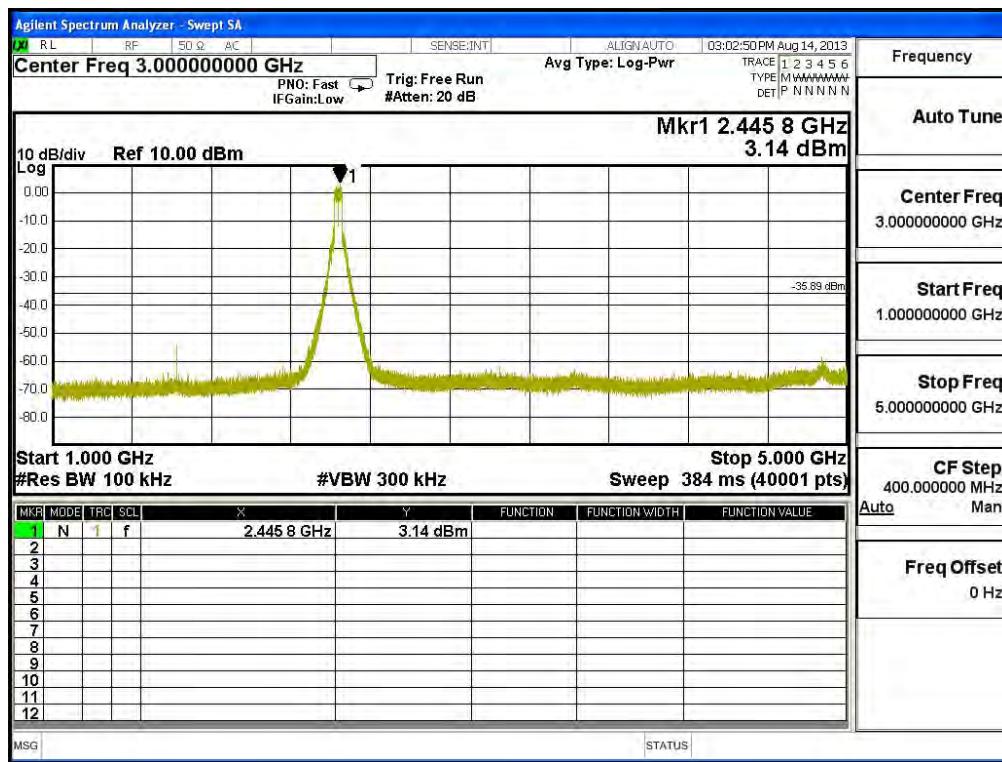
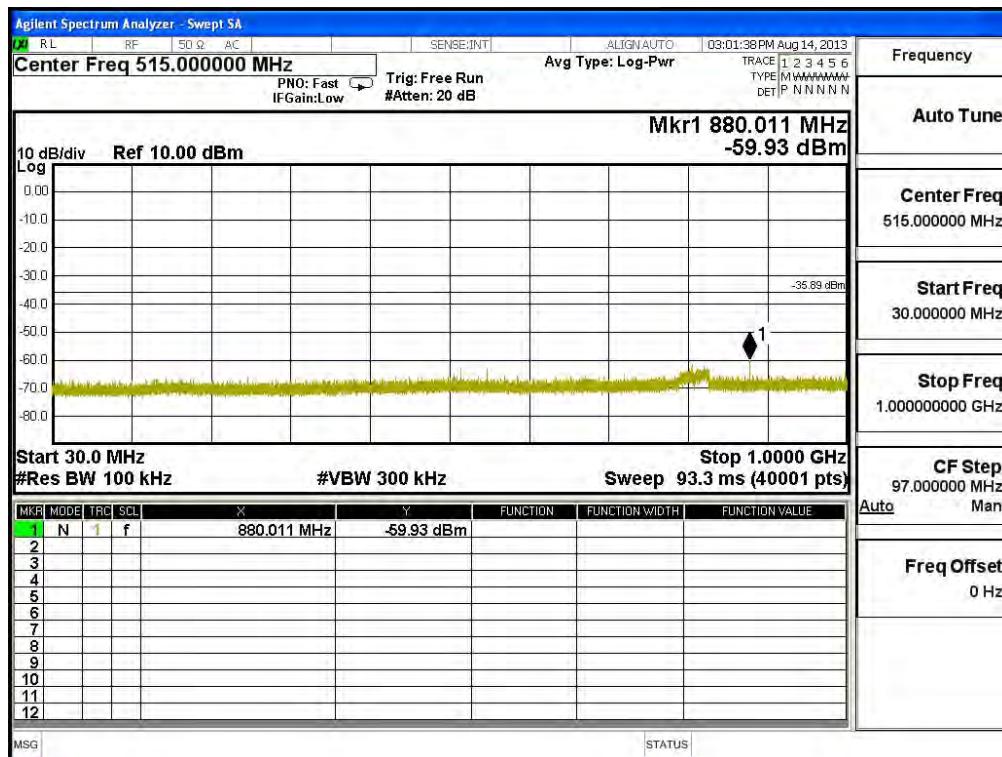
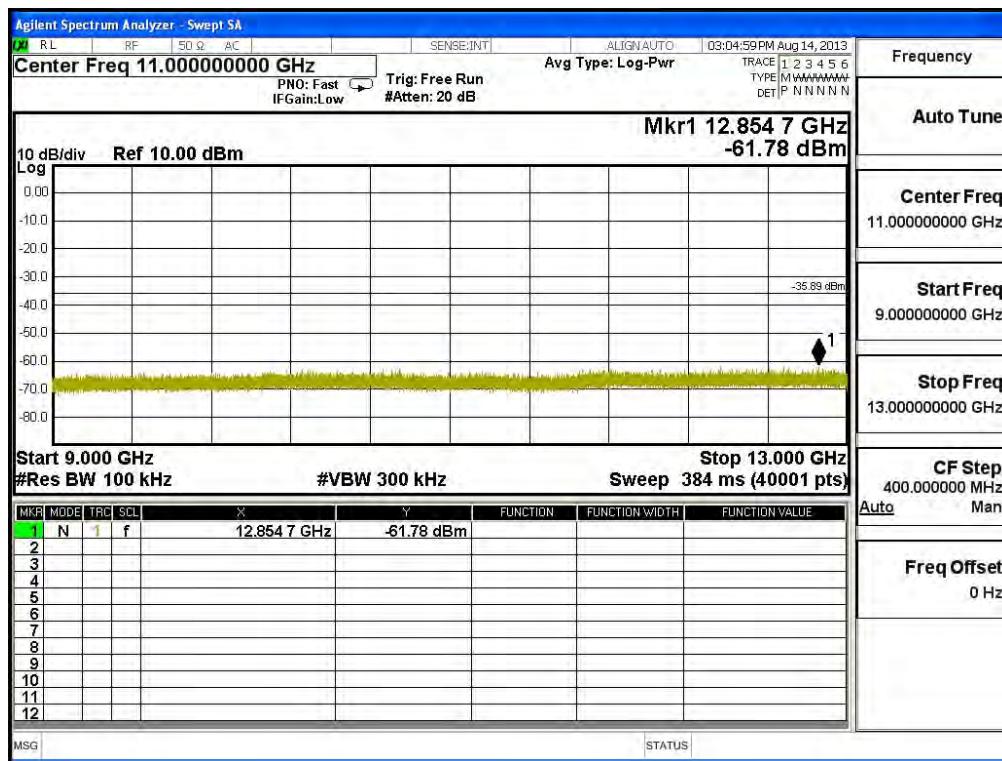
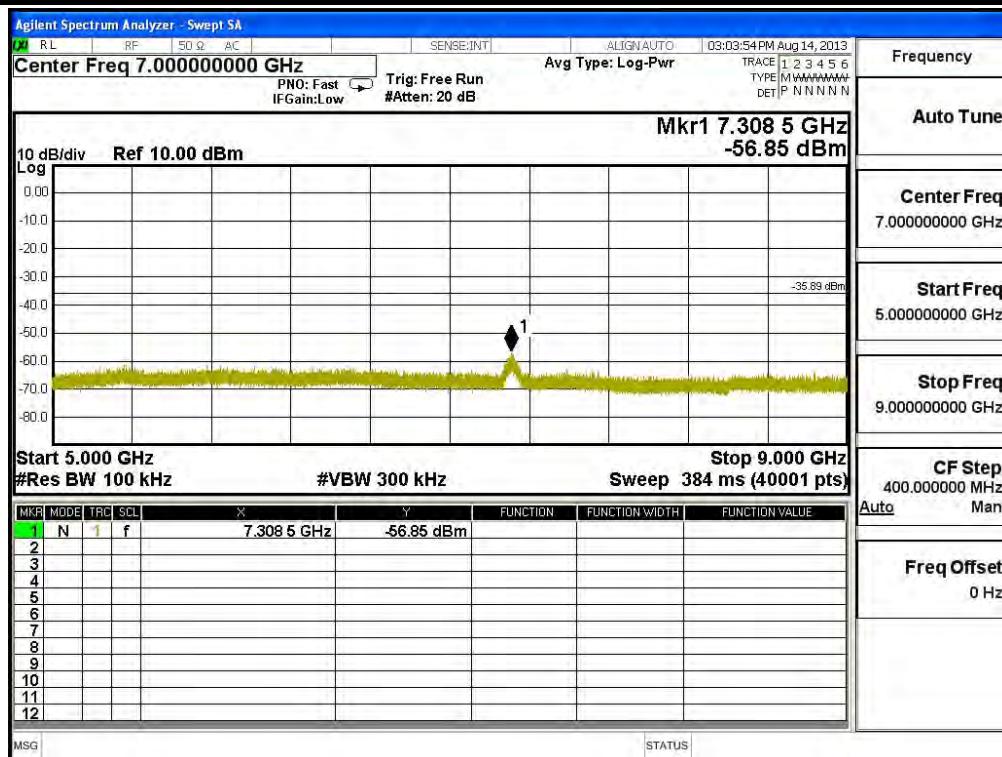
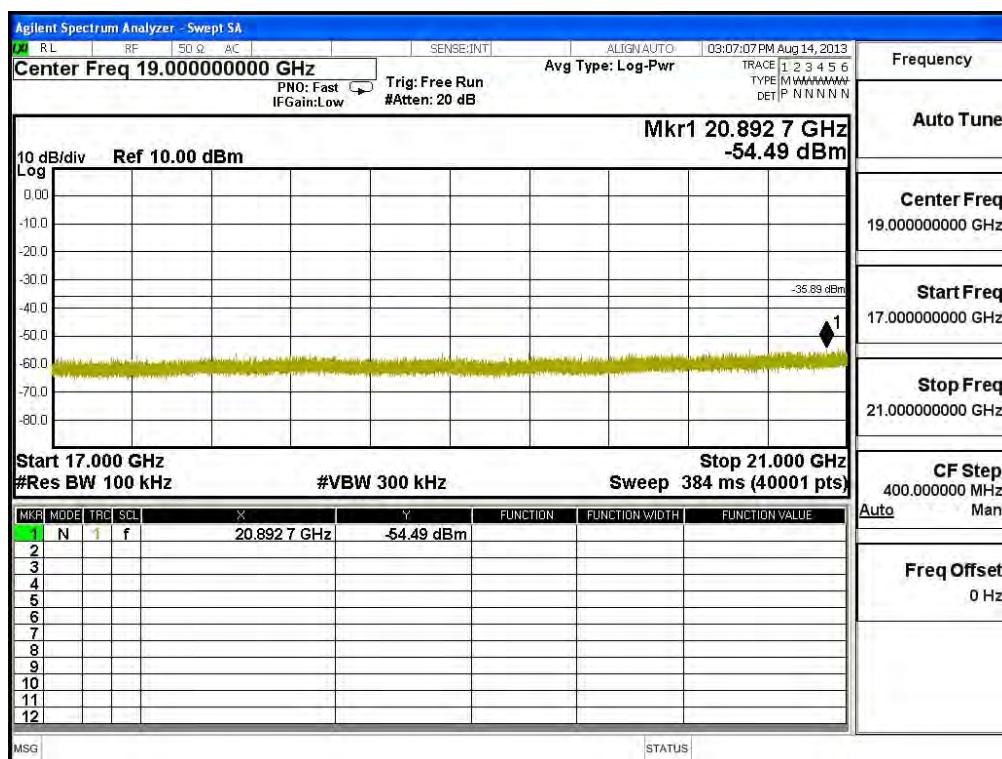
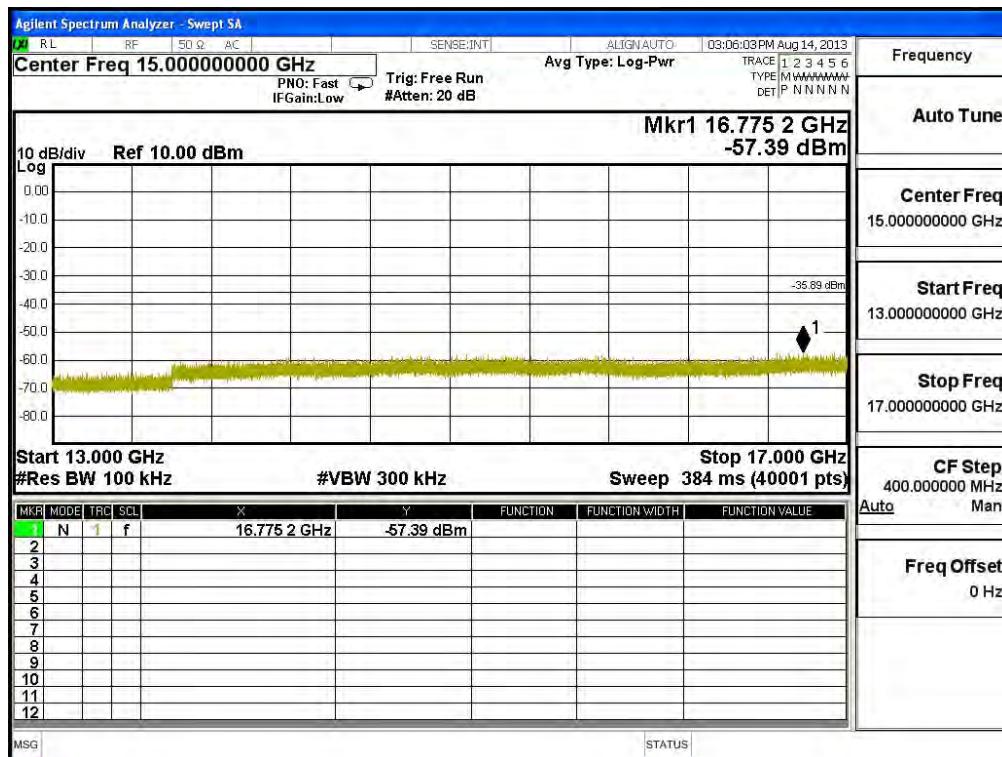
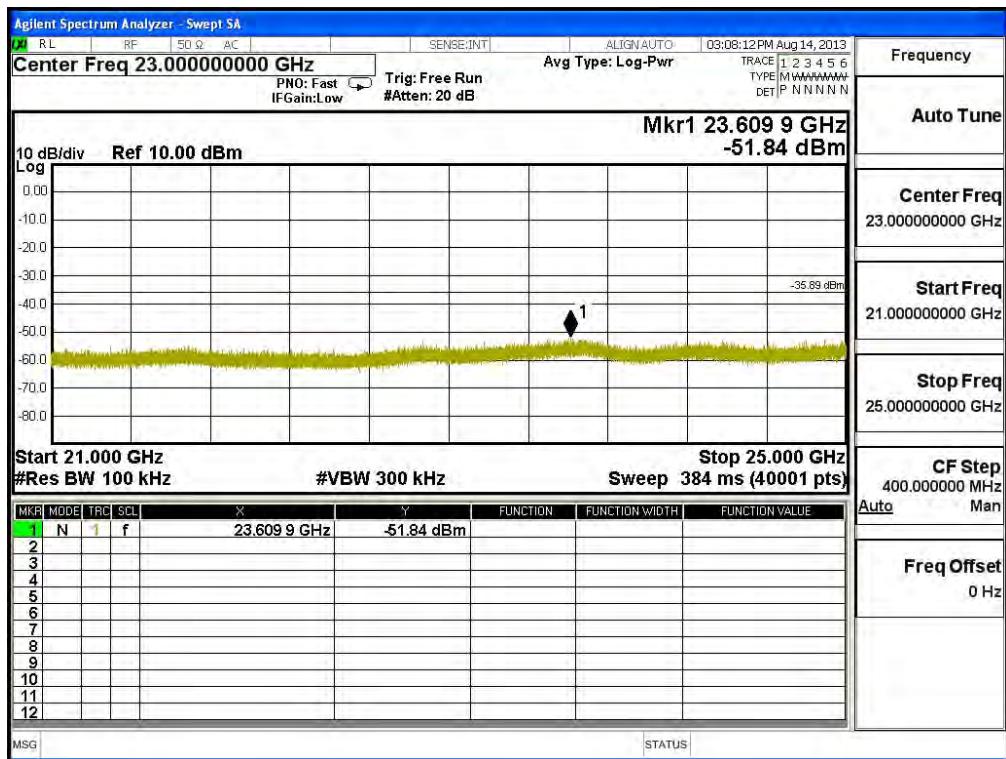


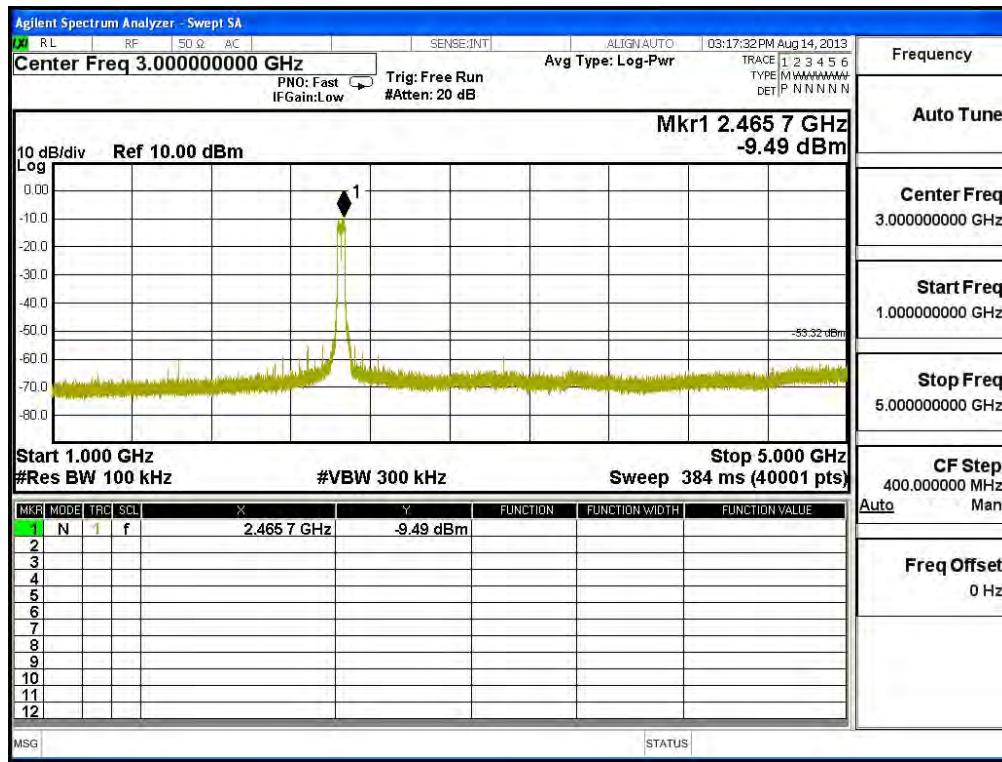
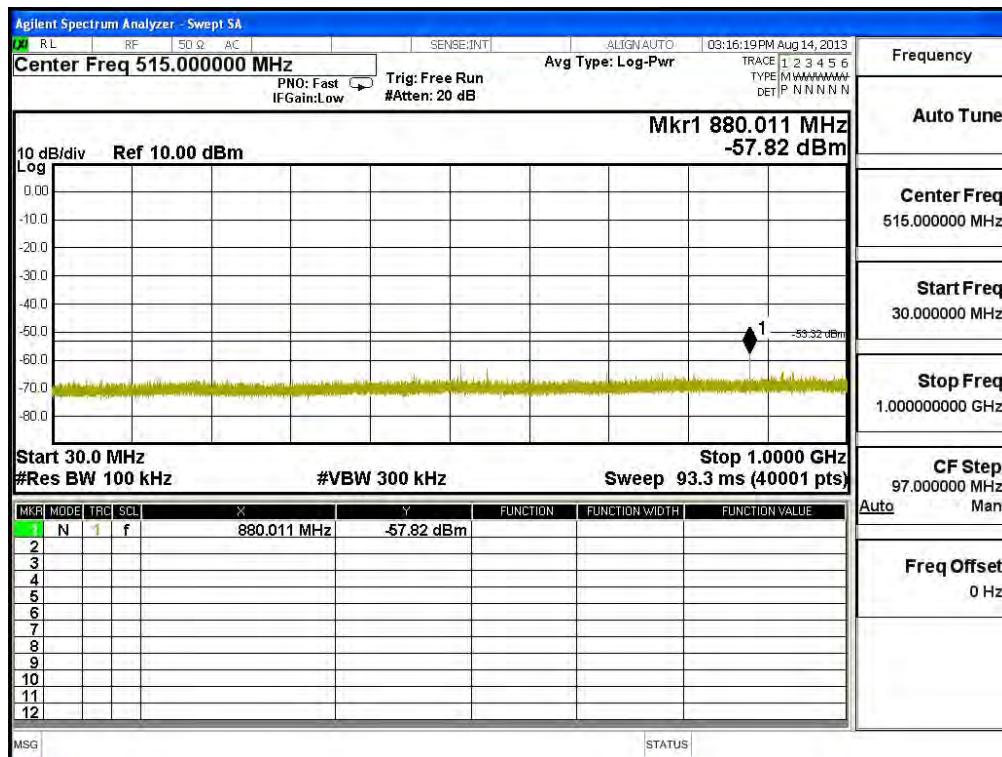
Channel 04 (2437MHz) 30MHz -25GHz-Chain B

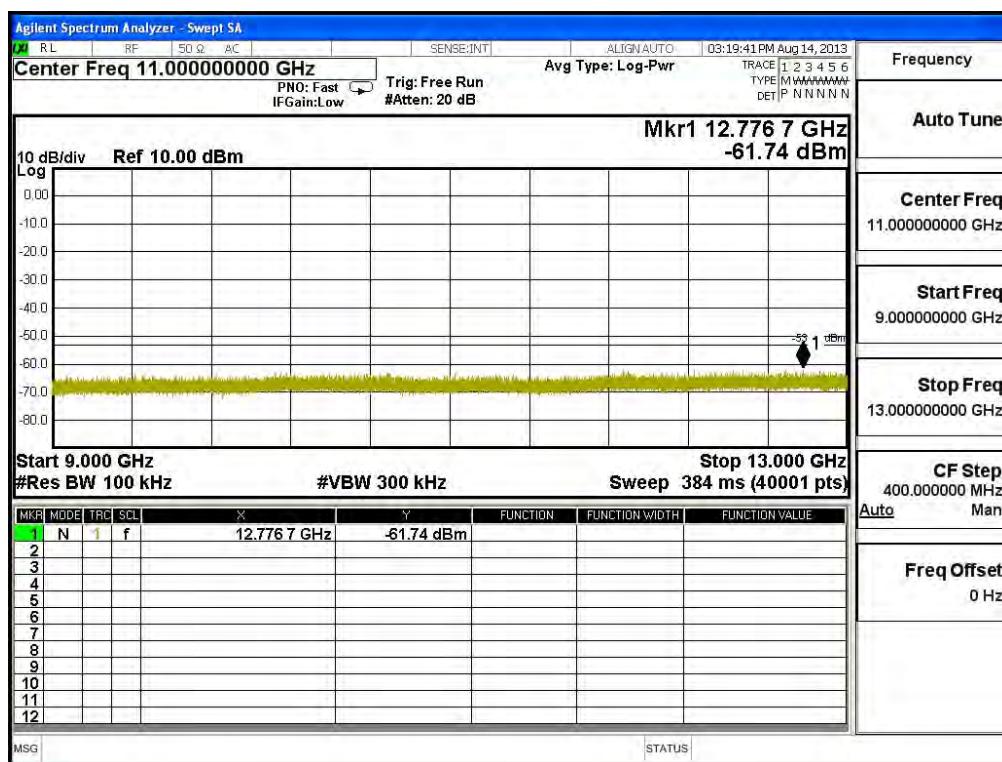
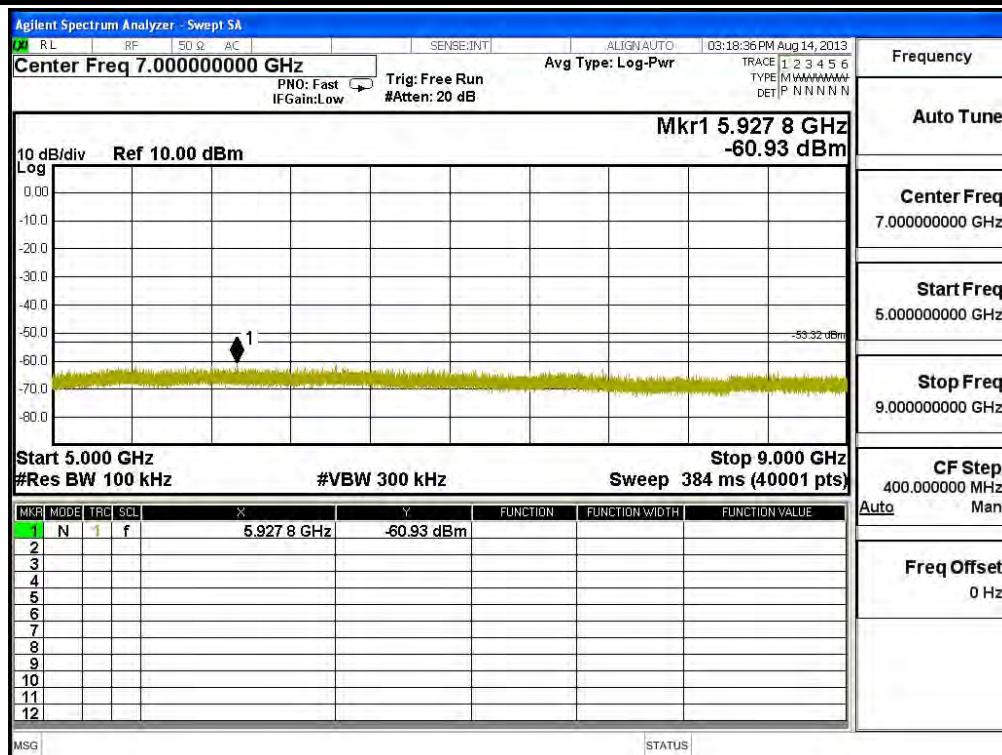


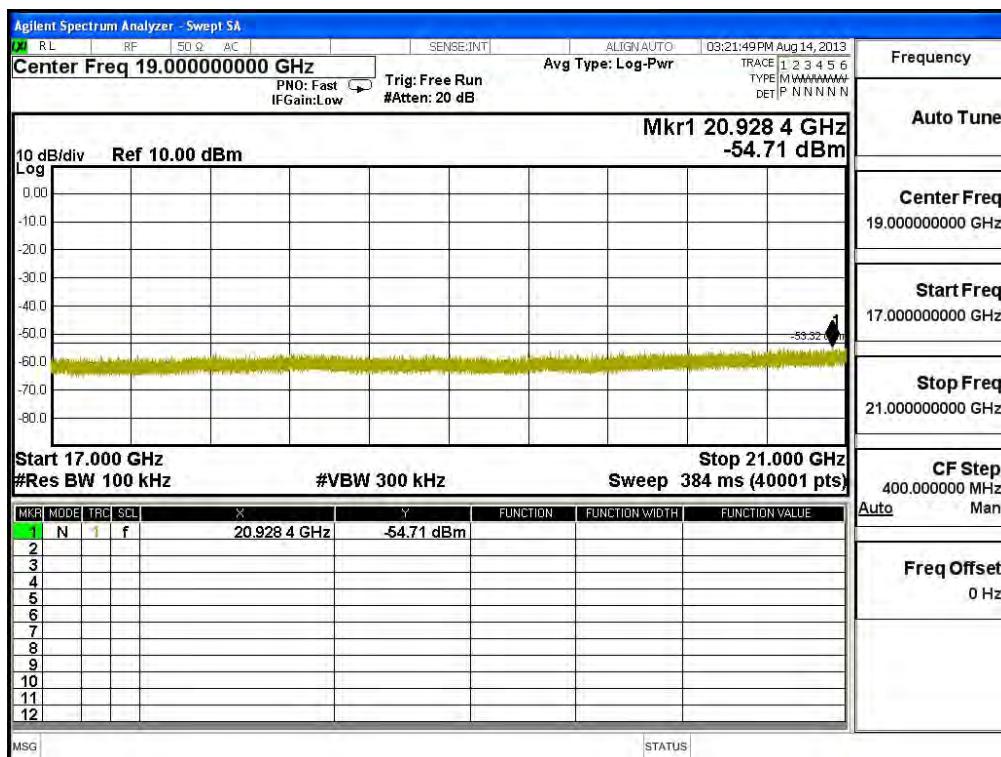
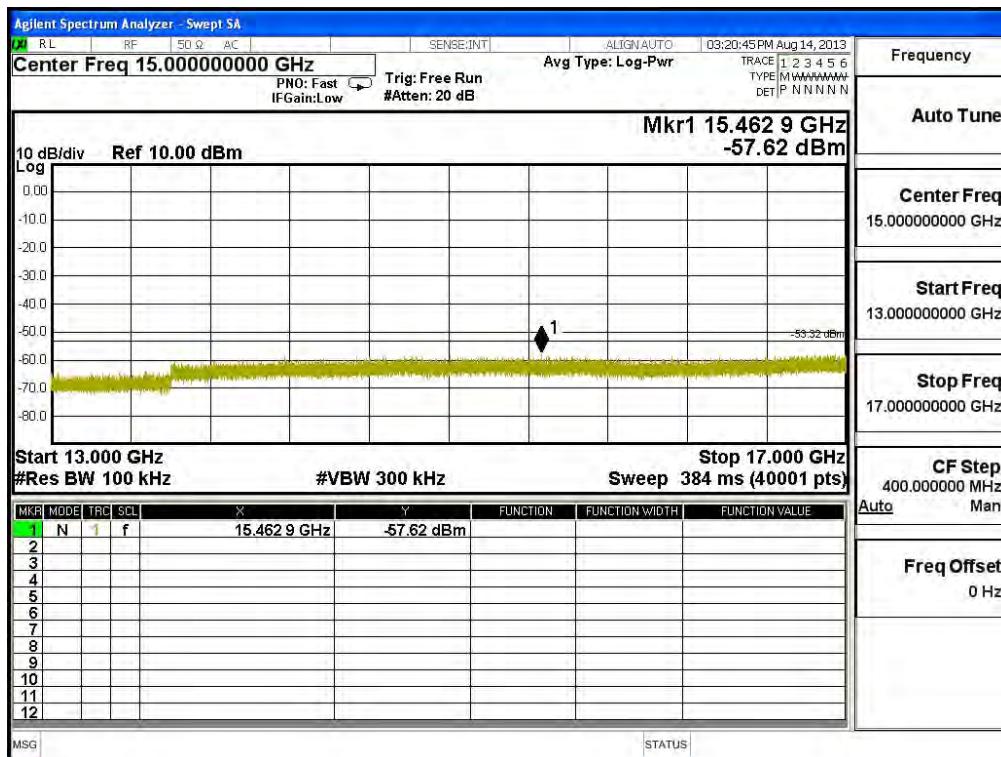


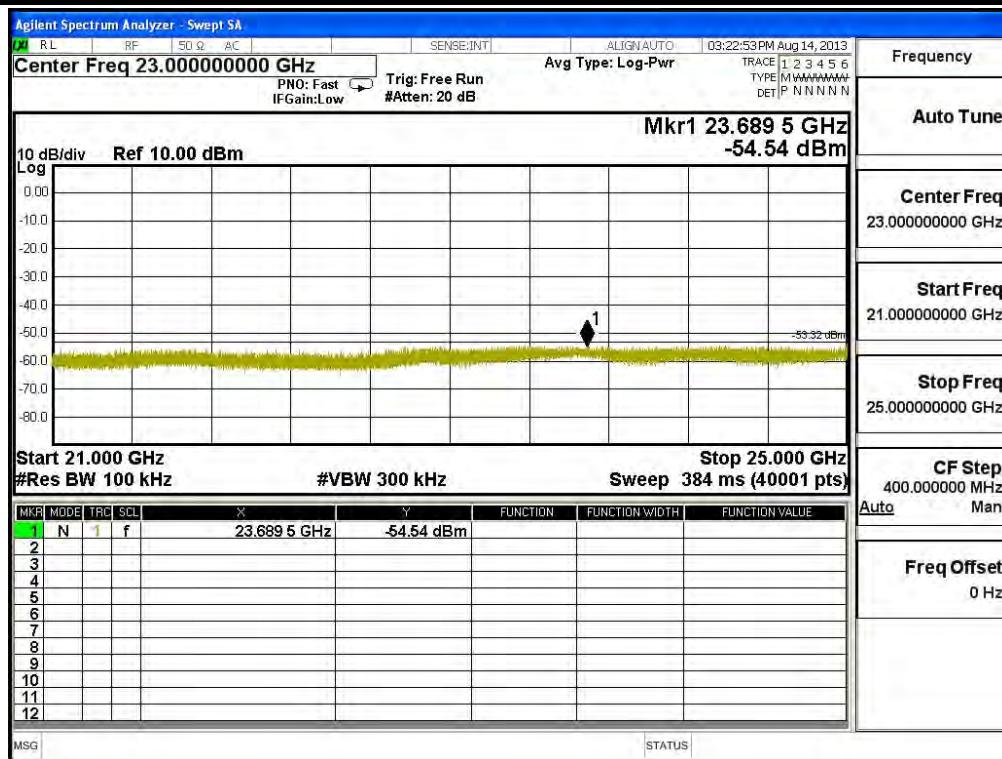




Channel 07 (2452MHz) 30MHz -25GHz-Chain B


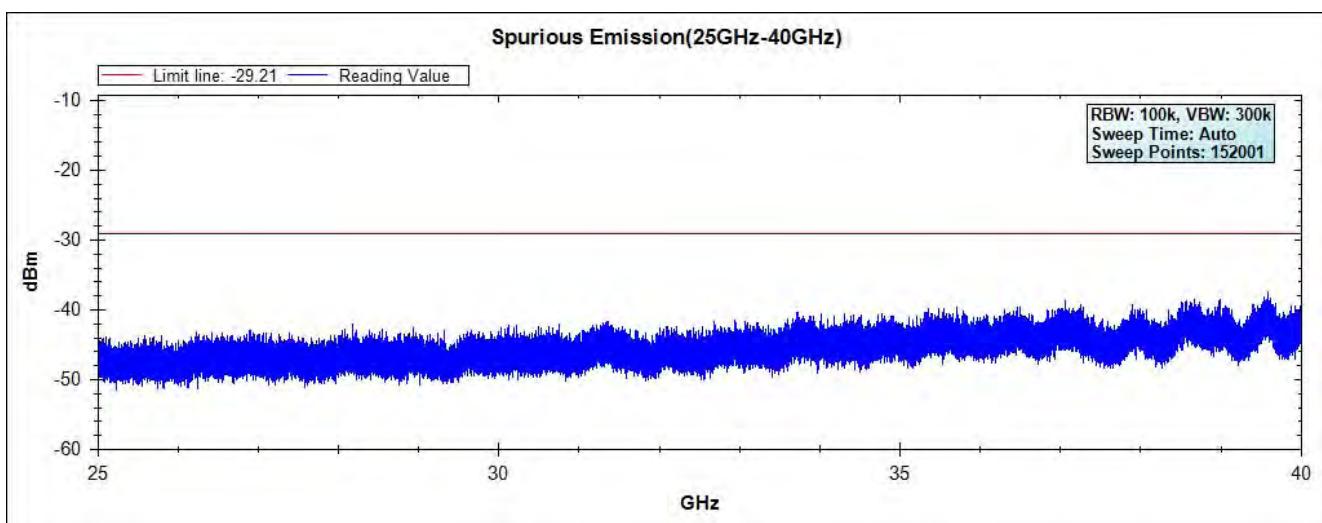
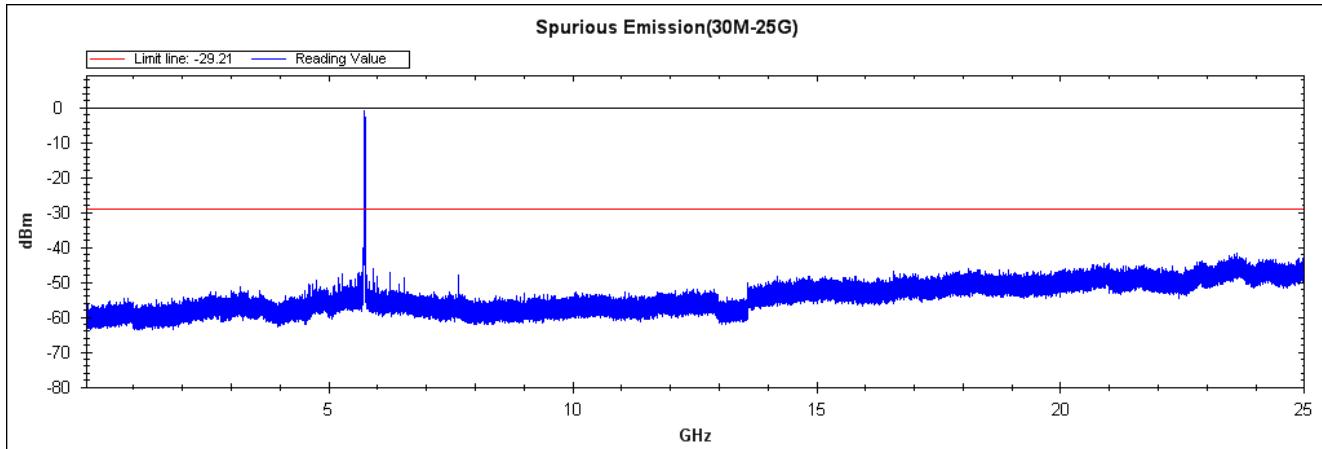


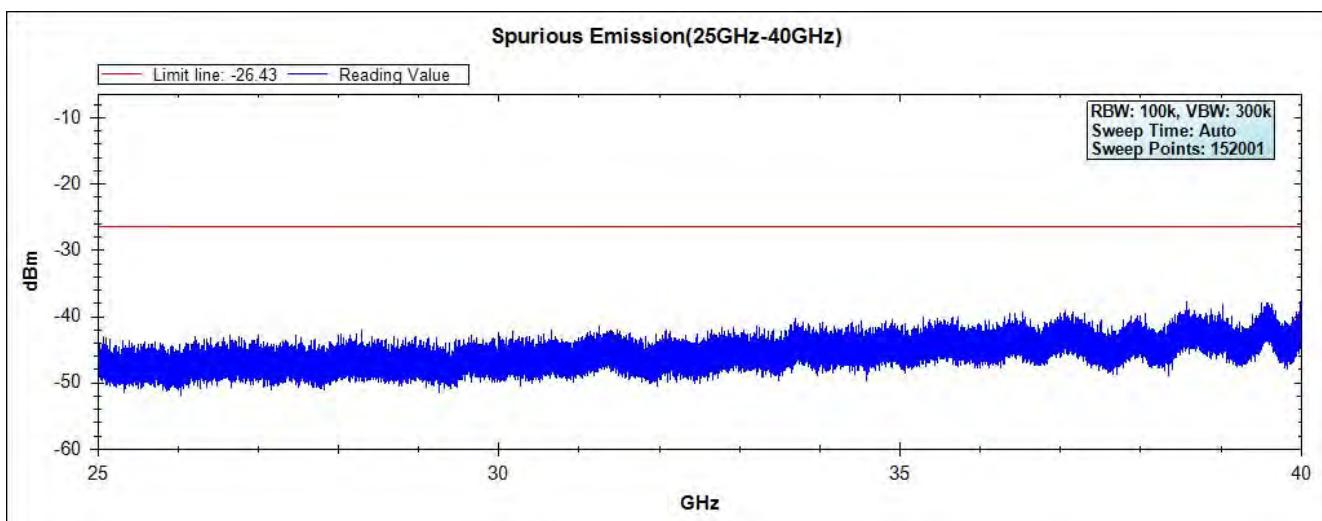
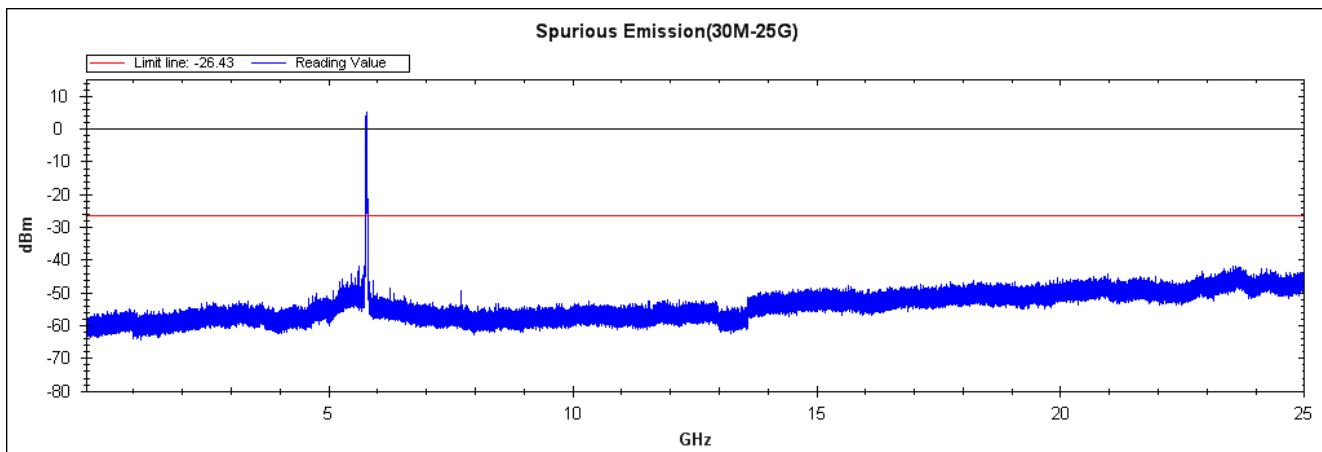


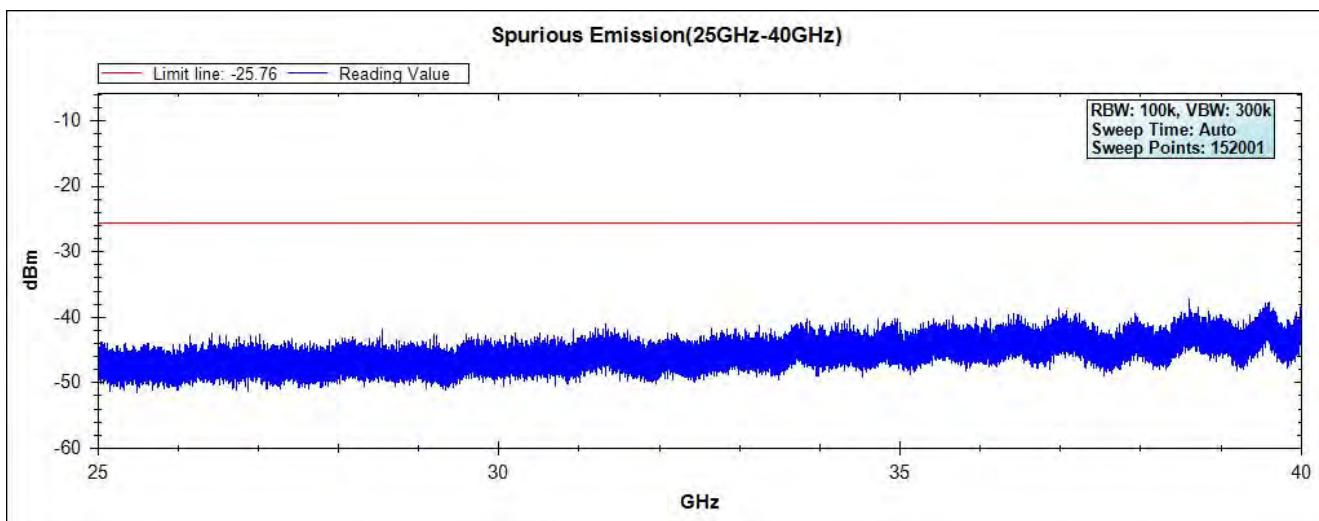
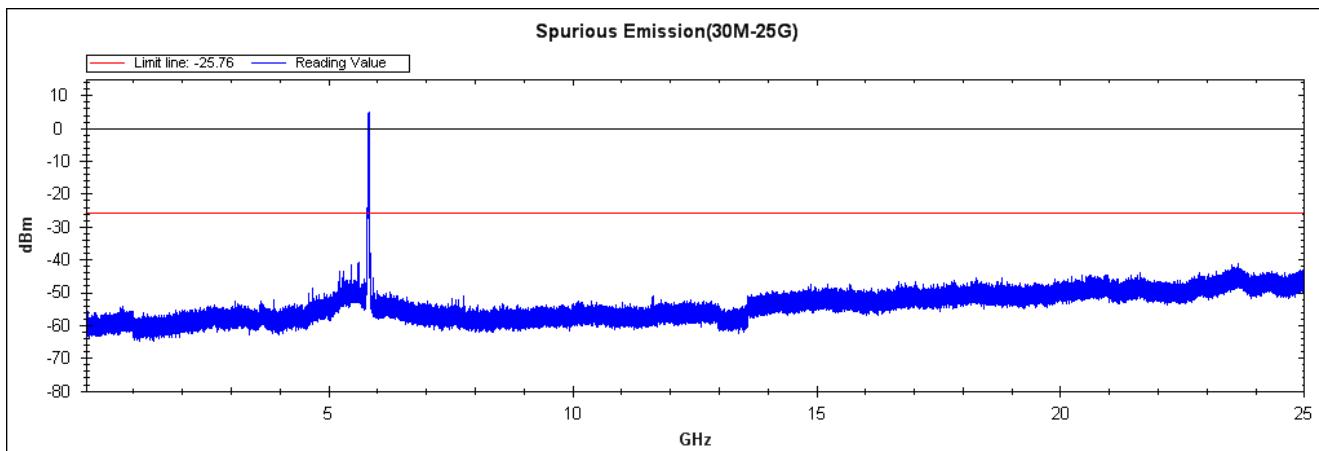


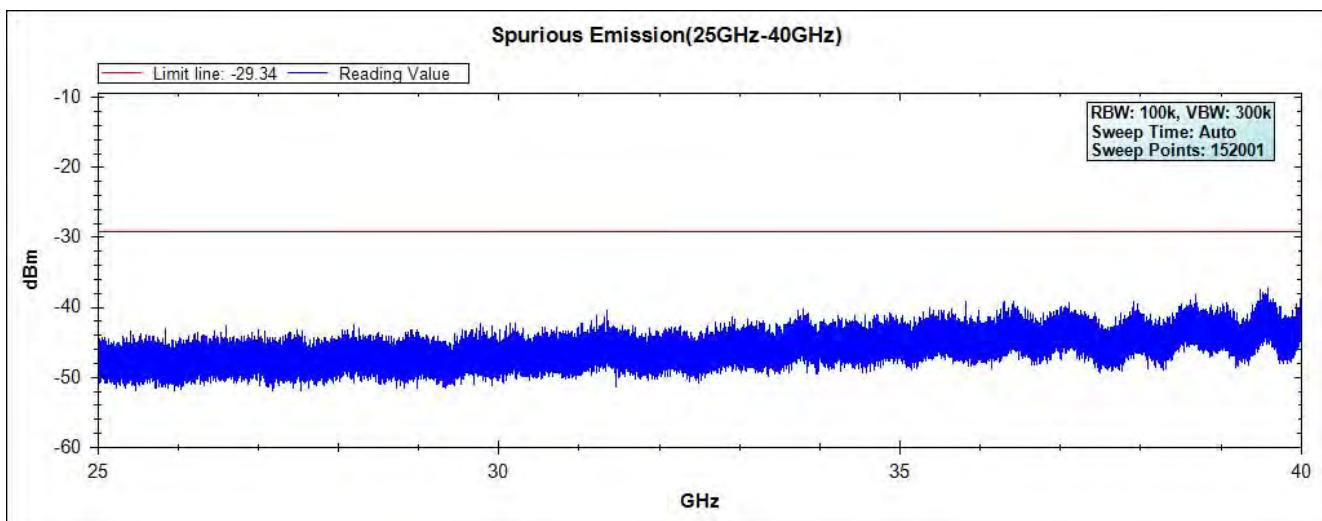
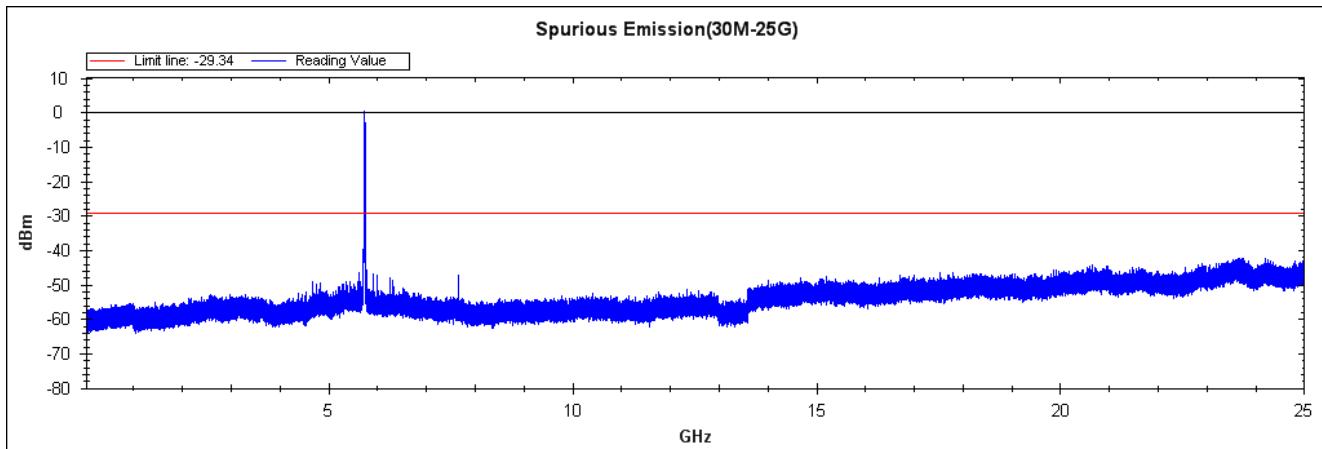
Product : SpectraGuard® Access Point / Sensor
Test Item : RF Antenna Conducted Spurious
Test Site : No.3 OATS
Test Mode : Mode 13: Transmit - 802.11n-20BW_14.4Mbps(5G Band)(PIFA Antenna)

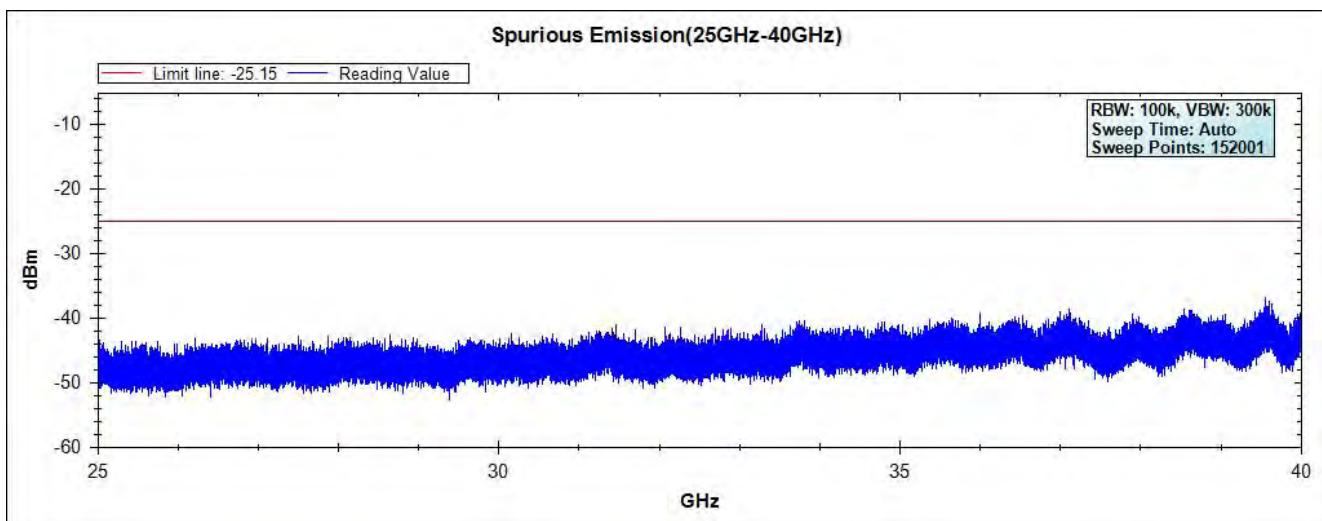
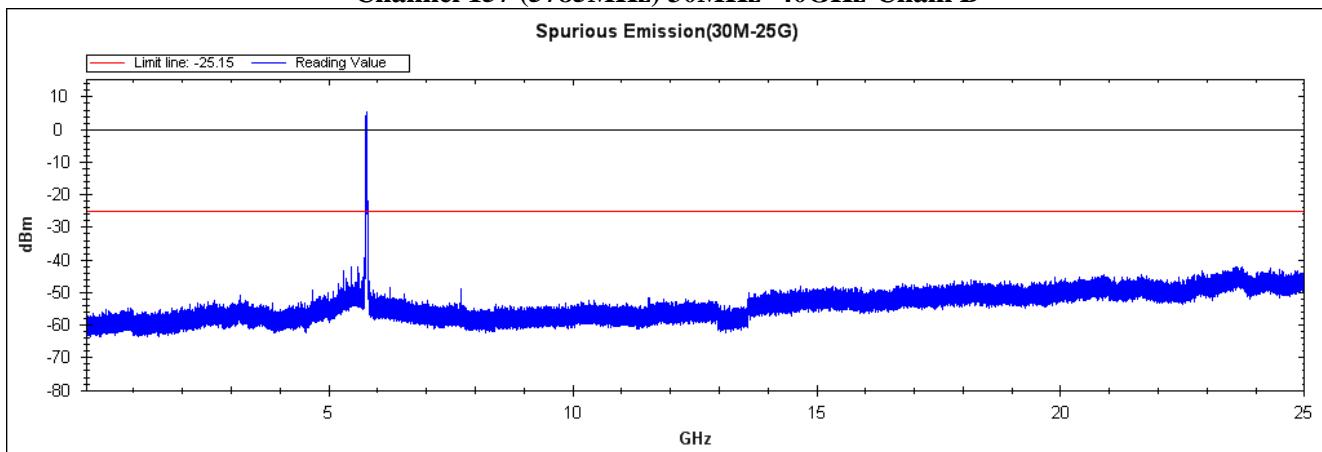
Channel 49 (5745MHz) 30MHz -40GHz-Chain A

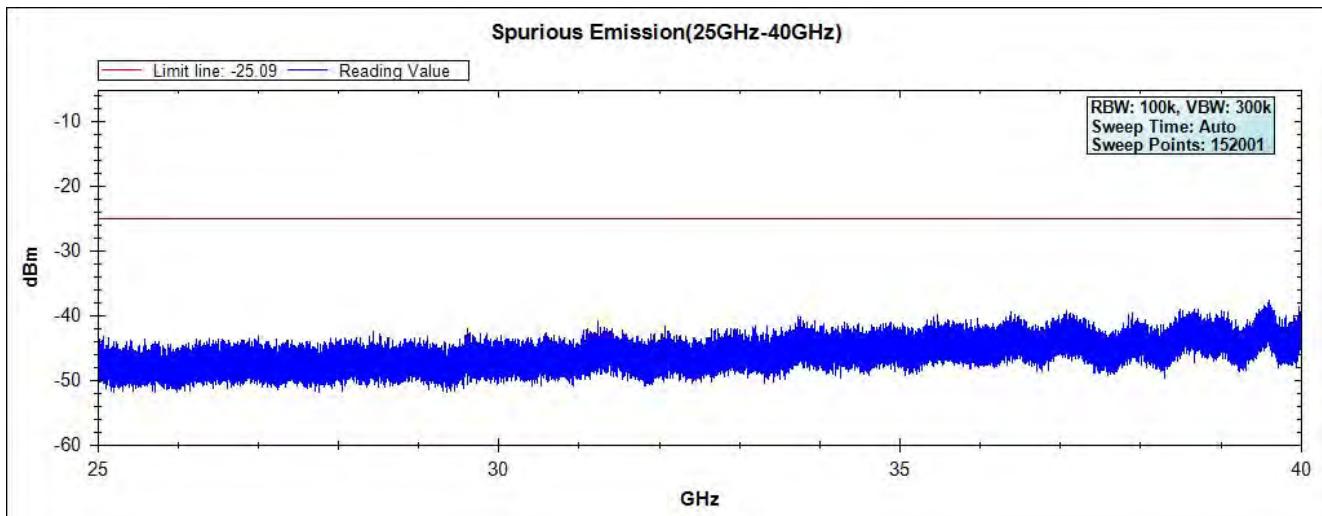
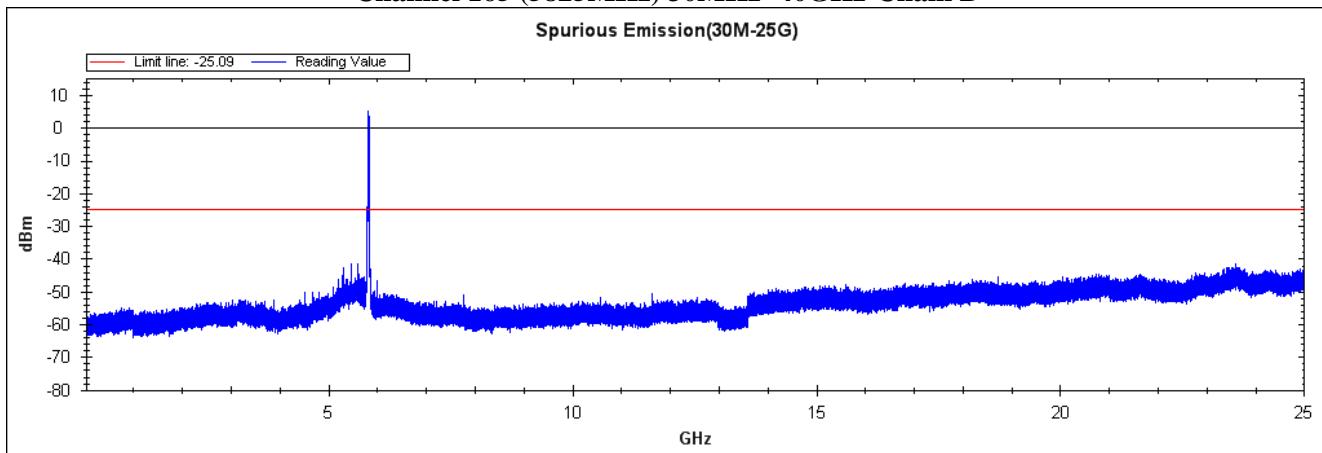


Channel 157 (5785MHz) 30MHz -40GHz-Chain A

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

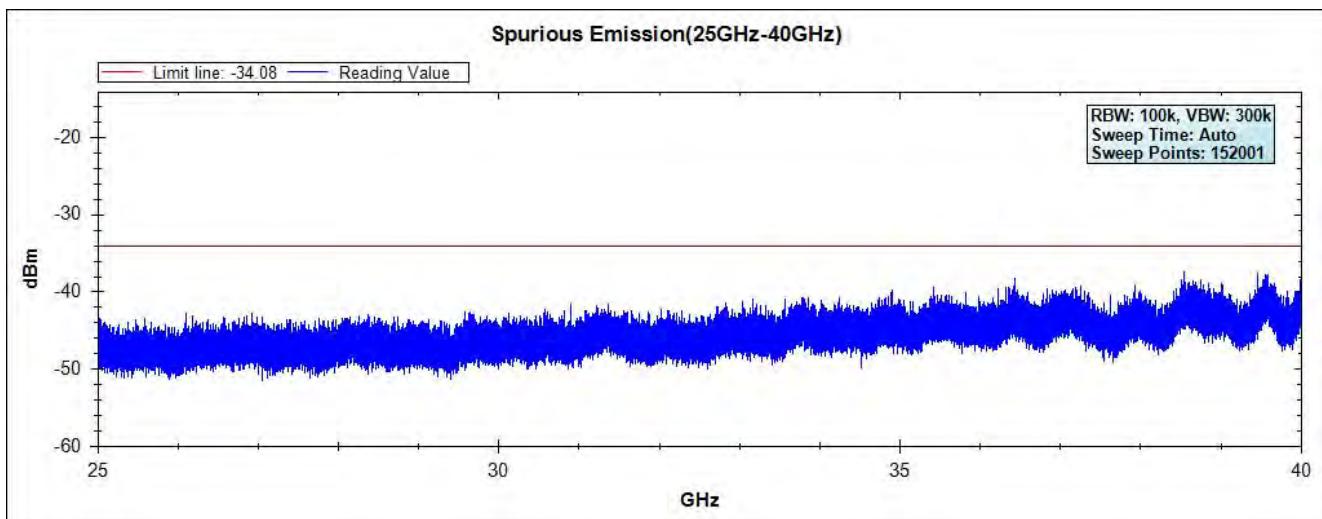
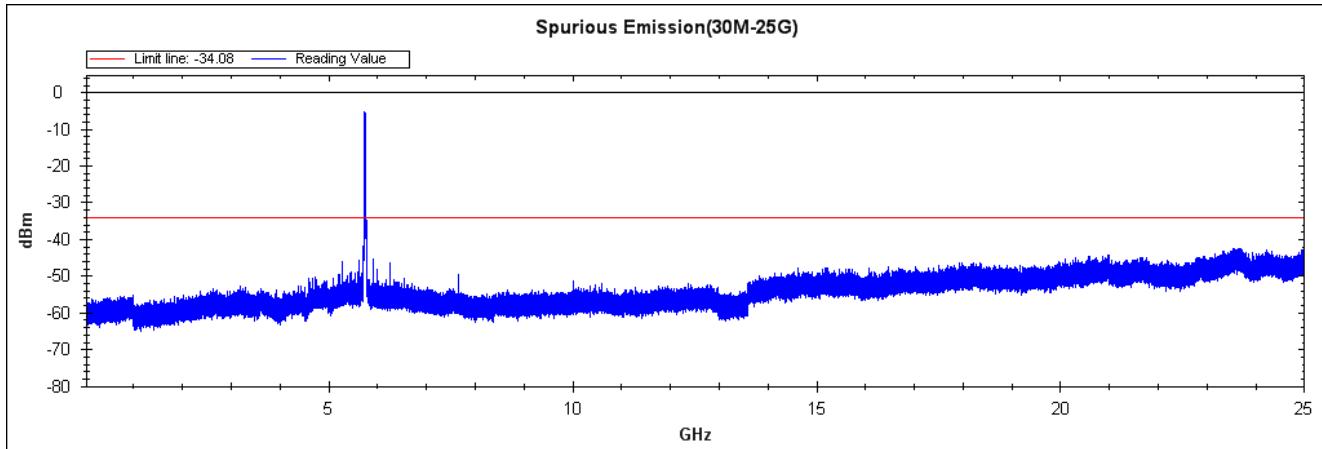
Channel 49 (5745MHz) 30MHz -40GHz-Chain B

