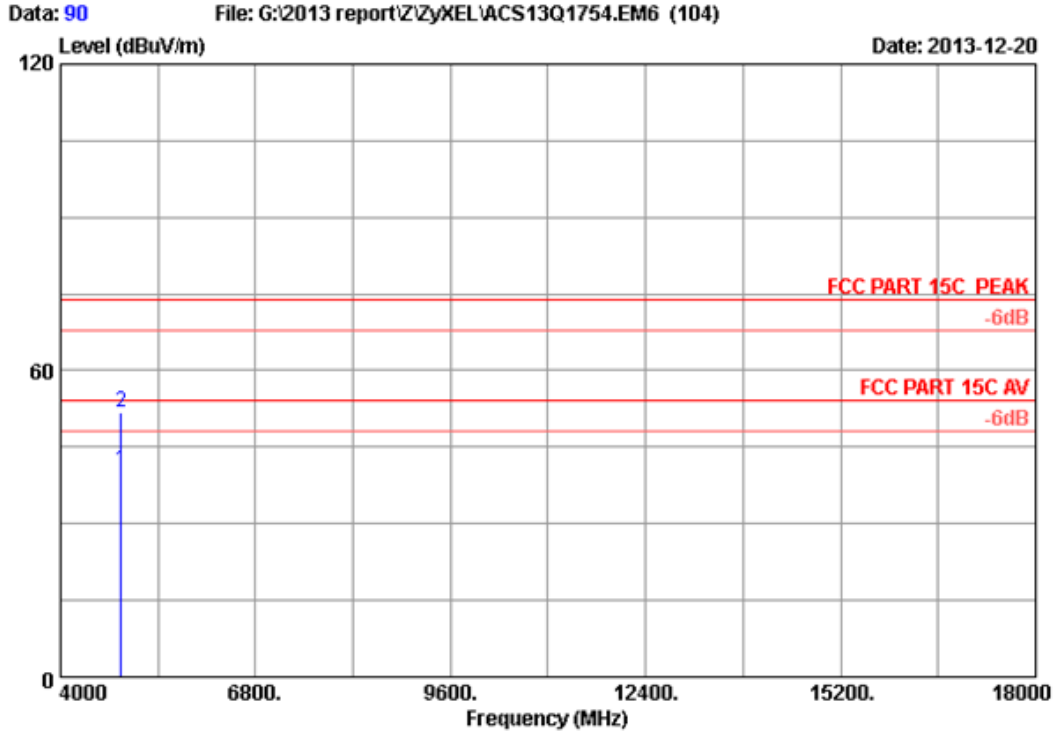


Site no. : 3m Chamber Data no. : 89  
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54% Engineer : Leo-Li  
EUT : Wireless N300 4-port USB Ethernet Gateway  
Power supply : DC 12V From Adapter Input AC 120V/60Hz  
Test mode : IEEE802.11n HT40 CH6 2437MHz Tx Mode  
M/N : EMG1312-R10A

