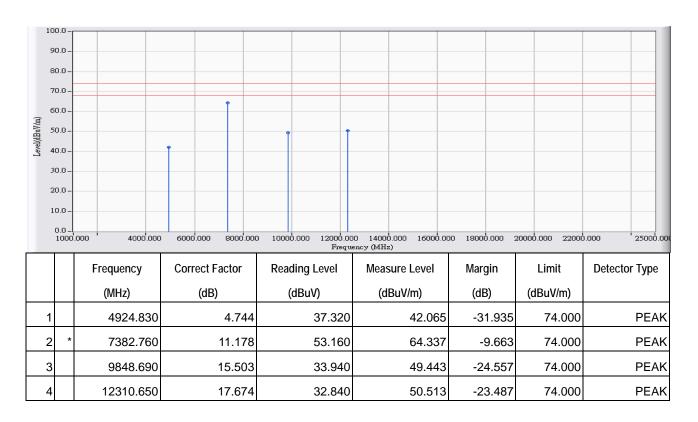
Site : Site 2	Time : 2009/03/25 - 14:15
Limit : FCC_SpartC_15.247_H_03M_PK	Margin : 6
Probe : Site 2_FCC_1-18G(2009-01) - HORIZONTAL	Power : AC 120V / 60Hz
EUT : Wireless N 150 Home Router	Note : TX-802.11g-2462



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. " \* ", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



Site : Site 2	Time : 2009/03/25 - 14:21
Limit : FCC_SpartC_15.247_H_03M_PK	Margin : 6
Probe : Site 2_FCC_1-18G(2009-01) - VERTICAL	Power : AC 120V / 60Hz
EUT : Wireless N 150 Home Router	Note : TX-802.11g-2462



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. " \* ", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



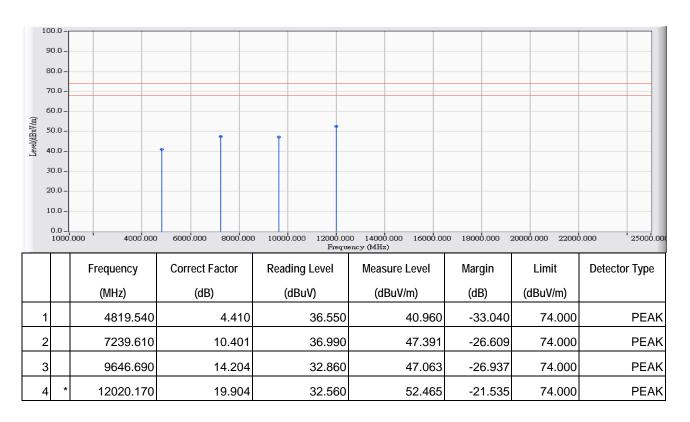
Site : Site 2	Time : 2009/03/25 - 14:27
Limit : FCC_SpartC_15.247_H_03M_AV	Margin : 6
Probe : Site 2_FCC_1-18G(2009-01) - VERTICAL	Power : AC 120V / 60Hz
EUT : Wireless N 150 Home Router	Note : TX-802.11g-2462



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. " \* ", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



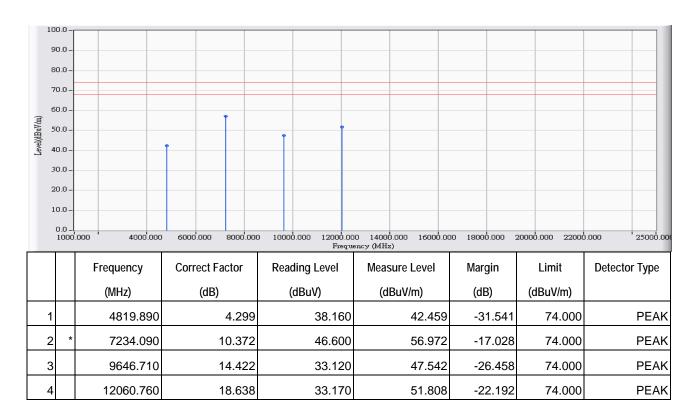
Site : Site 2	Time : 2009/03/25 - 14:37
Limit : FCC_SpartC_15.247_H_03M_PK	Margin : 6
Probe : Site 2_FCC_1-18G(2009-01) - HORIZONTAL	Power : AC 120V / 60Hz
EUT : Wireless N 150 Home Router	Note : TX-802.11n_20MHz-2412



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. " \* ", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



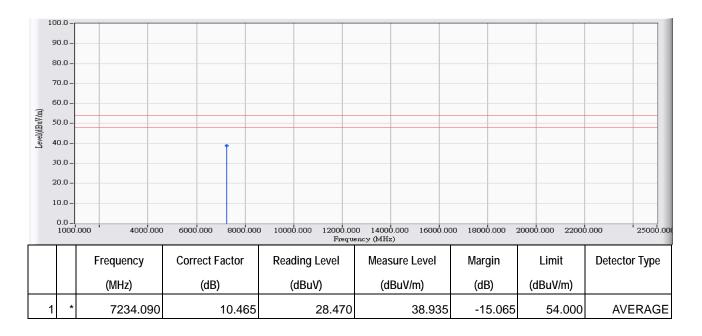
Site : Site 2	Time : 2009/03/25 - 14:42
Limit : FCC_SpartC_15.247_H_03M_PK	Margin : 6
Probe : Site 2_FCC_1-18G(2009-01) - VERTICAL	Power : AC 120V / 60Hz
EUT : Wireless N 150 Home Router	Note : TX-802.11n_20MHz-2412



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. " \* ", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



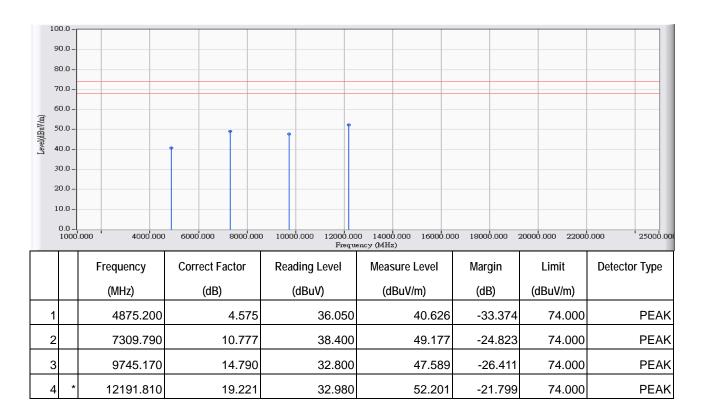
Site : Site 2	Time : 2009/03/25 - 14:47
Limit : FCC_SpartC_15.247_H_03M_AV	Margin : 6
Probe : Site 2_FCC_1-18G(2009-01) - VERTICAL	Power : AC 120V / 60Hz
EUT : Wireless N 150 Home Router	Note : TX-802.11n_20MHz-2412



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. " \* ", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



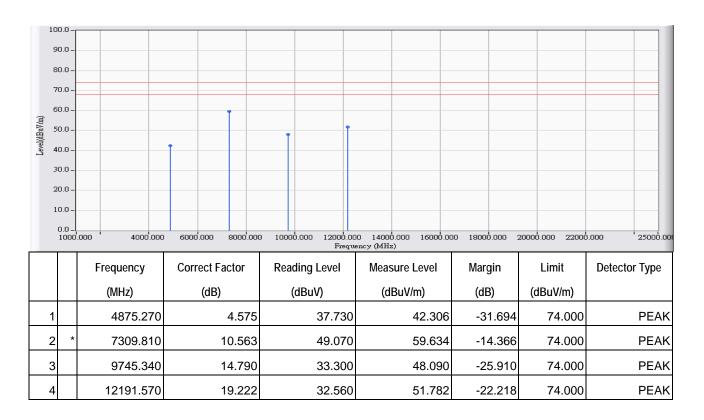
Site : Site 2	Time : 2009/03/25 - 14:56
Limit : FCC_SpartC_15.247_H_03M_PK	Margin : 6
Probe : Site 2_FCC_1-18G(2009-01) - HORIZONTAL	Power : AC 120V / 60Hz
EUT : Wireless N 150 Home Router	Note : TX-802.11n_20MHz-2437



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. " \* ", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



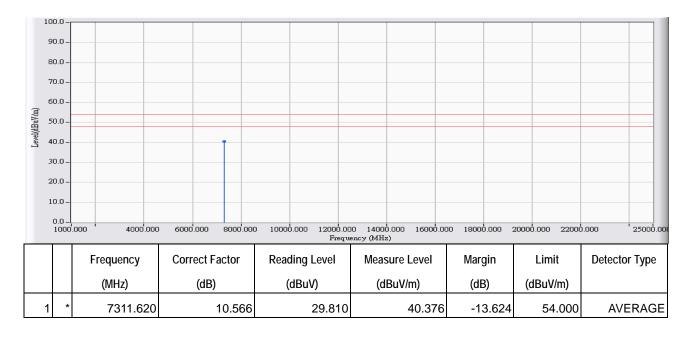
Site : Site 2	Time : 2009/03/25 - 15:02
Limit : FCC_SpartC_15.247_H_03M_PK	Margin : 6
Probe : Site 2_FCC_1-18G(2009-01) - VERTICAL	Power : AC 120V / 60Hz
EUT : Wireless N 150 Home Router	Note : TX-802.11n_20MHz-2437



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. " \* ", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



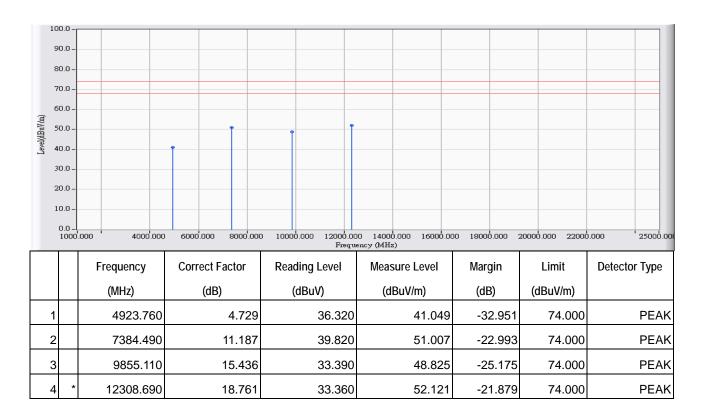
Site : Site 2	Time : 2009/03/25 - 15:14
Limit : FCC_SpartC_15.247_H_03M_AV	Margin : 6
Probe : Site 2_FCC_1-18G(2009-01) - VERTICAL	Power : AC 120V / 60Hz
EUT : Wireless N 150 Home Router	Note : TX-802.11n_20MHz-2437



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. " \* ", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



Site : Site 2	Time : 2009/03/25 - 15:25
Limit : FCC_SpartC_15.247_H_03M_PK	Margin : 6
Probe : Site 2_FCC_1-18G(2009-01) - HORIZONTAL	Power : AC 120V / 60Hz
EUT : Wireless N 150 Home Router	Note: TX-802.11n_20MHz-2462



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. " \* ", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



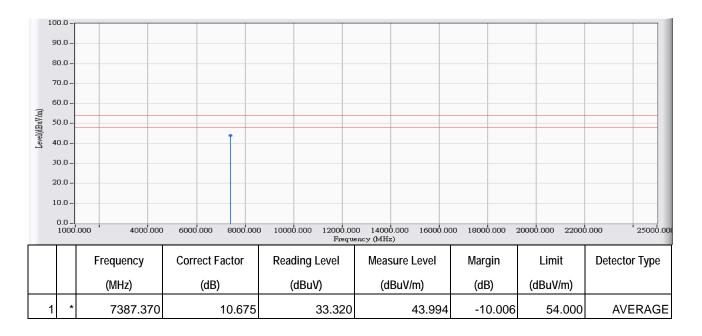
Site : Site 2	Time : 2009/03/25 - 15:30
Limit : FCC_SpartC_15.247_H_03M_PK	Margin : 6
Probe : Site 2_FCC_1-18G(2009-01) - VERTICAL	Power : AC 120V / 60Hz
EUT : Wireless N 150 Home Router	Note: TX-802.11n_20MHz-2462



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. " \* ", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- The average measurement was not performed when the peak measured data under the limit of average detection.



