

Product : SpectraGuardR 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)	2462.300	30.482	64.415	94.897	--	--	--
07 (Peak)	2483.500	30.586	28.859	59.444	74.00	54.00	Pass
07 (Peak)	2483.900	30.587	30.481	61.068	74.00	54.00	Pass
07 (Average)	2464.100	30.491	52.240	82.731	--	--	--
07 (Average)	2483.500	30.586	15.949	46.534	74.00	54.00	Pass

Figure Channel 07:

Vertical (Peak)

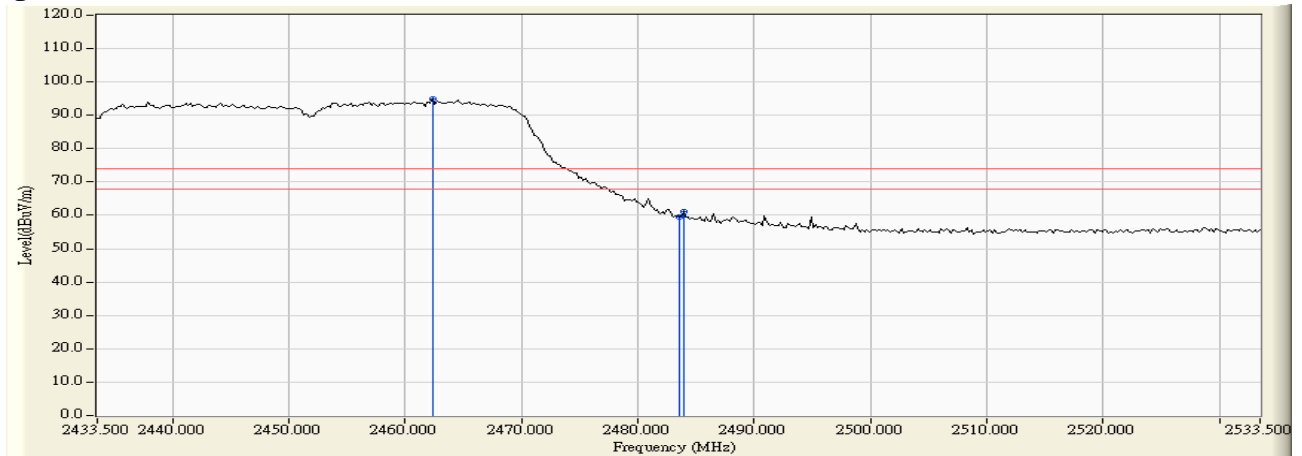
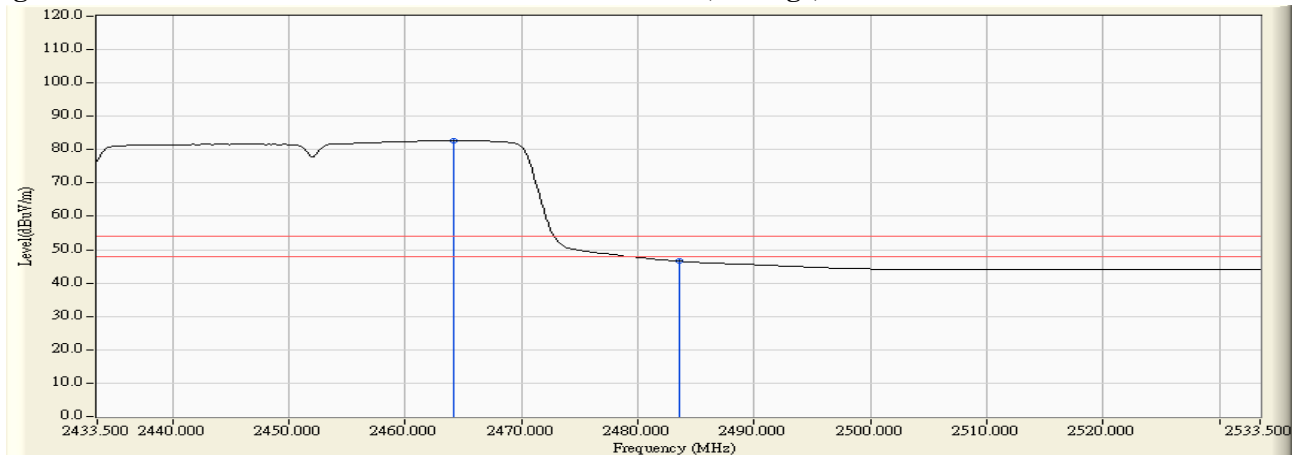


Figure Channel 01:

Vertical (Average)



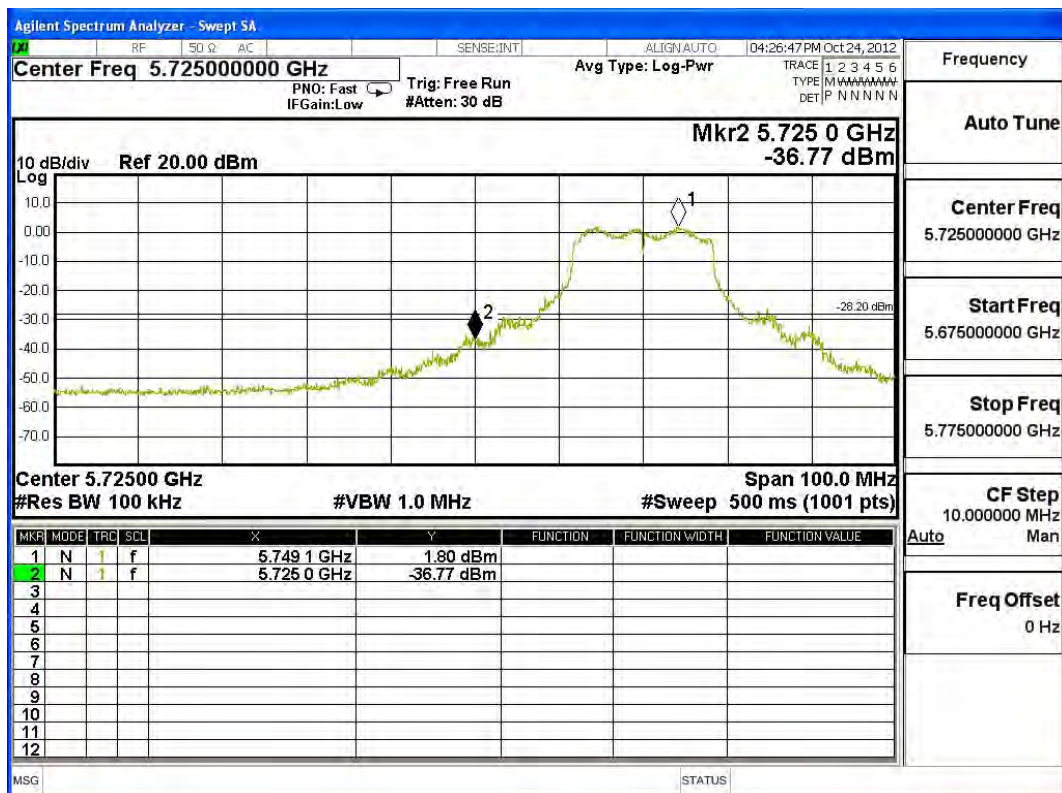
Note:

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

Chain A

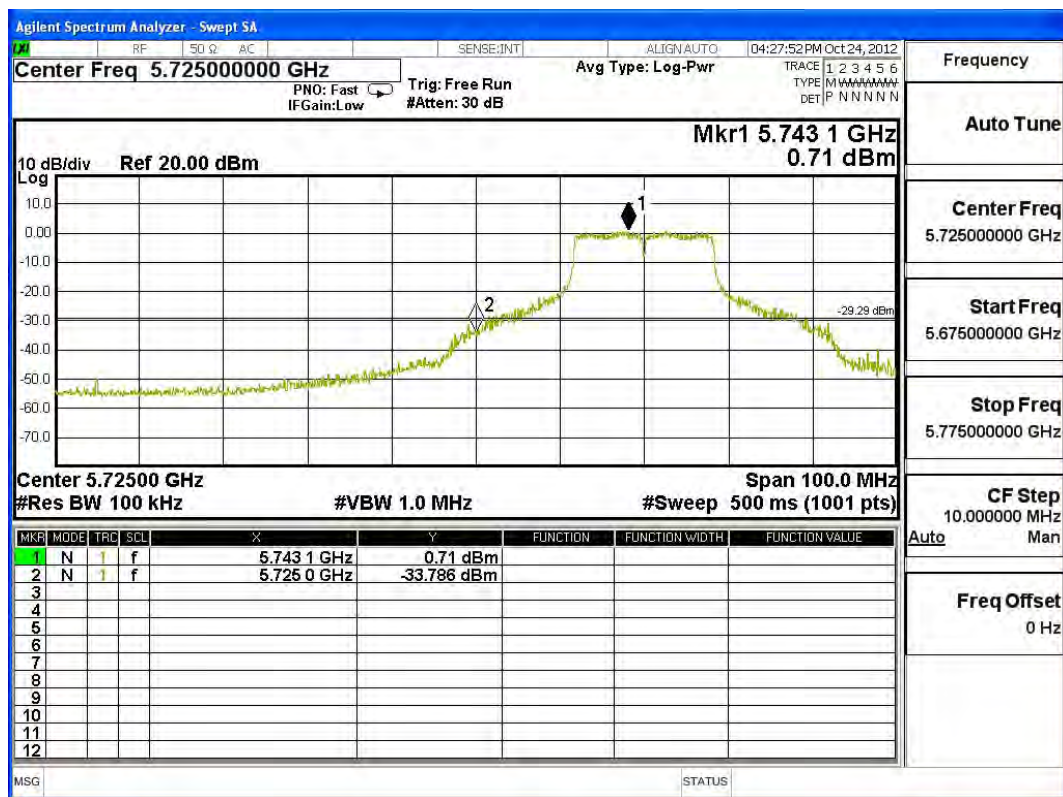
Test Frequency (MHz)	Measurement Level Δ (dB)	Limit Δ (dB)	Result
5745	38.57	>30	PASS



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

Chain B

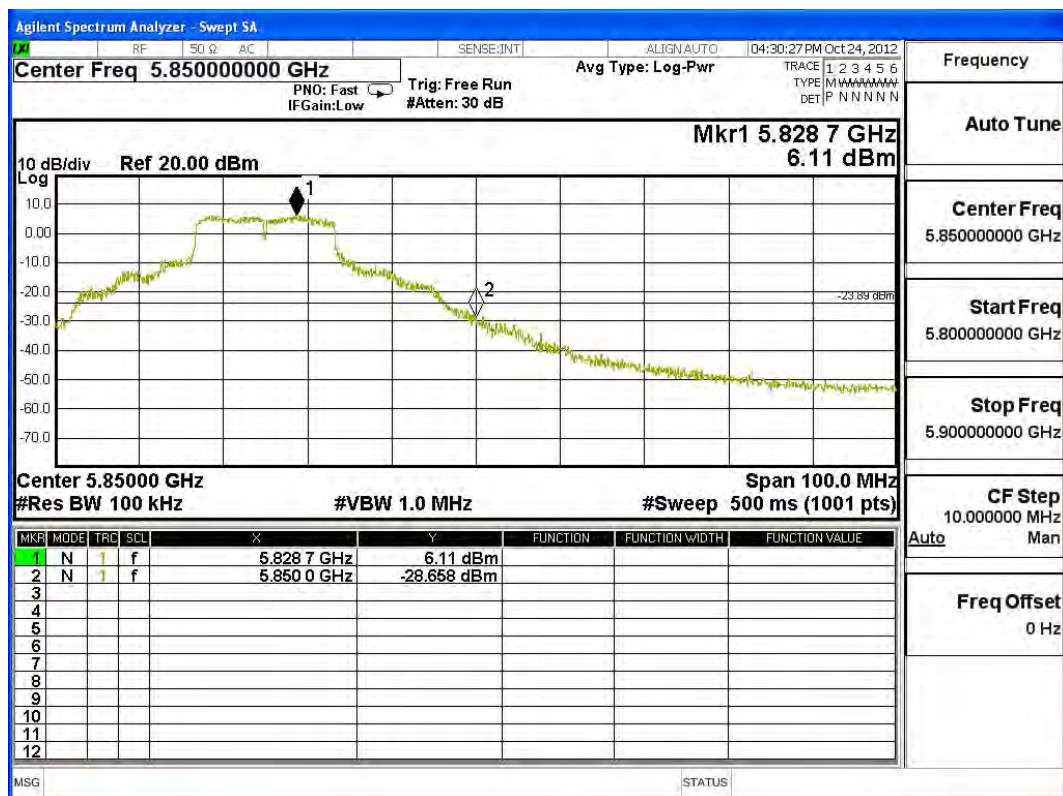
Test Frequency (MHz)	Measurement Level Δ (dB)	Limit Δ (dB)	Result
5745	34.496	>30	PASS



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

Chain A

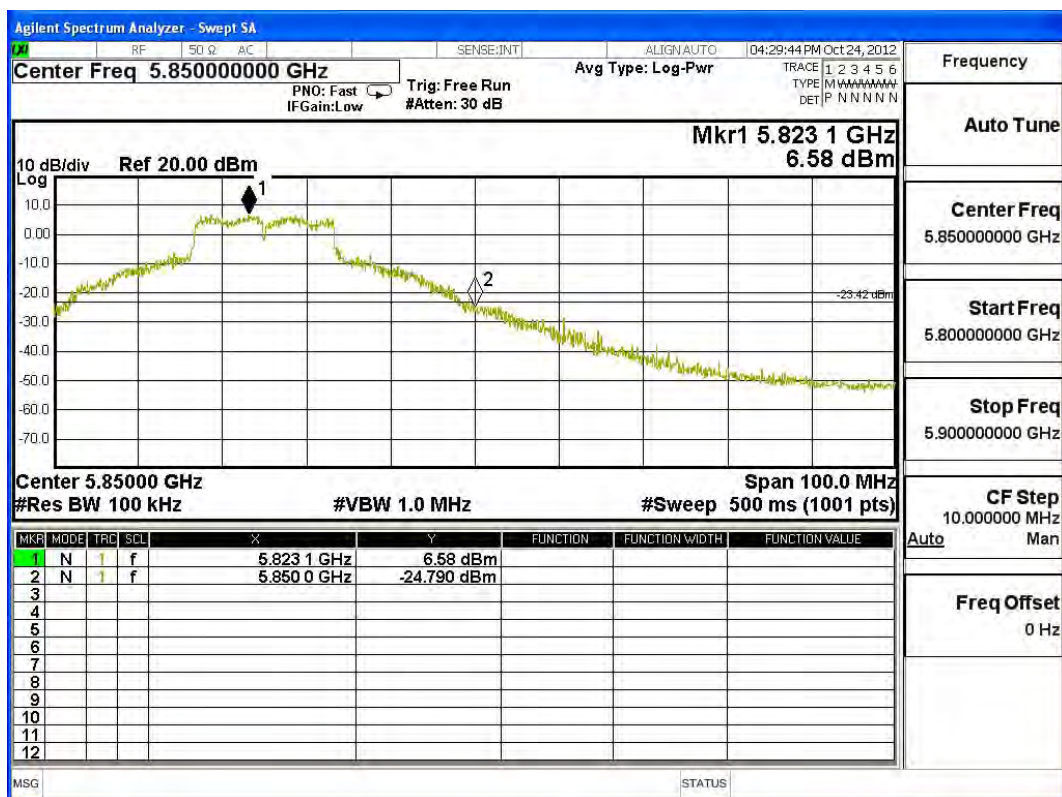
Test Frequency (MHz)	Measurement Level Δ (dB)	Limit Δ (dB)	Result
5825	34.768	>30	PASS



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

Chain B

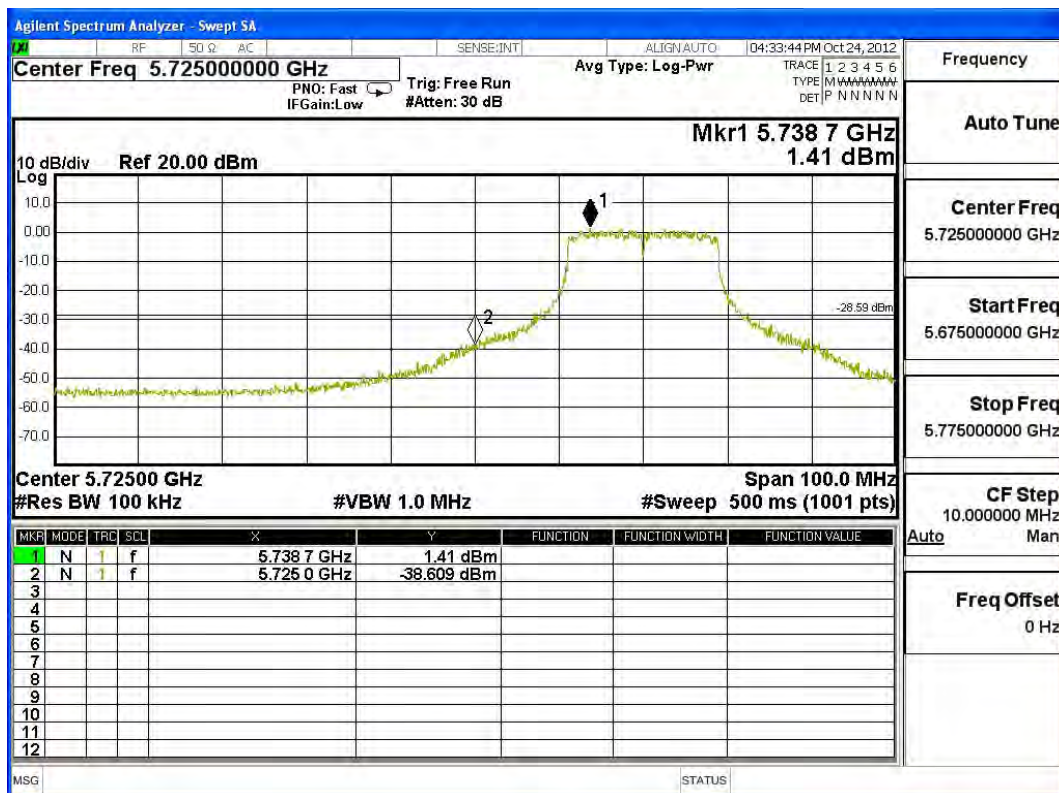
Test Frequency (MHz)	Measurement Level Δ (dB)	Limit Δ (dB)	Result
5825	31.37	>30	PASS



Product : SpectraGuardR 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

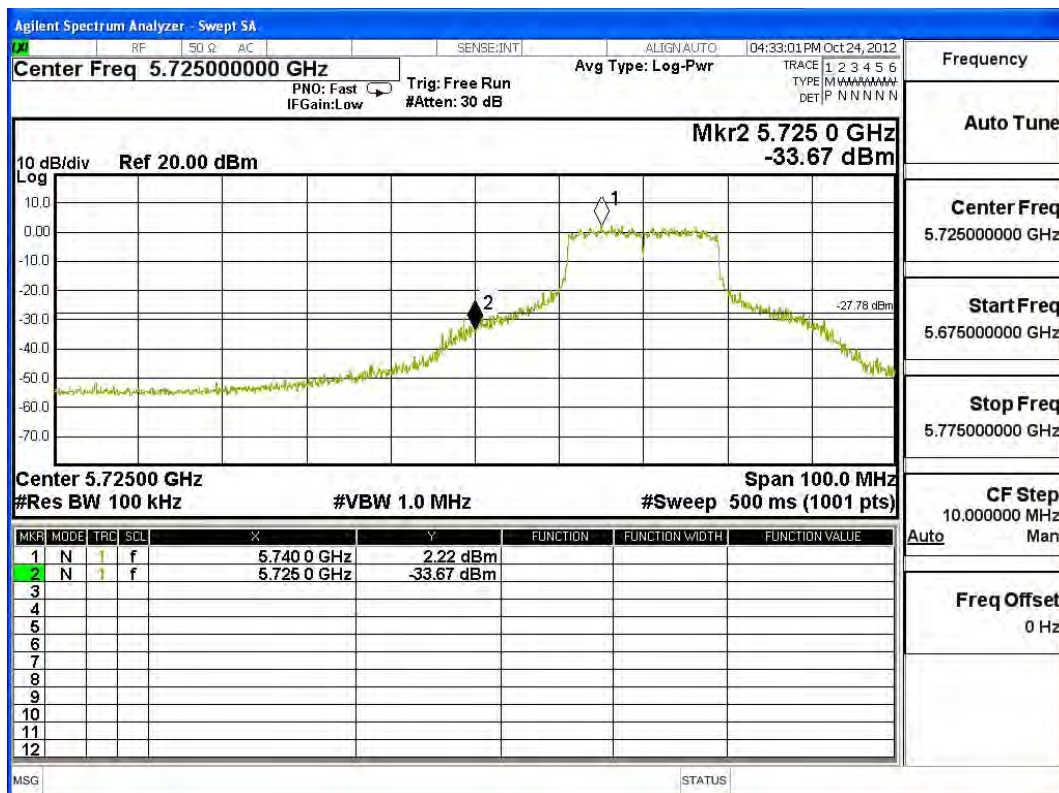
Test Frequency (MHz)	Measurement Level Δ (dB)	Limit Δ (dB)	Result
5745	40.019	>30	PASS



Product : SpectraGuardR 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

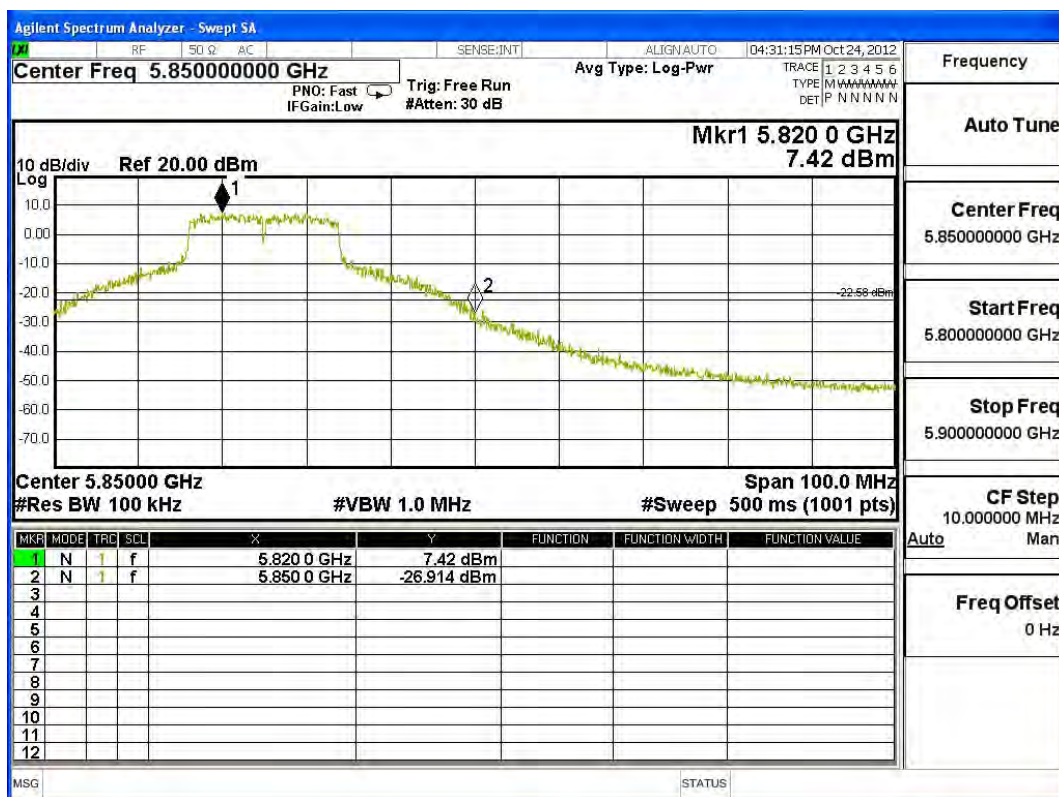
Test Frequency (MHz)	Measurement Level Δ (dB)	Limit Δ (dB)	Result
5745	35.89	>30	PASS



Product : SpectraGuardR 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

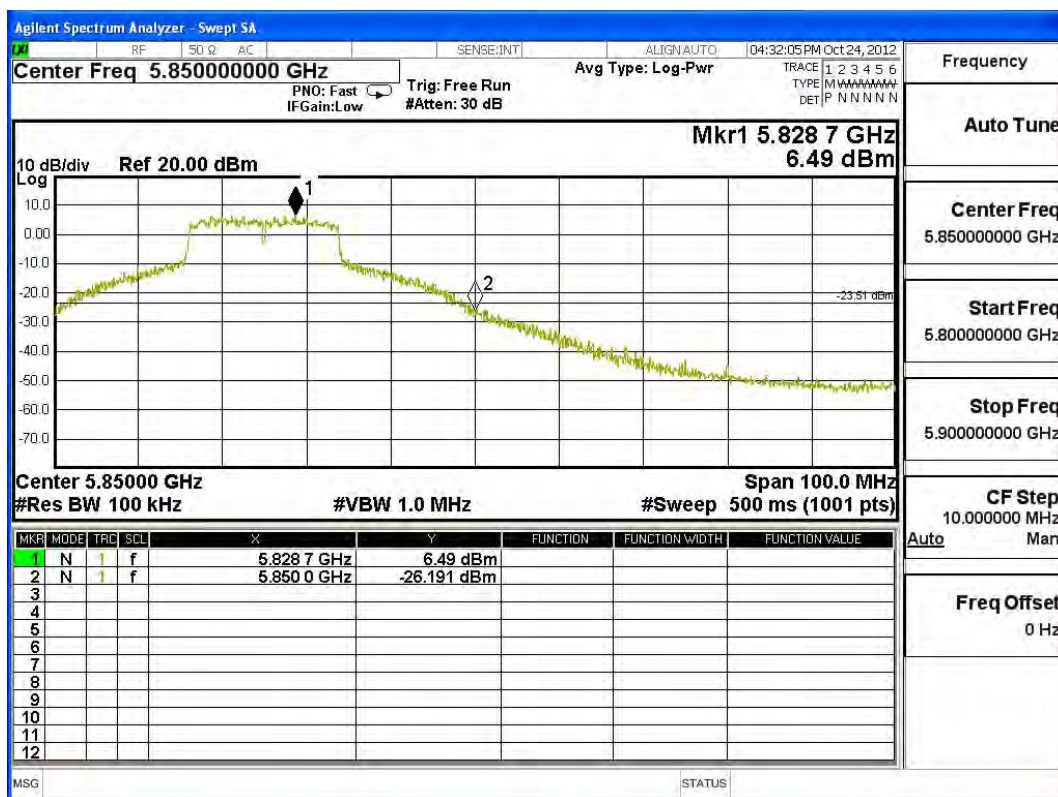
Test Frequency (MHz)	Measurement Level Δ (dB)	Limit Δ (dB)	Result
5825	34.334	>30	PASS



Product : SpectraGuardR 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

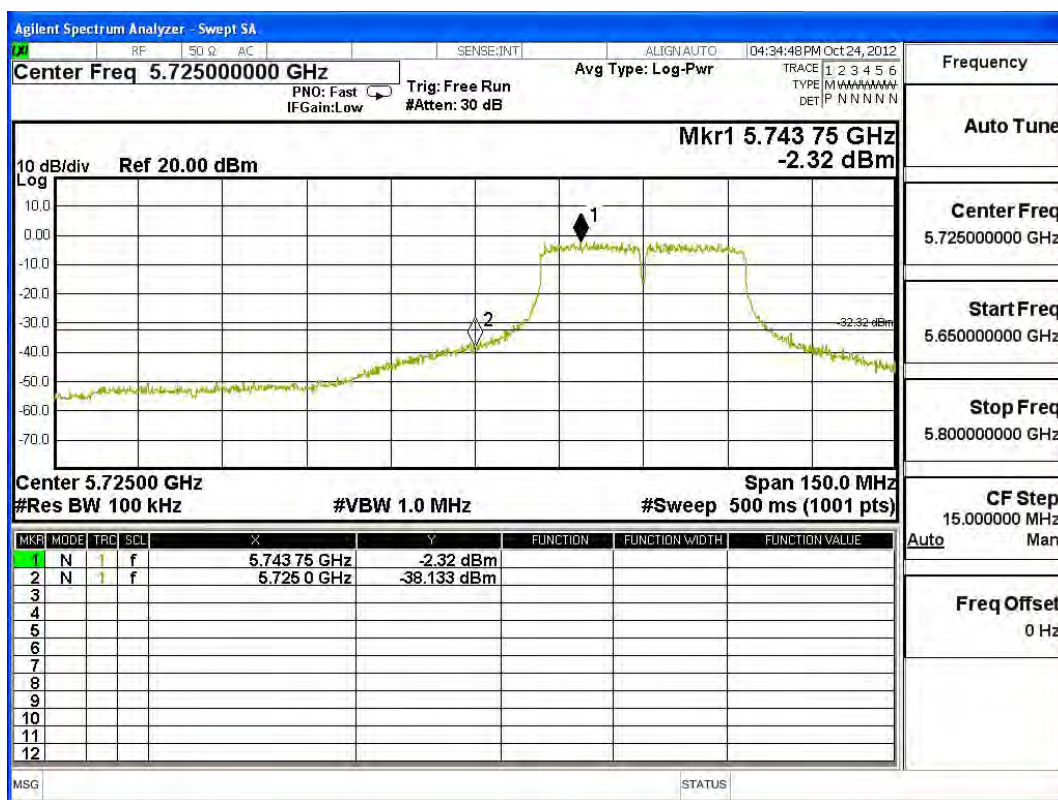
Test Frequency (MHz)	Measurement Level Δ (dB)	Limit Δ (dB)	Result
5825	32.681	>30	PASS



