

Site no. : 3m Chamber Data no. : 72
Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300 Mbps 4-Port Wireless Broadband Router
Power supply : DC 9V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11nHT20 CH11 2462MHz Tx

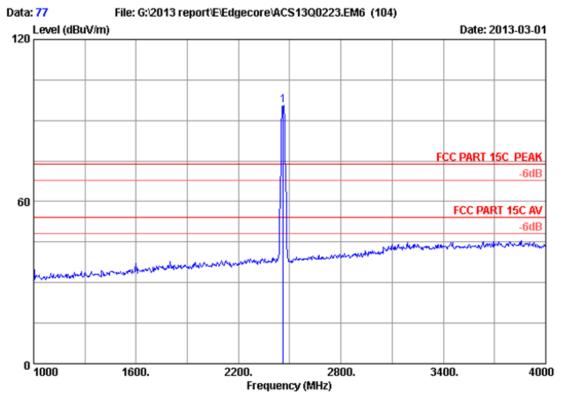
M/N : SMCWBR14-N5

.

Freq.	Ant. Factor (dB/m)	Factor	_	Emission Level (dBuV/m)	Limits	_	Remark
4924.000 4924.000		 34.60 34.60	45.13 30.98	52.23 38.08	74.00 54.00	21.77 15.92	Peak 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. : 77

Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300 Mbps 4-Port Wireless Broadband Router
Power supply : DC 9V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11nHT20 CH11 2462MHz Tx

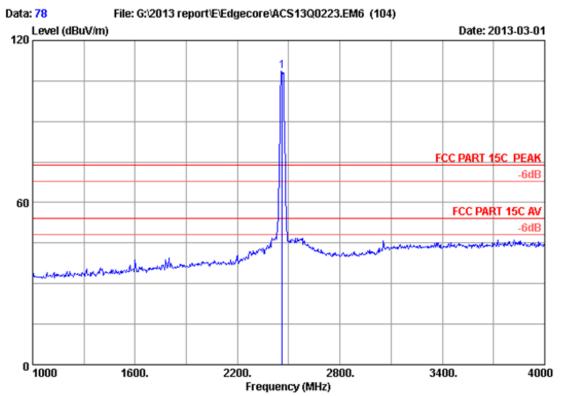
M/N : SMCWBR14-N5

:

		Ant.	Cable	Amp.		Emission			
	Freq. (MHz)				_	Level (dBuV/m)		_	Remark
1	2462.000	28.05	6.12	34.44	95.87	95.60	74.00	-21.60	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. : 78
Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300 Mbps 4-Port Wireless Broadband Router
Power supply : DC 9V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11nHT20 CH11 2462MHz Tx

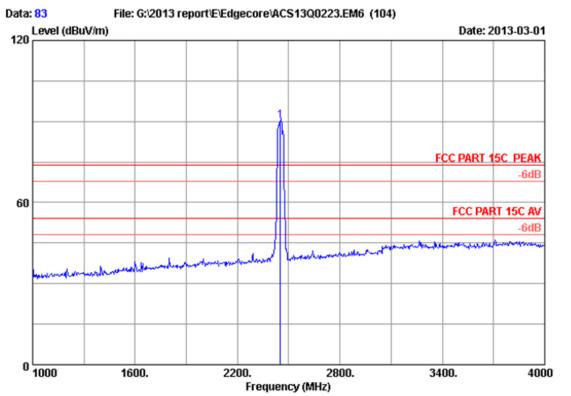
M/N : SMCWBR14-N5

:

	-		loss	Factor	_	Emission Level (dBuV/m)		_	Remark
1	2462.000	28.05	6.12	34.44	108.96	108.69	74.00	-34.69	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. : 83

Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Leo-Li EUT : 300 Mbps 4-Port Wireless Broadband Router Power supply : DC 9V From Adapter Input AC 120V/60Hz

Test mode : IEEE802.11nHT40 CH7 2452MHz Tx

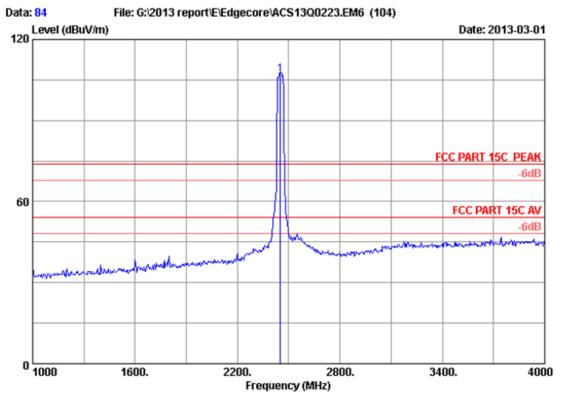
M/N : SMCWBR14-N5

:

	Freq.			Factor	Reading	Emission Level (dBuV/m)		_	Remark
1	2452.000	28.03	6.09	34.44	90.64	90.32	74.00	-16.32	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. : 84 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL

: FCC PART 15C PEAK Limit

Env. / Ins. : 23*C/54% Engineer : Leo-Li : 300 Mbps 4-Port Wireless Broadband Router Power supply: DC 9V From Adapter Input AC 120V/60Hz

: IEEE802.11nHT40 CH7 2452MHz Tx Test mode

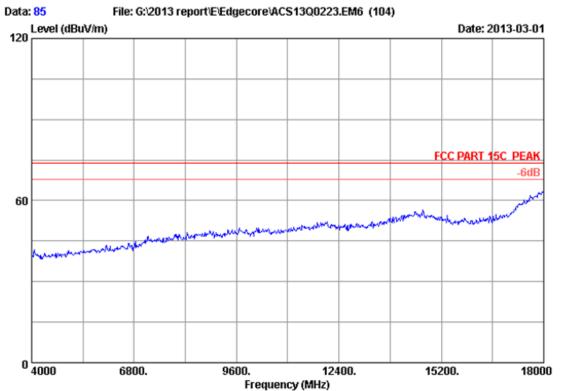
M/N : SMCWBR14-N5

	-		loss	Factor	_	Emission Level (dBuV/m)	Limits	_	Remark
1	2452.000	28.03	6.09	34.44	107.34	107.02	74.00	-33.02	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. : 85

Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

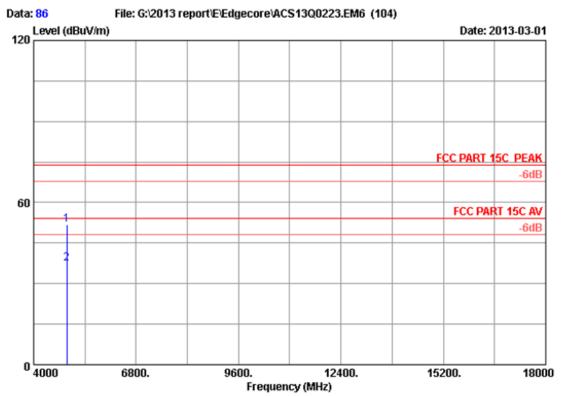
Env. / Ins. : 23*C/54% Engineer : Leo-Li EUT : 300 Mbps 4-Port Wireless Broadband Router Power supply : DC 9V From Adapter Input AC 120V/60Hz

Test mode : IEEE802.11nHT40 CH7 2452MHz Tx

M/N : SMCWBR14-N5

:





: 3m Chamber Data no. : 86 Site no. Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL

: FCC PART 15C PEAK Limit

Env. / Ins. : 23*C/54% Engineer : Leo-Li : 300 Mbps 4-Port Wireless Broadband Router Power supply: DC 9V From Adapter Input AC 120V/60Hz : IEEE802.11nHT40 CH7 2452MHz Tx Test mode

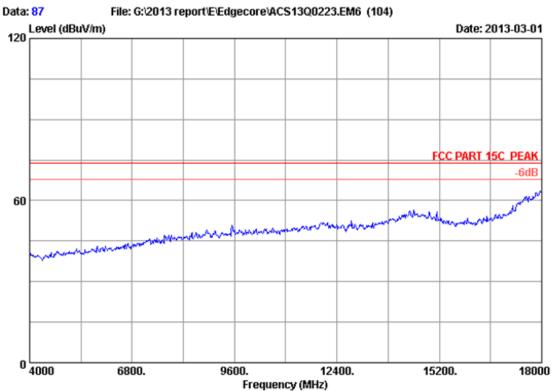
M/N : SMCWBR14-N5

Freq.	loss	Factor	_	Emission Level (dBuV/m)	Limits	Margin (dB)	Remark
4904.000 4904.000	 	34.60 34.60	44.73 30.37			22.22 16.58	Peak Àverage

- 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. : 87

Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

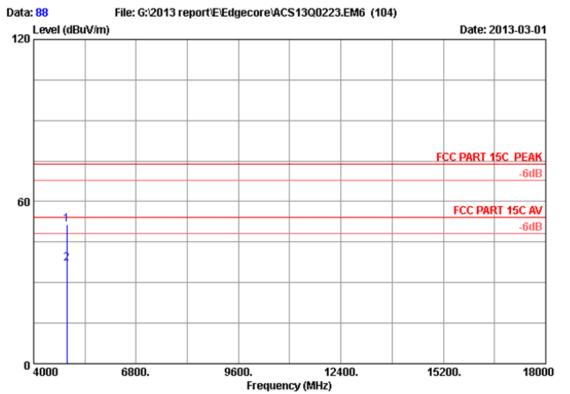
Env. / Ins. : 23*C/54% Engineer : Leo-Li EUT : 300 Mbps 4-Port Wireless Broadband Router Power supply : DC 9V From Adapter Input AC 120V/60Hz

Test mode : IEEE802.11nHT40 CH7 2452MHz Tx

M/N : SMCWBR14-N5

:





Site no. : 3m Chamber Data no. : 88

Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Leo-Li EUT : 300 Mbps 4-Port Wireless Broadband Router Power supply : DC 9V From Adapter Input AC 120V/60Hz

Test mode : IEEE802.11nHT40 CH7 2452MHz Tx

M/N : SMCWBR14-N5

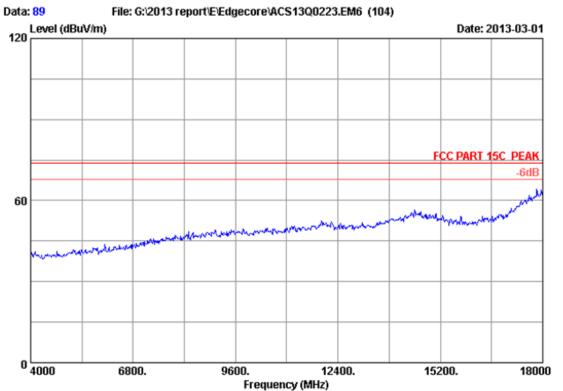
:

Freq.	Ant. Factor (dB/m)	Factor	_	Emission Level (dBuV/m)	Limits	Margin (dB)	Remark
4904.000 4904.000		 34.60 34.60	44.36 30.19		74.00 54.00	22.59 16.76	Peak 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. : 89

Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

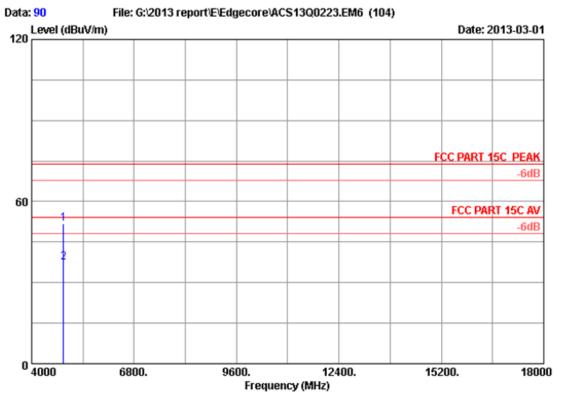
Env. / Ins. : 23*C/54% Engineer : Leo-Li EUT : 300 Mbps 4-Port Wireless Broadband Router Power supply : DC 9V From Adapter Input AC 120V/60Hz

Test mode : IEEE802.11nHT40 CH4 2437MHz Tx

M/N : SMCWBR14-N5

:





Site no. : 3m Chamber Data no. : 90

Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300 Mbps 4-Port Wireless Broadband Router
Power supply : DC 9V From Adapter Input AC 120V/60Hz

Test mode : IEEE802.11nHT40 CH4 2437MHz Tx

M/N : SMCWBR14-N5

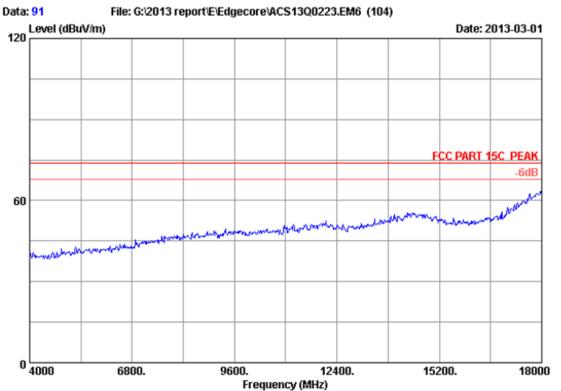
:

Freq.	Ant. Factor (dB/m)	Factor	_	Emission Level (dBuV/m)	Limits	Margin (dB)	Remark
4874.000 4874.000		 34.60 34.60	44.78 30.59		74.00 54.00	22.26 16.45	Peak 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. : 91
Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

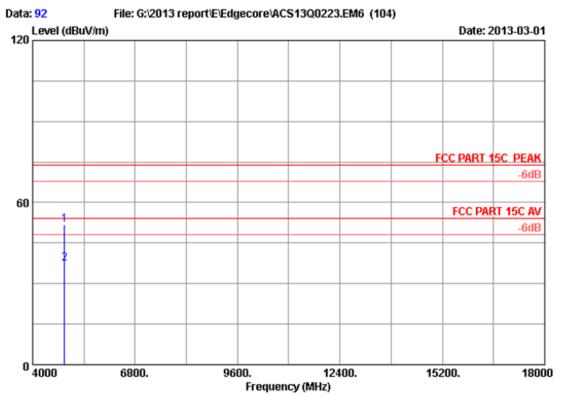
Env. / Ins. : 23*C/54% Engineer : Leo-Li EUT : 300 Mbps 4-Port Wireless Broadband Router Power supply : DC 9V From Adapter Input AC 120V/60Hz

Test mode : IEEE802.11nHT40 CH4 2437MHz Tx

M/N : SMCWBR14-N5

:





Site no. : 3m Chamber Data no. : 92
Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300 Mbps 4-Port Wireless Broadband Router
Power supply : DC 9V From Adapter Input AC 120V/60Hz

Test mode : IEEE802.11nHT40 CH4 2437MHz Tx

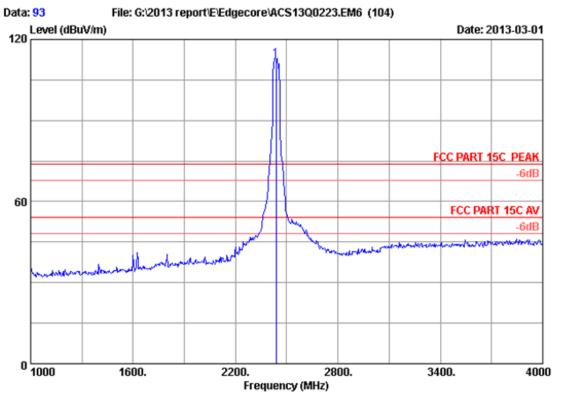
M/N : SMCWBR14-N5

:

Freq.		Factor	_	Emission Level (dBuV/m)	Limits	Margin (dB)	Remark
4874.000 4874.000	 	34.60 34.60	44.69 30.51		74.00 54.00	22.35 16.53	Peak 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.





: 3m Chamber Data no. : 93 Site no. Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL

: FCC PART 15C PEAK Limit

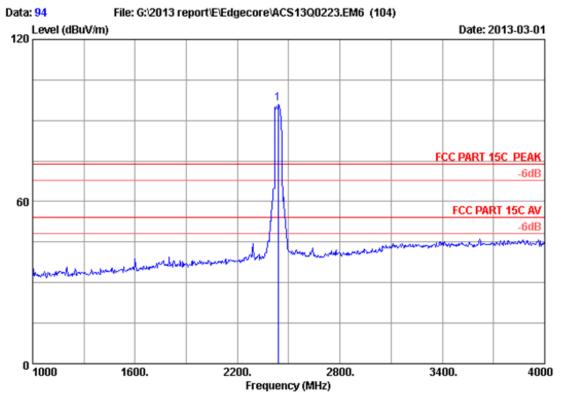
Env. / Ins. : 23*C/54% Engineer : Leo-Li : 300 Mbps 4-Port Wireless Broadband Router Power supply: DC 9V From Adapter Input AC 120V/60Hz : IEEE802.11nHT40 CH4 2437MHz Tx Test mode

M/N : SMCWBR14-N5

	•	Factor		Factor	_	Emission Level (dBuV/m)		_	Remark
1	2437.000	28.03	6.06	34.44	113.06	112.71	74.00	-38.71	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. : 94

Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Leo-Li EUT : 300 Mbps 4-Port Wireless Broadband Router Power supply : DC 9V From Adapter Input AC 120V/60Hz

Test mode : IEEE802.11nHT40 CH4 2437MHz Tx

M/N : SMCWBR14-N5

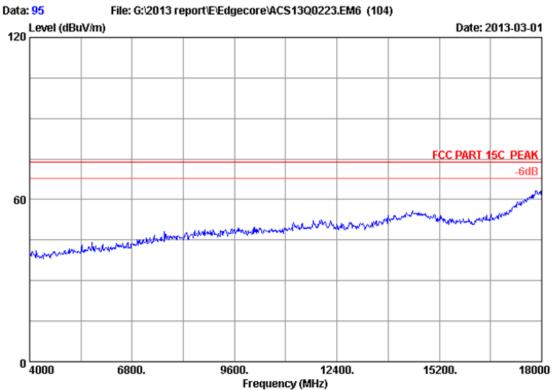
:

	Freq.	Factor		Factor	Reading	Emission Level (dBuV/m)	Limits	_	Remark	
L	2437.000	28.03	6.06	34.44	96.52	96.17	74.00	-22.17	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. : 95

Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

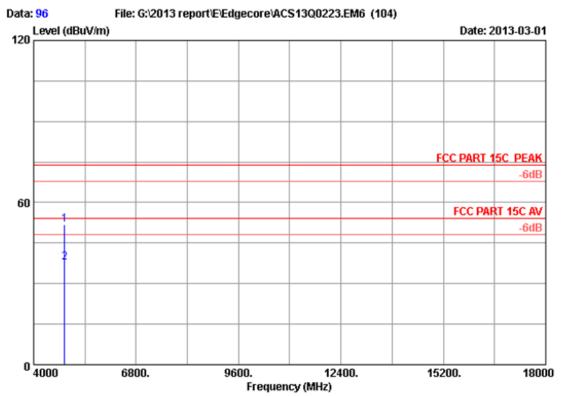
Env. / Ins. : 23*C/54% Engineer : Leo-Li EUT : 300 Mbps 4-Port Wireless Broadband Router Power supply : DC 9V From Adapter Input AC 120V/60Hz

Test mode : IEEE802.11nHT40 CH1 2422MHz Tx

M/N : SMCWBR14-N5

:





Site no. : 3m Chamber Data no. : 96
Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Leo-Li EUT : 300 Mbps 4-Port Wireless Broadband Router Power supply : DC 9V From Adapter Input AC 120V/60Hz

Test mode : IEEE802.11nHT40 CH1 2422MHz Tx

M/N : SMCWBR14-N5

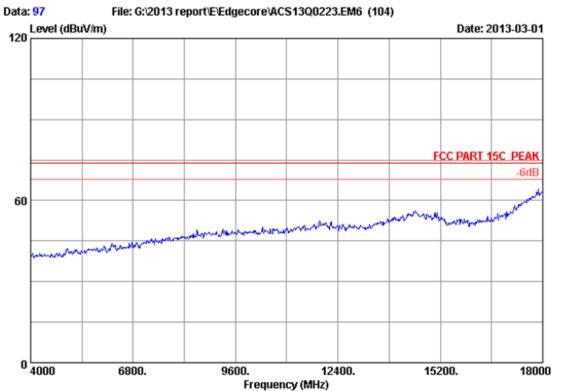
:

Freq.	loss	Factor	_	Emission Level (dBuV/m)	Limits	Margin (dB)	Remark
4844.000 4844.000	 	34.60 34.60	44.83 30.75		74.00 54.00	22.30 16.38	Peak Àverage

- 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. : 97

Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

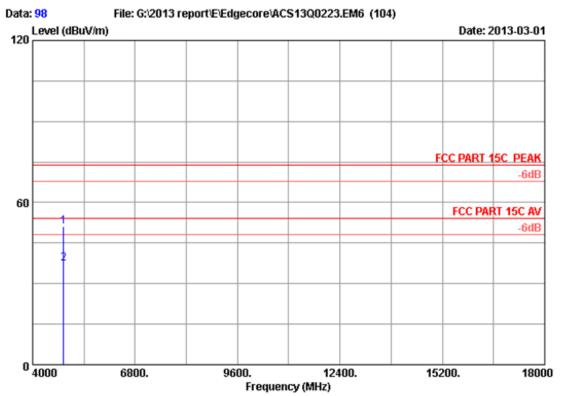
Env. / Ins. : 23*C/54% Engineer : Leo-Li EUT : 300 Mbps 4-Port Wireless Broadband Router Power supply : DC 9V From Adapter Input AC 120V/60Hz

Test mode : IEEE802.11nHT40 CH1 2422MHz Tx

M/N : SMCWBR14-N5

:





Site no. : 3m Chamber Data no. : 98

Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300 Mbps 4-Port Wireless Broadband Router
Power supply : DC 9V From Adapter Input AC 120V/60Hz

