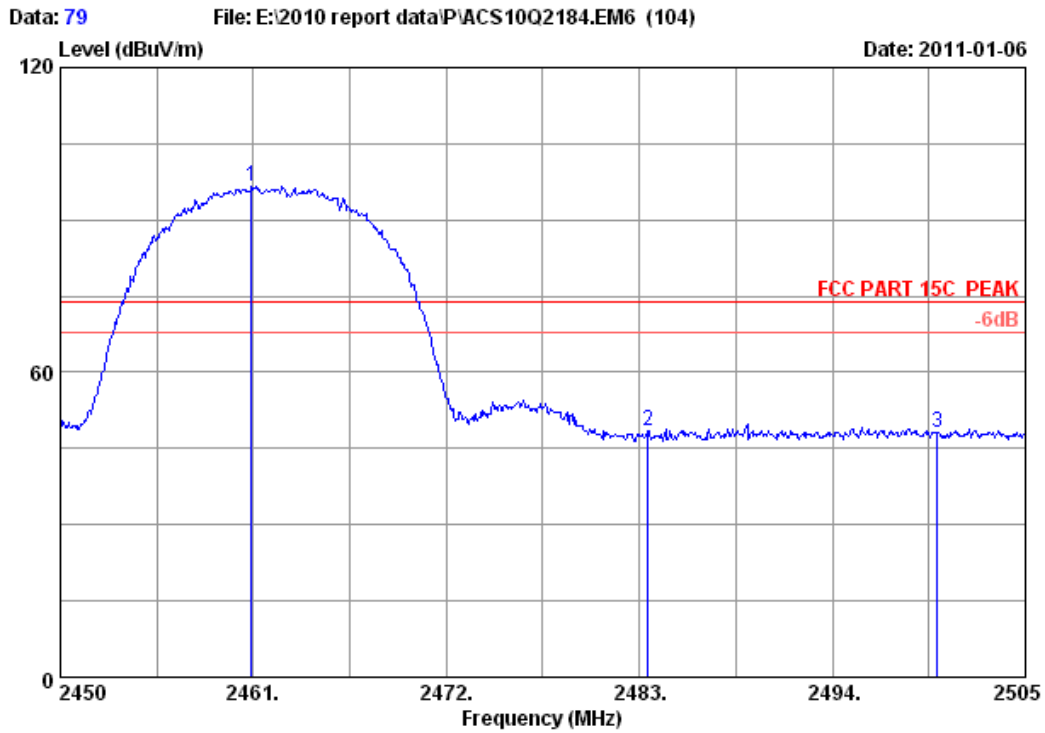


Site no. : 10m Chamber Data no. : 76
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL
 Limit : FCC PART 15C AV
 Env. / Ins. : 23°C/54% Engineer : Sunny-lu
 EUT : 300Mbps Wireless N Router
 Power : DC 9V From Adapter Input AC 120V/60Hz
 Test mode : IEEE802.11b CH1 2412MHz Tx
 M/N : PW-RN501D

	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	2330.760	29.40	7.27	36.63	43.64	43.68	54.00	10.32	Average
2	2370.600	29.43	7.35	36.62	41.96	42.12	54.00	11.88	Average
3	2390.000	29.44	7.39	36.62	39.54	39.75	54.00	14.25	Average
4	2398.560	29.44	7.39	36.62	52.86	53.07	54.00	0.93	Average
5	2400.000	29.44	7.43	36.62	49.70	49.95	54.00	4.05	Average
6	2413.200	29.45	7.43	36.62	99.52	99.78	54.00	-45.78	Average

Remarks:

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

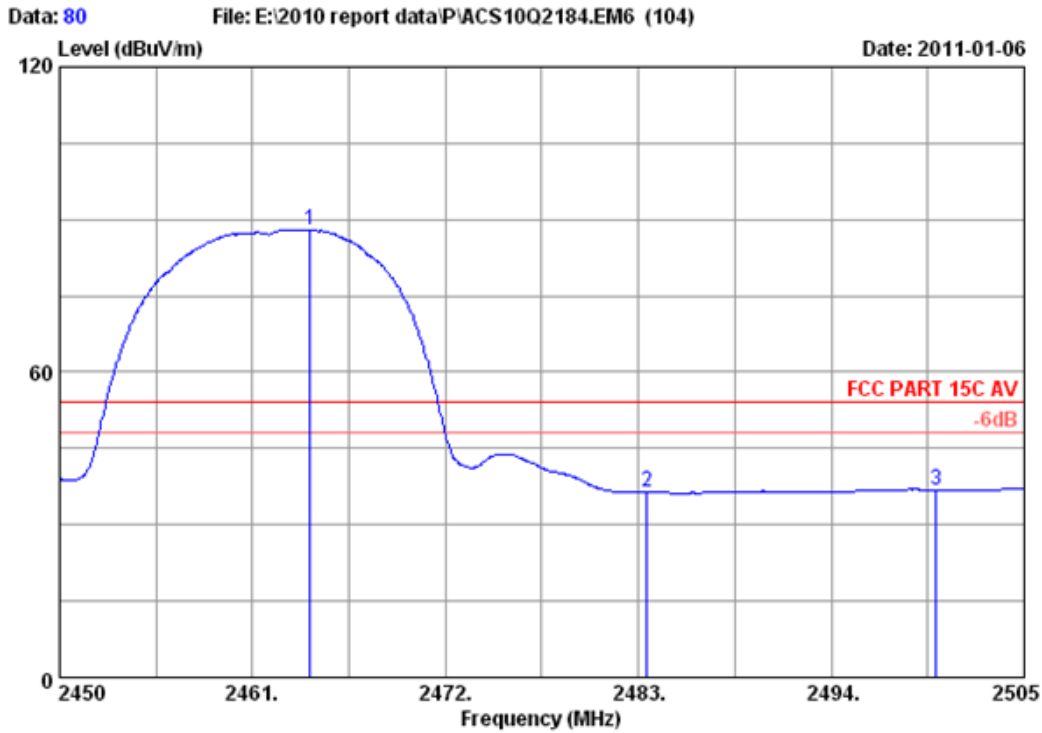


Site no. : 10m Chamber Data no. : 79
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 23*C/54% Engineer : Sunny-lu
 EUT : 300Mbps Wireless N Router
 Power : DC 9V From Adapter Input AC 120V/60Hz
 Test mode : IEEE802.11b CH11 2462MHz Tx
 M/N : PW-RN501D

	Ant. Freq. (MHz)	Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBUV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Remark
1	2460.890	29.48	7.54	36.61	96.20	96.61	74.00	-22.61	Peak
2	2483.500	29.49	7.58	36.60	47.94	48.41	74.00	25.59	Peak
3	2500.000	29.50	7.62	36.60	47.74	48.26	74.00	25.74	Peak

Remarks:

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

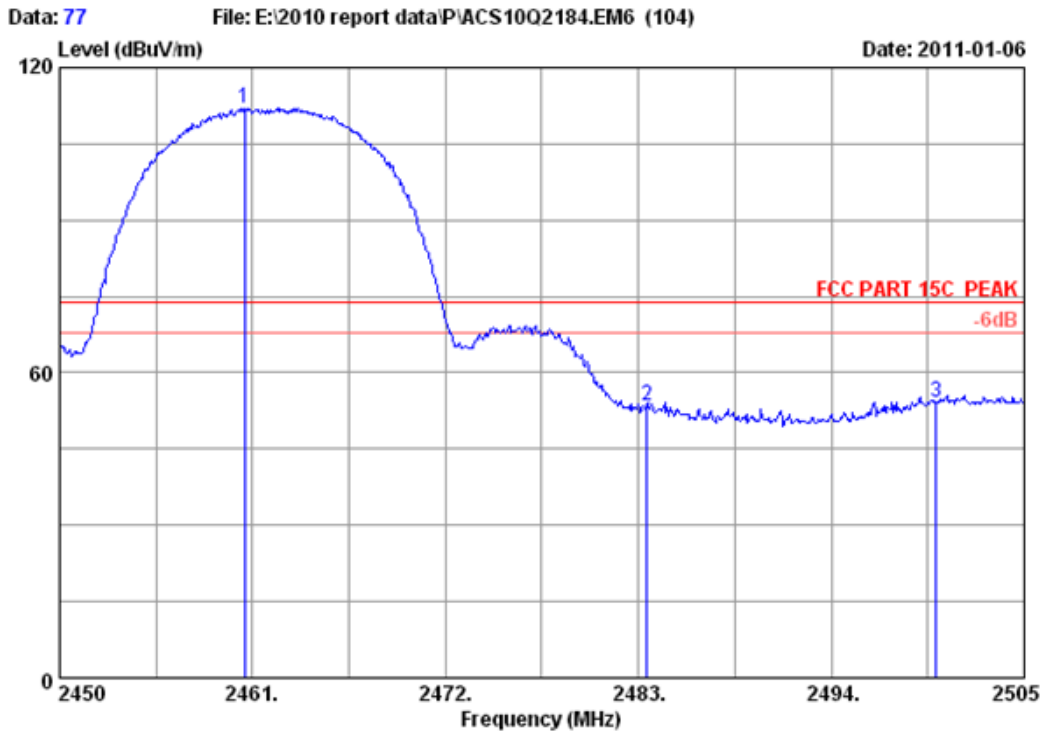


Site no. : 10m Chamber Data no. : 80
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C AV
 Env. / Ins. : 23°C/54% Engineer : Sunny-lu
 EUT : 300Mbps Wireless N Router
 Power : DC 9V From Adapter Input AC 120V/60Hz
 Test mode : IEEE802.11b CH11 2462MHz Tx
 M/N : PW-RN501D

	Ant. Freq. (MHz)	Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBUV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Remark
1	2464.300	29.48	7.54	36.61	87.64	88.05	54.00	-34.05	Average
2	2483.500	29.49	7.58	36.60	35.93	36.40	54.00	17.60	Average
3	2500.000	29.50	7.62	36.60	36.28	36.80	54.00	17.20	Average

Remarks:

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

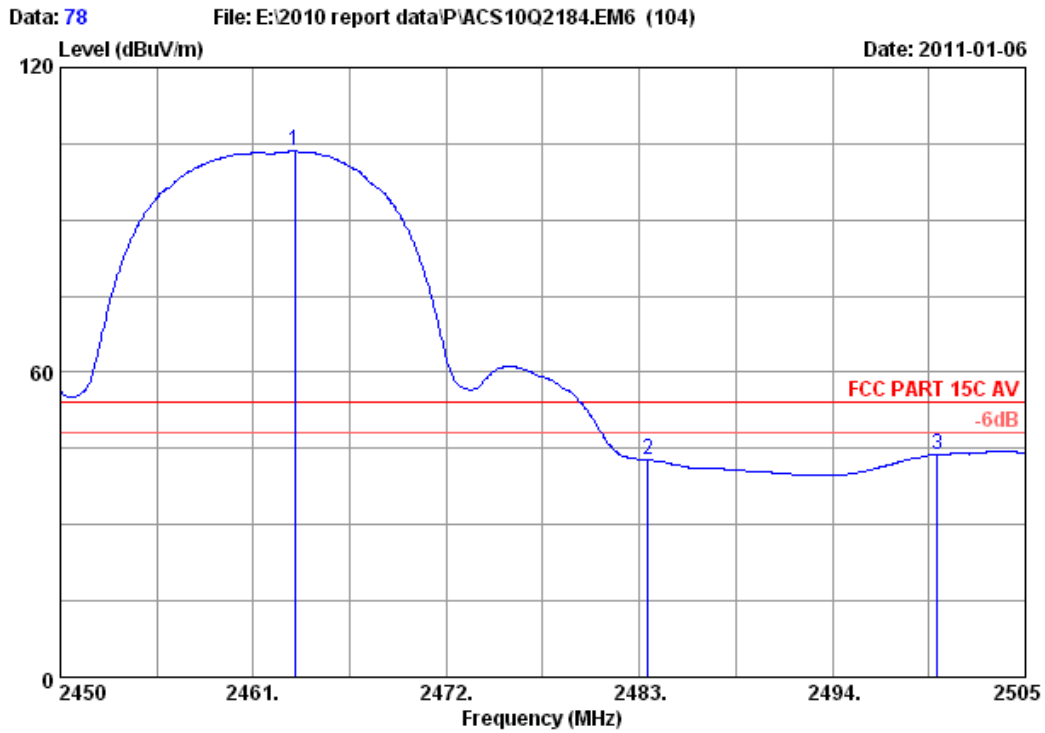


Site no. : 10m Chamber Data no. : 77
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 23°C/54% Engineer : Sunny-lu
 EUT : 300Mbps Wireless N Router
 Power : DC 9V From Adapter Input AC 120V/60Hz
 Test mode : IEEE802.11b CH11 2462MHz Tx
 M/N : PW-RN501D

	Ant. Freq. (MHz)	Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2460.560	29.48	7.54	36.61	111.65	112.06	74.00	-38.06	Peak
2	2483.500	29.49	7.58	36.60	52.88	53.35	74.00	20.65	Peak
3	2500.000	29.50	7.62	36.60	53.58	54.10	74.00	19.90	Peak

Remarks:

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

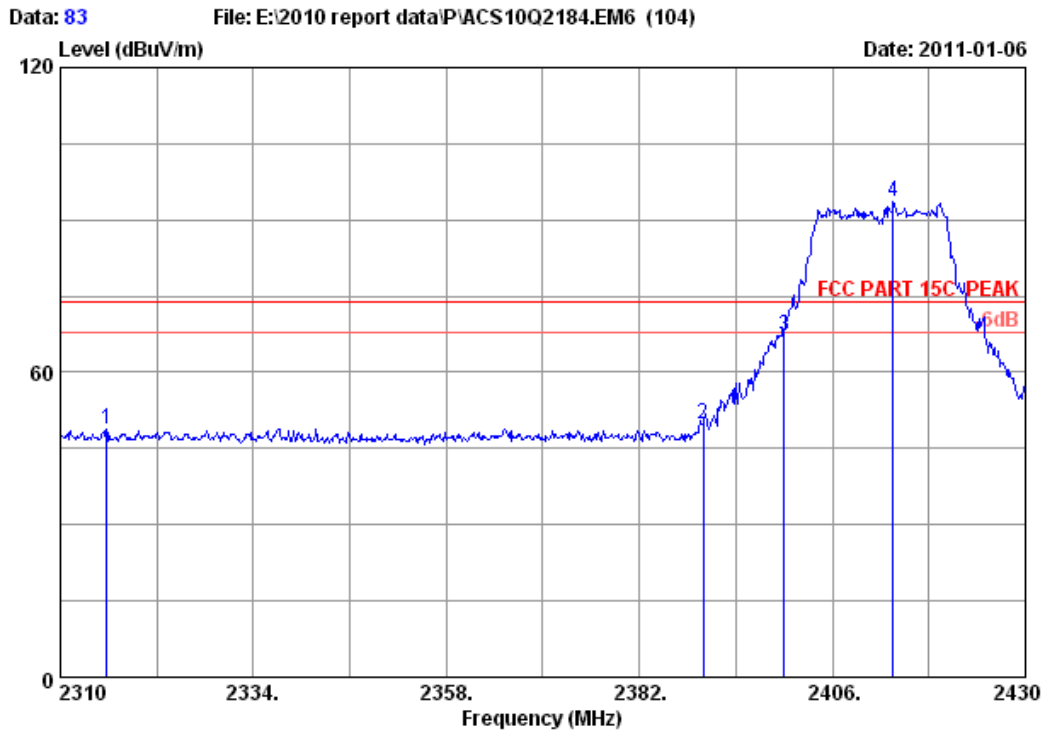


Site no. : 10m Chamber Data no. : 78
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL
 Limit : FCC PART 15C AV
 Env. / Ins. : 23*C/54% Engineer : Sunny-lu
 EUT : 300Mbps Wireless N Router
 Power : DC 9V From Adapter Input AC 120V/60Hz
 Test mode : IEEE802.11b CH11 2462MHz Tx
 M/N : PW-RN501D

	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	2463.365	29.48	7.54	36.61	103.12	103.53	54.00	-49.53	Average
2	2483.500	29.49	7.58	36.60	42.28	42.75	54.00	11.25	Average
3	2500.000	29.50	7.62	36.60	43.30	43.82	54.00	10.18	Average

Remarks:

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

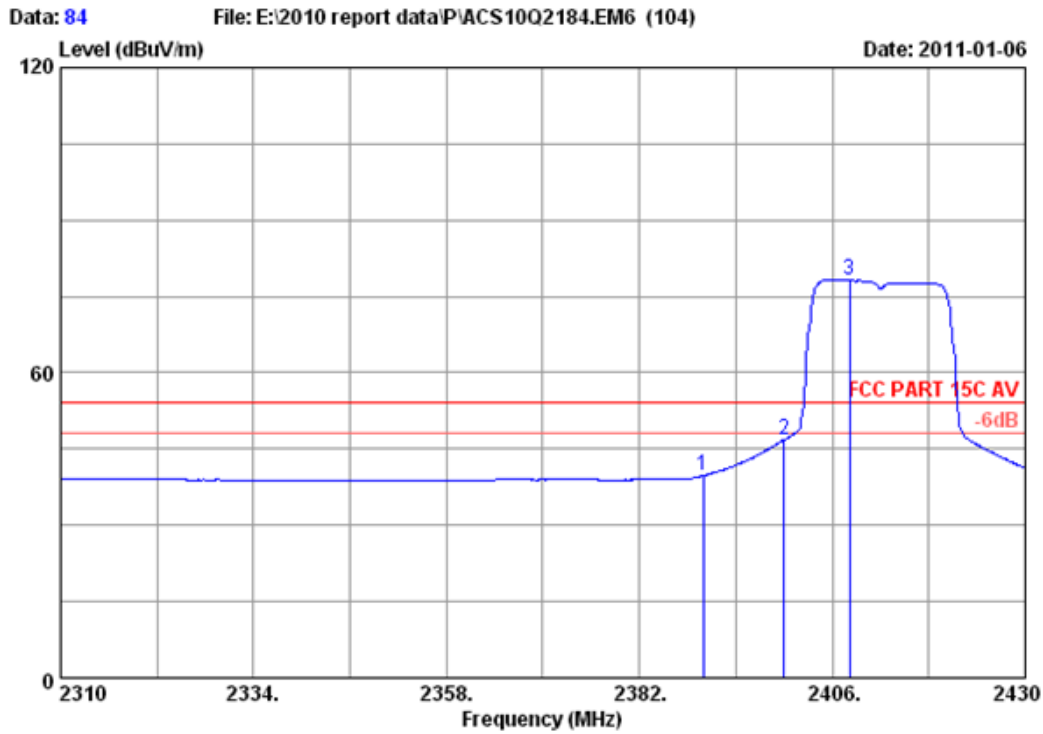


Site no. : 10m Chamber Data no. : 83
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 23*C/54% Engineer : Sunny-lu
 EUT : 300Mbps Wireless N Router
 Power : DC 9V From Adapter Input AC 120V/60Hz
 Test mode : IEEE802.11g CH1 2412MHz Tx
 M/N : PW-RN501D

	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	2315.760	29.39	7.24	36.63	48.97	48.97	74.00	25.03	Peak
2	2390.000	29.44	7.39	36.62	49.44	49.65	74.00	24.35	Peak
3	2400.000	29.44	7.43	36.62	66.97	67.22	74.00	6.78	Peak
4	2413.560	29.45	7.43	36.62	93.21	93.47	74.00	-19.47	Peak

Remarks:

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

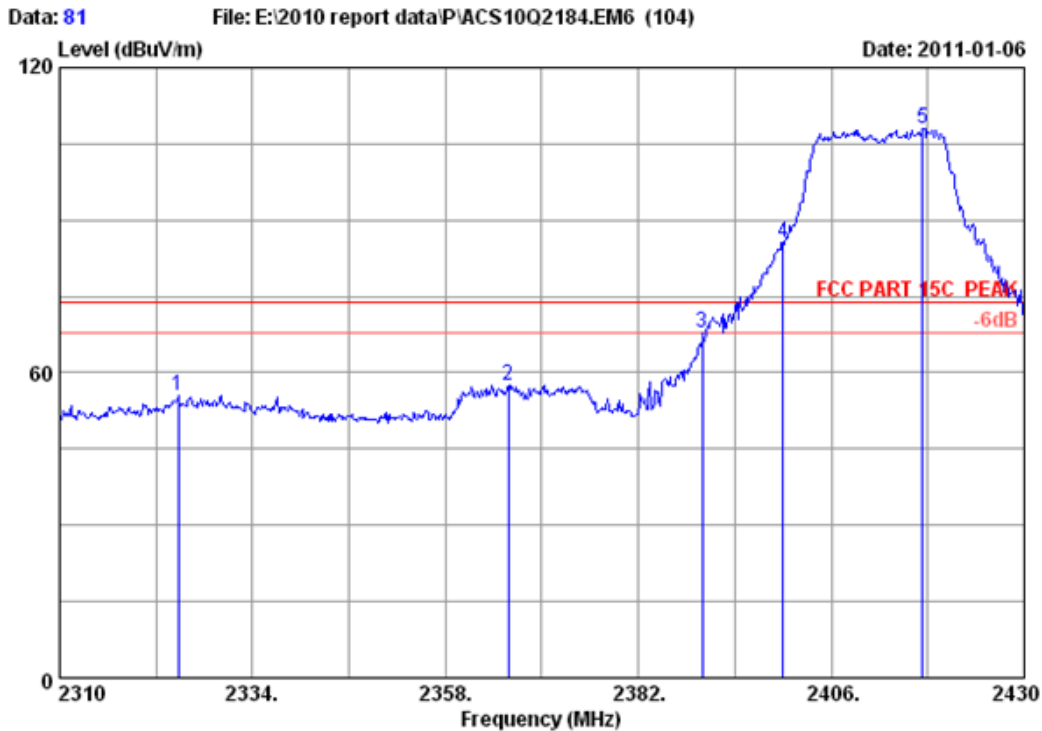


Site no. : 10m Chamber Data no. : 84
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C AV
 Env. / Ins. : 23°C/54% Engineer : Sunny-lu
 EUT : 300Mbps Wireless N Router
 Power : DC 9V From Adapter Input AC 120V/60Hz
 Test mode : IEEE802.11g CH1 2412MHz Tx
 M/N : PW-RN501D

	Ant. Freq. (MHz)	Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.000	29.44	7.39	36.62	39.54	39.75	54.00	14.25	Average
2	2400.000	29.44	7.43	36.62	46.54	46.79	54.00	7.21	Average
3	2408.160	29.45	7.43	36.62	77.91	78.17	54.00	-24.17	Average

Remarks:

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

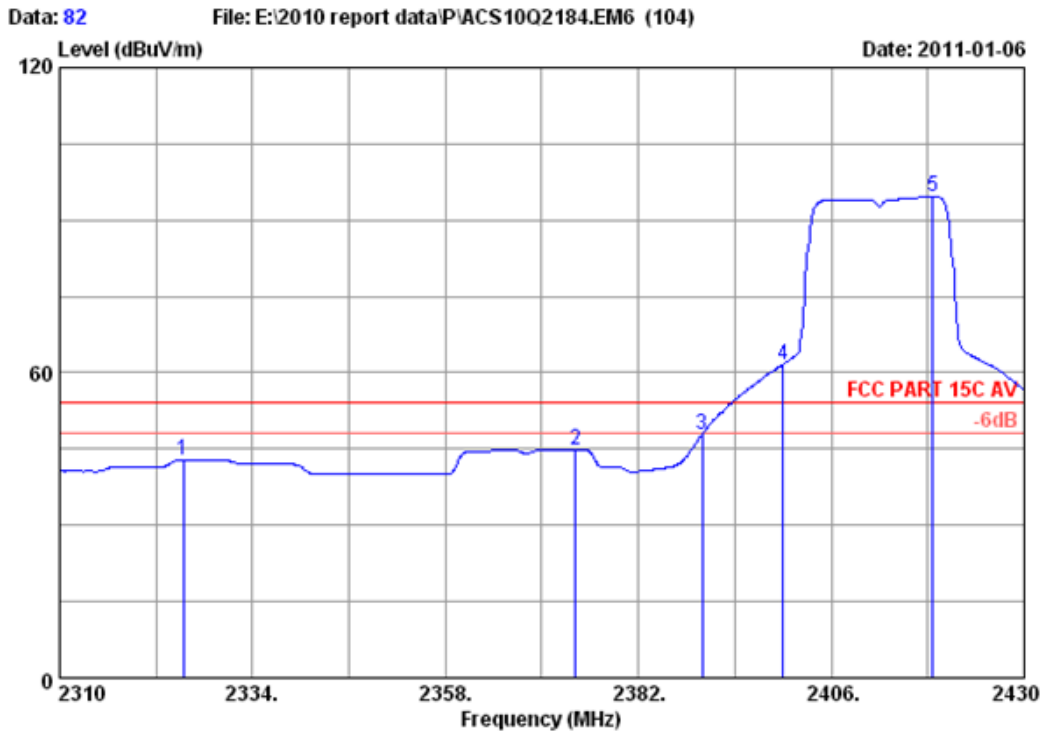


Site no. : 10m Chamber Data no. : 81
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 23°C/54% Engineer : Sunny-lu
 EUT : 300Mbps Wireless N Router
 Power : DC 9V From Adapter Input AC 120V/60Hz
 Test mode : IEEE802.11g CH1 2412MHz Tx
 M/N : PW-RN501D

	Ant. Freq. (MHz)	Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2324.760	29.40	7.27	36.63	55.52	55.56	74.00	18.44	Peak
2	2365.800	29.42	7.35	36.62	57.47	57.62	74.00	16.38	Peak
3	2390.000	29.44	7.39	36.62	67.60	67.81	74.00	6.19	Peak
4	2400.000	29.44	7.43	36.62	85.27	85.52	74.00	-11.52	Peak
5	2417.400	29.45	7.43	36.61	107.80	108.07	74.00	-34.07	Peak

Remarks:

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

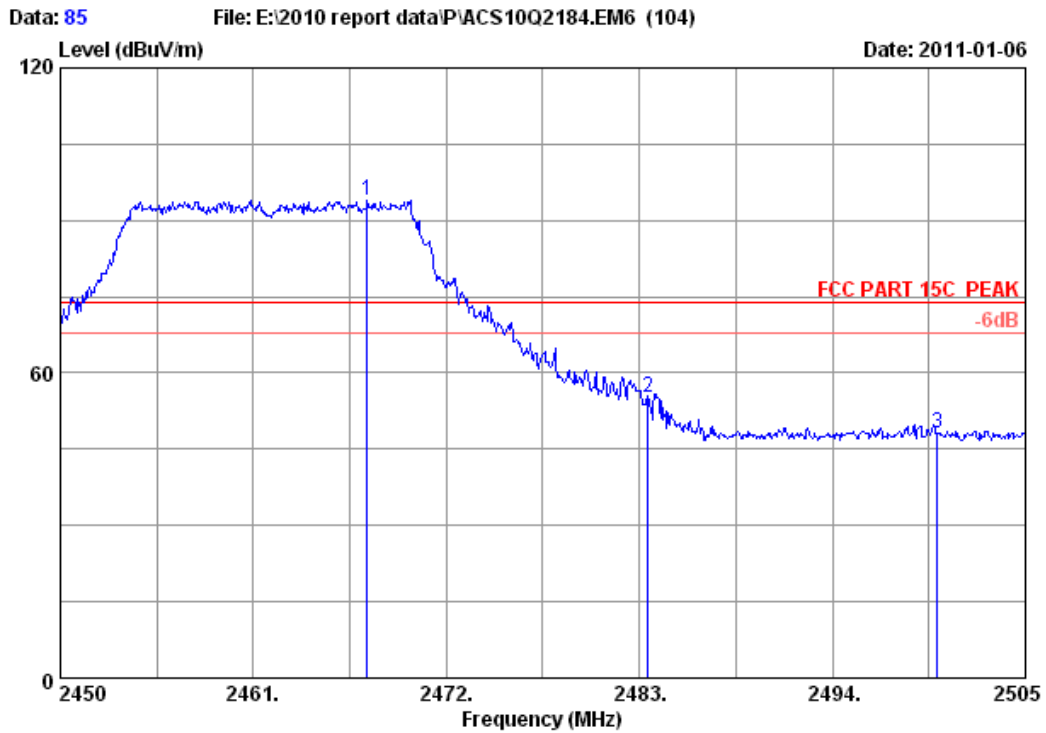


Site no. : 10m Chamber Data no. : 82
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL
 Limit : FCC PART 15C AV
 Env. / Ins. : 23°C/54% Engineer : Sunny-lu
 EUT : 300Mbps Wireless N Router
 Power : DC 9V From Adapter Input AC 120V/60Hz
 Test mode : IEEE802.11g CH1 2412MHz Tx
 M/N : PW-RN501D

	Ant. Freq. (MHz)	Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBUV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Remark
1	2325.360	29.40	7.27	36.63	42.77	42.81	54.00	11.19	Average
2	2374.200	29.43	7.35	36.62	44.78	44.94	54.00	9.06	Average
3	2390.000	29.44	7.39	36.62	47.72	47.93	54.00	6.07	Average
4	2400.000	29.44	7.43	36.62	61.42	61.67	54.00	-7.67	Average
5	2418.600	29.45	7.43	36.61	94.31	94.58	54.00	-40.58	Average

Remarks:

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

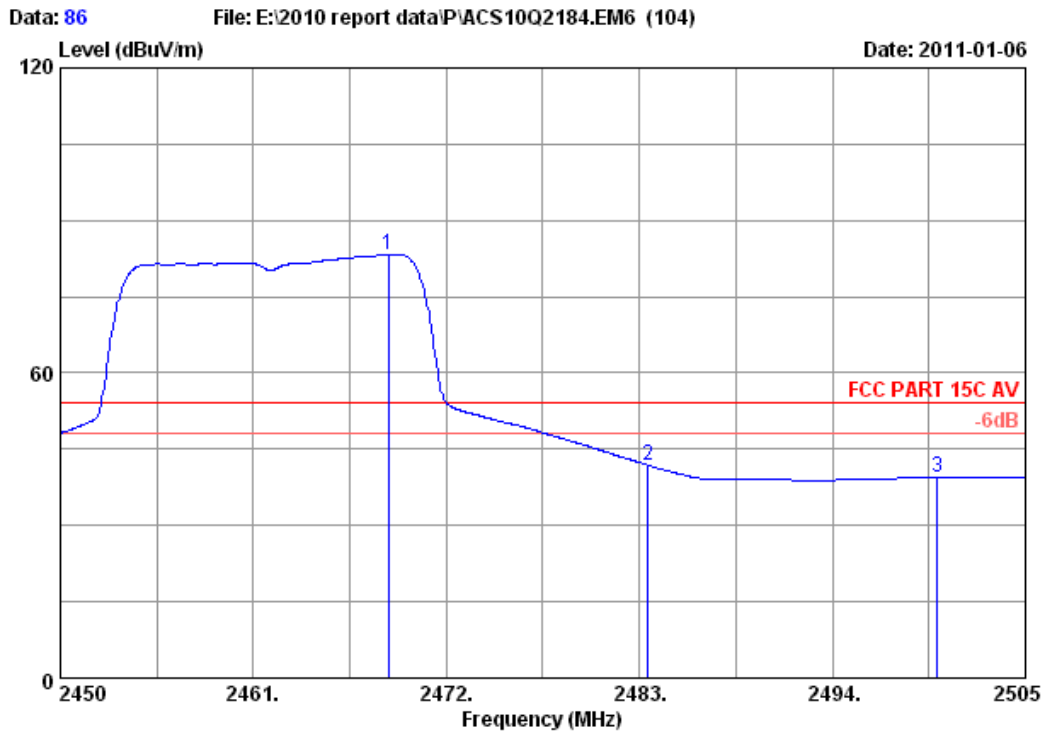


Site no. : 10m Chamber Data no. : 85
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 23*C/54% Engineer : Sunny-lu
 EUT : 300Mbps Wireless N Router
 Power : DC 9V From Adapter Input AC 120V/60Hz
 Test mode : IEEE802.11g CH11 2462MHz Tx
 M/N : PW-RN501D

	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	2467.490	29.48	7.54	36.60	93.54	93.96	74.00	-19.96	Peak
2	2483.500	29.49	7.58	36.60	54.68	55.15	74.00	18.85	Peak
3	2500.000	29.50	7.62	36.60	47.48	48.00	74.00	26.00	Peak

Remarks:

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

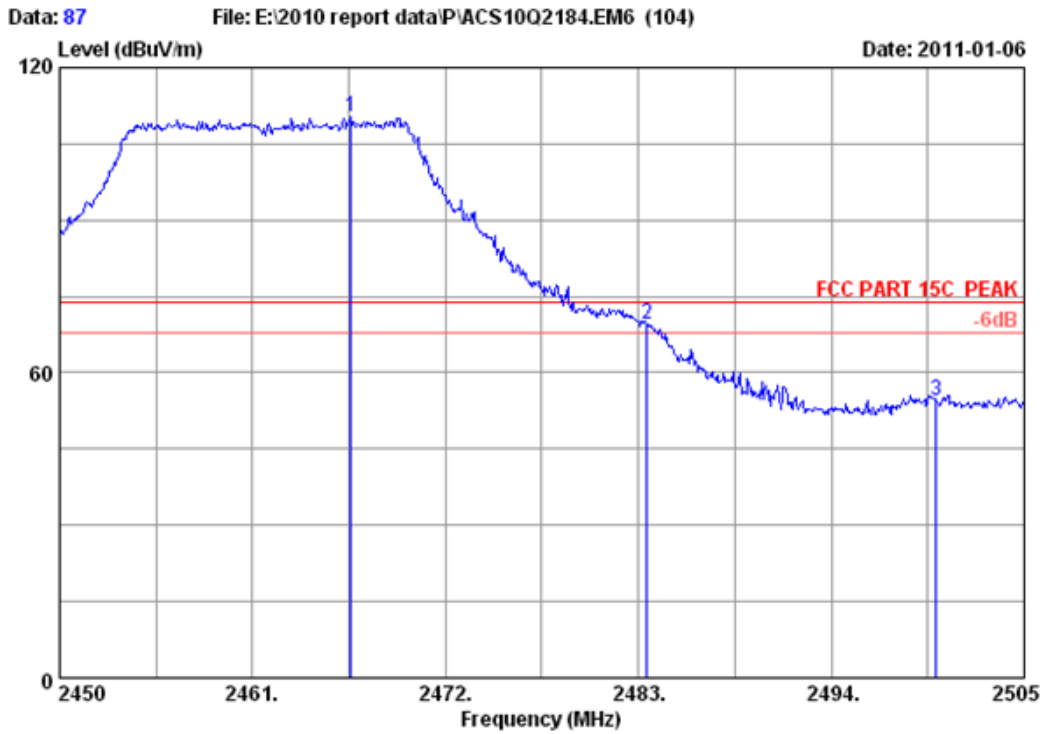


Site no. : 10m Chamber Data no. : 86
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C AV
 Env. / Ins. : 23*C/54% Engineer : Sunny-lu
 EUT : 300Mbps Wireless N Router
 Power : DC 9V From Adapter Input AC 120V/60Hz
 Test mode : IEEE802.11g CH11 2462MHz Tx
 M/N : PW-RN501D

	Freq. Factor (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2468.700	29.48	7.54	36.60	82.80	83.22	54.00	-29.22	Average
2	2483.500	29.49	7.58	36.60	41.37	41.84	54.00	12.16	Average
3	2500.000	29.50	7.62	36.60	38.88	39.40	54.00	14.60	Average

Remarks:

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

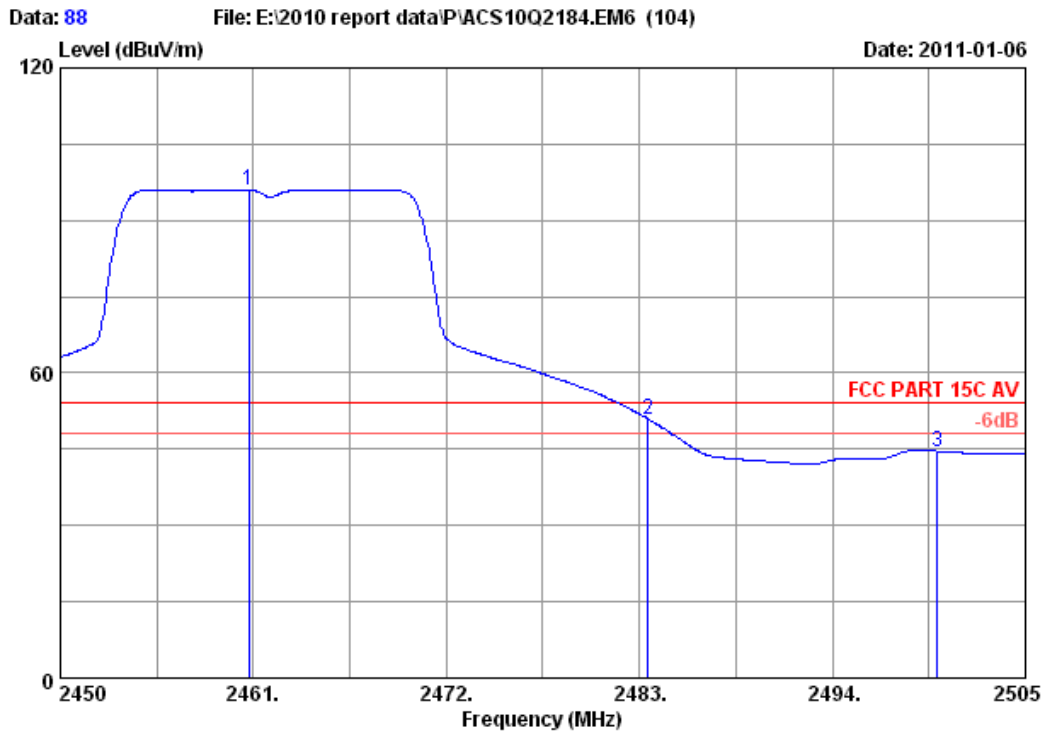


Site no. : 10m Chamber Data no. : 87
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 23°C/54% Engineer : Sunny-lu
 EUT : 300Mbps Wireless N Router
 Power : DC 9V From Adapter Input AC 120V/60Hz
 Test mode : IEEE802.11g CH11 2462MHz Tx
 M/N : PW-RN501D

	Ant. Freq. (MHz)	Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2466.610	29.48	7.54	36.60	109.83	110.25	74.00	-36.25	Peak
2	2483.500	29.49	7.58	36.60	68.96	69.43	74.00	4.57	Peak
3	2500.000	29.50	7.62	36.60	53.92	54.44	74.00	19.56	Peak

Remarks:

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

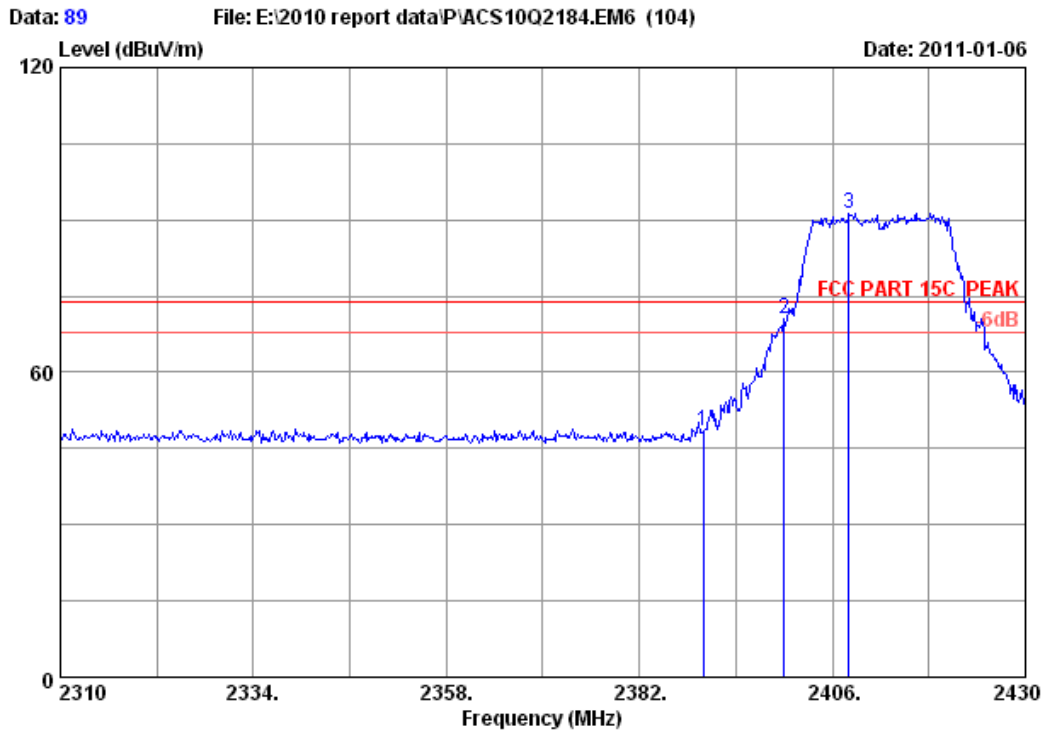


Site no. : 10m Chamber Data no. : 88
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL
 Limit : FCC PART 15C AV
 Env. / Ins. : 23*C/54% Engineer : Sunny-lu
 EUT : 300Mbps Wireless N Router
 Power : DC 9V From Adapter Input AC 120V/60Hz
 Test mode : IEEE802.11g CH11 2462MHz Tx
 M/N : PW-RN501D

	Freq. Factor (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2460.725	29.48	7.54	36.61	95.54	95.95	54.00	-41.95	Average
2	2483.500	29.49	7.58	36.60	50.47	50.94	54.00	3.06	Average
3	2500.000	29.50	7.62	36.60	44.09	44.61	54.00	9.39	Average

Remarks:

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

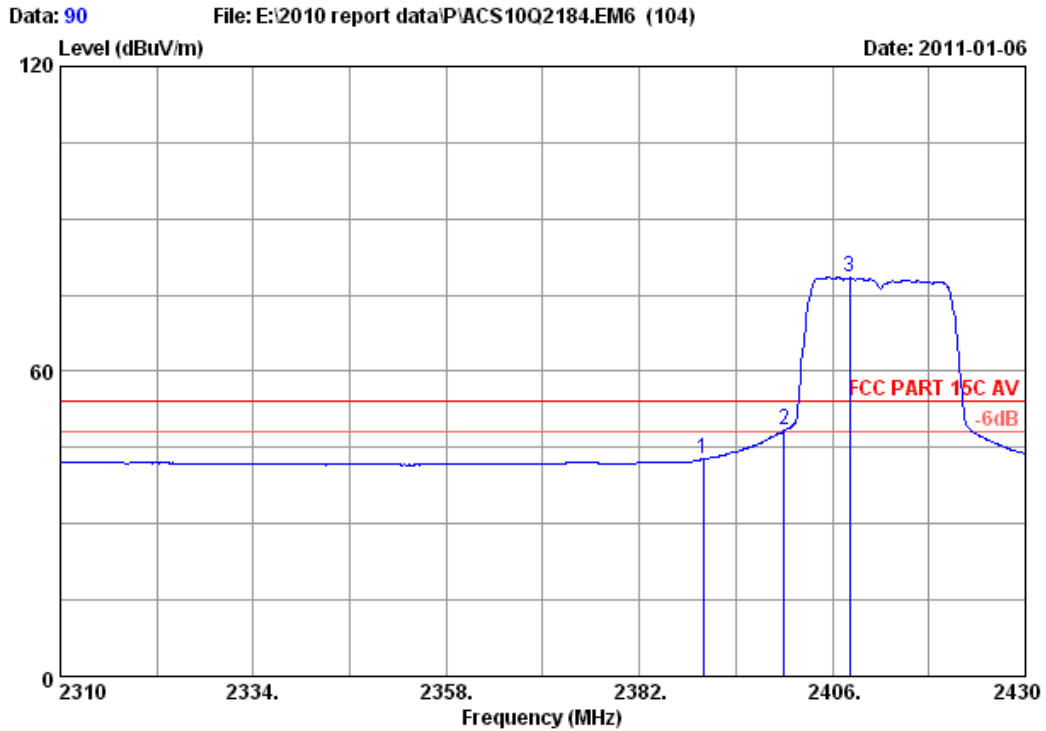


Site no. : 10m Chamber Data no. : 89
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 23*C/54% Engineer : Sunny-lu
 EUT : 300Mbps Wireless N Router
 Power : DC 9V From Adapter Input AC 120V/60Hz
 Test mode : IEEE802.11n HT20 CH1 2412MHz Tx
 M/N : PW-RN501D

	Ant. Factor (MHz)	Cable loss (dB/m)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark	
1	2390.000	29.44	7.39	36.62	48.39	48.60	74.00	25.40	Peak
2	2400.000	29.44	7.43	36.62	70.22	70.47	74.00	3.53	Peak
3	2408.040	29.45	7.43	36.62	90.93	91.19	74.00	-17.19	Peak

Remarks:

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

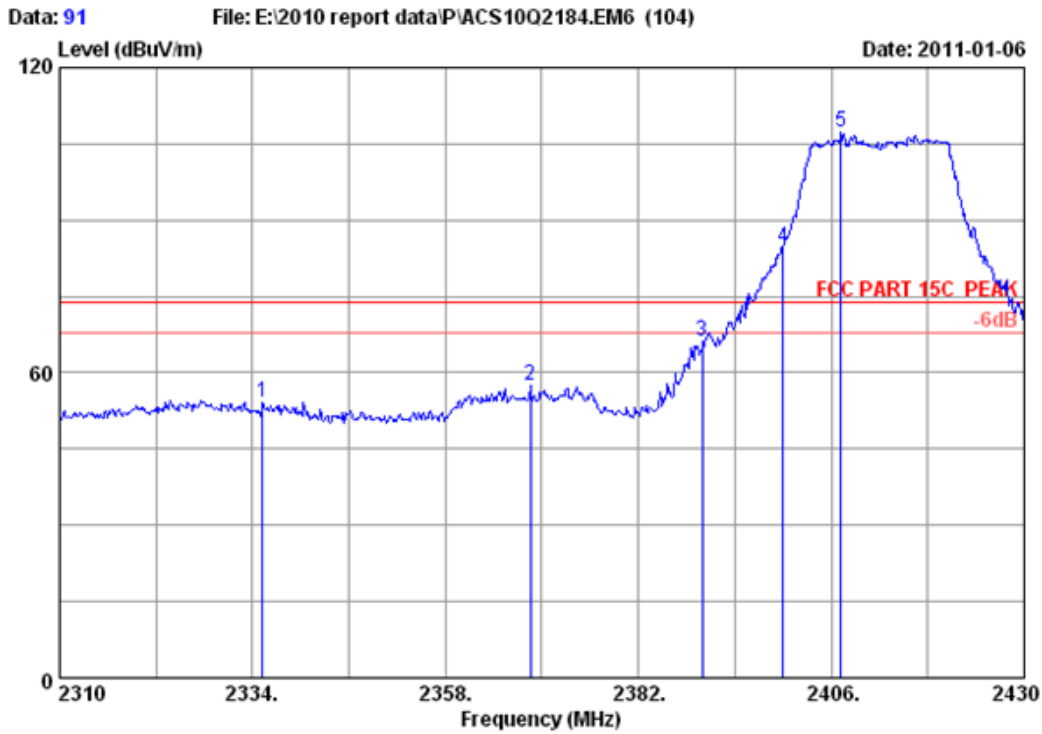


Site no. : 10m Chamber Data no. : 90
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C AV
 Env. / Ins. : 23*C/54% Engineer : Sunny-lu
 EUT : 300Mbps Wireless N Router
 Power : DC 9V From Adapter Input AC 120V/60Hz
 Test mode : IEEE802.11n HT20 CH1 2412MHz Tx
 M/N : PW-RN501D

	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	29.44	7.39	36.62	42.51	42.72	54.00	11.28	Average
2	2400.000	29.44	7.43	36.62	48.11	48.36	54.00	5.64	Average
3	2408.160	29.45	7.43	36.62	78.16	78.42	54.00	-24.42	Average

Remarks:

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

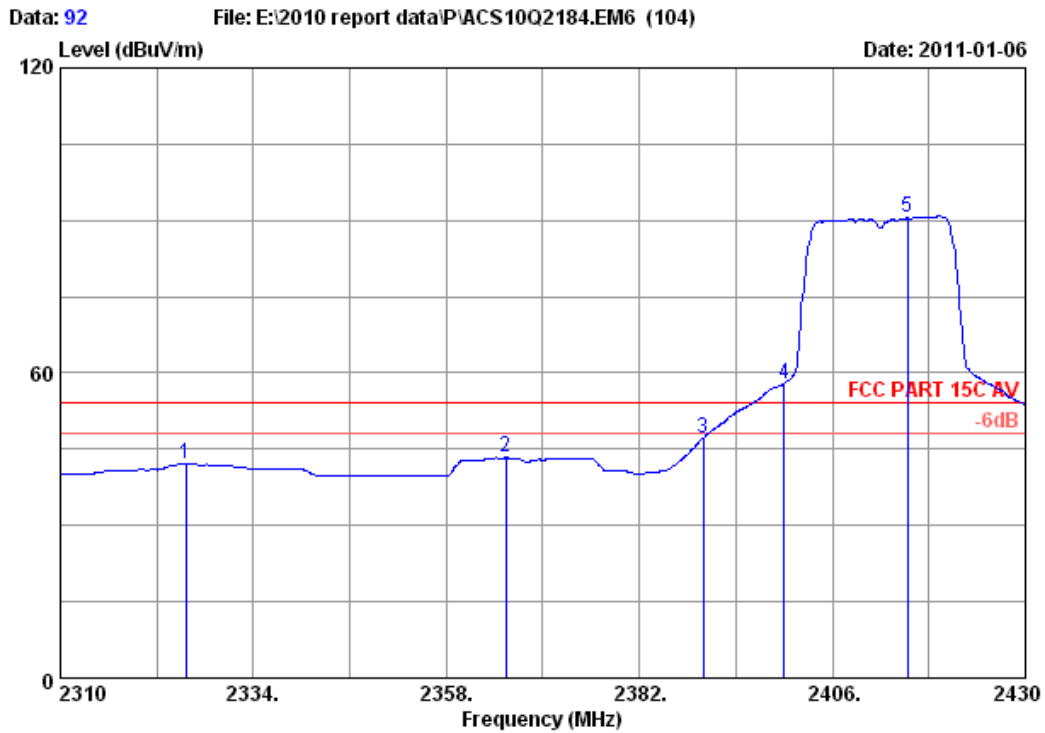


Site no. : 10m Chamber Data no. : 91
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 23*C/54% Engineer : Sunny-lu
 EUT : 300Mbps Wireless N Router
 Power : DC 9V From Adapter Input AC 120V/60Hz
 Test mode : IEEE802.11n HT20 CH1 2412MHz Tx
 M/N : PW-RN501D

	Ant. Freq. (MHz)	Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2335.200	29.41	7.27	36.63	54.25	54.30	74.00	19.70	Peak
2	2368.560	29.43	7.35	36.62	57.17	57.33	74.00	16.67	Peak
3	2390.000	29.44	7.39	36.62	65.93	66.14	74.00	7.86	Peak
4	2400.000	29.44	7.43	36.62	84.20	84.45	74.00	-10.45	Peak
5	2407.200	29.45	7.43	36.62	107.01	107.27	74.00	-33.27	Peak

Remarks:

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

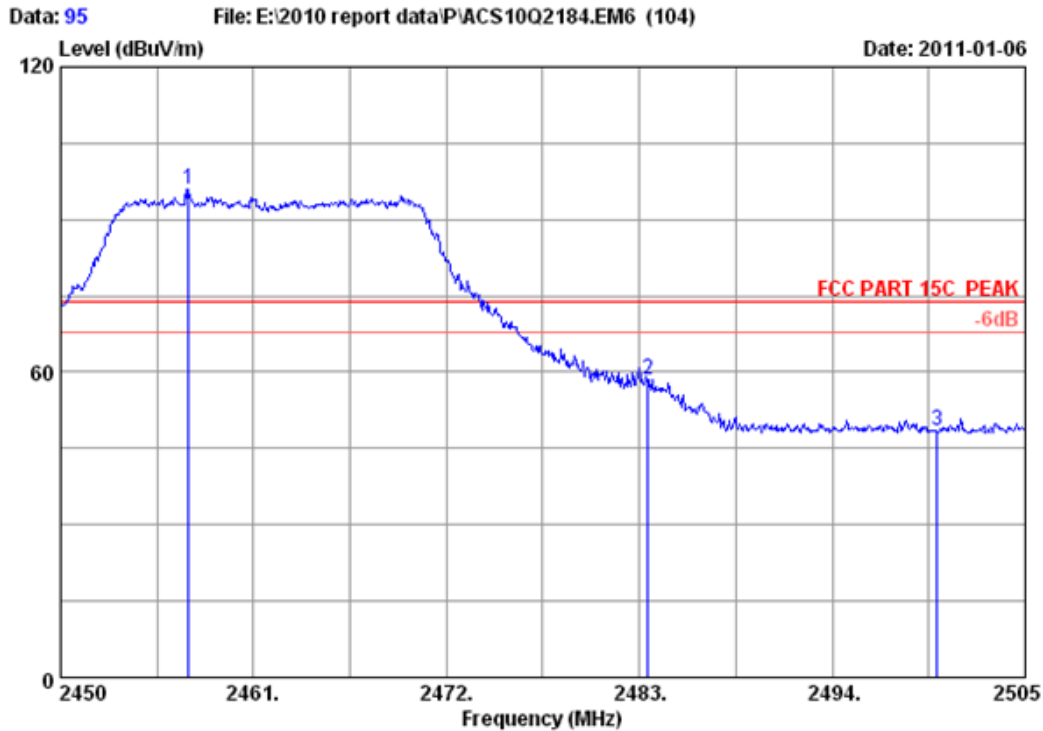


Site no. : 10m Chamber Data no. : 92
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL
 Limit : FCC PART 15C AV
 Env. / Ins. : 23*C/54% Engineer : Sunny-lu
 EUT : 300Mbps Wireless N Router
 Power : DC 9V From Adapter Input AC 120V/60Hz
 Test mode : IEEE802.11n HT20 CH1 2412MHz Tx
 M/N : PW-RN501D

	Freq.	Ant.	Cable	Amp.	Reading	Emission	Limits	Margin	Remark
	(MHz)	(dB/m)	loss	Factor	(dBuV)	Level	(dBuV/m)	(dB)	
			(dB)	(dB)		(dBuV/m)	(dBuV/m)		
1	2325.600	29.40	7.27	36.63	41.96	42.00	54.00	12.00	Average
2	2365.440	29.42	7.35	36.62	43.15	43.30	54.00	10.70	Average
3	2390.000	29.44	7.39	36.62	47.07	47.28	54.00	6.72	Average
4	2400.000	29.44	7.43	36.62	57.72	57.97	54.00	-3.97	Average
5	2415.360	29.45	7.43	36.61	90.18	90.45	54.00	-36.45	Average

Remarks:

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

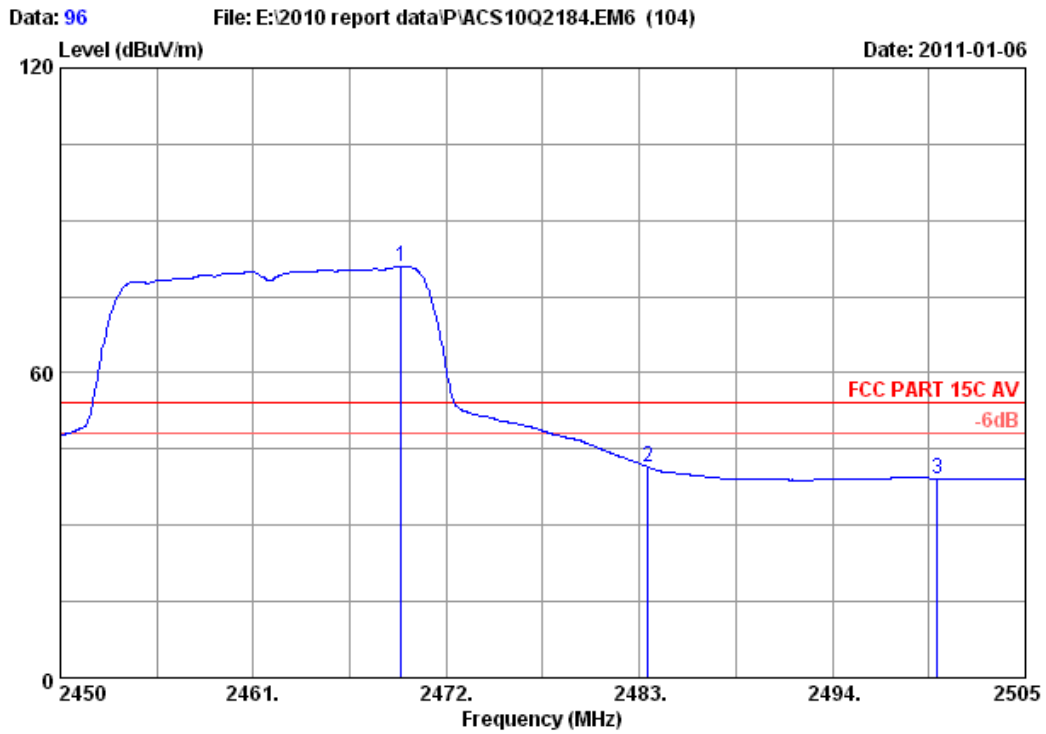


Data: 95 File: E:\2010 report data\P\ACS10Q2184.EM6 (104) Date: 2011-01-06
 Site no. : 10m Chamber Data no. : 95
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 23*C/54% Engineer : Sunny-lu
 EUT : 300Mbps Wireless N Router
 Power : DC 9V From Adapter Input AC 120V/60Hz
 Test mode : IEEE802.11n HT20 CH11 2462MHz Tx
 M/N : PW-RN501D

	Ant. 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	2457.315	29.48	7.50	36.61	95.46	95.83	74.00	-21.83	Peak
2	2483.500	29.49	7.58	36.60	58.14	58.61	74.00	15.39	Peak
3	2500.000	29.50	7.62	36.60	47.79	48.31	74.00	25.69	Peak

Remarks:

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

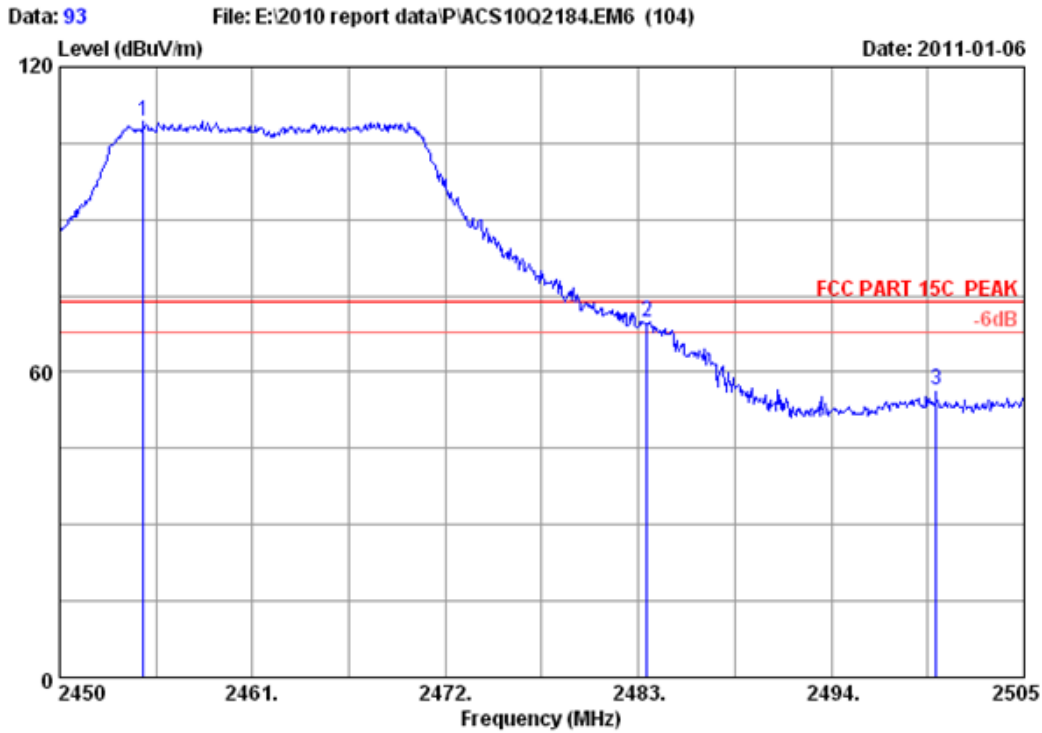


Site no. : 10m Chamber Data no. : 96
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C AV
 Env. / Ins. : 23°C/54% Engineer : Sunny-lu
 EUT : 300Mbps Wireless N Router
 Power : DC 9V From Adapter Input AC 120V/60Hz
 Test mode : IEEE802.11n HT20 CH11 2462MHz Tx
 M/N : PW-RN501D

	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Emission Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2469.415	29.48	7.54	36.60	80.55	80.97	54.00	-26.97	Average
2	2483.500	29.49	7.58	36.60	40.99	41.46	54.00	12.54	Average
3	2500.000	29.50	7.62	36.60	38.62	39.14	54.00	14.86	Average

Remarks:

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

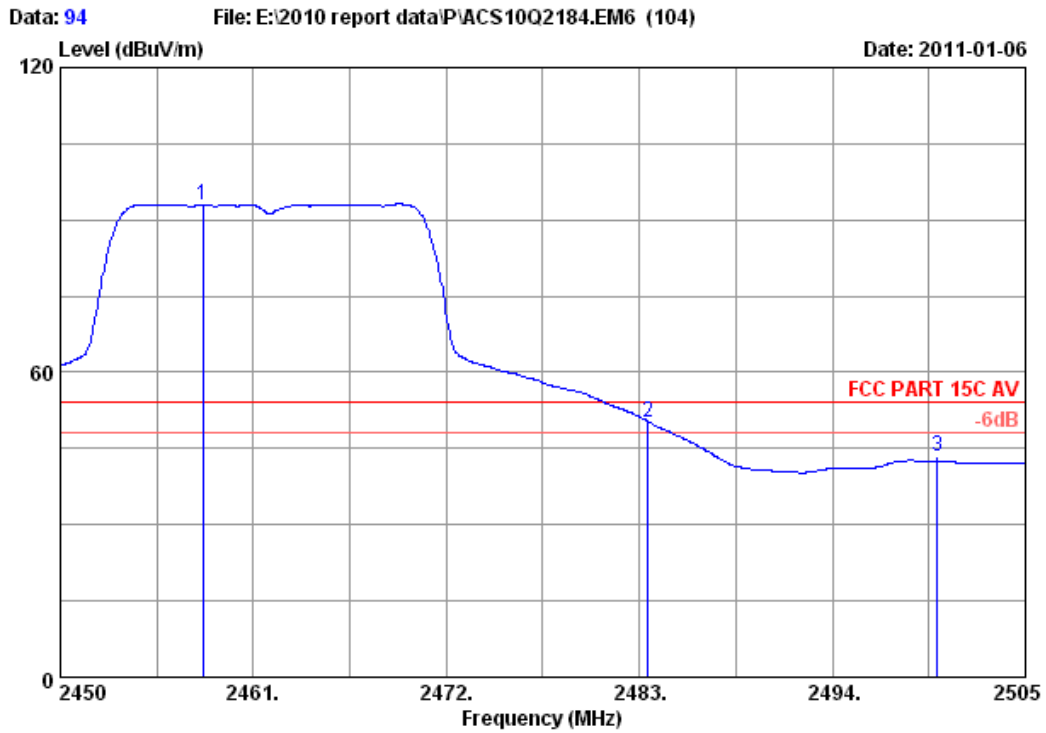


Site no. : 10m Chamber Data no. : 93
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 23*C/54% Engineer : Sunny-lu
 EUT : 300Mbps Wireless N Router
 Power : DC 9V From Adapter Input AC 120V/60Hz
 Test mode : IEEE802.11n HT20 CH11 2462MHz Tx
 M/N : PW-RN501D

	Ant. 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	2454.785	29.48	7.50	36.61	109.09	109.46	74.00	-35.46	Peak
2	2483.500	29.49	7.58	36.60	69.40	69.87	74.00	4.13	Peak
3	2500.000	29.50	7.62	36.60	55.91	56.43	74.00	17.57	Peak

Remarks:

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

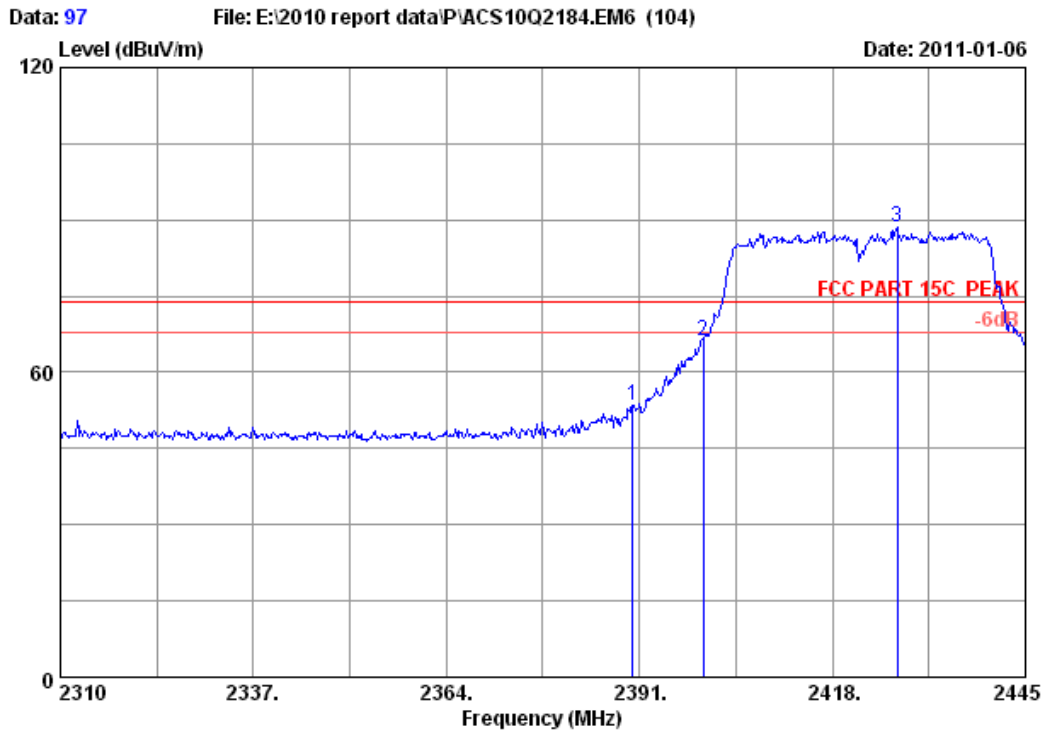


Site no. : 10m Chamber Data no. : 94
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL
 Limit : FCC PART 15C AV
 Env. / Ins. : 23*C/54% Engineer : Sunny-lu
 EUT : 300Mbps Wireless N Router
 Power : DC 9V From Adapter Input AC 120V/60Hz
 Test mode : IEEE802.11n HT20 CH11 2462MHz Tx
 M/N : PW-RN501D

	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	2458.140	29.48	7.50	36.61	92.71	93.08	54.00	-39.08	Average
2	2483.500	29.49	7.58	36.60	49.80	50.27	54.00	3.73	Average
3	2500.000	29.50	7.62	36.60	42.90	43.42	54.00	10.58	Average

Remarks:

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

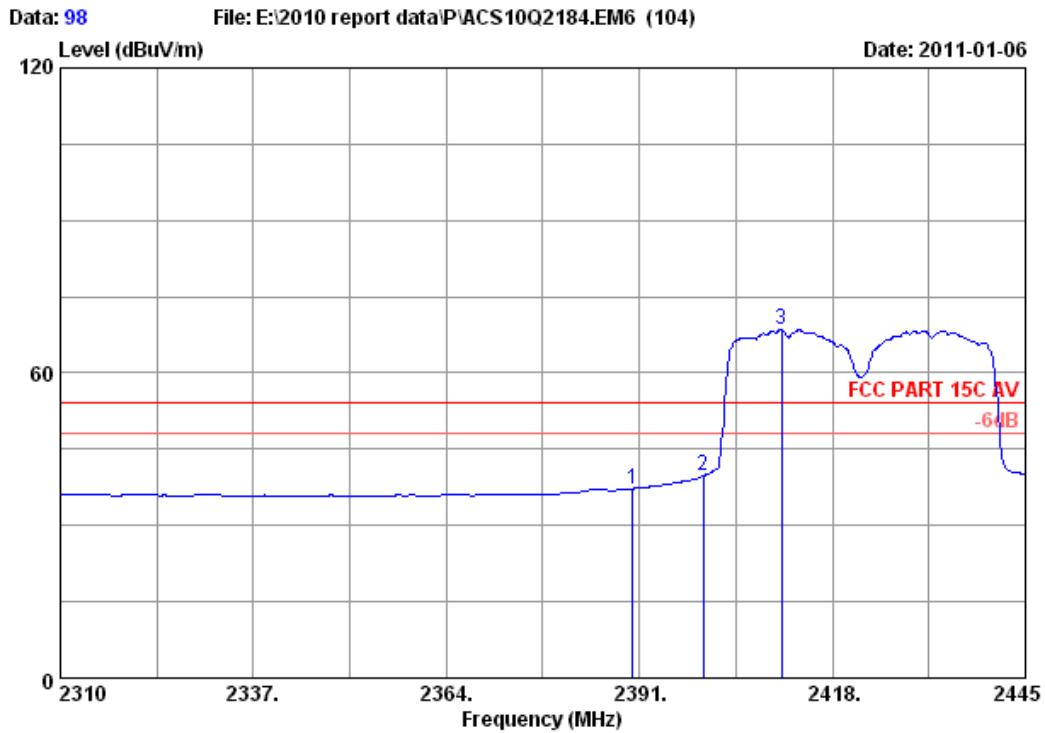


Site no. : 10m Chamber Data no. : 97
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 23°C/54% Engineer : Sunny-lu
 EUT : 300Mbps Wireless N Router
 Power : DC 9V From Adapter Input AC 120V/60Hz
 Test mode : IEEE802.11n HT40 CH1 2422MHz Tx
 M/N : PW-RN501D

	Ant. Factor (MHz)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark	
1	2390.000	29.44	7.39	36.62	53.32	53.53	74.00	20.47	Peak
2	2400.000	29.44	7.43	36.62	65.95	66.20	74.00	7.80	Peak
3	2427.045	29.46	7.46	36.61	88.15	88.46	74.00	-14.46	Peak

Remarks:

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

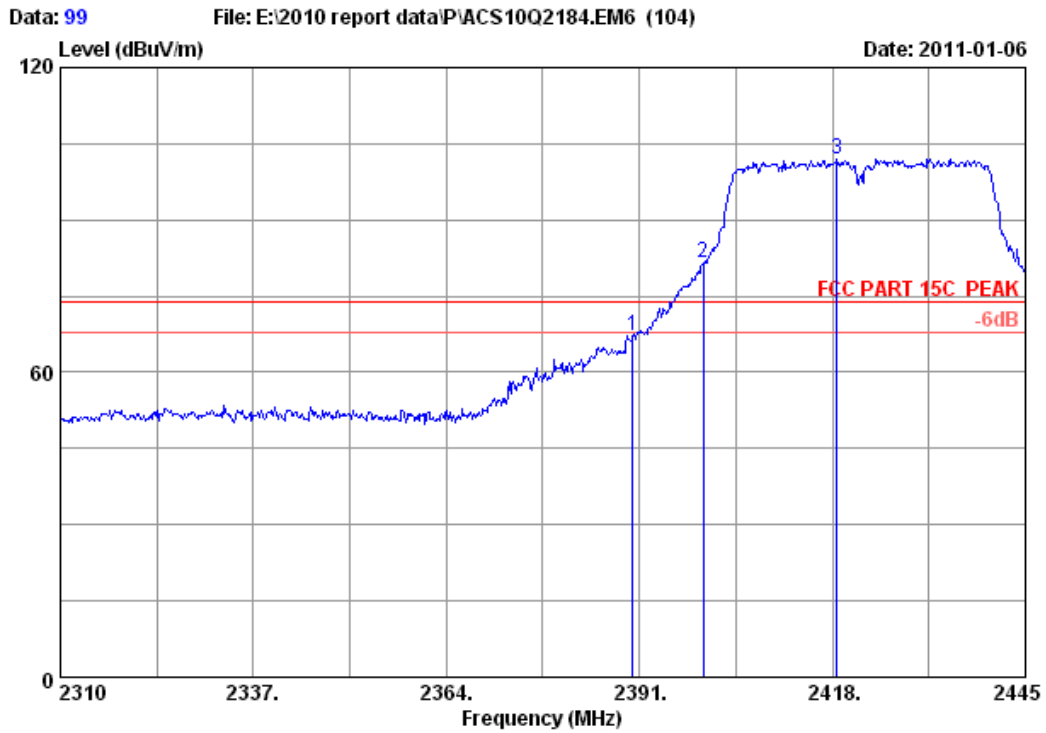


Site no. : 10m Chamber Data no. : 98
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C AV
 Env. / Ins. : 23*C/54% Engineer : Sunny-lu
 EUT : 300Mbps Wireless N Router
 Power : DC 9V From Adapter Input AC 120V/60Hz
 Test mode : IEEE802.11n HT40 CH1 2422MHz Tx
 M/N : PW-RN501D

	Freq. Factor (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	29.44	7.39	36.62	37.05	37.26	54.00	16.74	Average
2	2400.000	29.44	7.43	36.62	39.54	39.79	54.00	14.21	Average
3	2410.845	29.45	7.43	36.62	68.18	68.44	54.00	-14.44	Average

Remarks:

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

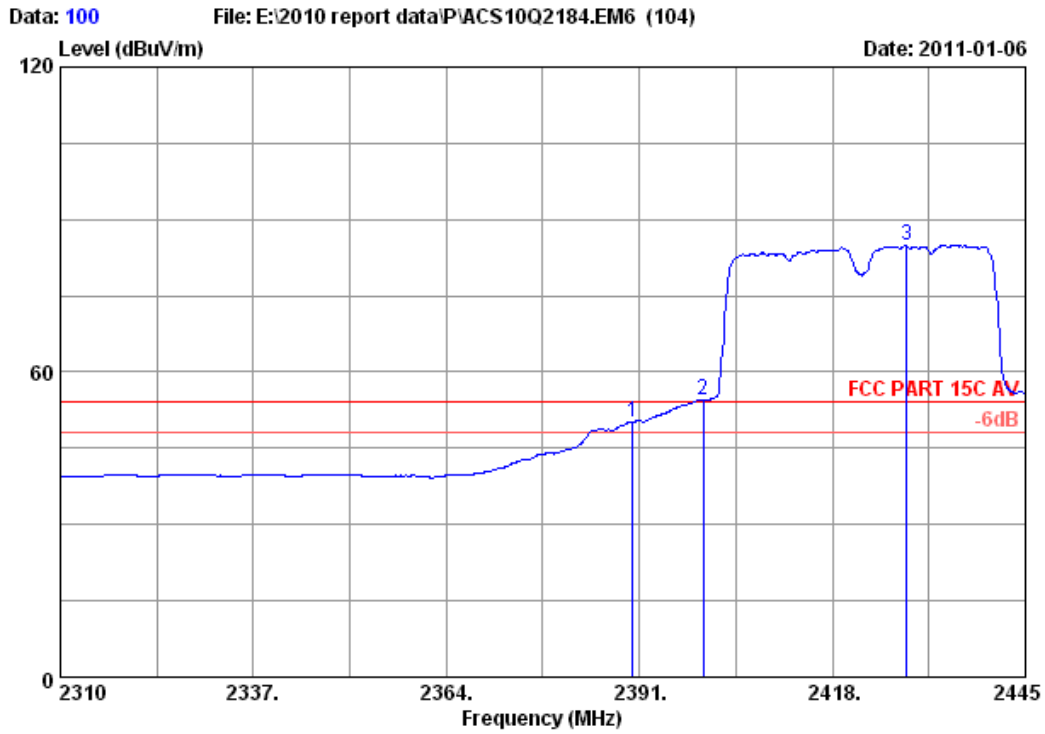


Site no. : 10m Chamber Data no. : 99
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 23*C/54% Engineer : Sunny-lu
 EUT : 300Mbps Wireless N Router
 Power : DC 9V From Adapter Input AC 120V/60Hz
 Test mode : IEEE802.11n HT40 CH1 2422MHz Tx
 M/N : PW-RN501D

	Ant. Factor (MHz)	Cable loss (dB/m)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark	
1	2390.000	29.44	7.39	36.62	66.99	67.20	74.00	6.80	Peak
2	2400.000	29.44	7.43	36.62	81.34	81.59	74.00	-7.59	Peak
3	2418.675	29.45	7.43	36.61	101.80	102.07	74.00	-28.07	Peak

Remarks:

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

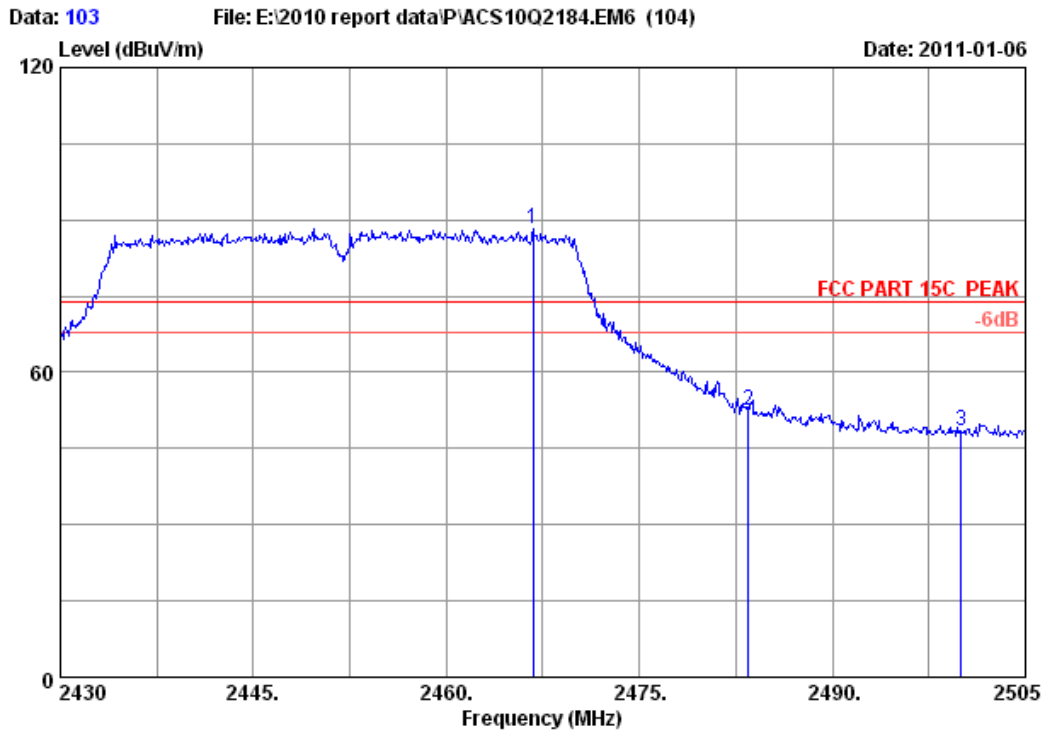


Site no. : 10m Chamber Data no. : 100
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL
 Limit : FCC PART 15C AV
 Env. / Ins. : 23°C/54% Engineer : Sunny-lu
 EUT : 300Mbps Wireless N Router
 Power : DC 9V From Adapter Input AC 120V/60Hz
 Test mode : IEEE802.11n HT40 CH1 2422MHz Tx
 M/N : PW-RN501D

	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Emission Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.000	29.44	7.39	36.62	49.81	50.02	54.00	3.98	Average
2	2400.000	29.44	7.43	36.62	54.21	54.46	54.00	-0.46	Average
3	2428.395	29.46	7.46	36.61	84.52	84.83	54.00	-30.83	Average

Remarks:

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

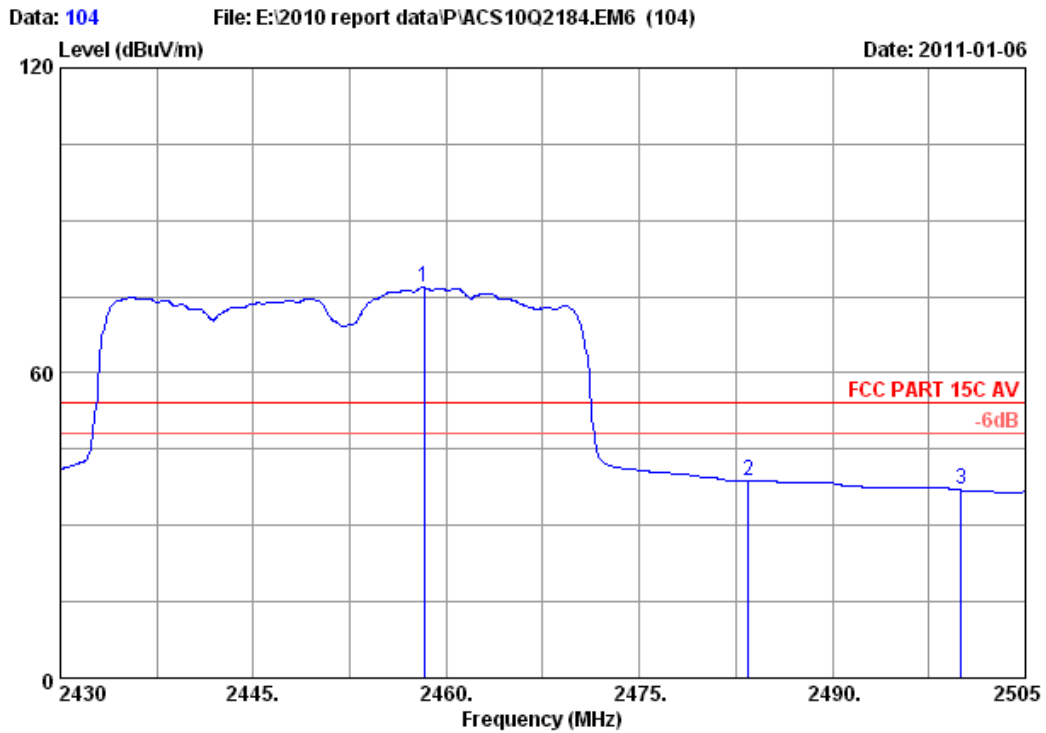


Site no. : 10m Chamber Data no. : 103
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 23°C/54% Engineer : Sunny-lu
 EUT : 300Mbps Wireless N Router
 Power : DC 9V From Adapter Input AC 120V/60Hz
 Test mode : IEEE802.11n HT40 CH7 2452MHz Tx
 M/N : PW-RN501D

	Ant. Factor (MHz)	Cable loss (dB/m)	Amp. Factor (dB)	Reading (dBUV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Remark	
1	2466.750	29.48	7.54	36.60	87.81	88.23	74.00	-14.23	Peak
2	2483.500	29.49	7.58	36.60	51.88	52.35	74.00	21.65	Peak
3	2500.000	29.50	7.62	36.60	48.02	48.54	74.00	25.46	Peak

Remarks:

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

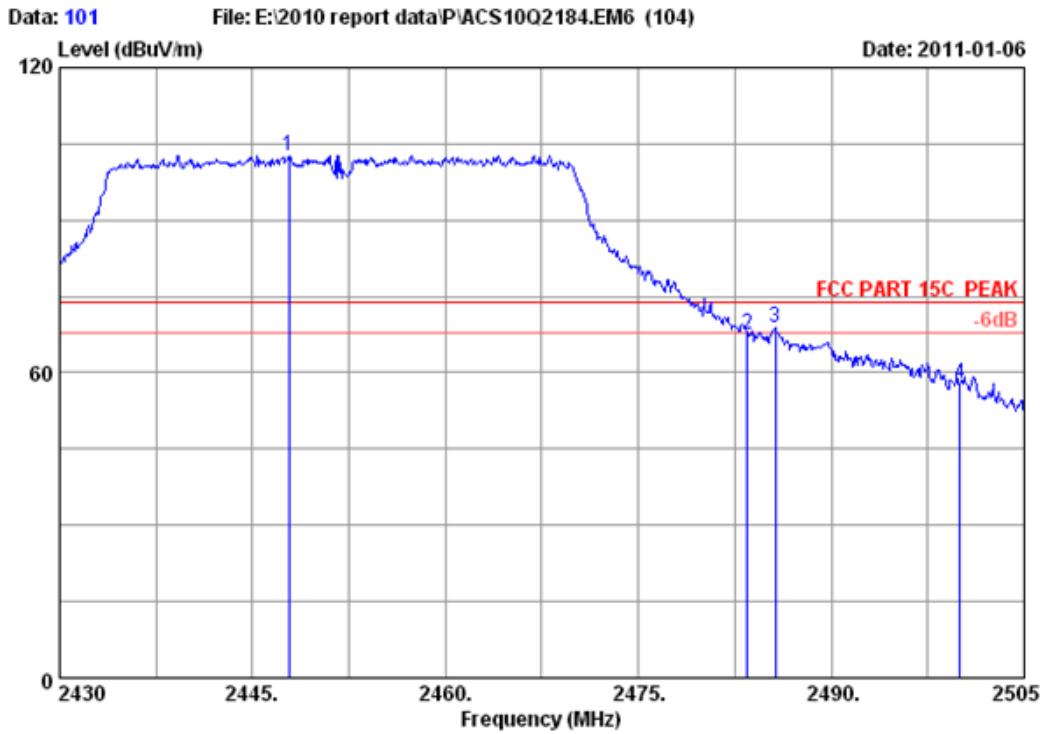


Site no. : 10m Chamber Data no. : 104
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C AV
 Env. / Ins. : 23*C/54% Engineer : Sunny-lu
 EUT : 300Mbps Wireless N Router
 Power : DC 9V From Adapter Input AC 120V/60Hz
 Test mode : IEEE802.11n HT40 CH7 2452MHz Tx
 M/N : PW-RN501D

	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	2458.275	29.48	7.50	36.61	76.40	76.77	54.00	-22.77	Average
2	2483.500	29.49	7.58	36.60	38.29	38.76	54.00	15.24	Average
3	2500.000	29.50	7.62	36.60	36.44	36.96	54.00	17.04	Average

Remarks:

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

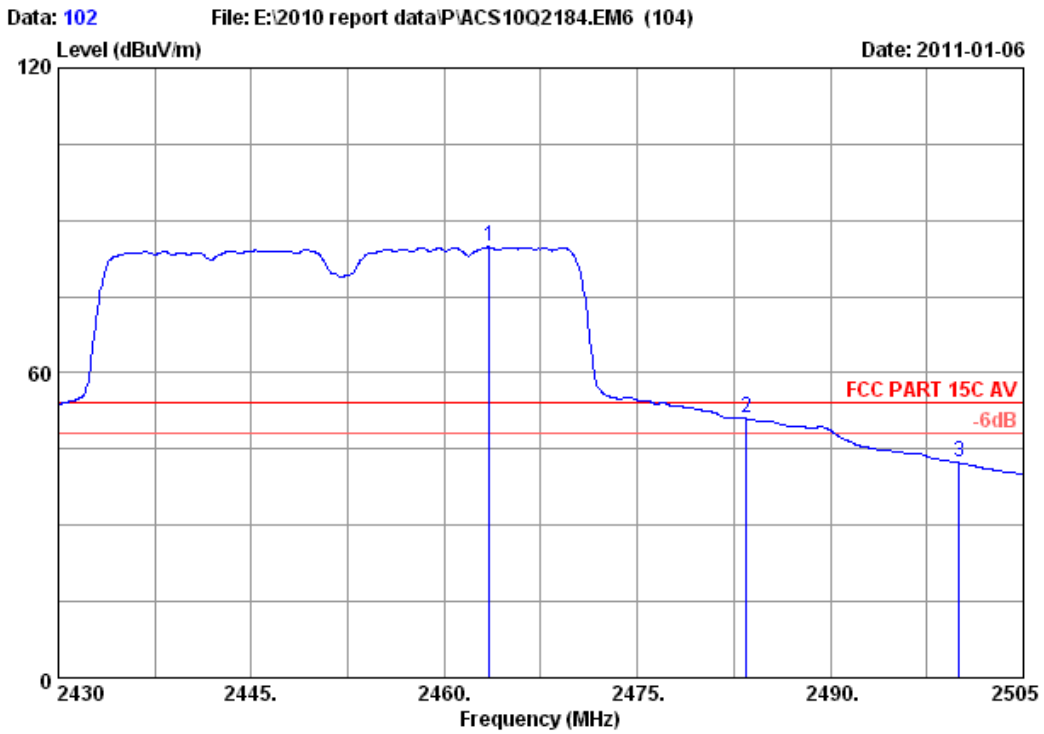


Site no. : 10m Chamber Data no. : 101
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 23°C/54% Engineer : Sunny-lu
 EUT : 300Mbps Wireless N Router
 Power : DC 9V From Adapter Input AC 120V/60Hz
 Test mode : IEEE802.11n HT40 CH7 2452MHz Tx
 M/N : PW-RN501D

