FCC Test Report

Product Name	Wireless Access Point
Model No	AP-90M
FCC ID.	AFJ360300

Applicant	ICOM Incorporated
Address	1-1-32 Kamiminami, Hirano-ku, Osaka, 547-0003, Japan

Date of Receipt	Sep. 10, 2014
Issue Date	Feb. 04, 2015
Report No.	1490280R-RFUSP25V00
Report Version	V1.0

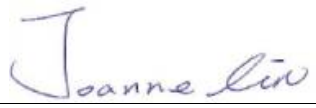
Testing Laboratory
3023

Test Report

Issue Date: Feb. 04, 2015
Report No.: 1490280R-RFUSP25V00

QuieTek

Product Name	Wireless Access Point
Applicant	ICOM Incorporated
Address	1-1-32 Kamiminami, Hirano-ku, Osaka, 547-0003, Japan
Manufacturer	ICOM Incorporated
Model No.	AP-90M
EUT Rated Voltage	AC 100-240V, 50-60Hz
EUT Test Voltage	AC 120V/60Hz
Trade Name	ICOM
Applicable Standard	FCC CFR Title 47 Part 15 Subpart C: 2013 ANSI C63.4: 2009, ANSI C63.10: 2009 KDB 558074 D01 DTS Meas Guidance v03r02
Test Result	Complied

Documented By : 

(Senior Adm. Specialist / Joanne Lin)

Tested By : 

(Engineer / Jack Hsu)

Approved By : 

(Director / Vincent Lin)

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1. GENERAL INFORMATION

1.1. EUT Description

Product Name	Wireless Access Point
Trade Name	ICOM
Model No.	AP-90M
FCC ID.	AFJ360300
Frequency Range	802.11b/g/n-20MHz:2412-2462MHz , 802.11n-40MHz:2422-2452MHz 802.11a/n-20MHz:5745-5825MHz ,802.11n-40MHz:5755-5795MHz 802.11ac-80MHz: 5775MHz
Number of Channels	802.11b/g/n-20MHz: 11, n-40MHz: 7 802.11a/n-20MHz: 5, n-40MHz: 2, ac-80MHz: 1
Data Speed	802.11b: 1-11Mbps, 802.11a/g: 6-54Mbps, 802.11n: up to 300Mbps 802.11ac: up to 866.7Mbps
Channel separation	802.11b/g/n-20MHz: 5 MHz, 802.11a/n-20MHz: 20MHz 802.11n-40MHz: 40MHz, 802.11ac-80MHz: 80MHz
Type of Modulation	802.11b:DSSS, DBPSK, DQPSK, CCK 802.11a/g/n/ac: OFDM, BPSK, QPSK, 16QAM, 64QAM, 256AM
Antenna type	Internal / External: Dipole
Antenna Gain	Refer to the table “Antenna List”
Channel Control	Auto
Power Adapter	MFR: ICOM, M/N: SA142B-12U Input: AC 100-240V~50-60Hz, 1.2A Output: 12V⎓ 3.5A Cable Out: Non-Shielded, 1.8m

Antenna List

No.	Manufacturer	Part No.	Antenna Type	Peak Gain	Note
1	Wistron NeWeb Corp.	3ARNRA001S1	Dipole	1.15dBi for 2.4GHz 3.24dBi for 5.725~5.825GHz	Internal Antenna
2	WHA YU INDUSTRIAL	C1251-510008-A	Dipole	3.00dBi for 2.4GHz 5.00dBi for 5.725~5.825GHz	External Antenna

Note: The antenna connector is Reverse SMA type.

Internal Antenna:

802.11b/g/n-20MHz Center Frequency of Each Channel:

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 01:	2412 MHz	Channel 02:	2417 MHz	Channel 03:	2422 MHz	Channel 04:	2427 MHz
Channel 05:	2432 MHz	Channel 06:	2437 MHz	Channel 07:	2442 MHz	Channel 08:	2447 MHz
Channel 09:	2452 MHz	Channel 10:	2457 MHz	Channel 11:	2462 MHz		

802.11n-40MHz (2.4G Band) Center Working Frequency of Each Channel:

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 3:	2422 MHz	Channel 4:	2427 MHz	Channel 5:	2432 MHz	Channel 6:	2437 MHz
Channel 7:	2442 MHz	Channel 8:	2447 MHz	Channel 9:	2452 MHz		

802.11a/n-20MHz Center Working Frequency of Each Channel:

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 149:	5745 MHz	Channel 153:	5765 MHz	Channel 157:	5785 MHz	Channel 161:	5805 MHz
Channel 165:	5825 MHz						

802.11n-40MHz (5G Band) Center Working Frequency of Each Channel:

Channel	Frequency	Channel	Frequency
Channel 151:	5755 MHz	Channel 159:	5795 MHz

External Antenna:

802.11b/g/n-20MHz Center Frequency of Each Channel:

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 01:	2412 MHz	Channel 02:	2417 MHz	Channel 03:	2422 MHz	Channel 04:	2427 MHz
Channel 05:	2432 MHz	Channel 06:	2437 MHz	Channel 07:	2442 MHz	Channel 08:	2447 MHz
Channel 09:	2452 MHz	Channel 10:	2457 MHz	Channel 11:	2462 MHz		

802.11n-40MHz (2.4G Band) Center Working Frequency of Each Channel:

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 3:	2422 MHz	Channel 4:	2427 MHz	Channel 5:	2432 MHz	Channel 6:	2437 MHz
Channel 7:	2442 MHz	Channel 8:	2447 MHz	Channel 9:	2452 MHz		

802.11a/n-20MHz Center Working Frequency of Each Channel:

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 149:	5745 MHz	Channel 153:	5765 MHz	Channel 157:	5785 MHz	Channel 161:	5805 MHz
Channel 165:	5825 MHz						

802.11n-40MHz (5G Band) Center Working Frequency of Each Channel:

Channel	Frequency	Channel	Frequency
Channel 151:	5755 MHz	Channel 159:	5795 MHz

802.11ac-80MHz Center Working Frequency of Each Channel:

Channel	Frequency
Channel 155:	5775 MHz

Note:

1. This device is a Wireless Access Point with a built-in two WLAN transceivers, Internal Antenna of transceiver support 802.11a/n20/n40, External Antenna of transceiver support 802.11a/n20/n40/ac20/ac40/ac80 technology.
2. Regarding to the operation frequency, the lowest, middle and highest frequency are selected to perform the test.
3. Continuous transmission mode provides a 100% duty cycle to perform the test.
4. Lowest and highest data rates are tested in each mode. Only worst case is shown in the report. (802.11b is 1Mbps、802.11a/g is 6Mbps、802.11n(20M-BW) is 14.4Mbps、802.11n(40M-BW) is 30Mbps and 802.11ac(80M-BW) is 65 Mbps).
5. At result of pretests, module supports dual-channel transmission, only the worst case is shown in the report. (802.11b is chain B (Internal)、802.11b is chain A (External)、802.11g is chain A、802.11a is chain A)
6. These tests are conducted on a sample for the purpose of demonstrating compliance of 802.11a/b/g/n transmitter with Part 15 Subpart C Paragraph 15.247 of spread spectrum devices.
7. The EUT was setup according to ANSI C63.10: 2009 (table height of 1.5 meters was used during radiated emission measurements above 1 GHz instead of a 80 cm table height).

Test Mode:	Mode 1: Transmit - 802.11b 1Mbps
	Mode 2: Transmit - 802.11g 6Mbps
	Mode 3: Transmit - 802.11a 6Mbps
	Mode 4: Transmit - 802.11n-20BW_14.4Mbps(2.4G Band)
	Mode 5: Transmit - 802.11n-40BW_30Mbps(2.4G Band)
	Mode 6: Transmit - 802.11n-20BW_14.4Mbps(5G Band)
	Mode 7: Transmit - 802.11n-40BW_30Mbps(5G Band)
	Mode 8: Transmit - 802.11ac-80BW-65Mbps

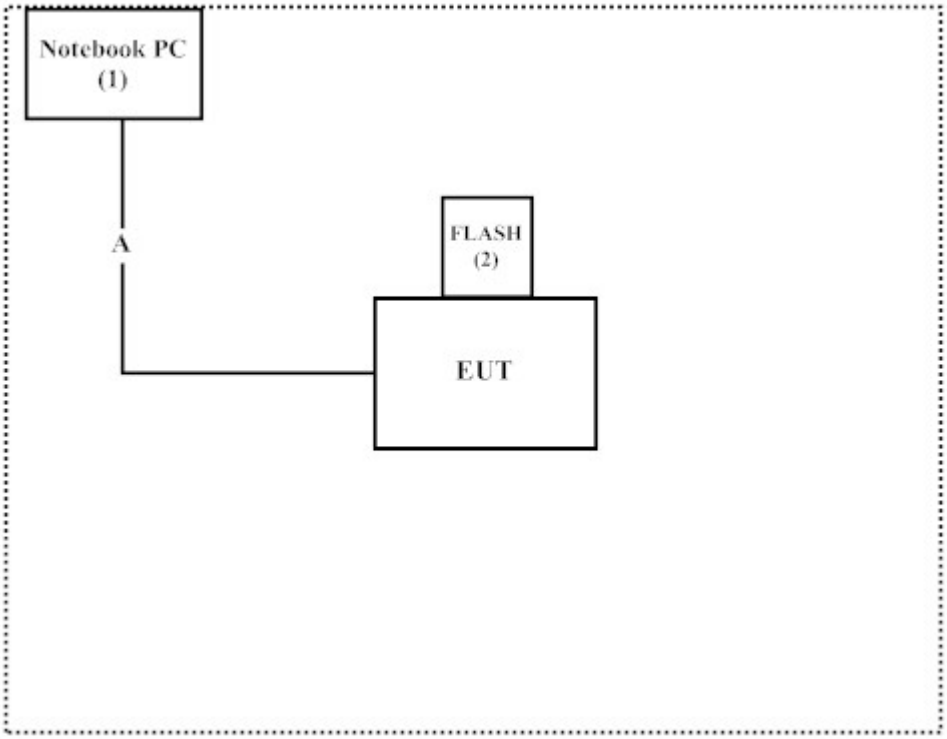
1.3. Tested System Details

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

Product		Manufacturer	Model No.	Serial No.	Power Cord
1	Notebook PC	DELL	PP18L	36119001664	Non-Shielded, 0.8m
2	FLASH	Transcend	JetFlash110	155422-2931	N/A

Signal Cable Type		Signal cable Description
A	LAN Cable	Non-Shielded, 2m

1.4. Configuration of Tested System



1.5. EUT Exercise Software

(1) Setup the EUT as shown on 1.4

(2) Execute “Cmd Tool v1.0.0.3” program on the EUT.

(3) Configure the test mode, the test channel, and the data rate.

(4) Start the continuous transmission.

(5) Verify that the EUT works properly.

1.6. Test Facility

Ambient conditions in the laboratory:

Items	Required (IEC 68-1)	Actual
Temperature (°C)	15-35	20-35
Humidity (%RH)	25-75	50-65
Barometric pressure (mbar)	860-1060	950-1000

The related certificate for our laboratories about the test site and management system can be downloaded from QuieTek Corporation's Web Site : http://www.quietek.com/tw/ctg/cts/accreditations.htm
The address and introduction of QuieTek Corporation's laboratories can be founded in our Web site : http://www.quietek.com/

Site Description: File on
Federal Communications Commission
FCC Engineering Laboratory
7435 Oakland Mills Road
Columbia, MD 21046
Registration Number: 92195

Site Name: Quietek Corporation
Site Address: No.5-22, Ruishukeng Linkou Dist.,
New Taipei City 24451, Taiwan, R.O.C.
TEL: 886-2-8601-3788 / FAX : 886-2-8601-3789
E-Mail : service@quietek.com

FCC Accreditation Number: TW1014

2. Conducted Emission

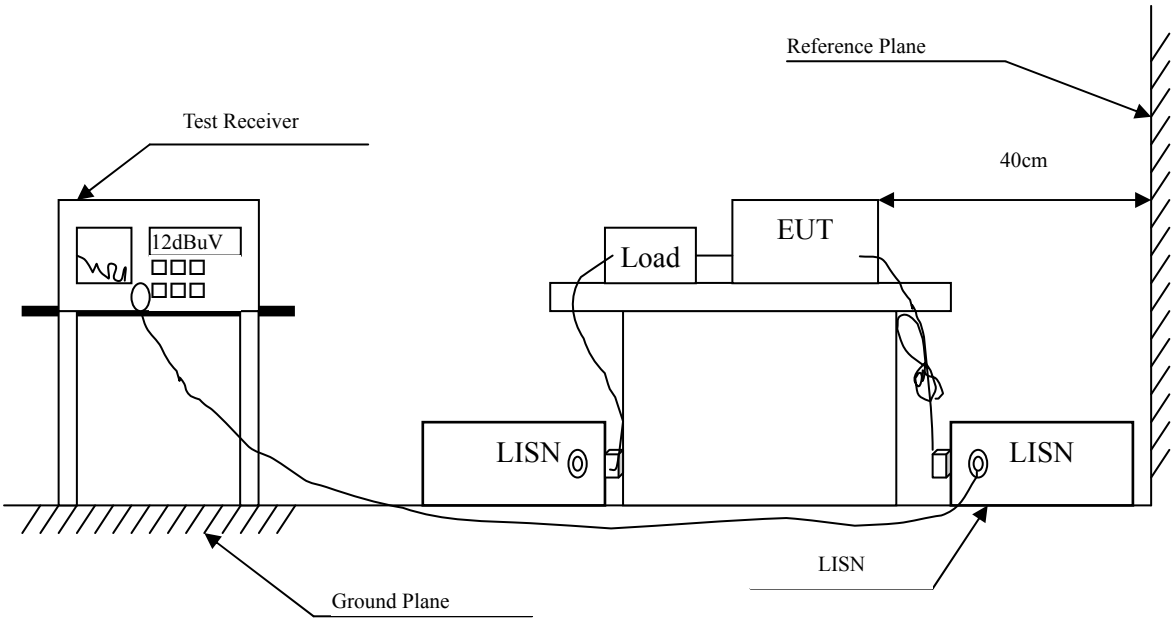
2.1. Test Equipment

	Equipment	Manufacturer	Model No. / Serial No.	Last Cal.	Remark
X	Test Receiver	R & S	ESCS 30 / 825442/018	Sep., 2014	
X	Artificial Mains Network	R & S	ENV4200 / 848411/10	Feb., 2015	Peripherals
X	LISN	R & S	ESH3-Z5 / 825562/002	Feb., 2015	EUT
	DC LISN	Schwarzbeck	8226 / 176	Mar., 2014	EUT
X	Pulse Limiter	R & S	ESH3-Z2 / 357.8810.52	Feb., 2015	
	No.1 Shielded Room				

Note:

1. All equipments are calibrated every one year.
2. The test instruments marked by "X" are used to measure the final test results.

2.2. Test Setup



2.3. Limits

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

2.4. Test Procedure

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 C63.10: 2009 on conducted measurement.
Conducted emissions were invested over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9kHz.

2.5. Uncertainty

± 2.26 dB

2.6. Test Result of Conducted Emission

Product : Wireless Access Point
Test Item : Conducted Emission Test
Power Line : Line 1
Test Mode : Mode 5: Transmit - 802.11n-40BW_30Mbps(2.4G Band) (2437MHz) (Internal Antenna)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV	dB	dBµV
Line 1					
Quasi-Peak					
0.170	9.665	36.380	46.045	-19.384	65.429
0.236	9.662	29.890	39.552	-23.991	63.543
0.306	9.666	31.370	41.036	-20.507	61.543
0.466	9.675	32.470	42.145	-14.826	56.971
0.810	9.694	25.360	35.054	-20.946	56.000
28.486	10.049	21.720	31.769	-28.231	60.000
Average					
0.170	9.665	23.870	33.535	-21.894	55.429
0.236	9.662	21.140	30.802	-22.741	53.543
0.306	9.666	21.320	30.986	-20.557	51.543
0.466	9.675	21.510	31.185	-15.786	46.971
0.810	9.694	14.260	23.954	-22.046	46.000
28.486	10.049	16.090	26.139	-23.861	50.000

Note:

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

Product : Wireless Access Point
Test Item : Conducted Emission Test
Power Line : Line 2
Test Mode : Mode 5: Transmit - 802.11n-40BW_30Mbps(2.4G Band) (2437MHz) (Internal Antenna)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV	dB	dBµV
Line 2					
Quasi-Peak					
0.181	9.662	36.420	46.082	-19.032	65.114
0.224	9.662	28.210	37.872	-26.014	63.886
0.291	9.665	31.050	40.715	-21.256	61.971
0.459	9.675	34.320	43.995	-13.176	57.171
0.841	9.695	25.790	35.485	-20.515	56.000
28.451	10.279	24.620	34.899	-25.101	60.000
Average					
0.181	9.662	31.440	41.102	-14.012	55.114
0.224	9.662	9.280	18.942	-34.944	53.886
0.291	9.665	19.880	29.545	-22.426	51.971
0.459	9.675	22.770	32.445	-14.726	47.171
0.841	9.695	15.100	24.795	-21.205	46.000
28.451	10.279	16.580	26.859	-23.141	50.000

Note:

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

Product : Wireless Access Point
Test Item : Conducted Emission Test
Power Line : Line 1
Test Mode : Mode 7: Transmit - 802.11n-40BW_30Mbps(5G Band) (5755MHz) (Internal Antenna)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV	dB	dBµV
Line 1					
Quasi-Peak					
0.177	9.663	36.560	46.223	-19.006	65.229
0.236	9.662	30.030	39.692	-23.851	63.543
0.310	9.666	30.500	40.166	-21.263	61.429
0.435	9.673	31.180	40.853	-17.004	57.857
1.267	9.719	21.580	31.299	-24.701	56.000
27.955	10.054	21.810	31.864	-28.136	60.000
Average					
0.177	9.663	27.260	36.923	-18.306	55.229
0.236	9.662	18.530	28.192	-25.351	53.543
0.310	9.666	20.390	30.056	-21.373	51.429
0.435	9.673	17.220	26.893	-20.964	47.857
1.267	9.719	11.990	21.709	-24.291	46.000
27.955	10.054	13.080	23.134	-26.866	50.000

Note:

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

Product : Wireless Access Point
Test Item : Conducted Emission Test
Power Line : Line 2
Test Mode : Mode 7: Transmit - 802.11n-40BW_30Mbps(5G Band) (5755MHz) (Internal Antenna)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV	dB	dBµV
Line 2					
Quasi-Peak					
0.181	9.662	36.480	46.142	-18.972	65.114
0.228	9.662	28.400	38.062	-25.709	63.771
0.298	9.666	31.810	41.476	-20.295	61.771
0.463	9.675	34.280	43.955	-13.102	57.057
0.826	9.695	26.230	35.925	-20.075	56.000
28.283	10.277	24.540	34.817	-25.183	60.000
Average					
0.181	9.662	29.490	39.152	-15.962	55.114
0.228	9.662	18.200	27.862	-25.909	53.771
0.298	9.666	23.880	33.546	-18.225	51.771
0.463	9.675	23.880	33.555	-13.502	47.057
0.826	9.695	14.210	23.905	-22.095	46.000
28.283	10.277	16.280	26.557	-23.443	50.000

Note:

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

Product : Wireless Access Point
Test Item : Conducted Emission Test
Power Line : Line 1
Test Mode : Mode 5: Transmit - 802.11n-40BW_30Mbps(2.4G Band) (2437MHz) (External Antenna)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV	dB	dBµV
Line 1					
Quasi-Peak					
0.185	9.661	37.320	46.981	-18.019	65.000
0.302	9.666	32.030	41.696	-19.961	61.657
0.466	9.675	33.700	43.375	-13.596	56.971
0.845	9.696	26.840	36.536	-19.464	56.000
1.310	9.721	23.860	33.581	-22.419	56.000
27.923	10.054	23.090	33.144	-26.856	60.000
Average					
0.185	9.661	18.060	27.721	-27.279	55.000
0.302	9.666	25.370	35.036	-16.621	51.657
0.466	9.675	23.030	32.705	-14.266	46.971
0.845	9.696	16.480	26.176	-19.824	46.000
1.310	9.721	13.430	23.151	-22.849	46.000
27.923	10.054	15.680	25.734	-24.266	50.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. “ “ means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : Wireless Access Point
Test Item : Conducted Emission Test
Power Line : Line 2
Test Mode : Mode 5: Transmit - 802.11n-40BW_30Mbps(2.4G Band) (2437MHz) (External Antenna)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV	dB	dBµV
Line 2					
Quasi-Peak					
0.181	9.662	37.300	46.962	-18.152	65.114
0.236	9.662	31.290	40.952	-22.591	63.543
0.306	9.666	31.990	41.656	-19.887	61.543
0.451	9.674	33.260	42.934	-14.466	57.400
0.830	9.695	25.160	34.855	-21.145	56.000
27.650	10.271	24.760	35.031	-24.969	60.000
Average					
0.181	9.662	25.400	35.062	-20.052	55.114
0.236	9.662	17.830	27.492	-26.051	53.543
0.306	9.666	20.820	30.486	-21.057	51.543
0.451	9.674	19.280	28.954	-18.446	47.400
0.830	9.695	14.800	24.495	-21.505	46.000
27.650	10.271	24.450	34.721	-15.279	50.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. “ “ means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : Wireless Access Point
Test Item : Conducted Emission Test
Power Line : Line 1
Test Mode : Mode 8: Transmit - 802.11ac-80BW-65Mbps (5775MHz) (External Antenna)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV	dB	dBµV
Line 1					
Quasi-Peak					
0.170	9.665	39.450	49.115	-16.314	65.429
0.224	9.662	30.590	40.252	-23.634	63.886
0.295	9.666	31.510	41.176	-20.681	61.857
0.466	9.675	33.860	43.535	-13.436	56.971
0.677	9.686	26.990	36.676	-19.324	56.000
27.978	10.054	22.480	32.534	-27.466	60.000
Average					
0.170	9.665	31.290	40.955	-14.474	55.429
0.224	9.662	15.010	24.672	-29.214	53.886
0.295	9.666	19.710	29.376	-22.481	51.857
0.466	9.675	23.880	33.555	-13.416	46.971
0.677	9.686	17.130	26.816	-19.184	46.000
27.978	10.054	14.260	24.314	-25.686	50.000

Note:

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

Product : Wireless Access Point
Test Item : Conducted Emission Test
Power Line : Line 2
Test Mode : Mode 8: Transmit - 802.11ac-80BW-65Mbps (5775MHz) (External Antenna)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV	dB	dBµV
Line 2					
Quasi-Peak					
0.173	9.664	37.500	47.164	-18.179	65.343
0.298	9.666	31.710	41.376	-20.395	61.771
0.451	9.674	33.460	43.134	-14.266	57.400
0.482	9.676	32.640	42.316	-14.198	56.514
0.826	9.695	25.380	35.075	-20.925	56.000
27.658	10.271	24.560	34.831	-25.169	60.000
Average					
0.173	9.664	24.900	34.564	-20.779	55.343
0.298	9.666	21.800	31.466	-20.305	51.771
0.451	9.674	23.030	32.704	-14.696	47.400
0.451	9.674	19.820	29.494	-17.906	47.400
0.482	9.676	21.500	31.176	-15.338	46.514
0.826	9.695	14.100	23.795	-22.205	46.000
27.658	10.271	21.700	31.971	-18.029	50.000

Note:

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

3. Maximum Conducted Power

3.1. Test Equipment

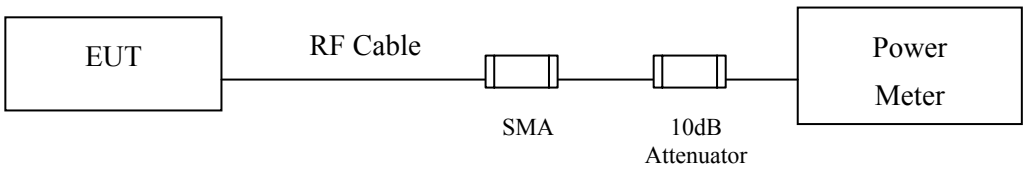
	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
X	Power Meter	Anritsu	ML2495A/6K00003357	May, 2014
X	Power Sensor	Anritsu	MA2411B/0738448	Jun., 2014
	Spectrum Analyzer	R&S	FSP40 / 100170	Jun., 2014
	Spectrum Analyzer	Agilent	E4407B / US39440758	Jun., 2014
X	Spectrum Analyzer	Agilent	N9010A / MY48030495	Apr., 2014

Note:

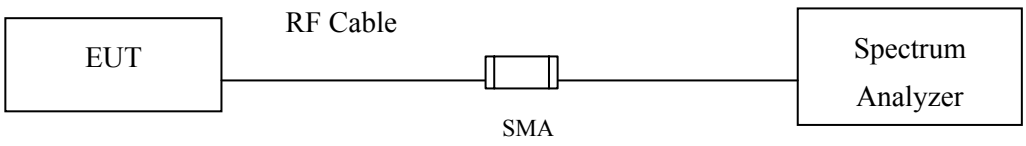
1. All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.
2. The test instruments marked with "X" are used to measure the final test results.

3.2. Test Setup

Conduction Power Measurement (for ≦40 MHz)



Conduction Power Measurement (for 80 MHz)



3.3. Limits

The maximum peak power shall be less 1 Watt.

3.4. Test Procedure

The EUT was tested according to DTS test procedure of KDB 558074 for compliance to FCC 47CFR 15.247 requirements.

BW≦40MHz: The maximum peak conducted output power using KDB 558074 D01 DTS Meas Guidance v03r02 section 9.1.2 PKPM1 Peak power meter method
Note: the power meter have a video bandwidth that is greater than or equal to the measurement bandwidth, (Anritsu/ MA2411B video bandwidth: 50MHz)

BW=80MHz: The maximum average conducted output power using KDB 558074 D01 DTS Meas Guidance v03r02 section 9.2.2.2 Method AVGSA-1, Measurement using a spectrum analyzer (SA) for 802.11ac. (Trace averaging with the EUT transmitting at full power throughout each sweep).

3.5. Uncertainty

Power sensor/meter method: ± 0.517 dB
Spectrum analyzer method: ± 1.27 dB

3.6. Test Result of Maximum Conducted Power

Product : Wireless Access Point
Test Item : Maximum Conducted Power
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit - 802.11b 1Mbps (Internal Antenna)

CHAIN A (Cable loss = 0.5dB)

Channel No	Frequency (MHz)	Peak Power For different Data Rate (Mbps)				Required Limit	Result
		1	2	5.5	11		
		Measurement Level (dBm)					
01	2412	10.41	--	--	--	<30dBm	Pass
06	2437	10.02	--	--	--	<30dBm	Pass
11	2462	11.74	11.54	11.46	11.4	<30dBm	Pass

Note: Peak Power Output Value =Reading value on power meter + cable loss

CHAIN B (Cable loss = 0.5dB)

Channel No	Frequency (MHz)	Peak Power For different Data Rate (Mbps)				Required Limit	Result
		1	2	5.5	11		
		Measurement Level (dBm)					
01	2412	11.56	--	--	--	<30dBm	Pass
06	2437	10.79	--	--	--	<30dBm	Pass
11	2462	11.58	11.37	11.28	11.23	<30dBm	Pass

Note: Peak Power Output Value =Reading value on power meter + cable loss

Product : Wireless Access Point
Test Item : Maximum Conducted Power
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit - 802.11g 6Mbps (Internal Antenna)

CHAIN A (Cable loss = 0.5dB)

Channel No	Frequency (MHz)	Peak Power For different Data Rate (Mbps)								Required Limit	Result
		6	9	12	18	24	36	48	54		
		Measurement Level (dBm)									
01	2412	20.26	--	--	--	--	--	--	--	<30dBm	Pass
06	2437	20.18	--	--	--	--	--	--	--	<30dBm	Pass
11	2462	20.35	20.27	20.25	20.16	19.92	19.79	19.75	19.74	<30dBm	Pass

Note: Peak Power Output Value =Reading value on power meter + cable loss

CHAIN B (Cable loss = 0.5dB)

Channel No	Frequency (MHz)	Peak Power For different Data Rate (Mbps)								Required Limit	Result
		6	9	12	18	24	36	48	54		
		Measurement Level (dBm)									
01	2412	20.59	20.49	20.43	20.35	20.25	20.11	20	19.84	<30dBm	Pass
06	2437	20.21	--	--	--	--	--	--	--	<30dBm	Pass
11	2462	20.3	--	--	--	--	--	--	--	<30dBm	Pass

Note: Peak Power Output Value =Reading value on power meter + cable loss

Product : Wireless Access Point
Test Item : Maximum Conducted Power
Test Site : No.3 OATS
Test Mode : Mode 3: Transmit - 802.11a 6Mbps (Internal Antenna)

CHAIN A (Cable loss =1.5dB)

Channel No	Frequency (MHz)	Peak Power For different Data Rate (Mbps)								Required Limit	Result
		6	9	12	18	24	36	48	54		
		Measurement Level (dBm)									
149	5745	20.33	--	--	--	--	--	--	--	<30dBm	Pass
157	5785	20.61	--	--	--	--	--	--	--	<30dBm	Pass
165	5825	20.65	20.57	20.53	20.49	20.43	20.37	20.34	20.29	<30dBm	Pass

Note: Peak Power Output Value =Reading value on power meter + cable loss

CHAIN B (Cable loss =1.5dB)

Channel No	Frequency (MHz)	Peak Power For different Data Rate (Mbps)								Required Limit	Result
		6	9	12	18	24	36	48	54		
		Measurement Level (dBm)									
149	5745	20.14	--	--	--	--	--	--	--	<30dBm	Pass
157	5785	20.45	20.39	20.38	20.36	20.32	20.28	20.22	20.12	<30dBm	Pass
165	5825	20.44	--	--	--	--	--	--	--	<30dBm	Pass

Note: Peak Power Output Value =Reading value on power meter + cable loss

Product : Wireless Access Point
Test Item : Maximum Conducted Power
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit - 802.11n-20BW_14.4Mbps(2.4G Band) (Internal Antenna)

CHAIN A (Cable loss =0.5dB)

Channel No	Frequency (MHz)	Peak Power For different Data Rate (Mbps)								Required Limit	Result
		14.4	28.9	43.3	57.8	86.7	115.6	130	144.4		
		Measurement Level (dBm)									
01	2412	20.34	20.21	20.16	20.06	20	19.95	19.91	19.84	<30dBm	Pass
06	2437	20.25	--	--	--	--	--	--	--	<30dBm	Pass
11	2462	20.21	--	--	--	--	--	--	--	<30dBm	Pass

Note: Peak Power Output Value =Reading value on power meter + cable loss

CHAIN B (Cable loss =0.5dB)

Channel No	Frequency (MHz)	Peak Power For different Data Rate (Mbps)								Required Limit	Result
		14.4	28.9	43.3	57.8	86.7	115.6	130	144.4		
		Measurement Level (dBm)									
01	2412	20.68	20.58	20.51	20.46	20.37	20.24	20.13	20.03	<30dBm	Pass
06	2437	20.61	--	--	--	--	--	--	--	<30dBm	Pass
11	2462	20.53	--	--	--	--	--	--	--	<30dBm	Pass

Note: Peak Power Output Value =Reading value on power meter + cable loss

CHAIN A+B

Channel	Frequency (MHz)	Data Rata (Mbps)	Chain A Power (dBm)	Chain B Power (dBm)	Chain A+B Power (dBm)	Limit (dBm)	Result
1	2412	14.4	20.34	20.68	23.52	<30dBm	Pass
6	2437	14.4	20.25	20.61	23.44	<30dBm	Pass
11	2462	14.4	20.21	20.53	23.38	<30dBm	Pass

Note: Peak Power Output Value (dBm) = 10*LOG (Chain A (mW)+ Chain B (mW))

Product : Wireless Access Point
Test Item : Maximum Conducted Power
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit - 802.11n-20BW_14.4Mbps(5G Band) (Internal Antenna)

CHAIN A (Cable loss =1.5dB)

Channel No	Frequency (MHz)	Peak Power For different Data Rate (Mbps)								Required Limit	Result
		14.4	28.9	43.3	57.8	86.7	115.6	130	144.4		
		Measurement Level (dBm)									
149	5745	17.96	--	--	--	--	--	--	--	<30dBm	Pass
157	5785	18.37	18.36	18.34	18.29	18.26	18.15	18.05	17.97	<30dBm	Pass
165	5825	17.91	--	--	--	--	--	--	--	<30dBm	Pass

Note: Peak Power Output Value =Reading value on power meter + cable loss

CHAIN B (Cable loss =1.5dB)

Channel No	Frequency (MHz)	Peak Power For different Data Rate (Mbps)								Required Limit	Result
		14.4	28.9	43.3	57.8	86.7	115.6	130	144.4		
		Measurement Level (dBm)									
149	5745	18.66	--	--	--	--	--	--	--	<30dBm	Pass
157	5785	18.67	18.56	18.48	18.4	18.29	18.1	17.94	17.76	<30dBm	Pass
165	5825	18.26	--	--	--	--	--	--	--	<30dBm	Pass

Note: Peak Power Output Value =Reading value on power meter + cable loss

CHAIN A+B

Channel	Frequency (MHz)	Data Rata (Mbps)	Chain A Power (dBm)	Chain B Power (dBm)	Chain A+B Power (dBm)	Limit (dBm)	Result
149	5745	14.4	17.96	18.69	21.35	<30dBm	Pass
157	5785	14.4	18.37	18.67	21.53	<30dBm	Pass
165	5825	14.4	17.91	18.26	21.10	<30dBm	Pass

Note: Peak Power Output Value (dBm) = 10*LOG (Chain A (mW)+ Chain B (mW))

Product : Wireless Access Point
Test Item : Maximum Conducted Power
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit - 802.11n-40BW_30Mbps(2.4G Band) (Internal Antenna)

CHAIN A (Cable loss =0.5dB)

Channel No	Frequency (MHz)	Peak Power For different Data Rate (Mbps)								Required Limit	Result
		30	60	90	120	180	240	270	300		
		Measurement Level (dBm)									
03	2422	18.93	--	--	--	--	--	--	--	<30dBm	Pass
06	2437	18.33	--	--	--	--	--	--	--	<30dBm	Pass
09	2452	18.93	18.91	18.75	18.68	18.45	18.34	18.23	18.1	<30dBm	Pass

Note: Peak Power Output Value =Reading value on power meter + cable loss

CHAIN B (Cable loss =0.5dB)

Channel No	Frequency (MHz)	Peak Power For different Data Rate (Mbps)								Required Limit	Result
		30	60	90	120	180	240	270	300		
		Measurement Level (dBm)									
03	2422	19.23	19.2	19.14	19.07	19.04	18.98	18.86	18.78	<30dBm	Pass
06	2437	18.65	--	--	--	--	--	--	--	<30dBm	Pass
09	2452	19.01	--	--	--	--	--	--	--	<30dBm	Pass

Note: Peak Power Output Value =Reading value on power meter + cable loss

CHAIN A+B

Channel	Frequency (MHz)	Data Rata (Mbps)	Chain A Power (dBm)	Chain B Power (dBm)	Chain A+B Power (dBm)	Limit (dBm)	Result
03	2422	30	18.93	19.23	22.09	<30dBm	Pass
06	2437	30	18.33	18.65	21.50	<30dBm	Pass
09	2452	30	18.93	19.01	21.98	<30dBm	Pass

Note: Peak Power Output Value (dBm) = 10*LOG (Chain A (mW)+ Chain B (mW))

Product : Wireless Access Point
Test Item : Maximum Conducted Power
Test Site : No.3 OATS
Test Mode : Mode 7: Transmit - 802.11n-40BW_30Mbps(5G Band) (Internal Antenna)

CHAIN A (Cable loss =1.5dB)

Channel No	Frequency (MHz)	Peak Power For different Data Rate (Mbps)								Required Limit	Result
		30	60	90	120	180	240	270	300		
		Measurement Level (dBm)									
151	5755	20.19	--	--	--	--	--	--	--	<30dBm	Pass
159	5795	20.19	20.11	20.04	19.97	19.89	19.84	19.78	19.71	<30dBm	Pass

Note: Peak Power Output Value =Reading value on power meter + cable loss

CHAIN B (Cable loss =1.5dB)

Channel No	Frequency (MHz)	Peak Power For different Data Rate (Mbps)								Required Limit	Result
		30	60	90	120	180	240	270	300		
		Measurement Level (dBm)									
151	5755	18.81	--	--	--	--	--	--	--	<30dBm	Pass
159	5795	18.92	18.79	18.71	18.64	18.55	18.48	18.42	18.37	<30dBm	Pass

Note: Peak Power Output Value =Reading value on power meter + cable loss

CHAIN A+B

Channel	Frequency (MHz)	Data Rata (Mbps)	Chain A Power (dBm)	Chain B Power (dBm)	Chain A+B Power (dBm)	Limit (dBm)	Result
151	5755	30	20.19	18.81	22.56	<30dBm	Pass
159	5795	30	20.19	18.92	22.61	<30dBm	Pass

Note: Peak Power Output Value (dBm) = 10*LOG (Chain A (mW)+ Chain B (mW))

Product : Wireless Access Point
Test Item : Maximum Conducted Power
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit - 802.11b 1Mbps (External Antenna)

CHAIN A (Cable loss =0.5dB)

Channel No	Frequency (MHz)	Peak Power For different Data Rate (Mbps)				Required Limit	Result
		1	2	5.5	11		
		Measurement Level (dBm)					
01	2412	16.31	--	--	--	<30dBm	Pass
06	2437	16.68	--	--	--	<30dBm	Pass
11	2462	17.01	16.82	16.65	16.47	<30dBm	Pass

Note: Peak Power Output Value =Reading value on power meter + cable loss

CHAIN B (Cable loss =0.5dB)

Channel No	Frequency (MHz)	Peak Power For different Data Rate (Mbps)				Required Limit	Result
		1	2	5.5	11		
		Measurement Level (dBm)					
01	2412	16.03	15.85	15.72	15.66	<30dBm	Pass
06	2437	15.58	--	--	--	<30dBm	Pass
11	2462	15.77	--	--	--	<30dBm	Pass

Note: Peak Power Output Value =Reading value on power meter + cable loss

Product : Wireless Access Point
Test Item : Maximum Conducted Power
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit - 802.11g 6Mbps (External Antenna)

CHAIN A (Cable loss =0.5dB)

Channel No	Frequency (MHz)	Peak Power For different Data Rate (Mbps)								Required Limit	Result
		6	9	12	18	24	36	48	54		
		Measurement Level (dBm)									
01	2412	20.92	--	--	--	--	--	--	--	<30dBm	Pass
06	2437	21.04	20.74	20.69	20.55	20.31	20.10	19.95	19.74	<30dBm	Pass
11	2462	17.09	--	--	--	--	--	--	--	<30dBm	Pass

Note: Peak Power Output Value =Reading value on power meter + cable loss

CHAIN B (Cable loss =0.5dB)

Channel No	Frequency (MHz)	Peak Power For different Data Rate (Mbps)								Required Limit	Result
		6	9	12	18	24	36	48	54		
		Measurement Level (dBm)									
01	2412	20.55	20.32	20.14	20	19.84	19.45	19.23	19.01	<30dBm	Pass
06	2437	20.32	--	--	--	--	--	--	--	<30dBm	Pass
11	2462	16.74	--	--	--	--	--	--	--	<30dBm	Pass

Note: Peak Power Output Value =Reading value on power meter + cable loss

Product : Wireless Access Point
Test Item : Maximum Conducted Power
Test Site : No.3 OATS
Test Mode : Mode 3: Transmit - 802.11a 6Mbps (External Antenna)

CHAIN A (Cable loss =1.5dB)

Channel No	Frequency (MHz)	Peak Power For different Data Rate (Mbps)								Required Limit	Result
		6	9	12	18	24	36	48	54		
		Measurement Level (dBm)									
149	5745	17.47	--	--	--	--	--	--	--	<30dBm	Pass
157	5785	17.51	17.33	17.02	16.88	16.64	16.43	16.22	16.12	<30dBm	Pass
165	5825	17.41	--	--	--	--	--	--	--	<30dBm	Pass

Note: Peak Power Output Value =Reading value on power meter + cable loss

CHAIN B (Cable loss =1.5dB)

Channel No	Frequency (MHz)	Peak Power For different Data Rate (Mbps)								Required Limit	Result
		6	9	12	18	24	36	48	54		
		Measurement Level (dBm)									
149	5745	17.24	--	--	--	--	--	--	--	<30dBm	Pass
157	5785	17.38	17.17	16.87	16.64	16.41	16.15	16.02	15.88	<30dBm	Pass
165	5825	17.22	--	--	--	--	--	--	--	<30dBm	Pass

Note: Peak Power Output Value =Reading value on power meter + cable loss

Product : Wireless Access Point
Test Item : Maximum Conducted Power
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit - 802.11n-20BW_14.4Mbps(2.4G Band) (External Antenna)

CHAIN A (Cable loss =0.5dB)

Channel No	Frequency (MHz)	Peak Power For different Data Rate (Mbps)								Required Limit	Result
		14.4	28.9	43.3	57.8	86.7	115.6	130	144.4		
		Measurement Level (dBm)									
01	2412	17.96	--	--	--	--	--	--	--	<30dBm	Pass
06	2437	18.2	18.03	17.95	17.75	17.54	17.12	17.02	16.85	<30dBm	Pass
11	2462	15.01	--	--	--	--	--	--	--	<30dBm	Pass

Note: Peak Power Output Value =Reading value on power meter + cable loss

CHAIN B (Cable loss =0.5dB)

Channel No	Frequency (MHz)	Peak Power For different Data Rate (Mbps)								Required Limit	Result
		14.4	28.9	43.3	57.8	86.7	115.6	130	144.4		
		Measurement Level (dBm)									
01	2412	17.35	--	--	--	--	--	--	--	<30dBm	Pass
06	2437	17.38	17.09	16.87	16.61	16.30	16.11	16.05	15.98	<30dBm	Pass
11	2462	14.41	--	--	--	--	--	--	--	<30dBm	Pass

Note: Peak Power Output Value =Reading value on power meter + cable loss

CHAIN A+B

Channel	Frequency (MHz)	Data Rata (Mbps)	Chain A Power (dBm)	Chain B Power (dBm)	Chain A+B Power (dBm)	Limit (dBm)	Result
1	2412	14.4	17.96	17.35	20.68	<30dBm	Pass
6	2437	14.4	18.20	17.38	20.82	<30dBm	Pass
11	2462	14.4	15.01	14.41	17.73	<30dBm	Pass

Note: Peak Power Output Value (dBm) = 10*LOG (Chain A (mW)+ Chain B (mW))

Product : Wireless Access Point
Test Item : Maximum Conducted Power
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit - 802.11n-20BW_14.4Mbps(5G Band) (External Antenna)

CHAIN A (Cable loss =1.5dB)

Channel No	Frequency (MHz)	Peak Power For different Data Rate (Mbps)								Required Limit	Result
		14.4	28.9	43.3	57.8	86.7	115.6	130	144.4		
		Measurement Level (dBm)									
149	5745	15.84	--	--	--	--	--	--	--	<30dBm	Pass
157	5785	16.03	15.99	15.84	15.77	15.71	15.62	15.59	15.54	<30dBm	Pass
165	5825	15.49	--	--	--	--	--	--	--	<30dBm	Pass

Note: Peak Power Output Value =Reading value on power meter + cable loss

CHAIN B (Cable loss =1.5dB)

Channel No	Frequency (MHz)	Peak Power For different Data Rate (Mbps)								Required Limit	Result
		14.4	28.9	43.3	57.8	86.7	115.6	130	144.4		
		Measurement Level (dBm)									
149	5745	17.18	17.02	16.88	16.65	16.59	16.52	16.42	16.31	<30dBm	Pass
157	5785	16.36	--	--	--	--	--	--	--	<30dBm	Pass
165	5825	15.8	--	--	--	--	--	--	--	<30dBm	Pass

Note: Peak Power Output Value =Reading value on power meter + cable loss

CHAIN A+B

Channel	Frequency (MHz)	Data Rata (Mbps)	Chain A Power (dBm)	Chain B Power (dBm)	Chain A+B Power (dBm)	Limit (dBm)	Result
149	5745	14.4	15.84	17.18	19.57	<30dBm	Pass
157	5785	14.4	16.03	16.36	19.21	<30dBm	Pass
165	5825	14.4	15.49	15.80	18.66	<30dBm	Pass

Note: Peak Power Output Value (dBm) = 10*LOG (Chain A (mW)+ Chain B (mW))

Product : Wireless Access Point
Test Item : Maximum Conducted Power
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit - 802.11n-40BW_30Mbps(2.4G Band) (External Antenna)

CHAIN A (Cable loss =0.5dB)

Channel No	Frequency (MHz)	Peak Power For different Data Rate (Mbps)								Required Limit	Result
		30	60	90	120	180	240	270	300		
		Measurement Level (dBm)									
03	2422	15.46	--	--	--	--	--	--	--	<30dBm	Pass
06	2437	15.67	15.44	15.03	14.99	14.84	14.75	14.61	14.42	<30dBm	Pass
09	2452	12.28	--	--	--	--	--	--	--	<30dBm	Pass

Note: Peak Power Output Value =Reading value on power meter + cable loss

CHAIN B (Cable loss =0.5dB)

Channel No	Frequency (MHz)	Peak Power For different Data Rate (Mbps)								Required Limit	Result
		30	60	90	120	180	240	270	300		
		Measurement Level (dBm)									
03	2422	14.93	--	--	--	--	--	--	--	<30dBm	Pass
06	2437	15.08	14.88	14.68	14.42	14.21	13.97	13.77	13.52	<30dBm	Pass
09	2452	12.01	--	--	--	--	--	--	--	<30dBm	Pass

Note: Peak Power Output Value =Reading value on power meter + cable loss

CHAIN A+B

Channel	Frequency (MHz)	Data Rata (Mbps)	Chain A Power (dBm)	Chain B Power (dBm)	Chain A+B Power (dBm)	Limit (dBm)	Result
03	2422	30	15.46	14.93	18.21	<30dBm	Pass
06	2437	30	15.67	15.08	18.40	<30dBm	Pass
09	2452	30	12.28	12.01	15.16	<30dBm	Pass

Note: Peak Power Output Value (dBm) = 10*LOG (Chain A (mW)+ Chain B (mW))

Product : Wireless Access Point
Test Item : Maximum Conducted Power
Test Site : No.3 OATS
Test Mode : Mode 7: Transmit - 802.11n-40BW_30Mbps(5G Band) (External Antenna)

CHAIN A (Cable loss =1.5dB)

Channel No	Frequency (MHz)	Peak Power For different Data Rate (Mbps)								Required Limit	Result
		30	60	90	120	180	240	270	300		
		Measurement Level (dBm)									
151	5755	18.65	--	--	--	--	--	--	--	<30dBm	Pass
159	5795	18.95	18.65	18.46	18.26	18.12	17.99	18.91	17.88	<30dBm	Pass

Note: Peak Power Output Value =Reading value on power meter + cable loss

CHAIN B (Cable loss =1.5dB)

Channel No	Frequency (MHz)	Peak Power For different Data Rate (Mbps)								Required Limit	Result
		30	60	90	120	180	240	270	300		
		Measurement Level (dBm)									
151	5755	19.35	19.02	18.74	18.52	18.21	17.95	17.74	17.55	<30dBm	Pass
159	5795	19.08	--	--	--	--	--	--	--	<30dBm	Pass

Note: Peak Power Output Value =Reading value on power meter + cable loss

CHAIN A+B

Channel	Frequency (MHz)	Data Rata (Mbps)	Chain A Power (dBm)	Chain B Power (dBm)	Chain A+B Power (dBm)	Limit (dBm)	Result
151	5755	30	18.65	19.35	22.02	<30dBm	Pass
159	5795	30	18.95	19.08	22.03	<30dBm	Pass

Note: Peak Power Output Value (dBm) = 10*LOG (Chain A (mW)+ Chain B (mW))

Product : Wireless Access Point
Test Item : Maximum conducted output power
Test Site : No.3 OATS
Test Mode : Mode 8: Transmit - 802.11ac-80BW-65Mbps (External Antenna)

CHAIN A

Cable loss=1dB		Maximum conducted output power										
Channel No	Frequency (MHz)	Data Rate (Mbps)										Peak Power
		VTH0	VTH1	VTH2	VTH3	VTH4	VTH5	VTH6	VTH7	VTH8	VTH9	
155	5775	10.18	10.06	9.94	9.88	9.72	9.58	9.41	9.34	9.22	9.16	<30dBm

Note: Maximum conducted output power Value =Reading average value on Spectrum Analyzer.

CHAIN B

Cable loss=1dB		Maximum conducted output power										
Channel No	Frequency (MHz)	Data Rate (Mbps)										Required Limit
		VTH0	VTH1	VTH2	VTH3	VTH4	VTH5	VTH6	VTH7	VTH8	VTH9	
155	5775	9.9	9.4	8.6	8.42	7.88	7.42	6.91	6.4	5.82	5.42	<30dBm

Note: Maximum conducted output power Value =Reading average value on Spectrum Analyzer.

Maximum conducted output power Measurement:
(CHAIN A+ B)

Channel Number	Frequency	Chain A Power	Chain B Power	Output Power	Output Power Limit
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)
155	5775	10.18	9.90	13.05	30

Note: Output Power (dBm) = 10LOG (Chain A Power (mW)+ Chain B Power (mW))

Figure Channel 155: (Chain A)

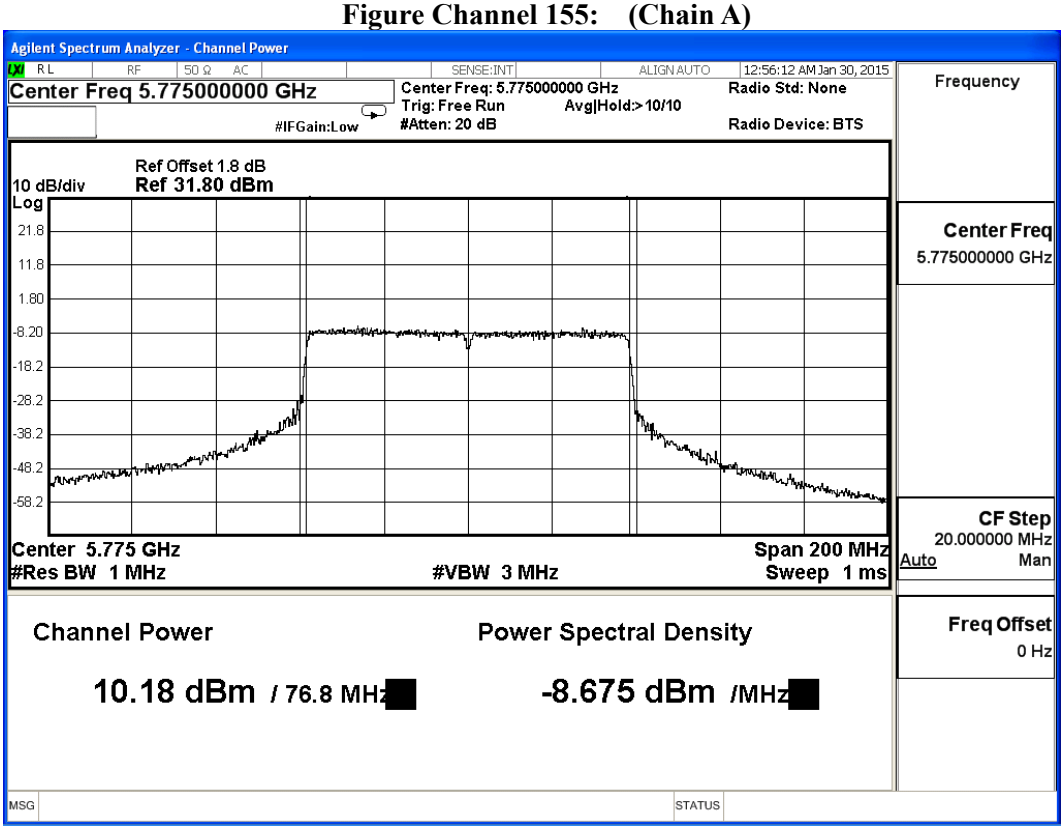
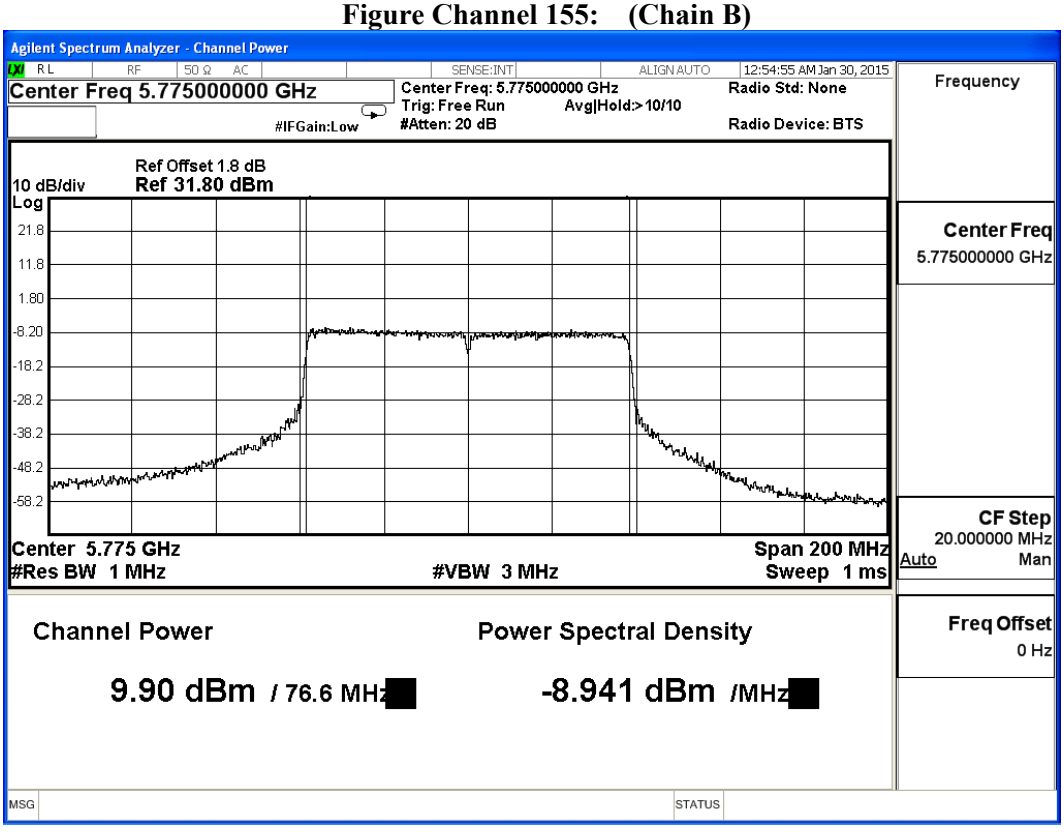


Figure Channel 155: (Chain B)



4. Radiated Emission

4.1. Test Equipment

The following test equipments are used during the radiated emission test:

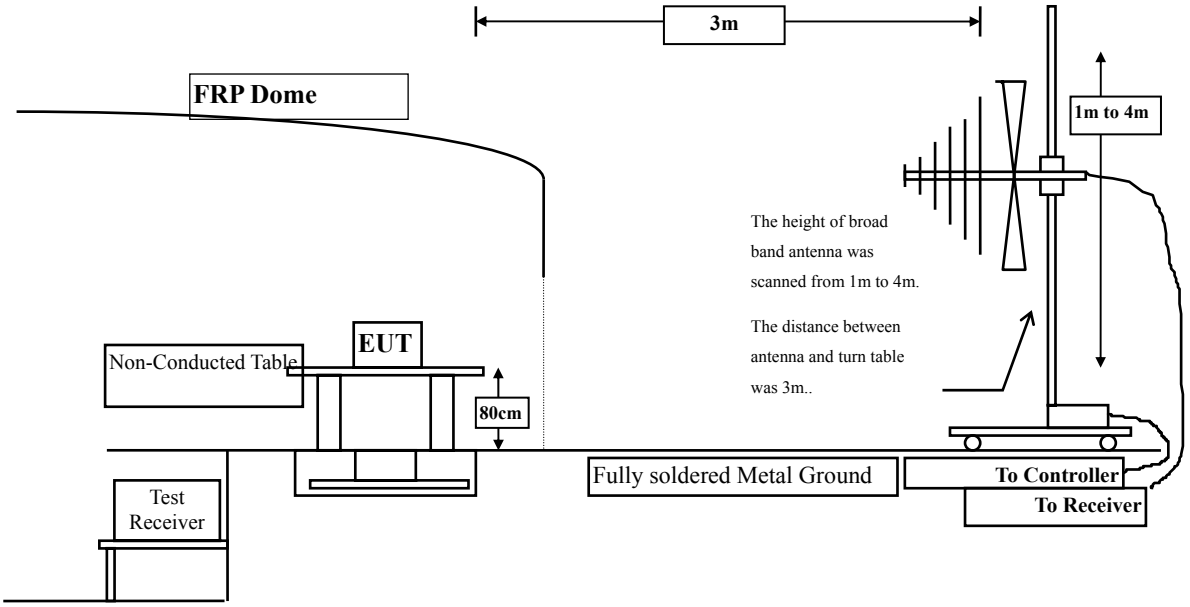
Test Site		Equipment	Manufacturer	Model No./Serial No.	Last Cal.
☒Site # 3	X	Magnetic Loop Antenna	Teseq	HLA6121/ 37133	Sep, 2014
	X	Bilog Antenna	Schaffner Chase	CBL6112B/ 2707	Jun., 2014
	X	EMI Test Receiver	R&S	ESCS 30/838251/ 001	Jun., 2014
	X	Coaxial Cable	QTK(Arnist)	RG 214/ LC003-RG	Jun., 2014
	X	Coaxial signal switch	Arnist	MP59B/ 6200798682	Jun., 2014

Test Site		Equipment	Manufacturer	Model No./Serial No.	Last Cal.
☒CB # 8	X	Spectrum Analyzer	R&S	FSP40/ 100339	Oct., 2014
	X	Horn Antenna	ETS-Lindgren	3117/ 35205	Mar., 2014
	X	Horn Antenna	Schwarzbeck	BBHA9170/209	Jan., 2015
	X	Horn Antenna	TRC	AH-0801/95051	Aug., 2014
	X	Pre-Amplifier	EMCI	EMC012630SE/980210	Jan., 2015
	X	Pre-Amplifier	MITEQ	JS41-001040000-58-5P/153945	Jul., 2014
	X	Pre-Amplifier	NARDA	DBL-1840N506/013	Jul., 2014

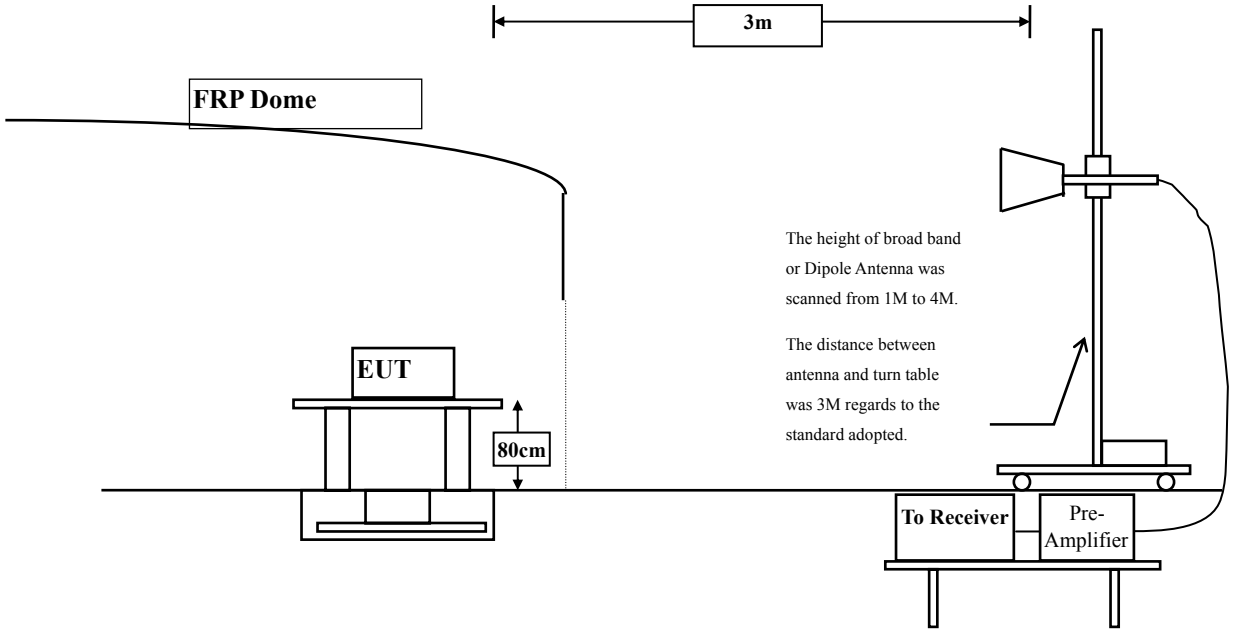
Note: 1. All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.
2. The test instruments marked with "X" are used to measure the final test results.

4.2. Test Setup

Radiated Emission Below 1GHz



Radiated Emission Above 1GHz



4.3. Limits

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 30dB 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(a) Limits		
Frequency MHz	Field strength (microvolts/meter)	Measurement distance (meter)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

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

4.4. Test Procedure

The EUT was setup according to ANSI C63.10: 2009 and tested according to DTS test procedure of KDB558074 for compliance to FCC 47CFR 15.247 requirements.

The EUT is placed on a turn table which is 0.8 meter above ground. The turn table is rotated 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 is scanned between 1 meter and 4 meters to find out the maximum emission level. This is repeated for both horizontal and vertical polarization of the antenna. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.10: 2009 on radiated measurement.

The resolution bandwidth below 30MHz setting on the field strength meter is 9kHz and 30MHz~1GHz is 120kHz and above 1GHz is 1MHz.

Radiated emission measurements below 30MHz are made using Loop Antenna and 30MHz~1GHz are made using broadband Bilog antenna and above 1GHz are made using Horn Antennas.

The measurement is divided into the Preliminary Measurement and the Final Measurement.

The suspected frequencies are searched for in Preliminary Measurement with the measurement antenna kept pointed at the source of the emission both in azimuth and elevation, with the polarization of the antenna oriented for maximum response. The antenna is pointed at an angle towards the source of the emission, and the EUT is rotated in both height and polarization to maximize the measured emission. The emission is kept within the illumination area of the 3 dB bandwidth of the antenna.

The worst radiated emission is measured in the Open Area Test Site on the Final Measurement.

The measurement frequency range form 9KHz - 10th Harmonic of fundamental was investigated.

4.5. Uncertainty

± 3.9 dB above 1GHz

± 3.8 dB below 1GHz

4.6. Test Result of Radiated Emission

Product : Wireless Access Point
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit - 802.11b 1Mbps (2412MHz) (Internal Antenna)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal					
Peak Detector:					
4824.000	2.428	50.740	53.169	-20.831	74.000
7236.000	9.858	39.320	49.178	-24.822	74.000
9648.000	10.296	39.670	49.966	-24.034	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4824.000	2.836	55.970	58.807	-15.193	74.000
7236.000	9.676	38.910	48.586	-25.414	74.000
9648.000	10.556	39.010	49.567	-24.433	74.000
Average Detector:					
4824.000	2.836	48.990	51.827	-2.173	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, 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. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Wireless Access Point
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit - 802.11b 1Mbps (2437 MHz) (Internal Antenna)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal					
Peak Detector:					
4874.000	2.076	48.860	50.937	-23.063	74.000
7311.000	9.512	39.220	48.732	-25.268	74.000
9748.000	9.630	37.960	47.590	-26.410	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4874.000	2.532	54.180	56.712	-17.288	74.000
7311.000	10.089	38.360	48.449	-25.551	74.000
9748.000	10.266	38.970	49.237	-24.763	74.000
Average Detector:					
4874.000	2.532	49.530	52.062	-1.938	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, 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. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Wireless Access Point
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit - 802.11b 1Mbps (2462 MHz) (Internal Antenna)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal					
Peak Detector:					
4924.000	2.191	48.420	50.611	-23.389	74.000
7386.000	11.180	37.900	49.080	-24.920	74.000
9848.000	10.801	38.440	49.241	-24.759	74.000
Average					
Detector:					
--					
Vertical					
Peak Detector:					
4924.000	35.871	49.260	52.065	-21.935	74.000
7386.000	42.467	38.090	49.270	-24.730	74.000
9848.000	43.137	38.540	49.341	-24.659	74.000
Average					
Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, 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. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Wireless Access Point
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit - 802.11g 6Mbps (2412MHz) (Internal Antenna)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal					
Peak Detector:					
4824.000	2.428	54.210	56.639	-17.361	74.000
7236.000	9.177	39.690	48.867	-25.133	74.000
9648.000	10.019	39.070	49.090	-24.910	74.000
Average Detector:					
4824.000	2.428	38.430	40.859	-13.141	54.000
Vertical					
Peak Detector:					
4824.000	2.836	60.740	63.577	-10.423	74.000
7236.000	9.676	38.910	48.586	-25.414	74.000
9648.000	10.556	39.090	49.647	-24.353	74.000
Average Detector:					
4824.000	2.836	44.600	47.437	-6.563	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, 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. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Wireless Access Point
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit - 802.11g 6Mbps (2437 MHz) (Internal Antenna)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal Peak Detector:					
4874.000	2.076	53.650	55.727	-18.273	74.000
7311.000	9.512	39.170	48.682	-25.318	74.000
9748.000	9.630	38.410	48.040	-25.960	74.000
Average Detector:					
4874.000	2.076	36.550	38.627	-15.373	54.000
Vertical Peak Detector:					
4874.000	2.532	60.750	63.282	-10.718	74.000
7311.000	10.089	38.530	48.619	-25.381	74.000
9748.000	10.266	39.330	49.597	-24.403	74.000
Average Detector:					
4874.000	2.532	42.850	45.382	-8.618	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, 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. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Wireless Access Point
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit - 802.11g 6Mbps (2462 MHz) (Internal Antenna)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal					
Peak Detector:					
4924.000	2.191	53.100	55.291	-18.709	74.000
7386.000	10.373	38.700	49.074	-24.926	74.000
9848.000	9.964	38.040	48.004	-25.996	74.000
Average					
Detector:					
4924.000	2.191	35.970	38.161	-15.839	54.000
Vertical					
Peak Detector:					
4924.000	2.805	55.550	58.355	-15.645	74.000
7386.000	11.180	39.100	50.280	-23.720	74.000
9848.000	10.801	38.670	49.471	-24.529	74.000
Average					
Detector:					
4924.000	2.805	38.310	41.115	-12.885	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, 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. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Wireless Access Point
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmit - 802.11a 6Mbps (5745 MHz) (Internal Antenna)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal Peak Detector:					
11490.000	17.106	38.190	55.297	-18.703	74.000
Average Detector:					
11490.000	17.106	23.780	40.887	-13.113	54.000
Vertical Peak Detector:					
11490.000	18.034	44.230	62.265	-11.735	74.000
Average Detector:					
11490.000	18.034	31.620	49.655	-4.345	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, 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. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Wireless Access Point
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmit - 802.11a 6Mbps (5785 MHz) (Internal Antenna)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal Peak Detector:					
11570.000	16.809	39.190	55.999	-18.001	74.000
Average Detector:					
11570.000	16.809	24.230	41.039	-12.961	54.000
Vertical Peak Detector:					
11570.000	17.698	43.390	61.088	-12.912	74.000
Average Detector:					
11570.000	17.698	30.990	48.688	-5.312	54.000

Note:
1. All Readings below 1GHz are Quasi-Peak, 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. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Wireless Access Point
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmit - 802.11a 6Mbps (5825 MHz) (Internal Antenna)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal Peak Detector:					
11650.000	16.158	37.440	53.598	-20.402	74.000
Average Detector:					
--					
Vertical Peak Detector:					
11650.000	17.274	43.020	60.295	-13.705	74.000
Average Detector:					
11650.000	17.274	30.090	47.365	-6.635	54.000

Note:
1. All Readings below 1GHz are Quasi-Peak, 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. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Wireless Access Point
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit - 802.11n-20BW_14.4Mbps(2.4G Band) (2412MHz) (Internal Antenna)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal					
Peak Detector:					
4824.000	2.428	56.470	58.899	-15.101	74.000
7236.000	9.177	39.350	48.527	-25.473	74.000
9648.000	10.019	38.550	48.570	-25.430	74.000
Average Detector:					
4824.000	2.428	39.350	41.779	-12.221	54.000
Vertical					
Peak Detector:					
4824.000	2.836	62.730	65.567	-8.433	74.000
7236.000	9.676	38.450	48.126	-25.874	74.000
9648.000	10.556	40.350	50.907	-23.093	74.000
Average Detector:					
4824.000	2.836	45.200	48.037	-5.963	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, 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. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Wireless Access Point
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit - 802.11n-20BW_14.4Mbps(2.4G Band) (2437 MHz) (Internal Antenna)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal Peak Detector:					
4874.000	2.076	54.560	56.637	-17.363	74.000
7311.000	9.512	39.390	48.902	-25.098	74.000
9748.000	9.630	38.120	47.750	-26.250	74.000
Average Detector:					
4874.000	2.076	37.900	39.977	-14.023	54.000
Vertical Peak Detector:					
4874.000	2.532	61.610	64.142	-9.858	74.000
7311.000	10.089	41.220	51.309	-22.691	74.000
9748.000	10.266	39.280	49.547	-24.453	74.000
Average Detector:					
4874.000	2.532	44.010	46.542	-7.458	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, 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. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Wireless Access Point
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit - 802.11n-20BW_14.4Mbps(2.4G Band) (2462 MHz) (Internal Antenna)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal					
Peak Detector:					
4924.000	2.191	52.530	54.721	-19.279	74.000
7386.000	10.373	38.110	48.484	-25.516	74.000
9848.000	9.964	38.870	48.834	-25.166	74.000
Average					
Detector:					
4924.000	2.191	36.600	38.791	-15.209	54.000
Vertical					
Peak Detector:					
4924.000	2.805	58.170	60.975	-13.025	74.000
7386.000	11.180	38.260	49.440	-24.560	74.000
9848.000	10.801	38.770	49.571	-24.429	74.000
Average					
Detector:					
4924.000	2.805	40.380	43.185	-10.815	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, 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. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Wireless Access Point
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit - 802.11n-20BW_14.4Mbps(5G Band) (5745MHz) (Internal Antenna)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal					
Peak Detector:					
11490.000	17.106	40.550	57.657	-16.343	74.000
Average					
Detector:					
11490.000	17.106	26.640	43.747	-10.253	54.000
Vertical					
Peak Detector:					
11490.000	18.034	51.180	69.215	-4.785	74.000
Average					
Detector:					
11490.000	18.034	35.370	53.405	-0.595	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, 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. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Wireless Access Point
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit - 802.11n-20BW_14.4Mbps(5G Band) (5785 MHz) (Internal Antenna)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal Peak Detector:					
11570.000	16.809	39.460	56.269	-17.731	74.000
Average Detector:					
11570.000	16.809	25.420	42.229	-11.771	54.000
Vertical Peak Detector:					
11570.000	17.698	50.460	68.158	-5.842	74.000
Average Detector:					
11570.000	17.698	34.020	51.718	-2.282	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, 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. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Wireless Access Point
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit - 802.11n-20BW_14.4Mbps(5G Band) (5825 MHz) (Internal Antenna)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal Peak Detector:					
11650.000	16.158	38.970	55.128	-18.872	74.000
Average Detector:					
11650.000	16.158	24.740	40.898	-13.102	54.000
Vertical Peak Detector:					
11650.000	17.274	49.870	67.145	-6.855	74.000
Average Detector:					
11650.000	17.274	33.660	50.935	-3.065	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, 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. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Wireless Access Point
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit - 802.11n-40BW_30Mbps(2.4G Band) (2422 MHz) (Internal Antenna)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal Peak Detector:					
4844.000	2.280	49.640	51.921	-22.079	74.000
7266.000	9.106	39.100	48.206	-25.794	74.000
9688.000	9.663	39.020	48.683	-25.317	74.000
Average Detector:					
--					
Vertical Peak Detector:					
4844.000	2.707	54.740	57.448	-16.552	74.000
7266.000	9.626	39.310	48.936	-25.064	74.000
9688.000	10.284	39.190	49.474	-24.526	74.000
Average Detector:					
4844.000	2.707	38.850	41.558	-12.442	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, 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. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Wireless Access Point
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit - 802.11n-40BW_30Mbps(2.4G Band) (2437 MHz) (Internal Antenna)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal Peak Detector:					
4874.000	2.076	48.870	50.947	-23.053	74.000
7311.000	9.512	38.910	48.422	-25.578	74.000
9748.000	9.630	38.460	48.090	-25.910	74.000
Average Detector:					
--					
Vertical Peak Detector:					
4874.000	2.532	54.830	57.362	-16.638	74.000
7311.000	10.089	38.840	48.929	-25.071	74.000
9748.000	10.266	39.710	49.977	-24.023	74.000
Average Detector:					
4874.000	2.532	39.170	41.702	-12.298	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, 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. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Wireless Access Point
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit - 802.11n-40BW_30Mbps(2.4G Band) (2452 MHz) (Internal Antenna)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal Peak Detector:					
4904.000	2.000	46.280	48.281	-25.719	74.000
7356.000	10.308	38.460	48.768	-25.232	74.000
9808.000	9.850	37.800	47.650	-26.350	74.000
Average Detector:					
--					
Vertical Peak Detector:					
4904.000	2.513	51.770	54.284	-19.716	74.000
7356.000	11.022	38.490	49.512	-24.488	74.000
9808.000	10.512	38.510	49.022	-24.978	74.000
Average Detector:					
4904.000	2.513	35.250	37.764	-16.236	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, 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. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Wireless Access Point
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 7: Transmit - 802.11n-40BW_30Mbps(5G Band) (5755MHz) (Internal Antenna)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal					
Peak Detector:					
11510.000	17.124	39.280	56.404	-17.596	74.000
Average					
Detector:					
11510.000	17.124	25.330	42.454	-11.546	54.000
Vertical					
Peak Detector:					
11510.000	18.081	50.390	68.471	-5.529	74.000
Average					
Detector:					
11510.000	18.081	34.780	52.861	-1.139	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, 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. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Wireless Access Point
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 7: Transmit - 802.11n-40BW_30Mbps(5G Band) (5795 MHz) (Internal Antenna)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal Peak Detector:					
11590.000	16.701	38.240	54.940	-19.060	74.000
Average Detector:					
11590.000	16.701	24.780	41.480	-12.520	54.000
Vertical Peak Detector:					
11590.000	17.567	49.760	67.326	-6.674	74.000
Average Detector:					
11590.000	17.567	33.410	50.976	-3.024	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, 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. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Wireless Access Point
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit - 802.11b 1Mbps (2412MHz) (External Antenna)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal					
Peak Detector:					
4824.000	2.428	46.450	48.879	-25.121	74.000
7236.000	9.177	38.730	47.907	-26.093	74.000
9648.000	10.019	38.380	48.400	-25.600	74.000
Average					
Detector:					
--					
Vertical					
Peak Detector:					
4824.000	2.836	49.810	52.647	-21.353	74.000
7236.000	9.676	38.780	48.456	-25.544	74.000
9648.000	10.556	38.820	49.377	-24.623	74.000
Average					
Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, 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. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Wireless Access Point
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit - 802.11b 1Mbps (2437 MHz) (External Antenna)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal Peak Detector:					
4874.000	2.076	47.680	49.757	-24.243	74.000
7311.000	9.512	40.220	49.732	-24.268	74.000
9748.000	9.630	37.920	47.550	-26.450	74.000
Average Detector:					
--					
Vertical Peak Detector:					
4874.000	2.532	49.970	52.502	-21.498	74.000
7311.000	10.089	39.050	49.139	-24.861	74.000
9748.000	10.266	38.760	49.027	-24.973	74.000
Average Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, 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. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Wireless Access Point
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit - 802.11b 1Mbps (2462 MHz) (External Antenna)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal					
Peak Detector:					
4924.000	2.191	46.650	48.841	-25.159	74.000
7386.000	10.373	38.170	48.544	-25.456	74.000
9848.000	9.964	39.360	49.324	-24.676	74.000
Average					
Detector:					
--					
Vertical					
Peak Detector:					
4924.000	2.805	47.850	50.655	-23.345	74.000
7386.000	11.180	39.020	50.200	-23.800	74.000
9848.000	10.801	38.900	49.701	-24.299	74.000
Average					
Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, 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. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Wireless Access Point
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit - 802.11g 6Mbps (2412MHz) (External Antenna)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal					
Peak Detector:					
4824.000	2.428	51.080	53.509	-20.491	74.000
7236.000	9.177	39.130	48.307	-25.693	74.000
9648.000	10.019	40.650	50.670	-23.330	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4824.000	2.836	52.060	54.897	-19.103	74.000
7236.000	9.676	40.890	50.566	-23.434	74.000
9648.000	10.556	39.630	50.187	-23.813	74.000
Average Detector:					
4824.000	2.836	37.040	39.877	-14.123	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, 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. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Wireless Access Point
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit - 802.11g 6Mbps (2437 MHz) (External Antenna)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal					
Peak Detector:					
4874.000	2.076	51.000	53.077	-20.923	74.000
7311.000	9.512	40.160	49.672	-24.328	74.000
9748.000	9.630	39.650	49.280	-24.720	74.000
Average					
Detector:					
--					
Vertical					
Peak Detector:					
4874.000	2.532	50.940	53.472	-20.528	74.000
7311.000	10.089	40.520	50.609	-23.391	74.000
9748.000	10.266	38.470	48.737	-25.263	74.000
Average					
Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, 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. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Wireless Access Point
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit - 802.11g 6Mbps (2462 MHz) (External Antenna)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal					
Peak Detector:					
4924.000	2.191	46.510	48.701	-25.299	74.000
7386.000	10.373	39.120	49.494	-24.506	74.000
9848.000	9.964	38.650	48.614	-25.386	74.000
Average					
Detector:					
--					
Vertical					
Peak Detector:					
4924.000	2.805	50.390	53.195	-20.805	74.000
7386.000	11.180	38.600	49.780	-24.220	74.000
9848.000	10.801	39.040	49.841	-24.159	74.000
Average					
Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, 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. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Wireless Access Point
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmit - 802.11a 6Mbps (5745 MHz) (External Antenna)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal Peak Detector:					
11490.000	17.196	42.330	59.527	-14.473	74.000
Average Detector:					
11490.000	17.196	27.650	44.847	-9.153	54.000
Vertical Peak Detector:					
11490.000	18.124	50.120	68.245	-5.755	74.000
Average Detector:					
11490.000	18.124	34.520	52.645	-1.355	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, 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. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Wireless Access Point
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmit - 802.11a 6Mbps (5785 MHz) (External Antenna)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal Peak Detector:					
11570.000	16.899	41.590	58.489	-15.511	74.000
Average Detector:					
11570.000	16.899	26.690	43.589	-10.411	54.000
Vertical Peak Detector:					
11570.000	17.788	49.770	67.558	-6.442	74.000
Average Detector:					
11570.000	17.788	33.120	50.908	-3.092	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, 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. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Wireless Access Point
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmit - 802.11a 6Mbps (5825 MHz) (External Antenna)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal Peak Detector:					
11650.000	16.325	40.990	57.316	-16.684	74.000
Average Detector:					
11650.000	16.325	26.020	42.346	-11.654	54.000
Vertical Peak Detector:					
11650.000	17.441	49.220	66.662	-7.338	74.000
Average Detector:					
11650.000	17.441	33.230	50.672	-3.328	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, 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. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Wireless Access Point
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit - 802.11n-20BW_14.4Mbps(2.4G Band) (2412MHz) (External Antenna)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal					
Peak Detector:					
4824.000	2.428	49.820	52.249	-21.751	74.000
7236.000	9.177	39.680	48.857	-25.143	74.000
9648.000	10.019	38.980	49.000	-25.000	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4824.000	2.836	47.730	50.567	-23.433	74.000
7236.000	9.676	40.860	50.536	-23.464	74.000
9648.000	10.556	39.210	49.767	-24.233	74.000
Average Detector:					
--					

Note:
1. All Readings below 1GHz are Quasi-Peak, 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. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Wireless Access Point
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit - 802.11n-20BW_14.4Mbps(2.4G Band) (2437 MHz) (External Antenna)

Frequency MHz	Correct Factor dB	Reading Level dBμV	Measurement Level dBμV/m	Margin dB	Limit dBμV/m
Horizontal Peak Detector:					
4874.000	2.076	50.630	52.707	-21.293	74.000
7311.000	9.512	39.060	48.572	-25.428	74.000
9748.000	9.630	39.950	49.580	-24.420	74.000
Average Detector:					
--					
Vertical Peak Detector:					
4874.000	2.532	49.620	52.152	-21.848	74.000
7311.000	10.089	39.570	49.659	-24.341	74.000
9748.000	10.266	39.330	49.597	-24.403	74.000
Average Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, 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. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Wireless Access Point
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit - 802.11n-20BW_14.4Mbps(2.4G Band) (2462 MHz) (External Antenna)

Frequency MHz	Correct Factor dB	Reading Level dBμV	Measurement Level dBμV/m	Margin dB	Limit dBμV/m
Horizontal Peak Detector:					
4924.000	2.191	50.160	52.351	-21.649	74.000
7386.000	10.373	39.920	50.294	-23.706	74.000
9848.000	9.964	39.180	49.144	-24.856	74.000
Average Detector:					
--					
Vertical Peak Detector:					
4924.000	2.805	50.270	53.075	-20.925	74.000
7386.000	11.180	39.220	50.400	-23.600	74.000
9848.000	10.801	39.670	50.471	-23.529	74.000
Average Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, 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. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Wireless Access Point
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit - 802.11n-20BW_14.4Mbps(5G Band) (5745MHz) (External Antenna)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal					
Peak Detector:					
11490.000	17.196	41.890	59.087	-14.913	74.000
Average					
Detector:					
11490.000	17.196	27.880	45.077	-8.923	54.000
Vertical					
Peak Detector:					
11490.000	18.124	51.330	69.455	-4.545	74.000
Average					
Detector:					
11490.000	18.124	35.120	53.245	-0.755	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, 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. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Wireless Access Point
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit - 802.11n-20BW_14.4Mbps(5G Band) (5785 MHz) (External Antenna)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal Peak Detector:					
11570.000	16.899	40.690	57.589	-16.411	74.000
Average Detector:					
11570.000	16.899	26.890	43.789	-10.211	54.000
Vertical Peak Detector:					
11570.000	17.788	50.060	67.848	-6.152	74.000
Average Detector:					
11570.000	17.788	34.760	52.548	-1.452	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, 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. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Wireless Access Point
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit - 802.11n-20BW_14.4Mbps(5G Band) (5825 MHz) (External Antenna)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal Peak Detector:					
11650.000	16.325	39.960	56.286	-17.714	74.000
Average Detector:					
11650.000	16.325	26.330	42.656	-11.344	54.000
Vertical Peak Detector:					
11650.000	17.441	49.910	67.352	-6.648	74.000
Average Detector:					
11650.000	17.441	34.250	51.692	-2.308	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, 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. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Wireless Access Point
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit - 802.11n-40BW_30Mbps(2.4G Band) (2422 MHz) (External Antenna)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal Peak Detector:					
4844.000	2.280	48.540	50.821	-23.179	74.000
7266.000	9.106	39.410	48.516	-25.484	74.000
9688.000	9.663	39.100	48.763	-25.237	74.000
Average Detector:					
--					
Vertical Peak Detector:					
4844.000	2.707	50.920	53.628	-20.372	74.000
7266.000	9.626	39.690	49.316	-24.684	74.000
9688.000	10.284	39.410	49.694	-24.306	74.000
Average Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, 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. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Wireless Access Point
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit - 802.11n-40BW_30Mbps(2.4G Band) (2437 MHz) (External Antenna)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal Peak Detector:					
4874.000	2.076	50.420	52.497	-21.503	74.000
7311.000	9.512	39.920	49.432	-24.568	74.000
9748.000	9.630	39.450	49.080	-24.920	74.000
Average Detector:					
--					
Vertical Peak Detector:					
4874.000	2.532	50.640	53.172	-20.828	74.000
7311.000	10.089	39.800	49.889	-24.111	74.000
9748.000	10.266	39.960	50.227	-23.773	74.000
Average Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, 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. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Wireless Access Point
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit - 802.11n-40BW_30Mbps(2.4G Band) (2452 MHz) (External Antenna)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal Peak Detector:					
4904.000	2.000	50.570	52.571	-21.429	74.000
7356.000	10.308	39.910	50.218	-23.782	74.000
9808.000	9.850	39.950	49.800	-24.200	74.000
Average Detector:					
--					
Vertical Peak Detector:					
4904.000	2.513	50.270	52.784	-21.216	74.000
7356.000	11.022	39.740	50.762	-23.238	74.000
9808.000	10.512	39.560	50.072	-23.928	74.000
Average Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, 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. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Wireless Access Point
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 7: Transmit - 802.11n-40BW_30Mbps(5G Band) (5755MHz) (External Antenna)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal					
Peak Detector:					
11510.000	17.214	39.440	56.654	-17.346	74.000
Average					
Detector:					
11510.000	17.214	25.790	43.004	-10.996	54.000
Vertical					
Peak Detector:					
11510.000	18.171	50.690	68.861	-5.139	74.000
Average					
Detector:					
11510.000	18.171	34.660	52.831	-1.169	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, 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. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Wireless Access Point
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 7: Transmit - 802.11n-40BW_30Mbps(5G Band) (5795 MHz) (External Antenna)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal Peak Detector:					
11590.000	16.791	38.660	55.450	-18.550	74.000
Average Detector:					
11590.000	16.791	24.970	41.760	-12.240	54.000
Vertical Peak Detector:					
11590.000	17.657	49.660	67.316	-6.684	74.000
Average Detector:					
11590.000	17.657	33.510	51.166	-2.834	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, 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. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Wireless Access Point
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 8: Transmit - 802.11ac-80BW-65Mbps (5775 MHz) (External Antenna)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal Peak Detector:					
11550.000	16.914	37.760	54.674	-19.326	74.000
Average Detector:					
11550.000	16.914	24.090	41.004	-12.996	54.000
Vertical Peak Detector:					
11550.000	17.826	46.940	64.765	-9.235	74.000
Average Detector:					
11550.000	17.826	31.580	49.405	-4.595	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, 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. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Wireless Access Point
Test Item : General Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit - 802.11b 1Mbps (2437 MHz) (Internal Antenna)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal					
342.340	-3.272	45.677	42.405	-3.595	46.000
400.540	-2.276	40.324	38.048	-7.952	46.000
516.940	1.654	34.864	36.518	-9.482	46.000
604.240	4.770	24.506	29.276	-16.724	46.000
908.820	6.029	25.474	31.503	-14.497	46.000
961.200	6.450	27.352	33.802	-20.198	54.000
Vertical					
237.580	-8.970	41.964	32.994	-13.006	46.000
435.460	-8.800	34.465	25.665	-20.335	46.000
515.000	-1.090	25.385	24.295	-21.705	46.000
627.520	-3.120	33.221	30.101	-15.899	46.000
707.060	0.089	29.004	29.093	-16.907	46.000
804.060	3.587	28.318	31.905	-14.095	46.000

Note:

1. All Readings below 1GHz are Quasi-Peak, 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. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.
8. No emission found between lowest internal used/generated frequency to 30MHz.

Product : Wireless Access Point
Test Item : General Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit - 802.11g 6Mbps (2437 MHz) (Internal Antenna)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal					
130.880	-10.159	38.696	28.537	-14.963	43.500
462.620	1.172	29.243	30.415	-15.585	46.000
532.460	1.957	38.541	40.498	-5.502	46.000
621.700	2.170	29.083	31.254	-14.746	46.000
662.440	2.084	34.981	37.065	-8.935	46.000
840.920	5.191	28.571	33.762	-12.238	46.000
Vertical					
414.120	-7.902	48.840	40.938	-5.062	46.000
441.280	-8.494	46.001	37.507	-8.493	46.000
532.460	-0.563	38.541	37.978	-8.022	46.000
662.440	-2.026	34.981	32.955	-13.045	46.000
716.760	-0.653	40.192	39.539	-6.461	46.000
961.200	7.260	27.182	34.442	-19.558	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, 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. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.
8. No emission found between lowest internal used/generated frequency to 30MHz.

Product : Wireless Access Point
Test Item : General Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmit - 802.11a 6Mbps (5785MHz) (Internal Antenna)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal					
134.760	-10.298	44.503	34.205	-9.295	43.500
249.220	-6.014	39.979	33.965	-12.035	46.000
338.460	-3.925	40.778	36.853	-9.147	46.000
456.800	-0.067	29.928	29.861	-16.139	46.000
580.960	3.505	31.048	34.553	-11.447	46.000
866.140	5.596	30.411	36.007	-9.993	46.000
Vertical					
144.460	-6.257	38.729	32.472	-11.028	43.500
280.260	-8.717	38.426	29.709	-16.291	46.000
369.500	-2.868	39.007	36.139	-9.861	46.000
456.800	-4.697	31.708	27.011	-18.989	46.000
528.580	-0.462	34.073	33.611	-12.389	46.000
749.740	2.510	27.765	30.275	-15.725	46.000

Note:

1. All Readings below 1GHz are Quasi-Peak, 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. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.
8. No emission found between lowest internal used/generated frequency to 30MHz.

Product : Wireless Access Point
Test Item : General Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit - 802.11n-20BW_14.4Mbps(2.4G Band) (2437 MHz) (Internal Antenna)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal					
348.160	-2.268	34.994	32.726	-13.274	46.000
493.660	-0.536	28.214	27.678	-18.322	46.000
660.500	2.097	25.595	27.692	-18.308	46.000
821.520	5.961	23.725	29.686	-16.314	46.000
908.820	6.029	25.519	31.548	-14.452	46.000
961.200	6.450	27.090	33.540	-20.460	54.000
Vertical					
222.060	-8.789	36.902	28.113	-17.887	46.000
493.660	-2.396	28.214	25.818	-20.182	46.000
540.220	0.121	23.680	23.801	-22.199	46.000
745.860	1.828	24.748	26.576	-19.424	46.000
806.000	3.908	23.878	27.786	-18.214	46.000
924.340	5.550	23.413	28.963	-17.037	46.000

Note:

1. All Readings below 1GHz are Quasi-Peak, 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. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.
8. No emission found between lowest internal used/generated frequency to 30MHz.

Product : Wireless Access Point
Test Item : General Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit - 802.11n-20BW_14.4Mbps(5G Band) (5785 MHz) (Internal Antenna)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal					
80.440	-12.510	40.927	28.417	-11.583	40.000
154.160	-10.091	41.154	31.063	-12.437	43.500
322.940	-4.442	39.612	35.170	-10.830	46.000
439.340	-2.009	37.564	35.555	-10.445	46.000
600.360	3.977	27.962	31.939	-14.061	46.000
866.140	5.596	30.962	36.558	-9.442	46.000
Vertical					
138.640	-5.795	37.372	31.577	-11.923	43.500
229.820	-8.512	45.567	37.055	-8.945	46.000
328.760	-5.099	41.917	36.818	-9.182	46.000
509.180	-0.158	38.175	38.017	-7.983	46.000
606.180	-1.594	25.231	23.637	-22.363	46.000
928.220	6.203	32.443	38.646	-7.354	46.000

Note:

1. All Readings below 1GHz are Quasi-Peak, 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. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.
8. No emission found between lowest internal used/generated frequency to 30MHz.

Product : Wireless Access Point
Test Item : General Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit - 802.11n-40BW_30Mbps(2.4G Band) (2437 MHz) (Internal Antenna)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal					
311.300	-4.026	43.022	38.996	-7.004	46.000
431.580	-2.099	40.656	38.557	-7.443	46.000
530.520	1.873	34.202	36.075	-9.925	46.000
608.120	4.384	34.558	38.942	-7.058	46.000
755.560	4.321	27.901	32.222	-13.778	46.000
871.960	5.175	26.678	31.853	-14.147	46.000
Vertical					
410.240	-6.616	44.923	38.307	-7.693	46.000
447.100	-7.746	44.598	36.852	-9.148	46.000
579.020	-5.706	40.564	34.858	-11.142	46.000
679.900	1.000	34.746	35.746	-10.254	46.000
743.920	1.246	36.929	38.175	-7.825	46.000
860.320	0.666	37.953	38.619	-7.381	46.000

Note:

1. All Readings below 1GHz are Quasi-Peak, 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. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.
8. No emission found between lowest internal used/generated frequency to 30MHz.

Product : Wireless Access Point
Test Item : General Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 7: Transmit - 802.11n-40BW_30Mbps(5G Band) (5755MHz) (Internal Antenna)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal					
128.940	-10.088	44.707	34.619	-8.881	43.500
338.460	-3.925	38.718	34.793	-11.207	46.000
456.800	-0.067	29.133	29.066	-16.934	46.000
600.360	3.977	27.527	31.504	-14.496	46.000
749.740	3.320	27.775	31.095	-14.905	46.000
866.140	5.596	29.968	35.564	-10.436	46.000
Vertical					
136.700	-5.143	35.960	30.817	-12.683	43.500
299.660	-6.855	38.802	31.947	-14.053	46.000
367.560	-2.545	36.304	33.759	-12.241	46.000
515.000	-1.090	35.770	34.680	-11.320	46.000
668.260	-1.694	29.387	27.693	-18.307	46.000
840.920	2.961	34.118	37.079	-8.921	46.000

Note:

1. All Readings below 1GHz are Quasi-Peak, 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. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.
8. No emission found between lowest internal used/generated frequency to 30MHz.

