

5. RF antenna conducted test

5.1. Test Equipment

The following test equipments are used during the test:

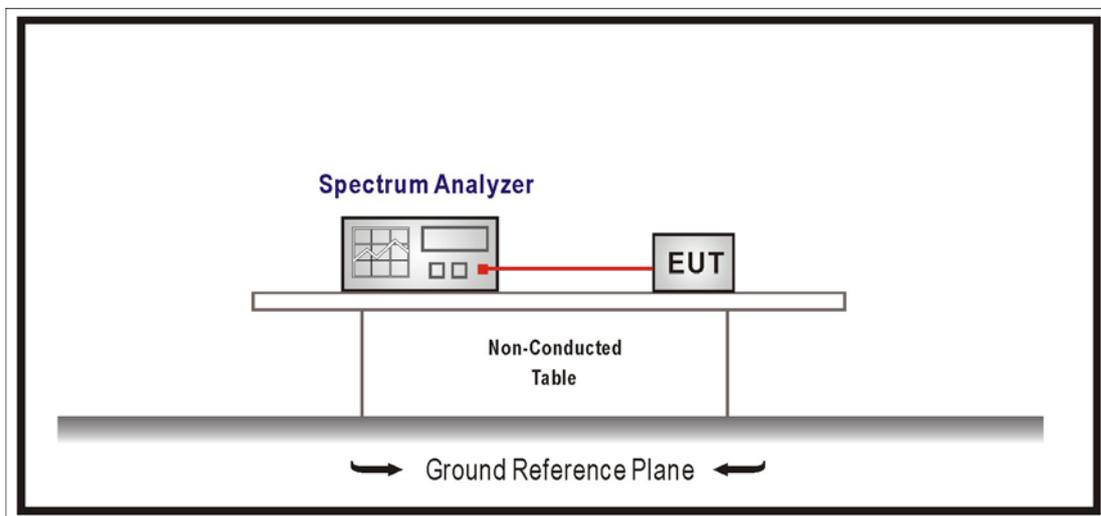
RF antenna conducted test / SR7

Instrument	Manufacturer	Model No.	Serial No	Next Cal. Date
Spectrum Analyzer	Agilent	N9010A-EXA	US47140172	2014/07/31

Note: 1. All equipments that need to calibrate are with calibration period of 1 year.

5.2. Test Setup

RF Antenna Conducted Measurement:



5.3. Limits

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

5.4. Test Procedure

The EUT was setup according to ANSI C63.4: 2009 and tested according to DTS test procedure of Oct. 2012 KDB558074 for compliance to FCC 47CFR 15.247 requirements Set RBW = 100 kHz, Set VBW > RBW, scan up through 10th harmonic.

5.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2012

5.6. Uncertainty

Conducted is defined as ± 1.27 dB

5.7. Test Result

Product	Dual Band 3x3 802.11ac PCI-E Adapter		
Test Item	RF antenna conducted test		
Test Mode	Mode 1: Transmit (CDD mode)		
Date of Test	2013/08/27	Test Site	SR7

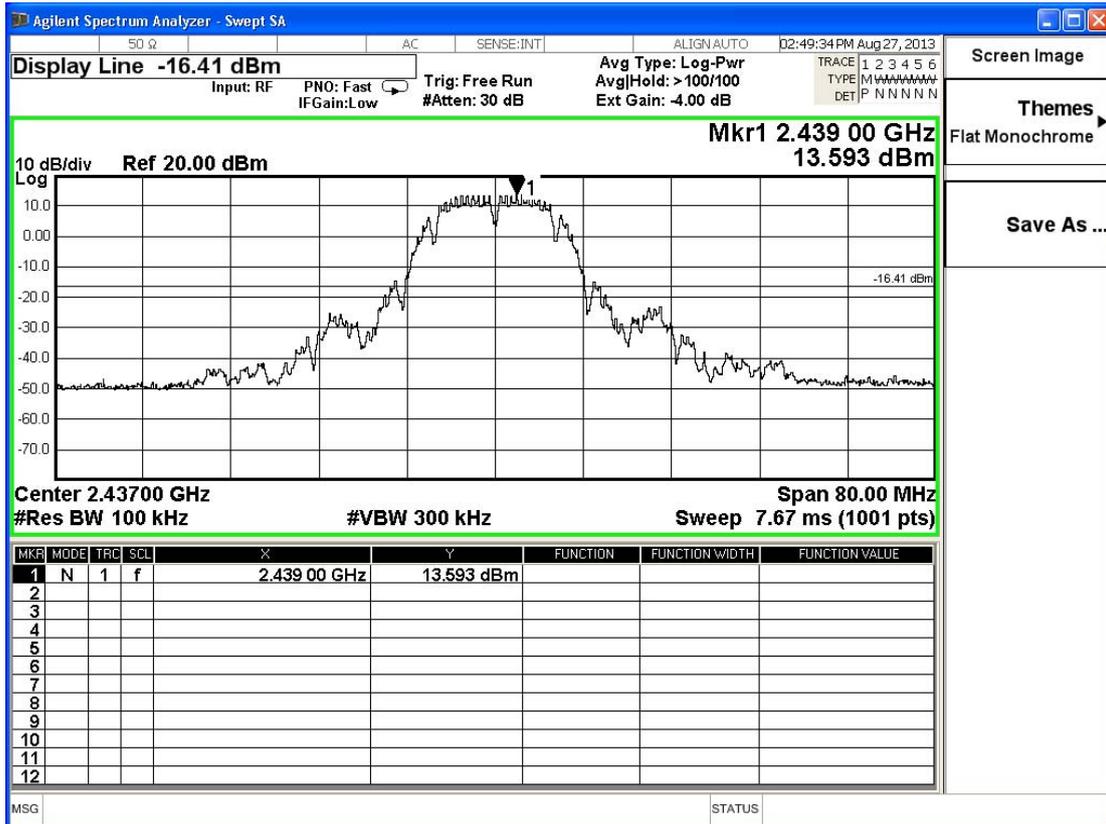
IEEE 802.11b(ANT 0), Antenna Gain: 3dBi Duty Cycle: 1

Channel No.	Frequency (MHz)	Measure Level (dBc)	Limit (dBc)	Result
1	2412	55.011	≥30	Pass
11	2462	52.589	≥30	Pass

Channel 01 (2412MHz)



Channel 06 (2437MHz)



Channel 11 (2462MHz)



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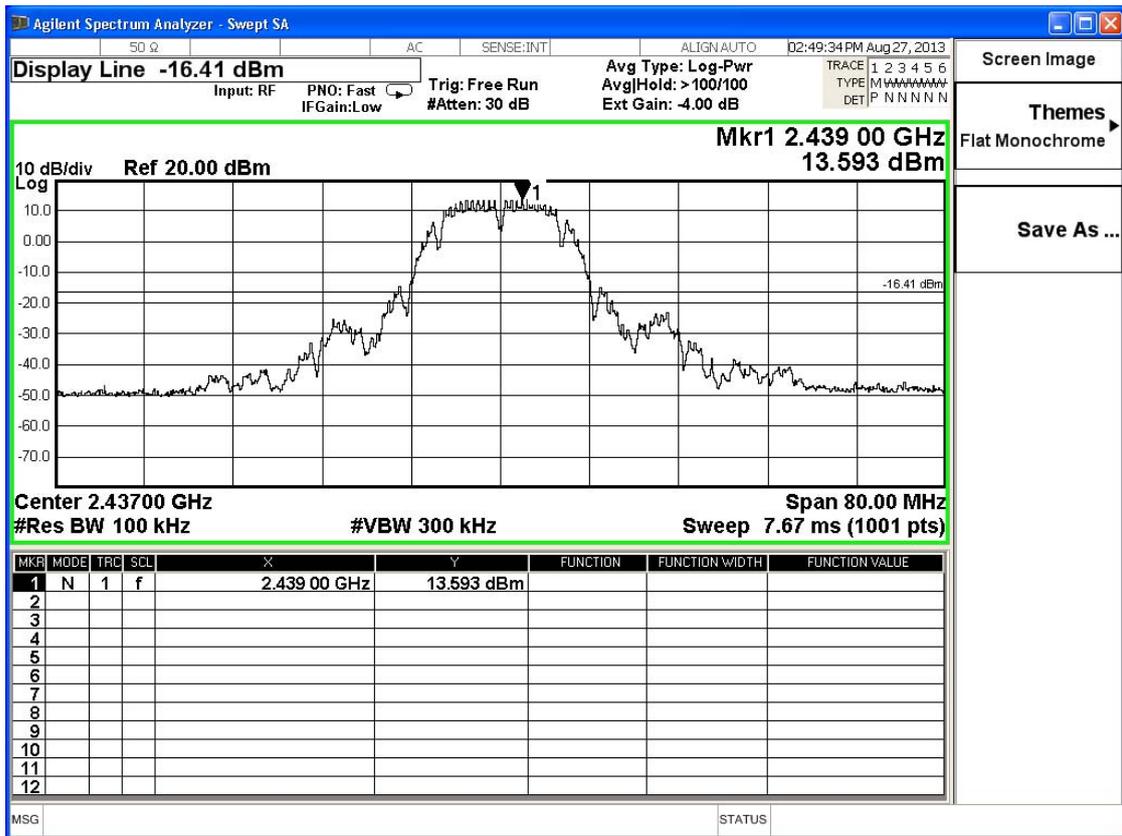
IEEE 802.11b(ANT 1), Antenna Gain: 3dBi Duty Cycle: 1