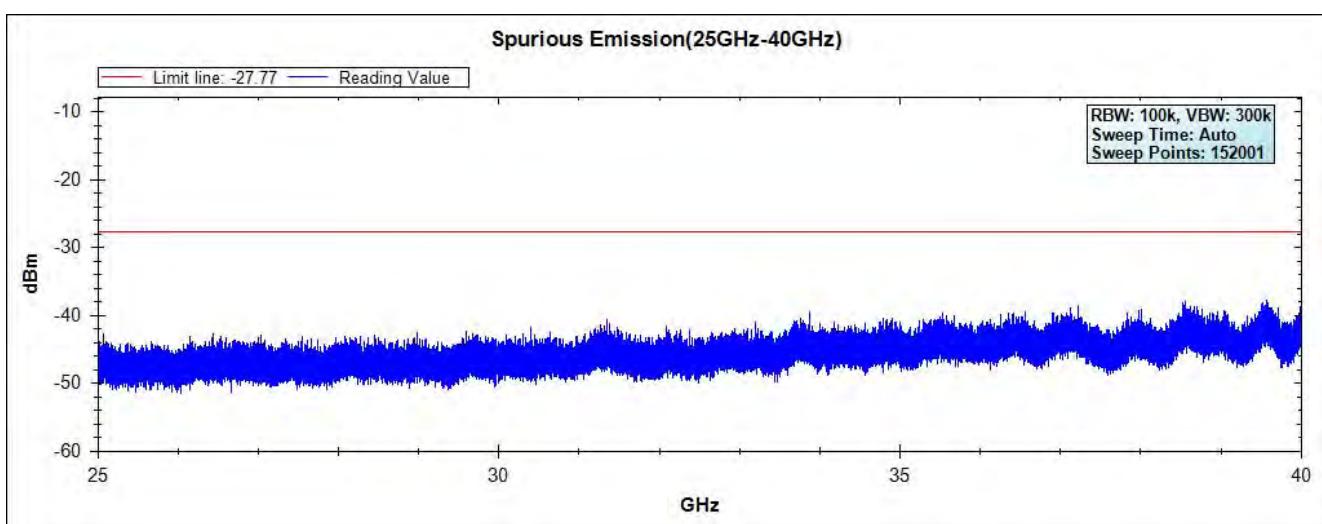
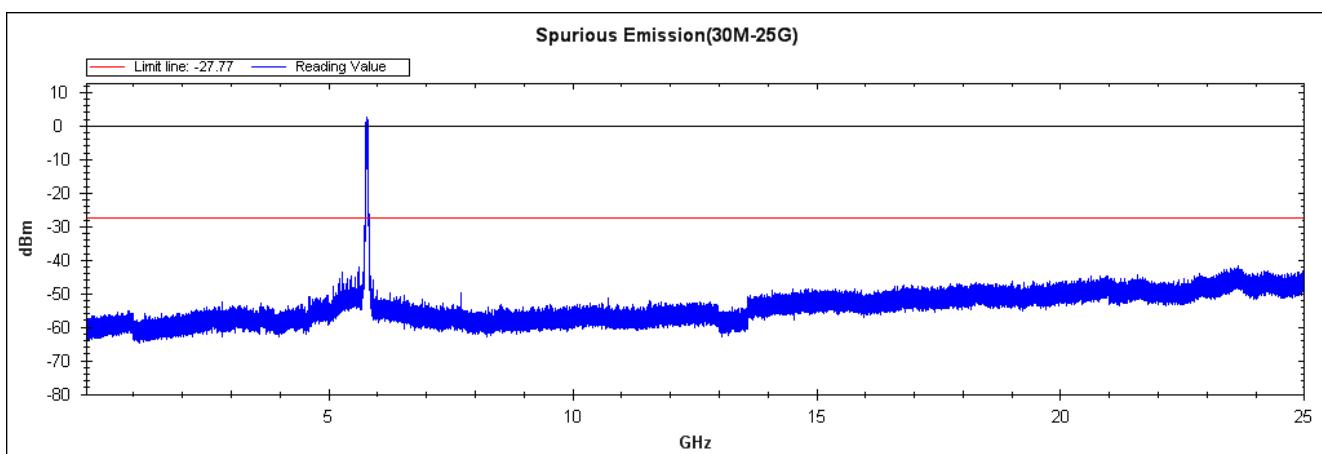
Channel 157 (5785MHz) 30MHz -40GHz-Chain B

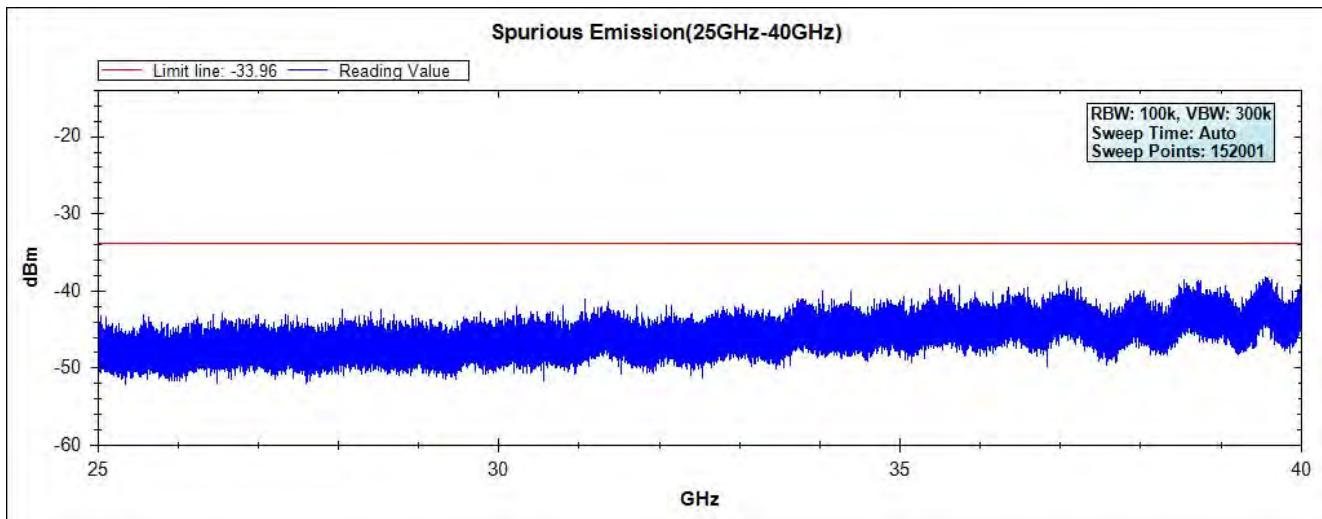
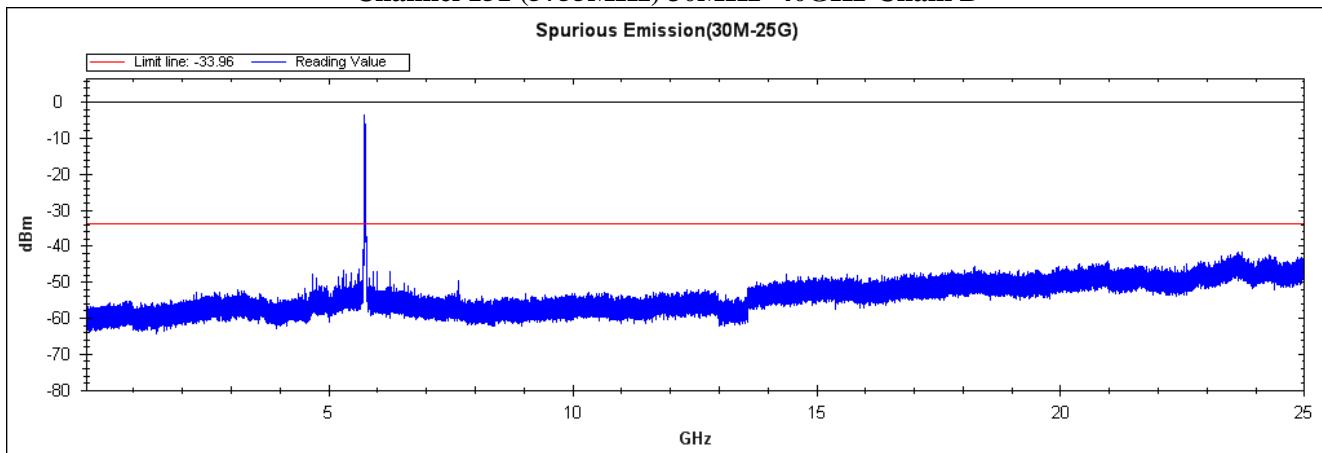
Channel 165 (5825MHz) 30MHz -40GHz-Chain B

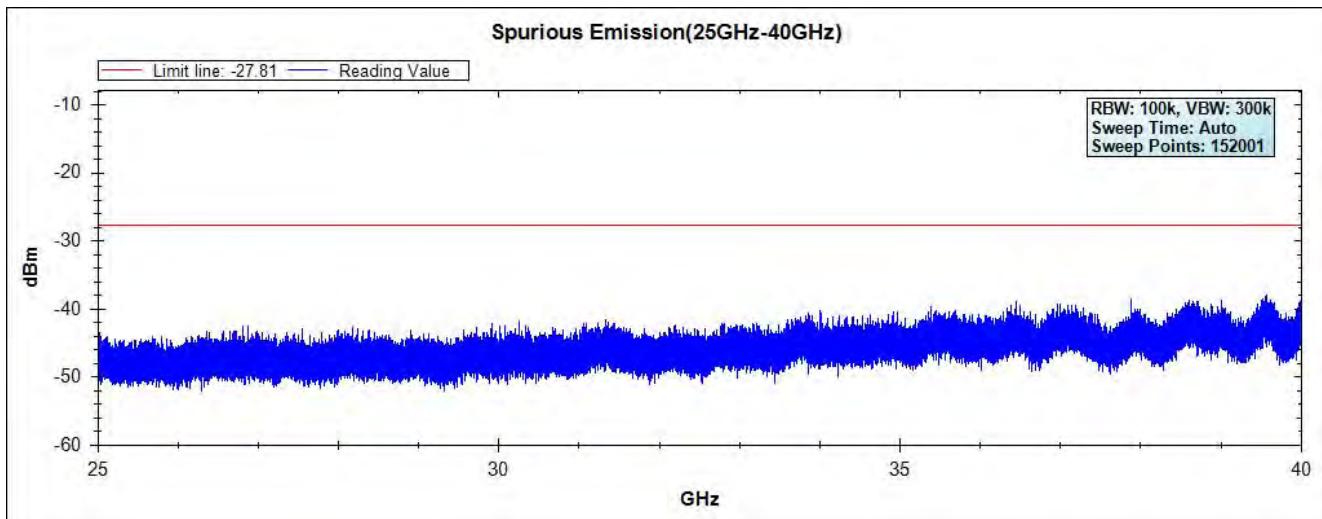
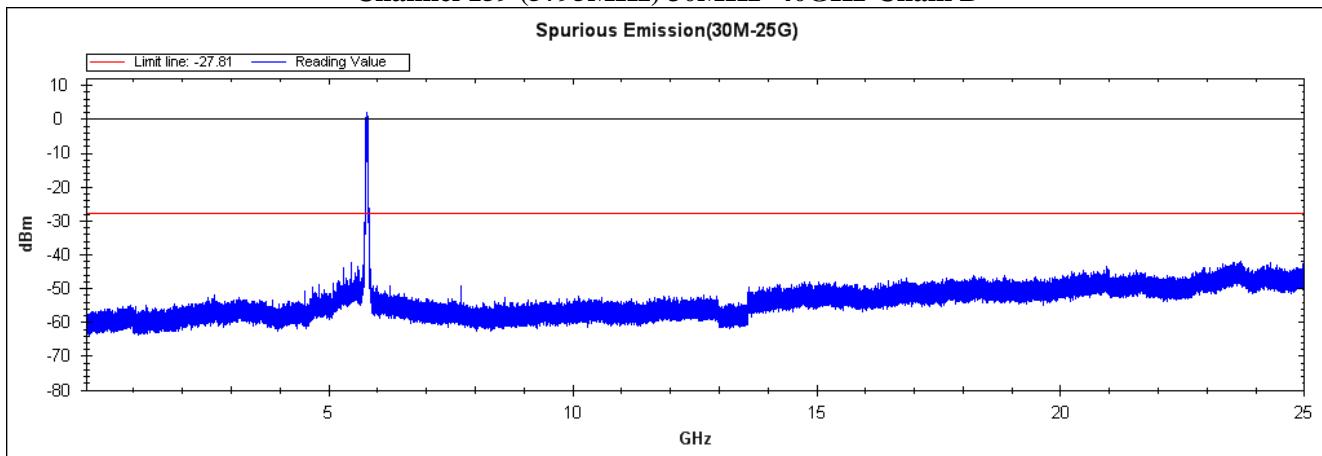
Product : SpectraGuard® Access Point / Sensor
Test Item : RF Antenna Conducted Spurious
Test Site : No.3 OATS
Test Mode : Mode 14: Transmit - 802.11n-40BW_30Mbps(5G Band)(PIFA Antenna)

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



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

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

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

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, 2013
Spectrum Analyzer	Agilent	E4407B / US39440758	Jun, 2013
X Spectrum Analyzer	Agilent	N9010A / MY48030495	Apr., 2013

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:

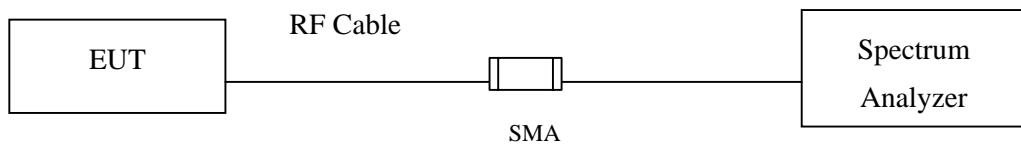
The following test equipments are used during the band edge tests:

Test Site	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
X Site # 3	Bilog Antenna	Schaffner Chase	CBL6112B/2673	Sep., 2012
	X Horn Antenna	Schwarzbeck	BBHA9120D/D305	Sep., 2012
	Horn Antenna	Schwarzbeck	BBHA9170/208	Jul., 2013
	Pre-Amplifier	QTK	QTK-AMP-03 / 0003	May, 2013
	X Pre-Amplifier	QTK	AP-180C / CHM_0906076	Sep., 2012
	Pre-Amplifier	MITEQ	AMF-4D-180400-45-6P/ 925975	Mar, 2013
	X Spectrum Analyzer	Agilent	E4407B / US39440758	May, 2013
	Test Receiver	R & S	ESCS 30/ 825442/018	Sep., 2012
	X Coaxial Cable	QuieTek	QTK-CABLE/ CAB5	Feb., 2013
	X Controller	QuieTek	QTK-CONTROLLER/ CTRL3	N/A
	X Coaxial Switch	Anritsu	MP59B/6200265729	N/A

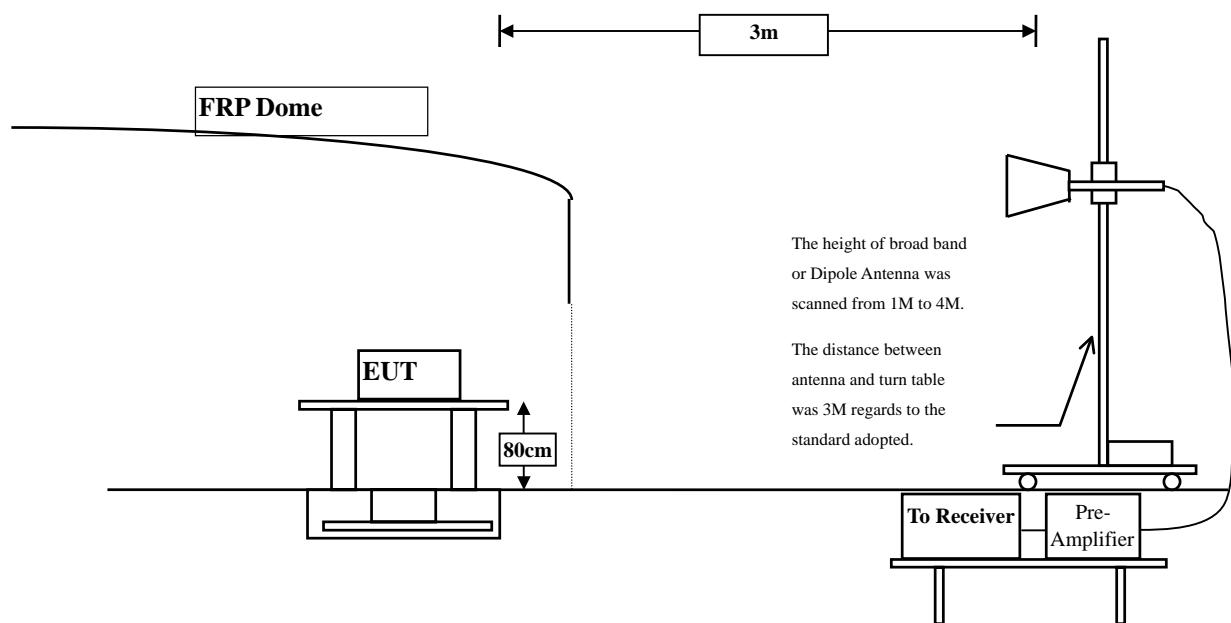
- Note:
1. All instruments are calibrated every one year.
 2. The test instruments marked by “X” are used to measure the final test results.

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 30dB 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 : SpectraGuard® Access Point / Sensor
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmit (802.11b 1Mbps)(Dipole Antenna)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
01 (Peak)	2390.000	31.509	28.290	59.799	74.00	54.00	Pass
01 (Peak)	2414.600	31.659	78.548	110.206	--	--	--
01 (Average)	2386.200	31.494	18.500	49.994	74.00	54.00	Pass
01 (Average)	2390.000	31.509	16.592	48.101	74.00	54.00	Pass
01 (Average)	2414.800	31.660	75.376	107.036	--	--	--

Figure Channel 01:

Horizontal (Peak)

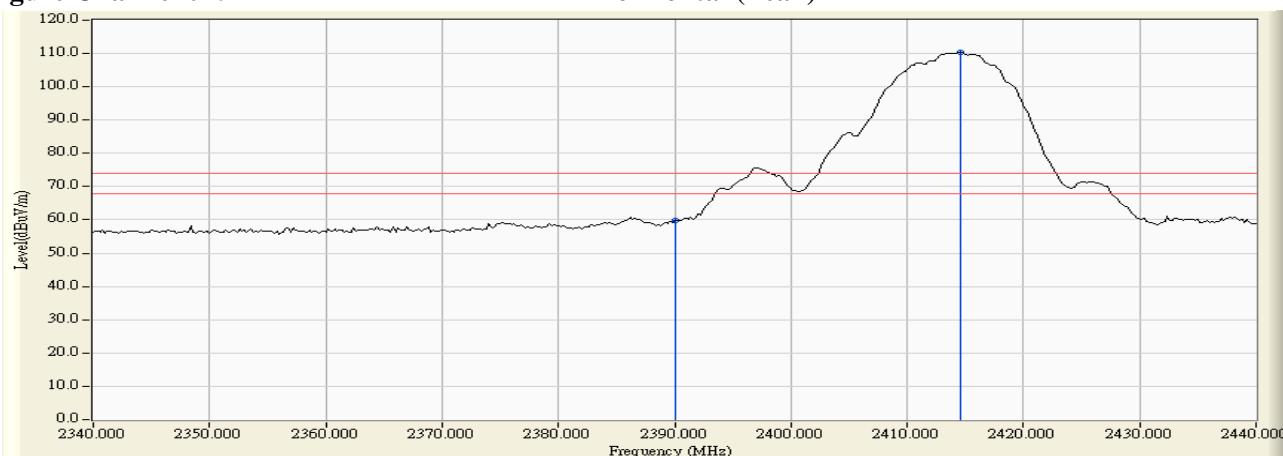
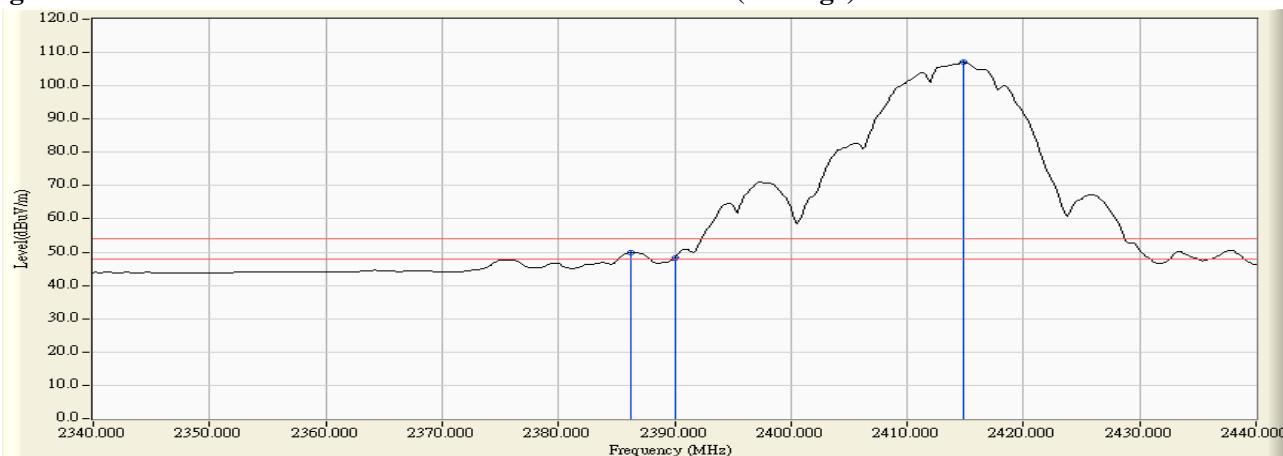


Figure Channel 01:

Horizontal (Average)



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

Product : SpectraGuard® Access Point / Sensor
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmit (802.11b 1Mbps)(Dipole Antenna)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
01 (Peak)	2390.000	30.915	25.110	56.025	74.00	54.00	Pass
01 (Peak)	2410.600	30.941	71.851	102.792	--	--	--
01 (Average)	2390.000	30.915	13.127	44.042	74.00	54.00	Pass
01 (Average)	2411.200	30.944	68.183	99.127	--	--	--

Figure Channel 01:

Vertical (Peak)

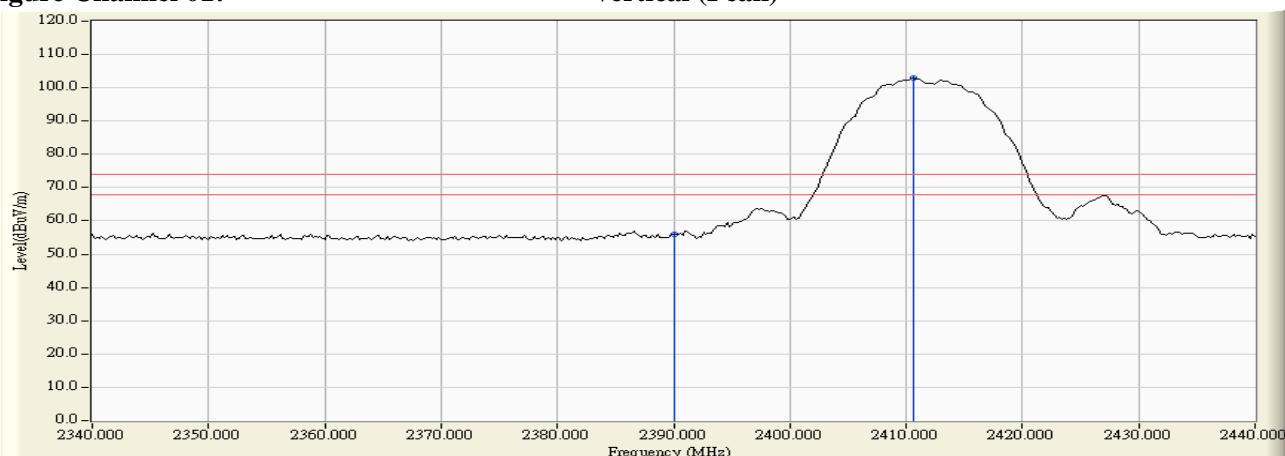
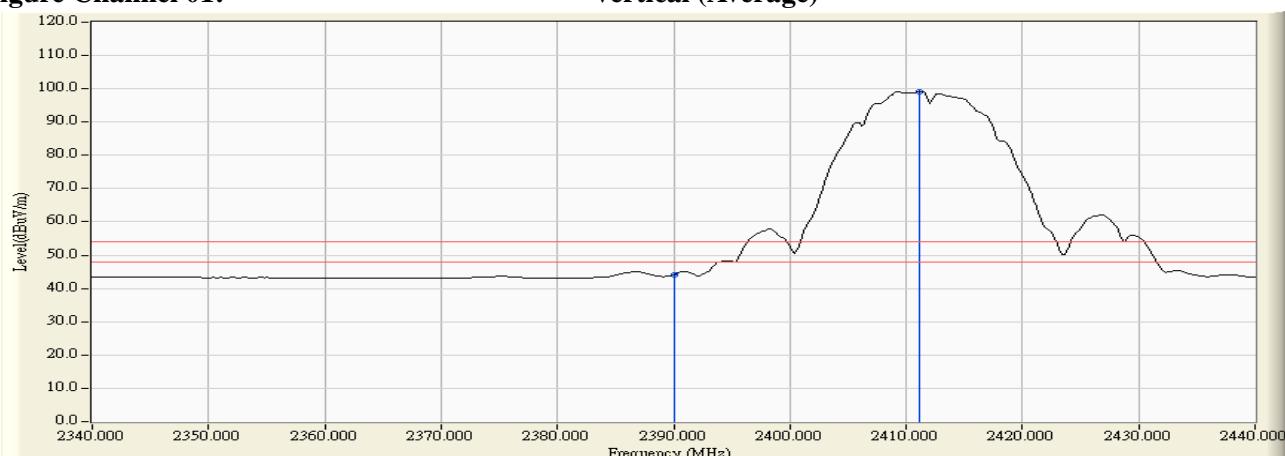


Figure Channel 01:

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 : SpectraGuard® Access Point / Sensor
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmit (802.11b 1Mbps)(Dipole Antenna)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
11 (Peak)	2463.500	32.031	77.032	109.063	--	--	--
11 (Peak)	2483.500	32.182	28.650	60.832	74.00	54.00	Pass
11 (Average)	2464.700	32.039	73.636	105.676	--	--	--
11 (Average)	2483.500	32.182	19.568	51.750	74.00	54.00	Pass
11 (Average)	2487.700	32.213	19.379	51.593	74.00	54.00	Pass

Figure Channel 11:

Horizontal (Peak)

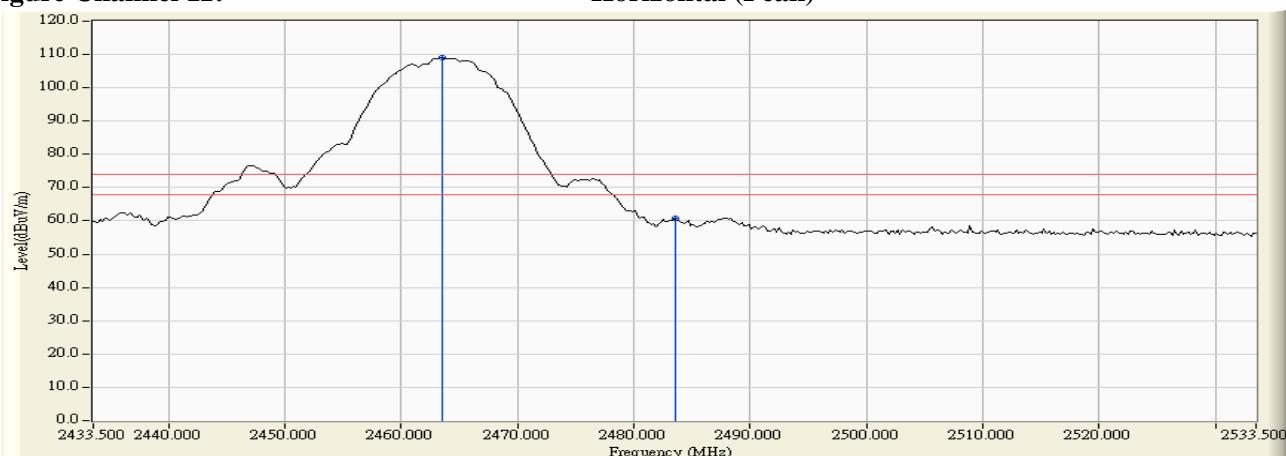
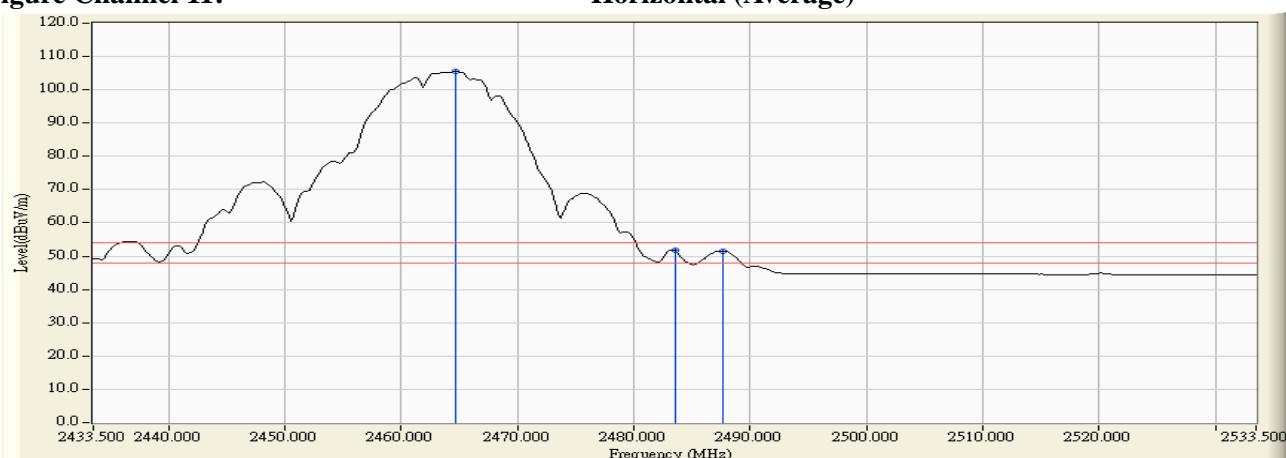


Figure Channel 11:

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 : SpectraGuard® Access Point / Sensor
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmit (802.11b 1Mbps)(Dipole Antenna)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
11 (Peak)	2460.500	31.280	70.905	102.185	--	--	--
11 (Peak)	2483.500	31.435	26.191	57.626	74.00	54.00	Pass
11 (Average)	2459.300	31.272	67.315	98.587	--	--	--
11 (Average)	2483.500	31.435	15.247	46.682	74.00	54.00	Pass

Figure Channel 11:

Vertical (Peak)

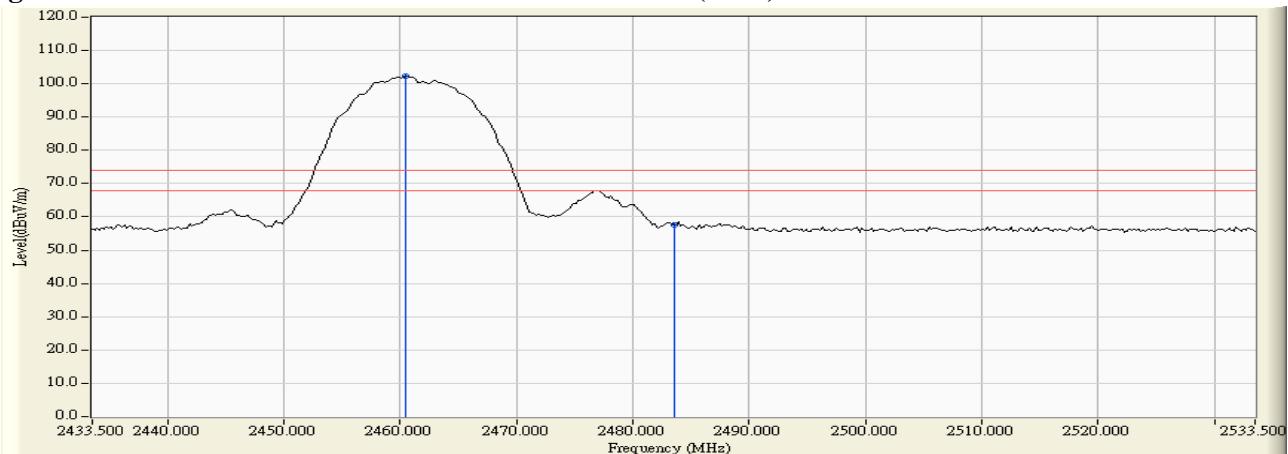
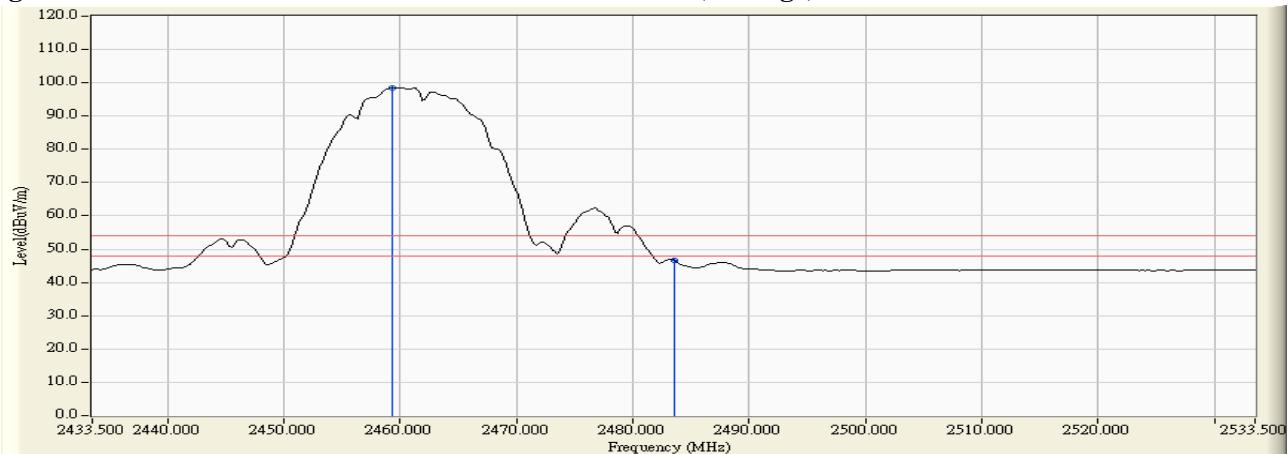


Figure Channel 11:

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 : SpectraGuard® Access Point / Sensor
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmit (802.11g 6Mbps)(Dipole Antenna)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
01 (Peak)	2390.000	31.509	30.348	61.857	74.00	54.00	Pass
01 (Peak)	2416.200	31.671	74.730	106.400	--	--	--
01(Average)	2390.000	31.509	15.062	46.571	74.00	54.00	Pass
01(Average)	2415.600	31.665	64.296	95.962	--	--	--

Figure Channel 01:

Horizontal (Peak)

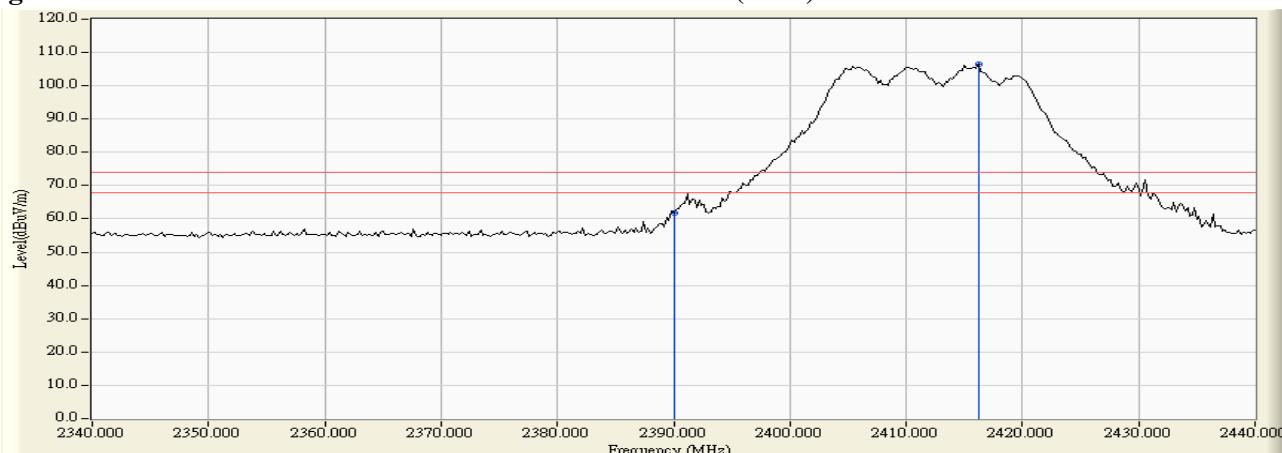
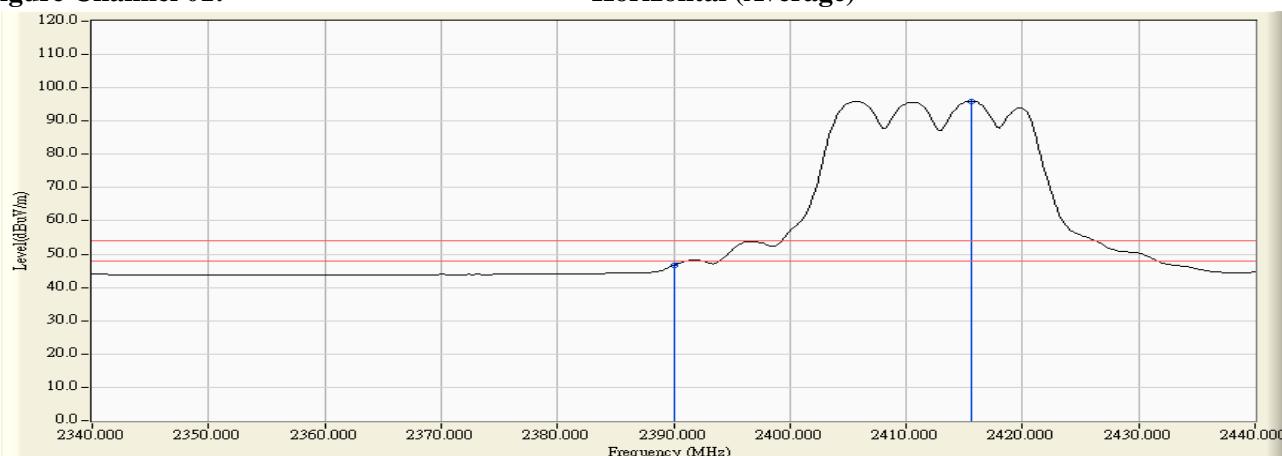


Figure Channel 01:

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 : SpectraGuard® Access Point / Sensor
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmit (802.11g 6Mbps)(Dipole Antenna)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
01 (Peak)	2390.000	30.915	24.219	55.134	74.00	54.00	Pass
01 (Peak)	2418.000	30.991	65.019	96.009	--	--	--
01 (Average)	2390.000	30.915	12.243	43.158	74.00	54.00	Pass
01 (Average)	2418.200	30.992	55.068	86.059	--	--	--

Figure Channel 01:

Vertical (Peak)

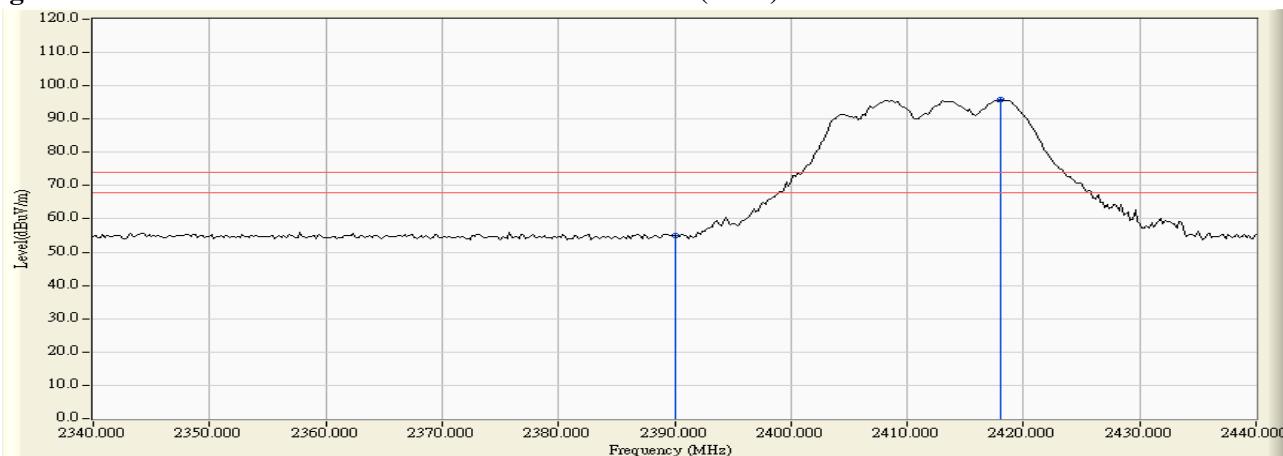
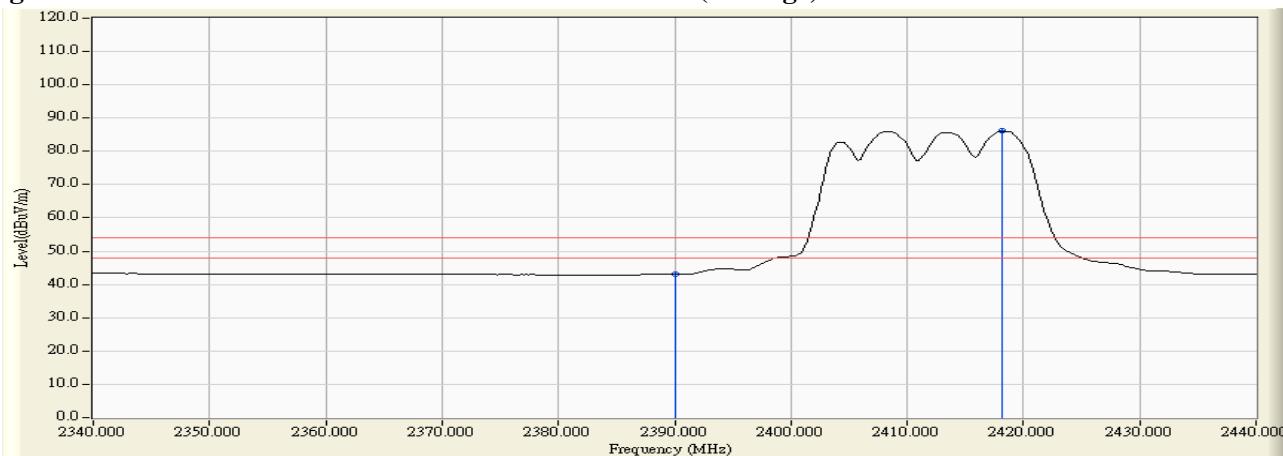


Figure Channel 01:

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 : SpectraGuard® Access Point / Sensor
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmit (802.11g 6Mbps)(Dipole Antenna)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
11 (Peak)	2457.900	31.988	73.816	105.804	--	--	--
11 (Peak)	2483.500	32.182	38.489	70.671	74.00	54.00	Pass
11 (Average)	2458.500	31.992	63.483	95.476	--	--	--
11 (Average)	2483.500	32.182	17.637	49.819	74.00	54.00	Pass

Figure Channel 11:

Horizontal (Peak)

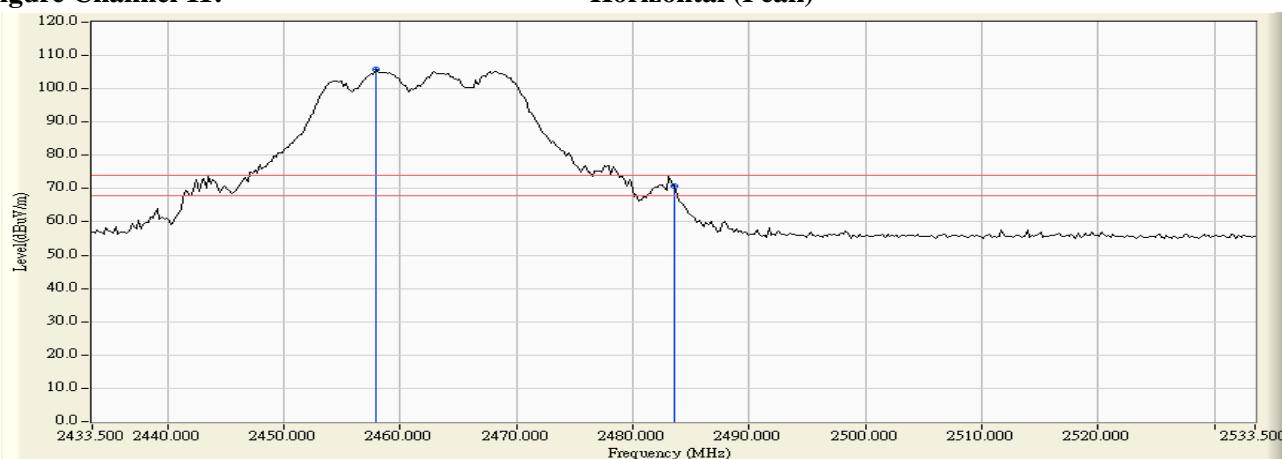
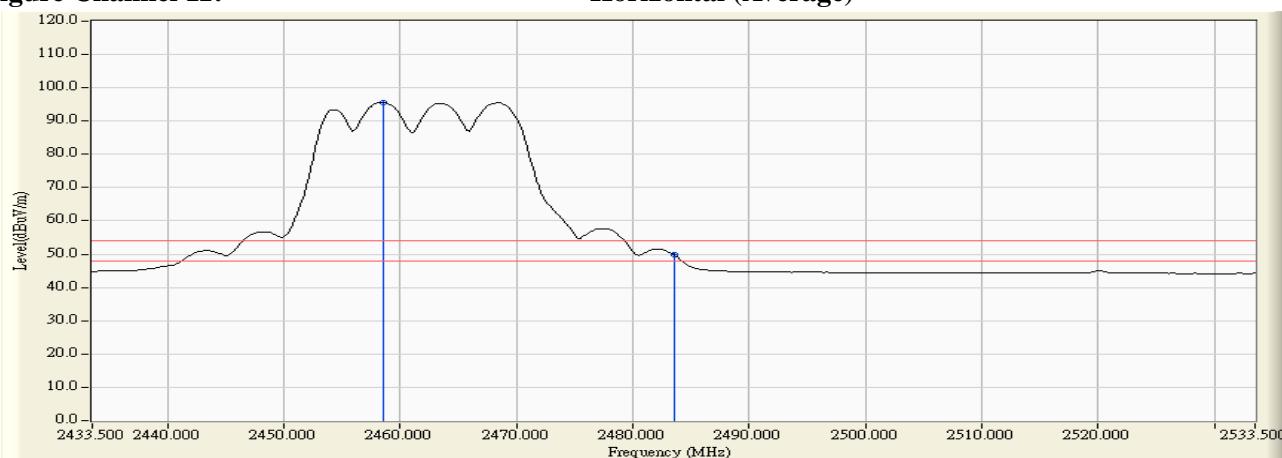


Figure Channel 11:

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 : SpectraGuard® Access Point / Sensor
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmit (802.11g 6Mbps)(Dipole Antenna)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
11 (Peak)	2455.700	31.247	65.335	96.582	--	--	--
11 (Peak)	2483.500	31.435	27.062	58.497	74.00	54.00	Pass
11 (Average)	2465.700	31.315	55.714	87.029	--	--	--
11 (Average)	2483.500	31.435	13.079	44.514	74.00	54.00	Pass

Figure Channel 11:

Vertical (Peak)

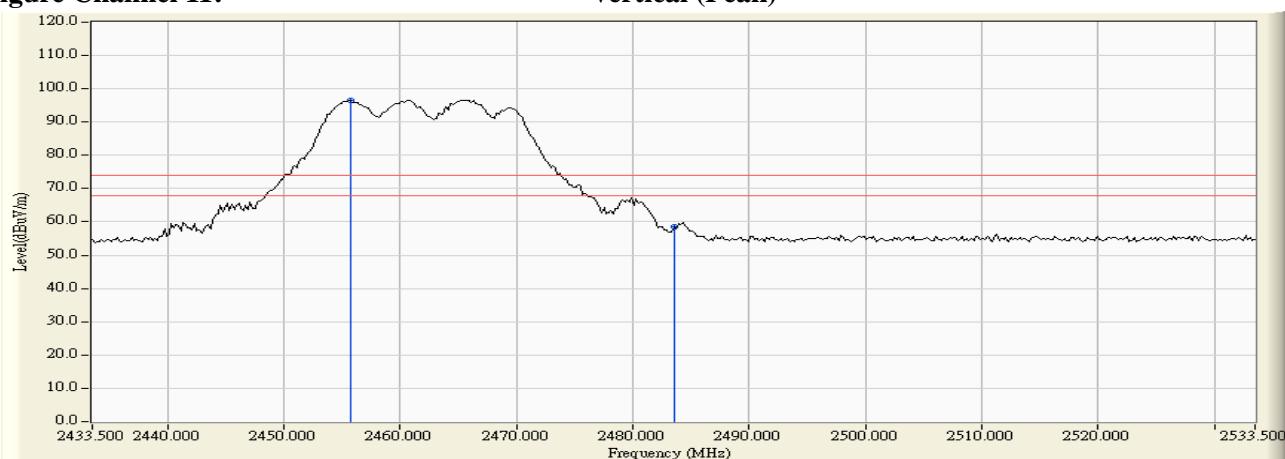


Figure Channel 11:

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 : SpectraGuard® Access Point / Sensor
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 4: Transmit - 802.11n-20BW_14.4Mbps(2.4G Band)(Dipole Antenna)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
01 (Peak)	2390.000	31.509	31.953	63.462	74.00	54.00	Pass
01 (Peak)	2416.800	31.675	73.959	105.634	--	--	--
01 (Average)	2390.000	31.509	16.534	48.043	74.00	54.00	Pass
01 (Average)	2417.000	31.676	61.911	93.588	--	--	--

Figure Channel 01:

Horizontal (Peak)

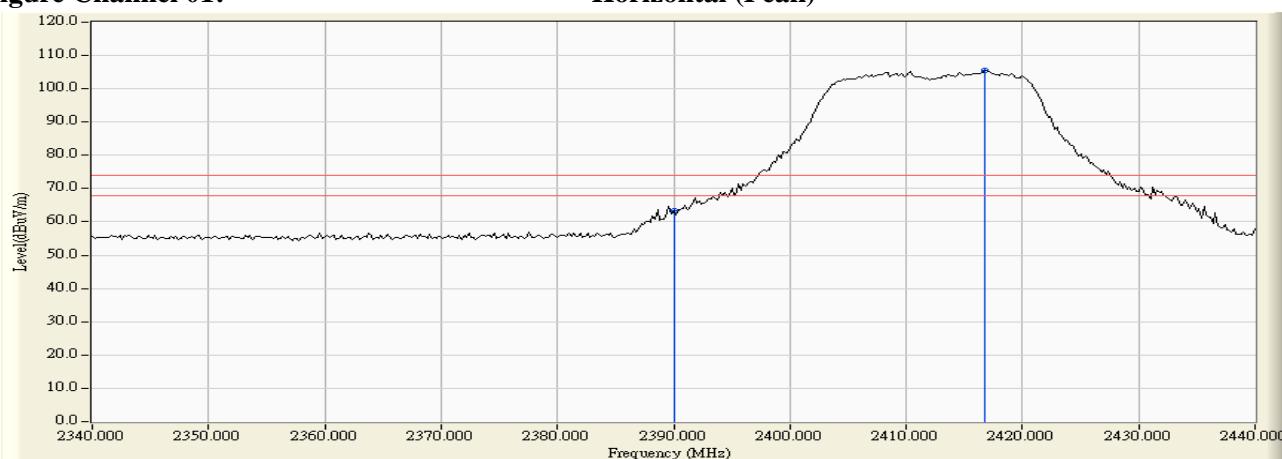
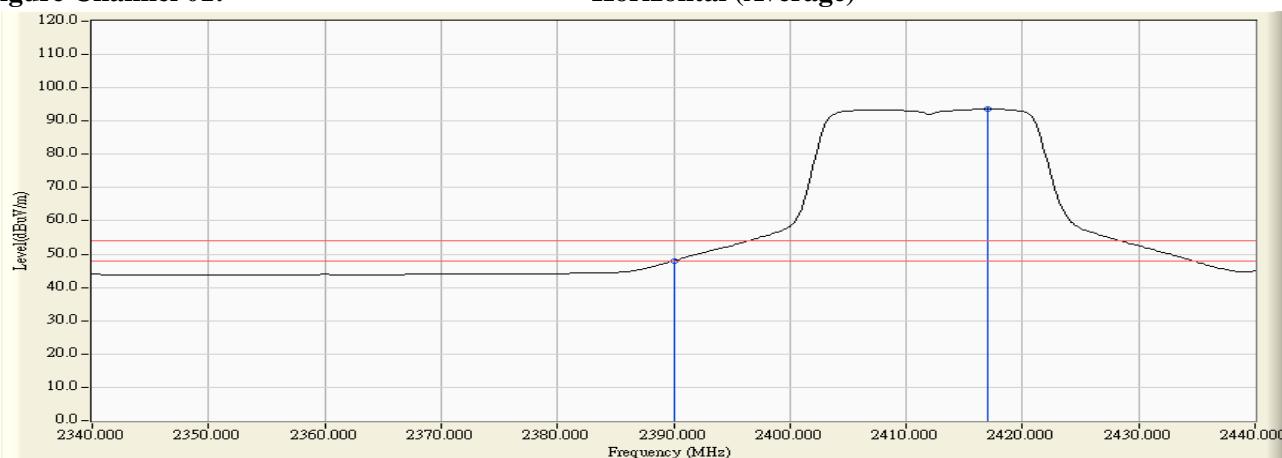


Figure Channel 01:

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 : SpectraGuard® Access Point / Sensor
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 4: Transmit - 802.11n-20BW_14.4Mbps(2.4G Band)(Dipole Antenna)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
01 (Peak)	2390.000	30.915	27.199	58.114	74.00	54.00	Pass
01 (Peak)	2406.600	30.930	66.618	97.548	--	--	--
01 (Average)	2390.000	30.915	13.411	44.326	74.00	54.00	Pass
01 (Average)	2416.400	30.979	54.391	85.370	--	--	--

Figure Channel 01:

Vertical (Peak)

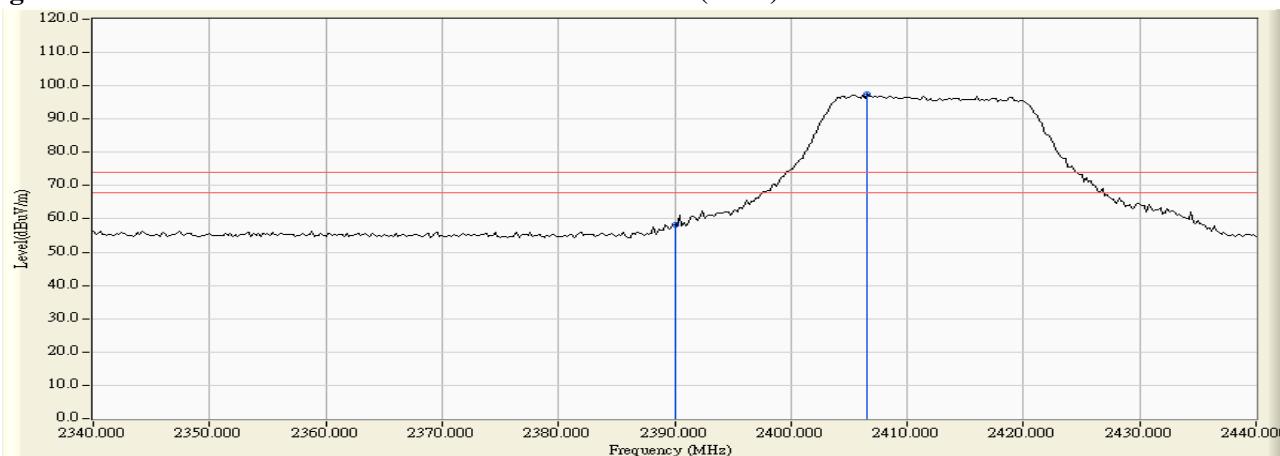
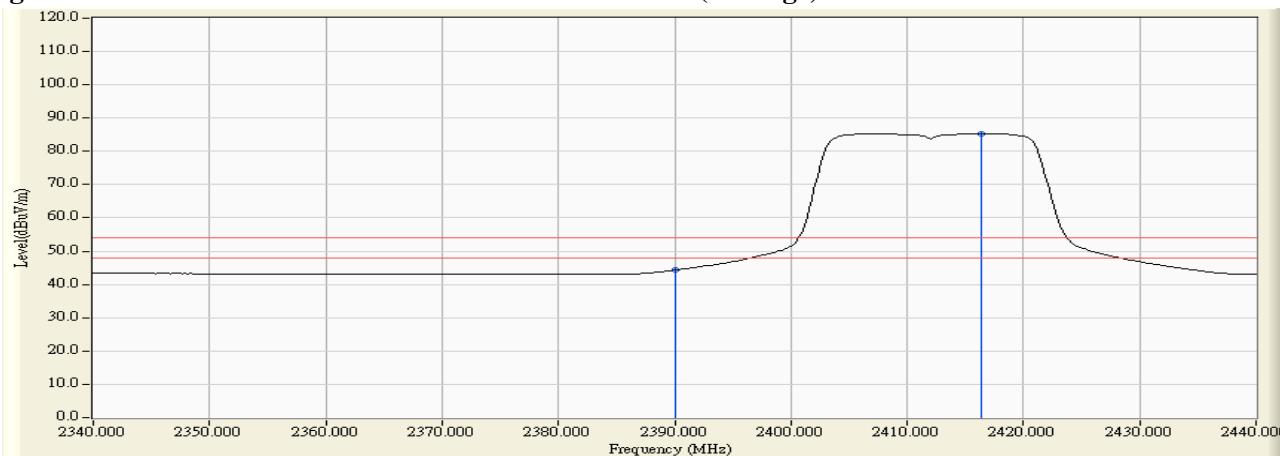


Figure Channel 01:

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 : SpectraGuard® Access Point / Sensor
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 4: Transmit - 802.11n-20BW_14.4Mbps(2.4G Band)(Dipole Antenna)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
11 (Peak)	2458.700	31.994	73.789	105.783	--	--	--
11 (Peak)	2483.500	32.182	34.052	66.234	74.00	54.00	Pass
11 (Average)	2467.100	32.058	60.964	93.022	--	--	--
11 (Average)	2483.500	32.182	17.829	50.011	74.00	54.00	Pass

Figure Channel 11:

Horizontal (Peak)

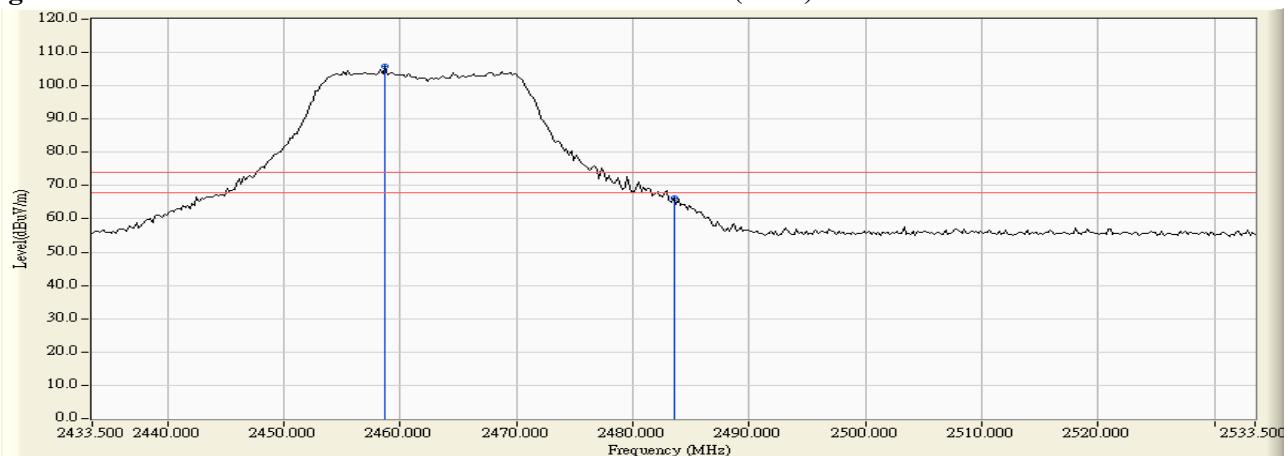
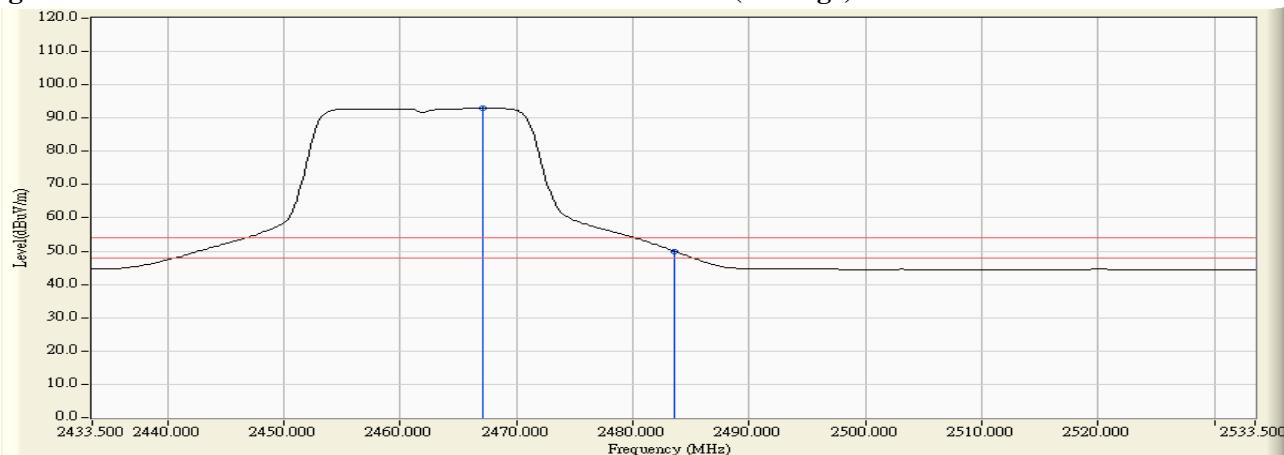