	Ant. 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	2447.850	29.47	7.50	36.61	102.36	102.72	74.00	-28.72	Peak
2	2483.500	29.49	7.58	36.60	67.13	67.60	74.00	6.40	Peak
3	2485.650	29.49	7.58	36.60	68.28	68.75	74.00	5.25	Peak
4	2500.000	29.50	7.62	36.60	57.17	57.69	74.00	16.31	Peak

Remarks:

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



Site no. : 10m Chamber Data no. : 102
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL
 Limit : FCC PART 15C AV
 Env. / Ins. : 23°C/54% Engineer : Sunny-lu
 EUT : 300Mbps Wireless N Router
 Power : DC 9V From Adapter Input AC 120V/60Hz
 Test mode : IEEE802.11n HT40 CH7 2452MHz Tx
 M/N : PW-RN501D

	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Emission Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2463.525	29.48	7.54	36.61	84.33	84.74	54.00	-30.74	Average
2	2483.500	29.49	7.58	36.60	50.53	51.00	54.00	3.00	Average
3	2500.000	29.50	7.62	36.60	41.77	42.29	54.00	11.71	Average

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
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 Analyzer	Agilent	E4446A	US44300459	May.08,10	1 Year
2.	Attenuator	Agilent	8491B	MY39262165	May.08,10	1 Year
3.	RF Cable	Hubersuhner	SUCOFLEX102	28618/2	May.08,10	1Year

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 100kHz RBW and 300 kHz 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 Router		
M/N: PW-RN501D		
Test date: 2011-01-07	Pressure: 100.6 kpa	Humidity: 56 %
Tested by: Sunny-lu	Test site: RF Site	Temperature : 25 °C

Cable loss: 0.6 dB		Attenuator loss: 20 dB		Antenna Gain: 5.0 dBi	
Test Mode	CH	Result		Limit (KHz)	
		Chain0 6dB bandwidth (MHz)	Chain1 6dB bandwidth (MHz)		
11b	CH1	12.560	12.134	>500	
	CH6	13.042	12.113	>500	
	CH11	12.084	12.607	>500	
11g	CH1	16.520	16.605	>500	
	CH6	16.567	16.550	>500	
	CH11	16.590	16.601	>500	
11n HT20	CH1	17.791	17.780	>500	
	CH6	17.715	17.751	>500	
	CH11	17.698	17.752	>500	
11n HT40	CH1	36.389	36.403	>500	
	CH4	36.171	36.125	>500	
	CH7	36.433	36.184	>500	
Conclusion : PASS					

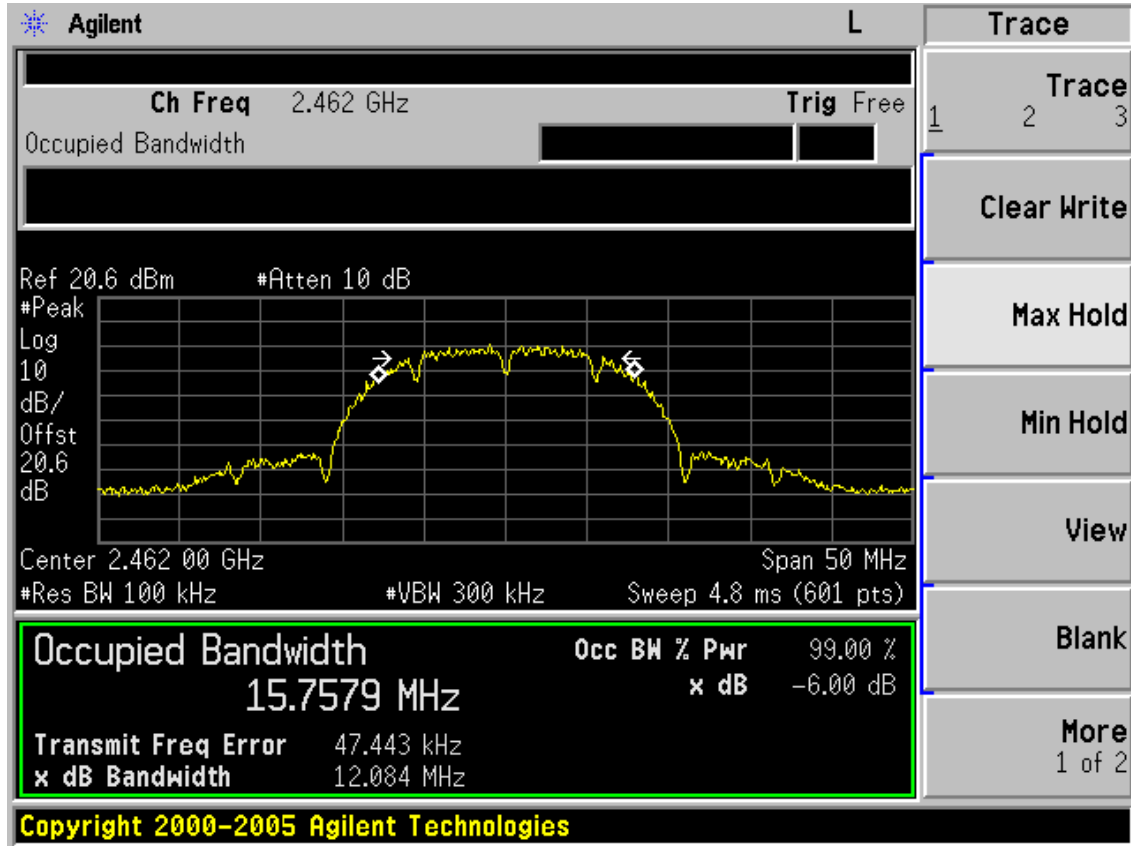
Chain 0
 Test Mode: IEEE 802.11b TX
 Test CH1: 2412MHz

Agilent		L	Marker
Ch Freq 2.412 GHz		Trig Free	Select Marker
Occupied Bandwidth			1 2 3 4
Ref 20.6 dBm #Atten 10 dB			Normal
			Delta
Center 2.412 00 GHz Span 50 MHz			Delta Pair (Tracking Ref)
#Res BW 100 kHz #VBW 300 kHz Sweep 4.8 ms (601 pts)			Ref Δ
Occupied Bandwidth 15.8139 MHz		Occ BW % Pwr	Span Pair
Transmit Freq Error 3.568 kHz		x dB	Center
x dB Bandwidth 12.560 MHz			Off
			More 1 of 2
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Test CH6: 2437MHz

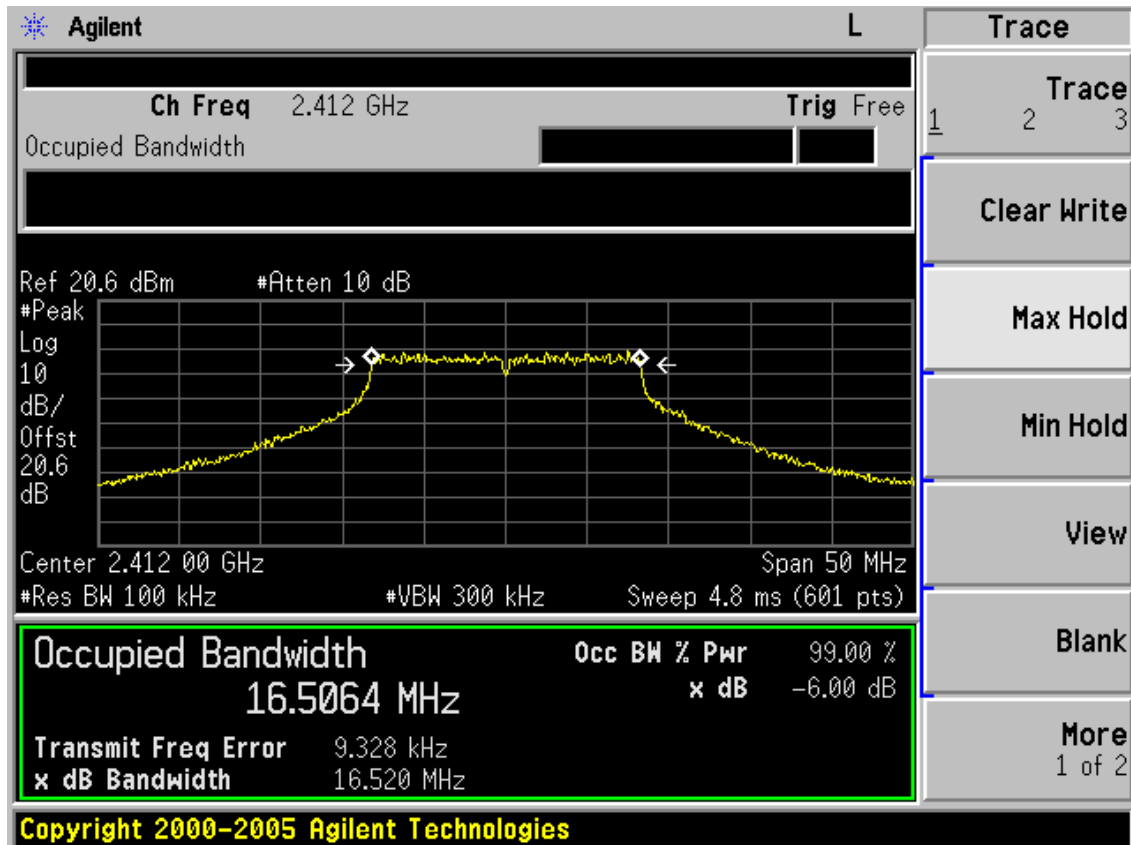
Agilent		L	Trace
Ch Freq 2.437 GHz		Trig Free	Trace
Occupied Bandwidth			1 2 3
Ref 20.6 dBm #Atten 10 dB			Clear Write
			Max Hold
Center 2.437 00 GHz Span 50 MHz			Min Hold
#Res BW 100 kHz #VBW 300 kHz Sweep 4.8 ms (601 pts)			View
Occupied Bandwidth 15.7398 MHz		Occ BW % Pwr	Blank
Transmit Freq Error 66.861 kHz		x dB	More 1 of 2
x dB Bandwidth 13.042 MHz			
File Operation Status, A:\SCREN659.GIF file saved			

Test CH11: 2462MHz



Test Mode: IEEE 802.11g TX

Test CH1: 2412MHz



Test CH6: 2437MHz

Agilent
L

Ch Freq 2.437 GHz
Trig Free

Ref 20.6 dBm #Atten 10 dB

Center 2.437 00 GHz Span 50 MHz
#Res BW 100 kHz #VBW 300 kHz Sweep 4.8 ms (601 pts)

Occupied Bandwidth	Occ BW % Pwr	99.00 %
16.5145 MHz	x dB	-6.00 dB
Transmit Freq Error	2.546 kHz	
x dB Bandwidth	16.567 MHz	

File Operation Status, A:\SCREN665.GIF file saved

Trace

Trace 1 2 3

Clear Write

Max Hold

Min Hold

View

Blank

More 1 of 2

Test CH11: 2462MHz

Agilent
L

Ch Freq 2.462 GHz
Trig Free

Ref 20.6 dBm #Atten 10 dB

Center 2.462 00 GHz Span 50 MHz
#Res BW 100 kHz #VBW 300 kHz Sweep 4.8 ms (601 pts)

Occupied Bandwidth	Occ BW % Pwr	99.00 %
16.5165 MHz	x dB	-6.00 dB
Transmit Freq Error	8.158 kHz	
x dB Bandwidth	16.590 MHz	

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Trace

Trace 1 2 3

Clear Write

Max Hold

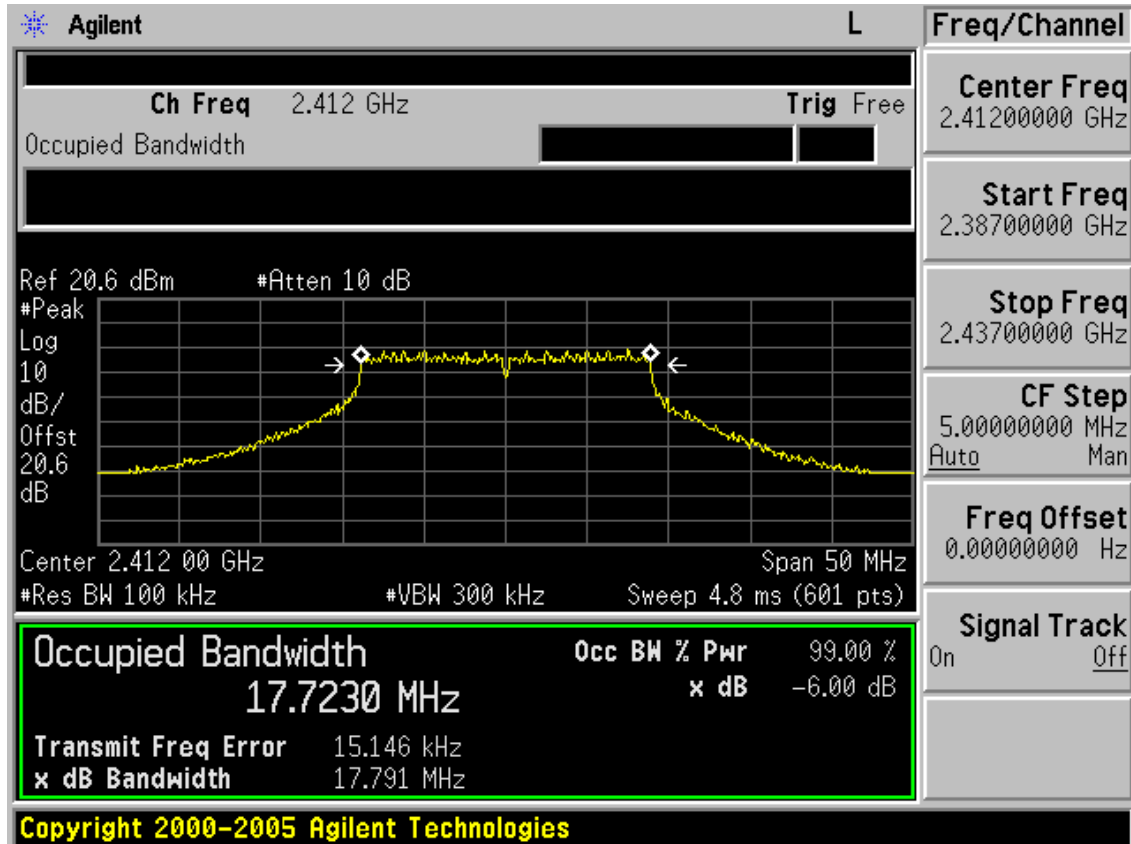
Min Hold

View

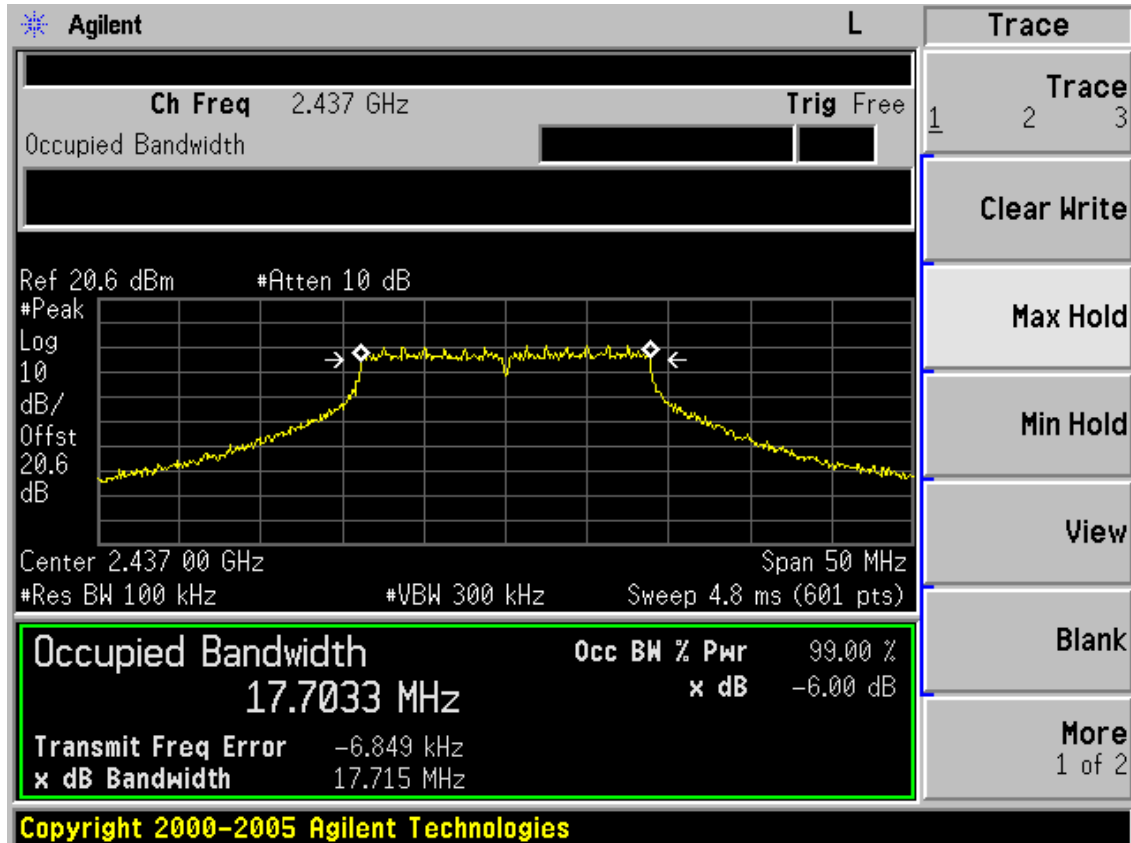
Blank

More 1 of 2

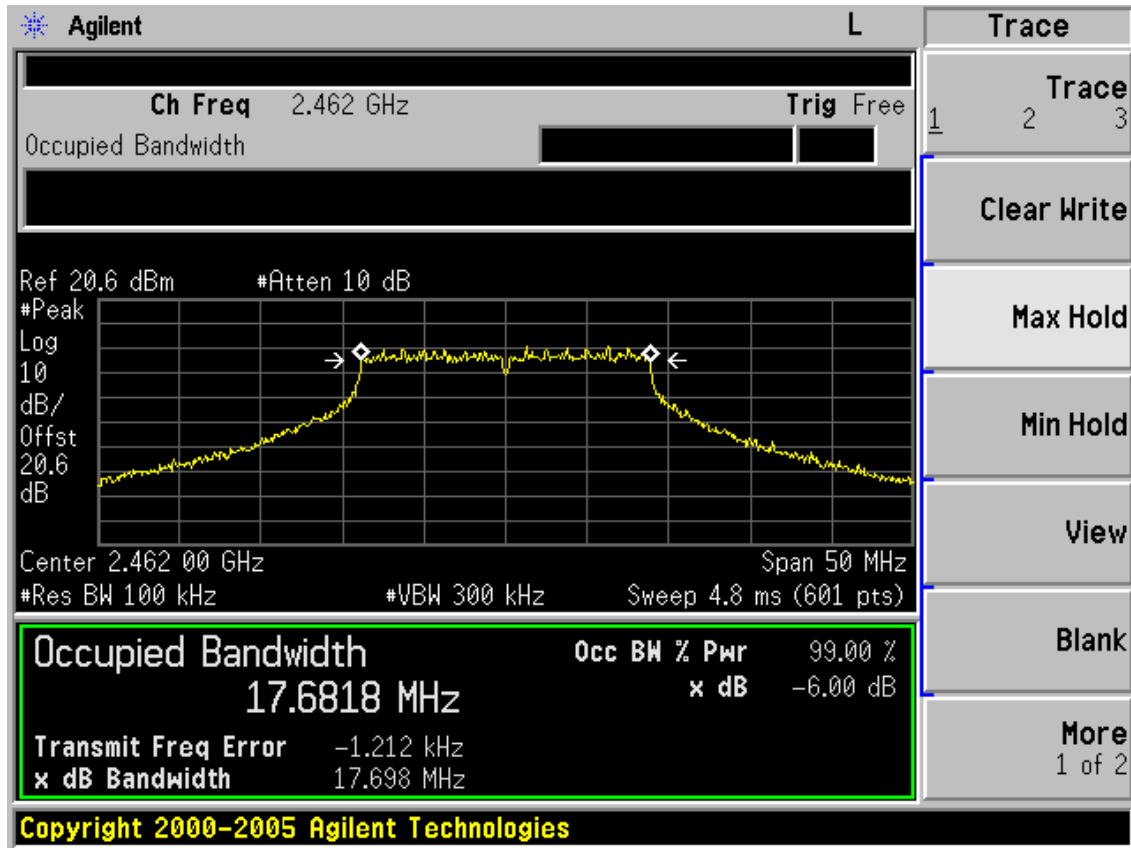
Test Mode: IEEE 802.11n HT20TX
 Test CH1: 2412MHz



