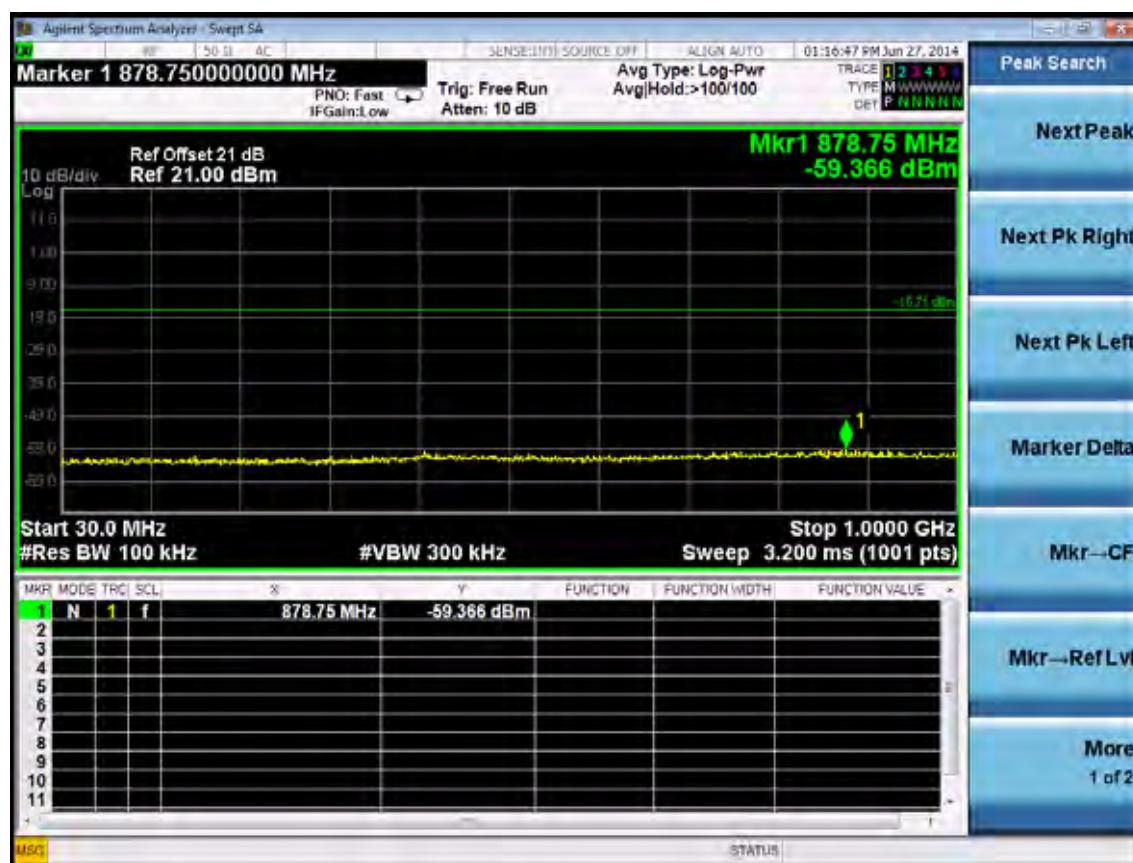
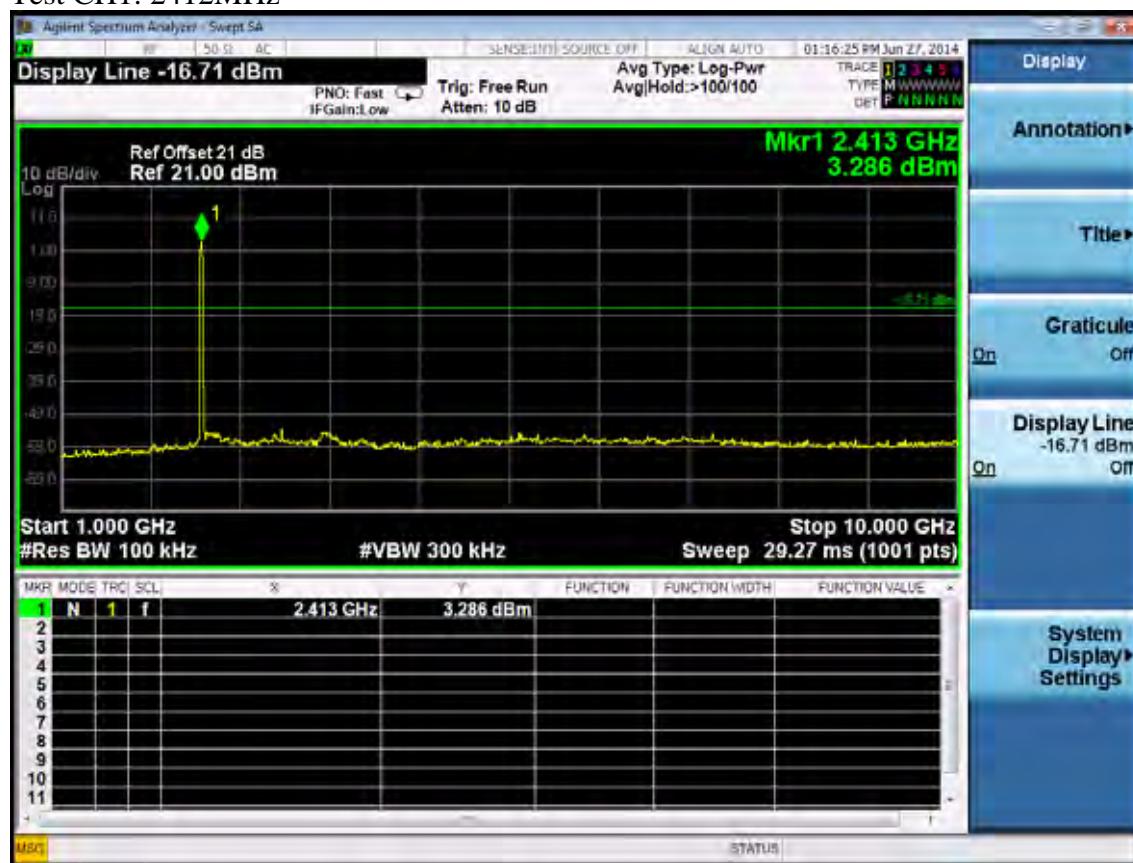
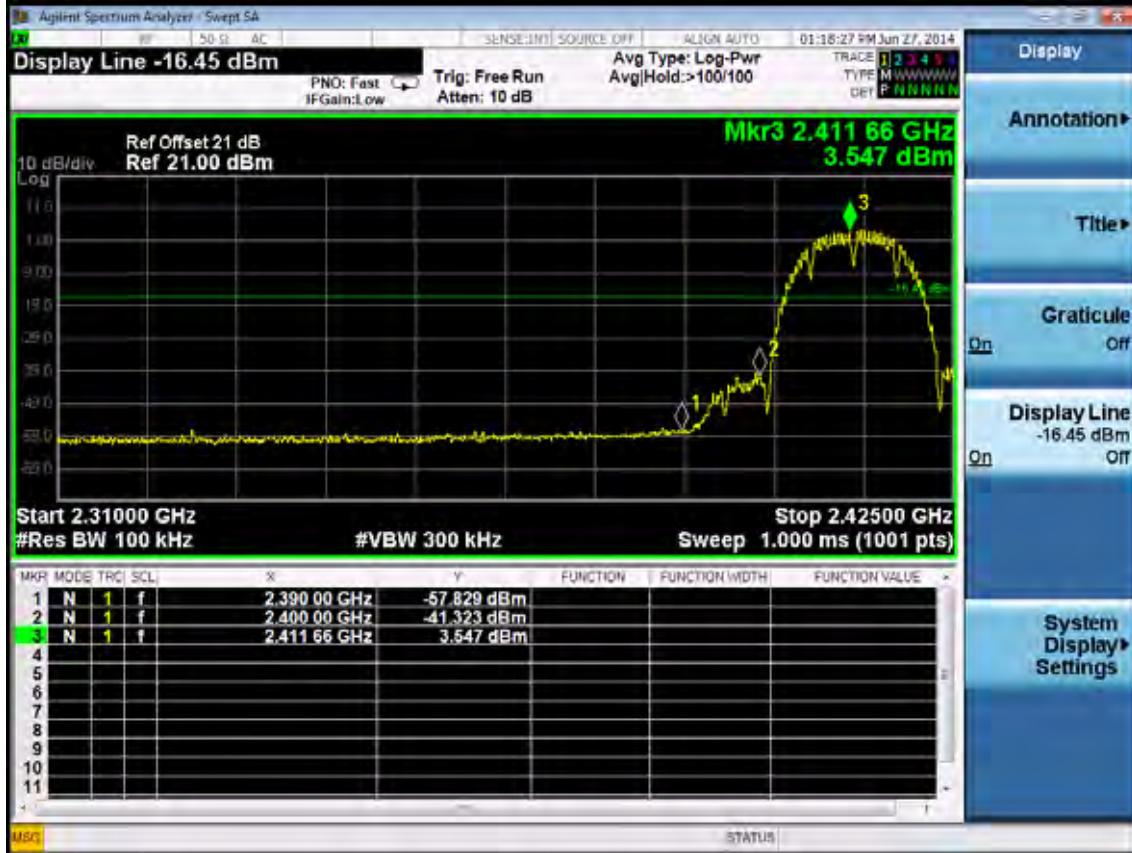
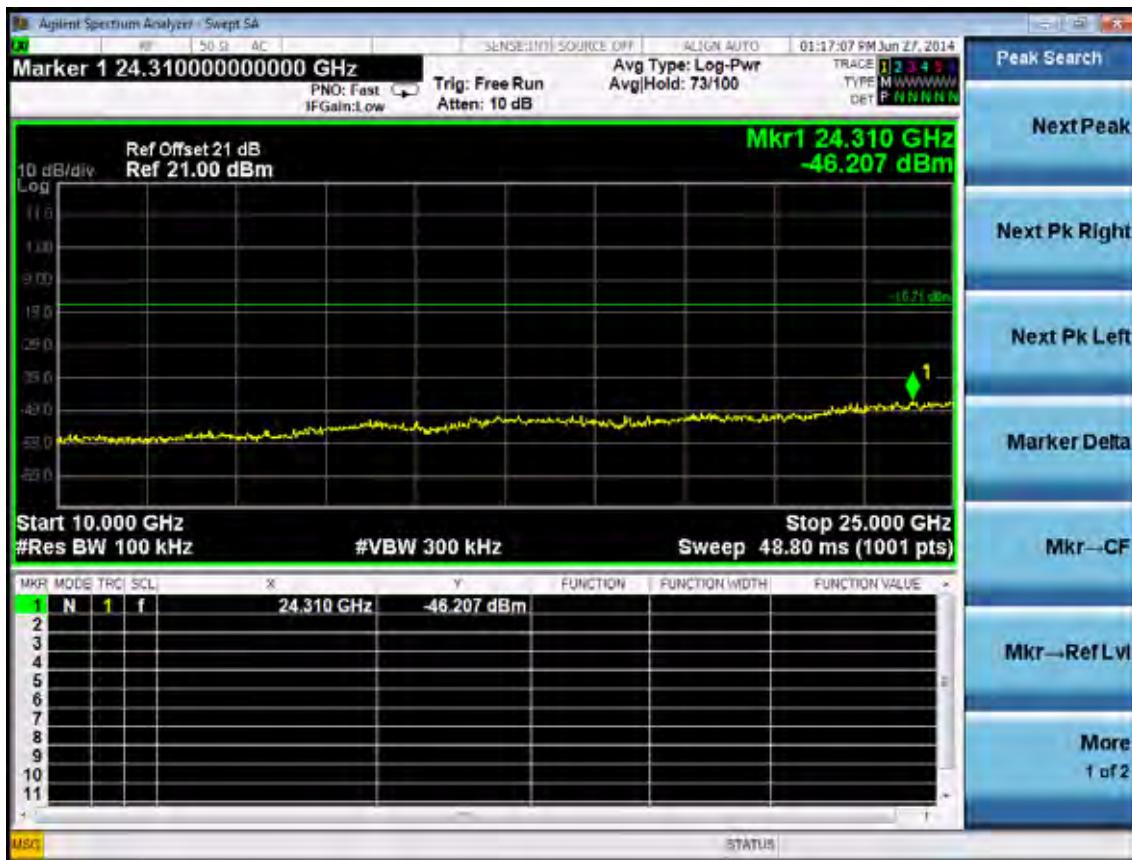


Chain 2:

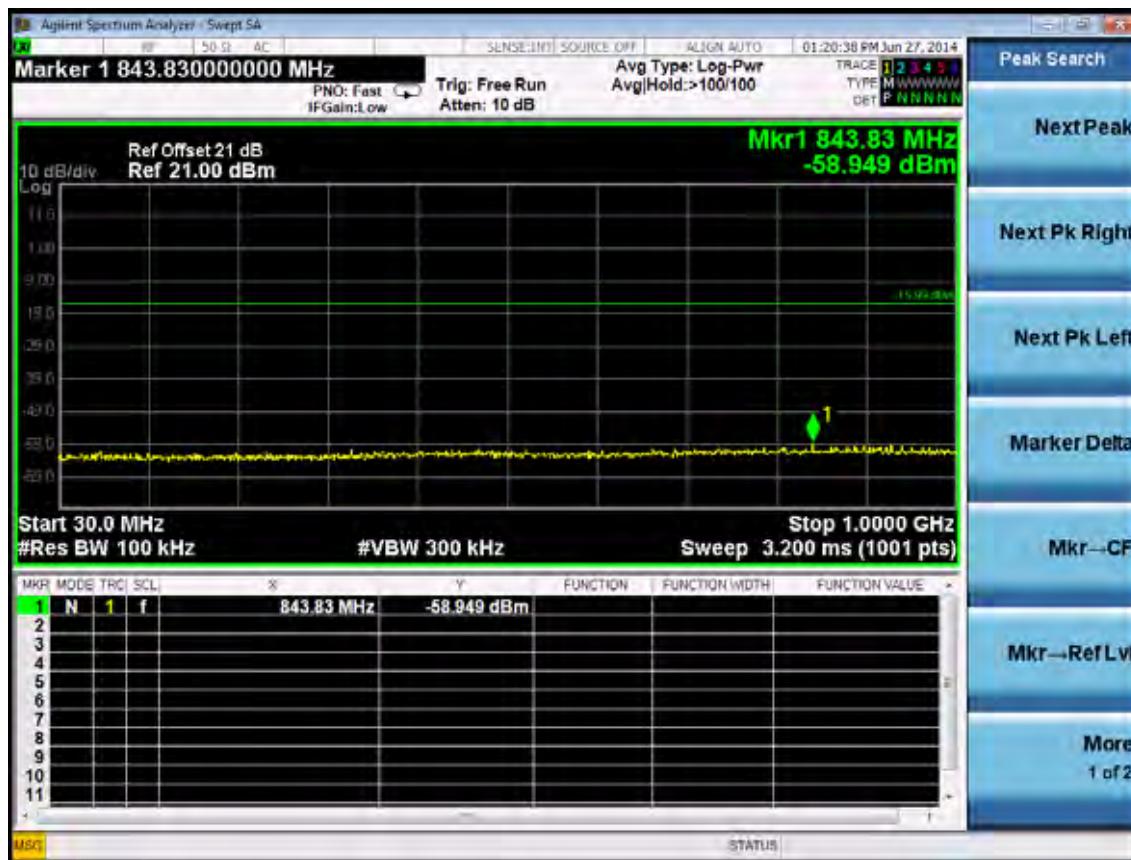
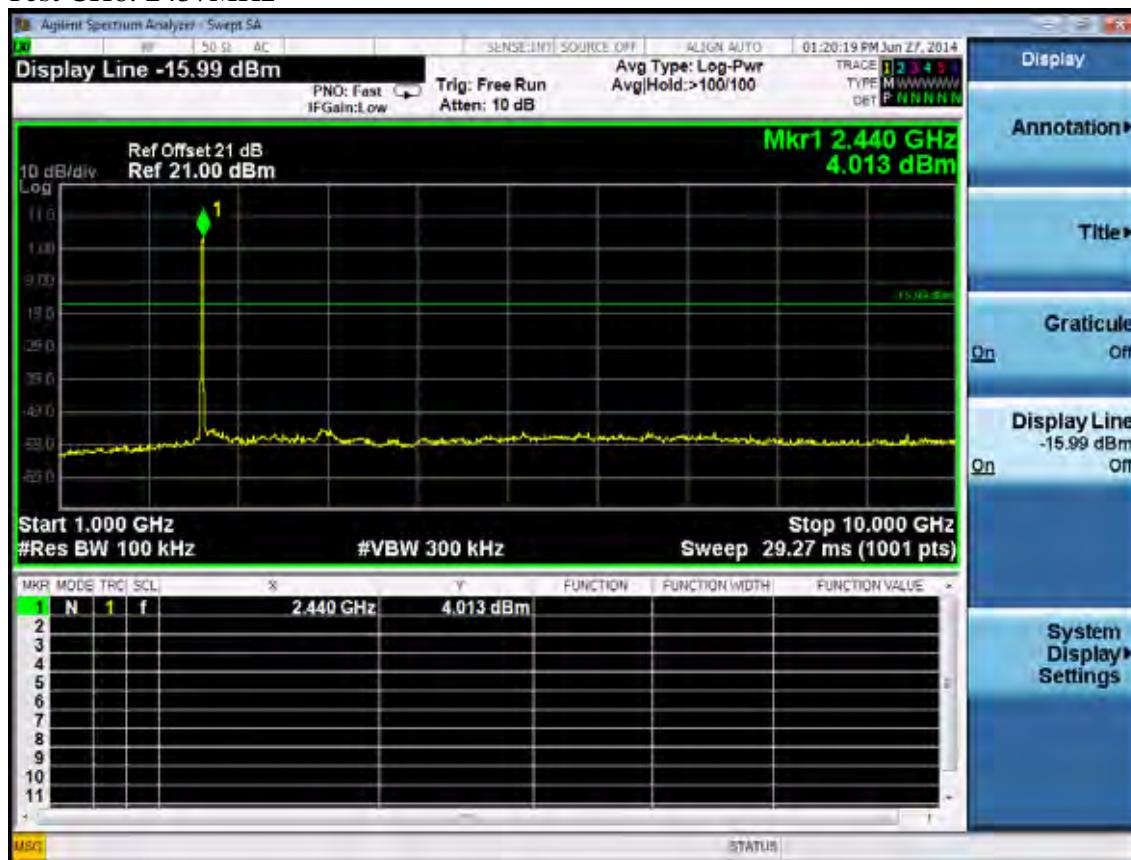
Test Mode: IEEE 802.11b TX

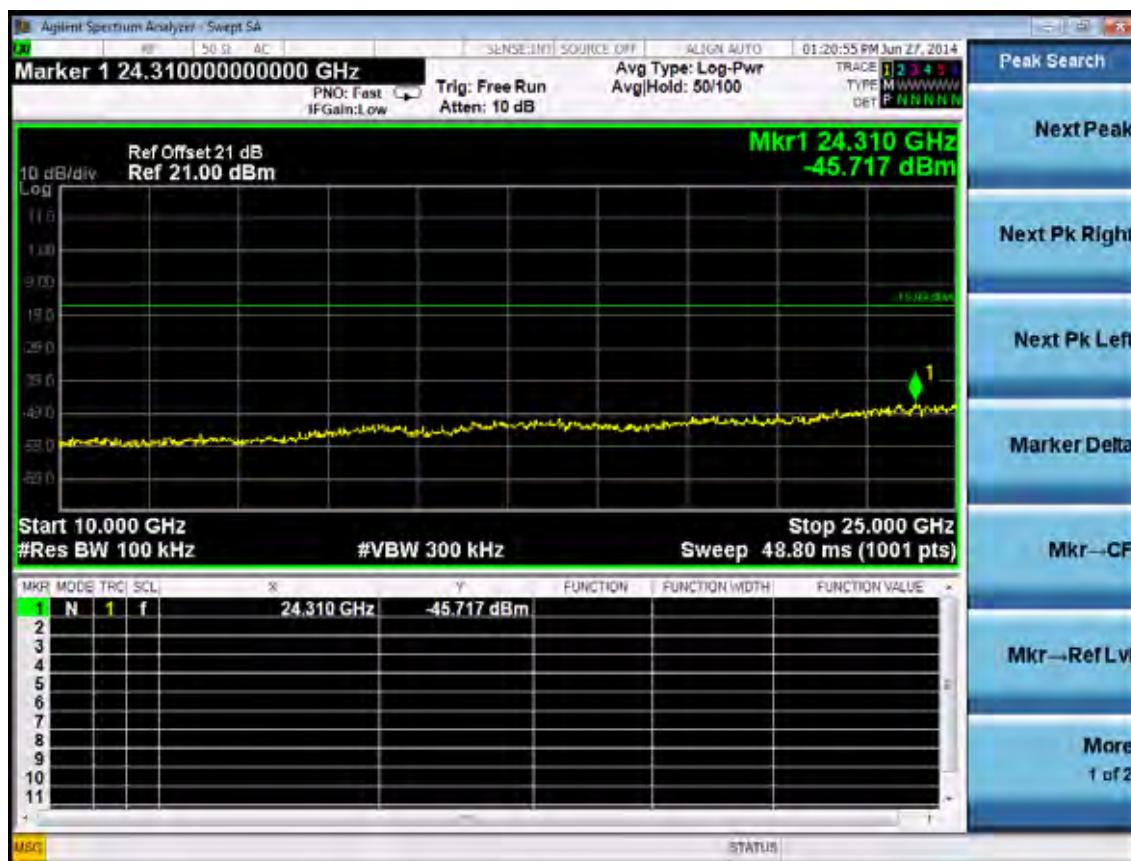
Test CH1: 2412MHz



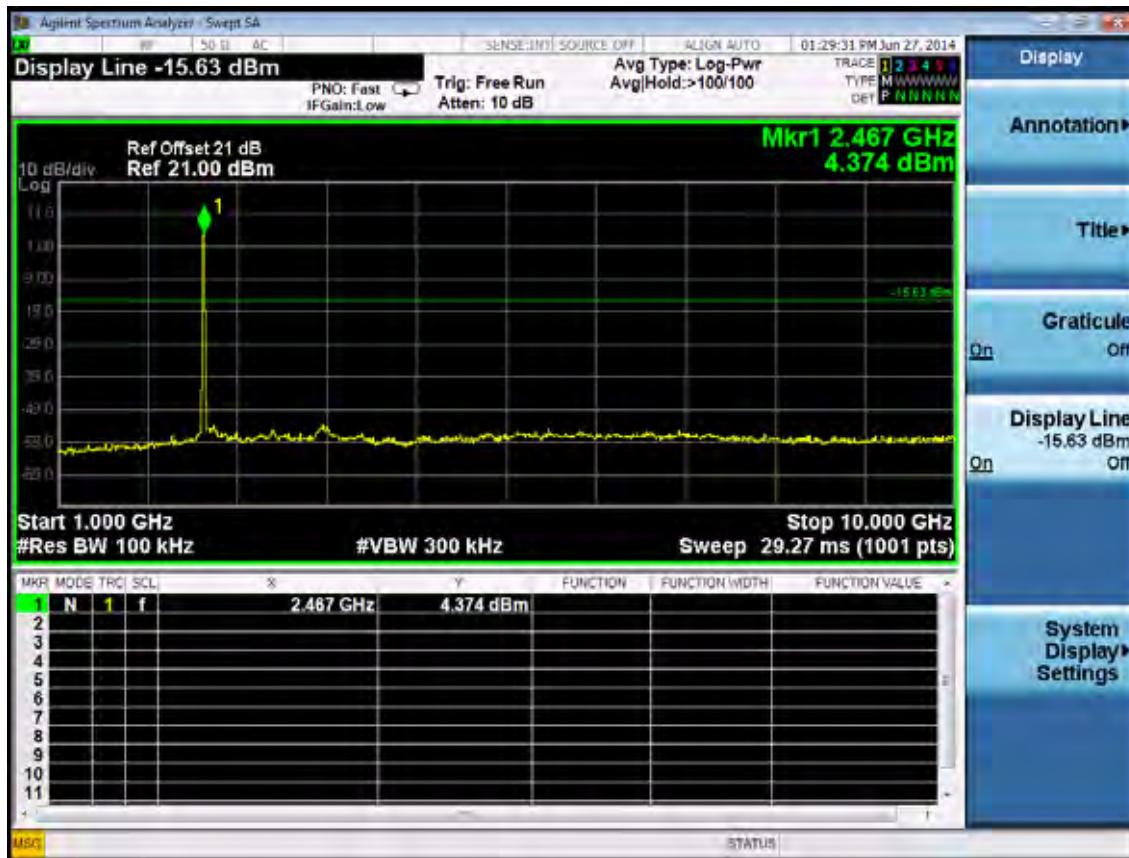


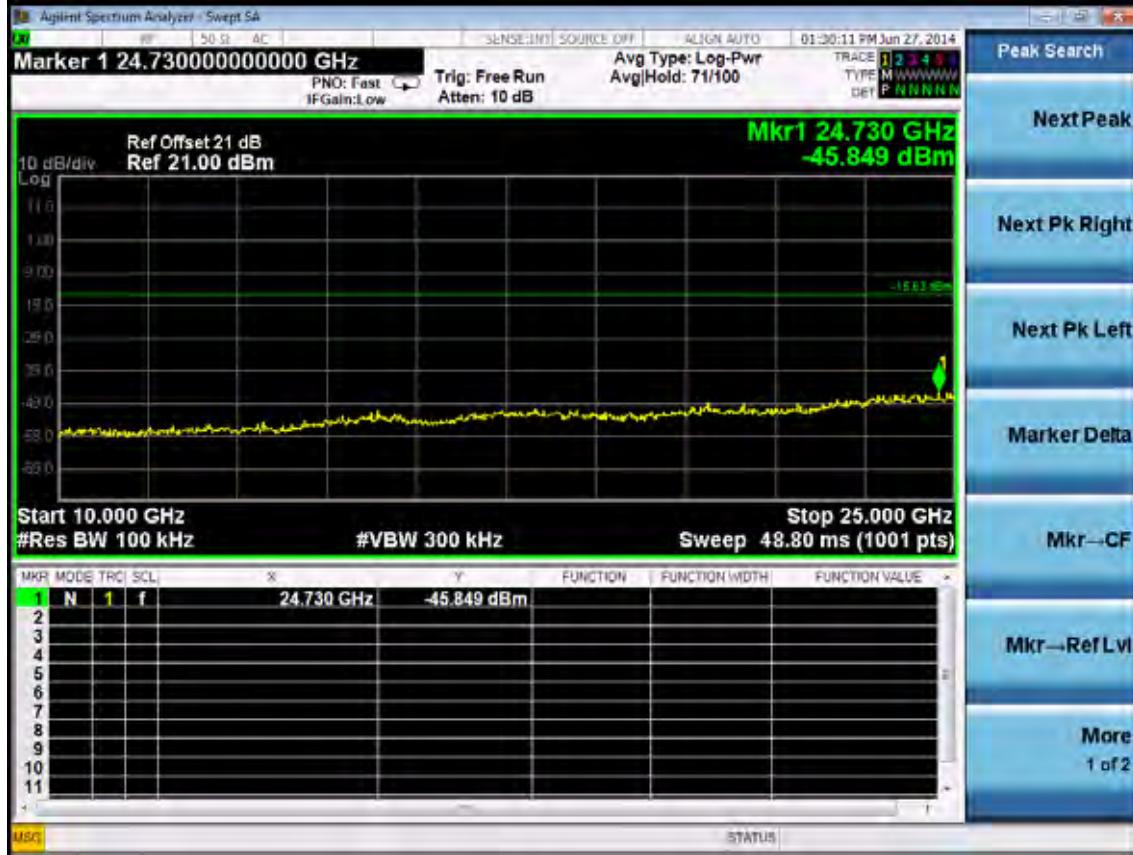
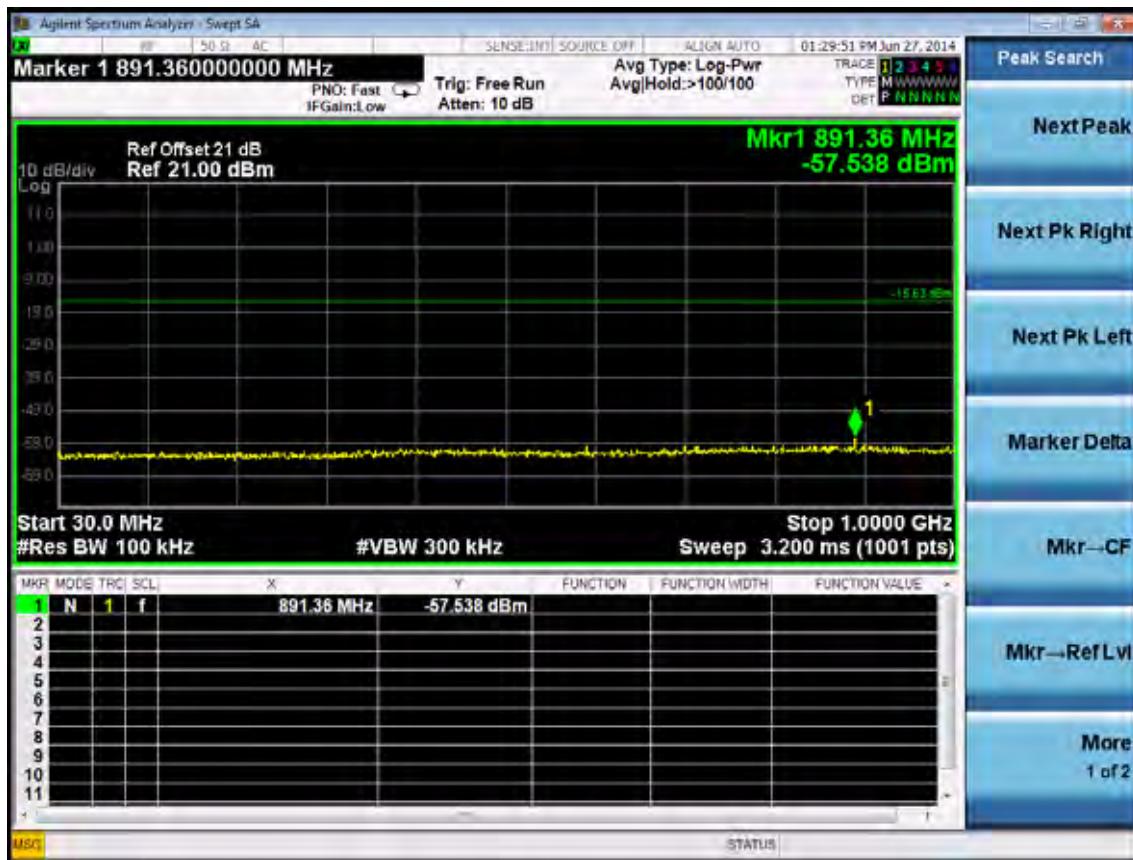
Test CH6: 2437MHz





Test CH11: 2462MHz

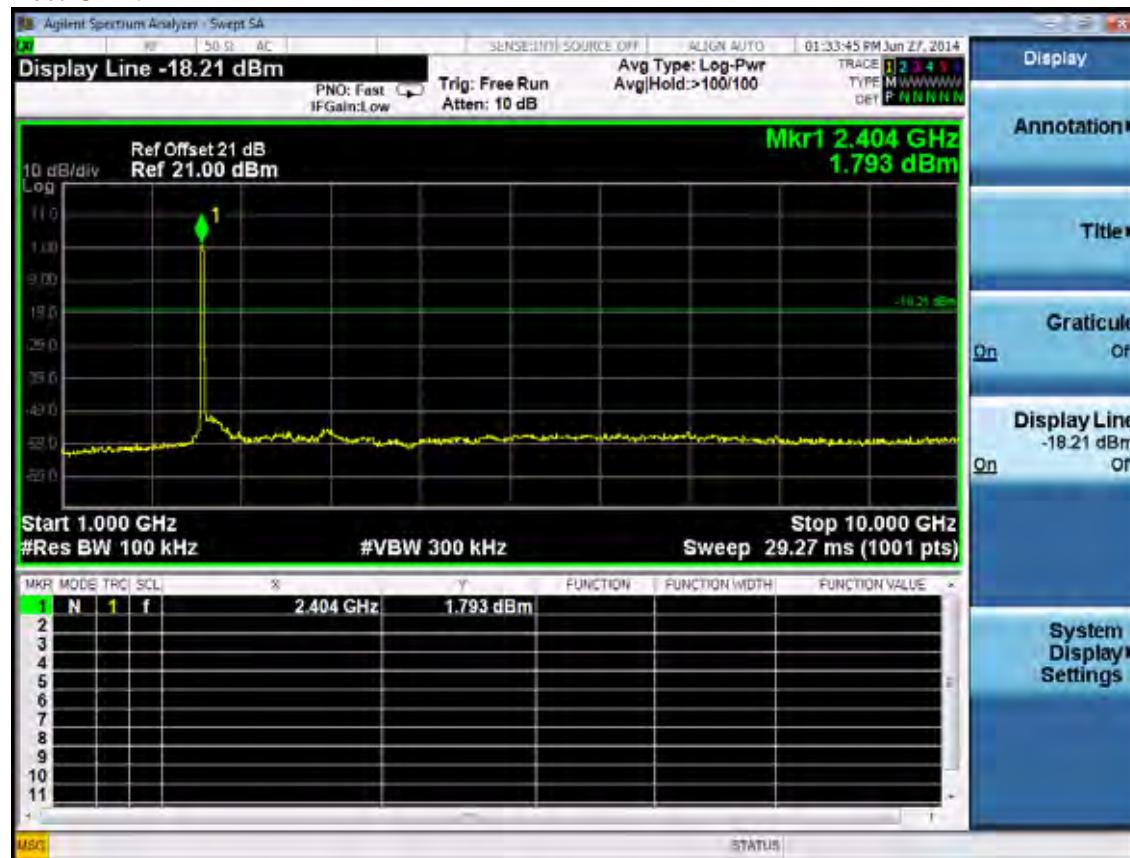


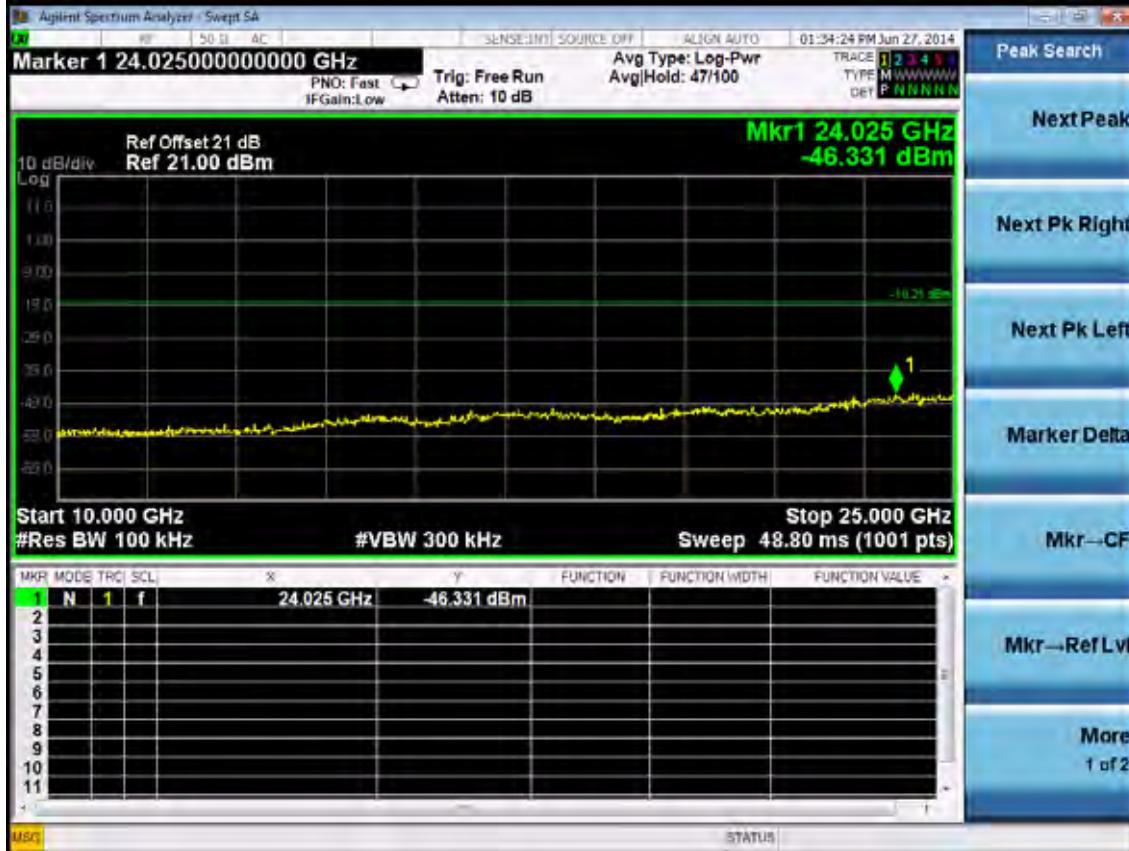
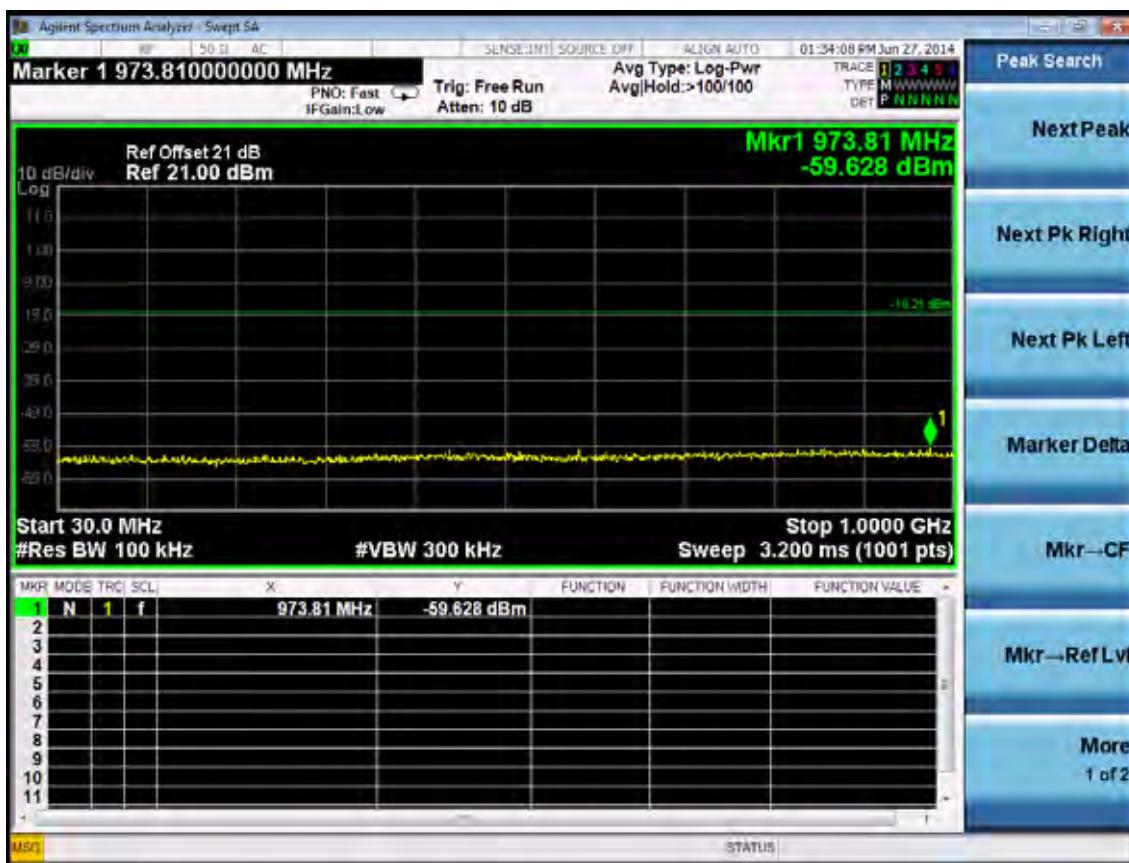


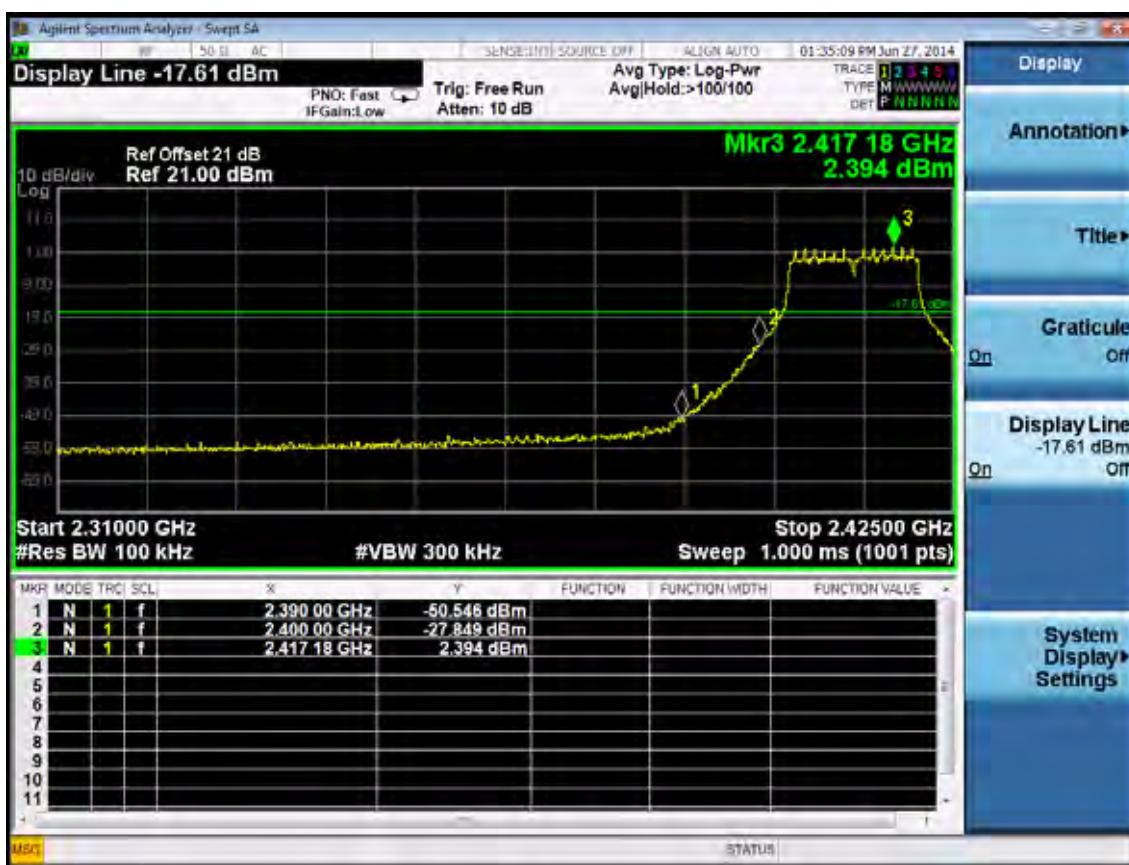


Test Mode: IEEE 802.11g TX

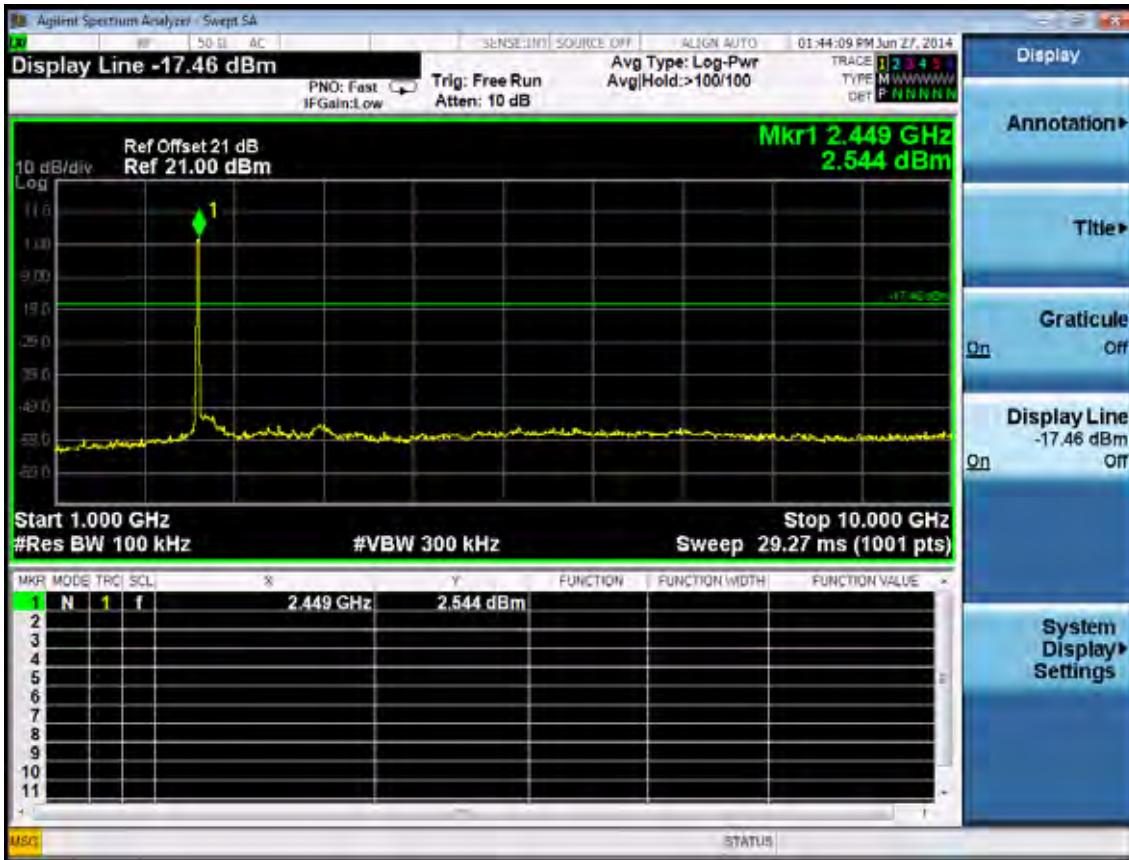
Test CH1: 2412MHz

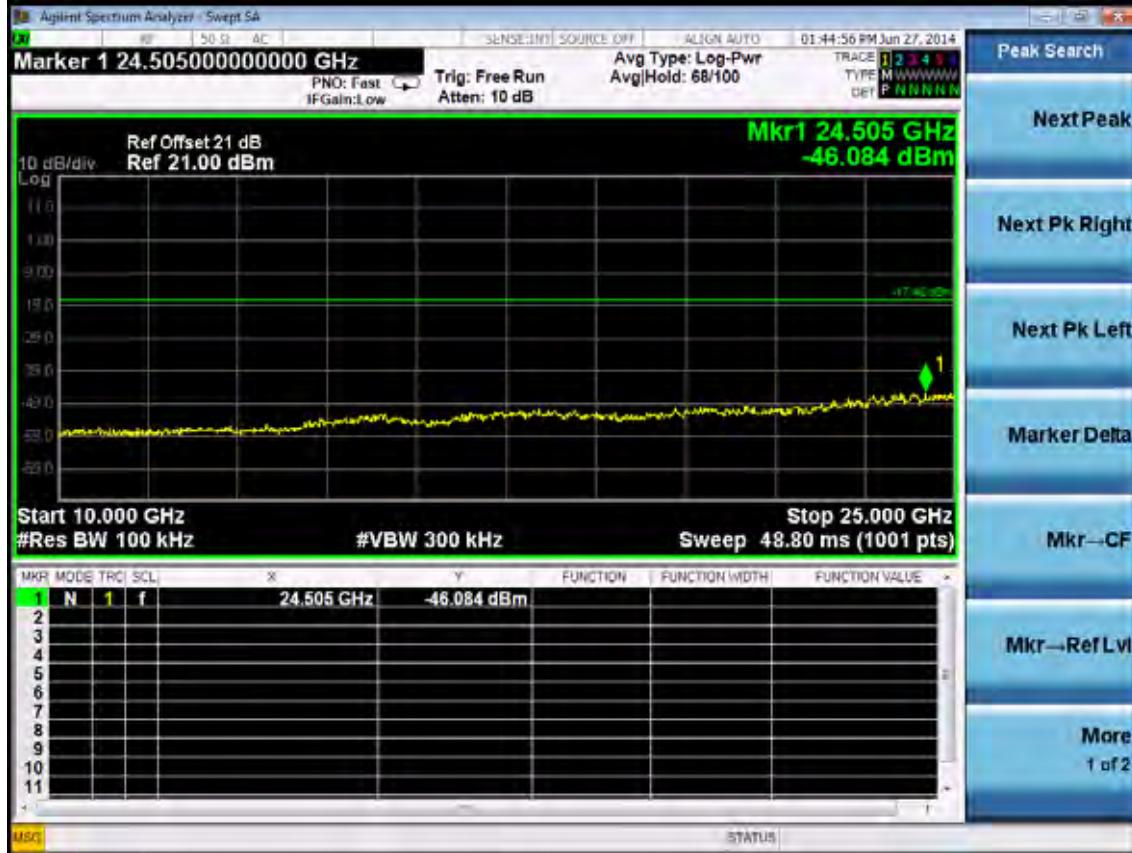
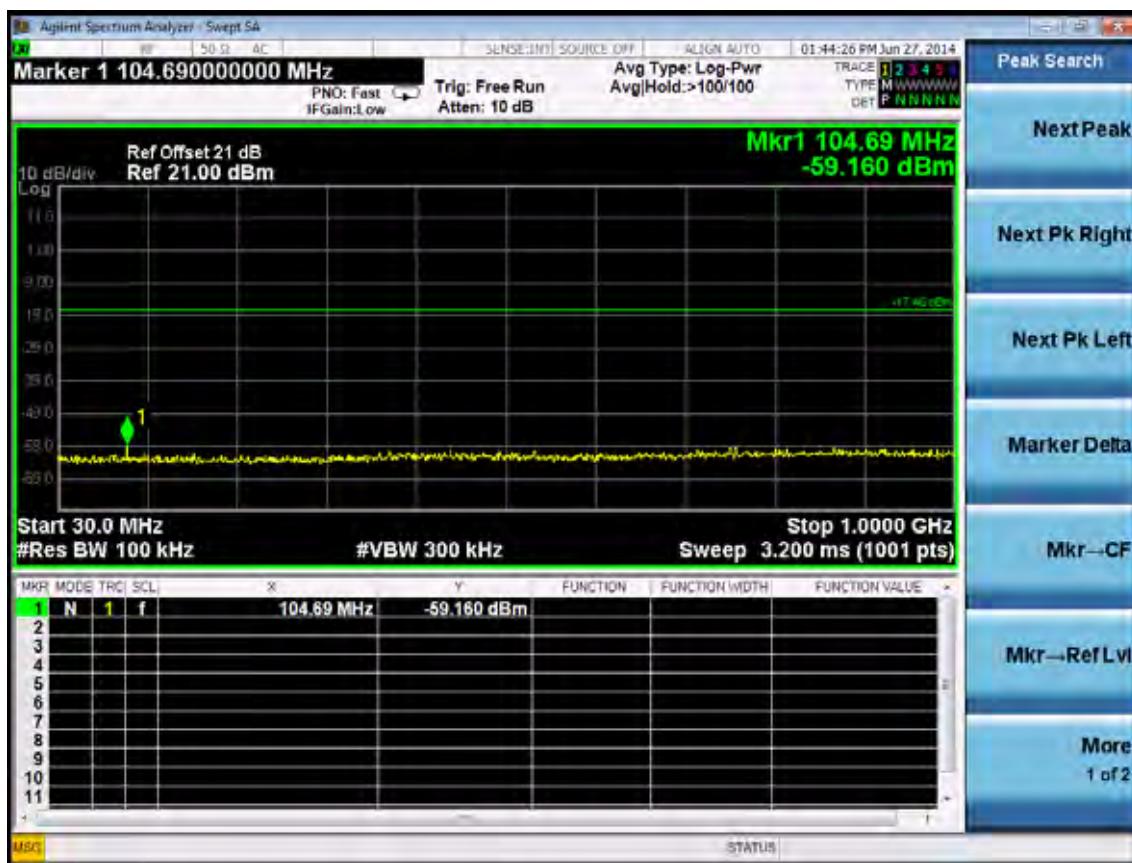




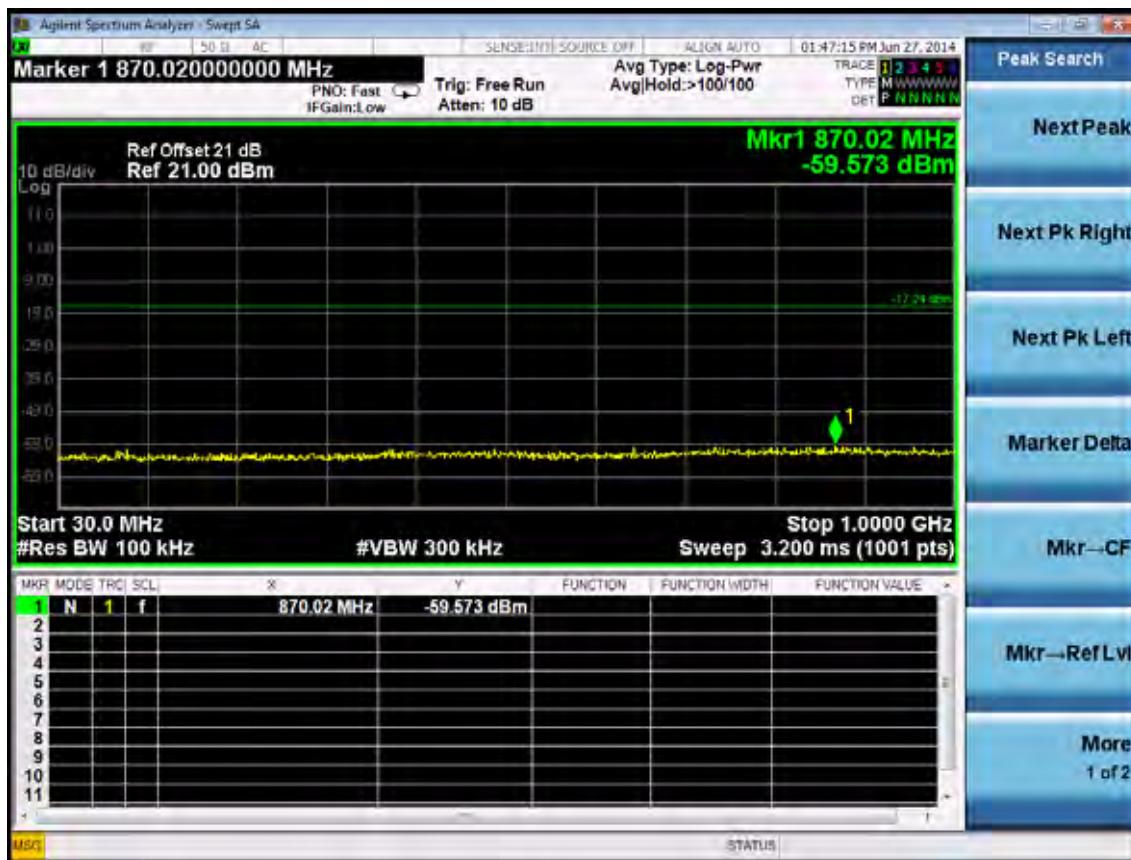
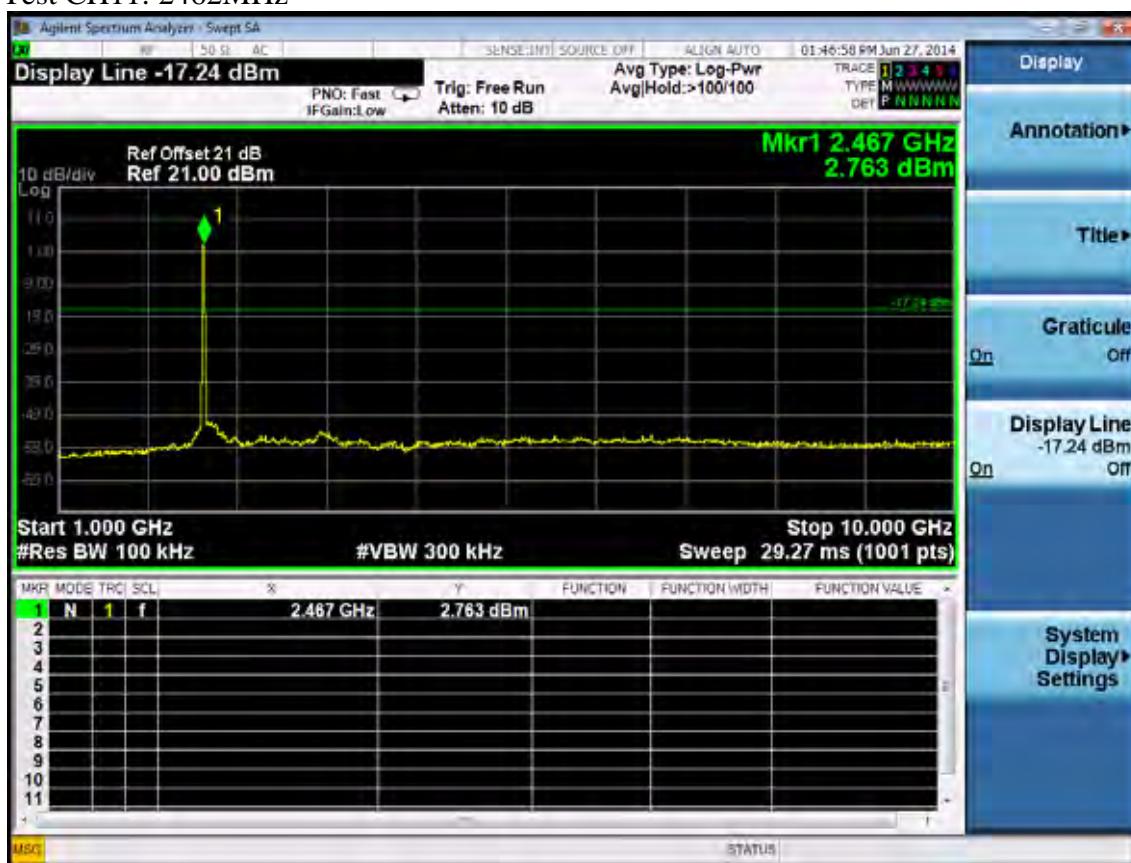


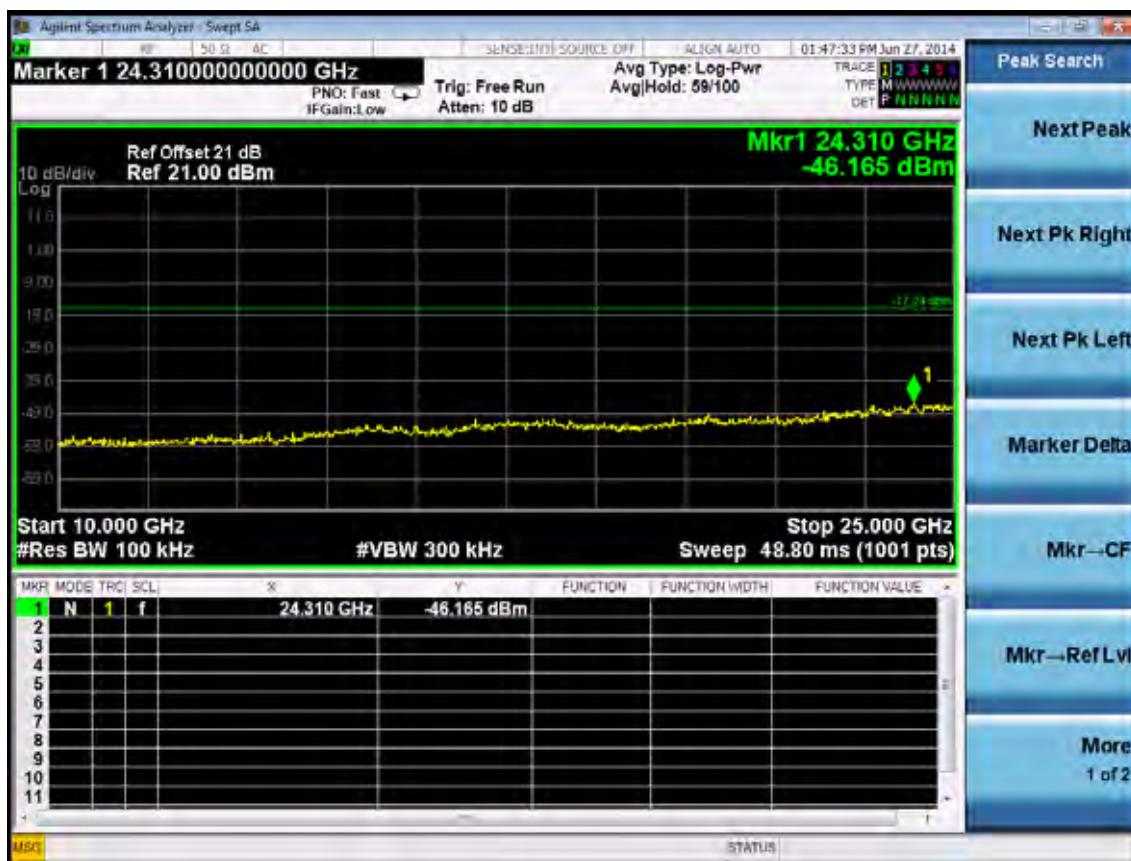
Test CH6: 2437MHz





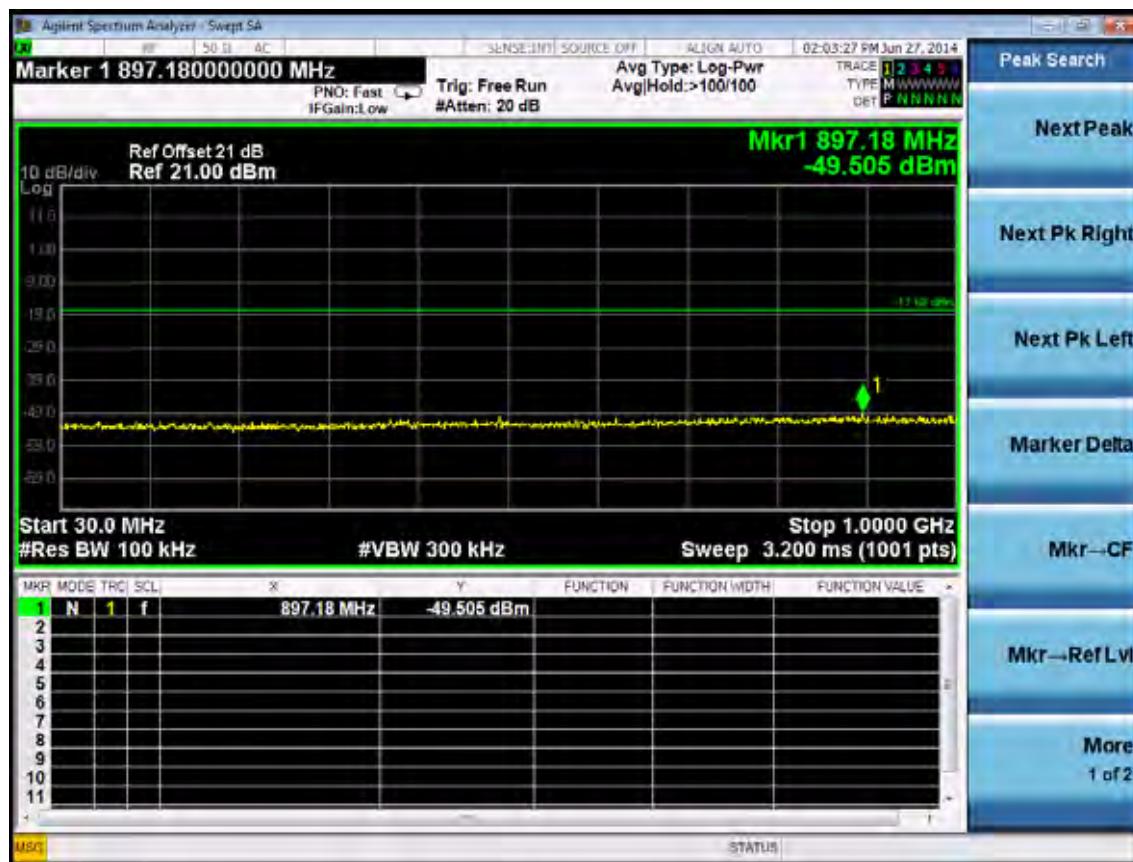
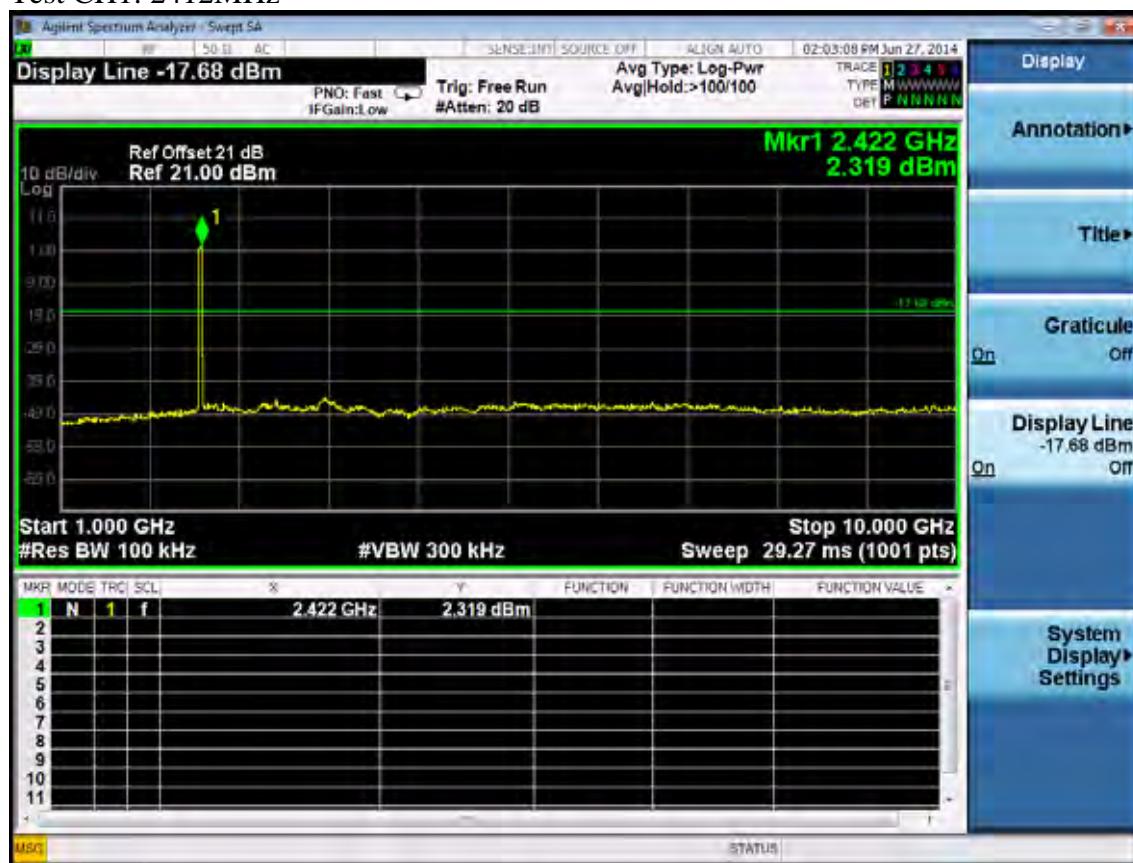
Test CH11: 2462MHz

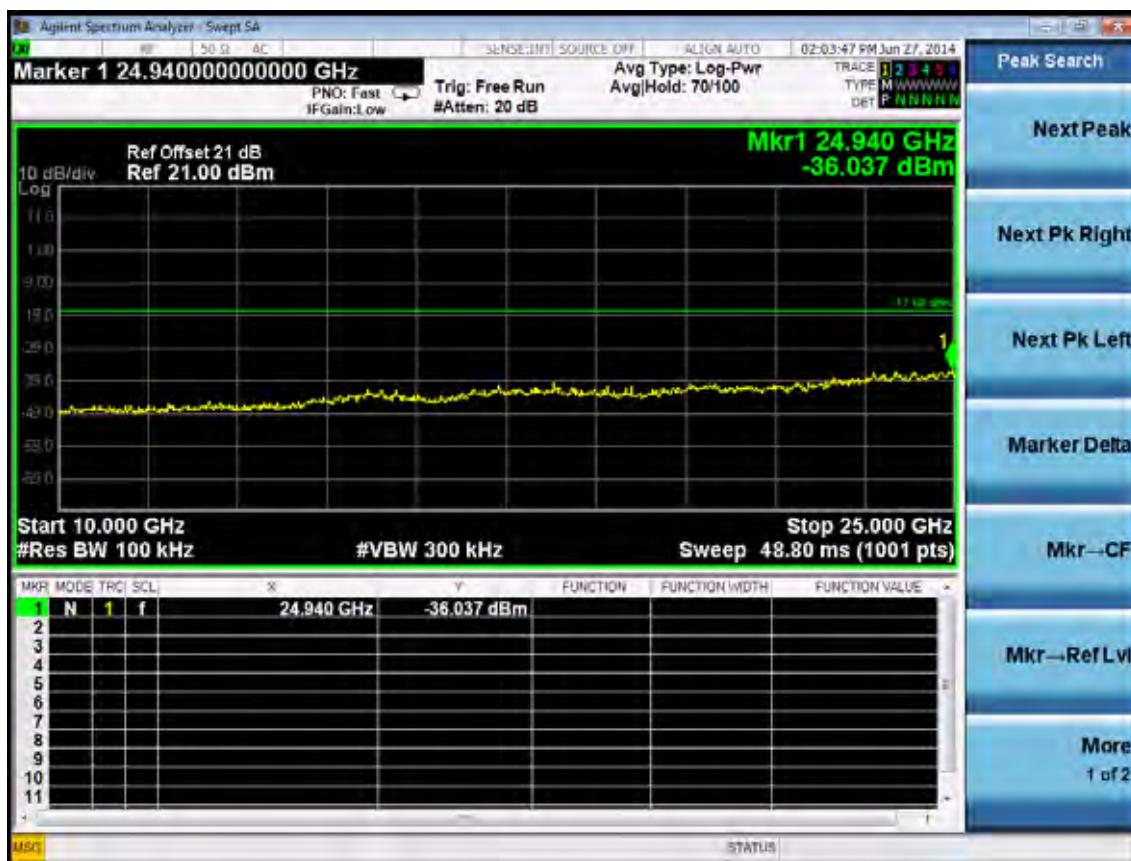




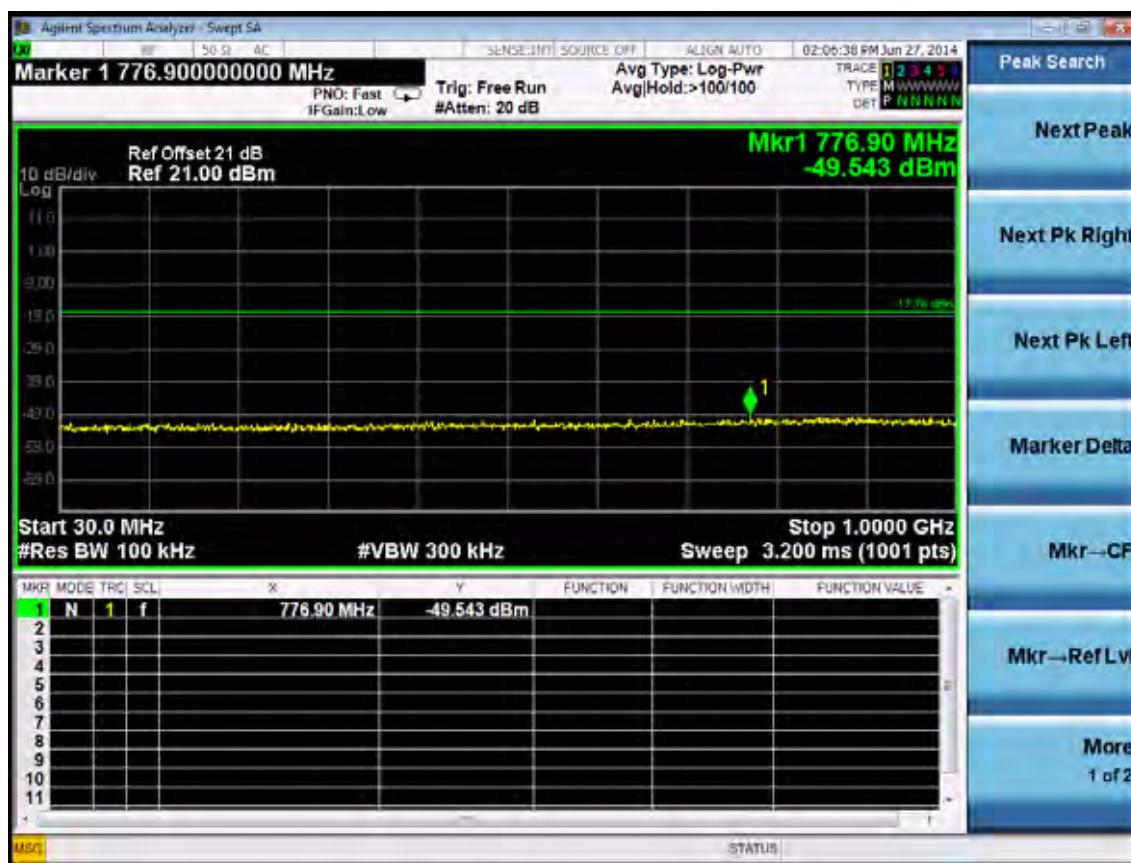
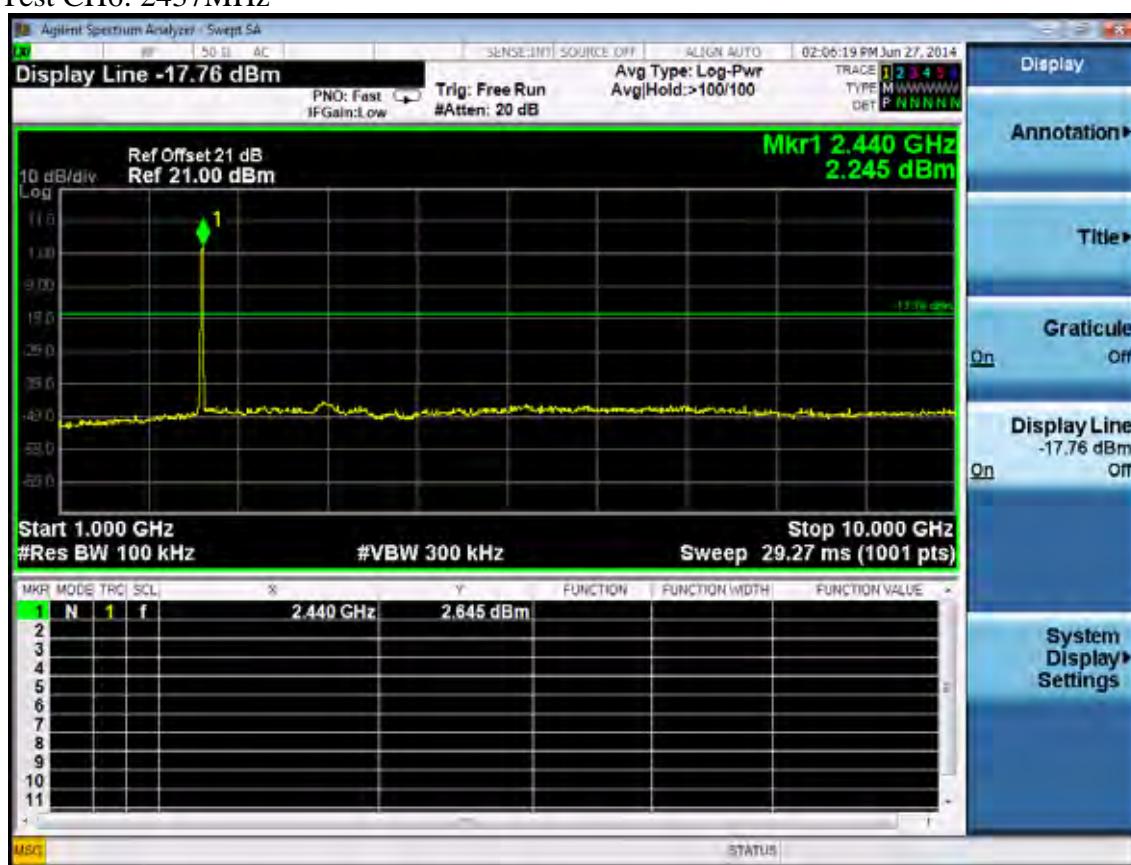
Test Mode: IEEE 802.11n HT20 TX