Figure Channel 11:

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 : SpectraGuard® Access Point / Sensor
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 4: Transmit - 802.11n-20BW_14.4Mbps(2.4G Band)(Dipole Antenna)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
11 (Peak)	2460.300	31.278	64.954	96.233	--	--	--
11 (Peak)	2483.500	31.435	28.544	59.979	74.00	54.00	Pass
11 (Average)	2456.100	31.250	52.972	84.222	--	--	--
11 (Average)	2483.500	31.435	13.632	45.067	74.00	54.00	Pass

Figure Channel 11:

Vertical (Peak)

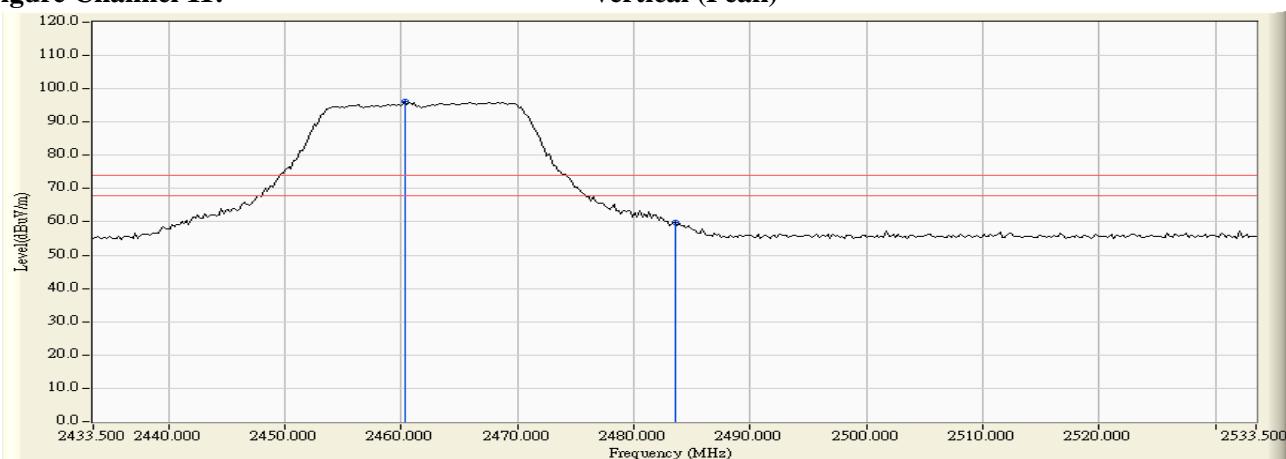
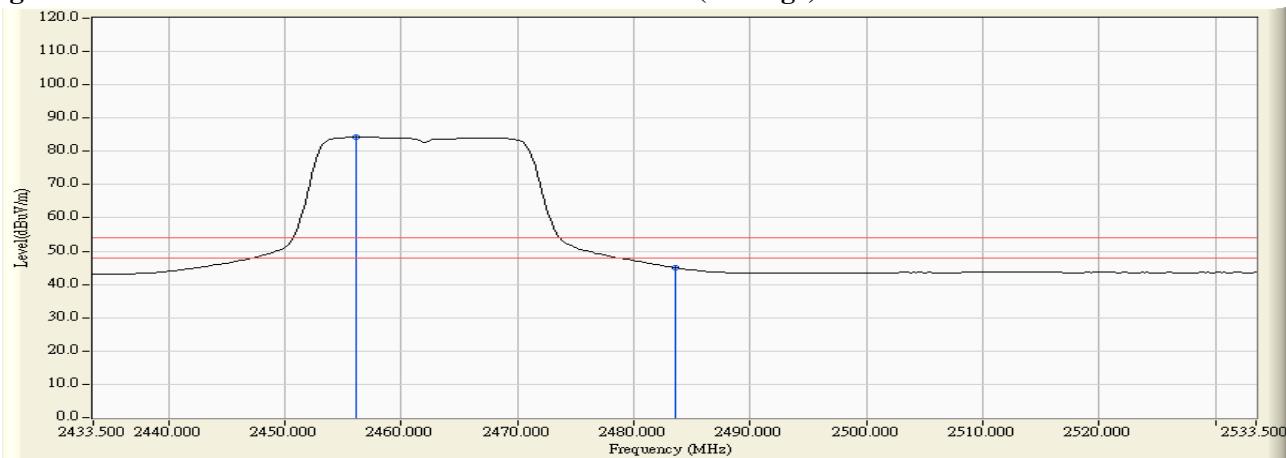


Figure Channel 11:

Vertical (Average)



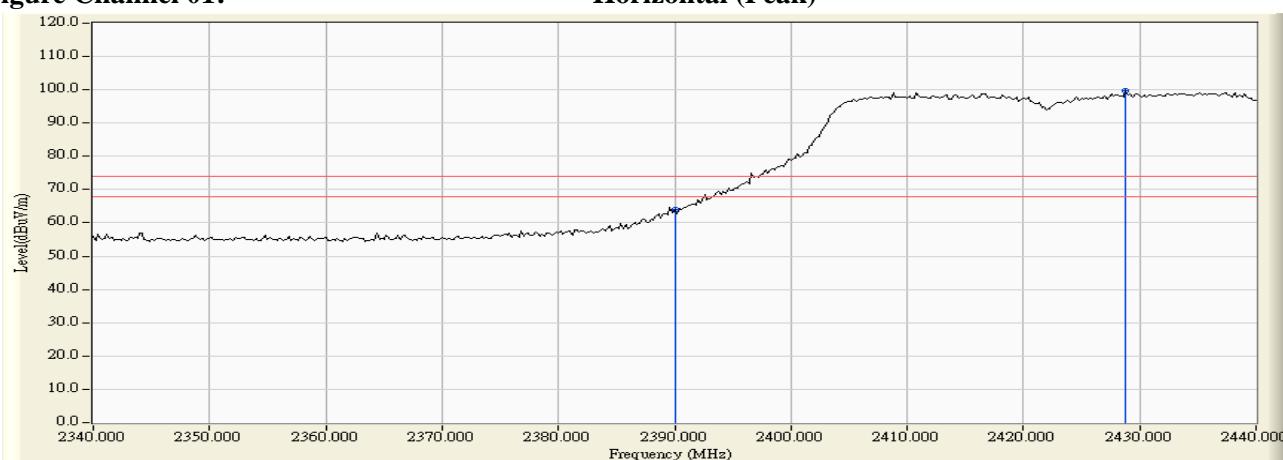
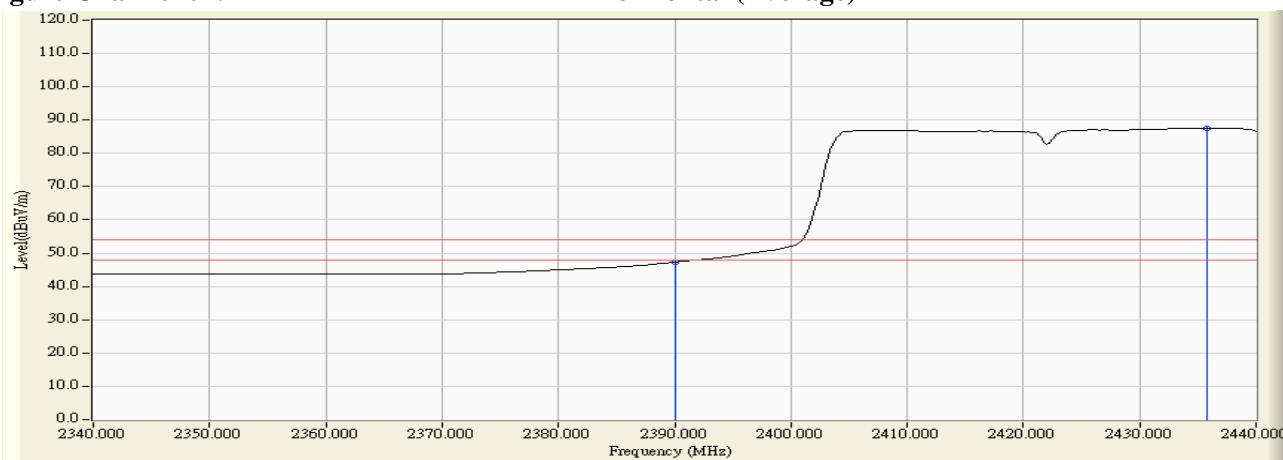
Note:

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 : SpectraGuard® Access Point / Sensor
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 5: Transmit - 802.11n-40BW_30Mbps(2.4G Band)(Dipole Antenna)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
01 (Peak)	2390.000	31.509	32.453	63.962	74.00	54.00	Pass
01 (Peak)	2428.800	31.766	68.048	99.815	--	--	--
01 (Average)	2390.000	31.509	15.835	47.344	74.00	54.00	Pass
01 (Average)	2435.800	31.820	55.762	87.582	--	--	--

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 : SpectraGuard® Access Point / Sensor
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 5: Transmit - 802.11n-40BW_30Mbps(2.4G Band)(Dipole Antenna)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
01 (Peak)	2390.000	30.915	26.640	57.555	74.00	54.00	Pass
01 (Peak)	2408.400	30.936	59.371	90.306	--	--	--
01 (Average)	2390.000	30.915	13.132	44.047	74.00	54.00	Pass
01 (Average)	2435.000	31.106	47.651	78.756	--	--	--

Figure Channel 01:

Vertical (Peak)

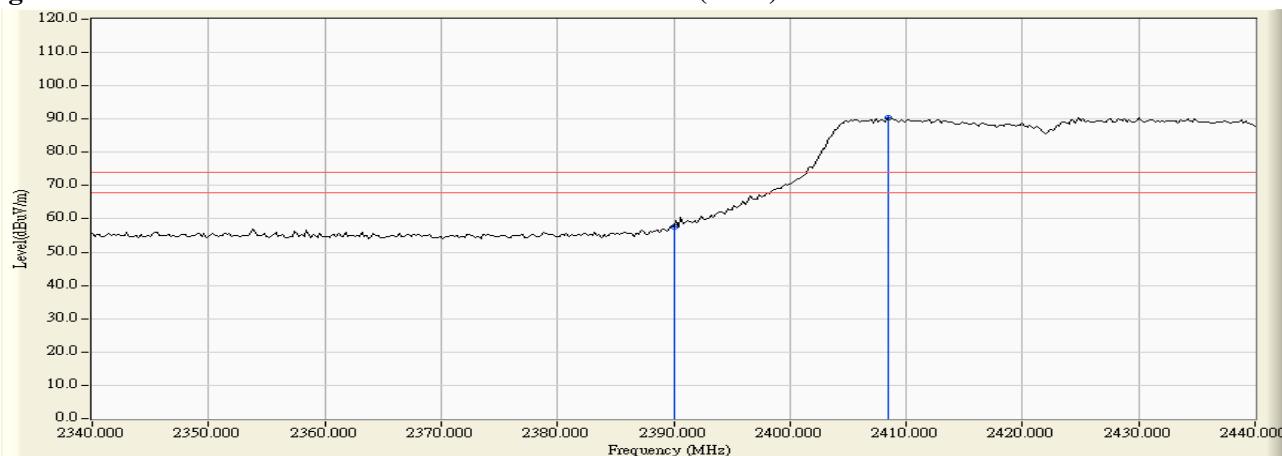
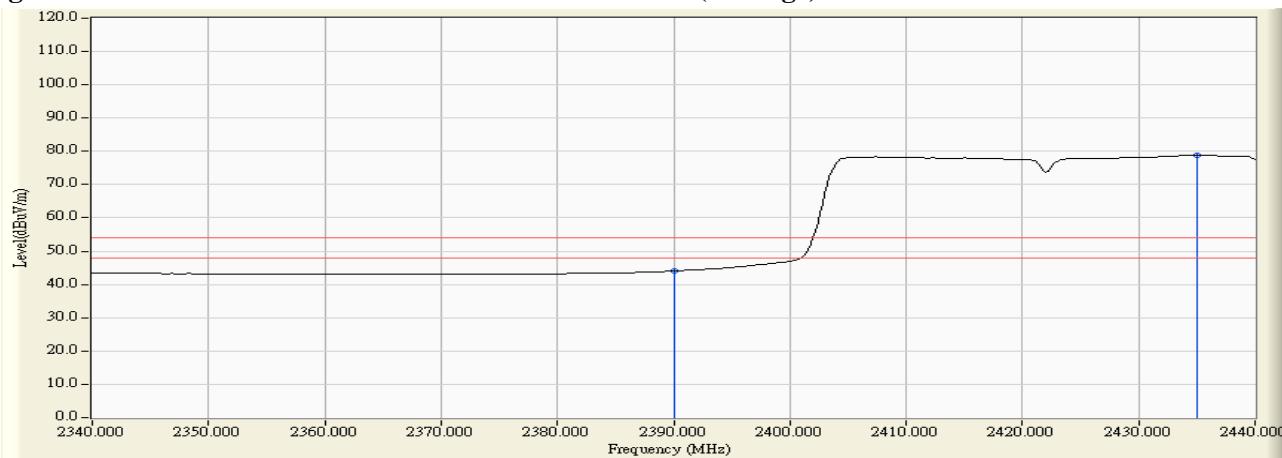


Figure Channel 01:

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 : SpectraGuard® Access Point / Sensor
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 5: Transmit - 802.11n-40BW_30Mbps(2.4G Band)(Dipole Antenna)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
07 (Peak)	2439.300	31.847	69.509	101.356	--	--	--
07 (Peak)	2483.500	32.182	36.195	68.377	74.00	54.00	Pass
07 (Average)	2468.100	32.065	57.428	89.493	--	--	--
07 (Average)	2483.500	32.182	19.801	51.983	74.00	54.00	Pass

Figure Channel 07:

Horizontal (Peak)

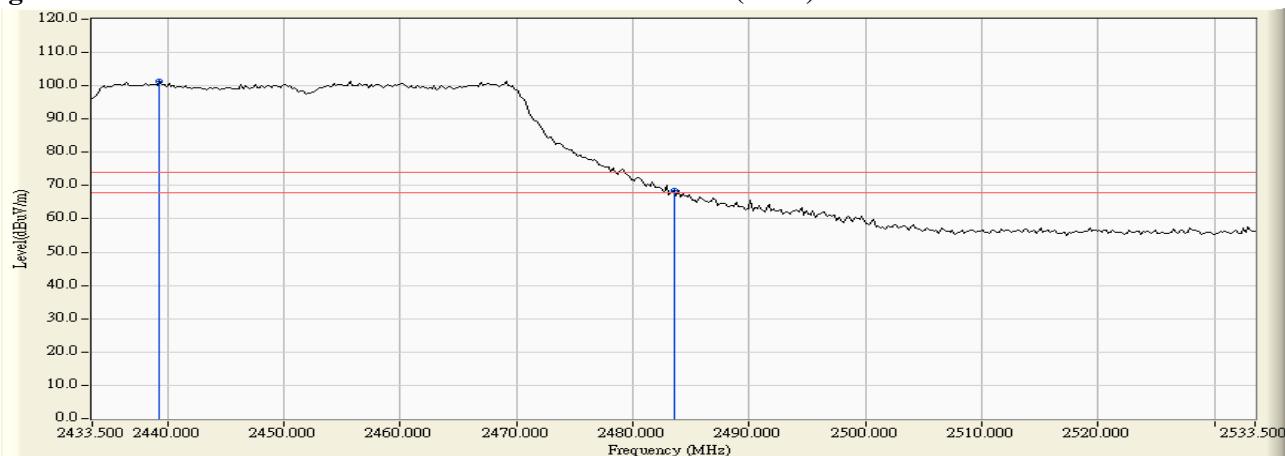
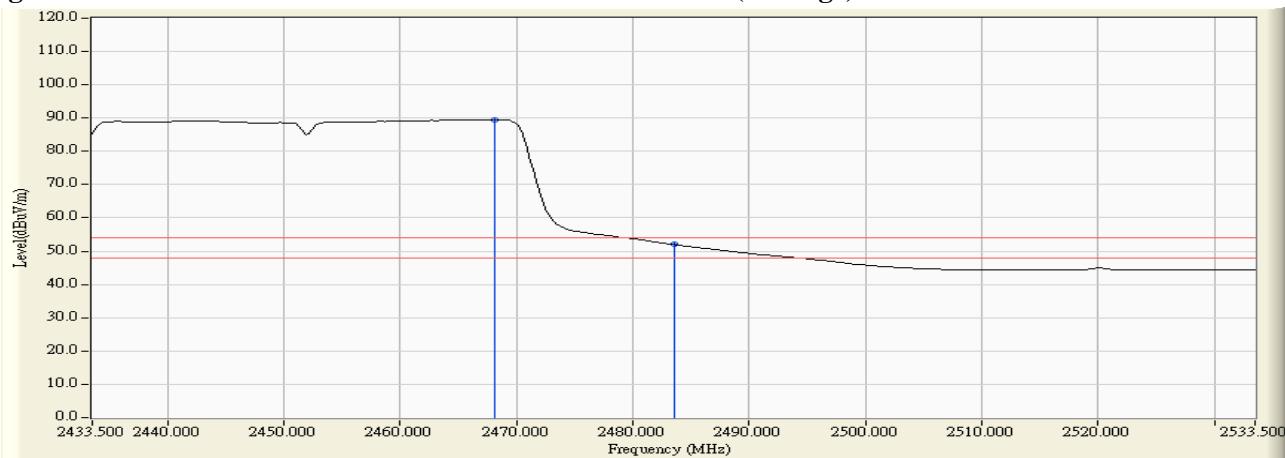


Figure Channel 07:

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 : SpectraGuard® Access Point / Sensor
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 5: Transmit - 802.11n-40BW_30Mbps(2.4G Band)(Dipole Antenna)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
07 (Peak)	2462.700	31.295	60.537	91.832	--	--	--
07 (Peak)	2483.500	31.435	27.844	59.279	74.00	54.00	Pass
07 (Average)	2468.300	31.333	48.902	80.235	--	--	--
07 (Average)	2483.500	31.435	14.450	45.885	74.00	54.00	Pass

Figure Channel 07:

Vertical (Peak)

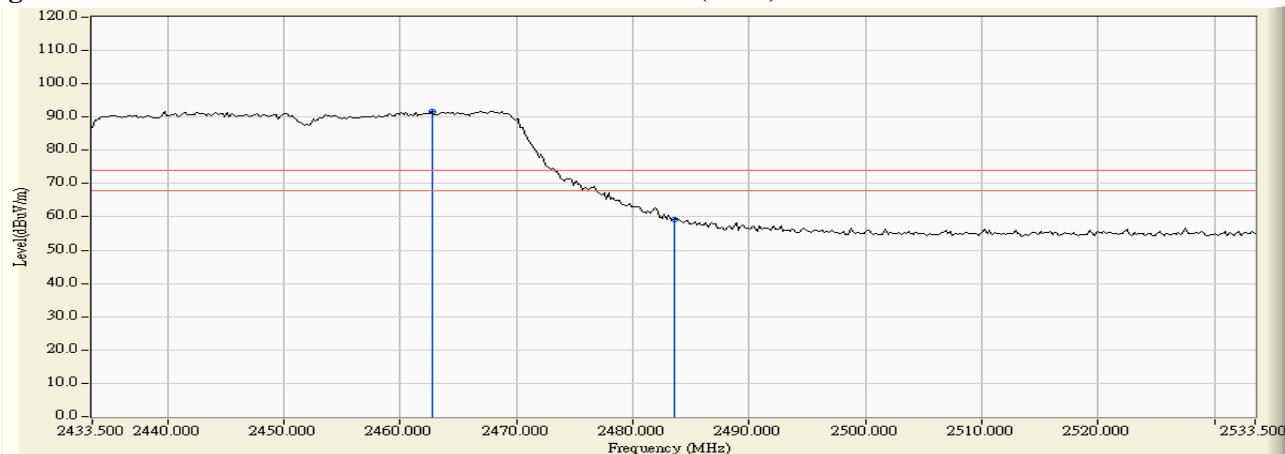
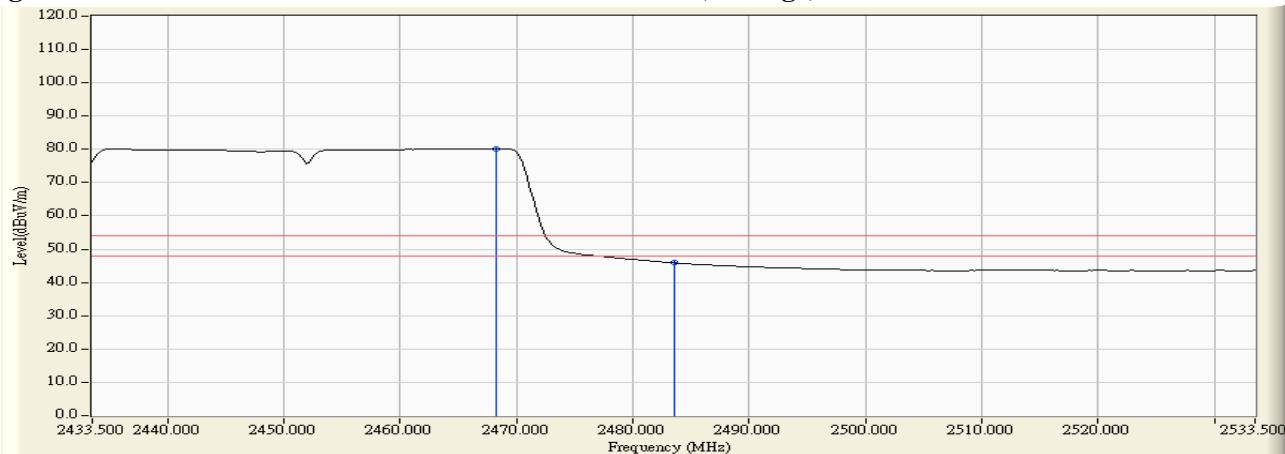


Figure Channel 01:

Vertical (Average)



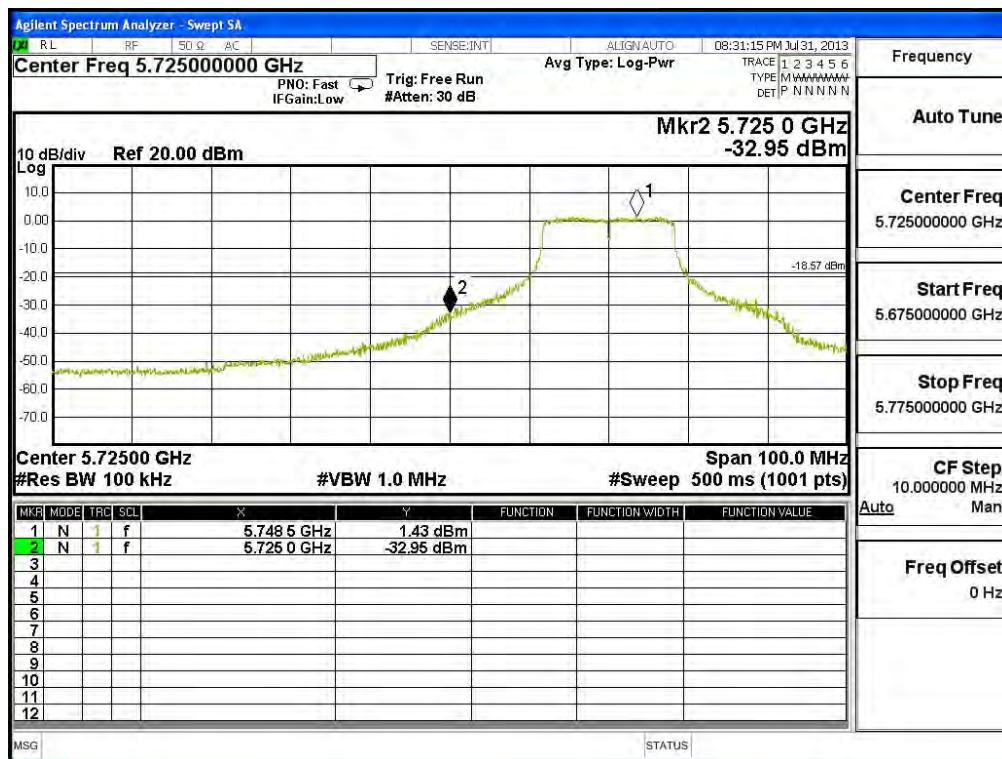
Note:

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 : SpectraGuard® Access Point / Sensor
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmit - 802.11a 6Mbps(Dipole Antenna)

Chain A

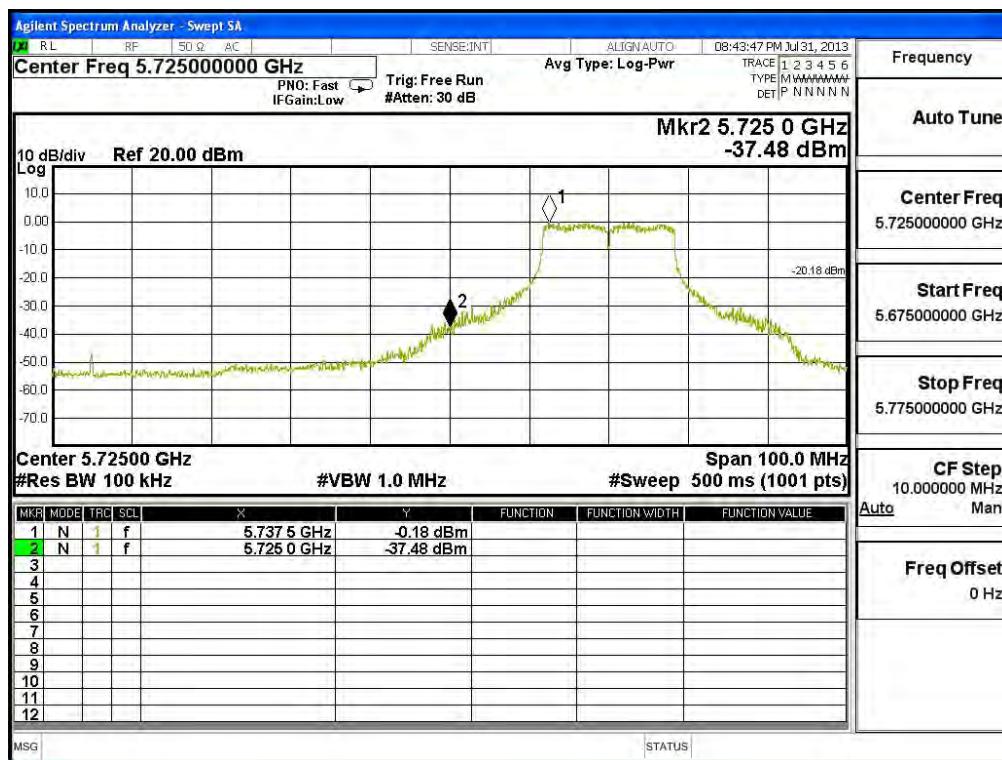
Test Frequency (MHz)	Measurement Level Δ (dB)	Limit Δ (dB)	Result
5745	34.38	>30	PASS



Product : SpectraGuard® Access Point / Sensor
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmit - 802.11a 6Mbps(Dipole Antenna)

Chain B

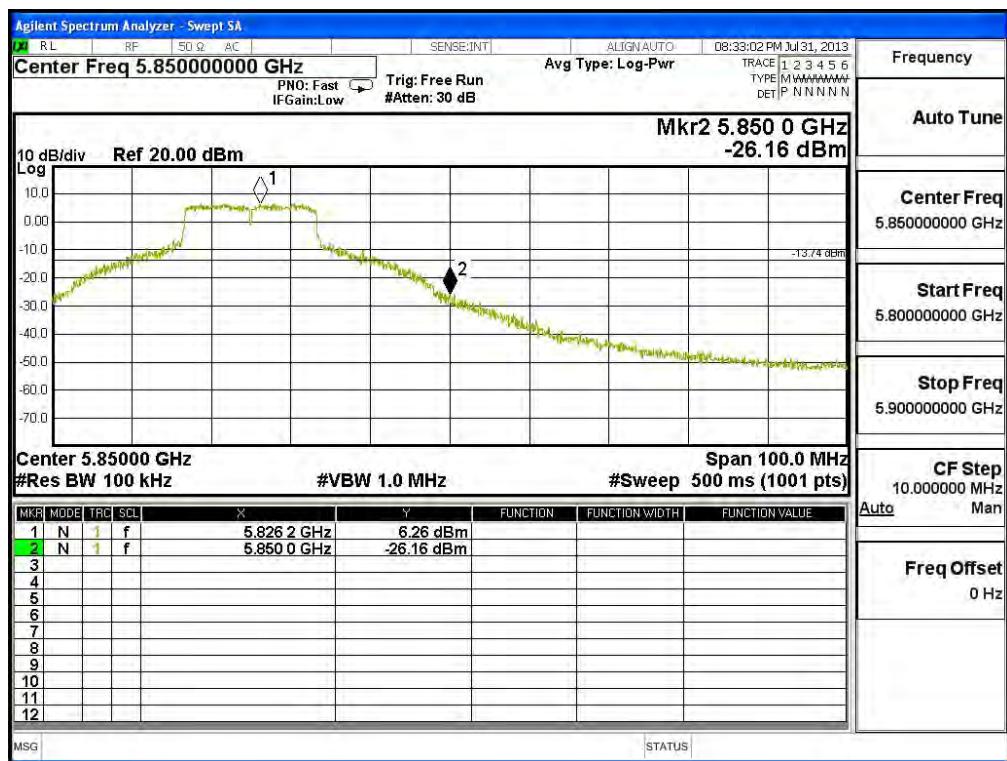
Test Frequency (MHz)	Measurement Level Δ (dB)	Limit Δ (dB)	Result
5745	37.66	>30	PASS



Product : SpectraGuard® Access Point / Sensor
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmit - 802.11a 6Mbps(Dipole Antenna)

Chain A

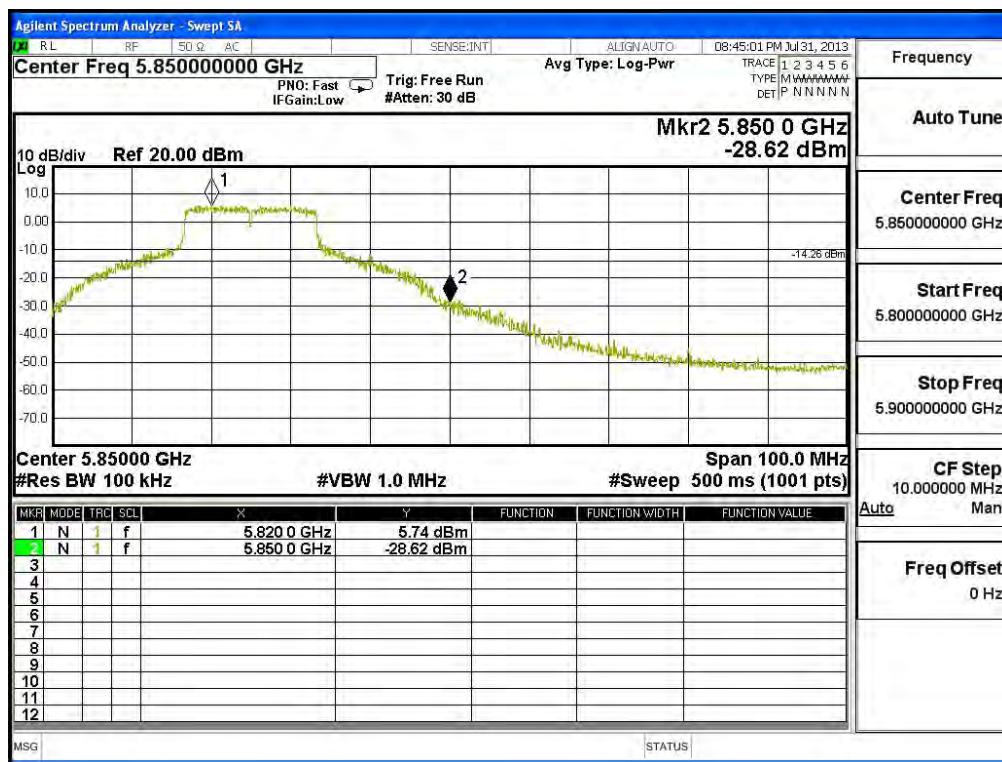
Test Frequency (MHz)	Measurement Level Δ (dB)	Limit Δ (dB)	Result
5825	32.42	>30	PASS



Product : SpectraGuard® Access Point / Sensor
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmit - 802.11a 6Mbps(Dipole Antenna)

Chain B

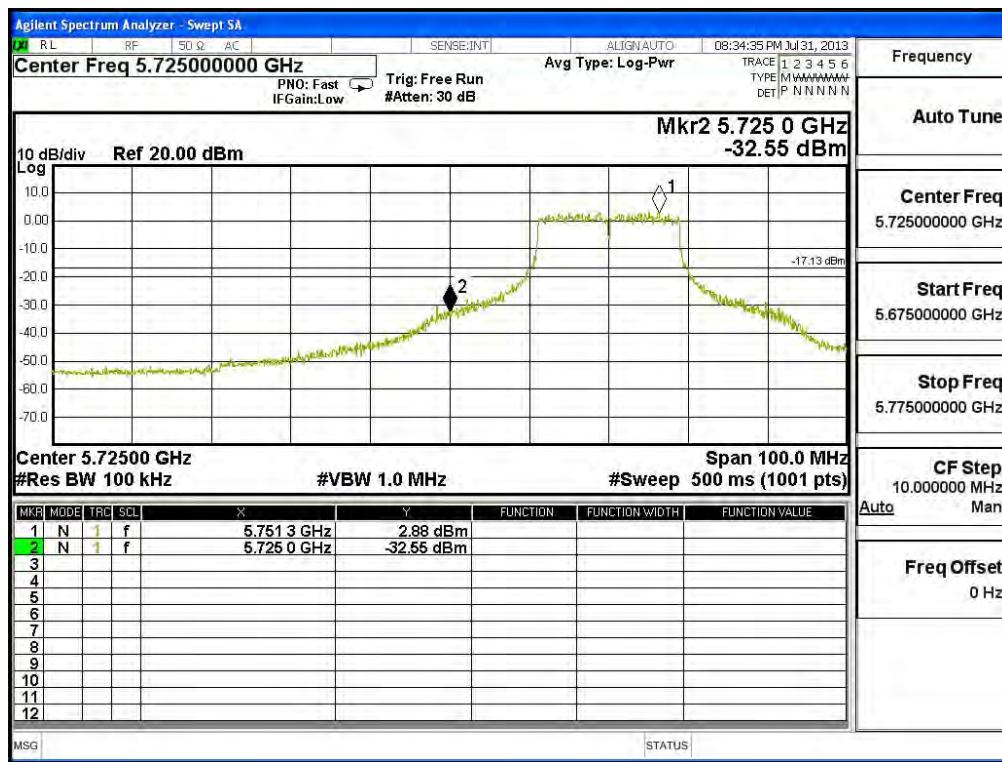
Test Frequency (MHz)	Measurement Level Δ (dB)	Limit Δ (dB)	Result
5825	34.36	>30	PASS



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

Chain A

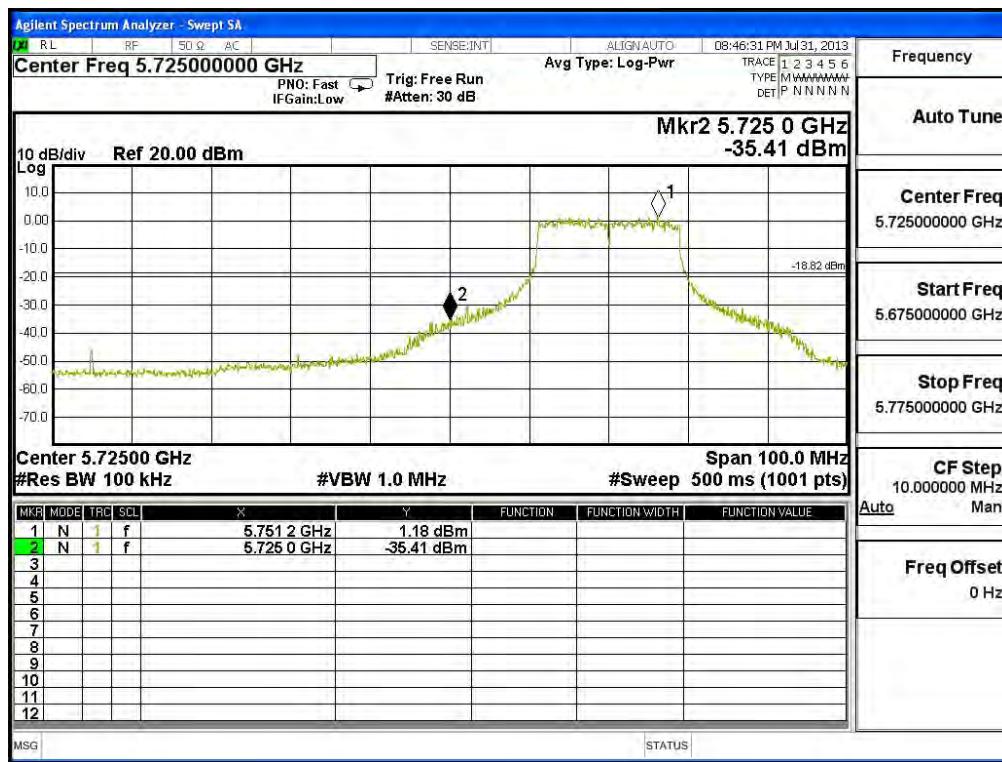
Test Frequency (MHz)	Measurement Level Δ (dB)	Limit Δ (dB)	Result
5745	35.44	>30	PASS



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

Chain B

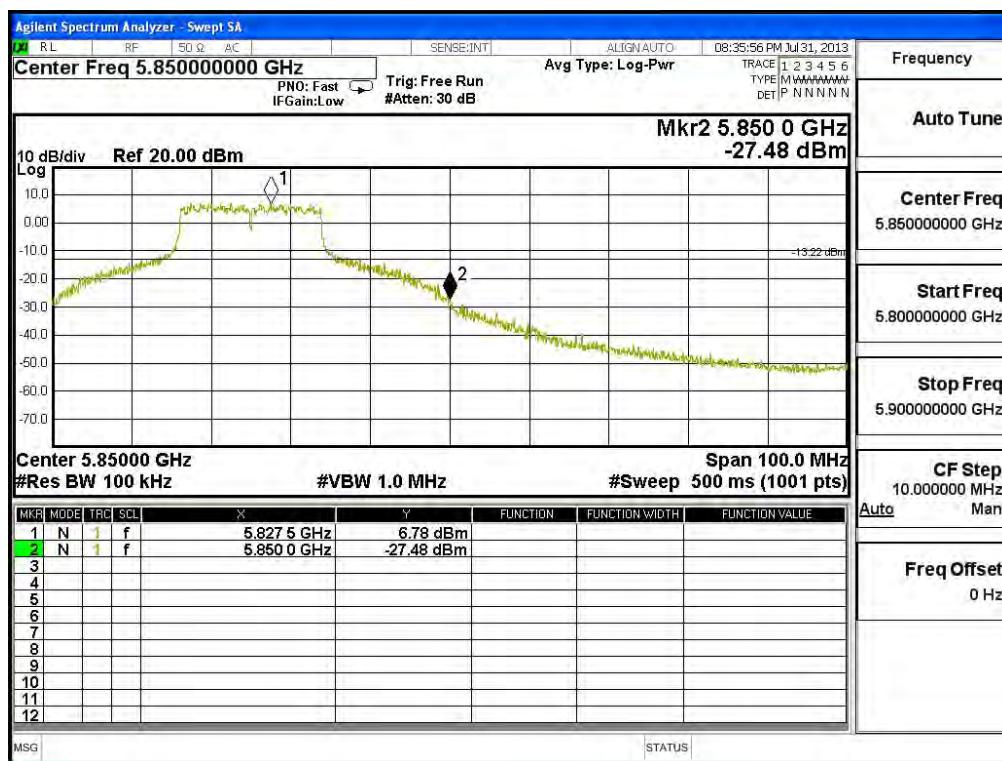
Test Frequency (MHz)	Measurement Level Δ (dB)	Limit Δ (dB)	Result
5745	36.59	>30	PASS



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

Chain A

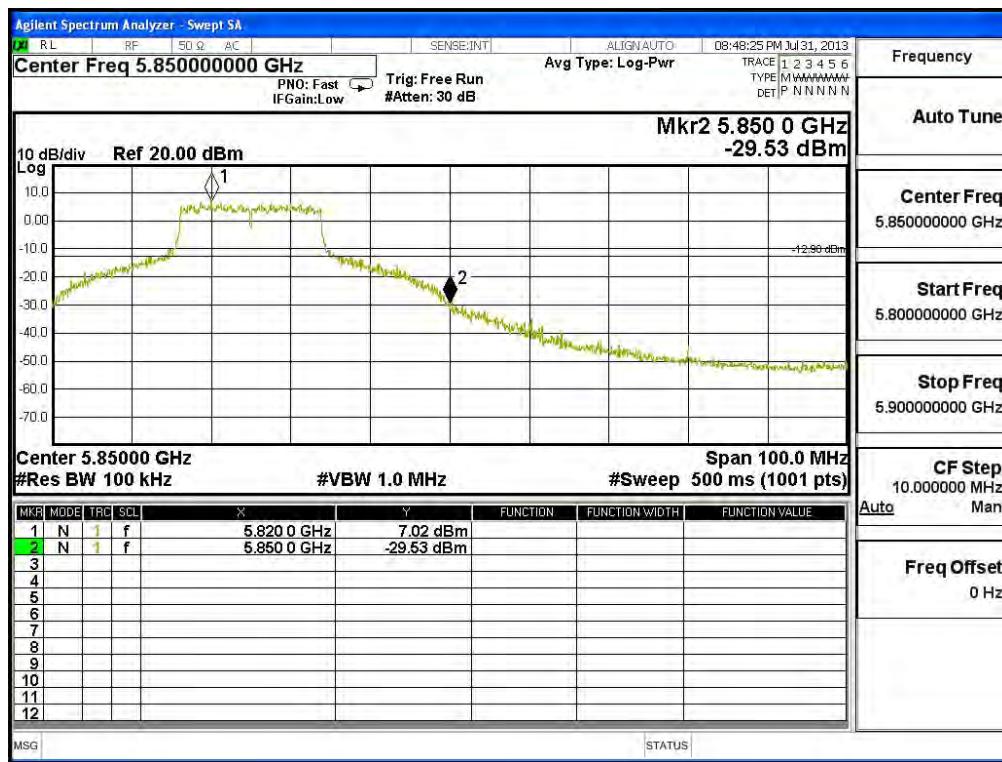
Test Frequency (MHz)	Measurement Level Δ (dB)	Limit Δ (dB)	Result
5825	34.26	>30	PASS



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

Chain B

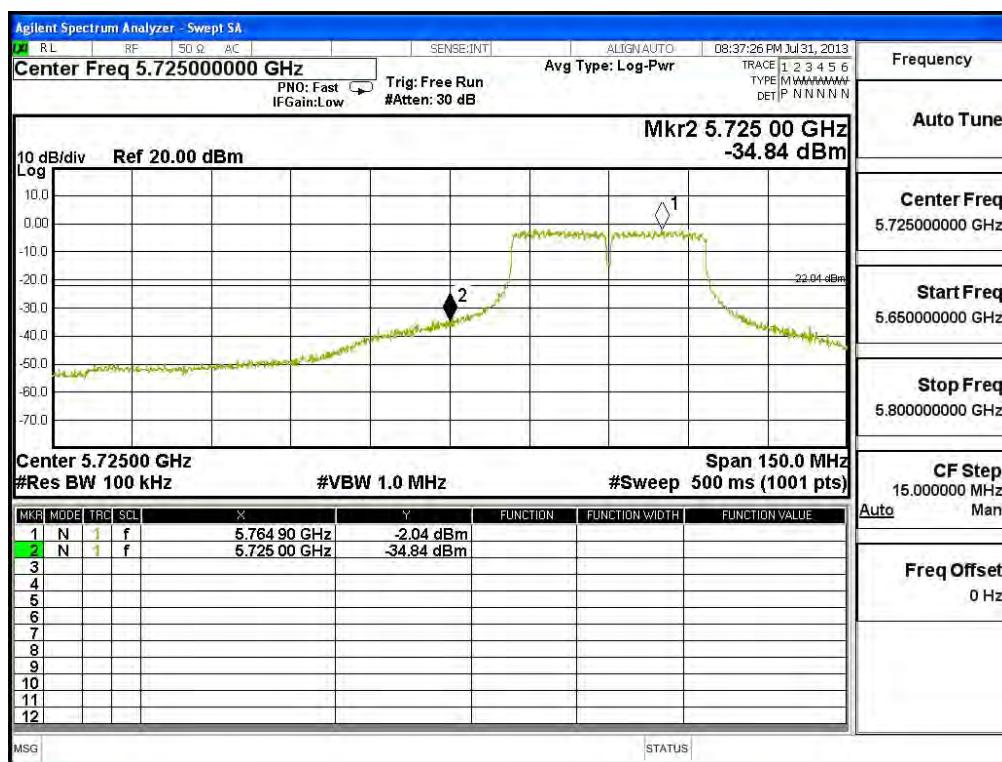
Test Frequency (MHz)	Measurement Level Δ (dB)	Limit Δ (dB)	Result
5825	36.55	>30	PASS



Product : SpectraGuard® Access Point / Sensor
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 7: Transmit - 802.11n-40BW_30Mbps(5G Band)(Dipole Antenna)

Chain A

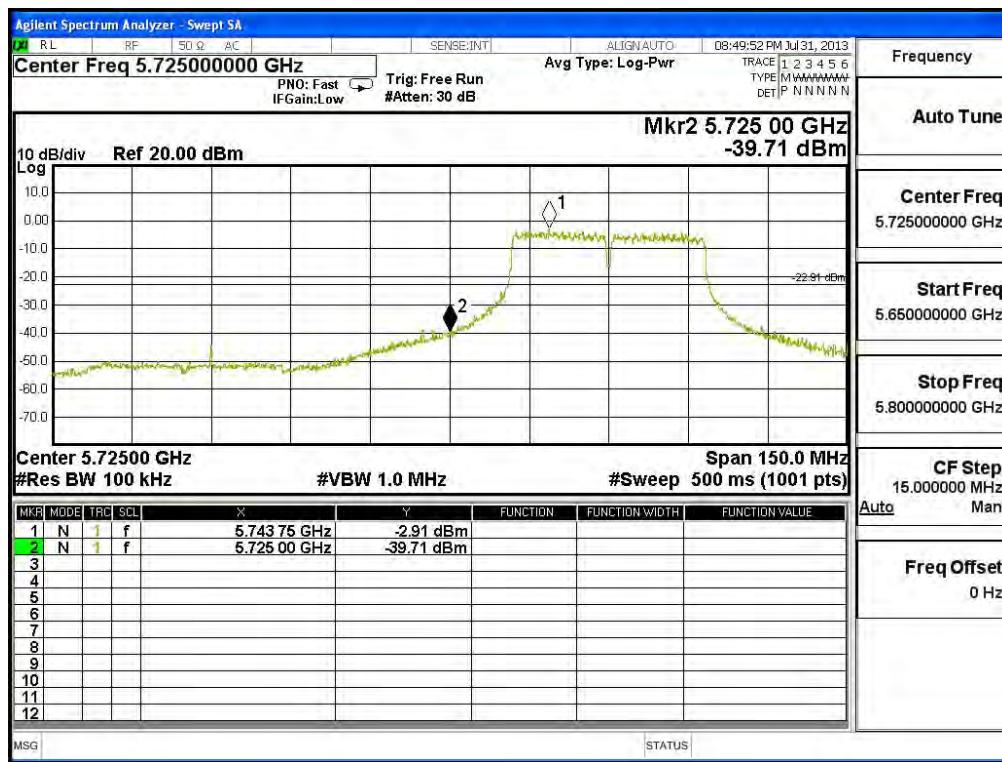
Test Frequency (MHz)	Measurement Level Δ (dB)	Limit Δ (dB)	Result
5755	36.88	>30	PASS



Product : SpectraGuard® Access Point / Sensor
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 7: Transmit - 802.11n-40BW_30Mbps(5G Band)(Dipole Antenna)

Chain B

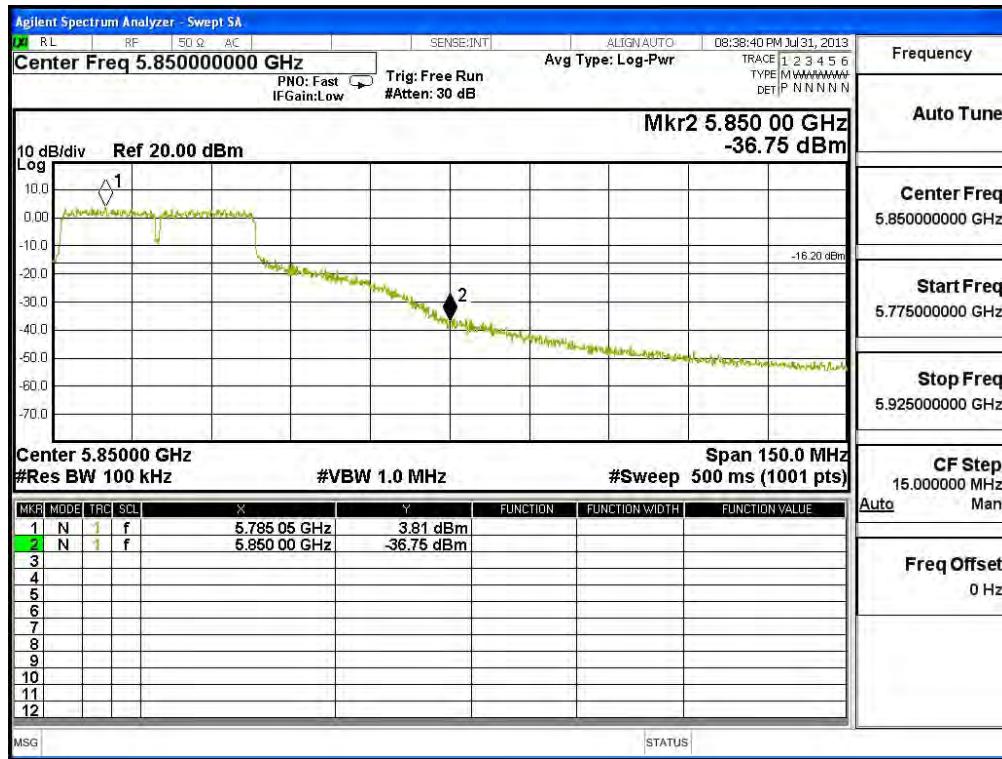
Test Frequency (MHz)	Measurement Level Δ (dB)	Limit Δ (dB)	Result
5755	42.62	>30	PASS



Product : SpectraGuard® Access Point / Sensor
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 7: Transmit - 802.11n-40BW_30Mbps(5G Band)(Dipole Antenna)

Chain A

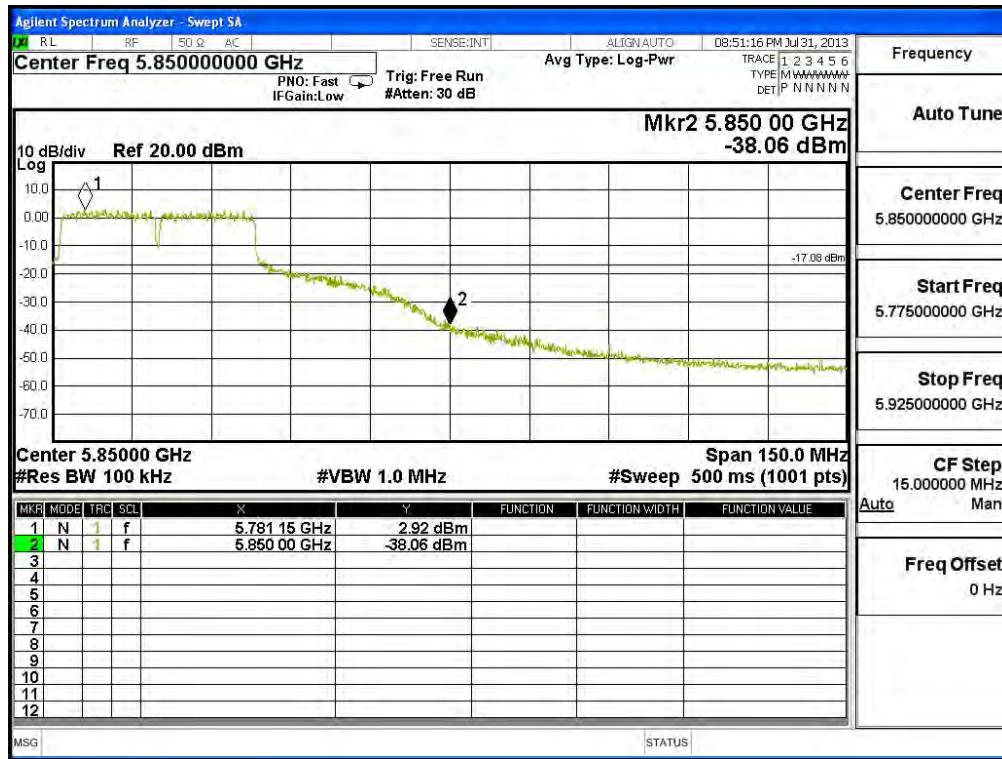
Test Frequency (MHz)	Measurement Level Δ (dB)	Limit Δ (dB)	Result
5795	40.56	>30	PASS



Product : SpectraGuard® Access Point / Sensor
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 7: Transmit - 802.11n-40BW_30Mbps(5G Band)(Dipole Antenna)

Chain B

Test Frequency (MHz)	Measurement Level Δ (dB)	Limit Δ (dB)	Result
5795	40.97	>30	PASS



Product : SpectraGuard® Access Point / Sensor
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 8: Transmit (802.11b 1Mbps)(PIFA Antenna)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
01 (Peak)	2386.800	31.497	27.476	58.973	74.00	54.00	Pass
01 (Peak)	2390.000	31.509	25.730	57.239	74.00	54.00	Pass
01 (Peak)	2413.000	31.646	75.771	107.417	--	--	--
01 (Average)	2386.600	31.496	14.565	46.061	74.00	54.00	Pass
01 (Average)	2390.000	31.509	13.577	45.086	74.00	54.00	Pass
01 (Average)	2414.800	31.660	71.782	103.442	--	--	--

Figure Channel 01:

Horizontal (Peak)

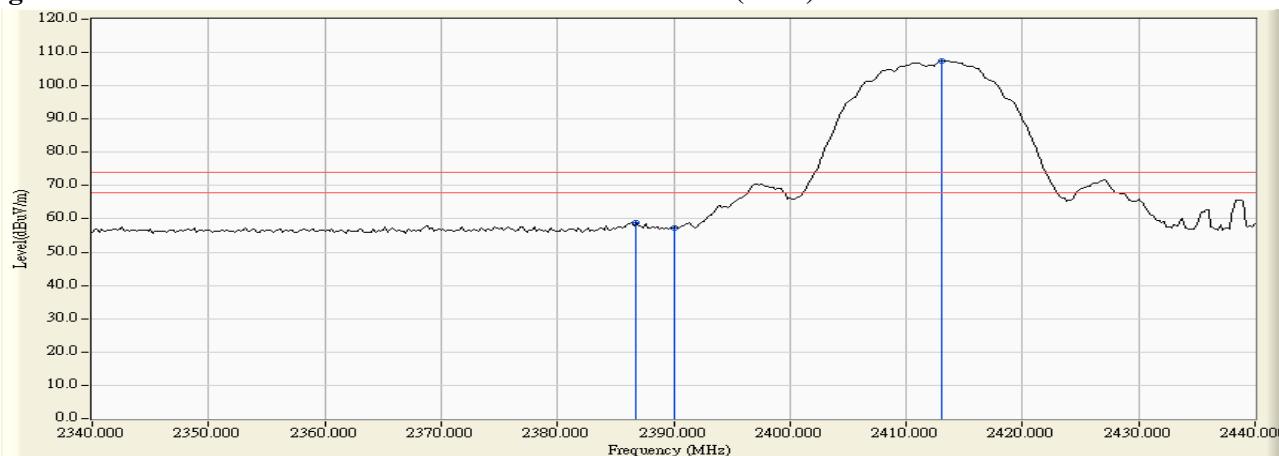
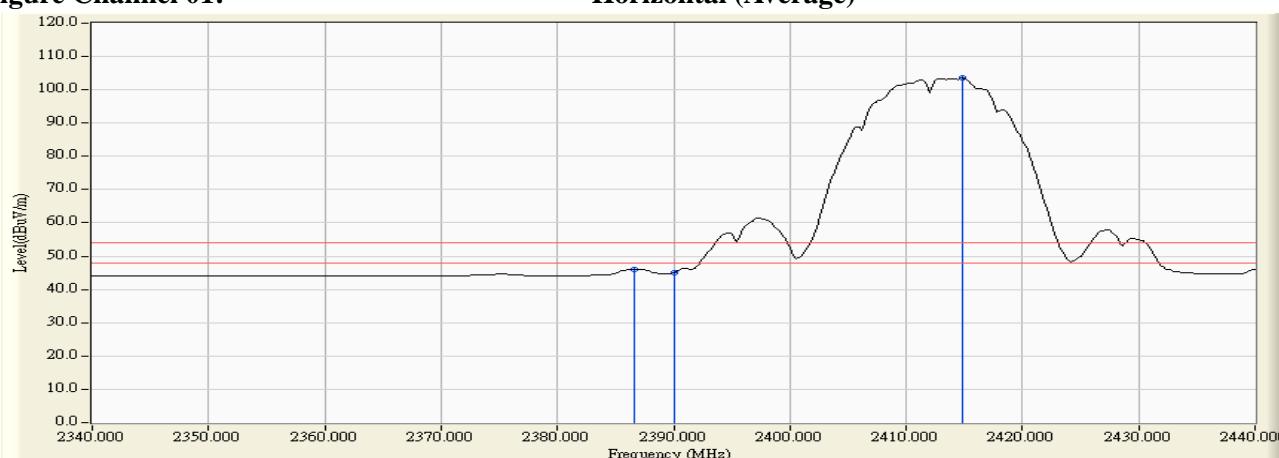


Figure Channel 01:

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 : SpectraGuard® Access Point / Sensor
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 8: Transmit (802.11b 1Mbps)(PIFA Antenna)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
01 (Peak)	2386.600	30.931	26.927	57.858	74.00	54.00	Pass
01 (Peak)	2390.000	30.915	26.166	57.081	74.00	54.00	Pass
01 (Peak)	2411.000	30.942	76.148	107.090	--	--	--
01 (Average)	2386.000	30.934	15.039	45.973	74.00	54.00	Pass
01 (Average)	2390.000	30.915	13.418	44.333	74.00	54.00	Pass
01 (Average)	2411.200	30.944	72.479	103.423	--	--	--

Figure Channel 01:

Vertical (Peak)

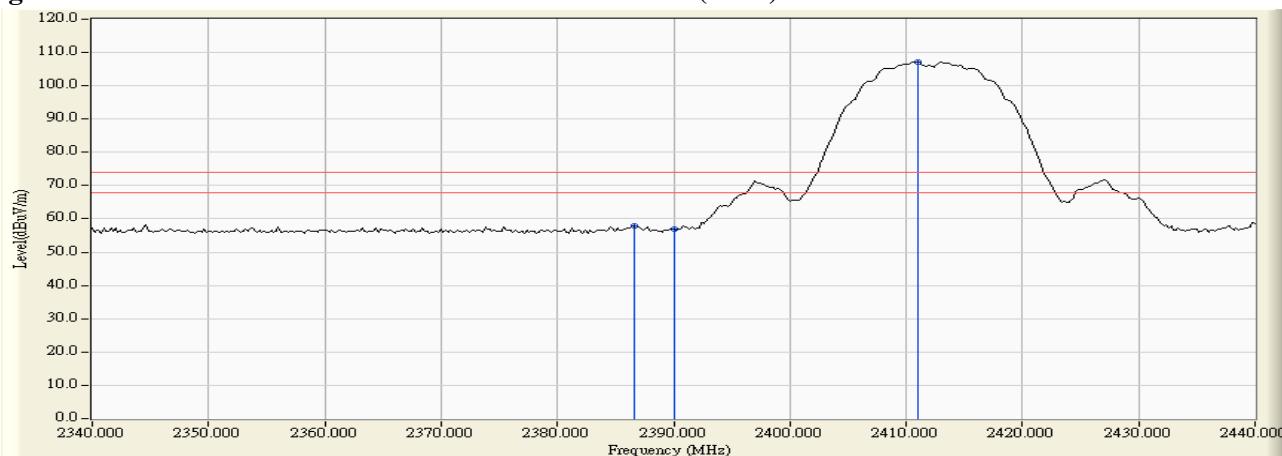
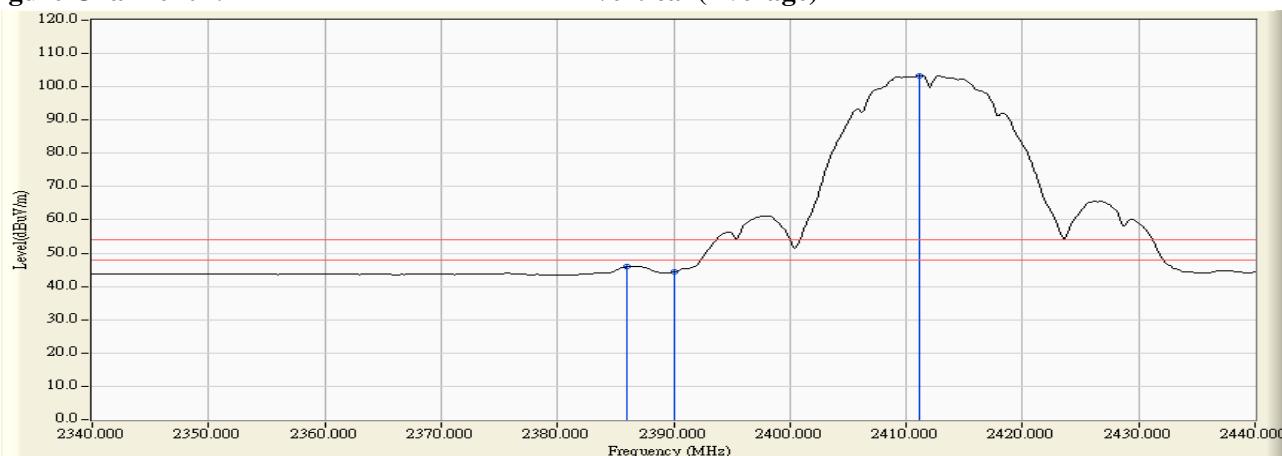