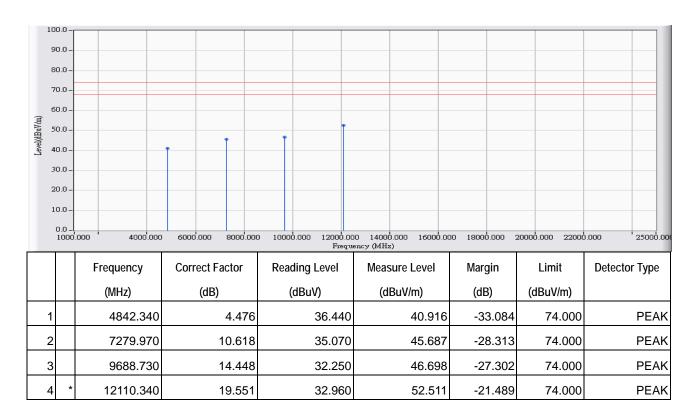
Site : Site 2	Time : 2009/03/25 - 15:36
Limit : FCC_SpartC_15.247_H_03M_AV	Margin : 6
Probe : Site 2_FCC_1-18G(2009-01) - VERTICAL	Power : AC 120V / 60Hz
EUT : Wireless N 150 Home Router	Note : TX-802.11n_20MHz-2462



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. " \* ", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



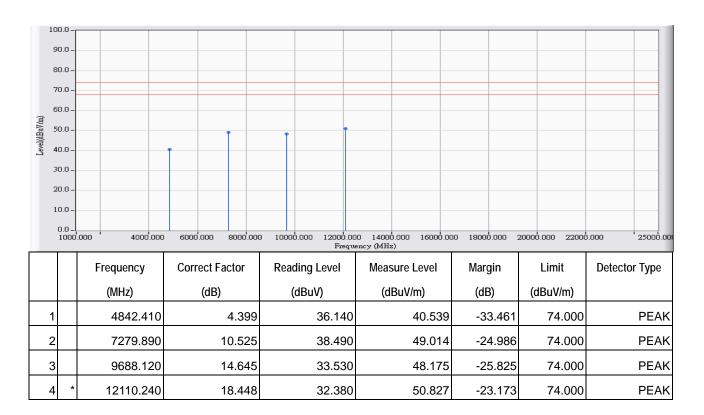
Site : Site 2	Time : 2009/03/25 - 15:47
Limit : FCC_SpartC_15.247_H_03M_PK	Margin : 6
Probe : Site 2_FCC_1-18G(2009-01) - HORIZONTAL	Power : AC 120V / 60Hz
EUT : Wireless N 150 Home Router	Note : TX-802.11n_40MHz-2422



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. " \* ", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



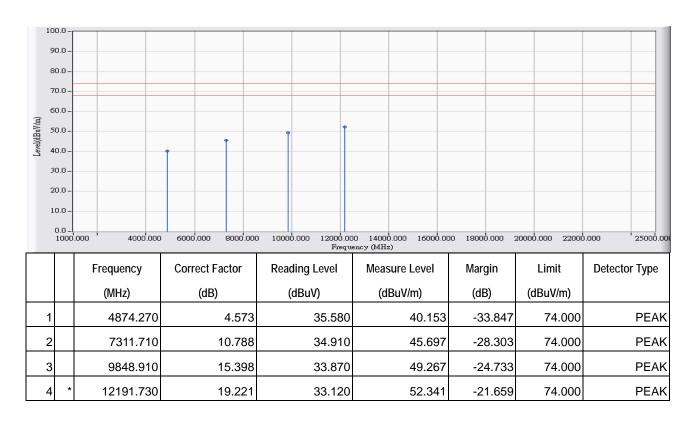
Site : Site 2	Time : 2009/03/25 - 15:57
Limit : FCC_SpartC_15.247_H_03M_PK	Margin : 6
Probe : Site 2_FCC_1-18G(2009-01) - VERTICAL	Power : AC 120V / 60Hz
EUT : Wireless N 150 Home Router	Note: TX-802.11n_40MHz-2422



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. " \* ", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



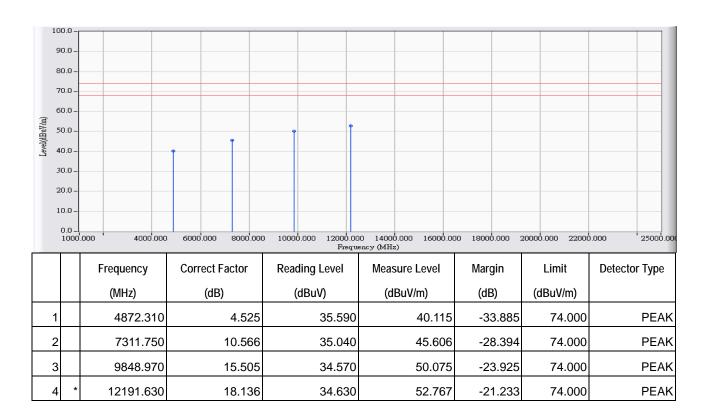
Site : Site 2	Time : 2009/03/25 - 16:15
Limit : FCC_SpartC_15.247_H_03M_PK	Margin : 6
Probe : Site 2_FCC_1-18G(2009-01) - HORIZONTAL	Power : AC 120V / 60Hz
EUT : Wireless N 150 Home Router	Note : TX-802.11n_40MHz-2437



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. " \* ", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



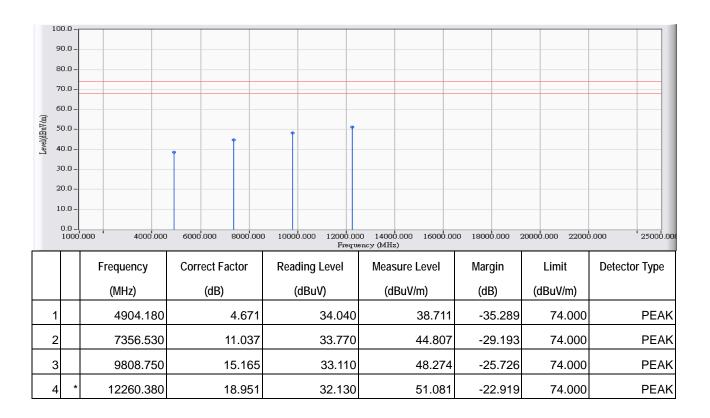
Site : Site 2	Time : 2009/04/05 - 13:00
Limit : FCC_SpartC_15.247_H_03M_PK	Margin : 6
Probe : Site 2_FCC_1-18G(2009-01) - VERTICAL	Power : AC 120V / 60Hz
EUT : Wireless N 150 Home Router	Note: TX-802.11n_40MHz-2437



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. " \* ", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- The average measurement was not performed when the peak measured data under the limit of average detection.



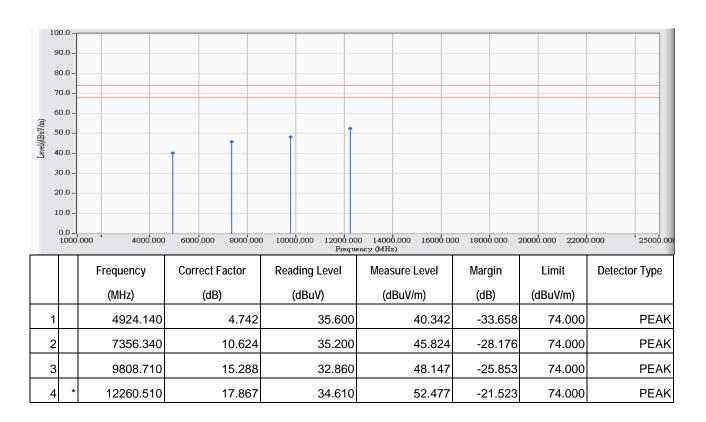
Site : Site 2	Time : 2009/04/05 - 13:05
Limit : FCC_SpartC_15.247_H_03M_PK	Margin : 6
Probe : Site 2_FCC_1-18G(2009-01) - HORIZONTAL	Power : AC 120V / 60Hz
EUT : Wireless N 150 Home Router	Note: TX-802.11n_40MHz-2452



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. " \* ", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- The average measurement was not performed when the peak measured data under the limit of average detection.



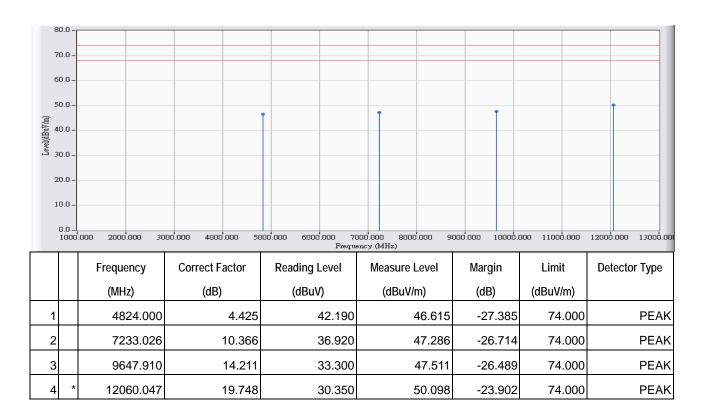
Site : Site 2	Time : 2009/04/05 - 13:10
Limit : FCC_SpartC_15.247_H_03M_PK	Margin : 6
Probe : Site 2_FCC_1-18G(2009-01) - VERTICAL	Power : AC 120V / 60Hz
EUT : Wireless N 150 Home Router	Note : TX-802.11n_40MHz_2452



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "\*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



Site : Site 2	Time : 2009/04/05 - 13:40
Limit : FCC_SpartC_15.247_H_03M_PK	Margin : 6
Probe : Site 2_FCC_1-18G(2009-01) - HORIZONTAL	Power : AC 120V / 60Hz
EUT : Wireless N 150 Home Router	Note : TX-802.11b-2412



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. " \* ", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



#### 5. RF antenna conducted test

# 5.1. Test Equipment

The following test equipments are used during the test:

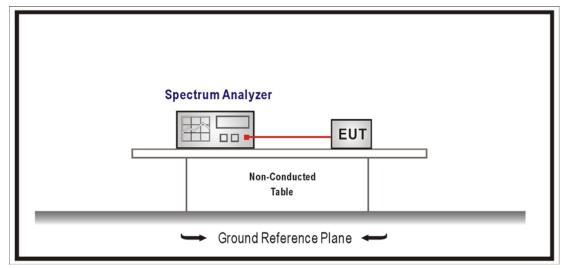
RF C	RF Conducted Measurement:					
Item	Equipment	Manufacturer	Model No. / Serial No.	Last Cal.		
1	Spectrum Analyzer	R&S	FSP / 100561	Mar., 2009		
2	No.1 OATS			Sep., 2008		

Note: 1. All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

2. Test instruments are marked with "X" are used to measure the final test results.

### 5.2. Test Setup

RF Antenna Conducted Measurement:





#### 5.3. Limits

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on an RF conducted or radiated measurement. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).

#### 5.4. Test Procedure

The EUT was setup according to ANSI C63.4, 2003 and tested according to FHSS test procedure of FCC Public Notice DA 00-705 for compliance to FCC 47CFR 15.247 requirements

Set RBW = 100 kHz, Set VBW> RBW, scan up through 10th harmonic.

### 5.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.207: 2009

### 5.6. Uncertainty

The measurement uncertainty Conducted is defined as  $\pm$  1.27dB Radiated is defined as  $\pm$  3.9dB

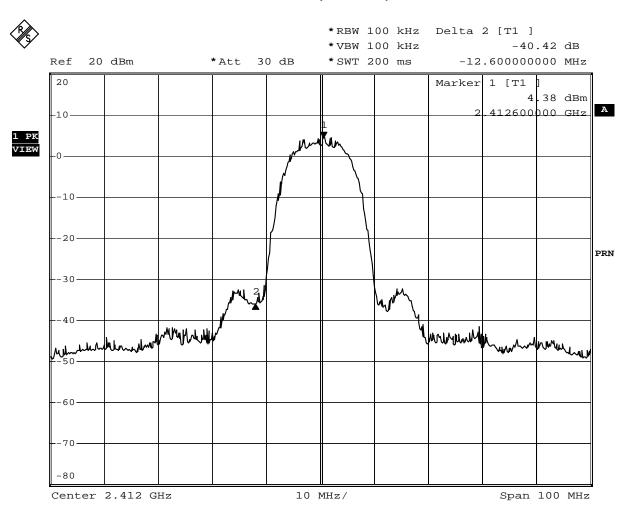


#### 5.7. Test Result

Product	Wireless N 150 Home Router		
Test Item	RF antenna conducted test		
Test Mode	Transmit		
Date of Test	2009/03/29	Test Site	No.1 OATS

IEEE 802.11b, Antenna Gain: 1.8dBi, Duty Cycle: 1				
Channel No. Frequency Measure Level Limit				
Channel No.	(MHz)	(dBc)	(dBc)	Result
1	2412	40.42	≥ 30	Pass
11	2462	49.96	≥ 30	Pass

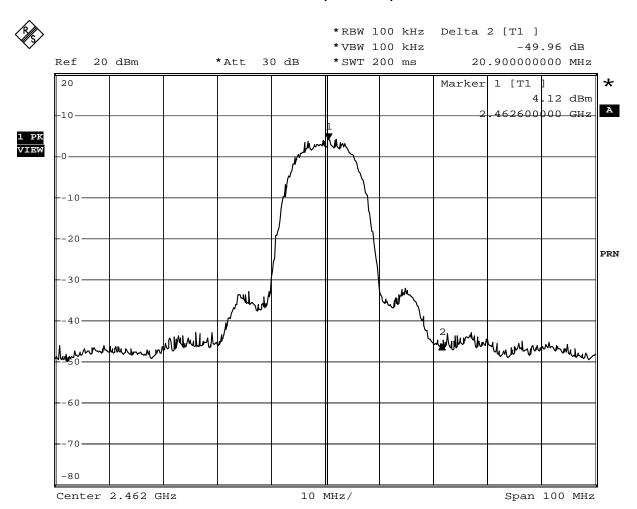
### **Channel 01 (2412MHz)**



Date: 27.MAR.2009 09:50:17



# **Channel 11 (2462MHz)**



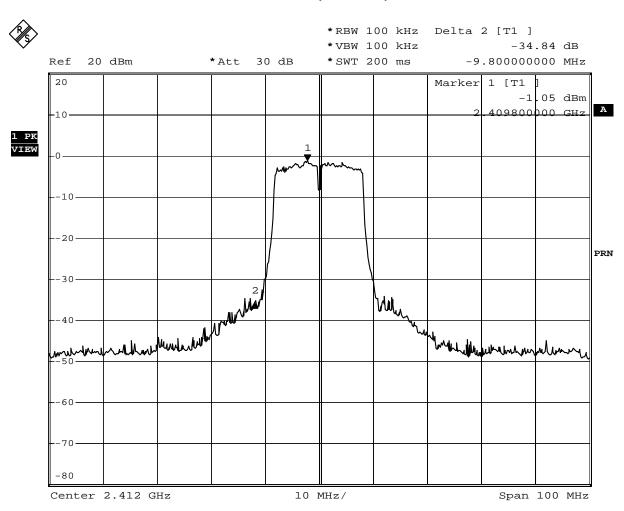
Date: 27.MAR.2009 10:29:00



Product	Wireless N 150 Home Router		
Test Item	RF antenna conducted test		
Test Mode	Transmit		
Date of Test	2009/03/29	Test Site	No.1 OATS

IEEE 802.11g, Antenna Gain: 1.8dBi, Duty Cycle: 1				
Chanal Na	Frequency	Measure Level	Limit	Desult
Channel No.	(MHz)	(dBc)	(dBc)	Result
1	2412	34.84	≥ 30	Pass
11	2462	44.57	≥ 30	Pass