Test mode : IEEE802.11nHT40 CH1 2422MHz Tx

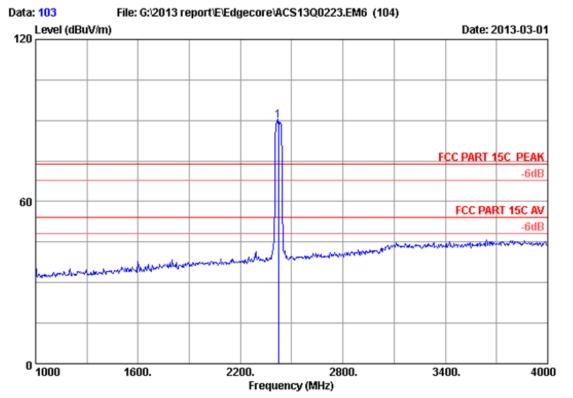
M/N : SMCWBR14-N5

:

Freq.		Factor	_	Emission Level (dBuV/m)	Limits	Margin (dB)	Remark
4844.000 4844.000		34.60 34.60	44.38 30.51		74.00 54.00	22.75 16.62	Peak 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. : 103

Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : 300 Mbps 4-Port Wireless Broadband Router
Power supply : DC 9V From Adapter Input AC 120V/60Hz

Test mode : IEEE802.11nHT40 CH1 2422MHz Tx

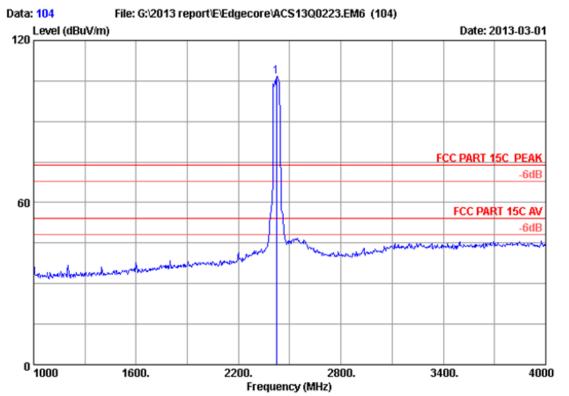
M/N : SMCWBR14-N5

:

		Ant.	Cable	Amp.		Emission			
	Freq. (MHz)	Factor (dB/m)			_	Level (dBuV/m)		Margin (dB)	Remark
1	2422.000	28.00	6.06	34.44	90.21	89.83	74.00	-15.83	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. : 104

Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Leo-Li EUT : 300 Mbps 4-Port Wireless Broadband Router Power supply : DC 9V From Adapter Input AC 120V/60Hz

Test mode : IEEE802.11nHT40 CH1 2422MHz Tx

M/N : SMCWBR14-N5

:

	Freq.	Factor		Factor	_	Emission Level (dBuV/m)		_	Remark
1	2422.000	28.00	6.06	34.44	106.95	106.57	74.00	-32.57	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.

5. CONDUCTED SPURIOUS EMISSIONS

5.1.Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum Analyzer	Agilent	E4446A	US44300459	May.08,12	1 Year
2.	Attenuator	Agilent	8491B	MY39262165	May.08,12	1 Year
3.	RF Cable	Hubersuhner	SUCOFLEX102	28618/2	May.08,12	1Year

5.2.Limit

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

5.3.Test Procedure

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

5.4. Test result

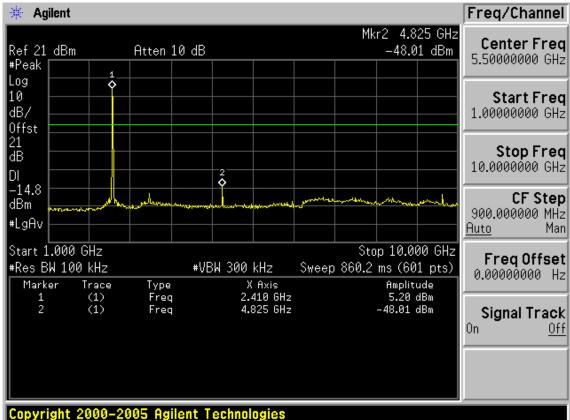
PASS (The testing data was attached in the next pages.)

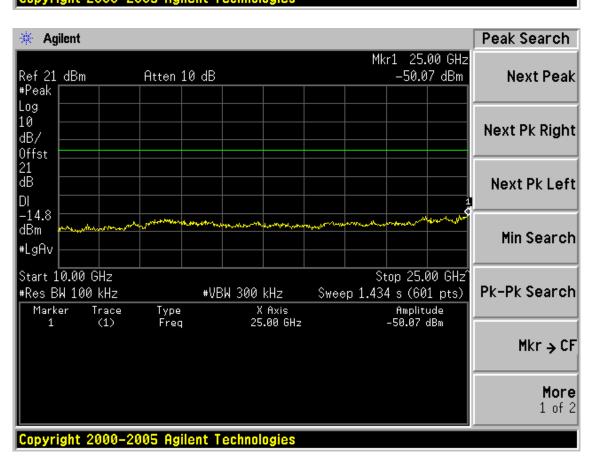


ANT0

Test Mode: IEEE 802.11b TX

Test CH1: 2412MHz



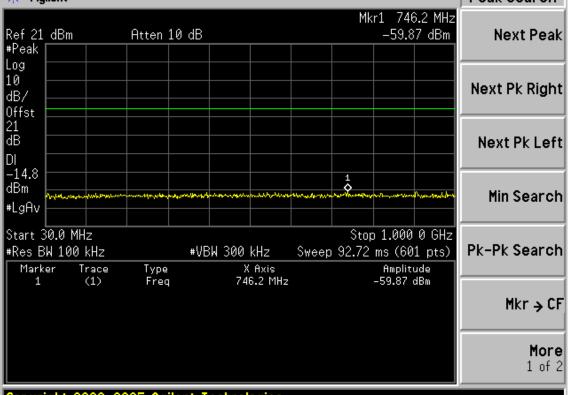




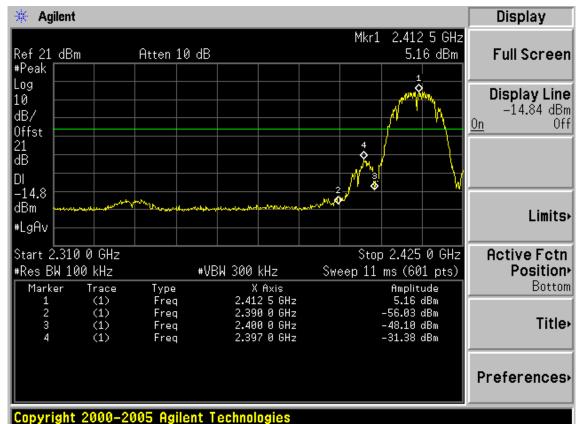
Agilent Peak Search

Ref 21 dBm Atten 10 dB -59.87 dBm

#Peak Next Peak



Copyright 2000-2005 Agilent Technologies

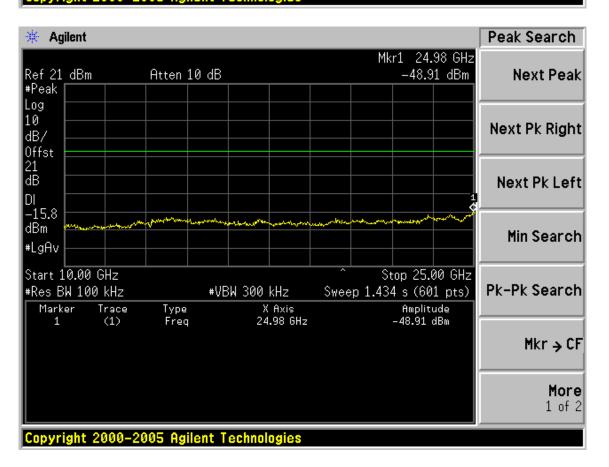


page



FCC ID: YZKSMCWBR14N5V2

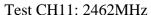
Test CH6: 2437MHz 🔆 Agilent Display Mkr2 4.870 GHz Ref 21 dBm Atten 10 dB -47.17 dBm Full Screen #Peak Log ø Display Line 10 –15.79 dBm dB/ 0n Off Offst 21 dB -2· DL -15**.**8 dBm Limits+ #LgAv Start 1.000 GHz Stop 10.000 GHz **Active Fctn** #Res BW 100 kHz #VBW 300 kHz Sweep 860.2 ms (601 pts) Position P Amplitude 4.21 dBm -47.17 dBm X Axis 2.440 GHz Bottom Marker Trace (1) (1) Freq 4.870 GHz Freq Title> Preferences+ Copyright 2000-2005 Agilent Technologies



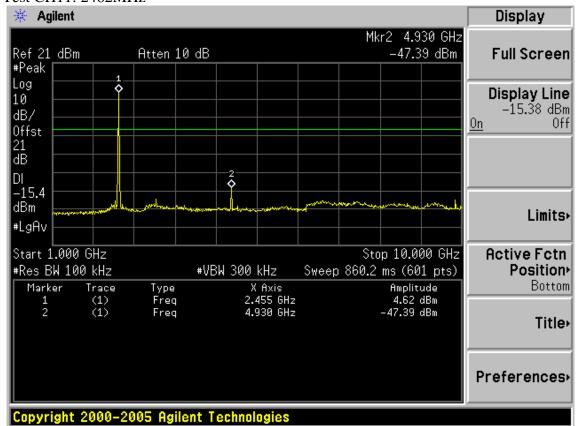


FCC ID:YZKSMCWBR14N5V2

Peak Search Agilent Mkr1 1.000 0 GHz -59.41 dBm Atten 10 dB Ref 21 dBm Next Peak #Peak Log 10 **Next Pk Right** dB/ Offst 21 ďΒ Next Pk Left DI -15.8 dBm Min Search #LgAv Start 3<mark>0.0 MHz</mark> Stop 1.000 0 GHz Pk-Pk Search #Res BW 100 kHz Sweep 92.72 ms (601 pts) #VBW 300 kHz X Axis 1.000 0 GHz Marker Trace Amplitude Type (1) Freq -59.41 dBm Mkr → CF More 1 of 2



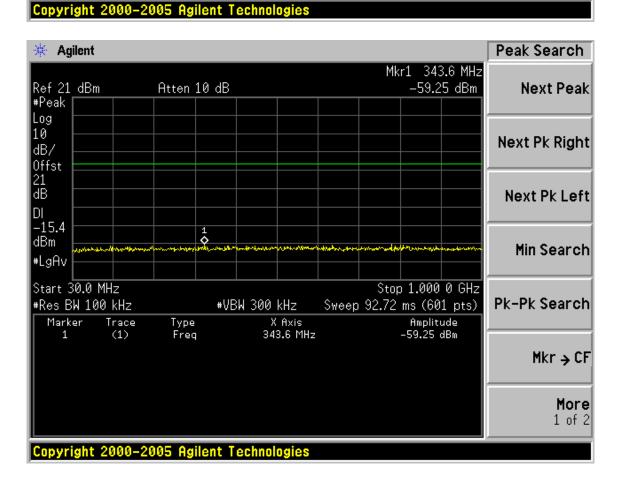
Copyright 2000-2005 Agilent Technologies