Figure Channel 01:

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 : SpectraGuard® Access Point / Sensor
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 8: Transmit (802.11b 1Mbps)(PIFA Antenna)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
11 (Peak)	2463.100	32.028	76.306	108.334	--	--	--
11 (Peak)	2483.500	32.182	29.478	61.660	74.00	54.00	Pass
11 (Average)	2461.100	32.013	72.488	104.501	--	--	--
11 (Average)	2483.500	32.182	19.984	52.166	74.00	54.00	Pass
11 (Average)	2487.700	32.213	19.807	52.021	74.00	54.00	Pass

Figure Channel 11:

Horizontal (Peak)

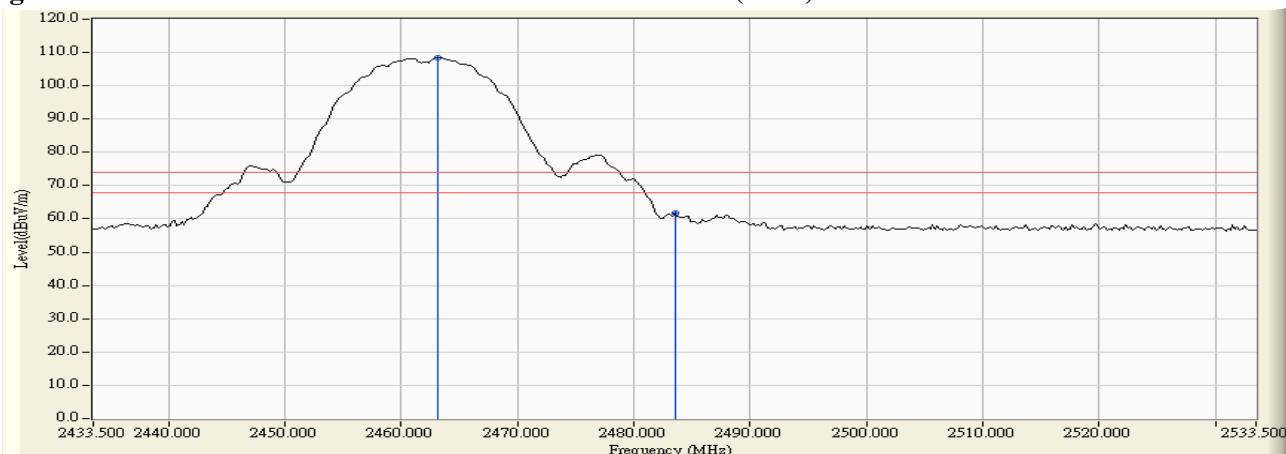
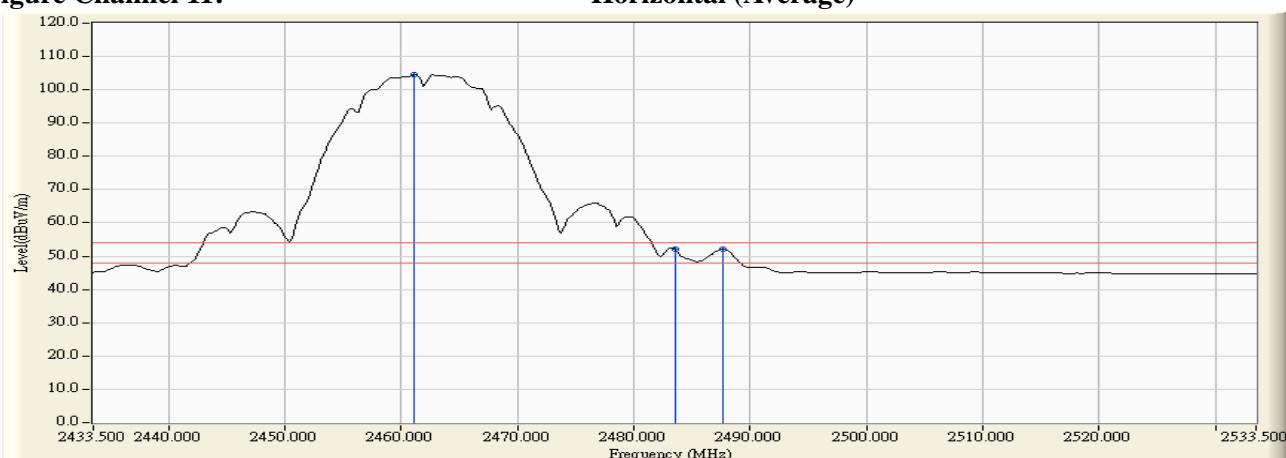


Figure Channel 11:

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 : SpectraGuard® Access Point / Sensor
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 8: Transmit (802.11b 1Mbps)(PIFA Antenna)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
11 (Peak)	2463.500	31.300	76.023	107.323	--	--	--
11 (Peak)	2483.500	31.435	28.770	60.205	74.00	54.00	Pass
11 (Peak)	2484.100	31.439	32.388	63.827	74.00	54.00	Pass
11 (Average)	2464.700	31.308	72.315	103.624	--	--	--
11 (Average)	2483.500	31.435	16.517	47.952	74.00	54.00	Pass
11 (Average)	2487.900	31.465	17.396	48.861	74.00	54.00	Pass

Figure Channel 11:

Vertical (Peak)

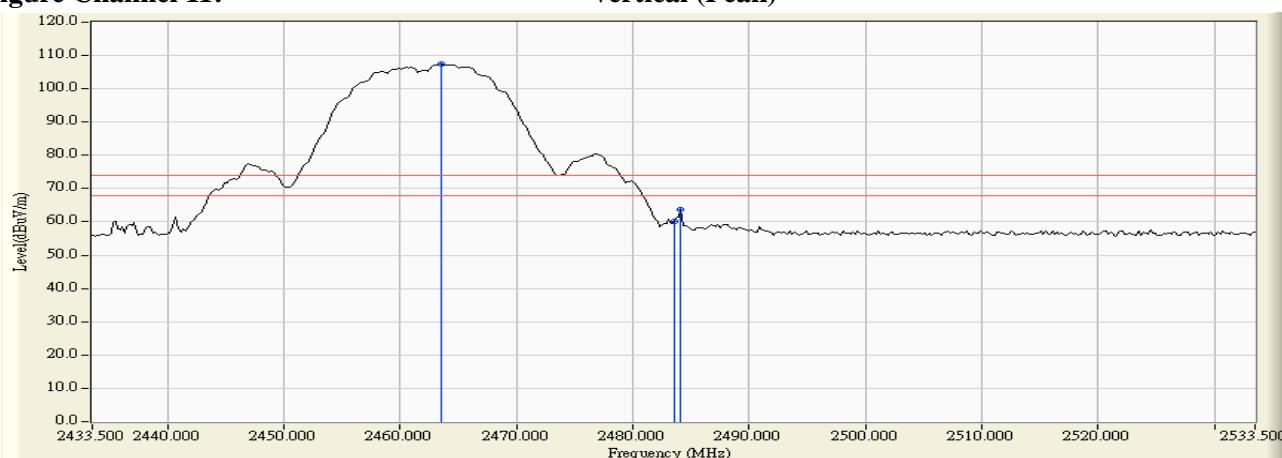
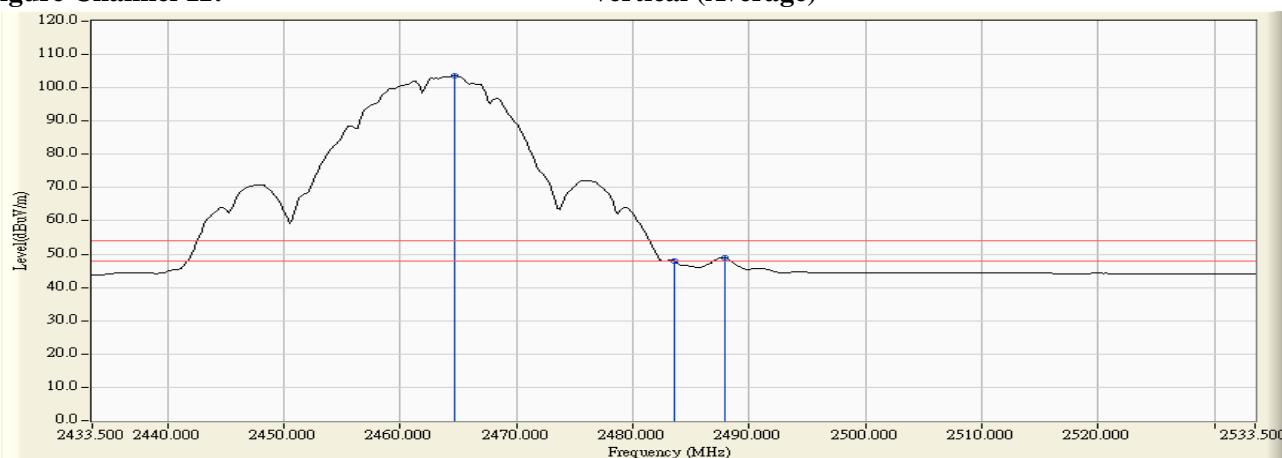


Figure Channel 11:

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 : SpectraGuard® Access Point / Sensor
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 9: Transmit (802.11g 6Mbps)(PIFA Antenna)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
01 (Peak)	2390.000	31.509	31.123	62.632	74.00	54.00	Pass
01 (Peak)	2415.600	31.665	71.872	103.538	--	--	--
01(Average)	2390.000	31.509	14.357	45.866	74.00	54.00	Pass
01(Average)	2414.600	31.659	61.345	93.003	--	--	--

Figure Channel 01:

Horizontal (Peak)

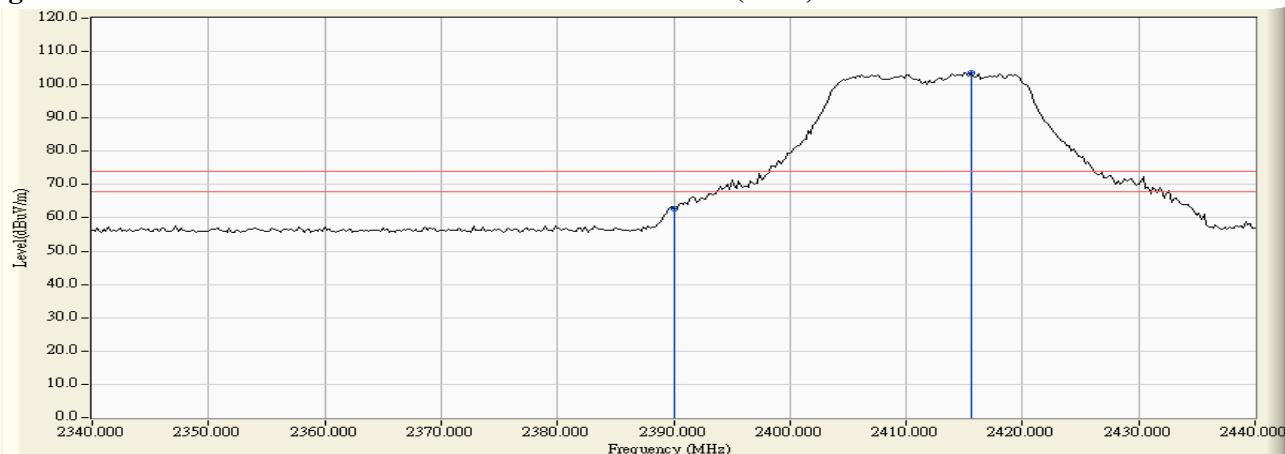
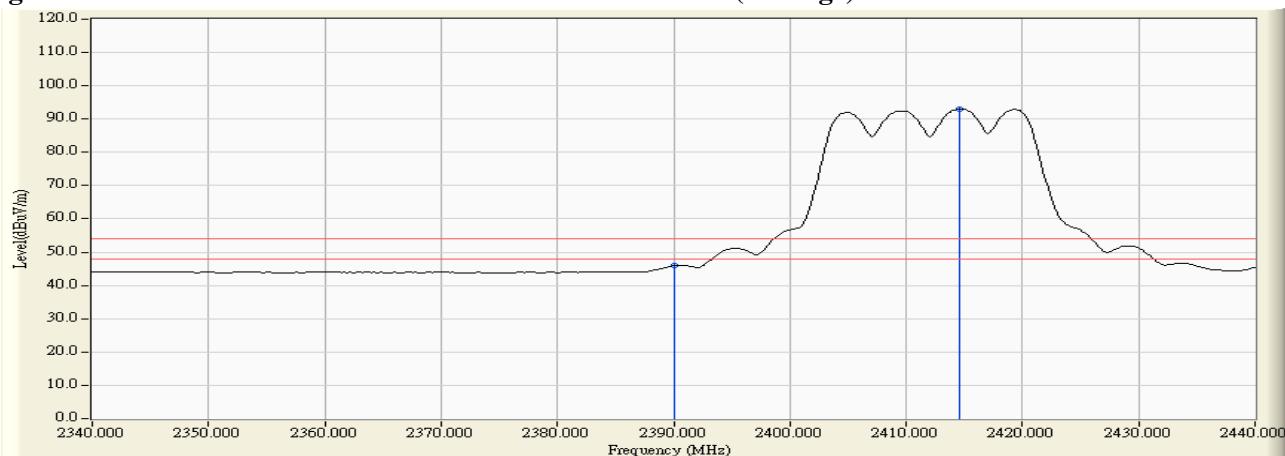


Figure Channel 01:

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 : SpectraGuard® Access Point / Sensor
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 9: Transmit (802.11g 6Mbps)(PIFA Antenna)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
01 (Peak)	2390.000	30.915	33.107	64.022	74.00	54.00	Pass
01 (Peak)	2416.400	30.979	72.693	103.672	--	--	--
01 (Average)	2390.000	30.915	14.608	45.523	74.00	54.00	Pass
01 (Average)	2415.400	30.972	62.050	93.022	--	--	--

Figure Channel 01:

Vertical (Peak)

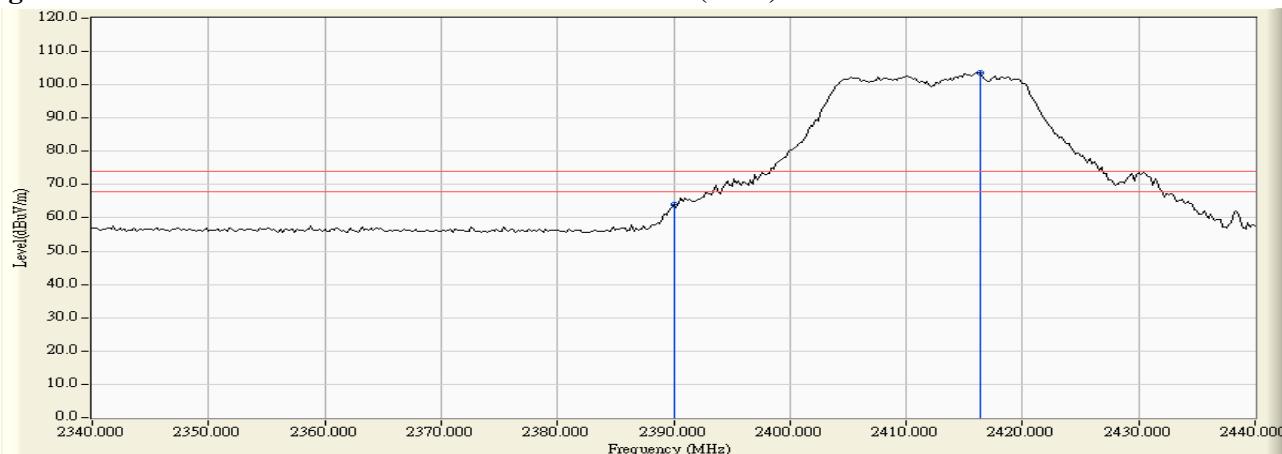
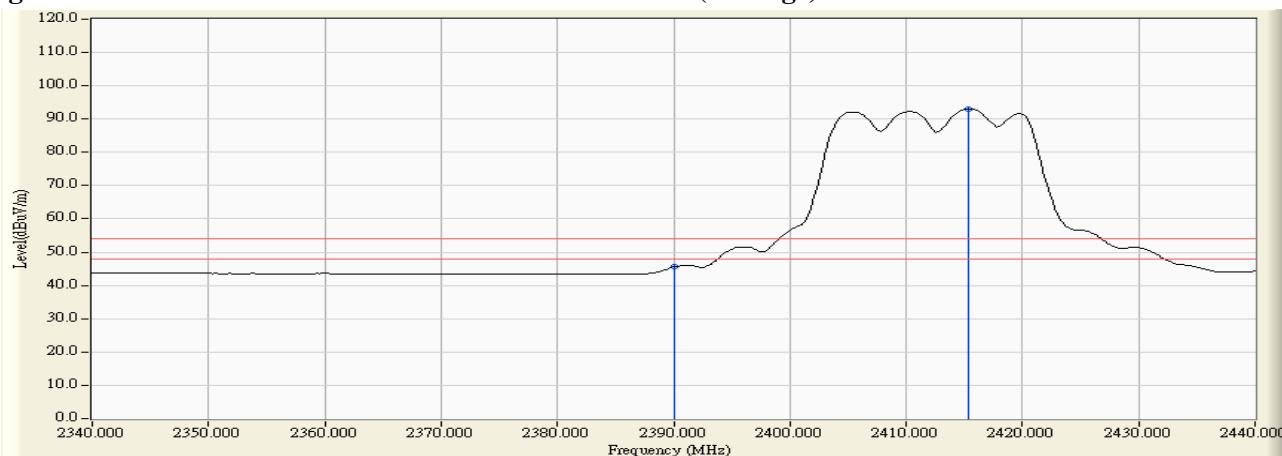


Figure Channel 01:

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 : SpectraGuard® Access Point / Sensor
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 9: Transmit (802.11g 6Mbps)(PIFA Antenna)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
11 (Peak)	2465.500	32.046	71.775	103.821	--	--	--
11 (Peak)	2483.500	32.182	36.355	68.537	74.00	54.00	Pass
11 (Average)	2466.900	32.057	61.231	93.287	--	--	--
11 (Average)	2483.500	32.182	14.576	46.758	74.00	54.00	Pass

Figure Channel 11:

Horizontal (Peak)

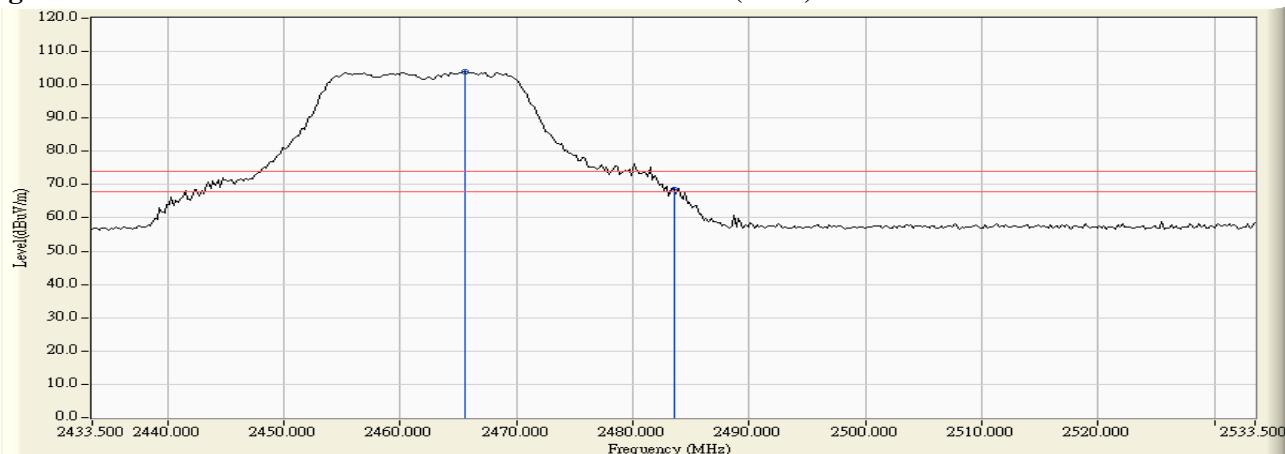
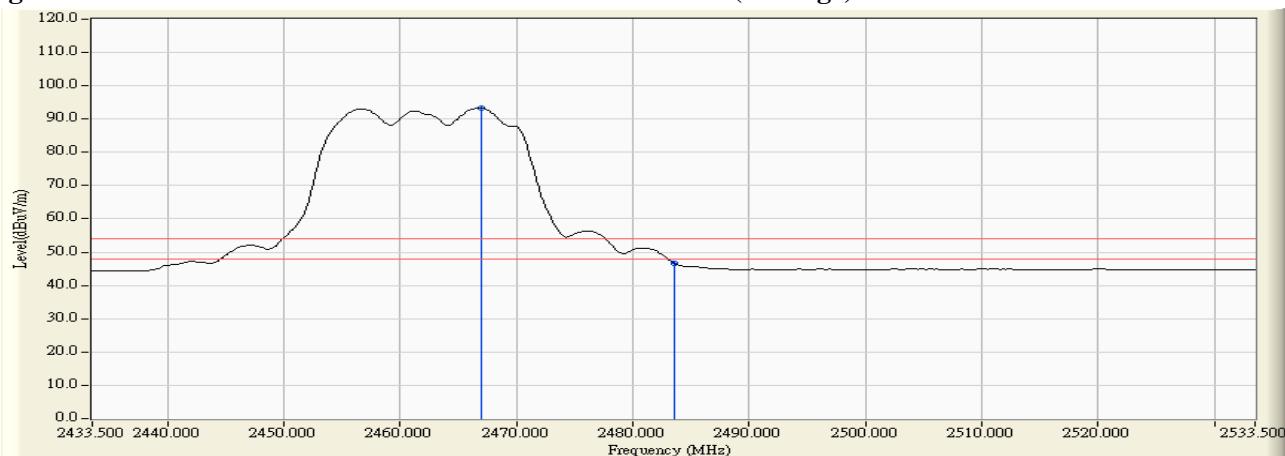


Figure Channel 11:

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 : SpectraGuard® Access Point / Sensor
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 9: Transmit (802.11g 6Mbps)(PIFA Antenna)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
11 (Peak)	2465.700	31.315	72.648	103.963	--	--	--
11 (Peak)	2483.500	31.435	37.506	68.941	74.00	54.00	Pass
11 (Average)	2465.300	31.313	63.014	94.327	--	--	--
11 (Average)	2483.500	31.435	17.373	48.808	74.00	54.00	Pass

Figure Channel 11:

Vertical (Peak)

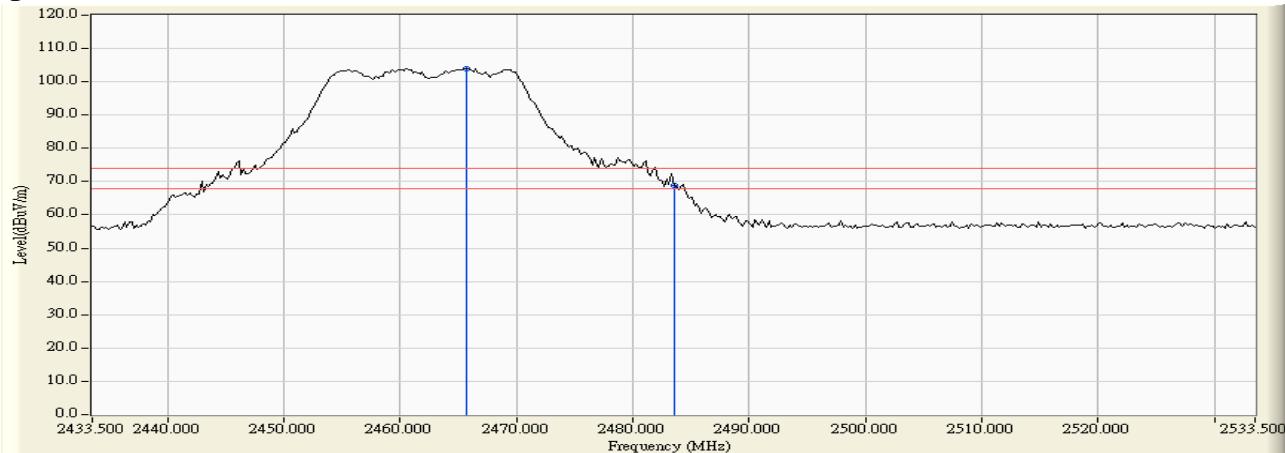
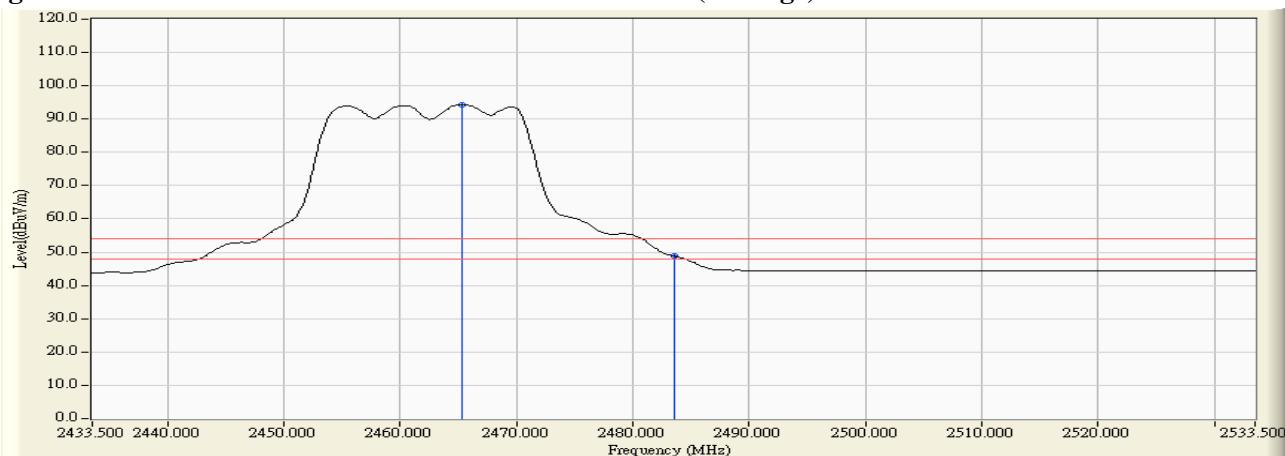


Figure Channel 11:

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 : SpectraGuard® Access Point / Sensor
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 11: Transmit - 802.11n-20BW_14.4Mbps(2.4G Band)(PIFA Antenna)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
01 (Peak)	2390.000	31.509	32.338	63.847	74.00	54.00	Pass
01 (Peak)	2415.400	31.664	72.292	103.956	--	--	--
01 (Average)	2390.000	31.509	15.712	47.221	74.00	54.00	Pass
01 (Average)	2417.600	31.681	60.232	91.913	--	--	--

Figure Channel 01:

Horizontal (Peak)

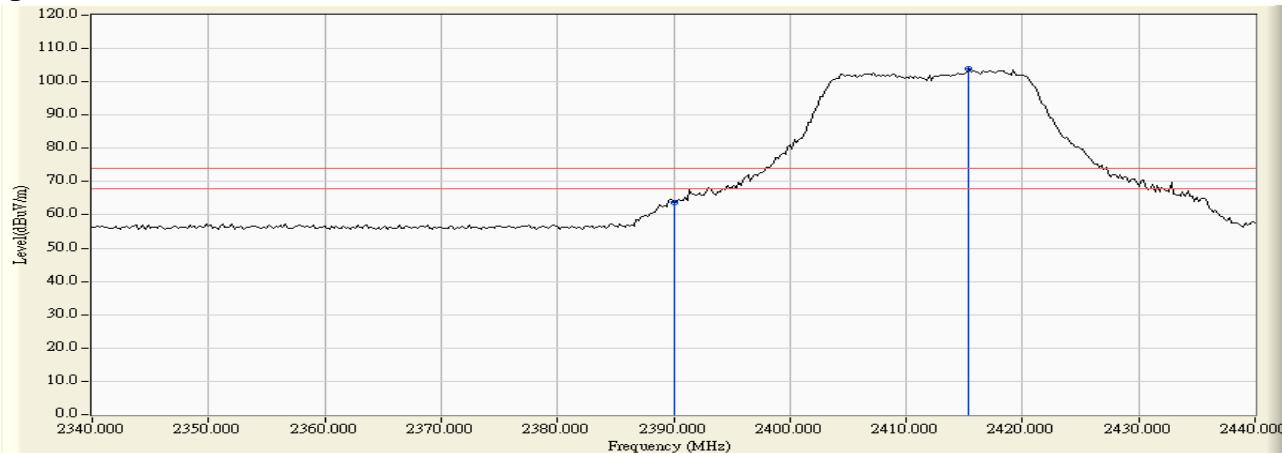
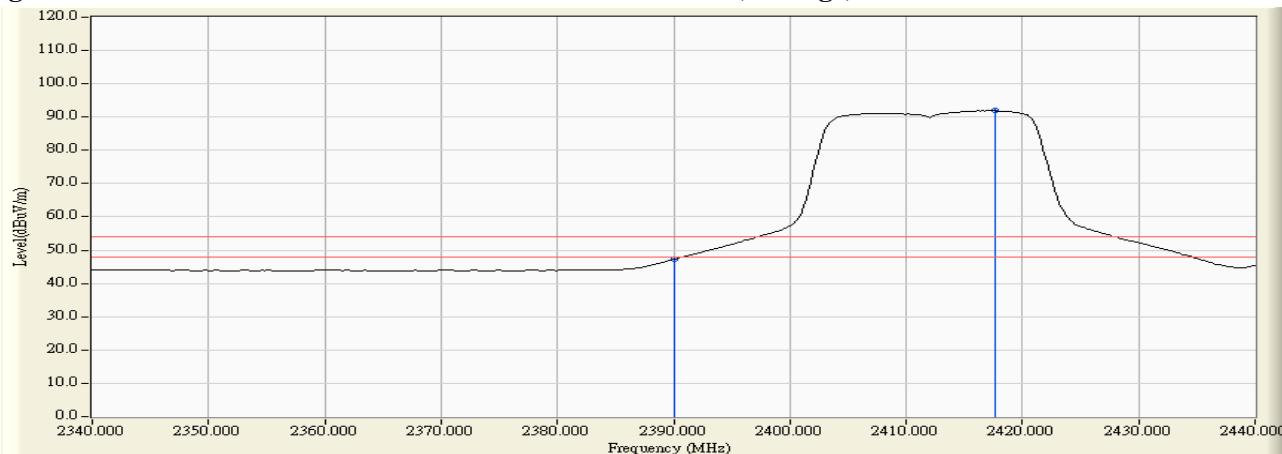


Figure Channel 01:

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 : SpectraGuard® Access Point / Sensor
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 11: Transmit - 802.11n-20BW_14.4Mbps(2.4G Band)(PIFA Antenna)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
01 (Peak)	2389.600	30.917	34.998	65.915	74.00	54.00	Pass
01 (Peak)	2390.000	30.915	32.456	63.371	74.00	54.00	Pass
01 (Peak)	2407.200	30.931	72.307	103.239	--	--	--
01 (Average)	2390.000	30.915	16.760	47.675	74.00	54.00	Pass
01 (Average)	2416.600	30.981	61.286	92.267	--	--	--

Figure Channel 01:

Vertical (Peak)

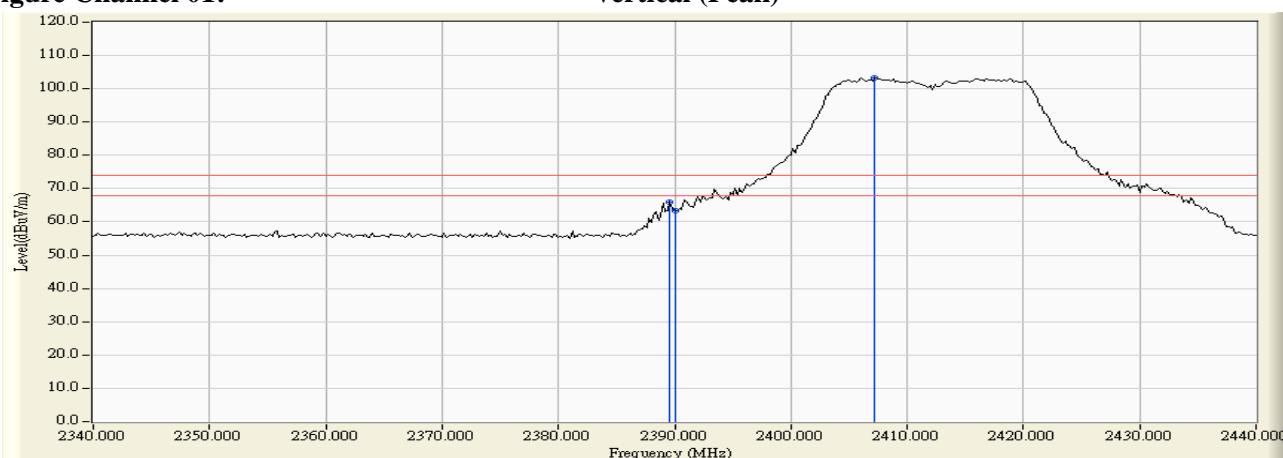
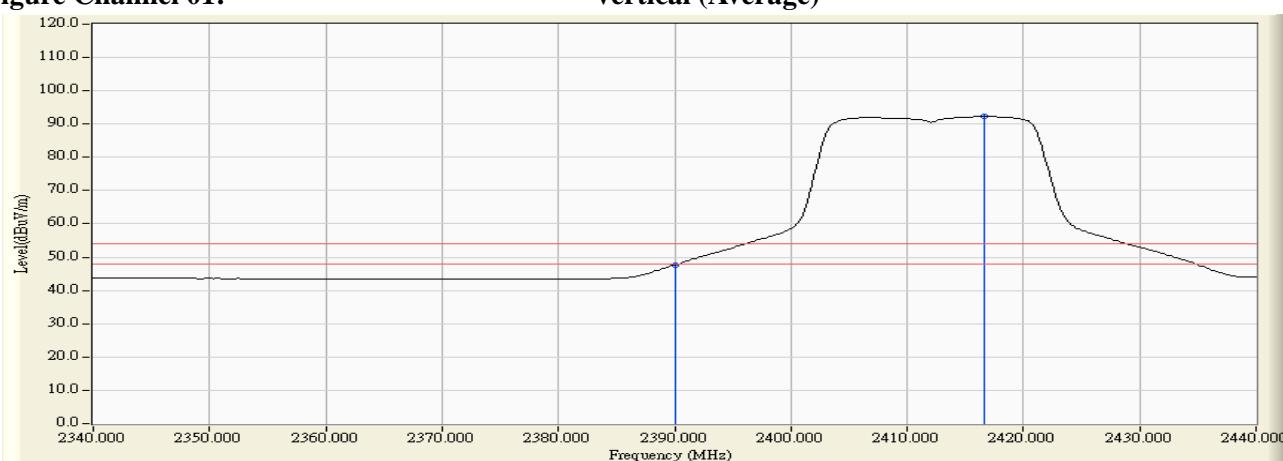


Figure Channel 01:

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 : SpectraGuard® Access Point / Sensor
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 11: Transmit - 802.11n-20BW_14.4Mbps(2.4G Band)(PIFA Antenna)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
11 (Peak)	2469.100	32.073	72.070	104.143	--	--	--
11 (Peak)	2483.500	32.182	34.034	66.216	74.00	54.00	Pass
11 (Average)	2468.100	32.065	59.855	91.920	--	--	--
11 (Average)	2483.500	32.182	17.673	49.855	74.00	54.00	Pass

Figure Channel 11:

Horizontal (Peak)

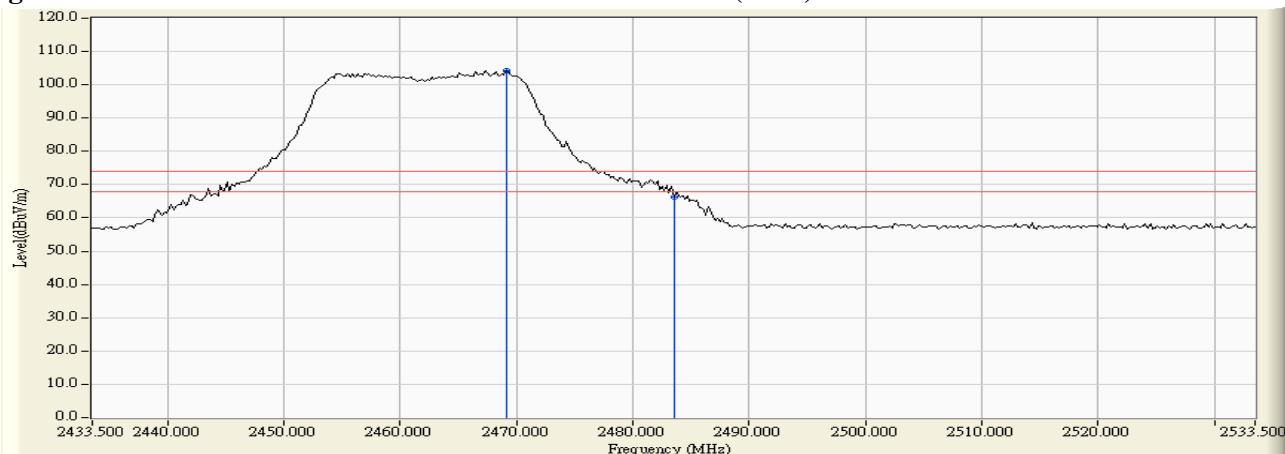
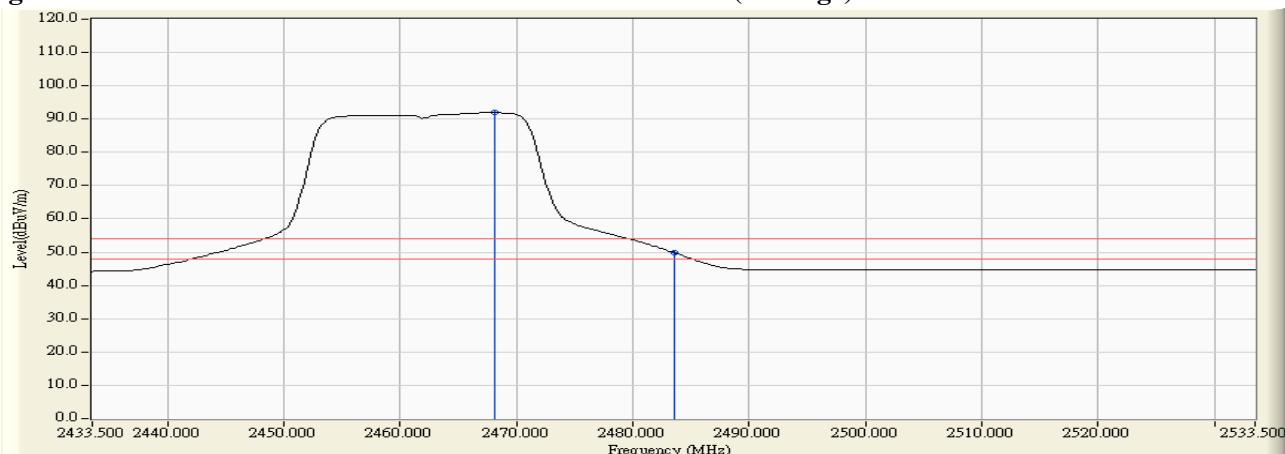


Figure Channel 11:

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 : SpectraGuard® Access Point / Sensor
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 11: Transmit - 802.11n-20BW_14.4Mbps(2.4G Band)(PIFA Antenna)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
11 (Peak)	2466.900	31.324	73.367	104.690	--	--	--
11 (Peak)	2483.500	31.435	39.342	70.777	74.00	54.00	Pass
11 (Average)	2467.900	31.330	61.515	92.845	--	--	--
11 (Average)	2483.500	31.435	19.275	50.710	74.00	54.00	Pass

Figure Channel 11:

Vertical (Peak)

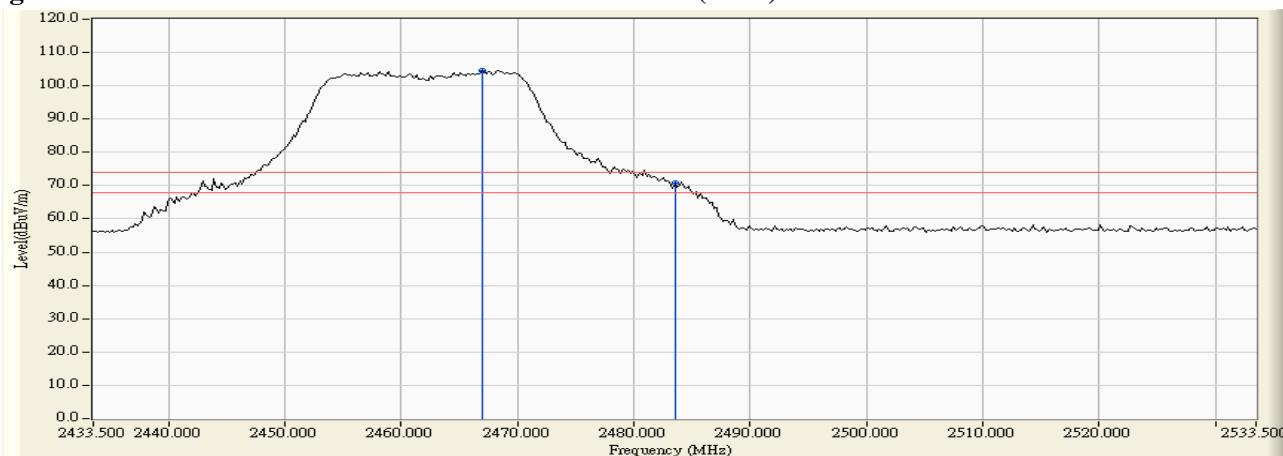
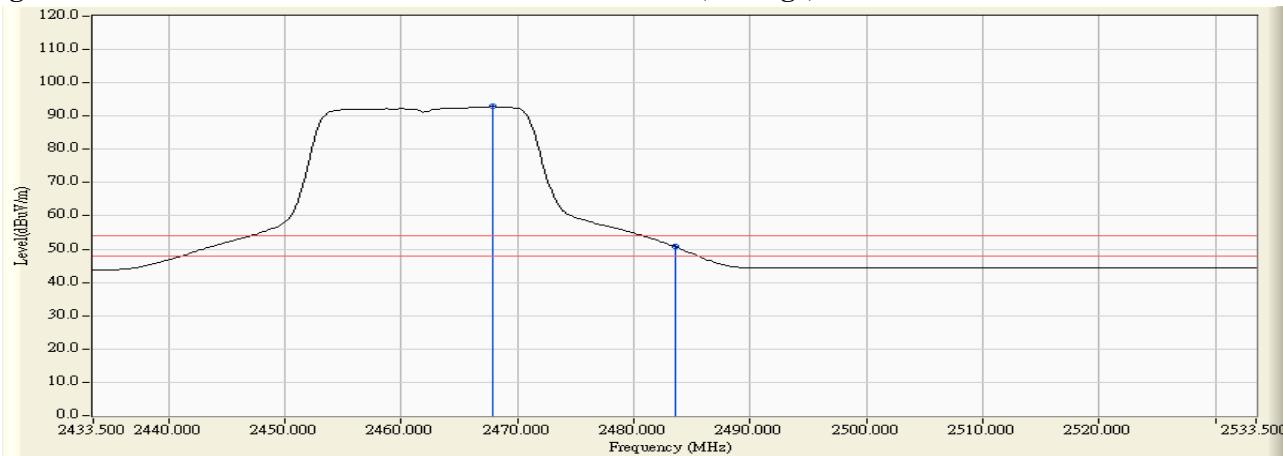


Figure Channel 11:

Vertical (Average)



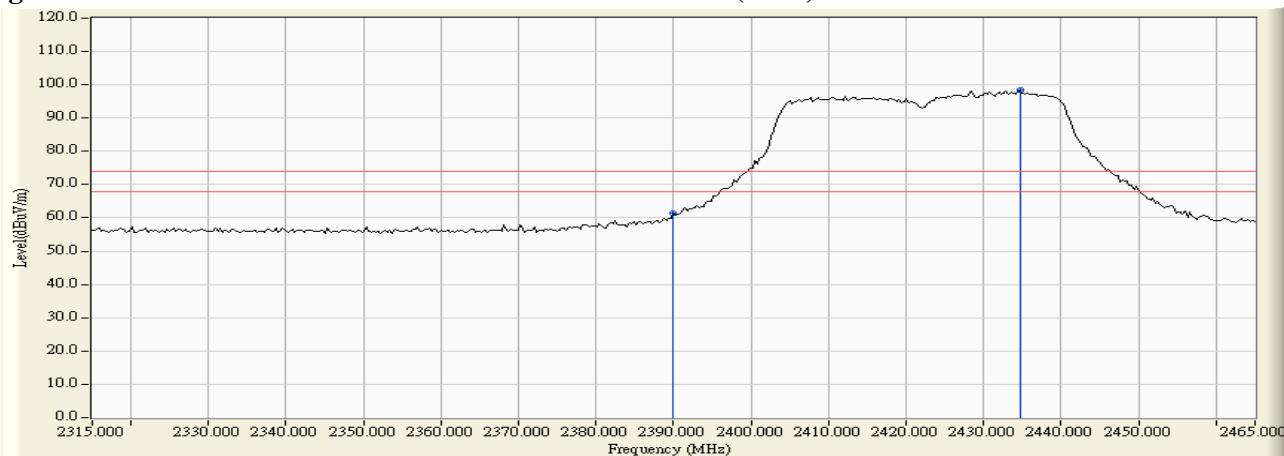
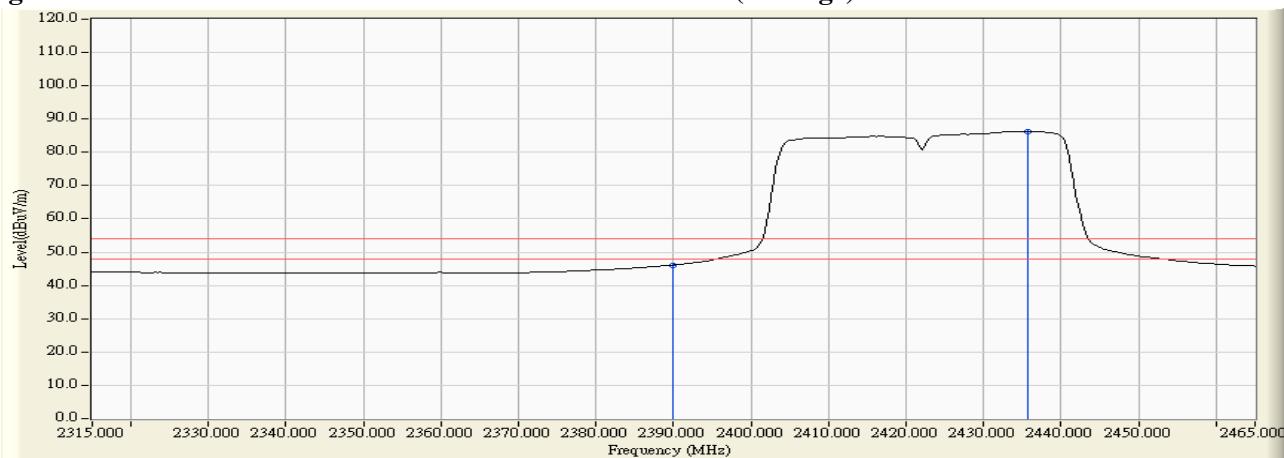
Note:

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 : SpectraGuard® Access Point / Sensor
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 12: Transmit - 802.11n-40BW_30Mbps(2.4G Band)(PIFA Antenna)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
01 (Peak)	2390.000	31.509	29.822	61.331	74.00	54.00	Pass
01 (Peak)	2434.700	31.812	66.731	98.543	--	--	--
01 (Average)	2390.000	31.509	14.652	46.161	74.00	54.00	Pass
01 (Average)	2435.600	31.819	54.529	86.348	--	--	--

Figure Channel 01:
Horizontal (Peak)

Figure Channel 01:
Horizontal (Average)


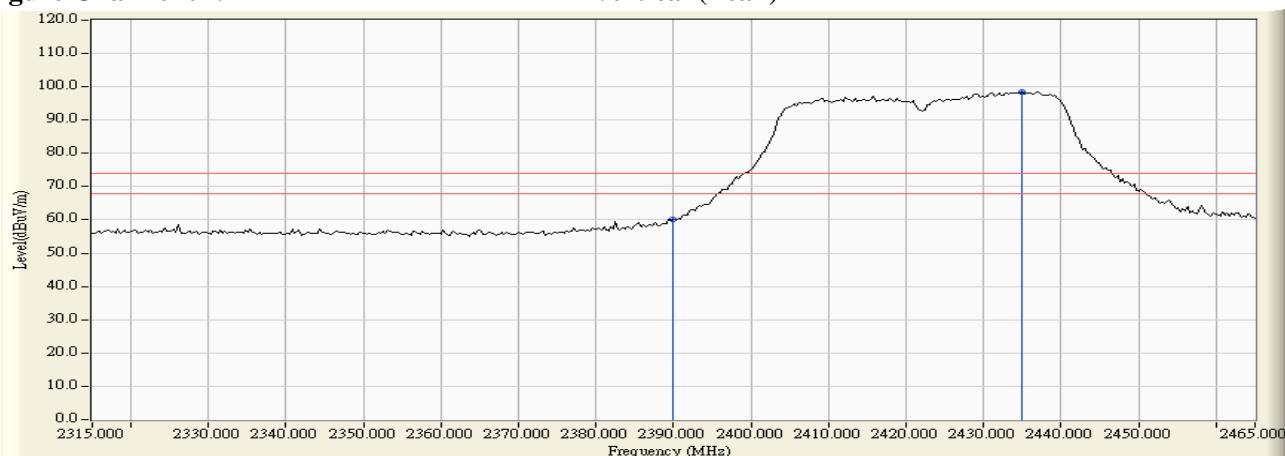
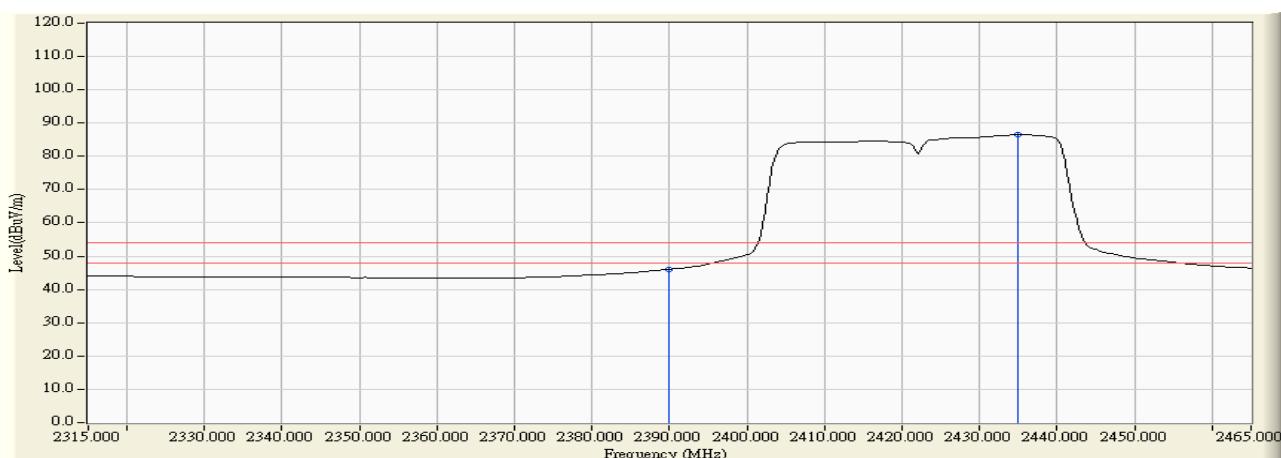
Note:

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 : SpectraGuard® Access Point / Sensor
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 12: Transmit - 802.11n-40BW_30Mbps(2.4G Band)(PIFA Antenna)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
01 (Peak)	2390.000	30.915	29.276	60.191	74.00	54.00	Pass
01 (Peak)	2435.000	31.106	67.410	98.515	--	--	--
01 (Average)	2390.000	30.915	15.149	46.064	74.00	54.00	Pass
01 (Average)	2435.000	31.106	55.355	86.460	--	--	--

Figure Channel 01:
Vertical (Peak)

Figure Channel 01:
Vertical (Average)


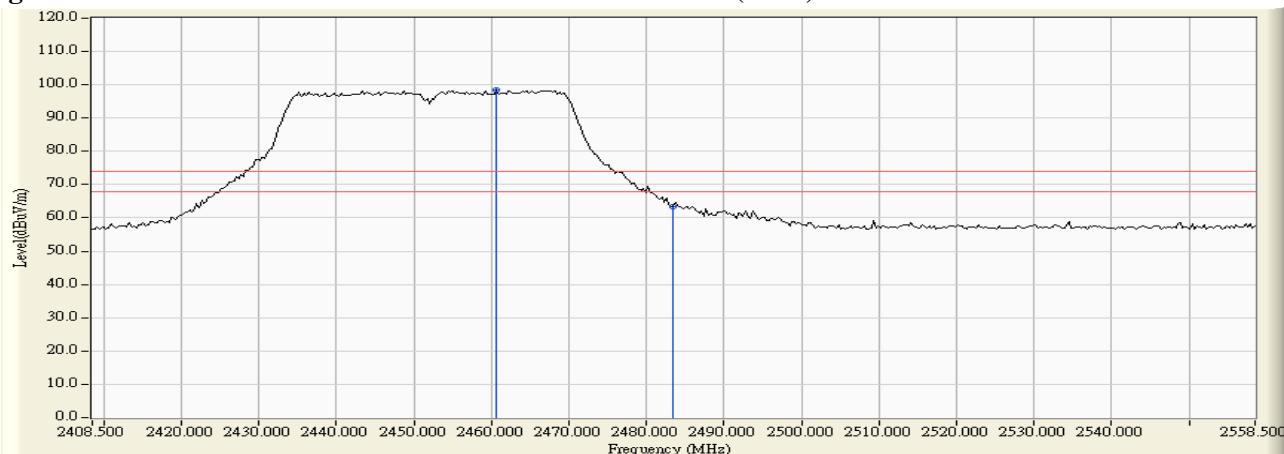
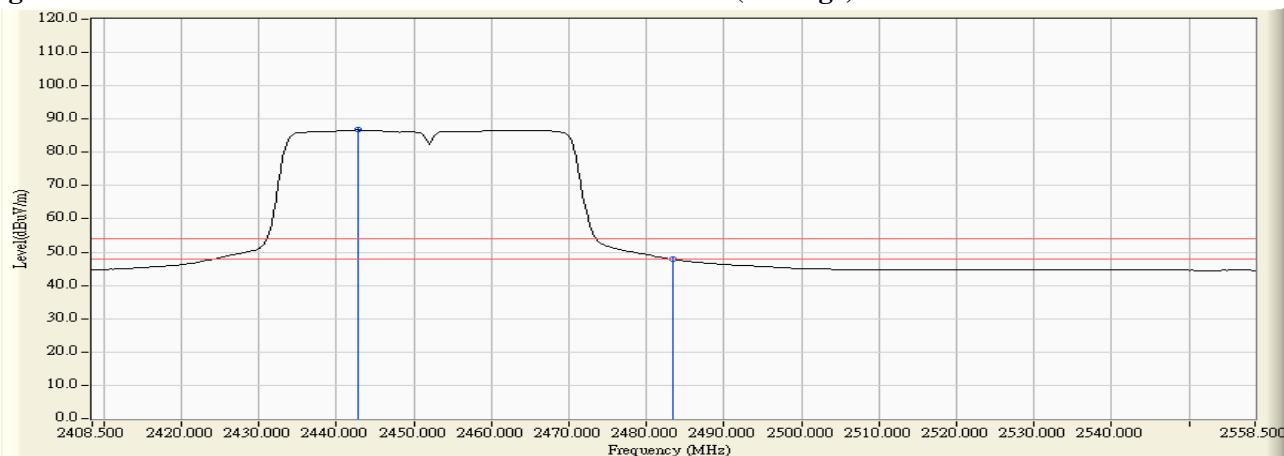
Note:

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 : SpectraGuard® Access Point / Sensor
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 12: Transmit - 802.11n-40BW_30Mbps(2.4G Band)(PIFA Antenna)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
07 (Peak)	2460.700	32.010	66.335	98.345	--	--	--
07 (Peak)	2483.500	32.182	31.130	63.312	74.00	54.00	Pass
07 (Average)	2442.700	31.873	54.843	86.716	--	--	--
07 (Average)	2483.500	32.182	15.624	47.806	74.00	54.00	Pass

Figure Channel 07:
Horizontal (Peak)

Figure Channel 07:
Horizontal (Average)


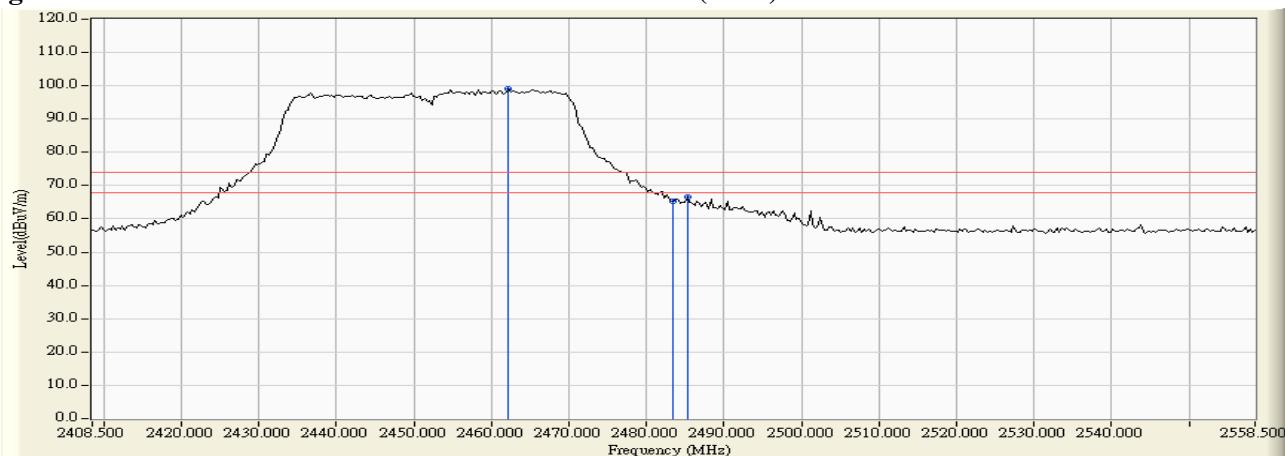
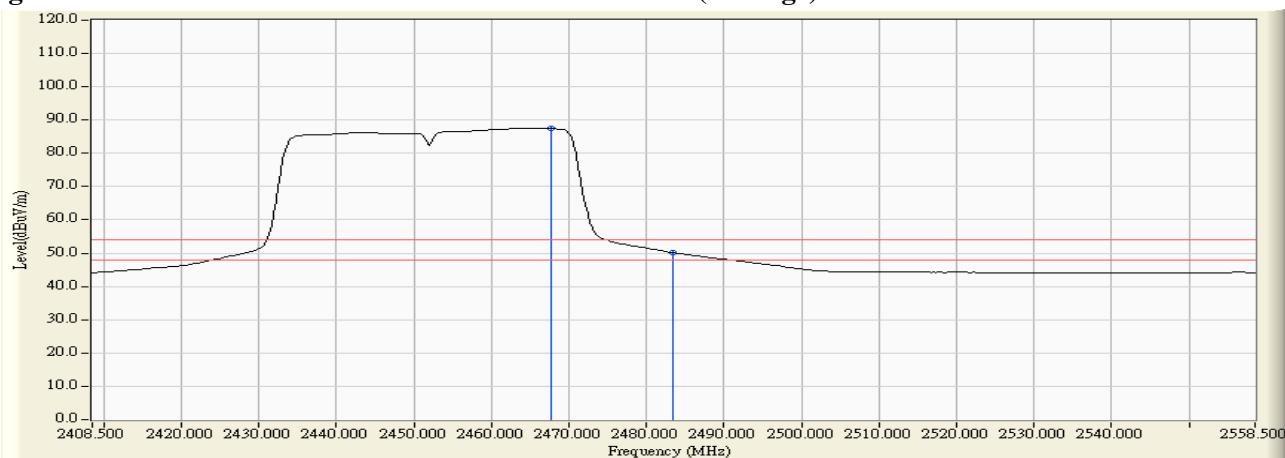
Note:

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 : SpectraGuard® Access Point / Sensor
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 12: Transmit - 802.11n-40BW_30Mbps(2.4G Band)(PIFA Antenna)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
07 (Peak)	2462.200	31.291	67.639	98.931	--	--	--
07 (Peak)	2483.500	31.435	33.797	65.232	74.00	54.00	Pass
07 (Peak)	2485.300	31.448	35.050	66.498	74.00	54.00	Pass
07 (Average)	2467.600	31.328	56.163	87.491	--	--	--
07 (Average)	2483.500	31.435	18.672	50.107	74.00	54.00	Pass

Figure Channel 07:
Vertical (Peak)

