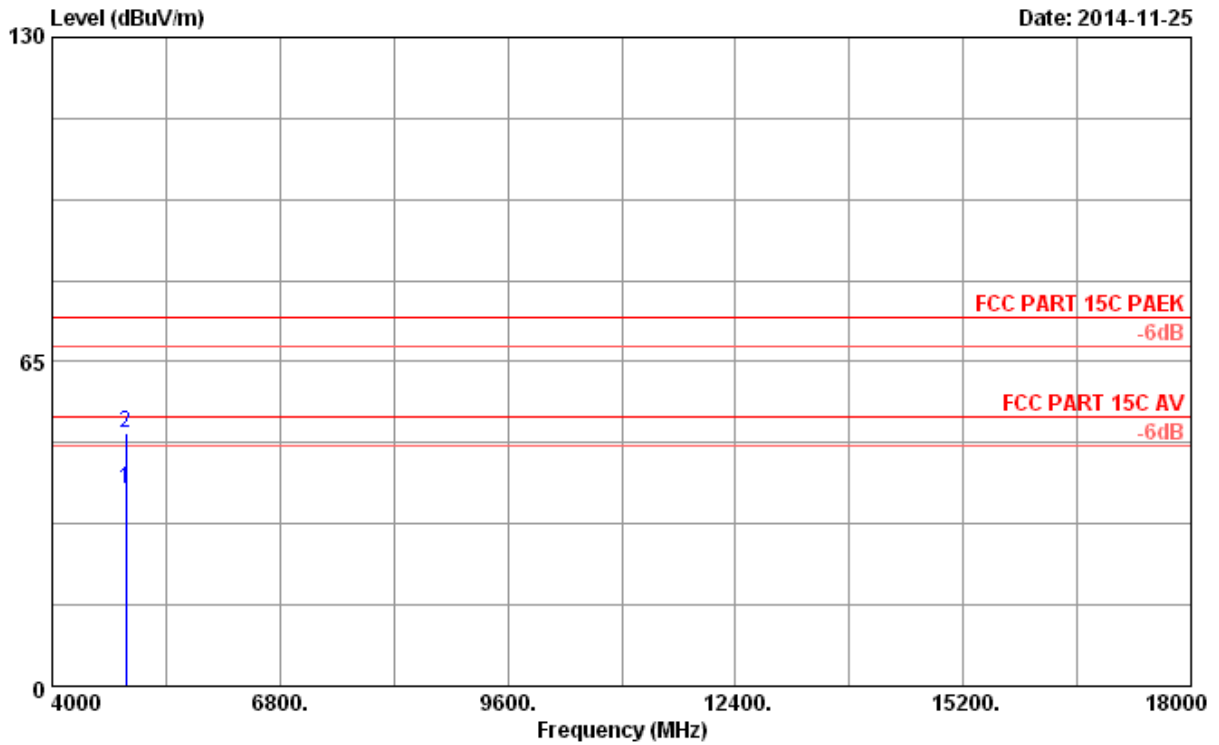


Data: 96

File: F:\2014 Report\T\TP-LINK\ACS14Q1571-FCC -1119.EM6 (104)

Date: 2014-11-25



Site no. : 3m Chamber Data no. : 96
 Dis. / Ant. : 3m 2014 3115 (4580) Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PAEK
 Env. / Ins. : 24*C/56% Engineer : Alice_yang
 EUT : 300Mbps Wireless N Gigabit Access Point
 Power rating : DC 12V From Adapter Input AC 120V/60Hz
 Test Mode : IEEE802.11n HT40 2452MHz Tx
 M/N : M/N:EAP120

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4904.000	33.03	8.66	35.70	33.65	39.64	54.00	14.36	Average
2	4904.000	33.03	8.66	35.70	44.87	50.86	74.00	23.14	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor
 2. The emission levels that are 20dB below the official limit are not reported.

5. CONDUCTED SPURIOUS EMISSIONS

5.1. Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum	Agilent	N9030A	MY51380221	Oct.29, 14	1 Year
2.	Attenuator (20dB)	Agilent	8491B	MY39262165	Apr. 28,14	1 Year
3.	RF Cable	Hubersuhner	SUCOFLEX102	28620/2	Apr. 28,14	1 Year

5.2. Limit

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

5.3. Test Procedure

The transmitter output was connected to a spectrum analyzer, The resolution bandwidth is set to 100 kHz, The video bandwidth is set to 300 kHz and measure all the emissions detected.

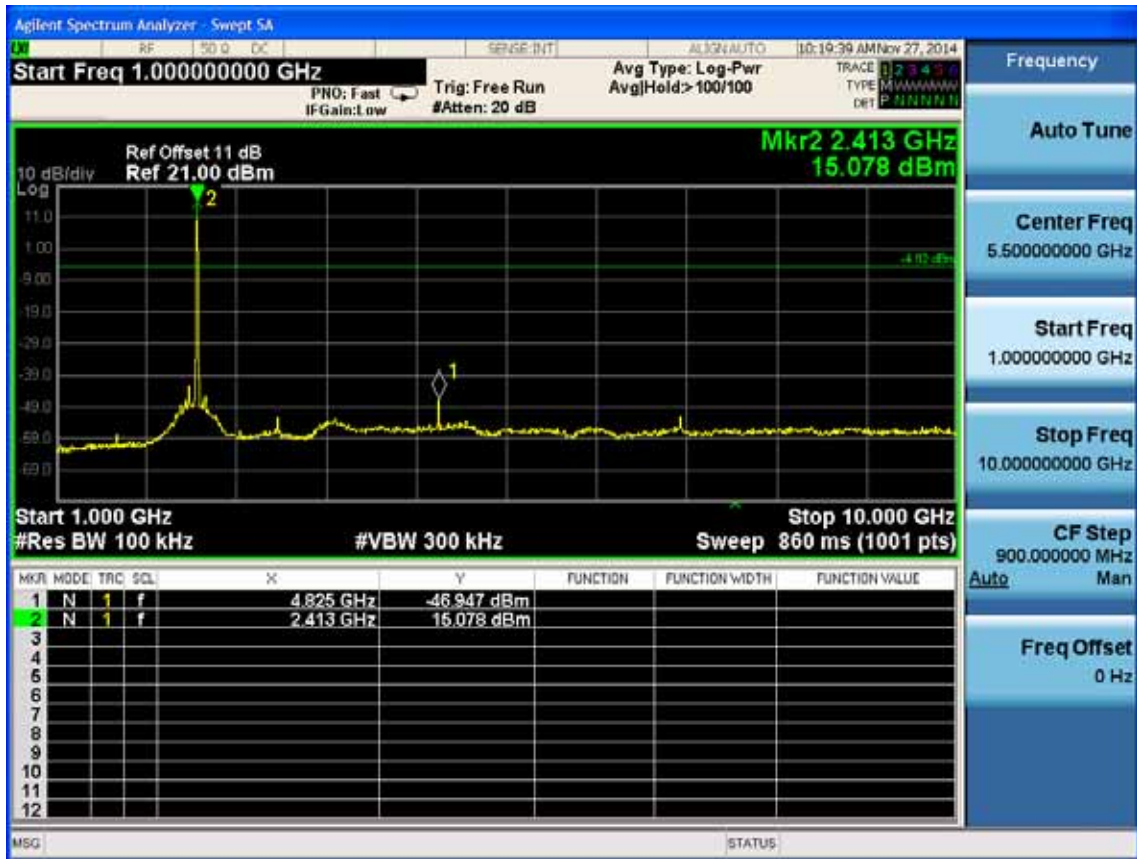
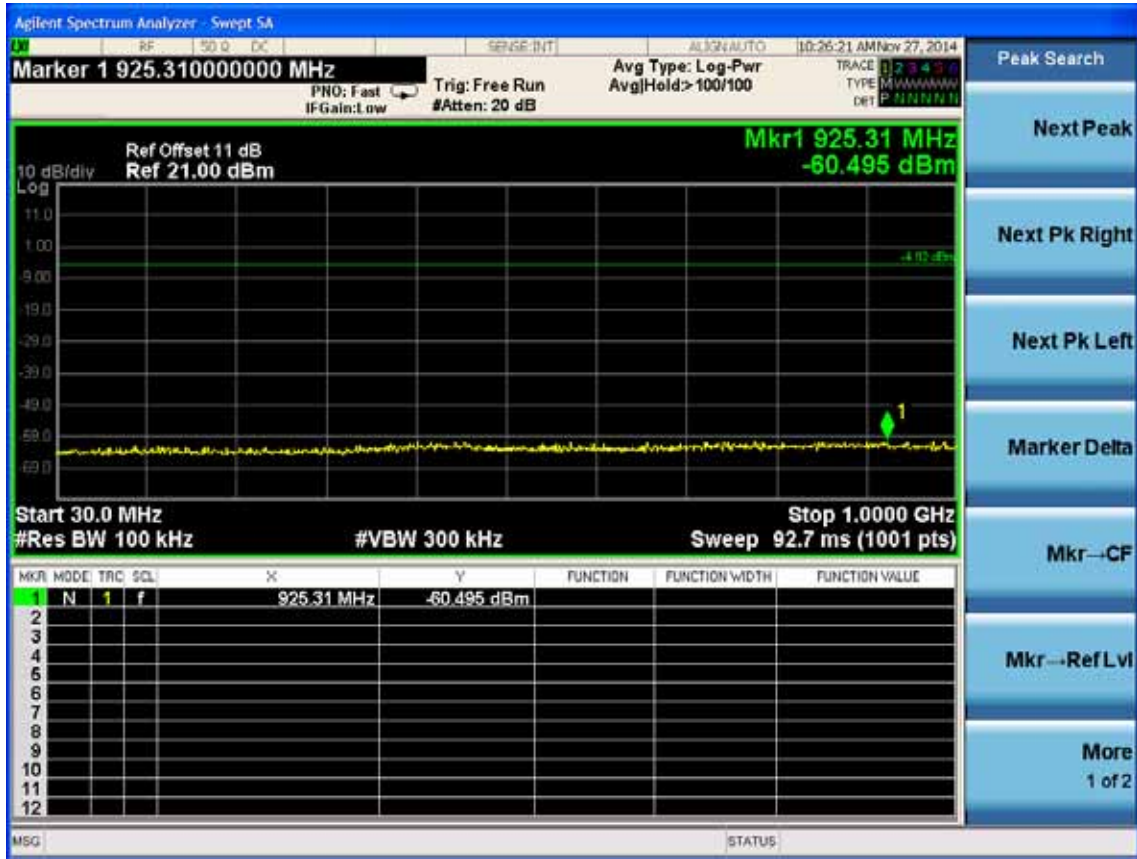
5.4. Test result

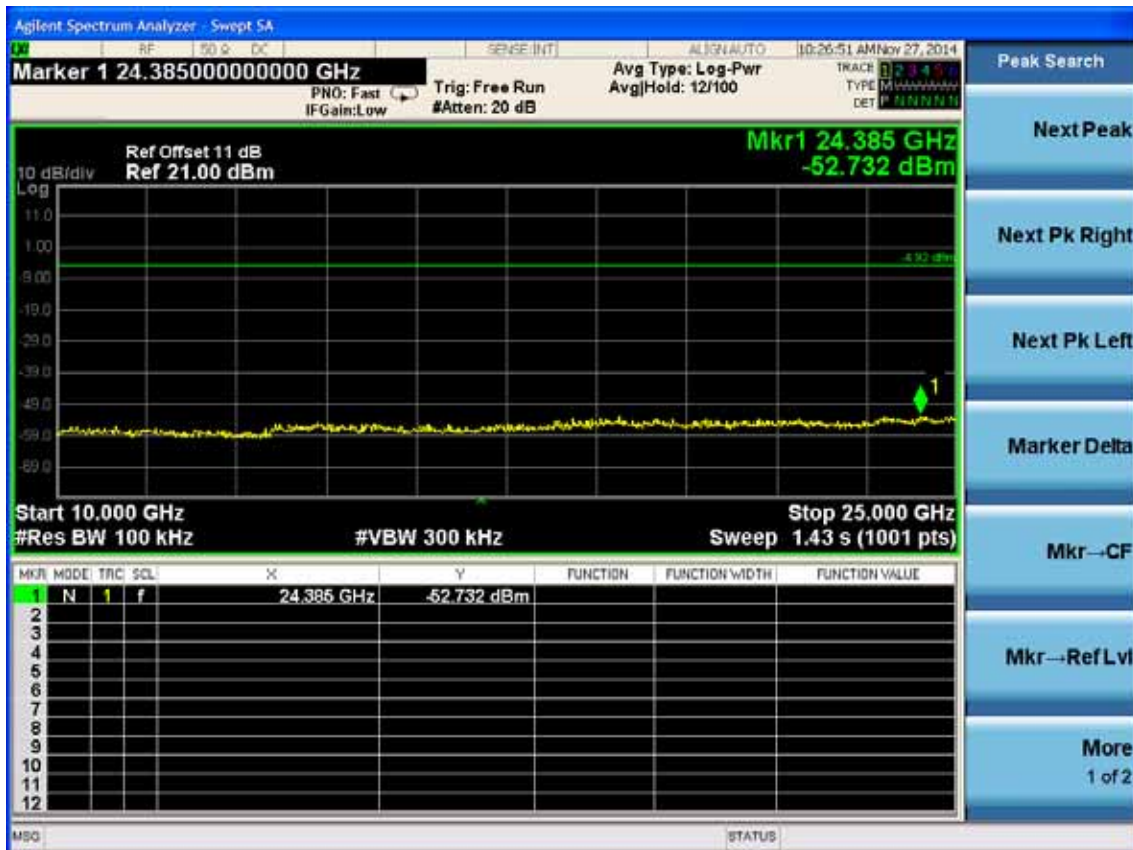
PASS (The testing data was attached in the next pages.)

ANT 0

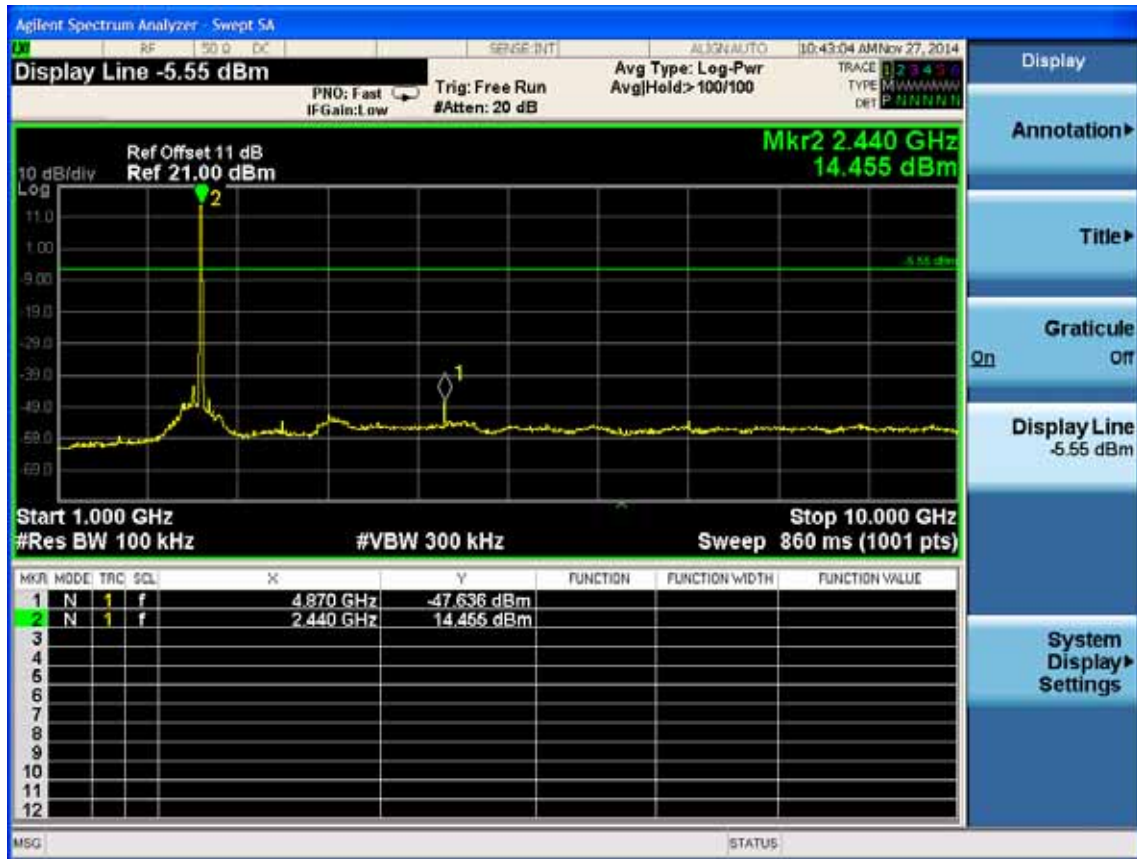
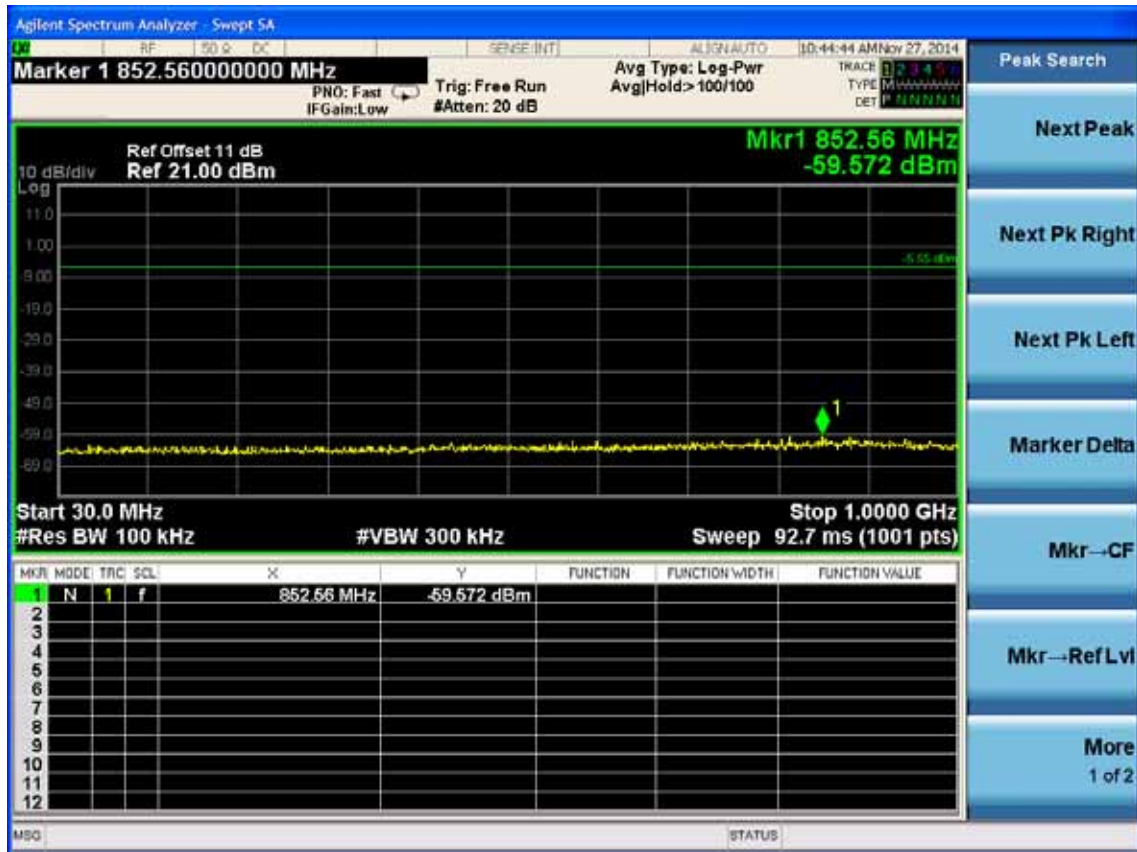
Test Mode: IEEE 802.11b TX