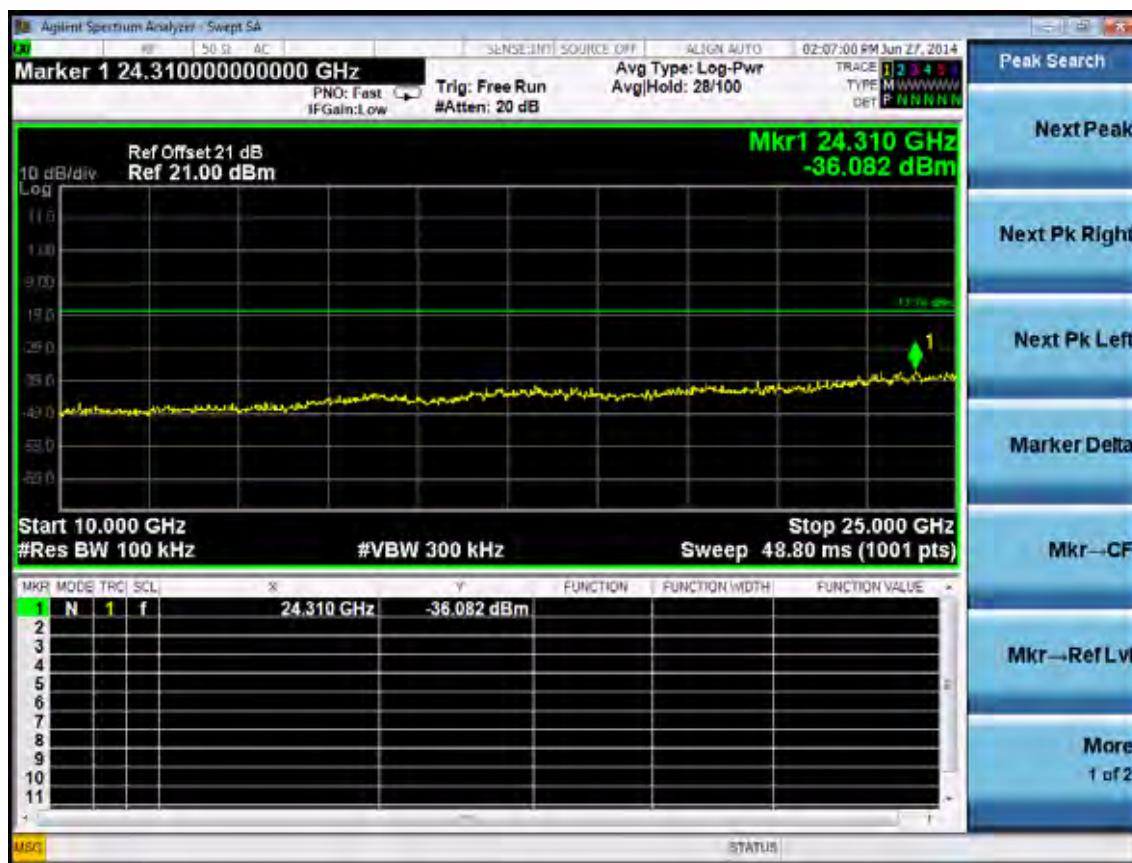
Test CH1: 2412MHz



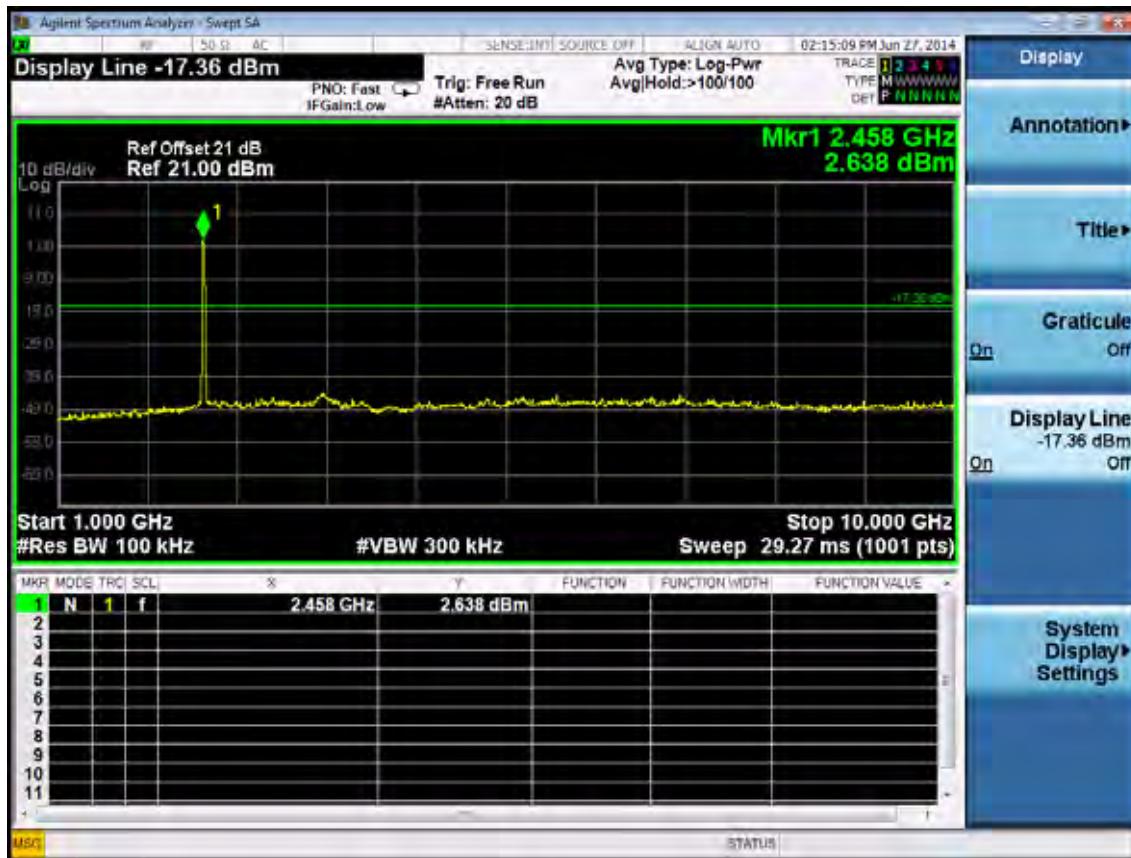


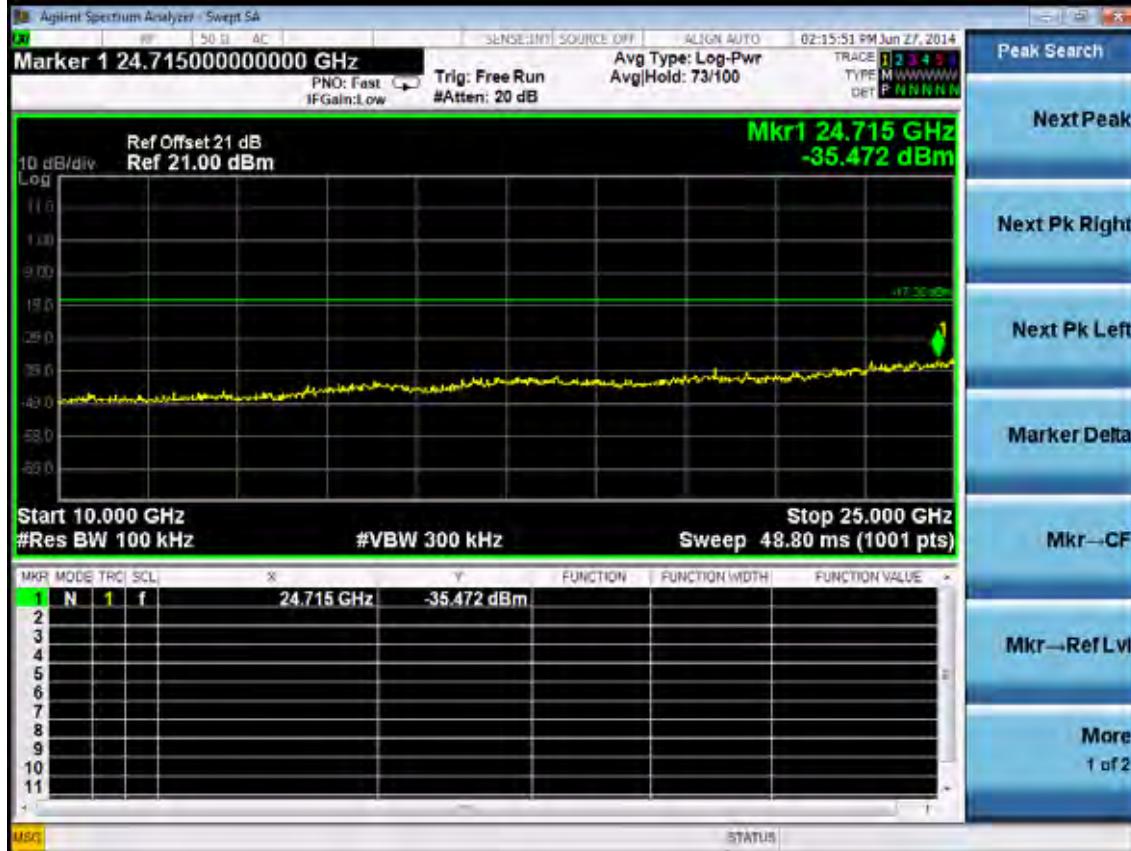
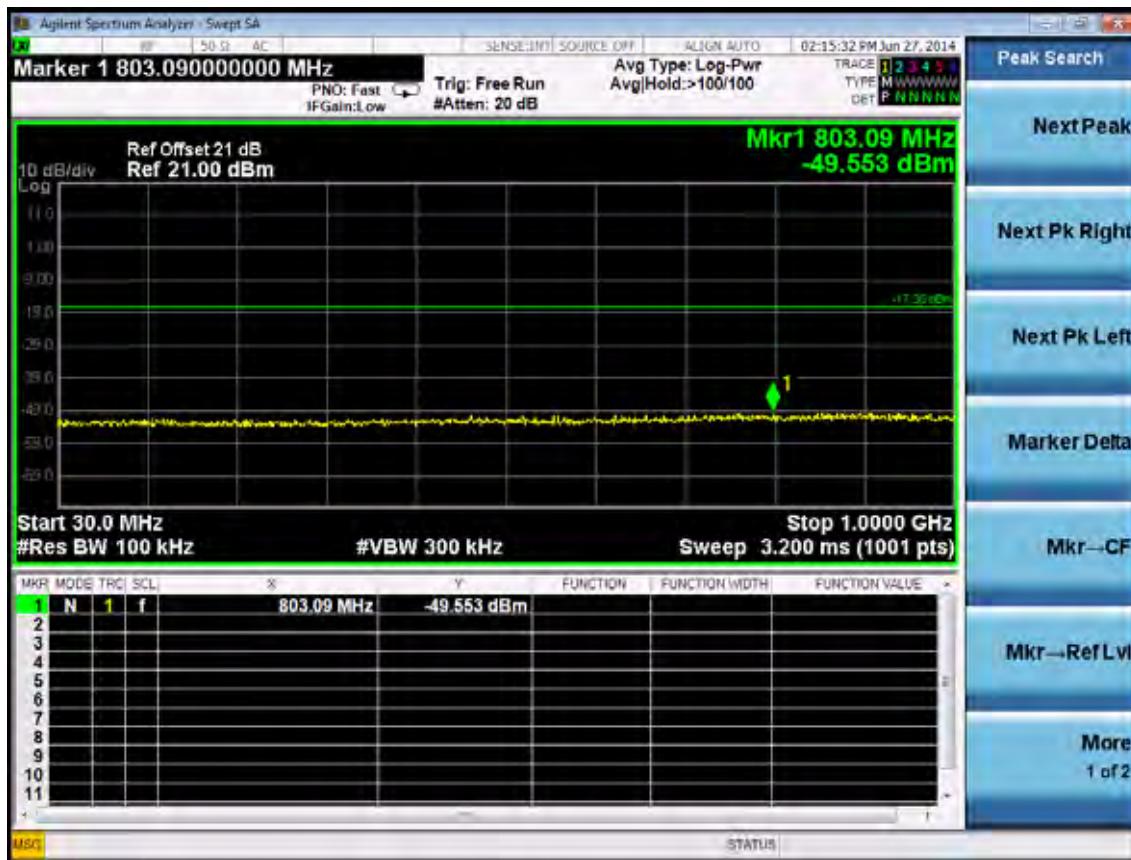
Test CH6: 2437MHz





Test CH11: 2462MHz

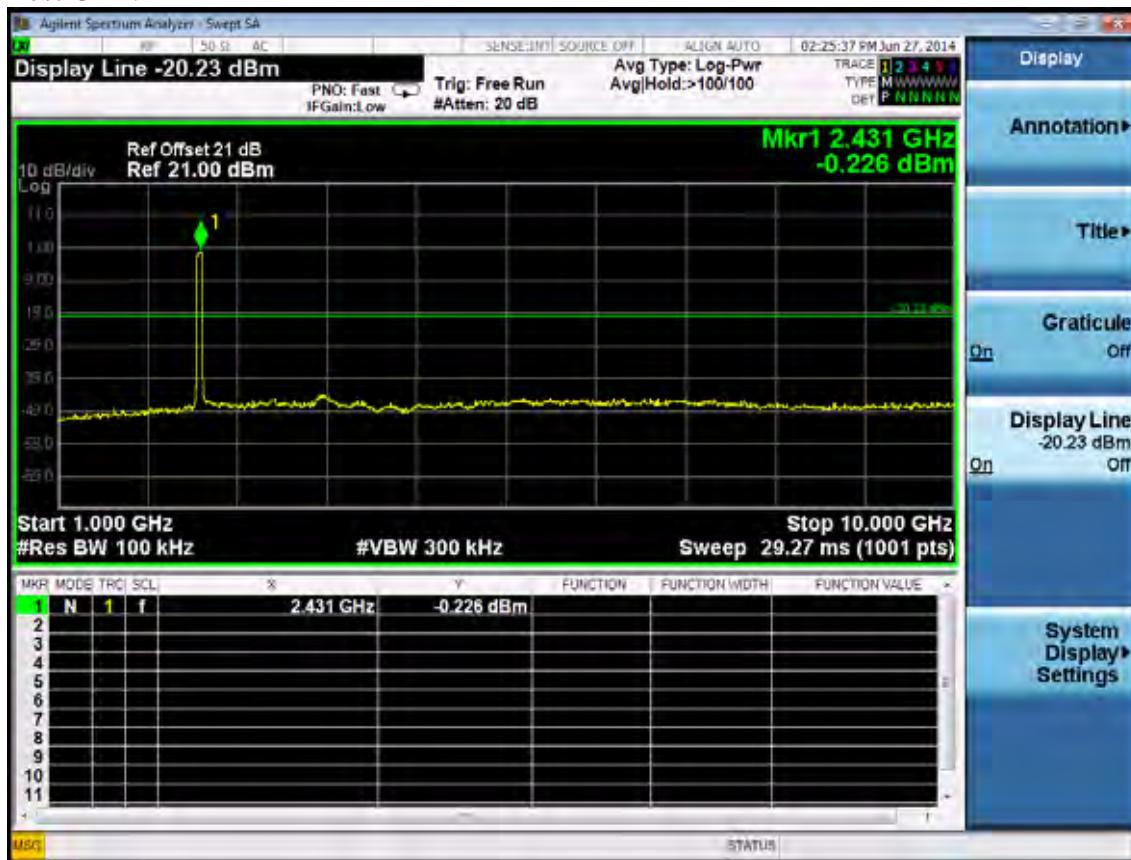


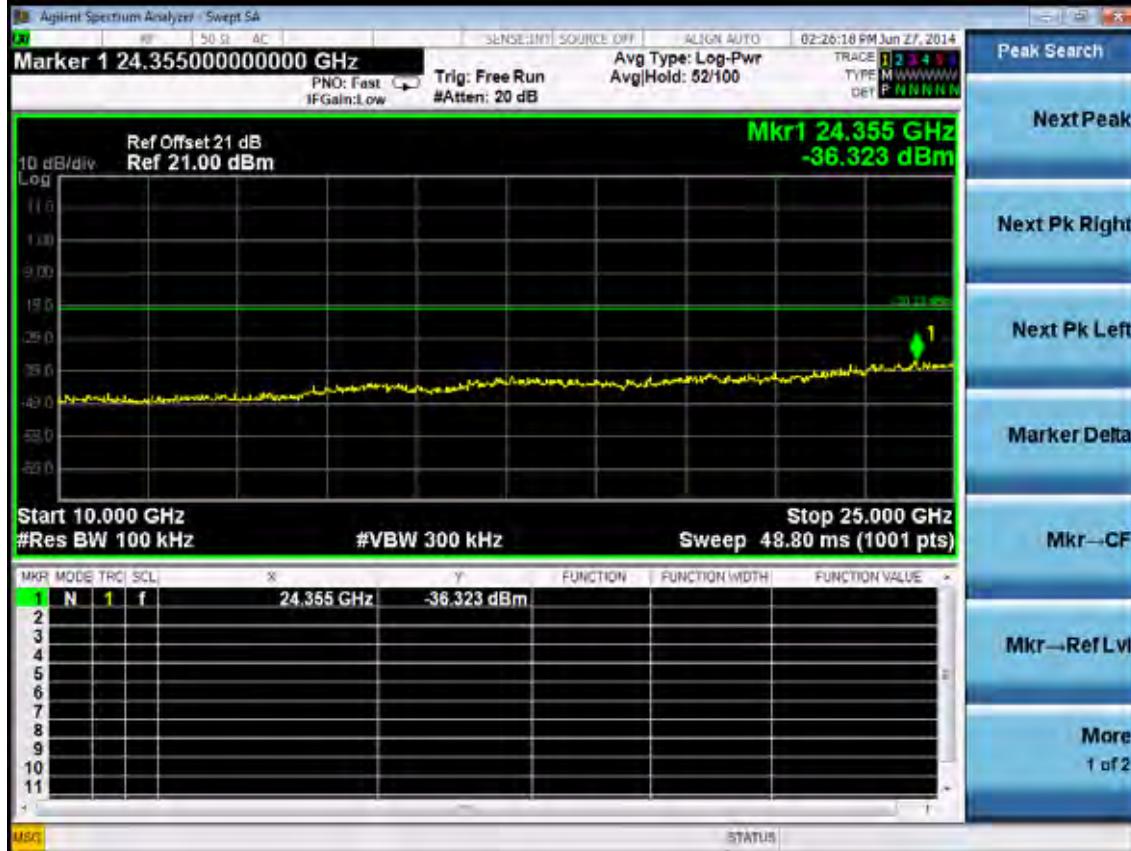
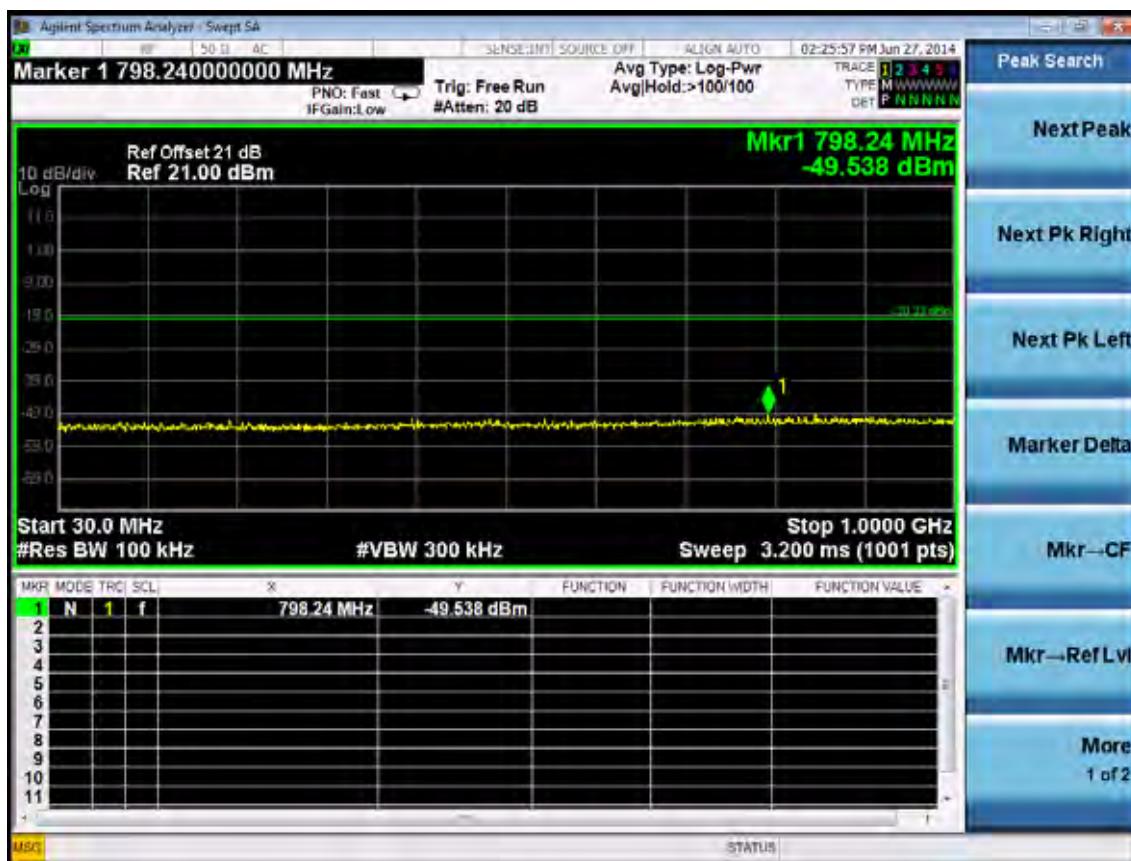


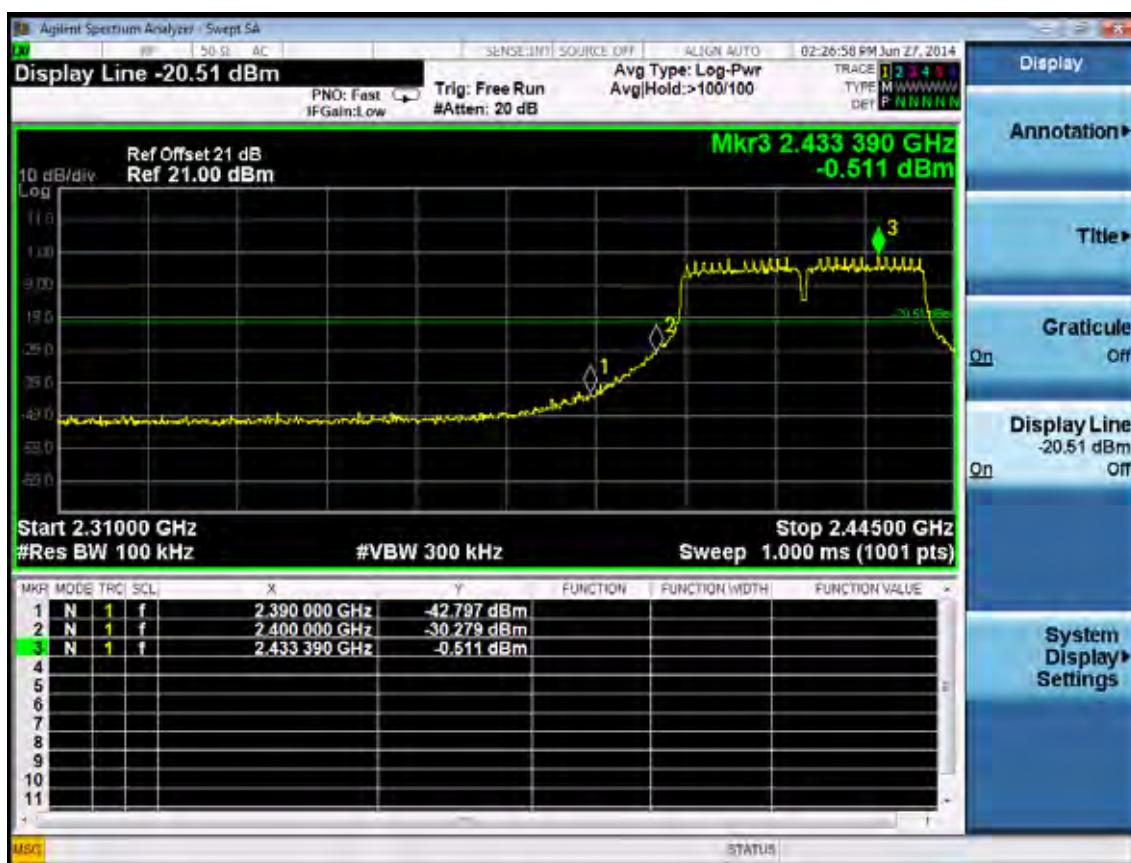


Test Mode: IEEE 802.11n HT40 TX

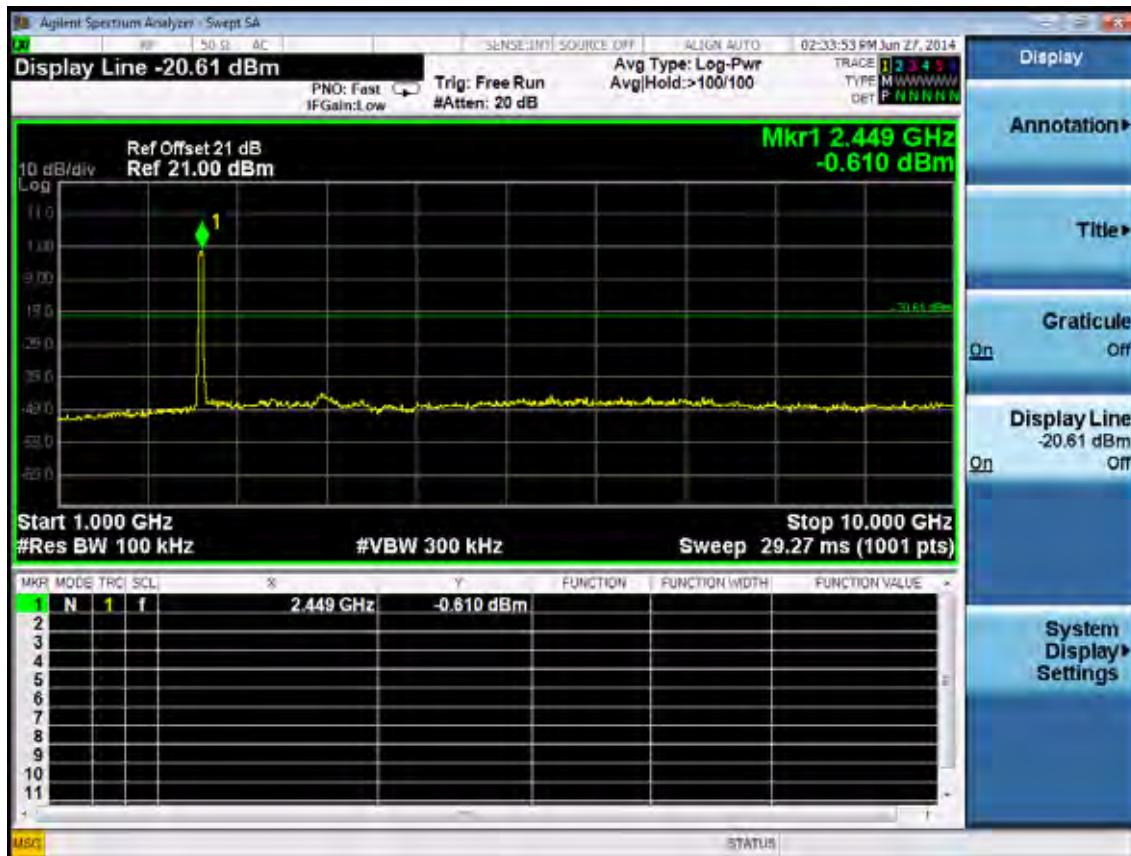
Test CH1: 2422MHz

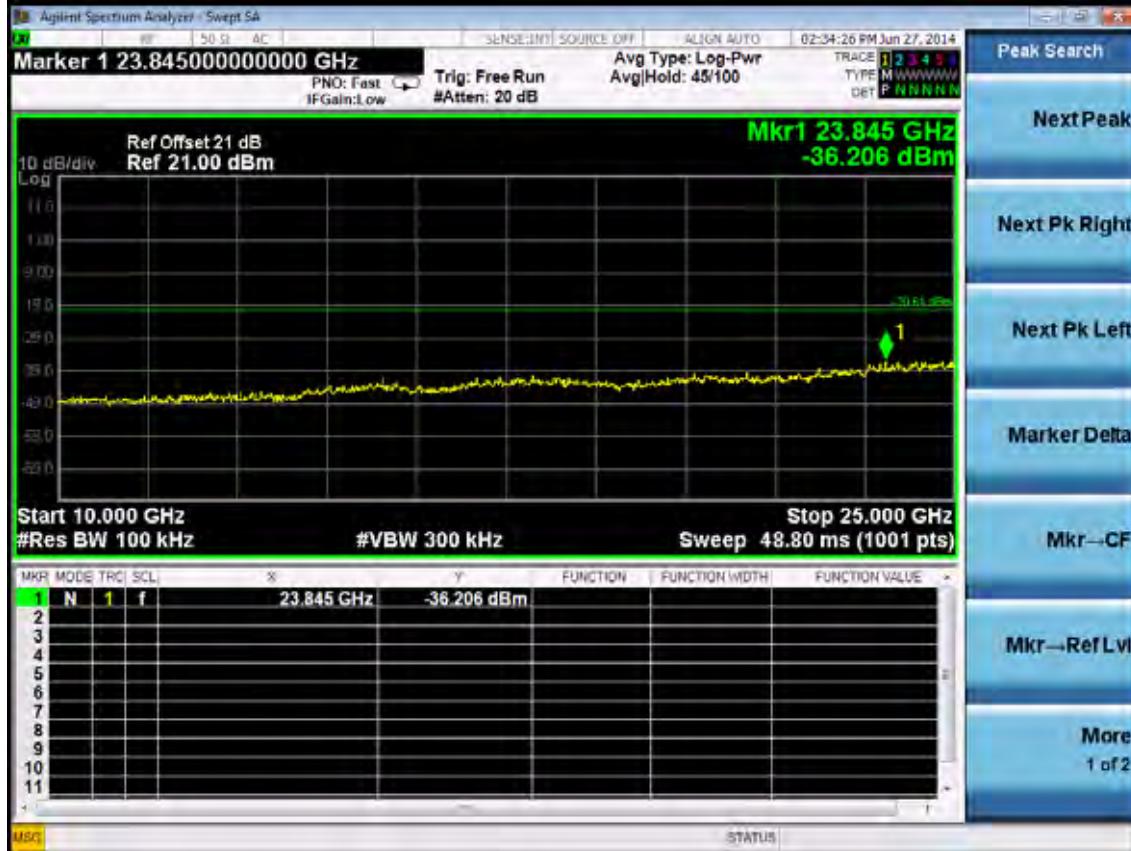
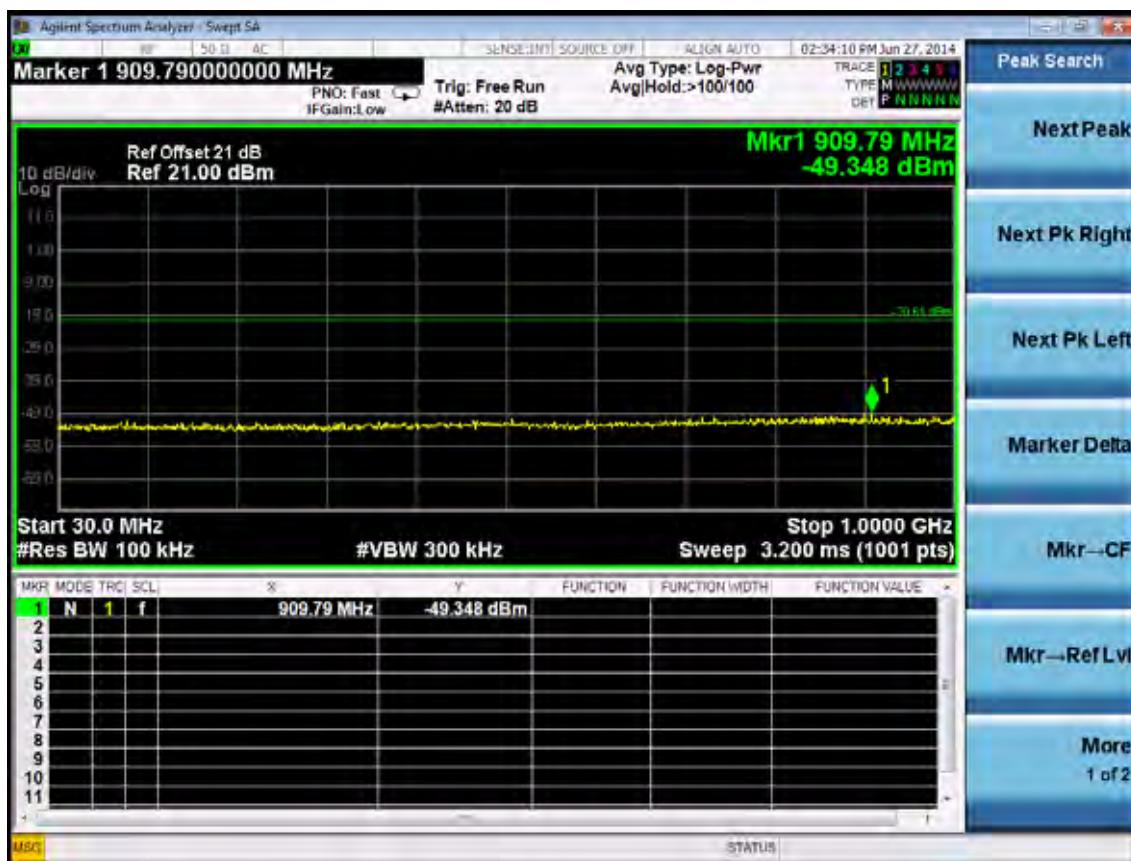




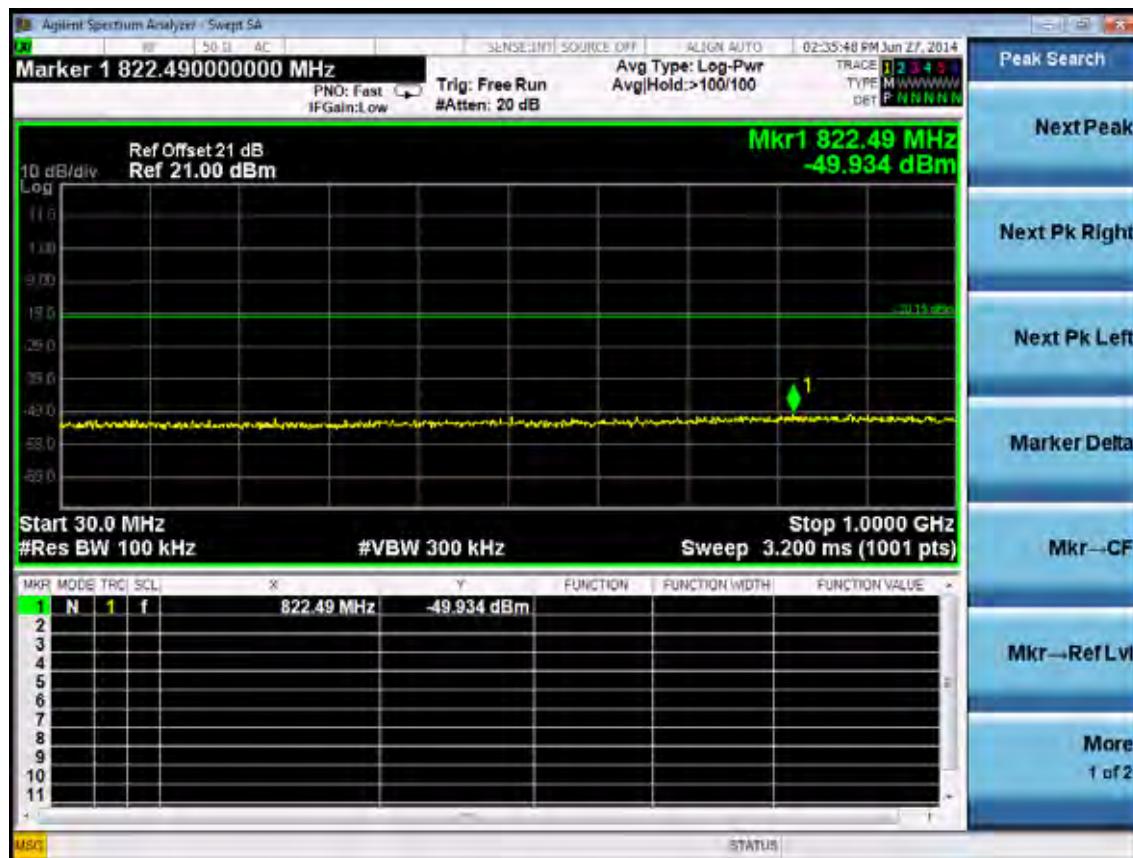
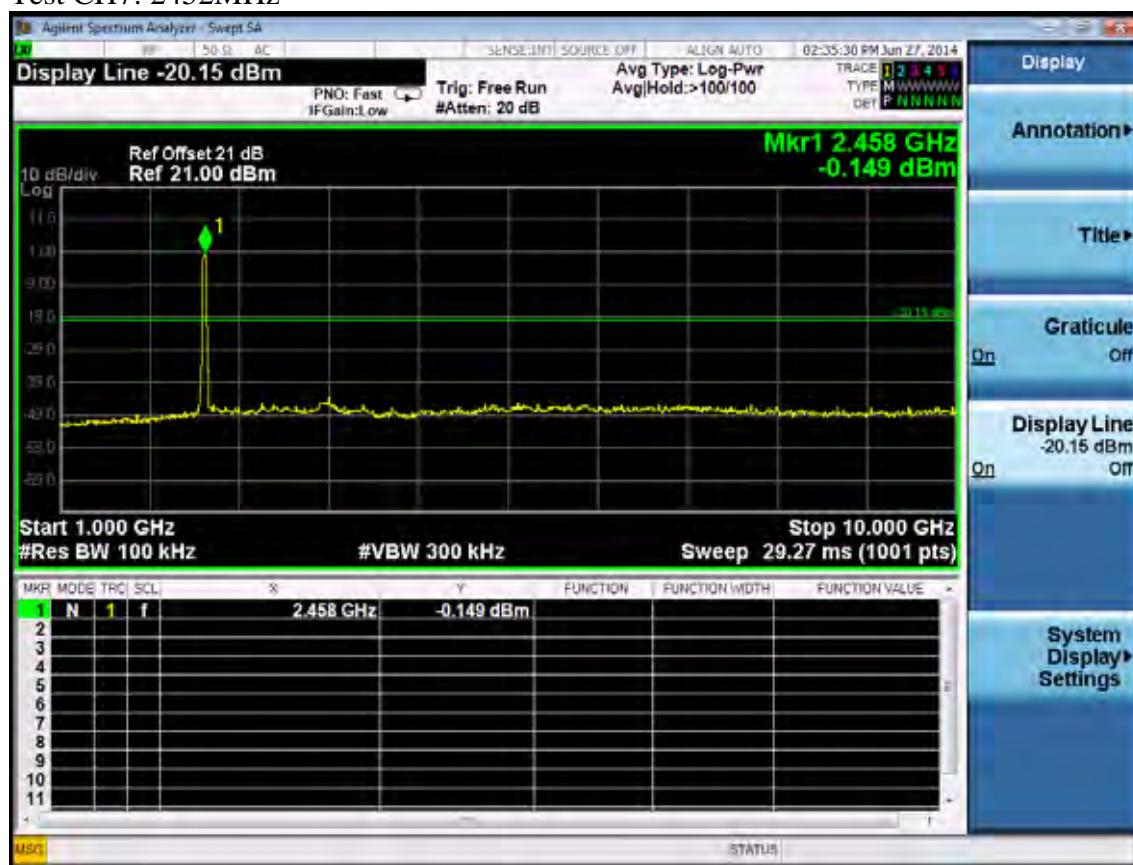


Test CH4: 2437MHz





Test CH7: 2452MHz

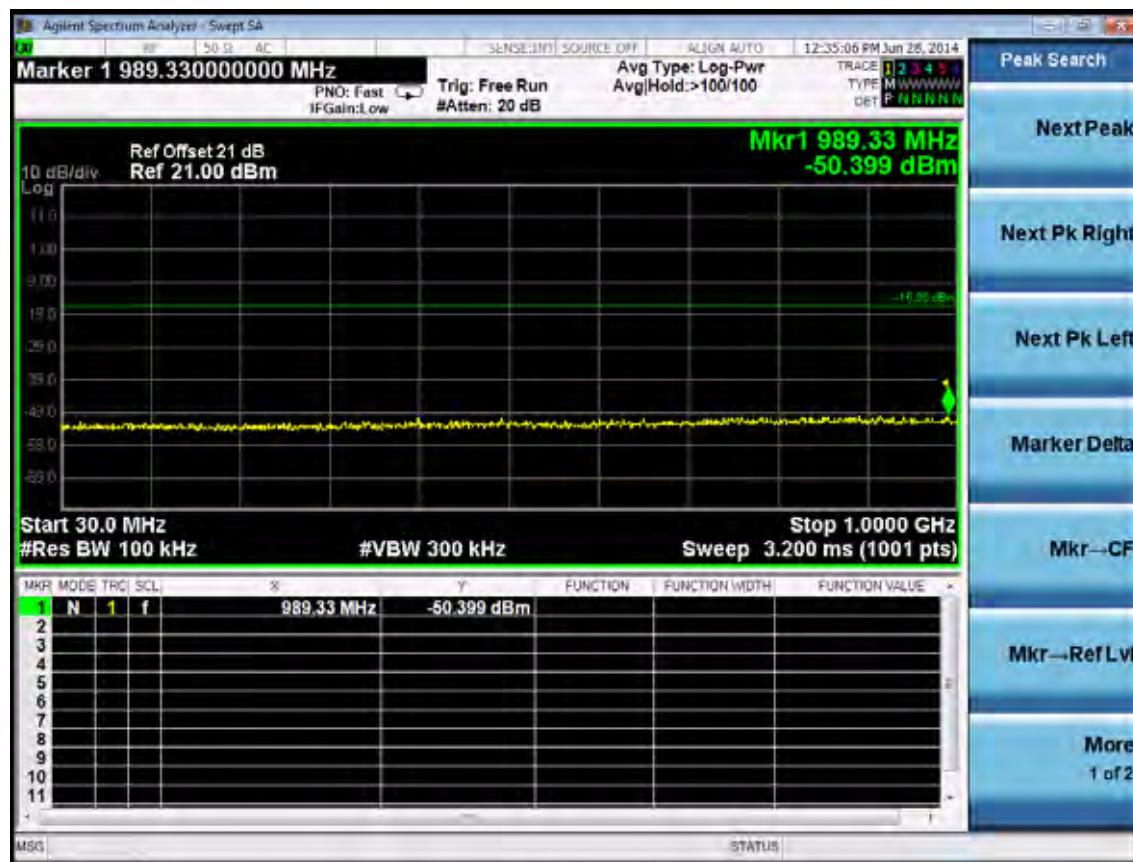
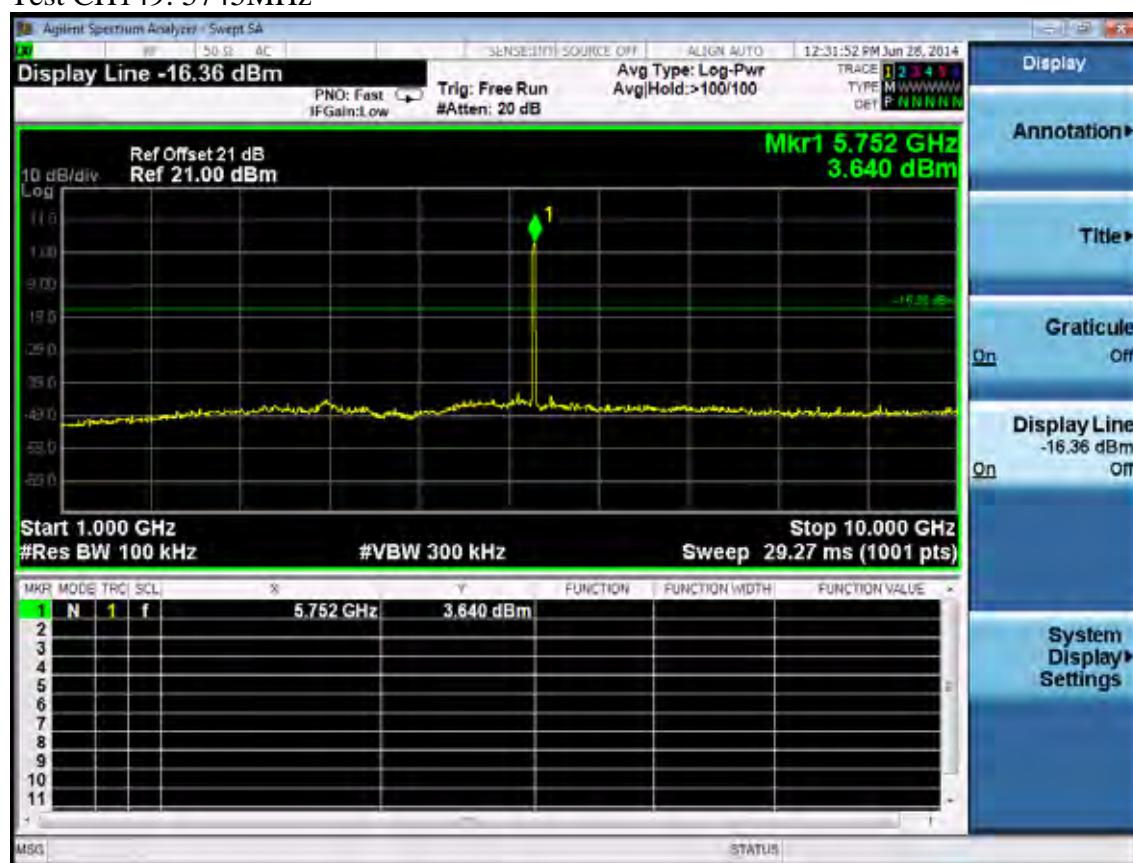


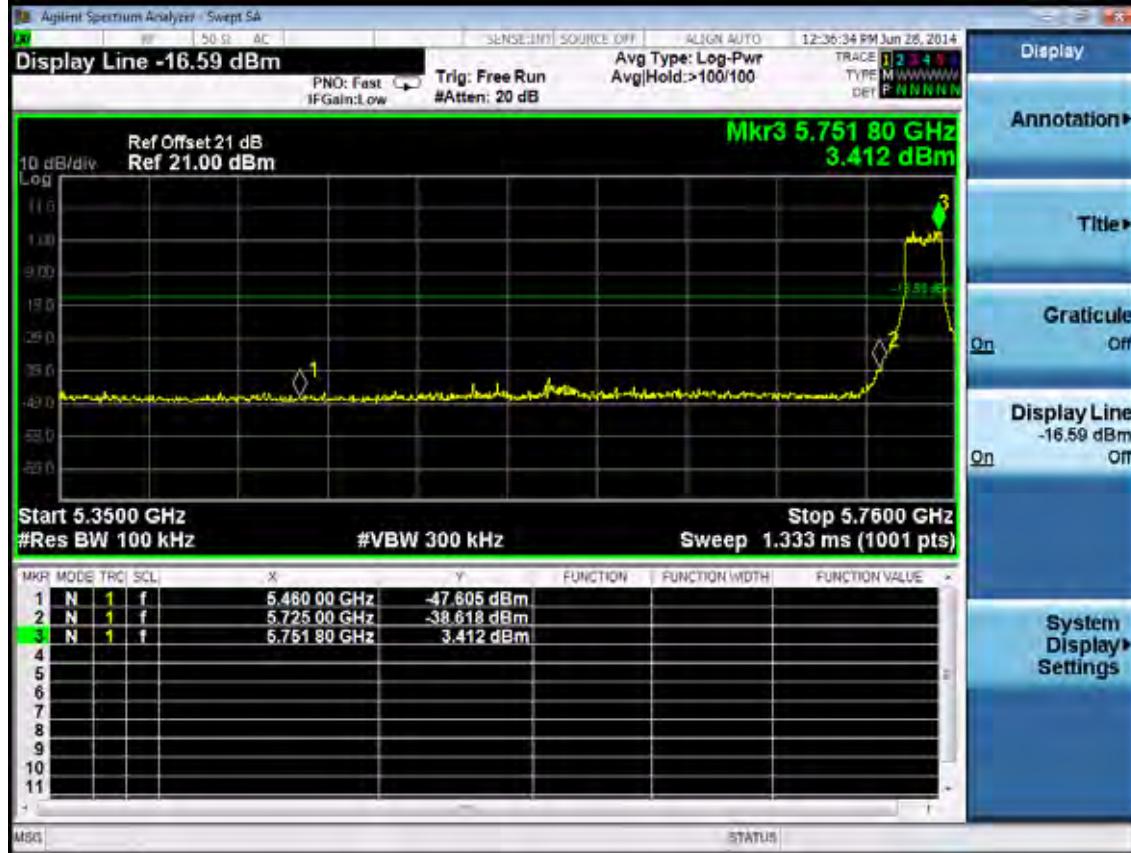
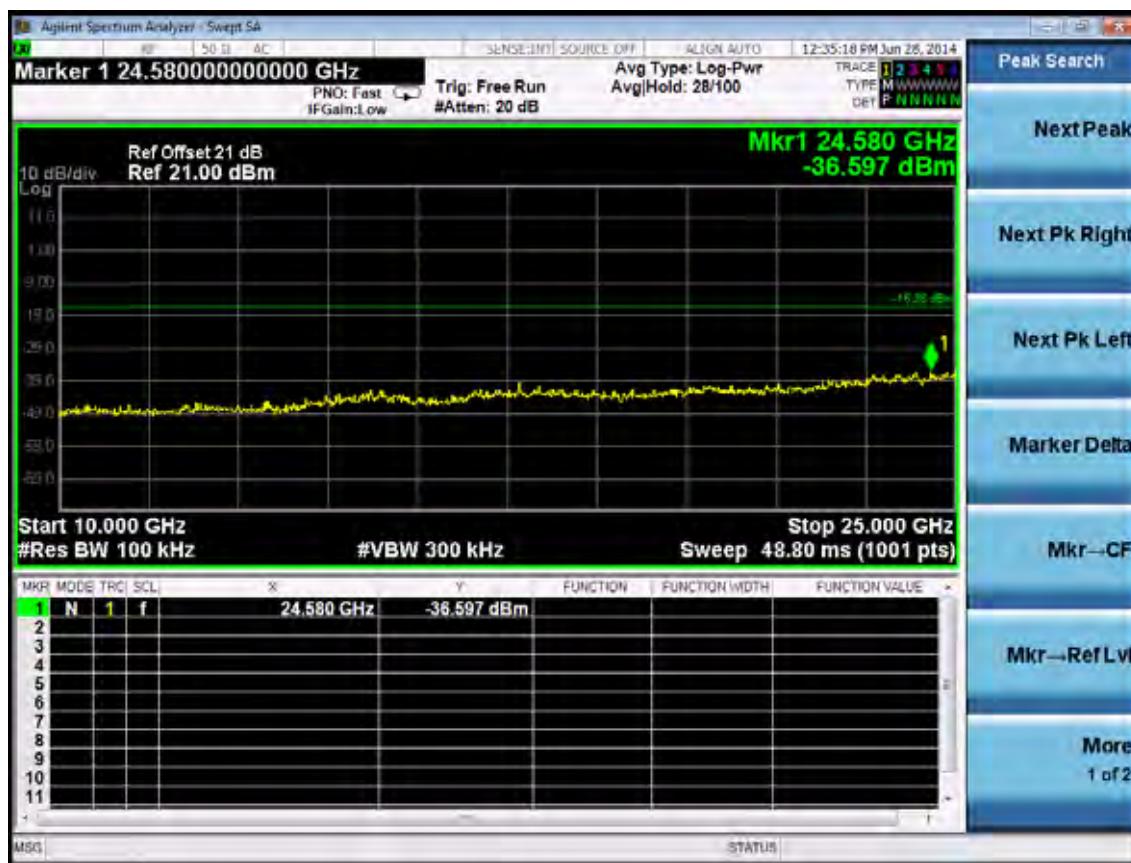


5.8G:
Chain 1:

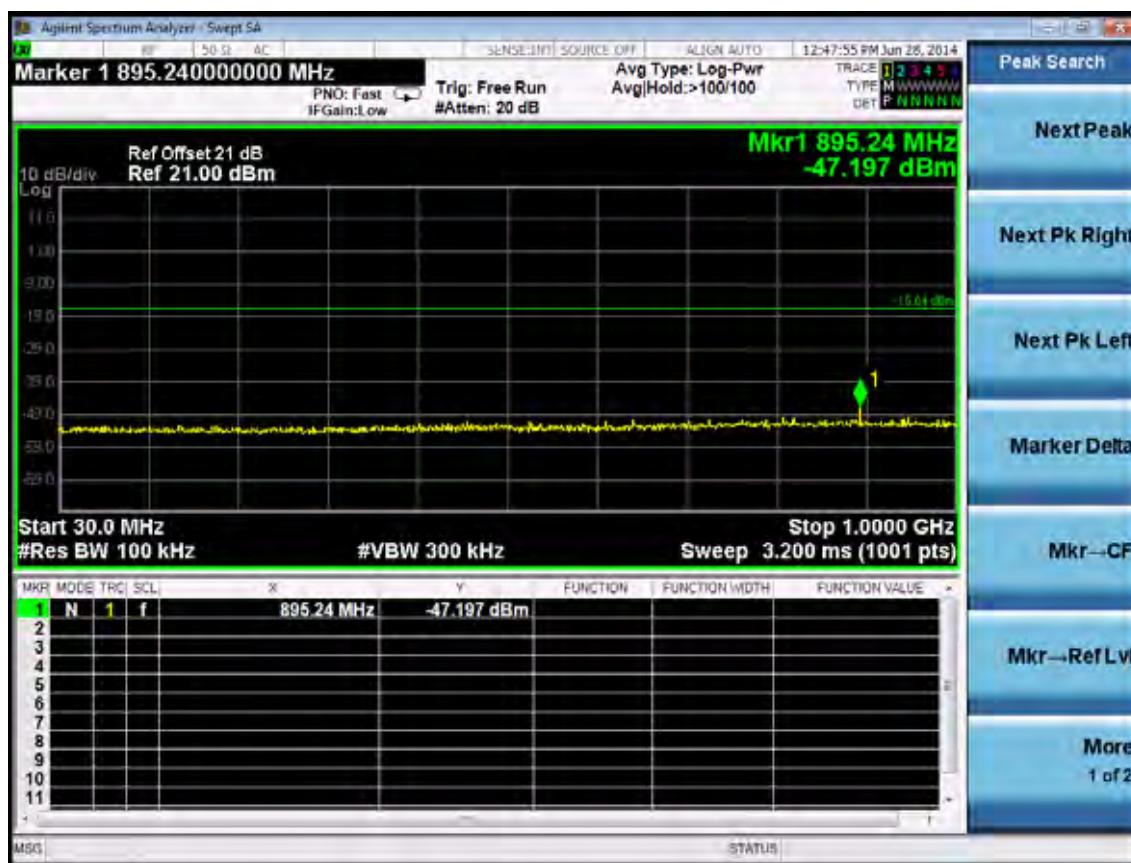
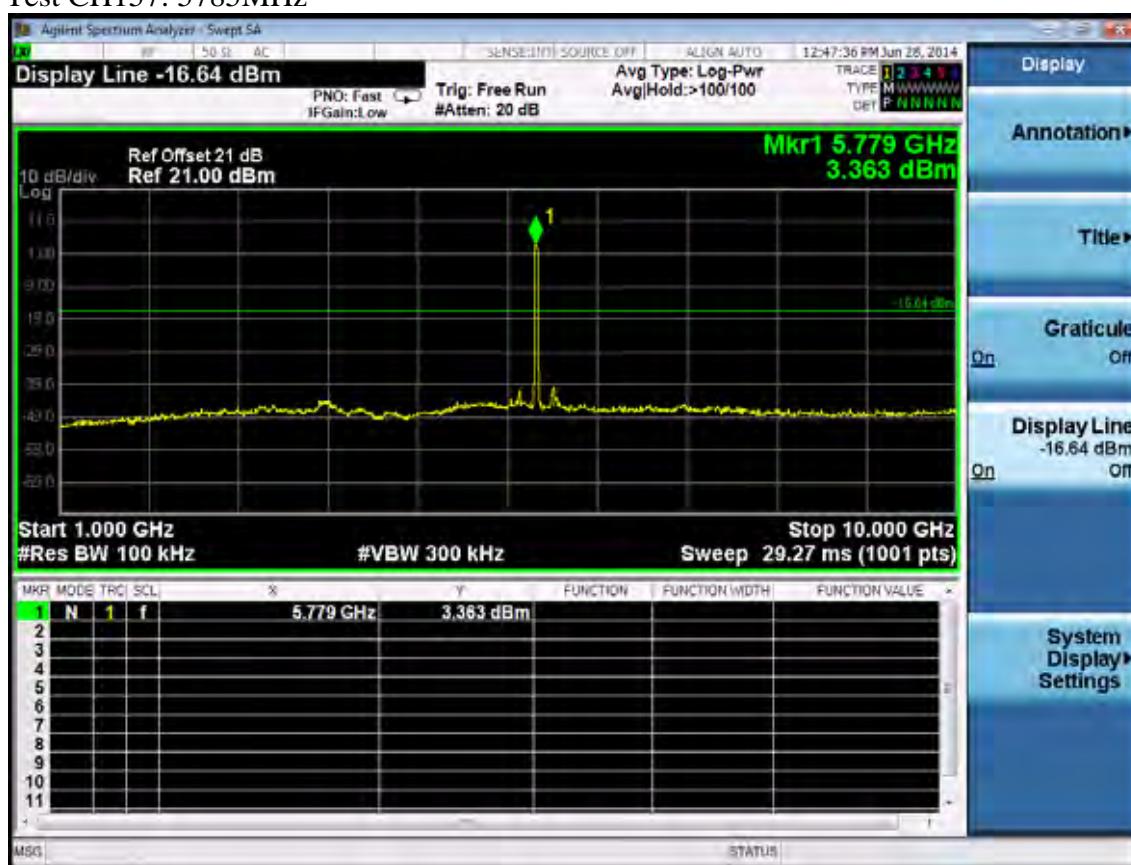
Test Mode: IEEE 802.11a TX

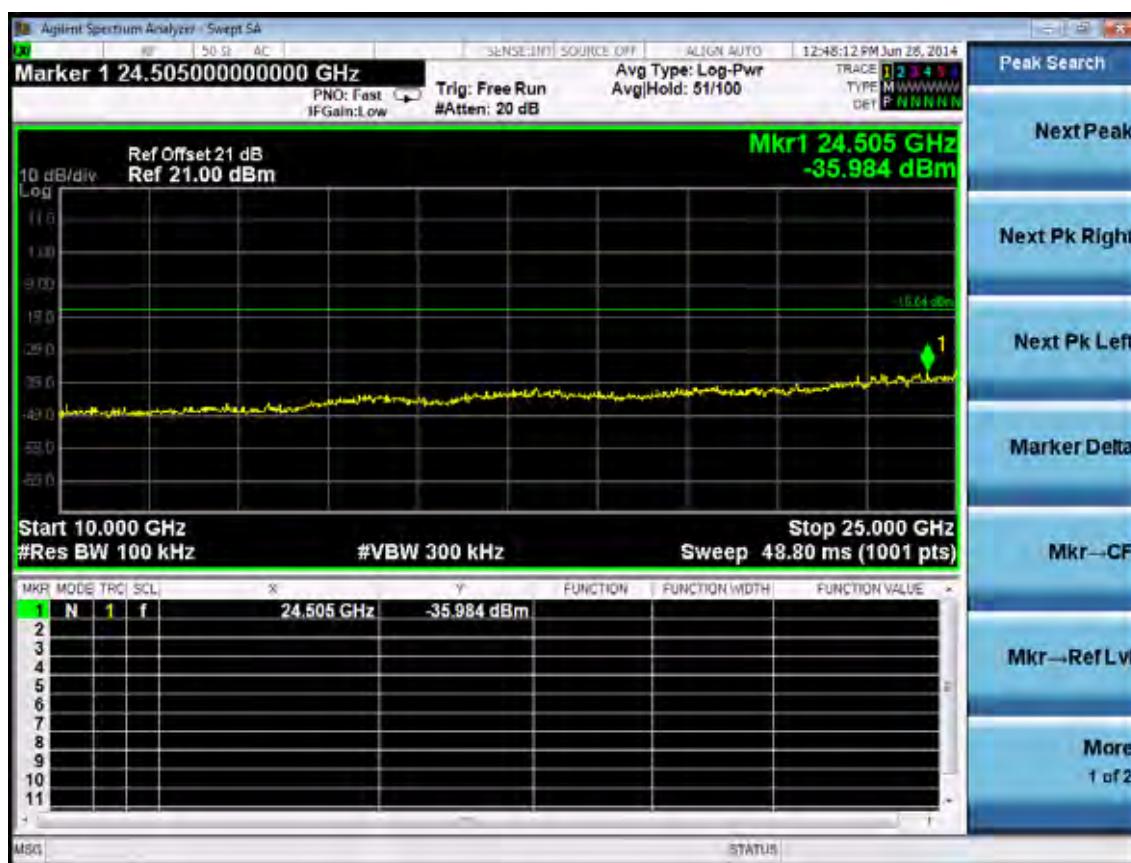
Test CH149: 5745MHz



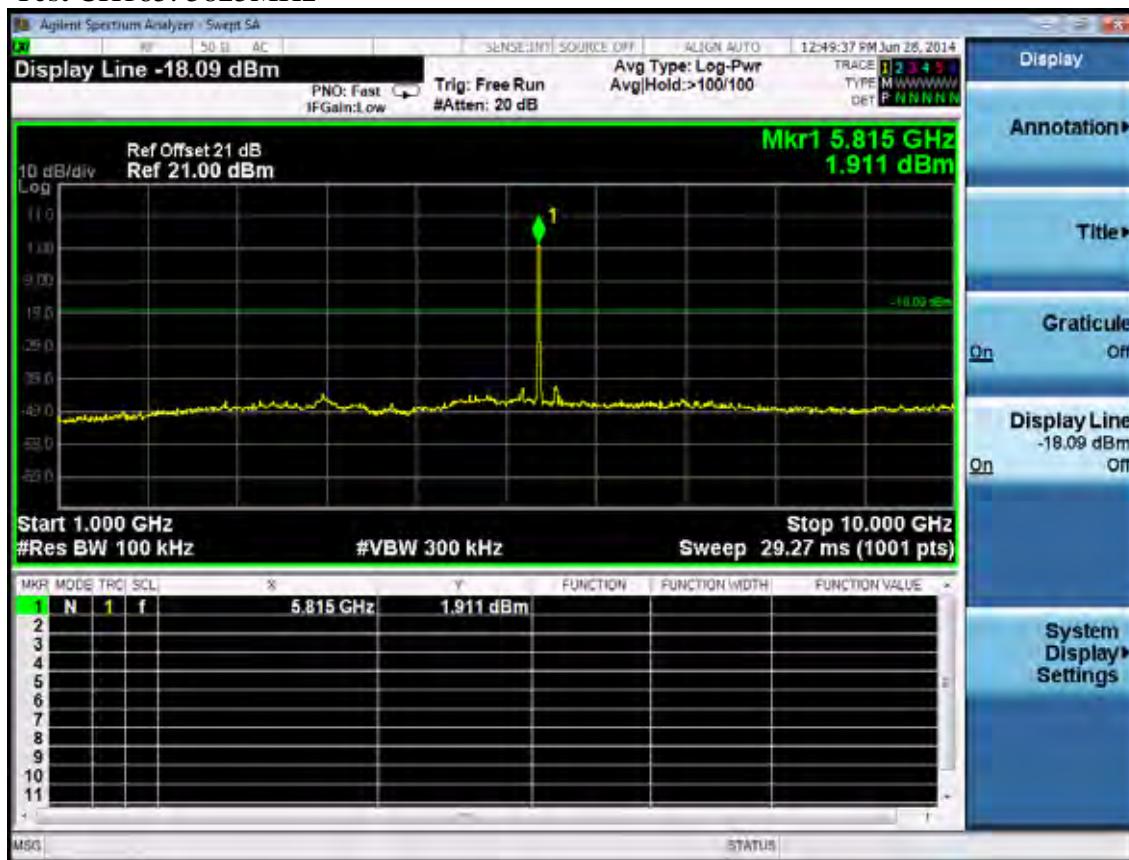


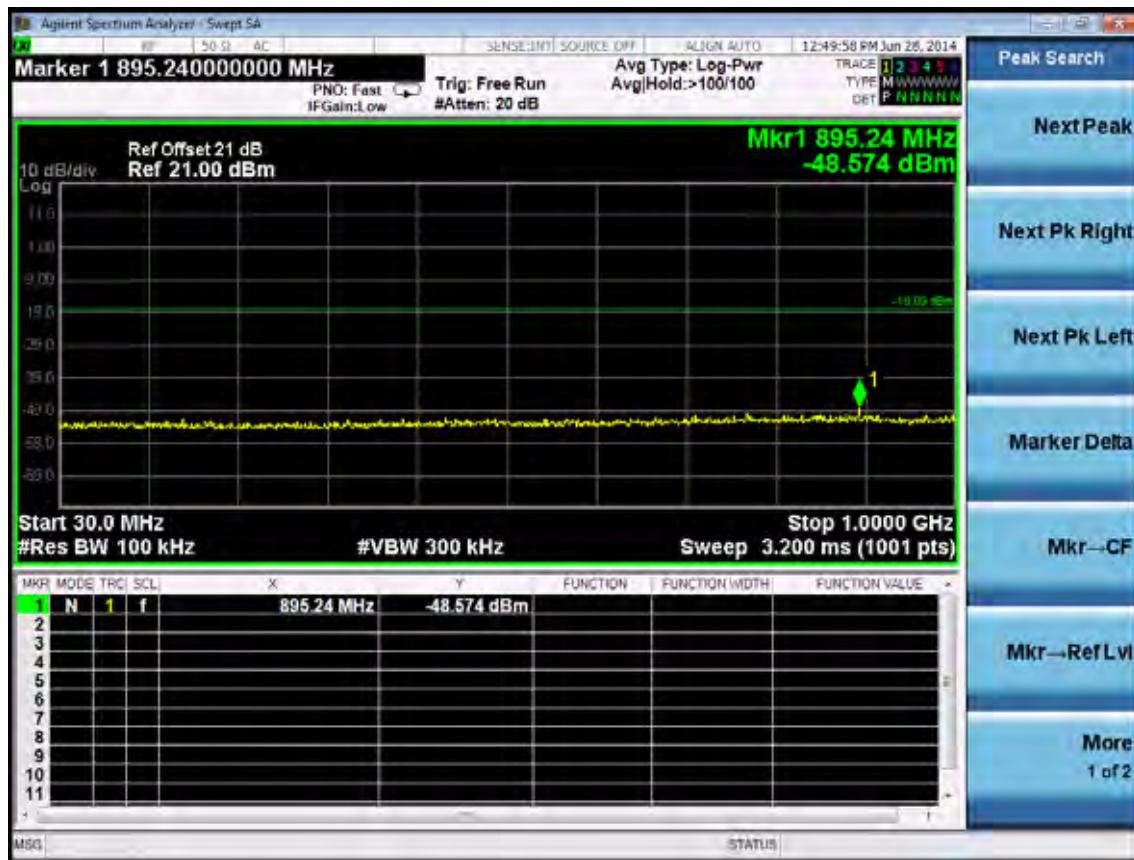
Test CH157: 5785MHz

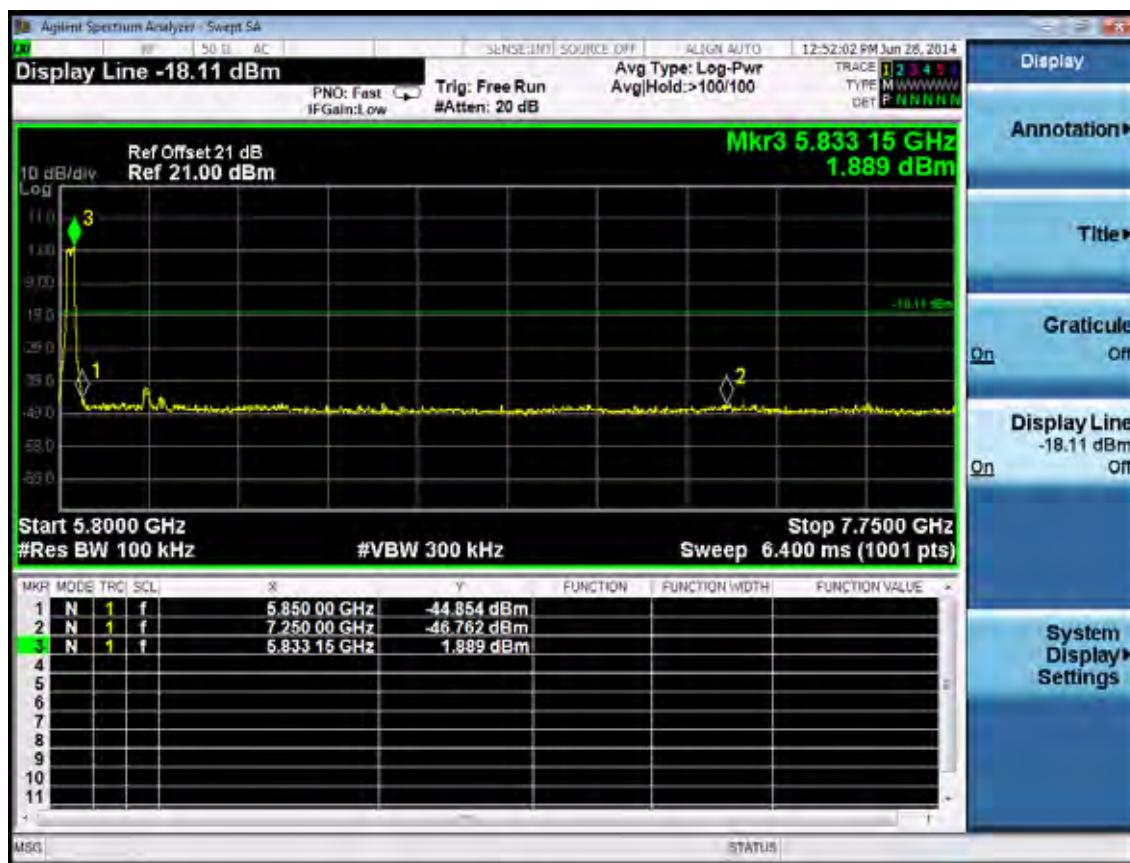




Test CH165: 5825MHz

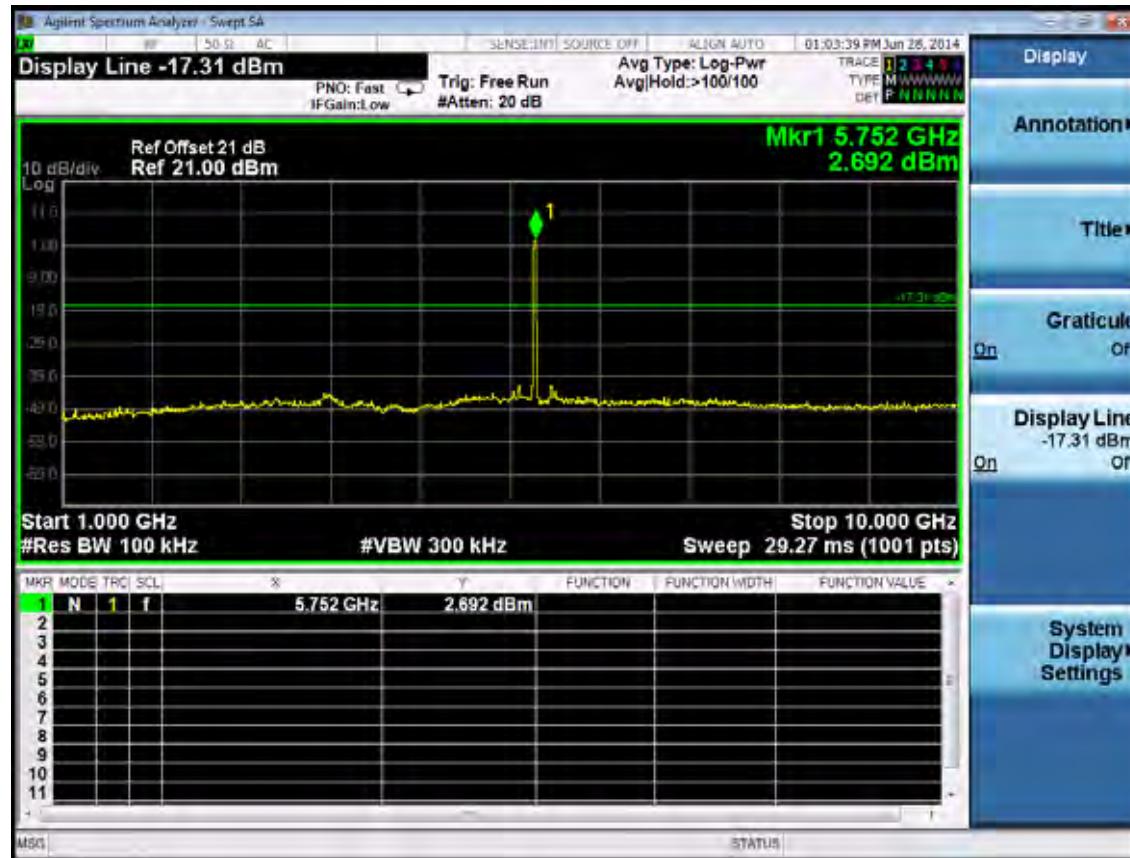


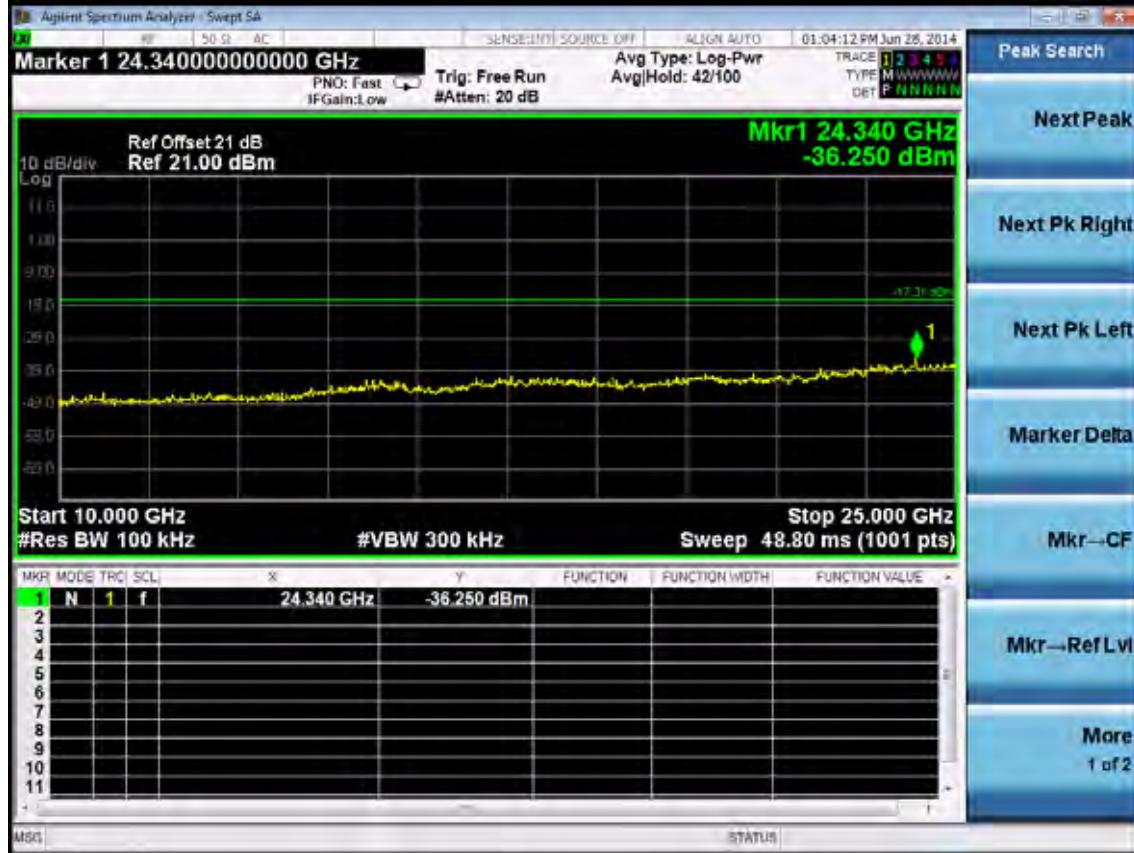
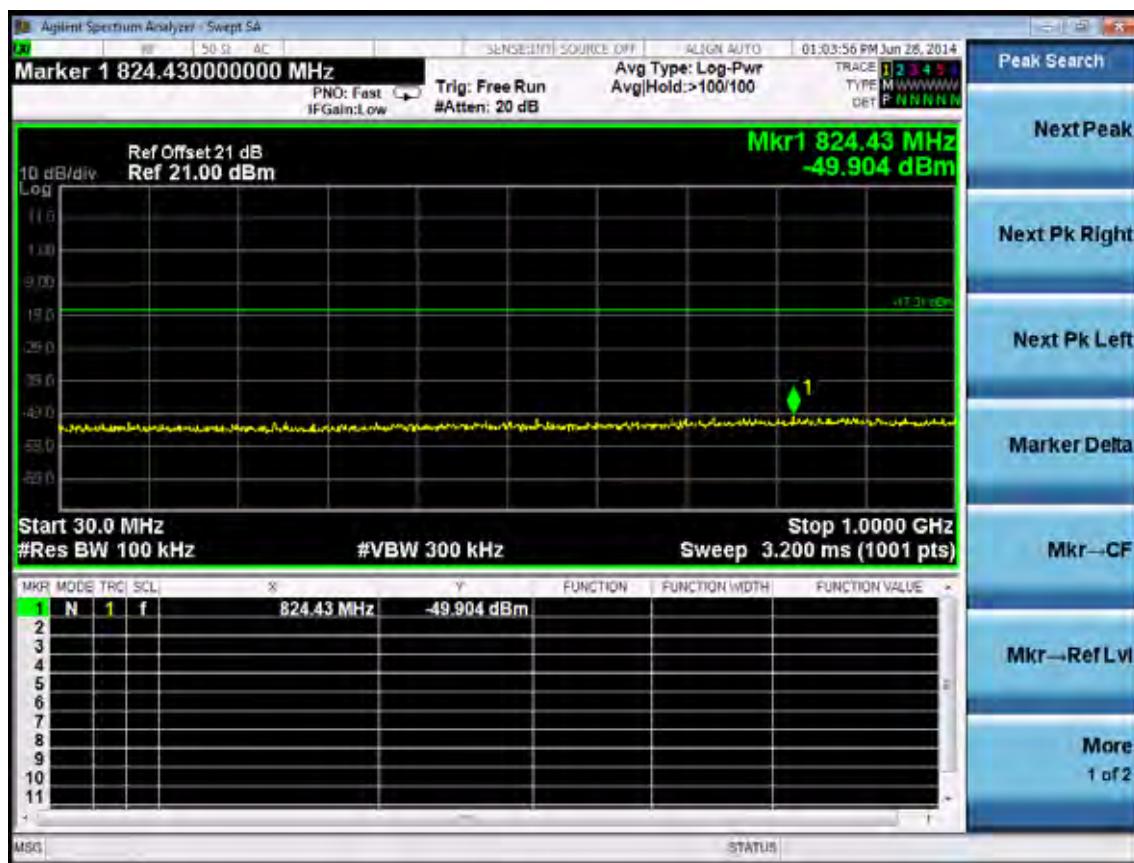


