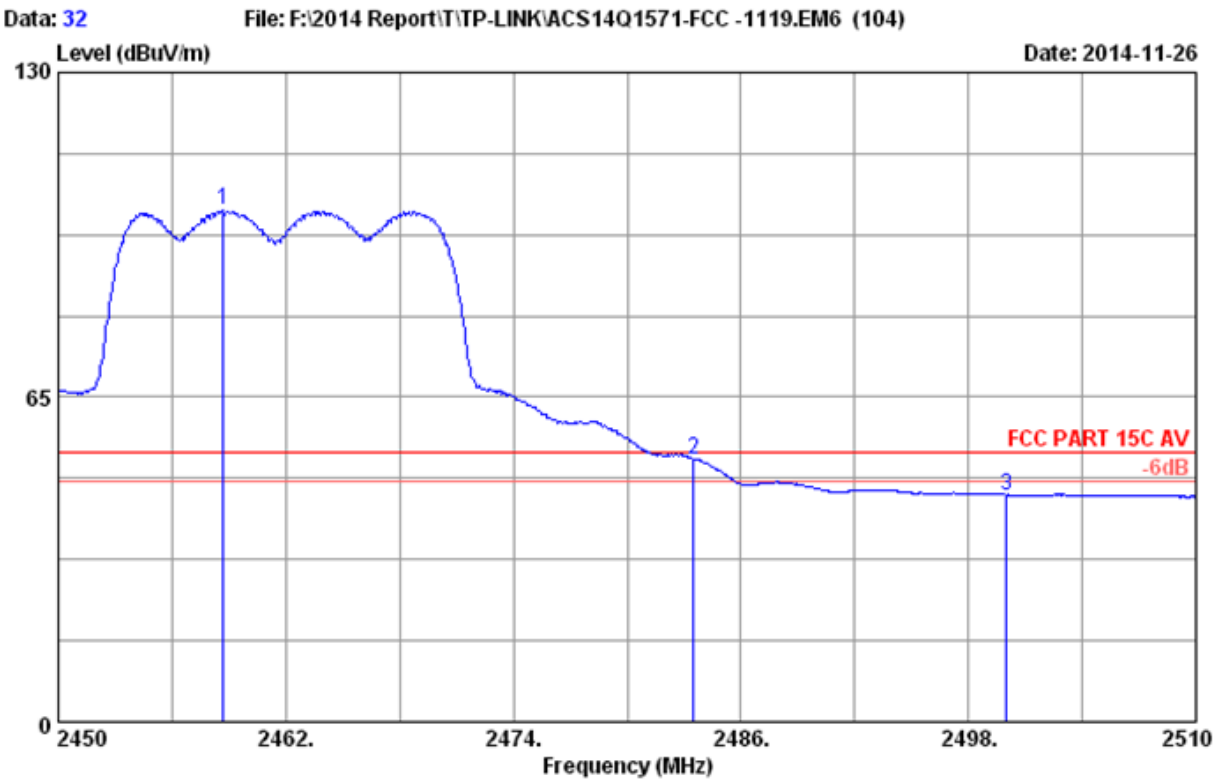
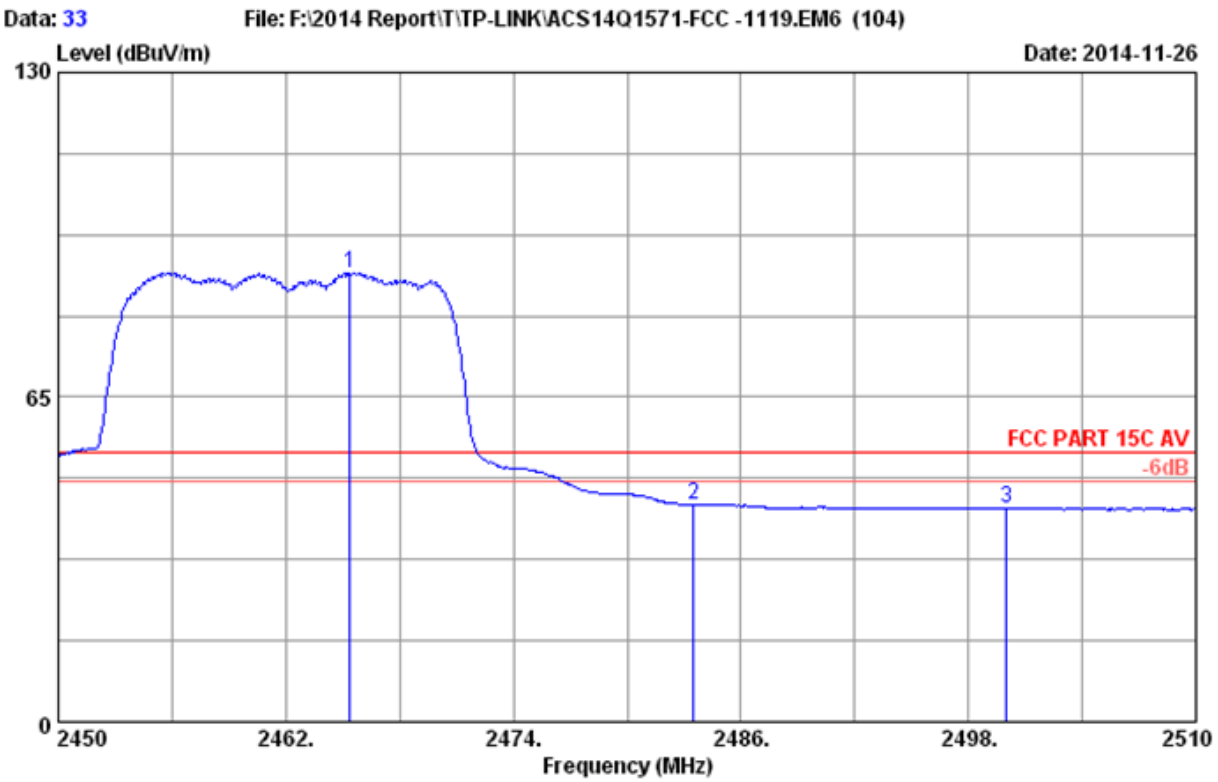


Site no. : 3m Chamber Data no. : 32
Dis. / Ant. : 3m 2014 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C AV
Env. / Ins. : 24*C/56% Engineer : Alice_yang
EUT : 300Mbps Wireless N Gigabit Access Point
Power rating : DC 12V From Adapter Input AC 120V/60Hz
Test Mode : IEEE802.11g 2462MHz Tx
M/N : M/N:EAP120

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2458.700	28.31	5.88	35.70	103.87	102.36	54.00	-48.36	Average
2	2483.500	28.36	5.92	35.70	54.04	52.62	54.00	1.38	Average
3	2500.000	28.40	5.94	35.70	46.78	45.42	54.00	8.58	Average

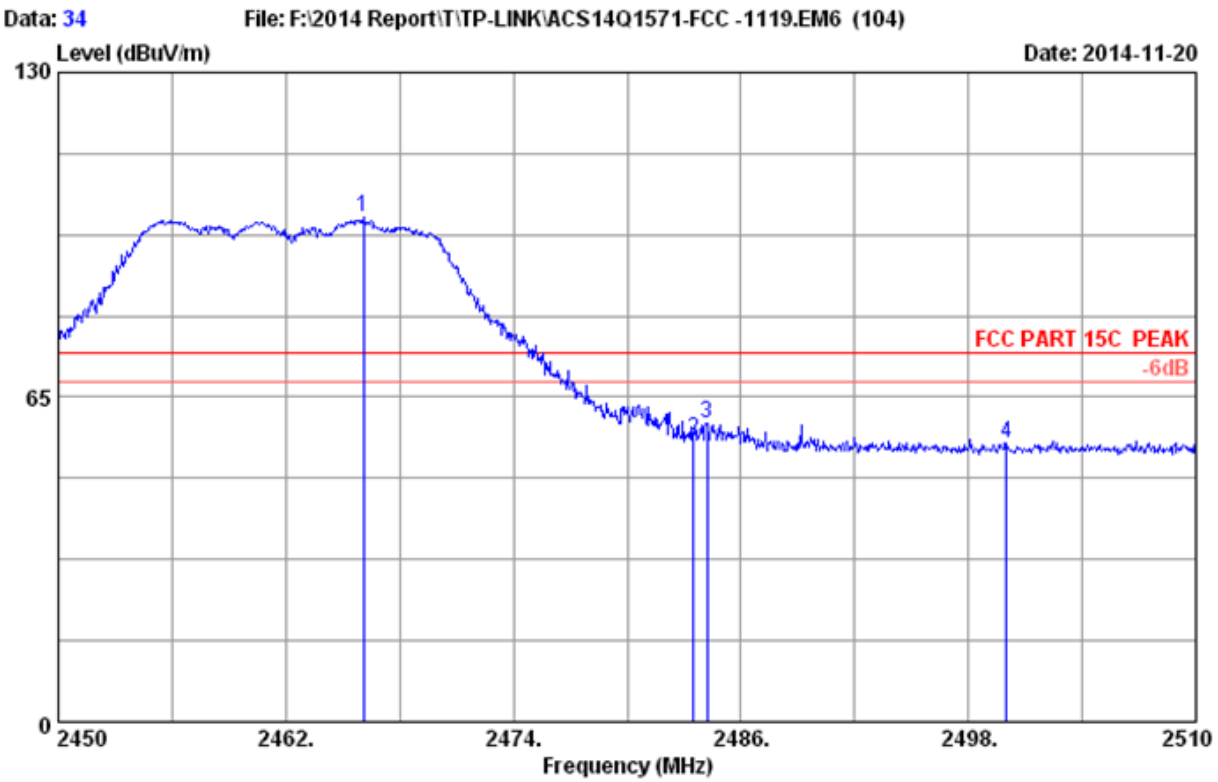
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 33
Dis. / Ant. : 3m 2014 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C AV
Env. / Ins. : 24*C/56% Engineer : Alice_yang
EUT : 300Mbps Wireless N Gigabit Access Point
Power rating : DC 12V From Adapter Input AC 120V/60Hz
Test Mode : IEEE802.11g 2462MHz Tx
M/N : M/N:EAP120

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2465.360	28.32	5.89	35.70	91.40	89.91	54.00	-35.91	Average
2	2483.500	28.36	5.92	35.70	44.87	43.45	54.00	10.55	Average
3	2500.000	28.40	5.94	35.70	44.07	42.71	54.00	11.29	Average

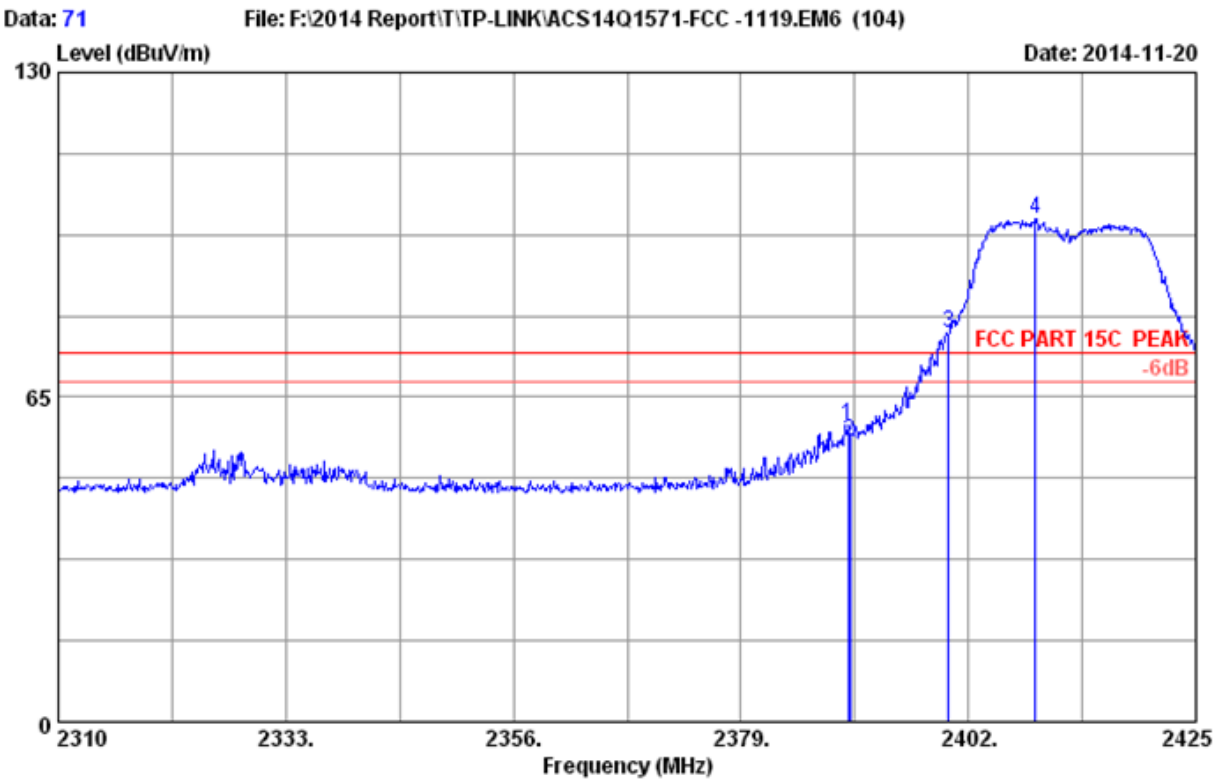
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 34
Dis. / Ant. : 3m 2014 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 24*C/56% Engineer : Alice_yang
EUT : 300Mbps Wireless N Gigabit Access Point
Power rating : DC 12V From Adapter Input AC 120V/60Hz
Test Mode : IEEE802.11g 2462MHz Tx
M/N : M/N:EAP120

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2466.080	28.33	5.89	35.70	102.33	100.85	74.00	-26.85	Peak
2	2483.500	28.36	5.92	35.70	57.81	56.39	74.00	17.61	Peak
3	2484.200	28.37	5.92	35.70	61.33	59.92	74.00	14.08	Peak
4	2500.000	28.40	5.94	35.70	57.21	55.85	74.00	18.15	Peak

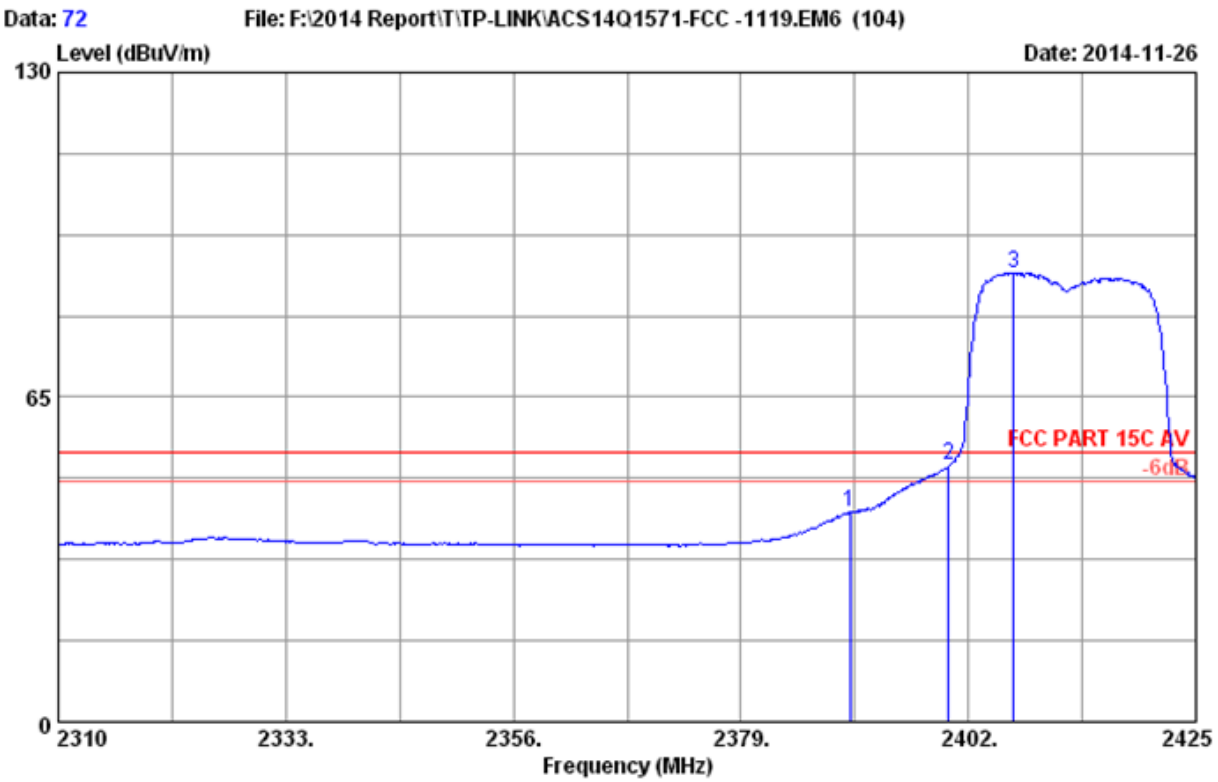
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 71
Dis. / Ant. : 3m 2014 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 24*C/56% Engineer : Alice_yang
EUT : 300Mbps Wireless N Gigabit Access Point
Power rating : DC 12V From Adapter Input AC 120V/60Hz
Test Mode : IEEE802.11n HT20 2412MHz Tx
M/N : M/N:EAP120

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2389.810	28.16	5.78	35.70	61.14	59.38	74.00	14.62	Peak
2	2390.000	28.16	5.78	35.70	57.76	56.00	74.00	18.00	Peak
3	2400.000	28.18	5.80	35.70	79.53	77.81	74.00	-3.81	Peak
4	2408.785	28.20	5.81	35.70	102.49	100.80	74.00	-26.80	Peak

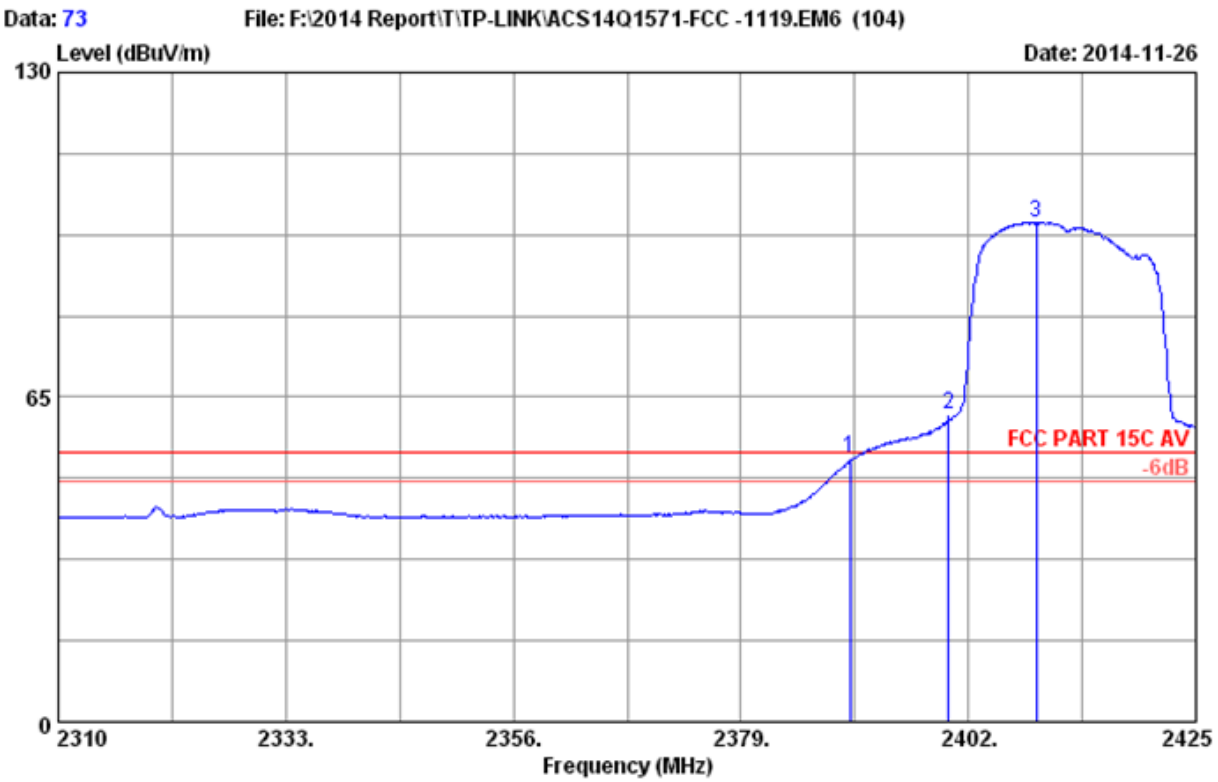
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 72
Dis. / Ant. : 3m 2014 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C AV
Env. / Ins. : 24*C/56% Engineer : Alice_yang
EUT : 300Mbps Wireless N Gigabit Access Point
Power rating : DC 12V From Adapter Input AC 120V/60Hz
Test Mode : IEEE802.11n HT20 2412MHz Tx
M/N : M/N:EAP120

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.000	28.16	5.78	35.70	43.75	41.99	54.00	12.01	Average
2	2400.000	28.18	5.80	35.70	53.01	51.29	54.00	2.71	Average
3	2406.600	28.19	5.81	35.70	91.68	89.98	54.00	-35.98	Average