Figure Channel 01:
Vertical (Average)


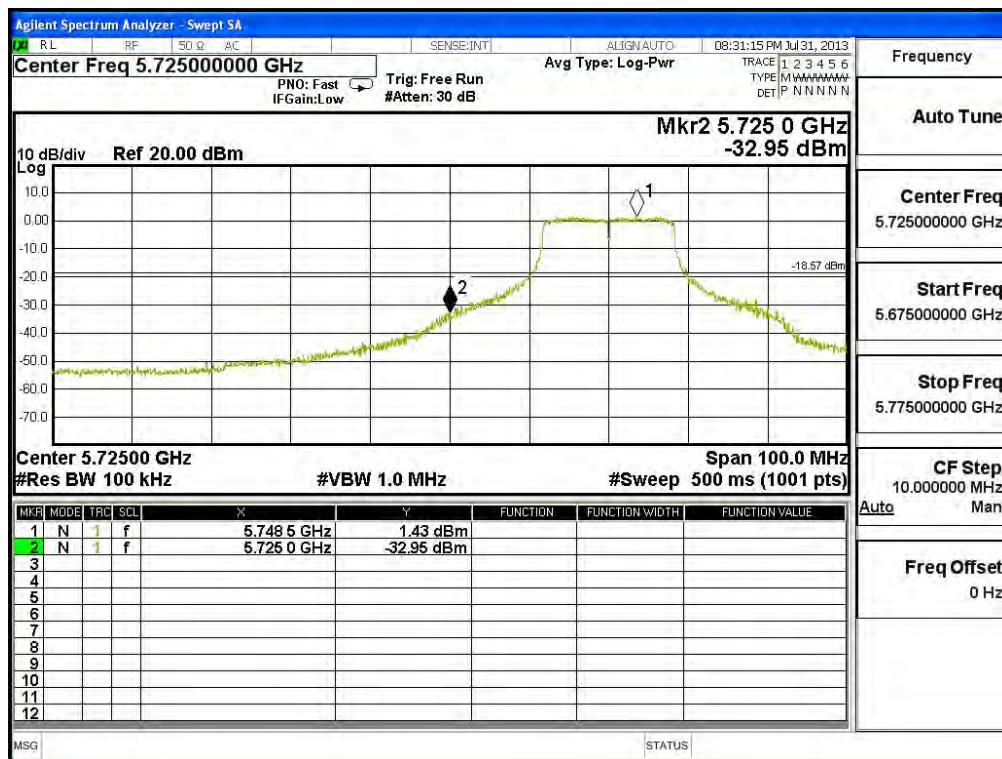
Note:

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 : SpectraGuard® Access Point / Sensor
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 10: Transmit - 802.11a 6Mbps(PIFA Antenna)

Chain A

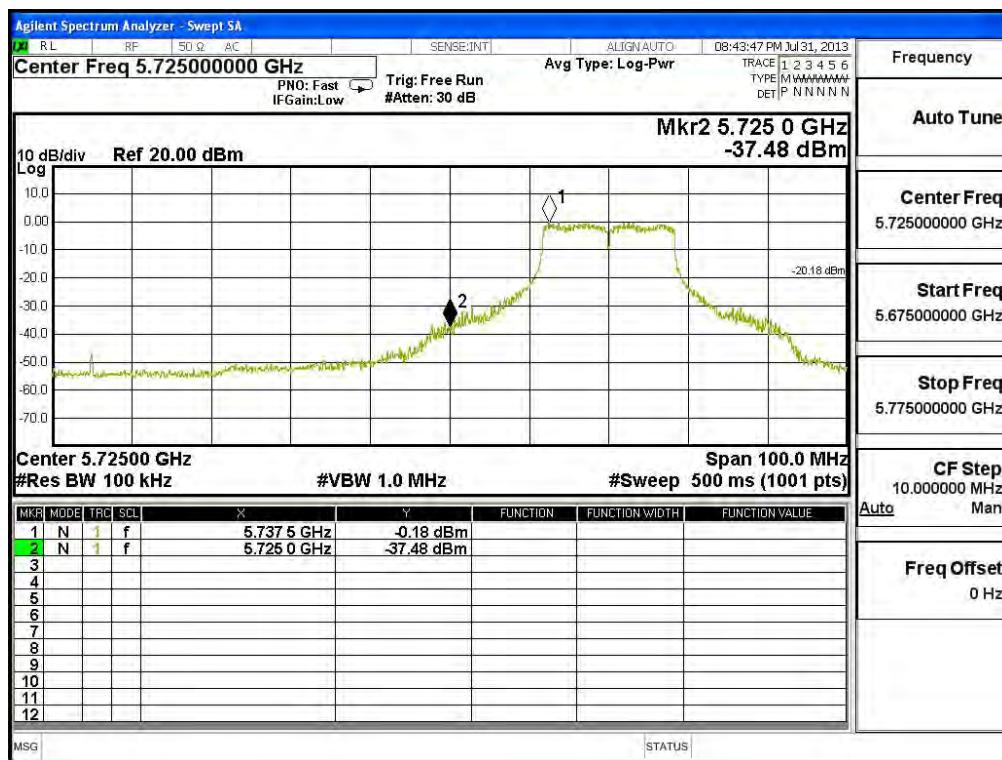
Test Frequency (MHz)	Measurement Level Δ (dB)	Limit Δ (dB)	Result
5745	34.38	>30	PASS



Product : SpectraGuard® Access Point / Sensor
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 10: Transmit - 802.11a 6Mbps(PIFA Antenna)

Chain B

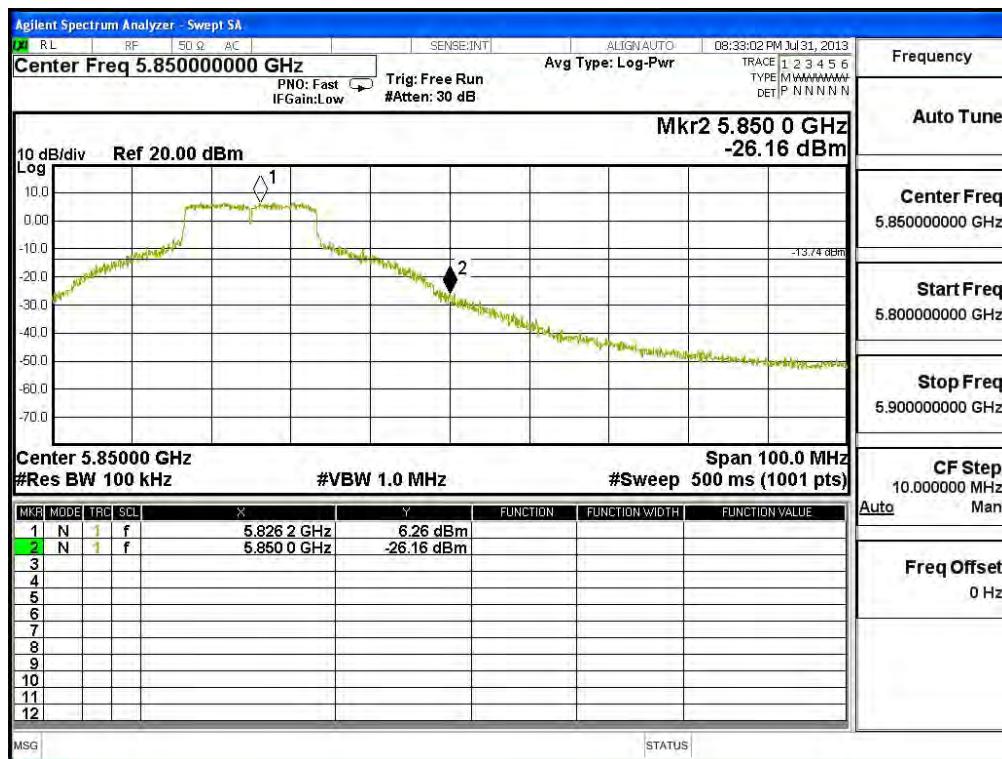
Test Frequency (MHz)	Measurement Level Δ (dB)	Limit Δ (dB)	Result
5745	37.66	>30	PASS



Product : SpectraGuard® Access Point / Sensor
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 10: Transmit - 802.11a 6Mbps(PIFA Antenna)

Chain A

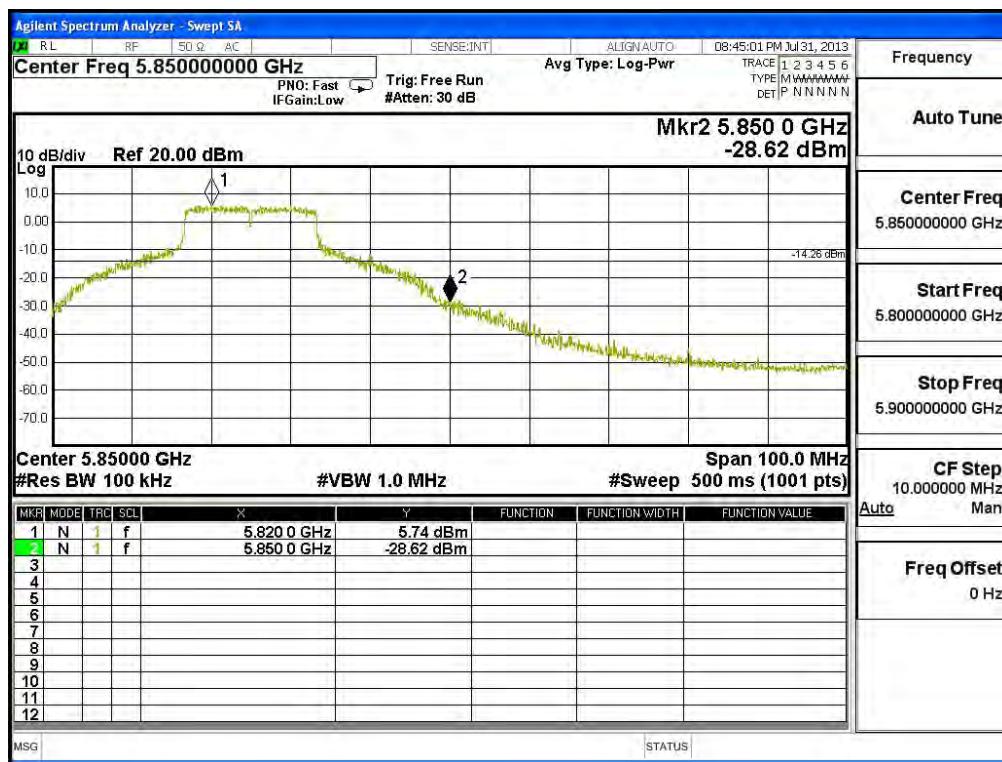
Test Frequency (MHz)	Measurement Level Δ (dB)	Limit Δ (dB)	Result
5825	32.42	>30	PASS



Product : SpectraGuard® Access Point / Sensor
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 10: Transmit - 802.11a 6Mbps(PIFA Antenna)

Chain B

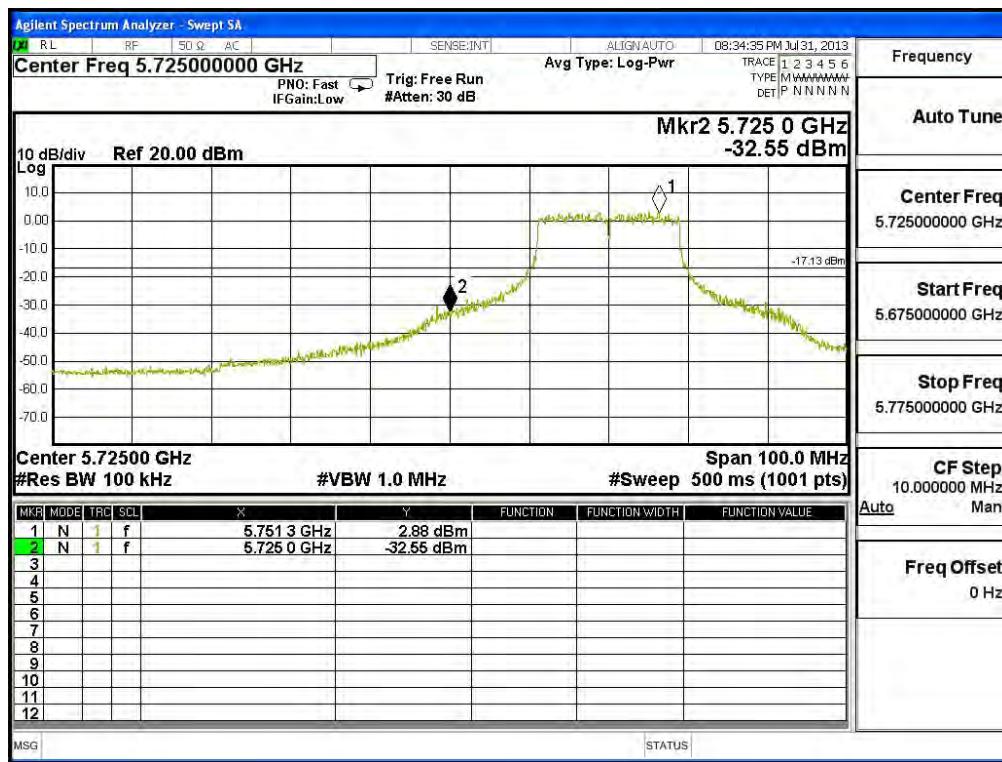
Test Frequency (MHz)	Measurement Level Δ (dB)	Limit Δ (dB)	Result
5825	34.36	>30	PASS



Product : SpectraGuard® Access Point / Sensor
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 13: Transmit - 802.11n-20BW_14.4Mbps(5G Band)(PIFA Antenna)

Chain A

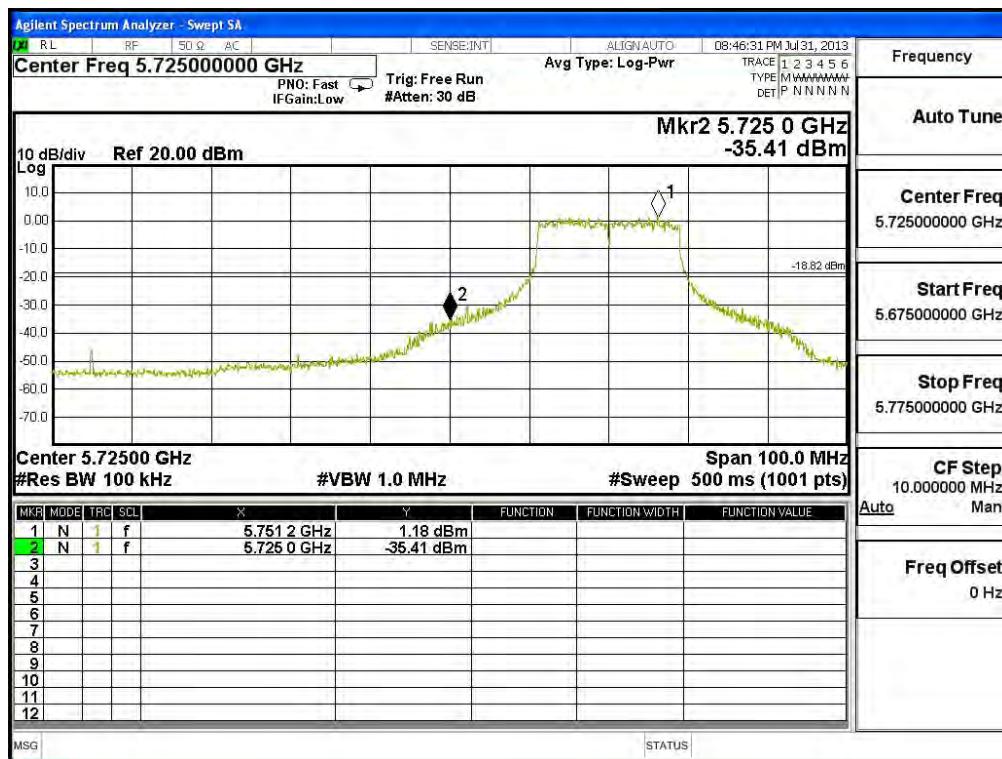
Test Frequency (MHz)	Measurement Level Δ (dB)	Limit Δ (dB)	Result
5745	35.43	>30	PASS



Product : SpectraGuard® Access Point / Sensor
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 13: Transmit - 802.11n-20BW_14.4Mbps(5G Band)(PIFA Antenna)

Chain B

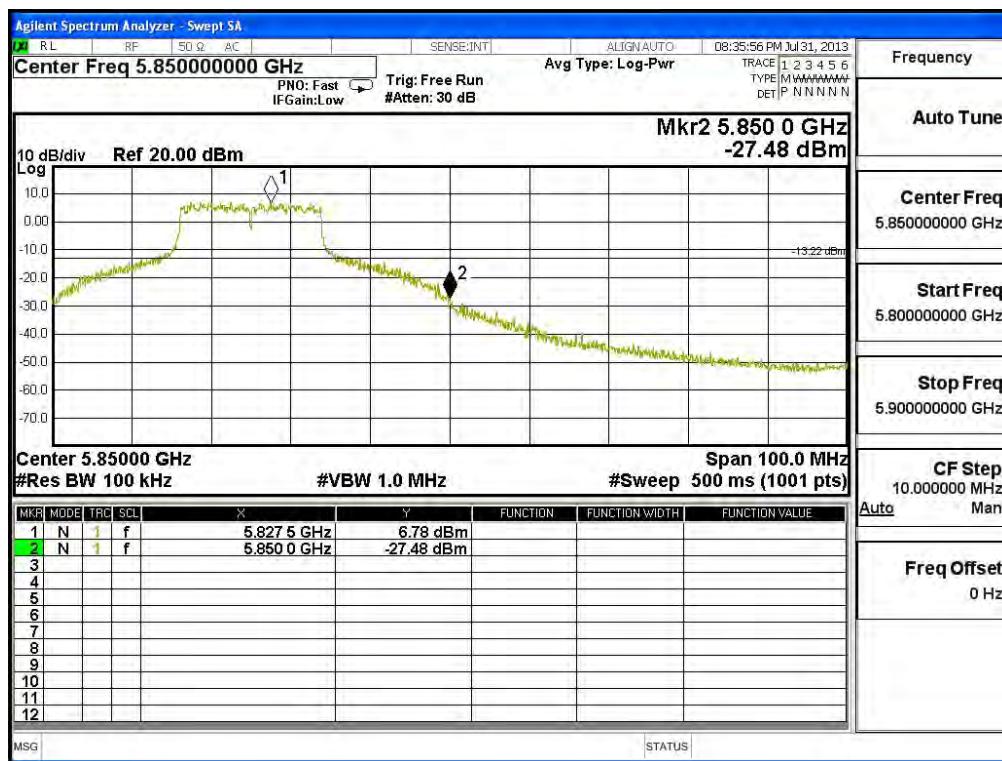
Test Frequency (MHz)	Measurement Level Δ (dB)	Limit Δ (dB)	Result
5745	36.59	>30	PASS



Product : SpectraGuard® Access Point / Sensor
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 13: Transmit - 802.11n-20BW_14.4Mbps(5G Band)(PIFA Antenna)

Chain A

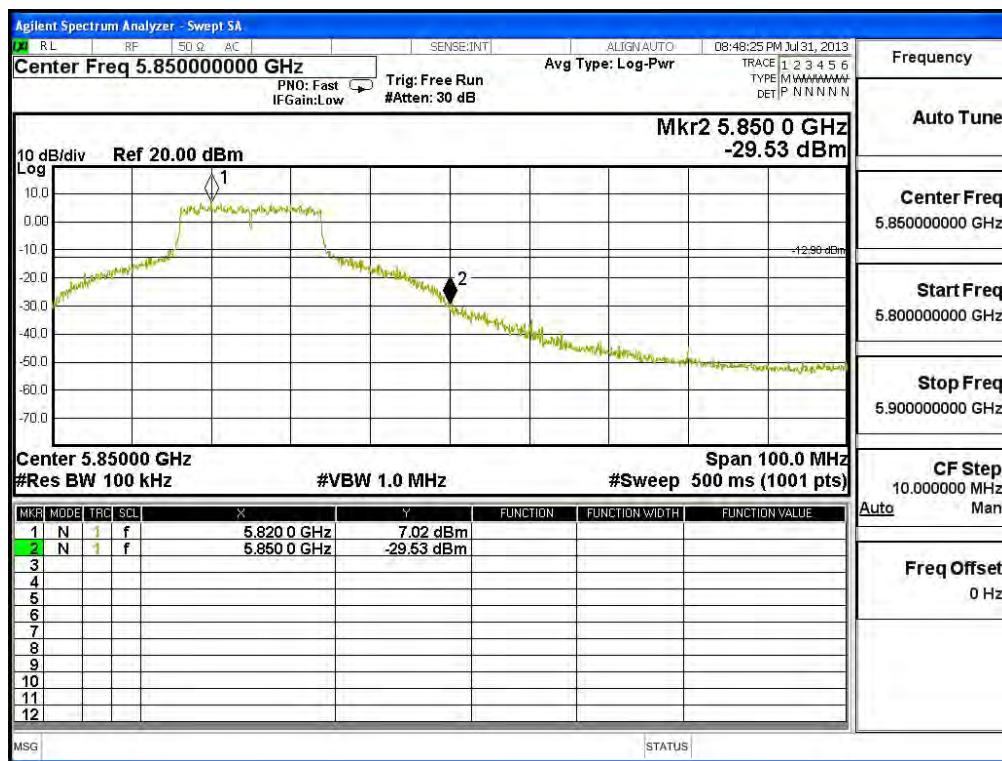
Test Frequency (MHz)	Measurement Level Δ (dB)	Limit Δ (dB)	Result
5825	34.26	>30	PASS



Product : SpectraGuard® Access Point / Sensor
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 13: Transmit - 802.11n-20BW_14.4Mbps(5G Band)(PIFA Antenna)

Chain B

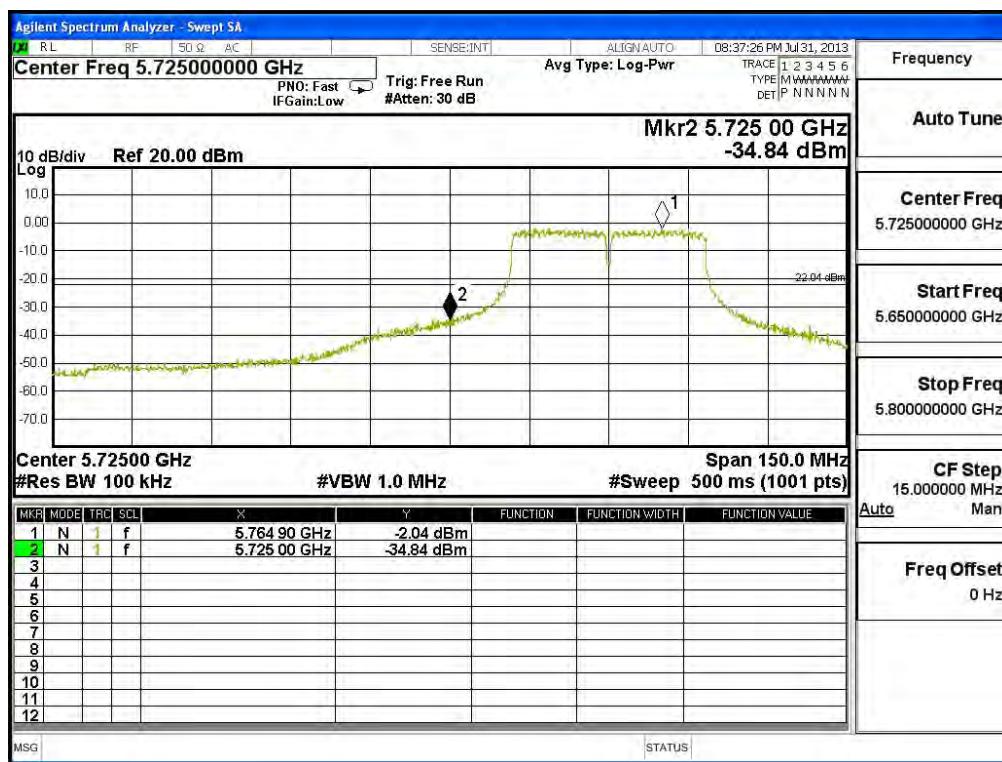
Test Frequency (MHz)	Measurement Level Δ (dB)	Limit Δ (dB)	Result
5825	36.55	>30	PASS



Product : SpectraGuard® Access Point / Sensor
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 14: Transmit - 802.11n-40BW_30Mbps(5G Band)(PIFA Antenna)

Chain A

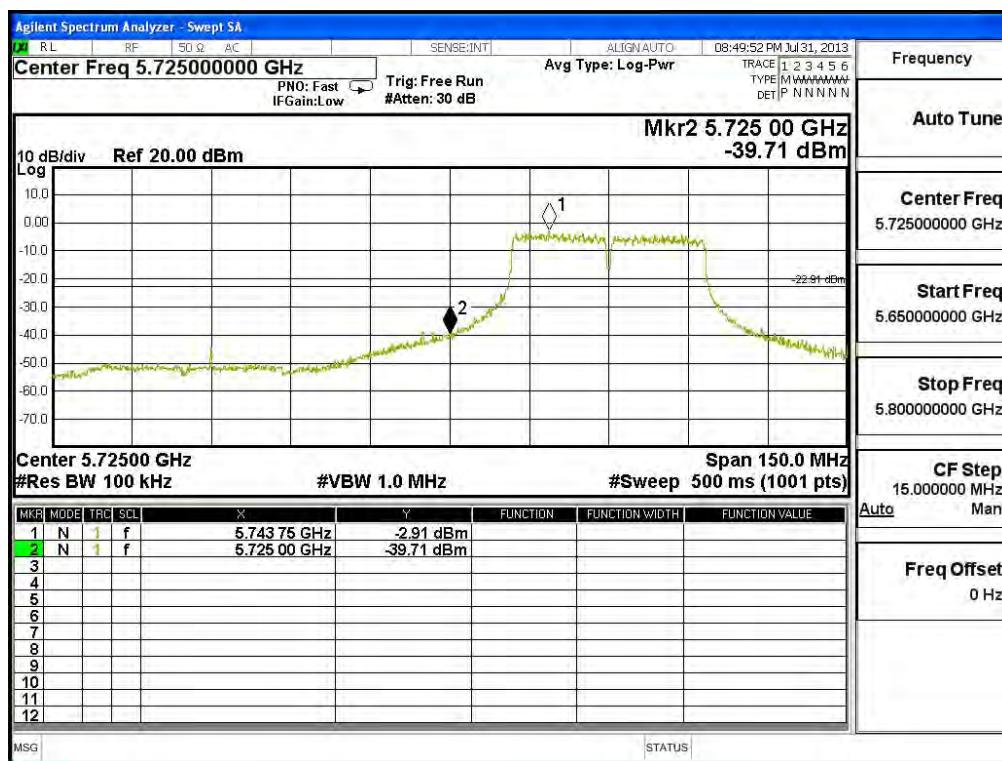
Test Frequency (MHz)	Measurement Level Δ (dB)	Limit Δ (dB)	Result
5755	36.88	>30	PASS



Product : SpectraGuard® Access Point / Sensor
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 14: Transmit - 802.11n-40BW_30Mbps(5G Band)(PIFA Antenna)

Chain B

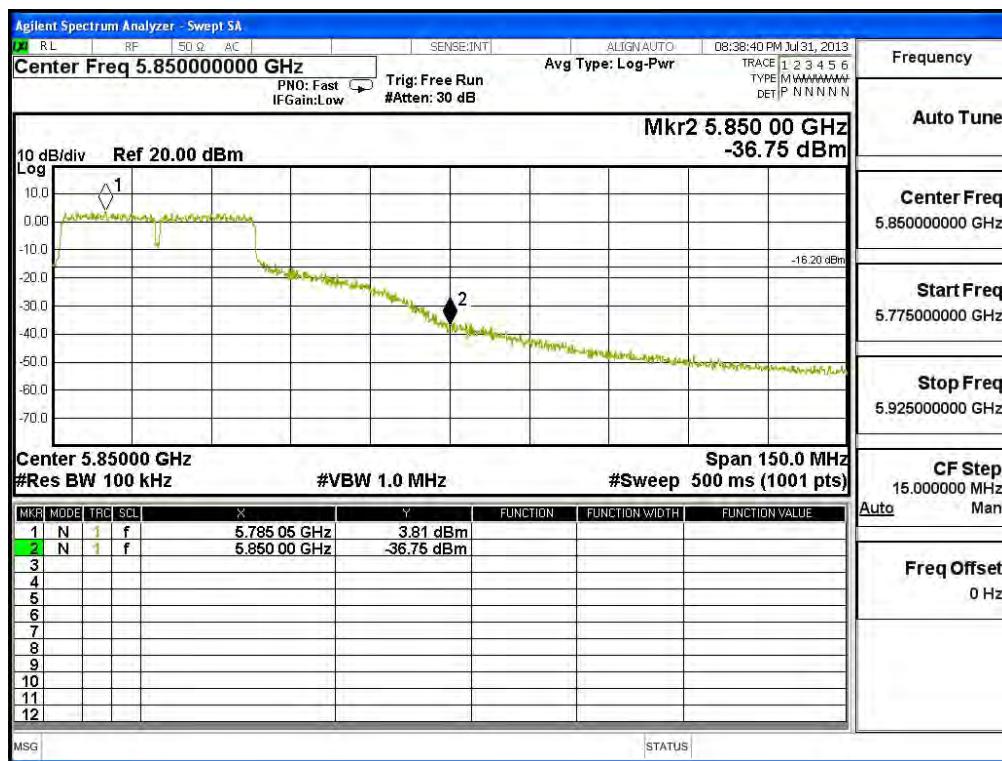
Test Frequency (MHz)	Measurement Level Δ (dB)	Limit Δ (dB)	Result
5755	42.62	>30	PASS



Product : SpectraGuard® Access Point / Sensor
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 14: Transmit - 802.11n-40BW_30Mbps(5G Band)(PIFA Antenna)

Chain A

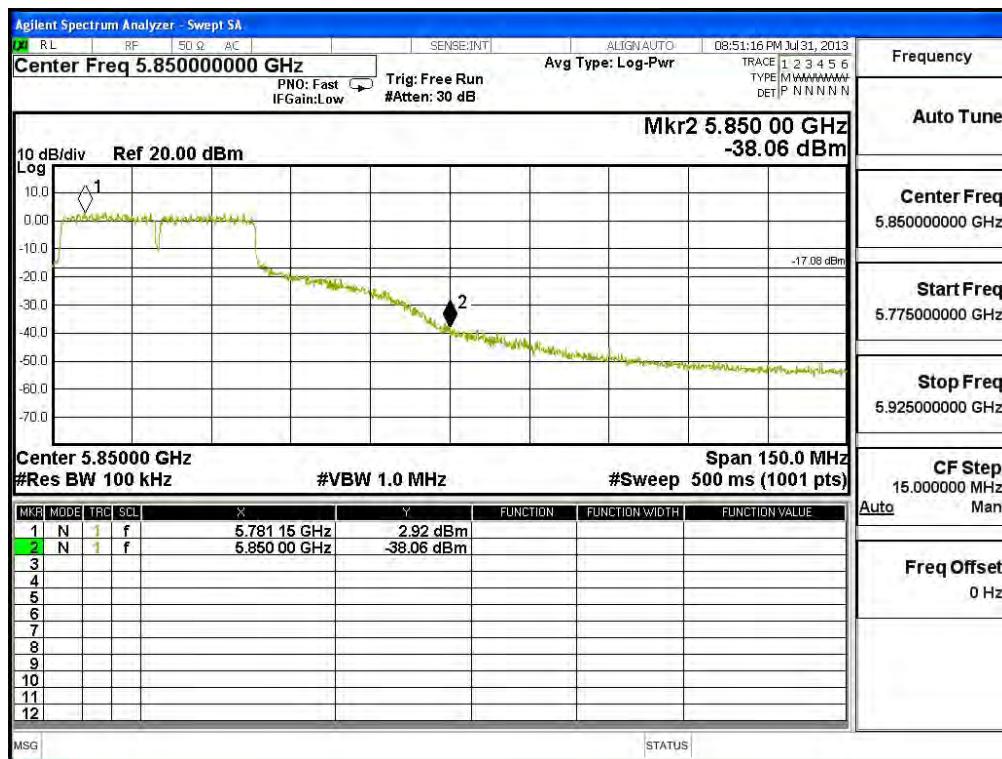
Test Frequency (MHz)	Measurement Level Δ (dB)	Limit Δ (dB)	Result
5795	4.56	>30	PASS



Product : SpectraGuard® Access Point / Sensor
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 14: Transmit - 802.11n-40BW_30Mbps(5G Band)(PIFA Antenna)

Chain B

Test Frequency (MHz)	Measurement Level Δ (dB)	Limit Δ (dB)	Result
5795	40.98	>30	PASS



7. Occupied Bandwidth

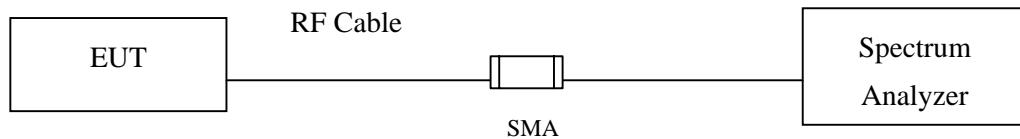
7.1. Test Equipment

Equipment	Manufacturer	Model No./Serial No.	Last Cal.
Spectrum Analyzer	R&S	FSP40 / 100170	Jun, 2013
Spectrum Analyzer	Agilent	E4407B / US39440758	Jun, 2013
X Spectrum Analyzer	Agilent	N9010A / MY48030495	Apr., 2013

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 for compliance to FCC 47CFR 15.247 requirements.

Set RBW = 1-5% of the emission bandwidth, $VBW \geq 3 * RBW$

7.5. Uncertainty

$\pm 150\text{Hz}$

7.6. Test Result of Occupied Bandwidth

Product : SpectraGuard® Access Point / Sensor
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmit (802.11b 1Mbps)(Dipole Antenna) (2412MHz)

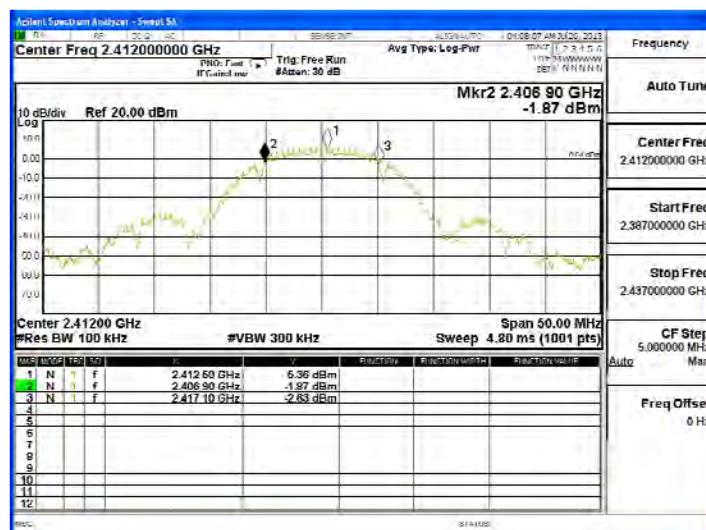
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
1	2412.00	10200	>500	Pass

Figure Channel 1: (Chain A)



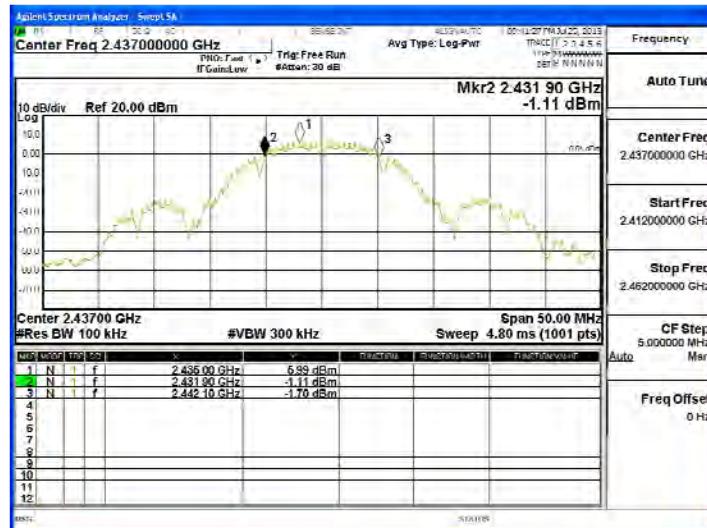
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
1	2412.00	10200	>500	Pass

Figure Channel 1: (Chain B)

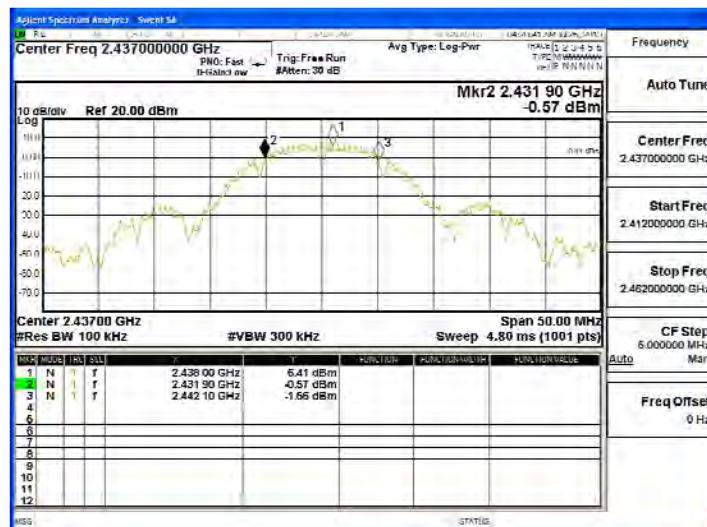


Product : SpectraGuard® Access Point / Sensor
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmit (802.11b 1Mbps)(Dipole Antenna) (2437MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
6	2437.00	10200	>500	Pass

Figure Channel 6: (Chain A)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
6	2437.00	10200	>500	Pass

Figure Channel 6: (Chain B)

Product : SpectraGuard® Access Point / Sensor
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmit (802.11b 1Mbps)(Dipole Antenna) (2462MHz)

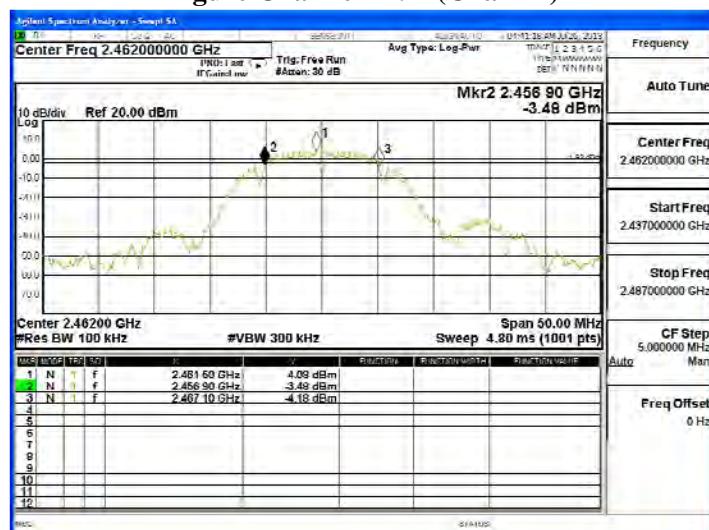
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
11	2462.00	10200	>500	Pass

Figure Channel 11: (Chain A)



Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
11	2462.00	10200	>500	Pass

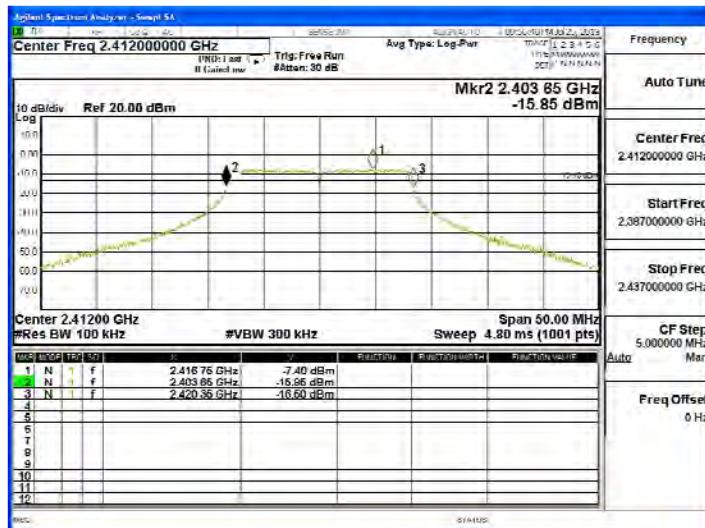
Figure Channel 11: (Chain B)



Product : SpectraGuard® Access Point / Sensor
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmit (802.11g 6Mbps)(Dipole Antenna) (2412MHz)

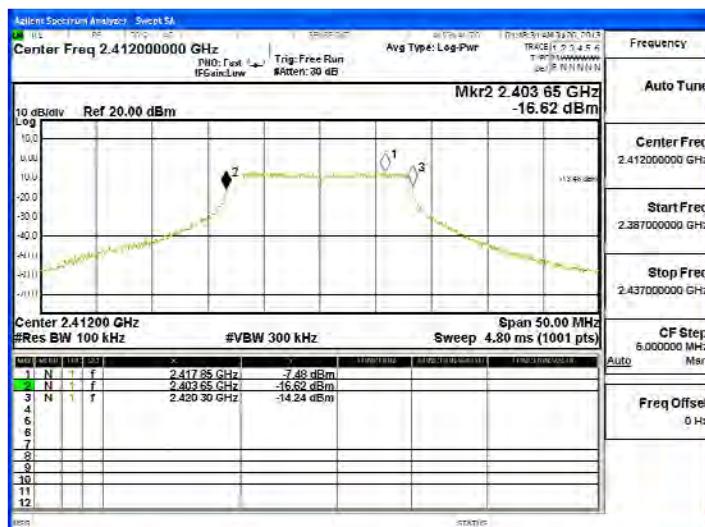
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
1	2412.00	16700	>500	Pass

Figure Channel 1: (Chain A)



Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
1	2412.00	16650	>500	Pass

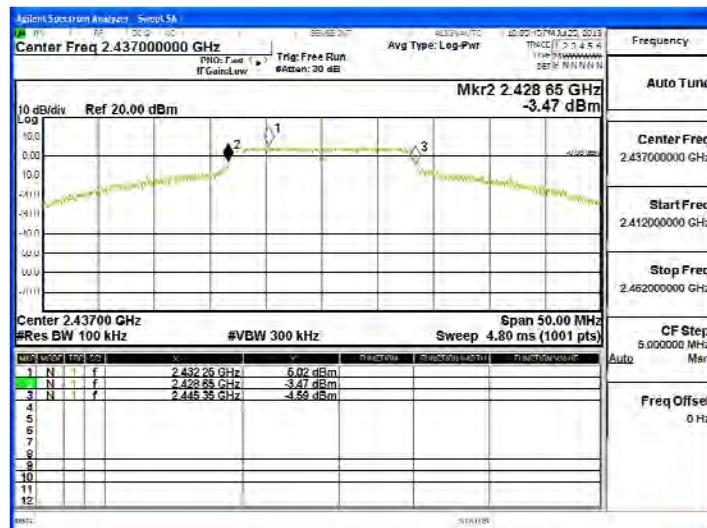
Figure Channel 1: (Chain B)



Product : SpectraGuard® Access Point / Sensor
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmit (802.11g 6Mbps)(Dipole Antenna) (2437MHz)

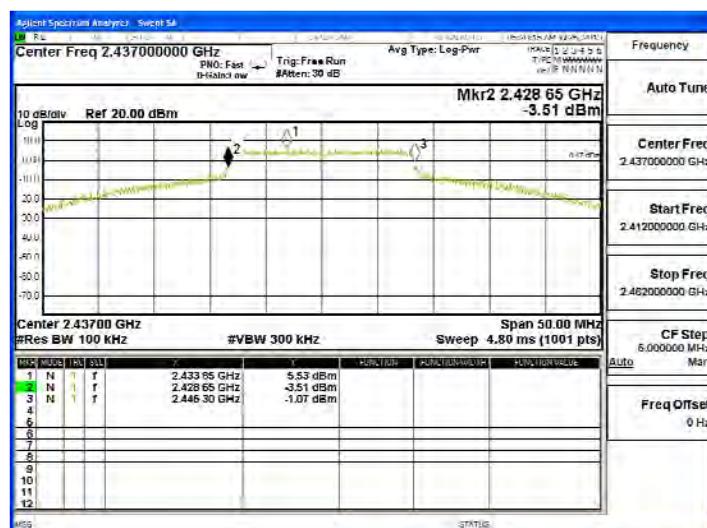
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
6	2437.00	16700	>500	Pass

Figure Channel 6: (Chain A)



Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
6	2437.00	16650	>500	Pass

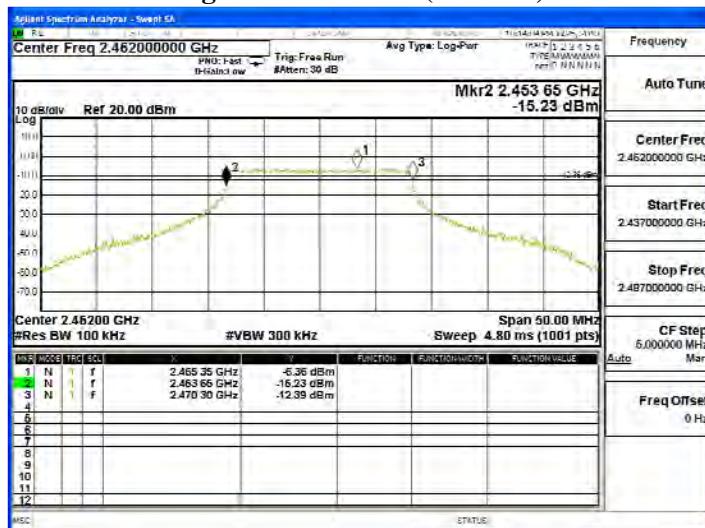
Figure Channel 6: (Chain B)



Product : SpectraGuard® Access Point / Sensor
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmit (802.11g 6Mbps)(Dipole Antenna) (2462MHz)

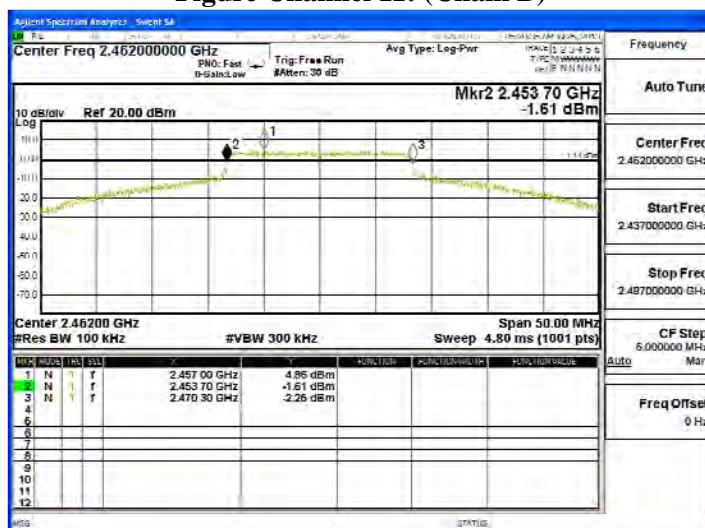
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
11	2462.00	16650	>500	Pass

Figure Channel 11: (Chain A)



Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
11	2462.00	16600	>500	Pass

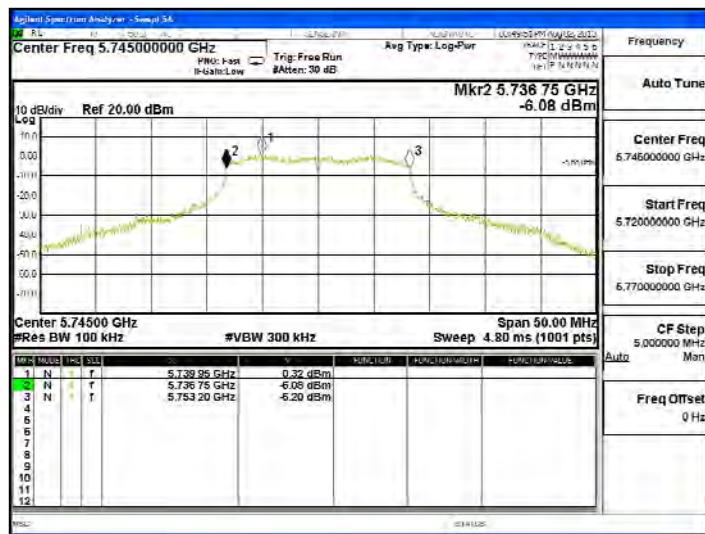
Figure Channel 11: (Chain B)



Product : SpectraGuard® Access Point / Sensor
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmit - 802.11a 6Mbps(Dipole Antenna) (5745MHz)

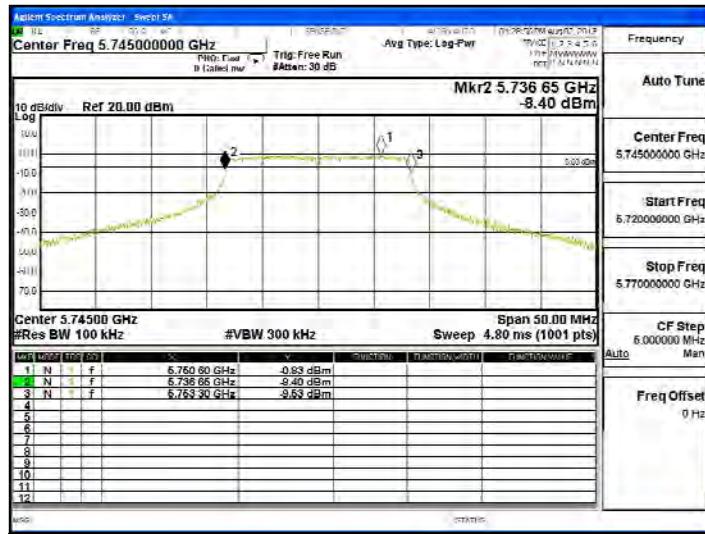
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
149	5745.00	16450	>500	Pass

Figure Channel 149: (Chain A)



Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
149	5745.00	16650	>500	Pass

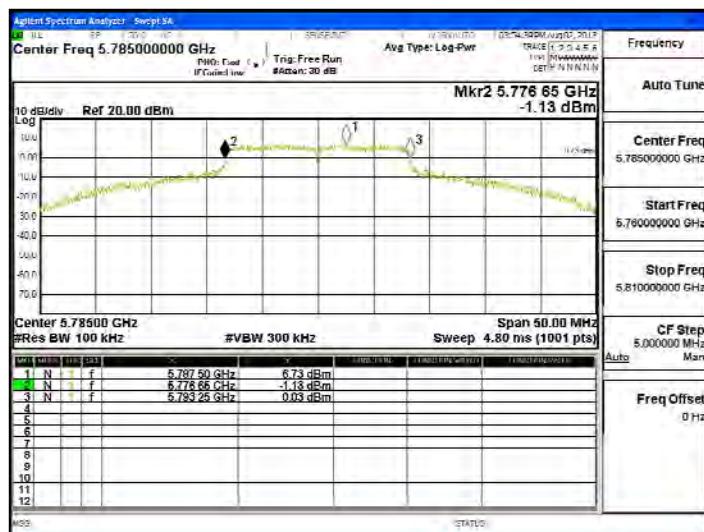
Figure Channel 149: (Chain B)



Product : SpectraGuard® Access Point / Sensor
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmit - 802.11a 6Mbps(Dipole Antenna) (5785MHz)

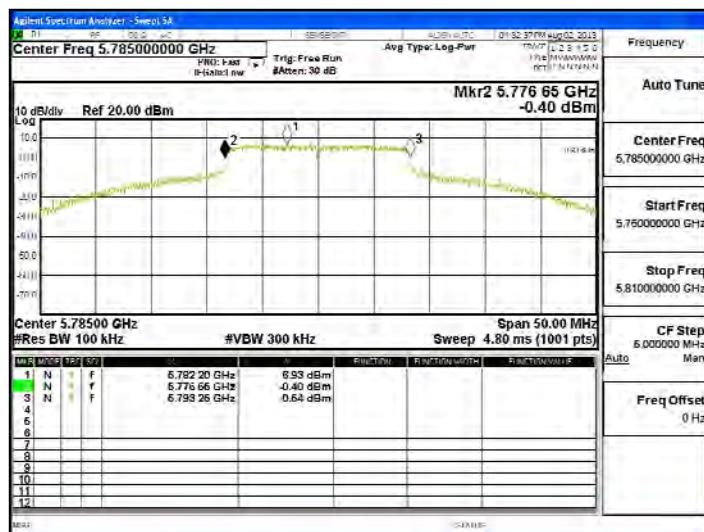
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
157	5785.00	16600	>500	Pass

Figure Channel 157: (Chain A)



Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
157	5785.00	16600	>500	Pass

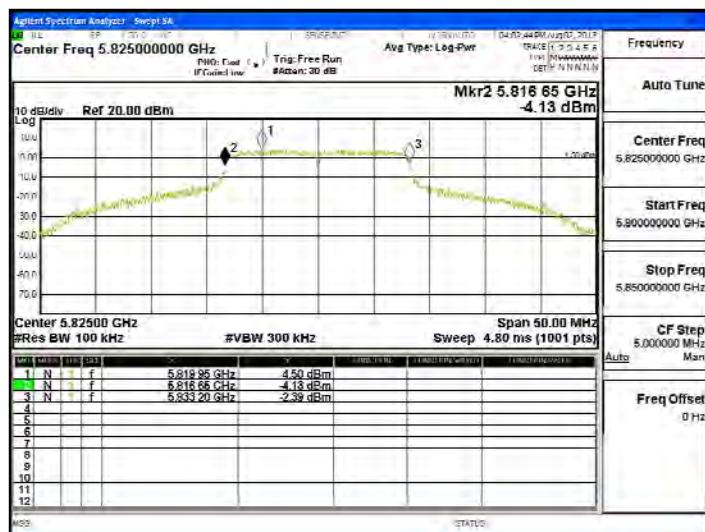
Figure Channel 157: (Chain B)



Product : SpectraGuard® Access Point / Sensor
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmit - 802.11a 6Mbps(Dipole Antenna) (5825MHz)

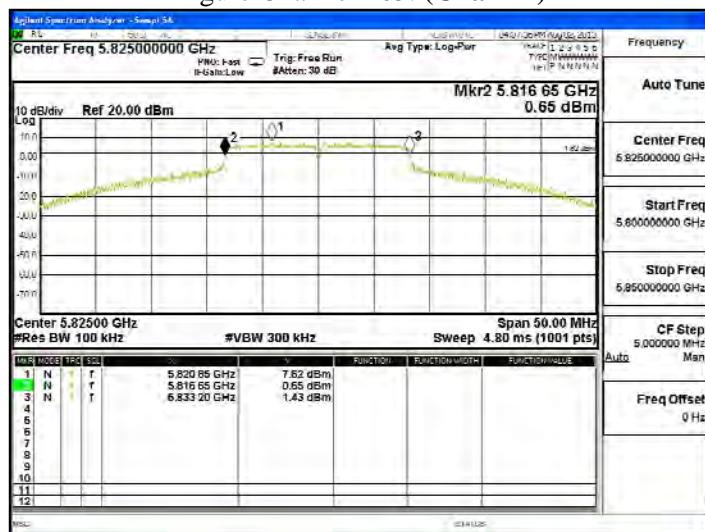
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
165	5825.00	16550	>500	Pass

Figure Channel 165: (Chain A)



Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
165	5825.00	16550	>500	Pass

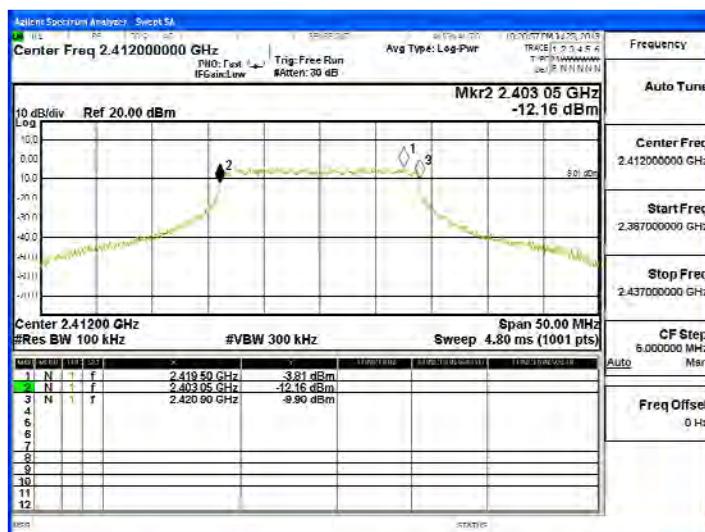
Figure Channel 165: (Chain B)



Product : SpectraGuard® Access Point / Sensor
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 4: Transmit - 802.11n-20BW_14.4Mbps(2.4G Band)(Dipole Antenna)
 (2412MHz)

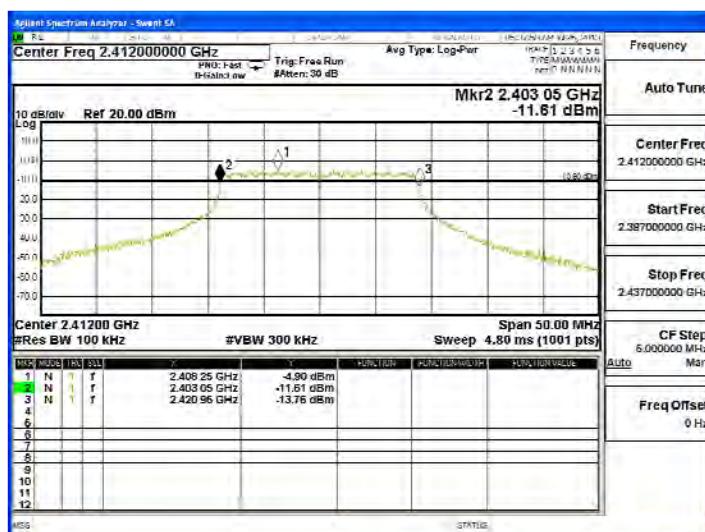
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
1	2412.00	17850	>500	Pass

Figure Channel 1: (Chain A)



Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
1	2412.00	17900	>500	Pass

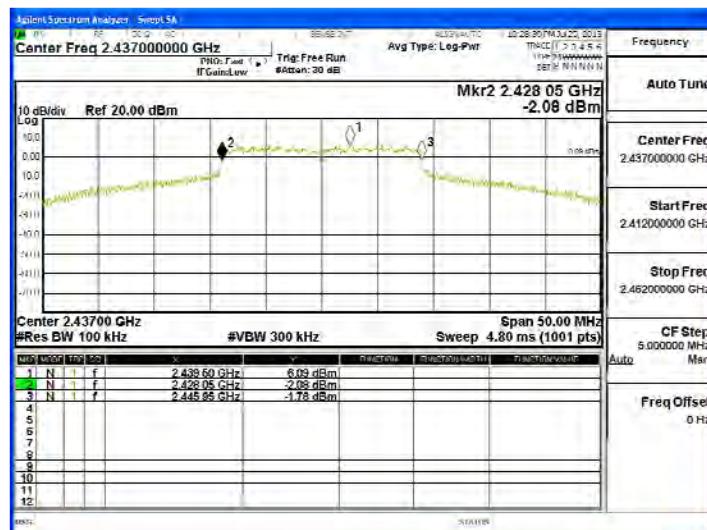
Figure Channel 1: (Chain B)



Product : SpectraGuard® Access Point / Sensor
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 4: Transmit - 802.11n-20BW_14.4Mbps(2.4G Band)(Dipole Antenna)
 (2437MHz)

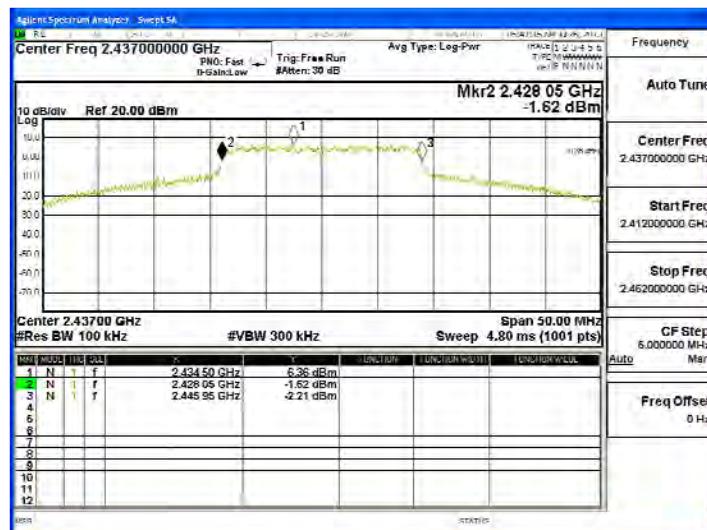
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
6	2437.00	17900	>500	Pass

Figure Channel 6: (Chain A)



Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
6	2437.00	17900	>500	Pass

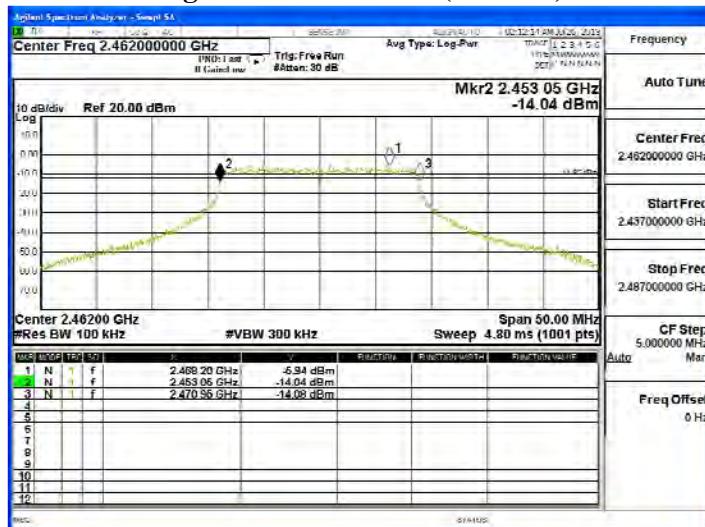
Figure Channel 6: (Chain B)



Product : SpectraGuard® Access Point / Sensor
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 4: Transmit - 802.11n-20BW_14.4Mbps(2.4G Band)(Dipole Antenna)
 (2462MHz)