Product : Wireless Access Point
Test Item : General Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit - 802.11b 1Mbps (2437 MHz) (External Antenna)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal					
140.580	-10.471	42.258	31.787	-11.713	43.500
214.300	-10.791	45.891	35.100	-8.400	43.500
288.020	-4.579	43.031	38.452	-7.548	46.000
402.480	-2.263	36.089	33.826	-12.174	46.000
516.940	1.654	32.194	33.848	-12.152	46.000
660.500	2.097	27.369	29.466	-16.534	46.000
Vertical					
107.600	-0.318	32.753	32.435	-11.065	43.500
291.900	-8.004	38.566	30.561	-15.439	46.000
381.140	-1.558	34.674	33.116	-12.884	46.000
499.480	-0.852	33.149	32.297	-13.703	46.000
600.360	-2.833	26.284	23.451	-22.549	46.000
875.840	1.621	32.579	34.200	-11.800	46.000

Note:

1. All Readings below 1GHz are Quasi-Peak, 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. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.
8. No emission found between lowest internal used/generated frequency to 30MHz.

Product : Wireless Access Point
Test Item : General Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit - 802.11g 6Mbps (2437 MHz) (External Antenna)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal					
99.840	-7.471	41.640	34.169	-9.331	43.500
191.020	-10.040	48.005	37.965	-5.535	43.500
295.780	-3.655	44.392	40.737	-5.263	46.000
359.800	-1.680	39.123	37.443	-8.557	46.000
499.480	0.048	34.980	35.028	-10.972	46.000
856.440	6.382	29.982	36.364	-9.636	46.000
Vertical					
134.760	-4.648	39.111	34.463	-9.037	43.500
328.760	-5.099	40.508	35.409	-10.591	46.000
400.540	-5.156	37.686	32.531	-13.469	46.000
499.480	-0.852	32.151	31.299	-14.701	46.000
697.360	1.311	29.643	30.954	-15.046	46.000
875.840	1.621	32.279	33.900	-12.100	46.000

Note:

1. All Readings below 1GHz are Quasi-Peak, 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. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.
8. No emission found between lowest internal used/generated frequency to 30MHz.

Product : Wireless Access Point
Test Item : General Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmit - 802.11a 6Mbps (5785MHz) (External Antenna)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal					
134.760	-10.298	44.503	34.205	-9.295	43.500
249.220	-6.014	39.979	33.965	-12.035	46.000
338.460	-3.925	40.778	36.853	-9.147	46.000
456.800	-0.067	29.928	29.861	-16.139	46.000
580.960	3.505	31.048	34.553	-11.447	46.000
866.140	5.596	30.411	36.007	-9.993	46.000
Vertical					
144.460	-6.257	38.729	32.472	-11.028	43.500
280.260	-8.717	38.426	29.709	-16.291	46.000
369.500	-2.868	39.007	36.139	-9.861	46.000
456.800	-4.697	31.708	27.011	-18.989	46.000
528.580	-0.462	34.073	33.611	-12.389	46.000
749.740	2.510	27.765	30.275	-15.725	46.000

Note:

1. All Readings below 1GHz are Quasi-Peak, 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. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.
8. No emission found between lowest internal used/generated frequency to 30MHz.

Product : Wireless Access Point
Test Item : General Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit - 802.11n-20BW_14.4Mbps(2.4G Band) (2437 MHz) (External Antenna)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal					
109.540	-7.488	39.486	31.998	-11.502	43.500
189.080	-10.289	43.798	33.509	-9.991	43.500
258.920	-5.050	41.525	36.475	-9.525	46.000
359.800	-1.680	37.768	36.088	-9.912	46.000
499.480	0.048	33.322	33.370	-12.630	46.000
798.240	5.148	29.889	35.037	-10.963	46.000
Vertical					
115.360	-2.630	38.453	35.823	-7.677	43.500
251.160	-7.505	39.874	32.369	-13.631	46.000
398.600	-4.678	36.061	31.383	-14.617	46.000
509.180	-0.158	34.303	34.145	-11.855	46.000
699.300	0.695	32.789	33.484	-12.516	46.000
875.840	1.621	30.430	32.051	-13.949	46.000

Note:

1. All Readings below 1GHz are Quasi-Peak, 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. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.
8. No emission found between lowest internal used/generated frequency to 30MHz.

Product : Wireless Access Point
Test Item : General Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit - 802.11n-20BW_14.4Mbps(5G Band) (5785 MHz) (External Antenna)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal					
80.440	-12.510	40.927	28.417	-11.583	40.000
154.160	-10.091	41.154	31.063	-12.437	43.500
322.940	-4.442	39.612	35.170	-10.830	46.000
439.340	-2.009	37.564	35.555	-10.445	46.000
600.360	3.977	27.962	31.939	-14.061	46.000
866.140	5.596	30.962	36.558	-9.442	46.000
Vertical					
138.640	-5.795	37.372	31.577	-11.923	43.500
229.820	-8.512	45.567	37.055	-8.945	46.000
328.760	-5.099	41.917	36.818	-9.182	46.000
509.180	-0.158	38.175	38.017	-7.983	46.000
606.180	-1.594	25.231	23.637	-22.363	46.000
928.220	6.203	32.443	38.646	-7.354	46.000

Note:

1. All Readings below 1GHz are Quasi-Peak, 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. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.
8. No emission found between lowest internal used/generated frequency to 30MHz.

Product : Wireless Access Point
Test Item : General Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit - 802.11n-40BW_30Mbps(2.4G Band) (2437 MHz) (External Antenna)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal					
125.060	-9.946	44.672	34.726	-8.774	43.500
256.980	-5.073	40.428	35.355	-10.645	46.000
400.540	-2.276	39.875	37.599	-8.401	46.000
532.460	1.957	27.387	29.344	-16.656	46.000
685.720	2.959	28.013	30.971	-15.029	46.000
866.140	5.596	31.138	36.734	-9.266	46.000
Vertical					
109.540	-0.418	35.377	34.959	-8.541	43.500
204.600	-7.666	41.967	34.300	-9.200	43.500
289.960	-8.267	43.534	35.267	-10.733	46.000
398.600	-4.678	34.435	29.757	-16.243	46.000
503.360	-0.852	31.848	30.996	-15.004	46.000
602.300	-2.333	29.150	26.817	-19.183	46.000

Note:

1. All Readings below 1GHz are Quasi-Peak, 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. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.
8. No emission found between lowest internal used/generated frequency to 30MHz.

Product : Wireless Access Point
Test Item : General Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 7: Transmit - 802.11n-40BW_30Mbps(5G Band) (5755MHz) (External Antenna)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal					
128.940	-10.088	44.707	34.619	-8.881	43.500
338.460	-3.925	38.718	34.793	-11.207	46.000
456.800	-0.067	29.133	29.066	-16.934	46.000
600.360	3.977	27.527	31.504	-14.496	46.000
749.740	3.320	27.775	31.095	-14.905	46.000
866.140	5.596	29.968	35.564	-10.436	46.000
Vertical					
136.700	-5.143	35.960	30.817	-12.683	43.500
299.660	-6.855	38.802	31.947	-14.053	46.000
367.560	-2.545	36.304	33.759	-12.241	46.000
515.000	-1.090	35.770	34.680	-11.320	46.000
668.260	-1.694	29.387	27.693	-18.307	46.000
840.920	2.961	34.118	37.079	-8.921	46.000

Note:

1. All Readings below 1GHz are Quasi-Peak, 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. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.
8. No emission found between lowest internal used/generated frequency to 30MHz.

Product : Wireless Access Point
Test Item : General Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 8: Transmit - 802.11ac-80BW-65Mbps (5775MHz) (External Antenna)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal					
119.240	-7.291	33.557	26.267	-17.233	43.500
225.940	-9.647	40.120	30.473	-15.527	46.000
365.620	0.382	34.742	35.124	-10.876	46.000
551.860	3.390	26.610	30.000	-16.000	46.000
800.180	6.417	25.506	31.923	-14.077	46.000
941.800	6.790	24.068	30.858	-15.142	46.000
Vertical					
43.580	-10.919	42.686	31.767	-8.233	40.000
173.560	-2.713	27.407	24.694	-18.806	43.500
371.440	-0.310	25.291	24.981	-21.019	46.000
606.180	2.246	23.370	25.616	-20.384	46.000
782.720	2.757	22.928	25.685	-20.315	46.000
930.160	3.830	23.042	26.872	-19.128	46.000

Note:

1. All Readings below 1GHz are Quasi-Peak, 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. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.
8. No emission found between lowest internal used/generated frequency to 30MHz.

5. RF Antenna conducted test

5.1. Test Equipment

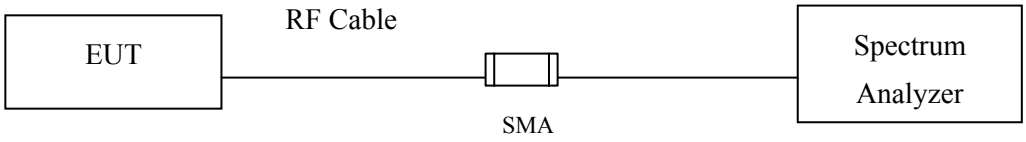
	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
X	Spectrum Analyzer	R&S	FSP40 / 100170	Jun., 2014
	Spectrum Analyzer	Agilent	E4407B / US39440758	Jun., 2014
X	Spectrum Analyzer	Agilent	N9010A / MY48030495	Apr., 2014

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

2. The test instruments 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 either an RF conducted or a 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 tested according to DTS test procedure of KDB558074 for compliance to FCC 47CFR 15.247 requirements.

Set RBW = 100 kHz, Set VBW ≥ 3 x RBW, scan up through 10th harmonic.

5.5. Uncertainty

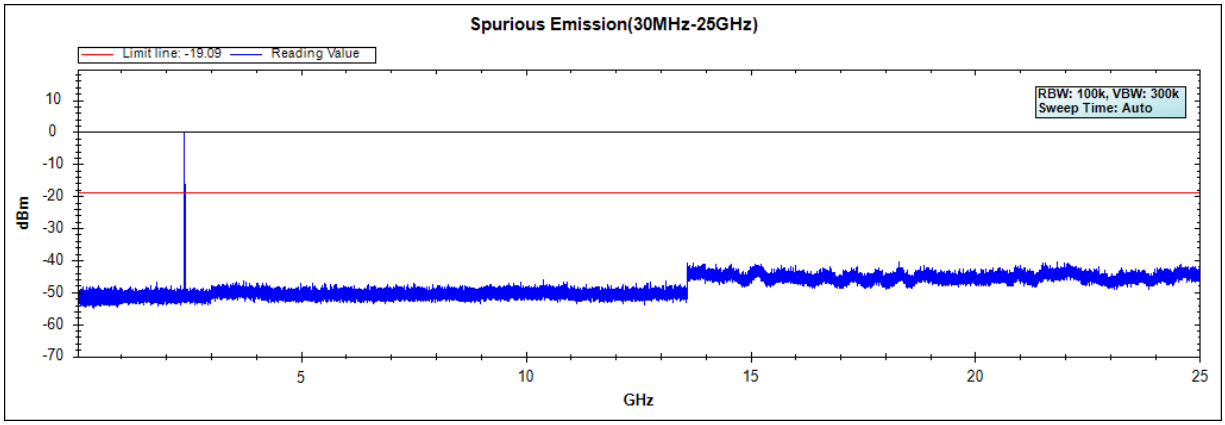
The measurement uncertainty

Conducted is defined as ± 1.27dB

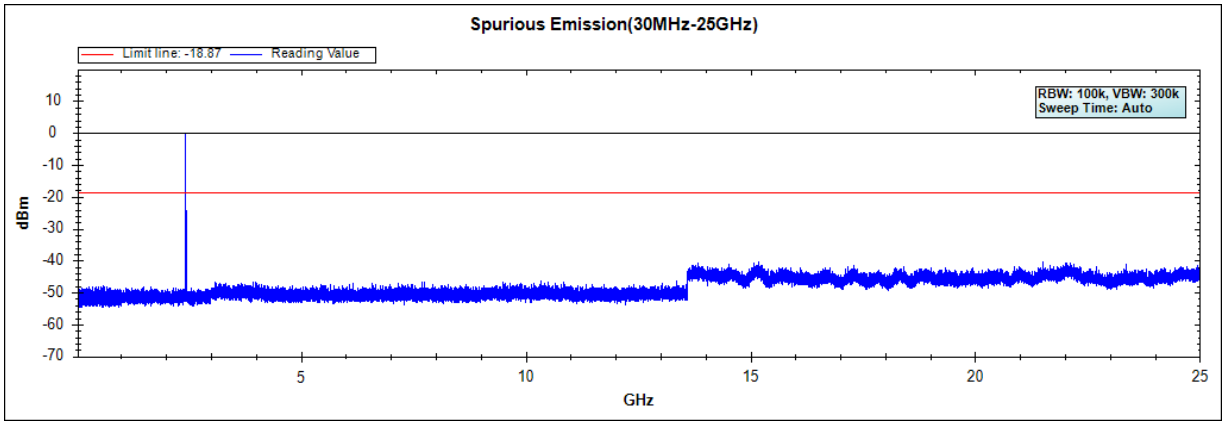
5.6. Test Result of RF antenna conducted test

Product : Wireless Access Point
Test Item : RF antenna conducted test
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit - 802.11b 1Mbps (Internal Antenna)

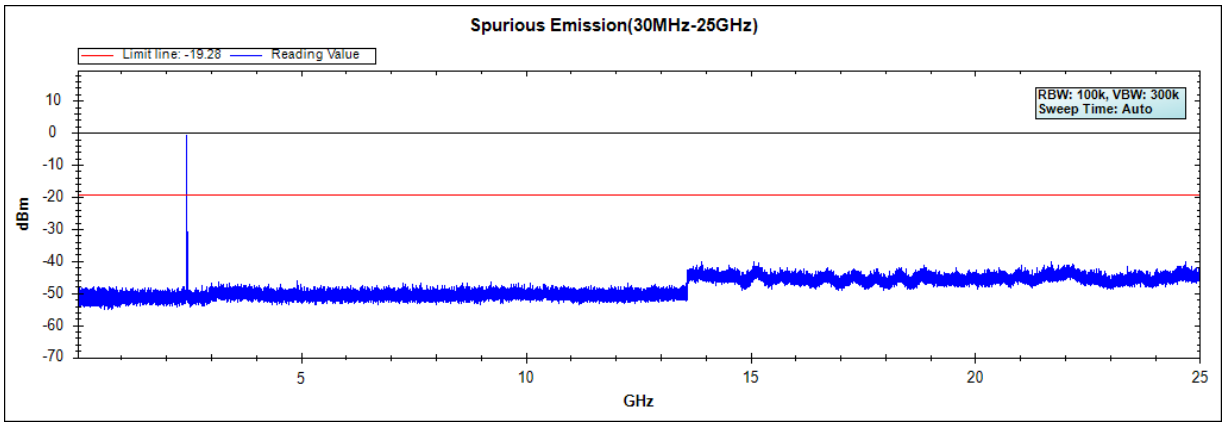
Channel 01 (2412MHz) 30MHz-25GHz



Channel 06 (2437MHz) 30MHz -25GHz



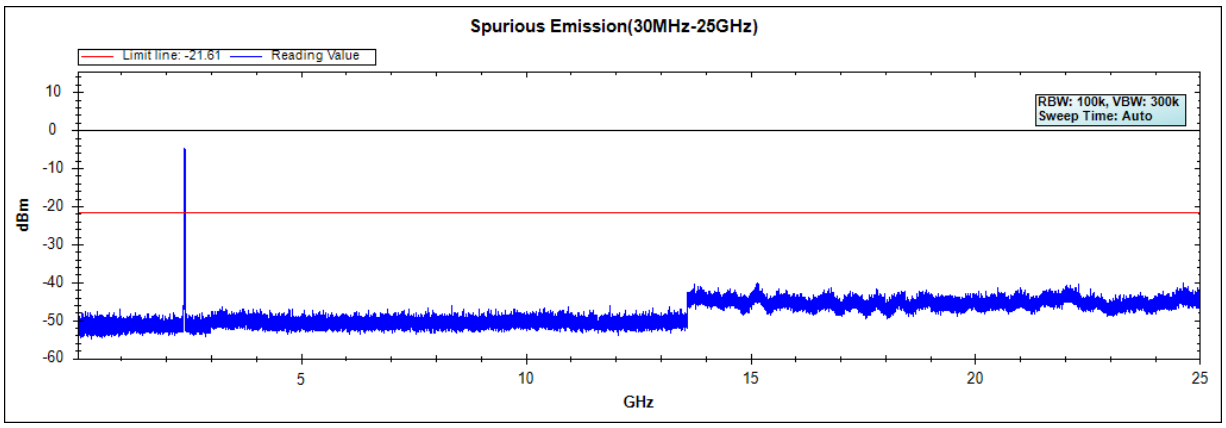
Channel 11 (2462MHz) 30MHz -25GHz



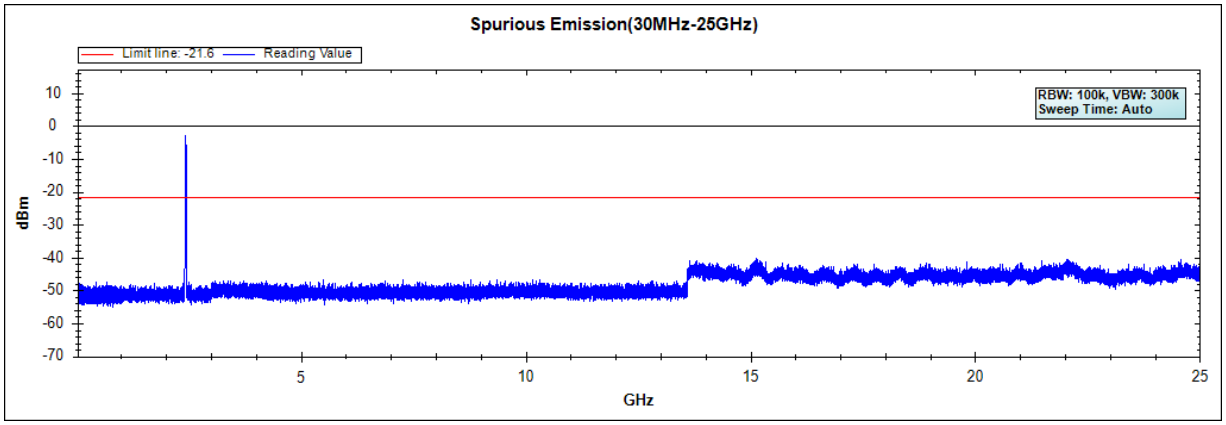
Note: The above test pattern is synthesized by multiple of the frequency range.

Product : Wireless Access Point
Test Item : RF Antenna Conducted Spurious
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit - 802.11g 6Mbps (Internal Antenna)

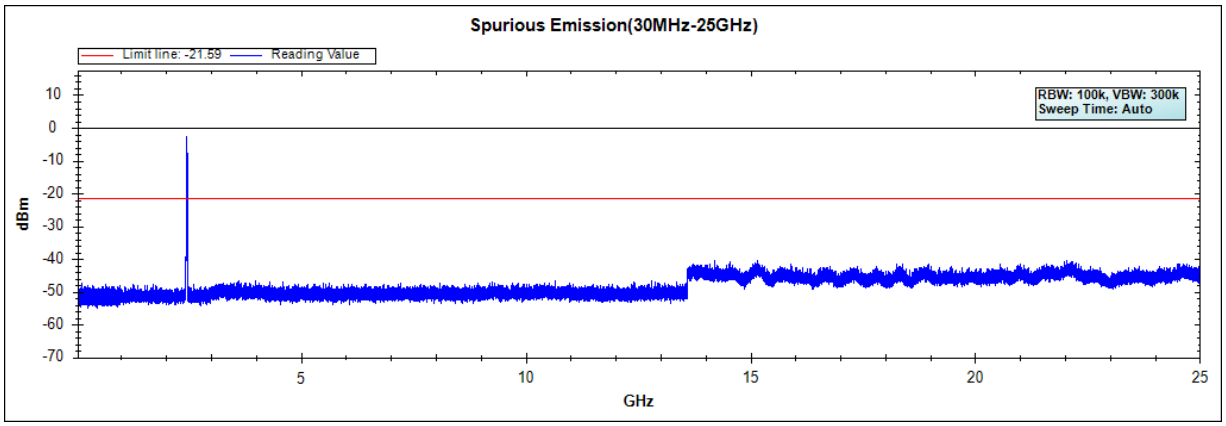
Channel 01 (2412MHz) 30MHz -25GHz



Channel 06 (2437MHz) 30MHz -25GHz



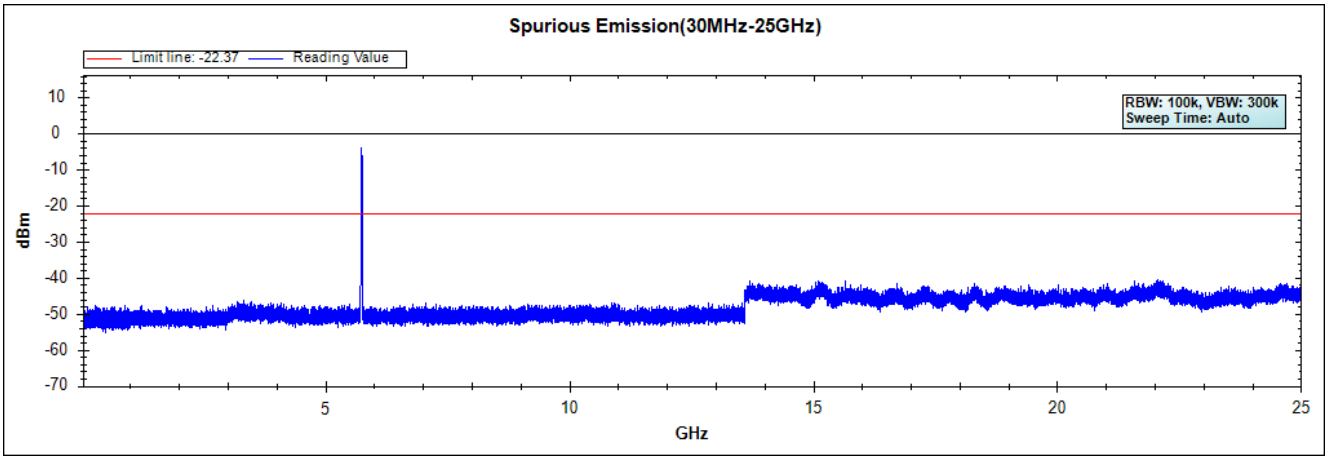
Channel 11 (2462MHz) 30MHz -25GHz

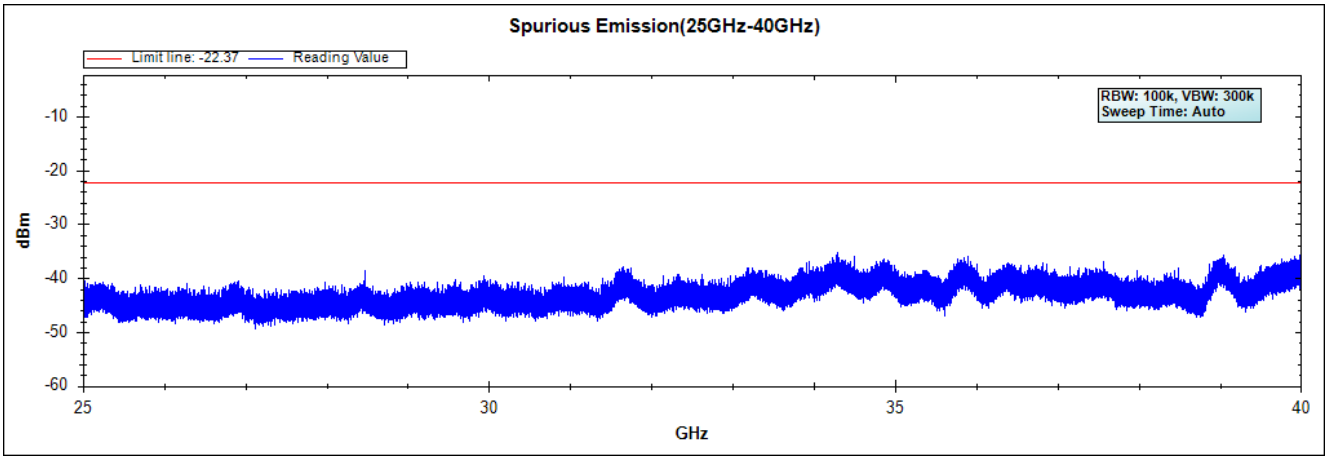


Note: The above test pattern is synthesized by multiple of the frequency range.

Product : Wireless Access Point
Test Item : RF Antenna Conducted Spurious
Test Site : No.3 OATS
Test Mode : Mode 3: Transmit - 802.11a 6Mbps (Internal Antenna)

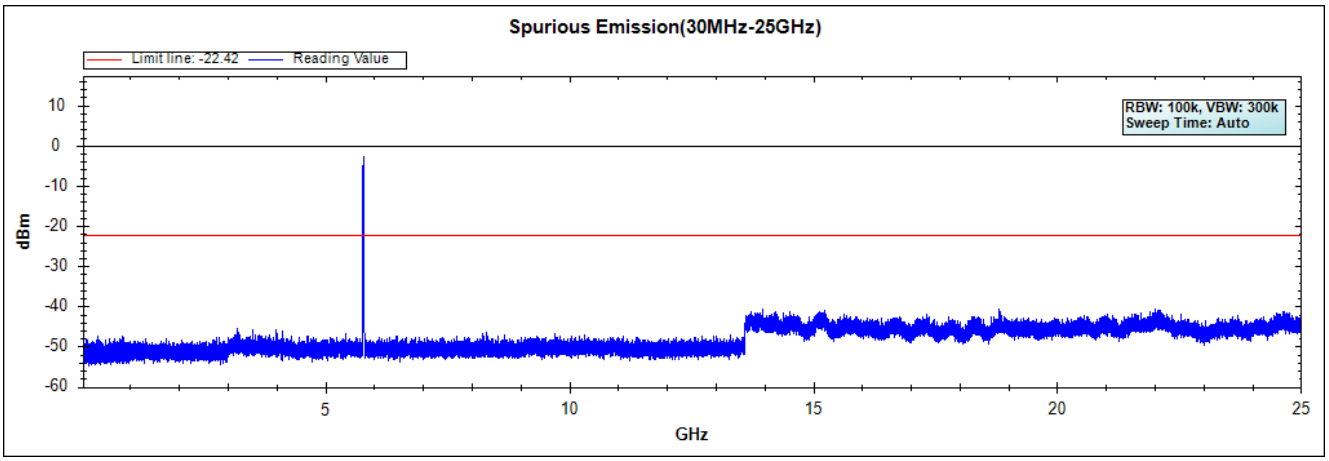
Channel 149 (5745MHz) 30MHz -40GHz

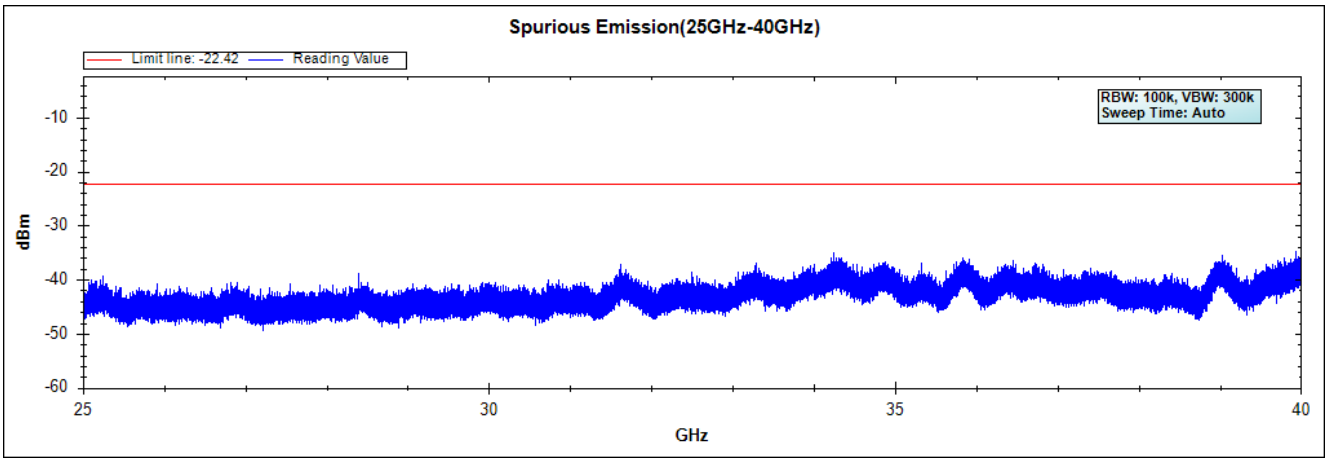




Note: The above test pattern is synthesized by multiple of the frequency range.

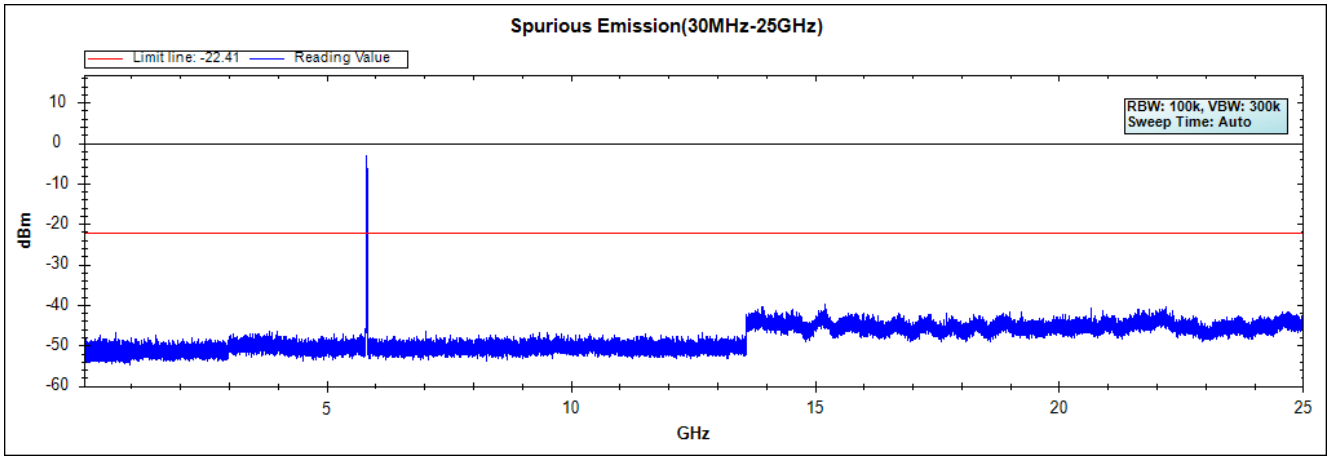
Channel 157 (5785MHz) 30MHz -40GHz

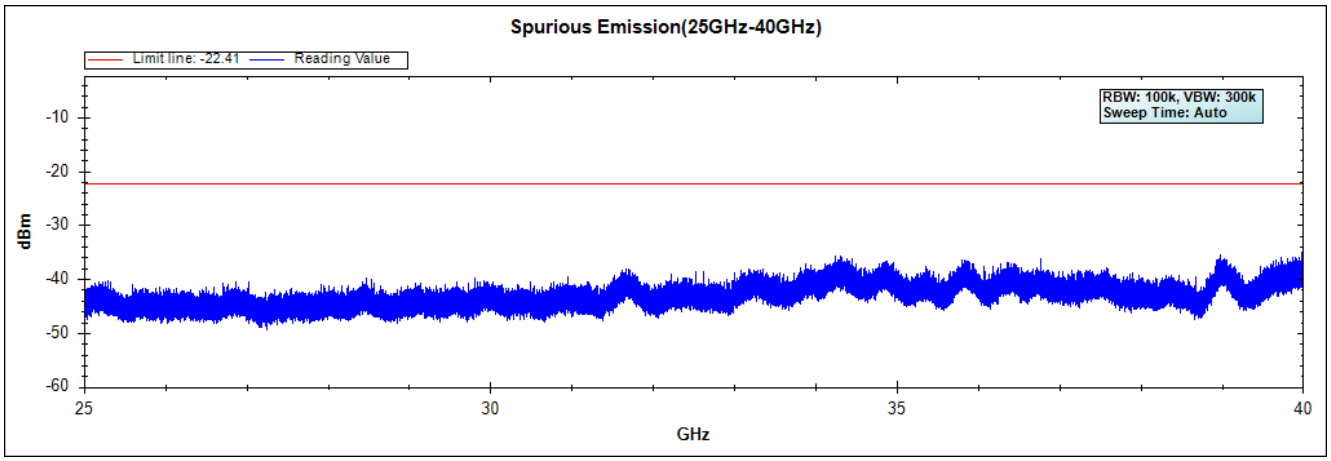




Note: The above test pattern is synthesized by multiple of the frequency range.

Channel 165 (5825MHz) 30MHz -40GHz

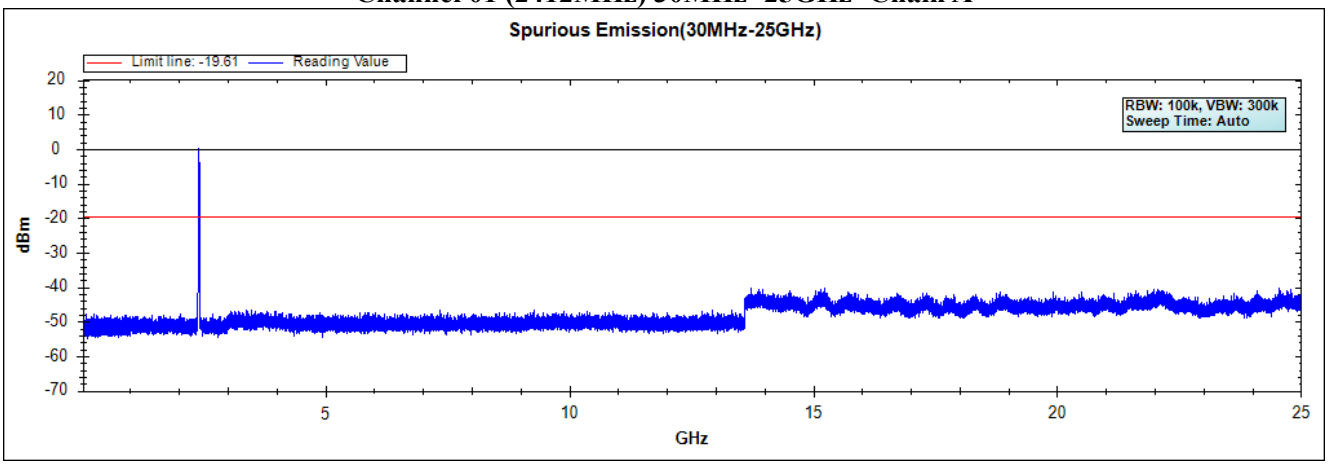




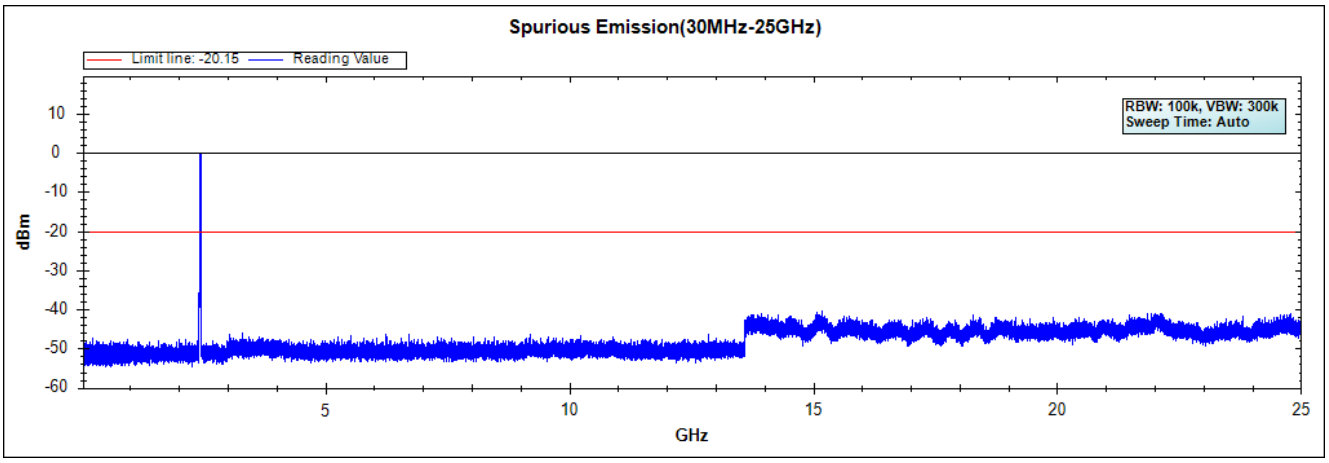
Note: The above test pattern is synthesized by multiple of the frequency range.

Product : Wireless Access Point
Test Item : RF Antenna Conducted Spurious
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit - 802.11n-20BW_14.4Mbps(2.4G Band) (Internal Antenna)

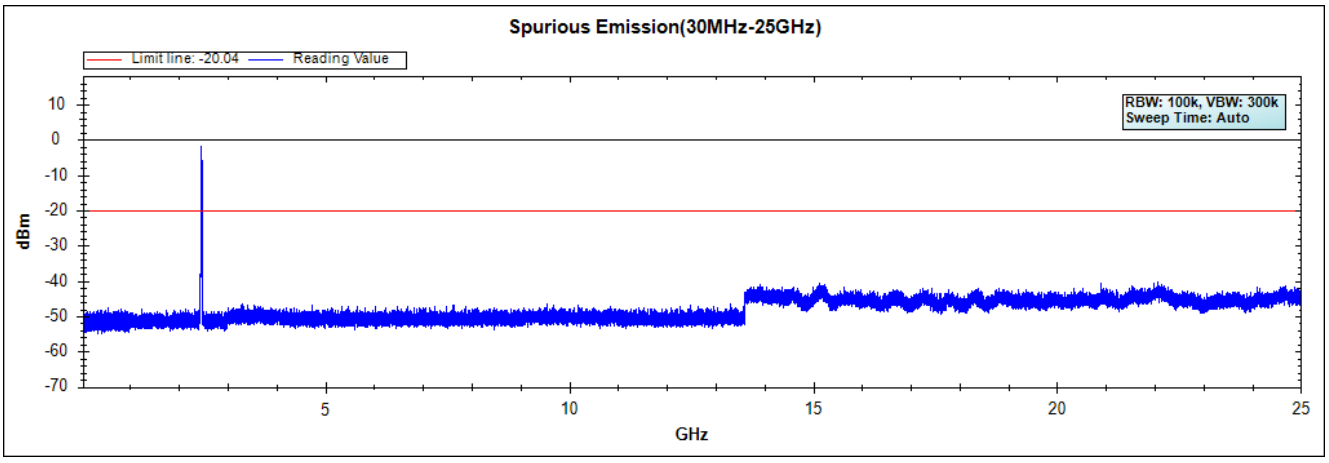
Channel 01 (2412MHz) 30MHz -25GHz- Chain A



Channel 06 (2437MHz) 30MHz -25GHz- Chain A

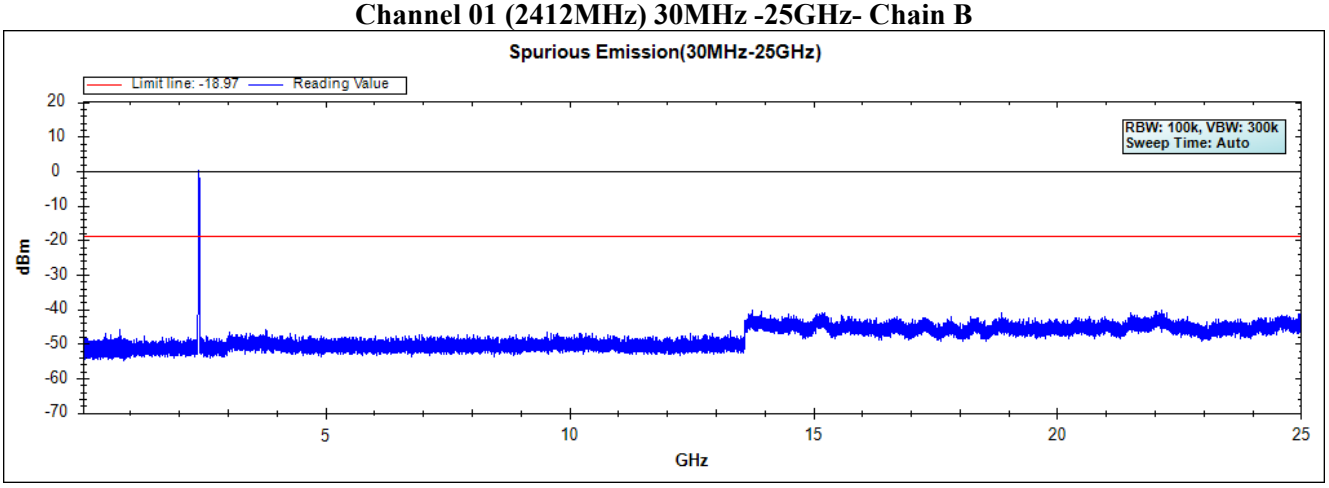


Channel 11 (2462MHz) 30MHz -25GHz- Chain A

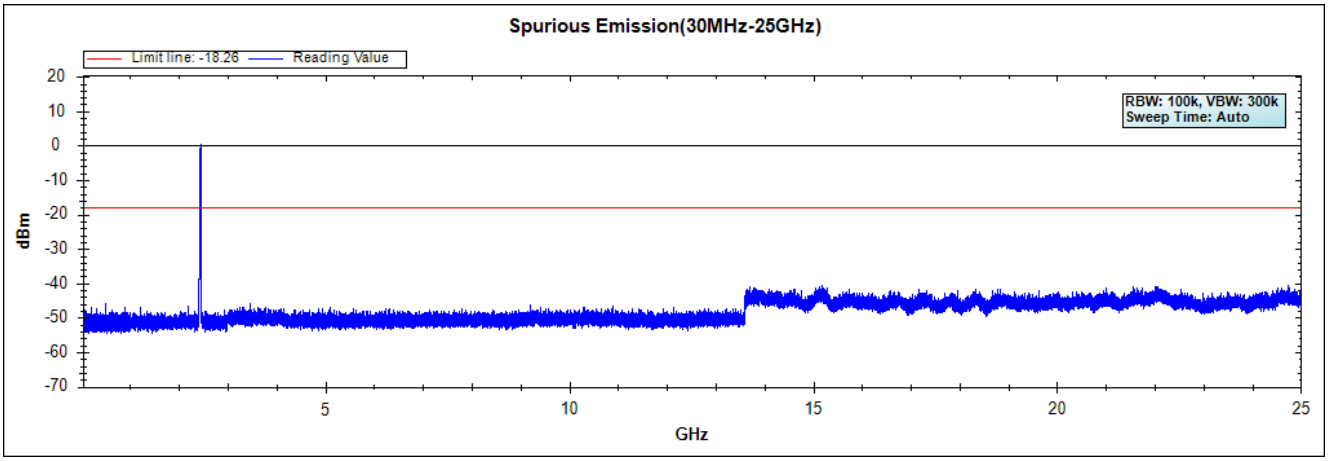


Note: The above test pattern is synthesized by multiple of the frequency range.

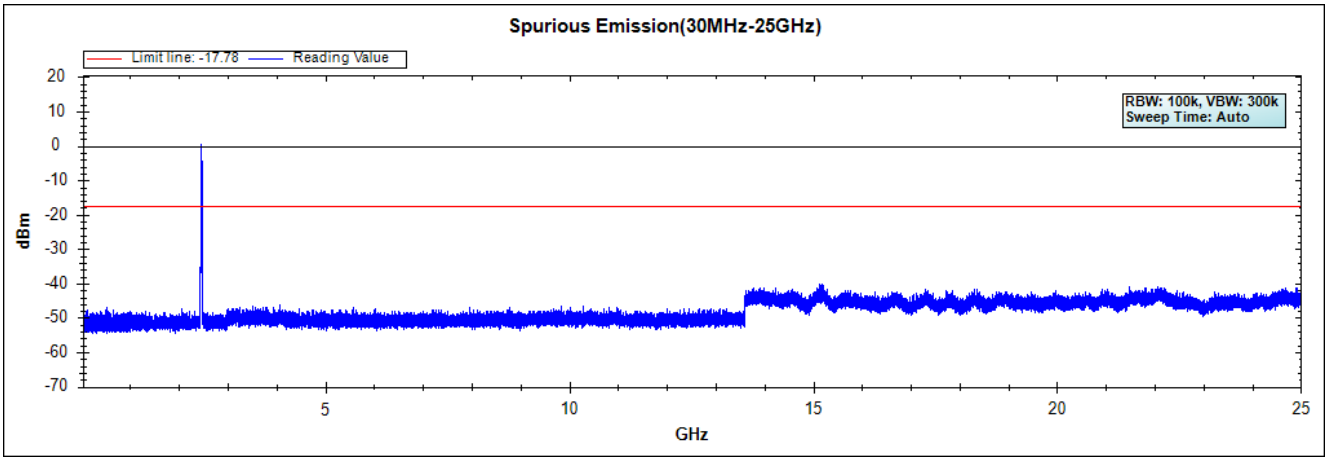
Channel 01 (2412MHz) 30MHz -25GHz- Chain B



Channel 06 (2437MHz) 30MHz -25GHz- Chain B



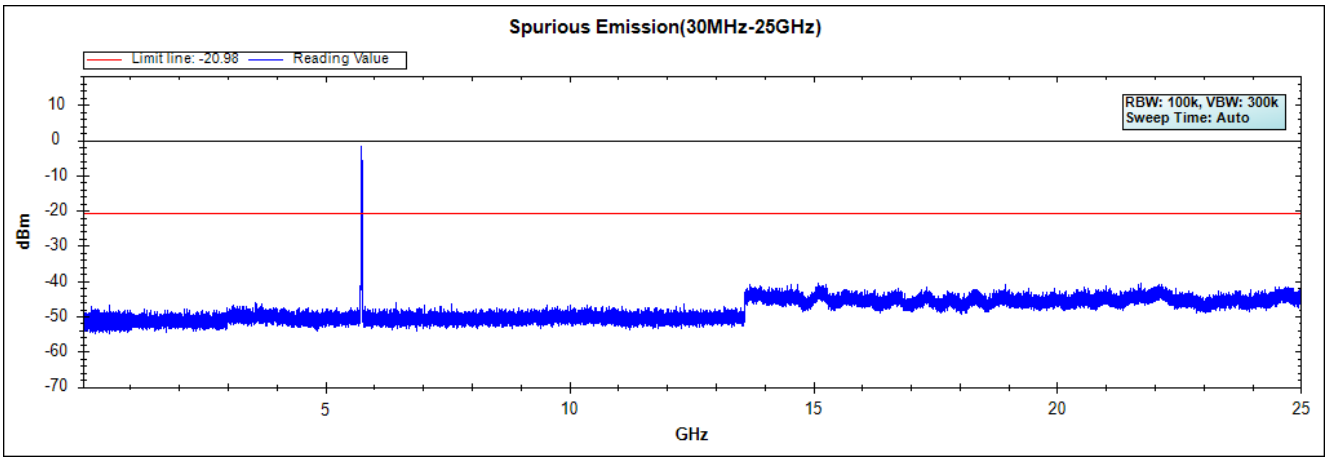
Channel 11 (2462MHz) 30MHz -25GHz- Chain B

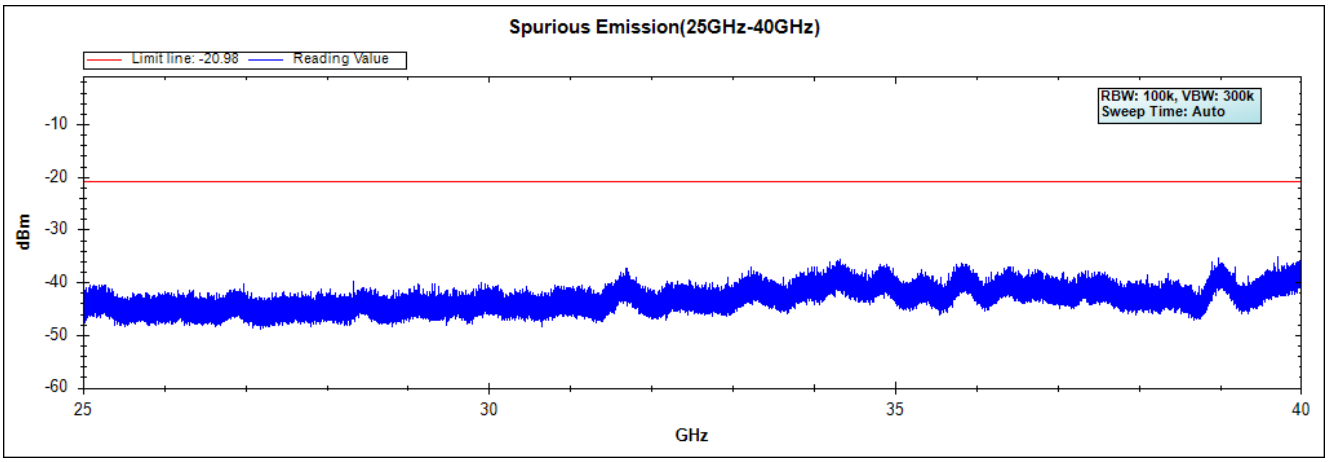


Note: The above test pattern is synthesized by multiple of the frequency range.

Product : Wireless Access Point
Test Item : RF Antenna Conducted Spurious
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit - 802.11n-20BW_14.4Mbps(5G Band) (Internal Antenna)

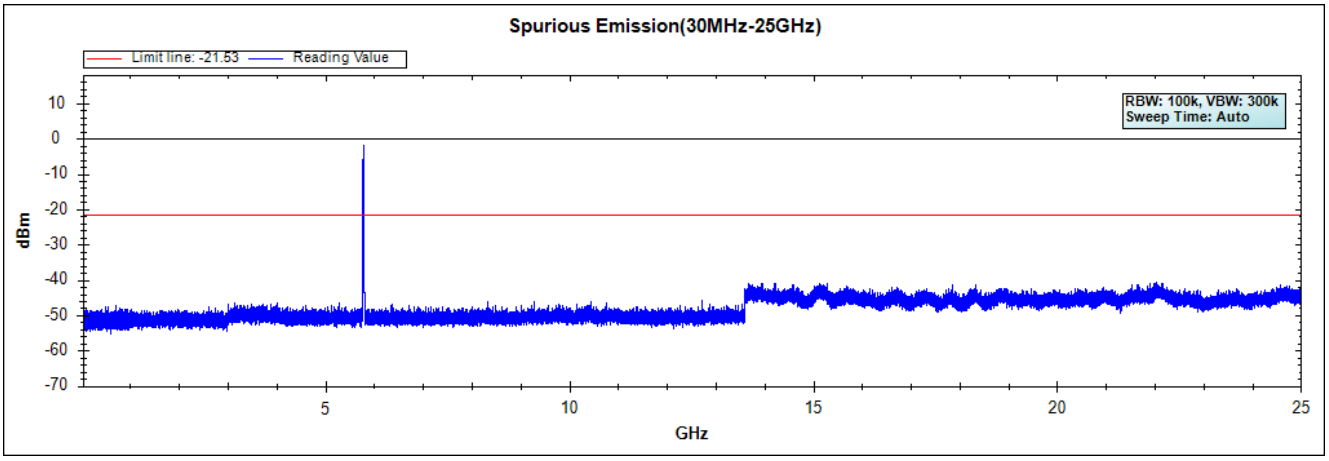
Channel 49 (5745MHz) 30MHz -40GHz-Chain A

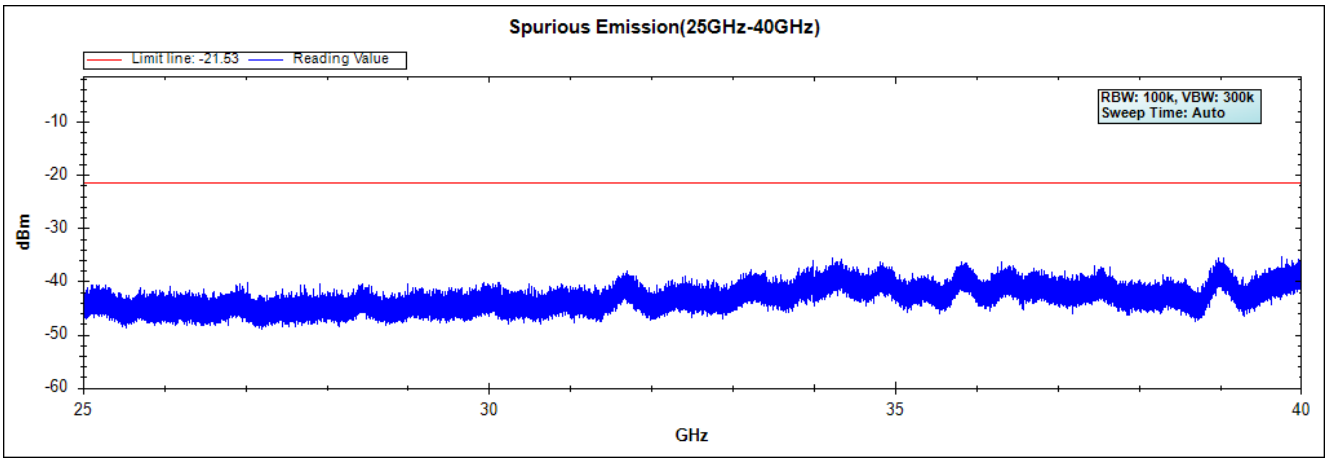




Note: The above test pattern is synthesized by multiple of the frequency range.

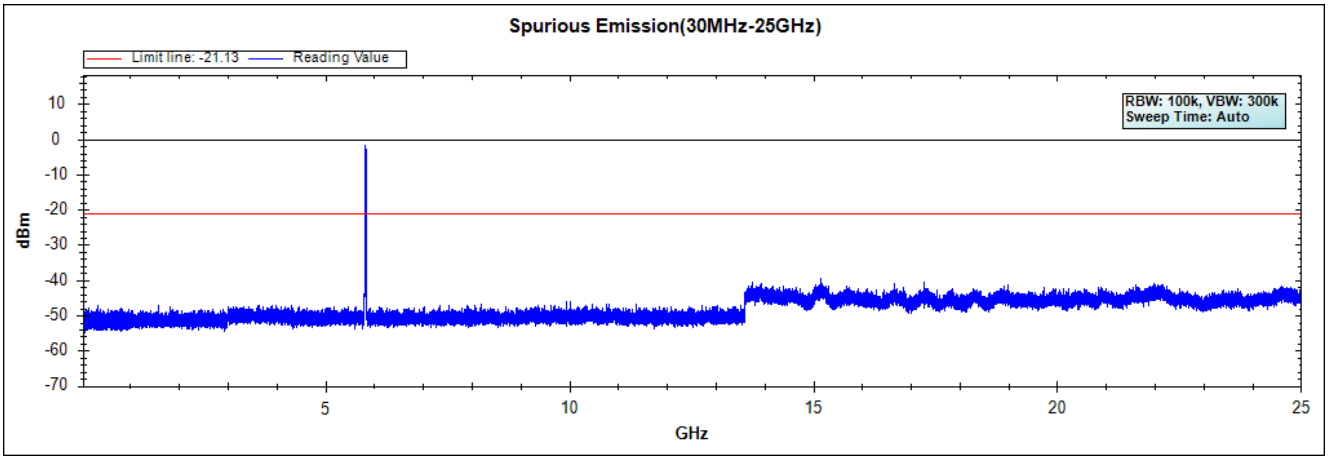
Channel 157 (5785MHz) 30MHz -40GHz-Chain A

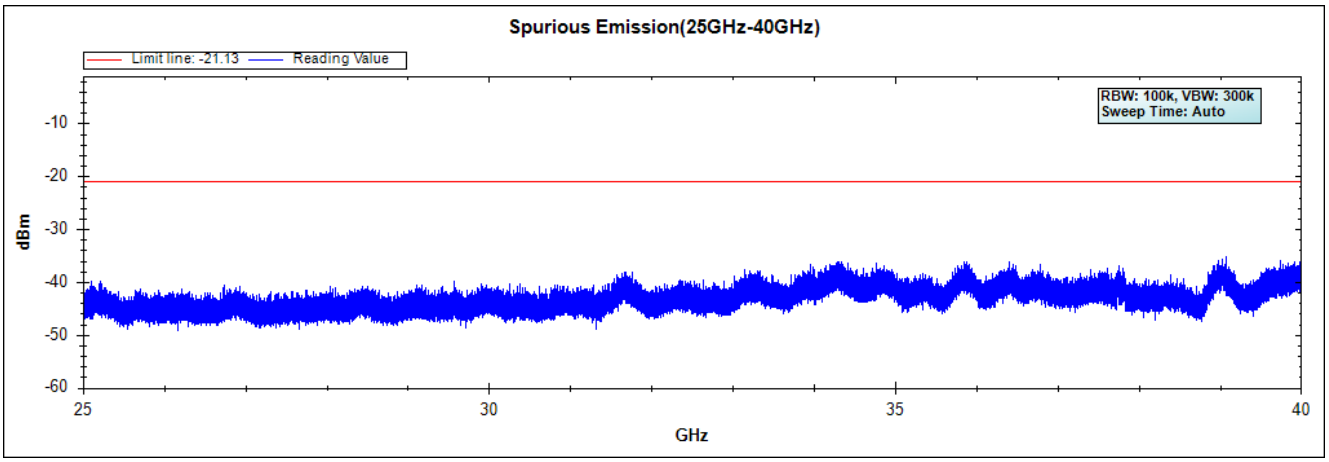




Note: The above test pattern is synthesized by multiple of the frequency range.

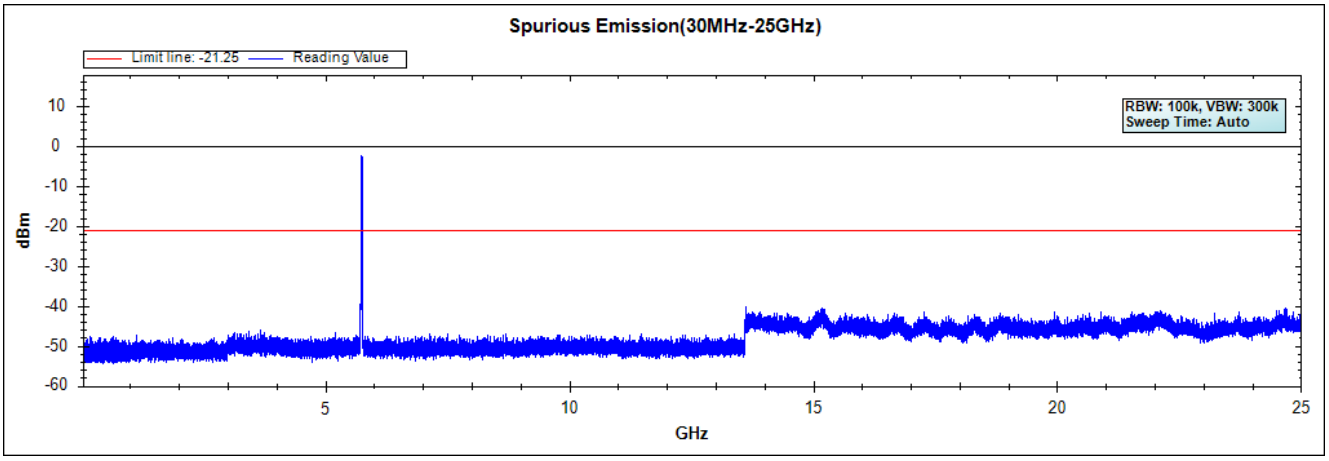
Channel 165 (5825MHz) 30MHz -40GHz-Chain A

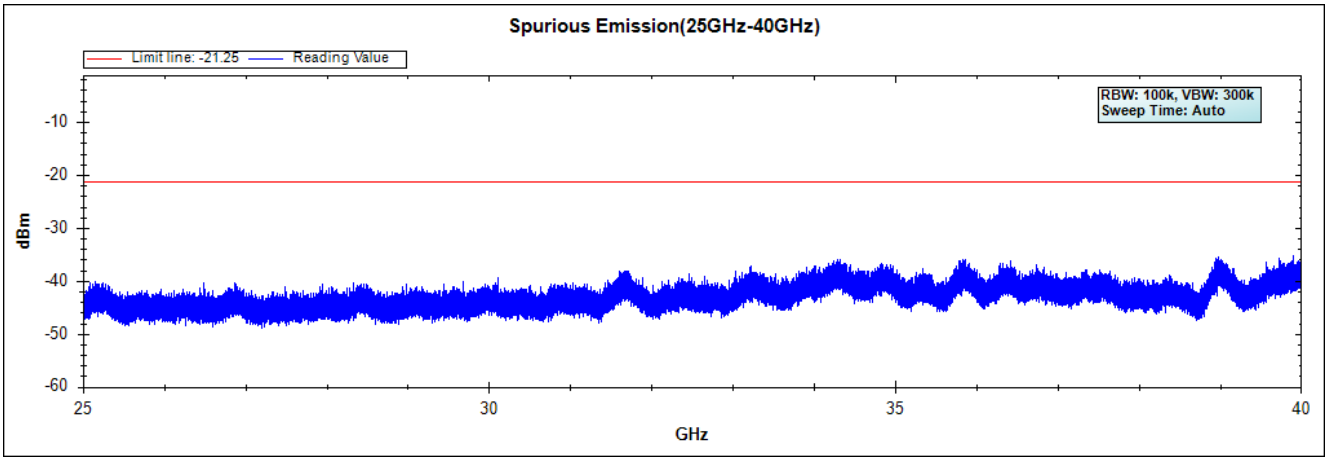




Note: The above test pattern is synthesized by multiple of the frequency range.

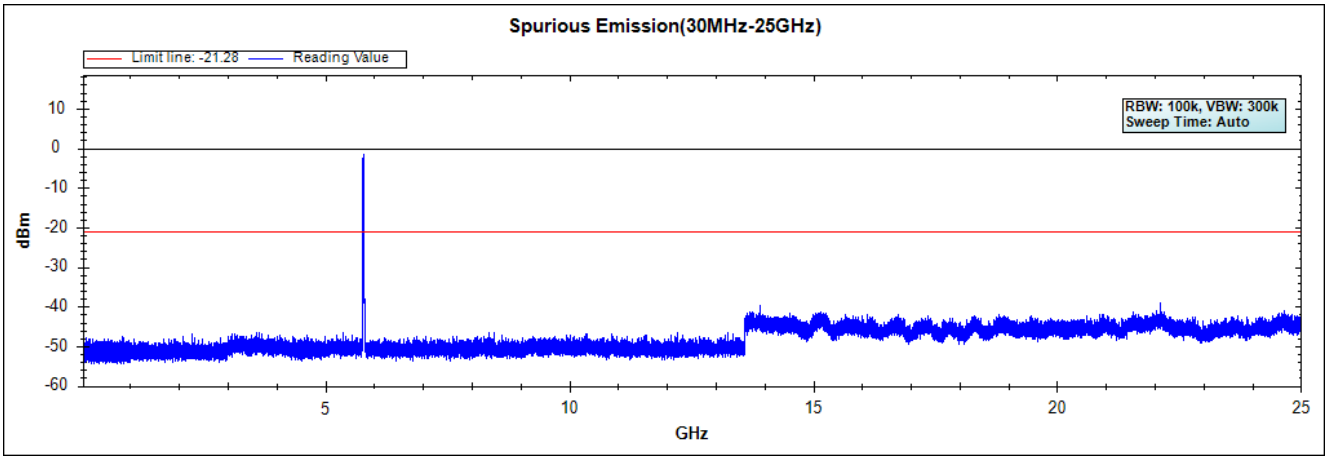
Channel 49 (5745MHz) 30MHz -40GHz-Chain B

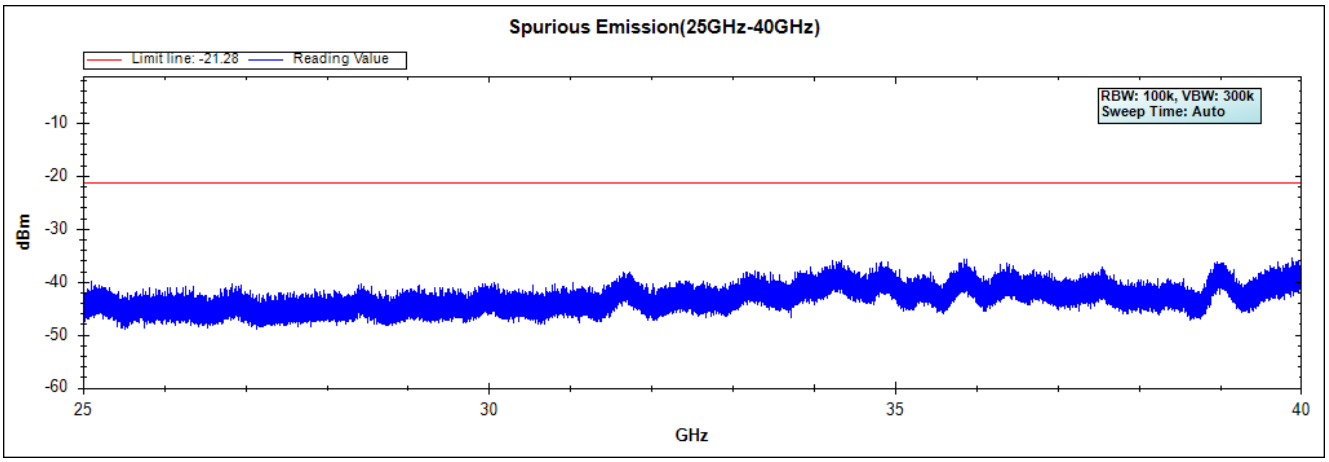




Note: The above test pattern is synthesized by multiple of the frequency range.

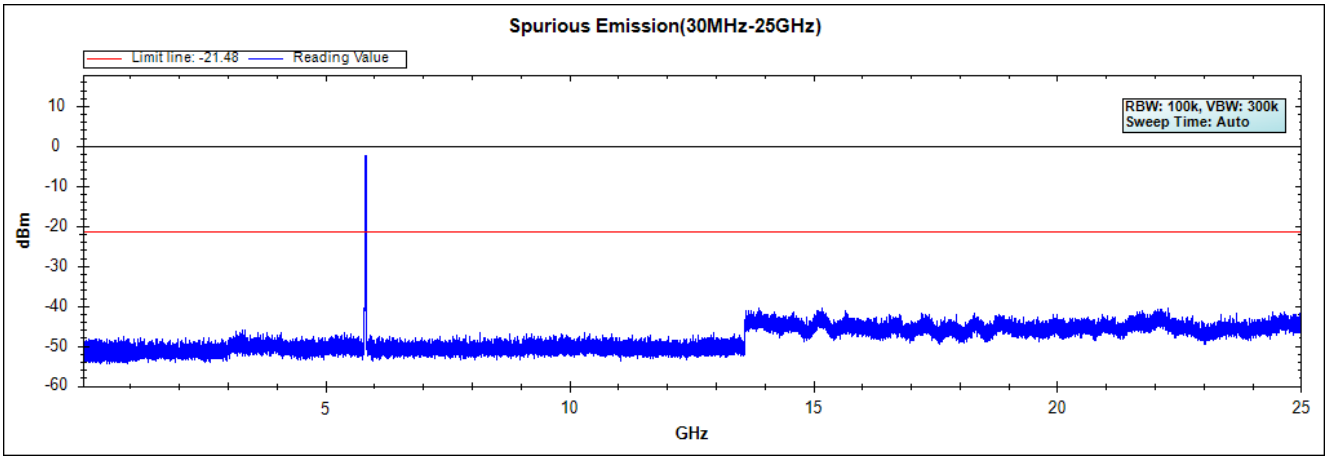
Channel 157 (5785MHz) 30MHz -40GHz-Chain B

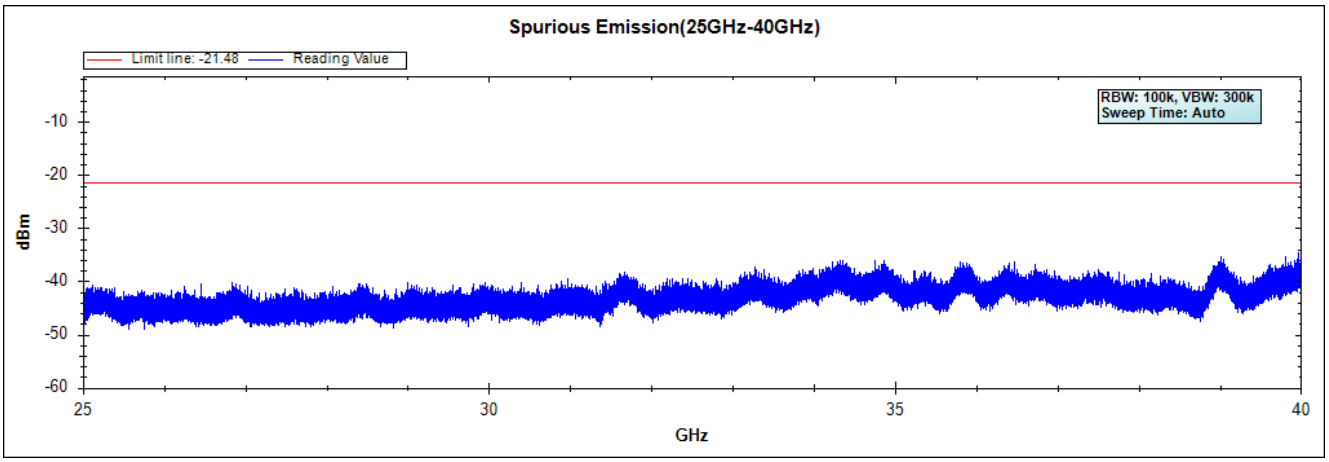




Note: The above test pattern is synthesized by multiple of the frequency range.

Channel 165 (5825MHz) 30MHz -40GHz-Chain B

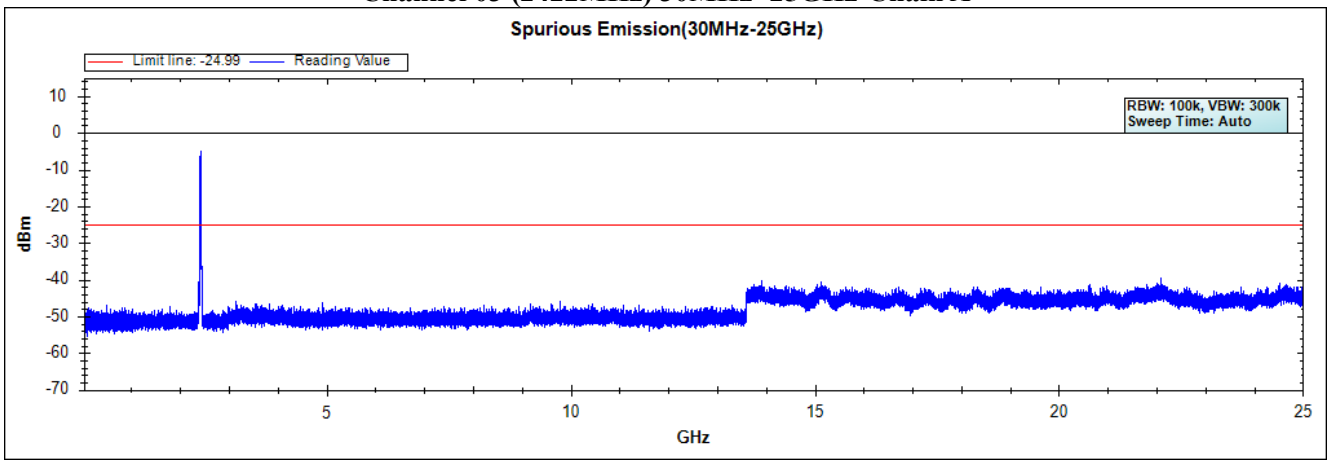




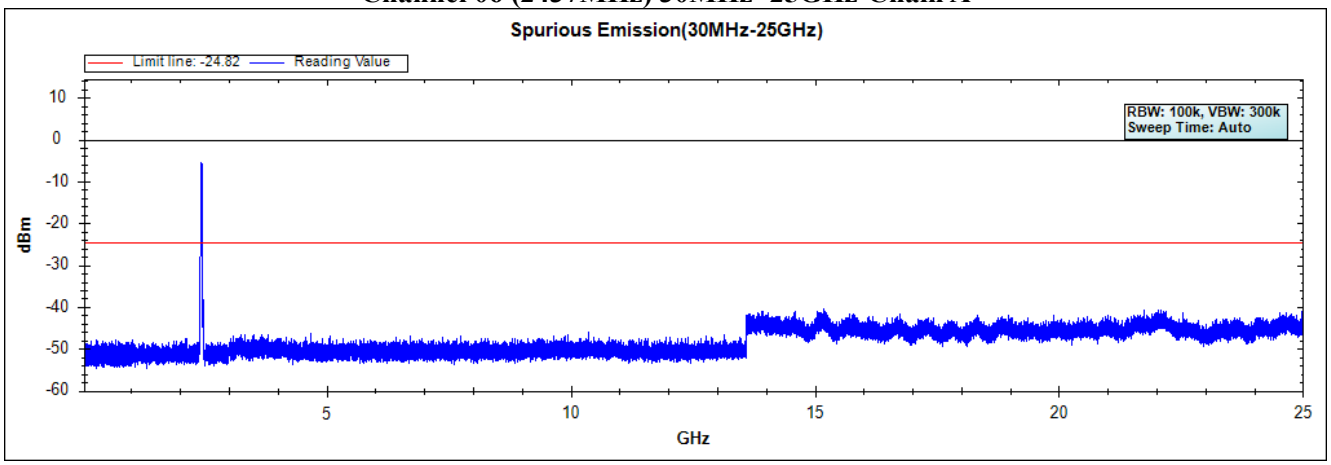
Note: The above test pattern is synthesized by multiple of the frequency range.

Product : Wireless Access Point
Test Item : RF Antenna Conducted Spurious
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit - 802.11n-40BW_30Mbps(2.4G Band) (Internal Antenna)

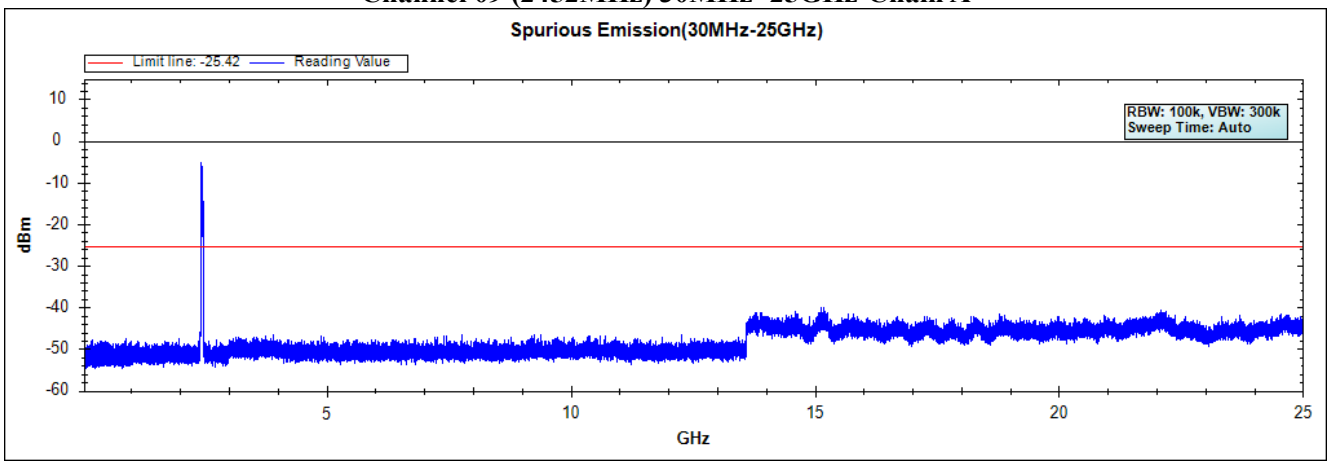
Channel 03 (2422MHz) 30MHz -25GHz-Chain A



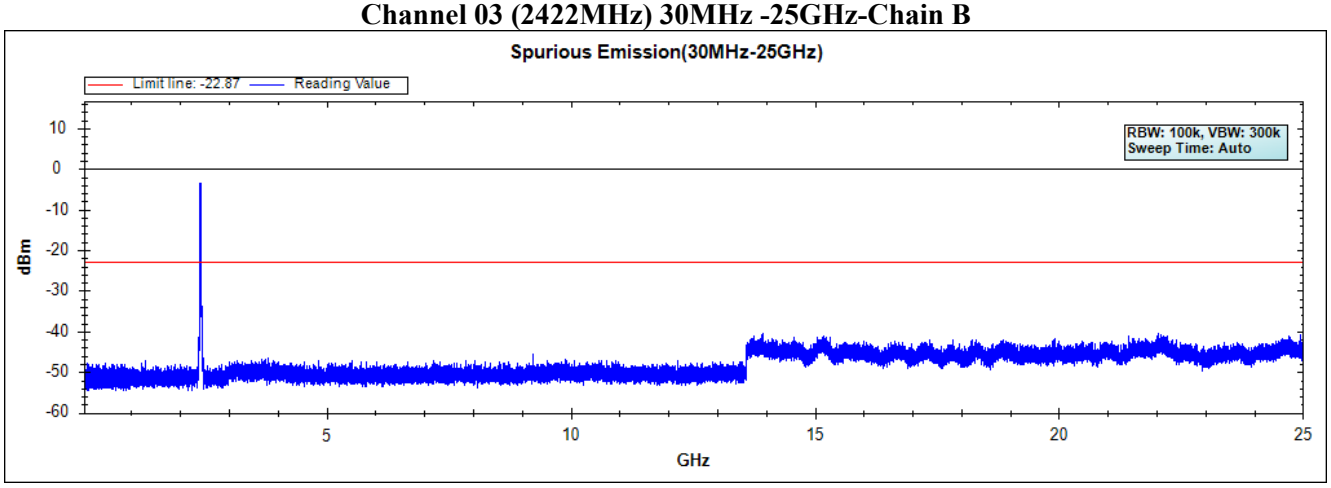
Channel 06 (2437MHz) 30MHz -25GHz-Chain A



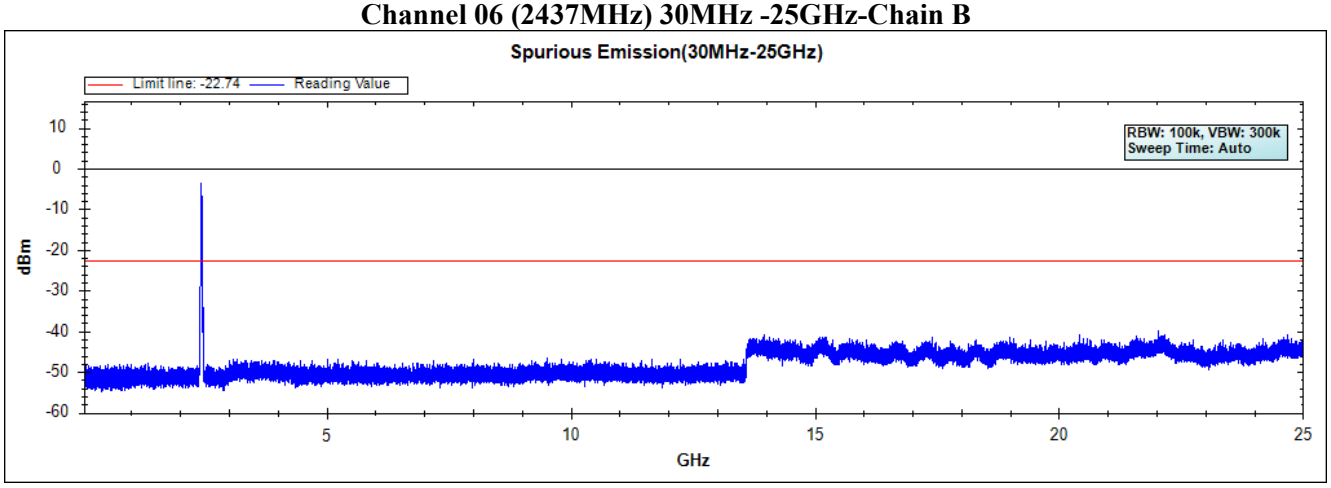
Channel 09 (2452MHz) 30MHz -25GHz-Chain A



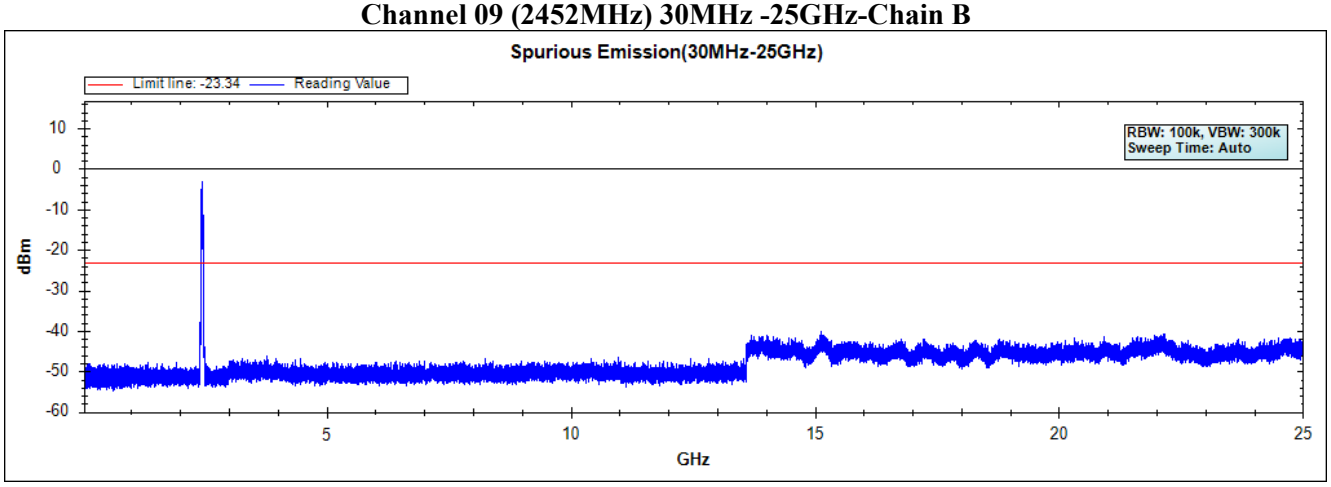
Channel 03 (2422MHz) 30MHz -25GHz-Chain B



Channel 06 (2437MHz) 30MHz -25GHz-Chain B

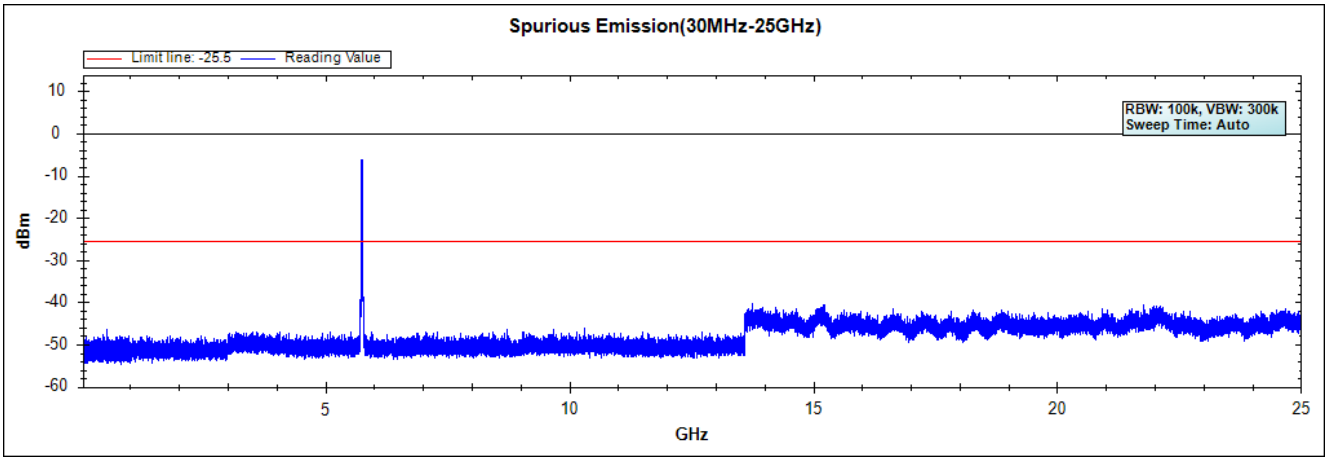


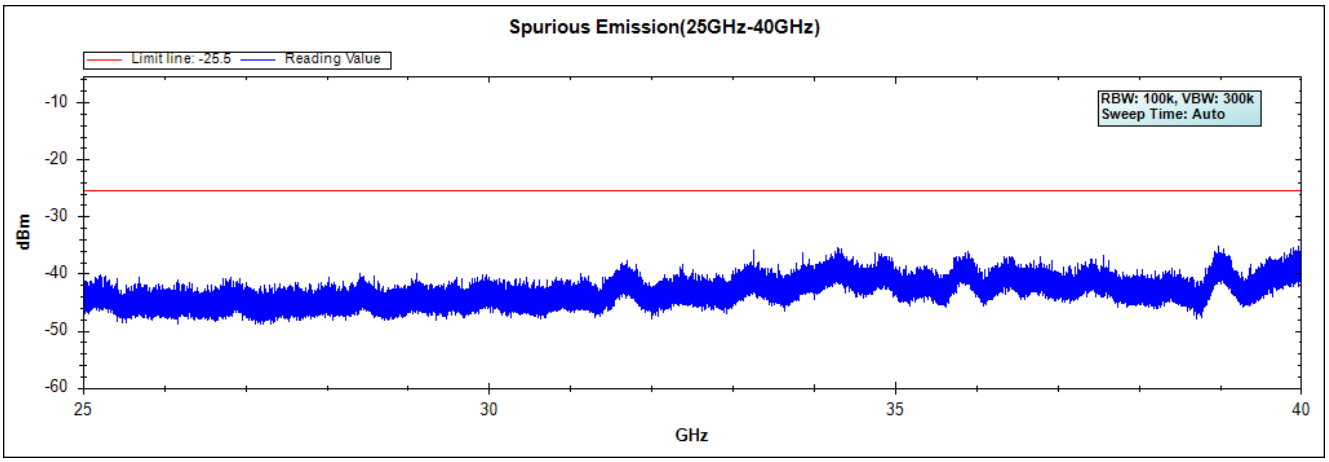
Channel 09 (2452MHz) 30MHz -25GHz-Chain B



Product : Wireless Access Point
Test Item : RF Antenna Conducted Spurious
Test Site : No.3 OATS
Test Mode : Mode 7: Transmit - 802.11n-40BW_30Mbps(5G Band) (Internal Antenna)

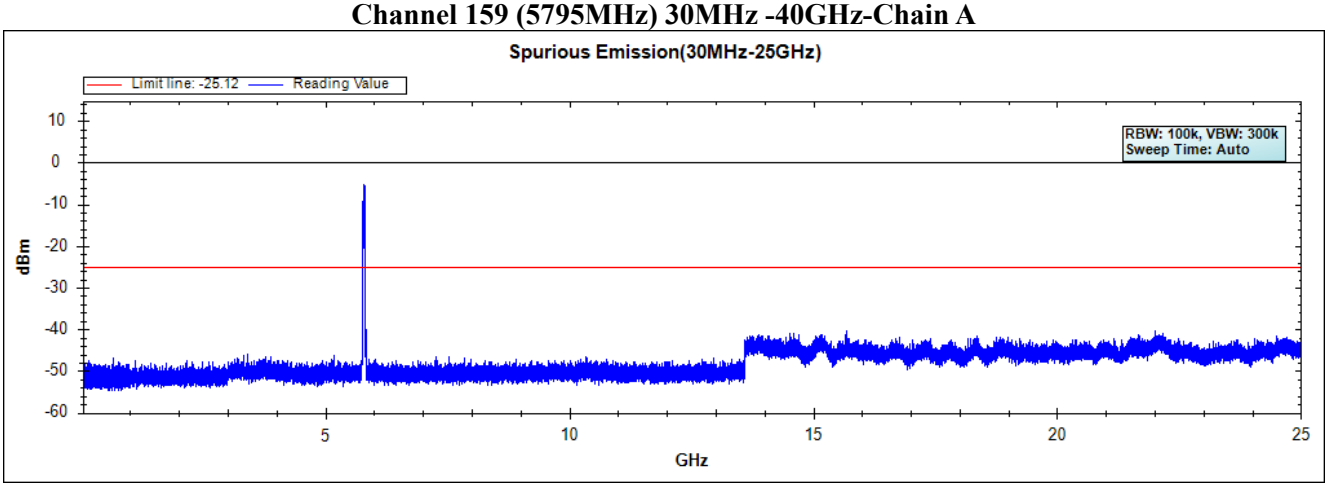
Channel 151 (5755MHz) 30MHz -40GHz-Chain A

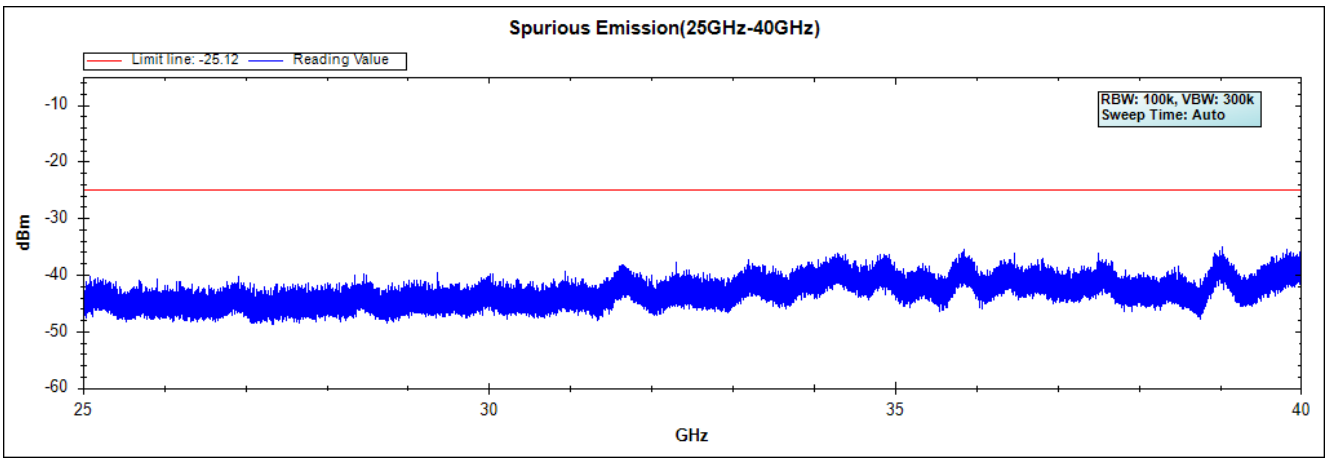




Note: The above test pattern is synthesized by multiple of the frequency range.