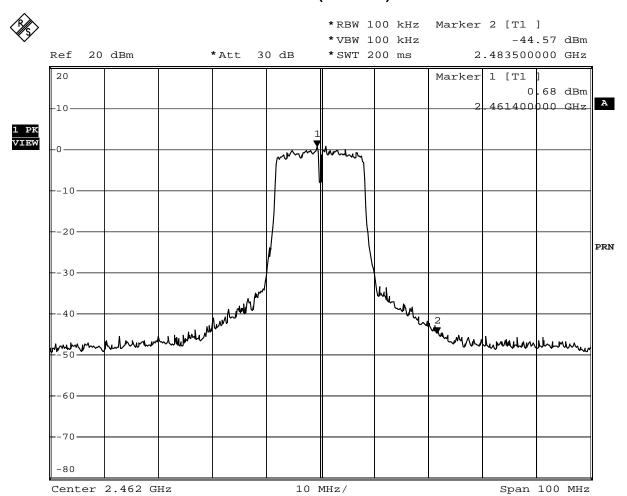
# Channel 01 (2412MHz)



Date: 27.MAR.2009 10:54:24



### **Channel 11 (2462MHz)**



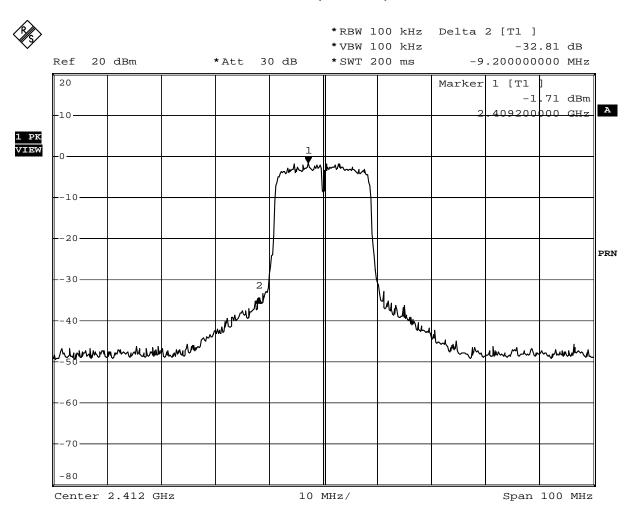
Date: 27.MAR.2009 11:13:20



Product	Wireless N 150 Home Router		
Test Item	RF antenna conducted test		
Test Mode	Transmit		
Date of Test	2009/03/27	Test Site	No.1 OATS

IEEE 802.11n (ANT A (20MHz)), Antenna Gain: 1.8dBi, Duty Cycle: 1				
Channal Na	Frequency	Measure Level	Limit	Dooult
Channel No.	(MHz)	(dBc)	(dBc)	Result
1	2412	32.81	≥ 30	Pass
11	2462	43.80	≥ 30	Pass

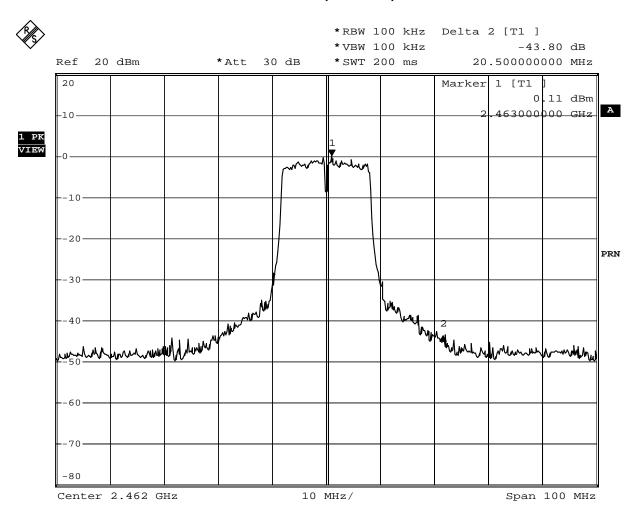
# Channel 1 (2412MHz)



Date: 27.MAR.2009 11:49:56



### **Channel 11 (2462MHz)**



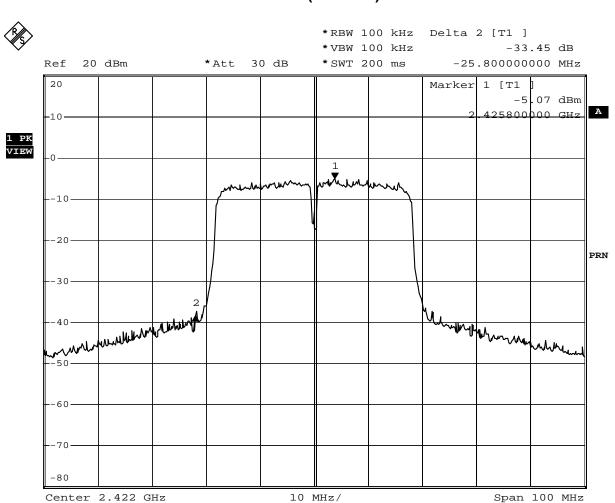
Date: 27.MAR.2009 06:09:00



Product	Wireless N 150 Home Router		
Test Item	RF antenna conducted test		
Test Mode	Transmit		
Date of Test	2009/03/27	Test Site	No.1 OATS

IEEE 802.11n (ANT A (40MHz)), Antenna Gain: 1.8dBi, Duty Cycle: 1				
Channel No	Frequency	Measure Level	Limit	Dooult
Channel No.	(MHz)	(dBc)	(dBc)	Result
3	2422	33.45	≥ 30	Pass
9	2452	38.90	≥ 30	Pass

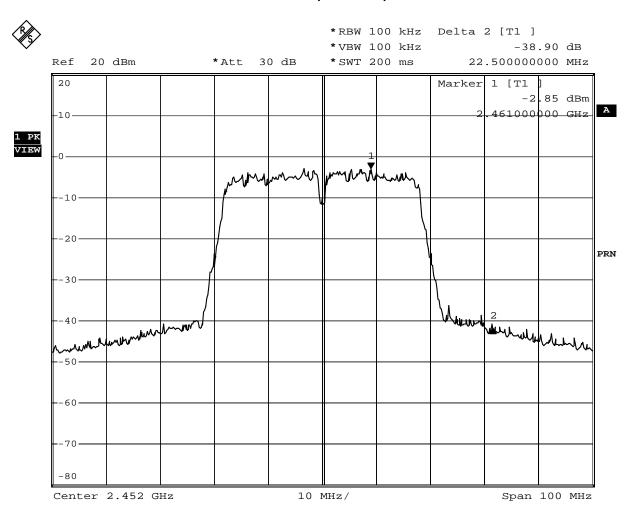
### Channel 3 (2422MHz)



Date: 27.MAR.2009 05:11:15



# **Channel 9 (2452MHz)**



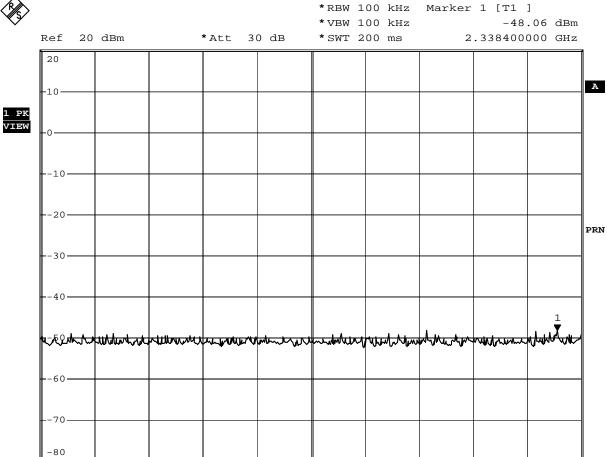
Date: 27.MAR.2009 06:06:13

Stop 2.4 GHz



### (1GHz-2.4GHz)





140 MHz/

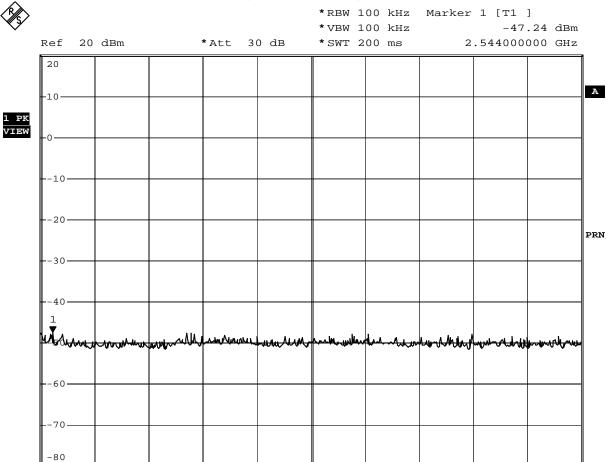
Date: 27.MAR.2009 14:33:29

Start 1 GHz

Stop 4.5 GHz



# (2.5GHz~4.5GHz)



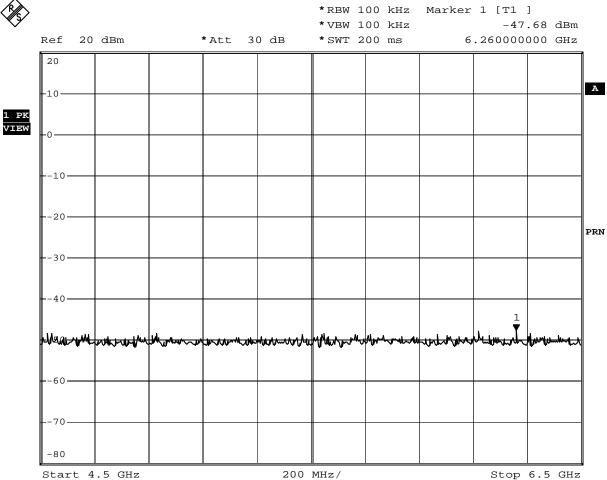
200 MHz/

Date: 27.MAR.2009 14:36:18

Start 2.5 GHz



# (4.5GHz~6.5GHz)

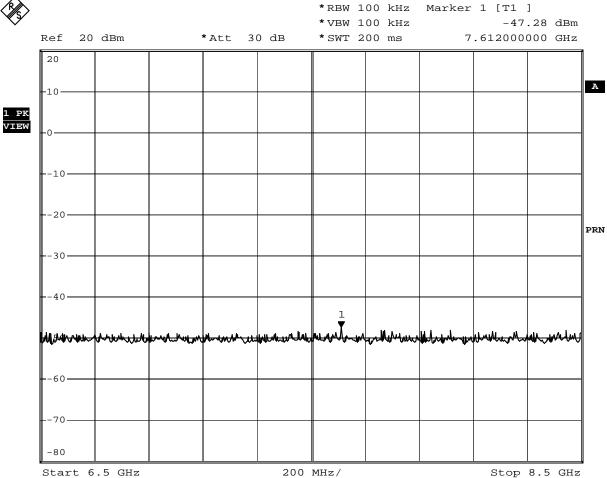


Date: 27.MAR.2009 14:36:56





### (6.5GHz~8.5GHz)

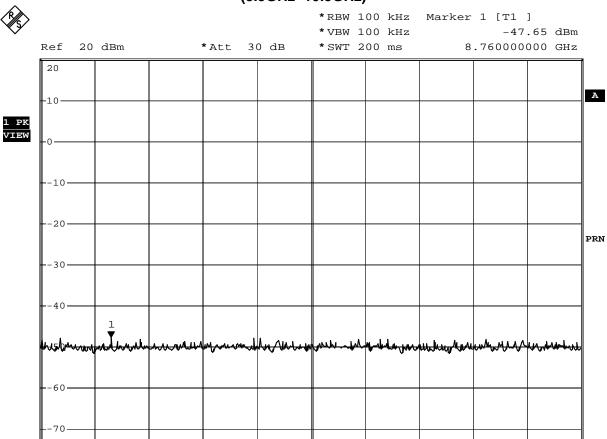


Date: 27.MAR.2009 14:37:35

Stop 10.5 GHz



### (8.5GHz~10.5GHz)



200 MHz/

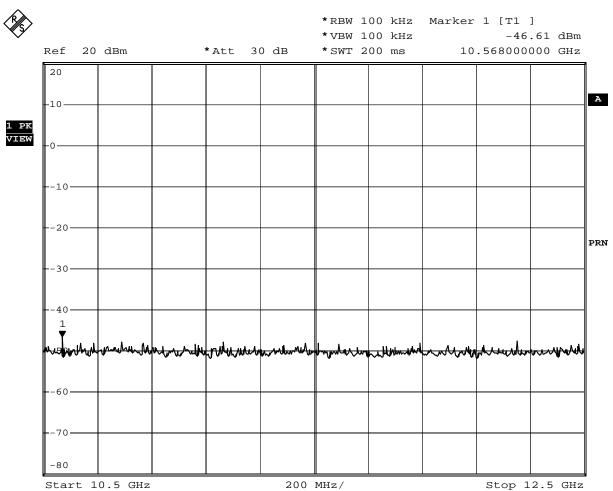
Date: 27.MAR.2009 14:38:21

-80

Start 8.5 GHz



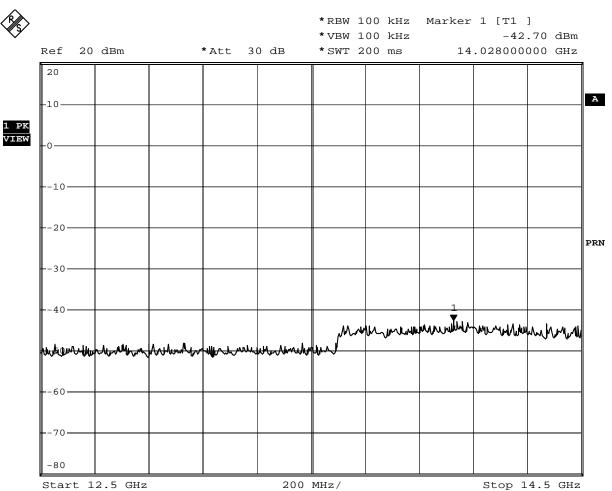
# (10.5GHz~12.5GHz)



