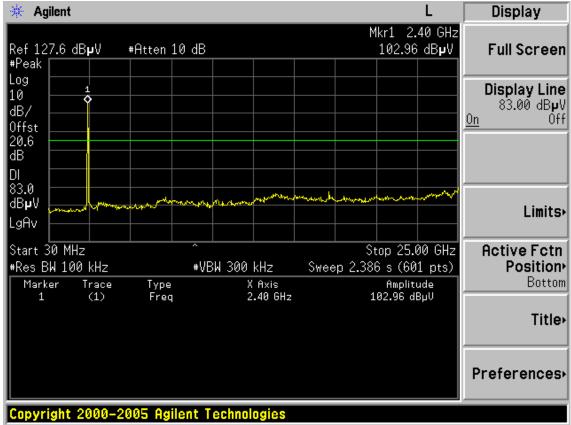
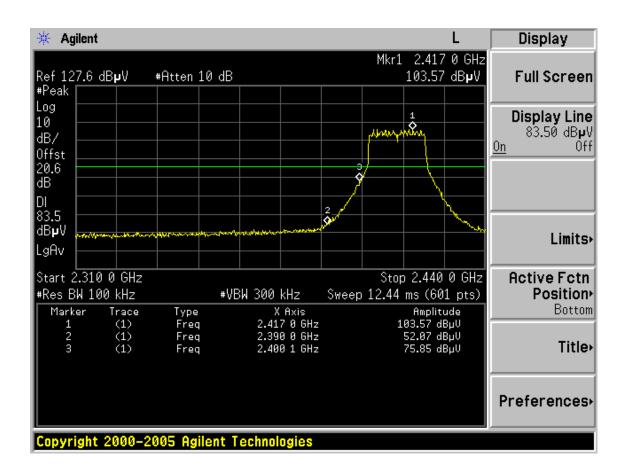
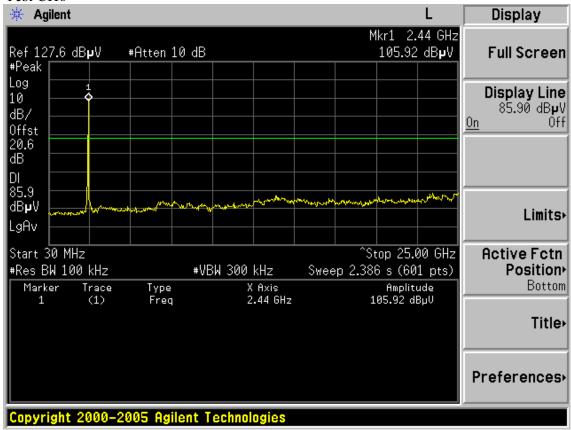
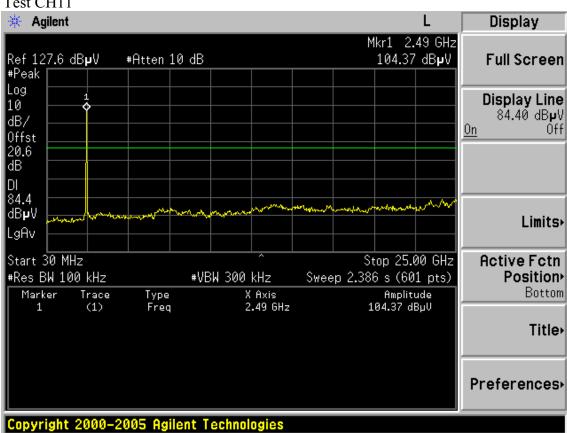


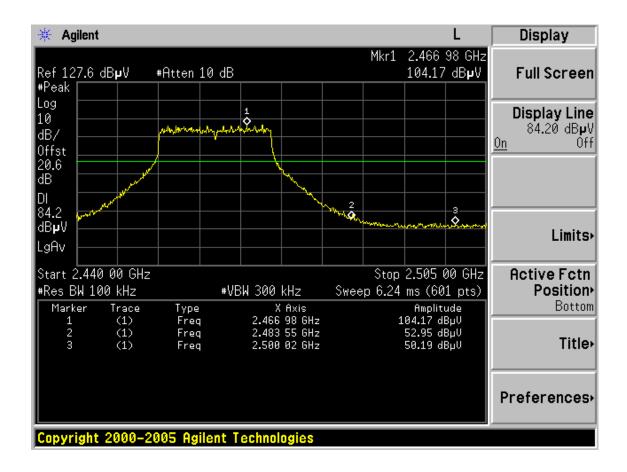
Test Mode: IEEE 802.11n HT20 TX





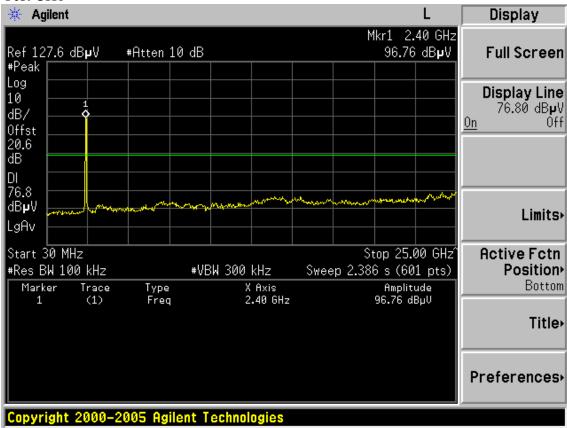


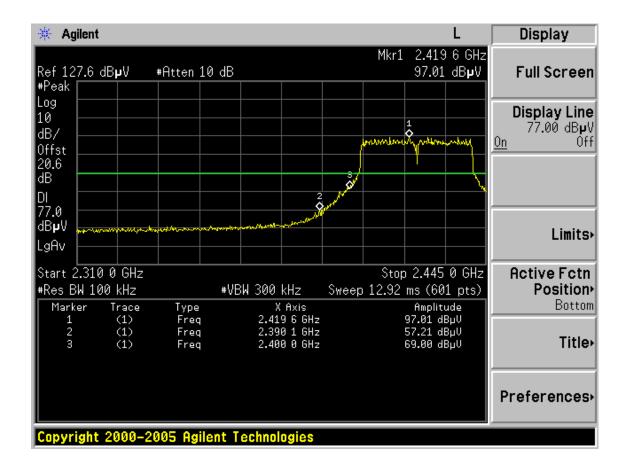


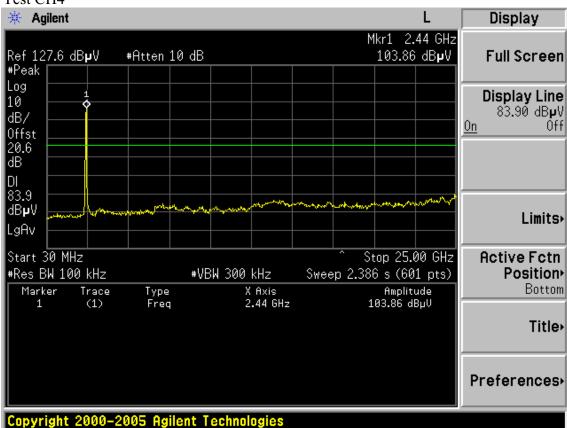


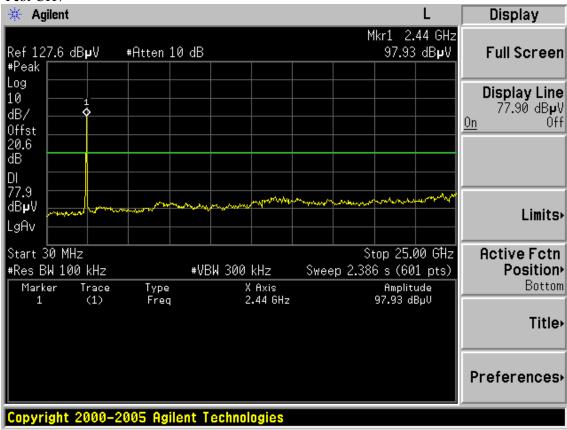
Test Mode: IEEE 802.11n HT40 TX

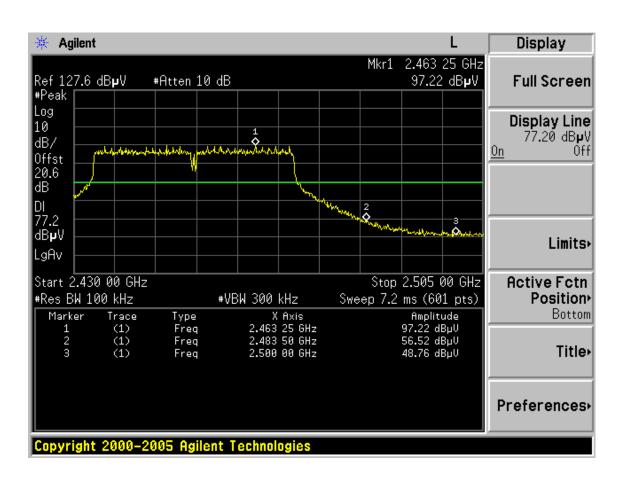






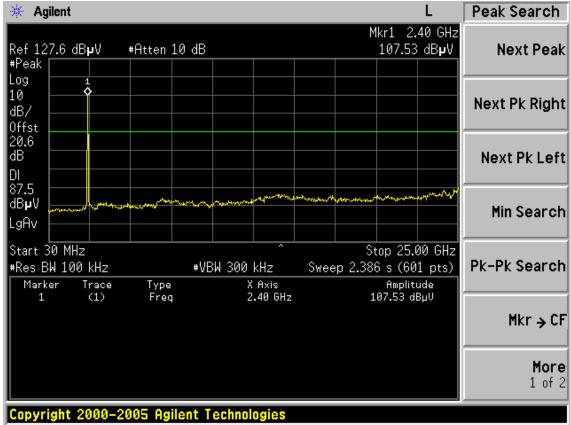


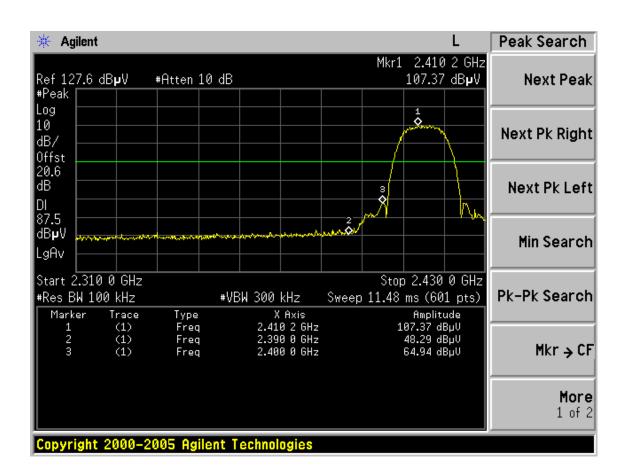


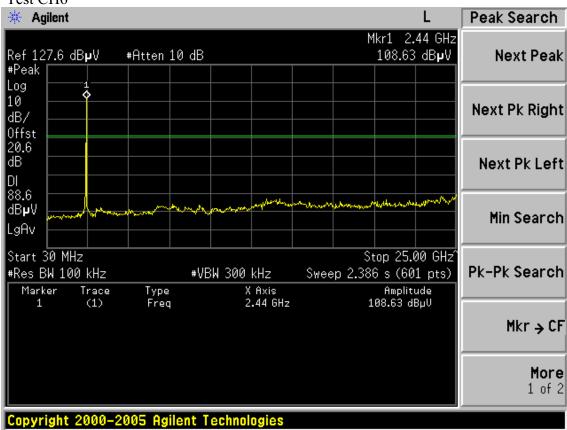


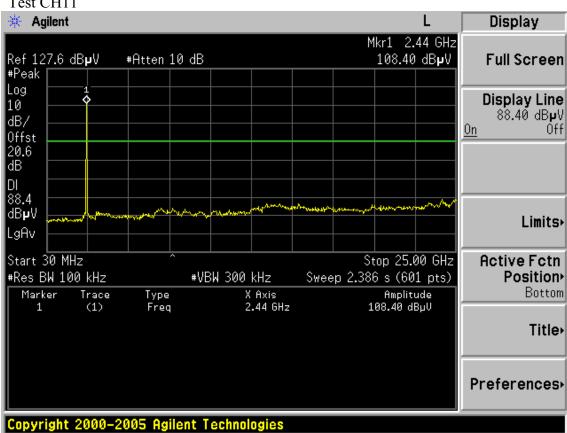
Chain 2:

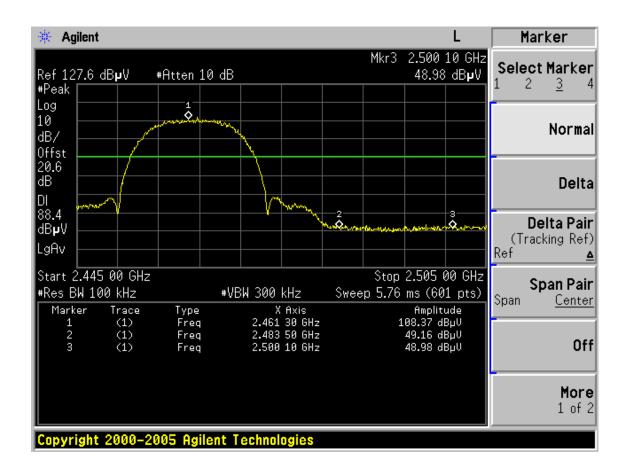
Test Mode: IEEE 802.11b TX





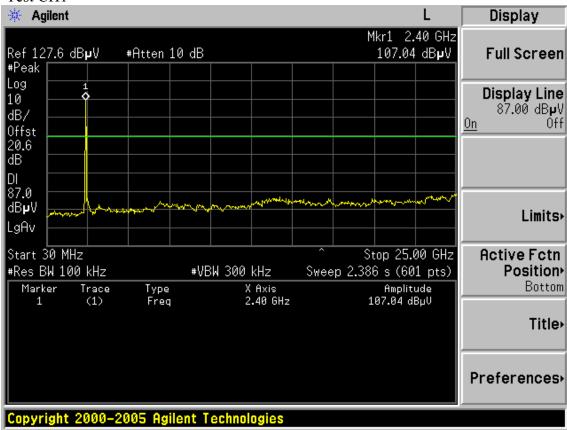


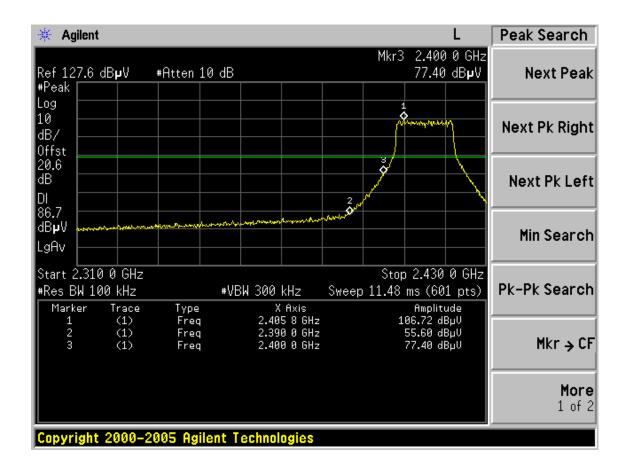




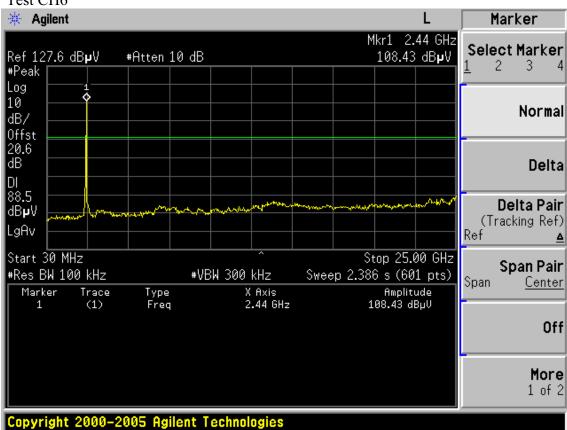
Test Mode: IEEE 802.11g TX

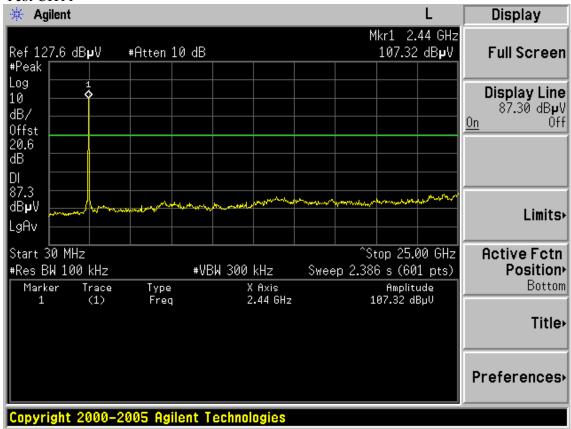


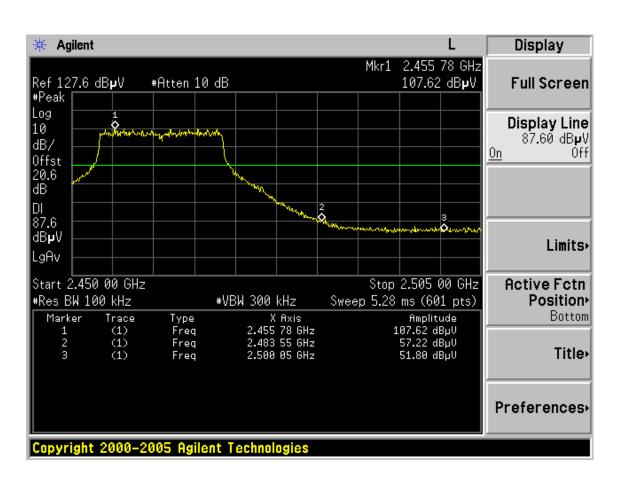




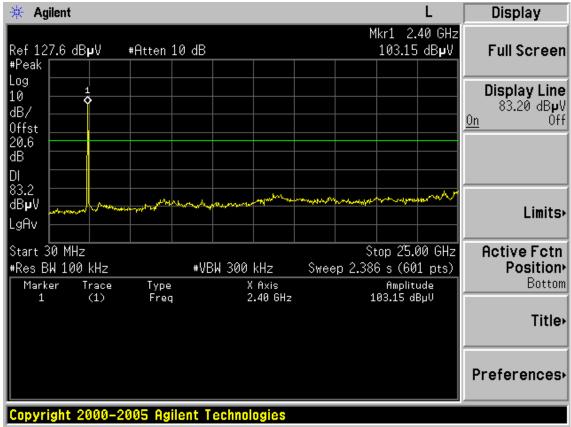


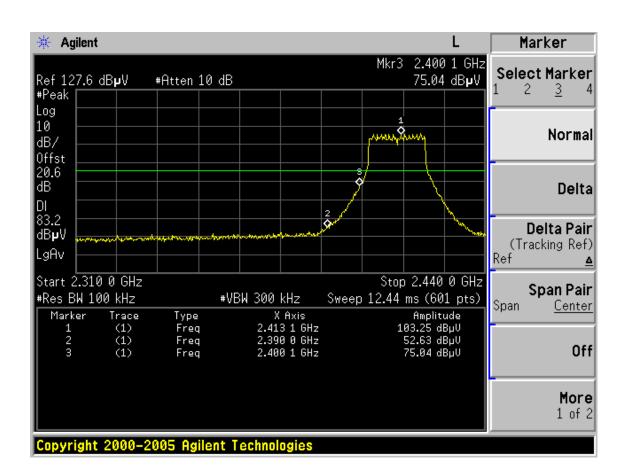


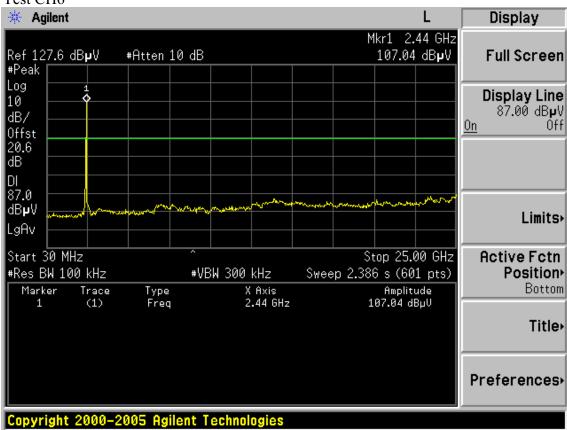


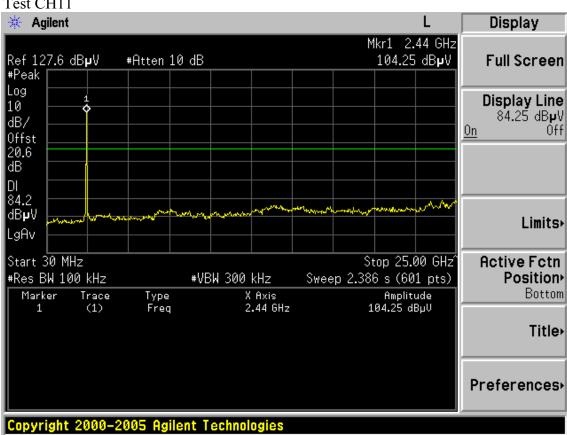


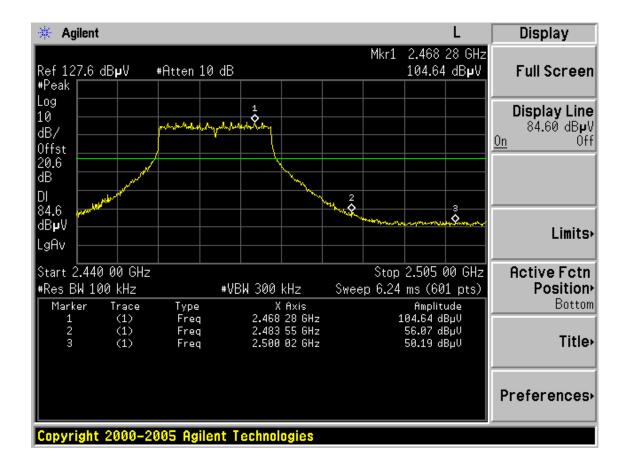
Test Mode: IEEE 802.11n HT20 TX





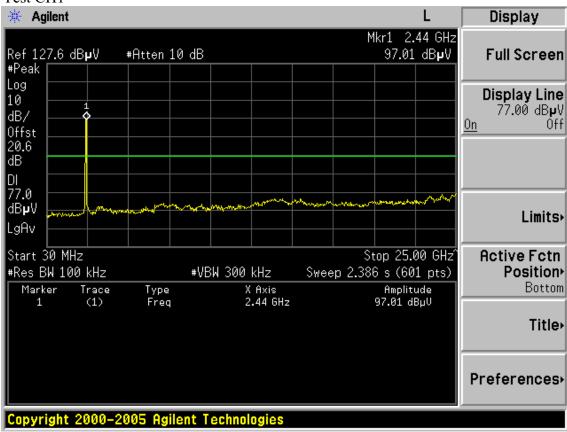


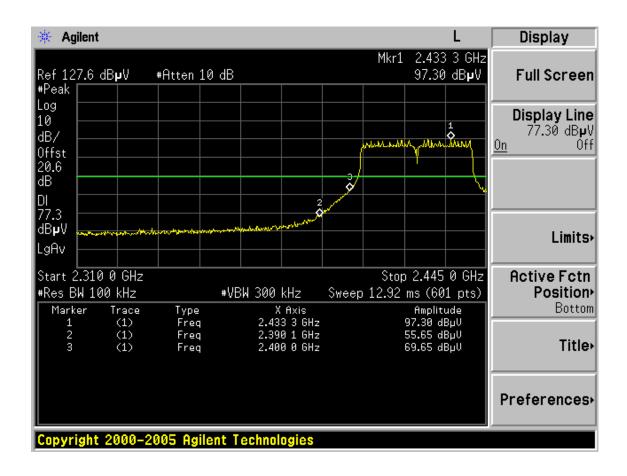


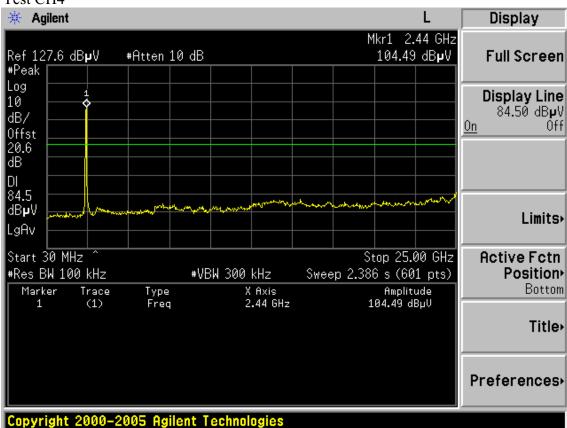


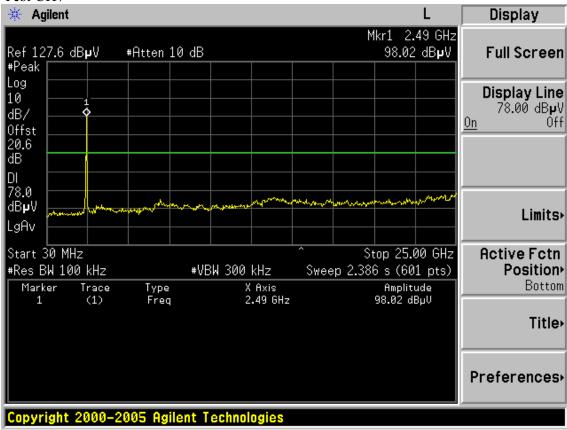
Test Mode: IEEE 802.11n HT40 TX

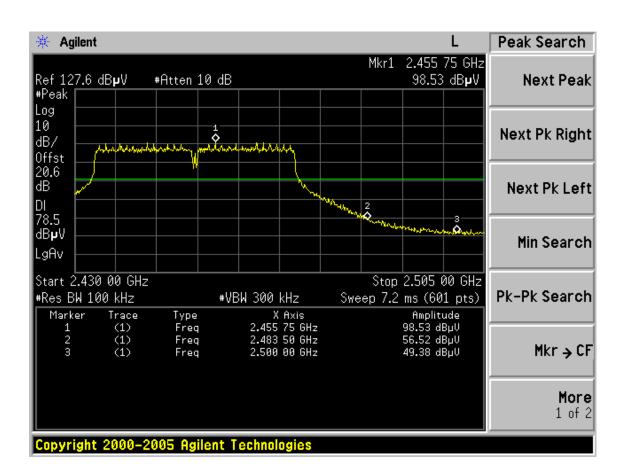






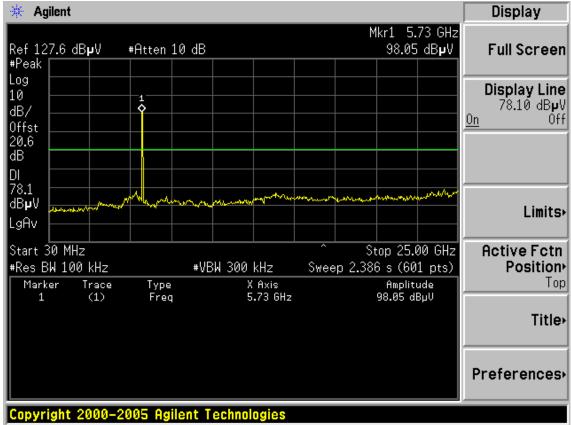


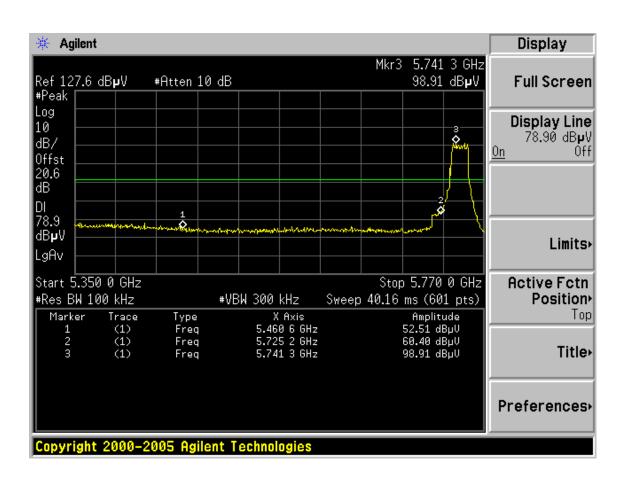


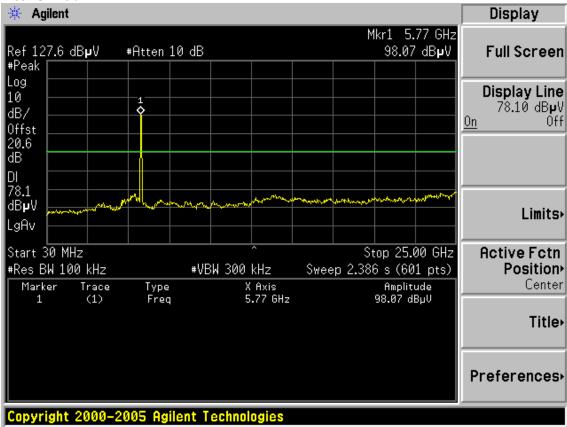


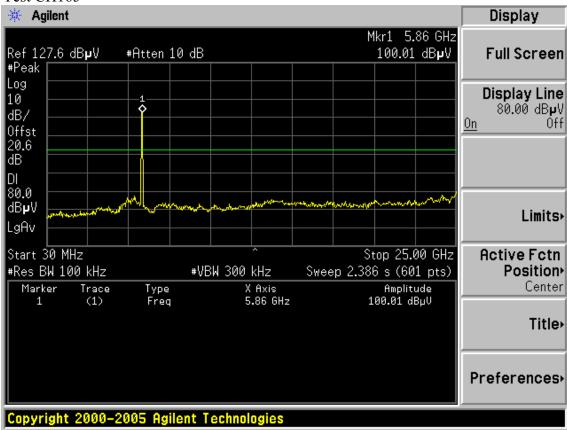
# (5G) Chain 1:

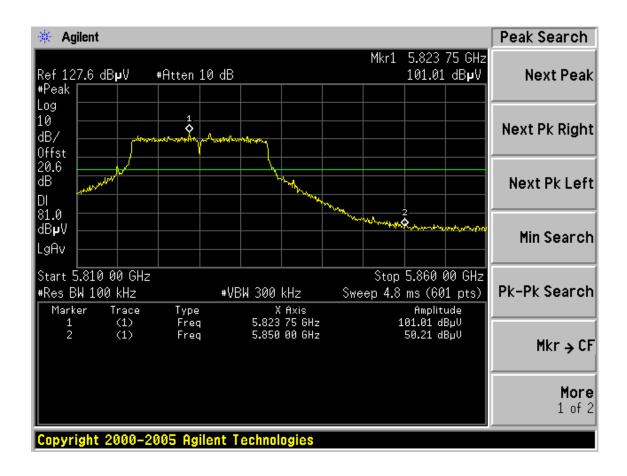
Test Mode: IEEE 802.11a TX





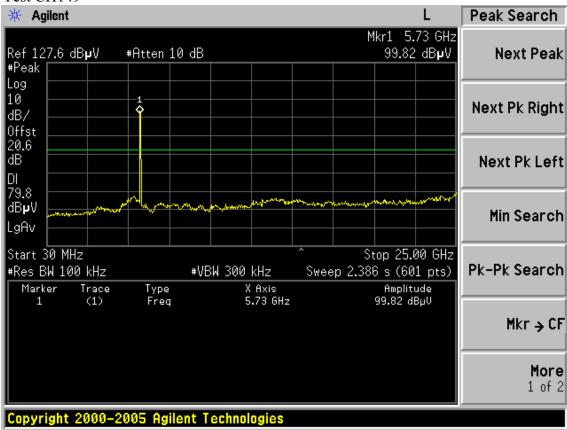


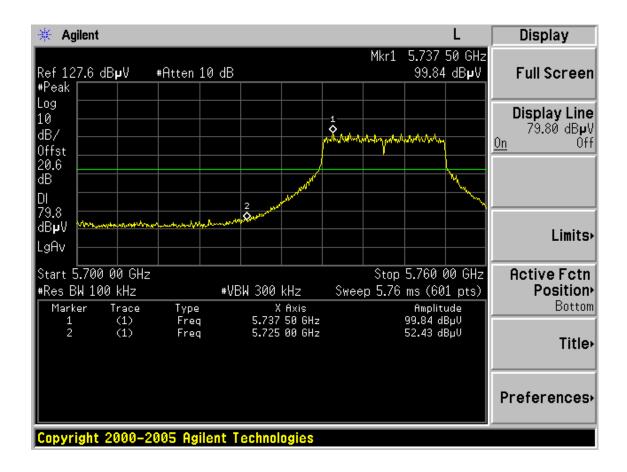


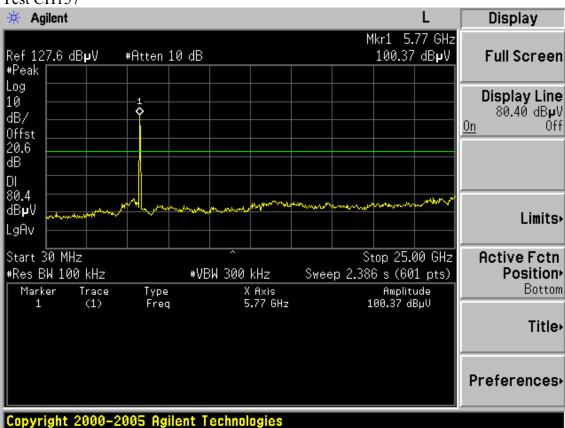


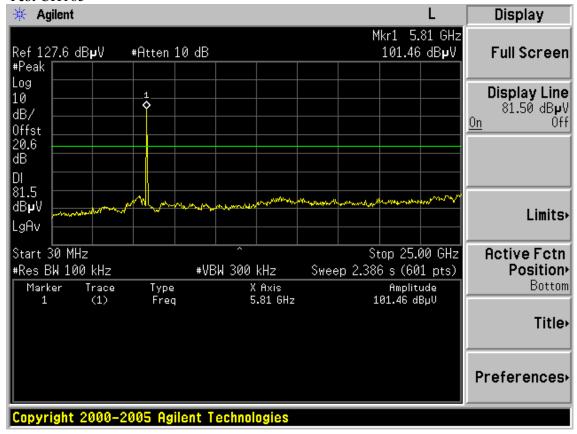
Test Mode: IEEE 802.11n HT20 TX

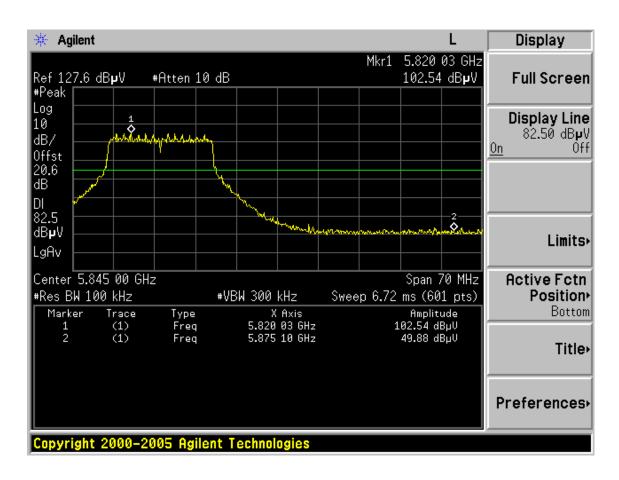




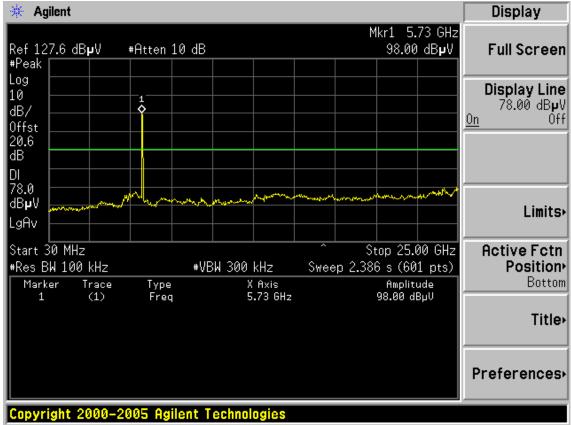


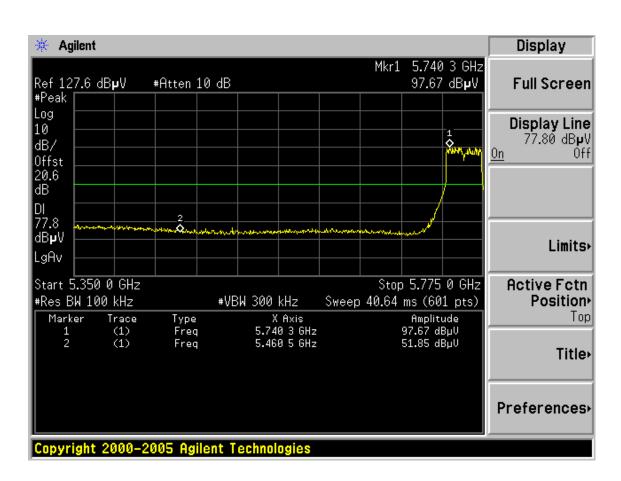


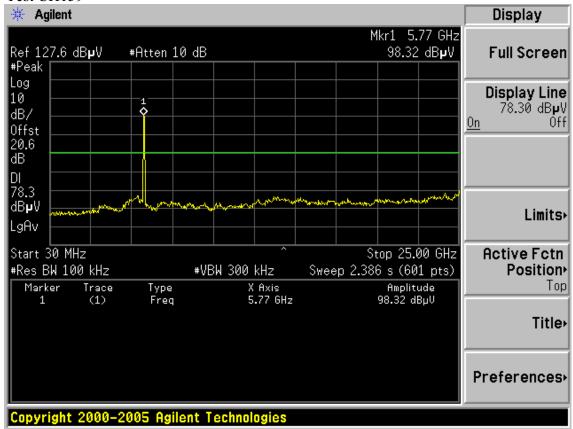


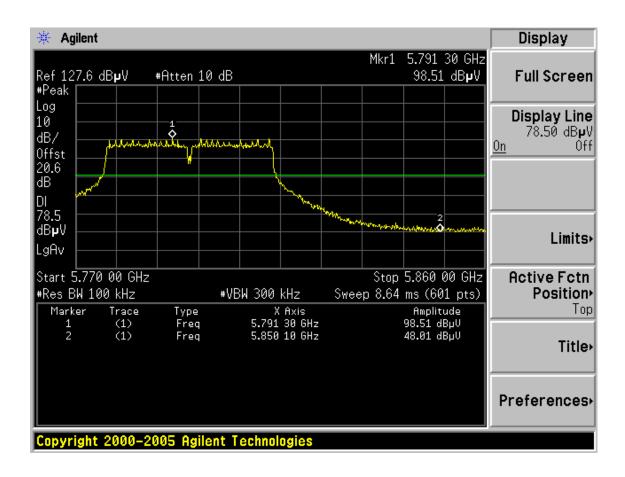


Test Mode: IEEE 802.11n HT40 TX



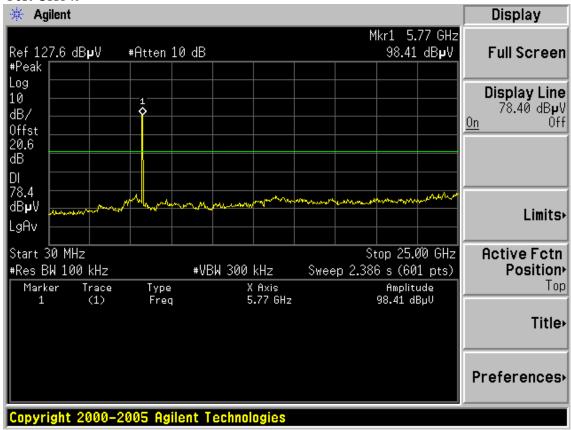


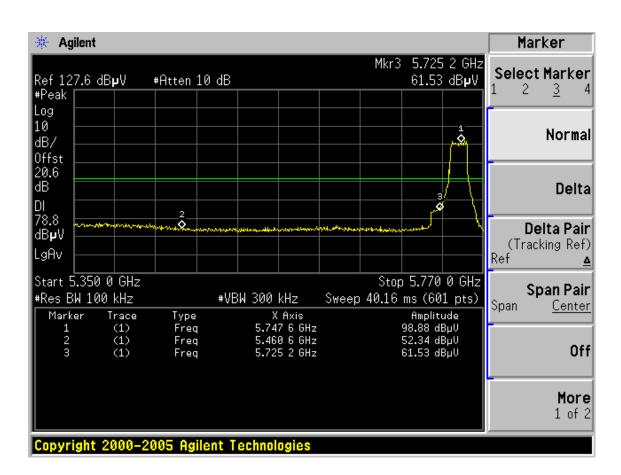


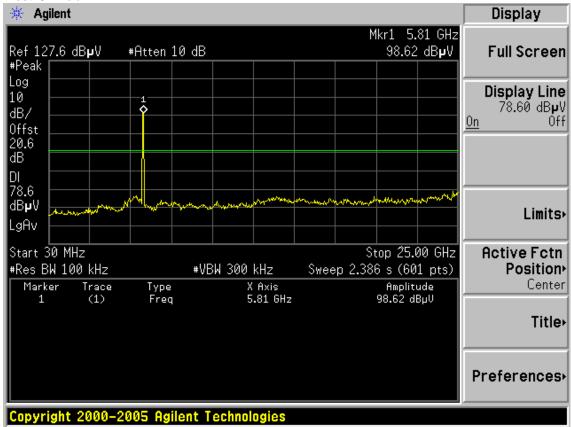


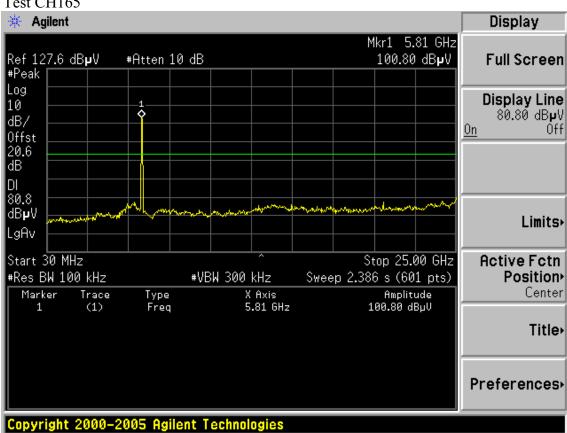
Chain 2:

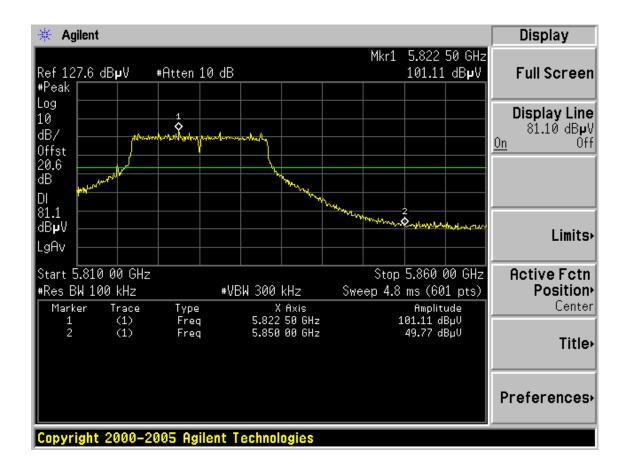
Test Mode: IEEE 802.11a TX





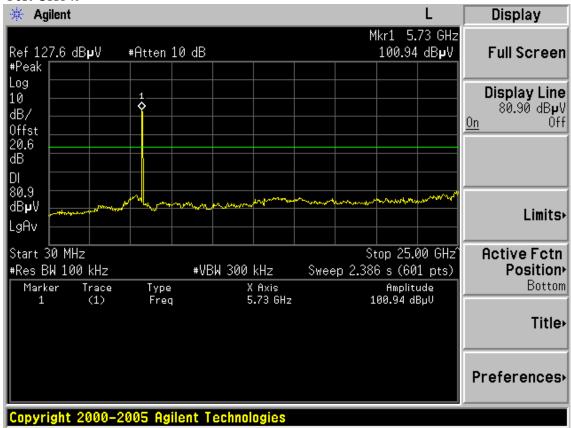


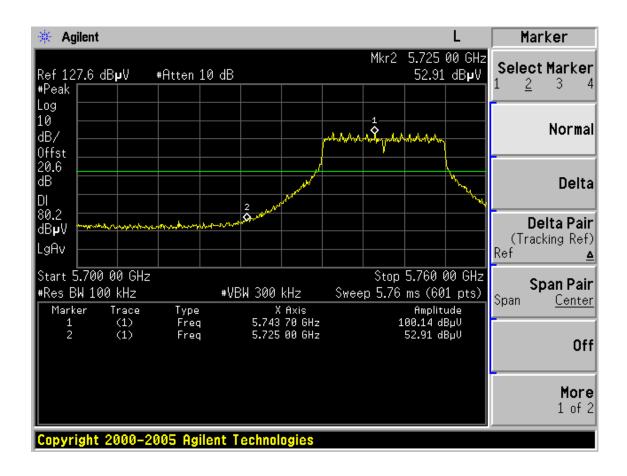


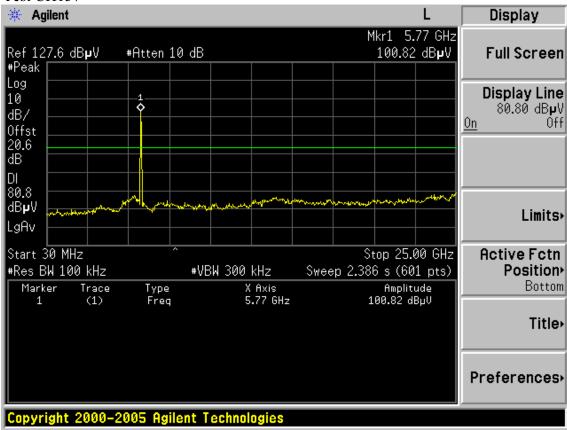


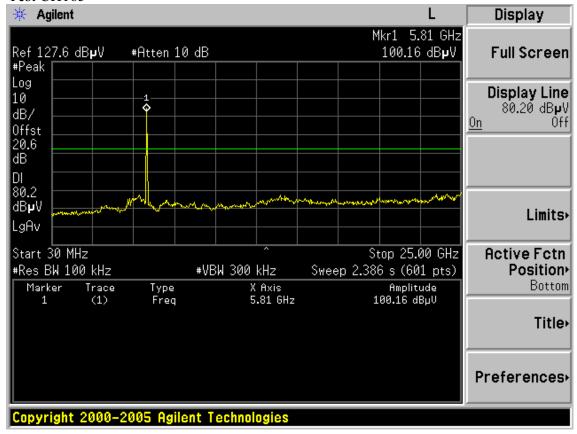
Test Mode: IEEE 802.11n HT20 TX

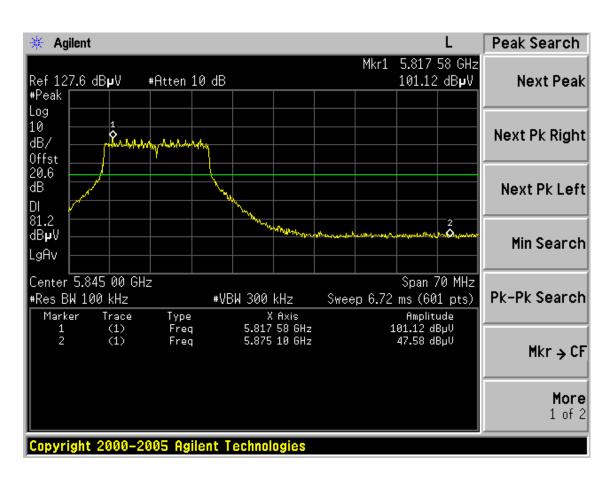




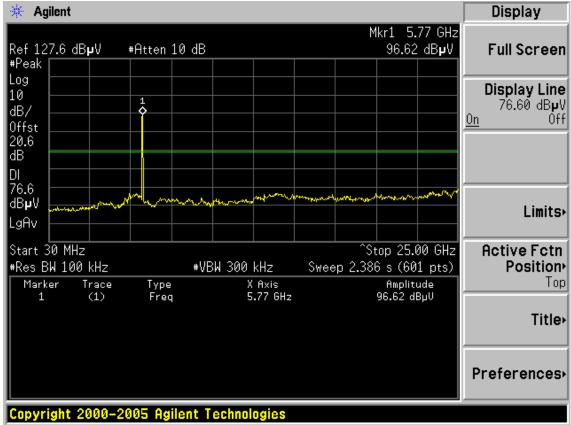


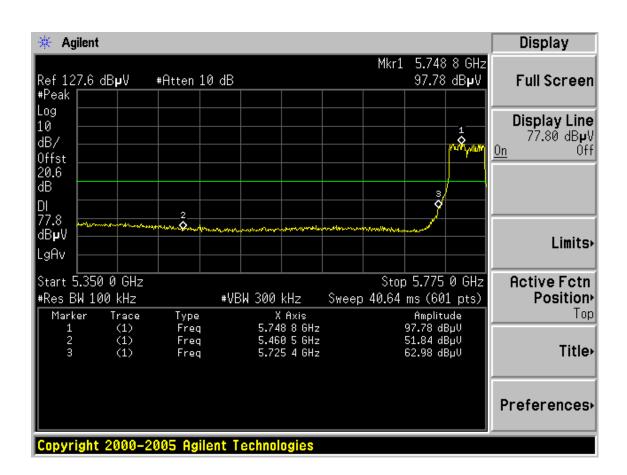


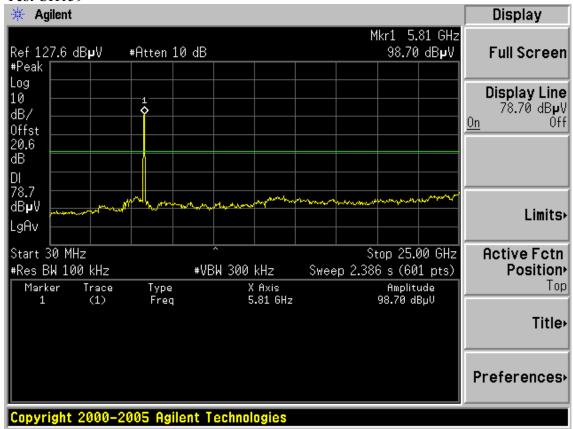


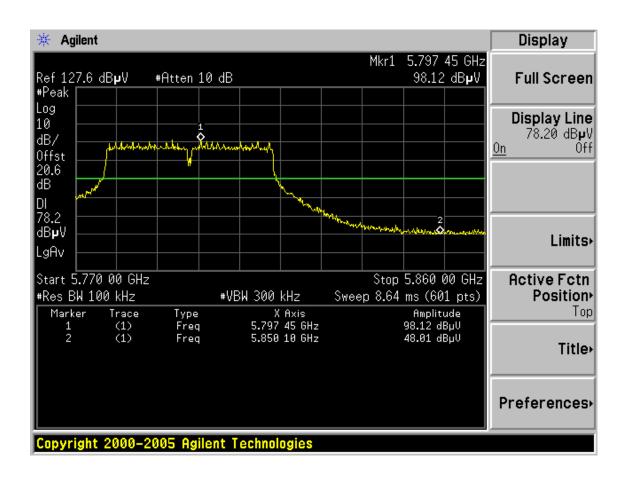


Test Mode: IEEE 802.11n HT40 TX









# 6. BAND EDGE COMPLIANCE TEST

# 6.1.Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum Analyzer	Agilent	E4446A	E4446A US44300459		1 Year
2.	Horn Antenna	EMCO	3115	9607-4877	Nov.25, 09	1.5 Year
3.	Amplifier	Agilent	8449B	3008A02495	May.08, 10	1 Year
4.	RF Cable	Hubersuhner	SUCOFLEX102	28620/2	May.08,10	1 Year
5.	RF Cable	Hubersuhner	SUCOFLEX102	28618/2	May.08,10	1 Year
6.	RF Cable	Hubersuhner	SUCOFLEX102	28610/2	May.08,10	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.