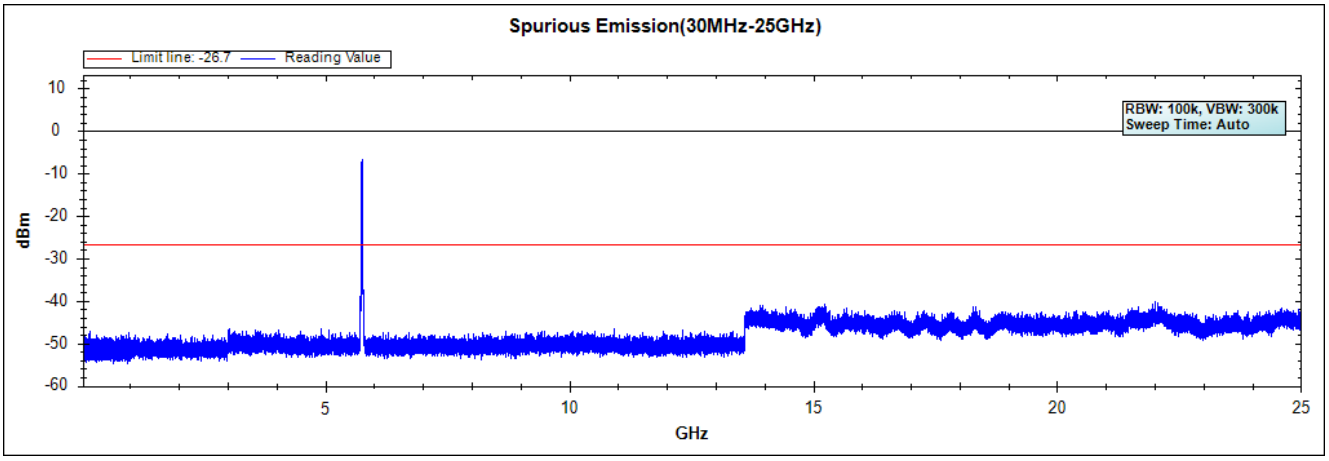
Channel 159 (5795MHz) 30MHz -40GHz-Chain A

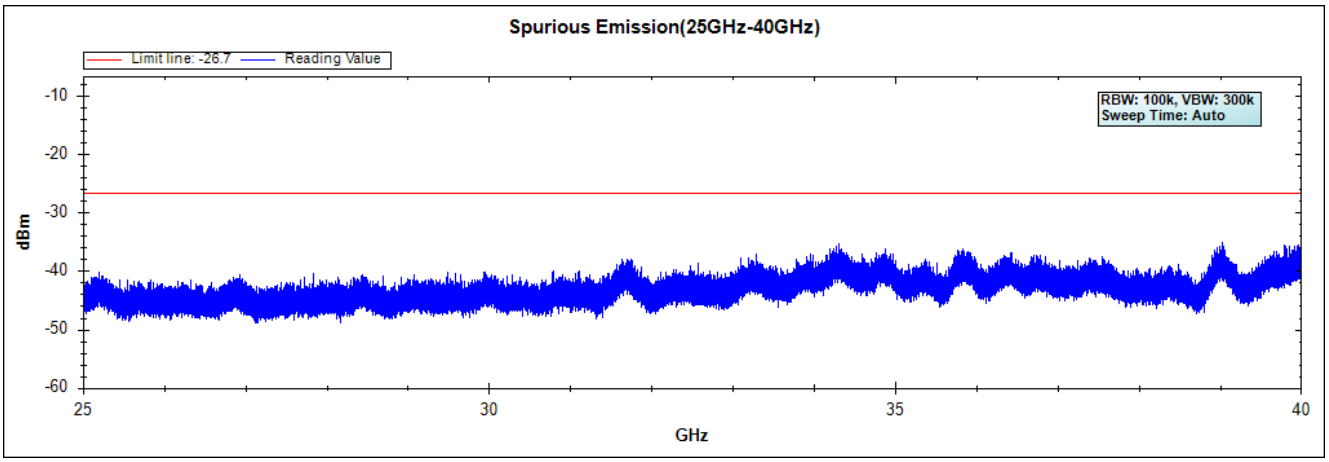




Note: The above test pattern is synthesized by multiple of the frequency range.

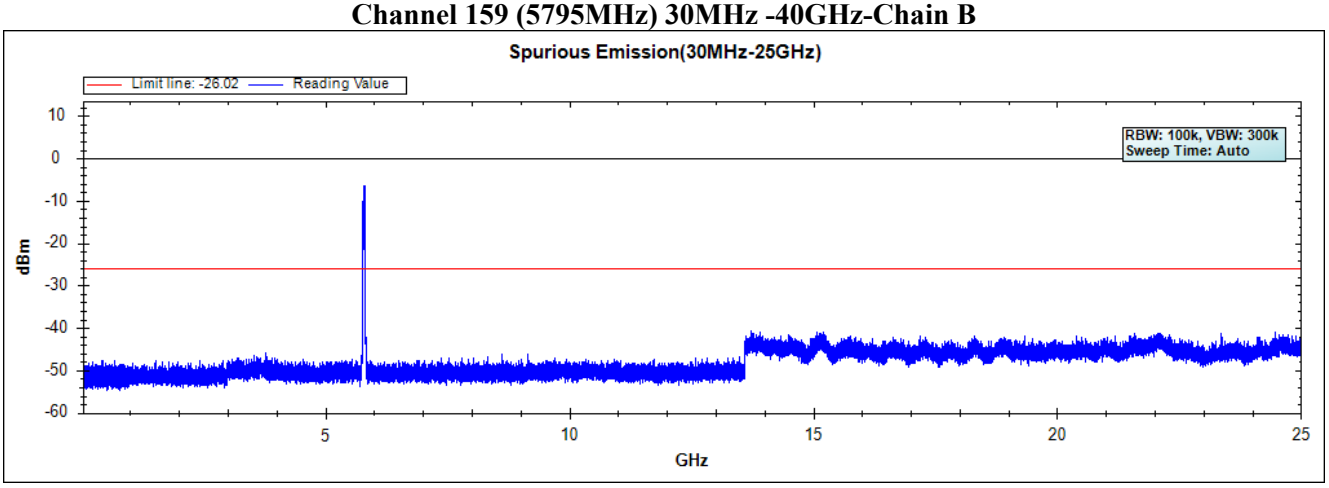
Channel 151 (5755MHz) 30MHz -40GHz-Chain B

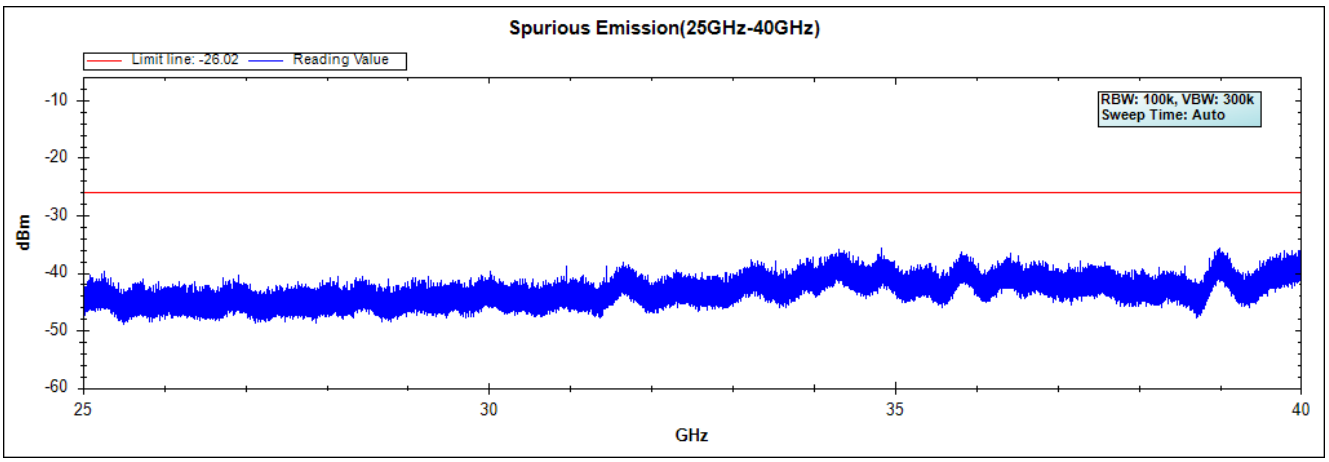




Note: The above test pattern is synthesized by multiple of the frequency range.

Channel 159 (5795MHz) 30MHz -40GHz-Chain B

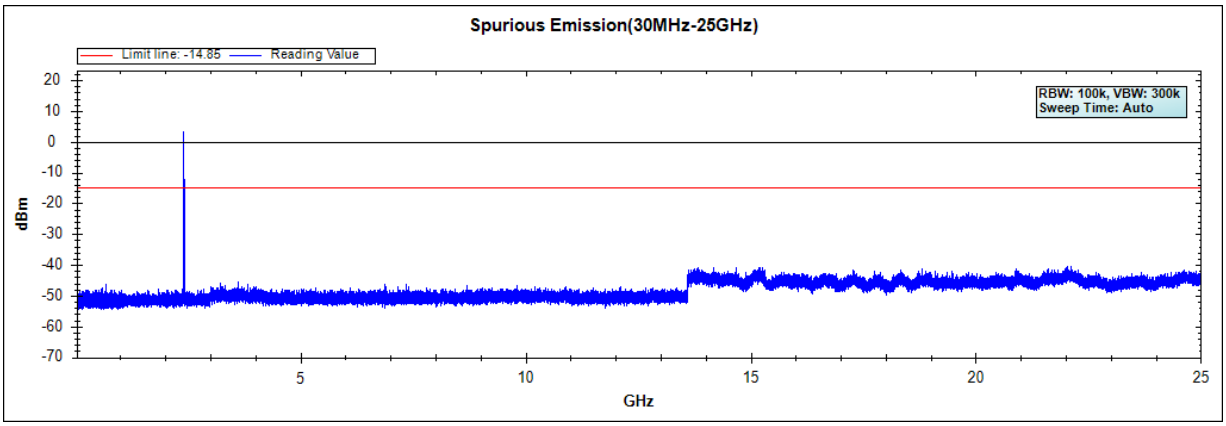




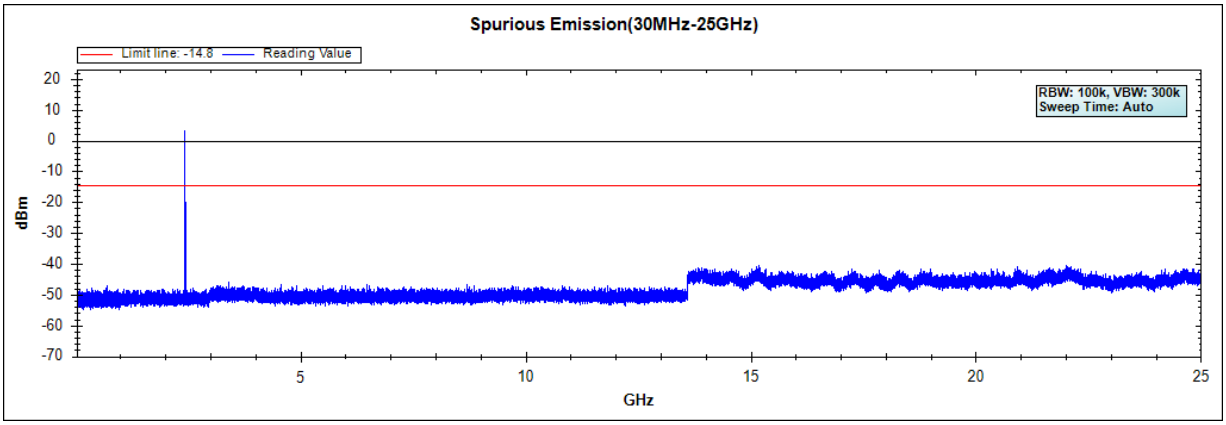
Note: The above test pattern is synthesized by multiple of the frequency range.

Product : Wireless Access Point
Test Item : RF antenna conducted test
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit - 802.11b 1Mbps (External Antenna)

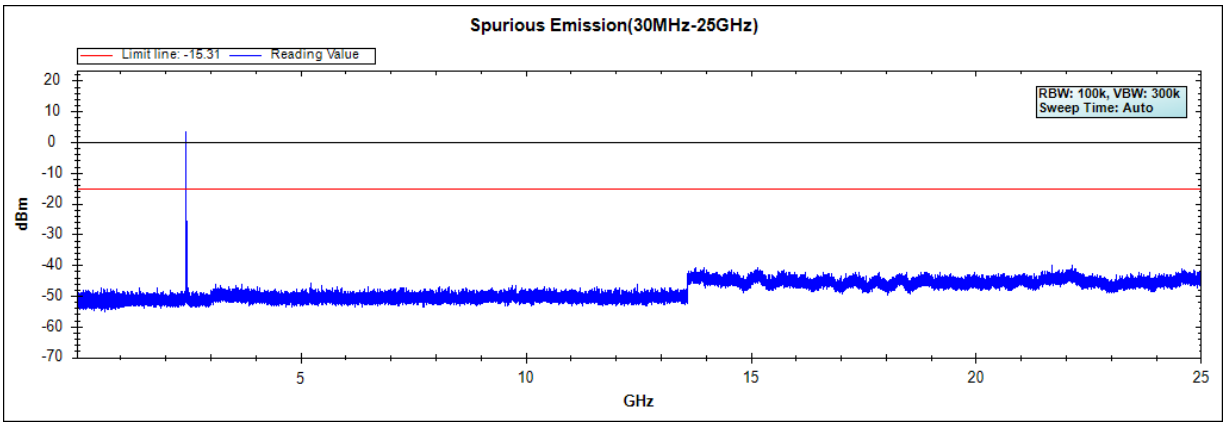
Channel 01 (2412MHz) 30MHz-25GHz



Channel 06 (2437MHz) 30MHz -25GHz



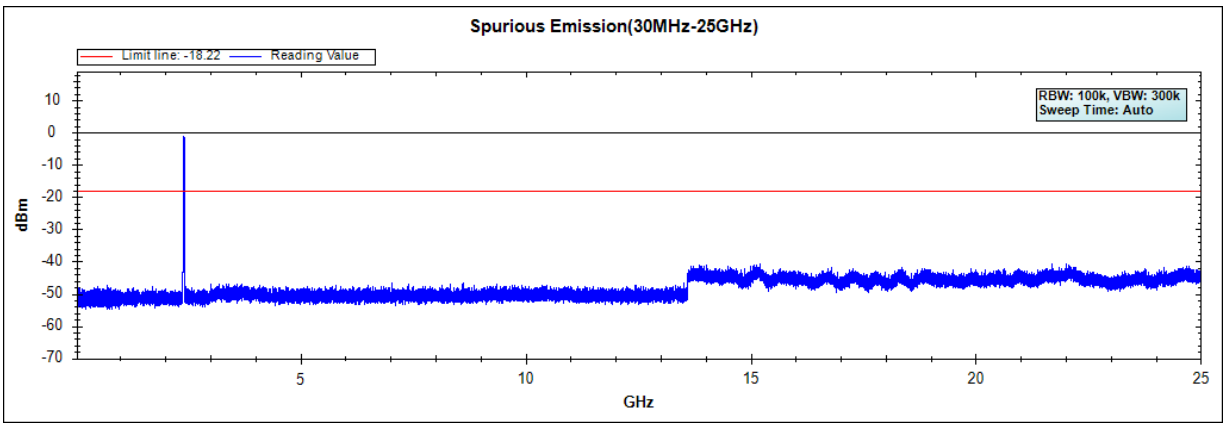
Channel 11 (2462MHz) 30MHz -25GHz



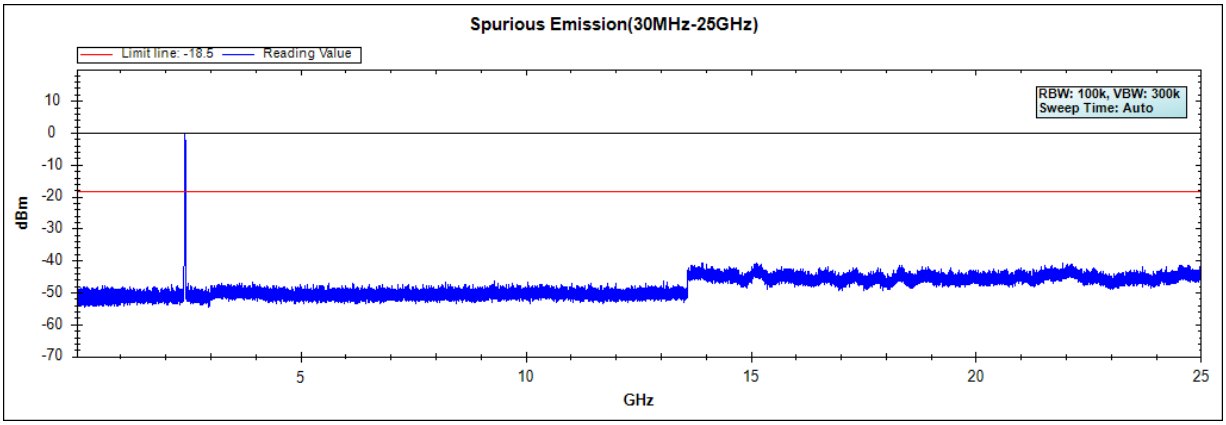
Note: The above test pattern is synthesized by multiple of the frequency range.

Product : Wireless Access Point
Test Item : RF Antenna Conducted Spurious
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit - 802.11g 6Mbps (External Antenna)

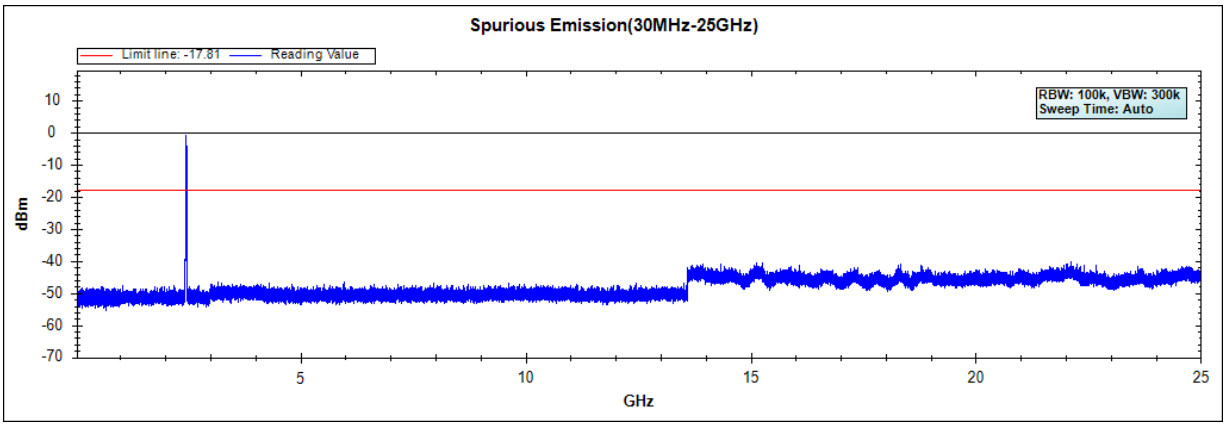
Channel 01 (2412MHz) 30MHz -25GHz



Channel 06 (2437MHz) 30MHz -25GHz



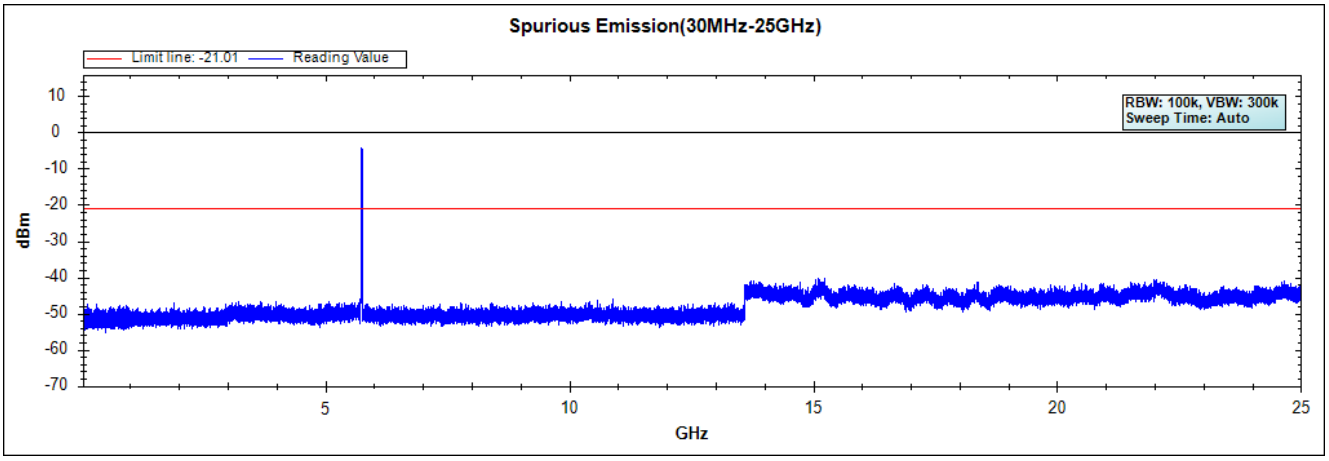
Channel 11 (2462MHz) 30MHz -25GHz

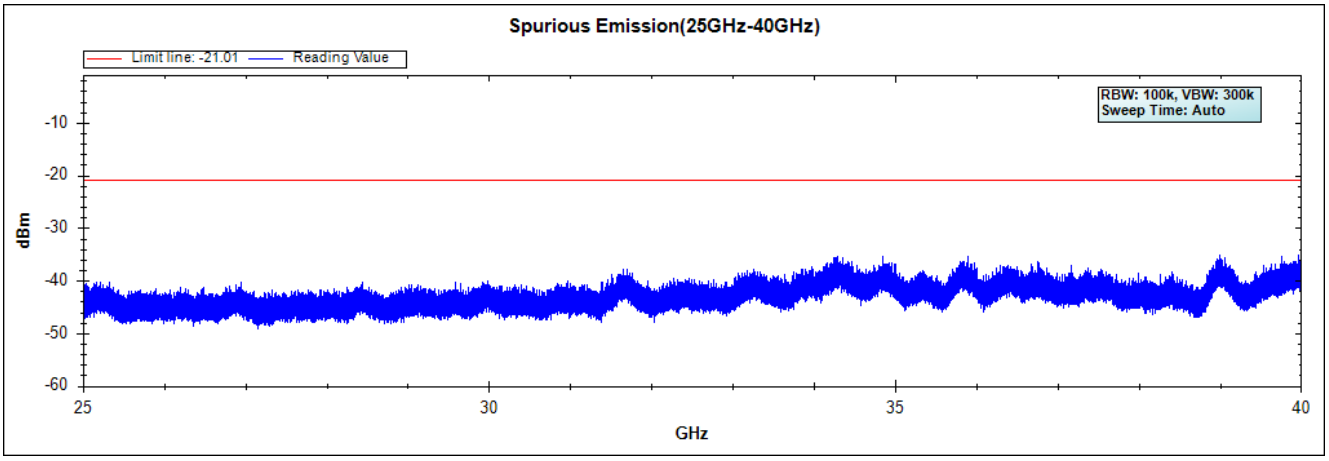


Note: The above test pattern is synthesized by multiple of the frequency range.

Product	:	Wireless Access Point
Test Item	:	RF Antenna Conducted Spurious
Test Site	:	No.3 OATS
Test Mode	:	Mode 3: Transmit - 802.11a 6Mbps (External Antenna)

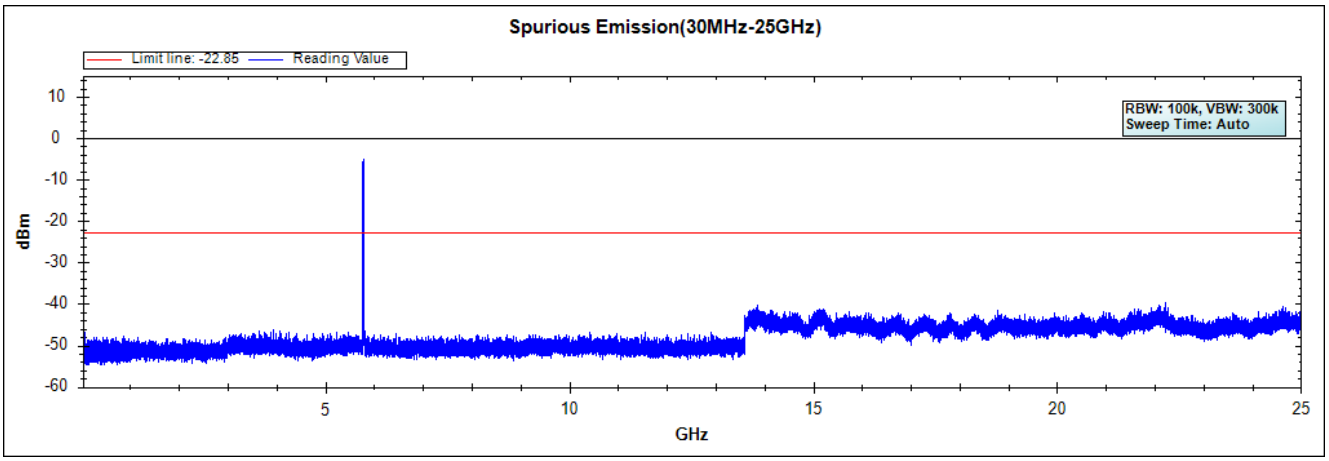
Channel 149 (5745MHz) 30MHz -40GHz

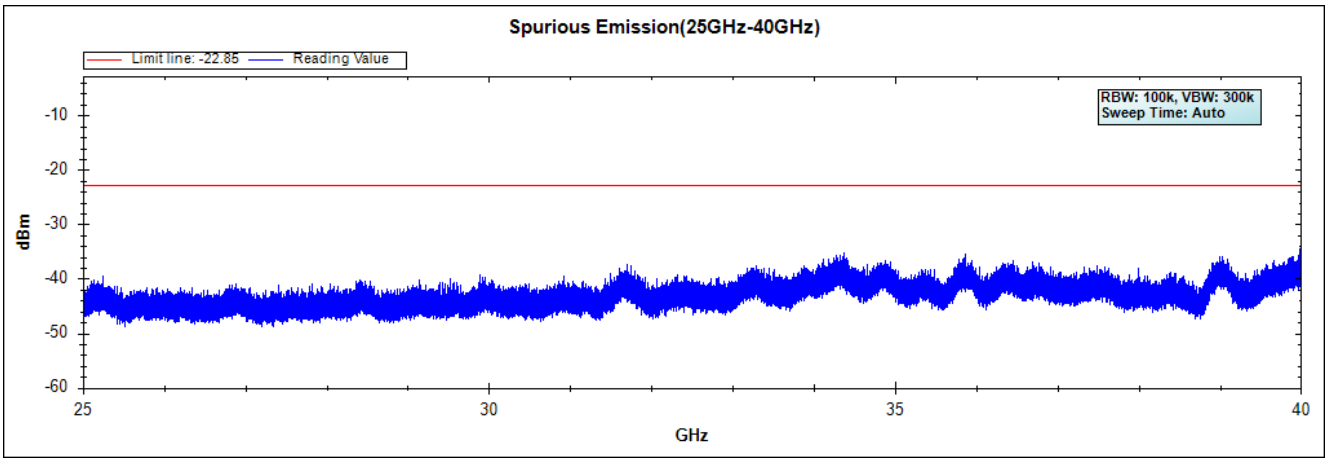




Note: The above test pattern is synthesized by multiple of the frequency range.

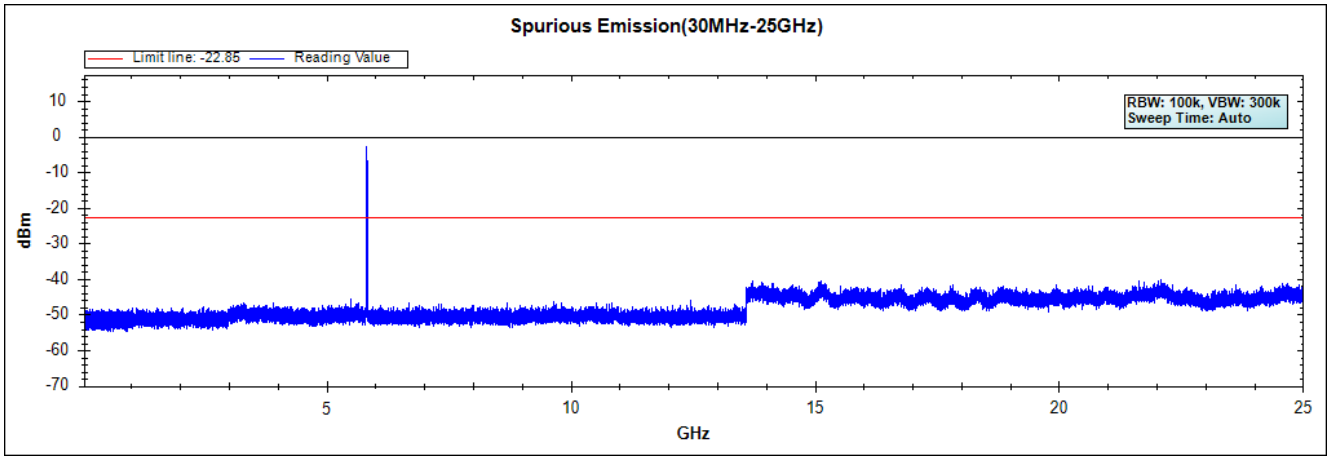
Channel 157 (5785MHz) 30MHz -40GHz

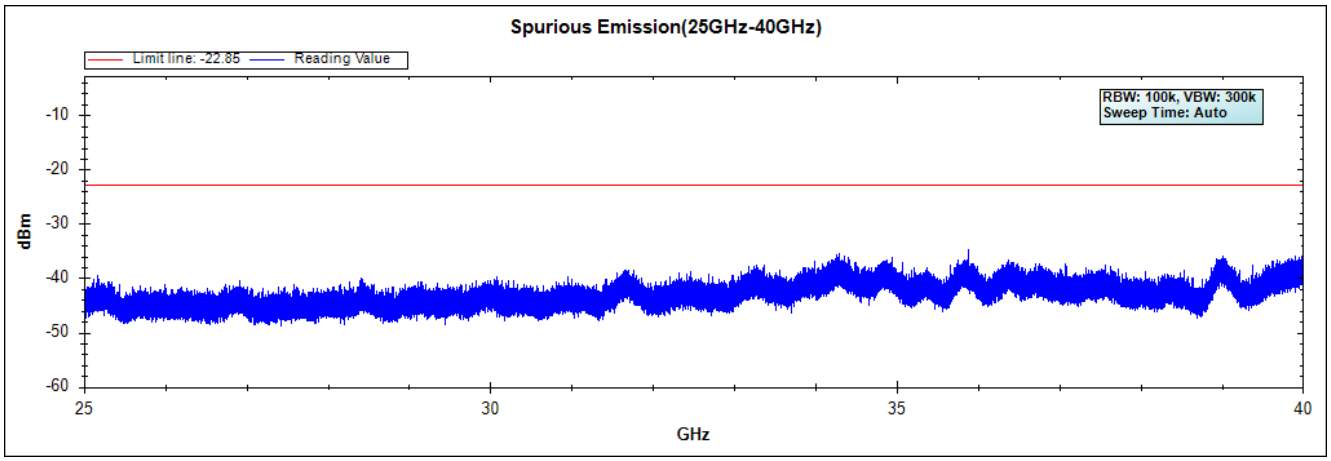




Note: The above test pattern is synthesized by multiple of the frequency range.

Channel 165 (5825MHz) 30MHz -40GHz

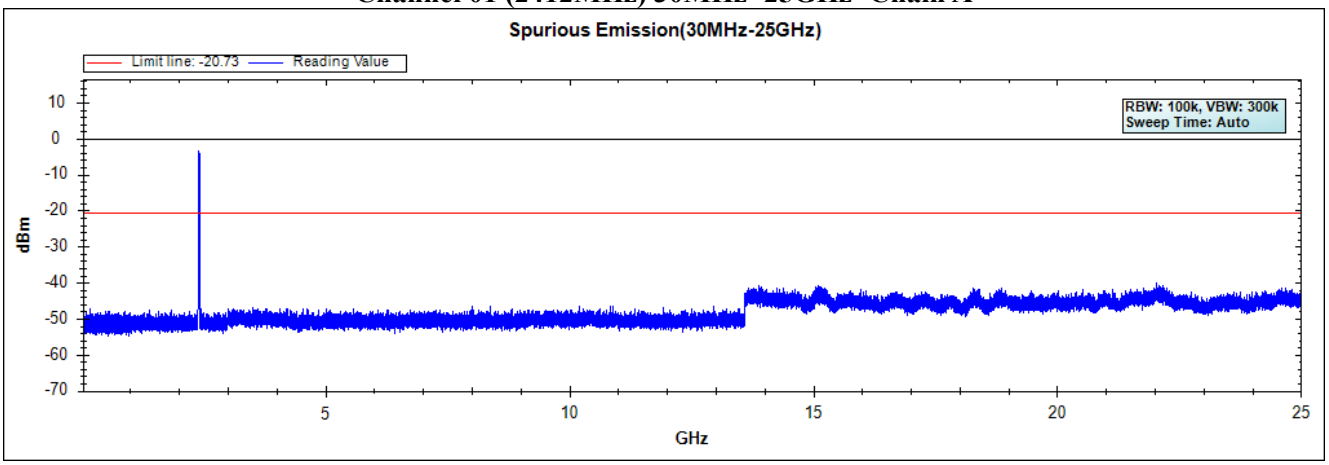




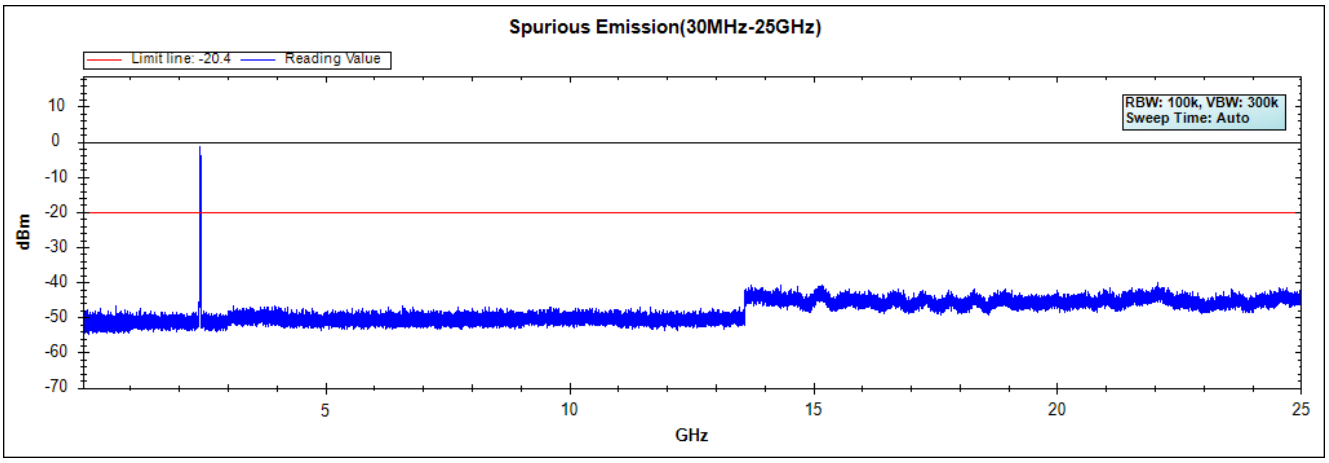
Note: The above test pattern is synthesized by multiple of the frequency range.

Product : Wireless Access Point
Test Item : RF Antenna Conducted Spurious
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit - 802.11n-20BW_14.4Mbps(2.4G Band) (External Antenna)

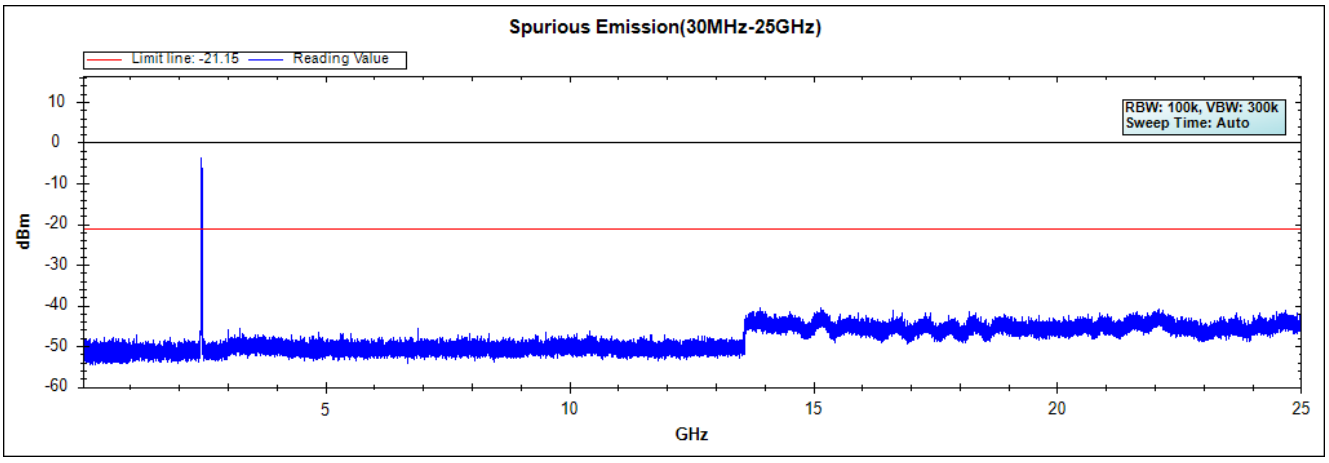
Channel 01 (2412MHz) 30MHz -25GHz- Chain A



Channel 06 (2437MHz) 30MHz -25GHz- Chain A

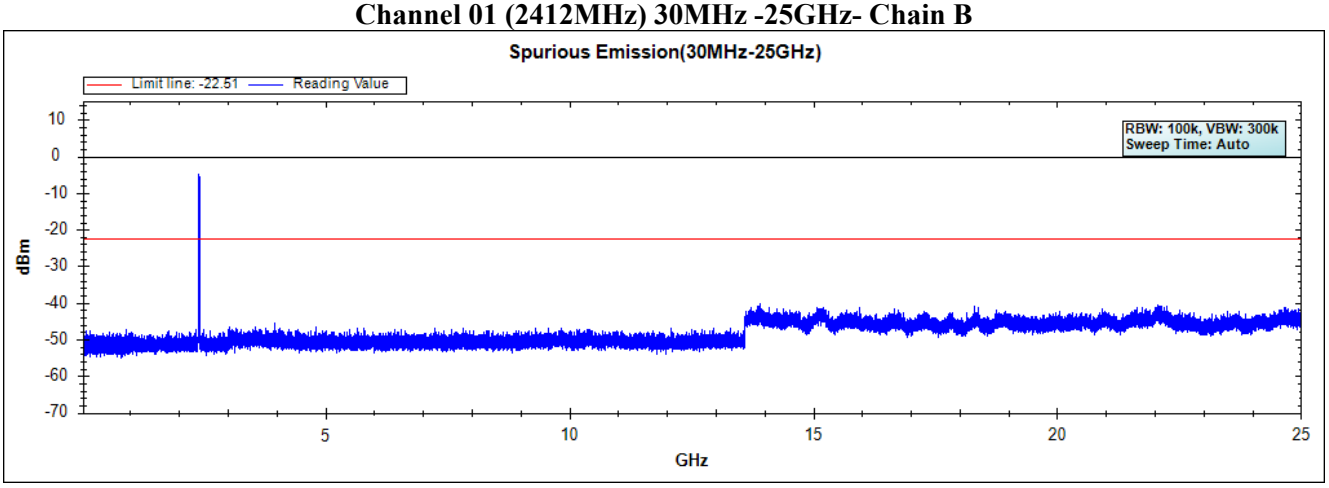


Channel 11 (2462MHz) 30MHz -25GHz- Chain A

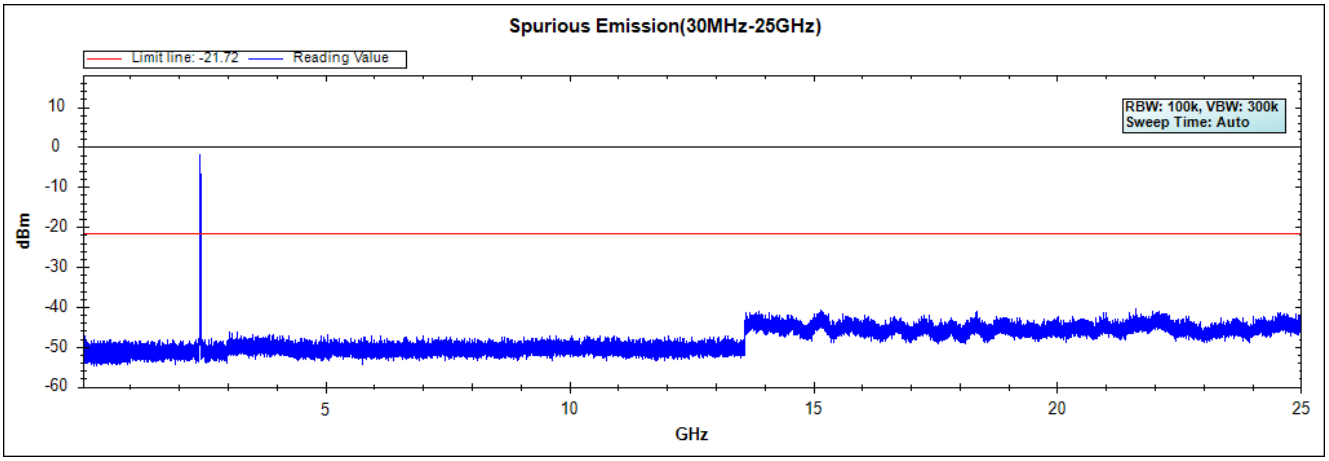


Note: The above test pattern is synthesized by multiple of the frequency range.

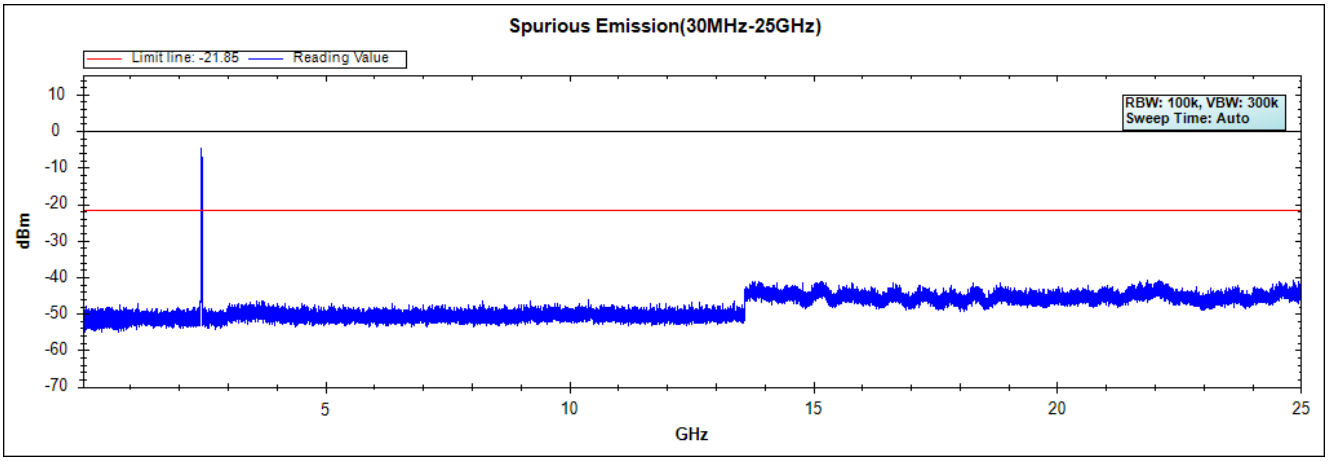
Channel 01 (2412MHz) 30MHz -25GHz- Chain B



Channel 06 (2437MHz) 30MHz -25GHz- Chain B



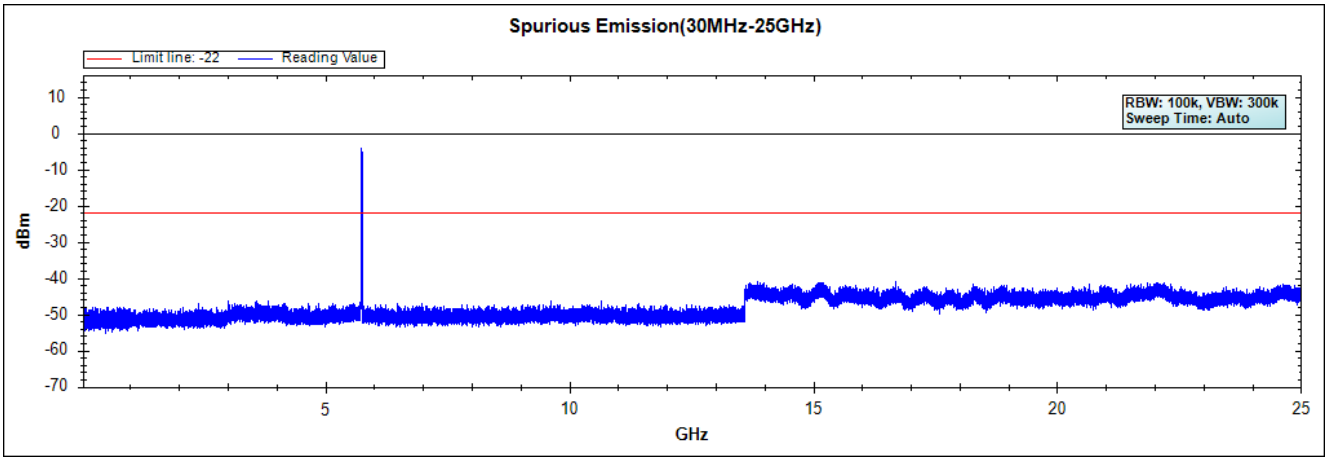
Channel 11 (2462MHz) 30MHz -25GHz- Chain B

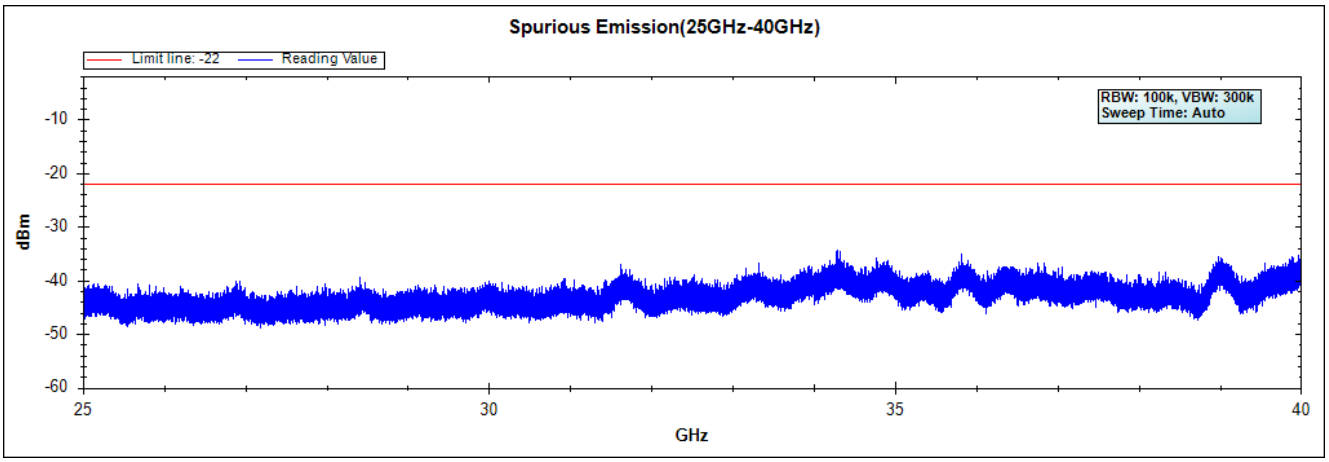


Note: The above test pattern is synthesized by multiple of the frequency range.

Product : Wireless Access Point
Test Item : RF Antenna Conducted Spurious
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit - 802.11n-20BW_14.4Mbps(5G Band) (External Antenna)

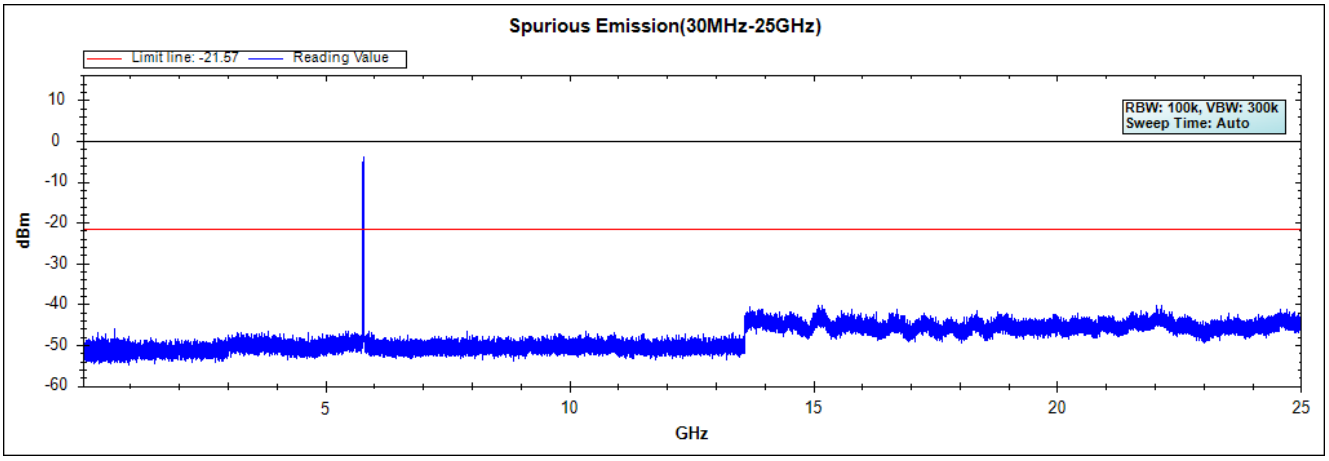
Channel 49 (5745MHz) 30MHz -40GHz-Chain A

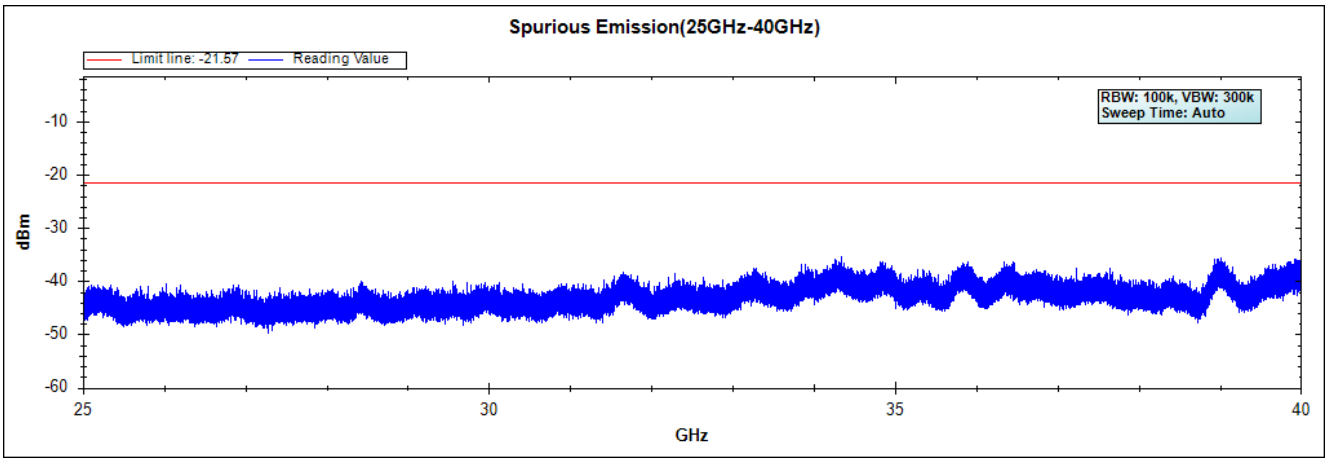




Note: The above test pattern is synthesized by multiple of the frequency range.

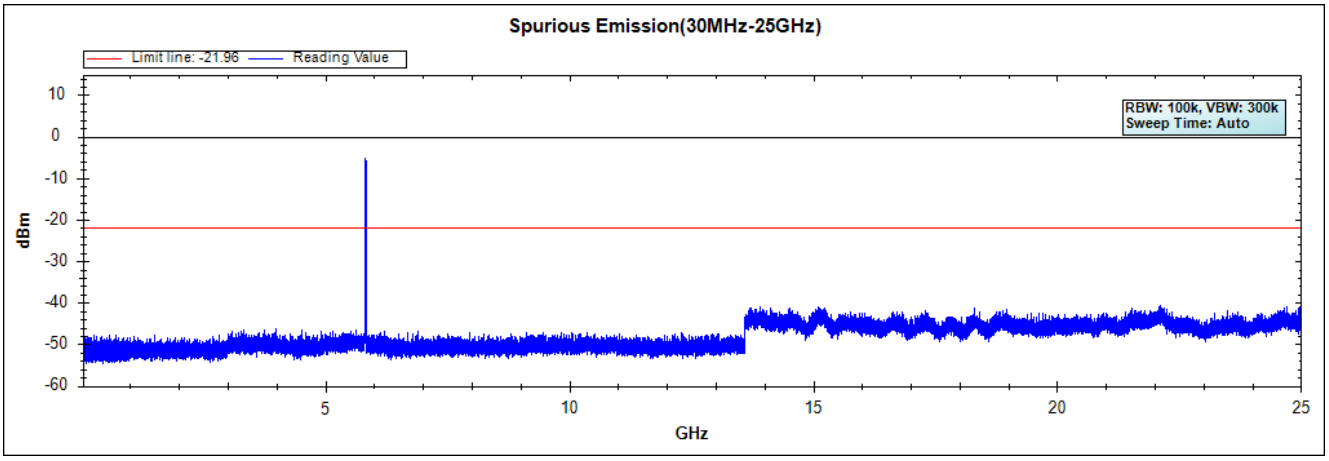
Channel 157 (5785MHz) 30MHz -40GHz-Chain A

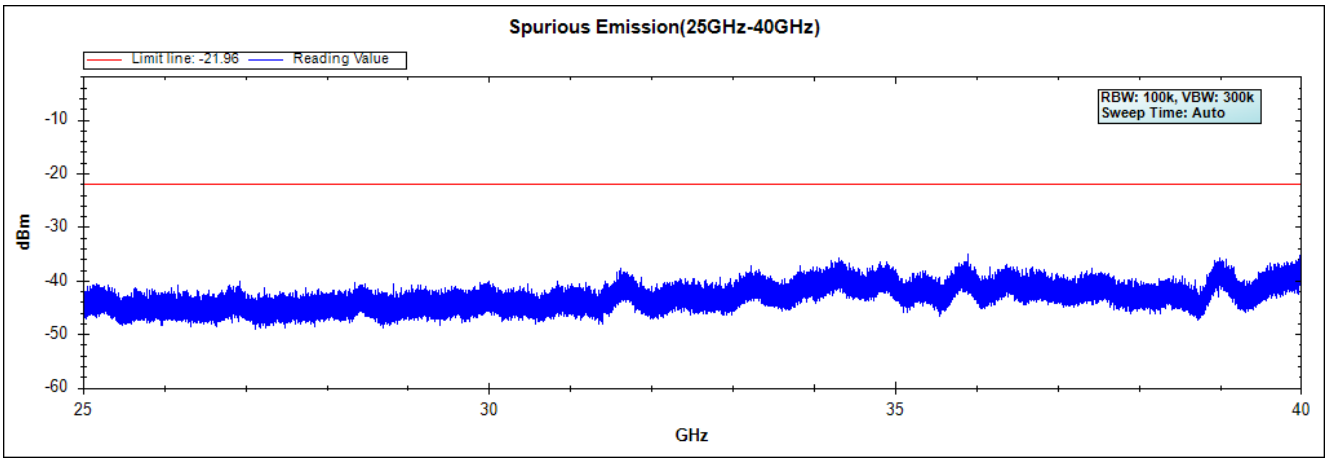




Note: The above test pattern is synthesized by multiple of the frequency range.

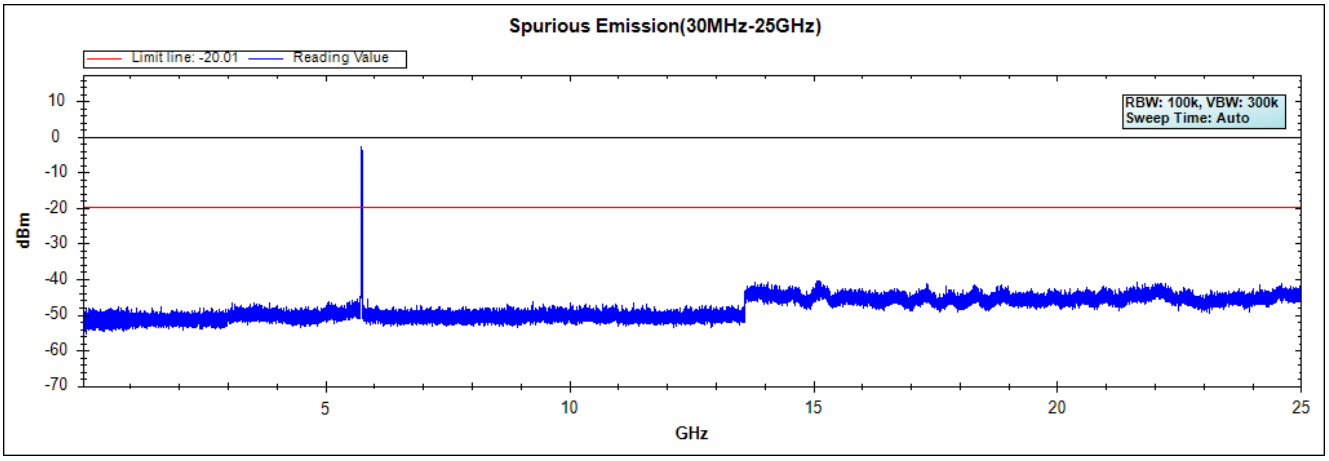
Channel 165 (5825MHz) 30MHz -40GHz-Chain A

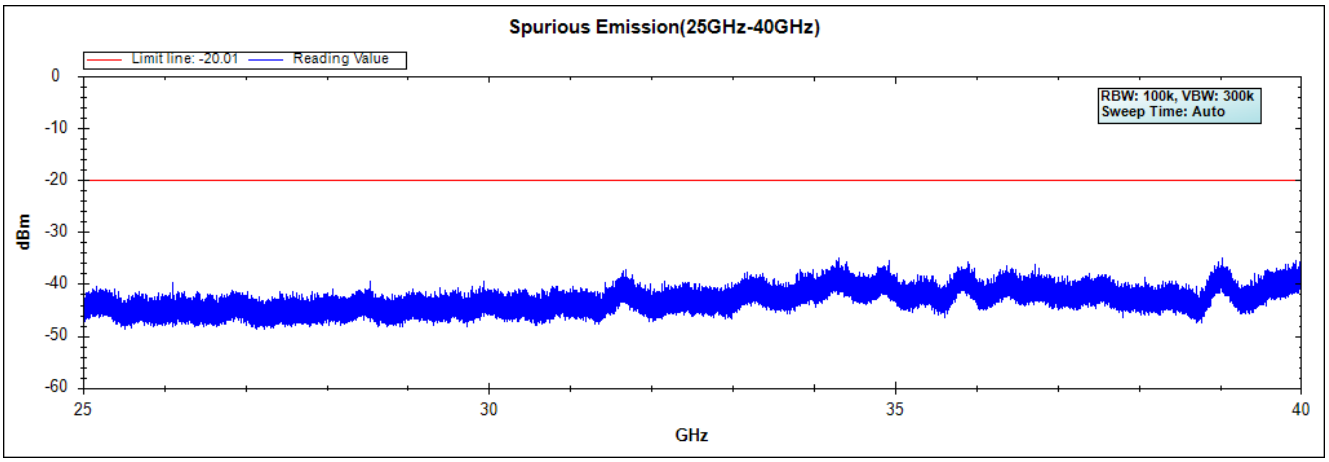




Note: The above test pattern is synthesized by multiple of the frequency range.

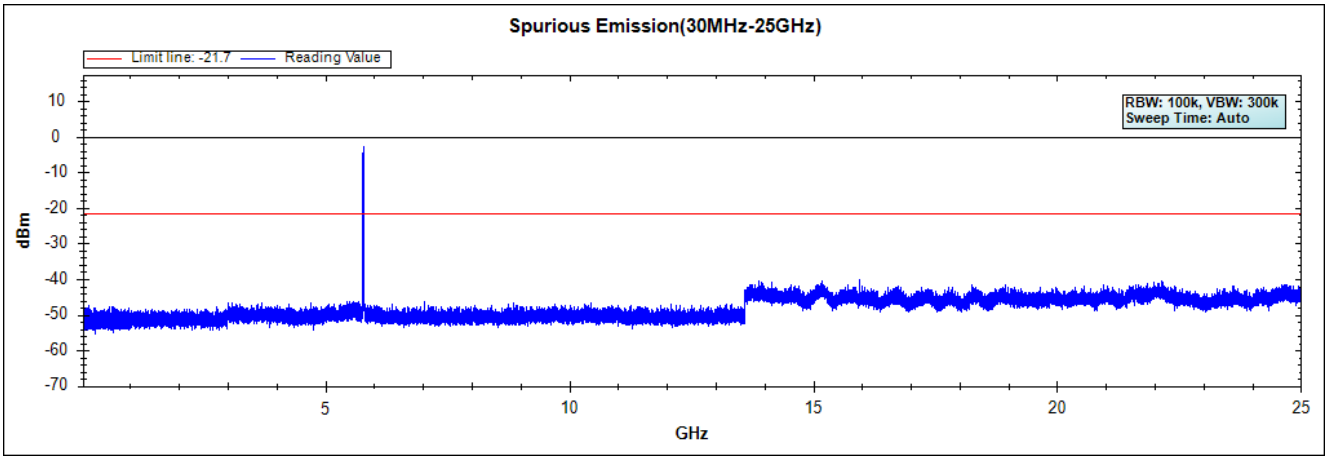
Channel 49 (5745MHz) 30MHz -40GHz-Chain B

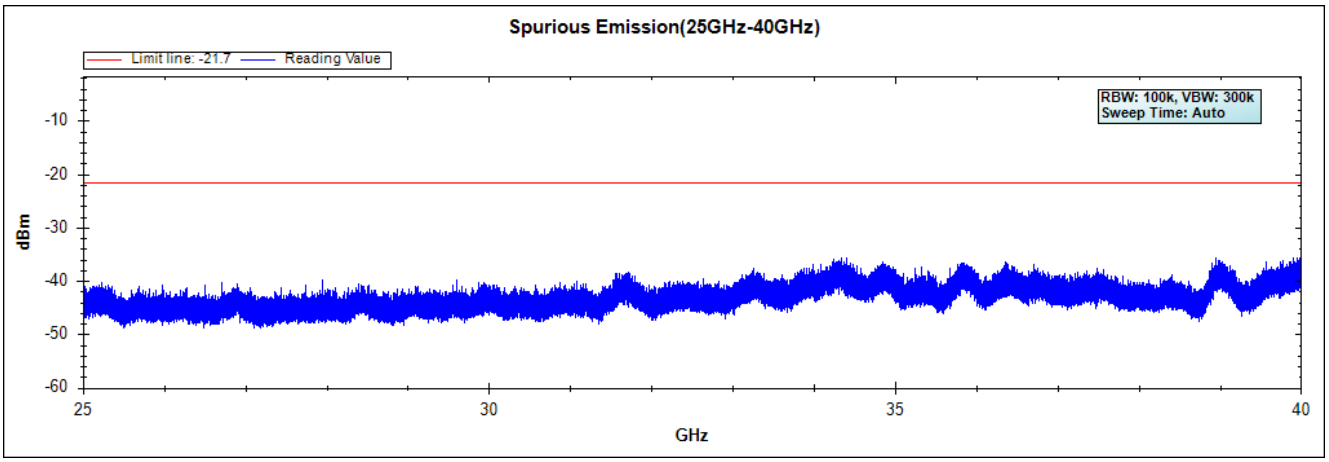




Note: The above test pattern is synthesized by multiple of the frequency range.

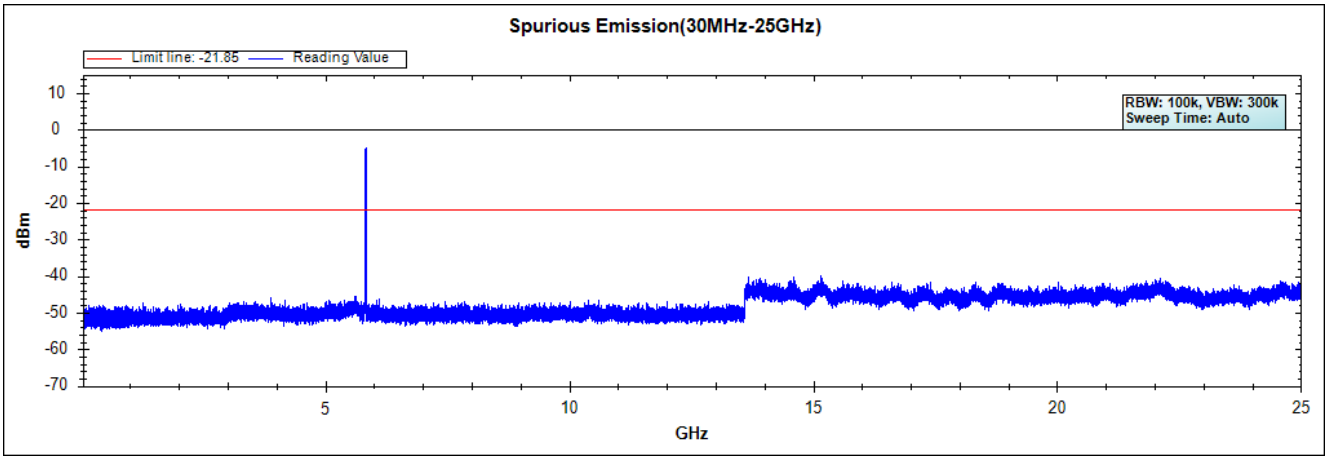
Channel 157 (5785MHz) 30MHz -40GHz-Chain B

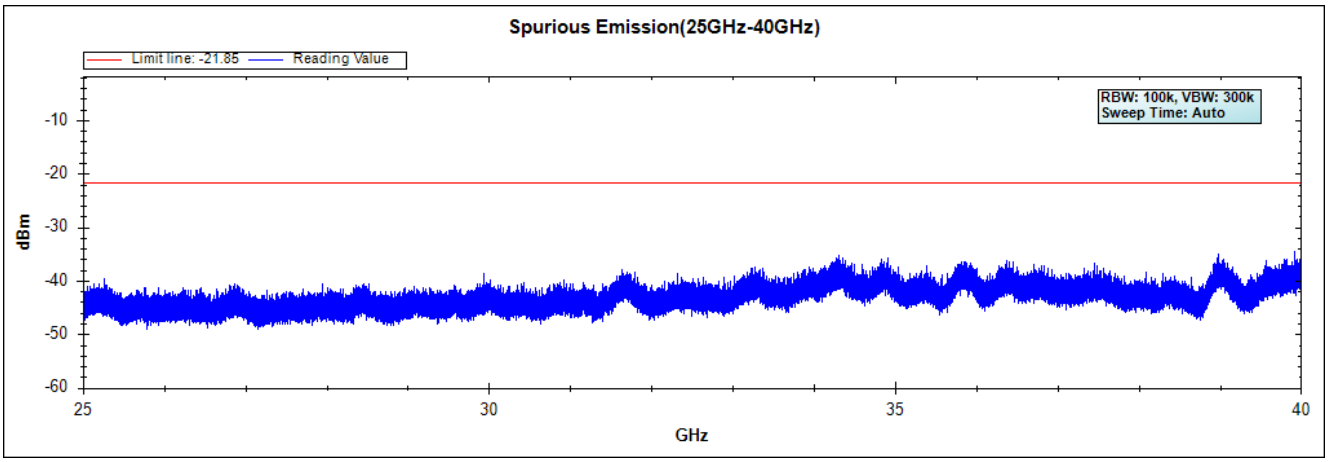




Note: The above test pattern is synthesized by multiple of the frequency range.

Channel 165 (5825MHz) 30MHz -40GHz-Chain B

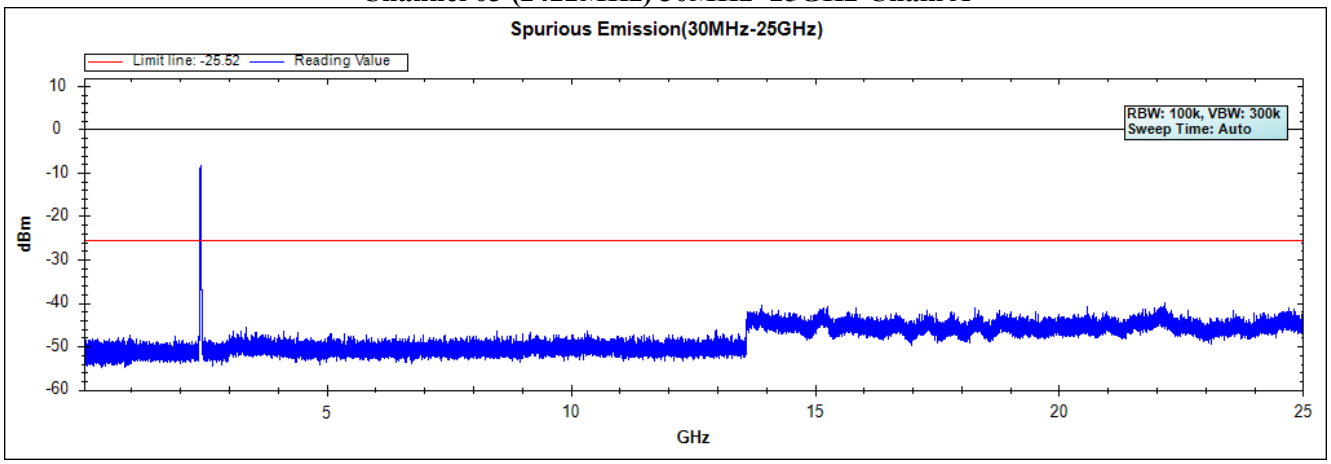




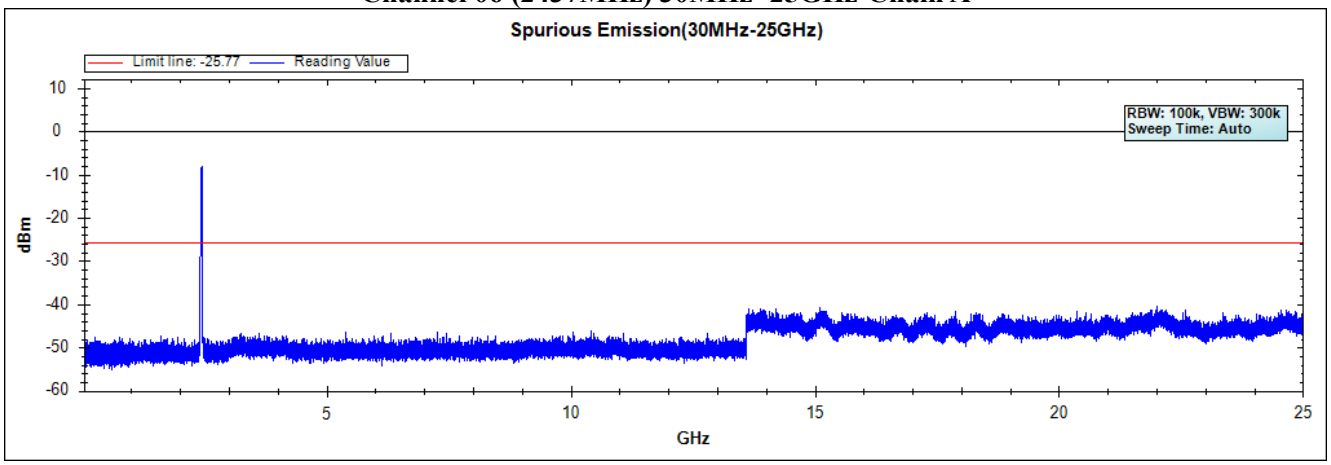
Note: The above test pattern is synthesized by multiple of the frequency range.

Product : Wireless Access Point
Test Item : RF Antenna Conducted Spurious
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit - 802.11n-40BW_30Mbps(2.4G Band) (External Antenna)

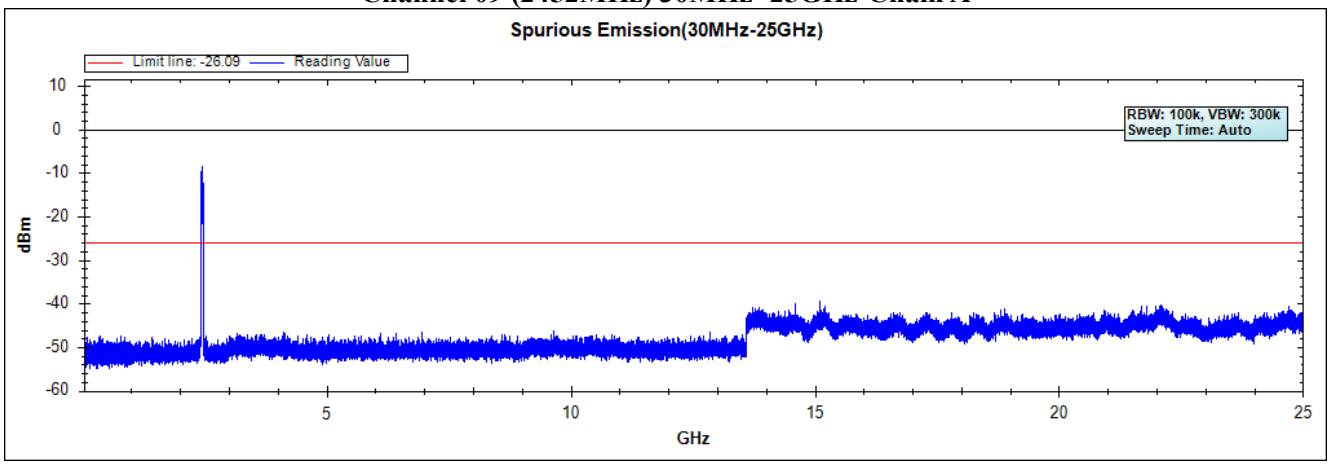
Channel 03 (2422MHz) 30MHz -25GHz-Chain A



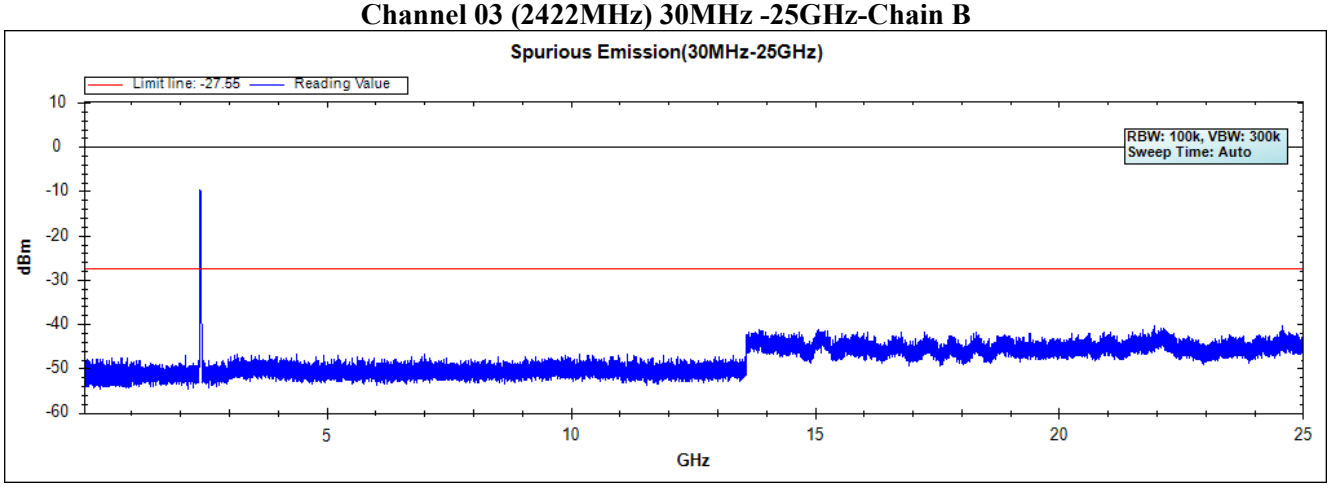
Channel 06 (2437MHz) 30MHz -25GHz-Chain A



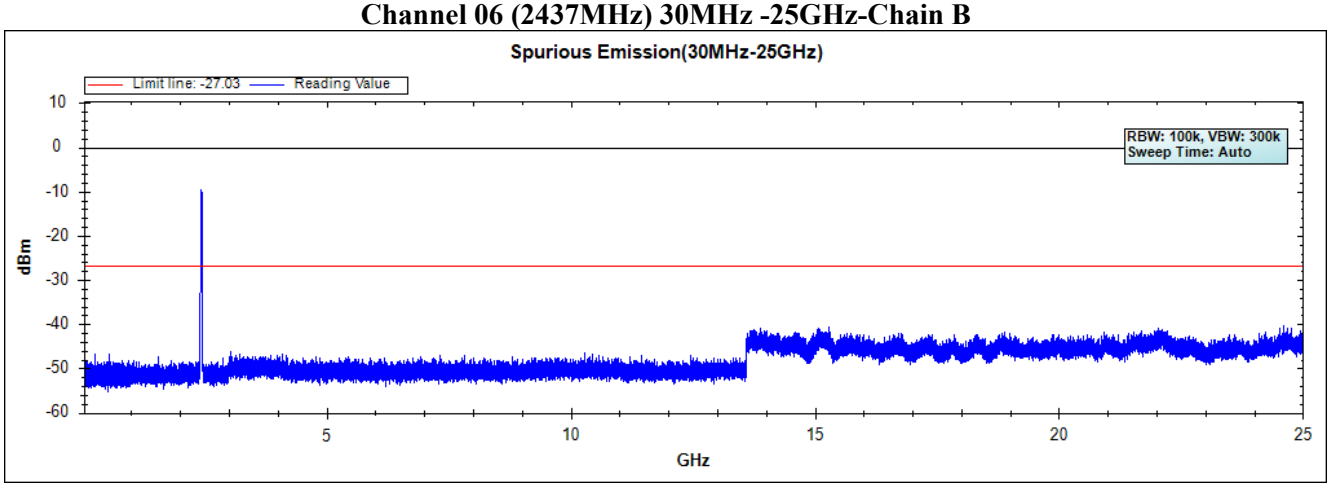
Channel 09 (2452MHz) 30MHz -25GHz-Chain A



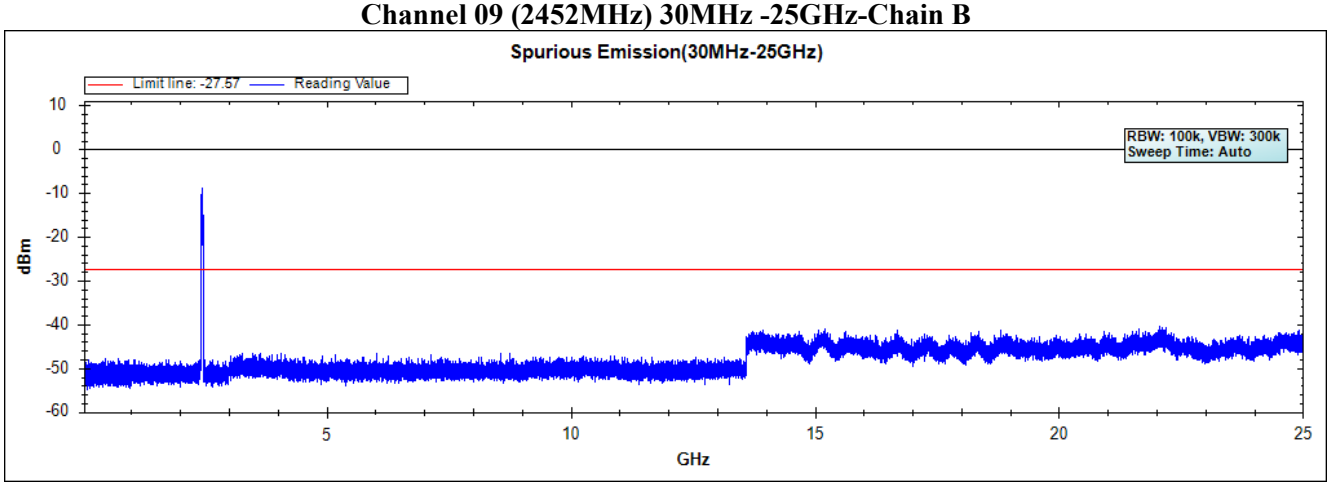
Channel 03 (2422MHz) 30MHz -25GHz-Chain B



Channel 06 (2437MHz) 30MHz -25GHz-Chain B

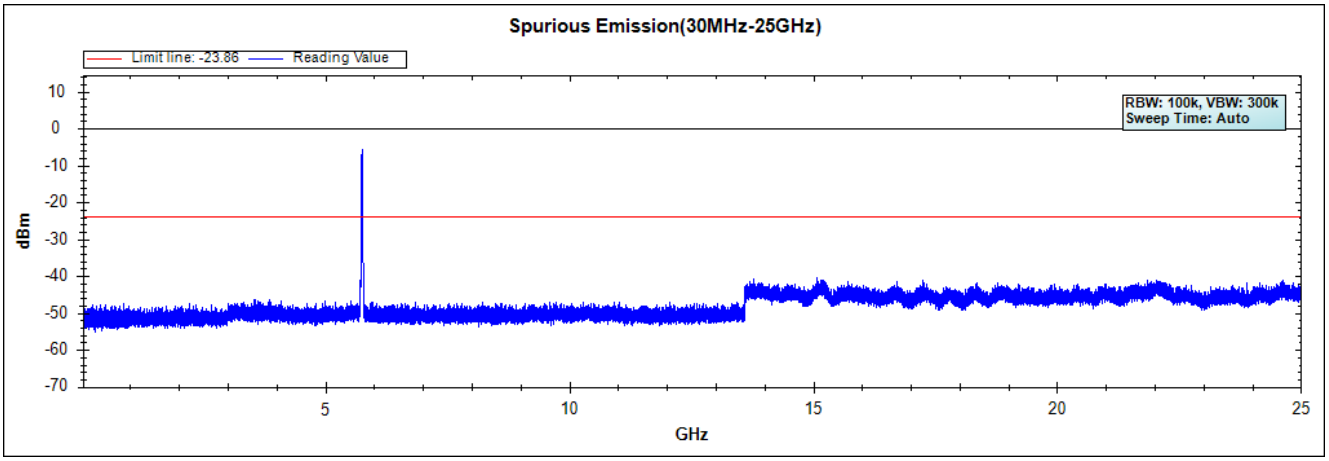


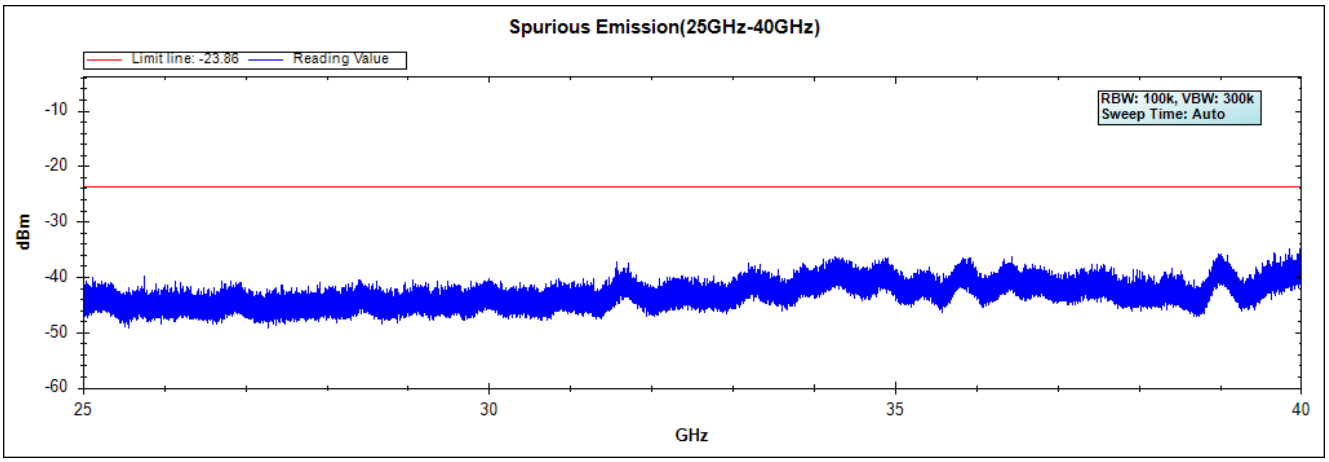
Channel 09 (2452MHz) 30MHz -25GHz-Chain B



Product : Wireless Access Point
Test Item : RF Antenna Conducted Spurious
Test Site : No.3 OATS
Test Mode : Mode 7: Transmit - 802.11n-40BW_30Mbps(5G Band) (External Antenna)

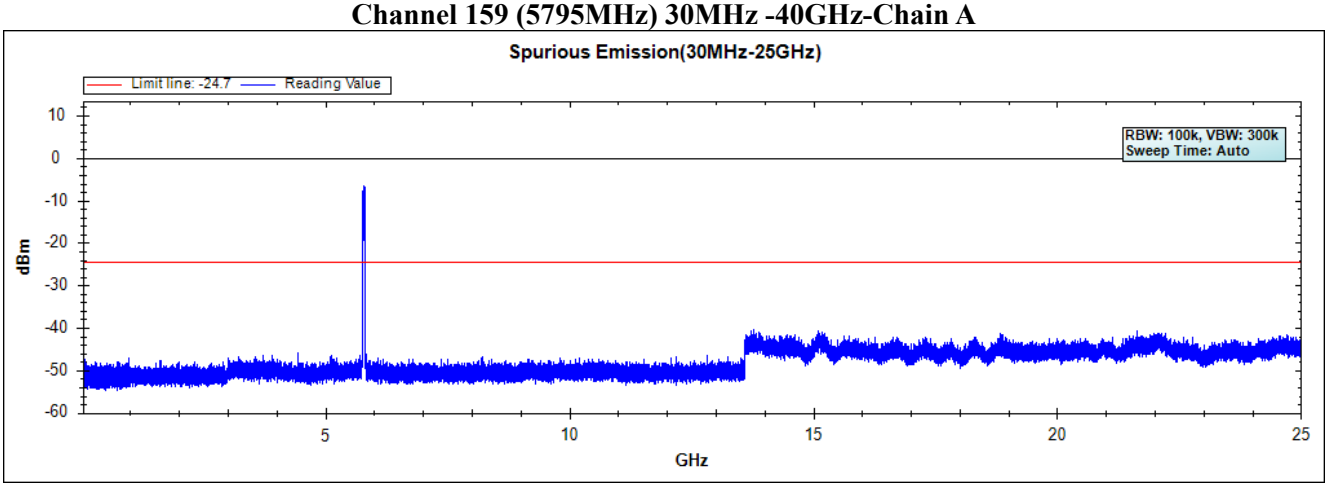
Channel 151 (5755MHz) 30MHz -40GHz-Chain A

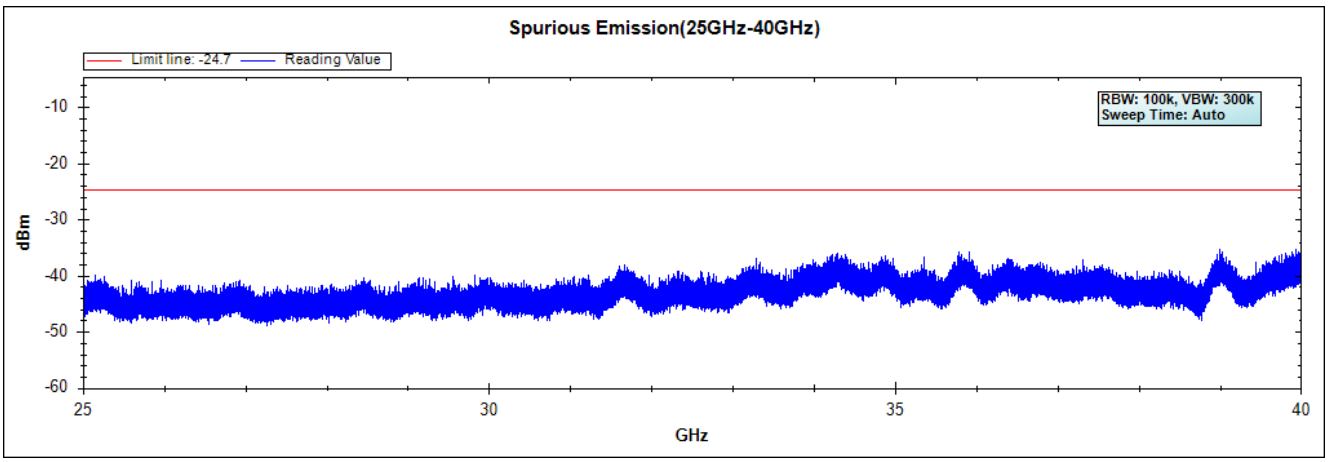




Note: The above test pattern is synthesized by multiple of the frequency range.

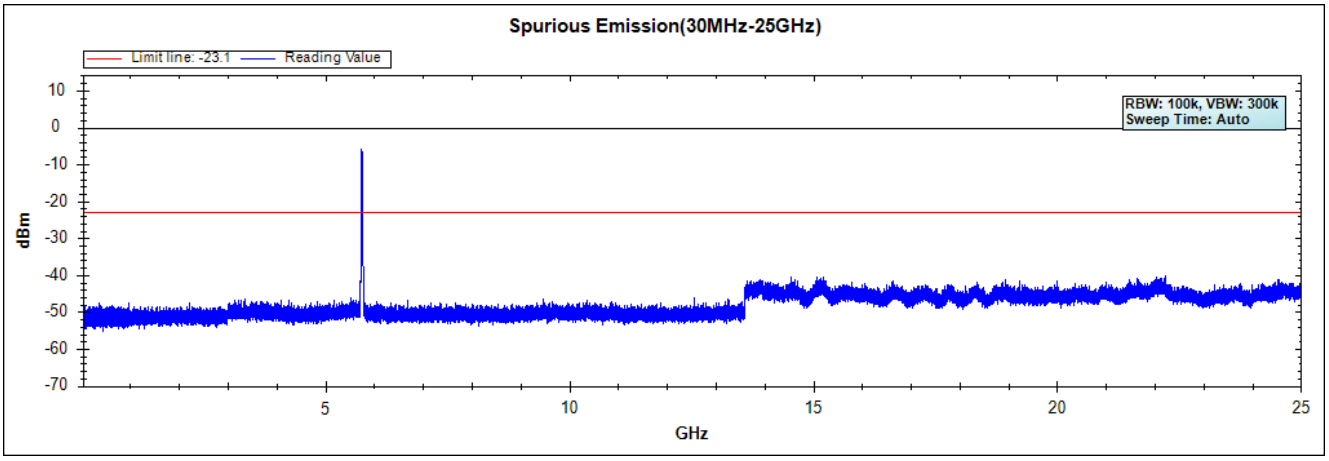
Channel 159 (5795MHz) 30MHz -40GHz-Chain A

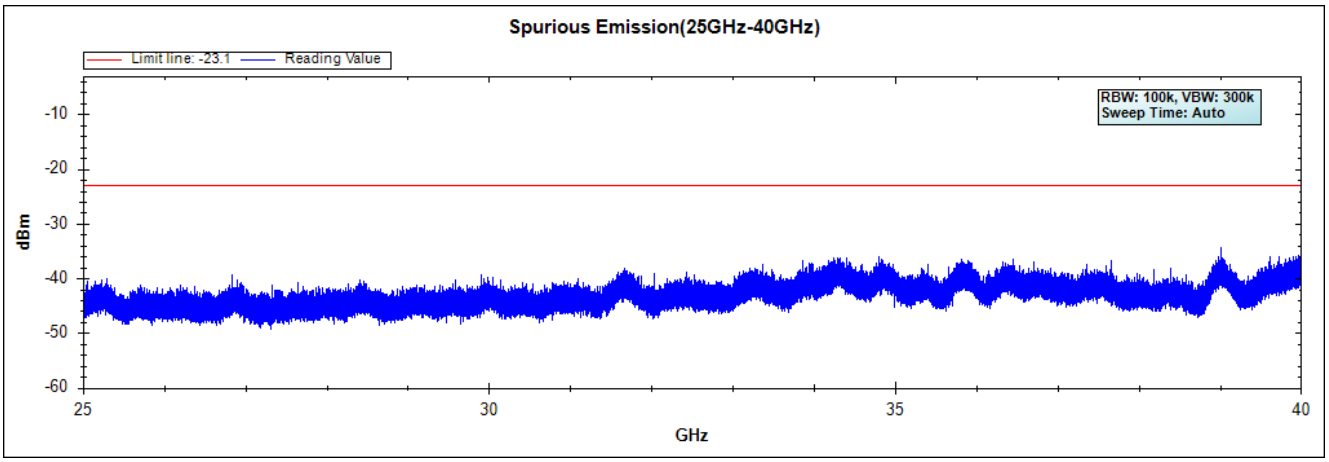




Note: The above test pattern is synthesized by multiple of the frequency range.

