EMC TEST REPORT for Intentional Radiator (Wi-Fi Function)

No. 140800095SHA-001

Applicant	: Adtran, Inc. 901 Explorer Boulevard, Huntsville, Alabama, USA
Manufacturer	: Adtran, Inc. 901 Explorer Boulevard, Huntsville, Alabama, USA
Equipment	: GPON ONT
Type/Model	: TOTAL ACCESS 334RG
Trade Name	: ADTRAN

SUMMARY

The equipment complies with the requirements according to the following standard(s):

47CFR Part 15 (2013): Radio Frequency Devices

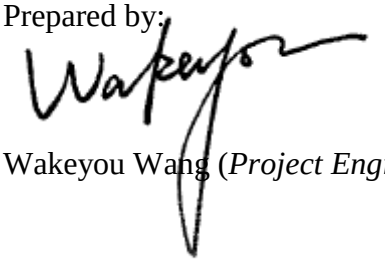
ANSI C63.4 (2009): American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz

RSS-210 Issue 8 (December 2010): Low-power Licence-exempt Radiocommunication Devices (All Frequency Bands): Category I Equipment

RSS-Gen Issue 3 (December 2010): General Requirements and Information for the Certification of Radiocommunication Equipment

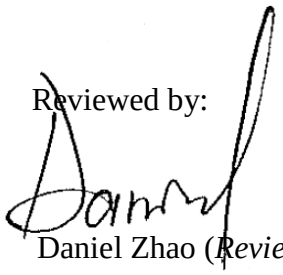
Date of issue: Aug 18, 2014

Prepared by:



Wakeyou Wang (*Project Engineer*)

Reviewed by:



Daniel Zhao (*Reviewer*)

Description of Test Facility

Name: Intertek Testing Services Limited Shanghai
Address: Building 86, No. 1198 Qinzhou Rd., North, Shanghai 200233, P.R. China

FCC Registration Number: 236597
IC Assigned Code: 2042B-1

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Subcontractor:

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FCC Registration Number: 800392
IC Assigned Code: 4075B-2

Content

1. General Information

1.1 Applicant Information

Applicant:		Adtran, Inc. 901 Explorer Boulevard, Huntsville, Alabama, USA
Name of contact:		Jeff Whitmire
Tel:		256-963-8000
Fax:		256-963-8250
Manufacturer:		Adtran, Inc. 901 Explorer Boulevard, Huntsville, Alabama, USA
Sample received date	:	Nov. 22, 2013
Sample Identification No	:	*0131122-23-001*
Date of test	:	Nov. 22, 2013~ Dec. 13, 2013

1.2 Identification of the EUT

Equipment:	GPON ONT
Type/model:	TOTAL ACCESS 334RG
FCC ID:	HDC1287567G1
IC:	2250A-1287567G1

1.3 Technical specification

Frequency Range:	2412 - 2462MHz, 2422 - 2452MHz
Modulation:	DBPSK @1Mbps DQPSK@2Mbp CCK@5.5/11Mbps BPSK@6/9 Mbps QPSK@12/18Mbps 16-QAM@24Mbps 64-QAM@48/54Mbps and above
Gain of Antenna:	Fixed Dipole antenna, 2.0dBi max, 2T2R MIMO
Rating:	DC 12V, 2A powered by AC/DC adapter:

Manufactory	*:*	*DVE*
M/N	*:*	*DSA-24PFE-15 FUS 120200*
Input	*:*	*AC 100-240V~, 50/60Hz, 0.8A*
Output	*:*	*DC 12V, 2A*

Description of EUT:	The EUT is Wi-Fi device supporting 802.11b/g/n20/n40 modes.
Channel Description:	The channel spacing is 5MHz.

1.4 Mode of operation during the test / Test peripherals used

While testing transmitting mode of EUT, the internal modulation and continuously transmission was applied.

The lowest, middle and highest channel were tested as representatives.
For 802.11b/g/n HT20 ----- lowest, 2412MHz; middle, 2437MHz; highest, 2462MHz.
For 802.11n HT40 ----- lowest, 2422MHz; middle, 2437MHz; highest, 2452MHz.

Test Peripherals:
PC: HP ProBook 6450b

Power setting by Software offered by the applicant:

Test Mode	Test Channel	Chain A	Chain B	Chain A+B
802.11b	L	56	53	
	M	54	54	
	H	49	54	
802.11g	L	63	63	
	M	63	63	
	H	62	62	
802.11n HT20	L	63	63	56
	M	63	63	56
	H	61	61	56
802.11n HT40	L	63	63	56
	M	63	63	56
	H	59	61	56

2. Test Specification

2.1 Instrument list

Equipment	Type	Manu.	Internal no.	Due date
Test Receiver	ESCS 30	R&S	EC 2107	2014-10-20
Test Receiver	ESIB 26	R&S	EC 3045	2014-10-19
A.M.N.	ESH2-Z5	R&S	EC 3119	2015-1-8
A.M.N.	ENV 216	R&S	EC 3393	2014-8-8
A.M.N.	ENV 216	R&S	EC 3394	2014-8-8
A.M.N.	ENV4200	R&S	EC3558	2014-8-8
Ultra-broadband antenna	HL 562	R&S	EC 3046-1	2014-5-14
Bilog Antenna	CBL 6112D	TESEQ	EC 4206	2015-4-27
Horn antenna	HF 906	R&S	EC 3049	2015-4-27
Horn antenna	3117	ETS	EC 4792-1	2014-4-16
Horn antenna	HAP18-26W		EC 4792-3	2014-4-9
Pre-amplifier	Pre-amp 18	R&S	EC 3222	2014-4-11
Pre-amplifier	Tpa0118-40	R&S	EC 4792-2	2014-4-11
Semi-anechoic chamber	-	Albatross project	EC 3048	2014-5-11
Fully-anechoic chamber	-	Albatross project	EC 3047	2014-5-11
High Pass Filter	WHKX 1.0/15G-10SS	Wainwright	EC4297-1	2015-1-7
High Pass Filter	WHKX 2.8/18G-12SS	Wainwright	EC4297-2	2015-1-7
High Pass Filter	WHKX 7.0/1.8G-8SS	Wainwright	EC4297-3	2015-1-7
Band Reject Filter	WRCGV 2400/2483-2390/2493-35/10SS	Wainwright	EC4297-4	2015-1-7
Power sensor / Power meter	N1911A/N1921A	Agilent	EC4318	2014-04-11

2.2 Test Standard

47CFR Part 15 (2013)
ANSI C63.4 (2009)
RSS-210 Issue 8 (December 2010)
RSS-Gen Issue 3 (December 2010)

2.3 Test Summary

This report applies to tested sample only. This report shall not be reproduced in part without written approval of Intertek Testing Service Shanghai Limited.

TEST ITEM	FCC REFERANCE	IC REFERANCE	RESULT
Minimum 6dB Bandwidth	15.247(a)(2)	RSS-210 Issue 8 Annex 8	Pass
Maximum peak output power	15.247(b)	RSS-210 Issue 8 Annex 8	Pass
Power spectrum density	15.247(e)	RSS-210 Issue 8 Annex 8	Pass
Radiated emission	15.205 & 15.209	RSS-210 Issue 8 Clause 2	Pass
Emission outside the frequency band	15.247(d)	RSS-210 Issue 8 Annex 8	Pass
Power line conducted emission	15.207	RSS-Gen Issue 3 Clause 7.2.4	Pass

2.4 Data rate VS power

The date rate with highest power level for each mode was chosen to perform test.

Mode	Data Rate (Mbps)	CH	AV Power (dBm)
802.11b	1	M	**22.45**
	2	M	22.08
	5.5	M	21.44
	11	M	21.12
802.11g	6	M	**21.37**
	9	M	21.33
	12	M	21.27
	18	M	21.25
	24	M	21.19
	36	M	21.17
	48	M	21.13
	54	M	21.01
802.11n HT20	MCS8	M	**20.96**
	MCS9	M	20.94
	MCS10	M	20.76
	MCS11	M	20.41
	MCS12	M	20.35
	MCS13	M	20.30
	MCS14	M	20.27
	MCS15	M	20.11
802.11n HT40	MCS8	M	**20.96**
	MCS9	M	20.87
	MCS10	M	20.63
	MCS11	M	20.30
	MCS12	M	20.21
	MCS13	M	20.35
	MCS14	M	20.09
	MCS15	M	19.98

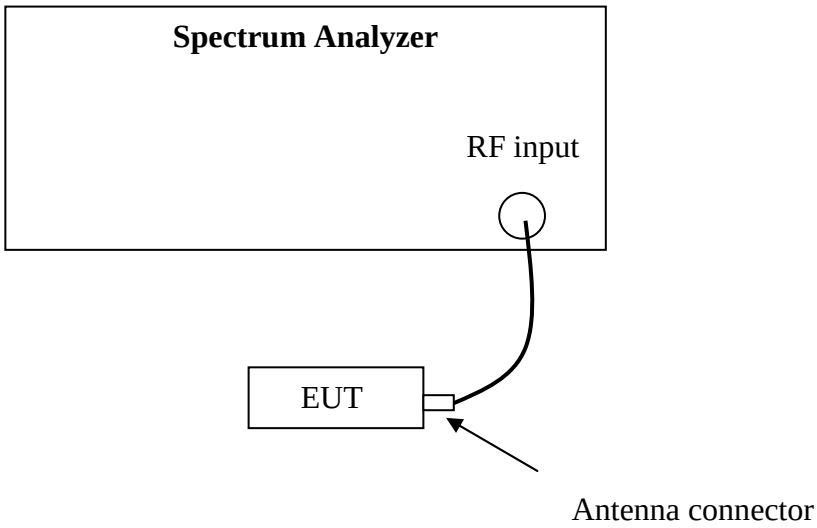
3. Minimum 6dB Bandwidth

Test result: PASS

3.1 Limit

For systems using digital modulation techniques that may operate in the 902 - 928 MHz, 2400 - 2483.5 MHz and 5725 - 5850 MHz bands, the minimum 6 dB bandwidth shall be at least 500 kHz.

3.2 Test Configuration



3.3 Test Procedure and test setup

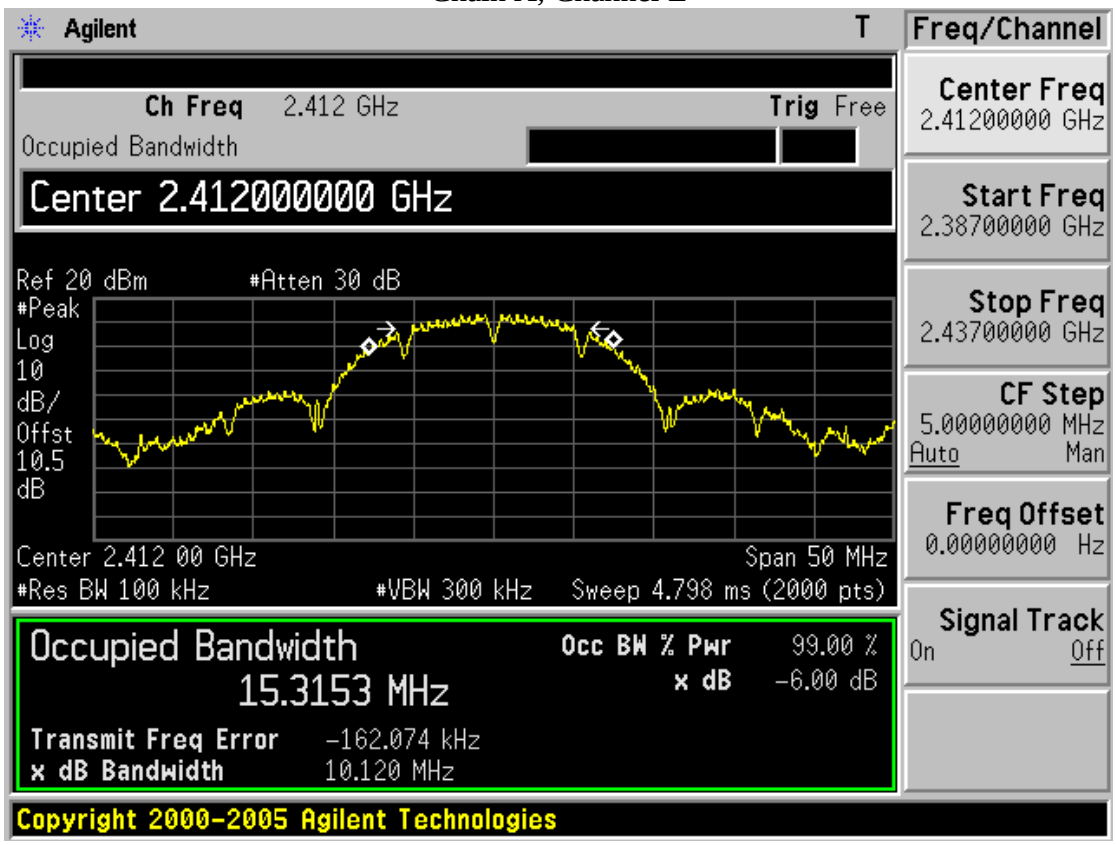
The minimum 6dB bandwidth per FCC §15.247(a)(2) is measured using the Spectrum Analyzer according to DTS test procedure of "KDB558074 D01 DTS Meas Guidance v03r01" for compliance to FCC 47CFR 15.247 requirements.

3.4 Test Protocol

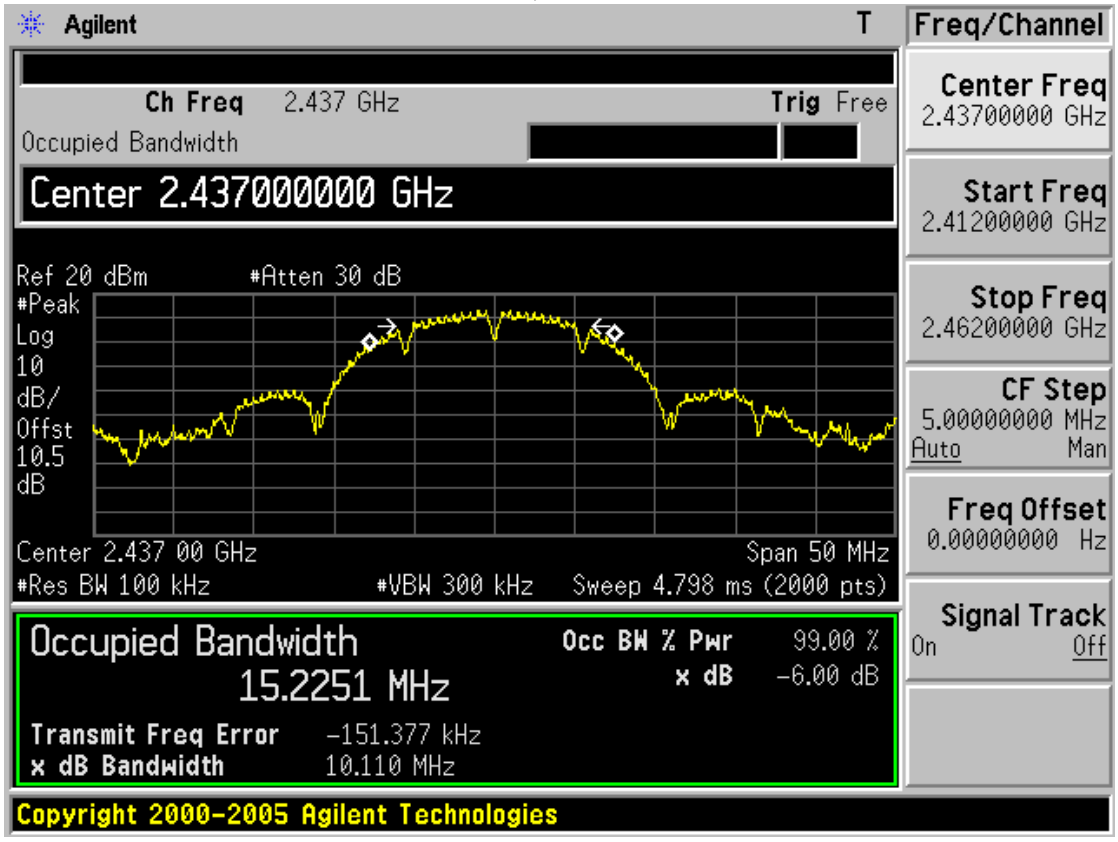
Temperature : 25°C
Relative Humidity : 55%

Mode	CH	Bandwidth (MHz)		Limit (MHz)
		Chain A	Chain B	
802.11b	L	10.12	10.11	≥0.5
	M	10.11	10.11	
	H	10.08	10.11	

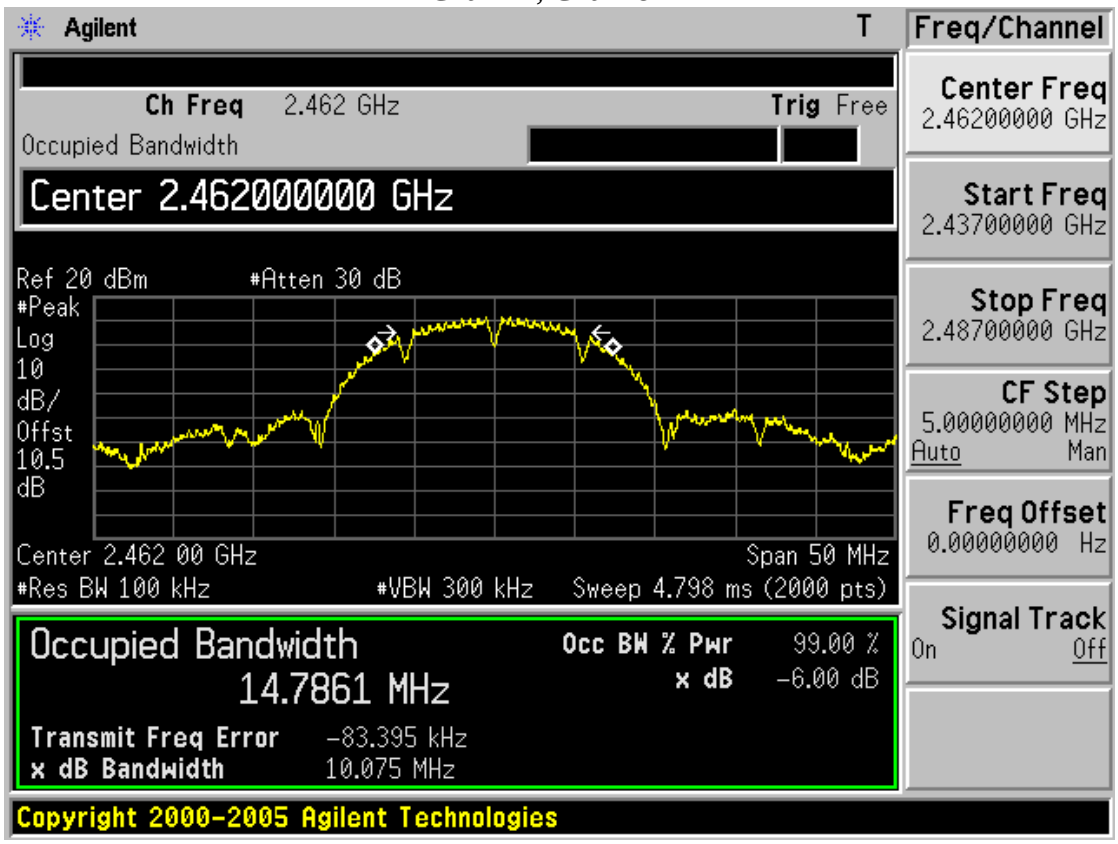
Chain A, Channel L



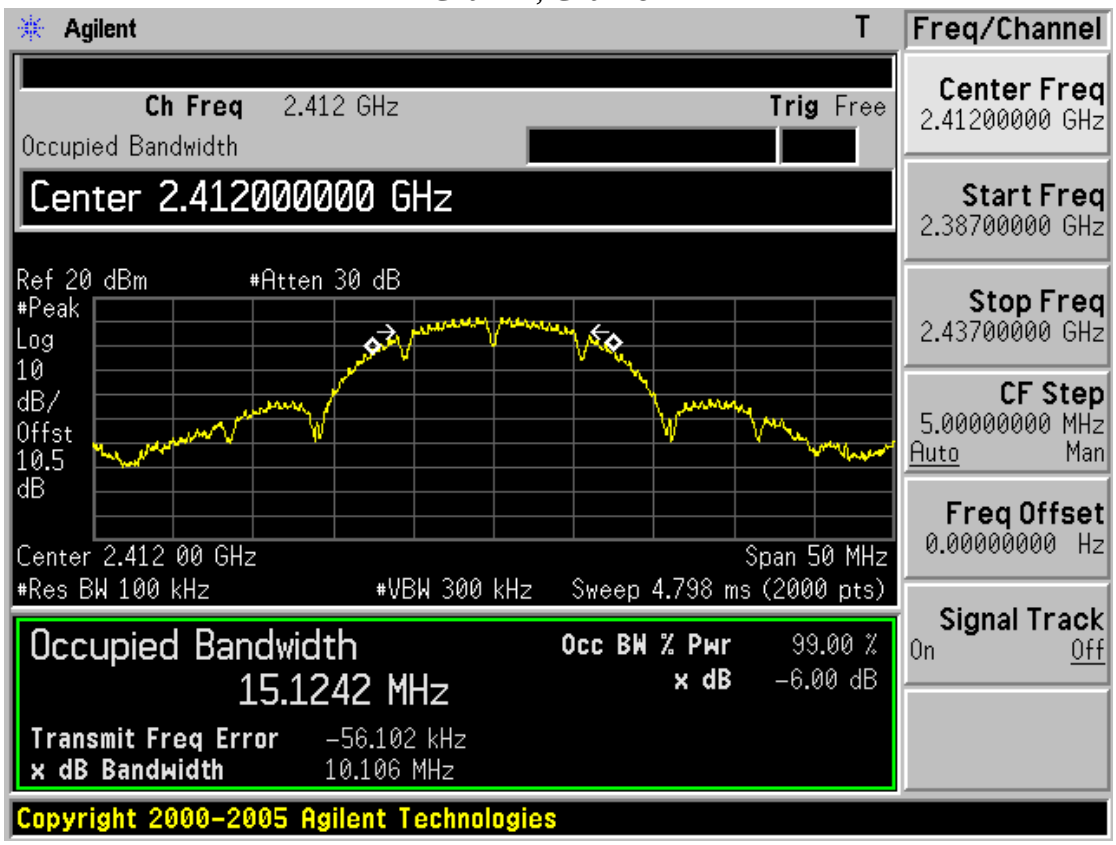
Chain A, Channel M



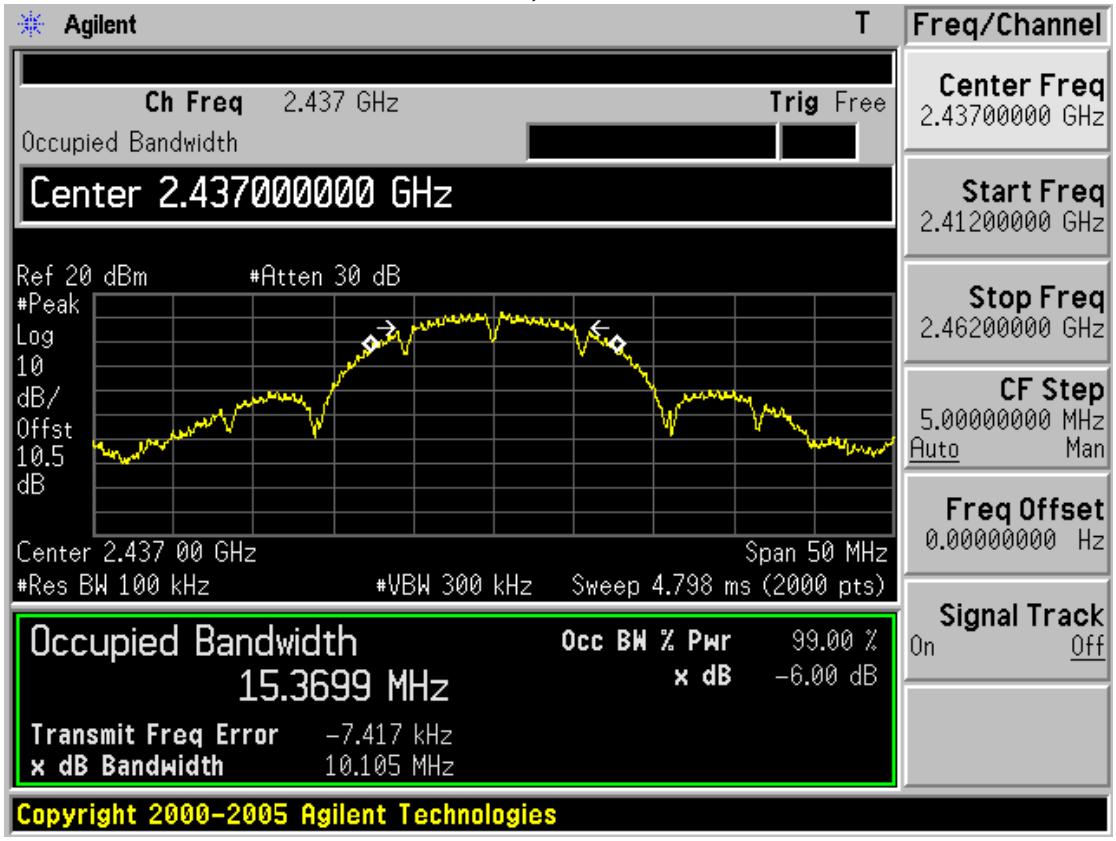
Chain A, Channel H



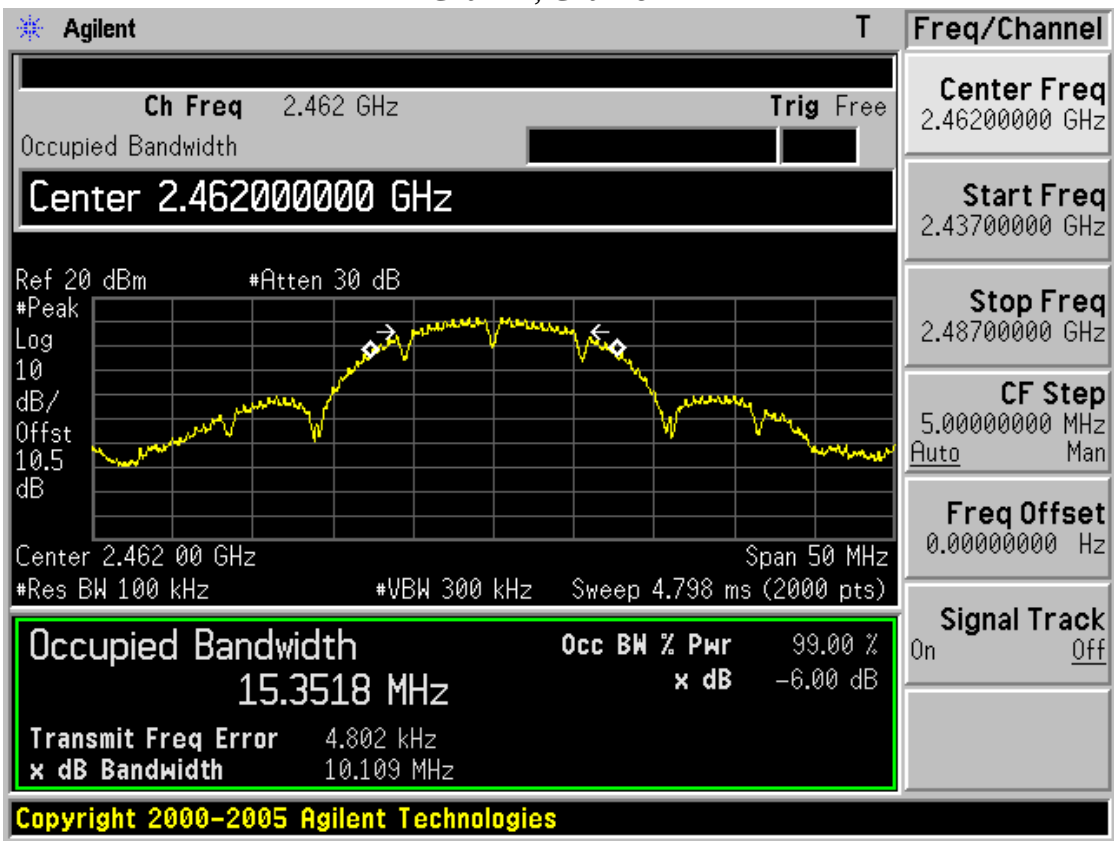
Chain B, Channel L



Chain B, Channel M

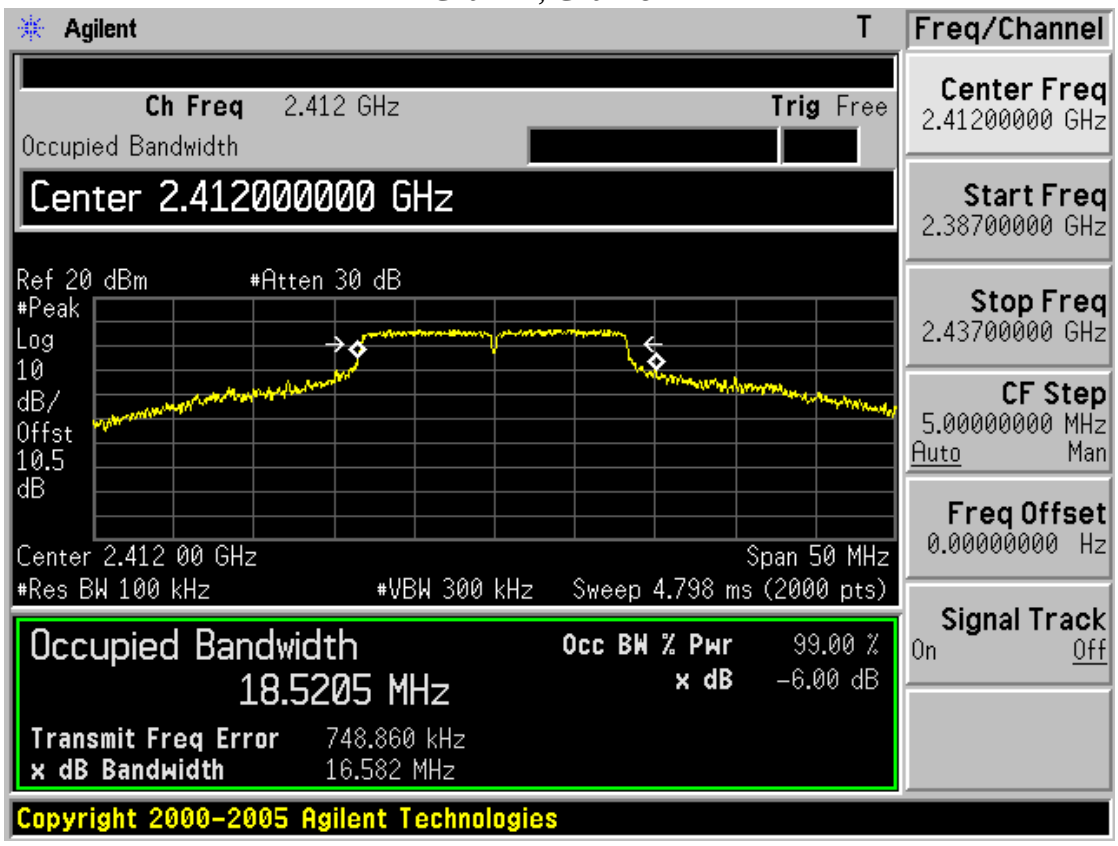


Chain B, Channel H

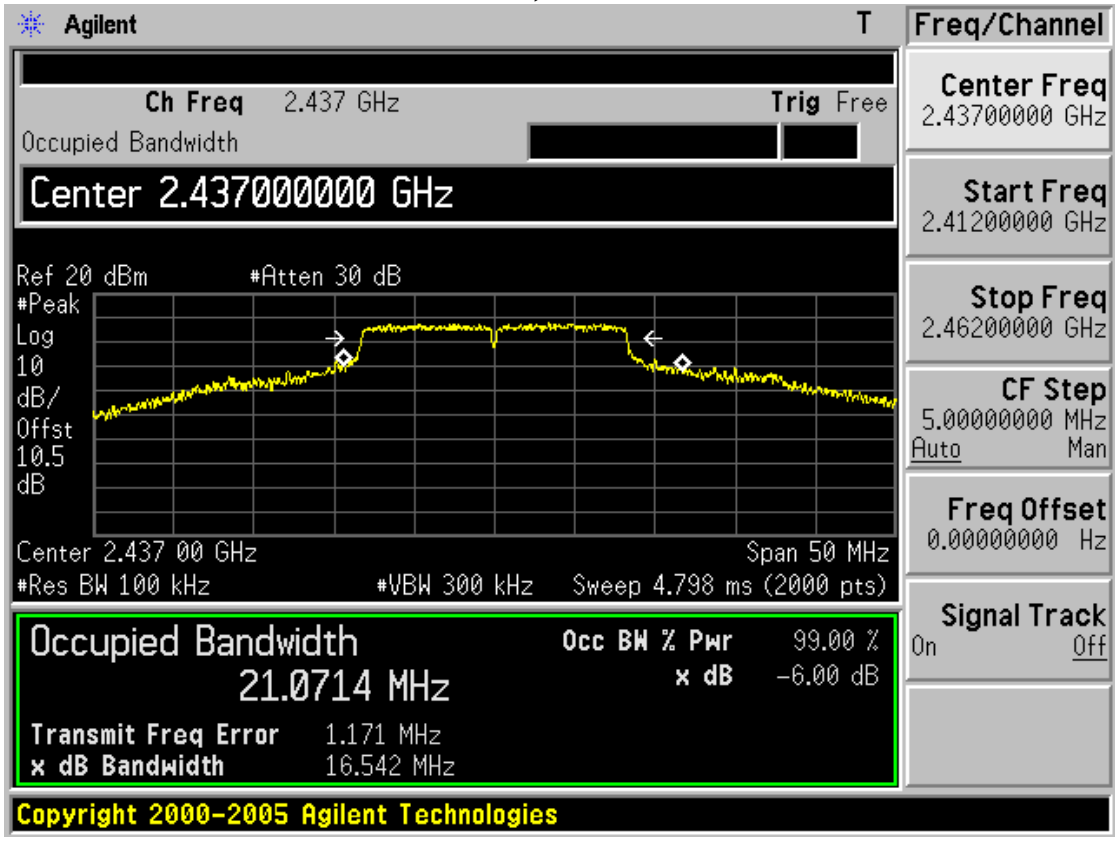


Mode	CH	Bandwidth (MHz)		Limit (MHz)
		Chain A	Chain B	
802.11g	L	16.58	16.54	≥0.5
	M	16.54	16.55	
	H	16.50	16.56	