Test CH6: 2437MHz

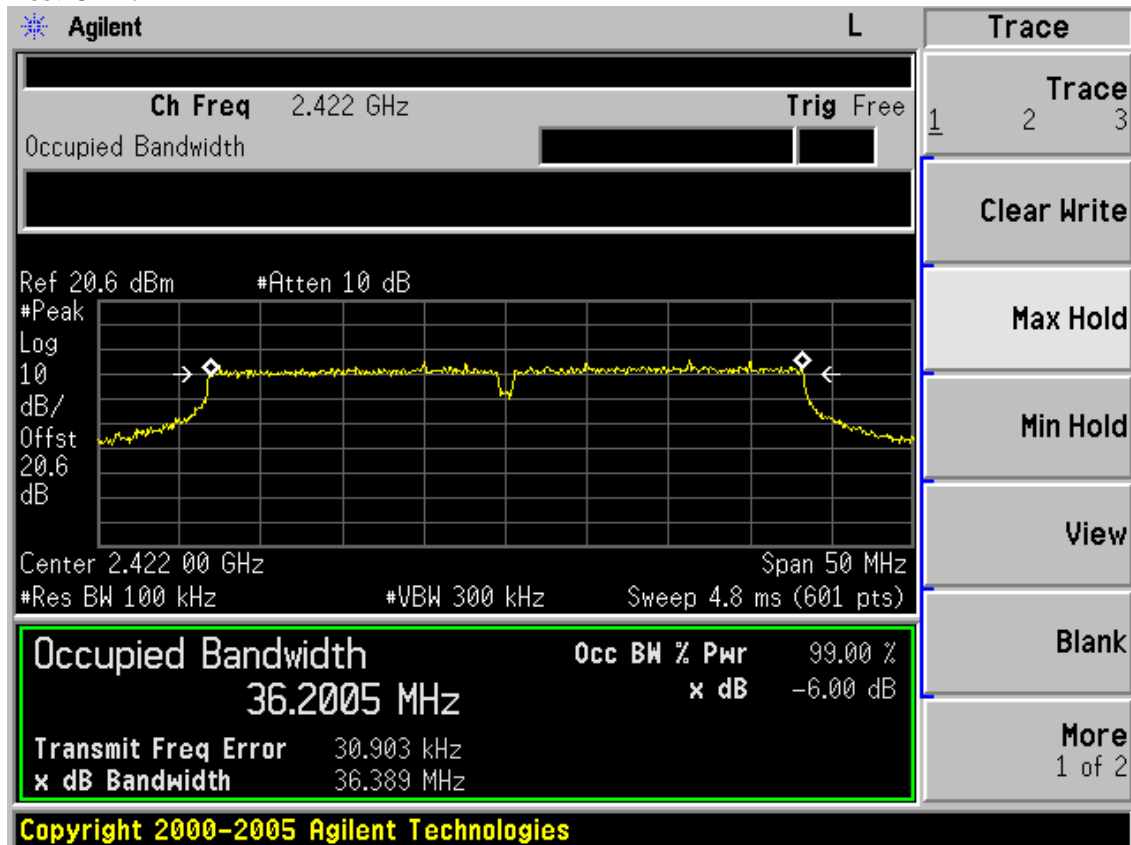


Test CH11: 2462MHz

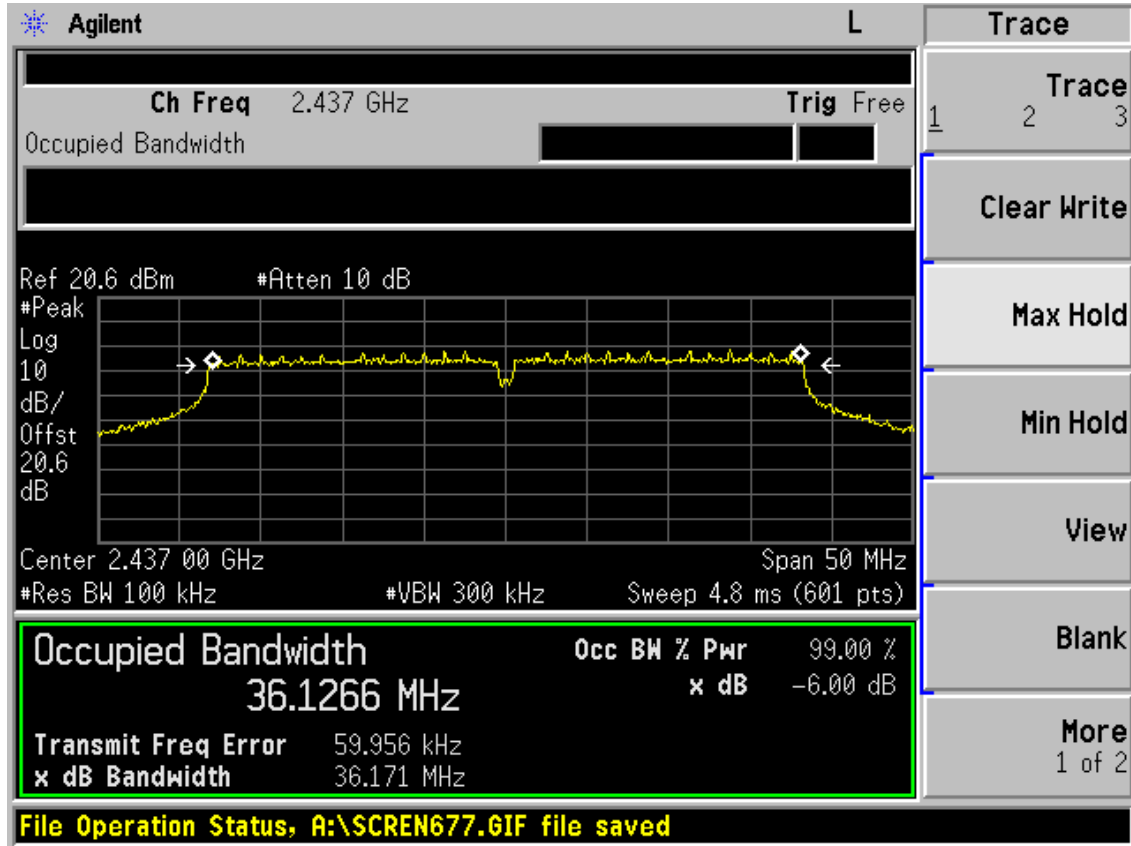


Test Mode: IEEE 802. 11n HT40TX

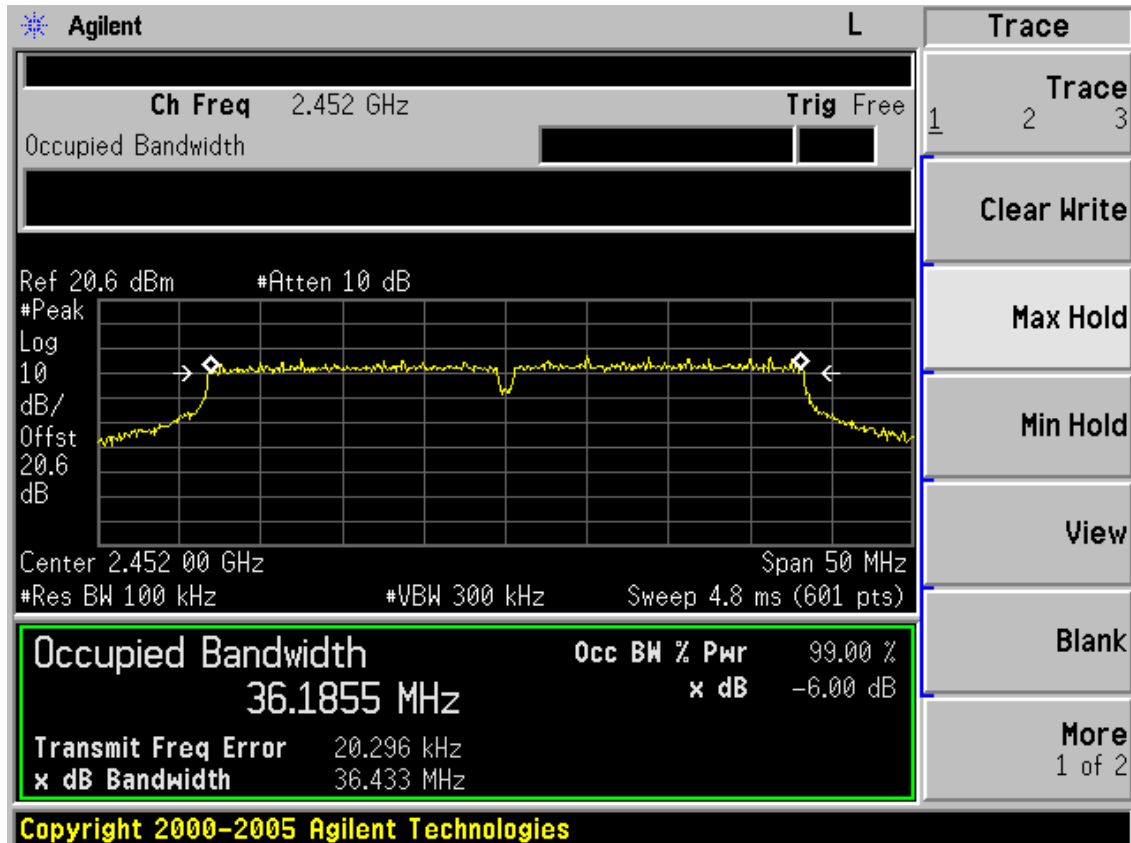
Test CH1: 2422MHz



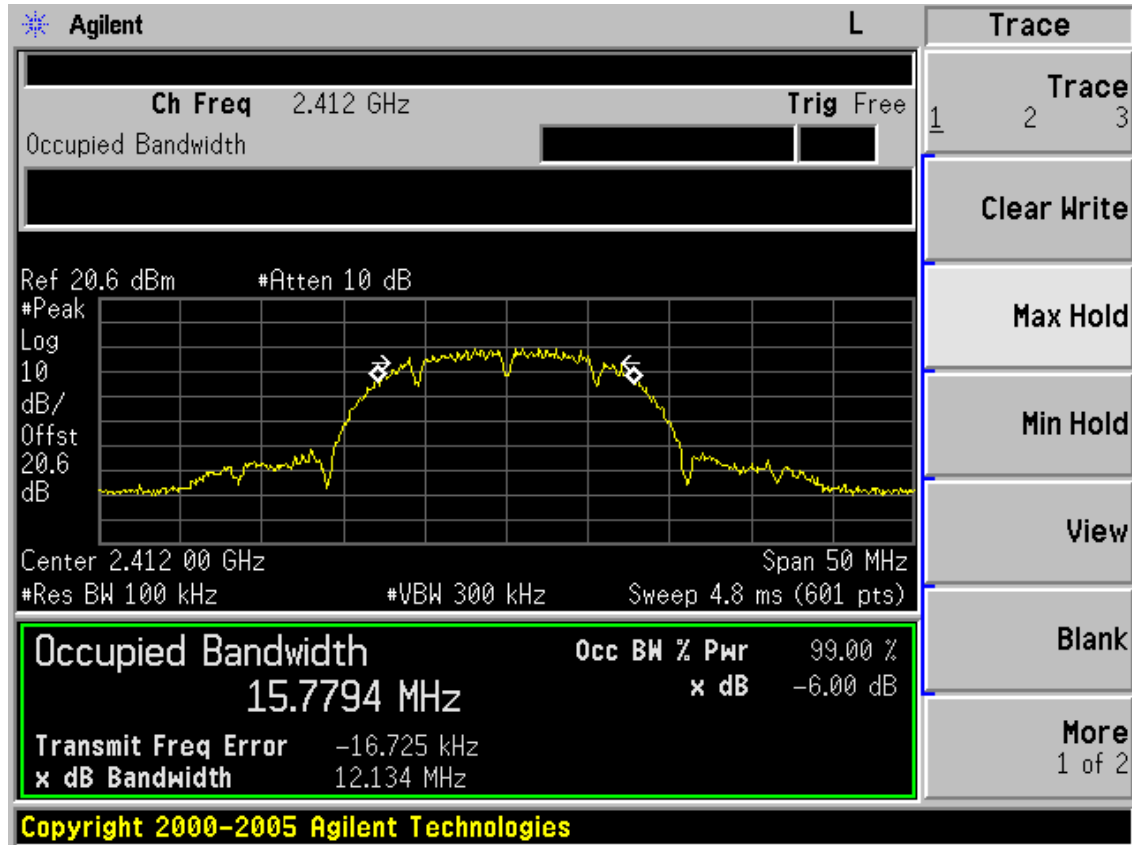
Test CH4: 2437MHz



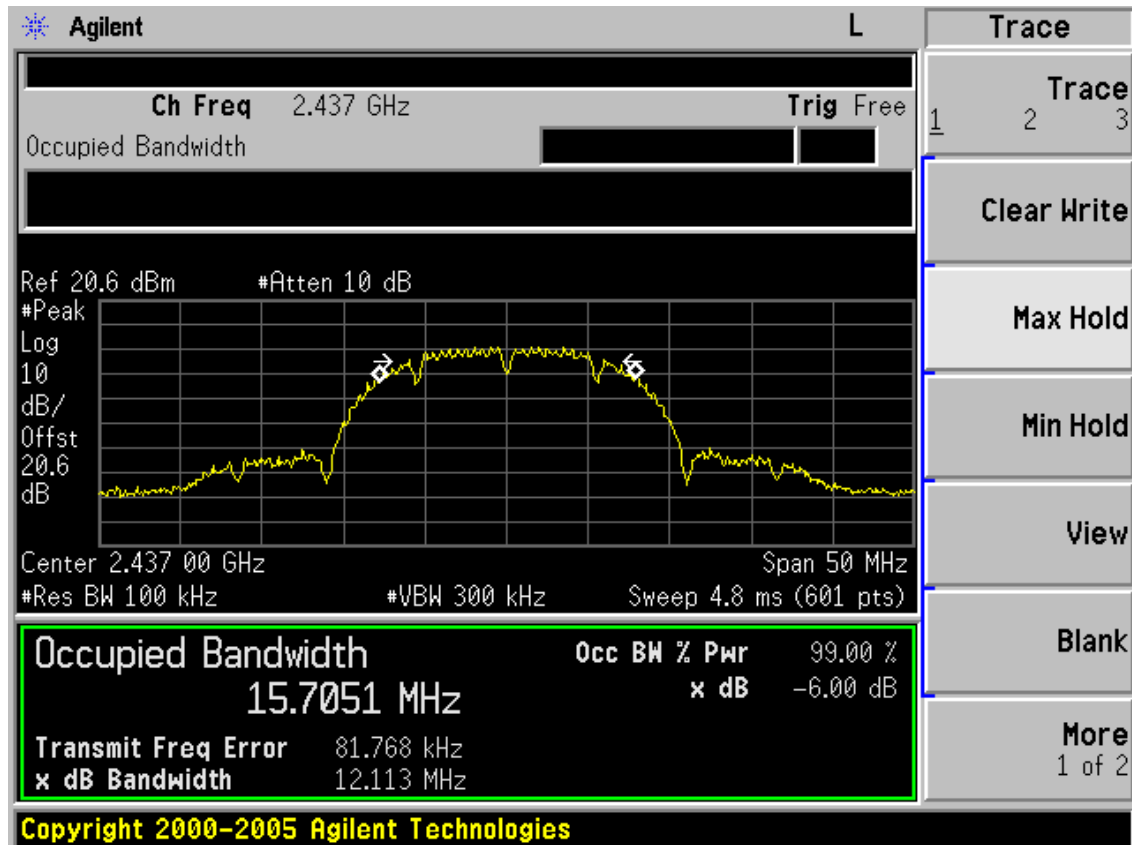
Test CH7: 2452MHz



Chain1
 Test Mode: IEEE 802.11b TX
 Test CH1: 2412MHz



Test CH6: 2437MHz



Test CH1: 2462MHz

Agilent
L

Ch Freq 2.462 GHz
Trig Free

Ref 20.6 dBm #Atten 10 dB

#Peak

Log

10

dB/

Offst

20.6

dB

Center 2.462 00 GHz Span 50 MHz

#Res BW 100 kHz #VBW 300 kHz Sweep 4.8 ms (601 pts)

Occupied Bandwidth	Occ BW % Pwr	99.00 %
15.6933 MHz	x dB	-6.00 dB
Transmit Freq Error	56.244 kHz	
x dB Bandwidth	12.607 MHz	

File Operation Status, A:\SCREN661.GIF file saved

Trace

Trace
1
2
3

Clear Write

Max Hold

Min Hold

View

Blank

More
1 of 2

Test Mode: IEEE 802.11g TX

Test CH1: 2412MHz

Agilent
L

Ch Freq 2.412 GHz
Trig Free

Ref 20.6 dBm #Atten 10 dB

#Peak

Log

10

dB/

Offst

20.6

dB

Center 2.412 00 GHz Span 50 MHz

#Res BW 100 kHz #VBW 300 kHz Sweep 4.8 ms (601 pts)

Occupied Bandwidth	Occ BW % Pwr	99.00 %
16.5393 MHz	x dB	-6.00 dB
Transmit Freq Error	1.898 kHz	
x dB Bandwidth	16.605 MHz	

File Operation Status, A:\SCREN663.GIF file saved

Trace

Trace
1
2
3

Clear Write

Max Hold

Min Hold

View

Blank

More
1 of 2

Test CH6: 2437MHz

Agilent
L
Trace

Ch Freq 2.437 GHz
Trig Free

Ref 20.6 dBm #Atten 10 dB

#Peak

Log

10

dB/

Offst

20.6

dB

Center 2.437 00 GHz Span 50 MHz

#Res BW 100 kHz #VBW 300 kHz Sweep 4.8 ms (601 pts)

Occupied Bandwidth	Occ BW % Pwr	99.00 %
16.4956 MHz	x dB	-6.00 dB
Transmit Freq Error	2.768 kHz	
x dB Bandwidth	16.550 MHz	

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1 2 3

Trace

Clear Write

Max Hold

Min Hold

View

Blank

More
1 of 2

Test CH11: 2462MHz

Agilent
L
Trace

Ch Freq 2.462 GHz
Trig Free

Ref 20.6 dBm #Atten 10 dB

#Peak

Log

10

dB/

Offst

20.6

dB

Center 2.462 00 GHz Span 50 MHz

#Res BW 100 kHz #VBW 300 kHz Sweep 4.8 ms (601 pts)

Occupied Bandwidth	Occ BW % Pwr	99.00 %
16.5244 MHz	x dB	-6.00 dB
Transmit Freq Error	11.003 kHz	
x dB Bandwidth	16.601 MHz	

File Operation Status, A:\SCREN667.GIF file saved

1 2 3

Trace

Clear Write

Max Hold

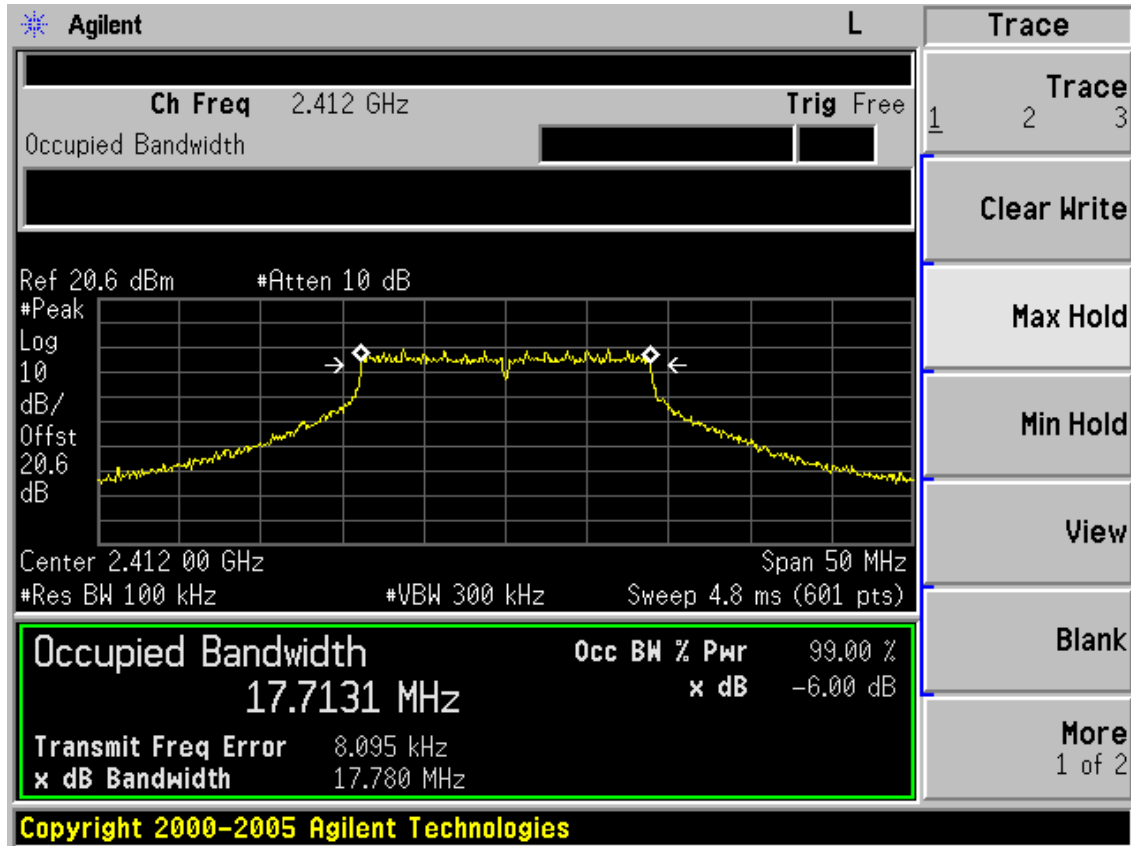
Min Hold

View

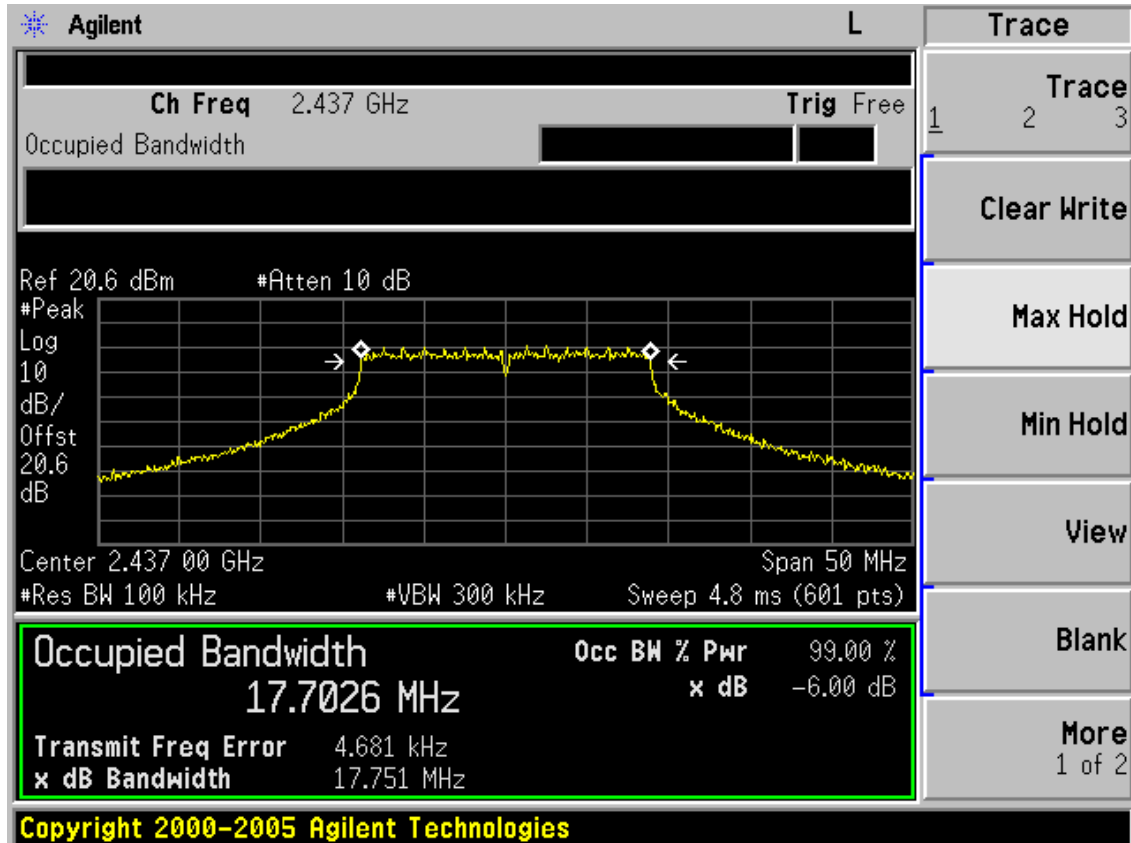
Blank

More
1 of 2

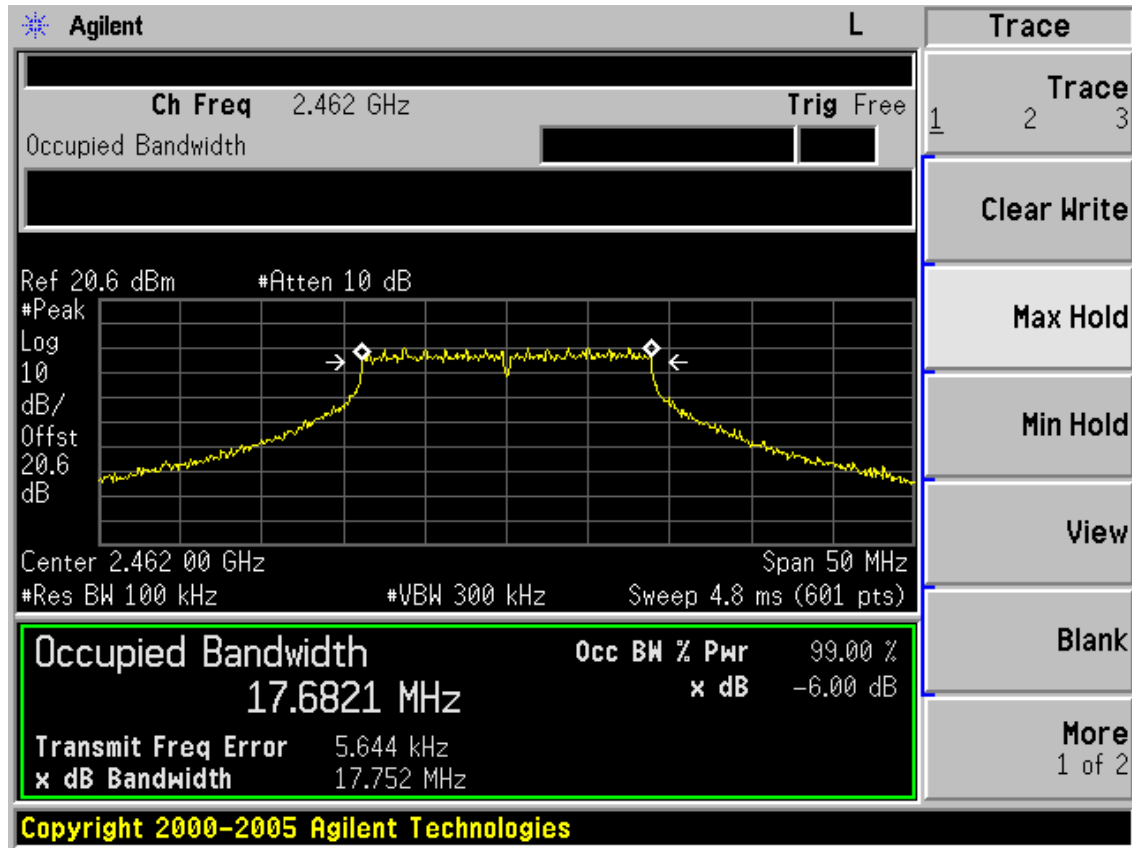
Test Mode: IEEE 802.11n HT20TX
 Test CH1: 2412MHz



Test CH6: 2437MHz

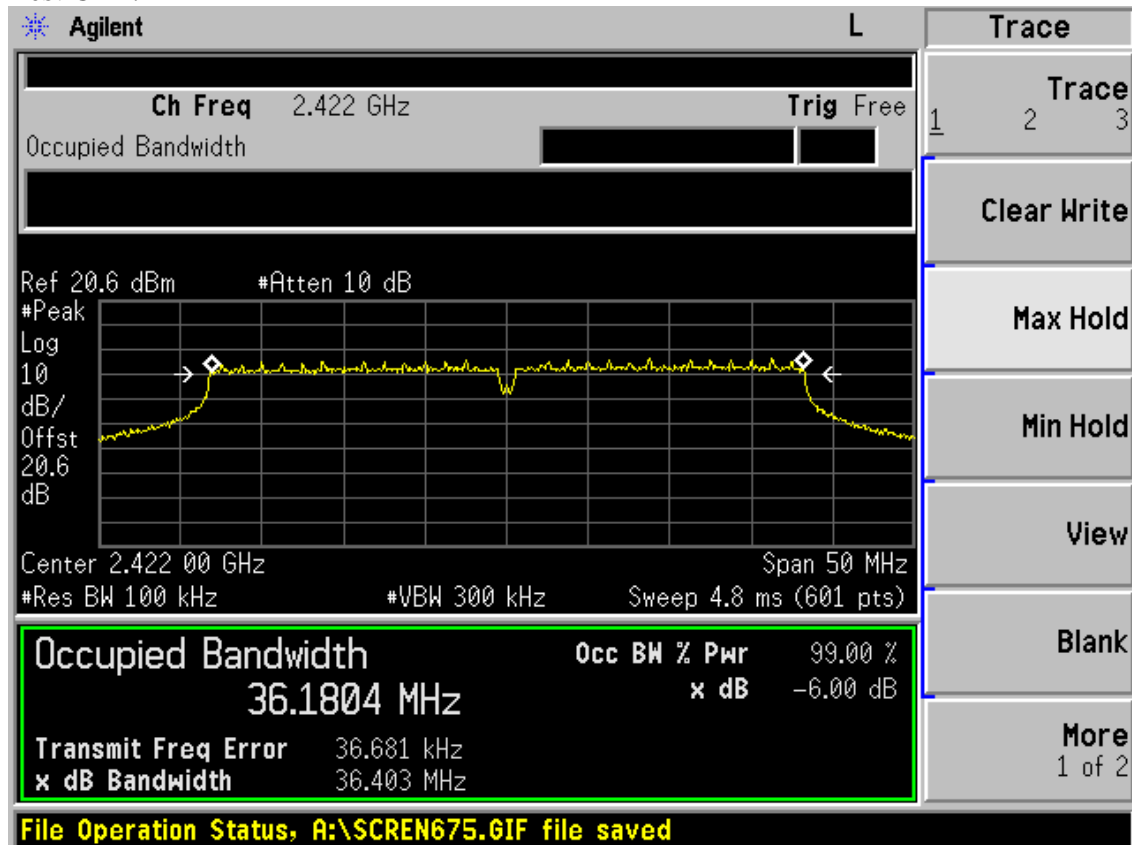


Test CH11: 2462MHz



Test Mode: IEEE 802. 11n HT40TX

Test CH1: 2422MHz



Test CH4: 2437MHz

Agilent
L

Ch Freq 2.437 GHz
Trig Free

Ref 20.6 dBm #Atten 10 dB

#Peak

Log

10

dB/

Offst

20.6

dB

Center 2.437 00 GHz Span 50 MHz

#Res BW 100 kHz #VBW 300 kHz Sweep 4.8 ms (601 pts)

Occupied Bandwidth	Occ BW % Pwr	99.00 %
36.1741 MHz	x dB	-6.00 dB
Transmit Freq Error	56.106 kHz	
x dB Bandwidth	36.125 MHz	

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Trace

Trace
1
2
3

Clear Write

Max Hold

Min Hold

View

Blank

More
1 of 2

Test CH7: 2452MHz

Agilent
L

Ch Freq 2.452 GHz
Trig Free

Ref 20.6 dBm #Atten 10 dB

#Peak

Log

10

dB/

Offst

20.6

dB

Center 2.452 00 GHz Span 50 MHz

#Res BW 100 kHz #VBW 300 kHz Sweep 4.8 ms (601 pts)

Occupied Bandwidth	Occ BW % Pwr	99.00 %
36.1688 MHz	x dB	-6.00 dB
Transmit Freq Error	43.985 kHz	
x dB Bandwidth	36.184 MHz	

File Operation Status, A:\SCREEN679.GIF file saved

Trace

Trace
1
2
3

Clear Write

Max Hold

Min Hold

View

Blank

More
1 of 2

8. OUTPUT POWER TEST

8.1. Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Power meter	Anritsu	ML2487A	6K00002472	May.08,10	1Year
2.	Power sensor	Anritsu	MA2491A	0033005	May.08,10	1Year
3	Attenuator	Agilent	8491B	MY39262165	May.08,10	1 Year
4	Spectrum Analyzer	Agilent	E4446A	US44300459	May.08, 10	1 Year
5	RF Cable	Hubersuhner	SUCOFLEX102	28618/2	May.08,10	1Year

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

For systems using digital modulation in the 2400—2483.5MHz, 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 20dB attenuator.
- 2, For IEEE 802.11b/g and IEEE802.11n HT20 mode, use a PK power meter which’s bandwidth is 20MHz and above 6dB 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 Bandwidth correction method according to ANSI C63.10 clause 6.10.2.1 part (c) was used:
 - 1) Set the RBW=3MHz and VBW =8MHz
 - 2) Turn averaging off
 - 3) Set sweep to automatic
 - 4) Set the span just large enough to capture the emission
 - 5) Use a peak detector on max hold
 - 6) Record the measured power
 - 7) Calculate Output power of EUT use the formula:

Peak output power =measured power+ 10log[(6dB bandwidth of emission)/(analyzer RBW)]

- 4, For IEEE802.11n mode, it’s MIMO technology, so account total PK output power by add each chain’s PK output power.