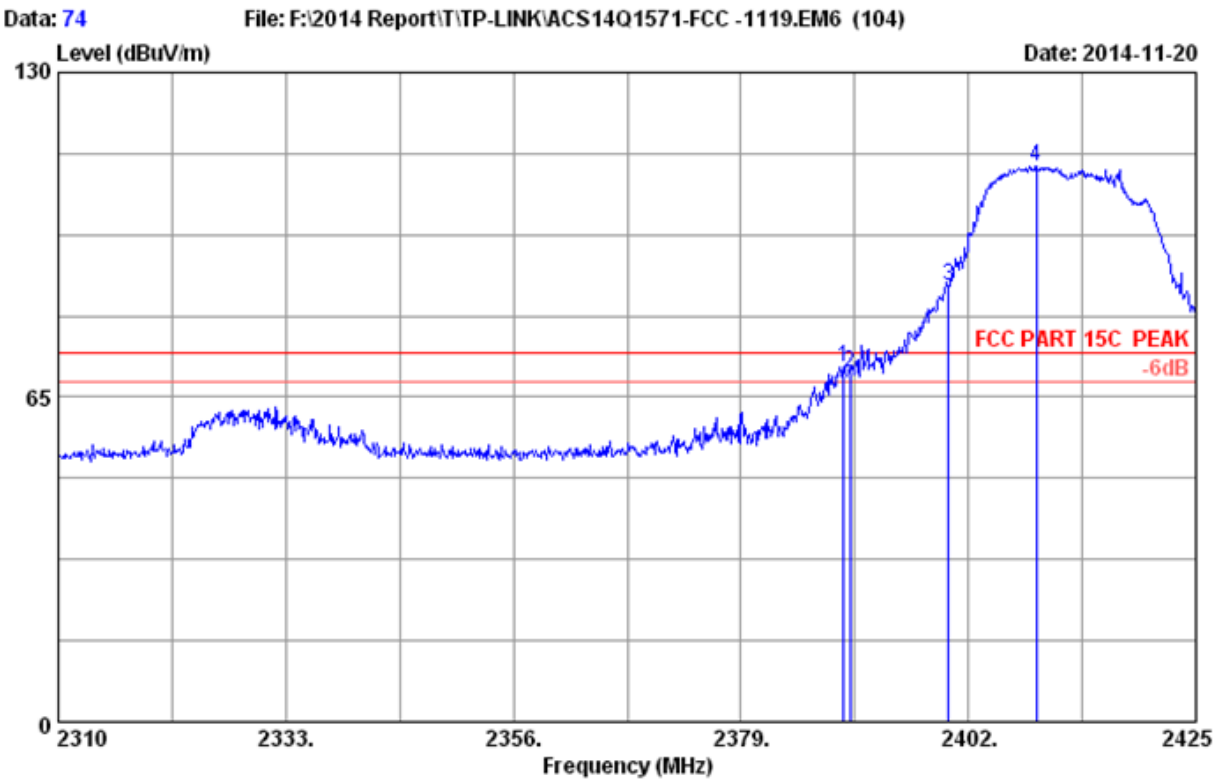
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 73
Dis. / Ant. : 3m 2014 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C AV
Env. / Ins. : 24*C/56% Engineer : Alice_yang
EUT : 300Mbps Wireless N Gigabit Access Point
Power rating : DC 12V From Adapter Input AC 120V/60Hz
Test Mode : IEEE802.11n HT20 2412MHz Tx
M/N : M/N:EAP120

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.000	28.16	5.78	35.70	54.62	52.86	54.00	1.14	Average
2	2400.000	28.18	5.80	35.70	63.18	61.46	54.00	-7.46	Average
3	2408.900	28.20	5.81	35.70	101.72	100.03	54.00	-46.03	Average

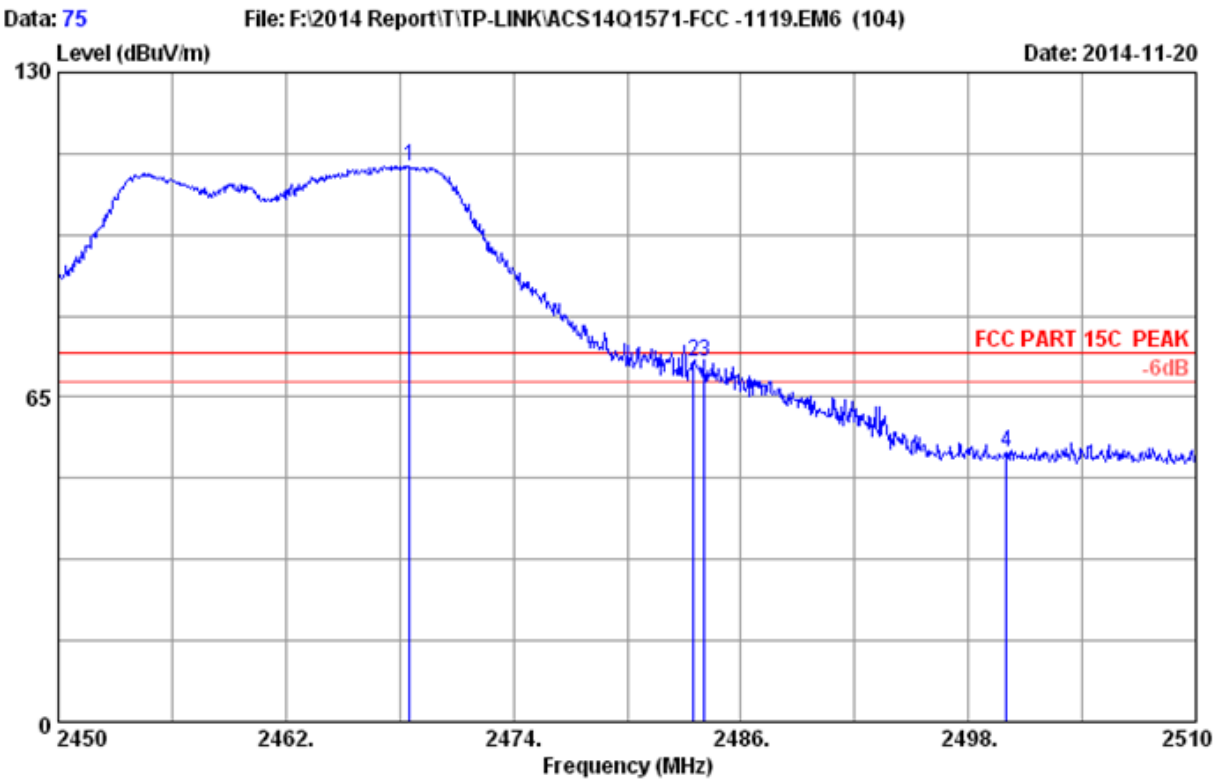
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 74
Dis. / Ant. : 3m 2014 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 24*C/56% Engineer : Alice_yang
EUT : 300Mbps Wireless N Gigabit Access Point
Power rating : DC 12V From Adapter Input AC 120V/60Hz
Test Mode : IEEE802.11n HT20 2412MHz Tx
M/N : M/N:EAP120

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2389.350	28.16	5.78	35.70	72.83	71.07	74.00	2.93	Peak
2	2390.000	28.16	5.78	35.70	71.80	70.04	74.00	3.96	Peak
3	2400.000	28.18	5.80	35.70	89.07	87.35	74.00	-13.35	Peak
4	2408.900	28.20	5.81	35.70	112.80	111.11	74.00	-37.11	Peak

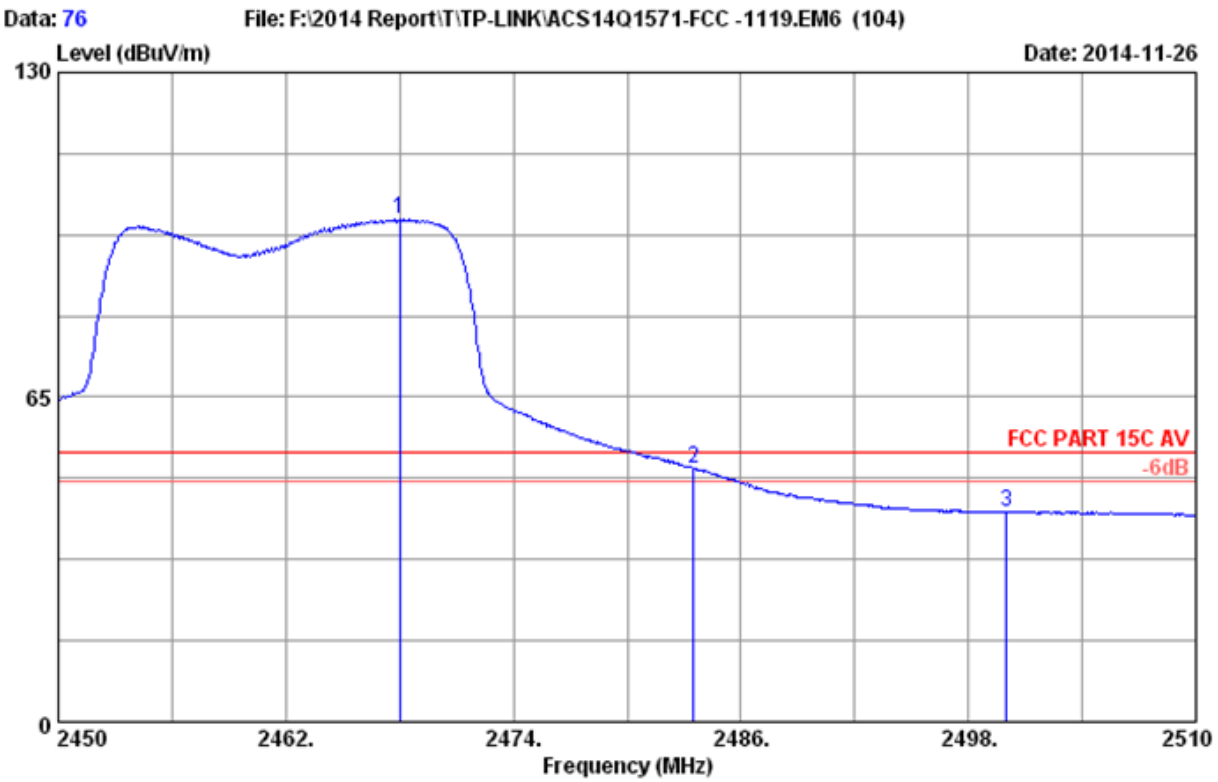
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 75
Dis. / Ant. : 3m 2014 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 24*C/56% Engineer : Alice_yang
EUT : 300Mbps Wireless N Gigabit Access Point
Power rating : DC 12V From Adapter Input AC 120V/60Hz
Test Mode : IEEE802.11n HT20 2462MHz Tx
M/N : M/N:EAP120

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2468.540	28.33	5.90	35.70	112.68	111.21	74.00	-37.21	Peak
2	2483.500	28.36	5.92	35.70	73.39	71.97	74.00	2.03	Peak
3	2484.080	28.36	5.92	35.70	73.58	72.16	74.00	1.84	Peak
4	2500.000	28.40	5.94	35.70	55.31	53.95	74.00	20.05	Peak

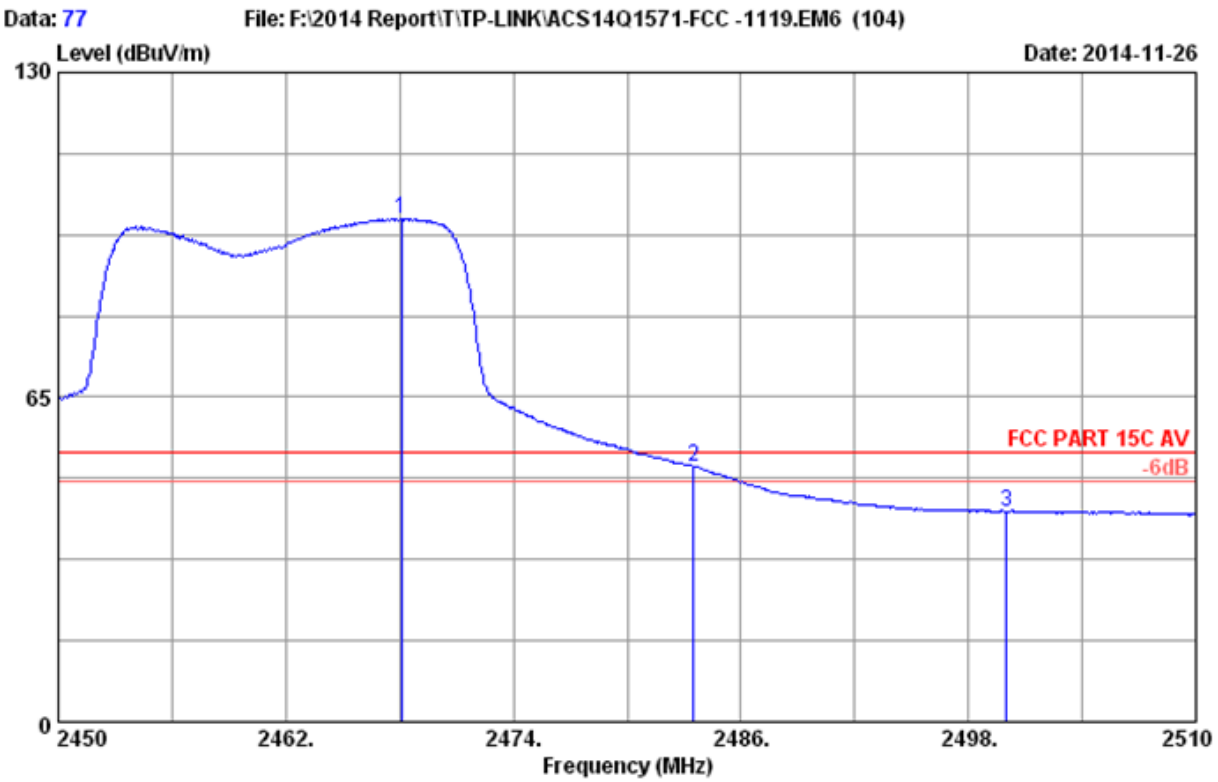
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 76
Dis. / Ant. : 3m 2014 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C AV
Env. / Ins. : 24*C/56% Engineer : Alice_yang
EUT : 300Mbps Wireless N Gigabit Access Point
Power rating : DC 12V From Adapter Input AC 120V/60Hz
Test Mode : IEEE802.11n HT20 2462MHz Tx
M/N : M/N:EAP120

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2468.000	28.33	5.90	35.70	102.18	100.71	54.00	-46.71	Average
2	2483.500	28.36	5.92	35.70	52.17	50.75	54.00	3.25	Average
3	2500.000	28.40	5.94	35.70	43.29	41.93	54.00	12.07	Average

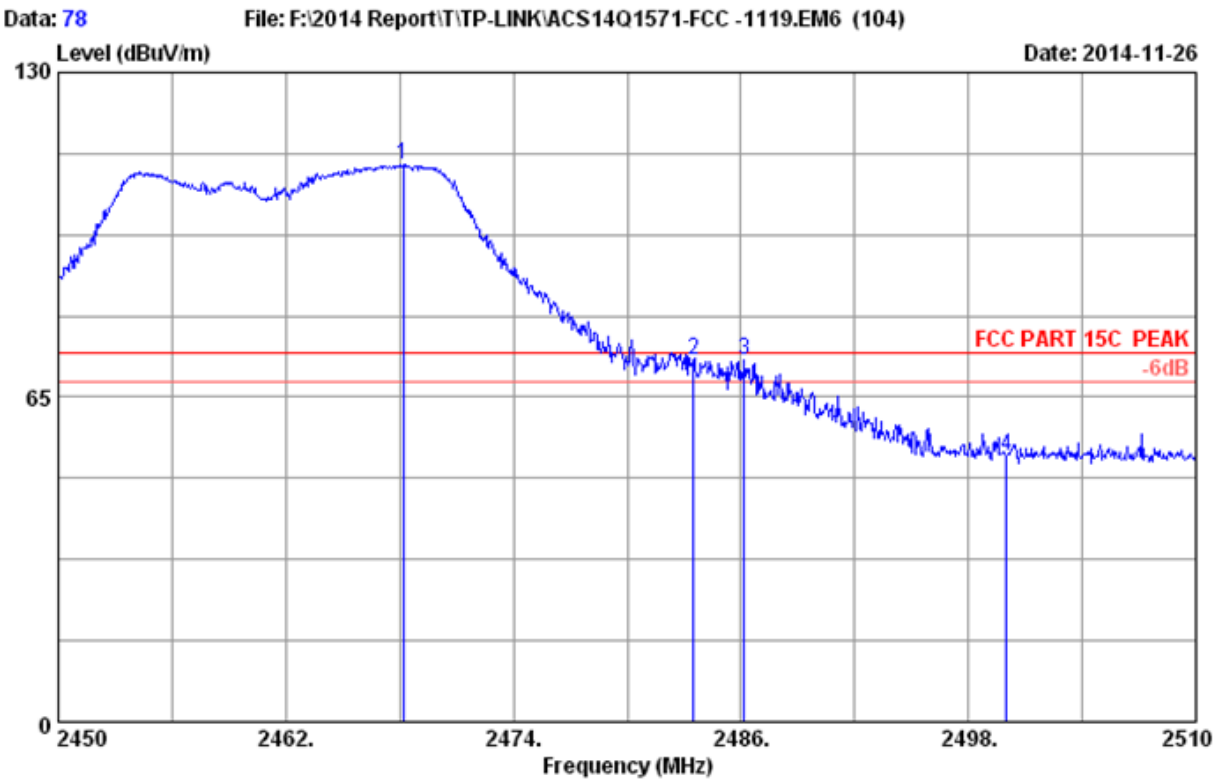
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 77
Dis. / Ant. : 3m 2014 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C AV
Env. / Ins. : 24*C/56% Engineer : Alice_yang
EUT : 300Mbps Wireless N Gigabit Access Point
Power rating : DC 12V From Adapter Input AC 120V/60Hz
Test Mode : IEEE802.11n HT20 2462MHz Tx
M/N : M/N:EAP120

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2468.120	28.33	5.90	35.70	102.23	100.76	54.00	-46.76	Average
2	2483.500	28.36	5.92	35.70	52.49	51.07	54.00	2.93	Average
3	2500.000	28.40	5.94	35.70	43.45	42.09	54.00	11.91	Average

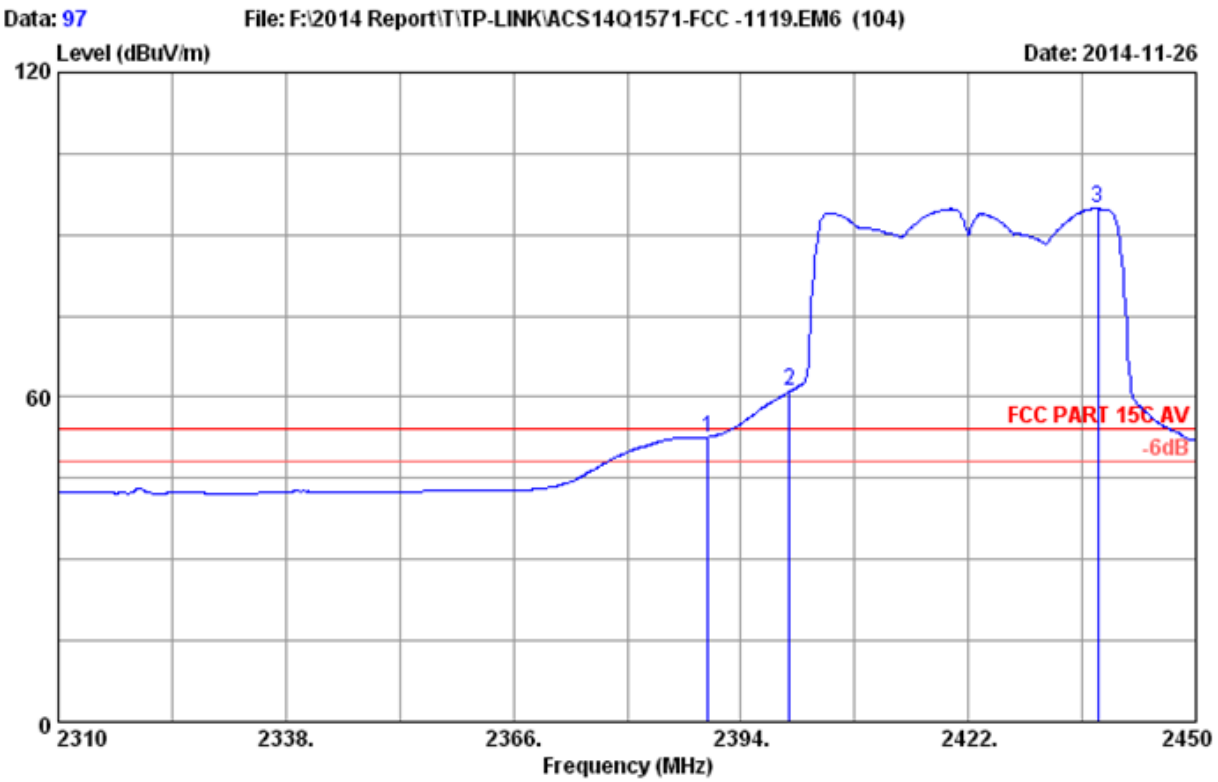
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 78
Dis. / Ant. : 3m 2014 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 24*C/56% Engineer : Alice_yang
EUT : 300Mbps Wireless N Gigabit Access Point
Power rating : DC 12V From Adapter Input AC 120V/60Hz
Test Mode : IEEE802.11n HT20 2462MHz Tx
M/N : M/N:EAP120

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2468.180	28.33	5.90	35.70	112.91	111.44	74.00	-37.44	Peak
2	2483.500	28.36	5.92	35.70	73.91	72.49	74.00	1.51	Peak
3	2486.180	28.37	5.92	35.70	73.85	72.44	74.00	1.56	Peak
4	2500.000	28.40	5.94	35.70	54.47	53.11	74.00	20.89	Peak

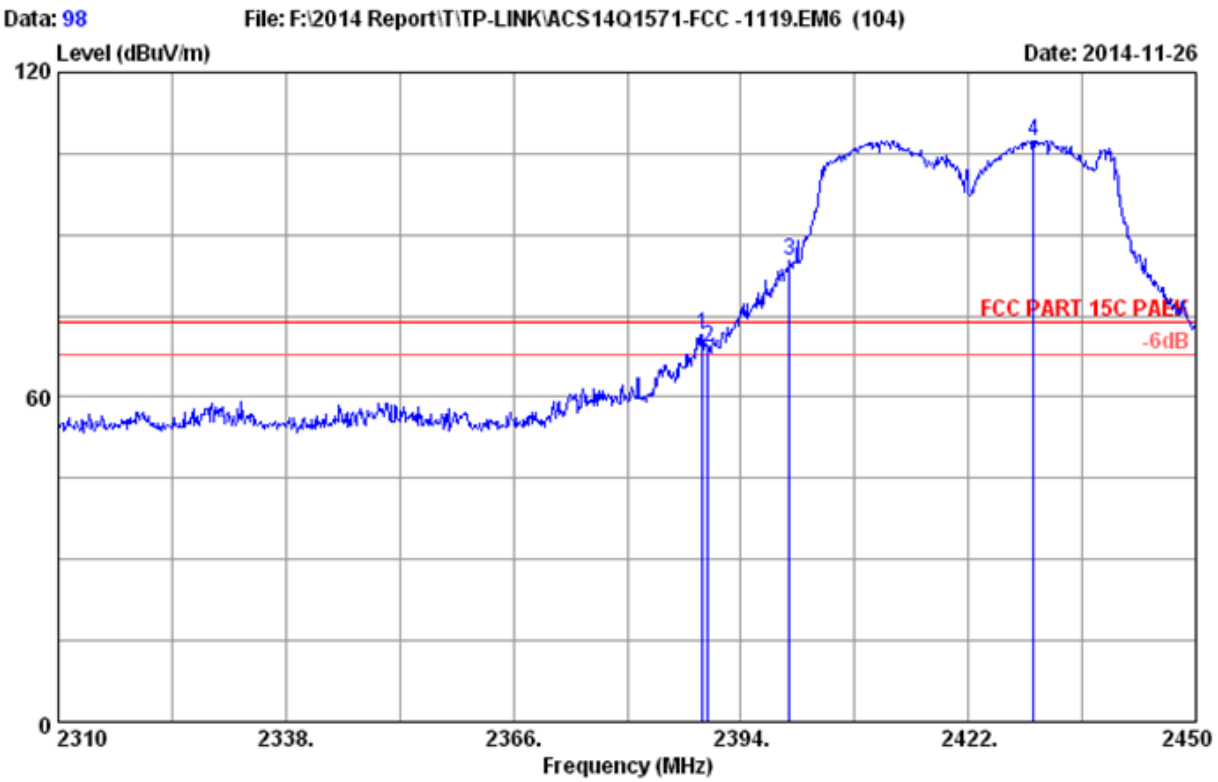
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 97
Dis. / Ant. : 3m 2014 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C AV
Env. / Ins. : 24*C/56% Engineer : Alice_yang
EUT : 300Mbps Wireless N Gigabit Access Point
Power rating : DC 12V From Adapter Input AC 120V/60Hz
Test Mode : IEEE802.11nHT40 2422MHz Tx
M/N : M/N:EAP120