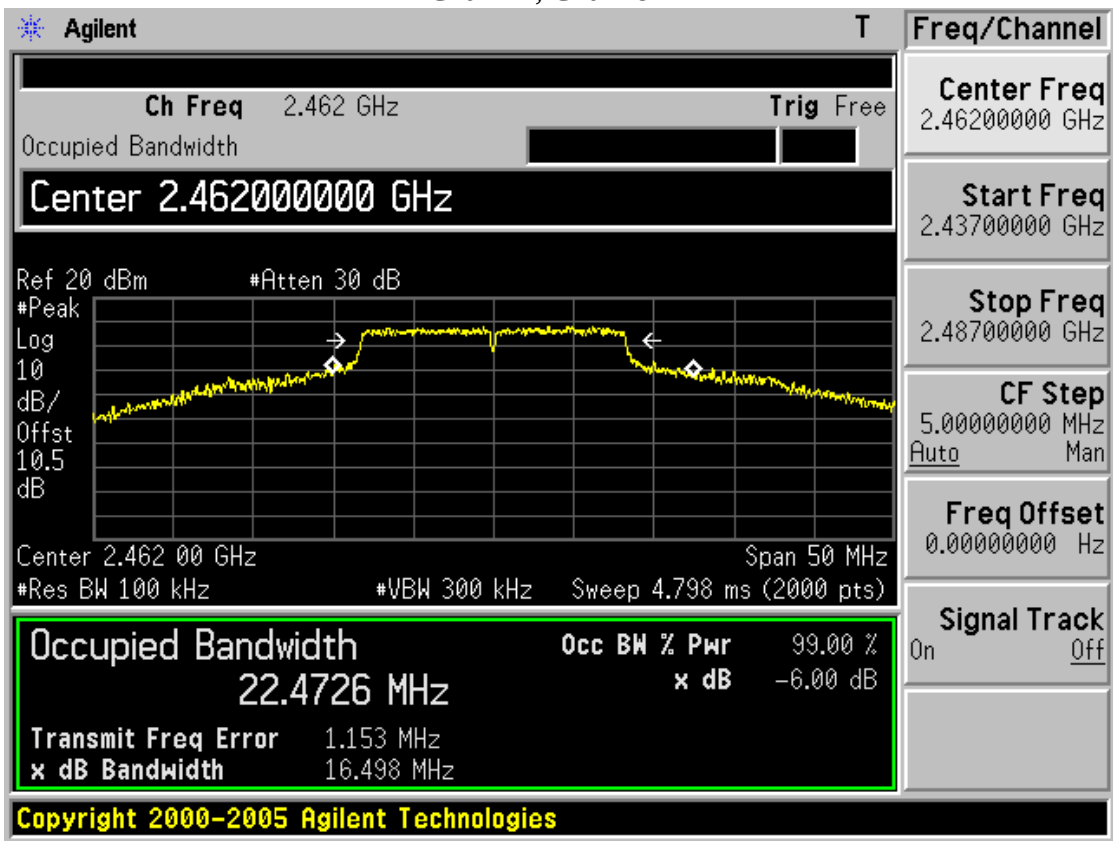
Chain A, Channel L



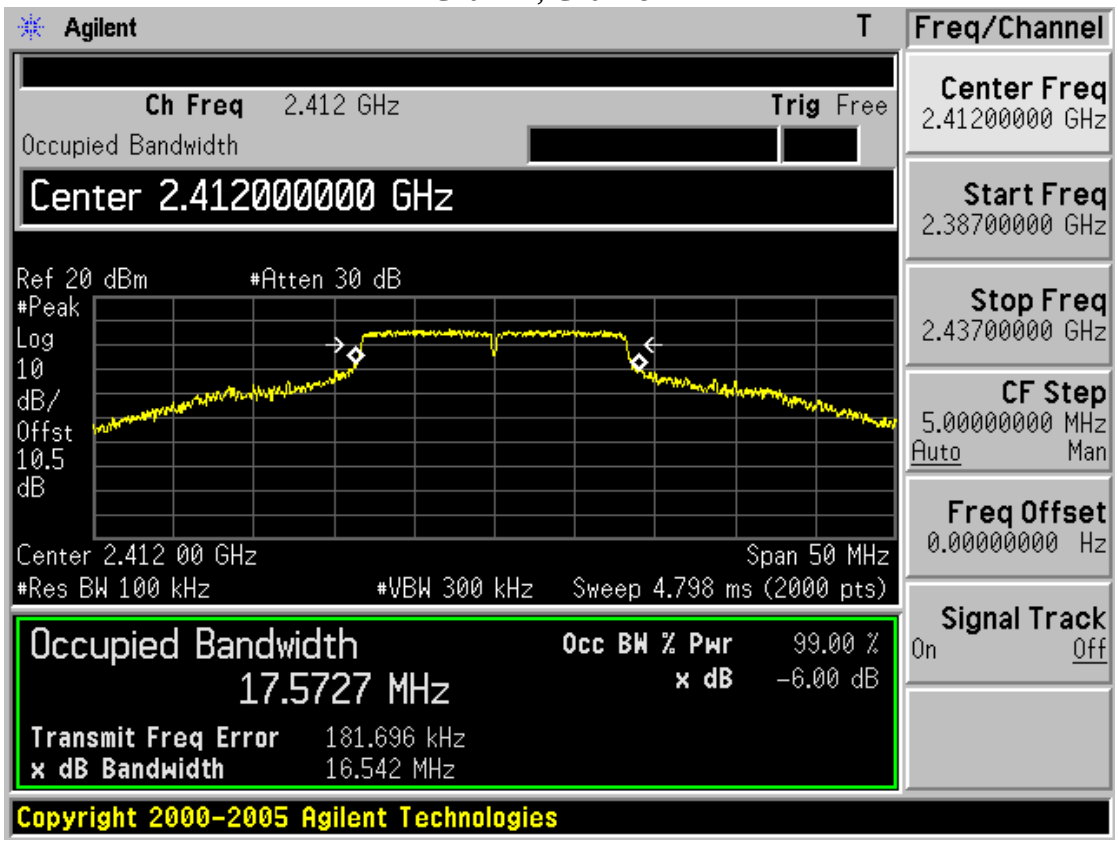
Chain A, Channel M



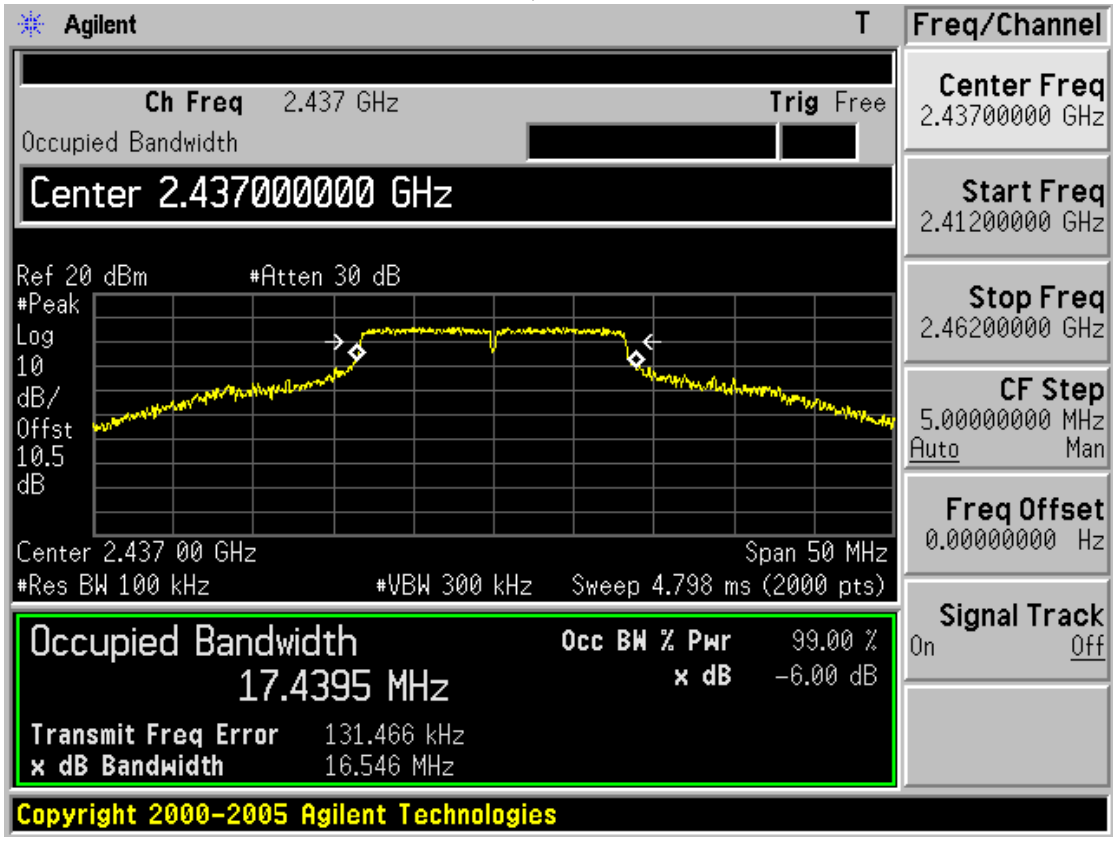
Chain A, Channel H



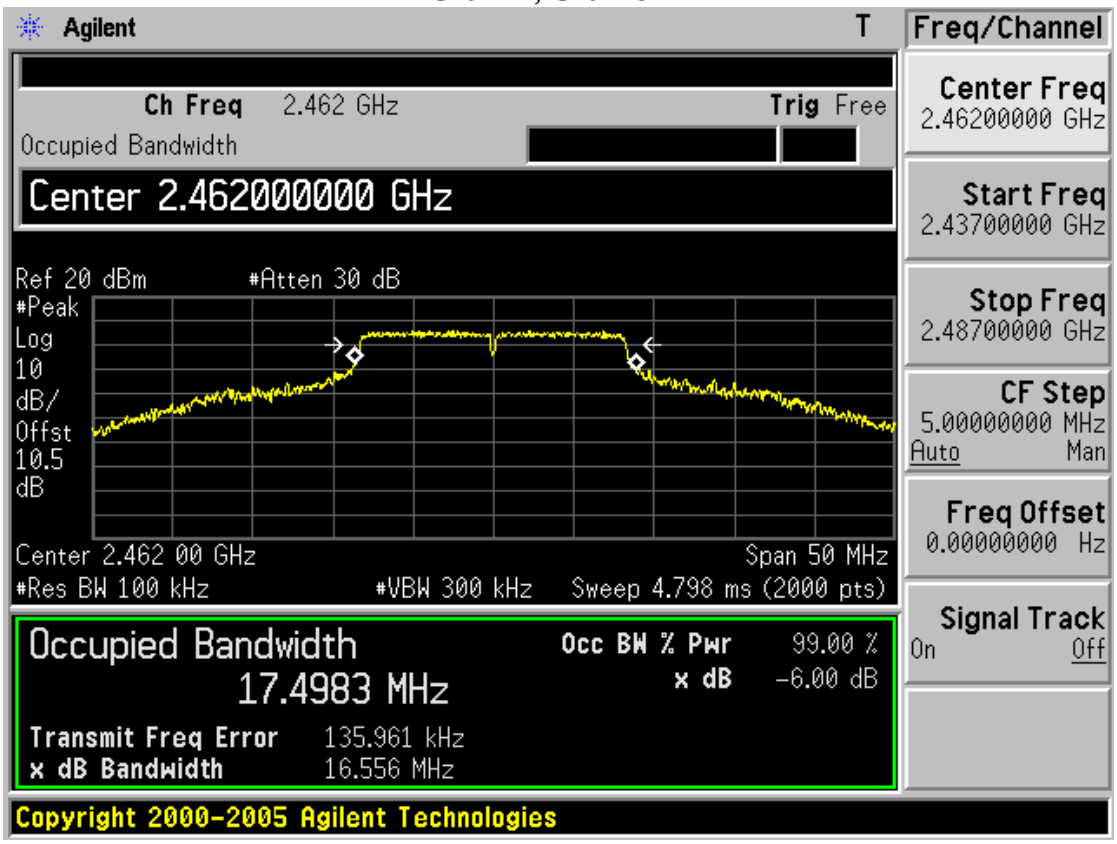
Chain B, Channel L



Chain B, Channel M

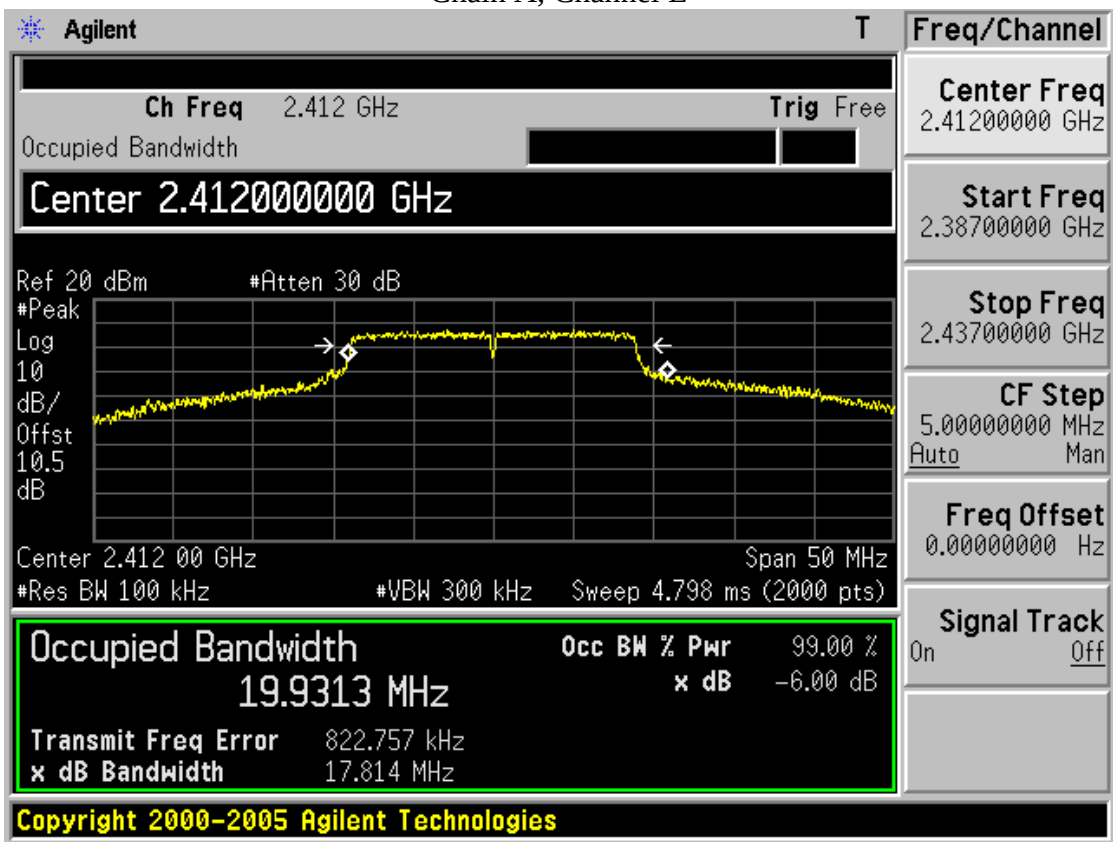


Chain B, Channel H

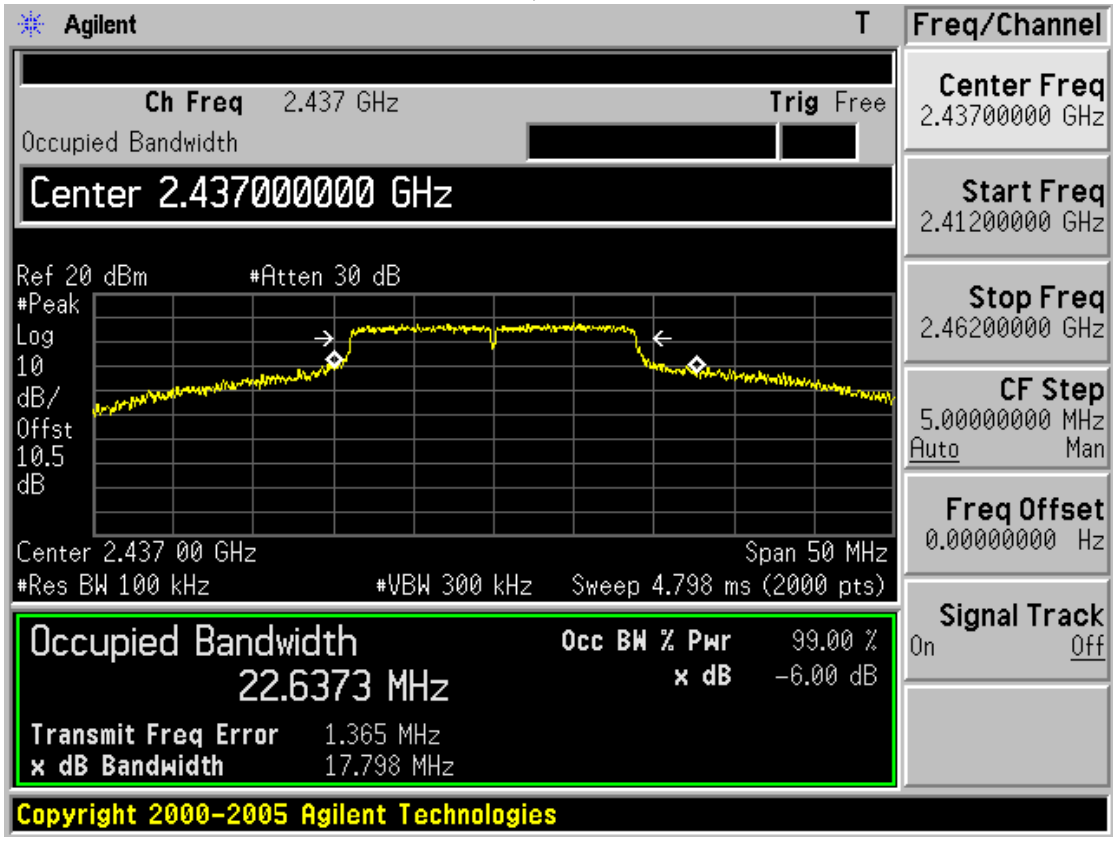


Mode	CH	Bandwidth (MHz)		Limit (MHz)
		Chain A	Chain B	
802.11n HT20	L	17.81	17.82	⩾0.5
	M	17.80	17.84	
	H	17.82	17.83	

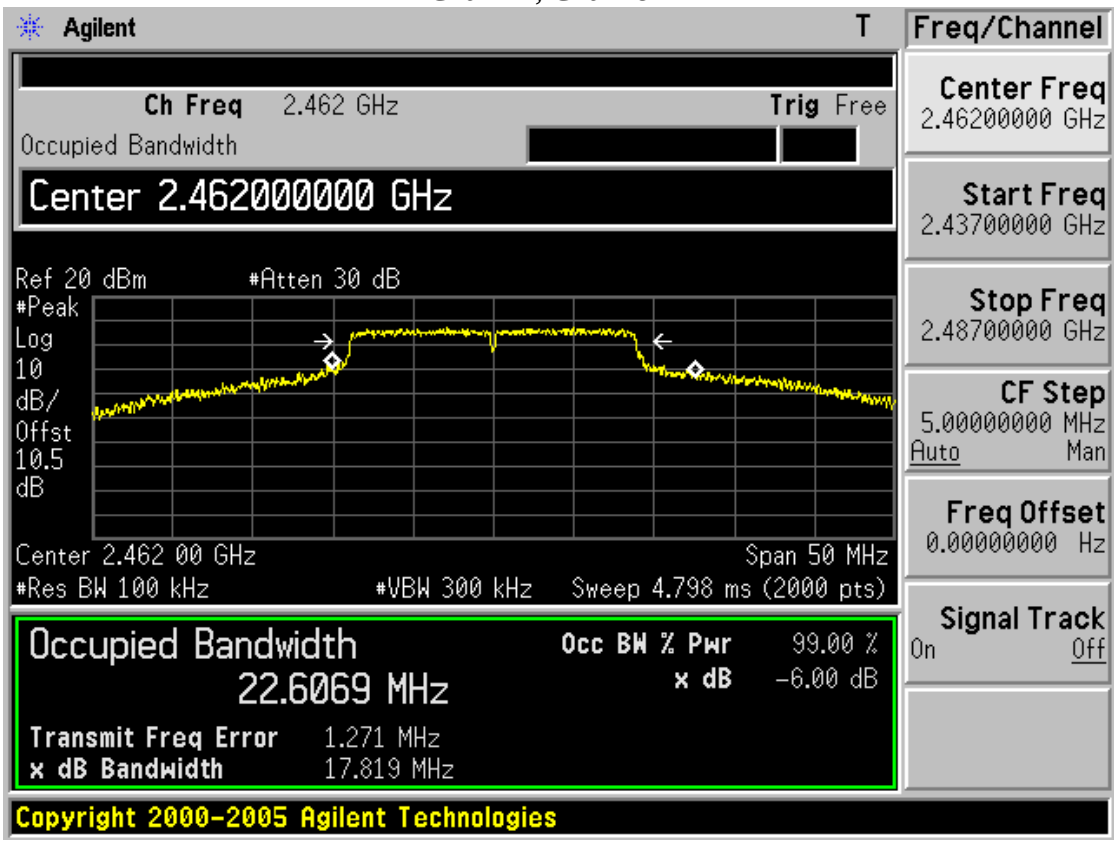
Chain A, Channel L



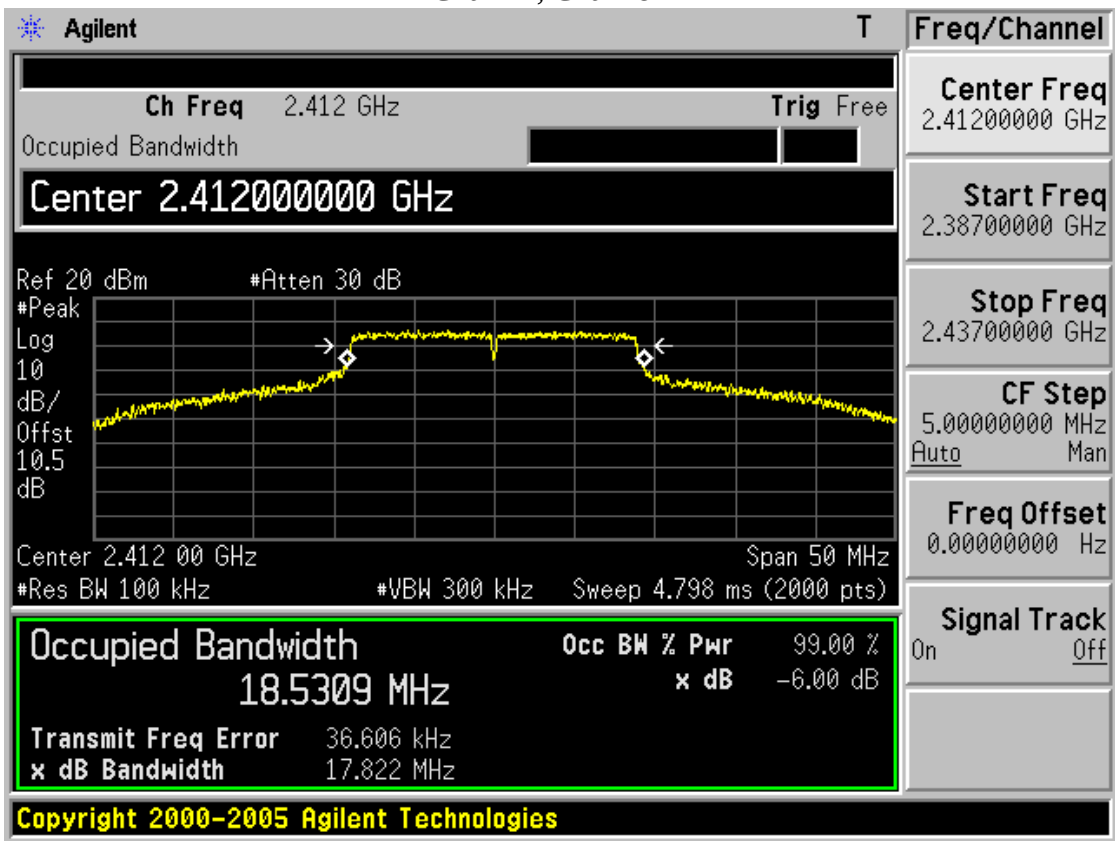
Chain A, Channel M



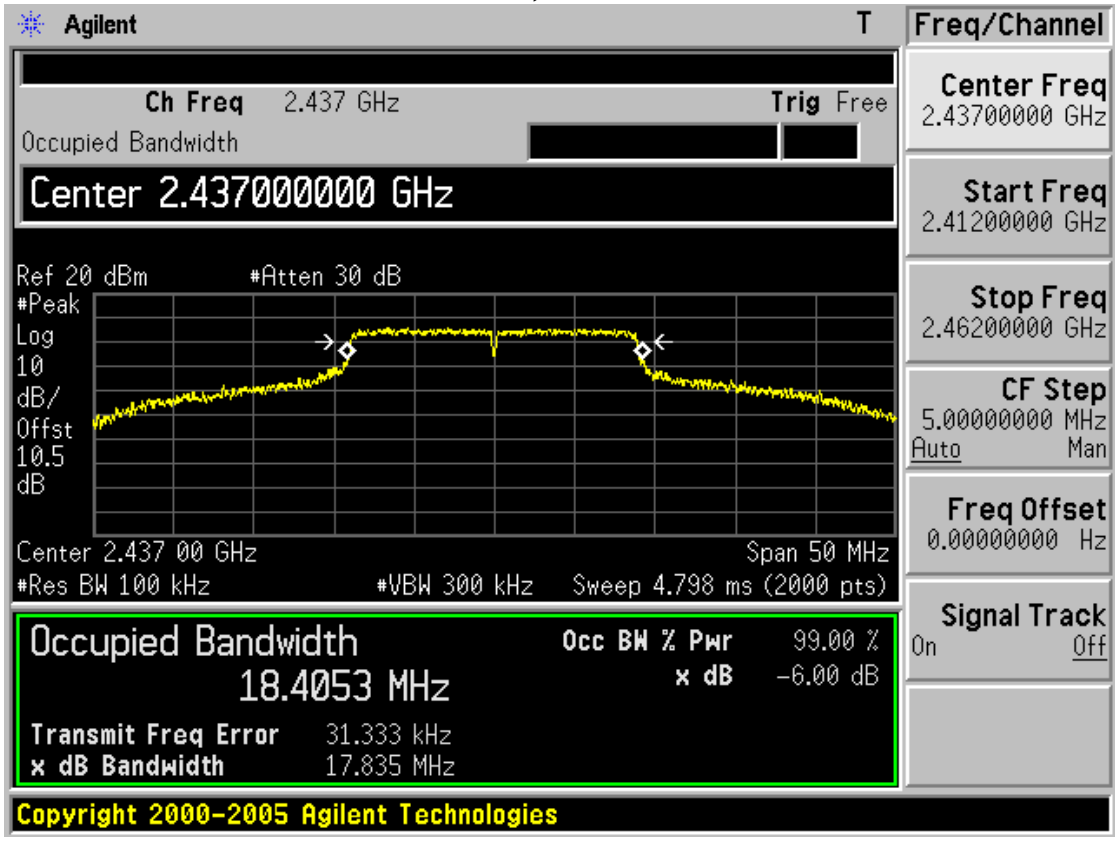
Chain A, Channel H



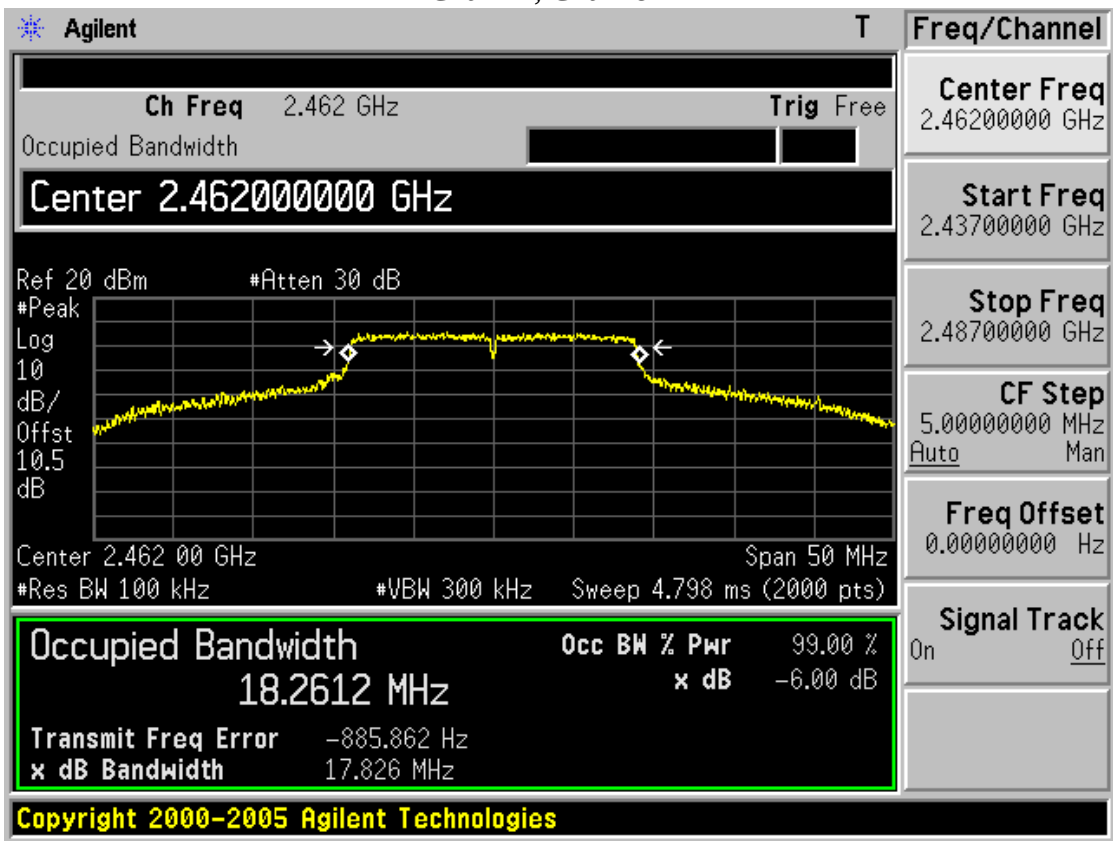
Chain B, Channel L



Chain B, Channel M

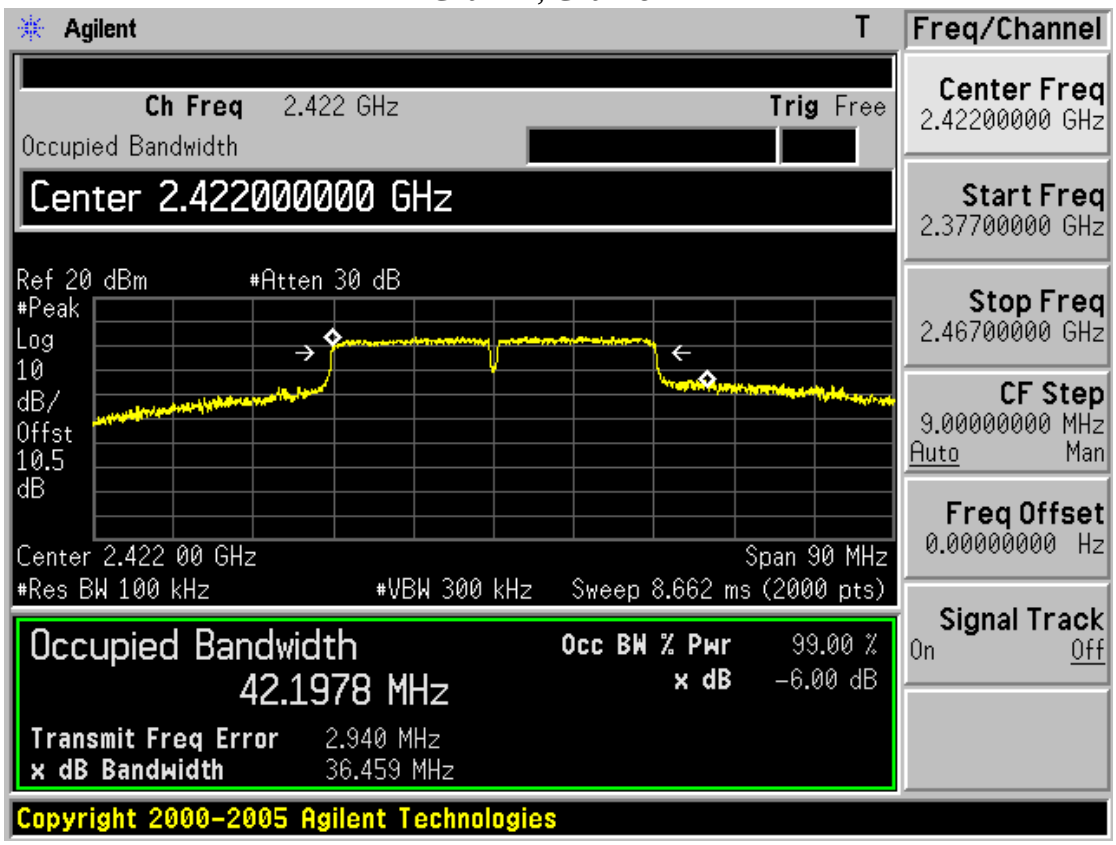


Chain B, Channel H

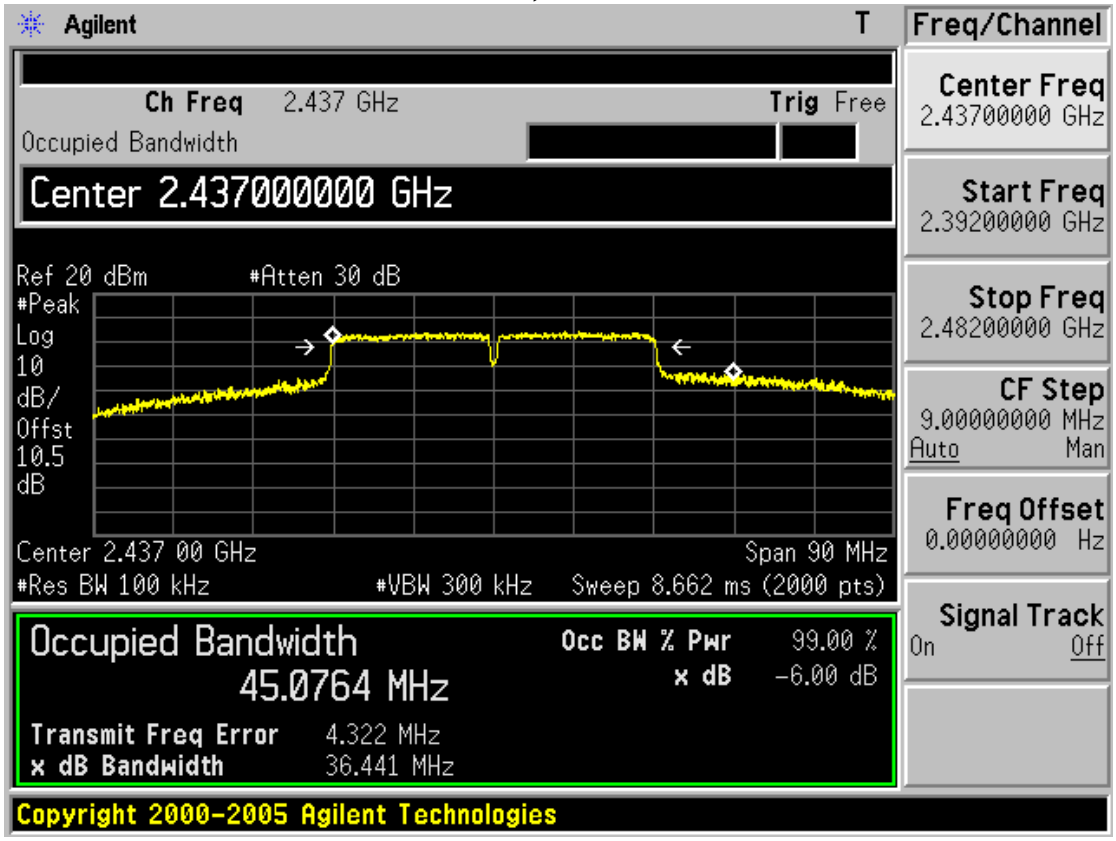


Mode	CH	Bandwidth (MHz)		Limit (MHz)
		Chain A	Chain B	
802.11n HT40	L	36.46	36.45	≥0.5
	M	36.44	36.45	
	H	36.44	36.41	