# 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 upperband-edges of the emission:
  - (a) PEAK: RBW=1MHz;VBW=3MHz / Sweep=AUTO
  - (b) AVERAGE: RBW=1MHz / VBW=10Hz / Sweep=AUTO

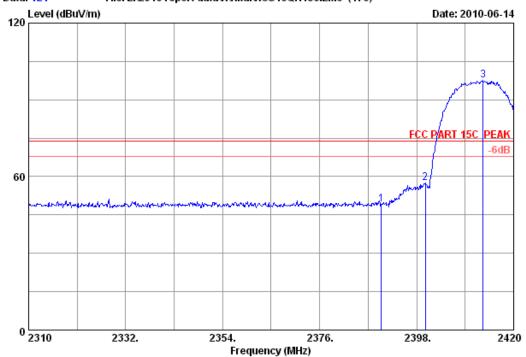
# 6.4. Test Results

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

All the emissions outside operation frequency band were comply with 15.209 limit







Site no. : 3m Chamber Data no. : 121 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

: FCC PART 15C PEAK Limit

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu

: A2 WiFi Access Point/Bridge

Power : DC 48V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11b CH1 2412MHz Tx

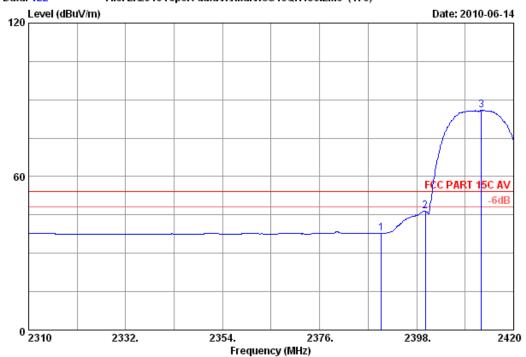
: AP5822 M/N

		Ant.	Cable	Amp.	Emission					
	Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark	
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m	) (dB)		
1	2390.000	29.44	8.67	36.09	47.14	49.16	74.00	24.84	Peak	
2	2400.000	29.44	8.72	36.09	55.49	57.56	74.00	16.44	Peak	
3	2413.070	29.45	8.72	35.95	95.34	97.56	74.00	-23.56	Peak	

- 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. : 3m Chamber Data no. : 122 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL Limit : FCC PART 15C AV

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu

: A2 WiFi Access Point/Bridge

Power : DC 48V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11b CH1 2412MHz Tx

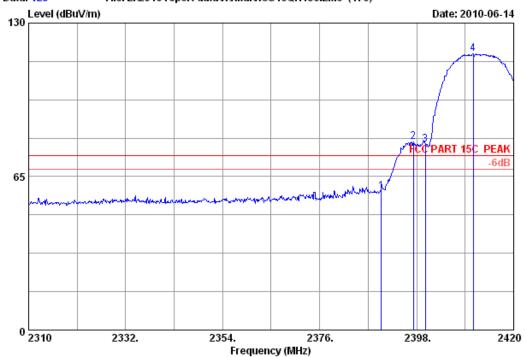
: AP5822 M/N

		Ant.	Cable	Amp.	Emission				
	Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m	) (dB)	
1	2390.000	29.44	8.67	36.09	35.84	37.86	54.00	16.14	Average
2	2400.000	29.44	8.72	36.09	44.26	46.33	54.00	7.67	Average
3	2412.630	29.45	8.72	35.95	83.62	85.84	54.00	-31.84	Average

- 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. : 3m Chamber Data no. : 123
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu

EUT : A2 WiFi Access Point/Bridge

Power : DC 48V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11b CH1 2412MHz Tx

M/N : AP5822

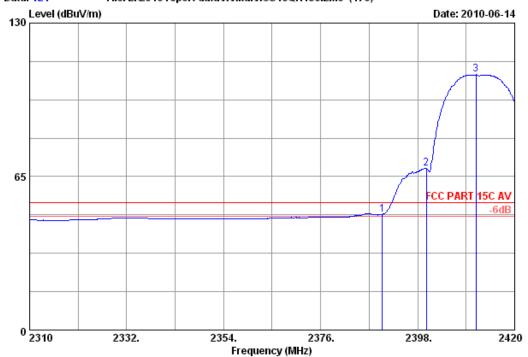
		Ant.	Cable	Amp.	Emission					
	Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark	
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		
1	2390.000	29.44	8.67	36.09	56.71	58.73	74.00	15.27	Peak	
2	2397.230	29.44	8.72	36.09	77.71	79.78	74.00	-5.78	Peak	
3	2400.000	29.44	8.72	36.09	76.68	78.75	74.00	-4.75	Peak	
4	2410.870	29.45	8.72	35.95	114.80	117.02	74.00 -	-43.02	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. : 3m Chamber Data no. : 124
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL
Limit : FCC PART 15C AV
Env. / Ins. : 23\*C/54% Engineer : Sunny-lu

EUT : A2 WiFi Access Point/Bridge

Power : DC 48V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11b CH1 2412MHz Tx

M/N : AP5822

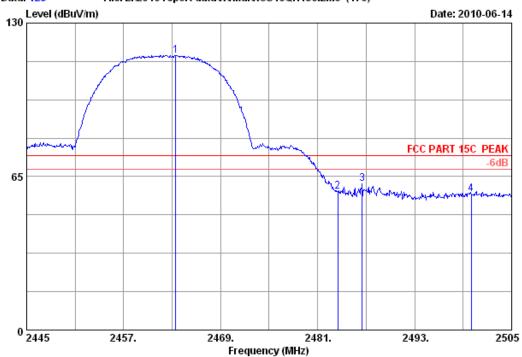
	Ant. Cable Amp.				Emission				
	•				Reading		Limits	Margin	Remark
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m	) (dB)	
					46.00	40.01		4 00	
Т	2390.000	29.44	8.67	36.09	46.99	49.01	54.00	4.99	Average
2	2400.000	29.44	8.72	36.09	66.20	68.27	54.00	-14.27	Average
3	2411.200	29.45	8.72	35.95	105.89	108.11	54.00	-54.11	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.



# File: E:\2010 report data\A\Altai\ACS10QH130.EM6 (176)



Site no. : 3m Chamber Data no. : 125 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL : FCC PART 15C PEAK Limit Engineer : Sunny-lu

Env. / Ins. : 23\*C/54%

: A2 WiFi Access Point/Bridge

Power : DC 48V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11b CH11 2462MHz Tx

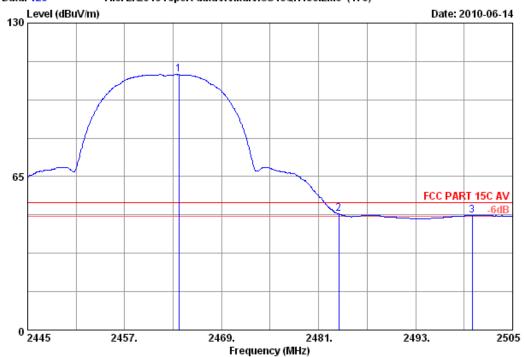
: AP5822 M/N

		Ant.	Cable	Amp.		Emissio:	n			
	-	Factor (dB/m)	loss (dB)		Reading	Level (dBuV/m)		_	Remark	
	(Mnz)	(GB/M)	(ub)	(ив)	(ubuv) 	(авау/ш)	(ubuv/m	, (ub) 		
1	2463.420	29.48	8.82	36.02	114.13	116.41	74.00	-42.41	Peak	
	2483.500				56.20	58.59	74.00	15.41	Peak	
3	2486.520	29.49	8.87	35.97	59.45	61.84	74.00	12.16	Peak	
4	2500.000	29.50	8.92	36.00	55.07	57.49	74.00	16.51	Peak	

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







EUT : A2 WiFi Access Point/Bridge

Power : DC 48V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11b CH11 2462MHz Tx

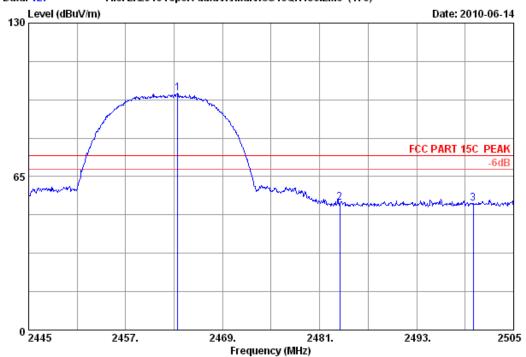
M/N : AP5822

		Ant.	Cable	Amp.	Emission				
	Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m	) (dB)	
1	2463.720	29.48	8.82	36.02	106.02	108.30	54.00	-54.30	Average
2	2483.500	29.49	8.87	35.97	46.71	49.10	54.00	4.90	Average
3	2500.000	29.50	8.92	36.00	46.00	48.42	54.00	5.58	Average

- 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. : 3m Chamber Data no. : 127 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

: FCC PART 15C PEAK Limit

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu

: A2 WiFi Access Point/Bridge

Power : DC 48V From Adapter input AC 120V/60Hz

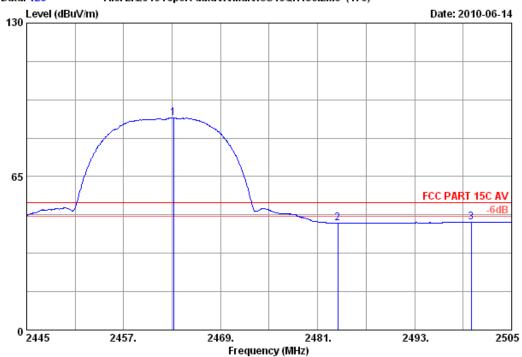
Test mode : IEEE802.11b CH11 2462MHz Tx

		Ant.	cable	Amp.		Emissio:	n			
	Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark	
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m	(dB)		
1	2463.420	29.48	8.82	36.02	97.95	100.23	74.00	-26.23	Peak	
2	2483.500	29.49	8.87	35.97	51.66	54.05	74.00	19.95	Peak	
3	2500.000	29.50	8.92	36.00	51.06	53.48	74.00	20.52	Peak	

- 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. : 3m Chamber Data no. : 128 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL Limit : FCC PART 15C AV

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu

: A2 WiFi Access Point/Bridge

Power : DC 48V From Adapter input AC 120V/60Hz

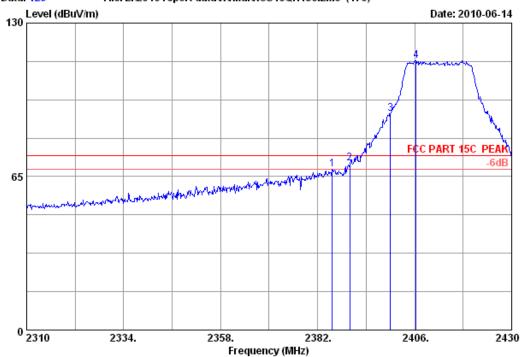
Test mode : IEEE802.11b CH11 2462MHz Tx

	Ant. Cable Am			Amp.	Emission				
	Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m	) (dB)	
1	2463.180	29.48	8.82	36.02	87.50	89.78	54.00	-35.78	Average
2	2483.500	29.49	8.87	35.97	42.94	45.33	54.00	8.67	Average
3	2500.000	29.50	8.92	36.00	43.19	45.61	54.00	8.39	Average

- 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. : 3m Chamber Data no. : 129 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL : FCC PART 15C PEAK Limit

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu

: A2 WiFi Access Point/Bridge

Power
Test mode : IEEE002
: AP5822 : DC 48V From Adapter input AC 120V/60Hz

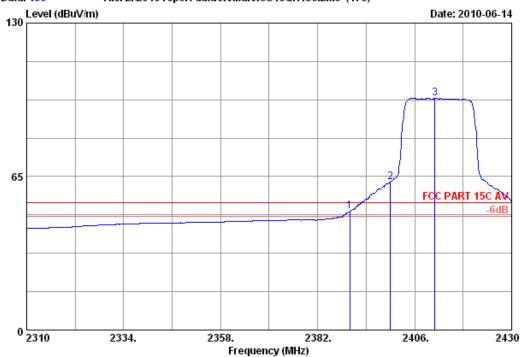
: IEEE802.11g CH1 2412MHz Tx

		Cable	Amp.		Emissio	n				
	Freq.		loss (dB)	Factor (dB)	Reading (dBuV)			_	Remark	
1	2385.600	29.44	8.67	36.09	65.96	67.98	74.00	6.02	Peak	
2	2390.000	29.44	8.67	36.09	68.48	70.50	74.00	3.50	Peak	
3	2400.000	29.44	8.72	36.09	89.69	91.76	74.00	-17.76	Peak	
4	2406.360	29.45	8.72	35.95	111.99	114.21	74.00	-40.21	Peak	

- 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. : 3m Chamber Data no. : 130 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL Limit : FCC PART 15C AV

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu

: A2 WiFi Access Point/Bridge

Power
Test mode : IEEE802
: AP5822 : DC 48V From Adapter input AC 120V/60Hz

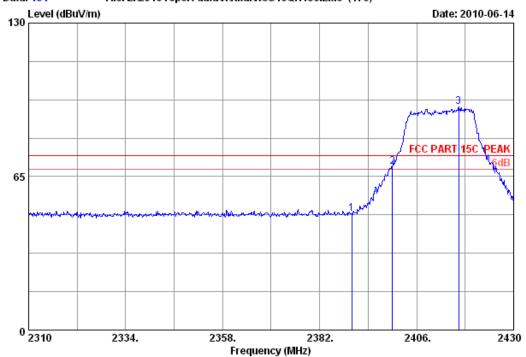
: IEEE802.11g CH1 2412MHz Tx

		Ant.	Cable	Amp.		Emissio:	n		
	Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m	) (dB)	
1	2390.000	29.44	8.67	36.09	48.23	50.25	54.00	3.75	Average
2	2400.000	29.44	8.72	36.09	60.73	62.80	54.00	-8.80	Average
3	2411.040	29.45	8.72	35.95	96.09	98.31	54.00	-44.31	Average

- 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. : 3m Chamber Data no. : 131 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

: FCC PART 15C PEAK Limit

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu

: A2 WiFi Access Point/Bridge

Power : DC 48V From Adapter input AC 120V/60Hz

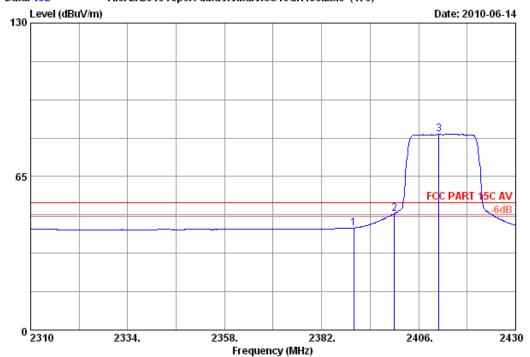
Test mode : IEEE802.11g CH1 2412MHz Tx

	-		loss	Factor	Reading (dBuV)		Limits	_	Remark	
2	2390.000 2400.000 2416.440	29.44	8.72	36.09	47.31 67.19 92.16	49.33 69.26 94.38	74.00 74.00 74.00	4.74	Peak Peak Peak	

- 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. : 3m Chamber Data no. : 132 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL Limit : FCC PART 15C AV

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu

: A2 WiFi Access Point/Bridge

Power : DC 48V From Adapter input AC 120V/60Hz

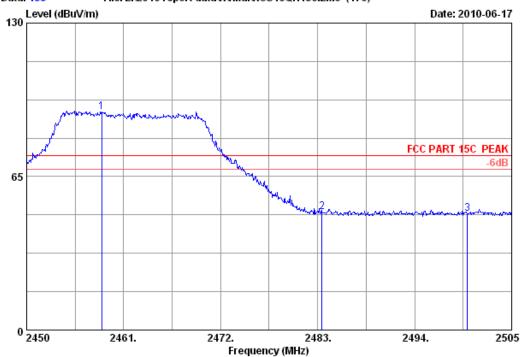
Test mode : IEEE802.11g CH1 2412MHz Tx

		Ant.	Cable	Amp.		Emissio:	n		
	Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m	) (dB)	
1	2390.000	29.44	8.67	36.09	41.21	43.23	54.00	10.77	Average
2	2400.000	29.44	8.72	36.09	47.21	49.28	54.00	4.72	Average
3	2411.040	29.45	8.72	35.95	80.86	83.08	54.00	-29.08	Average

- 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. : 3m Chamber Data no. : 133 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

: FCC PART 15C PEAK Limit

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu

: A2 WiFi Access Point/Bridge

Power : DC 48V From Adapter input AC 120V/60Hz

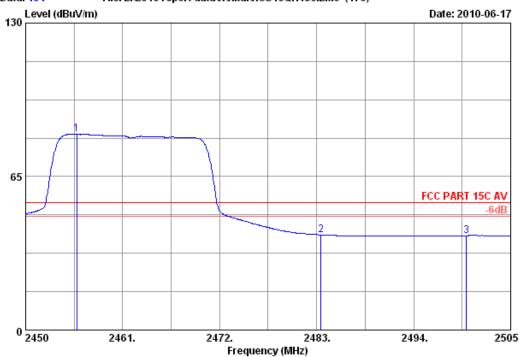
Test mode : IEEE802.11g CH11 2462MHz Tx

		Ant.	cable	Amp.		Emissio:	n			
	Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark	
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	) (dB)		
1	2458.525	29.48	8.82	36.02	90.21	92.49	74.00	-18.49	Peak	
2	2483.500	29.49	8.87	35.97	47.67	50.06	74.00	23.94	Peak	
3	2500.000	29.50	8.92	36.00	46.70	49.12	74.00	24.88	Peak	

- 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. : 3m Chamber Data no. : 134 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL Limit : FCC PART 15C AV

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu

: A2 WiFi Access Point/Bridge

Power
Test mode : IEEE802
: AP5822 : DC 48V From Adapter input AC 120V/60Hz

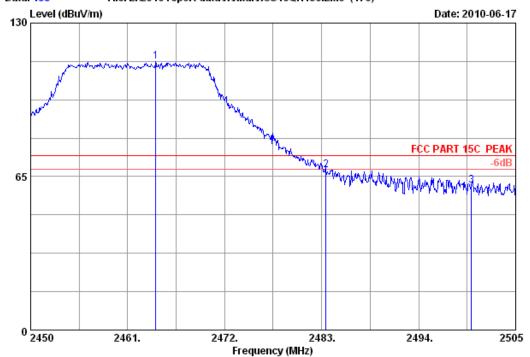
: IEEE802.11g CH11 2462MHz Tx

	•	Ant. Factor (dB/m)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits		Remark
1 2 3	2455.775 2483.500 2500.000		 36.02 35.97 36.00	80.75 37.91 37.58	83.03 40.30 40.00	54.00 54.00 54.00	-29.03 13.70 14.00	Average Average Average

- 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. : 3m Chamber Data no. : 135
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : A2 WiFi Access Point/Bridge

Power : DC 48V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11g CH11 2462MHz Tx

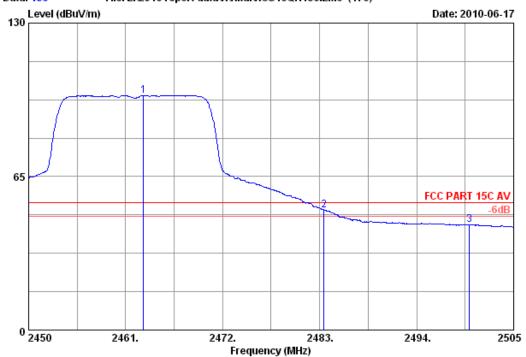
M/N : AP5822

	•		loss	Factor	Reading (dBuV)		Limits	_	Remark	
1	2464.190	29.48	8.82	36.02	111.40	113.68	74.00	-39.68	Peak	
2	2483.500	29.49	8.87	35.97	65.22	67.61	74.00	6.39	Peak	
3	2500.000	29.50	8.92	36.00	58.65	61.07	74.00	12.93	Peak	

- 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. : 3m Chamber Data no. : 136 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL Limit : FCC PART 15C AV

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu : A2 WiFi Access Point/Bridge

Power
Test mode : IEEE802
: AP5822 : DC 48V From Adapter input AC 120V/60Hz

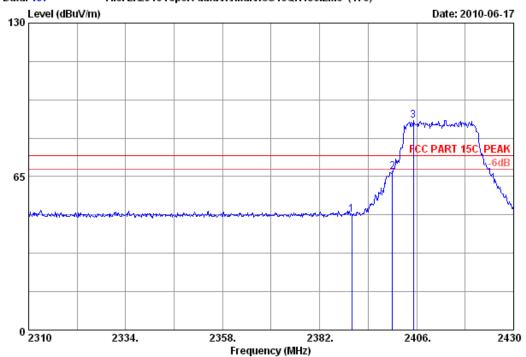
: IEEE802.11g CH11 2462MHz Tx

	Freq.	Ant. Factor (dB/m)	Amp. Factor (dB)	Reading (dBuV)	Emissio: Level (dBuV/m)	Limits		Remark
1 2 3	2463.035 2483.500 2500.000	29.49	 36.02 35.97 36.00	97.06 48.43 42.01	99.34 50.82 44.43	54.00 54.00 54.00	-45.34 3.18 9.57	Average Average Average

- 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. : 3m Chamber Data no. : 137 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

: FCC PART 15C PEAK Limit

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu

: A2 WiFi Access Point/Bridge

Power : DC 48V From Adapter input AC 120V/60Hz

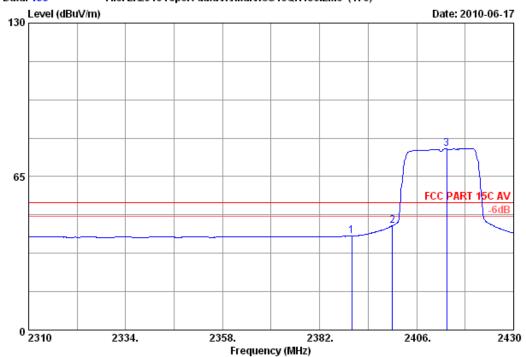
Test mode : IEEE802.11n HT20 CH1 2412MHz Tx

		Ant.	cable	Amp.		Emissio:	n			
	Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark	
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m	) (dB)		
1	2390.000	29.44	8.67	36.09	46.82	48.84	74.00	25.16	Peak	
2	2400.000	29.44	8.72	36.09	64.76	66.83	74.00	7.17	Peak	
3	2405.160	29.45	8.72	35.95	86.64	88.86	74.00	-14.86	Peak	

- 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. : 3m Chamber Data no. : 138 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL Limit : FCC PART 15C AV

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu

: A2 WiFi Access Point/Bridge

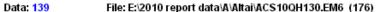
Power : DC 48V From Adapter input AC 120V/60Hz

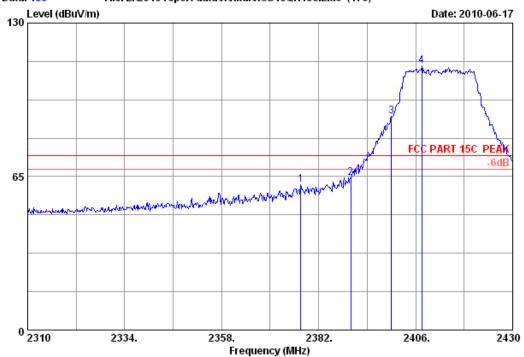
Test mode : IEEE802.11n HT20 CH1 2412MHz Tx

	Freq.	Ant. Factor (dB/m)		Amp. Factor (dB)	Reading (dBuV)	Emissio: Level (dBuV/m)	Limits		Remark
1 2 3	2390.000 2400.000 2413.440	29.44	8.72	36.09 36.09 35.95	37.75 42.03 74.48	39.77 44.10 76.70	54.00 54.00 54.00	14.23 9.90 -22.70	Average Average Average

- 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. : 3m Chamber Data no. : 139 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL : FCC PART 15C PEAK Limit

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu

: A2 WiFi Access Point/Bridge

Power : DC 48V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11n HT20 CH1 2412MHz Tx

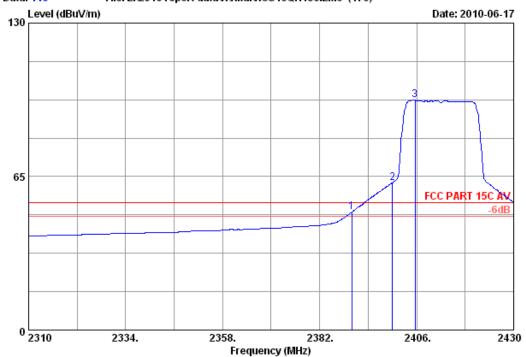
: AP5822 M/N

		Ant.	Cable	Amp.		Emissio:	n			
	Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark	
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m	) (dB)		
1	2377.560	29.43	8.67	36.00	59.45	61.55	74.00	12.45	Peak	
2	2390.000	29.44	8.67	36.09	62.47	64.49	74.00	9.51	Peak	
3	2400.000	29.44	8.72	36.09	88.37	90.44	74.00	-16.44	Peak	
4	2407.560	29.45	8.72	35.95	109.67	111.89	74.00	-37.89	Peak	

- 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. : 3m Chamber Data no. : 140

Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C AV

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : A2 WiFi Access Point/Bridge

Power : DC 48V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11n HT20 CH1 2412MHz Tx

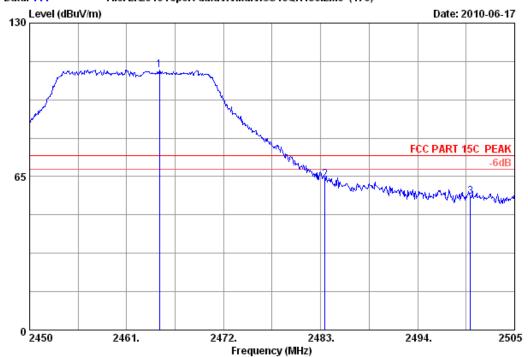
M/N : AP5822

		Ant.	Cable	Amp.		Emissio:	n		
	Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	2390.000	29.44	8.67	36.09	47.98	50.00	54.00	4.00	Average
2	2400.000	29.44	8.72	36.09	60.29	62.36	54.00	-8.36	Average
3	2405.640	29.45	8.72	35.95	95.10	97.32	54.00	-43.32	Average

- 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. : 3m Chamber Data no. : 141
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu

EUT : A2 WiFi Access Point/Bridge

Power : DC 48V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11n HT20 CH11 2462MHz Tx

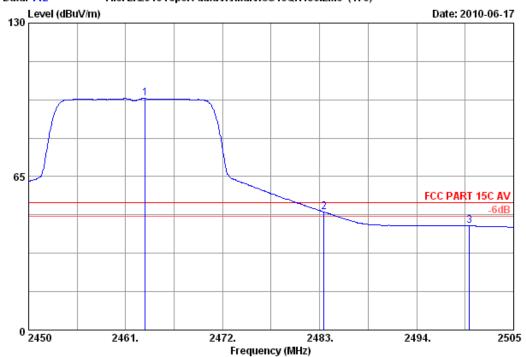
M/N : AP5822

		Ant.	Cable	Amp.		Emissio:	n			
	Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark	
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m	) (dB)		
1	2464.740	29.48	8.82	36.02	107.98	110.26	74.00	-36.26	Peak	
2	2483.500	29.49	8.87	35.97	61.50	63.89	74.00	10.11	Peak	
3	2500.000	29.50	8.92	36.00	54.10	56.52	74.00	17.48	Peak	

- 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. : 3m Chamber Data no. : 142
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL
Limit : FCC PART 15C AV
Env. / Ins. : 23\*C/54% Engineer : Sunny-lu

EUT : A2 WiFi Access Point/Bridge

Power : DC 48V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11n HT20 CH11 2462MHz Tx

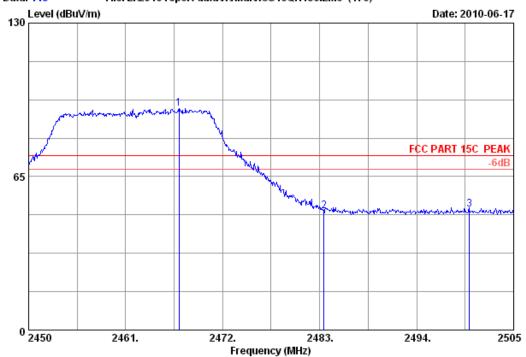
M/N : AP5822

		Ant.	Cable	Amp.		Emissio:	n		
	Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	2463.200	29.48	8.82	36.02	95.78	98.06	54.00	-44.06	Average
2	2483.500	29.49	8.87	35.97	47.59	49.98	54.00	4.02	Average
3	2500.000	29.50	8.92	36.00	41.64	44.06	54.00	9.94	Average

- 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. : 3m Chamber Data no. : 143 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL : FCC PART 15C PEAK Limit

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu

: A2 WiFi Access Point/Bridge

Power : DC 48V From Adapter input AC 120V/60Hz

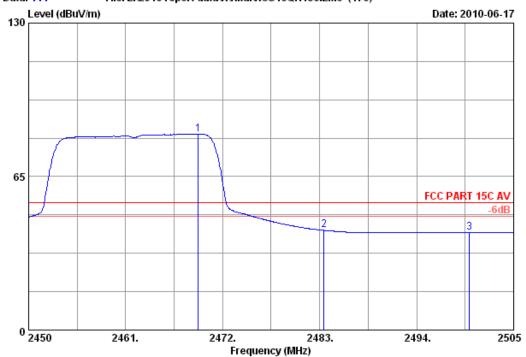
Test mode : IEEE802.11n HT20 CH11 2462MHz Tx

		Ant.	cable	Amp.		Emissio:	n			
	Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark	
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		
1	2467.050	29.48	8.82	36.02	91.49	93.77	74.00	-19.77	Peak	
2	2483.500	29.49	8.87	35.97	47.81	50.20	74.00	23.80	Peak	
3	2500.000	29.50	8.92	36.00	48.51	50.93	74.00	23.07	Peak	

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



# File: E:\2010 report data\A\Altai\ACS10QH130.EM6 (176)



Site no. : 3m Chamber Data no. : 144 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL Limit : FCC PART 15C AV

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu

: A2 WiFi Access Point/Bridge

Power : DC 48V From Adapter input AC 120V/60Hz

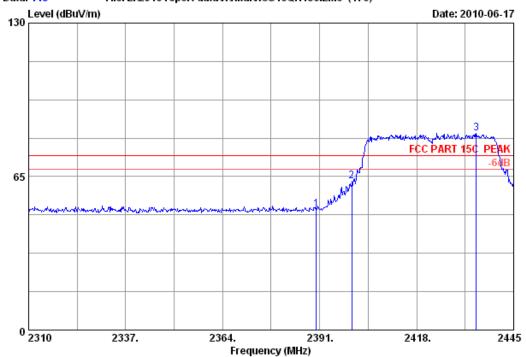
Test mode : IEEE802.11n HT20 CH11 2462MHz Tx

		Ant.	cable	Amp.		Emissio:	n		
	Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	2469.250	29.48	8.82	36.02	80.77	83.05	54.00 -	-29.05	Average
2	2483.500	29.49	8.87	35.97	39.83	42.22	54.00	11.78	Average
3	2500.000	29.50	8.92	36.00	38.97	41.39	54.00	12.61	Average

- 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. : 3m Chamber Data no. : 145 Ant. pol. : HORIZONTAL Dis. / Ant. : 3m 3115(0911)

: FCC PART 15C PEAK Limit

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu

: A2 WiFi Access Point/Bridge

Power : DC 48V From Adapter input AC 120V/60Hz

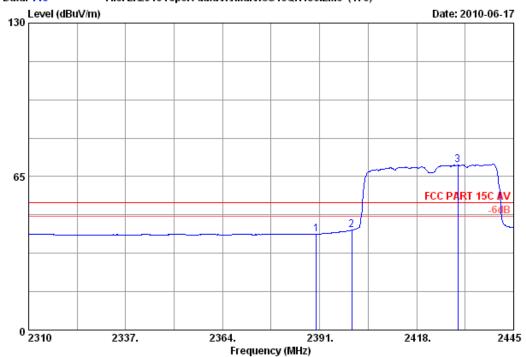
Test mode : IEEE802.11n HT40 CH1 2422MHz Tx

		Ant.	Cable	Amp.		Emissio:	n			
	Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark	
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		
1	2390.000	29.44	8.67	36.09	49.06	51.08	74.00	22.92	Peak	
2	2400.000	29.44	8.72	36.09	60.89	62.96	74.00	11.04	Peak	
3	2434.605	29.46	8.77	36.01	81.23	83.45	74.00	-9.45	Peak	

- 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. : 3m Chamber Data no. : 146 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL Limit : FCC PART 15C AV

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu

: A2 WiFi Access Point/Bridge

Power : DC 48V From Adapter input AC 120V/60Hz

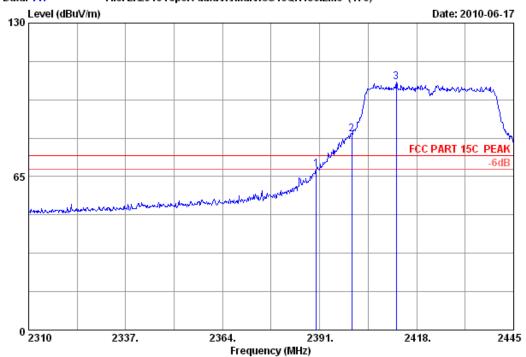
Test mode : IEEE802.11n HT40 CH1 2422MHz Tx

		Ant.	cable	Amp.		Emissio:	n		
	Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	2390.000	29.44	8.67	36.09	38.59	40.61	54.00	13.39	Average
2	2400.000	29.44	8.72	36.09	40.23	42.30	54.00	11.70	Average
3	2429.475	29.46	8.77	36.01	67.64	69.86	54.00	-15.86	Average

- 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. : 3m Chamber Data no. : 147 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL : FCC PART 15C PEAK Limit

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu

: A2 WiFi Access Point/Bridge

Power : DC 48V From Adapter input AC 120V/60Hz

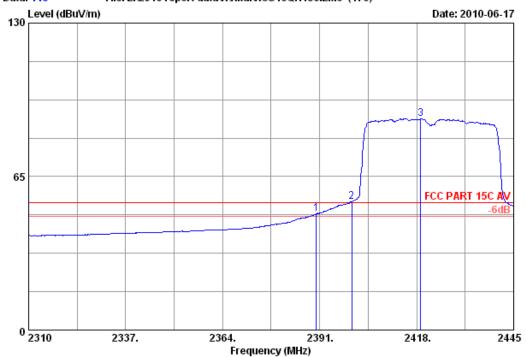
Test mode : IEEE802.11n HT40 CH1 2422MHz Tx

•	Ant. Factor (dB/m)	loss	Factor	Reading (dBuV)		Limits	_	Remark	
1 2390.000 2 2400.000 3 2412.330	29.44	8.72	36.09	66.11 80.94 102.72	68.13 83.01 104.94	74.00 74.00 74.00	5.87 -9.01 -30.94	Peak Peak Peak	

- 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. : 3m Chamber Data no. : 148

Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C AV

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu

EUT : A2 WiFi Access Point/Bridge

Power : DC 48V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11n HT40 CH1 2422MHz Tx

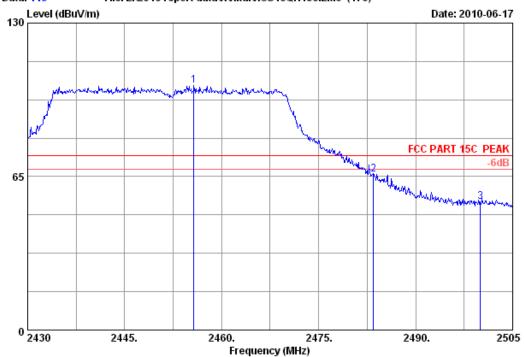
M/N : AP5822

	Freq.	Ant. Factor (dB/m)		Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits		Remark
1 2 3	2390.000 2400.000 2419.080	29.44	8.72	36.09 36.09 35.95	47.10 52.32 87.21	49.12 54.39 89.43	54.00 54.00 54.00	4.88 -0.39 -35.43	Average Average Average

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







Env. / Ins. : 23\*C/54% Engineer : Sunny-lu

EUT : A2 WiFi Access Point/Bridge

Power : DC 48V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11n HT40 CH7 2452MHz Tx

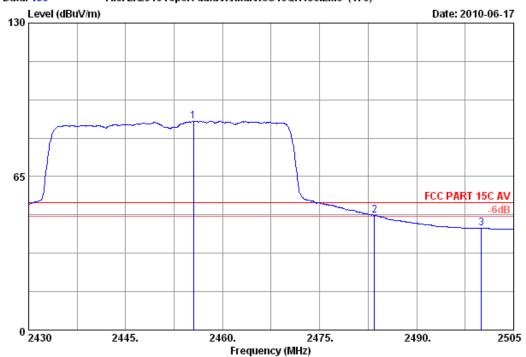
M/N : AP5822

		Ant.	cable	Amp.		Emissio:	n			
	Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark	
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m	) (dB)		
1	2455.725	29.48	8.82	36.02	101.24	103.52	74.00	-29.52	Peak	
2	2483.500	29.49	8.87	35.97	63.48	65.87	74.00	8.13	Peak	
3	2500.000	29.50	8.92	36.00	51.89	54.31	74.00	19.69	Peak	

- 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. : 3m Chamber Data no. : 150
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL
Limit : FCC PART 15C AV

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu

EUT : A2 WiFi Access Point/Bridge

Power : DC 48V From Adapter input AC 120V/60Hz

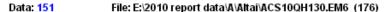
Test mode : IEEE802.11n HT40 CH7 2452MHz Tx

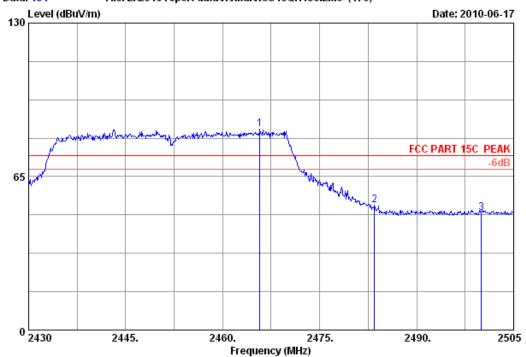
M/N : AP5822

		Ant.	cable	Amp.	Emission				
	Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	2455.500	29.48	8.82	36.02	86.21	88.49	54.00	-34.49	Average
2	2483.500	29.49	8.87	35.97	46.22	48.61	54.00	5.39	Average
3	2500.000	29.50	8.92	36.00	40.65	43.07	54.00	10.93	Average

- 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. : 3m Chamber Data no. : 151 Ant. pol. : HORIZONTAL Dis. / Ant. : 3m 3115(0911)

: FCC PART 15C PEAK Limit

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu

EUT : A2 WiFi Access Point/Bridge

Power : DC 48V From Adapter input AC 120V/60Hz

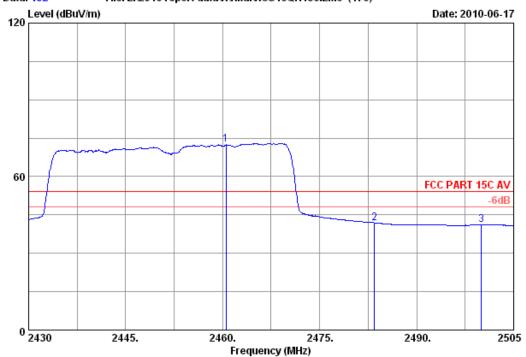
: IEEE802.11n HT40 CH7 2452MHz Tx Test mode

		Ant.	cable	Amp.		Emissio:	n			
	Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark	
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m	) (dB)		
1	2465.775	29.48	8.82	36.02	82.99	85.27	74.00	-11.27	Peak	
2	2483.500	29.49	8.87	35.97	50.30	52.69	74.00	21.31	Peak	
3	2500.000	29.50	8.92	36.00	47.33	49.75	74.00	24.25	Peak	

- 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. : 3m Chamber Data no. : 152 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL Limit : FCC PART 15C AV

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu

: A2 WiFi Access Point/Bridge

Power : DC 48V From Adapter input AC 120V/60Hz

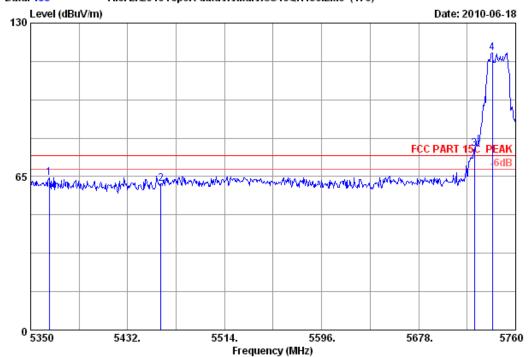
: IEEE802.11n HT40 CH7 2452MHz Tx Test mode

		Ant.	Cable	Amp.		Emissio:	n		
	Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	2460.525	29.48	8.82	36.02	70.11	72.39	54.00	-18.39	Average
2	2483.500	29.49	8.87	35.97	39.49	41.88	54.00	12.12	Average
3	2500.000	29.50	8.92	36.00	38.63	41.05	54.00	12.95	Average

- 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. : 3m Chamber Data no. : 153 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL : FCC PART 15C PEAK Limit

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu

: A2 WiFi Access Point/Bridge

Power : DC 48V From Adapter input AC 120V/60Hz Test mode : IEEE802.11n HT20 CH149 5745MHz Tx

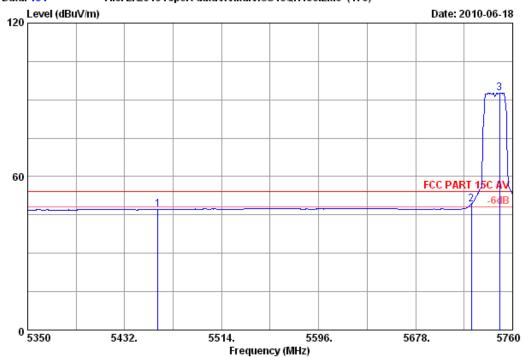
: AP5822 M/N

	Ant. Cabl			Amp.		Emission					
	Freq. (MHz)	Factor (dB/m)	loss (dB)	Factor (dB)	Reading (dBuV)			_	Remark		
1	5365.580	35.63	13.00	35.07	51.07	64.63	74.00	9.37	Peak		
2	5460.000	35.86	13.12	35.10	48.07	61.95	74.00	12.05	Peak		
3	5725.000	36.00	13.45	35.37	62.51	76.59	74.00	-2.59	Peak		
4	5740.320	36.00	13.45	35.12	103.09	117.42	74.00	-43.42	Peak		

- 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. : 3m Chamber Data no. : 154 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL Limit : FCC PART 15C AV

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu

: A2 WiFi Access Point/Bridge

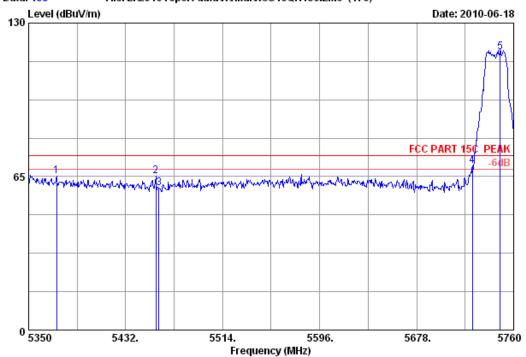
Power : DC 48V From Adapter input AC 120V/60Hz Test mode : IEEE802.11n HT20 CH149 5745MHz Tx

	Freq. (MHz)	Factor	loss (dB)	-	Reading (dBuV)	Level (dBuV/m)	Limits	_	Remark
2	5460.000 5725.000 5748.930	36.00	13.45	35.37	33.18 35.14 78.26	47.06 49.22 92.62	54.00 54.00 54.00	6.94 4.78 -38.62	Average Average Average

- 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. : 3m Chamber Data no. : 155
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu

EUT : A2 WiFi Access Point/Bridge

Power : DC 48V From Adapter input AC 120V/60Hz Test mode : IEEE802.11n HT20 CH149 5745MHz Tx

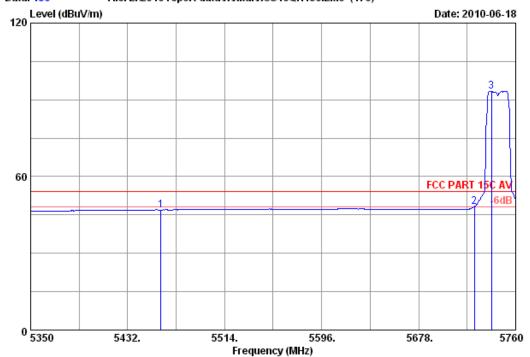
M/N : AP5822

		Ant.	Cable	Amp.		Emissio:	n			
	Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark	
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		
1	5373.780	35.63	13.03	35.07	51.52	65.11	74.00	8.89	Peak	
2	5457.420	35.86	13.12	35.10	51.14	65.02	74.00	8.98	Peak	
3	5460.000	35.86	13.12	35.10	46.13	60.01	74.00	13.99	Peak	
4	5725.000	36.00	13.45	35.37	55.44	69.52	74.00	4.48	Peak	
5	5748.520	36.00	13.48	35.12	103.38	117.74	74.00	-43.74	Peak	

- 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. : 3m Chamber Data no. : 156
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL
Limit : FCC PART 15C AV

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu

EUT : A2 WiFi Access Point/Bridge

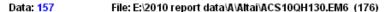
Power : DC 48V From Adapter input AC 120V/60Hz Test mode : IEEE802.11n HT20 CH149 5745MHz Tx

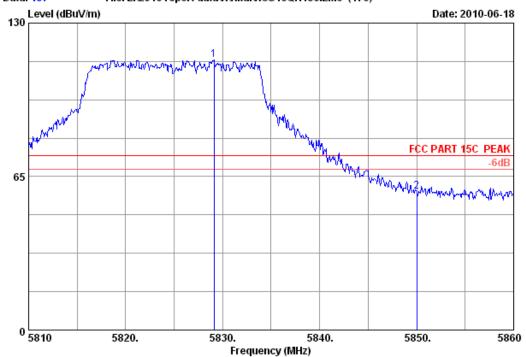
M/N : AP5822

	Ant. Cable Amp.			Emission					
	Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	5460.000	35.86	13.12	35.10	33.03	46.91	54.00	7.09	Average
2	5725.000	36.00	13.45	35.37	34.19	48.27	54.00	5.73	Average
3	5739.500	36.00	13.45	35.12	78.97	93.30	54.00 -	-39.30	Average

- 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. : 3m Chamber Data no. : 157
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu

EUT : A2 WiFi Access Point/Bridge

Power : DC 48V From Adapter input AC 120V/60Hz Test mode : IEEE802.11n HT20 CH165 5825MHz Tx

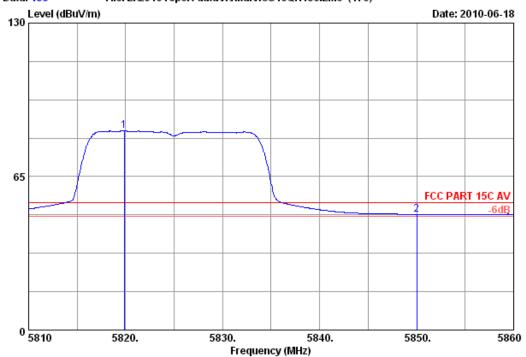
M/N : AP5822

		Ant.	Cable	Amp.	Emission					
	Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark	
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m	) (dB)		
1	5829.100	36.00	11.79	34.47	101.12	114.44	74.00	-40.44	Peak	
2	5850.000	36.00	11.81	34.46	45.33	58.68	74.00	15.32	Peak	

- 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. : 3m Chamber Data no. : 158 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL Limit : FCC PART 15C AV

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu

EUT : A2 WiFi Access Point/Bridge

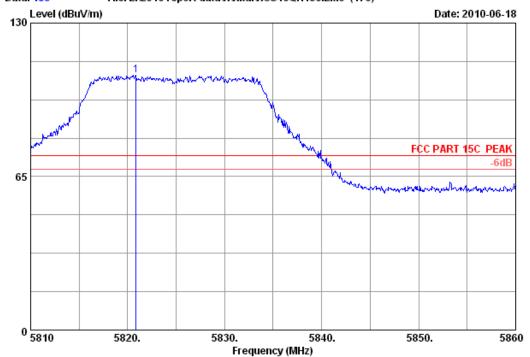
Power
Test mode : IEEE802
: AP5822 : DC 48V From Adapter input AC 120V/60Hz : IEEE802.11n HT20 CH165 5825MHz Tx

	•	Ant. Factor (dB/m)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits		Remark
_	5819.850 5850.000		 	71.00 35.70	84.32 49.05	54.00 54.00	-30.32 4.95	Average Average

- 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. : 3m Chamber Data no. : 159
Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu

EUT : A2 WiFi Access Point/Bridge

Power : DC 48V From Adapter input AC 120V/60Hz Test mode : IEEE802.11n HT20 CH165 5825MHz Tx

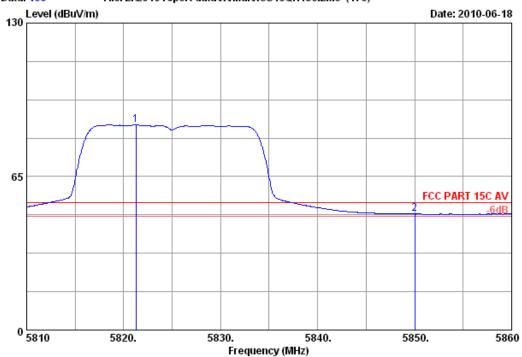
M/N : AP5822

	-		loss	Factor	Reading (dBuV)		Limits	_	Remark	
1	5820.850	36.00	11.79	34.47	94.50	107.82	74.00	-33.82	Peak	-

- 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 no. : 160 Site no. : 3m Chamber Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL Limit : FCC PART 15C AV

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu

EUT : A2 WiFi Access Point/Bridge

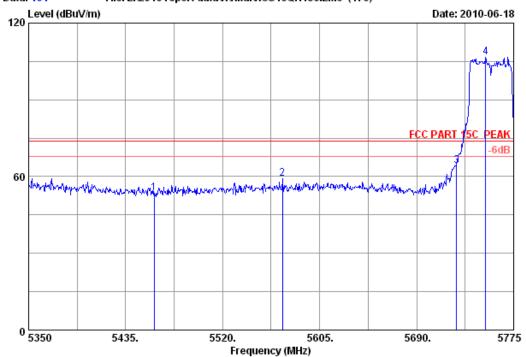
Power
Test mode : IEEE802
: AP5822 : DC 48V From Adapter input AC 120V/60Hz : IEEE802.11n HT20 CH165 5825MHz Tx

		Ant.	Cable	Amp.	Emission				
	Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m	) (dB)	
1	5821.250	36.00	11.79	34.47	73.54	86.86	54.00	-32.86	Average
2	5850.000	36.00	11.81	34.46	35.73	49.08	54.00	4.92	Average