Product : SpectraGuardR 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

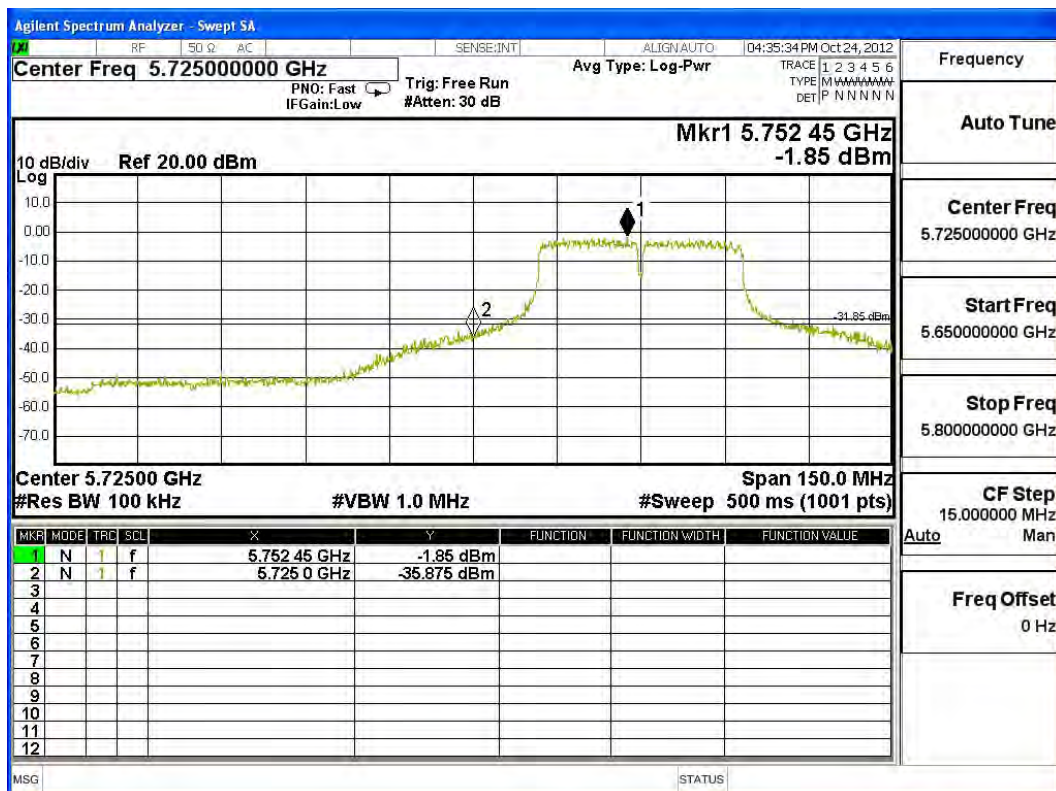
Test Frequency (MHz)	Measurement Level Δ (dB)	Limit Δ (dB)	Result
5755	35.813	>30	PASS



Product : SpectraGuardR 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

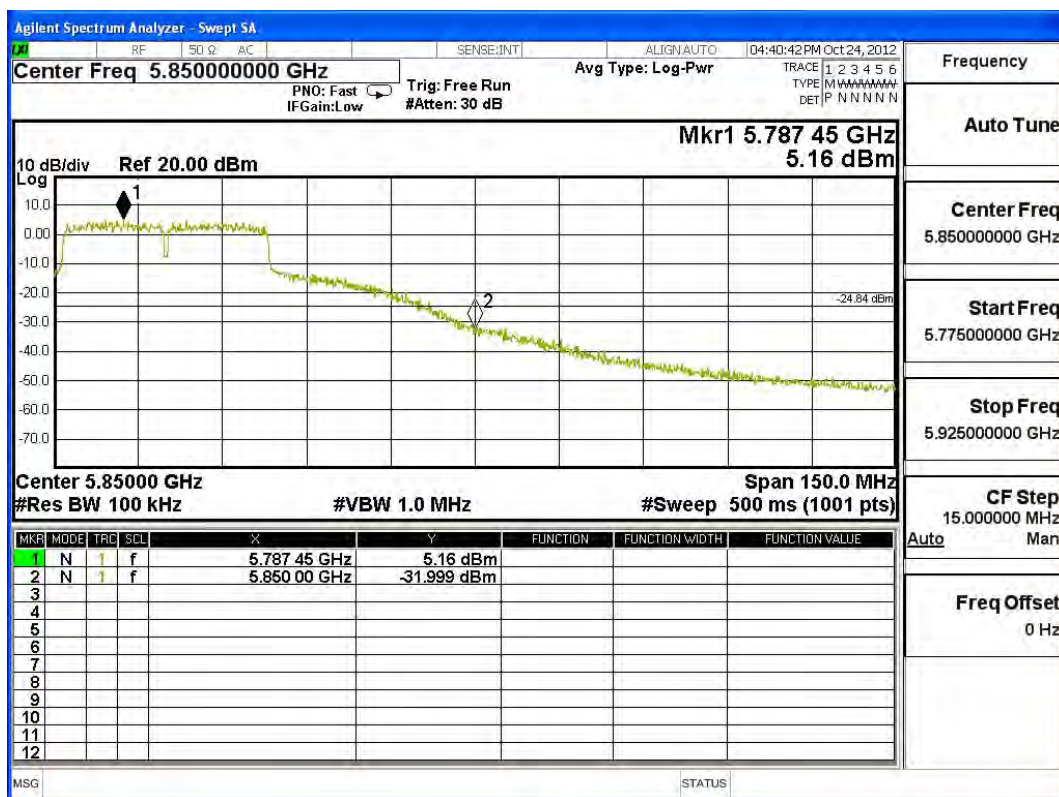
Test Frequency (MHz)	Measurement Level Δ (dB)	Limit Δ (dB)	Result
5755	34.025	>30	PASS



Product : SpectraGuardR 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

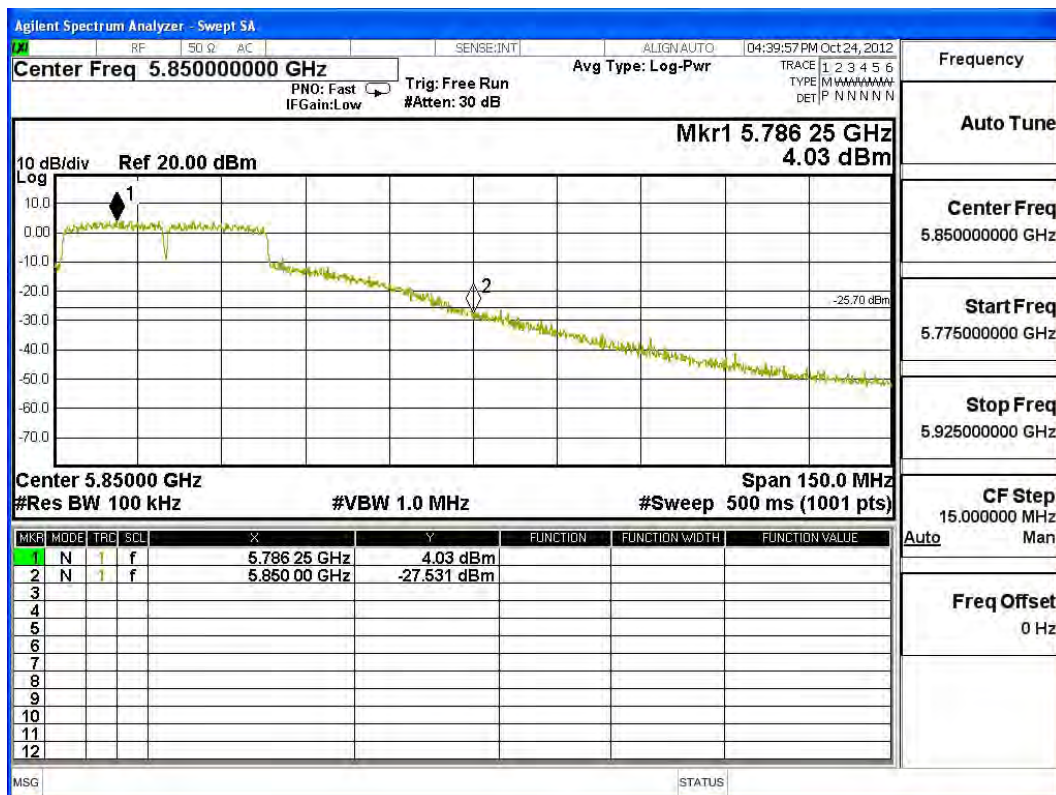
Test Frequency (MHz)	Measurement Level Δ (dB)	Limit Δ (dB)	Result
5795	37.159	>30	PASS



Product : SpectraGuardR 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	31.561	>30	PASS



7. Occupied Bandwidth

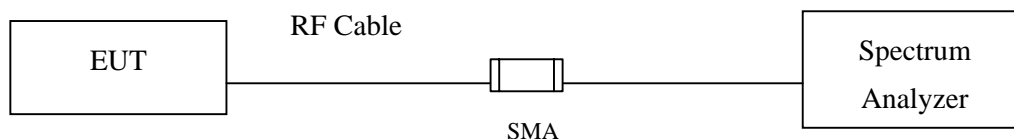
7.1. Test Equipment

	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
	Spectrum Analyzer	R&S	FSP40 / 100170	Jun, 2012
	Spectrum Analyzer	Agilent	E4407B / US39440758	Jun, 2012
X	Spectrum Analyzer	Agilent	N9010A / MY48030495	Apr., 2012

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 C63.4, 2003; tested according to DTS test procedure of Jan. 2012 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 : SpectraGuardR Access Point / Sensor
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmit (802.11b 1Mbps)(Dipole Antenna) (2412MHz)

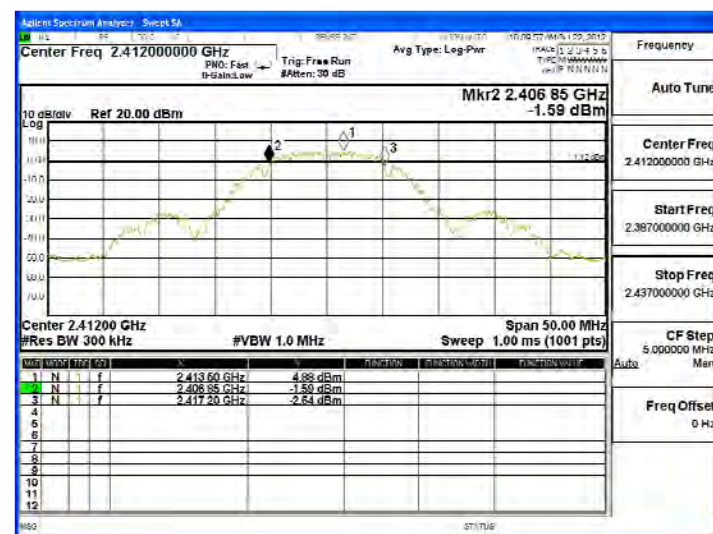
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
1	2412.00	10350	>500	Pass

Figure Channel 1: (Chain A)



Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
1	2412.00	10350	>500	Pass

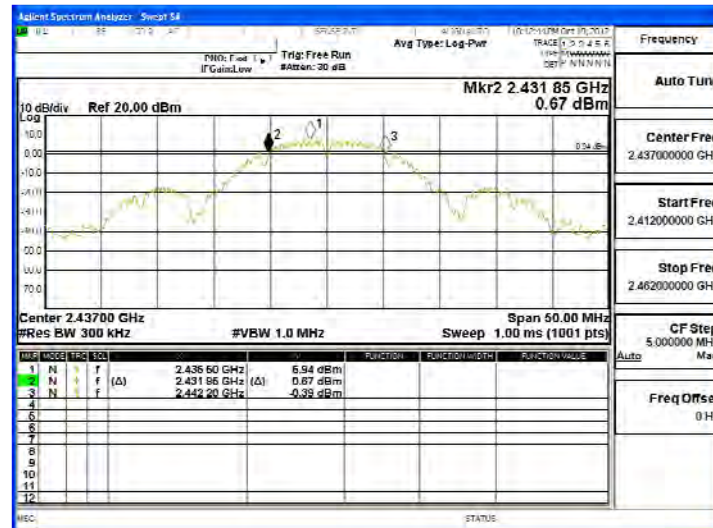
Figure Channel 1: (Chain B)



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

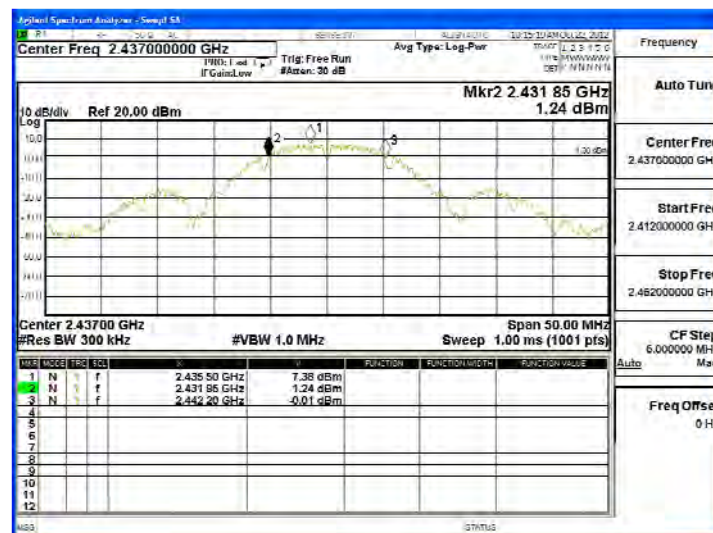
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
6	2437.00	10350	>500	Pass

Figure Channel 6: (Chain A)



Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
6	2437.00	10350	>500	Pass

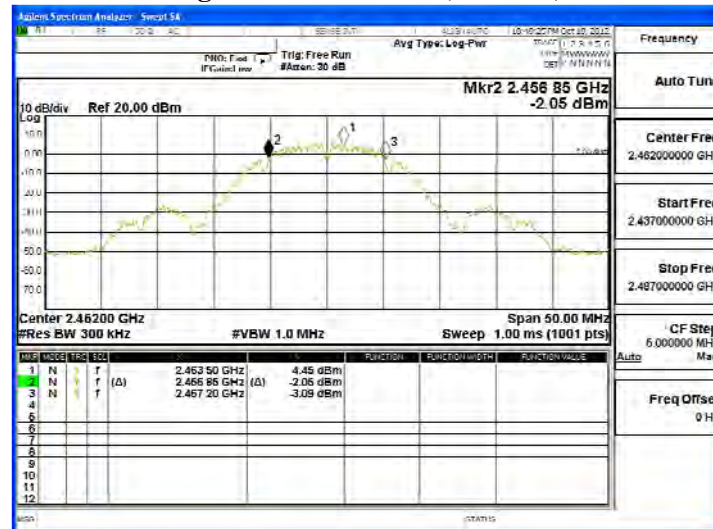
Figure Channel 6: (Chain B)



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

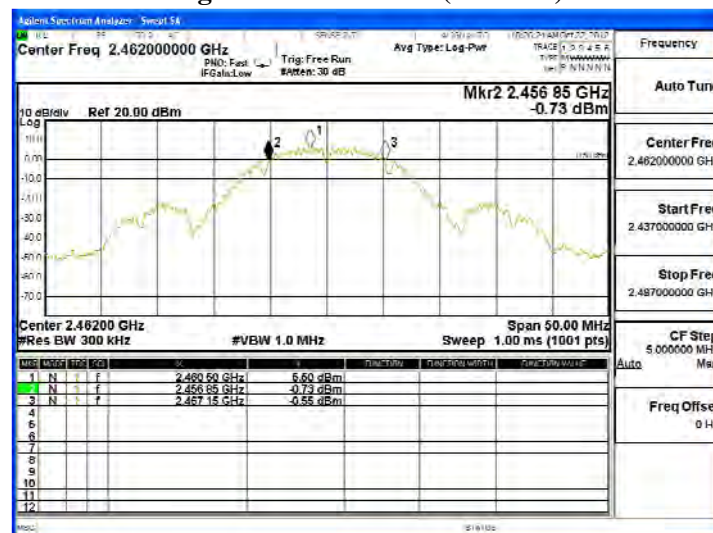
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
11	2462.00	10350	>500	Pass

Figure Channel 11: (Chain A)



Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
11	2462.00	10300	>500	Pass

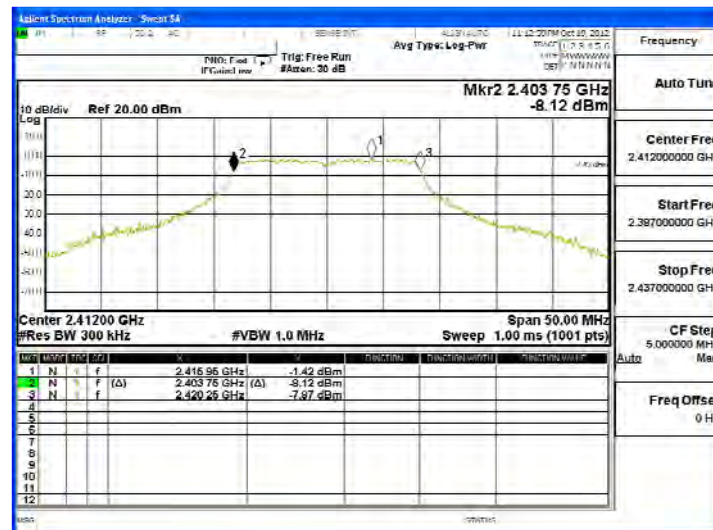
Figure Channel 11: (Chain B)



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

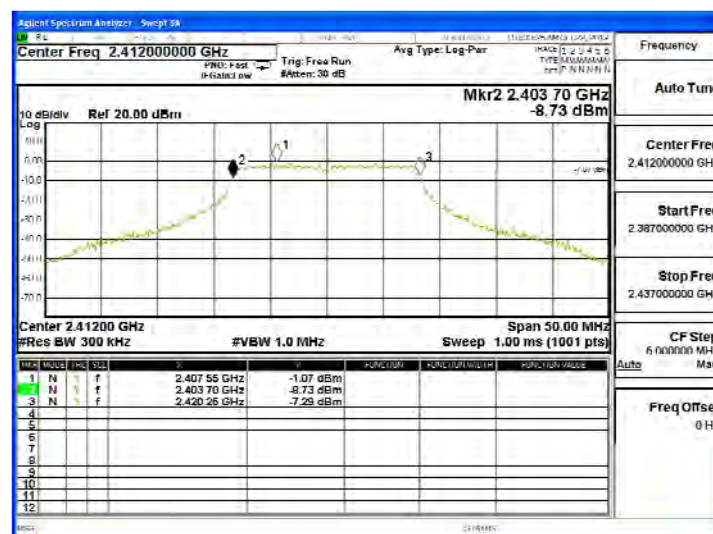
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
1	2412.00	16500	>500	Pass

Figure Channel 1: (Chain A)



Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
1	2412.00	16550	>500	Pass

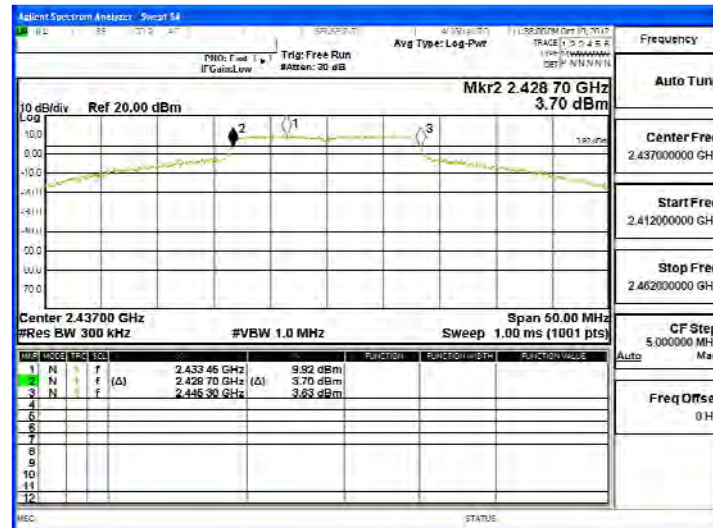
Figure Channel 1: (Chain B)



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

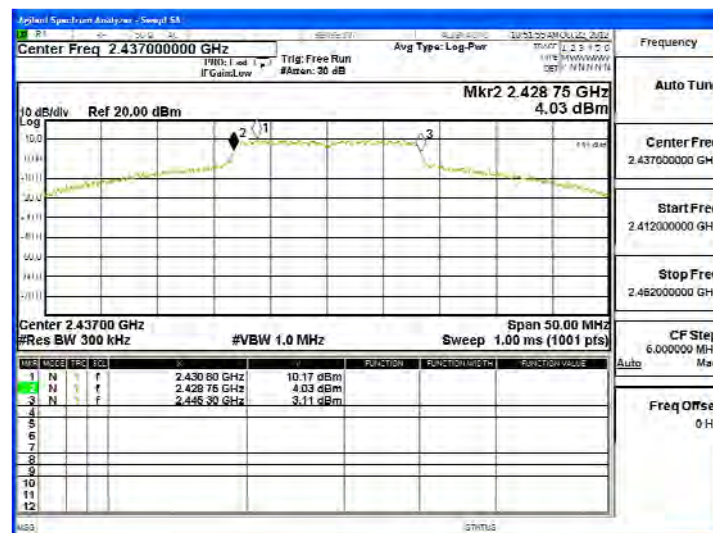
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
6	2437.00	16600	>500	Pass

Figure Channel 6: (Chain A)



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

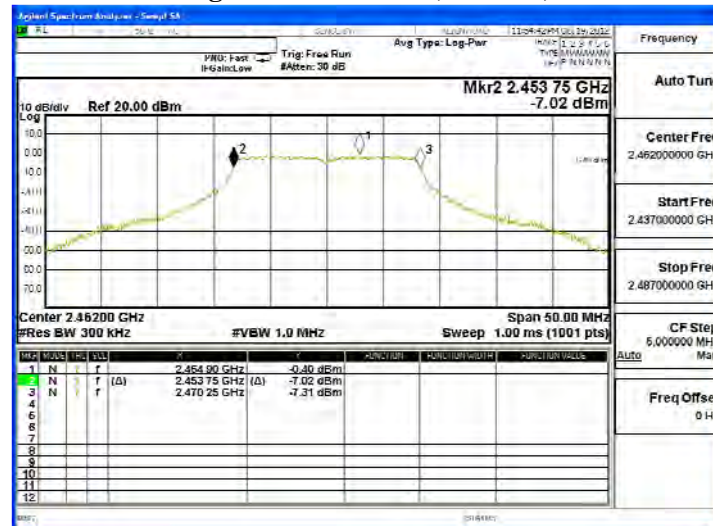
Figure Channel 6: (Chain B)



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

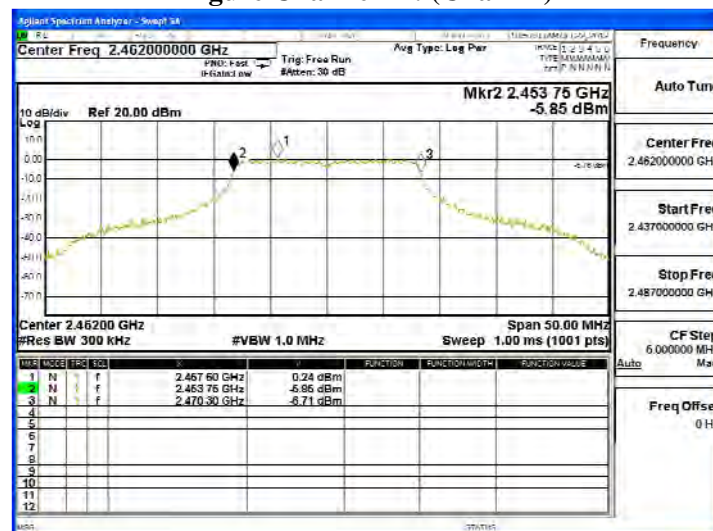
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
11	2462.00	16500	>500	Pass

Figure Channel 11: (Chain A)



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

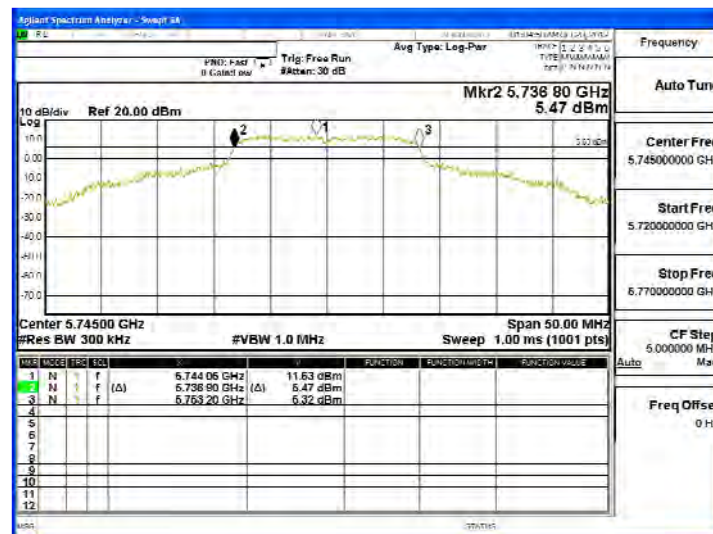
Figure Channel 11: (Chain B)



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

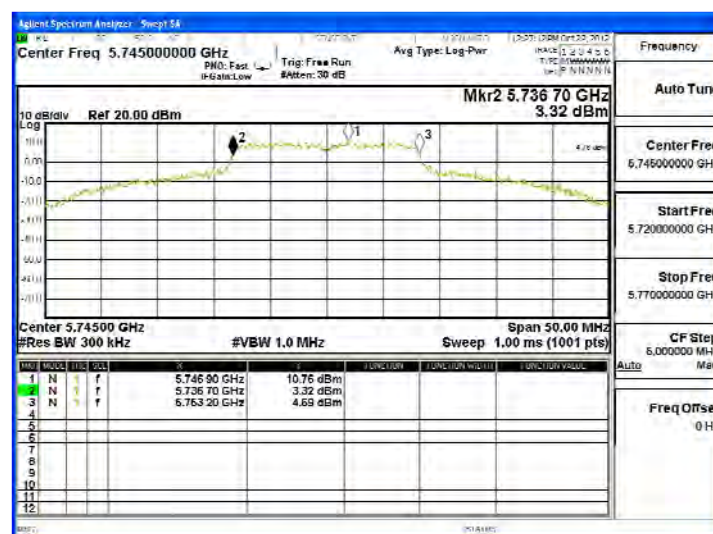
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
149	5745.00	16400	>500	Pass

Figure Channel 149: (Chain A)



Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
149	5745.00	16500	>500	Pass

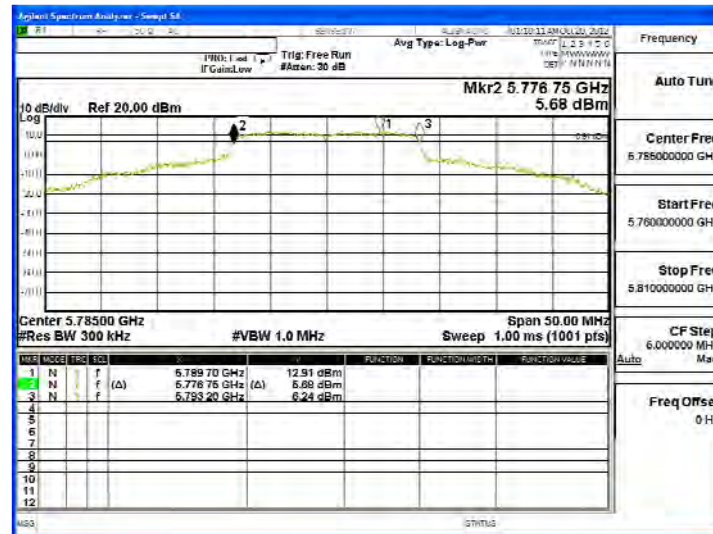
Figure Channel 149: (Chain B)



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

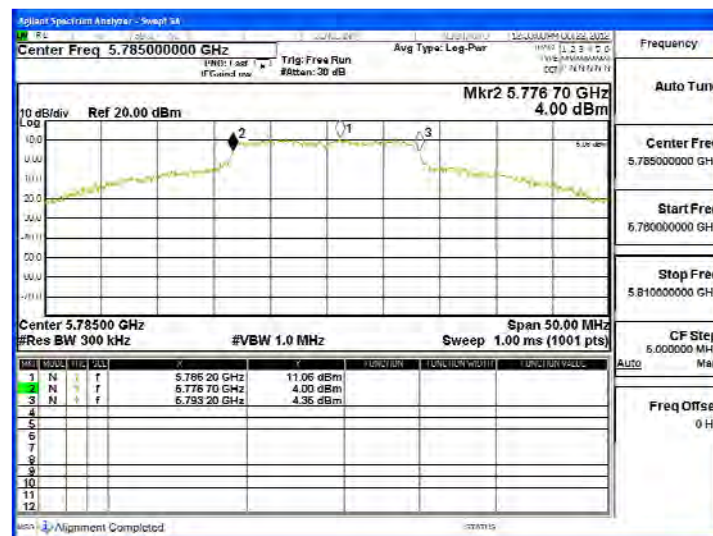
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
157	5785.00	16450	>500	Pass

Figure Channel 157: (Chain A)



Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
157	5785.00	16500	>500	Pass

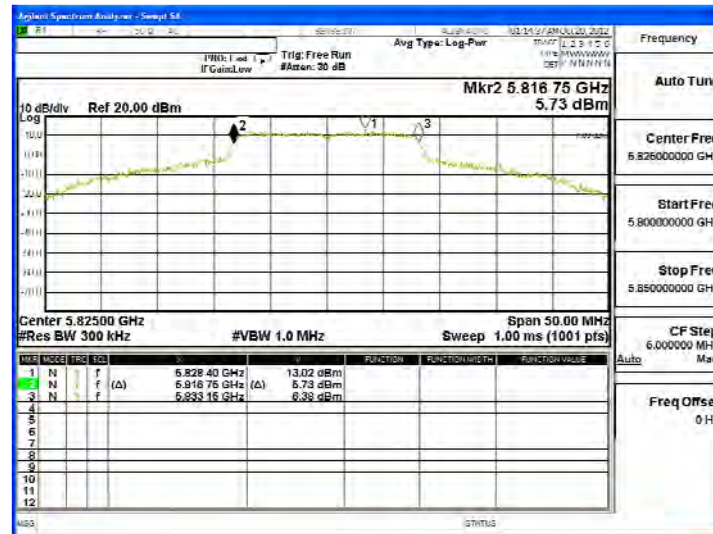
Figure Channel 157: (Chain B)