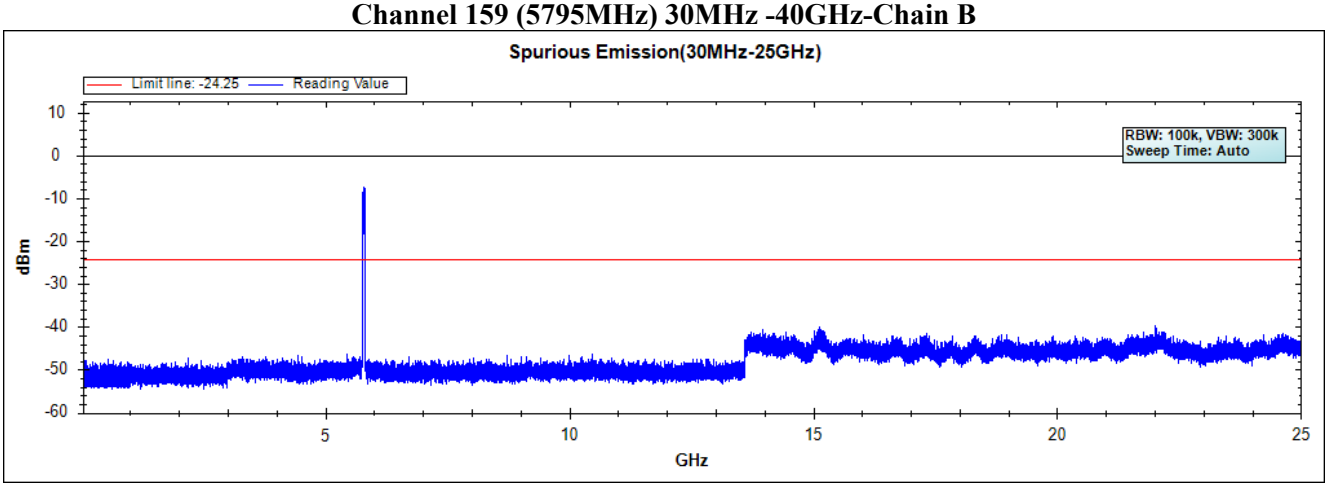
Channel 151 (5755MHz) 30MHz -40GHz-Chain B

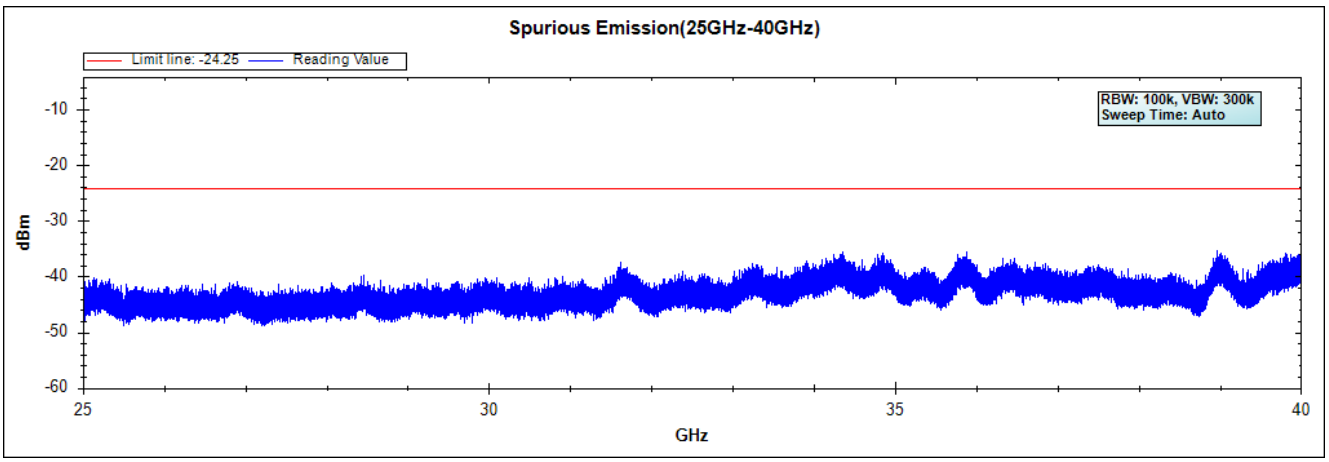




Note: The above test pattern is synthesized by multiple of the frequency range.

Channel 159 (5795MHz) 30MHz -40GHz-Chain B

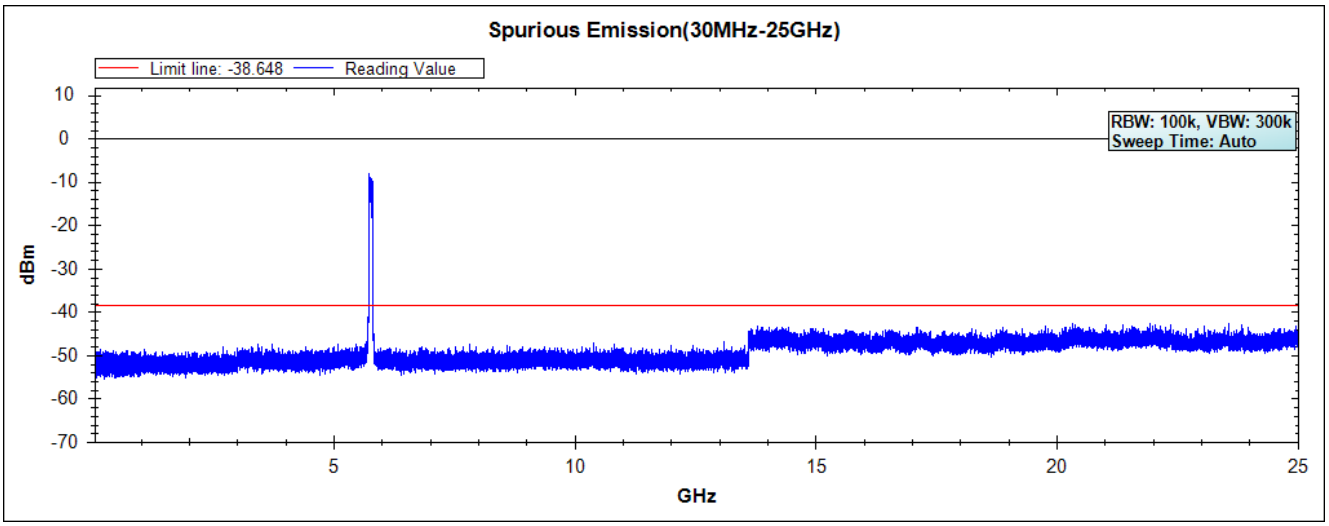


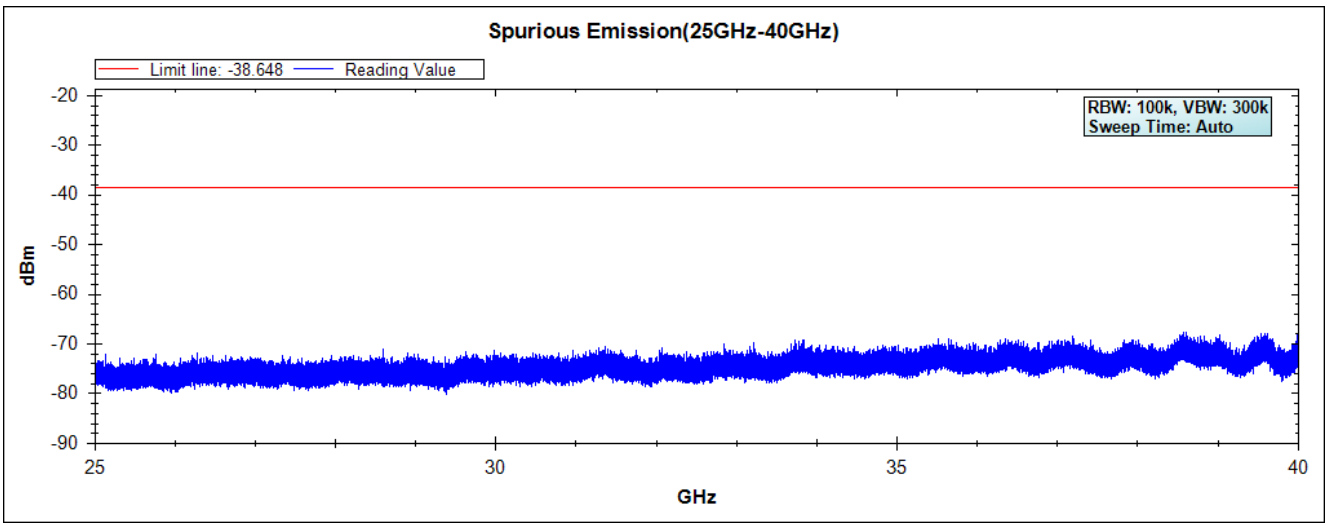


Note: The above test pattern is synthesized by multiple of the frequency range.

Product : Wireless Access Point
Test Item : RF Antenna Conducted Spurious
Test Site : No.3 OATS
Test Mode : Mode 8: Transmit - 802.11ac-80BW-65Mbps (External Antenna)

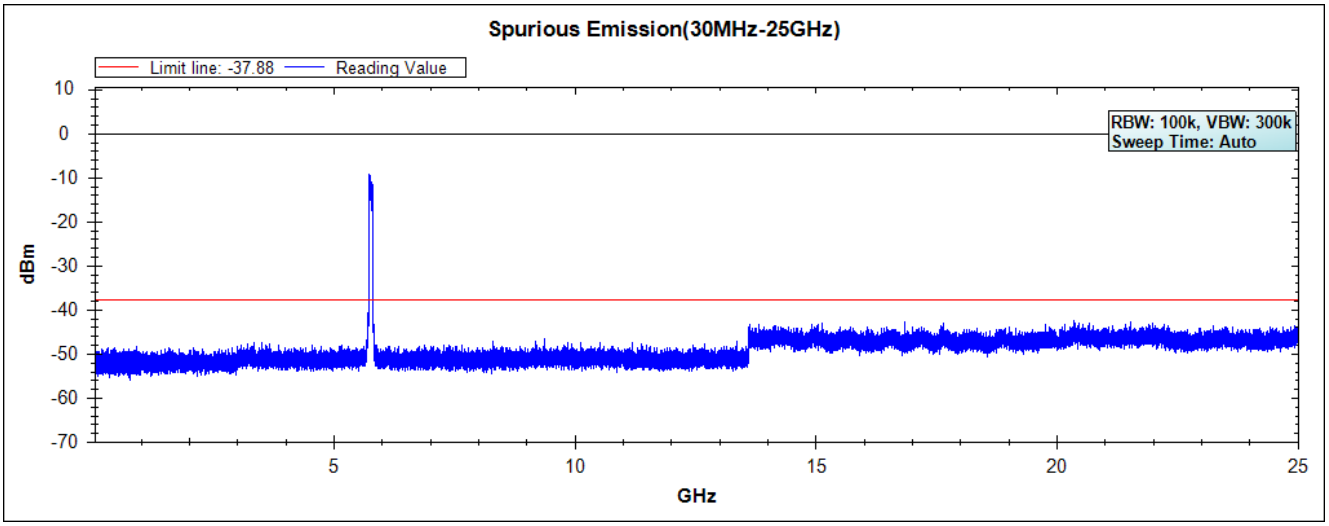
Channel 155 (5775MHz) 30MHz -40GHz-Chain A

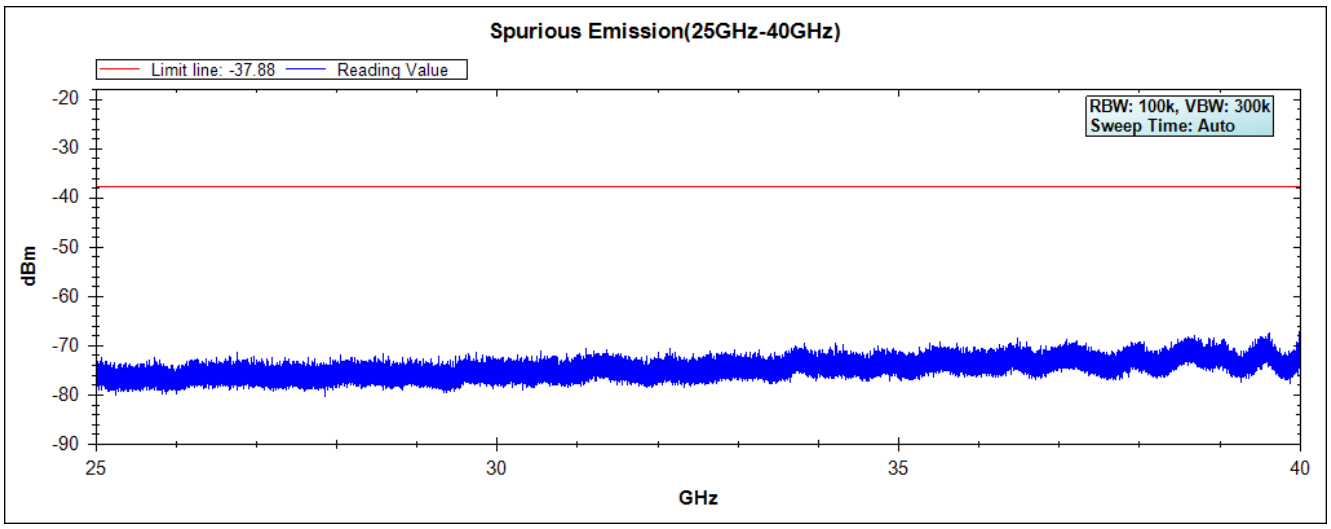




Note:
1. The above test pattern is synthesized by multiple of the frequency range.
2. Channel 5775 MHz was tested using the procedure in KDB 558074, section 9.2.2.2. Non-restricted frequency bands must comply with the KDB 558074, section 11.1 b) requirement.

Channel 155 (5775MHz) 30MHz -40GHz-Chain B





Note:

1. The above test pattern is synthesized by multiple of the frequency range.
2. Channel 5775 MHz was tested using the procedure in KDB 558074, section 9.2.2.2. Non-restricted frequency bands must comply with the KDB 558074, section 11.1 b) requirement.

6. Band Edge

6.1. Test Equipment

RF Conducted Measurement

The following test equipments are used during the band edge tests:

	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
	Spectrum Analyzer	R&S	FSP40 / 100170	Jun., 2014
	Spectrum Analyzer	Agilent	E4407B / US39440758	Jun., 2014
X	Spectrum Analyzer	Agilent	N9010A / MY48030495	Apr., 2014

Note:

1. All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.
2. The test instruments marked with "X" are used to measure the final test results.

RF Radiated Measurement:

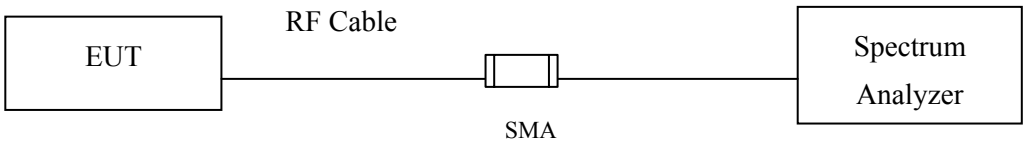
The following test equipments are used during the band edge tests:

Test Site		Equipment	Manufacturer	Model No./Serial No.	Last Cal.
☒CB # 8	X	Spectrum Analyzer	R&S	FSP40/ 100339	Oct., 2014
	X	Horn Antenna	ETS-Lindgren	3117/ 35205	Mar.,2014
	X	Horn Antenna	Schwarzbeck	BBHA9170/209	Jan., 2015
	X	Horn Antenna	TRC	AH-0801/95051	Aug., 2014
	X	Pre-Amplifier	EMCI	EMC012630SE/980210	Jan., 2015
	X	Pre-Amplifier	MITEQ	JS41-001040000-58-5P/153945	Jul., 2014
	X	Pre-Amplifier	NARDA	DBL-1840N506/013	Jul,, 2014

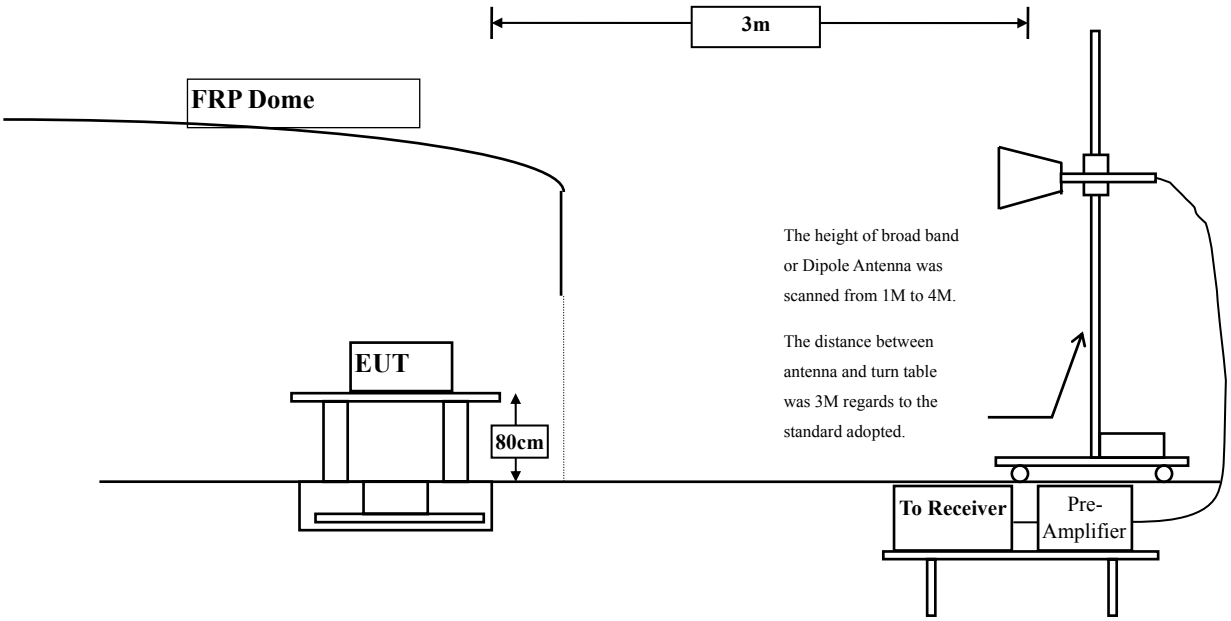
Note: 1. All instruments are calibrated every one year.
2. The test instruments marked by "X" are used to measure the final test results.

6.2. Test Setup

RF Conducted Measurement



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 C63.10: 2009 and tested according to DTS test procedure of KDB558074 for compliance to FCC 47CFR 15.247 requirements.
The EUT is placed on a turn table which is 0.8 meter above ground. The turn table is rotated 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 is scanned from 1 meter to 4 meters to find out the maximum emission level. This is repeated for both horizontal and vertical polarization of the antenna. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.10: 2009 on radiated measurement.

6.5. Uncertainty

± 3.9 dB above 1GHz
± 3.8 dB below 1GHz

6.6. Test Result of Band Edge

Product : Wireless Access Point
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit - 802.11b 1Mbps (2412MHz) (Internal Antenna)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
01 (Peak)	2389.600	-2.688	47.686	44.997	74.00	54.00	Pass
01 (Peak)	2390.000	-2.687	44.621	41.934	74.00	54.00	Pass
01 (Peak)	2400.000	-2.660	58.389	55.729	--	--	--
01 (Peak)	2413.000	-2.642	104.388	101.745	--	--	--
01 (Average)	2360.000	-2.819	35.502	32.683	74.00	54.00	Pass
01 (Average)	2390.000	-2.687	33.855	31.168	74.00	54.00	Pass
01 (Average)	2400.000	-2.660	49.029	46.369	--	--	--
01 (Average)	2411.400	-2.643	100.619	97.976	--	--	--

Figure Channel 01: Horizontal (Peak)

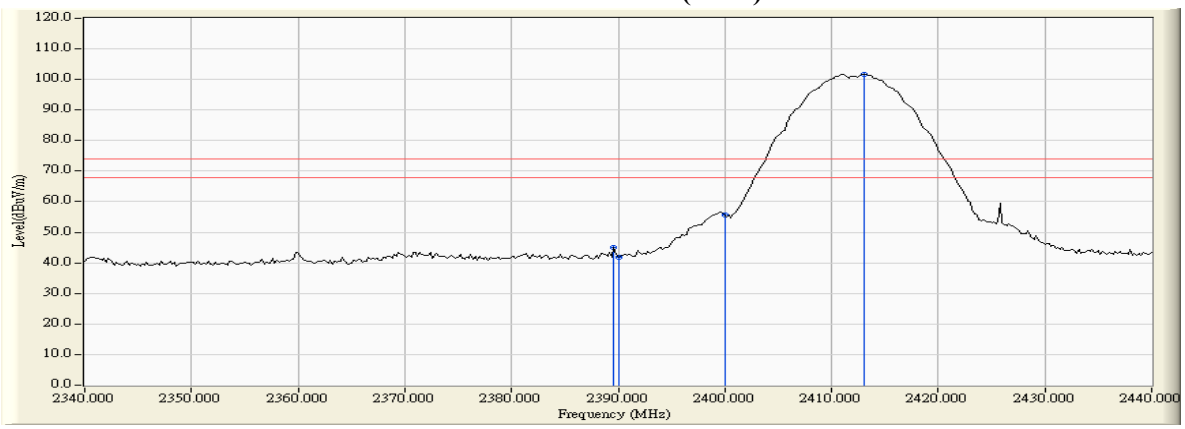
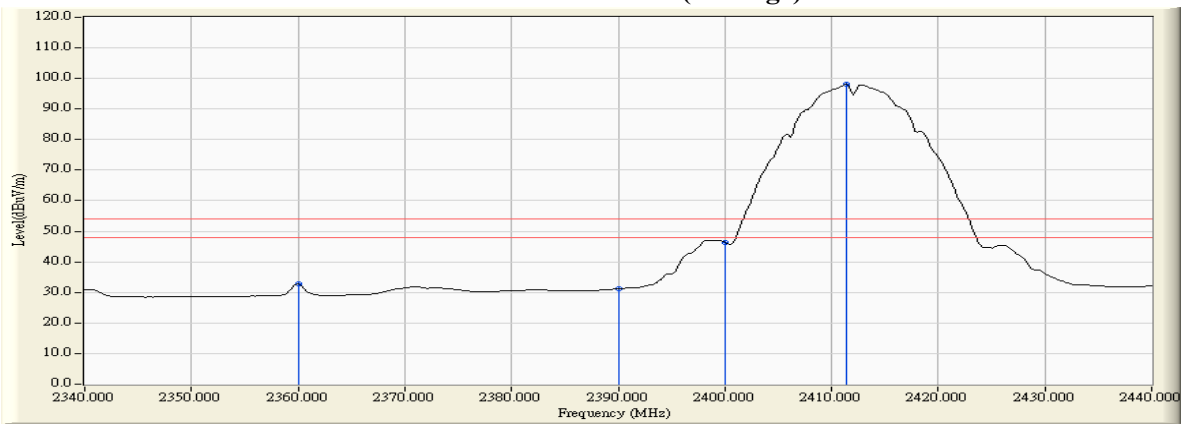


Figure Channel 01: Horizontal (Average)



Note: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.

Product : Wireless Access Point
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit - 802.11b 1Mbps (2412MHz) (Internal Antenna)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
01 (Peak)	2390.000	-4.159	47.910	43.751	74.00	54.00	Pass
01 (Peak)	2400.000	-4.171	59.556	55.385	--	--	--
01 (Peak)	2413.000	-4.163	105.980	101.816	--	--	--
01 (Average)	2372.800	-4.101	37.856	33.755	74.00	54.00	Pass
01 (Average)	2390.000	-4.159	37.542	33.383	74.00	54.00	Pass
01 (Average)	2400.000	-4.171	50.503	46.332	--	--	--
01 (Average)	2412.800	-4.164	102.162	97.998	--	--	--

Figure Channel 01: Vertical (Peak)

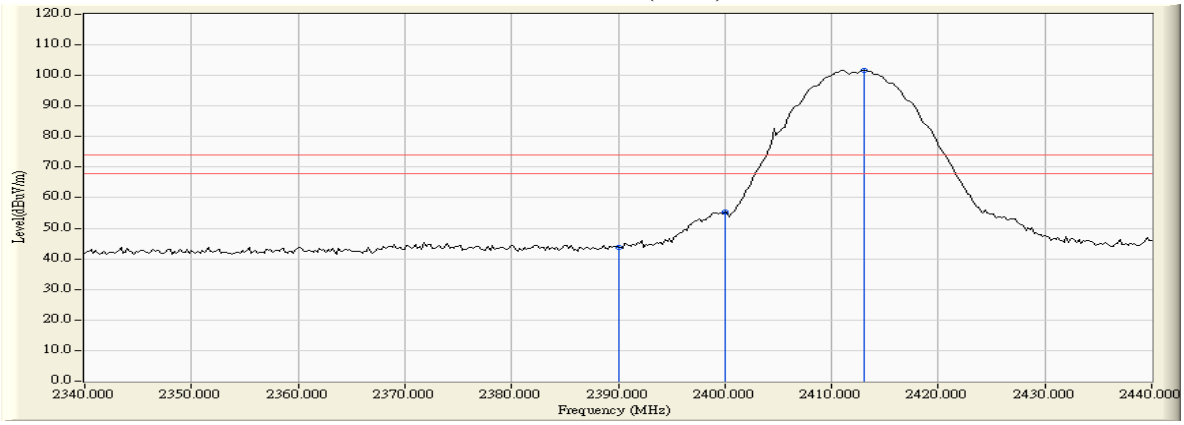
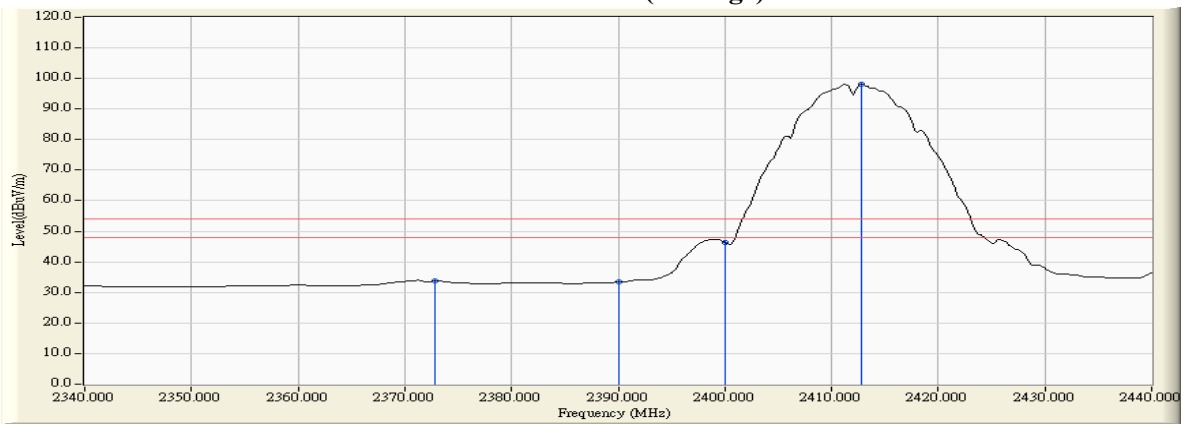


Figure Channel 01: Vertical (Average)



Note:

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.

Product : Wireless Access Point
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit - 802.11b 1Mbps (2462MHz) (Internal Antenna)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
11 (Peak)	2462.900	-2.622	103.798	101.176	--	--	--
11 (Peak)	2483.500	-2.601	46.240	43.638	74.00	54.00	Pass
11 (Peak)	2520.100	-2.730	51.150	48.421	74.00	54.00	Pass
11 (Average)	2461.100	-2.623	100.635	98.012	--	--	--
11 (Average)	2483.500	-2.601	37.249	34.647	74.00	54.00	Pass
11 (Average)	2519.900	-2.728	41.598	38.870	74.00	54.00	Pass

Figure Channel 11: Horizontal (Peak)

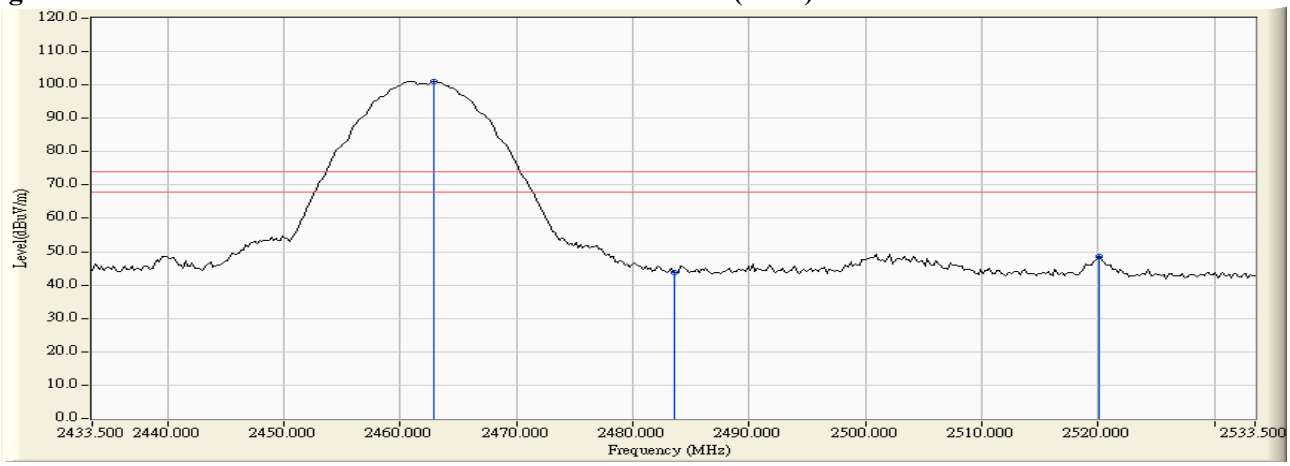
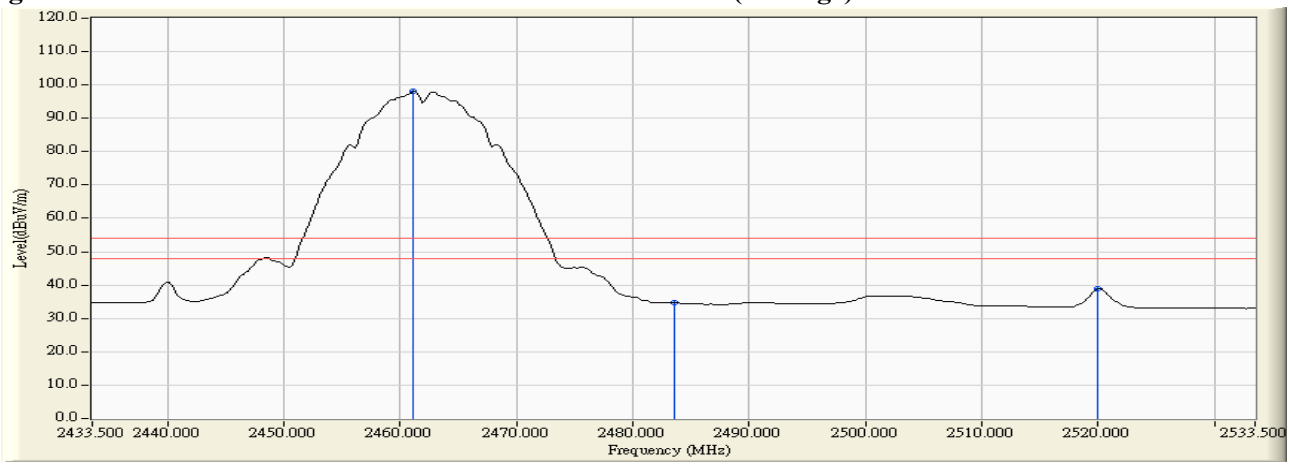


Figure Channel 11: Horizontal (Average)



Note:

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.

Product : Wireless Access Point
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit - 802.11b 1Mbps (2462MHz) (Internal Antenna)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
11 (Peak)	2462.900	-4.032	104.716	100.684	--	--	--
11 (Peak)	2483.500	-3.966	48.923	44.956	74.00	54.00	Pass
11 (Peak)	2500.700	-3.906	55.500	51.594	74.00	54.00	Pass
11 (Average)	2461.100	-4.037	100.961	96.924	--	--	--
11 (Average)	2483.500	-3.966	37.434	33.467	74.00	54.00	Pass
11 (Average)	2503.500	-3.893	41.740	37.847	74.00	54.00	Pass

Figure Channel 11: Vertical (Peak)

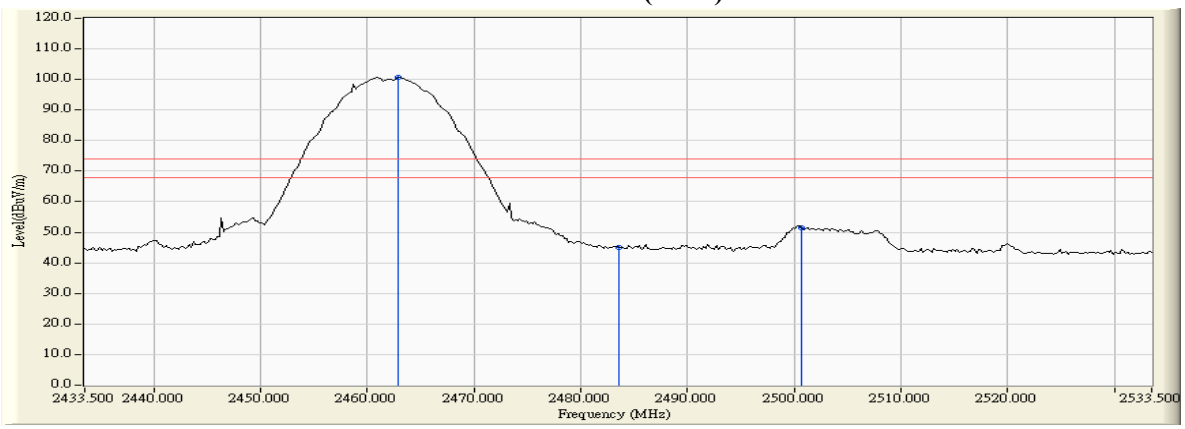
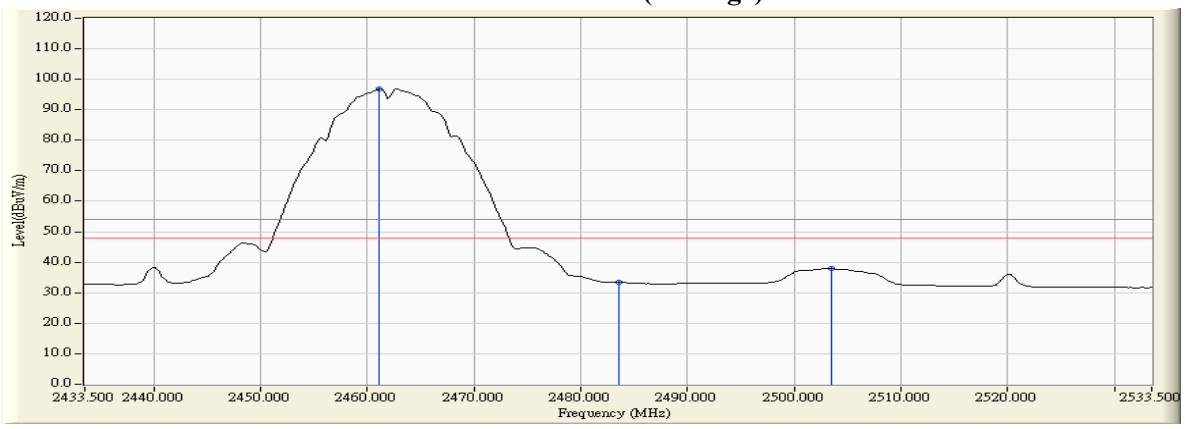


Figure Channel 11: Vertical (Average)



Note:

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.

Product : Wireless Access Point
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit - 802.11g 6Mbps (2412MHz) (Internal Antenna)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
01 (Peak)	2390.000	-2.687	72.883	70.196	74.00	54.00	Pass
01 (Peak)	2400.000	-2.660	87.140	84.480	--	--	--
01 (Peak)	2418.400	-2.641	108.774	106.132	--	--	--
01(Average)	2390.000	-2.687	52.184	49.497	74.00	54.00	Pass
01(Average)	2400.000	-2.660	66.551	63.891	--	--	--
01(Average)	2418.000	-2.642	96.716	94.074	--	--	--

Figure Channel 01: Horizontal (Peak)

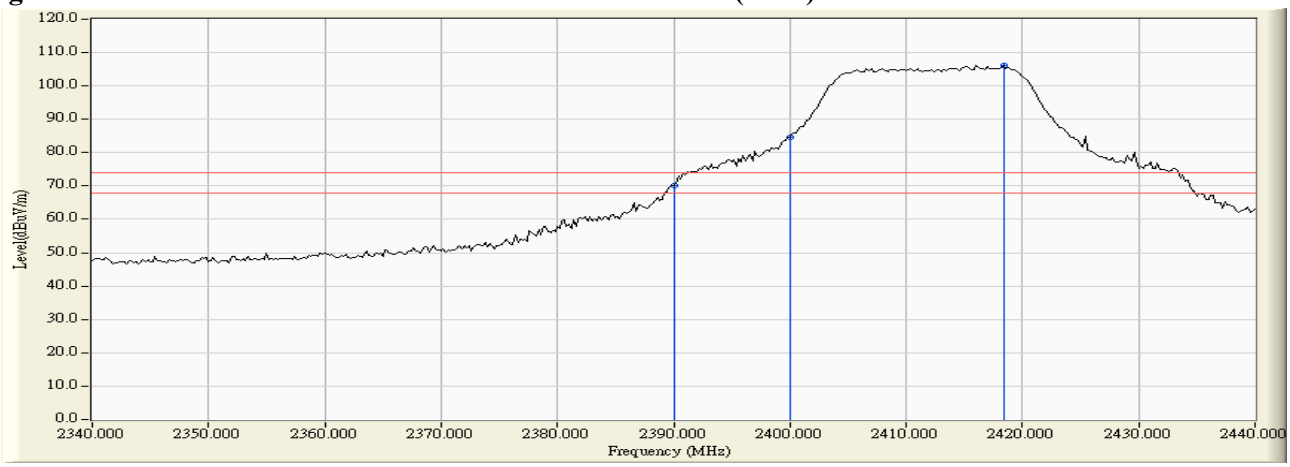
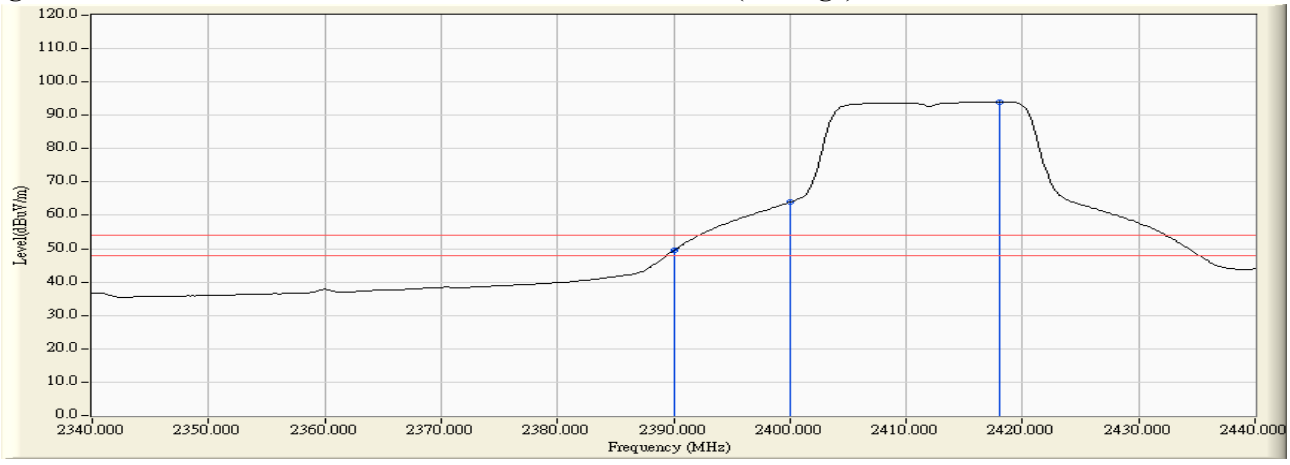


Figure Channel 01: Horizontal (Average)



Note:

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.

Product : Wireless Access Point
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit - 802.11g 6Mbps (2412MHz) (Internal Antenna)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
01 (Peak)	2390.000	-4.159	75.101	70.942	74.00	54.00	Pass
01 (Peak)	2400.000	-4.171	87.310	83.139	--	--	--
01 (Peak)	2416.000	-4.157	108.784	104.627	--	--	--
01 (Average)	2390.000	-4.159	52.586	48.427	74.00	54.00	Pass
01 (Average)	2400.000	-4.171	67.015	62.844	--	--	--
01 (Average)	2418.200	-4.151	96.810	92.659	--	--	--

Figure Channel 01: Vertical (Peak)

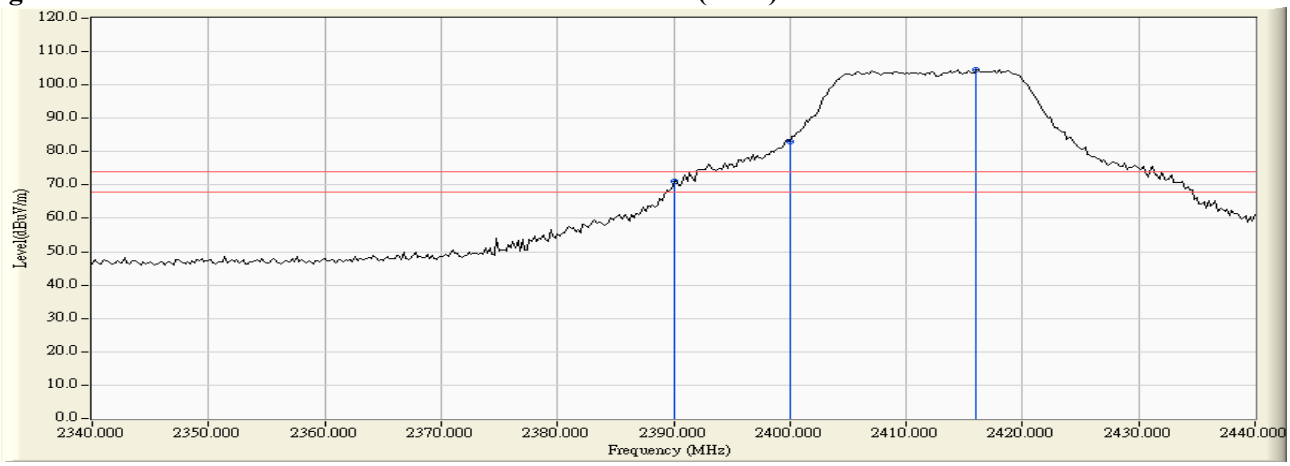
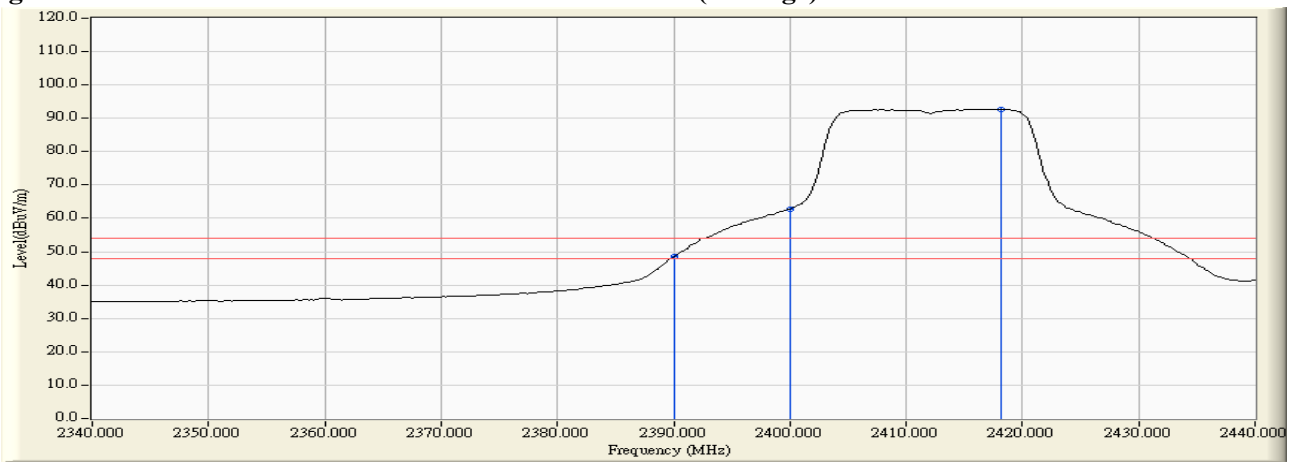


Figure Channel 01: Vertical (Average)



Note:

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.

Product : Wireless Access Point
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit - 802.11g 6Mbps (2462MHz) (Internal Antenna)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
11 (Peak)	2464.900	-2.620	106.651	104.031	--	--	--
11 (Peak)	2483.500	-2.601	73.471	70.869	74.00	54.00	Pass
11 (Average)	2456.300	-2.627	94.377	91.750	--	--	--
11 (Average)	2483.500	-2.601	50.928	48.326	74.00	54.00	Pass

Figure Channel 11: Horizontal (Peak)

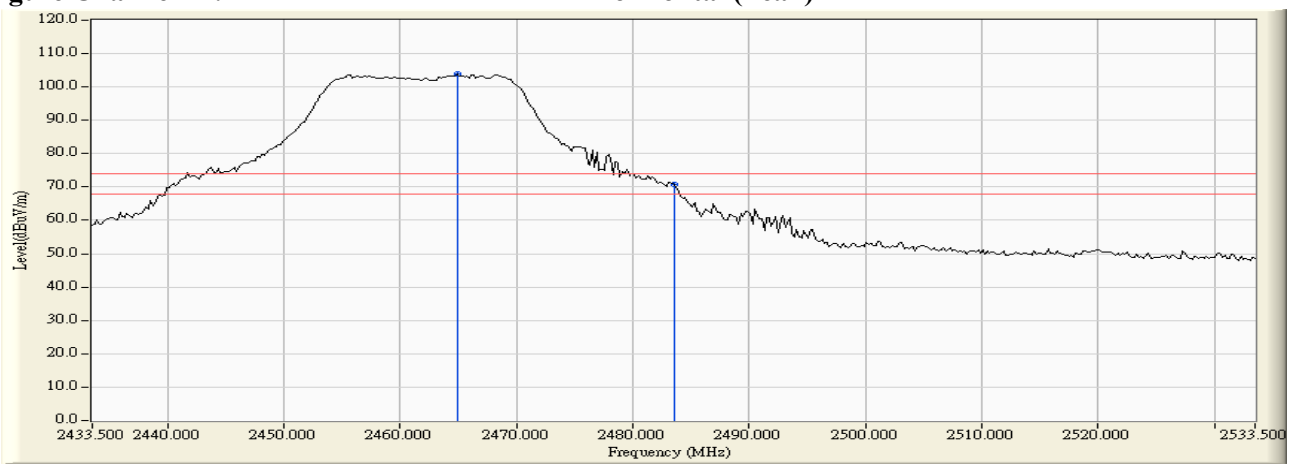
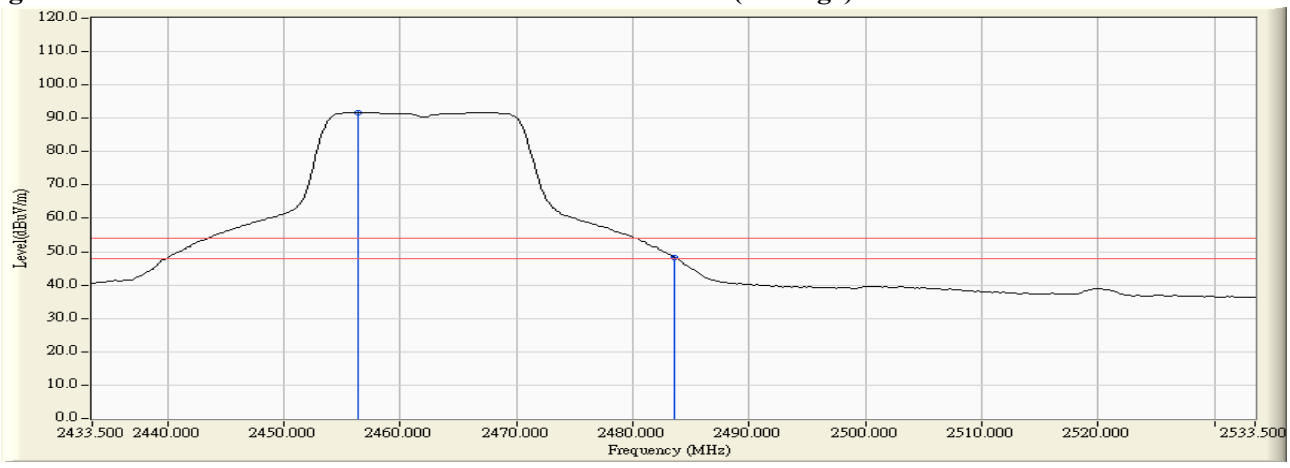


Figure Channel 11: Horizontal (Average)



Note:

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.

Product : Wireless Access Point
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit - 802.11g 6Mbps (2462MHz) (Internal Antenna)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
11 (Peak)	2466.300	-4.021	107.685	103.664	--	--	--
11 (Peak)	2483.500	-3.966	73.199	69.232	74.00	54.00	Pass
11 (Average)	2466.500	-4.020	95.583	91.563	--	--	--
11 (Average)	2483.500	-3.966	51.907	47.940	74.00	54.00	Pass

Figure Channel 11: Vertical (Peak)

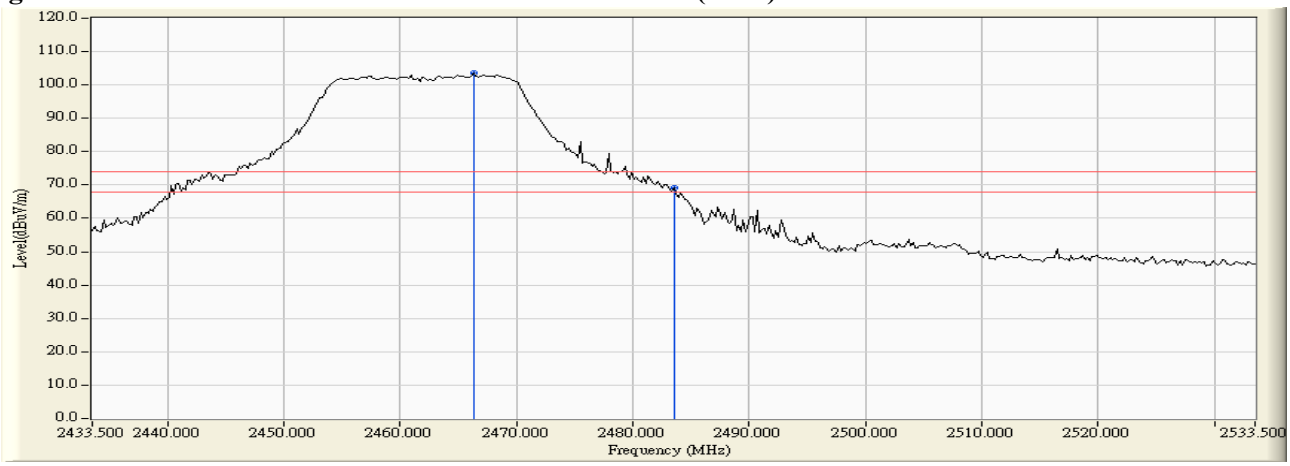
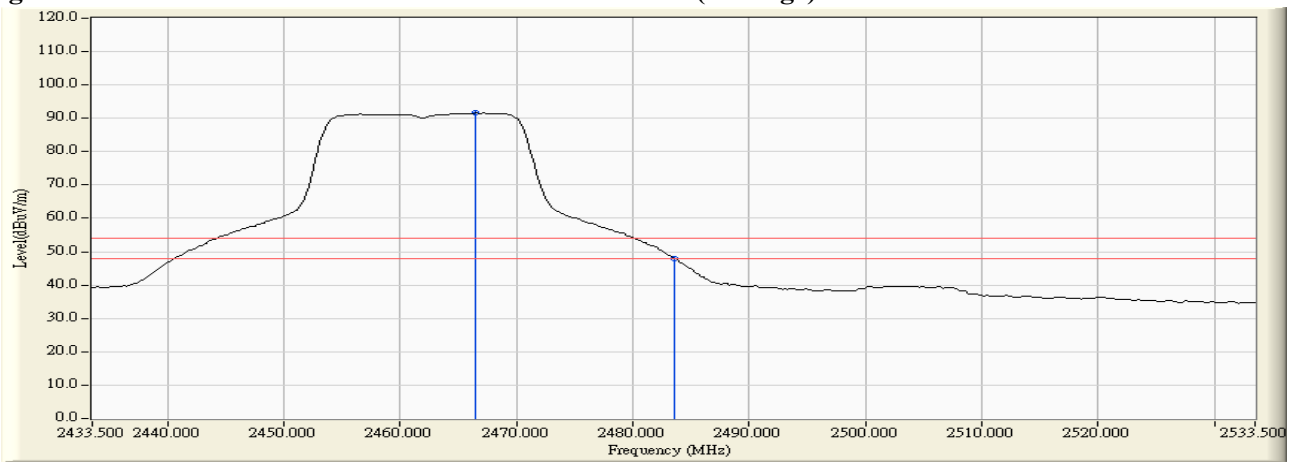


Figure Channel 11: Vertical (Average)



Note:

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.

Product : Wireless Access Point
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit - 802.11n-20BW_14.4Mbps(2.4G Band) (2412MHz) (Internal Antenna)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
01 (Peak)	2390.000	-2.687	74.218	71.531	74.00	54.00	Pass
01 (Peak)	2400.000	-2.660	85.661	83.001	--	--	--
01 (Peak)	2416.900	-2.642	106.853	104.211	--	--	--
01 (Average)	2390.000	-2.687	54.435	51.748	74.00	54.00	Pass
01 (Average)	2400.000	-2.660	63.311	60.651	--	--	--
01 (Average)	2416.600	-2.642	89.560	86.918	--	--	--

Figure Channel 01: Horizontal (Peak)

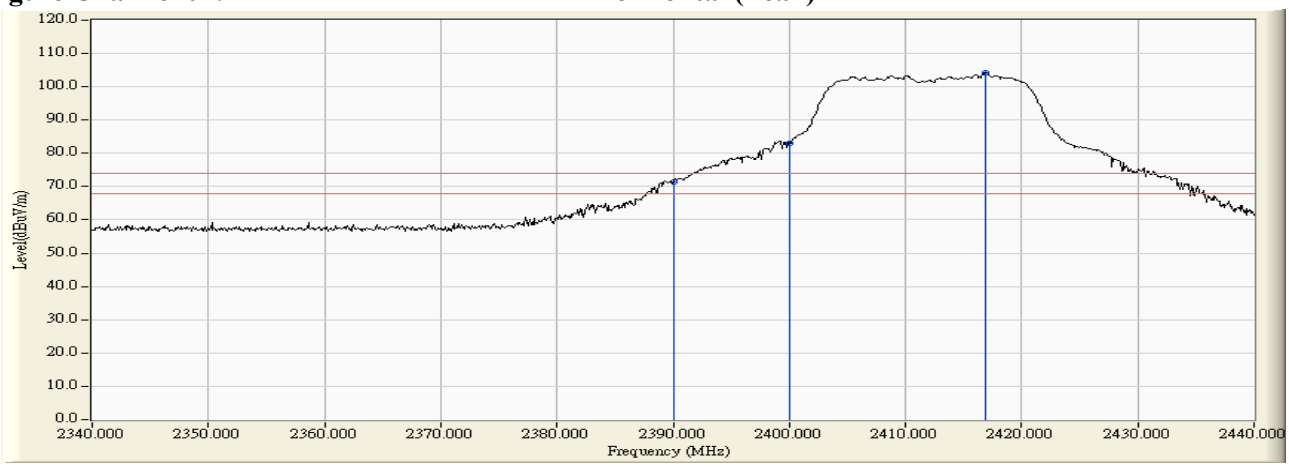
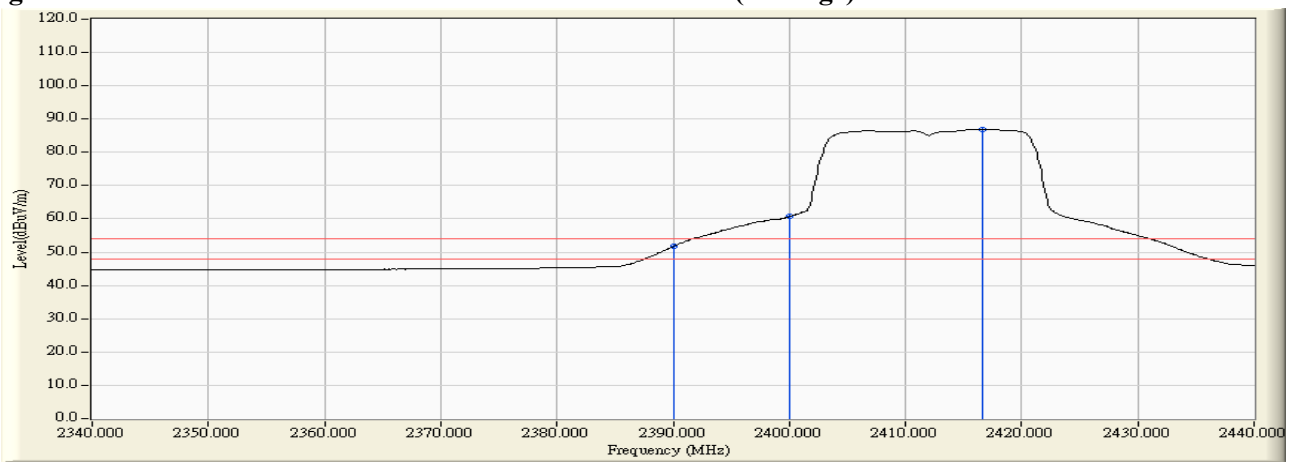


Figure Channel 01: Horizontal (Average)



Note:

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.

Product : Wireless Access Point
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit - 802.11n-20BW_14.4Mbps(2.4G Band) (2412MHz) (Internal Antenna)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
01 (Peak)	2390.000	-4.159	75.278	71.119	74.00	54.00	Pass
01 (Peak)	2400.000	-4.171	86.255	82.084	--	--	--
01 (Peak)	2416.000	-4.157	107.898	103.741	--	--	--
01 (Average)	2390.000	-4.159	56.432	52.273	74.00	54.00	Pass
01 (Average)	2400.000	-4.171	65.270	61.099	--	--	--
01 (Average)	2405.800	-4.170	90.814	86.644	--	--	--

Figure Channel 01: Vertical (Peak)

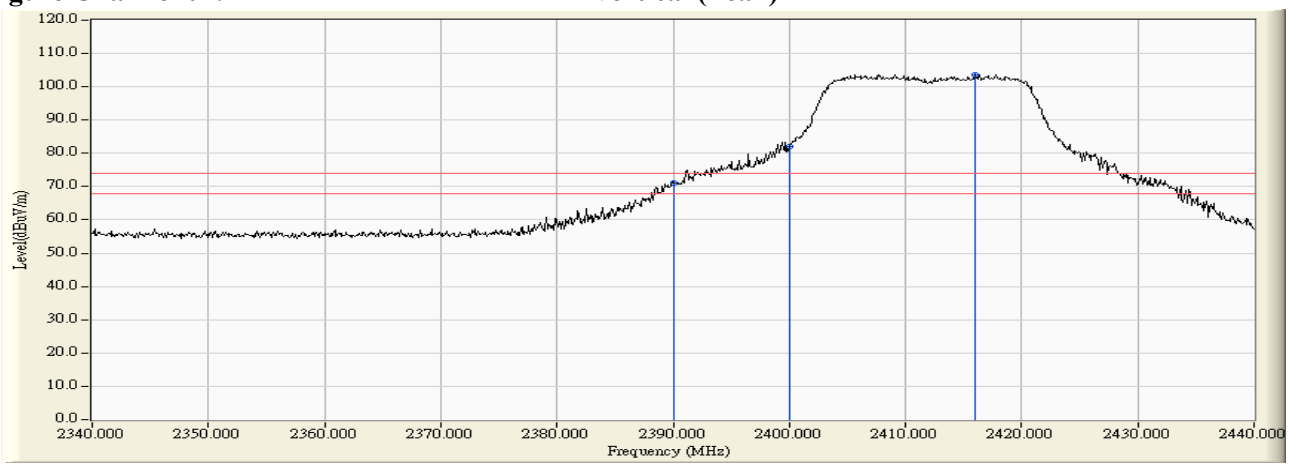
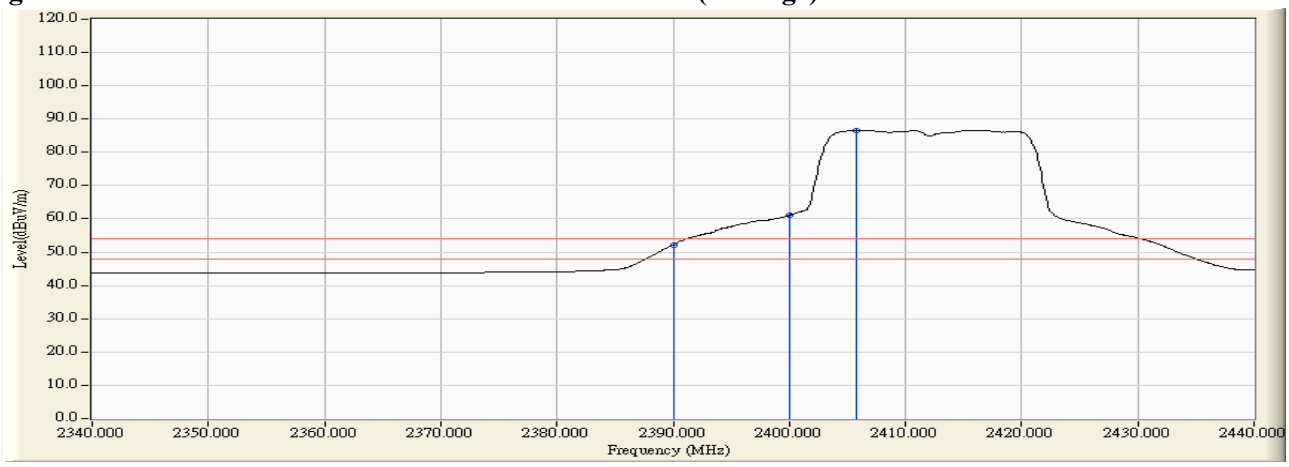


Figure Channel 01: Vertical (Average)



Note:

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.

Product : Wireless Access Point
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit - 802.11n-20BW_14.4Mbps(2.4G Band) (2462MHz) (Internal Antenna)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
11 (Peak)	2467.700	-2.617	108.623	106.006	--	--	--
11 (Peak)	2483.500	-2.601	70.494	67.892	74.00	54.00	Pass
11 (Average)	2456.700	-2.627	94.692	92.065	--	--	--
11 (Average)	2483.500	-2.601	53.627	51.025	74.00	54.00	Pass

Figure Channel 11: Horizontal (Peak)

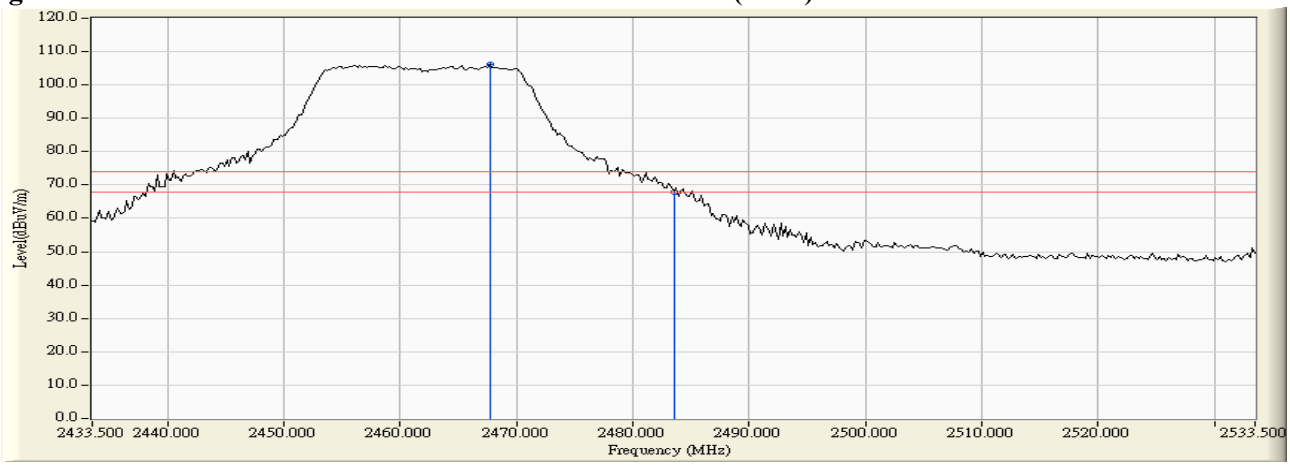
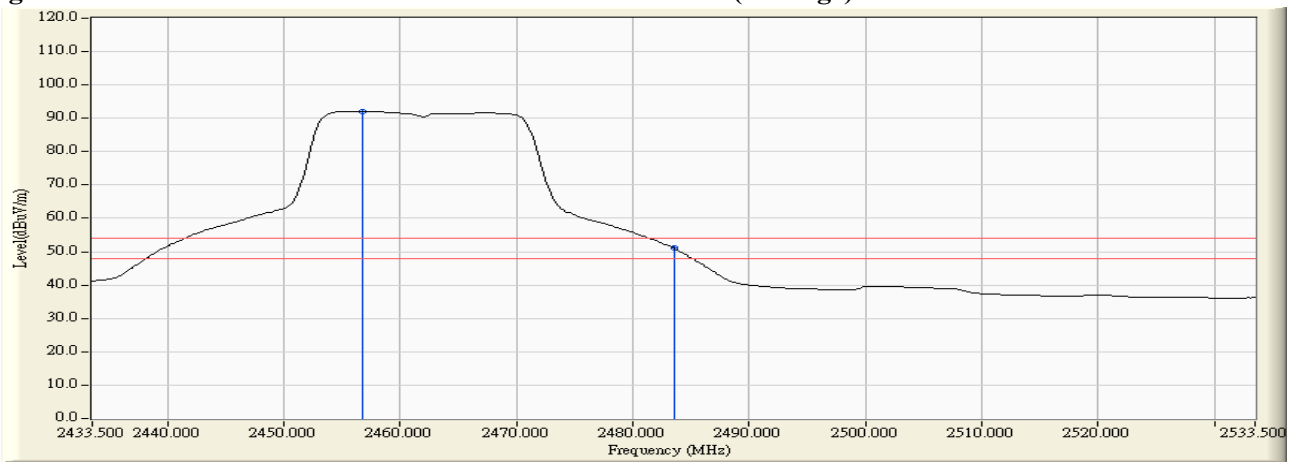


Figure Channel 11: Horizontal (Average)



Note:

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.

Product : Wireless Access Point
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit - 802.11n-20BW_14.4Mbps(2.4G Band) (2462MHz) (Internal Antenna)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
11 (Peak)	2467.300	-4.019	109.955	105.937	--	--	--
11 (Peak)	2483.500	-3.966	73.065	69.098	74.00	54.00	Pass
11 (Average)	2458.100	-4.046	95.033	90.987	--	--	--
11 (Average)	2483.500	-3.966	54.968	51.001	74.00	54.00	Pass

Figure Channel 11: Vertical (Peak)

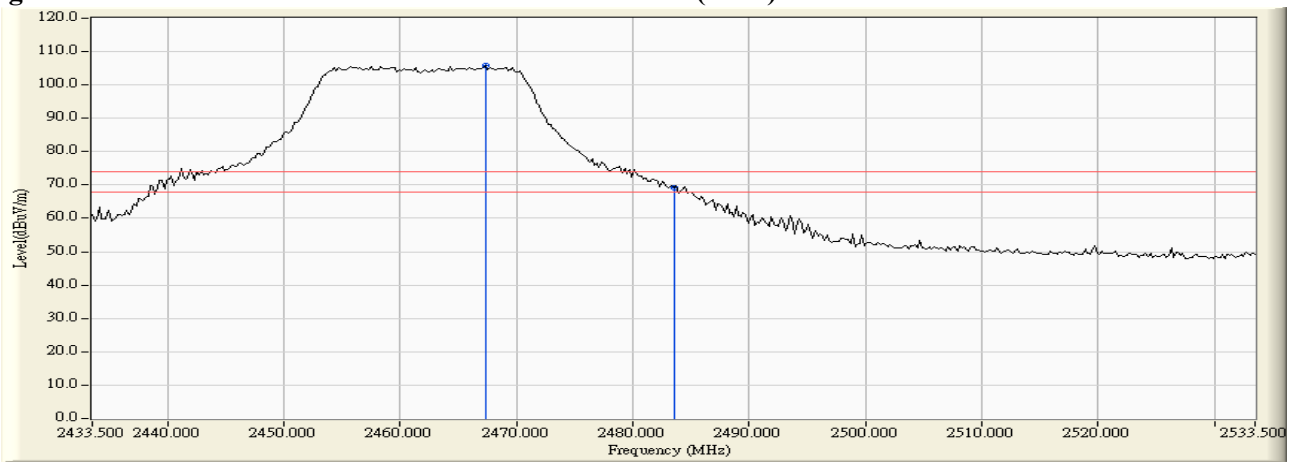
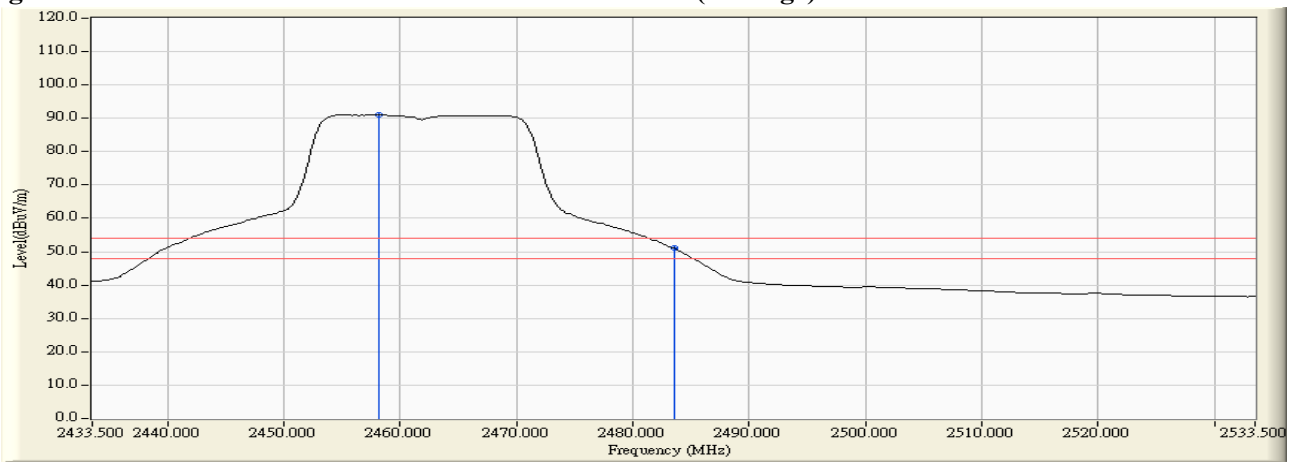


Figure Channel 11: Vertical (Average)



Note:

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.

Product : Wireless Access Point
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit - 802.11n-40BW_30Mbps(2.4G Band) (2422MHz) (Internal Antenna)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
03 (Peak)	2390.000	-2.687	68.503	65.816	74.00	54.00	Pass
03 (Peak)	2400.000	-2.660	79.162	76.502	--	--	--
03 (Peak)	2419.000	-2.642	101.679	99.038	--	--	--
03 (Average)	2390.000	-2.687	54.072	51.385	74.00	54.00	Pass
03 (Average)	2400.000	-2.660	57.477	54.817	--	--	--
03 (Average)	2407.100	-2.650	83.299	80.649	--	--	--

Figure Channel 03: Horizontal (Peak)

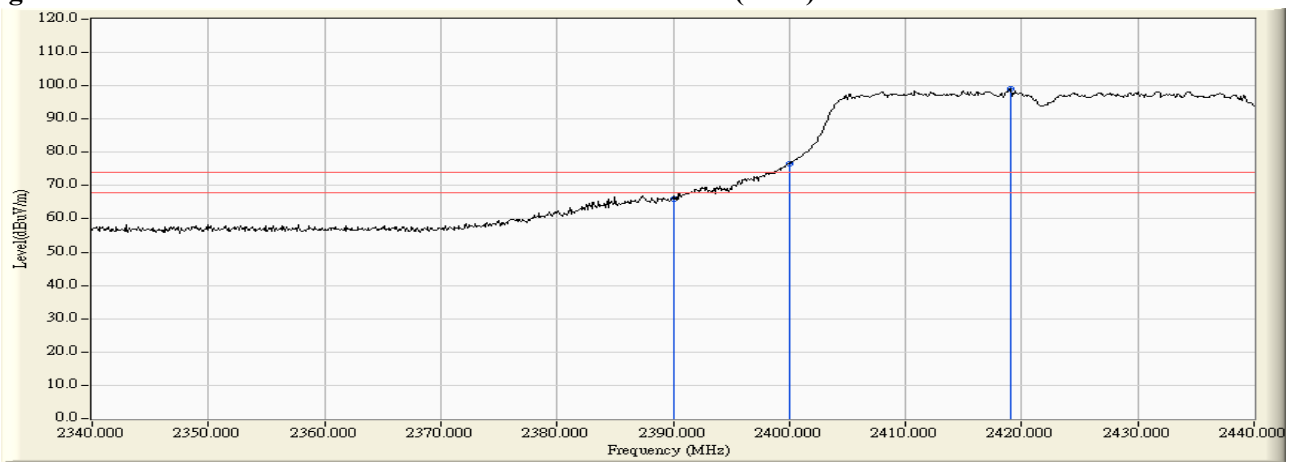
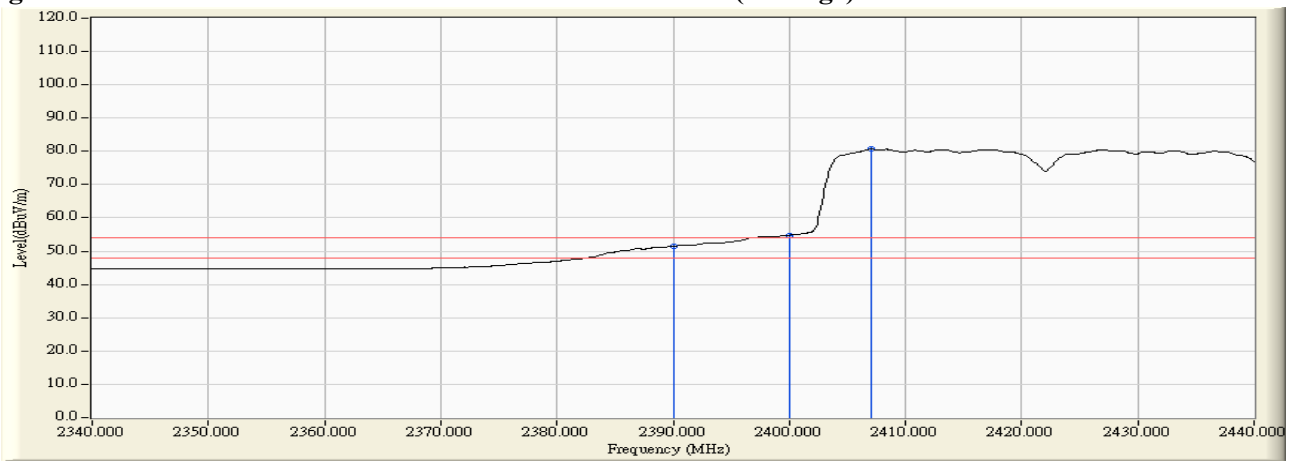


Figure Channel 03: Horizontal (Average)



Note:

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.

Product : Wireless Access Point
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit - 802.11n-40BW_30Mbps(2.4G Band) (2422MHz) (Internal Antenna)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
03 (Peak)	2390.000	-4.159	70.618	66.459	74.00	54.00	Pass
03 (Peak)	2400.000	-4.171	80.527	76.356	--	--	--
03 (Peak)	2409.400	-4.168	102.168	97.999	--	--	--
03 (Average)	2390.000	-4.159	55.227	51.068	74.00	54.00	Pass
03 (Average)	2400.000	-4.171	58.597	54.426	--	--	--
03 (Average)	2410.800	-4.169	84.496	80.327	--	--	--

Figure Channel 03: Vertical (Peak)

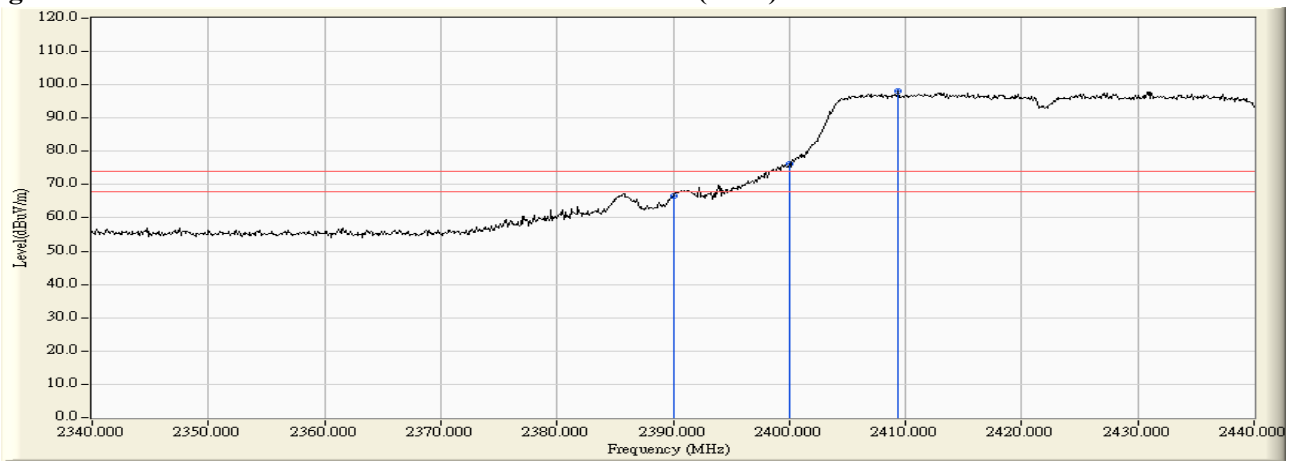
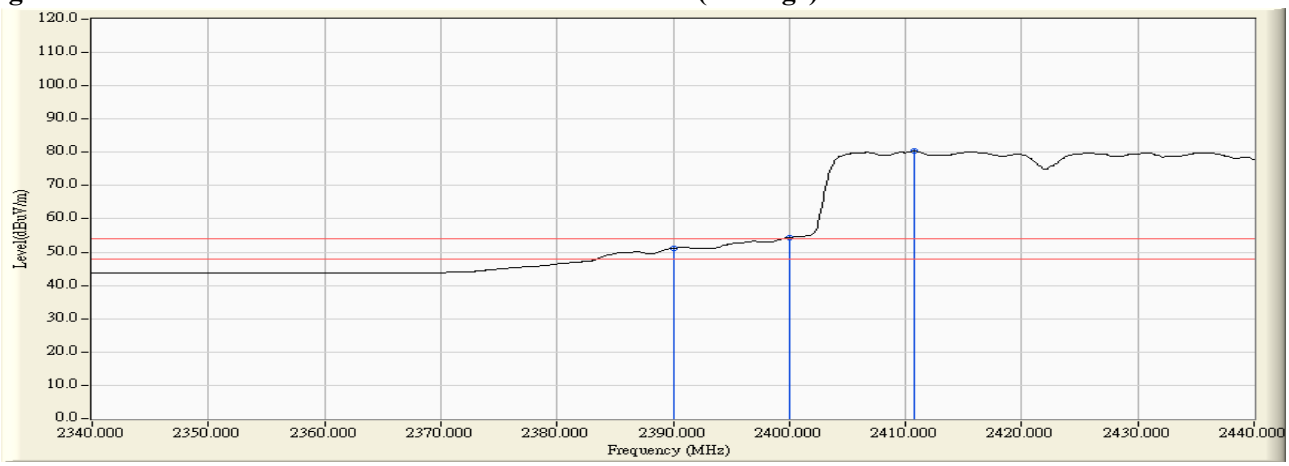


Figure Channel 03: Vertical (Average)



Note:

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.

Product : Wireless Access Point
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit - 802.11n-40BW_30Mbps(2.4G Band) (2452MHz) (Internal Antenna)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
09 (Peak)	2464.300	-2.620	103.627	101.007	--	--	--
09 (Peak)	2483.500	-2.601	72.047	69.445	74.00	54.00	Pass
09 (Peak)	2484.700	-2.600	75.900	73.299	74.00	54.00	Pass
09 (Average)	2465.300	-2.619	88.542	85.923	--	--	--
09 (Average)	2483.500	-2.601	54.072	51.470	74.00	54.00	Pass

Figure Channel 09: Horizontal (Peak)

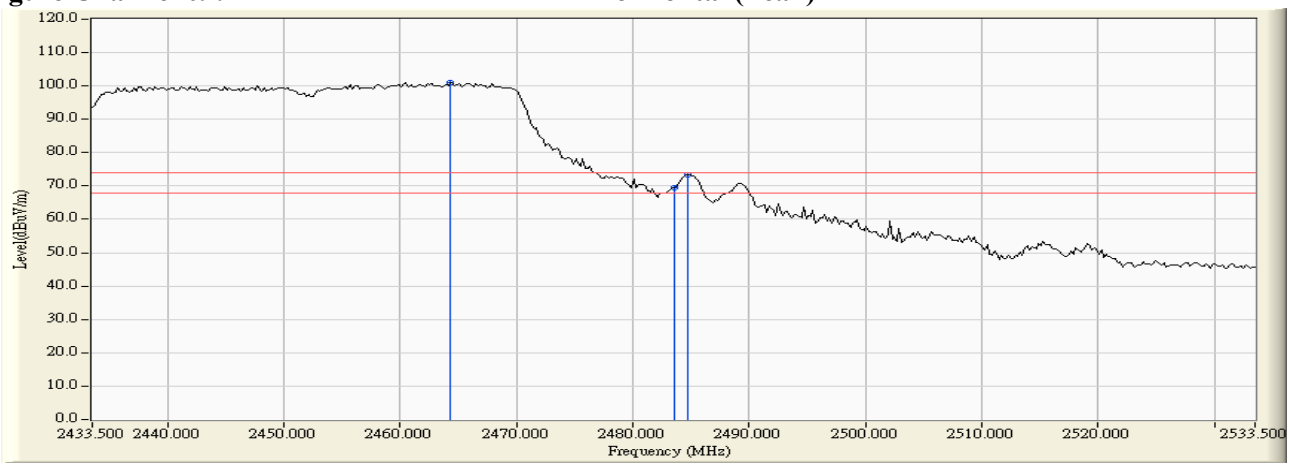
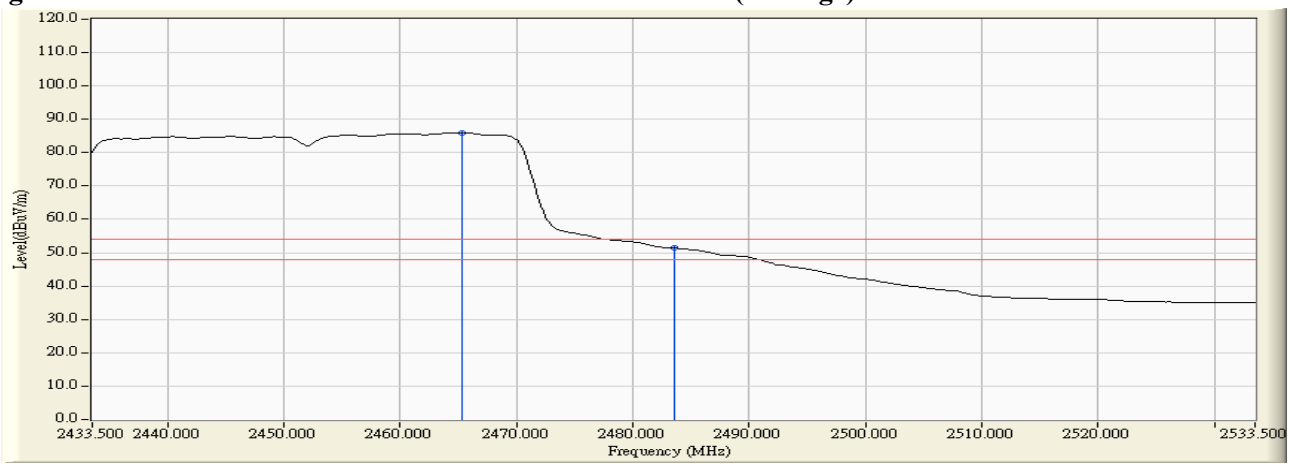


Figure Channel 09: Horizontal (Average)



Note:

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.

Product : Wireless Access Point
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit - 802.11n-40BW_30Mbps(2.4G Band) (2452MHz) (Internal Antenna)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
09 (Peak)	2443.100	-4.092	105.981	101.890	--	--	--
09 (Peak)	2483.500	-3.966	71.228	67.261	74.00	54.00	Pass
09 (Peak)	2487.100	-3.956	75.729	71.774	74.00	54.00	Pass
09 (Average)	2440.700	-4.097	89.545	85.448	--	--	--
09 (Average)	2483.500	-3.966	54.924	50.957	74.00	54.00	Pass

Figure Channel 09: Vertical (Peak)

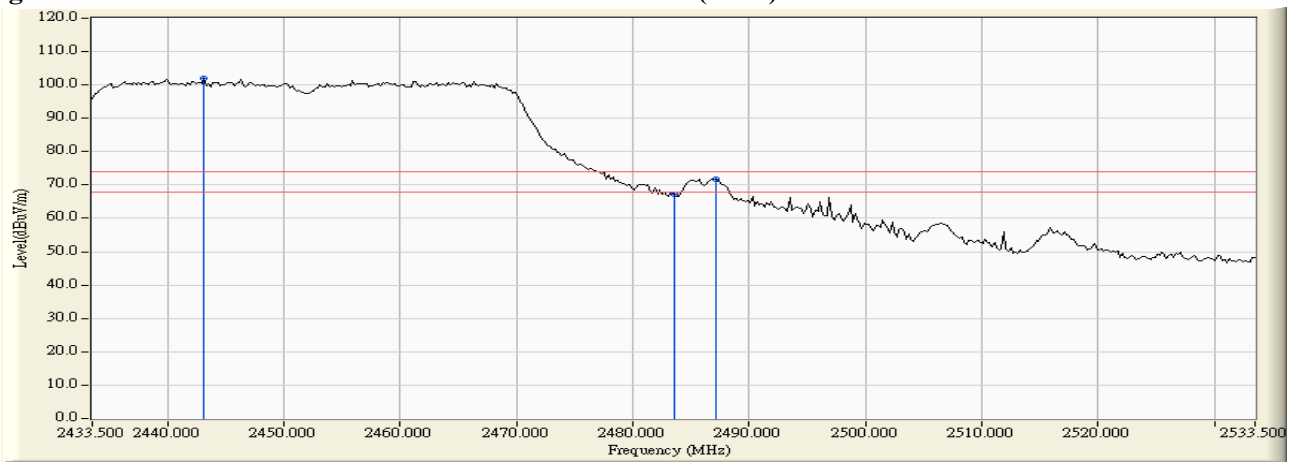
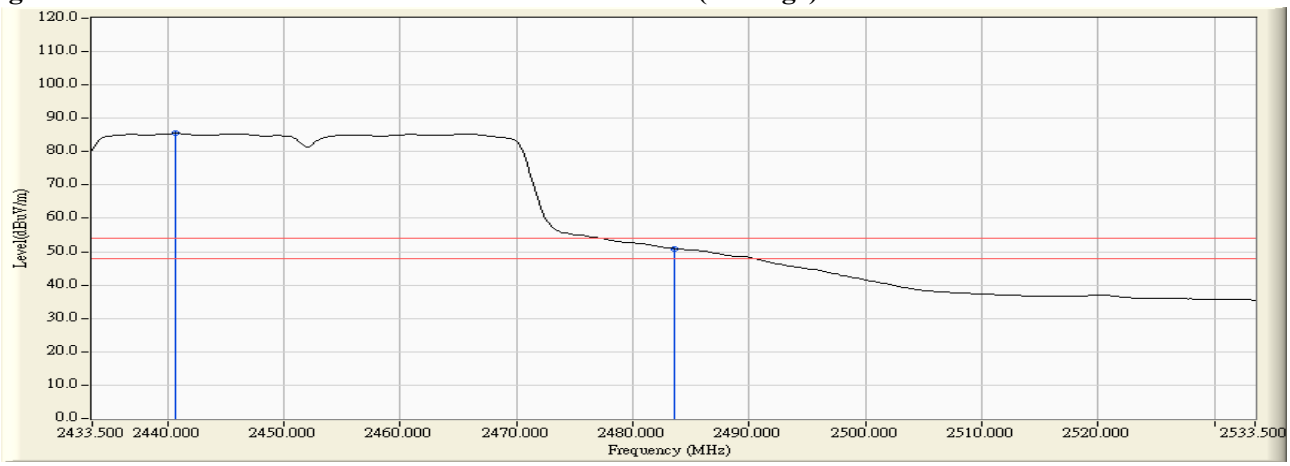


Figure Channel 09: Vertical (Average)



Note:

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.

Product : Wireless Access Point
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit - 802.11b 1Mbps (2412MHz) (External Antenna)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
01 (Peak)	2390.000	-2.687	49.418	46.731	74.00	54.00	Pass
01 (Peak)	2400.000	-2.660	66.671	64.011	--	--	--
01 (Peak)	2413.000	-2.642	104.211	101.568	--	--	--
01 (Average)	2390.000	-2.687	36.466	33.779	74.00	54.00	Pass
01 (Average)	2400.000	-2.660	45.686	43.026	--	--	--
01 (Average)	2411.400	-2.643	100.432	97.789	--	--	--

Figure Channel 01: Horizontal (Peak)

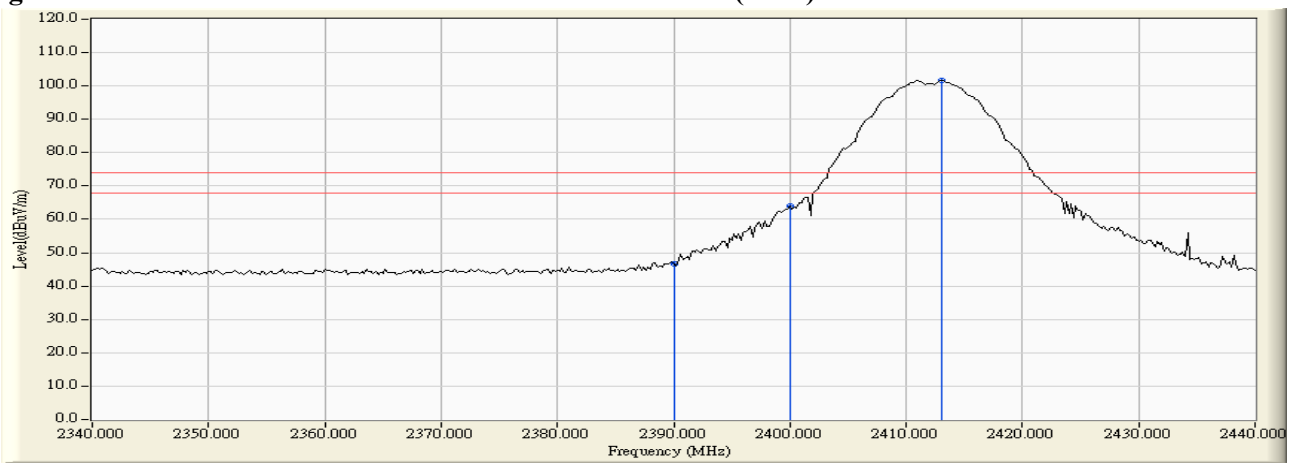
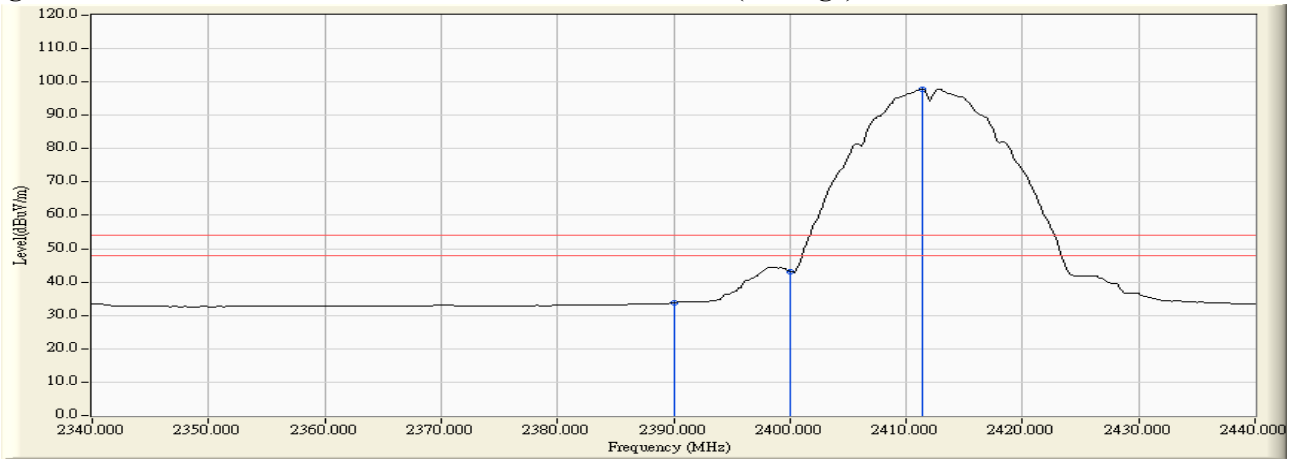


Figure Channel 01: Horizontal (Average)



Note: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.