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

8.4. Test Results

EUT: 300Mbps Wireless N Router		
M/N: PW-RN501D		
Test date: 2011-01-08	Pressure: 100.6 kpa	Humidity: 60%
Tested by: Sunny-lu	Test site: RF site	Temperature : 25°C

Cable loss: 0.6dB		Attenuator loss: 20 dB		Antenna Gain: 5.0dBi	
Mode	CH	Result			Limit (dBm)
		Chain 0 PK Output power(dBm)	Chain 1 PK Output power(dBm)	Total PK Output power(dBm)	
11b	CH1	20.17	20.07	23.13	30
	CH6	20.52	19.97	23.26	30
	CH11	20.20	19.76	23.00	30
11g	CH1	20.68	20.37	23.54	30
	CH6	22.52	22.20	25.37	30
	CH11	20.24	19.89	23.08	30
11n HT20	CH1	20.29	19.20	22.79	30
	CH6	22.46	21.94	25.22	30
	CH11	20.43	19.65	23.07	30

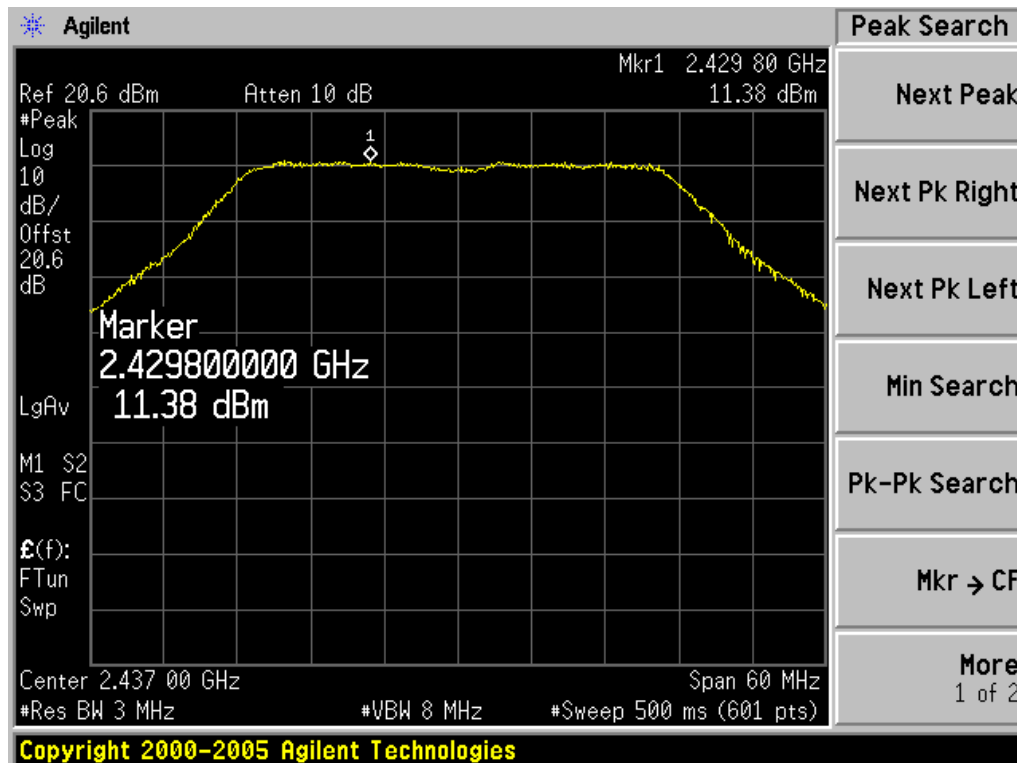
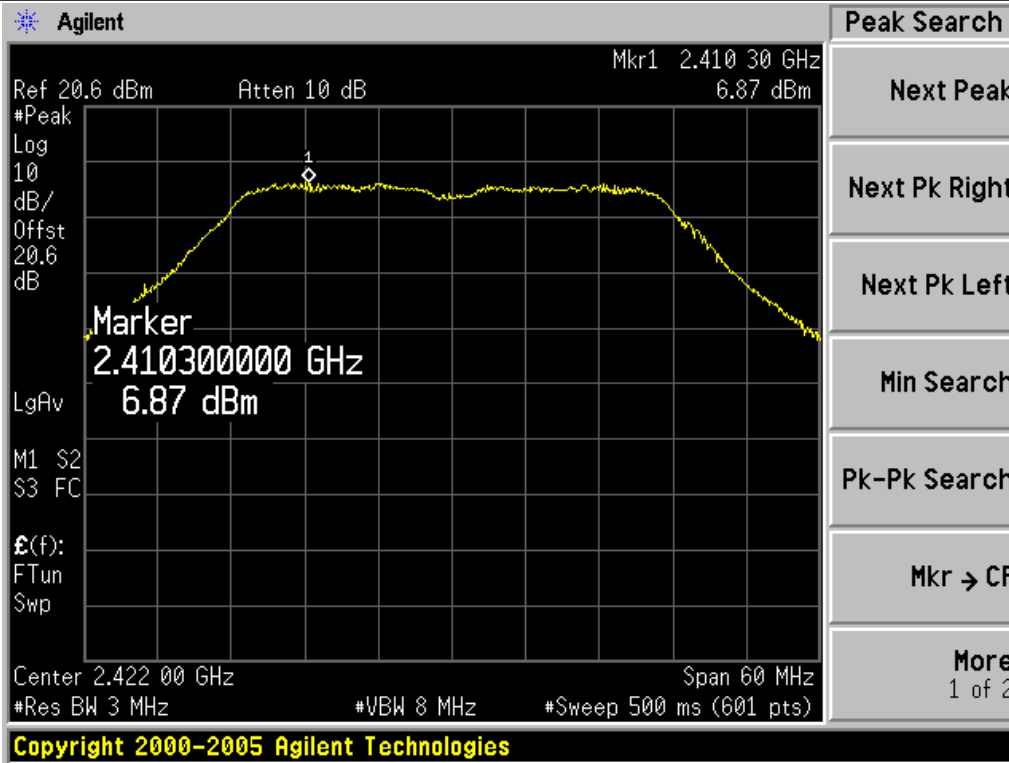
Mode	CH	Result					Limit (dBm)
		Chain 0 Measured power(dBm)/3 MHz	Chain 0 PK Output power(dBm)	Chain 1 Measured power(dBm)/ 3MHz	Chain 1 PK Output power(dBm)	Total PK Output Power (dBm)	
11n HT40	CH1	6.87	17.78	6.58	17.49	20.65	30
	CH4	11.38	22.29	10.43	21.34	24.85	30
	CH7	6.68	17.59	6.18	17.09	20.36	30

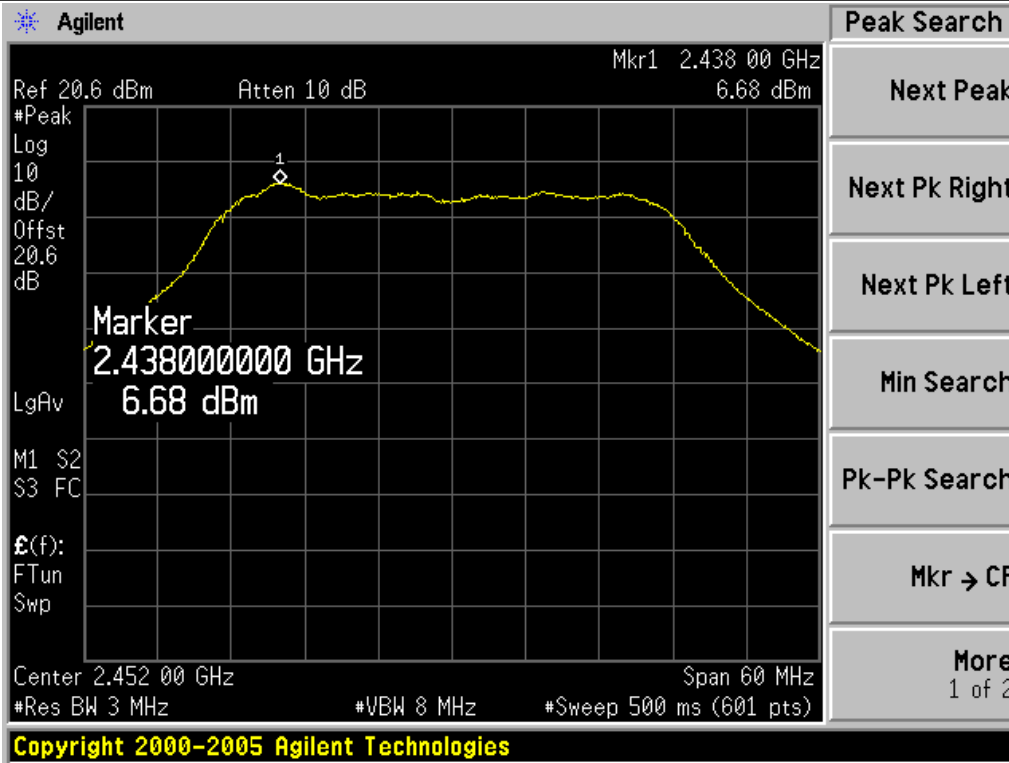
6dB Bandwidth for 11n HT40: 37MHz

BW correction factor = $10\log[(37\text{MHz})/(3\text{MHz})] = 10.91\text{dB}$

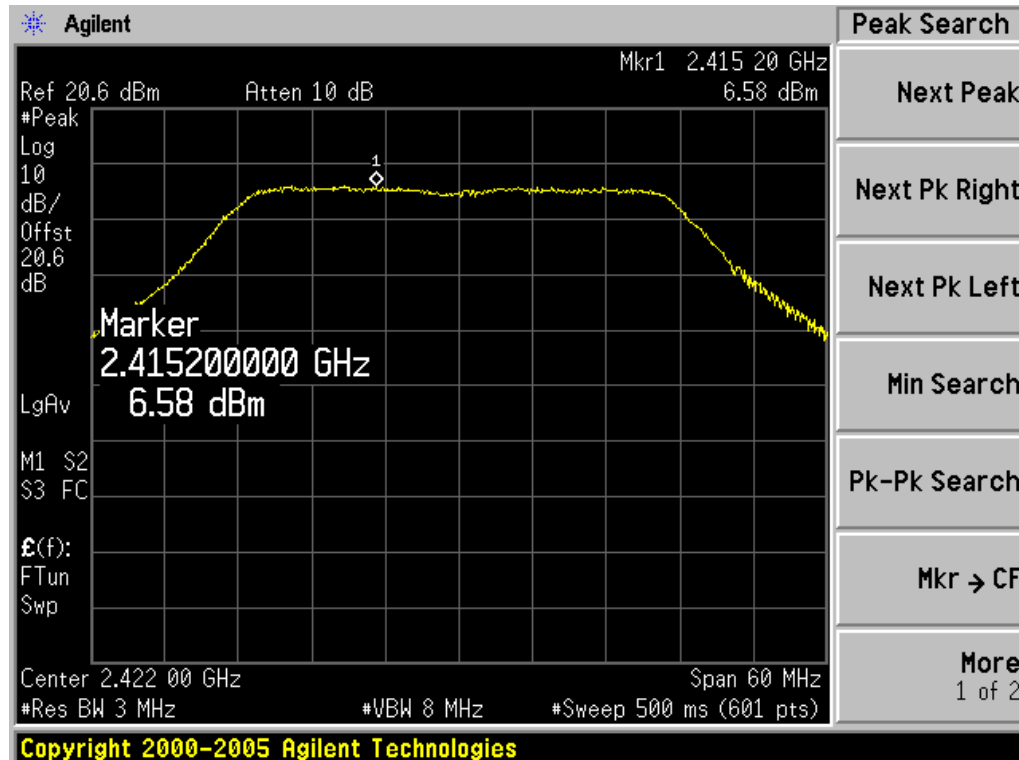
Conclusion: PASS

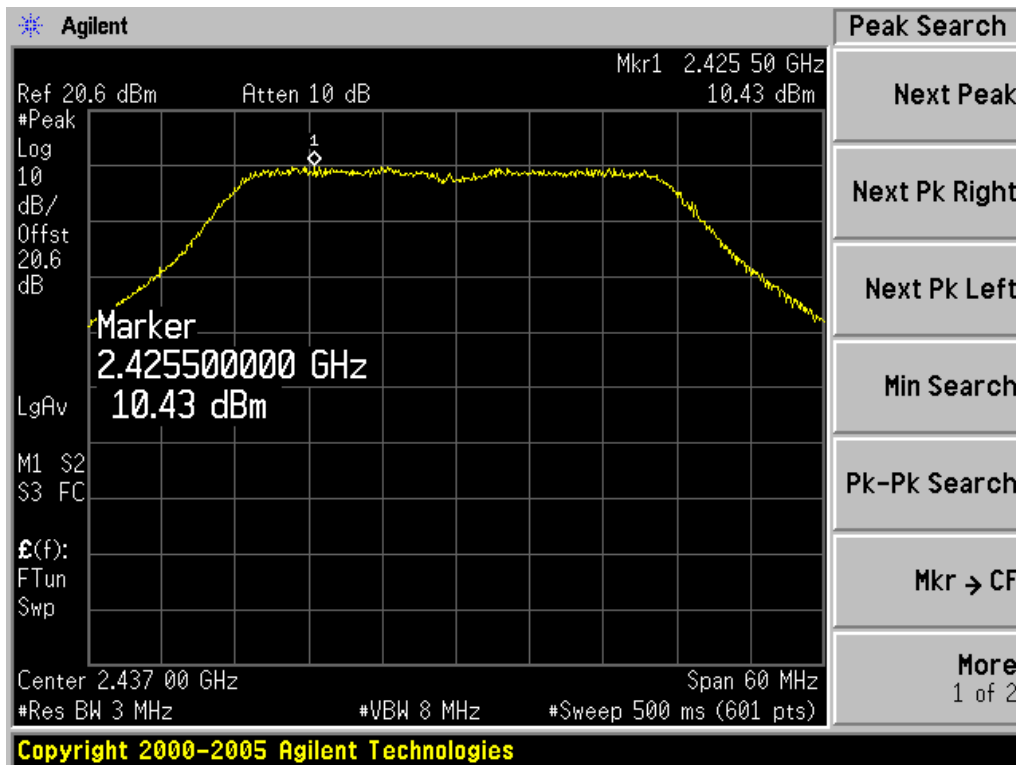
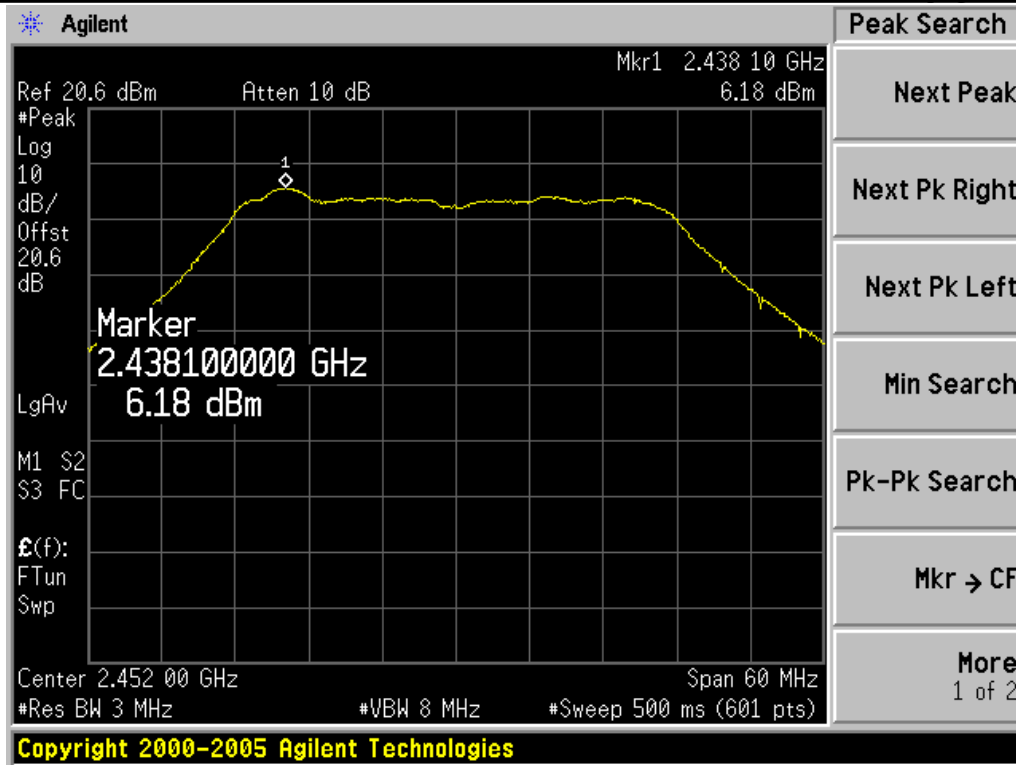
Chain 0





Chain 1





9. POWER SPECTRAL DENSITY TEST

9.1. Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum Analyzer	Agilent	E4446A	US44300459	May.08, 10	1 Year
2.	Attenuator	Agilent	8491B	MY39262165	May.08, 10	1 Year
3.	RF Cable	Hubersuhner	SUCOFLEX102	28618/2	May.08, 10	1Year

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, Follow the test procedure as described in ANSI C.10: 2009 Clause 6.11.2.3 to measure out each test modes and chain's power density with 3KHz.

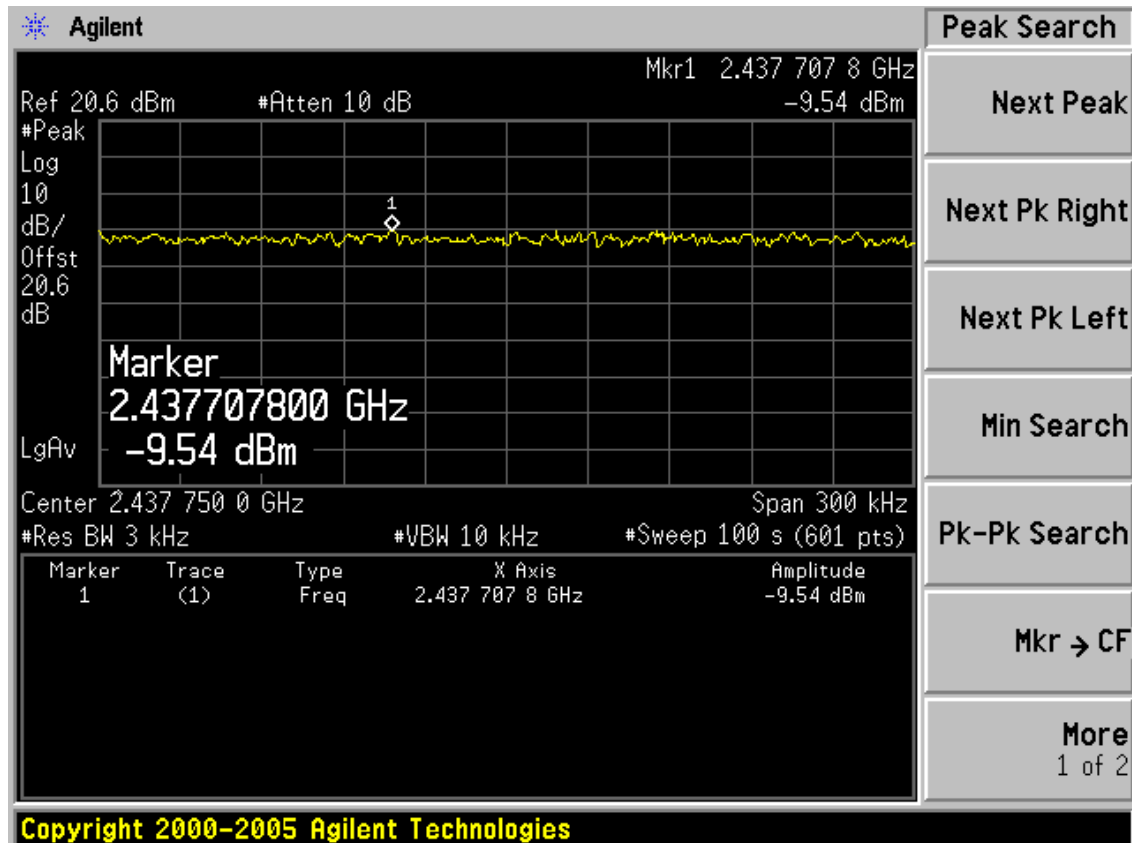
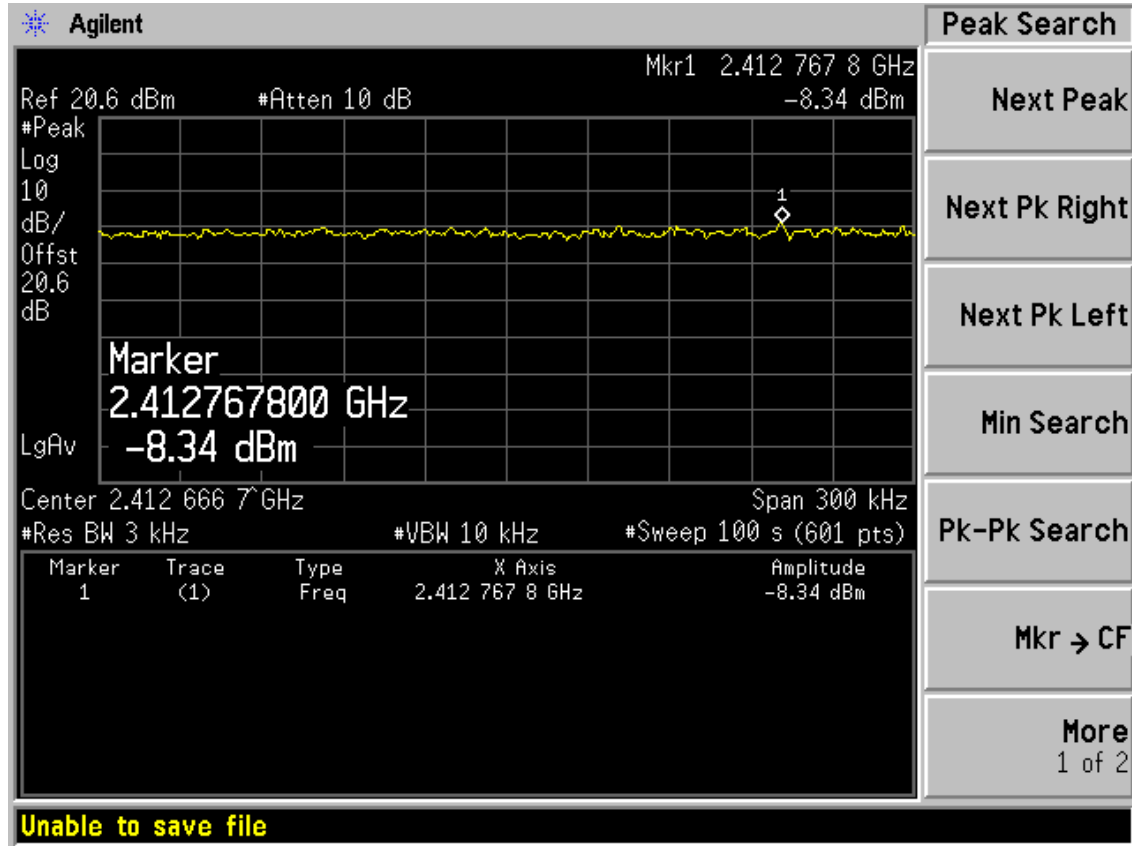
9.4. Test Results

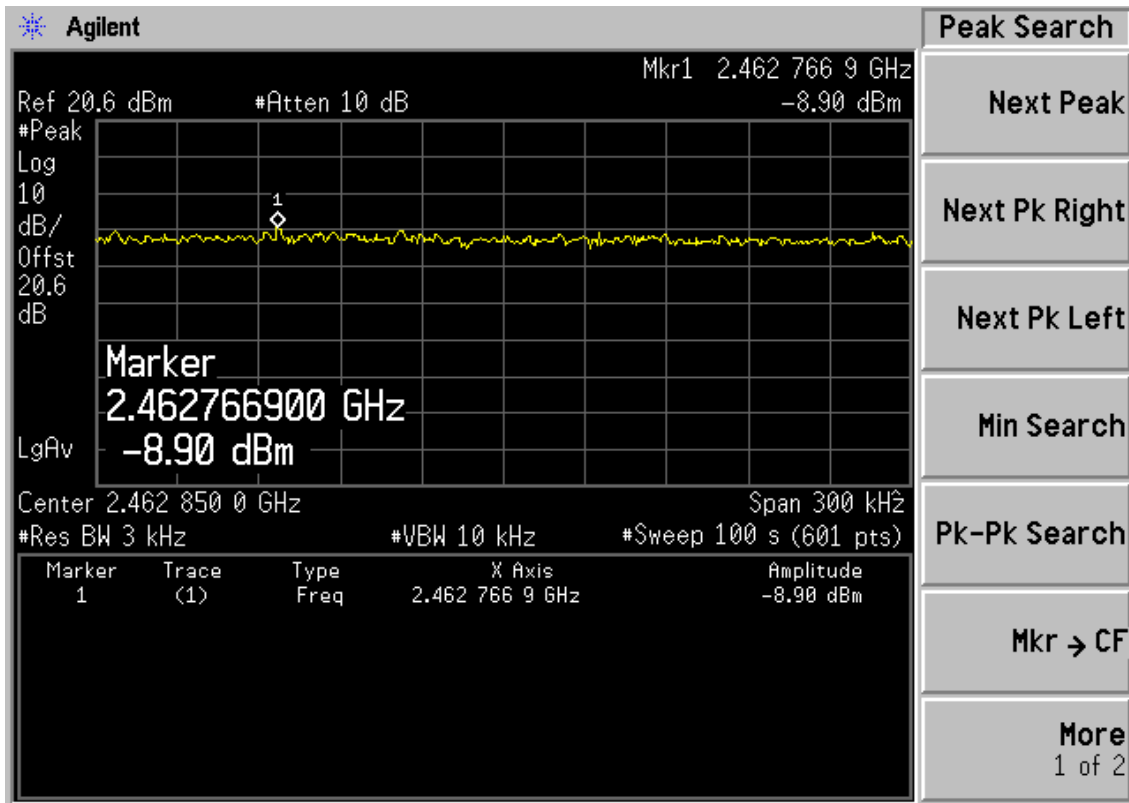
EUT:300Mbps Wireless N Router		
M/N: PW-RN501D		
Test date:2011-01-08	Pressure:100.6kpa	Humidity:60%
Tested by:Sunny-lu	Test site: RF site	Temperature : 25°C

Cable loss:0.6dB		Attenuator loss: 20dB		Antenna Gain: 5.0dBi	
Mode	CH	Result			Limit
		Chain0 Power density (dBm/3KHz)	Chain1 Power density (dBm/3KHz)	Total Power density (dBm/3KHz)	(dBm/3KHz)
11b	CH1	-8.34	-8.59	-5.45	8
	CH6	-9.54	-9.80	-6.66	8
	CH11	-8.90	-10.25	-6.51	8
11g	CH1	-13.15	-13.48	-10.30	8
	CH6	-9.31	-11.49	-7.25	8
	CH11	-12.83	-12.53	-9.67	8
11n HT20	CH1	-13.27	-13.82	-10.53	8
	CH6	-9.39	-11.61	-7.35	8
	CH11	-14.34	-13.14	-10.69	8
11n HT40	CH1	-18.65	-17.59	-15.08	8
	CH5	-12.83	-14.30	-10.49	8
	CH9	-14.47	-18.21	-12.94	8
Conclusion: PASS					

Chain 0

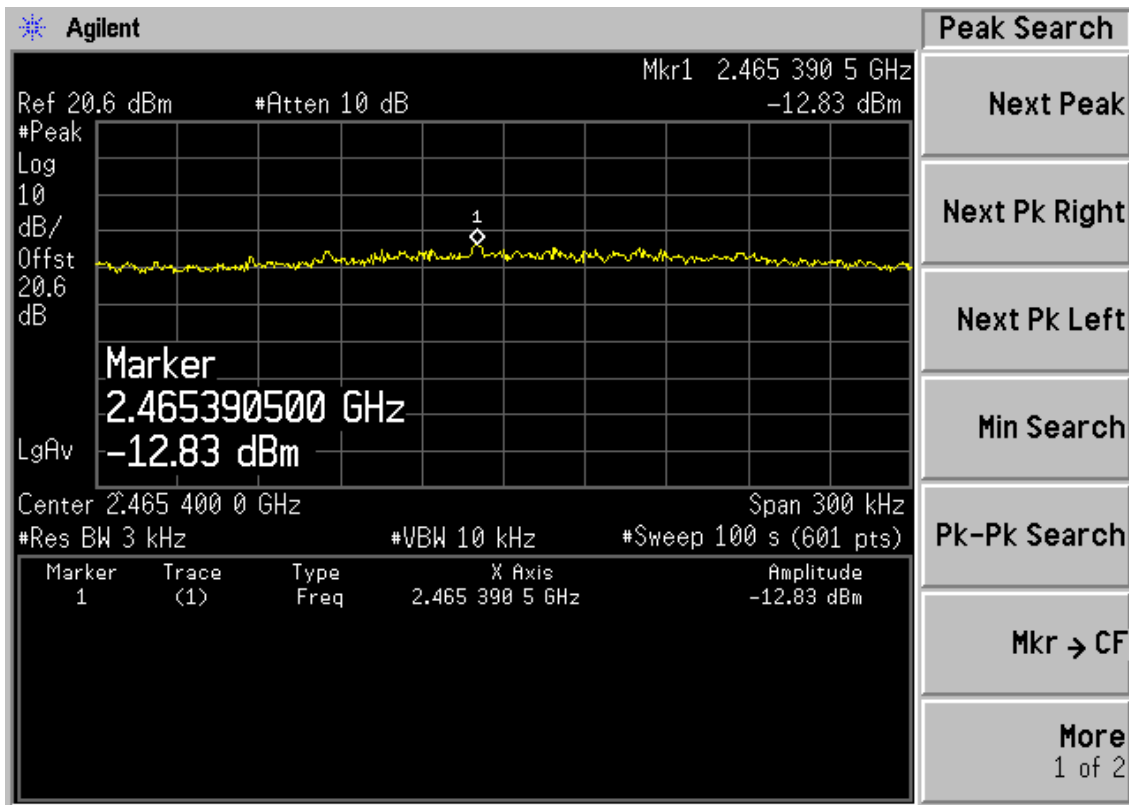
Test Mode: IEEE 802.11b TX



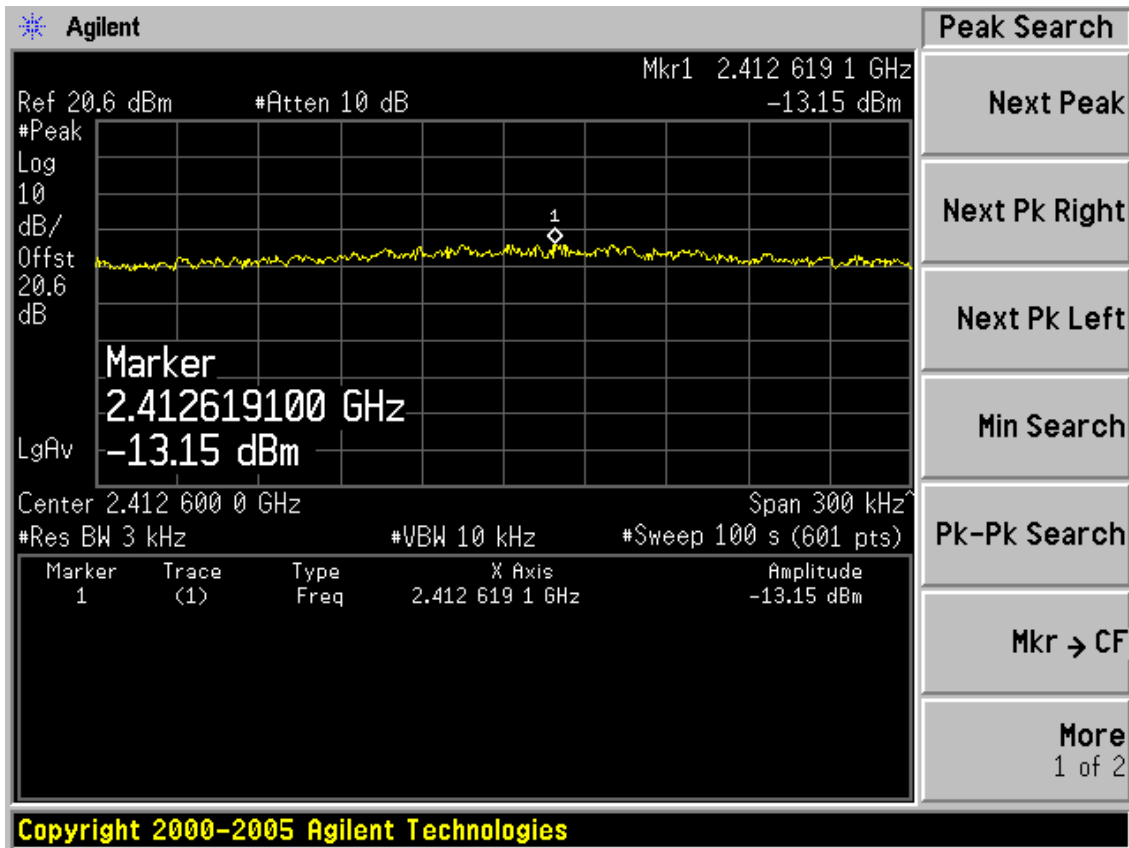
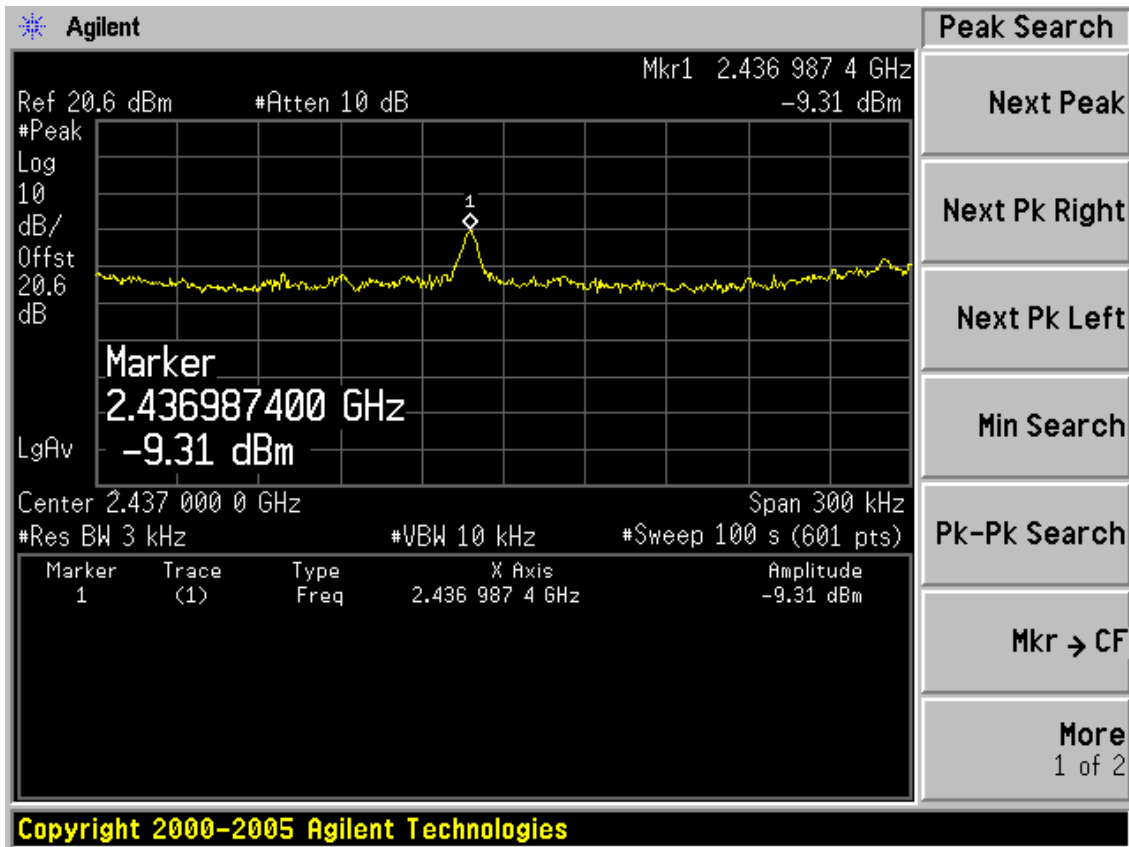