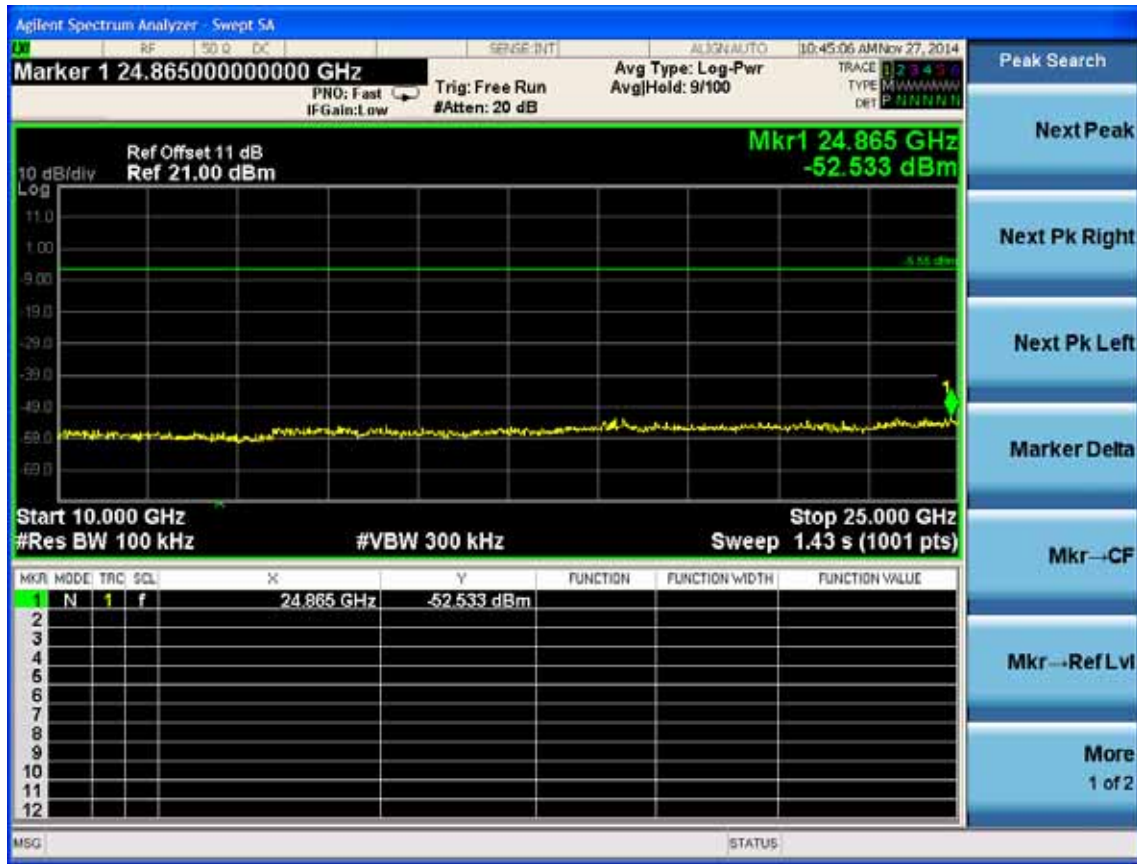
Test CH1: 2412MHz



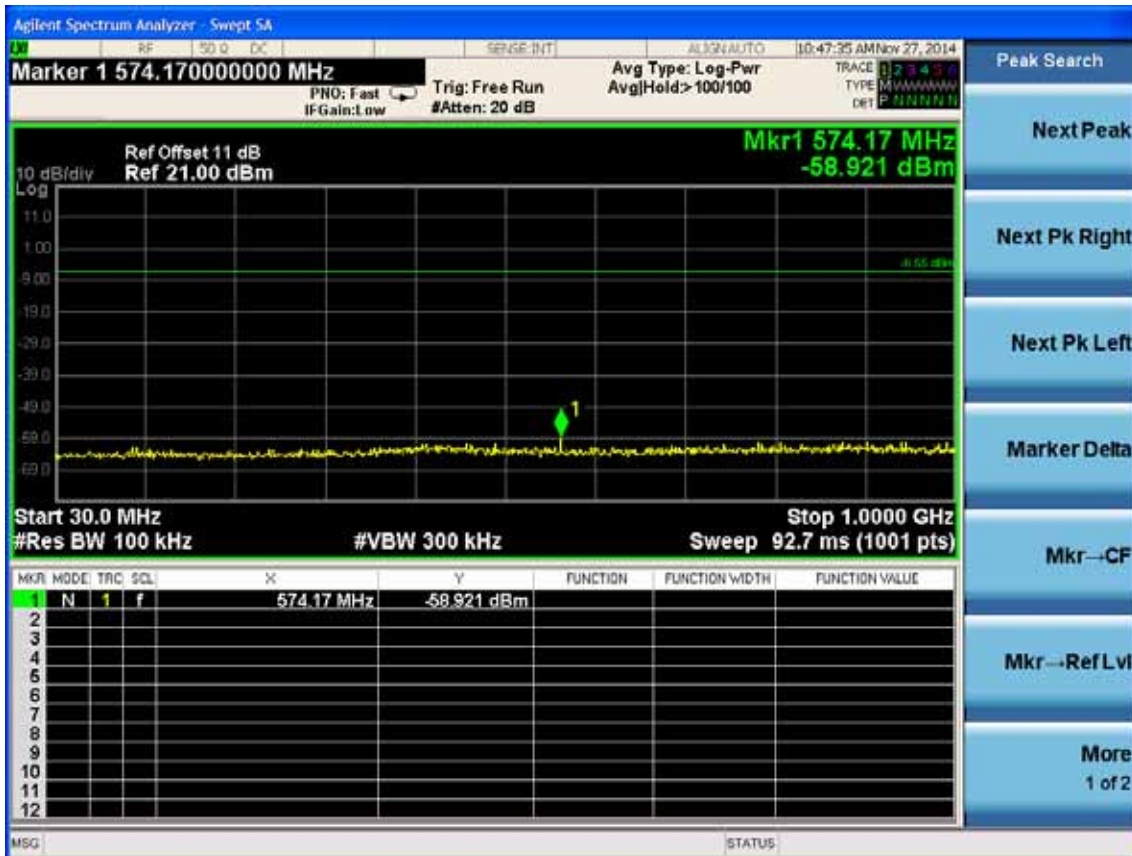


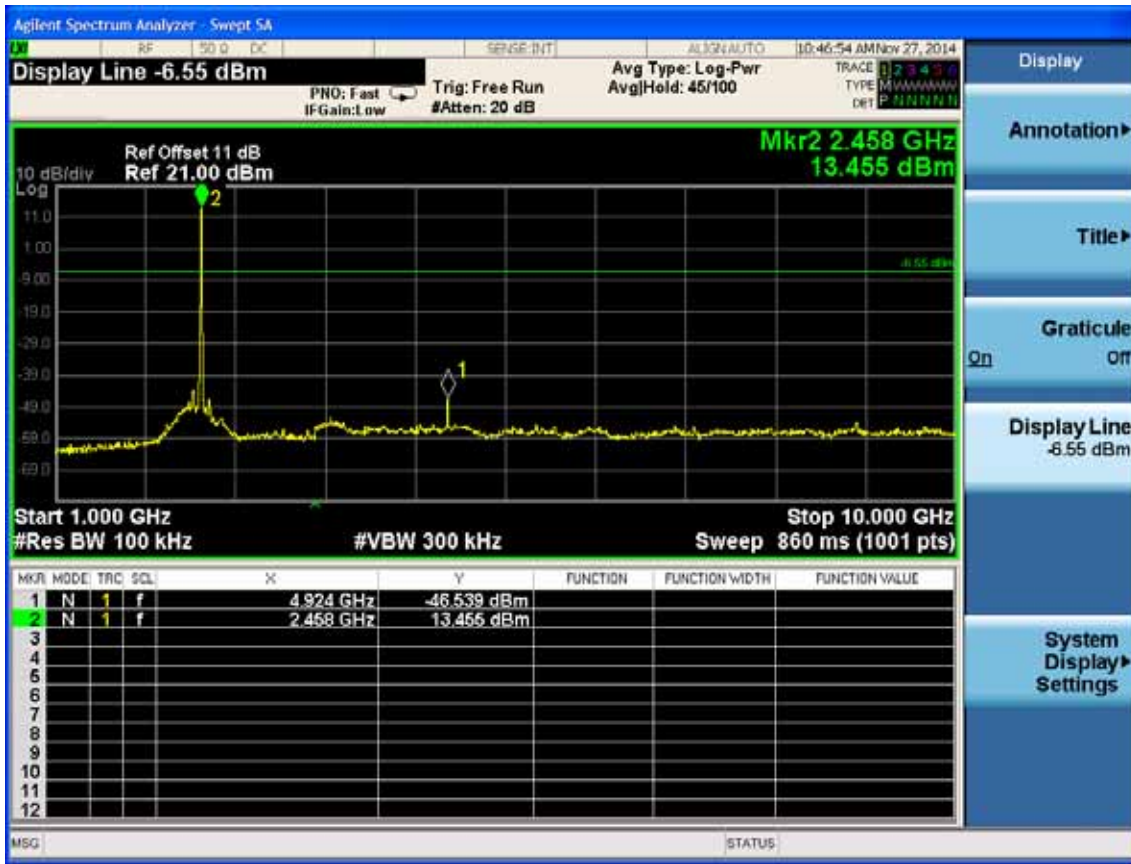
Test CH6: 2437MHz

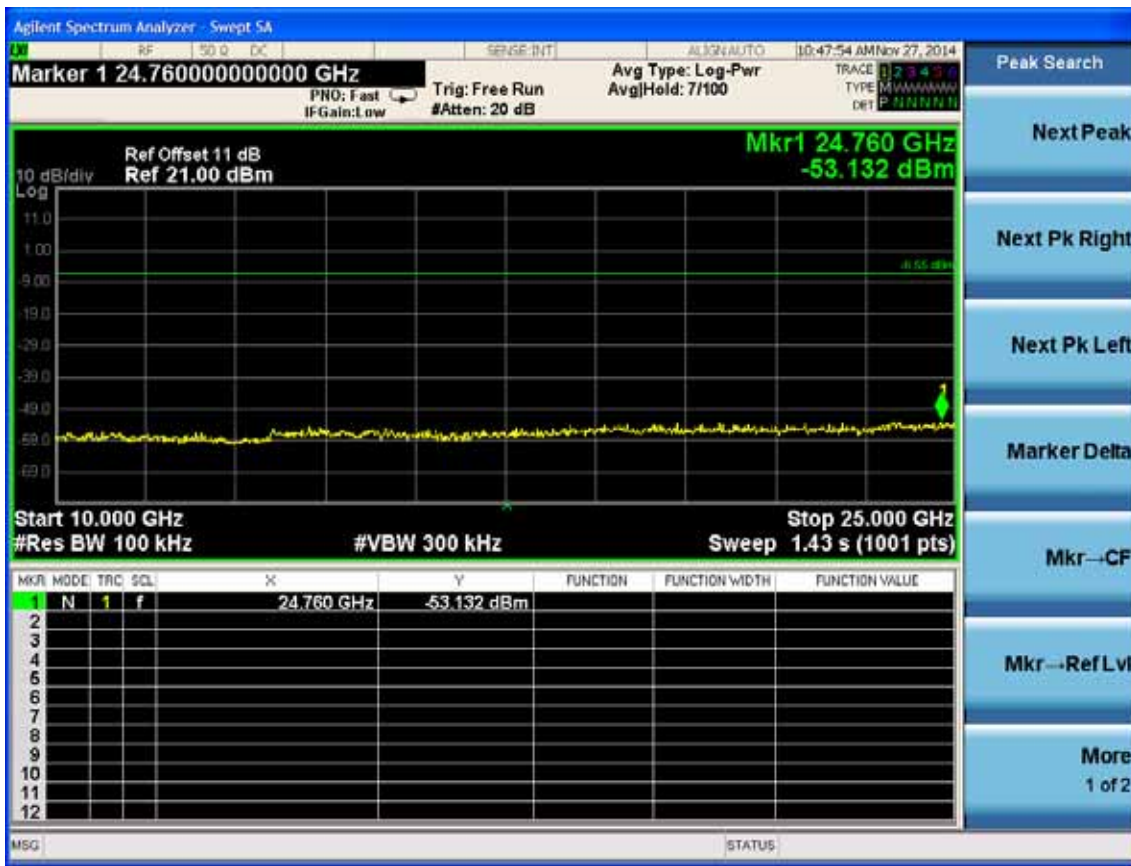




Test CH11: 2462MHz

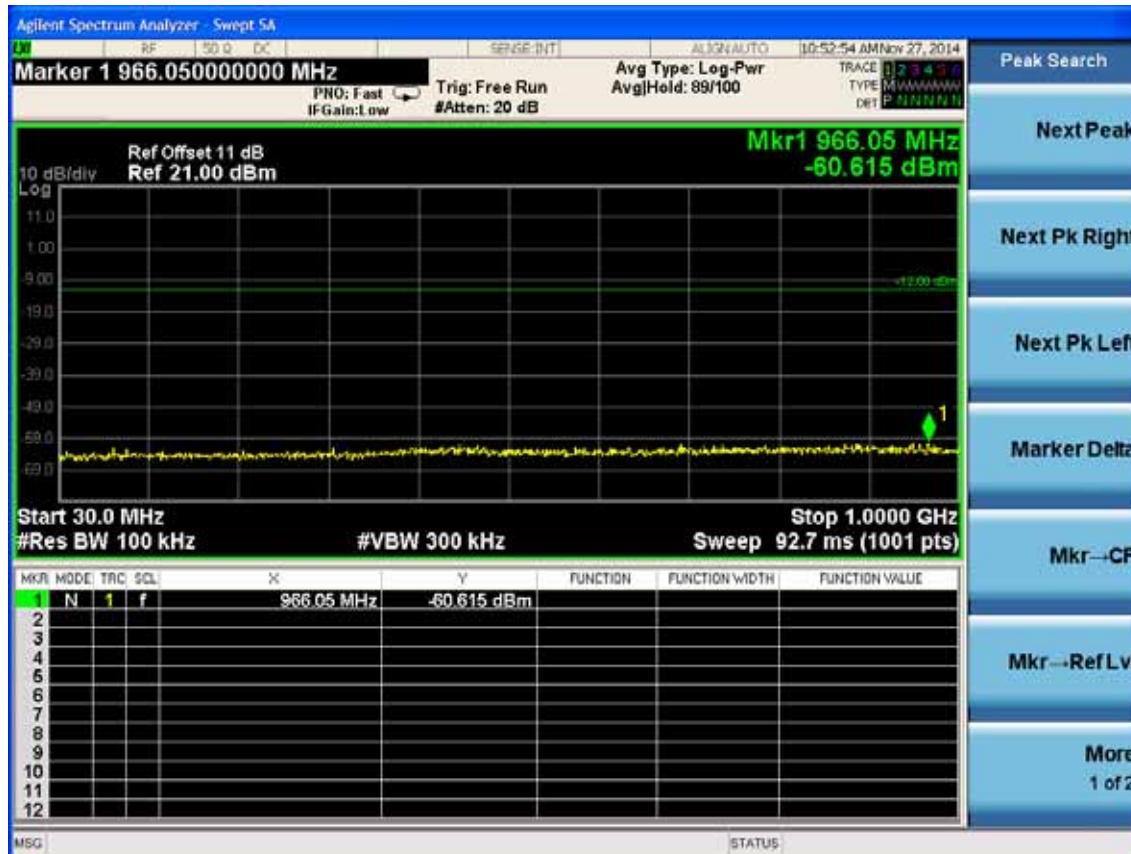


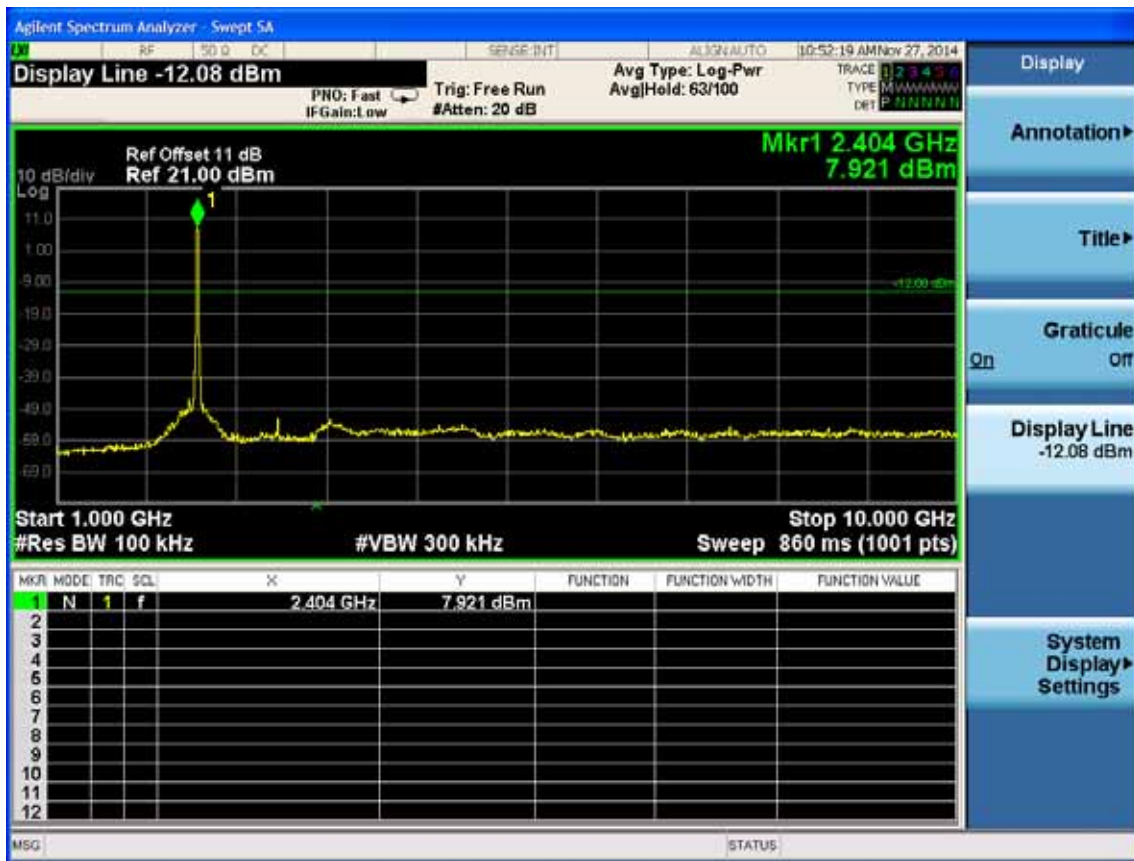


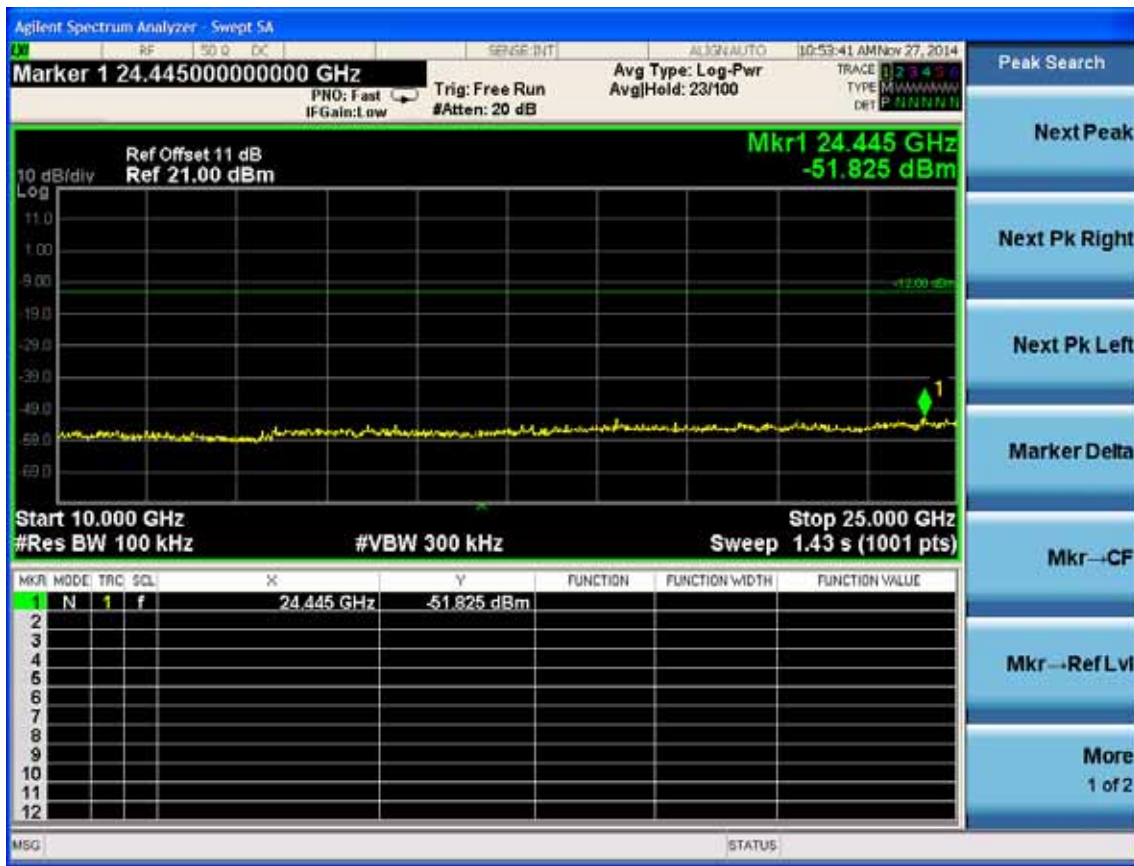


Test Mode: IEEE 802.11g TX

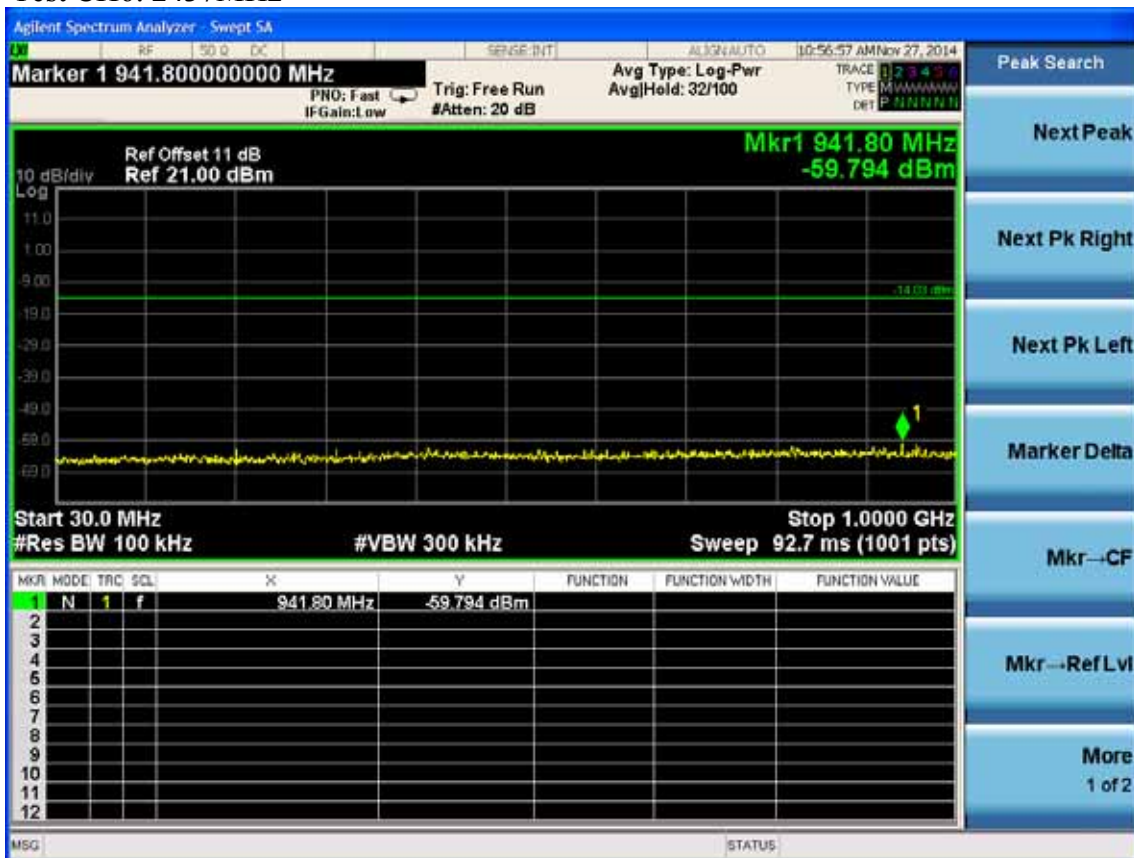
Test CH1: 2412MHz

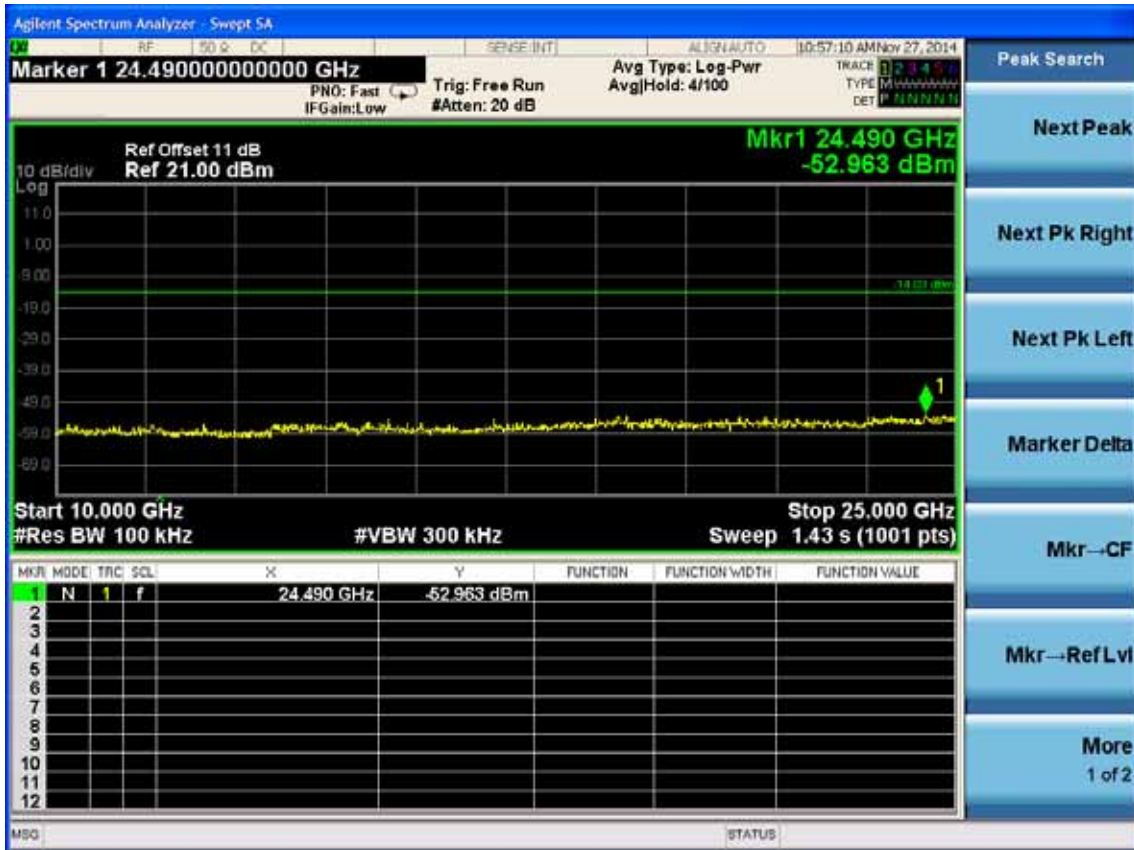
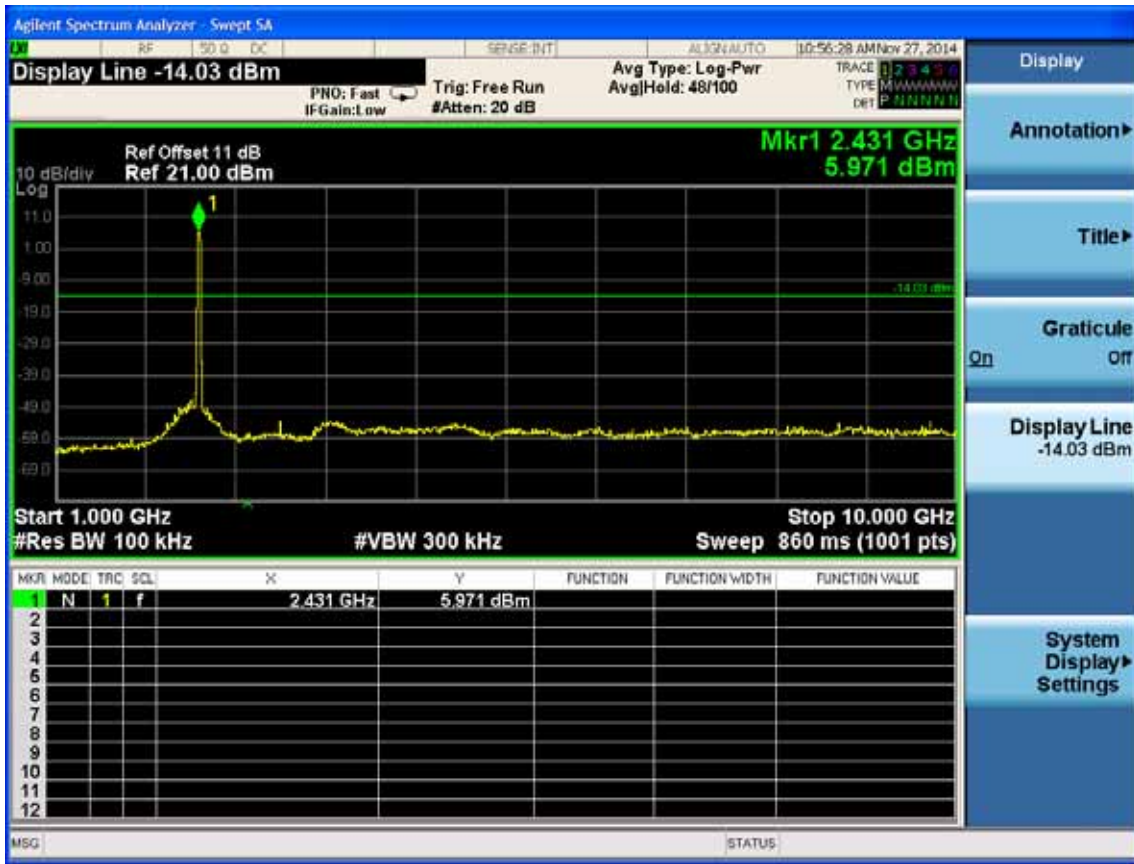




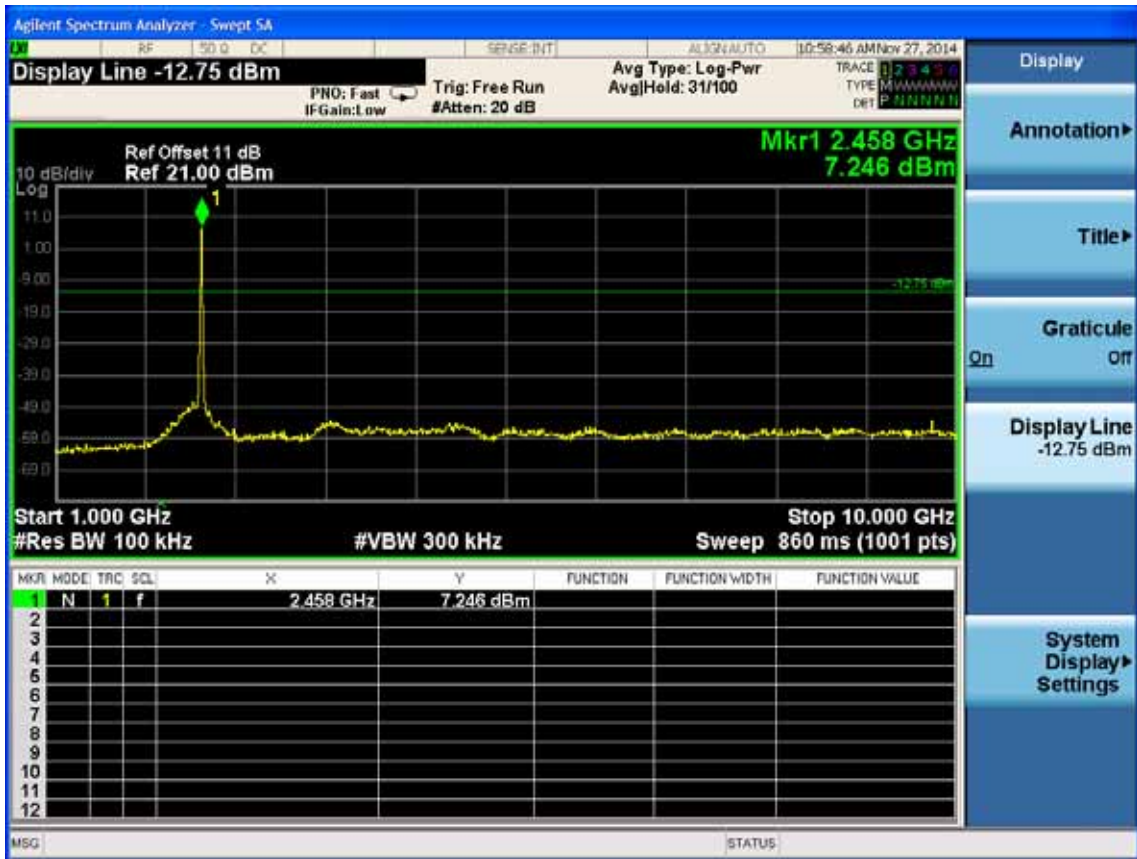
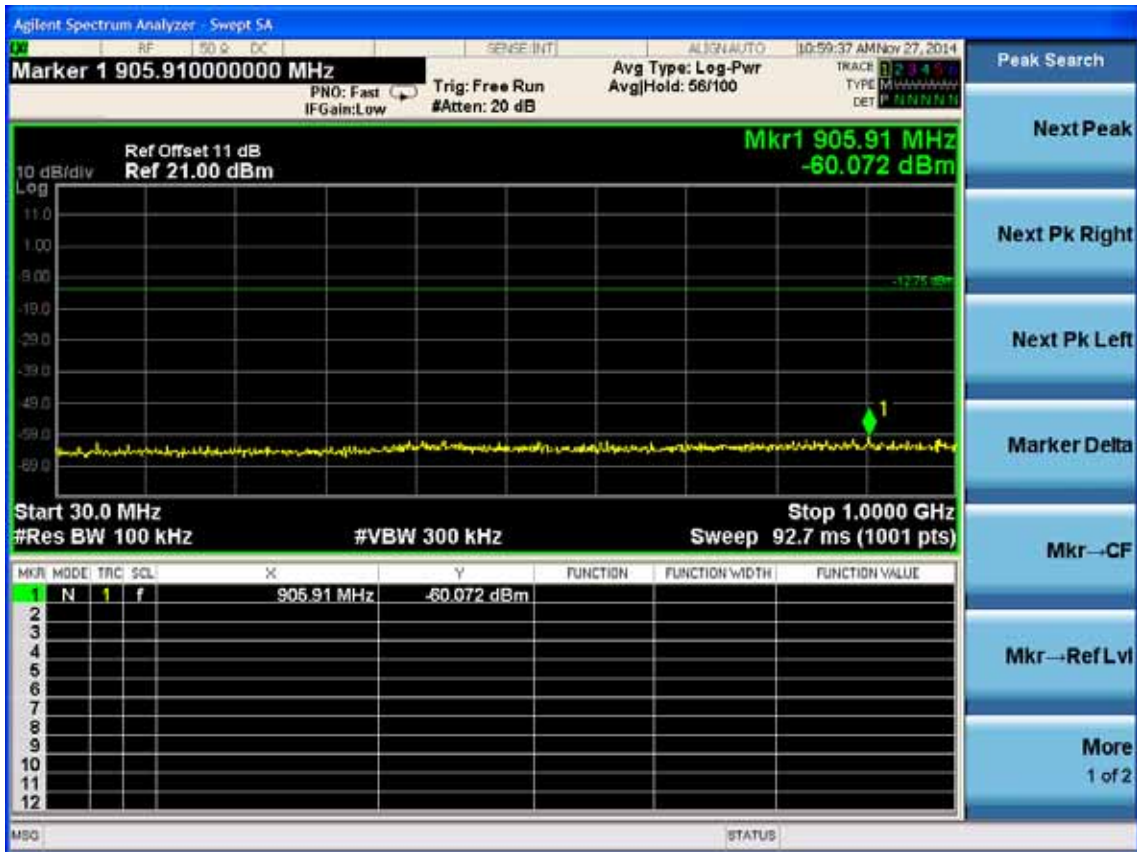


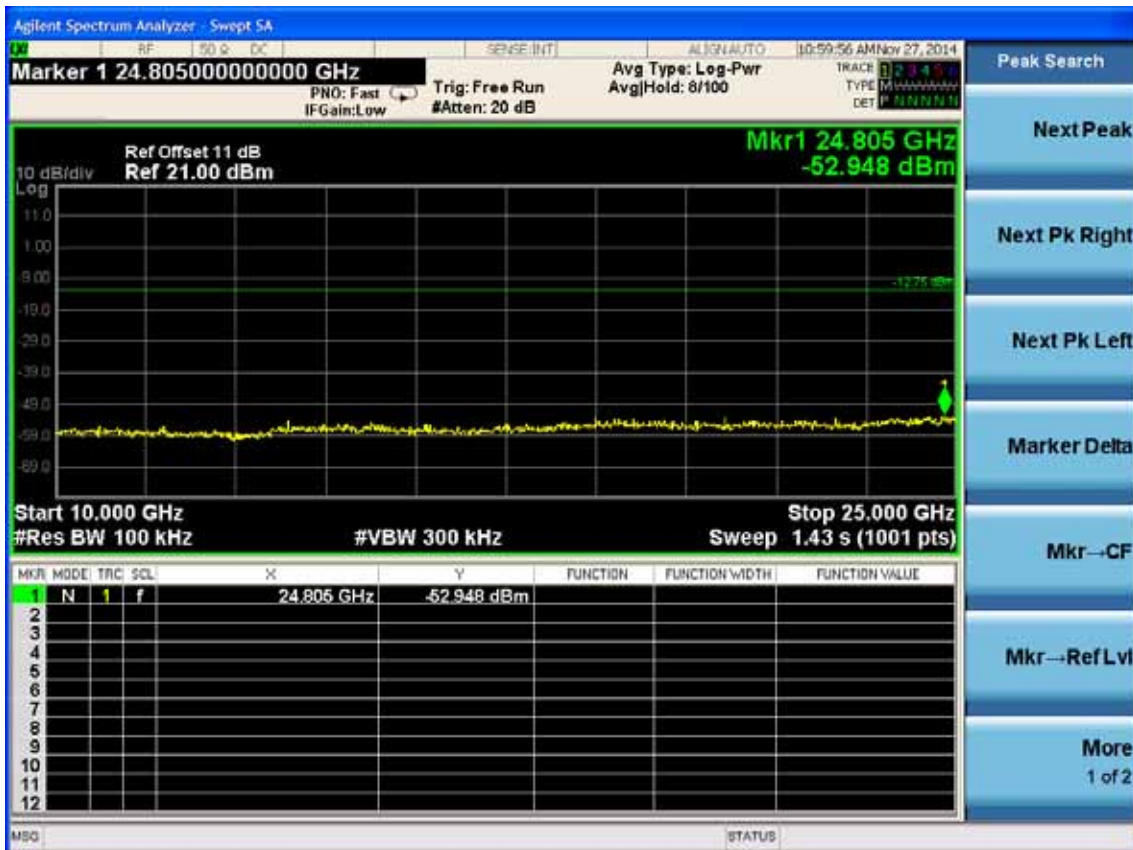
Test CH6: 2437MHz



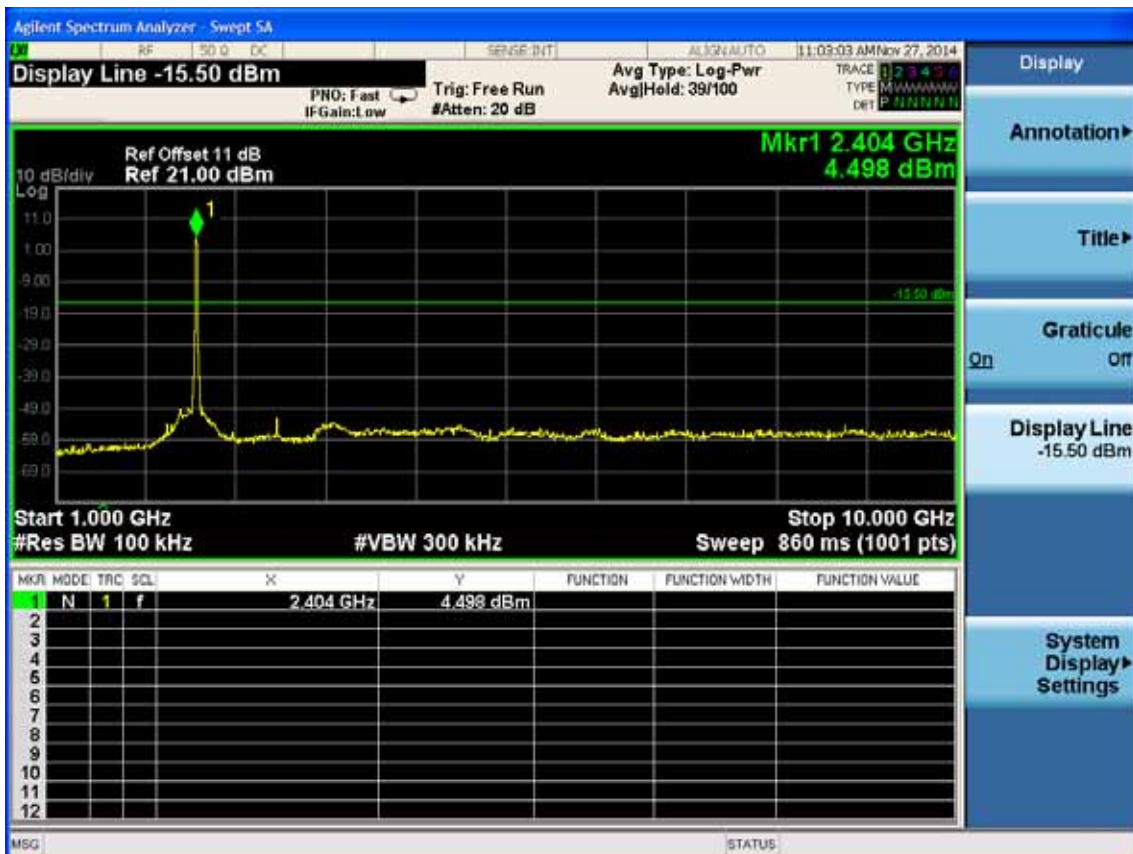
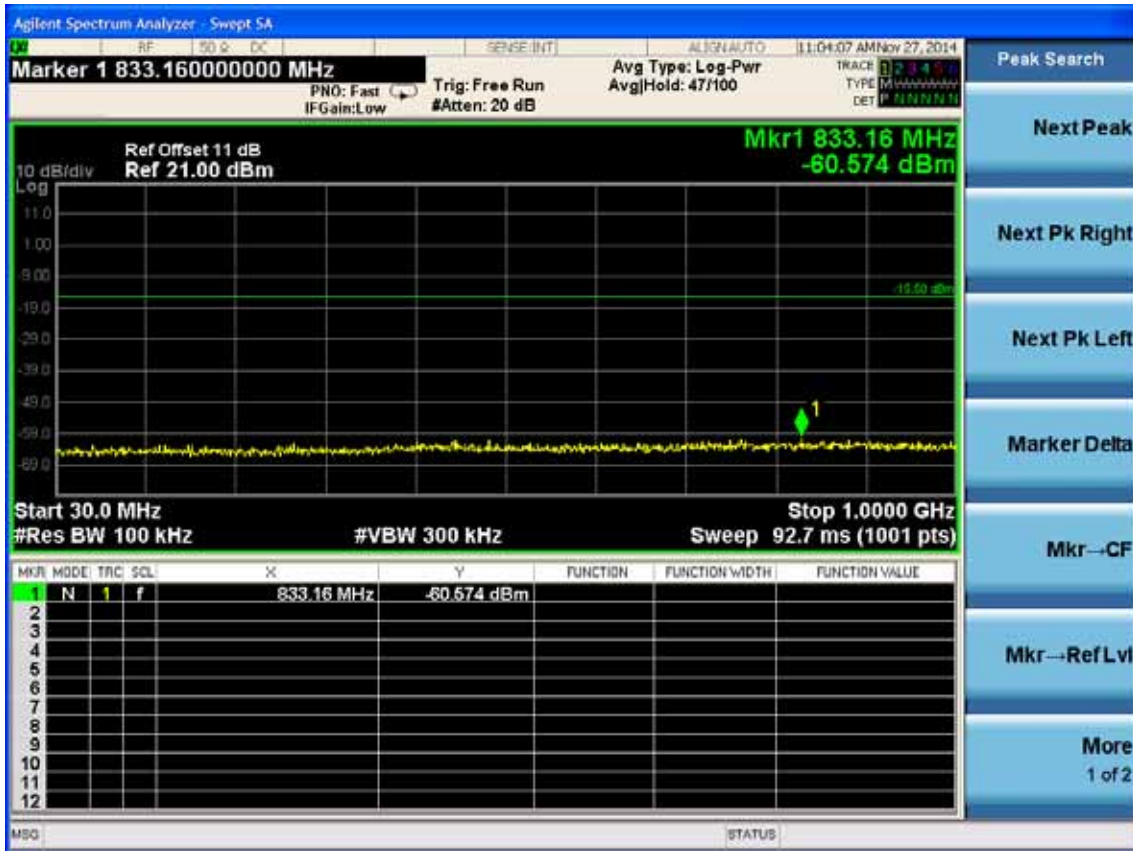