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

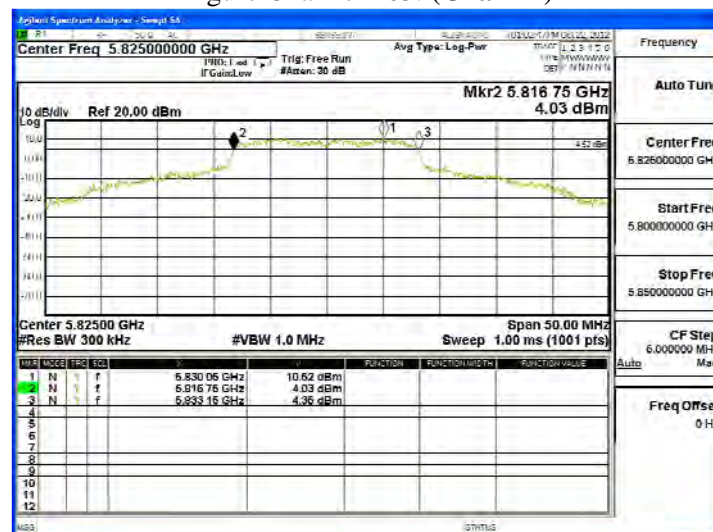
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
165	5825.00	16400	>500	Pass

Figure Channel 165: (Chain A)



Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
165	5825.00	16400	>500	Pass

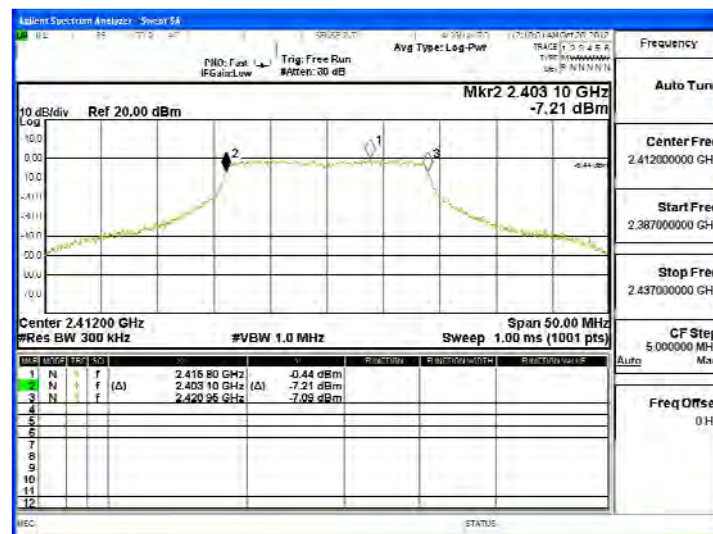
Figure Channel 165: (Chain B)



Product : SpectraGuardR 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)

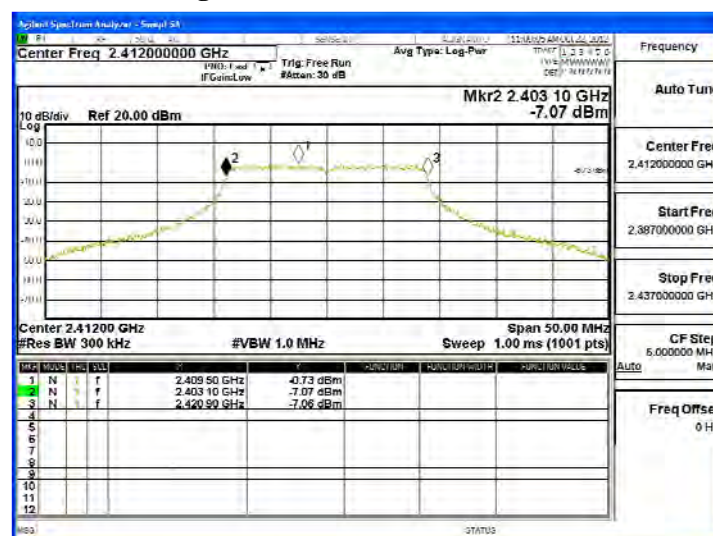
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
1	2412.00	17850	>500	Pass

Figure Channel 1: (Chain A)



Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
1	2412.00	17800	>500	Pass

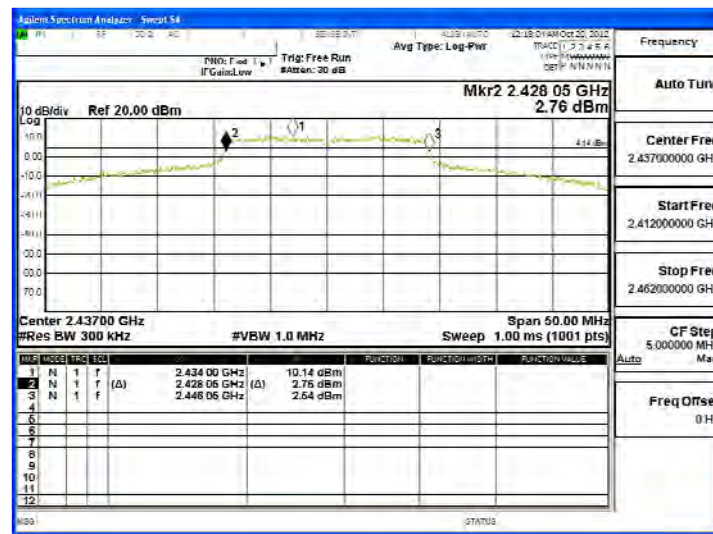
Figure Channel 1: (Chain B)



Product : SpectraGuardR 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)

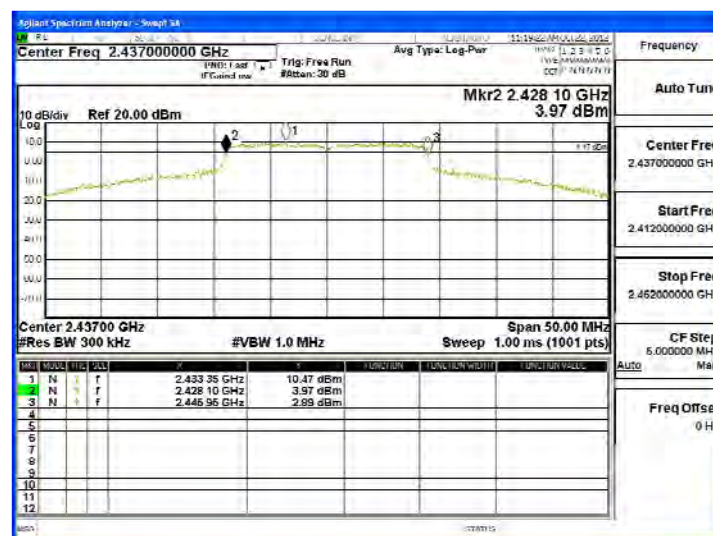
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
6	2437.00	17800	>500	Pass

Figure Channel 6: (Chain A)



Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
6	2437.00	17850	>500	Pass

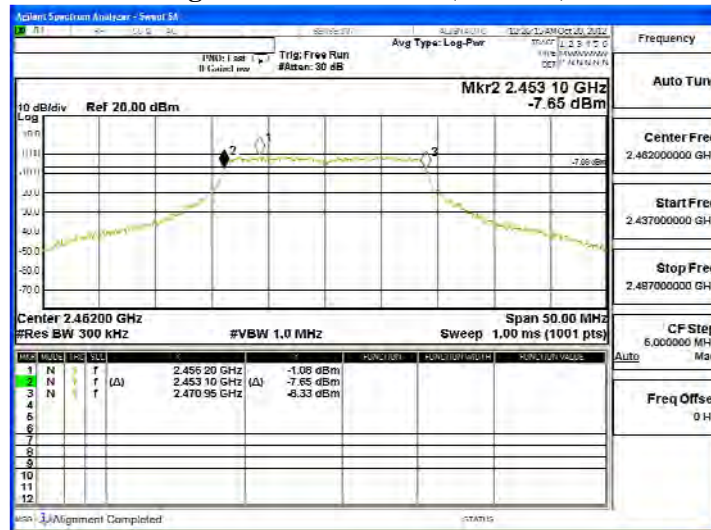
Figure Channel 6: (Chain B)



Product : SpectraGuardR 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)

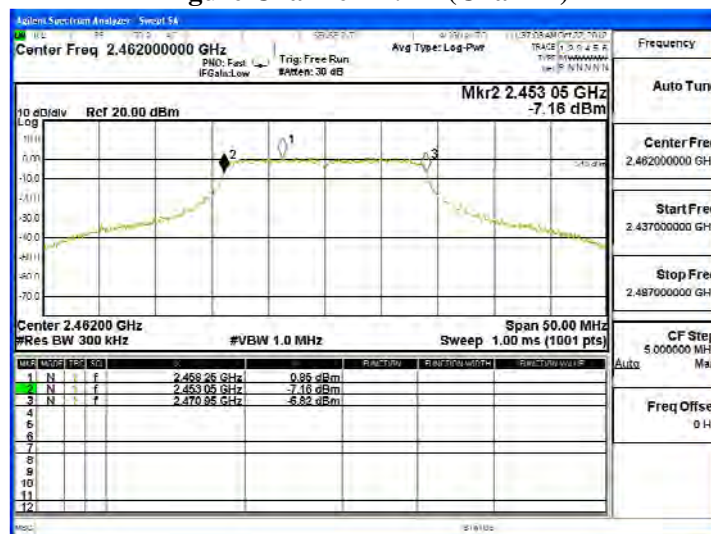
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
11	2462.00	17850	>500	Pass

Figure Channel 11: (Chain A)



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

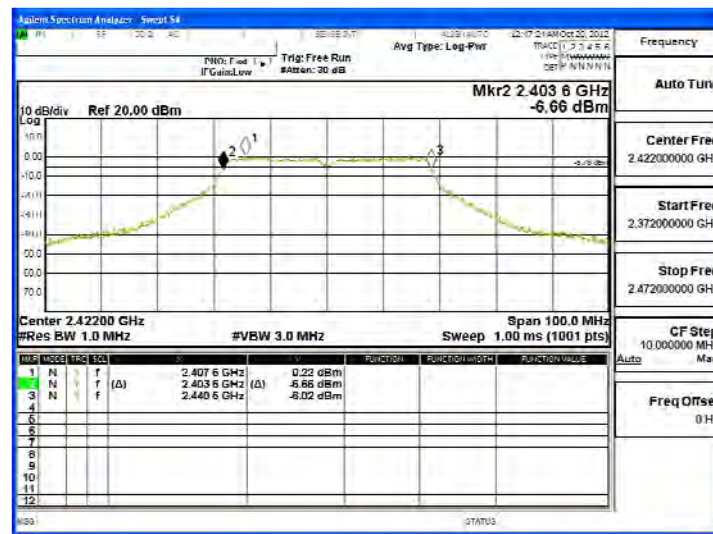
Figure Channel 11: (Chain B)



Product : SpectraGuardR 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)

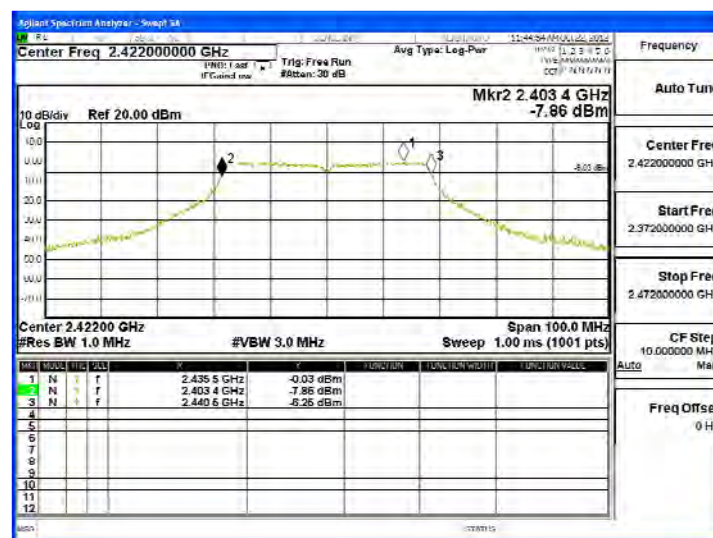
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
1	2422.00	36900	>500	Pass

Figure Channel 1: (Chain A)



Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
1	2422.00	37100	>500	Pass

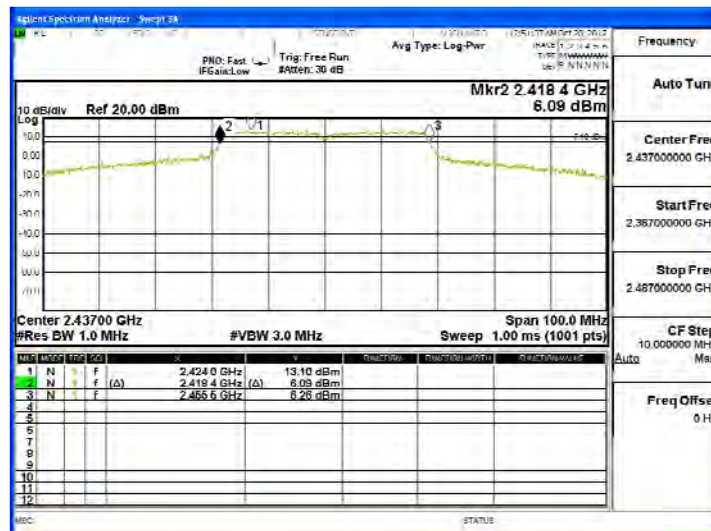
Figure Channel 1: (Chain B)



Product : SpectraGuardR 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)

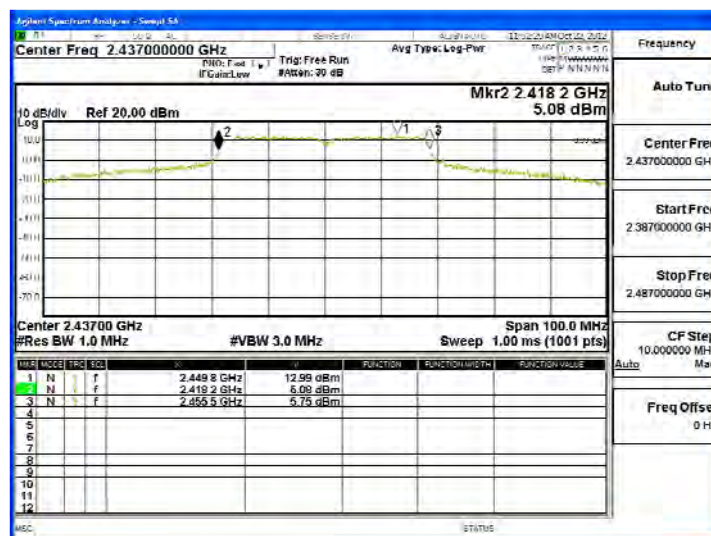
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
4	2437.00	37100	>500	Pass

Figure Channel 4: (Chain A)



Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
4	2437.00	37300	>500	Pass

Figure Channel 4: (Chain B)



Product : SpectraGuardR 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)

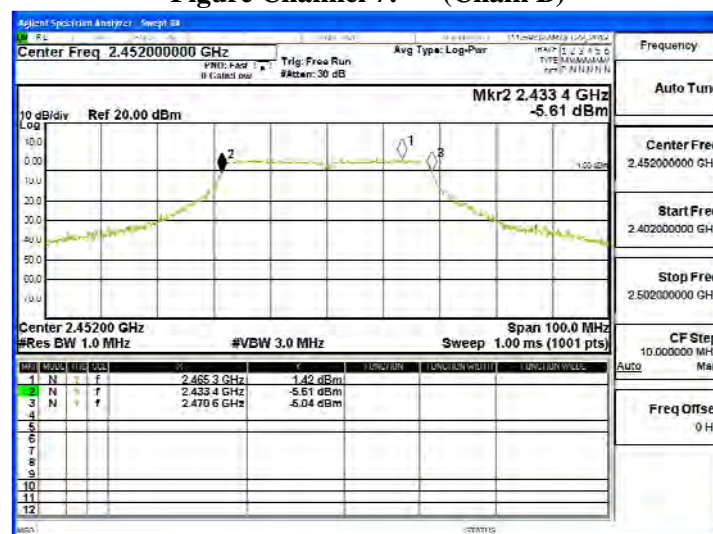
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
7	2452.00	37400	>500	Pass

Figure Channel 7: (Chain A)



Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
7	2452.00	37200	>500	Pass

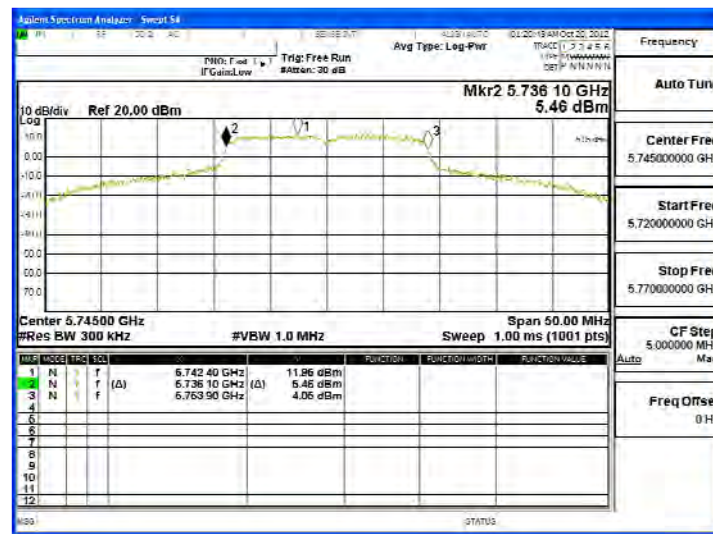
Figure Channel 7: (Chain B)



Product : SpectraGuardR 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)

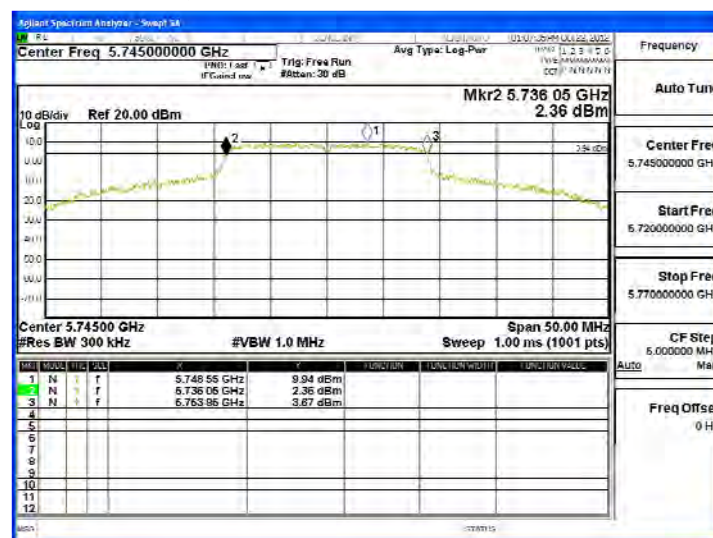
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
149	5745.00	17800	>500	Pass

Figure Channel 149: (Chain A)



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

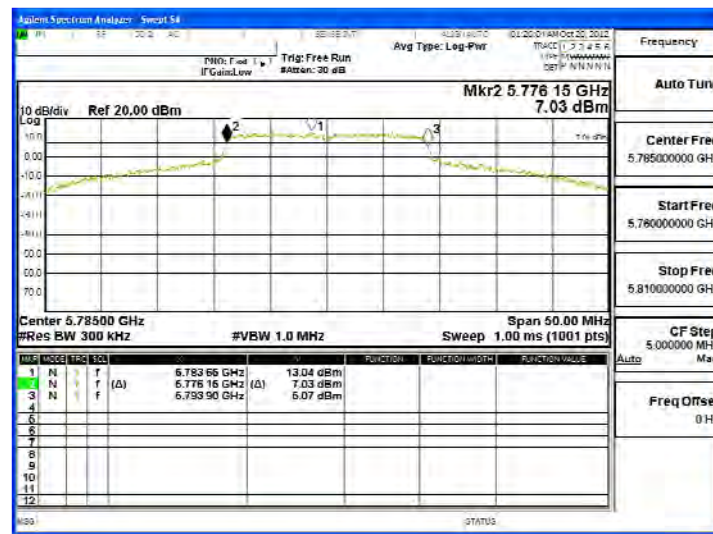
Figure Channel 149: (Chain B)



Product : SpectraGuardR 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)

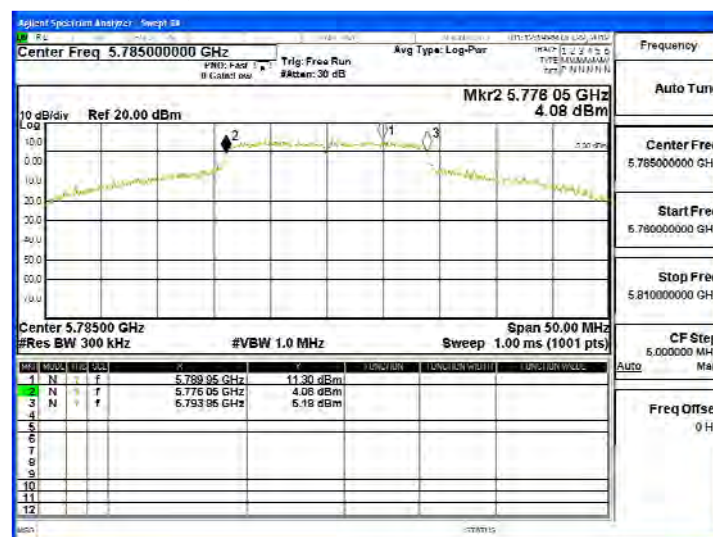
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
157	5785.00	17750	>500	Pass

Figure Channel 157: (Chain A)



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

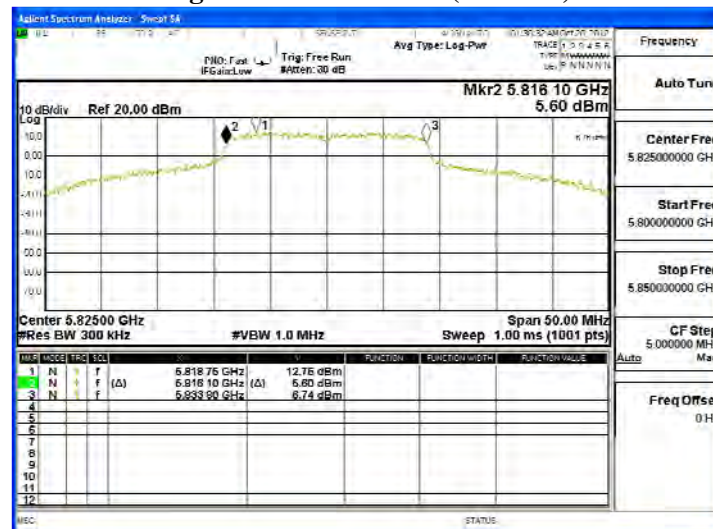
Figure Channel 157: (Chain B)



Product : SpectraGuardR 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)

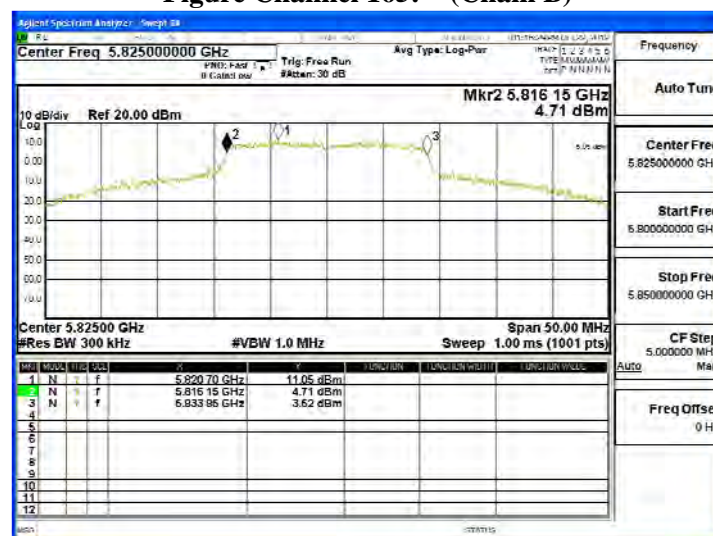
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
165	5825.00	17700	>500	Pass

Figure Channel 165: (Chain A)



Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
165	5825.00	17700	>500	Pass

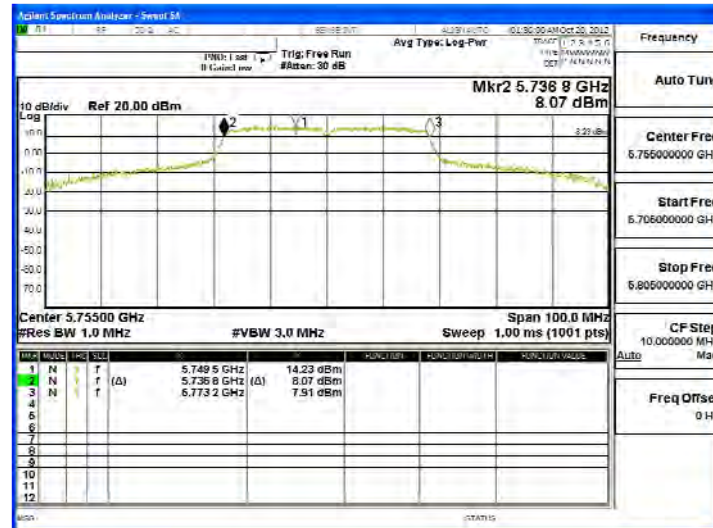
Figure Channel 165: (Chain B)



Product : SpectraGuardR 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)

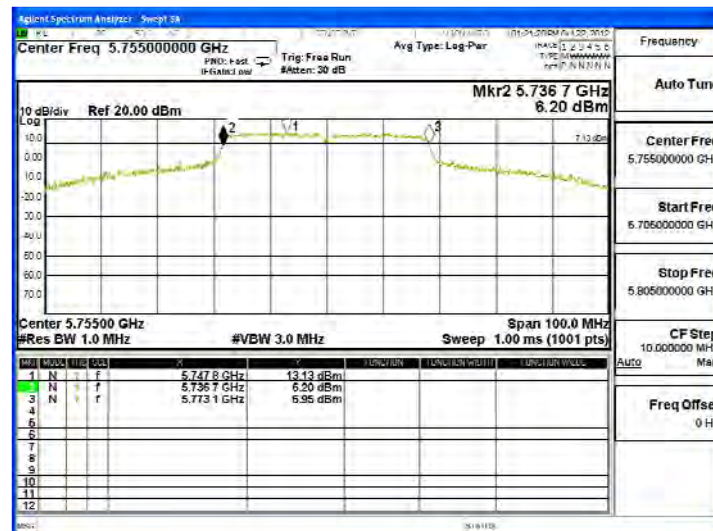
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
151	5755.00	36400	>500	Pass

Figure Channel 151: (Chain A)



Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
151	5755.00	36400	>500	Pass

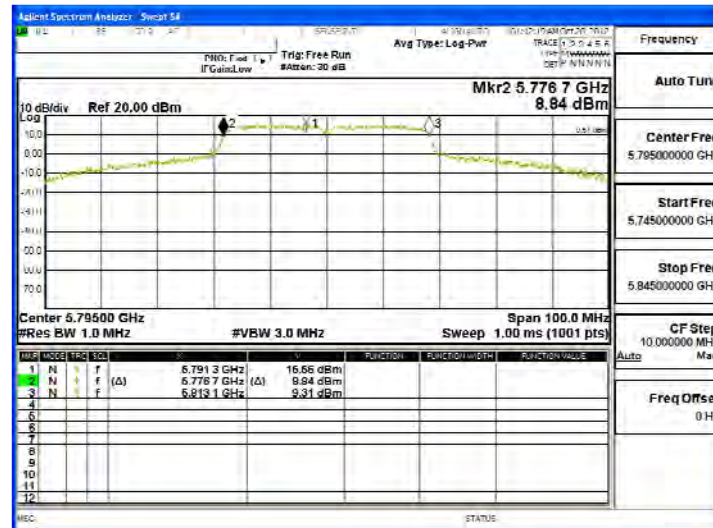
Figure Channel 151: (Chain B)



Product : SpectraGuardR 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)

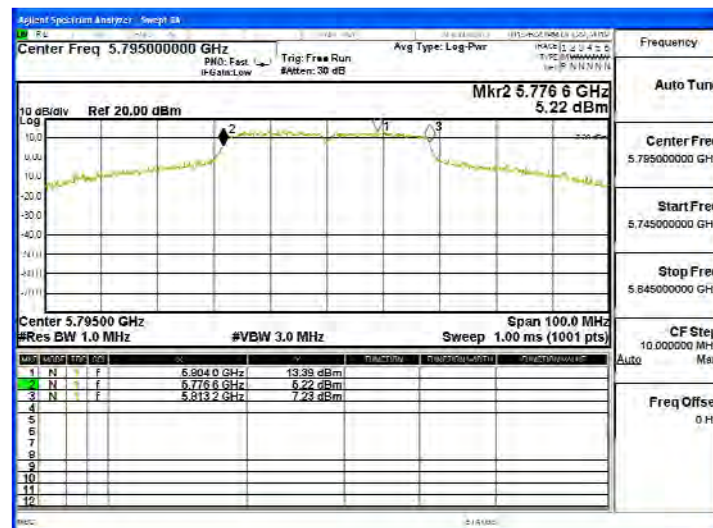
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
159	5795.00	36400	>500	Pass

Figure Channel 159: (Chain A)



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

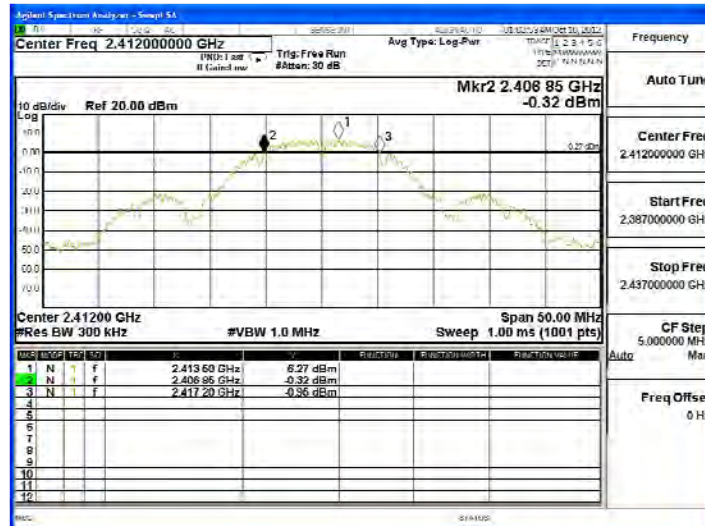
Figure Channel 159: (Chain B)