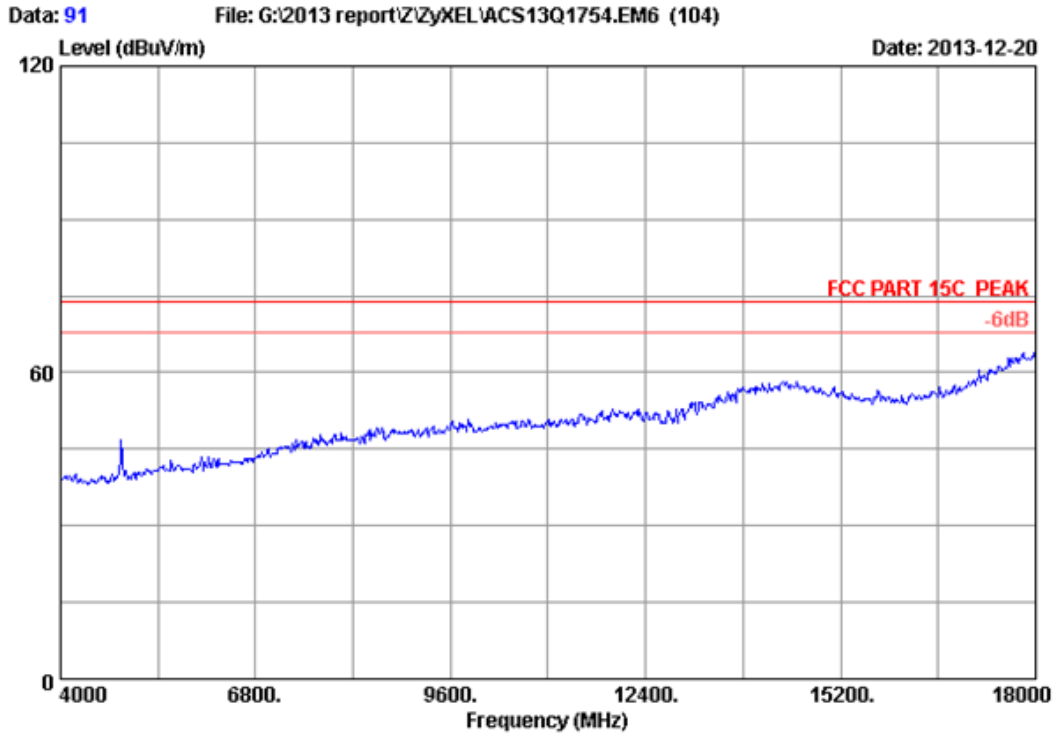


Site no. : 3m Chamber Data no. : 90  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N300 4-port USB Ethernet Gateway  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11n HT40 CH6 2437MHz Tx Mode  
 M/N : EMG1312-R10A

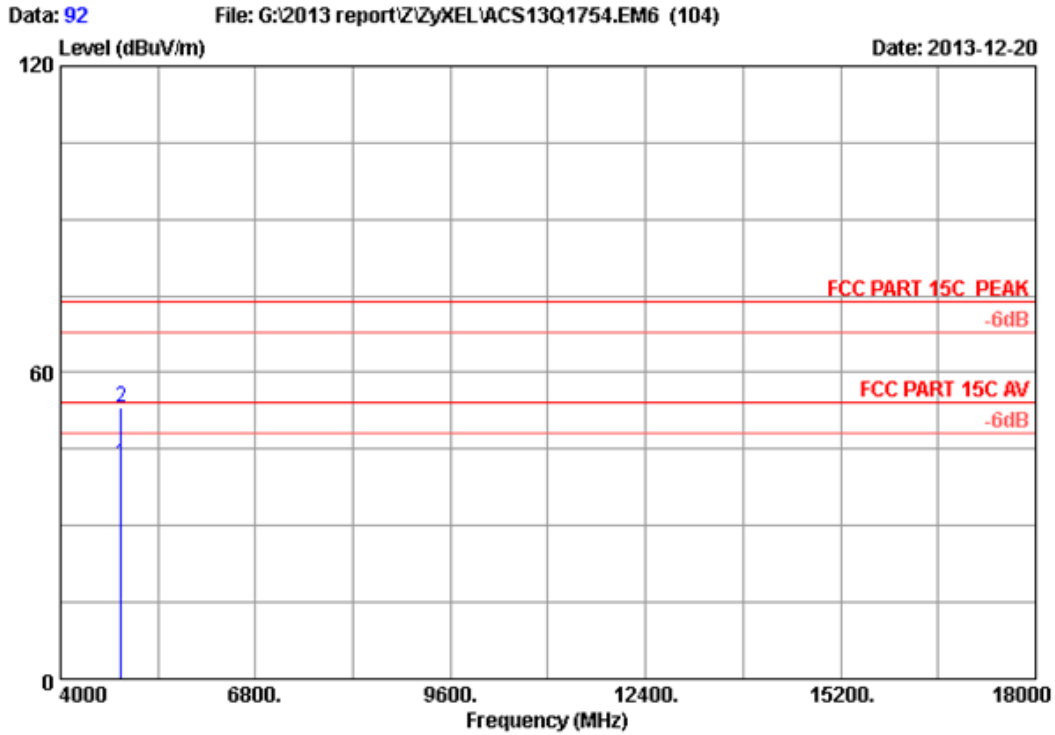
Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission			Remark
					Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	
1 4874.000	32.97	8.63	35.70	34.70	40.60	54.00	13.40	Average
2 4874.000	32.97	8.63	35.70	45.88	51.78	74.00	22.22	Peak