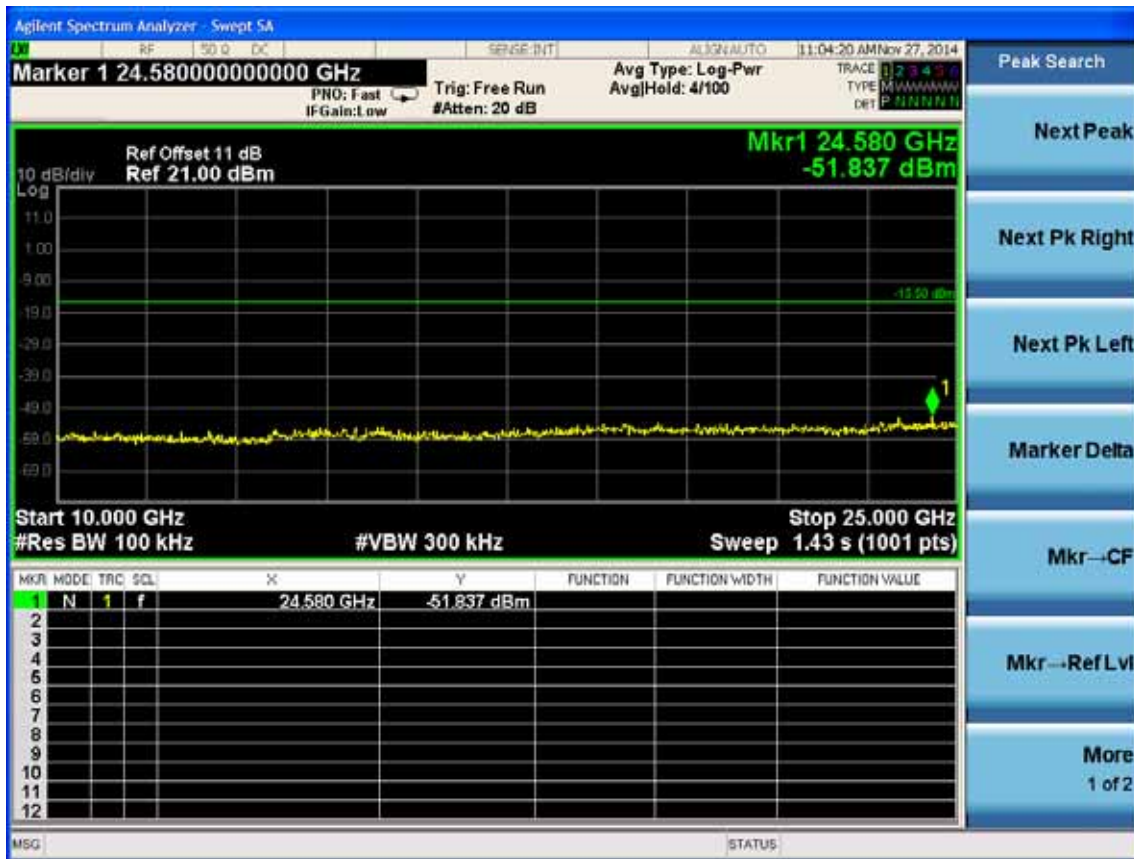
Test CH11: 2462MHz



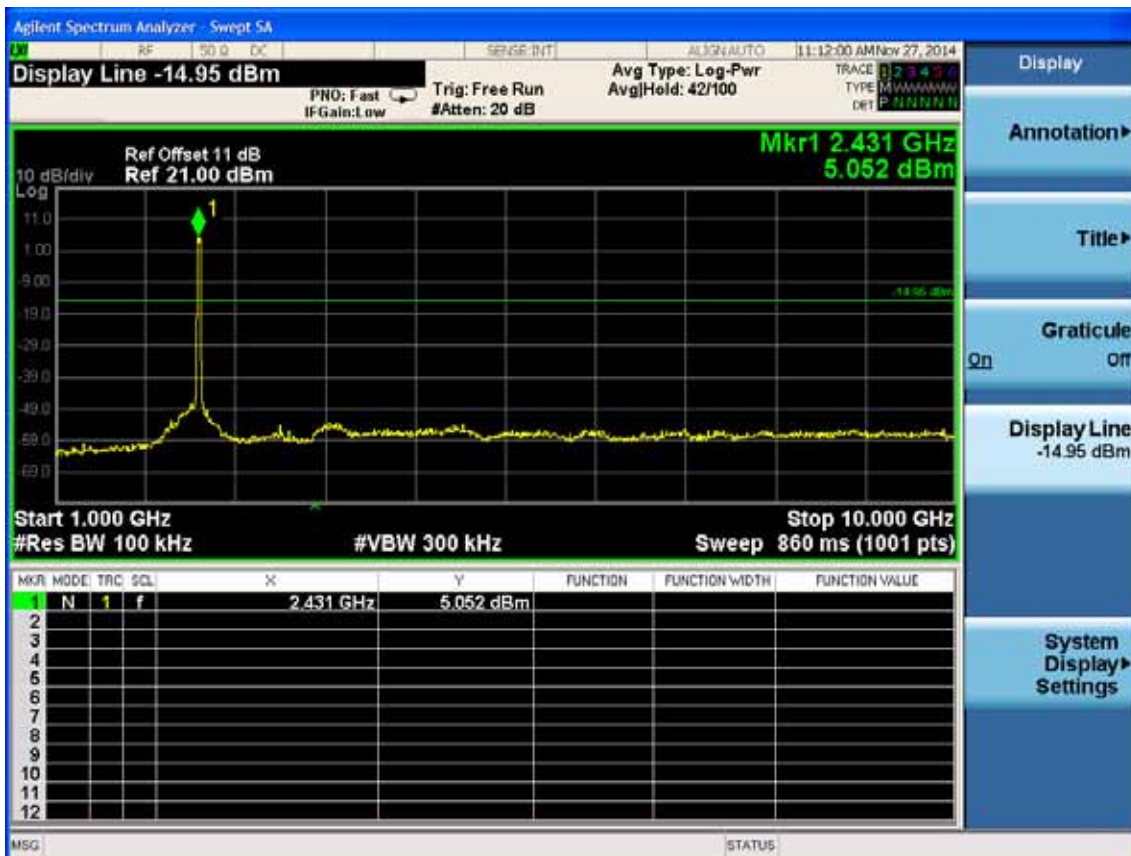
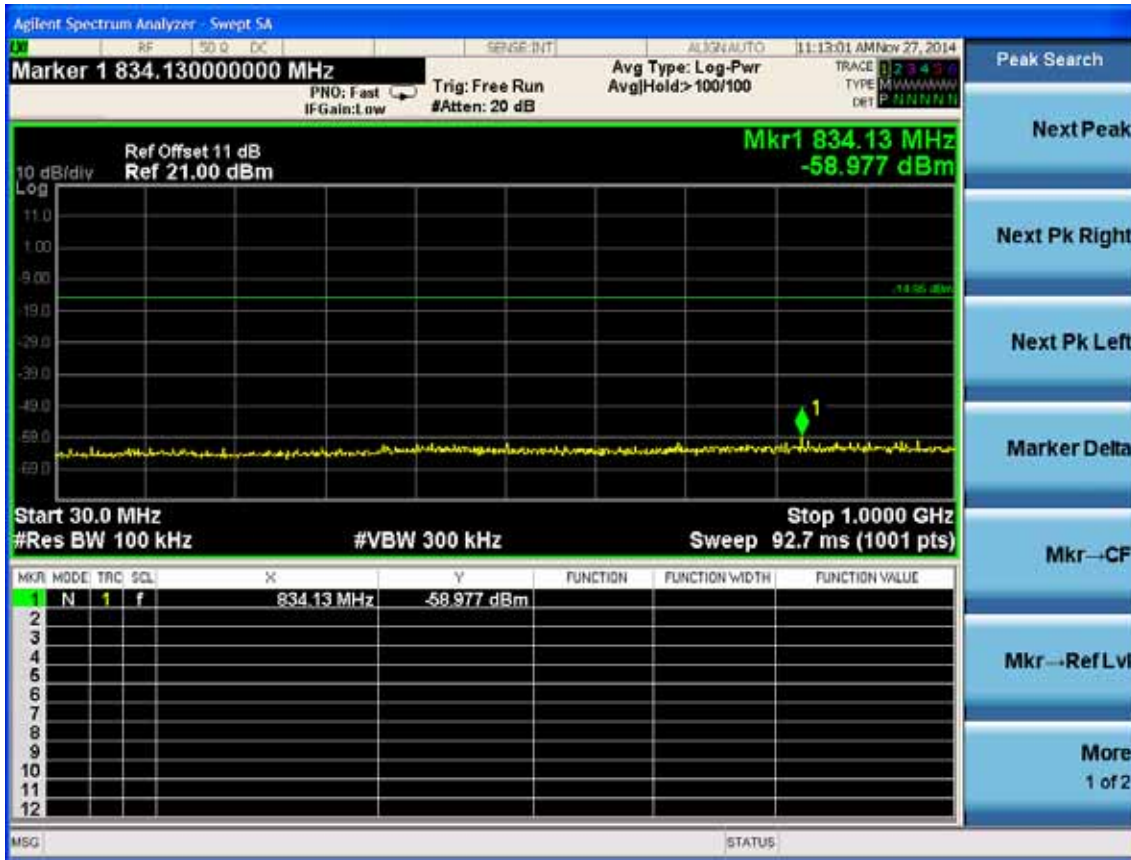


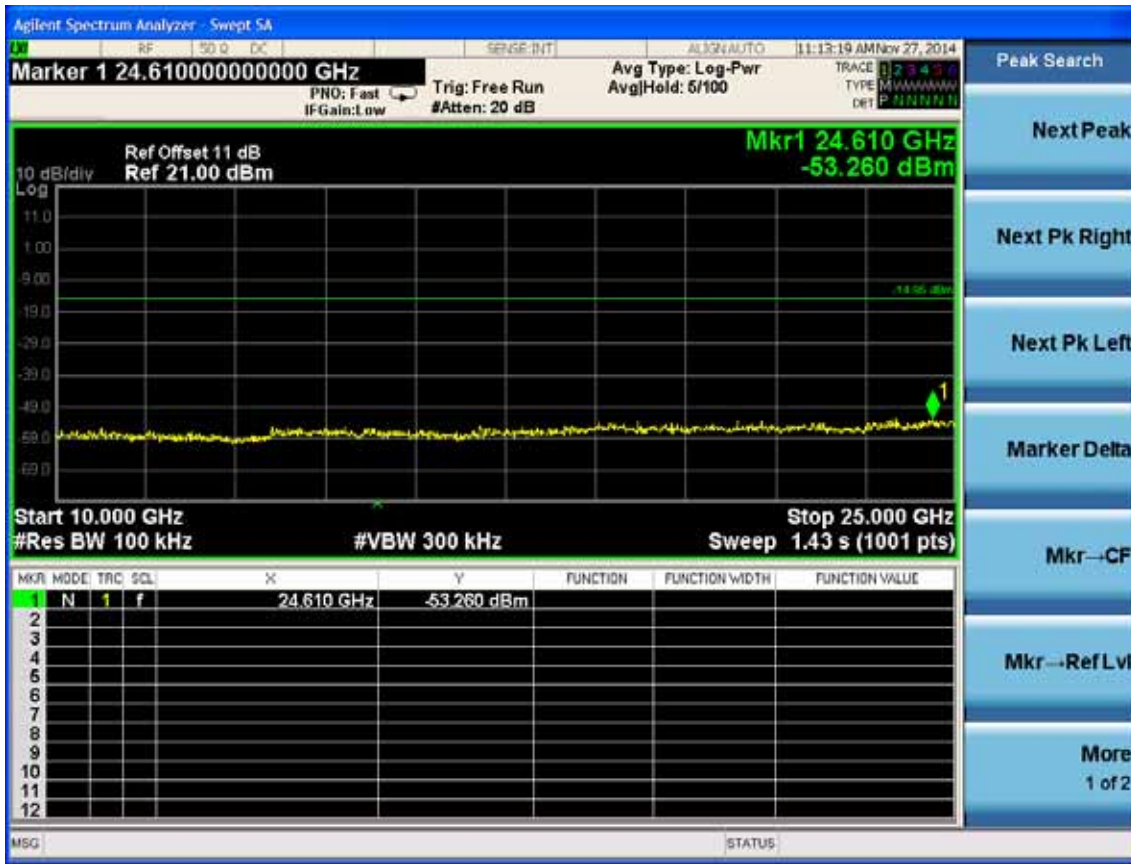
Test Mode: IEEE 802.11n HT20 TX
 Test CH1: 2412MHz



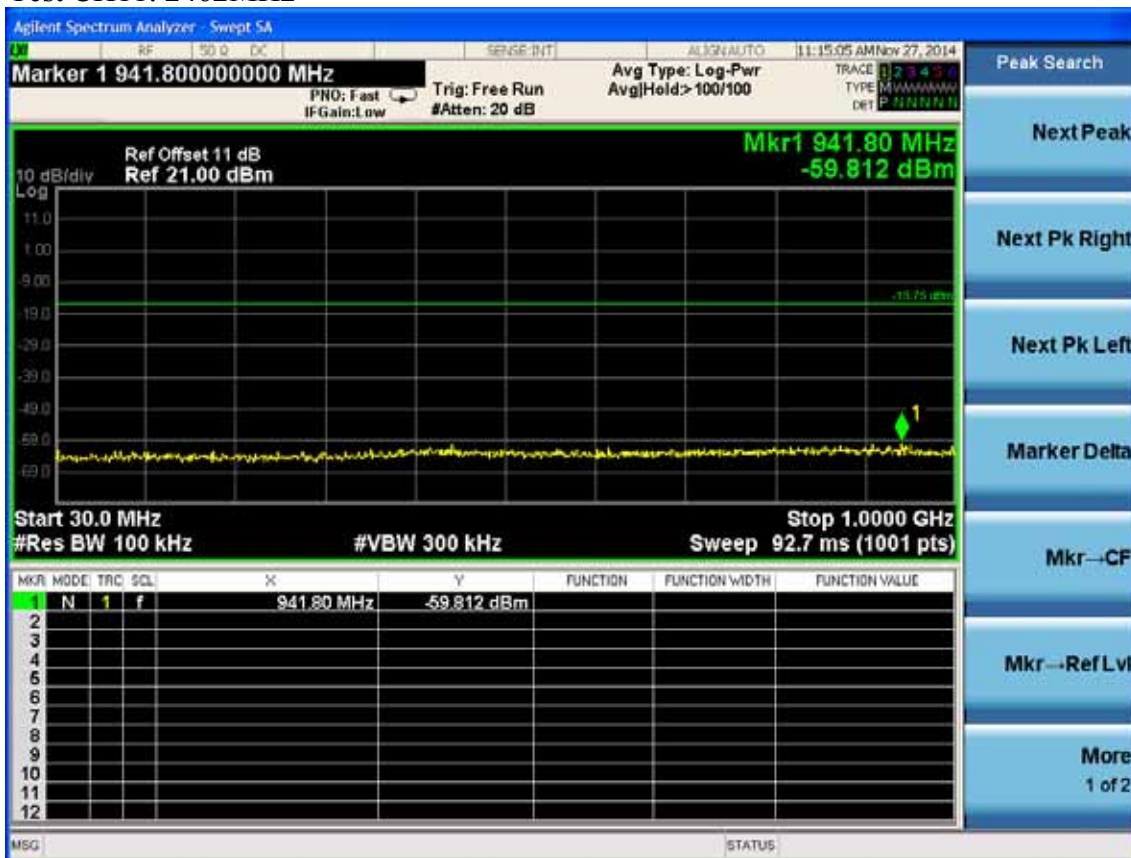


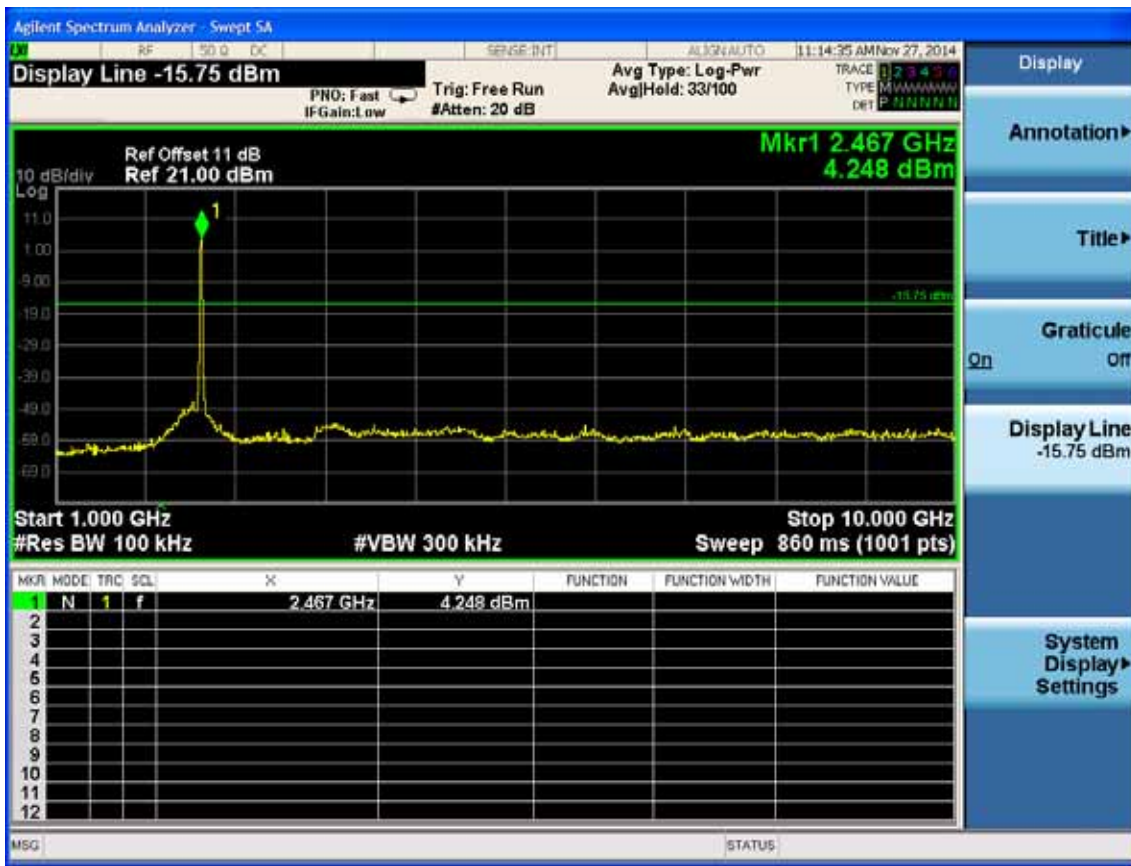
Test CH6: 2437MHz

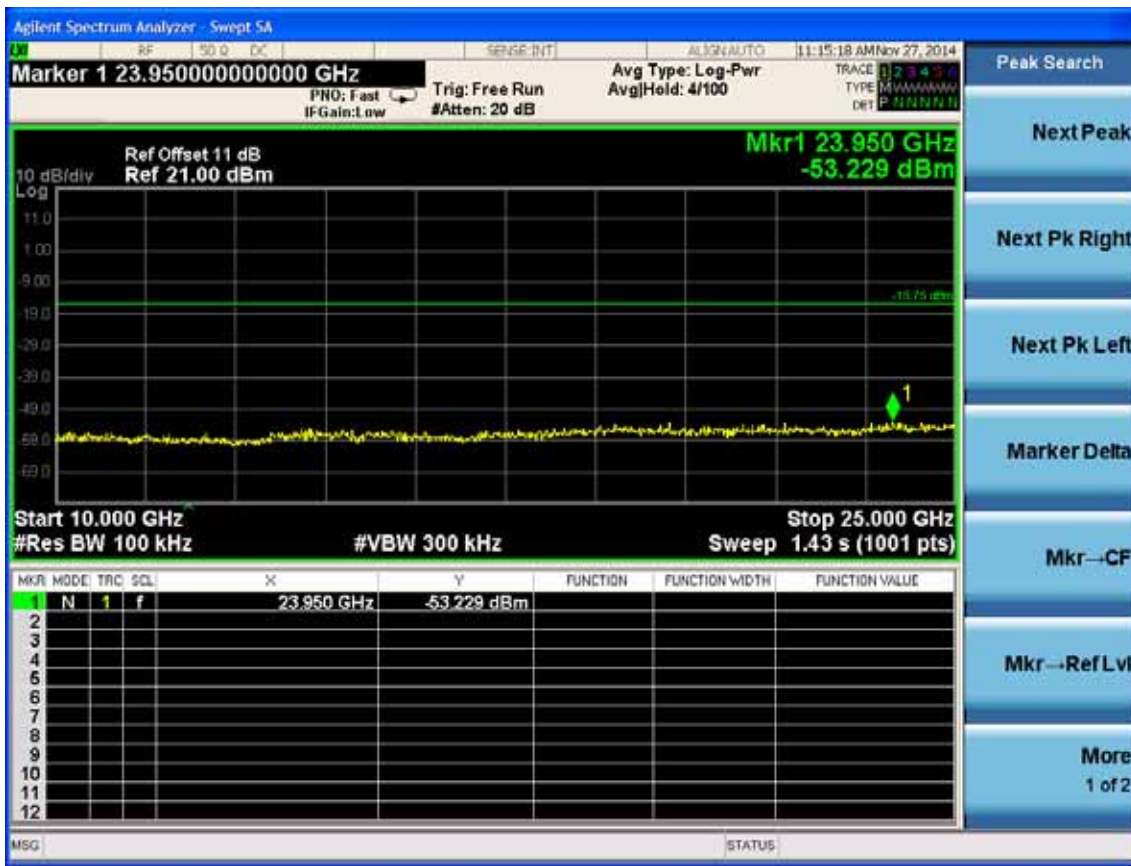




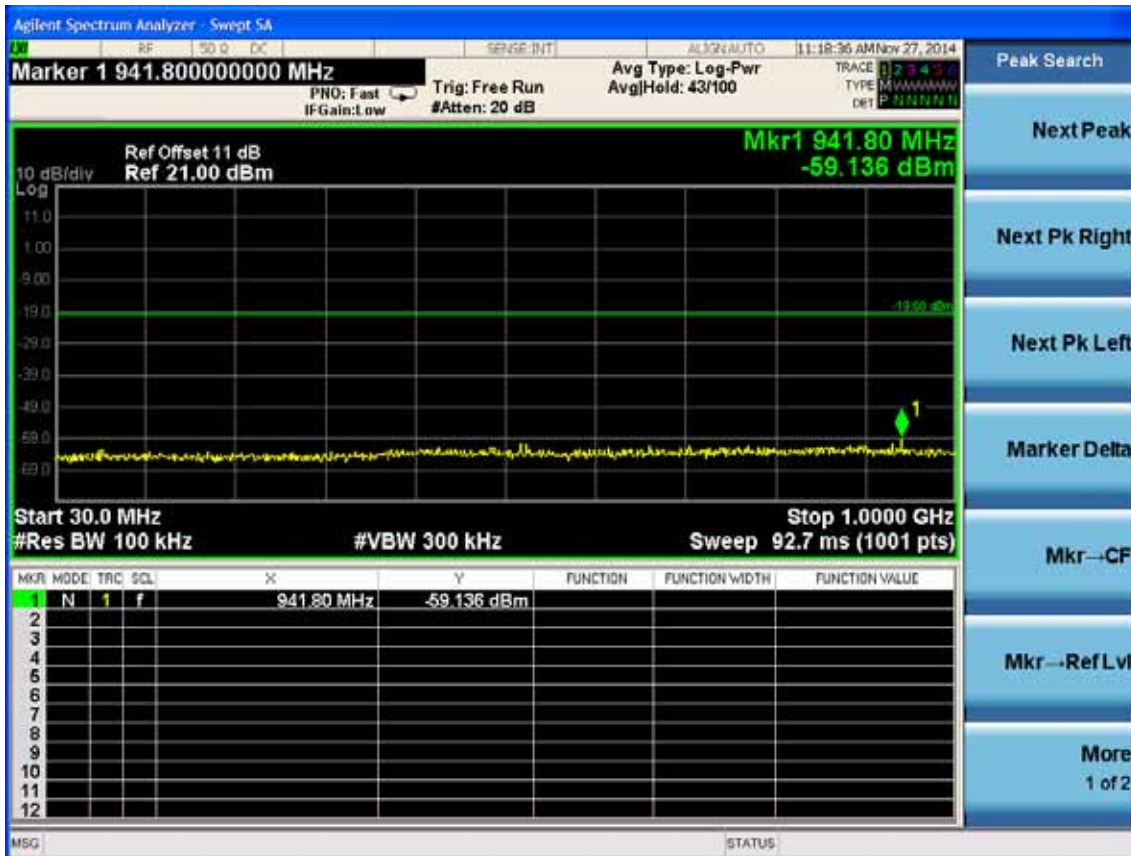
Test CH11: 2462MHz

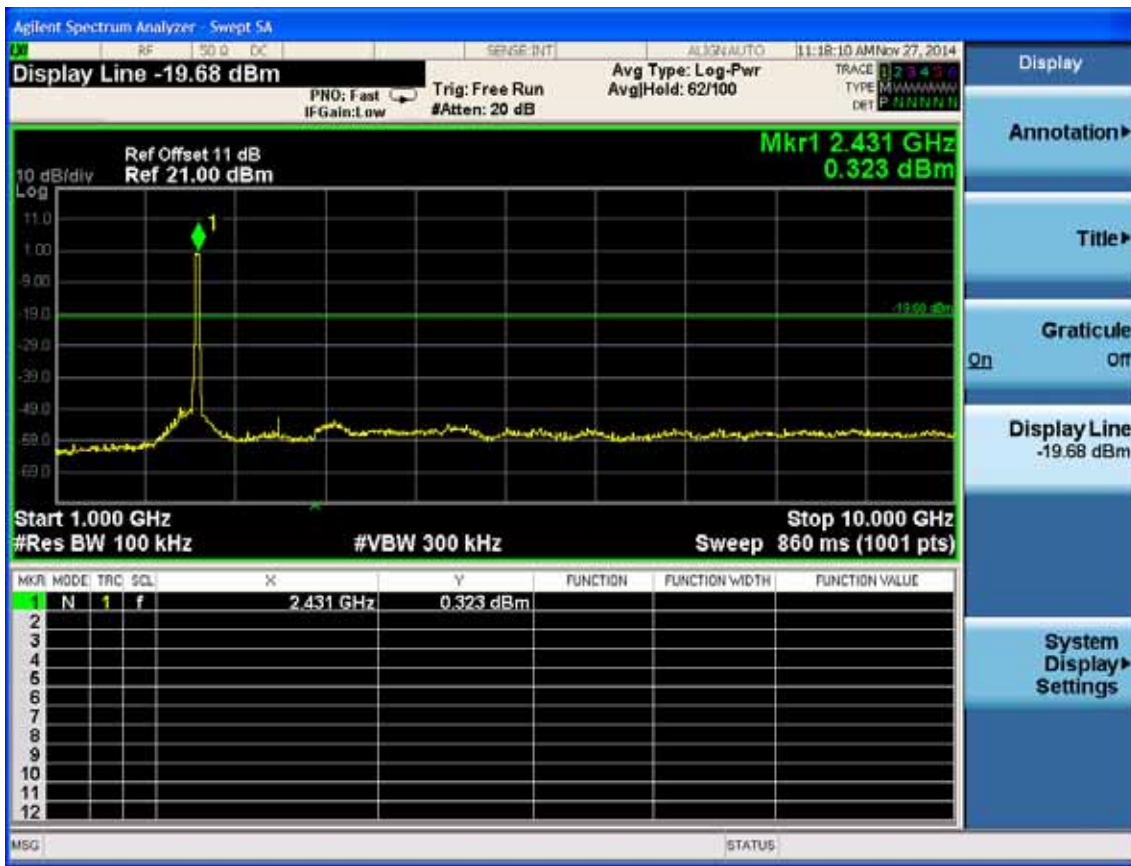


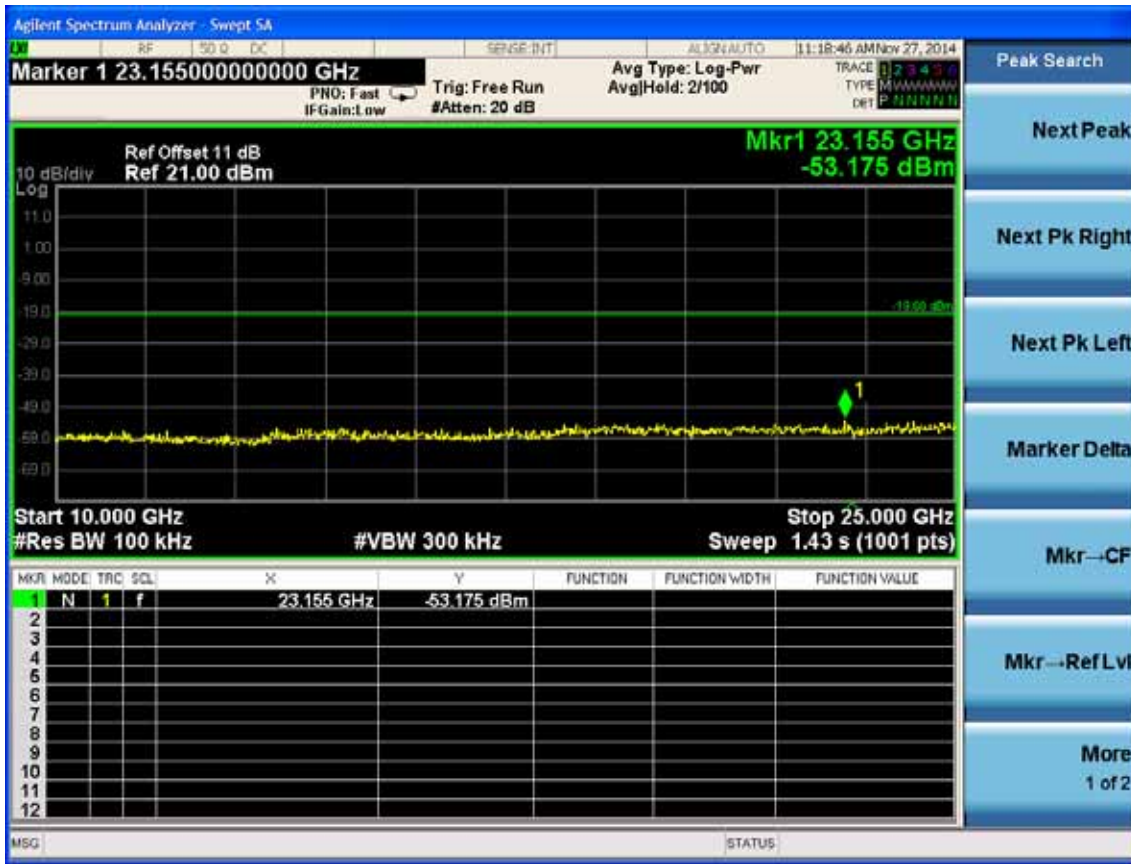




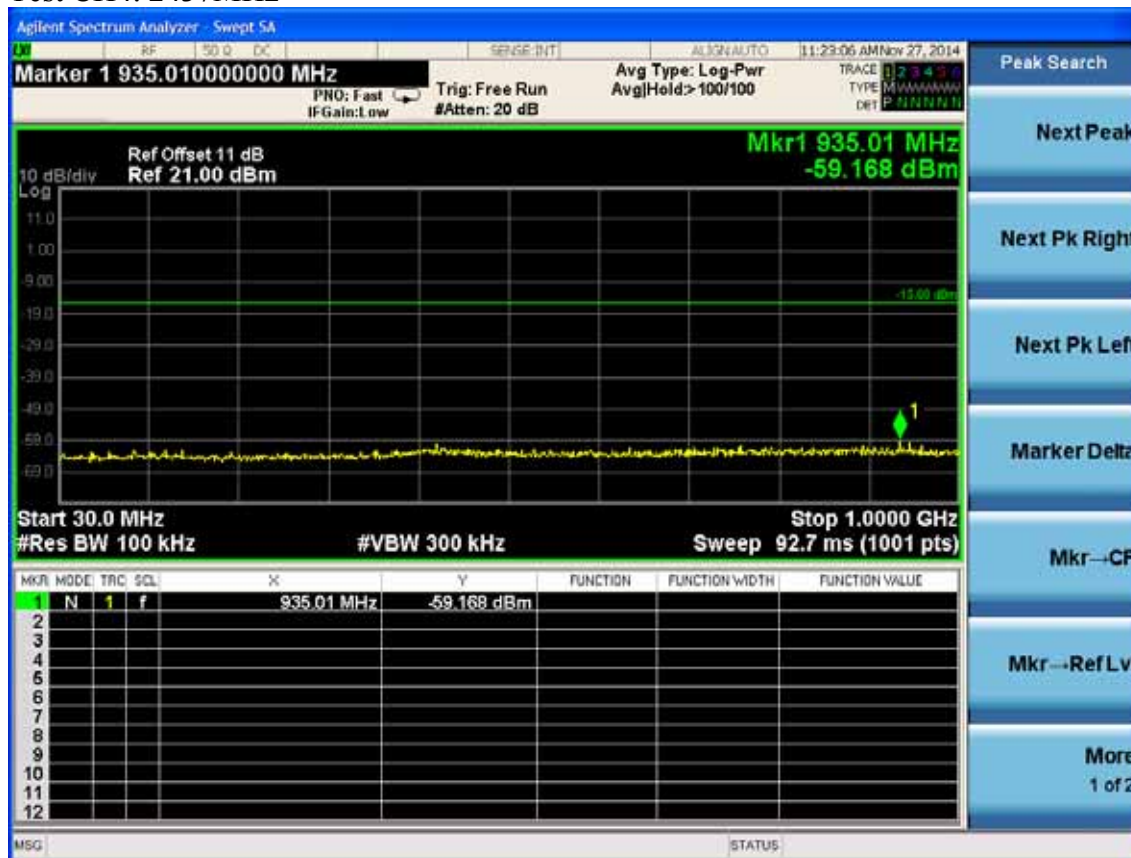
Test Mode: IEEE 802.11n HT40 TX
Test CH1: 2422MHz

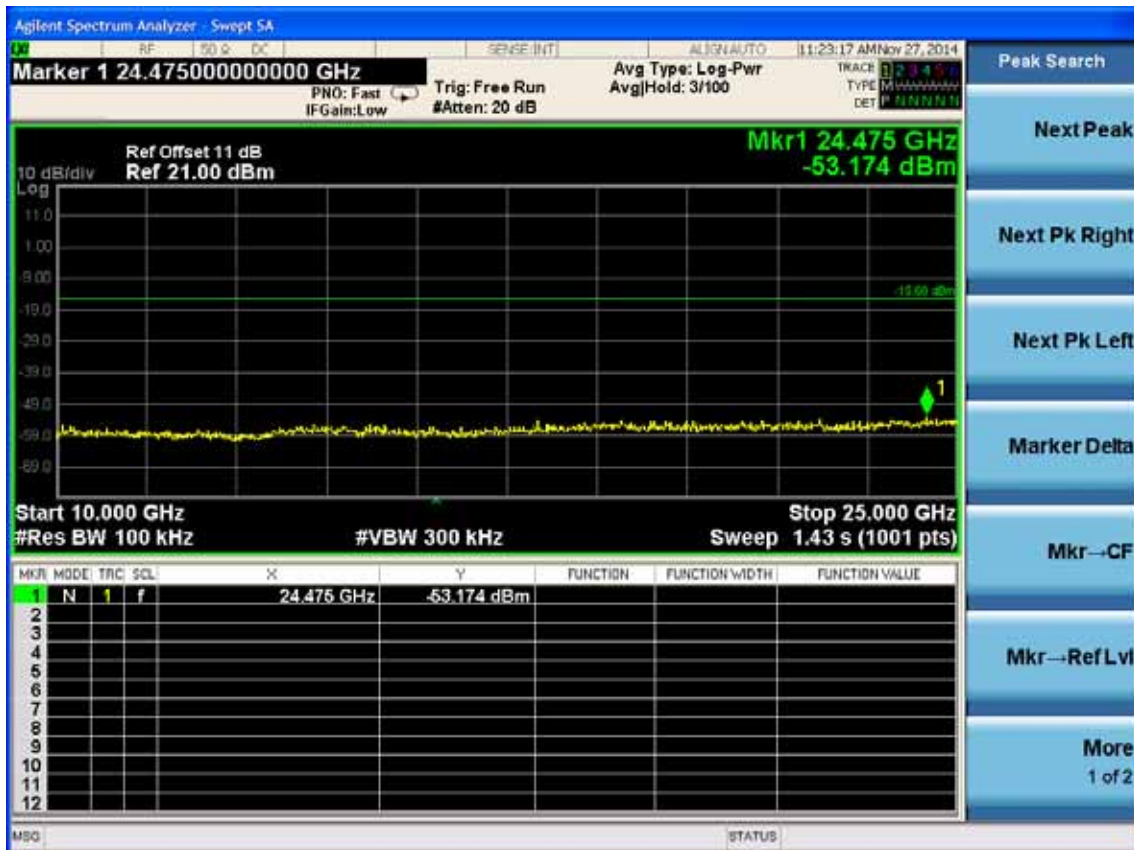
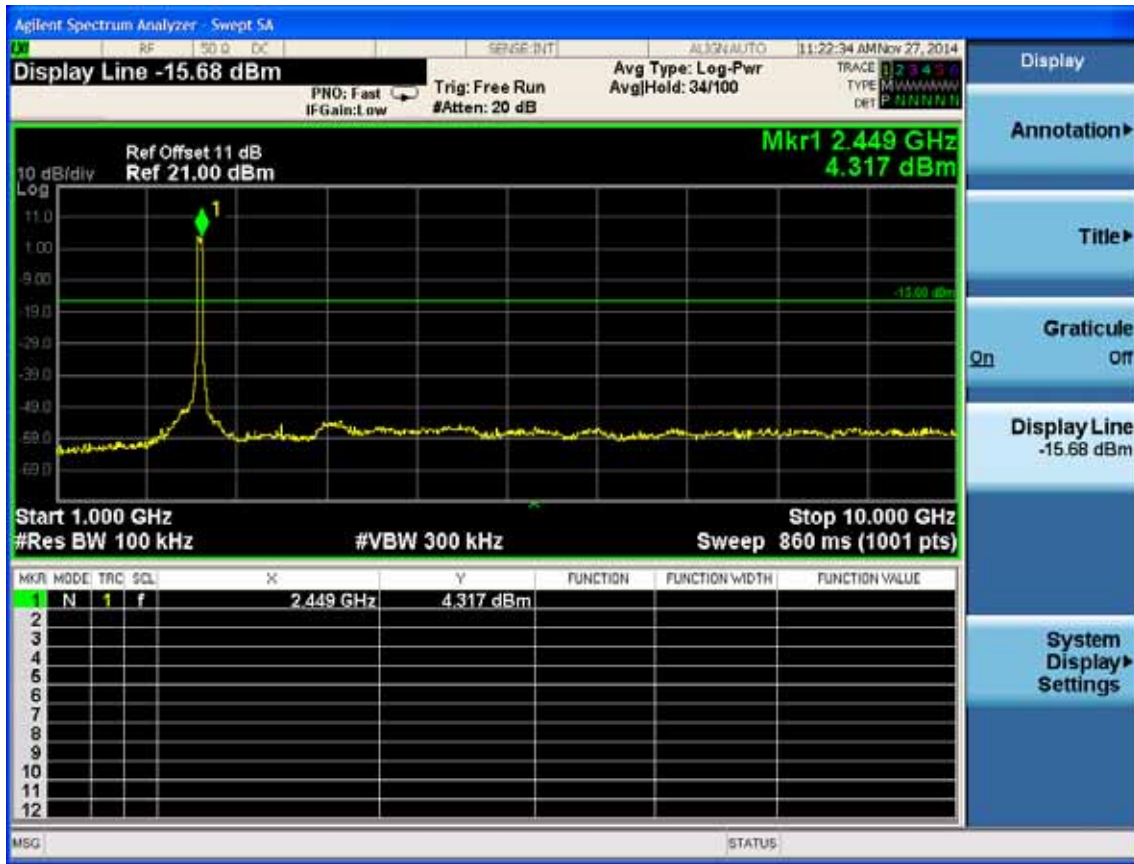