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

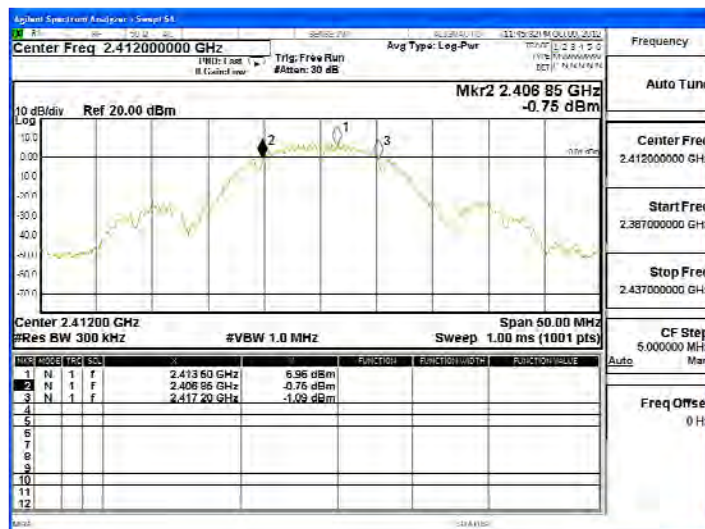
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
1	2412.00	10350	>500	Pass

Figure Channel 1: (Chain A)



Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
1	2412.00	10350	>500	Pass

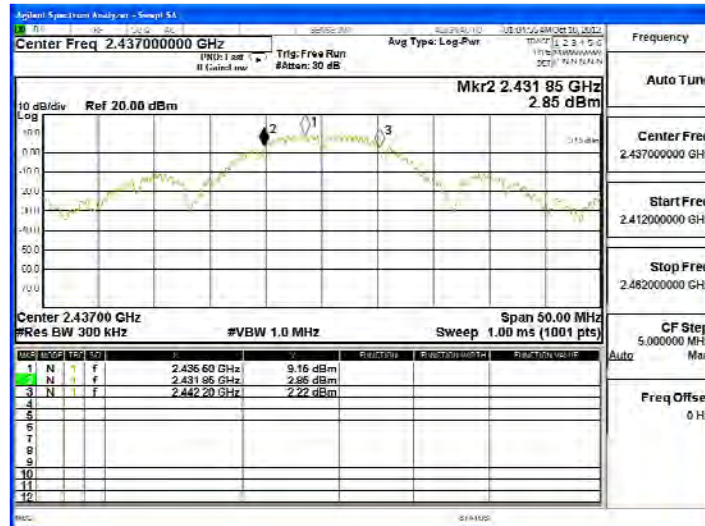
Figure Channel 1: (Chain B)



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

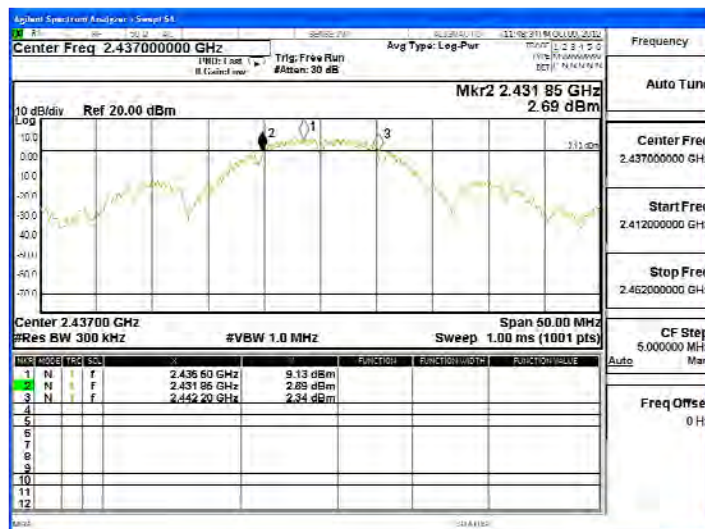
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
6	2437.00	10350	>500	Pass

Figure Channel 6: (Chain A)



Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
6	2437.00	10350	>500	Pass

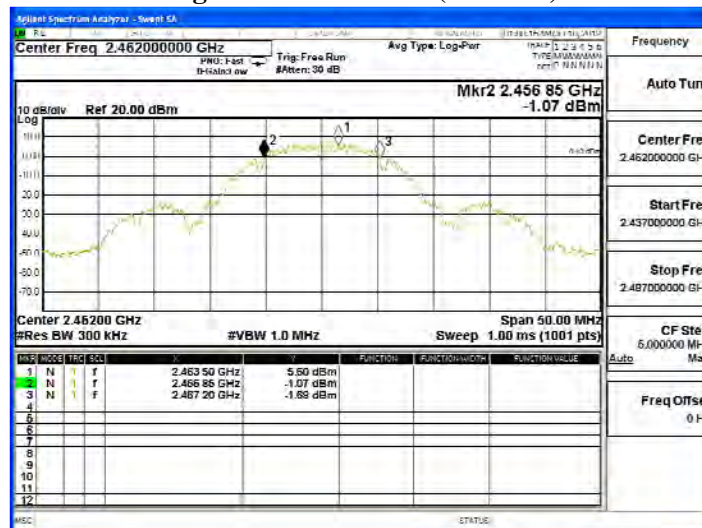
Figure Channel 6: (Chain B)



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

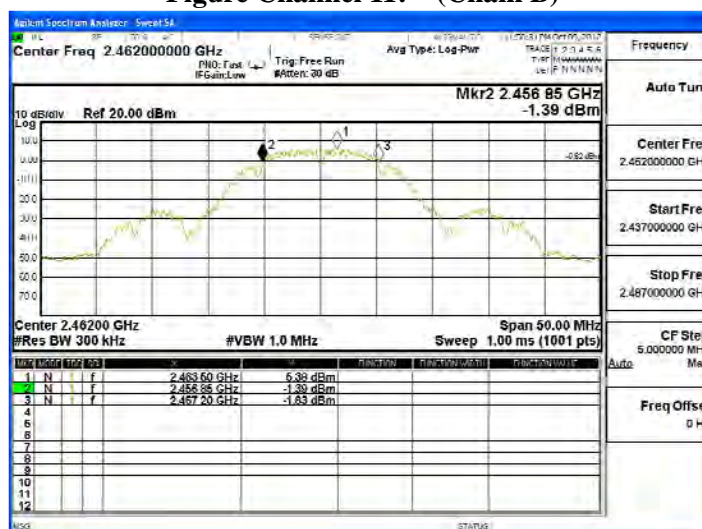
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
11	2462.00	10350	>500	Pass

Figure Channel 11: (Chain A)



Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
11	2462.00	10350	>500	Pass

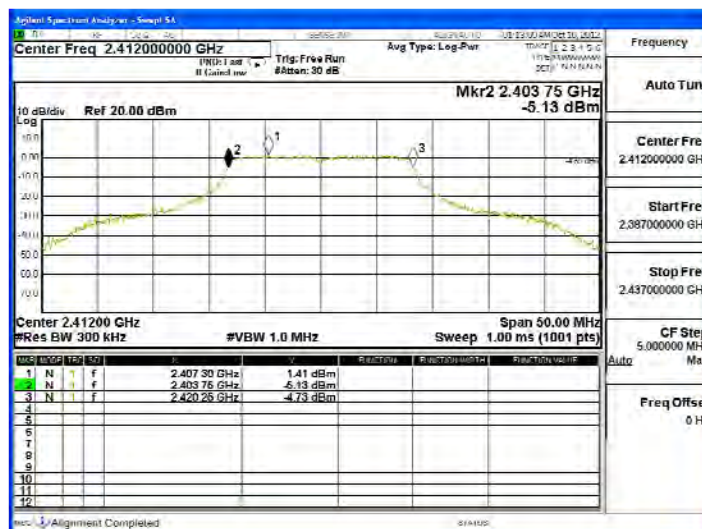
Figure Channel 11: (Chain B)



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

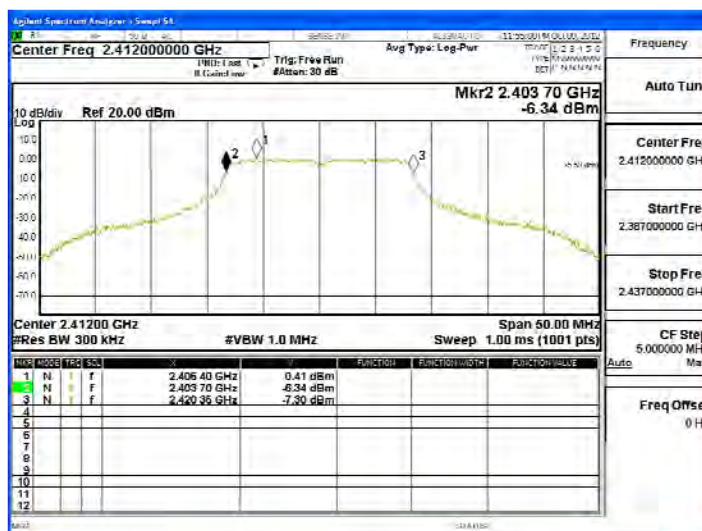
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
1	2412.00	16650	>500	Pass

Figure Channel 1: (Chain A)



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

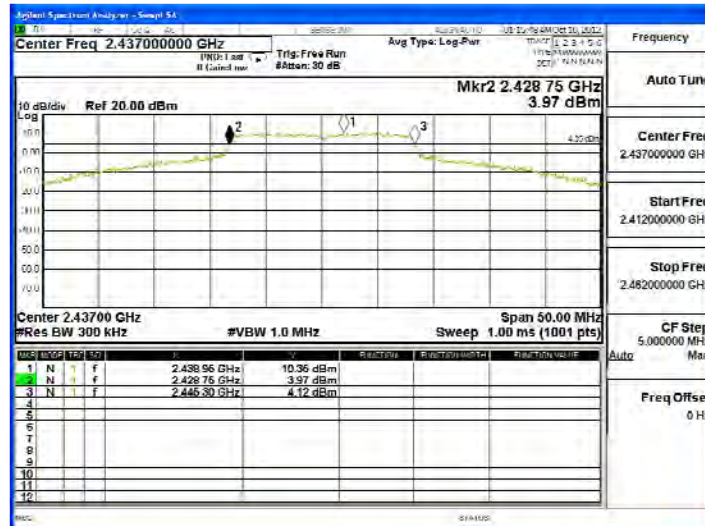
Figure Channel 1: (Chain B)



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

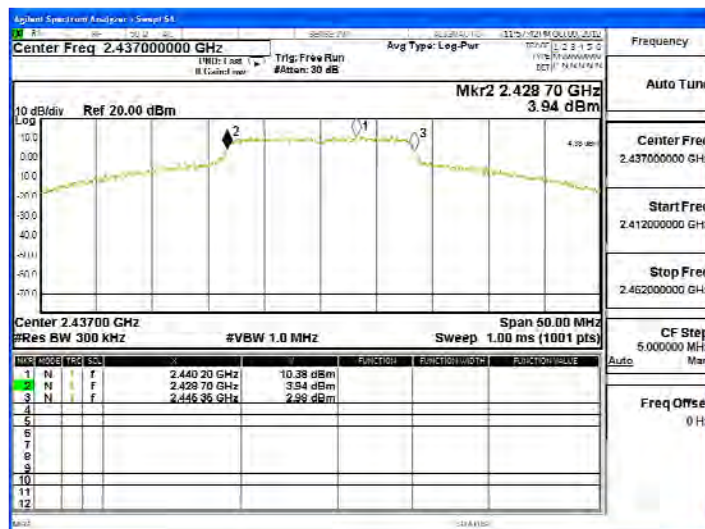
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
6	2437.00	16550	>500	Pass

Figure Channel 6: (Chain A)



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

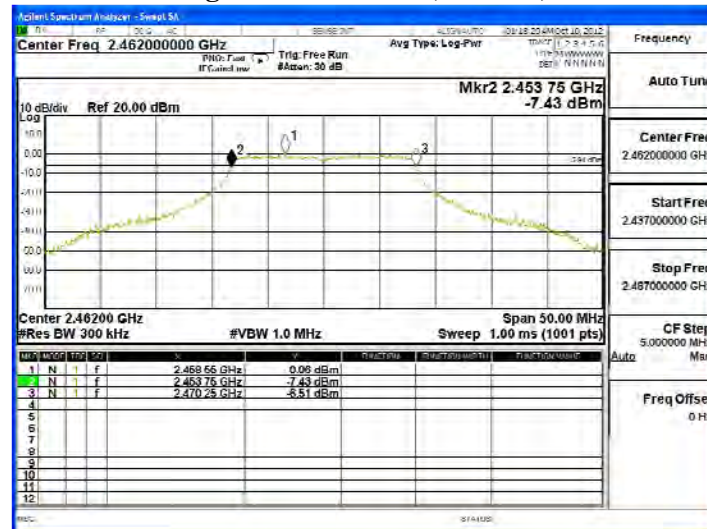
Figure Channel 6: (Chain B)



Product : SpectraGuardR 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	16550	>500	Pass

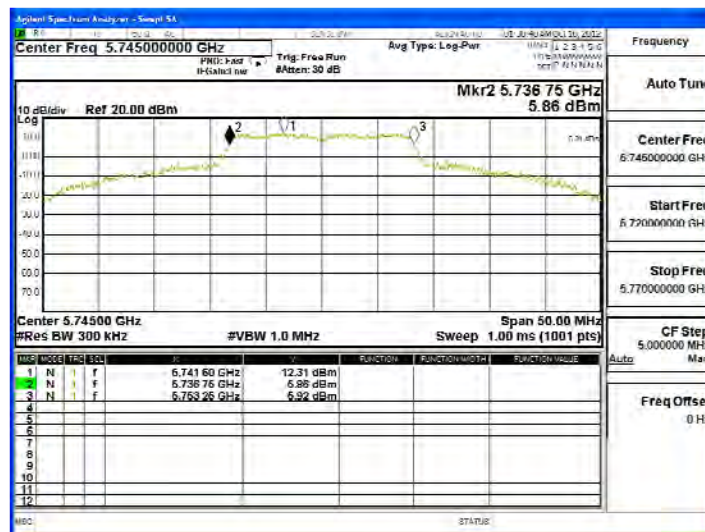
Figure Channel 11: (Chain B)



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

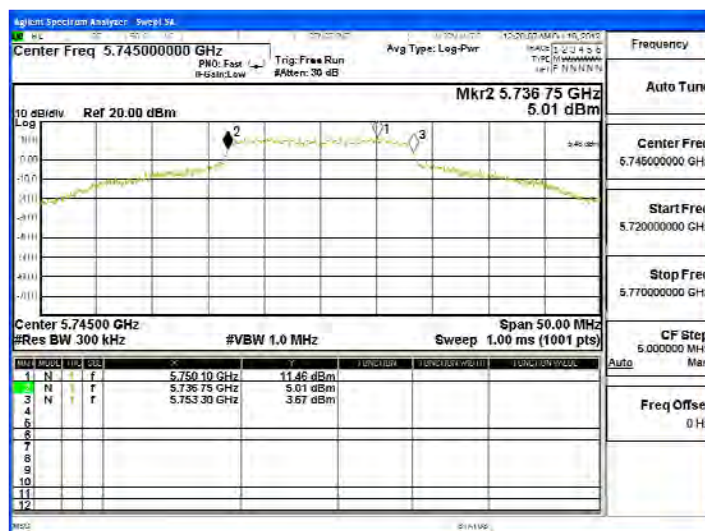
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
149	5745.00	16500	>500	Pass

Figure Channel 149: (Chain A)



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

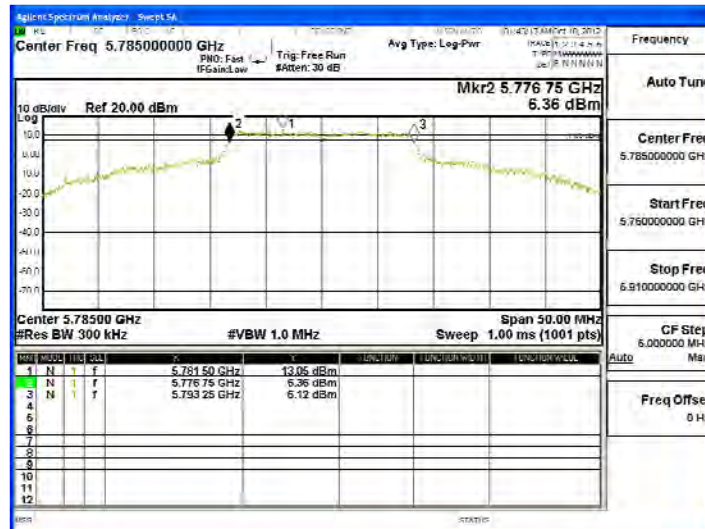
Figure Channel 149: (Chain B)



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

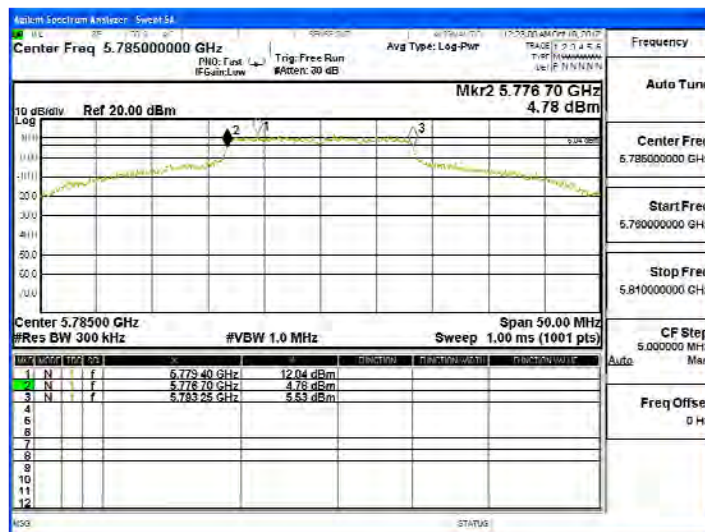
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
157	5785.00	16500	>500	Pass

Figure Channel 157: (Chain A)



Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
157	5785.00	16550	>500	Pass

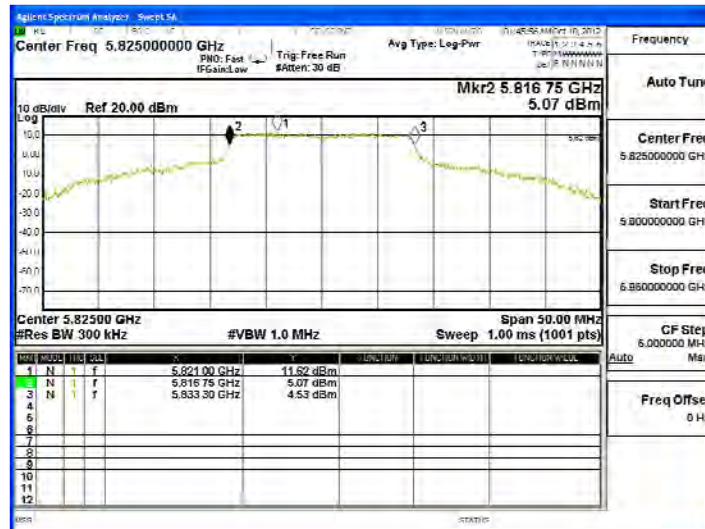
Figure Channel 157: (Chain B)



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

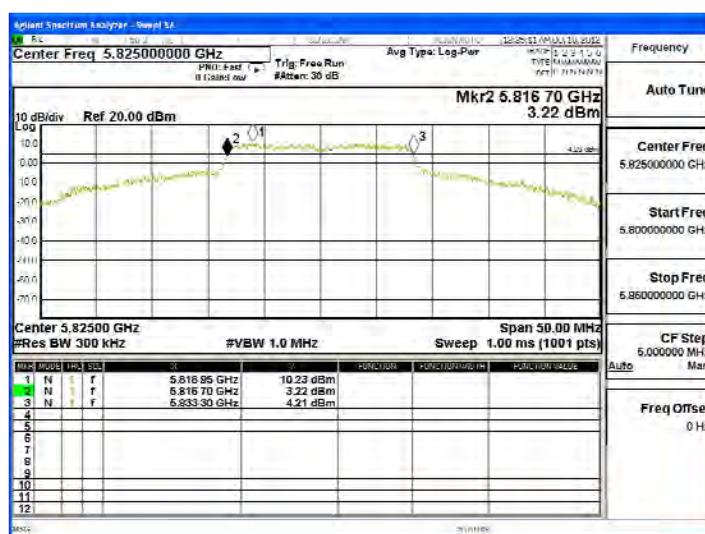
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
165	5825.00	16550	>500	Pass

Figure Channel 165: (Chain A)



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

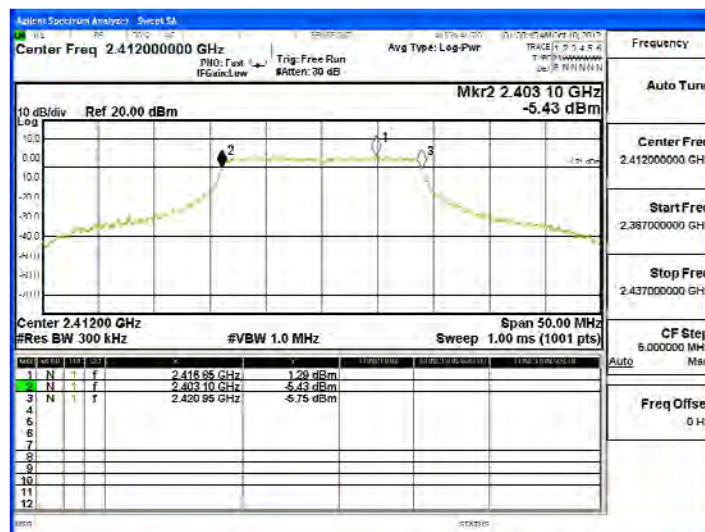
Figure Channel 165: (Chain B)



Product : SpectraGuardR 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)

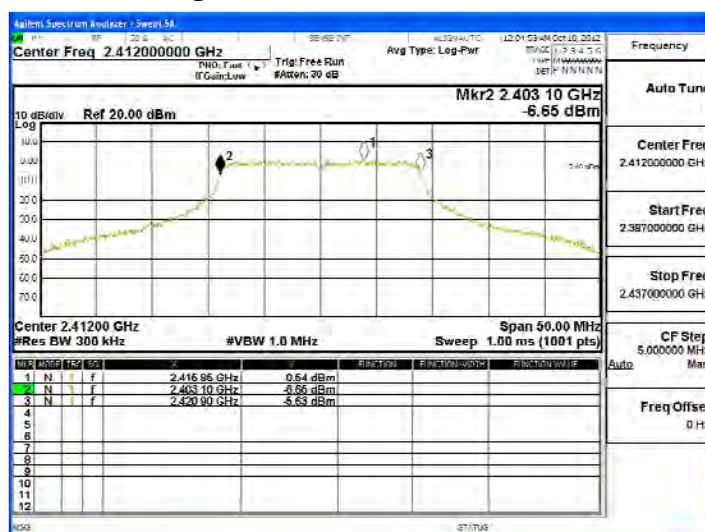
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
1	2412.00	17850	>500	Pass

Figure Channel 1: (Chain A)



Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
1	2412.00	17800	>500	Pass

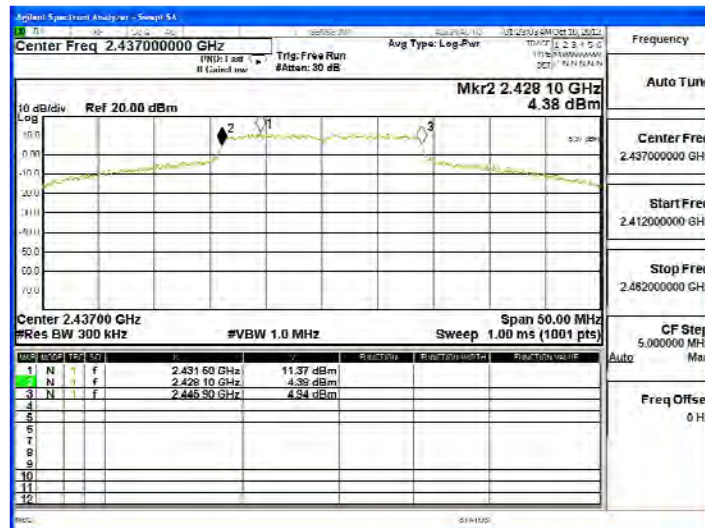
Figure Channel 1: (Chain B)



Product : SpectraGuardR 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)

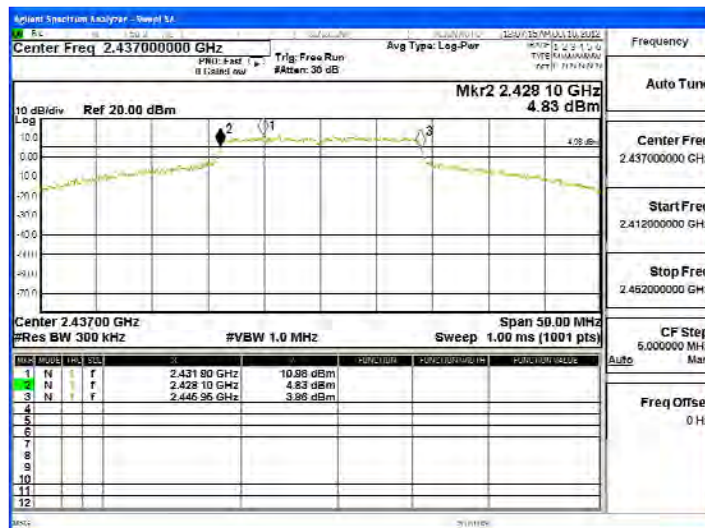
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
6	2437.00	17800	>500	Pass

Figure Channel 6: (Chain A)



Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
6	2437.00	17850	>500	Pass

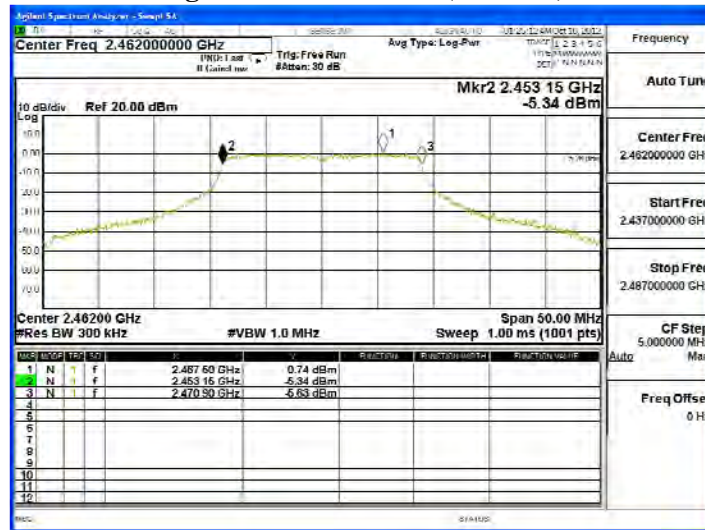
Figure Channel 6: (Chain B)



Product : SpectraGuardR 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)

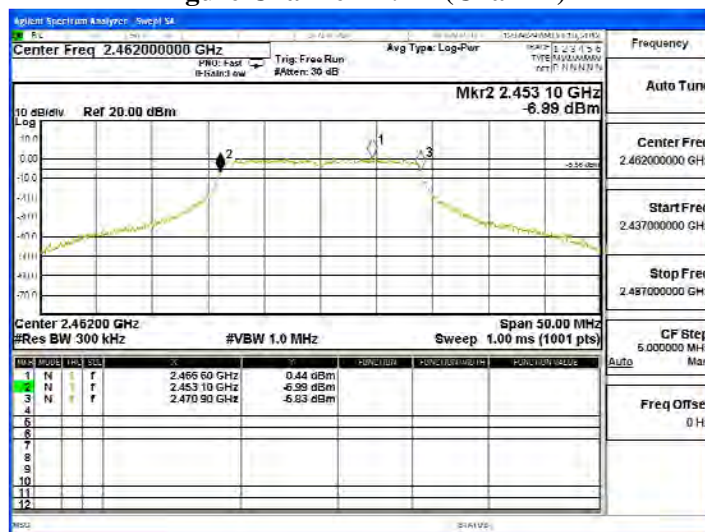
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
11	2462.00	17750	>500	Pass

Figure Channel 11: (Chain A)



Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
11	2462.00	17800	>500	Pass

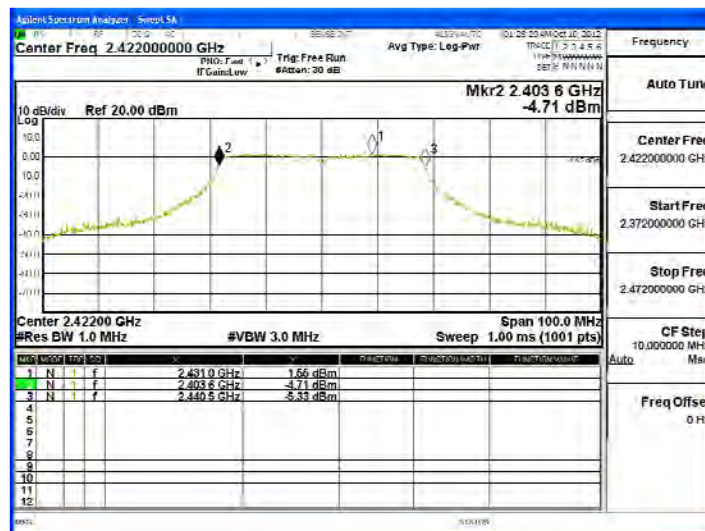
Figure Channel 11: (Chain B)



Product : SpectraGuardR 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)