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2389.940	28.16	5.78	35.70	54.37	52.61	54.00	1.39	Average
2	2400.000	28.18	5.80	35.70	62.77	61.05	54.00	-7.05	Average
3	2437.960	28.26	5.85	35.70	96.42	94.83	54.00	-40.83	Average

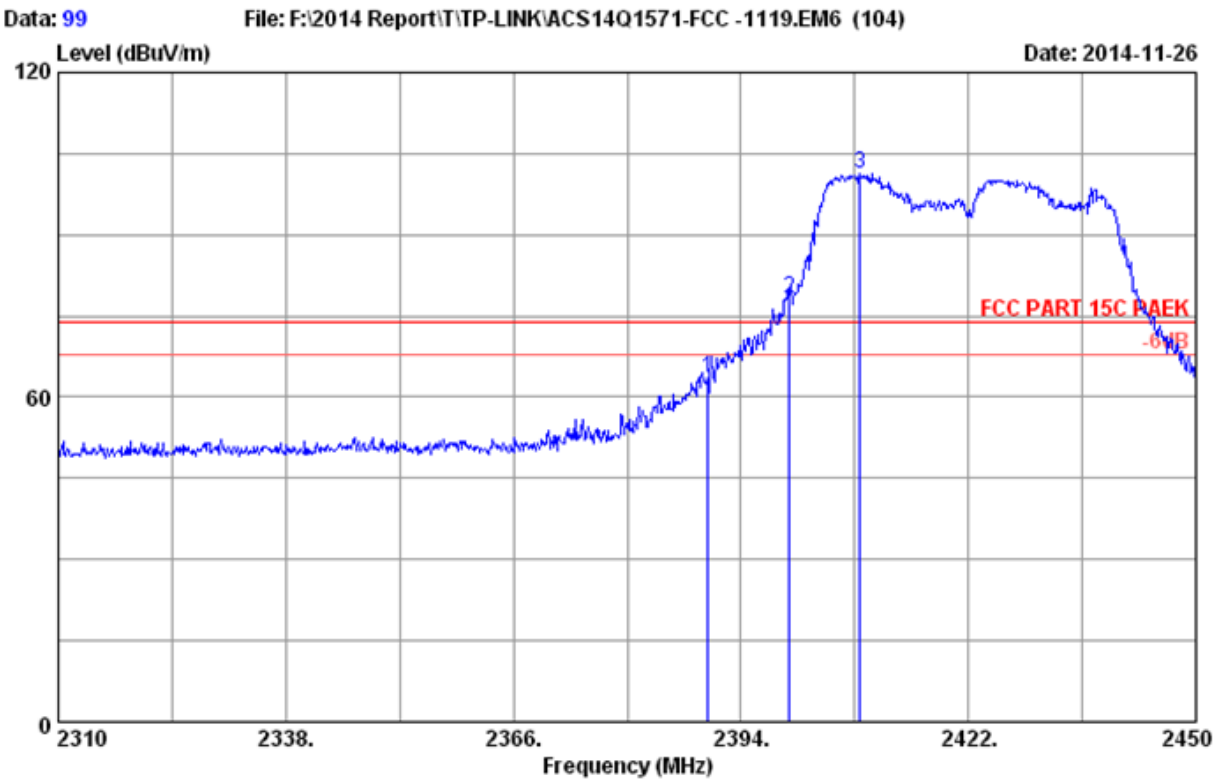
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 98
Dis. / Ant. : 3m 2014 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PAEK
Env. / Ins. : 24*C/56% Engineer : Alice_yang
EUT : 300Mbps Wireless N Gigabit Access Point
Power rating : DC 12V From Adapter Input AC 120V/60Hz
Test Mode : IEEE802.11nHT40 2422MHz Tx
M/N : M/N:EAP120

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2389.240	28.16	5.78	35.70	73.32	71.56	74.00	2.44	Peak
2	2390.000	28.16	5.78	35.70	70.87	69.11	74.00	4.89	Peak
3	2400.000	28.18	5.80	35.70	86.93	85.21	74.00	-11.21	Peak
4	2429.980	28.25	5.84	35.70	109.02	107.41	74.00	-33.41	Peak

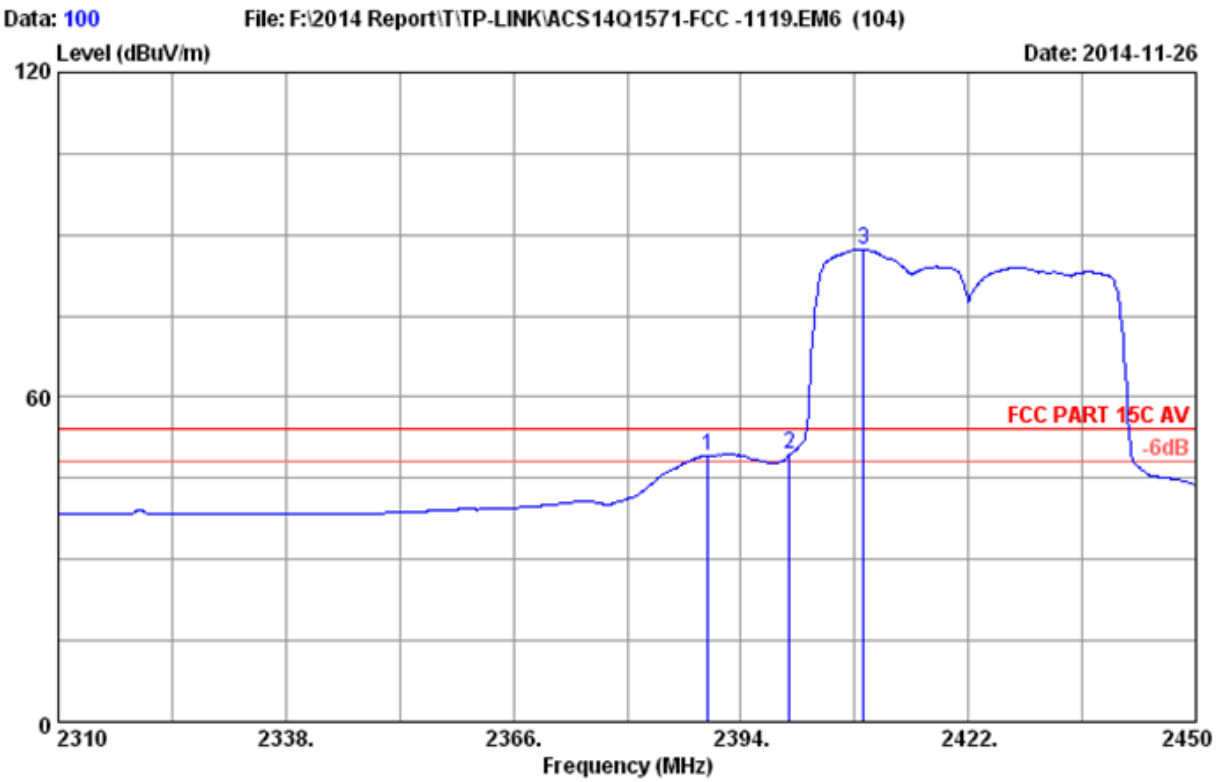
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 99
Dis. / Ant. : 3m 2014 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PAEK
Env. / Ins. : 24*C/56% Engineer : Alice_yang
EUT : 300Mbps Wireless N Gigabit Access Point
Power rating : DC 12V From Adapter Input AC 120V/60Hz
Test Mode : IEEE802.11nHT40 2422MHz Tx
M/N : M/N:EAP120

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.000	28.16	5.78	35.70	65.35	63.59	74.00	10.41	Peak
2	2400.000	28.18	5.80	35.70	79.78	78.06	74.00	-4.06	Peak
3	2408.700	28.20	5.81	35.70	102.96	101.27	74.00	-27.27	Peak

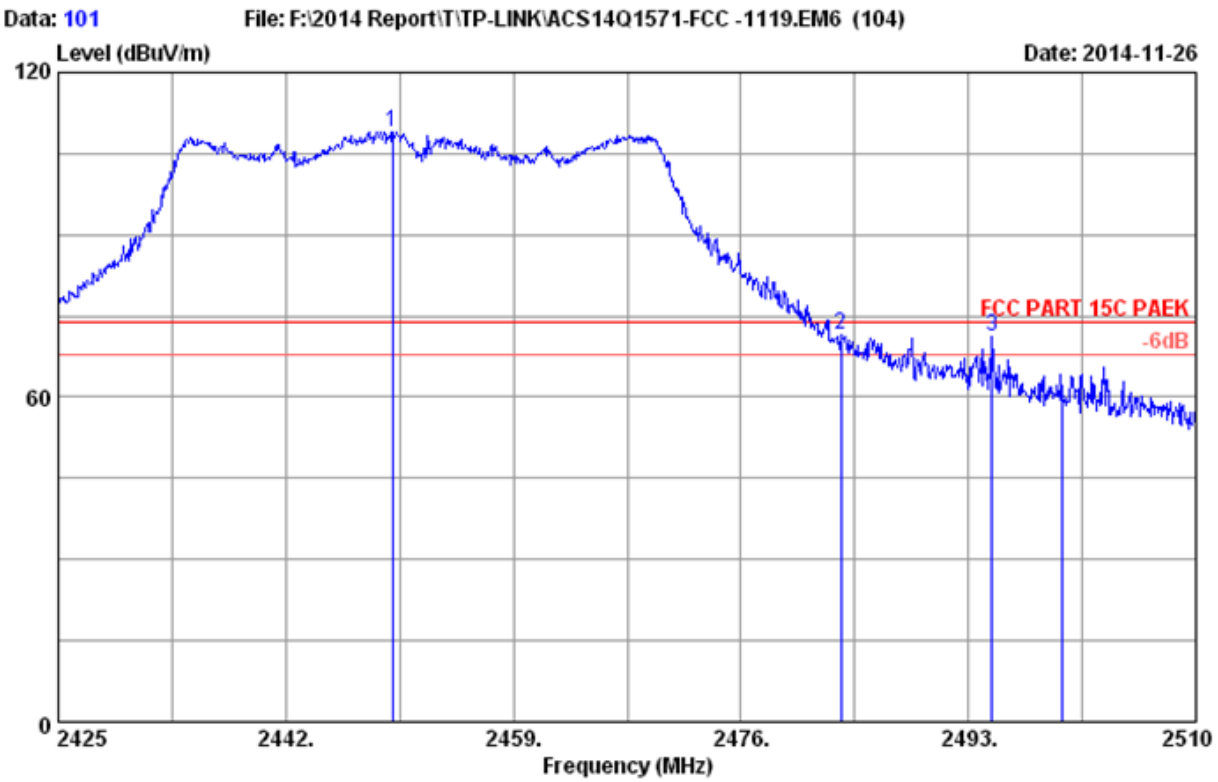
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 100
Dis. / Ant. : 3m 2014 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C AV
Env. / Ins. : 24*C/56% Engineer : Alice_yang
EUT : 300Mbps Wireless N Gigabit Access Point
Power rating : DC 12V From Adapter Input AC 120V/60Hz
Test Mode : IEEE802.11nHT40 2422MHz Tx
M/N : M/N:EAP120

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.000	28.16	5.78	35.70	51.00	49.24	54.00	4.76	Average
2	2400.000	28.18	5.80	35.70	51.25	49.53	54.00	4.47	Average
3	2409.120	28.20	5.81	35.70	88.97	87.28	54.00	-33.28	Average

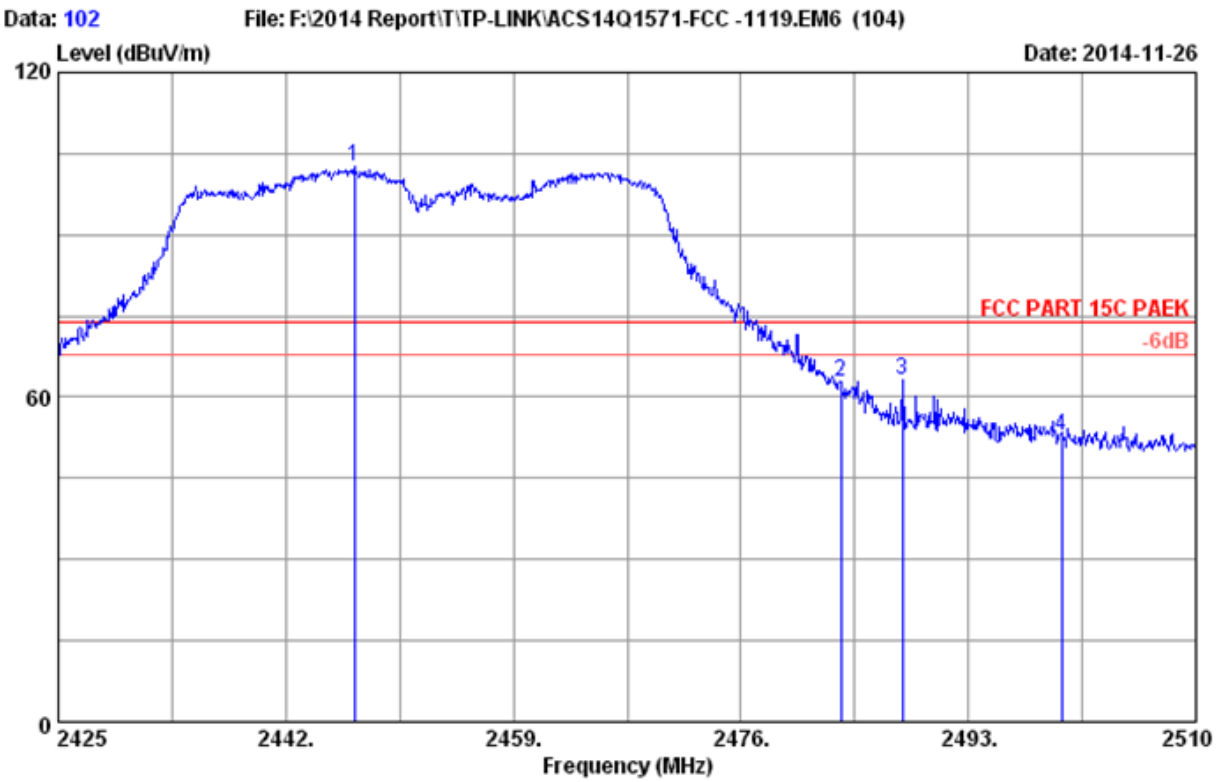
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 101
Dis. / Ant. : 3m 2014 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PAEK
Env. / Ins. : 24*C/56% Engineer : Alice_yang
EUT : 300Mbps Wireless N Gigabit Access Point
Power rating : DC 12V From Adapter Input AC 120V/60Hz
Test Mode : IEEE802.11nHT40 2452MHz Tx
M/N : M/N:EAP120

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2449.990	28.29	5.87	35.70	110.64	109.10	74.00	-35.10	Peak
2	2483.500	28.36	5.92	35.70	72.92	71.50	74.00	2.50	Peak
3	2494.785	28.39	5.93	35.70	72.68	71.30	74.00	2.70	Peak
4	2500.000	28.40	5.94	35.70	59.61	58.25	74.00	15.75	Peak

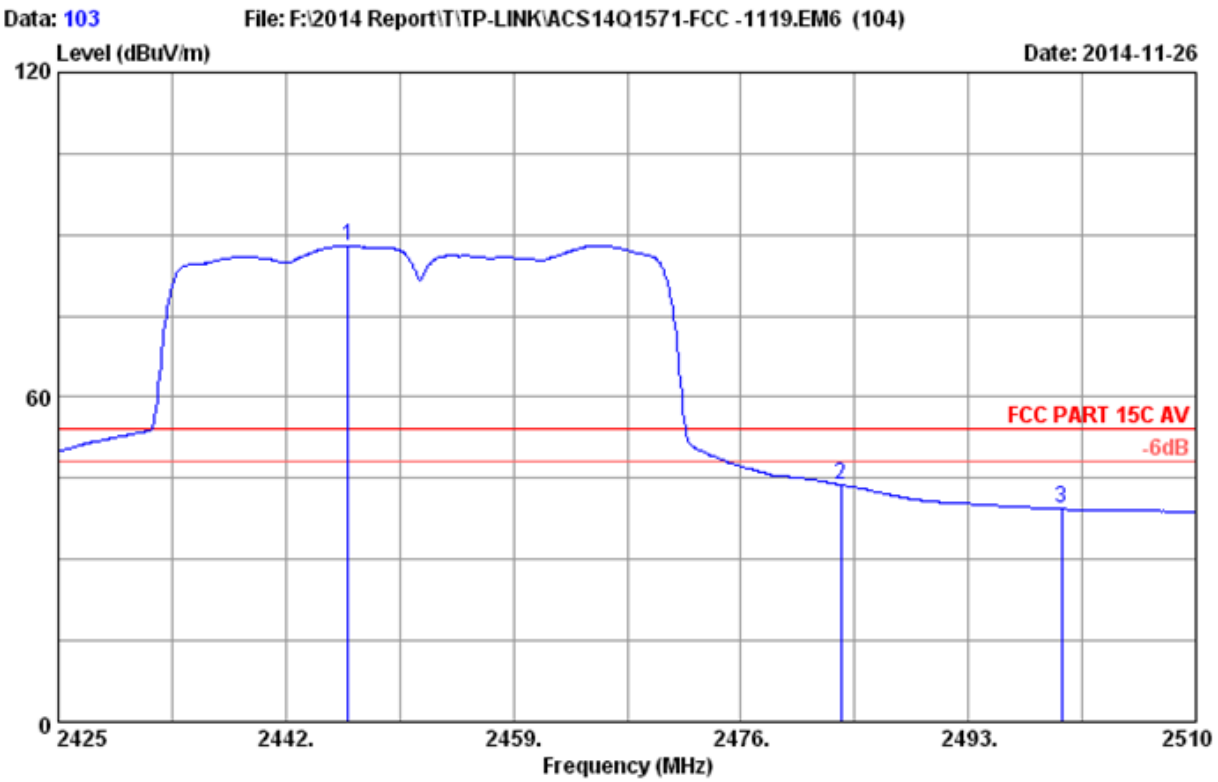
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 102
Dis. / Ant. : 3m 2014 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PAEK
Env. / Ins. : 24*C/56% Engineer : Alice_yang
EUT : 300Mbps Wireless N Gigabit Access Point
Power rating : DC 12V From Adapter Input AC 120V/60Hz
Test Mode : IEEE802.11nHT40 2452MHz Tx
M/N : M/N:EAP120

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2447.100	28.28	5.87	35.70	104.07	102.52	74.00	-28.52	Peak
2	2483.500	28.36	5.92	35.70	64.36	62.94	74.00	11.06	Peak
3	2488.070	28.37	5.93	35.70	64.55	63.15	74.00	10.85	Peak
4	2500.000	28.40	5.94	35.70	54.28	52.92	74.00	21.08	Peak

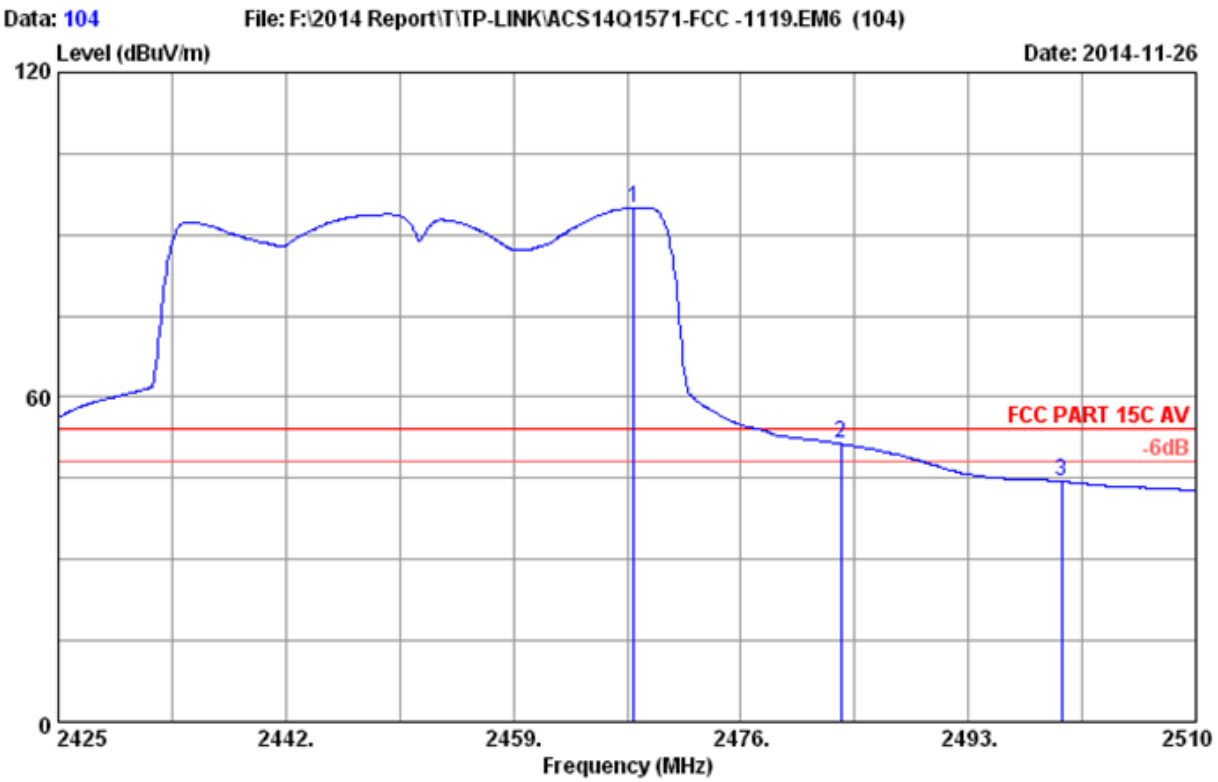
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 103
Dis. / Ant. : 3m 2014 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C AV
Env. / Ins. : 24*C/56% Engineer : Alice_yang
EUT : 300Mbps Wireless N Gigabit Access Point
Power rating : DC 12V From Adapter Input AC 120V/60Hz
Test Mode : IEEE802.11nHT40 2452MHz Tx
M/N : M/N:EAP120