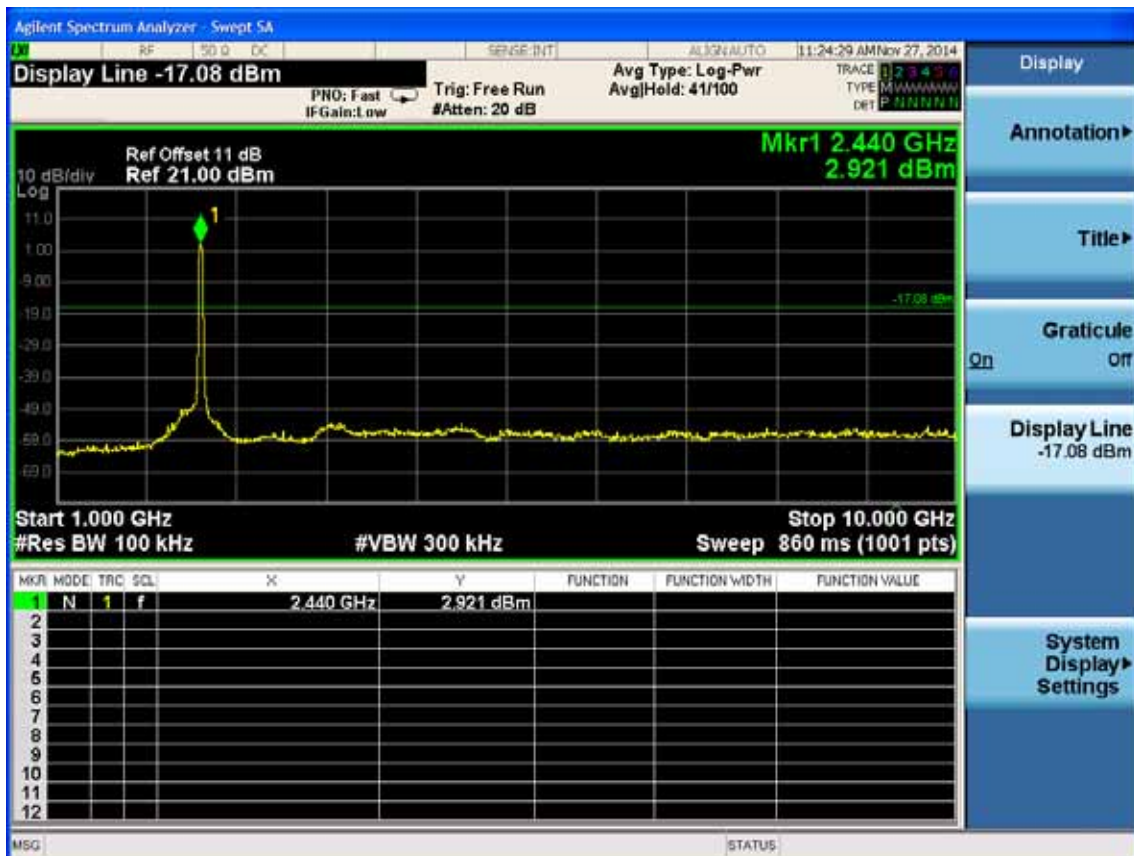
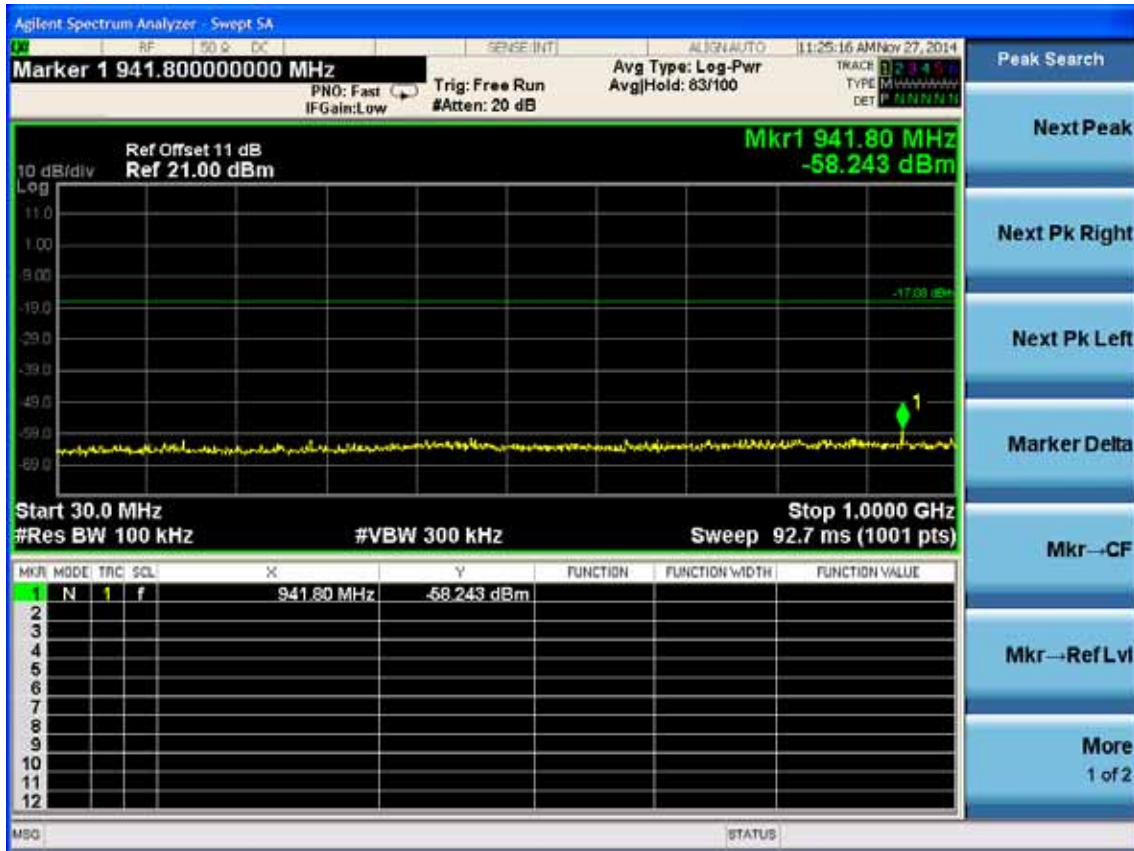


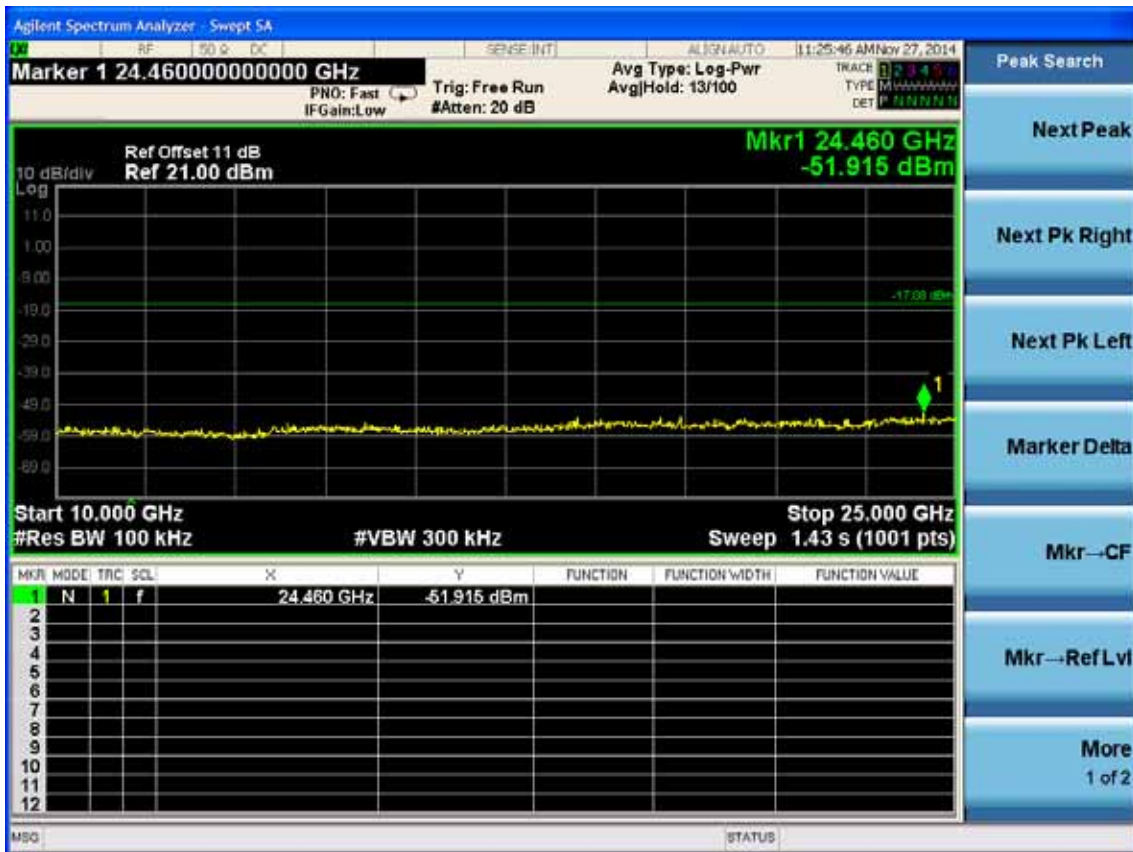
Test CH4: 2437MHz



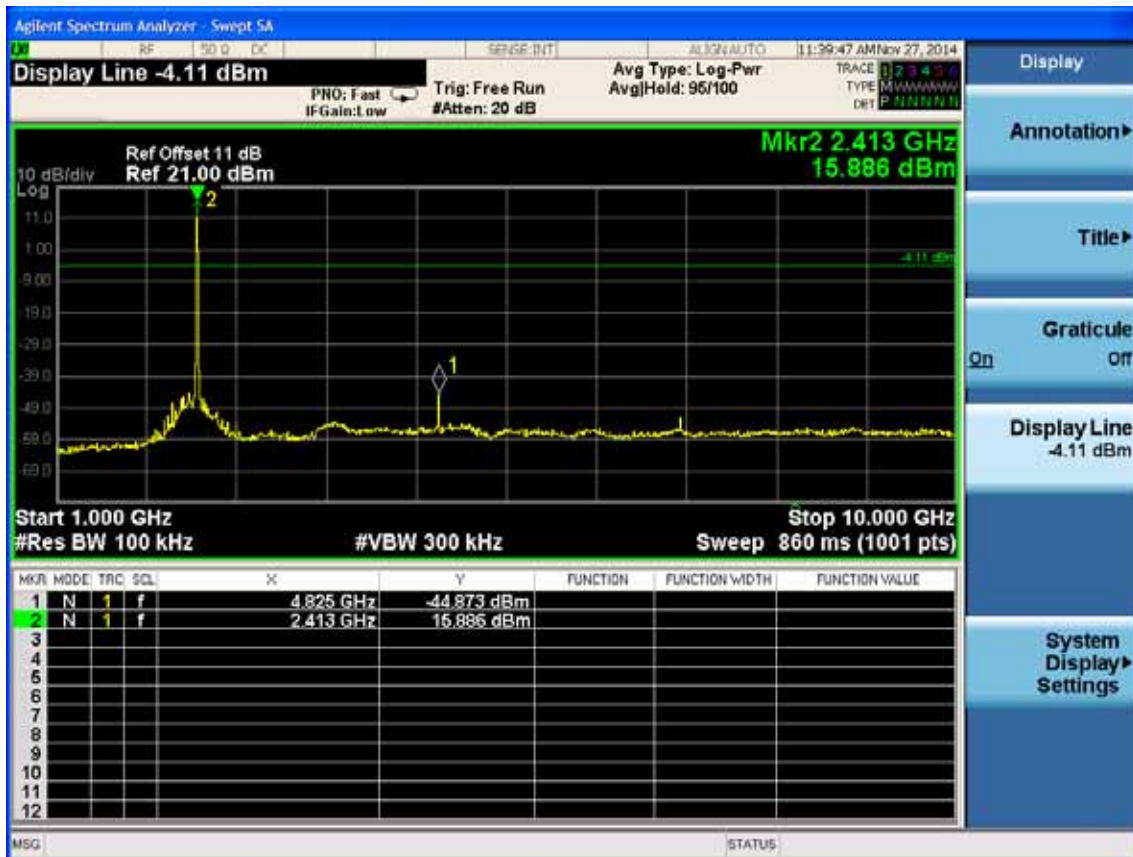
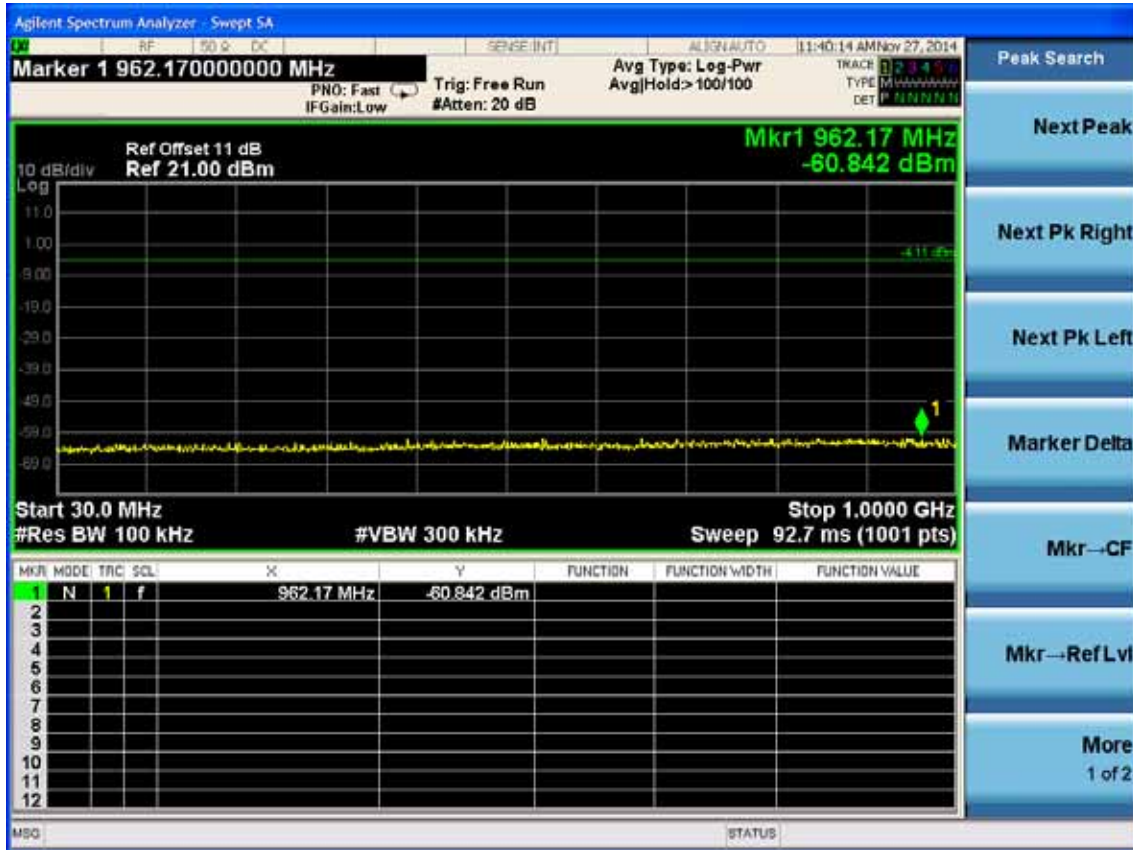


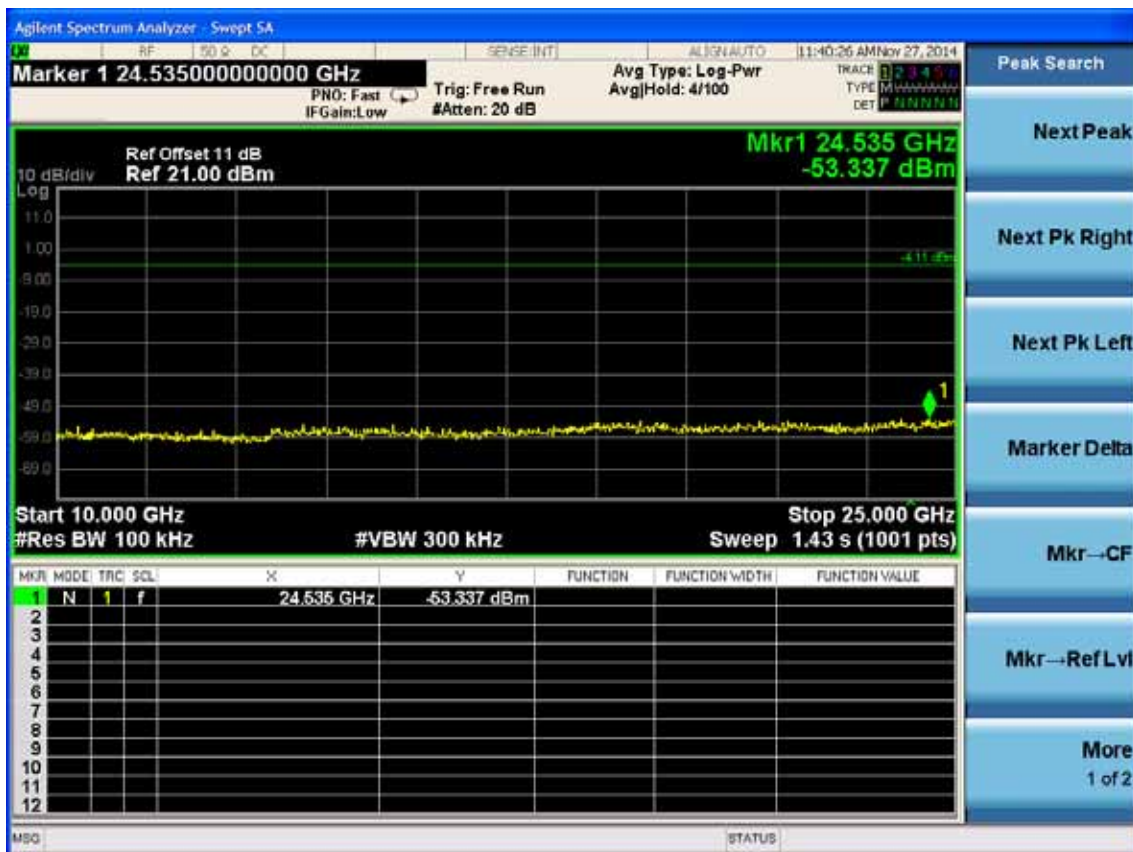
Test CH7: 2452MHz



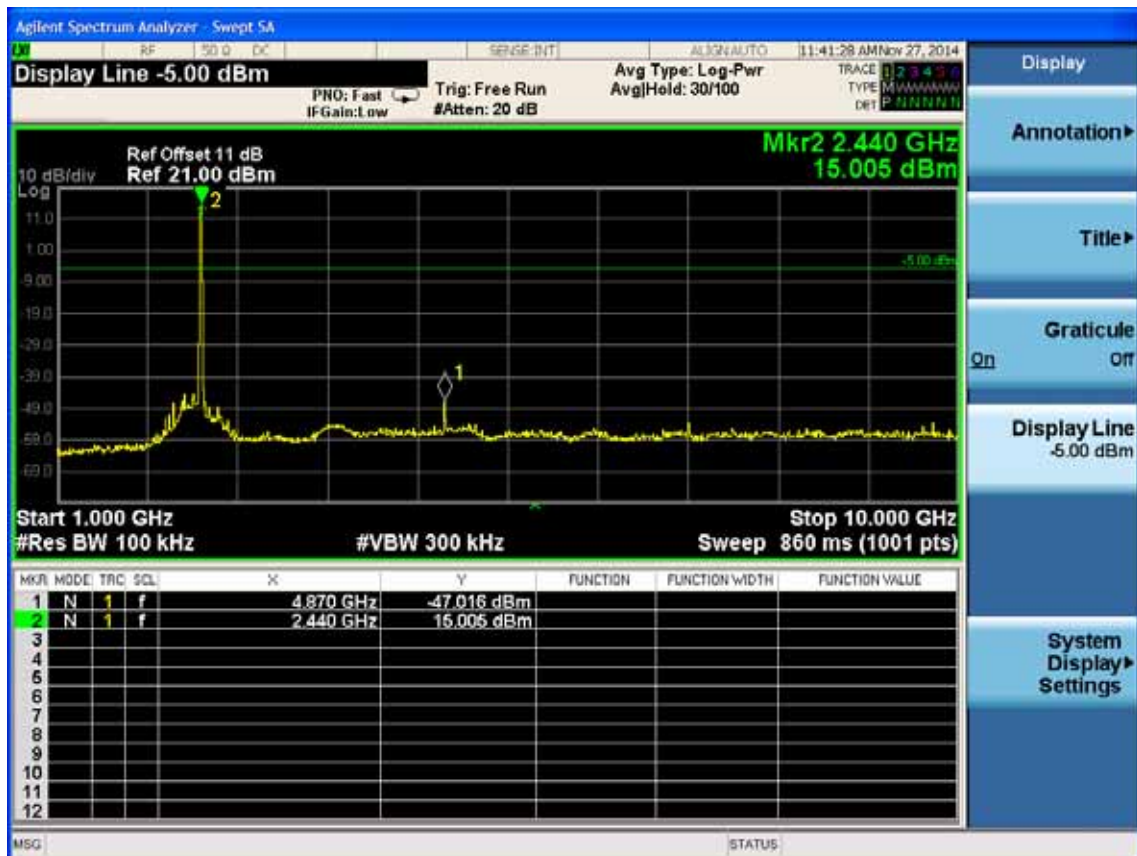
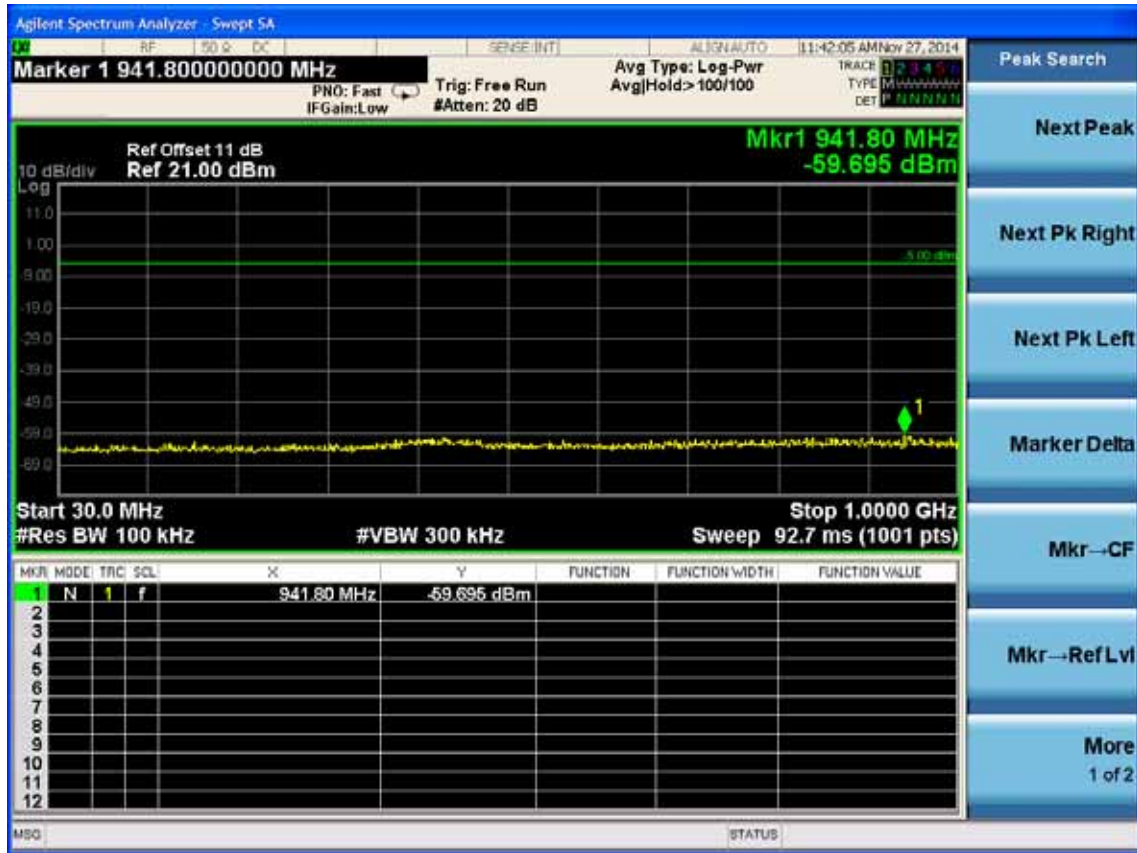


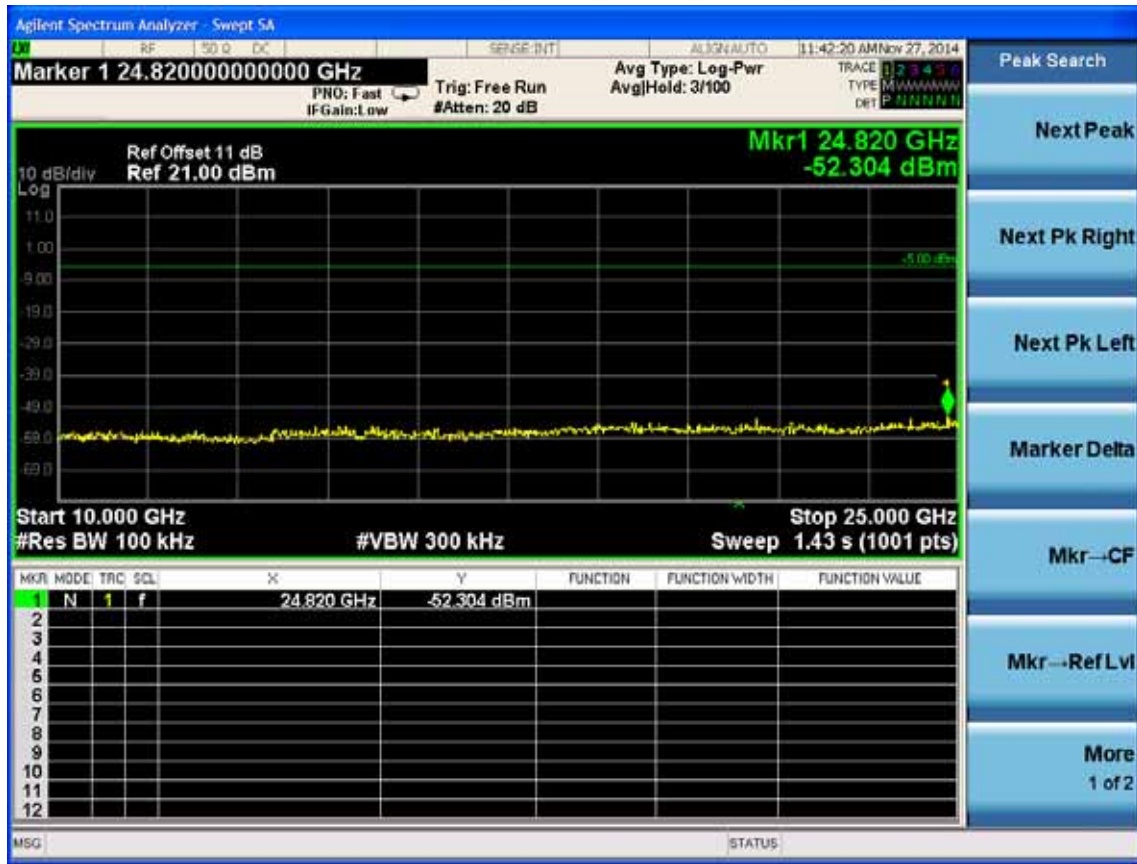
ANT 1:
 Test Mode: IEEE 802.11b TX
 Test CH1: 2412MHz