Channel No.	Frequency (MHz)	Measure Level (dBc)	Limit (dBc)	Result
1	2412	58.502	≥ 30	Pass
11	2462	63.407	≥ 30	Pass

Channel 01 (2412MHz)



Channel 06 (2437MHz)



Channel 11 (2462MHz)



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IEEE 802.11b(ANT 2), Antenna Gain: 3dBi Duty Cycle: 1

Channel No.	Frequency (MHz)	Measure Level (dBc)	Limit (dBc)	Result
1	2412	58.153	≥ 30	Pass
11	2462	61.335	≥ 30	Pass

Channel 01 (2412MHz)



Channel 06 (2437MHz)



Channel 11 (2462MHz)

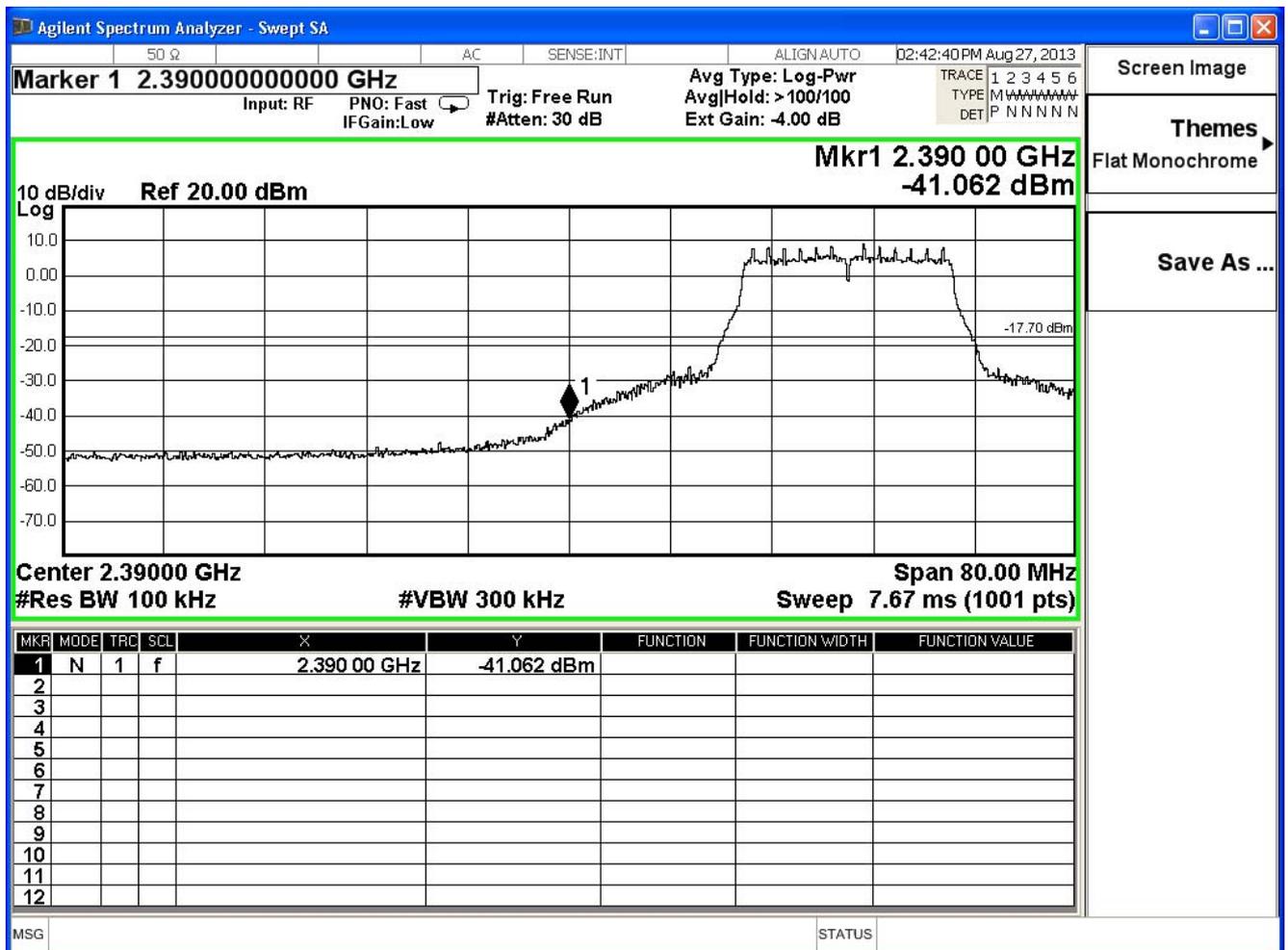


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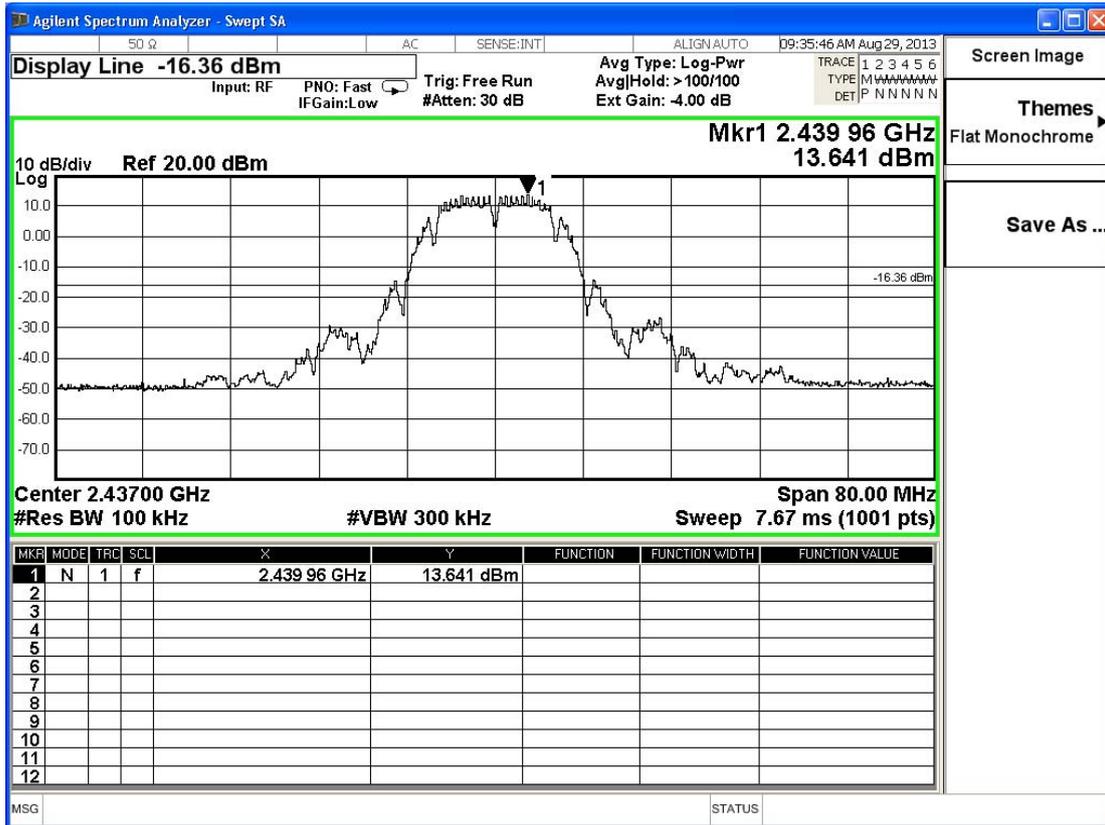
IEEE 802.11g(ANT 0), Antenna Gain: 3dBi Duty Cycle: 1

Channel No.	Frequency (MHz)	Measure Level (dBc)	Limit (dBc)	Result
1	2412	53.367	≥ 30	Pass
11	2462	50.657	≥ 30	Pass