- 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. : 3m Chamber Data no. : 161 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL : FCC PART 15C PEAK Limit Env. / Ins. : 23\*C/54% Engineer : Sunny-lu

: A2 WiFi Access Point/Bridge

Power : DC 48V From Adapter input AC 120V/60Hz Test mode : IEEE802.11n HT40 CH151 5755MHz Tx

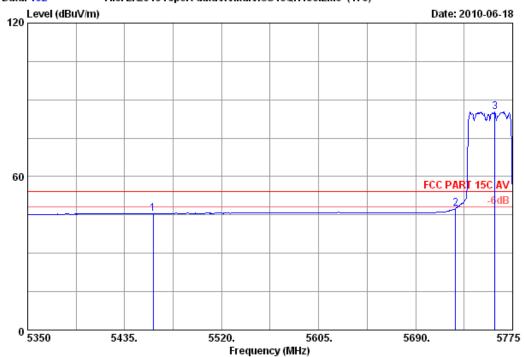
: AP5822 M/N

		Ant.	Cable	Amp.		Emissio	n			
	Freq.	Factor (dB/m)	loss (dB)	Factor (dB)	Reading (dBuV)				Remark	
1	5460.000	35 86	11 38	34 62	40.97	53.59	74.00	20.41	Peak	
_	5572.275				46.31	59.23		14.77	Peak	
_	5725.000				51.04	64.20	74.00	9.80	Peak	
4	5750.350	36.00	11.70	34.50	93.35	106.55	74.00	-32.55	Peak	

- 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. : 3m Chamber Data no. : 162
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL
Limit : FCC PART 15C AV

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu

EUT : A2 WiFi Access Point/Bridge

Power : DC 48V From Adapter input AC 120V/60Hz Test mode : IEEE802.11n HT40 CH151 5755MHz Tx

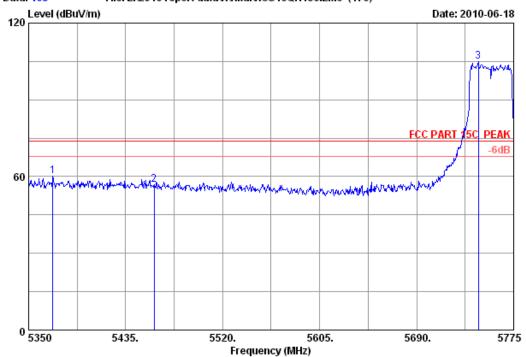
M/N : AP5822

	Ant. Cable			Amp.	Amp. Emission				
	Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	5460.000	35.86	11.38	34.62	32.82	45.44	54.00	8.56	Average
2	5725.000	36.00	11.67	34.51	34.45	47.61	54.00	6.39	Average
3	5759.275	36.00	11.72	34.49	72.17	85.40	54.00	-31.40	Average

- 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. : 3m Chamber Data no. : 163
Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu

EUT : A2 WiFi Access Point/Bridge

Power : DC 48V From Adapter input AC 120V/60Hz Test mode : IEEE802.11n HT40 CH151 5755MHz Tx

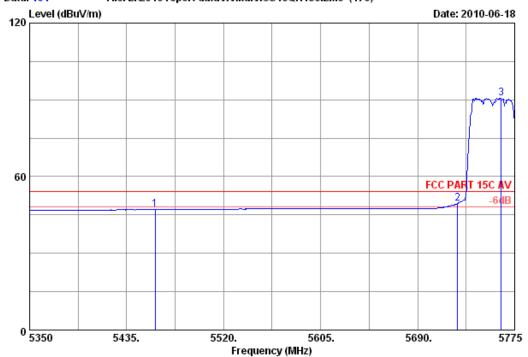
M/N : AP5822

	-	Factor		Factor	Reading (dBuV)		Limits	_	Remark	
1	5371.250	35.63	11.26	34.68	47.80	60.01	74.00	13.99	Peak	
2	5460.000	35.86	11.38	34.62	44.06	56.68	74.00	17.32	Peak	
3	5743.975	36.00	11.70	34.50	91.62	104.82	74.00	-30.82	Peak	

- 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. : 3m Chamber Data no. : 164 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL Limit : FCC PART 15C AV

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu

: A2 WiFi Access Point/Bridge

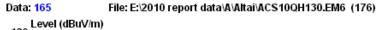
Power : DC 48V From Adapter input AC 120V/60Hz Test mode : IEEE802.11n HT40 CH151 5755MHz Tx

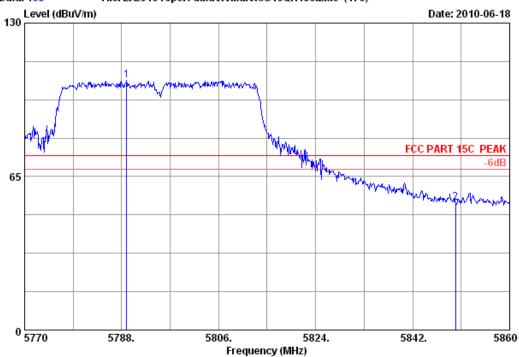
: AP5822 M/N

		Ant.	Cable	Amp.		Emissio:	n		
	Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	5460.000	35.86	11.38	34.62	34.43	47.05	54.00	6.95	Average
2	5725.000	36.00	11.67	34.51	36.28	49.44	54.00	4.56	Average
3	5763.100	36.00	11.72	34.49	77.43	90.66	54.00 -	-36.66	Average

- 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 no. : 165 Site no. : 3m Chamber Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

: FCC PART 15C PEAK Limit

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu

: A2 WiFi Access Point/Bridge

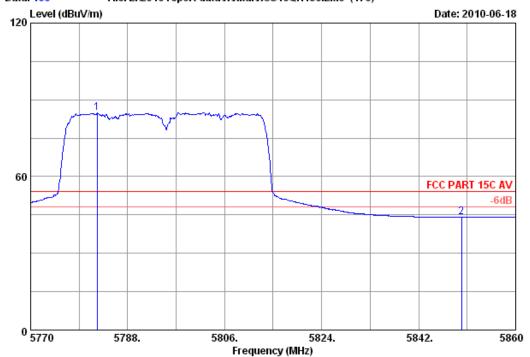
Power
Test mode : IEEE802
: AP5822 : DC 48V From Adapter input AC 120V/60Hz : IEEE802.11n HT40 CH159 5795MHz Tx

	Ant. Cable			e Amp. Emission						
	-				Reading			_	Remark	
	(MHZ)	(ab/m) 	(ab)	(ab) 	(dBuV) 	(abuv/m) 	(abuv/m	) (ab) 		
1	5788.900	36.00	11.74	34.48	92.31	105.57	74.00	-31.57	Peak	
2	5850.000	36.00	11.81	34.46	40.65	54.00	74.00	20.00	Peak	

- 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 no. : 166 Site no. : 3m Chamber Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL Limit : FCC PART 15C AV

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu

EUT : A2 WiFi Access Point/Bridge

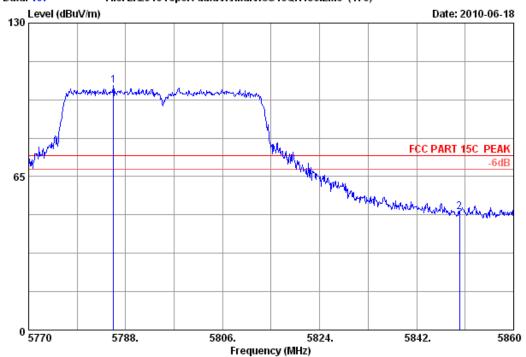
Power
Test mode : IEEE802
: AP5822 : DC 48V From Adapter input AC 120V/60Hz : IEEE802.11n HT40 CH159 5795MHz Tx

	Ant. Cable			e Amp. Emission					
	Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m	(dB)	
1	5782.330	36.00	11.74	34.48	71.61	84.87	54.00	-30.87	Average
2	5850.000	36.00	11.81	34.46	30.74	44.09	54.00	9.91	Average

- 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 no. : 167 Site no. : 3m Chamber Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL : FCC PART 15C PEAK Limit

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu

EUT : A2 WiFi Access Point/Bridge

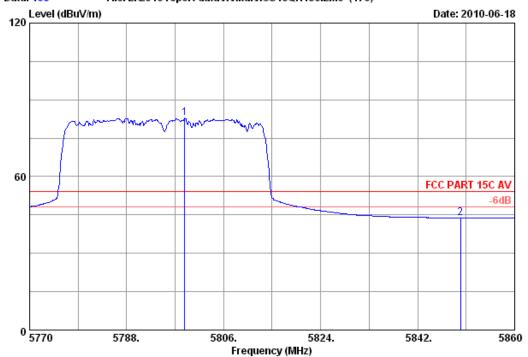
Power
Test mode : IEEE802
: AP5822 : DC 48V From Adapter input AC 120V/60Hz : IEEE802.11n HT40 CH159 5795MHz Tx

	Ant. Cable Amj			Amp.						
	Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark	
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m	) (dB)		
1	5785.750	36.00	11.74	34.48	90.37	103.63	74.00	-29.63	Peak	
2	5850.000	36.00	11.81	34.46	36.64	49.99	74.00	24.01	Peak	

- 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. : 3m Chamber Data no. : 168 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL Limit : FCC PART 15C AV

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu

EUT : A2 WiFi Access Point/Bridge

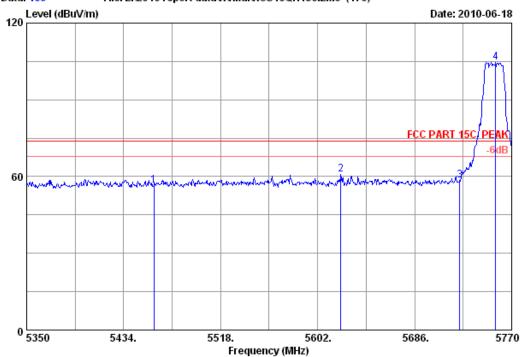
Power
Test mode : IEEE802
: AP5822 : DC 48V From Adapter input AC 120V/60Hz : IEEE802.11n HT40 CH159 5795MHz Tx

Ant. Cable			Amp. Emission					
-				Reading (dBuV)			_	Remark
5798.800 5850.000				69.45 30.53		54.00 - 54.00	-28.74 10.12	Average Average

- 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. : 3m Chamber Data no. : 169
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu

EUT : A2 WiFi Access Point/Bridge

Power : DC 48V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11a CH149 5745MHz Tx

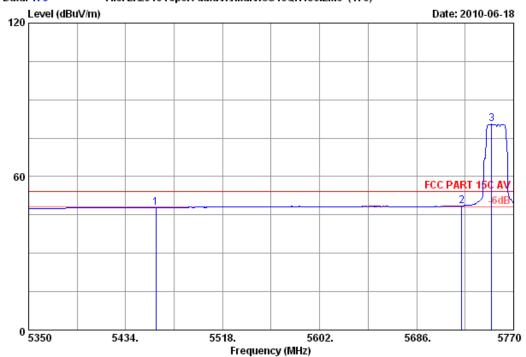
M/N : AP5822

	Freq.	Ant. Factor (dB/m)	Cable loss (dB)	•	Reading (dBuV)	Emissio: Level (dBuV/m)	Limits		Remark
1	5460.000	35.86	11.38	34.62	43.75	56.37	74.00	17.63	Peak
2	5622.160	36.00	11.56	34.55	47.87	60.88	74.00	13.12	Peak
3	5725.000	36.00	11.67	34.51	45.30	58.46	74.00	15.54	Peak
4	5756.140	36.00	11.70	34.49	91.44	104.65	74.00	-30.65	Peak

- 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. : 3m Chamber Data no. : 170 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL Limit : FCC PART 15C AV

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu

EUT : A2 WiFi Access Point/Bridge

Power : DC 48V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11a CH149 5745MHz Tx

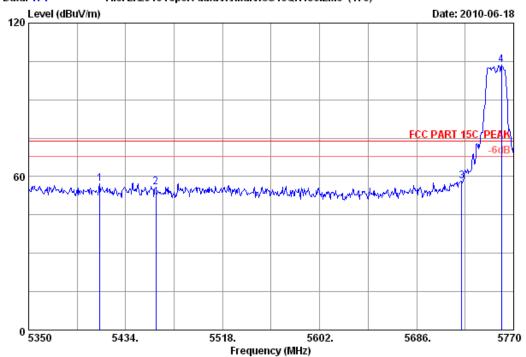
: AP5822 M/N

		Ant.	Cable	Amp.		Emissio:	n		
	Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	5460.000	35.86	11.38	34.62	35.17	47.79	54.00	6.21	Average
2	5725.000	36.00	11.67	34.51	35.27	48.43	54.00	5.57	Average
3	5751.100	36.00	11.70	34.50	67.21	80.41	54.00	-26.41	Average

- 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. : 3m Chamber Data no. : 171 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

: FCC PART 15C PEAK Limit

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu

: A2 WiFi Access Point/Bridge

Power : DC 48V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11a CH149 5745MHz Tx

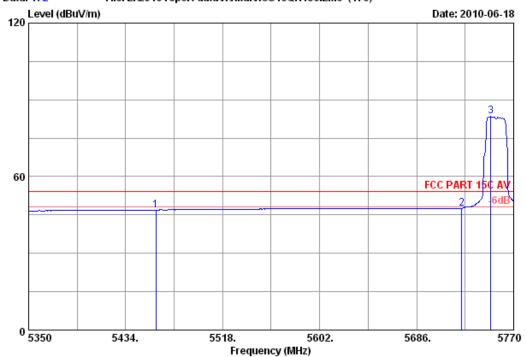
: AP5822 M/N

		Ant.	Cable	Amp.		Emissio	n			
	Freq. (MHz)	Factor (dB/m)	loss (dB)	Factor (dB)	Reading (dBuV)			_	Remark	
1	5411.740	35.77	11.31	34.65	44.63	57.06	74.00	16.94	Peak	
2	5460.000	35.86	11.38	34.62	43.15	55.77	74.00	18.23	Peak	
3	5725.000	36.00	11.67	34.51	45.08	58.24	74.00	15.76	Peak	
4	5759.500	36.00	11.72	34.49	90.31	103.54	74.00	-29.54	Peak	

- 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. : 3m Chamber Data no. : 172 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL Limit : FCC PART 15C AV

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu

: A2 WiFi Access Point/Bridge

Power : DC 48V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11a CH149 5745MHz Tx

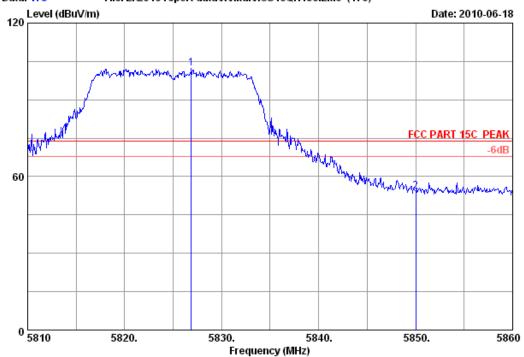
: AP5822 M/N

		Ant.	Cable	Amp.		Emissio:	n		
	Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	5460.000	35.86	11.38	34.62	34.28	46.90	54.00	7.10	Average
2	5725.000	36.00	11.67	34.51	34.37	47.53	54.00	6.47	Average
3	5750.260	36.00	11.70	34.50	70.26	83.46	54.00	-29.46	Average

- 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. : 3m Chamber Data no. : 173
Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu

EUT : A2 WiFi Access Point/Bridge

Power : DC 48V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11a CH165 5825MHz Tx

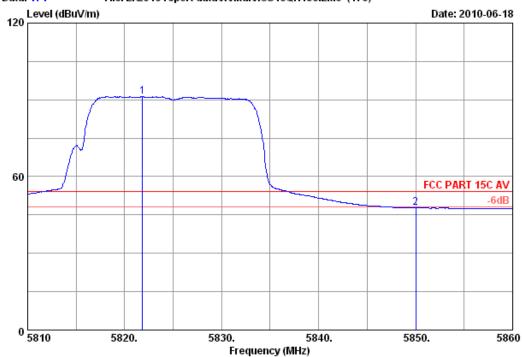
M/N : AP5822

		Ant.	Cable	Amp.		Emissio	n			
	Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark	
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m	(dB)		
1	5826.850	36.00	11.79	34.47	88.91	102.23	74.00	-28.23	Peak	
2	5850.000	36.00	11.81	34.46	40.85	54.20	74.00	19.80	Peak	

- 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 no. : 174 Site no. : 3m Chamber Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL Limit : FCC PART 15C AV

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu

EUT : A2 WiFi Access Point/Bridge

: DC 48V From Adapter input AC 120V/60Hz

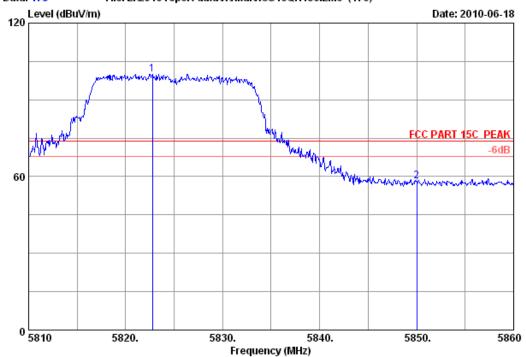
Power
Test mode : IEEE802
: AP5822 : IEEE802.11a CH165 5825MHz Tx

		Ant.	Cable	Amp.		Emissio	n		
	Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	5821.850	36.00	11.79	34.47	78.05	91.37	54.00	-37.37	Average
2	5850.000	36.00	11.81	34.46	34.39	47.74	54.00	6.26	Average

- 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. : 3m Chamber Data no. : 175 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

: FCC PART 15C PEAK Limit

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu

EUT : A2 WiFi Access Point/Bridge

Power : DC 48V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11a CH165 5825MHz Tx

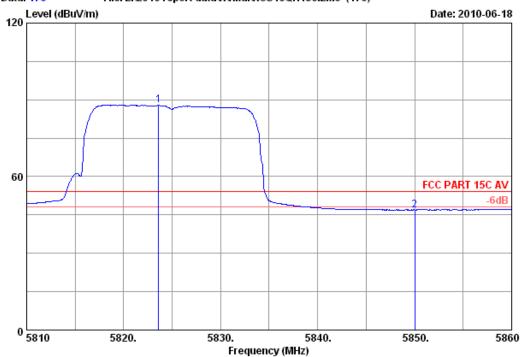
: AP5822 M/N

	-	Factor	loss	Reading (dBuV)	Limits	_	Remark	
_				 86.71 44.82	 74.00 74.00	-26.03 15.83	Peak Peak	

- 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. : 3m Chamber Data no. : 176 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL Limit : FCC PART 15C AV

Env. / Ins. : 23\*C/54%

Engineer : Sunny-lu EUT : A2 WiFi Access Point/Bridge

: DC 48V From Adapter input AC 120V/60Hz

Power
Test mode : IEEE802
: AP5822 : IEEE802.11a CH165 5825MHz Tx

	Ant.	Cable	Amp.		Emission	n		
-				Reading (dBuV)			_	Remark
5823.600 5850.000						54.00 - 54.00	-33.97 7.04	Average Average

- 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.

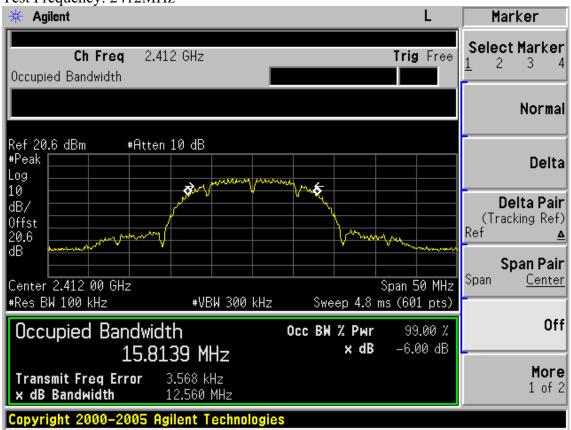
# 7.4.Test Results

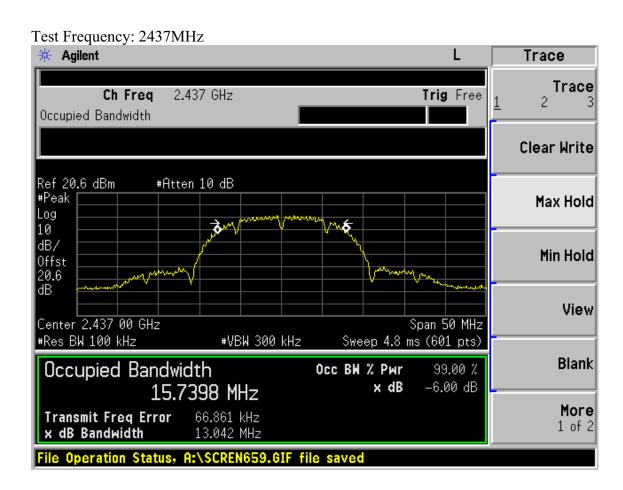
EUT: A2 WiFi Access Point/Bridge					
M/N: AP5822					
Test date: 2010-06-20	Pressure: 100.6 kpa	Humidity: 56 %			
Tested by: Sunny-lu Test site: RF Site Temperature : 25 °C					

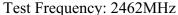
Cable loss:	0.6 dB	Attenuator loss: 20 dB		z:5.0 dBi z :16dBi
		Res		
Test	СН	Chain0	Chain1	Limit
Mode	CH	6dB bandwidth	6dB bandwidth	(KHz)
		(MHz)	(MHz)	
	CH1	12.560	12.134	>500
11b	CH6	13.042	12.113	>500
	CH11	12.084	12.607	>500
	CH1	16.520	16.605	>500
11g	CH6	16.567	16.550	>500
	CH11	16.590	16.601	>500
	CH1	17.791	17.780	>500
	CH6	17.715	17.751	>500
11n	CH11	17.698	17.752	>500
HT20	CH149	17.609	17.639	>500
	CH157	17.665	17.658	>500
	CH165	17.635	17.641	>500
	CH1	36.389	36.403	>500
1.1	CH4	36.171	36.125	>500
11n HT40	CH7	36.433	36.184	>500
П140	CH151	36.442	36.489	>500
	CH159	36.279	36.497	>500
	CH149	16.504	16.524	>500
11a	CH157	16.473	16.426	>500
	CH165	16.390	16.401	>500
Conclusion	: PASS			

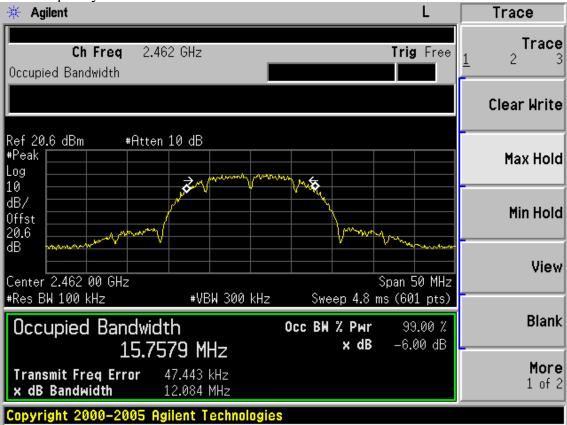
(2.4G) Chain 1:

Test Mode: IEEE 802.11b TX Test Frequency: 2412MHz

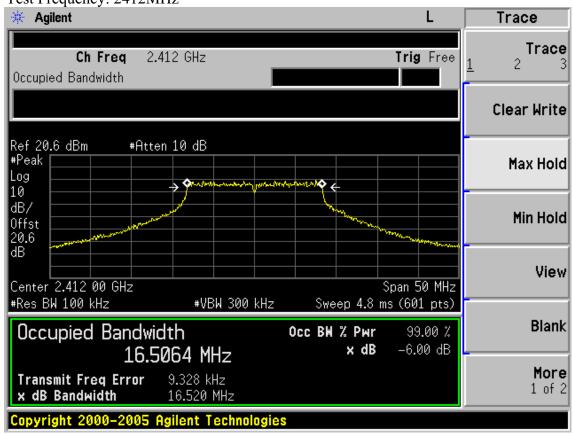


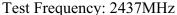


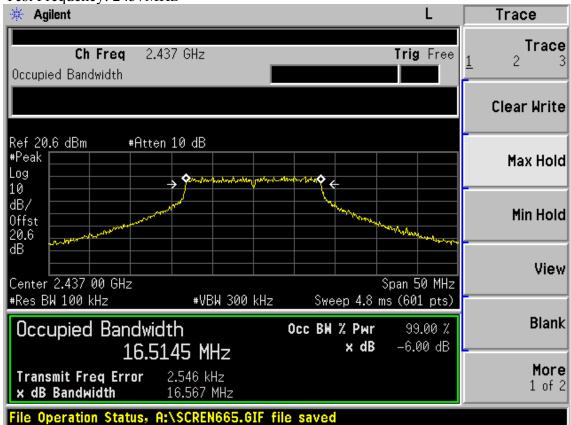


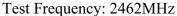


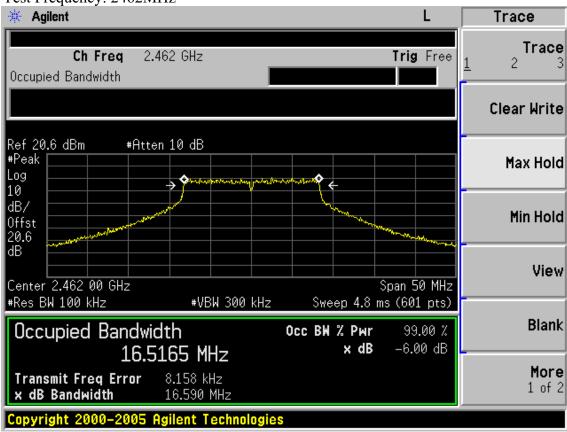
Test Mode: IEEE 802.11g TX Test Frequency: 2412MHz