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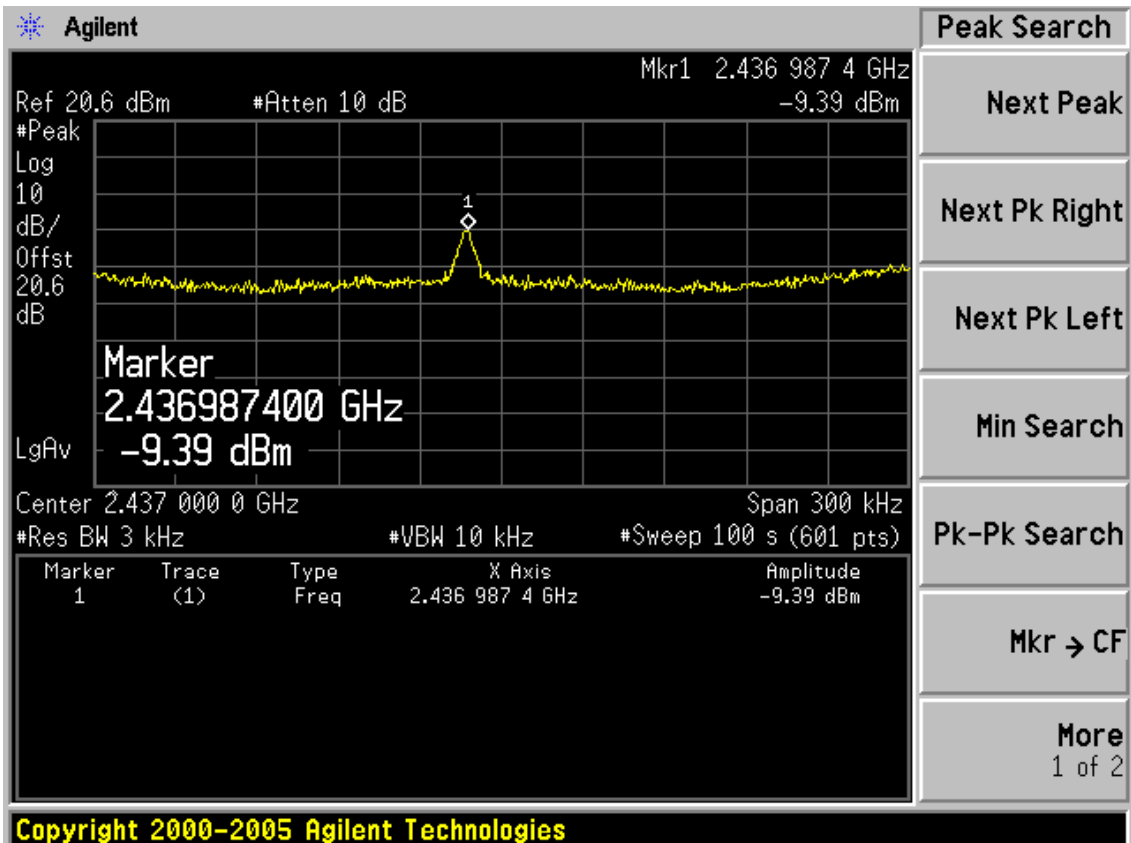
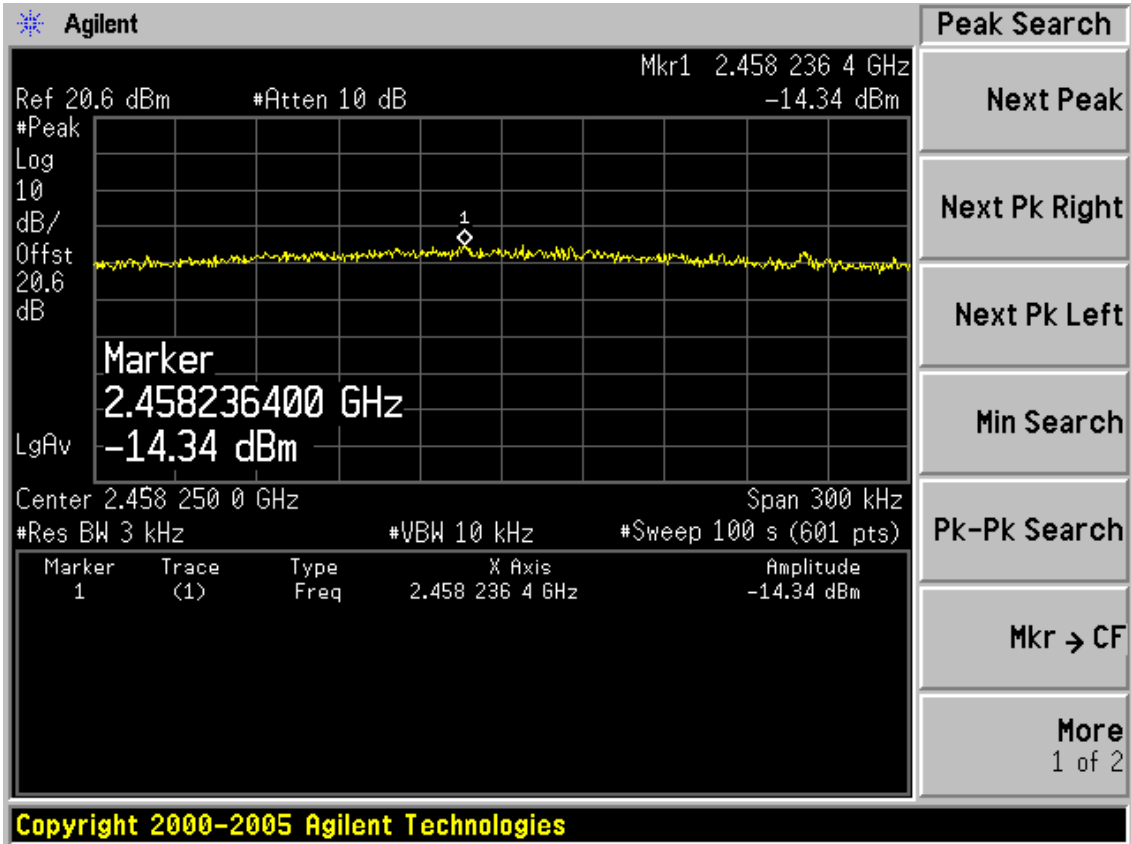
Test Mode: IEEE 802.11g TX

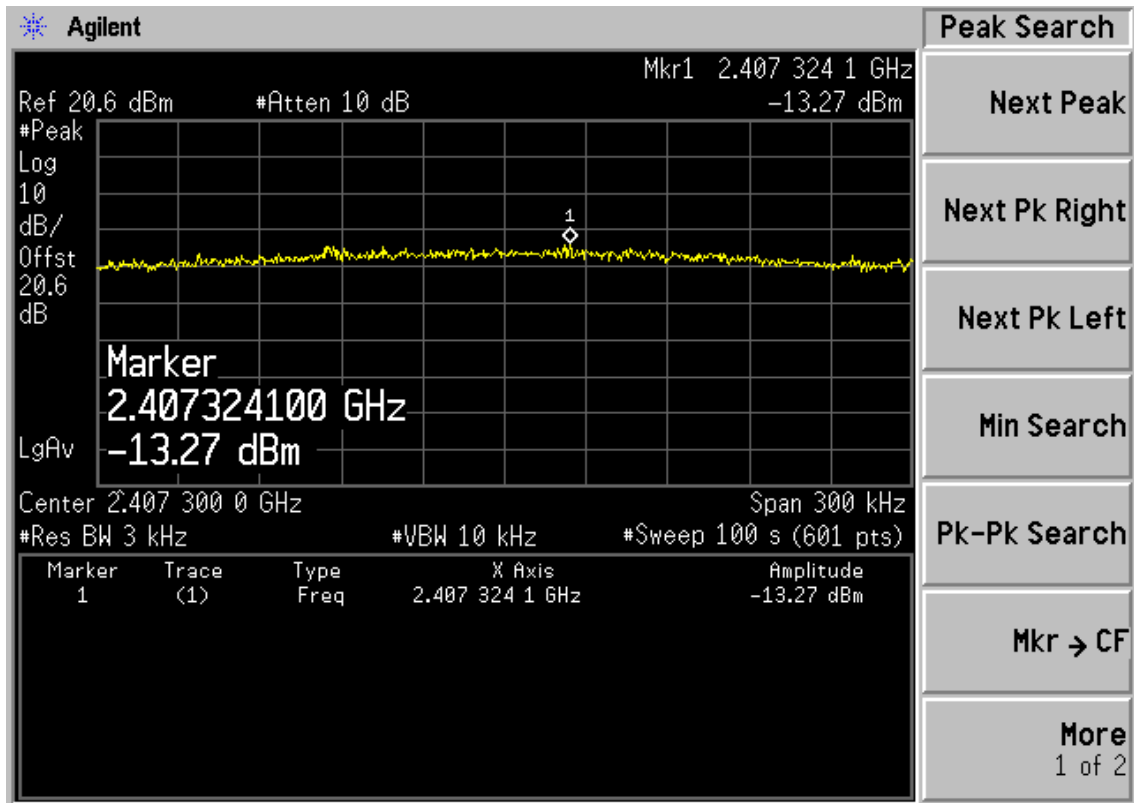


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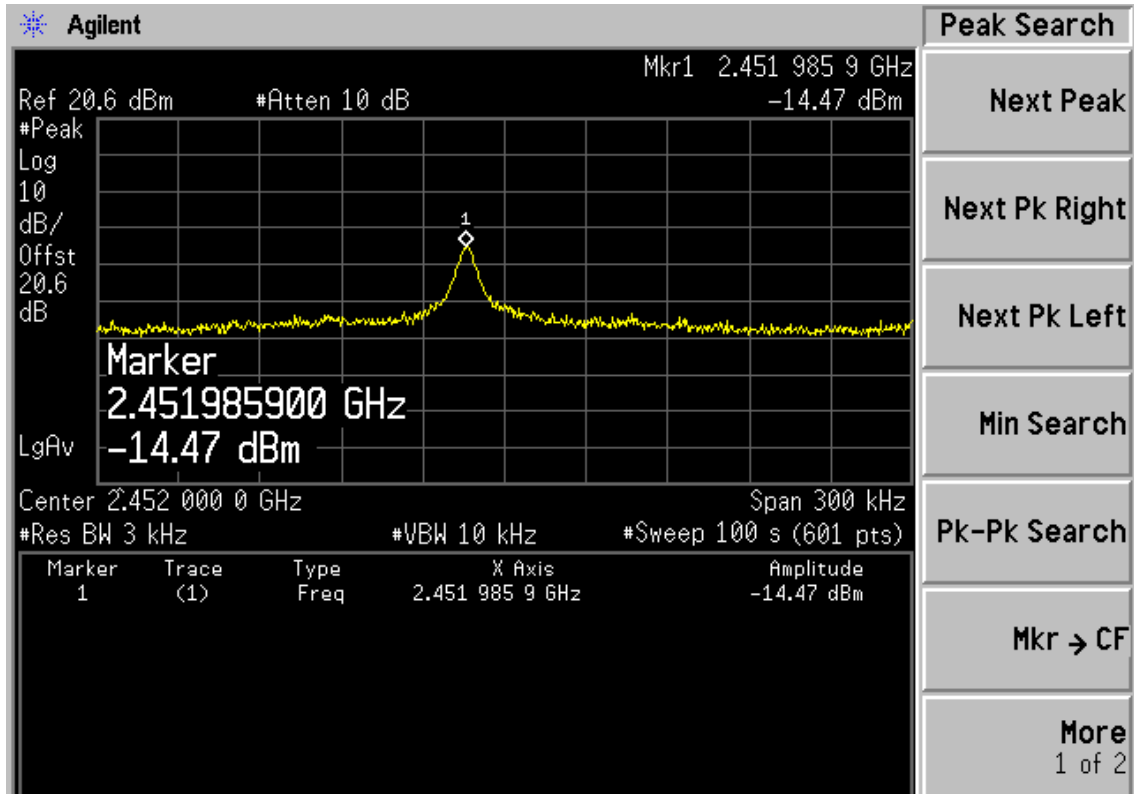
Test Mode: IEEE 802.11n HT20 TX



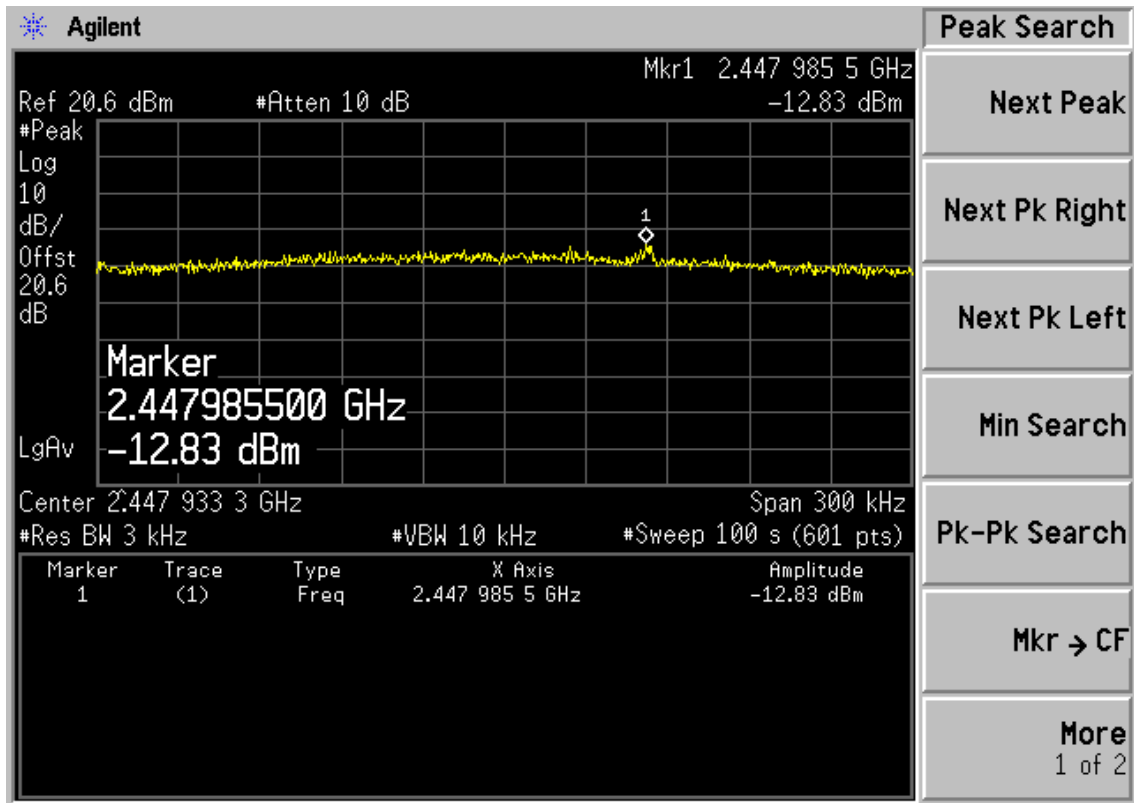


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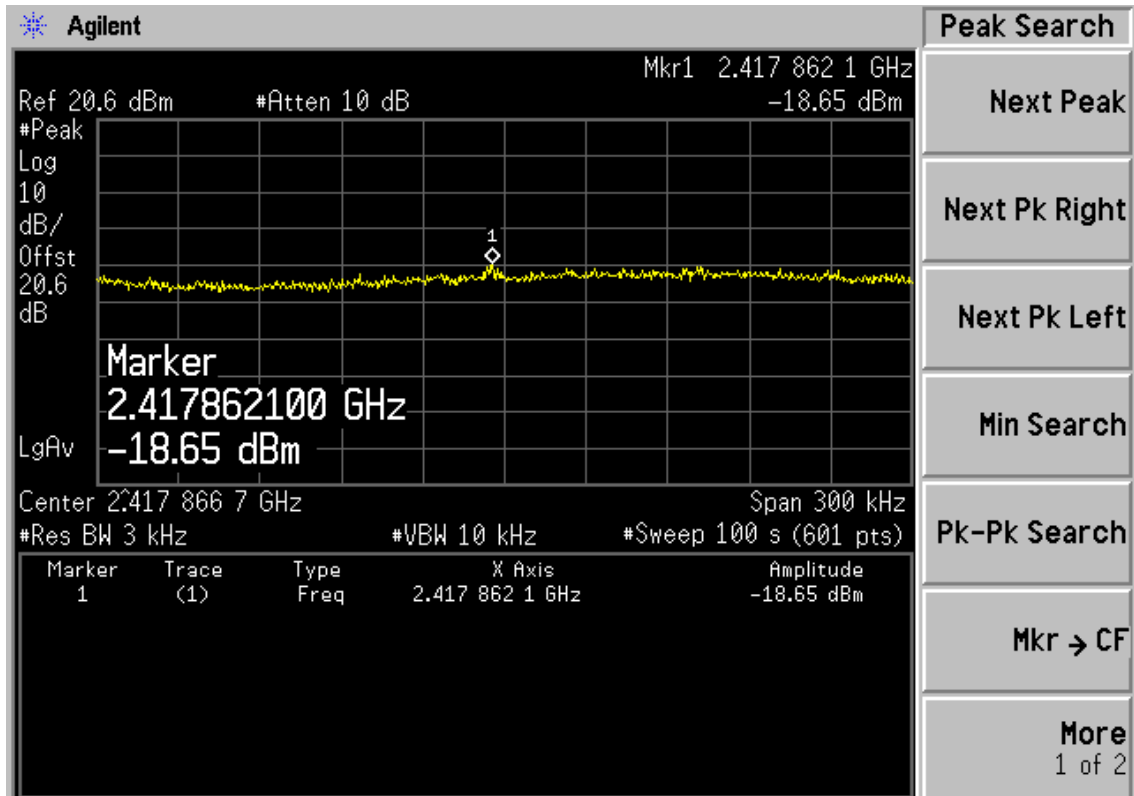
Test Mode: IEEE 802. 11n HT40 TX



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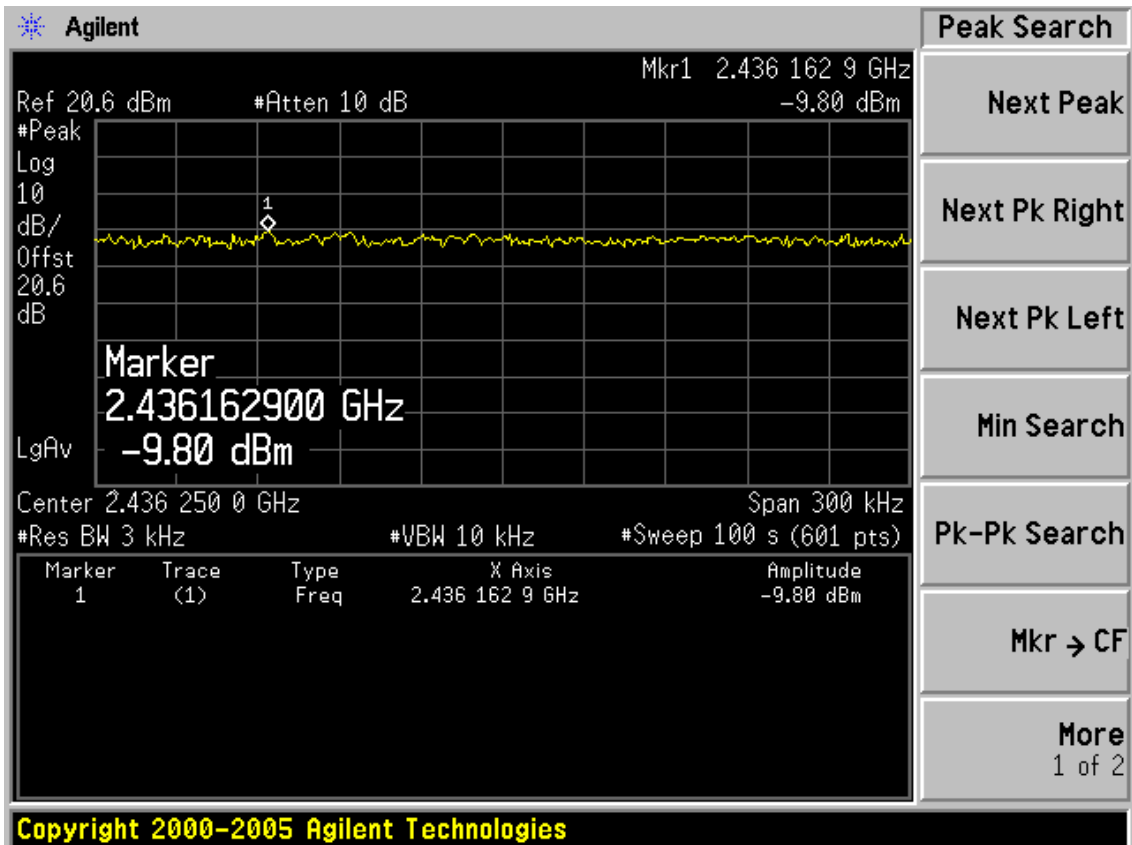
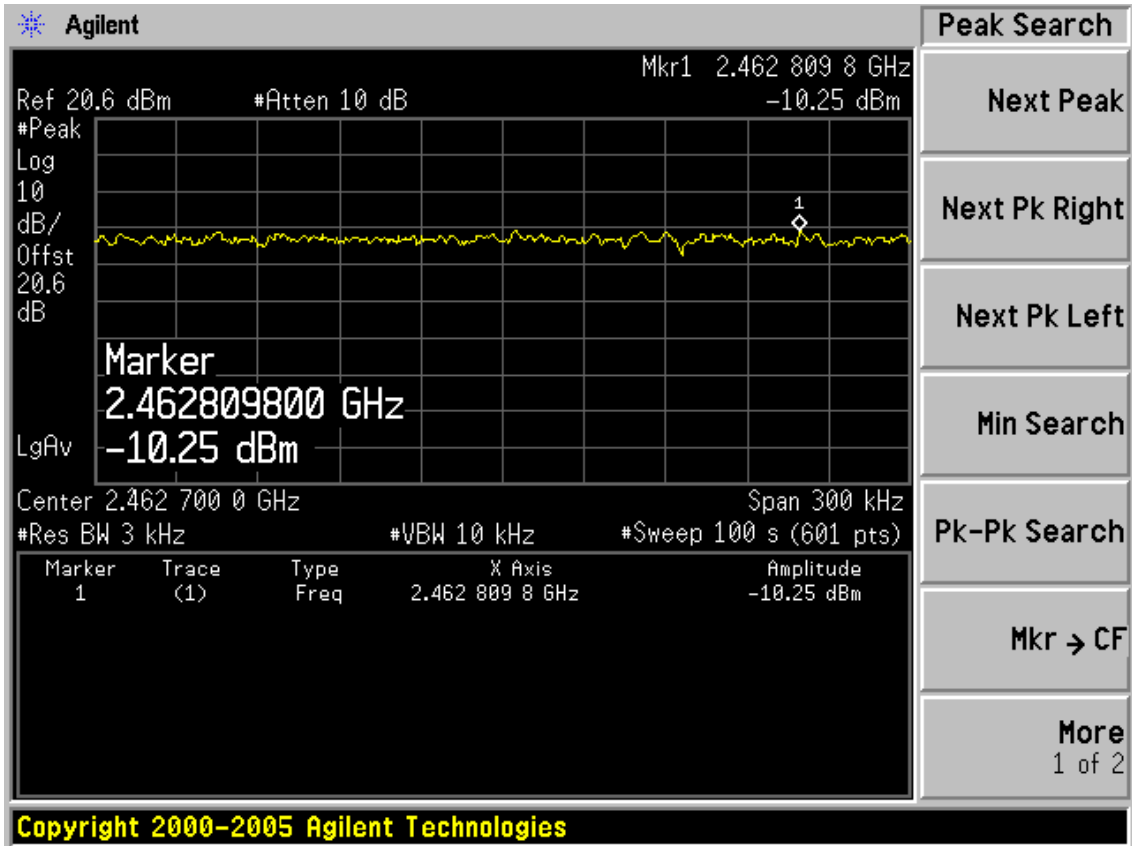
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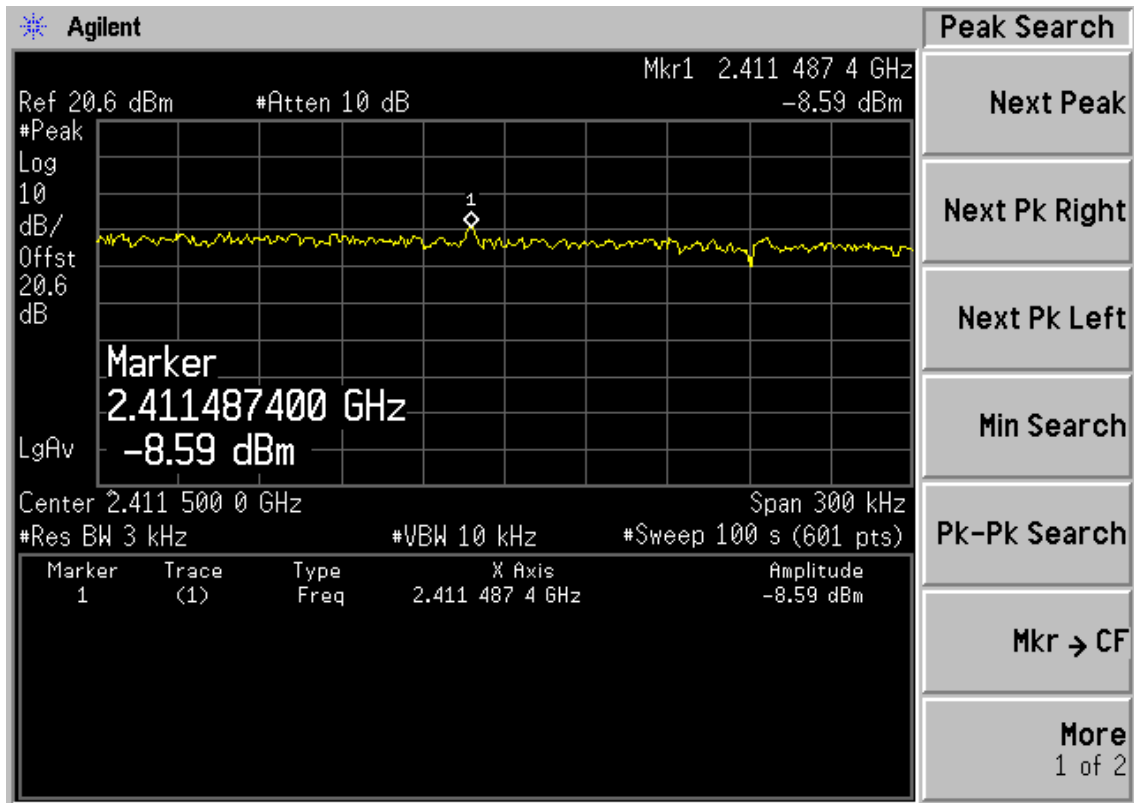