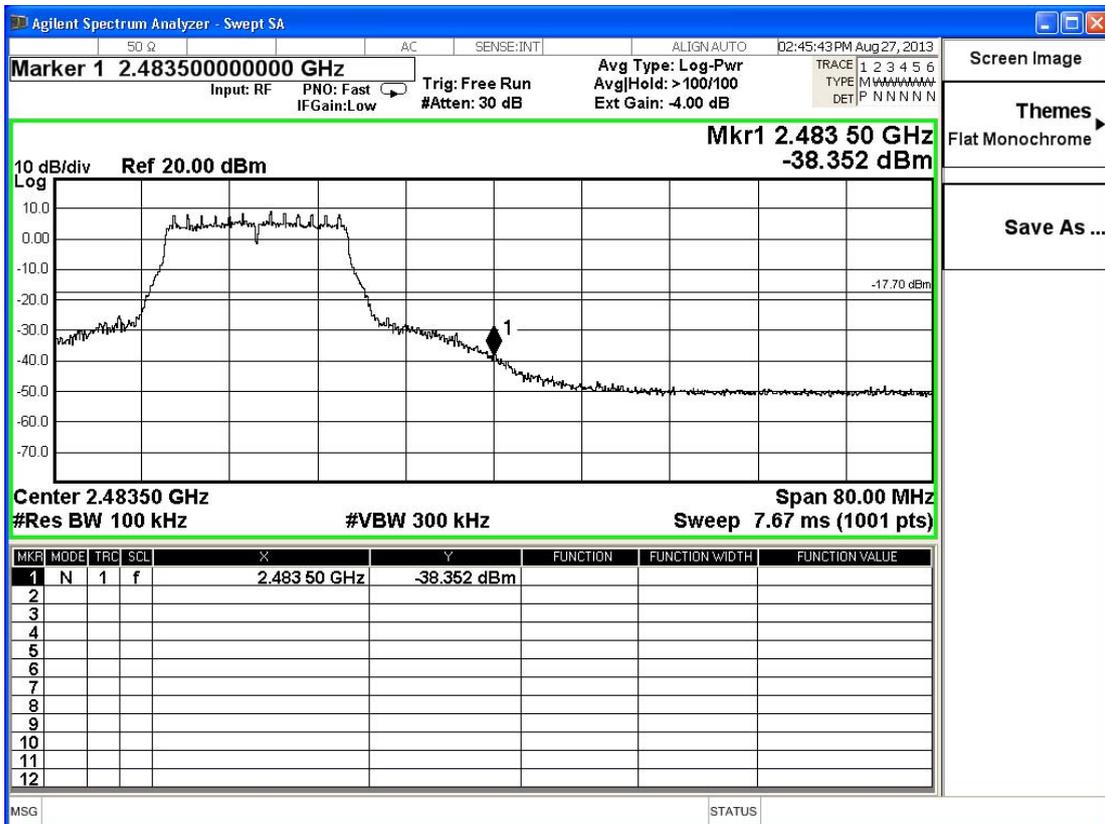
Channel 01 (2412MHz)



Channel 06 (2437MHz)



Channel 11 (2462MHz)

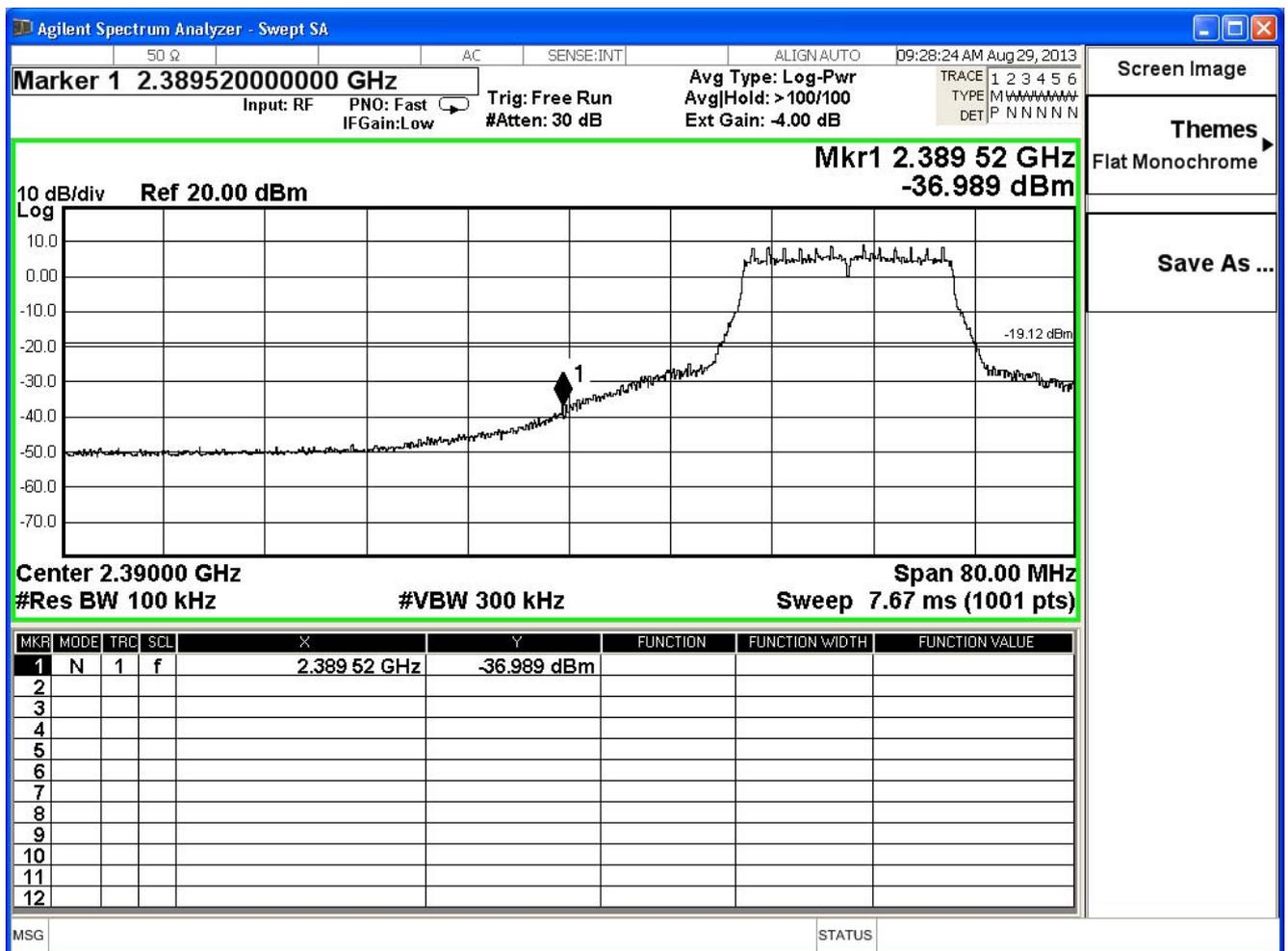


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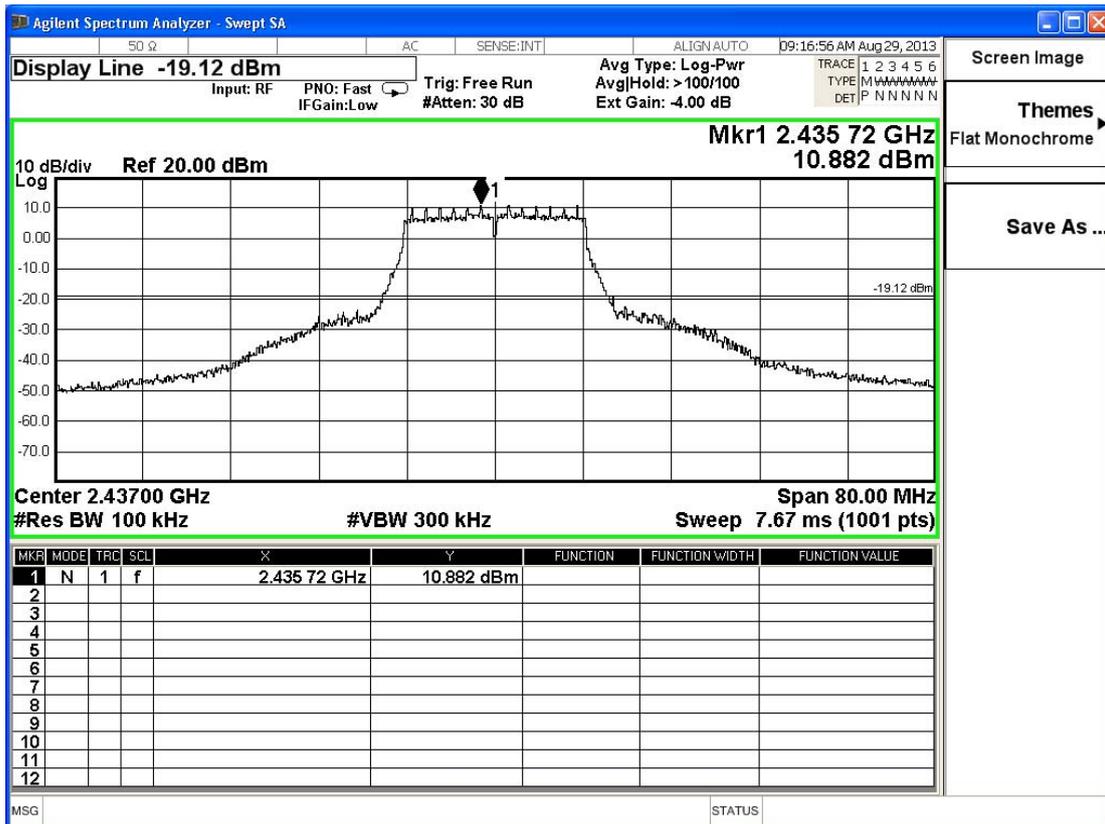
IEEE 802.11g(ANT 1), Antenna Gain: 3dBi Duty Cycle: 1

Channel No.	Frequency (MHz)	Measure Level (dBc)	Limit (dBc)	Result
1	2412	47.871	≥ 30	Pass
11	2462	54.519	≥ 30	Pass