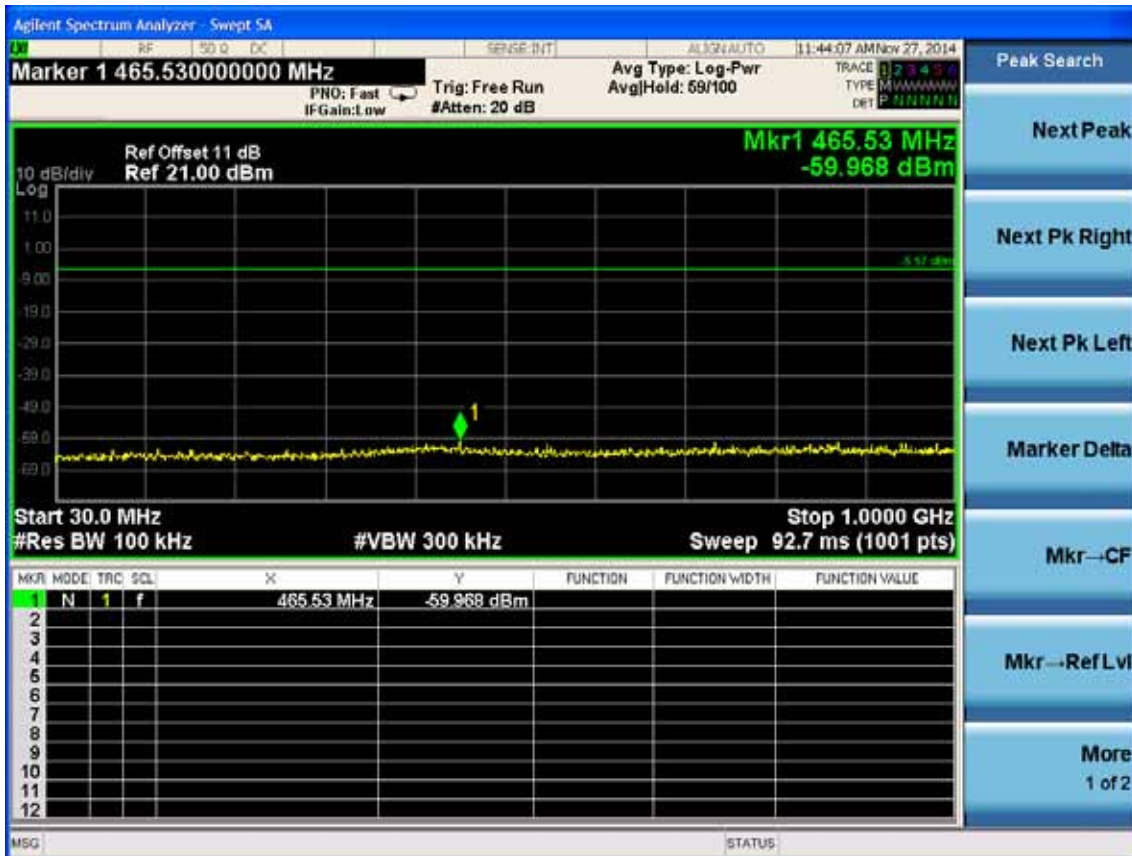


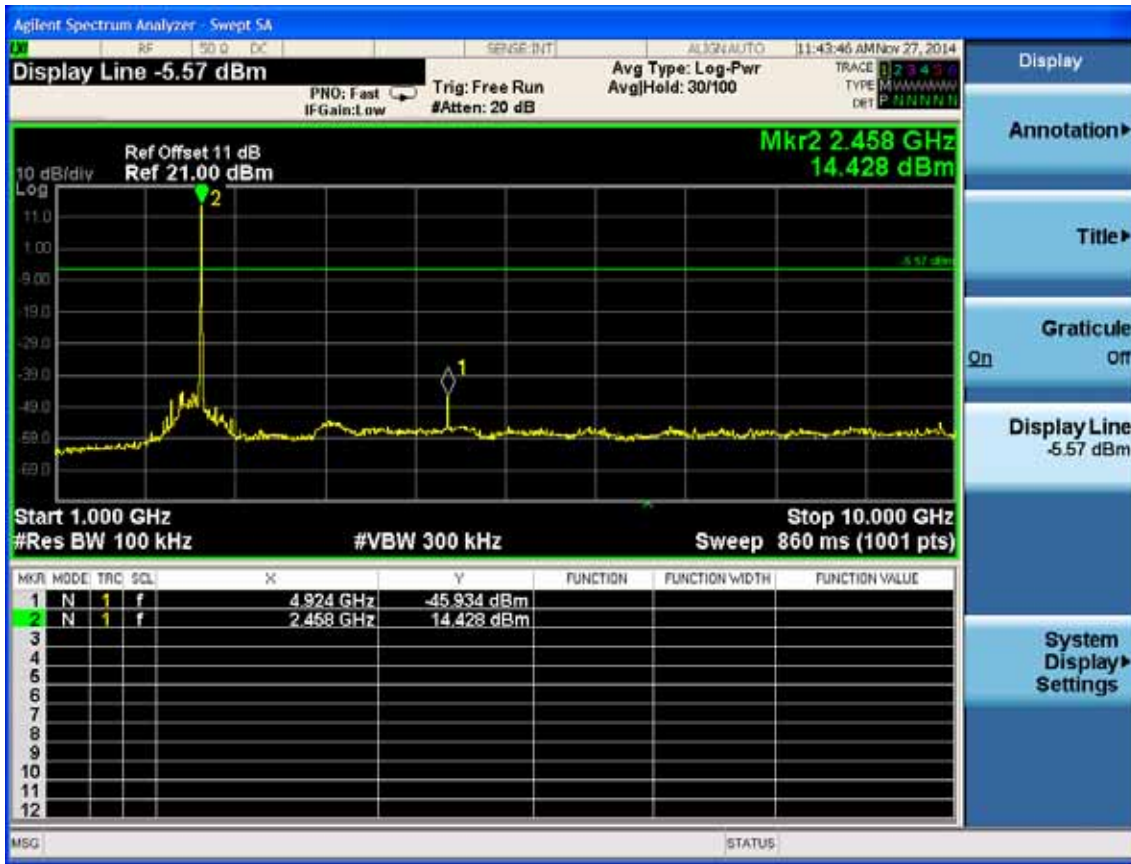
Test CH6: 2437MHz

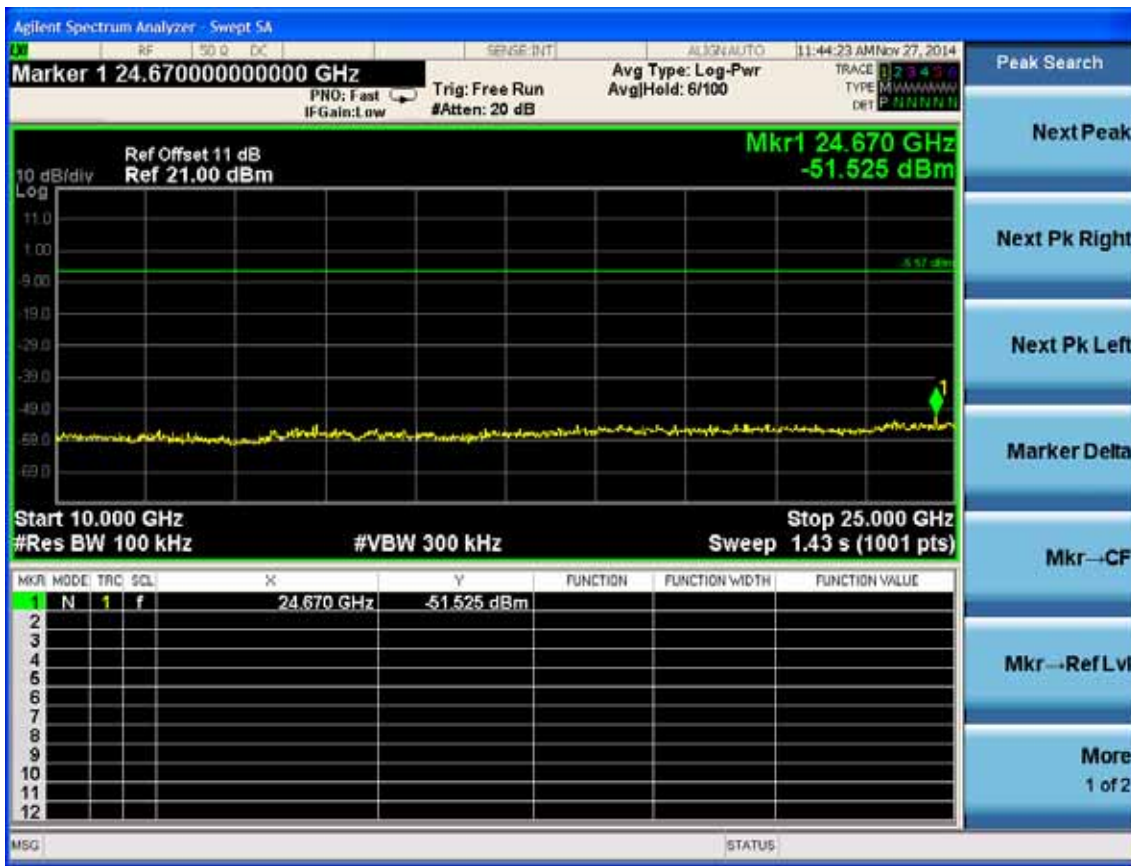




Test CH11: 2462MHz

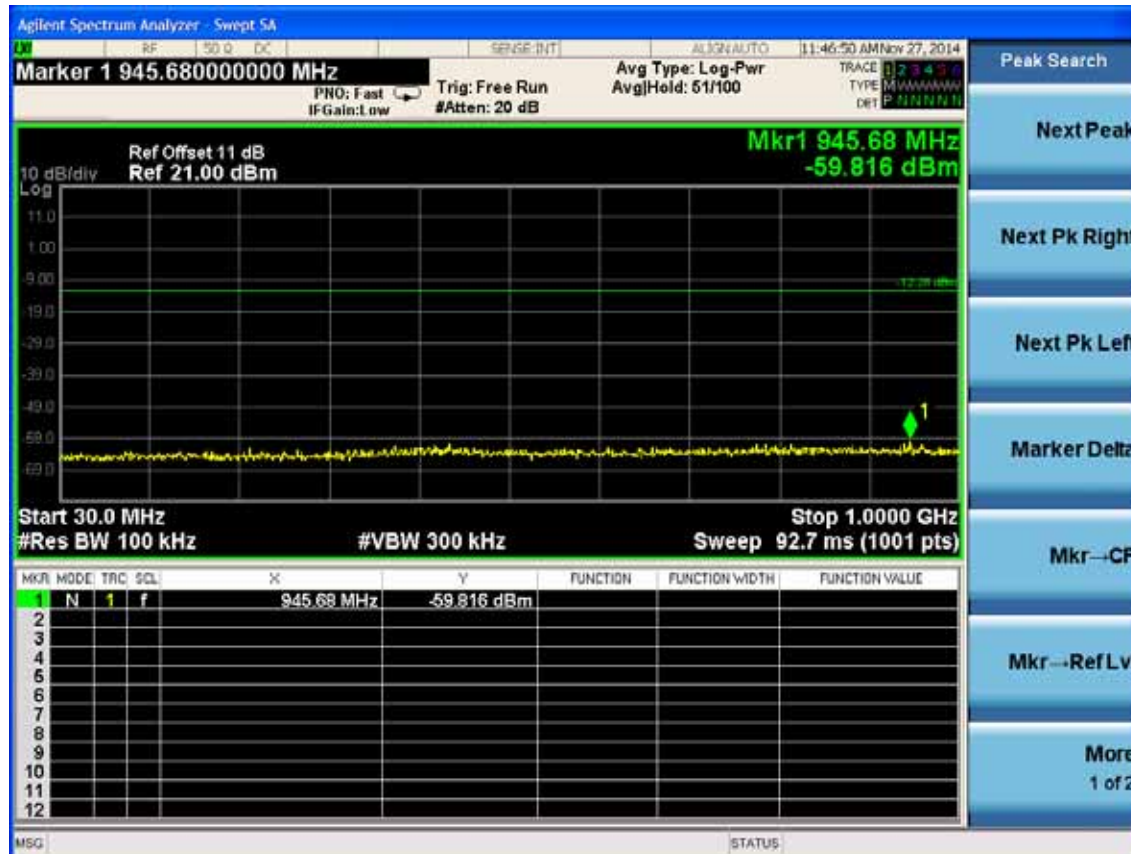


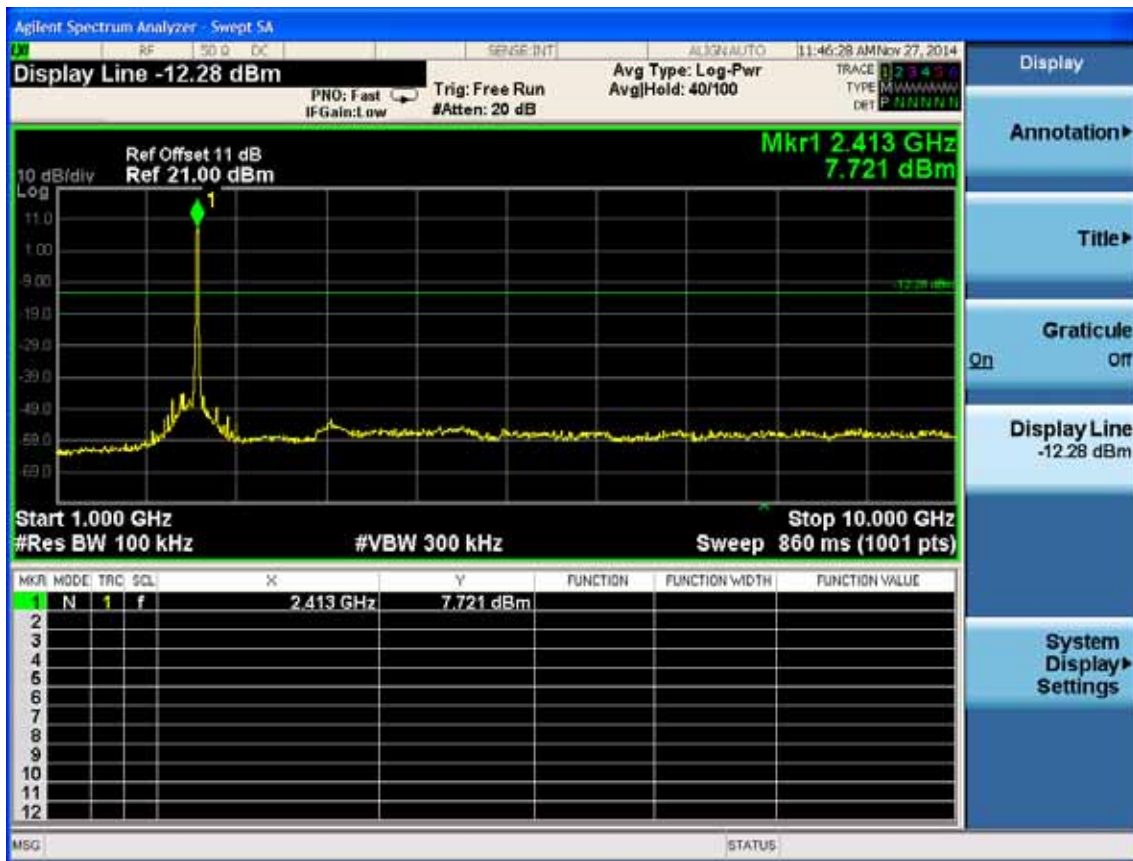


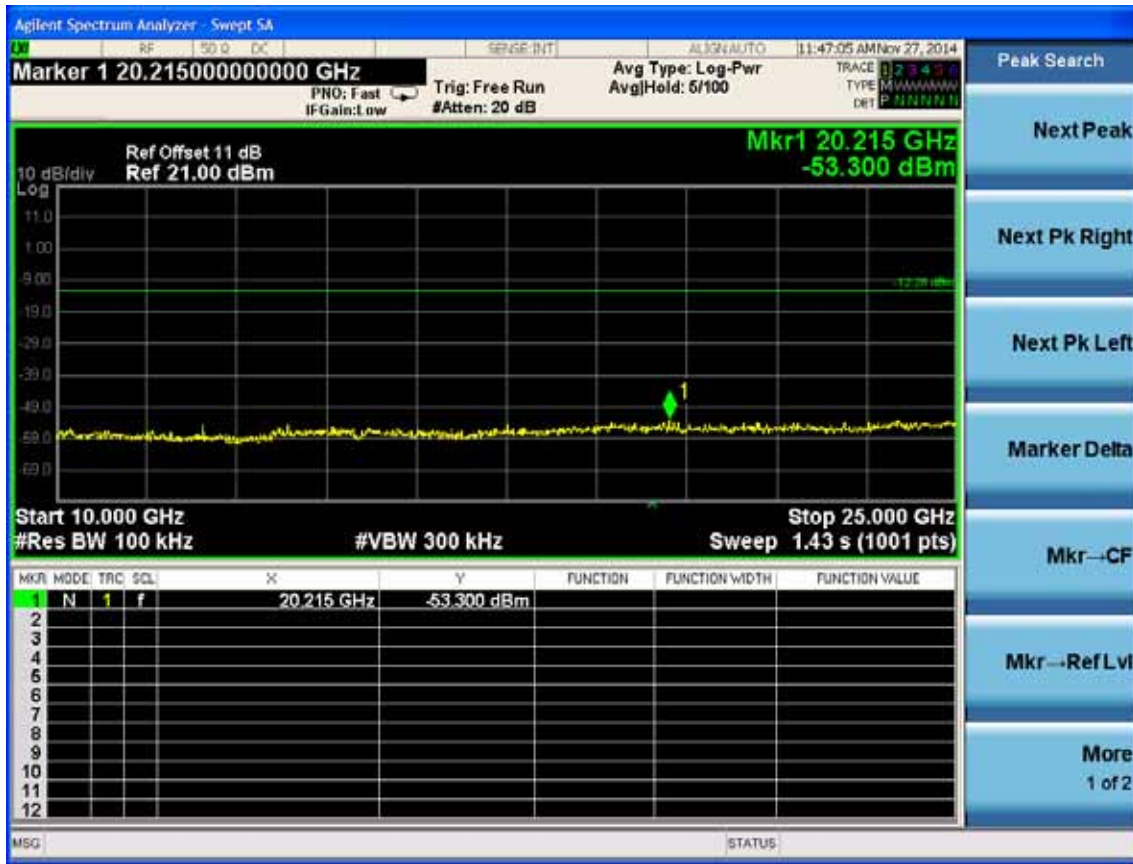


Test Mode: IEEE 802.11g TX

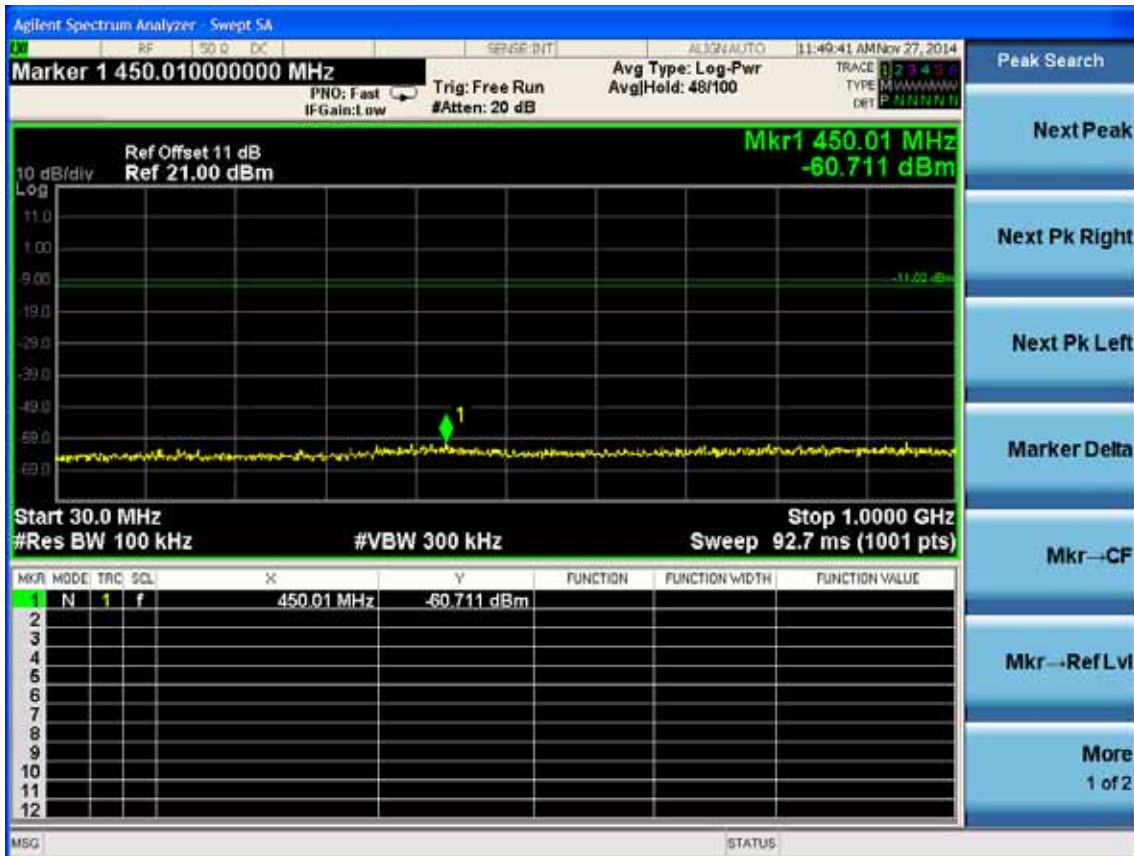
Test CH1: 2412MHz

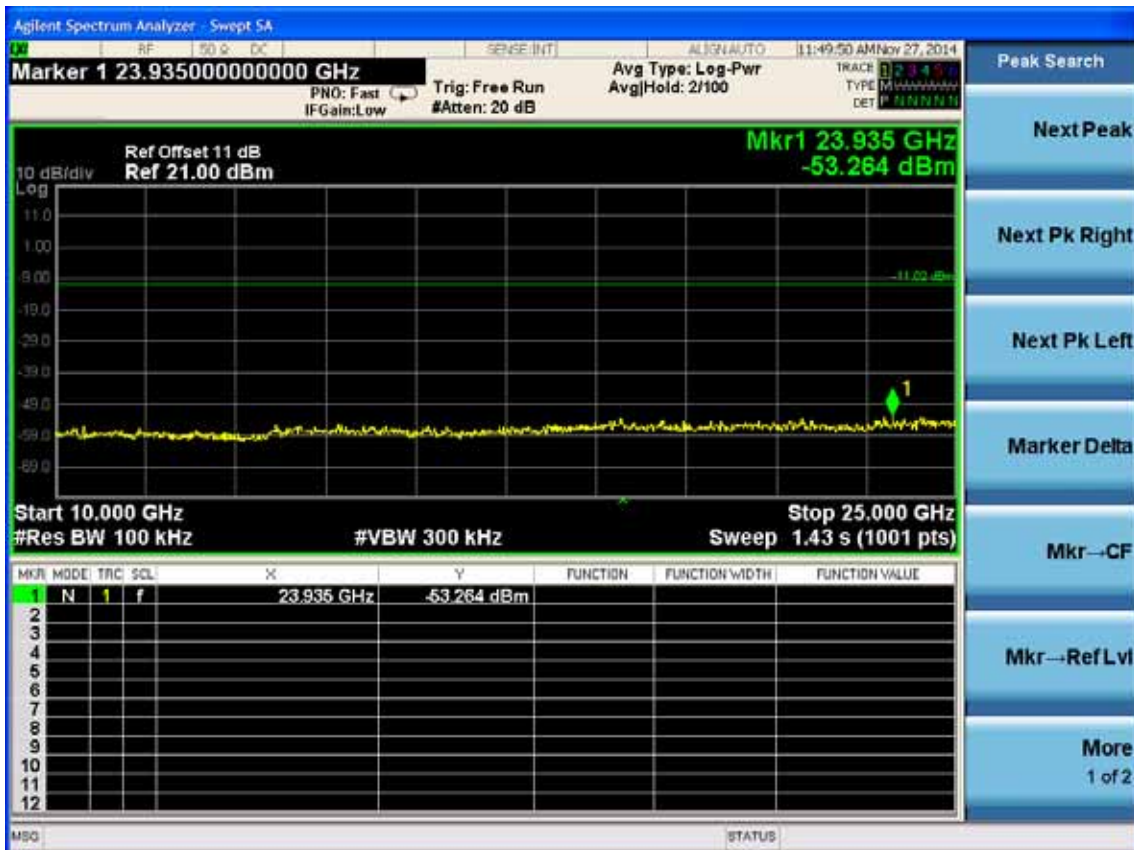
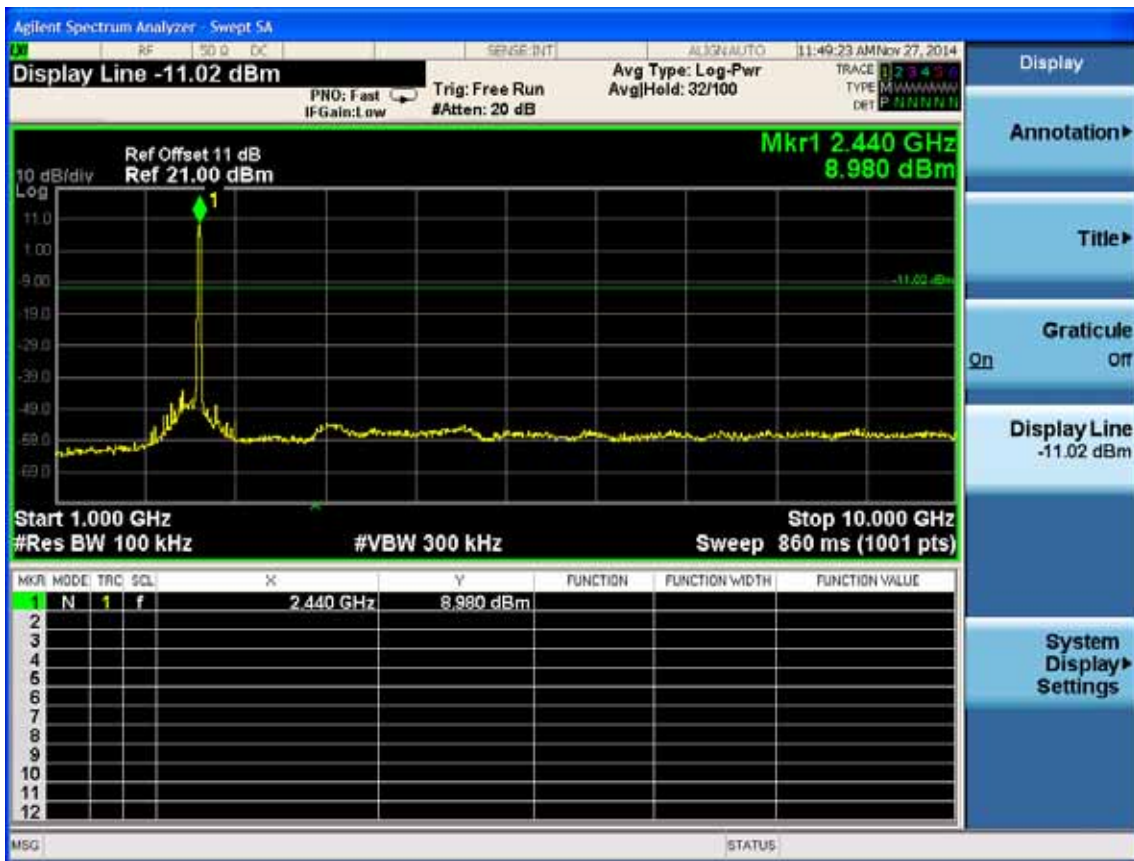




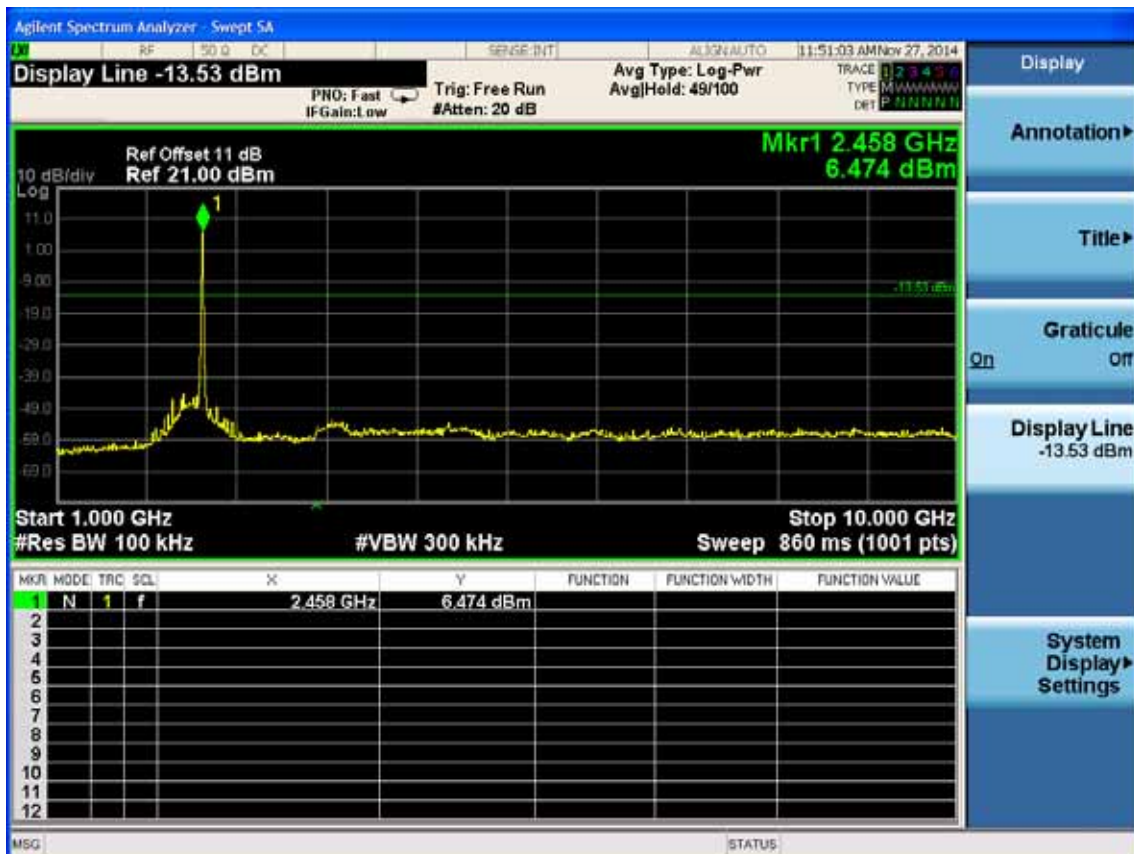
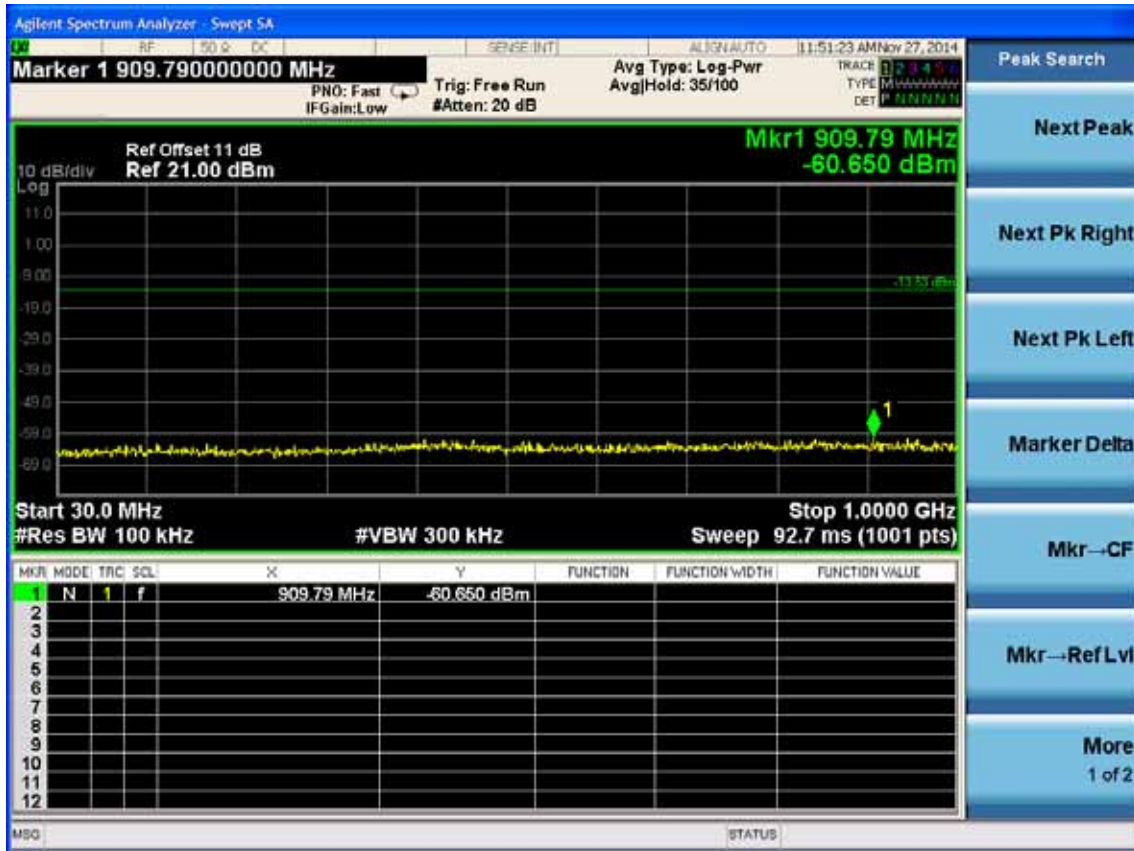


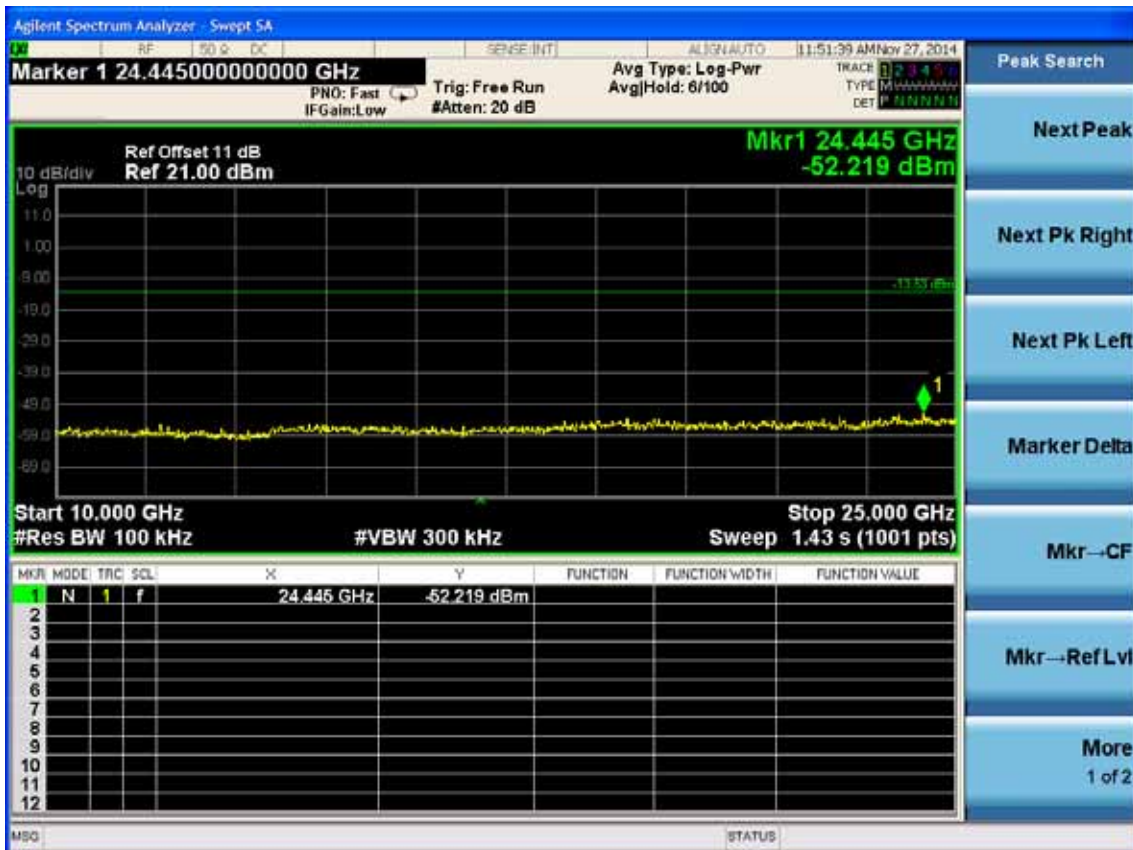
Test CH6: 2437MHz



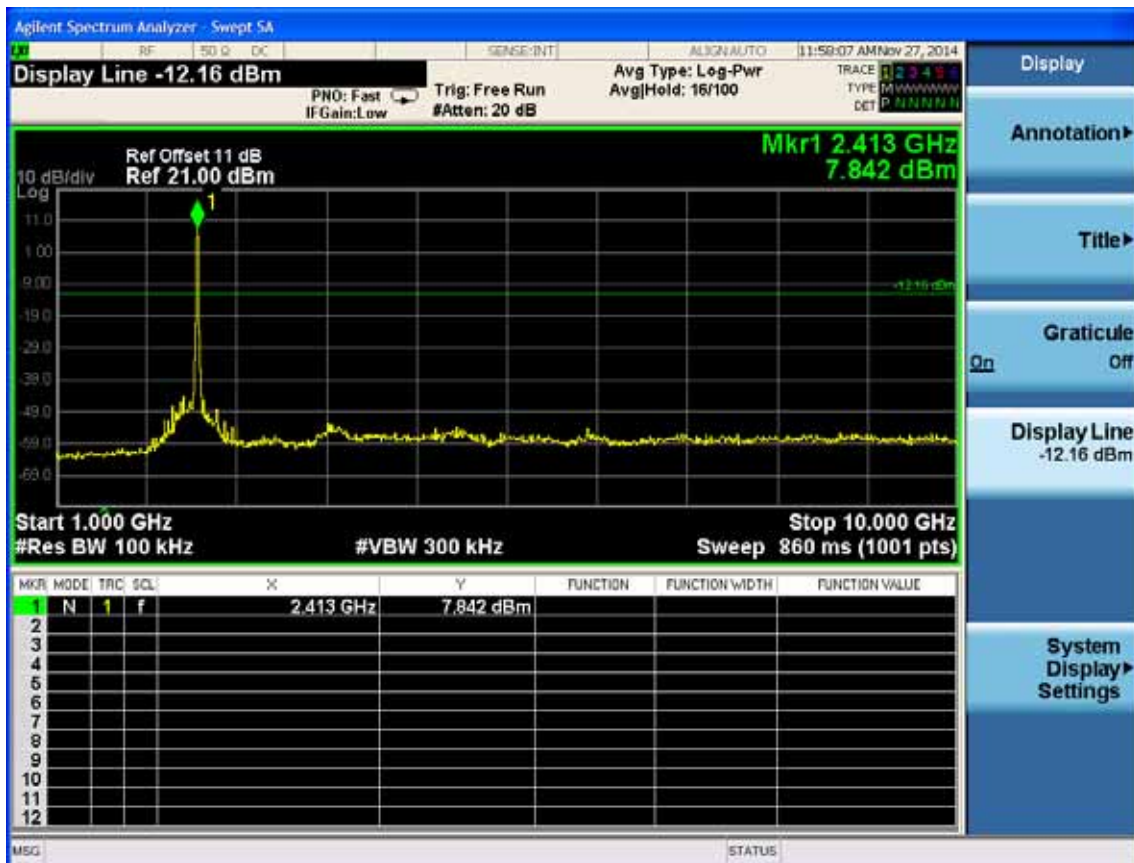
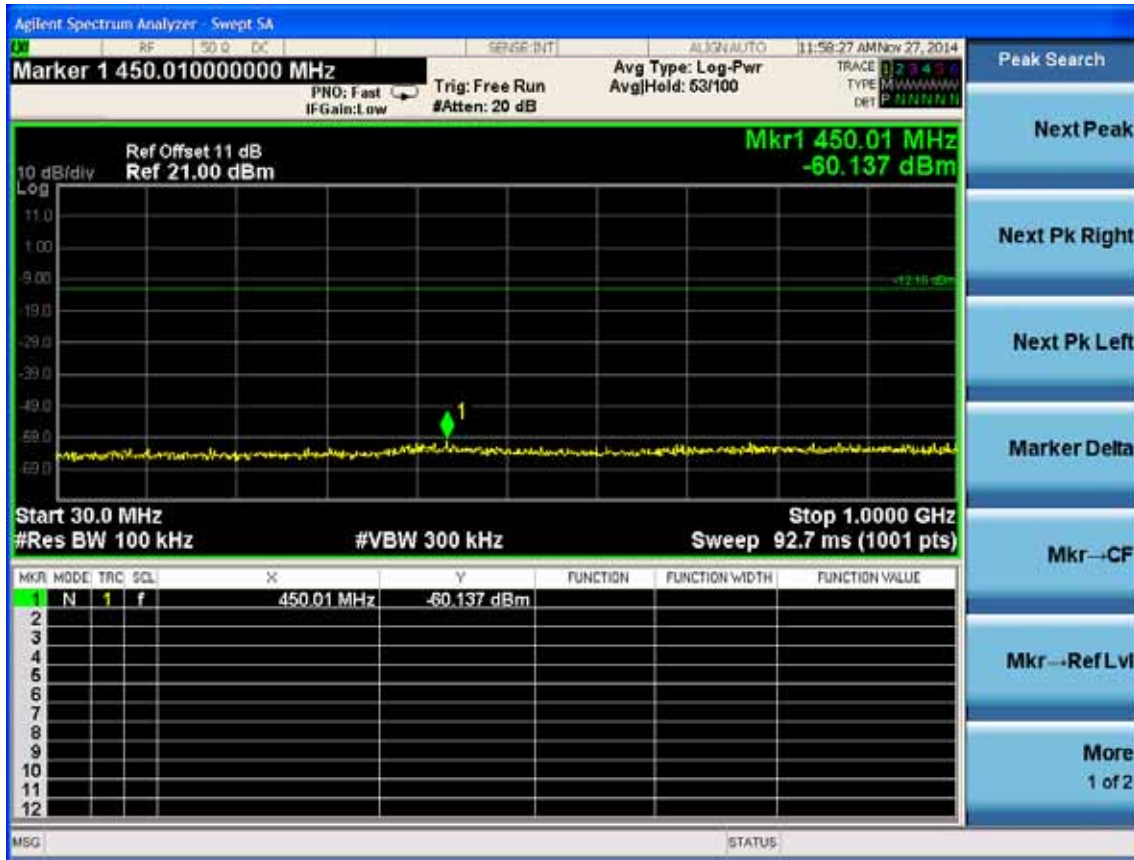