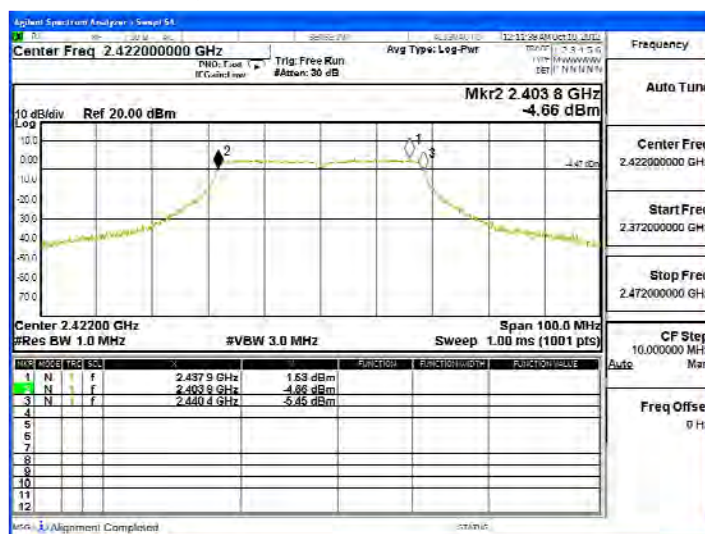
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
1	2422.00	36900	>500	Pass

Figure Channel 1: (Chain A)



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

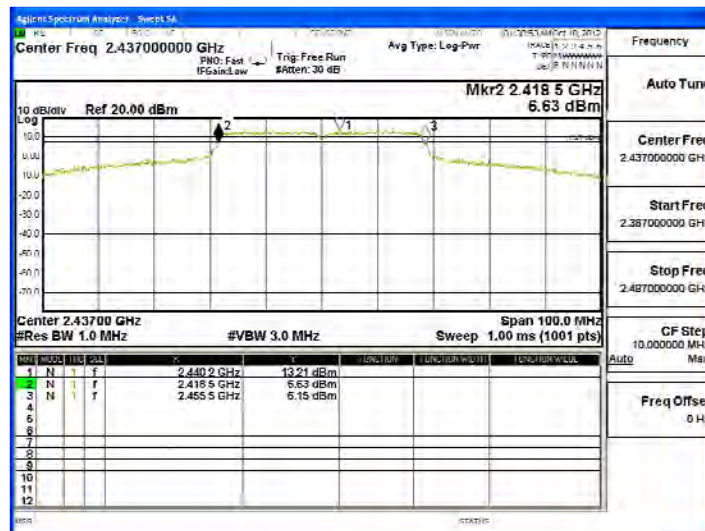
Figure Channel 1: (Chain B)



Product : SpectraGuardR 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)

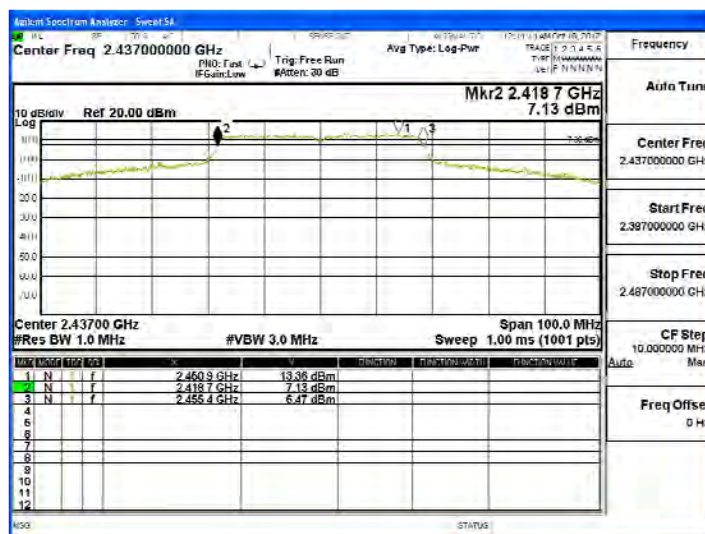
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
4	2437.00	37000	>500	Pass

Figure Channel 4: (Chain A)



Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
4	2437.00	36700	>500	Pass

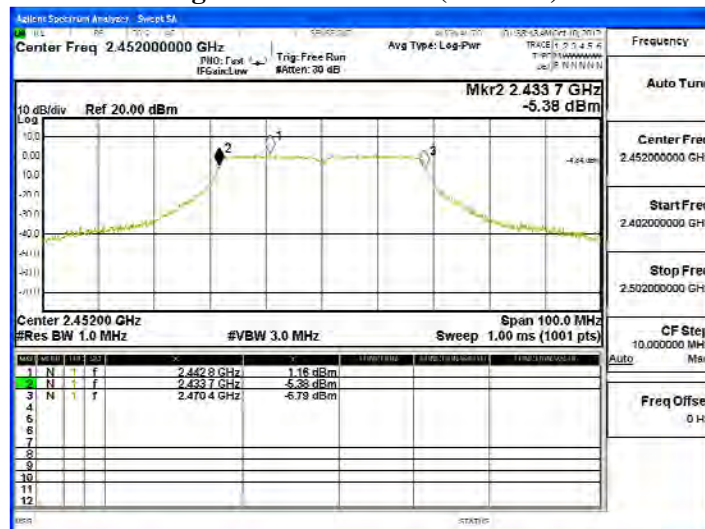
Figure Channel 4: (Chain B)



Product : SpectraGuardR 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)

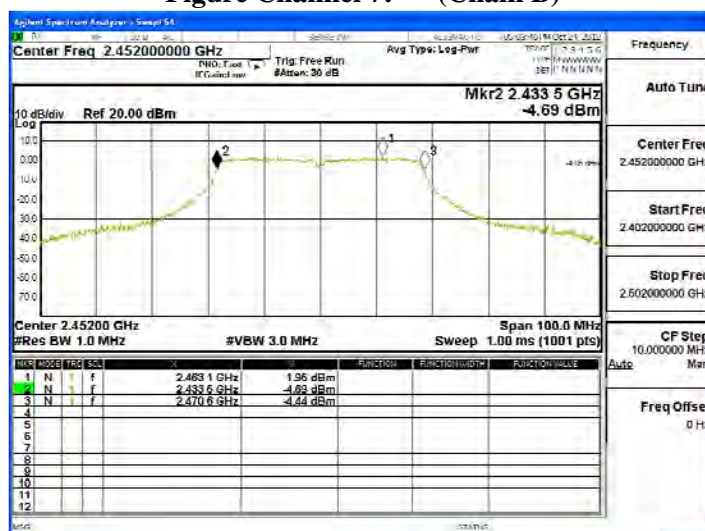
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
7	2452.00	36700	>500	Pass

Figure Channel 7: (Chain A)



Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
7	2452.00	37100	>500	Pass

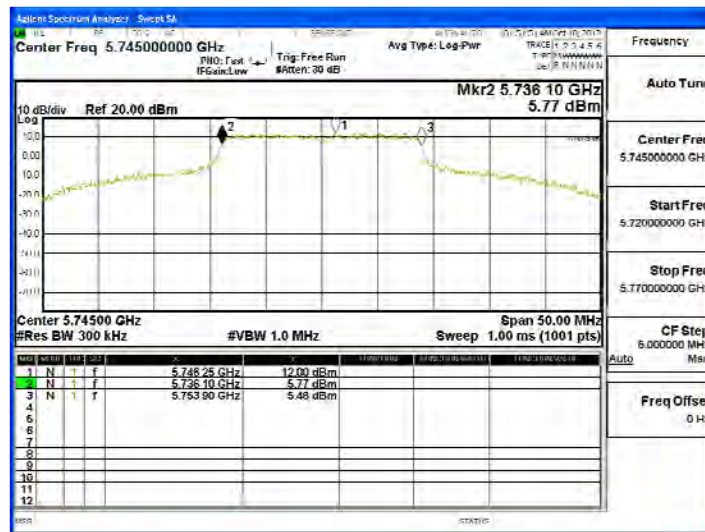
Figure Channel 7: (Chain B)



Product : SpectraGuardR 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)

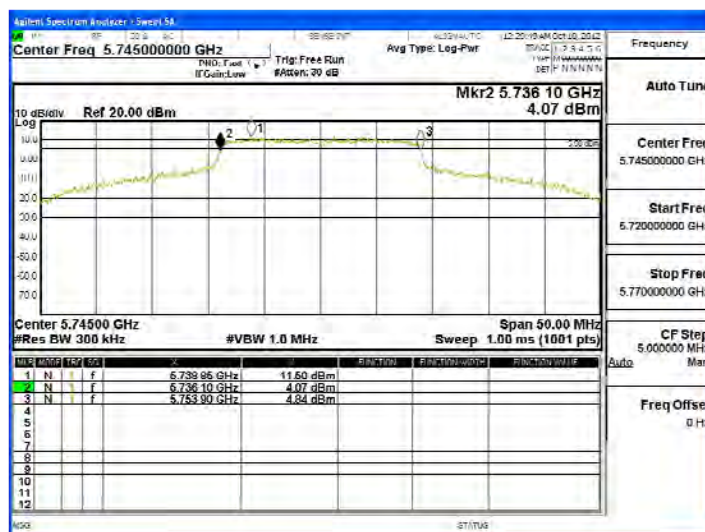
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
149	5745.00	17800	>500	Pass

Figure Channel 149: (Chain A)



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

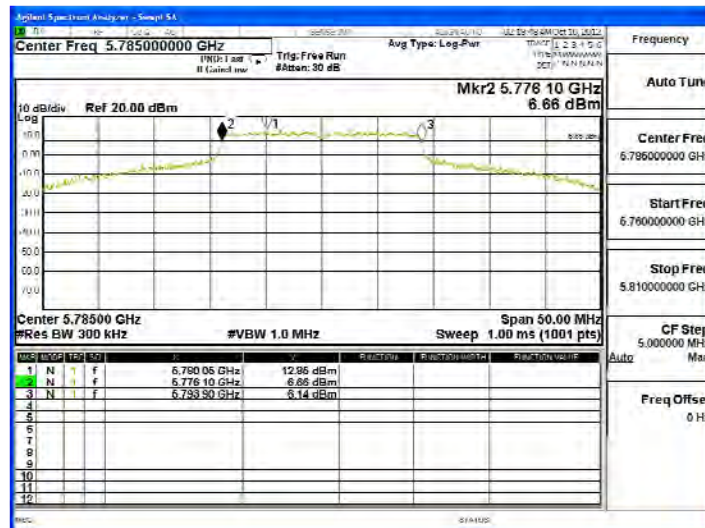
Figure Channel 149: (Chain B)



Product : SpectraGuardR 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)

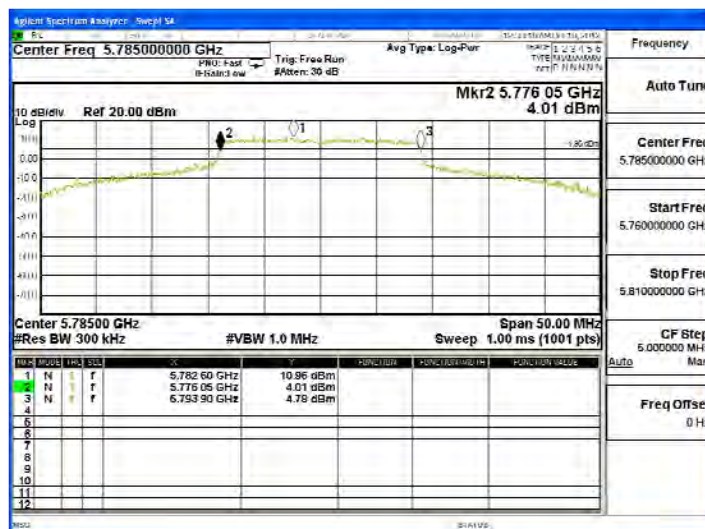
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
157	5785.00	17800	>500	Pass

Figure Channel 157: (Chain A)



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

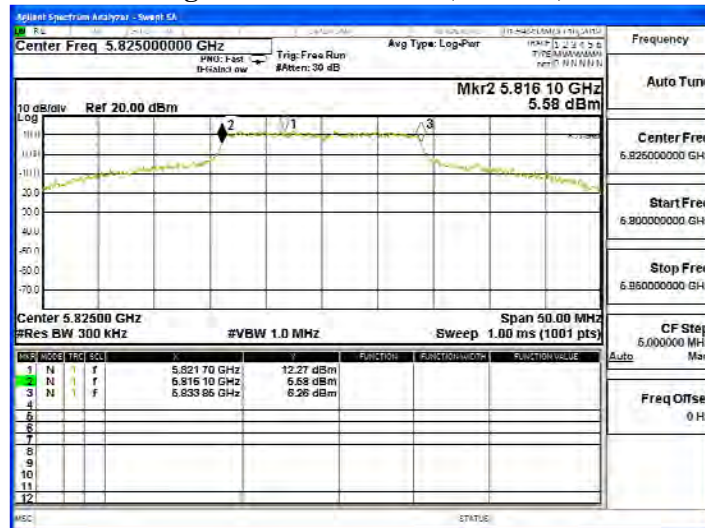
Figure Channel 157: (Chain B)



Product : SpectraGuardR 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)

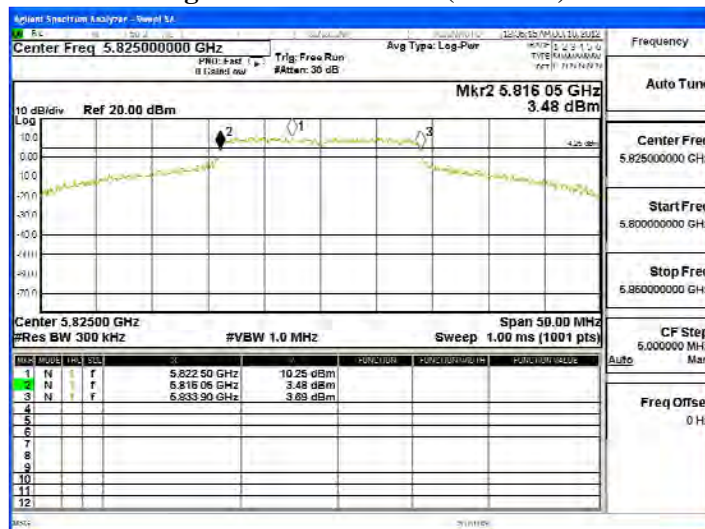
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
165	5825.00	17750	>500	Pass

Figure Channel 165: (Chain A)



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

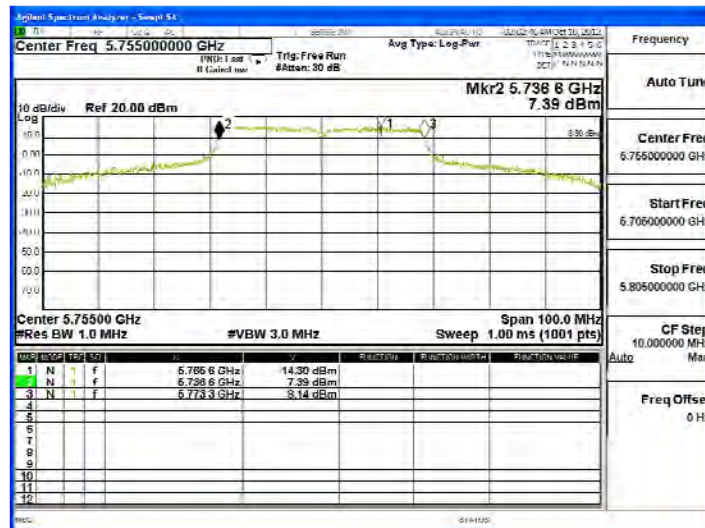
Figure Channel 165: (Chain B)



Product : SpectraGuardR 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)

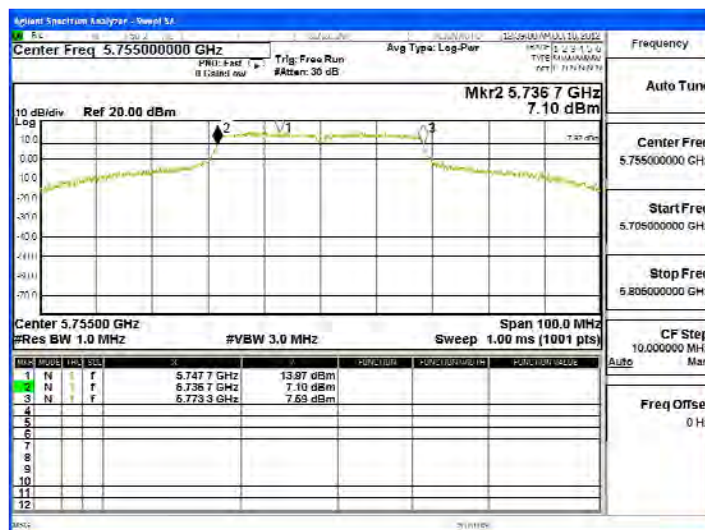
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
151	5755.00	36700	>500	Pass

Figure Channel 151: (Chain A)



Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
151	5755.00	36600	>500	Pass

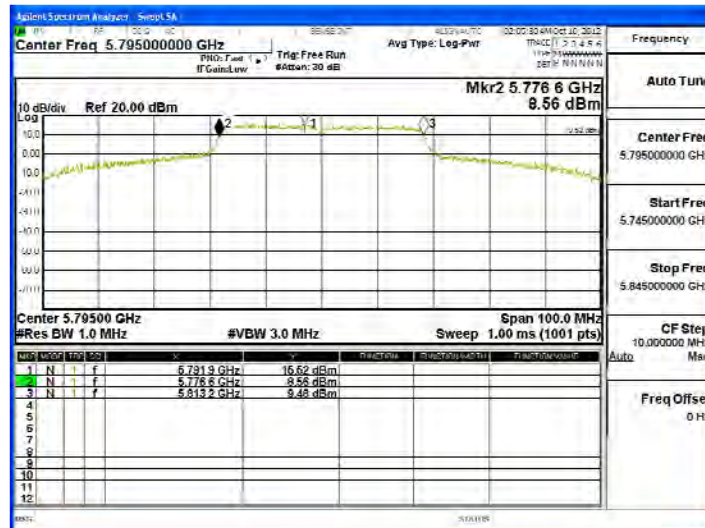
Figure Channel 151: (Chain B)



Product : SpectraGuardR 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)

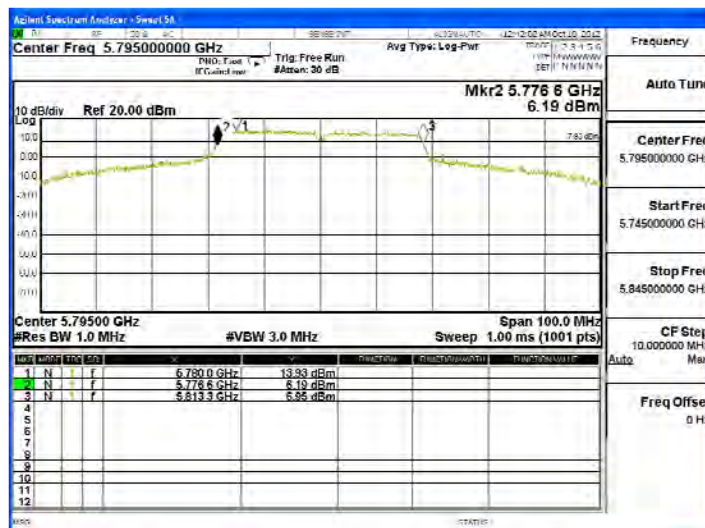
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
159	5795.00	36600	>500	Pass

Figure Channel 159: (Chain A)



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

Figure Channel 159: (Chain B)



8. Power Density

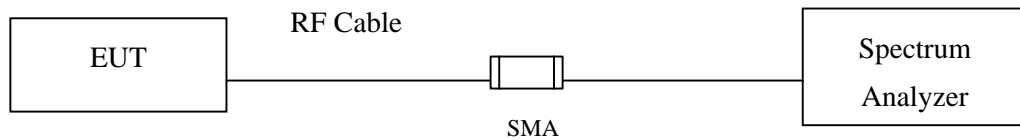
8.1. Test Equipment

	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
	Spectrum Analyzer	R&S	FSP40 / 100170	Jun, 2012
	Spectrum Analyzer	Agilent	E4407B / US39440758	Jun, 2012
X	Spectrum Analyzer	Agilent	N9010A / MY48030495	Apr., 2012

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 C63.4, 2003; tested according to DTS test procedure of Jan. 2012 KDB558074 Section 5.3.2 for compliance to FCC 47CFR 15.247 requirements.

Set RBW= 100 kHz, VBW \geq 300KHz, SPAN to 5-30 % greater than the EBW,

Detector= power average (RMS)

Scale the observed power level to an equivalent value in 3 kHz by adjusting (reducing) the measured power by a bandwidth correction factor (BWCF) where $BWCF = 10\log(3\text{ kHz}/100\text{ kHz}) = -15.2\text{ dB}$.

8.5. Uncertainty

$\pm 1.27\text{ dB}$

8.6. Test Result of Power Density

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

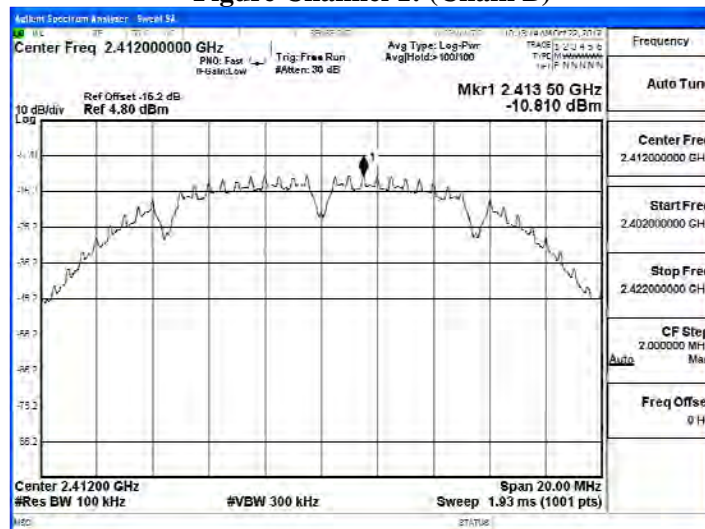
Channel No.	Frequency (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain A+B Power (dBm)	Limit (dBm)	Result
1	2412.00	-10.823	-10.810	-7.806	< 8dBm	Pass

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

Figure Channel 1: (Chain A)



Figure Channel 1: (Chain B)



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

Channel No.	Frequency (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain A+B Power (dBm)	Limit (dBm)	Result
6	2437	-8.374	-8.120	-5.235	< 8dBm	Pass

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

Figure Channel 6: (Chain A)

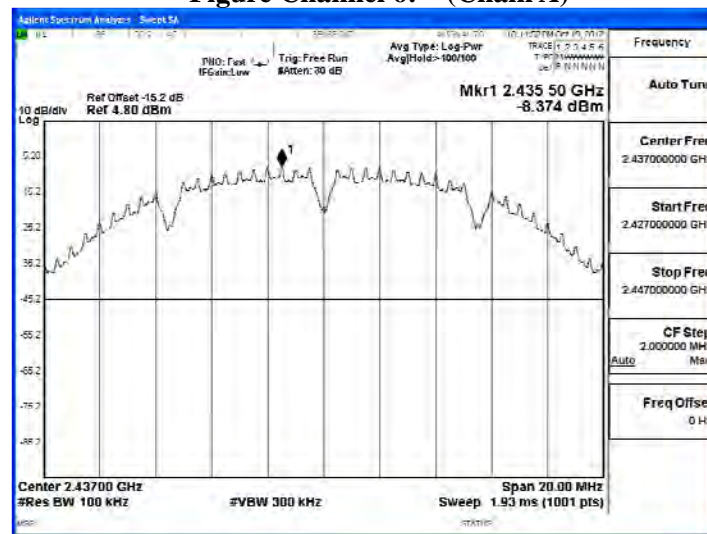


Figure Channel 6: (Chain B)



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

Channel No.	Frequency (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain A+B Power (dBm)	Limit (dBm)	Result
11	2462	-10.891	-9.901	-7.358	< 8dBm	Pass

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

Figure Channel 11: (Chain A)

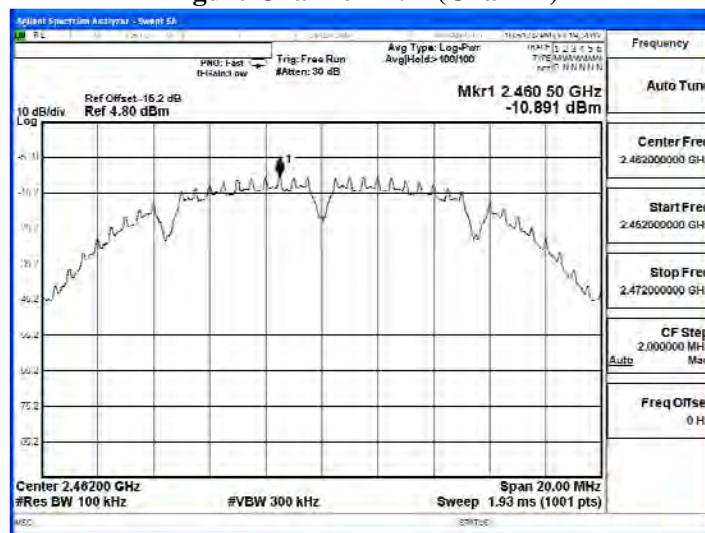
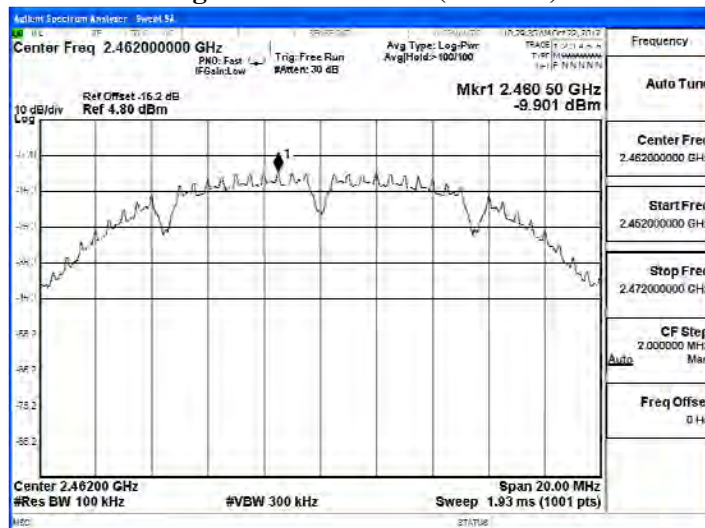


Figure Channel 11: (Chain B)



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

Channel No.	Frequency (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain A+B Power (dBm)	Limit (dBm)	Result
1	2412	-22.263	-21.862	-19.048	< 8dBm	Pass

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

Figure Channel 1: (Chain A)

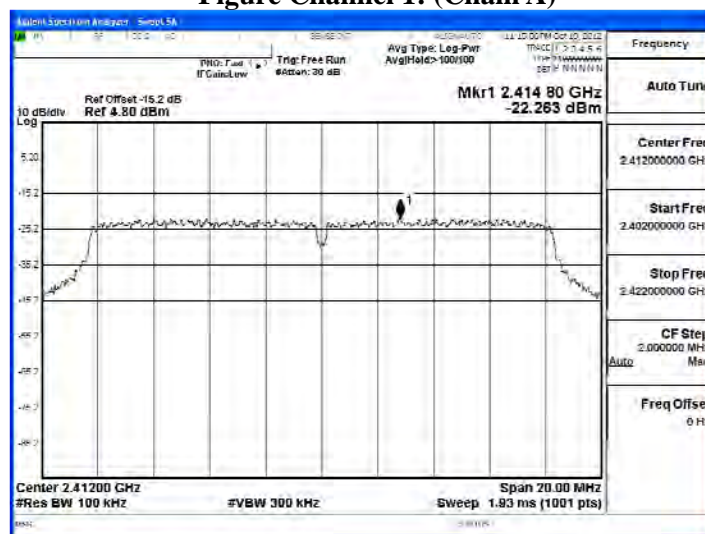
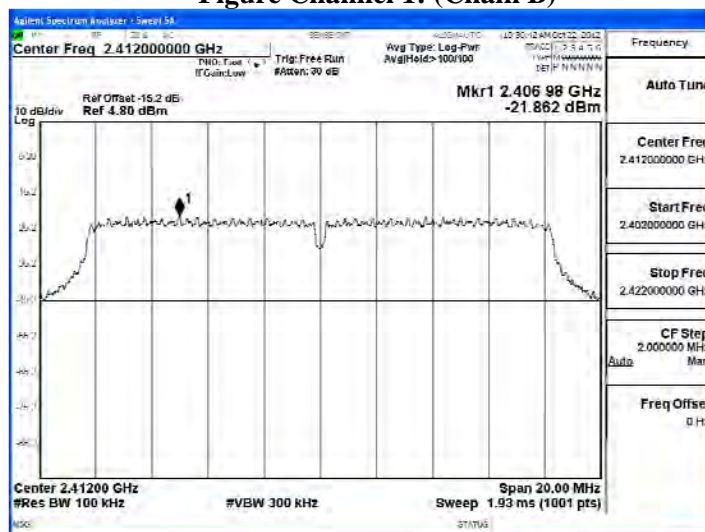


Figure Channel 1: (Chain B)



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

Channel No.	Frequency (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain A+B Power (dBm)	Limit (dBm)	Result
6	2437	-10.018	-10.330	-7.161	< 8dBm	Pass

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

Figure Channel 6: (Chain A)

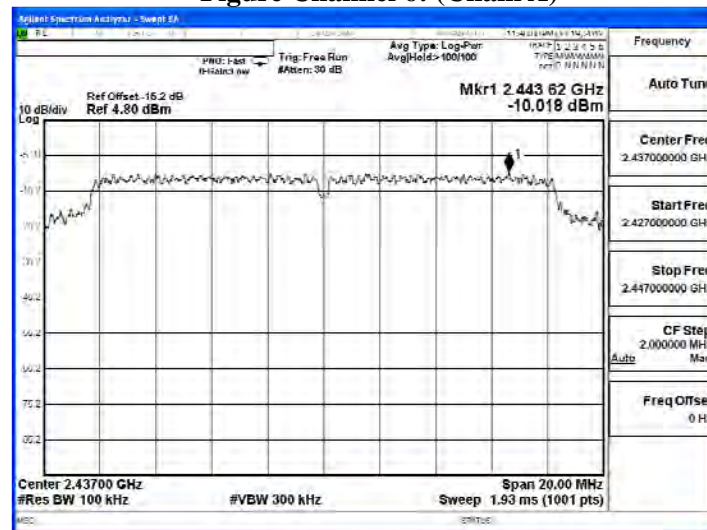
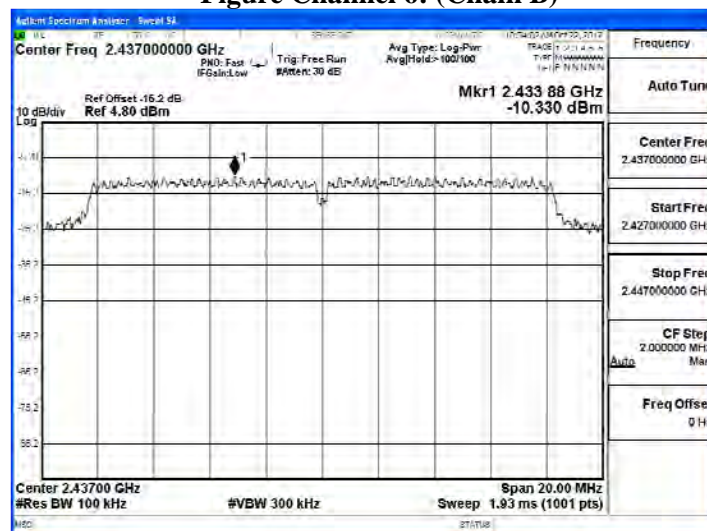