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. : 91  
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54% Engineer : Leo-Li  
EUT : Wireless N300 4-port USB Ethernet Gateway  
Power supply : DC 12V From Adapter Input AC 120V/60Hz  
Test mode : IEEE802.11n HT40 CH6 2437MHz Tx Mode  
M/N : EMG1312-R10A

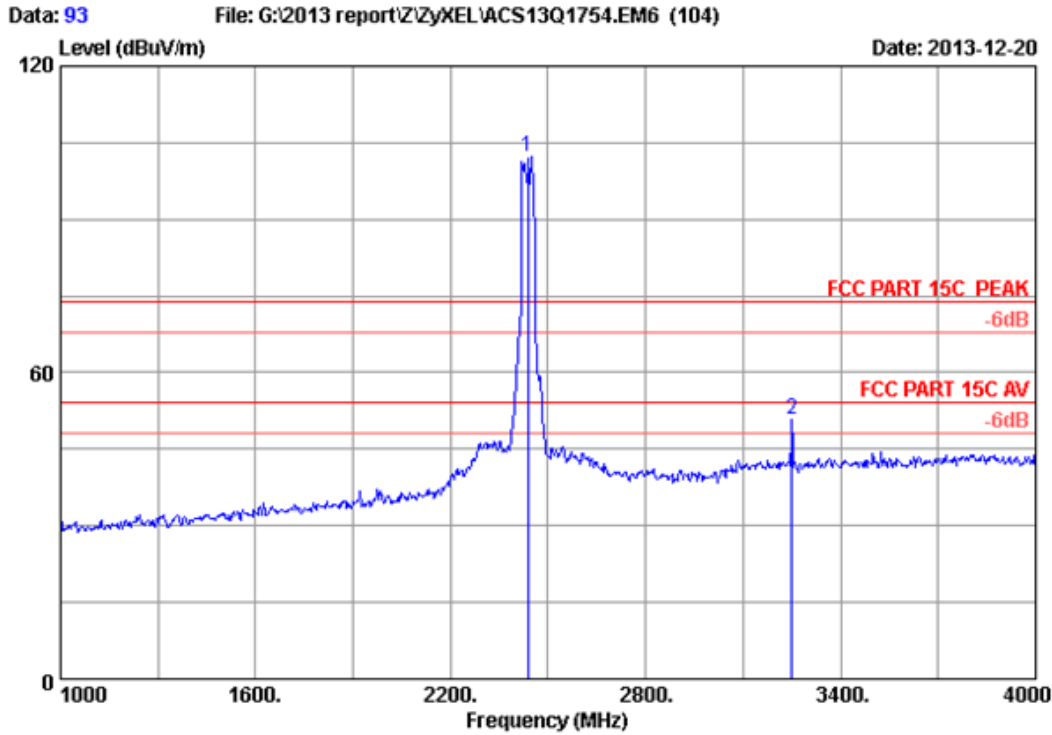


Site no. : 3m Chamber Data no. : 92  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N300 4-port USB Ethernet Gateway  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11n HT40 CH6 2437MHz Tx Mode  
 M/N : EMG1312-R10A

Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission			Remark
					Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	
1 4874.000	32.97	8.63	35.70	36.10	42.00	54.00	12.00	Average
2 4874.000	32.97	8.63	35.70	47.40	53.30	74.00	20.70	Peak

Remarks:

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

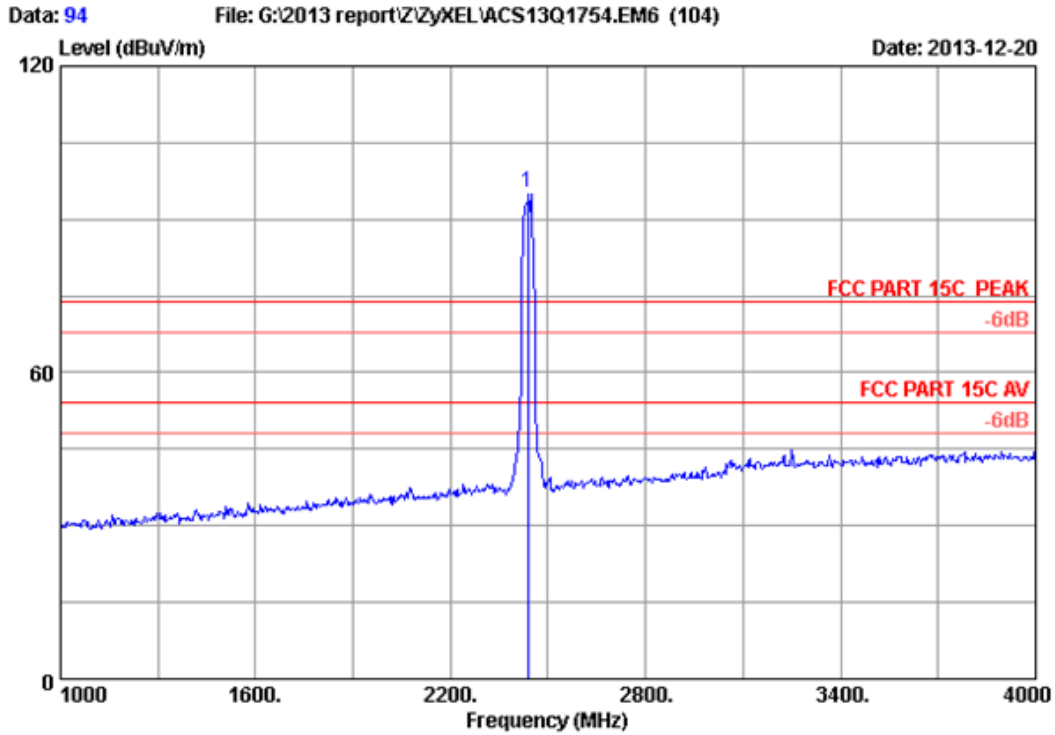


Site no. : 3m Chamber Data no. : 93  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N300 4-port USB Ethernet Gateway  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11n HT40 CH6 2437MHz Tx Mode  
 M/N : EMG1312-R10A

	Freq.	Ant.	Cable	Amp.	Emission				Remark
	(MHz)	Factor	loss	Factor	Reading	Level	Limits	Margin	
		(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	2437.000	28.26	5.85	35.70	103.90	102.31	74.00	-28.31	Peak
2	3250.000	30.90	6.93	35.70	48.81	50.94	74.00	23.06	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.