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Chain 1

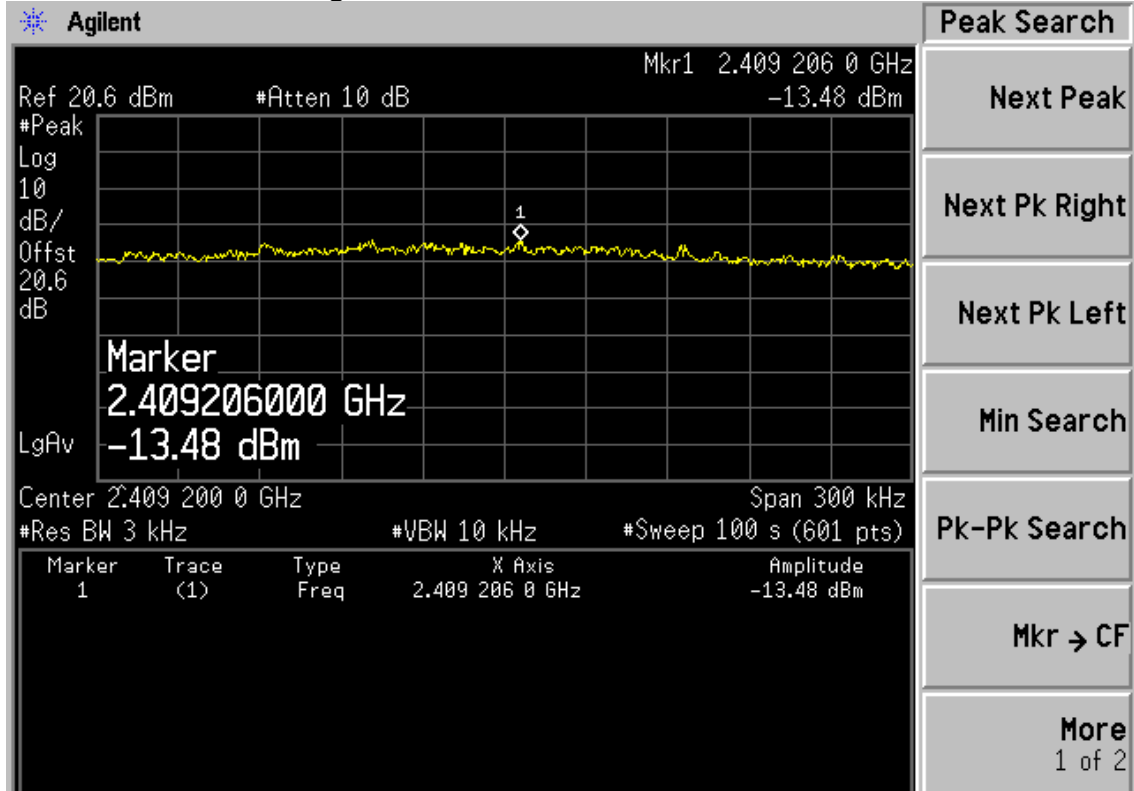
Test Mode: IEEE 802.11b TX



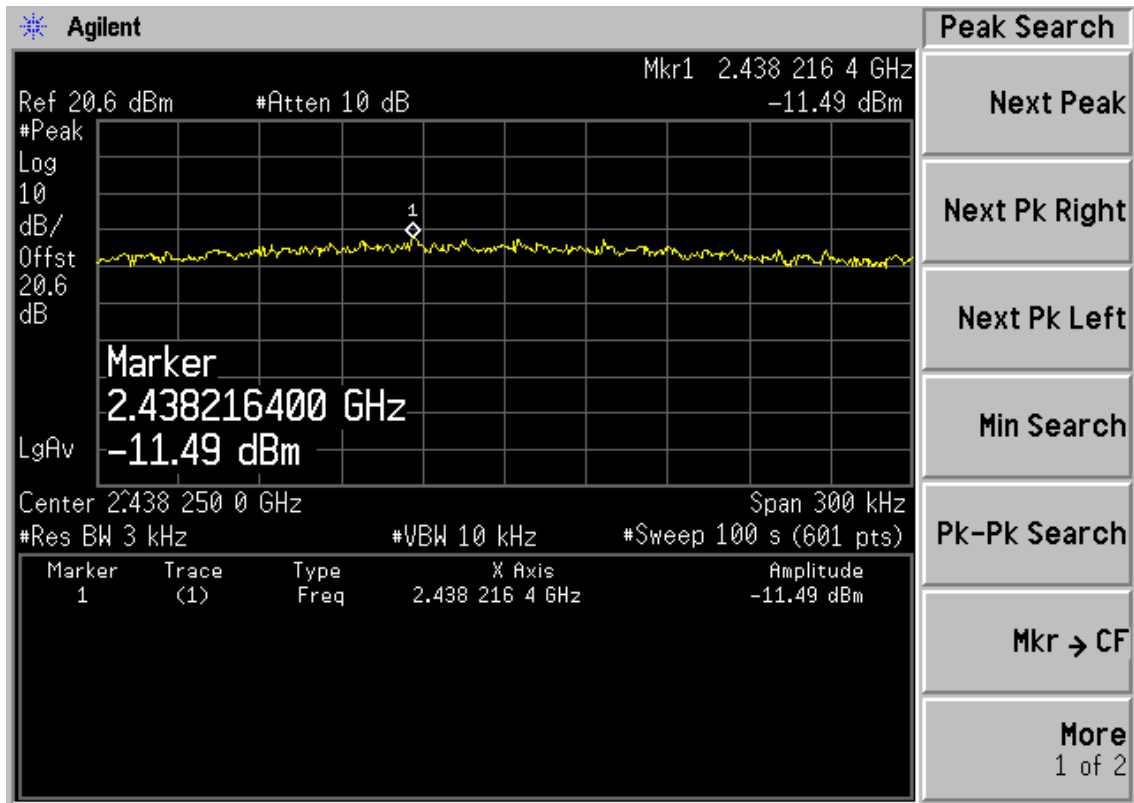


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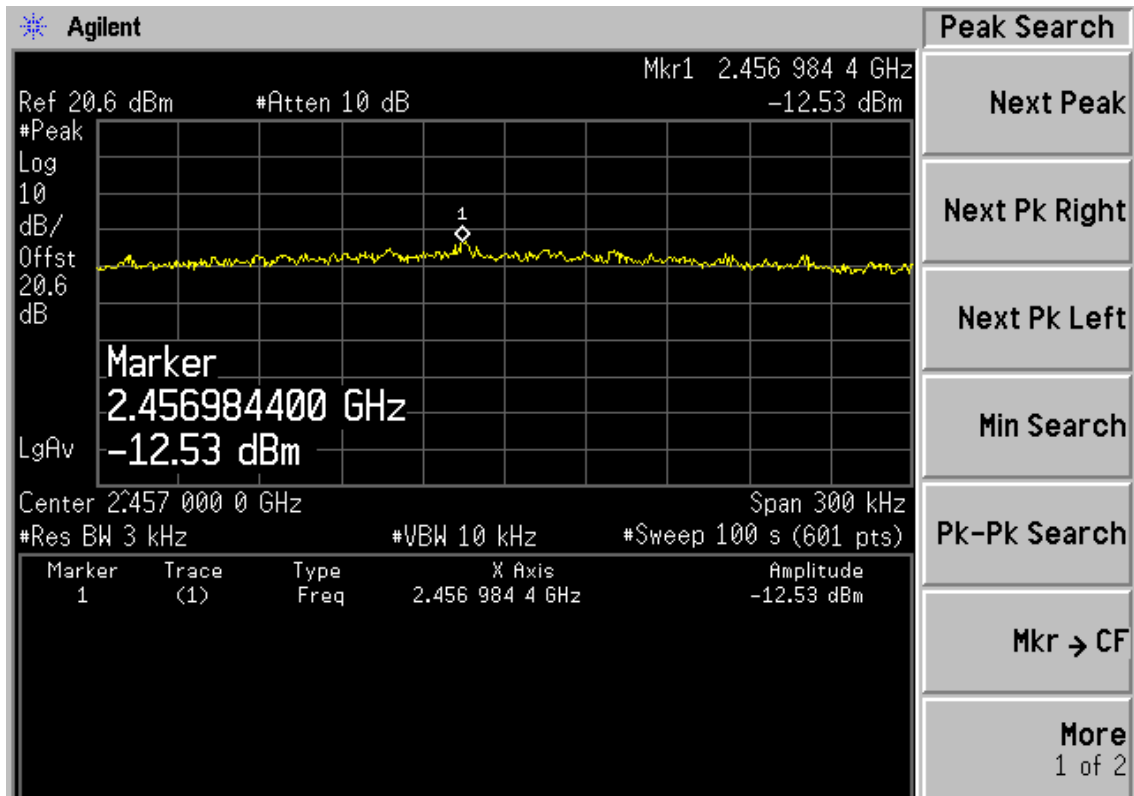
Test Mode: IEEE 802.11g TX



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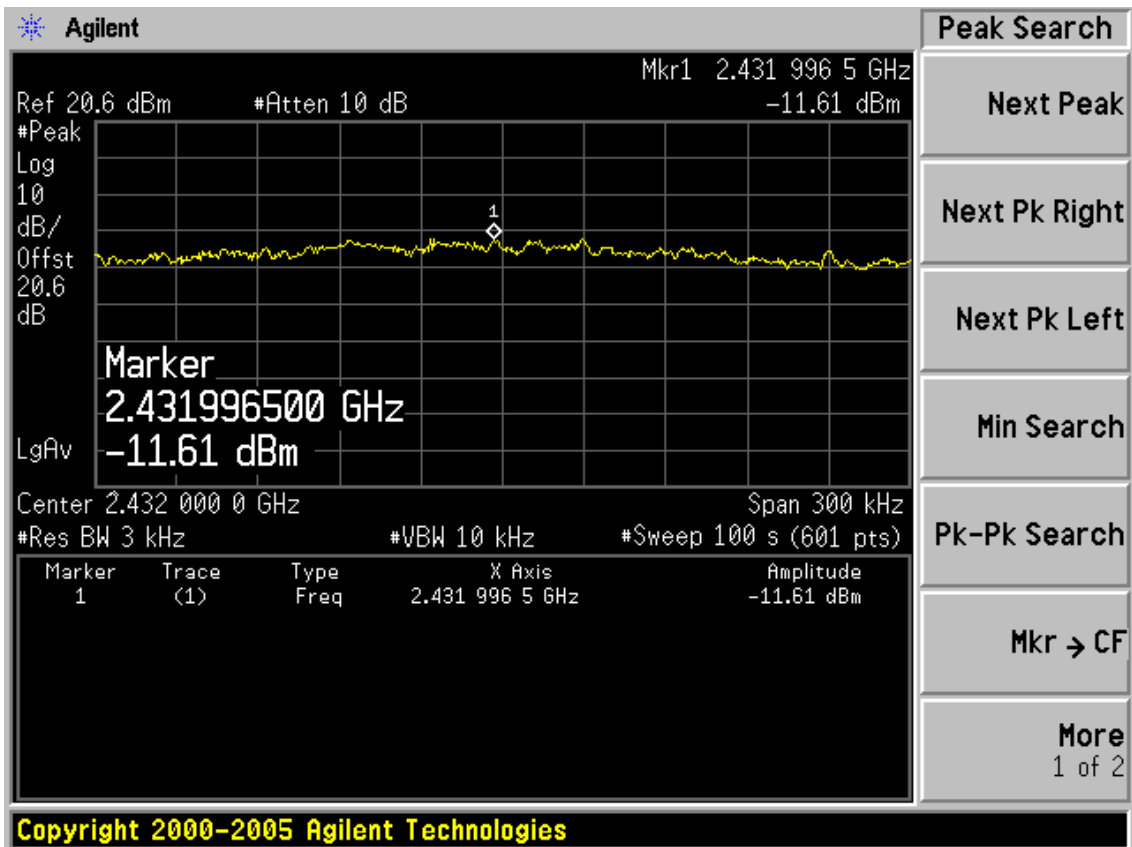
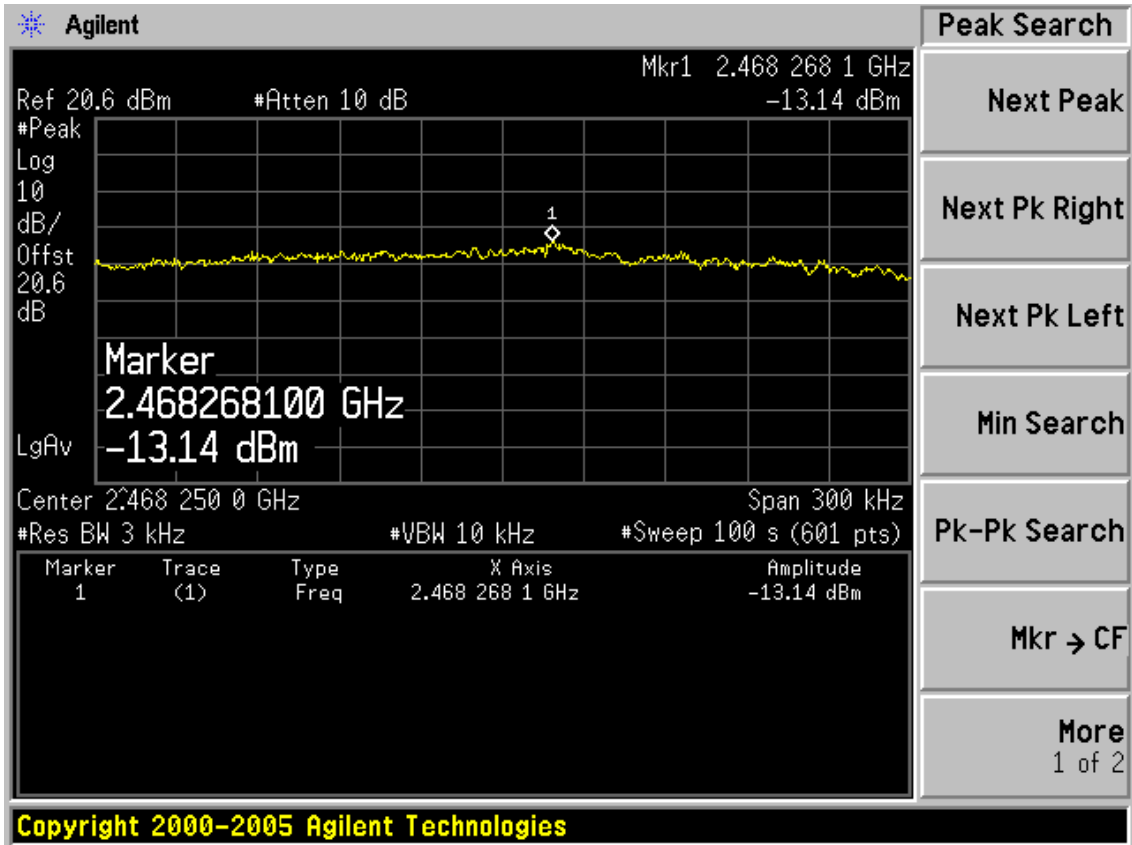


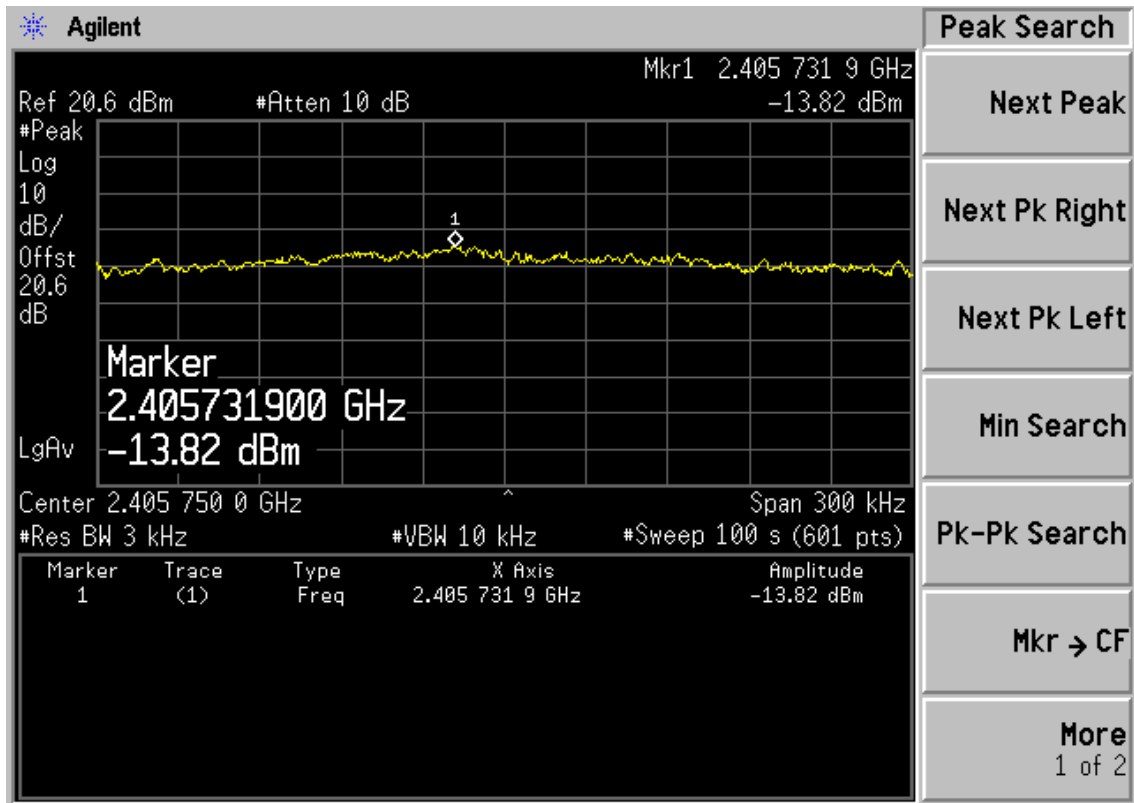
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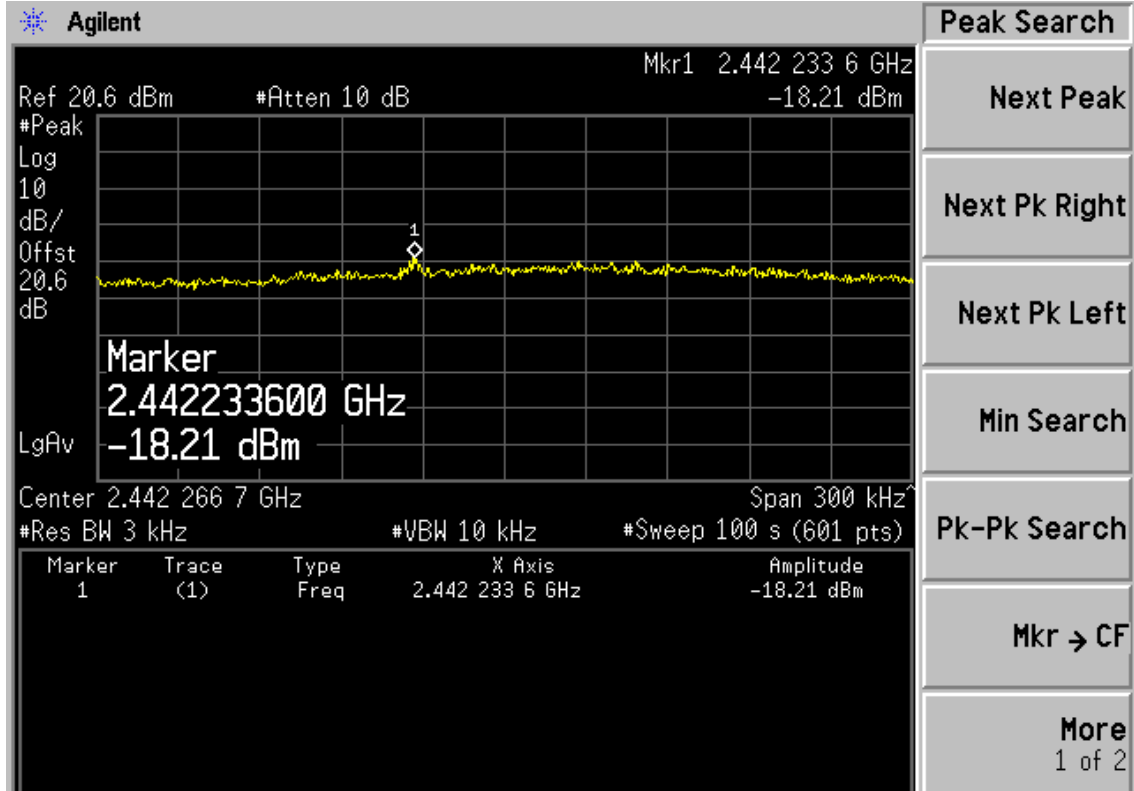
Test Mode: IEEE 802.11n HT20TX



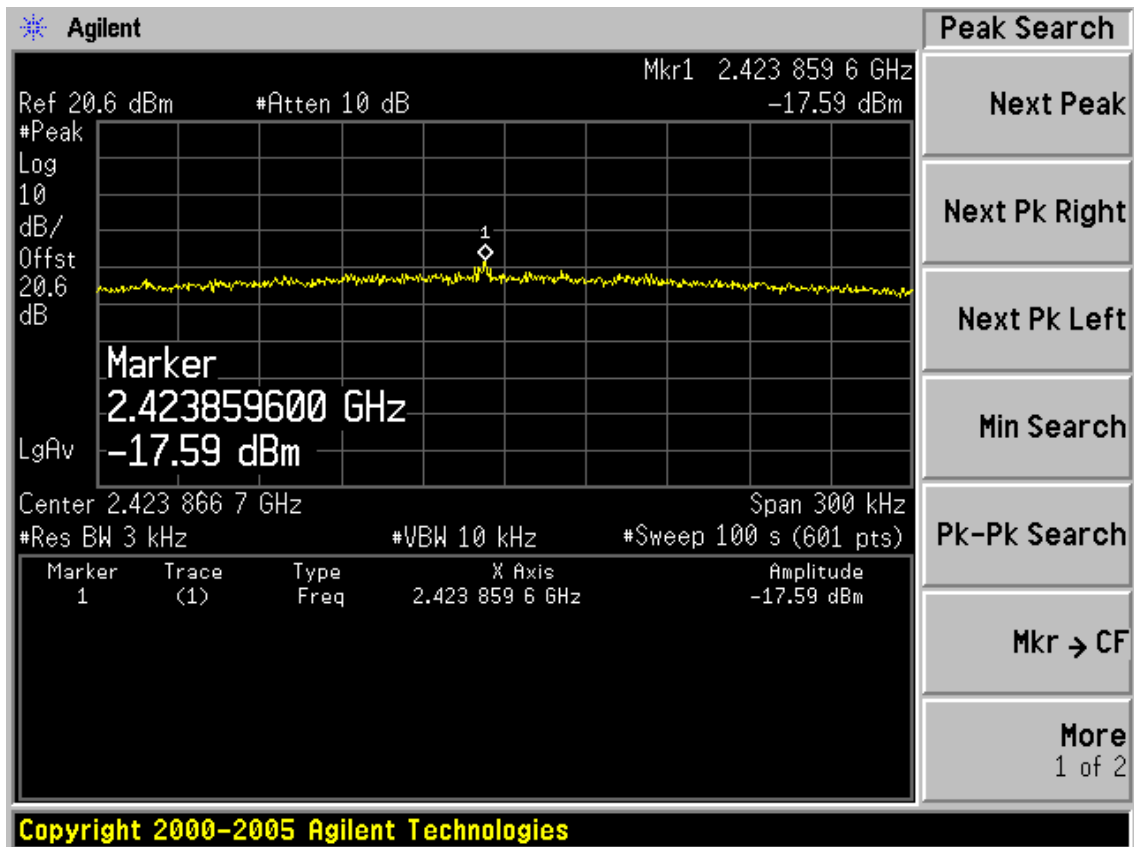
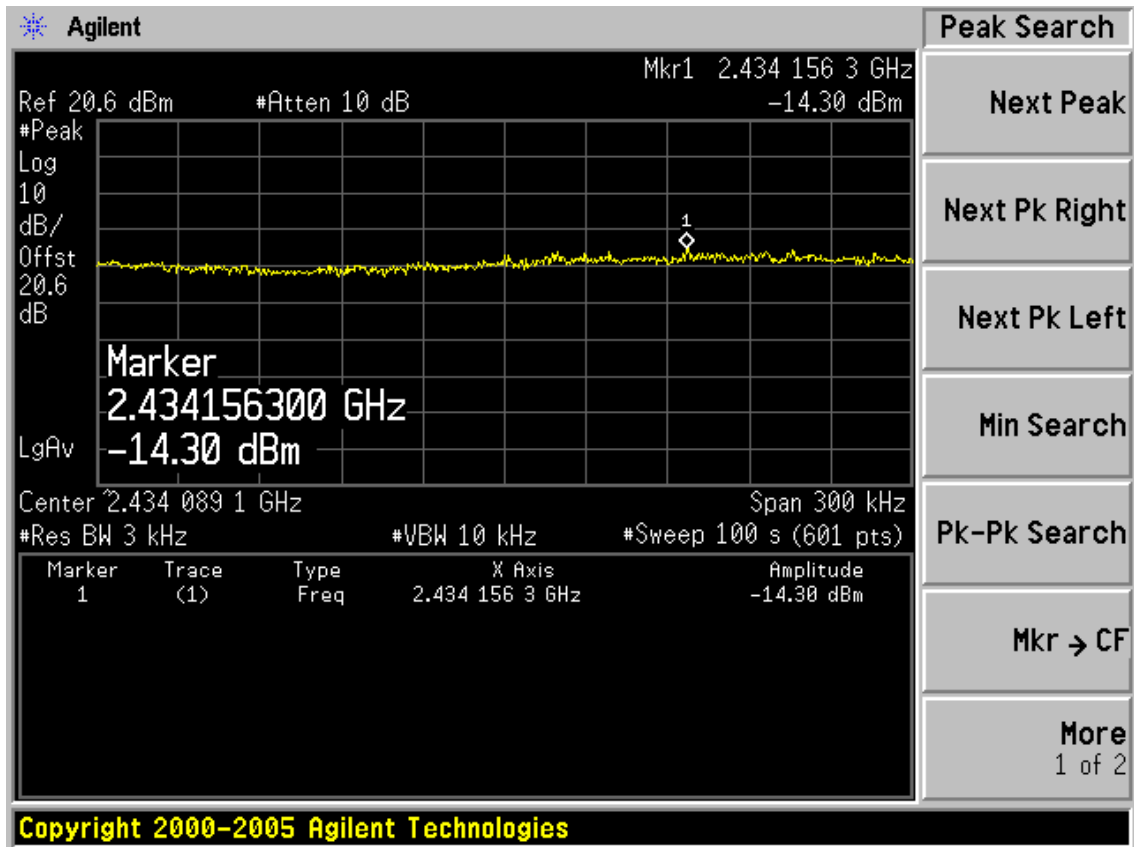


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Test Mode: IEEE 802. 11n HT20TX



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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 MIMO 2X2 dipole antenna with SMA-B connector 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 5dBi.

11.MPE ESTIMATION

11.1.Limit for General Population/ Uncontrolled Exposures

Frequency	Power density (mW/ cm ²)	Averaging time(minutes)
300MHz----1.5GHz	F/1500	30
1.5GHz---100GHz	1.0	30

Frequency(MHz)	Power density (mW/ cm ²)	Averaging time(minutes)
2412	1	30
2437	1	30
2462	1	30

Note: F= Frequency in MHz

11.2.2, Estimation Result

Mode	CH	Frequency (MHz)	PK Output power (dBm)	Output power (mW)	Antenna Gain (dBi)	Antenna Gain(linear)	MPE
11b	1	2412	23.13	205.59	5	3.16	0.1294
	6	2437	23.26	211.84	5	3.16	0.1333
	11	2462	23.00	199.53	5	3.16	0.1256
11g	1	2412	23.54	225.94	5	3.16	0.1422
	6	2437	25.37	344.35	5	3.16	0.2167
	11	2462	23.08	203.24	5	3.16	0.1279
11n HT20	1	2412	22.79	190.11	5	3.16	0.1197
	6	2437	25.22	332.66	5	3.16	0.2094
	11	2462	23.07	202.77	5	3.16	0.1276
11n HT40	1	2422	20.63	115.61	5	3.16	0.0728
	4	2437	24.93	311.17	5	3.16	0.1959
	7	2452	20.31	107.40	5	3.16	0.0676

Note: The estimation distance is 20cm

12. DEVIATION TO TEST SPECIFICATIONS

[NONE]