Figure Channel 6: (Chain B)



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

Channel No.	Frequency (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain A+B Power (dBm)	Limit (dBm)	Result
11	2462	-21.297	-20.198	-17.703	< 8dBm	Pass

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

Figure Channel 11: (Chain A)

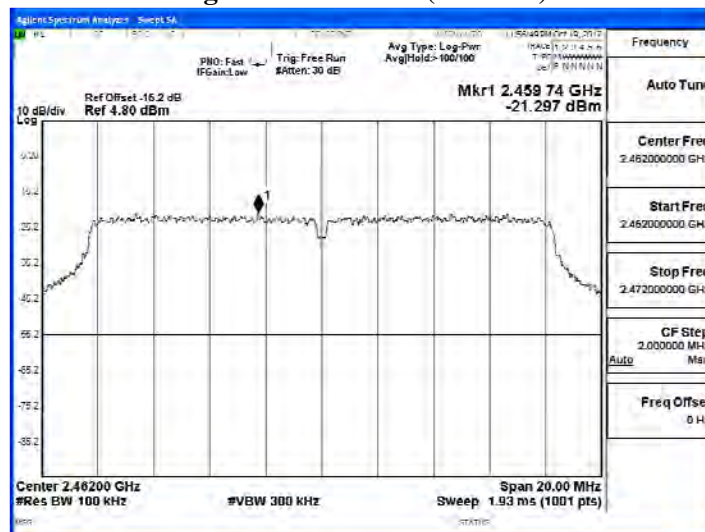
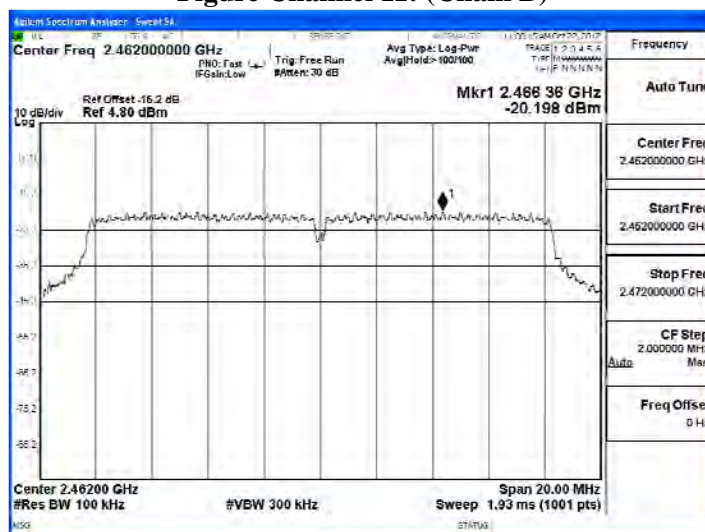


Figure Channel 11: (Chain B)



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

Channel No.	Frequency (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain A+B Power (dBm)	Limit (dBm)	Result
149	5745	-8.120	-10.162	-6.012	< 8dBm	Pass

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

Figure Channel 149: (Chain A)

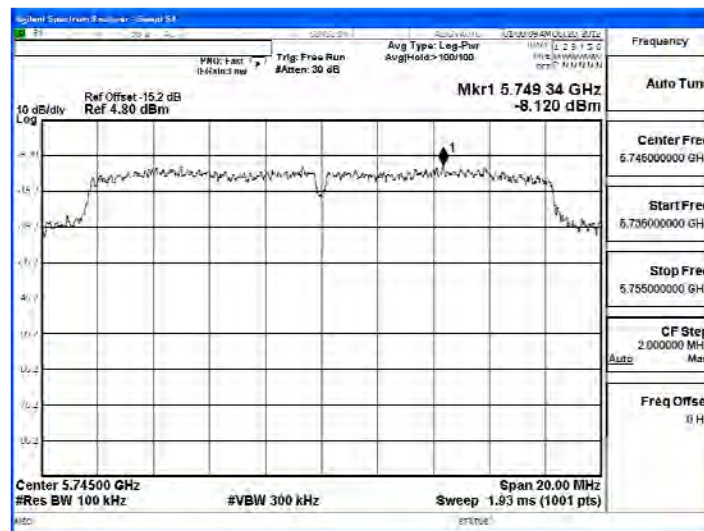
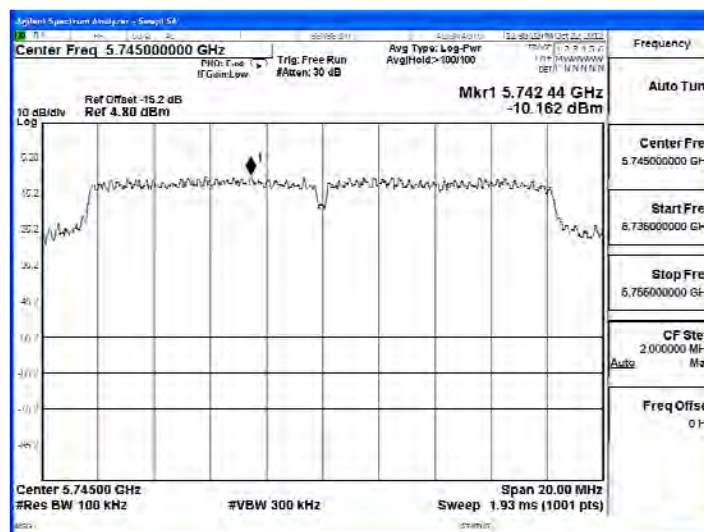


Figure Channel 149: (Chain B)



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

Channel No.	Frequency (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain A+B Power (dBm)	Limit (dBm)	Result
157	5785	-7.311	-9.483	-5.252	< 8dBm	Pass

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

Figure Channel 157: (Chain A)

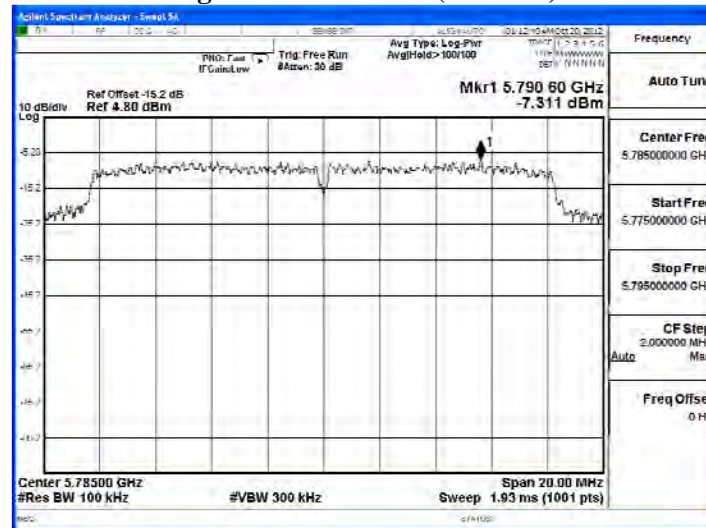
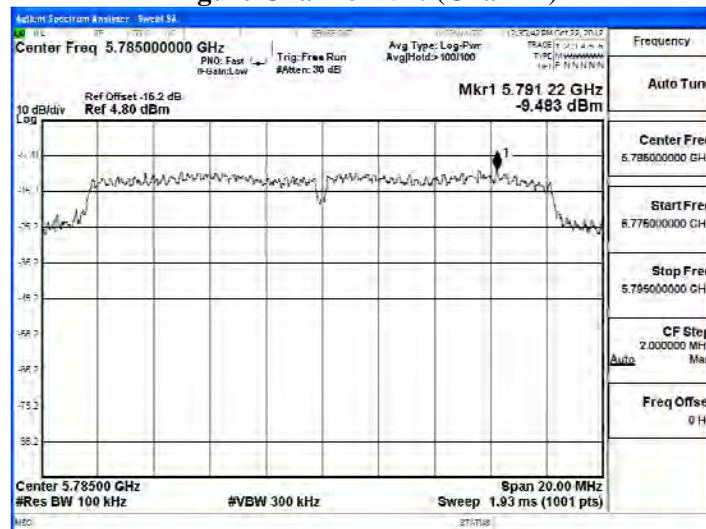


Figure Channel 157: (Chain B)



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

Channel No.	Frequency (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain A+B Power (dBm)	Limit (dBm)	Result
165	5825	-8.098	-9.247	-5.624	< 8dBm	Pass

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

Figure Channel 165: (Chain A)

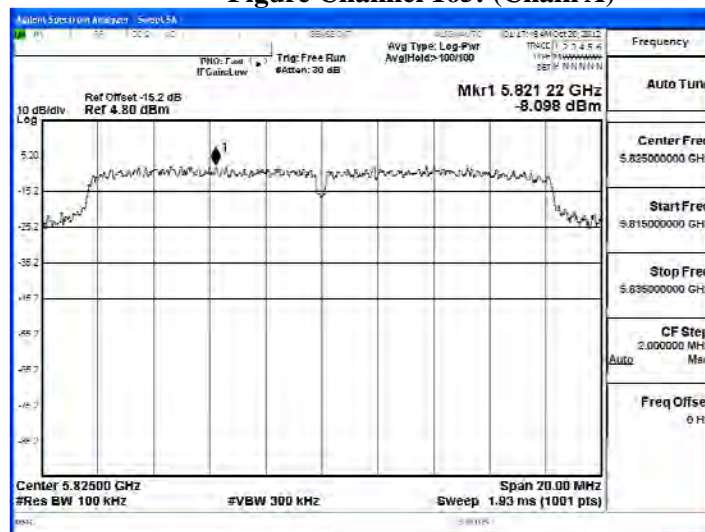
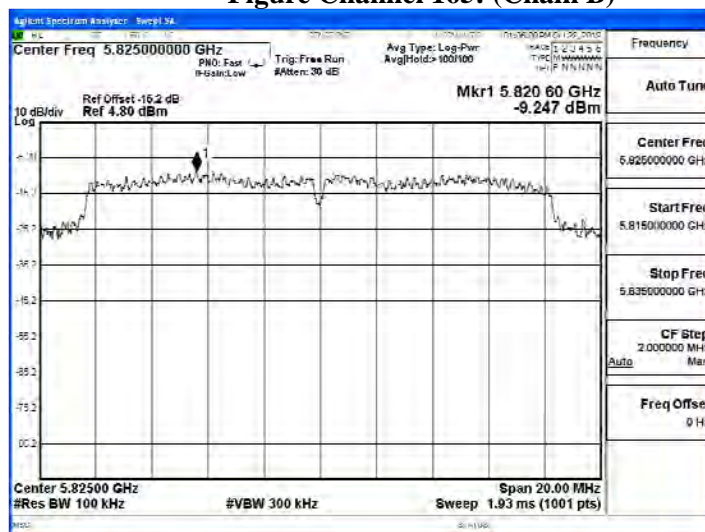


Figure Channel 165: (Chain B)



Product : SpectraGuardR 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)

Channel No.	Frequency (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain A+B Power (dBm)	Limit (dBm)	Result
1	2412.00	-20.405	-20.490	-17.437	< 8dBm	Pass

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

Figure Channel 1: (Chain A)

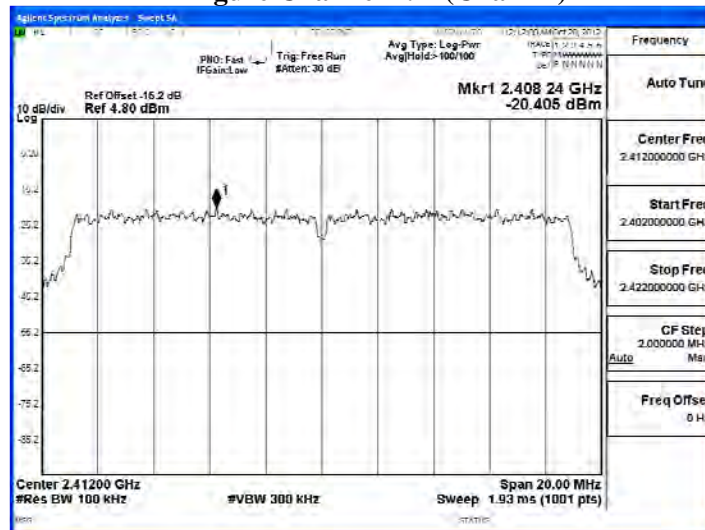
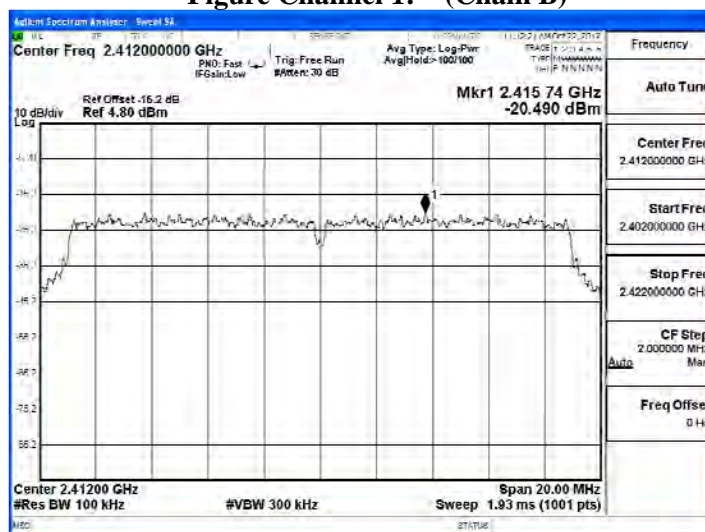


Figure Channel 1: (Chain B)



Product : SpectraGuardR 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)

Channel No.	Frequency (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain A+B Power (dBm)	Limit (dBm)	Result
6	2437.00	-8.838	-9.563	-6.175	< 8dBm	Pass

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

Figure Channel 6: (Chain A)

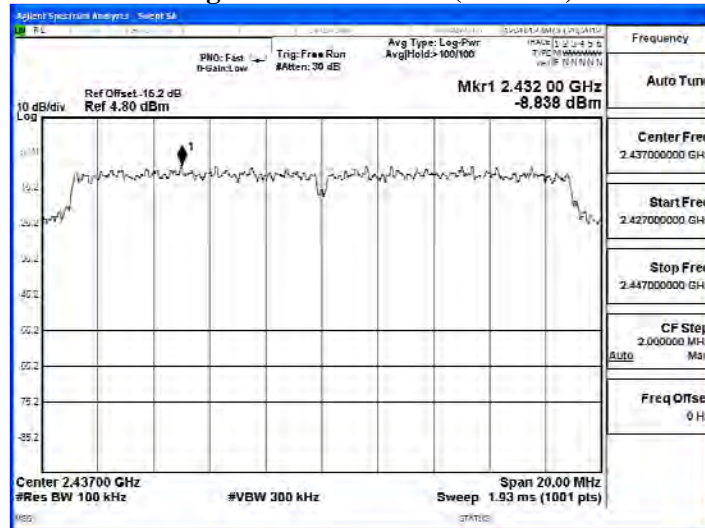
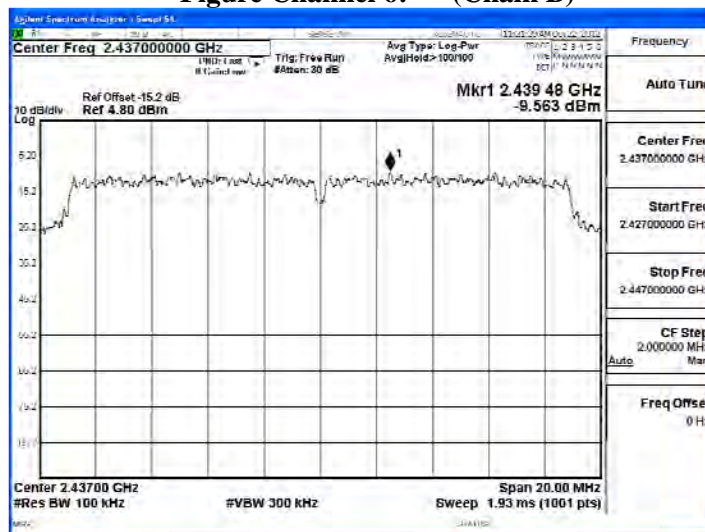


Figure Channel 6: (Chain B)



Product : SpectraGuardR 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)

Channel No.	Frequency (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain A+B Power (dBm)	Limit (dBm)	Result
11	2462.00	-20.597	-18.940	-16.680	< 8dBm	Pass

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

Figure Channel 11: (Chain A)

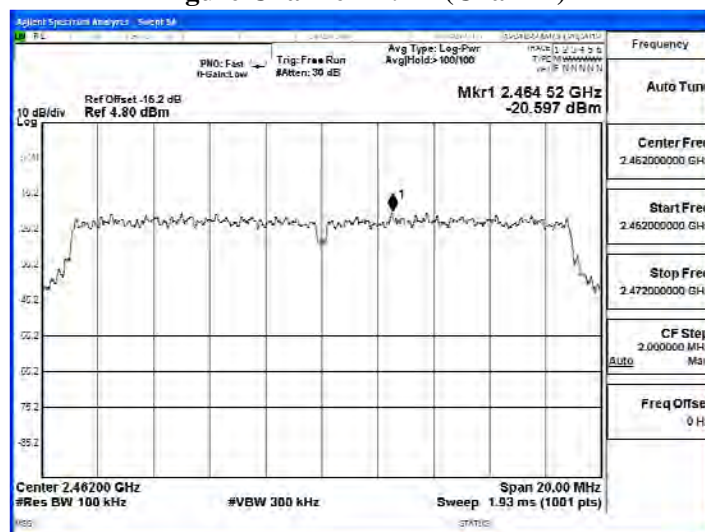
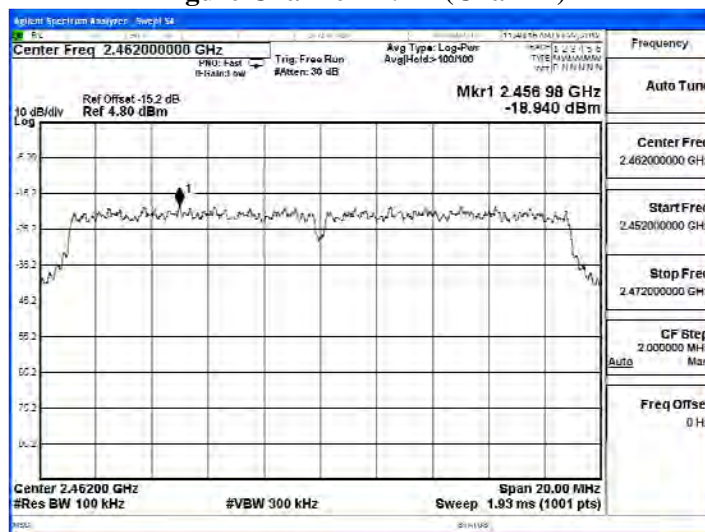


Figure Channel 11: (Chain B)



Product : SpectraGuardR 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)

Channel No.	Frequency (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain A+B Power (dBm)	Limit (dBm)	Result
1	2422.00	-25.161	-25.468	-22.301	< 8dBm	Pass

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

Figure Channel 1: (Chain A)

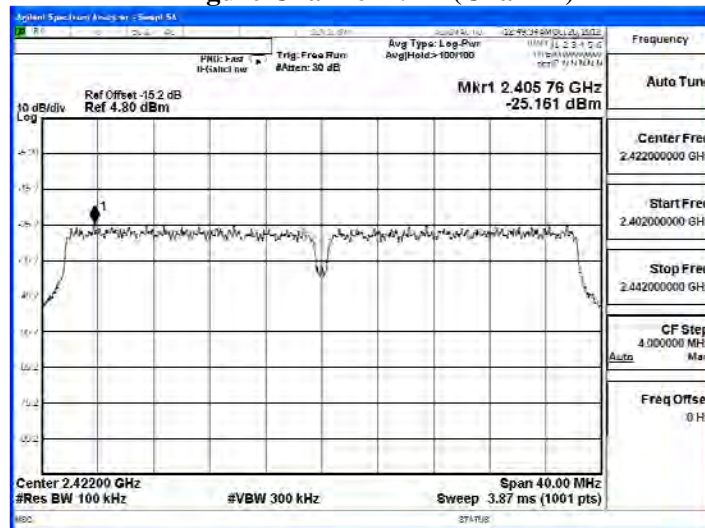
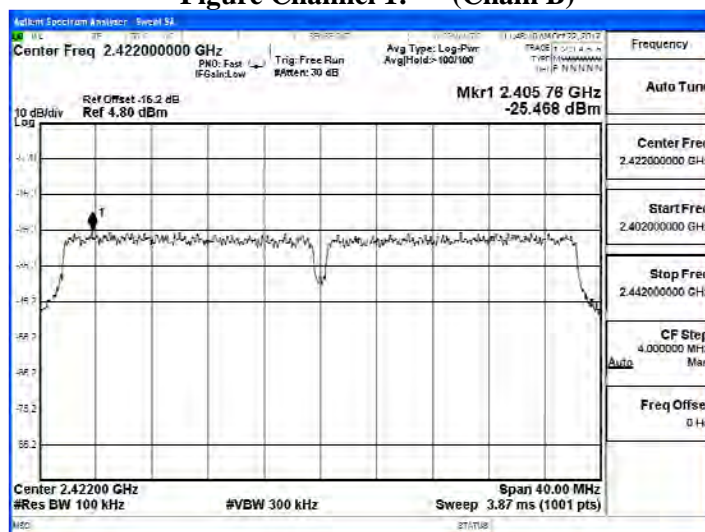


Figure Channel 1: (Chain B)



Product : SpectraGuardR 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)

Channel No.	Frequency (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain A+B Power (dBm)	Limit (dBm)	Result
4	2437.00	-12.131	-12.630	-9.363	< 8dBm	Pass

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

Figure Channel 4: (Chain A)

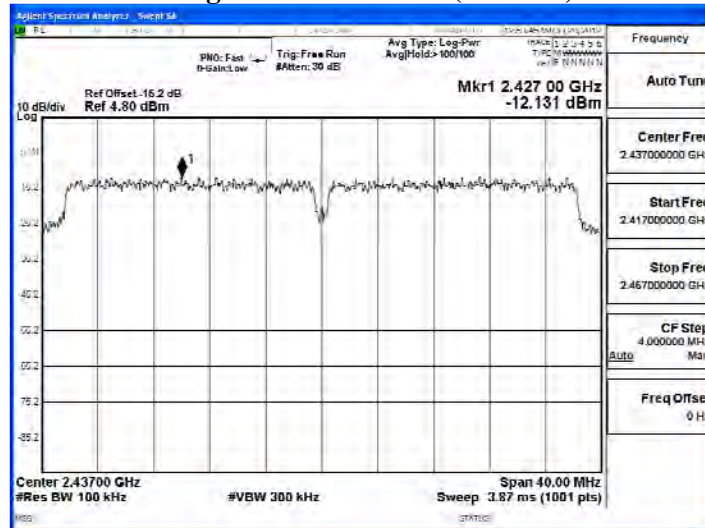
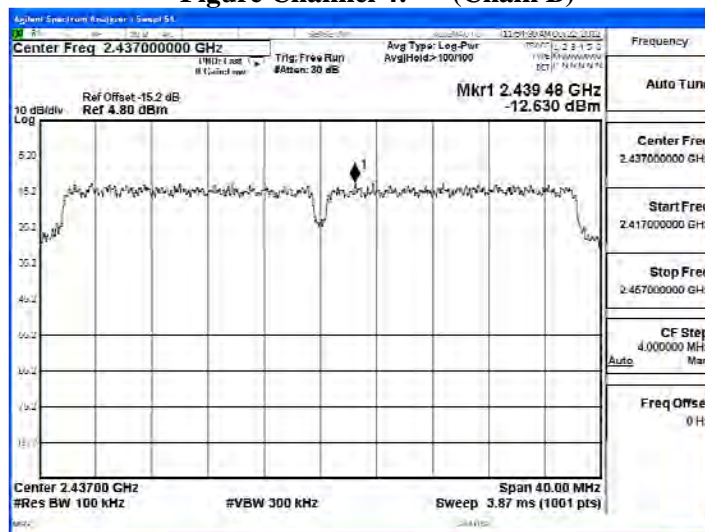


Figure Channel 4: (Chain B)



Product : SpectraGuardR 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)

Channel No.	Frequency (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain A+B Power (dBm)	Limit (dBm)	Result
7	2452.00	-24.476	-24.009	-21.226	< 8dBm	Pass

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

Figure Channel 7: (Chain A)

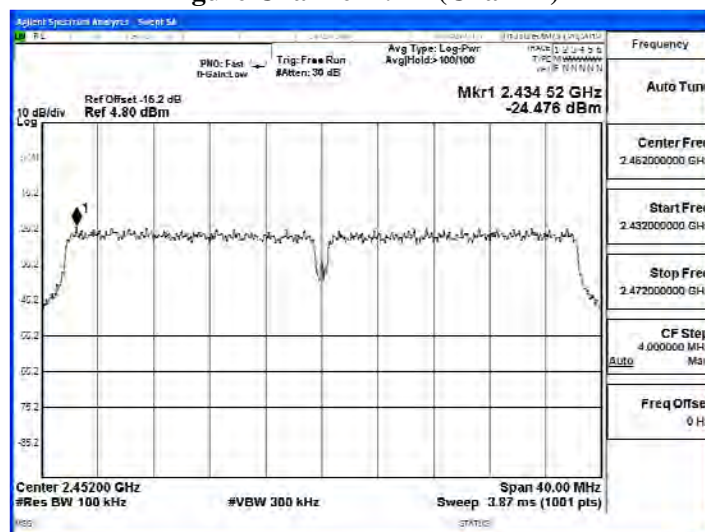
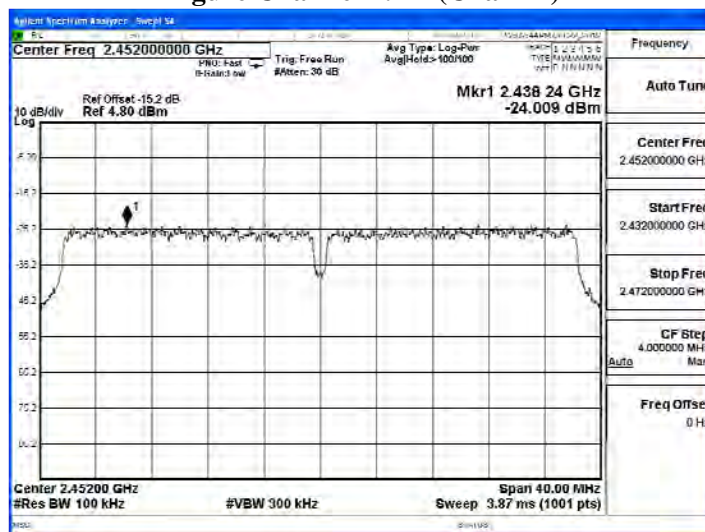


Figure Channel 7: (Chain B)



Product : SpectraGuardR 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)

Channel No.	Frequency (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain A+B Power (dBm)	Limit (dBm)	Result
149	5745.00	-7.790	-9.874	-5.698	< 8dBm	Pass

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

Figure Channel 149: (Chain A)

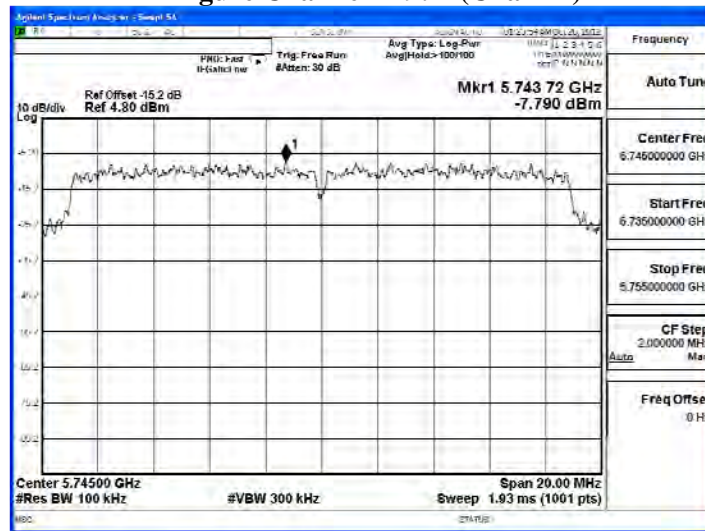
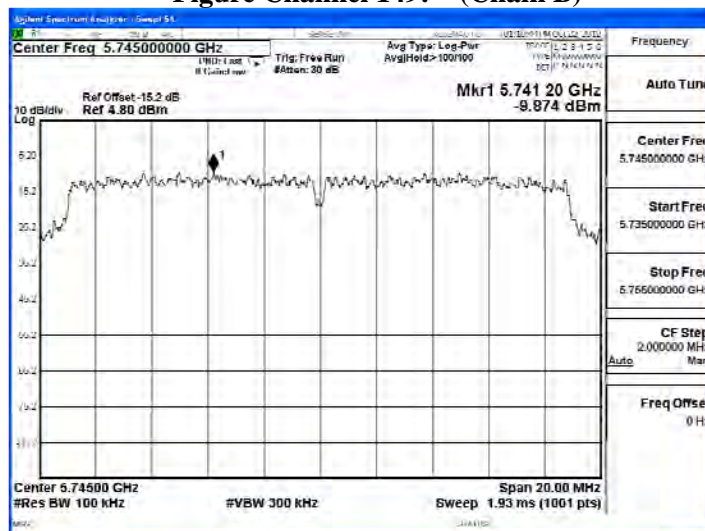