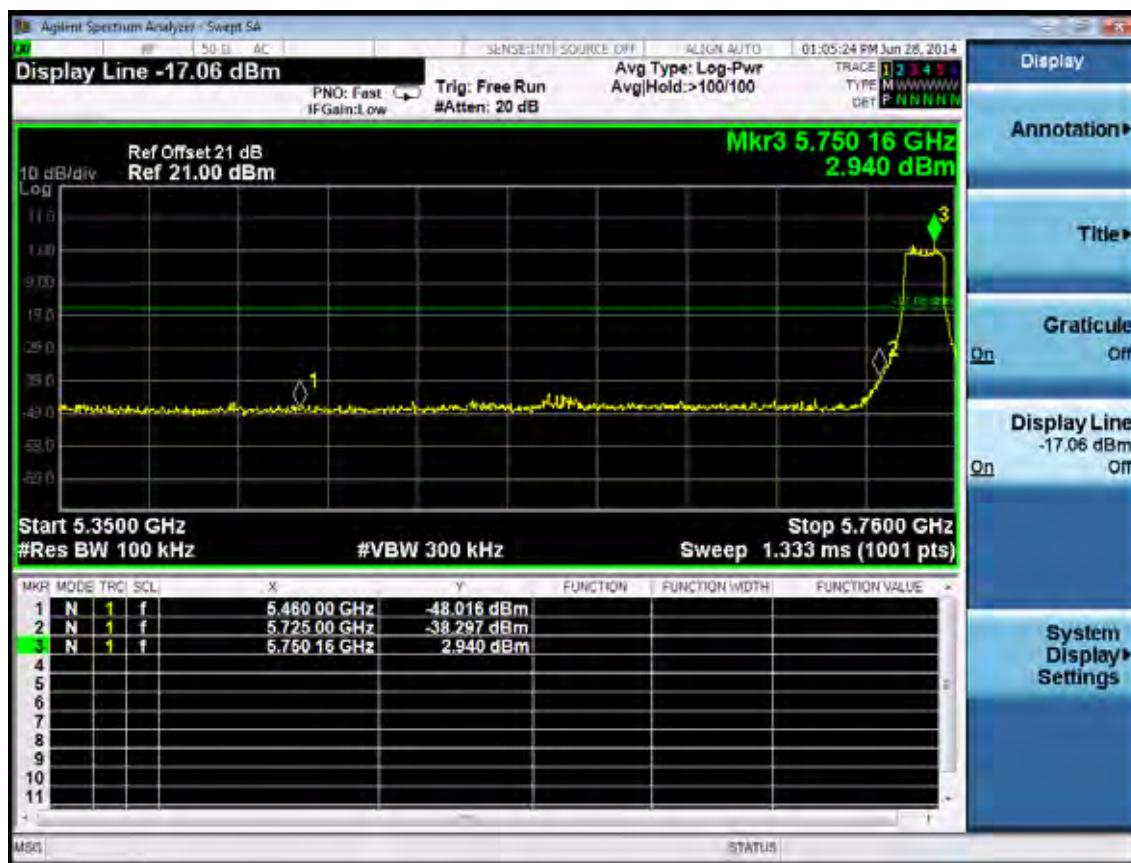


Test Mode: IEEE 802.11n HT20 TX

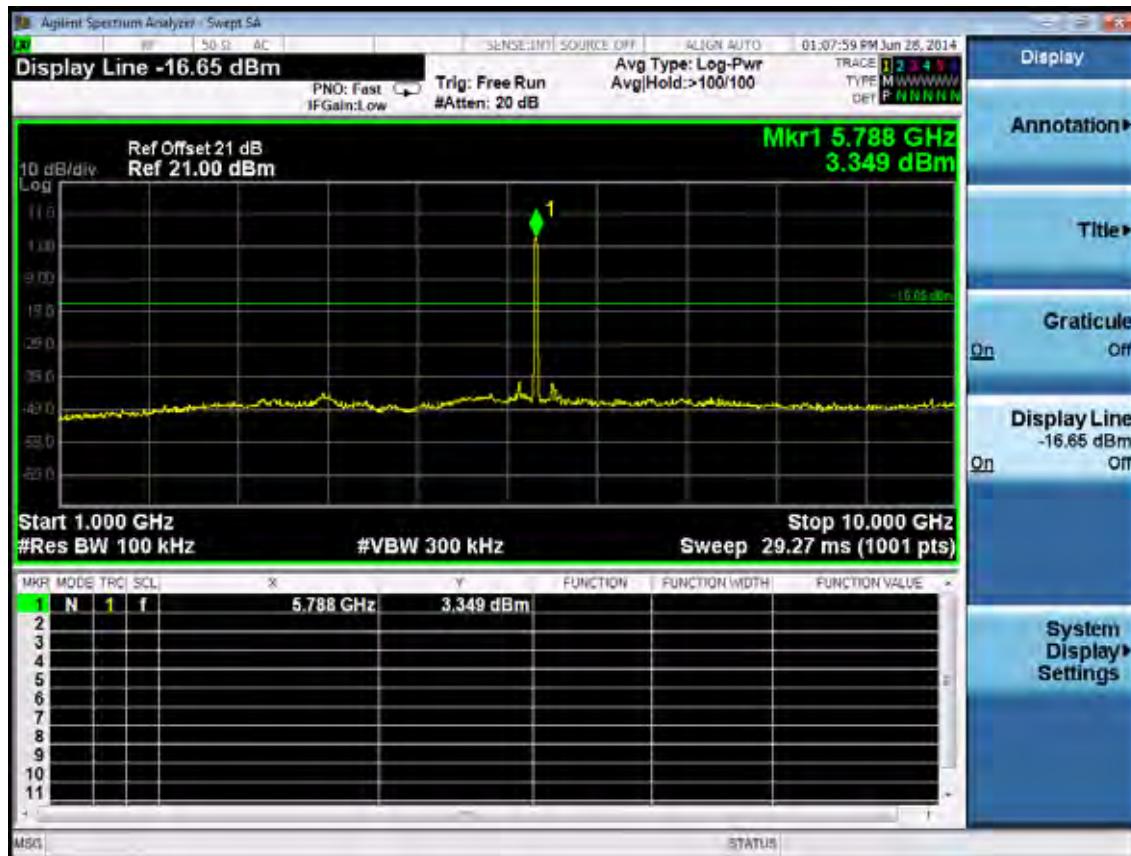
Test CH149: 5745MHz

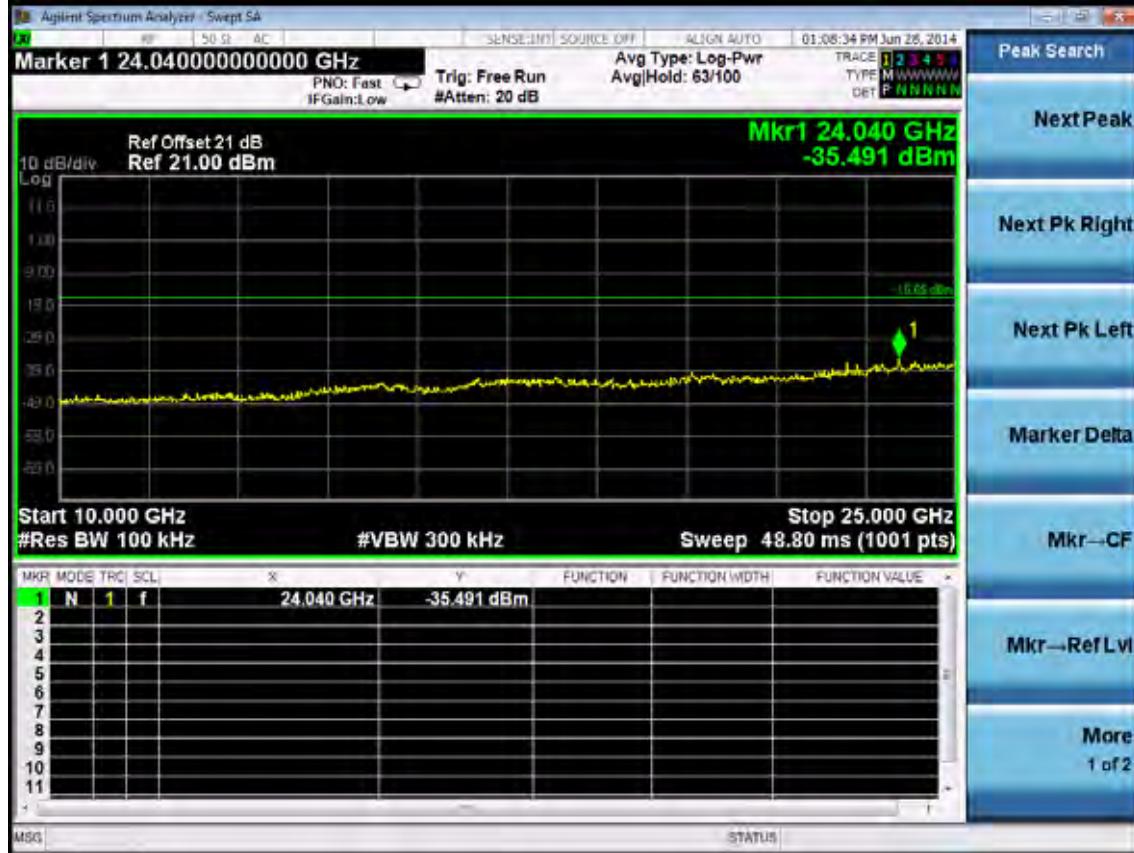
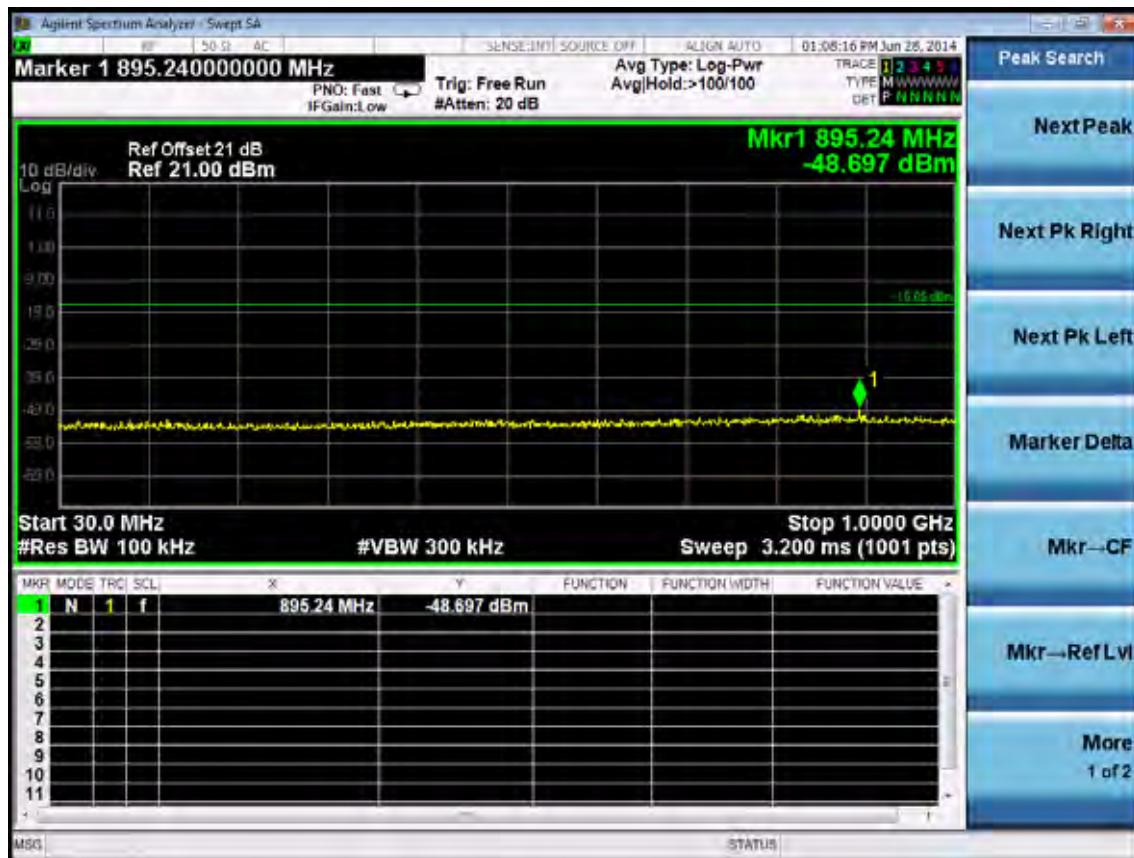




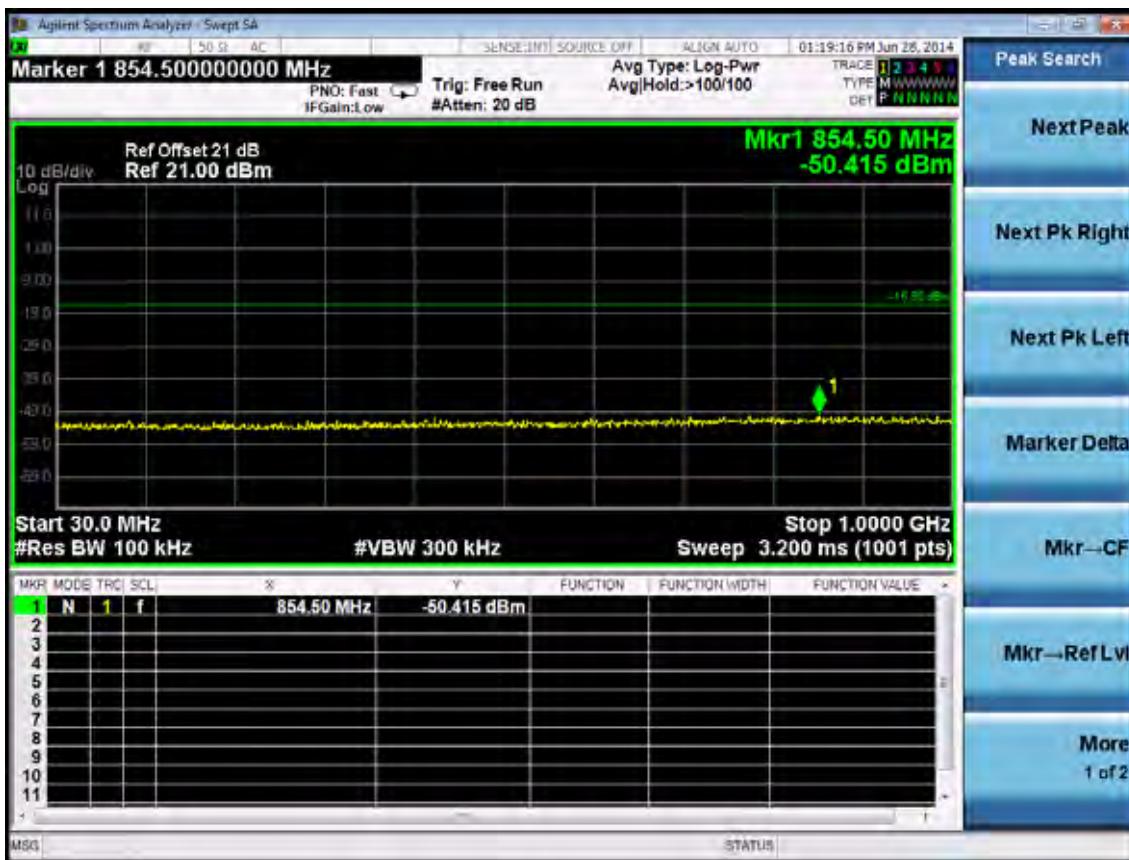
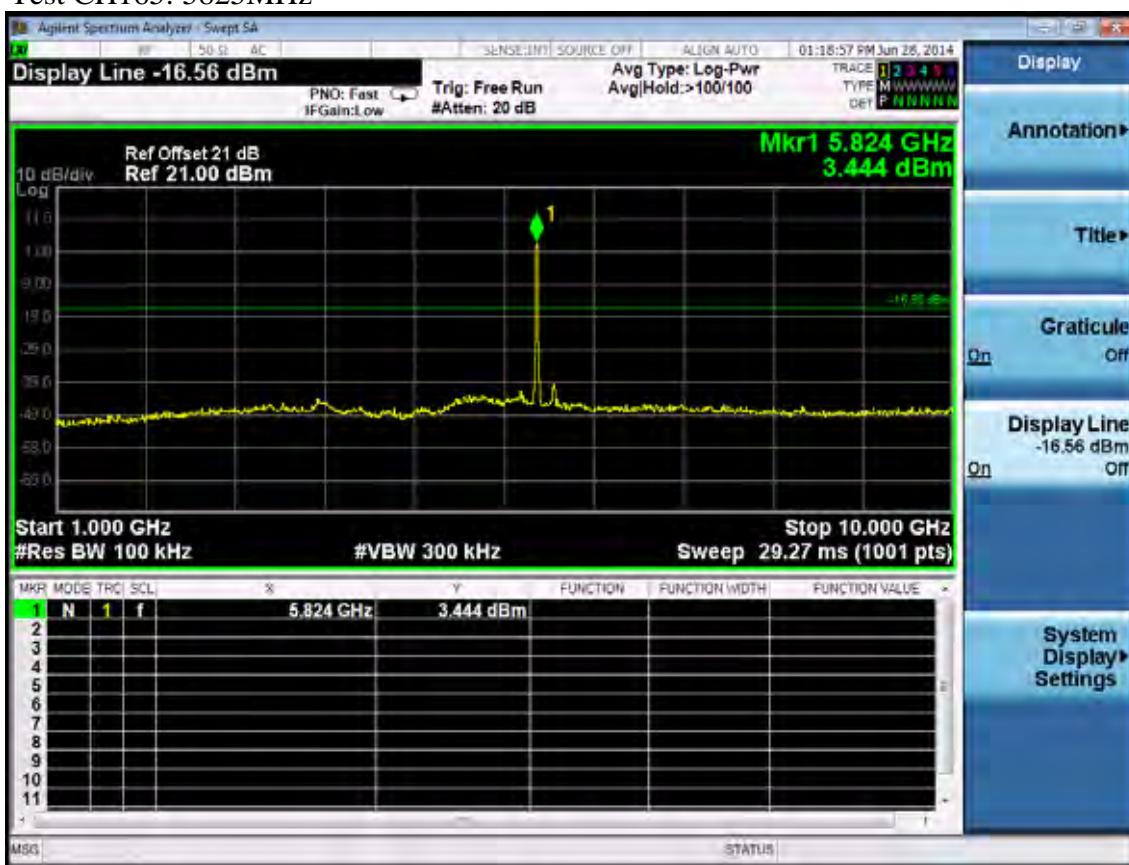


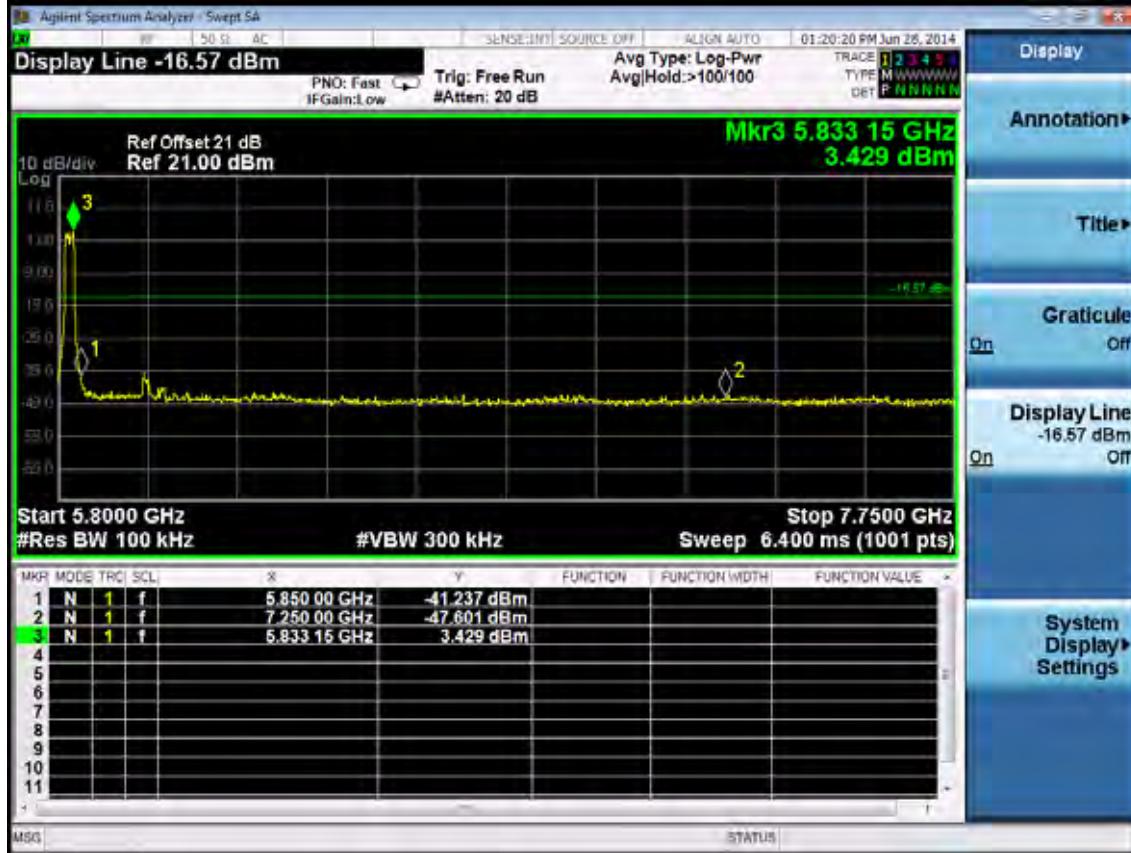
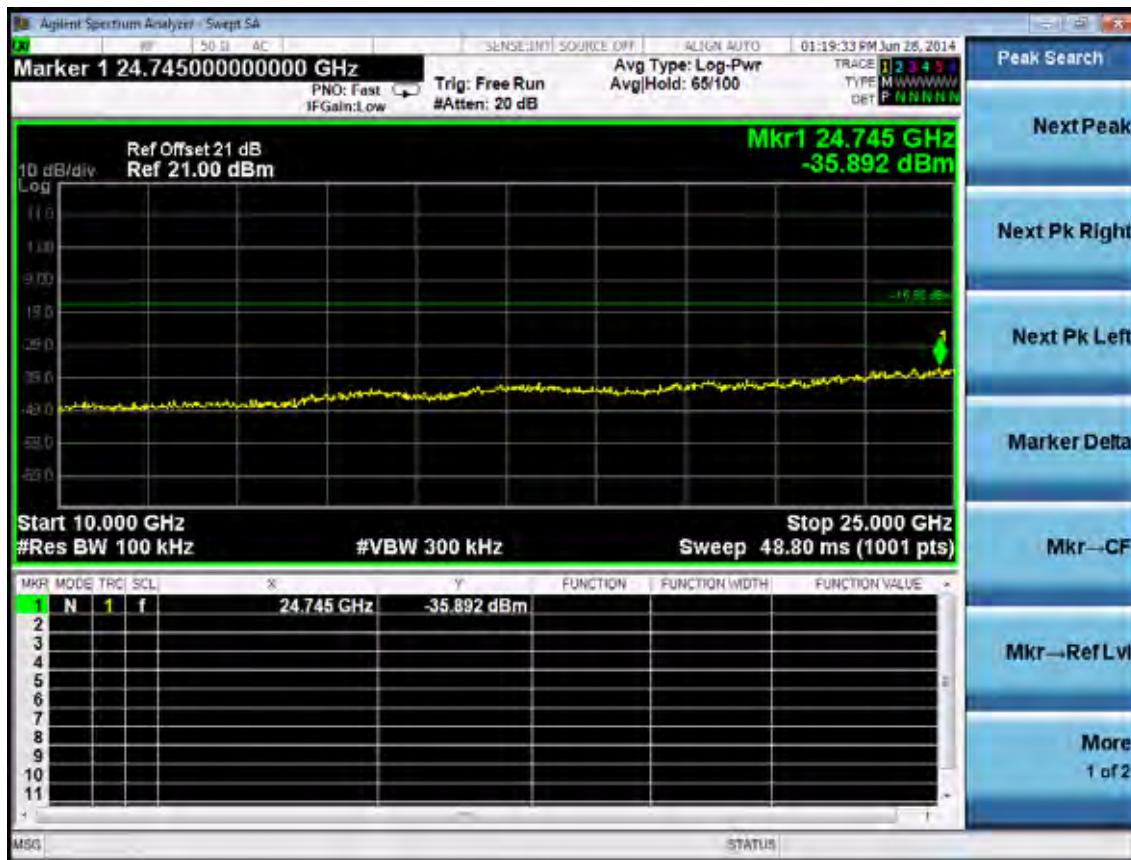
Test CH157: 5785MHz



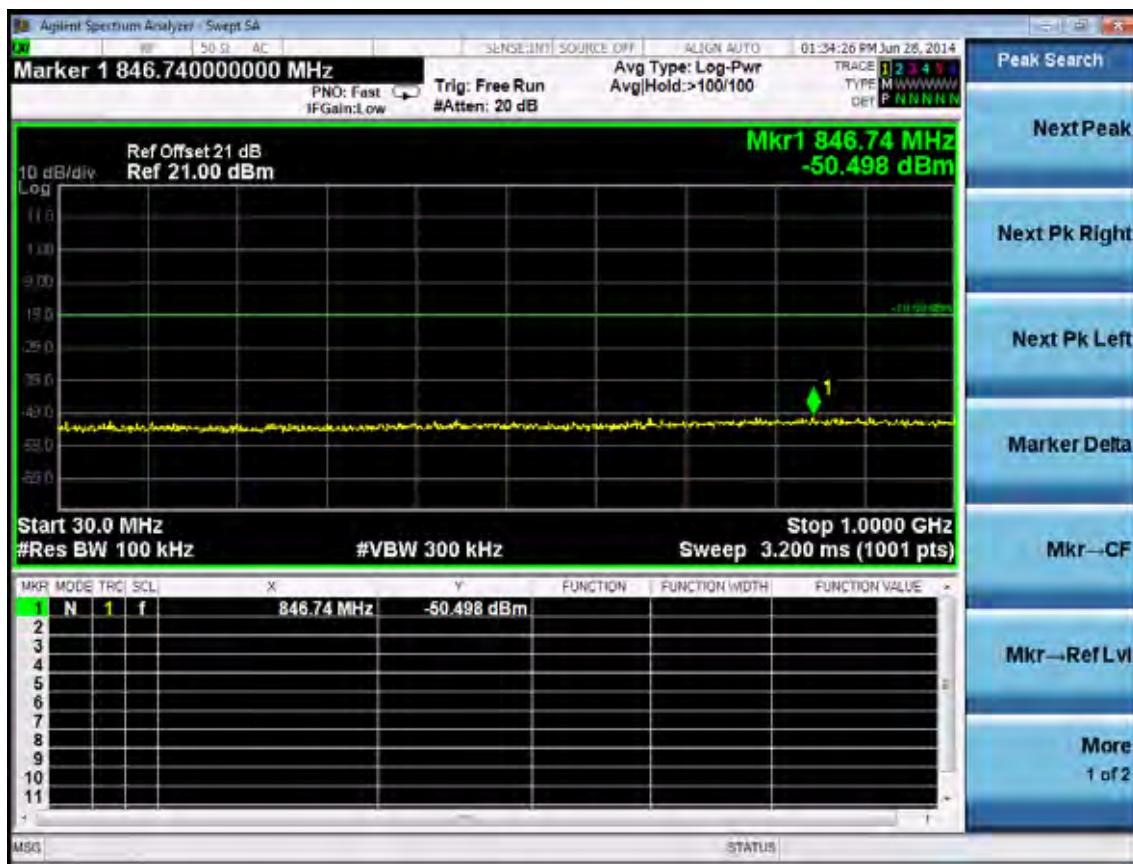
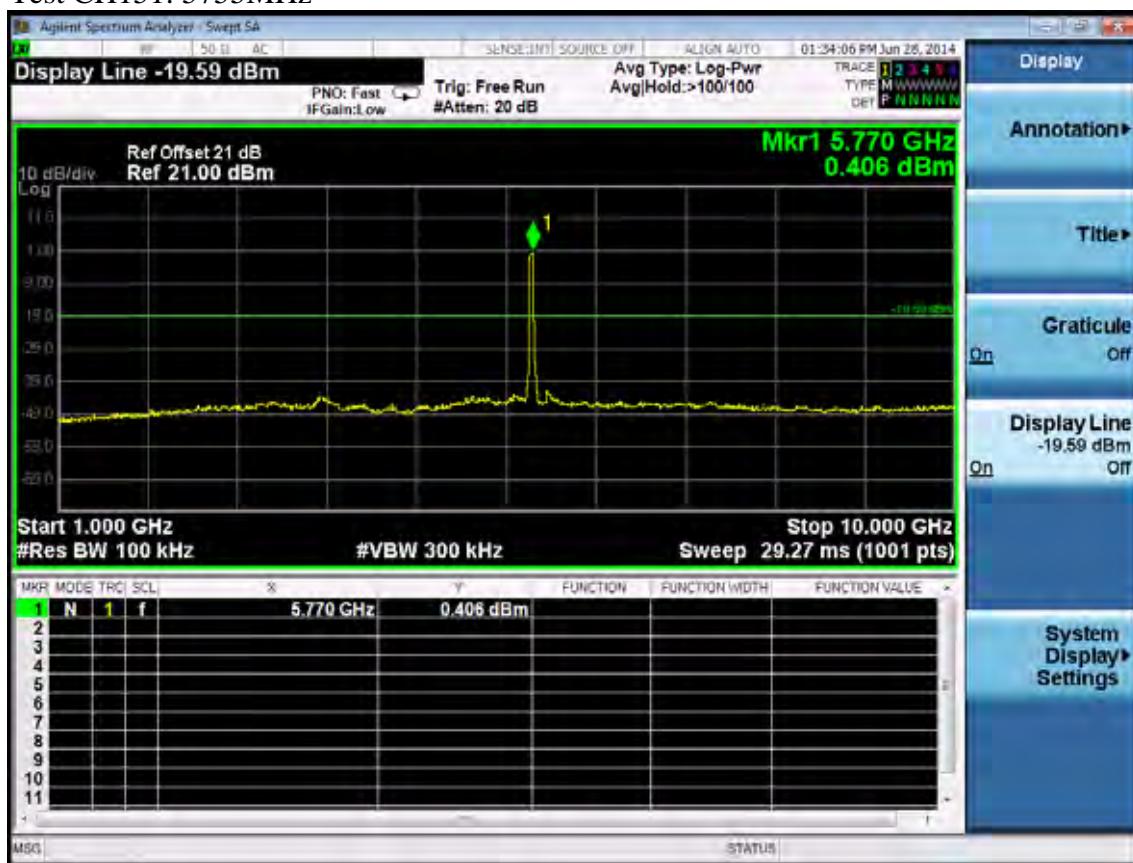


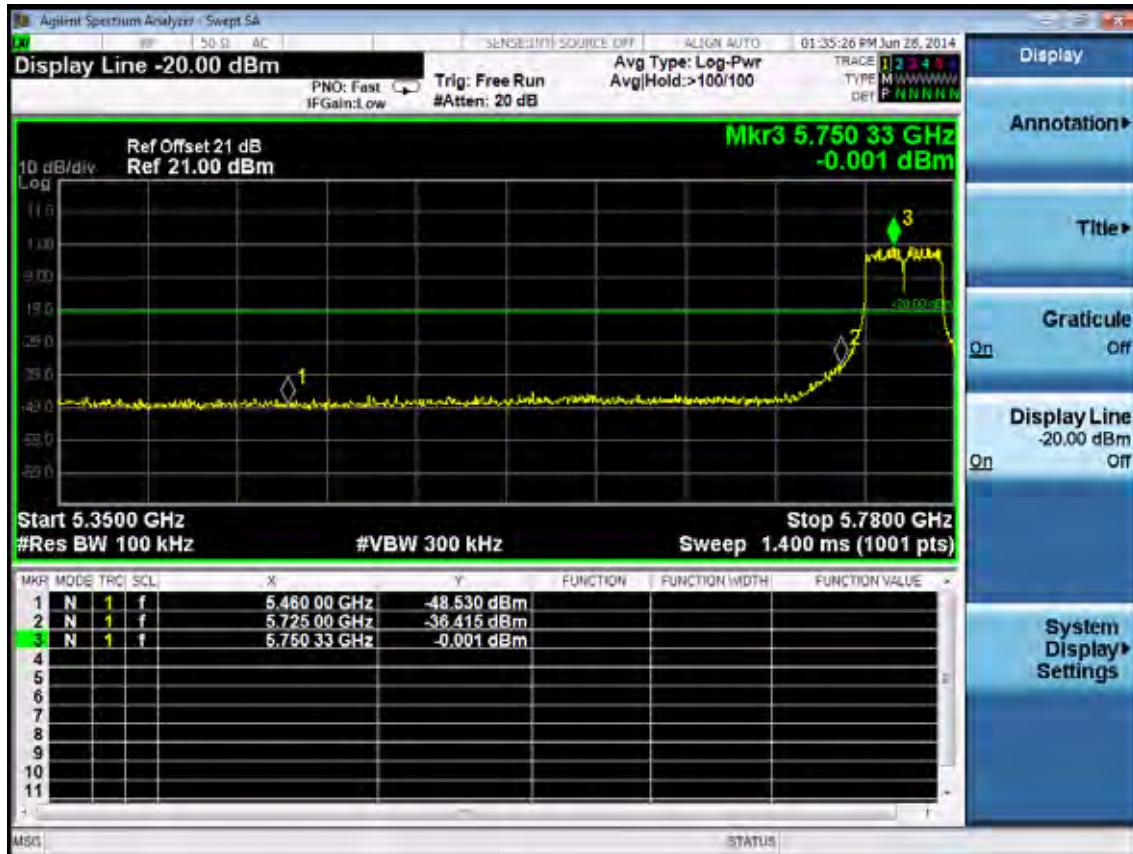
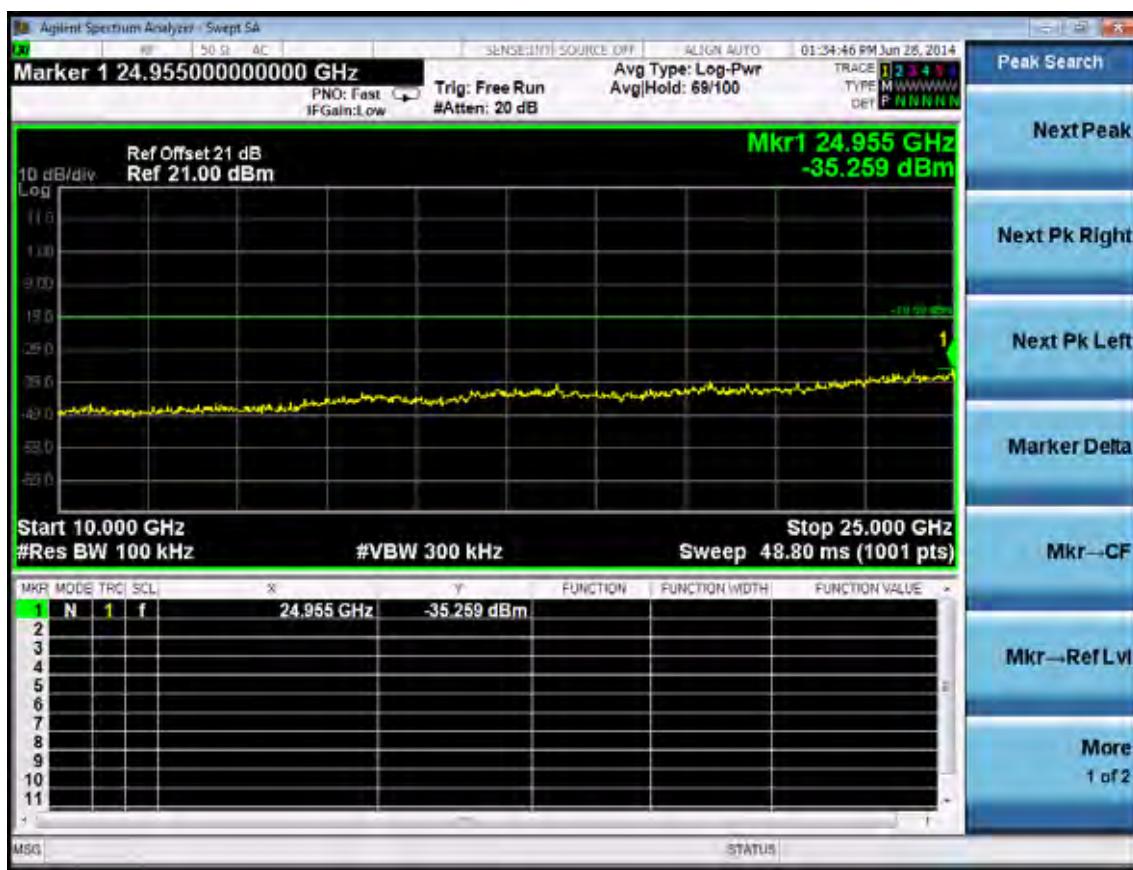
Test CH165: 5825MHz



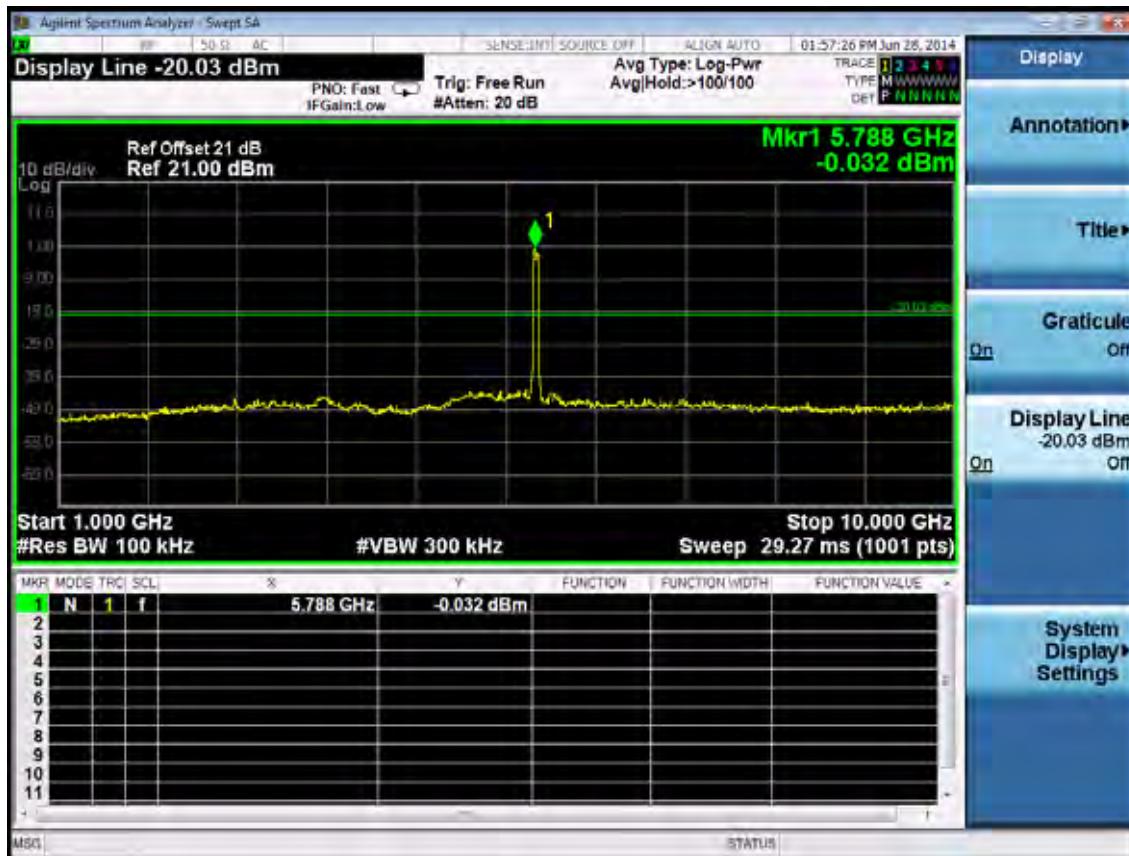


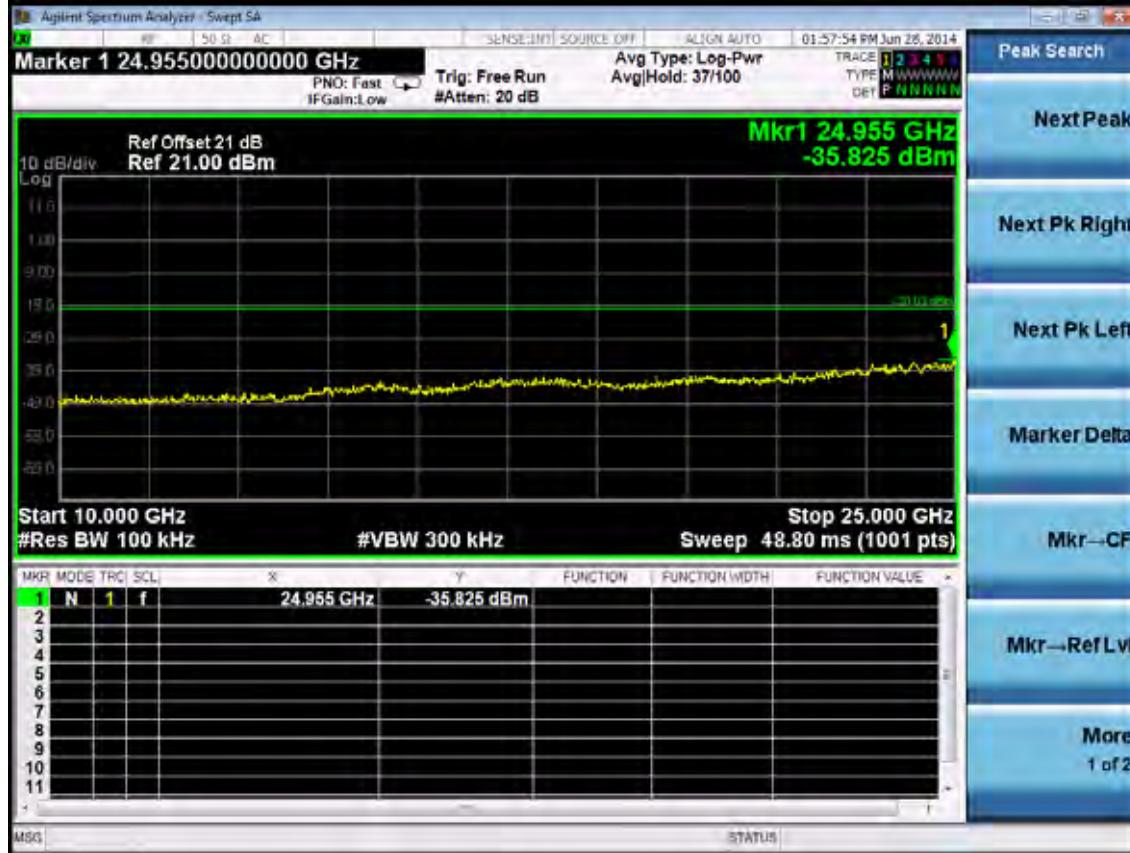
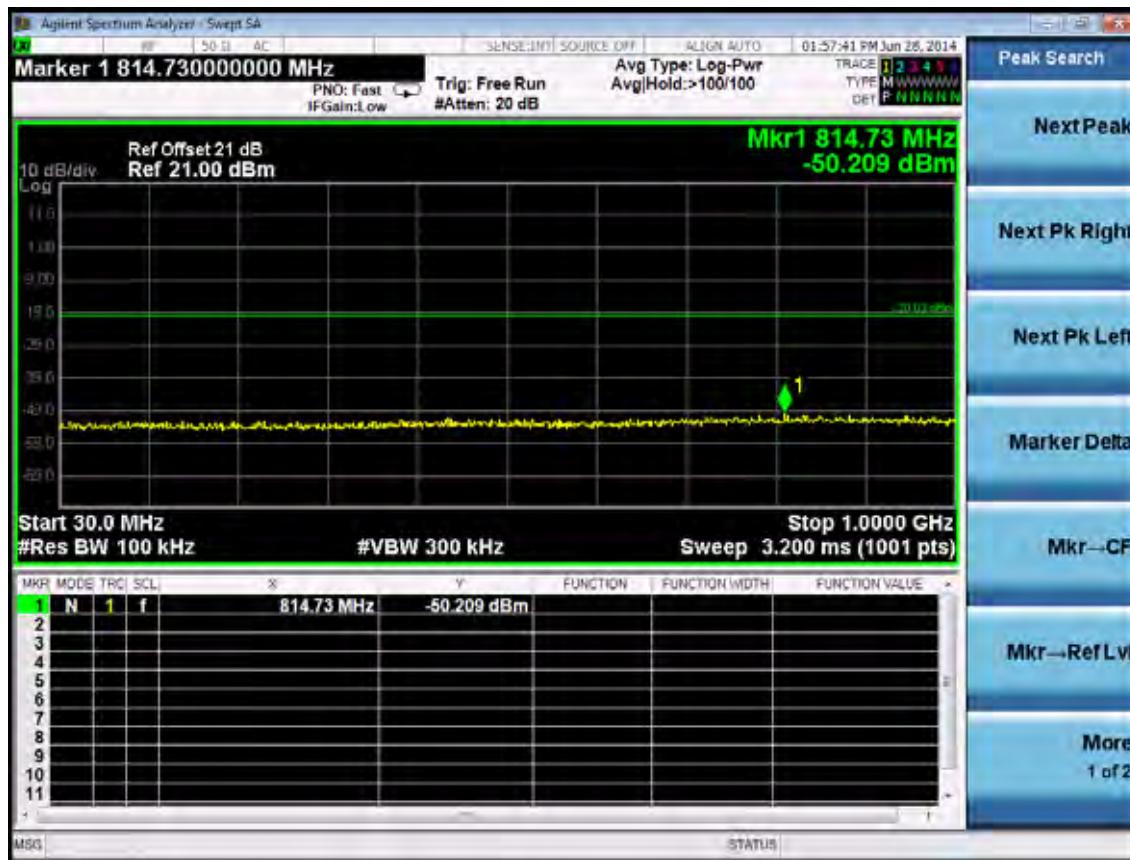
Test Mode: IEEE 802.11n HT40 TX
 Test CH151: 5755MHz





Test CH159: 5795MHz

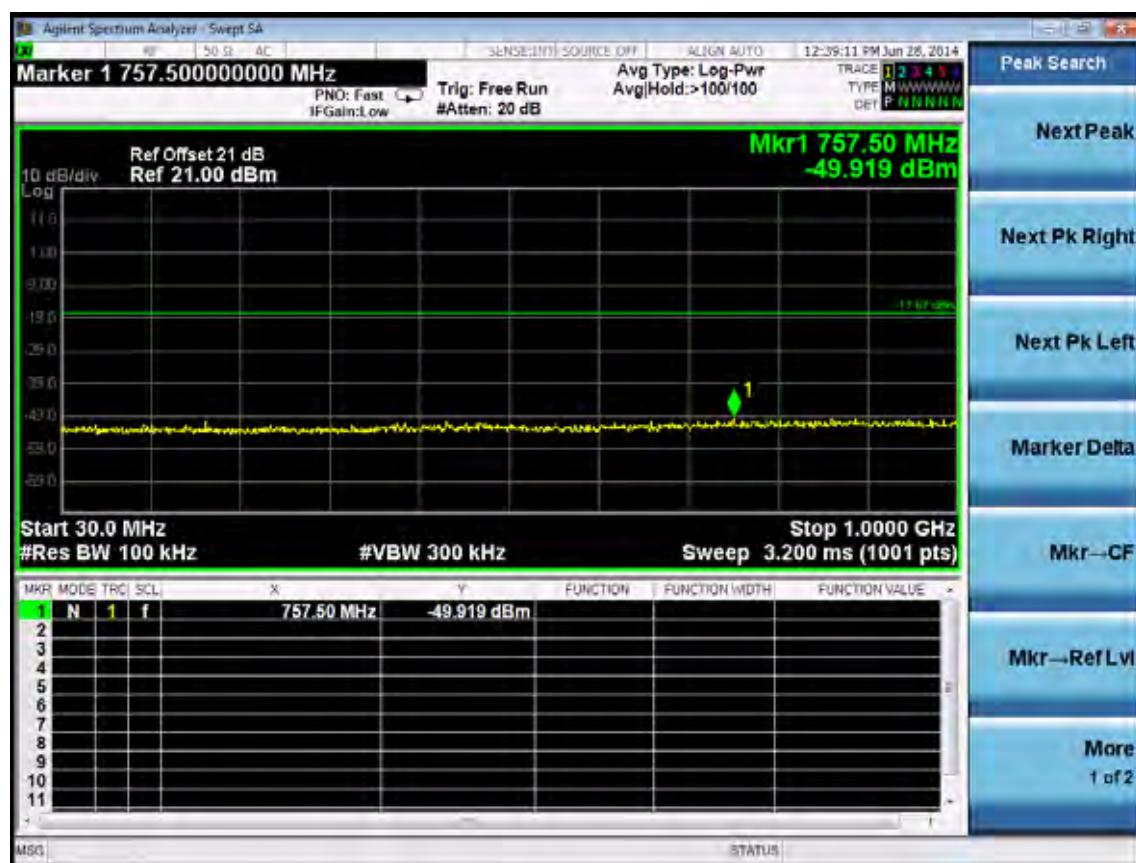
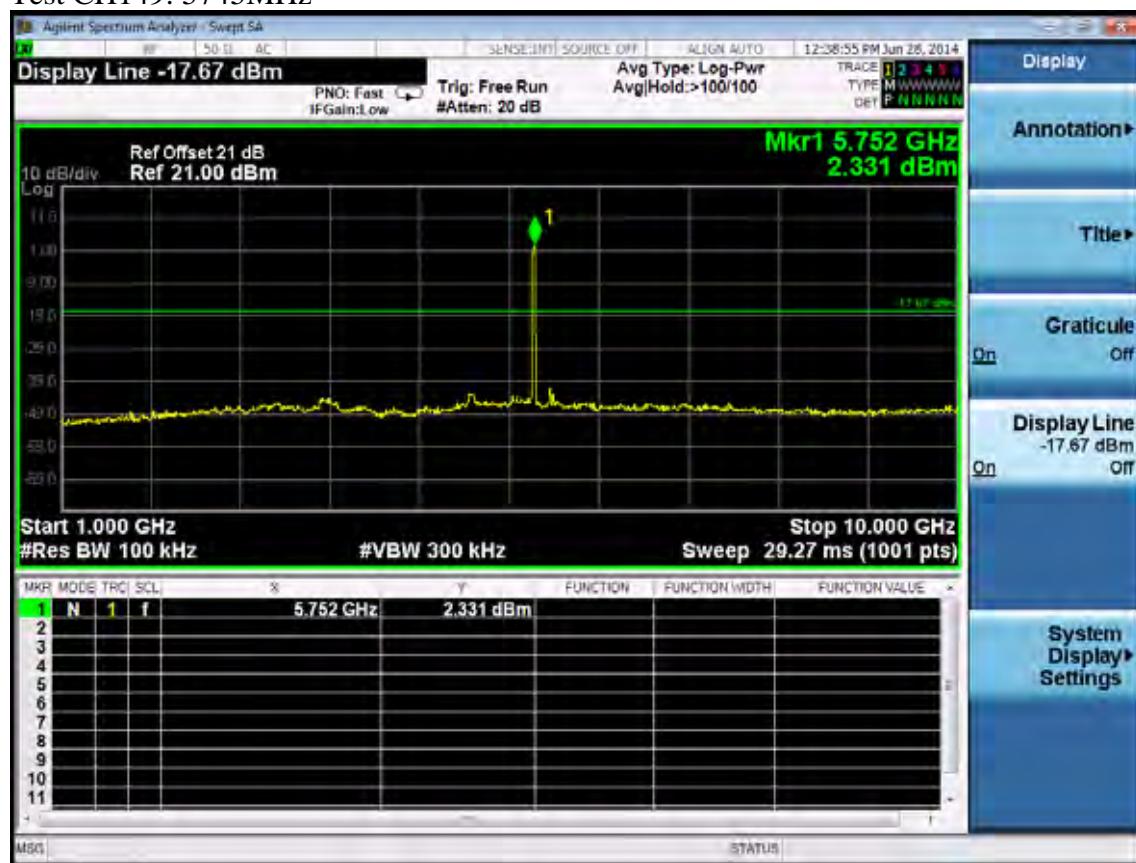


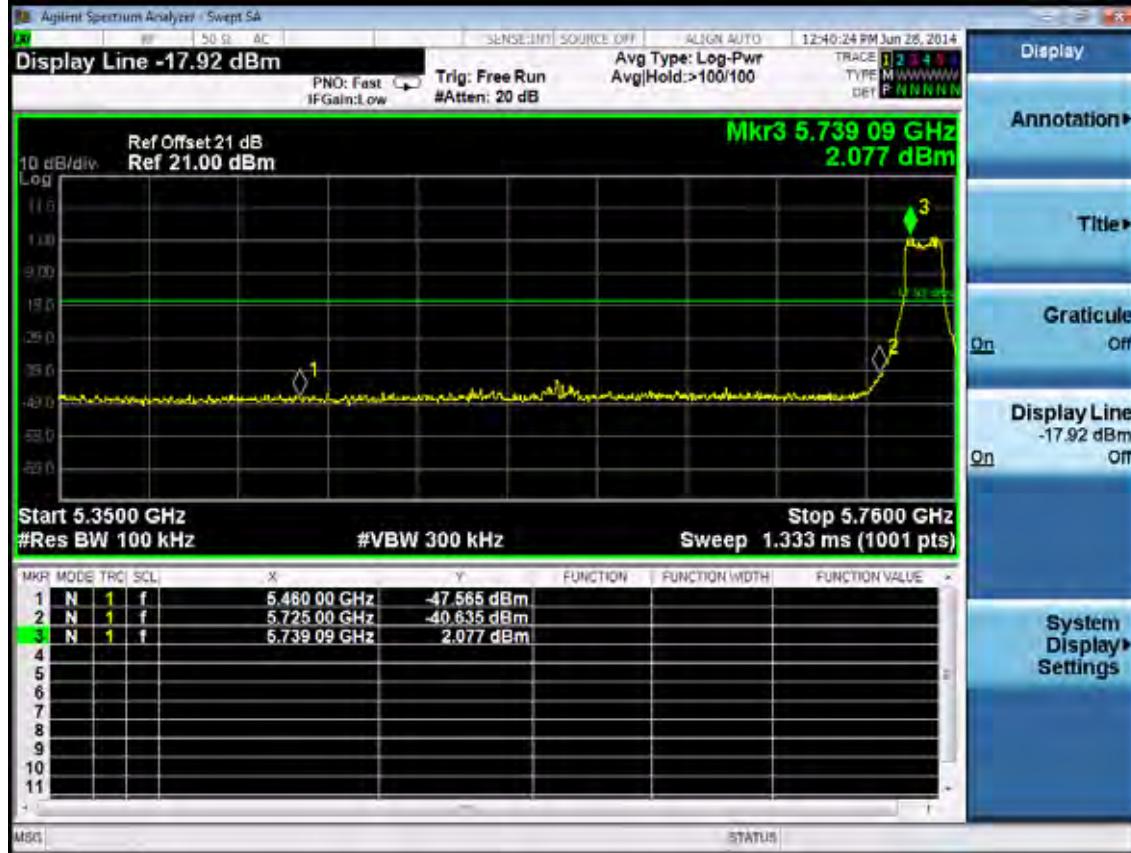
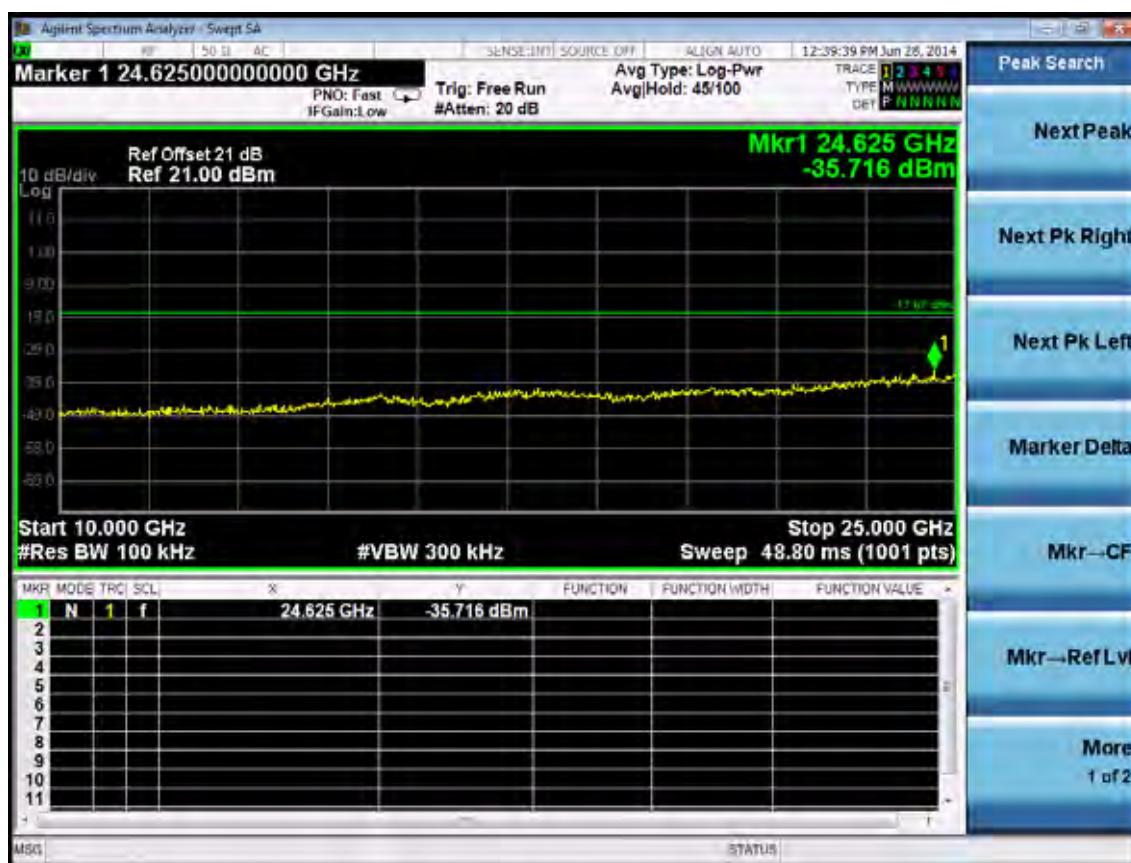


Chain 2:

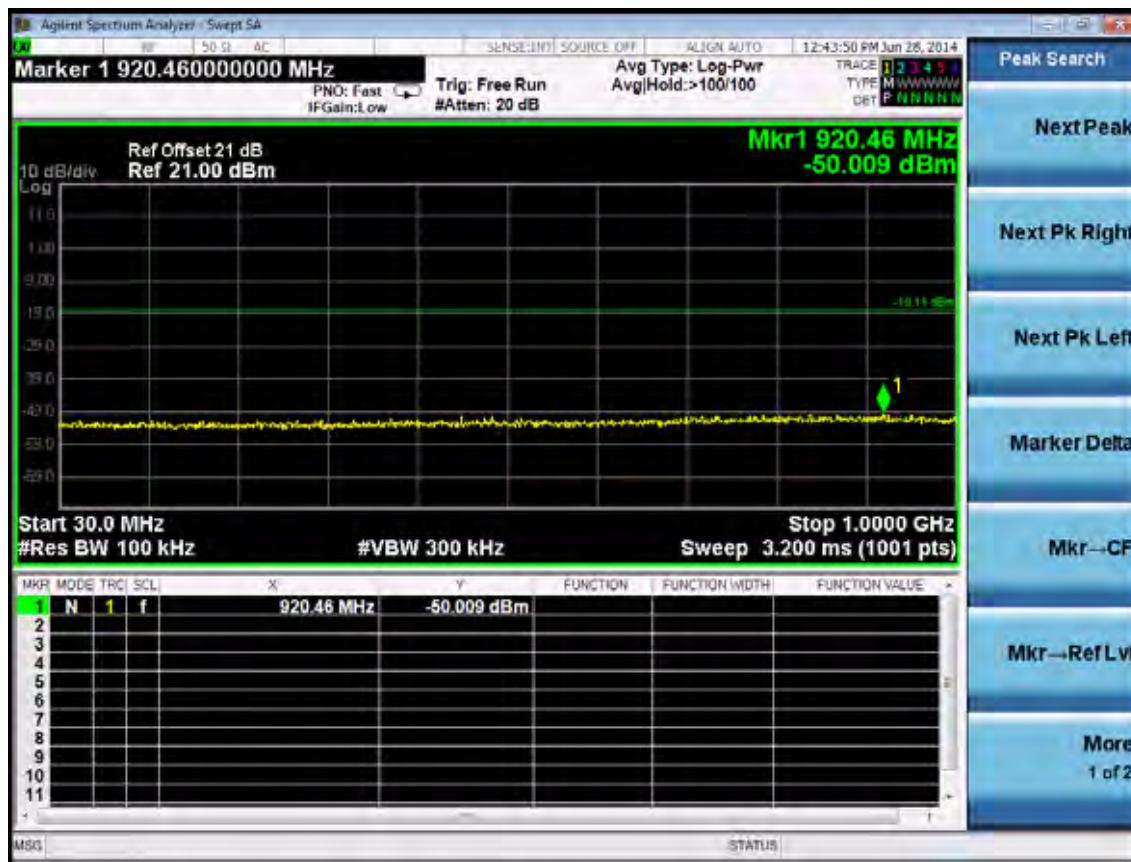
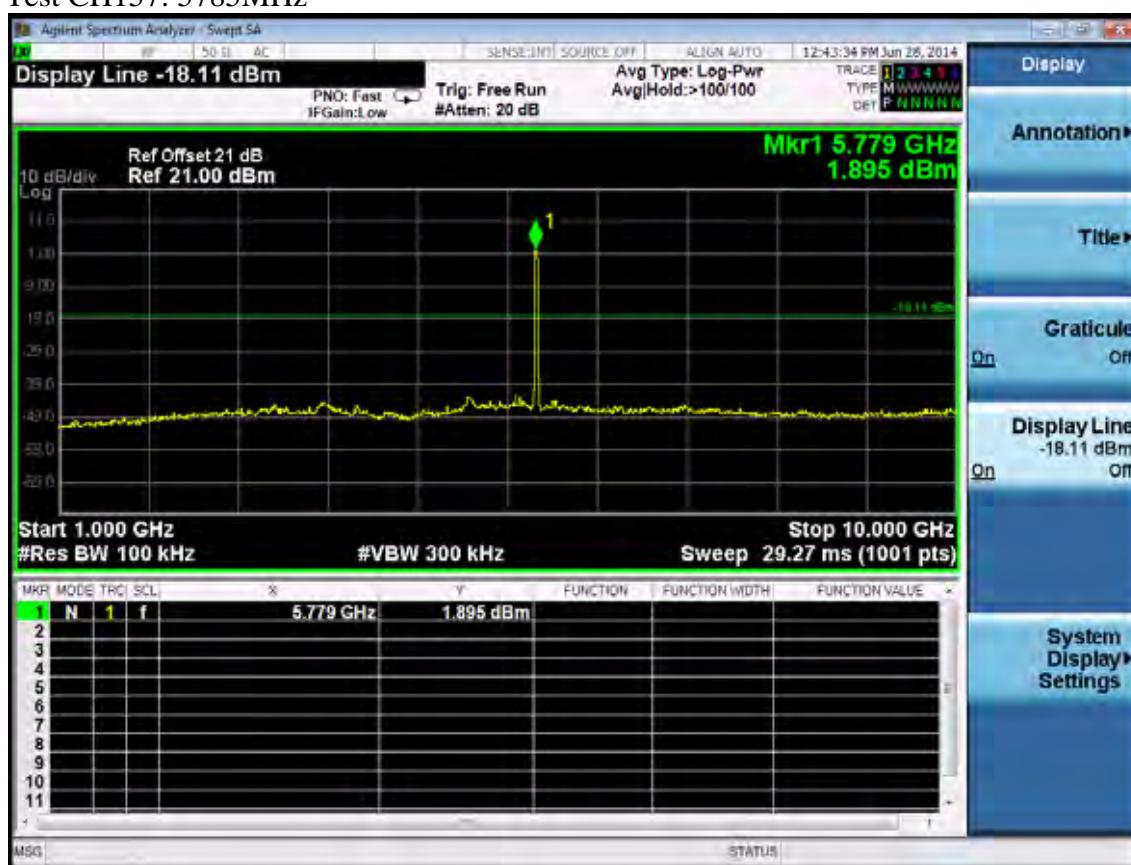
Test Mode: IEEE 802.11a TX

Test CH149: 5745MHz



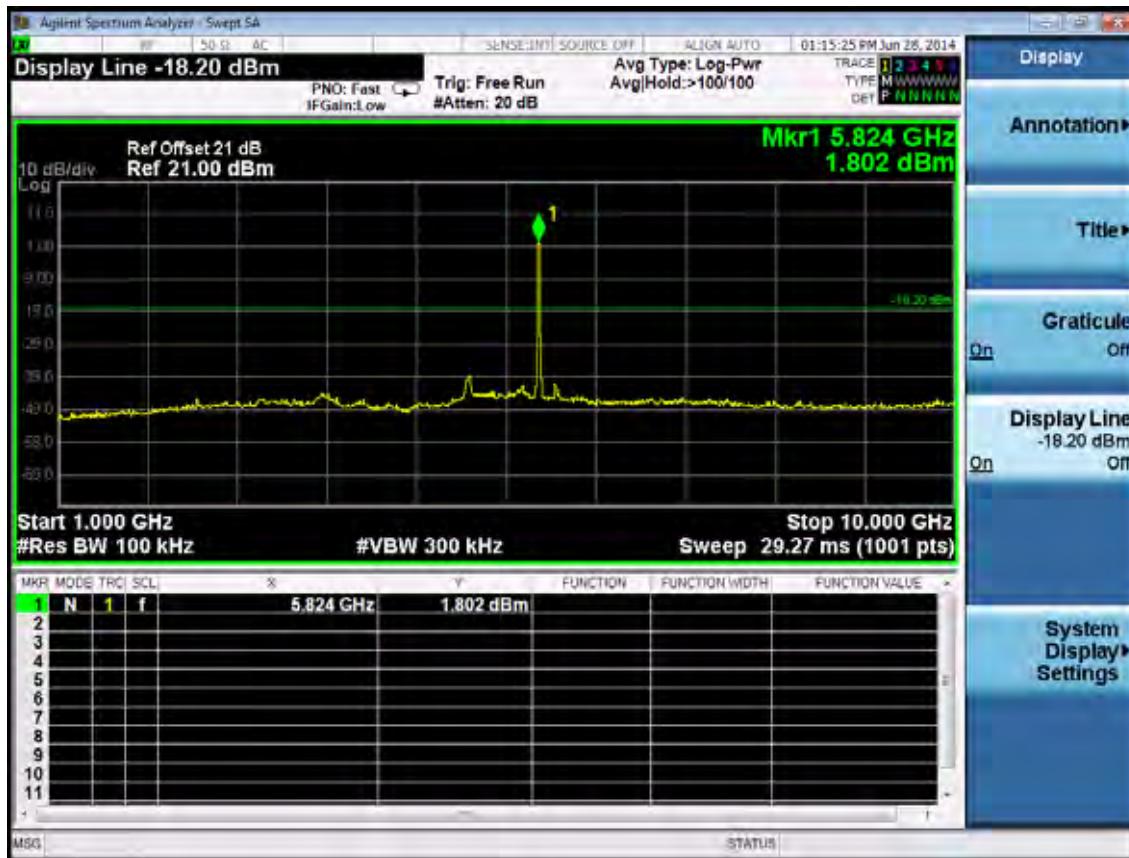


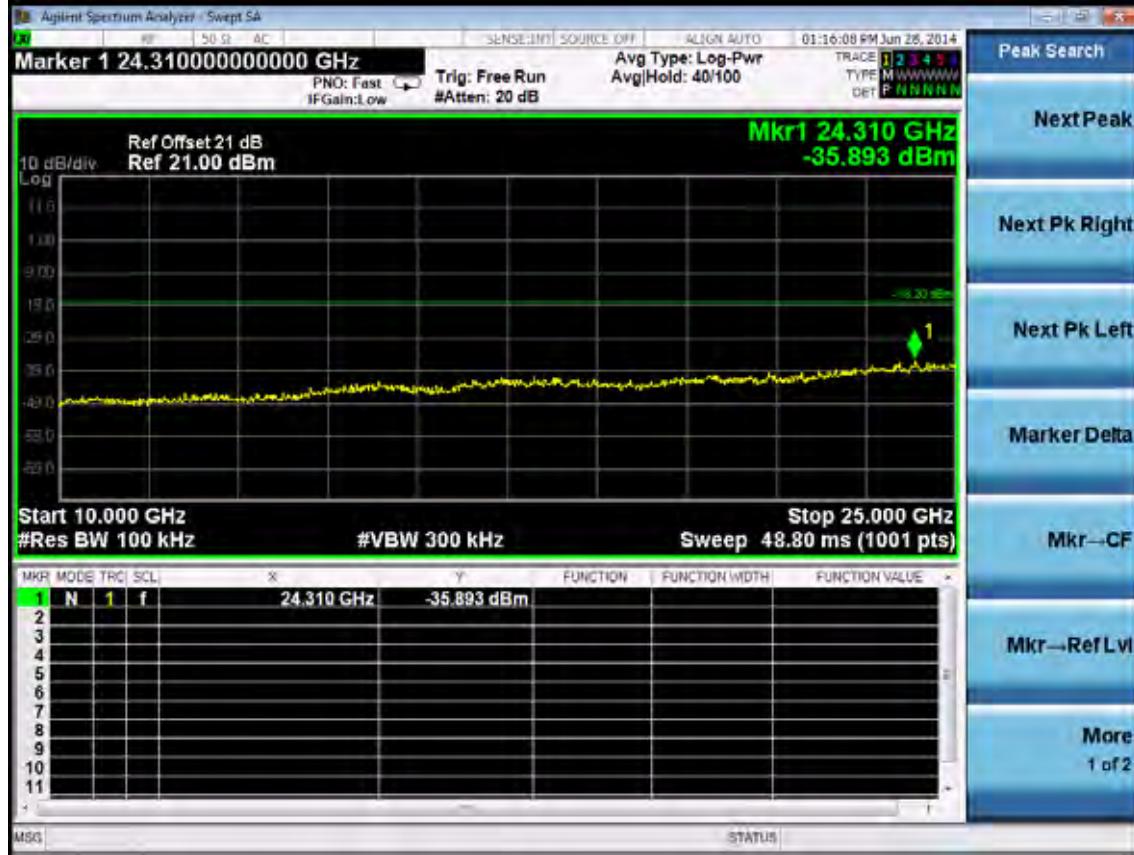
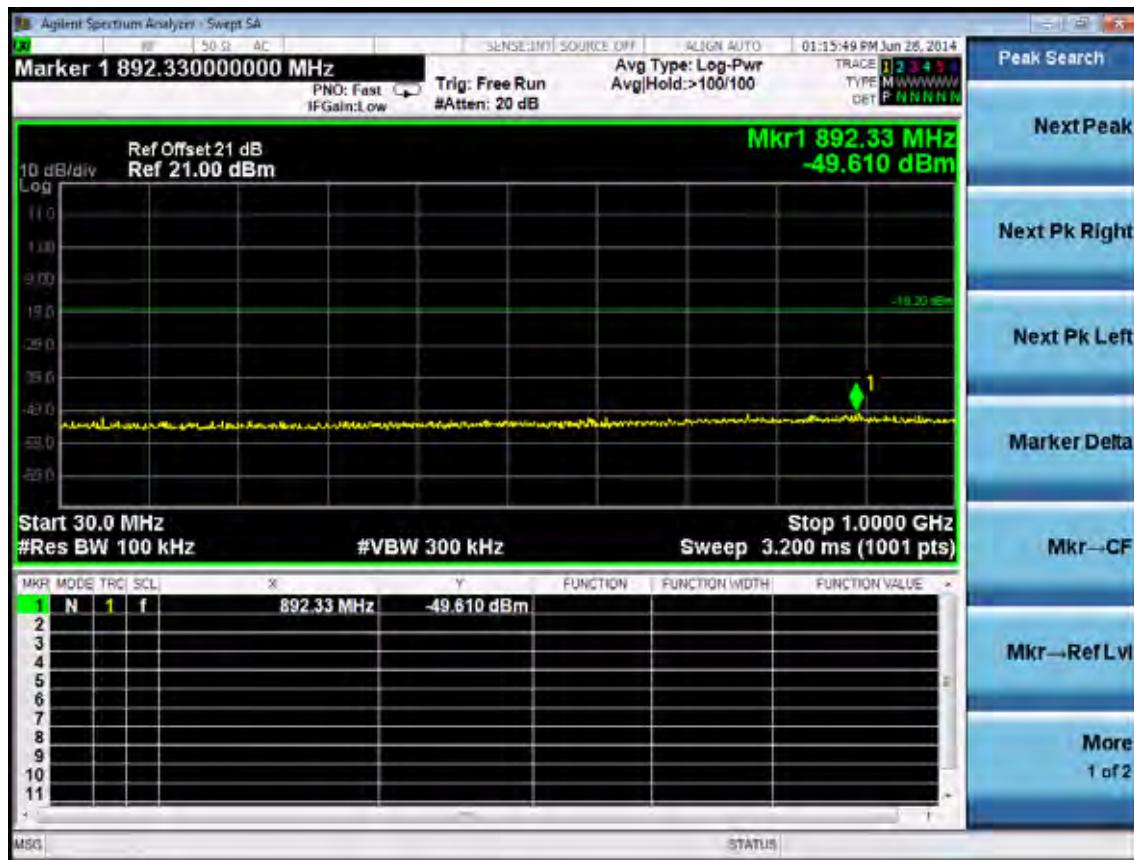
Test CH157: 5785MHz