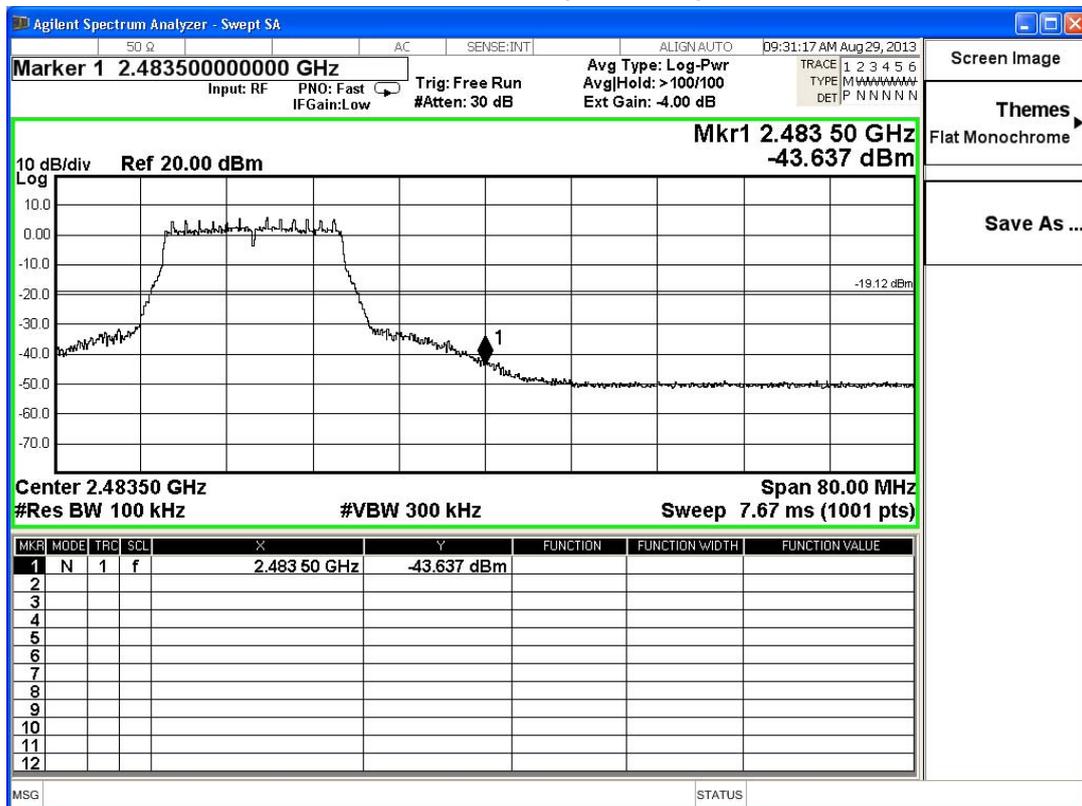
Channel 01 (2412MHz)



Channel 06 (2437MHz)



Channel 11 (2462MHz)



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IEEE 802.11g(ANT 2), Antenna Gain: 3dBi Duty Cycle: 1

Channel No.	Frequency (MHz)	Measure Level (dBc)	Limit (dBc)	Result
1	2412	48.479	≥ 30	Pass
11	2462	54.107	≥ 30	Pass

Channel 01 (2412MHz)



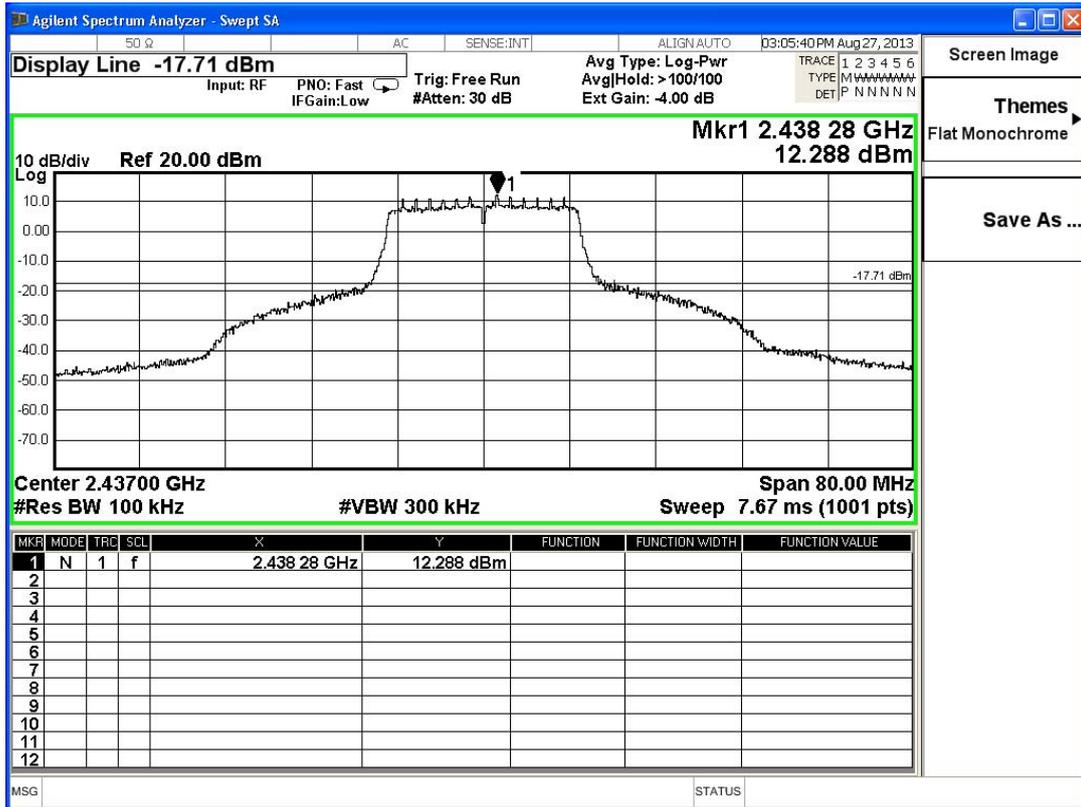
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IEEE 802.11n (20MHz), (ANT 0), Antenna Gain: 3dBi Duty Cycle: 1				
Channel No.	Frequency (MHz)	Measure Level (dBc)	Limit (dBc)	Result
1	2412	51.253	≥30	Pass
11	2462	48.524	≥30	Pass

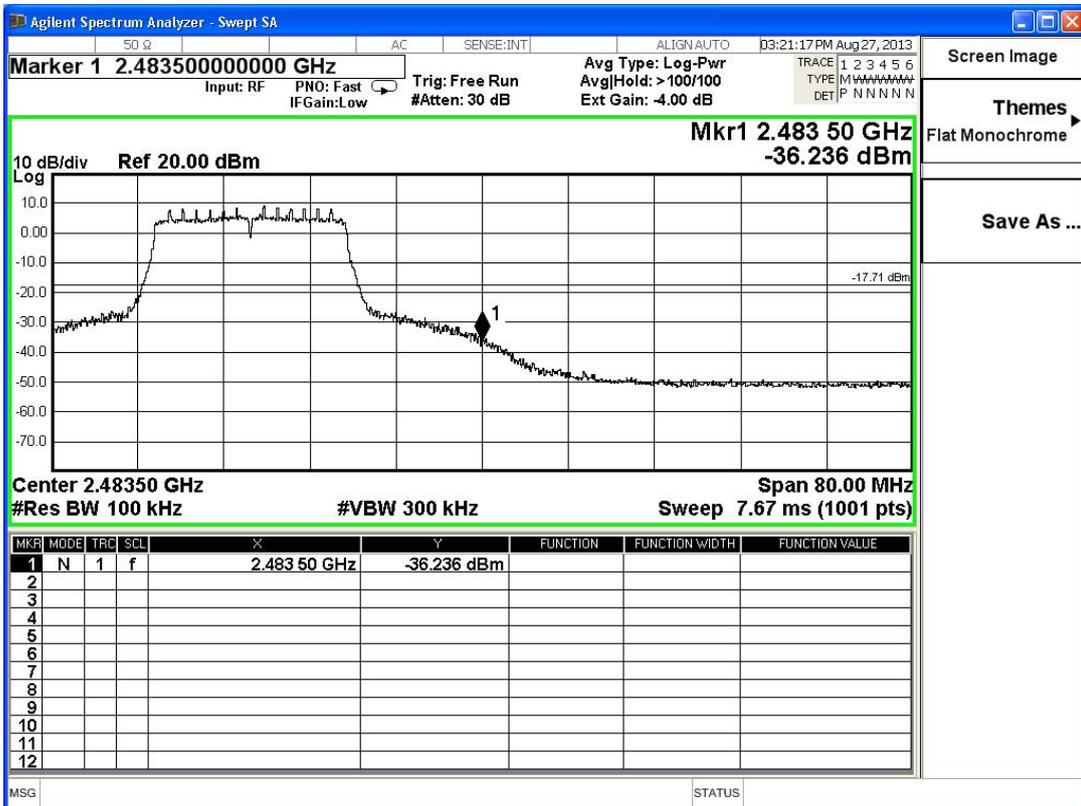
Channel 1 (2412MHz)



Channel 06 (2437MHz)