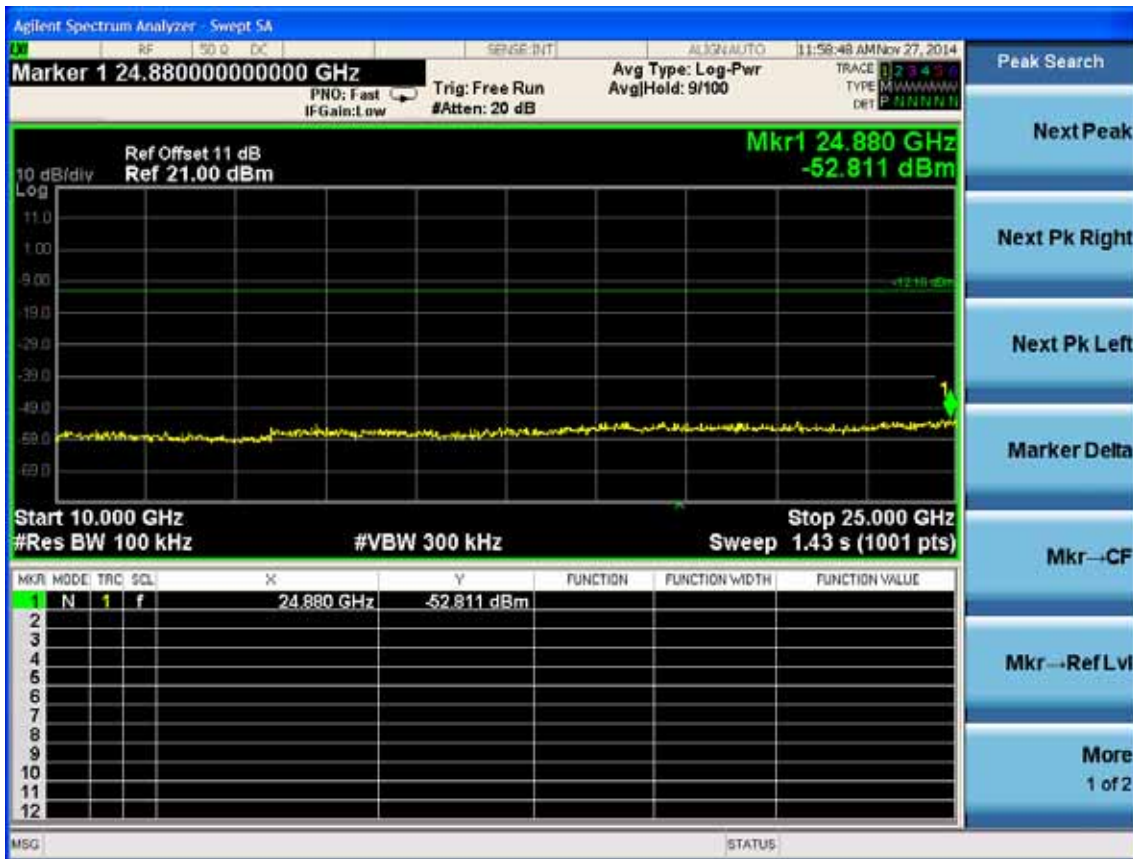
Test CH11: 2462MHz



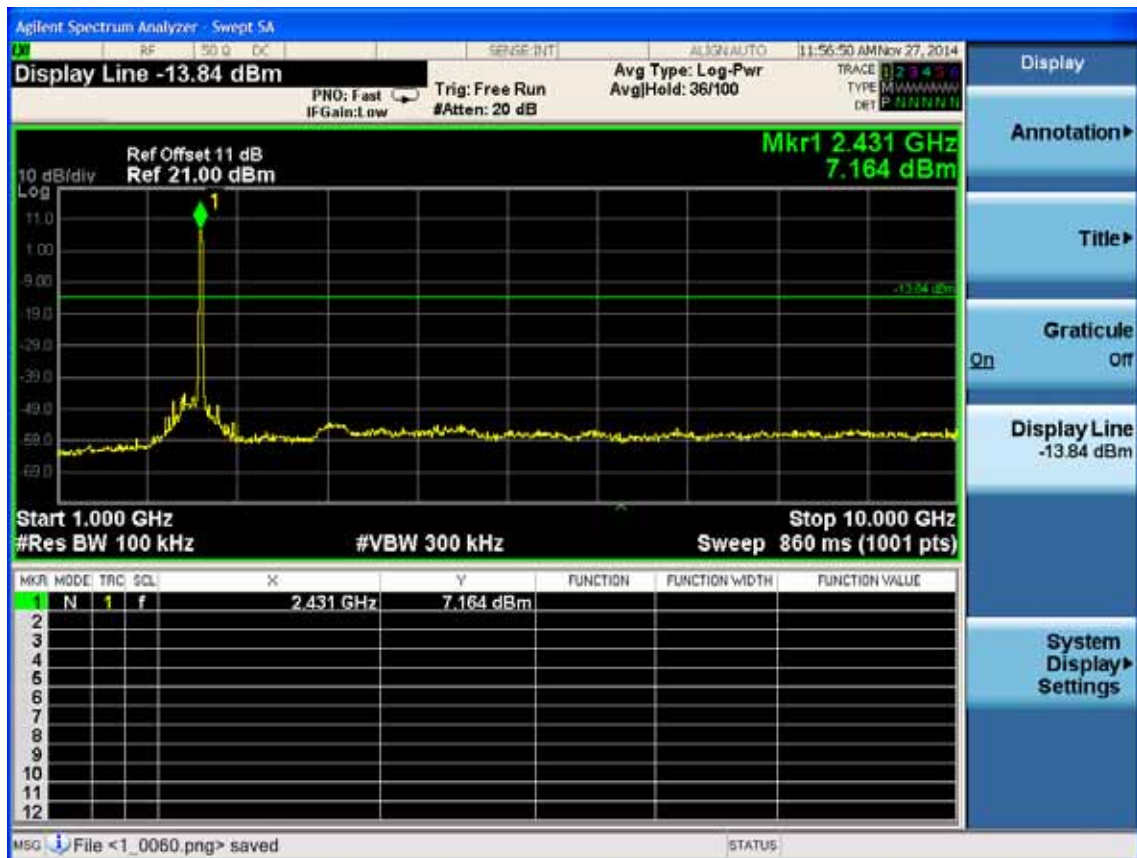
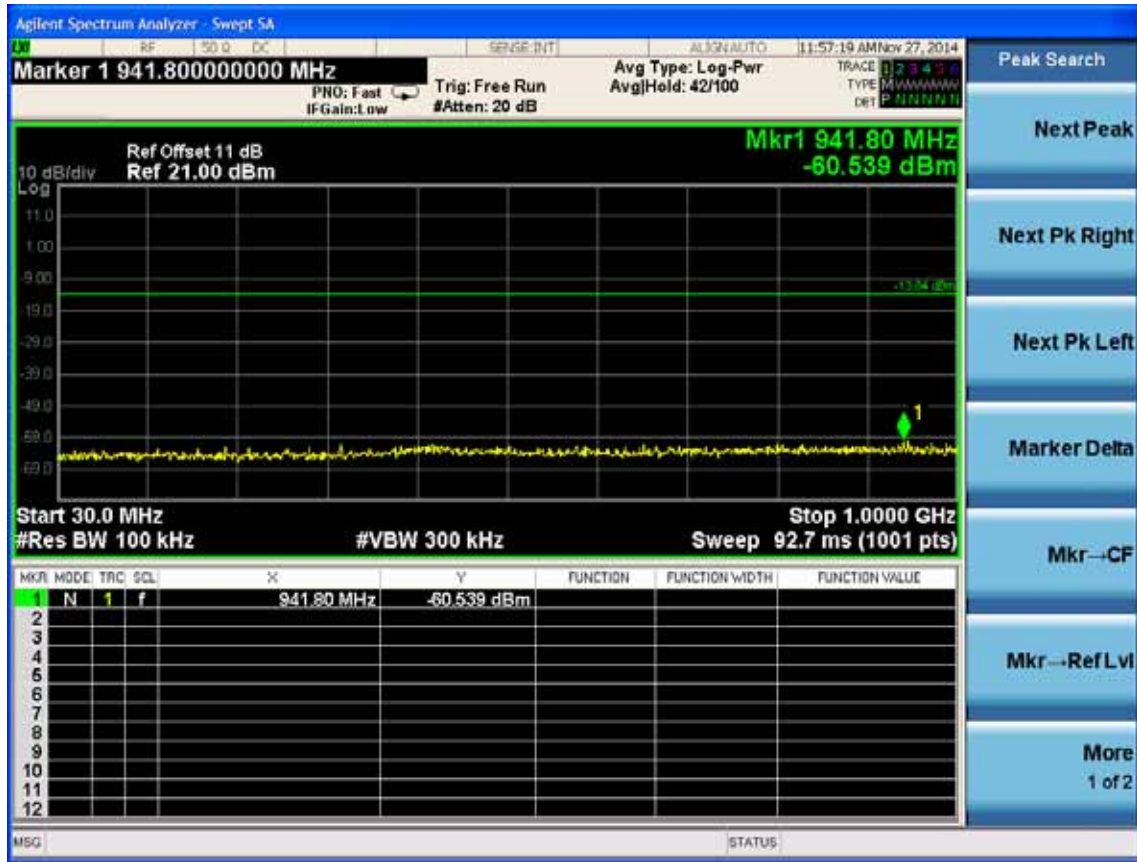


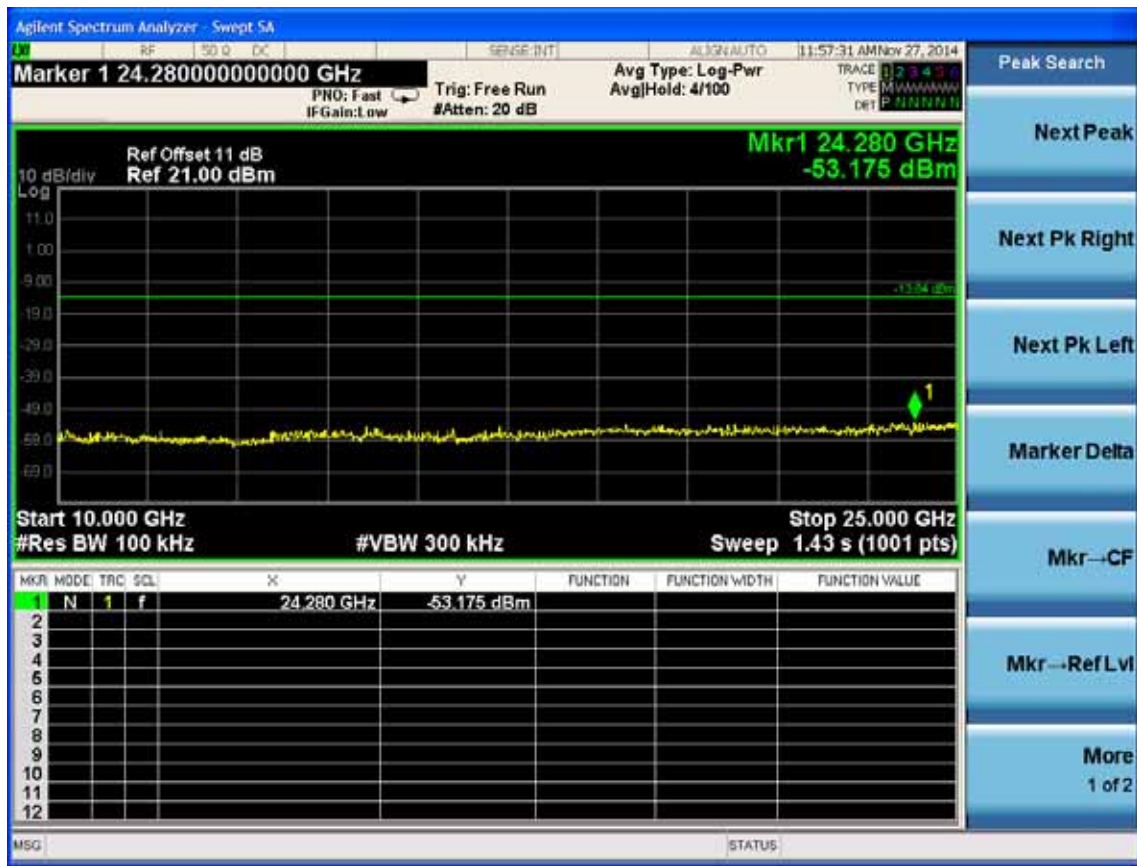
Test Mode: IEEE 802.11n HT20 TX
 Test CH1: 2412MHz



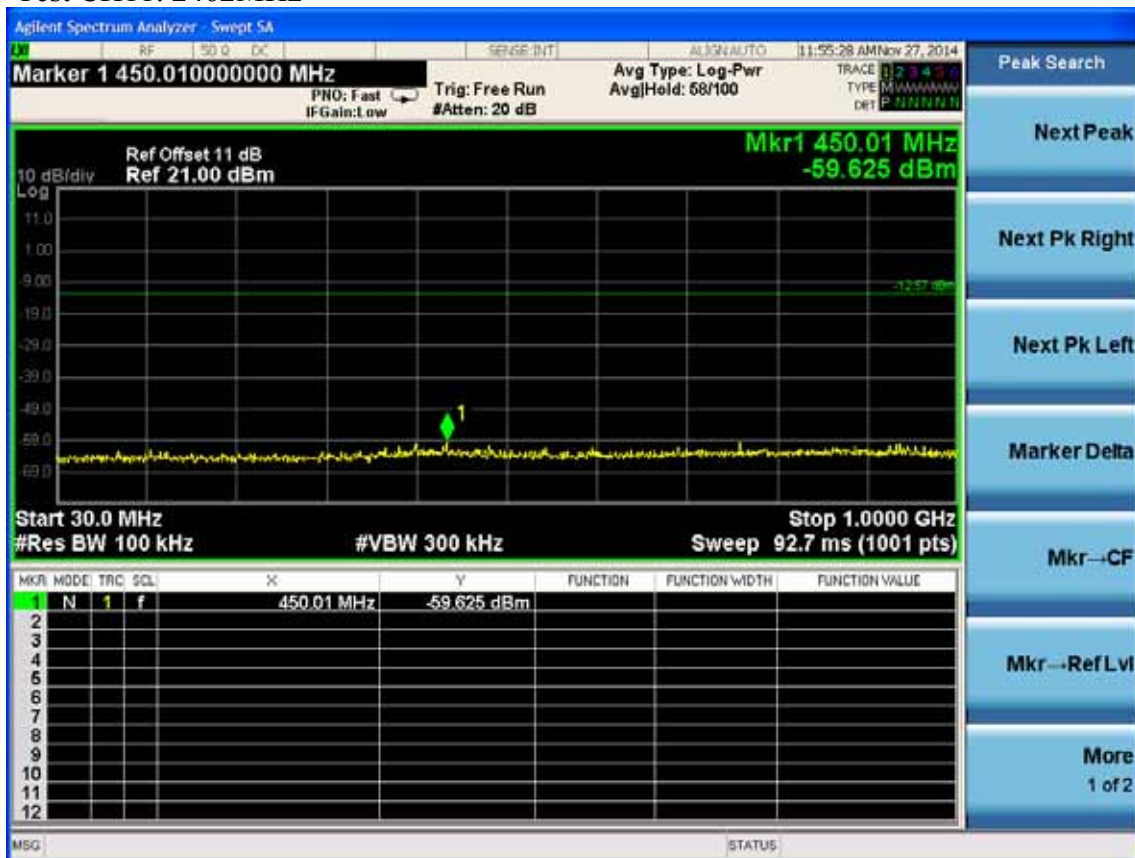


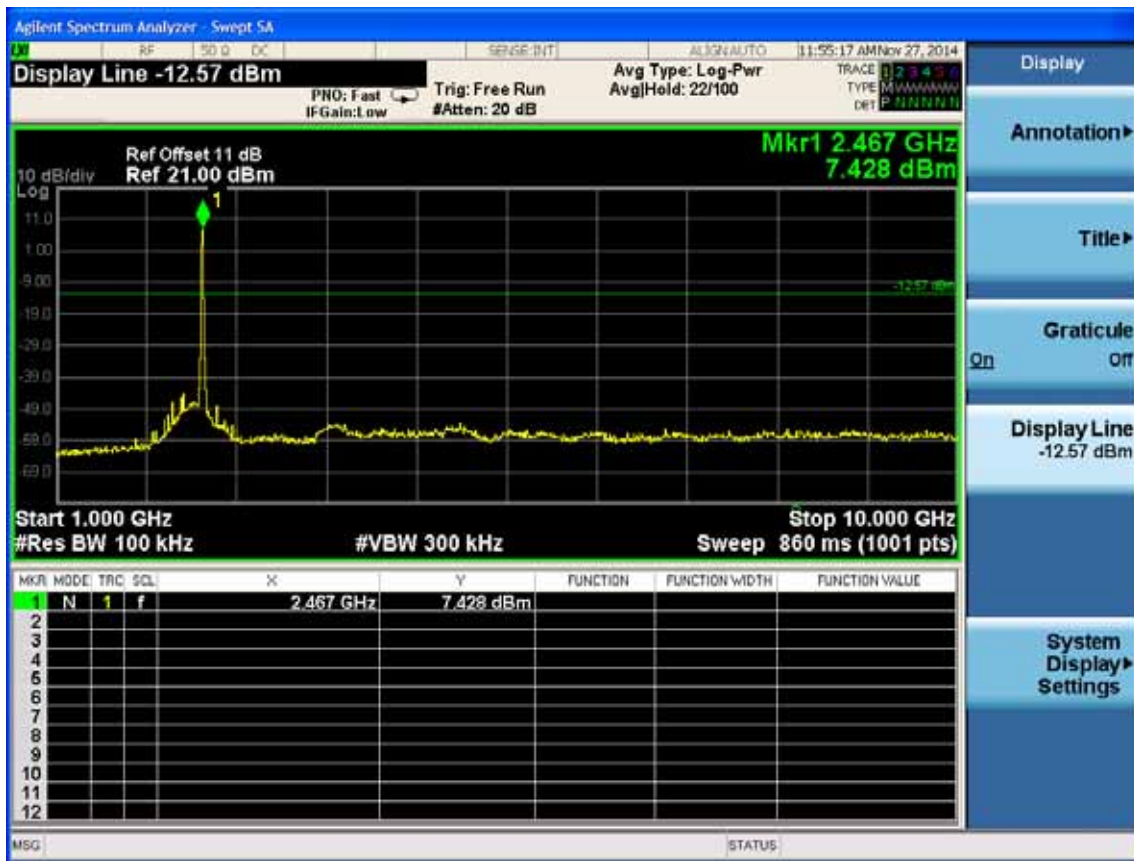
Test CH6: 2437MHz

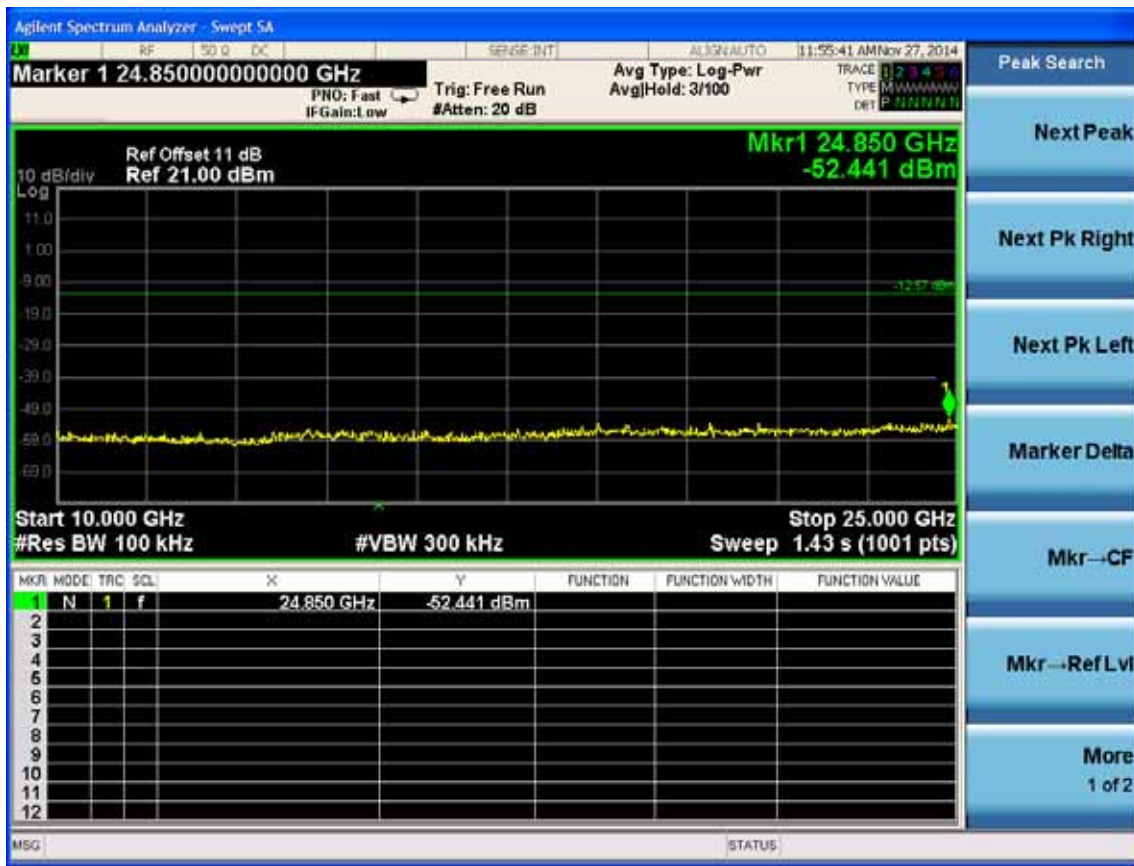




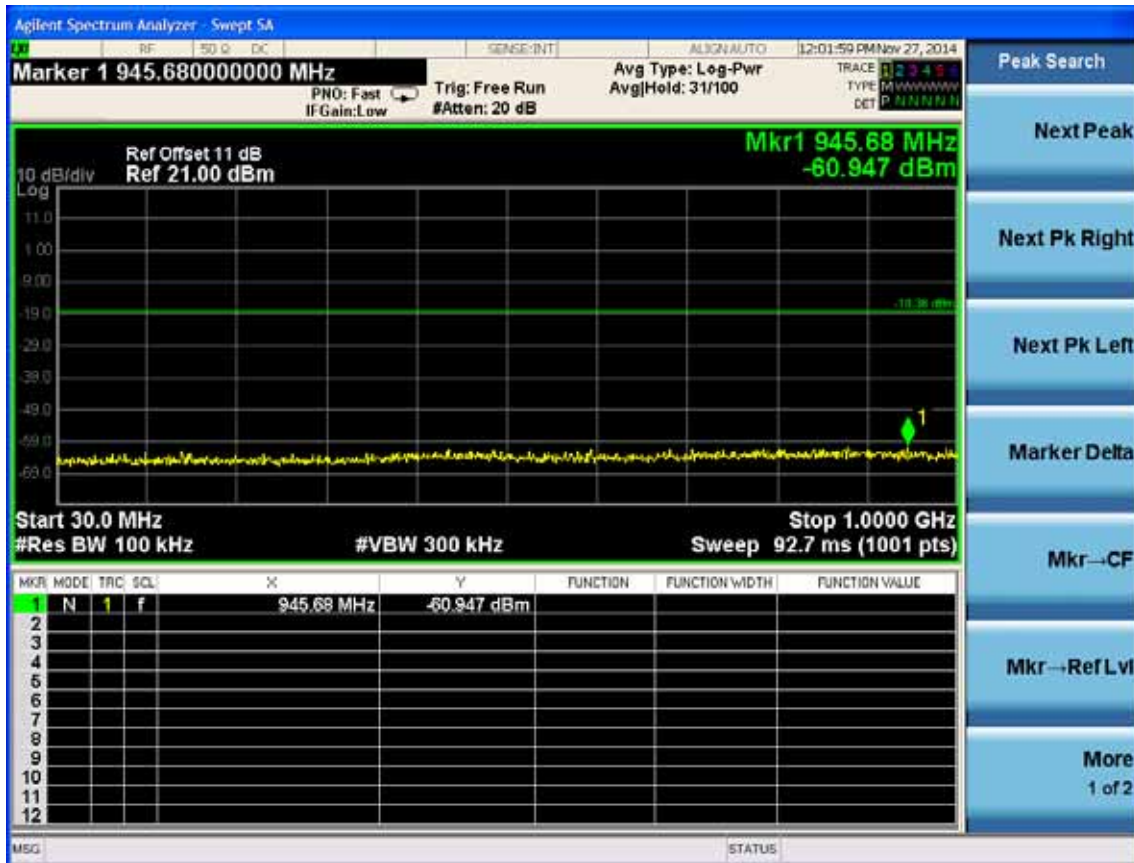
Test CH11: 2462MHz

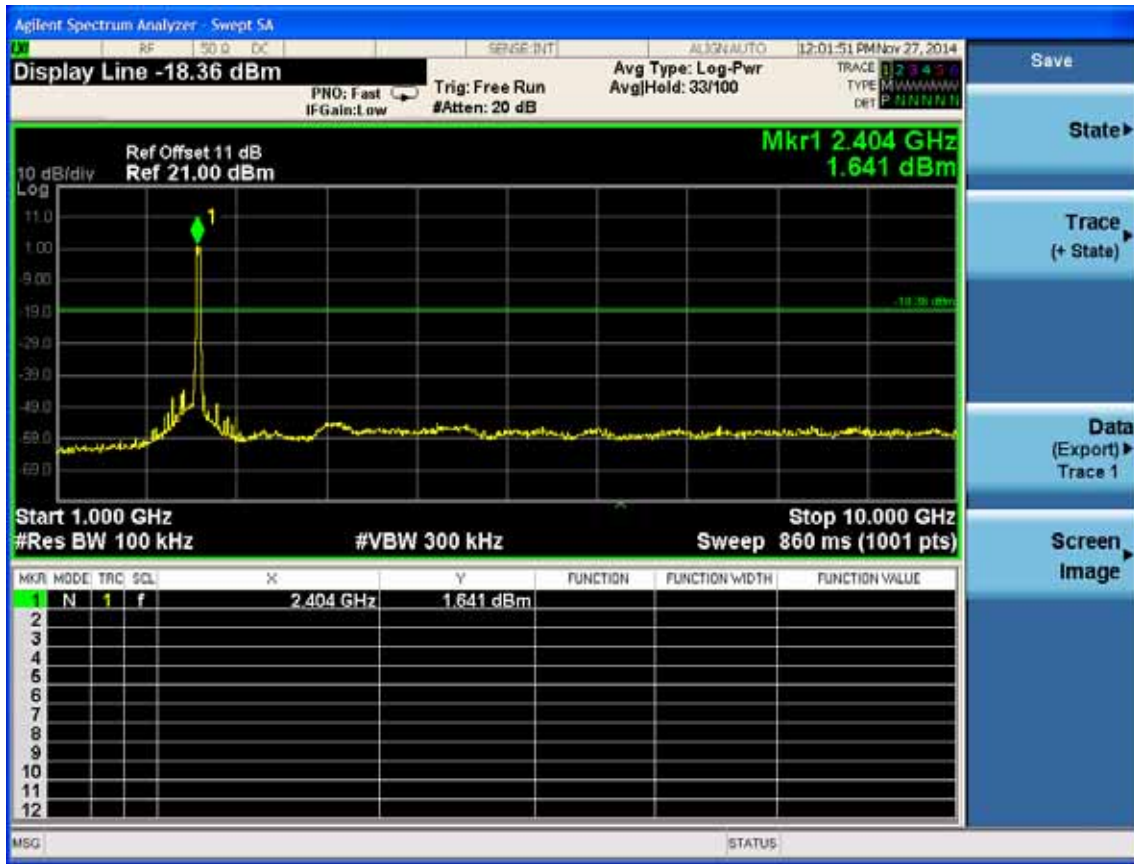


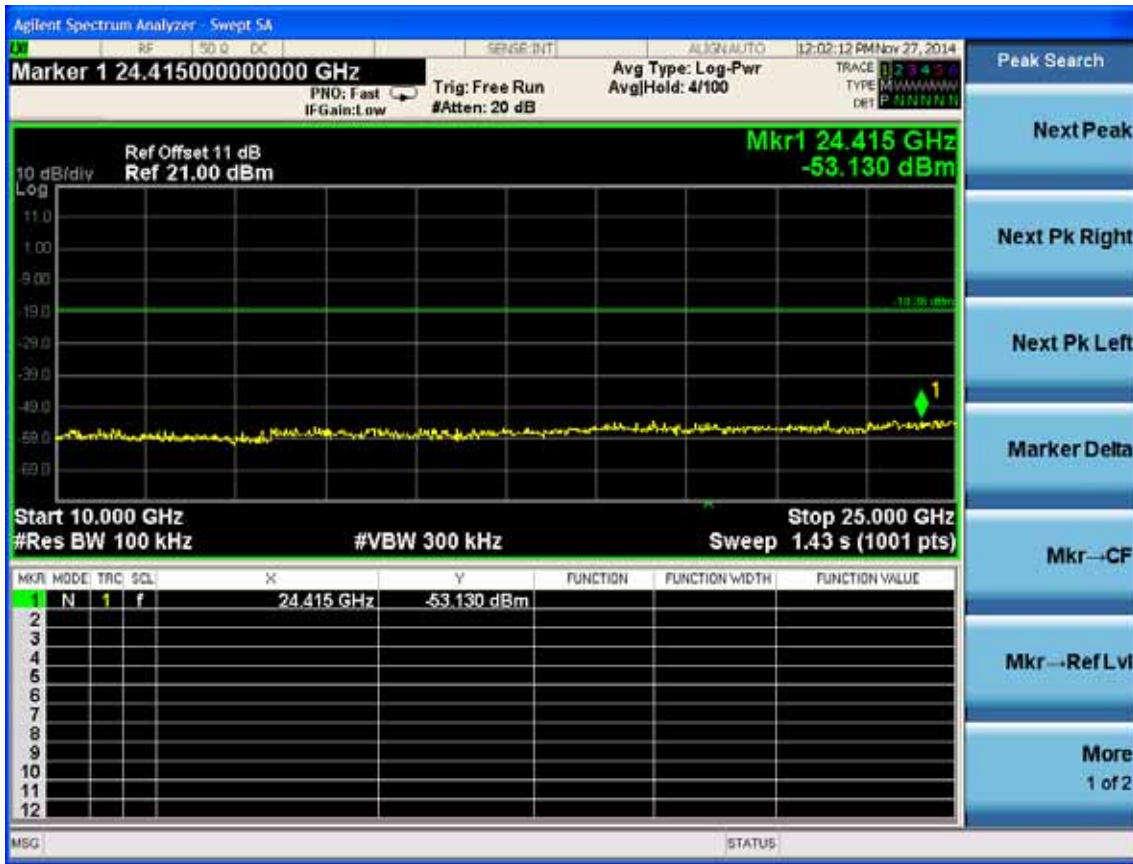




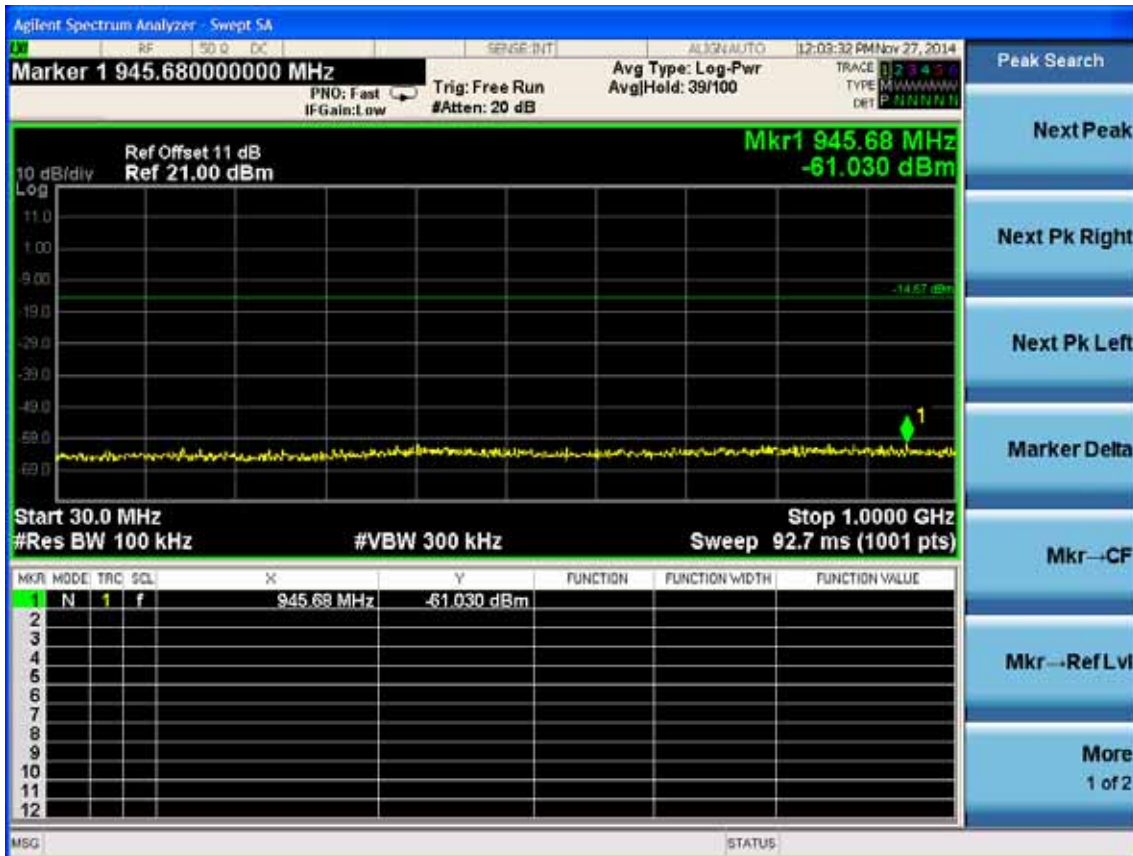
Test Mode: IEEE 802.11n HT40 TX
Test CH1: 2422MHz