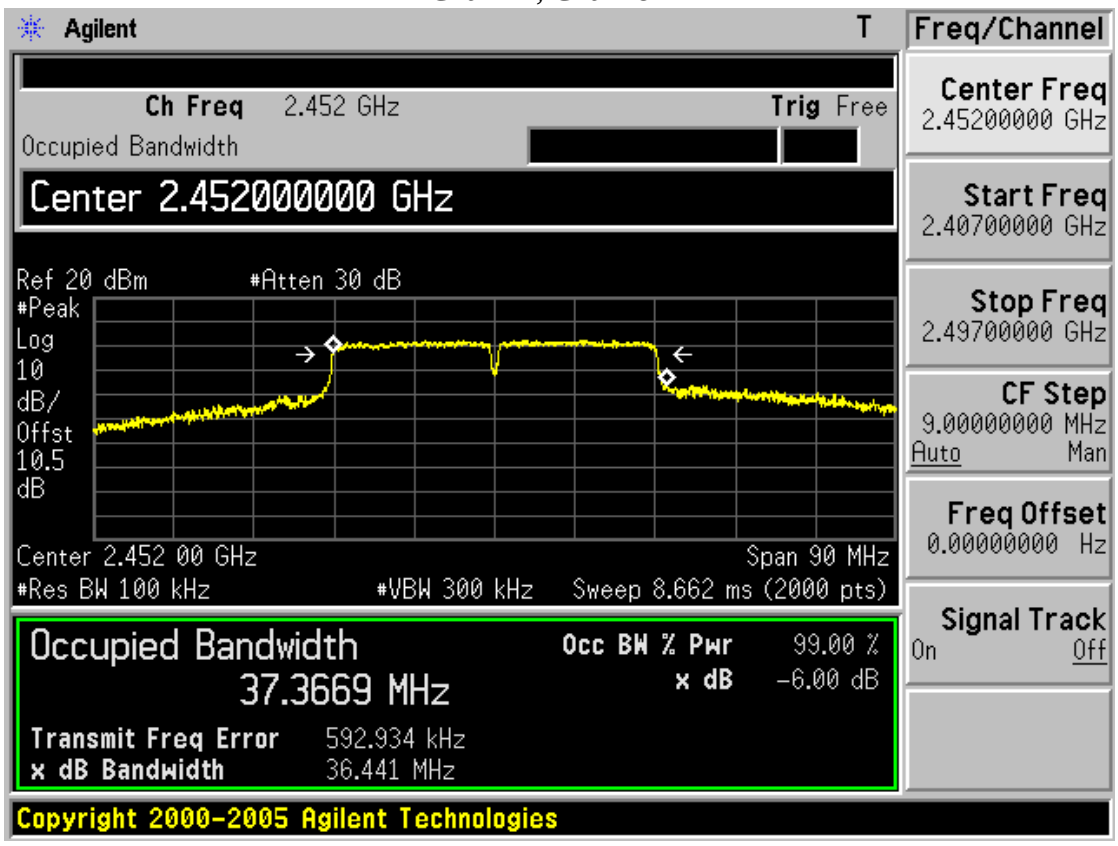
Chain A, Channel L



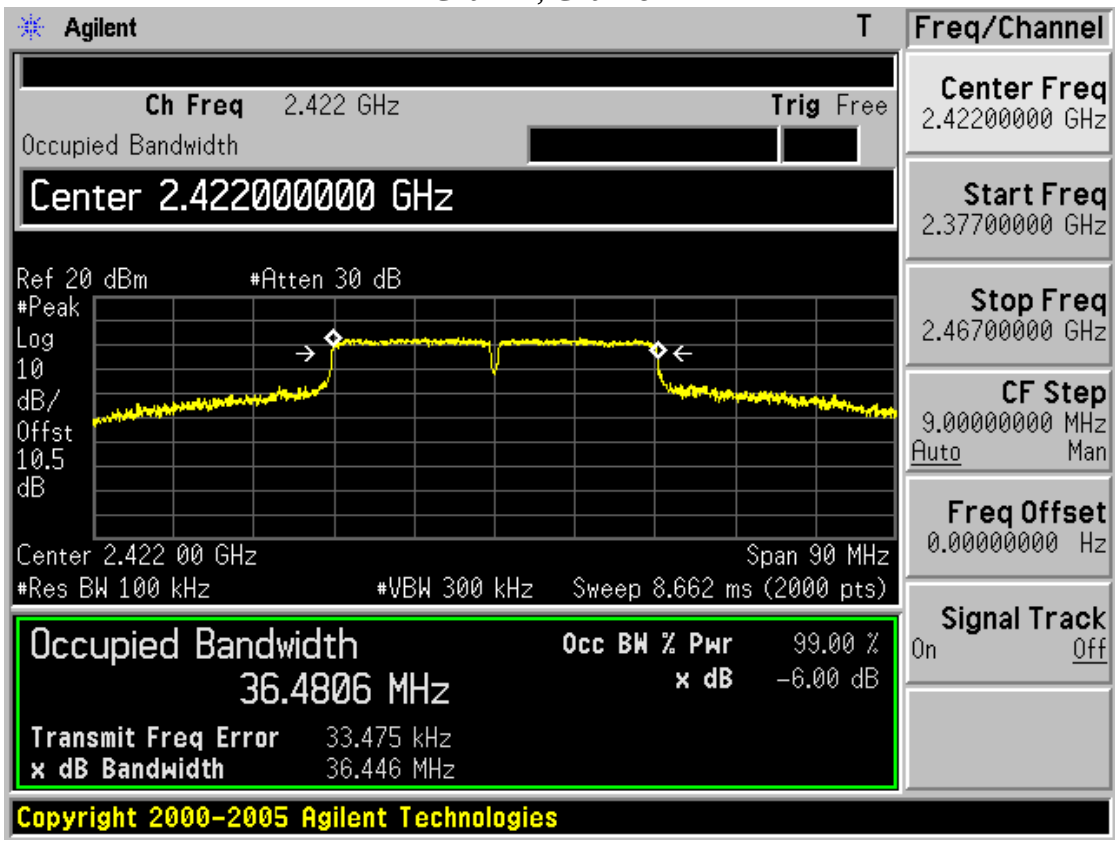
Chain A, Channel M



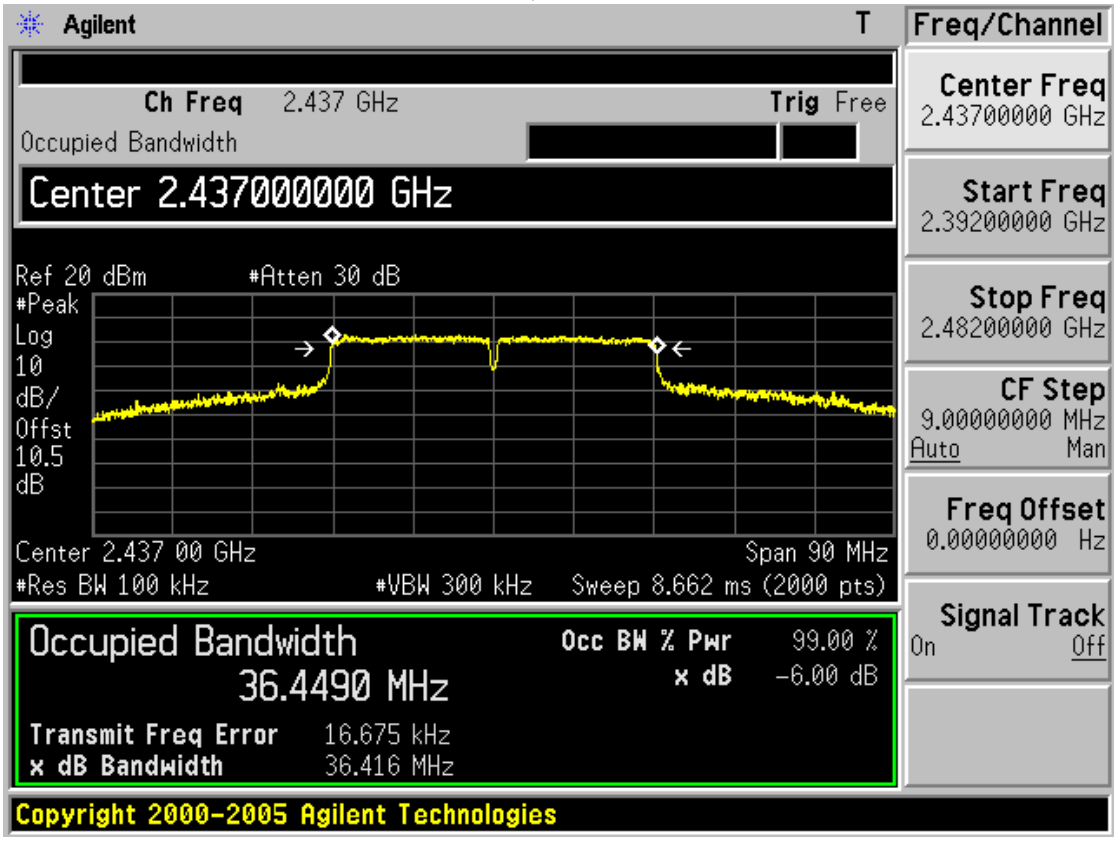
Chain A, Channel H



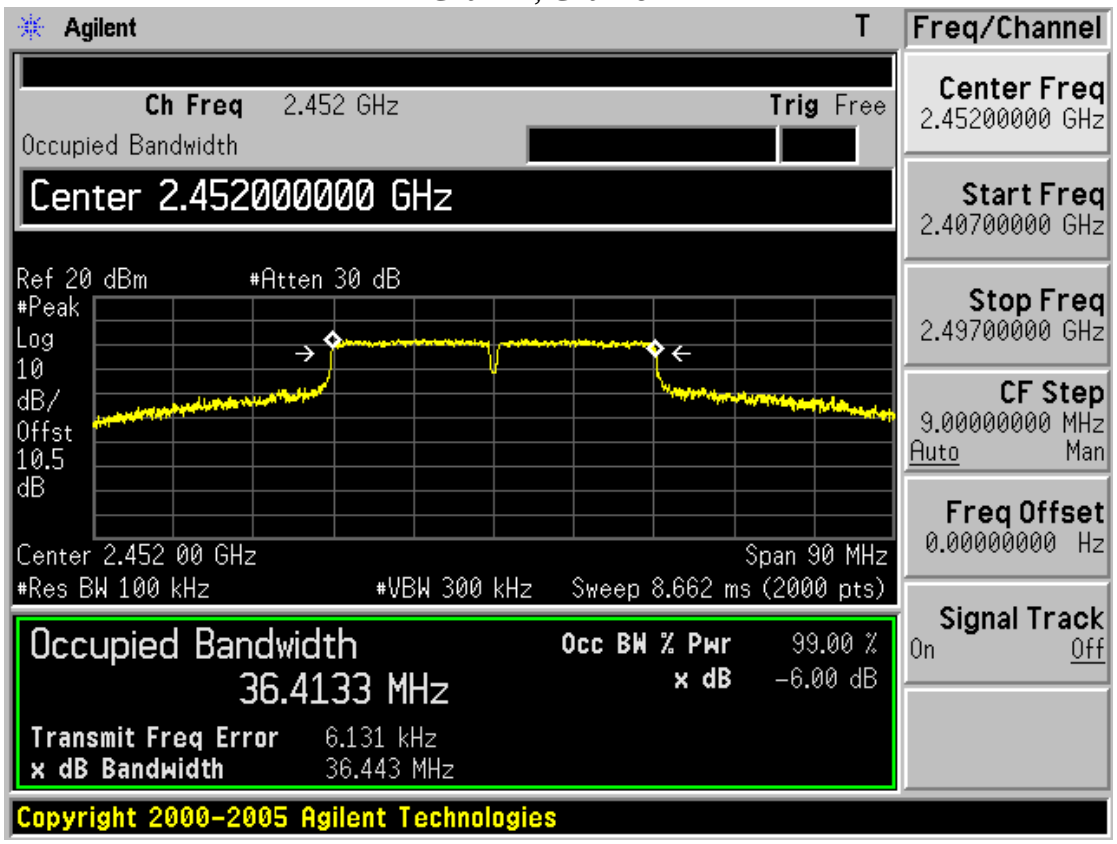
Chain B, Channel L



Chain B, Channel M



Chain B, Channel H



4. Maximum peak output power

Test result: Pass

4.1 Test limit

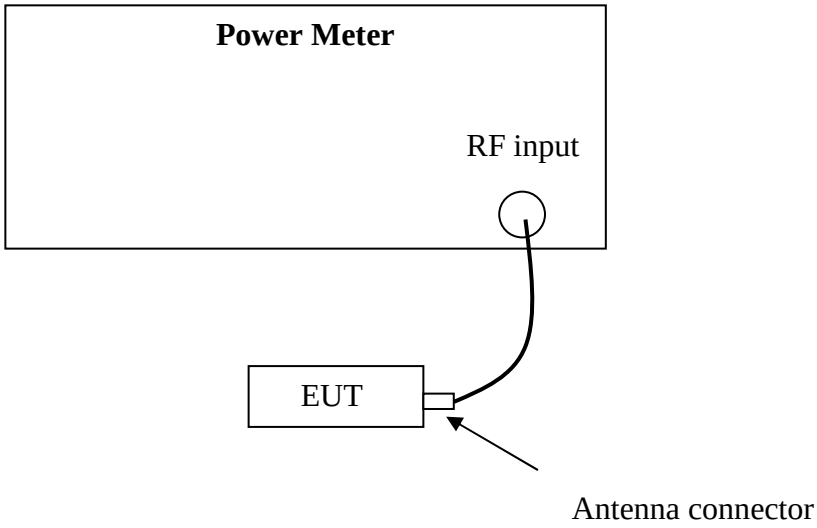
☐ For frequency hopping systems operating in the 2400-2483.5 MHz band employing at least 75 non-overlapping hopping channels, and all frequency hopping systems in the 5725-5850 MHz band: 1 watt

☐ For all other frequency hopping systems in the 2400-2483.5 MHz band: 0.125 watts

☒ For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt.

If the transmitting antenna of directional gain greater than 6dBi is used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

4.2 Test Configuration



4.3 Test procedure and test setup

The EUT was tested according to DTS test procedure of “KDB558074 D01 DTS Meas Guidance v03r01” for compliance to FCC 47CFR 15.247 requirements (clause 9.1.3).

4.4 Test protocol

Temperature : 25 °C
Relative Humidity : 55 %

Mode	CH	Conducted Power (dBm)		Limit (dBm)
		Chain A	Chain B	
802.11b	L	24.62	23.14	≤30
	M	24.43	23.45	
	H	23.07	23.29	

Mode	CH	Conducted Power (dBm)		Limit (dBm)
		Chain A	Chain B	
802.11g	L	26.18	25.10	≤30
	M	26.23	25.13	
	H	25.97	24.98	

Mode	CH	Conducted Power (dBm)		Limit (dBm)
		Chain A	Chain B	
802.11n HT20 (single Chain)	L	26.04	25.04	≤30
	M	26.18	25.08	
	H	25.81	24.99	

Mode	CH	Conducted Power (dBm)		Limit (dBm)
		Chain A	Chain B	
802.11n HT40 (single Chain)	L	26.05	25.06	≤30
	M	26.09	24.98	
	H	25.78	23.55	

Mode	CH	Total Power (dBm)	Limit (dBm)
		Chain A + B	
802.11n HT20 (Dual Chain)	L	27.51	≤30
	M	27.61	
	H	27.57	

Mode	CH	Total Power (dBm)	Limit (dBm)
		Chain A + B	
802.11n HT40 (Dual Chain)	L	27.38	≤30
	M	27.49	
	H	27.46	

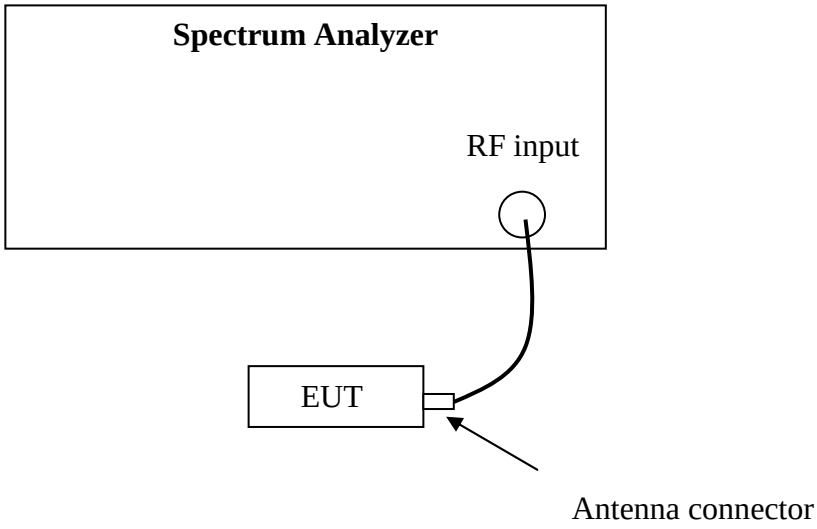
5. Power spectrum density

Test result: **Pass**

5.1 Test limit

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8dBm in any 3 kHz band during any time interval of continuous transmission.

5.2 Test Configuration



5.3 Test procedure and test setup

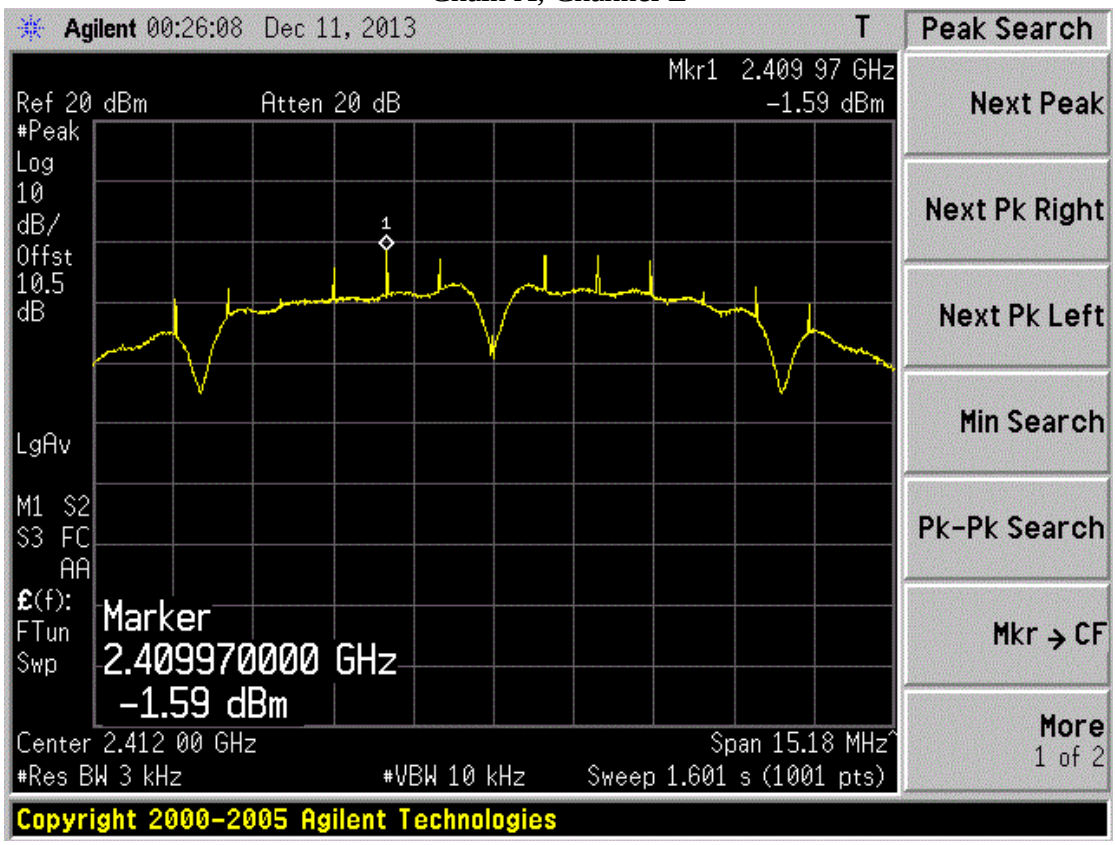
The power output per FCC §15.247(e) was tested according to DTS test procedure of "KDB558074 D01 DTS Meas Guidance v03r01" (clause 10.2) for compliance to FCC 47CFR 15.247 requirements.

5.4 Test Protocol

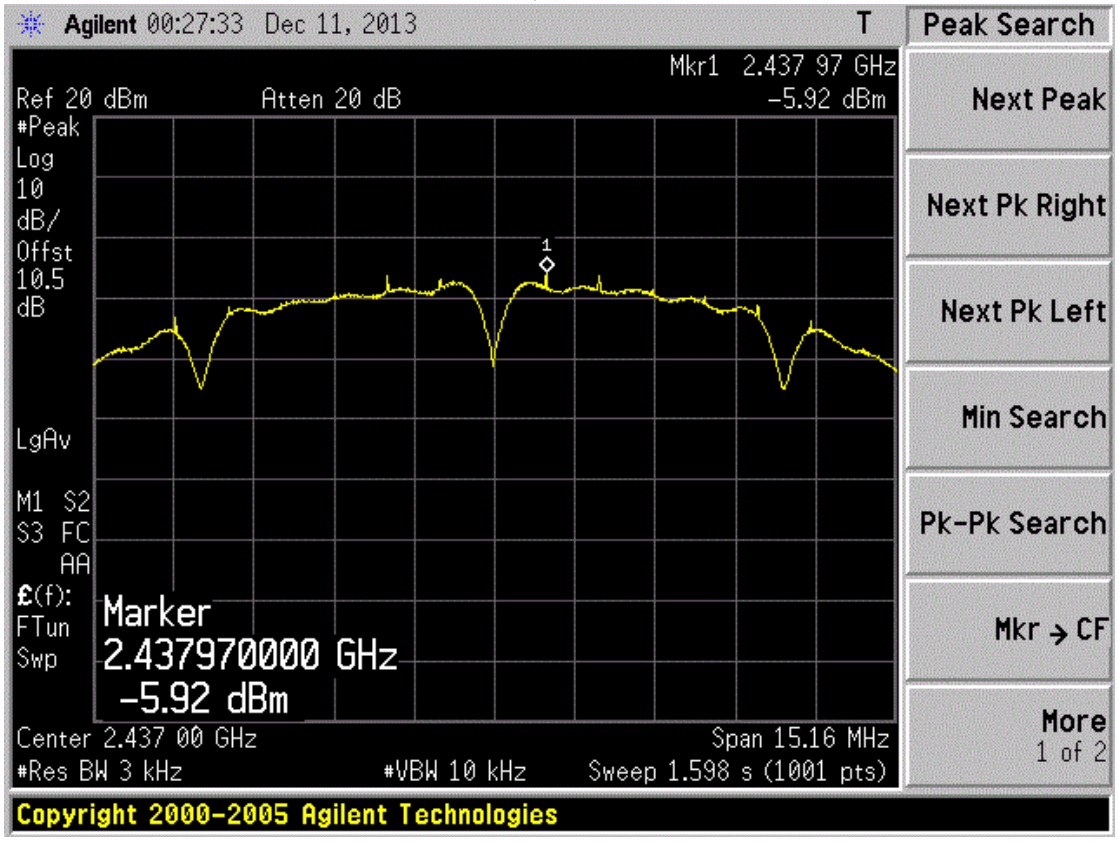
Temperature : 25 °C
Relative Humidity: 55 %

Mode	CH	Spectrum Density (dBm/3kHz)		Limit (dBm/3kHz)
		Chain A	Chain B	
802.11b	L	-1.50	-8.58	≤8.00
	M	-5.92	-8.11	
	H	-6.24	-8.46	

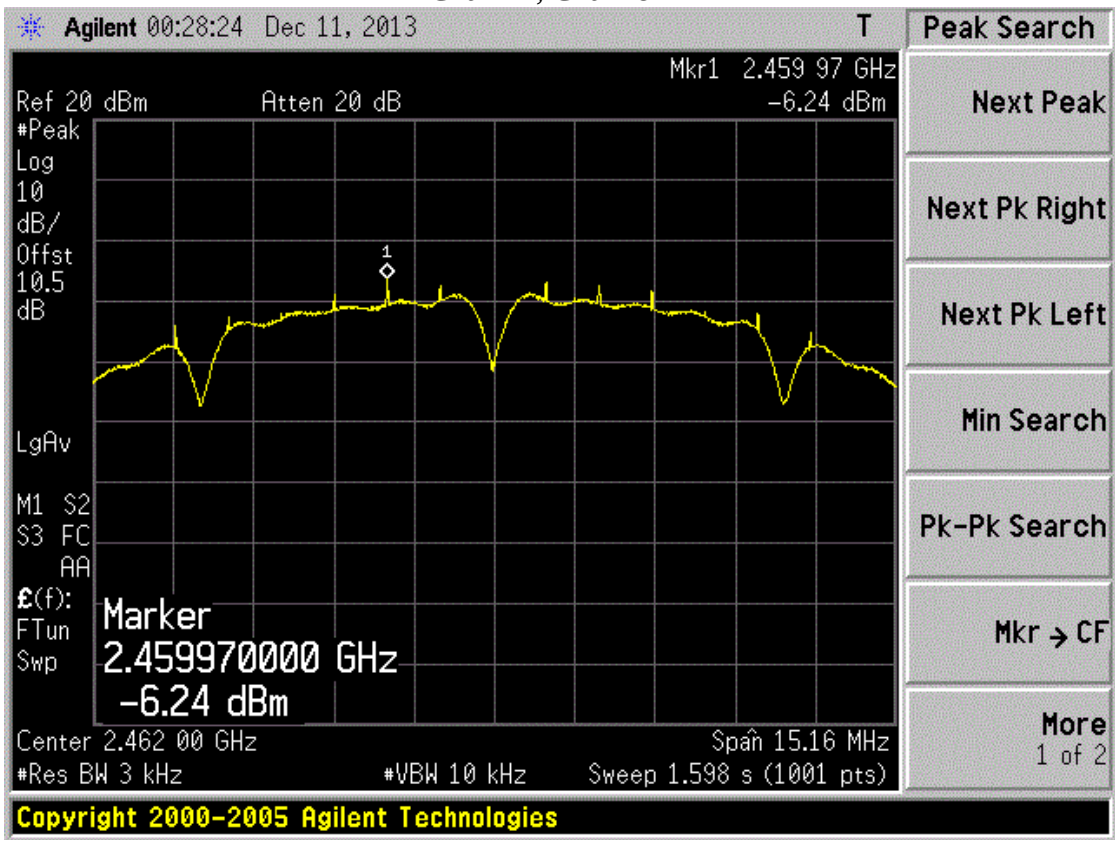
Chain A, Channel L



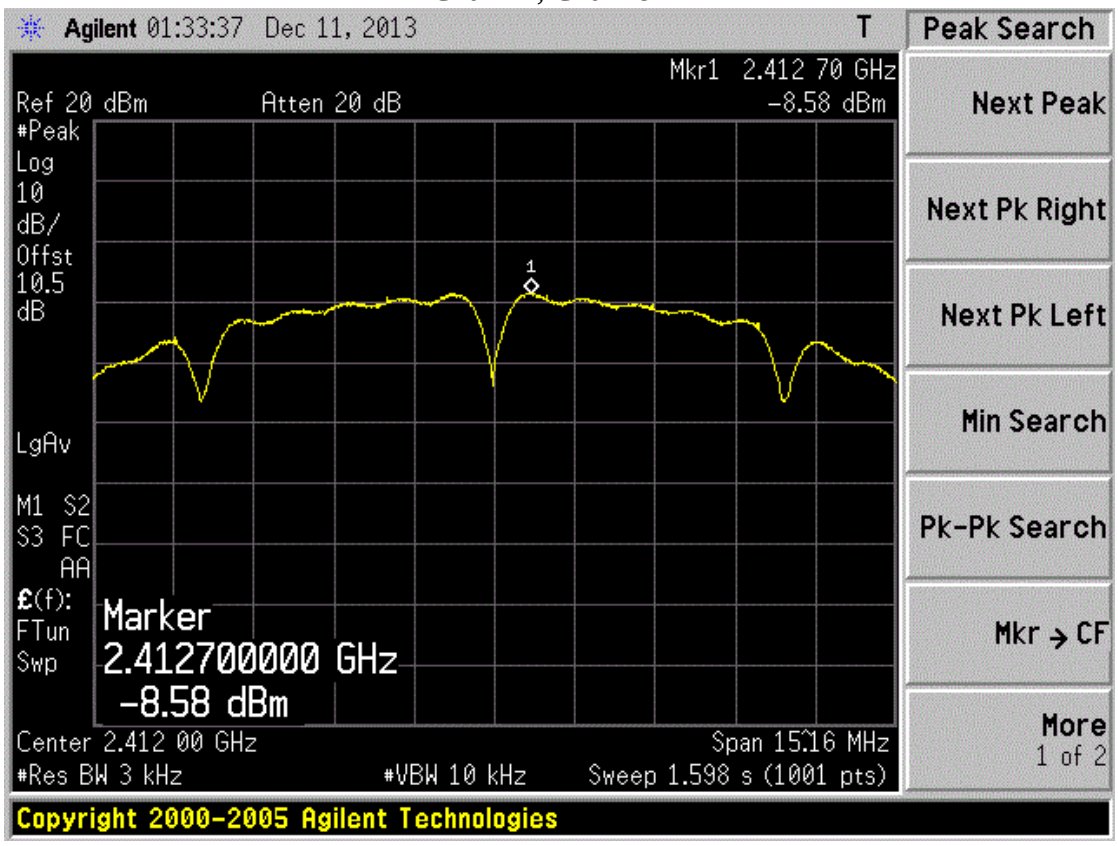
Chain A, Channel M



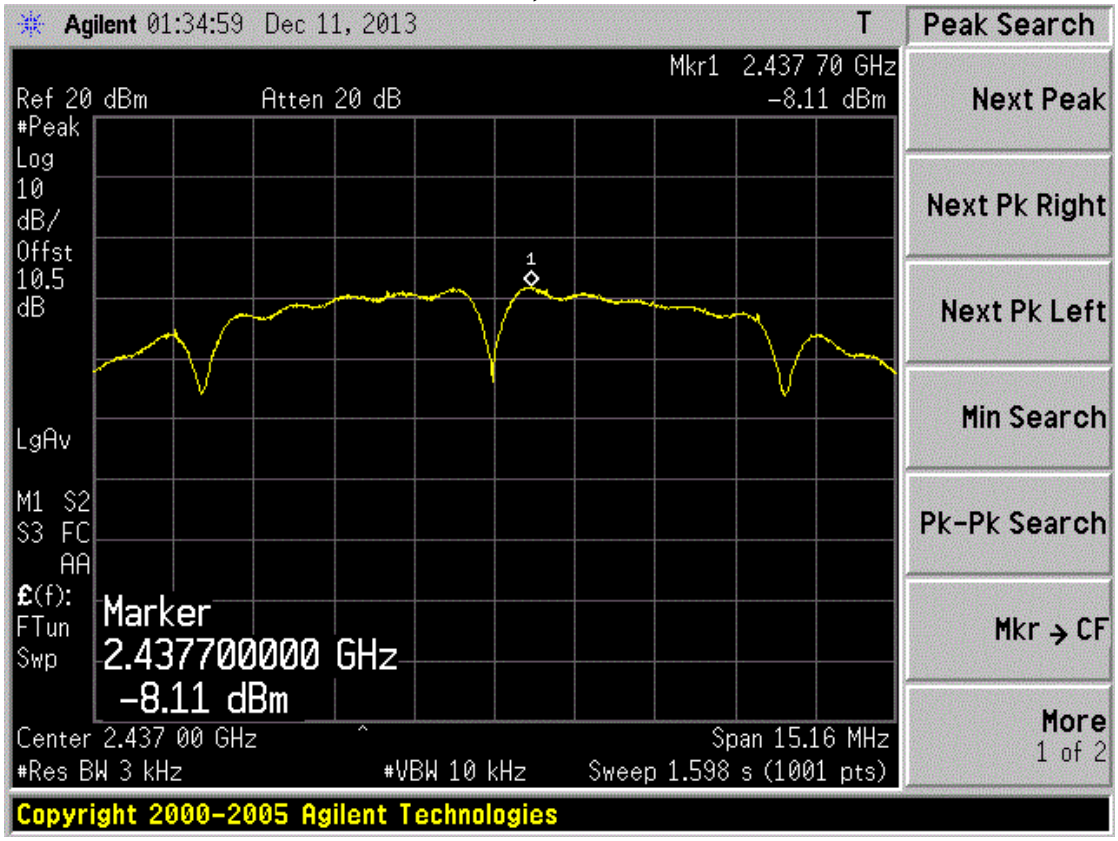
Chain A, Channel H



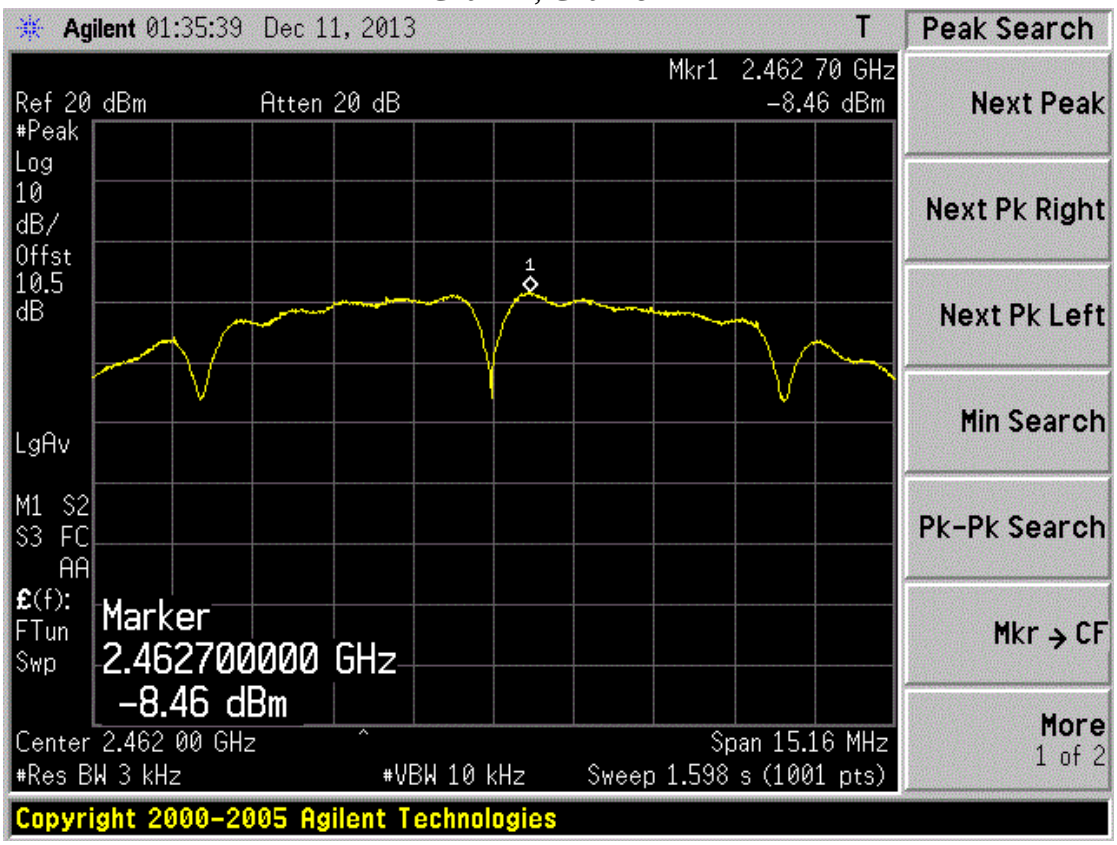
Chain B, Channel L



Chain B, Channel M

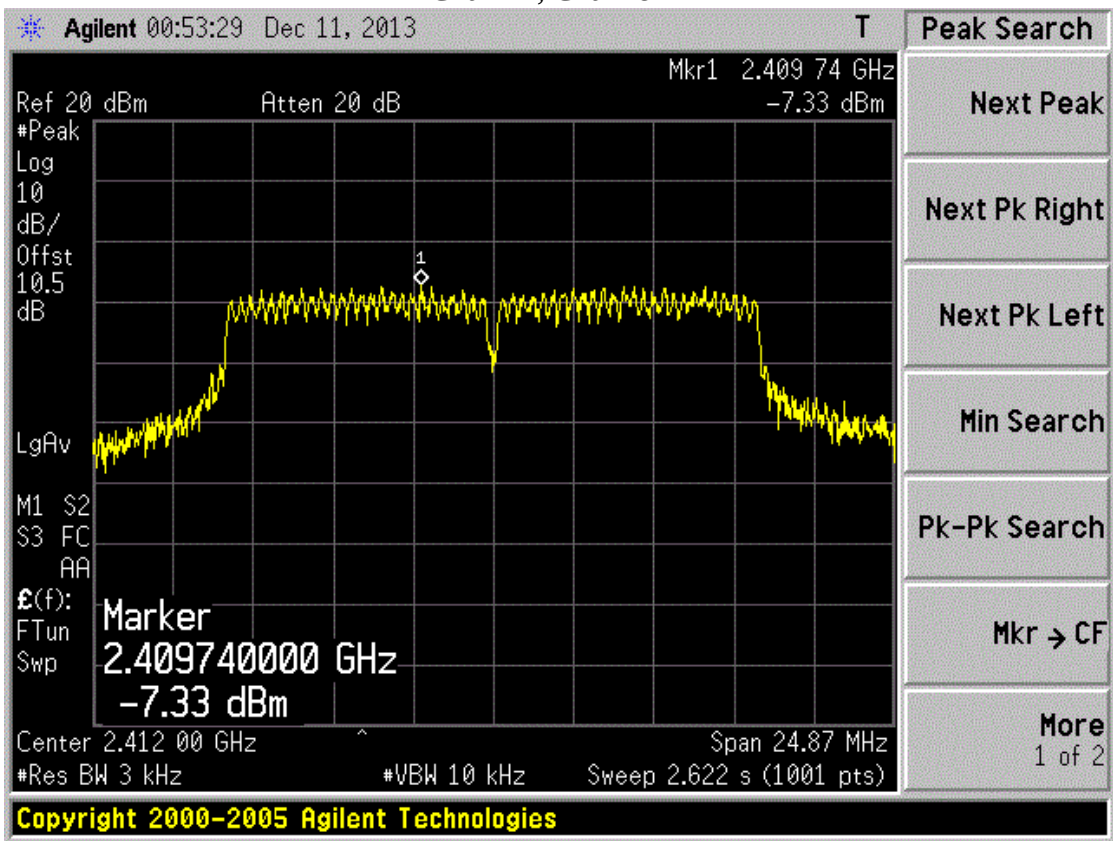


Chain B, Channel H

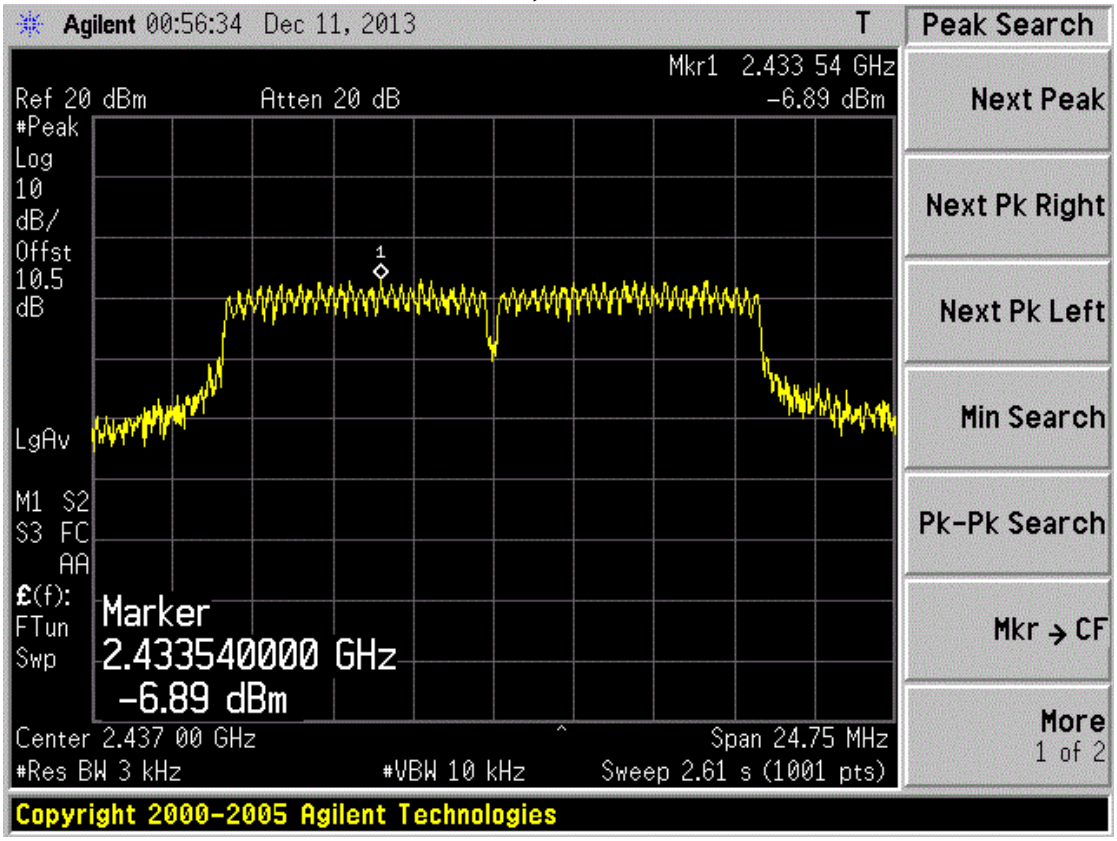


Mode	CH	Spectrum Density (dBm/3kHz)		Limit (dBm/3kHz)
		Chain A	Chain B	
802.11g	L	-7.33	-8.25	≤8.00
	M	-6.89	-8.39	
	H	-6.29	-8.36	