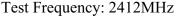


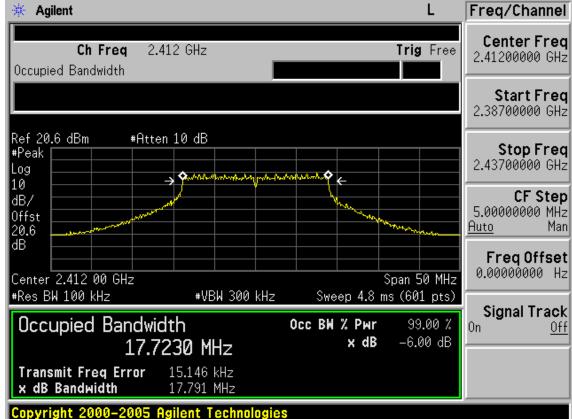


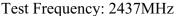


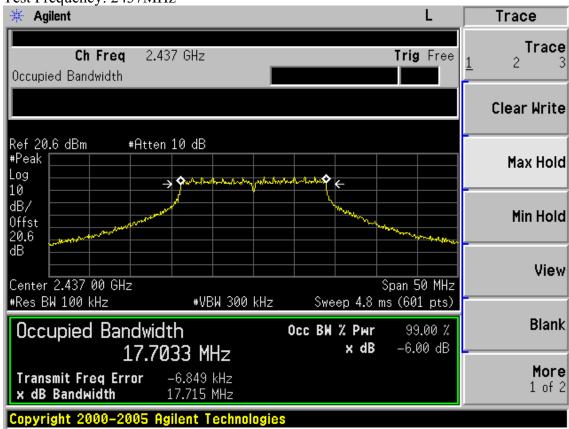


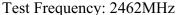
Test Mode: IEEE 802.11n HT20 TX

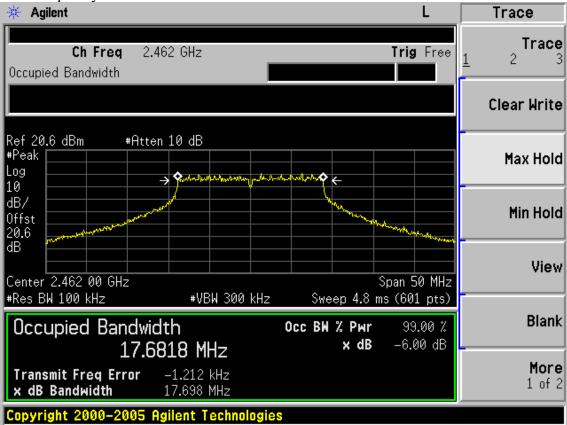






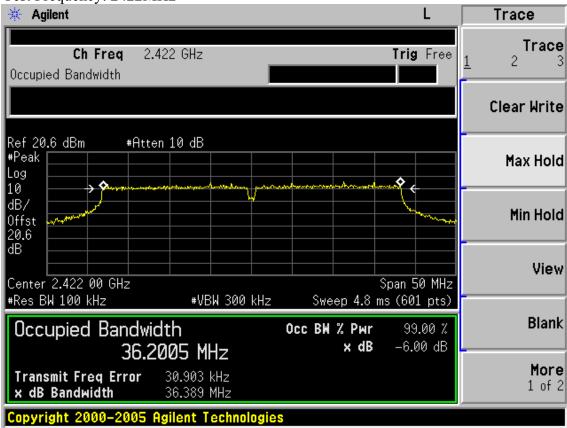




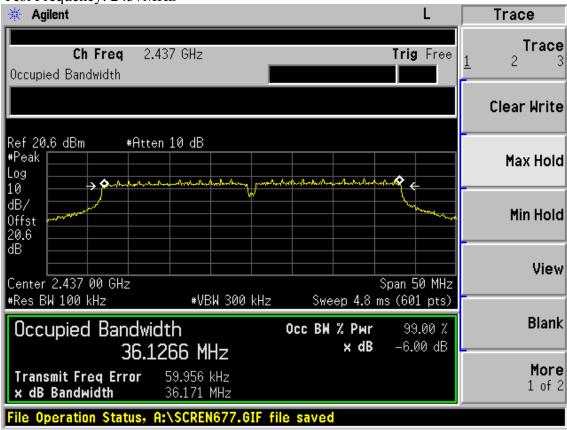


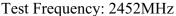
Test Mode: IEEE 802.11n HT40 TX

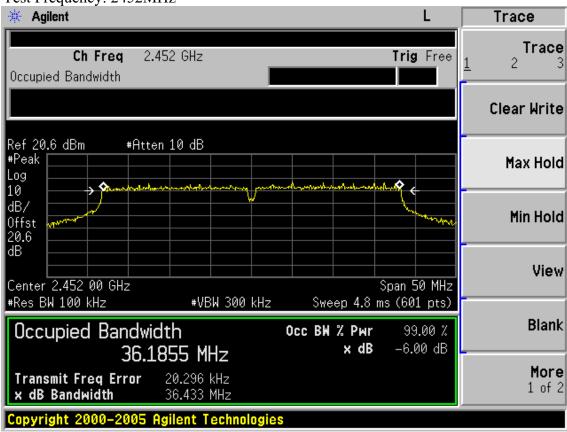
Test Frequency: 2422MHz



Test Frequency: 2437MHz

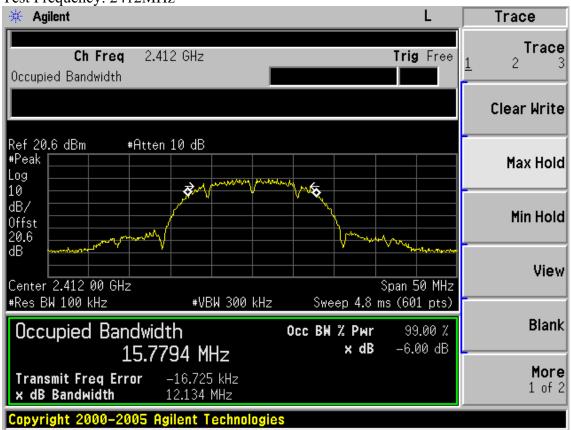


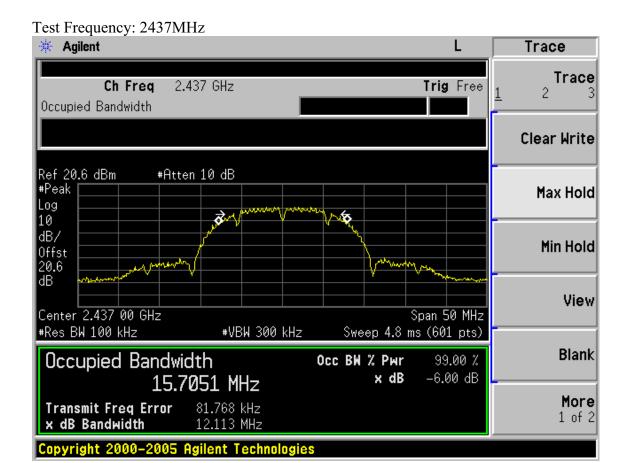


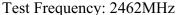


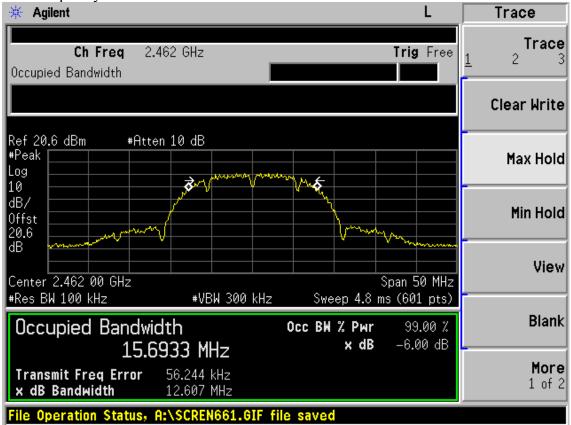
Chain 2:

Test Mode: IEEE 802.11b TX Test Frequency: 2412MHz

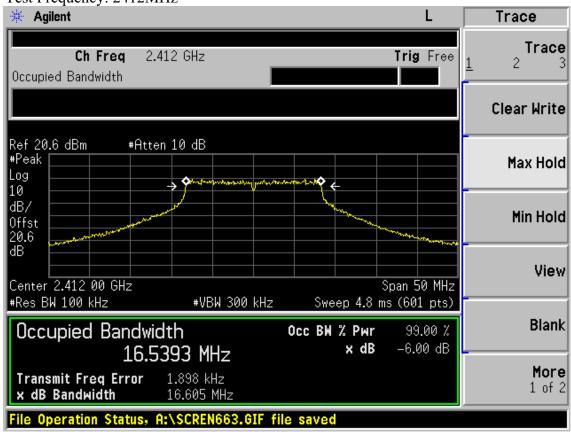


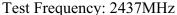


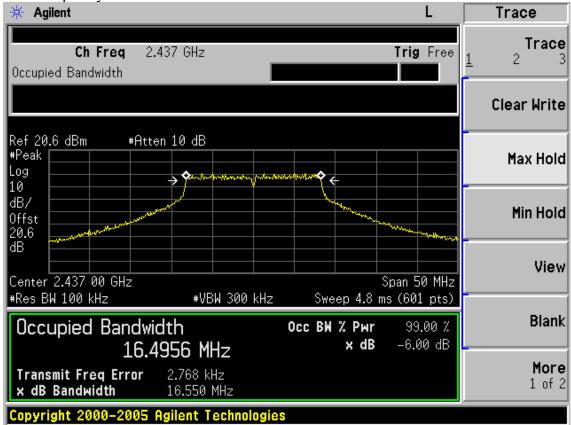


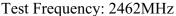


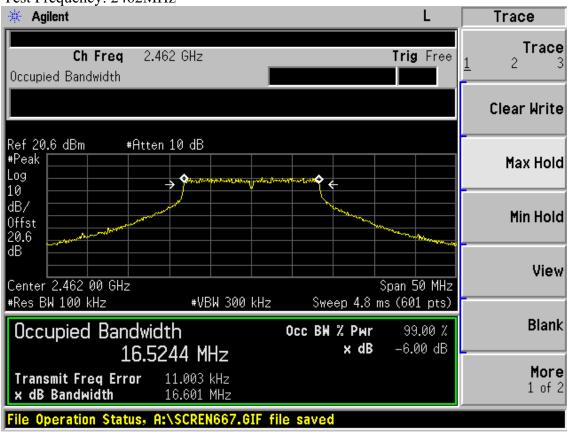
Test Mode: IEEE 802.11g TX Test Frequency: 2412MHz





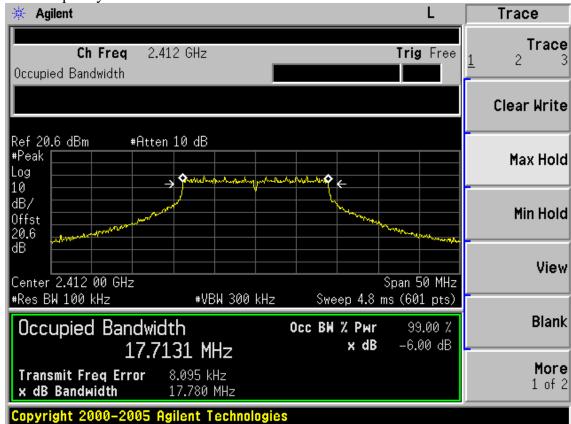


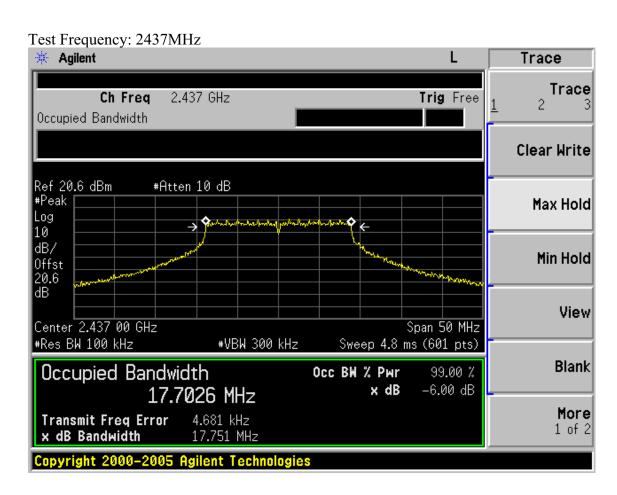


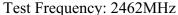


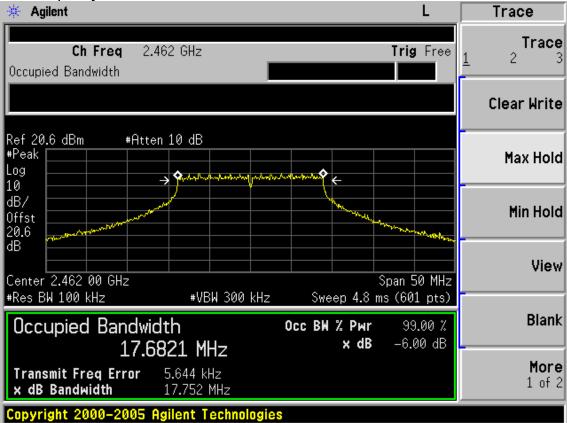
Test Mode: IEEE 802.11n HT20 TX

Test Frequency: 2412MHz

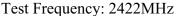


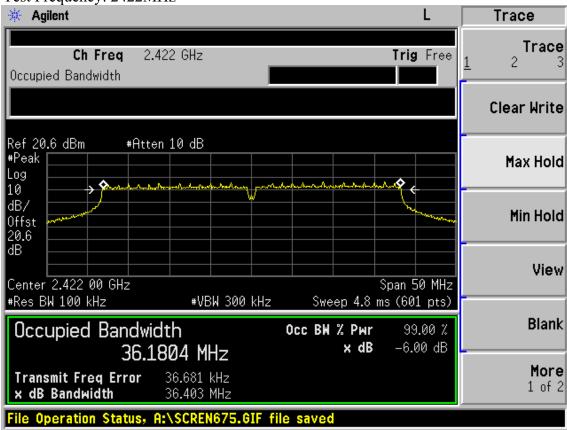


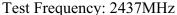


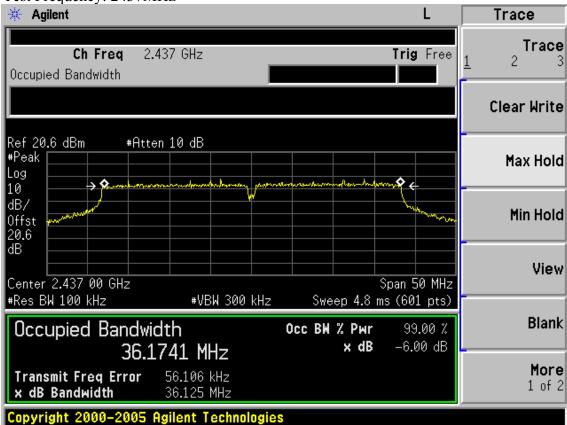


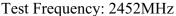
Test Mode: IEEE 802.11n HT40 TX

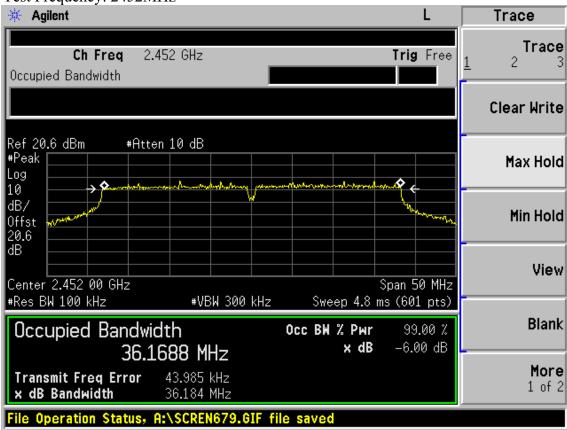






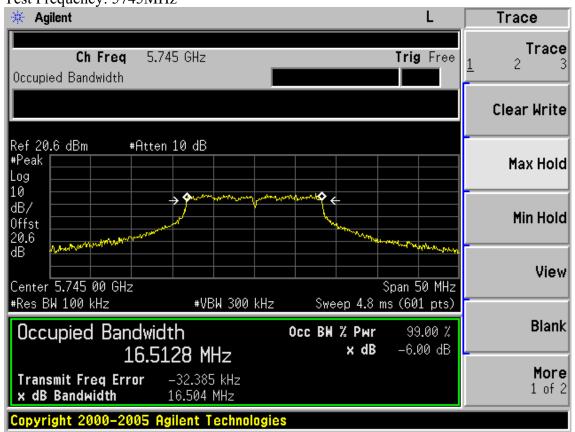


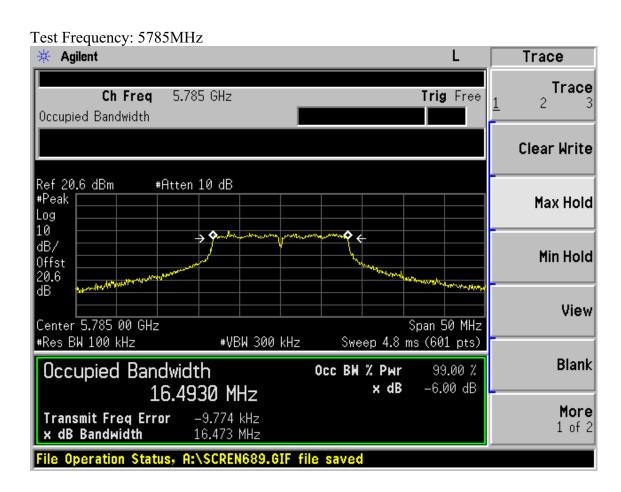


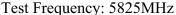


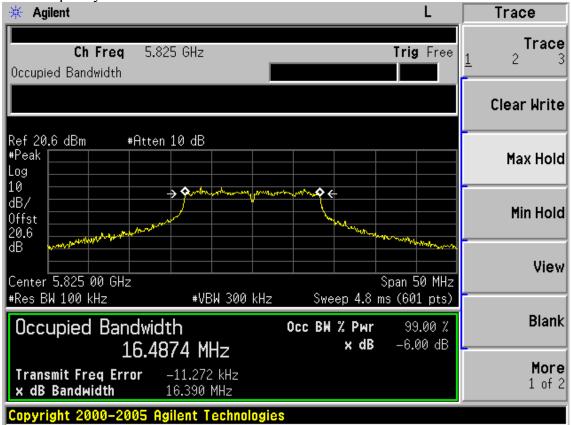
## (5G) Chain 1:

Test Mode: IEEE 802.11a TX Test Frequency: 5745MHz



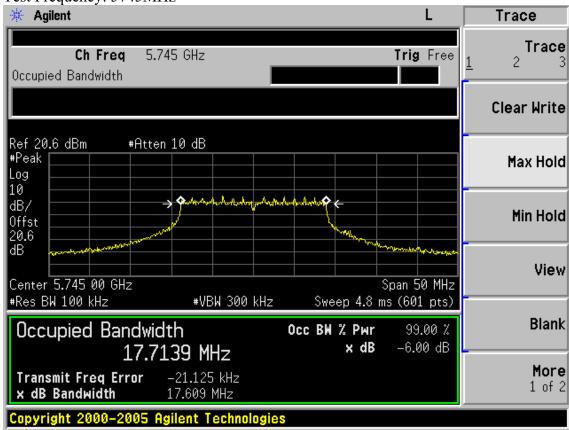


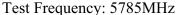


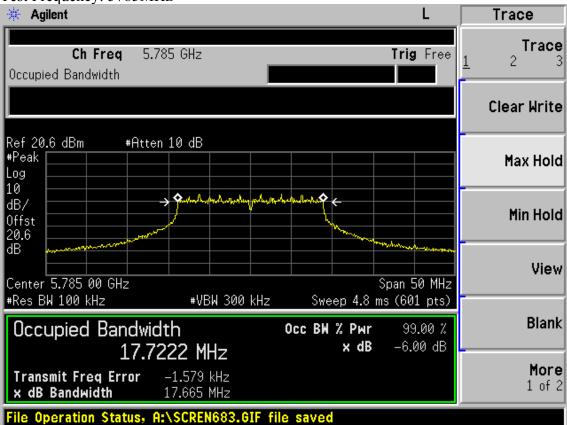


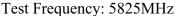
Test Mode: IEEE 802.11n HT20 TX

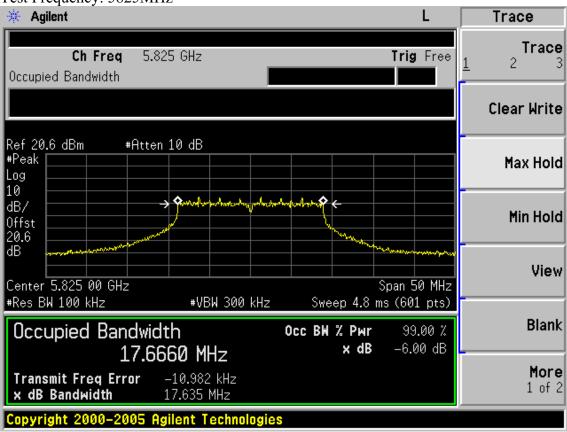
Test Frequency: 5745MHz





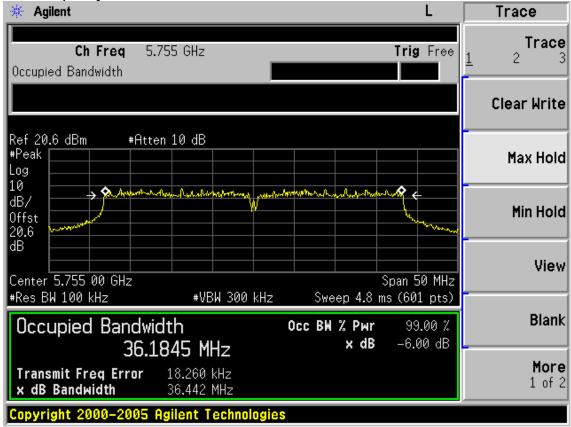






Test Mode: IEEE 802.11n HT40 TX

Test Frequency: 5755MHz

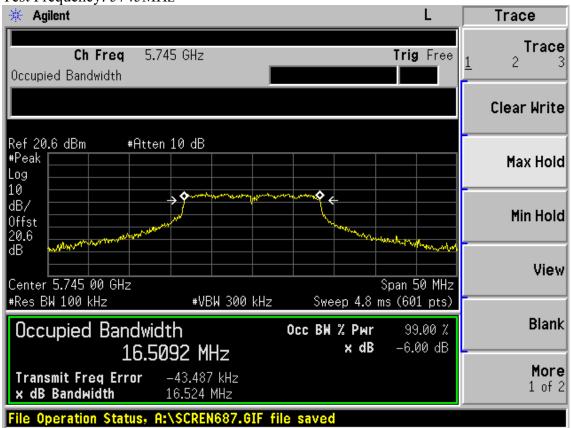


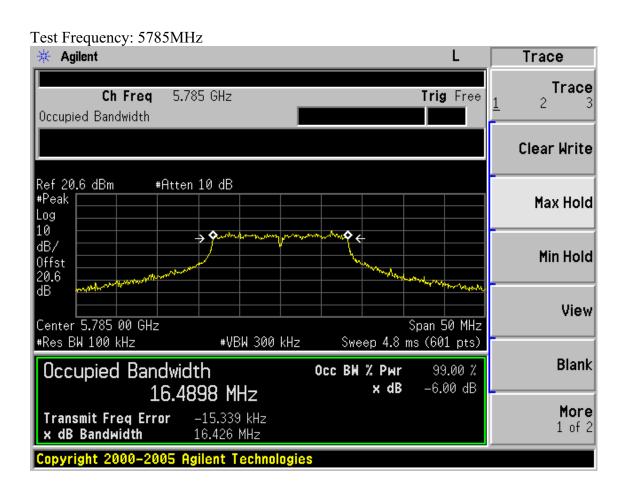
Test Frequency: 5795MHz

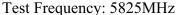


Chain 2:

Test Mode: IEEE 802.11a TX Test Frequency: 5745MHz



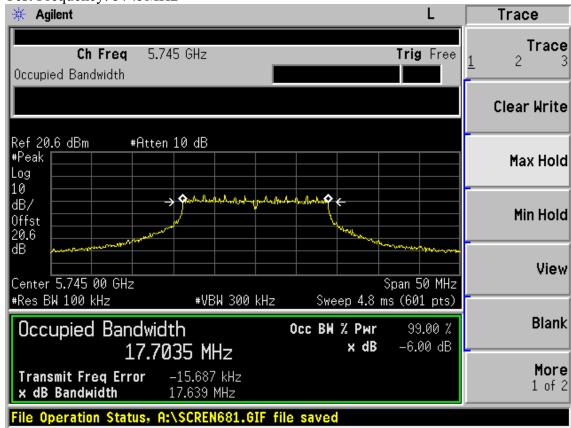


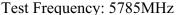


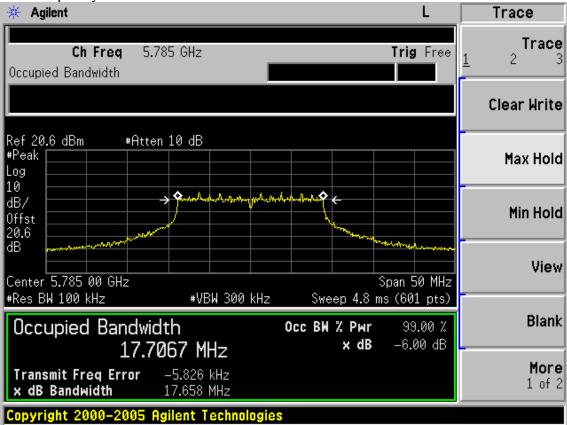


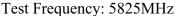
Test Mode: IEEE 802.11n HT20 TX

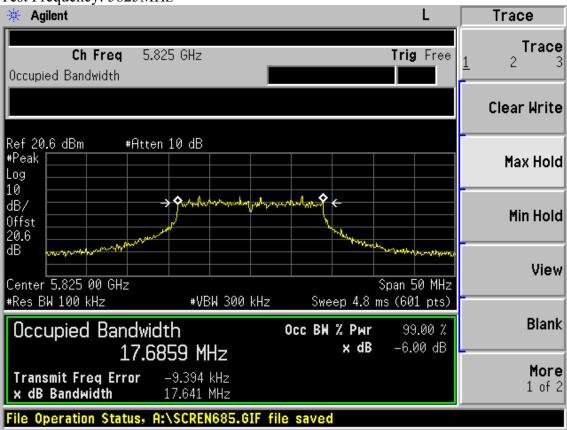
Test Frequency: 5745MHz



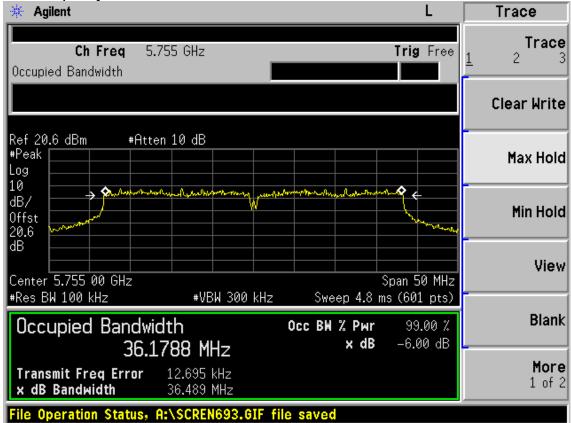


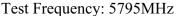


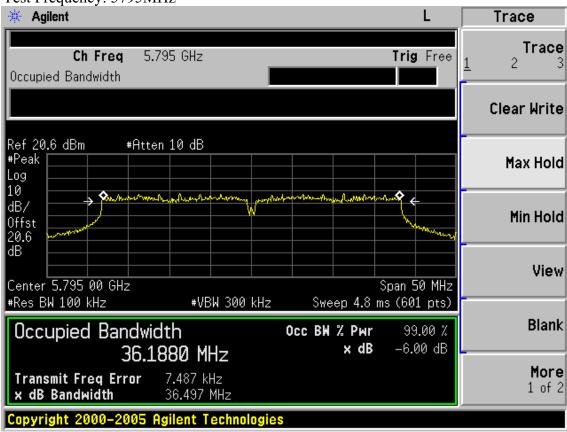




Test Frequency: 5755MHz







### 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	RF Cable	Hubersuhner	SUCOFLEX102	28618/2	May.08,10	1Year
5	Spectrum Analyzer	Agilent	E4446A	US44300459	May.08,10	1 Year

### 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)

If transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

#### 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 above 6dB bandwidth of signal to measure out each each test modes and chain's 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 the channel power measure function of Spectrum Analyzer was used to measure out the PK output power of each test modes and chain's.
- 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: A2 WiFi Access Point/Bridge						
M/N: AP5822						
Test date: 2010-06-20						
Tested by: Sunny-lu Test site: RF site Temperature: 25°C						

Cable loss: 0.6 dB		Attenuator loss: 20dB			Hz :5dBi z :16dBi
			Result	l	
Mode	СН	Chain 0	Chain 1	Total	Limit
Mode	Сп	PK Output	PK Output	PK Output	(dBm)
		power(dBm)	power(dBm)	power(dBm)	
	CH1	21.96	21.16	N/A	30
11b	CH6	26.06	25.41	N/A	30
	CH11	22.15	22.10	N/A	30
	CH1	20.26	18.59	N/A	30
11g	CH6	25.88	25.46	N/A	30
_	CH11	19.89	19.03	N/A	30
	CH1	17.51	17.47	20.50	30
	CH6	25.73	25.26	28.51	30
11n	CH11	17.89	17.56	20.74	30
HT20	CH149	14.01	13.36	16.71	20
	CH157	15.28	14.78	18.05	20
	CH165	15.83	14.28	18.13	20
	CH1	14.37	14.35	17.37	30
	CH4	22.22	21.71	24.98	30
11n	CH7	14.19	13.60	16.92	30
HT40	CH151	14.18	13.76	16.99	20
	CH159	14.67	14.53	17.61	20
	CH149	13.66	13.57	N/A	20
11a	CH157	15.56	15.26	N/A	20
	CH165	14.32	13.63	N/A	20

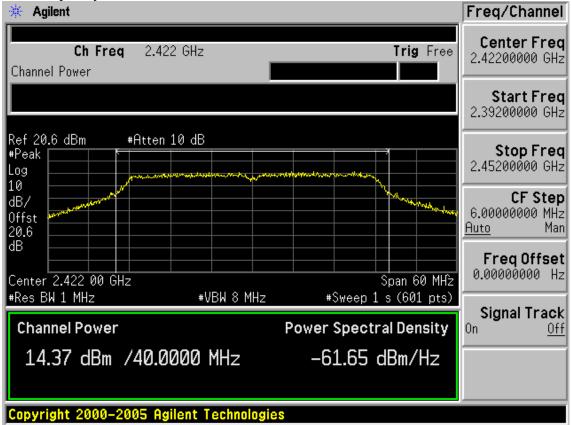
Note: For 5GHz band, the antenna Gain is 16dBi, exceeds 10dB, so the limit will be 30dBm-10dB= 20dBm.

Conclusion: PASS

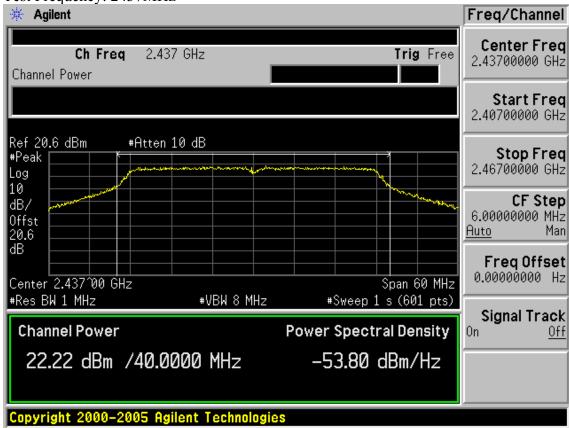
#### (2.4G) Chain 1:

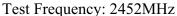
Test Mode: IEEE 802.11n HT40 TX

Test Frequency: 2422MHz



Test Frequency: 2437MHz



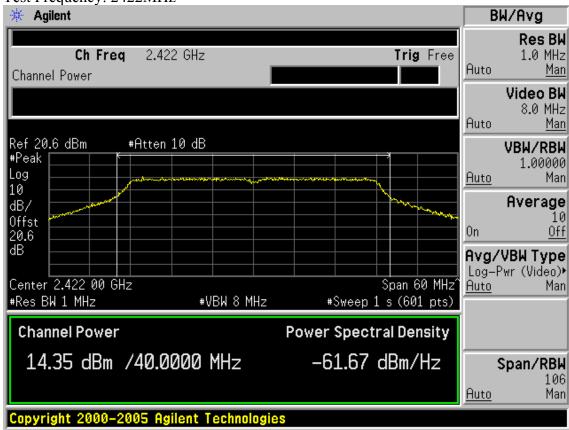


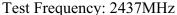


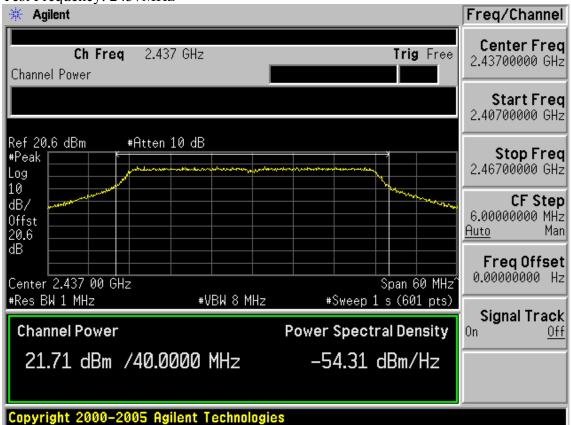
#### Chain 2:

Test Mode: IEEE 802.11n HT40 TX

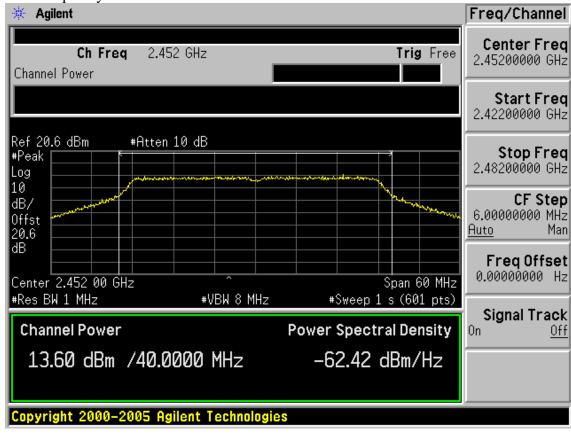
Test Frequency: 2422MHz







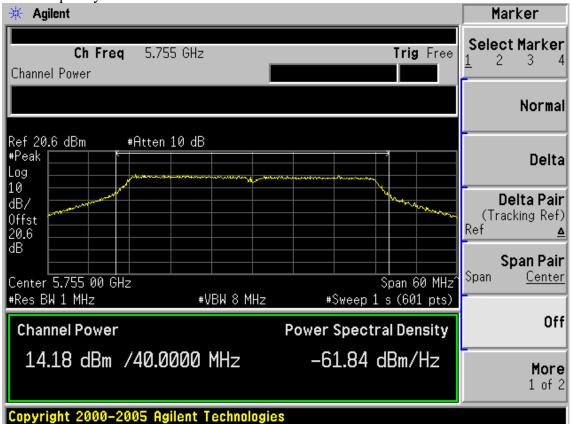
Test Frequency: 2452MHz



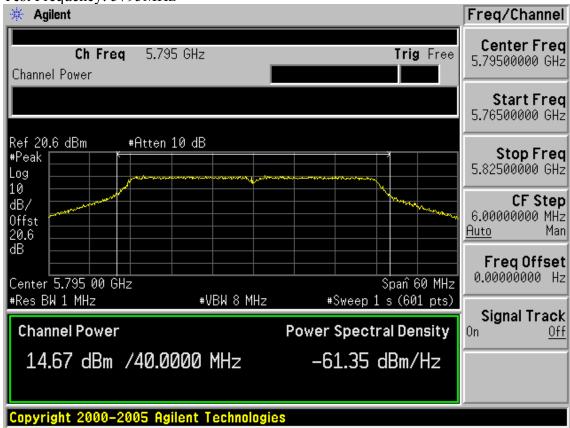
(5G) Chain 1:

Test Mode: IEEE 802.11n HT40 TX

Test Frequency: 5755MHz

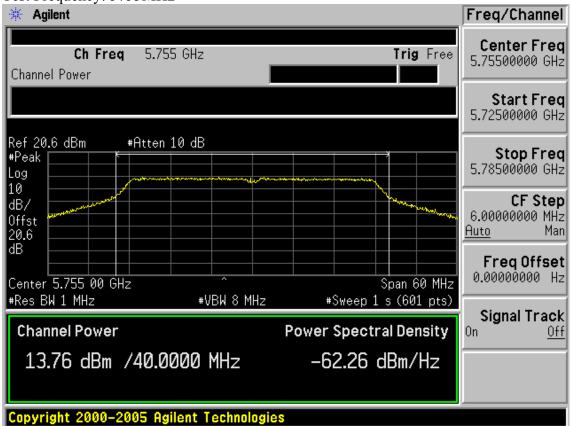


Test Frequency: 5795MHz

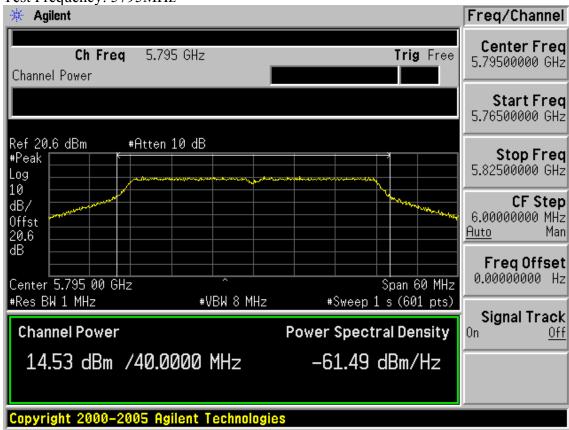


Chain 2:

Test Frequency: 5755MHz



Test Frequency: 5795MHz



### 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.
- 3, For IEEE802.11n mode, it's MIMO technology, so account total power density by add each chain's power density.

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

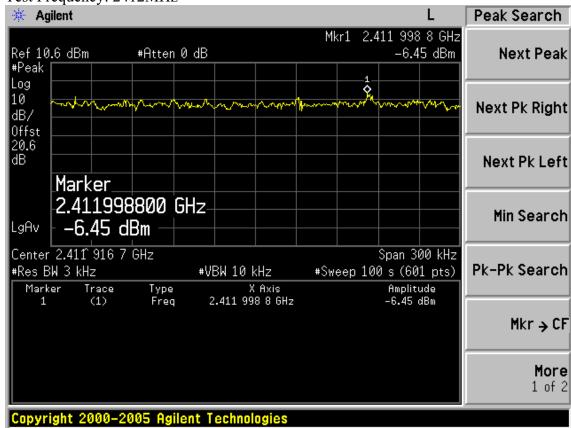
## 9.4. Test Results

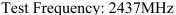
EUT: A2 WiFi Access Point/Bridge						
M/N: AP5822						
Test date: 2010-06-20						
Tested by: Sunny-lu						

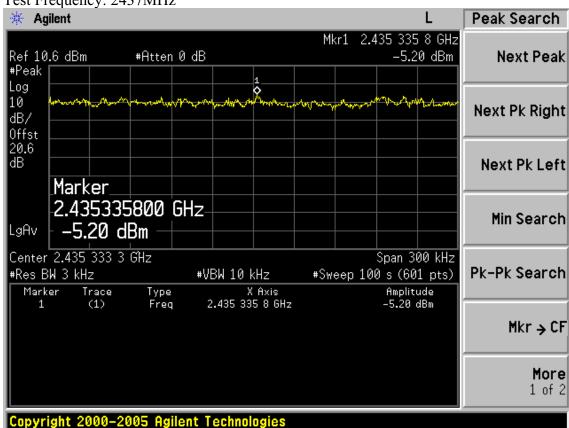
Cable loss:0.6dB		Attenuator loss: 20dB		Antenna Gain: 2.4GHz :5.0dBi 5GHz : 16dBi			
			Result	Limit			
Mode	СН	Chain0	Chain1	Total			
Mode	СП	Power density	Power density	Power density	(dBm/3KHz)		
		(dBm/3KHz)	(dBm/3KHz)	(dBm/3KHz)			
	CH1	-6.45	-5.86	N/A	8		
11b	CH6	-5.20	-5.14	N/A	8		
	CH11	-7.42	-7.25	N/A	8		
	CH1	-7.64	-7.37	N/A	8		
11g	СН6	-2.52	-2.46	N/A	8		
	CH11	-8.96	-7.38	N/A	8		
	CH1	-7.33	-7.46	-4.38	8		
	CH6	-3.18	-2.98	-0.07	8		
11n	CH11	-9.31	-8.99	-6.14	8		
HT20	CH149	-26.53	-25.86	-23.17	8		
	CH157	-24.98	-24.50	-21.72	8		
	CH165	-25.85	-25.59	-22.71	8		
	CH1	-13.27	-13.42	-10.33	8		
1.1	CH4	-7.93	-7.92	-4.91	8		
11n HT40	CH7	-14.68	-12.04	-10.15	8		
П140	CH151	-27.50	-25.05	-23.09	8		
	CH159	-26.86	-26.92	-23.88	8		
	CH149	-24.02	-24.07	N/A	8		
11a	CH157	-23.05	-22.97	N/A	8		
	CH165	-23.46	-22.78	N/A	8		
Conclusion	Conclusion: PASS						

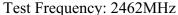
#### (2.4G) Chain 1:

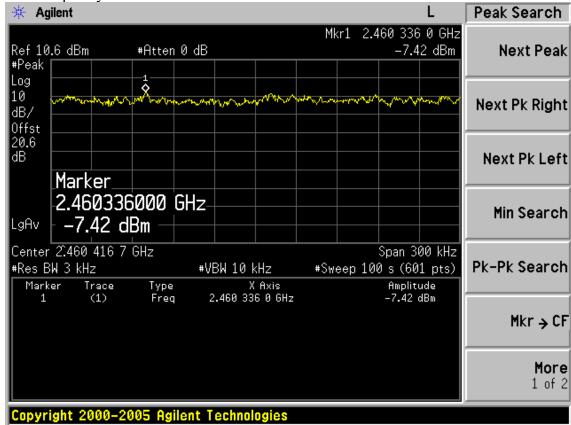
Test Mode: IEEE 802.11b TX Test Frequency: 2412MHz



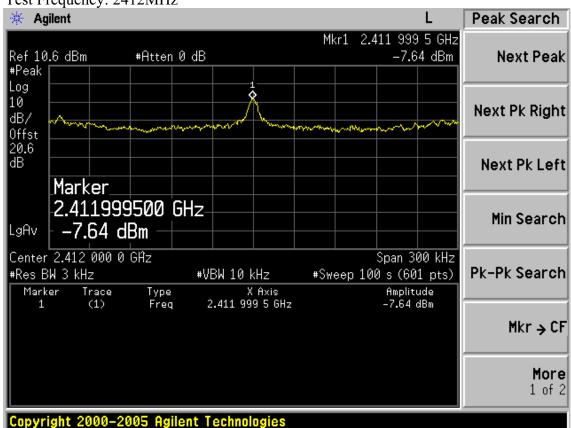


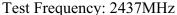


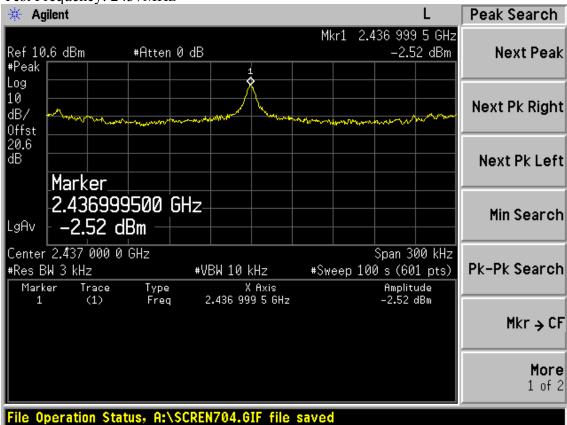


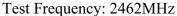


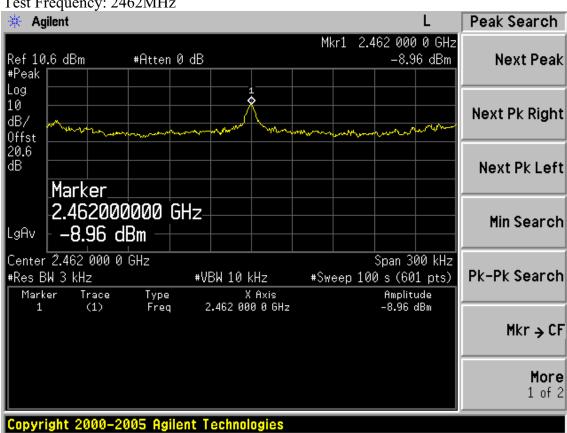
Test Mode: IEEE 802.11g TX Test Frequency: 2412MHz

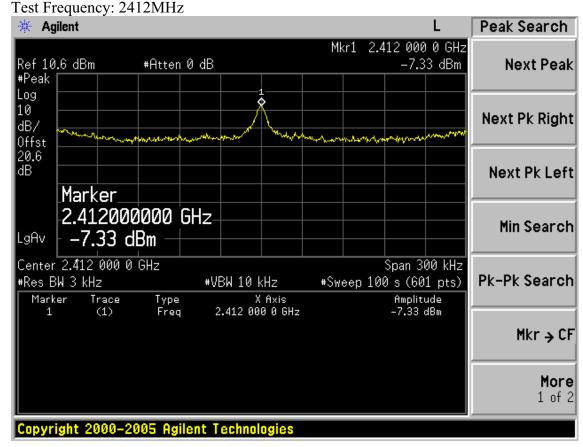


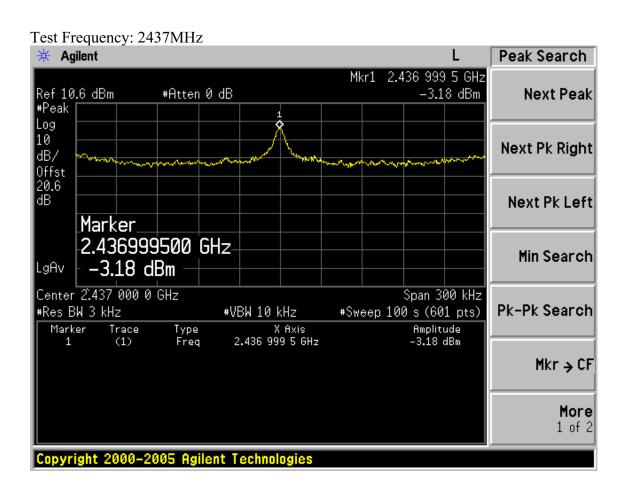


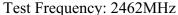


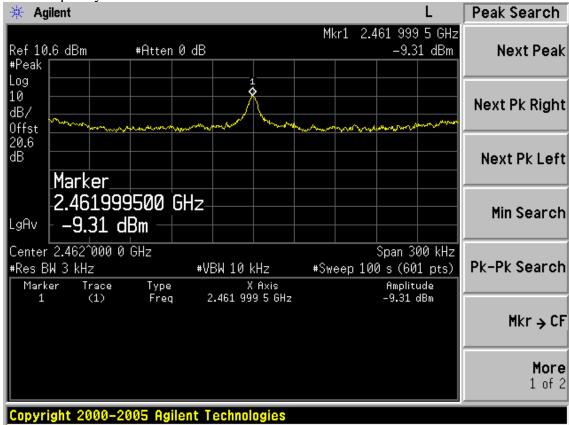


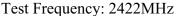


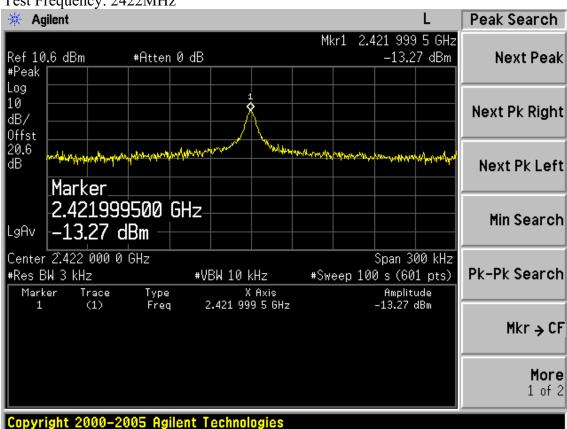


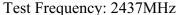


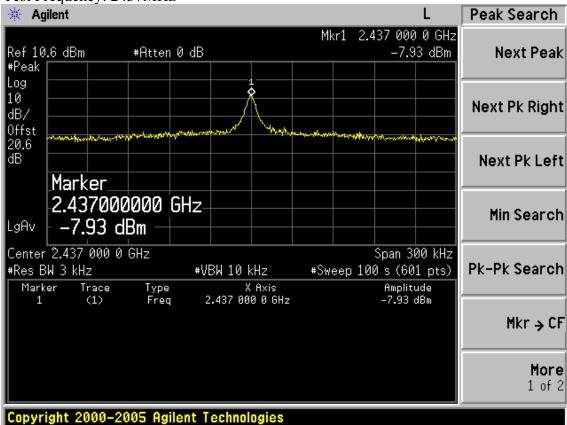


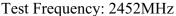


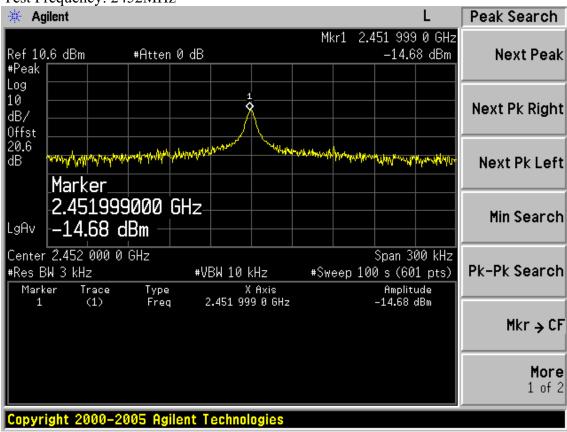






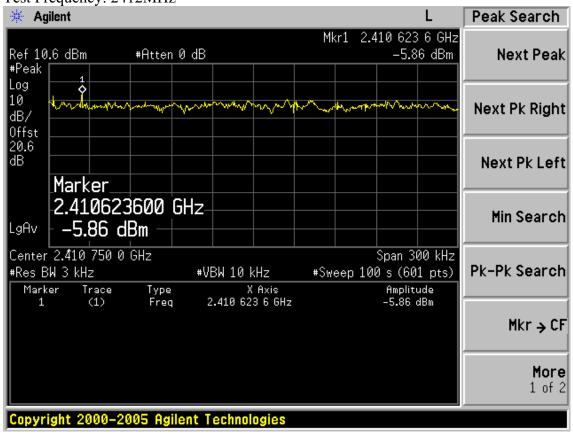


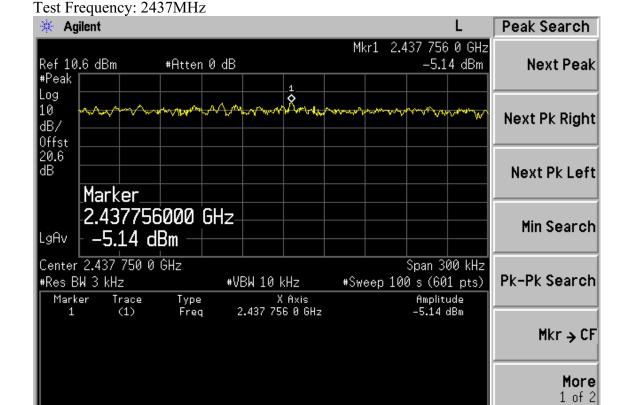




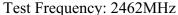
Chain 2:

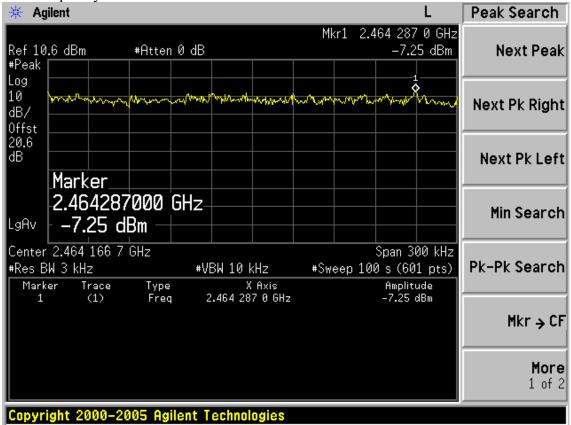
Test Mode: IEEE 802.11b TX Test Frequency: 2412MHz



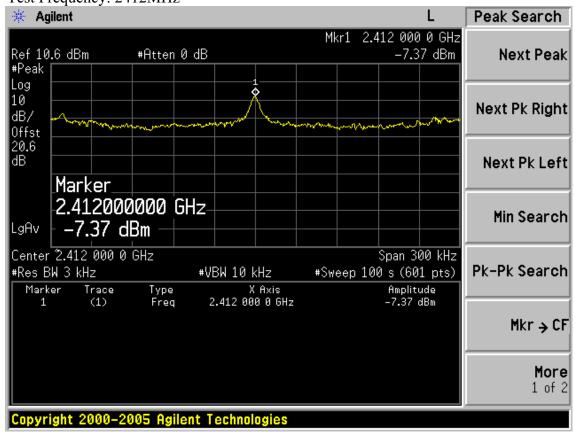


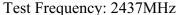
Copyright 2000-2005 Agilent Technologies

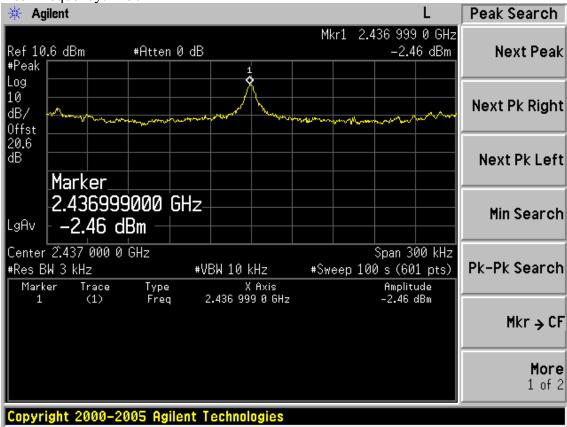


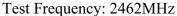


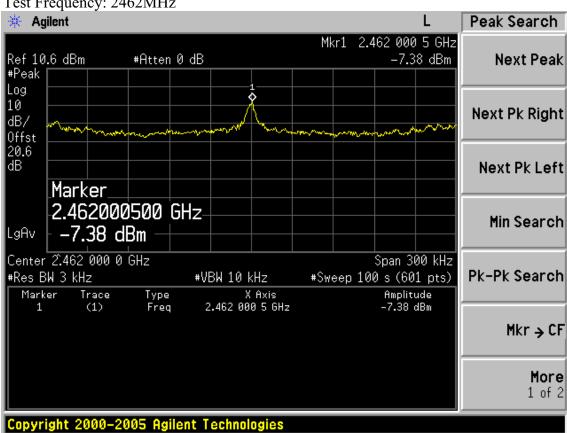
Test Mode: IEEE 802.11g TX Test Frequency: 2412MHz

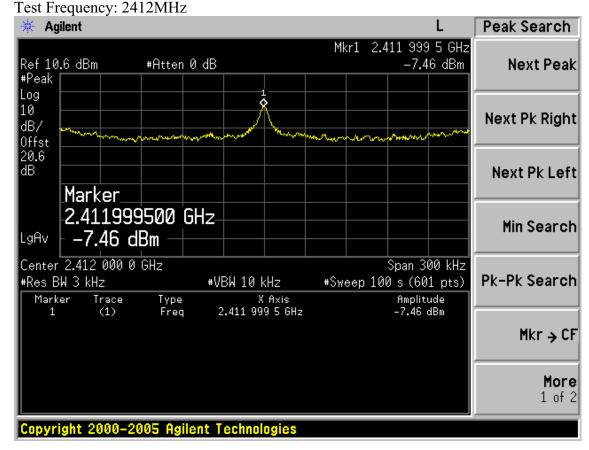


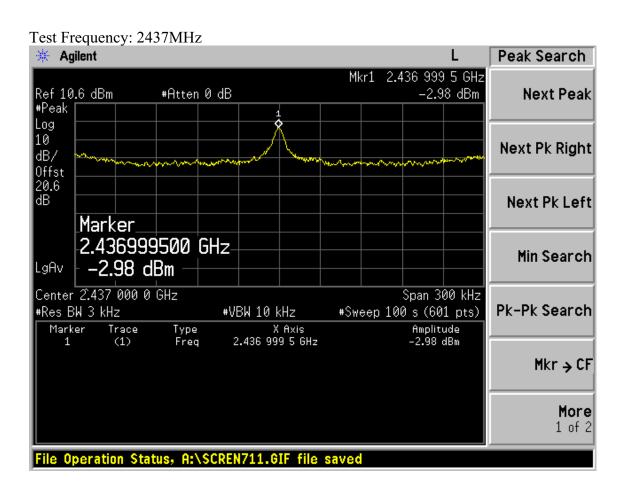


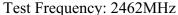


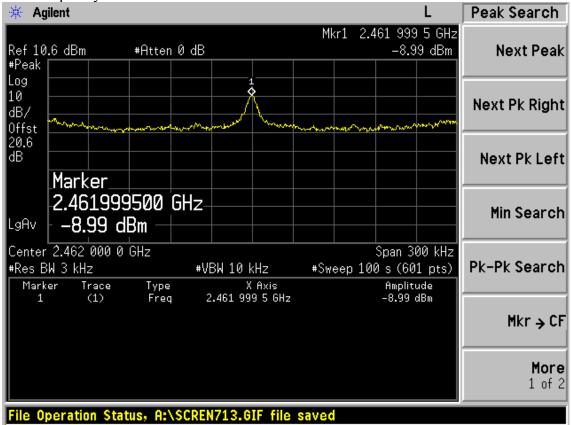


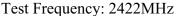


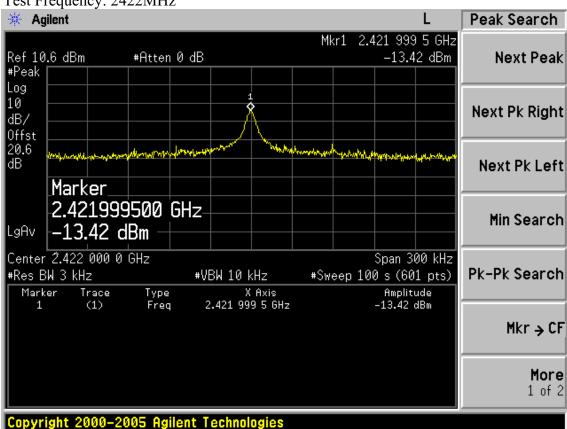


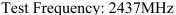


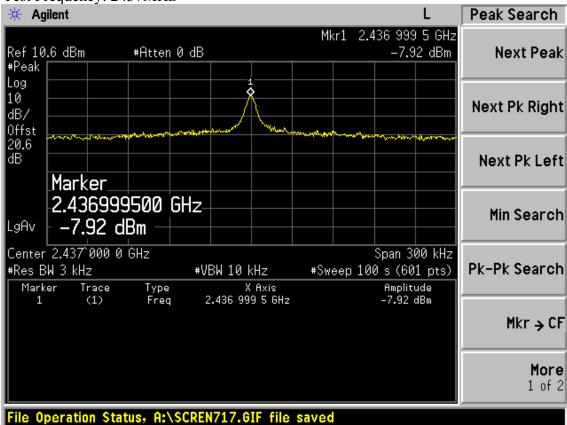




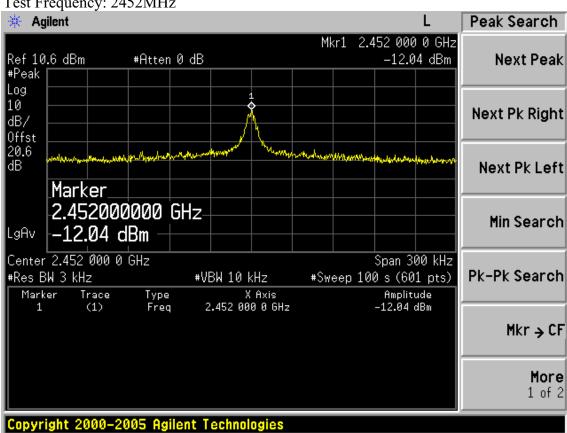






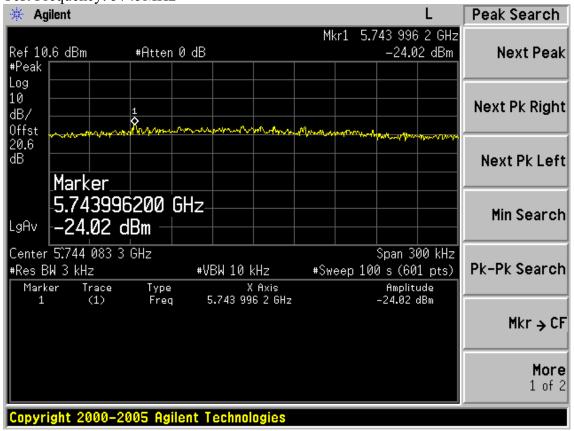


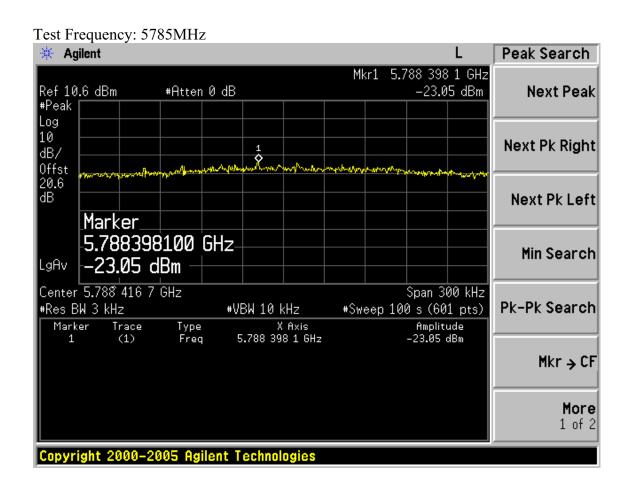
### Test Frequency: 2452MHz

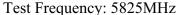


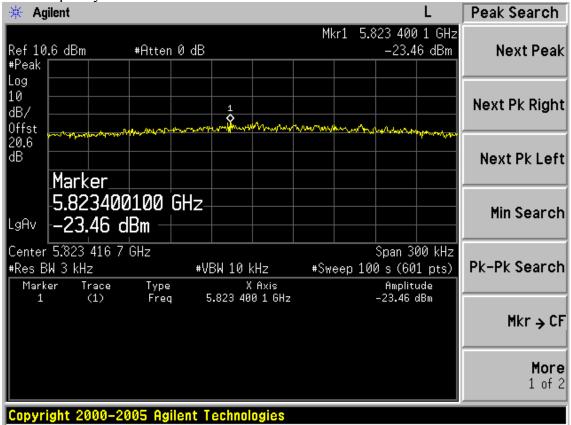
(5G) Chain 1:

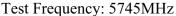
Test Mode: IEEE 802.11a TX Test Frequency: 5745MHz

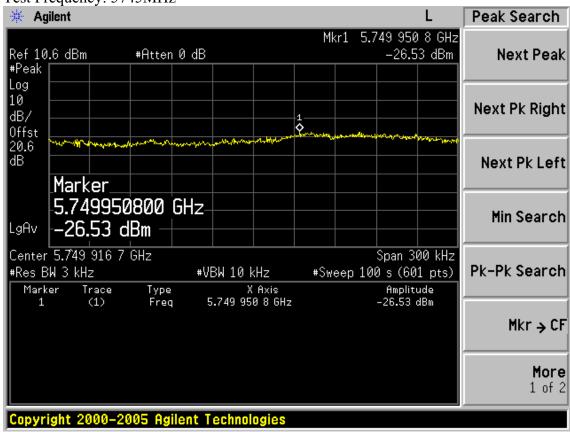


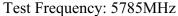


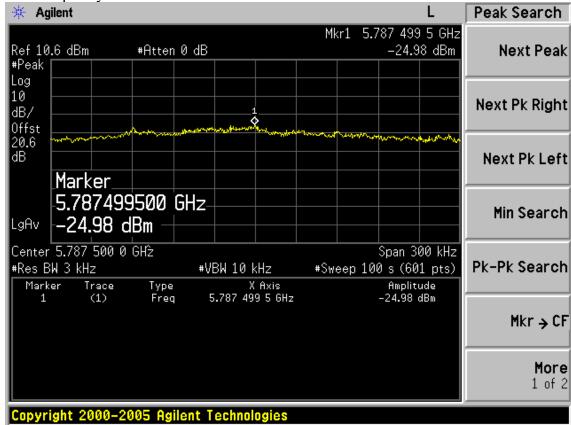


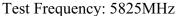


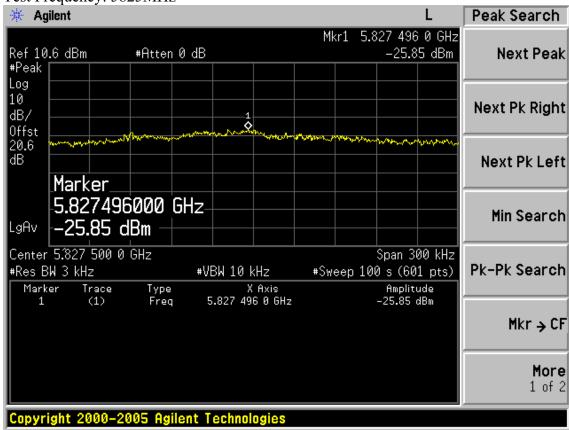




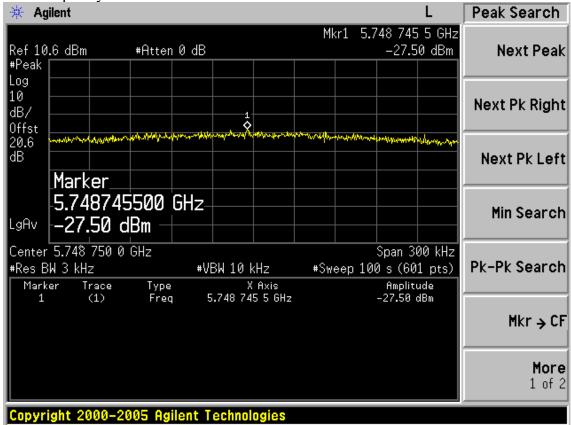


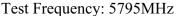


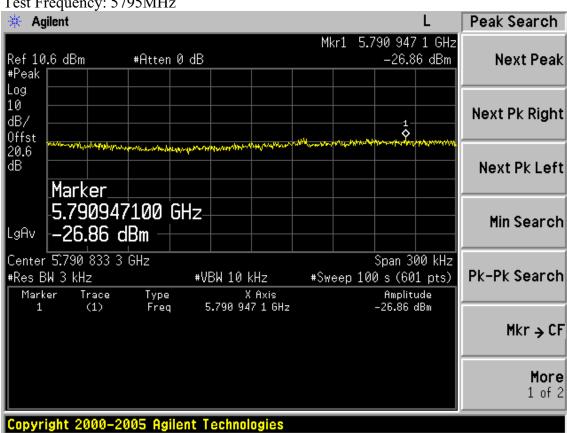




Test Frequency: 5755MHz

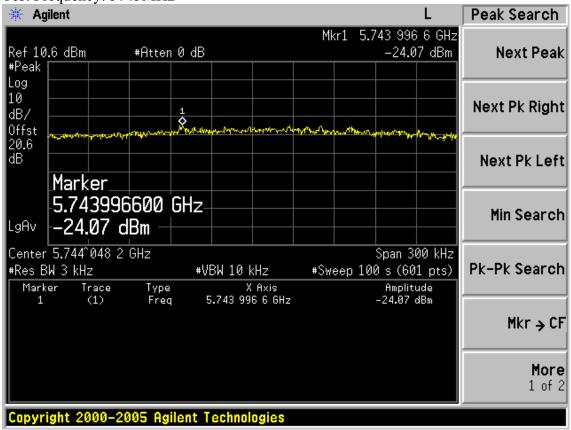


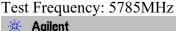


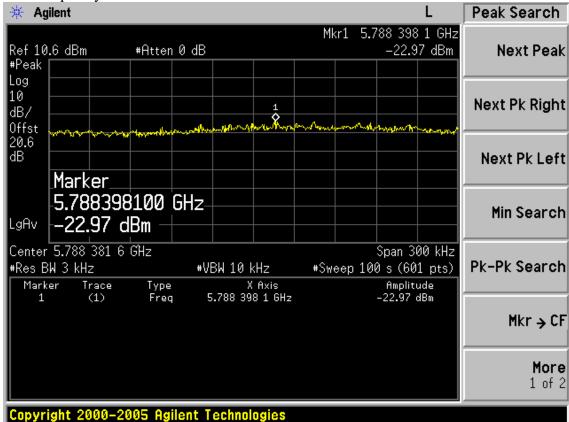


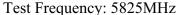
Chain 2:

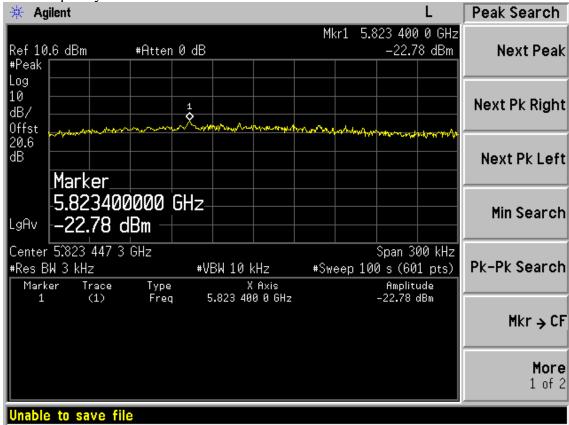
Test Mode: IEEE 802.11a TX Test Frequency: 5745MHz

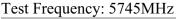


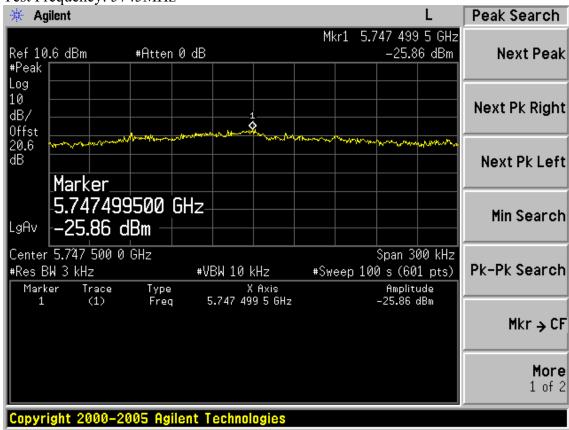


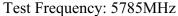


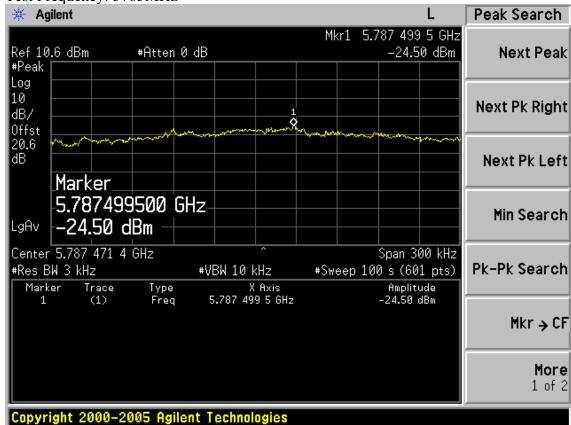


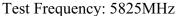


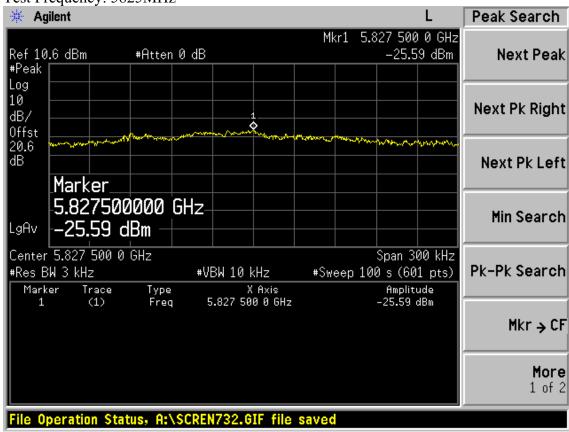




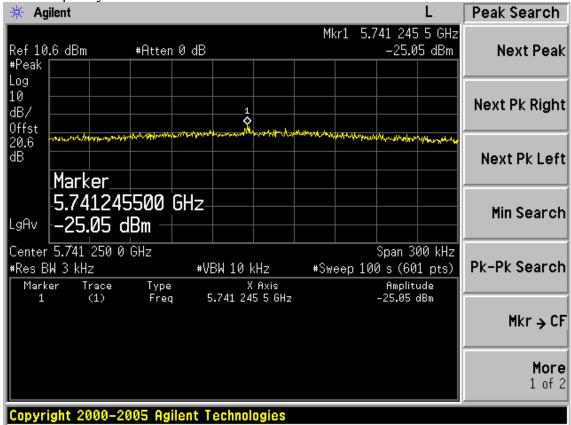


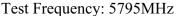


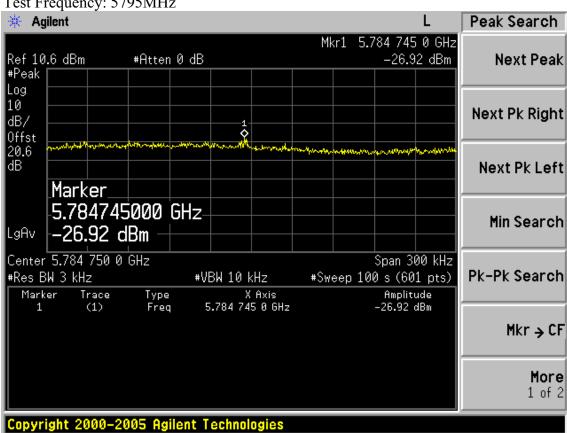




Test Frequency: 5755MHz







## 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

For 2.4GHz band, the antenna used is dipole antenna with SMA connector, but this device need be professionally installed, so it's can be exclude from comply with FCC antenna connector requirements, the maximum gain for 2.4GHz antenna is 5dBi.

For 5GHz band, the antenna used is integrated Flat Panel antenna that no antenna other than that furnished by the responsible party shall be used with the device, the maximum peak gain of the antenna is16dBi

# 11.MPE ESTIMATION

# 11.1.Limit for General Population/ Uncontrolled Exposures

Frequency	Power density (mW/cm <sup>2</sup> )	Averaging time(minutes)
300MHz1.5GHz	F/1500	30
1.5GHz100GHz	1.0	30

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

Note: F= Frequency in MHz

## 11.2.Estimation Result

Mode	СН	Frequency (MHz)	PK Output power (dBm)	Output power (mW)	antenna Gain (dBi)	antenna Gain (linear)	MPE
	CH1	2412	21.96	157.04	5	3.16	0.0195
11b	CH6	2437	26.06	403.65	5	3.16	0.0502
	CH11	2462	22.15	164.06	5	3.16	0.0204
	CH1	2412	20.26	106.17	5	3.16	0.0132
11g	CH6	2437	25.88	387.26	5	3.16	0.0481
	CH11	2462	19.89	97.50	5	3.16	0.0121
	CH1	2412	20.5	112.20	5	3.16	0.0140
	CH6	2437	28.51	709.58	5	3.16	0.0882
11n	CH11	2462	20.74	118.58	5	3.16	0.0147
HT20	CH149	5745	16.71	46.88	16	39.81	0.0734
	CH157	5785	18.05	63.83	16	39.81	0.0999
	CH165	5825	18.13	65.01	16	39.81	0.1018
	CH1	2422	17.37	54.58	5	3.16	0.0068
	CH4	2437	24.98	314.77	5	3.16	0.0391
11n HT40	CH7	2452	16.92	49.20	5	3.16	0.0061
	CH151	5755	16.99	50.00	16	39.81	0.0783
	CH159	5795	17.61	57.68	16	39.81	0.0903

Mode	СН	Frequency (MHz)	PK Output power (dBm)	Output power (mW)	antenna Gain (dBi)	antenna Gain (linear)	MPE
	CH149	5745	13.66	23.23	16	39.81	0.0364
11a	CH157	5785	15.56	35.97	16	39.81	0.0563
	CH165	5825	14.32	27.04	16	39.81	0.0423

Note: The estimation distance is 45cm

# 12. DEVIATION TO TEST SPECIFICATIONS

[NONE]