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2446.675	28.28	5.86	35.70	89.56	88.00	54.00	-34.00	Average
2	2483.500	28.36	5.92	35.70	45.22	43.80	54.00	10.20	Average
3	2500.000	28.40	5.94	35.70	40.68	39.32	54.00	14.68	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. : 104
Dis. / Ant. : 3m 2014 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C AV
Env. / Ins. : 24*C/56% Engineer : Alice_yang
EUT : 300Mbps Wireless N Gigabit Access Point
Power rating : DC 12V From Adapter Input AC 120V/60Hz
Test Mode : IEEE802.11nHT40 2452MHz Tx
M/N : M/N:EAP120

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2468.010	28.33	5.90	35.70	96.44	94.97	54.00	-40.97	Average
2	2483.500	28.36	5.92	35.70	52.81	51.39	54.00	2.61	Average
3	2500.000	28.40	5.94	35.70	45.78	44.42	54.00	9.58	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.29, 14	1Year
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

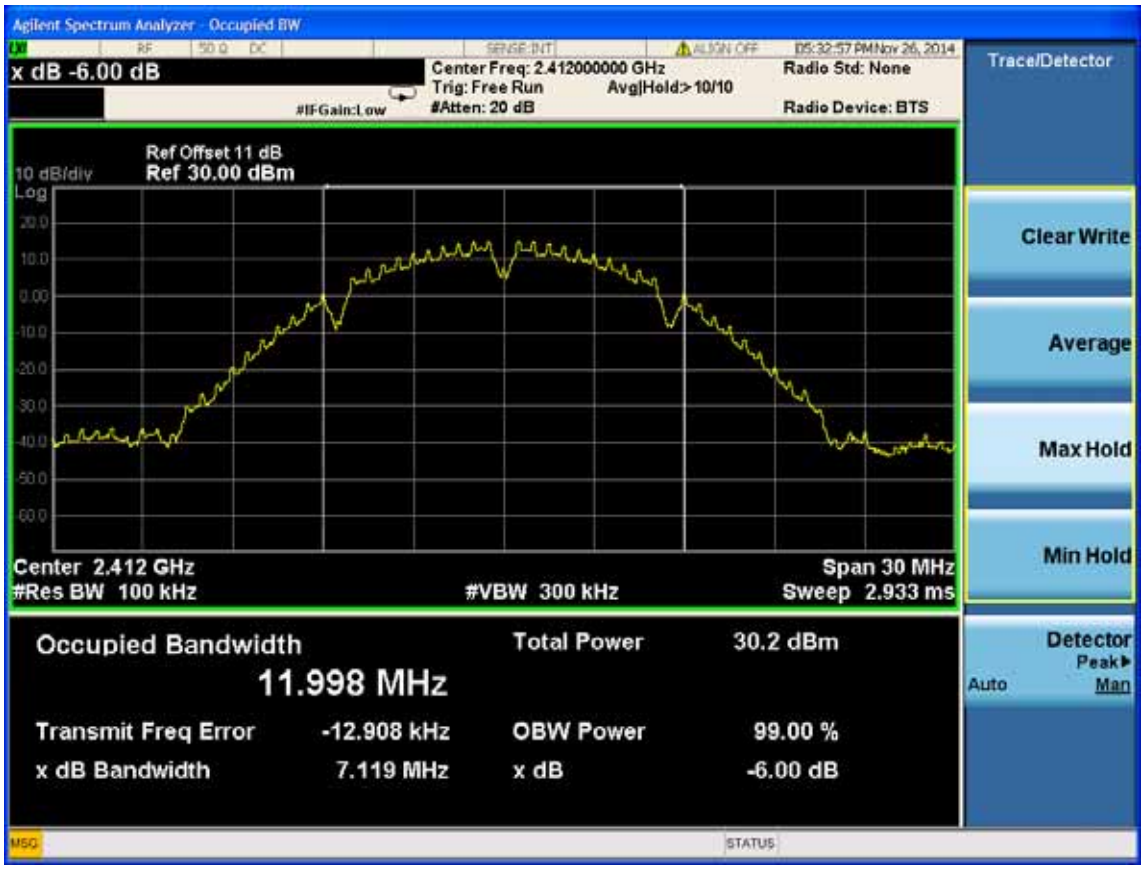
The transmitter output was connected to a spectrum analyzer, The bandwidth of the fundamental frequency was measured by spectrum analyzer with 300kHz RBW and 1MHz VBW. The 6dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 6dB.

7.4.Test Results

EUT: 300Mbps Wireless N Gigabit Access Point		
M/N: EAP120		
Test date: 2014-11-26	Pressure: 101.8±1.0kpa	Humidity: 54.1±3.0 %
Tested by: Alice_yang	Test site: RF site	Temperature: 22.9±0.6°C

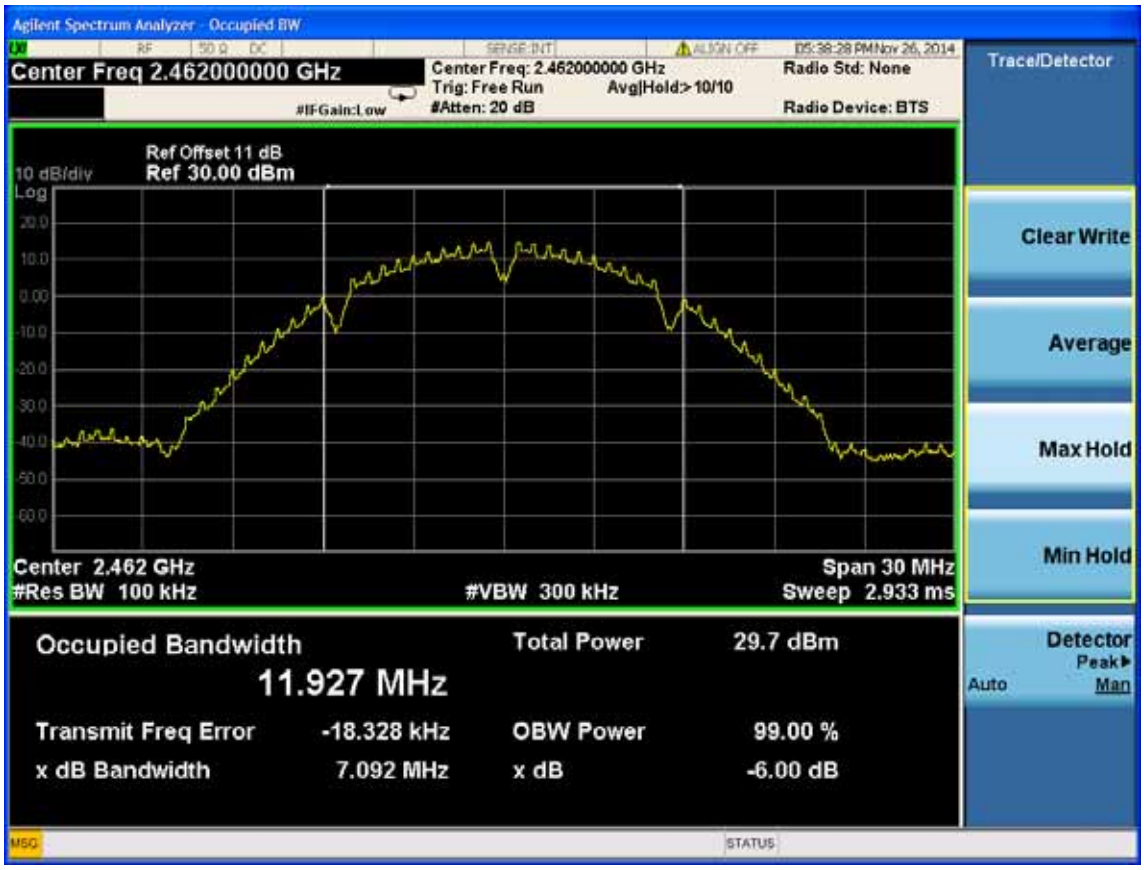
Test Mode	CH	-6dB bandwidth (MHz)		Limit (KHz)
		ANT0	ANT1	
11b	CH1	7.119	7.111	>500
	CH6	7.082	7.095	>500
	CH11	7.092	7.108	>500
11g	CH1	16.39	16.40	>500
	CH6	16.39	16.42	>500
	CH11	16.36	16.41	>500
11n HT20	CH1	17.59	17.61	>500
	CH6	17.60	17.59	>500
	CH11	17.59	17.59	>500
11n HT40	CH3	36.47	36.44	>500
	CH6	36.47	36.46	>500
	CH9	36.46	36.51	>500
Conclusion：PASS				

ANT 0:
Test Mode: IEEE 802.11b TX
Test CH1: 2412MHz

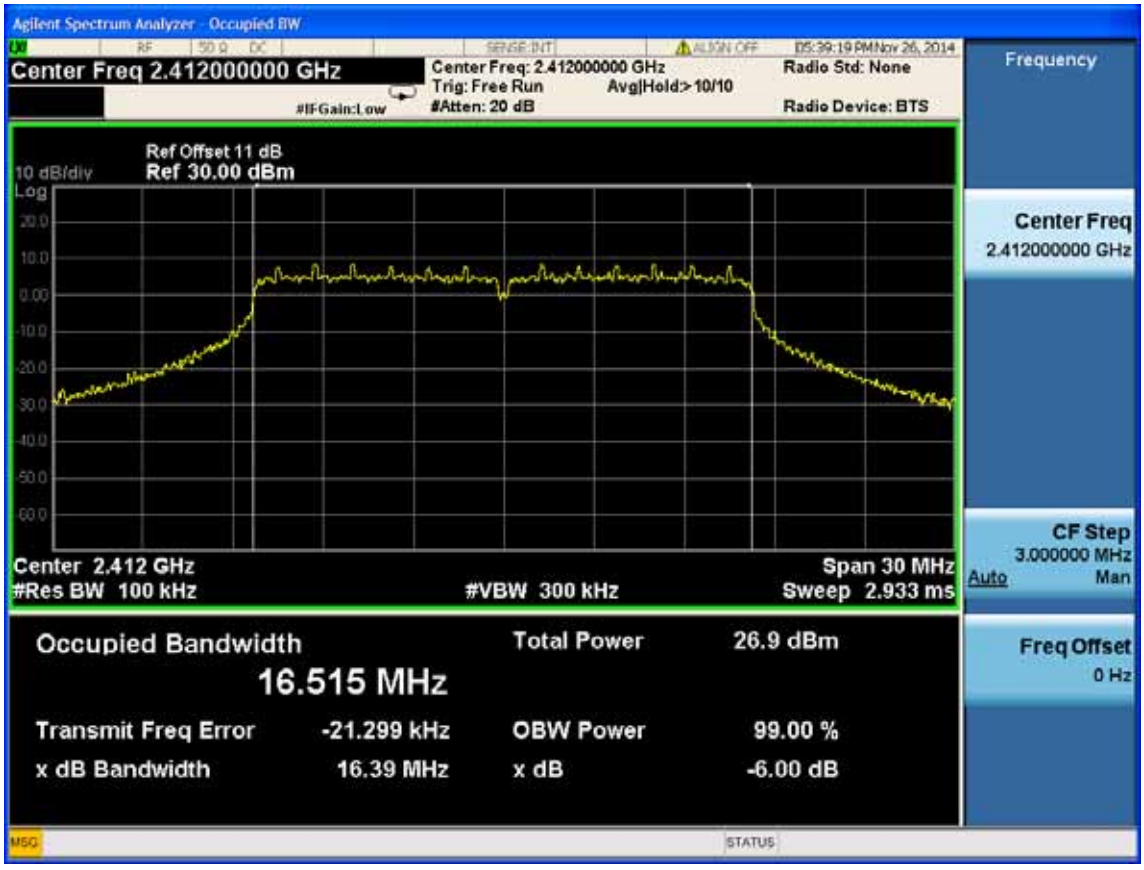


Test CH6: 2437MHz

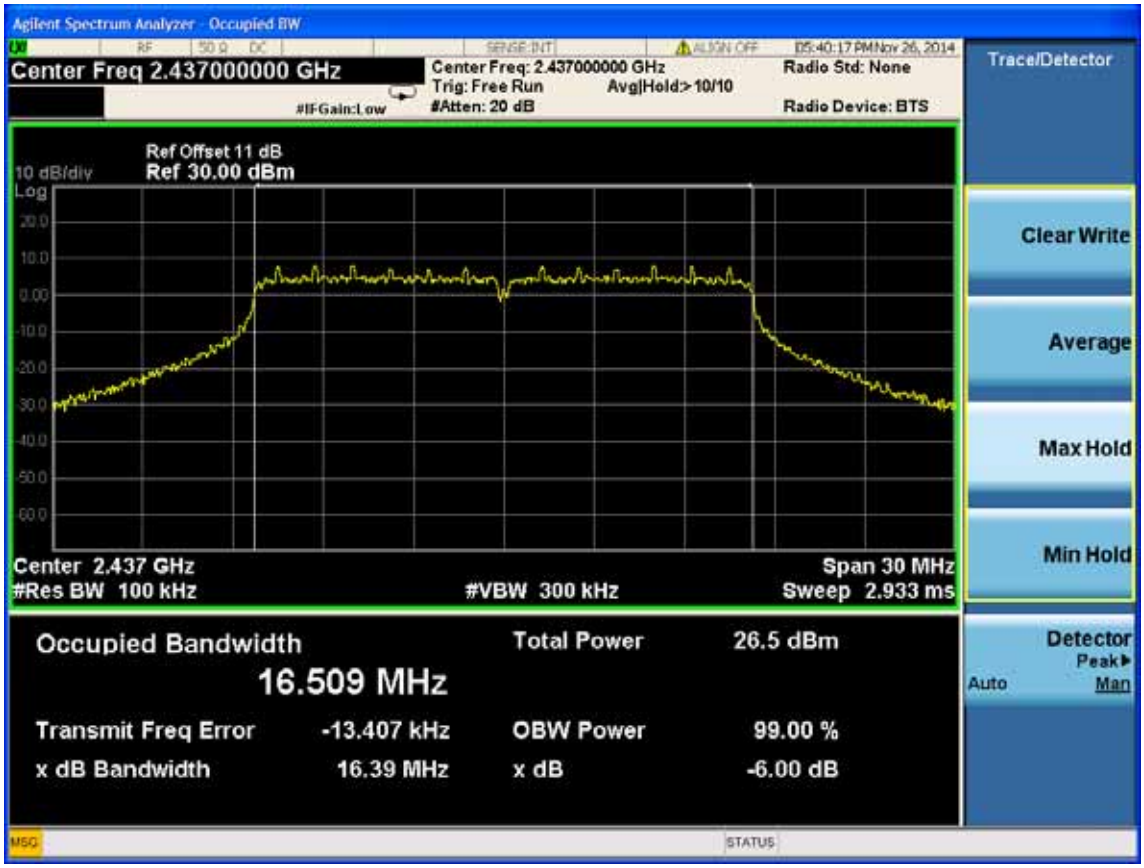
Test CH11: 2462MHz



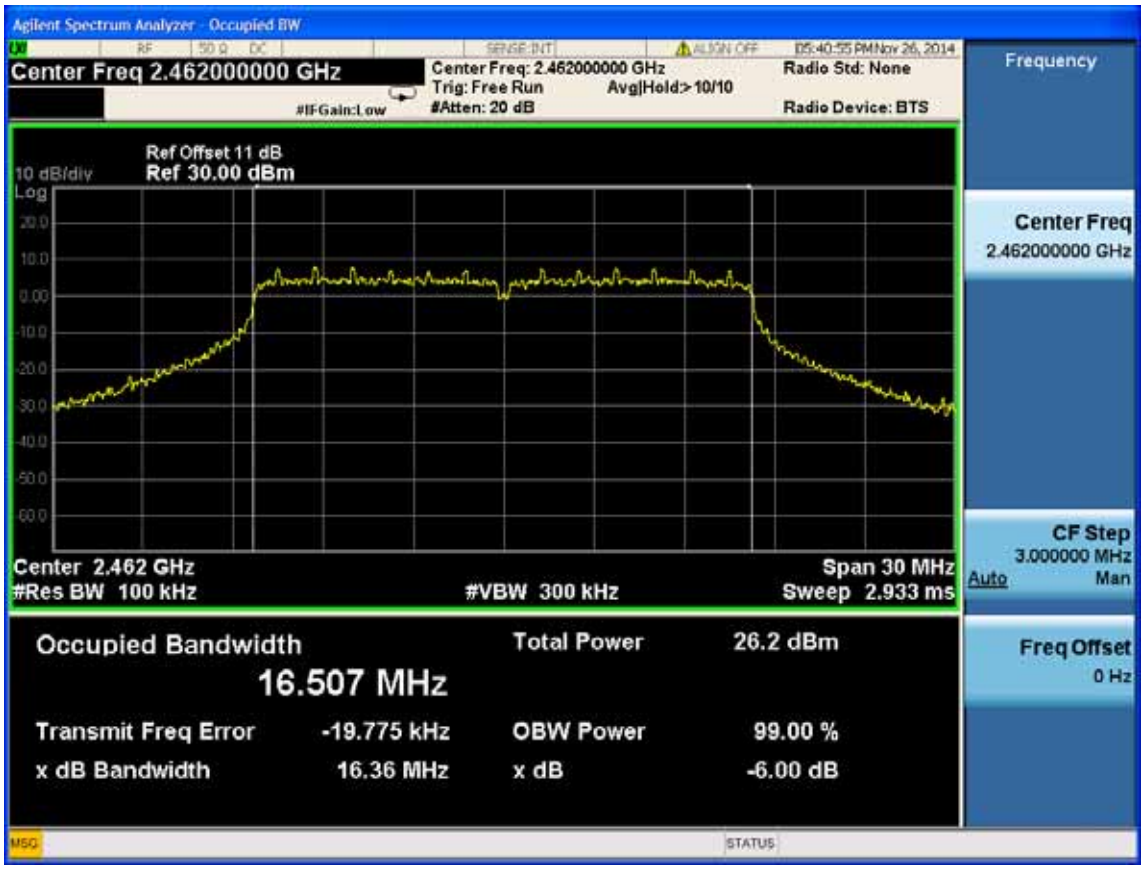
Test Mode: IEEE 802.11g TX
Test CH1: 2412MHz