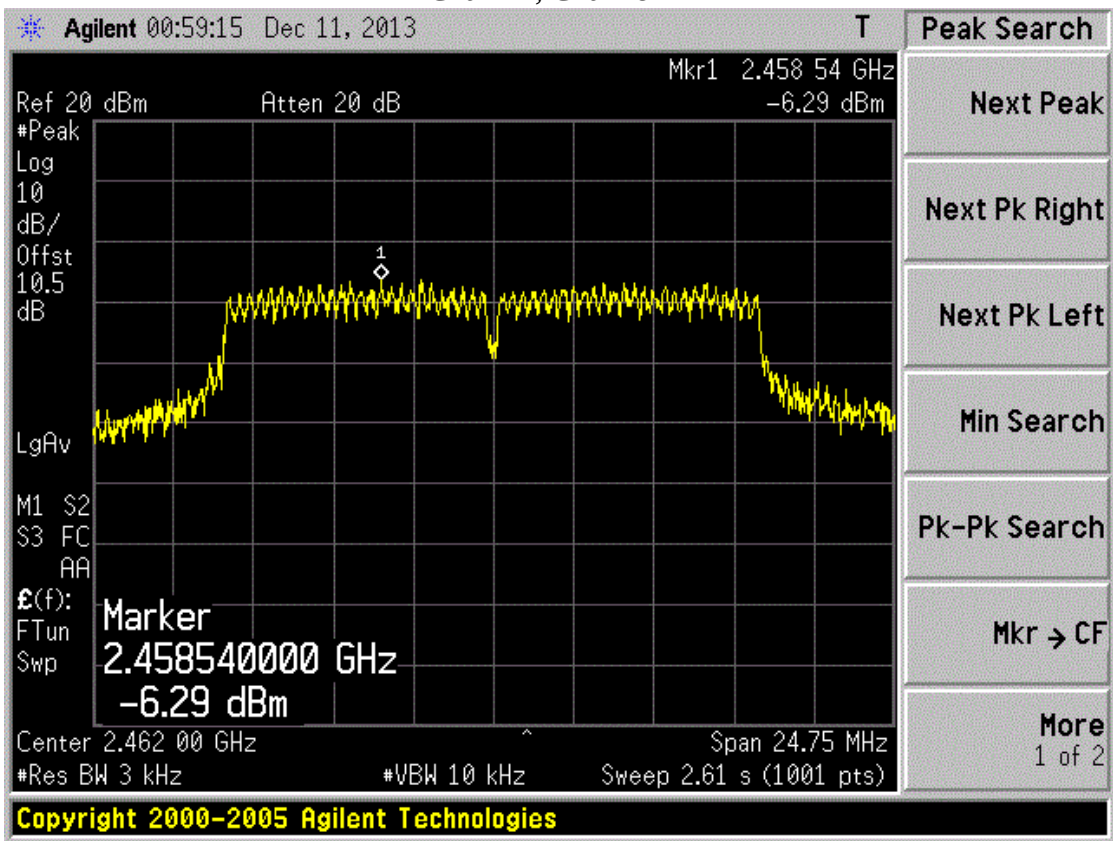
Chain A, Channel L



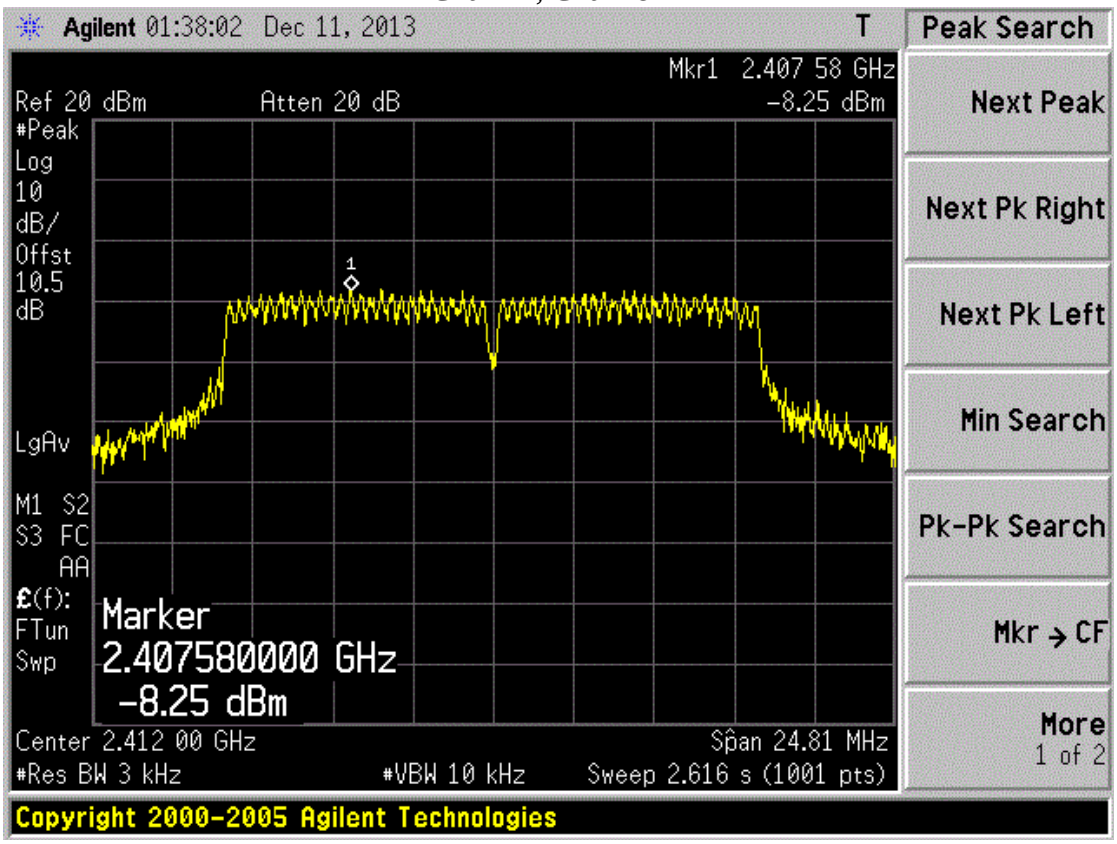
Chain A, Channel M



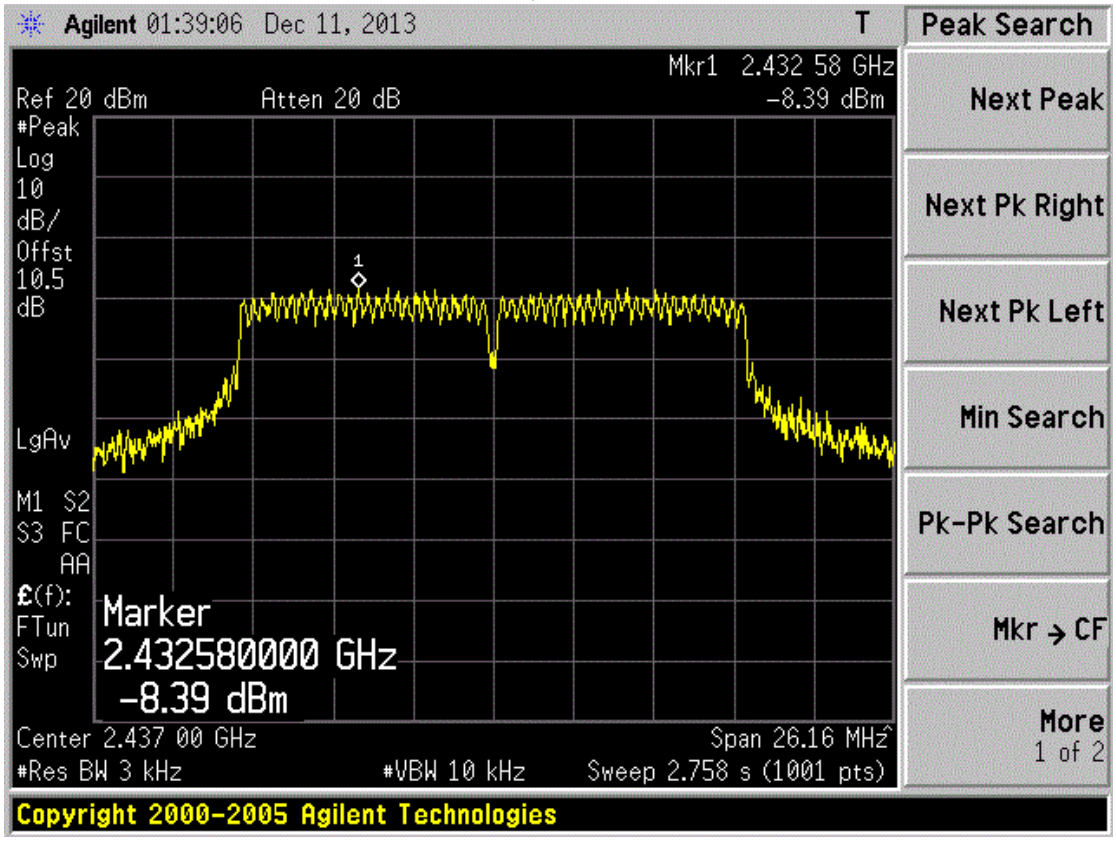
Chain A, Channel H



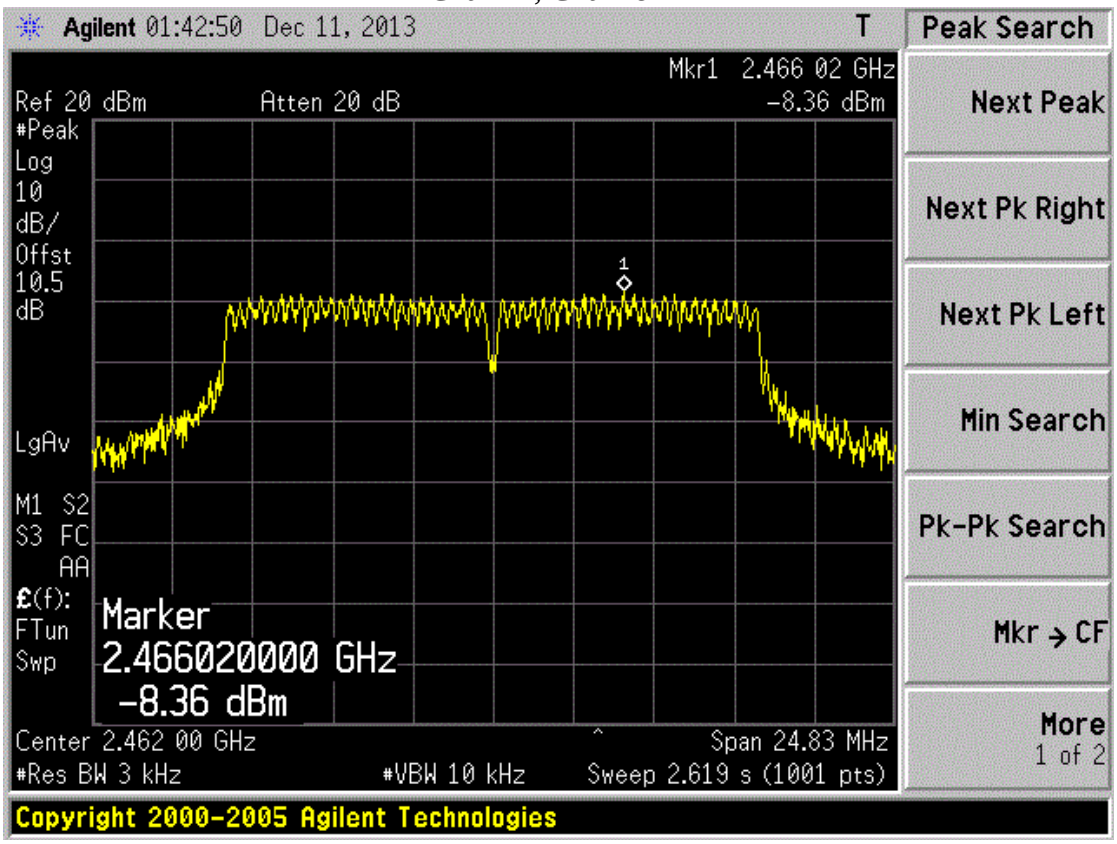
Chain B, Channel L



Chain B, Channel M

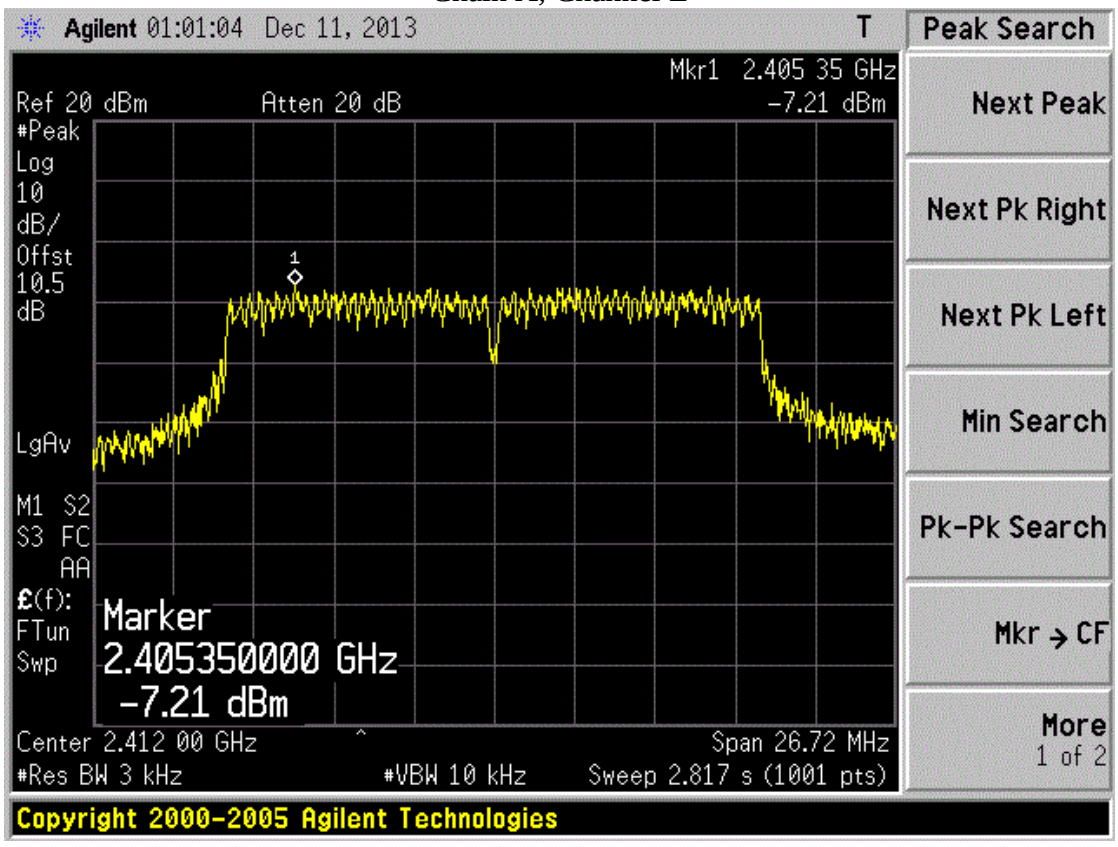


Chain B, Channel H

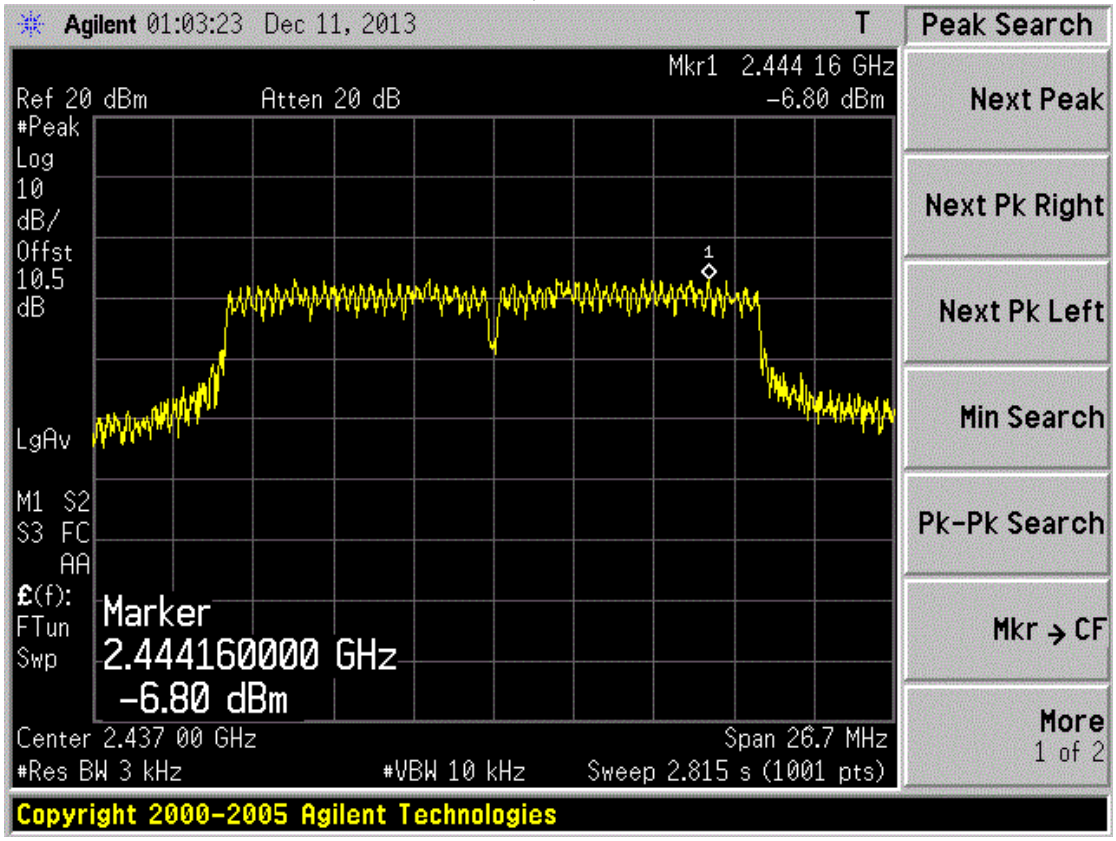


Mode	CH	Spectrum Density (dBm/3kHz)		Limit (dBm/3kHz)
		Chain A	Chain B	
802.11n HT20 (single chain)	L	-7.21	-7.54	≤8.00
	M	-6.80	-8.33	
	H	-7.01	-8.02	

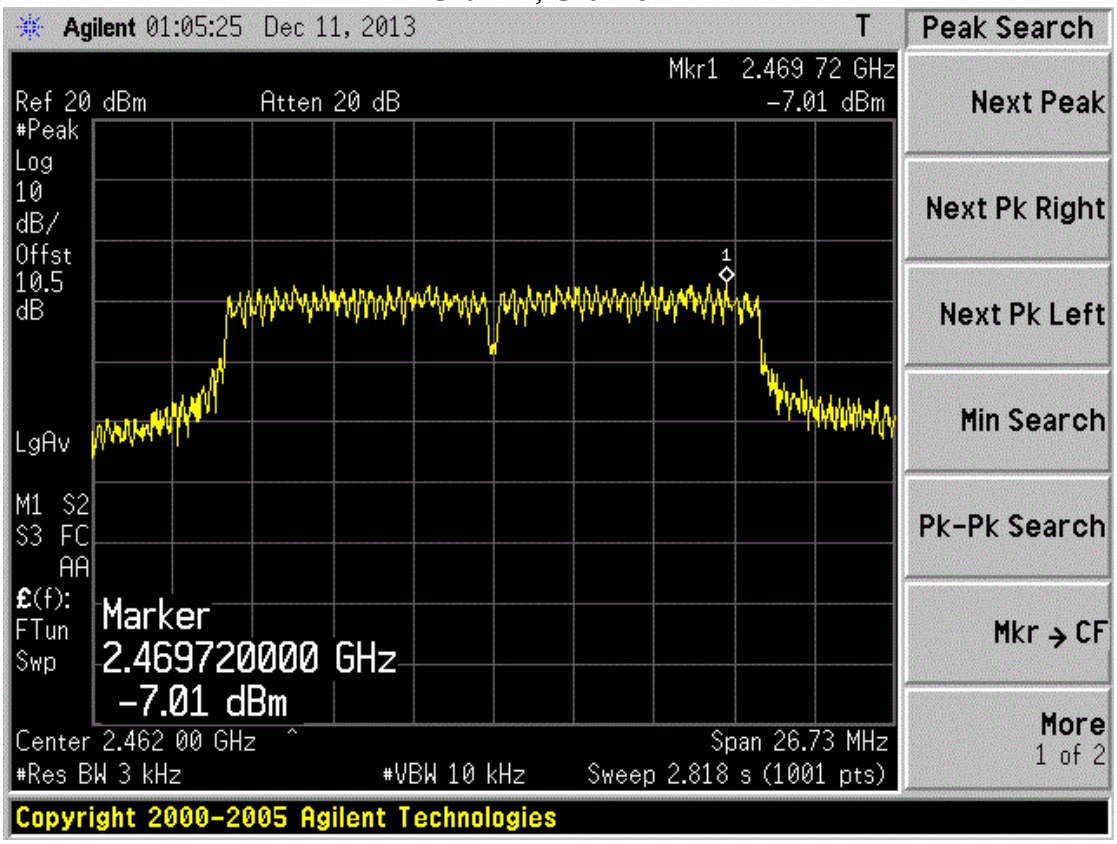
Chain A, Channel L



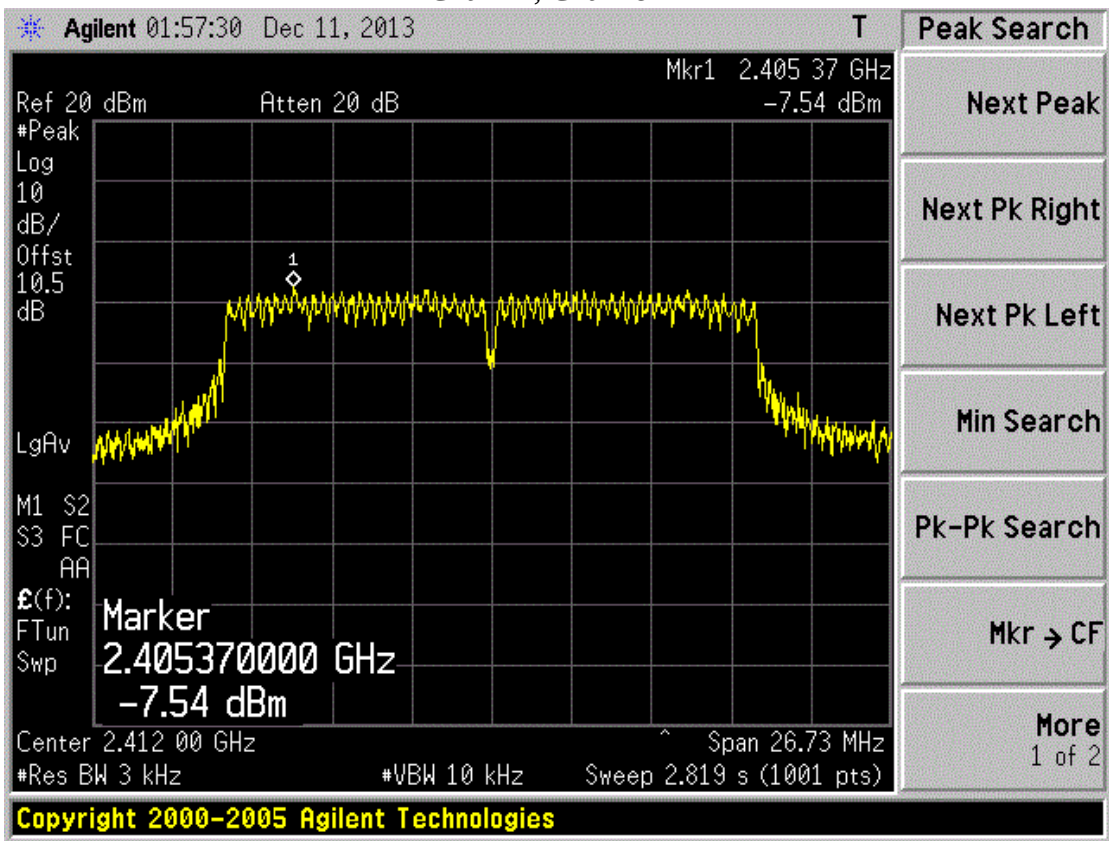
Chain A, Channel M



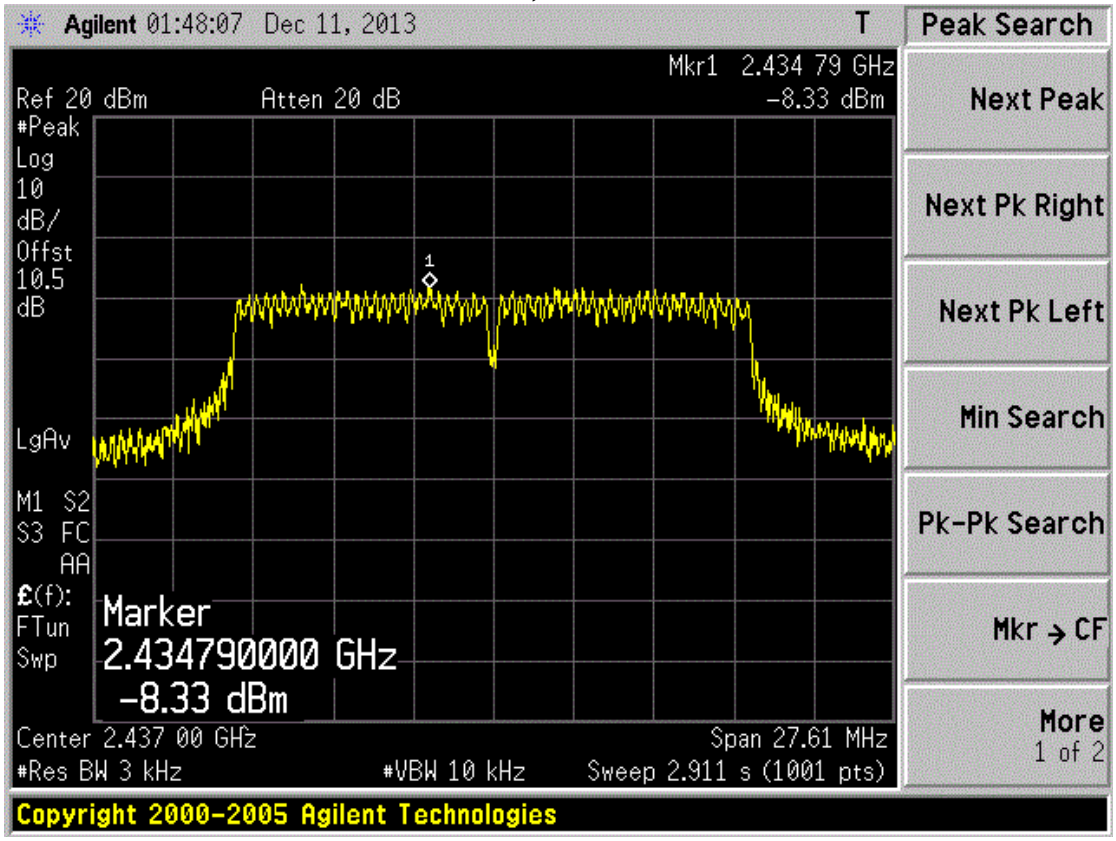
Chain A, Channel H



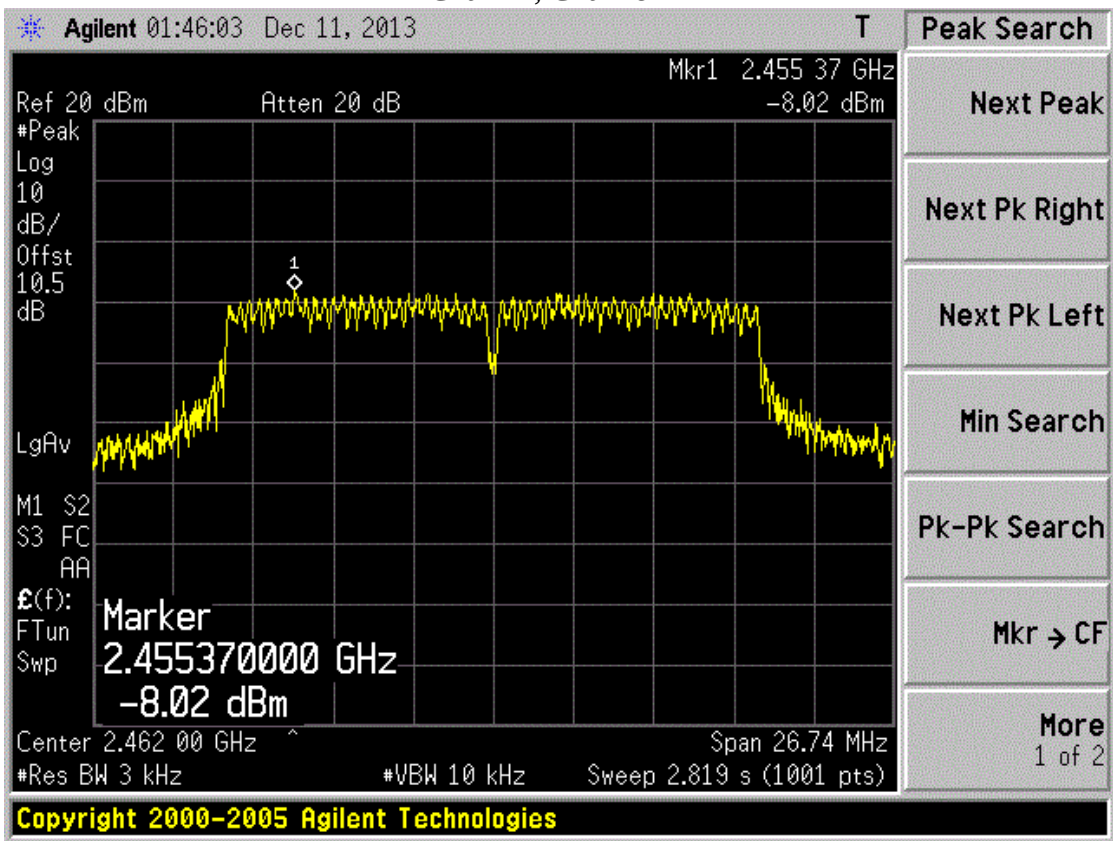
Chain B, Channel L



Chain B, Channel M

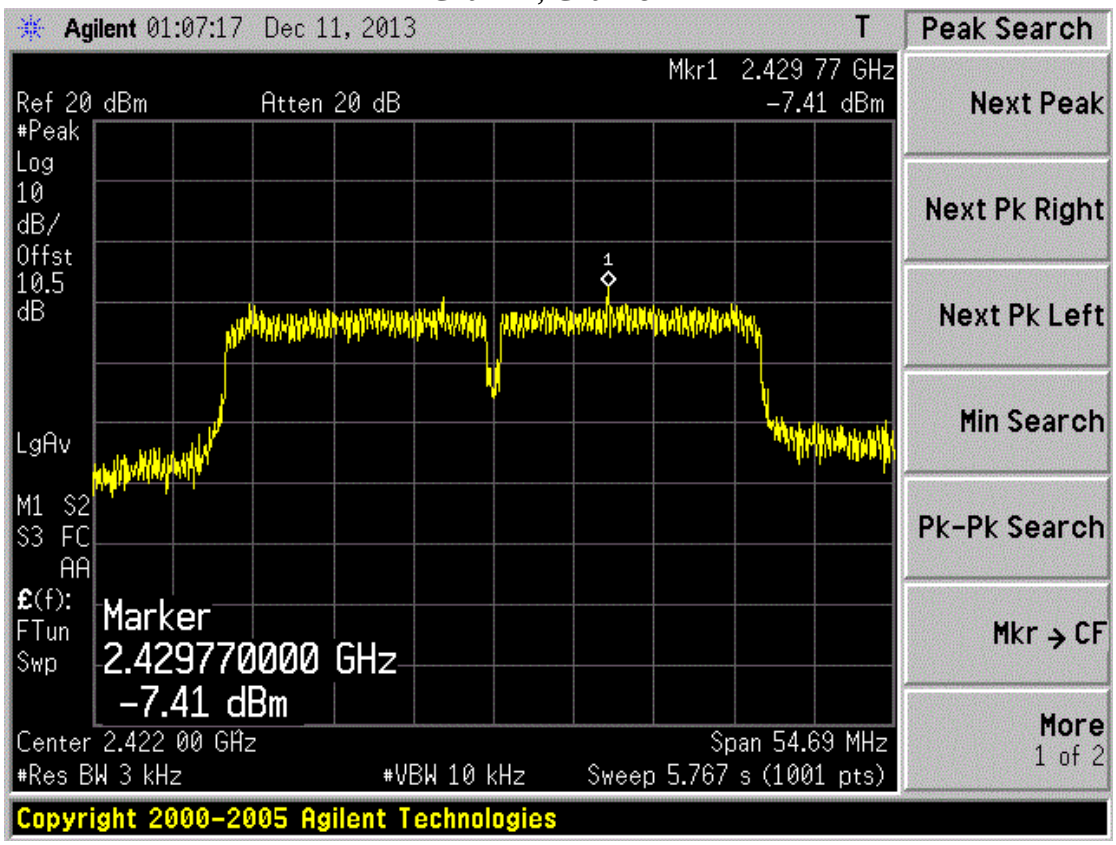


Chain B, Channel H

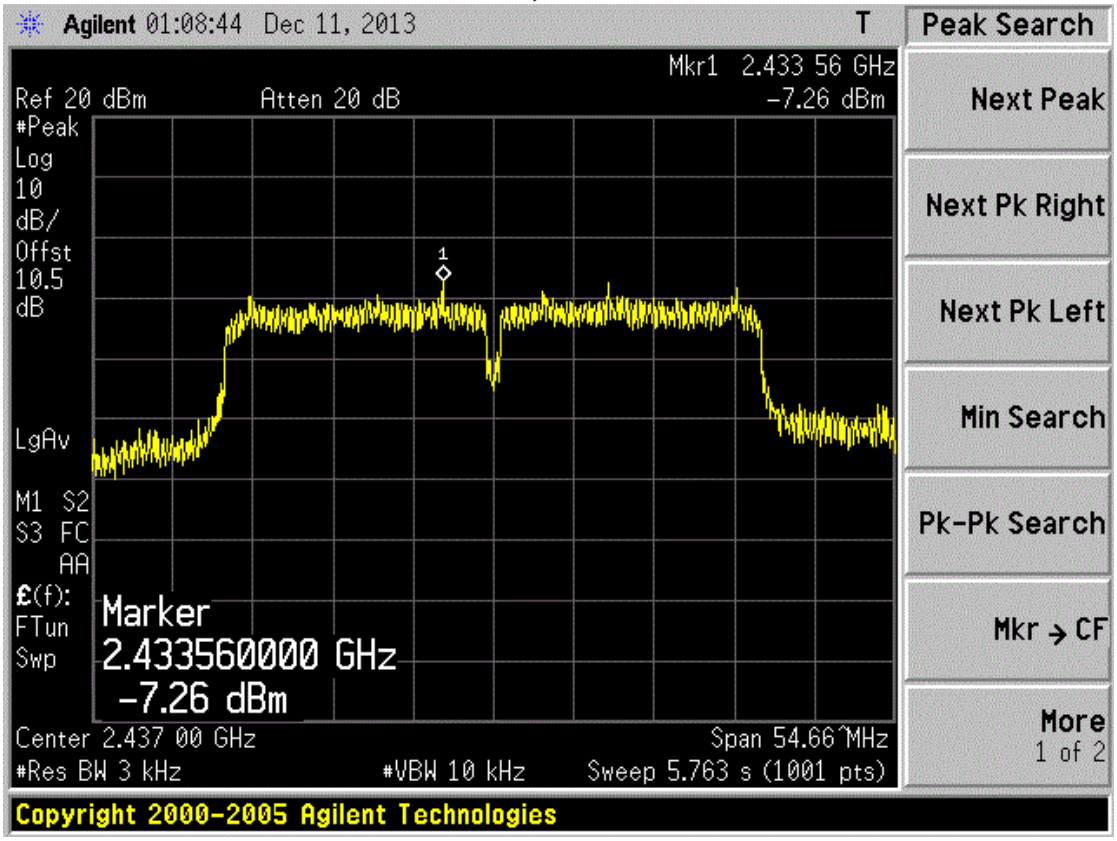


Mode	CH	Spectrum Density (dBm/3kHz)		Limit (dBm/3kHz)
		Chain A	Chain B	
802.11n HT40 (single chain)	L	-7.41	-13.50	≤8.00
	M	-7.26	-10.28	
	H	-8.86	-8.04	