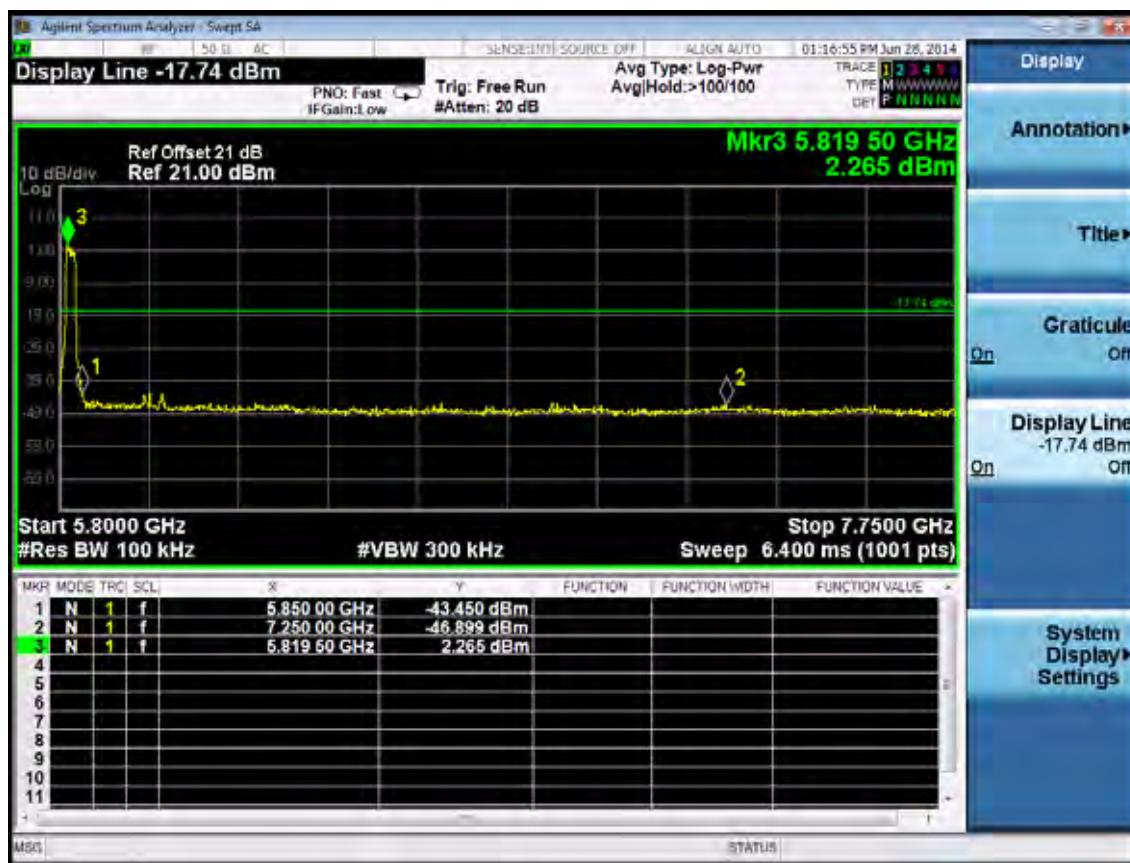




Test CH165: 5825MHz

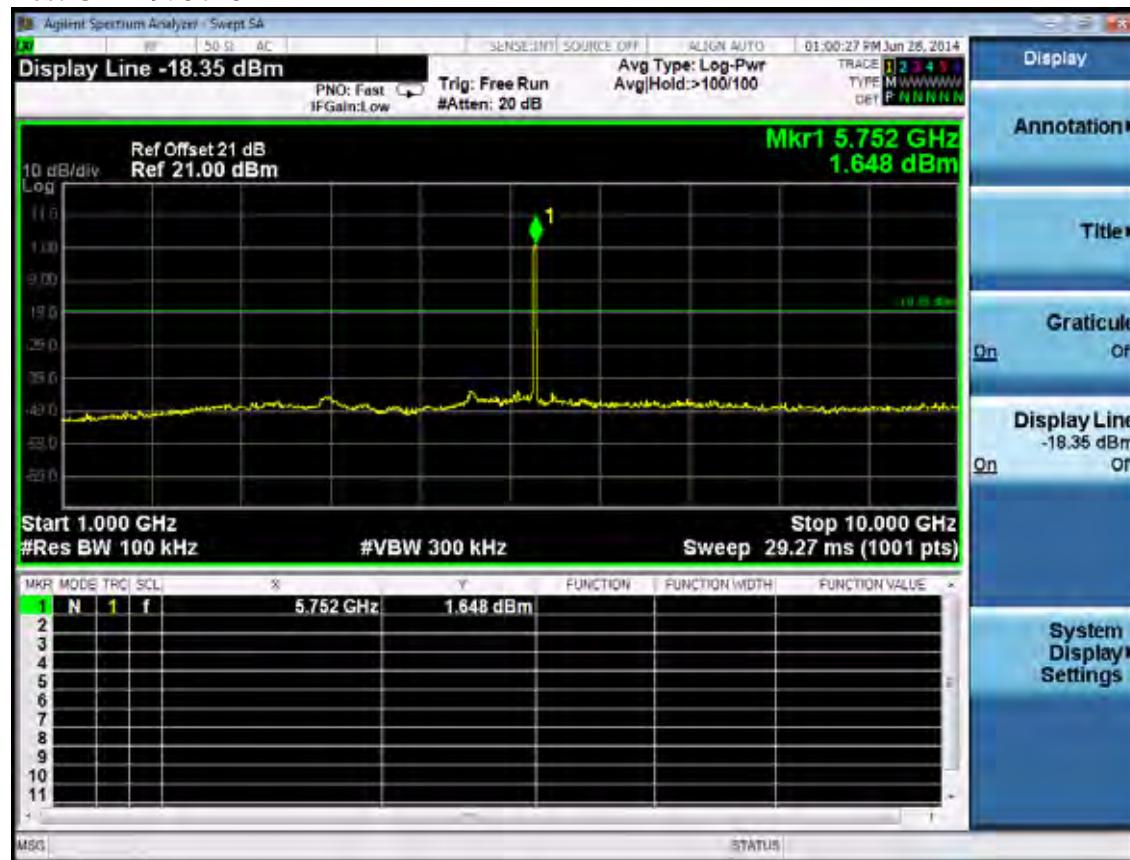


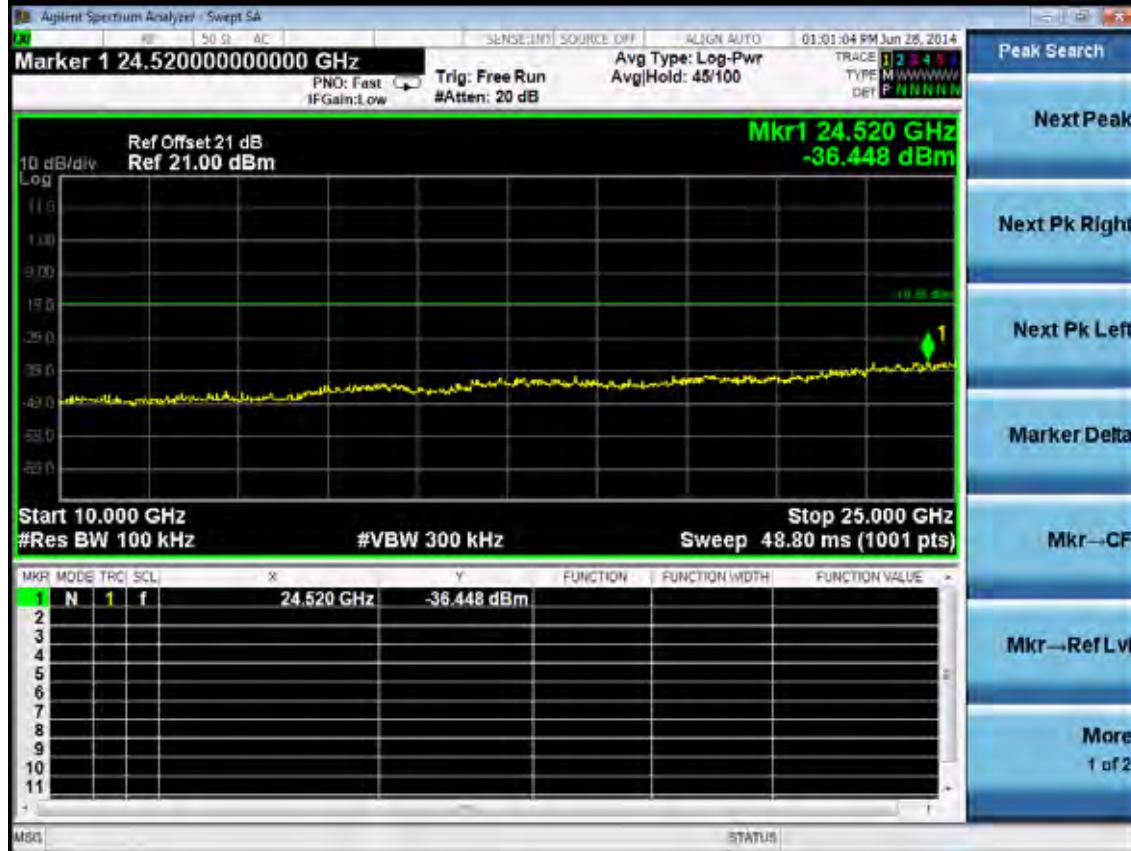
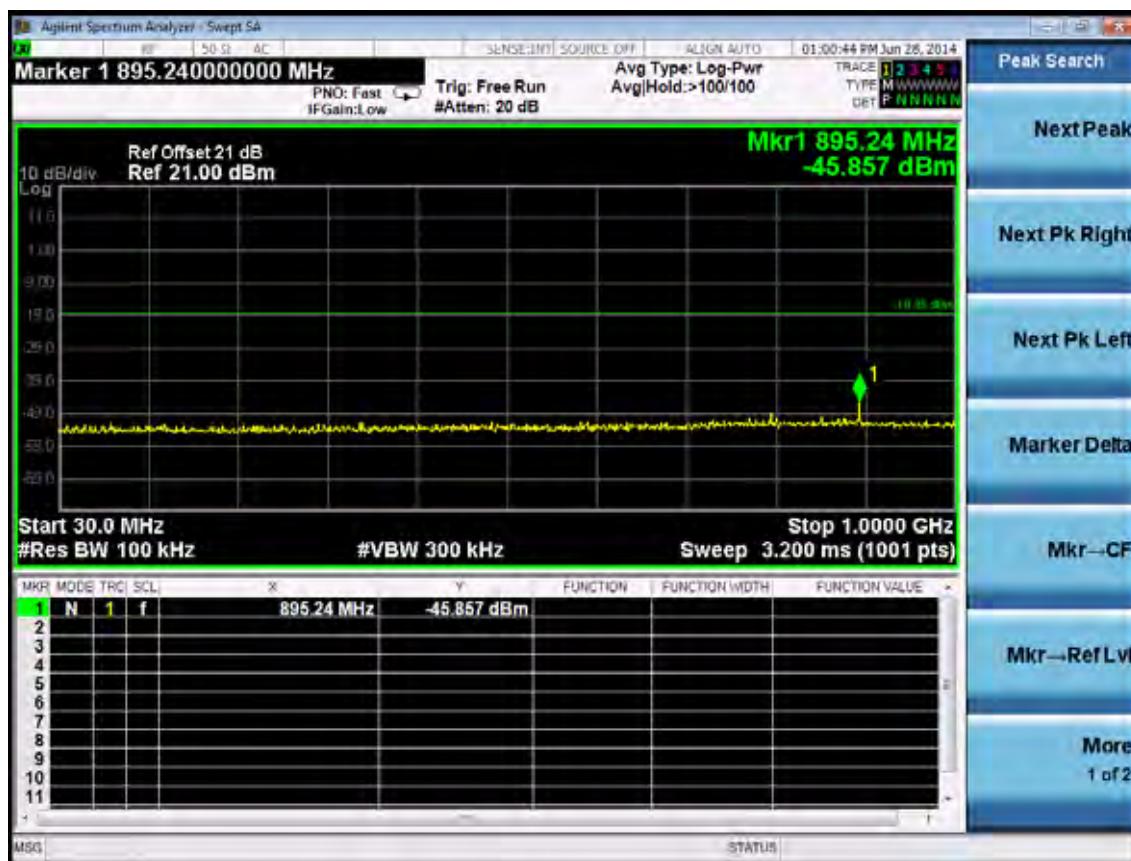


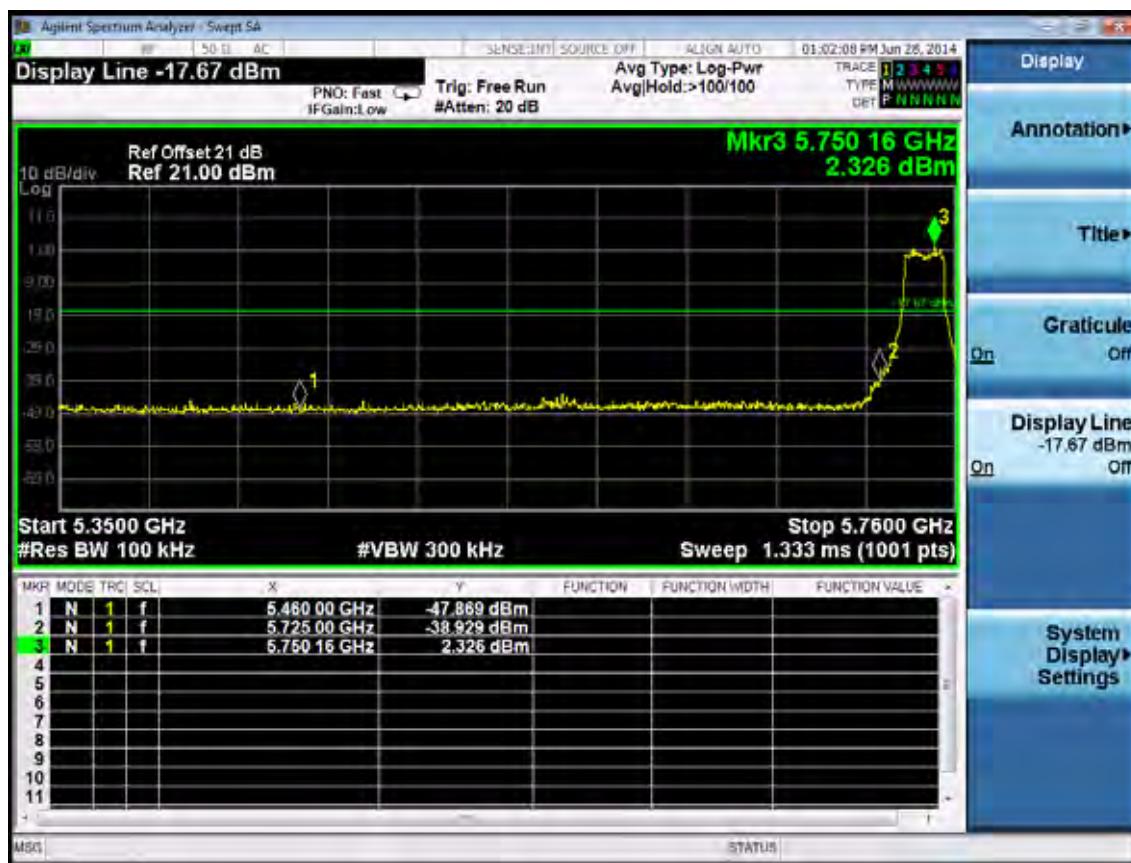


Test Mode: IEEE 802.11n HT20 TX

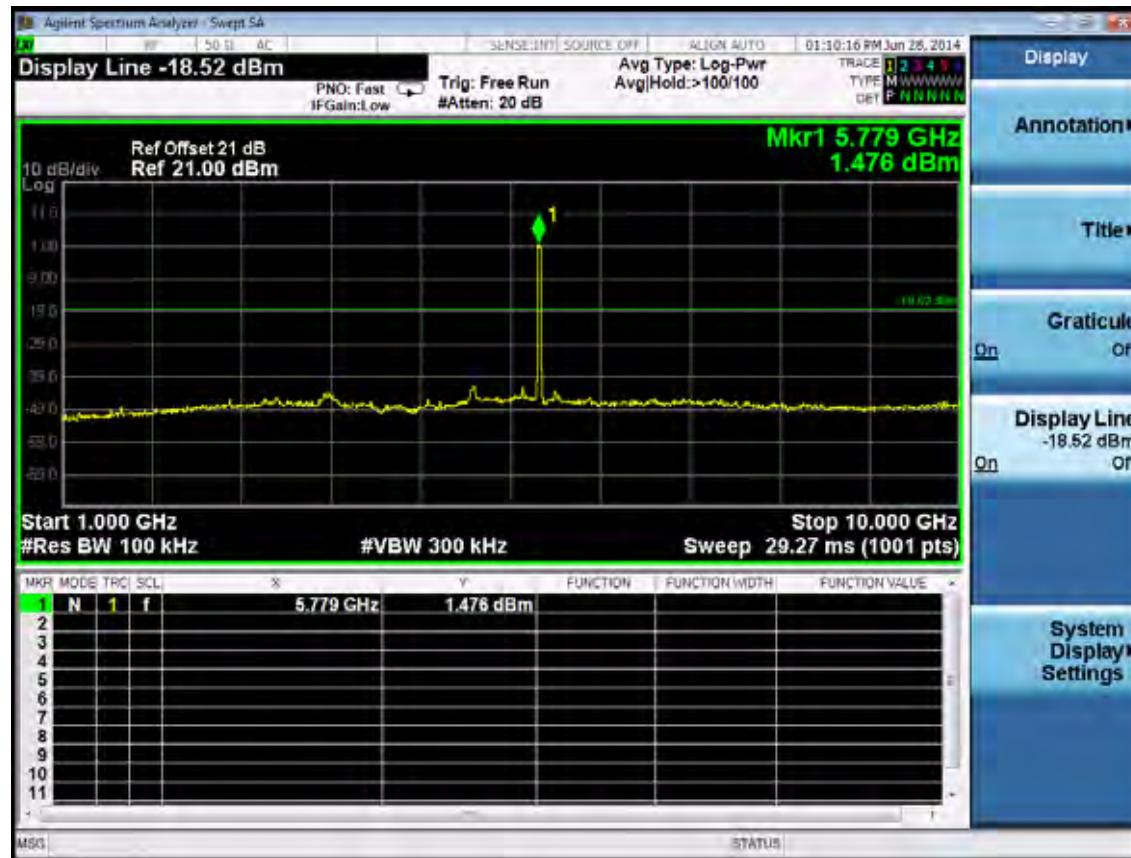
Test CH149: 5745MHz

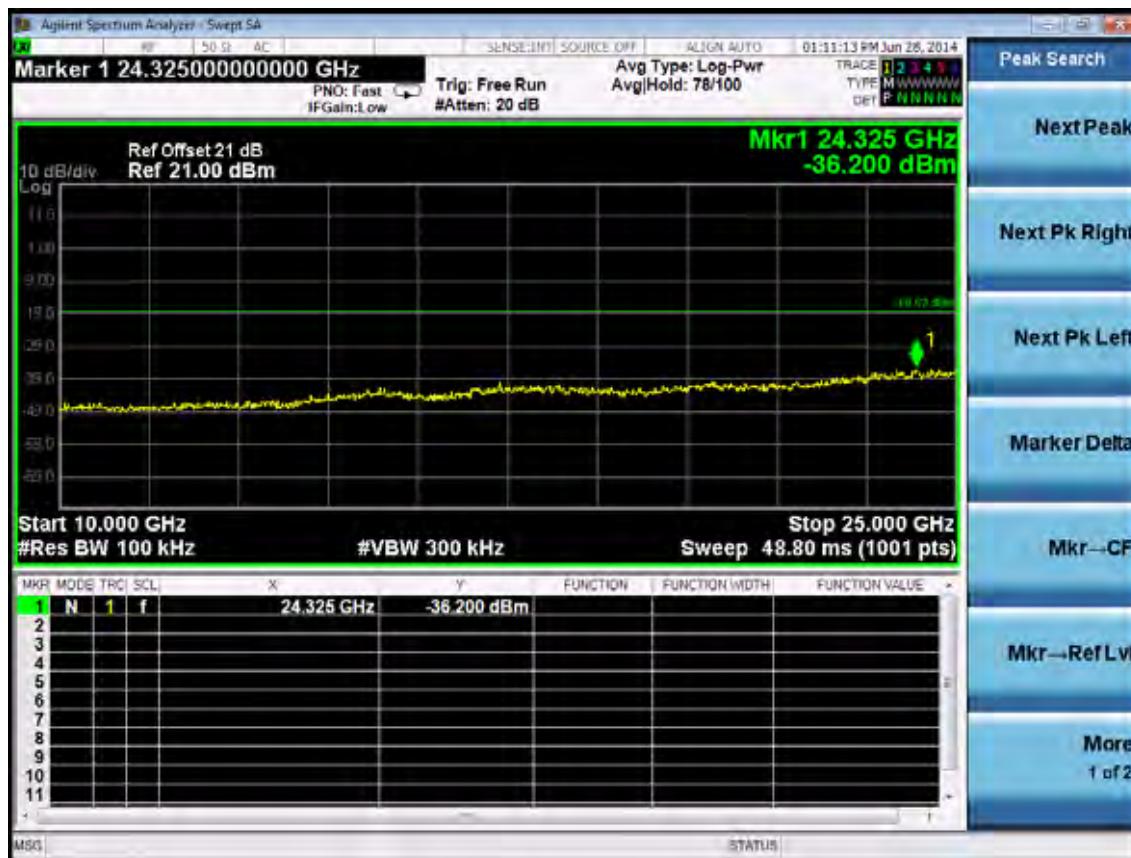
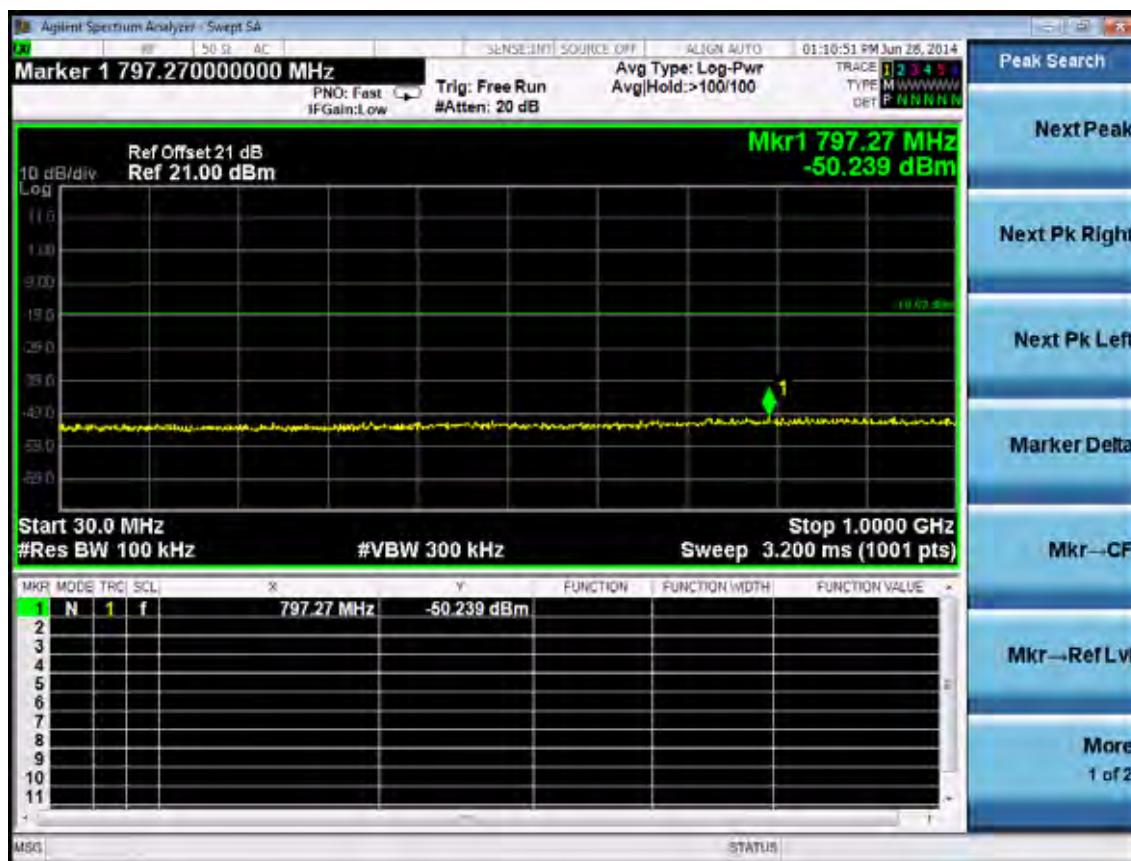




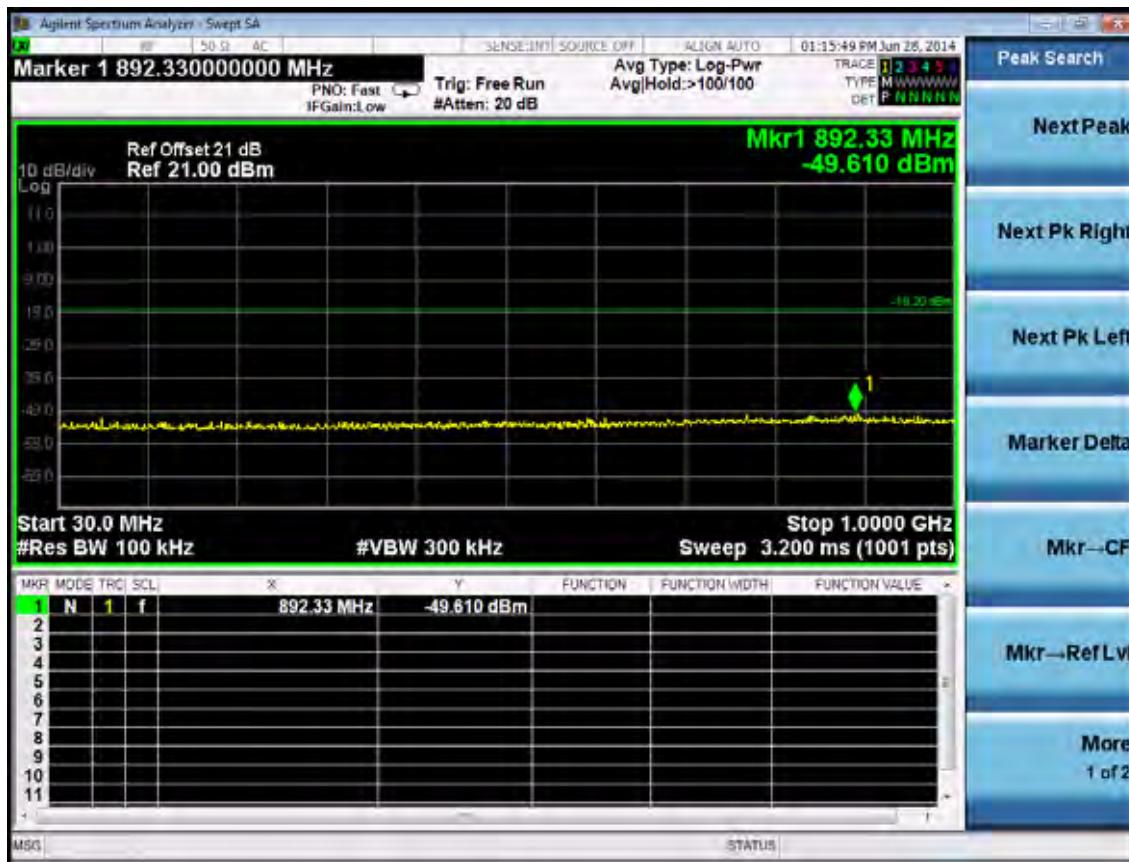
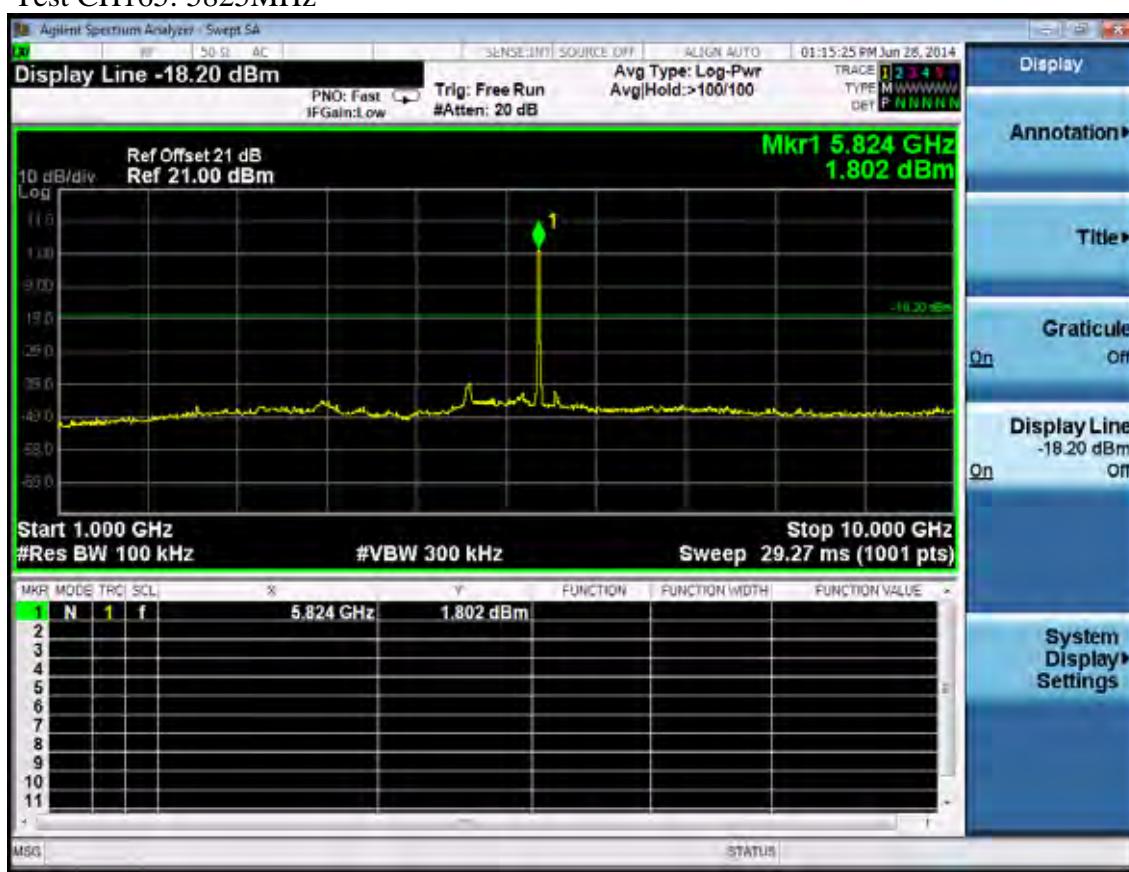


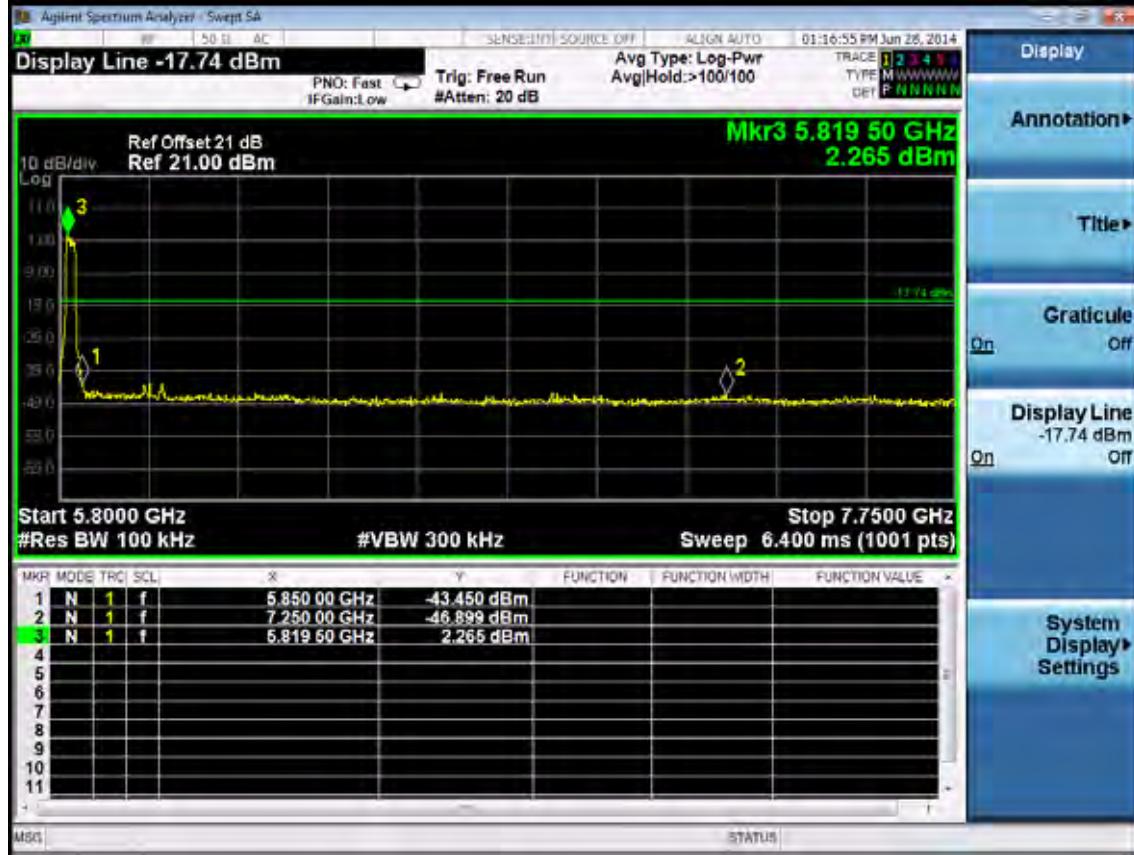
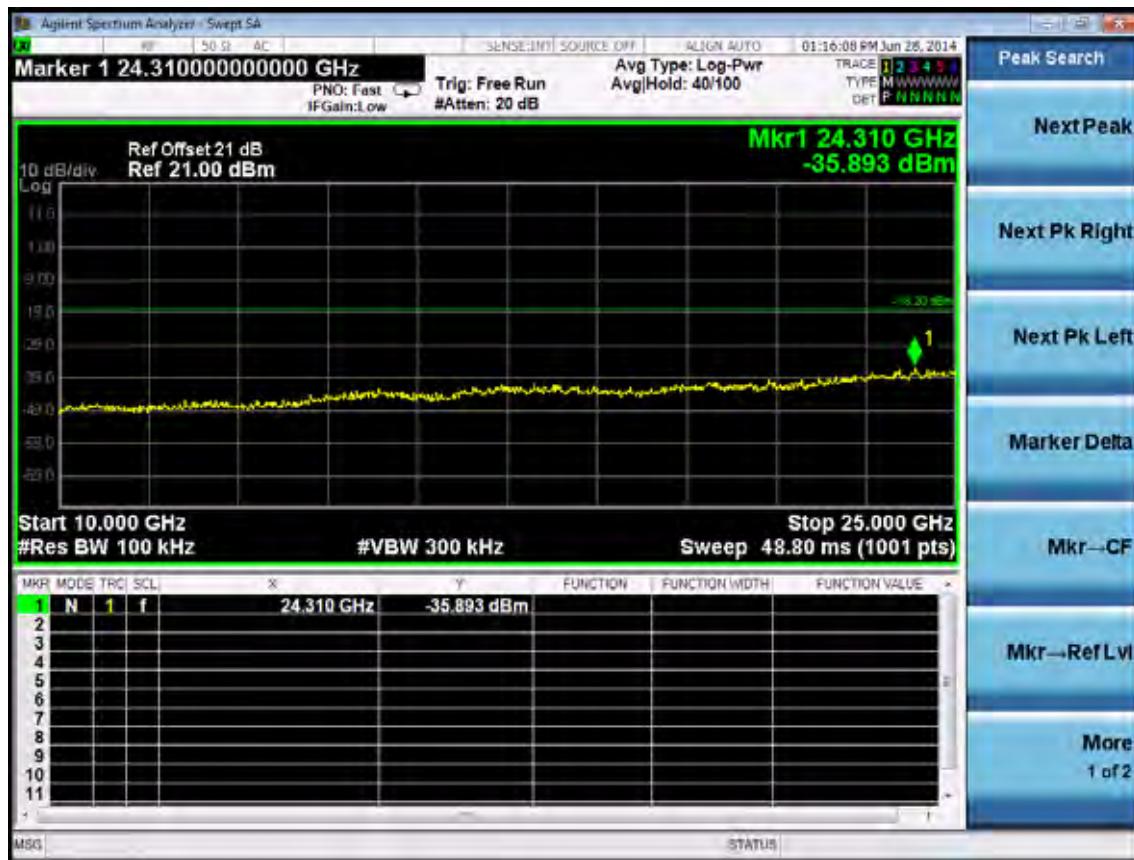
Test CH157: 5785MHz



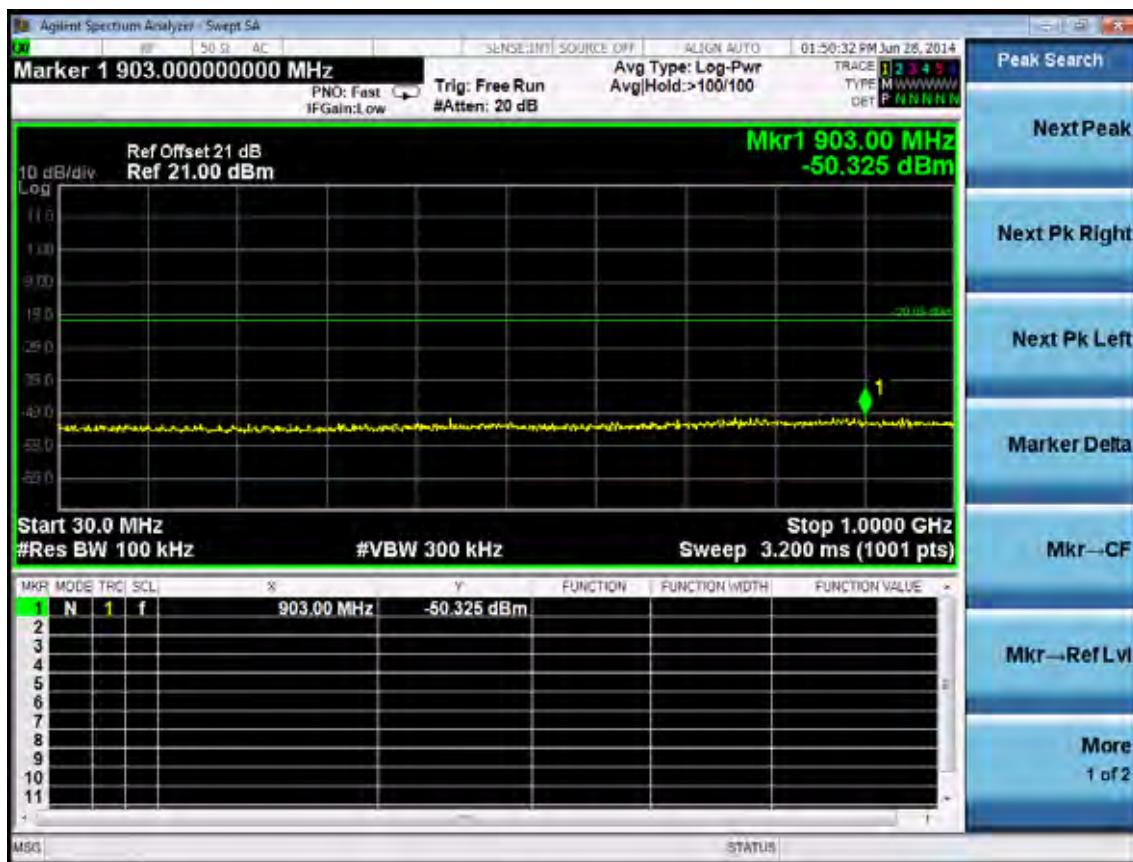
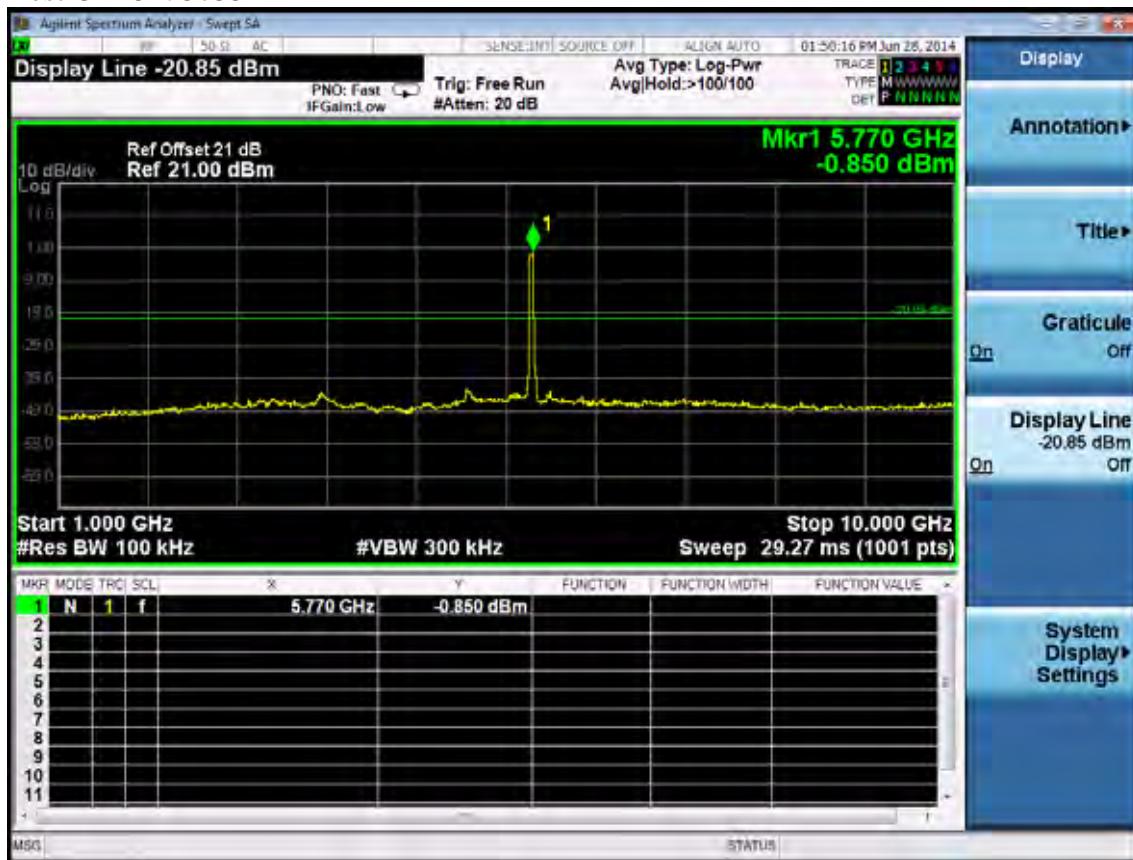


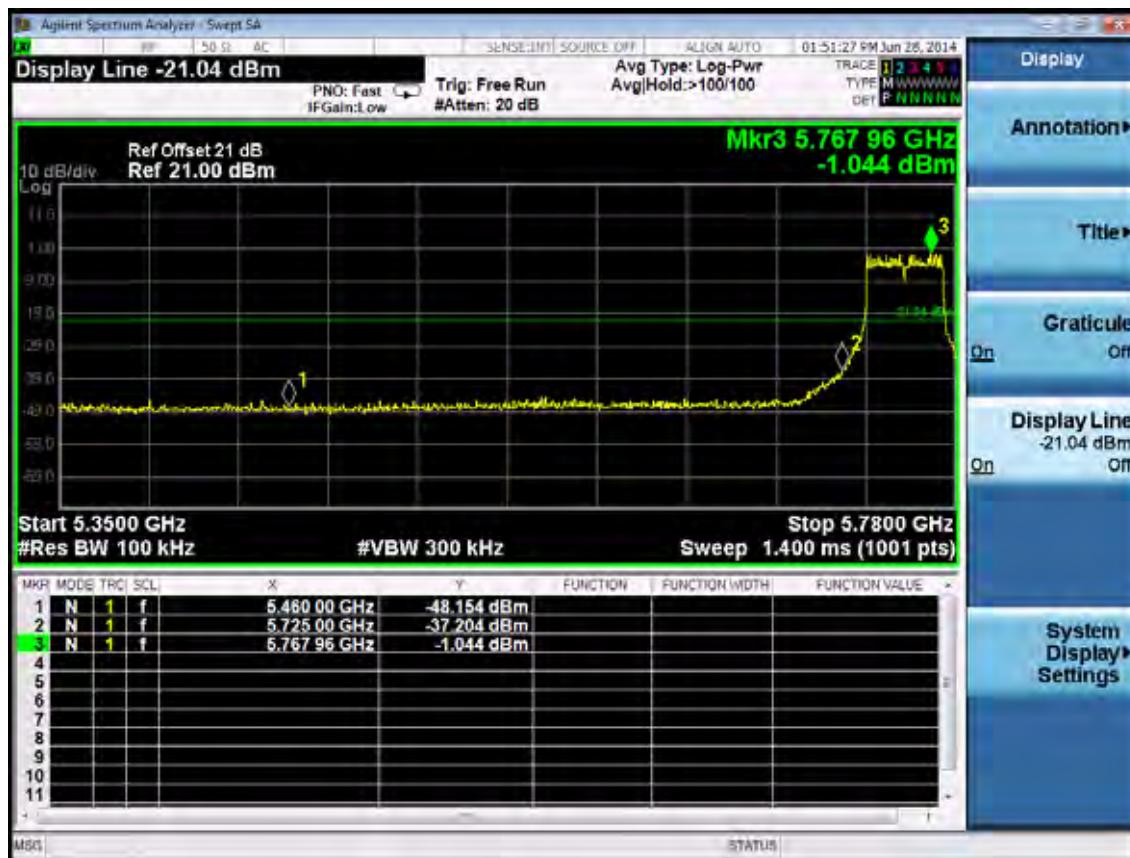
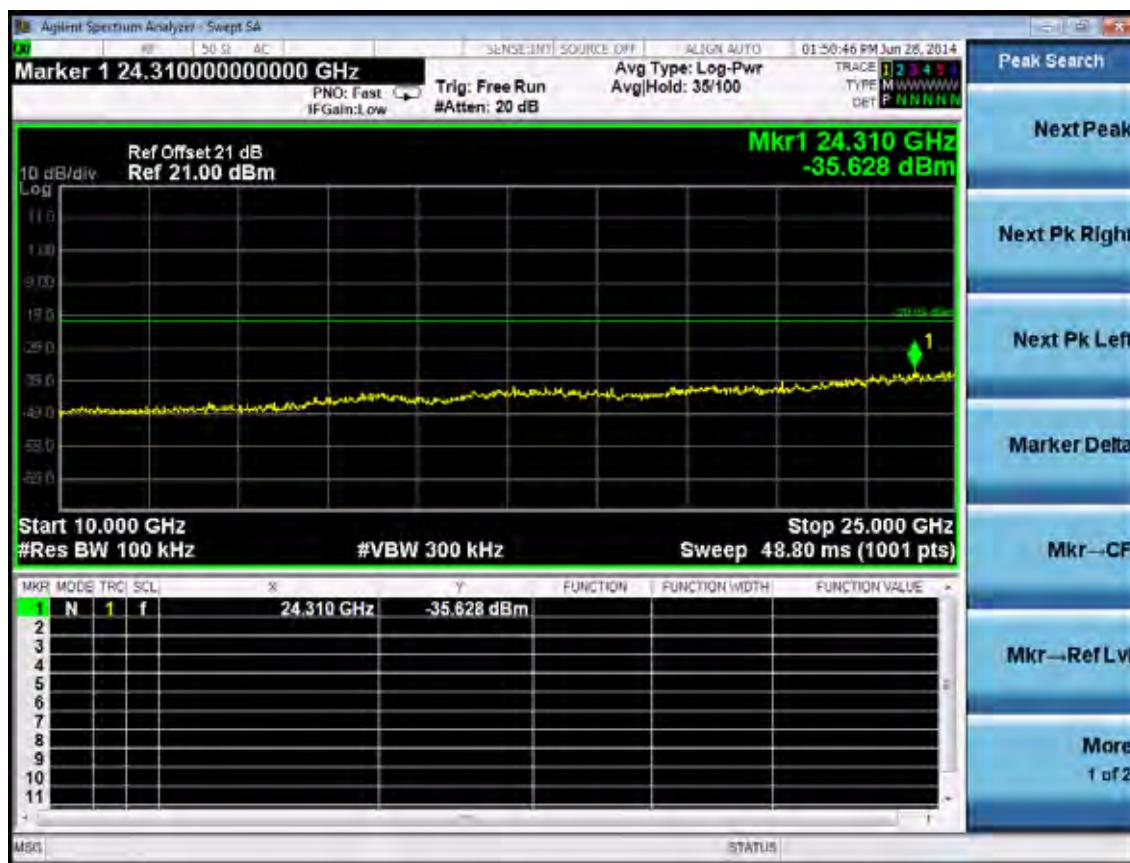
Test CH165: 5825MHz



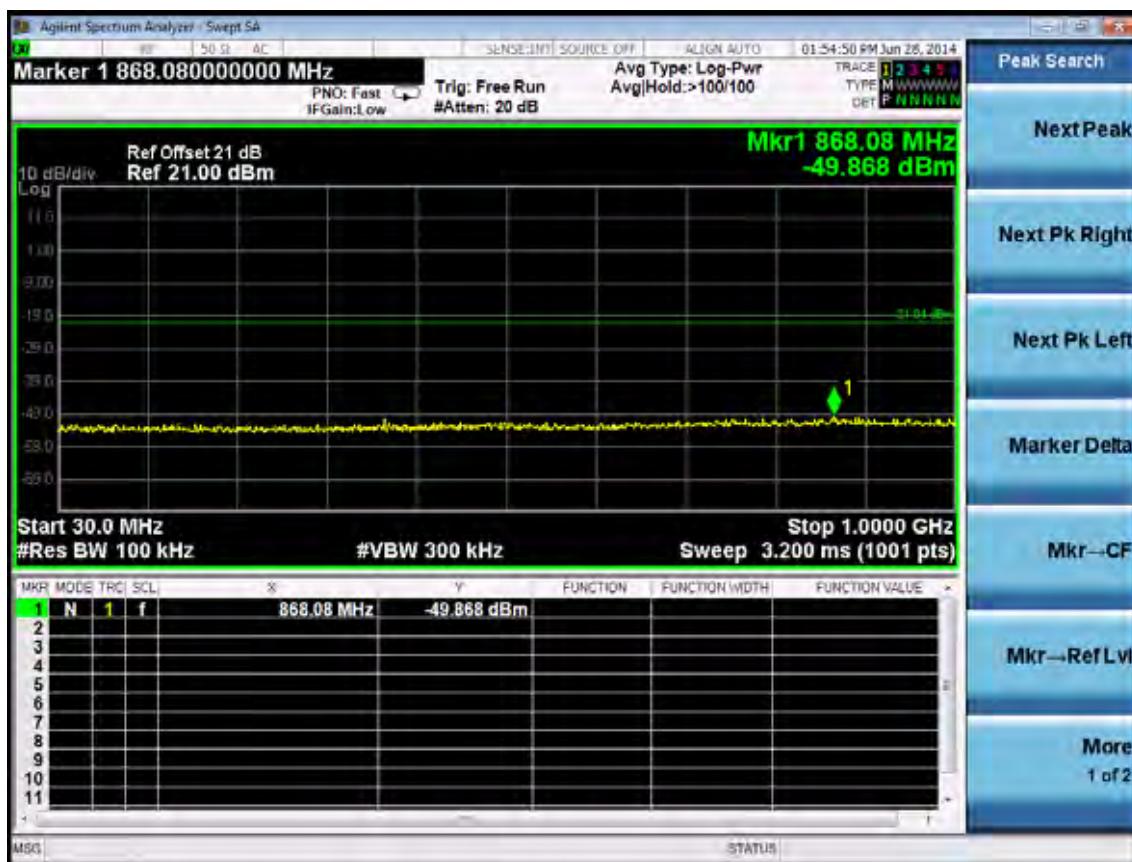
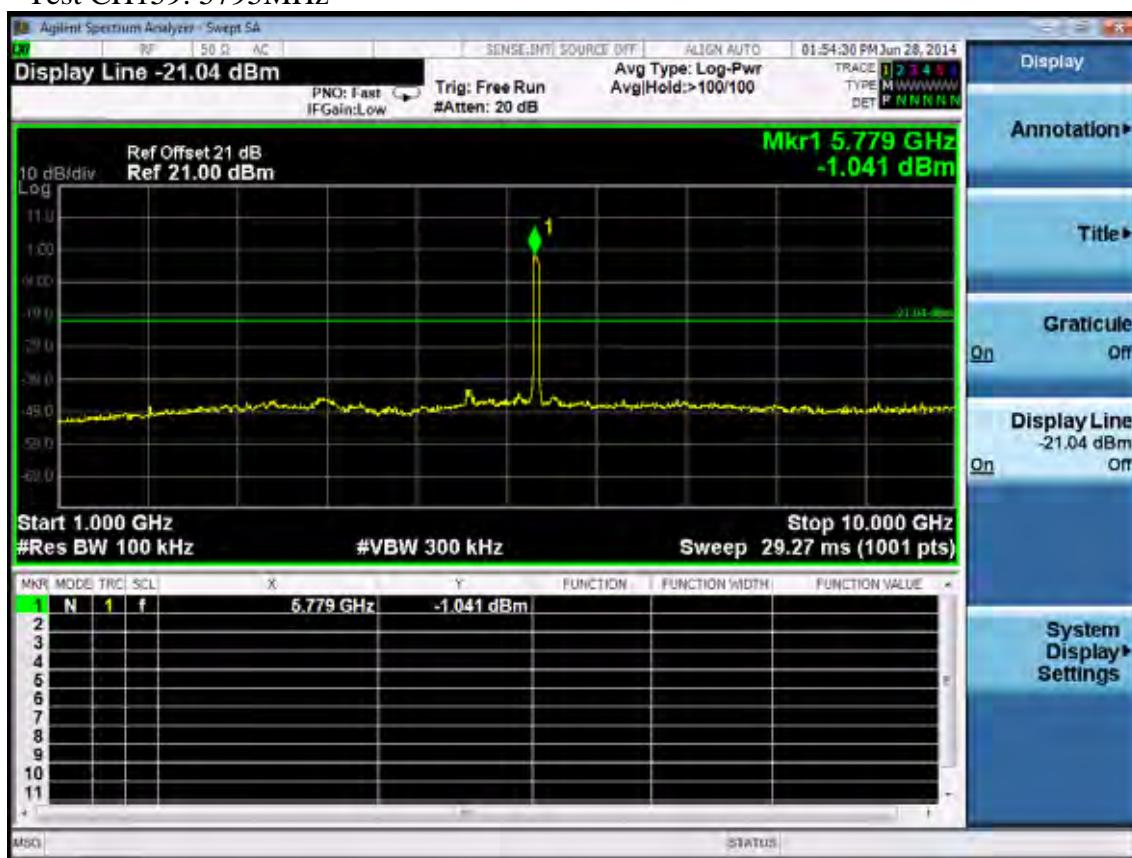


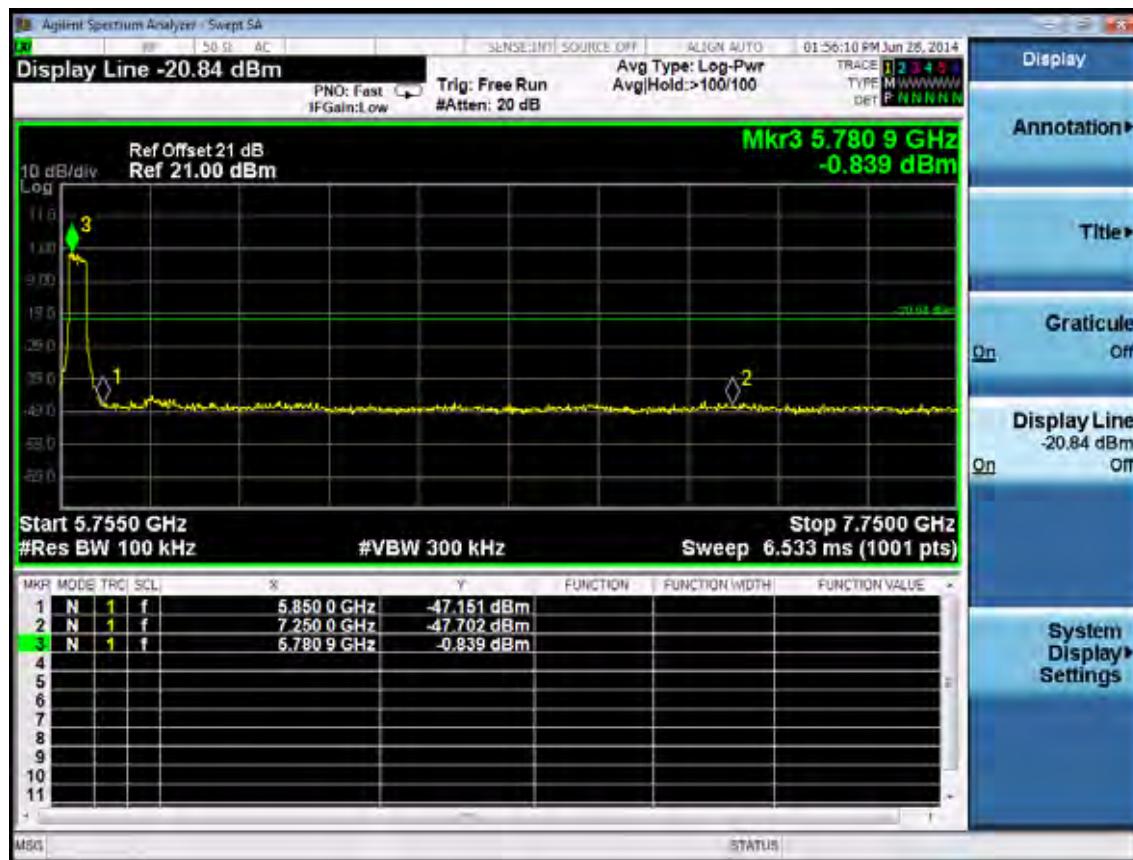
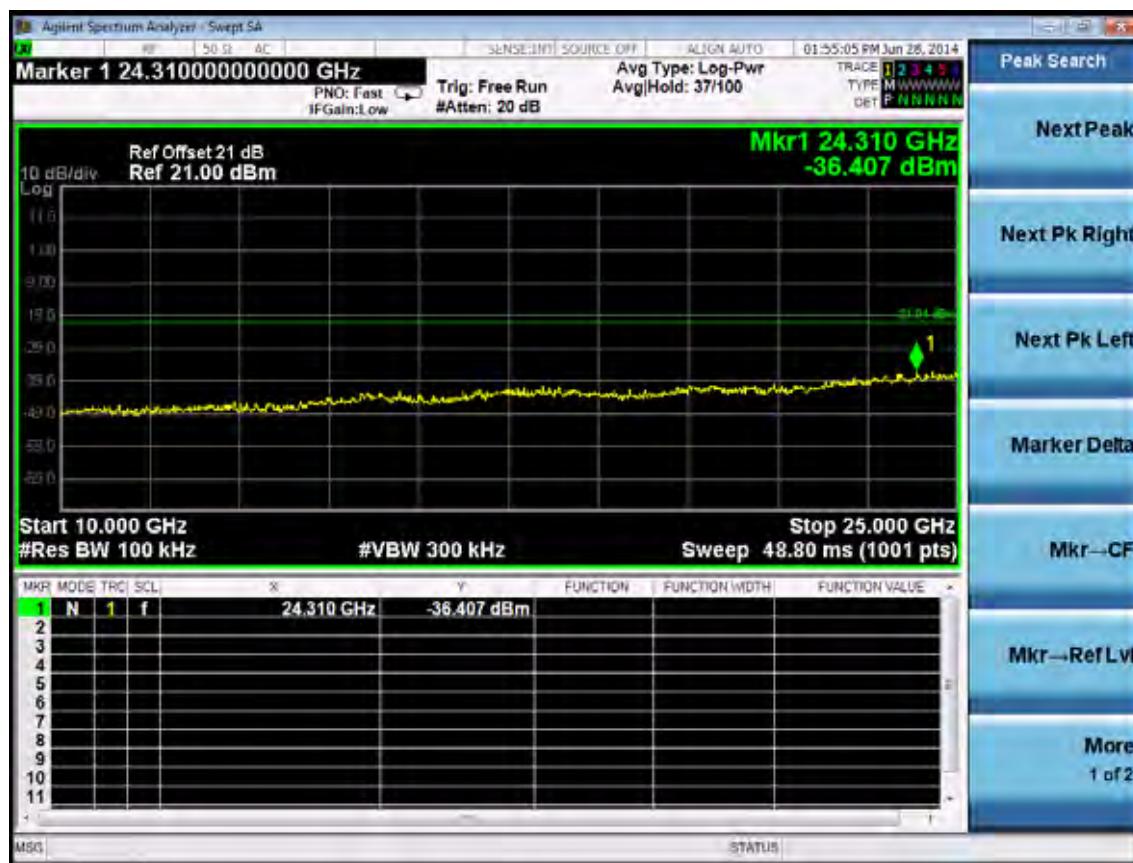
Test Mode: IEEE 802.11n HT40 TX
 Test CH151: 5755MHz





Test CH159: 5795MHz





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 2310MHz to 2390MHz and 2483.5MHz to 2500MHz restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions outside operation frequency band 2400MHz to 2483.5MHz shall be at least 20dB below the fundamental emissions, or comply with 15.209 limits.

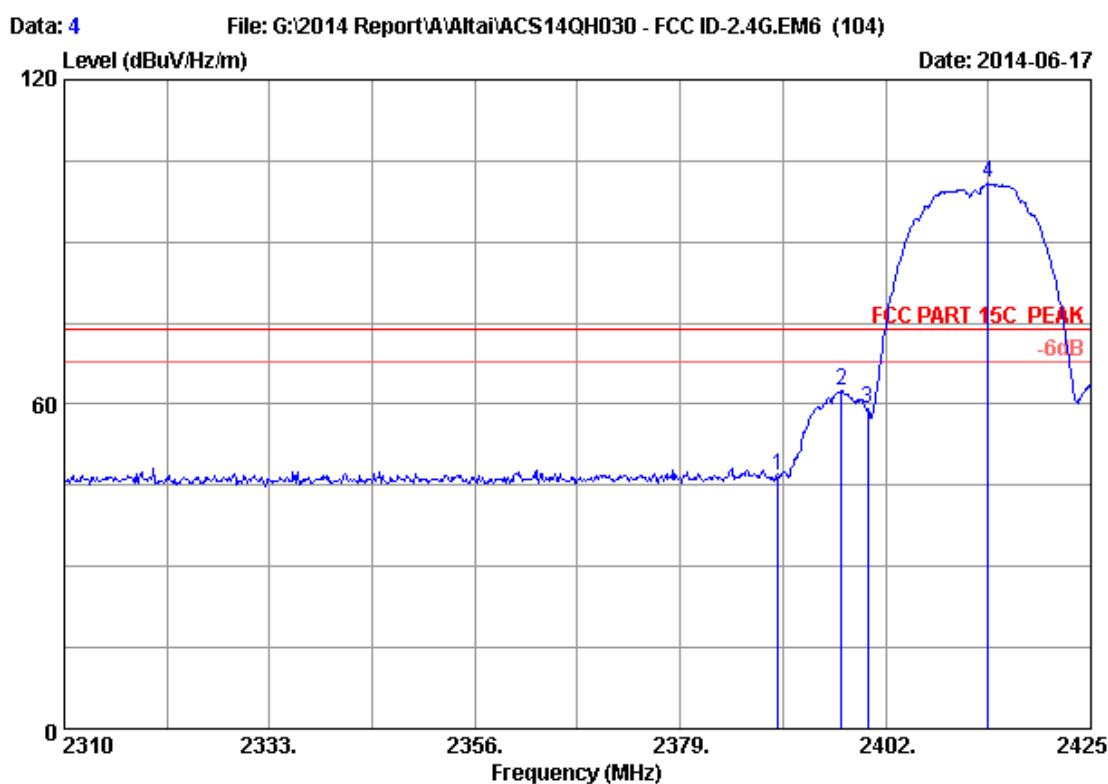
All the lower and upper band-edges emissions appearing within 5.35-5.46GHz and 7.25-7.75GHz restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions outside operation frequency band 5725MHz to 5850MHz shall be at least 20dB below the fundamental emissions, or comply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

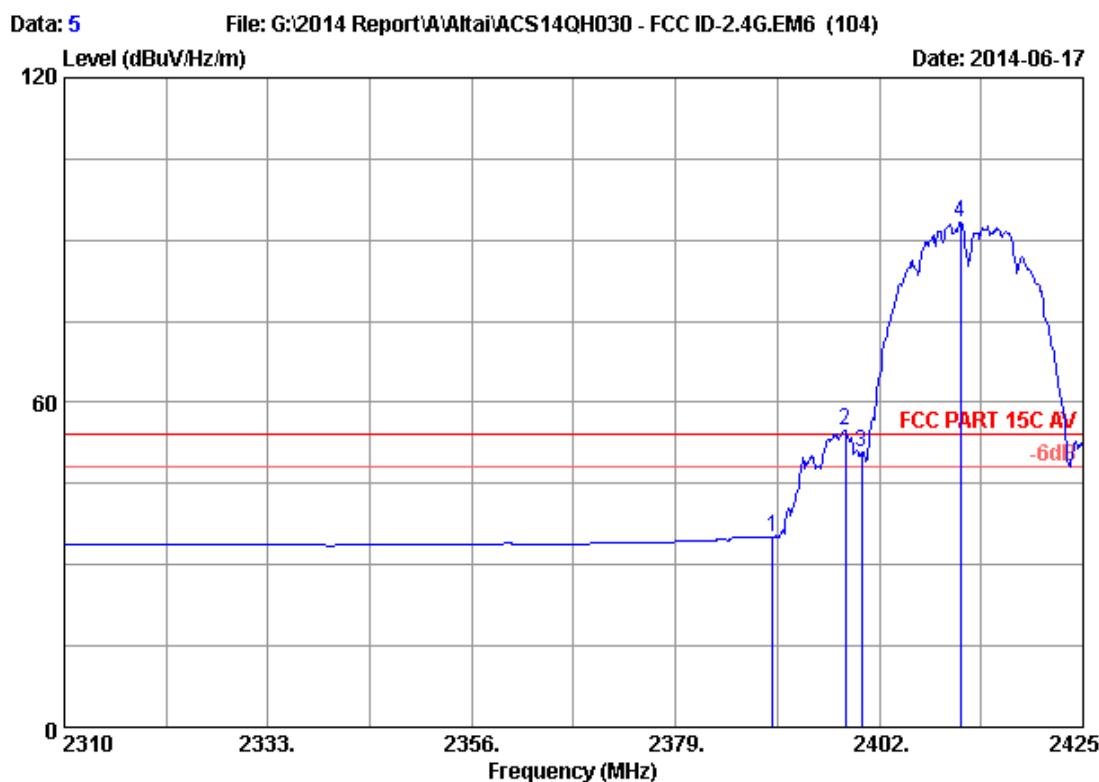
Pass (The testing data was attached in the next pages.)

2.4G:


Site no. : 3m Chamber Data no. : 4
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 24°C/56% Engineer : Leo-Li
 EUT : Altai A2-Ei Dual-band WiFi Access Point
 Power Rating : DC 56V From POE Input AC 120V/60Hz
 Test Mode : IEEE802.11b 2412MHz Tx
 M/N : WA2011N-E

No.	Freq. (MHz)	Ant.	Cable	AMP	Emission				Remark
		Factor (dB/m)	Loss (dB)	factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	
1	2390.000	28.16	5.78	35.70	48.54	46.78	74.00	27.22	Peak
2	2397.055	28.17	5.79	35.70	64.24	62.50	74.00	11.50	Peak
3	2400.000	28.18	5.80	35.70	60.79	59.07	74.00	14.93	Peak
4	2413.500	28.21	5.82	35.70	102.51	100.84	74.00	-26.84	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.



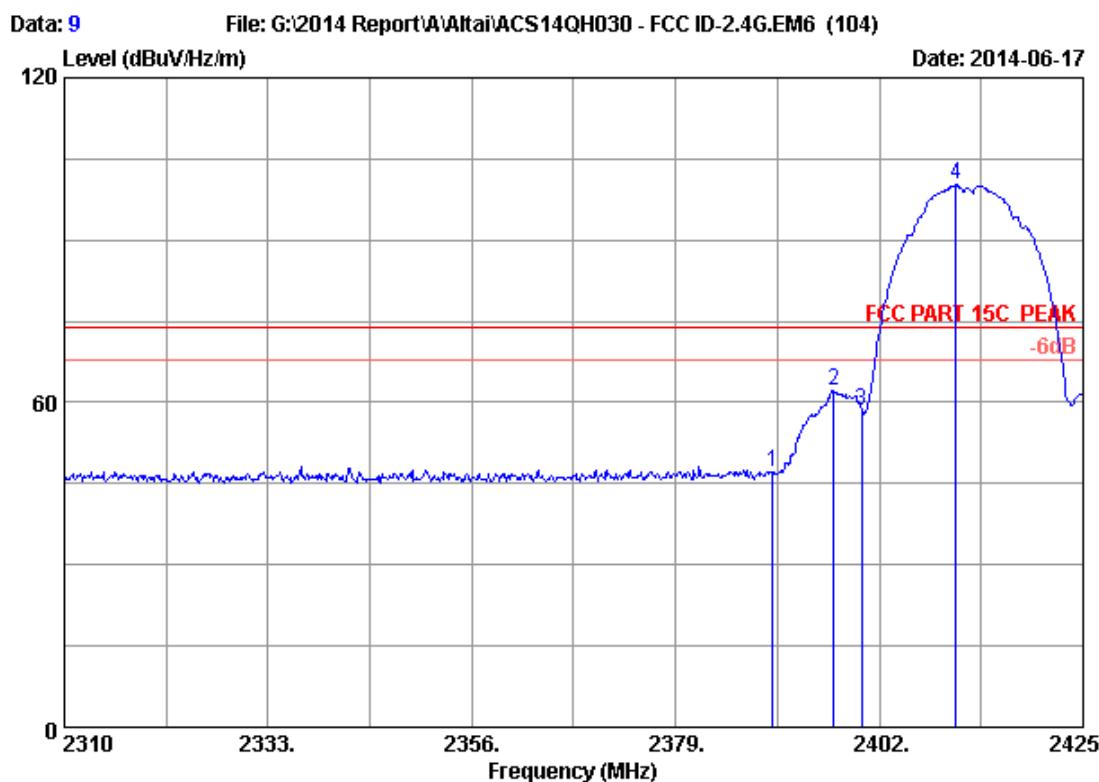
Site no. : 3m Chamber Data no. : 5
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C AV
 Env. / Ins. : 24°C/56% Engineer : Leo-Li
 EUT : Altai A2-Ei Dual-band WiFi Access Point
 Power Rating : DC 56V From POE Input AC 120V/60Hz
 Test Mode : IEEE802.11b 2412MHz Tx
 M/N : WA2011N-E

No.	Freq. (MHz)	Ant. Factor	Cable Loss (dB)	AMP factor (dB)	Emission				Margin (dB)	Remark
					Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)			
1	2390.000	28.16	5.78	35.70	36.93	35.17	54.00	18.83	Average	
2	2398.205	28.18	5.79	35.70	56.67	54.94	54.00	-0.94	Average	
3	2400.000	28.18	5.80	35.70	52.51	50.79	54.00	3.21	Average	
4	2411.200	28.20	5.81	35.70	95.06	93.37	54.00	-39.37	Average	

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading

-Amp Factor

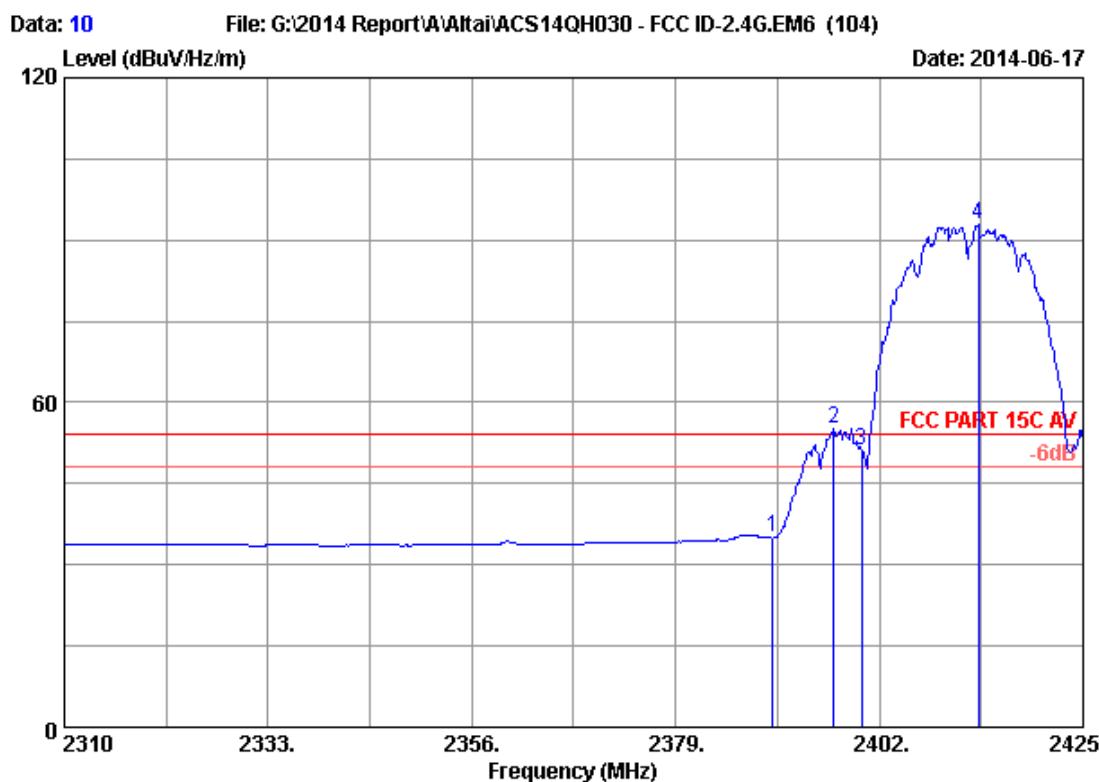
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 9
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 24°C/56% Engineer : Leo-Li
 EUT : Altai A2-Ei Dual-band WiFi Access Point
 Power Rating : DC 56V From POE Input AC 120V/60Hz
 Test Mode : IEEE802.11b 2412MHz Tx
 M/N : WA2011N-E

No.	Freq. (MHz)	Ant.	Cable	AMP	Emission				Remark
		Factor (dB/m)	Loss (dB)	factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	
1	2390.000	28.16	5.78	35.70	48.76	47.00	74.00	27.00	Peak
2	2396.825	28.17	5.79	35.70	63.97	62.23	74.00	11.77	Peak
3	2400.000	28.18	5.80	35.70	60.38	58.66	74.00	15.34	Peak
4	2410.625	28.20	5.81	35.70	101.83	100.14	74.00	-26.14	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.



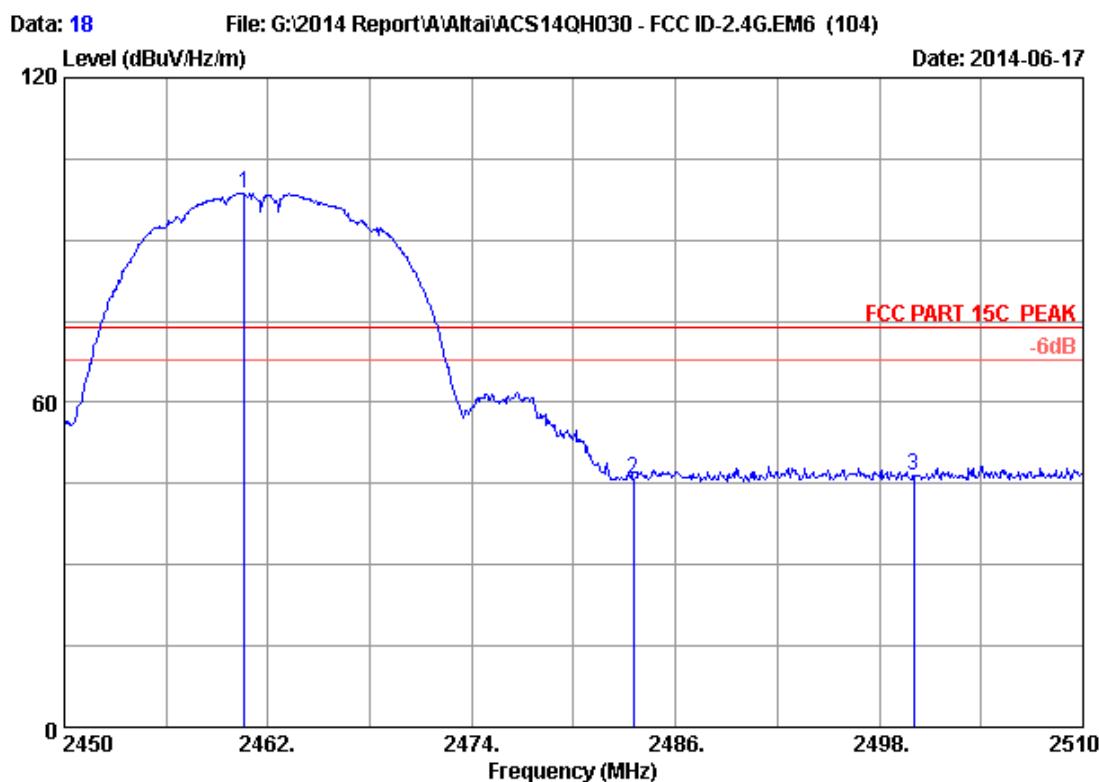
Site no. : 3m Chamber Data no. : 10
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
 Limit : FCC PART 15C AV
 Env. / Ins. : 24°C/56% Engineer : Leo-Li
 EUT : Altai A2-Ei Dual-band WiFi Access Point
 Power Rating : DC 56V From POE Input AC 120V/60Hz
 Test Mode : IEEE802.11b 2412MHz Tx
 M/N : WA2011N-E

No.	Freq. (MHz)	Ant. Factor	Cable Loss (dB)	AMP factor (dB)	Emission				Margin (dB)	Remark
					Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)			
1	2390.000	28.16	5.78	35.70	36.71	34.95	54.00	19.05	Average	
2	2396.825	28.17	5.79	35.70	57.02	55.28	54.00	-1.28	Average	
3	2400.000	28.18	5.80	35.70	52.86	51.14	54.00	2.86	Average	
4	2413.155	28.21	5.82	35.70	94.43	92.76	54.00	-38.76	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. : 18
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 24°C/56% Engineer : Leo-Li
EUT : Altai A2-Ei Dual-band WiFi Access Point
Power Rating : DC 56V From POE Input AC 120V/60Hz
Test Mode : IEEE802.11b 2462MHz Tx
M/N : WA2011N-E

No.	Freq. (MHz)	Ant.	Cable	AMP	Emission			
		Factor (dB/m)	Loss (dB)	factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)
1	2460.620	28.31	5.89	35.70	100.20	98.70	74.00	-24.70 Peak
2	2483.500	28.36	5.92	35.70	47.18	45.76	74.00	28.24 Peak
3	2500.000	28.40	5.94	35.70	47.76	46.40	74.00	27.60 Peak

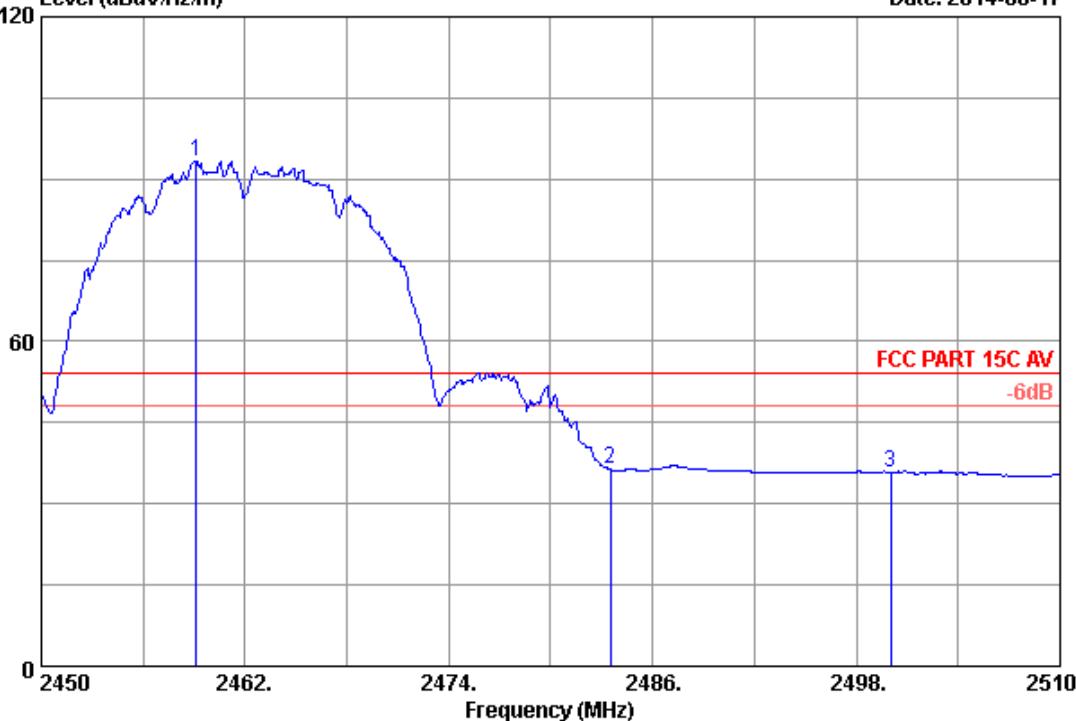
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
-Amp Factor
2. The emission levels that are 20dB below the official
limit are not reported.