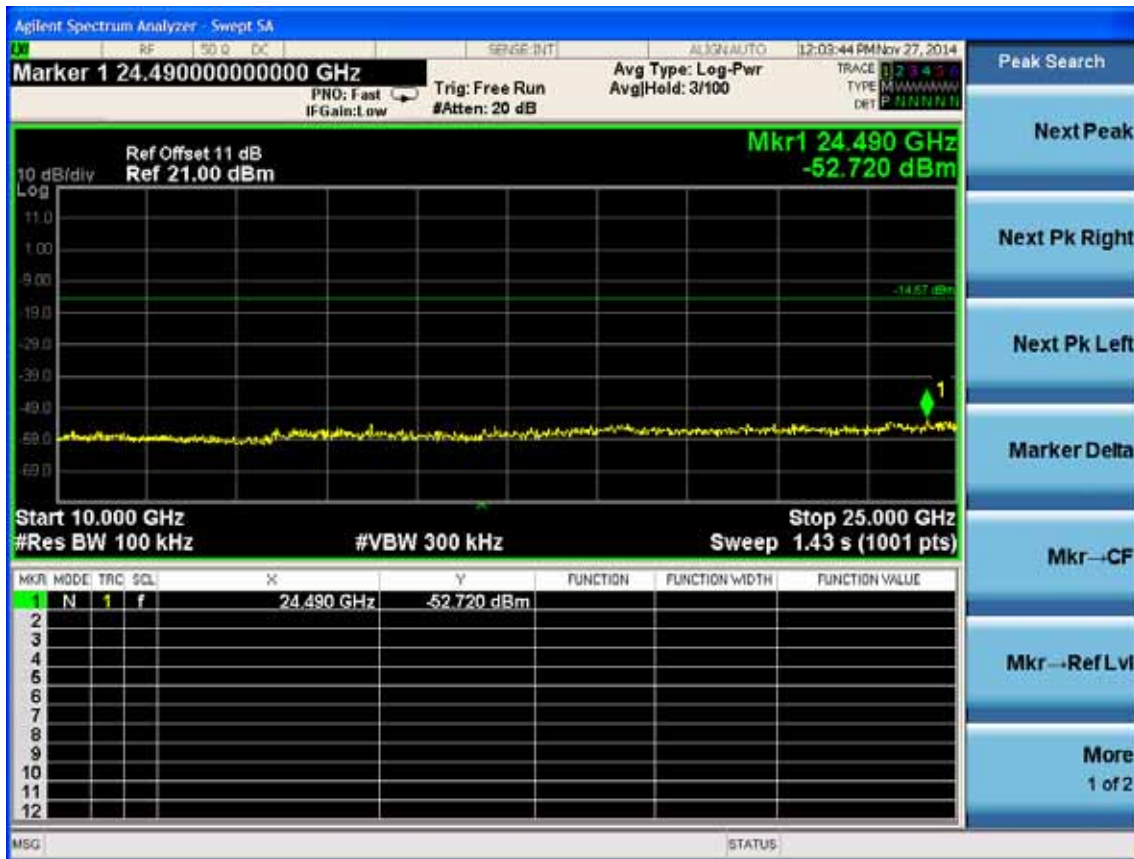
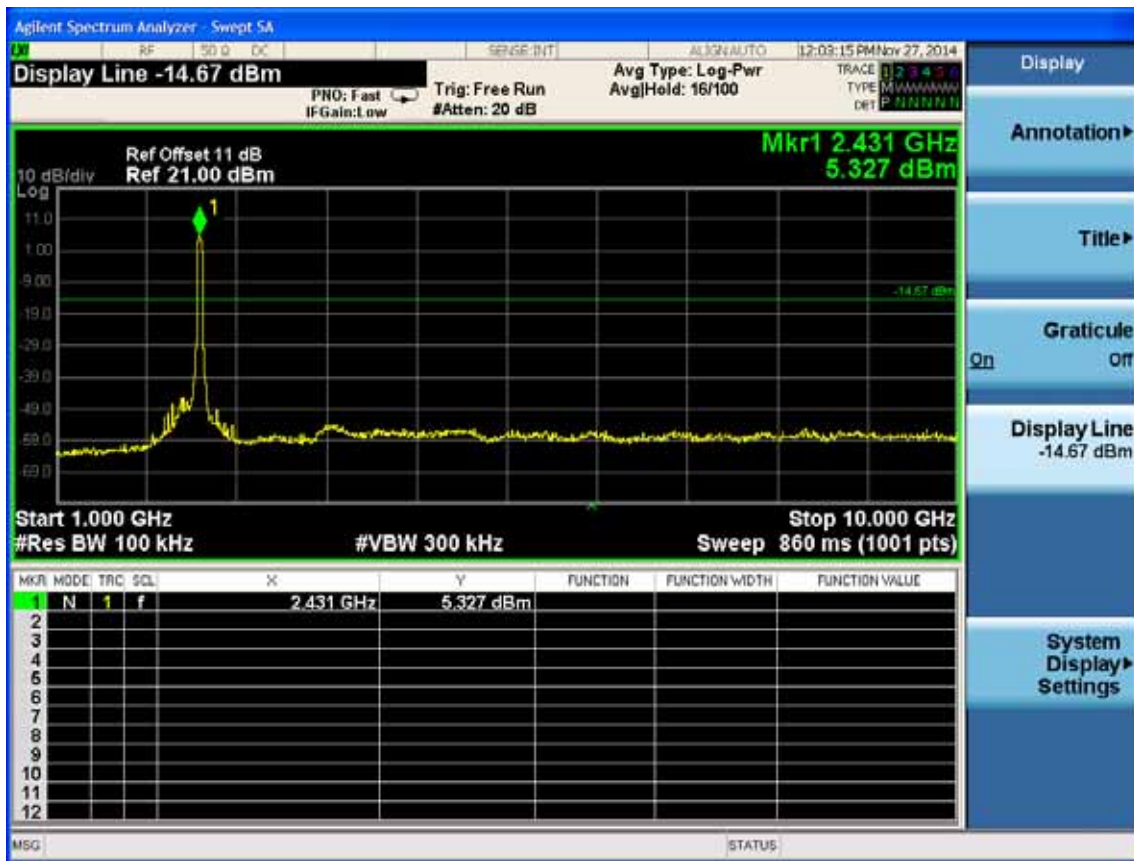




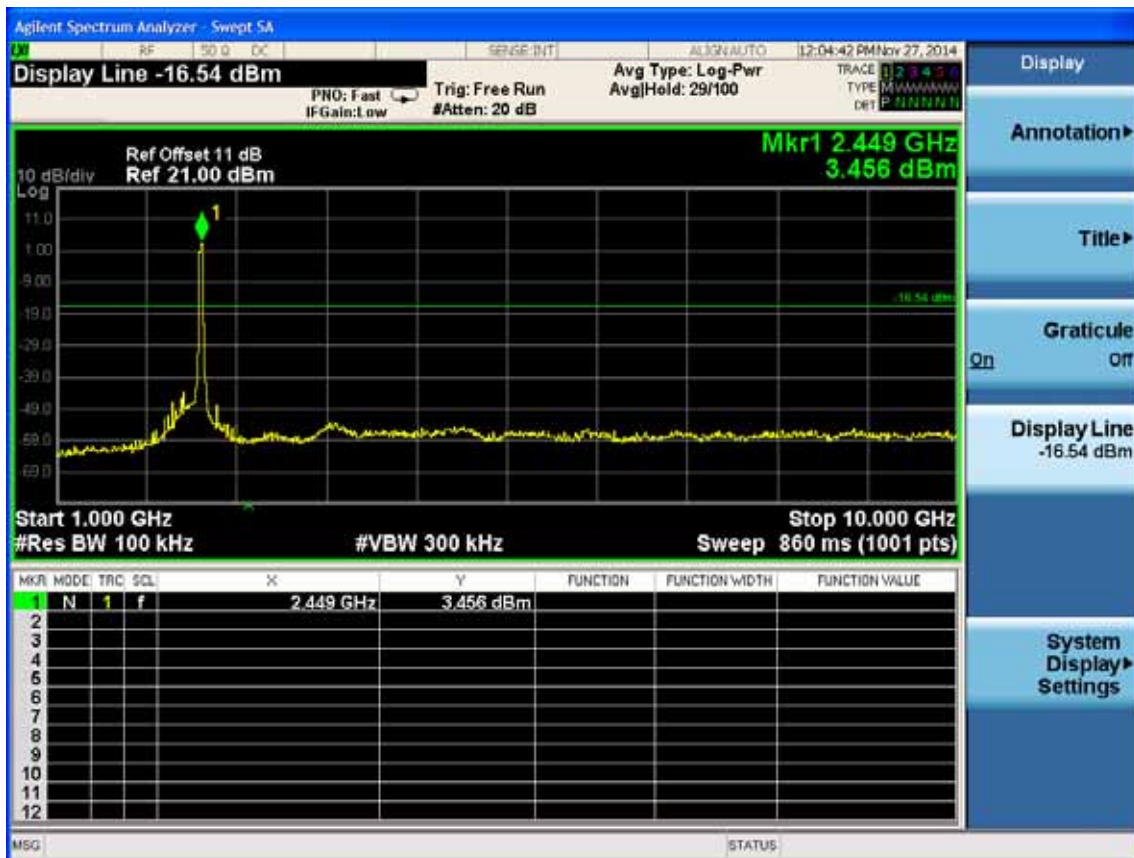
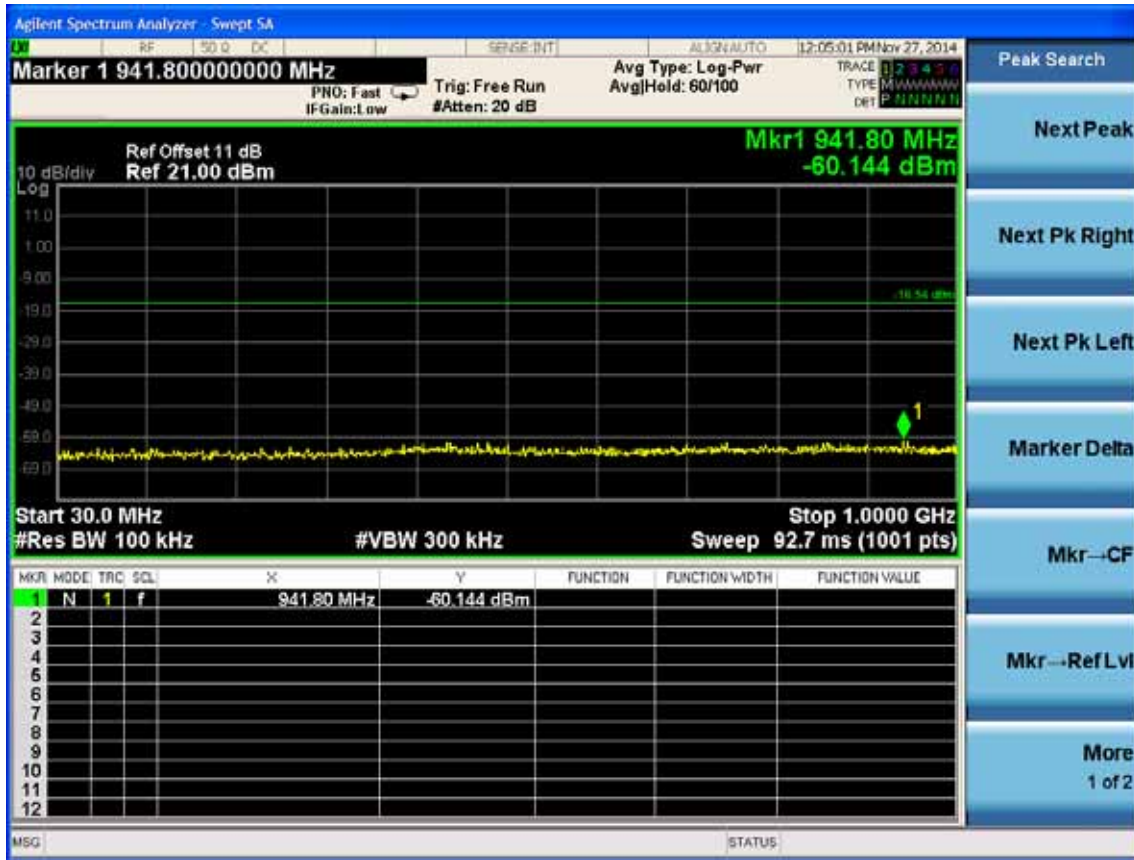


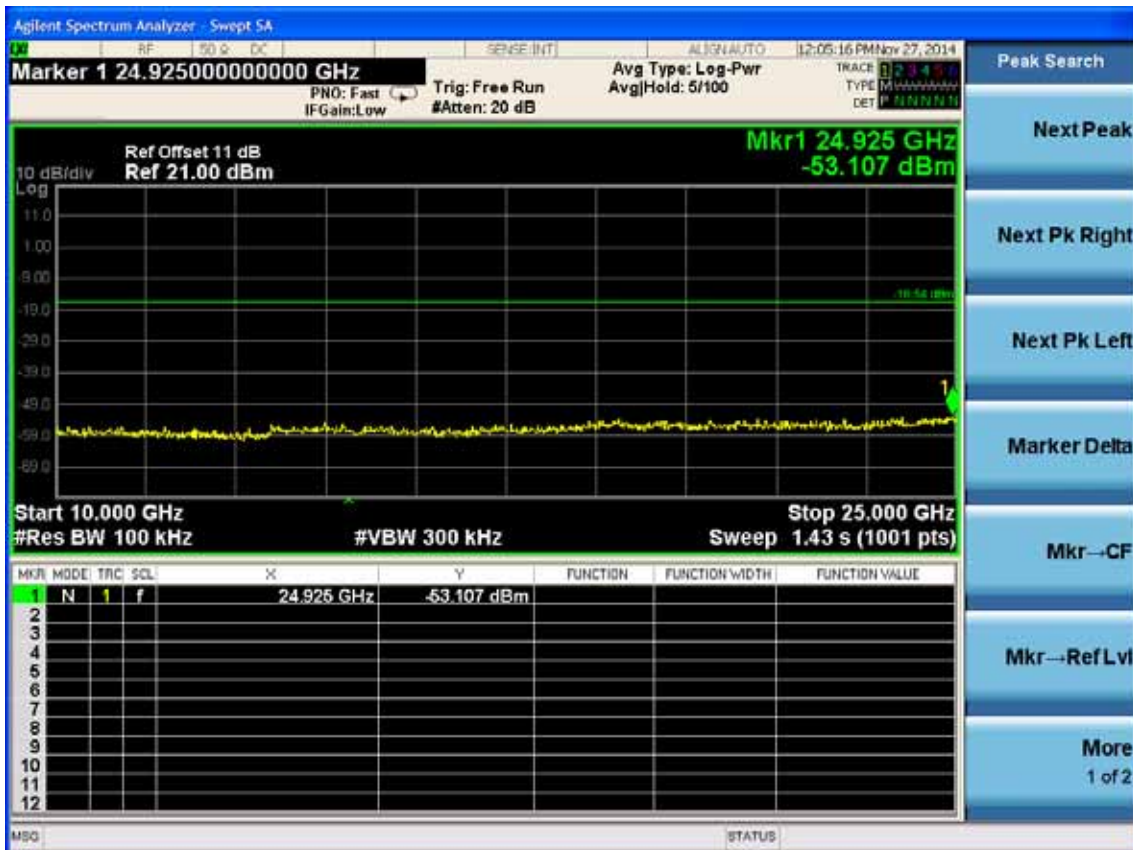
Test CH4: 2437MHz





Test CH7: 2452MHz





6. BAND EDGE COMPLIANCE TEST

6.1. Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Amp	HP	8449B	3008A02495	Apr. 28,14	1 Year
2.	Horn Antenna	ETS	3115	9510-4580	Jun. 06, 14	1 Year
3.	HF Cable	Hubersuhner	Sucoflex104	274094/4	Apr. 28,14	1 Year
4.	RF Cable	Hubersuhner	Sucoflex102	28610/2	Apr. 28,14	1 Year

6.2. Limit

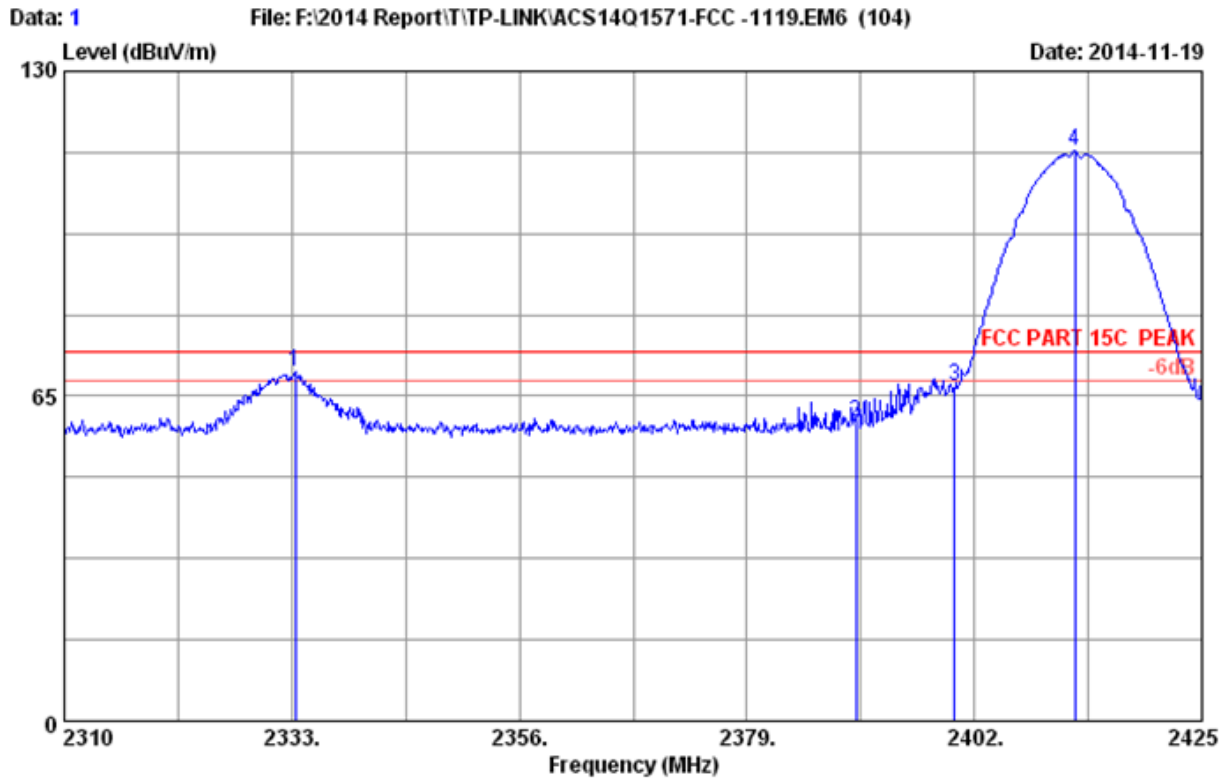
All the lower and upper band-edges emissions appearing within 5.35-5.46GHz and 7.25-7.75GHz restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions outside operation frequency band 5725MHz to 5850MHz shall be at least 20dB below the fundamental emissions, or comply with 15.209 limits.

6.3. Test Produce

1. The EUT is placed on a turntable, which is 0.8m above the ground plane and worked at highest radiated power.
2. The turntable was rotated for 360 degrees to determine the position of maximum emission level.
3. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emission.
4. Set the spectrum analyzer in the following setting in order to capture the lower and upper band-edges of the emission:
 - (a) PEAK: RBW=1MHz; VBW=3MHz; Sweep=AUTO
 - (b) AVERAGE: RBW=1MHz; VBW=10Hz; Sweep=AUTO

6.4. Test Results

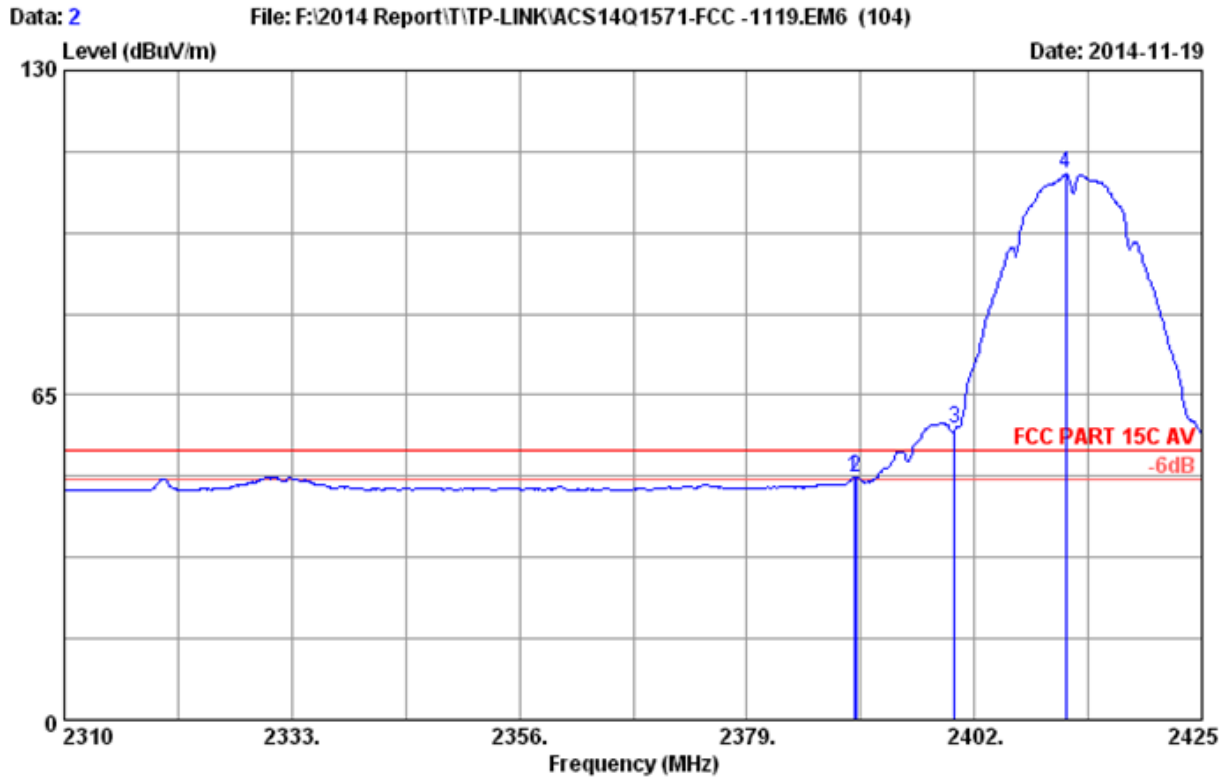
Pass (The testing data was attached in the next pages.)



Site no. : 3m Chamber Data no. : 1
 Dis. / Ant. : 3m 2014 3115 (4580) Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 24*C/56% Engineer : Alice_yang
 EUT : 300Mbps Wireless N Gigabit Access Point
 Power rating : DC 12V From Adapter Input AC 120V/60Hz
 Test Mode : IEEE802.11b 2412MHz Tx
 M/N : M/N:EAP120

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2333.345	28.03	5.70	35.70	71.72	69.75	74.00	4.25	Peak
2	2390.000	28.16	5.78	35.70	61.36	59.60	74.00	14.40	Peak
3	2400.000	28.18	5.80	35.70	68.53	66.81	74.00	7.19	Peak
4	2412.120	28.21	5.81	35.70	115.74	114.06	74.00	-40.06	Peak

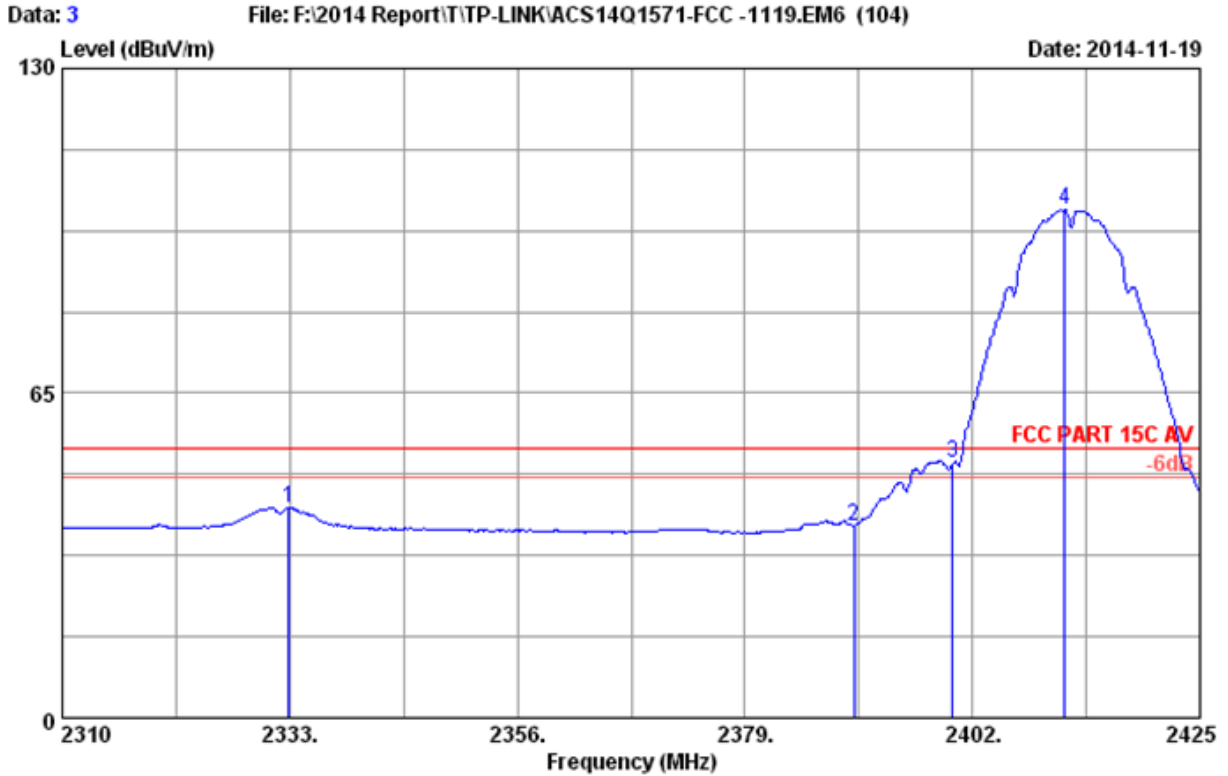
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 2
 Dis. / Ant. : 3m 2014 3115 (4580) Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C AV
 Env. / Ins. : 24°C/56% Engineer : Alice_yang
 EUT : 300Mbps Wireless N Gigabit Access Point
 Power rating : DC 12V From Adapter Input AC 120V/60Hz
 Test Mode : IEEE802.11b 2412MHz Tx
 M/N : M/N:EAP120

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2389.810	28.16	5.78	35.70	50.45	48.69	54.00	5.31	Average
2	2390.000	28.16	5.78	35.70	50.41	48.65	54.00	5.35	Average
3	2400.000	28.18	5.80	35.70	60.08	58.36	54.00	-4.36	Average
4	2411.200	28.20	5.81	35.70	110.92	109.23	54.00	-55.23	Average

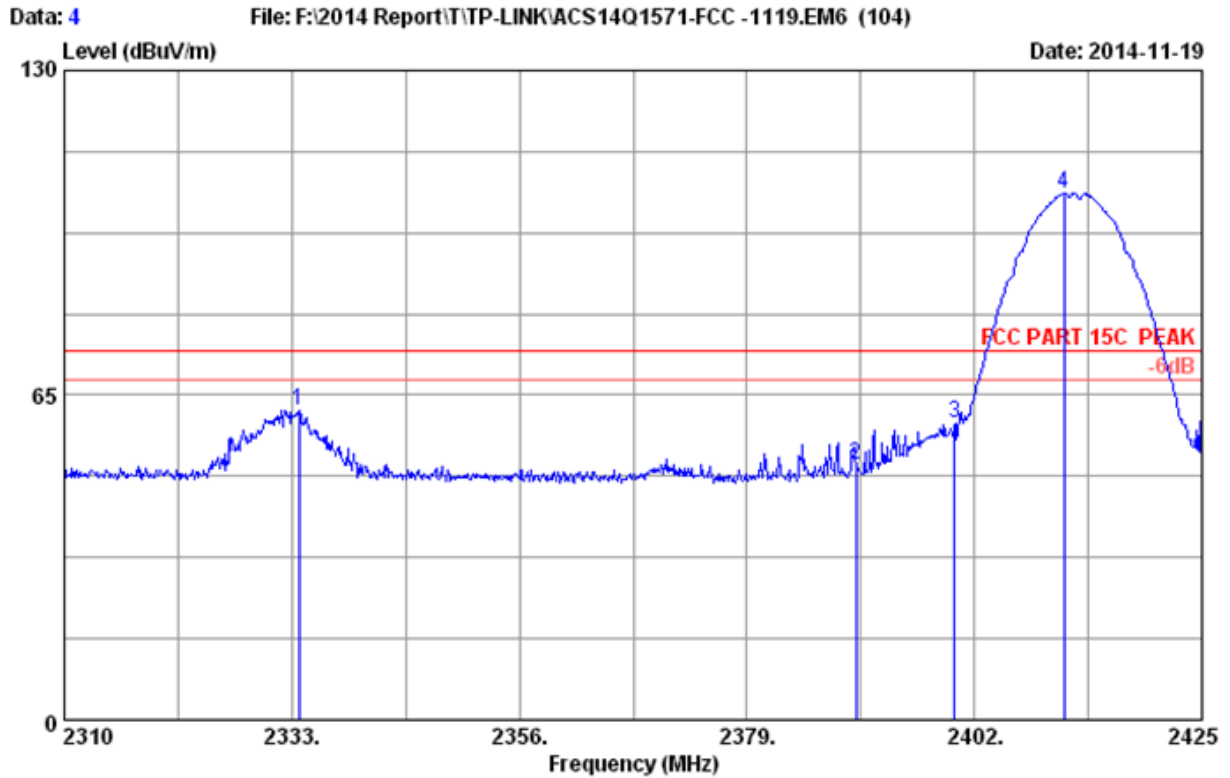
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp Factor
 2. The emission levels that are 20dB below the official
 limit are not reported.