FCC ID:YZKSMCWBR14N5V2

Peak Search Agilent Mkr1 24.98 GHz Atten 10 dB -49.01 dBm Ref 21 dBm Next Peak #Peak Log 10 Next Pk Right dB/ Offst 21 ďΒ Next Pk Left DI -15.4dBm Min Search #LgAv Start 10.00 GHz Stop 25.00 GHz Sweep 1.434 s (601 pts) Pk-Pk Search #Res BW 100 kHz #VBW 300 kHz X Axis 24.98 GHz Amplitude Marker Trace Type -49.01 dBm (1) Freq Mkr → CF More 1 of 2



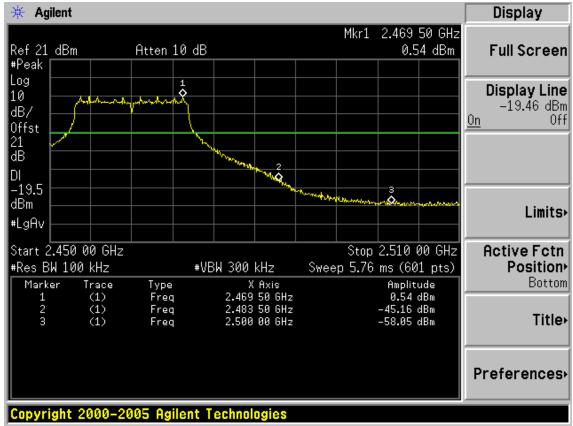


FCC ID:YZKSMCWBR14N5V2

Display 🔆 Agilent Mkr1 2.461 00 GHz 4.65 dBm Ref 21 dBm Atten 10 dB Full Screen #Peak Log ٥ Display Line -15.35 dBm 10 dB/ Off 0n Offst 21 ďΒ DI -15.4dBm Limits> #LgAv Start 2.450 00 GHz Stop 2.510 00 GHz **Active Fctn** #Res BW 100 kHz #VBW 300 kHz Sweep 5.76 ms (601 pts) Position > X Axis 2.461 00 GHz 2.483 50 GHz 2.500 00 GHz Bottom Marker Trace Amplitude Type 4.65 dBm -52.92 dBm -57.96 dBm (1) (1) (1) Freq 2 Freq 3 Title> Freq Preferences. Copyright 2000-2005 Agilent Technologies

Test Mode: IEEE 802.11g TX

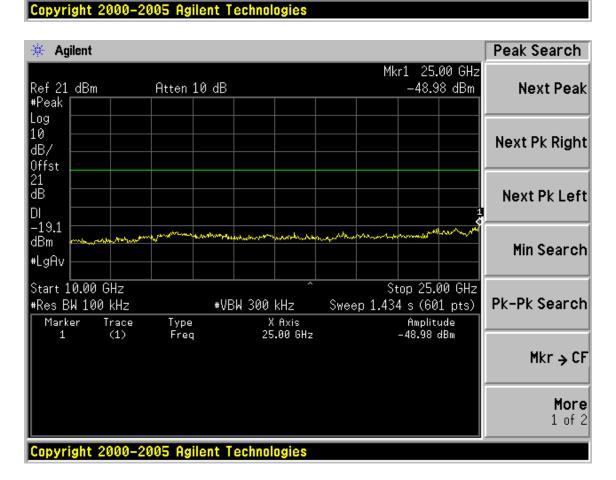
Test CH1: 2412MHz



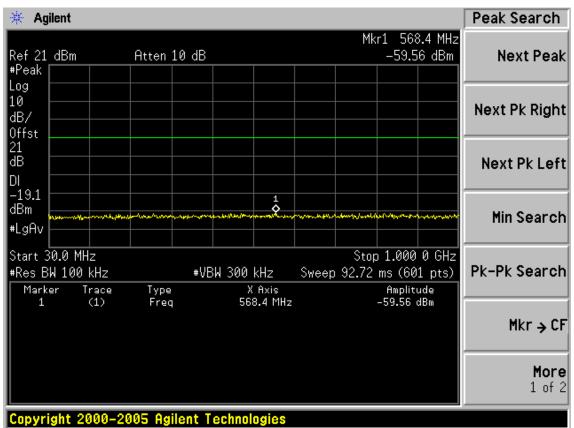


FCC ID:YZKSMCWBR14N5V2

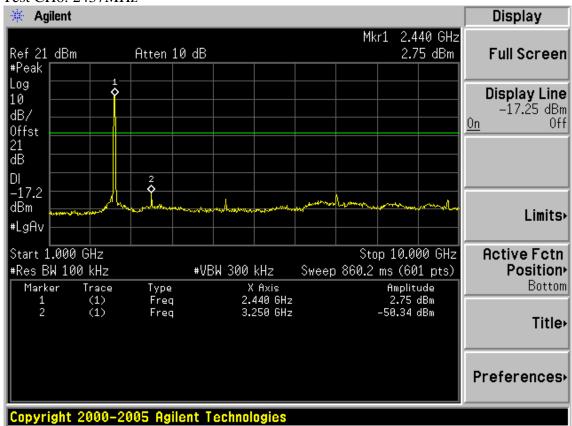
* Agilent Display Mkr1 2.455 GHz Atten 10 dB 0.93 dBm Ref 21 dBm Full Screen #Peak Log 1 Display Line 10 -19.07 dBm dB/ Off <u>0n</u> Offst ďΒ -19.1 dBm Limits. #LgAv Start 1.000 GHz Stop 10.000 GHz **Active Fctn** Position P #Res BW 100 kHz #VBW 300 kHz Sweep 860.2 ms (601 pts) X Axis 2.455 GHz Bottom Marker Trace Amplitude Type (1) Freq 0.93 dBm Title> Preferences+