Date: 27.MAR.2009 14:39:01



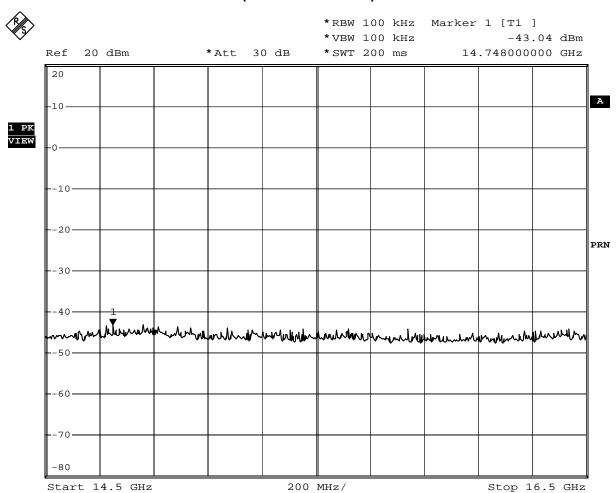
# (12.5GHz~14.5GHz)



Date: 27.MAR.2009 14:40:02



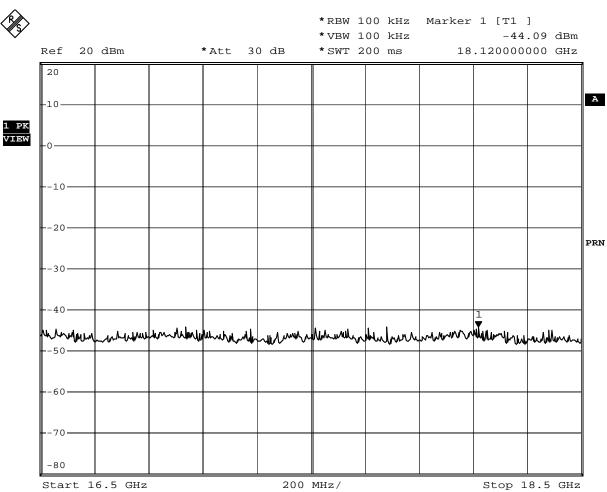
# (14.5GHz~16.5GHz)



Date: 27.MAR.2009 14:40:38



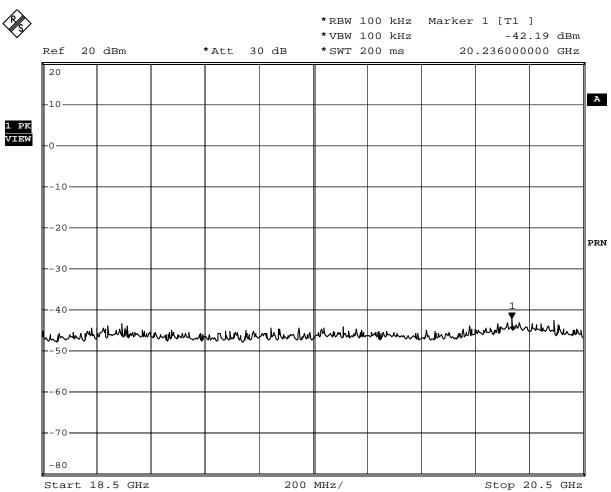
# (16.5GHz~18.5GHz)



Date: 27.MAR.2009 14:41:18



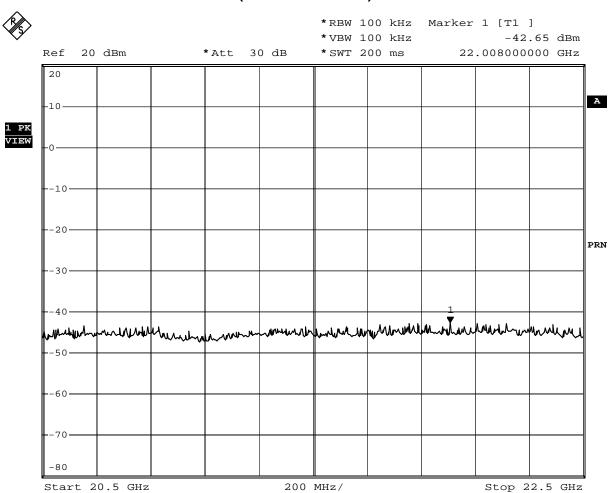
# (18.5GHz~20.5GHz)



Date: 27.MAR.2009 14:41:55



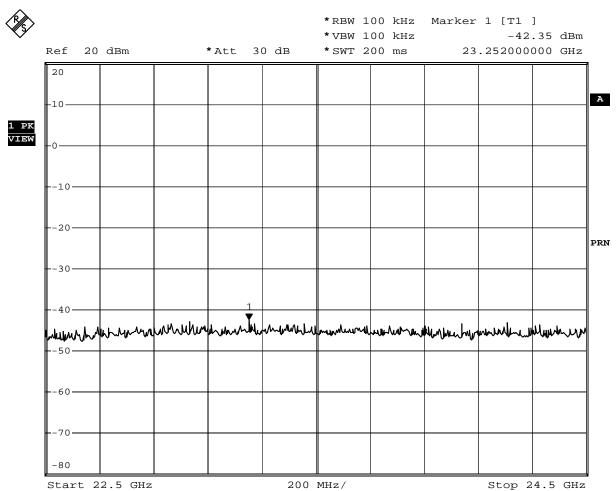
# (20.5GHz~22.5GHz)



Date: 27.MAR.2009 14:42:39



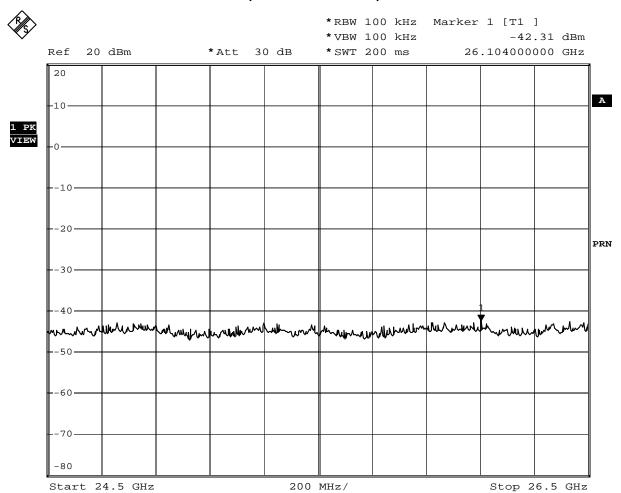
# (22.5GHz~24.5GHz)



Date: 27.MAR.2009 14:43:39



### (24.5GHz~26.5GHz)



Date: 27.MAR.2009 14:44:12



# 6. Radiated Emission Band Edge

# 6.1. Test Equipment

The following test equipments are used during the test:

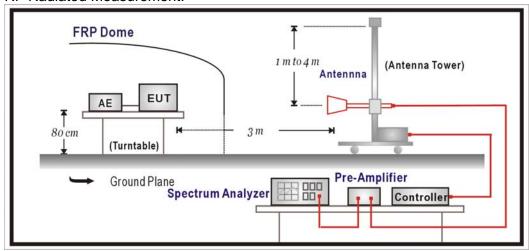
RF R	RF Radiated Measurement:					
Item		Equipment	Manufacturer	Model No. / Serial No.	Last Cal.	
1	Х	Spectrum Analyzer	R&S	FSP40 / 100005	Aug., 2008	
2	Х	Pre-Amplifier	HP	8449B / 3008A01123	Feb., 2008	
3		Loop Antenna	R&S	HFH2-Z2 / 833799/004	Sep., 2008	
4		BiconiLog Antenna	Schwarzbeck	VULB 9166 / 1061	Sep., 2008	
5		Bilog Antenna	Chase	CBL6112B / 2455	Sep., 2008	
6	Х	Horn Antenna	Schwarzbeck	BBHA 9120D / BBHA9120D312	Sep., 2008	
7	No.1 OATS Sep., 2008					

Note: 1. All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

2. Test instruments are marked with "X" are used to measure the final test results.

### 6.2. Test Setup

RF Radiated Measurement:





#### 6.3. Limits

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 20dB below the level of the fundamental or to the general radiated emission limits in paragraph 15.209, whichever is the lesser attenuation.

#### 6.4. Test Procedure

The EUT was setup according to ANSI C63.4, 2003 and tested according to FHSS test procedure of FCC Public Notice DA 00-705 for compliance to FCC 47CFR 15.247 requirements.

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 EUT was positioned such that the distance from antenna to the EUT was 3 meters.

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.

### 6.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.207: 2009

### 6.6. Uncertainty

The measurement uncertainty

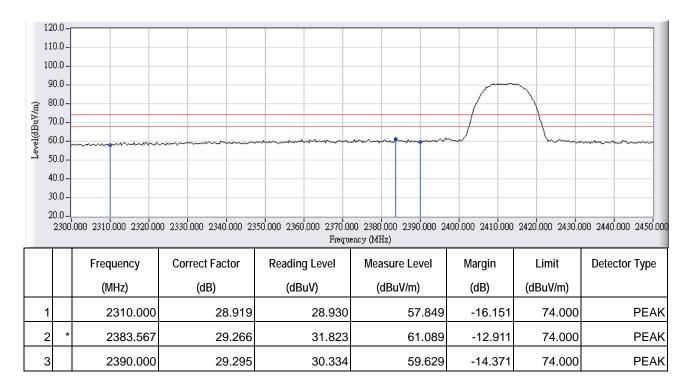
± 3.9 dB above 1GHz



#### 6.7. Test Result

#### Radiated is defined as

Site : Site 1	Time : 2009/03/25 - 16:33
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6
Probe : Site 1_FCC_1-18G(2009-01) - HORIZONTAL	Power : AC 120V / 60Hz
EUT : Wireless N 150 Home Router	Note : TX-802.11b-2412



- All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. " \* ", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



Site : Site 1	Time : 2009/03/25 - 16:37
Limit : FCC_SpartC_15.209_03M_AV	Margin : 6
Probe : Site 1_FCC_1-18G(2009-01) - HORIZONTAL	Power : AC 120V / 60Hz
EUT : Wireless N 150 Home Router	Note : TX-802.11b-2412



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "\*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



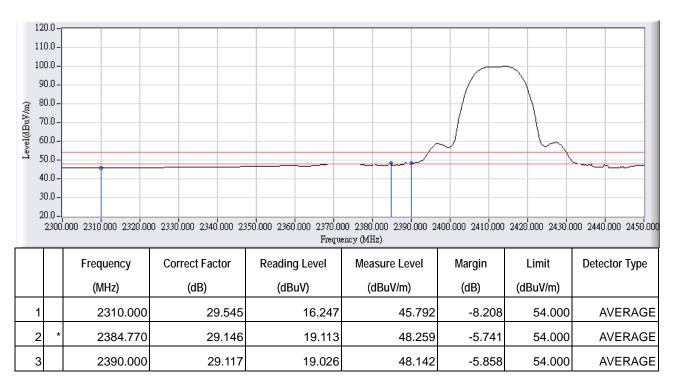
Site : Site 1	Time : 2009/03/25 - 16:52
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6
Probe : Site 1_FCC_1-18G(2009-01) - VERTICAL	Power : AC 120V / 60Hz
EUT : Wireless N 150 Home Router	Note : TX-802.11b-2412



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "\*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



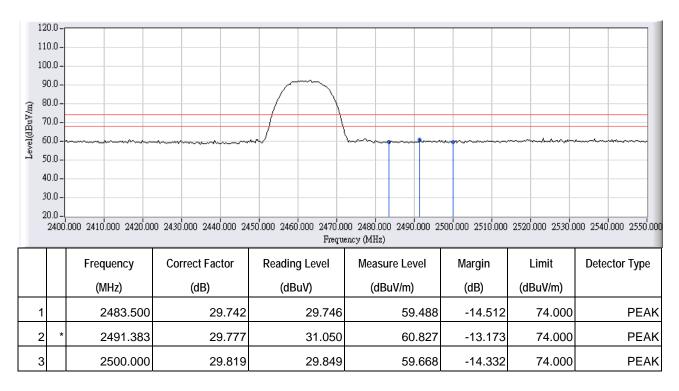
Site : Site 1	Time : 2009/03/25 - 17:02
Limit : FCC_SpartC_15.209_03M_AV	Margin : 6
Probe : Site 1_FCC_1-18G(2009-01) - VERTICAL	Power : AC 120V / 60Hz
EUT : Wireless N 150 Home Router	Note : TX-802.11b-2412



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "\*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



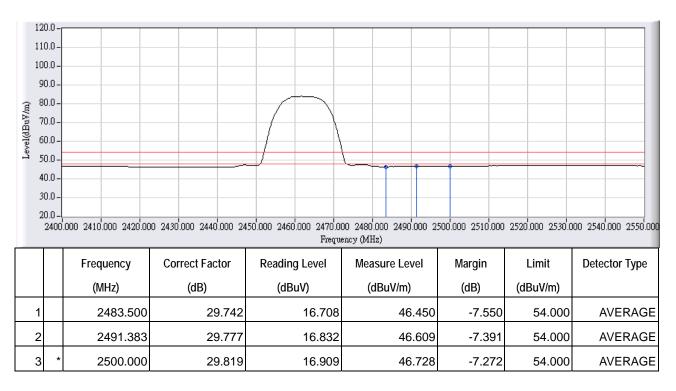
Site : Site 1	Time : 2009/03/25 - 17:08
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6
Probe : Site 1_FCC_1-18G(2009-01) - HORIZONTAL	Power : AC 120V / 60Hz
EUT : Wireless N 150 Home Router	Note : TX-802.11b-2462



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "\*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