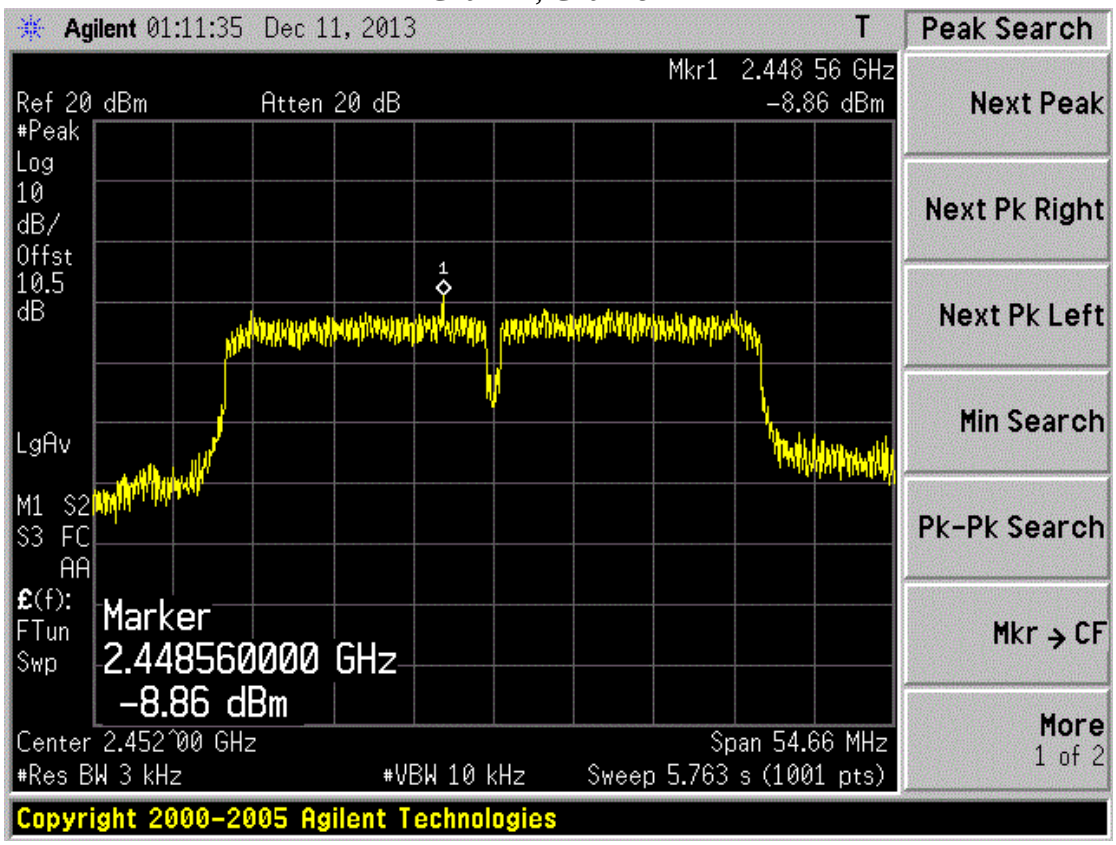
Chain A, Channel L



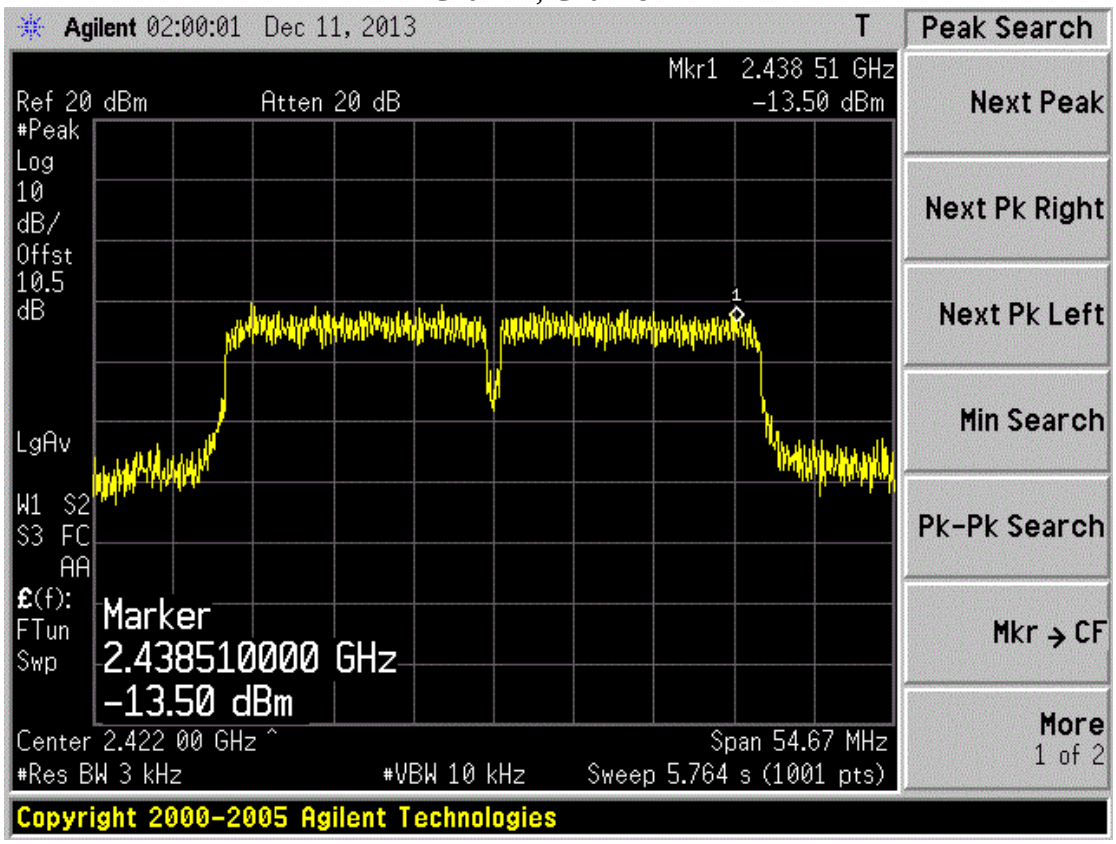
Chain A, Channel M



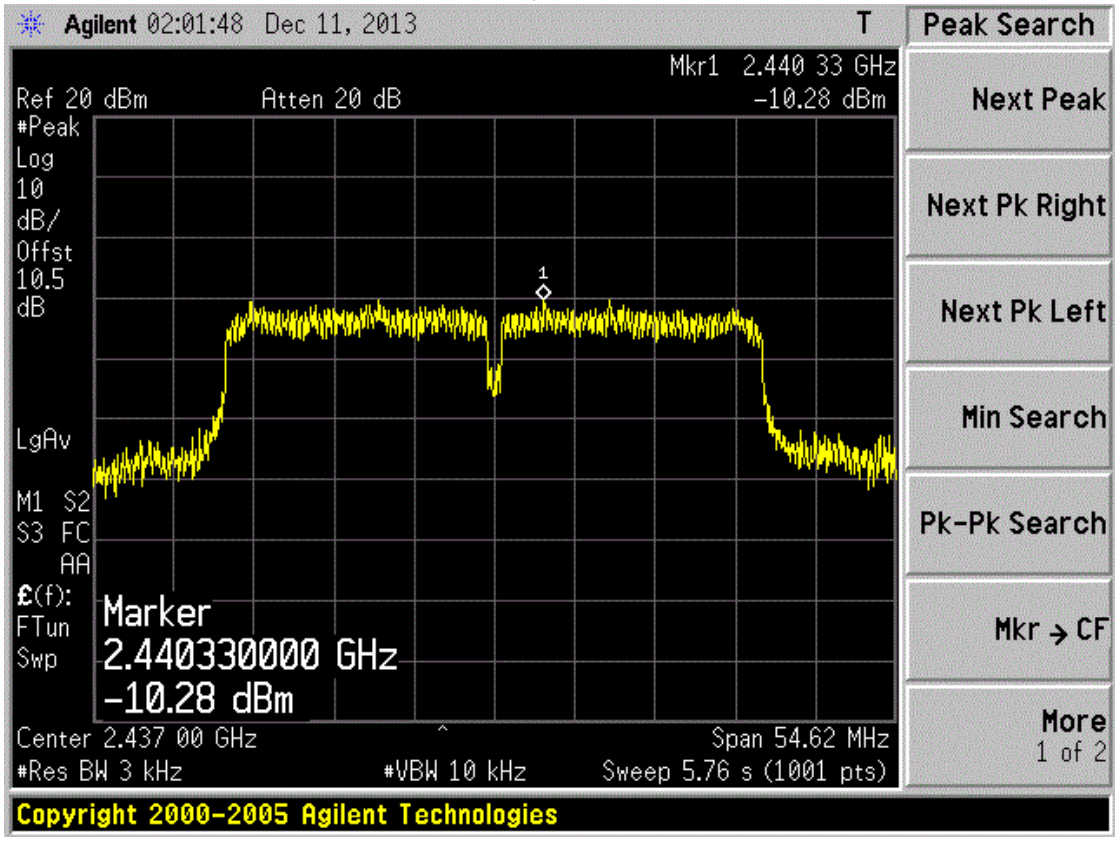
Chain A, Channel H



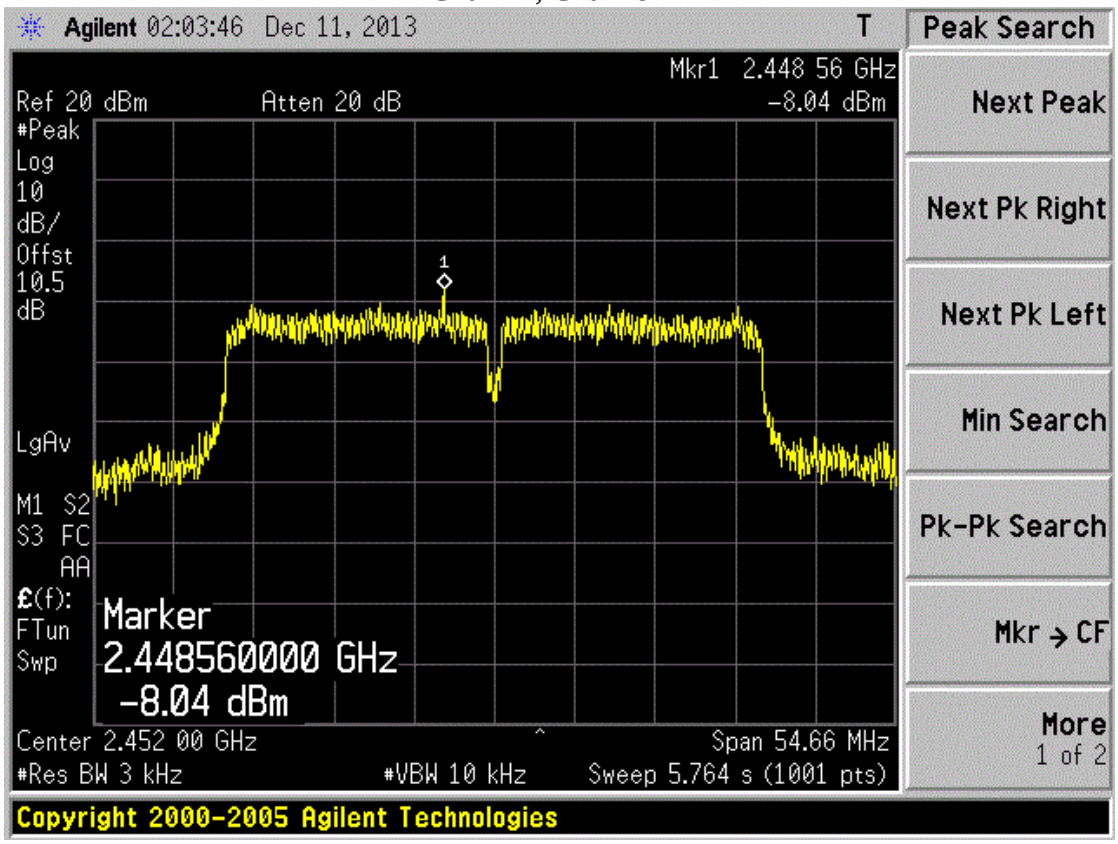
Chain B, Channel L



Chain B, Channel M

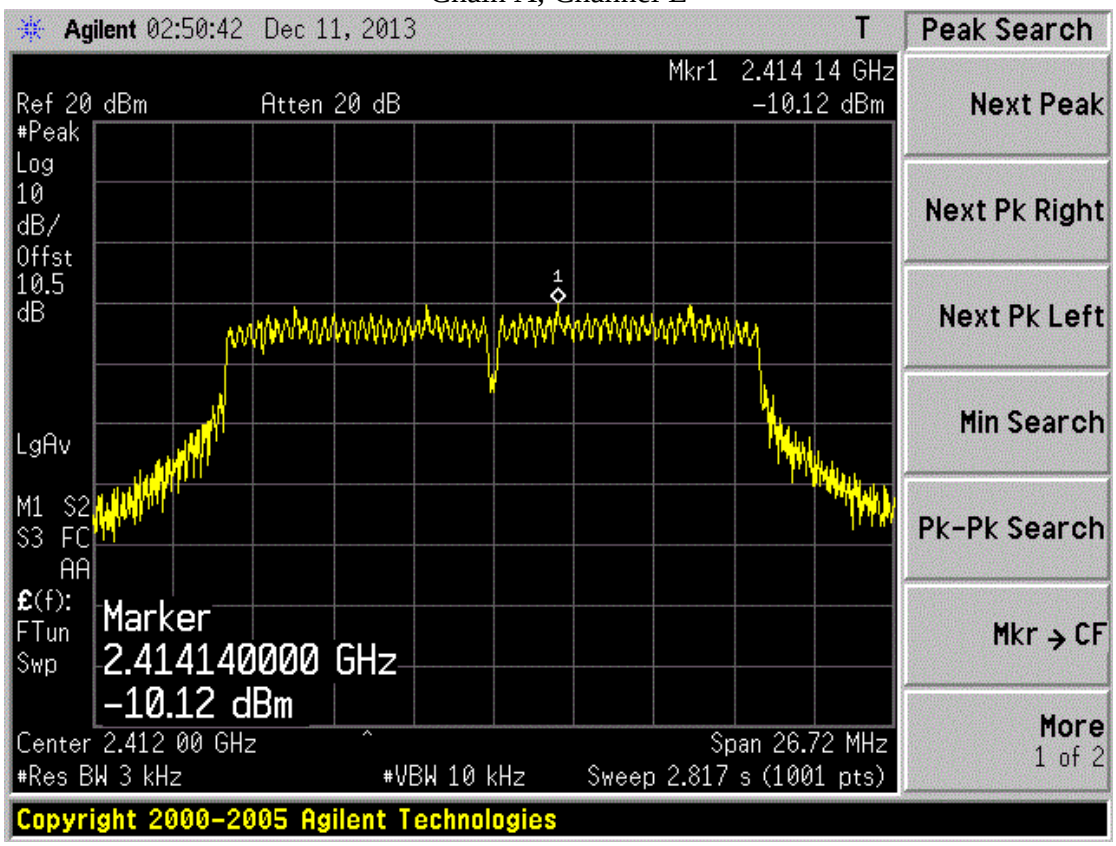


Chain B, Channel H

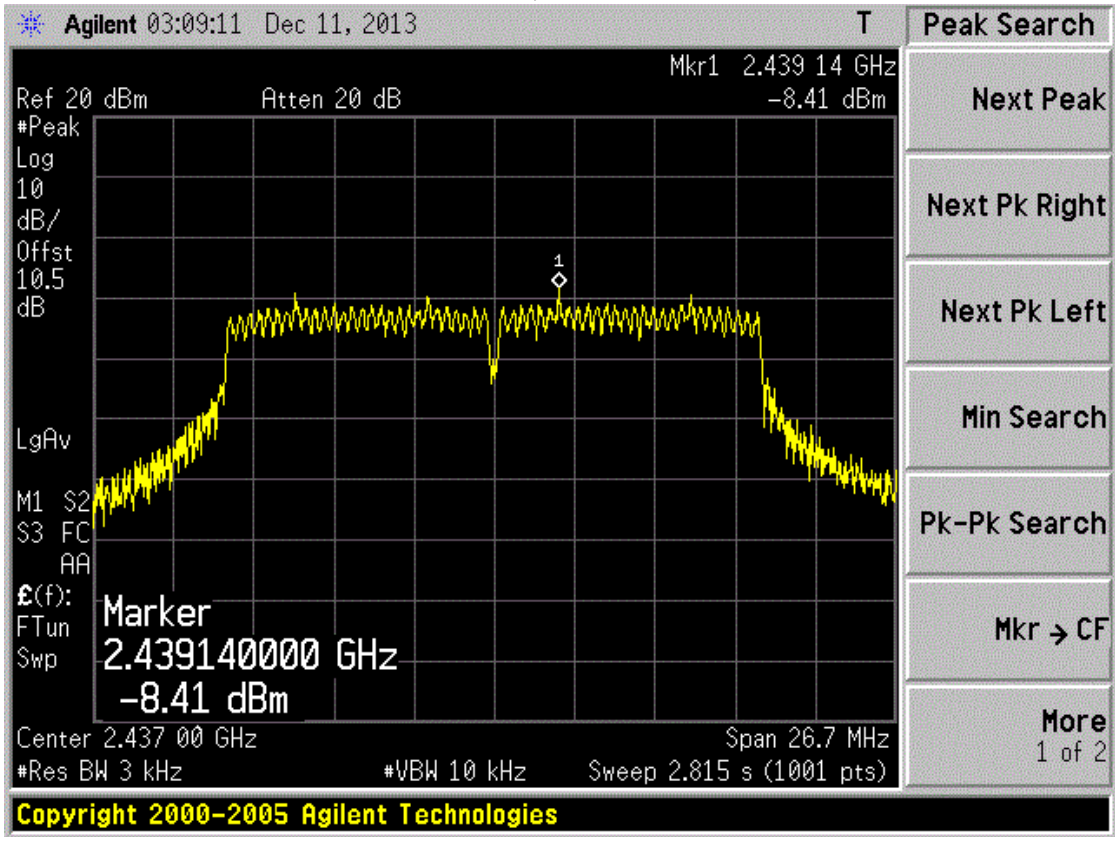


Mode	CH	Spectrum Density (dBm/3kHz)		Total Reading (dBm/3kHz)	Limit (dBm/3kHz)
		Chain A	Chain B	Chain A + B	
802.11n HT20 (dual chain)	L	-10.12	-10.03	-7.06	≤8.00
	M	-8.41	-10.83	-6.44	
	H	-7.67	-10.35	-5.80	

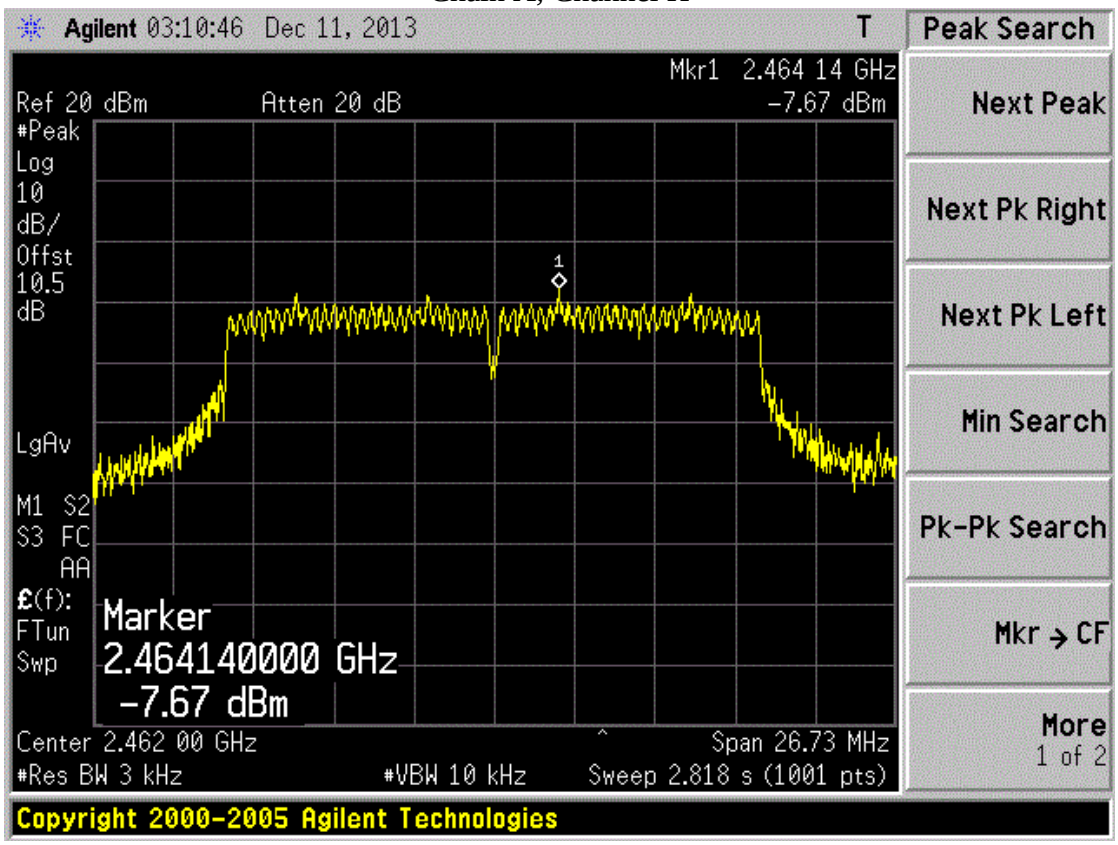
Chain A, Channel L



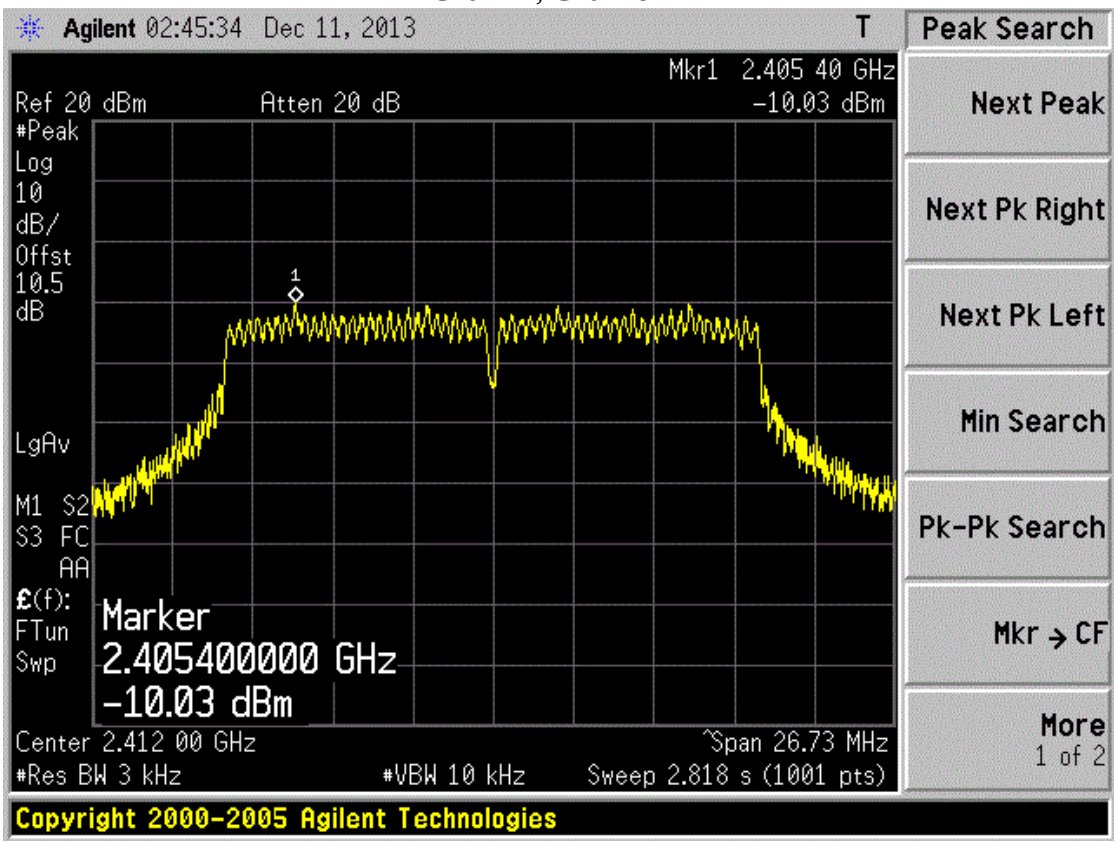
Chain A, Channel M



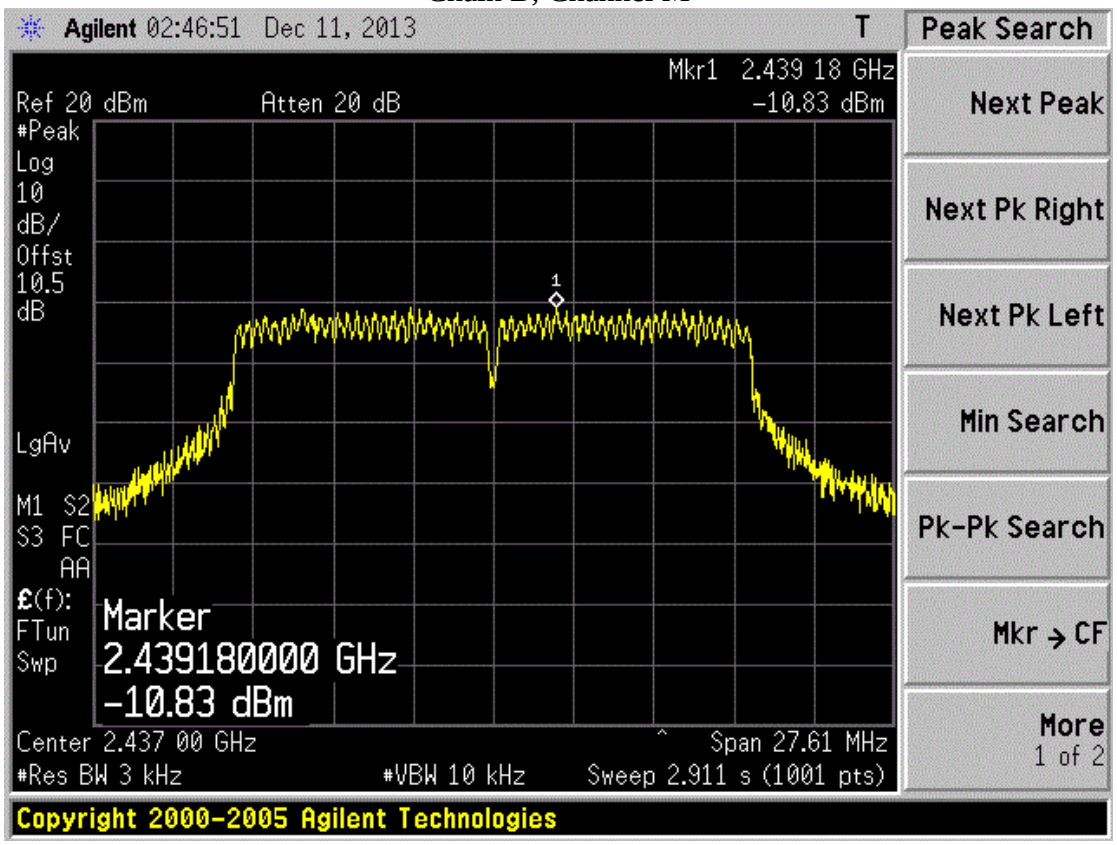
Chain A, Channel H



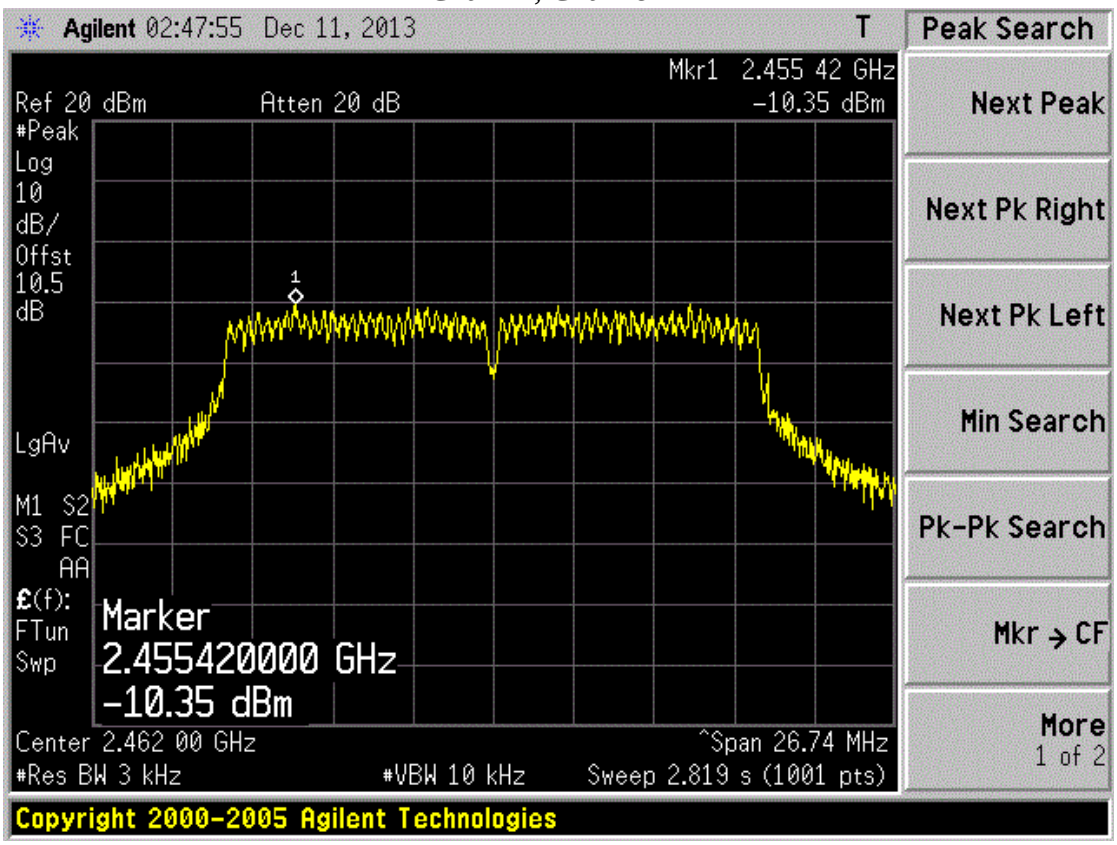
Chain B, Channel L



Chain B, Channel M

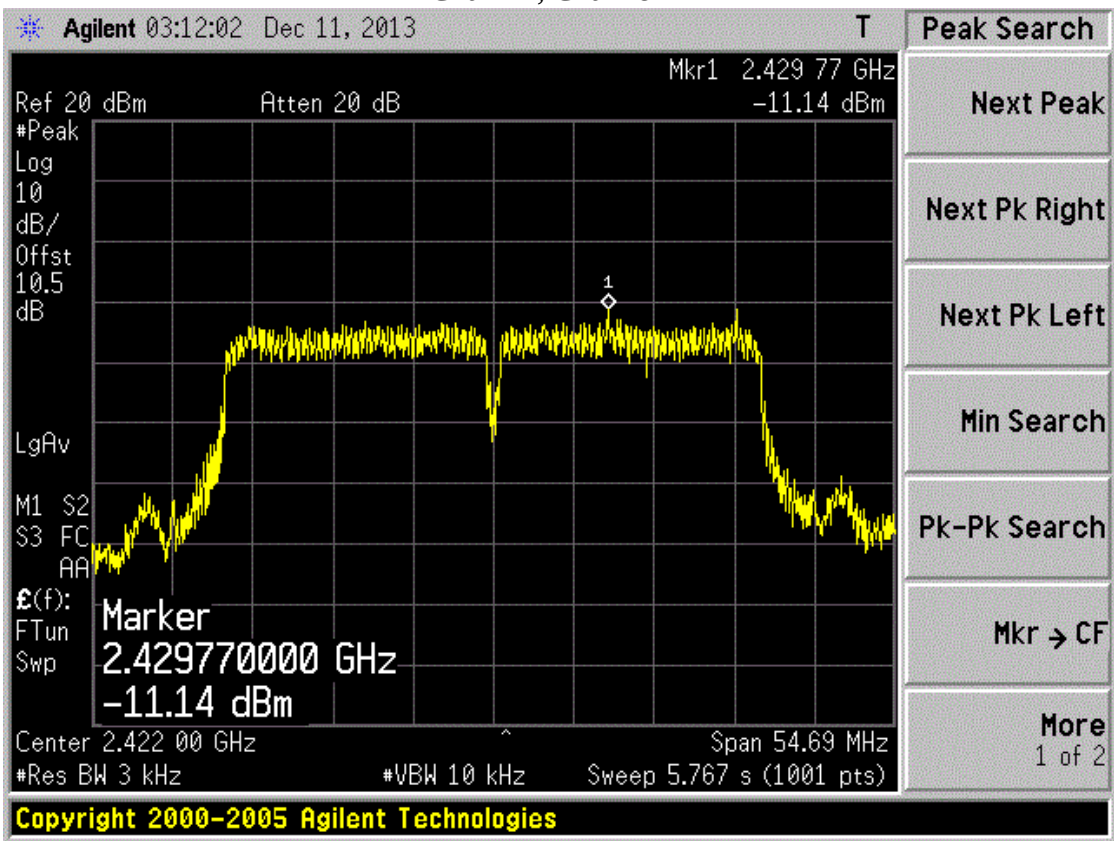


Chain B, Channel H

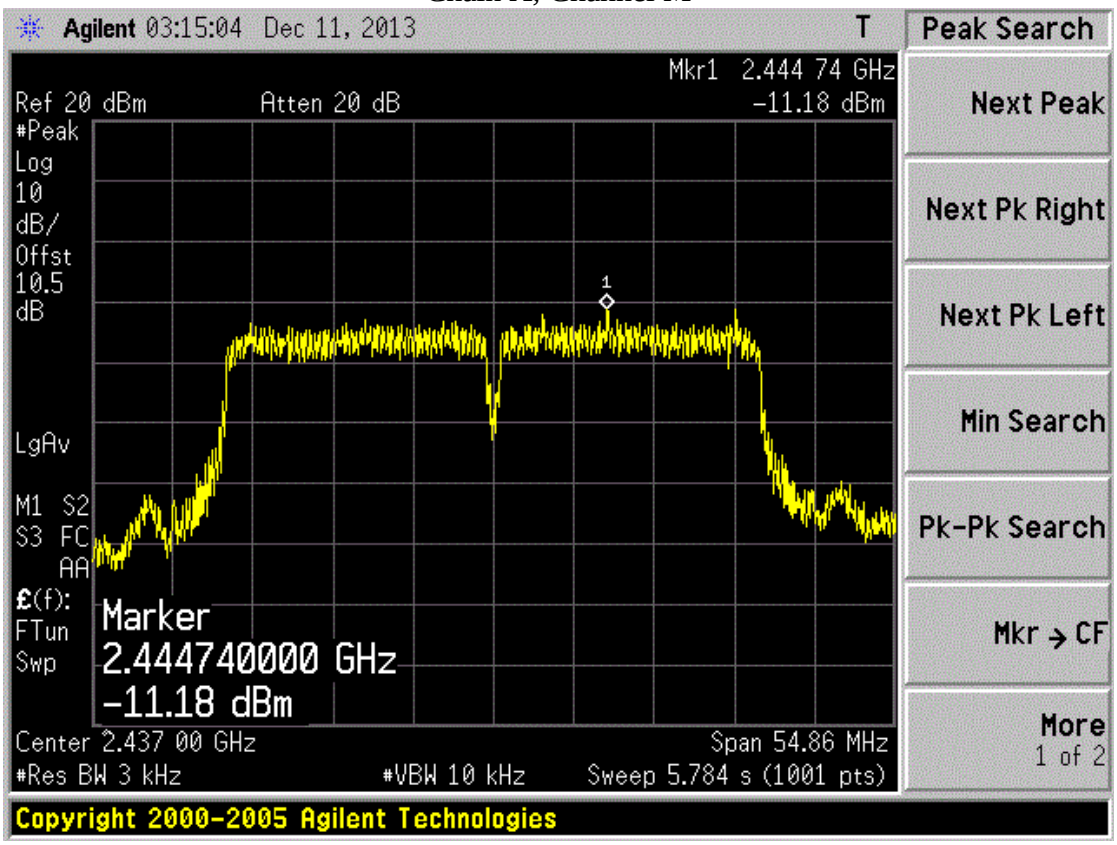


Mode	CH	Spectrum Density (dBm/3kHz)		Total Reading (dBm/3kHz)	Limit (dBm/3kHz)
		Chain A	Chain B	Chain A + B	
802.11n HT40 (dual chain)	L	-11.14	-13.52	-9.16	≤8.00
	M	-11.18	-13.61	-9.22	
	H	-10.84	-13.99	-9.13	