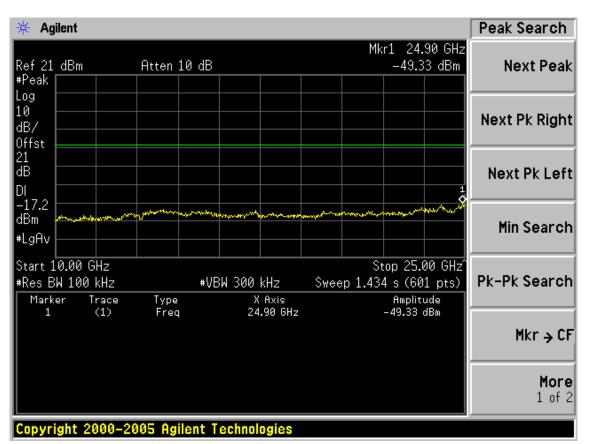


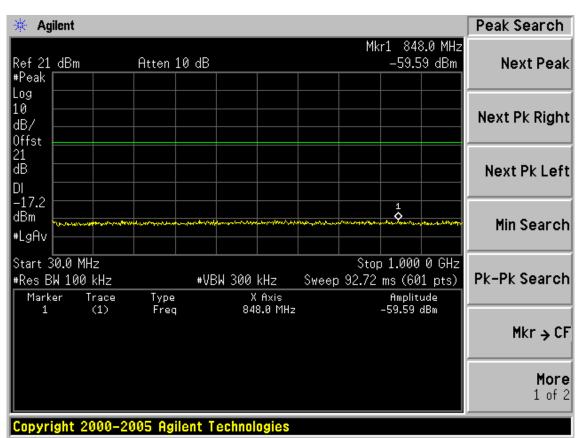


Test CH6: 2437MHz

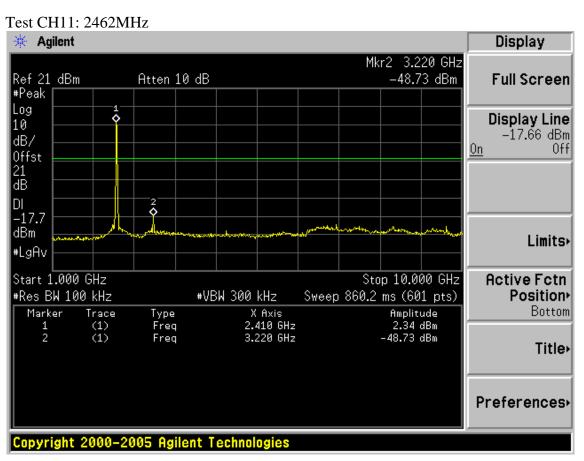


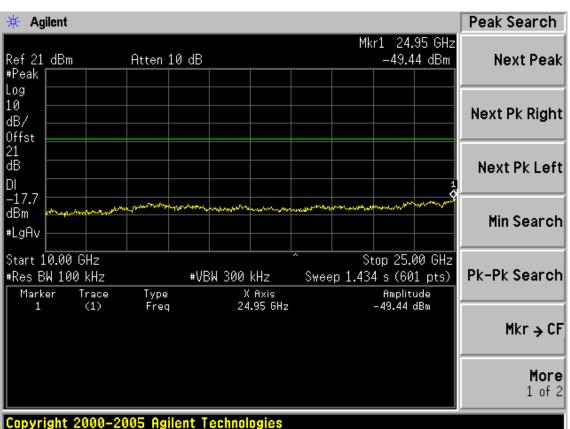




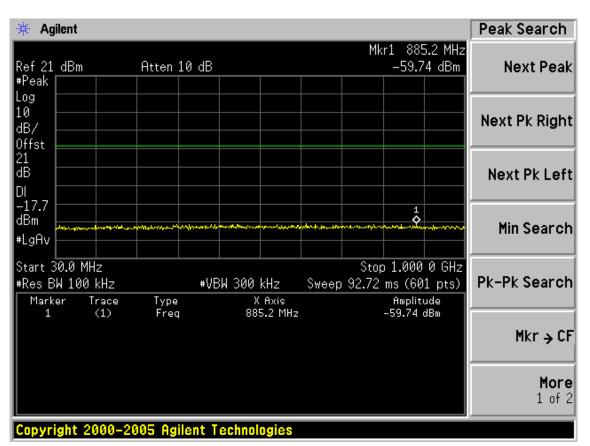


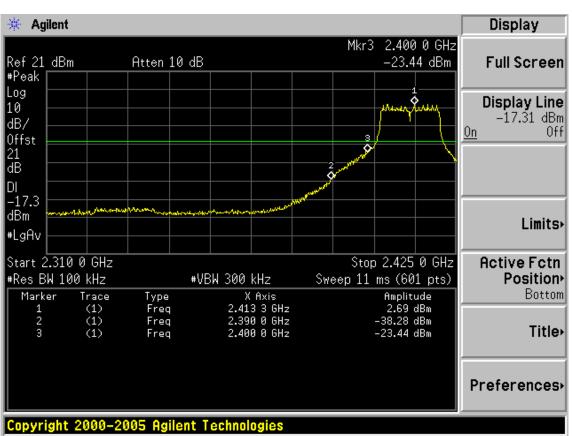








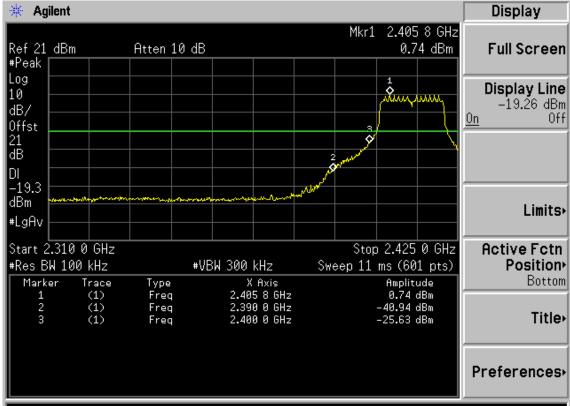




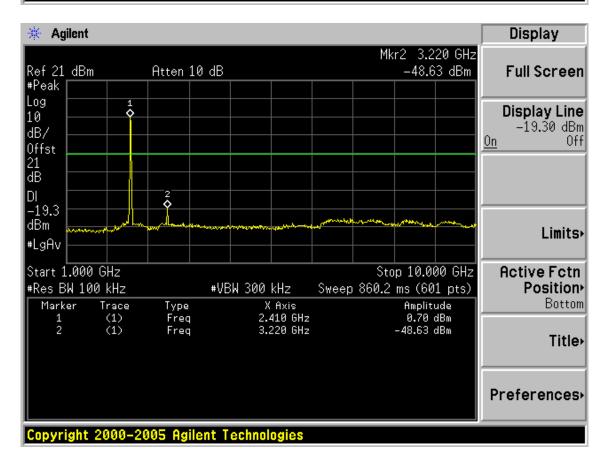




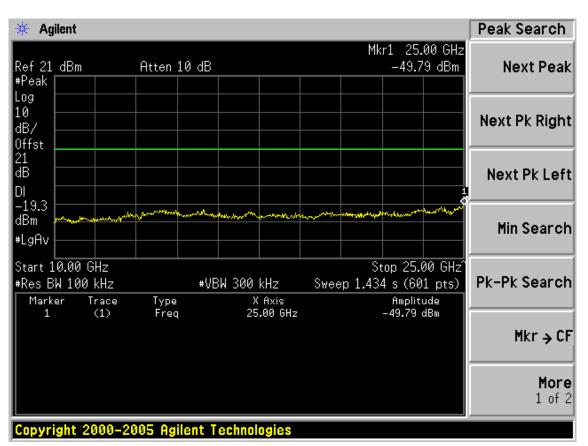
Test CH1: 2412MHz

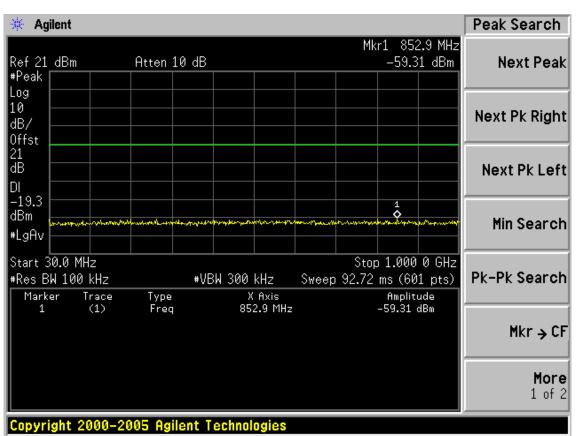


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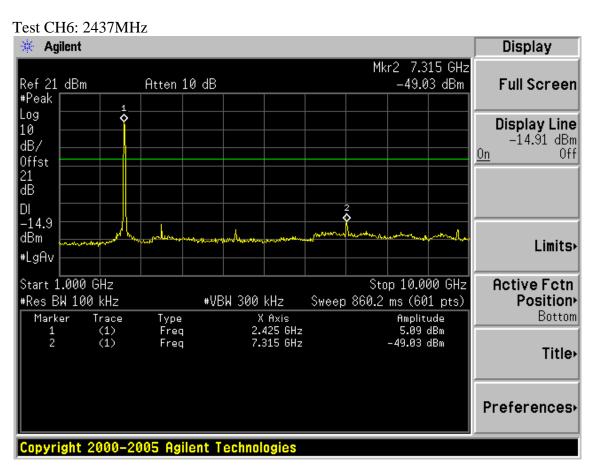