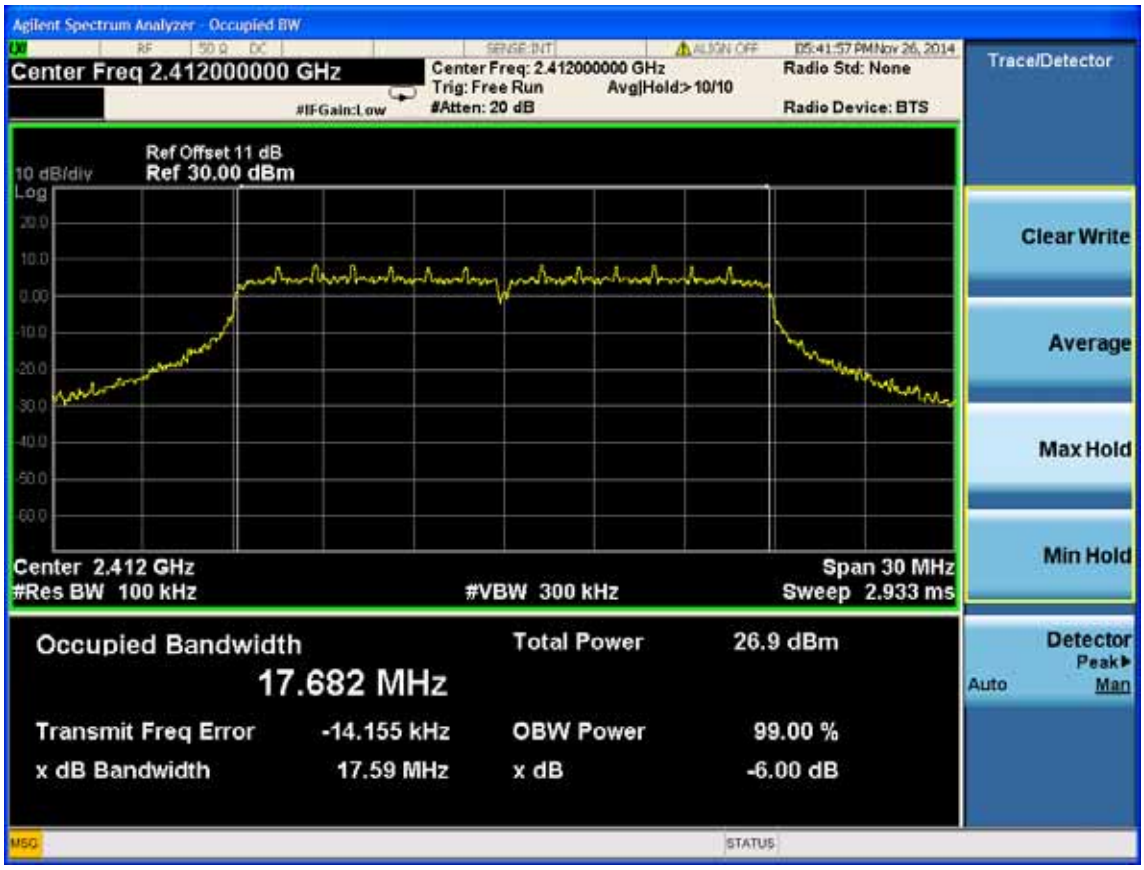
Test CH6: 2437MHz



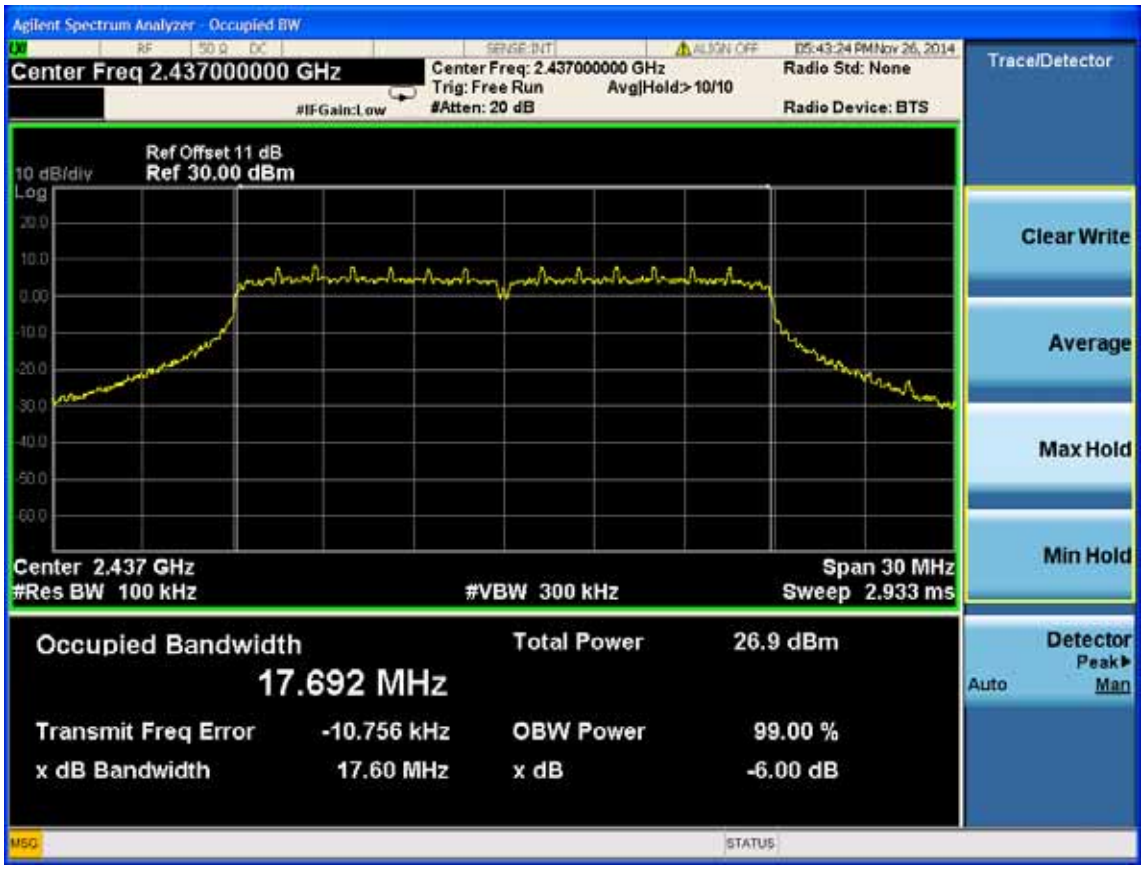
Test CH11: 2462MHz



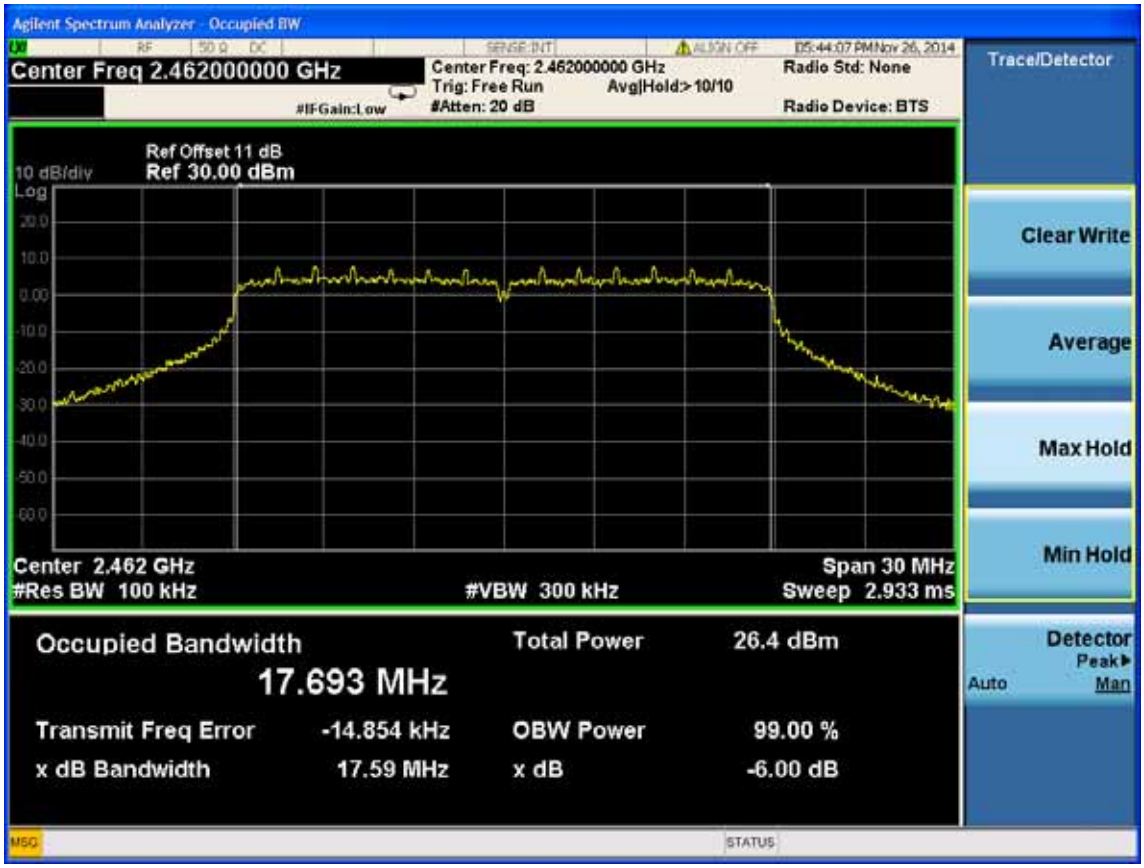
Test Mode: IEEE 802.11n HT20 TX
Test CH1: 2412MHz