Figure Channel 149: (Chain B)



Product : SpectraGuardR 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)

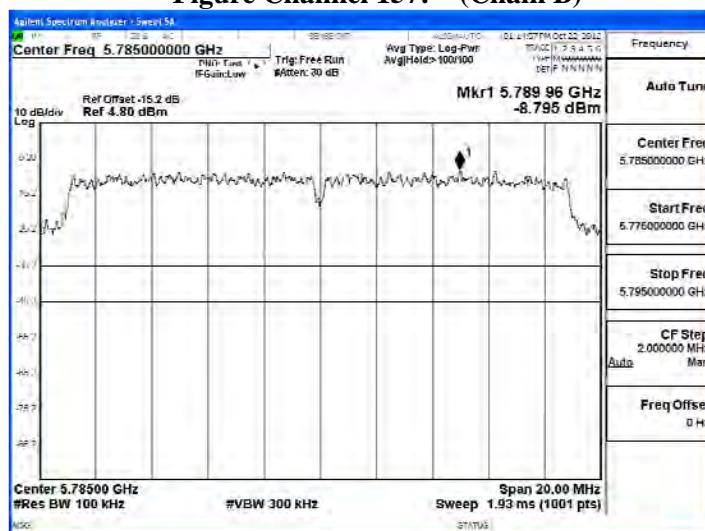
Channel No.	Frequency (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain A+B Power (dBm)	Limit (dBm)	Result
157	5785.00	-6.188	-8.795	-4.288	< 8dBm	Pass

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

Figure Channel 157: (Chain A)



Figure Channel 157: (Chain B)



Product : SpectraGuardR 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)

Channel No.	Frequency (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain A+B Power (dBm)	Limit (dBm)	Result
151	5755.00	-11.069	-11.887	-8.448	< 8dBm	Pass

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

Figure Channel 151: (Chain A)

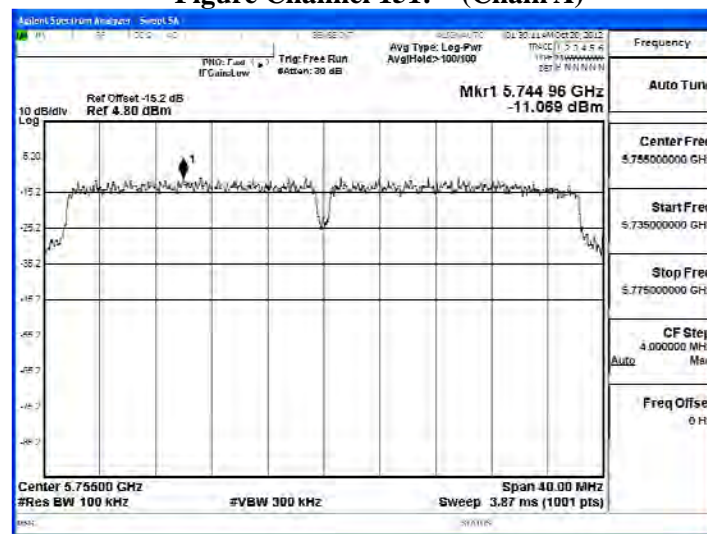
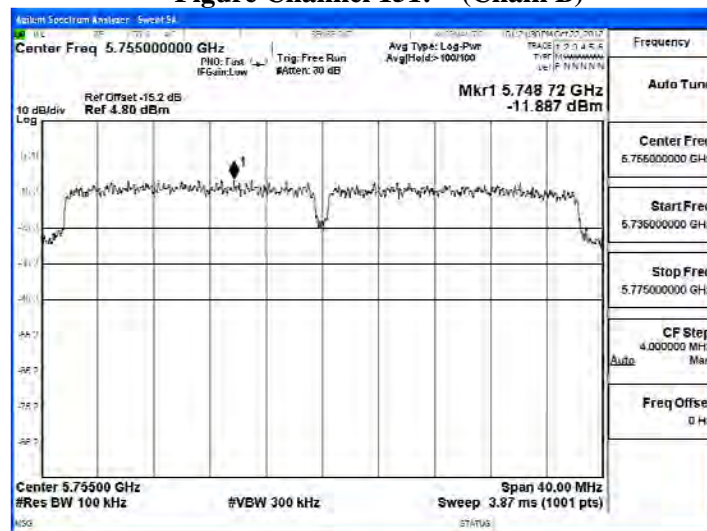


Figure Channel 151: (Chain B)



Product : SpectraGuardR 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)

Channel No.	Frequency (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain A+B Power (dBm)	Limit (dBm)	Result
159	5795.00	-9.696	-11.842	-7.627	< 8dBm	Pass

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

Figure Channel 159: (Chain A)

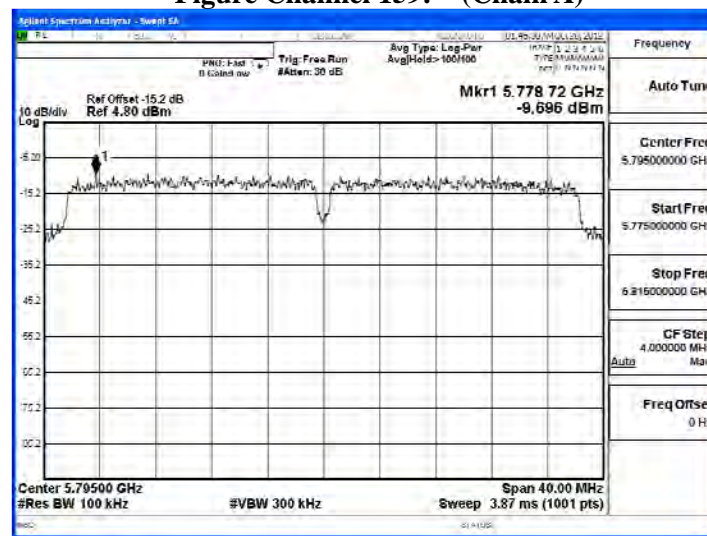
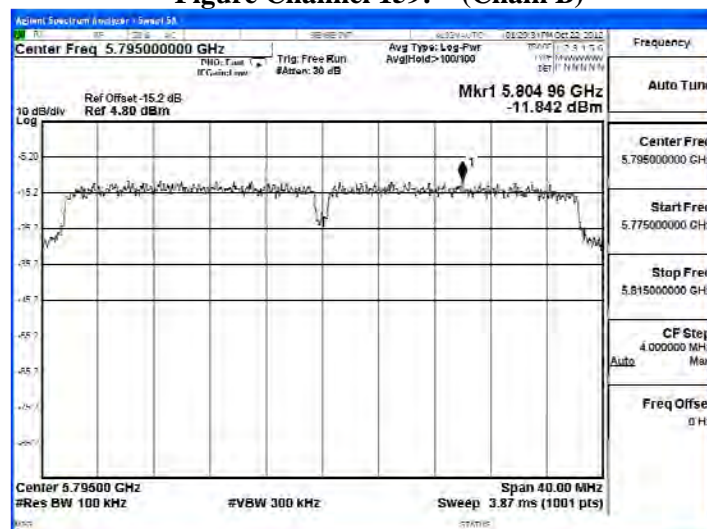


Figure Channel 159: (Chain B)



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

Channel No.	Frequency (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain A+B Power (dBm)	Limit (dBm)	Result
1	2412.00	-8.956	-9.348	-6.137	< 8dBm	Pass

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

Figure Channel 1: (Chain A)

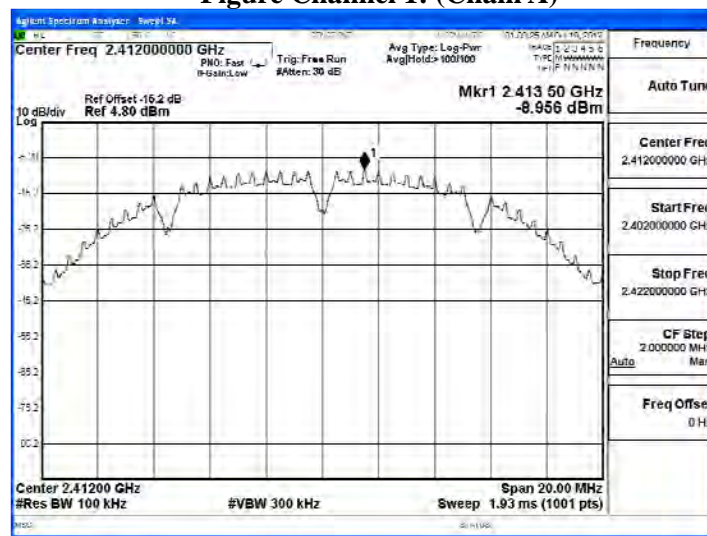
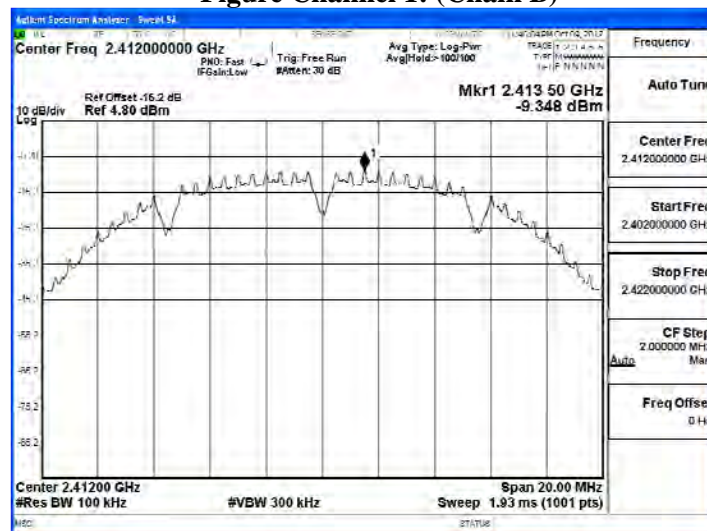


Figure Channel 1: (Chain B)



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

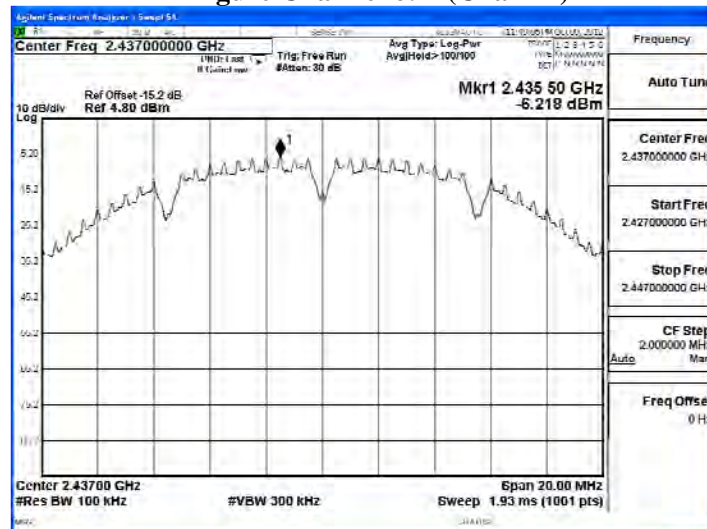
Channel No.	Frequency (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain A+B Power (dBm)	Limit (dBm)	Result
6	2437	-6.282	-6.218	-3.240	< 8dBm	Pass

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

Figure Channel 6: (Chain A)



Figure Channel 6: (Chain B)



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

Channel No.	Frequency (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain A+B Power (dBm)	Limit (dBm)	Result
11	2462	-9.179	-9.968	-6.545	< 8dBm	Pass

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

Figure Channel 11: (Chain A)

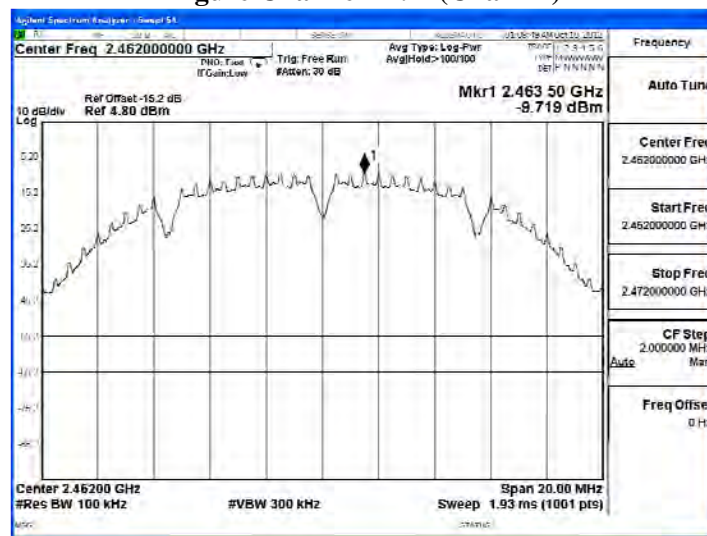
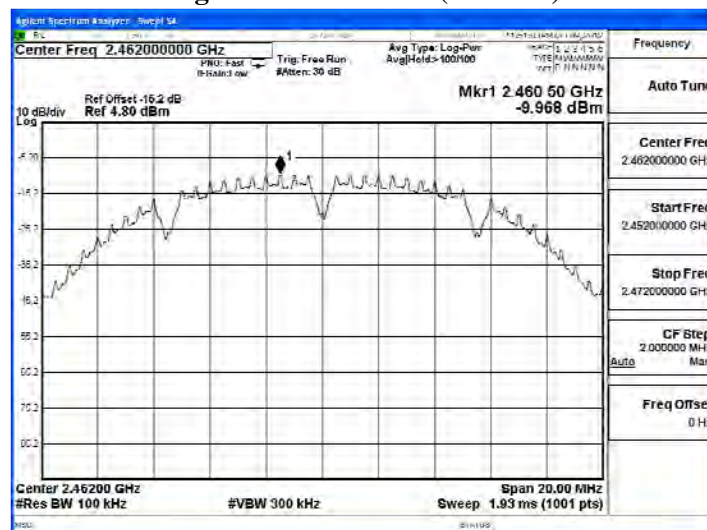


Figure Channel 11: (Chain B)



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

Channel No.	Frequency (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain A+B Power (dBm)	Limit (dBm)	Result
1	2412	-18.960	-19.266	-16.100	< 8dBm	Pass

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

Figure Channel 1: (Chain A)

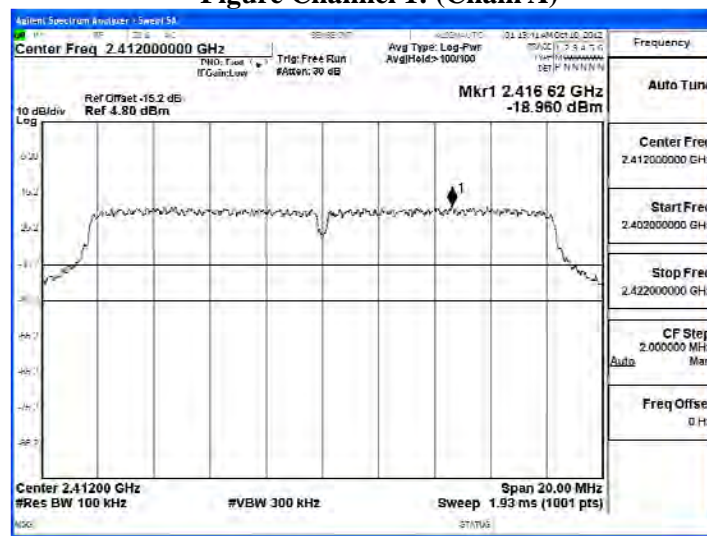
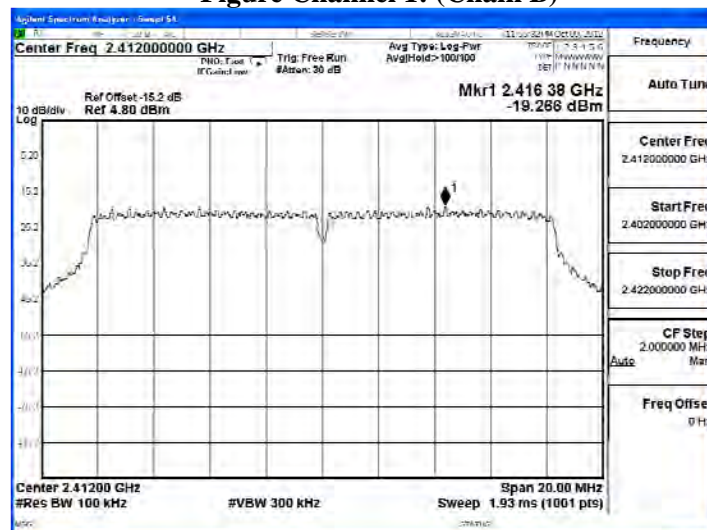


Figure Channel 1: (Chain B)



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

Channel No.	Frequency (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain A+B Power (dBm)	Limit (dBm)	Result
6	2437	-9.700	-9.555	-6.617	< 8dBm	Pass

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

Figure Channel 6: (Chain A)

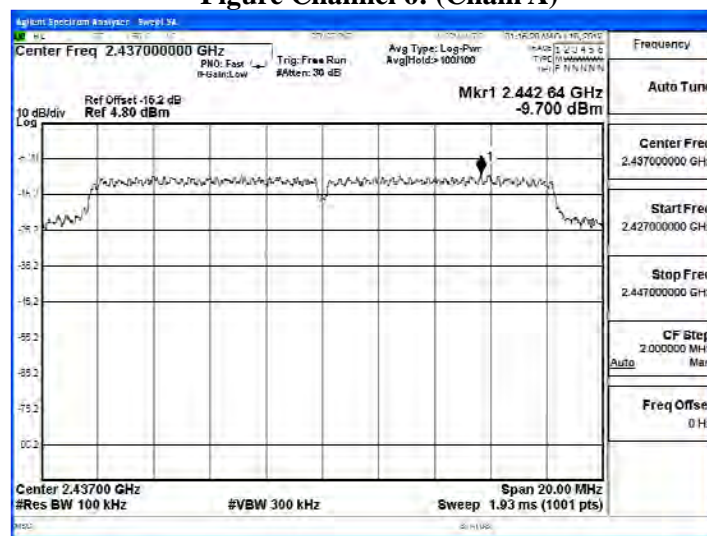
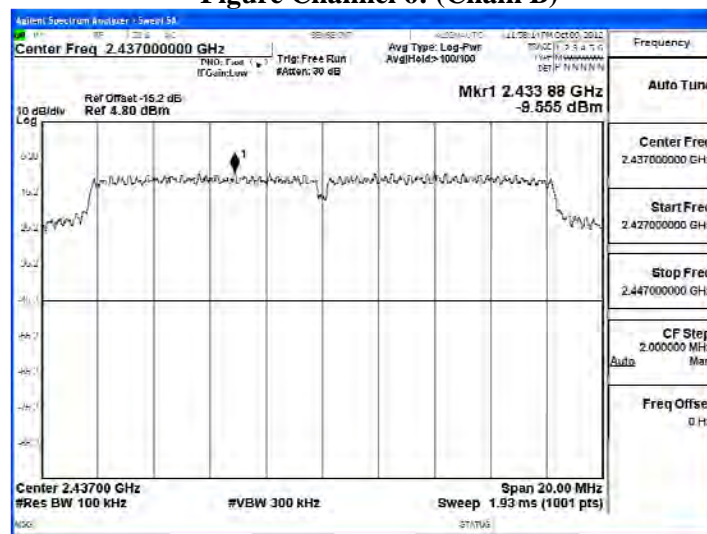


Figure Channel 6: (Chain B)



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

Channel No.	Frequency (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain A+B Power (dBm)	Limit (dBm)	Result
11	2462	-21.065	-20.894	-17.968	< 8dBm	Pass

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

Figure Channel 11: (Chain A)

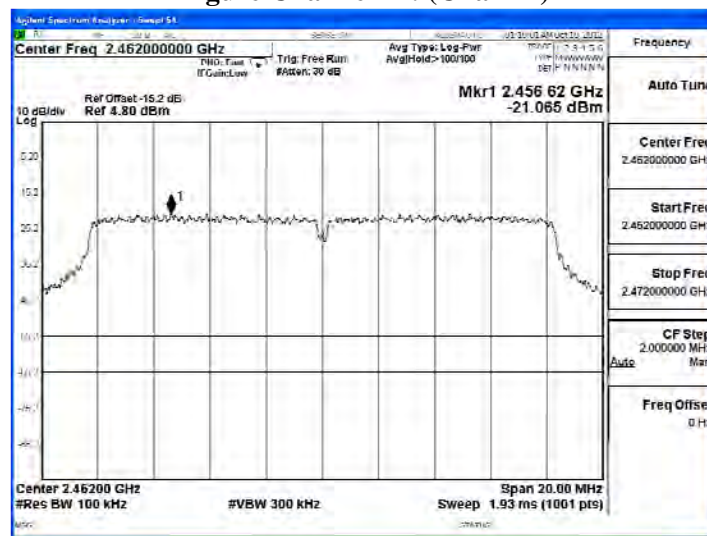
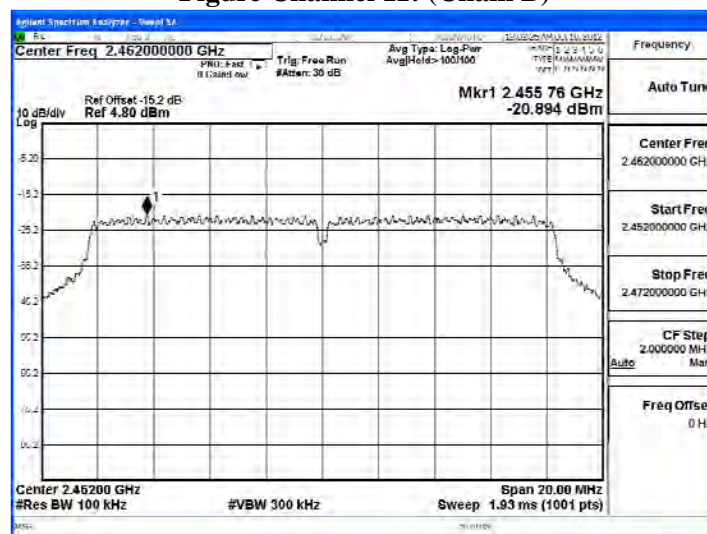


Figure Channel 11: (Chain B)



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

Channel No.	Frequency (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain A+B Power (dBm)	Limit (dBm)	Result
149	5745	-7.517	-8.985	-5.179	< 8dBm	Pass

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

Figure Channel 149: (Chain A)

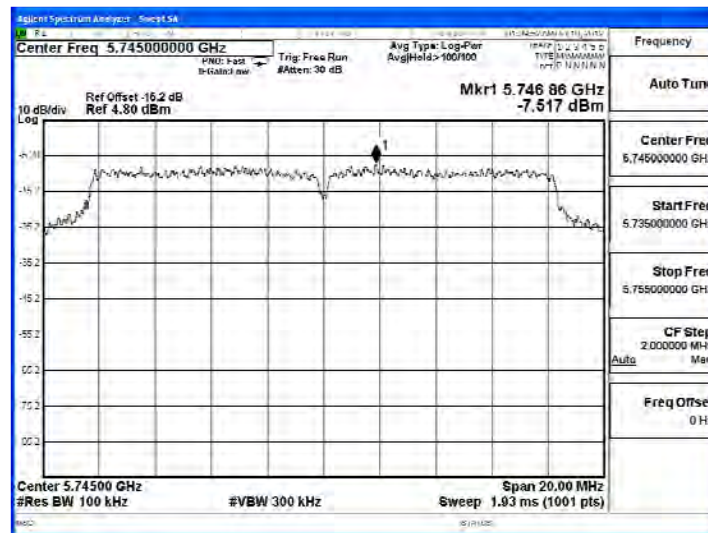
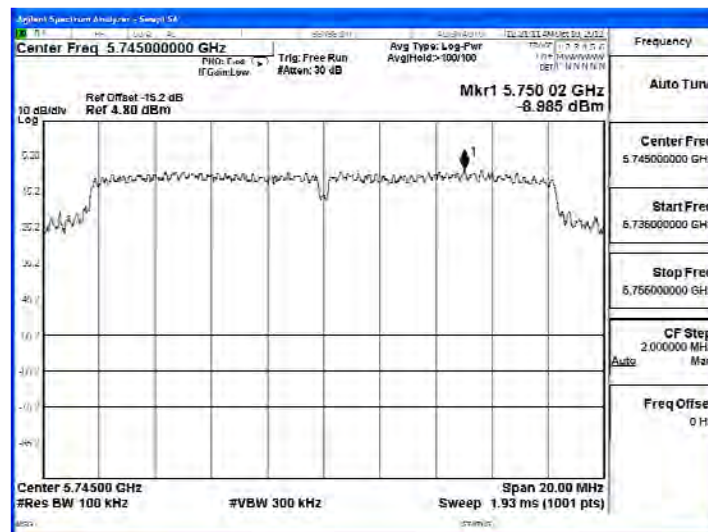


Figure Channel 149: (Chain B)



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

Channel No.	Frequency (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain A+B Power (dBm)	Limit (dBm)	Result
157	5785	-7.923	-8.585	-5.231	< 8dBm	Pass

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

Figure Channel 157: (Chain A)

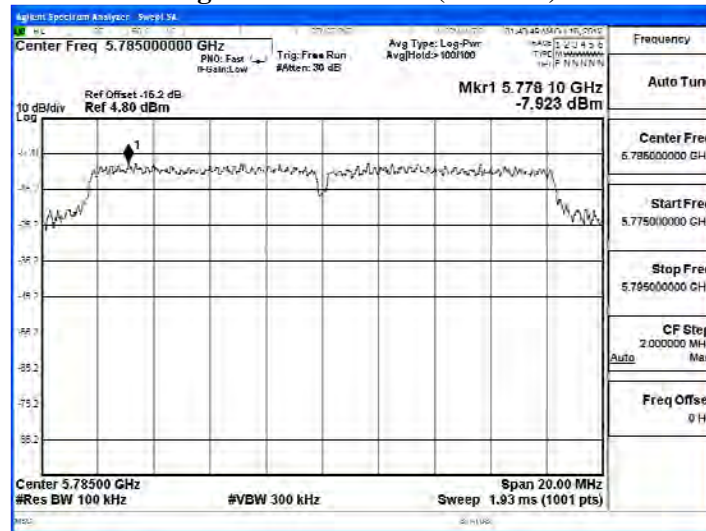
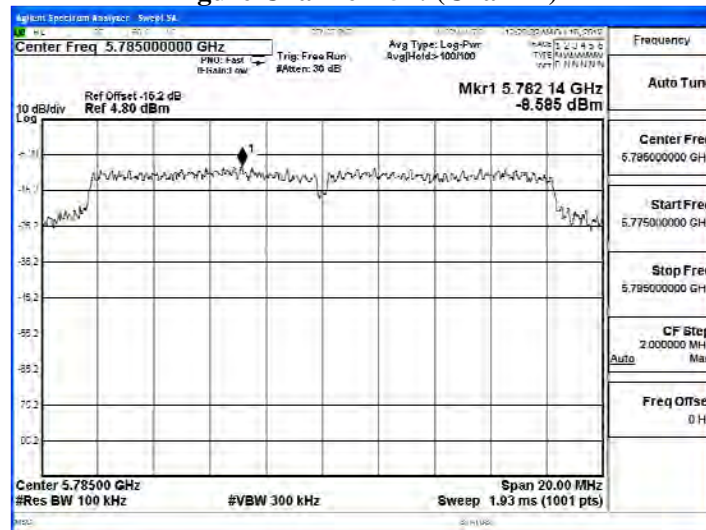


Figure Channel 157: (Chain B)



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

Channel No.	Frequency (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain A+B Power (dBm)	Limit (dBm)	Result
165	5825	-9.020	-9.639	-6.308	< 8dBm	Pass

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

Figure Channel 165: (Chain A)

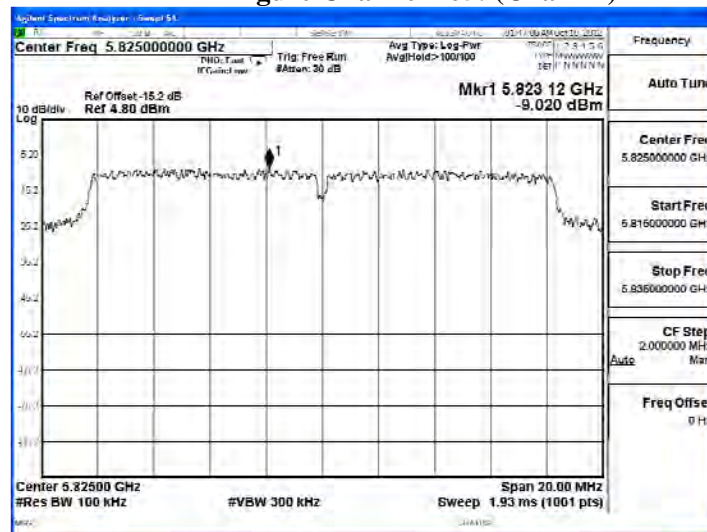
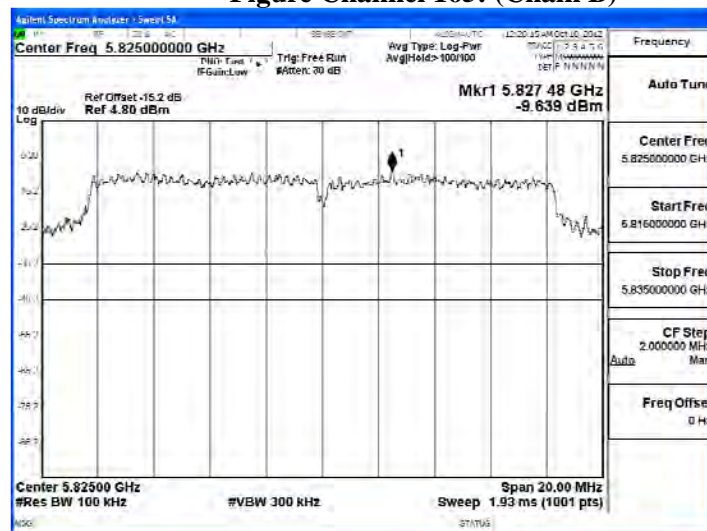


Figure Channel 165: (Chain B)