Data: 19

File: G:\2014 Report\A\Altai\ACS14QH030 - FCC ID-2.4G.EM6 (104)

Level (dBuV/Hz/m)

Date: 2014-06-17

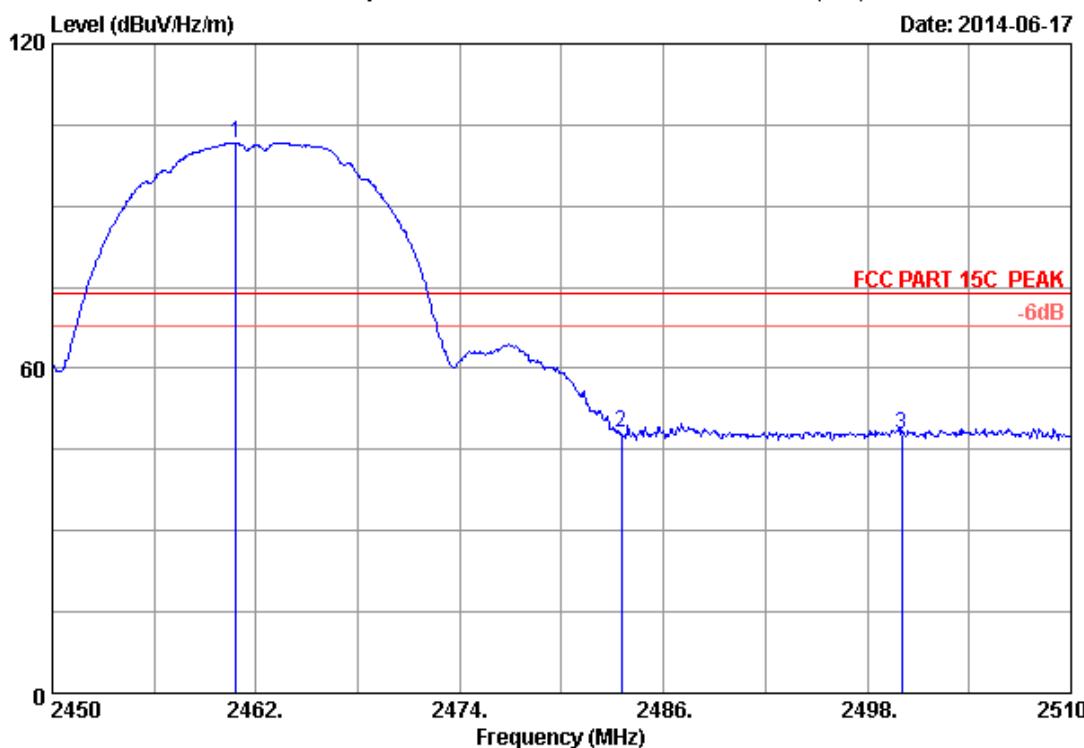


Site no. : 3m Chamber Data no. : 19
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C AV
Env. / Ins. : 24°C/56% Engineer : Leo-Li
EUT : Altai A2-Ei Dual-band WiFi Access Point
Power Rating : DC 56V From POE Input AC 120V/60Hz
Test Mode : IEEE802.11b 2462MHz Tx
M/N : WA2011N-E

No.	Freq. (MHz)	Ant. Factor	Cable Loss (dB)	AMP factor (dB)	Emission			
					Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)
1	2459.120	28.31	5.88	35.70	94.81	93.30	54.00	-39.30 QP
2	2483.500	28.36	5.92	35.70	37.76	36.34	54.00	17.66 QP
3	2500.000	28.40	5.94	35.70	37.18	35.82	54.00	18.18 QP

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.

Data: 25 File: G:\2014 Report\Altai\ACS14QH030 - FCC ID-2.4G.EM6 (104)



Site no.	:	3m Chamber	Data no.	:	25
Dis. / Ant.	:	3m 2013 3115 (4580)	Ant. pol.	:	VERTICAL
Limit	:	FCC PART 15C PEAK			
Env. / Ins.	:	24°C/56%	Engineer	:	Leo-Li
EUT	:	Altai A2-Ei Dual-band WiFi Access Point			
Power Rating	:	DC 56V From POE Input AC 120V/60Hz			
Test Mode	:	IEEE802.11b 2462MHz Tx			
M/N	:	WA2011N-E			

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Emission			
					Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)
1	2460.800	28.31	5.89	35.70	103.23	101.73	74.00	-27.73 Peak
2	2483.500	28.36	5.92	35.70	49.62	48.20	74.00	25.80 Peak
3	2500.000	28.40	5.94	35.70	49.09	47.73	74.00	26.27 Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading

-Amp Factor

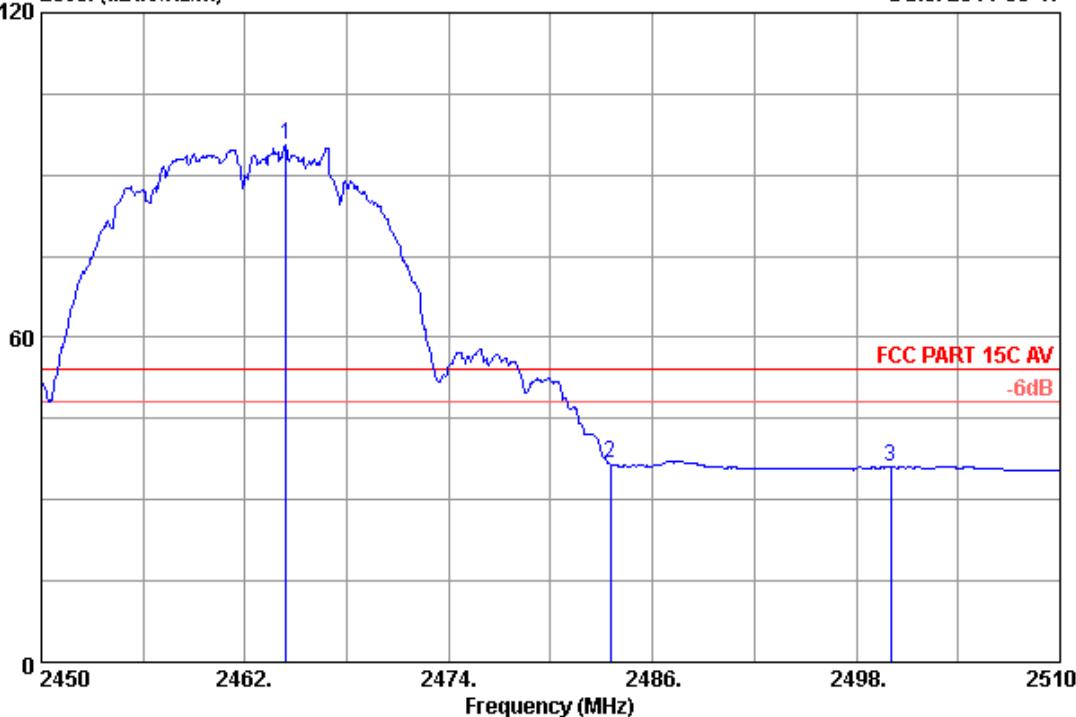
2. The emission levels that are 20dB below the official limit are not reported.

Data: 26

File: G:\2014 Report\Altai\ACS14QH030 - FCC ID-2.4G.EM6 (104)

Level (dBuV/Hz/m)

Date: 2014-06-17



Site no. : 3m Chamber Data no. : 26
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C AV
Env. / Ins. : 24°C/56% Engineer : Leo-Li
EUT : Altai A2-Ei Dual-band WiFi Access Point
Power Rating : DC 56V From POE Input AC 120V/60Hz
Test Mode : IEEE802.11b 2462MHz Tx
M/N : WA2011N-E

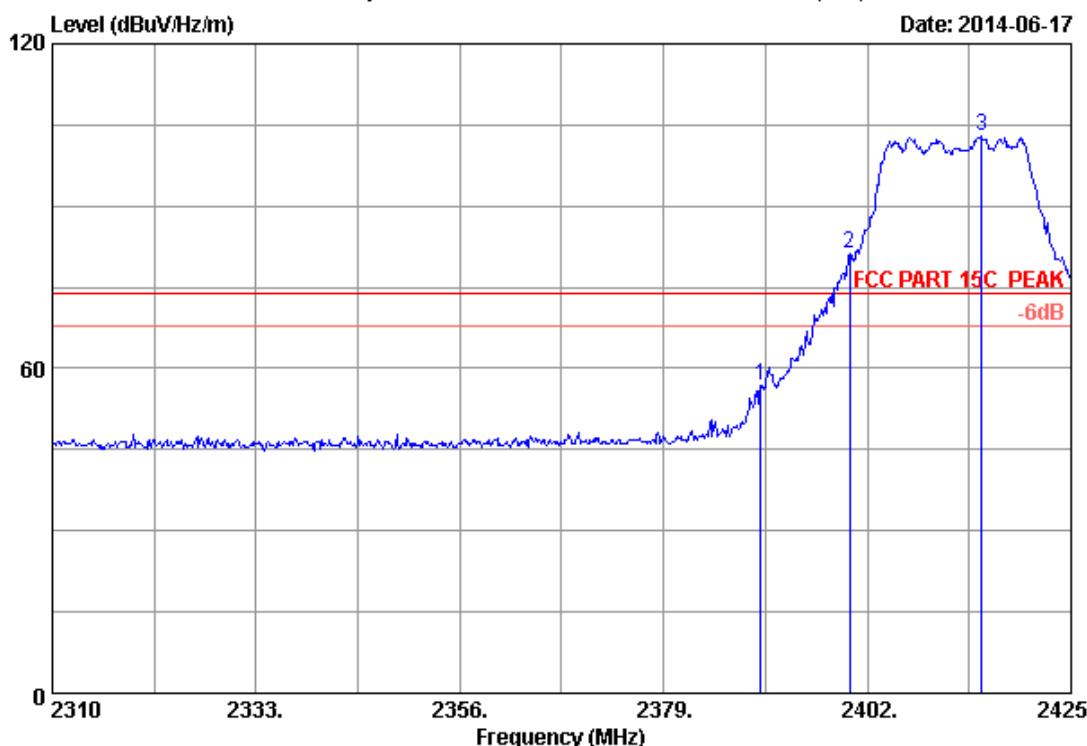
No.	Freq. (MHz)	Ant. Factor	Cable Loss (dB)	AMP factor (dB)	Emission			
					Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)
1	2464.400	28.32	5.89	35.70	96.95	95.46	54.00	-41.46 Average
2	2483.500	28.36	5.92	35.70	38.02	36.60	54.00	17.40 Average
3	2500.000	28.40	5.94	35.70	37.44	36.08	54.00	17.92 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.

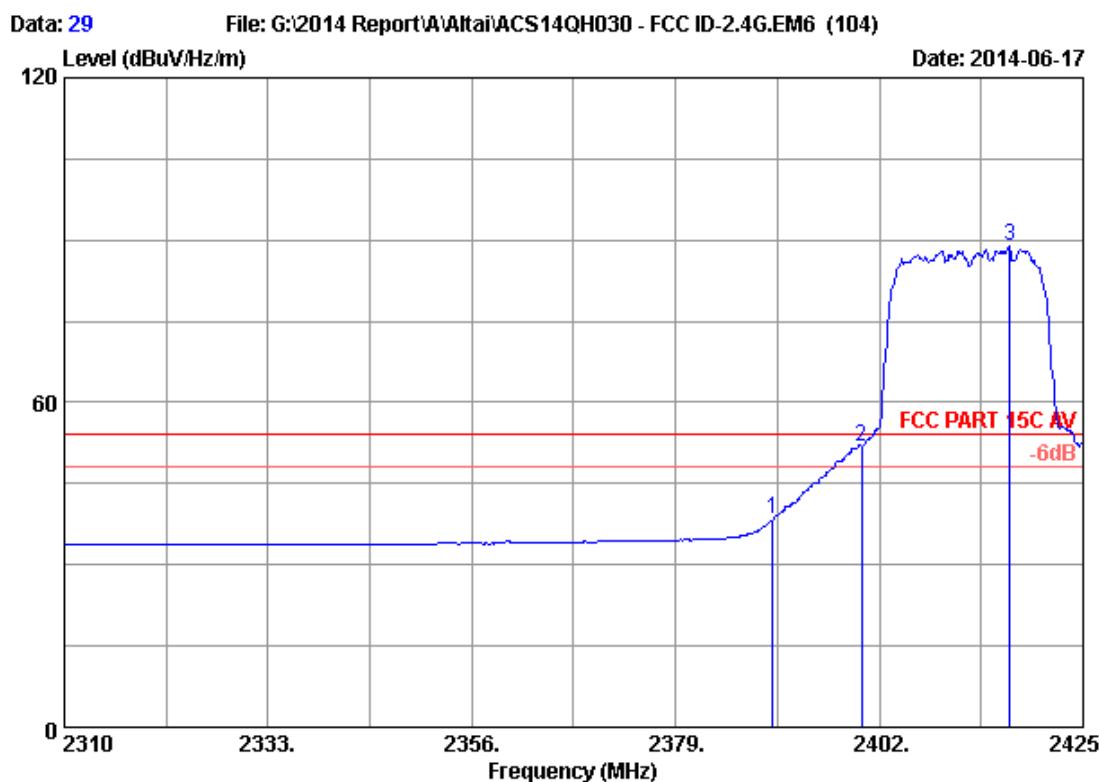
Data: 28 File: G:\2014 Report\A\Altai\ACS14QH030 - FCC ID-2.4G.EM6 (104)



Site no.	:	3m Chamber	Data no.	:	28
Dis. / Ant.	:	3m 2013 3115 (4580)	Ant. pol.	:	VERTICAL
Limit	:	FCC PART 15C PEAK			
Env. / Ins.	:	24°C/56%	Engineer	:	Leo-Li
EUT	:	Altai A2-Ei Dual-band WiFi Access Point			
Power Rating	:	DC 56V From POE Input AC 120V/60Hz			
Test Mode	:	IEEE802.11g 2412MHz Tx			
M/N	:	WA2011N-E			

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Emission			
					Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)
1	2390.000	28.16	5.78	35.70	58.62	56.86	74.00	17.14 Peak
2	2400.000	28.18	5.80	35.70	82.97	81.25	74.00	-7.25 Peak
3	2414.880	28.21	5.82	35.70	104.59	102.92	74.00	-28.92 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.



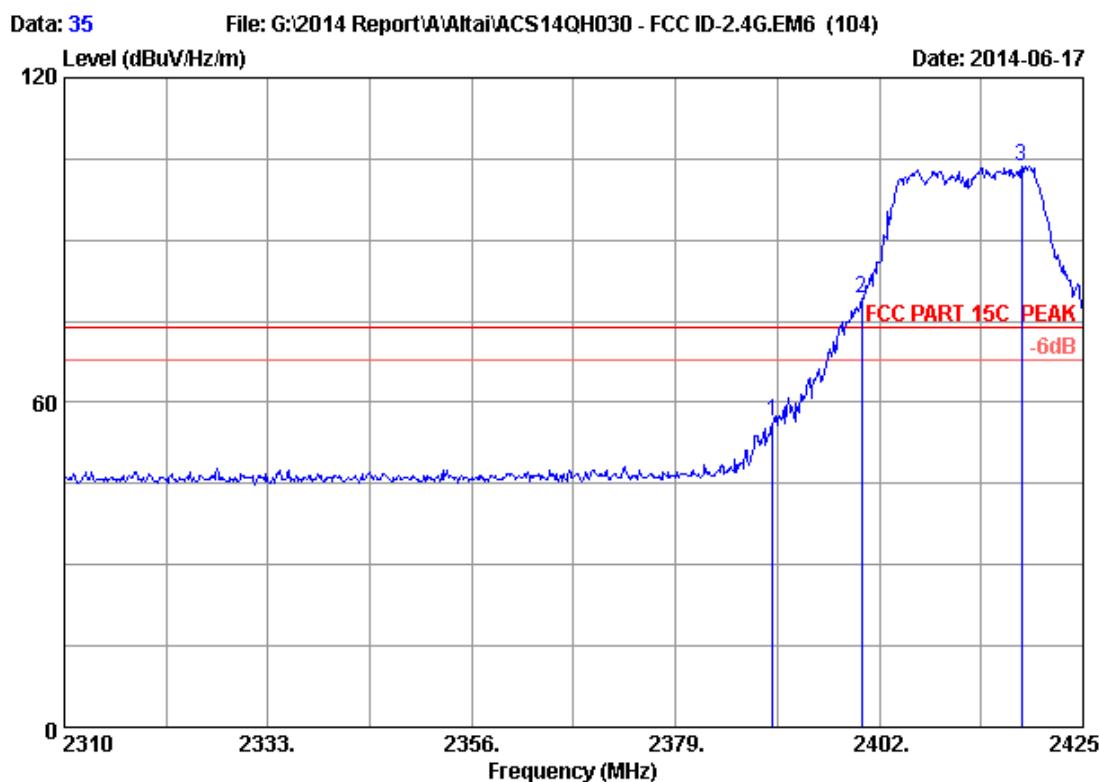
Site no. : 3m Chamber Data no. : 29
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C AV
Env. / Ins. : 24°C/56% Engineer : Leo-Li
EUT : Altai A2-Ei Dual-band WiFi Access Point
Power Rating : DC 56V From POE Input AC 120V/60Hz
Test Mode : IEEE802.11g 2412MHz Tx
M/N : WA2011N-E

No.	Freq. (MHz)	Ant.	Cable	AMP	Emission				
		Factor (dB/m)	Loss (dB)	factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.000	28.16	5.78	35.70	40.25	38.49	54.00	15.51	Average
2	2400.000	28.18	5.80	35.70	53.68	51.96	54.00	2.04	Average
3	2416.720	28.22	5.82	35.70	90.59	88.93	54.00	-34.93	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading

-Amp Factor

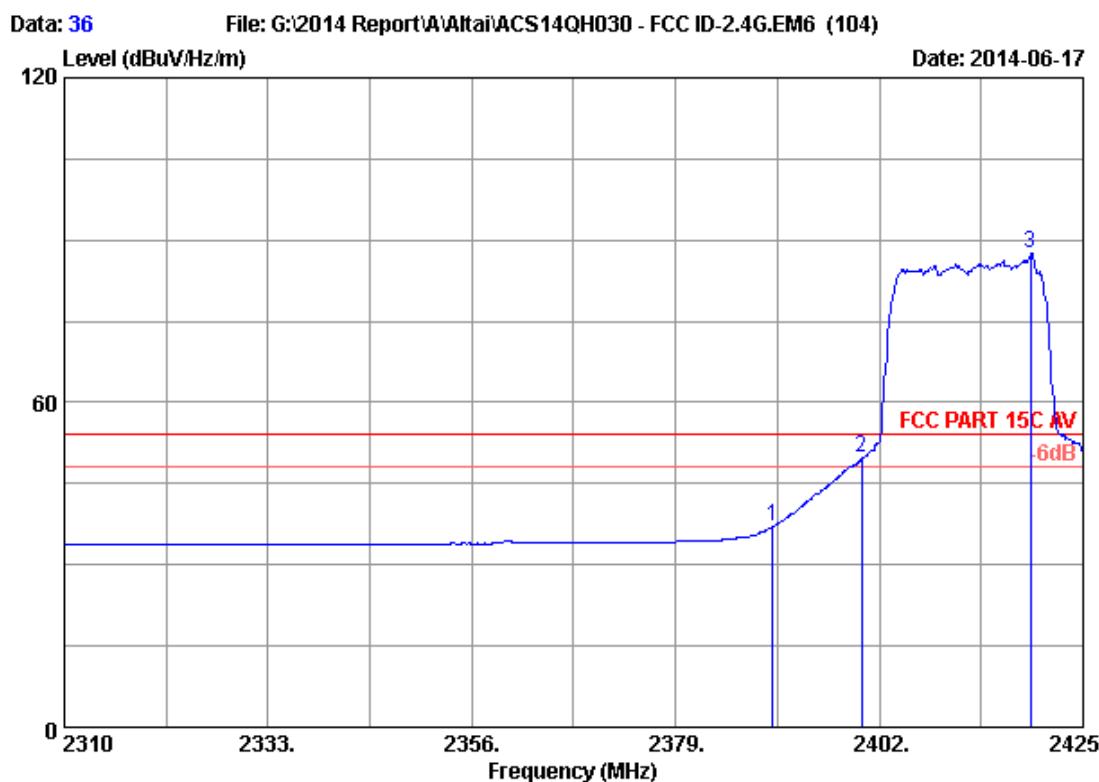
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 35
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 24°C/56% Engineer : Leo-Li
 EUT : Altai A2-Ei Dual-band WiFi Access Point
 Power Rating : DC 56V From POE Input AC 120V/60Hz
 Test Mode : IEEE802.11g 2412MHz Tx
 M/N : WA2011N-E

No.	Freq. (MHz)	Ant. Factor	Cable Loss (dB)	AMP factor (dB)	Emission			
					Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)
1	2390.000	28.16	5.78	35.70	58.25	56.49	74.00	17.51 Peak
2	2400.000	28.18	5.80	35.70	80.81	79.09	74.00	-5.09 Peak
3	2418.100	28.22	5.82	35.70	105.39	103.73	74.00	-29.73 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.



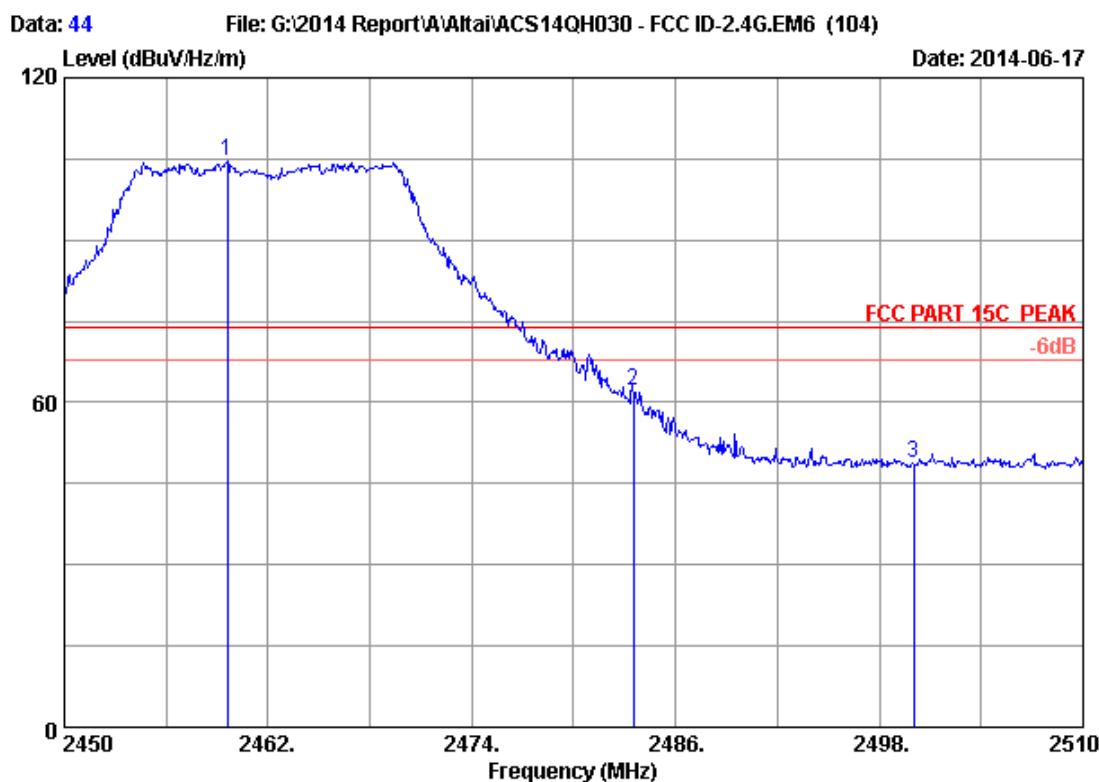
Site no. : 3m Chamber Data no. : 36
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C AV
 Env. / Ins. : 24°C/56% Engineer : Leo-Li
 EUT : Altai A2-Ei Dual-band WiFi Access Point
 Power Rating : DC 56V From POE Input AC 120V/60Hz
 Test Mode : IEEE802.11g 2412MHz Tx
 M/N : WA2011N-E

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Emission			
					Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)
1	2390.000	28.16	5.78	35.70	38.84	37.08	54.00	16.92 Average
2	2400.000	28.18	5.80	35.70	51.36	49.64	54.00	4.36 Average
3	2419.020	28.22	5.82	35.70	89.20	87.54	54.00	-33.54 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. : 44
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 24°C/56% Engineer : Leo-Li
EUT : Altai A2-Ei Dual-band WiFi Access Point
Power Rating : DC 56V From POE Input AC 120V/60Hz
Test Mode : IEEE802.11g 2462MHz Tx
M/N : WA2011N-E

No.	Freq. (MHz)	Ant. Factor	Cable Loss	AMP factor	Emission			
					Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)
1	2459.600	28.31	5.88	35.70	106.02	104.51	74.00	-30.51 Peak
2	2483.500	28.36	5.92	35.70	63.61	62.19	74.00	11.81 Peak
3	2500.000	28.40	5.94	35.70	50.21	48.85	74.00	25.15 Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading

-Amp Factor

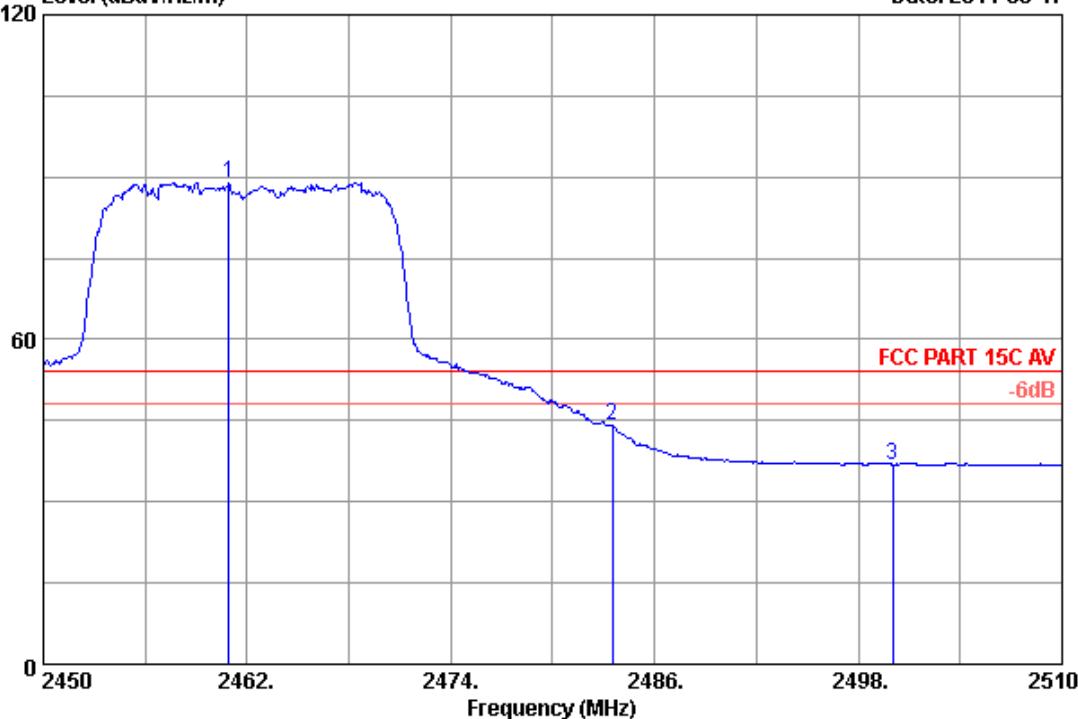
2. The emission levels that are 20dB below the official limit are not reported.

Data: 45

File: G:\2014 Report\A\Altai\ACS14QH030 - FCC ID-2.4G.EM6 (104)

Level (dBuV/Hz/m)

Date: 2014-06-17



Site no. : 3m Chamber Data no. : 45
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C AV
Env. / Ins. : 24°C/56% Engineer : Leo-Li
EUT : Altai A2-Ei Dual-band WiFi Access Point
Power Rating : DC 56V From POE Input AC 120V/60Hz
Test Mode : IEEE802.11g 2462MHz Tx
M/N : WA2011N-E

No.	Freq. (MHz)	Ant. Factor	Cable Loss (dB)	AMP factor (dB)	Emission			
					Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)
1	2460.920	28.31	5.89	35.70	90.55	89.05	54.00	-35.05 Average
2	2483.500	28.36	5.92	35.70	45.46	44.04	54.00	9.96 Average
3	2500.000	28.40	5.94	35.70	38.25	36.89	54.00	17.11 Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading

-Amp Factor

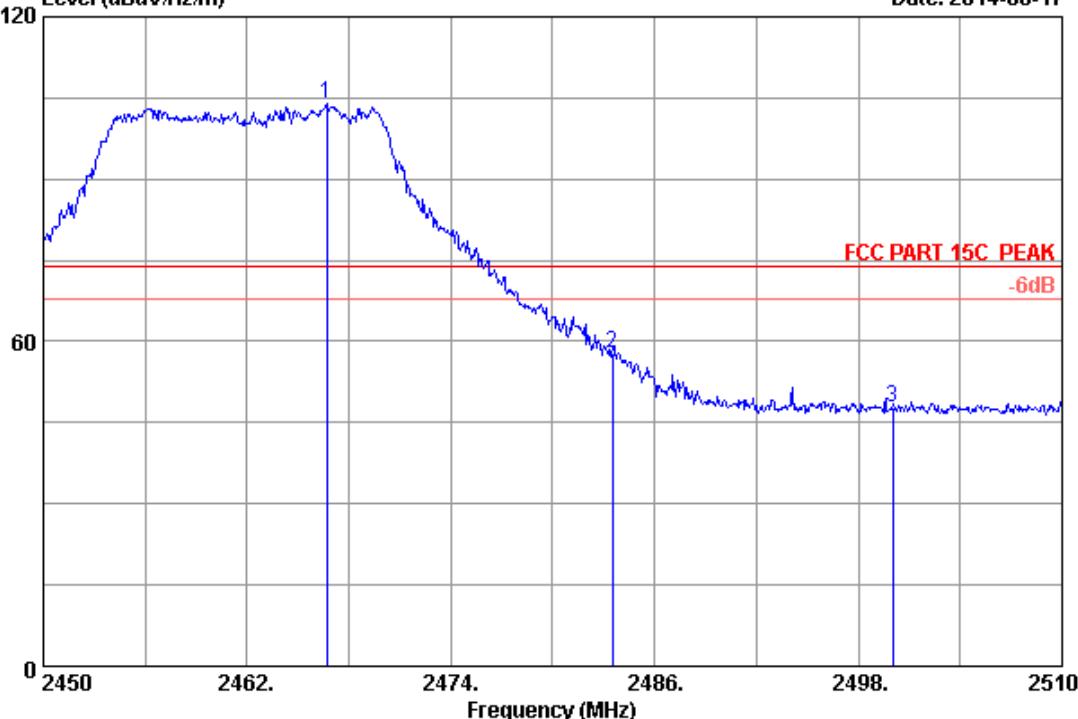
2. The emission levels that are 20dB below the official limit are not reported.

Data: 49

File: G:\2014 Report\Altai\ACS14QH030 - FCC ID-2.4G.EM6 (104)

Level (dBuV/Hz/m)

Date: 2014-06-17



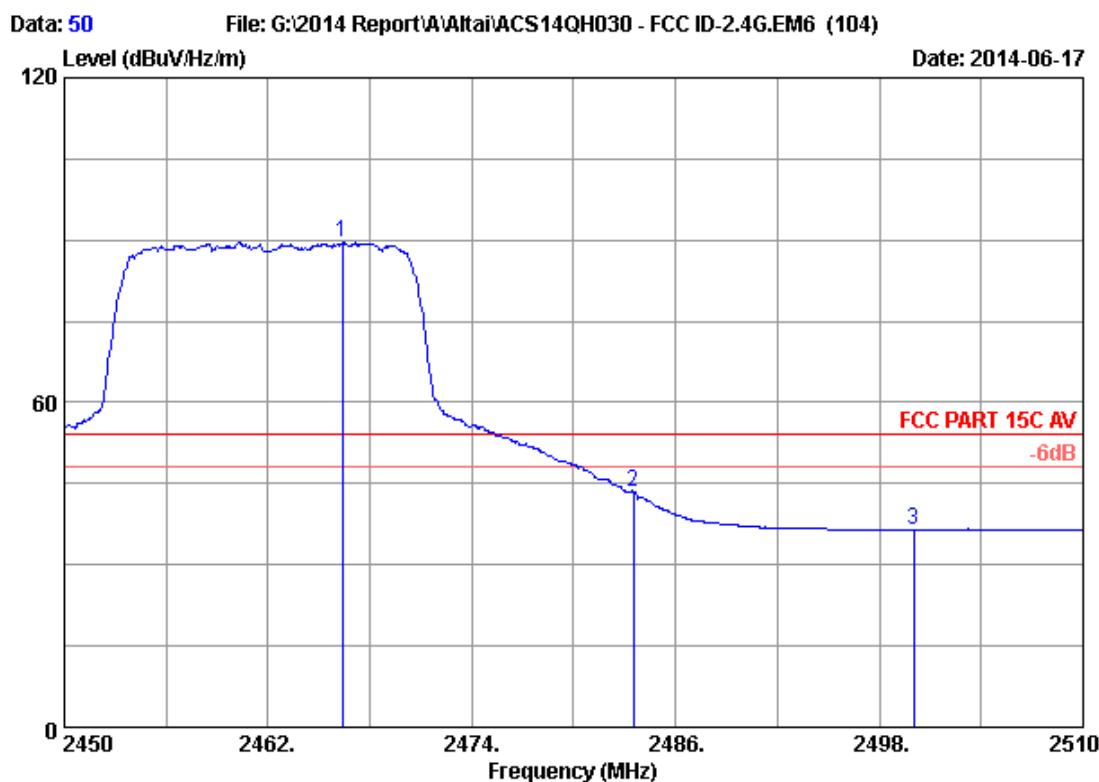
Site no. : 3m Chamber Data no. : 49
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 24°C/56% Engineer : Leo-Li
EUT : Altai A2-Ei Dual-band WiFi Access Point
Power Rating : DC 56V From POE Input AC 120V/60Hz
Test Mode : IEEE802.11g 2462MHz Tx
M/N : WA2011N-E

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Emission			
					Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)
1	2466.680	28.33	5.89	35.70	105.40	103.92	74.00	-29.92 Peak
2	2483.500	28.36	5.92	35.70	59.24	57.82	74.00	16.18 Peak
3	2500.000	28.40	5.94	35.70	49.21	47.85	74.00	26.15 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.

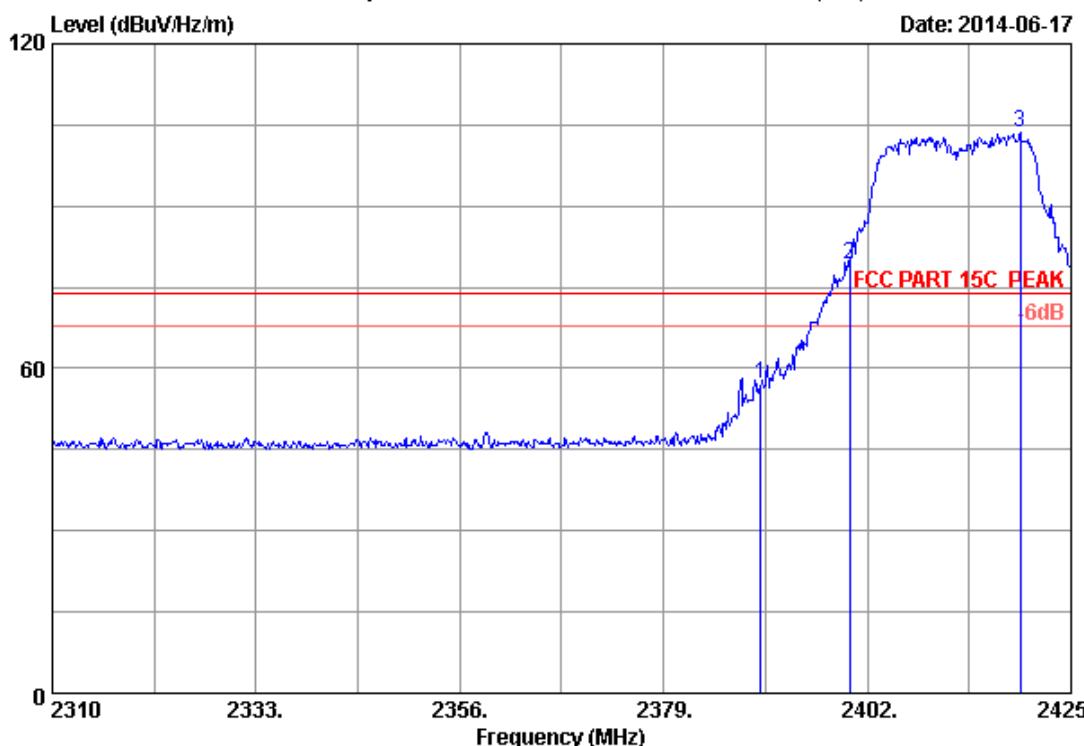


Site no. : 3m Chamber Data no. : 50
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C AV
 Env. / Ins. : 24°C/56% Engineer : Leo-Li
 EUT : Altai A2-Ei Dual-band WiFi Access Point
 Power Rating : DC 56V From POE Input AC 120V/60Hz
 Test Mode : IEEE802.11g 2462MHz Tx
 M/N : WA2011N-E

No.	Freq. (MHz)	Ant. Factor	Cable Loss (dB)	AMP factor (dB)	Emission			
					Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)
1	2466.380	28.33	5.89	35.70	91.06	89.58	54.00	-35.58 Average
2	2483.500	28.36	5.92	35.70	45.03	43.61	54.00	10.39 Average
3	2500.000	28.40	5.94	35.70	37.95	36.59	54.00	17.41 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.

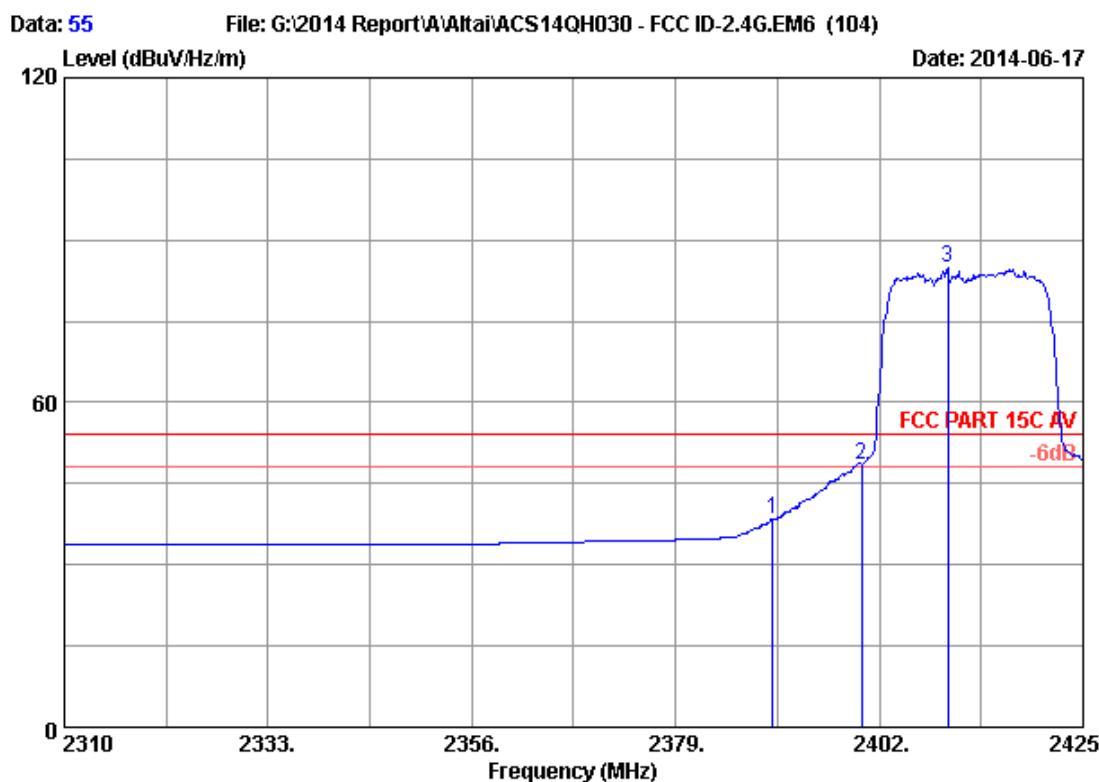
Data: 54 File: G:\2014 Report\A\Altai\ACS14QH030 - FCC ID-2.4G.EM6 (104)



Site no.	:	3m Chamber	Data no.	:	54
Dis. / Ant.	:	3m 2013 3115 (4580)	Ant. pol.	:	HORIZONTAL
Limit	:	FCC PART 15C PEAK			
Env. / Ins.	:	24°C/56%	Engineer	:	Leo-Li
EUT	:	Altai A2-Ei Dual-band WiFi Access Point			
Power Rating	:	DC 56V From POE Input AC 120V/60Hz			
Test Mode	:	IEEE802.11nHT20 2412MHz Tx			
M/N	:	WA2011N-E			

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Emission			
					Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)
1	2390.000	28.16	5.78	35.70	58.85	57.09	74.00	16.91 Peak
2	2400.000	28.18	5.80	35.70	81.09	79.37	74.00	-5.37 Peak
3	2419.250	28.22	5.83	35.70	105.25	103.60	74.00	-29.60 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.



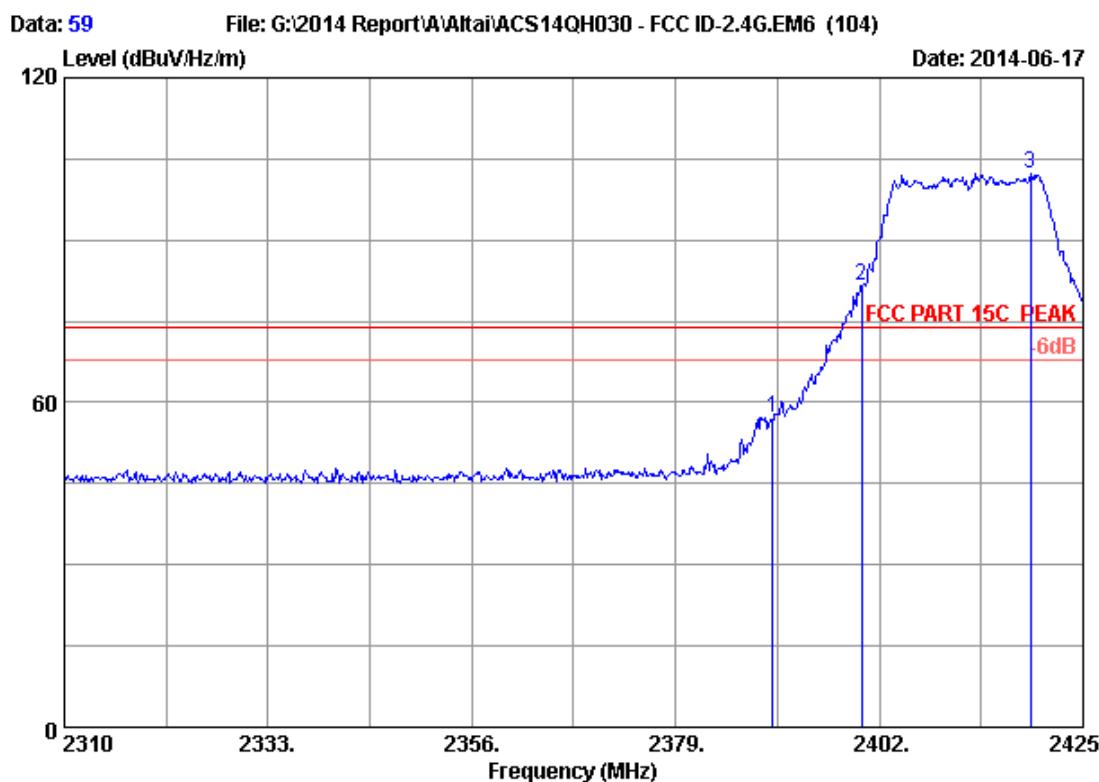
Site no. : 3m Chamber Data no. : 55
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C AV
 Env. / Ins. : 24°C/56% Engineer : Leo-Li
 EUT : Altai A2-Ei Dual-band WiFi Access Point
 Power Rating : DC 56V From POE Input AC 120V/60Hz
 Test Mode : IEEE802.11nHT20 2412MHz Tx
 M/N : WA2011N-E

No.	Freq. (MHz)	Ant.	Cable	AMP	Emission			
		Factor (dB/m)	Loss (dB)	factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)
1	2390.000	28.16	5.78	35.70	40.19	38.43	54.00	15.57 Average
2	2400.000	28.18	5.80	35.70	50.33	48.61	54.00	5.39 Average
3	2409.705	28.20	5.81	35.70	86.62	84.93	54.00	-30.93 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.

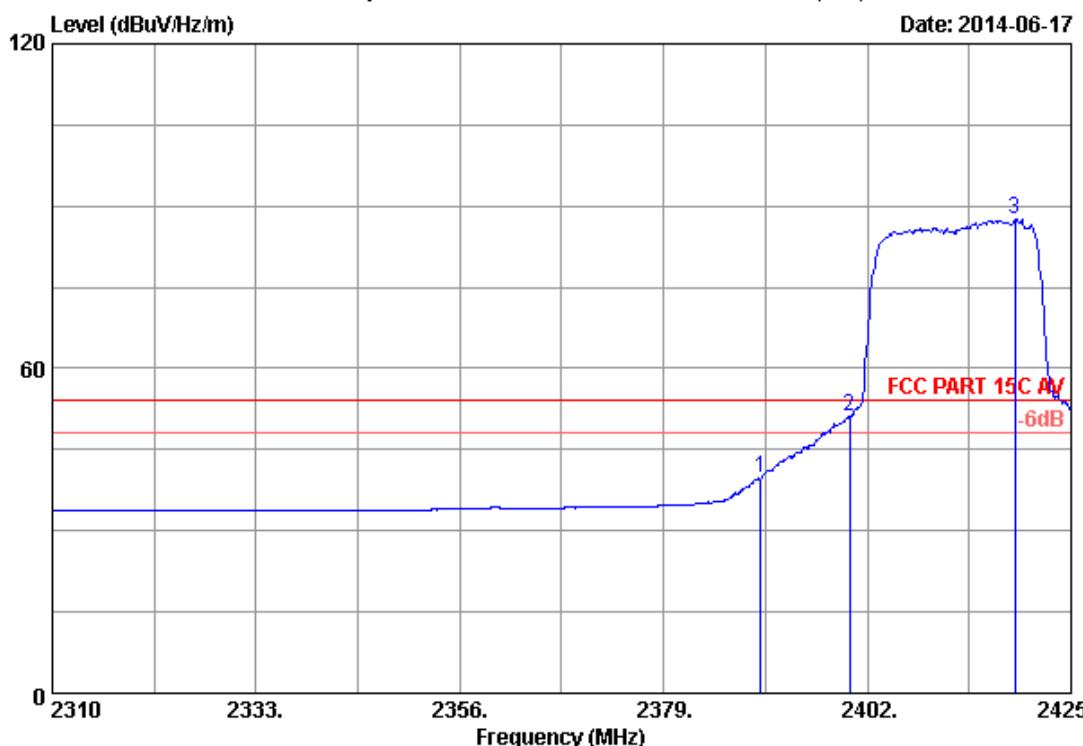


Site no. : 3m Chamber Data no. : 59
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 24°C/56% Engineer : Leo-Li
 EUT : Altai A2-Ei Dual-band WiFi Access Point
 Power Rating : DC 56V From POE Input AC 120V/60Hz
 Test Mode : IEEE802.11nHT20 2412MHz Tx
 M/N : WA2011N-E

No.	Freq. (MHz)	Ant. Factor	Cable Loss (dB)	AMP factor (dB)	Emission			
					Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)
1	2390.000	28.16	5.78	35.70	58.78	57.02	74.00	16.98 Peak
2	2400.000	28.18	5.80	35.70	83.38	81.66	74.00	-7.66 Peak
3	2419.020	28.22	5.82	35.70	103.83	102.17	74.00	-28.17 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.

Data: 60 File: G:\2014 Report\A\Altai\ACS14QH030 - FCC ID-2.4G.EM6 (104)



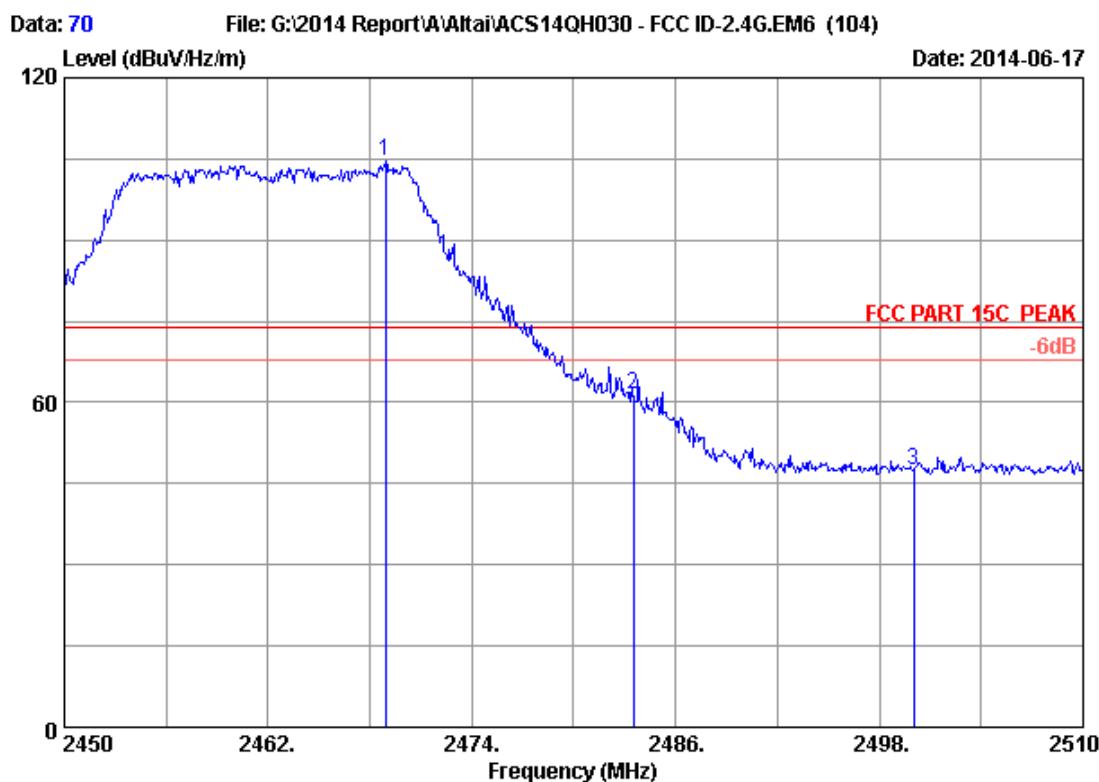
Site no. : 3m Chamber Data no. : 60
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C AV
Env. / Ins. : 24°C/56% Engineer : Leo-Li
EUT : Altai A2-Ei Dual-band WiFi Access Point
Power Rating : DC 56V From POE Input AC 120V/60Hz
Test Mode : IEEE802.11nHT20 2412MHz Tx
M/N : WA2011N-E

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Emission			
					Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)
1	2390.000	28.16	5.78	35.70	41.51	39.75	54.00	14.25 Average
2	2400.000	28.18	5.80	35.70	52.91	51.19	54.00	2.81 Average
3	2418.675	28.22	5.82	35.70	89.15	87.49	54.00	-33.49 Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading

-Amp Factor

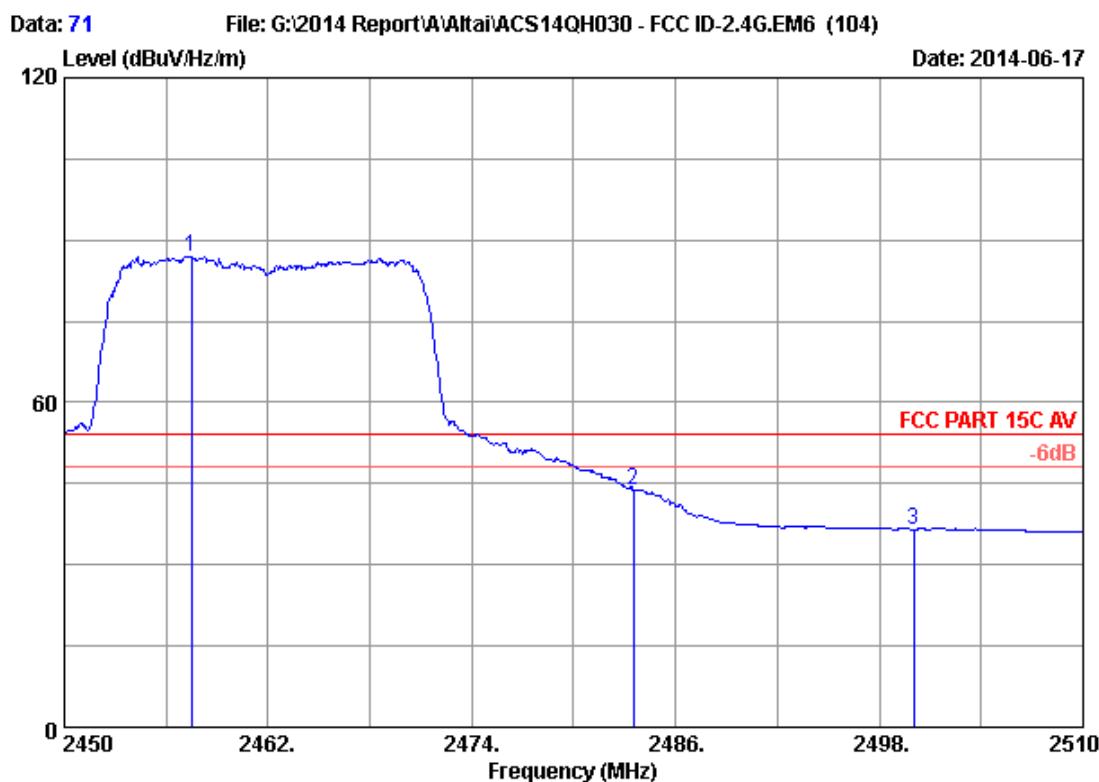
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 70
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 24°C/56% Engineer : Leo-Li
EUT : Altai A2-Ei Dual-band WiFi Access Point
Power Rating : DC 56V From POE Input AC 120V/60Hz
Test Mode : IEEE802.11nHT20 2462MHz Tx
M/N : WA2011N-E

No.	Freq. (MHz)	Ant.	Cable	AMP	Emission			
		Factor (dB/m)	Loss (dB)	factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)
1	2468.900	28.33	5.90	35.70	105.96	104.49	74.00	-30.49 Peak
2	2483.500	28.36	5.92	35.70	63.03	61.61	74.00	12.39 Peak
3	2500.000	28.40	5.94	35.70	48.95	47.59	74.00	26.41 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.

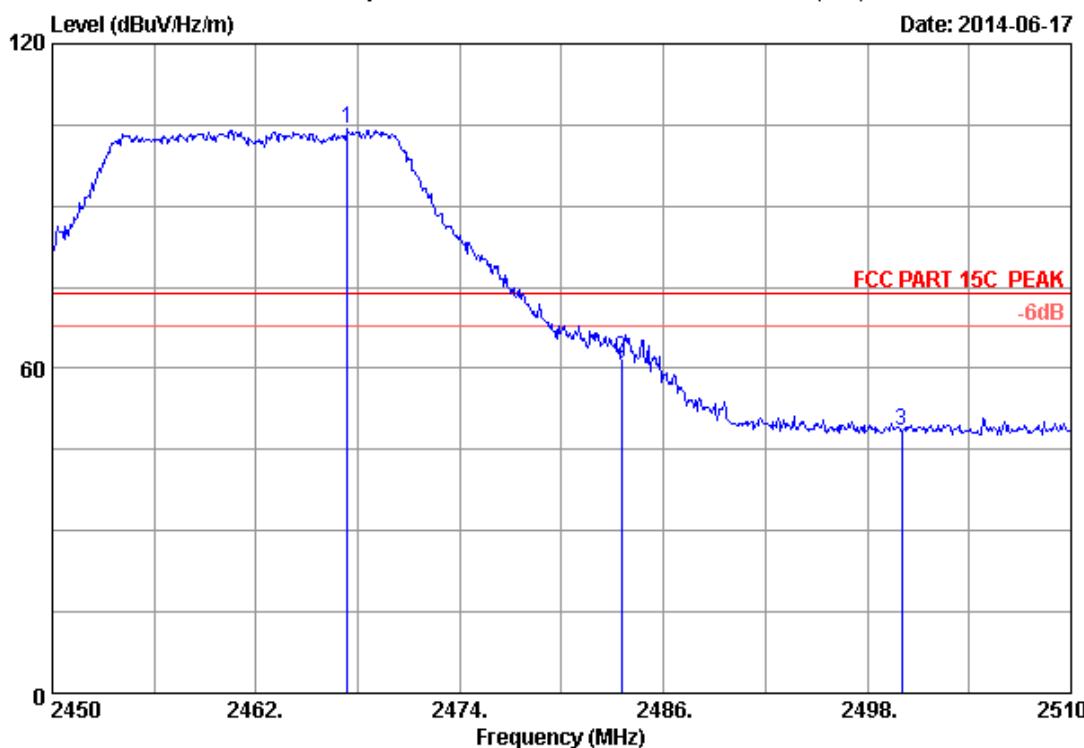


Site no. : 3m Chamber Data no. : 71
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C AV
Env. / Ins. : 24°C/56% Engineer : Leo-Li
EUT : Altai A2-Ei Dual-band WiFi Access Point
Power Rating : DC 56V From POE Input AC 120V/60Hz
Test Mode : IEEE802.11nHT20 2462MHz Tx
M/N : WA2011N-E

No.	Freq. (MHz)	Ant.	Cable	AMP	Emission			
		Factor (dB/m)	Loss (dB)	factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)
1	2457.500	28.31	5.88	35.70	88.48	86.97	54.00	-32.97 Average
2	2483.500	28.36	5.92	35.70	45.24	43.82	54.00	10.18 Average
3	2500.000	28.40	5.94	35.70	37.92	36.56	54.00	17.44 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.

Data: 75 File: G:\2014 Report\Altai\ACS14QH030 - FCC ID-2.4G.EM6 (104)



Site no. : 3m Chamber Data no. : 75
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 24°C/56% Engineer : Leo-Li
EUT : Altai A2-Ei Dual-band WiFi Access Point
Power Rating : DC 56V From POE Input AC 120V/60Hz
Test Mode : IEEE802.11nHT20 2462MHz Tx
M/N : WA2011N-E

No.	Freq. (MHz)	Ant. Factor	Cable Loss (dB)	AMP factor (dB)	Emission			
					Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)
1	2467.400	28.33	5.90	35.70	105.64	104.17	74.00	-30.17 Peak
2	2483.500	28.36	5.92	35.70	63.42	62.00	74.00	12.00 Peak
3	2500.000	28.40	5.94	35.70	49.89	48.53	74.00	25.47 Peak

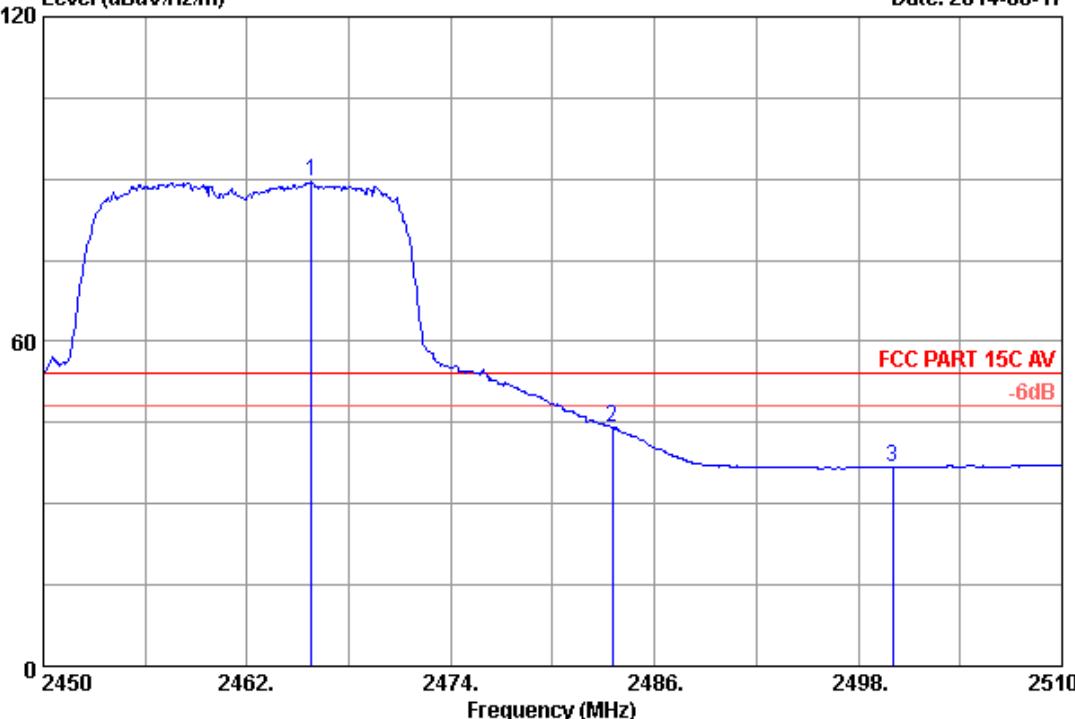
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
-Amp Factor
2. The emission levels that are 20dB below the official
limit are not reported.

Data: 76

File: G:\2014 Report\A\Altai\ACS14QH030 - FCC ID-2.4G.EM6 (104)

Level (dBuV/Hz/m)

Date: 2014-06-17



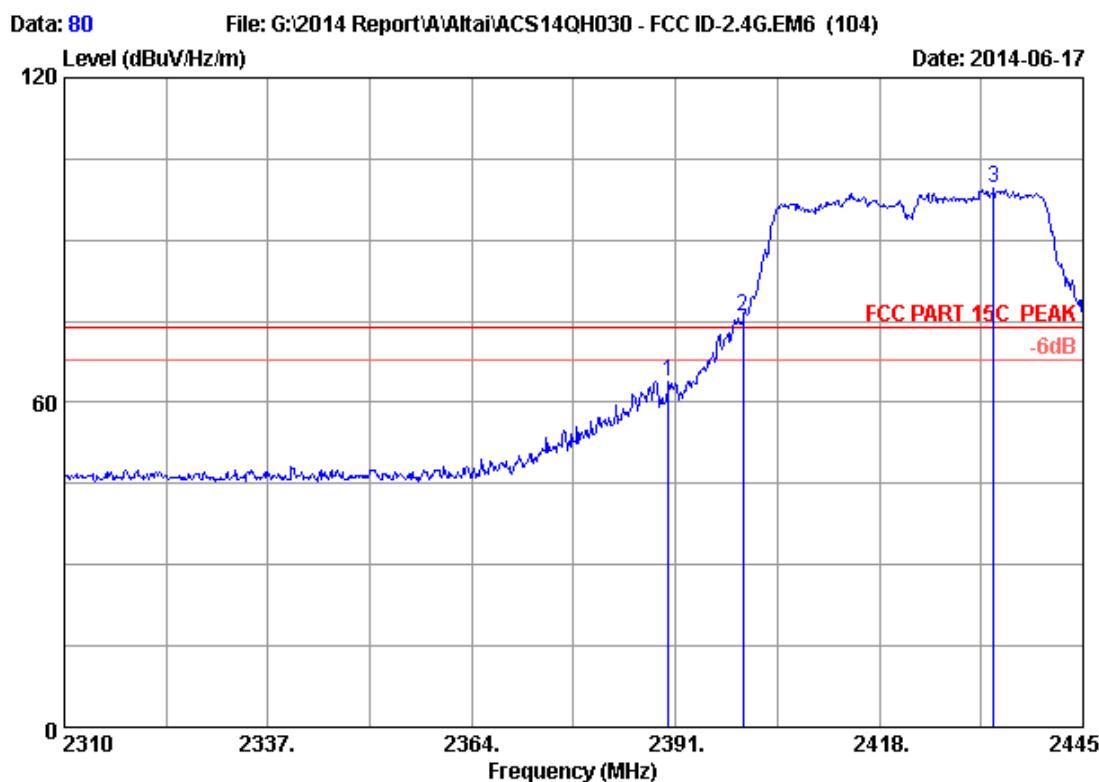
Site no. : 3m Chamber Data no. : 76
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C AV
Env. / Ins. : 24°C/56% Engineer : Leo-Li
EUT : Altai A2-Ei Dual-band WiFi Access Point
Power Rating : DC 56V From POE Input AC 120V/60Hz
Test Mode : IEEE802.11nHT20 2462MHz Tx
M/N : WA2011N-E

No.	Freq. (MHz)	Ant. Factor	Cable Loss (dB)	AMP factor (dB)	Emission			
					Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)
1	2465.780	28.32	5.89	35.70	90.91	89.42	54.00	-35.42 Average
2	2483.500	28.36	5.92	35.70	45.54	44.12	54.00	9.88 Average
3	2500.000	28.40	5.94	35.70	38.05	36.69	54.00	17.31 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.

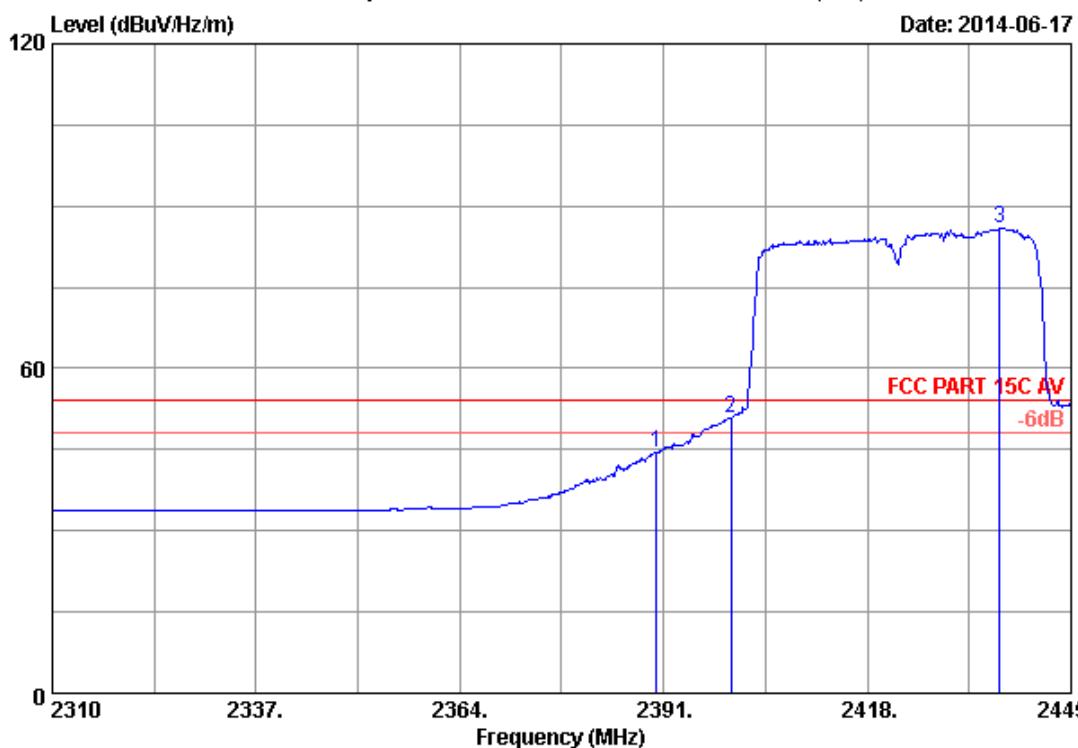


Site no. : 3m Chamber Data no. : 80
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 24°C/56% Engineer : Leo-Li
 EUT : Altai A2-Ei Dual-band WiFi Access Point
 Power Rating : DC 56V From POE Input AC 120V/60Hz
 Test Mode : IEEE802.11nHT40 2422MHz Tx
 M/N : WA2011N-E

No.	Freq. (MHz)	Ant. Factor	Cable Loss (dB)	AMP factor (dB)	Emission			
					Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)
1	2390.000	28.16	5.78	35.70	65.48	63.72	74.00	10.28 Peak
2	2400.000	28.18	5.80	35.70	77.65	75.93	74.00	-1.93 Peak
3	2433.120	28.25	5.85	35.70	101.12	99.52	74.00	-25.52 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.

Data: 81 File: G:\2014 Report\Altai\ACS14QH030 - FCC ID-2.4G.EM6 (104)



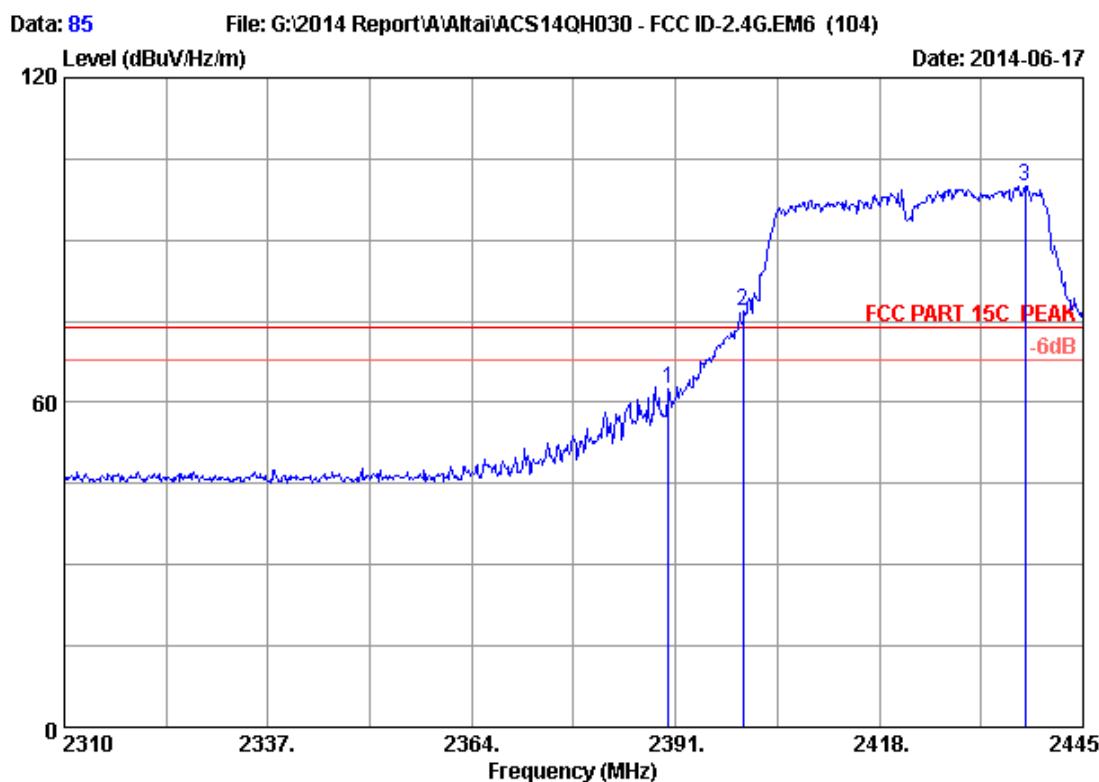
Site no. : 3m Chamber Data no. : 81
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C AV
Env. / Ins. : 24°C/56% Engineer : Leo-Li
EUT : Altai A2-Ei Dual-band WiFi Access Point
Power Rating : DC 56V From POE Input AC 120V/60Hz
Test Mode : IEEE802.11nHT40 2422MHz Tx
M/N : WA2011N-E

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Emission			
					Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)
1	2390.000	28.16	5.78	35.70	46.24	44.48	54.00	9.52 Average
2	2400.000	28.18	5.80	35.70	52.52	50.80	54.00	3.20 Average
3	2435.550	28.26	5.85	35.70	87.42	85.83	54.00	-31.83 Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading

-Amp Factor

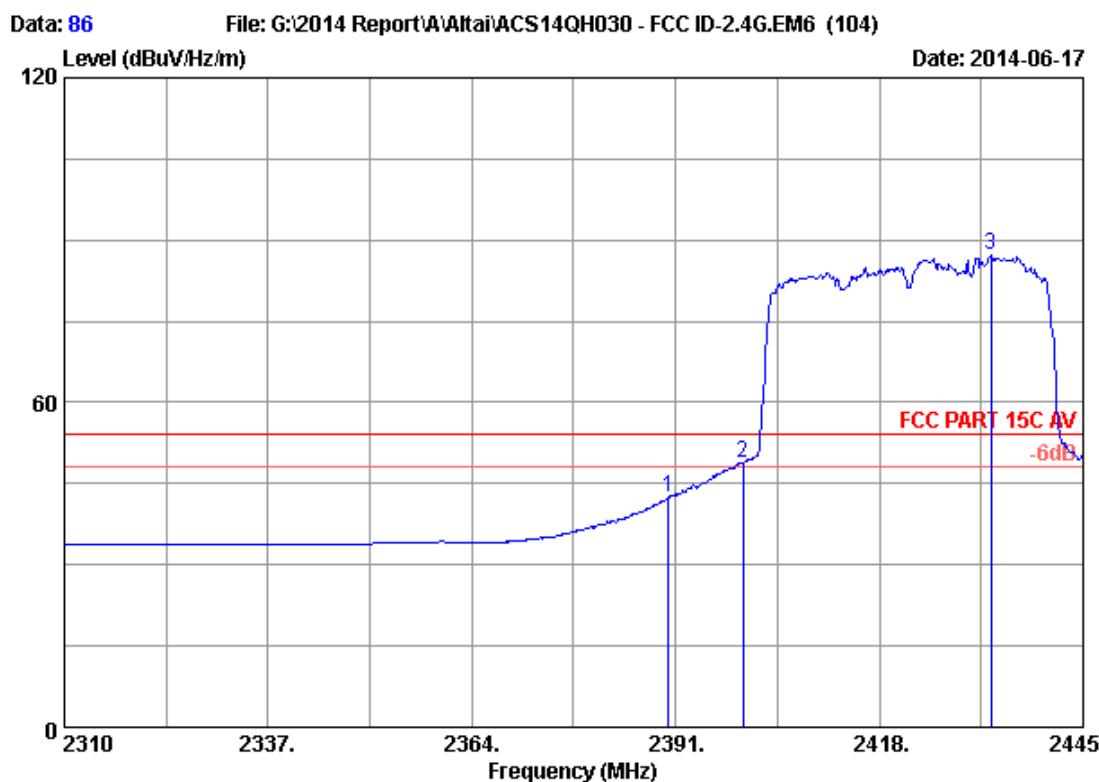
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 85
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 24°C/56% Engineer : Leo-Li
 EUT : Altai A2-Ei Dual-band WiFi Access Point
 Power Rating : DC 56V From POE Input AC 120V/60Hz
 Test Mode : IEEE802.11nHT40 2422MHz Tx
 M/N : WA2011N-E

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Emission			
					Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)
1	2390.000	28.16	5.78	35.70	64.22	62.46	74.00	11.54 Peak
2	2400.000	28.18	5.80	35.70	78.57	76.85	74.00	-2.85 Peak
3	2437.305	28.26	5.85	35.70	101.43	99.84	74.00	-25.84 Peak

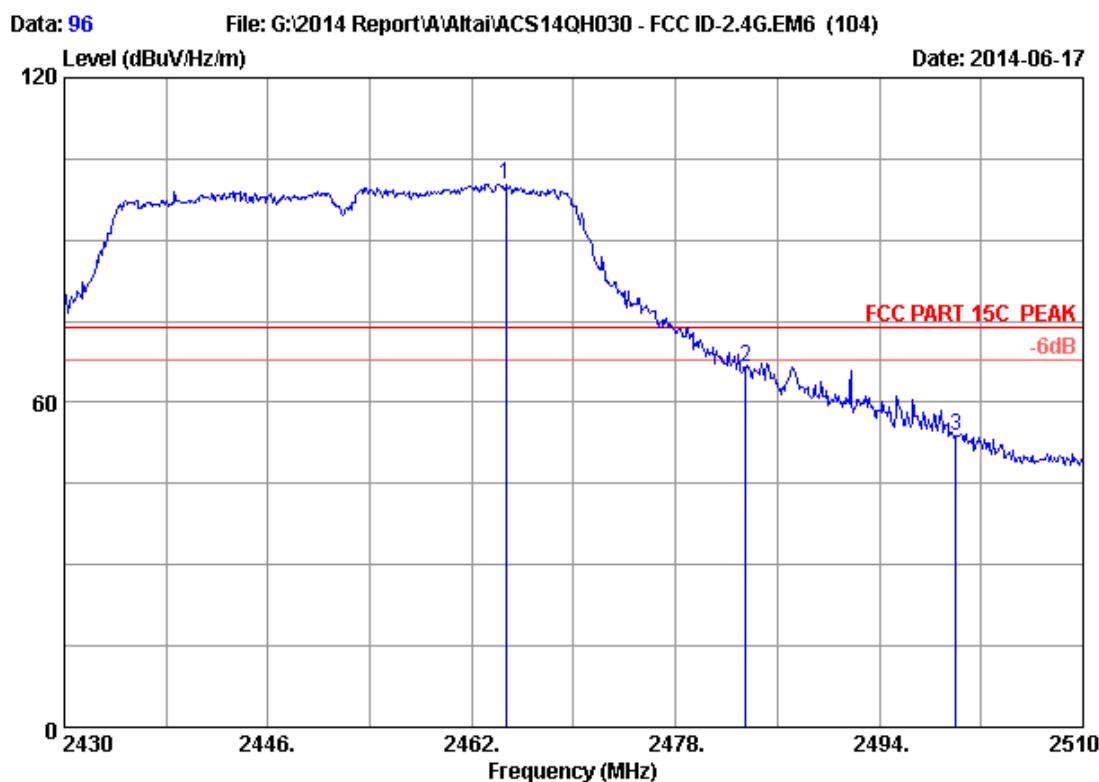
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp Factor
 2. The emission levels that are 20dB below the official
 limit are not reported.