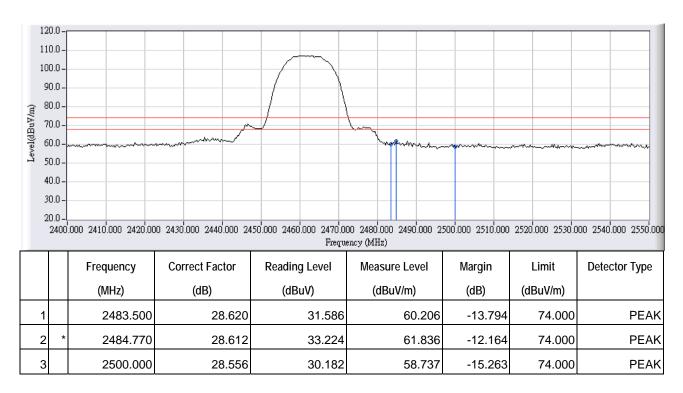
Site : Site 1	Time : 2009/03/25 - 17:10
Limit : FCC_SpartC_15.209_03M_AV	Margin : 6
Probe : Site 1_FCC_1-18G(2009-01) - HORIZONTAL	Power : AC 120V / 60Hz
EUT : Wireless N 150 Home Router	Note : TX-802.11b-2462



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "\*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



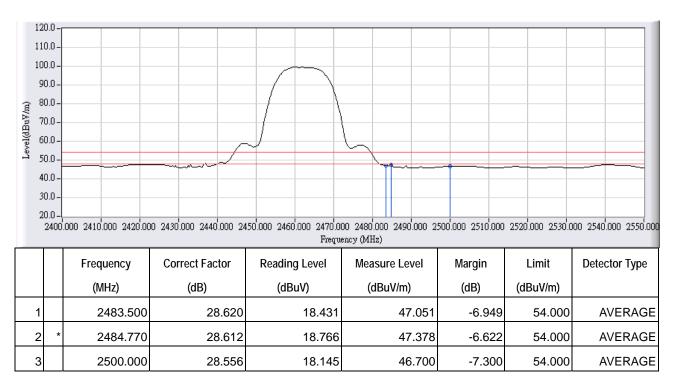
Site : Site 1	Time : 2009/03/25 - 17:20
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6
Probe : Site 1_FCC_1-18G(2009-01) - VERTICAL	Power : AC 120V / 60Hz
EUT : Wireless N 150 Home Router	Note : TX-802.11b-2462



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "\*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



Site : Site 1	Time : 2009/03/25 - 17:22
Limit : FCC_SpartC_15.209_03M_AV	Margin : 6
Probe : Site 1_FCC_1-18G(2009-01) - VERTICAL	Power : AC 120V / 60Hz
EUT : Wireless N 150 Home Router	Note : TX-802.11b-2462



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "\*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



Site : Site 1	Time : 2009/03/25 - 17:27
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6
Probe : Site 1_FCC_1-18G(2009-01) - HORIZONTAL	Power : AC 120V / 60Hz
EUT : Wireless N 150 Home Router	Note : TX-802.11g-2412



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "\*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- The average measurement was not performed when the peak measured data under the limit of average detection.



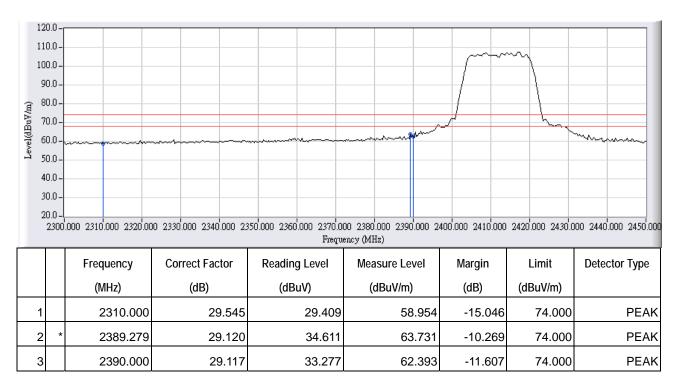
Site : Site 1	Time : 2009/03/25 - 17:30
Limit : FCC_SpartC_15.209_03M_AV	Margin : 6
Probe : Site 1_FCC_1-18G(2009-01) - HORIZONTAL	Power : AC 120V / 60Hz
EUT : Wireless N 150 Home Router	Note : TX-802.11g-2412



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "\*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



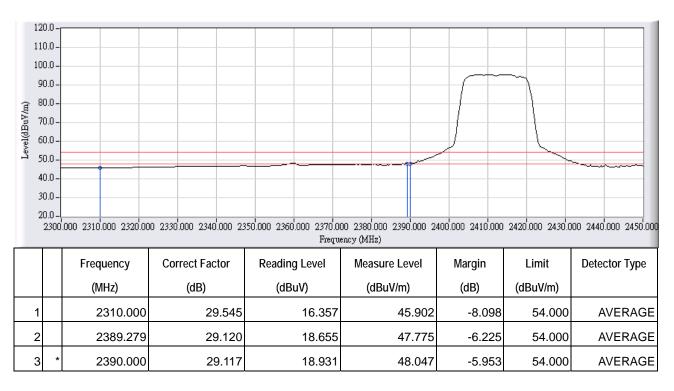
Site : Site 1	Time : 2009/03/25 - 17:36
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6
Probe : Site 1_FCC_1-18G(2009-01) - VERTICAL	Power : AC 120V / 60Hz
EUT : Wireless N 150 Home Router	Note : TX-802.11g-2412



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "\*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



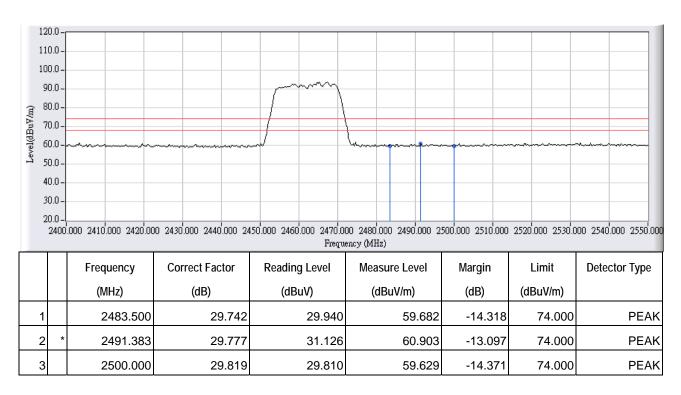
Site : Site 1	Time : 2009/03/25 - 17:38
Limit : FCC_SpartC_15.209_03M_AV	Margin : 6
Probe : Site 1_FCC_1-18G(2009-01) - VERTICAL	Power : AC 120V / 60Hz
EUT : Wireless N 150 Home Router	Note : TX-802.11g-2412



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "\*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



Site : Site 1	Time : 2009/03/25 - 17:43
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6
Probe : Site 1_FCC_1-18G(2009-01) - HORIZONTAL	Power : AC 120V / 60Hz
EUT : Wireless N 150 Home Router	Note : TX-802.11g-2462



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "\*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



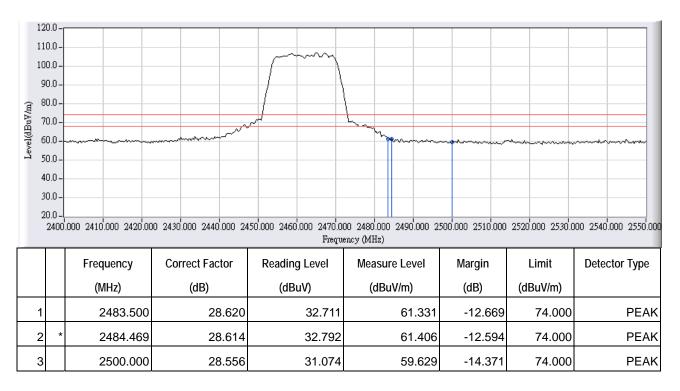
Site : Site 1	Time : 2009/03/25 - 17:47
Limit : FCC_SpartC_15.209_03M_AV	Margin : 6
Probe : Site 1_FCC_1-18G(2009-01) - HORIZONTAL	Power : AC 120V / 60Hz
EUT : Wireless N 150 Home Router	Note : TX-802.11g-2462



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "\*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



Site : Site 1	Time : 2009/03/25 - 17:52
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6
Probe : Site 1_FCC_1-18G(2009-01) - VERTICAL	Power : AC 120V / 60Hz
EUT : Wireless N 150 Home Router	Note : TX-802.11g-2462



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "\*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



Site : Site 1	Time : 2009/03/25 - 17:55
Limit : FCC_SpartC_15.209_03M_AV	Margin : 6
Probe : Site 1_FCC_1-18G(2009-01) - VERTICAL	Power : AC 120V / 60Hz
EUT : Wireless N 150 Home Router	Note : TX-802.11g-2462



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "  $^{\star}$  ", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



Site : Site 1	Time : 2009/04/01 - 17:07
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6
Probe : Site 1_FCC_1-18G(2009-01) - HORIZONTAL	Power : AC 120V / 60Hz
EUT : Wireless N 150 Home Router	Note: Bandedge-802.11n_20MHz_2412



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. " \* ", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



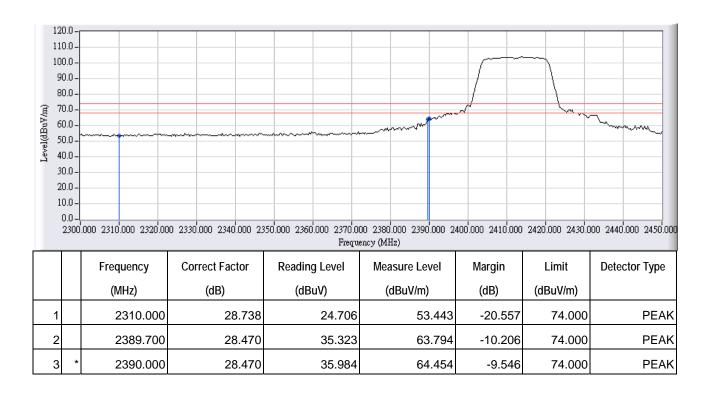
Site : Site 1	Time : 2009/04/01 - 17:12
Limit : FCC_SpartC_15.209_03M_AV	Margin : 6
Probe : Site 1_FCC_1-18G(2009-01) - HORIZONTAL	Power : AC 120V / 60Hz
EUT : Wireless N 150 Home Router	Note: Bandedge-802.11n_20MHz_2412



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. " \* ", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



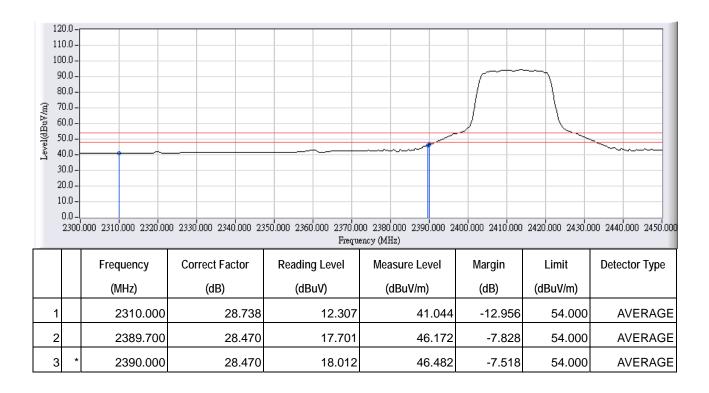
Site : Site 1	Time : 2009/04/01 - 17:18
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6
Probe : Site 1_FCC_1-18G(2009-01) - VERTICAL	Power : AC 120V / 60Hz
EUT : Wireless N 150 Home Router	Note: Bandedge-802.11n_20MHz_2412



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. " \* ", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



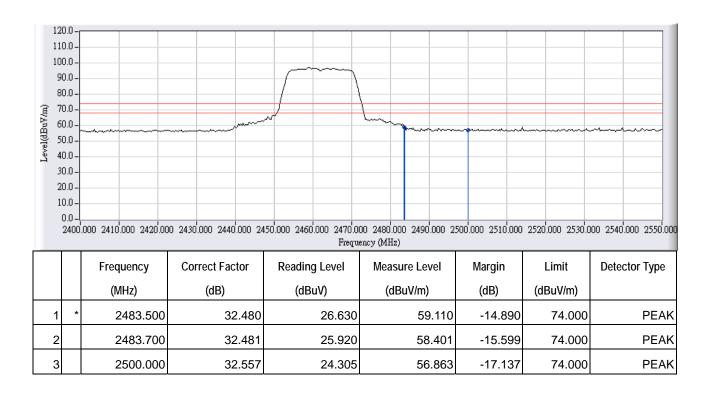
Site : Site 1	Time : 2009/04/01 - 17:19
Limit : FCC_SpartC_15.209_03M_AV	Margin : 6
Probe : Site 1_FCC_1-18G(2009-01) - VERTICAL	Power : AC 120V / 60Hz
EUT : Wireless N 150 Home Router	Note: Bandedge-802.11n_20MHz_2412



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. " \* ", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



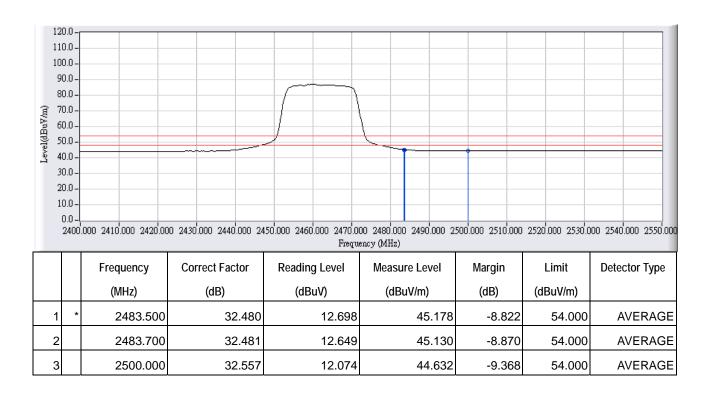
Site : Site 1	Time : 2009/04/01 - 17:22
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6
Probe : Site 1_FCC_1-18G(2009-01) - HORIZONTAL	Power : AC 120V / 60Hz
EUT : Wireless N 150 Home Router	Note: Bandedge-802.11n_20MHz_2462



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. " \* ", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