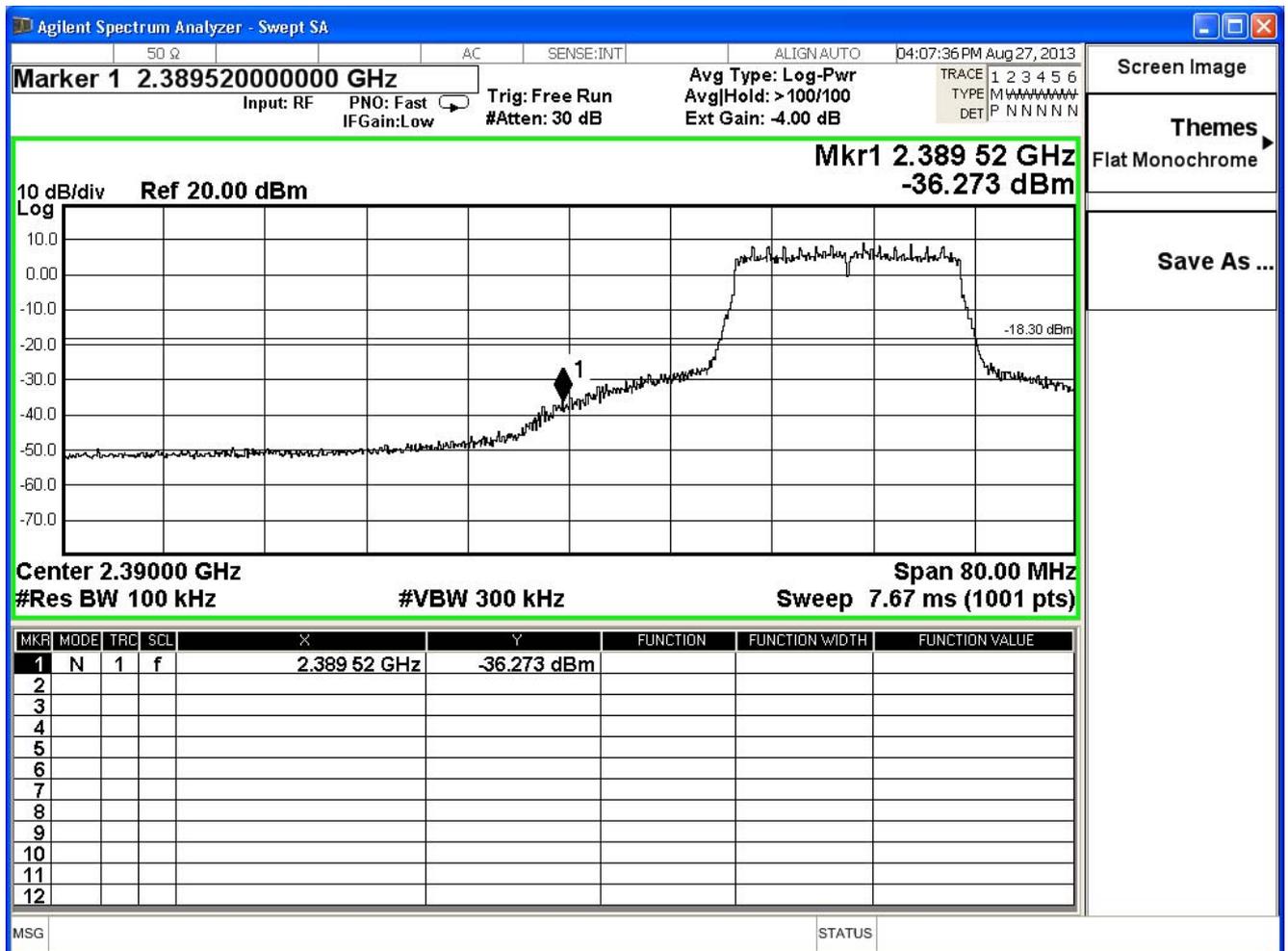
Channel 11 (2462MHz)



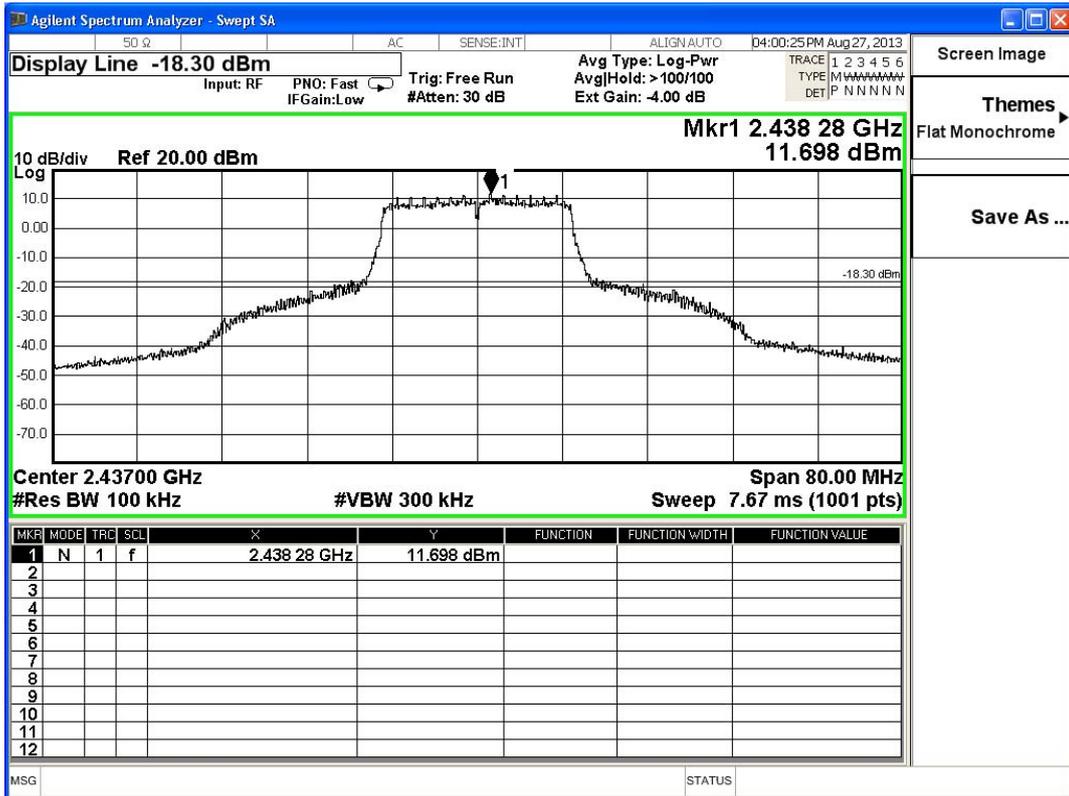
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IEEE 802.11n (20MHz), (ANT 1), Antenna Gain: 3dBi Duty Cycle: 1				
Channel No.	Frequency (MHz)	Measure Level (dBc)	Limit (dBc)	Result
1	2412	47.971	≥30	Pass
11	2462	43.168	≥30	Pass

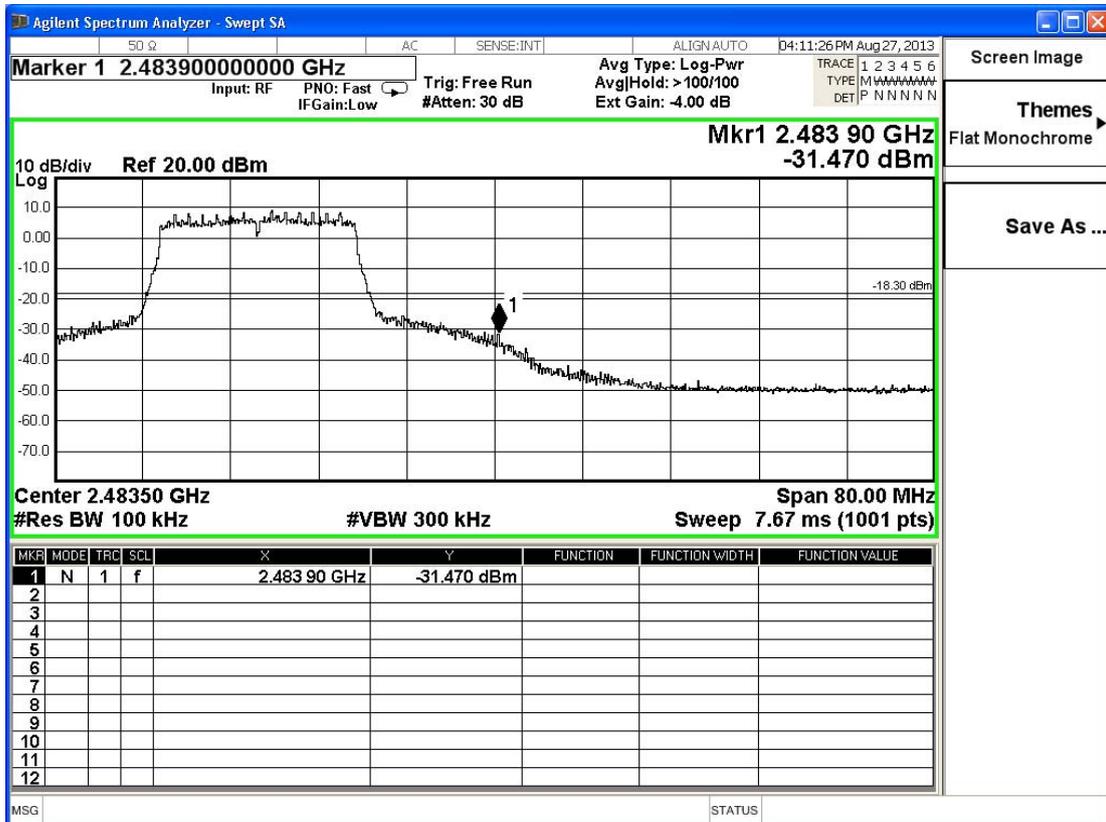
Channel 1 (2412MHz)