Product : Wireless Access Point
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit - 802.11b 1Mbps (2412MHz) (External Antenna)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
01 (Peak)	2385.800	-4.145	57.773	53.628	74.00	54.00	Pass
01 (Peak)	2390.000	-4.159	54.291	50.132	74.00	54.00	Pass
01 (Peak)	2400.000	-4.171	59.491	55.320	--	--	--
01 (Peak)	2413.000	-4.163	110.141	105.977	--	--	--
01 (Average)	2390.000	-4.159	39.115	34.956	74.00	54.00	Pass
01 (Average)	2400.000	-4.171	51.578	47.407	--	--	--
01 (Average)	2411.400	-4.167	106.473	102.305	--	--	--

Figure Channel 01: Vertical (Peak)

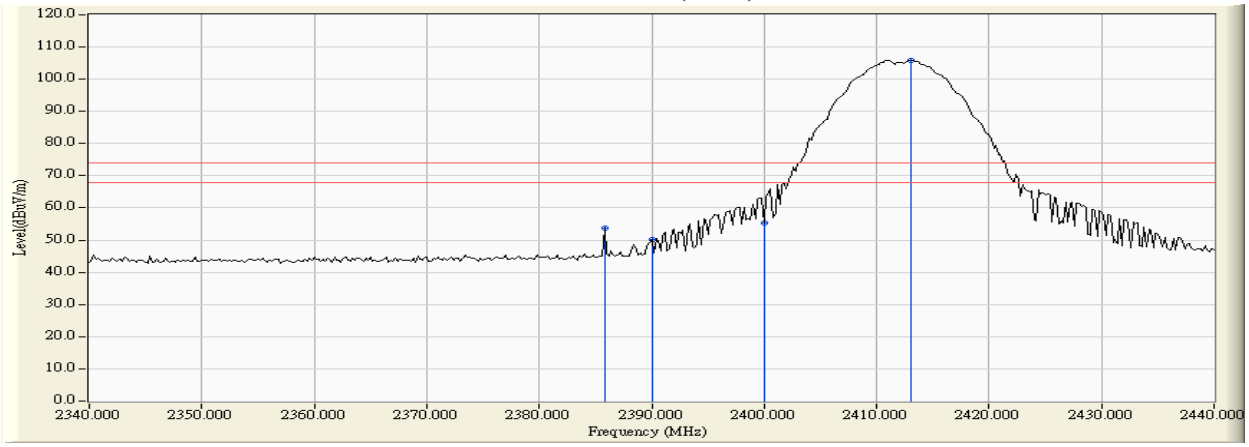
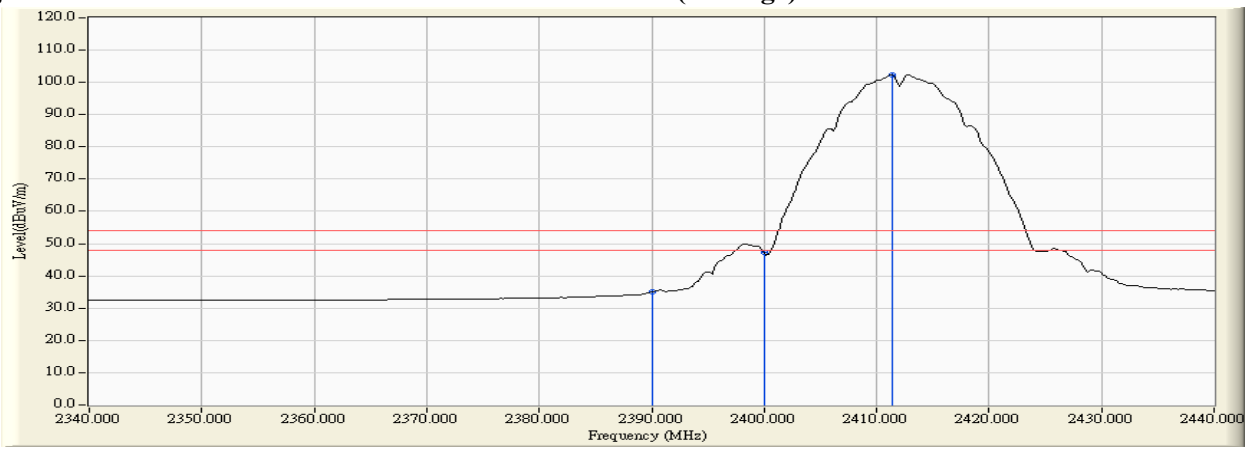


Figure Channel 01: Vertical (Average)



Note:

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.

Product : Wireless Access Point
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit - 802.11b 1Mbps (2462MHz) (External Antenna)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
11 (Peak)	2462.900	-2.622	105.451	102.829	--	--	--
11 (Peak)	2483.500	-2.601	55.198	52.596	74.00	54.00	Pass
11 (Average)	2461.300	-2.624	101.723	99.100	--	--	--
11 (Average)	2483.500	-2.601	37.852	35.250	74.00	54.00	Pass
11 (Average)	2505.300	-2.639	40.390	37.751	74.00	54.00	Pass

Figure Channel 11: Horizontal (Peak)

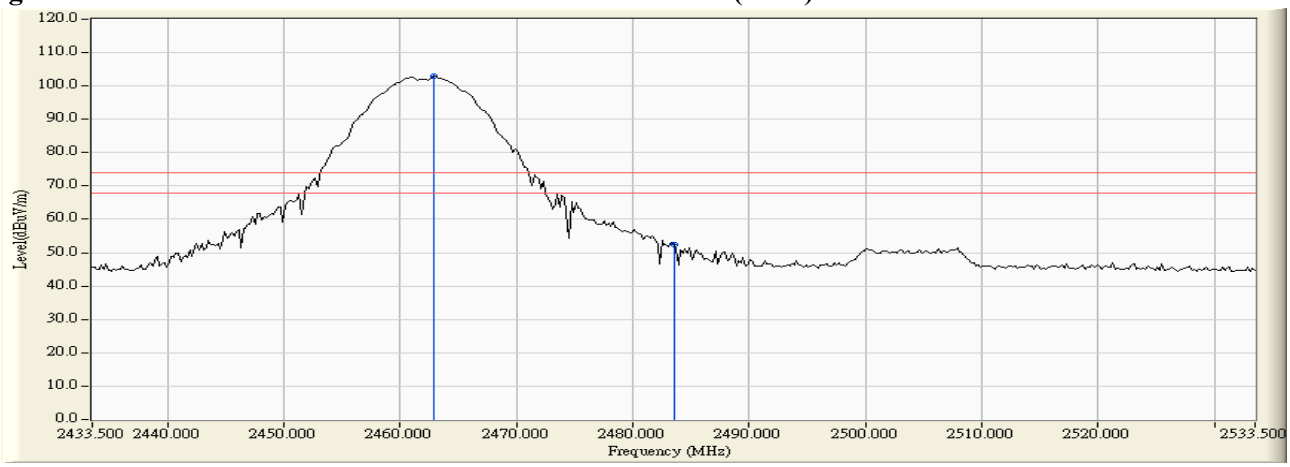
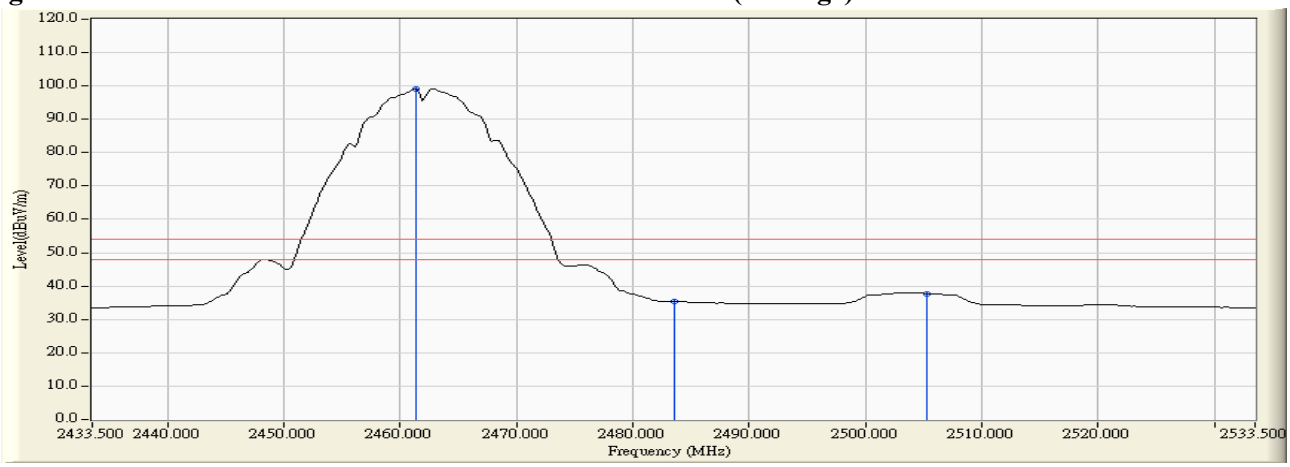


Figure Channel 11: Horizontal (Average)



Note:

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.

Product : Wireless Access Point
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit - 802.11b 1Mbps (2462MHz) (External Antenna)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
11 (Peak)	2462.900	-4.032	113.312	109.280	--	--	--
11 (Peak)	2483.500	-3.966	62.487	58.520	74.00	54.00	Pass
11 (Average)	2462.700	-4.032	109.544	105.512	--	--	--
11 (Average)	2483.500	-3.966	43.376	39.409	74.00	54.00	Pass
11 (Average)	2503.700	-3.892	44.433	40.541	74.00	54.00	Pass

Figure Channel 11: Vertical (Peak)

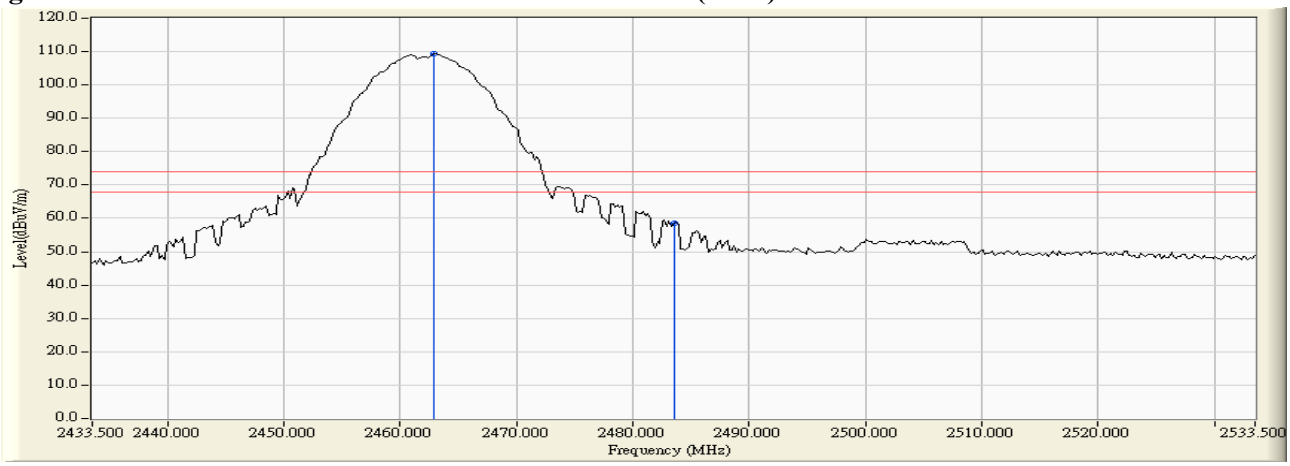
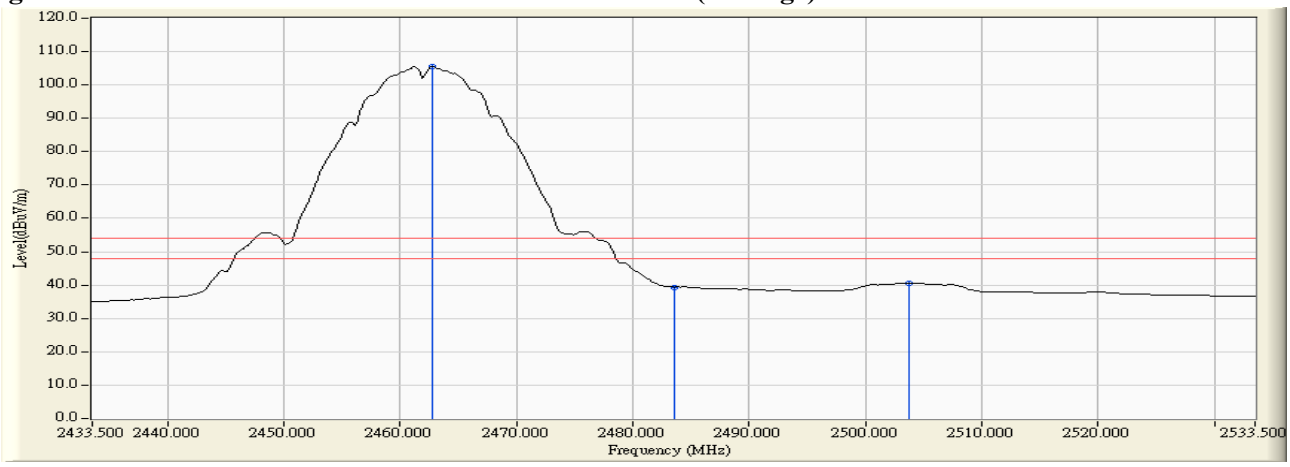


Figure Channel 11: Vertical (Average)



Note:

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.

Product : Wireless Access Point
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit - 802.11g 6Mbps (2412MHz) (External Antenna)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
01 (Peak)	2390.000	-2.687	66.102	63.415	74.00	54.00	Pass
01 (Peak)	2400.000	-2.660	80.264	77.604	--	--	--
01 (Peak)	2407.400	-2.649	105.520	102.871	--	--	--
01(Average)	2390.000	-2.687	47.643	44.956	74.00	54.00	Pass
01(Average)	2400.000	-2.660	62.659	59.999	--	--	--
01(Average)	2408.600	-2.647	95.308	92.661	--	--	--

Figure Channel 01: Horizontal (Peak)

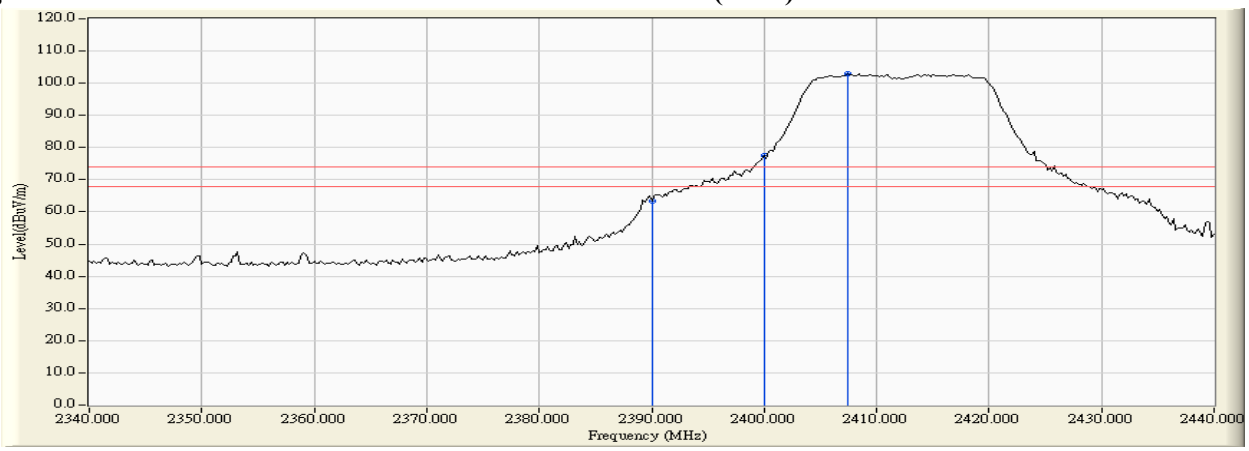
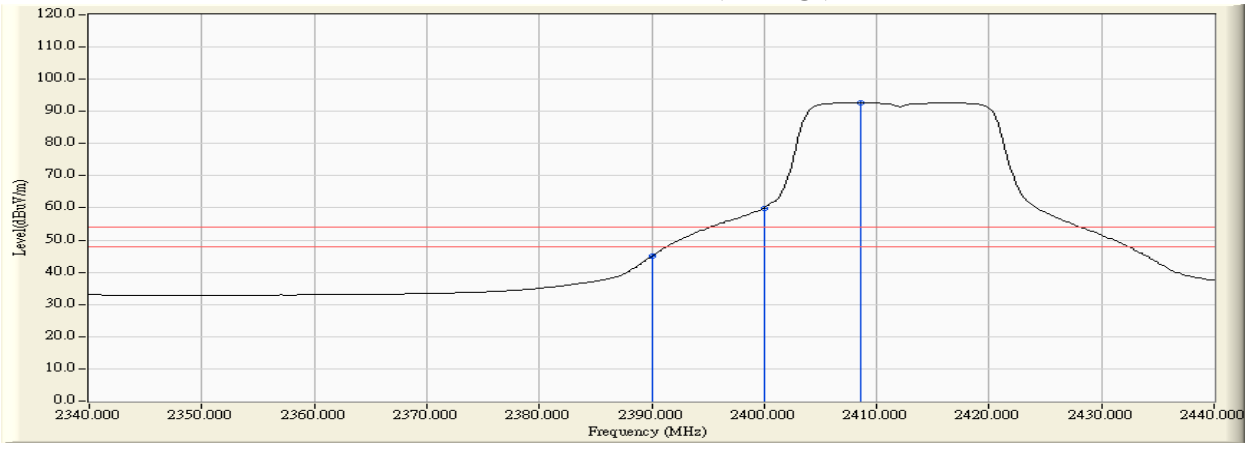


Figure Channel 01: Horizontal (Average)



Note:

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.

Product : Wireless Access Point
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit - 802.11g 6Mbps (2412MHz) (External Antenna)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
01 (Peak)	2390.000	-4.159	74.043	69.884	74.00	54.00	Pass
01 (Peak)	2400.000	-4.171	85.818	81.647	--	--	--
01 (Peak)	2417.200	-4.154	112.695	108.541	--	--	--
01 (Average)	2390.000	-4.159	53.914	49.755	74.00	54.00	Pass
01 (Average)	2400.000	-4.171	69.835	65.664	--	--	--
01 (Average)	2416.800	-4.155	102.249	98.094	--	--	--

Figure Channel 01: Vertical (Peak)

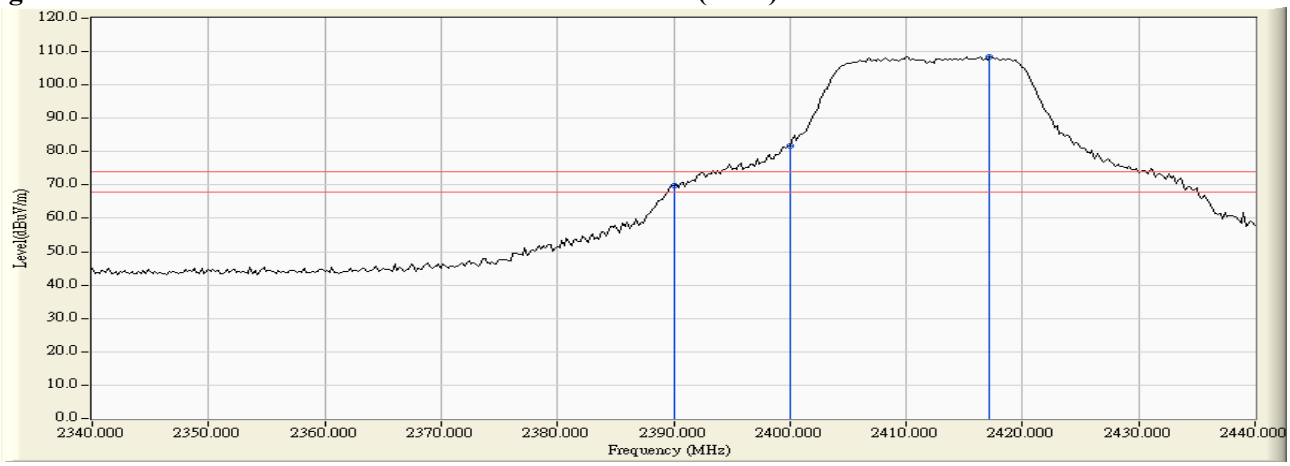
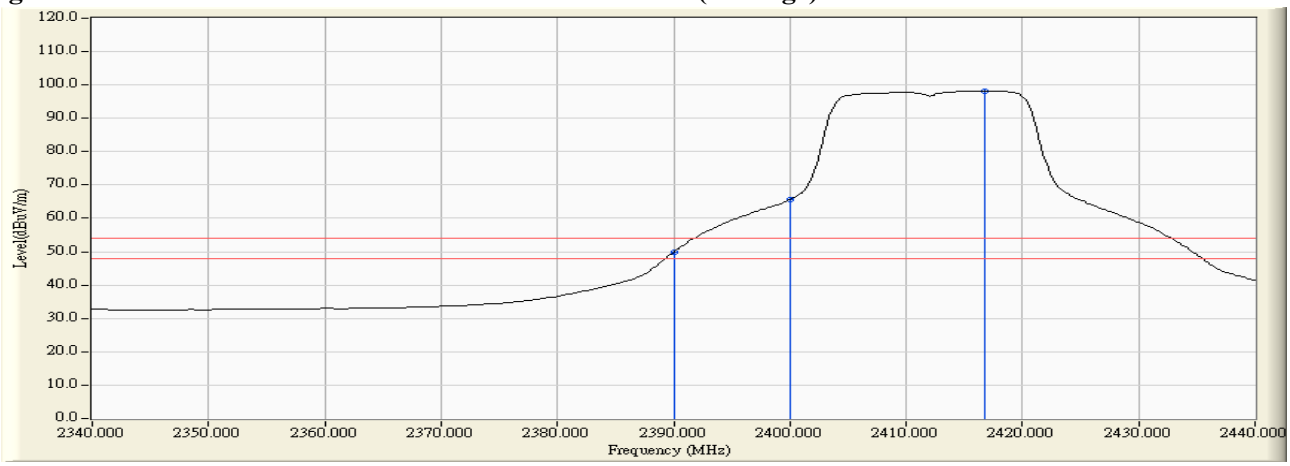


Figure Channel 01: Vertical (Average)



Note:

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.

Product : Wireless Access Point
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit - 802.11g 6Mbps (2462MHz) (External Antenna)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
11 (Peak)	2465.500	32.046	71.704	103.750	--	--	--
11 (Peak)	2483.500	32.182	32.597	64.779	74.00	54.00	Pass
11 (Peak)	2483.900	32.185	34.521	66.706	74.00	54.00	Pass
11 (Average)	2467.700	32.063	61.478	93.540	--	--	--
11 (Average)	2483.500	32.182	16.298	48.480	74.00	54.00	Pass

Figure Channel 11: Horizontal (Peak)

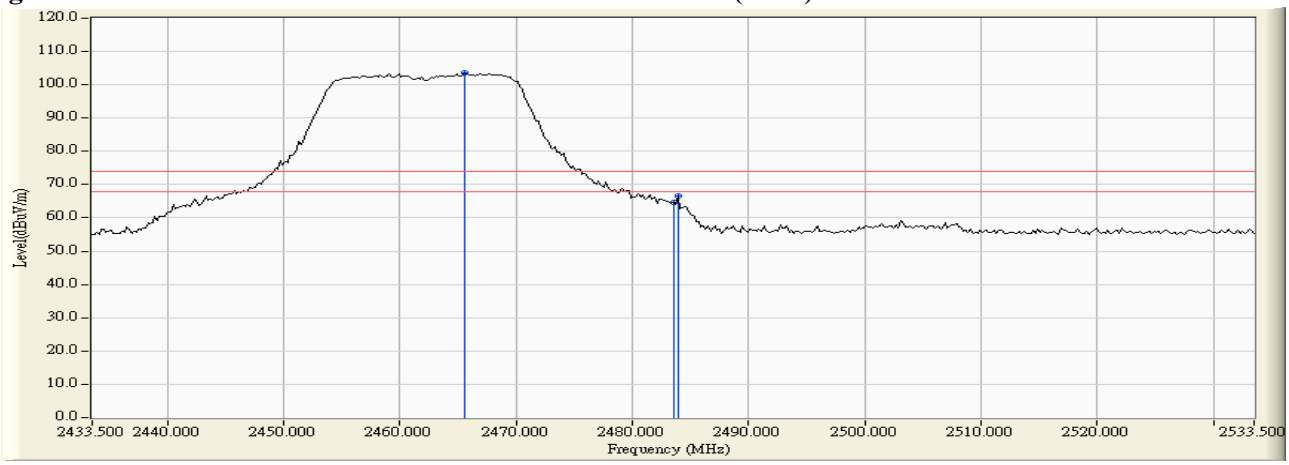
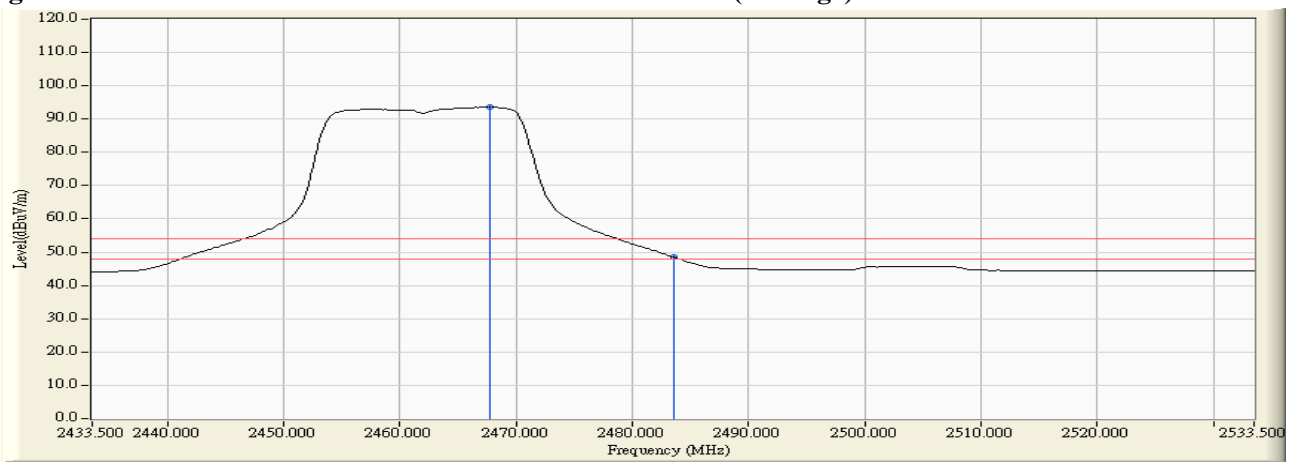


Figure Channel 11: Horizontal (Average)



Note:

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.

Product : Wireless Access Point
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit - 802.11g 6Mbps (2462MHz) (External Antenna)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
11 (Peak)	2467.500	31.327	76.674	108.001	--	--	--
11 (Peak)	2483.500	31.435	36.678	68.113	74.00	54.00	Pass
11 (Average)	2467.700	31.329	65.555	96.884	--	--	--
11 (Average)	2483.500	31.435	18.746	50.181	74.00	54.00	Pass

Figure Channel 11: Vertical (Peak)

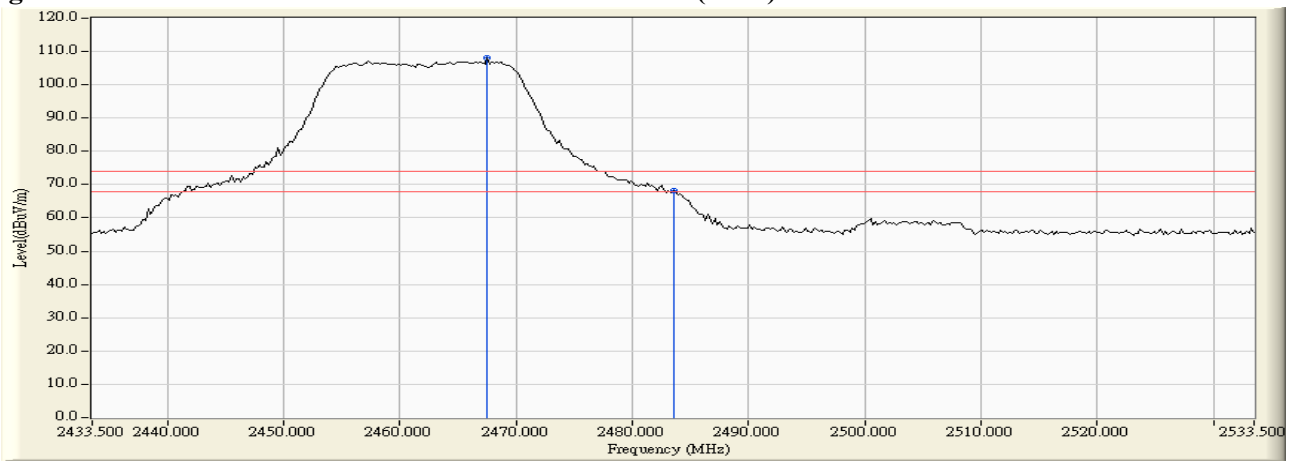
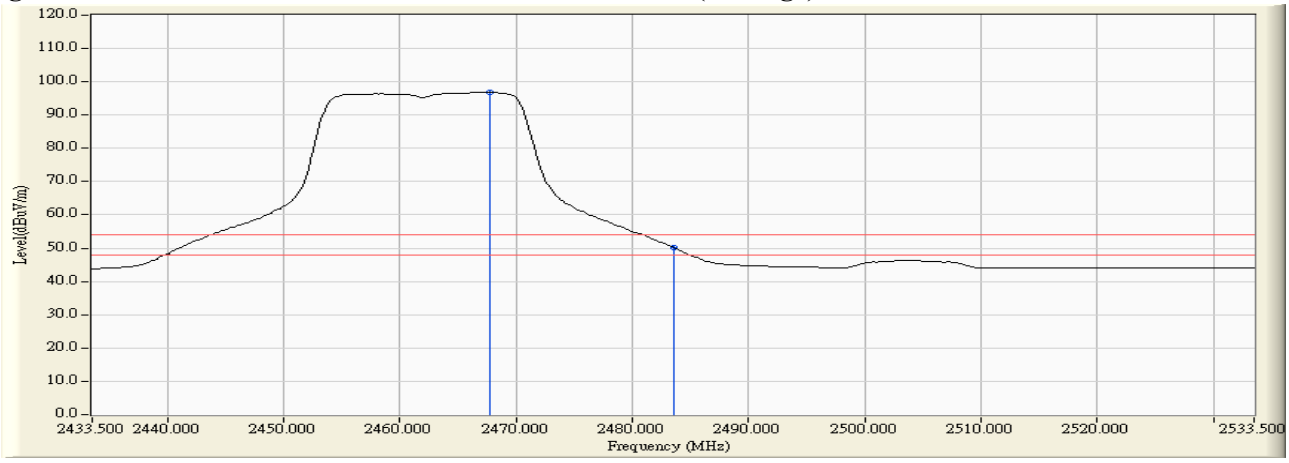


Figure Channel 11: Vertical (Average)



Note:

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.

Product : Wireless Access Point
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit - 802.11n-20BW_14.4Mbps(2.4G Band) (2412MHz) (External Antenna)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
01 (Peak)	2390.000	-2.687	61.370	58.683	74.00	54.00	Pass
01 (Peak)	2400.000	-2.660	79.041	76.381	--	--	--
01 (Peak)	2405.800	-2.652	105.932	103.280	--	--	--
01 (Average)	2390.000	-2.687	44.768	42.081	74.00	54.00	Pass
01 (Average)	2400.000	-2.660	61.031	58.371	--	--	--
01 (Average)	2417.400	-2.643	94.251	91.609	--	--	--

Figure Channel 01: Horizontal (Peak)

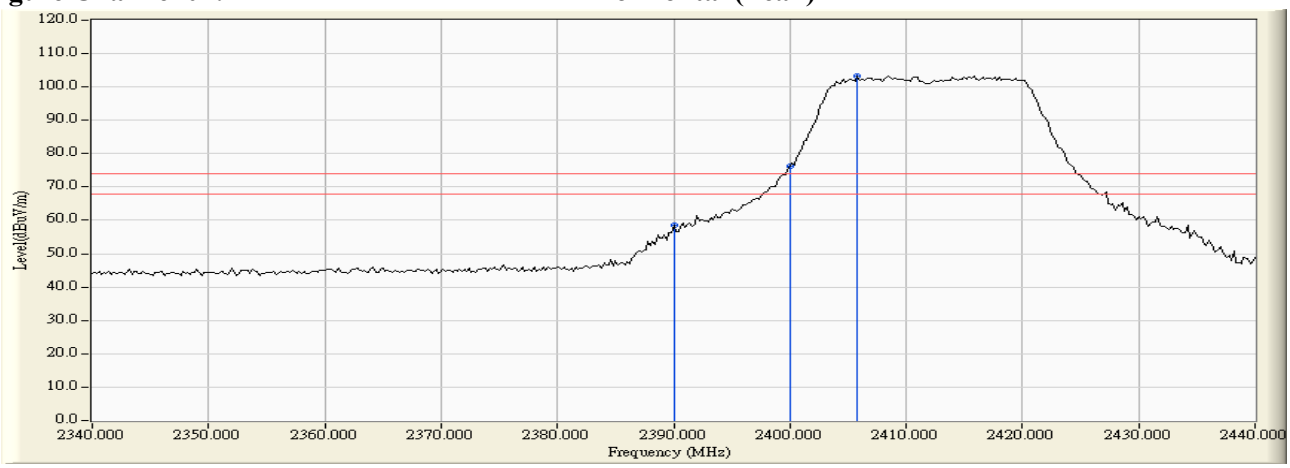
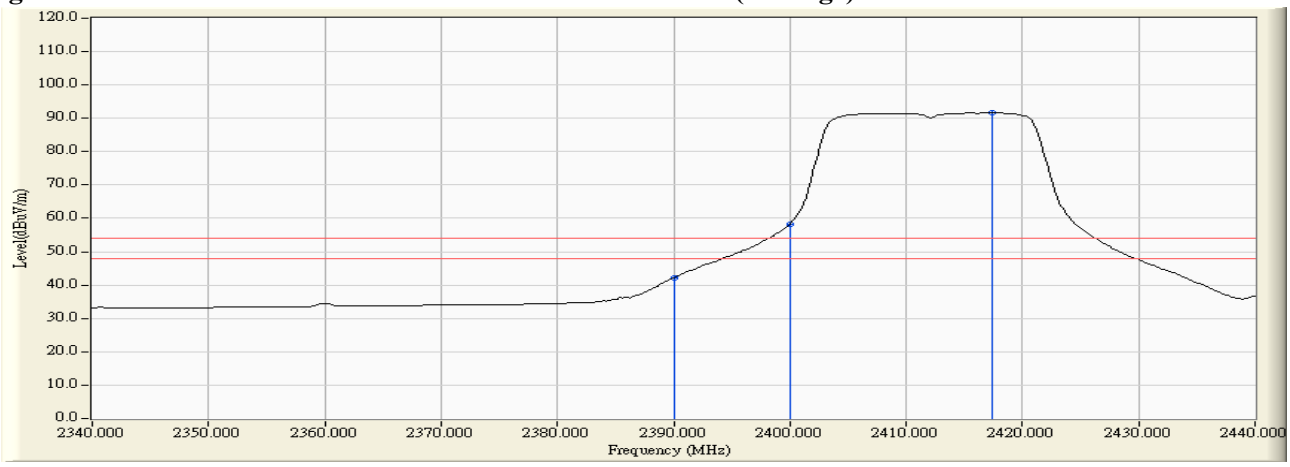


Figure Channel 01: Horizontal (Average)



Note:

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.

Product : Wireless Access Point
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit - 802.11n-20BW_14.4Mbps(2.4G Band) (2412MHz) (External Antenna)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
01 (Peak)	2390.000	-4.159	73.874	69.715	74.00	54.00	Pass
01 (Peak)	2400.000	-4.171	87.515	83.344	--	--	--
01 (Peak)	2418.200	-4.151	114.906	110.755	--	--	--
01 (Average)	2390.000	-4.159	55.126	50.967	74.00	54.00	Pass
01 (Average)	2400.000	-4.171	70.300	66.129	--	--	--
01 (Average)	2417.400	-4.154	102.593	98.440	--	--	--

Figure Channel 01: Vertical (Peak)

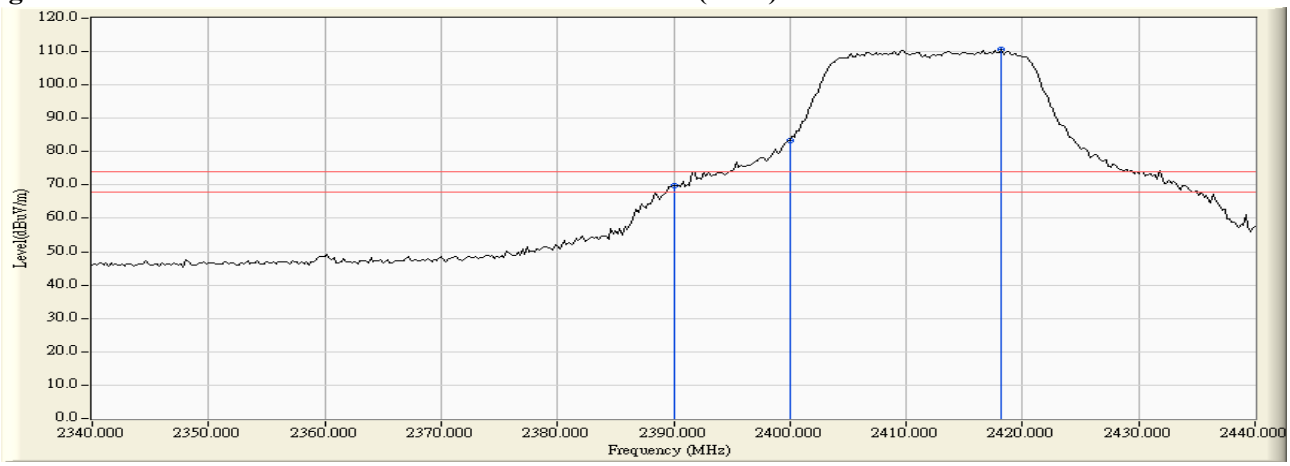
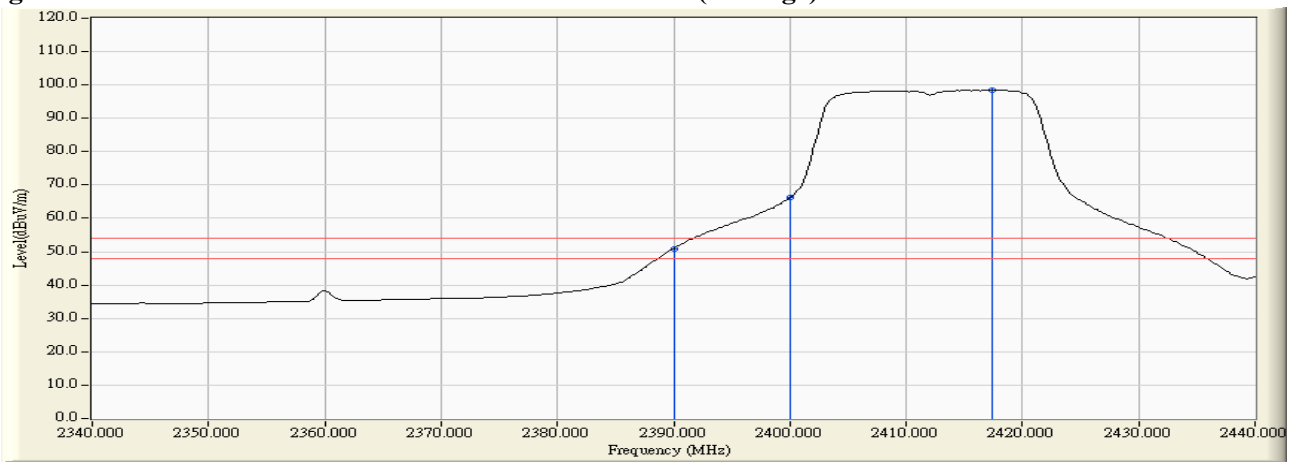


Figure Channel 01: Vertical (Average)



Note:

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.

Product : Wireless Access Point
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit - 802.11n-20BW_14.4Mbps(2.4G Band) (2462MHz) (External Antenna)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
11 (Peak)	2467.500	32.061	69.748	101.809	--	--	--
11 (Peak)	2483.500	32.182	27.674	59.856	74.00	54.00	Pass
11 (Average)	2467.700	32.063	58.555	90.617	--	--	--
11 (Average)	2483.500	32.182	14.217	46.399	74.00	54.00	Pass

Figure Channel 11: Horizontal (Peak)

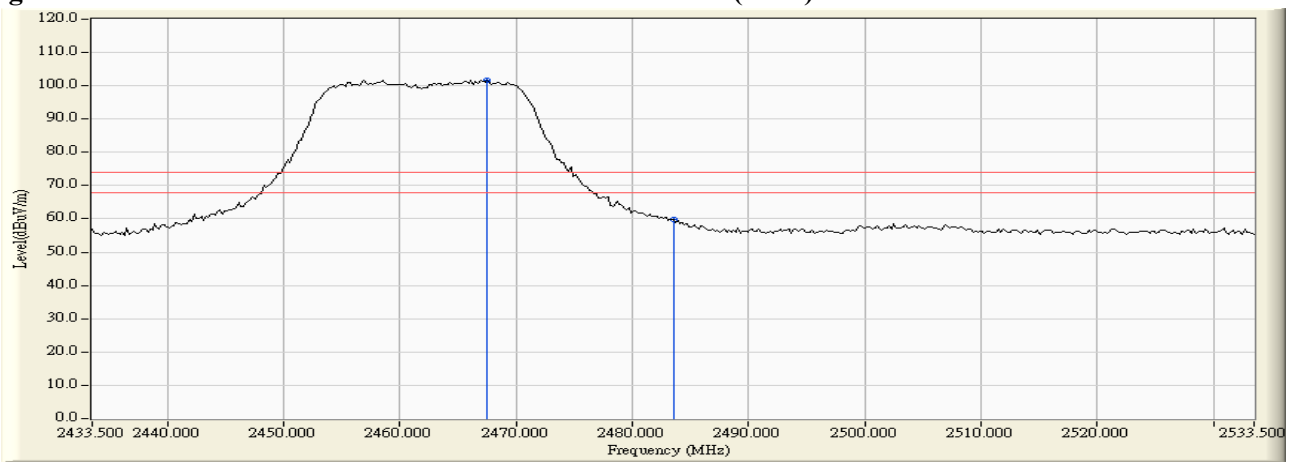
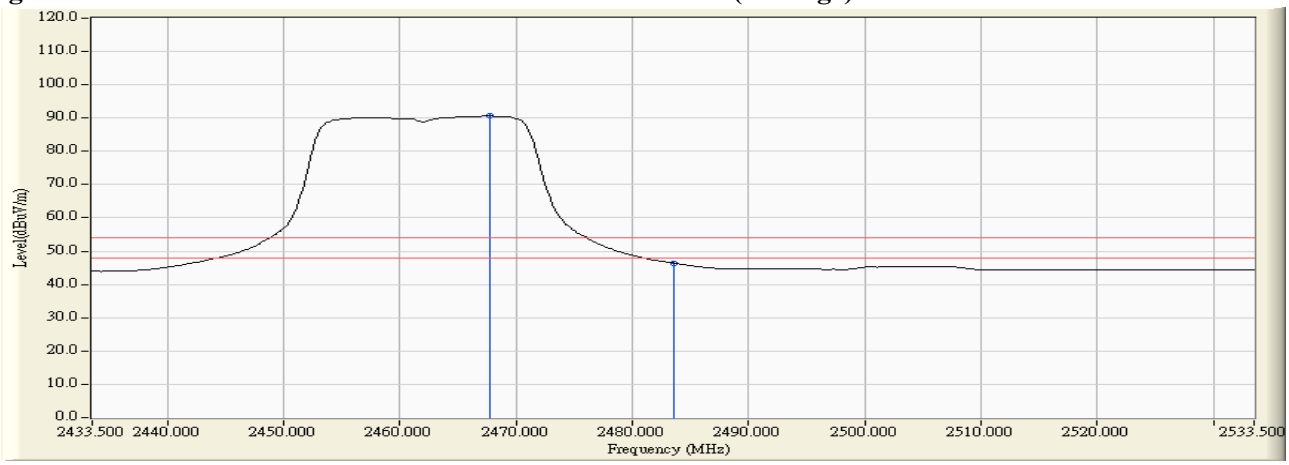


Figure Channel 11: Horizontal (Average)



Note:

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.

Product : Wireless Access Point
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit - 802.11n-20BW_14.4Mbps(2.4G Band) (2462MHz) (External Antenna)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
11 (Peak)	2459.900	31.276	76.619	107.895	--	--	--
11 (Peak)	2483.500	31.435	30.503	61.938	74.00	54.00	Pass
11 (Average)	2467.300	31.326	63.989	95.315	--	--	--
11 (Average)	2483.500	31.435	16.806	48.241	74.00	54.00	Pass

Figure Channel 11: Vertical (Peak)

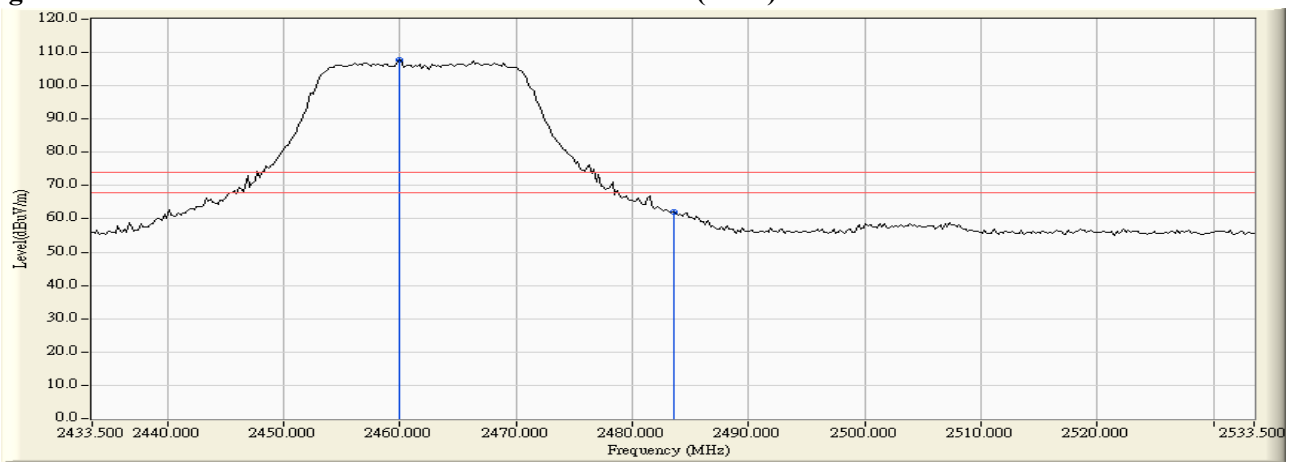
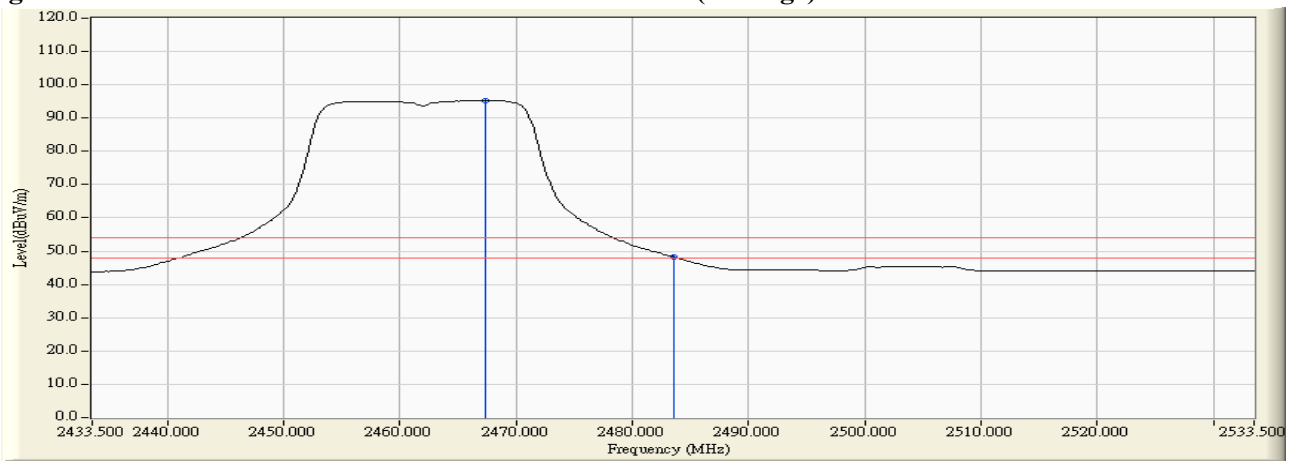


Figure Channel 11: Vertical (Average)



Note:

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.

Product : Wireless Access Point
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit - 802.11n-40BW_30Mbps(2.4G Band) (2422MHz) (External Antenna)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
03 (Peak)	2390.000	-2.687	59.794	57.107	74.00	54.00	Pass
03 (Peak)	2400.000	-2.660	74.050	71.390	--	--	--
03 (Peak)	2427.200	-2.639	102.459	99.820	--	--	--
03 (Average)	2390.000	-2.687	46.253	43.566	74.00	54.00	Pass
03 (Average)	2400.000	-2.660	56.923	54.263	--	--	--
03 (Average)	2430.400	-2.639	89.909	87.270	--	--	--

Figure Channel 03: Horizontal (Peak)

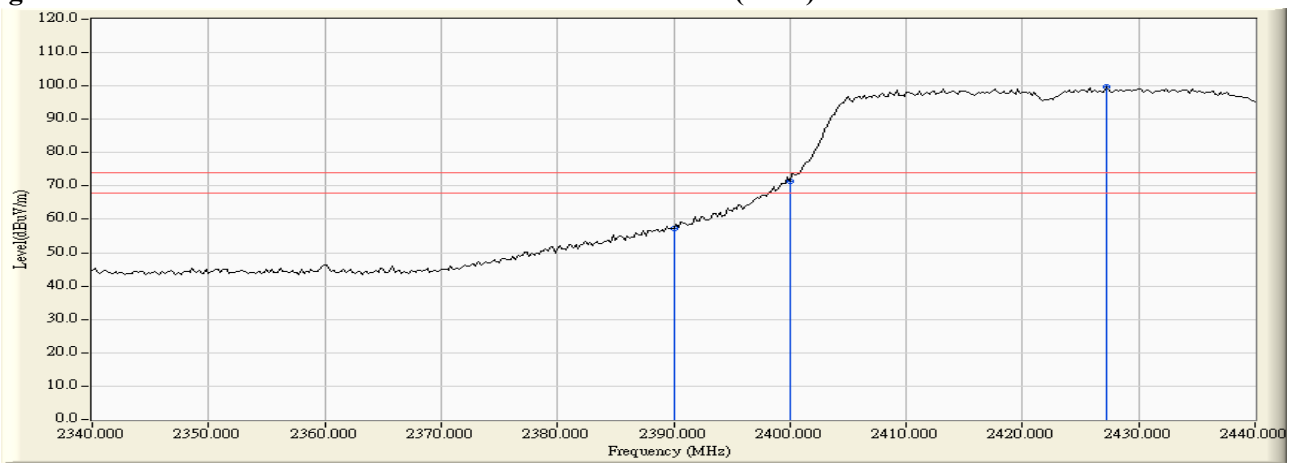
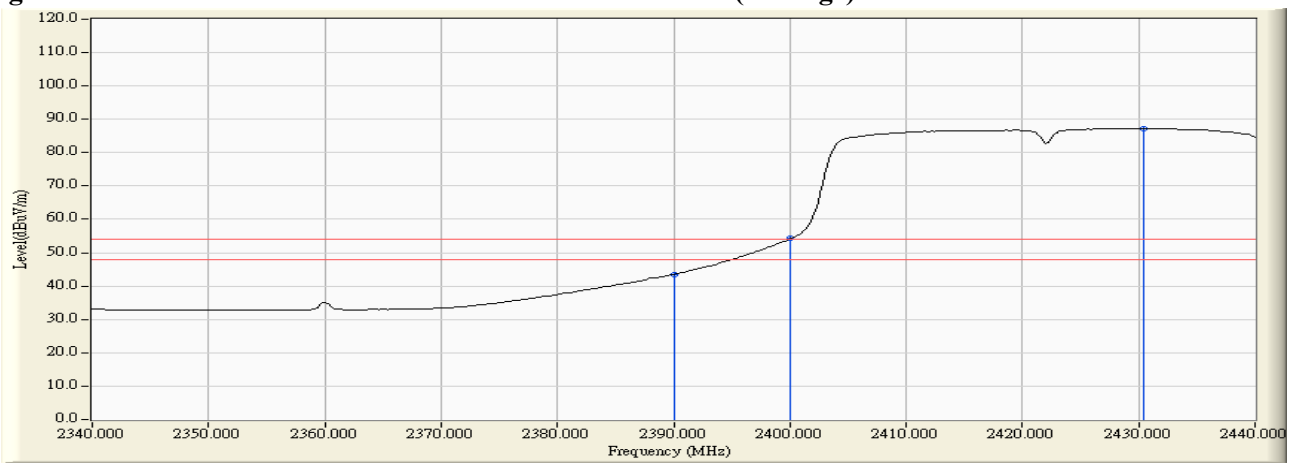


Figure Channel 03: Horizontal (Average)



Note:

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.

Product : Wireless Access Point
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit - 802.11n-40BW_30Mbps(2.4G Band) (2422MHz) (External Antenna)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
03 (Peak)	2390.000	-4.159	69.477	65.318	74.00	54.00	Pass
03 (Peak)	2400.000	-4.171	82.021	77.850	--	--	--
03 (Peak)	2430.000	-4.123	109.313	105.190	--	--	--
03 (Average)	2390.000	-4.159	55.449	51.290	74.00	54.00	Pass
03 (Average)	2400.000	-4.171	65.152	60.981	--	--	--
03 (Average)	2428.600	-4.126	97.285	93.158	--	--	--

Figure Channel 03: Vertical (Peak)

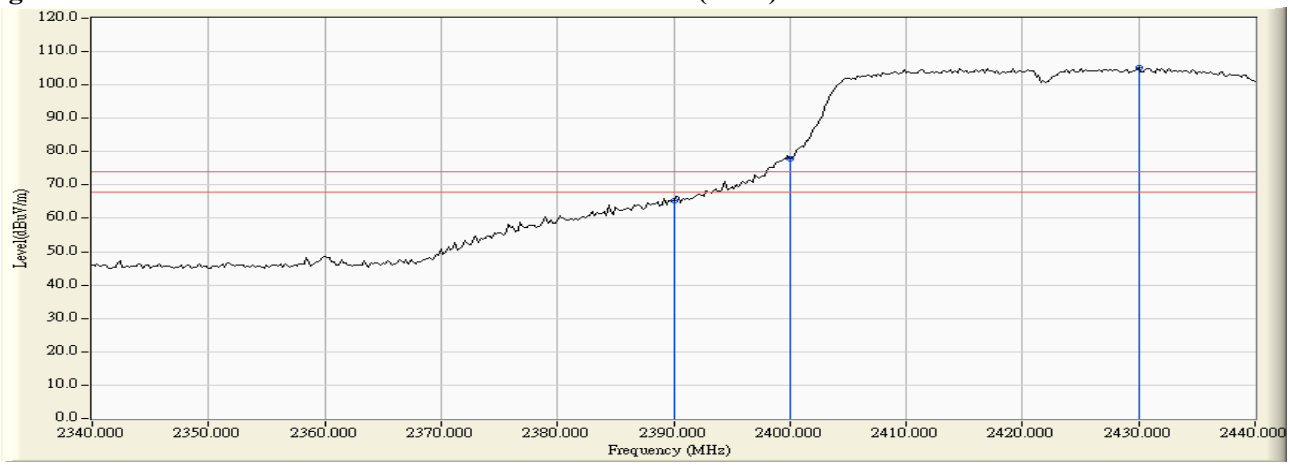
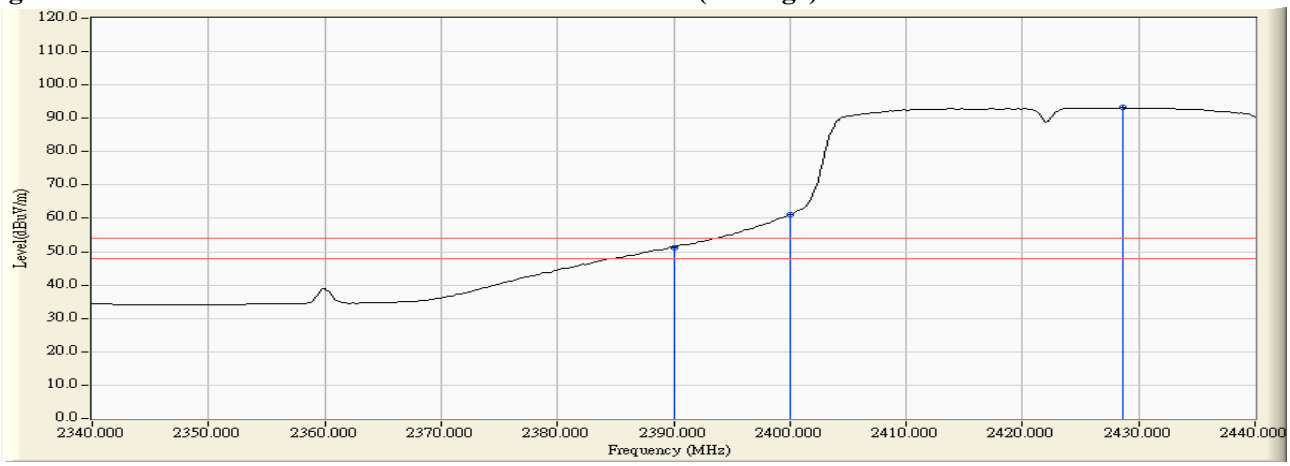


Figure Channel 03: Vertical (Average)



Note:

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.

Product : Wireless Access Point
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit - 802.11n-40BW_30Mbps(2.4G Band) (2452MHz) (External Antenna)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
09 (Peak)	2465.700	32.047	64.479	96.526	--	--	--
09 (Peak)	2483.500	32.182	27.438	59.620	74.00	54.00	Pass
09 (Peak)	2492.300	32.248	27.588	59.837	74.00	54.00	Pass
09 (Average)	2464.500	32.038	53.147	85.185	--	--	--
09 (Average)	2483.500	32.182	14.993	47.175	74.00	54.00	Pass

Figure Channel 09: Horizontal (Peak)

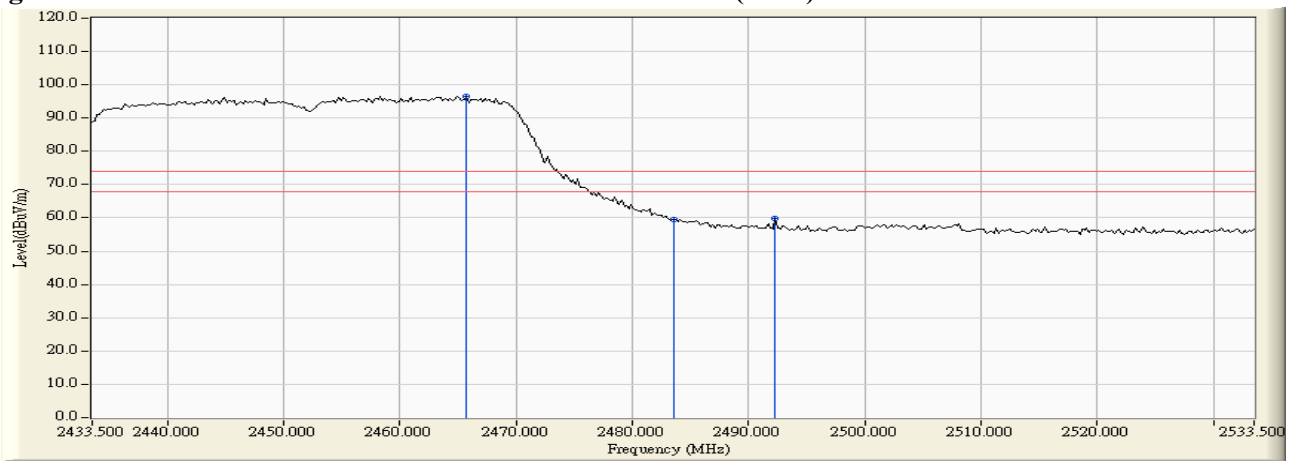
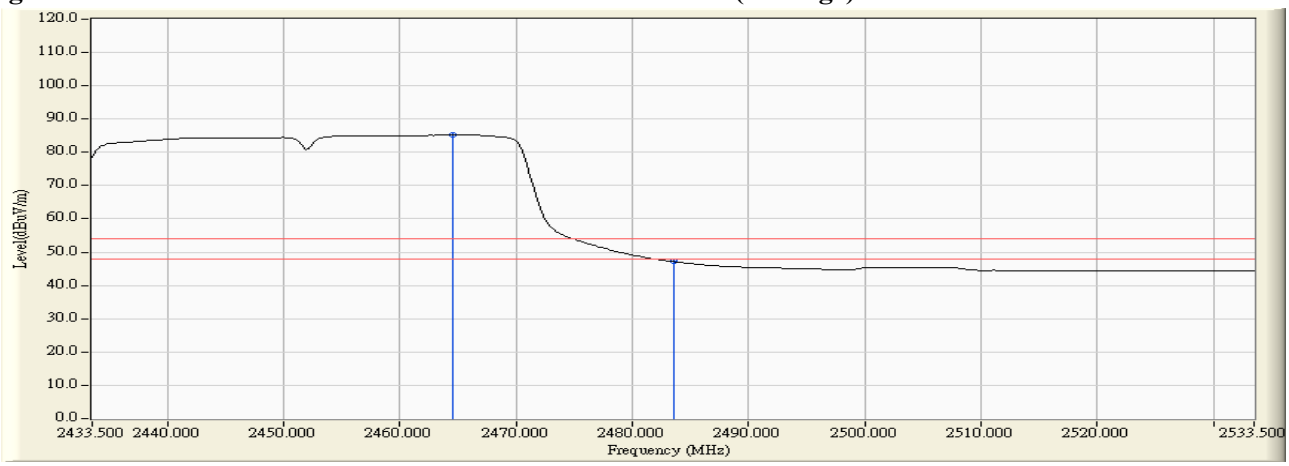


Figure Channel 09: Horizontal (Average)



Note:

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.

Product : Wireless Access Point
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit - 802.11n-40BW_30Mbps(2.4G Band) (2452MHz) (External Antenna)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
09 (Peak)	2442.900	31.159	71.334	102.493	--	--	--
09 (Peak)	2483.500	31.435	30.101	61.536	74.00	54.00	Pass
09 (Average)	2464.700	31.308	58.522	89.831	--	--	--
09 (Average)	2483.500	31.435	17.923	49.358	74.00	54.00	Pass

Figure Channel 09: Vertical (Peak)

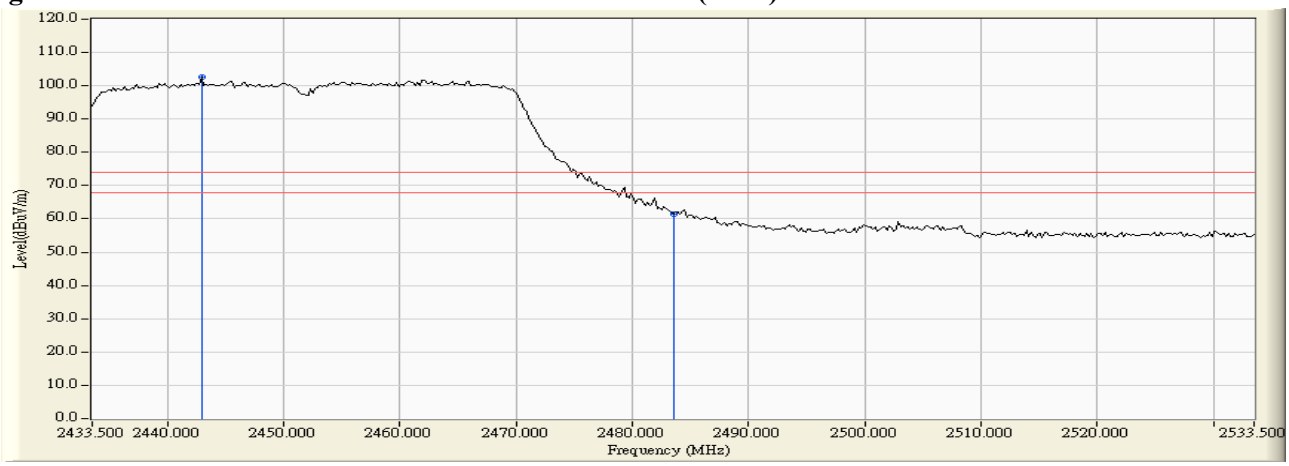
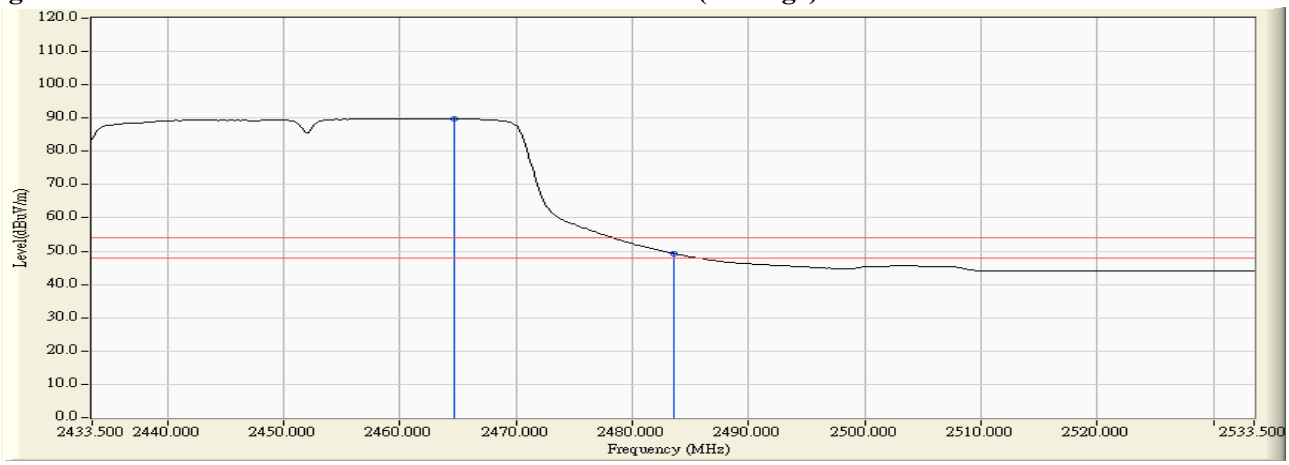


Figure Channel 09: Vertical (Average)



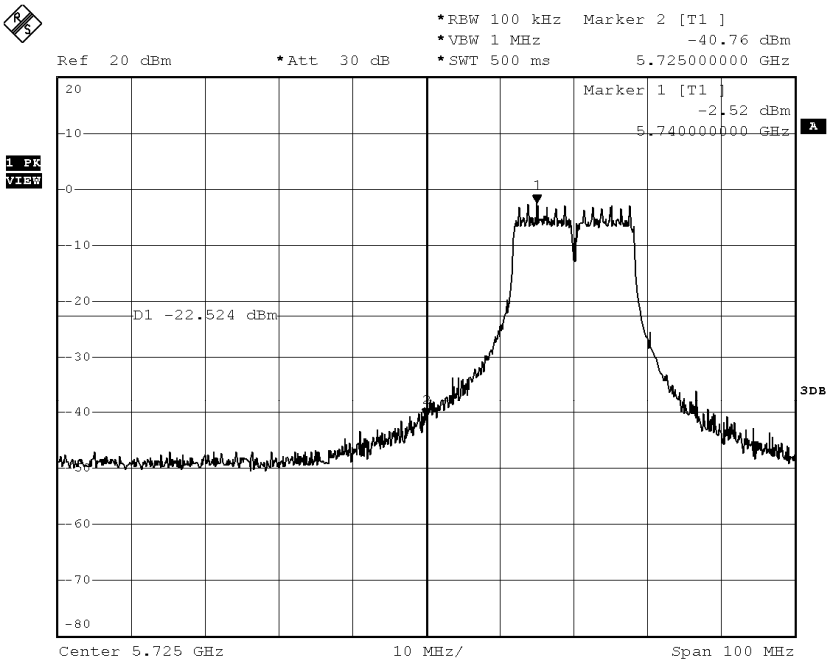
Note:

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.

Product : Wireless Access Point
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 3: Transmit - 802.11a 6Mbps (Internal Antenna)

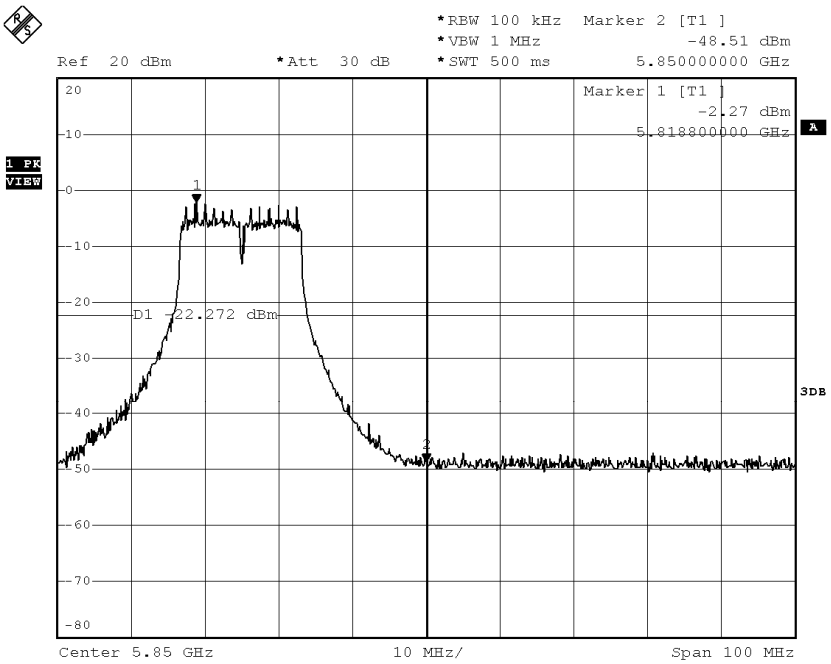
Test Frequency (MHz)	Measurement Level Δ (dB)	Limit Δ (dB)	Result
5745	38.24	>20	PASS
5825	46.24	>20	PASS

5745MHz



Date: 5.JAN.2015 09:06:35

5825MHz



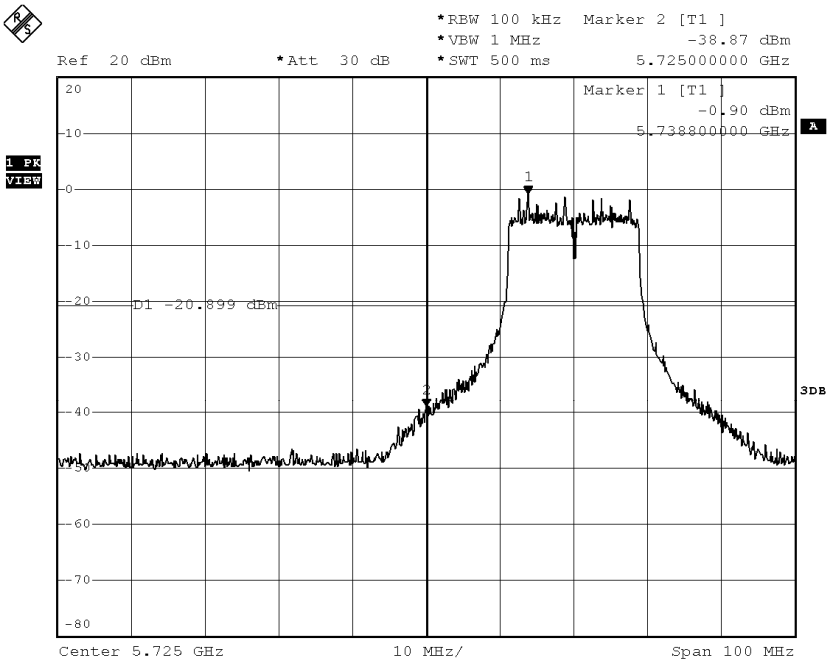
Date: 7.JAN.2015 03:21:58

Product : Wireless Access Point
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit - 802.11n-20BW_14.4Mbps(5G Band) (Internal Antenna)

Chain A

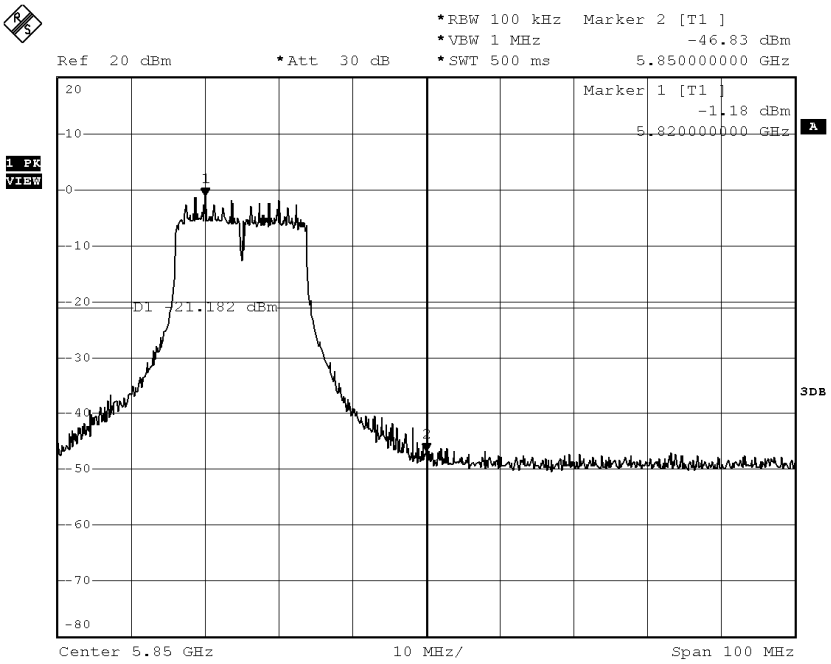
Test Frequency (MHz)	Measurement Level Δ (dB)	Limit Δ (dB)	Result
5745	37.97	>20	PASS
5825	45.65	>20	PASS

5745MHz



Date: 7.JAN.2015 03:54:08

5825MHz



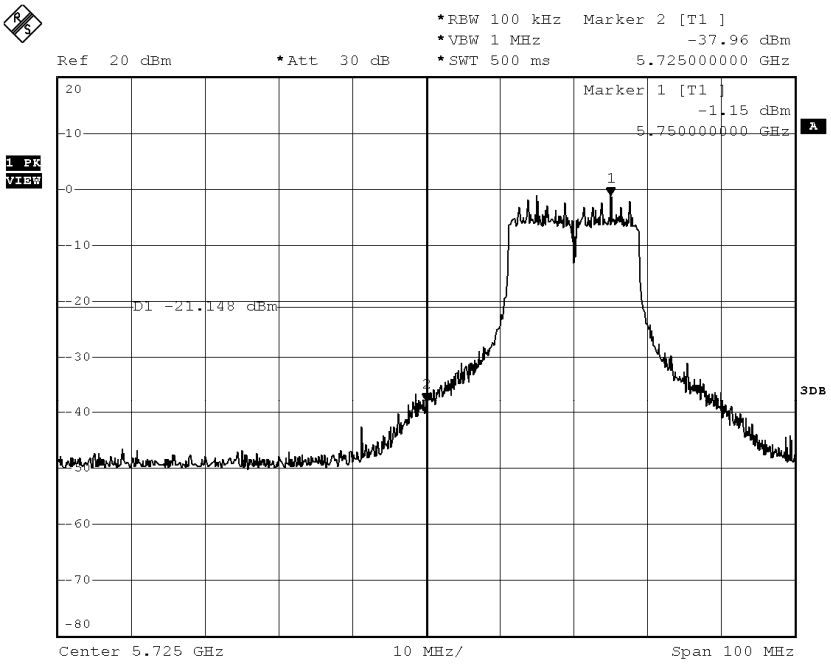
Date: 7.JAN.2015 07:03:29

Product : Wireless Access Point
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit - 802.11n-20BW_14.4Mbps(5G Band) (Internal Antenna)

Chain B

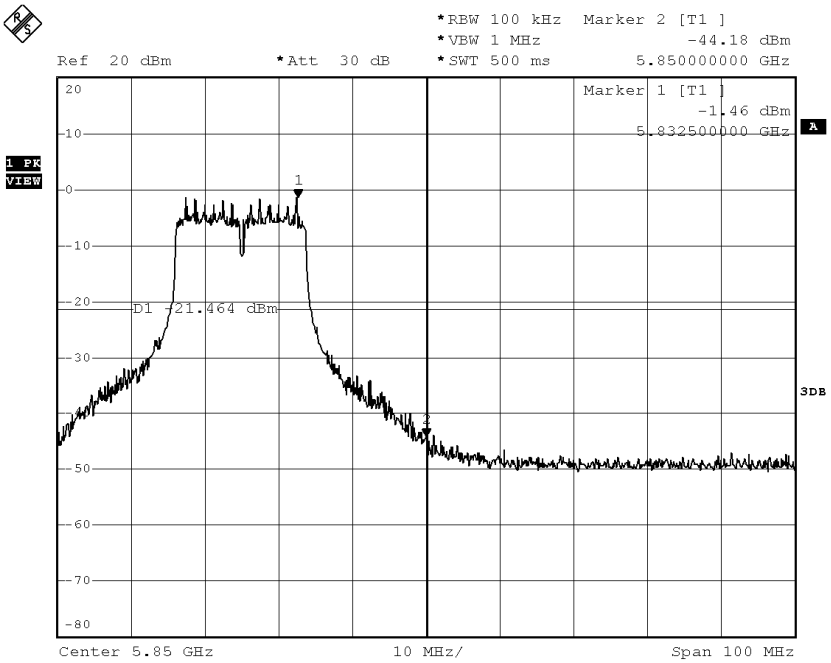
Test Frequency (MHz)	Measurement Level Δ (dB)	Limit Δ (dB)	Result
5745	36.81	>20	PASS
5825	42.72	>20	PASS

5745MHz



Date: 7.JAN.2015 04:36:28

5825MHz



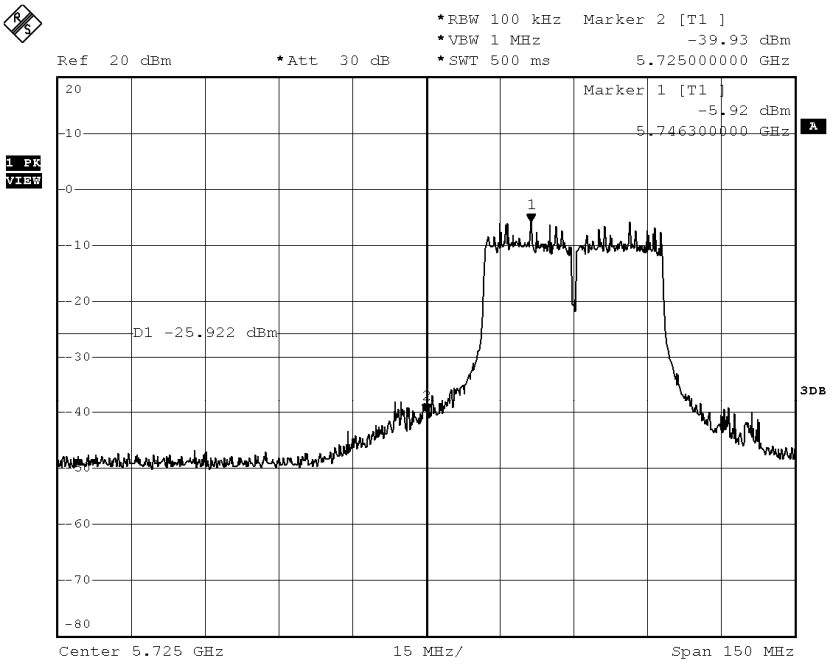
Date: 7.JAN.2015 07:46:04

Product : Wireless Access Point
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 7: Transmit - 802.11n-40BW_30Mbps(5G Band) (Internal Antenna)

Chain A

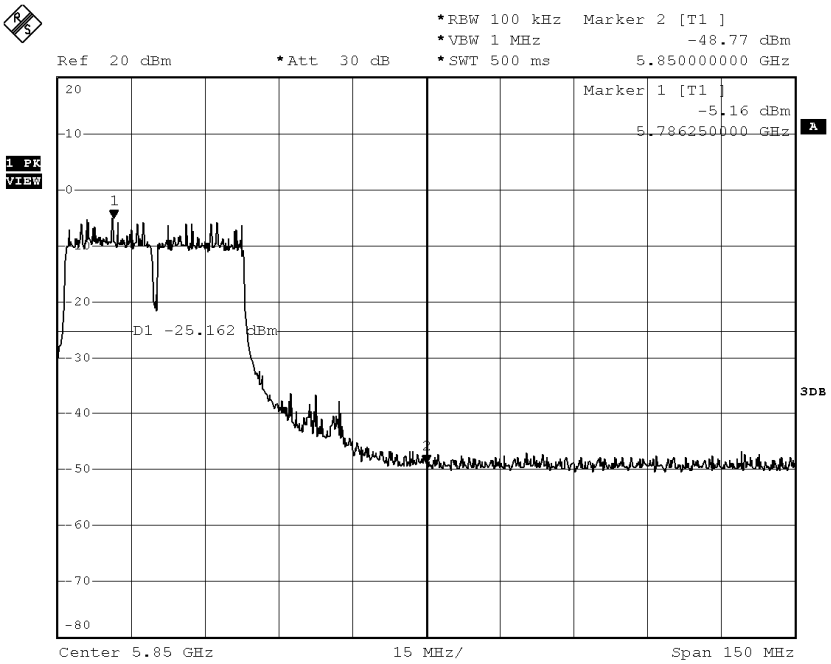
Test Frequency (MHz)	Measurement Level Δ (dB)	Limit Δ (dB)	Result
5755	34.01	>20	PASS
5795	43.22	>20	PASS

5755MHz



Date: 7.JAN.2015 08:14:39

5795MHz



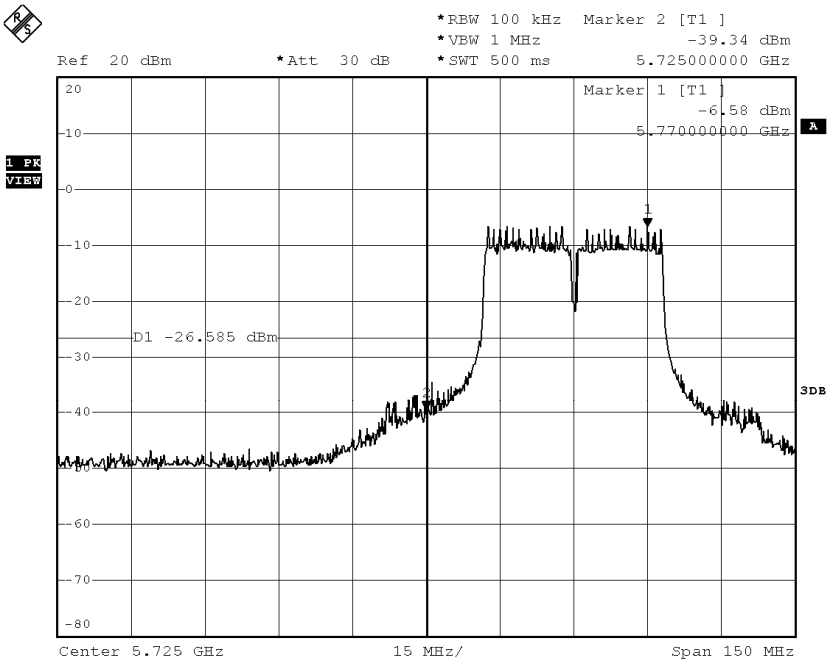
Date: 7.JAN.2015 09:11:48

Product : Wireless Access Point
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 7: Transmit - 802.11n-40BW_30Mbps(5G Band) (Internal Antenna)

Chain B

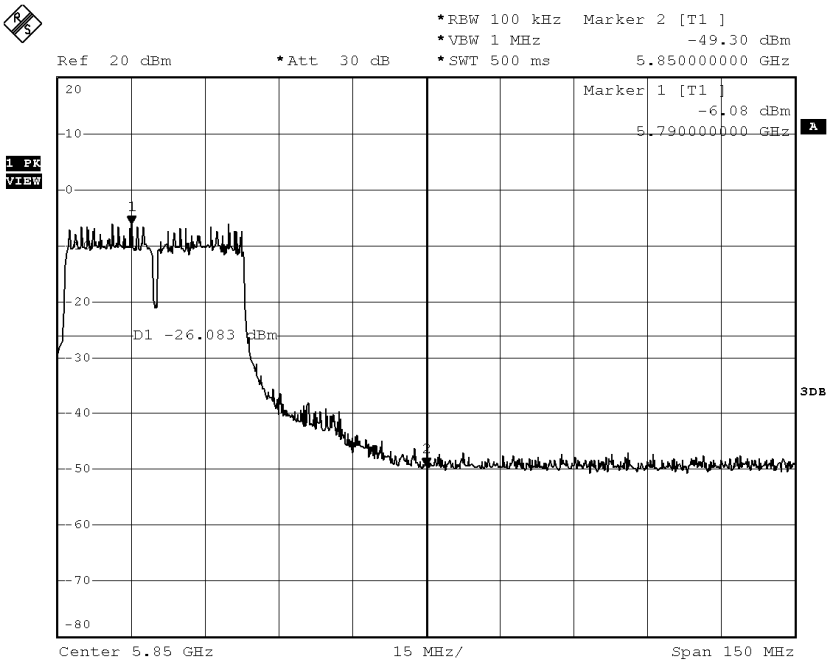
Test Frequency (MHz)	Measurement Level Δ (dB)	Limit Δ (dB)	Result
5755	32.76	>20	PASS
5795	38.24	>20	PASS

5755MHz



Date: 7.JAN.2015 08:44:16

5795MHz

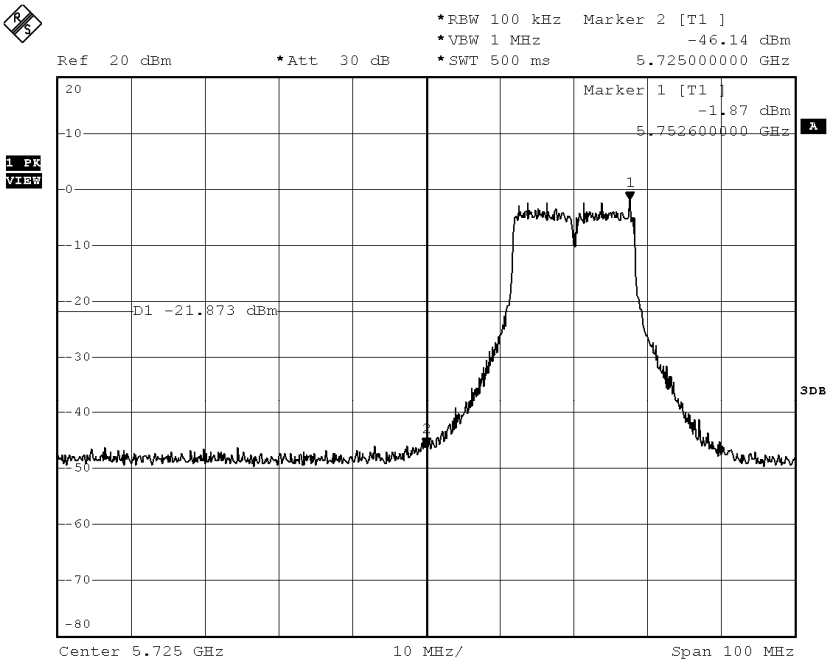


Date: 7.JAN.2015 09:41:58

Product : Wireless Access Point
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 3: Transmit - 802.11a 6Mbps (External Antenna)

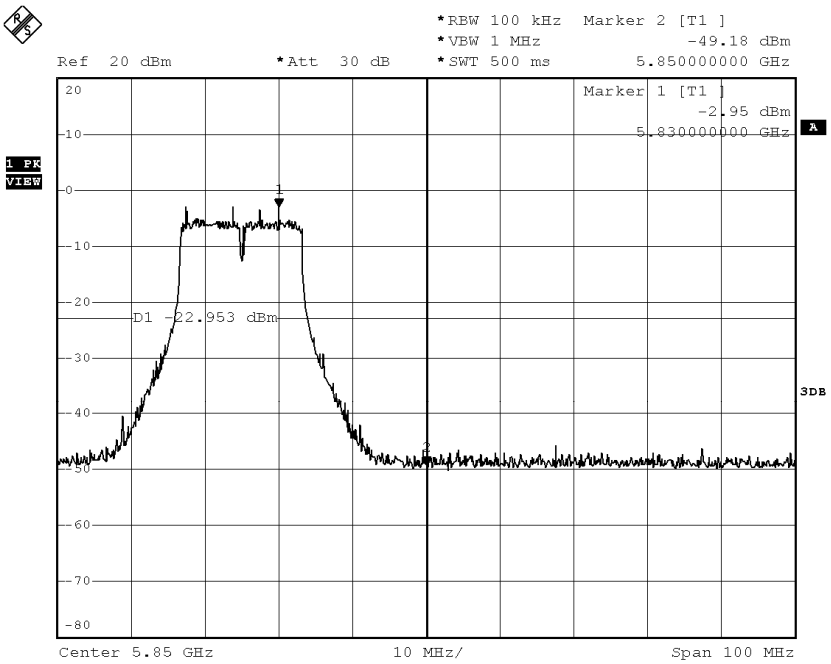
Test Frequency (MHz)	Measurement Level Δ (dB)	Limit Δ (dB)	Result
5745	44.27	>20	PASS
5825	46.23	>20	PASS

5745MHz



Date: 8.JAN.2015 03:23:01

5825MHz



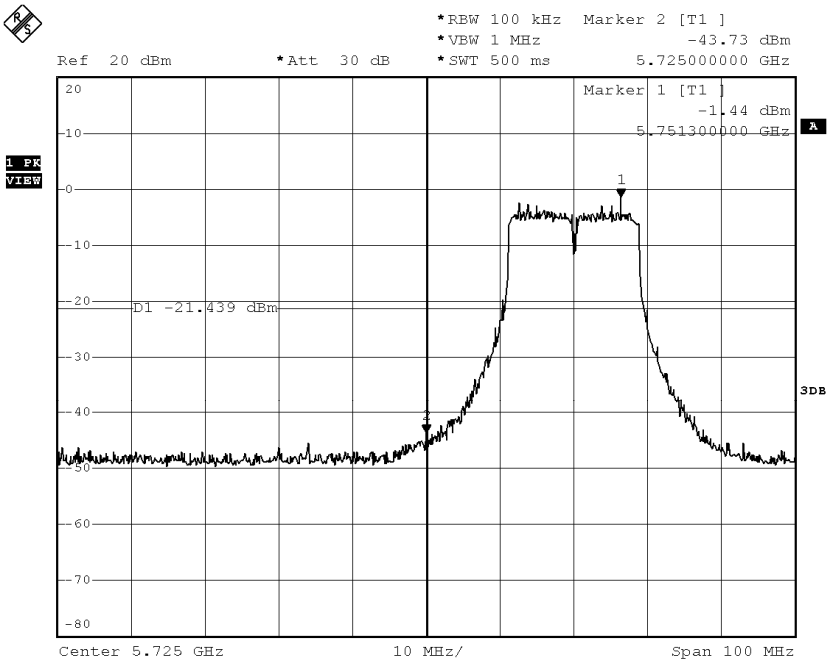
Date: 8.JAN.2015 04:30:59

Product : Wireless Access Point
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit - 802.11n-20BW_14.4Mbps(5G Band) (External Antenna)

Chain A

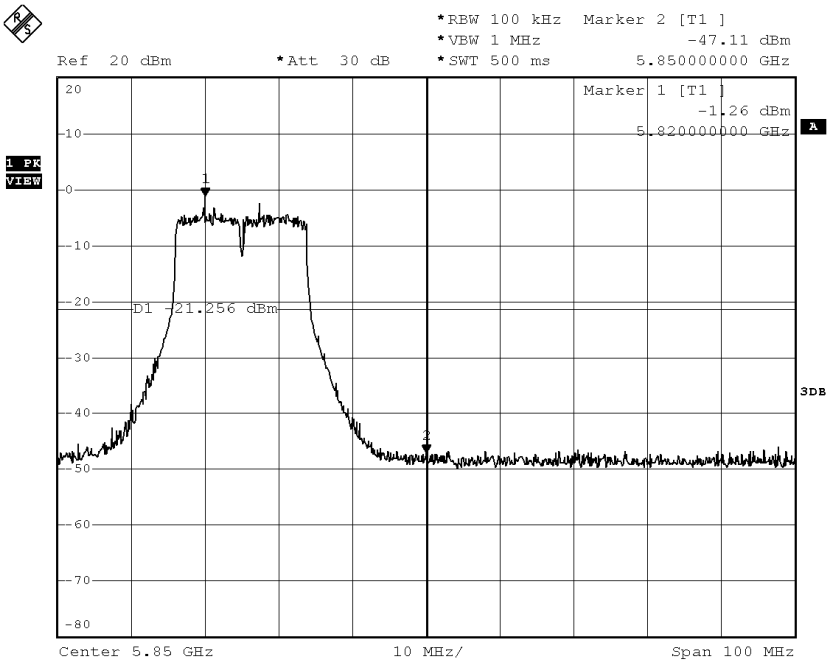
Test Frequency (MHz)	Measurement Level Δ (dB)	Limit Δ (dB)	Result
5745	42.29	>20	PASS
5825	45.85	>20	PASS