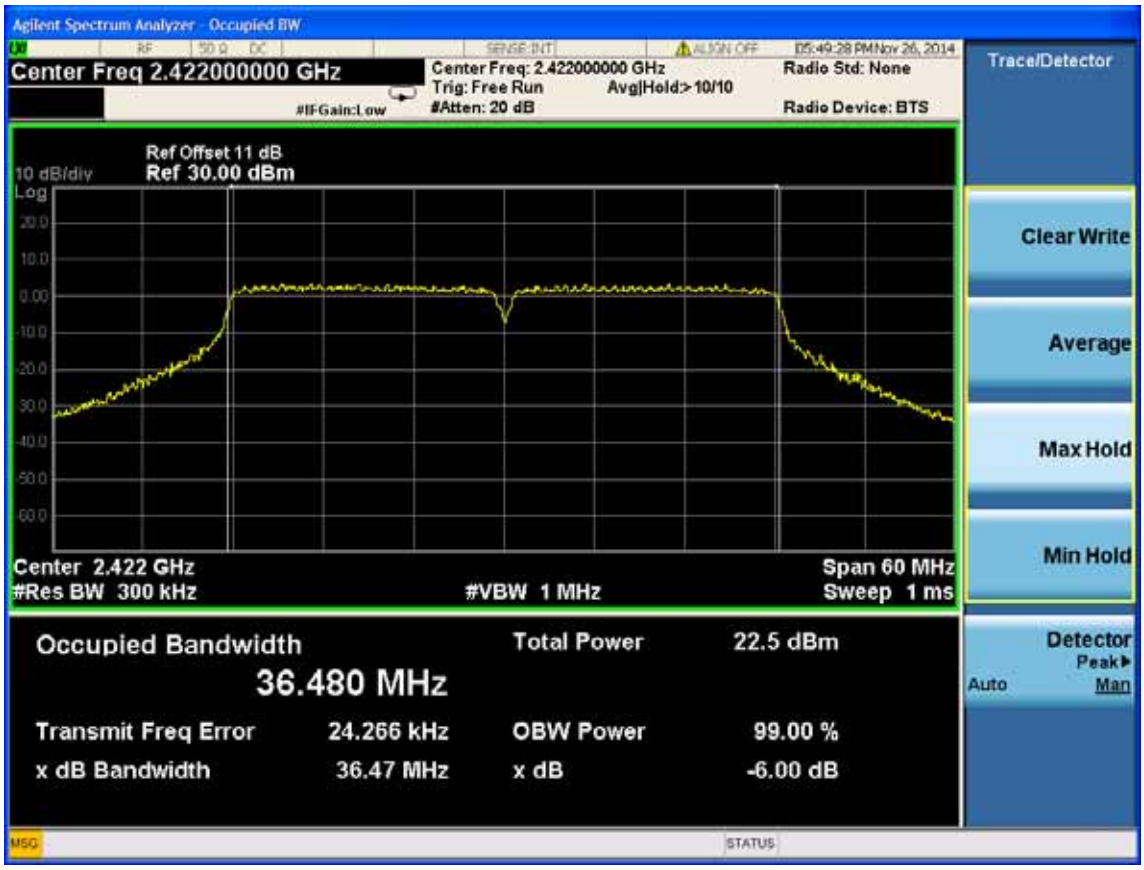
Test CH6: 2437MHz



Test CH11: 2462MHz

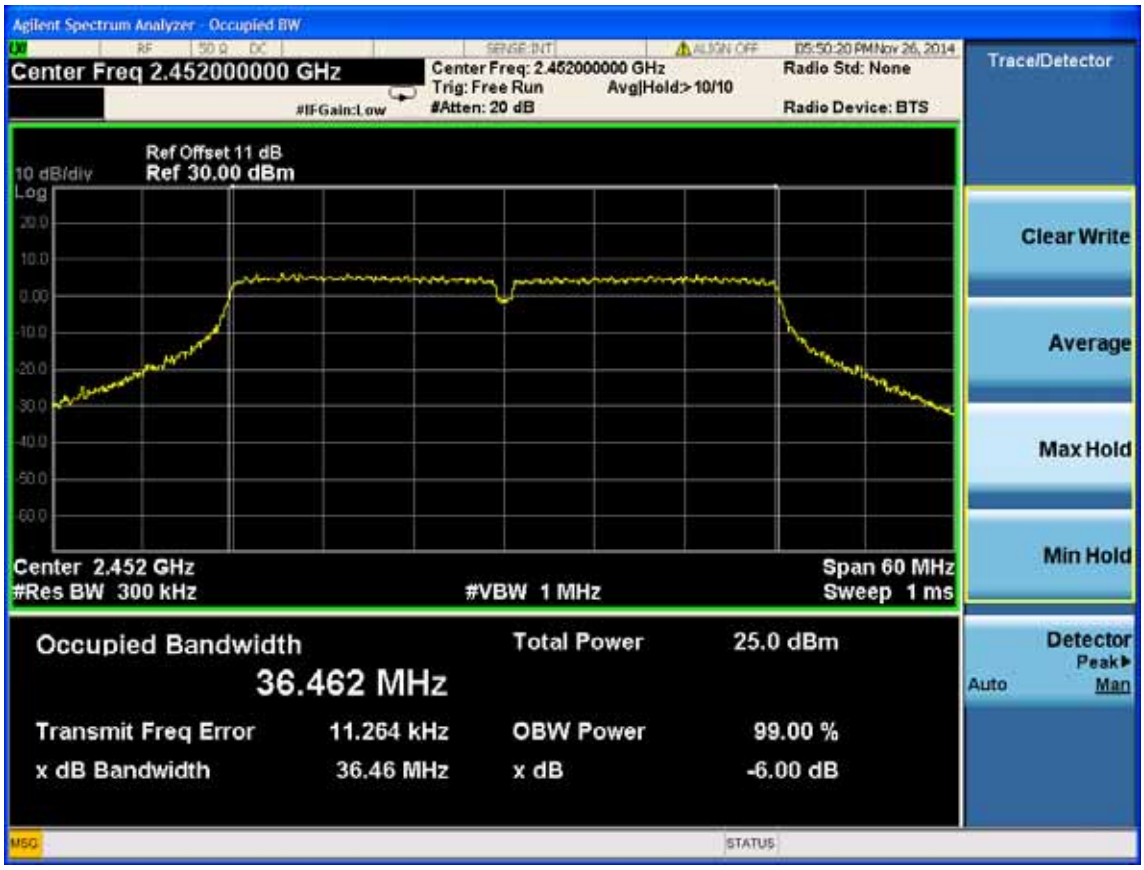


Test Mode: IEEE 802.11n HT40 TX
Test CH1: 2422MHz

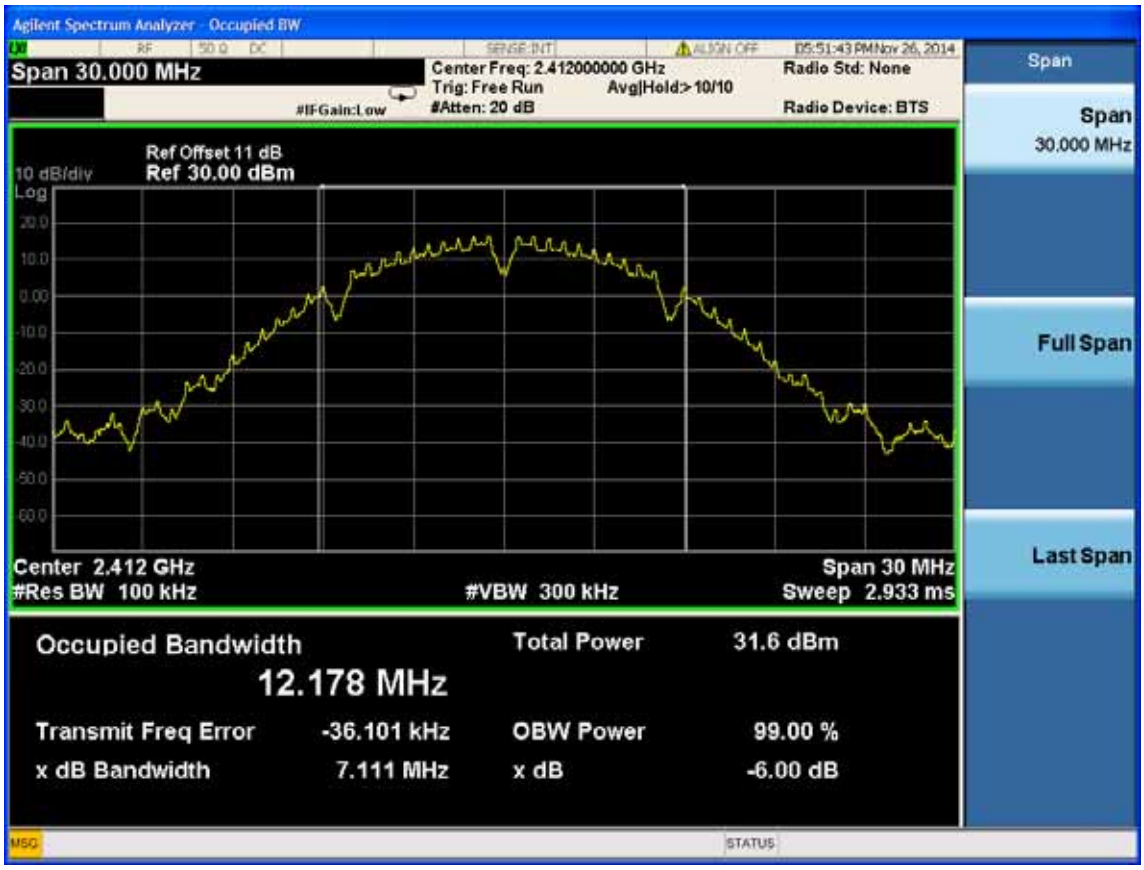


Test CH4: 2437MHz

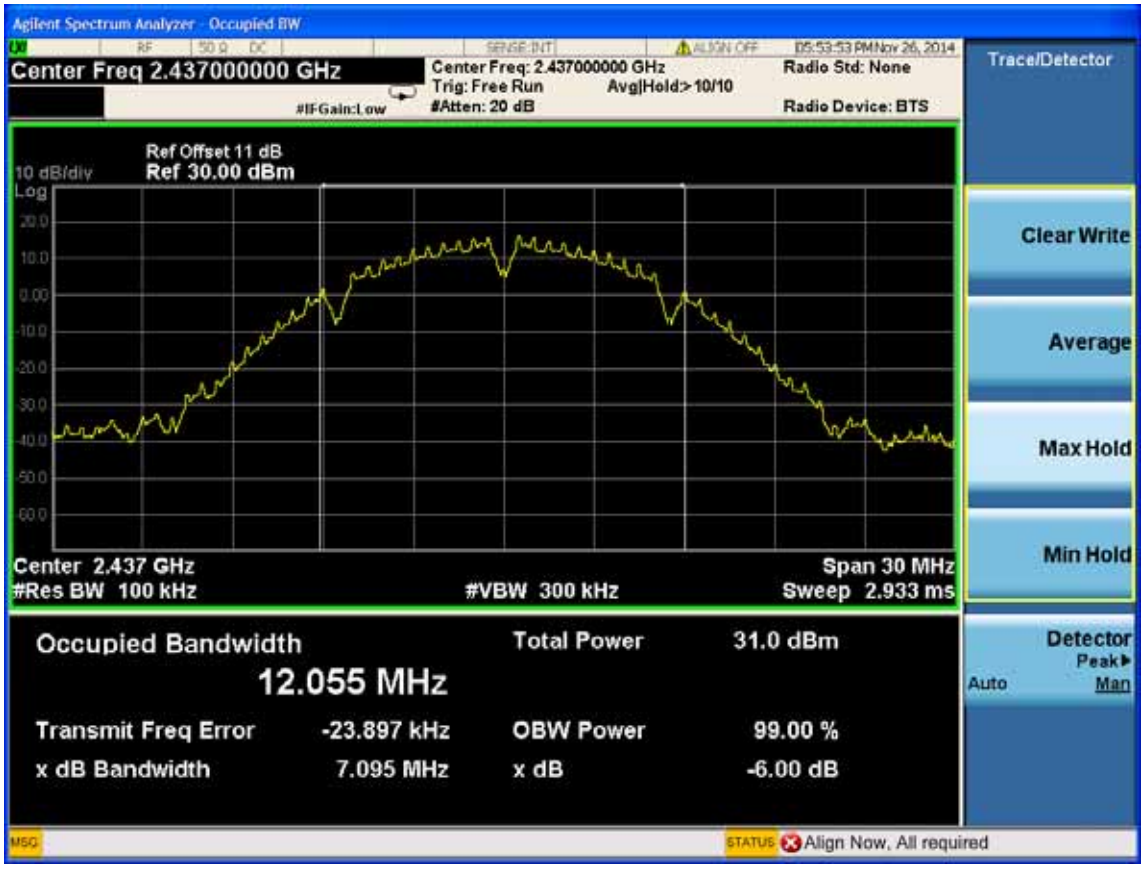
Test CH7: 2452MHz



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

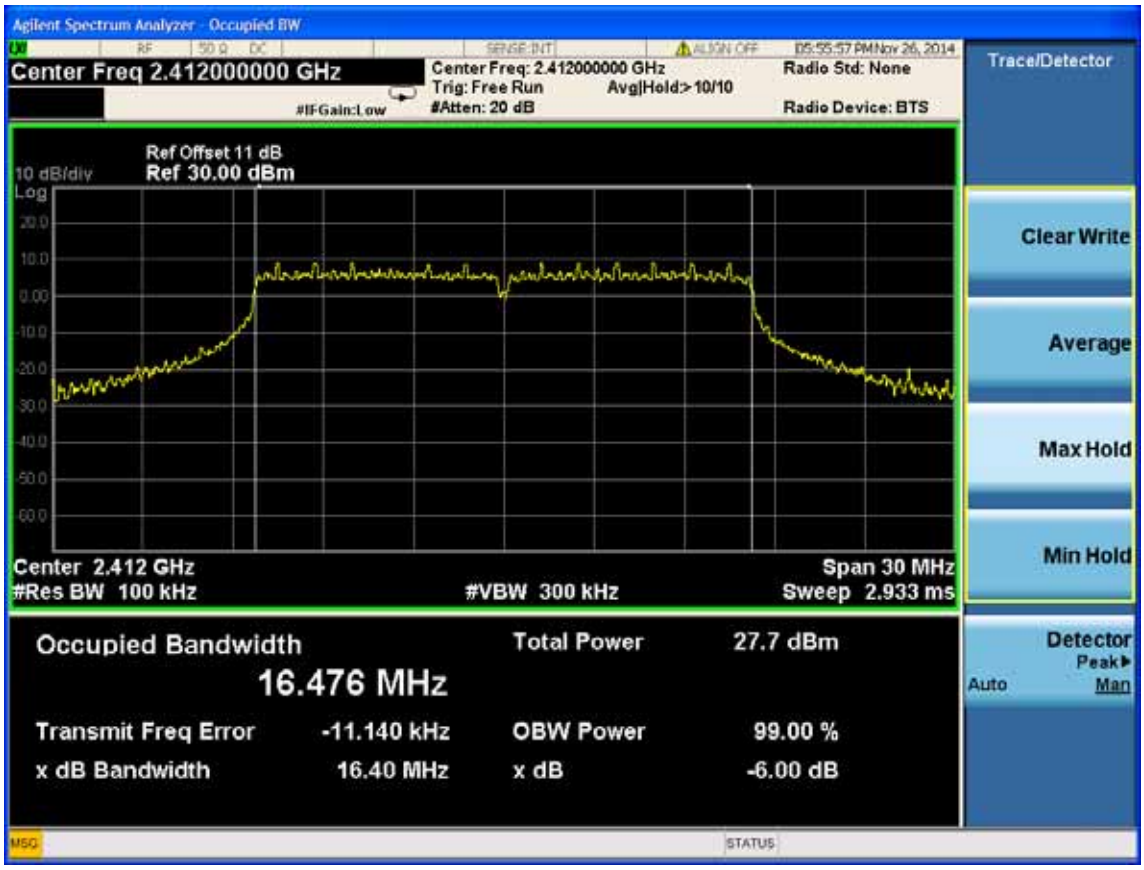


Test CH6: 2437MHz

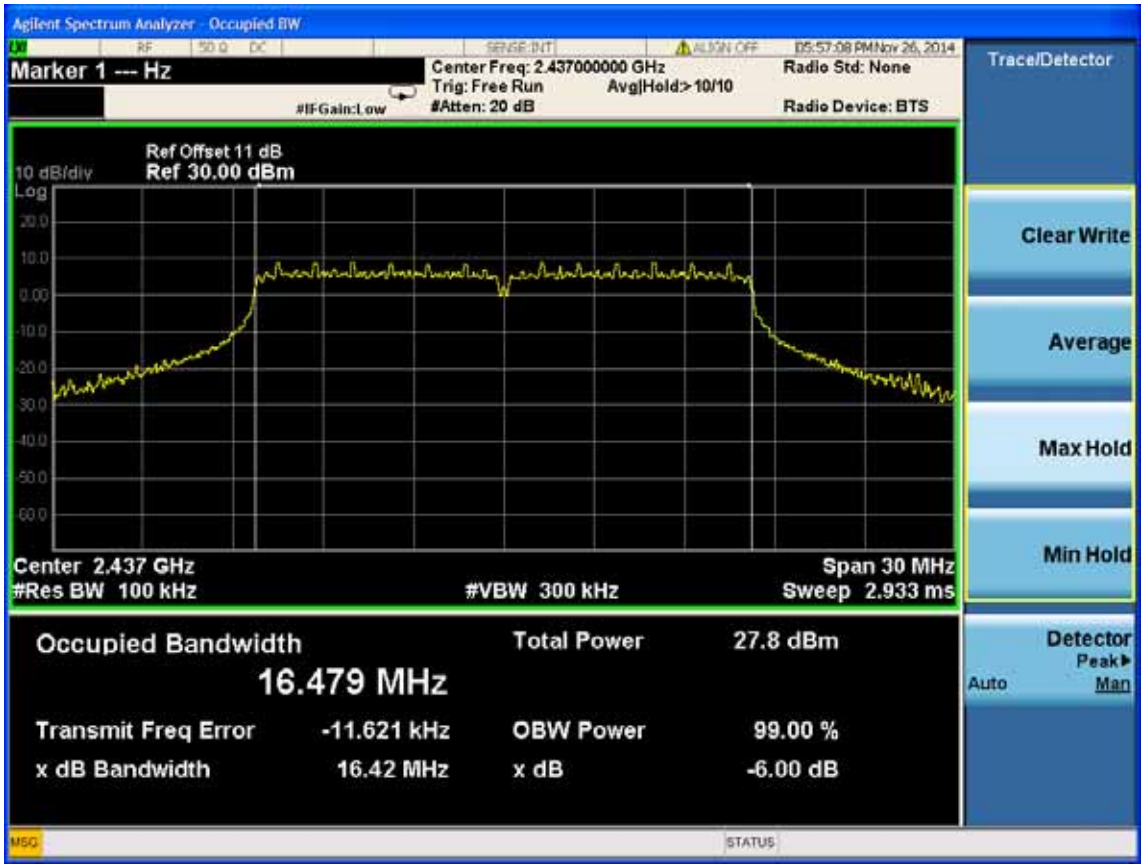


Test CH11: 2462MHz

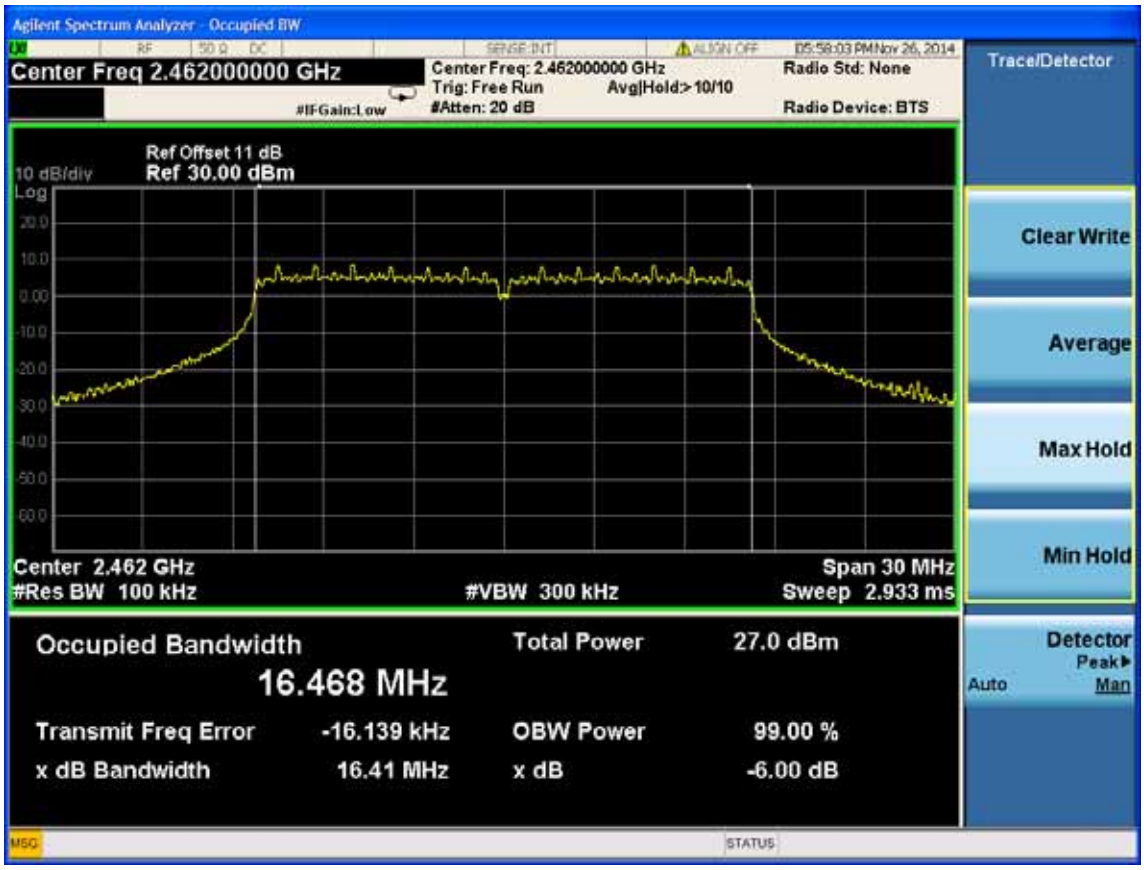
Test Mode: IEEE 802.11g TX
Test CH1: 2412MHz



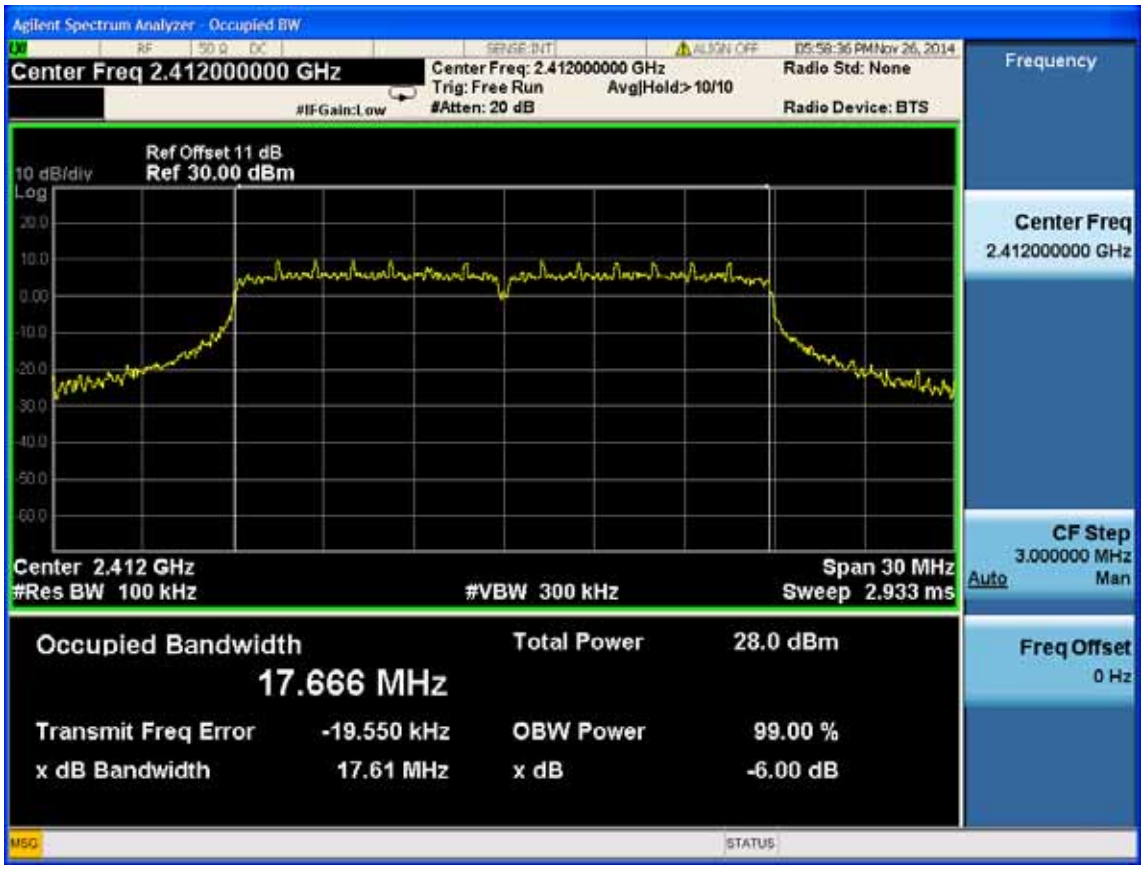
Test CH6: 2437MHz



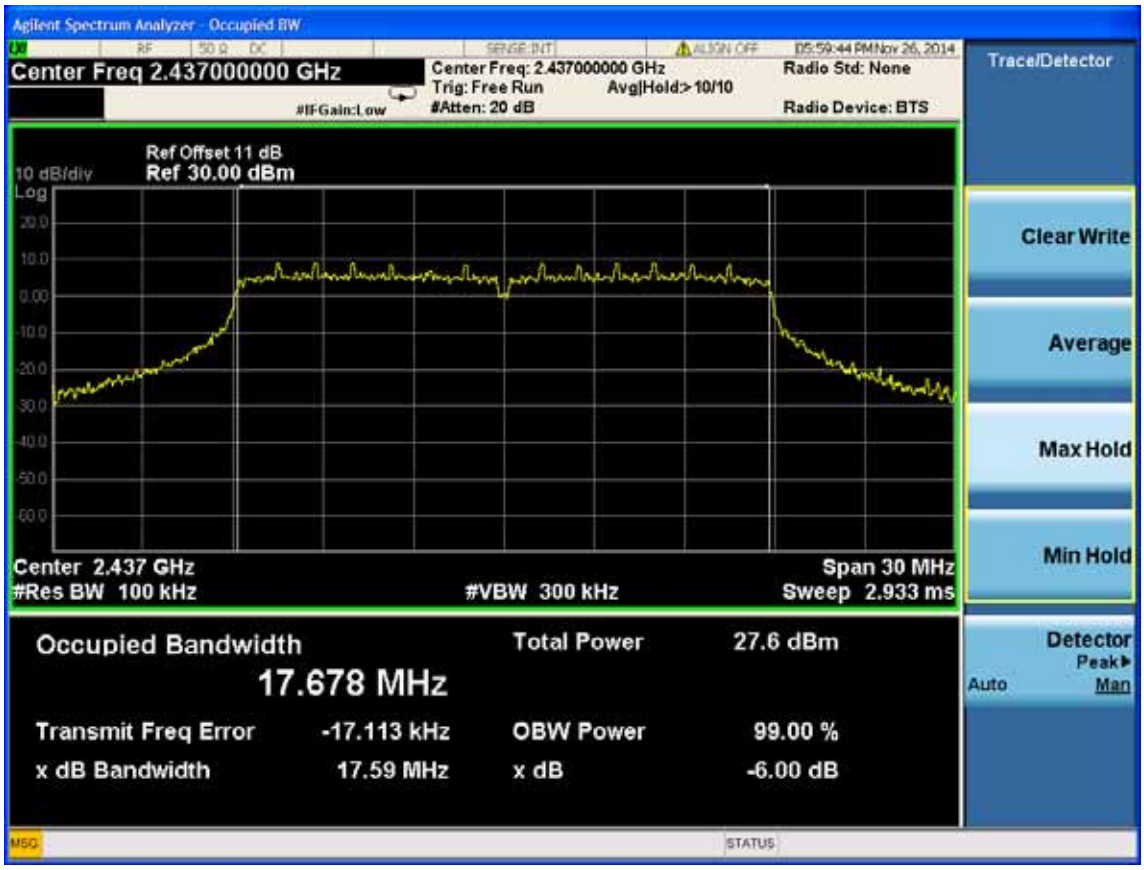
Test CH11: 2462MHz



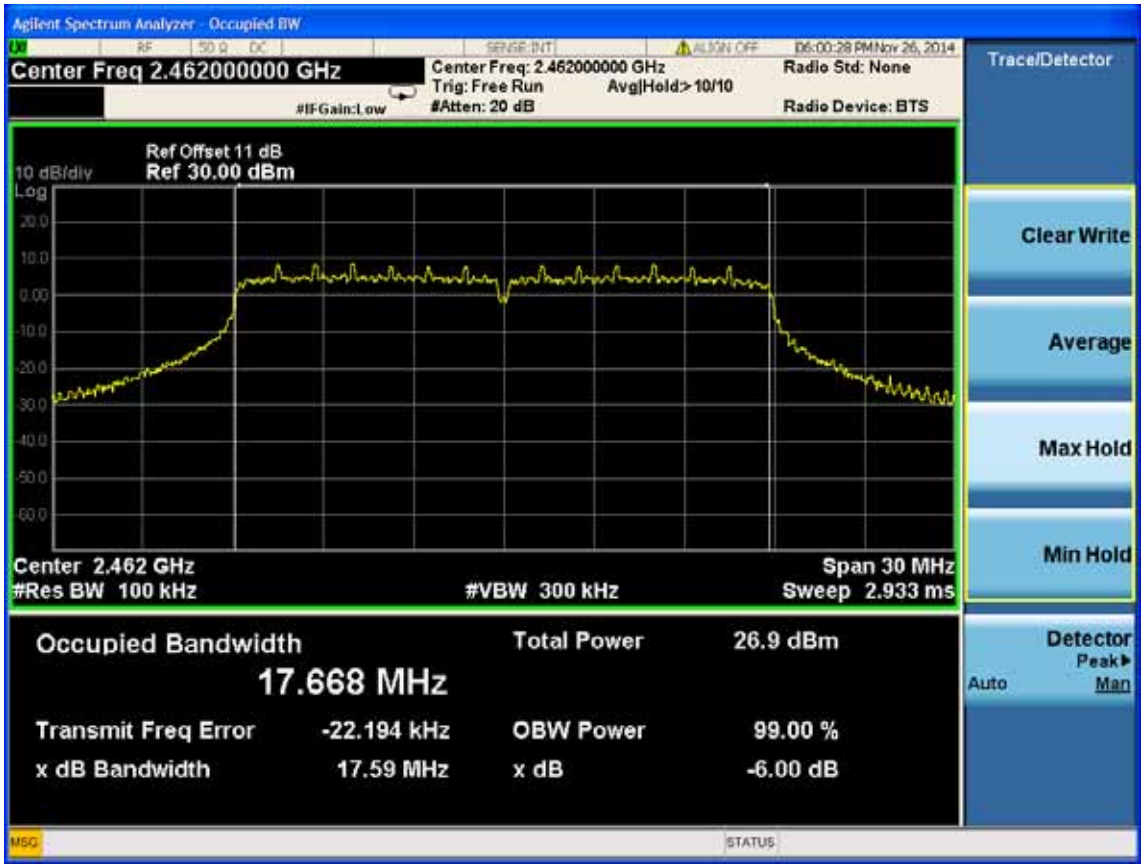
Test Mode: IEEE 802.11n HT20 TX
Test CH1: 2412MHz



Test CH6: 2437MHz

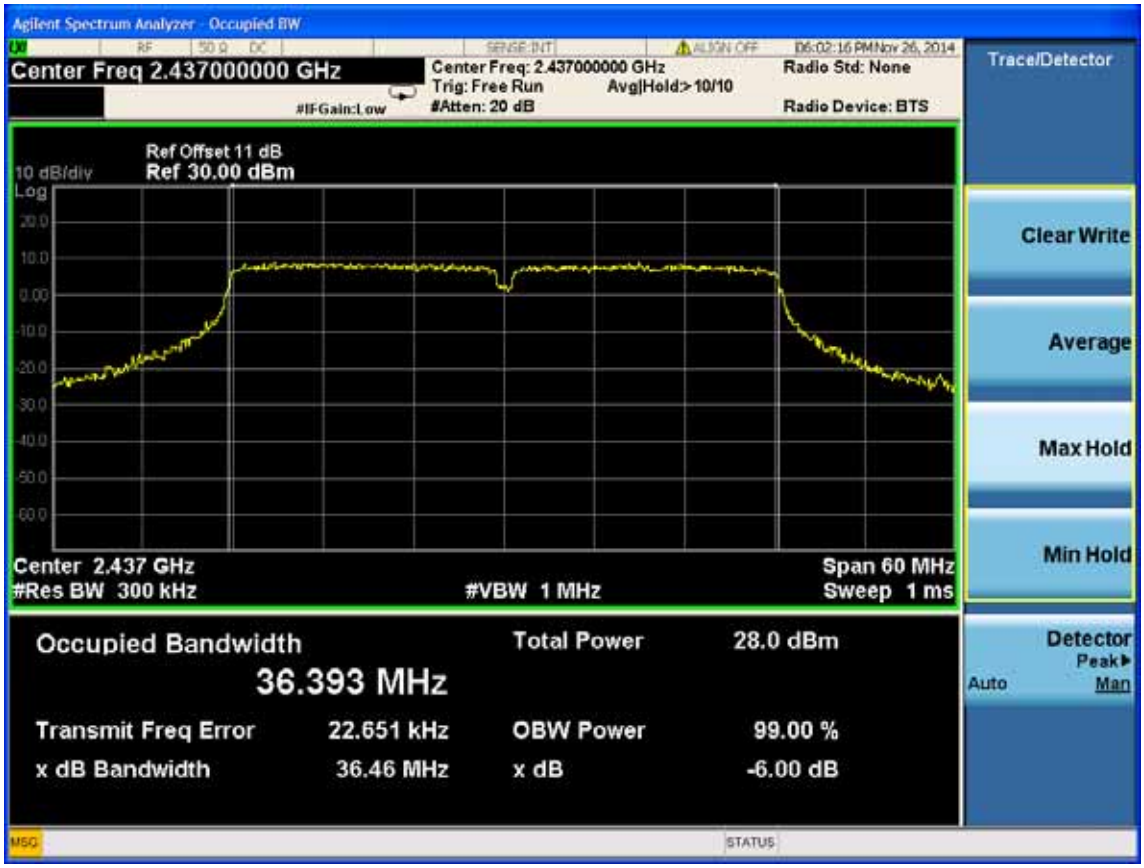


Test CH11: 2462MHz



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

Test CH4: 2437MHz



Test CH7: 2452MHz

8. OUTPUT POWER TEST

8.1.Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum	Agilent	N9030A	MY51380221	Oct.29, 14	1Year
2.	Power meter	Anritsu	ML2487A	6K00002472	Apr. 28,14	1Year
3.	Power sensor	Anritsu	MA2491A	0033005	Apr. 28,14	1Year
4.	Attenuator (20dB)	Agilent	8491B	MY39262165	Apr. 28,14	1Year
5.	RF Cable	Hubersuhner	SUCOFLEX102	28610/2	Apr. 28,14	1Year

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

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

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&802.11nVHT40&VHT80 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

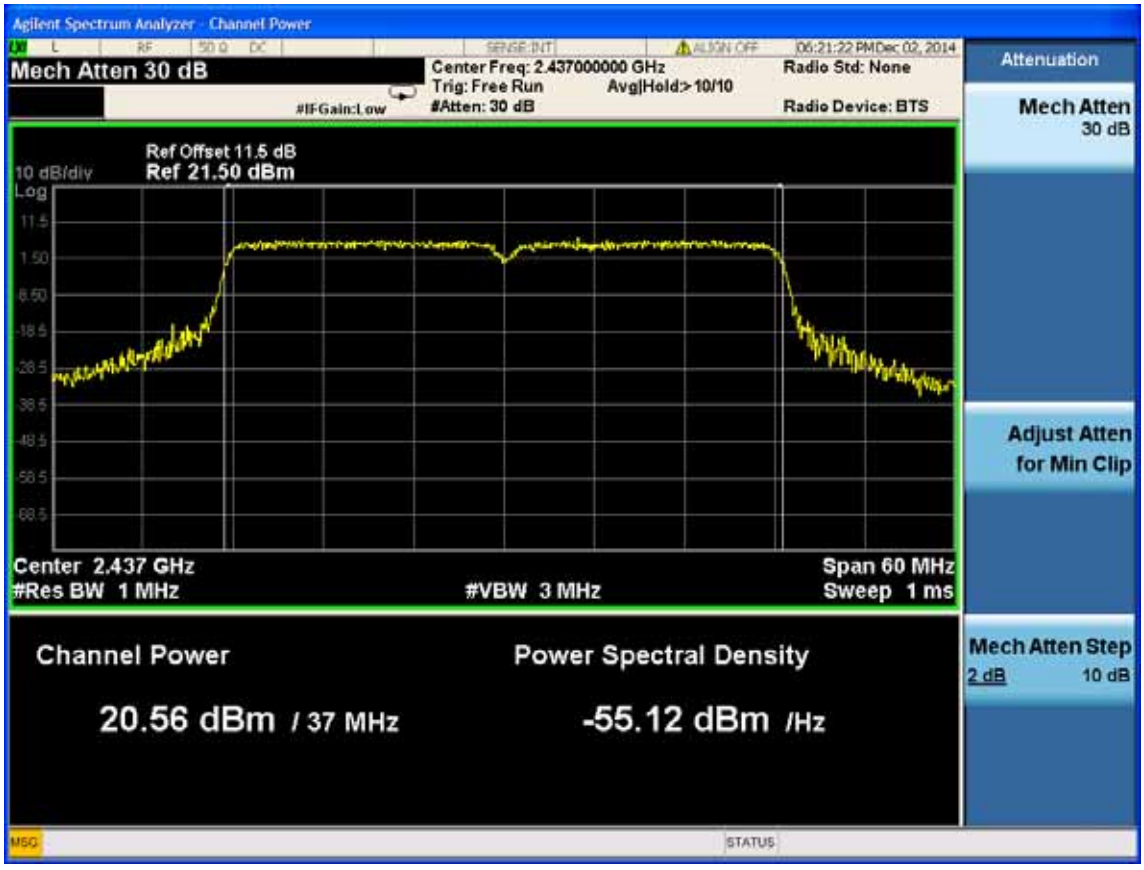
EUT: 300Mbps Wireless N Gigabit Access Point		
M/N: EAP120		
Test date: 2014-11-28	Pressure: 102.9±1.0 kpa	Humidity: 53.7±3.0%
Tested by: Alice_yang	Test site: RF site	Temperature:22.7±0.6 ℃

Test Mode	CH (MHz)	Output Power (dBm)			Limit (dBm)
		Antenna 0	Antenna 1	Total	
11b	CH1	22.49	24.36	26.54	30
	CH6	23.25	24.97	27.20	30
	CH11	23.09	24.82	27.05	30
11g	CH1	20.28	21.47	23.93	30
	CH6	20.49	21.28	23.91	30
	CH11	20.35	21.04	23.72	30
11nHT20	CH1	20.53	21.73	24.18	30
	CH6	20.34	21.08	23.74	30
	CH11	20.43	20.92	23.69	30
11nHT40	CH3	16.25	17.33	19.83	30
	CH6	20.56	21.44	24.03	30
	CH9	18.74	19.91	22.37	30
Conclusion: PASS					

Note: 1. 11b/g working at CDD mode which described in KDB662911.
Array Gain = 0 dB (i.e., no array gain) for NANT ≤ 4
2. As to 11n Mode direction Gain = G_{ANT} + Array Gain = 3 + 10log2 = 6dBi

ANT 0:
Test Mode: IEEE 802.11n HT40 TX
Test CH1: 2422MHz

Test CH4: 2437MHz



Test CH7: 2452MHz

ANT 1:

Test Mode: IEEE 802.11n HT40 TX

Test CH1: 2422MHz

Test CH4: 2437MHz

Test CH7: 2452MHz

9. POWER SPECTRAL DENSITY TEST

9.1.Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum	Agilent	N9030A	MY51380221	Oct.29, 14	1Year
2.	Attenuator (20dB)	Agilent	8491B	MY39262165	Apr. 28,14	1 Year
3	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 leval 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 ANT's Power density.