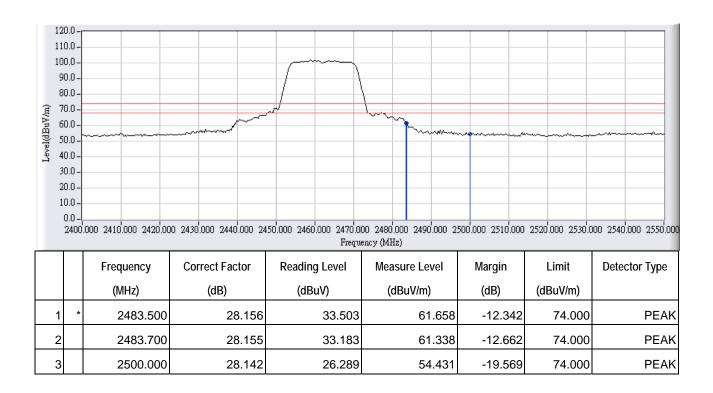
Site : Site 1	Time : 2009/04/01 - 17:24
Limit : FCC_SpartC_15.209_03M_AV	Margin : 6
Probe : Site 1_FCC_1-18G(2009-01) - HORIZONTAL	Power : AC 120V / 60Hz
EUT : Wireless N 150 Home Router	Note : Bandedge-802.11n_20MHz_2462



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "\*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



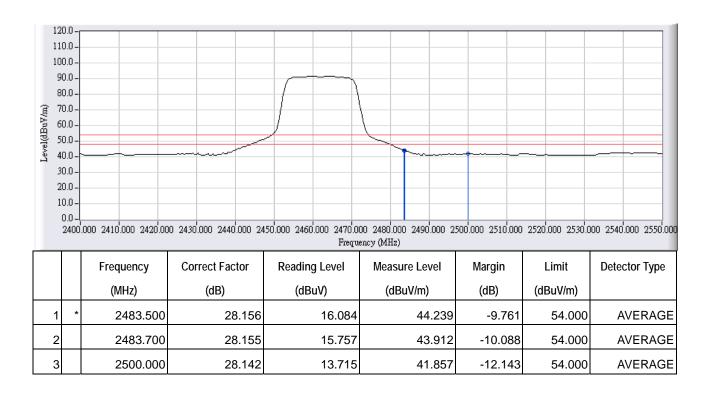
Site : Site 1	Time : 2009/04/01 - 17:29
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6
Probe : Site 1_FCC_1-18G(2009-01) - VERTICAL	Power : AC 120V / 60Hz
EUT : Wireless N 150 Home Router	Note : Bandedge-802.11n_20MHz_2462



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. " \* ", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



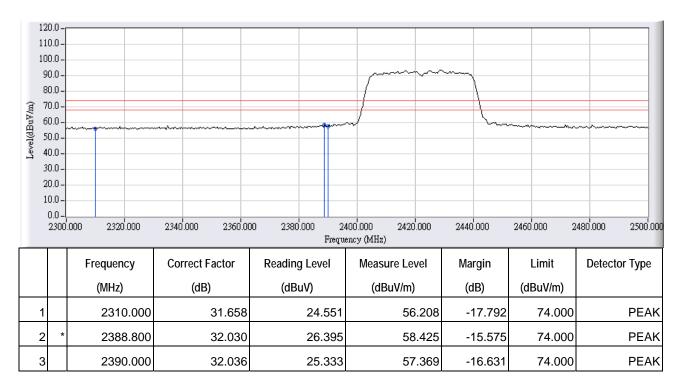
Site : Site 1	Time : 2009/04/01 - 17:31
Limit : FCC_SpartC_15.209_03M_AV	Margin : 6
Probe : Site 1_FCC_1-18G(2009-01) - VERTICAL	Power : AC 120V / 60Hz
EUT : Wireless N 150 Home Router	Note : Bandedge-802.11n_20MHz_2462



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. " \* ", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



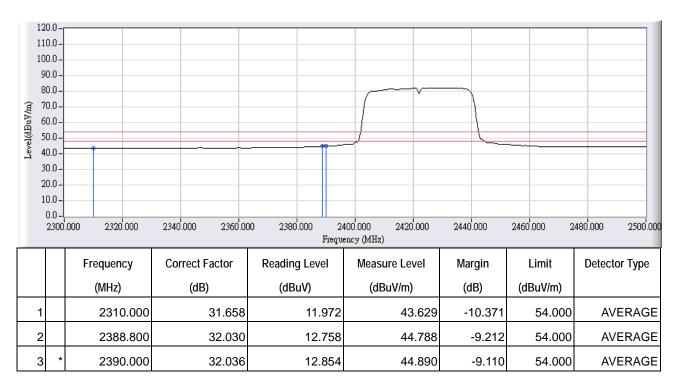
Site : Site 1	Time : 2009/04/01 - 17:36	
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6	
Probe : Site 1_FCC_1-18G(2009-01) - HORIZONTAL	Power : AC 120V / 60Hz	
EUT : Wireless N 150 Home Router	Note: Bandedge-802.11n_40MHz_2422	



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "\*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



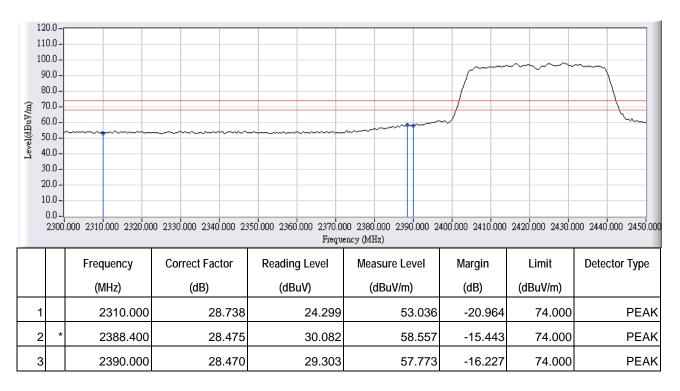
Site : Site 1	Time : 2009/04/01 - 17:42	
Limit : FCC_SpartC_15.209_03M_AV	Margin : 6	
Probe : Site 1_FCC_1-18G(2009-01) - HORIZONTAL	Power : AC 120V / 60Hz	
EUT : Wireless N 150 Home Router	Note: Bandedge-802.11n_40MHz_2422	



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "  $^{\star}$  ", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



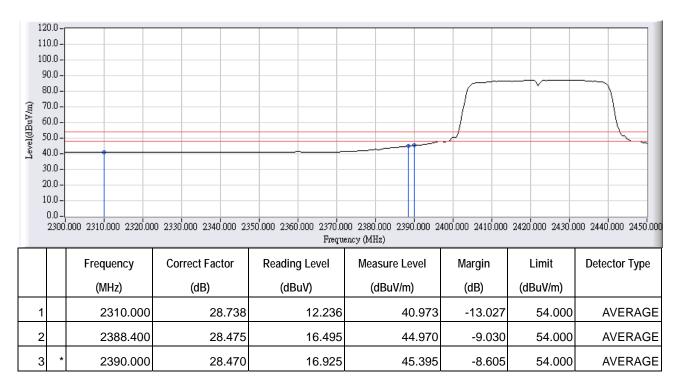
Site : Site 1	Time : 2009/04/01 - 17:46	
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6	
Probe : Site 1_FCC_1-18G(2009-01) - VERTICAL	Power : AC 120V / 60Hz	
EUT : Wireless N 150 Home Router	Note : Bandedge-802.11n_40MHz_2422	



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "\*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



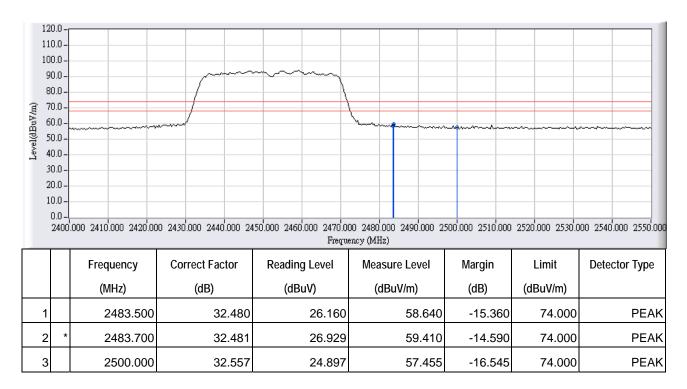
Site : Site 1	Time : 2009/04/01 - 17:49	
Limit : FCC_SpartC_15.209_03M_AV	Margin : 6	
Probe : Site 1_FCC_1-18G(2009-01) - VERTICAL	Power : AC 120V / 60Hz	
EUT : Wireless N 150 Home Router	Note : Bandedge-802.11n_40MHz_2422	



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "  $^{\star}$  ", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



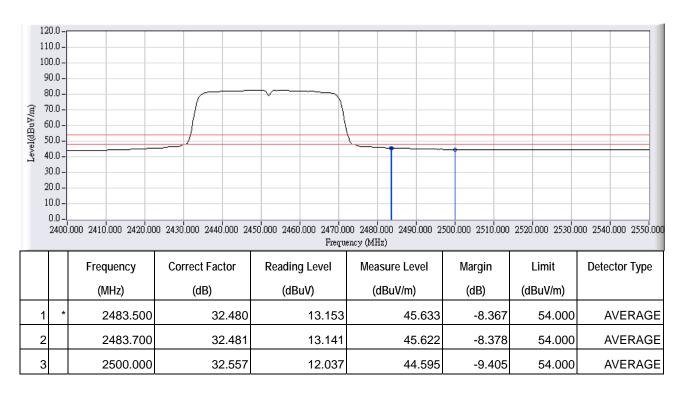
Site : Site 1	Time : 2009/04/01 - 17:54
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6
Probe : Site 1_FCC_1-18G(2009-01) - HORIZONTAL	Power : AC 120V / 60Hz
EUT : Wireless N 150 Home Router	Note : Bandedge-802.11n_40MHz_2452



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "\*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



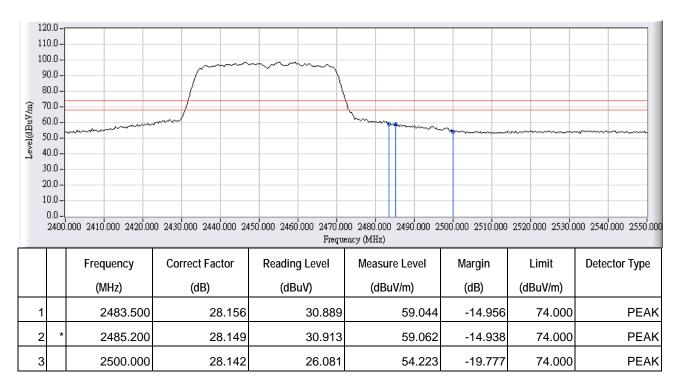
Site : Site 1	Time : 2009/04/01 - 17:55
Limit : FCC_SpartC_15.209_03M_AV	Margin : 6
Probe : Site 1_FCC_1-18G(2009-01) - HORIZONTAL	Power : AC 120V / 60Hz
EUT : Wireless N 150 Home Router	Note : Bandedge-802.11n_40MHz_2452



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "\*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



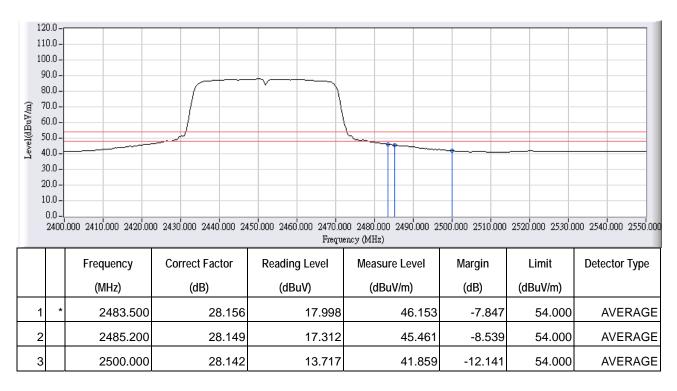
Site : Site 1	Time : 2009/04/01 - 17:59
Limit: FCC_SpartC_15.209_03M_PK	Margin : 6
Probe : Site 1_FCC_1-18G(2009-01) - VERTICAL	Power : AC 120V / 60Hz
EUT : Wireless N 150 Home Router	Note : Bandedge-802.11n_40MHz_2452



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "\*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- The average measurement was not performed when the peak measured data under the limit of average detection.



Site : Site 1	Time : 2009/04/01 - 18:01	
Limit : FCC_SpartC_15.209_03M_AV	Margin : 6	
Probe : Site 1_FCC_1-18G(2009-01) - VERTICAL	Power : AC 120V / 60Hz	
EUT : Wireless N 150 Home Router	Note: Bandedge-802.11n_40MHz_2452	



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "\*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



# 7. Occupied Bandwidth

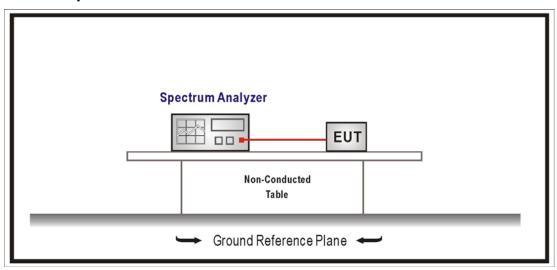
# 7.1. Test Equipment

The following test equipments are used during the test:

Item	Equipment	Manufacturer	Model No. / Serial No.	Last Cal.
1	Spectrum Analyzer	R & S	FSP / 100561	Mar., 2009
2	No.1 OATS			Sep., 2008

Note: 1. All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

# 7.2. Test Setup



#### 7.3. Test Procedures

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

Set RBW = 100 kHz, Span greater than RBW.

# 7.4. Limits

The 6 dB bandwidth must be greater than 500 kHz.