Channel 06 (2437MHz)



Channel 11 (2462MHz)



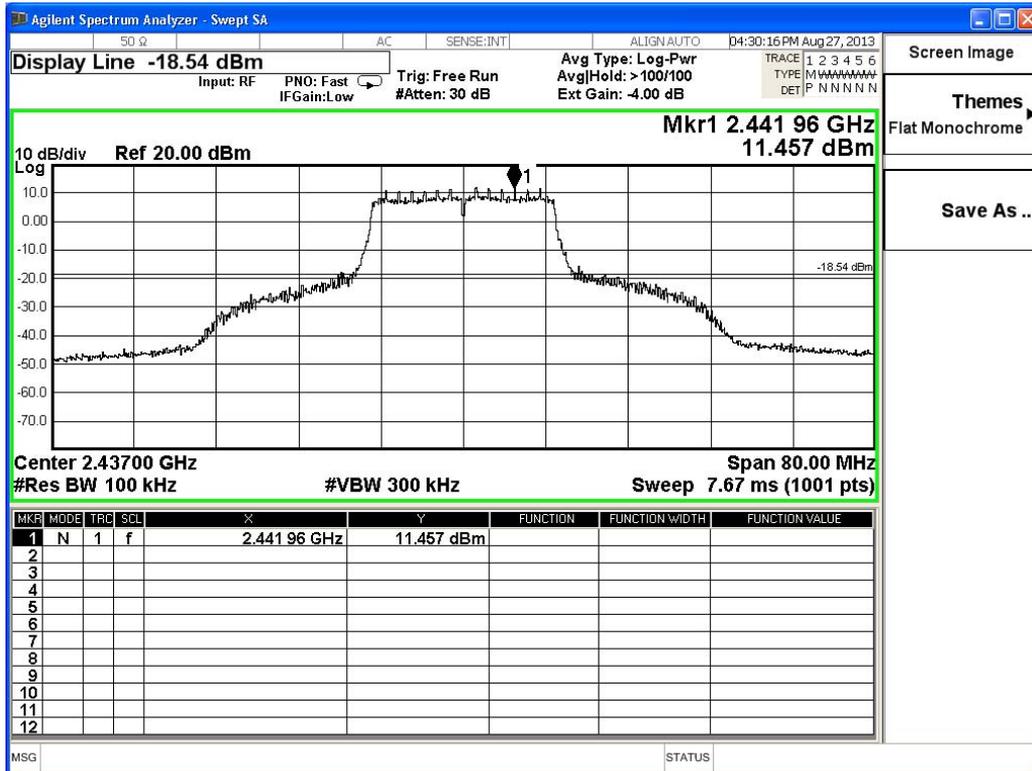
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IEEE 802.11n (20MHz), (ANT 2), Antenna Gain: 3dBi Duty Cycle: 1				
Channel No.	Frequency (MHz)	Measure Level (dBc)	Limit (dBc)	Result
1	2412	49.283	≥30	Pass
11	2462	45.596	≥30	Pass

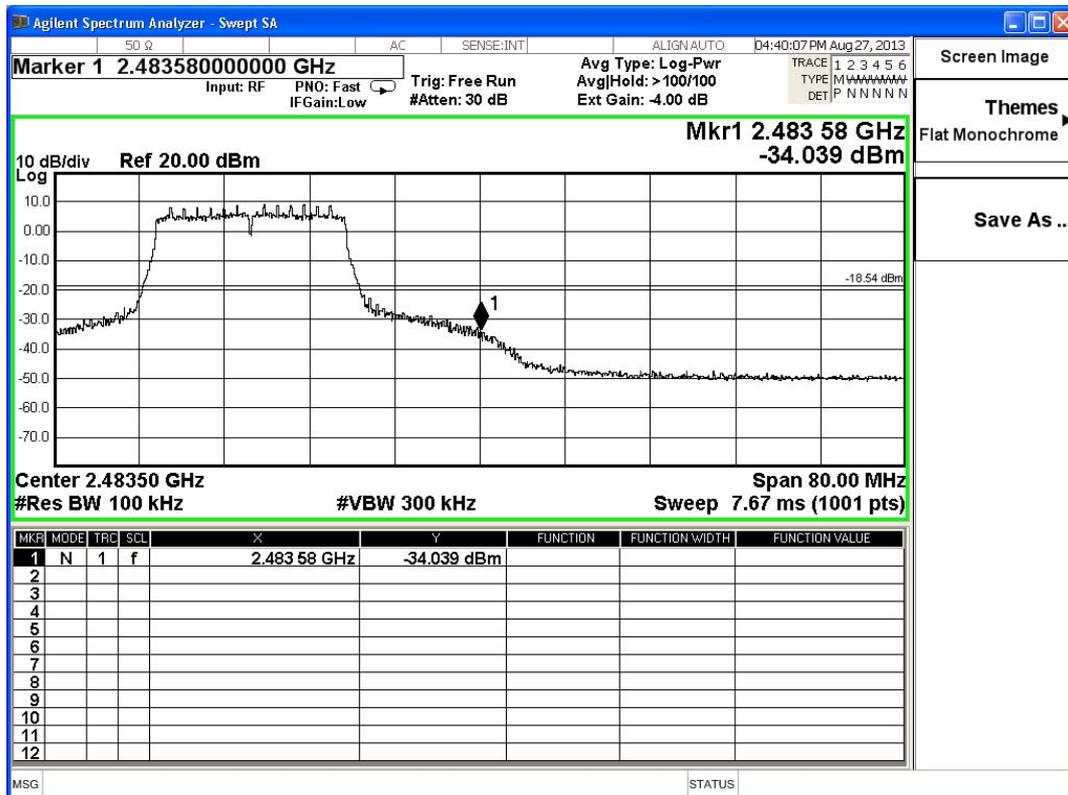
Channel 1 (2412MHz)



Channel 06 (2437MHz)



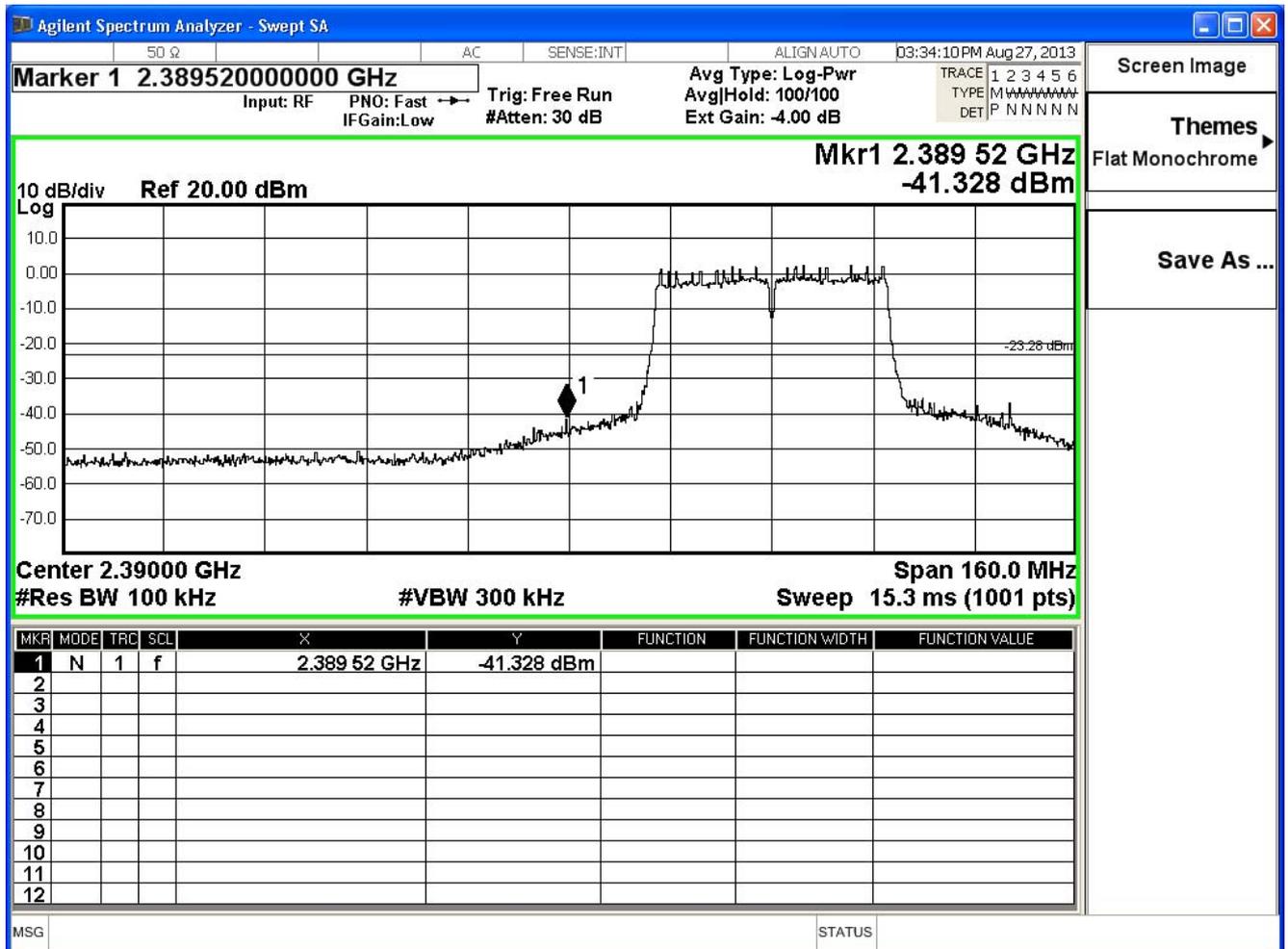
Channel 11 (2462MHz)