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

9.4.Test Results

EUT: 300Mbps Wireless N Gigabit Access Point		
M/N: EAP120		
Test date:2014-11-26	Pressure: 102.6±1.0kpa	Humidity: 51.8±3.0 %
Tested by: Alice_yang	Test site: RF site	Temperature: 22.9±0.6 ℃

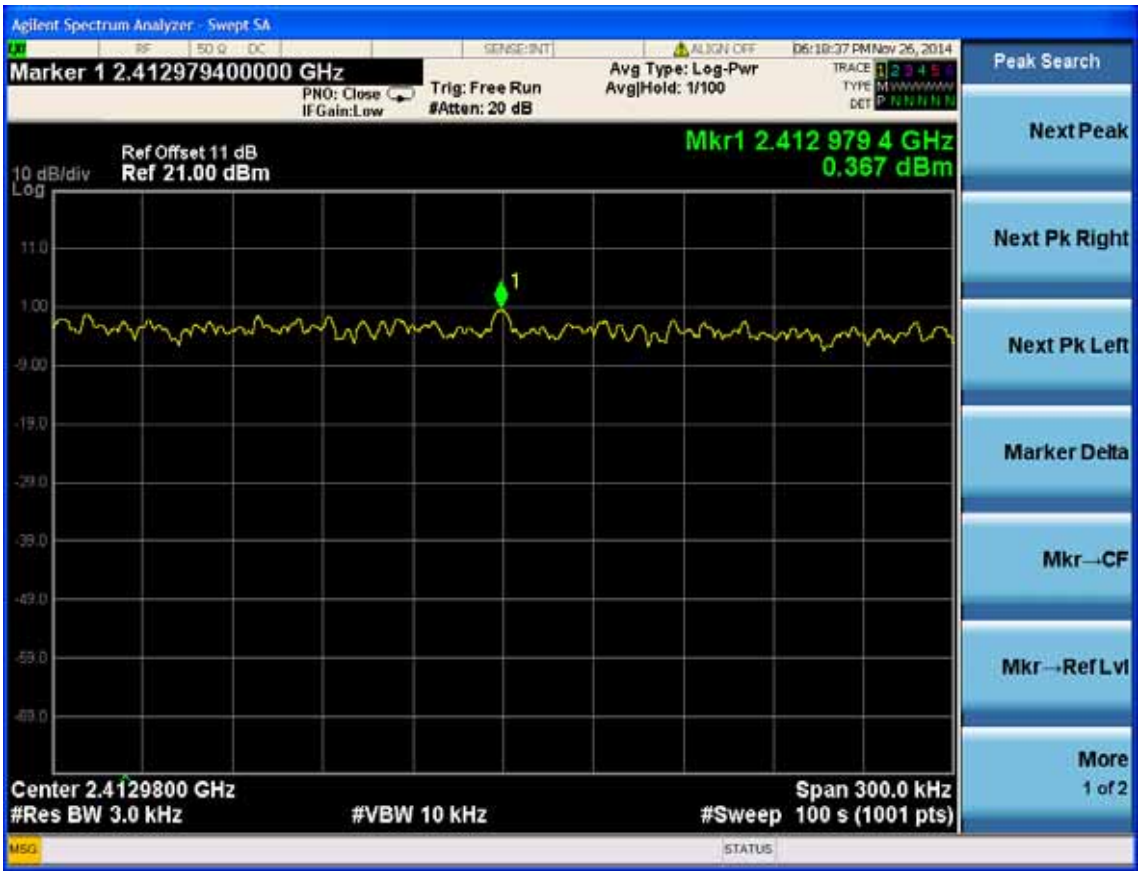
Test Mode	CH	Result			Limit (dBm/3KHz)
		Power density（dBm/3KHz）			
		Antenna 0	Antenna 1	Total	
11b	CH1	0.367	1.728	4.11	10
	CH6	0.163	1.381	3.82	10
	CH11	-0.041	0.287	3.14	10
11g	CH1	-5.887	-3.708	-1.65	10
	CH6	-5.306	-3.414	-1.25	10
	CH11	-4.425	-4.668	-1.53	10
11n HT20	CH1	-3.610	-3.921	-0.75	10
	CH6	-6.637	-4.552	-2.46	10
	CH11	-7.094	-6.535	-3.80	10
11n HT40	CH3	-13.836	-11.999	-9.81	10
	CH6	-5.528	-6.385	-2.93	10
	CH9	-8.398	-8.687	-5.53	10
Conclusion: PASS					

Note: 1. 11b/g working at CDD mode which described in KDB662911, and 11n Mode use MIMO,
so directional Gain = 2 + Array Gain = 3 + 10log2 = 6dBi

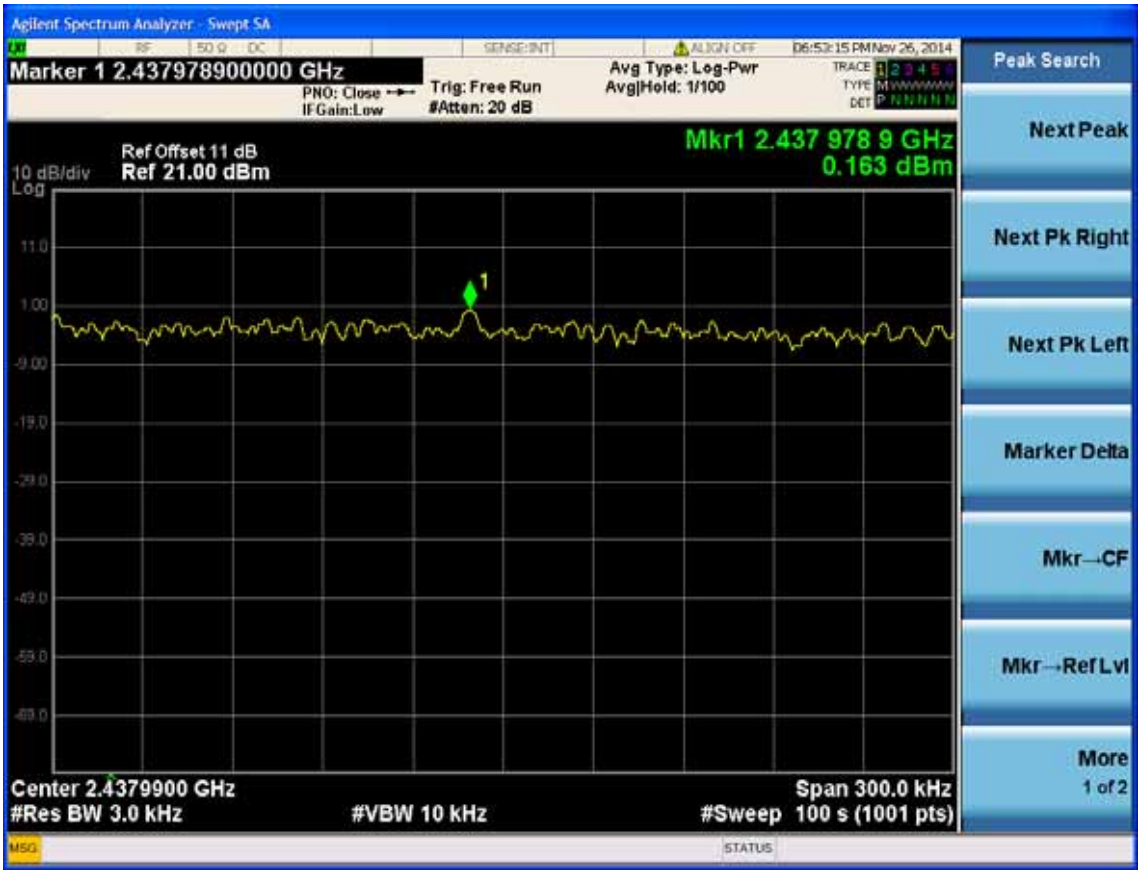
ANT 0:

Test Mode: IEEE 802.11b TX

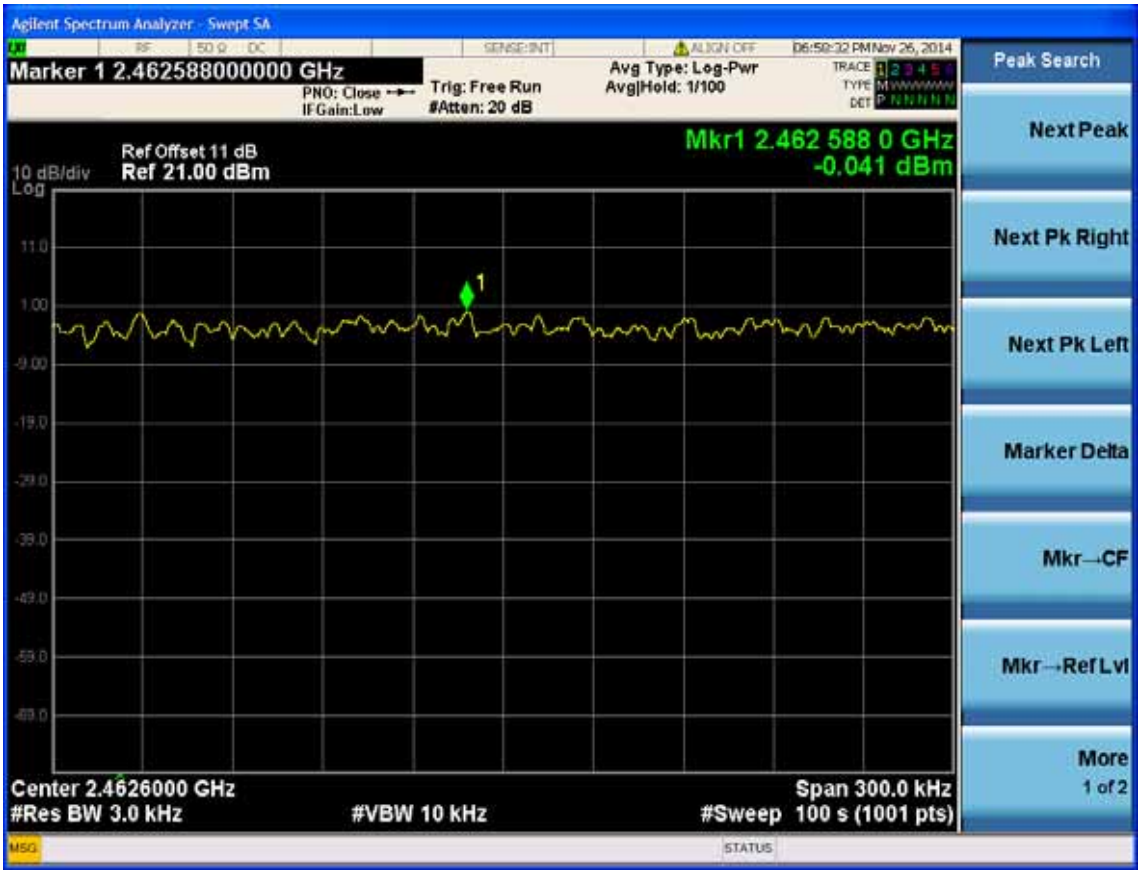
Test CH1: 2412MHz



Test CH6: 2437MHz

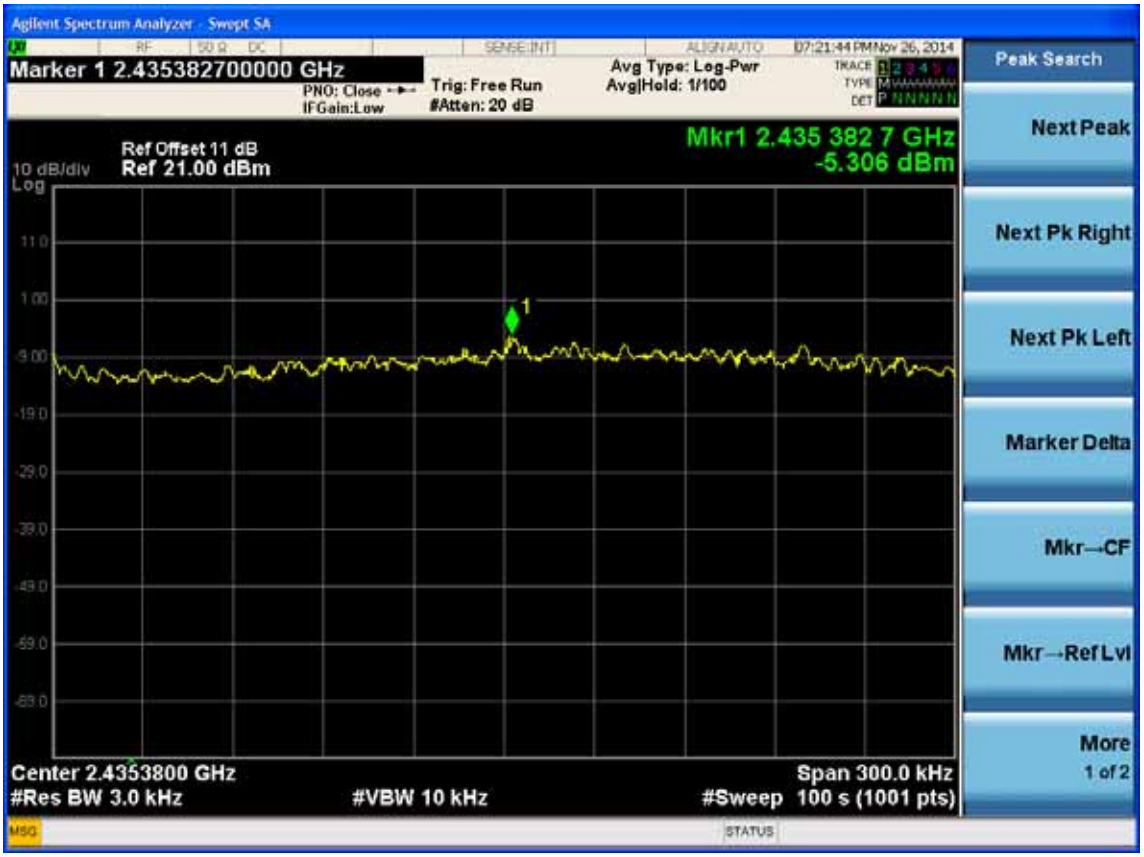


Test CH11: 2462MHz

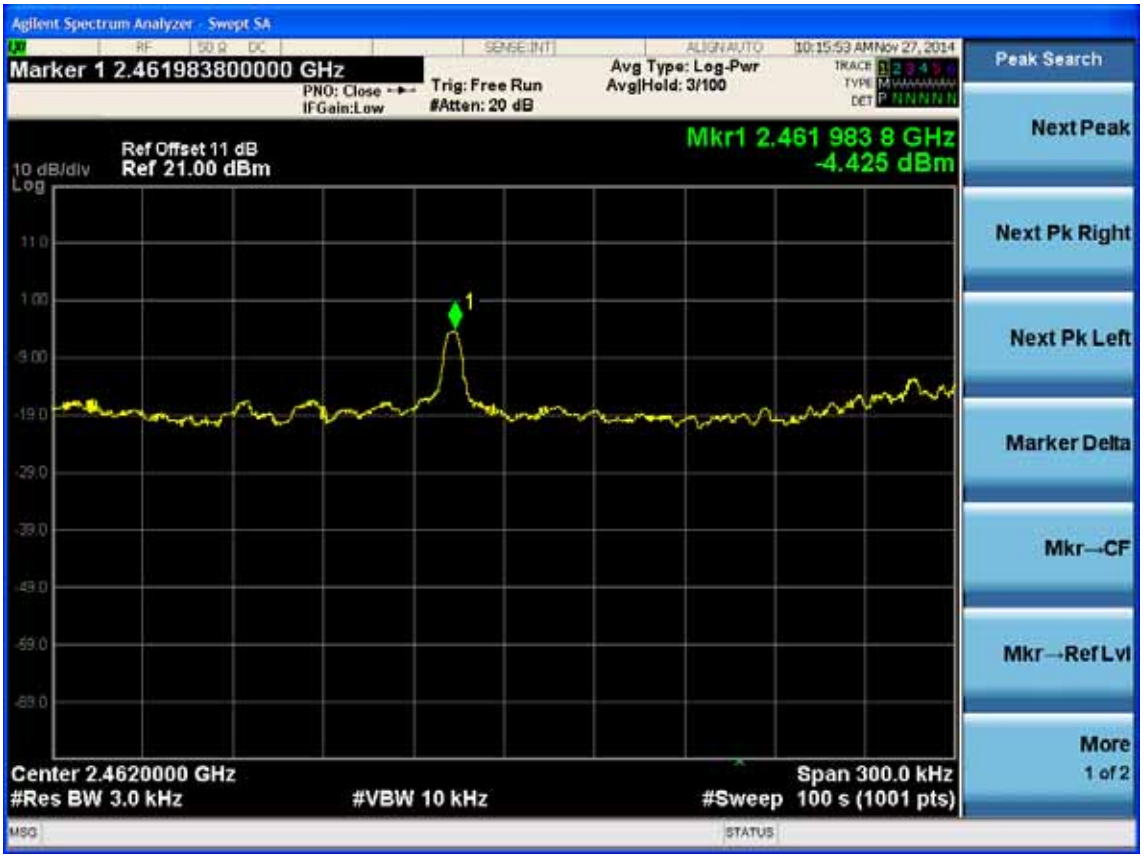


Test Mode: IEEE 802.11g TX
Test CH1: 2412MHz

Test CH6: 2437MHz



Test CH11: 2462MHz



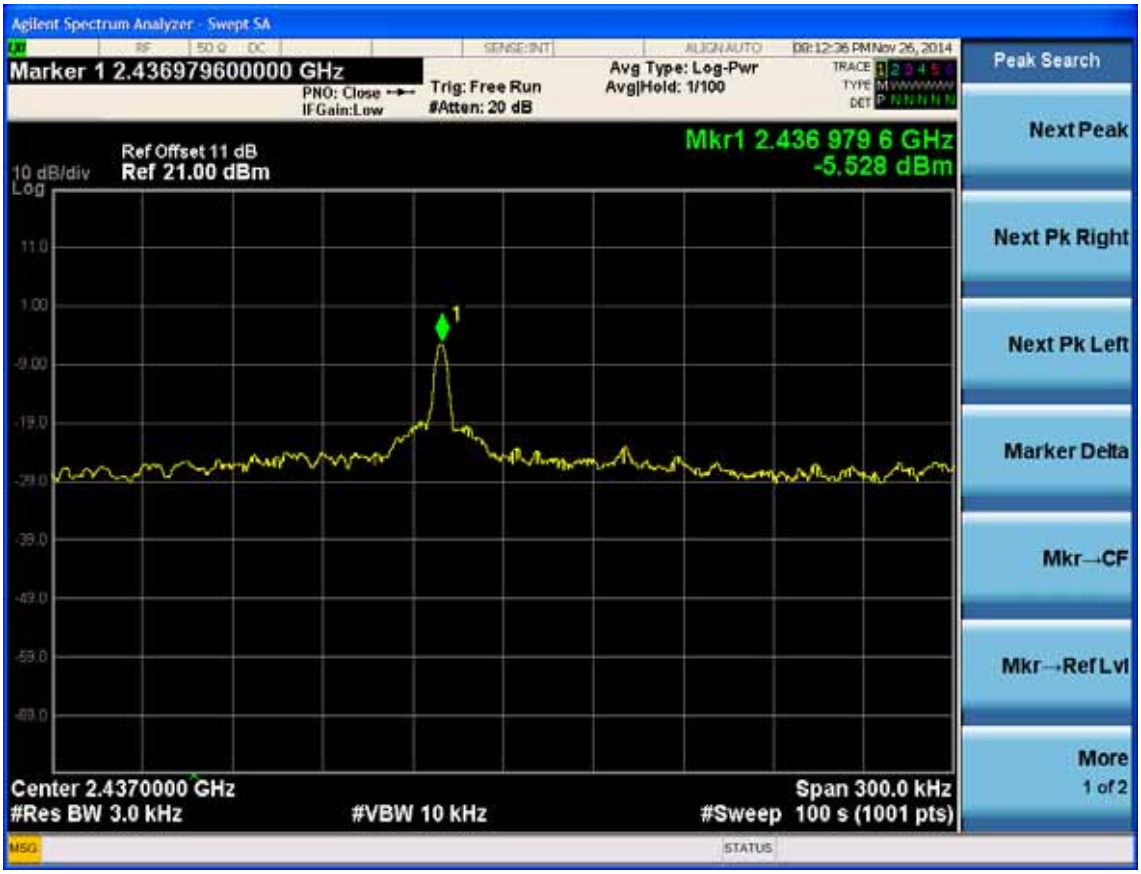
Test Mode: IEEE 802.11n HT20 TX
Test CH1: 2412MHz