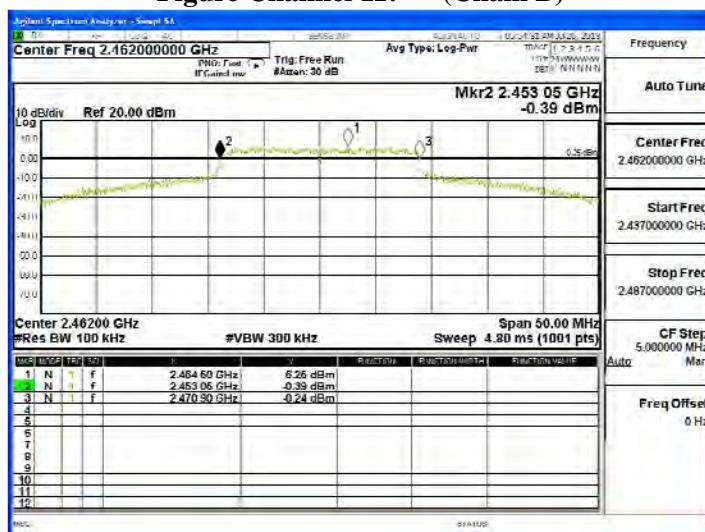
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
11	2462.00	17900	>500	Pass

Figure Channel 11: (Chain A)



Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
11	2462.00	17850	>500	Pass

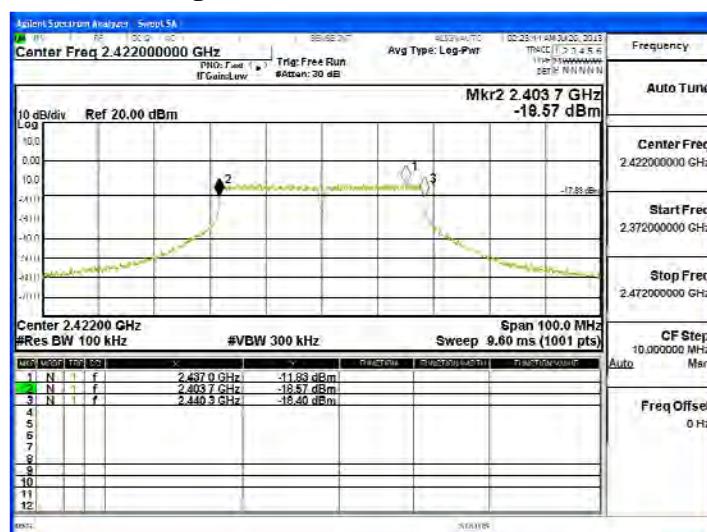
Figure Channel 11: (Chain B)



Product : SpectraGuard® Access Point / Sensor
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 5: Transmit - 802.11n-40BW_30Mbps(2.4G Band)(Dipole Antenna)
 (2422MHz)

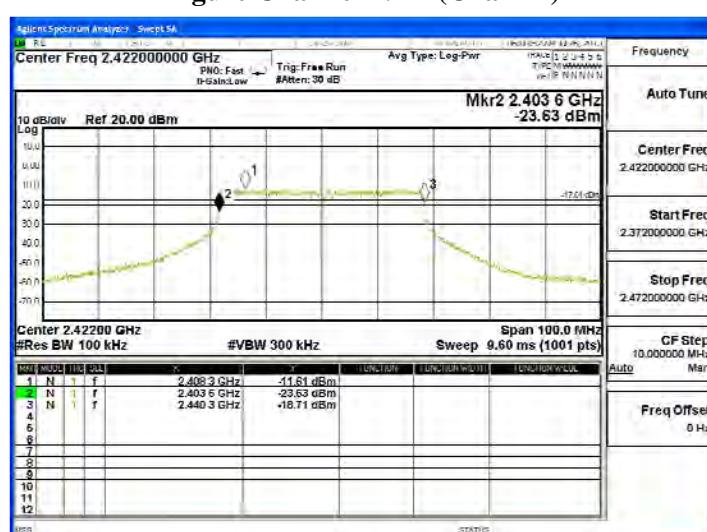
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
1	2422.00	36600	>500	Pass

Figure Channel 1: (Chain A)



Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
1	2422.00	36700	>500	Pass

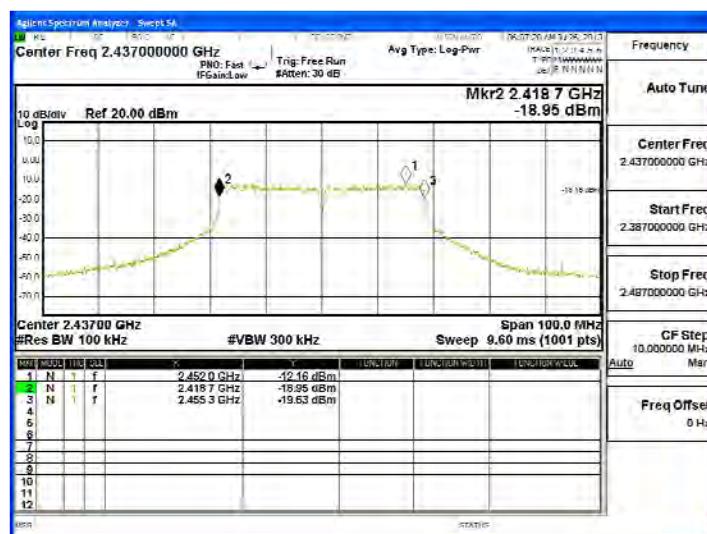
Figure Channel 1: (Chain B)



Product : SpectraGuard® Access Point / Sensor
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 5: Transmit - 802.11n-40BW_30Mbps(2.4G Band)(Dipole Antenna)
 (2437MHz)

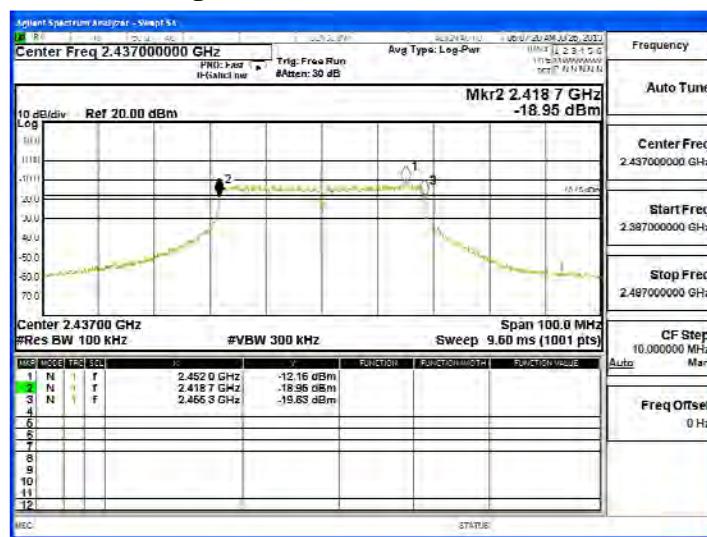
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
4	2437.00	36600	>500	Pass

Figure Channel 4: (Chain A)



Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
4	2437.00	36600	>500	Pass

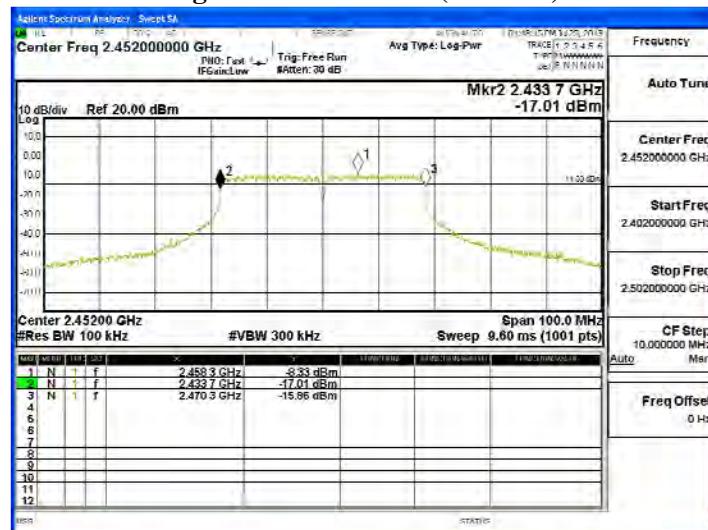
Figure Channel 4: (Chain B)



Product : SpectraGuard® Access Point / Sensor
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 5: Transmit - 802.11n-40BW_30Mbps(2.4G Band)(Dipole Antenna)
 (2452MHz)

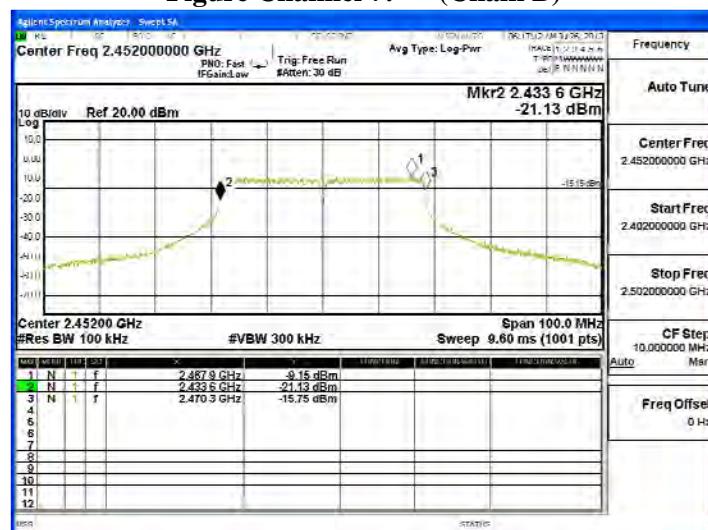
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
7	2452.00	36600	>500	Pass

Figure Channel 7: (Chain A)



Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
7	2452.00	36700	>500	Pass

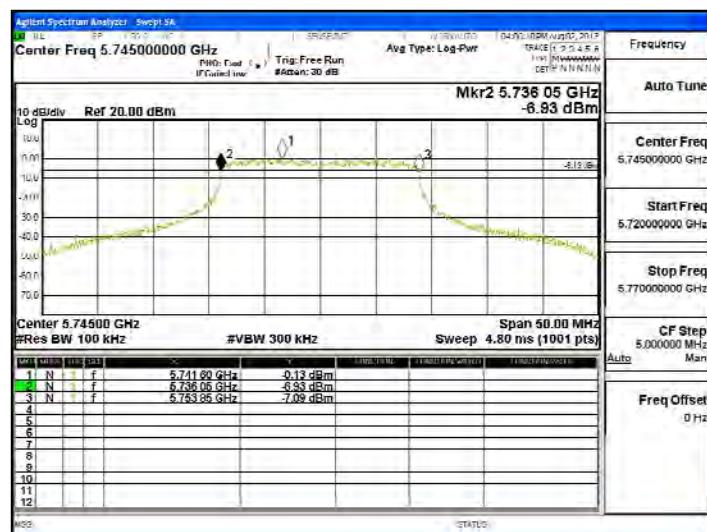
Figure Channel 7: (Chain B)



Product : SpectraGuard® Access Point / Sensor
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 6: Transmit - 802.11n-20BW_14.4Mbps(5G Band)(Dipole Antenna)
 (5745MHz)

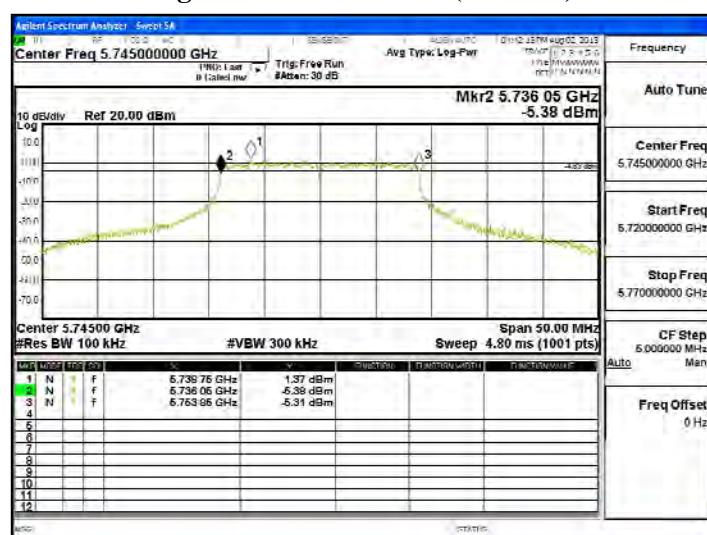
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
149	5745.00	17800	>500	Pass

Figure Channel 149: (Chain A)



Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
149	5745.00	17800	>500	Pass

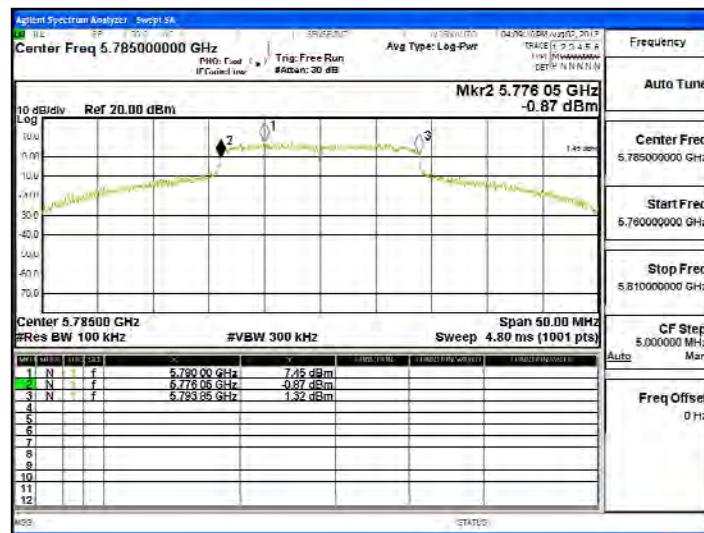
Figure Channel 149: (Chain B)



Product : SpectraGuard® Access Point / Sensor
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 6: Transmit - 802.11n-20BW_14.4Mbps(5G Band)(Dipole Antenna)
 (5785MHz)

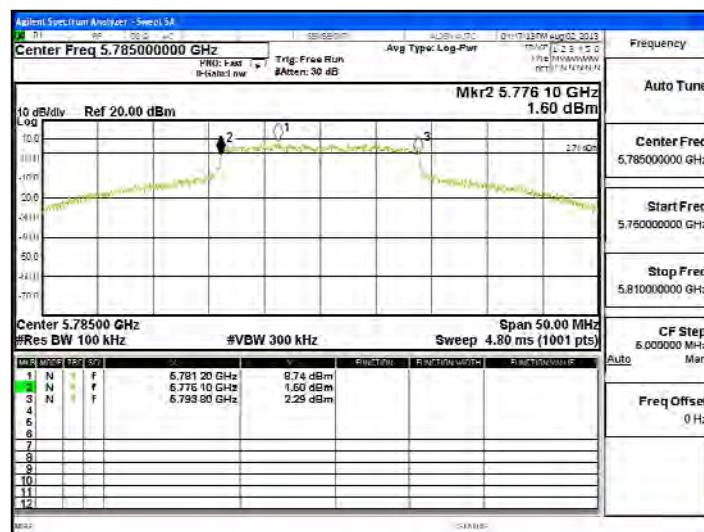
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
157	5785.00	17800	>500	Pass

Figure Channel 157: (Chain A)



Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
157	5785.00	17700	>500	Pass

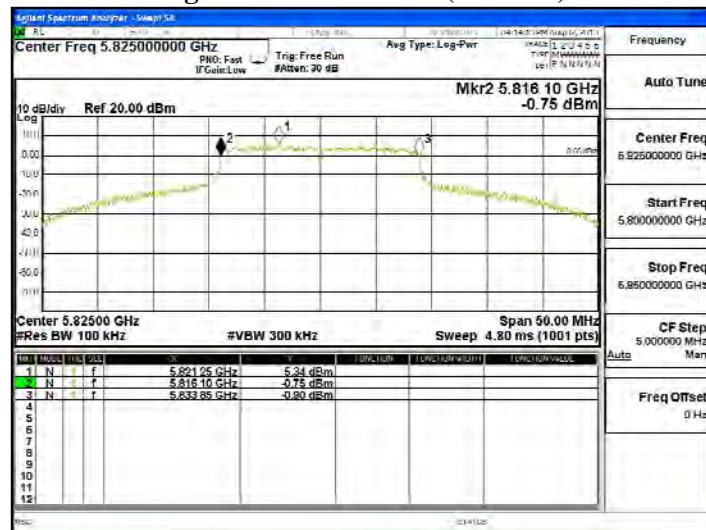
Figure Channel 157: (Chain B)



Product : SpectraGuard® Access Point / Sensor
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 6: Transmit - 802.11n-20BW_14.4Mbps(5G Band)(Dipole Antenna)
 (5825MHz)

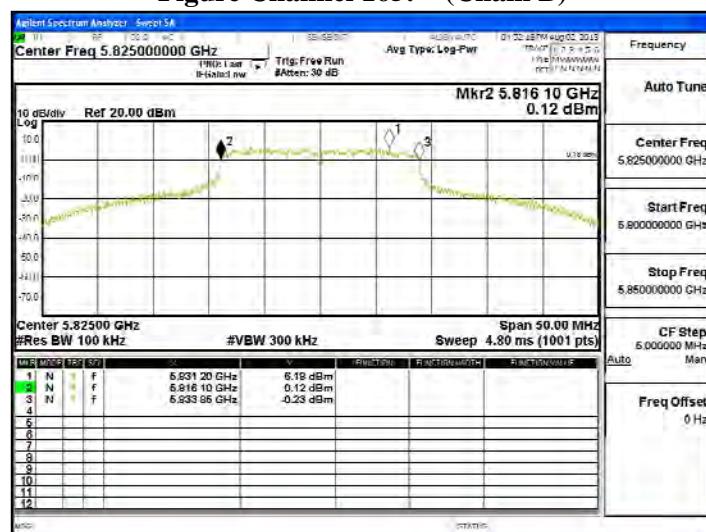
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
165	5825.00	17750	>500	Pass

Figure Channel 165: (Chain A)



Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
165	5825.00	17750	>500	Pass

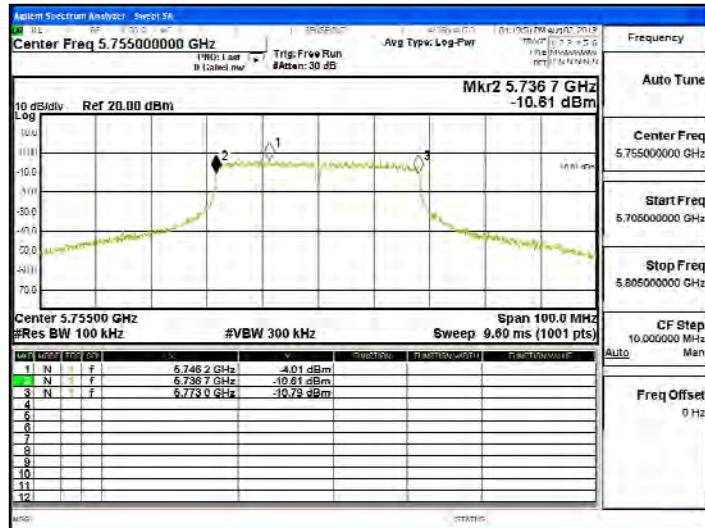
Figure Channel 165: (Chain B)



Product : SpectraGuard® Access Point / Sensor
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 7: Transmit - 802.11n-40BW_30Mbps(5G Band)(Dipole Antenna) (5755MHz)

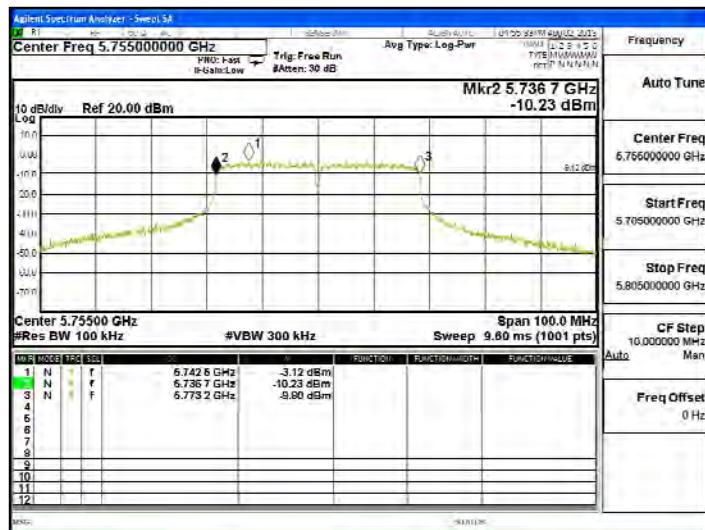
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
151	5755.00	36300	>500	Pass

Figure Channel 151: (Chain A)



Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
151	5755.00	36500	>500	Pass

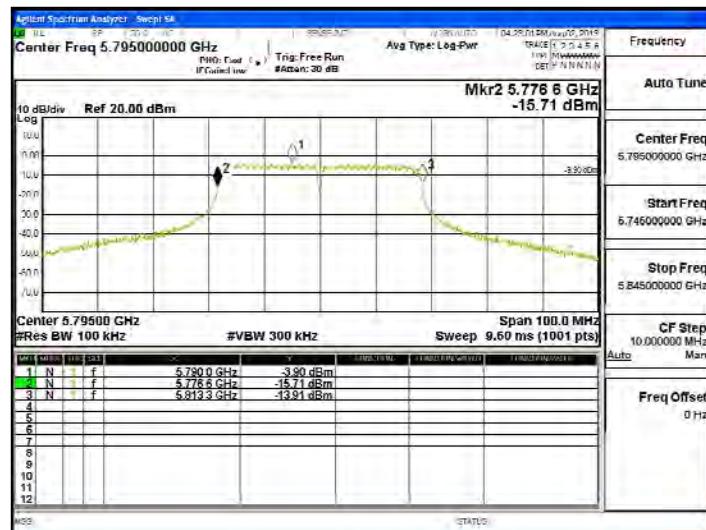
Figure Channel 151: (Chain B)



Product : SpectraGuard® Access Point / Sensor
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 7: Transmit - 802.11n-40BW_30Mbps(5G Band)(Dipole Antenna) (5795MHz)

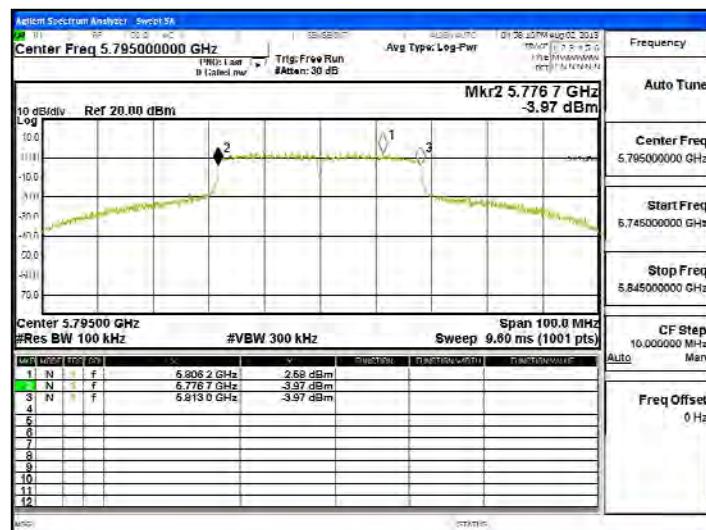
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
159	5795.00	36700	>500	Pass

Figure Channel 159: (Chain A)



Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
159	5795.00	36300	>500	Pass

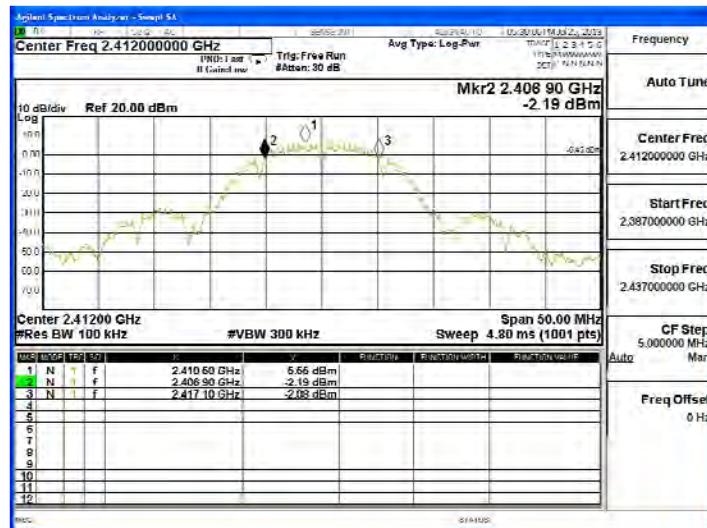
Figure Channel 159: (Chain B)



Product : SpectraGuard® Access Point / Sensor
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 8: Transmit (802.11b 1Mbps)(PIFA Antenna) (2412MHz)

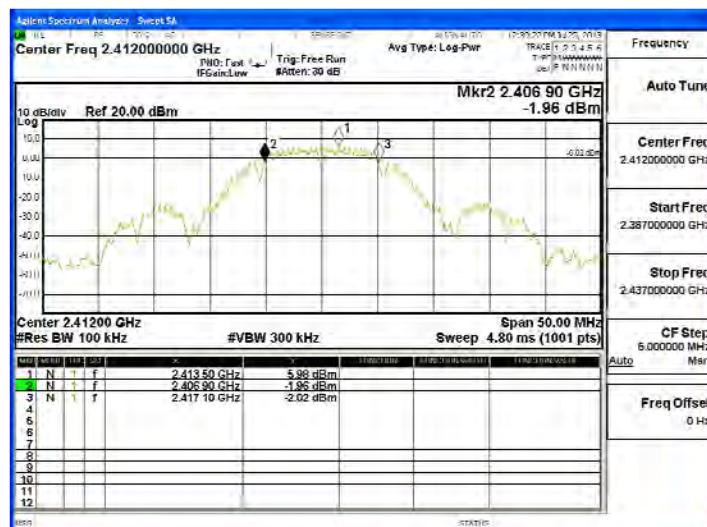
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
1	2412.00	10200	>500	Pass

Figure Channel 1: (Chain A)



Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
1	2412.00	10200	>500	Pass

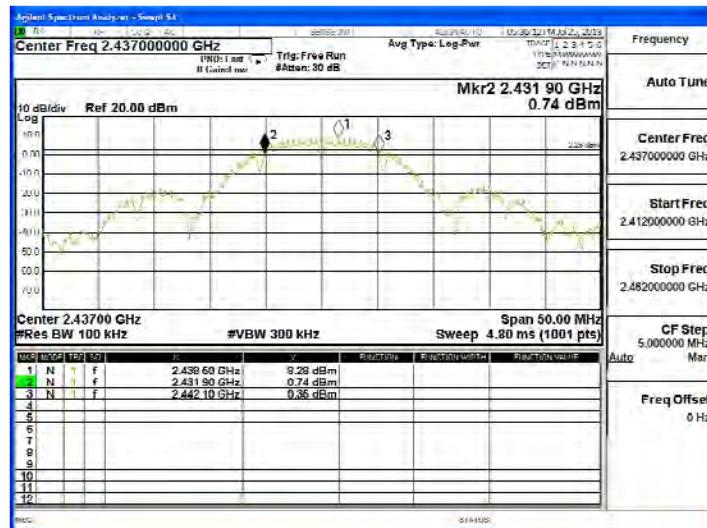
Figure Channel 1: (Chain B)



Product : SpectraGuard® Access Point / Sensor
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 8: Transmit (802.11b 1Mbps)(PIFA Antenna) (2437MHz)

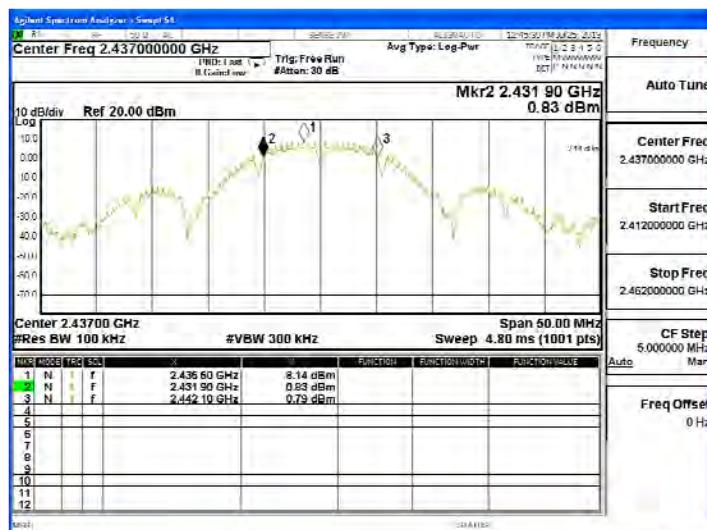
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
6	2437.00	10200	>500	Pass

Figure Channel 6: (Chain A)



Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
6	2437.00	10200	>500	Pass

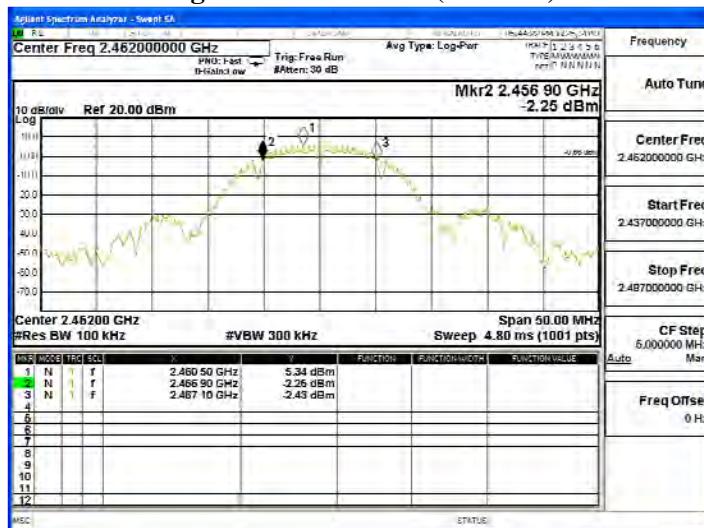
Figure Channel 6: (Chain B)



Product : SpectraGuard® Access Point / Sensor
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 8: Transmit (802.11b 1Mbps)(PIFA Antenna) (2462MHz)

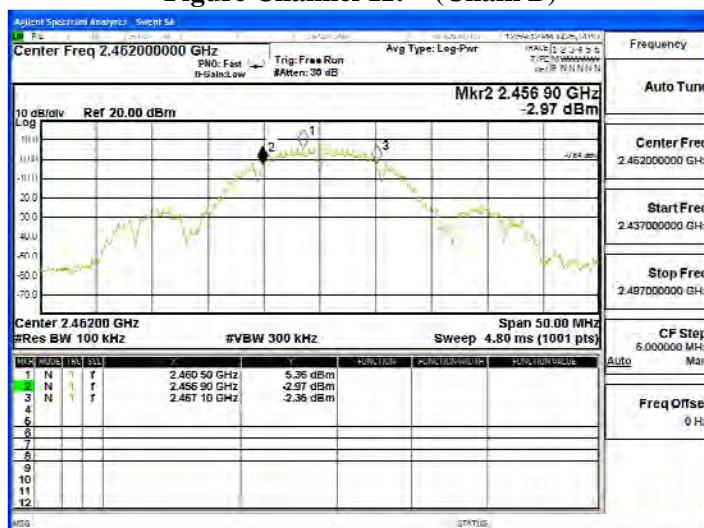
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
11	2462.00	10200	>500	Pass

Figure Channel 11: (Chain A)



Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
11	2462.00	10200	>500	Pass

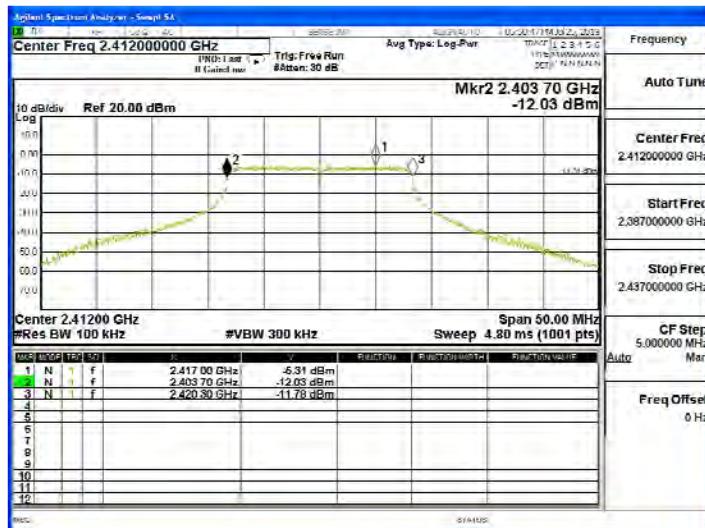
Figure Channel 11: (Chain B)



Product : SpectraGuard® Access Point / Sensor
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 9: Transmit (802.11g 6Mbps)(PIFA Antenna) (2412MHz)

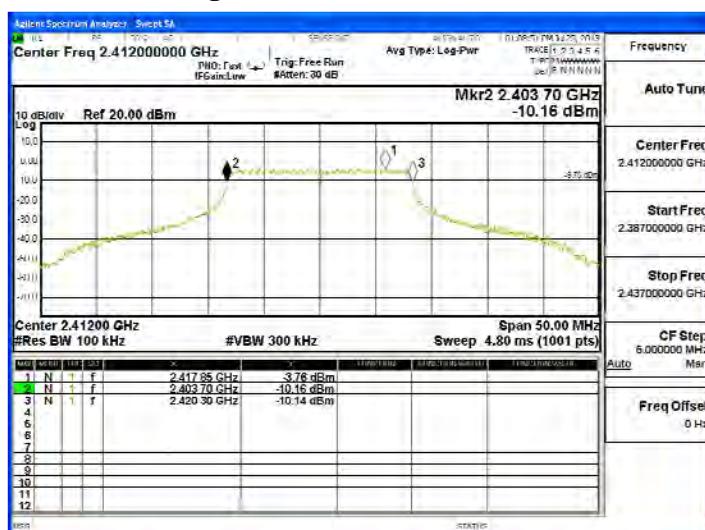
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
1	2412.00	16600	>500	Pass

Figure Channel 1: (Chain A)



Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
1	2412.00	16600	>500	Pass

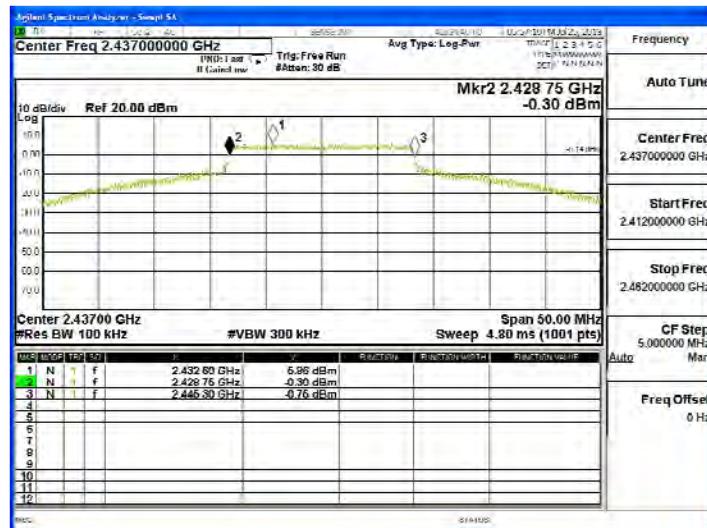
Figure Channel 1: (Chain B)



Product : SpectraGuard® Access Point / Sensor
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 9: Transmit (802.11g 6Mbps)(PIFA Antenna) (2437MHz)

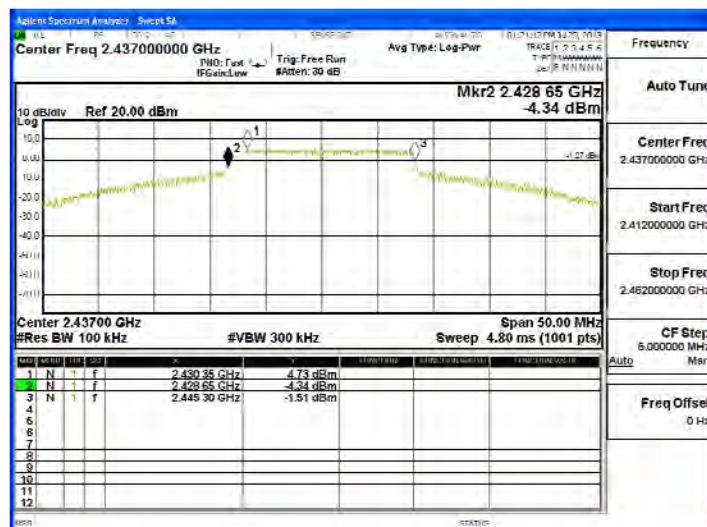
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
6	2437.00	16550	>500	Pass

Figure Channel 6: (Chain A)



Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
6	2437.00	16650	>500	Pass

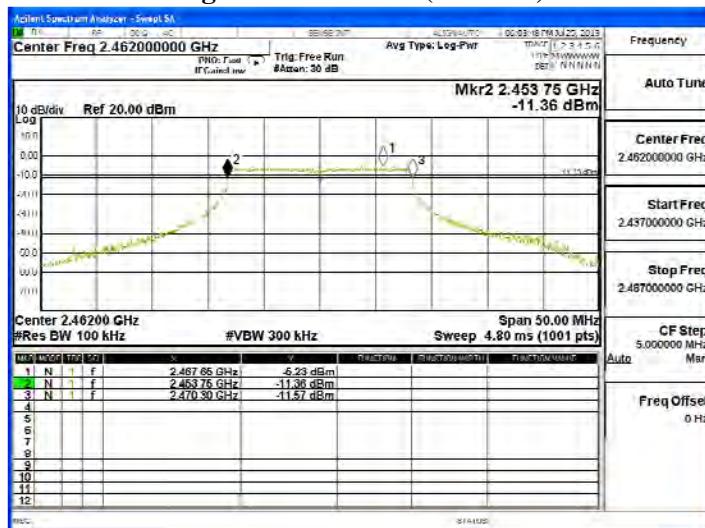
Figure Channel 6: (Chain B)



Product : SpectraGuard® Access Point / Sensor
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 9: Transmit (802.11g 6Mbps)(PIFA Antenna) (2462MHz)

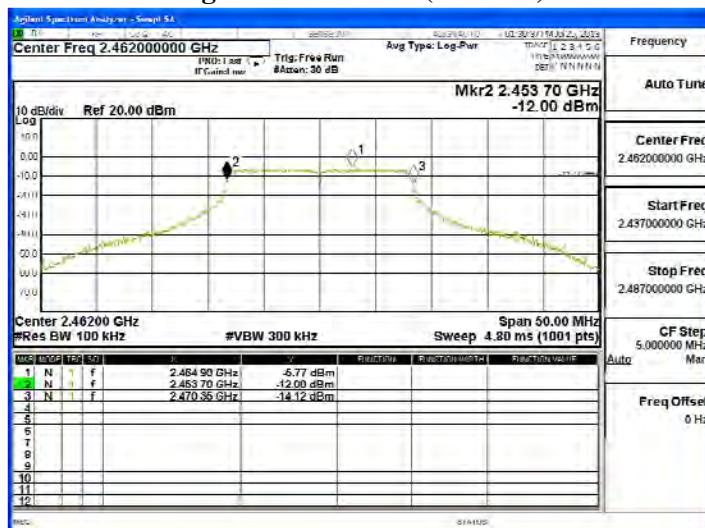
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
11	2462.00	16550	>500	Pass

Figure Channel 11: (Chain A)



Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
11	2462.00	16650	>500	Pass

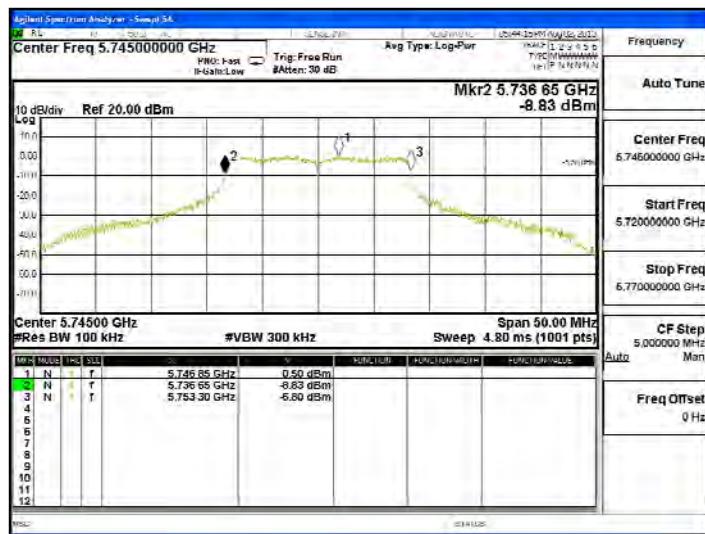
Figure Channel 11: (Chain B)



Product : SpectraGuard® Access Point / Sensor
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 10: Transmit - 802.11a 6Mbps(PIFA Antenna) (5745MHz)

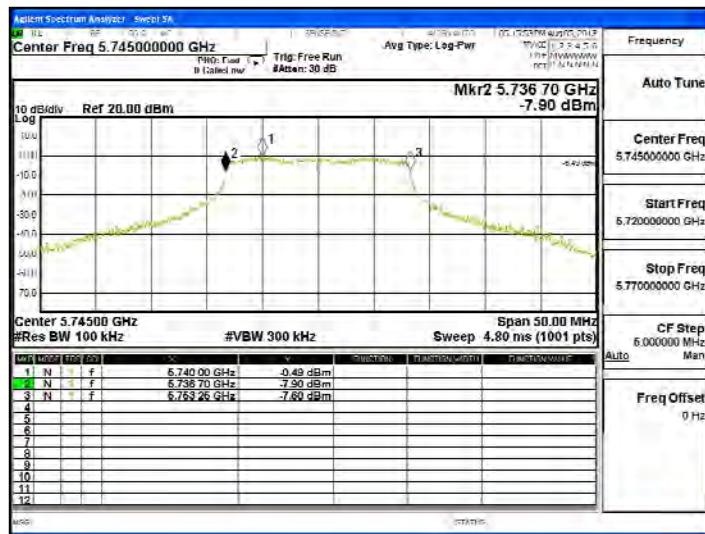
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
149	5745.00	16650	>500	Pass

Figure Channel 149: (Chain A)



Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
149	5745.00	16550	>500	Pass

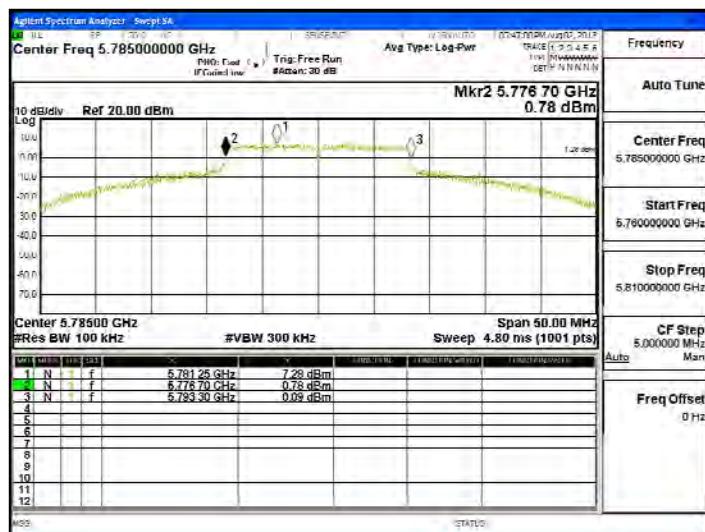
Figure Channel 149: (Chain B)



Product : SpectraGuard® Access Point / Sensor
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 10: Transmit - 802.11a 6Mbps(PIFA Antenna) (5785MHz)

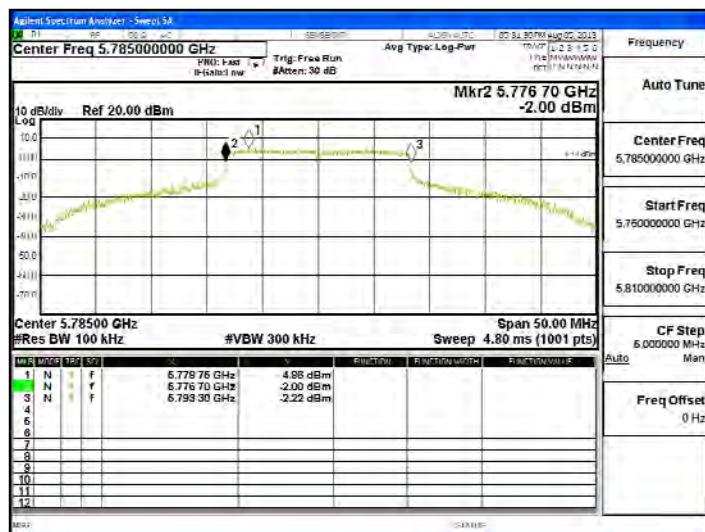
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
157	5785.00	16600	>500	Pass

Figure Channel 157: (Chain A)



Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
157	5785.00	16600	>500	Pass

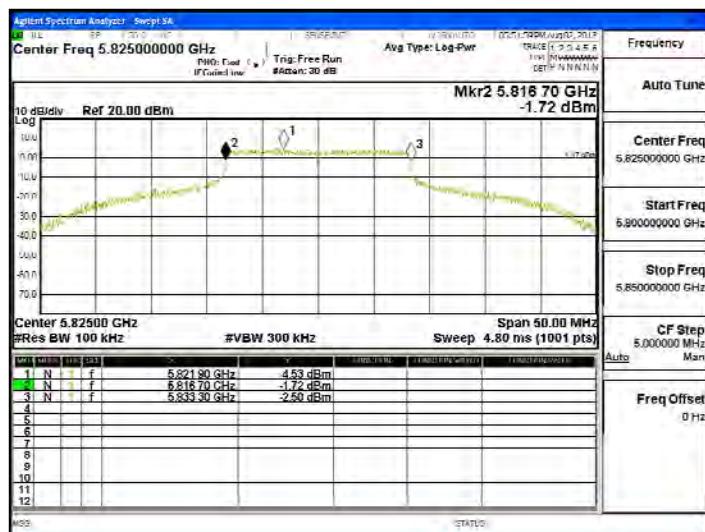
Figure Channel 157: (Chain B)



Product : SpectraGuard® Access Point / Sensor
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 10: Transmit - 802.11a 6Mbps(PIFA Antenna) (5825MHz)

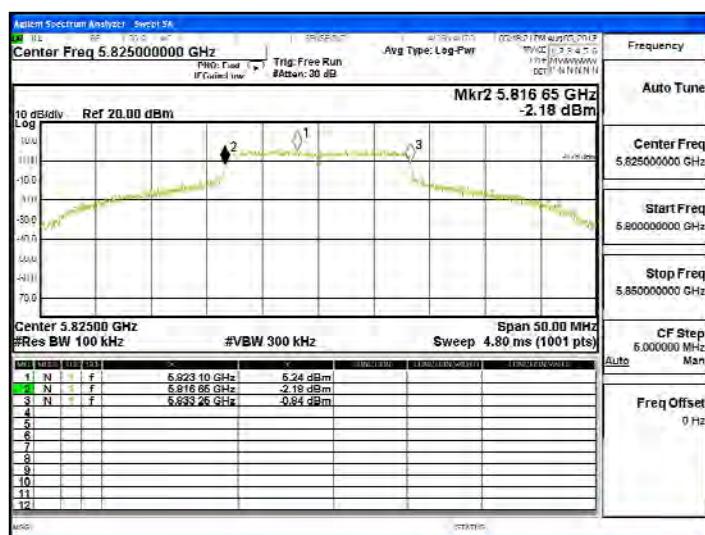
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
165	5825.00	16600	>500	Pass

Figure Channel 165: (Chain A)



Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
165	5825.00	16600	>500	Pass

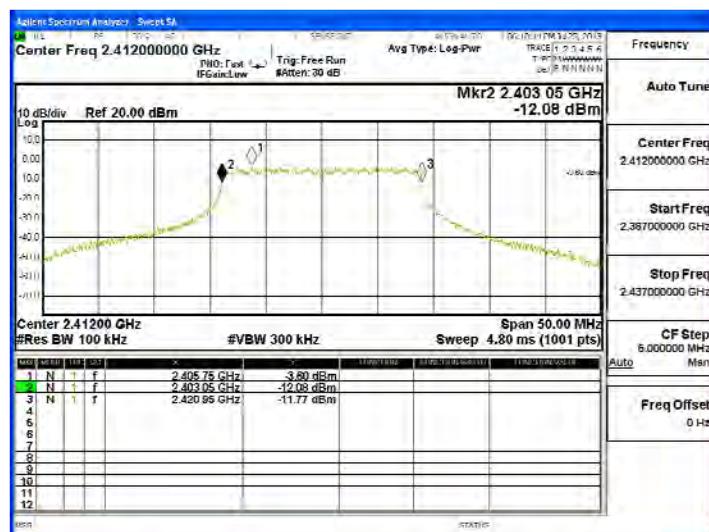
Figure Channel 165: (Chain B)



Product : SpectraGuard® Access Point / Sensor
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 11: Transmit - 802.11n-20BW_14.4Mbps(2.4G Band)(PIFA Antenna)
 (2412MHz)

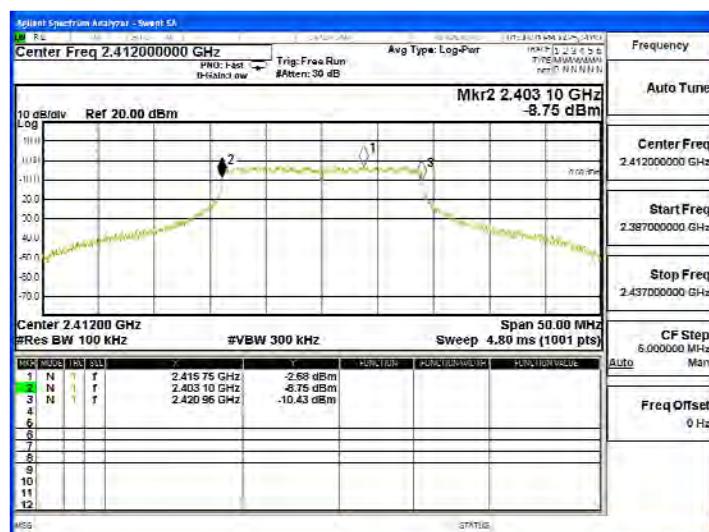
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
1	2412.00	17900	>500	Pass

Figure Channel 1: (Chain A)



Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
1	2412.00	17850	>500	Pass

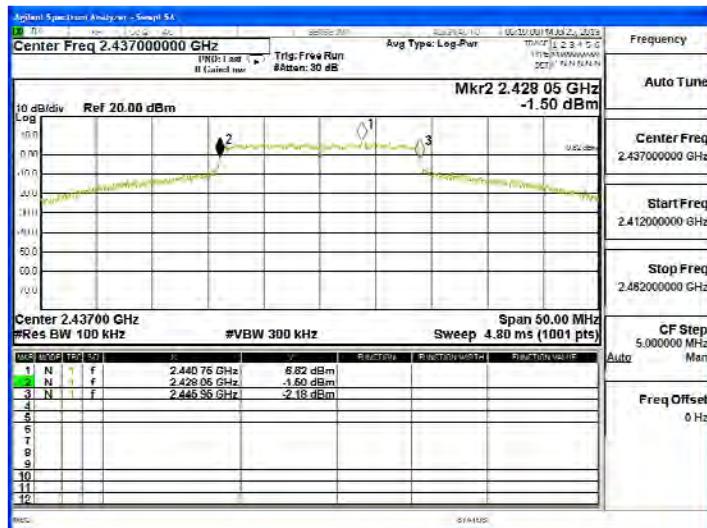
Figure Channel 1: (Chain B)



Product : SpectraGuard® Access Point / Sensor
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 11: Transmit - 802.11n-20BW_14.4Mbps(2.4G Band)(PIFA Antenna) (2437MHz)

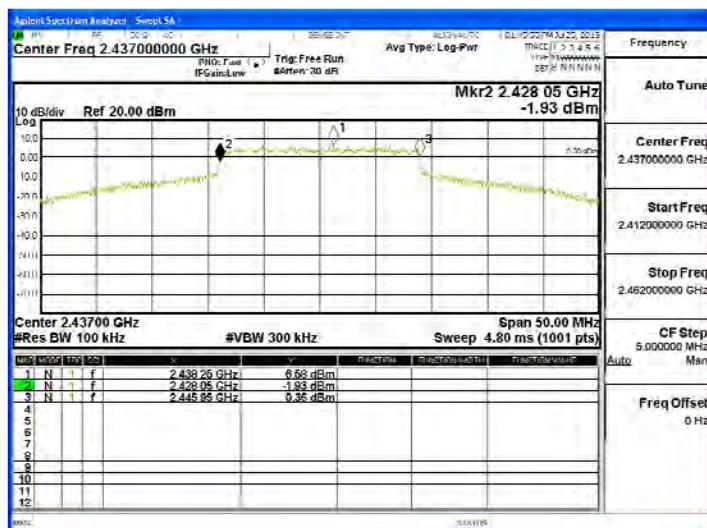
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
6	2437.00	17900	>500	Pass

Figure Channel 6: (Chain A)



Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
6	2437.00	17900	>500	Pass

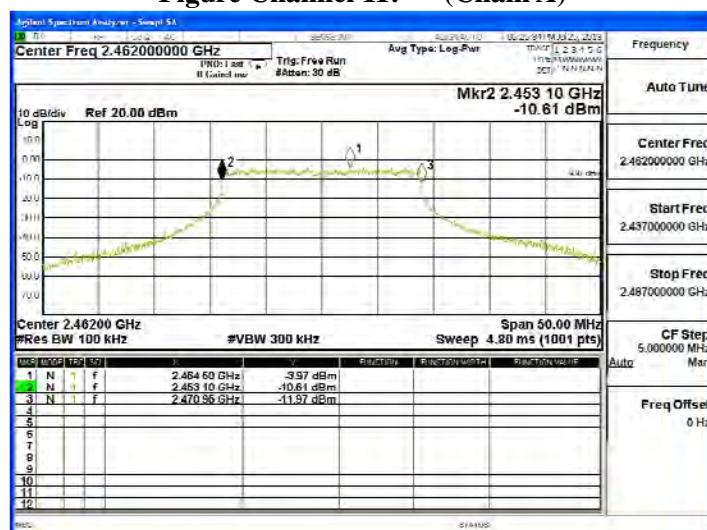
Figure Channel 6: (Chain B)



Product : SpectraGuard® Access Point / Sensor
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 11: Transmit - 802.11n-20BW_14.4Mbps(2.4G Band)(PIFA Antenna)
 (2462MHz)

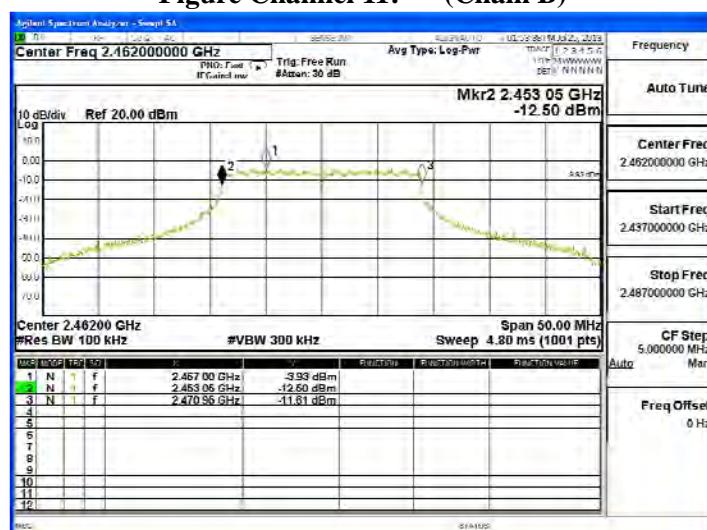
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
11	2462.00	17850	>500	Pass

Figure Channel 11: (Chain A)



Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
11	2462.00	17900	>500	Pass

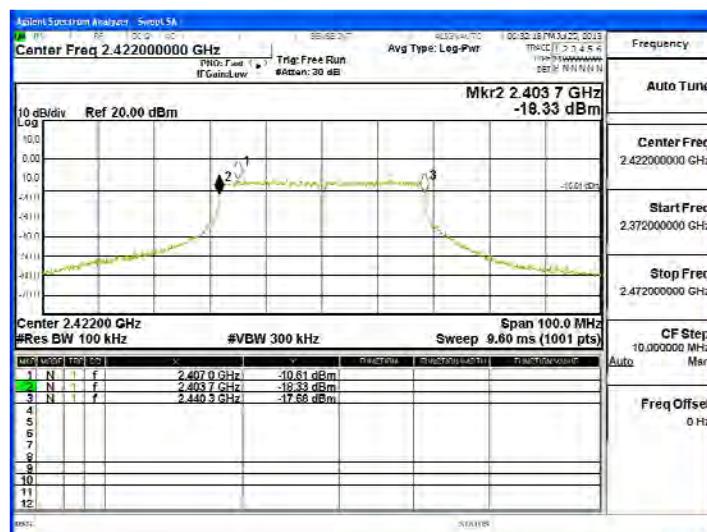
Figure Channel 11: (Chain B)



Product : SpectraGuard® Access Point / Sensor
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 12: Transmit - 802.11n-40BW_30Mbps(2.4G Band)(PIFA Antenna)
 (2422MHz)

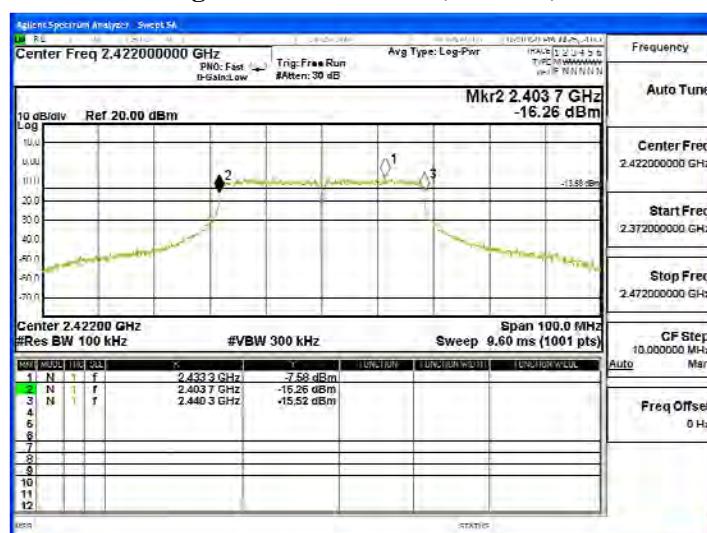
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
1	2422.00	36600	>500	Pass

Figure Channel 1: (Chain A)



Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
1	2422.00	36600	>500	Pass

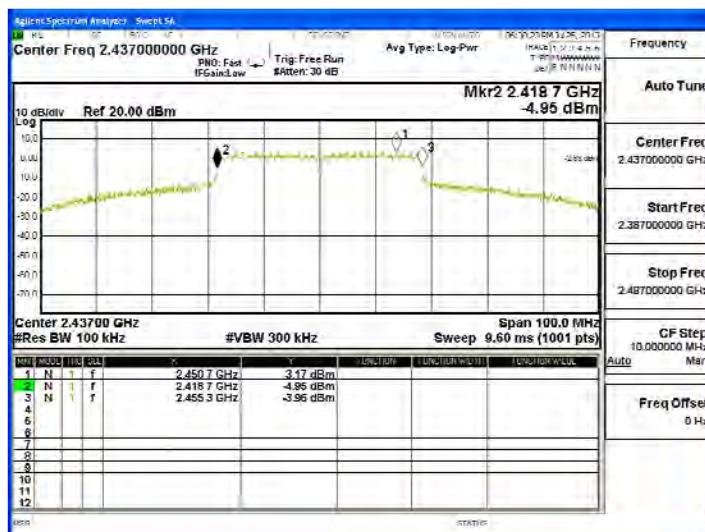
Figure Channel 1: (Chain B)



Product : SpectraGuard® Access Point / Sensor
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 12: Transmit - 802.11n-40BW_30Mbps(2.4G Band)(PIFA Antenna)
 (2437MHz)

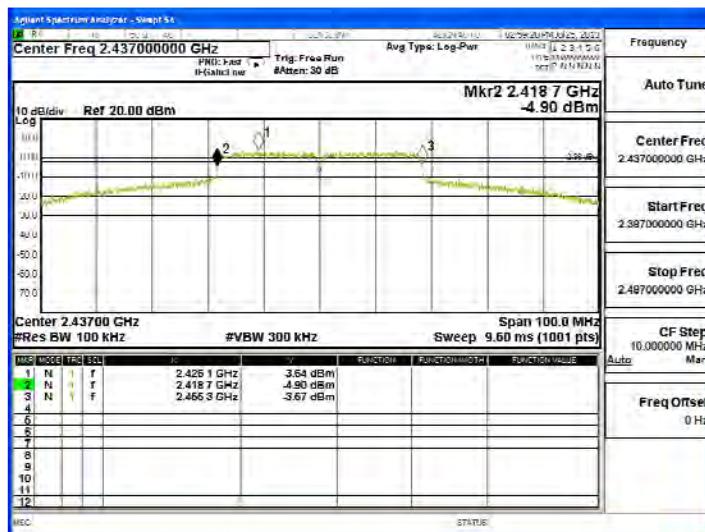
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
4	2437.00	36600	>500	Pass

Figure Channel 4: (Chain A)



Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
4	2437.00	36600	>500	Pass

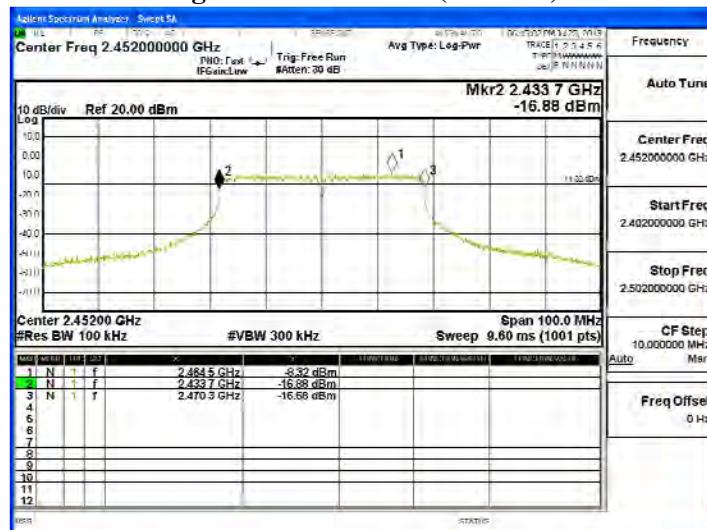
Figure Channel 4: (Chain B)