Site no. : 3m Chamber Data no. : 3
 Dis. / Ant. : 3m 2014 3115 (4580) Ant. pol. : VERTICAL
 Limit : FCC PART 15C AV
 Env. / Ins. : 24°C/56% Engineer : Alice_yang
 EUT : 300Mbps Wireless N Gigabit Access Point
 Power rating : DC 12V From Adapter Input AC 120V/60Hz
 Test Mode : IEEE802.11b 2412MHz Tx
 M/N : M/N:EAP120

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2332.885	28.03	5.70	35.70	44.13	42.16	54.00	11.84	Average
2	2390.000	28.16	5.78	35.70	40.15	38.39	54.00	15.61	Average
3	2400.000	28.18	5.80	35.70	52.70	50.98	54.00	3.02	Average
4	2411.315	28.20	5.81	35.70	103.47	101.78	54.00	-47.78	Average

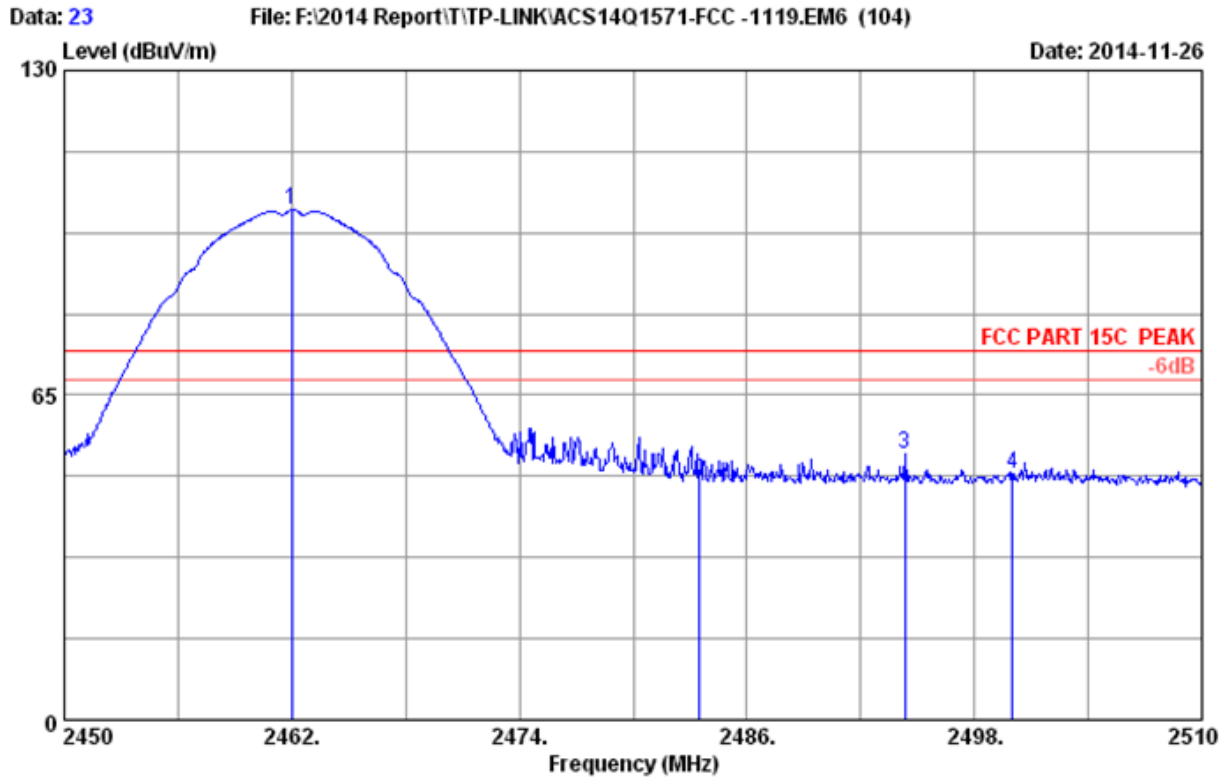
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 4
 Dis. / Ant. : 3m 2014 3115 (4580) Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 24°C/56% Engineer : Alice_yang
 EUT : 300Mbps Wireless N Gigabit Access Point
 Power rating : DC 12V From Adapter Input AC 120V/60Hz
 Test Mode : IEEE802.11b 2412MHz Tx
 M/N : M/N:EAP120

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2333.690	28.03	5.70	35.70	64.02	62.05	74.00	11.95	Peak
2	2390.000	28.16	5.78	35.70	52.68	50.92	74.00	23.08	Peak
3	2400.000	28.18	5.80	35.70	61.15	59.43	74.00	14.57	Peak
4	2411.085	28.20	5.81	35.70	107.06	105.37	74.00	-31.37	Peak

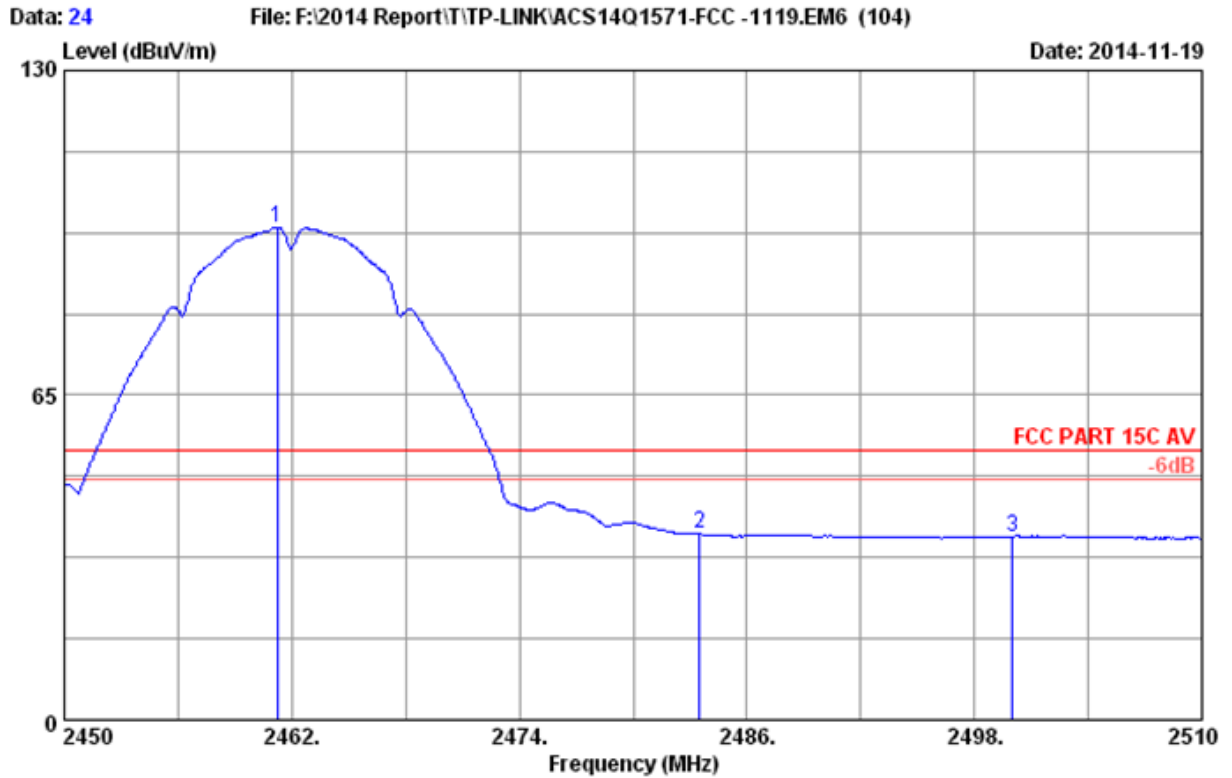
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 23
 Dis. / Ant. : 3m 2014 3115 (4580) Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 24°C/56% Engineer : Alice_yang
 EUT : 300Mbps Wireless N Gigabit Access Point
 Power rating : DC 12V From Adapter Input AC 120V/60Hz
 Test Mode : IEEE802.11b 2462MHz Tx
 M/N : M/N:EAP120

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2462.000	28.32	5.89	35.70	103.72	102.23	74.00	-28.23	Peak
2	2483.500	28.36	5.92	35.70	49.36	47.94	74.00	26.06	Peak
3	2494.340	28.39	5.93	35.70	54.43	53.05	74.00	20.95	Peak
4	2500.000	28.40	5.94	35.70	50.50	49.14	74.00	24.86	Peak

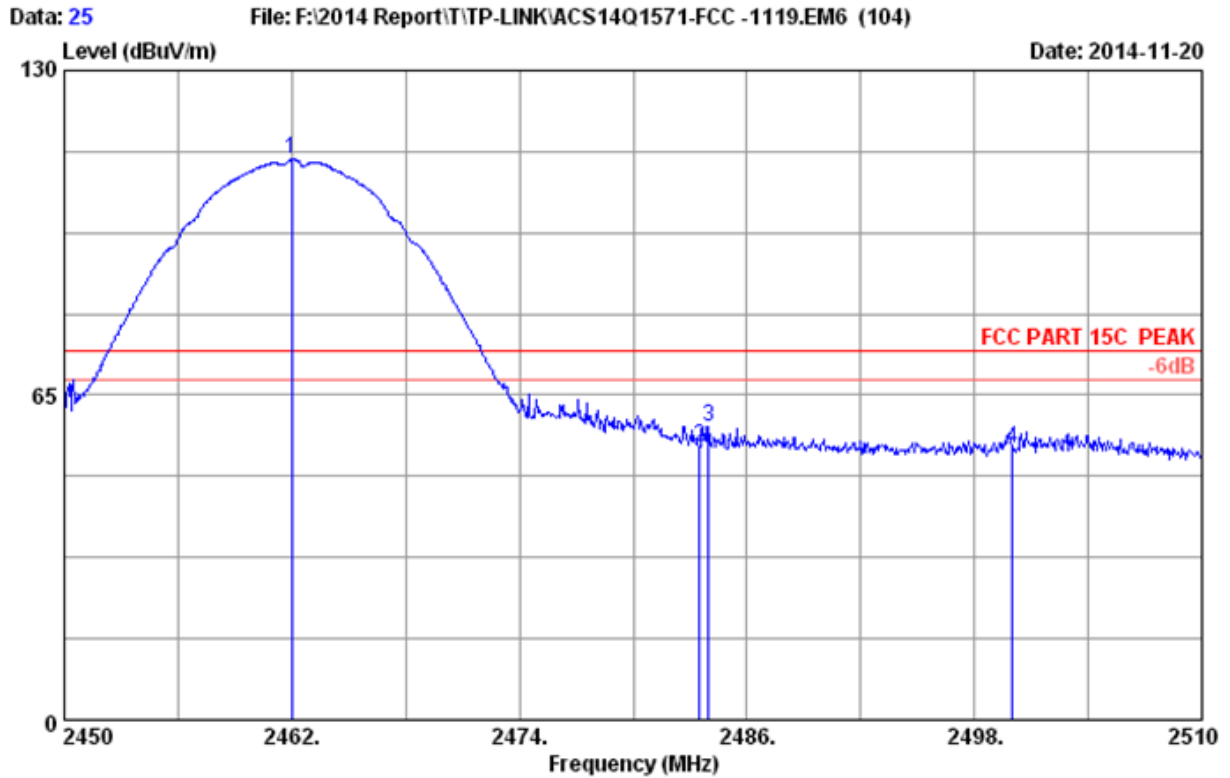
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 24
 Dis. / Ant. : 3m 2014 3115 (4580) Ant. pol. : VERTICAL
 Limit : FCC PART 15C AV
 Env. / Ins. : 24°C/56% Engineer : Alice_yang
 EUT : 300Mbps Wireless N Gigabit Access Point
 Power rating : DC 12V From Adapter Input AC 120V/60Hz
 Test Mode : IEEE802.11b 2462MHz Tx
 M/N : M/N:EAP120

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBUV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Remark
1	2461.220	28.31	5.89	35.70	100.13	98.63	54.00	-44.63	Average
2	2483.500	28.36	5.92	35.70	38.64	37.22	54.00	16.78	Average
3	2500.000	28.40	5.94	35.70	38.04	36.68	54.00	17.32	Average

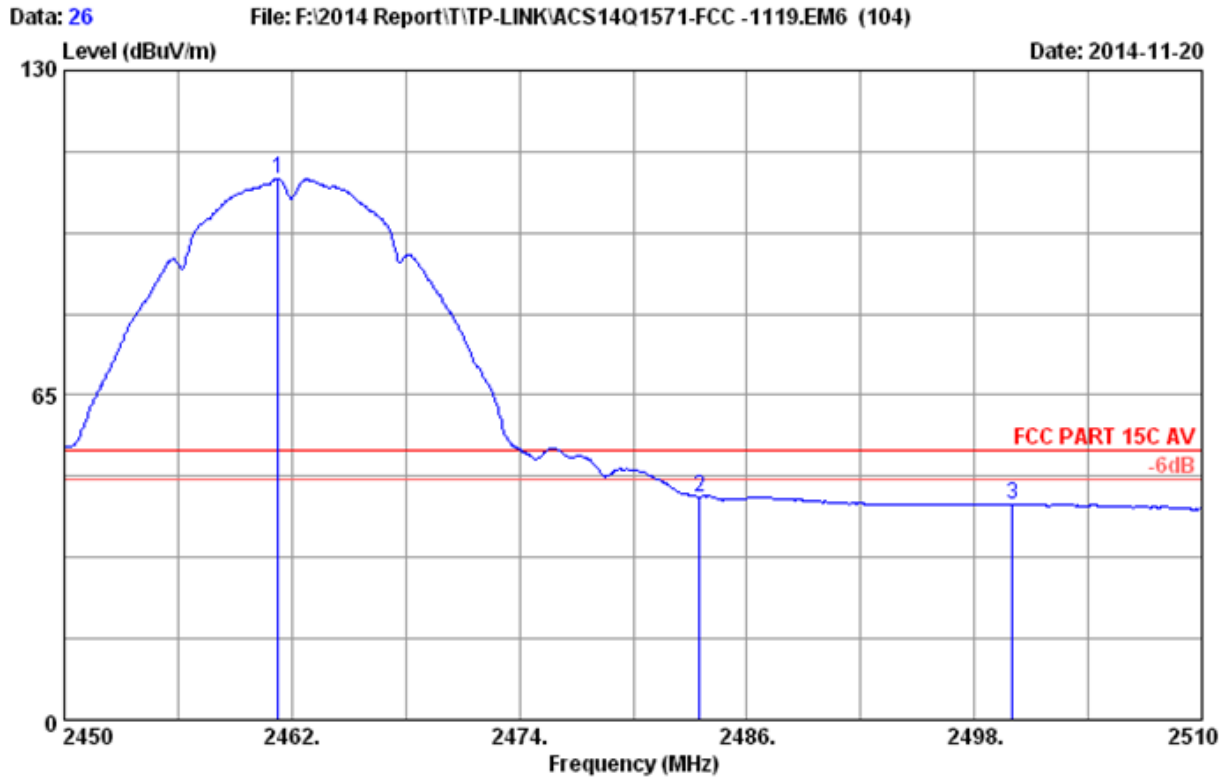
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp Factor
 2. The emission levels that are 20dB below the official
 limit are not reported.



Site no. : 3m Chamber Data no. : 25
 Dis. / Ant. : 3m 2014 3115 (4580) Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 24°C/56% Engineer : Alice_yang
 EUT : 300Mbps Wireless N Gigabit Access Point
 Power rating : DC 12V From Adapter Input AC 120V/60Hz
 Test Mode : IEEE802.11b 2462MHz Tx
 M/N : M/N:EAP120

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBUV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Remark
1	2462.000	28.32	5.89	35.70	113.79	112.30	74.00	-38.30	Peak
2	2483.500	28.36	5.92	35.70	56.18	54.76	74.00	19.24	Peak
3	2483.960	28.36	5.92	35.70	60.21	58.79	74.00	15.21	Peak
4	2500.000	28.40	5.94	35.70	55.63	54.27	74.00	19.73	Peak

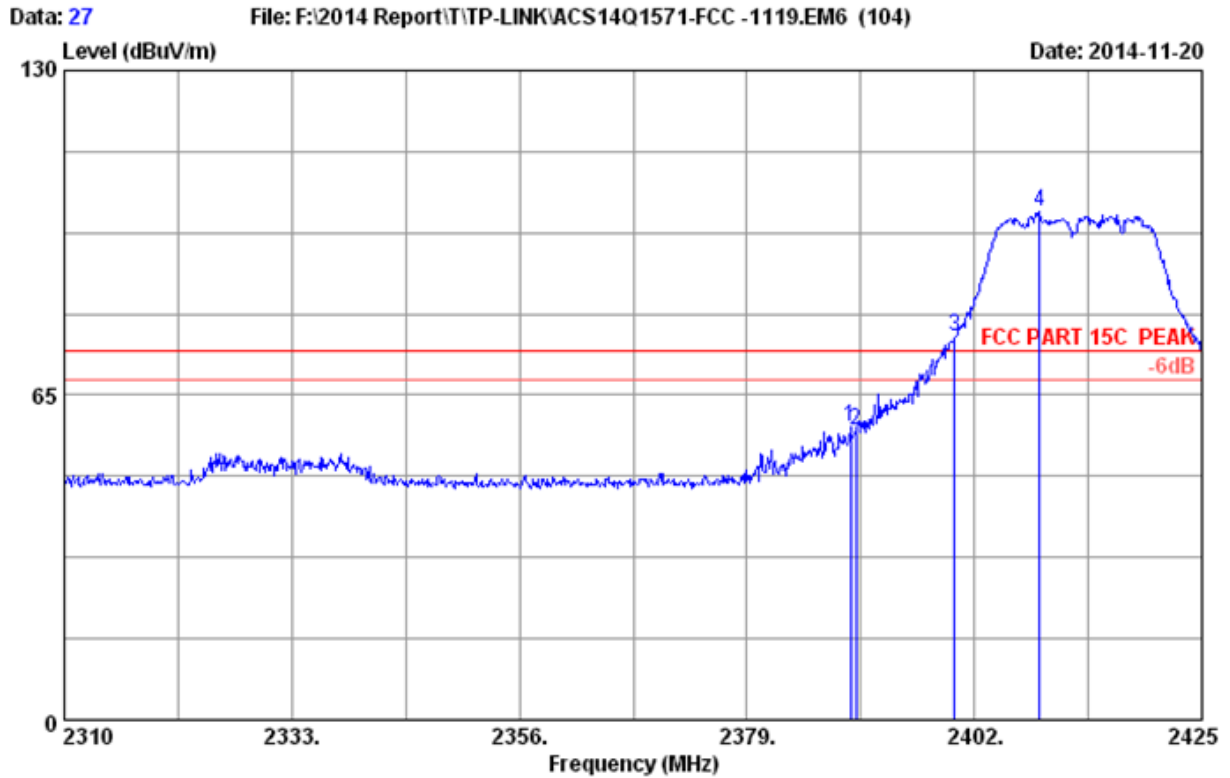
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 26
 Dis. / Ant. : 3m 2014 3115 (4580) Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C AV
 Env. / Ins. : 24°C/56% Engineer : Alice_yang
 EUT : 300Mbps Wireless N Gigabit Access Point
 Power rating : DC 12V From Adapter Input AC 120V/60Hz
 Test Mode : IEEE802.11b 2462MHz Tx
 M/N : M/N:EAP120

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2461.280	28.31	5.89	35.70	109.77	108.27	54.00	-54.27	Average
2	2483.500	28.36	5.92	35.70	46.08	44.66	54.00	9.34	Average
3	2500.000	28.40	5.94	35.70	44.50	43.14	54.00	10.86	Average

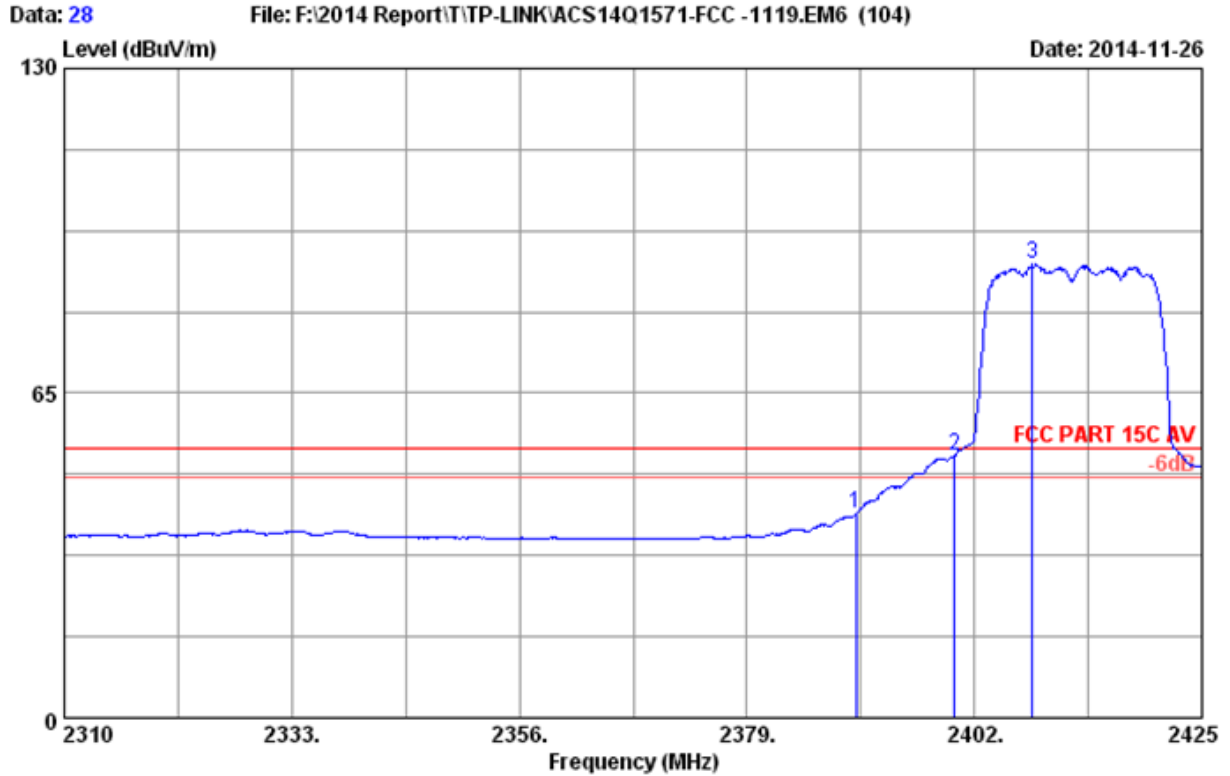
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 27
 Dis. / Ant. : 3m 2014 3115 (4580) Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 24°C/56% Engineer : Alice_yang
 EUT : 300Mbps Wireless N Gigabit Access Point
 Power rating : DC 12V From Adapter Input AC 120V/60Hz
 Test Mode : IEEE802.11g 2412MHz Tx
 M/N : M/N:EAP120

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2389.465	28.16	5.78	35.70	60.25	58.49	74.00	15.51	Peak
2	2390.000	28.16	5.78	35.70	59.60	57.84	74.00	16.16	Peak
3	2400.000	28.18	5.80	35.70	78.60	76.88	74.00	-2.88	Peak
4	2408.555	28.20	5.81	35.70	103.29	101.60	74.00	-27.60	Peak

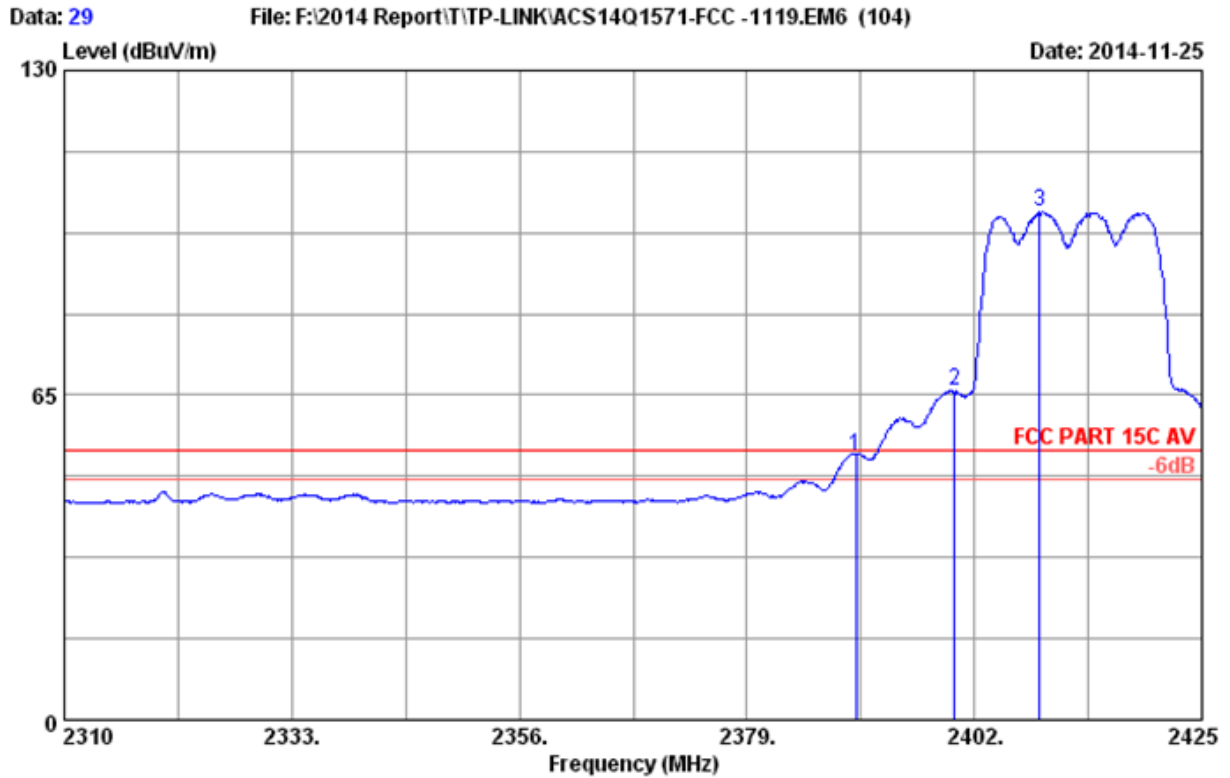
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 28
 Dis. / Ant. : 3m 2014 3115 (4580) Ant. pol. : VERTICAL
 Limit : FCC PART 15C AV
 Env. / Ins. : 24°C/56% Engineer : Alice_yang
 EUT : 300Mbps Wireless N Gigabit Access Point
 Power rating : DC 12V From Adapter Input AC 120V/60Hz
 Test Mode : IEEE802.11g 2412MHz Tx
 M/N : M/N:EAP120

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.000	28.16	5.78	35.70	42.53	40.77	54.00	13.23	Average
2	2400.000	28.18	5.80	35.70	54.28	52.56	54.00	1.44	Average
3	2407.865	28.20	5.81	35.70	92.48	90.79	54.00	-36.79	Average

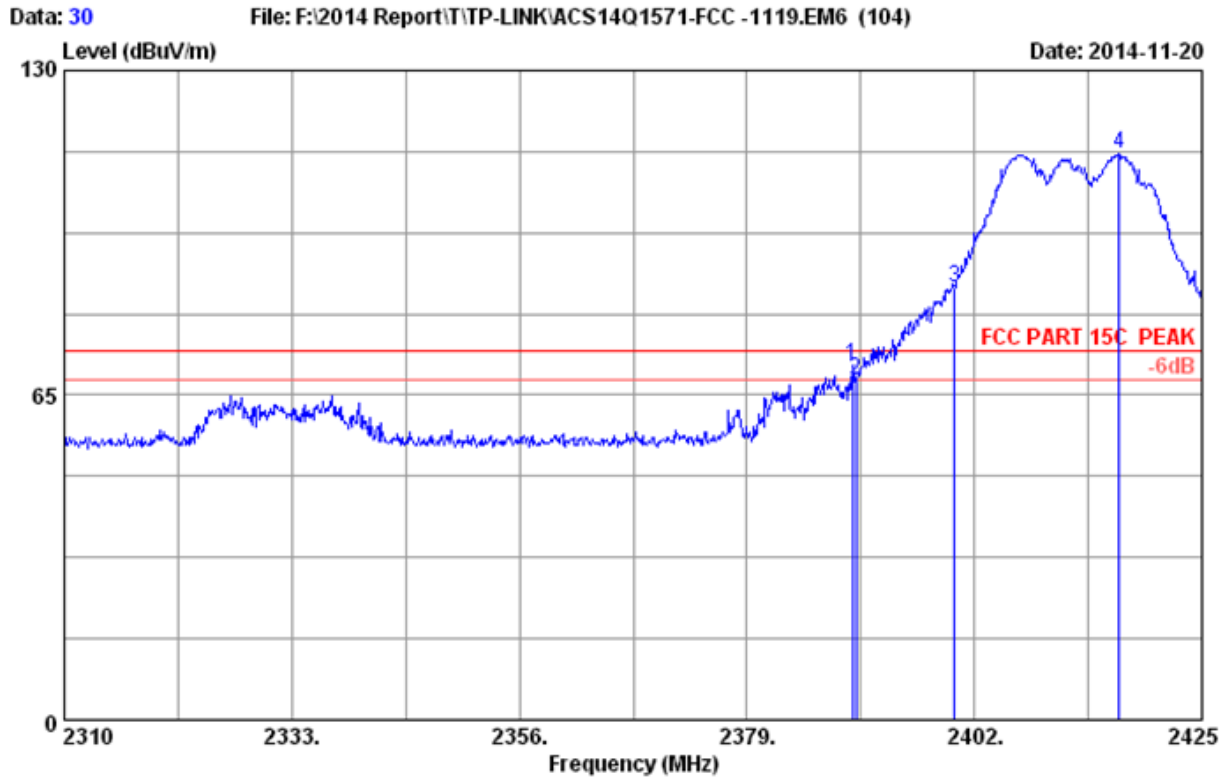
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 29
 Dis. / Ant. : 3m 2014 3115 (4580) Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C AV
 Env. / Ins. : 24°C/56% Engineer : Alice_yang
 EUT : 300Mbps Wireless N Gigabit Access Point
 Power rating : DC 12V From Adapter Input AC 120V/60Hz
 Test Mode : IEEE802.11g 2412MHz Tx
 M/N : M/N:EAP120

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.000	28.16	5.78	35.70	54.68	52.92	54.00	1.08	Average
2	2400.000	28.18	5.80	35.70	67.50	65.78	54.00	-11.78	Average
3	2408.555	28.20	5.81	35.70	103.30	101.61	54.00	-47.61	Average

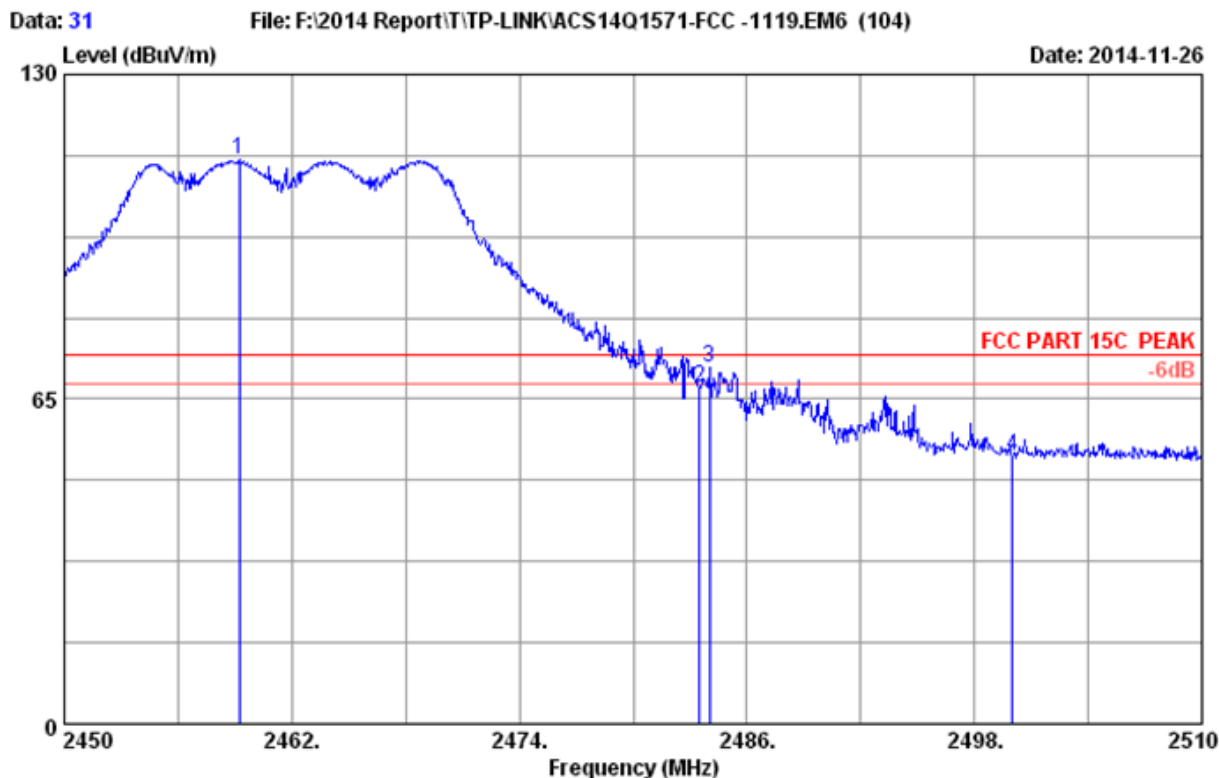
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 30
 Dis. / Ant. : 3m 2014 3115 (4580) Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 24°C/56% Engineer : Alice_yang
 EUT : 300Mbps Wireless N Gigabit Access Point
 Power rating : DC 12V From Adapter Input AC 120V/60Hz
 Test Mode : IEEE802.11g 2412MHz Tx
 M/N : M/N:EAP120

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2389.695	28.16	5.78	35.70	72.73	70.97	74.00	3.03	Peak
2	2390.000	28.16	5.78	35.70	69.77	68.01	74.00	5.99	Peak
3	2400.000	28.18	5.80	35.70	88.13	86.41	74.00	-12.41	Peak
4	2416.605	28.22	5.82	35.70	115.02	113.36	74.00	-39.36	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 31
 Dis. / Ant. : 3m 2014 3115 (4580) Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 24°C/56% Engineer : Alice_yang
 EUT : 300Mbps Wireless N Gigabit Access Point
 Power rating : DC 12V From Adapter Input AC 120V/60Hz
 Test Mode : IEEE802.11g 2462MHz Tx
 M/N : M/N:EAP120

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2459.240	28.31	5.88	35.70	114.40	112.89	74.00	-38.89	Peak
2	2483.500	28.36	5.92	35.70	68.93	67.51	74.00	6.49	Peak
3	2484.020	28.36	5.92	35.70	72.61	71.19	74.00	2.81	Peak
4	2500.000	28.40	5.94	35.70	54.89	53.53	74.00	20.47	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor
 2. The emission levels that are 20dB below the official limit are not reported.