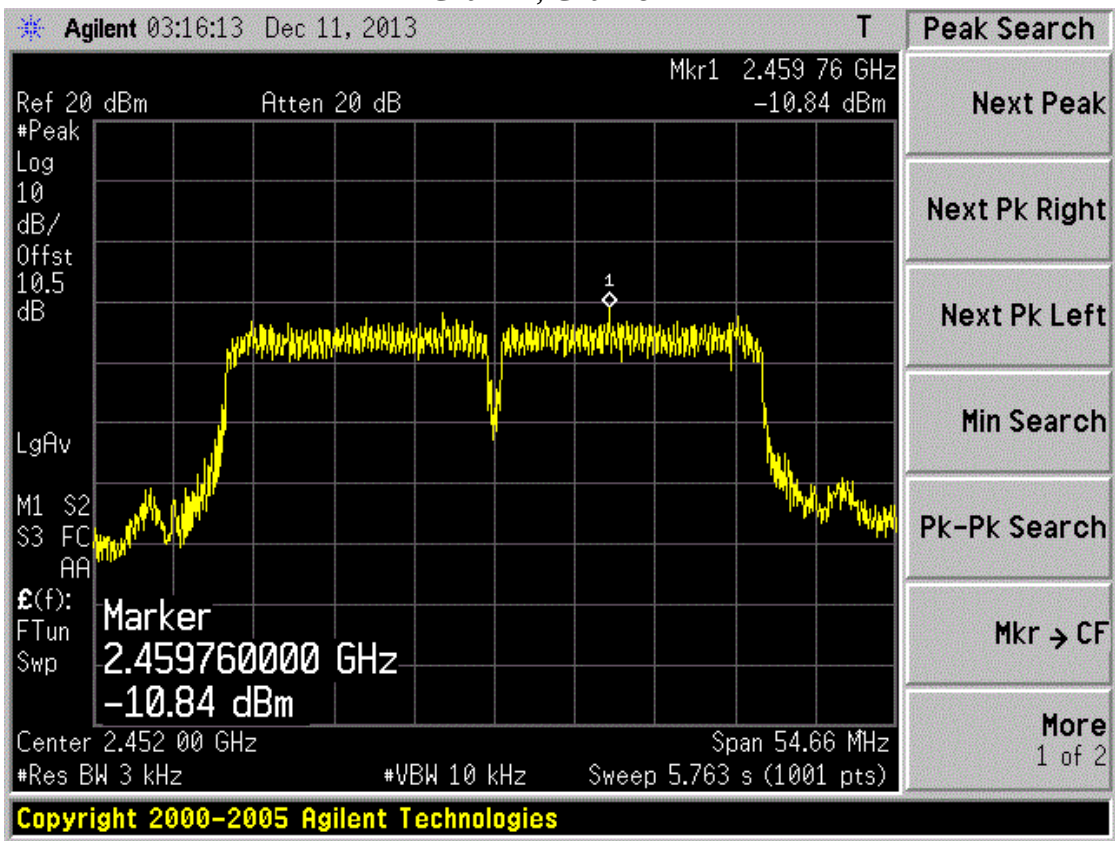
Chain A, Channel L



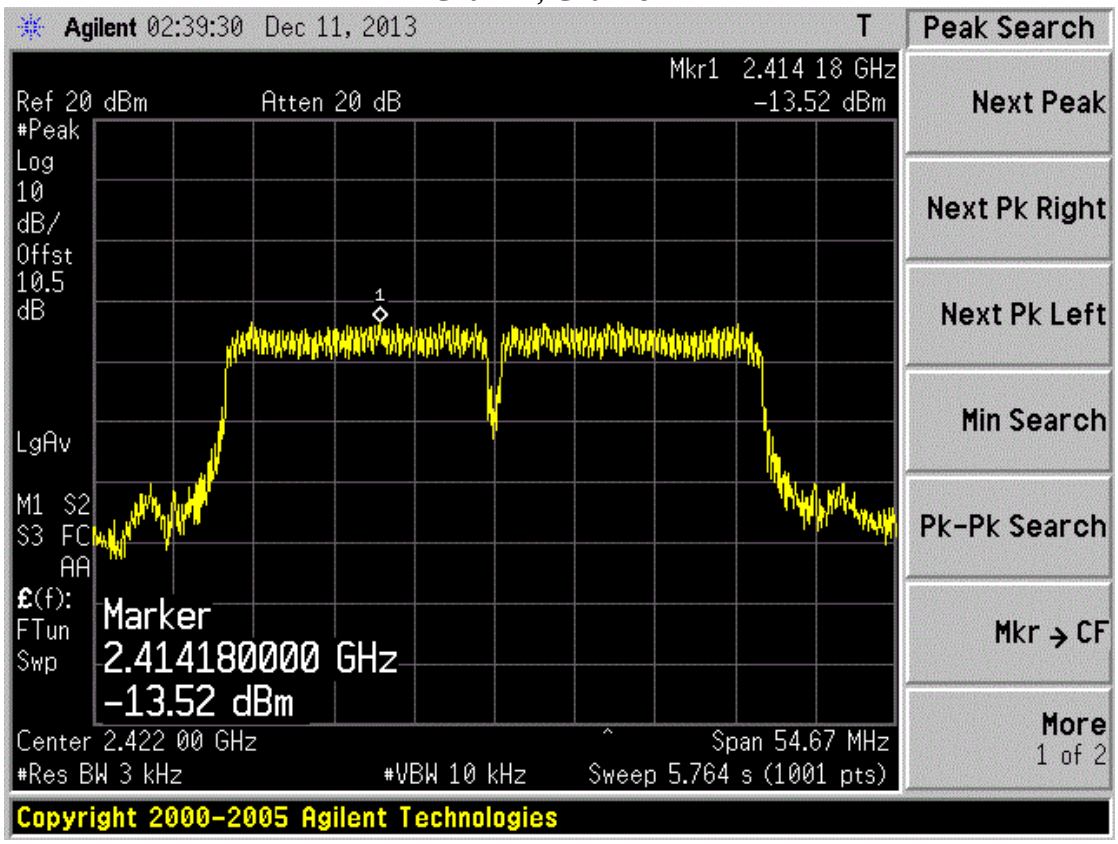
Chain A, Channel M



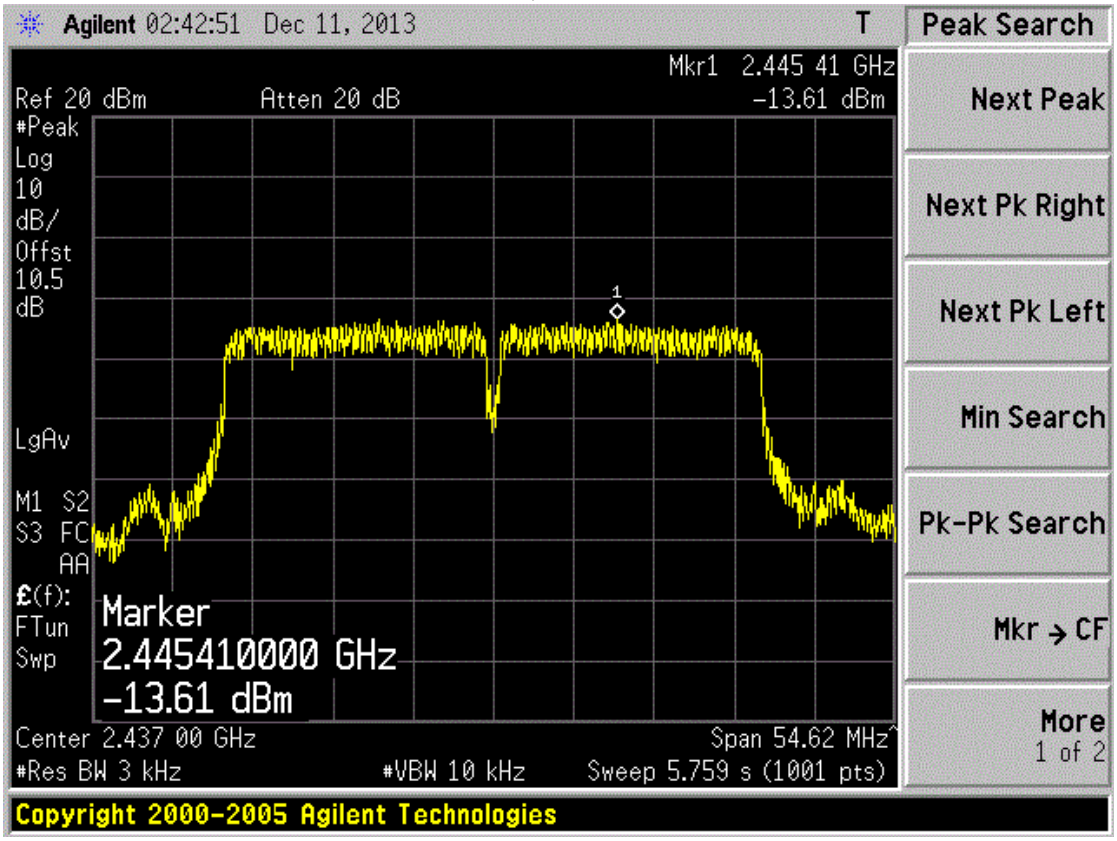
Chain A, Channel H



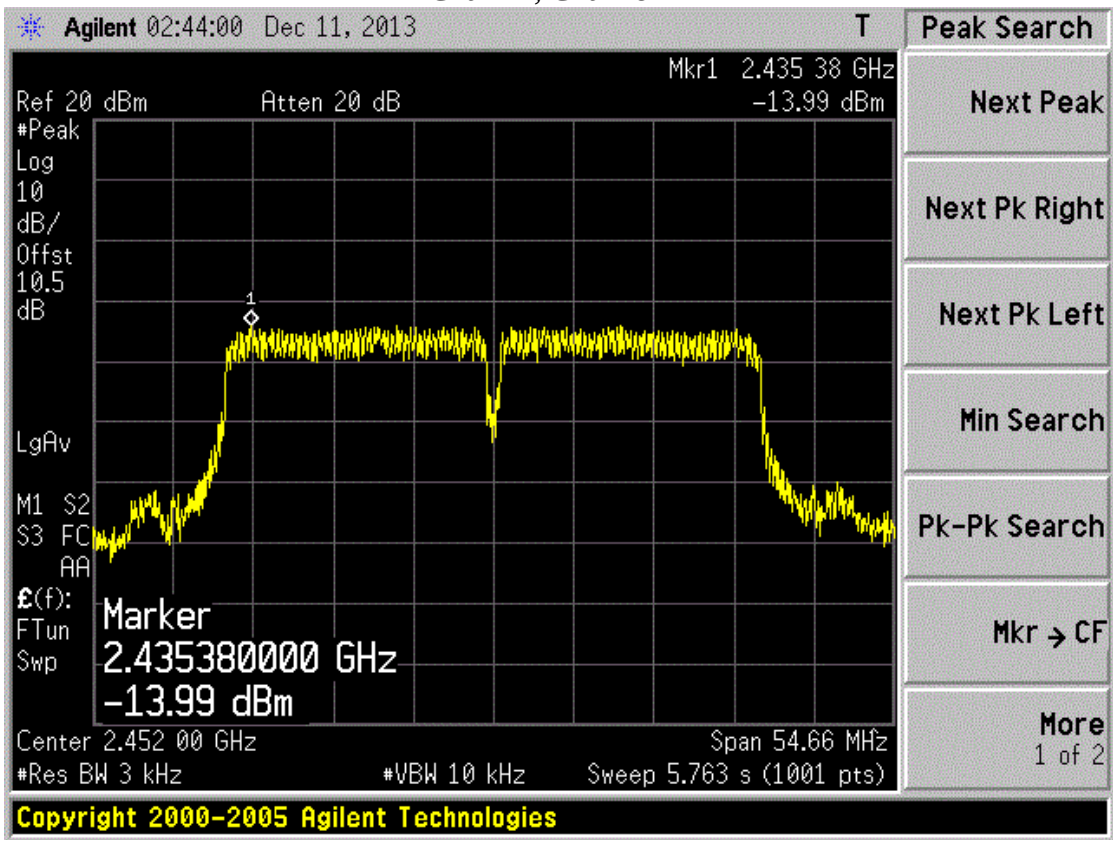
Chain B, Channel L



Chain B, Channel M



Chain B, Channel H



6. Radiated emission

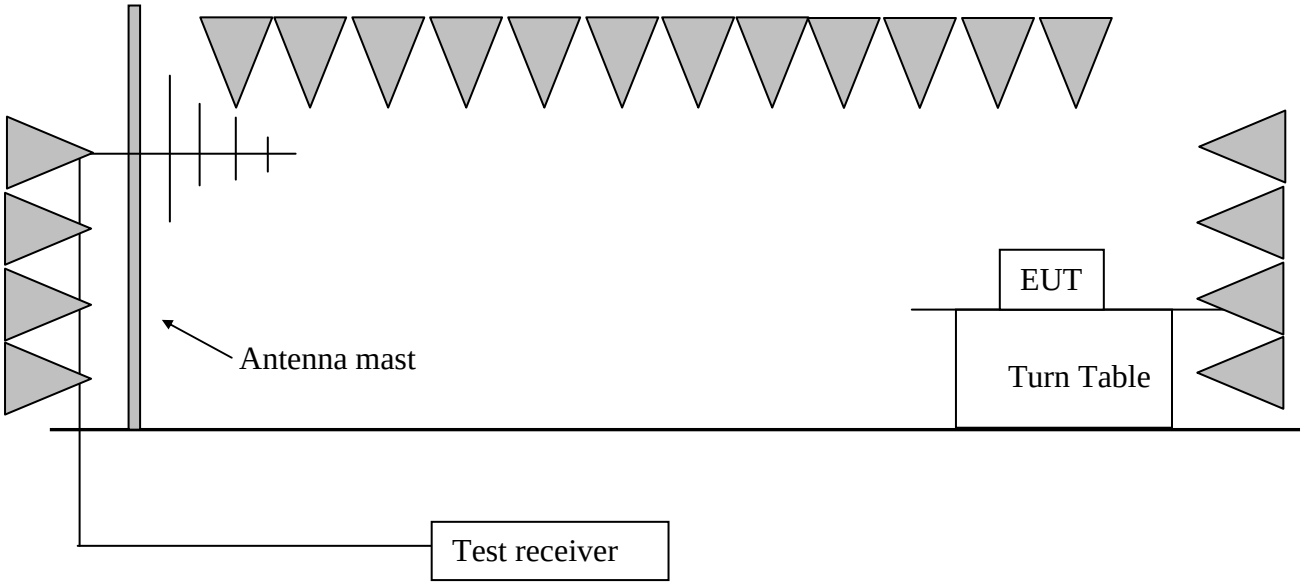
Test result: PASS

6.1 Test limit

The radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) showed as below:

Frequency (MHz)	Field Strength (dBuV/m)	Measurement Distance (m)
30 - 88	40.0	3
88 - 216	43.5	3
216 - 960	46.0	3
Above 960	54.0	3

6.2 Test Configuration



6.3 Test procedure and test setup

The measurement was applied in a semi-anechoic chamber. While testing for spurious emission higher than 1GHz, if applied, the pre-amplifier would be equipped just at the output terminal of the antenna.
The EUT and simulators were placed on a 0.8m high wooden turntable above the horizontal metal ground plane. The turn table rotated 360 degrees to determine the position of the maximum emission level. The EUT was set 3 meters away from the receiving antenna which was mounted on an antenna mast. The antenna moved up and down between from 1meter to 4 meters to find out the maximum emission level.
The EUT was tested according to DTS test procedure of KDB558074 D01 DTS “Meas Guidance v03r01” (clause 12.0) for compliance to FCC 47CFR 15.247 requirements.

6.4 Test protocol

Mode 802.11b

ANT	CH	Antenna	Frequency (MHz)	Reading Level (dBuV/m)	Factor (dB)	Measure Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
ANT A	1	H	4825.0	53.3	-6.2	47.1	54(Note3)	-6.9	PK
		V	4825.0	61.1	-6.2	54.9	74	-19.1	PK
		V	4825.0	59.5	-6.2	53.3	54	-0.7	AV
		H	7239.0	42.1	-1.6	40.5	54(Note3)	-13.5	PK
		V	7239.0	49.2	-1.6	47.6	54(Note3)	-6.4	PK
		H	9648.0	35.9	4.9	40.8	54(Note3)	-13.2	PK
		V	9644.5	39.4	4.9	44.3	54(Note3)	-9.7	PK
	6	H	4876.0	56.6	-6.2	50.4	54(Note3)	-3.6	PK
		V	4876.0	64.6	-6.2	58.4	74	-15.6	PK
		V	4876.1	59.5	-6.2	53.3	54	-0.7	AV
		H	7307.0	43.1	-1.4	41.7	54(Note3)	-12.3	PK
		V	7307.0	50.7	-1.4	49.3	54(Note3)	-4.7	PK
		H	9746.5	37.7	5.0	42.7	54(Note3)	-11.3	PK
		V	9746.5	41.2	5.1	46.3	54(Note3)	-7.7	PK
	11	H	4927.0	53.4	-6.2	47.2	54(Note3)	-6.8	PK
		V	4927.0	61.7	-6.1	55.6	74	-18.4	PK
		V	4923.9	58.8	-6.1	52.7	54	-1.3	AV
		H	7386.0	41.2	-1.0	40.2	54(Note3)	-13.8	PK
		V	7383.5	49.0	-1.1	47.9	54(Note3)	-6.1	PK
		H	9848.0	35.1	5.2	40.3	54(Note3)	-13.7	PK
		V	9848.5	37.4	5.3	42.7	54(Note3)	-11.3	PK
ANT B	1	H	4825.0	51.9	-6.2	45.7	54(Note3)	-8.3	PK
		V	4825.0	61.0	-6.2	54.8	74	-19.2	PK
		V	4823.9	58.7	-6.2	52.5	54	-1.5	AV
		H	7236.0	41.2	-1.6	39.6	54(Note3)	-14.4	PK
		V	7239.0	47.6	-1.6	46.0	54(Note3)	-8.0	PK
		H	9648.0	36.1	4.9	41.0	54(Note3)	-13.0	PK

		V	9618.0	35.7	4.9	40.6	54(Note3)	-13.4	PK
	6	H	4876.0	51.8	-6.2	45.6	54(Note3)	-8.4	PK
		V	4876.0	61.8	-6.2	55.6	74	-18.4	PK
		V	4873.9	59.3	-6.2	53.1	54	-0.9	AV
		H	7315.5	44.5	-1.4	43.1	54(Note3)	-10.9	PK
		V	7307.0	50.1	-1.4	48.7	54(Note3)	-5.3	PK
		H	9748.0	34.6	5.0	39.6	54(Note3)	-14.4	PK
		V	9746.5	38.7	5.1	43.8	54(Note3)	-10.2	PK
	11	H	4927.0	49.6	-6.2	43.4	54(Note3)	-10.6	PK
		V	4927.0	60.2	-6.1	54.1	74	-19.9	PK
		V	4924.0	58.6	-6.1	52.5	54	-1.5	AV
		H	7383.5	43.1	-1.1	42.0	54(Note3)	-12.0	PK
		V	7383.5	46.0	-1.1	44.9	54(Note3)	-9.1	PK
		H	9848.0	32.8	5.2	38.0	54(Note3)	-16.0	PK
		V	9848.0	34.0	5.3	39.3	54(Note3)	-14.7	PK

Mode 802.11g

ANT	CH	Antenna	Frequency (MHz)	Reading Level (dBuV/m)	Factor (dB)	Measure Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
ANT A	1	H	4825.0	52.5	-6.2	46.3	54(Note3)	-7.7	PK
		V	4816.5	58.9	-6.3	52.6	54(Note3)	-1.4	PK
		H	7230.5	46.2	-1.6	44.6	54(Note3)	-9.4	PK
		V	7239.0	48.9	-1.6	47.3	54(Note3)	-6.7	PK
		H	9648.0	36.9	4.9	41.8	54(Note3)	-12.2	PK
		V	9653.0	40.6	5.0	45.6	54(Note3)	-8.4	PK
	6	H	4876.0	54.8	-6.2	48.6	54(Note3)	-5.4	PK
		V	4876.0	63.7	-6.2	57.5	74	-16.5	PK
			4874.2	48.4	-6.2	42.2	54	-11.8	AV
		H	7307.0	44.6	-1.4	43.2	54(Note3)	-10.8	PK
		V	7307.0	52.5	-1.4	51.1	54(Note3)	-2.9	PK
		H	9746.5	39.9	5.0	44.9	54(Note3)	-9.1	PK
		V	9755.0	42.5	5.2	47.7	54(Note3)	-6.3	PK
	11	H	4918.5	56.0	-6.2	49.8	54(Note3)	-4.2	PK
		V	4927.0	66.2	-6.1	60.1	74	-13.9	PK
			4922.4	47.9	-6.1	41.8	54	-12.2	AV
		H	7383.5	46.7	-1.1	45.6	54(Note3)	-8.4	PK
		V	7383.5	54.1	-1.1	53.0	54(Note3)	-1.0	PK
		H	9848.0	35.5	5.2	40.7	54(Note3)	-13.3	PK
		V	9840.0	41.3	5.2	46.5	54(Note3)	-7.5	PK
ANT B	1	H	4825.0	49.0	-6.2	42.8	54(Note3)	-11.2	PK
		V	4825.0	57.1	-6.2	50.9	54(Note3)	-3.1	PK
		H	7236.0	41.0	-1.6	39.4	54(Note3)	-14.6	PK
		V	7239.0	49.0	-1.6	47.4	54(Note3)	-6.6	PK
		H	9648.0	36.5	4.9	41.4	54(Note3)	-12.6	PK
		V	9653.0	42.5	5.0	47.5	54(Note3)	-6.5	PK
	6	H	4876.0	47.6	-6.2	41.4	54(Note3)	-12.6	PK
		V	4876.0	57.5	-6.2	51.3	54(Note3)	-2.7	PK
		H	7324.0	43.2	-1.4	41.8	54(Note3)	-12.2	PK
		V	7307.0	50.0	-1.4	48.6	54(Note3)	-5.4	PK
		H	9748.0	35.0	5.0	40.0	54(Note3)	-14.0	PK
		V	9746.5	41.4	5.1	46.5	54(Note3)	-7.5	PK
	11	H	4918.5	59.8	-6.2	53.6	54(Note3)	-0.4	PK
		V	4918.5	59.8	-6.1	53.7	74	-20.3	PK
		H	7383.5	51.0	-1.1	49.9	54(Note3)	-4.1	PK
		V	7383.5	51.0	-1.1	49.9	54(Note3)	-4.1	PK
		H	9848.0	37.4	5.2	42.6	54(Note3)	-11.4	PK
		V	9848.0	37.4	5.3	42.7	54(Note3)	-11.3	PK

Mode 802.11n HT20

ANT	CH	Antenna	Frequency (MHz)	Reading Level (dBuV/m)	Factor (dB)	Measure Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
ANT A	1	H	4816.5	59.3	-6.2	53.1	54(Note3)	-0.9	PK
		V	4825.0	60.1	-6.2	53.9	54(Note3)	-0.1	PK
		H	7247.5	50.0	-1.6	48.4	54(Note3)	-5.6	PK
		V	7230.5	48.6	-1.6	47.0	54(Note3)	-7.0	PK
		H	9661.5	39.8	4.9	44.7	54(Note3)	-9.3	PK
		V	9661.5	41.3	5.0	46.3	54(Note3)	-7.7	PK
	6	H	4884.5	56.2	-6.2	50.0	54(Note3)	-4.0	PK
		V	4876.0	63.2	-6.2	57.0	74	-17.0	PK
		H	4876.2	48.1	-6.2	41.9	54	-12.1	AV
		V	7315.5	44.3	-1.4	42.9	54(Note3)	-11.1	PK
		H	7324.0	52.4	-1.4	51.0	54(Note3)	-3.0	PK
		V	9755.0	40.5	5.1	45.6	54(Note3)	-8.4	PK
			9746.5	43.9	5.1	49.0	54(Note3)	-5.0	PK
	11	H	4927.0	55.4	-6.2	49.2	54(Note3)	-4.8	PK
		V	4935.5	63.8	-6.1	57.7	74	-16.3	PK
		H	4935.0	46.6	-6.1	40.5	54	-13.5	AV
		V	7400.5	44.9	-1.0	43.9	54(Note3)	-10.1	PK
		H	7375.0	49.2	-1.1	48.1	54(Note3)	-5.9	PK
		V	9848.0	37.0	5.2	42.2	54(Note3)	-11.8	PK
			9848.5	41.0	5.3	46.3	54(Note3)	-7.7	PK
ANT B	1	H	4825.0	49.9	-6.2	43.7	54(Note3)	-10.3	PK
		V	4825.0	58.5	-6.2	52.3	54(Note3)	-1.7	PK
		H	7236.0	42.5	-1.6	40.9	54(Note3)	-13.1	PK
		V	7222.0	50.6	-1.7	48.9	54(Note3)	-5.1	PK
		H	9648.0	35.8	4.9	40.7	54(Note3)	-13.3	PK
		V	9644.5	43.1	4.9	48.0	54(Note3)	-6.0	PK
	6	H	4876.0	48.5	-6.2	42.3	54(Note3)	-11.7	PK
		V	4876.0	59.2	-6.2	53.0	54(Note3)	-1.0	PK
		H	7307.0	45.2	-1.4	43.8	54(Note3)	-10.2	PK
		V	7315.5	51.3	-1.4	49.9	54(Note3)	-4.1	PK
		H	9748.0	35.4	5.0	40.4	54(Note3)	-13.6	PK
		V	9746.5	42.6	5.1	47.7	54(Note3)	-6.3	PK
	11	H	4927.0	48.4	-6.2	42.2	54(Note3)	-11.8	PK
		V	4927.0	59.2	-6.1	53.1	54(Note3)	-0.9	PK
		H	7392.0	48.4	-1.0	47.4	54(Note3)	-6.6	PK
		V	7383.5	51.4	-1.1	50.3	54(Note3)	-3.7	PK
		H	9848.0	33.9	5.2	39.1	54(Note3)	-14.9	PK
		V	9848.5	37.9	5.3	43.2	54(Note3)	-10.8	PK

ANT A+B	1	H	4825.0	45.4	-6.2	39.2	54(Note3)	-14.8	PK
		V	4816.5	53.4	-6.3	47.1	54(Note3)	-6.9	PK
		H	7236.0	39.7	-1.6	38.1	54(Note3)	-15.9	PK
		V	7230.5	44.2	-1.6	42.6	54(Note3)	-11.4	PK
		H	9648.0	35.0	4.9	39.9	54(Note3)	-14.1	PK
		V	9593.5	37.6	4.9	42.5	54(Note3)	-11.5	PK
	6	H	4825.0	45.4	-6.2	39.2	54(Note3)	-14.8	PK
		V	4816.5	53.4	-6.3	47.1	54(Note3)	-6.9	PK
		H	7236.0	39.7	-1.6	38.1	54(Note3)	-15.9	PK
		V	7230.5	44.2	-1.6	42.6	54(Note3)	-11.4	PK
		H	9648.0	35.0	4.9	39.9	54(Note3)	-14.1	PK
		V	9593.5	37.6	4.9	42.5	54(Note3)	-11.5	PK
	11	H	4927.0	47.7	-6.2	41.5	54(Note3)	-12.5	PK
		V	4927.0	58.1	-6.1	52.0	54(Note3)	-2.0	PK
		H	7386.0	41.9	-1.0	40.9	54(Note3)	-13.1	PK
		V	7392.0	48.5	-1.0	47.5	54(Note3)	-6.5	PK
		H	9848.0	33.8	5.2	39.0	54(Note3)	-15.0	PK
		V	9848.0	34.6	5.3	39.9	54(Note3)	-14.1	PK

Mode 802.11n HT40

ANT	CH	Antenna	Frequency (MHz)	Reading Level (dBuV/m)	Factor (dB)	Measure Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
ANT A	3	H	4859.0	48.3	-6.1	42.2	54(Note3)	-11.8	PK
		V	4842.0	55.2	-6.2	49.0	54(Note3)	-5.0	PK
		H	7266.0	41.4	-1.6	39.9	54(Note3)	-14.1	PK
		V	7281.5	44.1	-1.5	42.7	54(Note3)	-11.3	PK
		H	9688.0	35.9	5.0	40.9	54(Note3)	-13.1	PK
		V	9688.0	36.4	5.1	41.4	54(Note3)	-12.6	PK
	6	H	4876.0	50.8	-6.2	44.6	54(Note3)	-9.4	PK
		V	4876.0	58.2	-6.2	52.0	54(Note3)	-2.0	PK
		H	7311.0	41.4	-1.4	40.0	54(Note3)	-14.0	PK
		V	7324.0	46.8	-1.4	45.4	54(Note3)	-8.6	PK
		H	9733.0	35.5	5.0	40.5	54(Note3)	-13.5	PK
		V	9755.0	38.5	5.2	43.7	54(Note3)	-10.3	PK
	9	H	4901.5	48.5	-6.2	42.3	54(Note3)	-11.7	PK
		V	4910.0	55.4	-6.1	49.2	54(Note3)	-4.8	PK
		H	7356.0	39.4	-1.2	38.2	54(Note3)	-15.8	PK
		V	7349.5	45.5	-1.2	44.3	54(Note3)	-9.7	PK
		H	9808.0	35.3	5.1	40.4	54(Note3)	-13.6	PK
		V	9808.0	36.2	5.2	41.5	54(Note3)	-12.5	PK
ANT B	3	H	4844.0	45.0	-6.1	38.9	54(Note3)	-15.1	PK
		V	4842.0	53.5	-6.2	47.3	54(Note3)	-6.7	PK
		H	7266.0	41.0	-1.6	39.4	54(Note3)	-14.6	PK
		V	7264.5	44.8	-1.6	43.3	54(Note3)	-10.7	PK
		H	9688.0	35.4	5.0	40.4	54(Note3)	-13.6	PK
		V	9688.0	37.6	5.1	42.7	54(Note3)	-11.3	PK
	6	H	4874.0	45.2	-6.2	39.0	54(Note3)	-15.0	PK
		V	4884.5	55.0	-6.2	48.8	54(Note3)	-5.2	PK
		H	7311.0	40.1	-1.4	38.7	54(Note3)	-15.3	PK
		V	7324.0	47.7	-1.4	46.4	54(Note3)	-7.6	PK
		H	9748.0	34.9	5.0	39.9	54(Note3)	-14.1	PK
		V	9748.0	35.9	5.1	41.1	54(Note3)	-12.9	PK
	9	H	4910.0	54.2	-6.2	48.0	54(Note3)	-6.0	PK
		V	4910.0	54.2	-6.1	48.0	54(Note3)	-6.0	PK
		H	7349.5	47.1	-1.2	45.9	54(Note3)	-8.1	PK
		V	7349.5	47.1	-1.2	45.9	54(Note3)	-8.1	PK
		H	9808.0	35.1	5.1	40.3	54(Note3)	-13.7	PK
		V	9808.0	35.1	5.2	40.4	54(Note3)	-13.6	PK

ANT A+B	3	H	4844.0	44.0	-6.1	37.9	54(Note3)	-16.1	PK
		V	4859.0	48.8	-6.2	42.7	54(Note3)	-11.3	PK
		H	7266.0	38.7	-1.6	37.1	54(Note3)	-16.9	PK
		V	7266.0	41.2	-1.6	39.7	54(Note3)	-14.3	PK
		H	9688.0	34.6	5.0	39.6	54(Note3)	-14.4	PK
		V	9688.0	36.2	5.1	41.3	54(Note3)	-12.7	PK
	6	H	4876.0	49.5	-6.2	43.3	54(Note3)	-10.7	PK
		V	4876.0	49.5	-6.2	43.3	54(Note3)	-10.7	PK
		H	7311.0	42.3	-1.4	40.9	54(Note3)	-13.1	PK
		V	7311.0	42.3	-1.4	40.9	54(Note3)	-13.1	PK
		H	9748.0	34.2	5.0	39.2	54(Note3)	-14.8	PK
		V	9748.0	34.2	5.1	39.3	54(Note3)	-14.7	PK
	9	H	4904.0	44.0	-6.2	37.8	54(Note3)	-16.2	PK
		V	4901.5	49.5	-6.1	43.4	54(Note3)	-10.6	PK
		H	7356.0	39.2	-1.2	38.1	54(Note3)	-15.9	PK
		V	7356.0	42.4	-1.2	41.2	54(Note3)	-12.8	PK
		H	9808.0	34.9	5.1	40.1	54(Note3)	-13.9	PK
		V	9808.0	34.1	5.2	39.3	54(Note3)	-14.7	PK

Note: 1. Measure Level = Reading Level + Factor.
2. The test trace is same as the ambient noise (the test frequency range: 9kHz~30MHz, 18GHz~25GHz), therefore no data appear in the report.
3. This limit applies for using average detector, if the test result on peak is lower than average limit, then average measurement needn't be performed.

Example: Assuming Antenna Factor = 30.20dB/m, Cable Loss = 2.00dB,
Gain of Preamplifier = 32.00dB, Reading level = 10dBuV.
Then Factor = 30.20 + 2.00 – 32.00 = 0.20dB/m; Measured level = 10dBuV + 0.20dB/m = 10.20dBuV/m
Assuming limit = 54dBuV/m, Measured level Reading = 10.20dBuV/m, then
Margin = 10.20-54 = -43.80dBuV/m

7. Emission outside the frequency Band

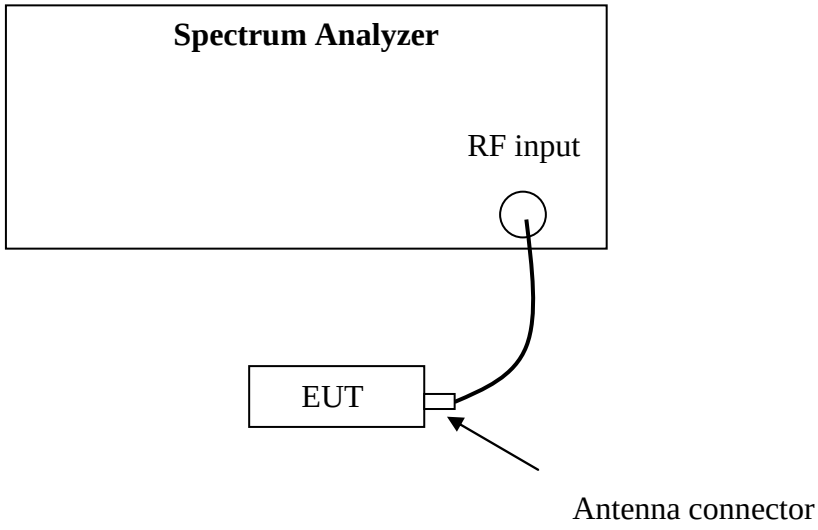
Test result: **PASS**

7.1 Limit

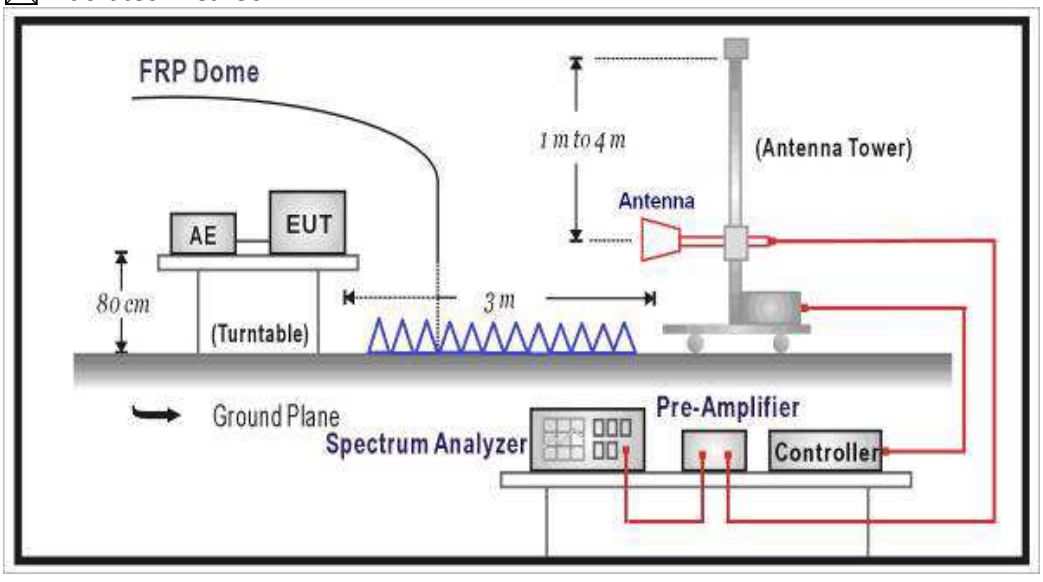
In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power.