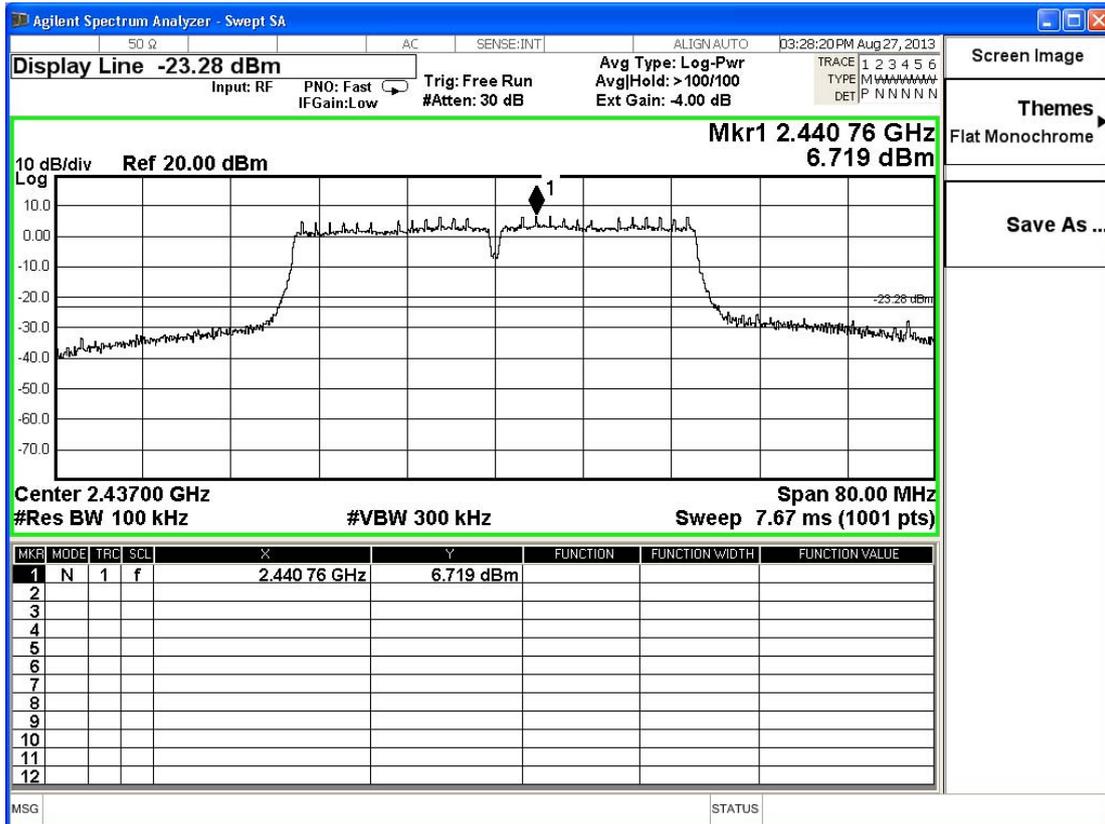
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IEEE 802.11n (40MHz), (ANT 0), Antenna Gain: 3dBi Duty Cycle: 1				
Channel No.	Frequency (MHz)	Measure Level (dBc)	Limit (dBc)	Result
3	2422	48.047	≥30	Pass
9	2452	41.855	≥30	Pass

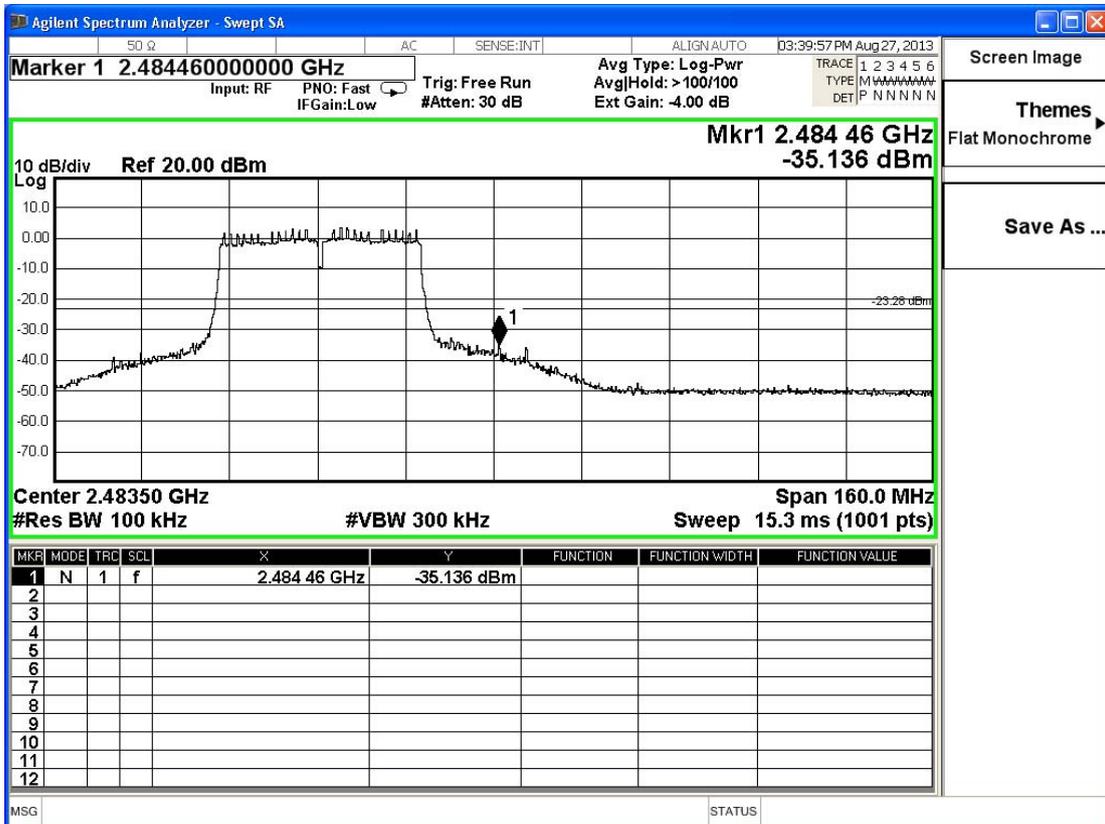
Channel 3 (2422MHz)



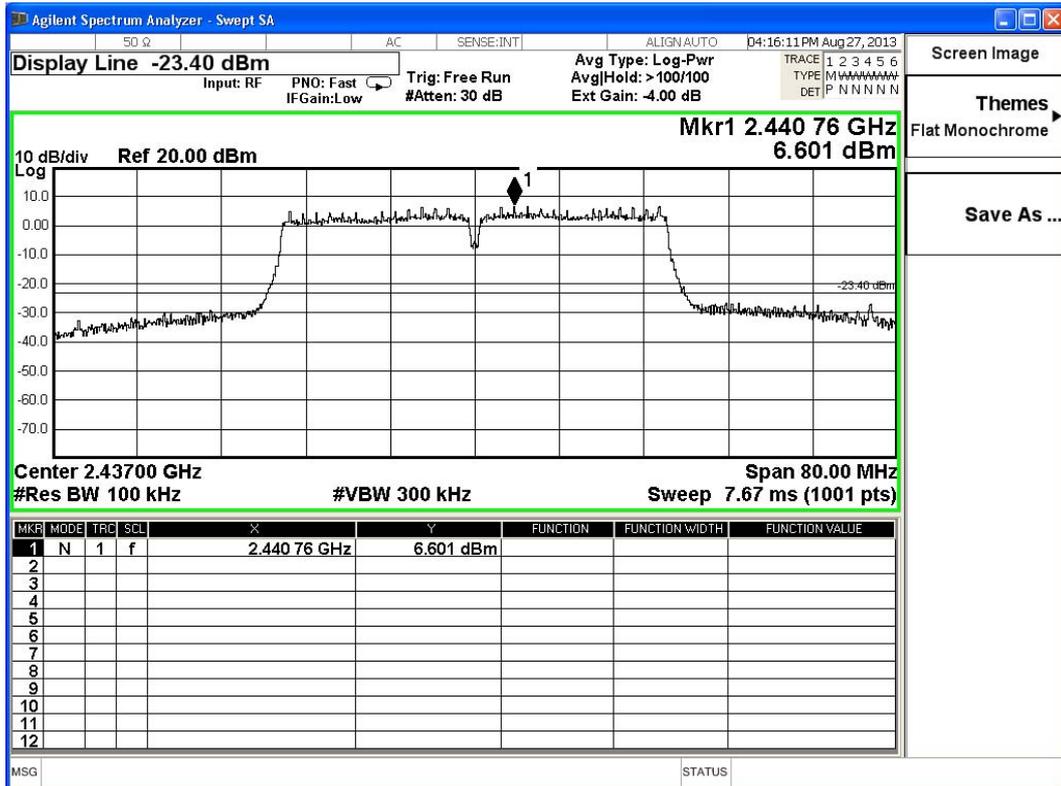
Channel 06 (2437MHz)