# 7.5. Uncertainty

The measurement uncertainty is defined as ±150Hz



# 7.6. Test Result

Product	Wireless N 150 Home Router			
Test Item	Occupied Bandwidth			
Test Mode	Transmit			
Date of Test	2009/03/27	Test Site	No.1 OATS	

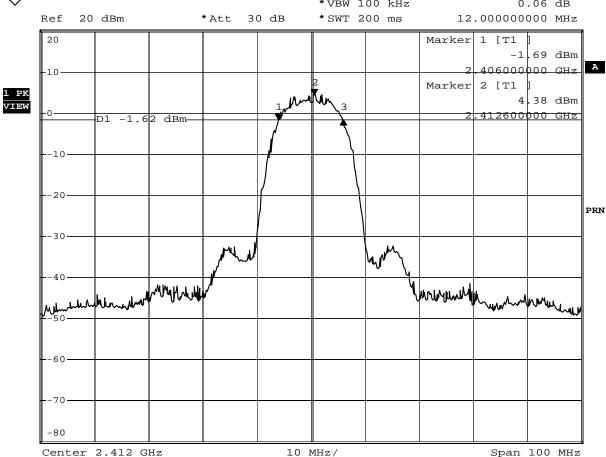
802.11 b				
Channel No. Frequency Measurement Level Rec		Required Limit (kHz)	Result	
1	2412.00	12000	≥500	Pass
6	2437.00	12000	≧500	Pass
11	2462.00	12000	≥500	Pass

# Channel 1



\*RBW 100 kHz Delta 3 [T1 ]

\*VBW 100 kHz 0.06 dB



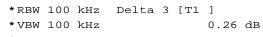
Date: 27.MAR.2009 09:54:16

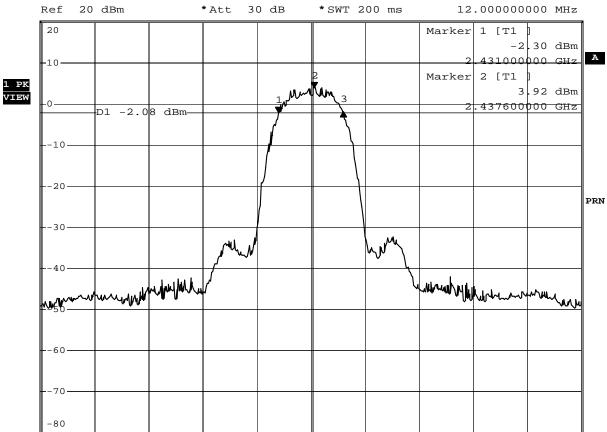
Span 100 MHz





# **Channel 6**





10 MHz/

Date: 27.MAR.2009 10:08:21

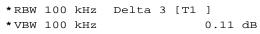
Center 2.437 GHz

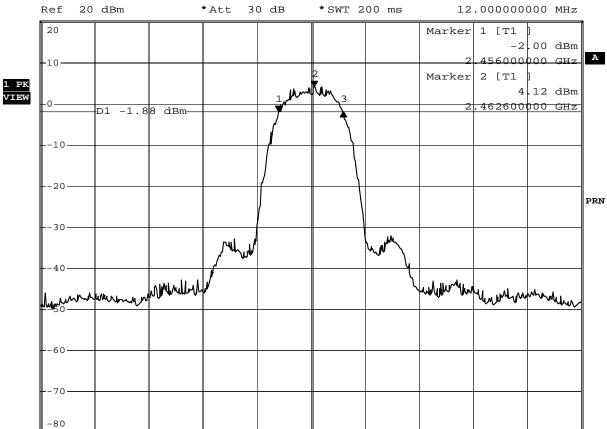
Span 100 MHz





# **Channel 11**





10 MHz/

Date: 27.MAR.2009 10:26:50

Center 2.462 GHz



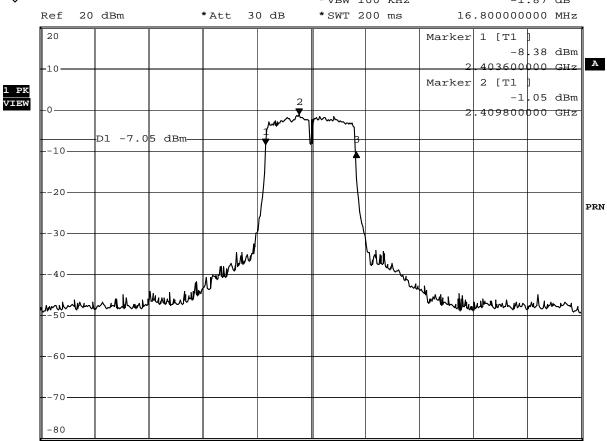
Product	Wireless N 150 Home Router		
Test Item	Occupied Bandwidth		
Test Mode	Transmit		
Date of Test	2009/03/27	Test Site	No.1 OATS

IEEE 802.11g				
Channel No.	Frequency	Measurement Level	Required Limit	Result
Chainlei No.	(MHz)	(kHz)	(kHz)	Nesuit
1	2412.00	16800	≧500	Pass
6	2437.00	16800	≧500	Pass
11	2462.00	16800	≧500	Pass



\*RBW 100 kHz Delta 3 [T1 ]
\*VBW 100 kHz -1.87 dB

Span 100 MHz

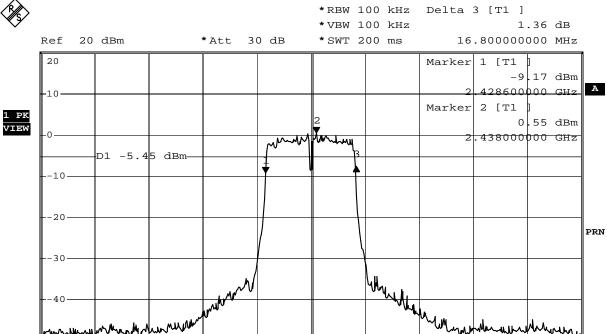


Date: 27.MAR.2009 10:55:47

Center 2.412 GHz

10 MHz/





Center 2.437 GHz 10 MHz/ Span 100 MHz

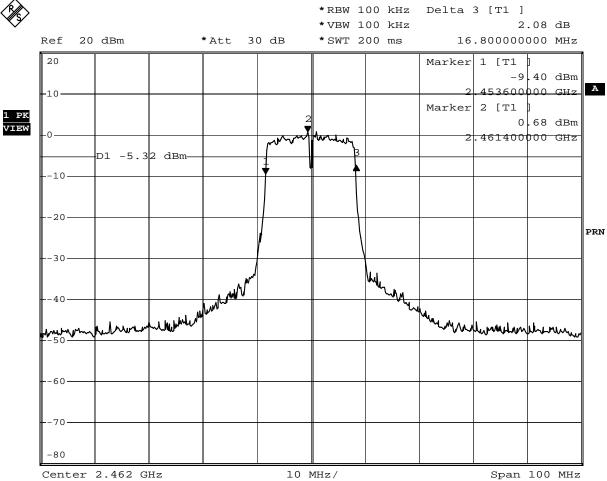
Date: 27.MAR.2009 11:00:05

-60-

-80





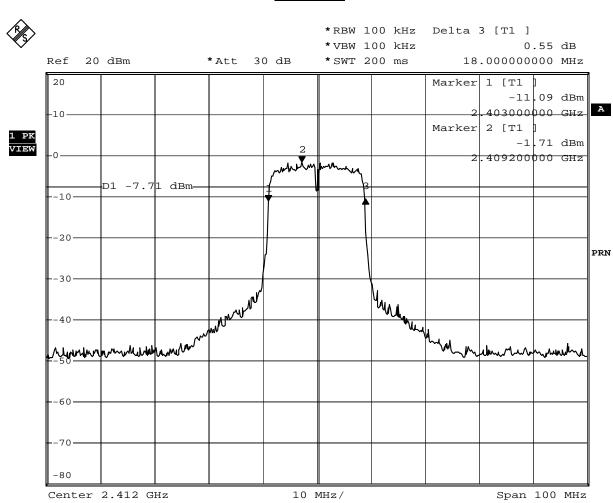


Date: 27.MAR.2009 11:11:42



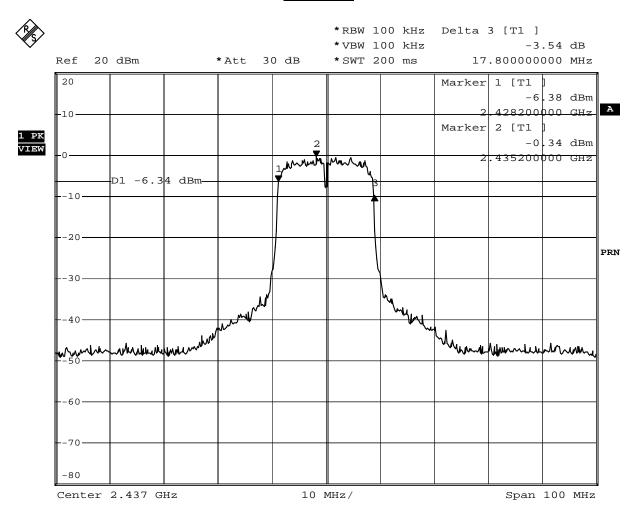
Product	Wireless N 150 Home Router		
Test Item	Occupied Bandwidth		
Test Mode	Transmit		
Date of Test	2009/03/27	Test Site	No.1 OATS

IEEE 802.11n (ANT A (20MHz))					
Frequency Measurement Level Required Limit					
Channel No.	(MHz)	(kHz)	(kHz)	Result	
1	2412.00	18000	≥500	Pass	
6	2437.00	17800	≥500	Pass	
11	2462.00	18000	≥500	Pass	



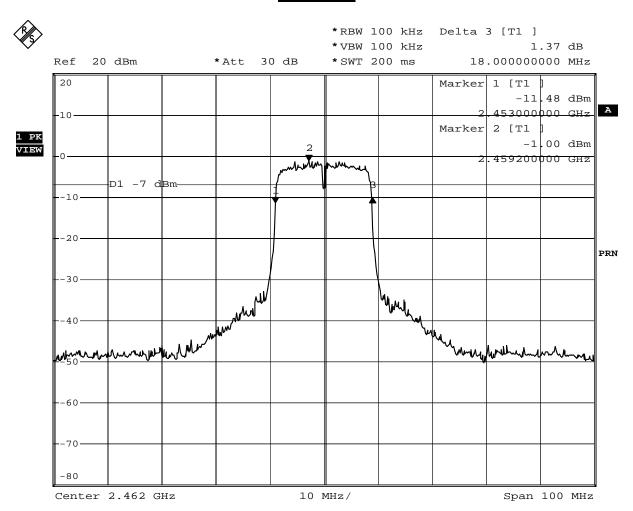
Date: 27.MAR.2009 11:48:41





Date: 27.MAR.2009 11:59:20





Date: 27.MAR.2009 13:18:22



Product	Wireless N 150 Home Router		
Test Item	Occupied Bandwidth		
Test Mode	Transmit		
Date of Test	2009/03/27	Test Site	No.1 OATS

IEEE 802.11n (ANT A (40MHz))					
Frequency Measurement Level Required Limit					
Channel No.	(MHz)	(kHz)	(kHz)	Result	
3	2422	36600	≥500	Pass	
6	2437	36800	≥500	Pass	
9	2452	36600	≥500	Pass	

\*RBW 100 kHz Delta 3 [T1 ]

\*VBW 100 kHz -4.45 dB Ref 20 dBm \*Att 30 dB \*SWT 200 ms 36.600000000 MHz 20 Marker 1 [T1] -11.54 dBm 2.403800000 GHz A -10-Marker 2 [T1] -5.07 dBm .425800000 GHz -20-PRN -30**-**-60<del>-</del> -80 Center 2.422 GHz 10 MHz/ Span 100 MHz

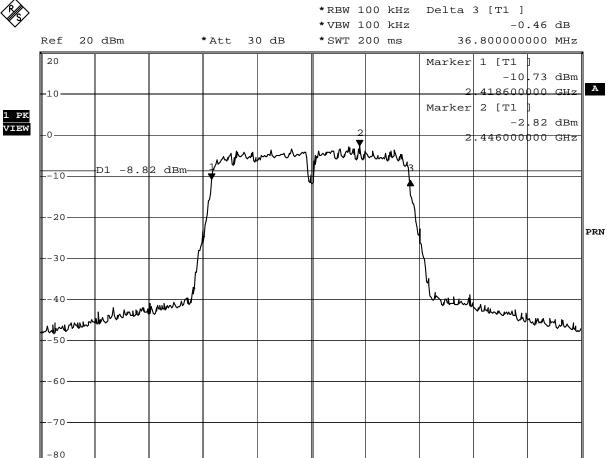
Date: 27.MAR.2009 05:12:37

Span 100 MHz





# Channel 6



10 MHz/

Date: 27.MAR.2009 05:14:12

Center 2.437 GHz

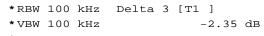
Span 100 MHz

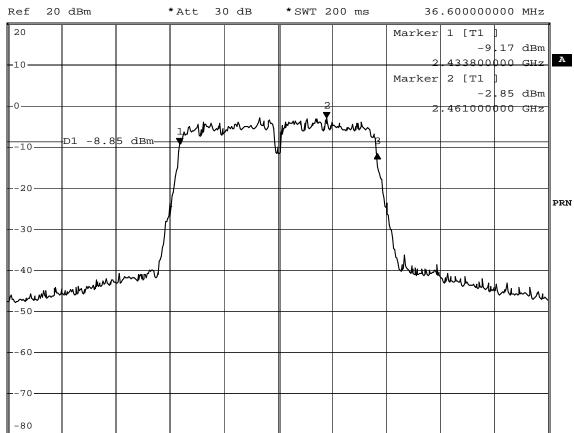


# \$\hat{8}

1 PK VIEW

# **Channel 9**





10 MHz/

Date: 27.MAR.2009 06:04:54

Center 2.452 GHz



# 8. Power Density

# 8.1. Test Equipment

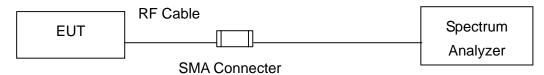
The following test equipment are used during the test:

Item	Equipment	Manufacturer	Model No. / Serial No.	Last Cal.
1	Spectrum Analyzer	R&S	FSP / 100561	Mar., 2009
2	No.1 OATS			Sep., 2008

Note: 1. All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

# 8.2. Test Setup

IEEE 802.11 b / g / n ( 20M / 40M ) MODE



#### 8.3. Limits

The peak power spectral density conducted from the intentional radiated to the antenna shall not be greater than +8dBm in any 3kHz band during any time interval of continuous transmission.