7.2 Test Configuration

☒ Conducted method



☒ Radiated method



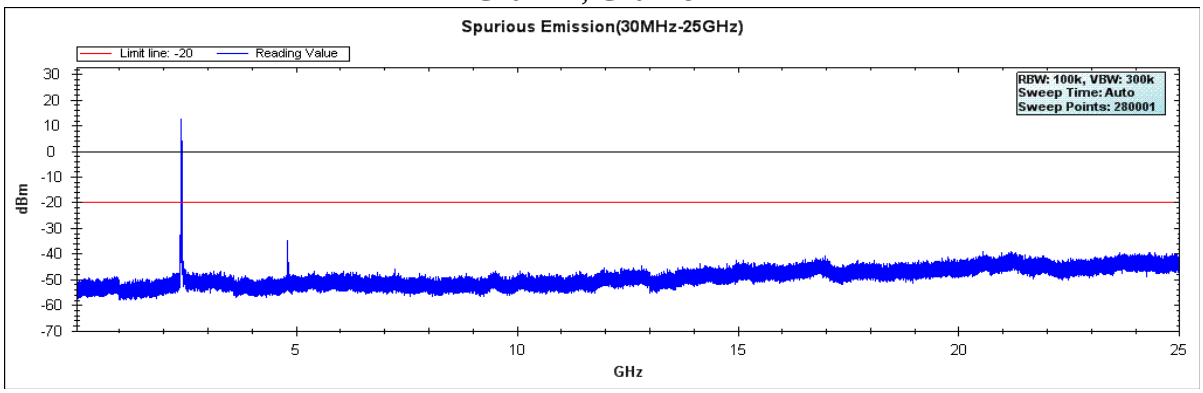
7.3 Test procedure and test setup

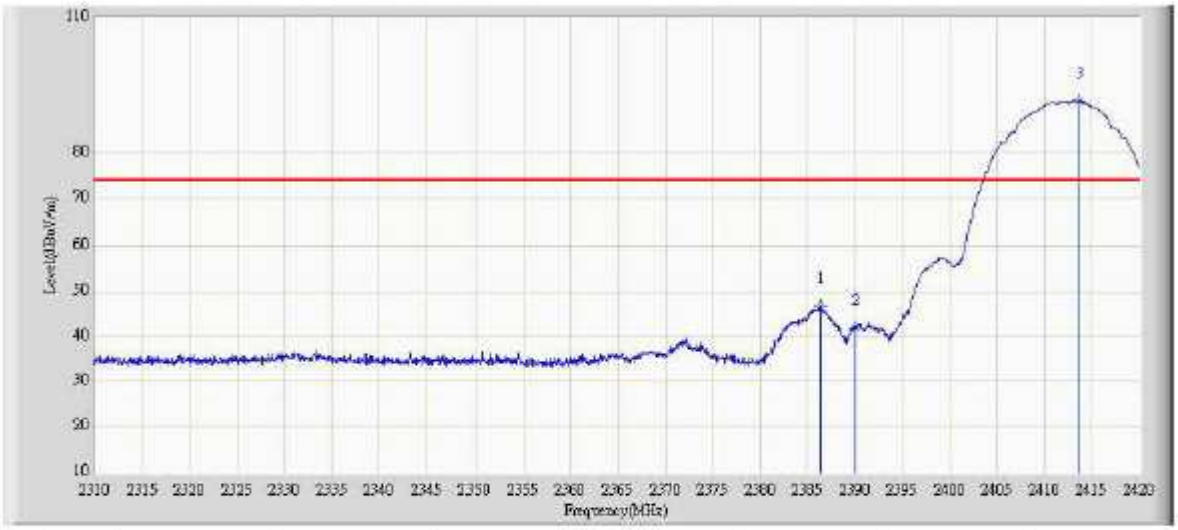
The Emission outside the frequency Band per FCC §15.247(d) is measured using the Spectrum Analyzer with the resolutions bandwidth set at 100kHz, the video bandwidth set at 300kHz, and the SPAN>>RBW.
The EUT was tested according to DTS test procedure of "KDB558074 D01 DTS Meas Guidance v03r01" (clause 11.0) for compliance to FCC 47CFR 15.247 requirements.

7.4 Test protocol

Mode	CH	Result		Limit (dB)
		Chain A	Chain B	
802.11b	L	Pass	Pass	≥20
	M	Pass	Pass	
	H	Pass	Pass	

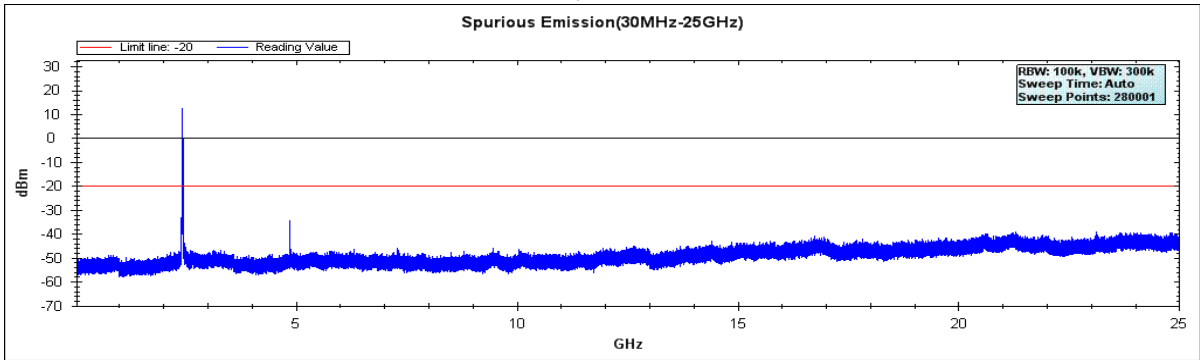
Chain A, Channel L



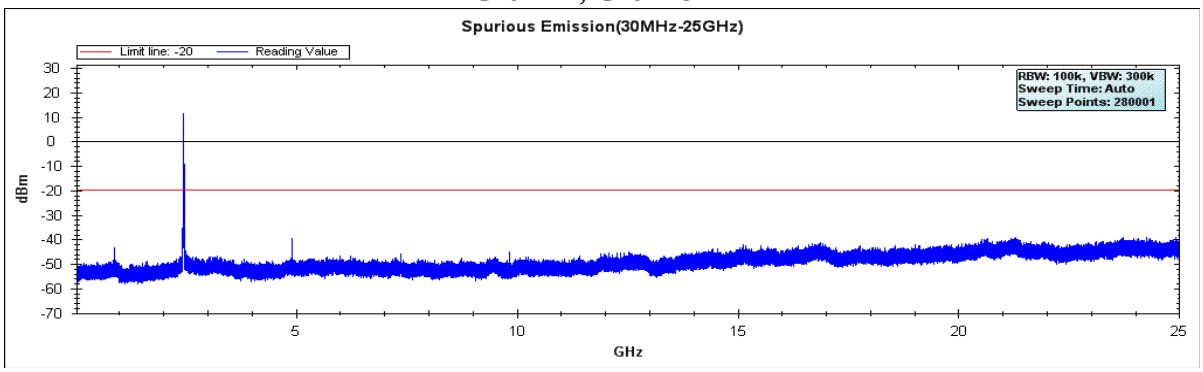


No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2386.285	46.645	37.786	-27.355	74.000	8.859	PK
2		2390.000	41.775	32.967	-32.225	74.000	8.808	PK
3	*	2413.730	91.615	82.131	N/A	N/A	9.483	PK

Chain A, Channel M

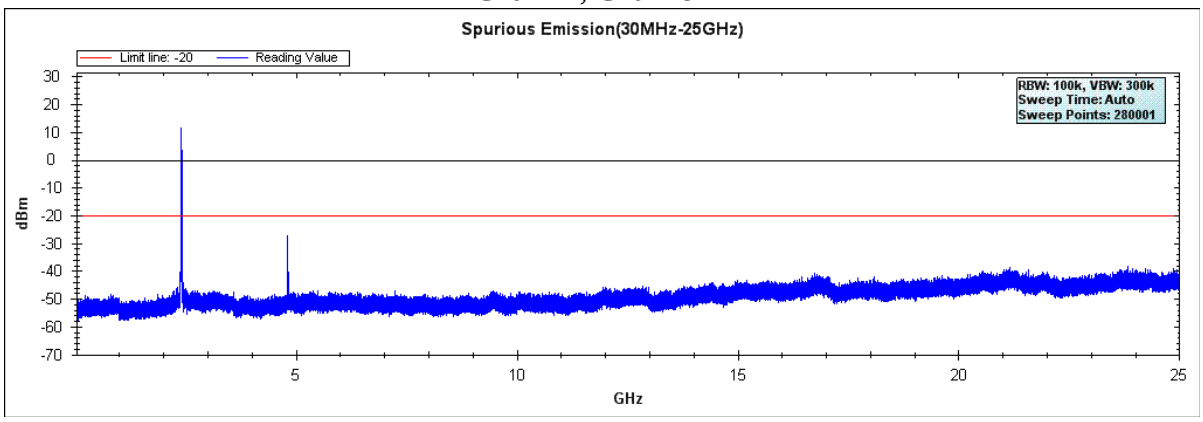


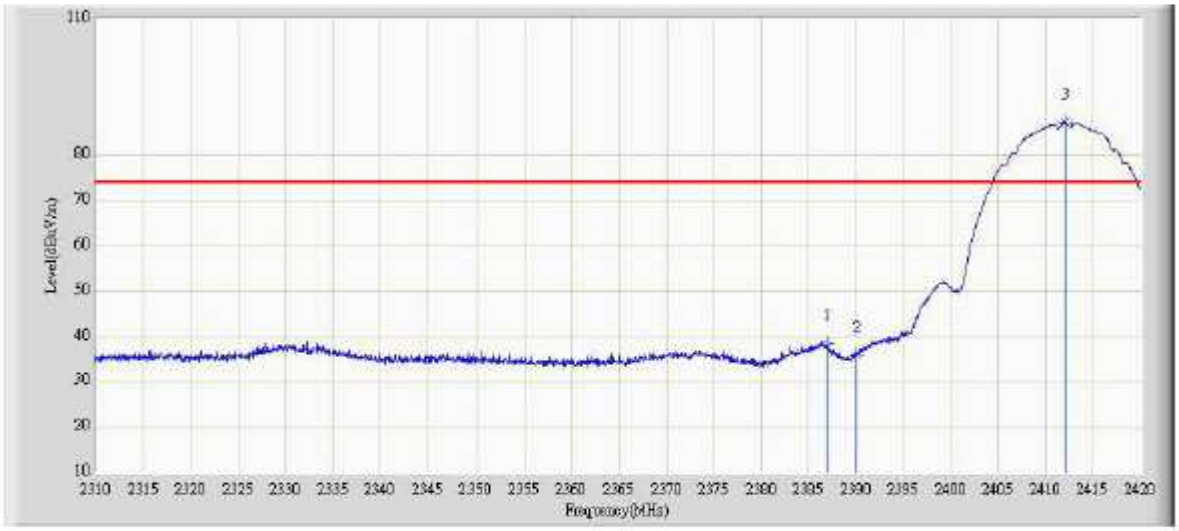
Chain A, Channel H



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2462.025	90.034	80.719	N/A	N/A	9.315	PK
2		2483.500	40.860	31.966	-33.140	74.000	8.894	PK
3		2487.600	42.164	33.351	-31.836	74.000	8.813	PK

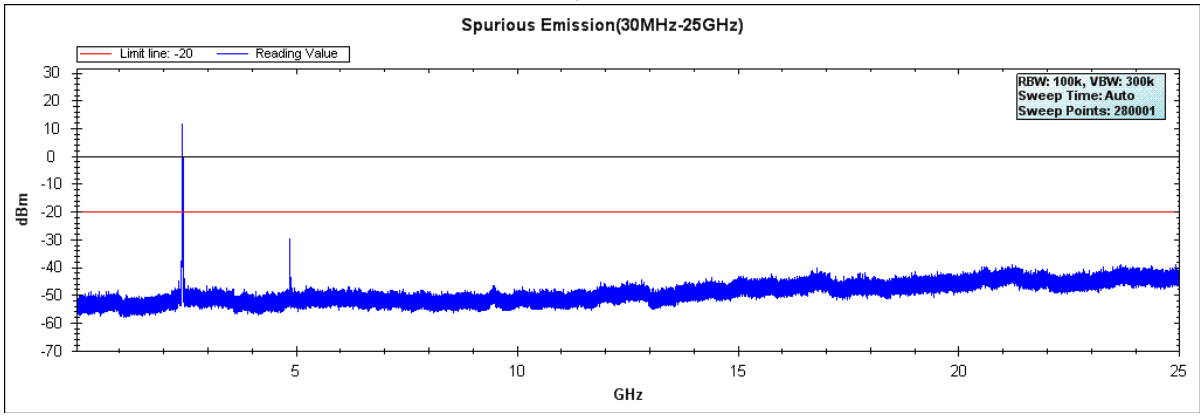
Chain B, Channel L



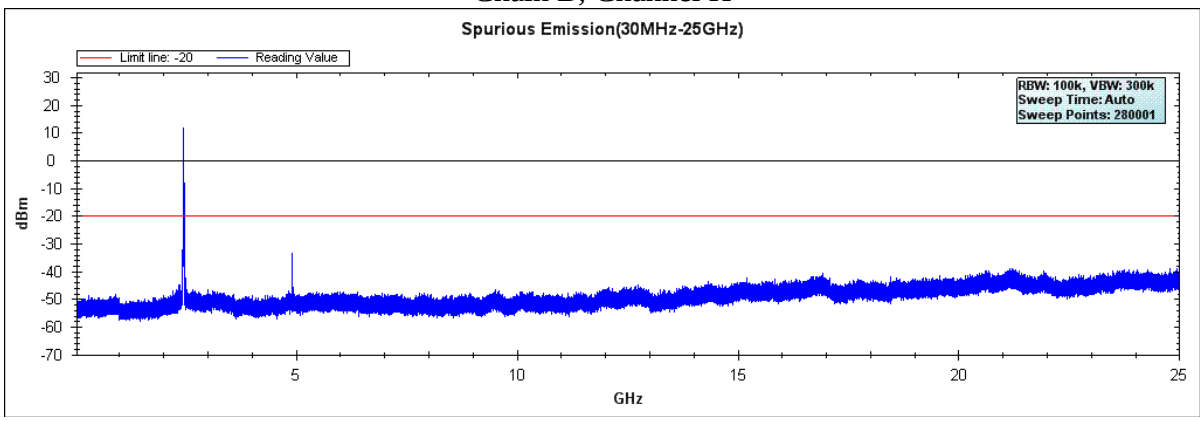


No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2386.835	38.445	29.594	-35.555	74.000	8.851	PK
2		2390.000	35.874	27.066	-38.126	74.000	8.808	PK
3	*	2412.025	87.293	78.412	N/A	N/A	8.881	PK

Chain B, Channel M



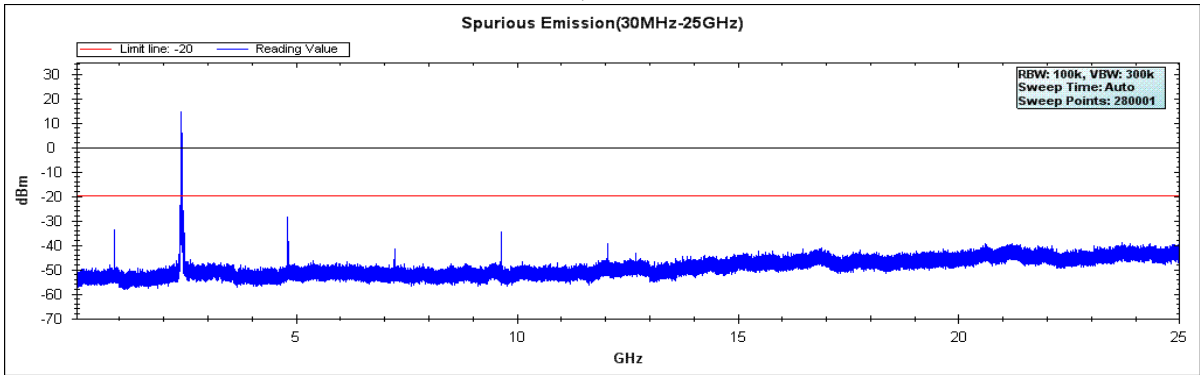
Chain B, Channel H

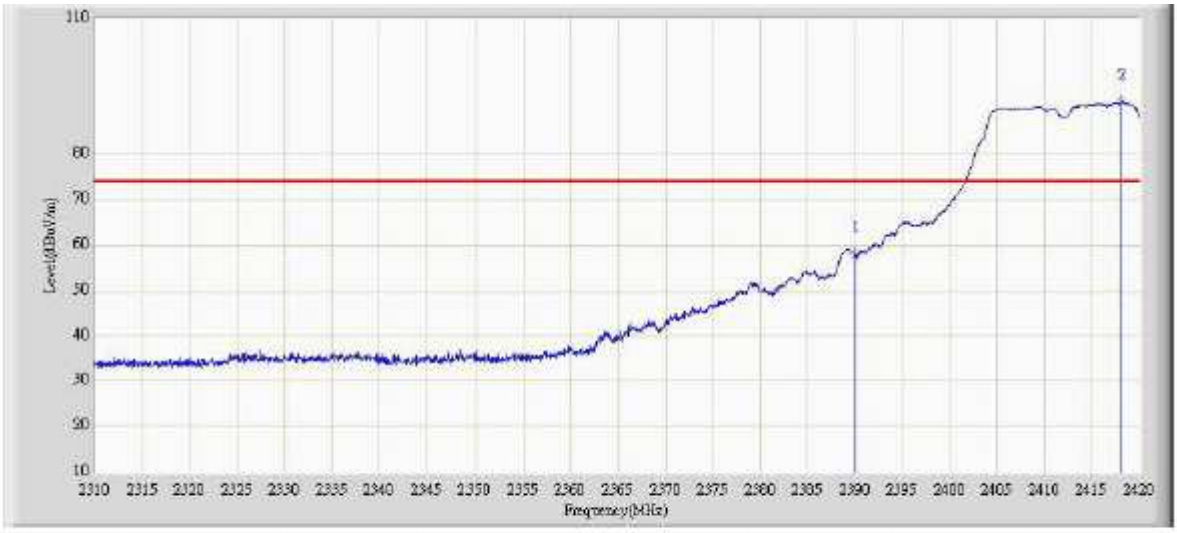


No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2462.100	88.330	79.017	N/A	N/A	9.313	PK
2		2483.500	39.393	30.499	-34.607	74.000	8.894	PK
3		2488.275	42.167	33.367	-31.833	74.000	8.800	PK

Mode	CH	Result		Limit (dB)
		Chain A	Chain B	
802.11g	L	Pass	Pass	≥20
	M	Pass	Pass	
	H	Pass	Pass	

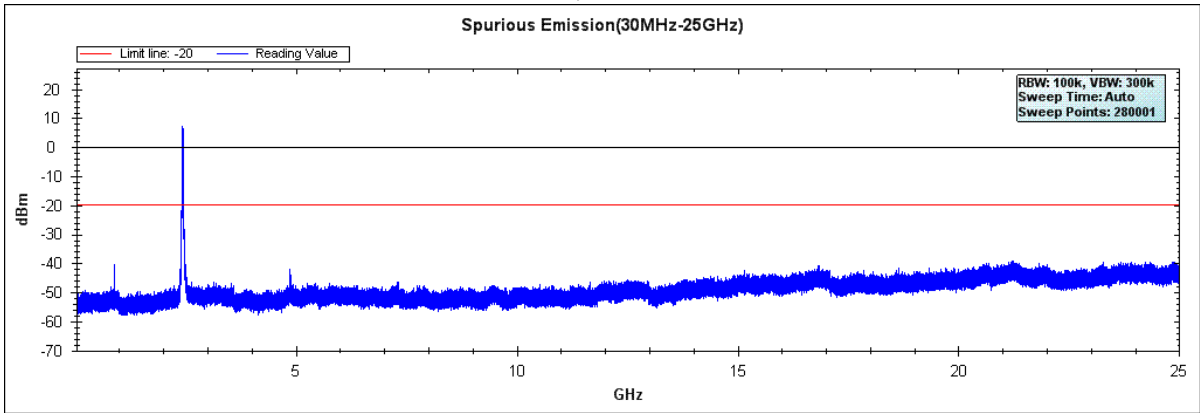
Chain A, Channel L



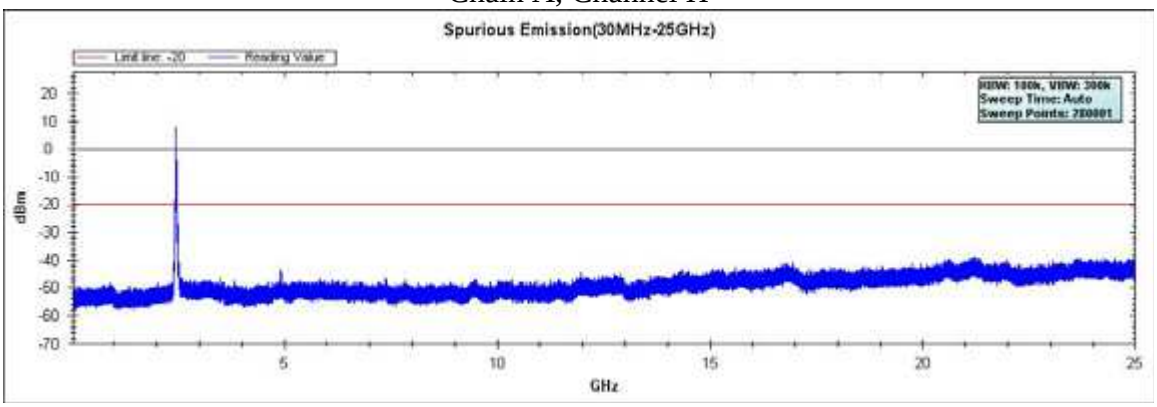


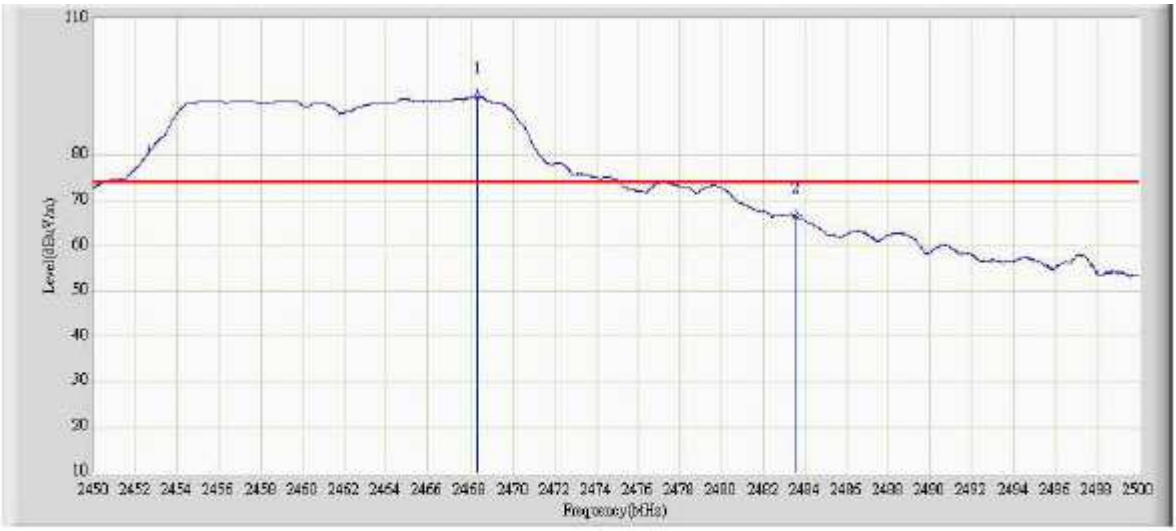
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	57.887	49.079	-16.113	74.000	8.808	PK
2	*	2418.130	91.558	82.570	N/A	N/A	8.988	PK

Chain A, Channel M



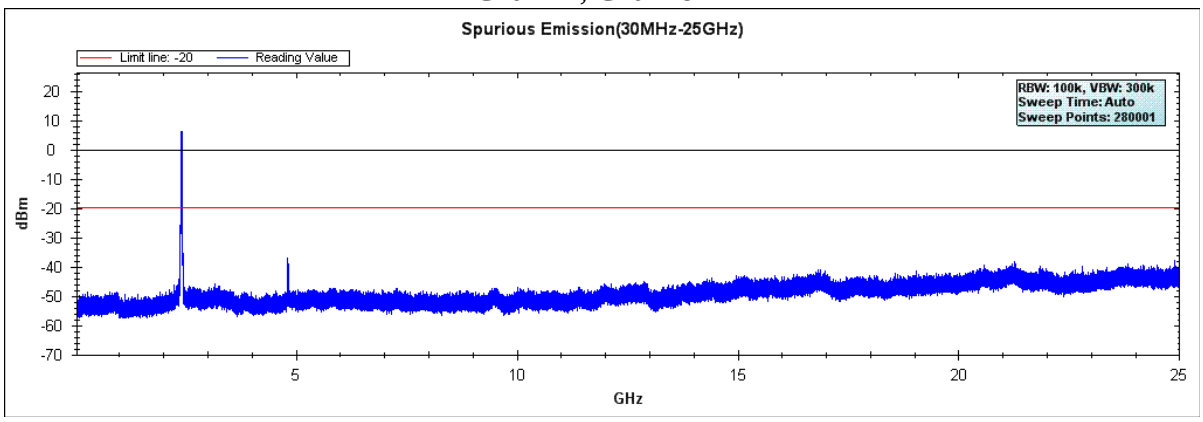
Chain A, Channel H





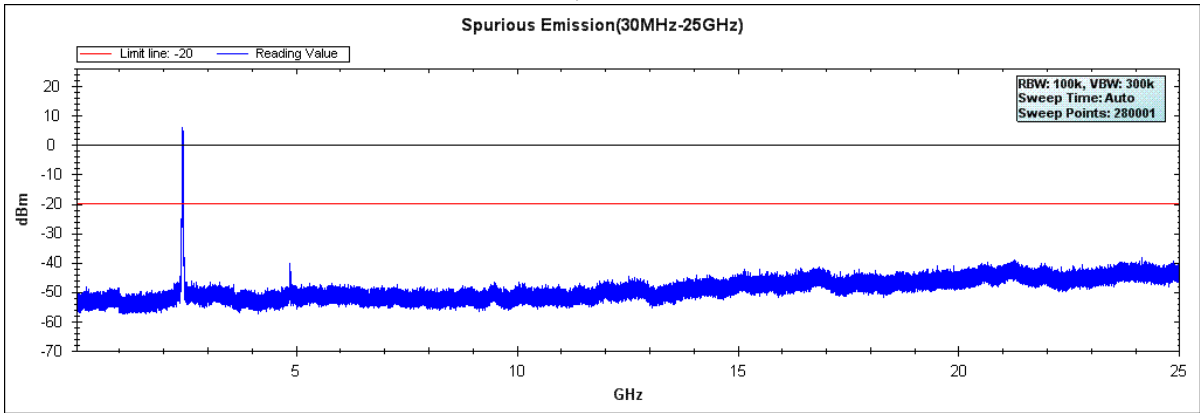
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2468.275	92.946	83.754	N/A	N/A	9.192	PK
2		2483.500	66.528	57.634	-7.472	74.000	8.894	PK

Chain B, Channel L

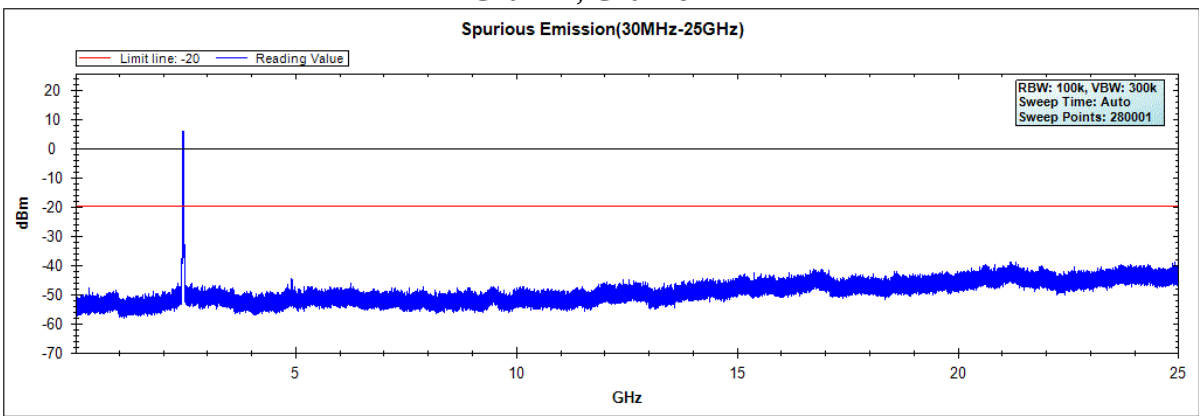


No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	59.188	50.380	-14.812	74.000	8.808	PK
2	*	2418.405	90.782	81.789	N/A	N/A	8.993	PK

Chain B, Channel M



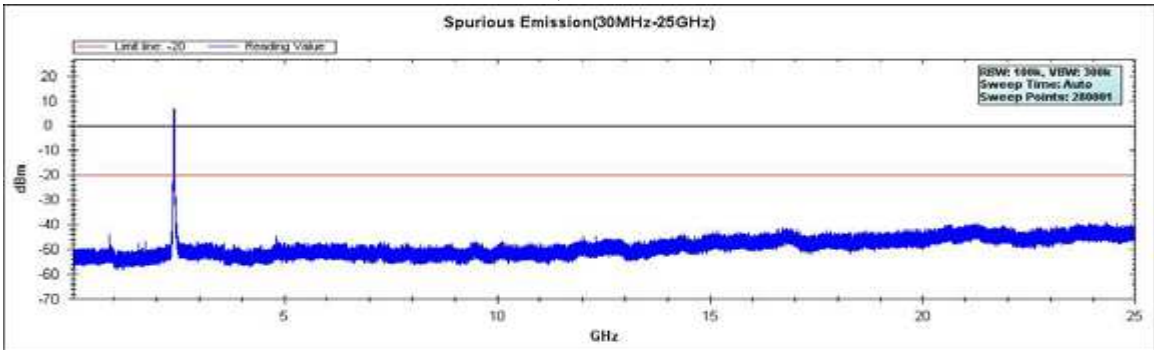
Chain B, Channel H



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2468.150	91.005	81.810	N/A	N/A	9.195	PK
2		2483.500	60.630	51.736	-13.370	74.000	8.894	PK

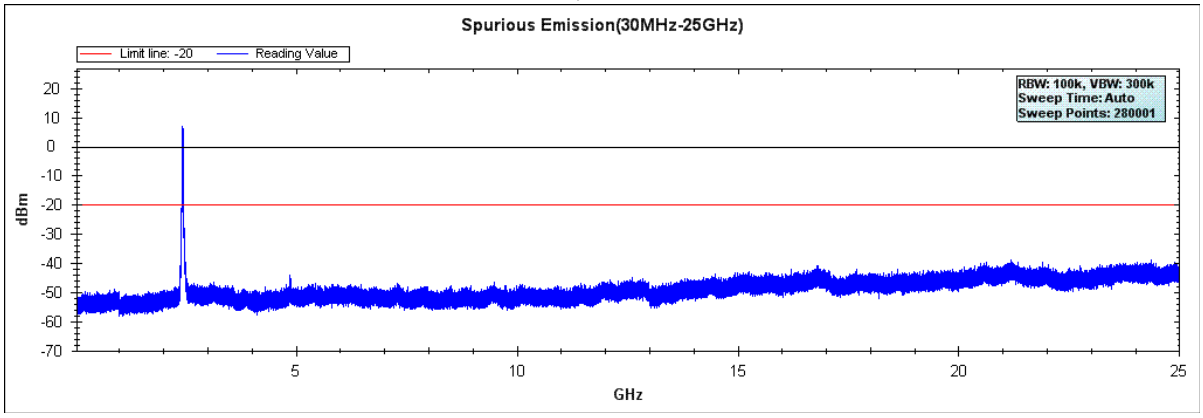
Mode	CH	Result		Limit (dB)
		Chain A	Chain B	
802.11n HT20 (Single Chain)	L	Pass	Pass	≥20
	M	Pass	Pass	
	H	Pass	Pass	

Chain A, Channel L

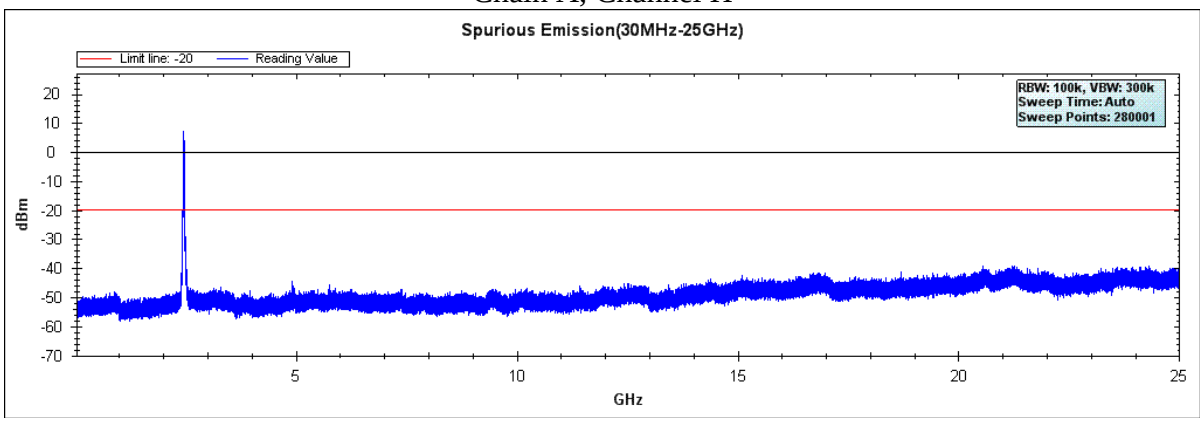


No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	63.009	54.201	-10.991	74.000	8.808	PK
2	*	2417.184	91.056	82.084	N/A	N/A	8.972	PK