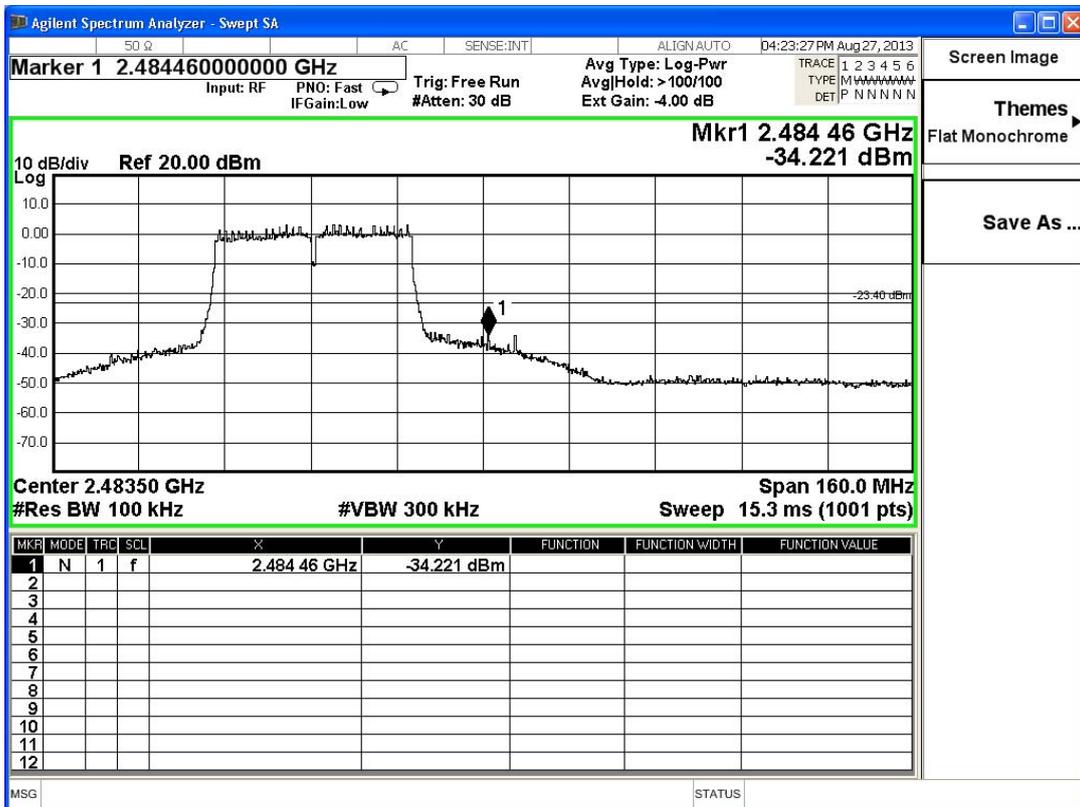
Channel 9 (2452MHz)



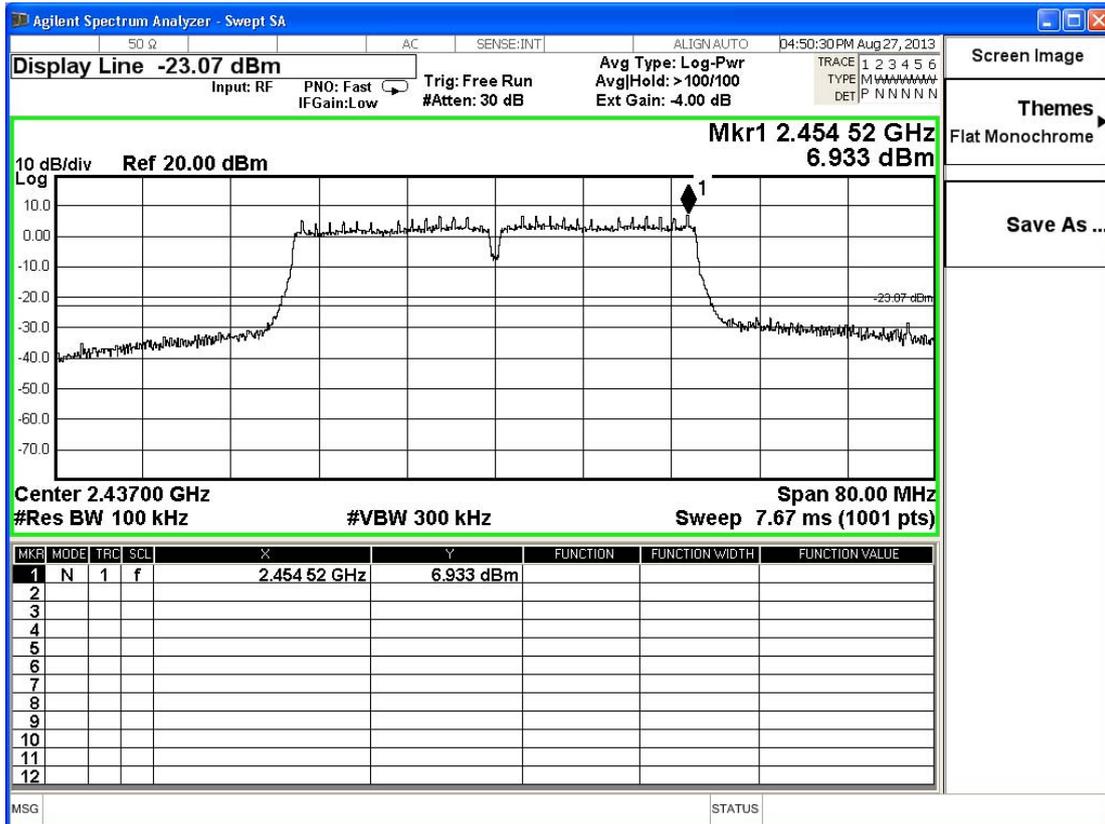
Channel 06 (2437MHz)



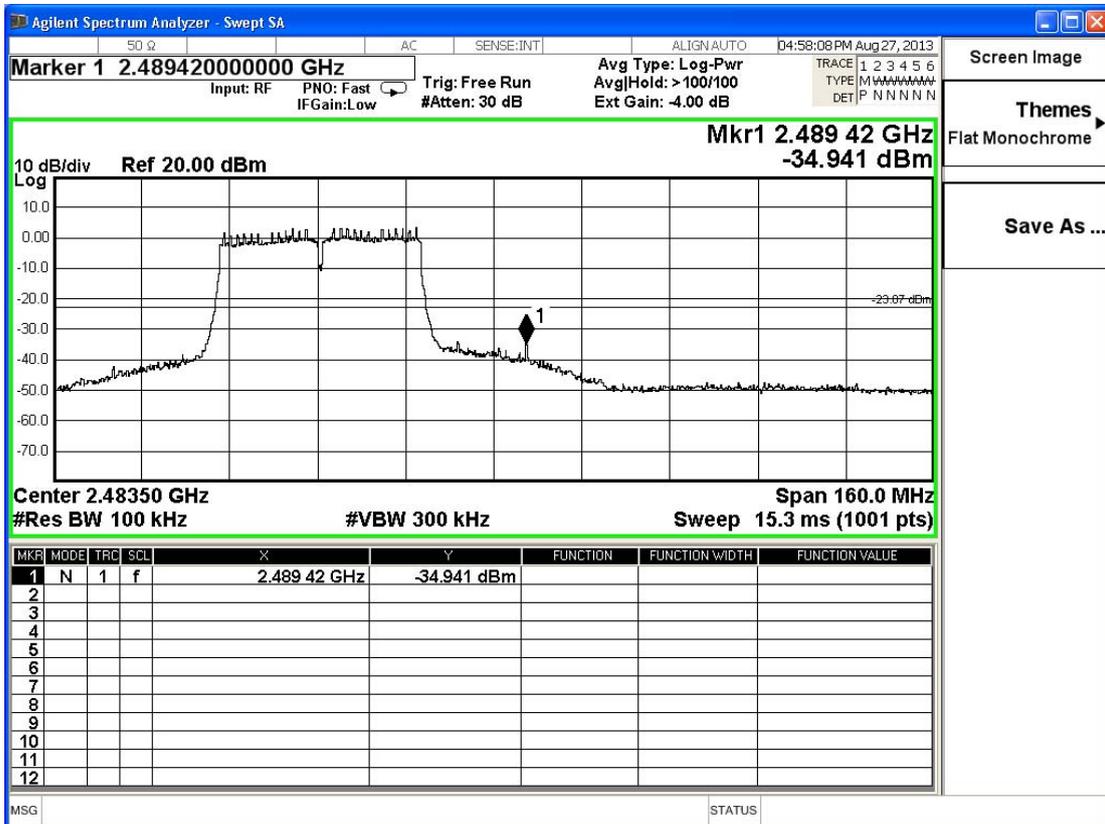
Channel 9 (2452MHz)



Channel 06 (2437MHz)



Channel 9 (2452MHz)



2462MHz (30MHz-25GHz) -802.11g