5745MHz



Date: 8.JAN.2015 04:58:38

5825MHz



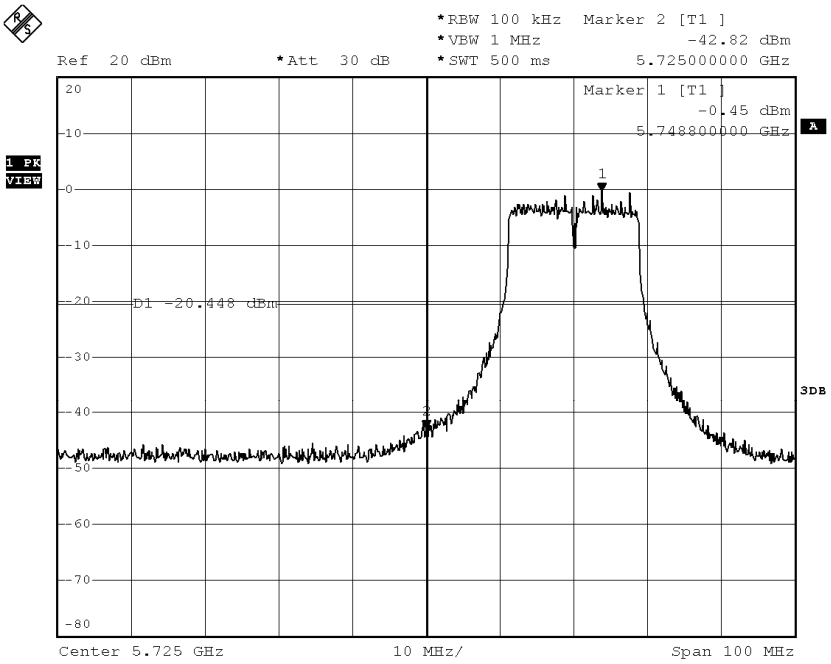
Date: 8.JAN.2015 07:32:52

Product : Wireless Access Point
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit - 802.11n-20BW_14.4Mbps(5G Band) (External Antenna)

Chain B

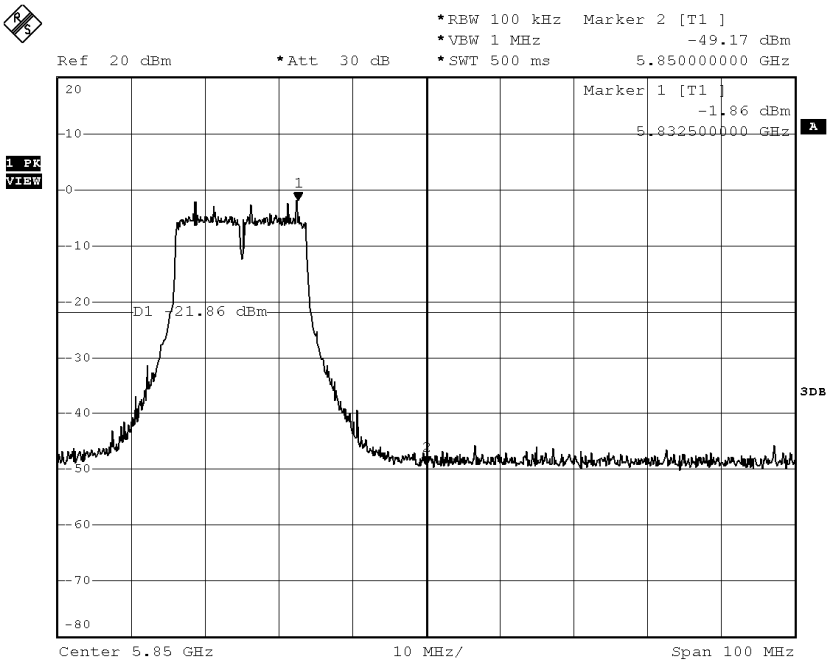
Test Frequency (MHz)	Measurement Level Δ (dB)	Limit Δ (dB)	Result
5745	42.37	>20	PASS
5825	47.31	>20	PASS

5745MHz



Date: 8.JAN.2015 05:26:16

5825MHz



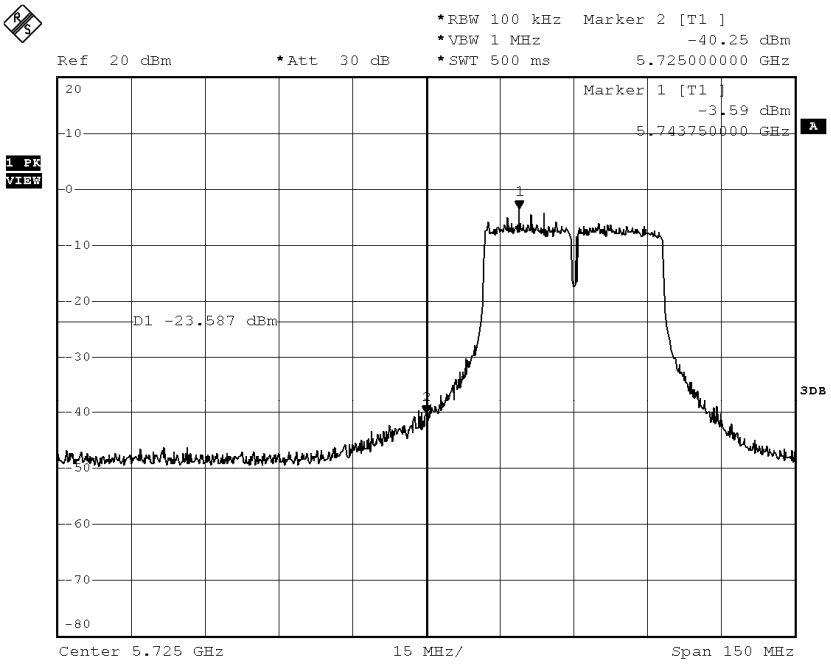
Date: 8.JAN.2015 08:03:28

Product : Wireless Access Point
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 7: Transmit - 802.11n-40BW_30Mbps(5G Band) (External Antenna)

Chain A

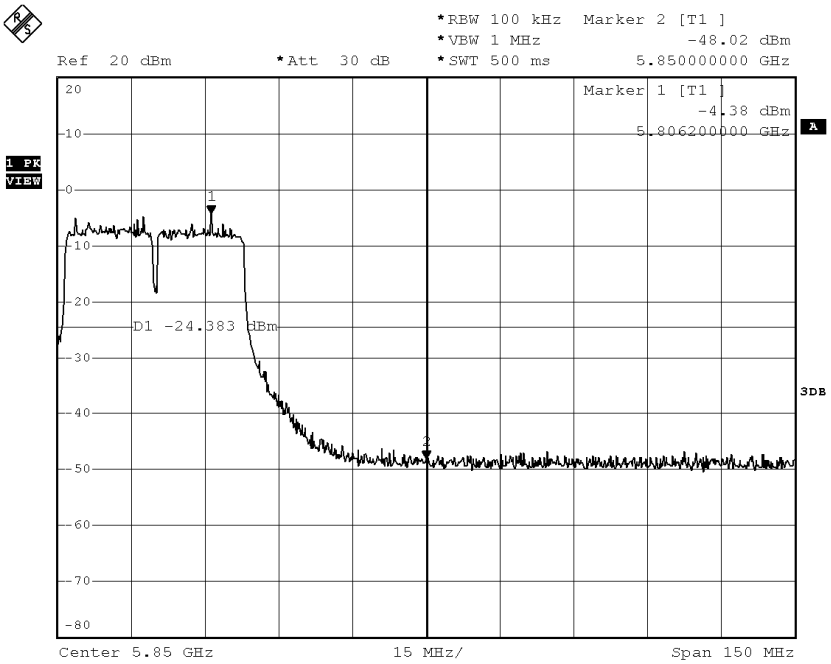
Test Frequency (MHz)	Measurement Level Δ (dB)	Limit Δ (dB)	Result
5755	36.66	>20	PASS
5795	43.64	>20	PASS

5755MHz



Date: 8.JAN.2015 08:33:36

5795MHz



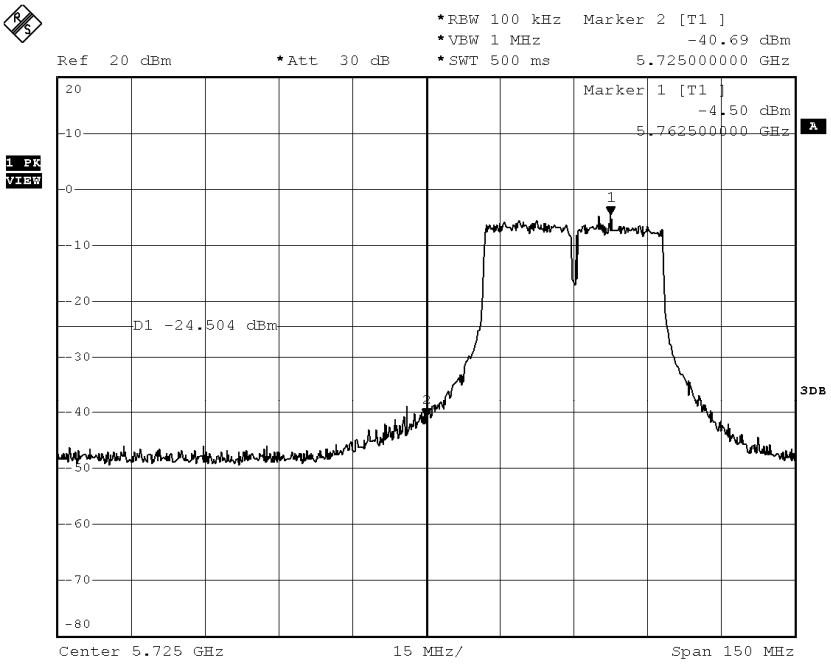
Date: 8.JAN.2015 09:38:50

Product : Wireless Access Point
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 7: Transmit - 802.11n-40BW_30Mbps(5G Band) (External Antenna)

Chain B

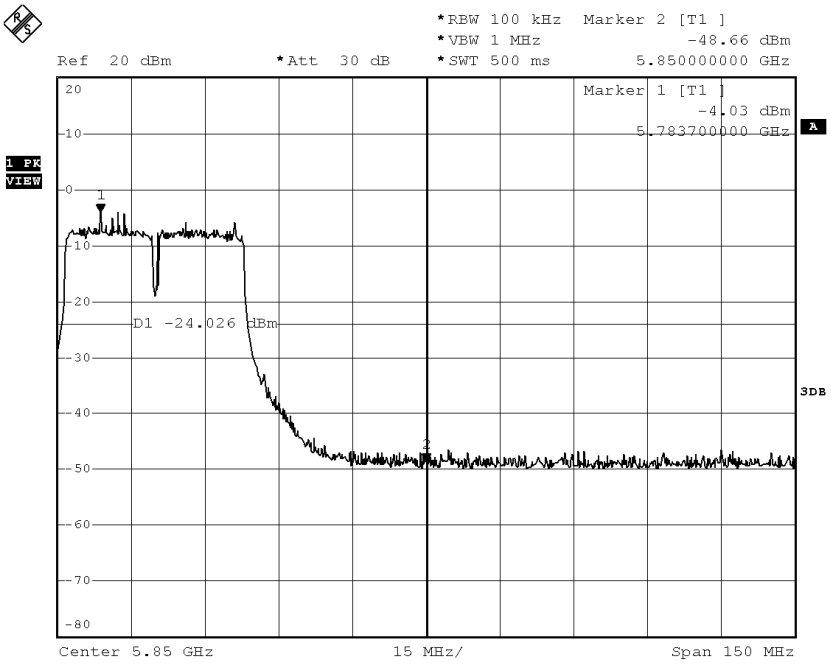
Test Frequency (MHz)	Measurement Level Δ (dB)	Limit Δ (dB)	Result
5755	36.19	>20	PASS
5795	44.63	>20	PASS

5755MHz



Date: 8.JAN.2015 09:08:53

5795MHz

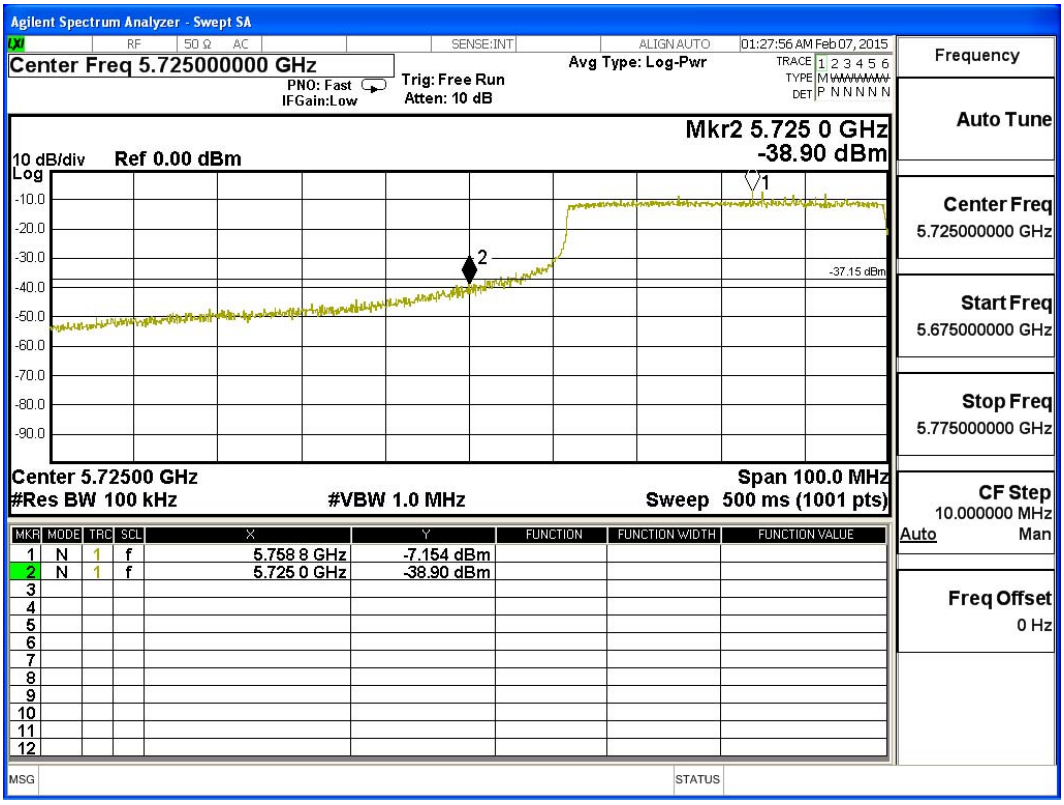


Date: 8.JAN.2015 10:14:11

Product : Wireless Access Point
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 8: Transmit - 802.11ac-80BW-65Mbps (External Antenna)

Chain A

Test Frequency (MHz)	Measurement Level Δ (dB)	Limit Δ (dB)	Result
5775	31.746	>30	PASS



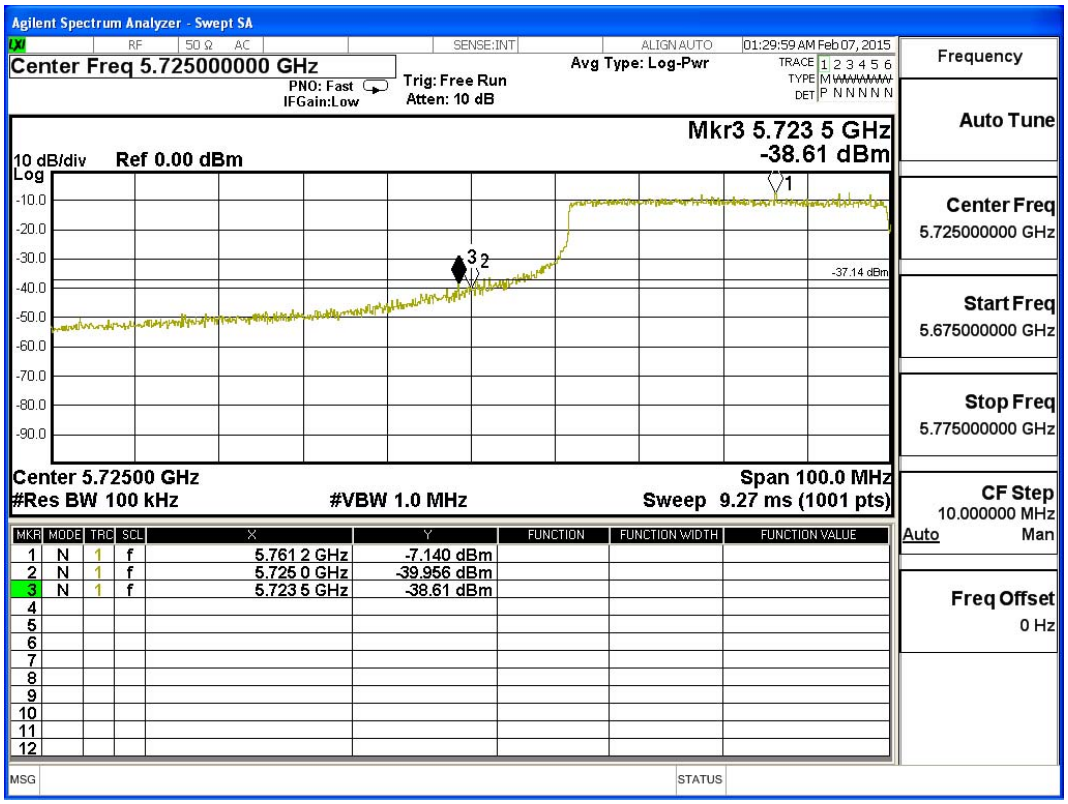
Note:

1. Channel 5775 MHz was tested using the procedure in KDB 558074, section 9.2.2.2. Non-restricted frequency bands must comply with the KDB 558074, section 11.1 b) requirement.

Product : Wireless Access Point
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 8: Transmit - 802.11ac-80BW-65Mbps (External Antenna)

Chain B

Test Frequency (MHz)	Measurement Level Δ (dB)	Limit Δ (dB)	Result
5775	31.180	>30	PASS



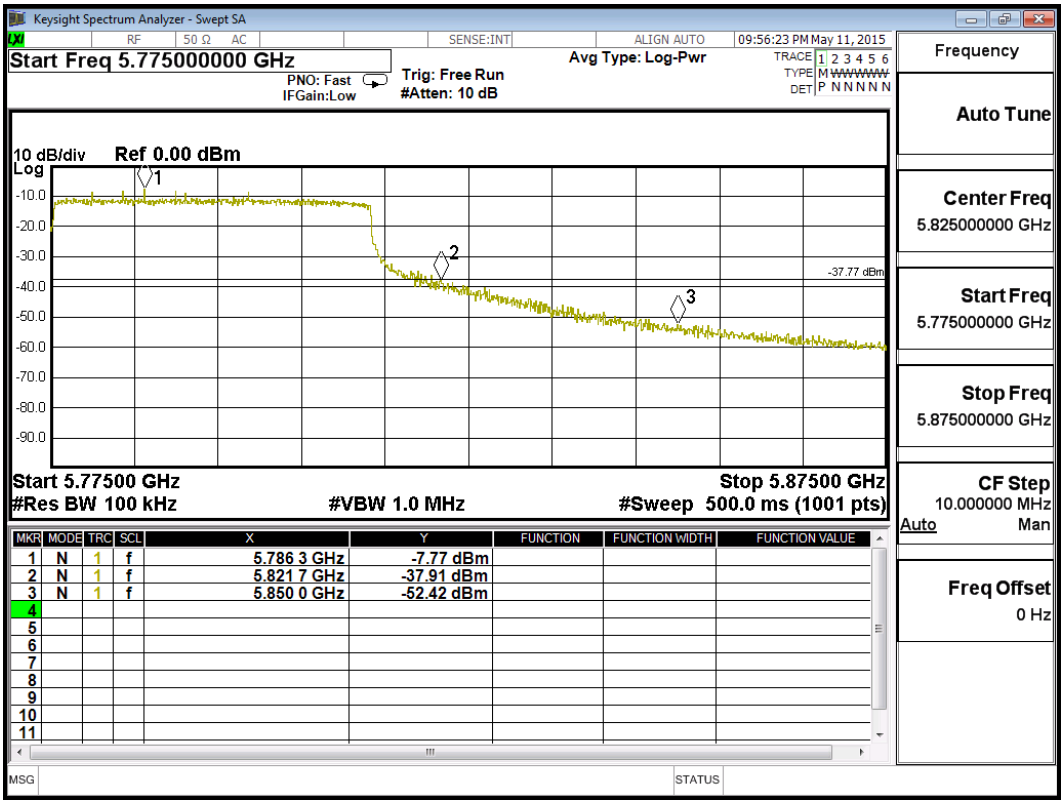
Note:

1. Channel 5775 MHz was tested using the procedure in KDB 558074, section 9.2.2.2. Non-restricted frequency bands must comply with the KDB 558074, section 11.1 b) requirement.

Product : Wireless Access Point
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 8: Transmit - 802.11ac-80BW-65Mbps (External Antenna)

Chain A

Test Frequency (MHz)	Measurement Level Δ (dB)	Limit Δ (dB)	Result
5775	44.650	>30	PASS



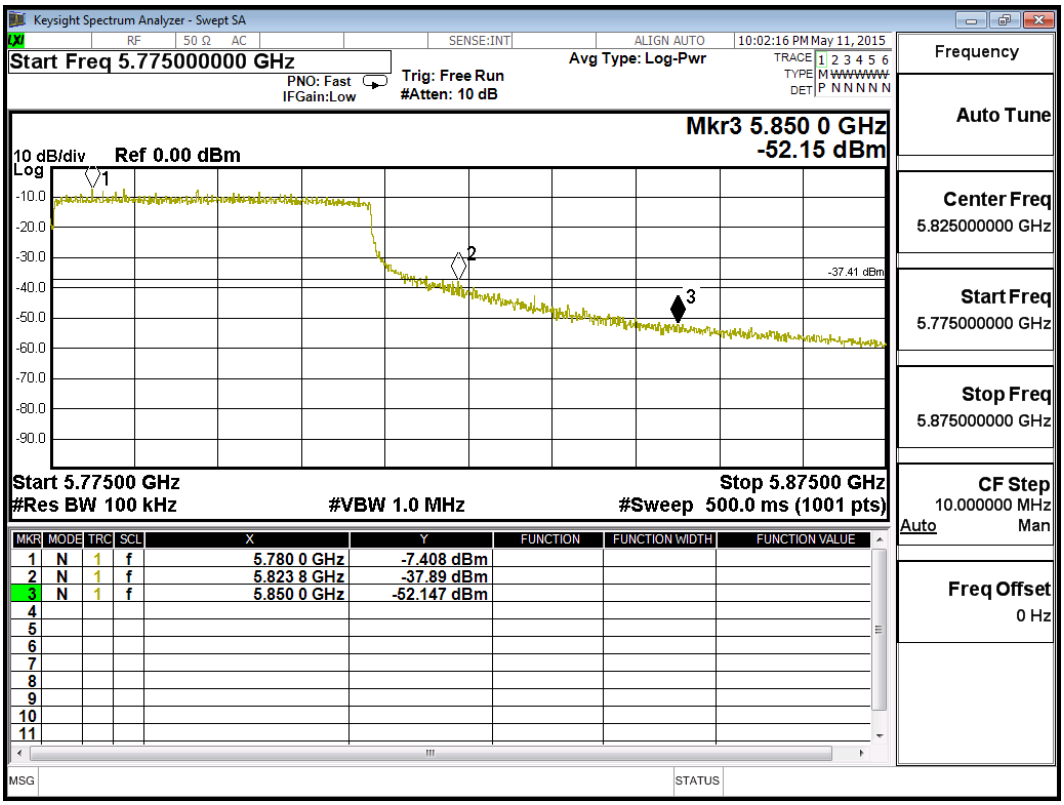
Note:

1. Channel 5775 MHz was tested using the procedure in KDB 558074, section 9.2.2.2. Non-restricted frequency bands must comply with the KDB 558074, section 11.1 b) requirement.

Product : Wireless Access Point
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 8: Transmit - 802.11ac-80BW-65Mbps (External Antenna)

Chain B

Test Frequency (MHz)	Measurement Level Δ (dB)	Limit Δ (dB)	Result
5775	44.739	>30	PASS



Note:

1. Channel 5775 MHz was tested using the procedure in KDB 558074, section 9.2.2.2. Non-restricted frequency bands must comply with the KDB 558074, section 11.1 b) requirement.

7. Occupied Bandwidth

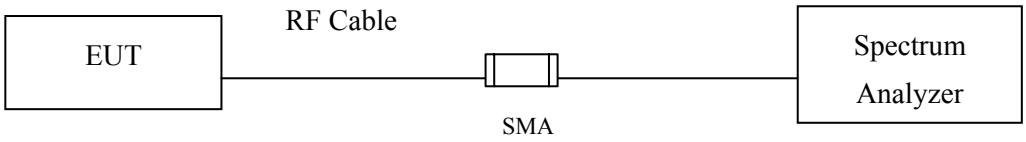
7.1. Test Equipment

	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
X	Spectrum Analyzer	R&S	FSP40 / 100170	Jun., 2014
	Spectrum Analyzer	Agilent	E4407B / US39440758	Jun., 2014
X	Spectrum Analyzer	Agilent	N9010A / MY48030495	Apr., 2014

Note:

1. All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.
2. The test instruments marked with "X" are used to measure the final test results.

7.2. Test Setup



7.3. Limits

The minimum bandwidth shall be at least 500 kHz.

7.4. Test Procedure

The EUT was setup according to ANSI C63.10: 2009; tested according to DTS test procedure of KDB558074 Section 8.1 for compliance to FCC 47CFR 15.247 requirements.
Set RBW = 100kHz, VBW≥3*RBW

7.5. Uncertainty

± 150Hz

7.6. Test Result of Occupied Bandwidth

Product : Wireless Access Point
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit - 802.11b 1Mbps (Internal Antenna)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
1	2412	7200	>500	Pass
6	2437	7150	>500	Pass
11	2462	7650	>500	Pass

Figure Channel 1:

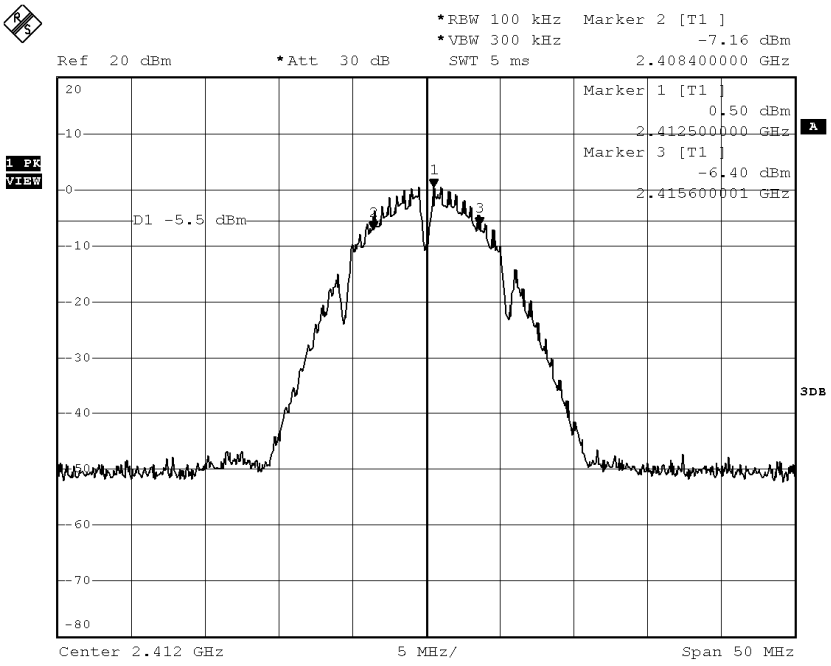
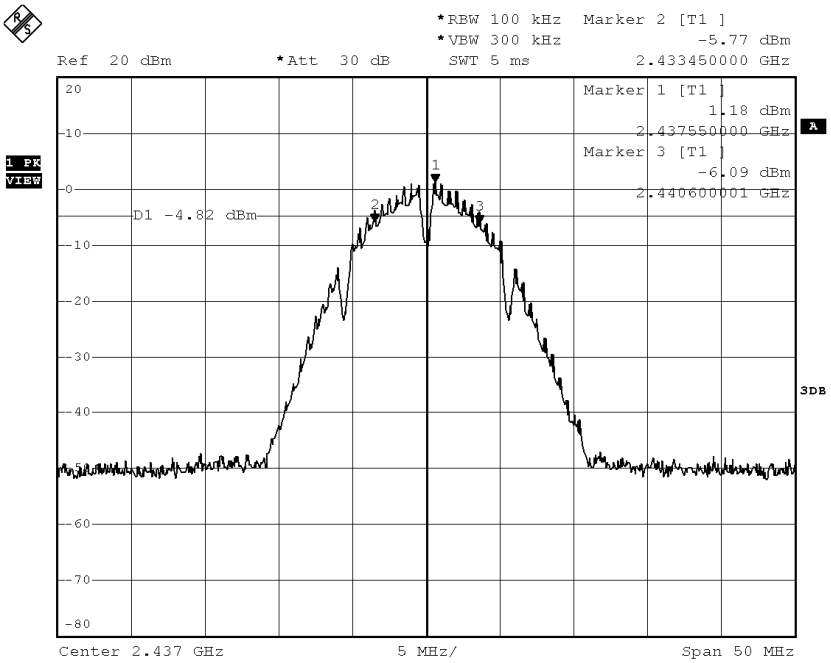
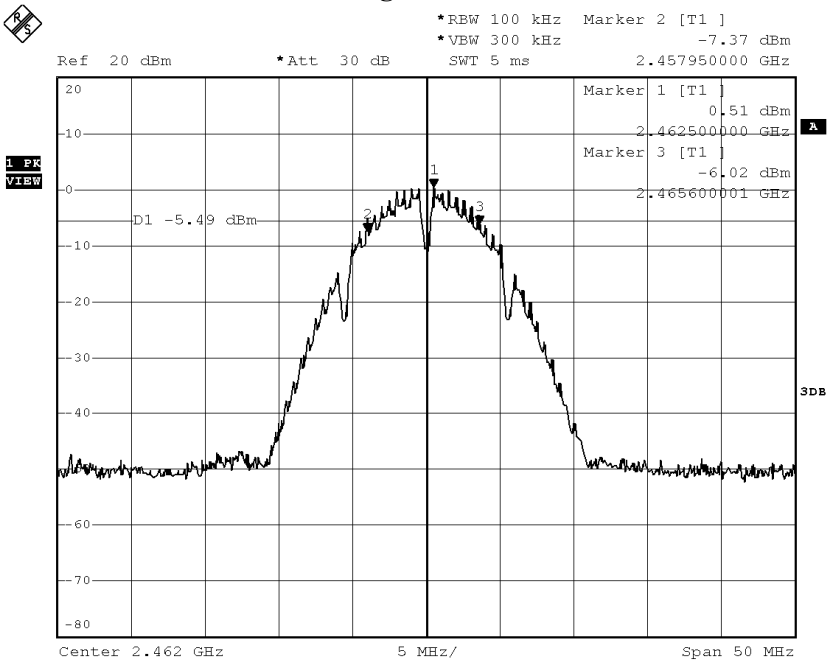


Figure Channel 6:



Date: 5.JAN.2015 05:17:22

Figure Channel 11:



Date: 5.JAN.2015 05:26:29

Product : Wireless Access Point
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit - 802.11g 6Mbps (Internal Antenna)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
1	2412	16500	>500	Pass
6	2437	16500	>500	Pass
11	2462	16500	>500	Pass

Figure Channel 1:

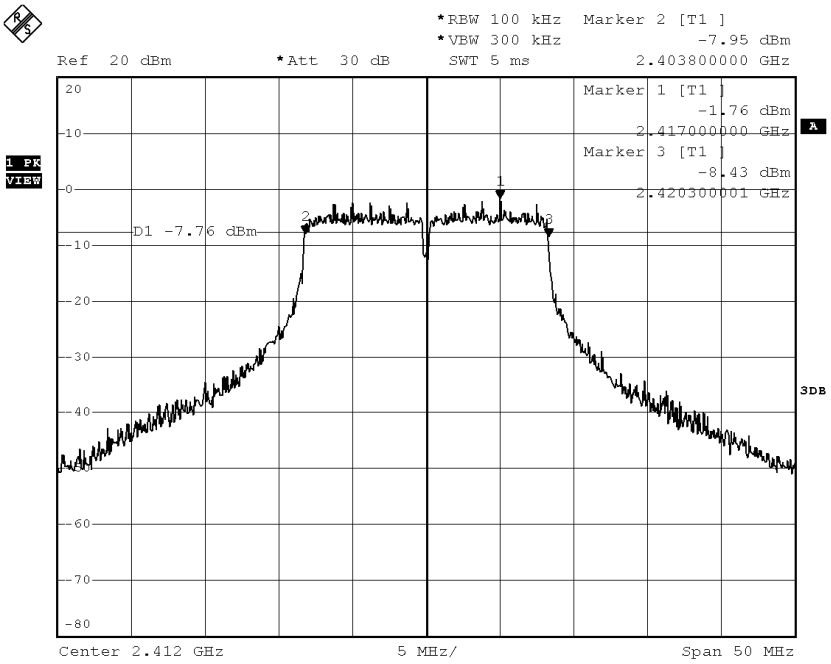
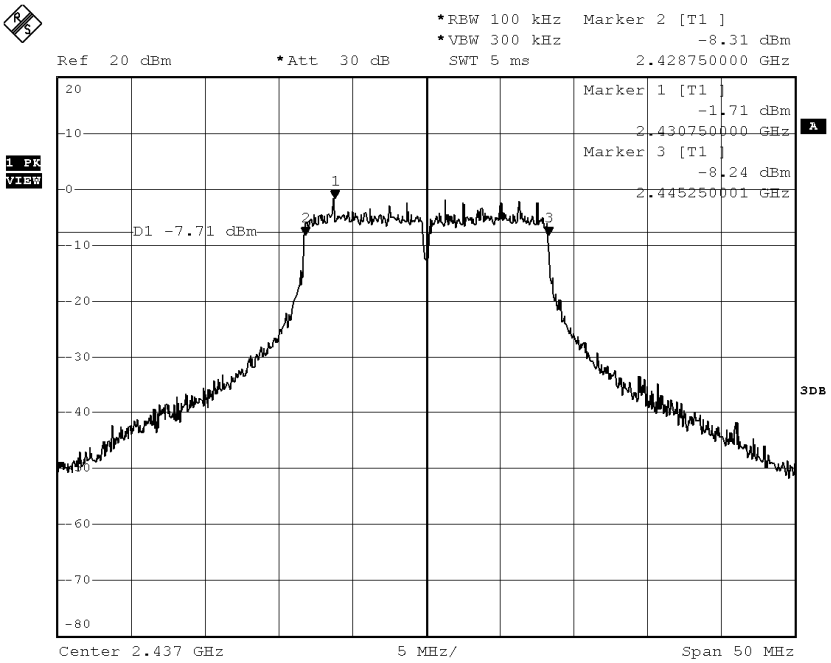
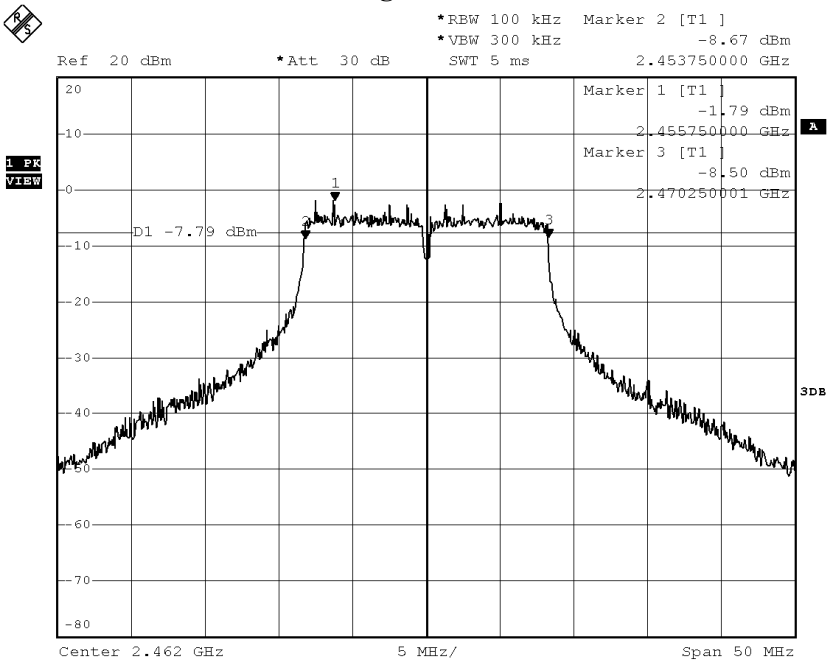


Figure Channel 6:



Date: 5.JAN.2015 06:04:02

Figure Channel 11:



Date: 5.JAN.2015 06:13:01

Product : Wireless Access Point
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmit - 802.11a 6Mbps (Internal Antenna)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
149	5745	16450	>500	Pass
157	5785	16450	>500	Pass
165	5825	16500	>500	Pass

Figure Channel 149:

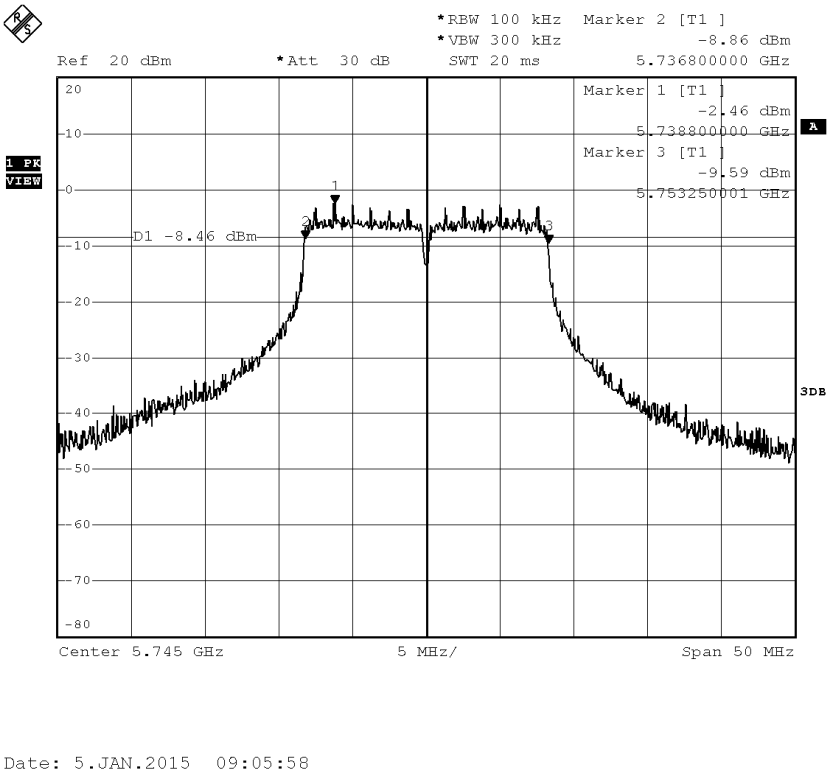
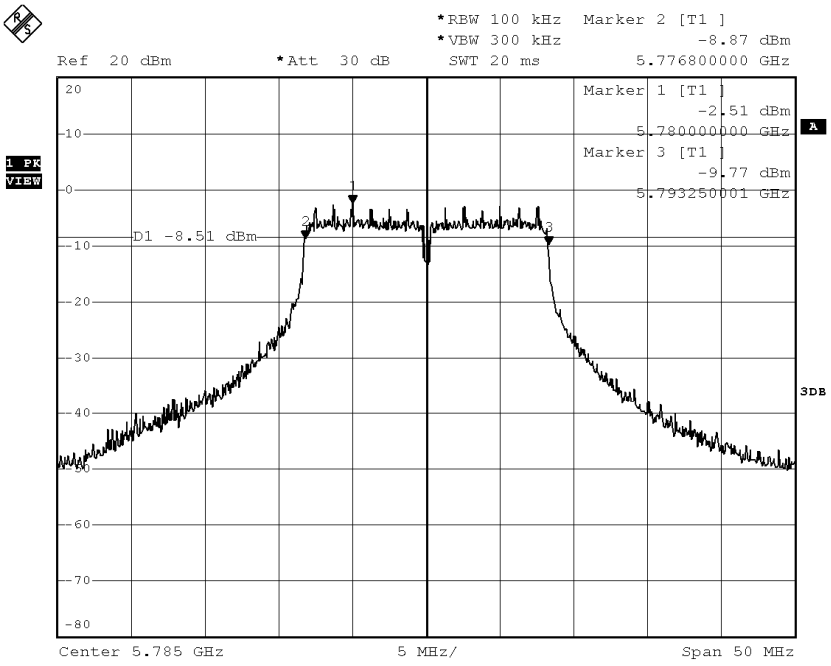
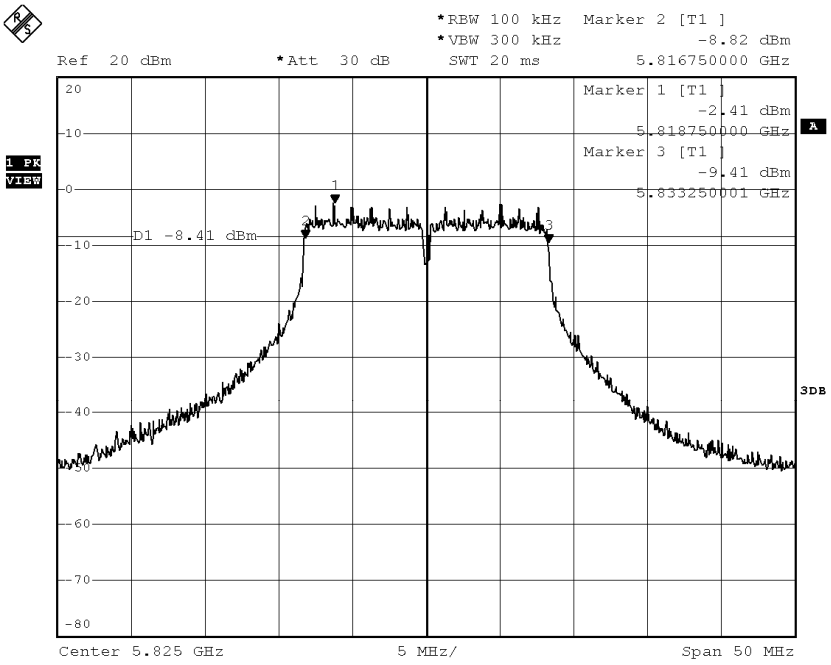


Figure Channel 157:



Date: 5.JAN.2015 09:36:04

Figure Channel 165:



Date: 7.JAN.2015 03:21:20

Product : Wireless Access Point
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit - 802.11n-20BW_14.4Mbps(2.4G Band) (Internal Antenna)

Chain A

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
1	2412	17750	>500	Pass
6	2437	17750	>500	Pass
11	2462	17700	>500	Pass

Figure Channel 1:

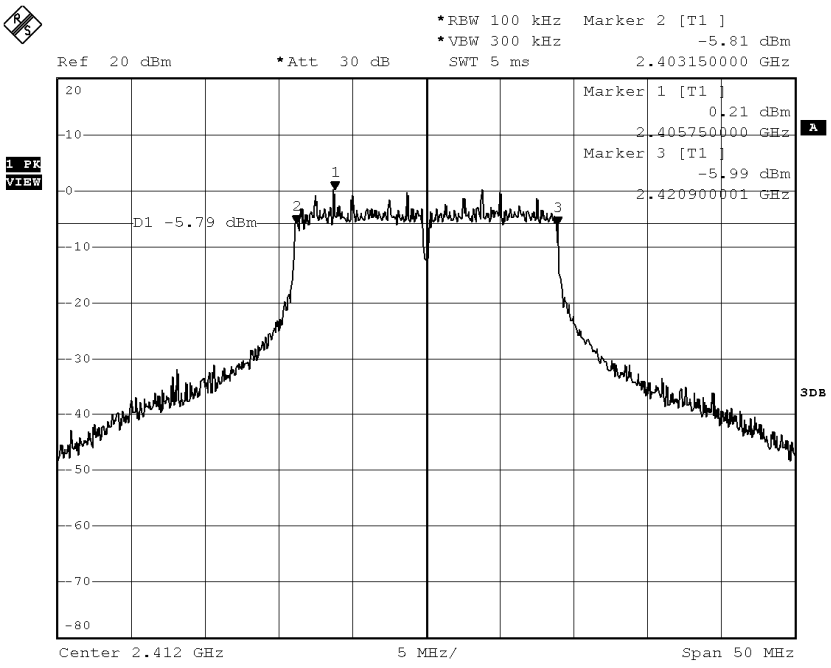
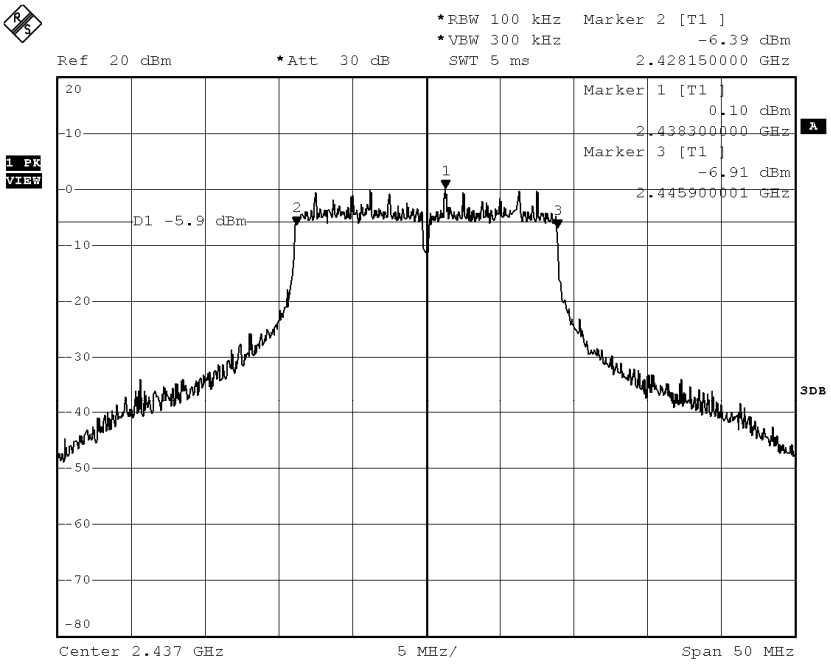
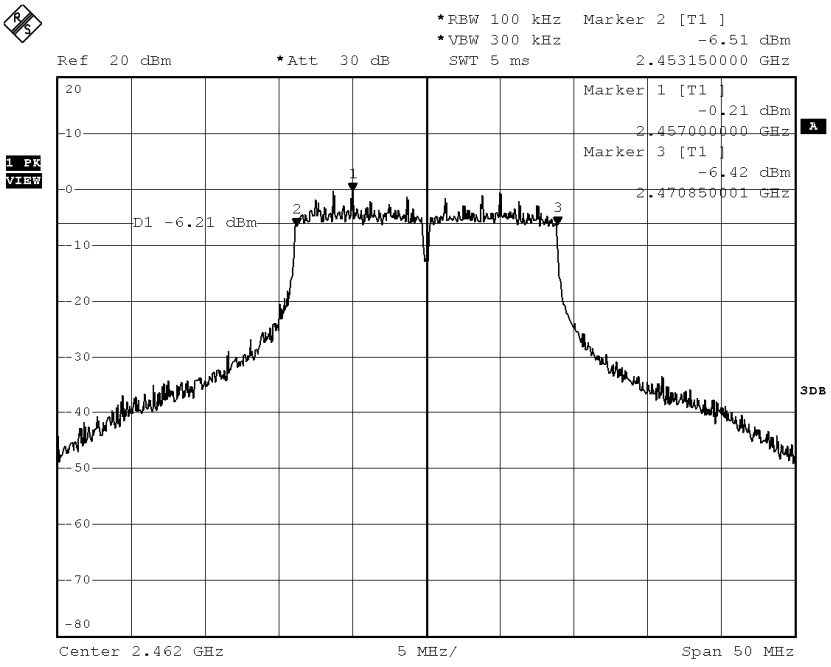


Figure Channel 6:



Date: 5.JAN.2015 07:14:16

Figure Channel 11:



Date: 5.JAN.2015 07:33:40

Product : Wireless Access Point
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit - 802.11n-20BW_14.4Mbps(2.4G Band) (Internal Antenna)

Chain B

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
1	2412	17400	>500	Pass
6	2437	17700	>500	Pass
11	2462	17700	>500	Pass

Figure Channel 1:

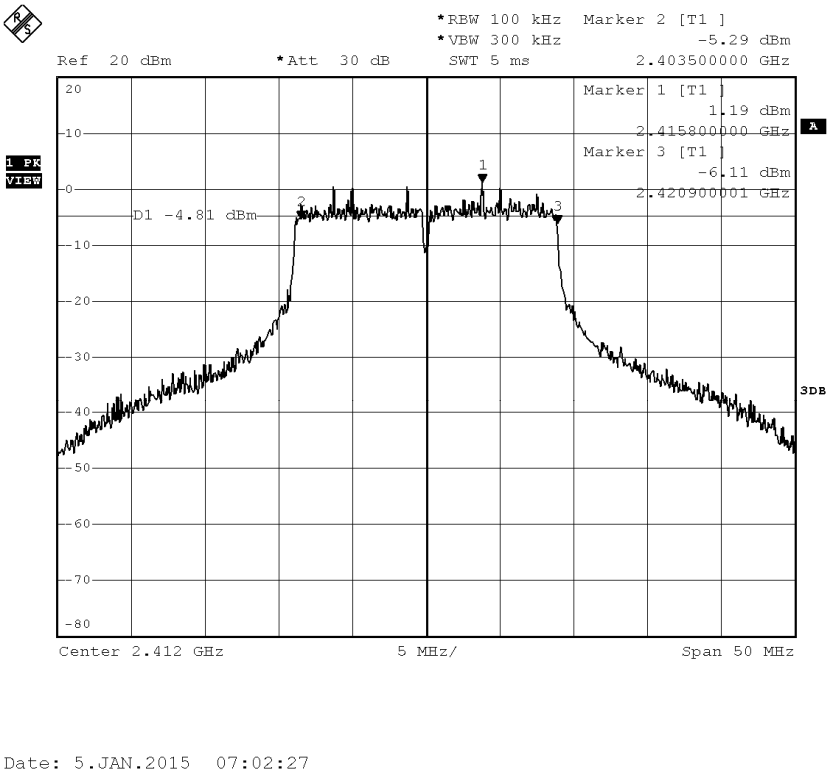
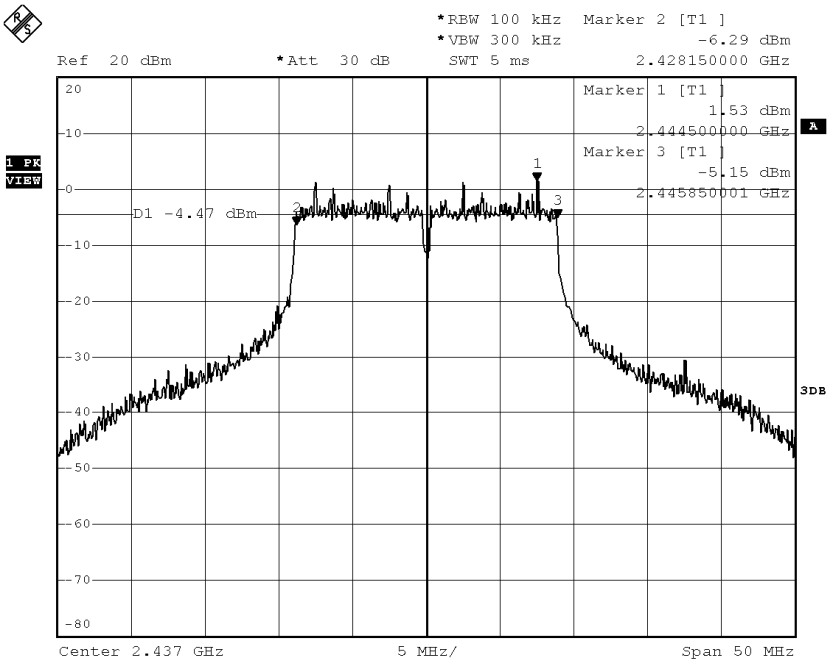
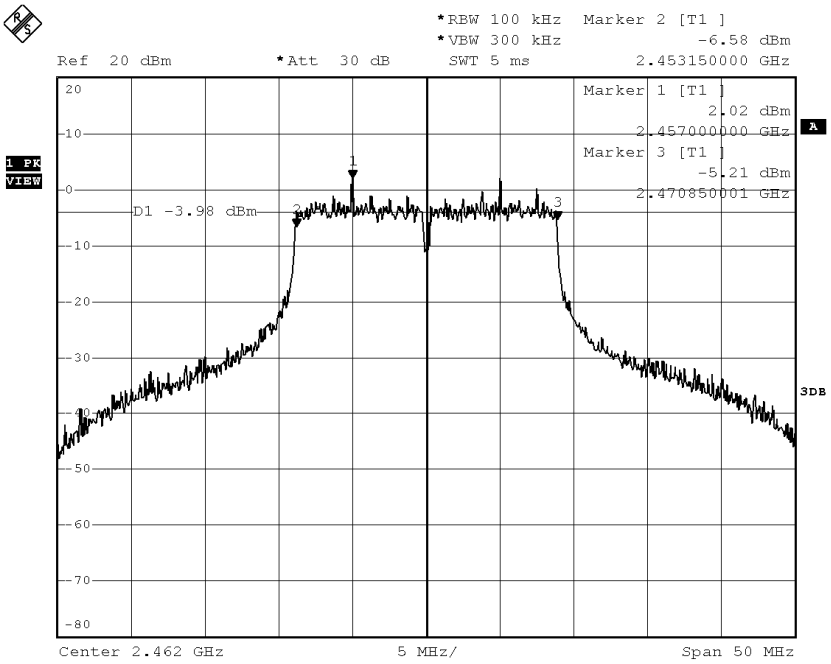


Figure Channel 6:



Date: 5.JAN.2015 07:23:24

Figure Channel 11:



Date: 5.JAN.2015 07:44:26

Product : Wireless Access Point
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit - 802.11n-40BW_30Mbps(2.4G Band) (Internal Antenna)

Chain A

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
03	2422	36600	>500	Pass
06	2437	35300	>500	Pass
09	2452	35900	>500	Pass

Figure Channel 03:

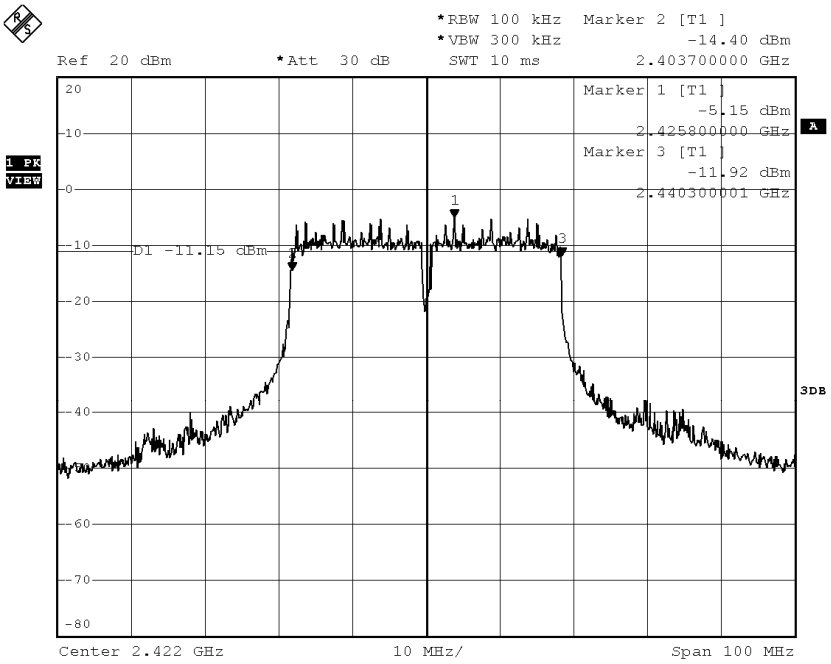
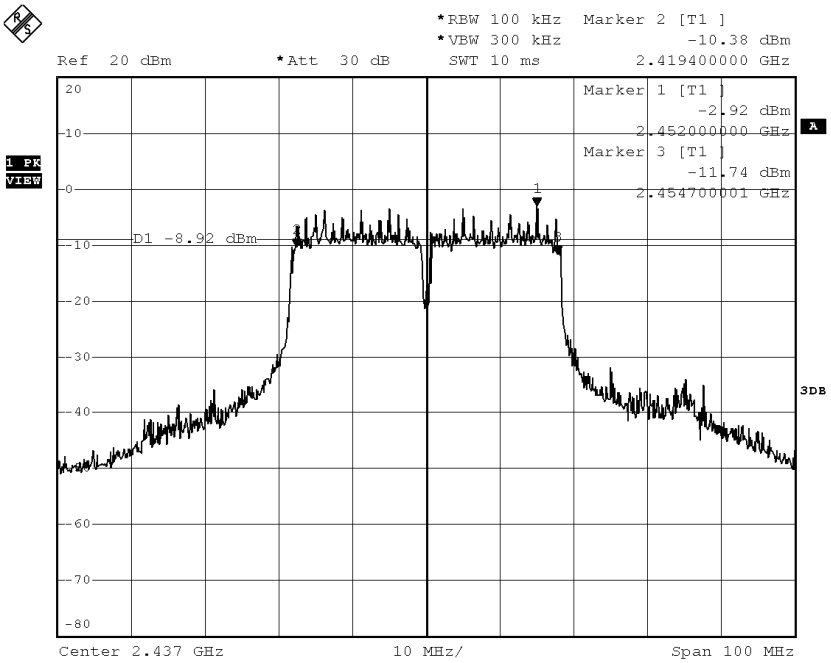
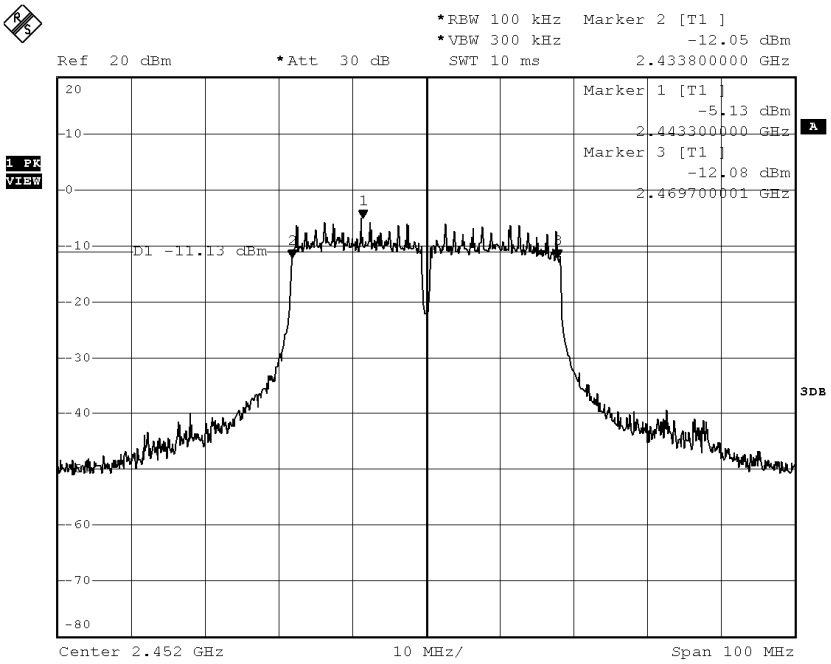


Figure Channel 06:



Date: 5.JAN.2015 08:17:41

Figure Channel 09:



Date: 5.JAN.2015 08:40:39

Product : Wireless Access Point
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit - 802.11n-40BW_30Mbps(2.4G Band) (Internal Antenna)

Chain B

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
03	2422	35600	>500	Pass
06	2437	35900	>500	Pass
09	2452	35600	>500	Pass

Figure Channel 03:

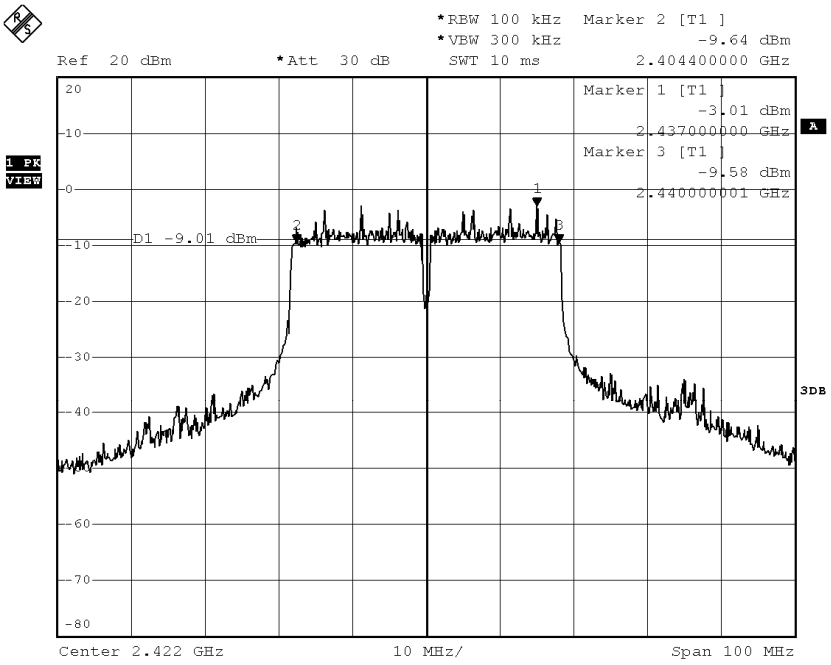
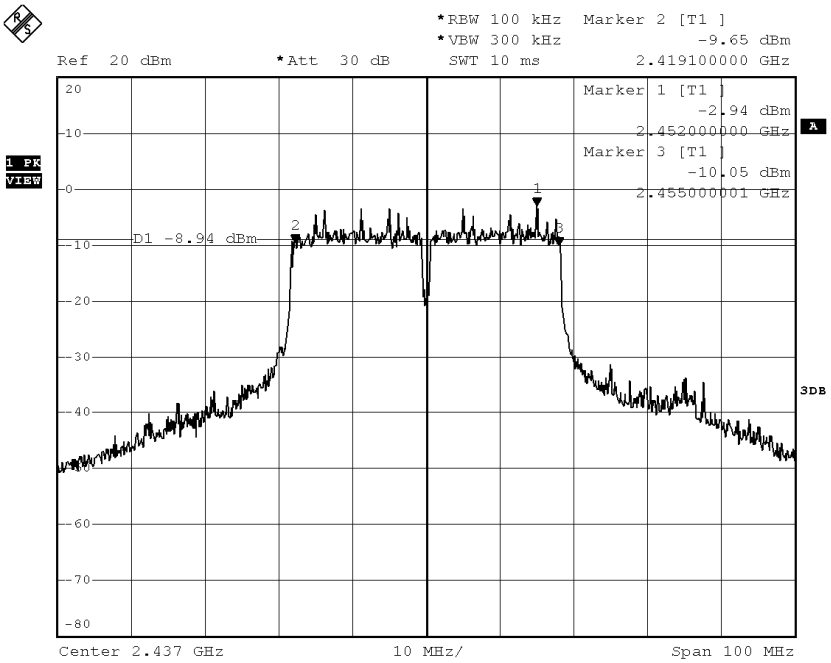
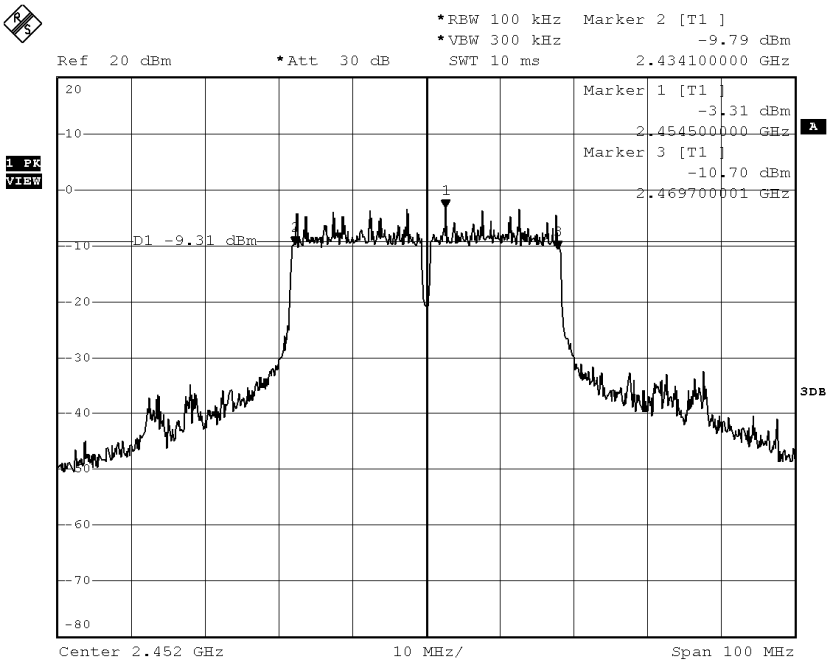


Figure Channel 06:



Date: 5.JAN.2015 08:27:07

Figure Channel 09:



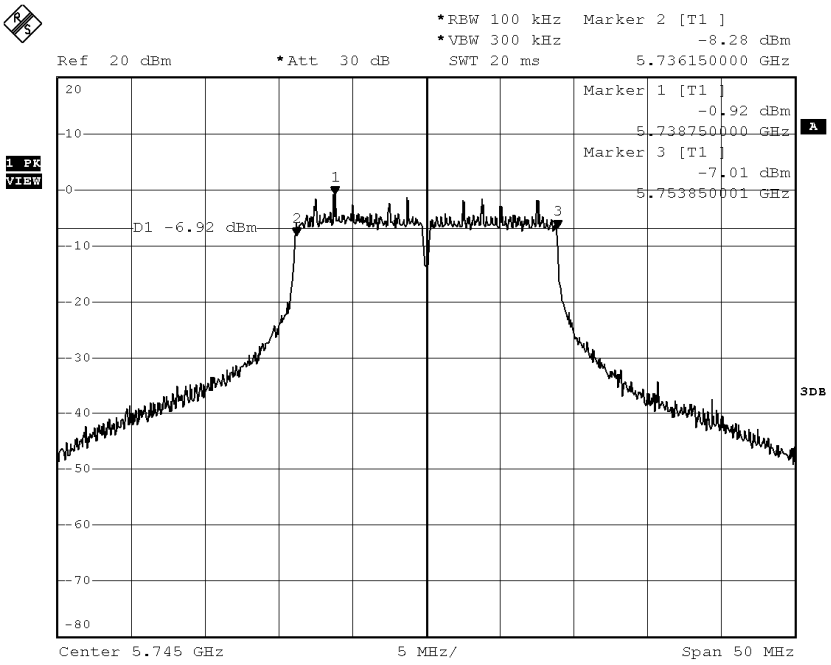
Date: 5.JAN.2015 08:53:49

Product : Wireless Access Point
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit - 802.11n-20BW_14.4Mbps(5G Band) (Internal Antenna)

Chain A

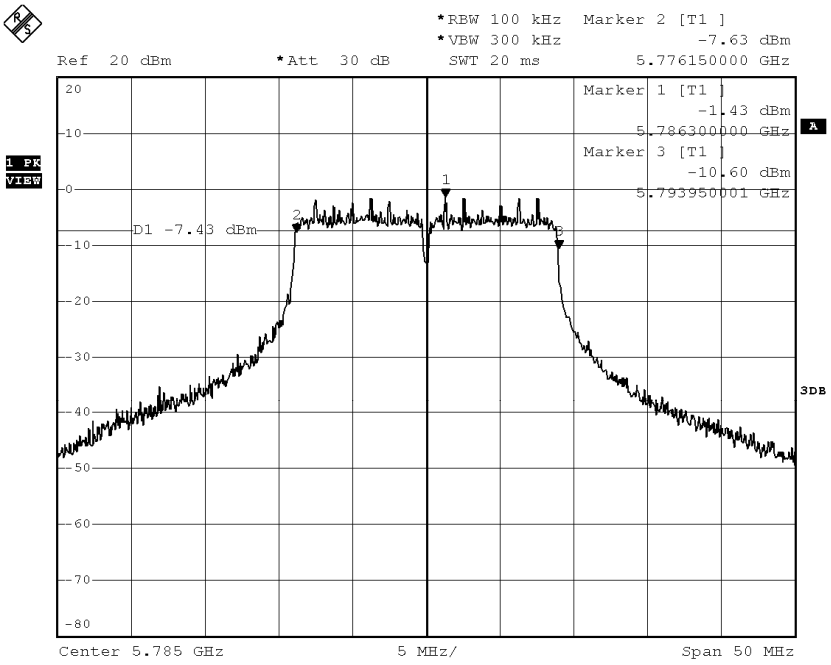
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
149	5745	17700	>500	Pass
157	5785	17800	>500	Pass
165	5825	17750	>500	Pass

Figure Channel 149:



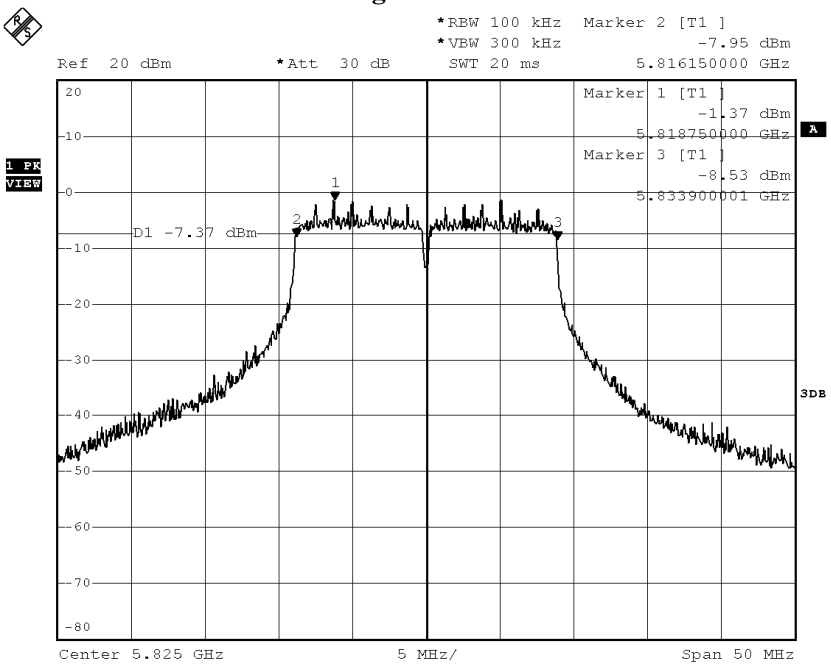
Date: 7.JAN.2015 03:53:30

Figure Channel 157:



Date: 7.JAN.2015 05:07:35

Figure Channel 165:



Date: 7.JAN.2015 07:02:53

Product : Wireless Access Point
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit - 802.11n-20BW_14.4Mbps(5G Band) (Internal Antenna)

Chain B

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
149	5745	17700	>500	Pass
157	5785	17750	>500	Pass
165	5825	17750	>500	Pass

Figure Channel 149:

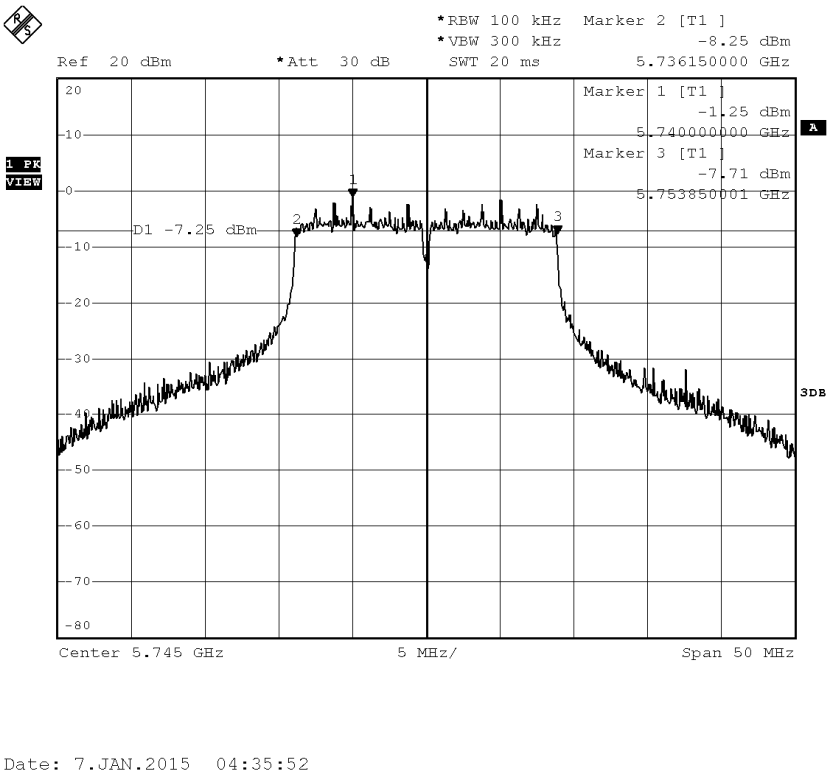
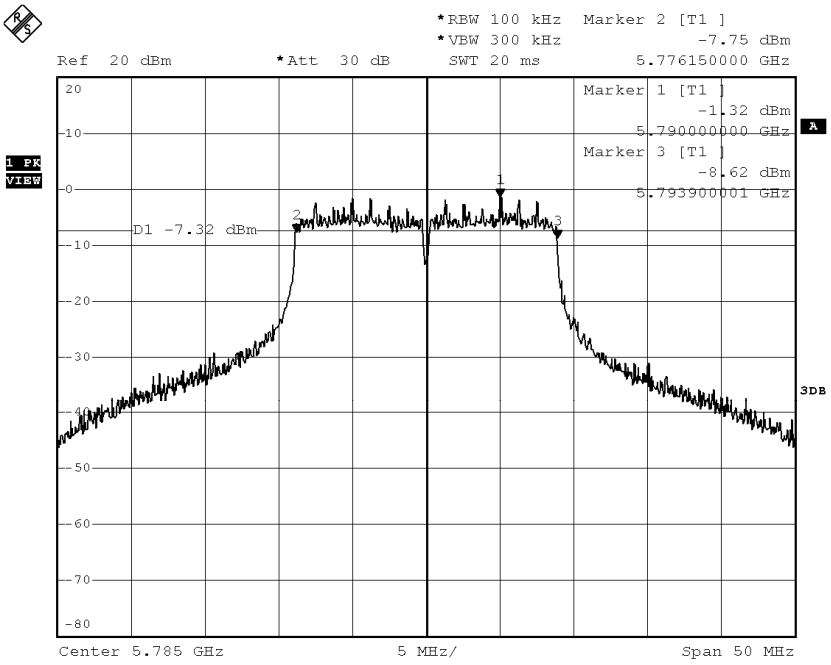
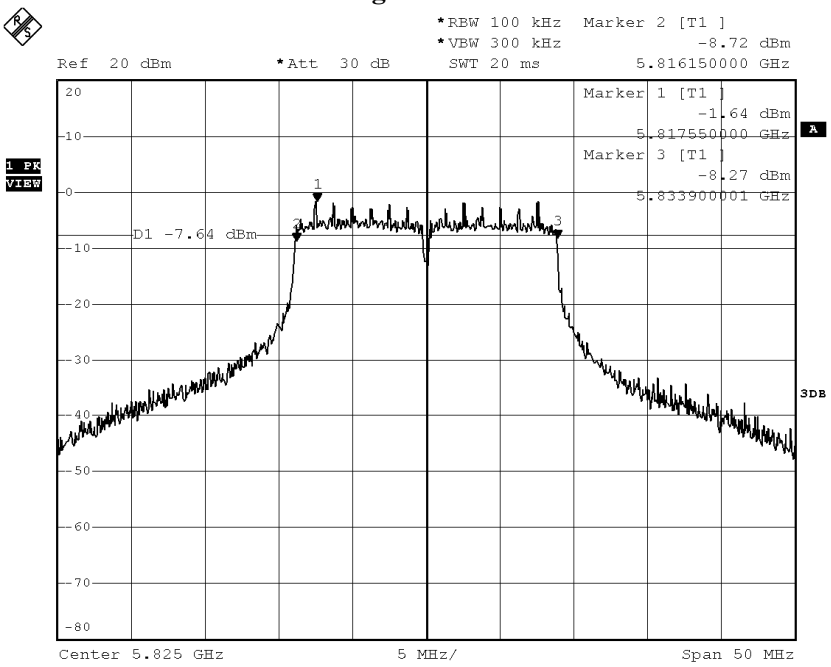


Figure Channel 157:



Date: 7.JAN.2015 05:47:54

Figure Channel 165:



Date: 7.JAN.2015 07:45:28

Product : Wireless Access Point
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Mode : Mode 7: Transmit - 802.11n-40BW_30Mbps(5G Band) (Internal Antenna)

Chain A

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
151	5755	36000	>500	Pass
159	5795	36200	>500	Pass

Figure Channel 151:

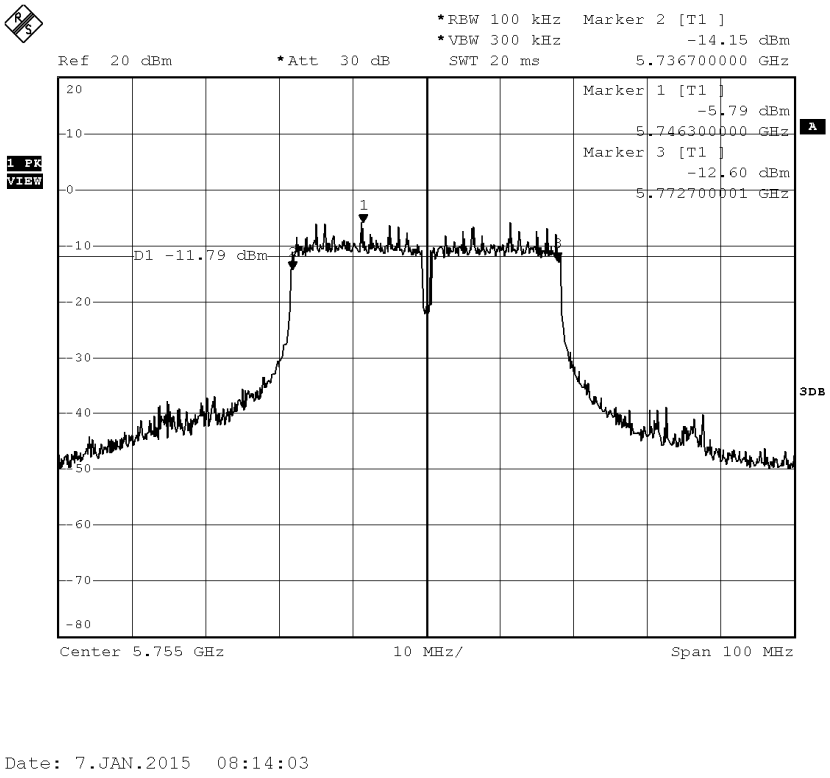
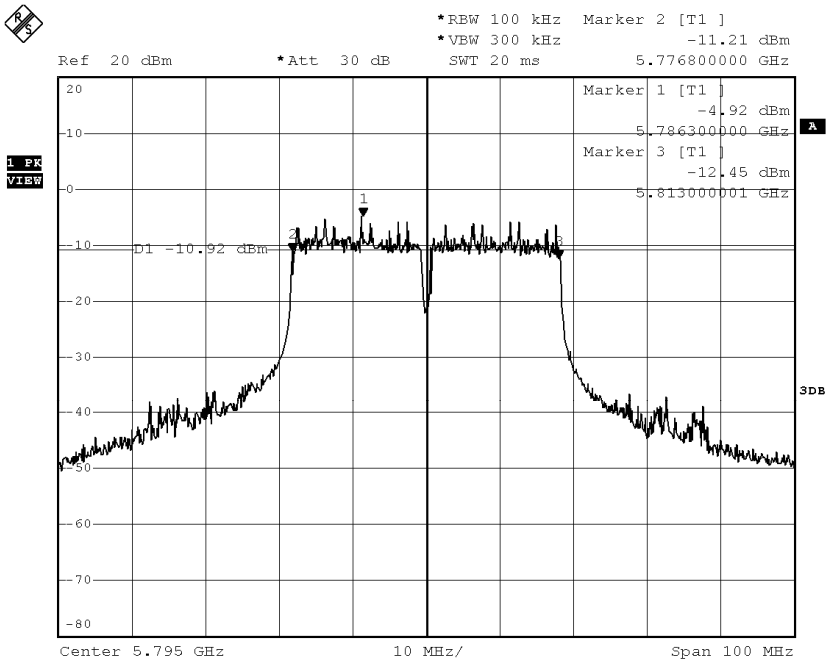


Figure Channel 159:



Product : Wireless Access Point
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Mode : Mode 7: Transmit - 802.11n-40BW_30Mbps(5G Band) (Internal Antenna)

Chain B

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
151	5755	36700	>500	Pass
159	5795	36400	>500	Pass

Figure Channel 151:

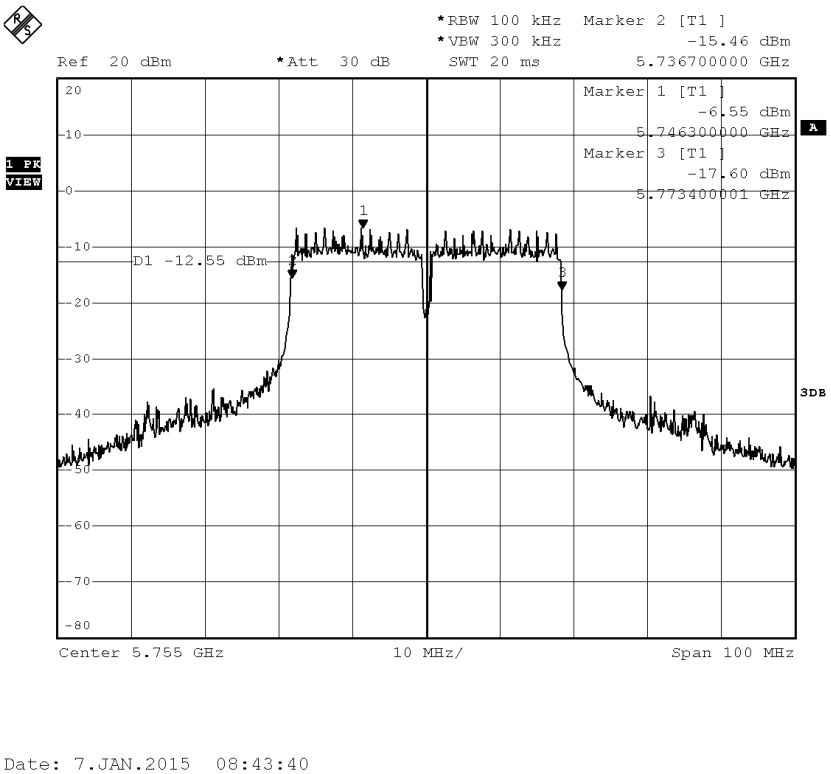
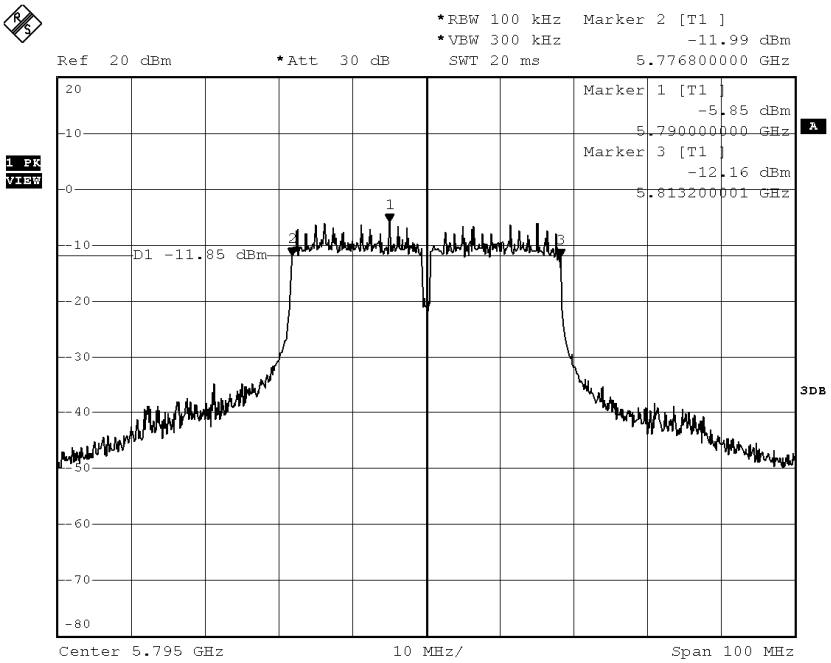


Figure Channel 159:



Product : Wireless Access Point
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit - 802.11b 1Mbps (External Antenna)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
1	2412	7200	>500	Pass
6	2437	7150	>500	Pass
11	2462	7200	>500	Pass

Figure Channel 1:

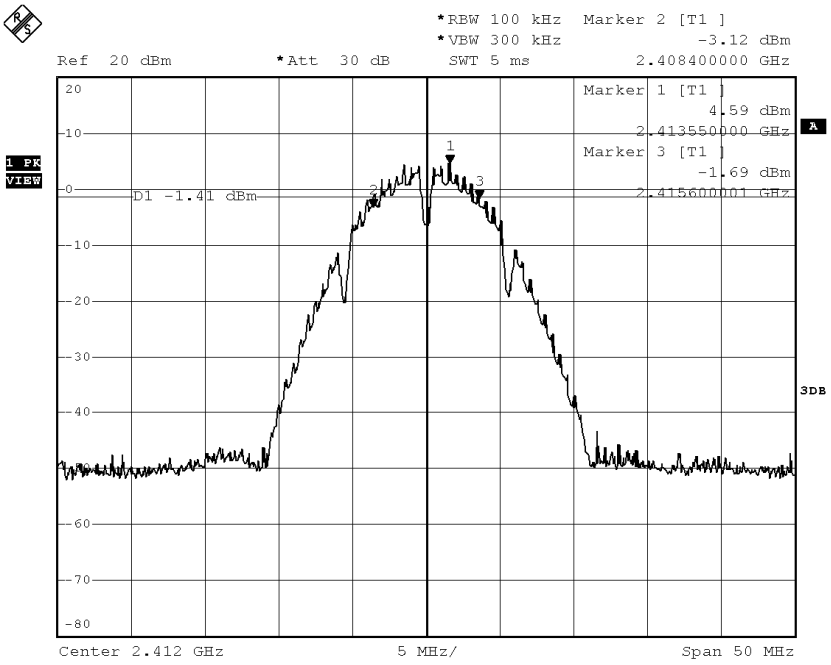
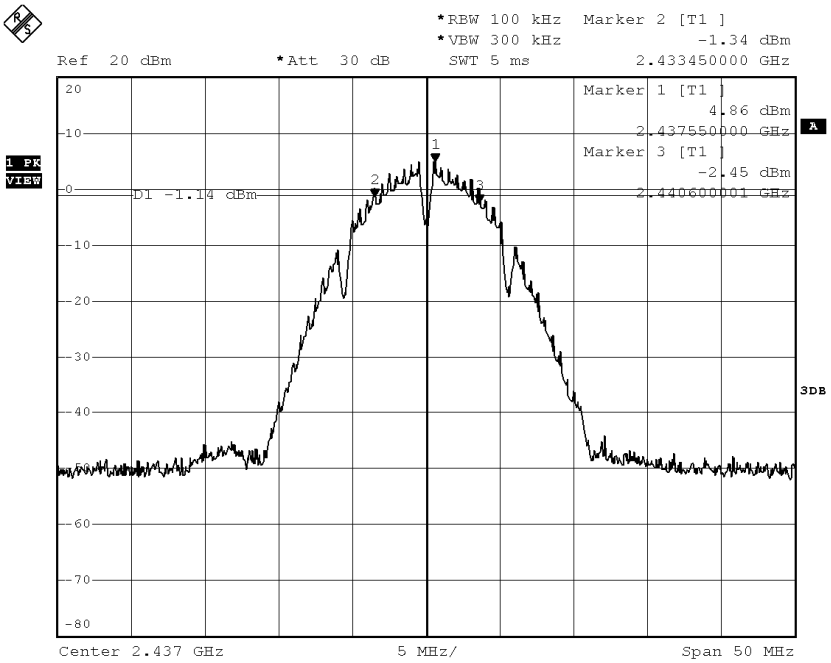
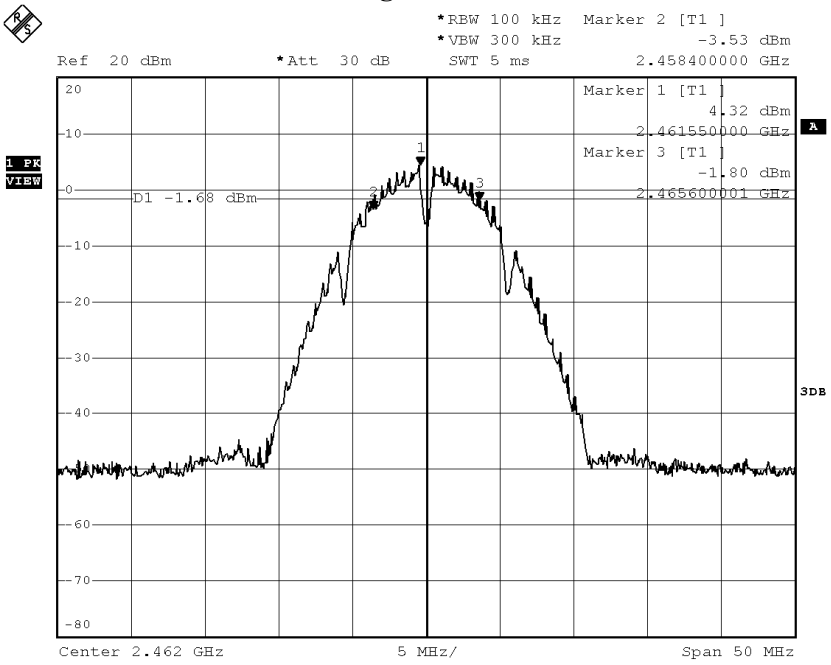


Figure Channel 6:



Date: 7.JAN.2015 10:57:53

Figure Channel 11:



Date: 7.JAN.2015 11:08:31

Product : Wireless Access Point
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit - 802.11g 6Mbps (External Antenna)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
1	2412	16550	>500	Pass
6	2437	16500	>500	Pass
11	2462	16600	>500	Pass

Figure Channel 1:

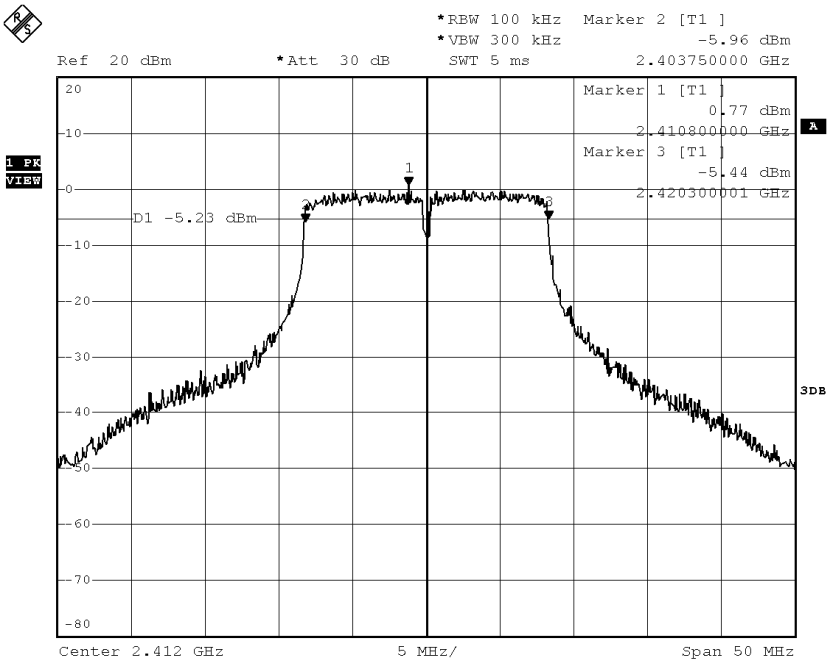
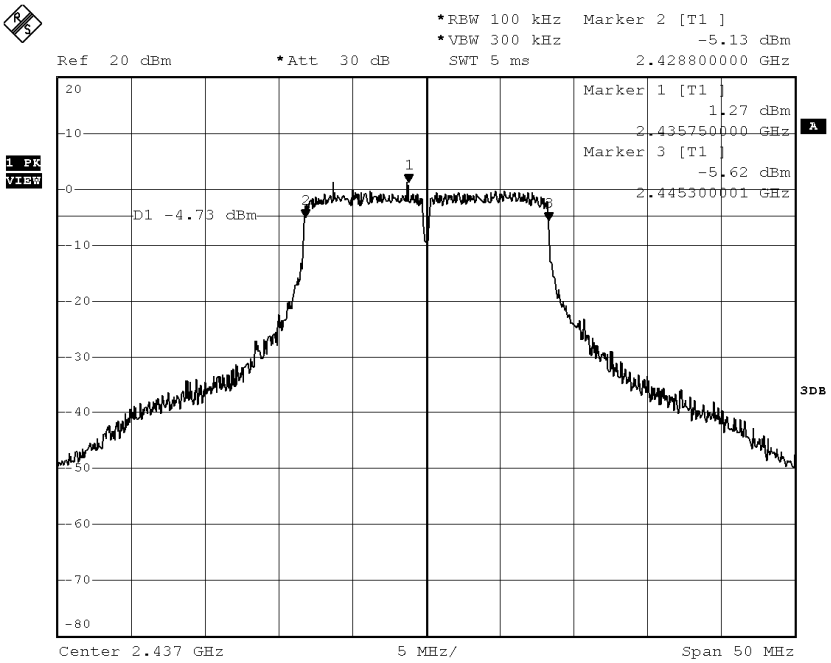
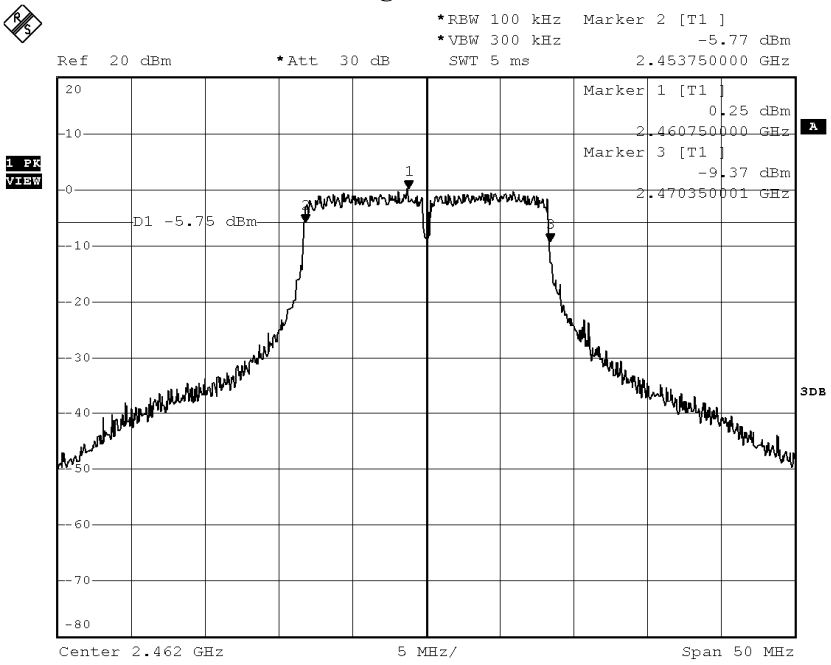


Figure Channel 6:



Date: 7.JAN.2015 11:47:29

Figure Channel 11:



Date: 7.JAN.2015 12:00:23

Product : Wireless Access Point
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmit - 802.11a 6Mbps (External Antenna)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
149	5745	16450	>500	Pass
157	5785	16450	>500	Pass
165	5825	16450	>500	Pass

Figure Channel 149:

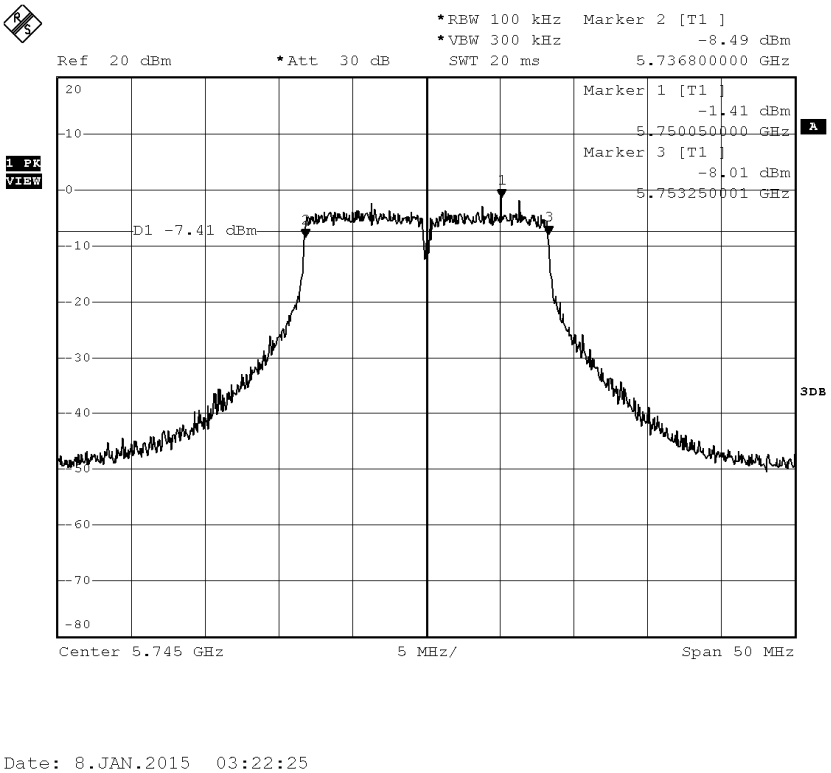
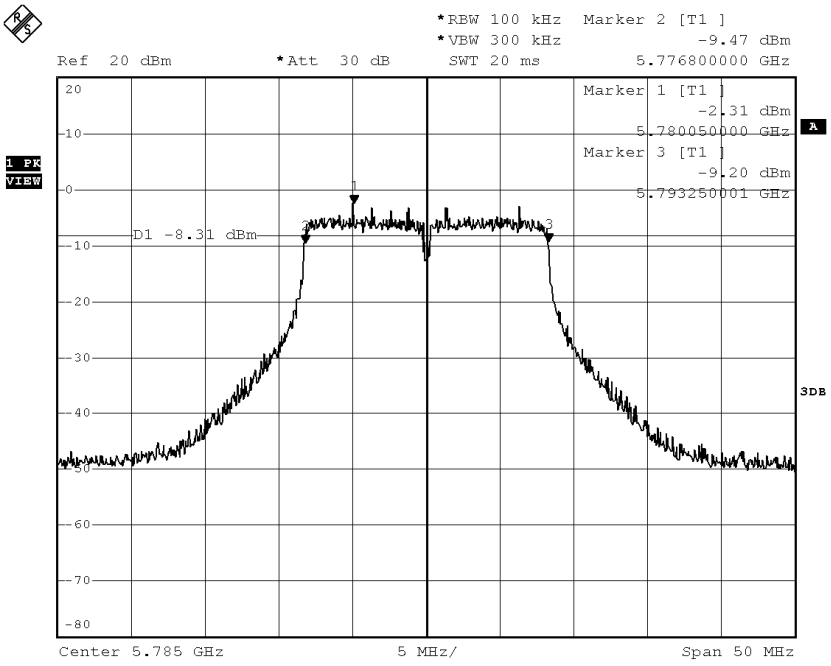
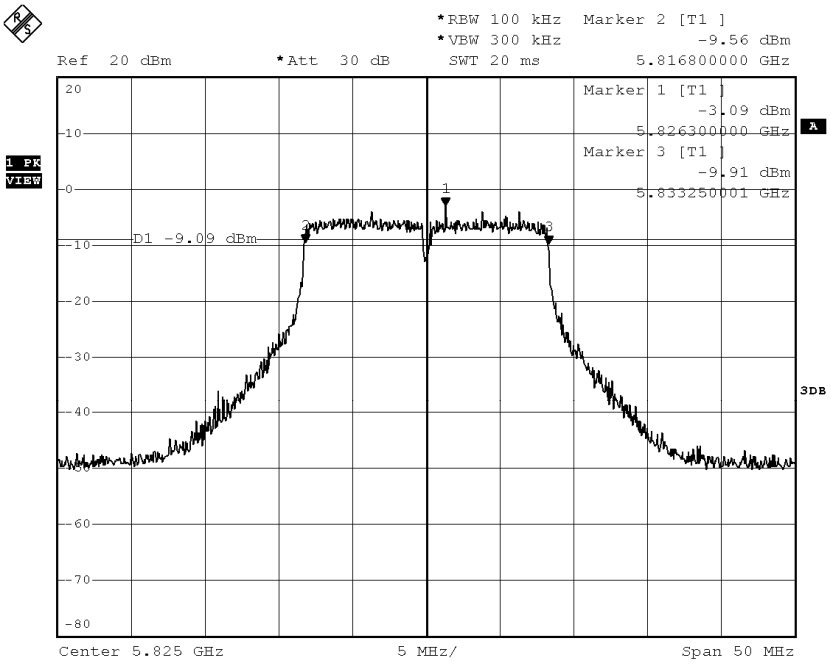


Figure Channel 157:



Date: 8.JAN.2015 03:52:01

Figure Channel 165:



Date: 8.JAN.2015 04:30:23

Product : Wireless Access Point
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit - 802.11n-20BW_14.4Mbps(2.4G Band) (External Antenna)

Chain A

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
1	2412	17850	>500	Pass
6	2437	17750	>500	Pass
11	2462	17750	>500	Pass

Figure Channel 1:

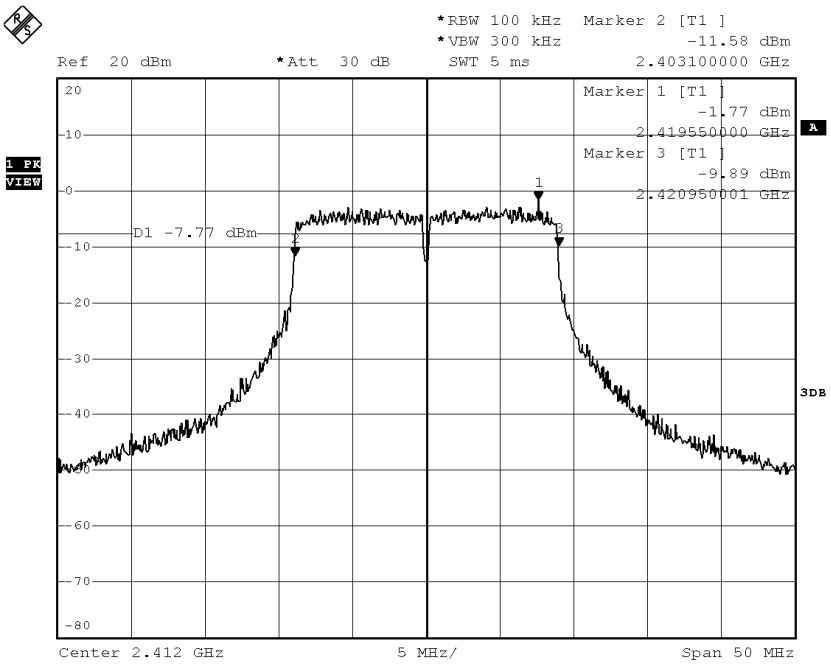
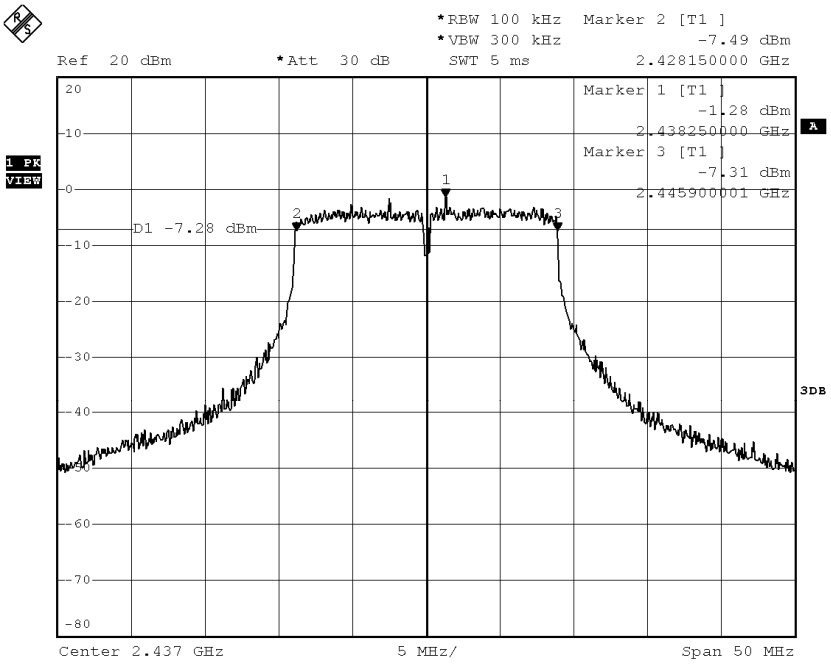
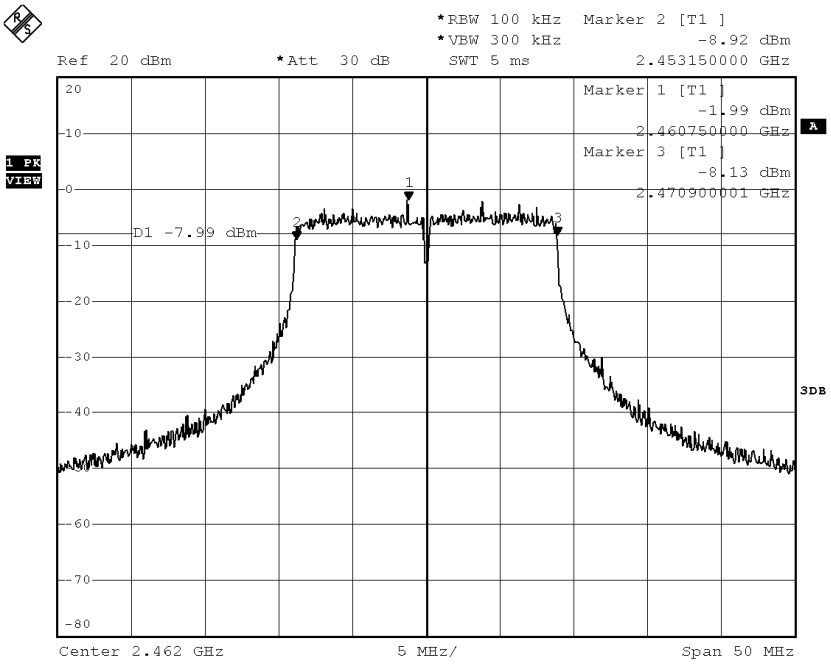


Figure Channel 6:



Date: 7.JAN.2015 12:47:10

Figure Channel 11:



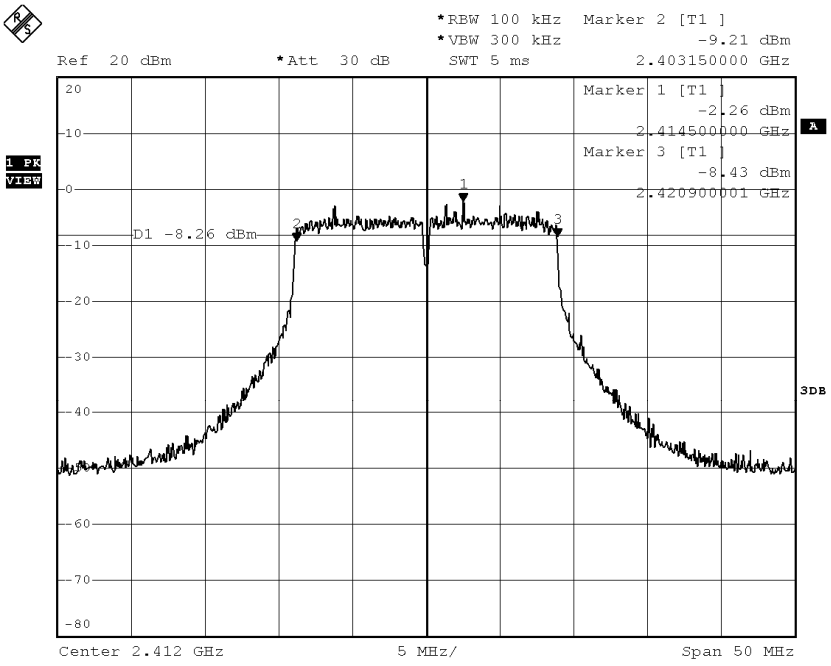
Date: 7.JAN.2015 13:15:01

Product : Wireless Access Point
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit - 802.11n-20BW_14.4Mbps(2.4G Band) (External Antenna)

Chain B

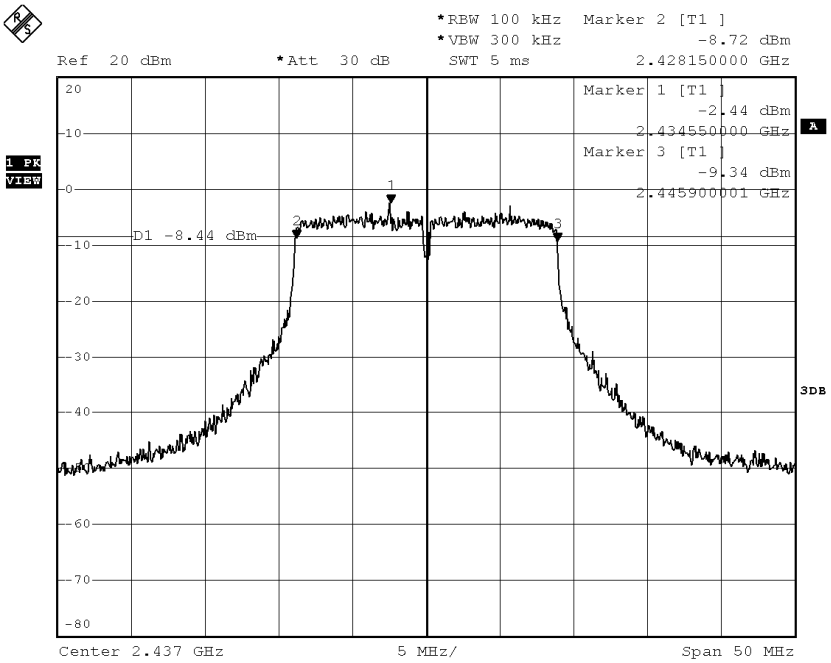
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
1	2412	17750	>500	Pass
6	2437	17750	>500	Pass
11	2462	17700	>500	Pass

Figure Channel 1:



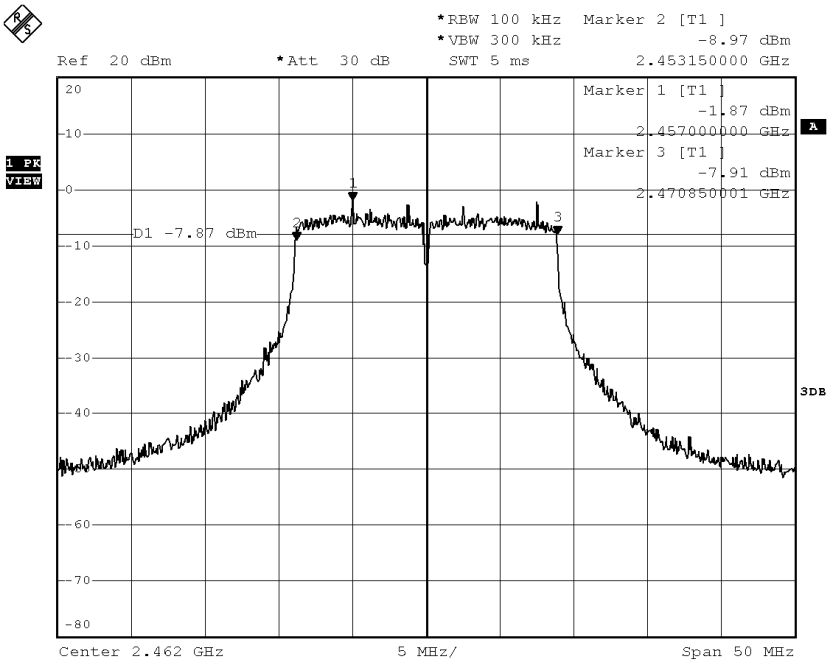
Date: 7.JAN.2015 12:34:28

Figure Channel 6:



Date: 7.JAN.2015 12:56:31

Figure Channel 11:



Date: 7.JAN.2015 13:28:31

Product : Wireless Access Point
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit - 802.11n-40BW_30Mbps(2.4G Band) (External Antenna)

Chain A

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
03	2422	36600	>500	Pass
06	2437	36300	>500	Pass
09	2452	36700	>500	Pass

Figure Channel 03:

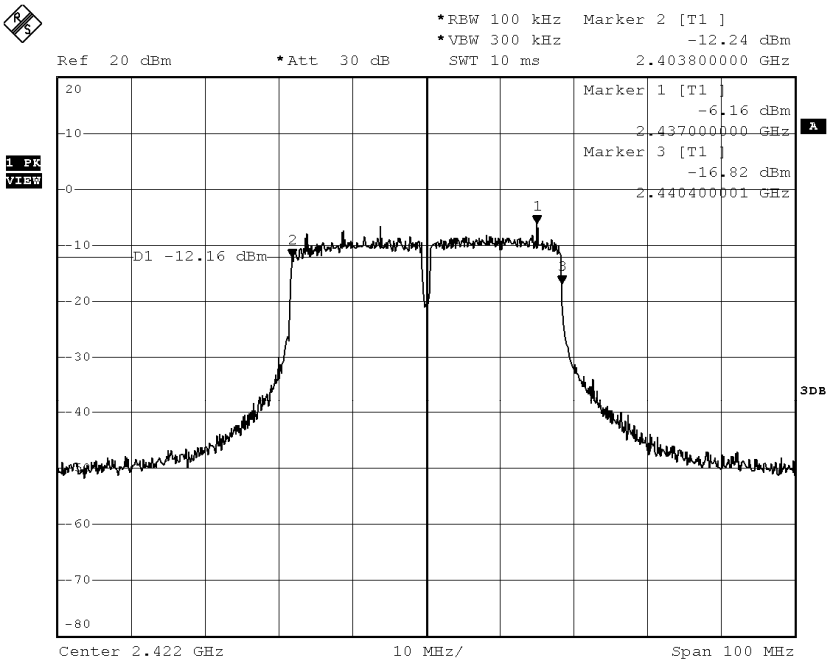
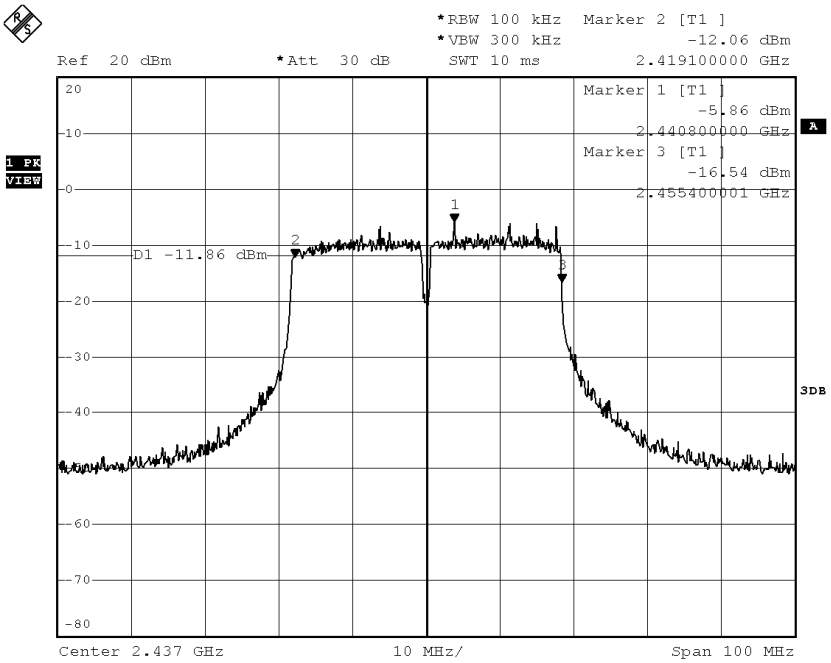
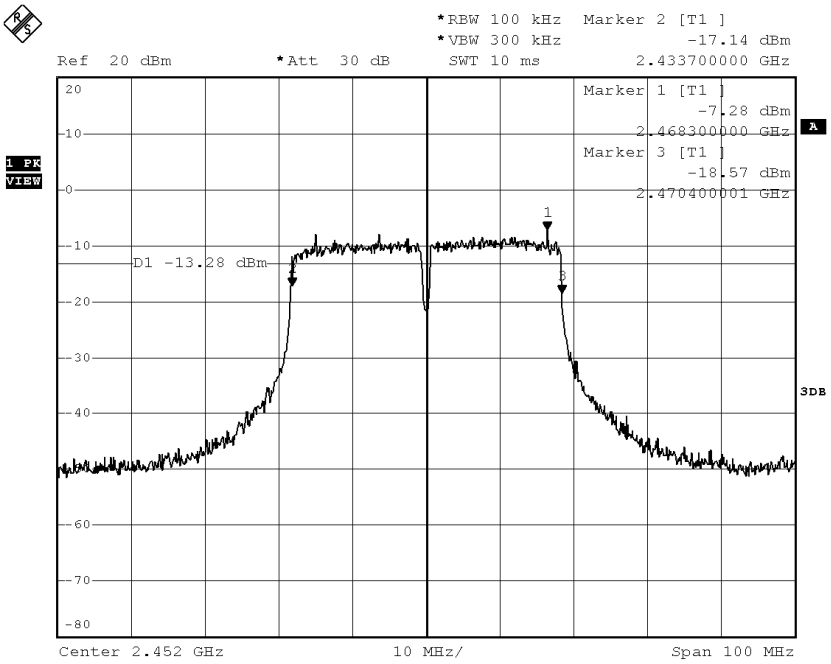


Figure Channel 06:



Date: 7.JAN.2015 14:11:29

Figure Channel 09:



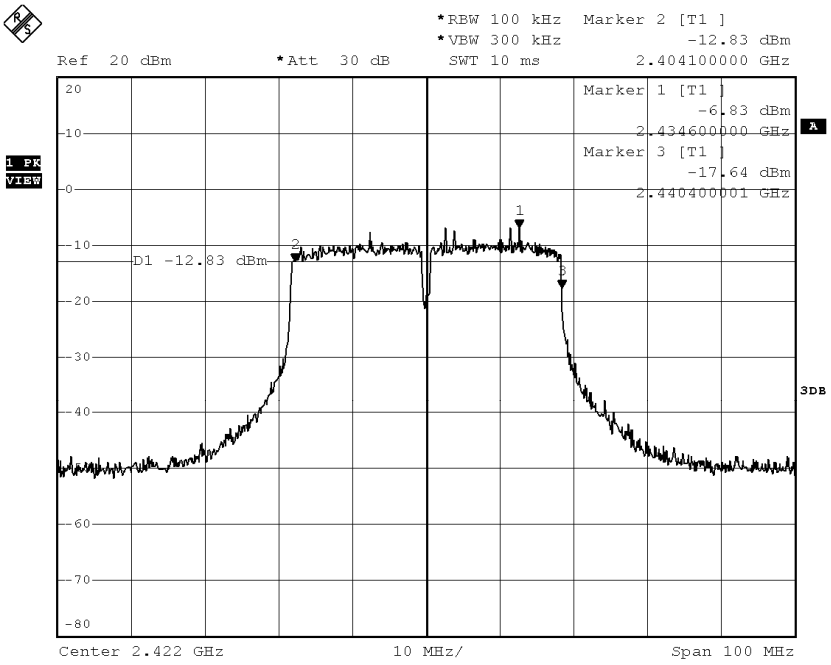
Date: 8.JAN.2015 02:54:31

Product : Wireless Access Point
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit - 802.11n-40BW_30Mbps(2.4G Band) (External Antenna)

Chain B

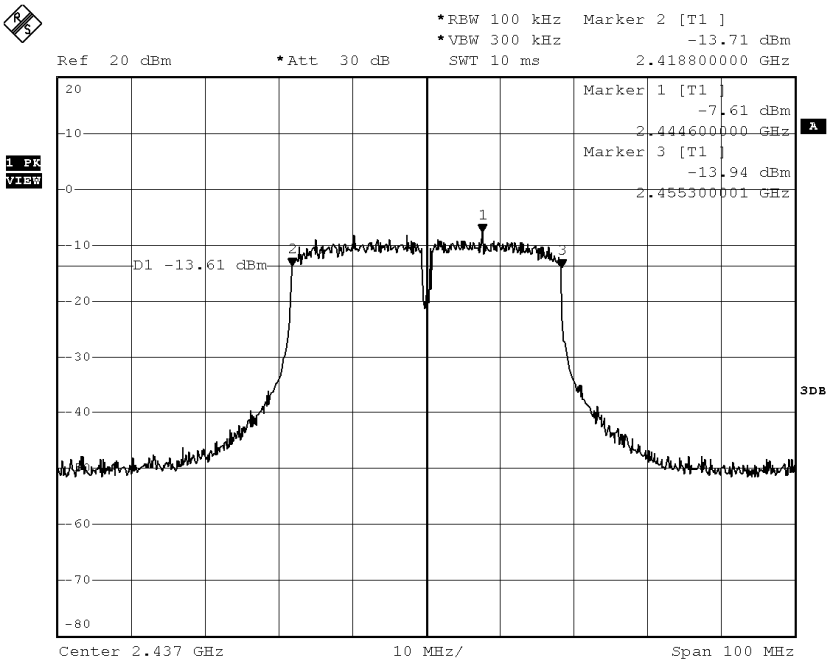
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
03	2422	36300	>500	Pass
06	2437	36500	>500	Pass
09	2452	35600	>500	Pass

Figure Channel 03:



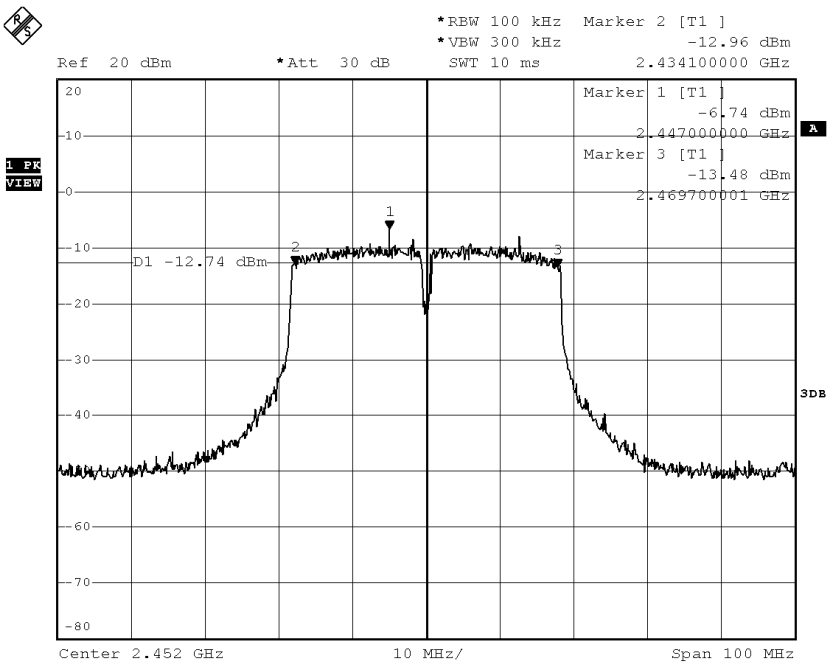
Date: 7.JAN.2015 13:56:15

Figure Channel 06:



Date: 7.JAN.2015 14:32:34

Figure Channel 09:



Date: 8.JAN.2015 03:06:00

Product : Wireless Access Point
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit - 802.11n-20BW_14.4Mbps(5G Band) (External Antenna)

Chain A

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
149	5745	17800	>500	Pass
157	5785	17800	>500	Pass
165	5825	17750	>500	Pass

Figure Channel 149:

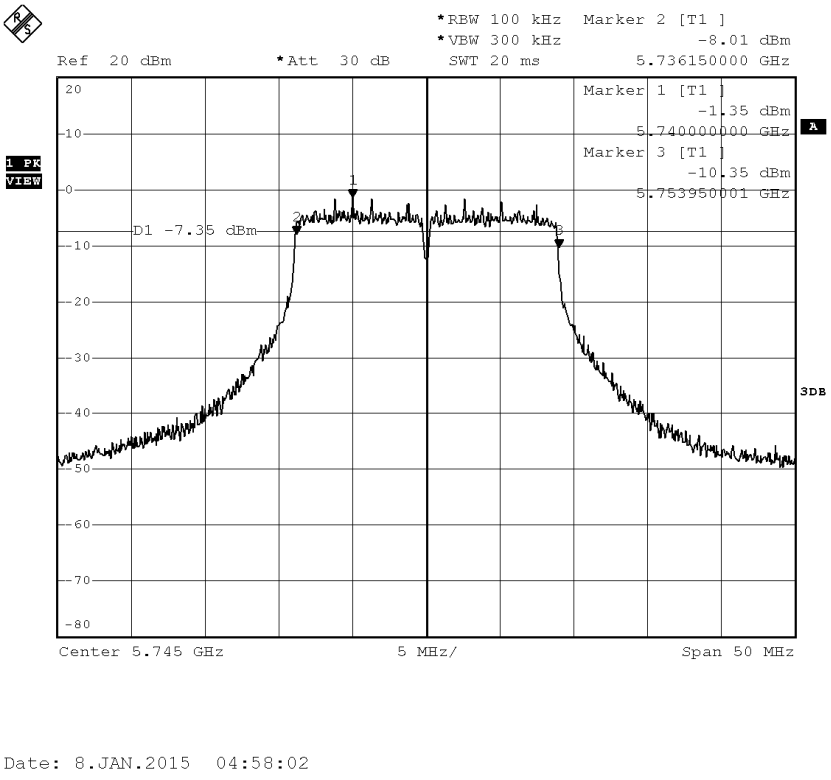
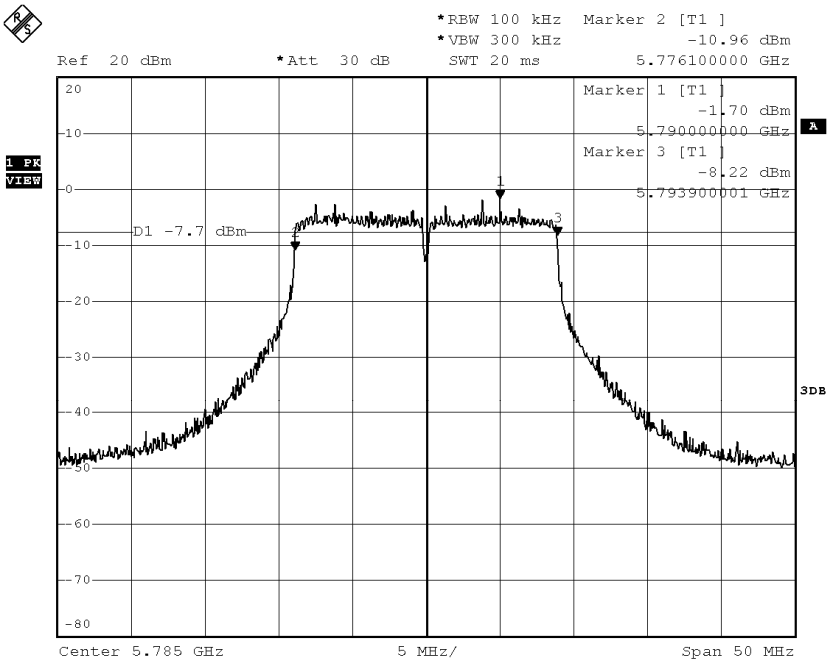
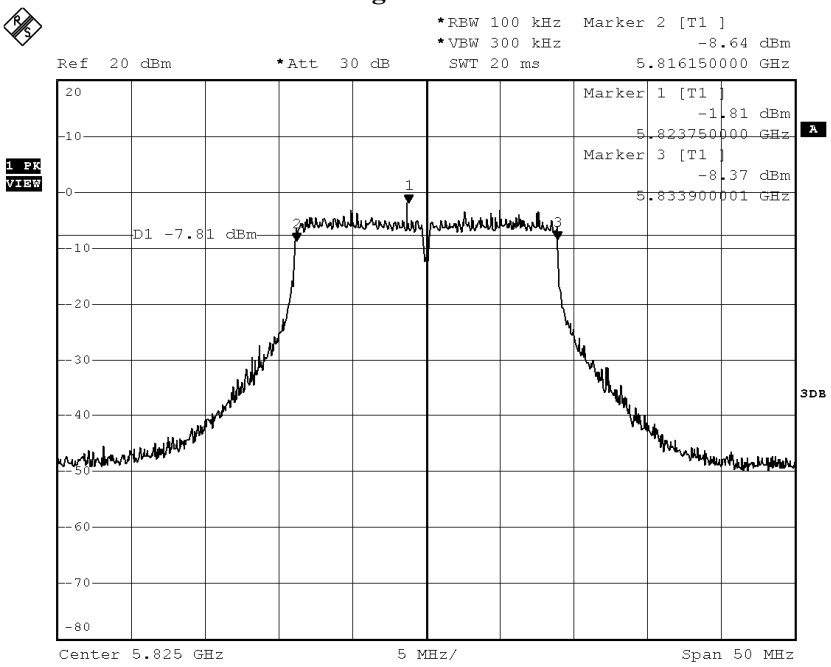


Figure Channel 157:



Date: 8.JAN.2015 06:38:01

Figure Channel 165:



Date: 8.JAN.2015 07:32:16

Product : Wireless Access Point
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit - 802.11n-20BW_14.4Mbps(5G Band) (External Antenna)

Chain B

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
149	5745	17750	>500	Pass
157	5785	17750	>500	Pass
165	5825	17800	>500	Pass

Figure Channel 149:

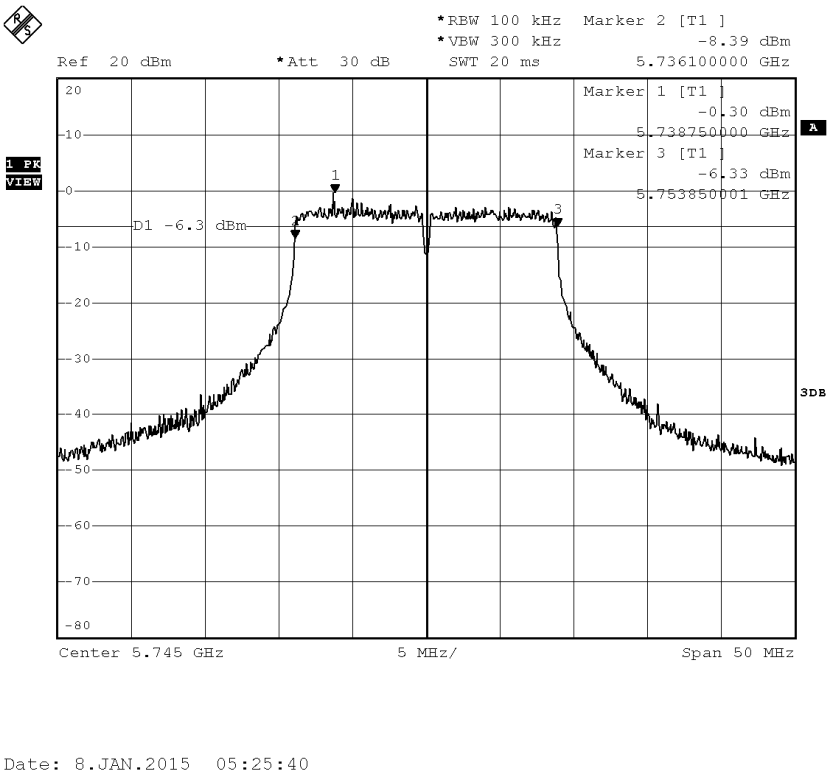
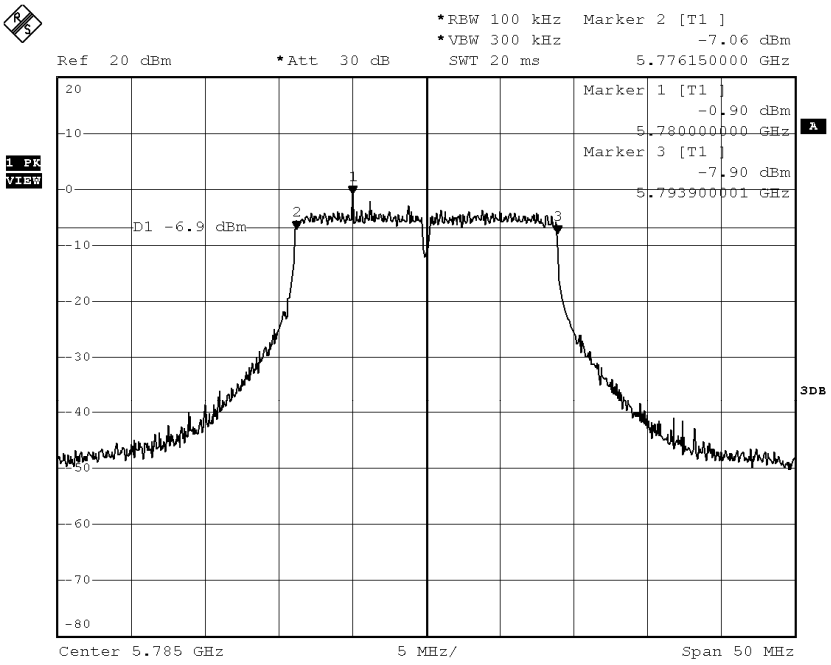
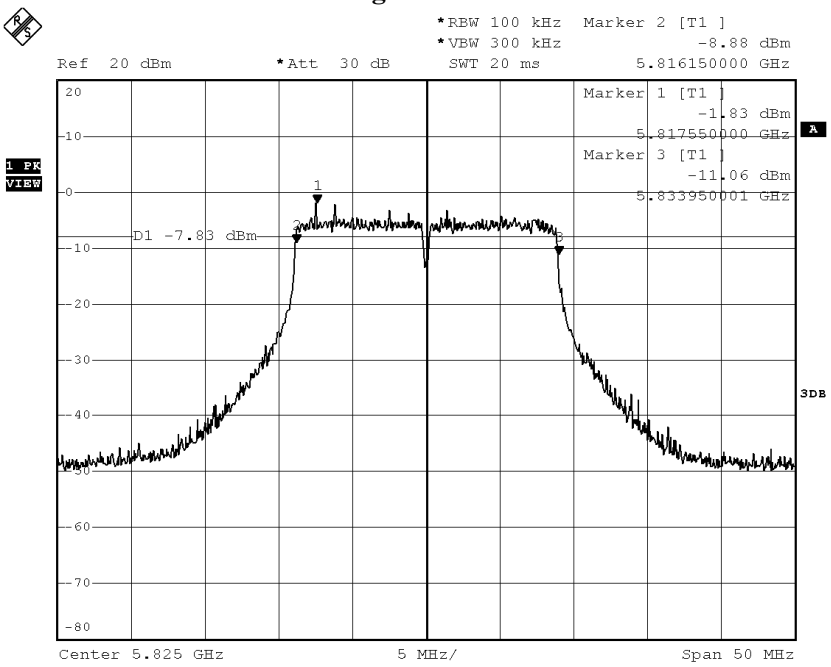


Figure Channel 157:



Date: 8.JAN.2015 07:05:03

Figure Channel 165:



Date: 8.JAN.2015 08:02:52

Product : Wireless Access Point
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Mode : Mode 7: Transmit - 802.11n-40BW_30Mbps(5G Band) (External Antenna)

Chain A

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
151	5755	36600	>500	Pass
159	5795	36600	>500	Pass

Figure Channel 151:

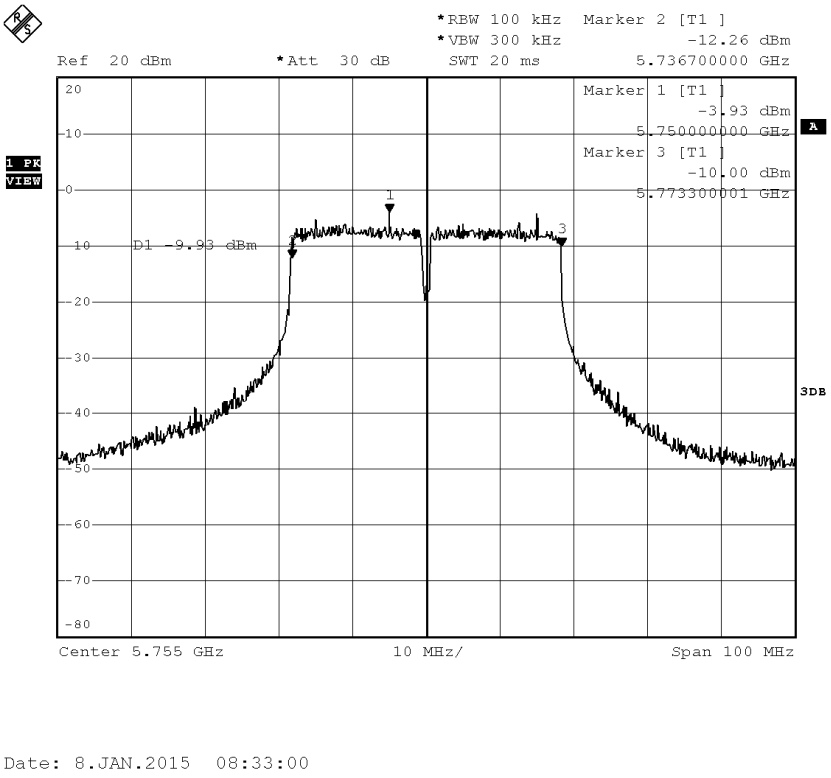
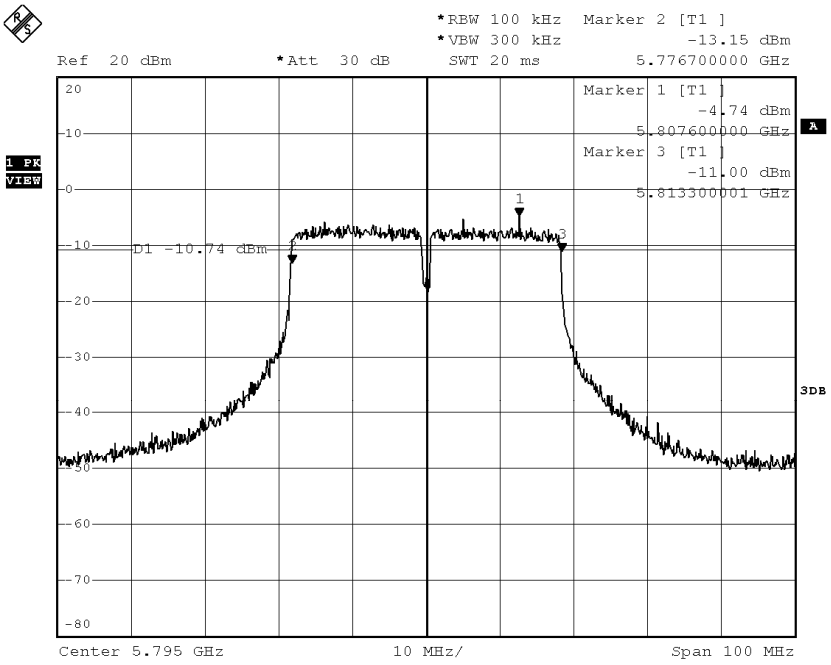


Figure Channel 159:



Product : Wireless Access Point
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Mode : Mode 7: Transmit - 802.11n-40BW_30Mbps(5G Band) (External Antenna)

Chain B

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
151	5755	36600	>500	Pass
159	5795	36600	>500	Pass

Figure Channel 151:

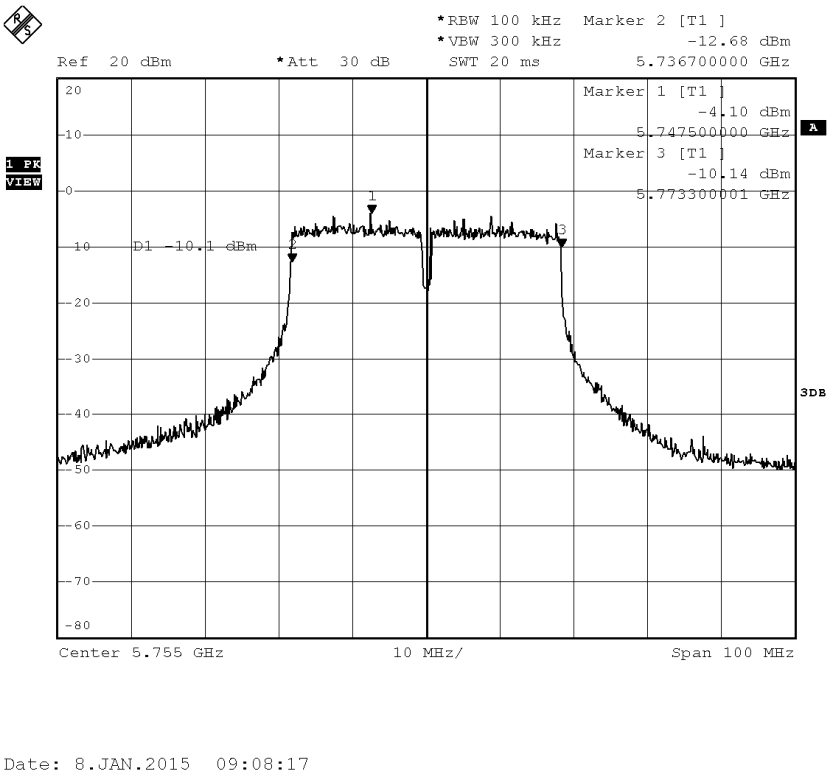
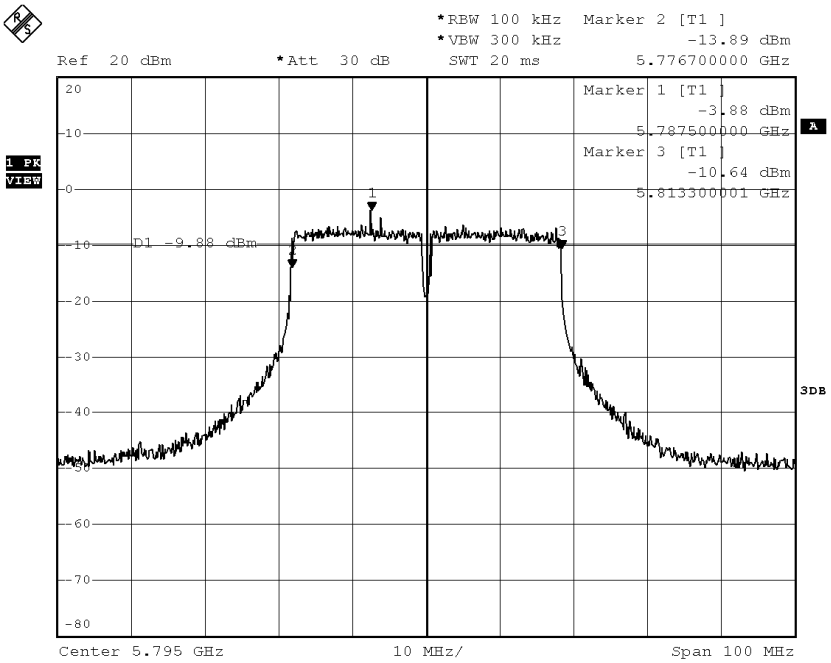


Figure Channel 159:



Date: 8.JAN.2015 10:13:35

Product : Wireless Access Point
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Mode : Mode 8: Transmit - 802.11ac-80BW-65Mbps (5775MHz) (External Antenna)

Chain A

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
155	5775.00	76800	>500	Pass

Chain B

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
155	5775.00	76600	>500	Pass

Figure Channel 155: (Chain A)

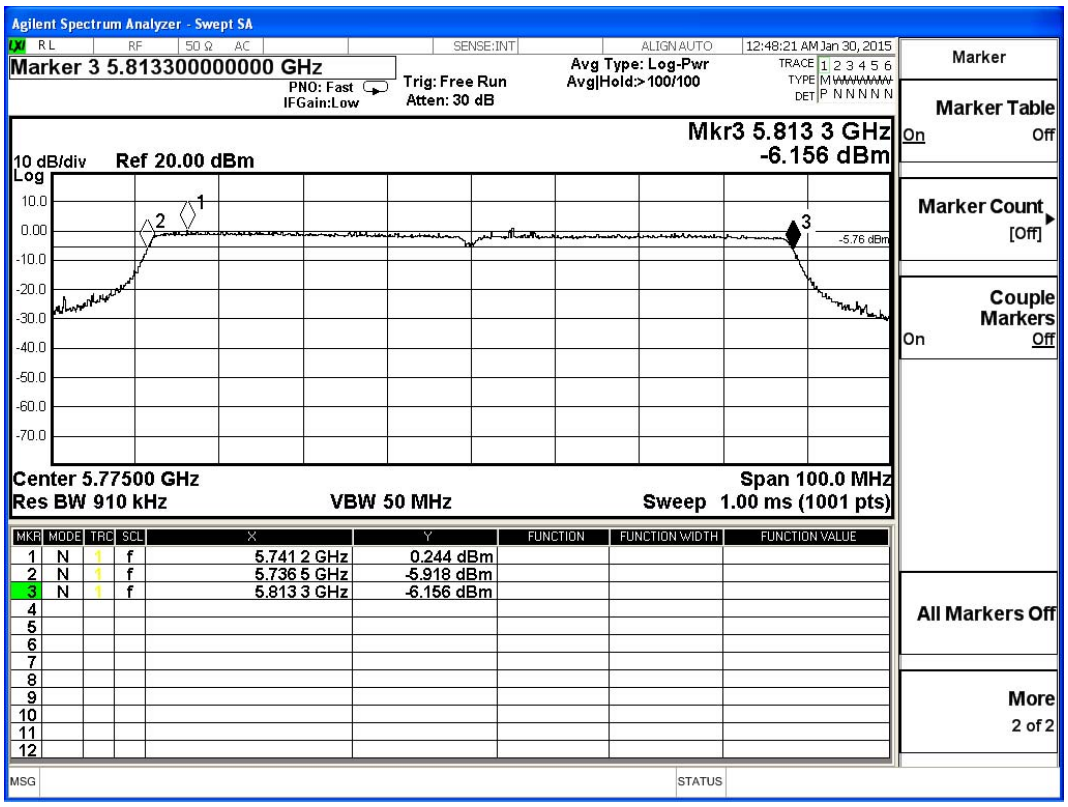
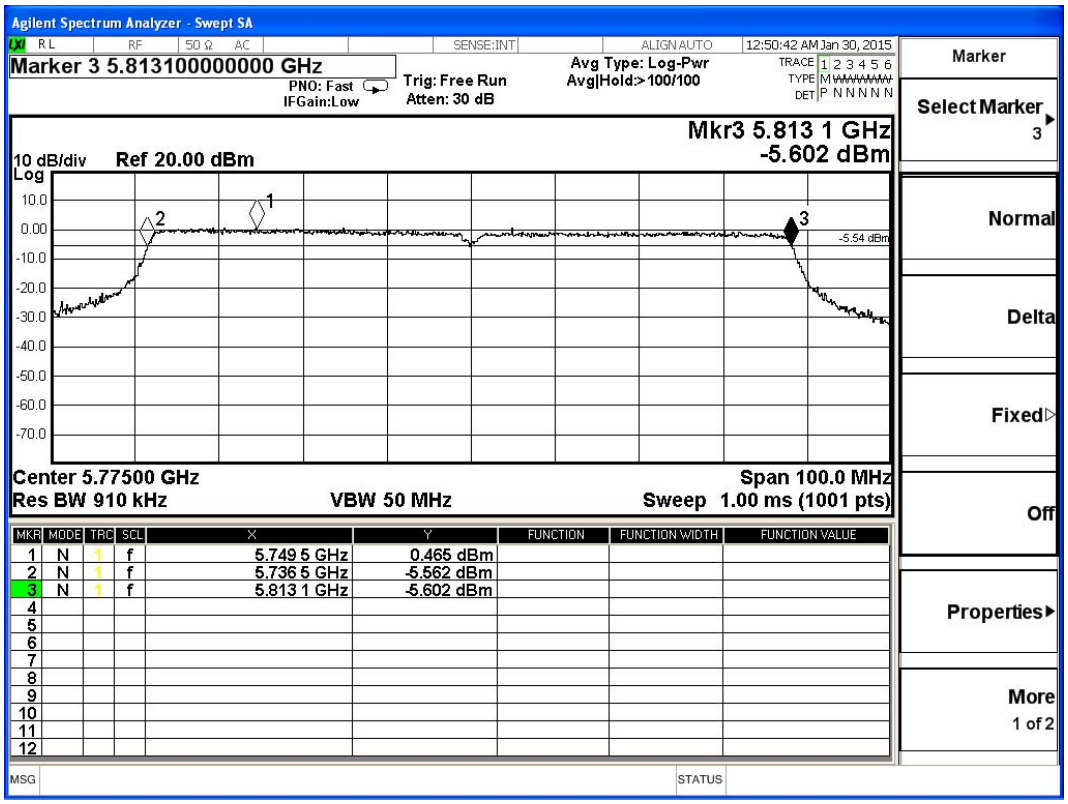


Figure Channel 155: (Chain B)



8. Power Density

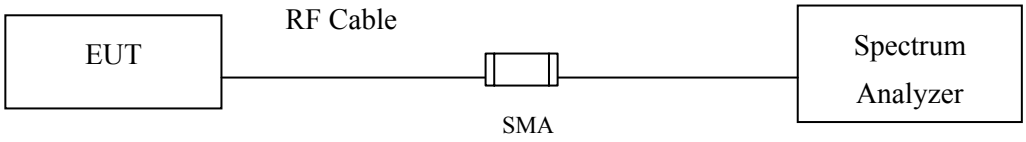
8.1. Test Equipment

	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
X	Spectrum Analyzer	R&S	FSP40 / 100170	Jun., 2014
	Spectrum Analyzer	Agilent	E4407B / US39440758	Jun., 2014
X	Spectrum Analyzer	Agilent	N9010A / MY48030495	Apr., 2014

Note:

1. All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.
2. The test instruments marked with "X" are used to measure the final test results.

8.2. Test Setup



8.3. Limits

The transmitted power density averaged over any 1 second interval shall not be greater +8dBm in any 3kHz bandwidth.

8.4. Test Procedure

The EUT was setup according to ANSI C63.10: 2009; tested according to DTS test procedure of KDB 558074 for compliance to FCC 47CFR 15.247 requirements.
The maximum power spectral density using KDB 558074 section 10.2 PKPSD (peak PSD) method.

8.5. Uncertainty

± 1.27 dB

8.6. Test Result of Power Density

Product : Wireless Access Point
Test Item : Power Density Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit - 802.11b 1Mbps (Internal Antenna)

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
1	2412	0.910	< 8dBm	Pass
6	2437	1.130	< 8dBm	Pass
11	2462	0.720	< 8dBm	Pass

Figure Channel 1:

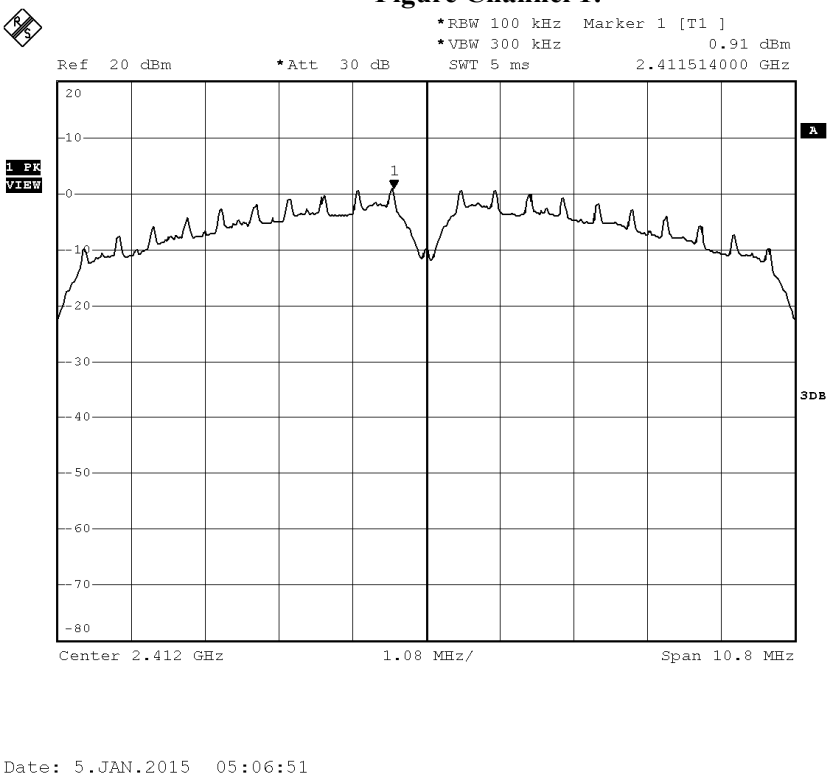
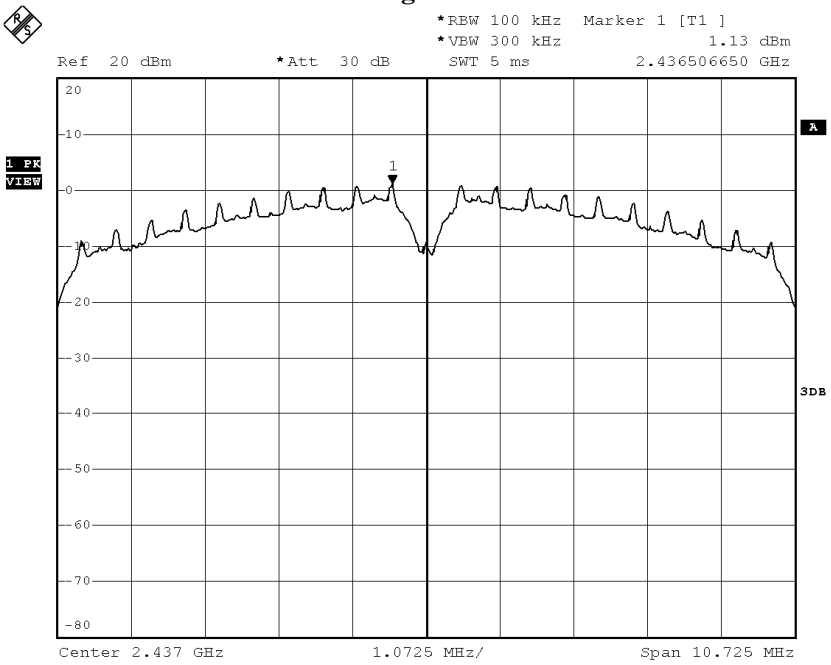
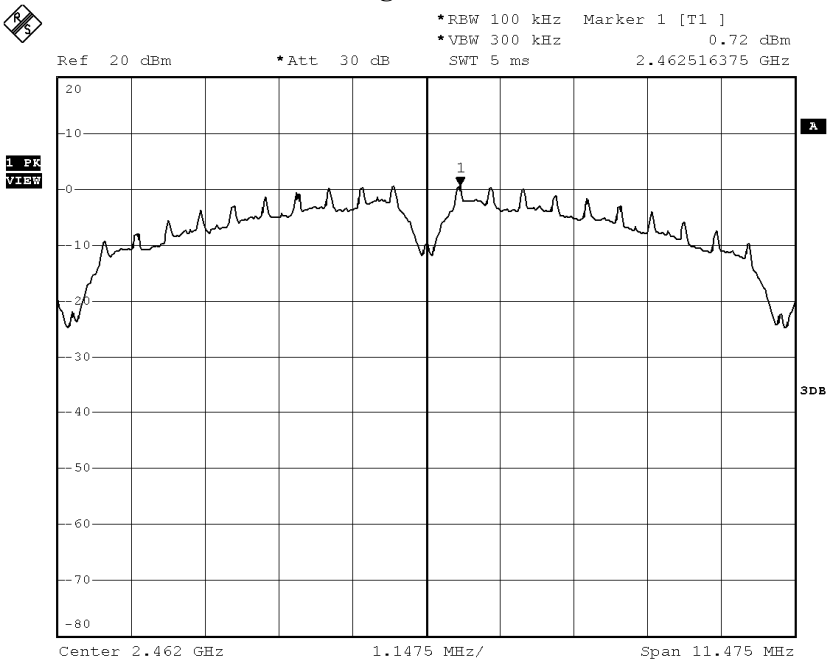


Figure Channel 6:



Date: 5.JAN.2015 05:17:59

Figure Channel 11:



Date: 5.JAN.2015 05:28:52

Product : Wireless Access Point
Test Item : Power Density Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit - 802.11g 6Mbps (Internal Antenna)

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
1	2422	-1.610	< 8dBm	Pass
6	2437	-1.600	< 8dBm	Pass
11	2452	-1.590	< 8dBm	Pass

Figure Channel 1:

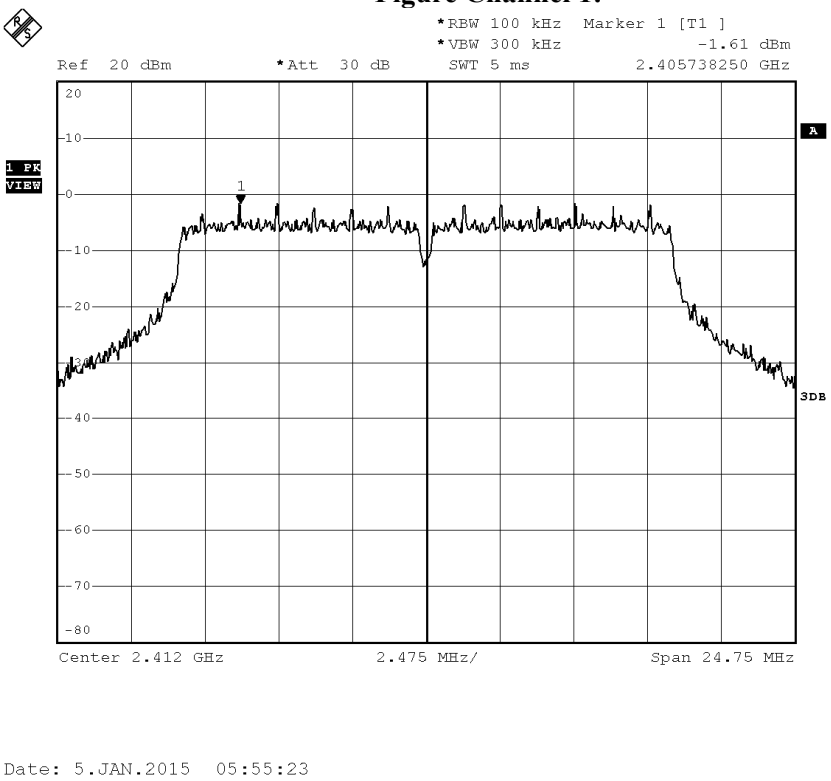
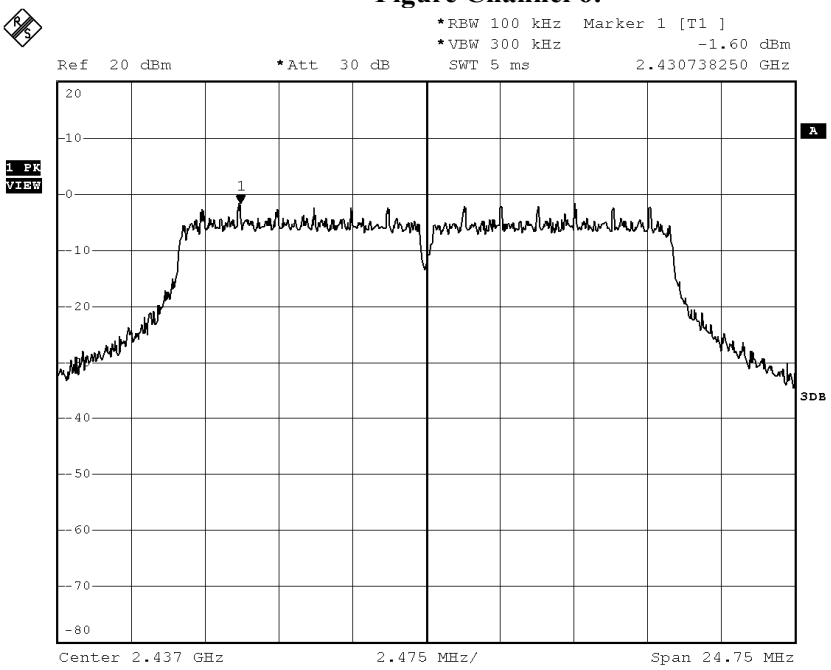
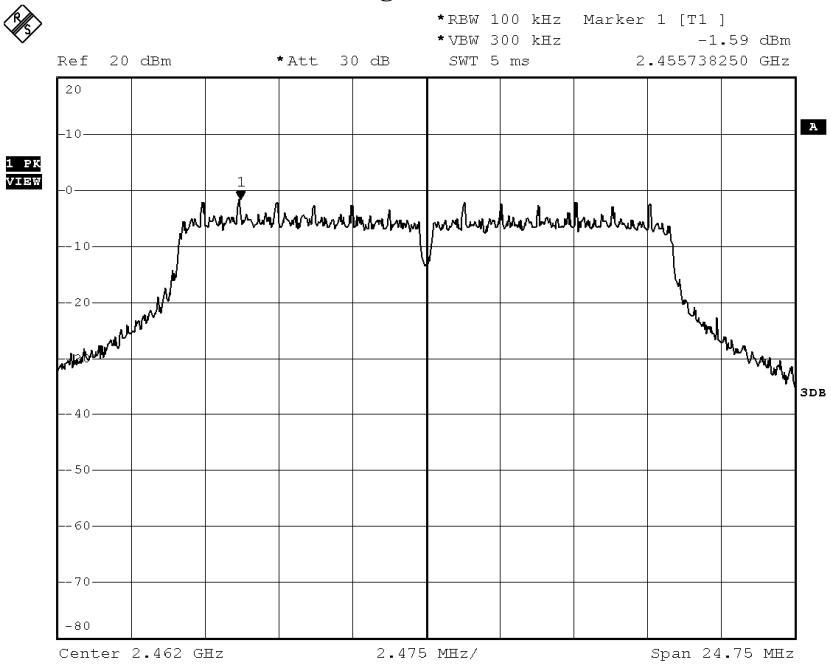


Figure Channel 6:



Date: 5.JAN.2015 06:04:38

Figure Channel 11:



Date: 5.JAN.2015 06:15:24

Product : Wireless Access Point
Test Item : Power Density Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmit - 802.11a 6Mbps (Internal Antenna)

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
149	5745	-2.370	< 8dBm	Pass
157	5785	-2.420	< 8dBm	Pass
165	5825	-2.410	< 8dBm	Pass

Figure Channel 149:

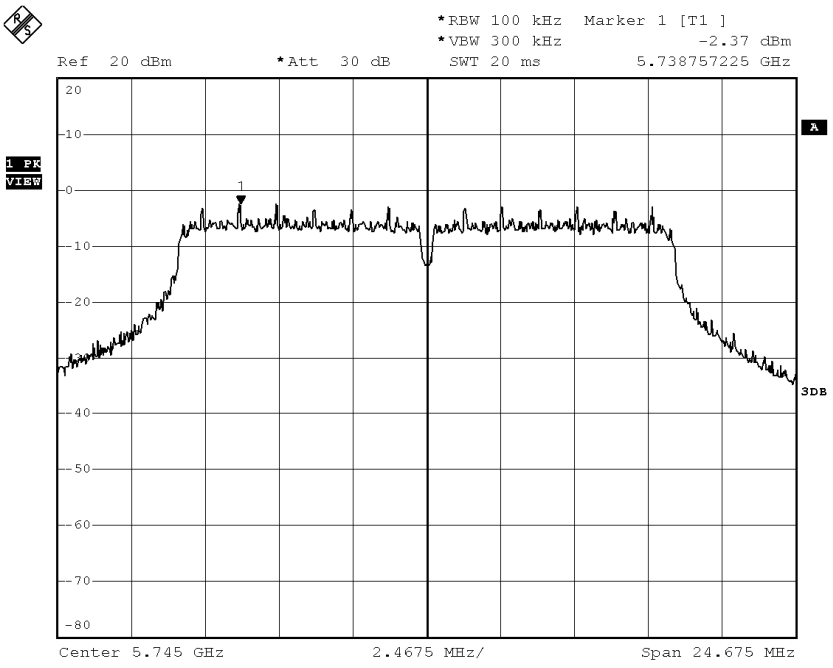
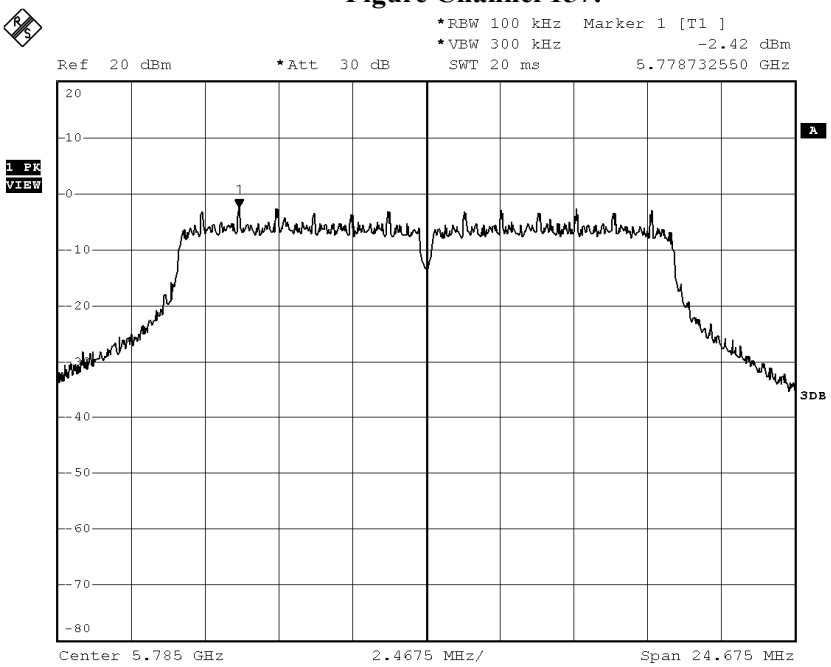
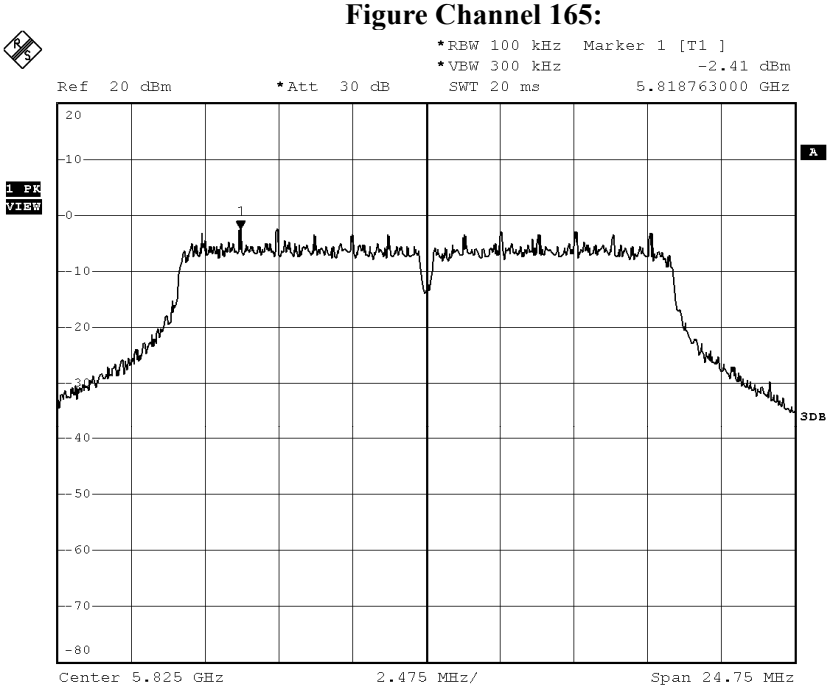


Figure Channel 157:



Date: 5.JAN.2015 09:36:41

Figure Channel 165:



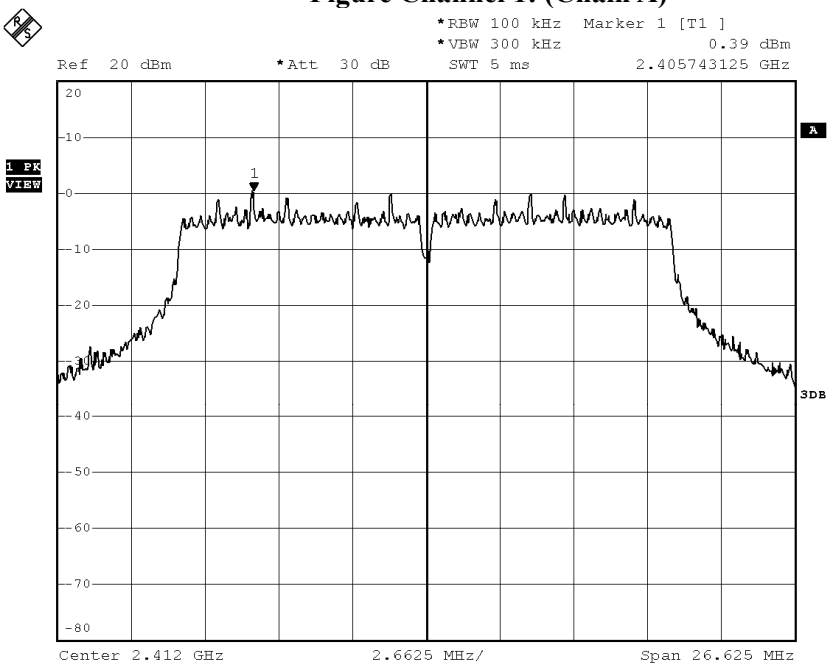
Date: 7.JAN.2015 03:22:35

Product : Wireless Access Point
Test Item : Power Density Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit - 802.11n-20BW_14.4Mbps(2.4G Band) (Internal Antenna)

Channel	Frequency (MHz)	Chain (dBm)	PPSD/MHz (dBm)	Total PPSD/MHz (dBm)	Limit	Result
1	2412	A	0.390	3.400	< 8dBm	Pass
		B	1.030	4.040	< 8dBm	Pass
6	2437	A	-0.150	2.860	< 8dBm	Pass
		B	1.740	4.750	< 8dBm	Pass
11	2462	A	-0.040	2.970	< 8dBm	Pass
		B	2.220	5.230	< 8dBm	Pass

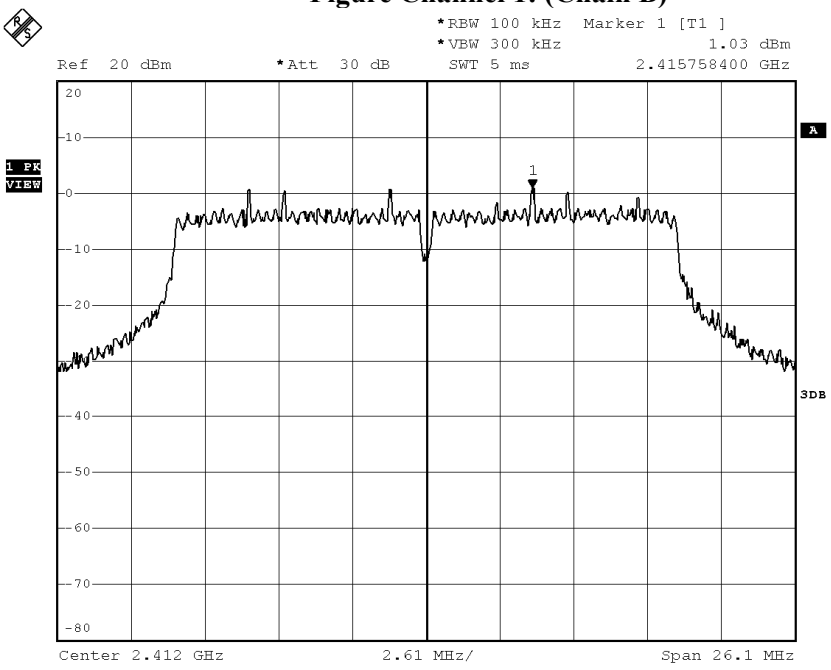
Note 1: The quantity 10*log 2 (two antennas) is added to the spectrum peak value according to document 662911 D01.

Figure Channel 1: (Chain A)



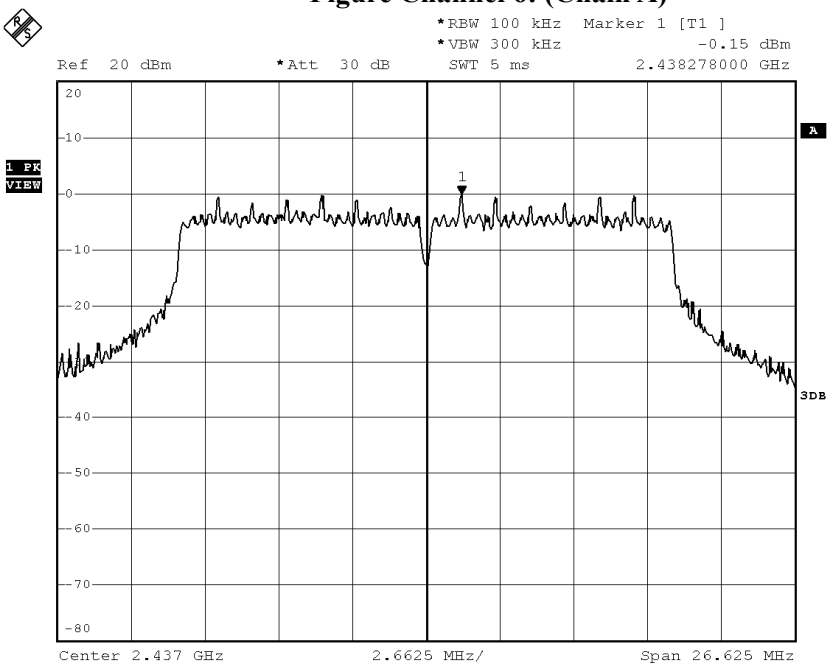
Date: 5.JAN.2015 06:50:29

Figure Channel 1: (Chain B)



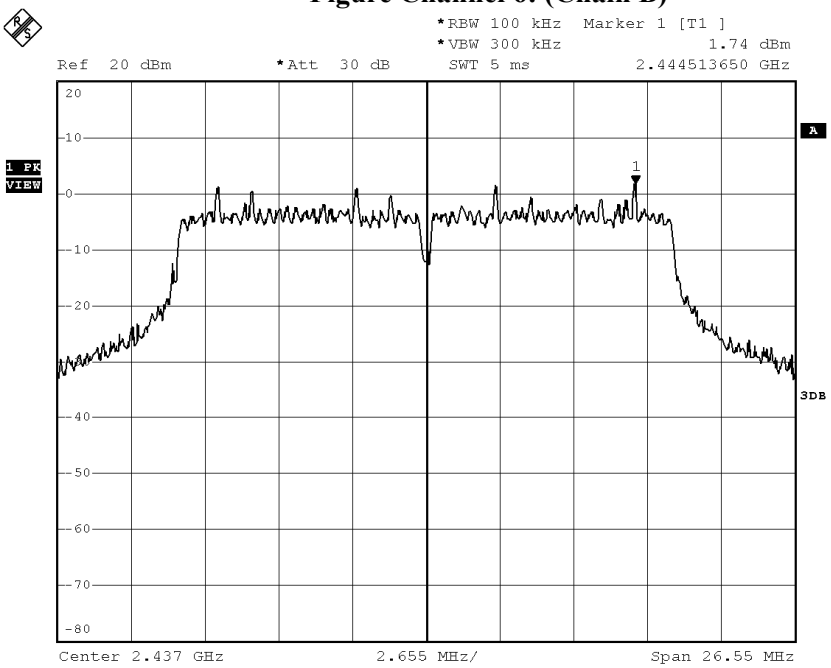
Date: 5.JAN.2015 07:04:54

Figure Channel 6: (Chain A)



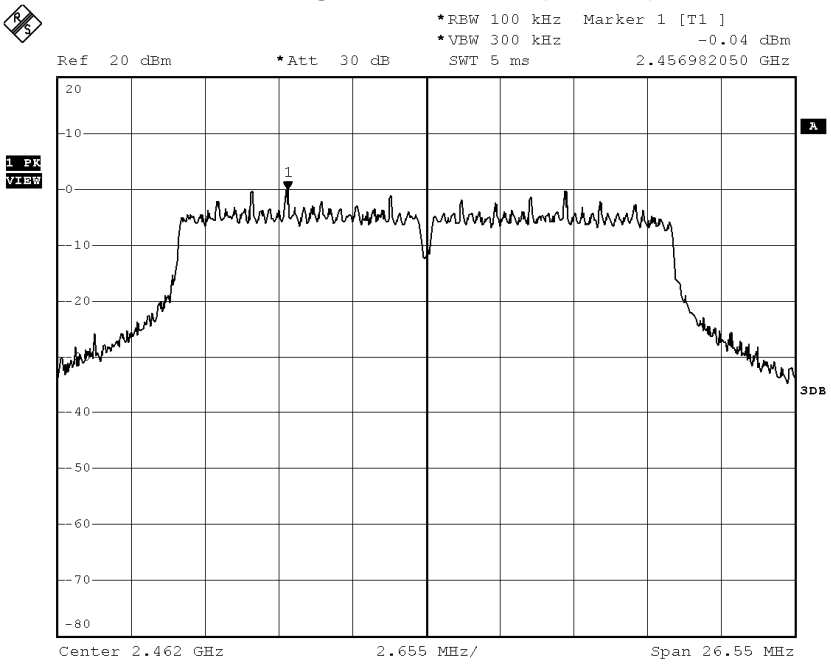
Date: 5.JAN.2015 07:14:53

Figure Channel 6: (Chain B)



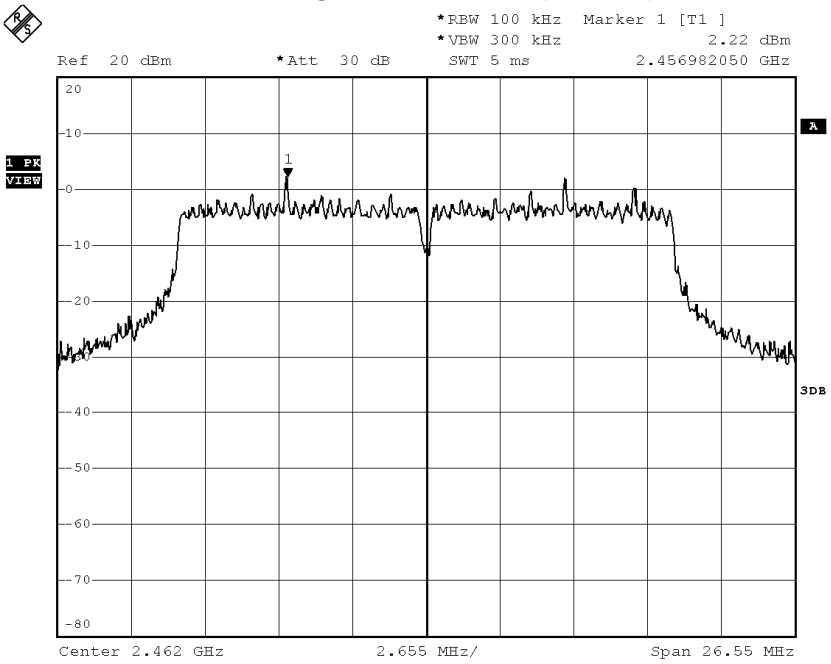
Date: 5.JAN.2015 07:24:00

Figure Channel 11: (Chain A)



Date: 5.JAN.2015 07:36:03

Figure Channel 11: (Chain B)



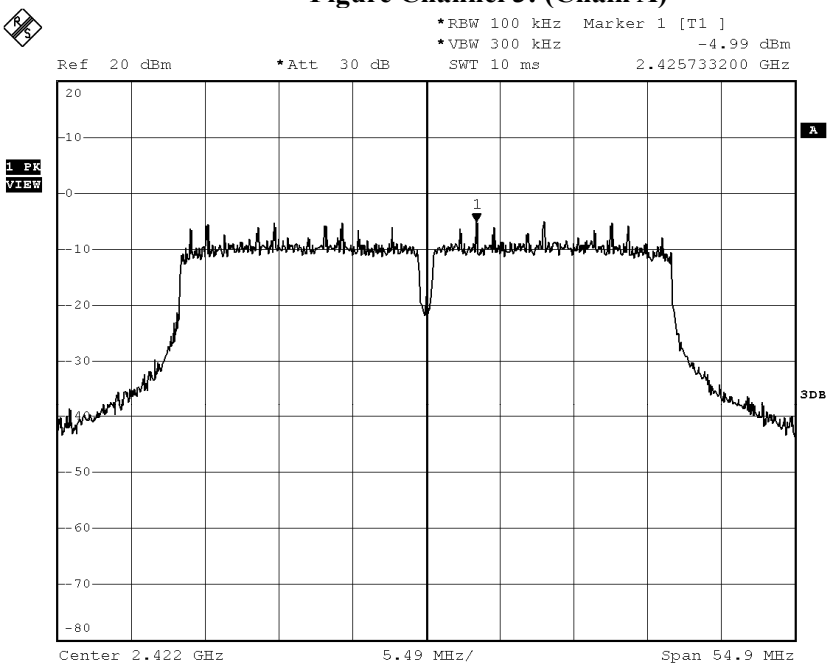
Date: 5.JAN.2015 07:46:49

Product : Wireless Access Point
Test Item : Power Density Data
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit - 802.11n-40BW_30Mbps(2.4G Band) (Internal Antenna)

Channel	Frequency (MHz)	Chain (dBm)	PPSD/MHz (dBm)	Total PPSD/MHz (dBm)	Limit	Result
3	2422	A	-4.990	-1.980	< 8dBm	Pass
		B	-2.870	0.140	< 8dBm	Pass
6	2437	A	-4.820	-1.810	< 8dBm	Pass
		B	-2.740	0.270	< 8dBm	Pass
9	2452	A	-5.420	-2.410	< 8dBm	Pass
		B	-3.340	-0.330	< 8dBm	Pass

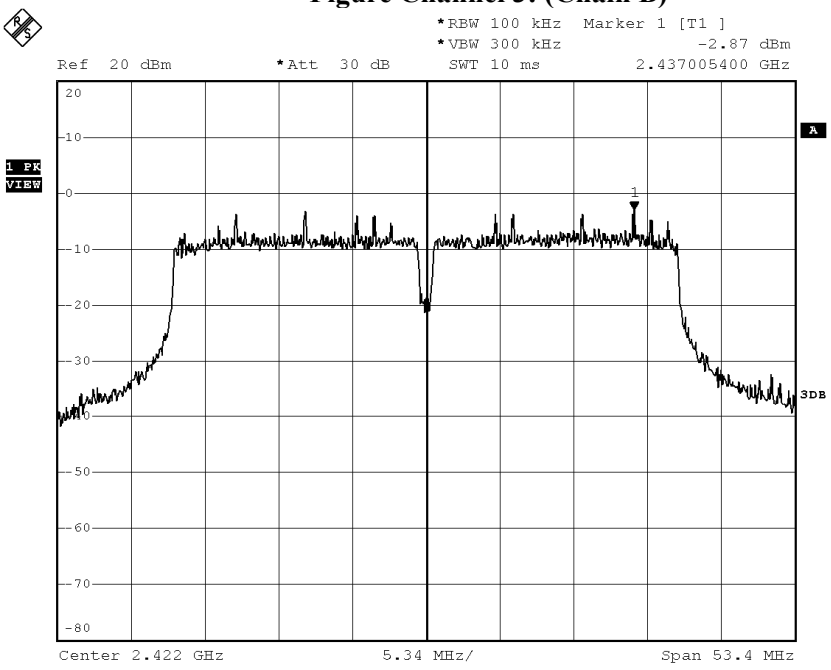
Note 1: The quantity 10*log 2 (two antennas) is added to the spectrum peak value according to document 662911 D01.