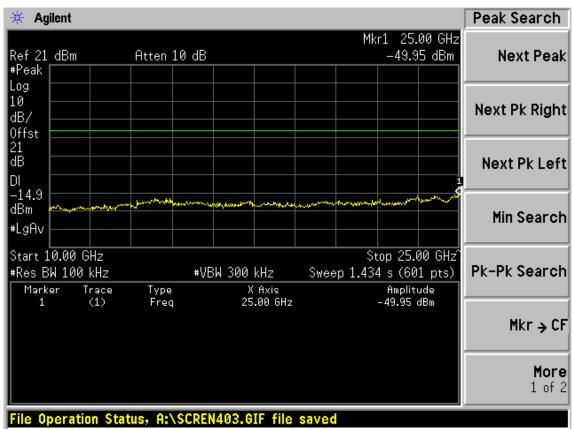




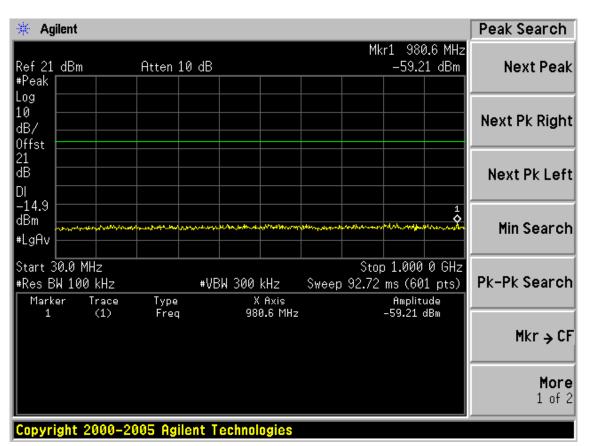




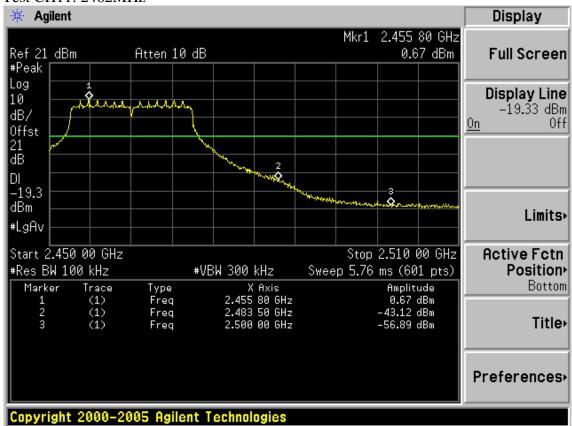




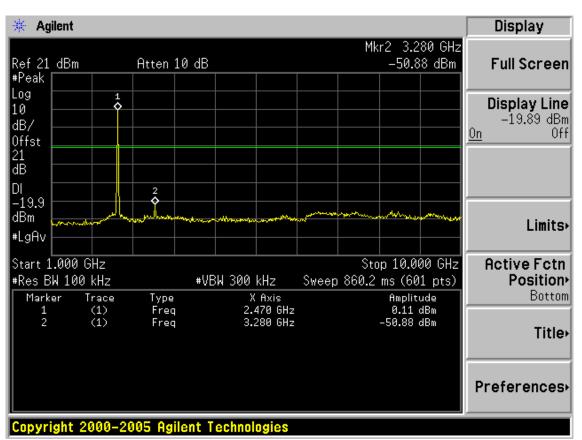


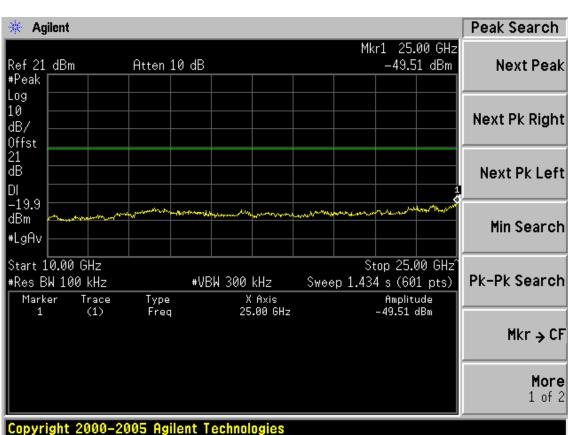


Test CH11: 2462MHz

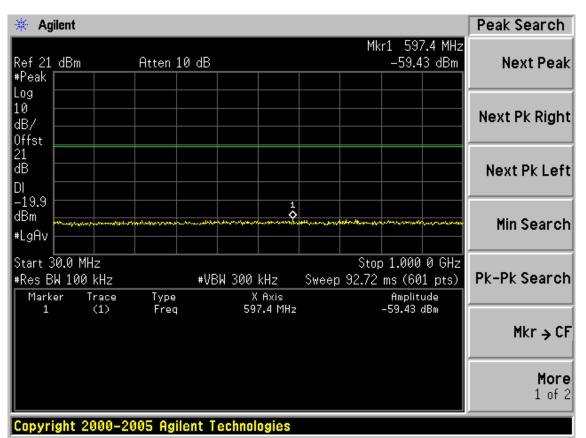






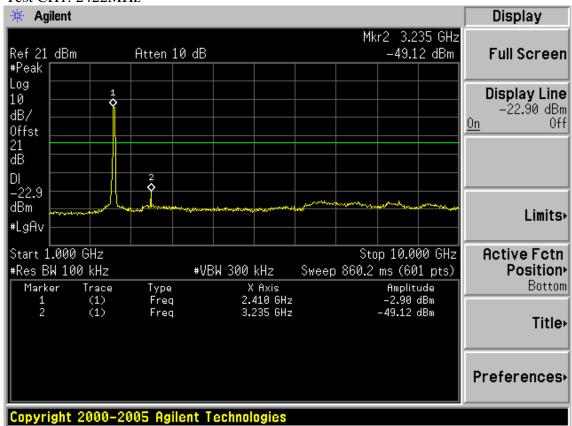




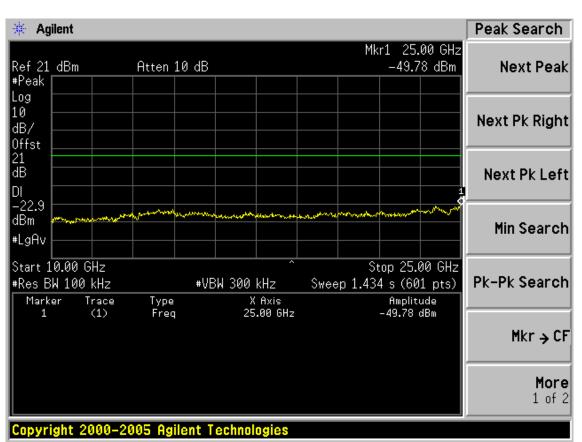


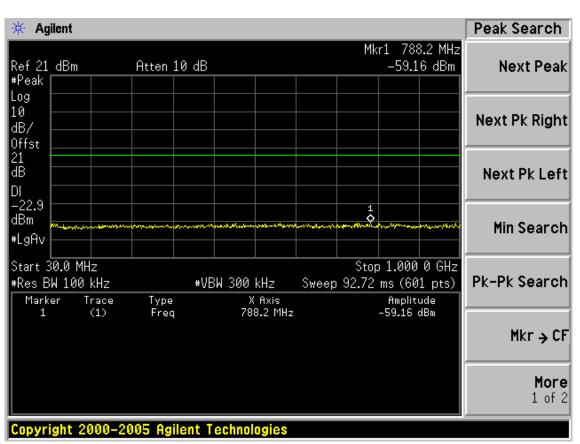
Test Mode: IEEE 802.11n HT40 TX

Test CH1: 2422MHz

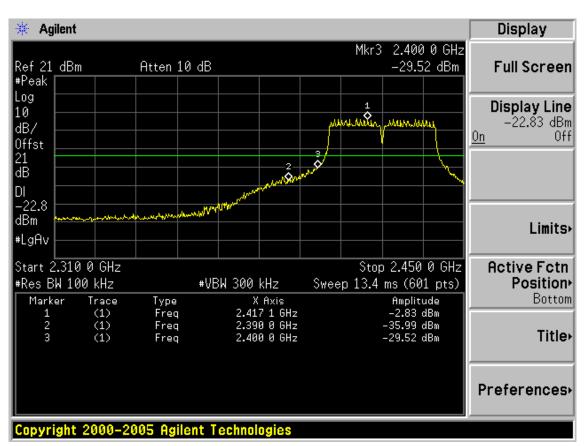




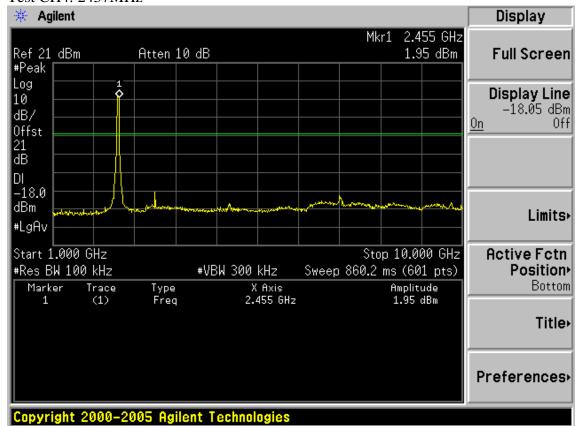




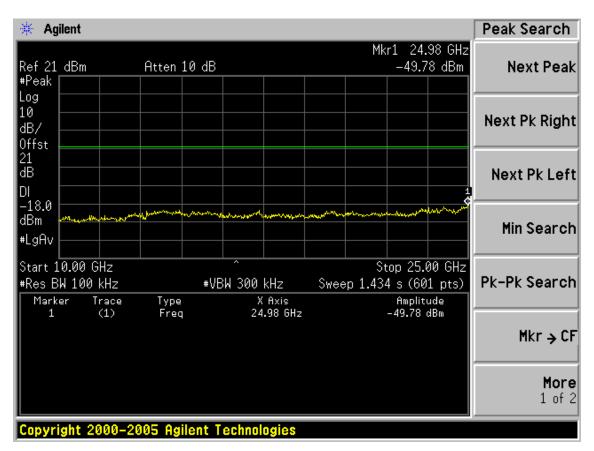


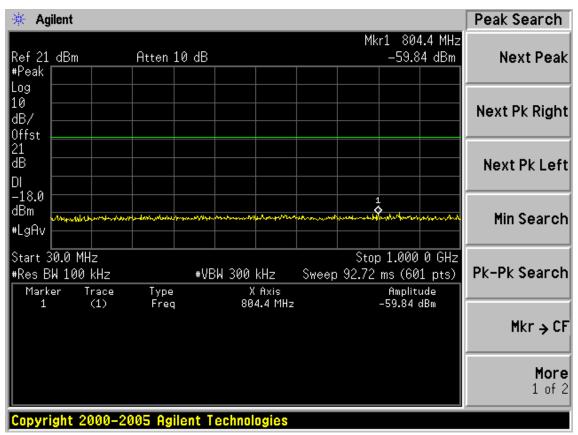


Test CH4: 2437MHz

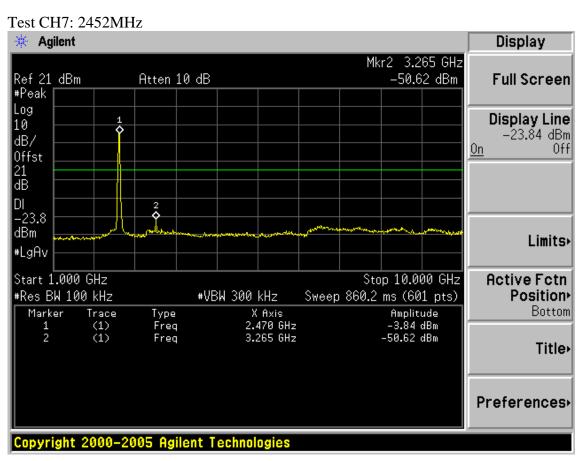


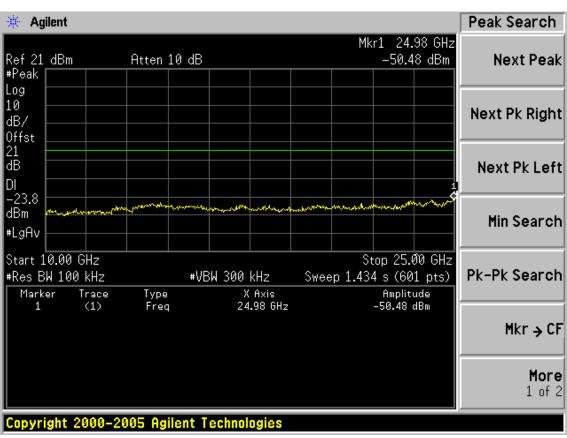




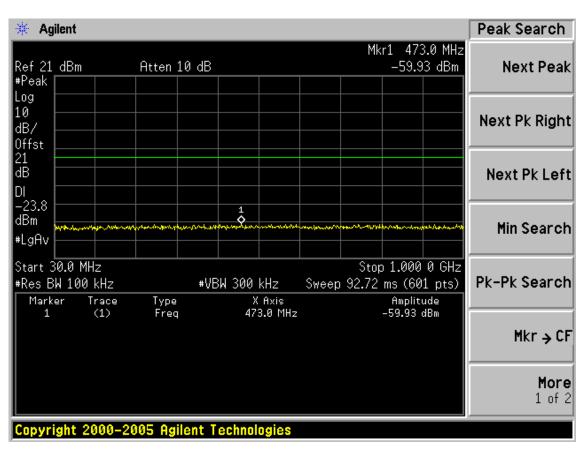


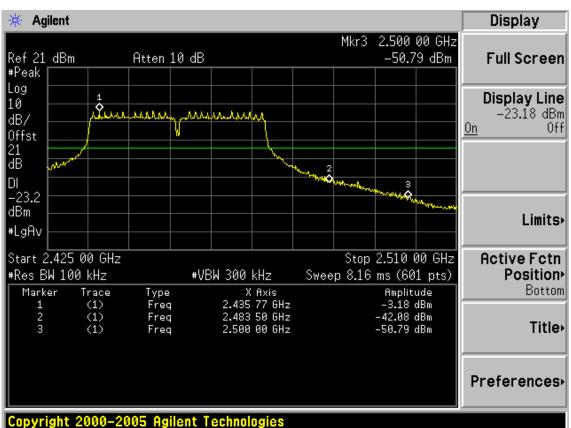










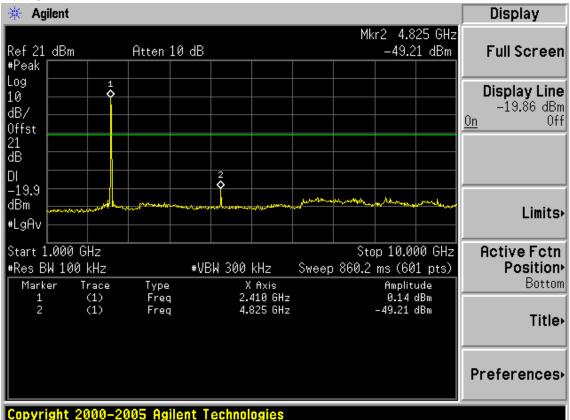


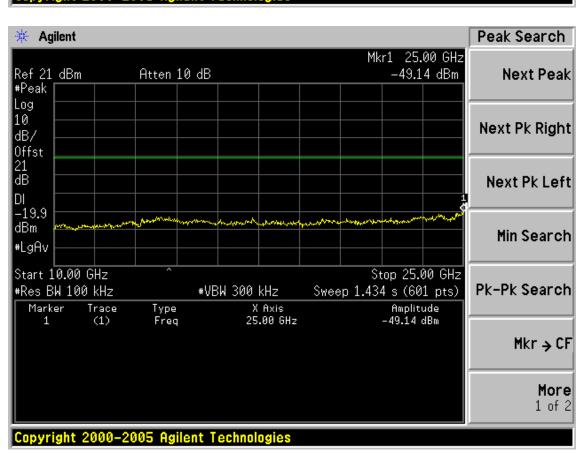