Site no. : 3m Chamber Data no. : 86
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C AV
 Env. / Ins. : 24°C/56% Engineer : Leo-Li
 EUT : Altai A2-Ei Dual-band WiFi Access Point
 Power Rating : DC 56V From POE Input AC 120V/60Hz
 Test Mode : IEEE802.11nHT40 2422MHz Tx
 M/N : WA2011N-E

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Emission			
					Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)
1	2390.000	28.16	5.78	35.70	44.26	42.50	54.00	11.50 Average
2	2400.000	28.18	5.80	35.70	50.60	48.88	54.00	5.12 Average
3	2432.850	28.25	5.84	35.70	88.71	87.10	54.00	-33.10 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. : 96
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 24°C/56% Engineer : Leo-Li
EUT : Altai A2-Ei Dual-band WiFi Access Point
Power Rating : DC 56V From POE Input AC 120V/60Hz
Test Mode : IEEE802.11nHT40 2452MHz Tx
M/N : WA2011N-E

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Emission			
					Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)
1	2464.640	28.32	5.89	35.70	101.92	100.43	74.00	-26.43 Peak
2	2483.500	28.36	5.92	35.70	67.92	66.50	74.00	7.50 Peak
3	2500.000	28.40	5.94	35.70	55.14	53.78	74.00	20.22 Peak

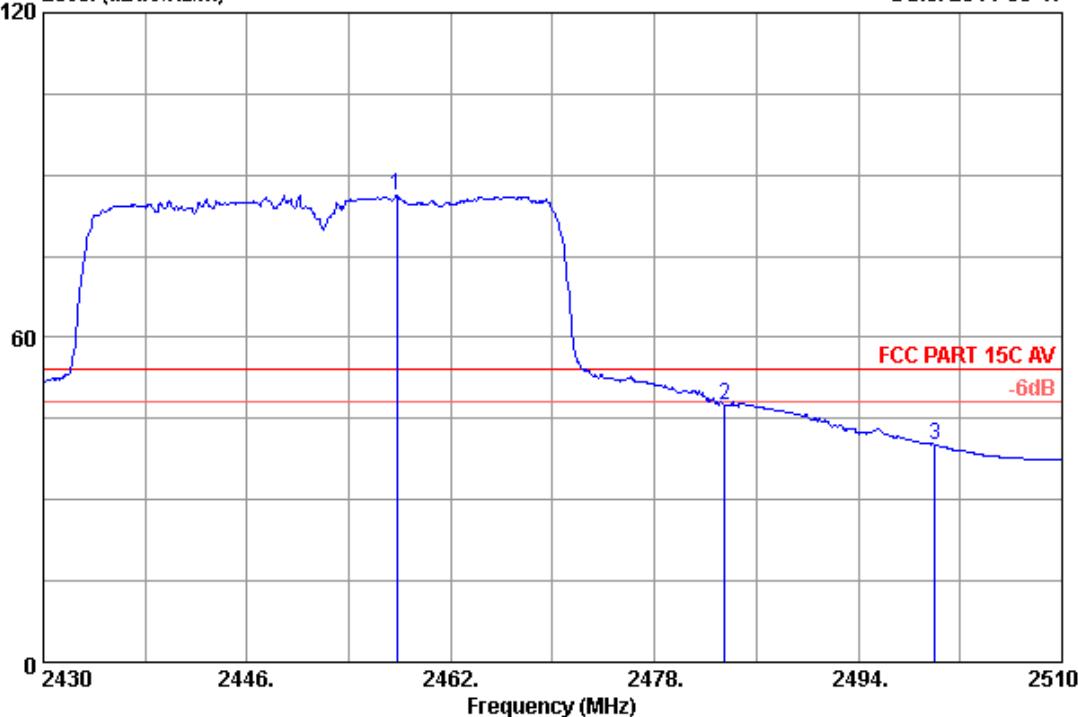
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
-Amp Factor
2. The emission levels that are 20dB below the official
limit are not reported.

Data: 97

File: G:\2014 Report\Altai\ACS14QH030 - FCC ID-2.4G.EM6 (104)

Level (dBuV/Hz/m)

Date: 2014-06-17



Site no. : 3m Chamber Data no. : 97
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C AV
Env. / Ins. : 24°C/56% Engineer : Leo-Li
EUT : Altai A2-Ei Dual-band WiFi Access Point
Power Rating : DC 56V From POE Input AC 120V/60Hz
Test Mode : IEEE802.11nHT40 2452MHz Tx
M/N : WA2011N-E

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Emission			
					Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)
1	2457.760	28.31	5.88	35.70	87.88	86.37	54.00	-32.37 Average
2	2483.500	28.36	5.92	35.70	48.96	47.54	54.00	6.46 Average
3	2500.000	28.40	5.94	35.70	41.60	40.24	54.00	13.76 Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading

-Amp Factor

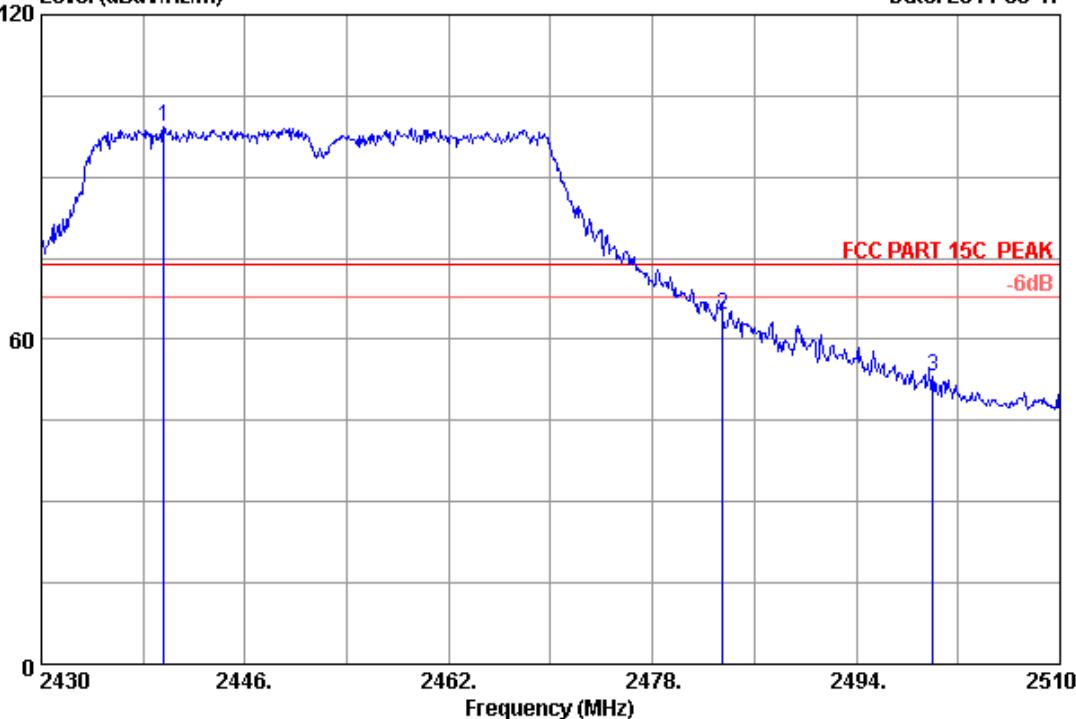
2. The emission levels that are 20dB below the official limit are not reported.

Data: 101

File: G:\2014 Report\Altai\ACS14QH030 - FCC ID-2.4G.EM6 (104)

Level (dBuV/Hz/m)

Date: 2014-06-17



Site no. : 3m Chamber Data no. : 101
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 24°C/56% Engineer : Leo-Li
EUT : Altai A2-Ei Dual-band WiFi Access Point
Power Rating : DC 56V From POE Input AC 120V/60Hz
Test Mode : IEEE802.11nHT40 2452MHz Tx
M/N : WA2011N-E

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Emission			
					Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)
1	2439.600	28.27	5.85	35.70	100.73	99.15	74.00	-25.15 Peak
2	2483.500	28.36	5.92	35.70	65.92	64.50	74.00	9.50 Peak
3	2500.000	28.40	5.94	35.70	54.42	53.06	74.00	20.94 Peak

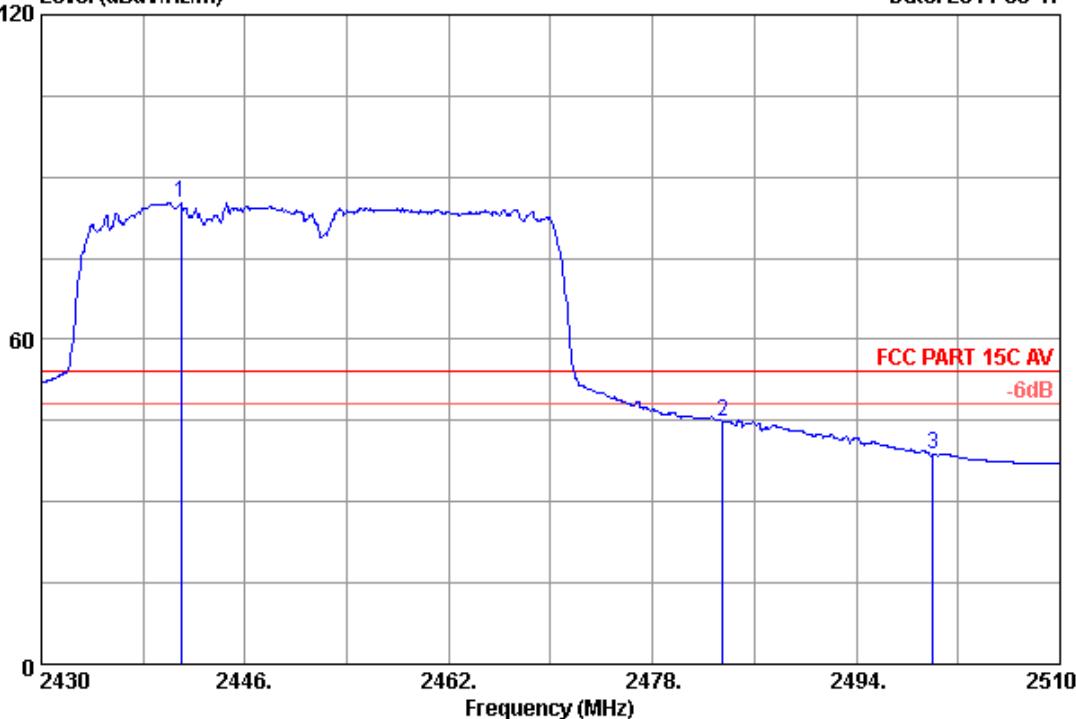
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
-Amp Factor
2. The emission levels that are 20dB below the official
limit are not reported.

Data: 102

File: G:\2014 Report\A\Altai\ACS14QH030 - FCC ID-2.4G.EM6 (104)

Level (dBuV/Hz/m)

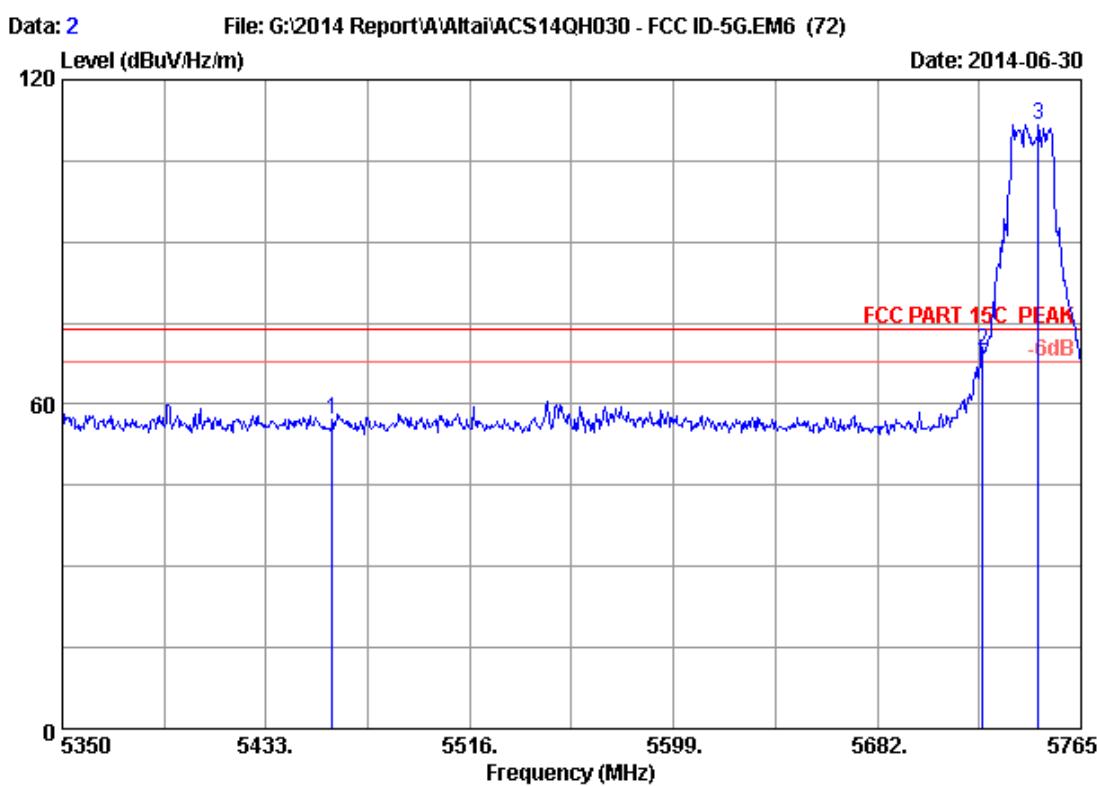
Date: 2014-06-17



Site no. : 3m Chamber Data no. : 102
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C AV
Env. / Ins. : 24°C/56% Engineer : Leo-Li
EUT : Altai A2-Ei Dual-band WiFi Access Point
Power Rating : DC 56V From POE Input AC 120V/60Hz
Test Mode : IEEE802.11nHT40 2452MHz Tx
M/N : WA2011N-E

No.	Freq. (MHz)	Ant. Factor	Cable Loss (dB)	AMP factor (dB)	Emission			
					Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)
1	2440.960	28.27	5.86	35.70	86.77	85.20	54.00	-31.20 Average
2	2483.500	28.36	5.92	35.70	46.33	44.91	54.00	9.09 Average
3	2500.000	28.40	5.94	35.70	40.03	38.67	54.00	15.33 Average

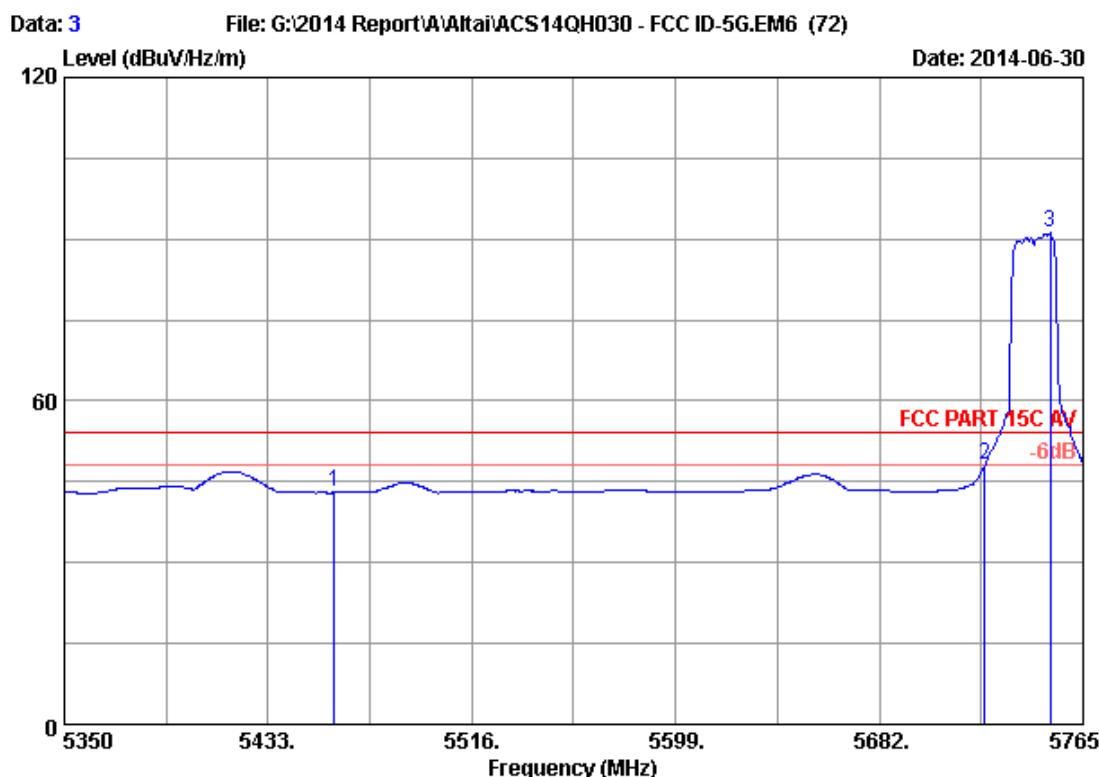
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
-Amp Factor
2. The emission levels that are 20dB below the official
limit are not reported.

5.8G:

Site no. : 3m Chamber Data no. : 2
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 24°C/56% Engineer : Leo-Li
 EUT : Altai A2-Ei Dual-band WiFi Access Point
 Power Rating : DC 56V From POE Input AC 120V/60Hz
 Test Mode : IEEE802.11a 5745MHz Tx
 M/N : WA2011N-E

No.	Freq. (MHz)	Ant.	Cable	AMP	Emission			
		Factor (dB/m)	Loss (dB)	factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)
1	5460.000	33.94	9.25	35.70	49.58	57.07	74.00	16.93 Peak
2	5725.000	34.09	9.52	35.70	61.89	69.80	74.00	4.20 Peak
3	5747.570	34.10	9.55	35.70	103.83	111.78	74.00	-37.78 Peak

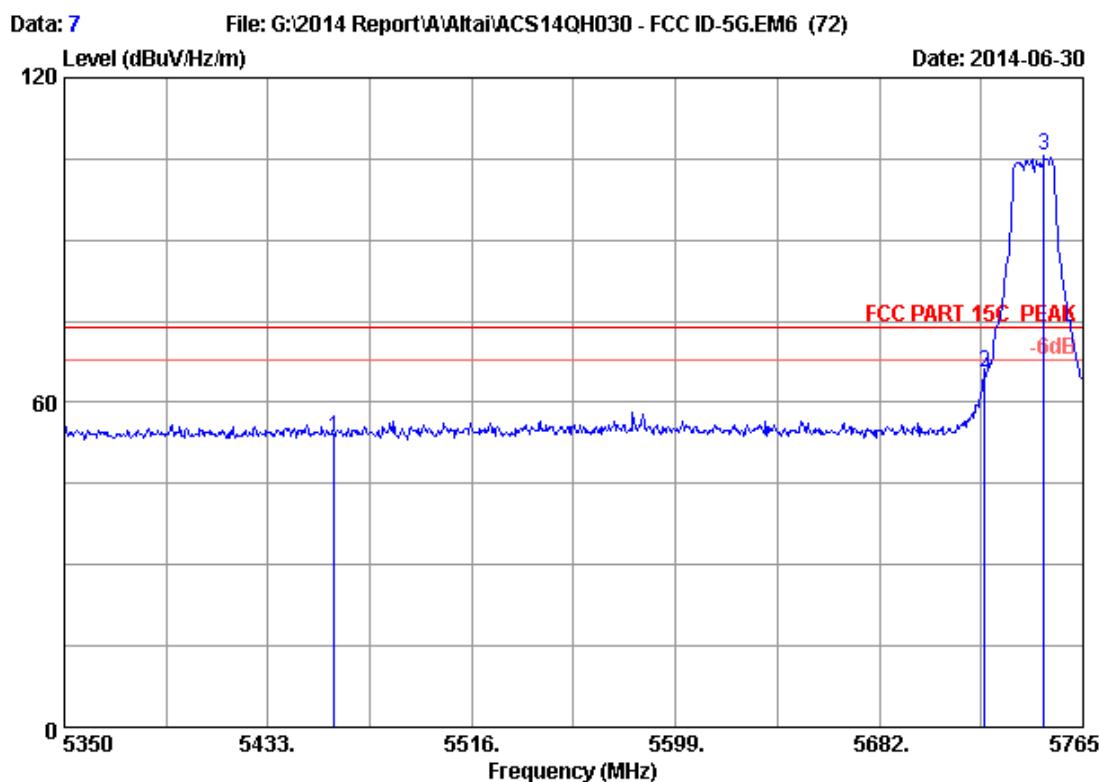
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp Factor
 2. The emission levels that are 20dB below the official
 limit are not reported.



Site no. : 3m Chamber Data no. : 3
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C AV
Env. / Ins. : 24°C/56% Engineer : Leo-Li
EUT : Altai A2-Ei Dual-band WiFi Access Point
Power Rating : DC 56V From POE Input AC 120V/60Hz
Test Mode : IEEE802.11a 5745MHz Tx
M/N : WA2011N-E

No.	Freq. (MHz)	Ant.	Cable	AMP	Emission			
		Factor (dB/m)	Loss (dB)	factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)
1	5460.000	33.94	9.25	35.70	35.50	42.99	54.00	11.01 Average
2	5725.000	34.09	9.52	35.70	40.32	48.23	54.00	5.77 Average
3	5751.720	34.10	9.55	35.70	83.21	91.16	54.00	-37.16 Average

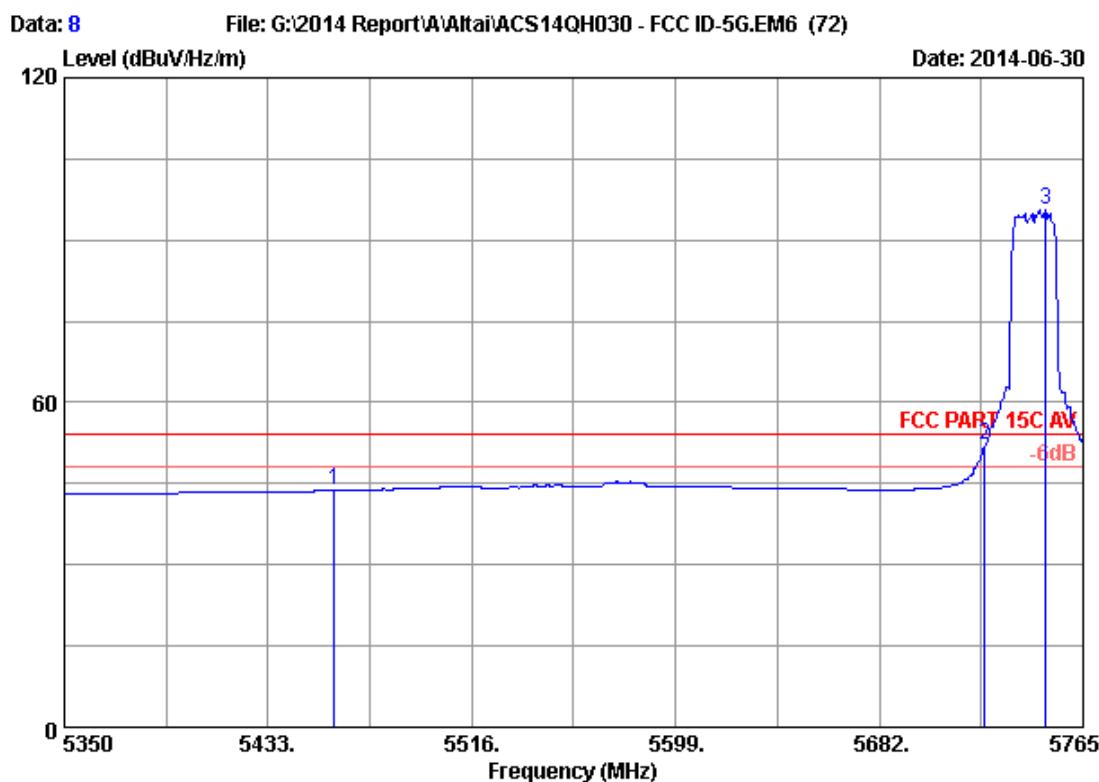
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
-Amp Factor
2. The emission levels that are 20dB below the official
limit are not reported.



Site no.	:	3m Chamber	Data no.	:	7
Dis. / Ant.	:	3m 2013 3115 (4580)	Ant. pol.	:	HORIZONTAL
Limit	:	FCC PART 15C PEAK			
Env. / Ins.	:	24°C/56%	Engineer	:	Leo-Li
EUT	:	Altai A2-Ei Dual-band WiFi Access Point			
Power Rating	:	DC 56V From POE Input AC 120V/60Hz			
Test Mode	:	IEEE802.11a 5745MHz Tx			
M/N	:	WA2011N-E			

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Emission			
					Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)
1	5460.000	33.94	9.25	35.70	45.83	53.32	74.00	20.68 Peak
2	5725.000	34.09	9.52	35.70	57.65	65.56	74.00	8.44 Peak
3	5749.230	34.10	9.55	35.70	97.63	105.58	74.00	-31.58 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.



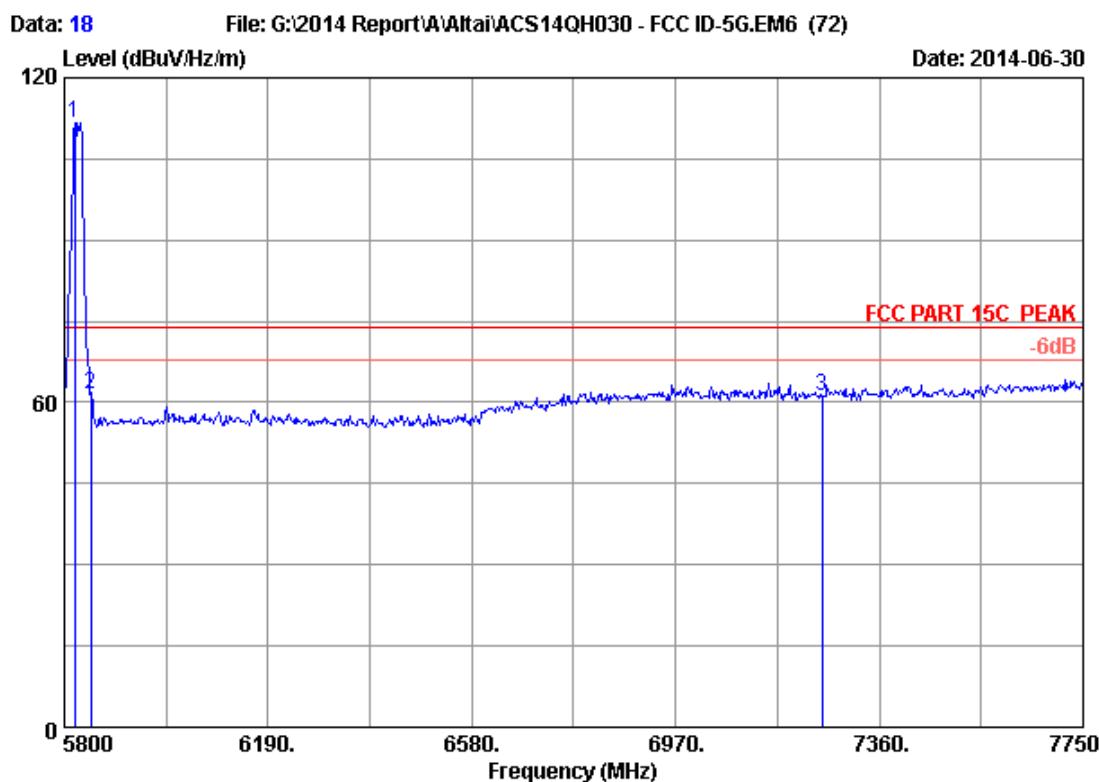
Site no. : 3m Chamber Data no. : 8
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
 Limit : FCC PART 15C AV
 Env. / Ins. : 24°C/56% Engineer : Leo-Li
 EUT : Altai A2-Ei Dual-band WiFi Access Point
 Power Rating : DC 56V From POE Input AC 120V/60Hz
 Test Mode : IEEE802.11a 5745MHz Tx
 M/N : WA2011N-E

No.	Freq. (MHz)	Ant.	Cable	AMP	Emission			
		Factor (dB/m)	Loss (dB)	factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)
1	5460.000	33.94	9.25	35.70	36.18	43.67	54.00	10.33 Average
2	5725.000	34.09	9.52	35.70	44.25	52.16	54.00	1.84 Average
3	5749.645	34.10	9.55	35.70	87.65	95.60	54.00	-41.60 Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading

-Amp Factor

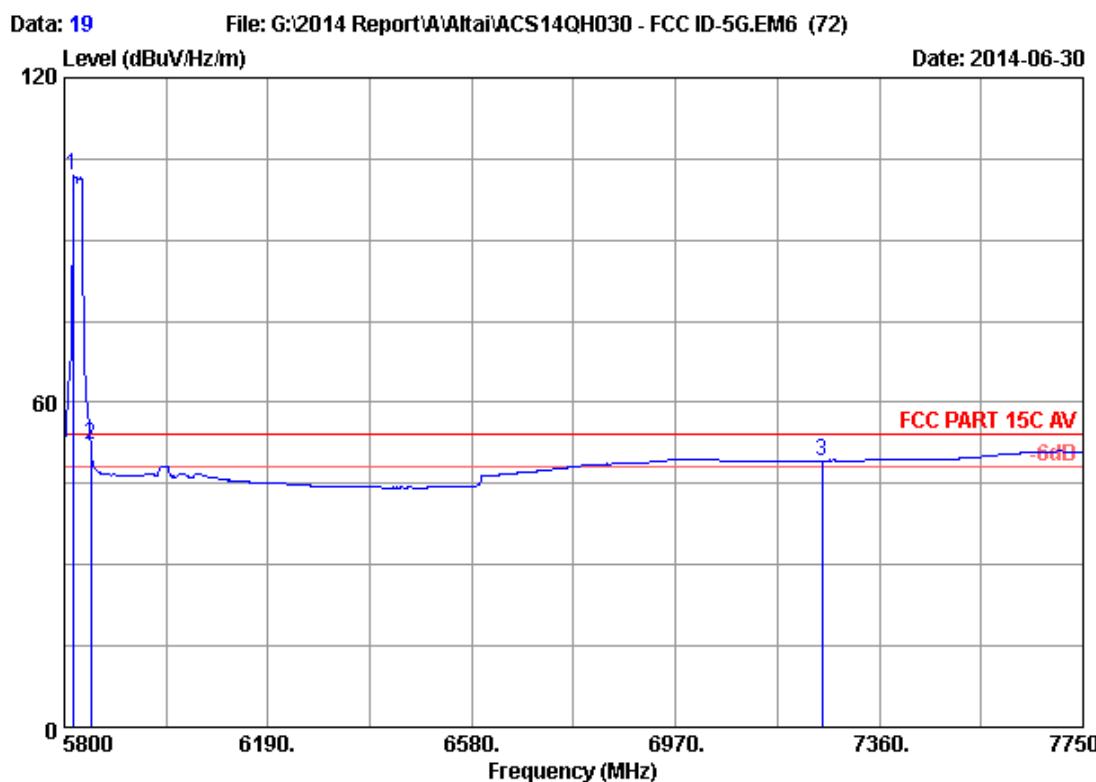
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 18
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 24°C/56% Engineer : Leo-Li
 EUT : Altai A2-Ei Dual-band WiFi Access Point
 Power Rating : DC 56V From POE Input AC 120V/60Hz
 Test Mode : IEEE802.11a 5825MHz Tx
 M/N : WA2011N-E

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Emission			
					Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)
1	5819.500	34.13	9.62	35.70	103.70	111.75	74.00	-37.75 Peak
2	5850.000	34.14	9.66	35.70	53.52	61.62	74.00	12.38 Peak
3	7250.000	36.05	10.99	35.45	49.66	61.25	74.00	12.75 Peak

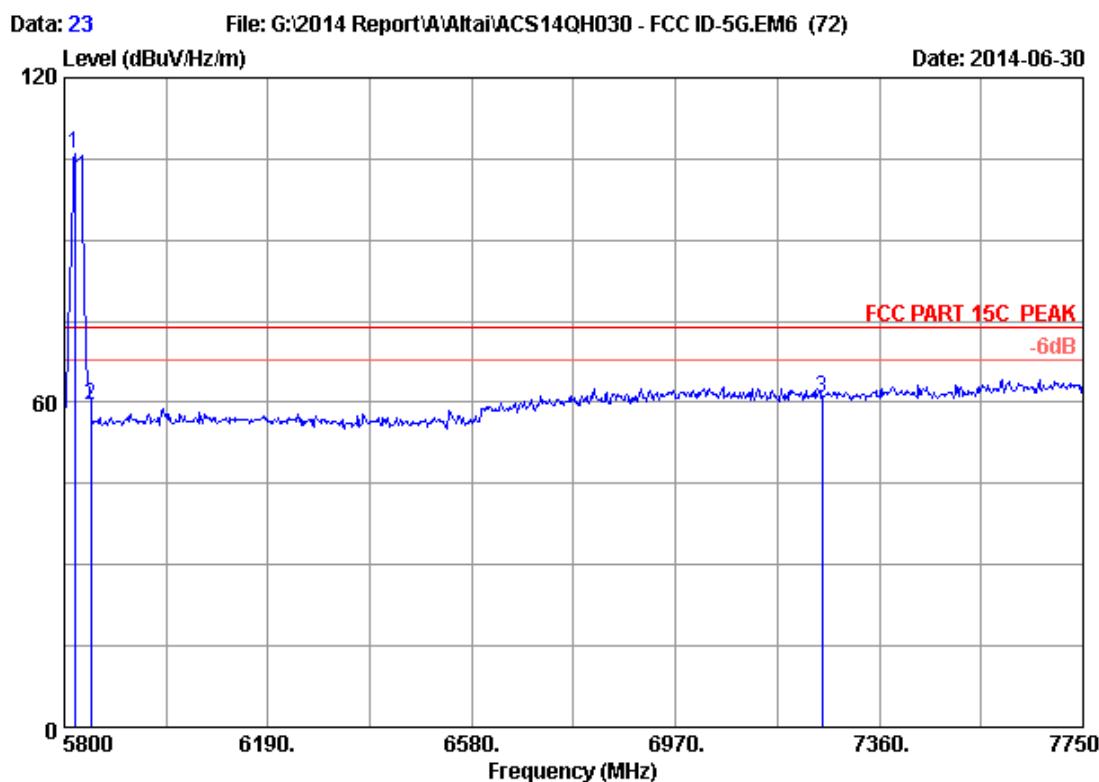
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp Factor
 2. The emission levels that are 20dB below the official
 limit are not reported.



Site no.	:	3m Chamber	Data no.	:	19
Dis. / Ant.	:	3m 2013 3115 (4580)	Ant. pol.	:	HORIZONTAL
Limit	:	FCC PART 15C AV			
Env. / Ins.	:	24°C/56%	Engineer	:	Leo-Li
EUT	:	Altai A2-Ei Dual-band WiFi Access Point			
Power Rating	:	DC 56V From POE Input AC 120V/60Hz			
Test Mode	:	IEEE802.11a 5825MHz Tx			
M/N	:	WA2011N-E			

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Emission			
					Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)
1	5815.600	34.13	9.62	35.70	93.82	101.87	54.00	-47.87 Average
2	5850.000	34.14	9.66	35.70	44.05	52.15	54.00	1.85 Average
3	7250.000	36.05	10.99	35.45	37.68	49.27	54.00	4.73 Average

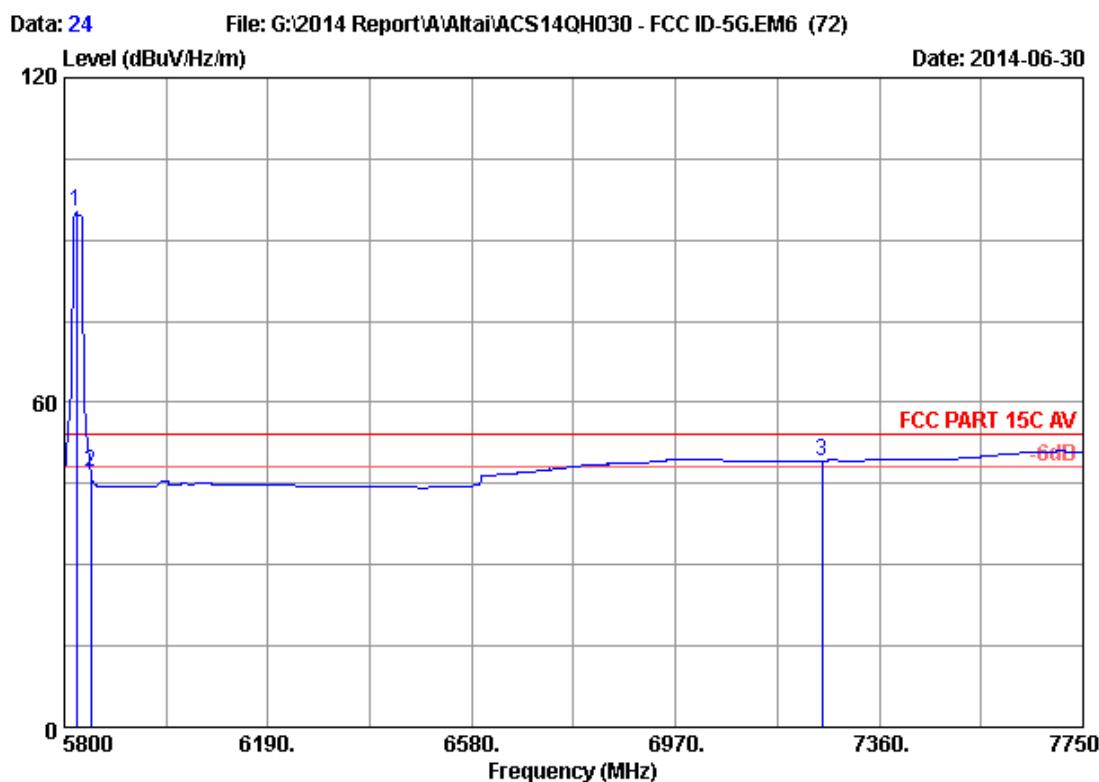
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
-Amp Factor
2. The emission levels that are 20dB below the official
limit are not reported.



Site no. : 3m Chamber Data no. : 23
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 24°C/56% Engineer : Leo-Li
EUT : Altai A2-Ei Dual-band WiFi Access Point
Power Rating : DC 56V From POE Input AC 120V/60Hz
Test Mode : IEEE802.11a 5825MHz Tx
M/N : WA2011N-E

No.	Freq. (MHz)	Ant.	Cable	AMP	Emission			
		Factor (dB/m)	Loss (dB)	factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)
1	5819.500	34.13	9.62	35.70	97.77	105.82	74.00	-31.82 Peak
2	5850.000	34.14	9.66	35.70	51.36	59.46	74.00	14.54 Peak
3	7250.000	36.05	10.99	35.45	49.36	60.95	74.00	13.05 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.



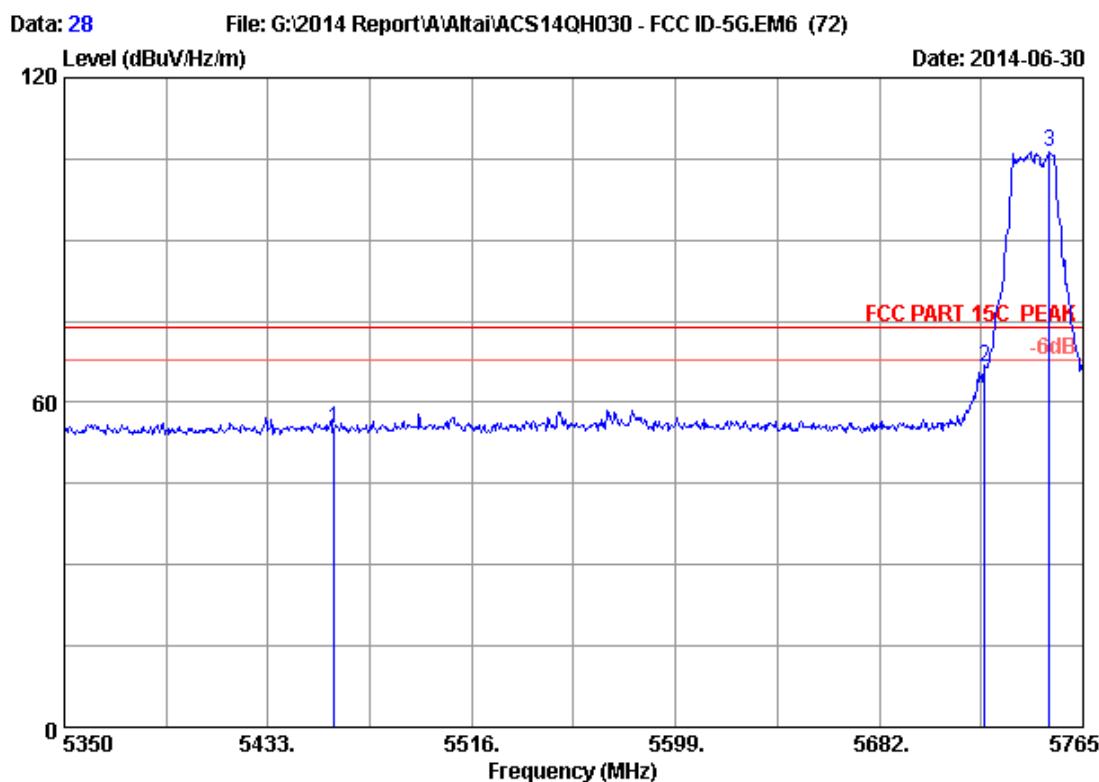
Site no. : 3m Chamber Data no. : 24
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C AV
Env. / Ins. : 24°C/56% Engineer : Leo-Li
EUT : Altai A2-Ei Dual-band WiFi Access Point
Power Rating : DC 56V From POE Input AC 120V/60Hz
Test Mode : IEEE802.11a 5825MHz Tx
M/N : WA2011N-E

No.	Freq. (MHz)	Ant.	Cable	AMP	Emission				
		Factor (dB/m)	Loss (dB)	factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5823.400	34.13	9.63	35.70	87.08	95.14	54.00	-41.14	Average
2	5850.000	34.14	9.66	35.70	38.88	46.98	54.00	7.02	Average
3	7250.000	36.05	10.99	35.45	37.70	49.29	54.00	4.71	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading

-Amp Factor

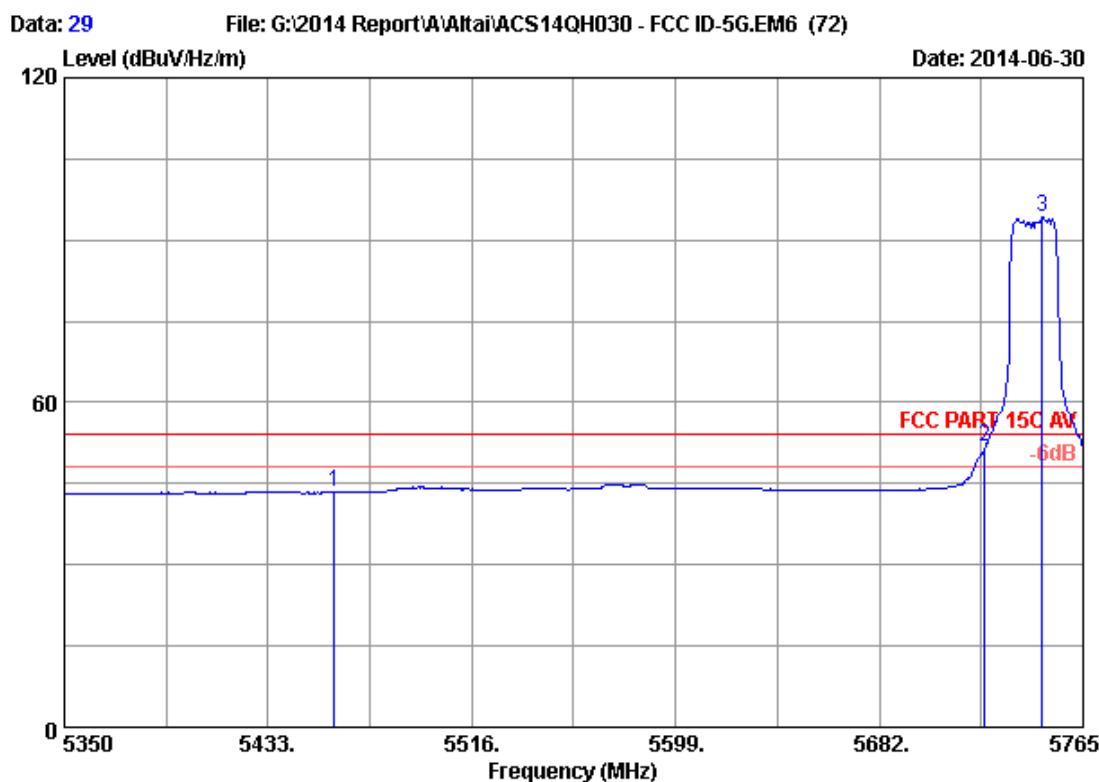
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 28
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 24°C/56% Engineer : Leo-Li
EUT : Altai A2-Ei Dual-band WiFi Access Point
Power Rating : DC 56V From POE Input AC 120V/60Hz
Test Mode : IEEE802.11nHT20 5745MHz Tx
M/N : WA2011N-E

No.	Freq. (MHz)	Ant.	Cable	AMP	Emission			
		Factor (dB/m)	Loss (dB)	factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)
1	5460.000	33.94	9.25	35.70	47.51	55.00	74.00	19.00 Peak
2	5725.000	34.09	9.52	35.70	58.68	66.59	74.00	7.41 Peak
3	5751.305	34.10	9.55	35.70	98.28	106.23	74.00	-32.23 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.



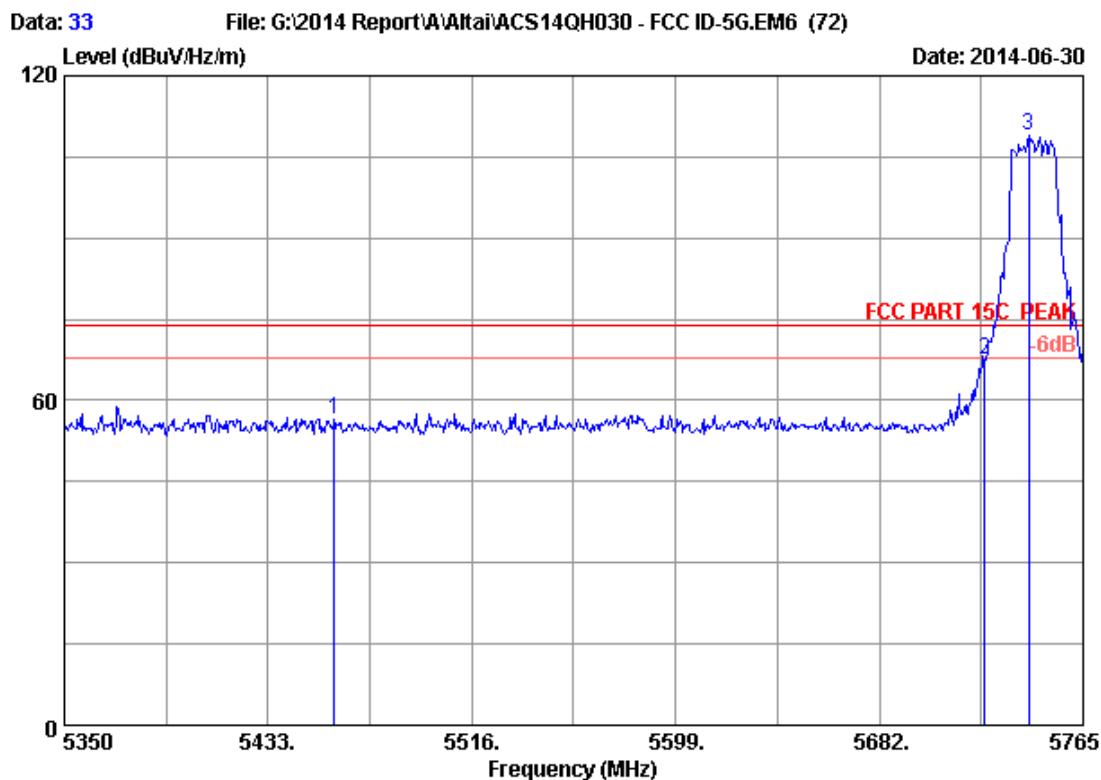
Site no. : 3m Chamber Data no. : 29
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
 Limit : FCC PART 15C AV
 Env. / Ins. : 24°C/56% Engineer : Leo-Li
 EUT : Altai A2-Ei Dual-band WiFi Access Point
 Power Rating : DC 56V From POE Input AC 120V/60Hz
 Test Mode : IEEE802.11nHT20 5745MHz Tx
 M/N : WA2011N-E

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Emission			
					Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)
1	5460.000	33.94	9.25	35.70	35.89	43.38	54.00	10.62 Average
2	5725.000	34.09	9.52	35.70	43.91	51.82	54.00	2.18 Average
3	5748.400	34.10	9.55	35.70	86.31	94.26	54.00	-40.26 Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading

-Amp Factor

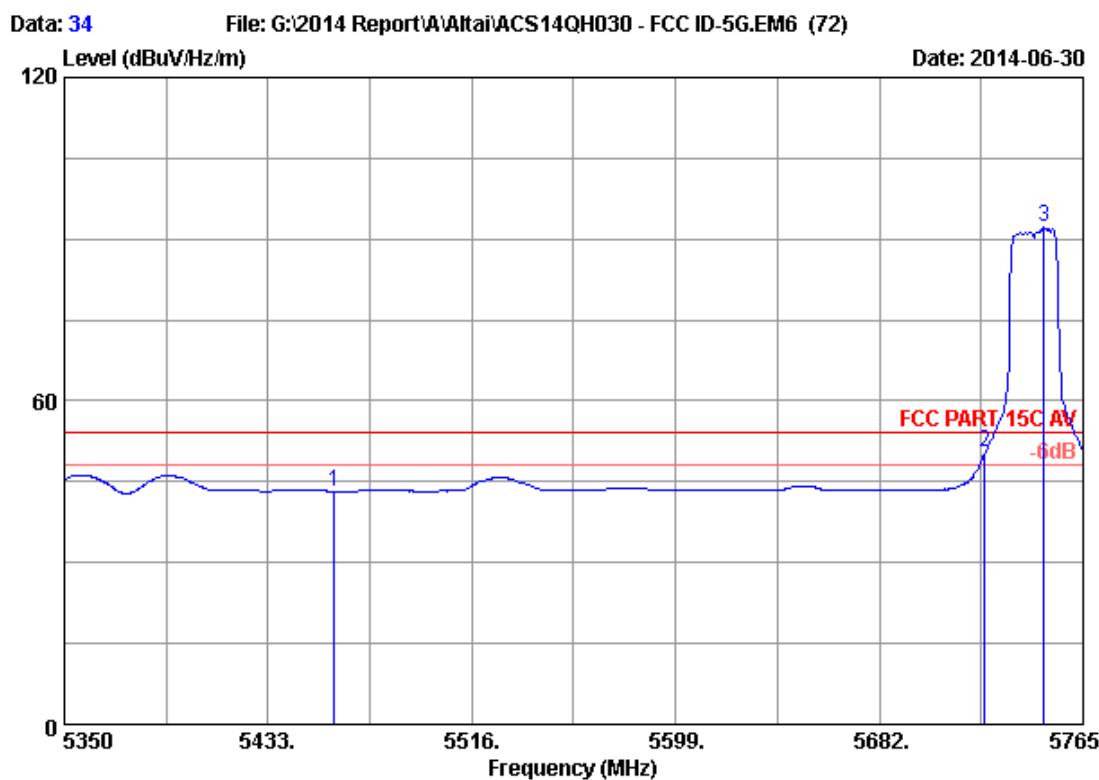
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 33
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 24°C/56% Engineer : Leo-Li
 EUT : Altai A2-Ei Dual-band WiFi Access Point
 Power Rating : DC 56V From POE Input AC 120V/60Hz
 Test Mode : IEEE802.11nHT20 5745MHz Tx
 M/N : WA2011N-E

No.	Freq. (MHz)	Ant. Factor	Cable Loss (dB)	AMP factor (dB)	Emission			
					Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)
1	5460.000	33.94	9.25	35.70	49.12	56.61	74.00	17.39 Peak
2	5725.000	34.09	9.52	35.70	59.52	67.43	74.00	6.57 Peak
3	5743.005	34.10	9.54	35.70	101.10	109.04	74.00	-35.04 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.

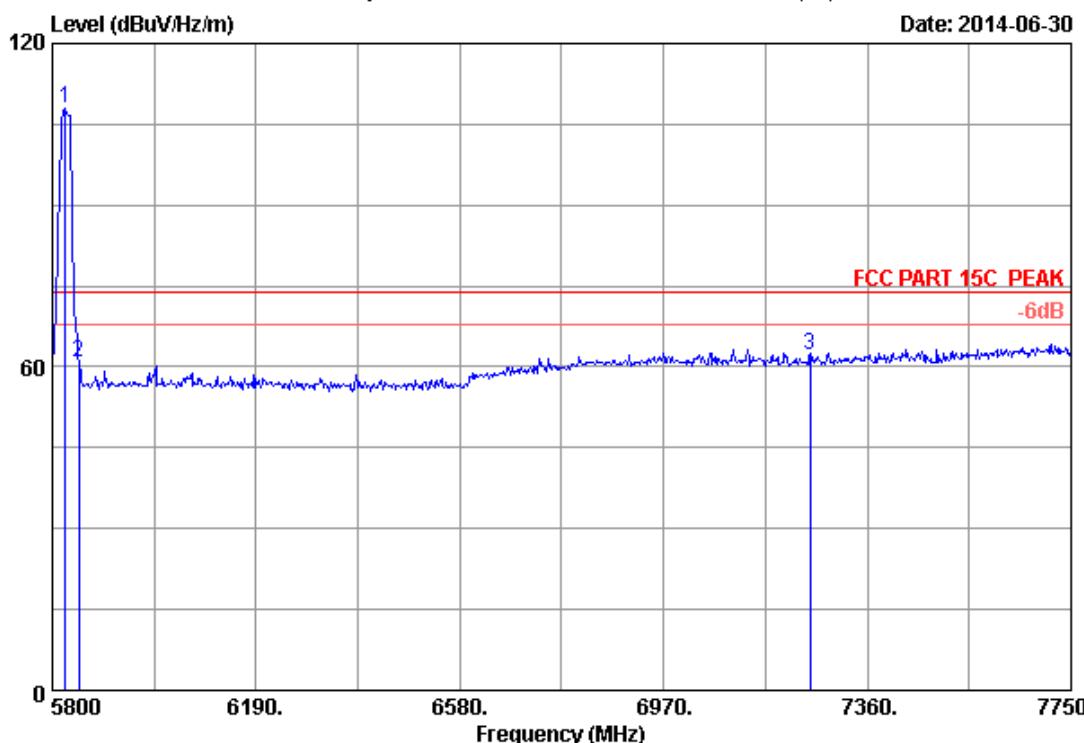


Site no. : 3m Chamber Data no. : 34
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C AV
Env. / Ins. : 24°C/56% Engineer : Leo-Li
EUT : Altai A2-Ei Dual-band WiFi Access Point
Power Rating : DC 56V From POE Input AC 120V/60Hz
Test Mode : IEEE802.11nHT20 5745MHz Tx
M/N : WA2011N-E

No.	Freq. (MHz)	Ant.	Cable	AMP	Emission			
		Factor (dB/m)	Loss (dB)	factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)
1	5460.000	33.94	9.25	35.70	35.76	43.25	54.00	10.75 Average
2	5725.000	34.09	9.52	35.70	42.43	50.34	54.00	3.66 Average
3	5749.230	34.10	9.55	35.70	84.16	92.11	54.00	-38.11 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.

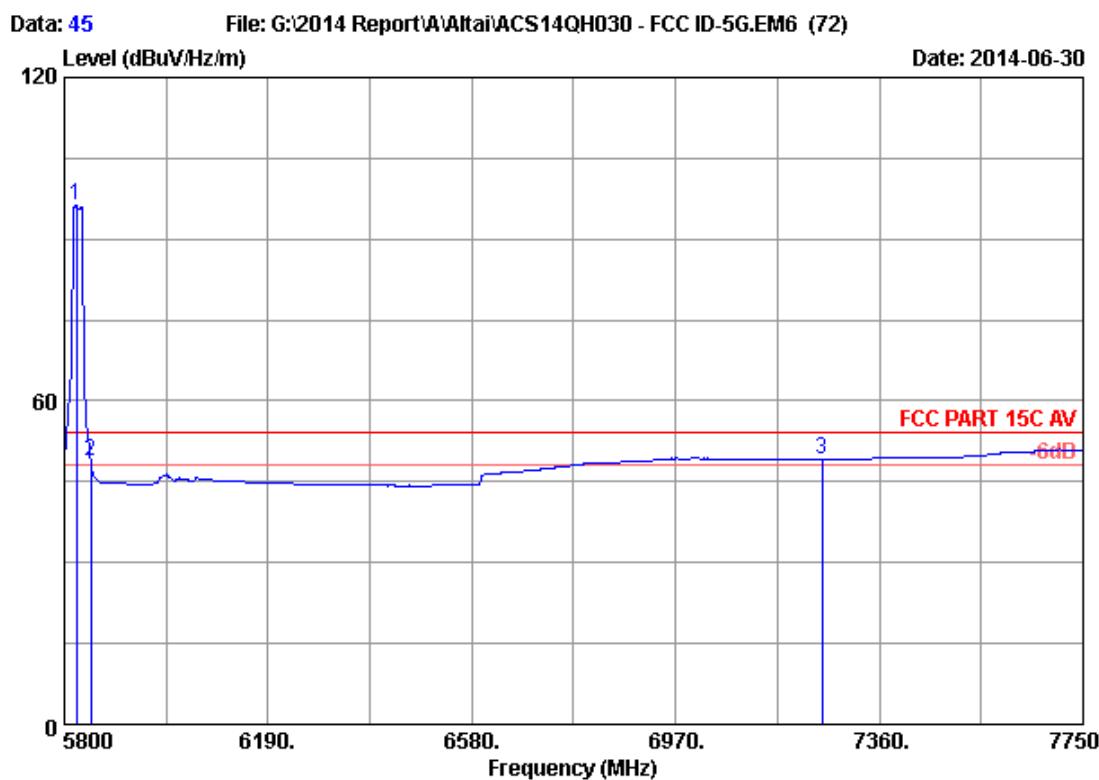
Data: 44 File: G:\2014 Report\A\Altai\ACS14QH030 - FCC ID-5G.EM6 (72)



Site no. : 3m Chamber Data no. : 44
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 24°C/56% Engineer : Leo-Li
EUT : Altai A2-Ei Dual-band WiFi Access Point
Power Rating : DC 56V From POE Input AC 120V/60Hz
Test Mode : IEEE802.11nHT20 5825MHz Tx
M/N : WA2011N-E

No.	Freq. (MHz)	Ant.	Cable	AMP	Emission			
		Factor (dB/m)	Loss (dB)	factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)
1	5825.350	34.13	9.63	35.70	99.89	107.95	74.00	-33.95 Peak
2	5850.000	34.14	9.66	35.70	52.57	60.67	74.00	13.33 Peak
3	7250.000	36.05	10.99	35.45	50.64	62.23	74.00	11.77 Peak

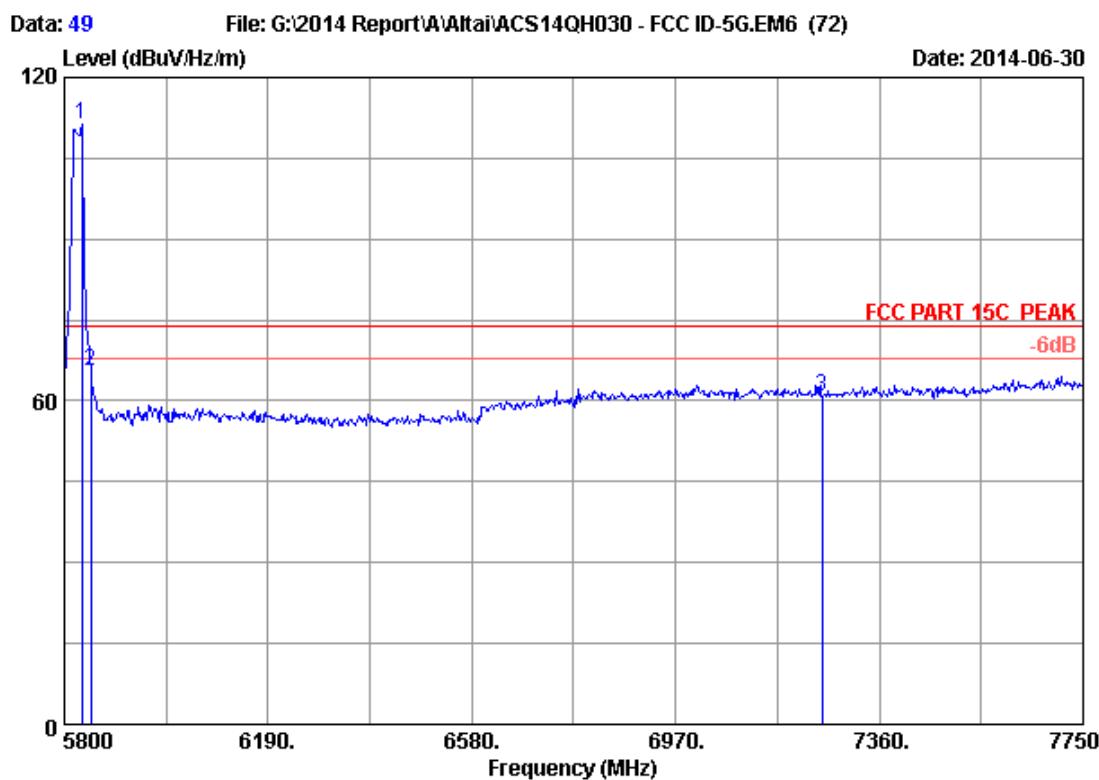
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
-Amp Factor
2. The emission levels that are 20dB below the official
limit are not reported.



Site no. : 3m Chamber Data no. : 45
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C AV
Env. / Ins. : 24°C/56% Engineer : Leo-Li
EUT : Altai A2-Ei Dual-band WiFi Access Point
Power Rating : DC 56V From POE Input AC 120V/60Hz
Test Mode : IEEE802.11nHT20 5825MHz Tx
M/N : WA2011N-E

No.	Freq. (MHz)	Ant. Factor	Cable Loss (dB/m)	AMP factor (dB)	Emission				
					Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5823.400	34.13	9.63	35.70	88.23	96.29	54.00	-42.29	Average
2	5850.000	34.14	9.66	35.70	40.60	48.70	54.00	5.30	Average
3	7250.000	36.05	10.99	35.45	37.61	49.20	54.00	4.80	Average

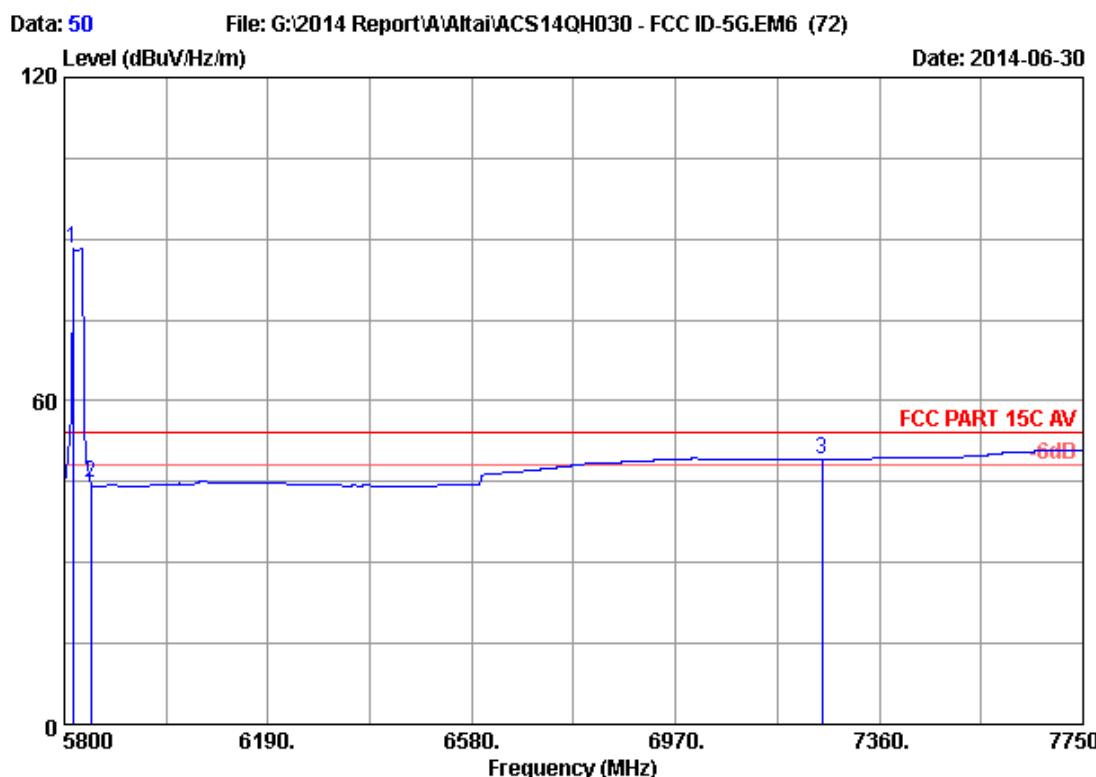
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
-Amp Factor
2. The emission levels that are 20dB below the official
limit are not reported.



Site no. : 3m Chamber Data no. : 49
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 24°C/56% Engineer : Leo-Li
 EUT : Altai A2-Ei Dual-band WiFi Access Point
 Power Rating : DC 56V From POE Input AC 120V/60Hz
 Test Mode : IEEE802.11nHT20 5825MHz Tx
 M/N : WA2011N-E

No.	Freq. (MHz)	Ant.	Cable	AMP	Emission			
		Factor (dB/m)	Loss (dB)	factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)
1	5833.150	34.13	9.64	35.70	103.21	111.28	74.00	-37.28 Peak
2	5850.000	34.14	9.66	35.70	57.40	65.50	74.00	8.50 Peak
3	7250.000	36.05	10.99	35.45	49.27	60.86	74.00	13.14 Peak

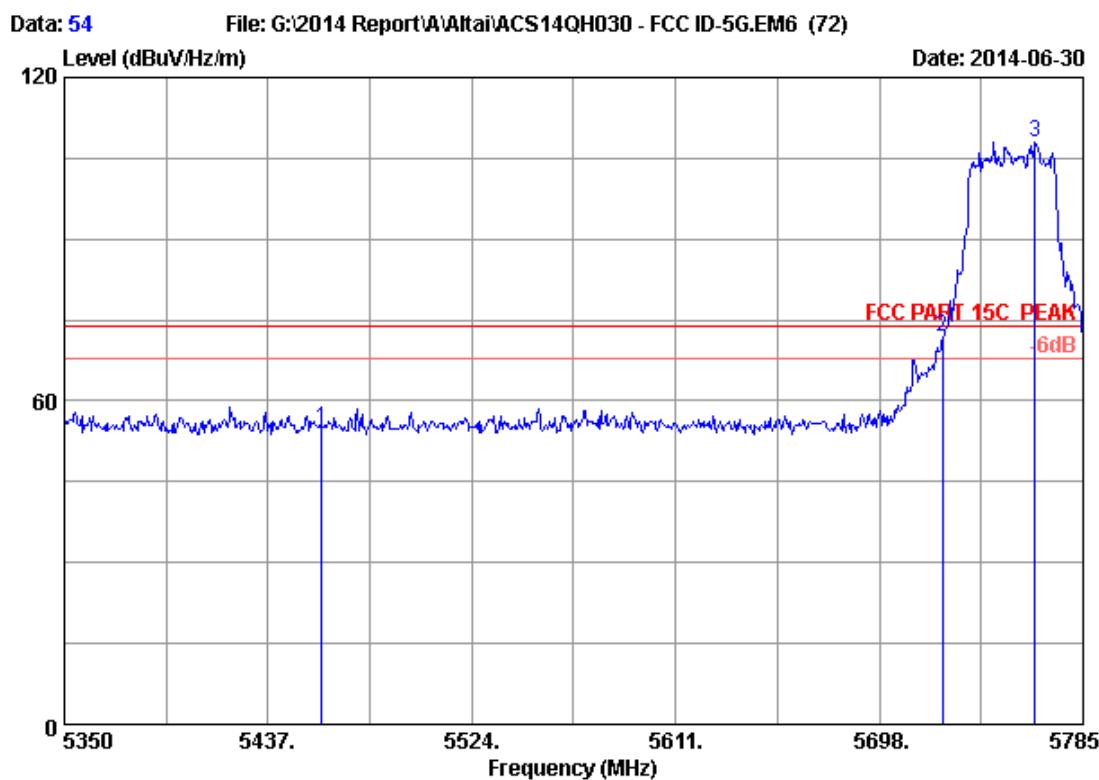
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp Factor
 2. The emission levels that are 20dB below the official
 limit are not reported.



Site no. : 3m Chamber Data no. : 50
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C AV
Env. / Ins. : 24°C/56% Engineer : Leo-Li
EUT : Altai A2-Ei Dual-band WiFi Access Point
Power Rating : DC 56V From POE Input AC 120V/60Hz
Test Mode : IEEE802.11nHT20 5825MHz Tx
M/N : WA2011N-E

No.	Freq. (MHz)	Ant.	Cable	AMP	Emission			
		Factor (dB/m)	Loss (dB)	factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)
1	5815.600	34.13	9.62	35.70	80.20	88.25	54.00	-34.25 Average
2	5850.000	34.14	9.66	35.70	36.81	44.91	54.00	9.09 Average
3	7250.000	36.05	10.99	35.45	37.62	49.21	54.00	4.79 Average

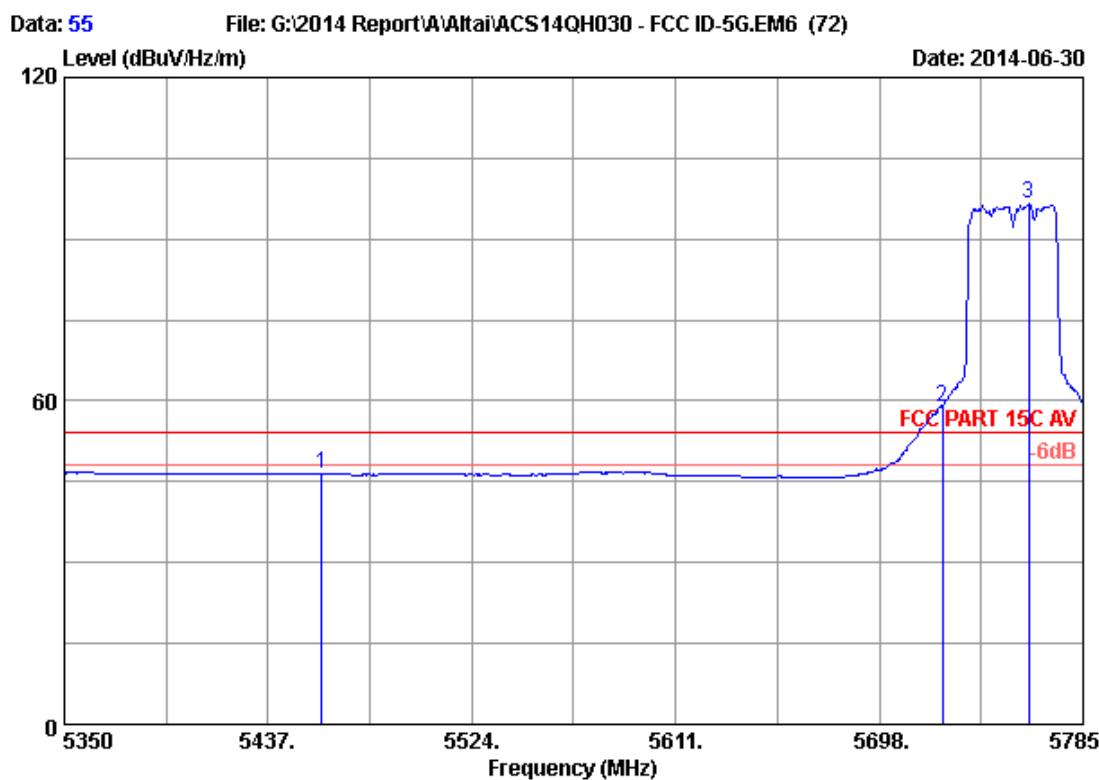
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
-Amp Factor
2. The emission levels that are 20dB below the official
limit are not reported.