Test CH6: 2437MHz

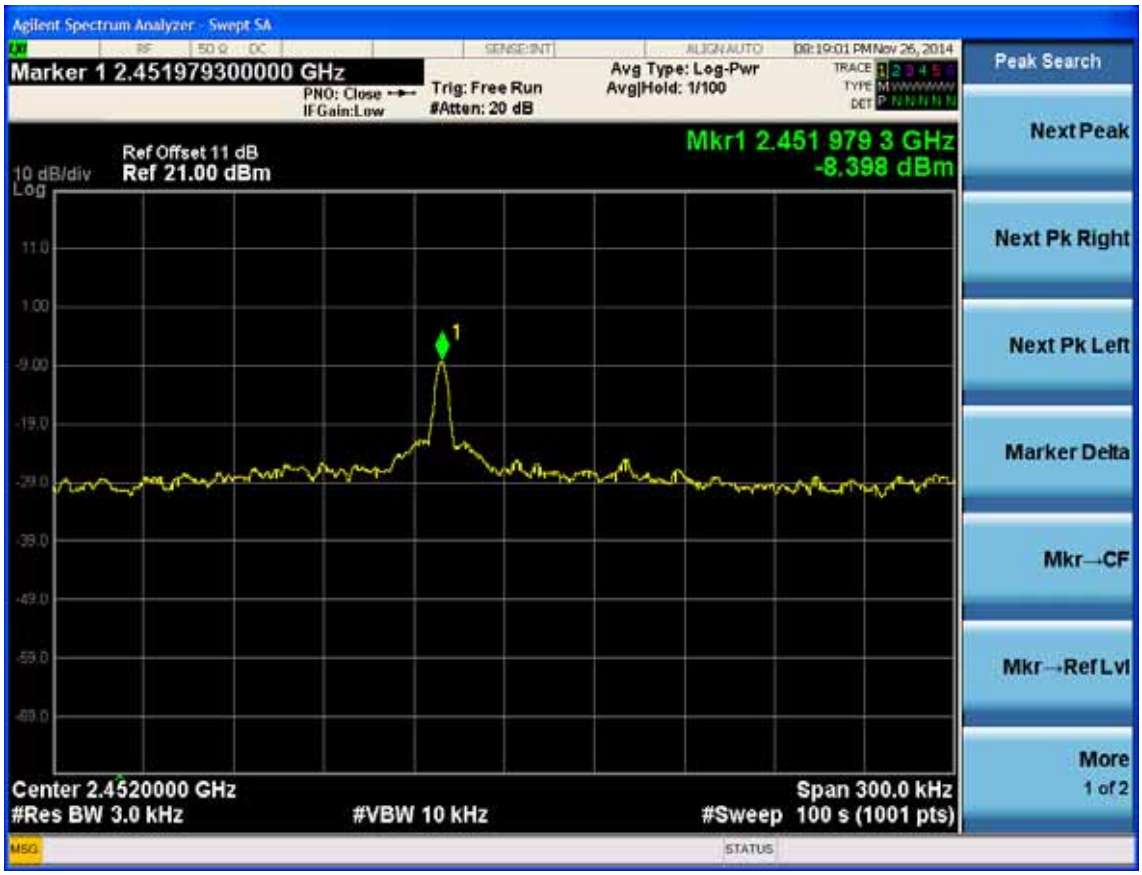
Test CH11: 2462MHz

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

Test CH4: 2437MHz



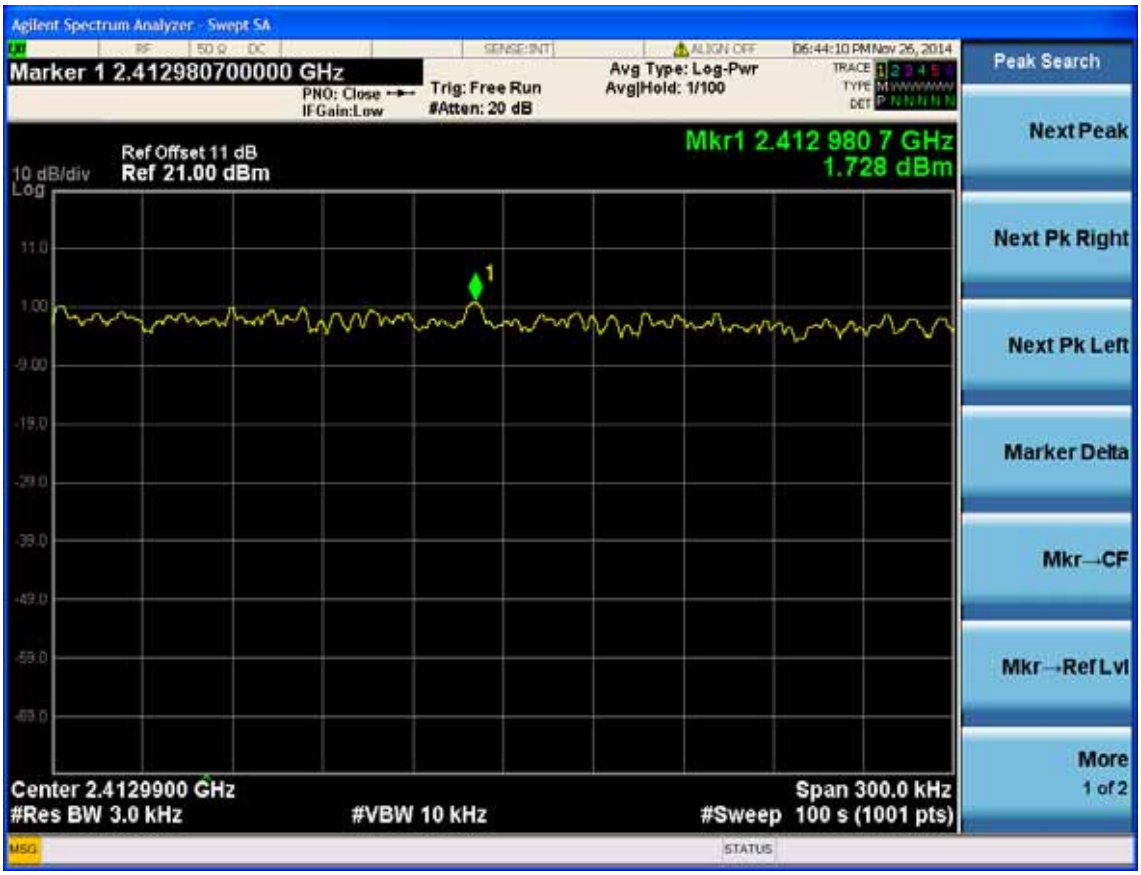
Test CH7: 2452MHz



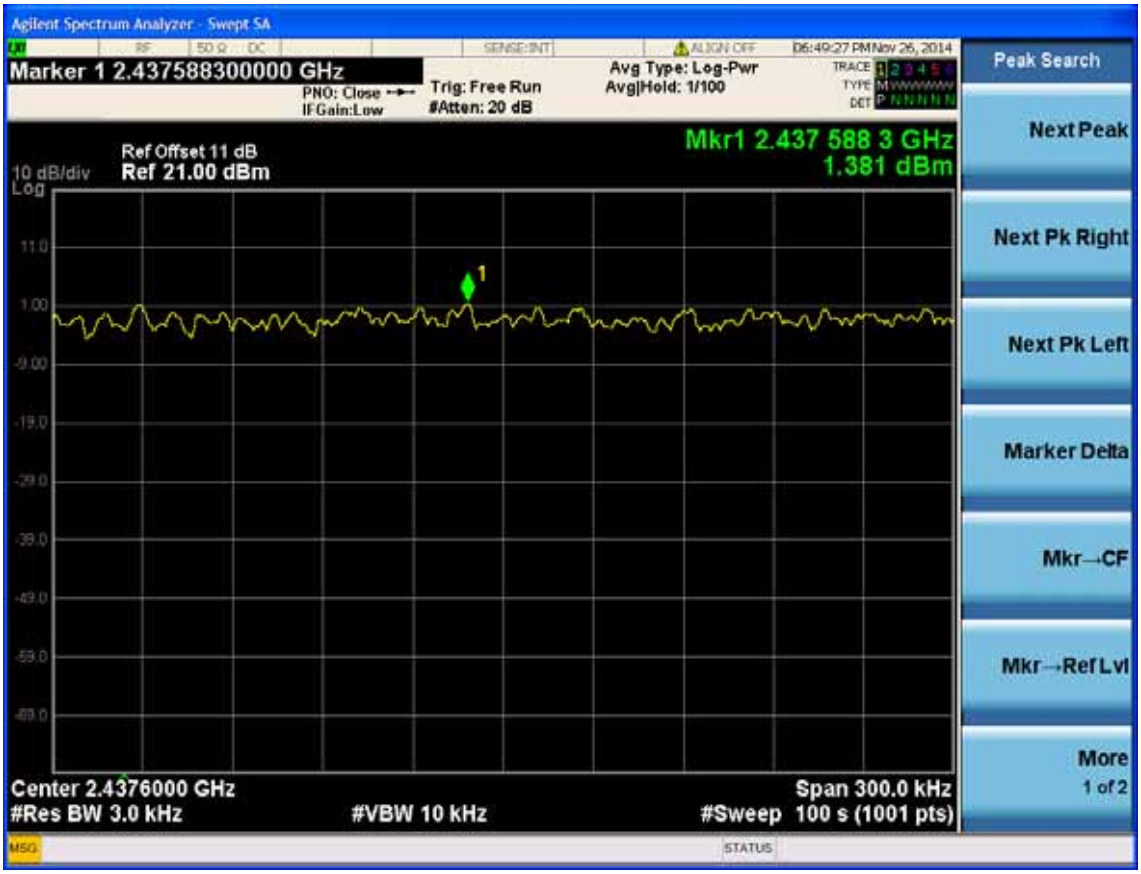
ANT 1:

Test Mode: IEEE 802.11b TX

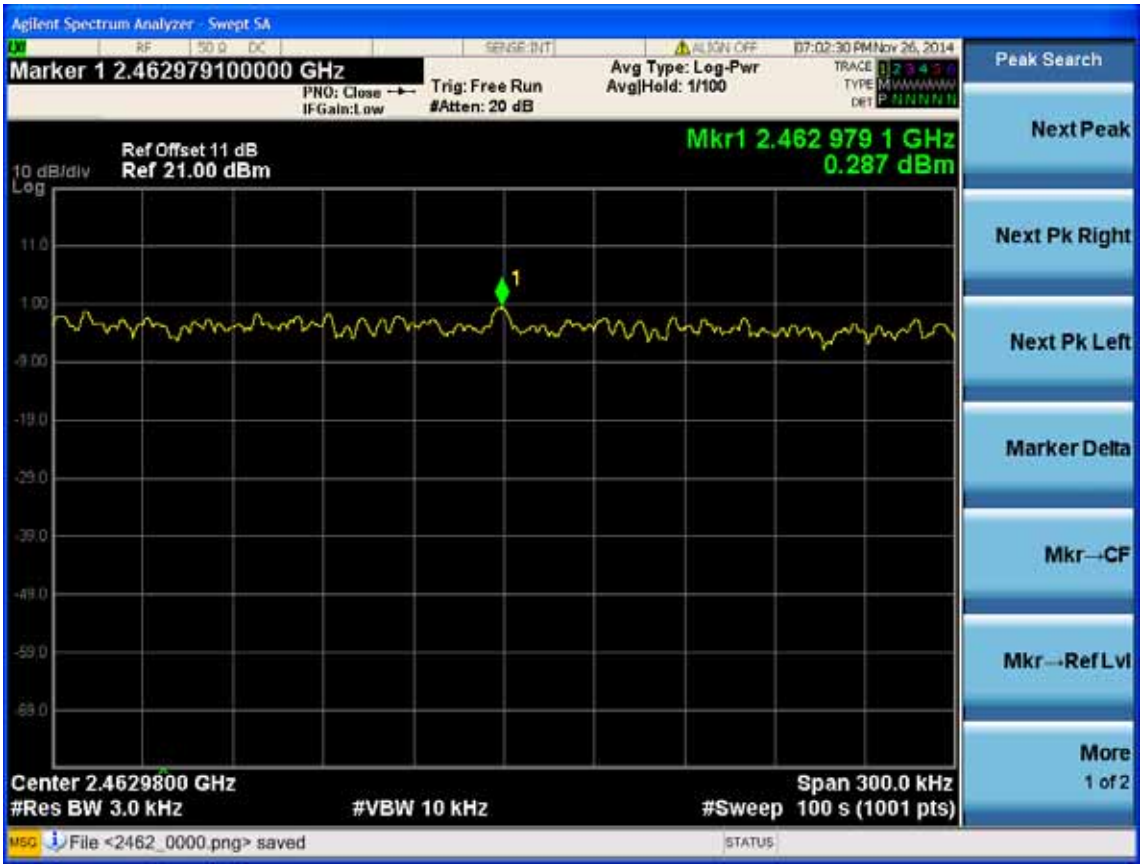
Test CH1: 2412MHz



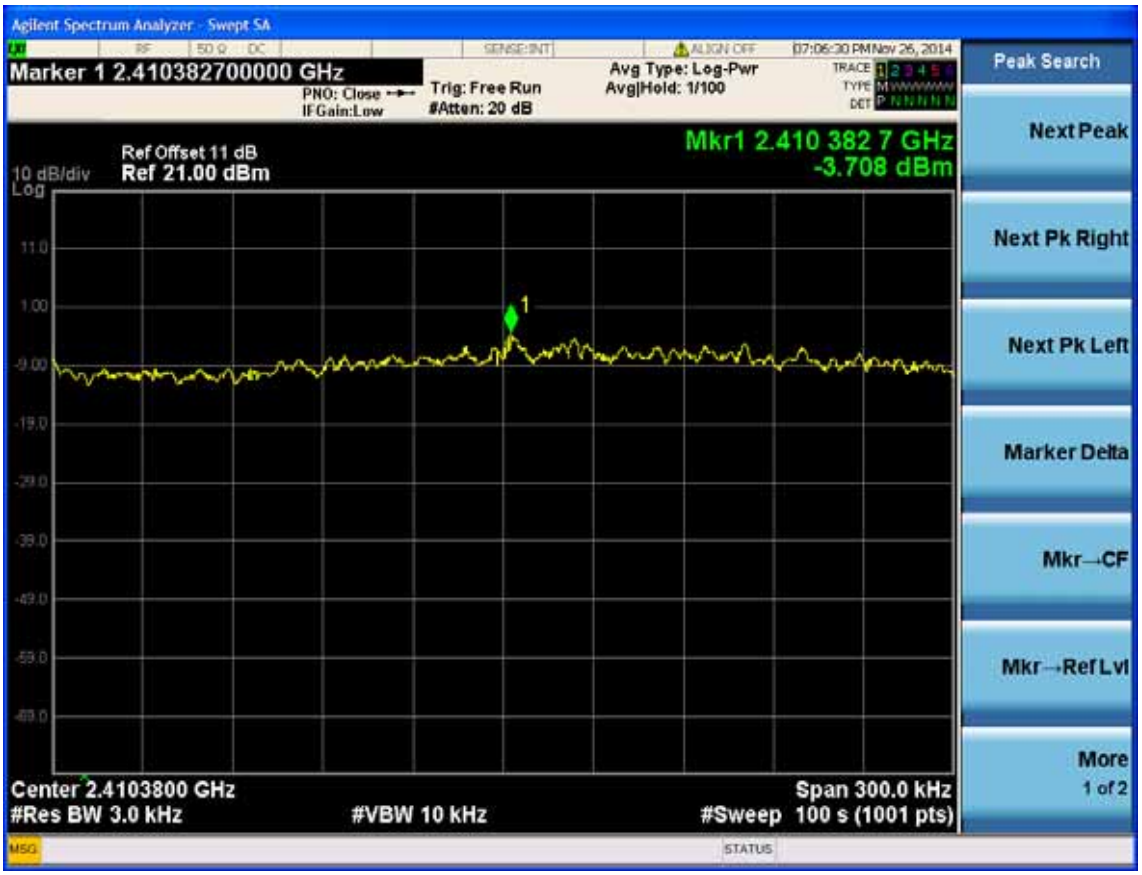
Test CH6: 2437MHz



Test CH11: 2462MHz



Test Mode: IEEE 802.11g TX
Test CH1: 2412MHz



Test CH6: 2437MHz

Test CH11: 2462MHz

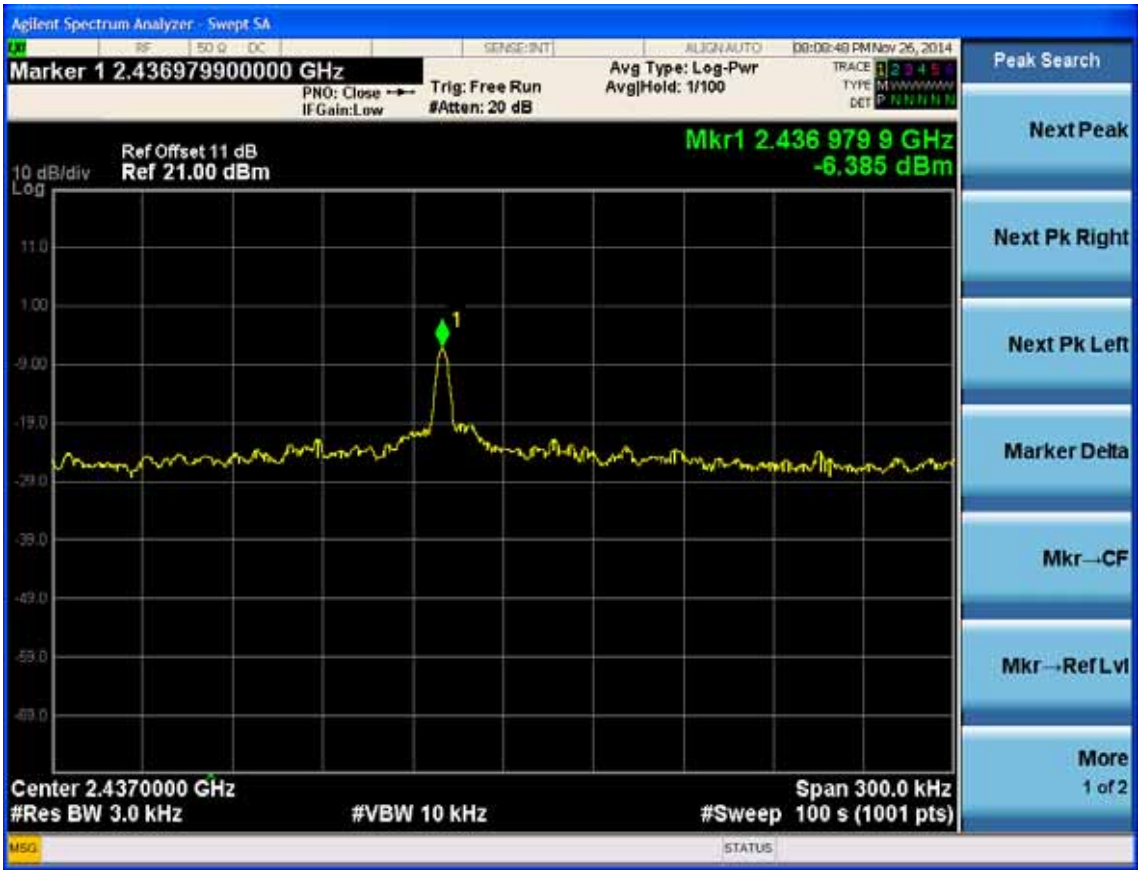
Test Mode: IEEE 802.11n HT20 TX
Test CH1: 2412MHz

Test CH6: 2437MHz

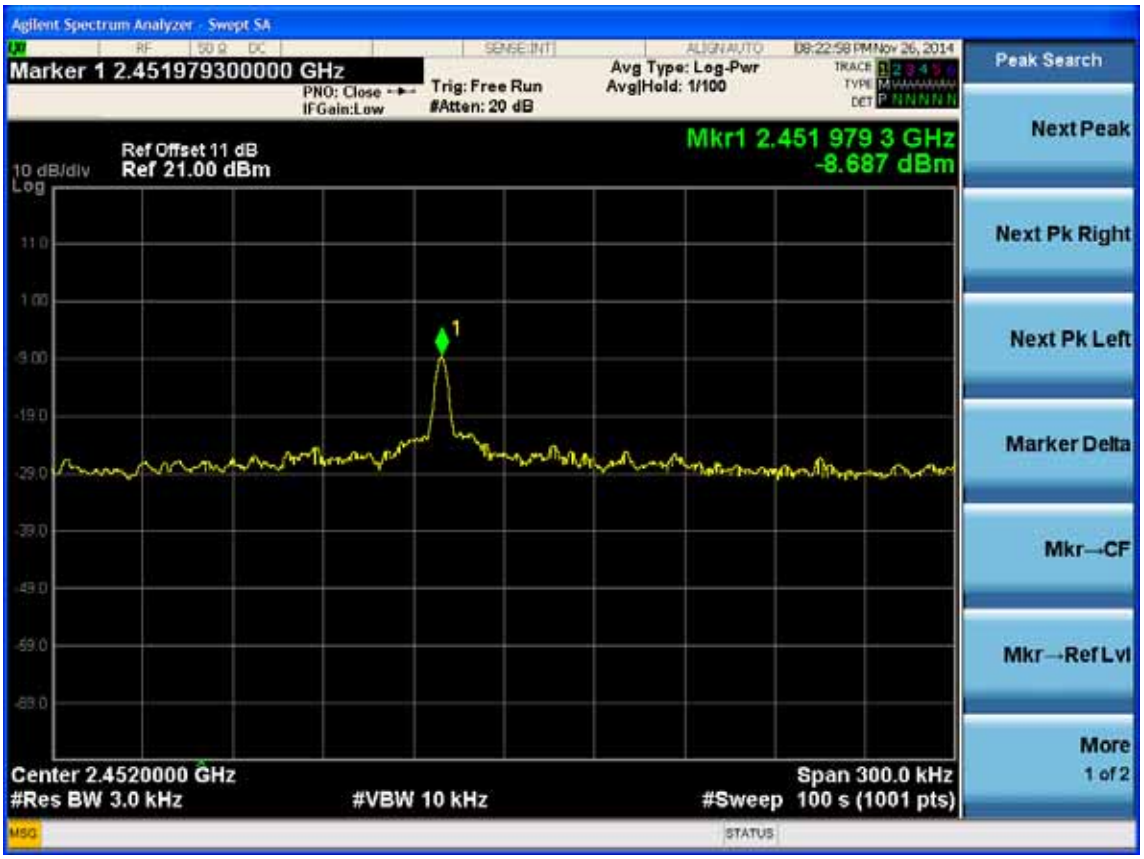
Test CH11: 2462MHz

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

Test CH4: 2437MHz



Test CH7: 2452MHz



11. ANTENNA REQUIREMENT

11.1. 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.

11.2. ANTENNA CONNECTED CONSTRUCTION

The antennas used for this product are dipole 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 is 3dBi.

12.DEVIATION TO TEST SPECIFICATIONS

[NONE]