ANT1

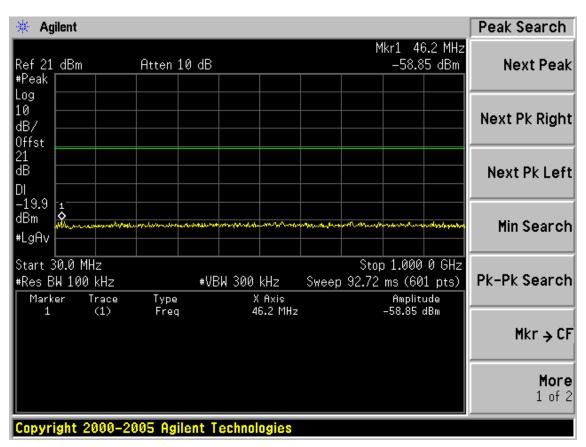
Test Mode: IEEE 802.11b TX

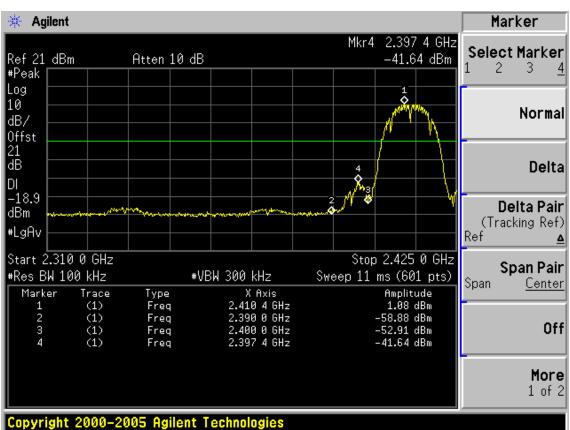
Test CH1: 2412MHz



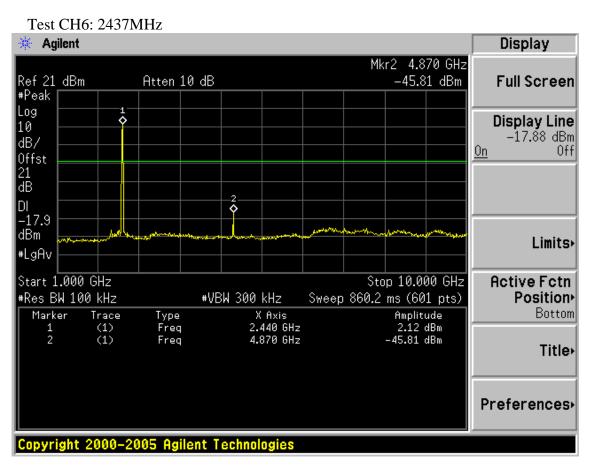


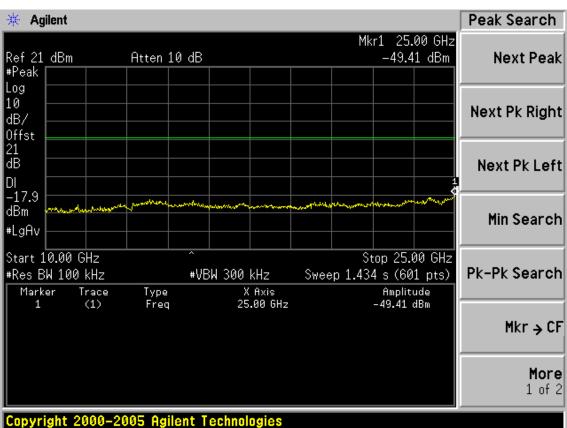




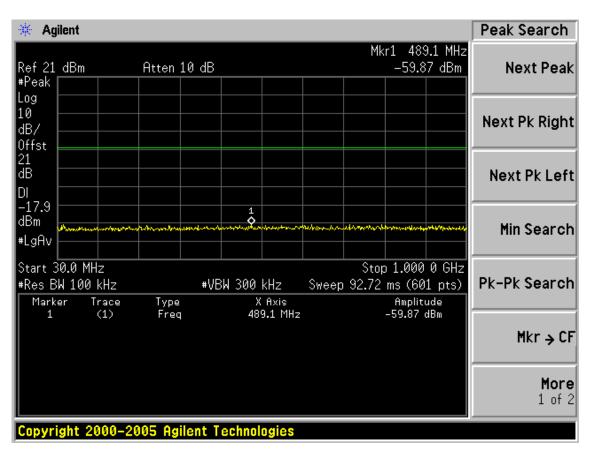




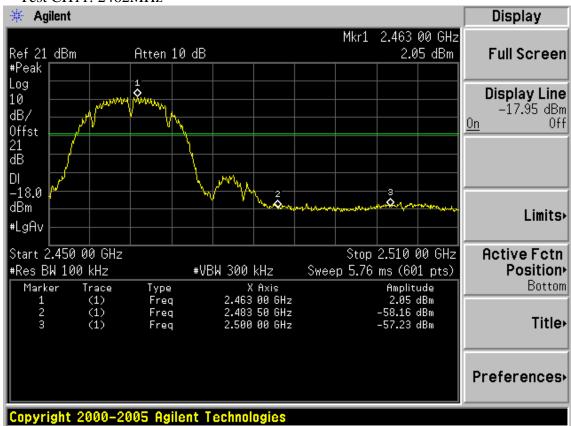




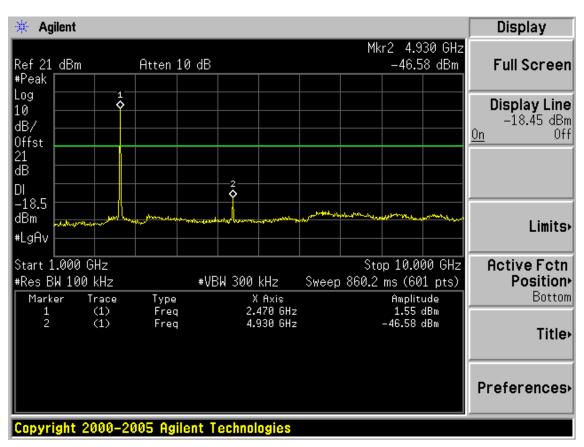


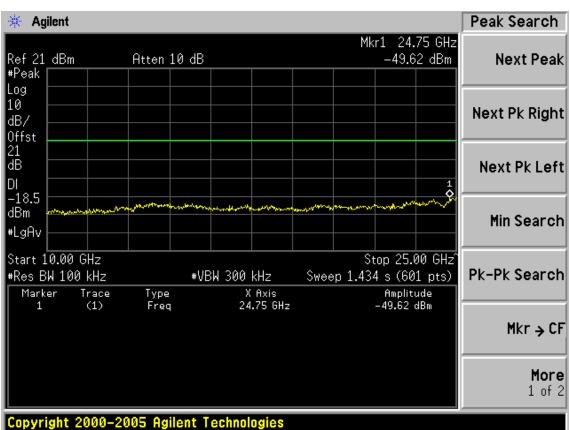


Test CH11: 2462MHz

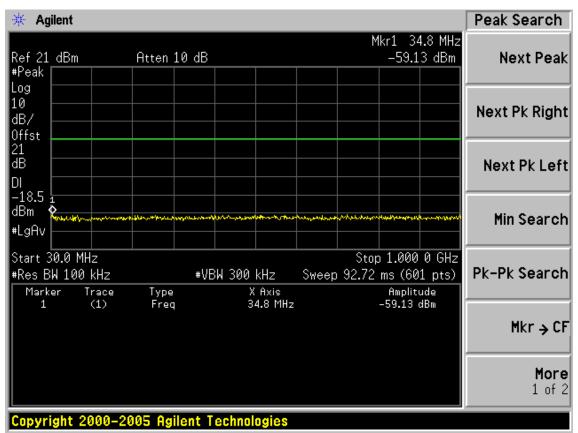






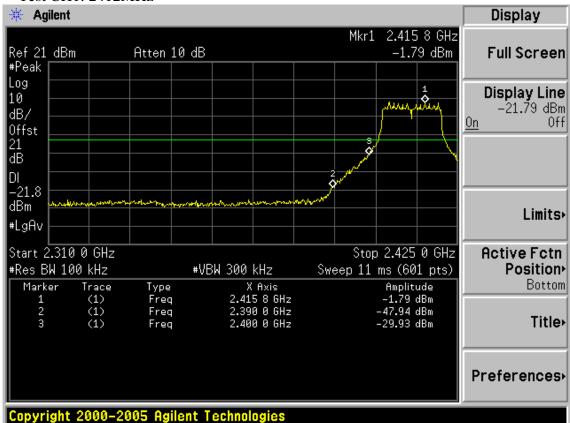




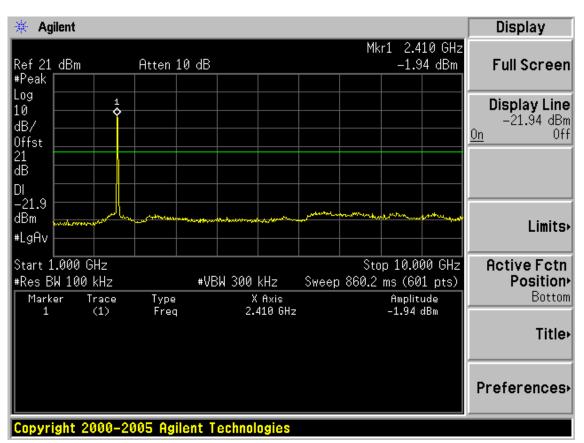


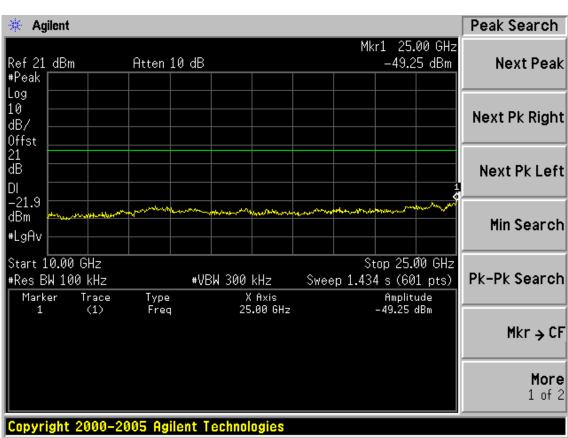
Test Mode: IEEE 802.11g TX

Test CH1: 2412MHz

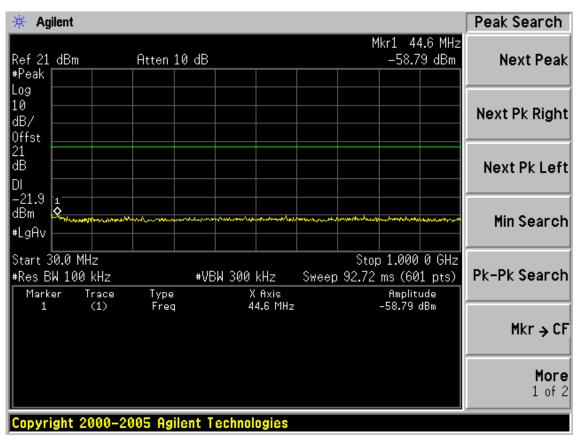




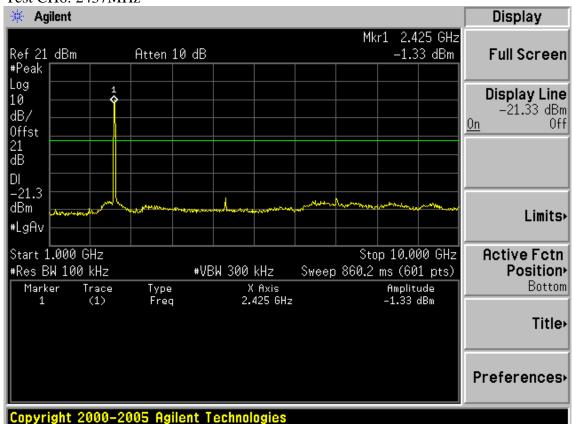








Test CH6: 2437MHz



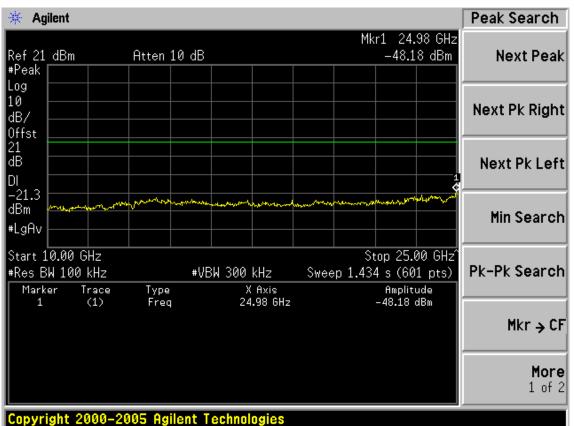


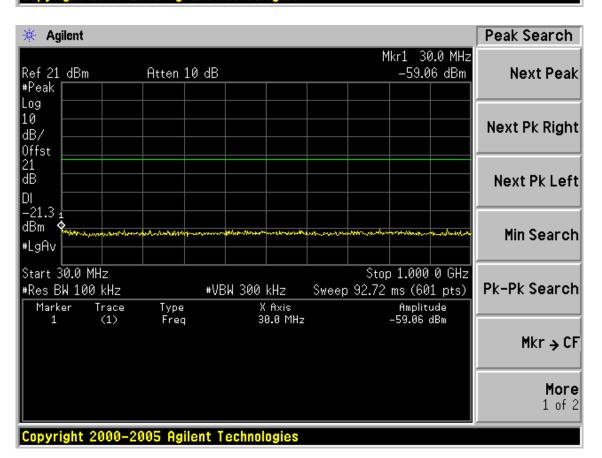
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page 5-32