Product : SpectraGuard® Access Point / Sensor
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 12: Transmit - 802.11n-40BW_30Mbps(2.4G Band)(PIFA Antenna)
 (2452MHz)

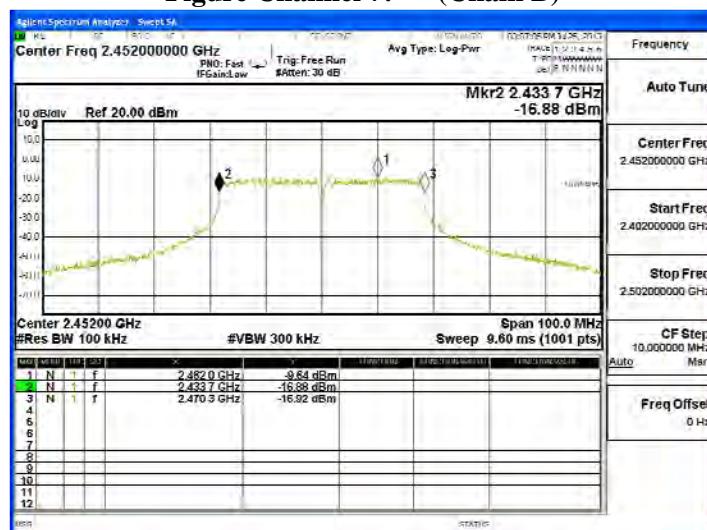
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
7	2452.00	36600	>500	Pass

Figure Channel 7: (Chain A)



Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
7	2452.00	36600	>500	Pass

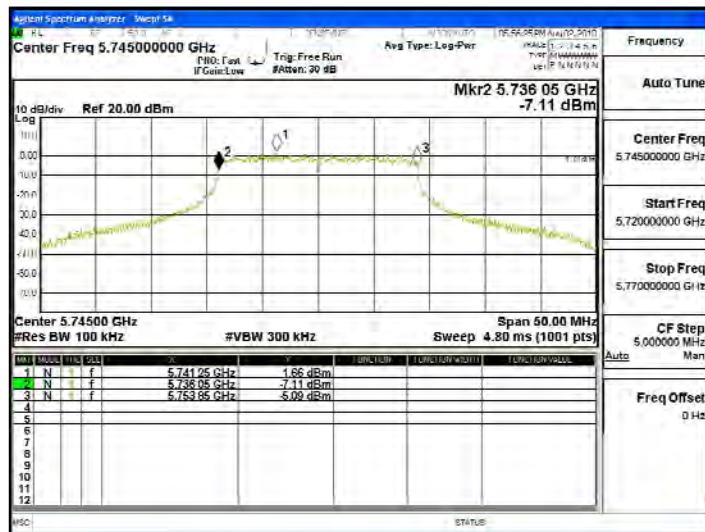
Figure Channel 7: (Chain B)



Product : SpectraGuard® Access Point / Sensor
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 13: Transmit - 802.11n-20BW_14.4Mbps(5G Band)(PIFA Antenna) (5745MHz)

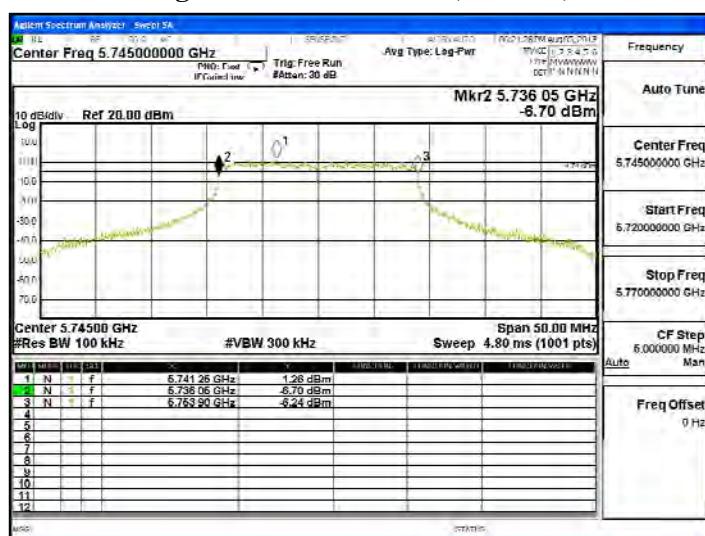
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
149	5745.00	17800	>500	Pass

Figure Channel 149: (Chain A)



Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
149	5745.00	17850	>500	Pass

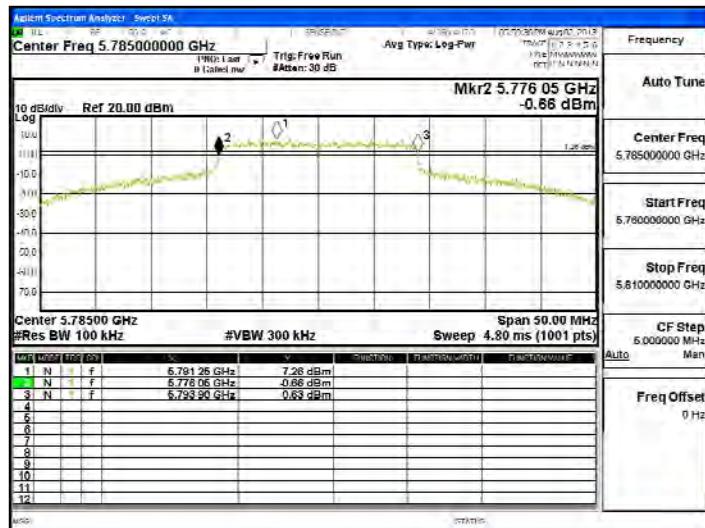
Figure Channel 149: (Chain B)



Product : SpectraGuard® Access Point / Sensor
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 13: Transmit - 802.11n-20BW_14.4Mbps(5G Band)(PIFA Antenna) (5785MHz)

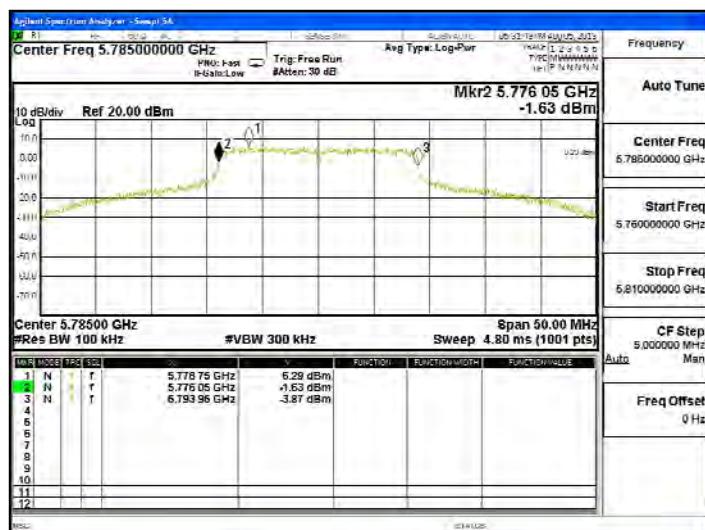
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
157	5785.00	17850	>500	Pass

Figure Channel 157: (Chain A)



Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
157	5785.00	17900	>500	Pass

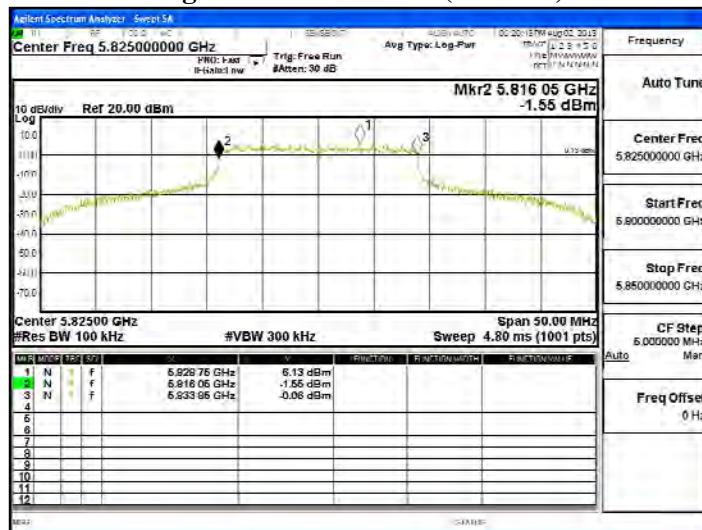
Figure Channel 157: (Chain B)



Product : SpectraGuard® Access Point / Sensor
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 13: Transmit - 802.11n-20BW_14.4Mbps(5G Band)(PIFA Antenna) (5825MHz)

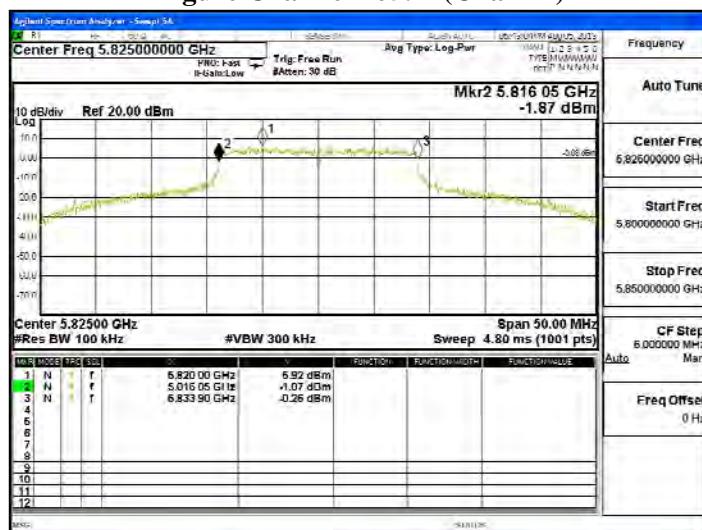
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
165	5825.00	17800	>500	Pass

Figure Channel 165: (Chain A)



Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
165	5825.00	17850	>500	Pass

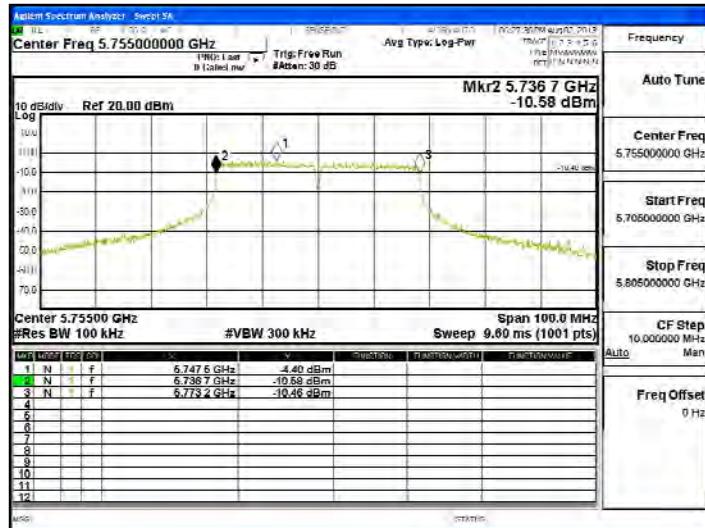
Figure Channel 165: (Chain B)



Product : SpectraGuard® Access Point / Sensor
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 14: Transmit - 802.11n-40BW_30Mbps(5G Band)(PIFA Antenna) (5755MHz)

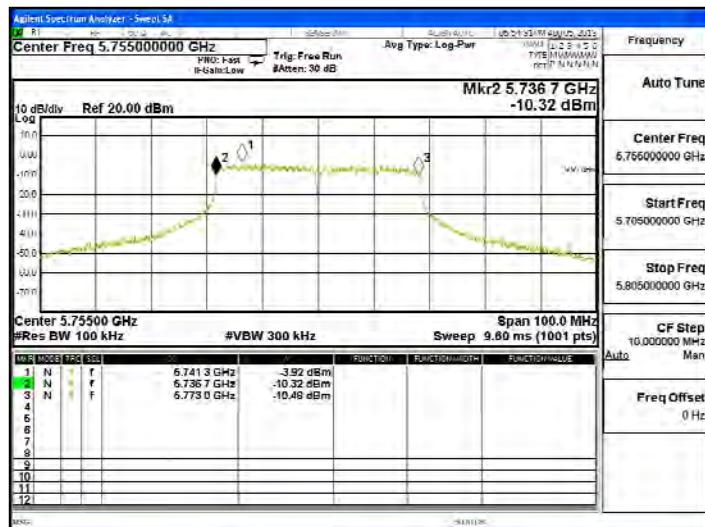
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
151	5755.00	36500	>500	Pass

Figure Channel 151: (Chain A)



Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
151	5755.00	36300	>500	Pass

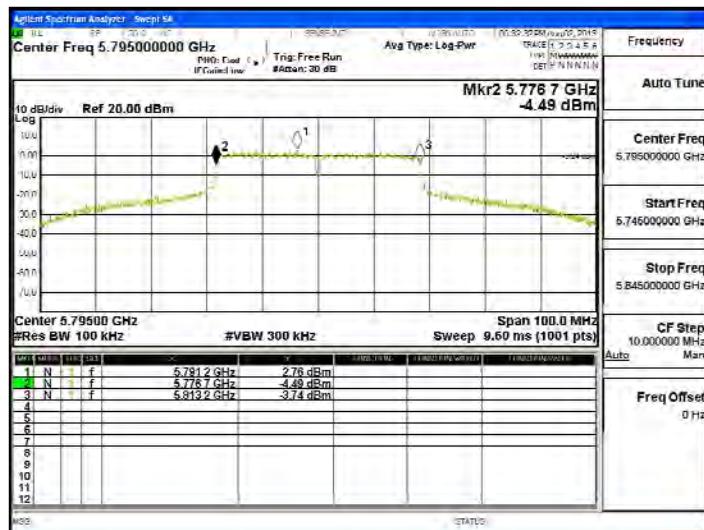
Figure Channel 151: (Chain B)



Product : SpectraGuard® Access Point / Sensor
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 14: Transmit - 802.11n-40BW_30Mbps(5G Band)(PIFA Antenna) (5795MHz)

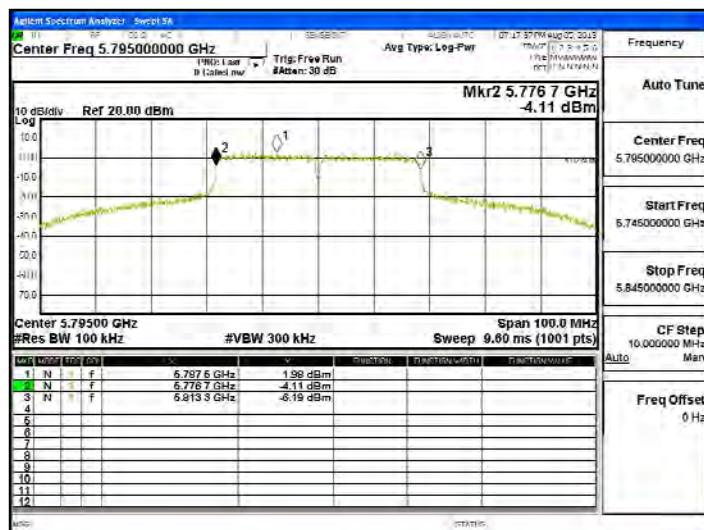
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
159	5795.00	36500	>500	Pass

Figure Channel 159: (Chain A)



Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
159	5795.00	36600	>500	Pass

Figure Channel 159: (Chain B)



8. Power Density

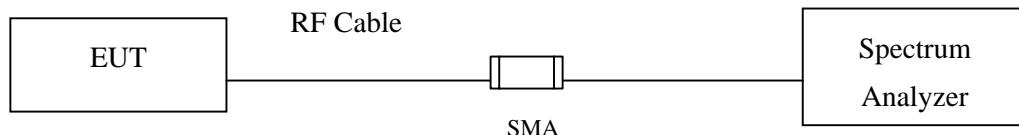
8.1. Test Equipment

Equipment	Manufacturer	Model No./Serial No.	Last Cal.
Spectrum Analyzer	R&S	FSP40 / 100170	Jun, 2013
Spectrum Analyzer	Agilent	E4407B / US39440758	Jun, 2013
X Spectrum Analyzer	Agilent	N9010A / MY48030495	Apr., 2013

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 : SpectraGuard® Access Point / Sensor
 Test Item : Power Density Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmit (802.11b 1Mbps)(Dipole Antenna) (2412MHz)

CHAIN	PPSD/MHz (dBm)	Total PPSD/MHz (dBm) ₁	Limit	Result
A	-8.440	-5.430	< 8dBm	Pass
B	-8.290	-5.280	< 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)

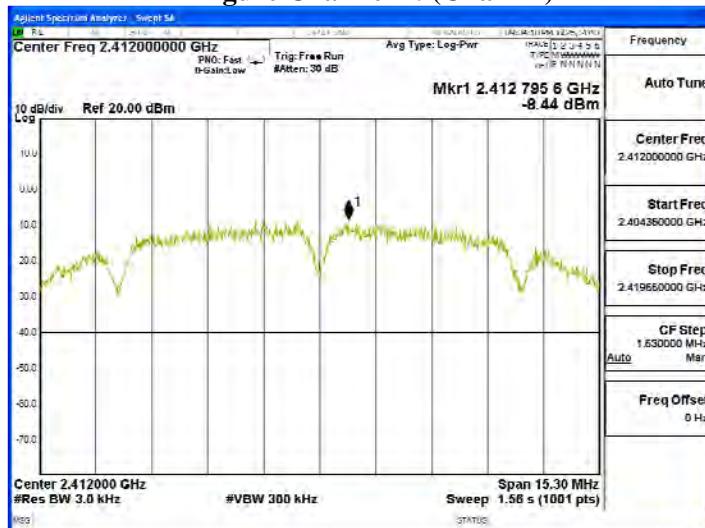
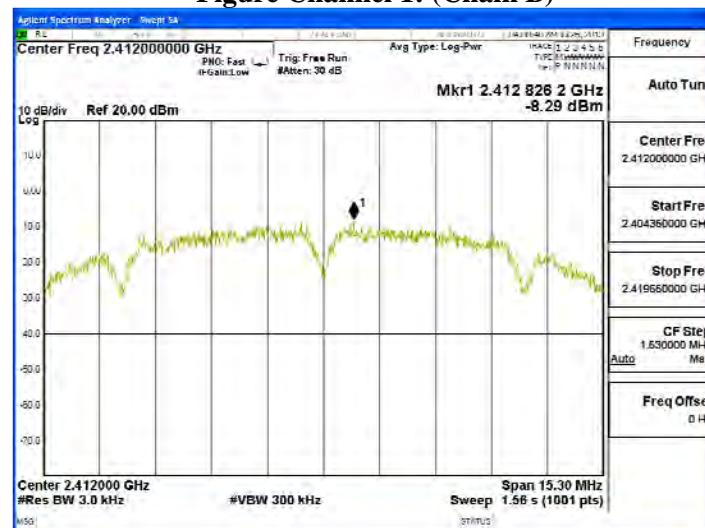


Figure Channel 1: (Chain B)



Product : SpectraGuard® Access Point / Sensor
 Test Item : Power Density Data
 Test Site : No.3OATS
 Test Mode : Mode 1: Transmit (802.11b 1Mbps)(Dipole Antenna) (2437MHz)

CHAIN	PPSD/MHz (dBm)	Total PPSD/MHz (dBm) ₁	Limit	Result
A	-7.610	-4.620	< 8dBm	Pass
B	-6.790	-3.780	< 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 6: (Chain A)

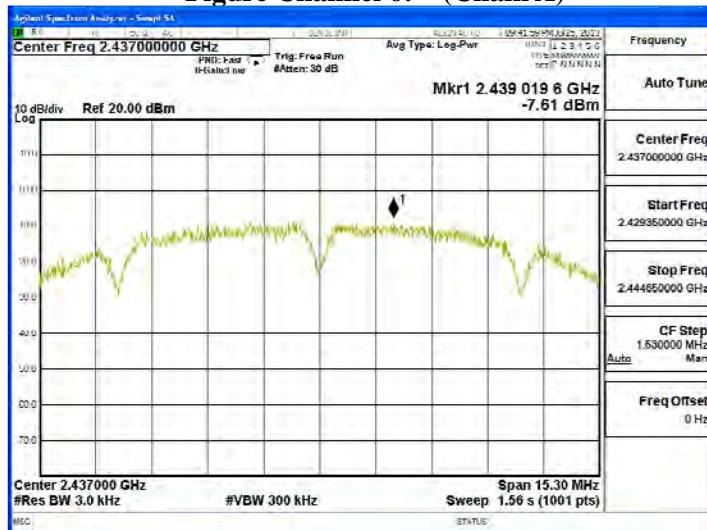
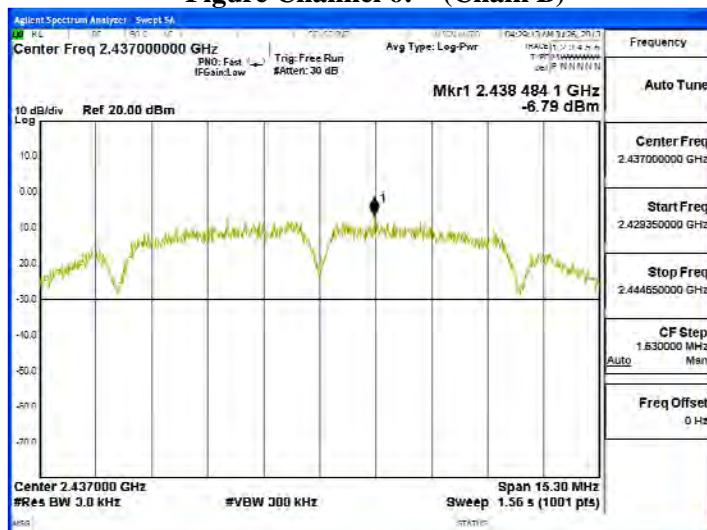


Figure Channel 6: (Chain B)



Product : SpectraGuard® Access Point / Sensor
 Test Item : Power Density Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmit (802.11b 1Mbps)(Dipole Antenna) (2462MHz)

CHAIN	PPSD/MHz (dBm)	Total PPSD/MHz (dBm) ₁	Limit	Result
A	-10.890	-7.880	< 8dBm	Pass
B	-10.320	-7.310	< 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 11: (Chain A)

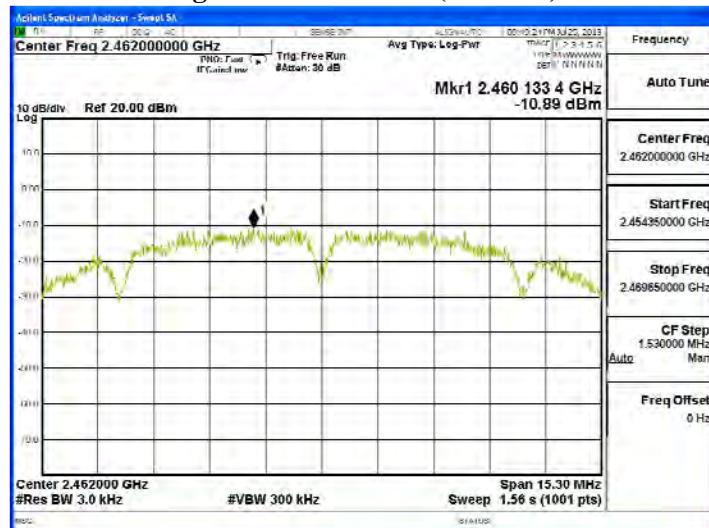


Figure Channel 11: (Chain B)



Product : SpectraGuard® Access Point / Sensor
 Test Item : Power Density Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmit (802.11g 6Mbps)(Dipole Antenna) (2412MHz)

CHAIN	PPSD/MHz (dBm)	Total PPSD/MHz (dBm)1	Limit	Result
A	-18.180	-15.170	< 8dBm	Pass
B	-19.200	-16.190	< 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)

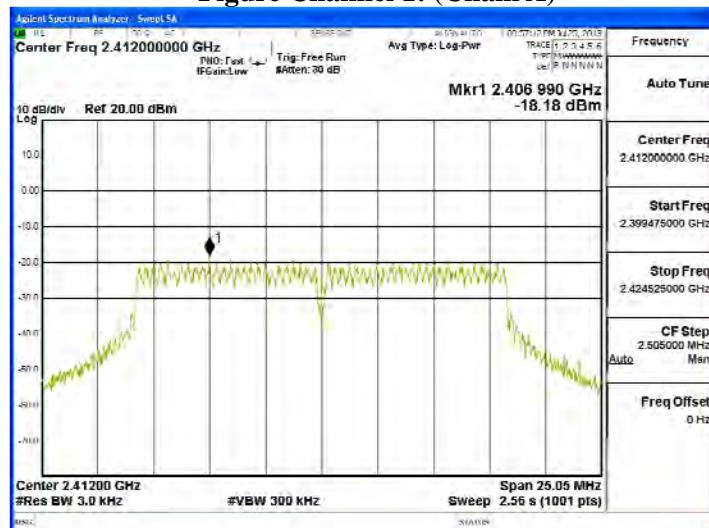
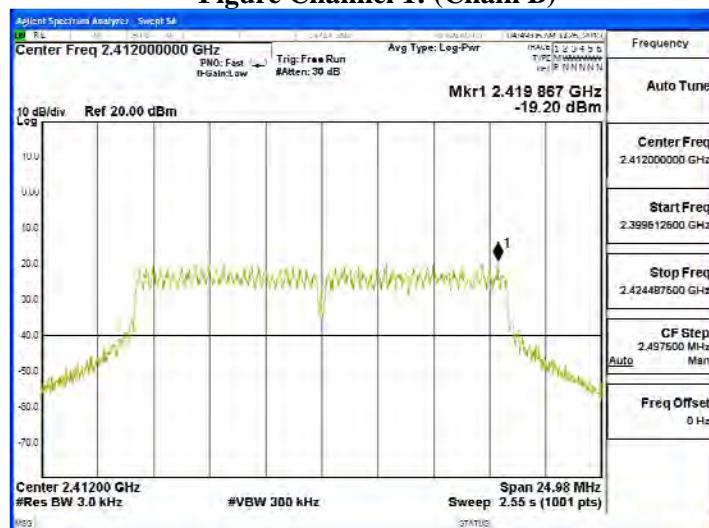


Figure Channel 1: (Chain B)



Product : SpectraGuard® Access Point / Sensor
 Test Item : Power Density Data
 Test Site : No.3OATS
 Test Mode : Mode 2: Transmit (802.11g 6Mbps)(Dipole Antenna) (2437MHz)

CHAIN	PPSD/MHz (dBm)	Total PPSD/MHz (dBm)1	Limit	Result
A	-7.170	-4.160	< 8dBm	Pass
B	-6.950	-3.940	< 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 6: (Chain A)

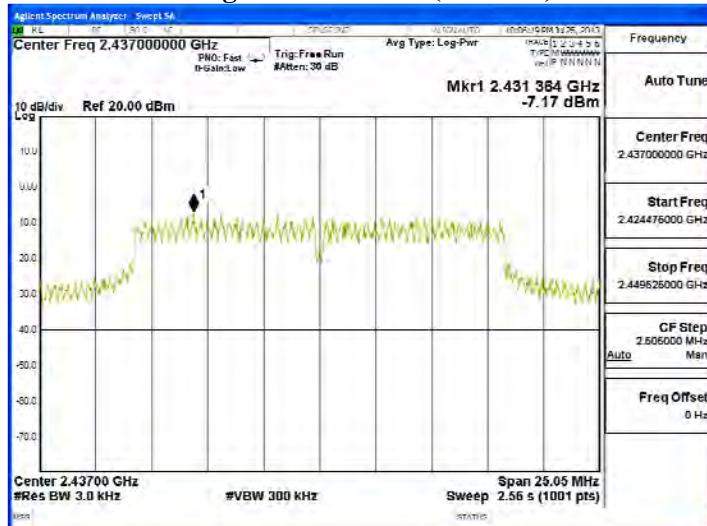
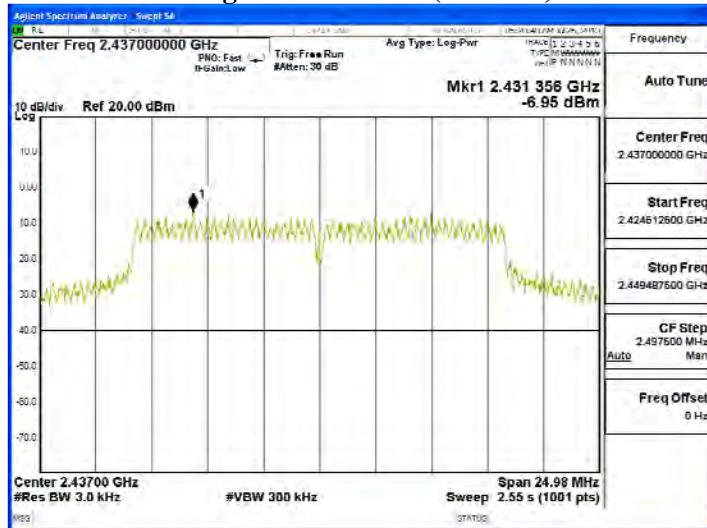


Figure Channel 6: (Chain B)



Product : SpectraGuard® Access Point / Sensor
 Test Item : Power Density Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmit (802.11g 6Mbps)(Dipole Antenna) (2462MHz)

CHAIN	PPSD/MHz (dBm)	Total PPSD/MHz (dBm)1	Limit	Result
A	-18.450	-15.440	< 8dBm	Pass
B	-8.370	-5.360	< 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 11: (Chain A)

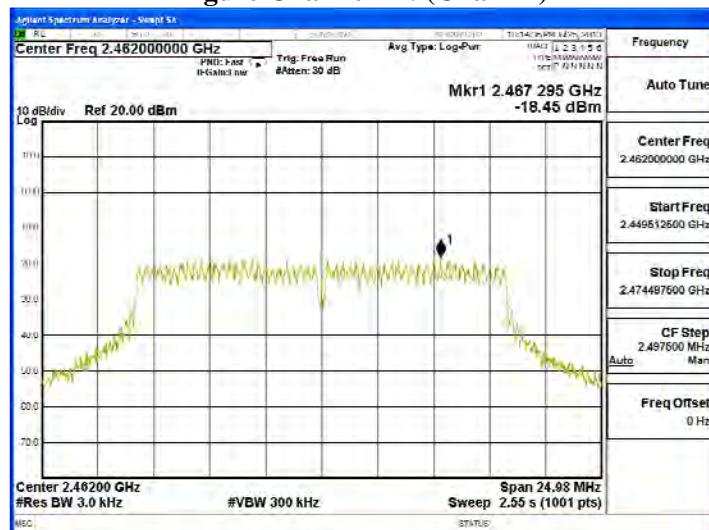
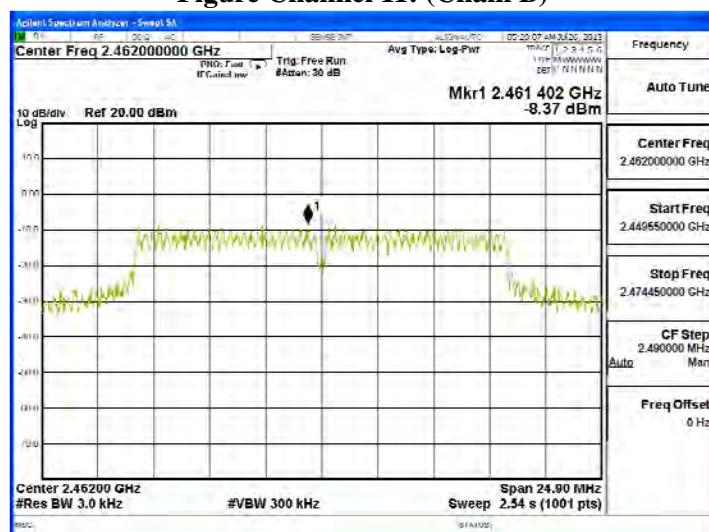


Figure Channel 11: (Chain B)



Product : SpectraGuard® Access Point / Sensor
 Test Item : Power Density Data
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmit - 802.11a 6Mbps(Dipole Antenna) (5745MHz)

CHAIN	PPSD/MHz (dBm)	Total PPSD/MHz (dBm)1	Limit	Result
A	0.450	3.460	< 8dBm	Pass
B	-1.010	2.000	< 8dBm	Pass

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

Figure Channel 149: (Chain A)

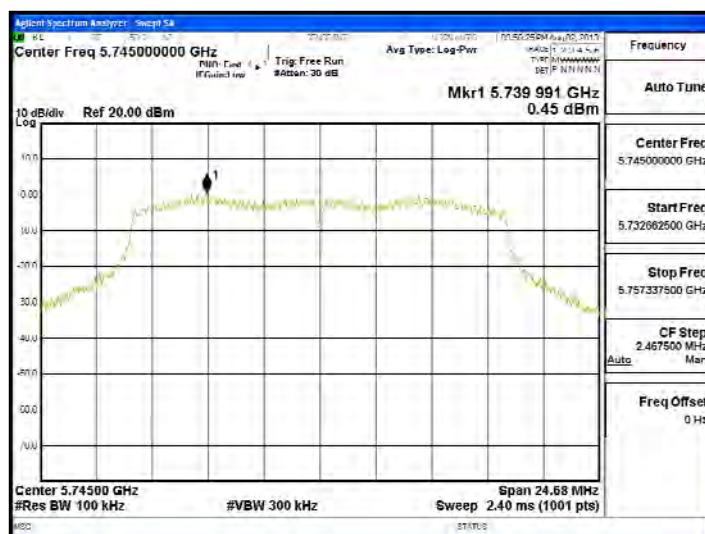


Figure Channel 149: (Chain B)



Product : SpectraGuard® Access Point / Sensor
 Test Item : Power Density Data
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmit - 802.11a 6Mbps(Dipole Antenna) (5785MHz)

CHAIN	PPSD/MHz (dBm)	Total PPSD/MHz (dBm)1	Limit	Result
A	4.530	7.540	< 8dBm	Pass
B	4.960	7.970	< 8dBm	Pass

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

Figure Channel 157: (Chain A)

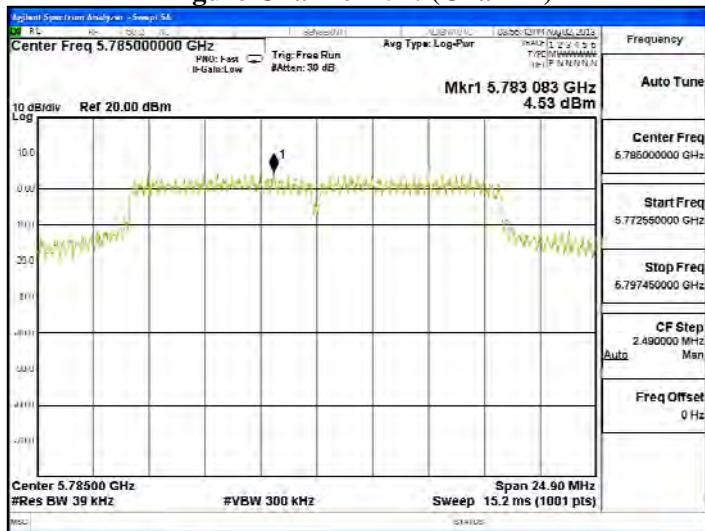
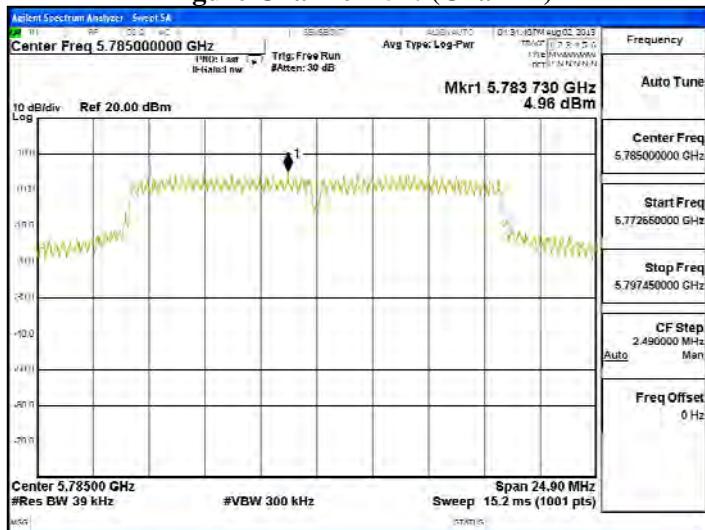


Figure Channel 157: (Chain B)



Product : SpectraGuard® Access Point / Sensor
 Test Item : Power Density Data
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmit - 802.11a 6Mbps(Dipole Antenna) (5825MHz)

CHAIN	PPSD/MHz (dBm)	Total PPSD/MHz (dBm)1	Limit	Result
A	4.550	7.560	< 8dBm	Pass
B	4.690	7.700	< 8dBm	Pass

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

Figure Channel 165: (Chain A)

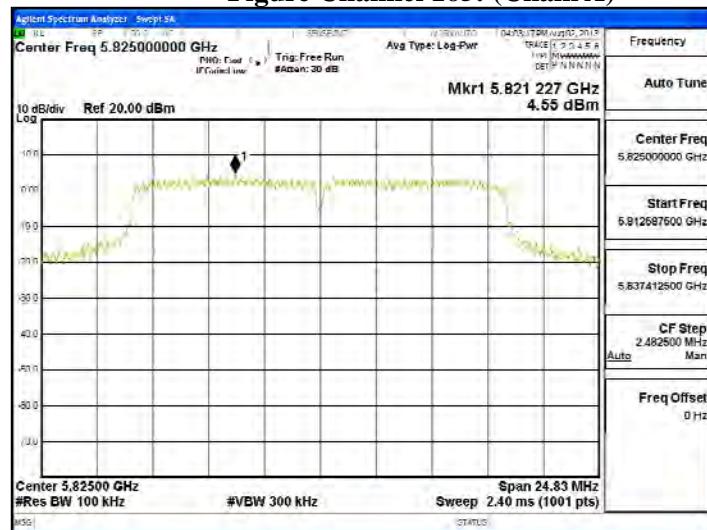
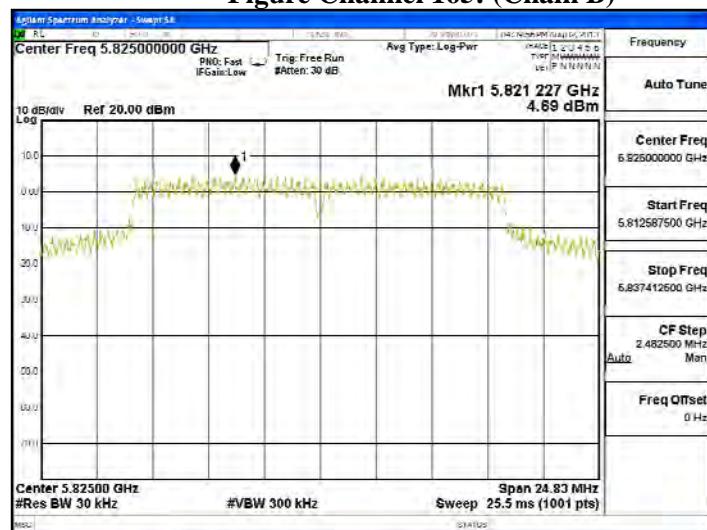


Figure Channel 165: (Chain B)



Product : SpectraGuard® Access Point / Sensor
 Test Item : Power Density Data
 Test Site : No.3 OATS
 Test Mode : Mode 4: Transmit - 802.11n-20BW_14.4Mbps(2.4G Band)(Dipole Antenna)
 (2412MHz)

CHAIN	PPSD/MHz (dBm)	Total PPSD/MHz (dBm)1	Limit	Result
A	-17.570	-14.560	< 8dBm	Pass
B	-18.560	-15.550	< 8dBm	Pass

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

Figure Channel 1: (Chain A)

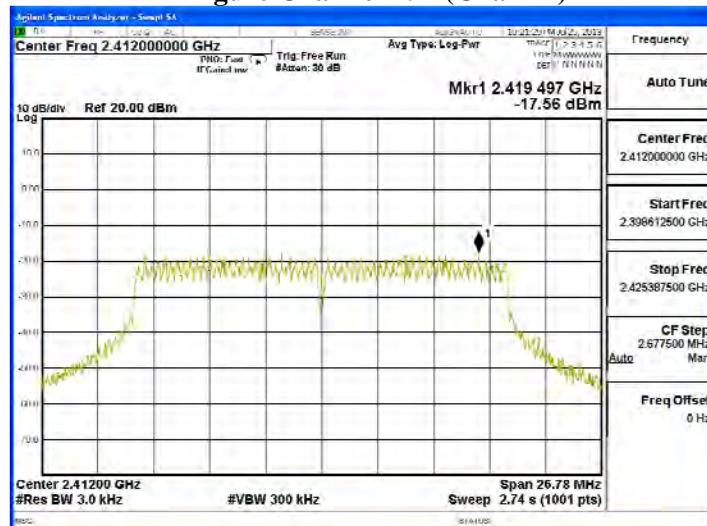
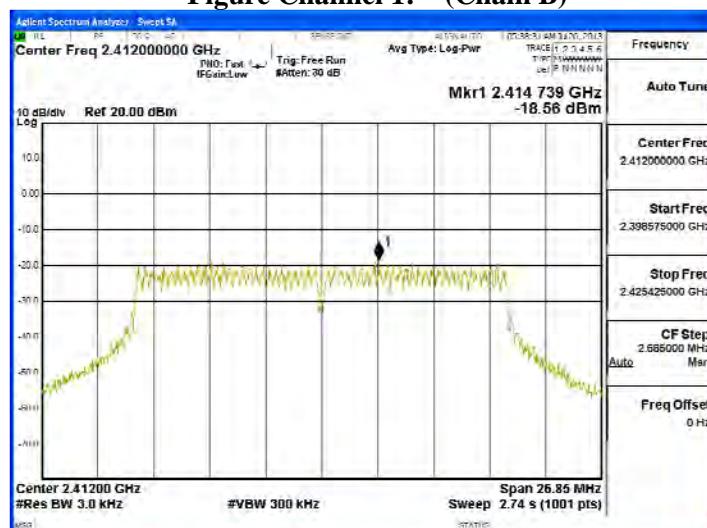


Figure Channel 1: (Chain B)



Product : SpectraGuard® Access Point / Sensor
 Test Item : Power Density Data
 Test Site : No.3OATS
 Test Mode : Mode 4: Transmit - 802.11n-20BW_14.4Mbps(2.4G Band)(Dipole Antenna)
 (2437MHz)

CHAIN	PPSD/MHz (dBm)	Total PPSD/MHz (dBm)1	Limit	Result
A	-6.230	-3.220	< 8dBm	Pass
B	-7.130	-4.120	< 8dBm	Pass

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

Figure Channel 6: (Chain A)

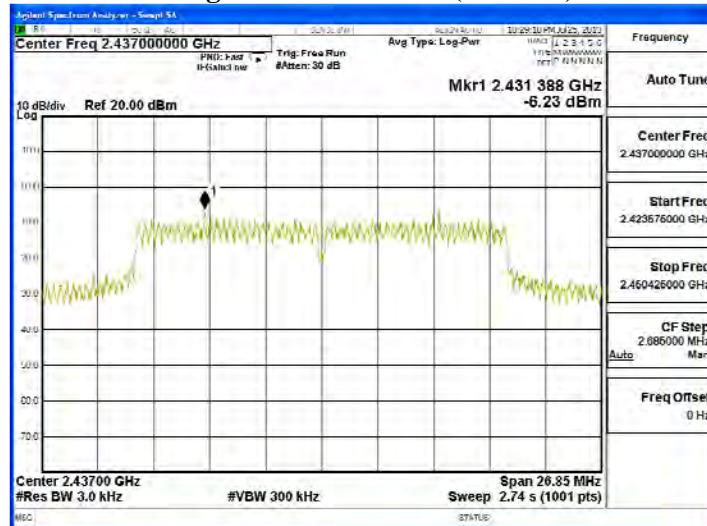
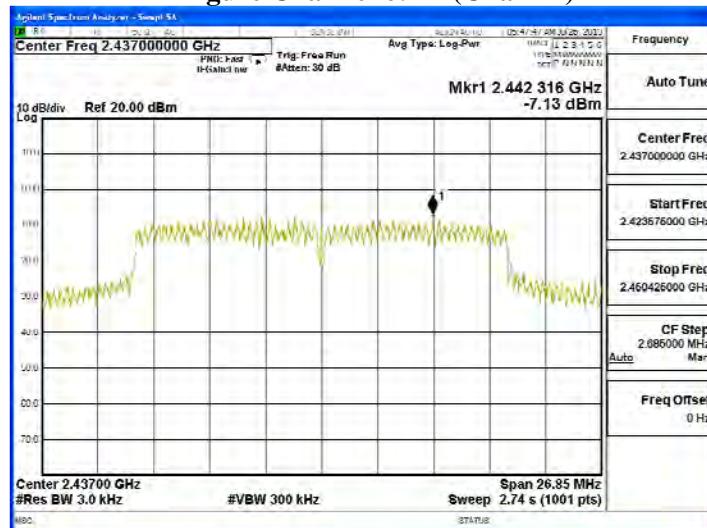


Figure Channel 6: (Chain B)



Product : SpectraGuard® Access Point / Sensor
 Test Item : Power Density Data
 Test Site : No.3 OATS
 Test Mode : Mode 4: Transmit - 802.11n-20BW_14.4Mbps(2.4G Band)(Dipole Antenna)
 (2462MHz)

CHAIN	PPSD/MHz (dBm)	Total PPSD/MHz (dBm)1	Limit	Result
A	-19.250	-16.240	< 8dBm	Pass
B	-6.600	-3.590	< 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 11: (Chain A)

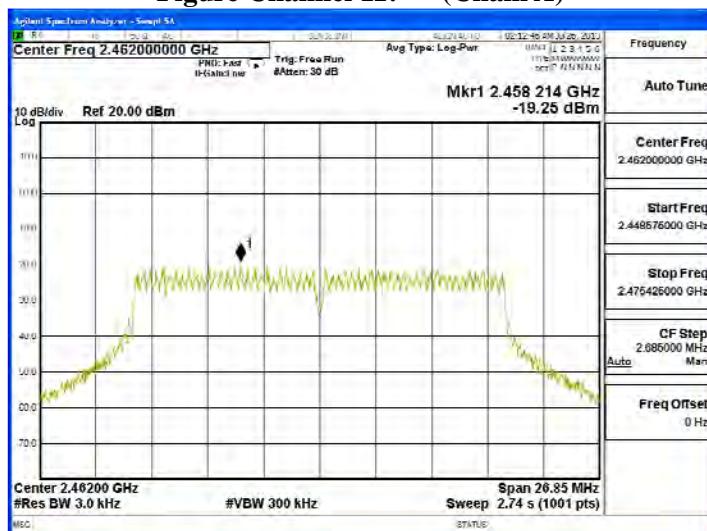
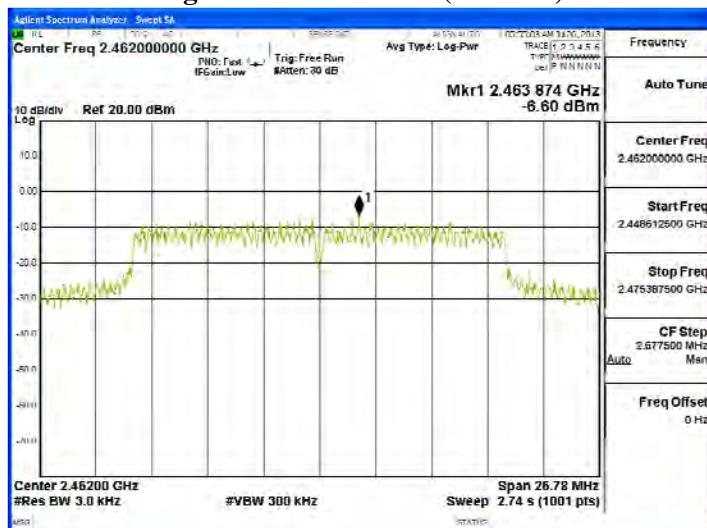


Figure Channel 11: (Chain B)



Product : SpectraGuard® Access Point / Sensor
 Test Item : Power Density Data
 Test Site : No.3 OATS
 Test Mode : Mode 5: Transmit - 802.11n-40BW_30Mbps(2.4G Band)(Dipole Antenna)
 (2422MHz)

CHAIN	PPSD/MHz (dBm)	Total PPSD/MHz (dBm)1	Limit	Result
A	-25.220	-22.210	< 8dBm	Pass
B	-26.140	-23.130	< 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)

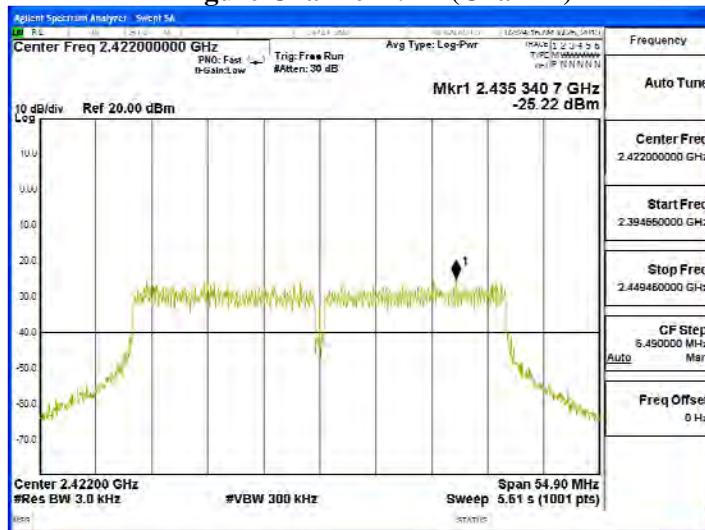
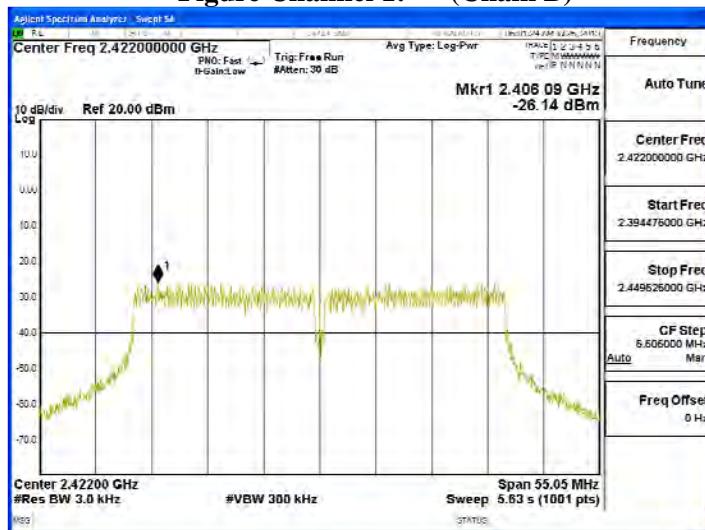


Figure Channel 1: (Chain B)



Product : SpectraGuard® Access Point / Sensor
 Test Item : Power Density Data
 Test Site : No.3OATS
 Test Mode : Mode 5: Transmit - 802.11n-40BW_30Mbps(2.4G Band)(Dipole Antenna)
 (2437MHz)

CHAIN	PPSD/MHz (dBm)	Total PPSD/MHz (dBm)1	Limit	Result
A	-10.820	-7.810	< 8dBm	Pass
B	-26.090	-23.080	< 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 4: (Chain A)

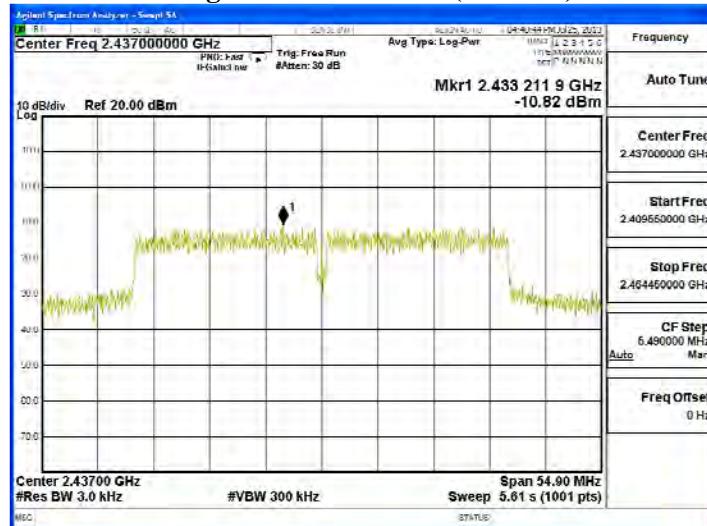
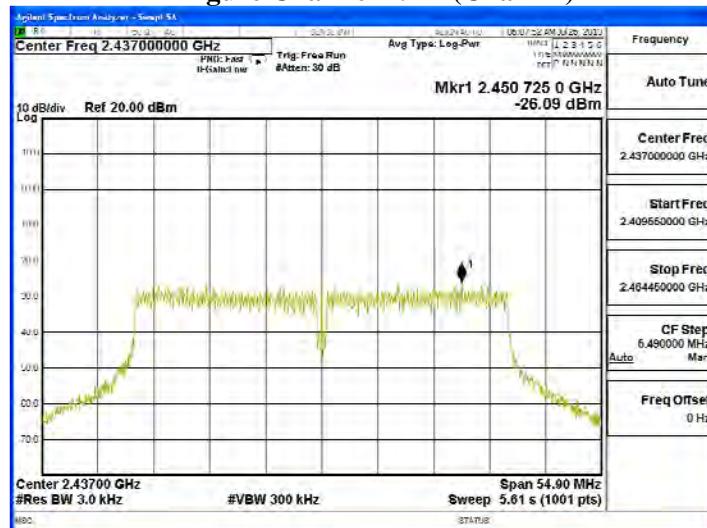


Figure Channel 4: (Chain B)



Product : SpectraGuard® Access Point / Sensor
 Test Item : Power Density Data
 Test Site : No.3 OATS
 Test Mode : Mode 5: Transmit - 802.11n-40BW_30Mbps(2.4G Band)(Dipole Antenna)
 (2452MHz)

CHAIN	PPSD/MHz (dBm)	Total PPSD/MHz (dBm)1	Limit	Result
A	-22.650	-19.640	< 8dBm	Pass
B	-22.170	-19.160	< 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 7: (Chain A)

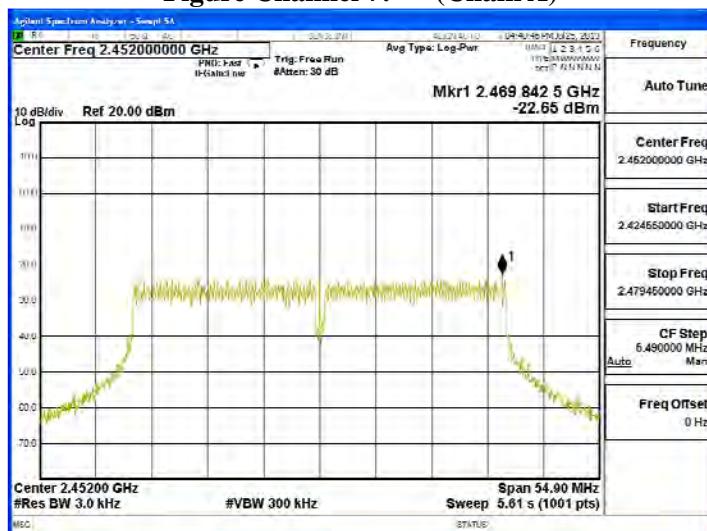
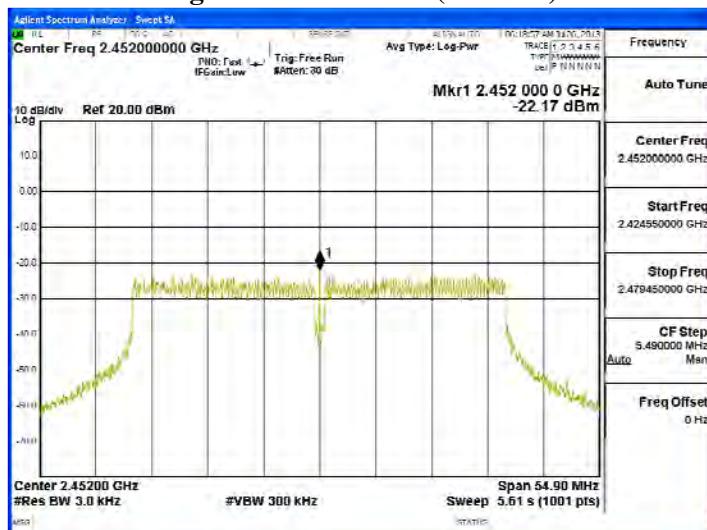


Figure Channel 7: (Chain B)



Product : SpectraGuard® Access Point / Sensor
 Test Item : Power Density Data
 Test Site : No.3 OATS
 Test Mode : Mode 6: Transmit - 802.11n-20BW_14.4Mbps(5G Band)(Dipole Antenna)
 (5745MHz)

CHAIN	PPSD/MHz (dBm)	Total PPSD/MHz (dBm)1	Limit	Result
A	0.280	3.290	< 8dBm	Pass
B	1.370	4.380	< 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)

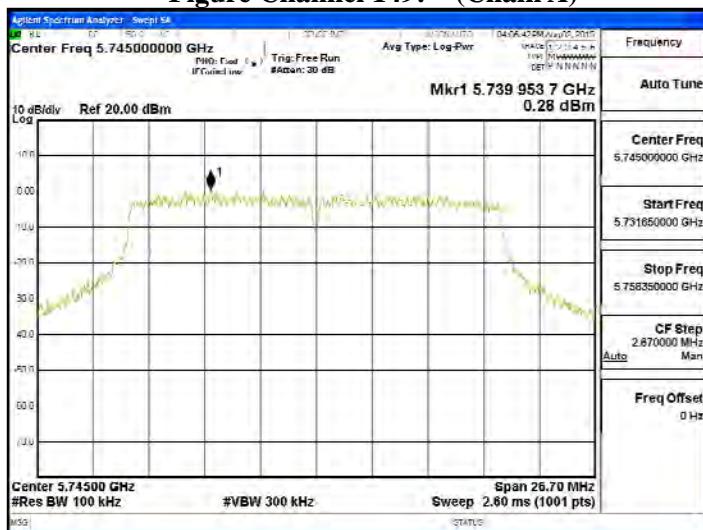


Figure Channel 149: (Chain B)



Product : SpectraGuard® Access Point / Sensor
 Test Item : Power Density Data
 Test Site : No.3OATS
 Test Mode : Mode 6: Transmit - 802.11n-20BW_14.4Mbps(5G Band)(Dipole Antenna)
 (5785MHz)

CHAIN	PPSD/MHz (dBm)	Total PPSD/MHz (dBm)1	Limit	Result
A	4.190	7.200	< 8dBm	Pass
B	4.620	7.630	< 8dBm	Pass

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

Figure Channel 157: (Chain A)

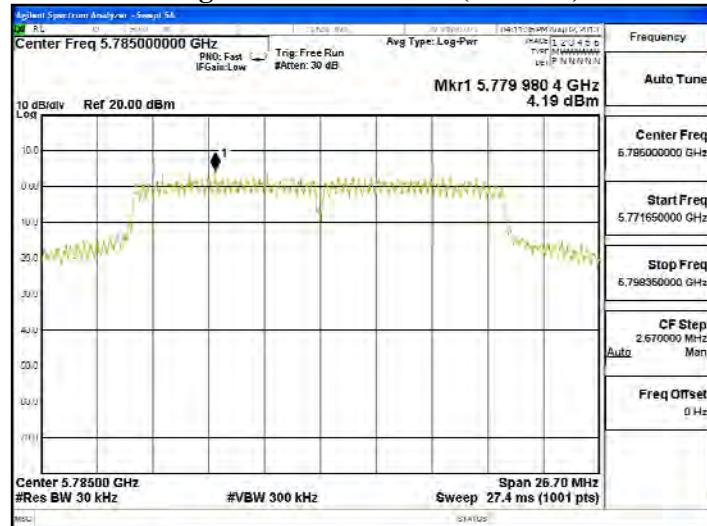
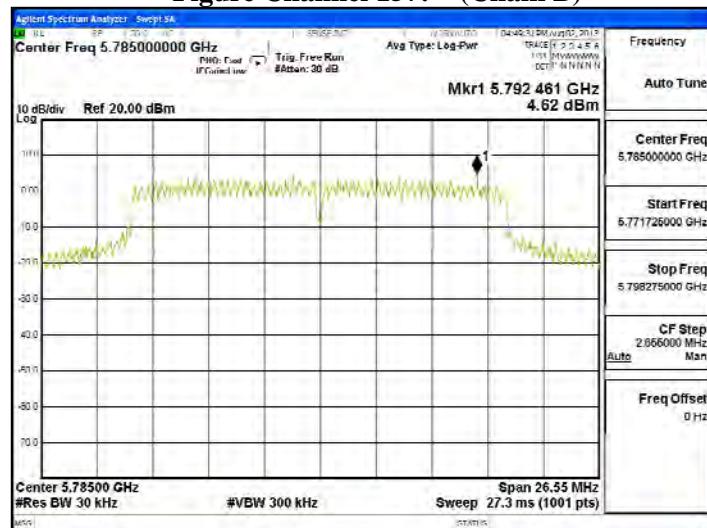


Figure Channel 157: (Chain B)



Product : SpectraGuard® Access Point / Sensor
 Test Item : Power Density Data
 Test Site : No.3 OATS
 Test Mode : Mode 6: Transmit - 802.11n-20BW_14.4Mbps(5G Band)(Dipole Antenna)
 (5825MHz)

CHAIN	PPSD/MHz (dBm)	Total PPSD/MHz (dBm)1	Limit	Result
A	4.880	7.890	< 8dBm	Pass
B	4.710	7.720	< 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 165: (Chain A)