### 8.4. Test Procedures

The EUT was setup according to ANSI C63.4, 2003; tested according to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements. Set RBW= 3 kHz, Set VBW≥ 9 kHz, Sweep time=Auto, Set detector=Peak detector

# 8.5. Uncertainty

The measurement uncertainty is defined as  $\pm 1.27$ dB.



# 8.6. Test Result

Product	Wireless N 150 Home Router		
Test Item	Power Density		
Test Mode	Transmit		
Date of Test	2009/03/27	Test Site	No.1 OATS

IEEE 802.11b				
Channel No. Frequency Measure Level Limit (MHz) (dBm) Result				Result
1	2412	-10.86	≦8	Pass
6	2437	-10.17	≦8	Pass
11	2462	-10.33	≦8	Pass

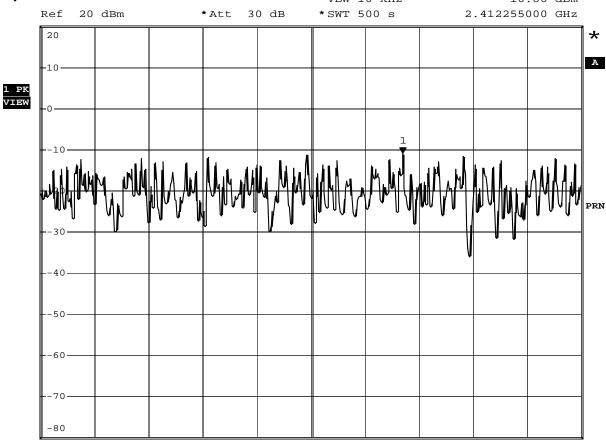
# Channel 1



\*RBW 3 kHz Marker 1 [T1 ]

\*VBW 10 kHz -10.86 dBm

Span 1.5 MHz



Date: 27.MAR.2009 03:21:46

Center 2.412 GHz

150 kHz/

Span 1.5 MHz



### 

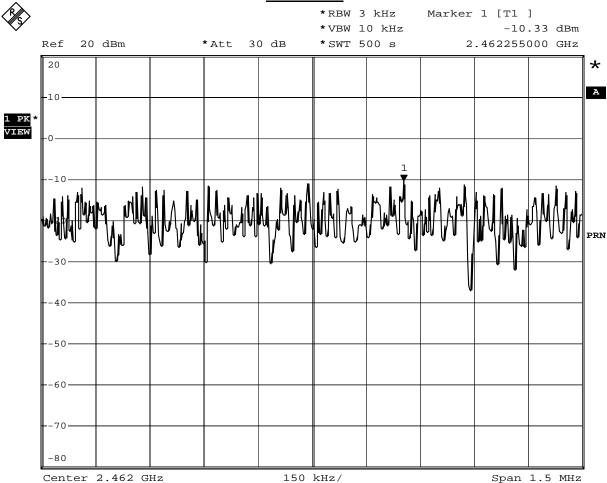
150 kHz/

Date: 27.MAR.2009 04:59:40

Center 2.437 GHz



#### Channel 11



Date: 27.MAR.2009 04:17:50



Product	Wireless N 150 Home Router		
Test Item	Power Density		
Test Mode	Transmit		
Date of Test	2009/03/27	Test Site	No.1 OATS

IEEE 802.11g				
Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
1	2412	-14.34	≦8	Pass
6	2437	-13.89	≦8	Pass
11	2462	-13.35	≦8	Pass

#### Channel 1



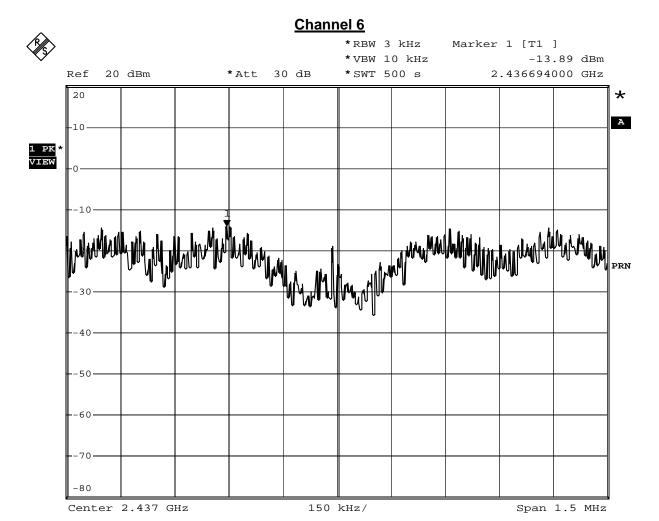
\*RBW 3 kHz Marker 1 [T1 ]

\*VBW 10 kHz -14.34 dBm

Ref 20 dBm \*Att 30 dB \*SWT 500 s 2.411694000 GHz 20 A -10 1 PK VIEW -40 -50 150 kHz/ Center 2.412 GHz Span 1.5 MHz

Date: 27.MAR.2009 05:02:05



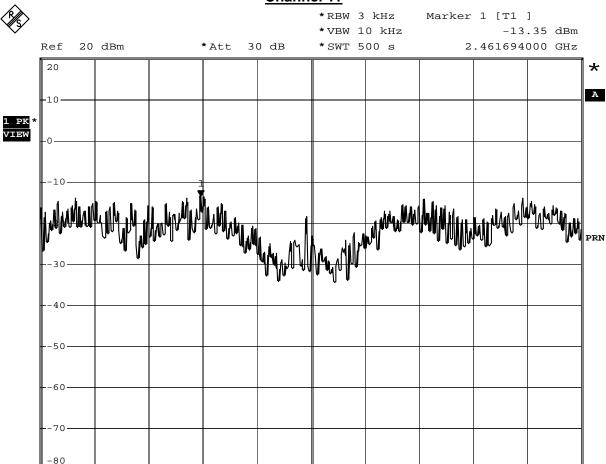


Date: 27.MAR.2009 04:26:12

Span 1.5 MHz



#### **Channel 11**



150 kHz/

Date: 27.MAR.2009 04:29:58

Center 2.462 GHz



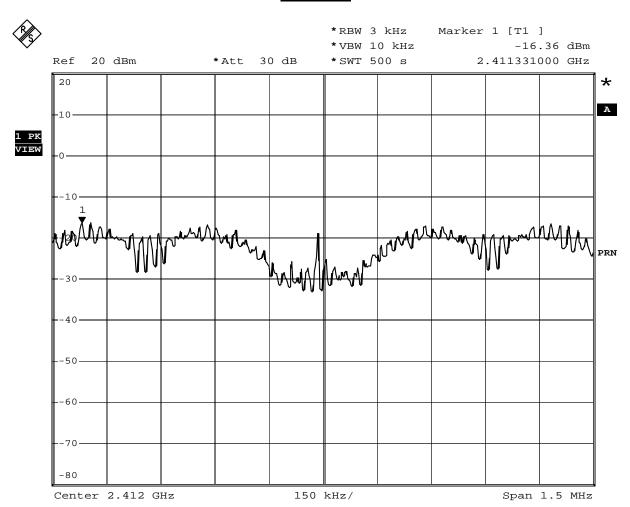
Product	Wireless N 150 Home Router		
Test Item	Power Density		
Test Mode	Transmit		
Date of Test	2009/03/27	Test Site	No.1 OATS

IEEE802.11n MCS0 20MHz_Tx; ANT A				
Channel No.	Frequency	Measure Level	Limit	Dooult
	(MHz)	(dBm)	(dBm)	Result
1	2412.00	-16.36	≦8	Pass
6	2437.00	-16.27	≦8	Pass
11	2462.00	-16.10	≦8	Pass

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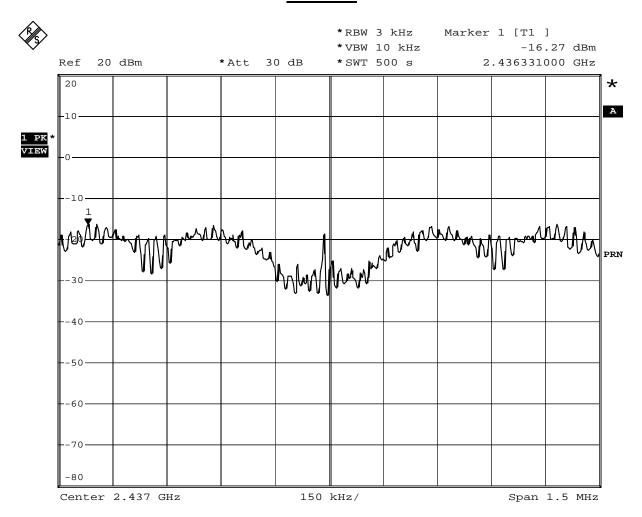
#### IEEE802.11n MCS0 20MHz\_Tx; ANT A Channel 1



Date: 27.MAR.2009 14:11:20



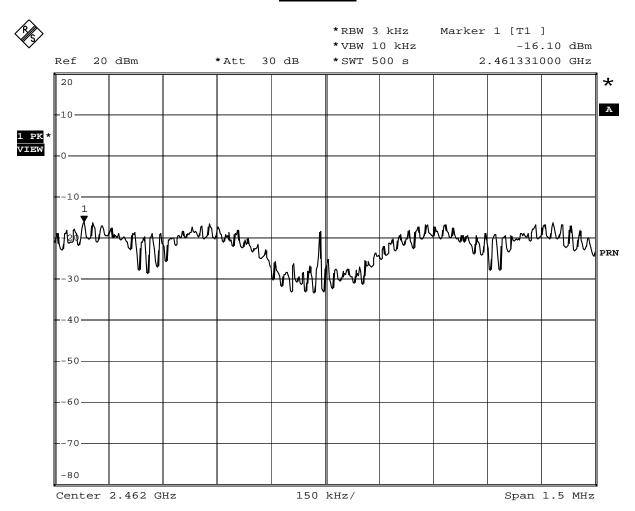
## IEEE802.11n MCS0 20MHz\_Tx; ANT A Channel 6



Date: 27.MAR.2009 04:36:26



# IEEE802.11n MCS0 20MHz\_Tx; ANT A Channel 11



Date: 27.MAR.2009 05:05:50



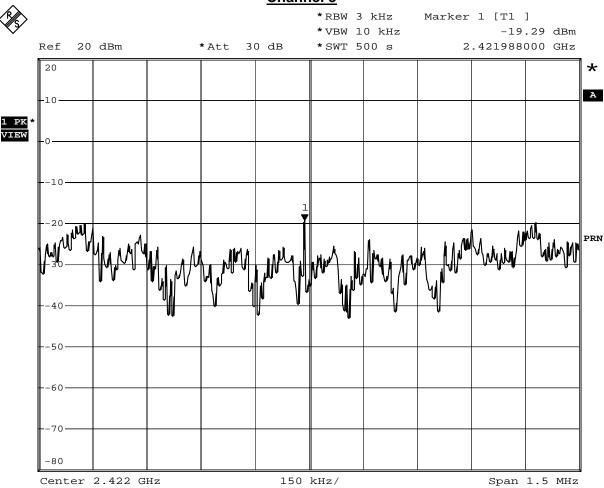
Product	Wireless N 150 Home Router		
Test Item	Power Density		
Test Mode	Transmit		
Date of Test	2009/03/27	Test Site	No.1 OATS

IEEE 802.11n MCS1 40MHz_Tx ; ANT A				
Channel No.	Frequency	Measure Level	Limit	Dogult
	(MHz)	(dBm)	(dBm)	Result
3	2422	-19.29	≦8	Pass
6	2437	-19.33	≦8	Pass
9	2452	-18.96	≦8	Pass

Page: 158 of 170



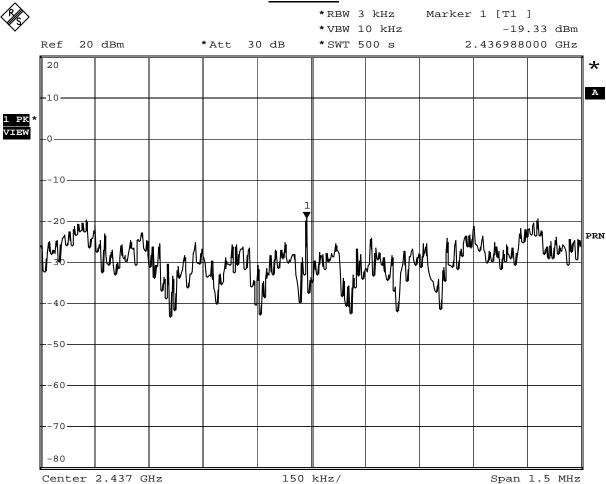
## IEEE 802.11n MCS1 40MHz\_Tx ; ANT A Channel 3



Date: 27.MAR.2009 05:56:27



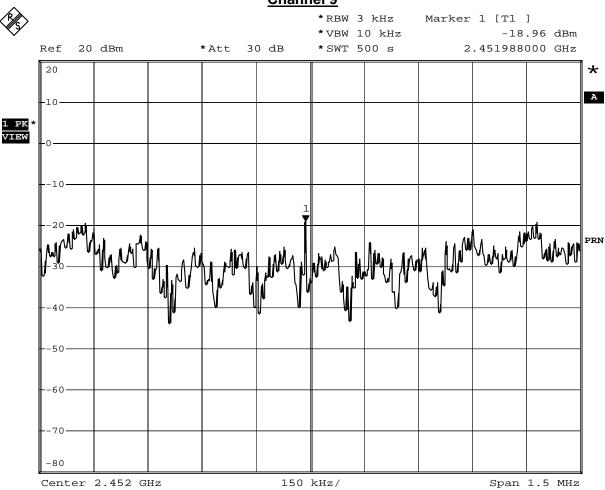
## IEEE 802.11n MCS1 40MHz\_Tx ; ANT A Channel 6



Date: 27.MAR.2009 05:58:12



## IEEE 802.11n MCS1 40MHz\_Tx ; ANT A Channel 9



Date: 27.MAR.2009 06:02:21