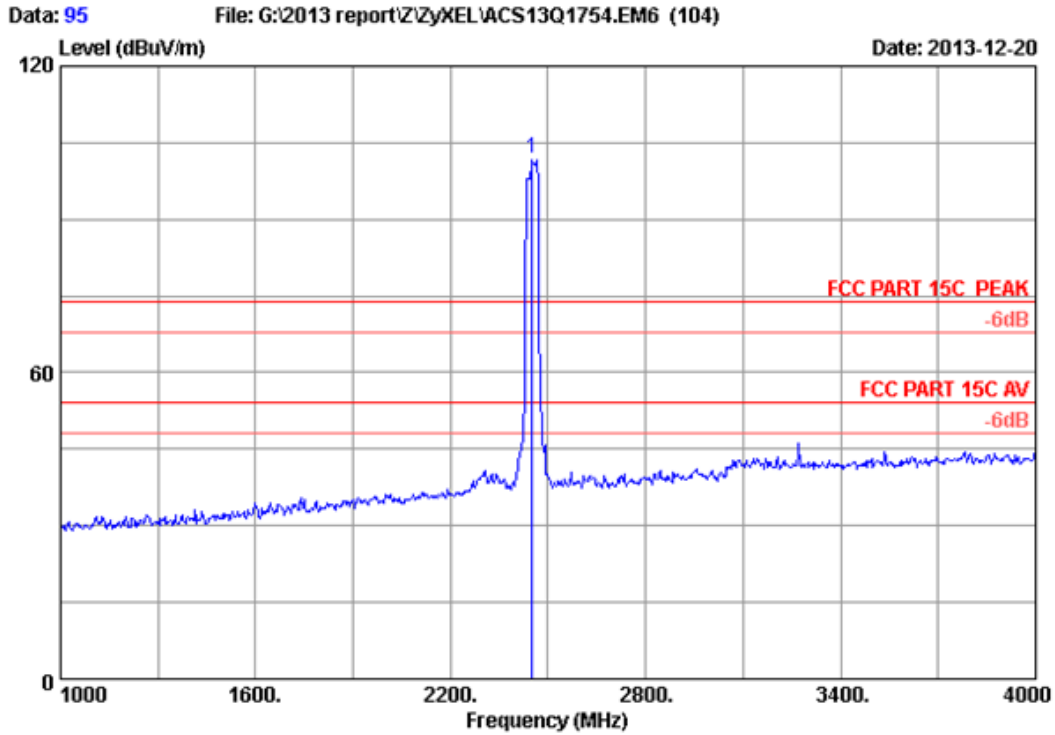


Site no. : 3m Chamber Data no. : 94  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N300 4-port USB Ethernet Gateway  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11n HT40 CH6 2437MHz Tx Mode  
 M/N : EMG1312-R10A

Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission			Remark
					Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	
1 2437.000	28.26	5.85	35.70	96.84	95.25	74.00	-21.25	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.