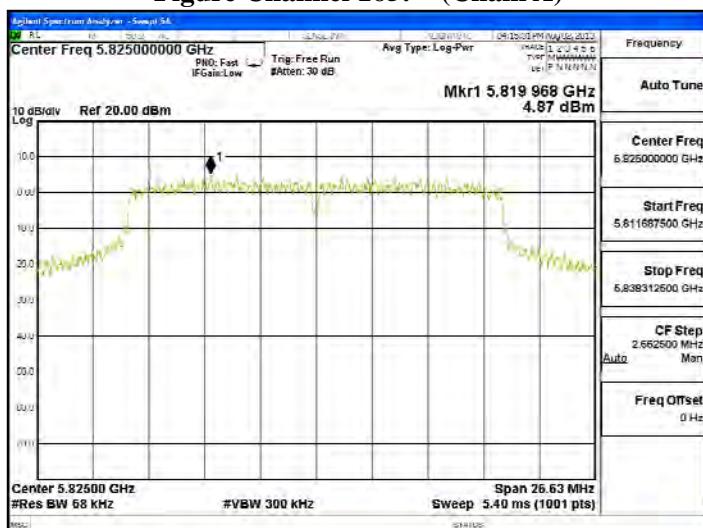
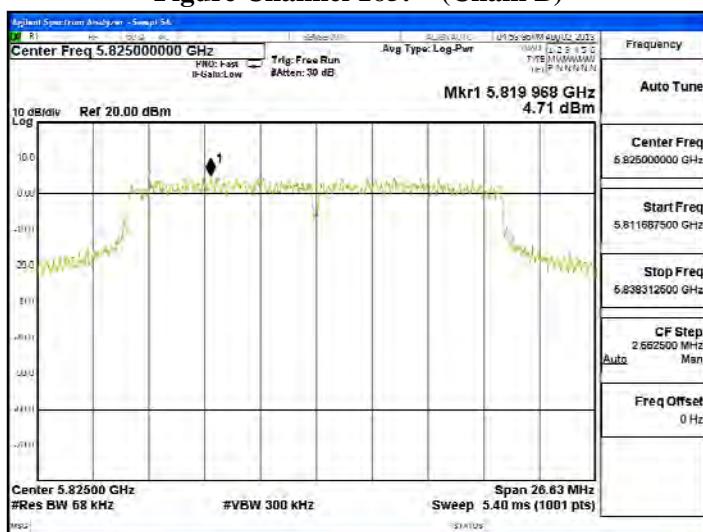


Figure Channel 165: (Chain B)



Product : SpectraGuard® Access Point / Sensor
 Test Item : Power Density Data
 Test Site : No.3 OATS
 Test Mode : Mode 7: Transmit - 802.11n-40BW_30Mbps(5G Band)(Dipole Antenna) (5755MHz)

CHAIN	PPSD/MHz (dBm)	Total PPSD/MHz (dBm)1	Limit	Result
A	-4.050	-1.040	< 8dBm	Pass
B	-3.000	0.010	< 8dBm	Pass

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

Figure Channel 151: (Chain A)

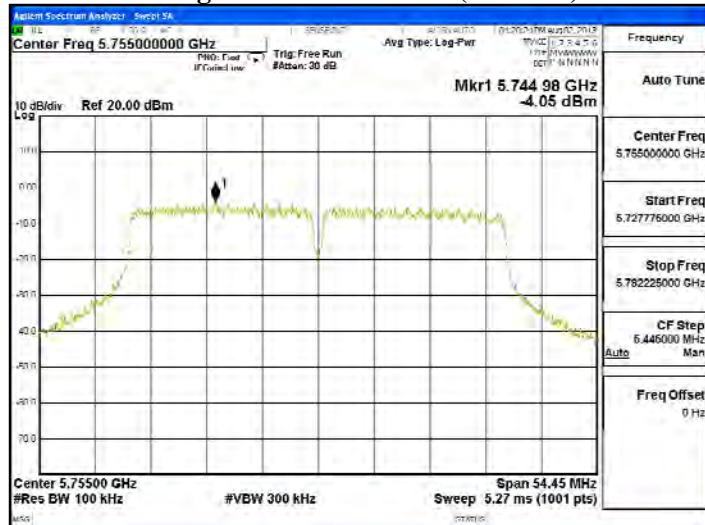
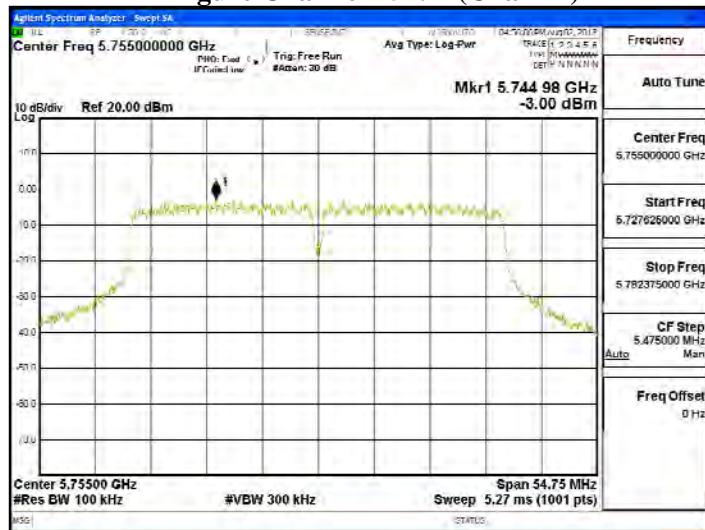


Figure Channel 151: (Chain B)



Product : SpectraGuard® Access Point / Sensor
 Test Item : Power Density Data
 Test Site : No.3OATS
 Test Mode : Mode 7: Transmit - 802.11n-40BW_30Mbps(5G Band)(Dipole Antenna) (5795MHz)

CHAIN	PPSD/MHz (dBm)	Total PPSD/MHz (dBm)1	Limit	Result
A	-3.670	-0.660	< 8dBm	Pass
B	2.760	5.770	< 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 159: (Chain A)

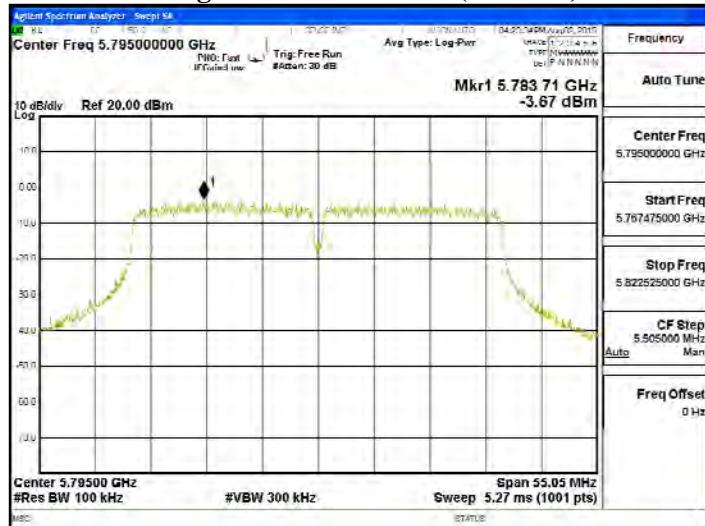
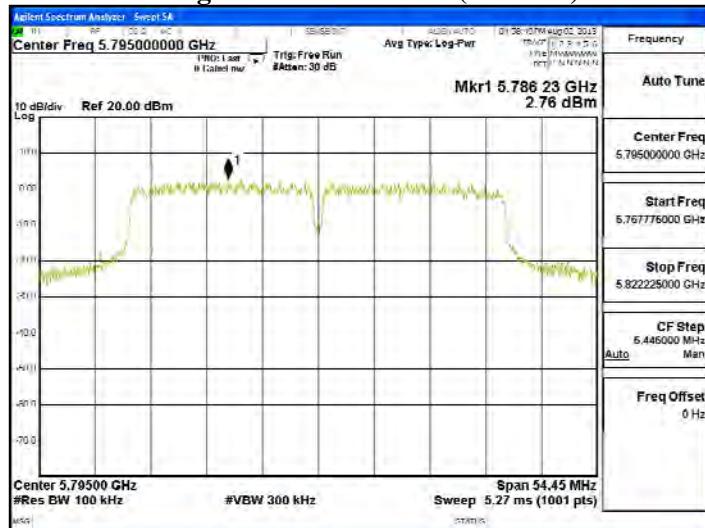


Figure Channel 159: (Chain B)



Product : SpectraGuard® Access Point / Sensor
 Test Item : Power Density Data
 Test Site : No.3 OATS
 Test Mode : Mode 8: Transmit (802.11b 1Mbps)(PIFA Antenna) (2412MHz)

CHAIN	PPSD/MHz (dBm)	Total PPSD/MHz (dBm)1	Limit	Result
A	-9.270	-6.260	< 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 1: (Chain A)

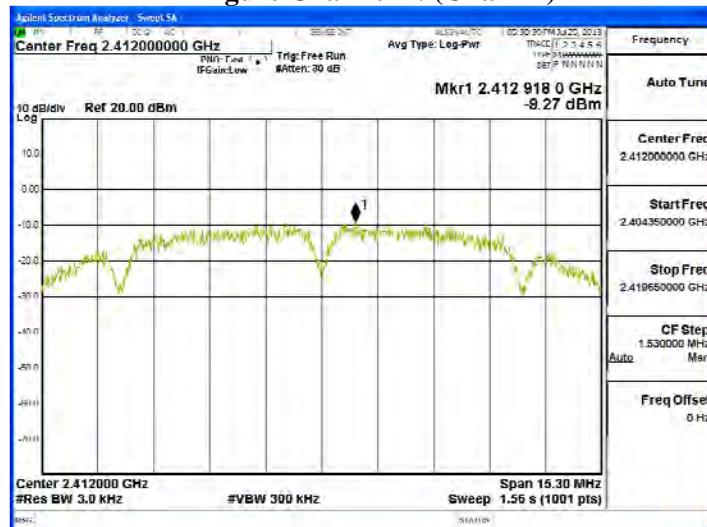
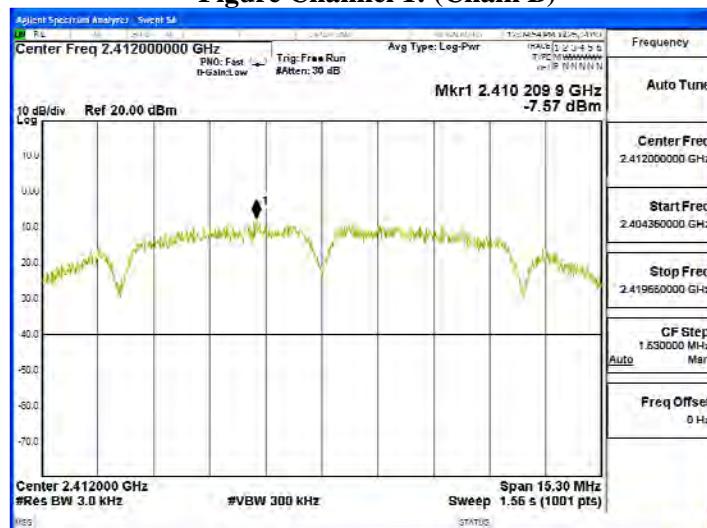


Figure Channel 1: (Chain B)



Product : SpectraGuard® Access Point / Sensor
 Test Item : Power Density Data
 Test Site : No.3OATS
 Test Mode : Mode 8: Transmit (802.11b 1Mbps)(PIFA Antenna) (2437MHz)

CHAIN	PPSD/MHz (dBm)	Total PPSD/MHz (dBm)1	Limit	Result
A	-2.840	0.170	< 8dBm	Pass
B	-6.350	-3.340	< 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 6: (Chain A)

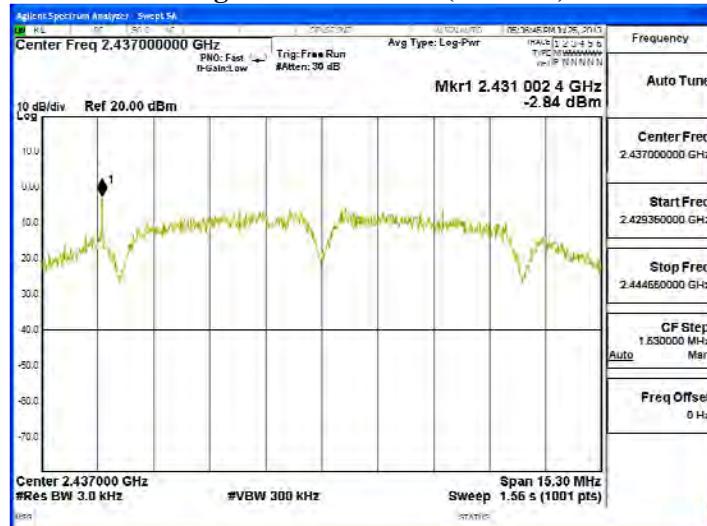
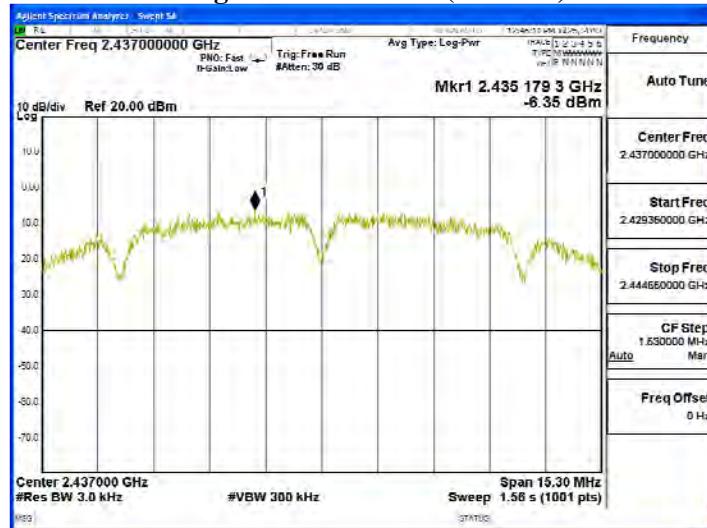


Figure Channel 6: (Chain B)



Product : SpectraGuard® Access Point / Sensor
 Test Item : Power Density Data
 Test Site : No.3 OATS
 Test Mode : Mode 8: Transmit (802.11b 1Mbps)(PIFA Antenna) (2462MHz)

CHAIN	PPSD/MHz (dBm)	Total PPSD/MHz (dBm)1	Limit	Result
A	-9.040	-6.030	< 8dBm	Pass
B	-9.150	-6.140	< 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 11: (Chain A)

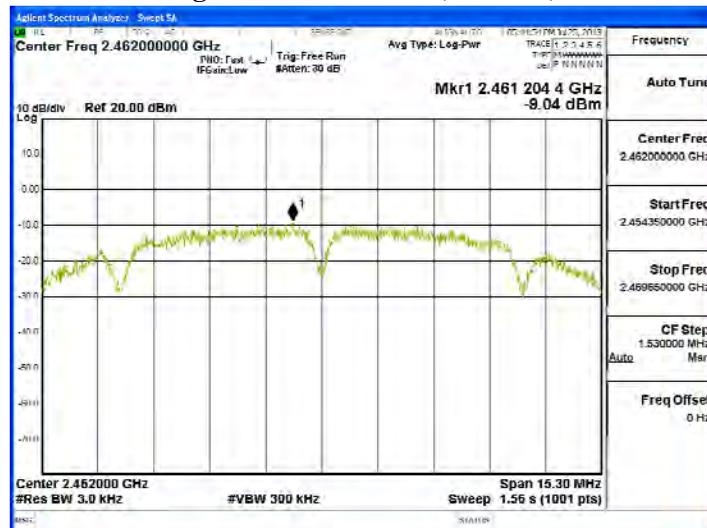
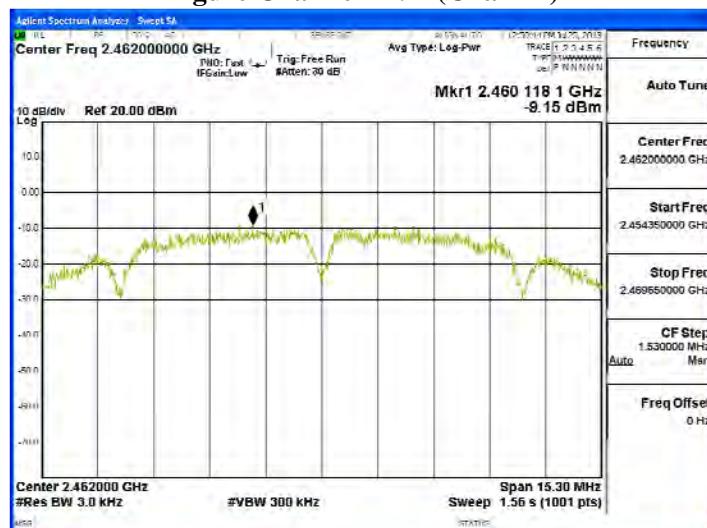


Figure Channel 11: (Chain B)



Product : SpectraGuard® Access Point / Sensor
 Test Item : Power Density Data
 Test Site : No.3 OATS
 Test Mode : Mode 9: Transmit (802.11g 6Mbps)(PIFA Antenna) (2412MHz)

CHAIN	PPSD/MHz (dBm)	Total PPSD/MHz (dBm)1	Limit	Result
A	-17.440	-14.430	< 8dBm	Pass
B	-15.280	-12.270	< 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)

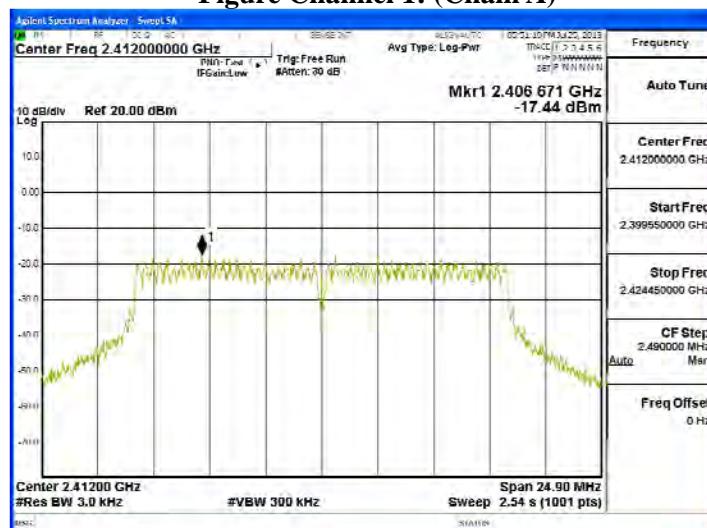
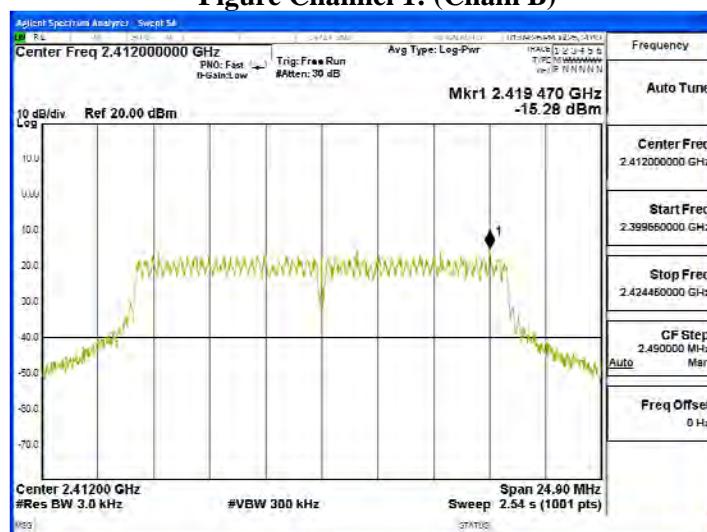


Figure Channel 1: (Chain B)



Product : SpectraGuard® Access Point / Sensor
 Test Item : Power Density Data
 Test Site : No.3OATS
 Test Mode : Mode 9: Transmit (802.11g 6Mbps)(PIFA Antenna) (2437MHz)

CHAIN	PPSD/MHz (dBm)	Total PPSD/MHz (dBm)1	Limit	Result
A	-6.570	-3.560	< 8dBm	Pass
B	-4.760	-1.750	< 8dBm	Pass

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

Figure Channel 6: (Chain A)

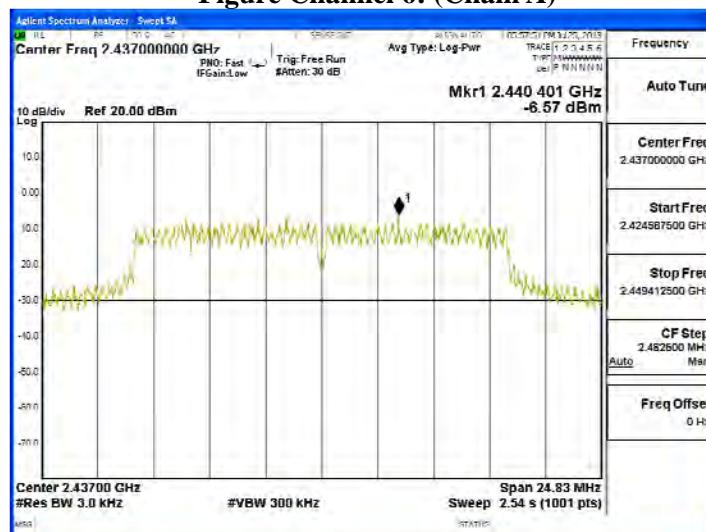
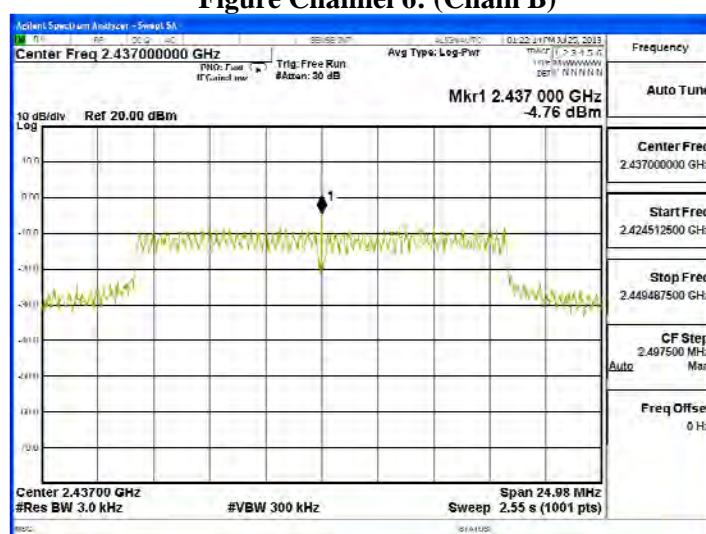


Figure Channel 6: (Chain B)



Product : SpectraGuard® Access Point / Sensor
 Test Item : Power Density Data
 Test Site : No.3 OATS
 Test Mode : Mode 9: Transmit (802.11g 6Mbps)(PIFA Antenna) (2462MHz)

CHAIN	PPSD/MHz (dBm)	Total PPSD/MHz (dBm)1	Limit	Result
A	-16.660	-13.650	< 8dBm	Pass
B	-17.440	-14.430	< 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 11: (Chain A)

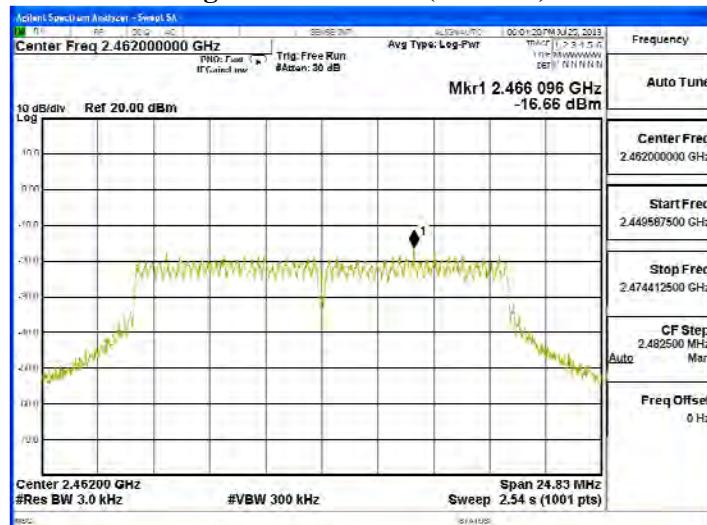
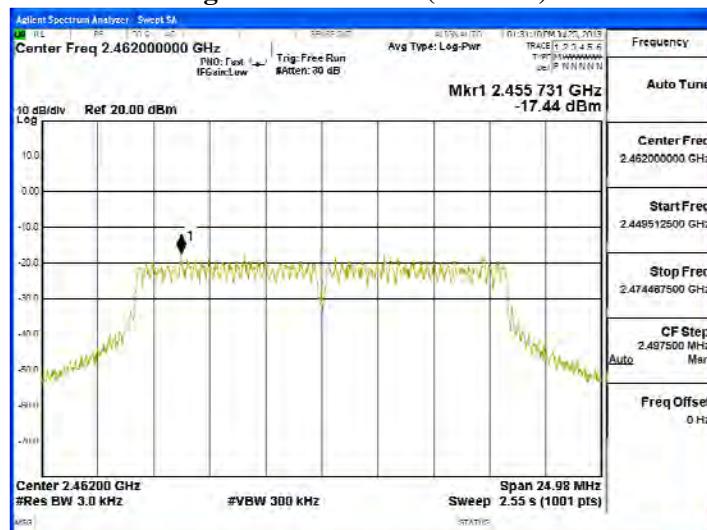


Figure Channel 11: (Chain B)



Product : SpectraGuard® Access Point / Sensor
 Test Item : Power Density Data
 Test Site : No.3 OATS
 Test Mode : Mode 10: Transmit - 802.11a 6Mbps(PIFA Antenna) (5745MHz)

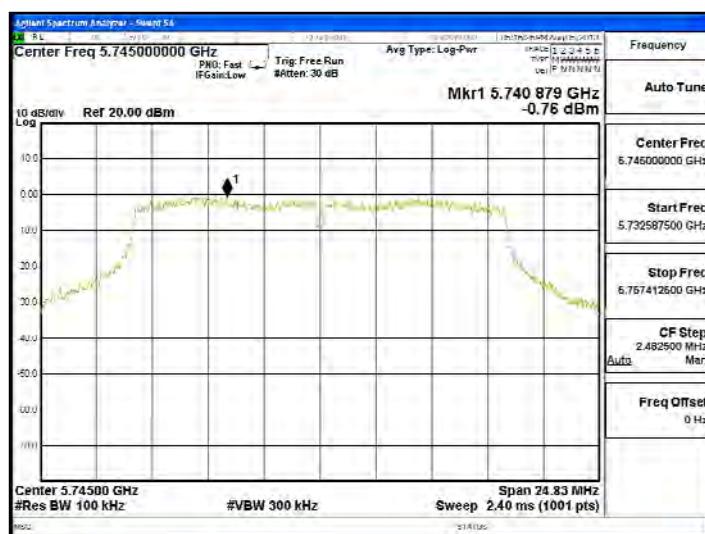
CHAIN	PPSD/MHz (dBm)	Total PPSD/MHz (dBm)1	Limit	Result
A	-0.060	2.950	< 8dBm	Pass
B	-0.760	2.250	< 8dBm	Pass

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

Figure Channel 149: (Chain A)



Figure Channel 149: (Chain B)



Product : SpectraGuard® Access Point / Sensor
 Test Item : Power Density Data
 Test Site : No.3 OATS
 Test Mode : Mode 10: Transmit - 802.11a 6Mbps(PIFA Antenna) (5785MHz)

CHAIN	PPSD/MHz (dBm)	Total PPSD/MHz (dBm)1	Limit	Result
A	4.140	7.150	< 8dBm	Pass
B	4.740	7.750	< 8dBm	Pass

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

Figure Channel 157: (Chain A)

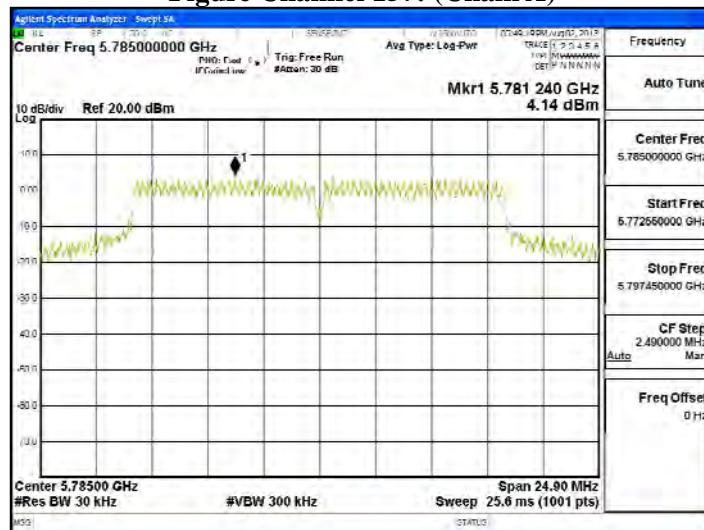
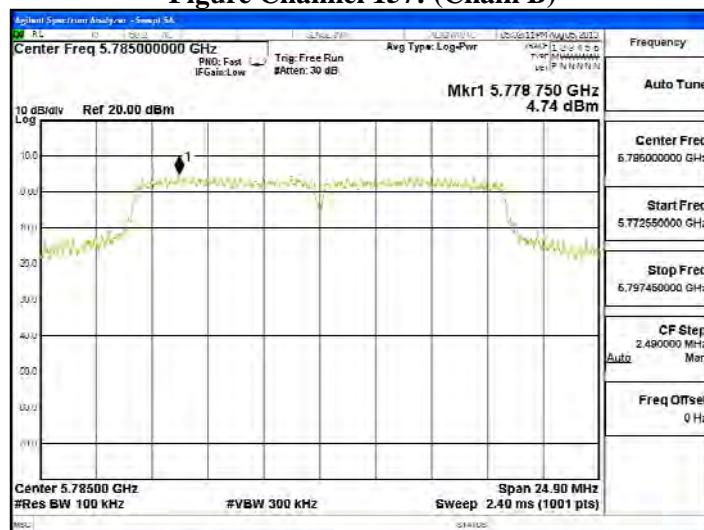


Figure Channel 157: (Chain B)



Product : SpectraGuard® Access Point / Sensor
 Test Item : Power Density Data
 Test Site : No.3 OATS
 Test Mode : Mode 10: Transmit - 802.11a 6Mbps(PIFA Antenna) (5825MHz)

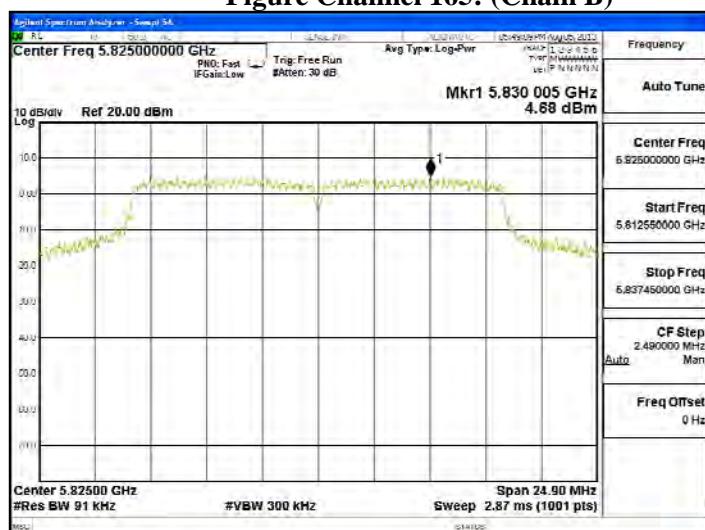
CHAIN	PPSD/MHz (dBm)	Total PPSD/MHz (dBm)1	Limit	Result
A	4.190	7.200	< 8dBm	Pass
B	4.680	7.690	< 8dBm	Pass

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

Figure Channel 165: (Chain A)



Figure Channel 165: (Chain B)



Product : SpectraGuard® Access Point / Sensor
 Test Item : Power Density Data
 Test Site : No.3 OATS
 Test Mode : Mode 11: Transmit - 802.11n-20BW_14.4Mbps(2.4G Band)(PIFA Antenna)
 (2412MHz)

CHAIN	PPSD/MHz (dBm)	Total PPSD/MHz (dBm)1	Limit	Result
A	-17.480	-14.470	< 8dBm	Pass
B	-16.020	-13.010	< 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 1: (Chain A)

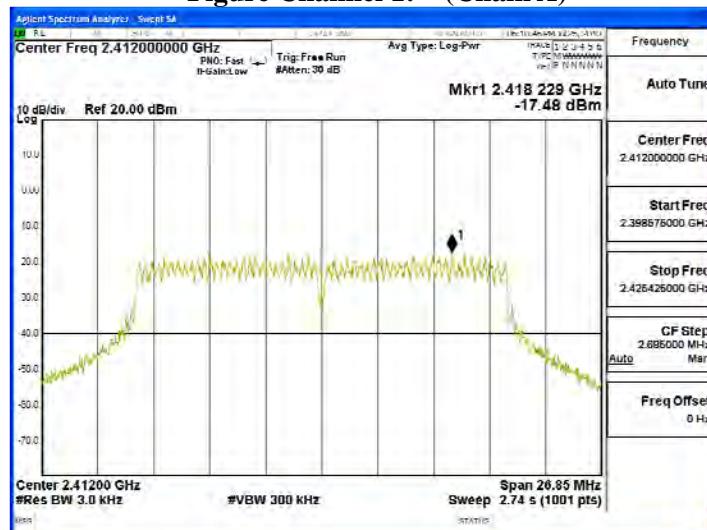
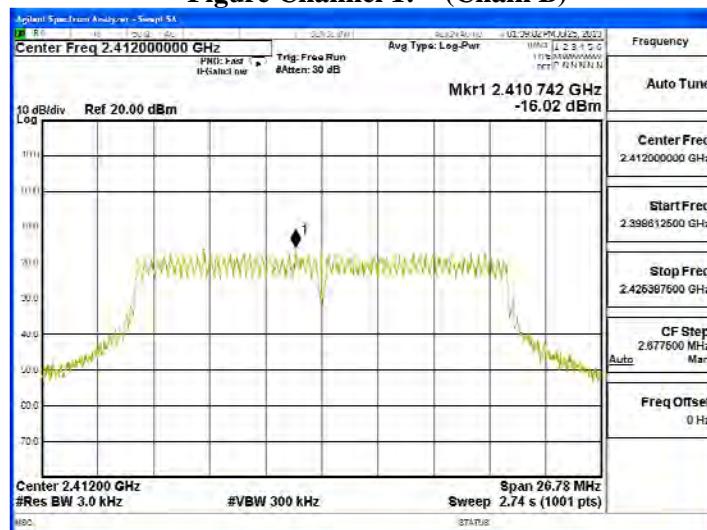


Figure Channel 1: (Chain B)



Product : SpectraGuard® Access Point / Sensor
 Test Item : Power Density Data
 Test Site : No.3OATS
 Test Mode : Mode 11: Transmit - 802.11n-20BW_14.4Mbps(2.4G Band)(PIFA Antenna)
 (2437MHz)

CHAIN	PPSD/MHz (dBm)	Total PPSD/MHz (dBm)1	Limit	Result
A	-7.310	-4.300	< 8dBm	Pass
B	-5.060	-2.050	< 8dBm	Pass

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

Figure Channel 6: (Chain A)

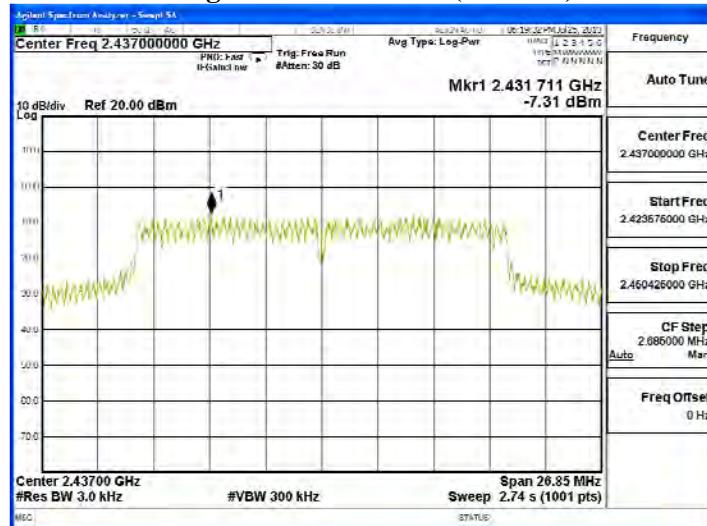
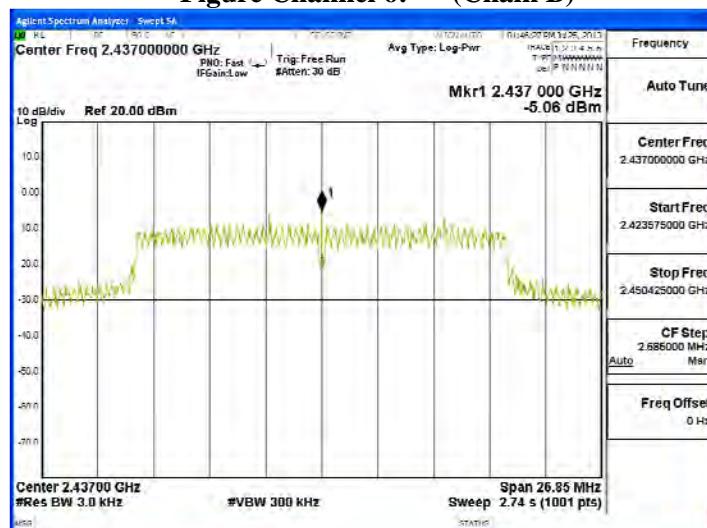


Figure Channel 6: (Chain B)



Product : SpectraGuard® Access Point / Sensor
 Test Item : Power Density Data
 Test Site : No.3 OATS
 Test Mode : Mode 11: Transmit - 802.11n-20BW_14.4Mbps(2.4G Band)(PIFA Antenna)
 (2462MHz)

CHAIN	PPSD/MHz (dBm)	Total PPSD/MHz (dBm)1	Limit	Result
A	-18.130	-15.120	< 8dBm	Pass
B	-17.890	-14.880	< 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 11: (Chain A)

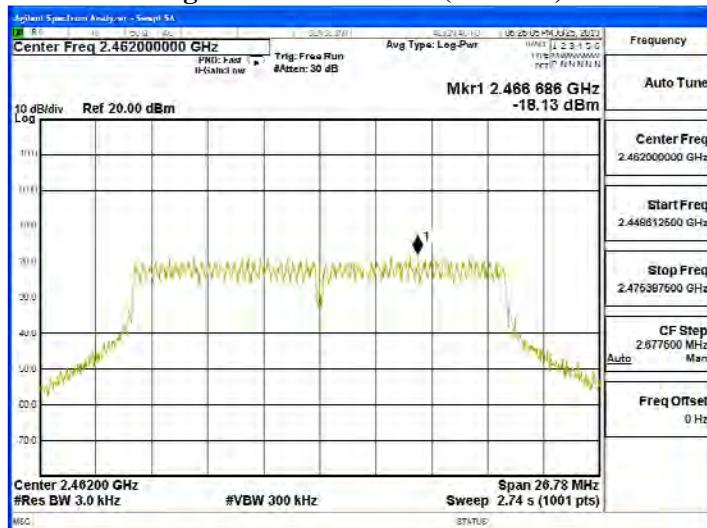
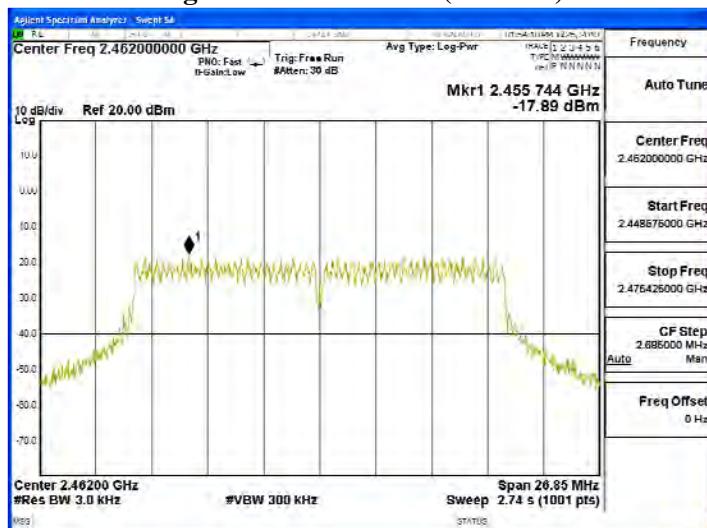


Figure Channel 11: (Chain B)



Product : SpectraGuard® Access Point / Sensor
 Test Item : Power Density Data
 Test Site : No.3 OATS
 Test Mode : Mode 12: Transmit - 802.11n-40BW_30Mbps(2.4G Band)(PIFA Antenna) (2422MHz)

CHAIN	PPSD/MHz (dBm)	Total PPSD/MHz (dBm)1	Limit	Result
A	-23.530	-20.540	< 8dBm	Pass
B	-21.090	-18.080	< 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)

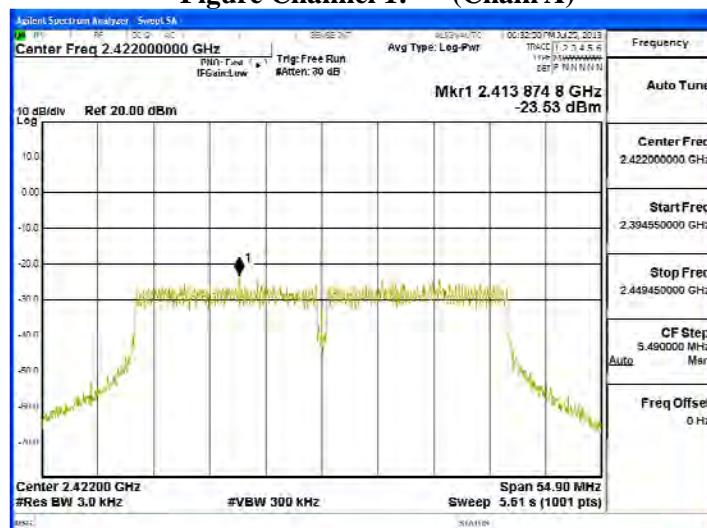
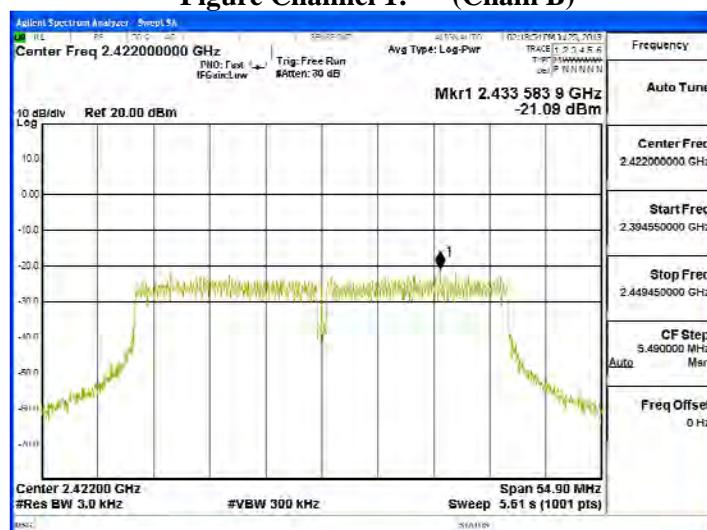


Figure Channel 1: (Chain B)



Product : SpectraGuard® Access Point / Sensor
 Test Item : Power Density Data
 Test Site : No.3OATS
 Test Mode : Mode 12: Transmit - 802.11n-40BW_30Mbps(2.4G Band)(PIFA Antenna) (2437MHz)

CHAIN	PPSD/MHz (dBm)	Total PPSD/MHz (dBm)1	Limit	Result
A	-10.980	-7.970	< 8dBm	Pass
B	-5.890	-2.880	< 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 4: (Chain A)

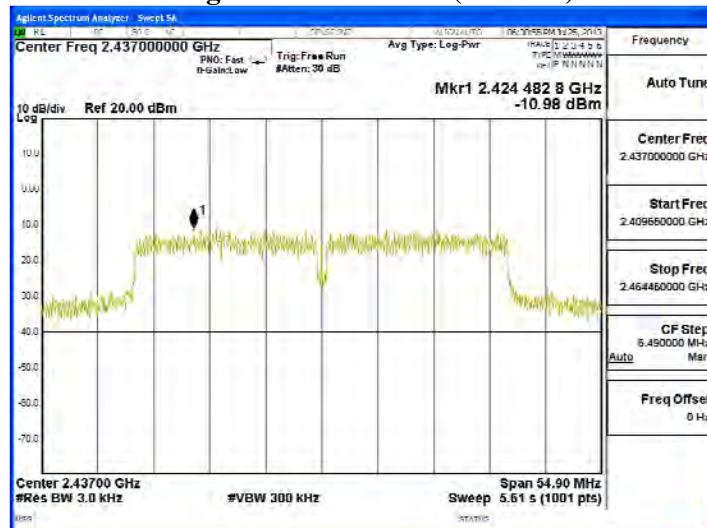
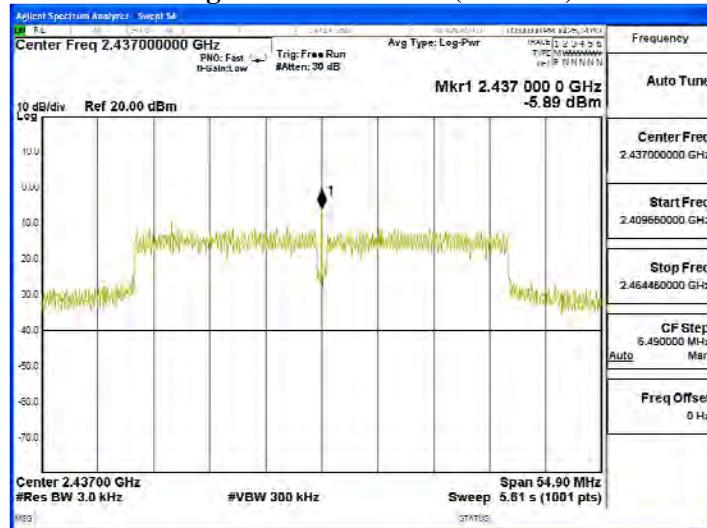


Figure Channel 4: (Chain B)



Product : SpectraGuard® Access Point / Sensor
 Test Item : Power Density Data
 Test Site : No.3 OATS
 Test Mode : Mode 12: Transmit - 802.11n-40BW_30Mbps(2.4G Band)(PIFA Antenna) (2452MHz)

CHAIN	PPSD/MHz (dBm)	Total PPSD/MHz (dBm)1	Limit	Result
A	-22.640	-19.630	< 8dBm	Pass
B	-23.320	-20.310	< 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 7: (Chain A)

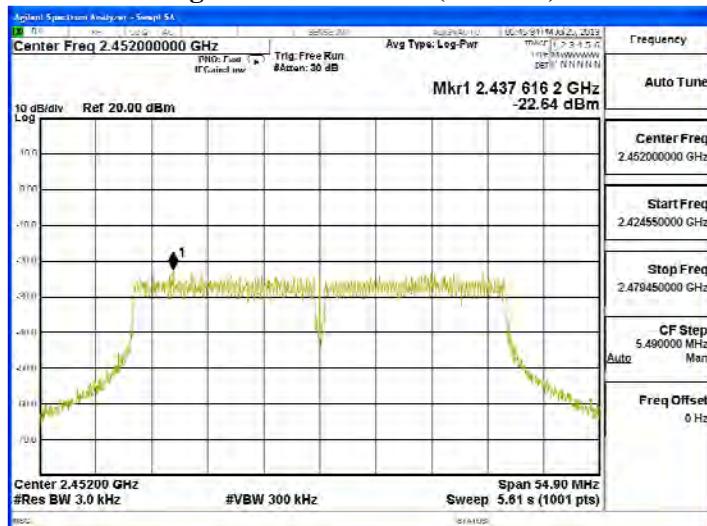
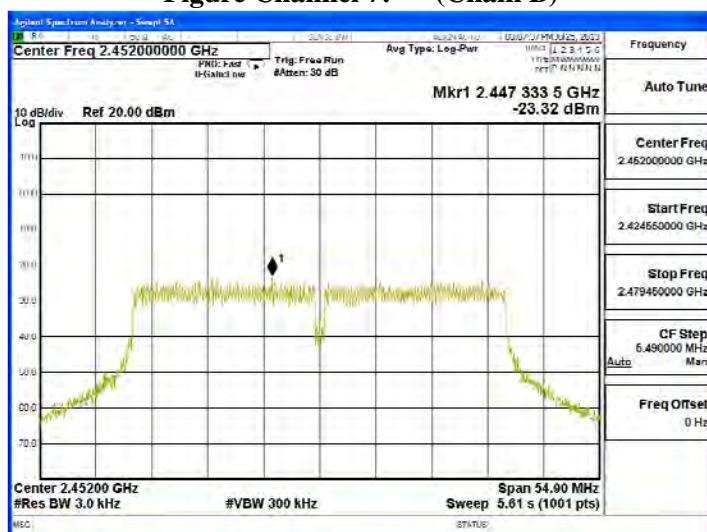


Figure Channel 7: (Chain B)



Product : SpectraGuard® Access Point / Sensor
 Test Item : Power Density Data
 Test Site : No.3 OATS
 Test Mode : Mode 13: Transmit - 802.11n-20BW_14.4Mbps(5G Band)(PIFA Antenna) (5745MHz)

CHAIN	PPSD/MHz (dBm)	Total PPSD/MHz (dBm)1	Limit	Result
A	0.790	3.800	< 8dBm	Pass
B	0.660	3.670	< 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)

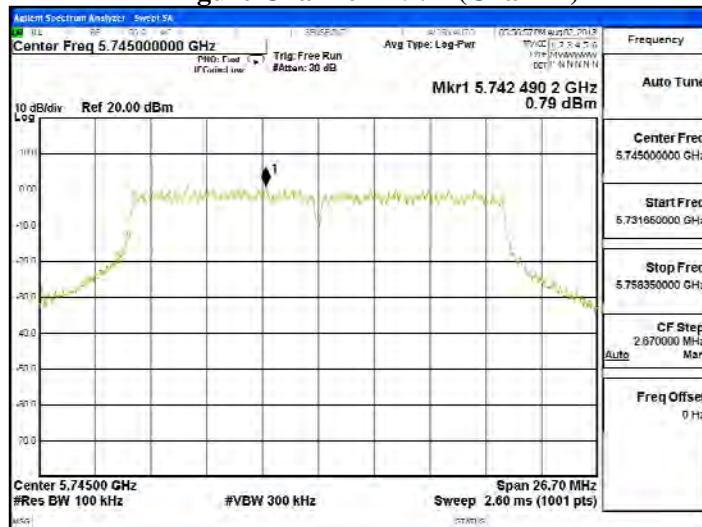
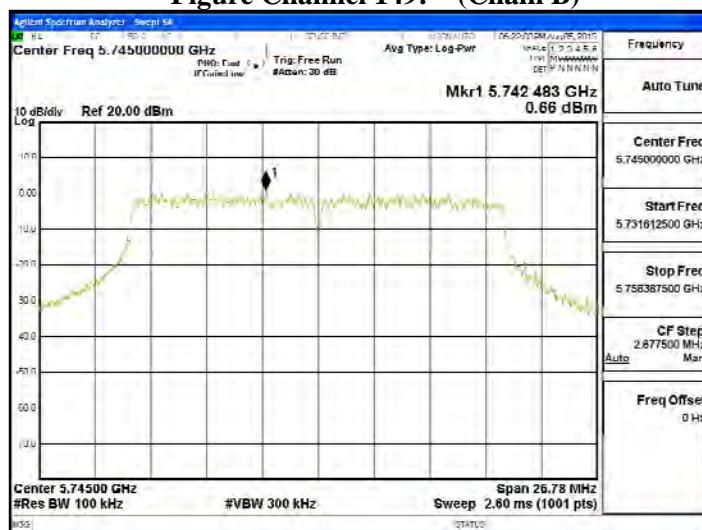


Figure Channel 149: (Chain B)



Product : SpectraGuard® Access Point / Sensor
 Test Item : Power Density Data
 Test Site : No.3OATS
 Test Mode : Mode 13: Transmit - 802.11n-20BW_14.4Mbps(5G Band)(PIFA Antenna) (5785MHz)

CHAIN	PPSD/MHz (dBm)	Total PPSD/MHz (dBm)1	Limit	Result
A	3.570	6.580	< 8dBm	Pass
B	4.850	7.860	< 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 157: (Chain A)

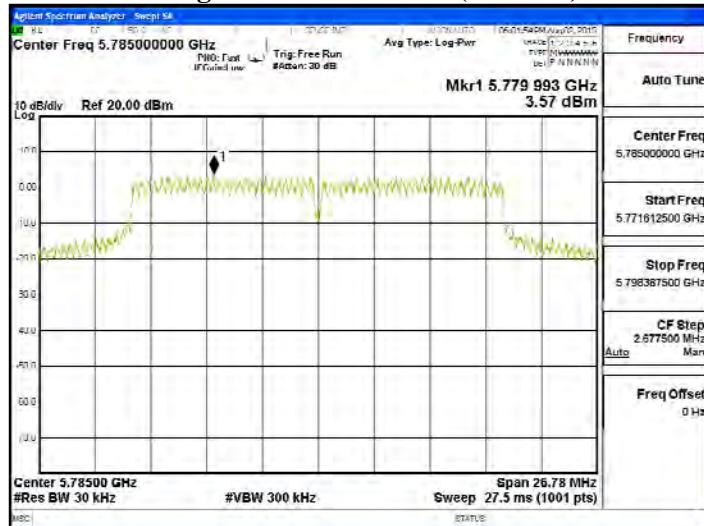
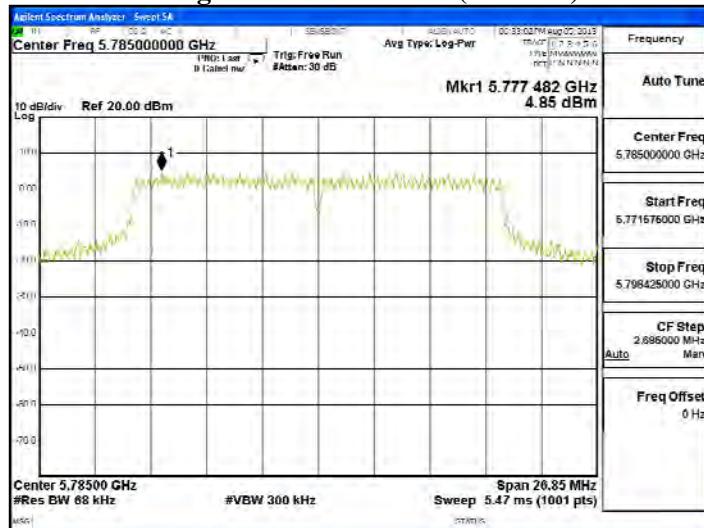


Figure Channel 157: (Chain B)



Product : SpectraGuard® Access Point / Sensor
 Test Item : Power Density Data
 Test Site : No.3 OATS
 Test Mode : Mode 13: Transmit - 802.11n-20BW_14.4Mbps(5G Band)(PIFA Antenna) (5825MHz)

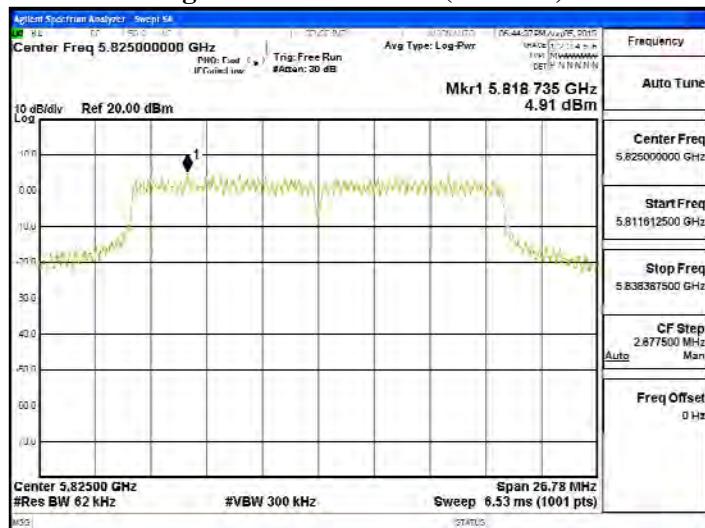
CHAIN	PPSD/MHz (dBm)	Total PPSD/MHz (dBm)1	Limit	Result
A	4.250	7.260	< 8dBm	Pass
B	4.910	7.920	< 8dBm	Pass

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

Figure Channel 165: (Chain A)



Figure Channel 165: (Chain B)



Product : SpectraGuard® Access Point / Sensor
 Test Item : Power Density Data
 Test Site : No.3 OATS
 Test Mode : Mode 14: Transmit - 802.11n-40BW_30Mbps(5G Band)(PIFA Antenna) (5755MHz)

CHAIN	PPSD/MHz (dBm)	Total PPSD/MHz (dBm)1	Limit	Result
A	-4.080	-1.070	< 8dBm	Pass
B	-3.960	-0.950	< 8dBm	Pass

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

Figure Channel 151: (Chain A)

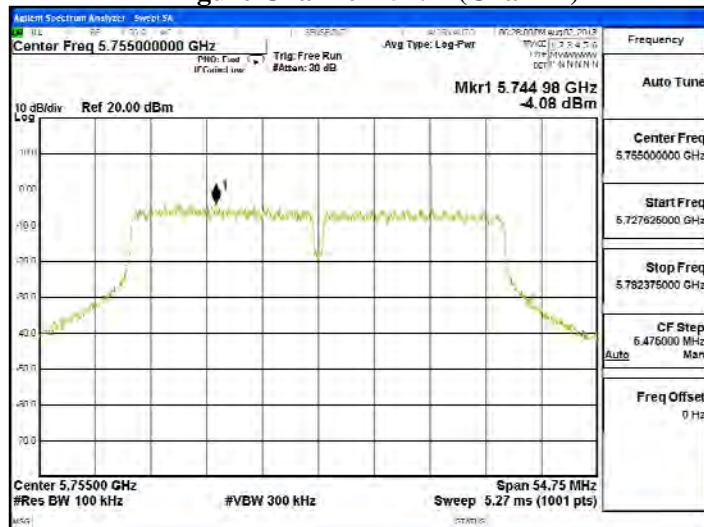
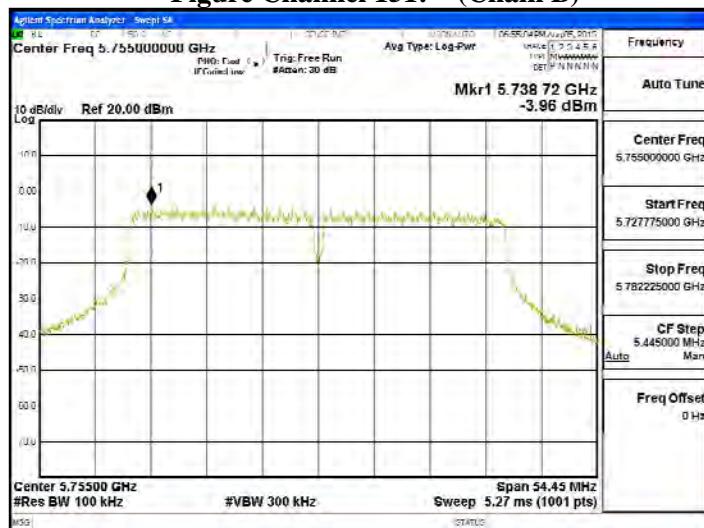


Figure Channel 151: (Chain B)



Product : SpectraGuard® Access Point / Sensor
 Test Item : Power Density Data
 Test Site : No.3OATS
 Test Mode : Mode 14: Transmit - 802.11n-40BW_30Mbps(5G Band)(PIFA Antenna) (5795MHz)

CHAIN	PPSD/MHz (dBm)	Total PPSD/MHz (dBm)1	Limit	Result
A	2.230	5.240	< 8dBm	Pass
B	2.190	5.200	< 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 159: (Chain A)

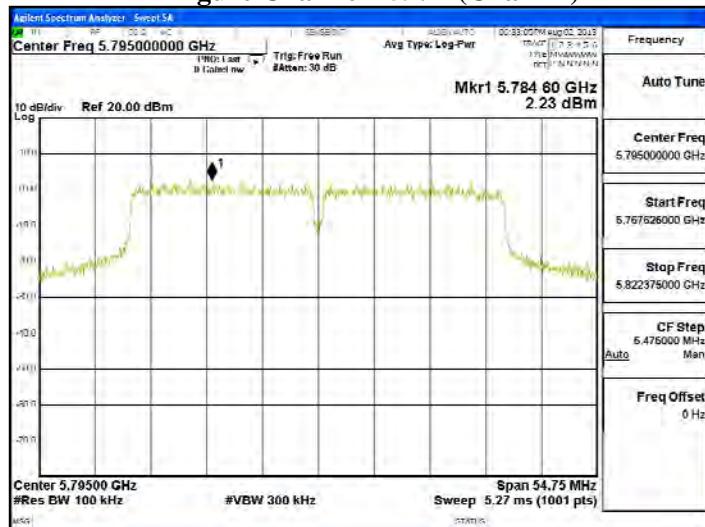
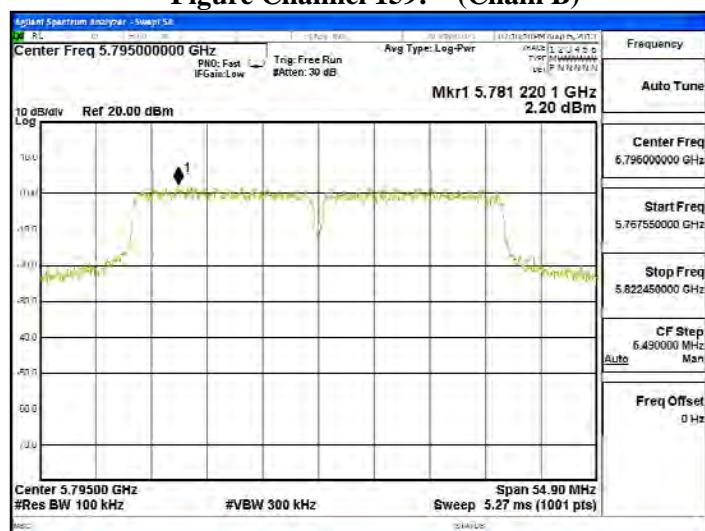


Figure Channel 159: (Chain B)



9. EMI Reduction Method During Compliance Testing

No modification was made during testing.