Product : SpectraGuardR 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)

Channel No.	Frequency (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain A+B Power (dBm)	Limit (dBm)	Result
1	2412.00	-18.373	-19.394	-15.843	< 8dBm	Pass

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

Figure Channel 1: (Chain A)

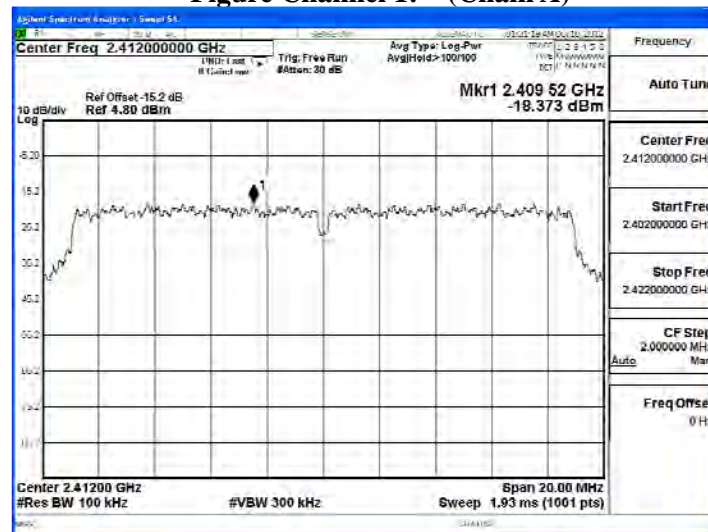
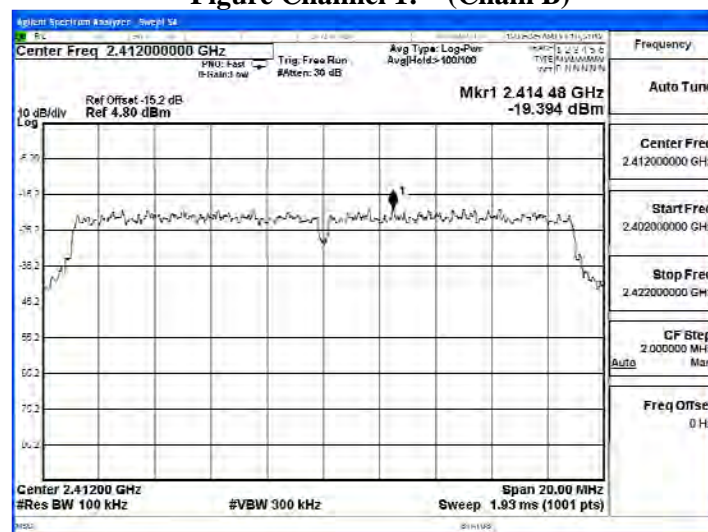


Figure Channel 1: (Chain B)



Product : SpectraGuardR 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)

Channel No.	Frequency (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain A+B Power (dBm)	Limit (dBm)	Result
6	2437.00	-8.824	-8.954	-5.878	< 8dBm	Pass

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

Figure Channel 6: (Chain A)

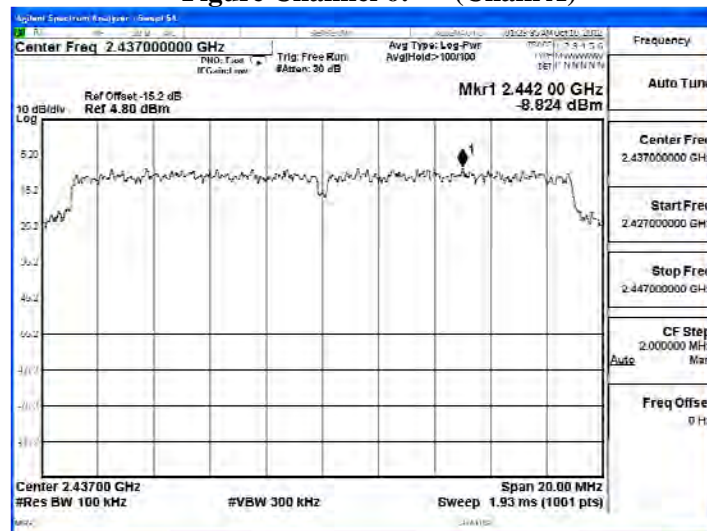
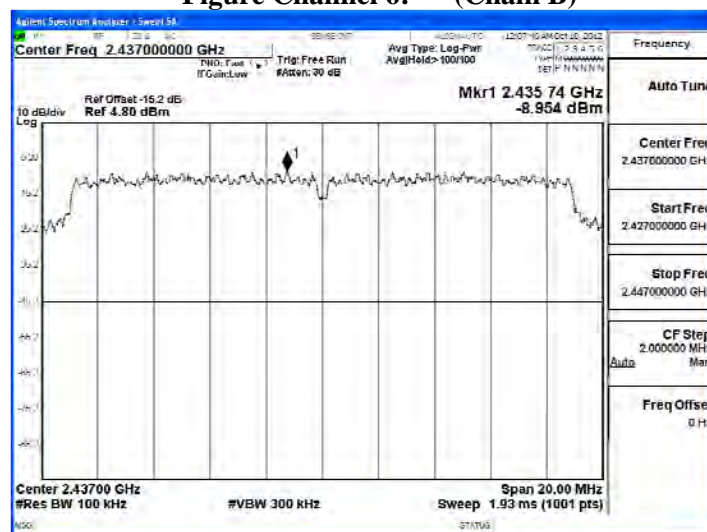


Figure Channel 6: (Chain B)



Product : SpectraGuardR 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)

Channel No.	Frequency (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain A+B Power (dBm)	Limit (dBm)	Result
11	2462.00	-19.311	-19.542	-16.415	< 8dBm	Pass

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

Figure Channel 11: (Chain A)

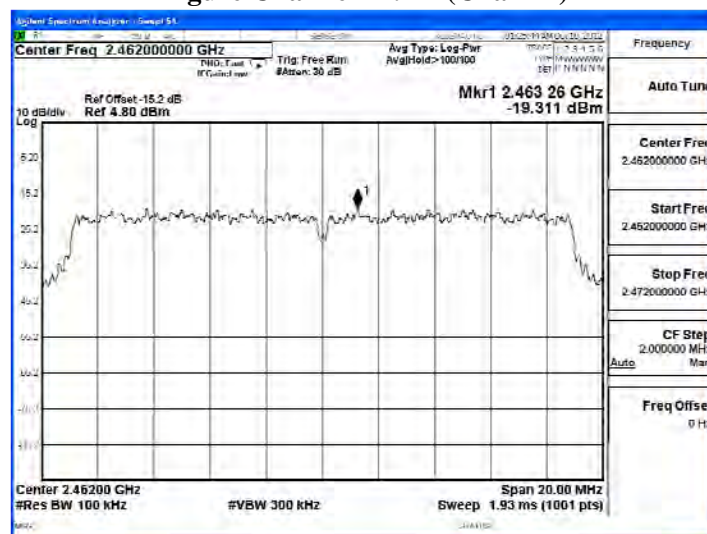
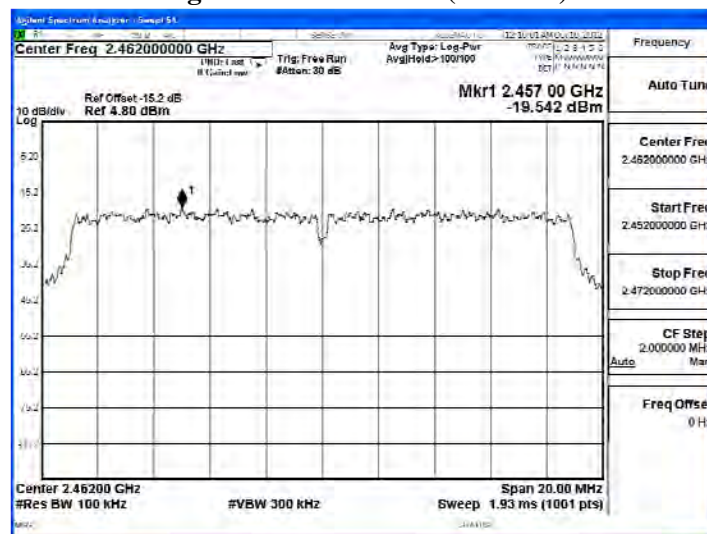


Figure Channel 11: (Chain B)



Product : SpectraGuardR 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)

Channel No.	Frequency (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain A+B Power (dBm)	Limit (dBm)	Result
1	2422.00	-23.483	-24.694	-21.036	< 8dBm	Pass

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

Figure Channel 1: (Chain A)

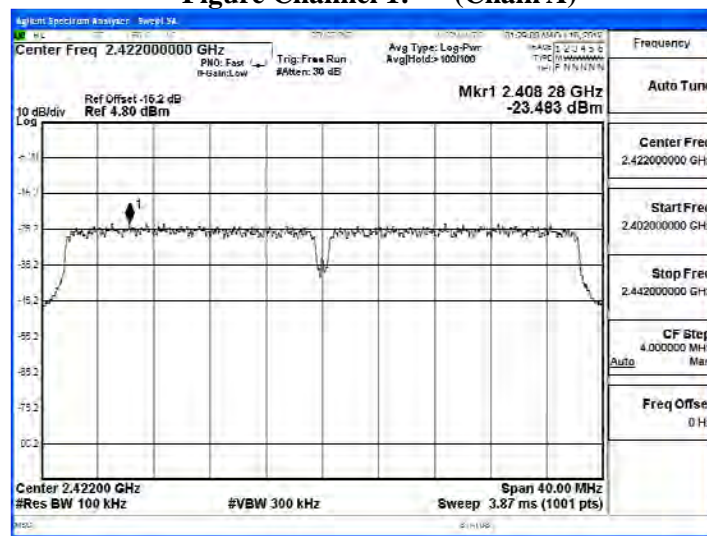
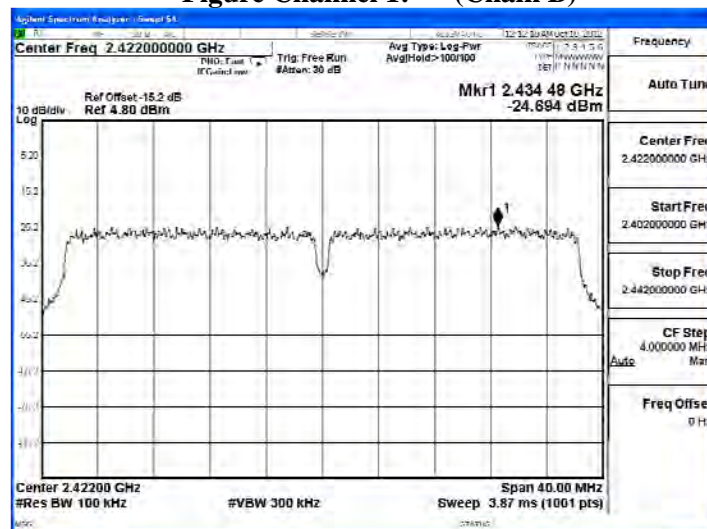


Figure Channel 1: (Chain B)



Product : SpectraGuardR 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)

Channel No.	Frequency (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain A+B Power (dBm)	Limit (dBm)	Result
4	2437.00	-11.266	-11.643	-8.440	< 8dBm	Pass

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

Figure Channel 4: (Chain A)

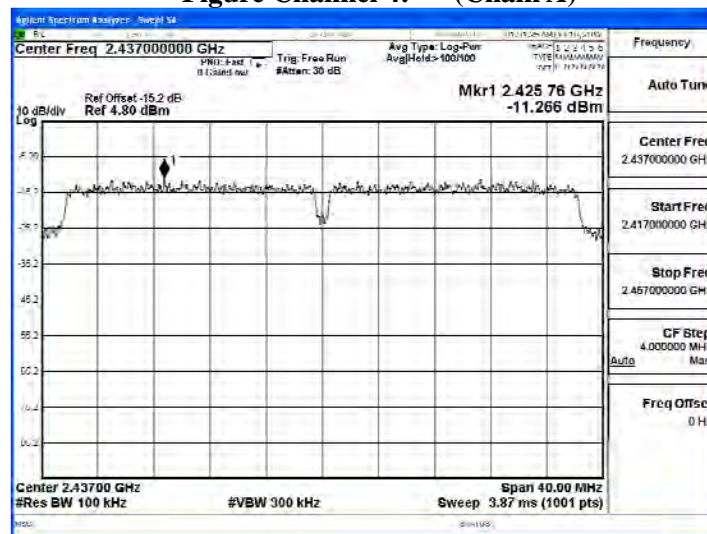
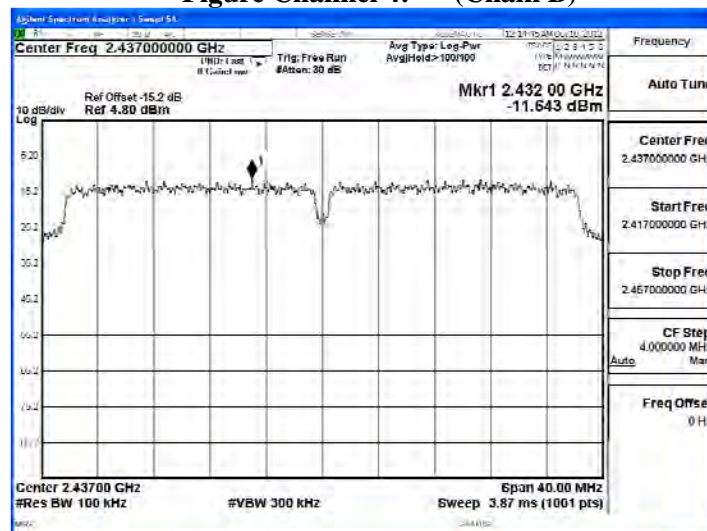


Figure Channel 4: (Chain B)



Product : SpectraGuardR 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)

Channel No.	Frequency (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain A+B Power (dBm)	Limit (dBm)	Result
7	2452.00	-24.512	-23.564	-21.002	< 8dBm	Pass

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

Figure Channel 7: (Chain A)

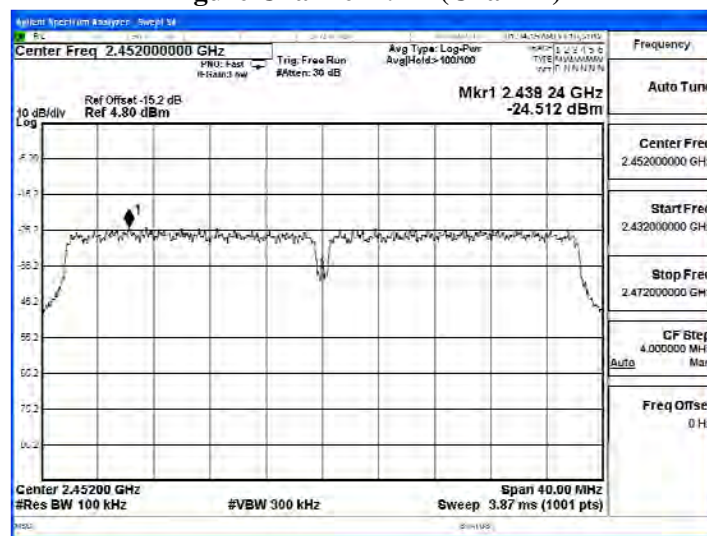
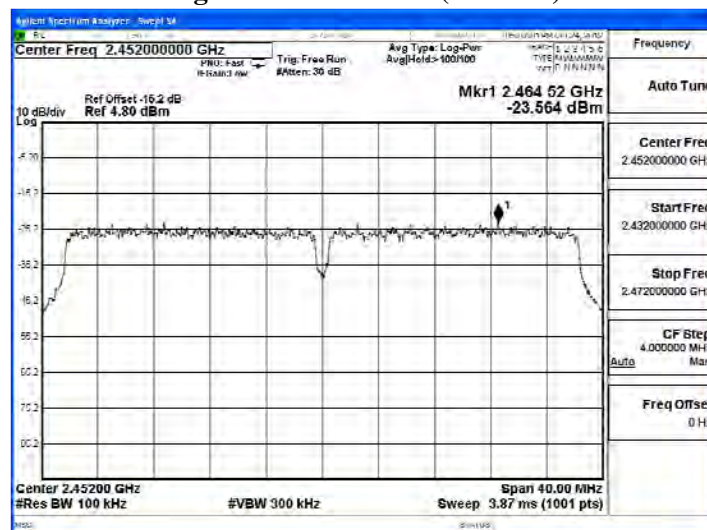


Figure Channel 7: (Chain B)



Product : SpectraGuardR 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)

Channel No.	Frequency (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain A+B Power (dBm)	Limit (dBm)	Result
149	5745.00	-7.674	-8.004	-4.826	< 8dBm	Pass

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

Figure Channel 149: (Chain A)

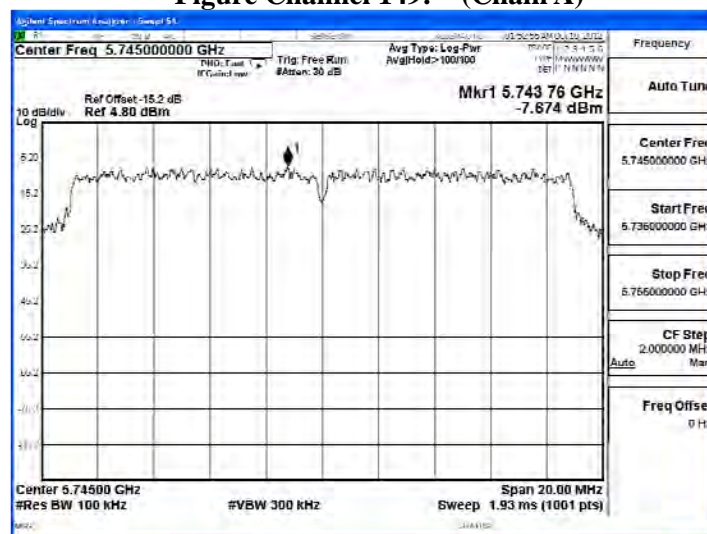
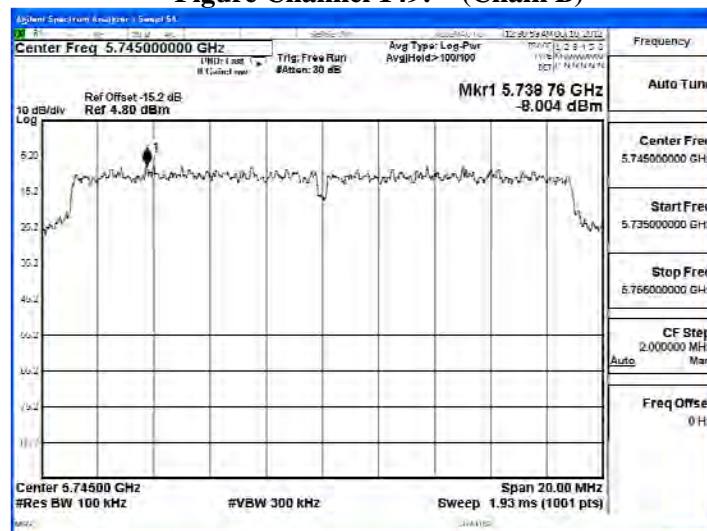


Figure Channel 149: (Chain B)



Product : SpectraGuardR 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)

Channel No.	Frequency (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain A+B Power (dBm)	Limit (dBm)	Result
157	5785.00	-6.833	-8.446	-4.555	< 8dBm	Pass

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

Figure Channel 157: (Chain A)

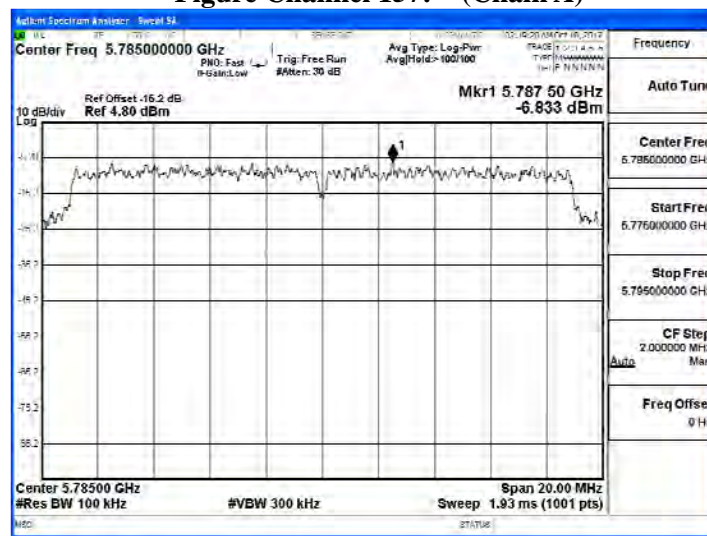
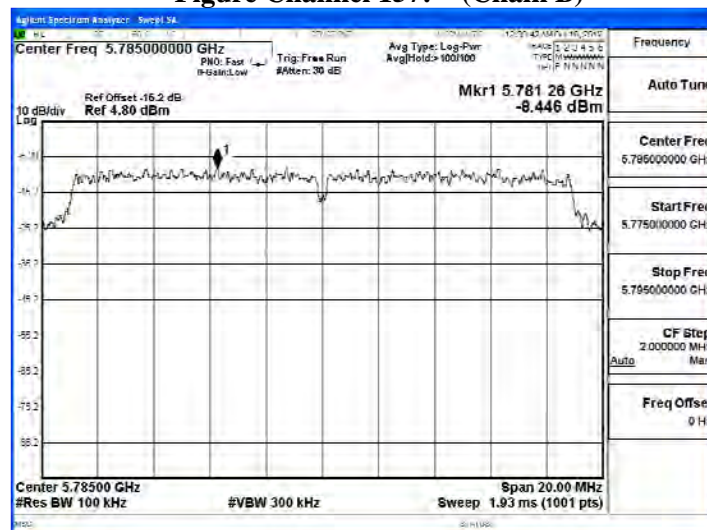


Figure Channel 157: (Chain B)



Product : SpectraGuardR 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)

Channel No.	Frequency (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain A+B Power (dBm)	Limit (dBm)	Result
165	5825.00	-6.684	-9.247	-4.769	< 8dBm	Pass

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

Figure Channel 165: (Chain A)

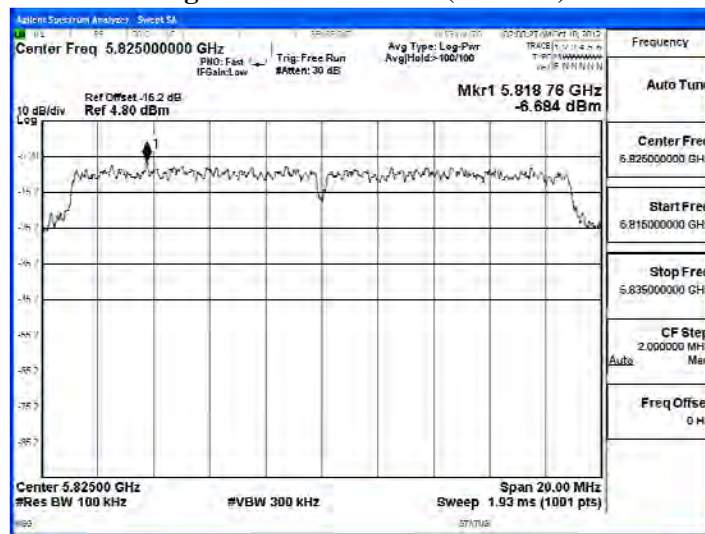
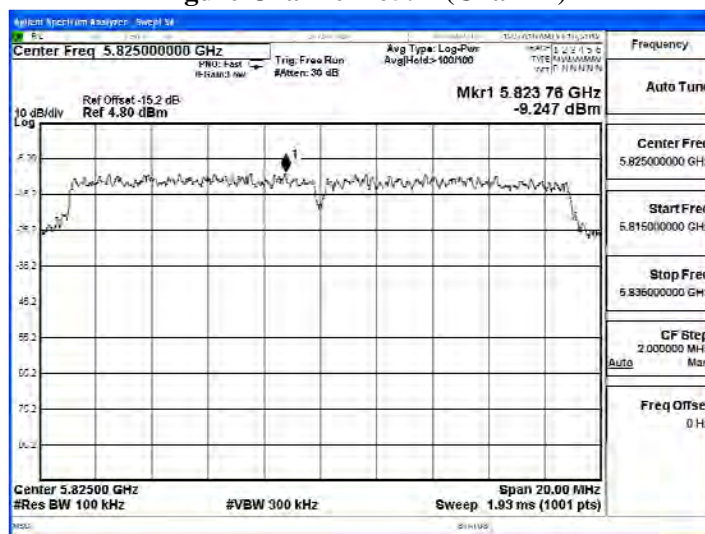


Figure Channel 165: (Chain B)



Product : SpectraGuardR 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)

Channel No.	Frequency (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain A+B Power (dBm)	Limit (dBm)	Result
151	5755.00	-10.537	-10.939	-7.723	< 8dBm	Pass

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

Figure Channel 151: (Chain A)

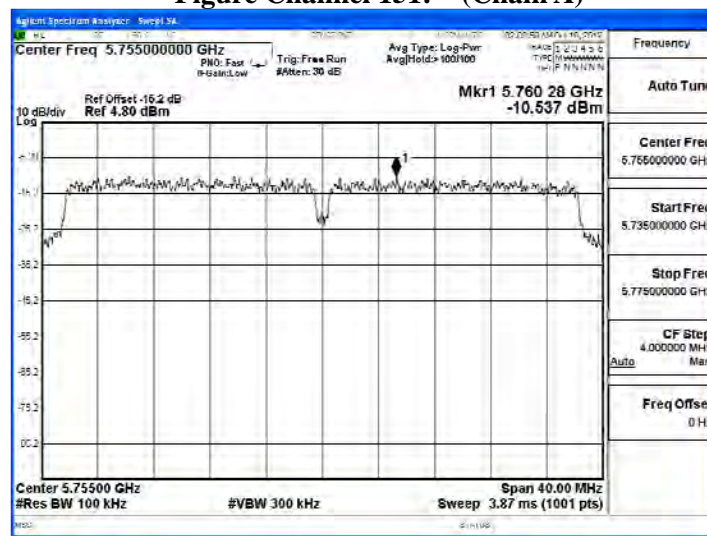
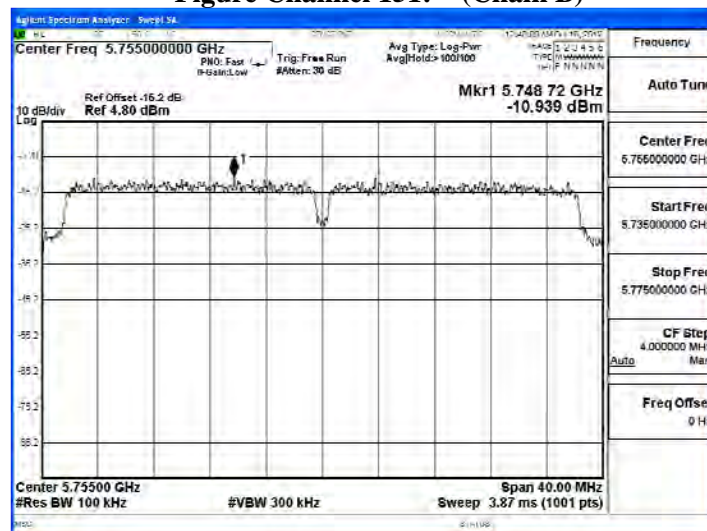


Figure Channel 151: (Chain B)



Product : SpectraGuardR 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)

Channel No.	Frequency (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain A+B Power (dBm)	Limit (dBm)	Result
159	5795.00	-9.506	-10.936	-7.152	< 8dBm	Pass

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

Figure Channel 159: (Chain A)

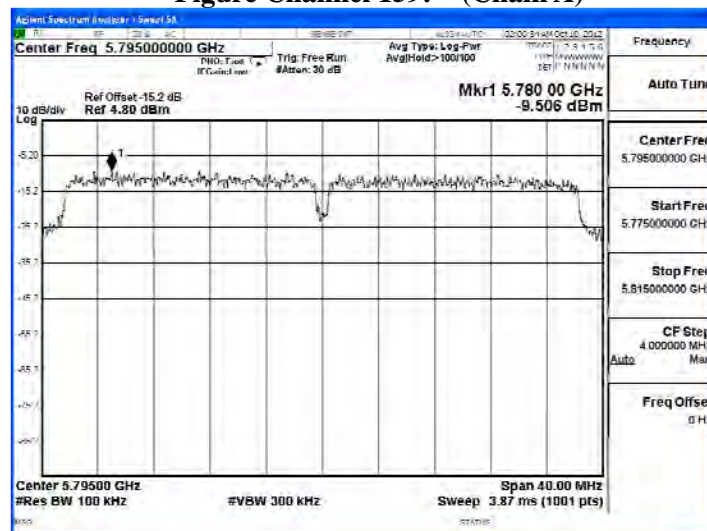
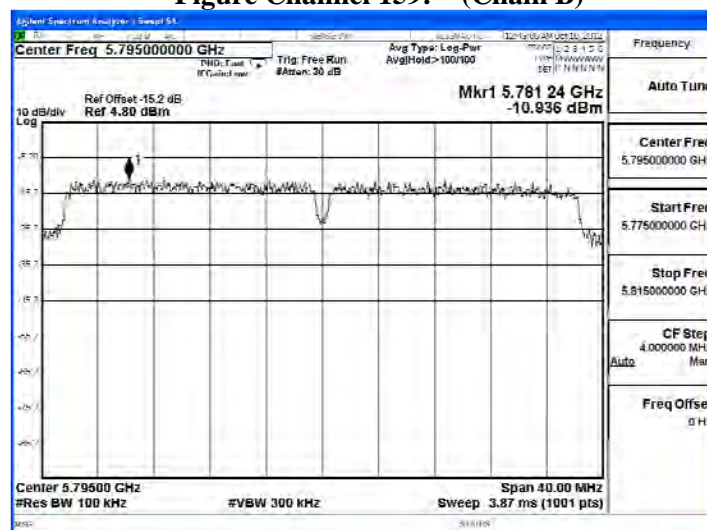


Figure Channel 159: (Chain B)



9. EMI Reduction Method During Compliance Testing

No modification was made during testing.

Attachment 1: EUT Test Photographs

Attachment 2: EUT Detailed Photographs