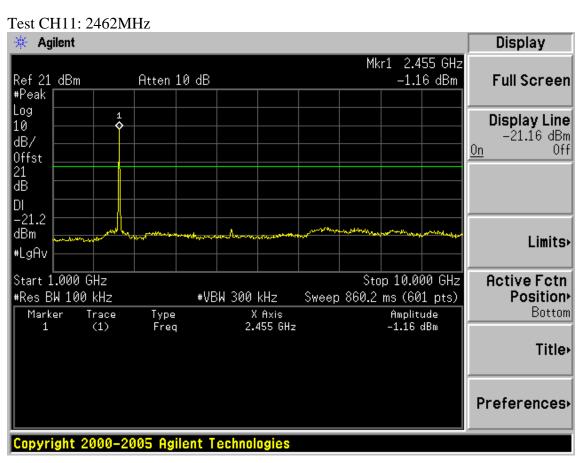
Anilent

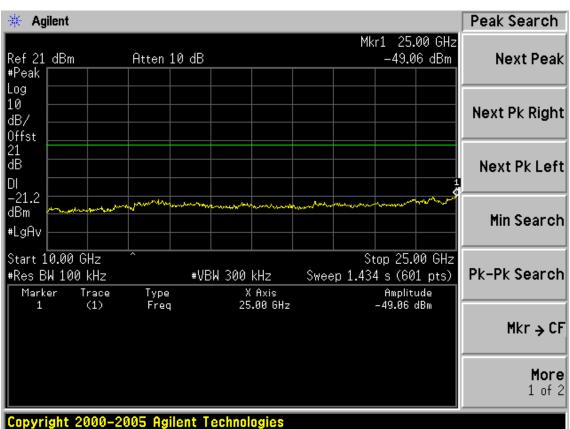
Peak Search



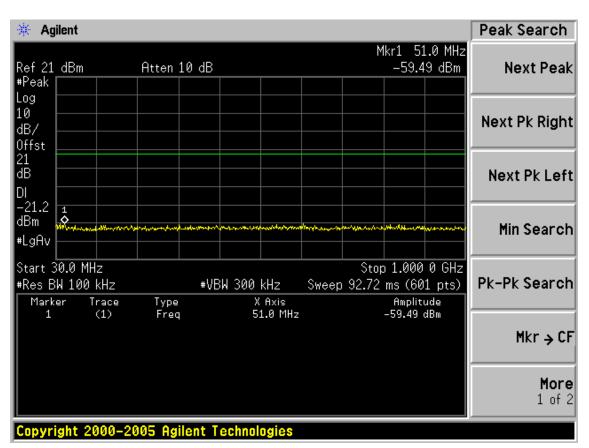


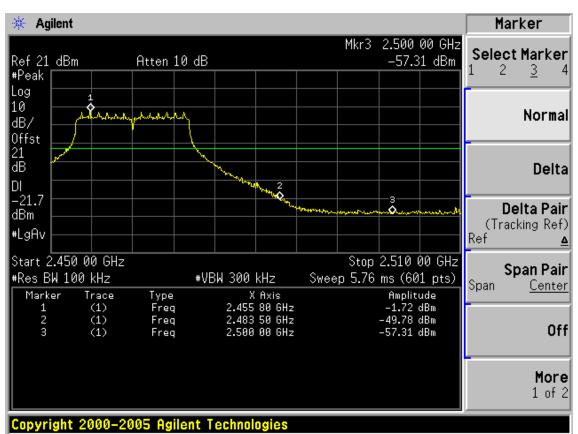




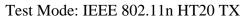




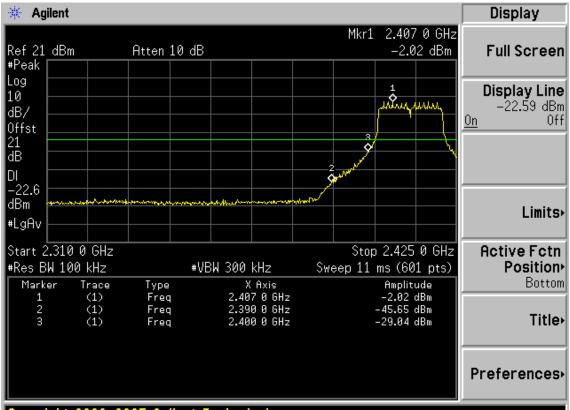




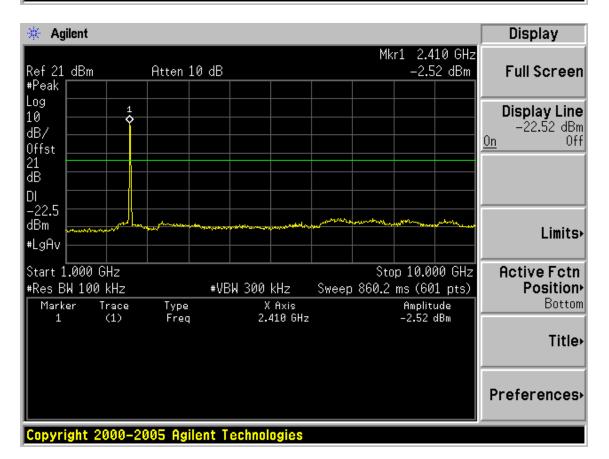




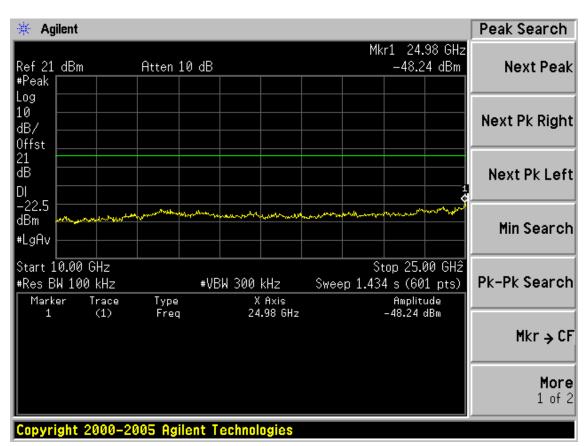
Test CH1: 2412MHz

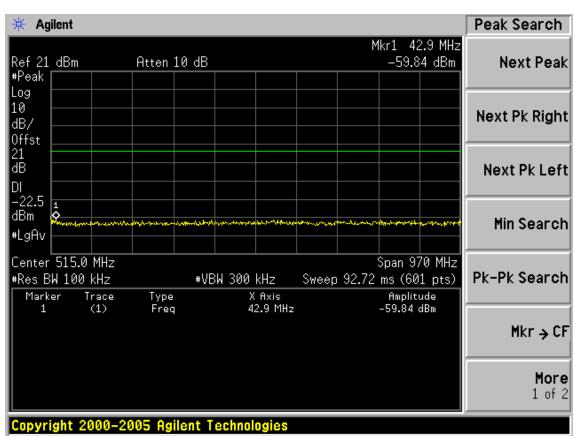


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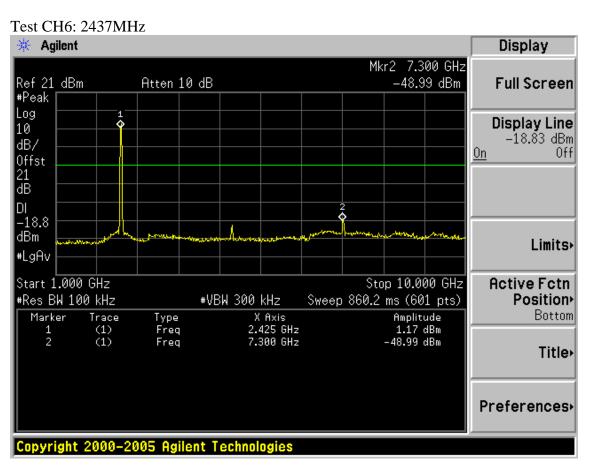


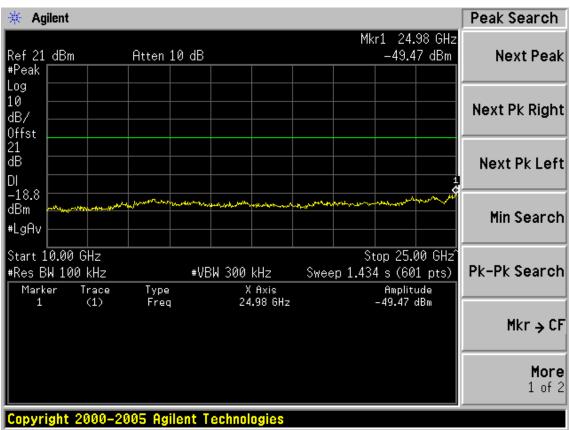




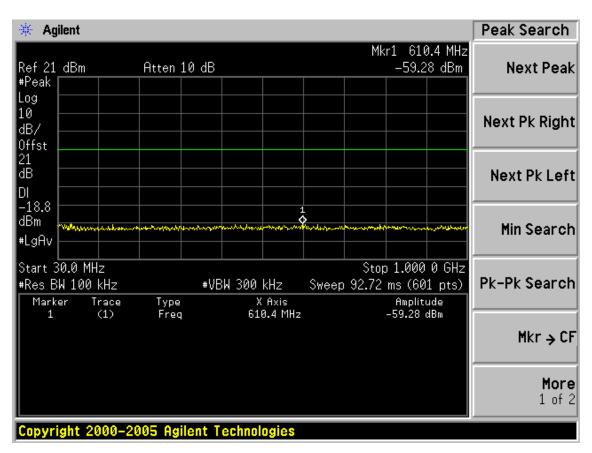












Test CH11: 2462MHz