Chain A, Channel M

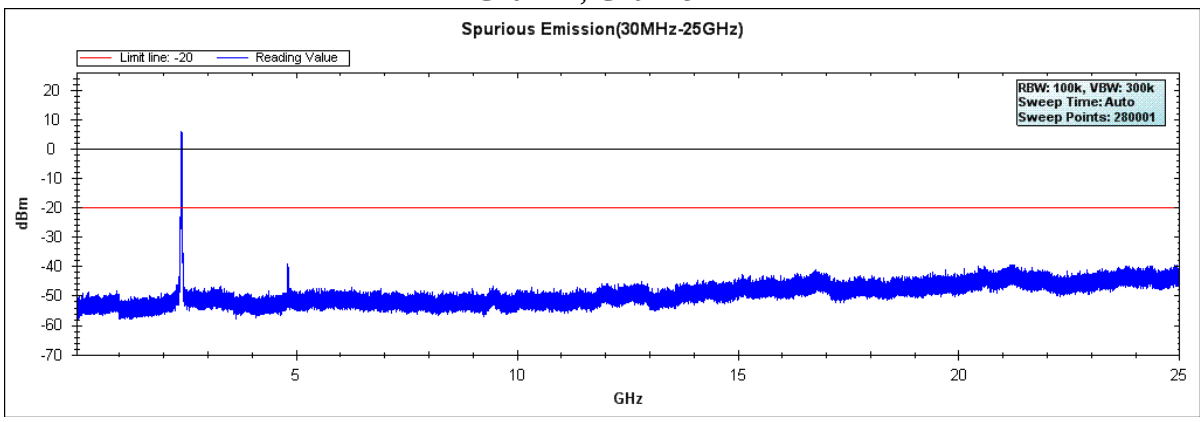


Chain A, Channel H



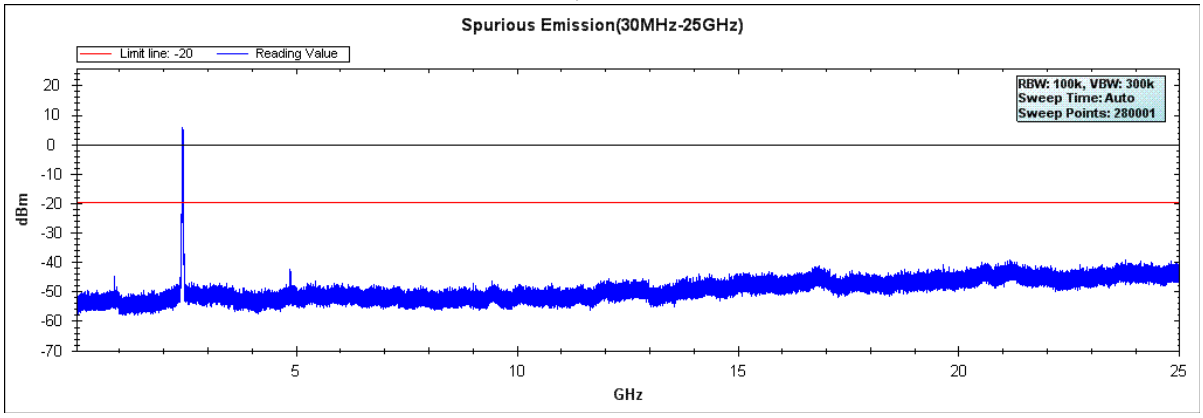
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2466.400	91.888	82.659	N/A	N/A	9.229	PK
2		2483.500	69.366	60.472	-4.634	74.000	8.894	PK

Chain B, Channel L

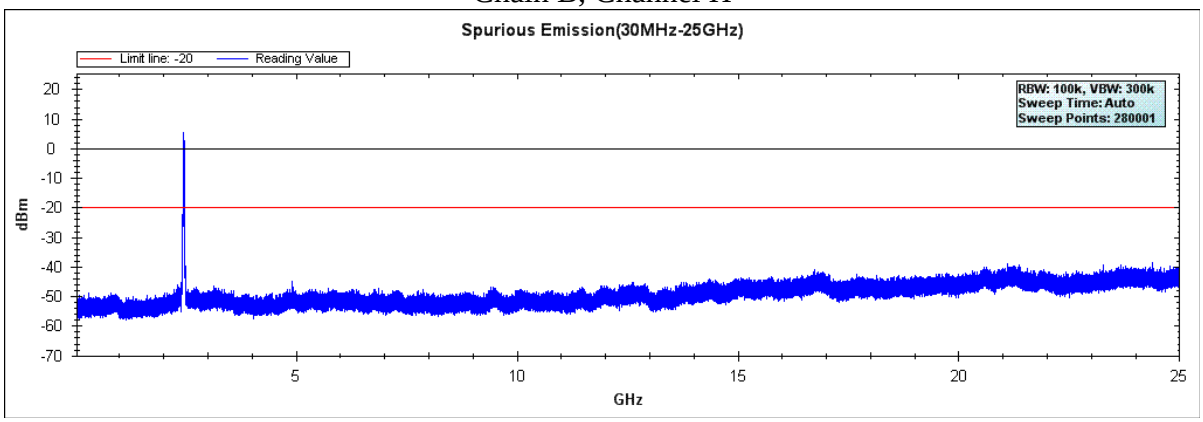


No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	63.734	54.926	-10.266	74.000	8.808	PK
2	*	2416.176	90.004	81.050	N/A	N/A	8.954	PK

Chain B, Channel M



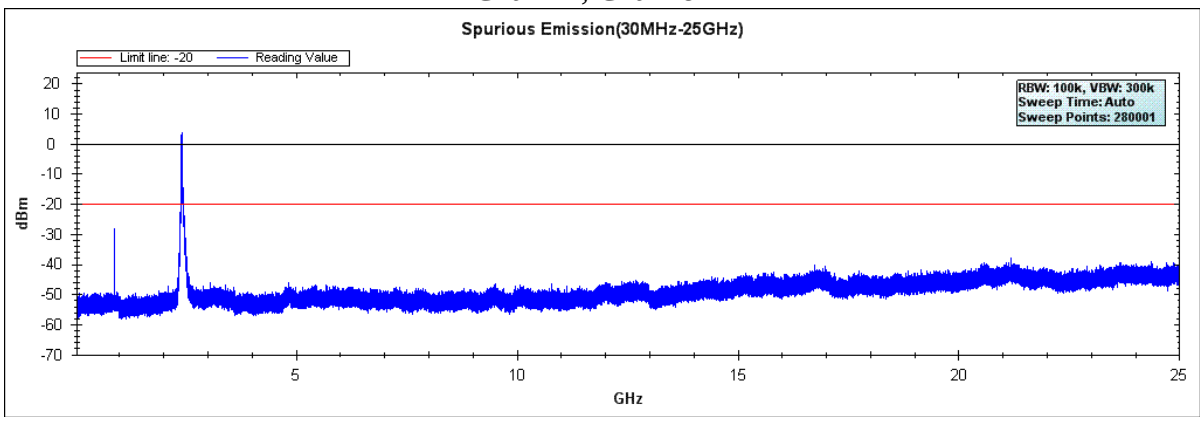
Chain B, Channel H

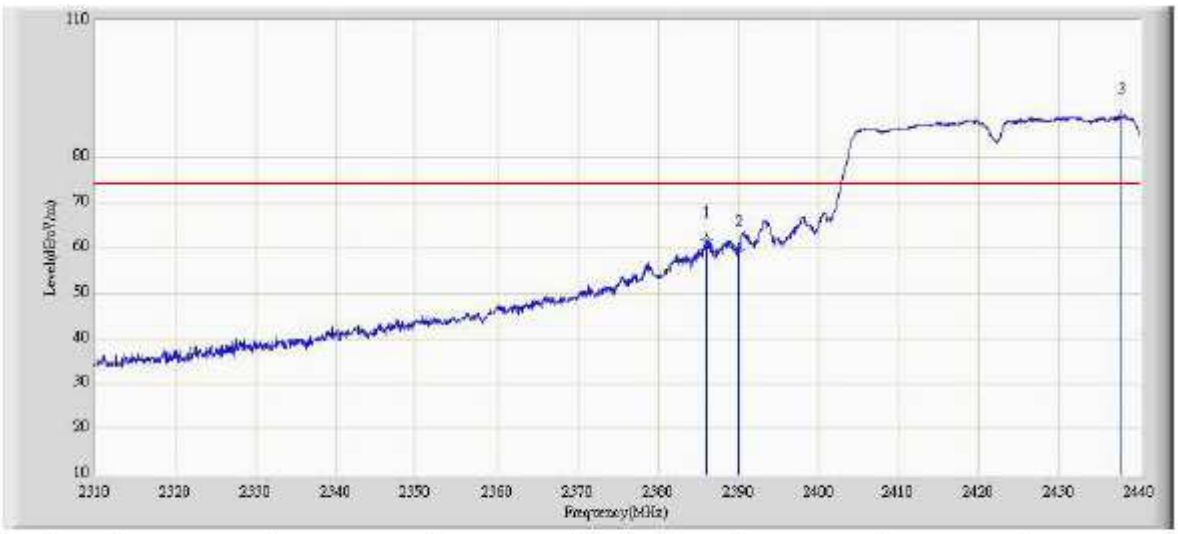


No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2467.575	90.000	80.794	N/A	N/A	9.206	PK
2		2483.500	63.284	54.390	-10.716	74.000	8.894	PK

Mode	CH	Result		Limit (dB)
		Chain A	Chain B	
802.11n HT40 (Single Chain)	L	Pass	Pass	≥20
	M	Pass	Pass	
	H	Pass	Pass	

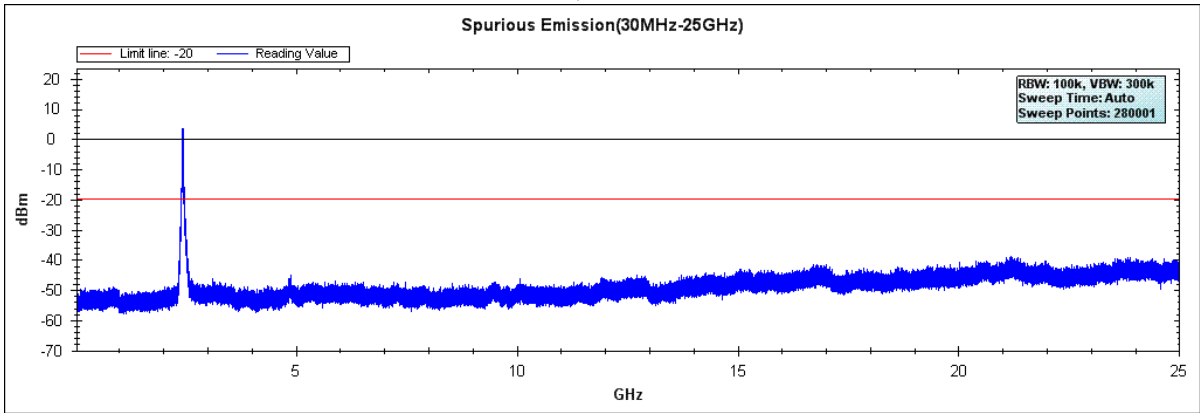
Chain A, Channel L



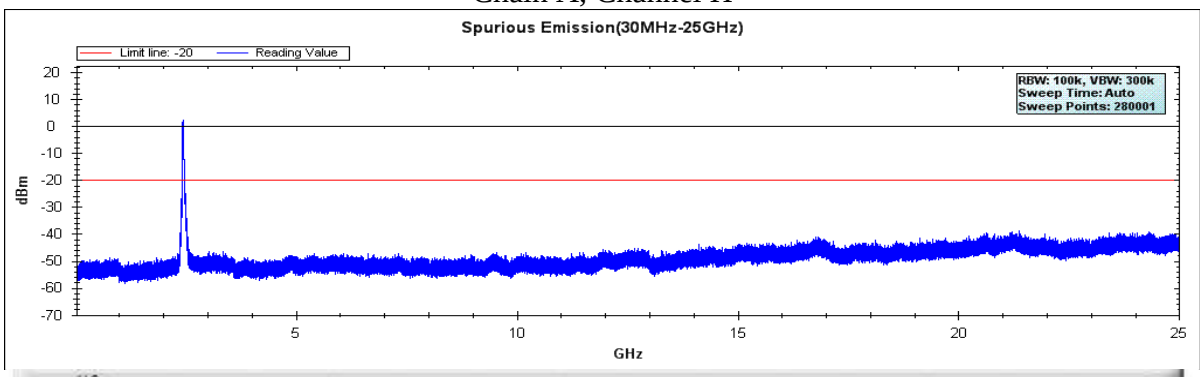


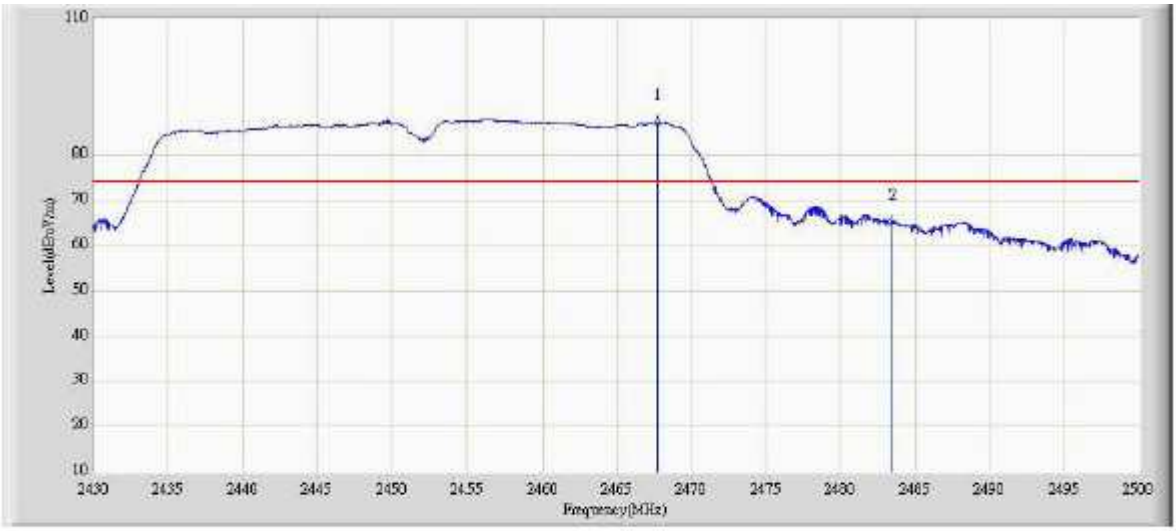
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2386.050	61.613	52.751	-12.387	74.000	8.862	PK
2		2390.000	59.630	50.822	-14.370	74.000	8.808	PK
3	*	2437.725	89.115	79.781	N/A	N/A	9.334	PK

Chain A, Channel M



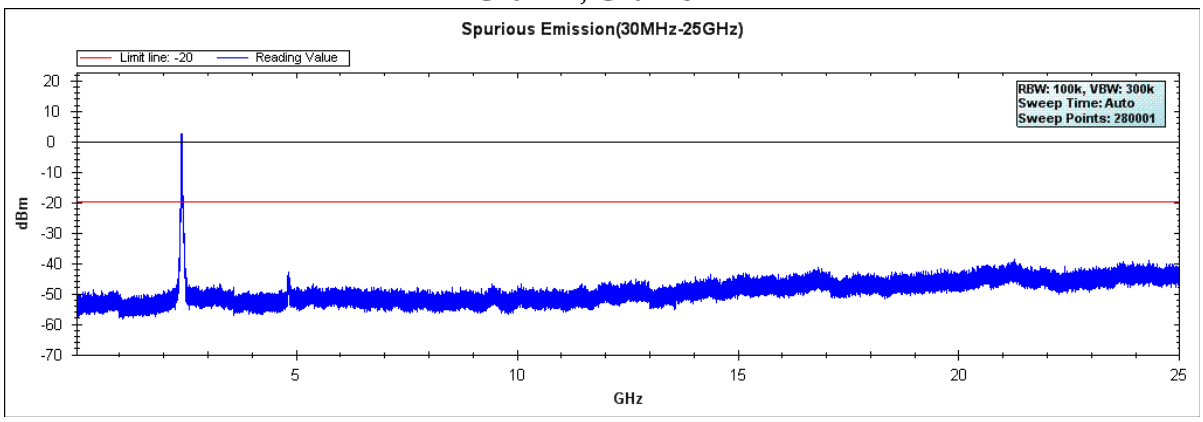
Chain A, Channel H

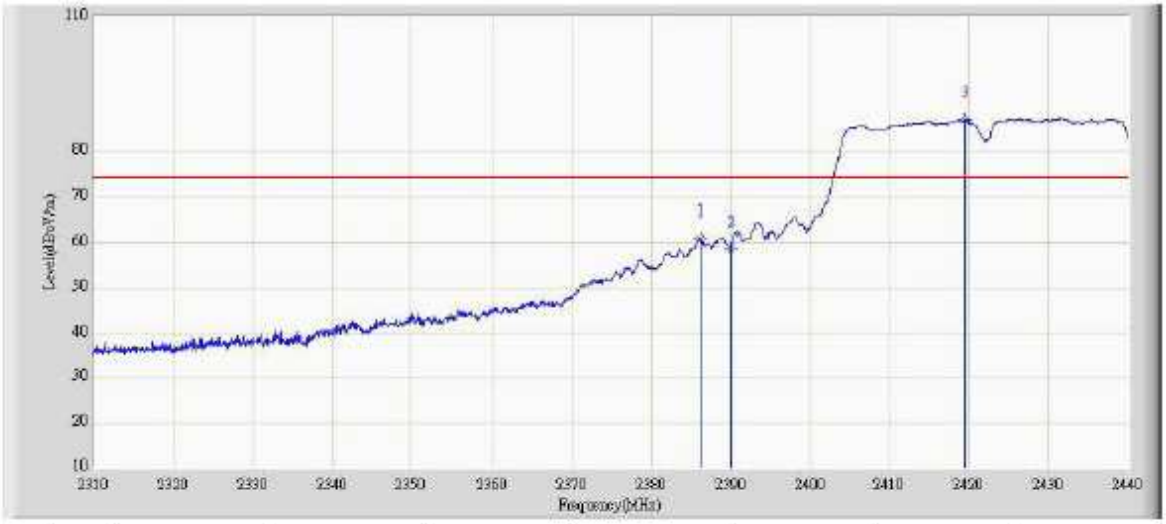




No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2467.660	87.225	78.021	N/A	N/A	9.204	PK
2		2483.500	65.241	56.347	-8.759	74.000	8.894	PK

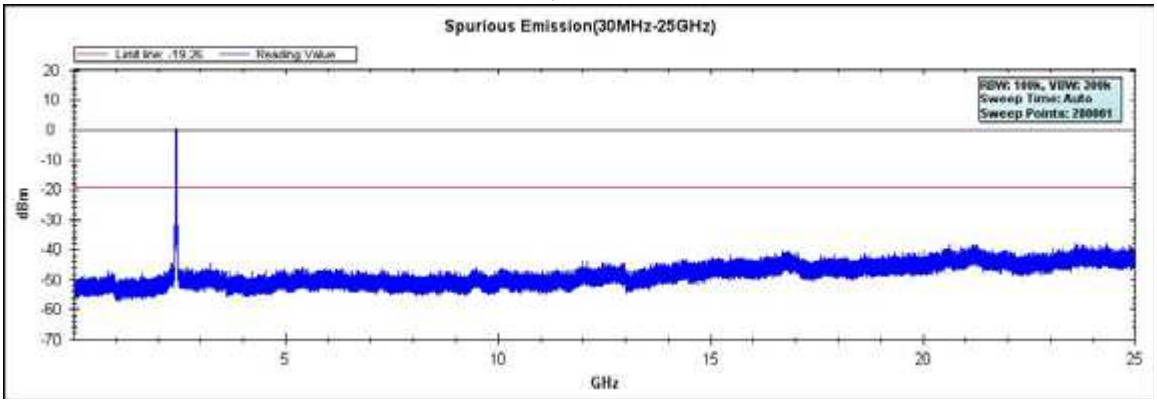
Chain B, Channel L



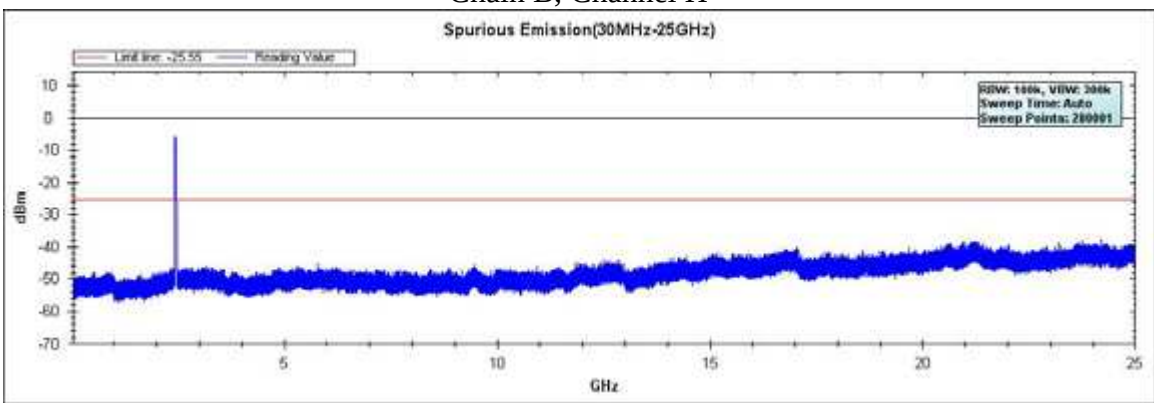


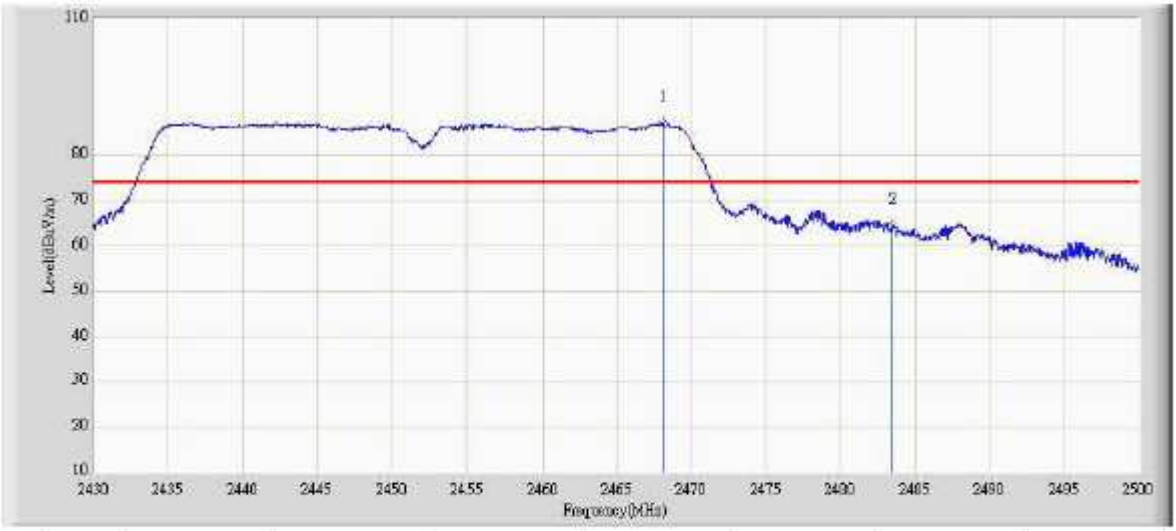
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2386.115	60.825	51.964	-13.175	74.000	8.861	PK
2		2390.000	58.674	49.866	-15.326	74.000	8.808	PK
3	*	2419.460	87.010	77.998	N/A	N/A	9.011	PK

Chain B, Channel M



Chain B, Channel H

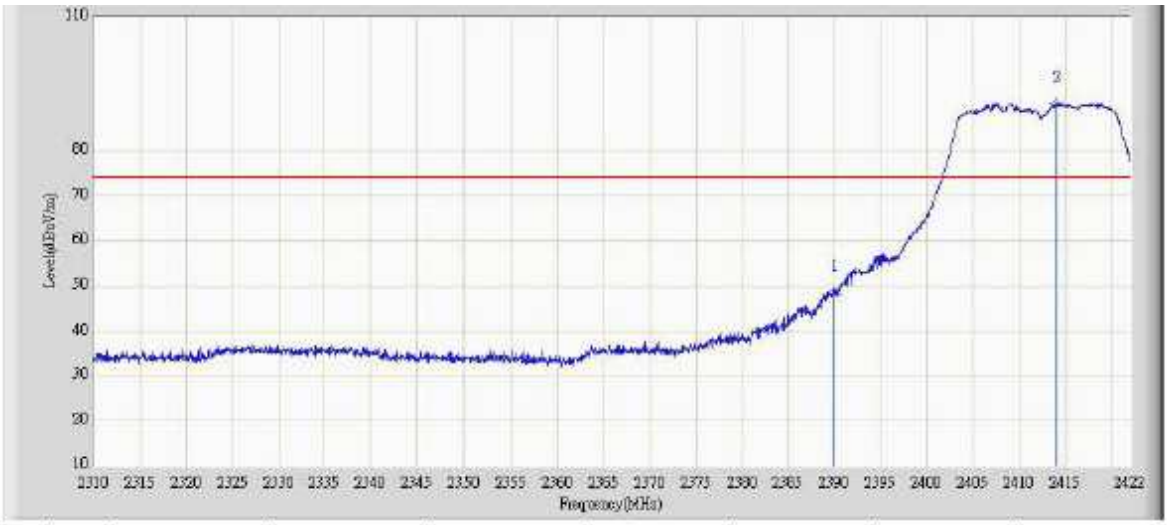




No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2468.080	86.876	77.680	N/A	N/A	9.196	PK
2		2483.500	64.307	55.413	-9.693	74.000	8.894	PK

Mode	CH	Result	Limit (dB)
		Chain A+B	
802.11n HT20 (Dual Chain)	L	Pass	≥20
	H	Pass	

Channel L



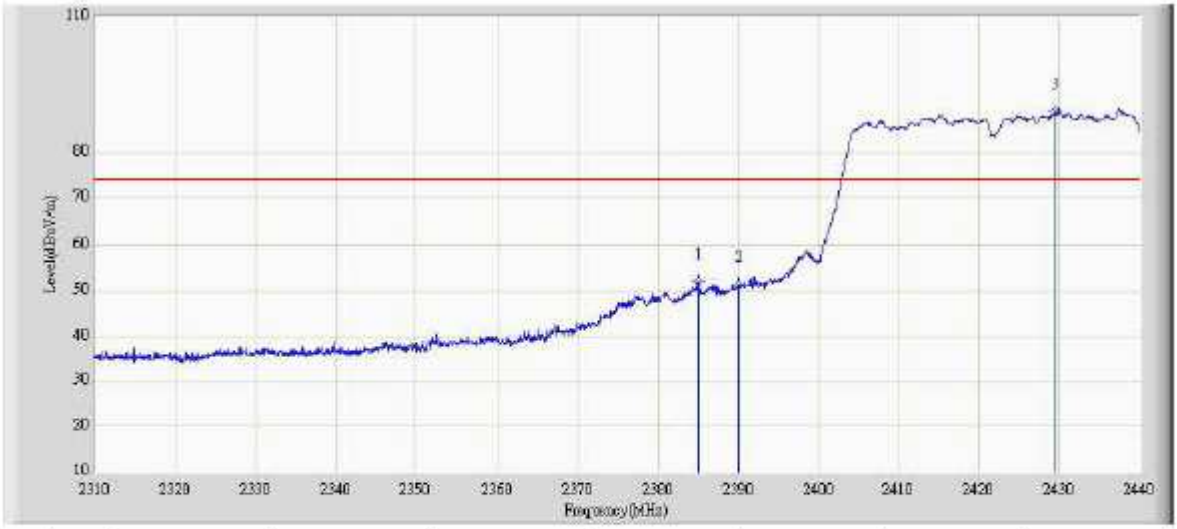
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	48.147	39.339	-25.853	74.000	8.808	PK
2	*	2414.048	90.355	81.438	N/A	N/A	8.916	PK

Channel H

No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2457.400	92.688	83.333	N/A	N/A	9.354	PK
2		2483.500	58.251	49.357	-15.749	74.000	8.894	PK

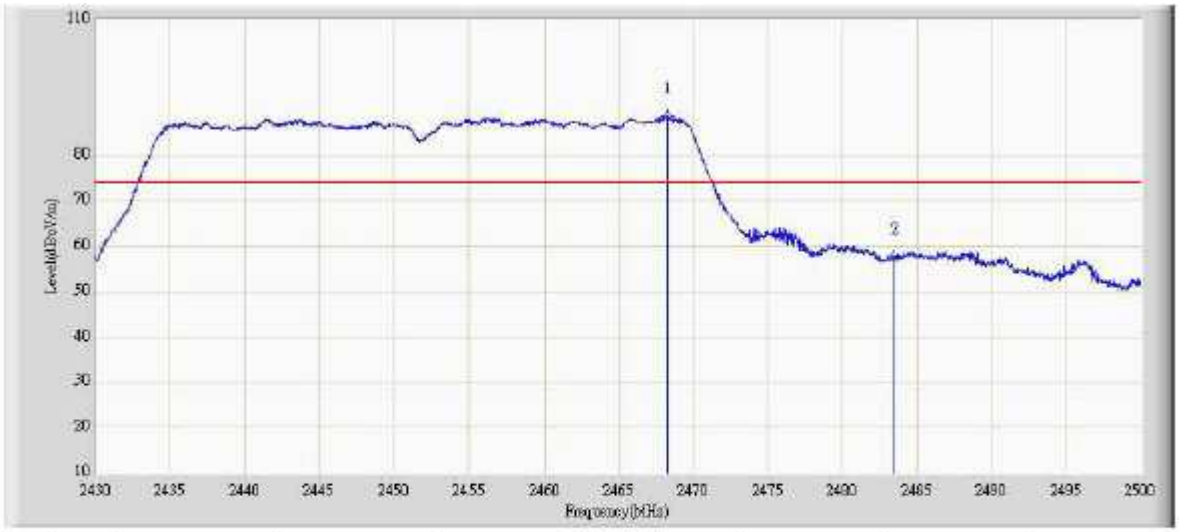
Mode	CH	Result	Limit (dB)
		Chain A+B	
802.11n HT40 (Dual Chain)	L	Pass	≥20
	H	Pass	

Channel L



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2384.945	51.941	43.064	-22.059	74.000	8.877	PK
2		2390.000	51.377	42.569	-22.623	74.000	8.808	PK
3	*	2429.535	89.126	79.937	N/A	N/A	9.189	PK

Channel H



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2468.255	88.734	79.542	N/A	N/A	9.192	PK
2		2483.500	57.753	48.859	-16.247	74.000	8.894	PK

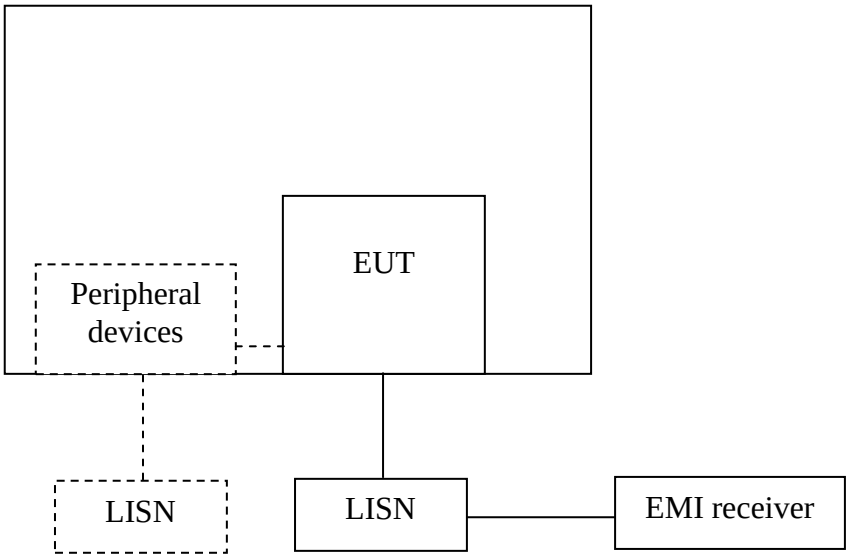
8. Power line conducted emission

Test result: **Pass**

8.1 Limit

Frequency of Emission (MHz)	Conducted Limit (dBuV)	
	QP	AV
0.15-0.5	66 to 56*	56 to 46 *
0.5-5	56	46
5-30	60	50
* Decreases with the logarithm of the frequency.		

8.2 Test configuration



☒ For table top equipment, wooden support is 0.8m height table

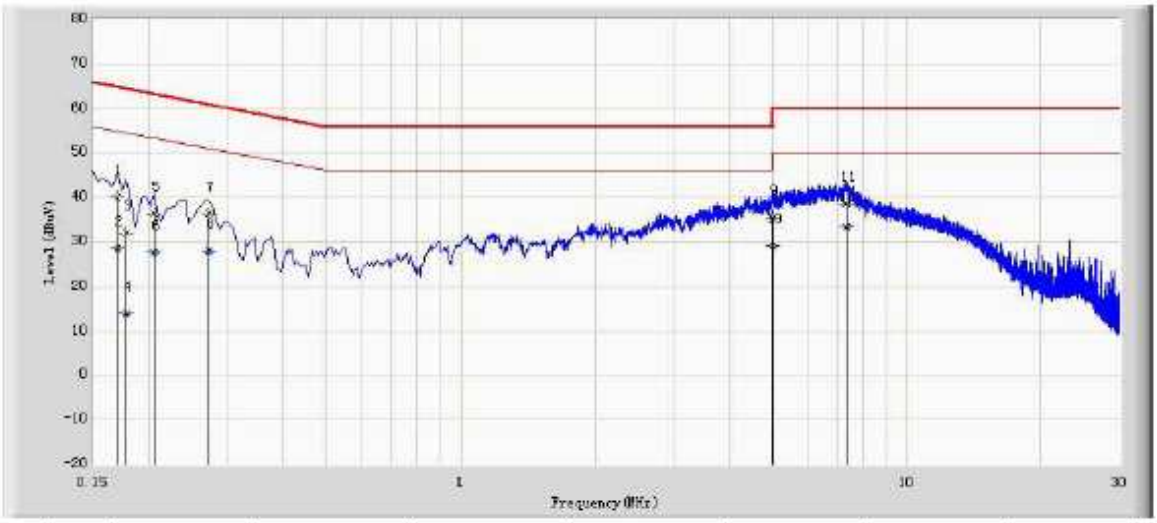
☐ For floor standing equipment, wooden support is 0.1m height rack.

8.3 Test procedure and test set up

The EUT are connected to the main power through a line impedance stabilization network (LISN). This provides a 50Ω/50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50Ω/50uH coupling impedance with 50Ω termination.
Both sides (Line and Neutral) of AC 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 on conducted measurement.
The bandwidth of the test receiver is set at 9 kHz.

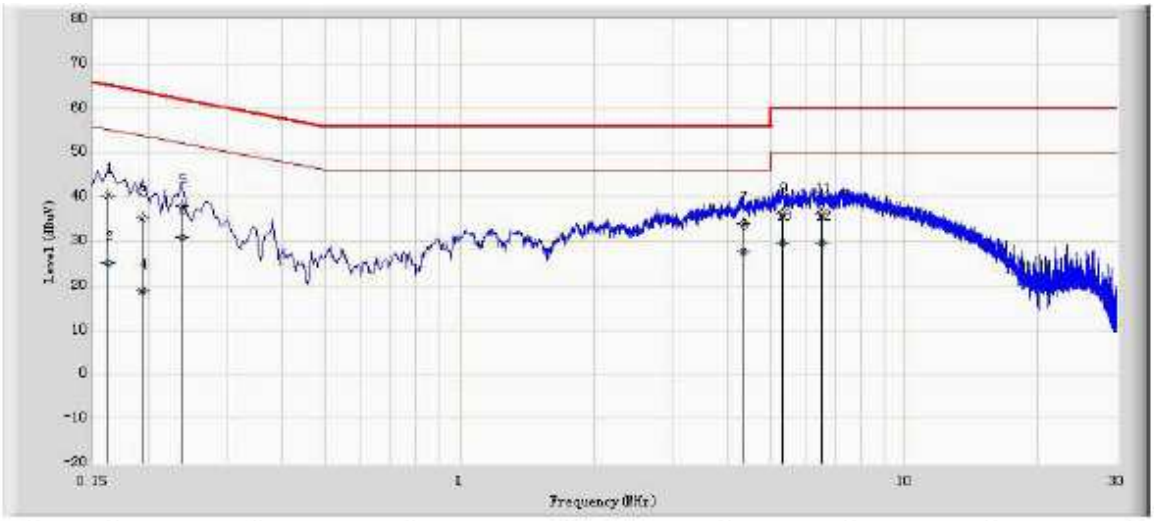
8.4 Test protocol

Line L



No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1		0.170	40.038	30.187	-24.923	64.960	9.851	QP
2		0.170	28.447	18.596	-26.514	54.960	9.851	AV
3		0.178	32.053	22.198	-32.525	64.578	9.855	QP
4		0.178	13.786	3.930	-40.793	54.578	9.855	AV
5		0.206	36.228	26.367	-27.137	63.365	9.861	QP
6		0.206	27.759	17.898	-25.606	53.365	9.861	AV
7		0.274	36.461	26.591	-24.534	60.996	9.870	QP
8		0.274	28.099	18.229	-22.897	50.996	9.870	AV
9		4.994	35.523	25.663	-20.477	56.000	9.860	QP
10		4.994	29.223	19.363	-16.777	46.000	9.860	AV
11		7.338	38.699	28.759	-21.301	60.000	9.940	QP
12	*	7.338	33.565	23.625	-16.435	50.000	9.940	AV

Line N



No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1		0.162	40.287	30.302	-25.074	65.361	9.986	QP
2		0.162	25.029	15.043	-30.332	55.361	9.986	AV
3		0.194	35.061	25.138	-28.802	63.864	9.924	QP
4		0.194	18.726	8.802	-35.138	53.864	9.924	AV
5		0.238	38.119	28.201	-24.047	62.166	9.919	QP
6		0.238	30.781	20.862	-21.385	52.166	9.919	AV
7		4.314	34.163	24.094	-21.837	56.000	10.070	QP
8	*	4.314	27.659	17.590	-18.341	46.000	10.070	AV
9		5.318	36.034	25.910	-23.966	60.000	10.124	QP
10		5.318	29.696	19.572	-20.304	50.000	10.124	AV
11		6.490	36.018	25.821	-23.982	60.000	10.197	QP
12		6.490	29.770	19.573	-20.230	50.000	10.197	AV