Site no. : 3m Chamber Data no. : 54
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 24°C/56% Engineer : Leo-Li
 EUT : Altai A2-Ei Dual-band WiFi Access Point
 Power Rating : DC 56V From POE Input AC 120V/60Hz
 Test Mode : IEEE802.11nHT40 5755MHz Tx
 M/N : WA2011N-E

No.	Freq. (MHz)	Ant. Factor	Cable Loss (dB/m)	AMP factor (dB)	Emission				
					Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5460.000	33.94	9.25	35.70	47.32	54.81	74.00	19.19	Peak
2	5725.000	34.09	9.52	35.70	63.86	71.77	74.00	2.23	Peak
3	5764.555	34.11	9.57	35.70	99.89	107.87	74.00	-33.87	Peak

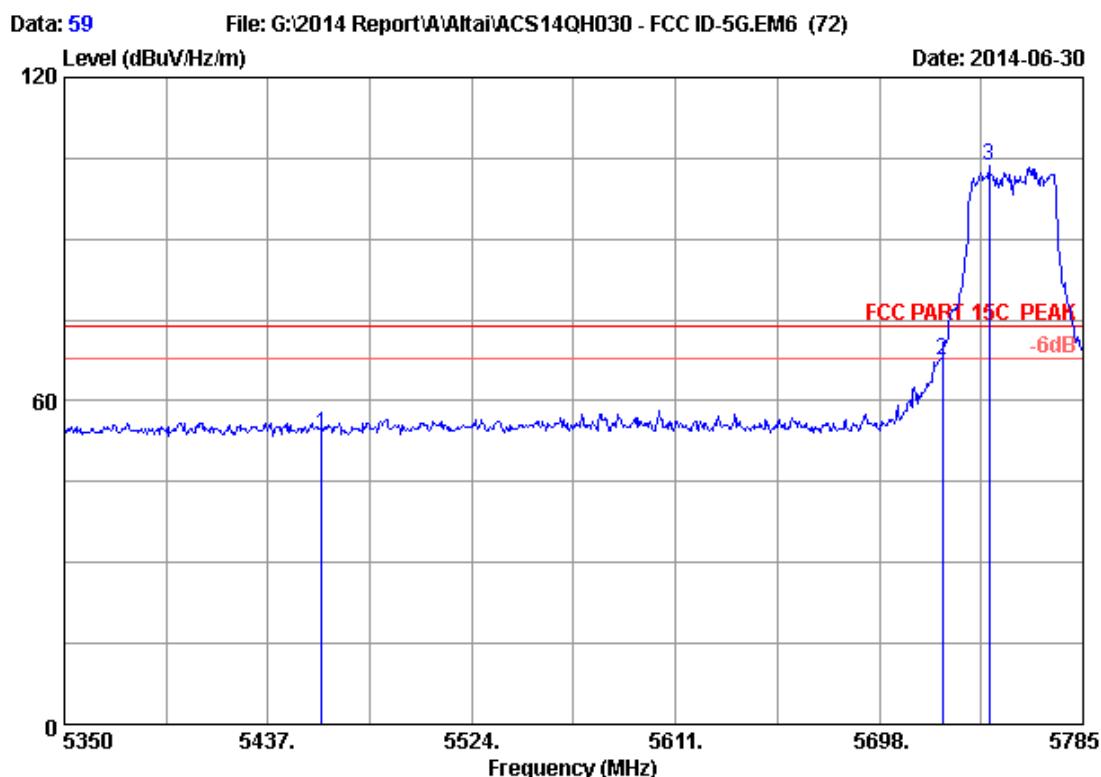
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp Factor
 2. The emission levels that are 20dB below the official
 limit are not reported.



Site no. : 3m Chamber Data no. : 55
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C AV
 Env. / Ins. : 24°C/56% Engineer : Leo-Li
 EUT : Altai A2-Ei Dual-band WiFi Access Point
 Power Rating : DC 56V From POE Input AC 120V/60Hz
 Test Mode : IEEE802.11nHT40 5755MHz Tx
 M/N : WA2011N-E

No.	Freq. (MHz)	Ant. Factor	Cable Loss (dB)	AMP factor (dB)	Emission			
					Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)
1	5460.000	33.94	9.25	35.70	38.92	46.41	54.00	7.59 Average
2	5725.000	34.09	9.52	35.70	50.76	58.67	54.00	-4.67 Average
3	5761.945	34.10	9.56	35.70	88.59	96.55	54.00	-42.55 Average

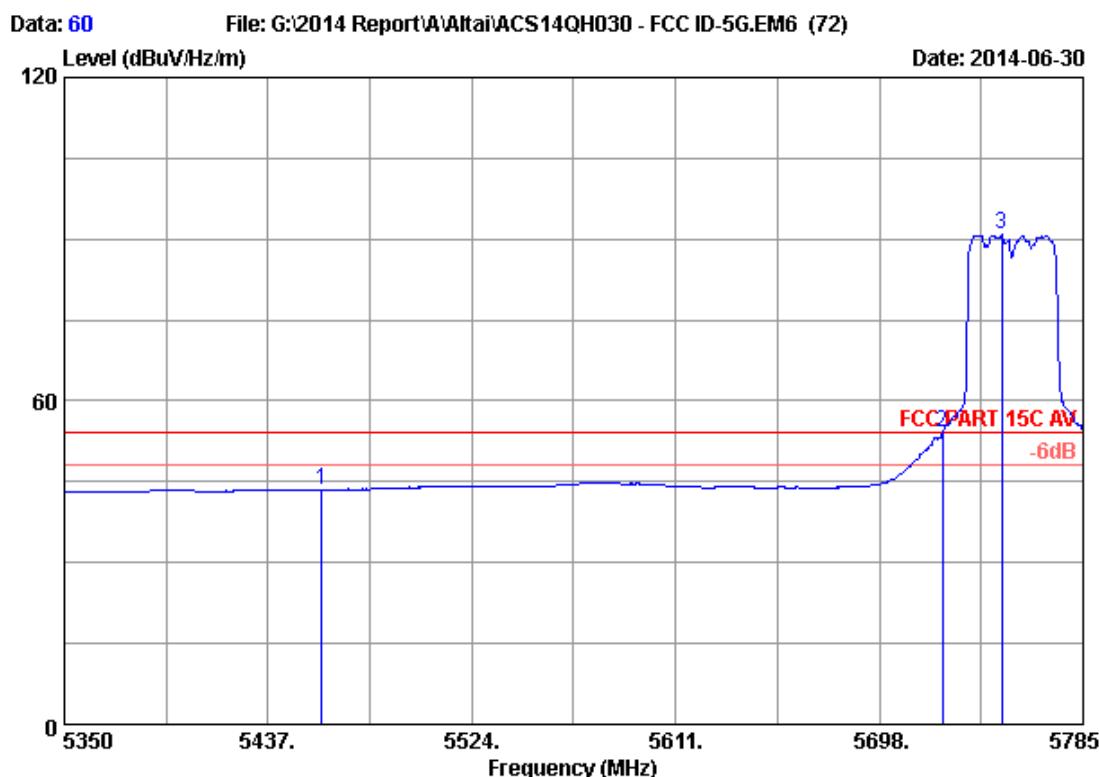
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp Factor
 2. The emission levels that are 20dB below the official
 limit are not reported.



Site no. : 3m Chamber Data no. : 59
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 24°C/56% Engineer : Leo-Li
 EUT : Altai A2-Ei Dual-band WiFi Access Point
 Power Rating : DC 56V From POE Input AC 120V/60Hz
 Test Mode : IEEE802.11nHT40 5755MHz Tx
 M/N : WA2011N-E

No.	Freq. (MHz)	Ant. Factor	Cable Loss (dB/m)	AMP factor (dB)	Emission				
					Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	5460.000	33.94	9.25	35.70	46.36	53.85	74.00	20.15	Peak
2	5725.000	34.09	9.52	35.70	59.73	67.64	74.00	6.36	Peak
3	5744.980	34.10	9.55	35.70	95.72	103.67	74.00	-29.67	Peak

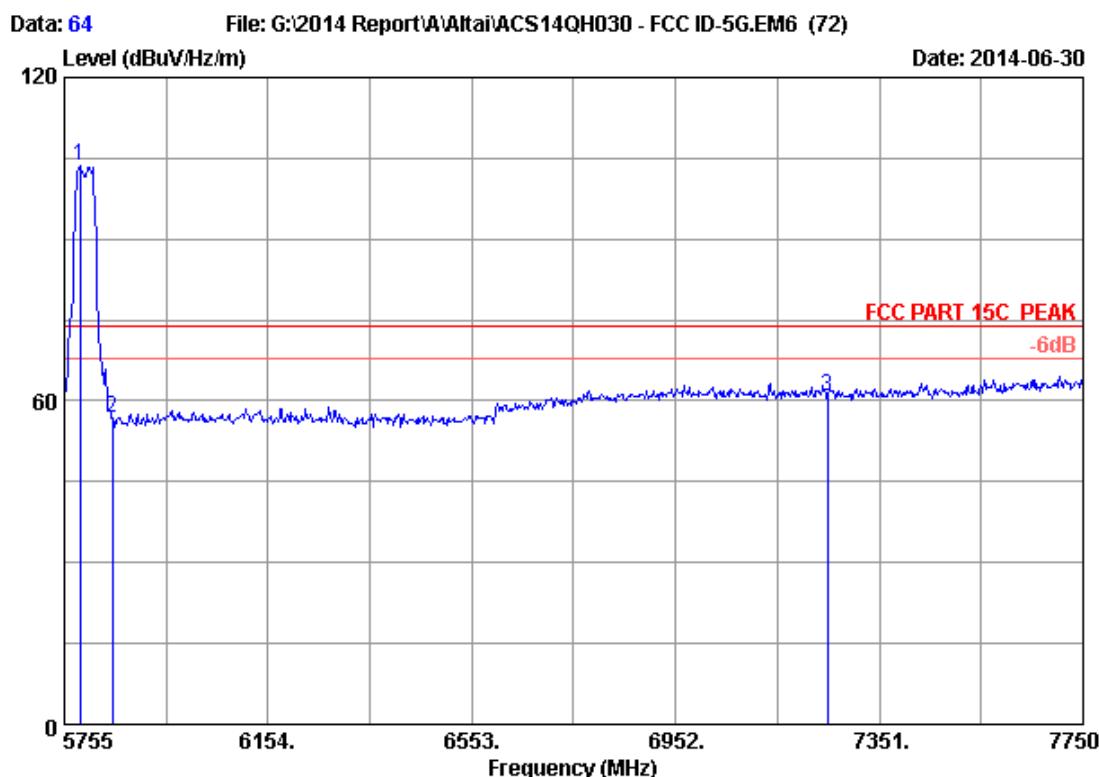
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp Factor
 2. The emission levels that are 20dB below the official
 limit are not reported.



Site no. : 3m Chamber Data no. : 60
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
 Limit : FCC PART 15C AV
 Env. / Ins. : 24°C/56% Engineer : Leo-Li
 EUT : Altai A2-Ei Dual-band WiFi Access Point
 Power Rating : DC 56V From POE Input AC 120V/60Hz
 Test Mode : IEEE802.11nHT40 5755MHz Tx
 M/N : WA2011N-E

No.	Freq. (MHz)	Ant. Factor	Cable Loss (dB)	AMP factor (dB)	Emission			
					Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)
1	5460.000	33.94	9.25	35.70	36.04	43.53	54.00	10.47 Average
2	5725.000	34.09	9.52	35.70	46.15	54.06	54.00	-0.06 Average
3	5750.200	34.10	9.55	35.70	83.07	91.02	54.00	-37.02 Average

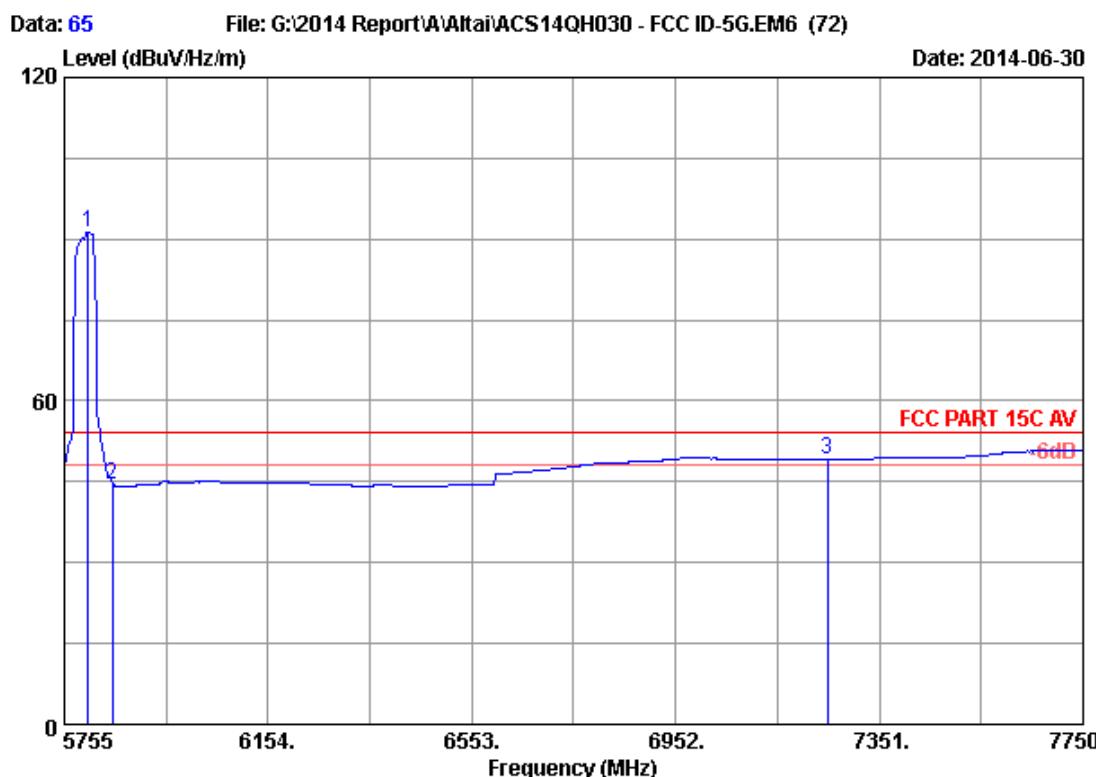
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp Factor
 2. The emission levels that are 20dB below the official
 limit are not reported.



Site no. : 3m Chamber Data no. : 64
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 24°C/56% Engineer : Leo-Li
 EUT : Altai A2-Ei Dual-band WiFi Access Point
 Power Rating : DC 56V From POE Input AC 120V/60Hz
 Test Mode : IEEE802.11nHT40 5795MHz Tx
 M/N : WA2011N-E

No.	Freq. (MHz)	Ant.	Cable	AMP	Emission			
		Factor (dB/m)	Loss (dB)	factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)
1	5784.925	34.11	9.59	35.70	95.64	103.64	74.00	-29.64 Peak
2	5850.000	34.14	9.66	35.70	48.87	56.97	74.00	17.03 Peak
3	7250.000	36.05	10.99	35.45	49.35	60.94	74.00	13.06 Peak

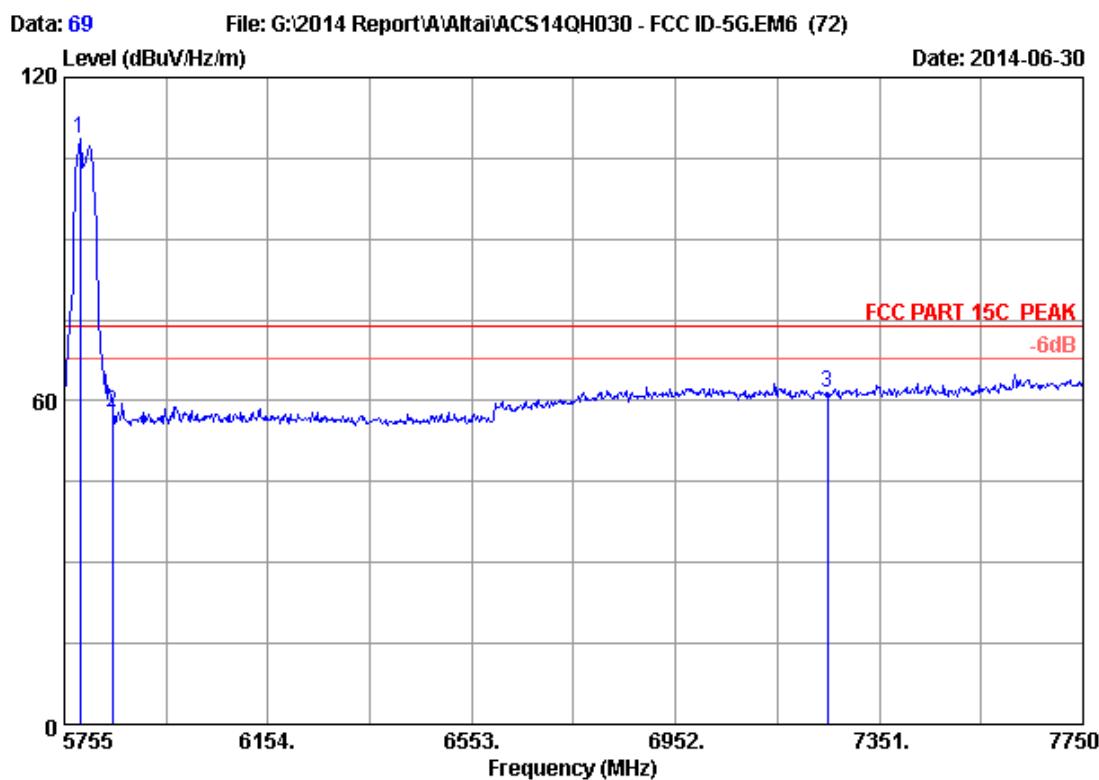
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp Factor
 2. The emission levels that are 20dB below the official
 limit are not reported.



Site no. : 3m Chamber Data no. : 65
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
 Limit : FCC PART 15C AV
 Env. / Ins. : 24°C/56% Engineer : Leo-Li
 EUT : Altai A2-Ei Dual-band WiFi Access Point
 Power Rating : DC 56V From POE Input AC 120V/60Hz
 Test Mode : IEEE802.11nHT40 5795MHz Tx
 M/N : WA2011N-E

No.	Freq. (MHz)	Ant. Factor	Cable Loss (dB/m)	AMP factor (dB)	Emission			
					Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)
1	5800.885	34.12	9.60	35.70	83.14	91.16	54.00	-37.16 Average
2	5850.000	34.14	9.66	35.70	36.31	44.41	54.00	9.59 Average
3	7250.000	36.05	10.99	35.45	37.65	49.24	54.00	4.76 Average

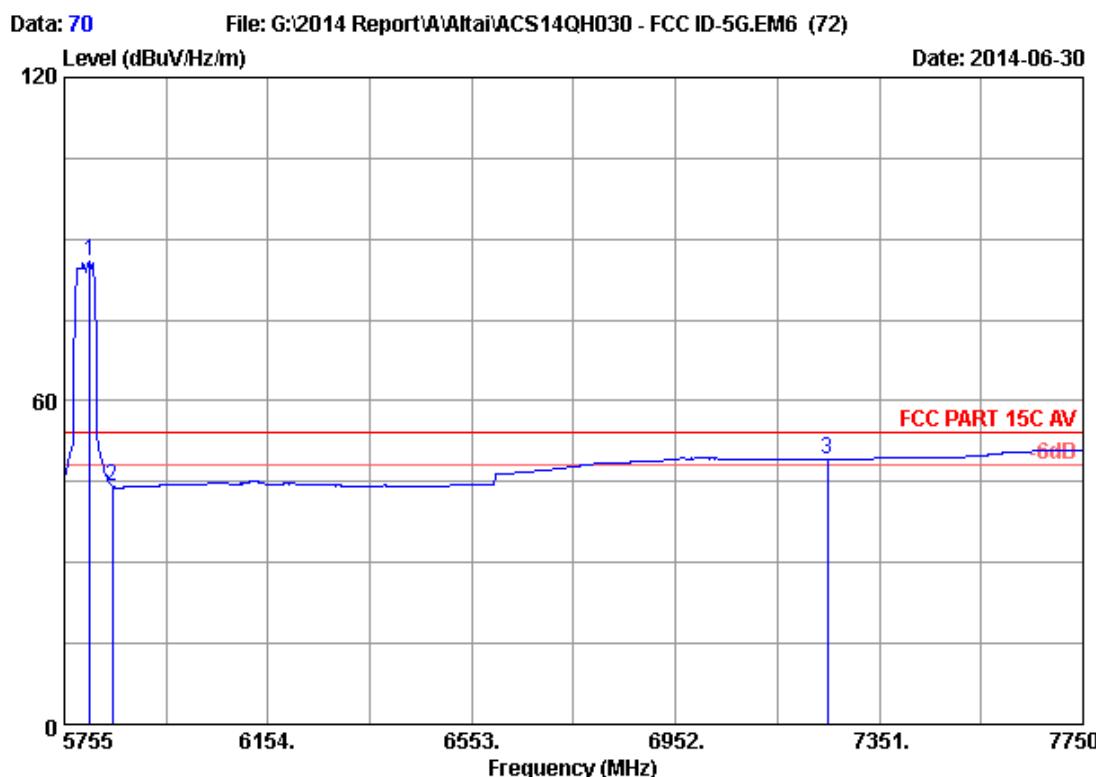
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp Factor
 2. The emission levels that are 20dB below the official
 limit are not reported.



Site no. : 3m Chamber Data no. : 69
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 24°C/56% Engineer : Leo-Li
 EUT : Altai A2-Ei Dual-band WiFi Access Point
 Power Rating : DC 56V From POE Input AC 120V/60Hz
 Test Mode : IEEE802.11nHT40 5795MHz Tx
 M/N : WA2011N-E

No.	Freq. (MHz)	Ant. Factor	Cable Loss (dB/m)	AMP factor (dB)	Emission			
					Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)
1	5784.925	34.11	9.59	35.70	100.79	108.79	74.00	-34.79 Peak
2	5850.000	34.14	9.66	35.70	49.63	57.73	74.00	16.27 Peak
3	7250.000	36.05	10.99	35.45	49.94	61.53	74.00	12.47 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.



Site no. : 3m Chamber Data no. : 70
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C AV
Env. / Ins. : 24°C/56% Engineer : Leo-Li
EUT : Altai A2-Ei Dual-band WiFi Access Point
Power Rating : DC 56V From POE Input AC 120V/60Hz
Test Mode : IEEE802.11nHT40 5795MHz Tx
M/N : WA2011N-E

No.	Freq. (MHz)	Ant.	Cable	AMP	Emission			
		Factor (dB/m)	Loss (dB)	factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)
1	5804.875	34.12	9.61	35.70	77.75	85.78	54.00	-31.78 Average
2	5850.000	34.14	9.66	35.70	35.93	44.03	54.00	9.97 Average
3	7250.000	36.05	10.99	35.45	37.63	49.22	54.00	4.78 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.

7. 6dB Bandwidth Test

7.1. Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum	Agilent	E4446A	US44300459	Apr. 28,14	1 Year
2.	Spectrum	Agilent	N9030A	MY51380221	Oct.31, 13	1 Year
3.	Attenuator (20dB)	Agilent	8491B	MY39262165	Apr. 28,14	1 Year
4.	RF Cable	Hubersuhner	SUCOFLEX102	28620/2	Apr. 28,14	1 Year

7.2. Limit

For direct sequence systems, the minimum 6dB bandwidth shall be at least 500kHz

7.3. Test Procedure

The transmitter output was connected to a spectrum analyzer, The bandwidth of the fundamental frequency was measured by spectrum analyzer with 300kHz RBW and 1MHz VBW. The 6dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 6dB.

7.4. Test Results

2.4G:

EUT: Altai A2-Ei Dual-band WiFi Access Point		
M/N: WA2011N-E		
Test date: 2014-06-28	Pressure: 101.2±1.0 kpa	Humidity: 52.8±3.0%
Tested by: Leo-Li	Test site: RF site	Temperature:23.9±0.6

Cable loss: 1 dB		Attenuator loss: 20 dB		
Test Mode	CH	6dB bandwidth (MHz)		Limit (KHz)
		ANT1	ANT2	
11b	CH1	12.64	12.67	>500
	CH6	12.67	12.66	>500
	CH11	12.22	12.64	>500
11g	CH1	16.47	16.40	>500
	CH6	16.50	16.40	>500
	CH11	16.50	16.50	>500
11n HT20	CH1	17.71	17.68	>500
	CH6	17.76	17.69	>500
	CH11	17.71	17.73	>500
11n HT40	CH1	36.35	36.54	>500
	CH4	36.48	36.47	>500
	CH7	36.50	36.68	>500
Conclusion : PASS				

5.8G:

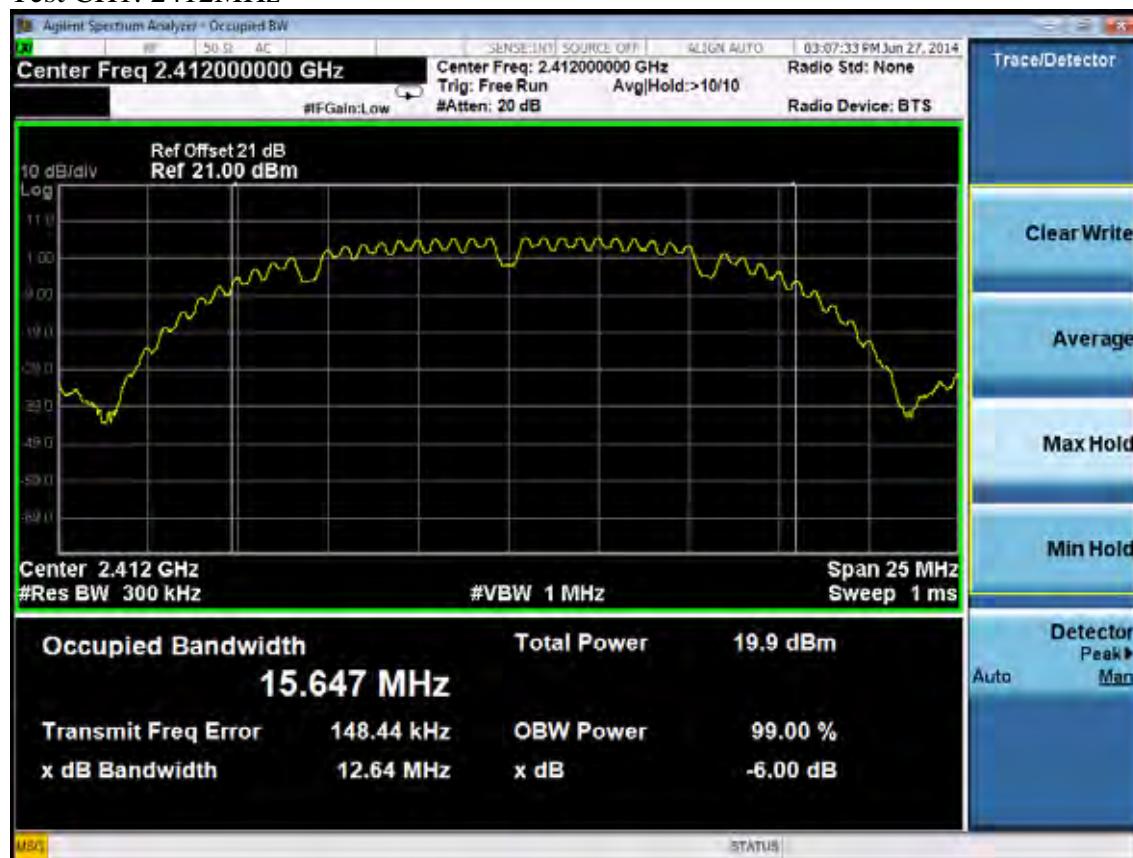
EUT: Altai A2-Ei Dual-band WiFi Access Point		
M/N: WA2011N-E		
Test date: 2014-06-28	Pressure: 101.2±1.0 kpa	Humidity: 52.8±3.0%
Tested by: Leo-Li	Test site: RF site	Temperature: 23.9±0.6

Cable loss: 1 dB		Attenuator loss: 20 dB		
Test Mode	CH	6dB bandwidth (MHz)		Limit (KHz)
		ANT1	ANT2	
11a	CH149	16.40	16.42	>500
	CH157	16.44	16.47	>500
	CH165	16.50	16.47	>500
11n HT20	CH149	17.69	17.67	>500
	CH157	17.78	17.69	>500
	CH165	17.75	17.67	>500
11n HT40	CH151	36.62	36.45	>500
	CH159	36.33	36.50	>500
Conclusion : PASS				

2.4G:
Chain 1:

Test Mode: IEEE 802.11b TX

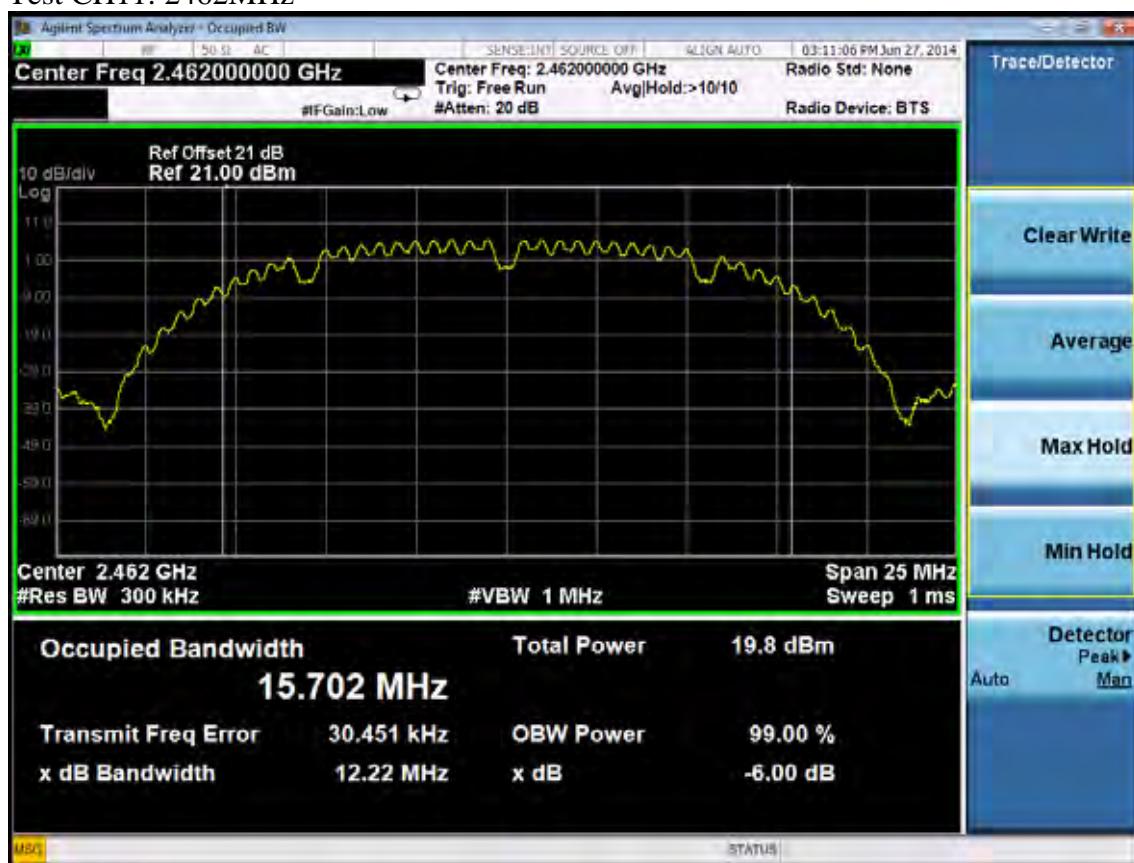
Test CH1: 2412MHz



Test CH6: 2437MHz

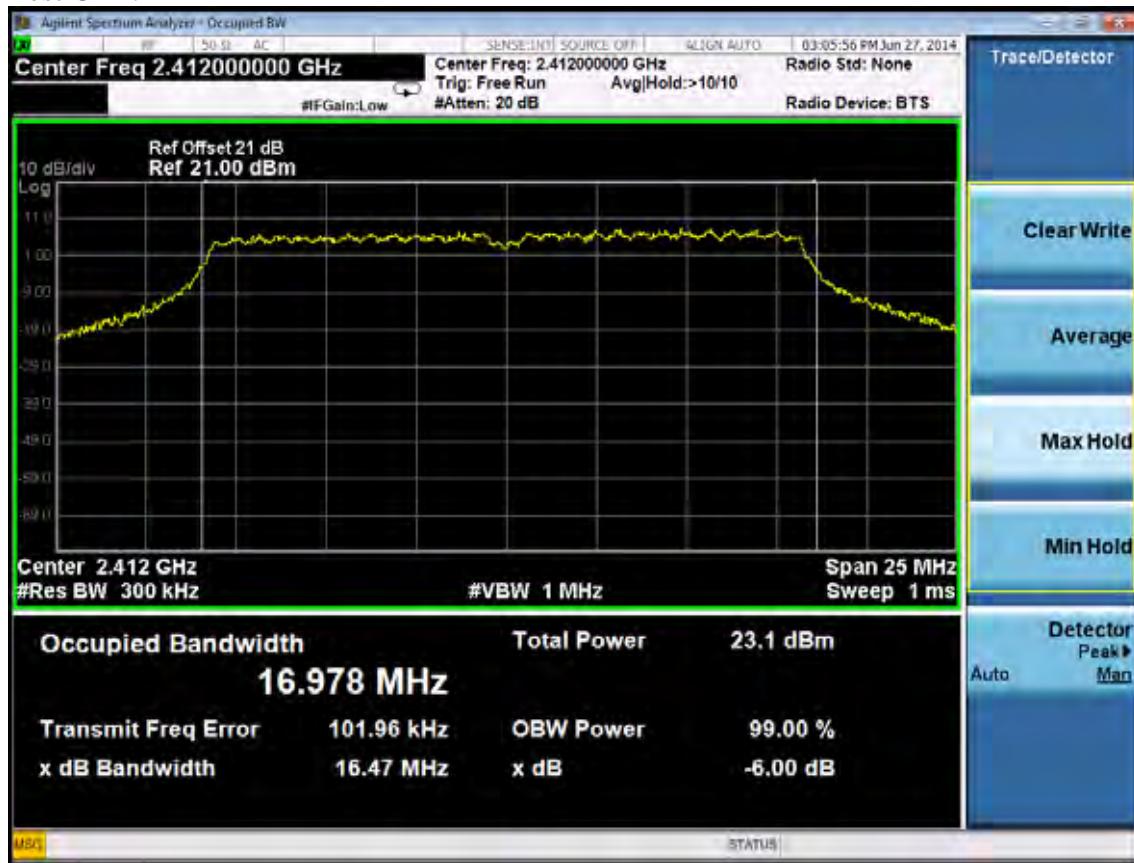


Test CH11: 2462MHz

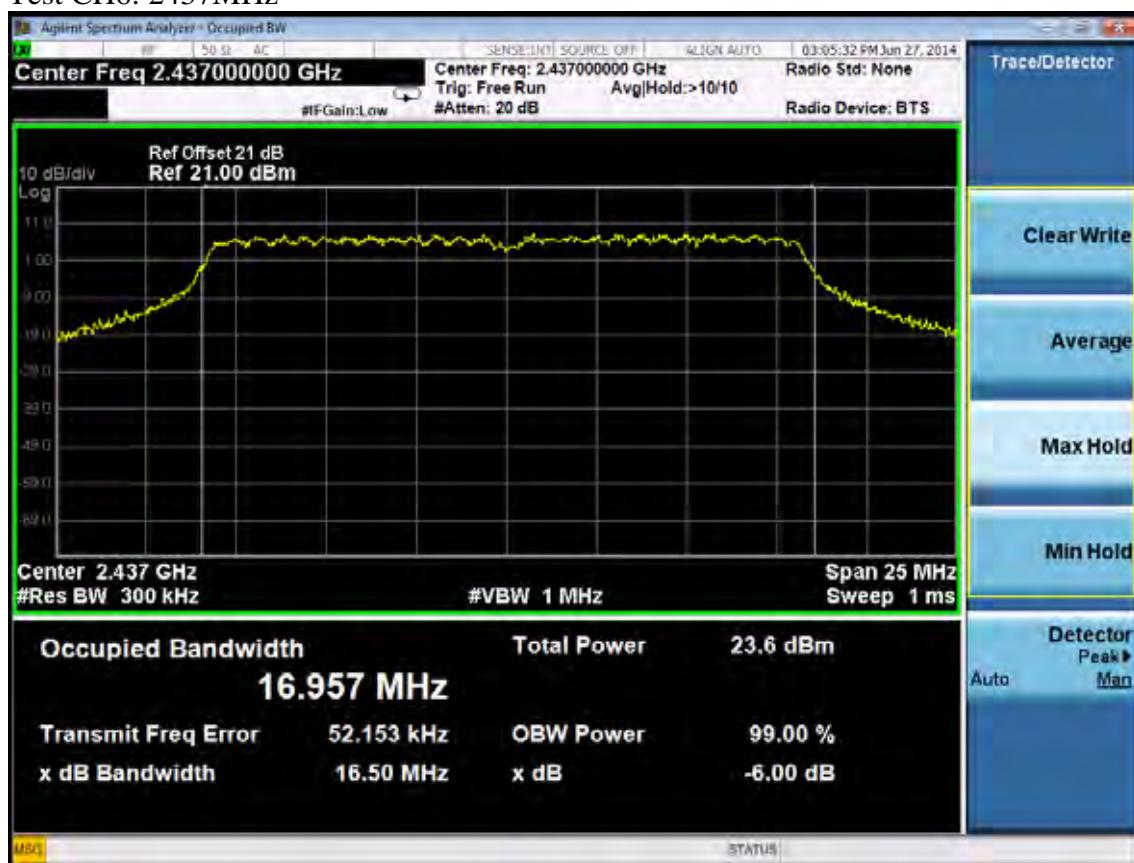


Test Mode: IEEE 802.11g TX

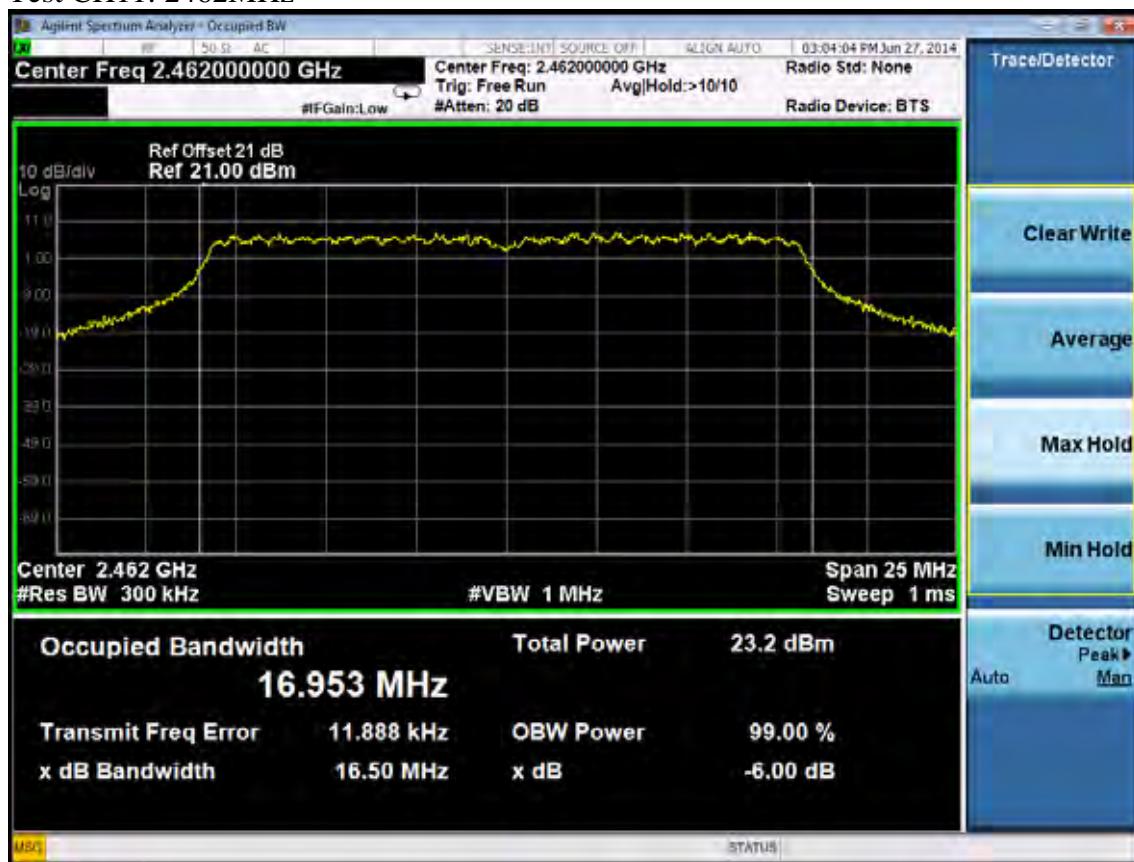
Test CH1: 2412MHz



Test CH6: 2437MHz

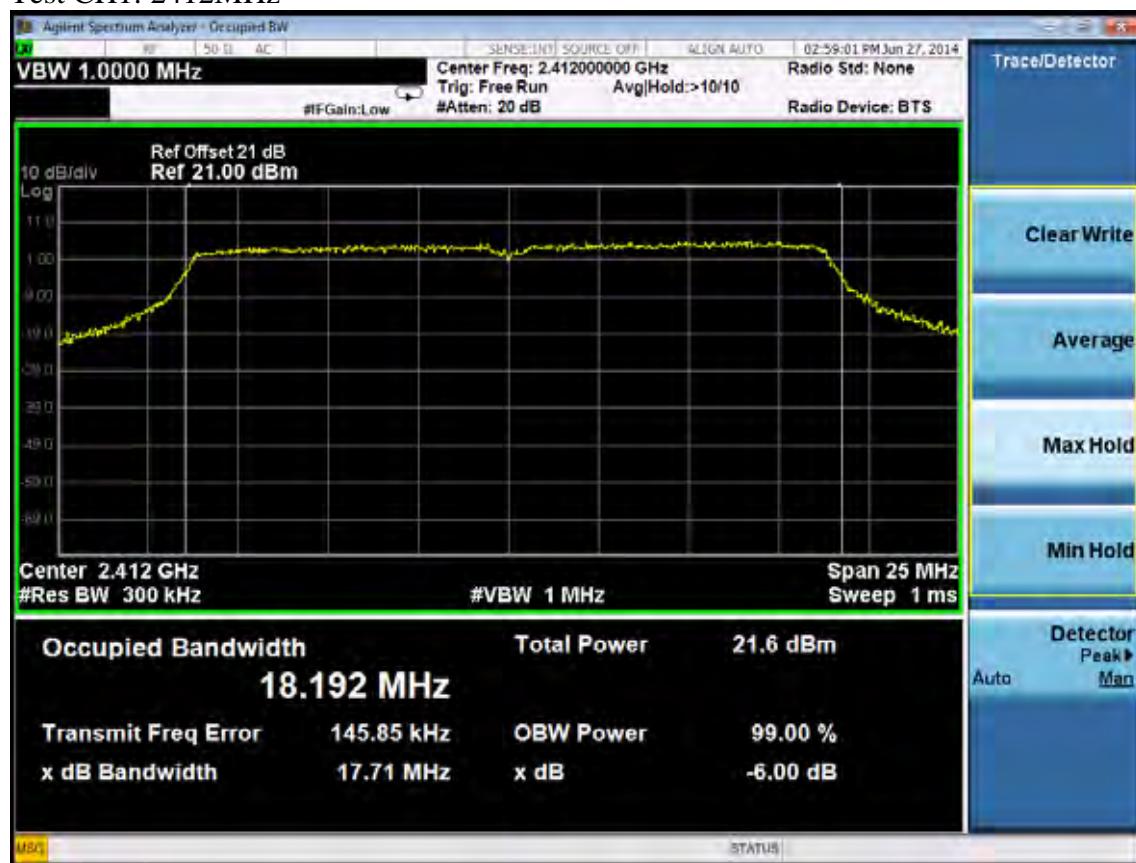


Test CH11: 2462MHz

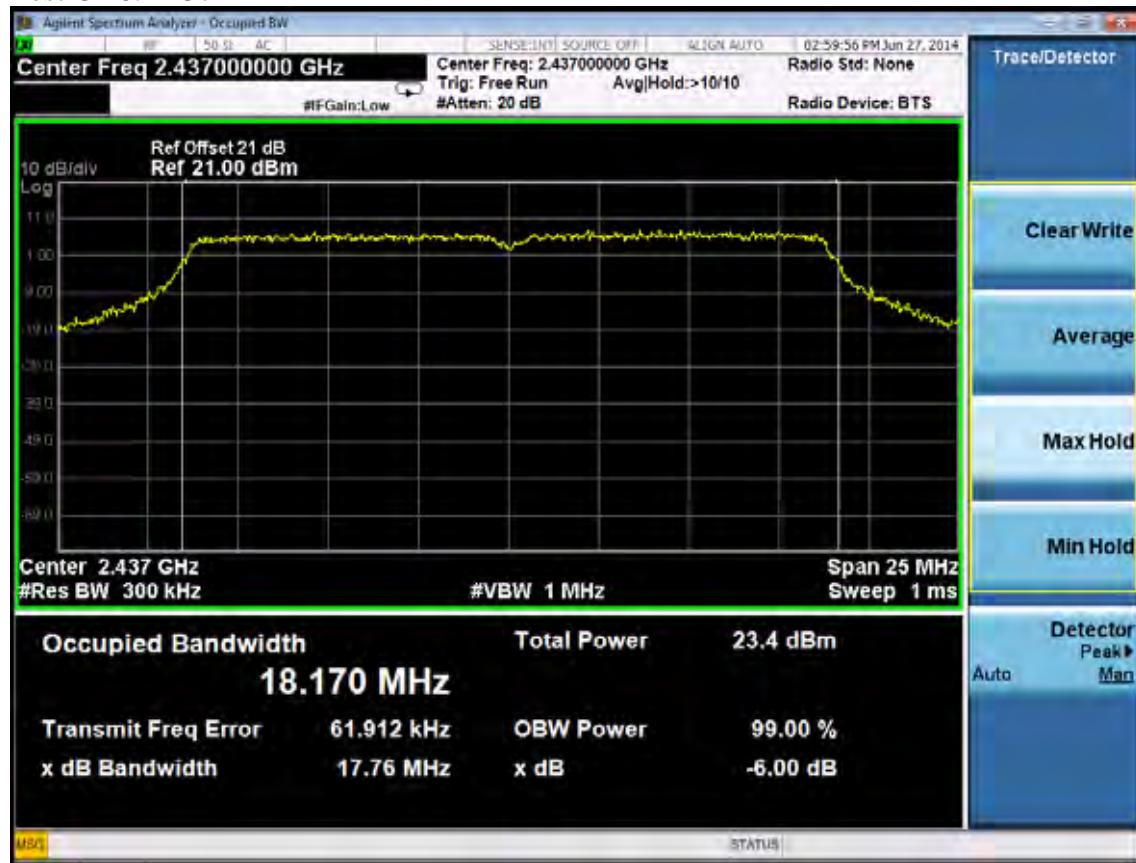


Test Mode: IEEE 802.11n HT20 TX

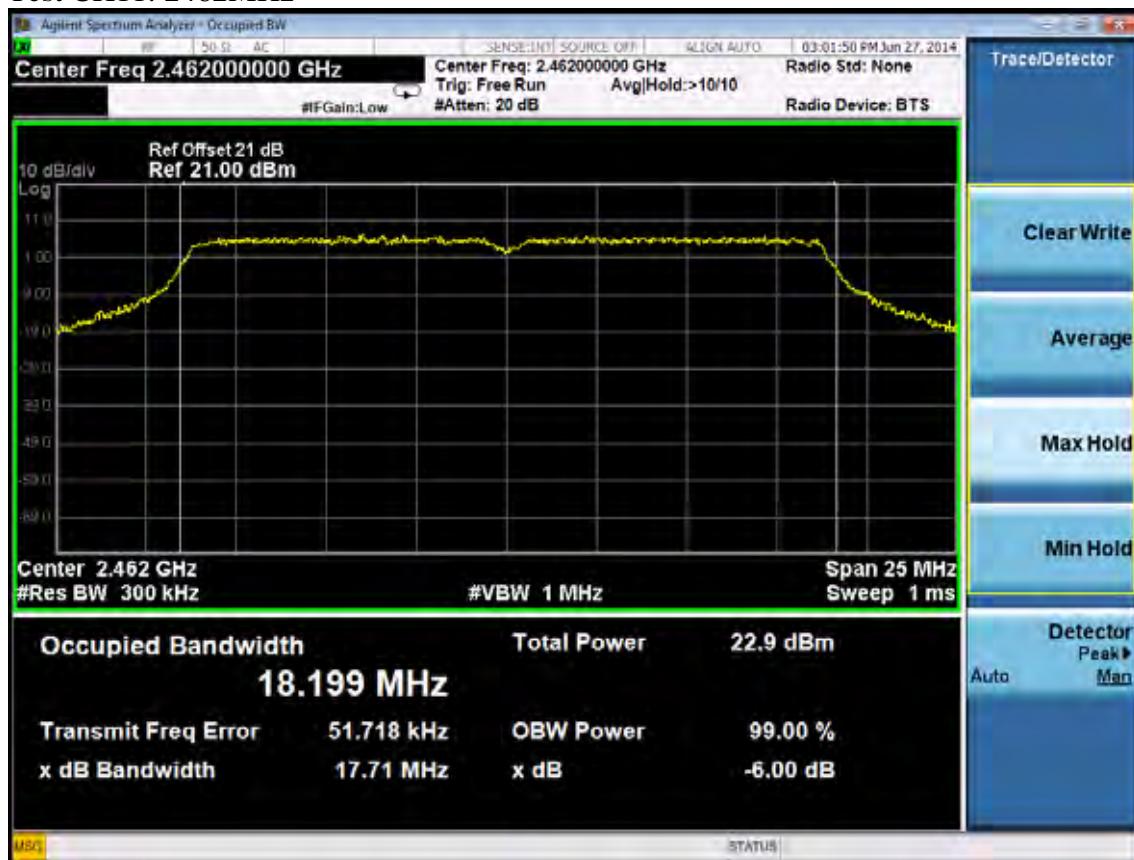
Test CH1: 2412MHz



Test CH6: 2437MHz



Test CH11: 2462MHz

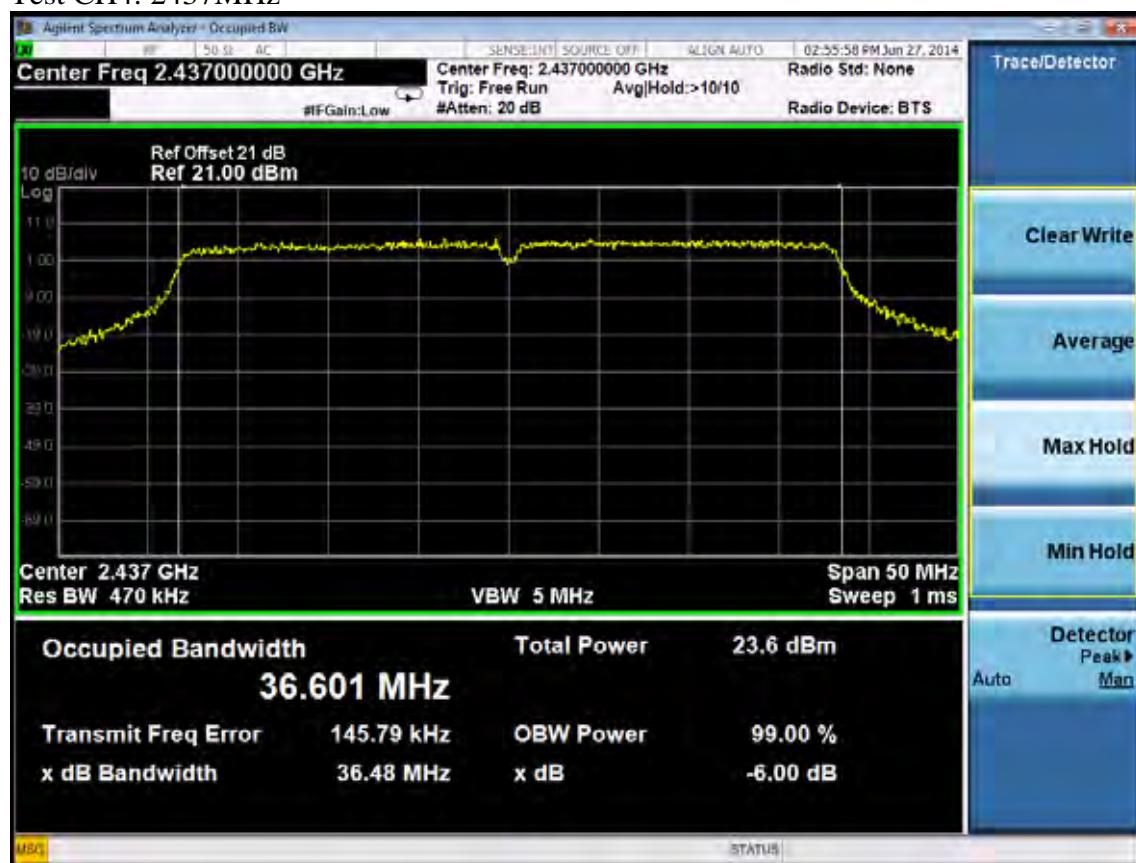


Test Mode: IEEE 802.11n HT40 TX

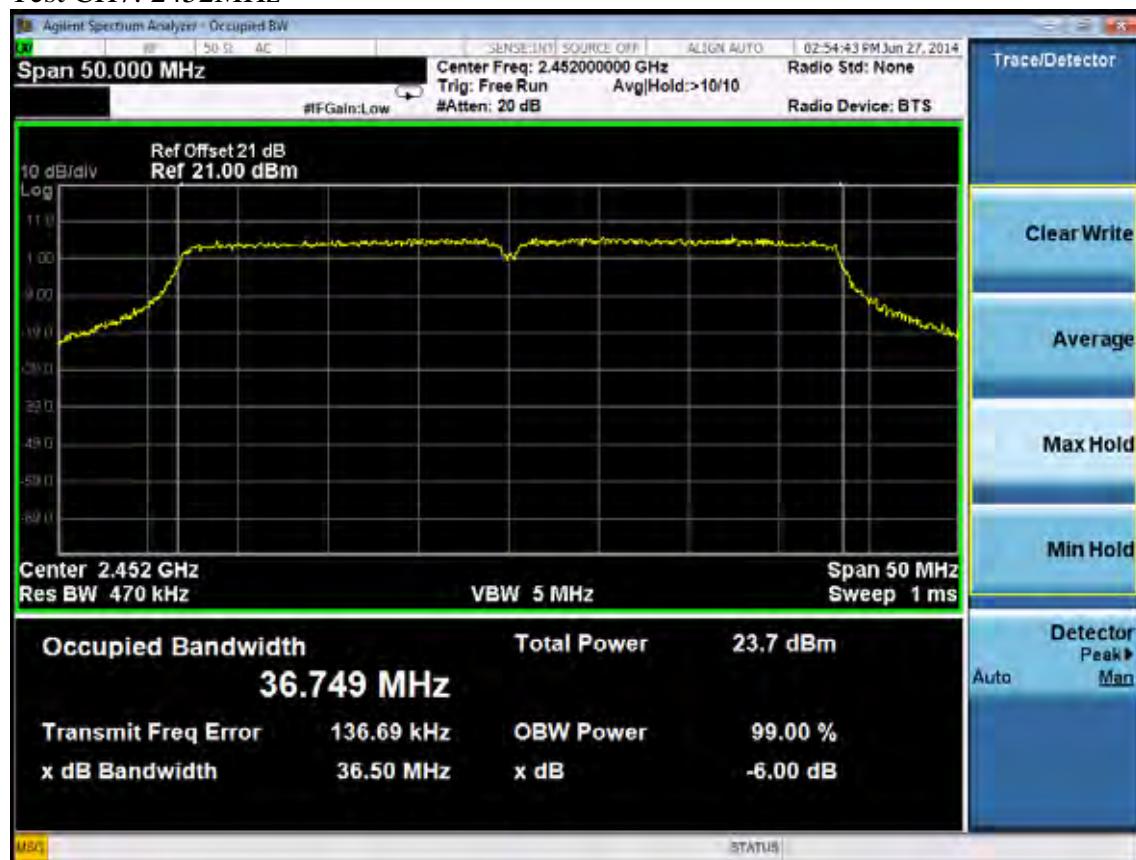
Test CH1: 2422MHz



Test CH4: 2437MHz



Test CH7: 2452MHz



Chain 2:

Test Mode: IEEE 802.11b TX

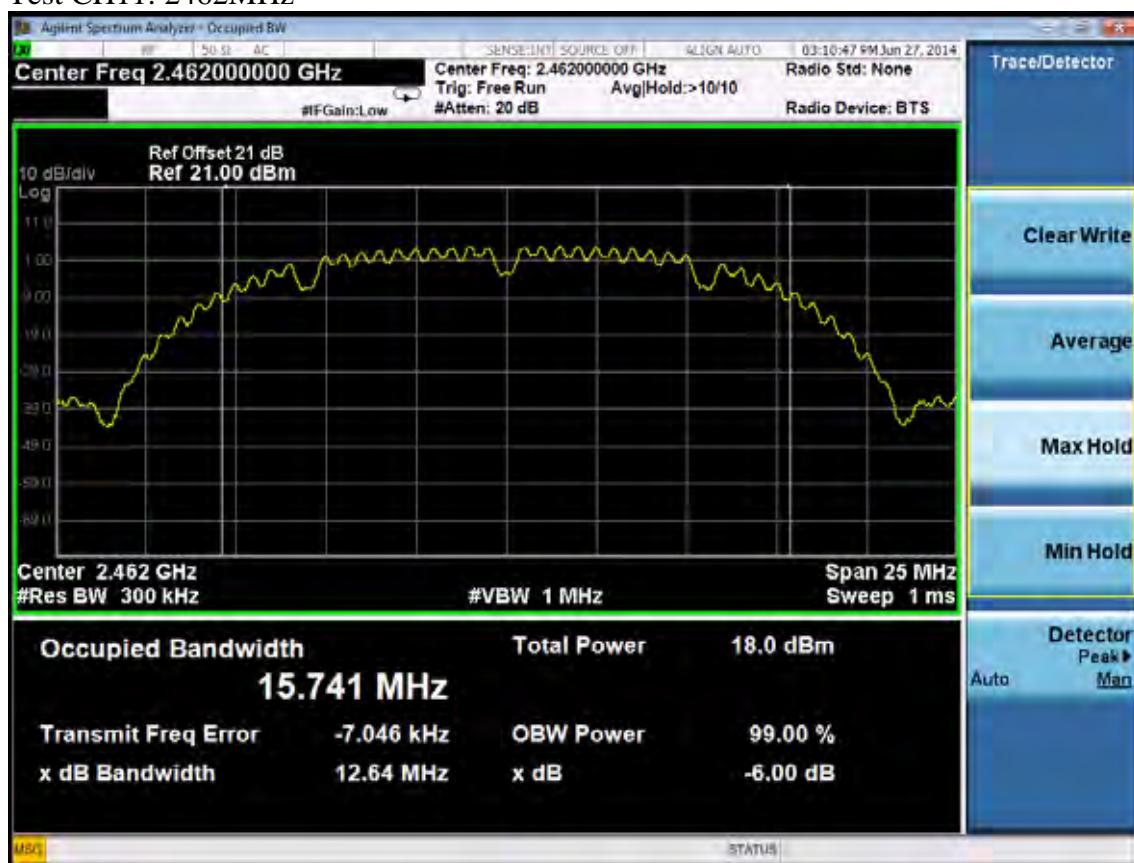
Test CH1: 2412MHz



Test CH6: 2437MHz

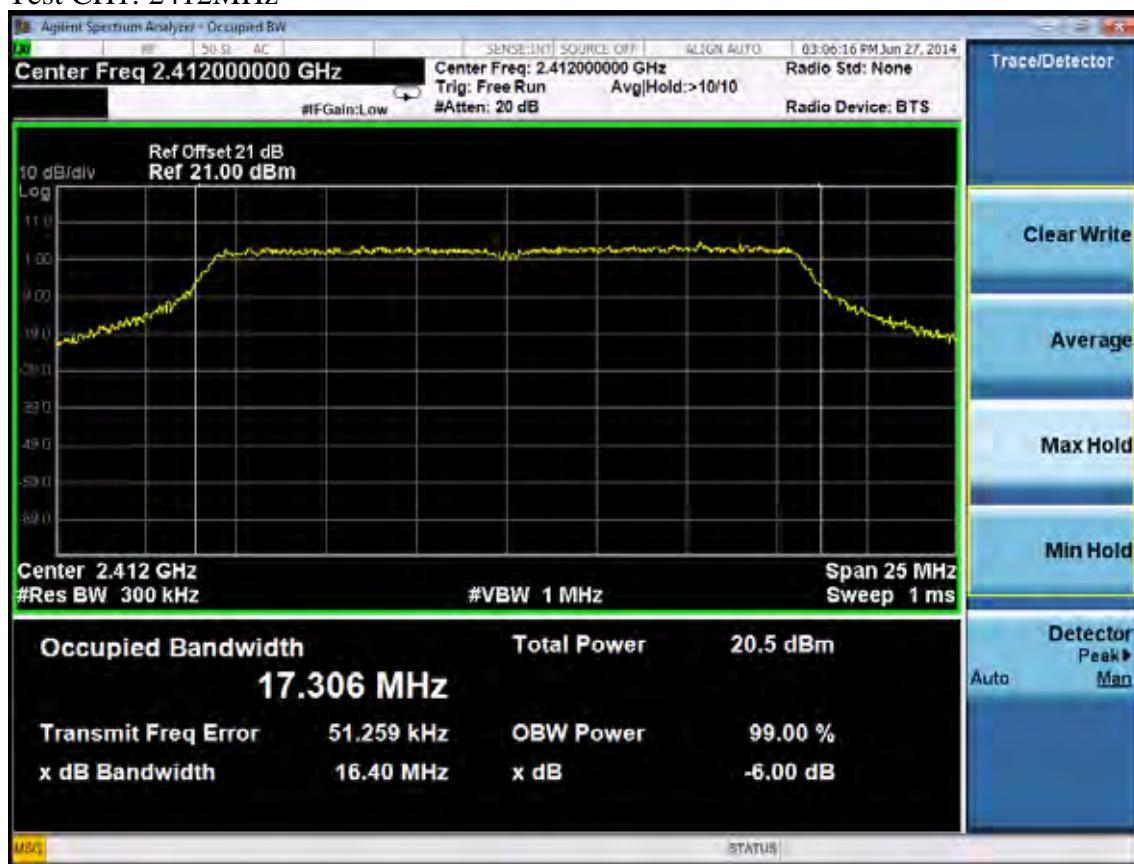


Test CH11: 2462MHz



Test Mode: IEEE 802.11g TX

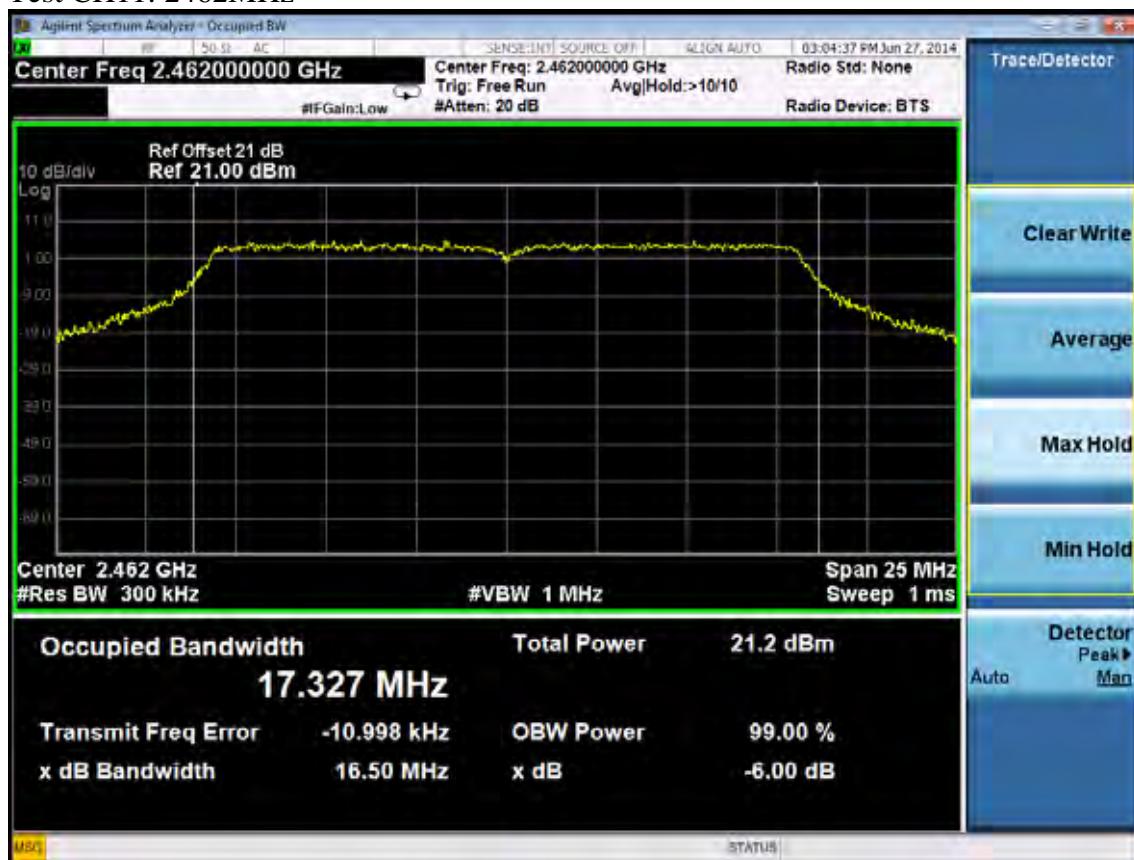
Test CH1: 2412MHz



Test CH6: 2437MHz

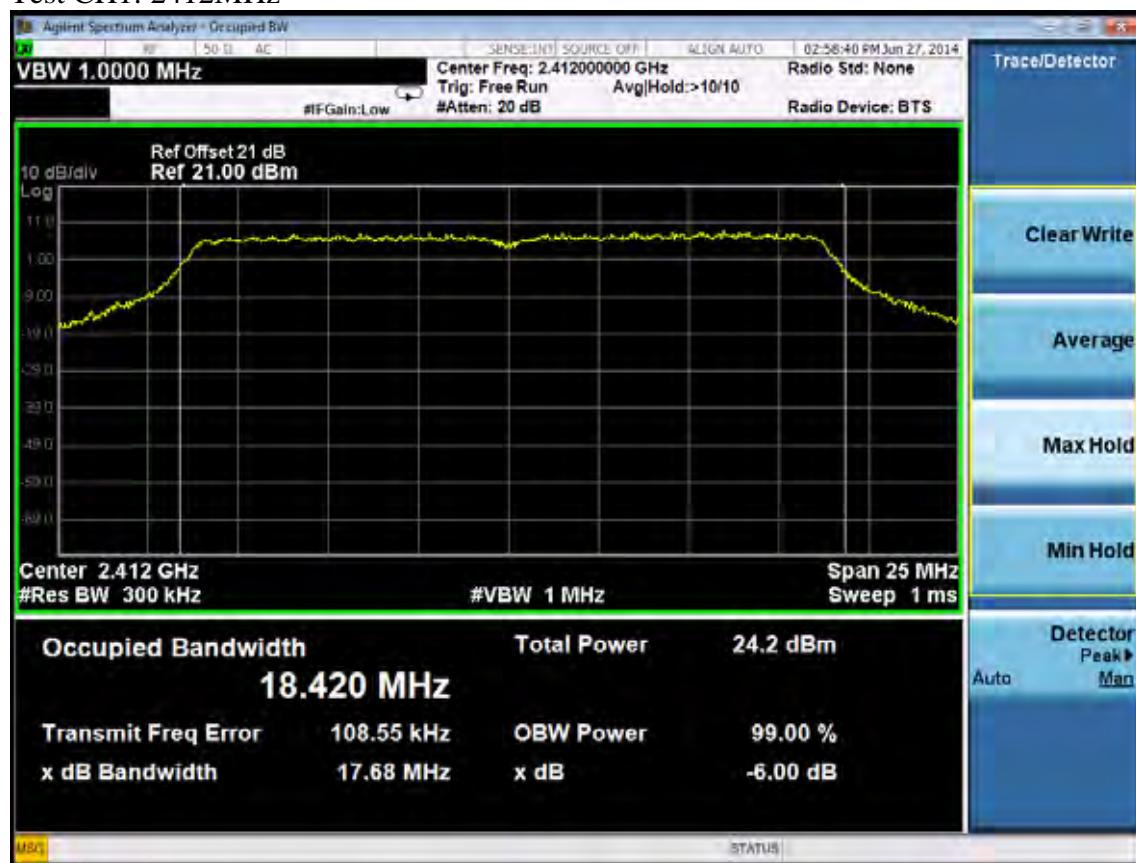


Test CH11: 2462MHz

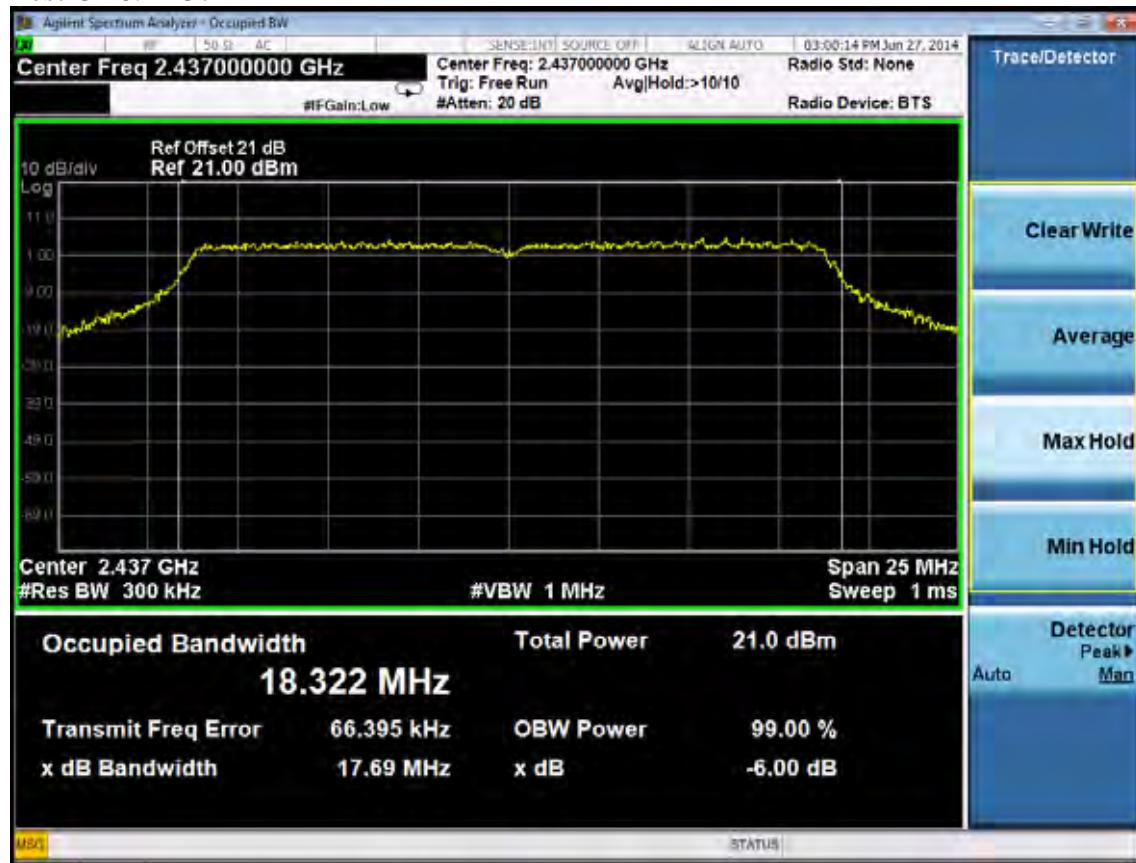


Test Mode: IEEE 802.11n HT20 TX

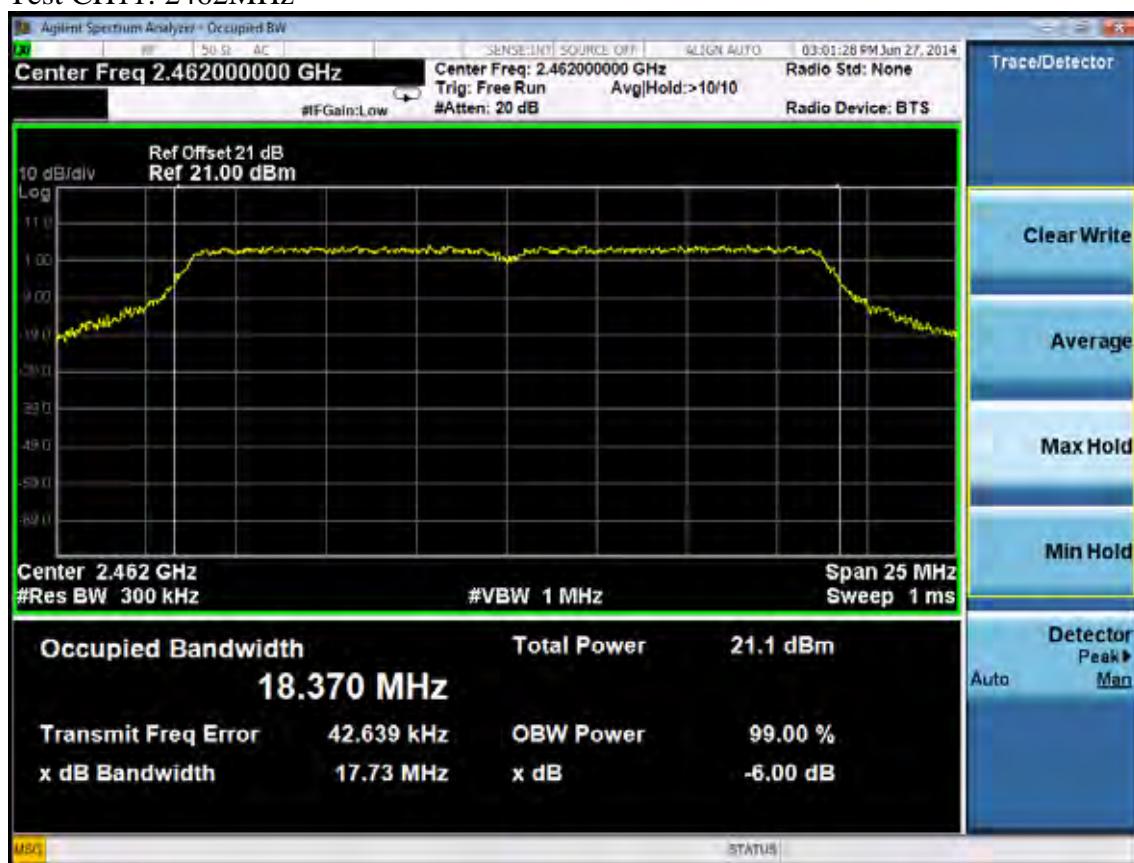
Test CH1: 2412MHz



Test CH6: 2437MHz

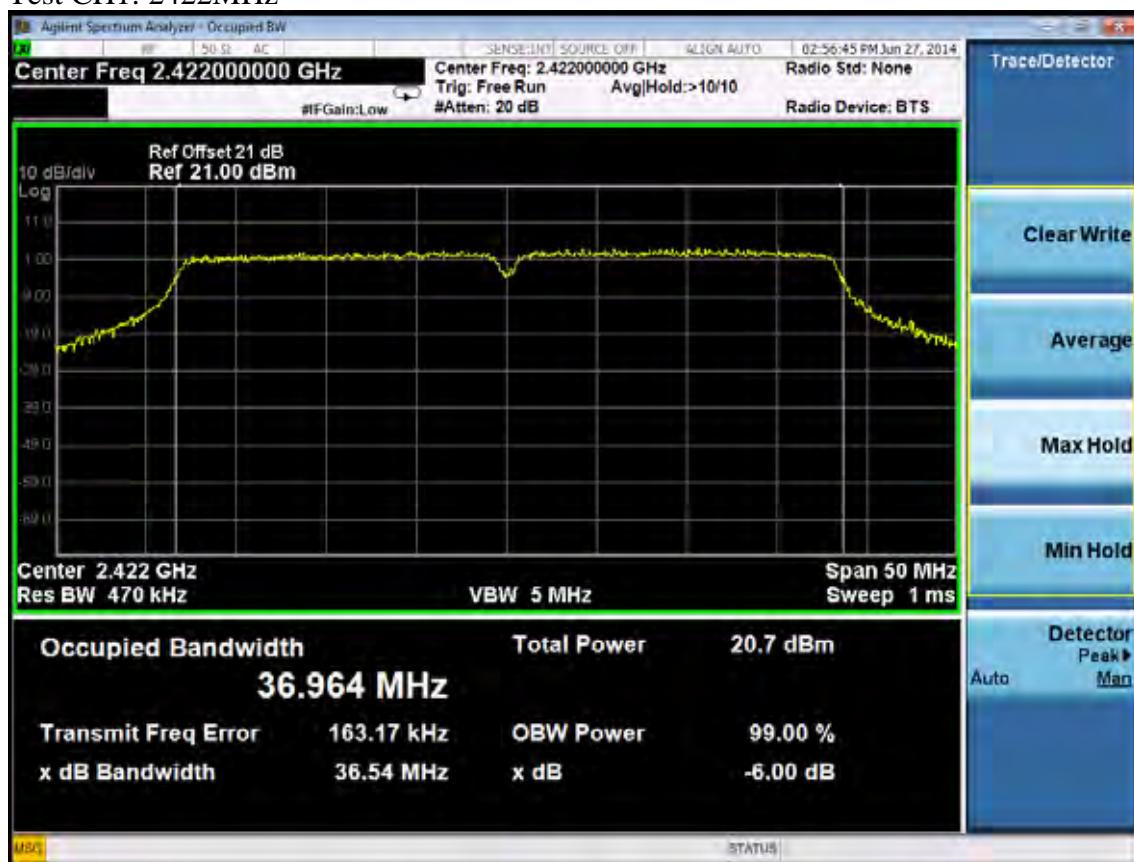


Test CH11: 2462MHz

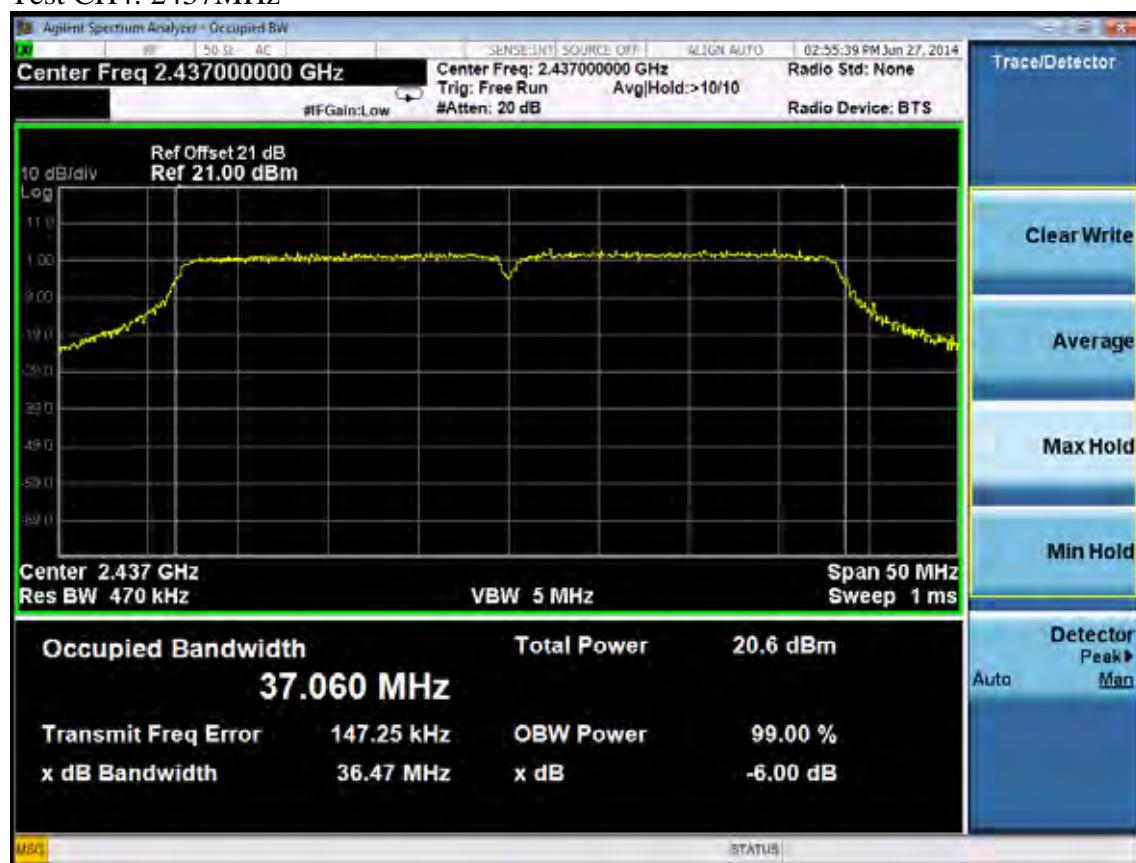


Test Mode: IEEE 802.11n HT40 TX

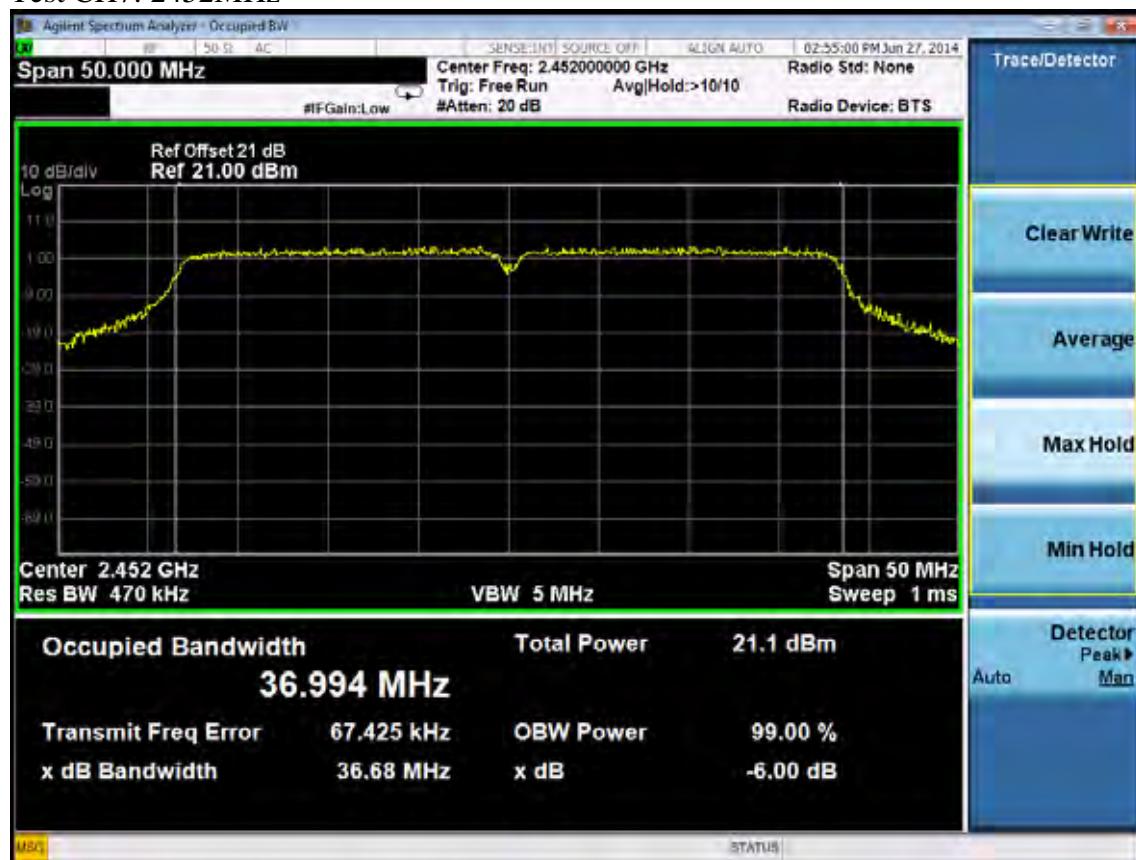
Test CH1: 2422MHz



Test CH4: 2437MHz



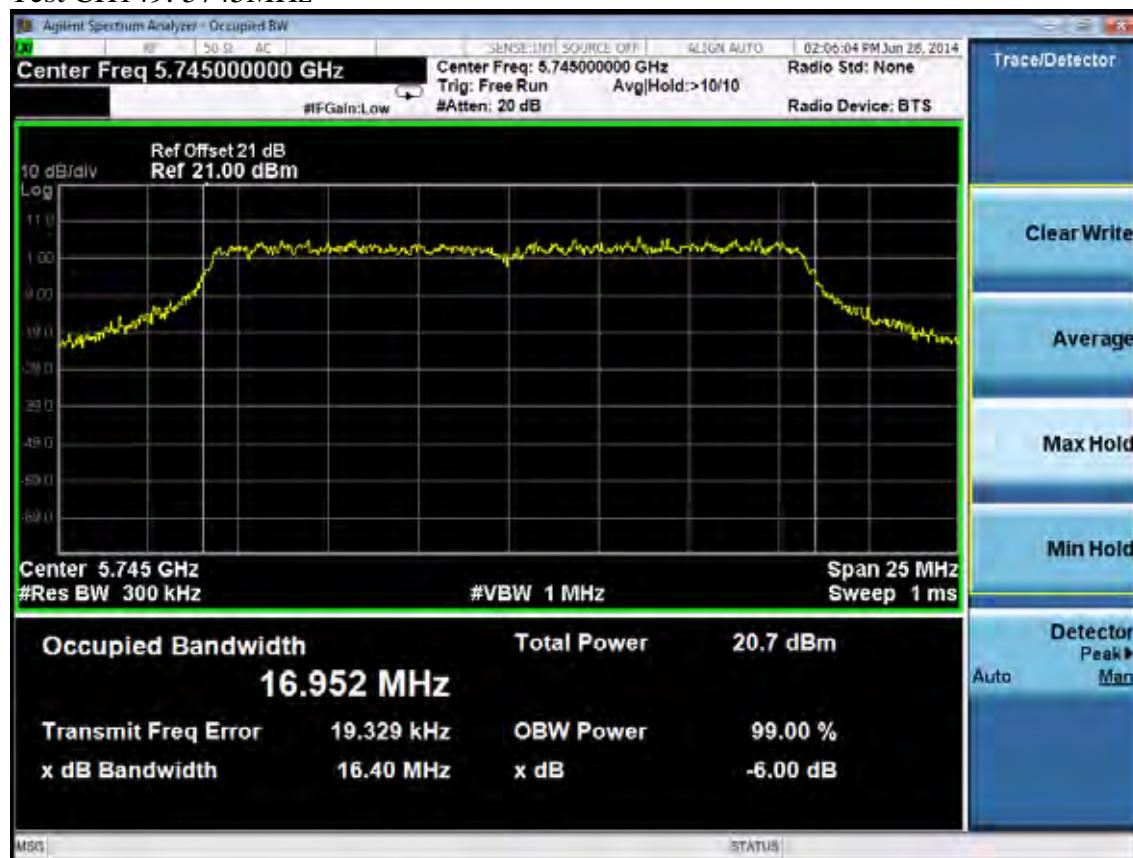
Test CH7: 2452MHz



5.8G:
Chain 1:

Test Mode: IEEE 802.11a TX

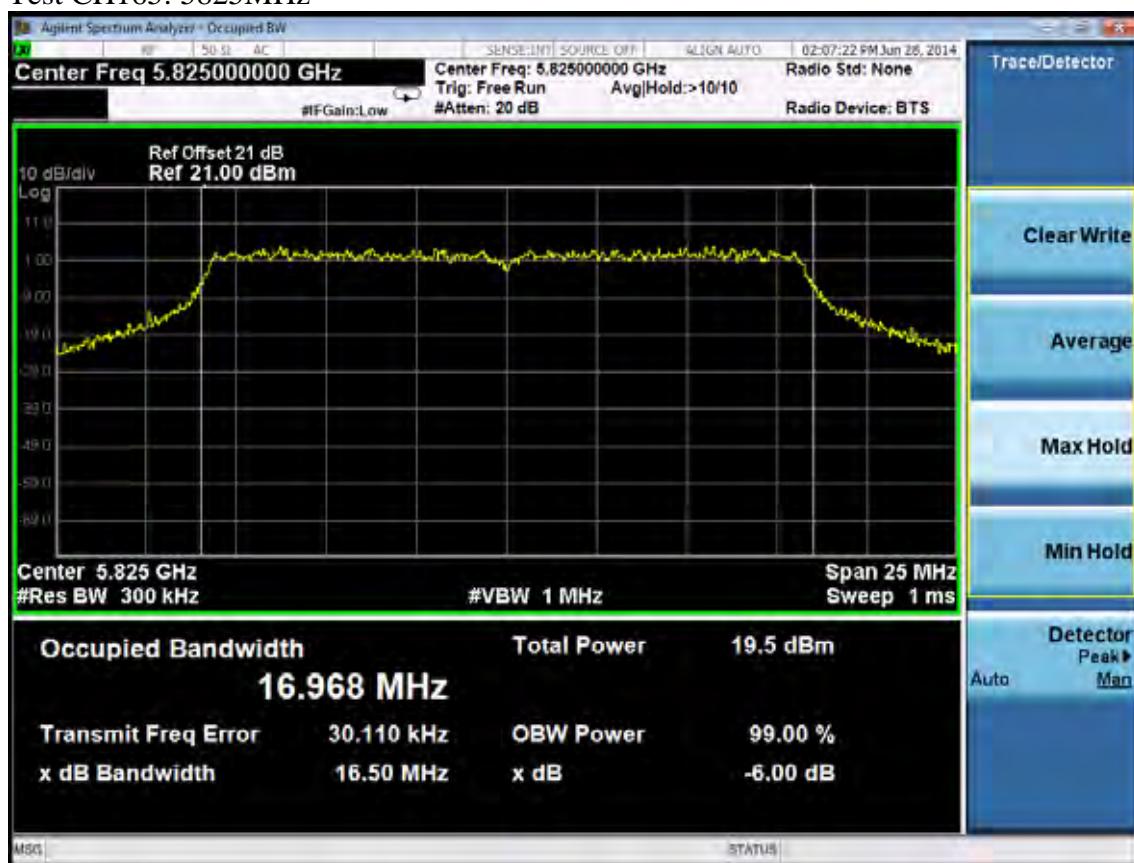
Test CH149: 5745MHz



Test CH157: 5785MHz

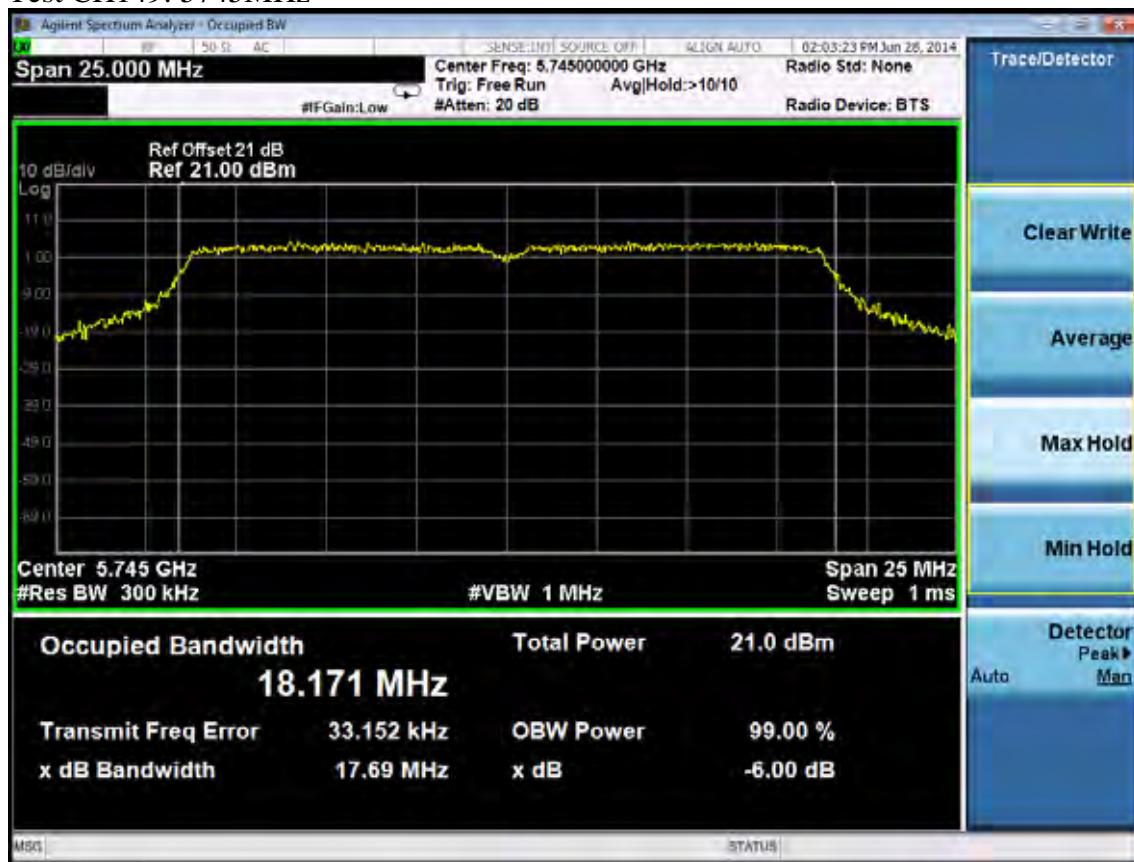


Test CH165: 5825MHz

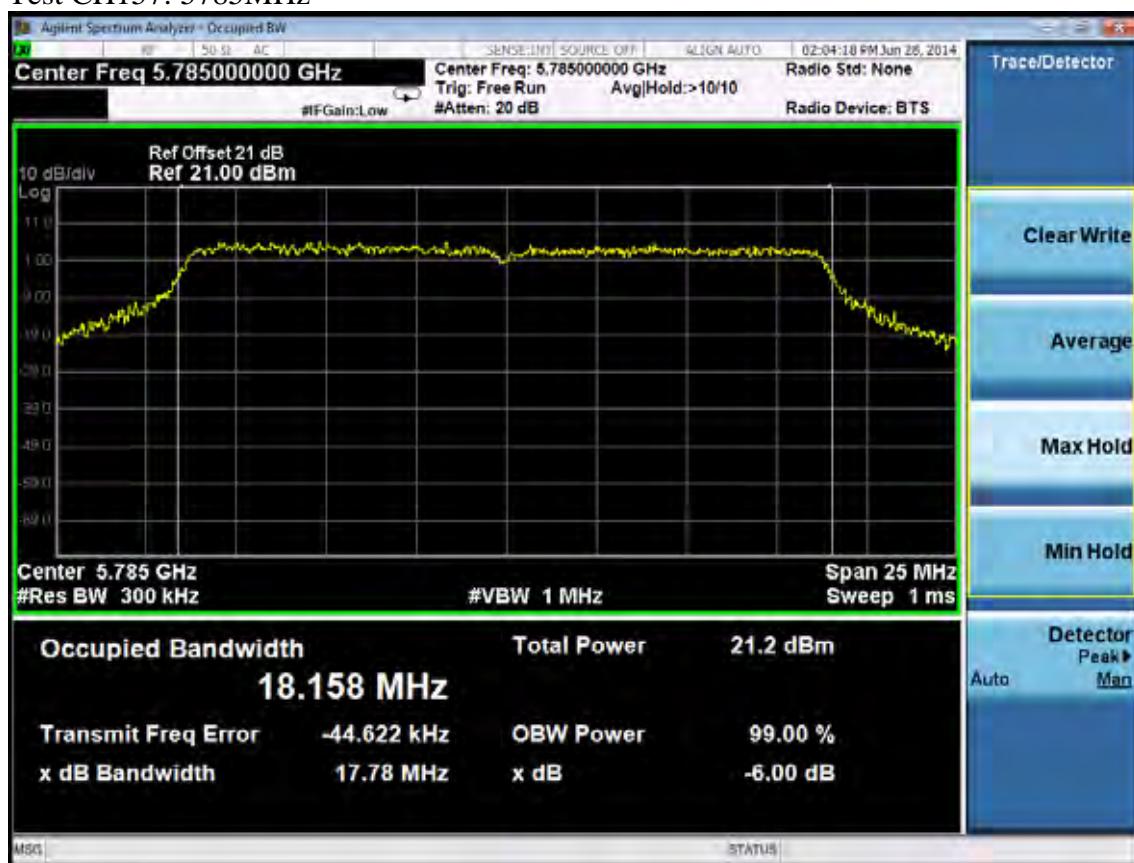


Test Mode: IEEE 802.11n HT20 TX

Test CH149: 5745MHz



Test CH157: 5785MHz

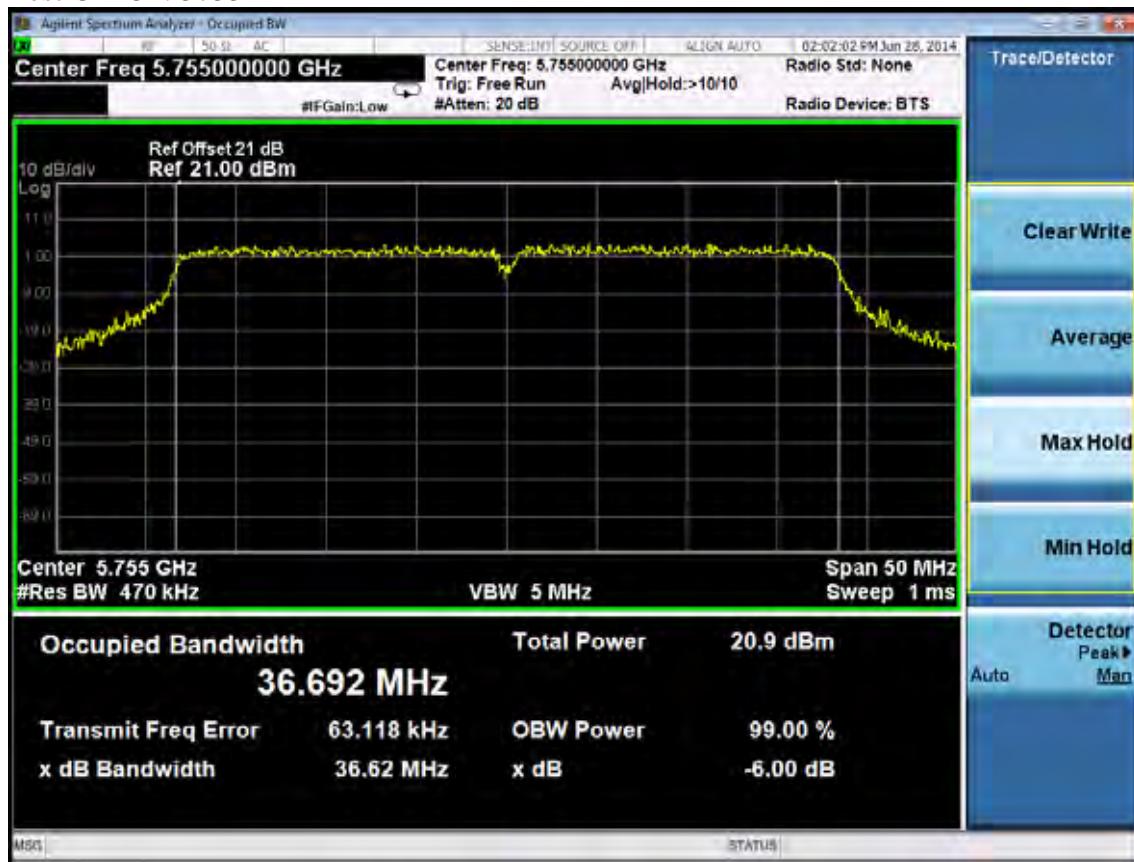


Test CH165: 5825MHz

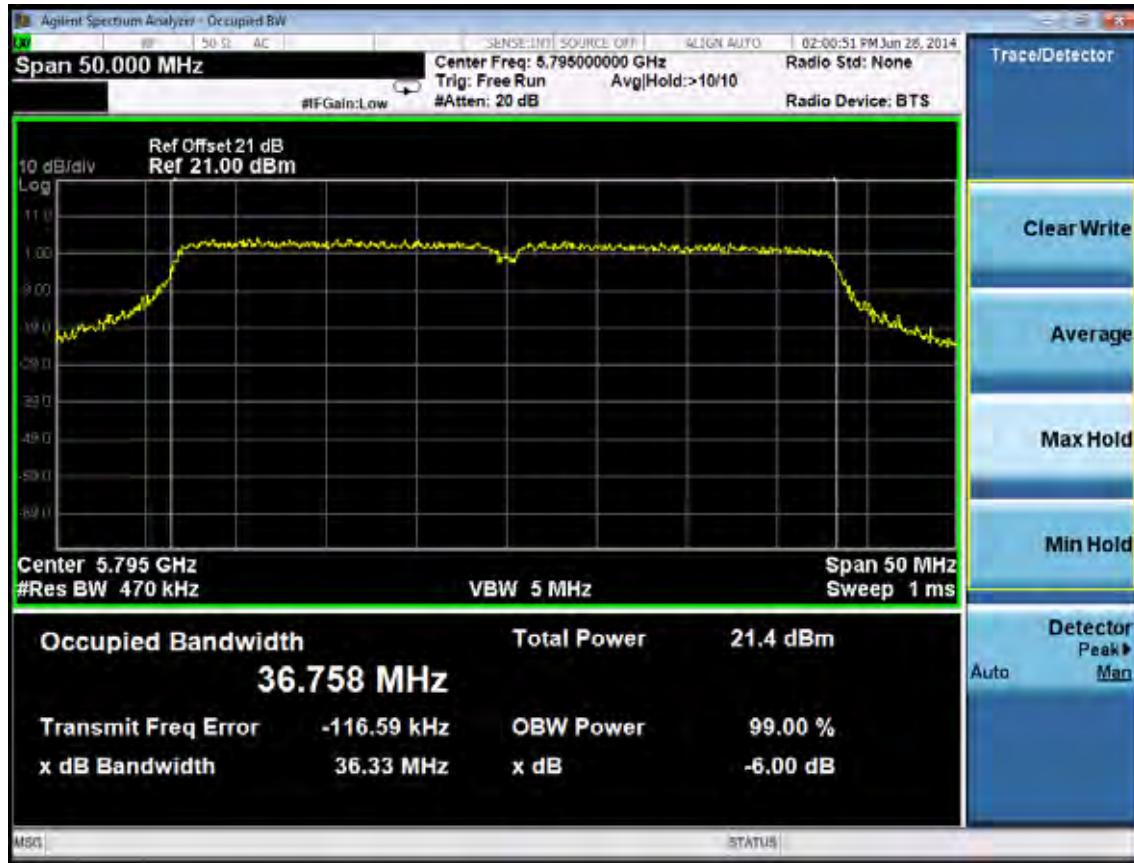


Test Mode: IEEE 802.11n HT40 TX

Test CH151: 5755MHz



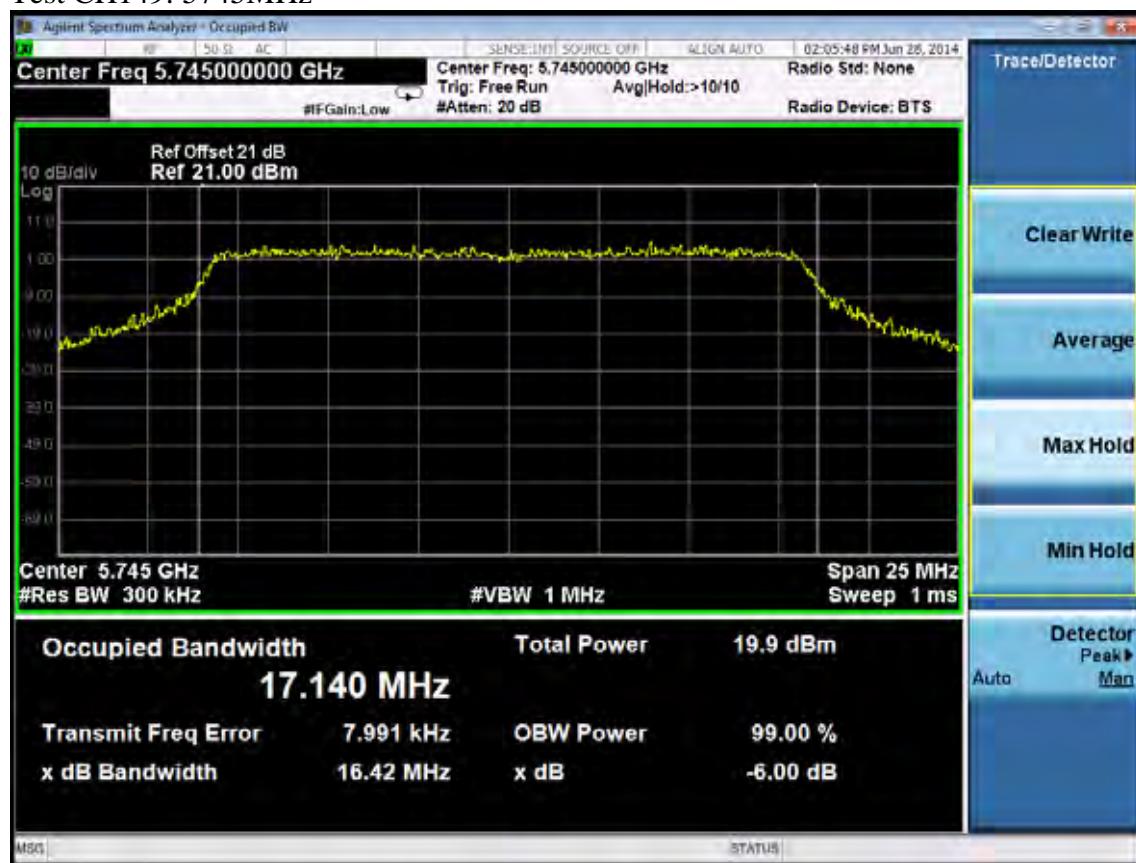
Test CH159: 5795MHz



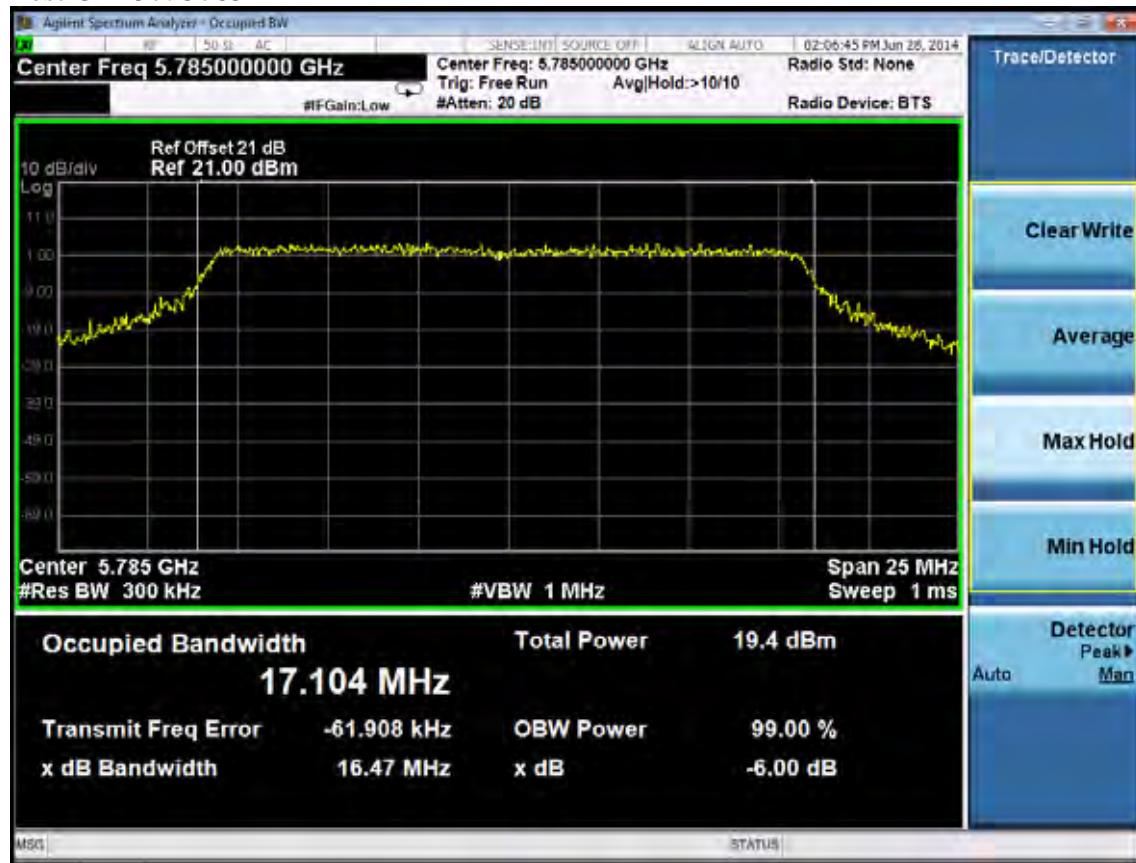
Chain 2:

Test Mode: IEEE 802.11a TX

Test CH149: 5745MHz



Test CH157: 5785MHz

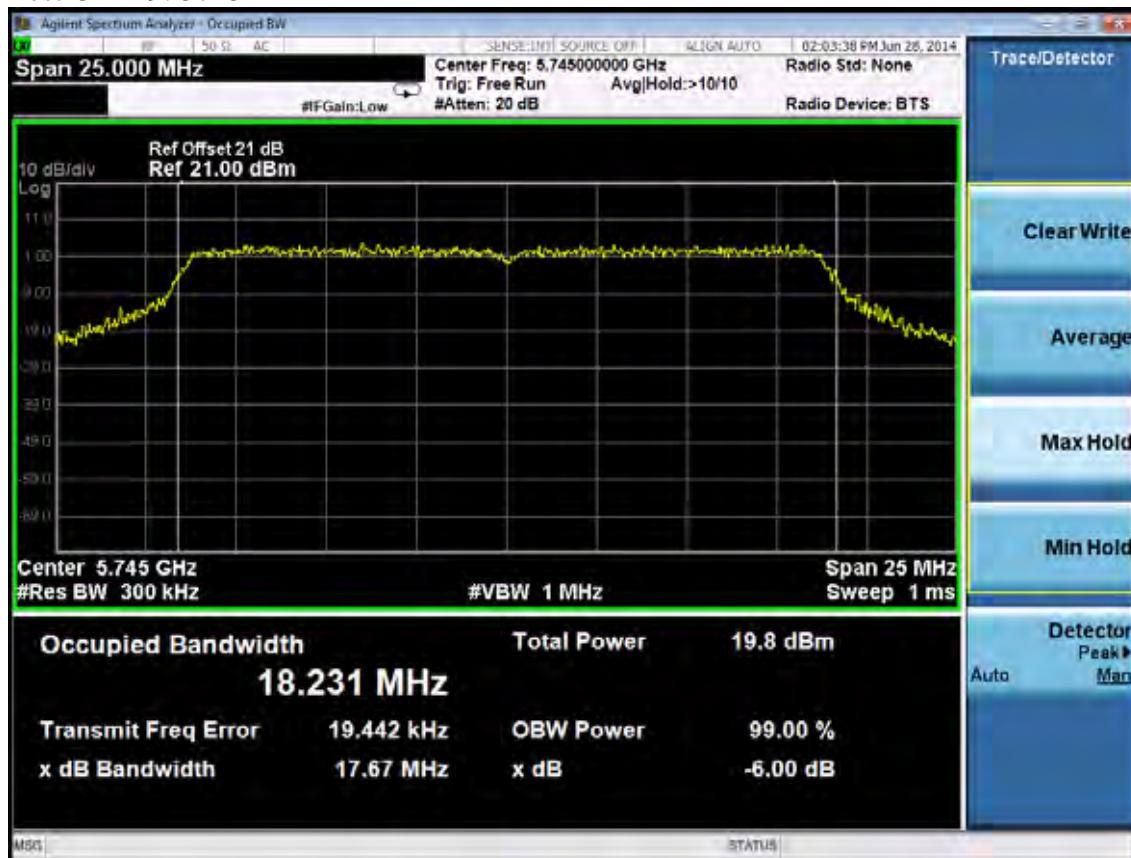


Test CH165: 5825MHz

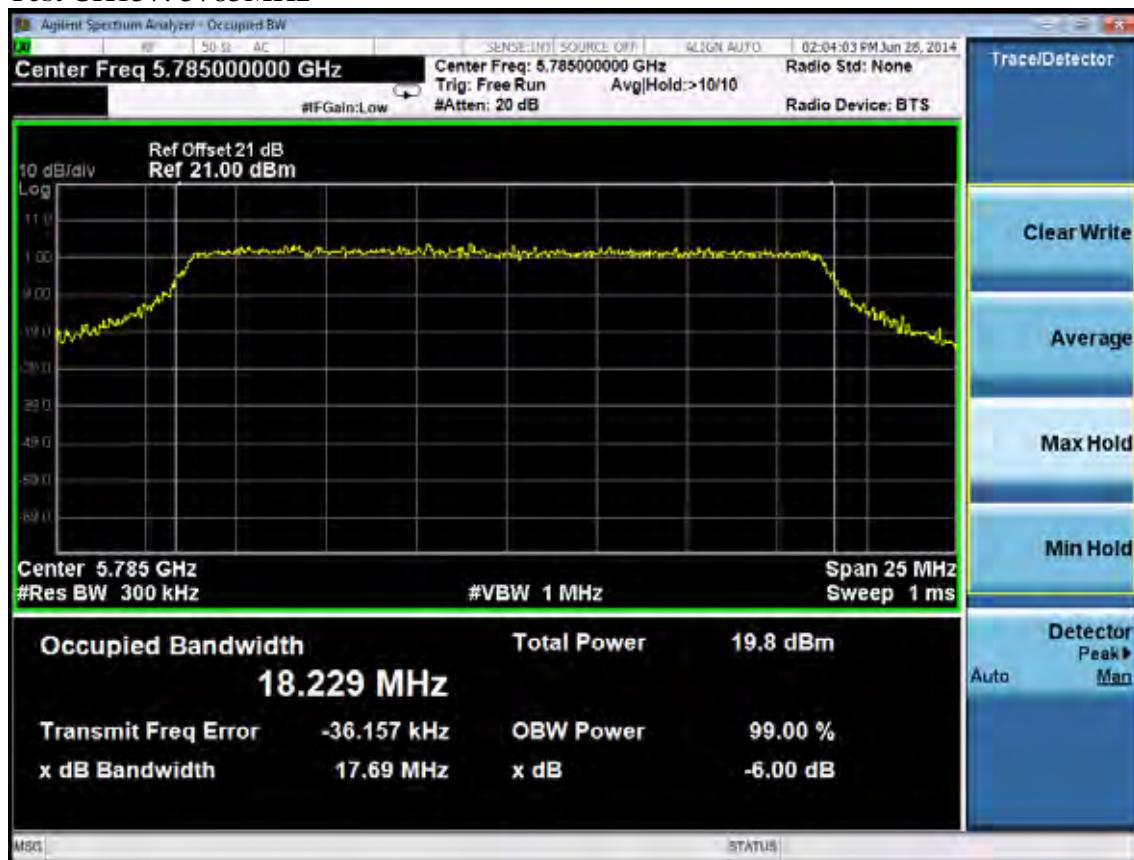


Test Mode: IEEE 802.11n HT20 TX

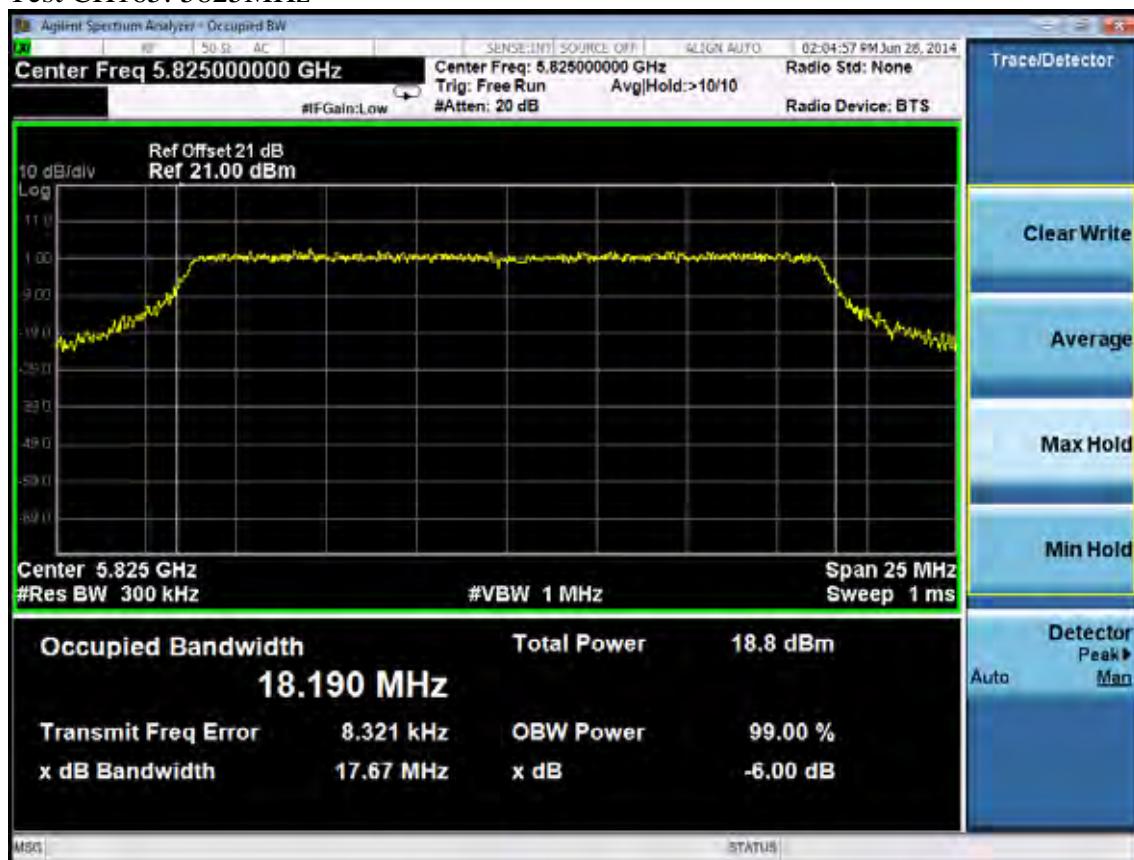
Test CH149: 5745MHz



Test CH157: 5785MHz

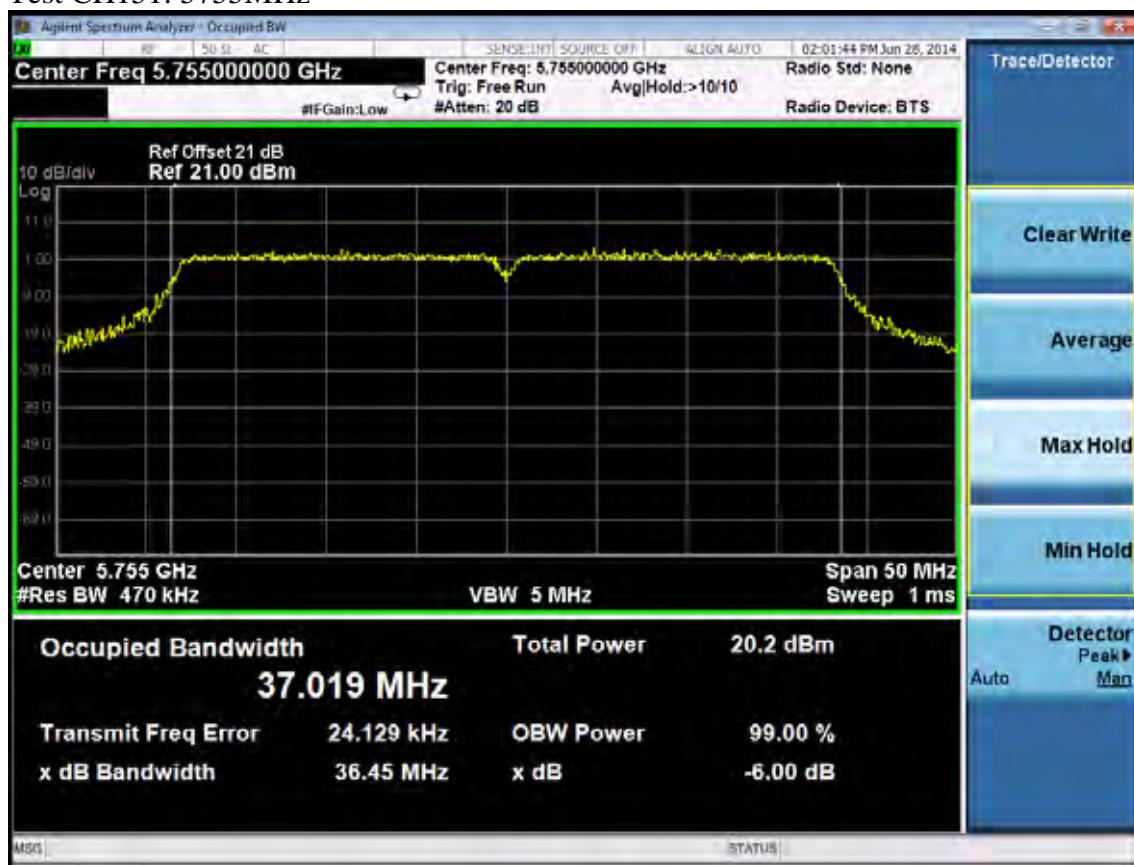


Test CH165: 5825MHz



Test Mode: IEEE 802.11n HT40 TX

Test CH151: 5755MHz



Test CH159: 5795MHz



8. OUTPUT POWER TEST

8.1. Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum	Agilent	E4446A	US44300459	Apr. 28,14	1 Year
2.	Spectrum	Agilent	N9030A	MY51380221	Oct.31, 13	1 Year
3.	Power meter	Anritsu	ML2487A	6K00002472	Apr. 28,14	1 Year
4.	Power sensor	Anritsu	MA2491A	0033005	Apr. 28,14	1 Year
5.	Attenuator (20dB)	Agilent	8491B	MY39262165	Apr. 28,14	1 Year
6	RF Cable	Hubersuhner	SUCOFLEX102	28610/2	Apr. 28,14	1 Year

8.2. Limit (FCC Part 15C 15.247 b(3))

For systems using digital modulation in the 2400—2483.5MHz, 5725-5850MHz, The Peak output Power shall not exceed 1W(30dBm)

Antenna gain 6dBi, Output Power Limit=30dBm-(antenna gain-6dBi)

8.3. Test Procedure

- 1, Connected the EUT's antenna port to measure device by 26dB attenuator.
- 2, For IEEE 802.11b/g and IEEE802.11n HT20 mode, use a PK power meter which's bandwidth is 20MHz and above 26dB bandwidth of signal to measure out each test modes' PK output power.
- 3, For IEEE802.11n HT40 mode, because the signal's bandwidth is about 40MHz and above 20MHz bandwidth of power sensor ML2491A. So use the test method described in KDB558074 clause 9.1.2.
 - 1) Set the RBW=1MHz and VBW =3MHz
 - 2) Set the span to a value that is 5-30% greater than EBW
 - 3) Detector = peak
 - 4) Sweep time = auto couple
 - 5) Trace Mode = max hold
 - 6) allow trace to fully stabilize
 - 7) use the spectrum amalyser's integrated band power measurement function with band limits set equal to the EBW band edges.

Note: The cable loss and attenuator loss were offset into measure device as an amplitude offset.

8.4. Test Results

2.4G:

EUT: Altai A2-Ei Dual-band WiFi Access Point							
M/N: WA2011N-E							
Test date: 2014-06-28	Pressure: 101.5±1.0 kpa		Humidity: 52.5±3.0%				
Tested by: Leo-Li	Test site: RF site		Temperature: 24.2±0.6				
Cable loss: 1 dB			Attenuator loss: 20 dB				
Test Mode	CH (MHz)	Peak output Power (dBm)			Limit (dBm)		
		ANT1	ANT2	Total			
11b	CH1	18.26	16.24	20.38	22		
	CH6	18.01	16.42	20.30	22		
	CH11	18.05	17.08	20.60	22		
11g	CH1	18.52	16.69	20.71	22		
	CH6	18.42	17.08	20.81	22		
	CH11	18.09	16.91	20.55	22		
11nHT20	CH1	18.29	16.58	20.53	22		
	CH6	18.21	16.88	20.61	22		
	CH11	17.93	16.77	20.40	22		
11nHT40	CH1	18.45	16.75	20.69	22		
	CH4	18.44	16.82	20.72	22		
	CH7	18.51	17.07	20.86	22		
Conclusion: PASS							

Test Mode: IEEE 802.11n HT40

ANT 1





ANT 2





5.8G:

EUT: Altai A2-Ei Dual-band WiFi Access Point							
M/N:WA2011N-E							
Test date: 2014-06-19	Pressure: 101.3±1.0 kpa		Humidity: 52.6±3.0%				
Tested by: Leo-Li	Test site: RF site		Temperature:22.3±0.6				
Cable loss: 1 dB			Attenuator loss: 20 dB				
Test Mode	Frequency (MHz)	Peak output Power (dBm)			Limit (dBm)		
		ANT1	ANT2	Total			
11a	5745	16.80	16.03	19.44	21		
	5785	17.12	15.58	19.43	21		
	5825	16.89	15.95	19.46	21		
11n HT20	5745	16.51	15.82	19.19	21		
	5785	16.93	15.39	19.24	21		
	5825	16.68	15.87	19.30	21		
11n HT40	5755	17.05	16.19	19.65	21		
	5795	16.90	15.66	19.33	21		
Conclusion: PASS							

Test Mode: IEEE 802.11n HT40

ANT 1



ANT 2



9. POWER SPECTRAL DENSITY TEST

9.1. Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum	Agilent	E4446A	US44300459	Apr. 28,14	1 Year
2.	Spectrum	Agilent	N9030A	MY51380221	Oct.31, 13	1 Year
4.	Attenuator (20dB)	Agilent	8491B	MY39262165	Apr. 28,14	1 Year
5	RF Cable	Hubersuhner	SUCOFLEX102	28610/2	Apr. 28,14	1 Year

9.2. Limit

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8dBm in any 3kHz band during any time interval of continuous transmission.

9.3. Test Procedure

1. Connected the EUT's antenna port to spectrum analyzer device by 20dB attenuator.
2. Set the test frequency as center frequency, Set RBW=3KHz, VBW=10KHz, Span large enough capture the entire frequency, Read out maximum peak level frequency
3. Set the frequency read from produce 2 as center frequency, then set the span= 300KHz, Sweep time=Span/RBW, Then Max hold, read out each mode and each chain's Power density.

Note: The cable loss and attenuator loss were offset into measure device as an amplitude

9.4. Test Results

2.4G:

EUT: Altai A2-Ei Dual-band WiFi Access Point		
M/N:WA2011N-E		
Test date: 2014-06-28	Pressure: 101.3±1.0 kpa	Humidity: 51.7±3.0%
Tested by: Leo-Li	Test site: RF Site	Temperature : 23.7±0.6

Cable loss: 1 dB		Attenuator loss: 20 dB			
Test Mode	CH	Power density (dBm/3KHz)			Limit (dBm/3KHz)
		ANT 1	ANT 2	Total	
11b	CH1	-7.141	-11.124	-5.68	8
	CH6	-7.353	-10.552	-5.65	8
	CH11	-8.209	-9.418	-5.76	8
11g	CH1	-8.819	-10.725	-6.66	8
	CH6	-7.584	-10.322	-5.73	8
	CH11	-7.833	-10.308	-5.89	8
11n HT20	CH1	-8.820	-11.692	-7.01	8
	CH6	-8.007	-10.588	-6.10	8
	CH11	-9.147	-10.428	-6.73	8
11n HT40	CH1	-14.401	-12.343	-10.24	8
	CH4	-9.407	-13.207	-7.89	8
	CH7	-10.168	-13.103	-8.83	8
Conclusion : PASS					

5.8G:

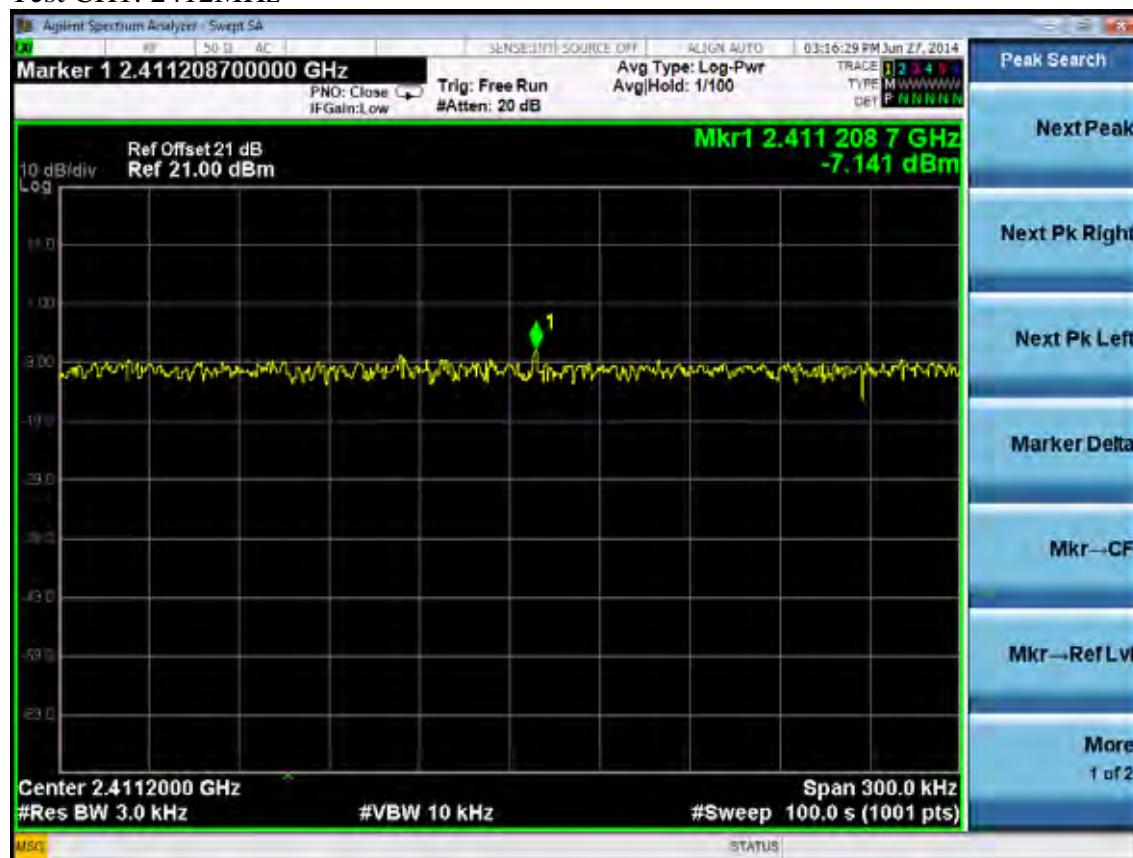
EUT: Altai A2-Ei Dual-band WiFi Access Point		
M/N:WA2011N-E		
Test date: 2014-06-28	Pressure: 101.3±1.0 kpa	Humidity: 51.7±3.0%
Tested by: Leo-Li	Test site: RF Site	Temperature : 23.7±0.6

Cable loss: 1 dB		Attenuator loss: 20 dB			
Test Mode	CH	Power density (dBm/3KHz)			Limit (dBm/3KHz)
		ANT 1	ANT 2	Total	
11a	CH149	-9.392	-11.775	-7.41	8
	CH157	-9.398	-11.730	-7.40	8
	CH165	-11.163	-6.191	-4.99	8
11n HT20	CH149	-10.619	-11.897	-8.20	8
	CH157	-9.200	-9.232	-6.21	8
	CH165	-9.567	-6.608	-4.83	8
11n HT40	CH151	-11.416	-6.942	-5.62	8
	CH159	-12.609	-13.298	-9.93	8
Conclusion : PASS					

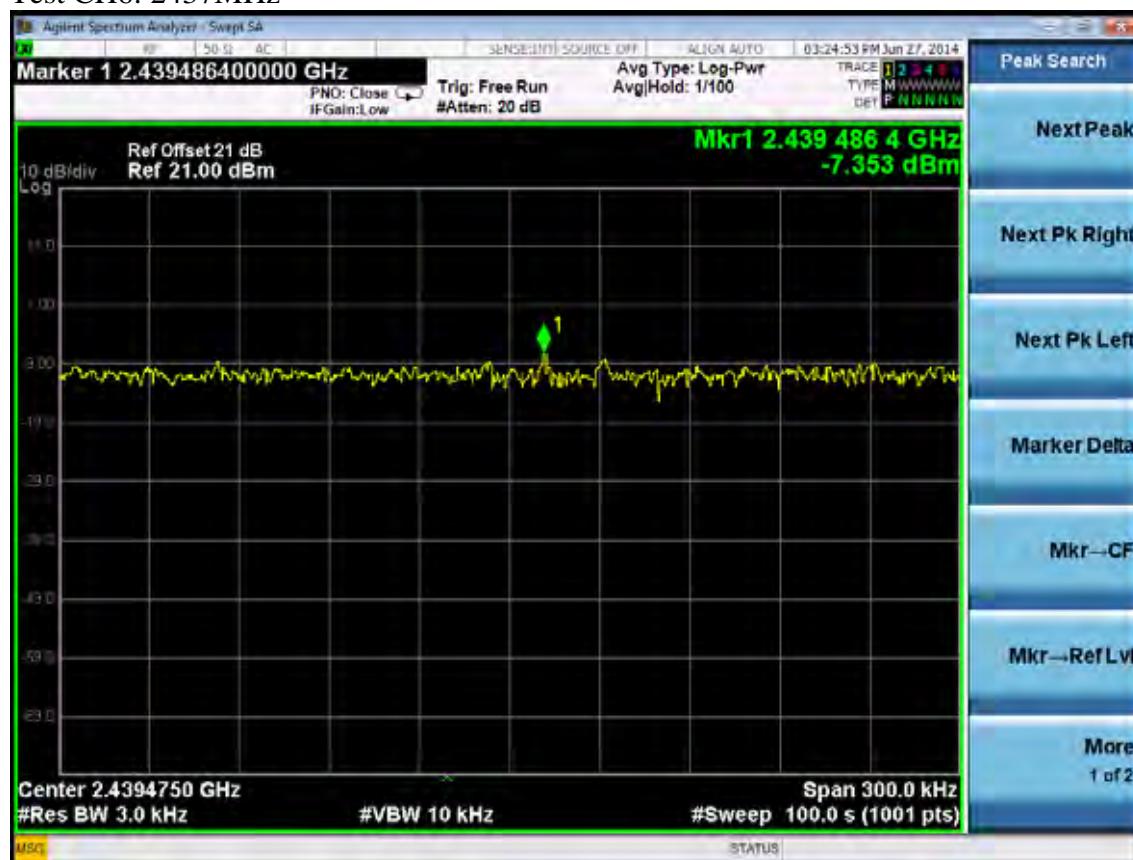
2.4G:
Chain 1:

Test Mode: IEEE 802.11b TX

Test CH1: 2412MHz



Test CH6: 2437MHz



Test CH11: 2462MHz

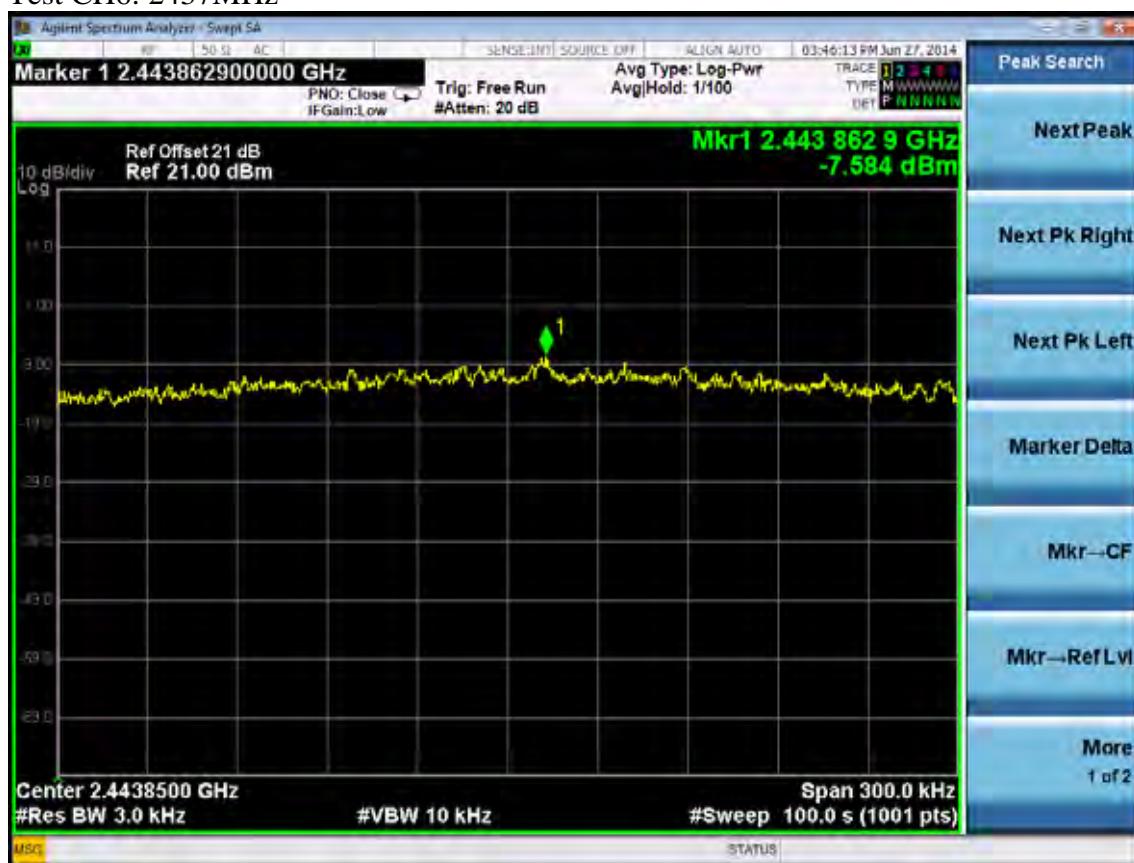


Test Mode: IEEE 802.11g TX

Test CH1: 2412MHz



Test CH6: 2437MHz



Test CH11: 2462MHz



Test Mode: IEEE 802.11n HT20 TX

Test CH1: 2412MHz



Test CH6: 2437MHz

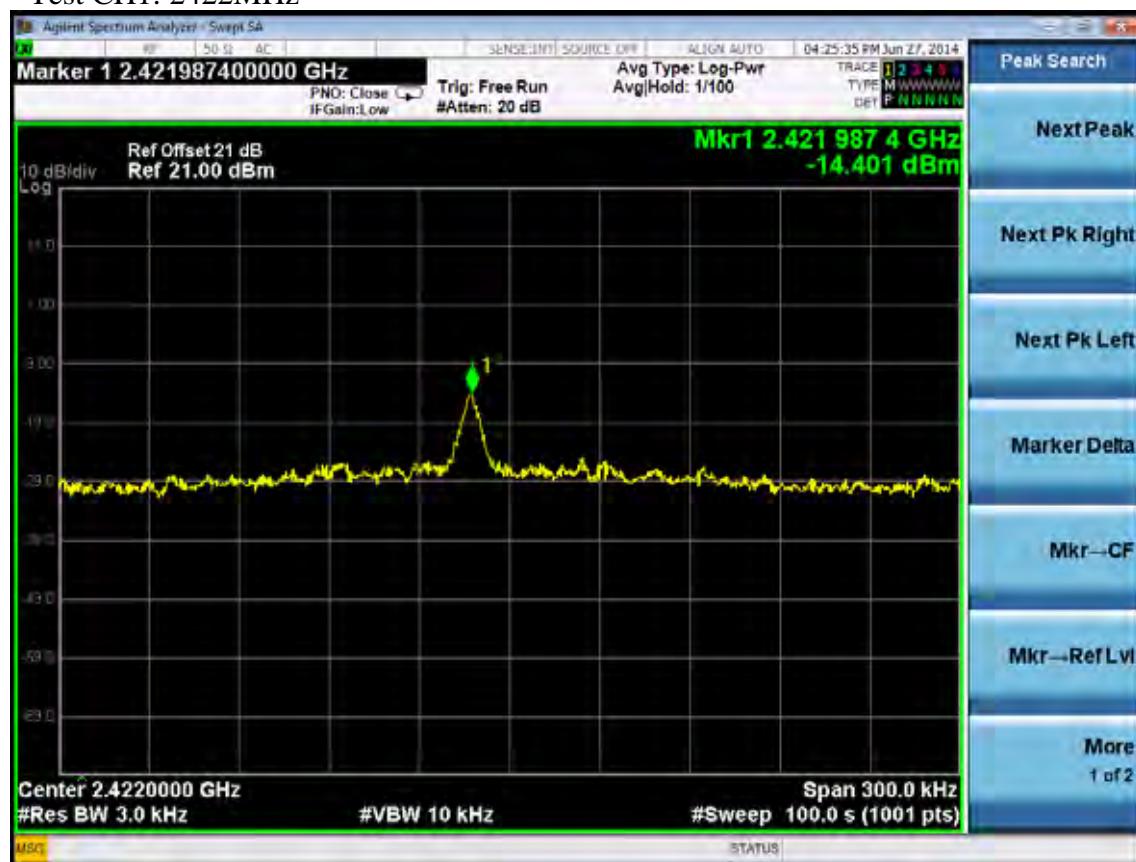


Test CH11: 2462MHz



Test Mode: IEEE 802.11n HT40 TX

Test CH1: 2422MHz



Test CH4: 2437MHz



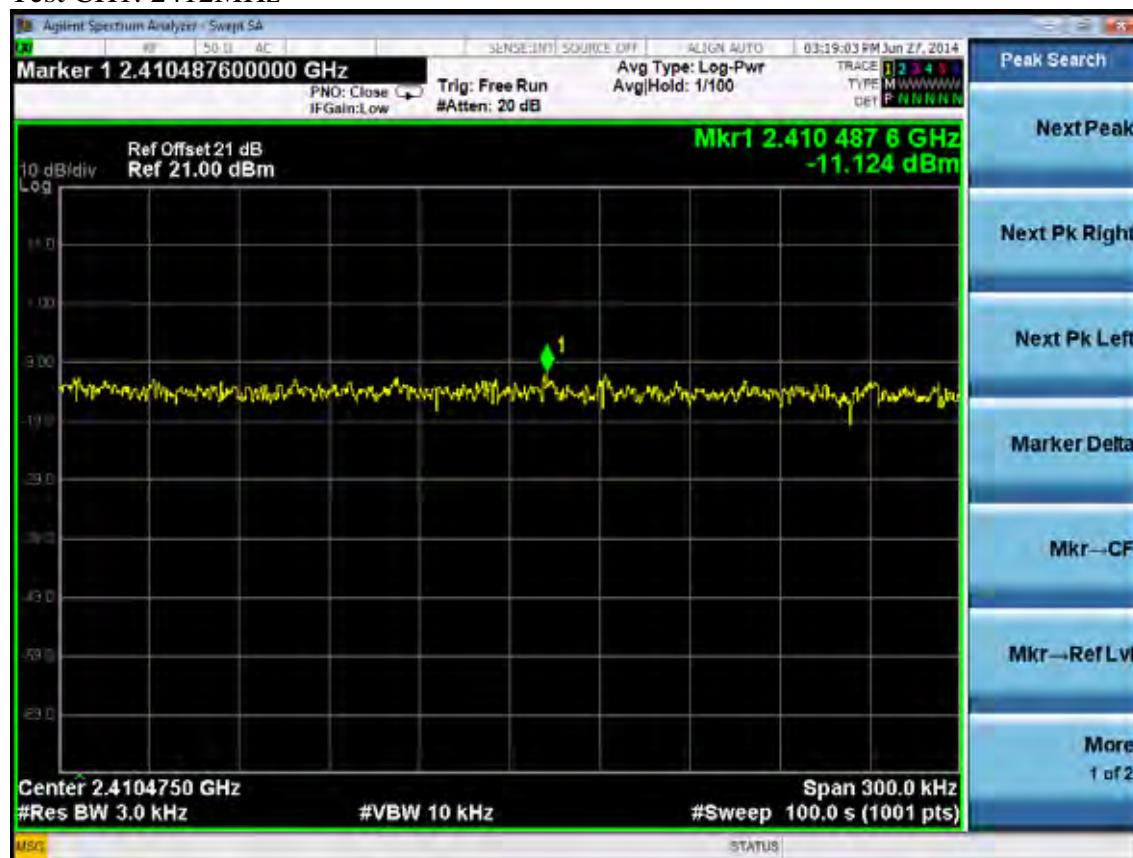
Test CH7: 2452MHz



Chain 2:

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



5.8G:**Chain 1:**

Test Mode: IEEE 802.11a TX

Test CH149: 5745MHz



Test CH157: 5785MHz



Test CH165: 5825MHz



Test Mode: IEEE 802.11n HT20 TX

Test CH149: 5745MHz



Test CH157: 5785MHz



Test CH165: 5825MHz



Test Mode: IEEE 802.11n HT40 TX

Test CH151: 5755MHz



Test CH159: 5795MHz



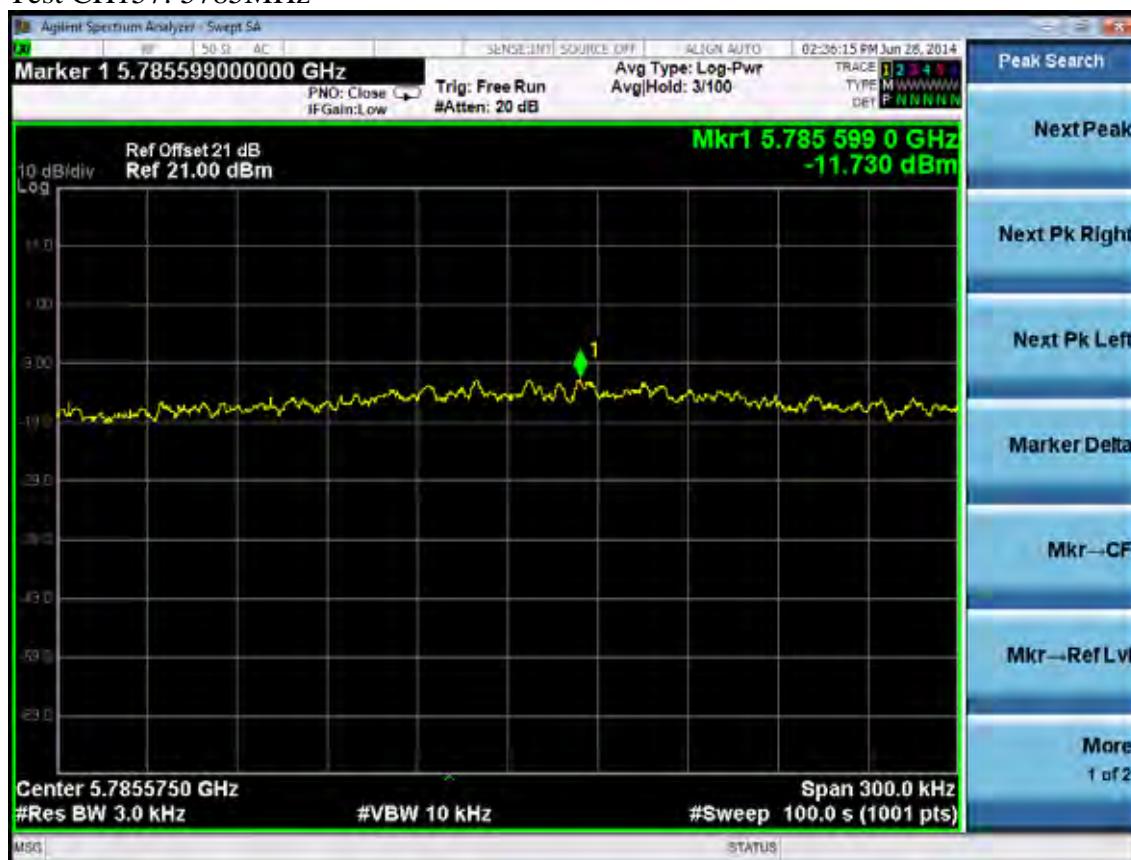
Chain 2:

Test Mode: IEEE 802.11a TX

Test CH149: 5745MHz



Test CH157: 5785MHz

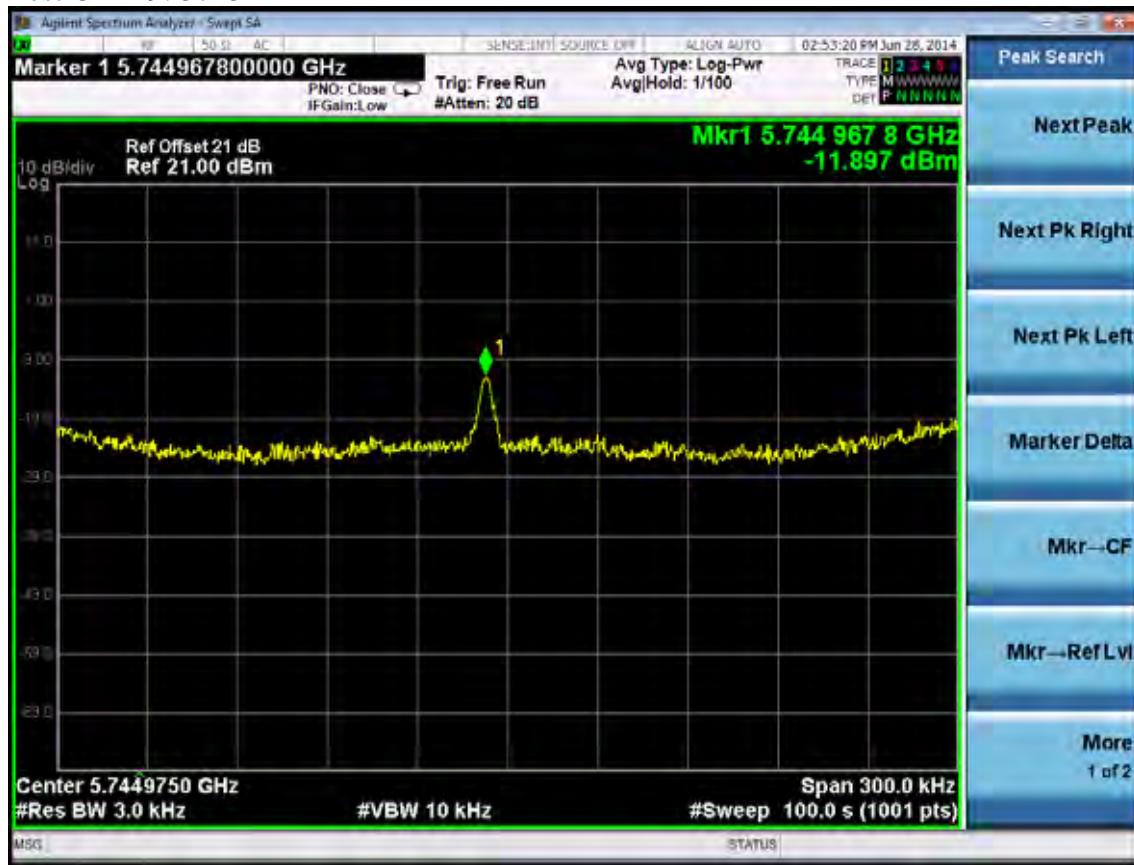


Test CH165: 5825MHz



Test Mode: IEEE 802.11n HT20 TX

Test CH149: 5745MHz



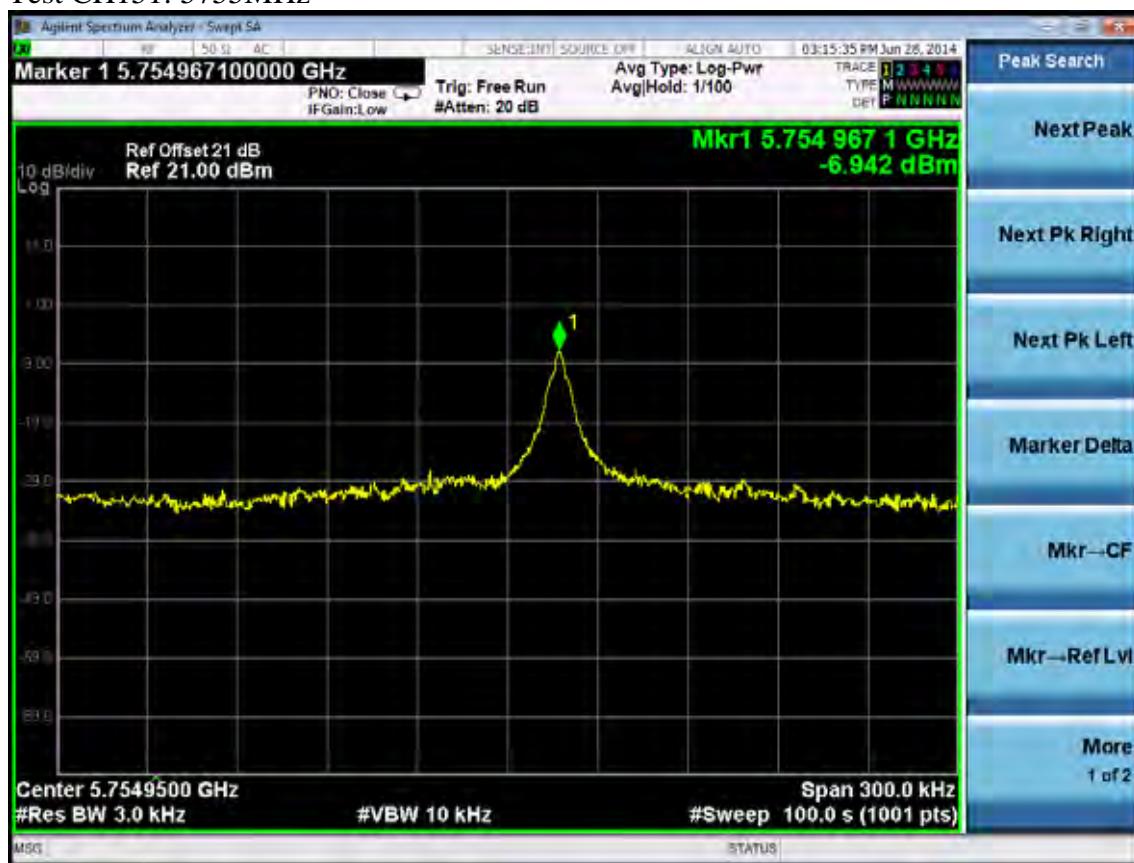
Test CH157: 5785MHz



Test CH165: 5825MHz



Test Mode: IEEE 802.11n HT40 TX
 Test CH151: 5755MHz



Test CH159: 5795MHz



10. ANTENNA REQUIREMENT

10.1. STANDARD APPLICABLE

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. And according to FCC 47 CFR Section 15.247 (b), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

10.2. ANTENNA CONNECTED CONSTRUCTION

The antennas used for this product are Built-in, external antenna that no antenna other than that furnished by the responsible party shall be used with the device, the maximum peak gain of the transmit antenna for 2.4GHz is 14dBi, and the maximum peak gain of the transmit antenna for 5.8GHz is 15dBi..



11.DEVIATION TO TEST SPECIFICATIONS

[NONE]