Figure Channel 3: (Chain A)



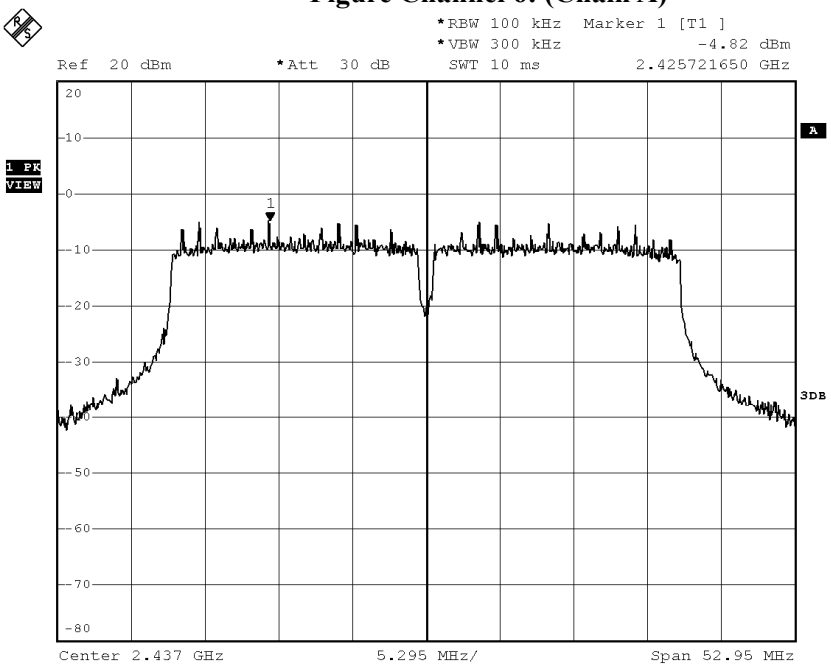
Date: 5.JAN.2015 07:58:08

Figure Channel 3: (Chain B)



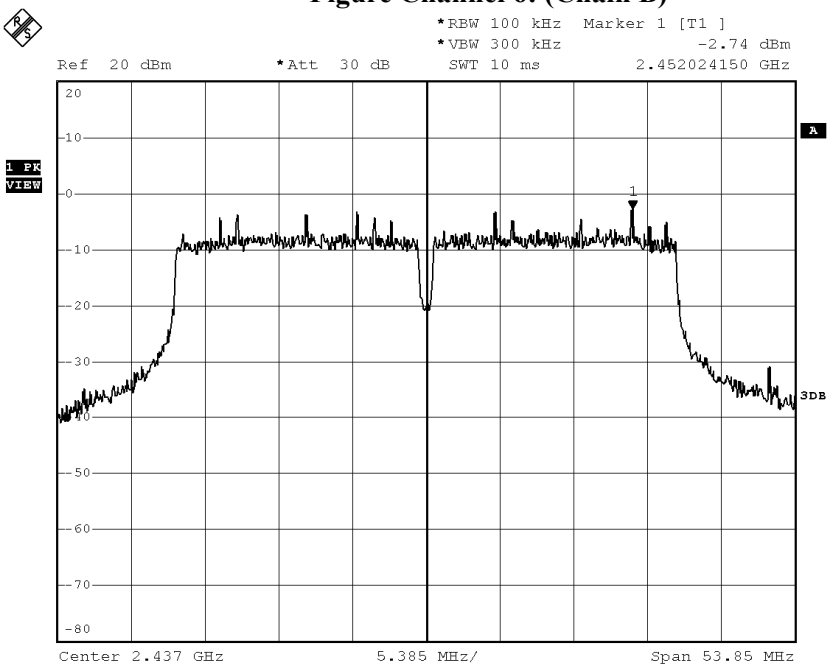
Date: 5.JAN.2015 08:09:02

Figure Channel 6: (Chain A)



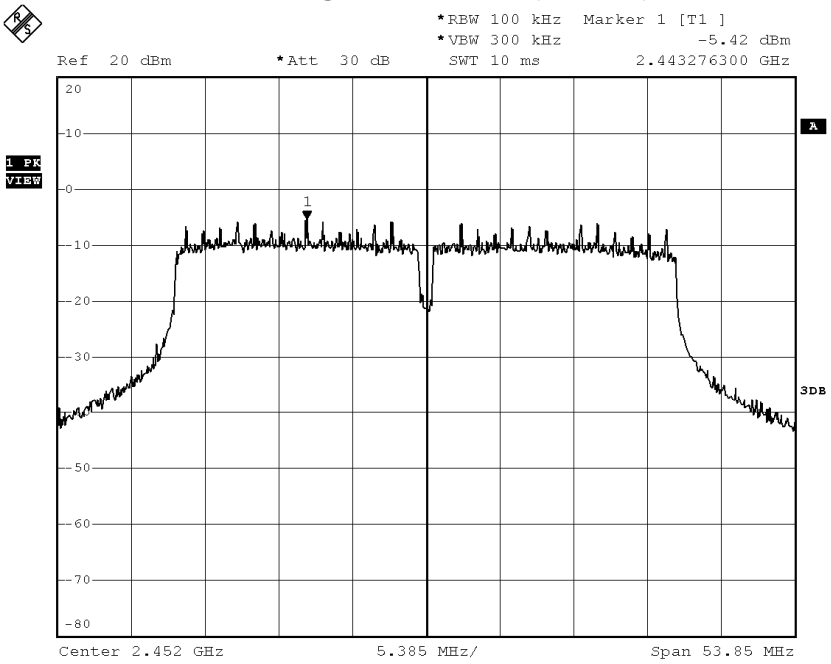
Date: 5.JAN.2015 08:18:18

Figure Channel 6: (Chain B)



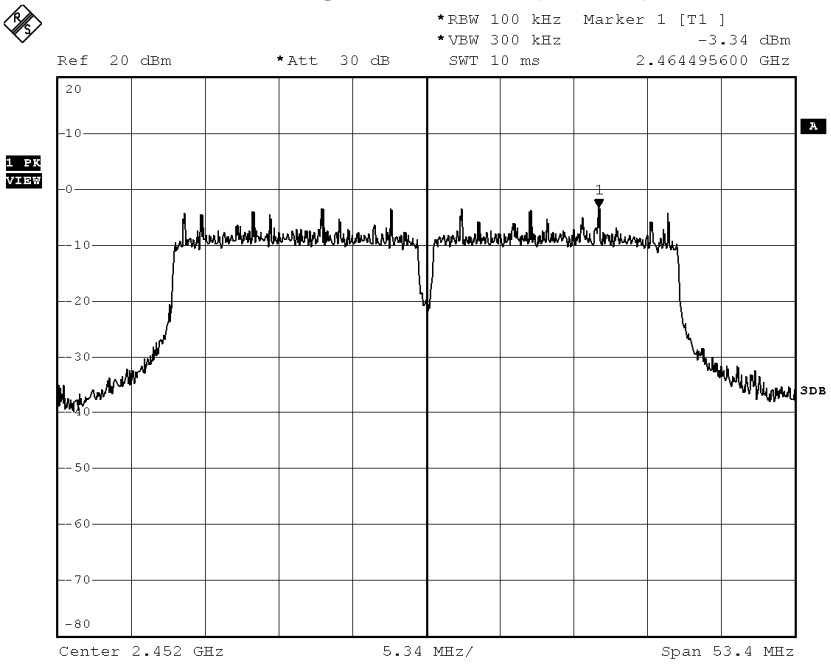
Date: 5.JAN.2015 08:27:44

Figure Channel 9: (Chain A)



Date: 5.JAN.2015 08:43:01

Figure Channel 9: (Chain B)



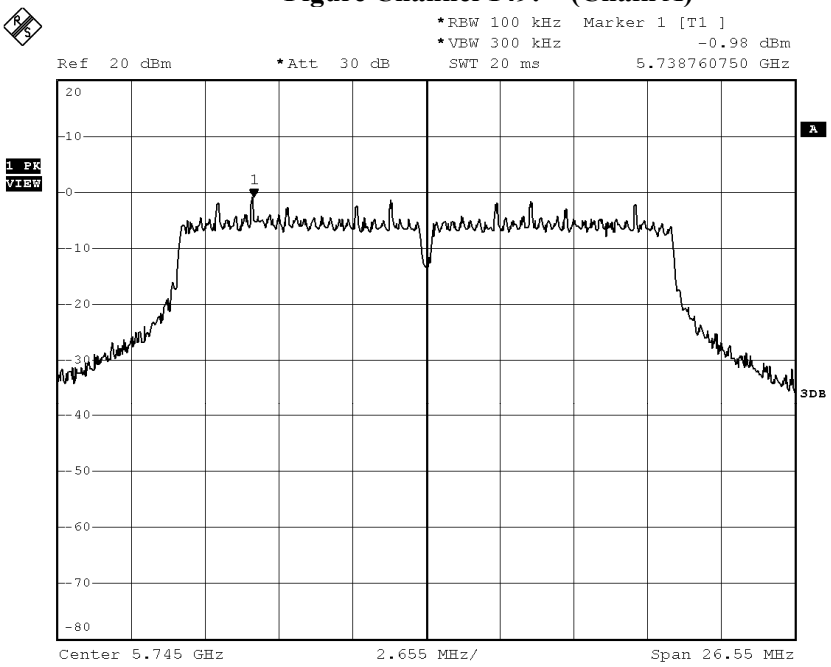
Date: 5.JAN.2015 08:56:12

Product : Wireless Access Point
Test Item : Power Density Data
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit - 802.11n-20BW_14.4Mbps(5G Band) (Internal Antenna)

Channel	Frequency (MHz)	Chain (dBm)	PPSD/MHz (dBm)	Total PPSD/MHz (dBm)	Limit	Result
149	5745	A	-0.980	2.030	< 8dBm	Pass
		B	-1.250	1.760	< 8dBm	Pass
157	5785	A	-1.530	1.480	< 8dBm	Pass
		B	-1.280	1.730	< 8dBm	Pass
165	5825	A	-1.130	1.880	< 8dBm	Pass
		B	-1.480	1.530	< 8dBm	Pass

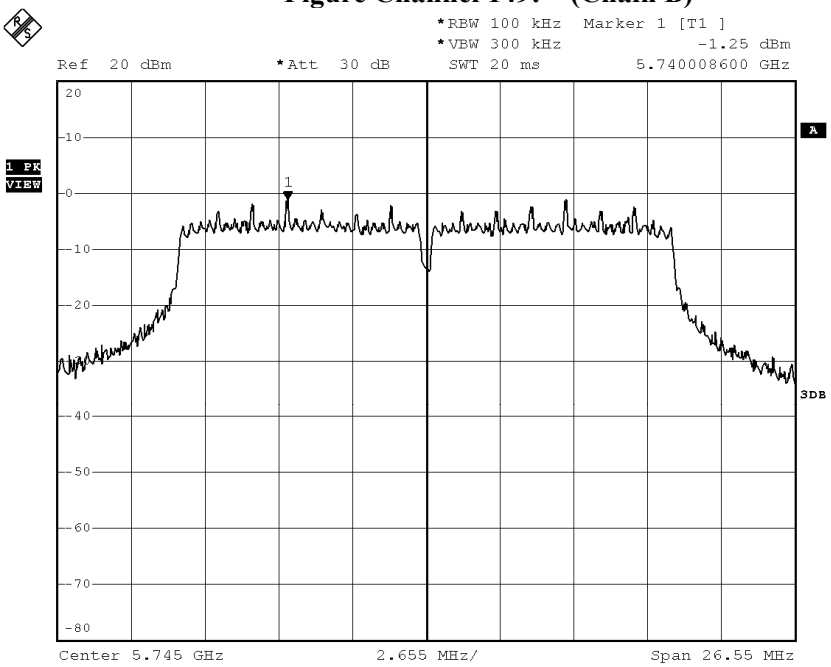
Note 1: The quantity 10*log 2 (two antennas) is added to the spectrum peak value according to document 662911 D01.

Figure Channel 149: (Chain A)



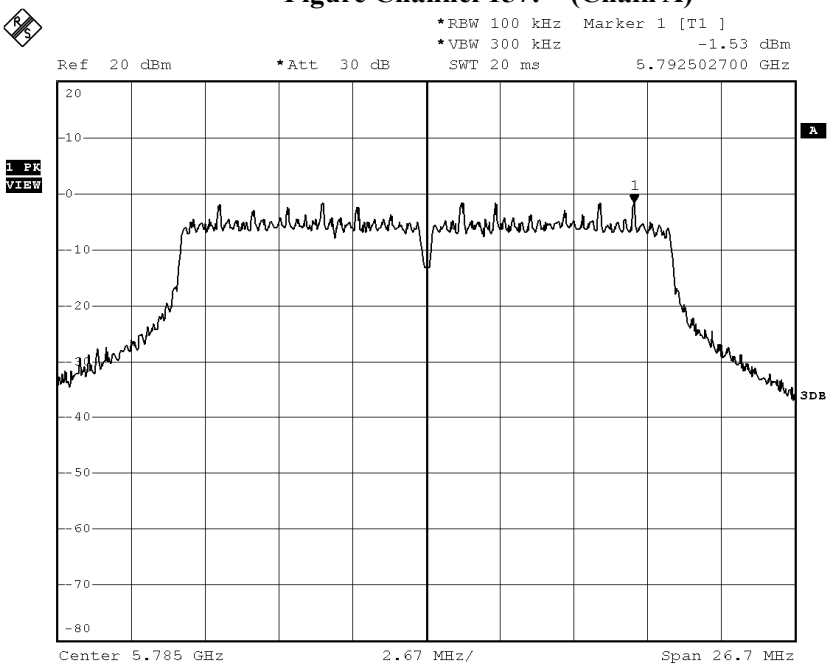
Date: 7.JAN.2015 03:54:46

Figure Channel 149: (Chain B)



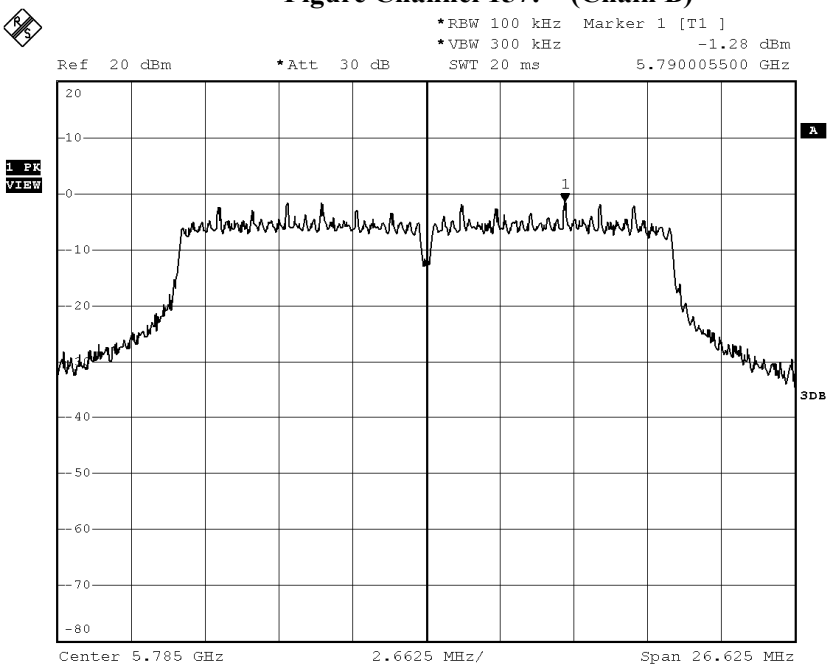
Date: 7.JAN.2015 04:37:05

Figure Channel 157: (Chain A)



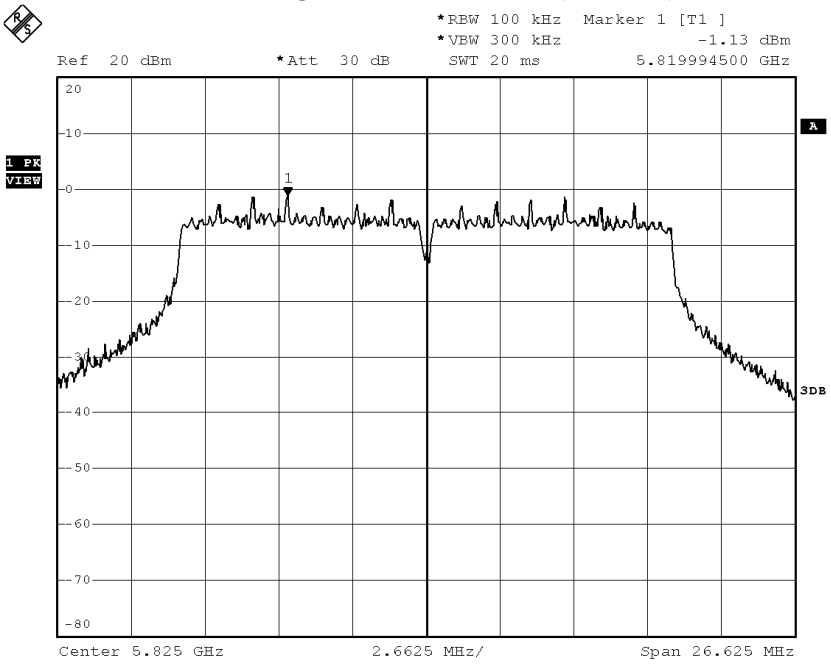
Date: 7.JAN.2015 05:08:12

Figure Channel 157: (Chain B)



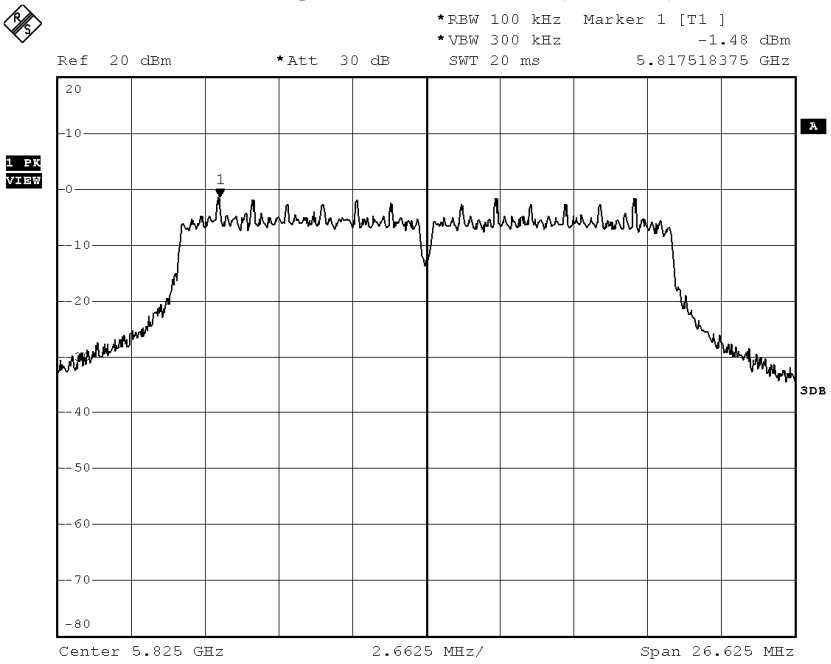
Date: 7.JAN.2015 05:48:30

Figure Channel 165: (Chain A)



Date: 7.JAN.2015 07:04:06

Figure Channel 165: (Chain B)



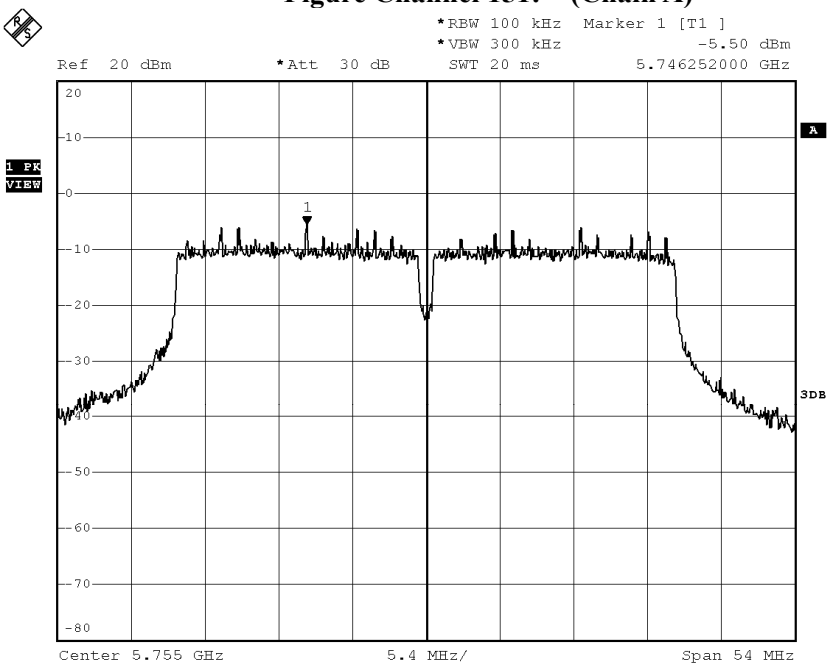
Date: 7.JAN.2015 07:46:41

Product : Wireless Access Point
Test Item : Power Density Data
Test Site : No.3 OATS
Test Mode : Mode 7: Transmit - 802.11n-40BW_30Mbps(5G Band) (Internal Antenna)

Channel	Frequency (MHz)	Chain (dBm)	PPSD/MHz (dBm)	Total PPSD/MHz (dBm)	Limit	Result
151	5755	A	-5.500	-2.490	< 8dBm	Pass
		B	-6.700	-3.690	< 8dBm	Pass
159	5795	A	-5.120	-2.110	< 8dBm	Pass
		B	-6.020	-3.010	< 8dBm	Pass

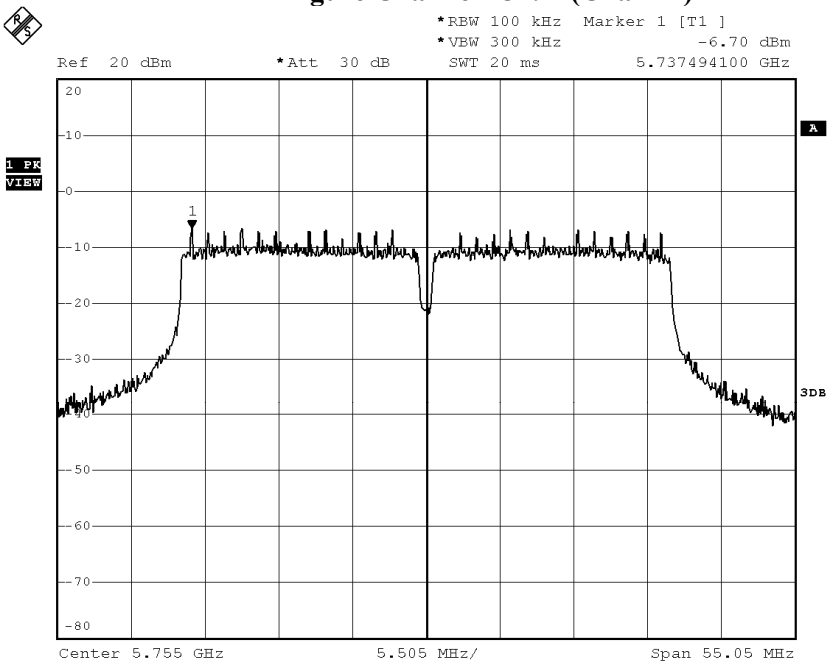
Note 1: The quantity 10*log 2 (two antennas) is added to the spectrum peak value according to document 662911 D01.

Figure Channel 151: (Chain A)



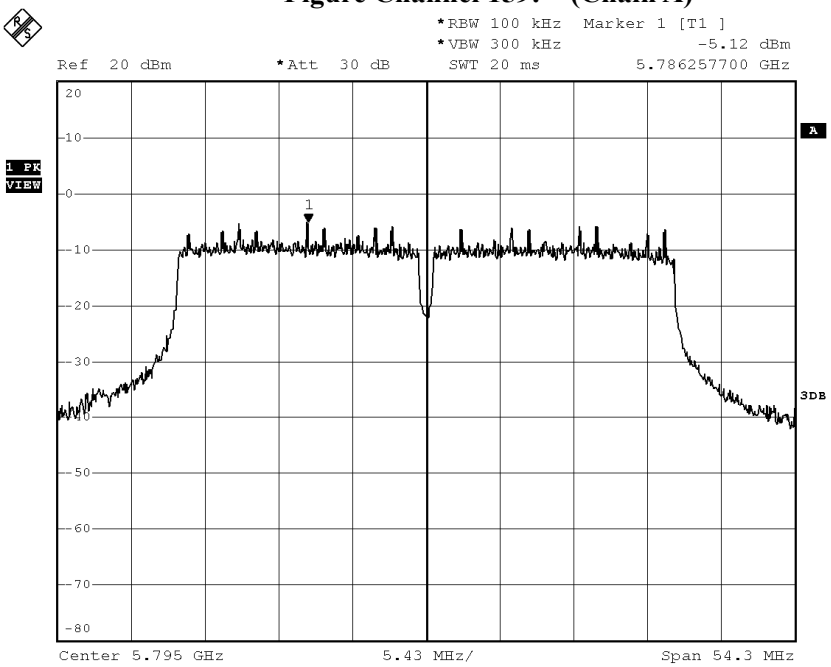
Date: 7.JAN.2015 08:15:16

Figure Channel 151: (Chain B)



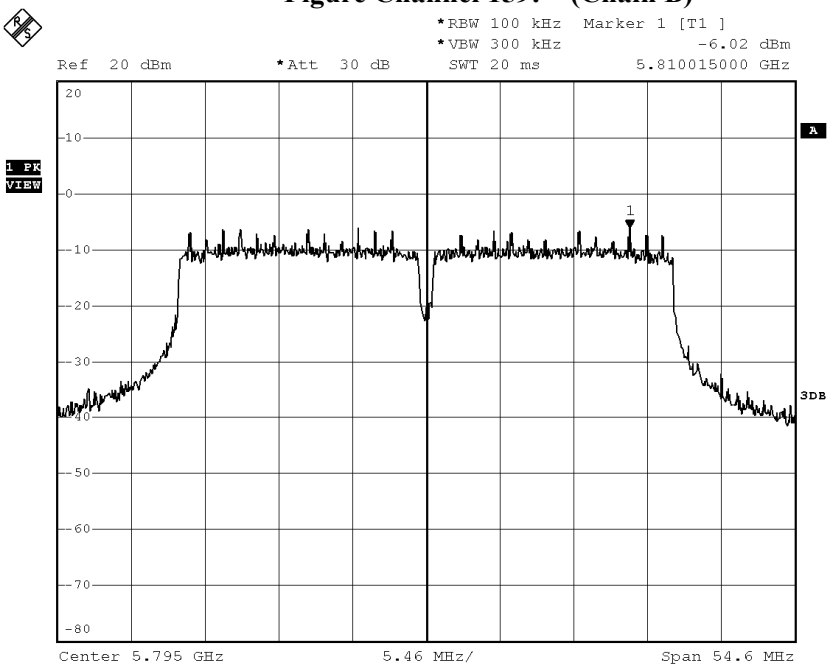
Date: 7.JAN.2015 08:44:53

Figure Channel 159: (Chain A)



Date: 7.JAN.2015 09:12:24

Figure Channel 159: (Chain B)



Date: 7.JAN.2015 09:42:35

Product : Wireless Access Point
Test Item : Power Density Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit - 802.11b 1Mbps (External Antenna)

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
1	2412	5.150	< 8dBm	Pass
6	2437	5.200	< 8dBm	Pass
11	2462	4.690	< 8dBm	Pass

Figure Channel 1:

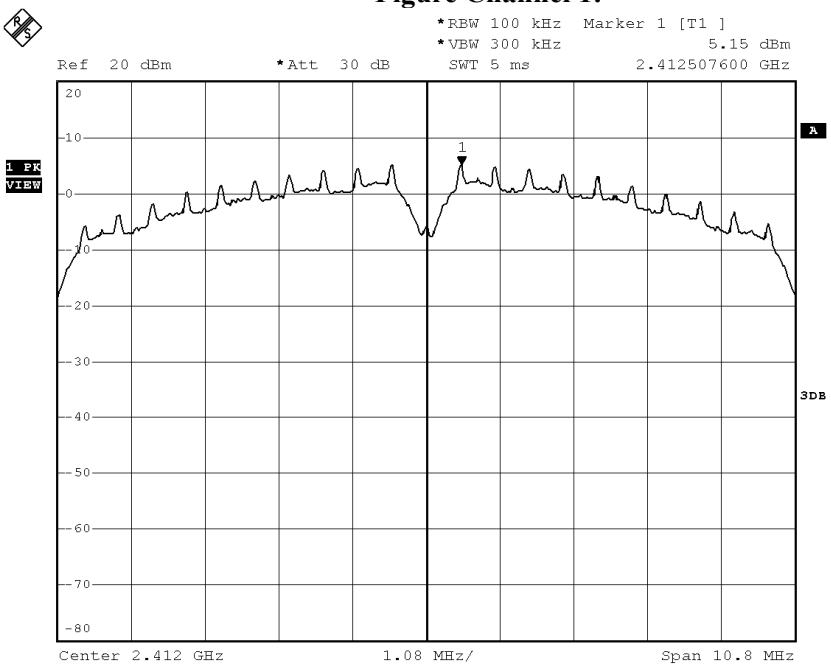
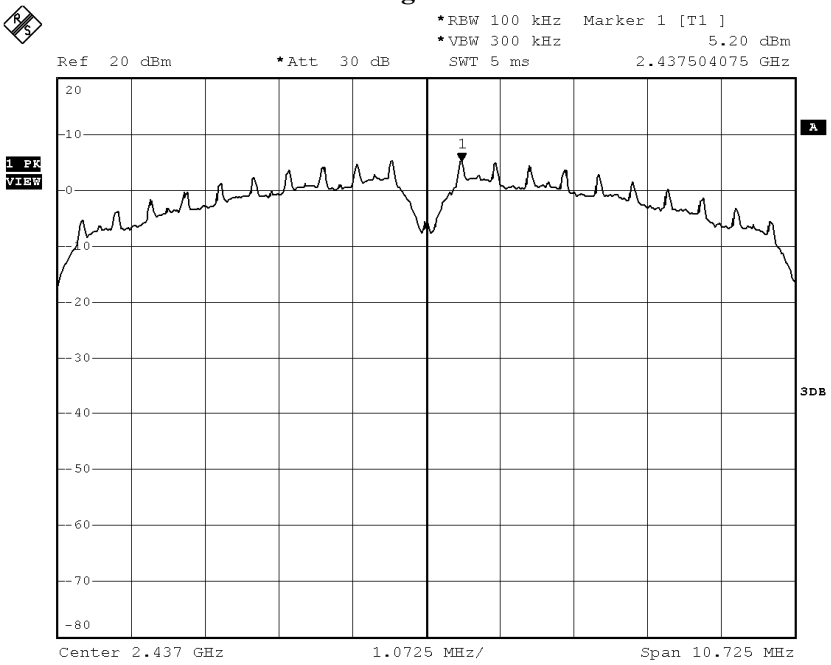
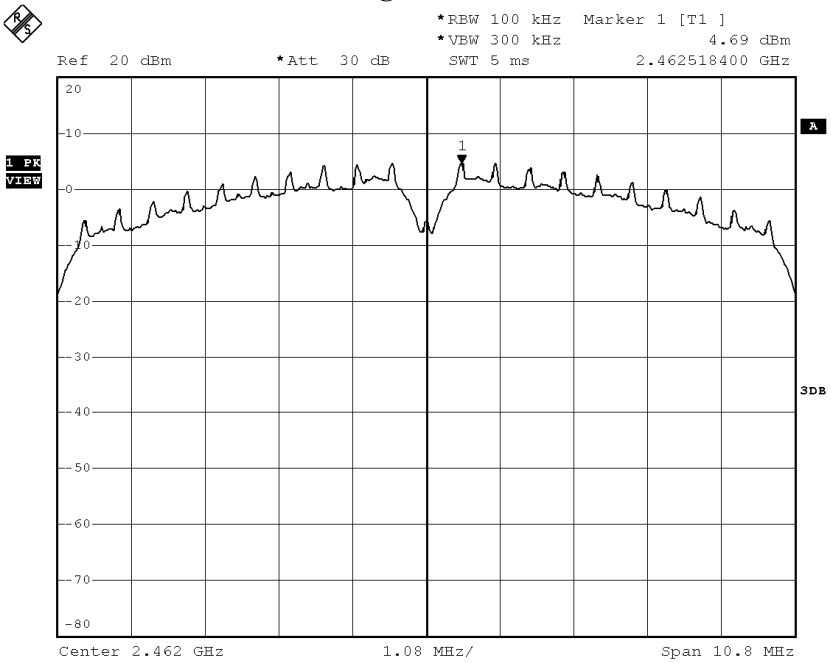


Figure Channel 6:



Date: 7.JAN.2015 10:58:30

Figure Channel 11:

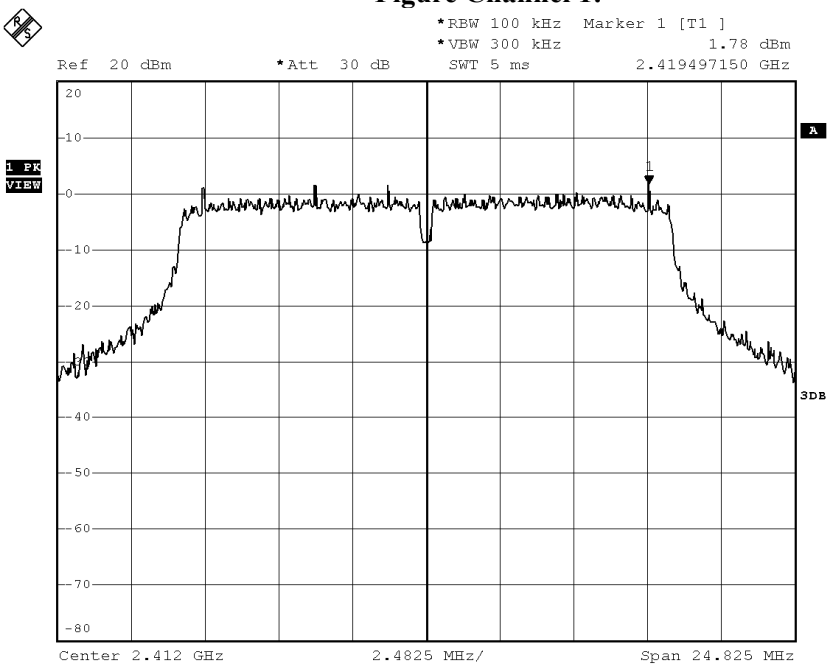


Date: 7.JAN.2015 11:10:54

Product : Wireless Access Point
Test Item : Power Density Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit - 802.11g 6Mbps (External Antenna)

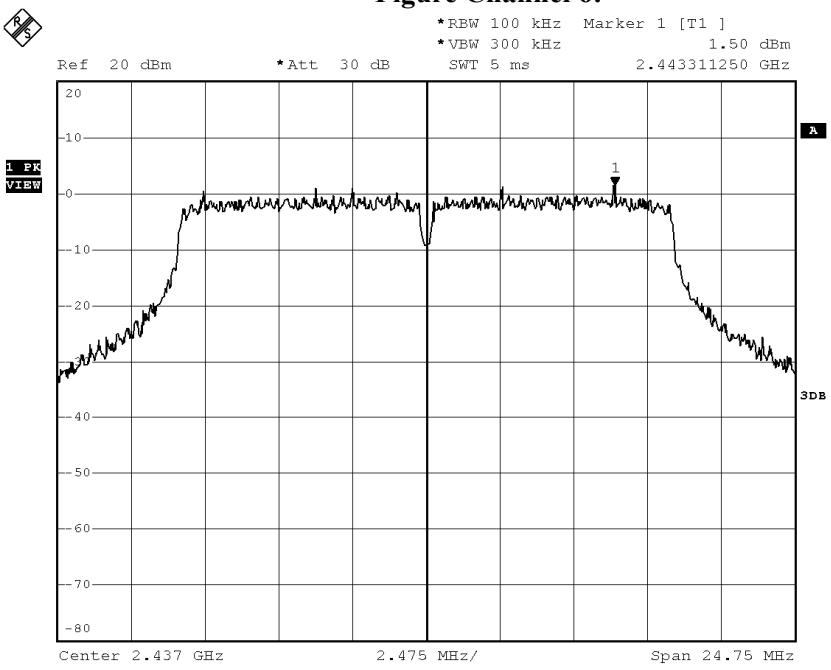
Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
1	2422	1.780	< 8dBm	Pass
6	2437	1.500	< 8dBm	Pass
11	2452	2.190	< 8dBm	Pass

Figure Channel 1:



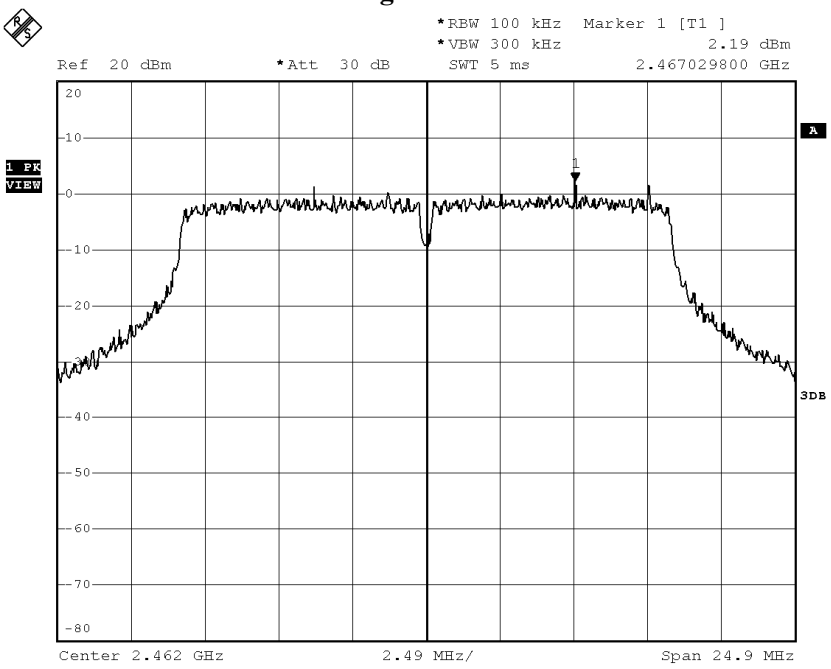
Date: 7.JAN.2015 11:23:46

Figure Channel 6:



Date: 7.JAN.2015 11:48:06

Figure Channel 11:



Date: 7.JAN.2015 12:02:46

Product : Wireless Access Point
Test Item : Power Density Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmit - 802.11a 6Mbps (External Antenna)

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
149	5745	-1.010	< 8dBm	Pass
157	5785	-2.850	< 8dBm	Pass
165	5825	-2.850	< 8dBm	Pass

Figure Channel 149:

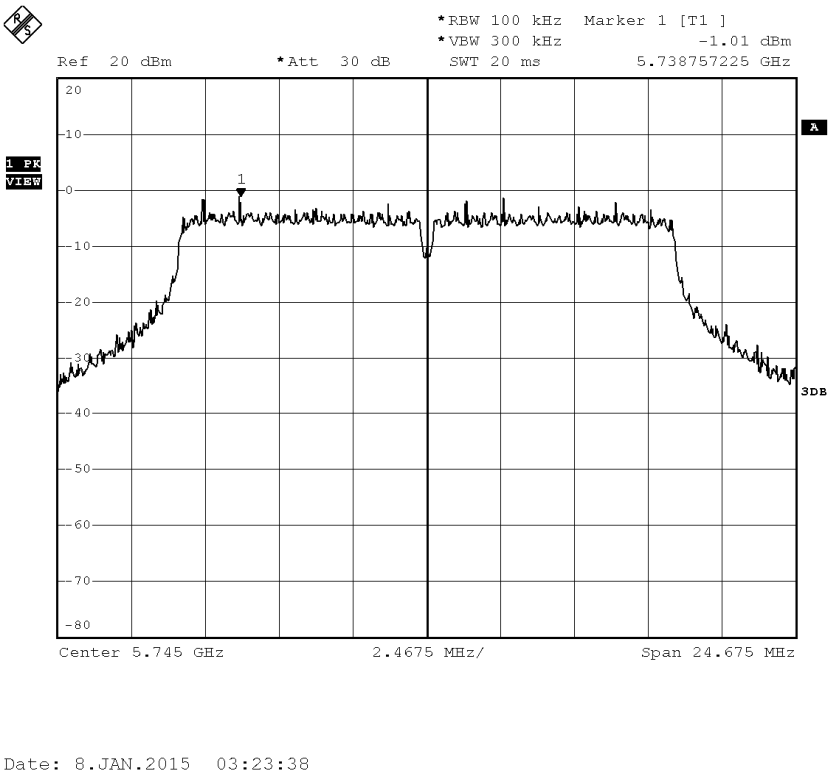
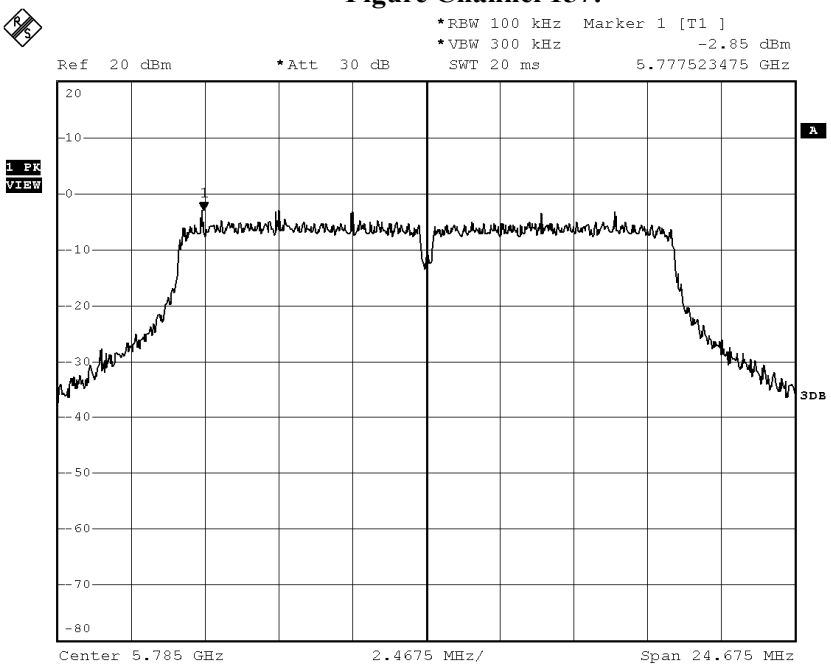
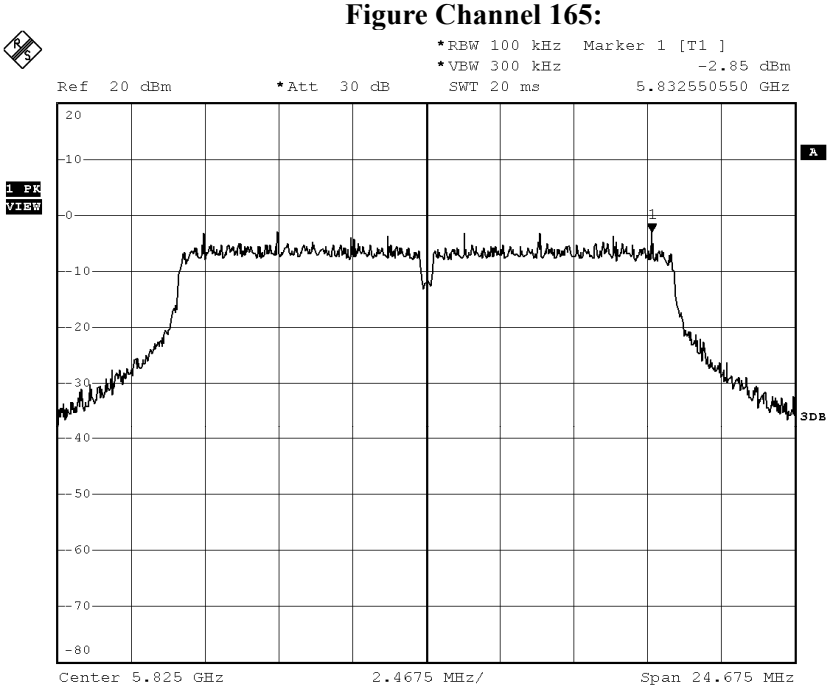


Figure Channel 157:



Date: 8.JAN.2015 03:52:38

Figure Channel 165:



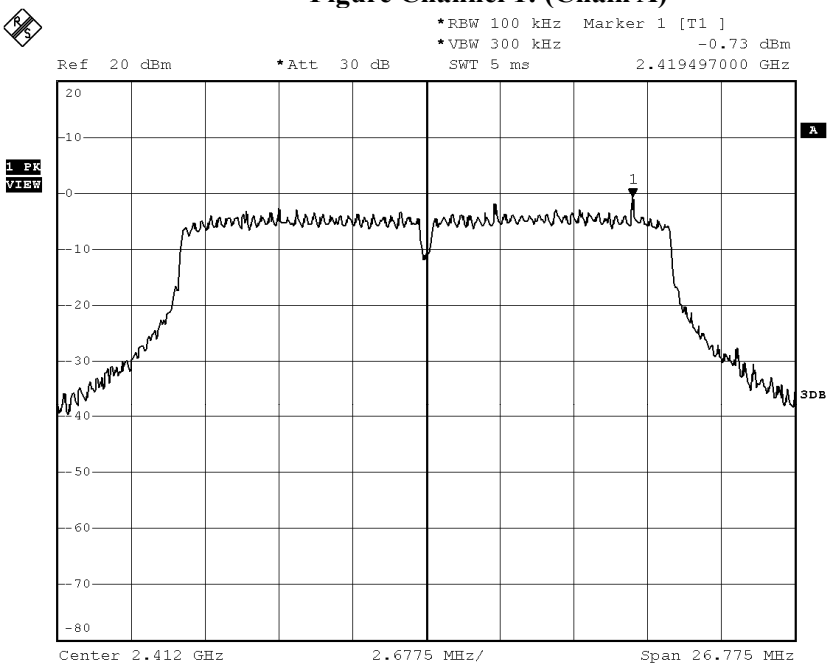
Date: 8.JAN.2015 04:31:36

Product : Wireless Access Point
Test Item : Power Density Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit - 802.11n-20BW_14.4Mbps(2.4G Band) (External Antenna)

Channel	Frequency (MHz)	Chain (dBm)	PPSD/MHz (dBm)	Total PPSD/MHz (dBm)	Limit	Result
1	2412	A	-0.730	2.280	< 8dBm	Pass
		B	-2.510	0.500	< 8dBm	Pass
6	2437	A	-0.400	2.610	< 8dBm	Pass
		B	-1.720	1.290	< 8dBm	Pass
11	2462	A	-1.150	1.860	< 8dBm	Pass
		B	-1.850	1.160	< 8dBm	Pass

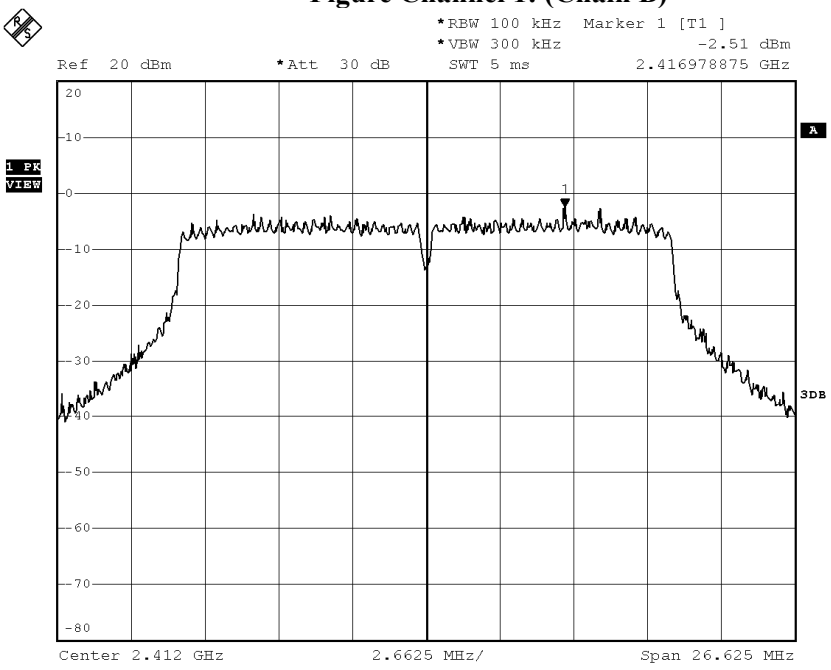
Note 1: The quantity 10*log 2 (two antennas) is added to the spectrum peak value according to document 662911 D01.

Figure Channel 1: (Chain A)



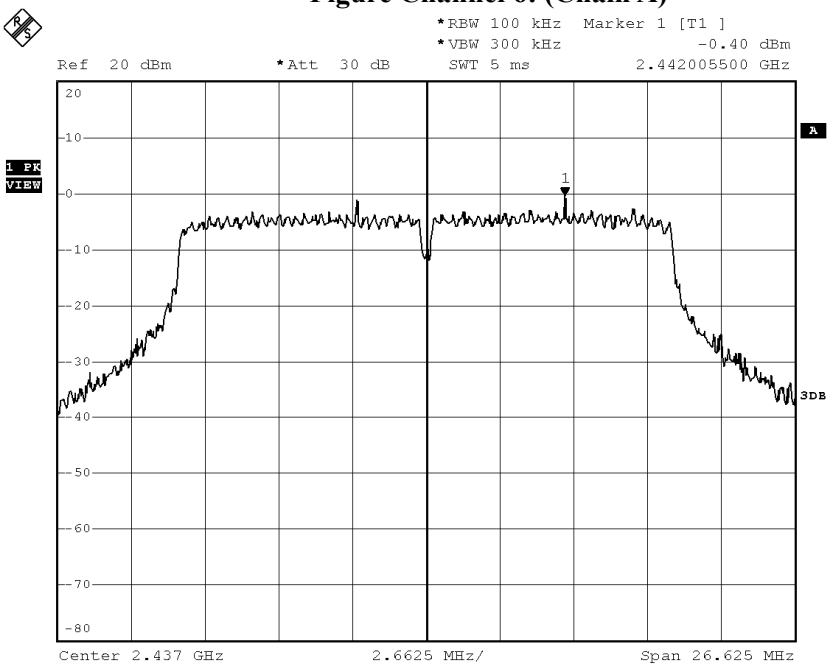
Date: 7.JAN.2015 12:17:49

Figure Channel 1: (Chain B)



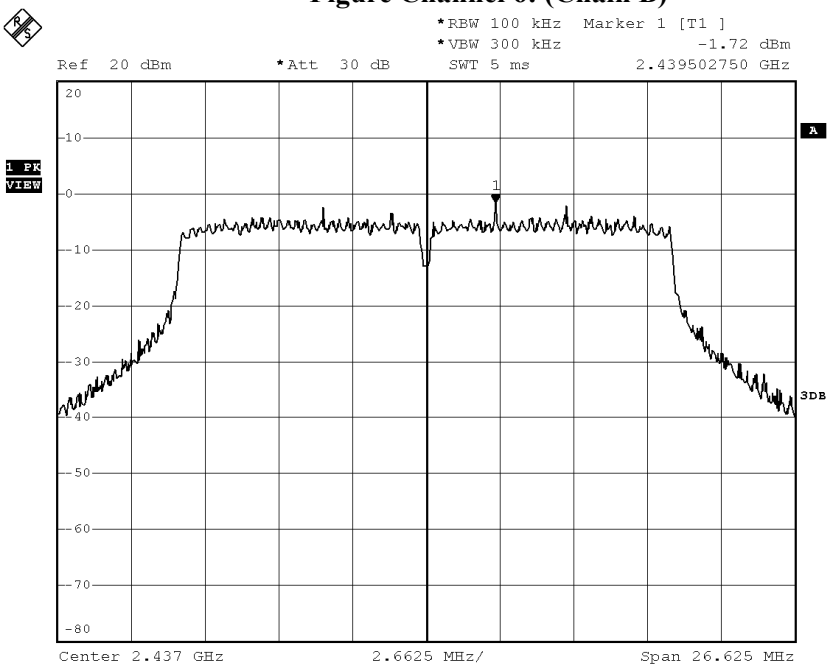
Date: 7.JAN.2015 12:36:56

Figure Channel 6: (Chain A)



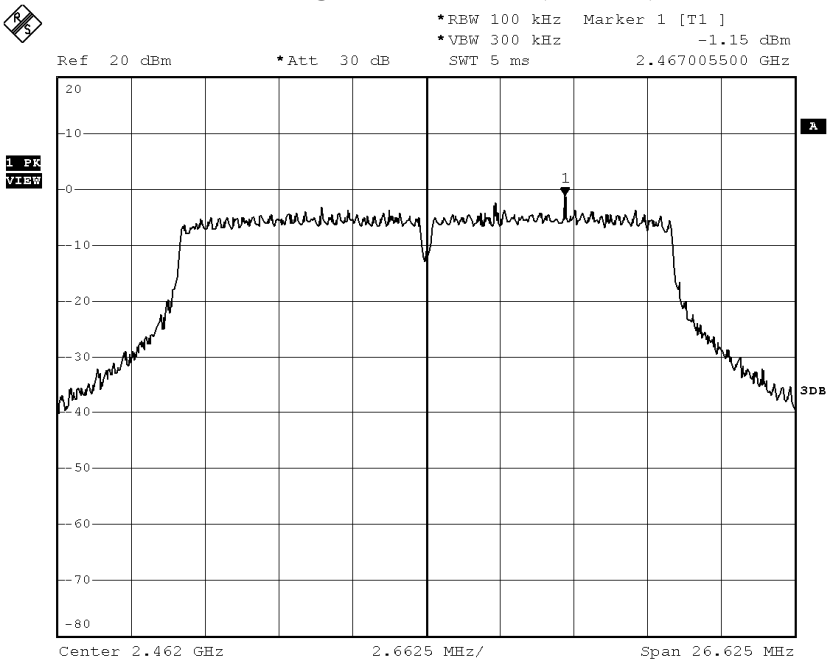
Date: 7.JAN.2015 12:47:47

Figure Channel 6: (Chain B)



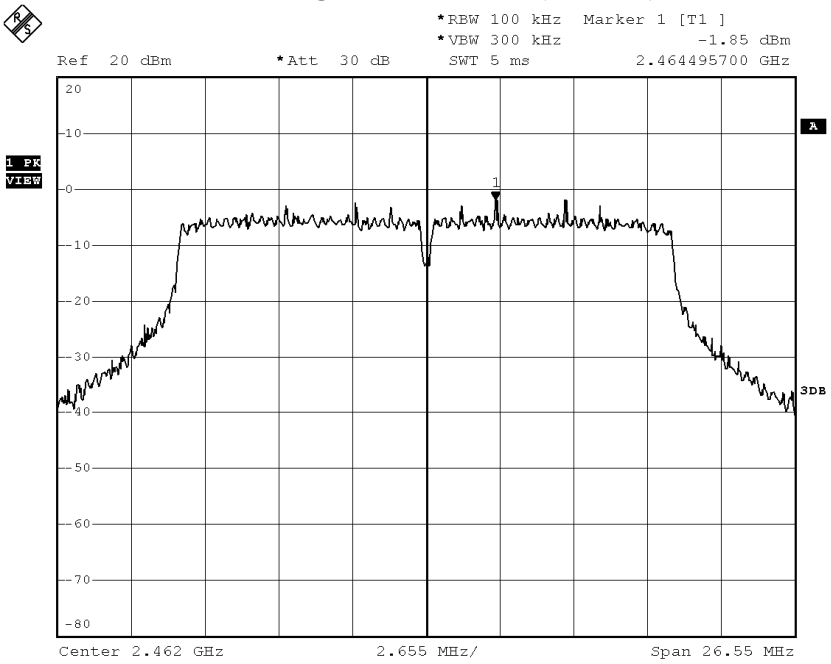
Date: 7.JAN.2015 12:57:08

Figure Channel 11: (Chain A)



Date: 7.JAN.2015 13:17:24

Figure Channel 11: (Chain B)



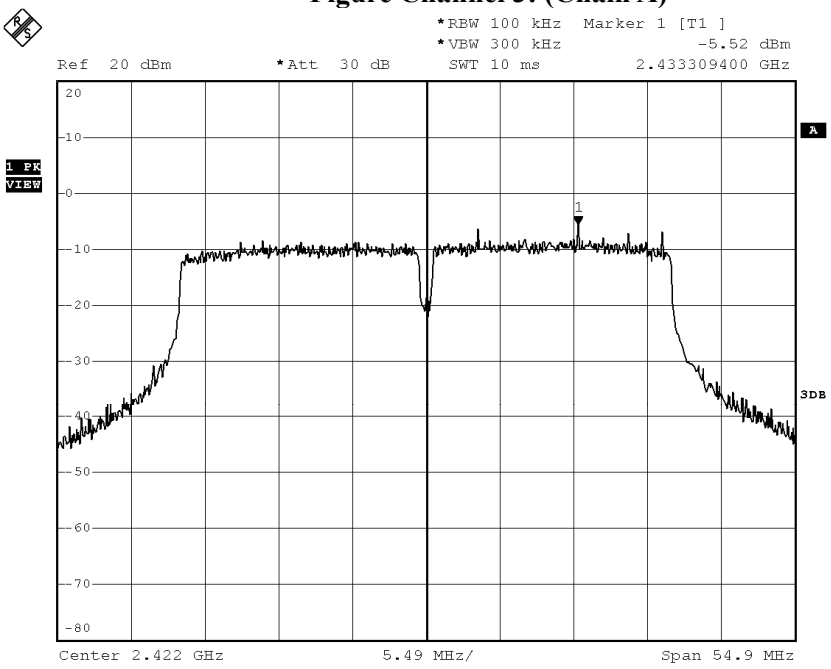
Date: 7.JAN.2015 13:30:53

Product : Wireless Access Point
Test Item : Power Density Data
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit - 802.11n-40BW_30Mbps(2.4G Band) (External Antenna)

Channel	Frequency (MHz)	Chain (dBm)	PPSD/MHz (dBm)	Total PPSD/MHz (dBm)	Limit	Result
3	2422	A	-5.520	-2.510	< 8dBm	Pass
		B	-7.550	-4.540	< 8dBm	Pass
6	2437	A	-5.770	-2.760	< 8dBm	Pass
		B	-7.030	-4.020	< 8dBm	Pass
9	2452	A	-6.090	-3.080	< 8dBm	Pass
		B	-7.570	-4.560	< 8dBm	Pass

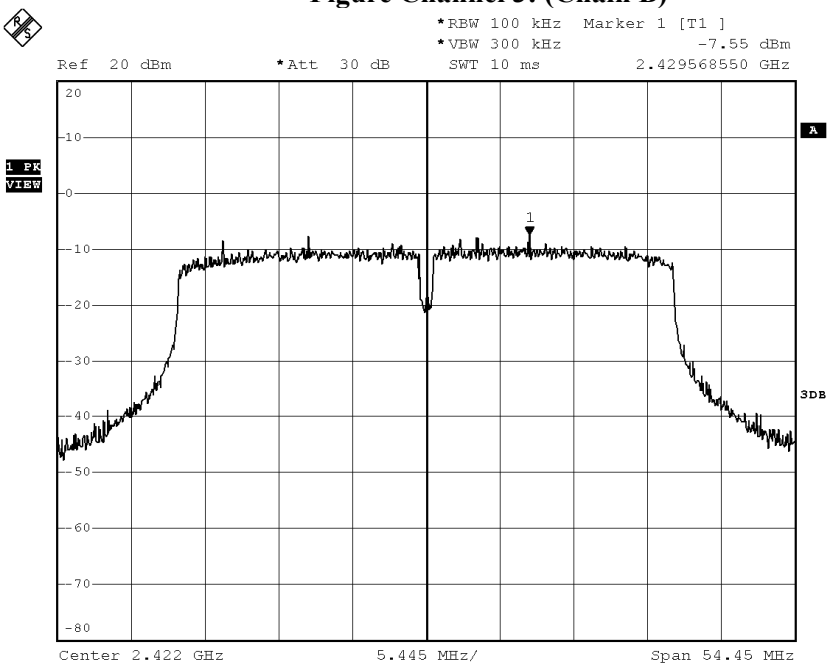
Note 1: The quantity 10*log 2 (two antennas) is added to the spectrum peak value according to document 662911 D01.

Figure Channel 3: (Chain A)



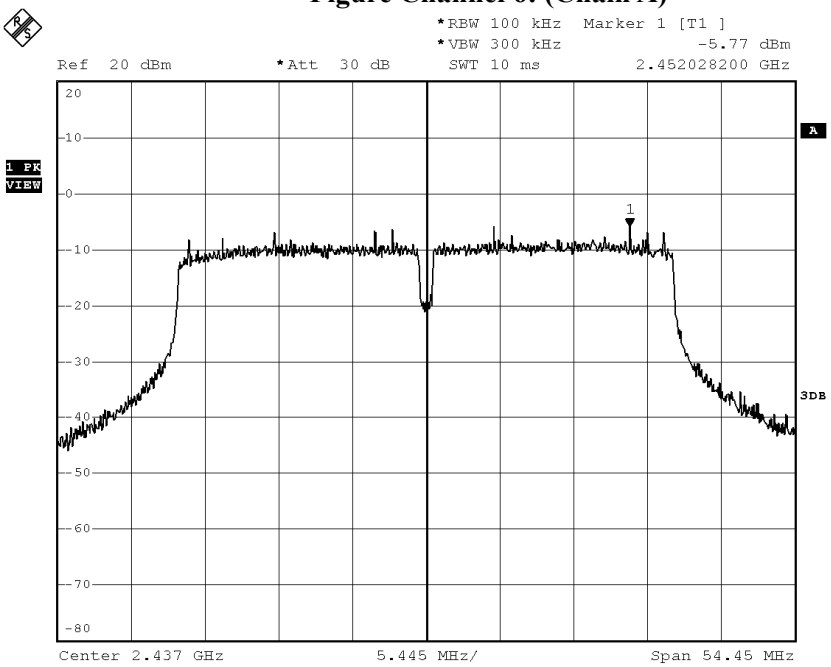
Date: 7.JAN.2015 13:44:37

Figure Channel 3: (Chain B)



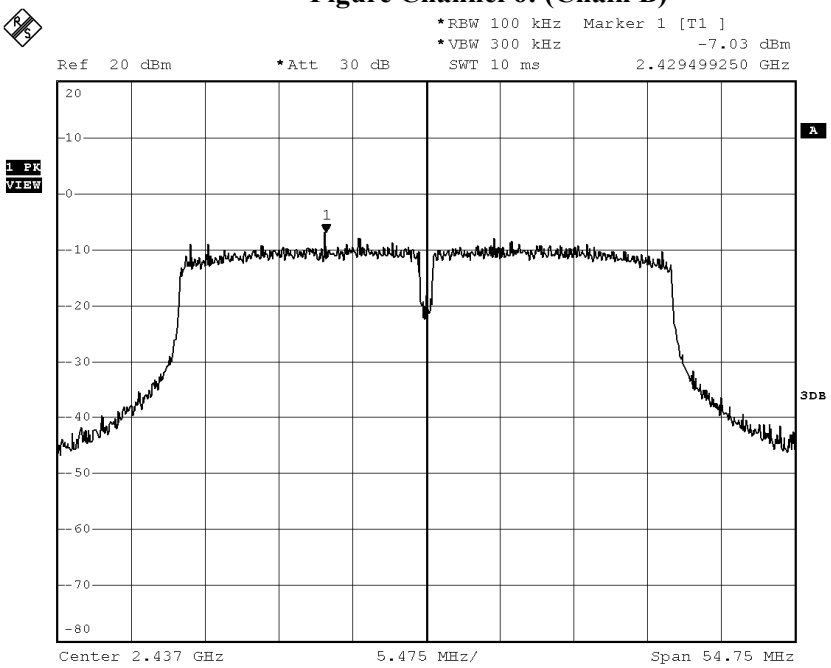
Date: 7.JAN.2015 13:58:42

Figure Channel 6: (Chain A)



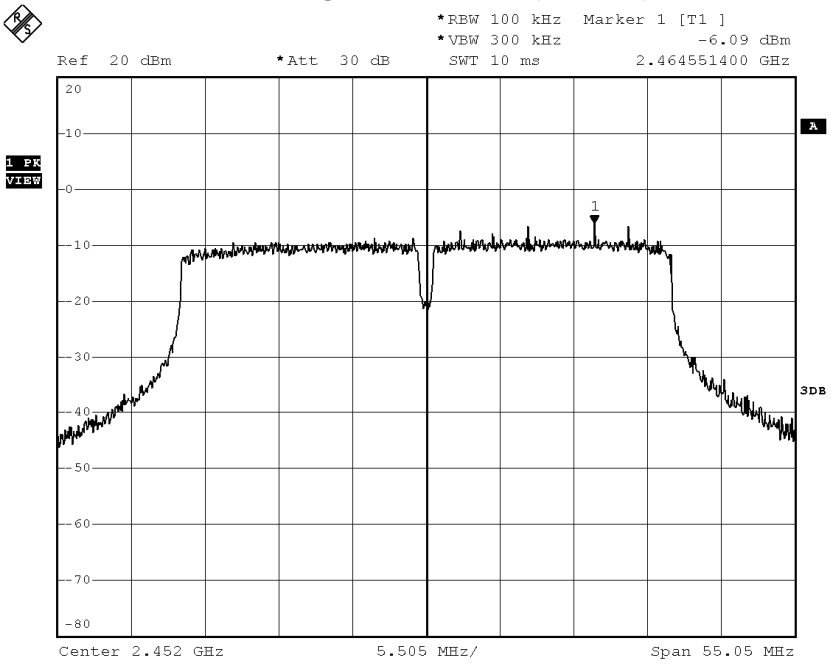
Date: 7.JAN.2015 14:12:06

Figure Channel 6: (Chain B)



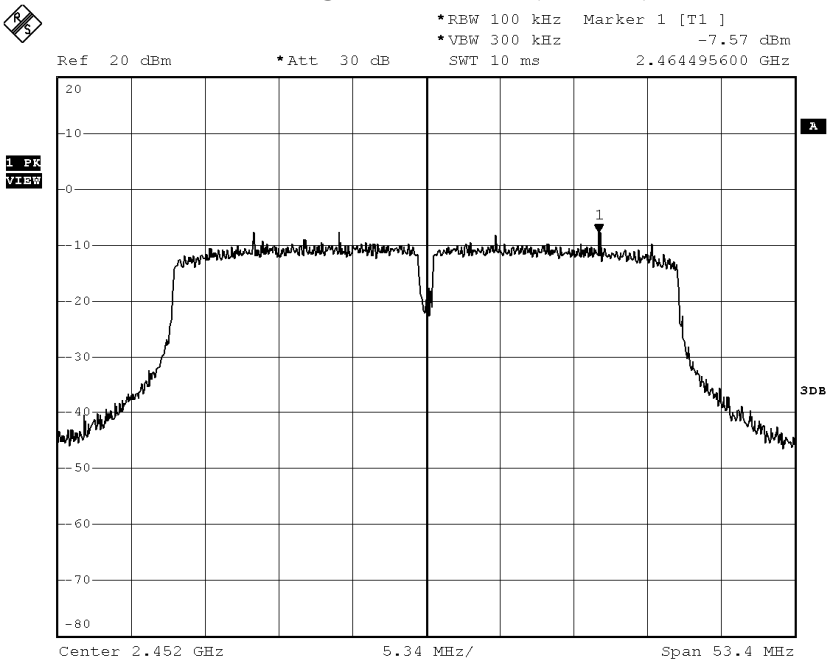
Date: 7.JAN.2015 14:33:11

Figure Channel 9: (Chain A)



Date: 8.JAN.2015 02:56:54

Figure Channel 9: (Chain B)



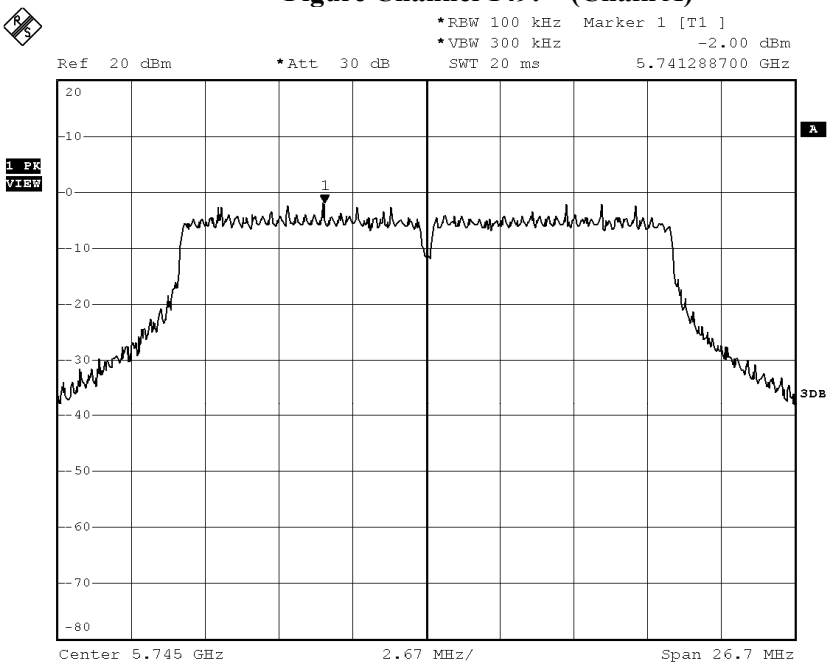
Date: 8.JAN.2015 03:08:24

Product : Wireless Access Point
Test Item : Power Density Data
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit - 802.11n-20BW_14.4Mbps(5G Band) (External Antenna)

Channel	Frequency (MHz)	Chain (dBm)	PPSD/MHz (dBm)	Total PPSD/MHz (dBm)	Limit	Result
149	5745	A	-2.000	1.010	< 8dBm	Pass
		B	-0.010	3.000	< 8dBm	Pass
157	5785	A	-1.570	1.440	< 8dBm	Pass
		B	-1.700	1.310	< 8dBm	Pass
165	5825	A	-1.960	1.050	< 8dBm	Pass
		B	-1.850	1.160	< 8dBm	Pass

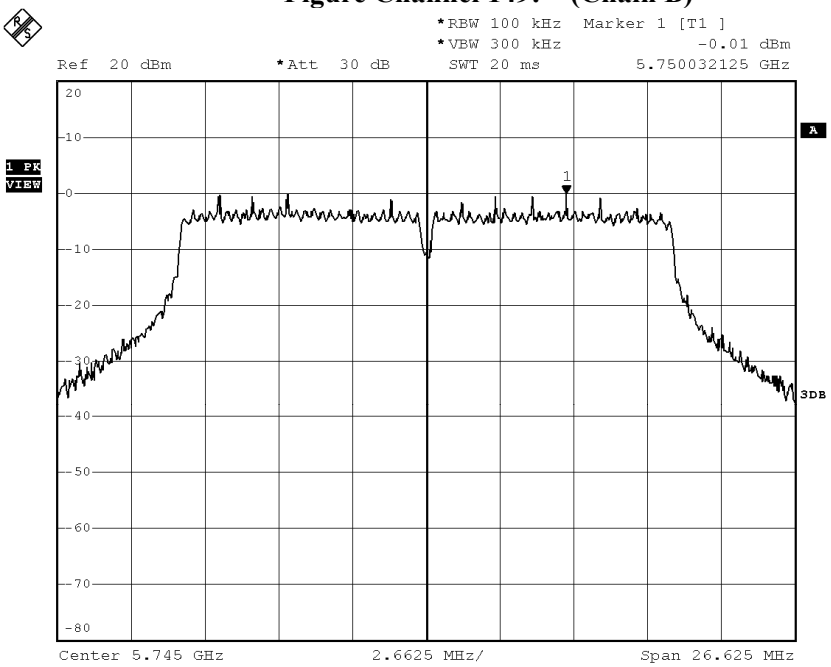
Note 1: The quantity 10*log 2 (two antennas) is added to the spectrum peak value according to document 662911 D01.

Figure Channel 149: (Chain A)



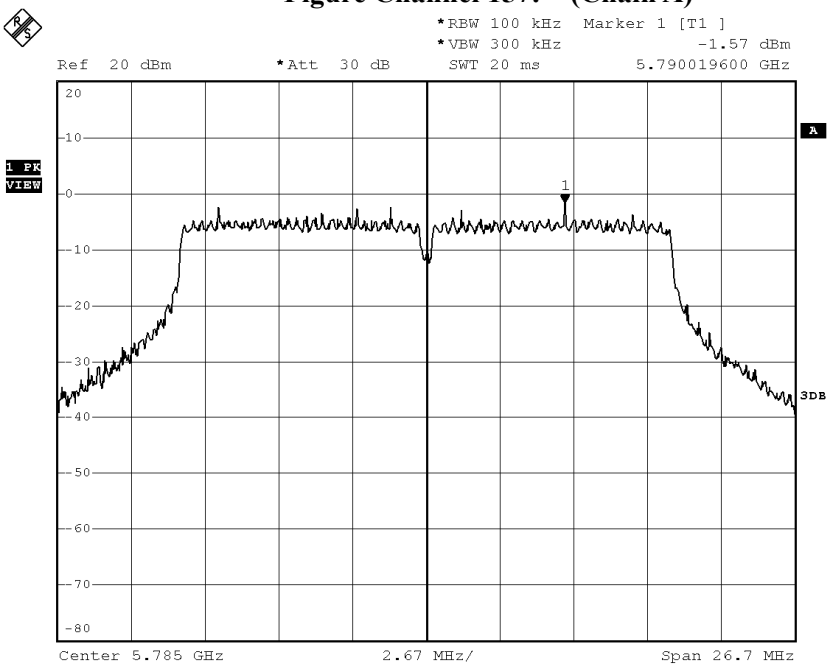
Date: 8.JAN.2015 04:59:15

Figure Channel 149: (Chain B)



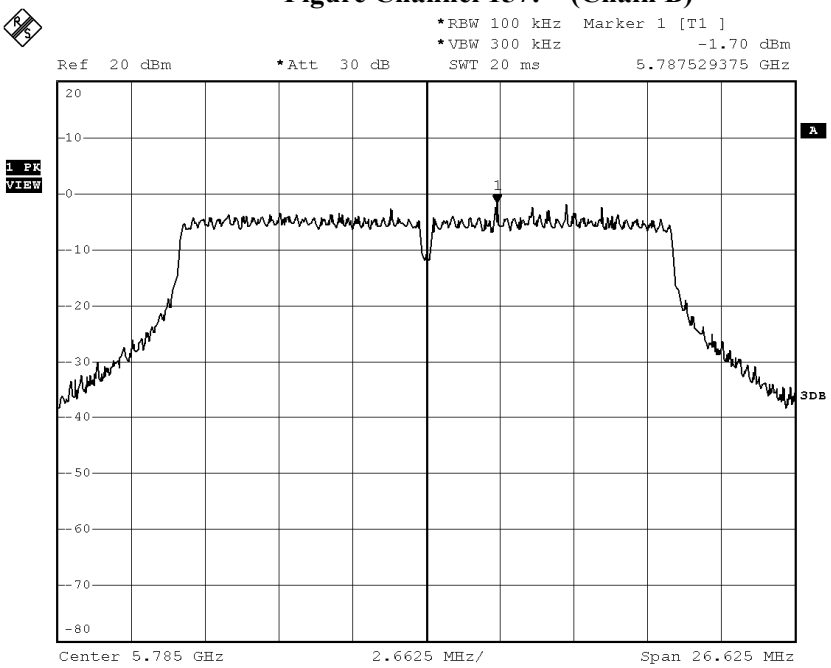
Date: 8.JAN.2015 05:26:53

Figure Channel 157: (Chain A)



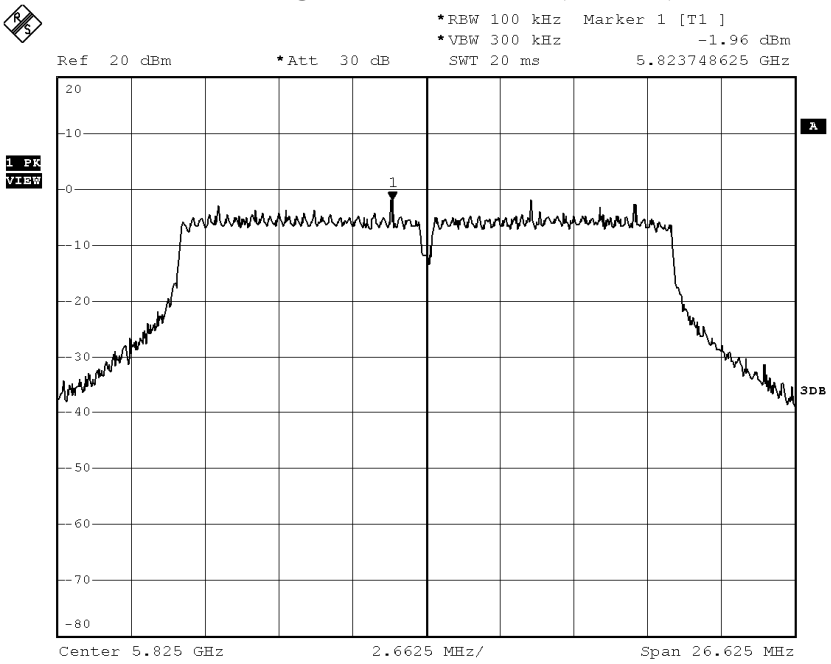
Date: 8.JAN.2015 06:38:38

Figure Channel 157: (Chain B)



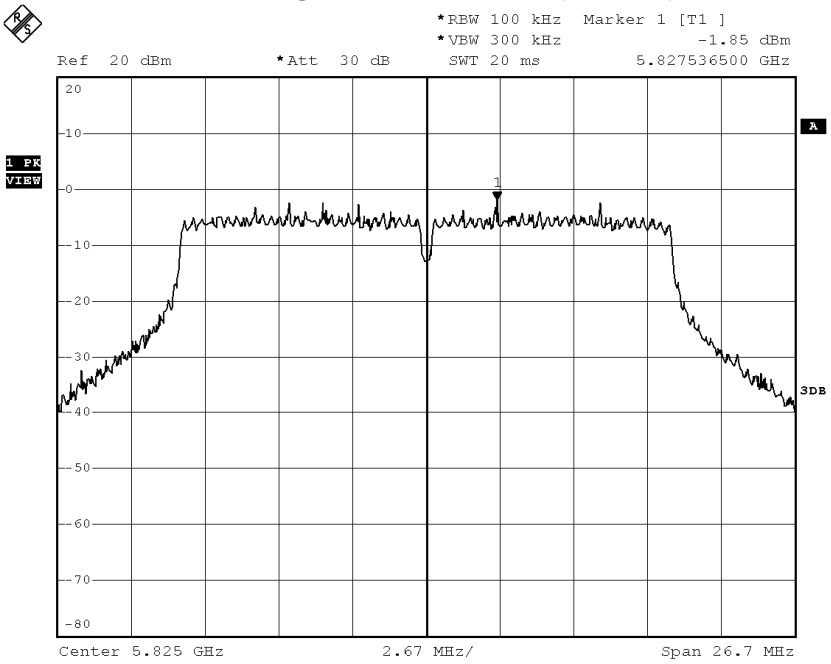
Date: 8.JAN.2015 07:05:39

Figure Channel 165: (Chain A)



Date: 8.JAN.2015 07:33:29

Figure Channel 165: (Chain B)



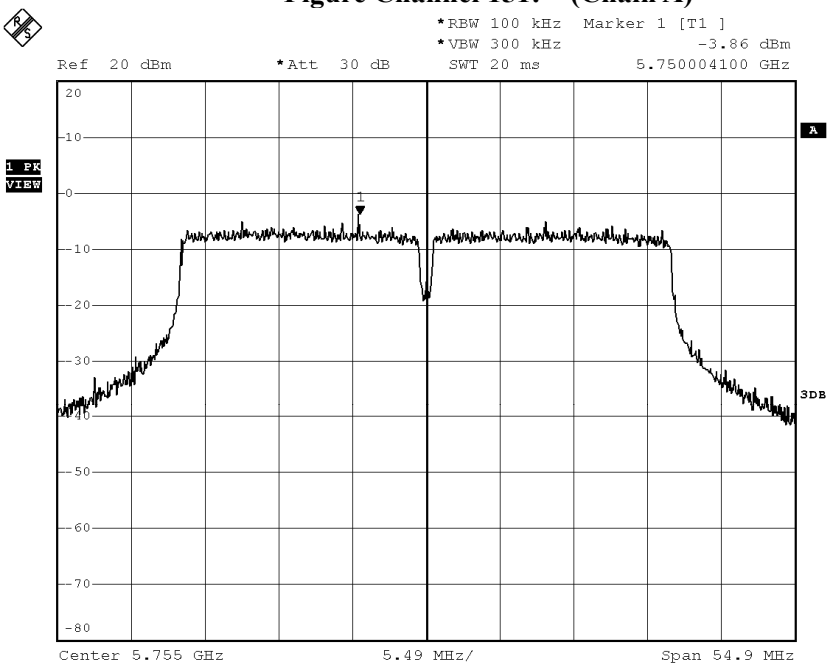
Date: 8.JAN.2015 08:04:05

Product : Wireless Access Point
Test Item : Power Density Data
Test Site : No.3 OATS
Test Mode : Mode 7: Transmit - 802.11n-40BW_30Mbps(5G Band) (External Antenna)

Channel	Frequency (MHz)	Chain (dBm)	PPSD/MHz (dBm)	Total PPSD/MHz (dBm)	Limit	Result
151	5755	A	-3.860	-0.850	< 8dBm	Pass
		B	-3.100	-0.090	< 8dBm	Pass
159	5795	A	-4.700	-1.690	< 8dBm	Pass
		B	-4.250	-1.240	< 8dBm	Pass

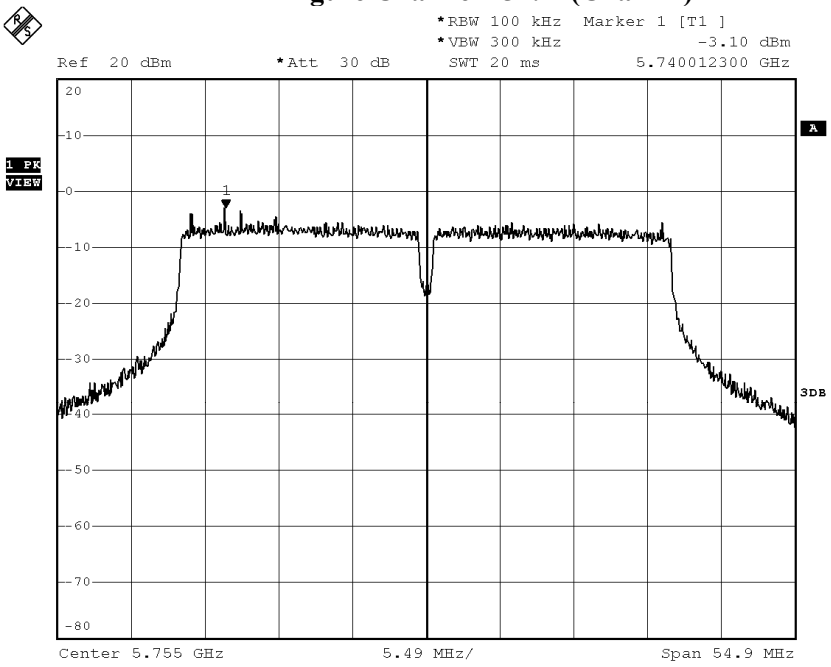
Note 1: The quantity 10*log 2 (two antennas) is added to the spectrum peak value according to document 662911 D01.

Figure Channel 151: (Chain A)



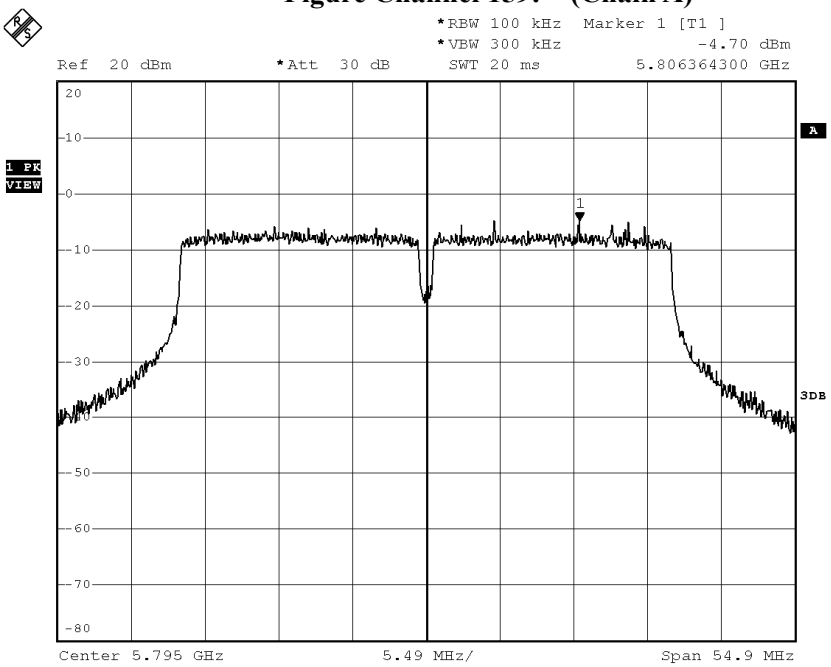
Date: 8.JAN.2015 08:34:13

Figure Channel 151: (Chain B)



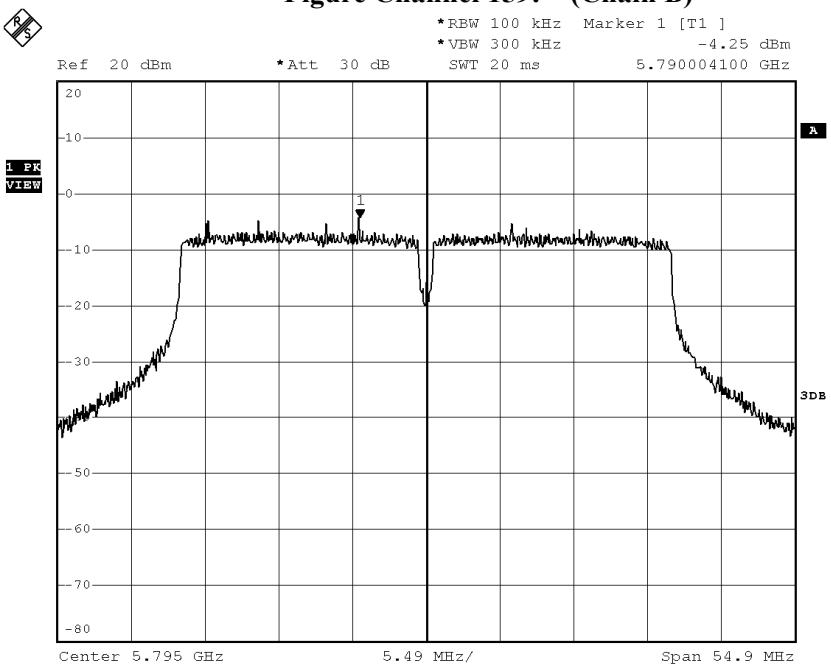
Date: 8.JAN.2015 09:09:30

Figure Channel 159: (Chain A)



Date: 8.JAN.2015 09:39:27

Figure Channel 159: (Chain B)



Date: 8.JAN.2015 10:14:48

Product : Wireless Access Point
Test Item : Power Density Data
Test Site : No.3OATS
Test Mode : Mode 8: Transmit - 802.11ac-80BW-65Mbps (External Antenna)

Channel	Frequency (MHz)	Chain (dBm)	PPSD/MHz (dBm)	Total PPSD/MHz (dBm)	Limit	Result
155	5775	A	-8.648	-5.638	< 8dBm	Pass
		B	-7.880	-4.870	< 8dBm	Pass

Note 1: The quantity 10*log 2 (two antennas) is added to the spectrum peak value according to document 662911 D01.

Figure Channel 155: (Chain A)

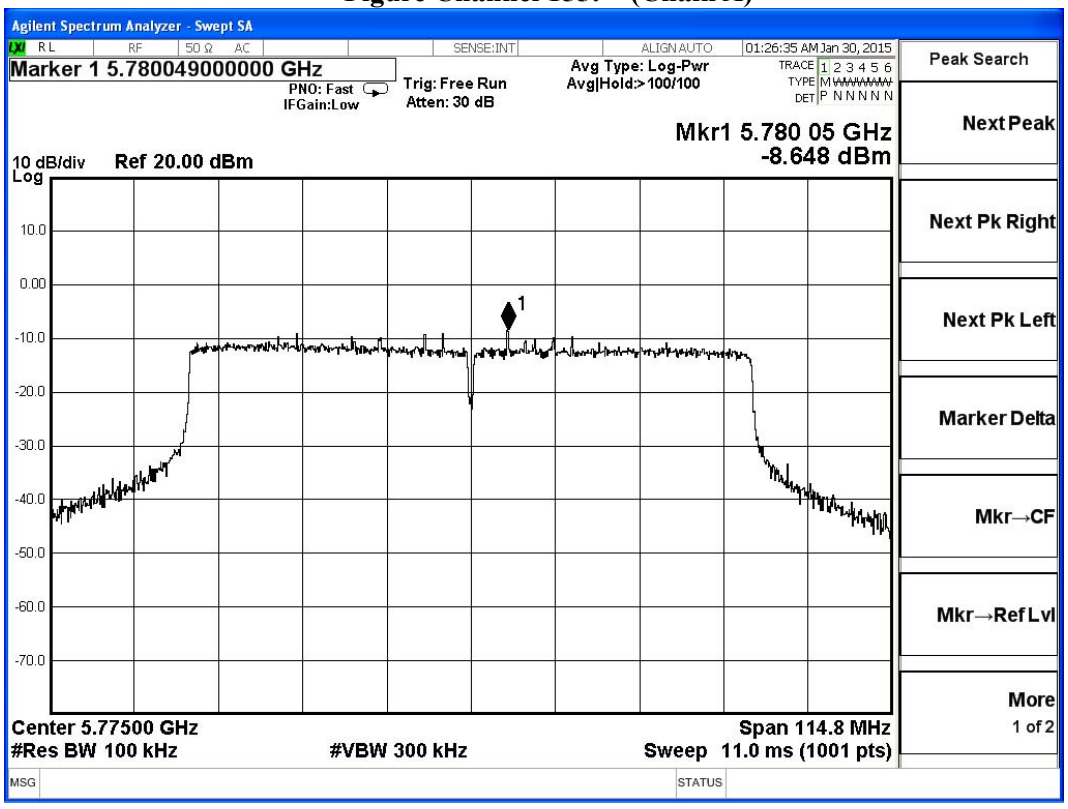
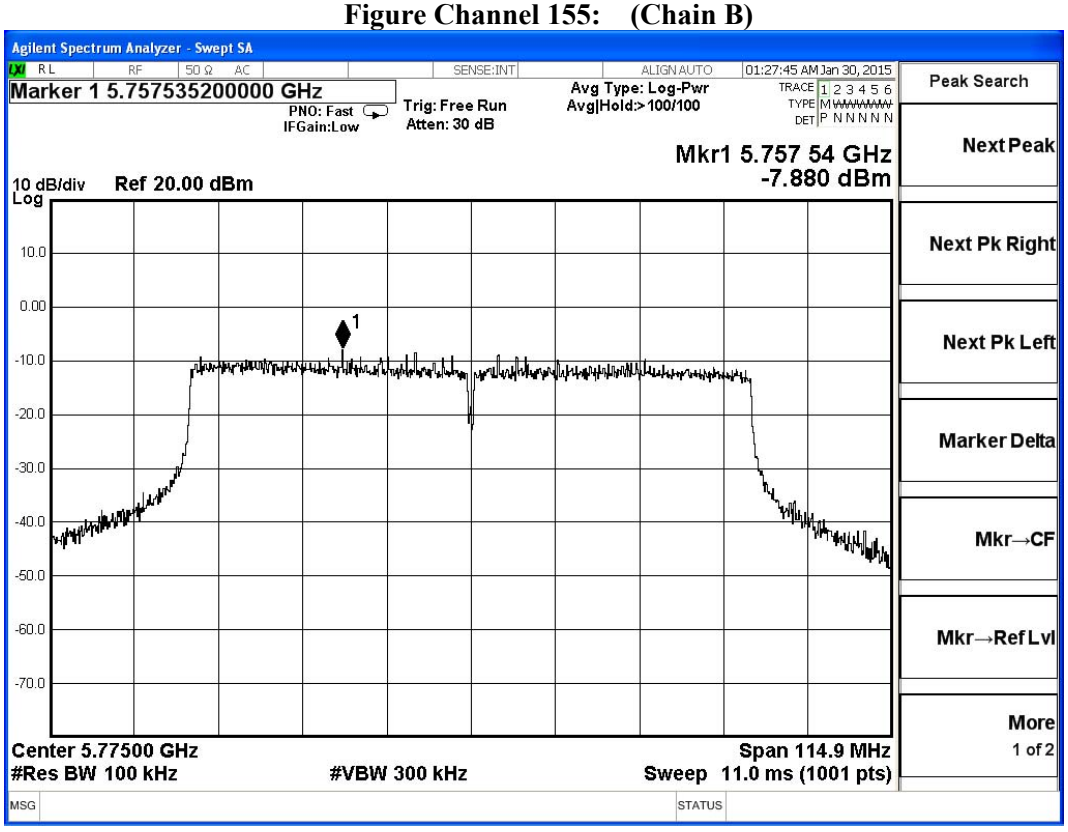


Figure Channel 155: (Chain B)



9. EMI Reduction Method During Compliance Testing

No modification was made during testing.

Attachment 1: EUT Test Photographs

Attachment 2: EUT Detailed Photographs