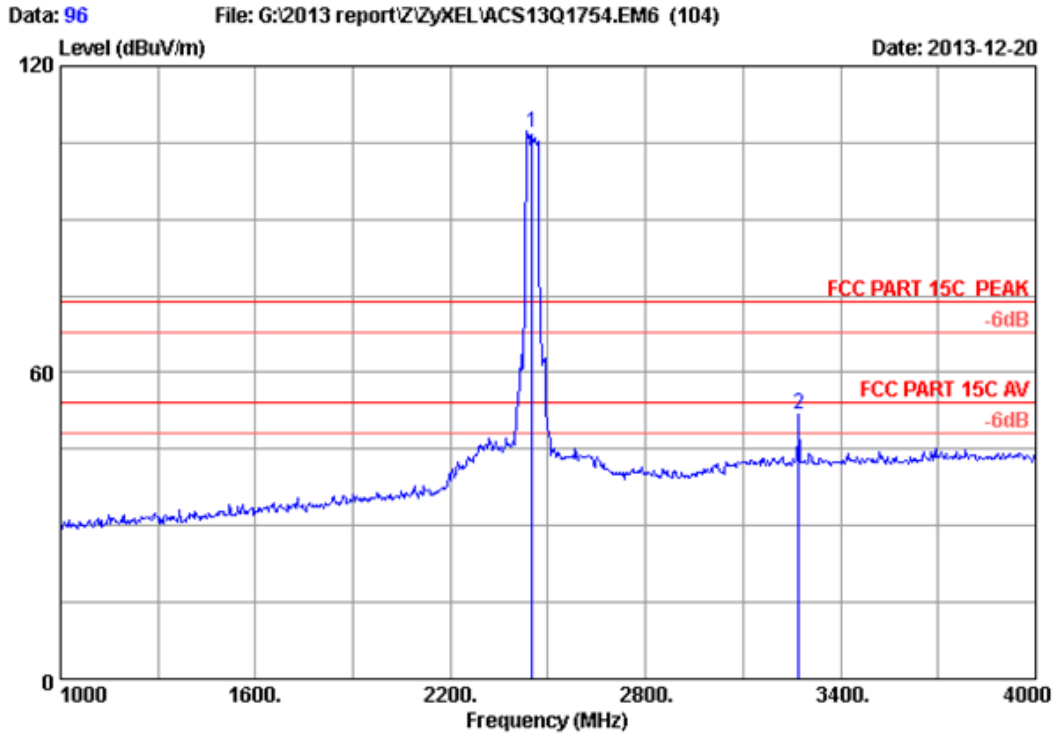


Site no. : 3m Chamber Data no. : 95  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N300 4-port USB Ethernet Gateway  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11n HT40 CH9 2452MHz Tx Mode  
 M/N : EMG1312-R10A

Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBUV)	Emission			Remark
					Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	
1 2452.000	28.29	5.87	35.70	103.36	101.82	74.00	-27.82	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.



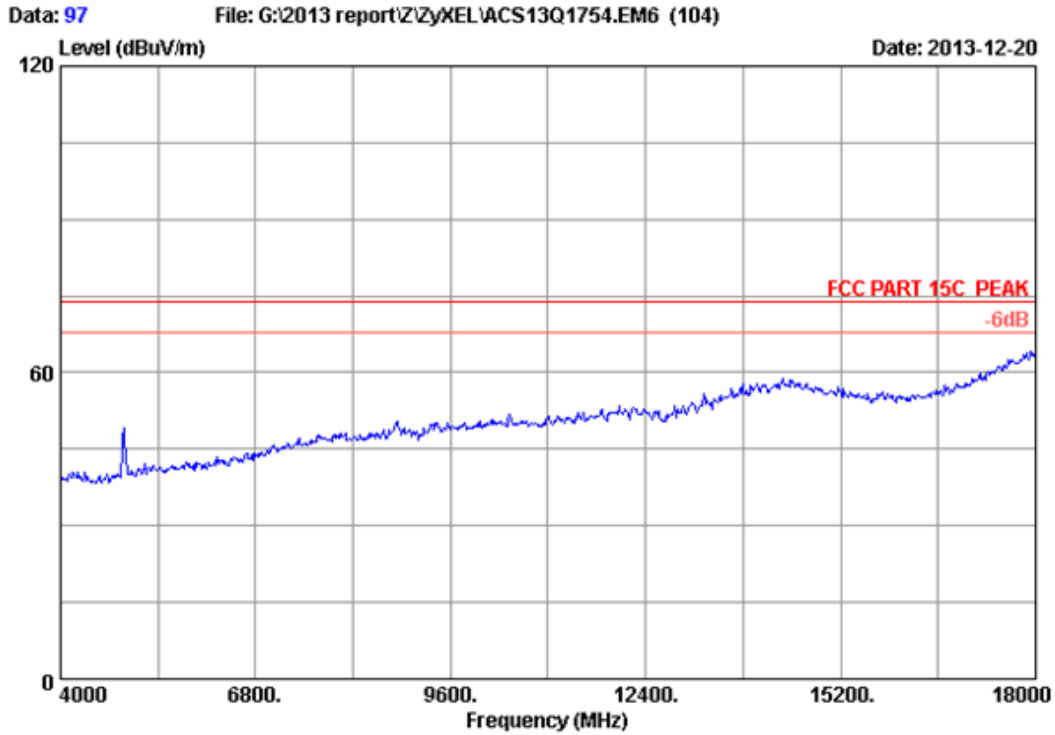
Site no. : 3m Chamber Data no. : 96  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N300 4-port USB Ethernet Gateway  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11n HT40 CH9 2452MHz Tx Mode  
 M/N : EMG1312-R10A

Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission			
					Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 2452.000	28.29	5.87	35.70	108.58	107.04	74.00	-33.04	Peak
2 3271.000	30.94	6.95	35.70	49.46	51.65	74.00	22.35	Peak

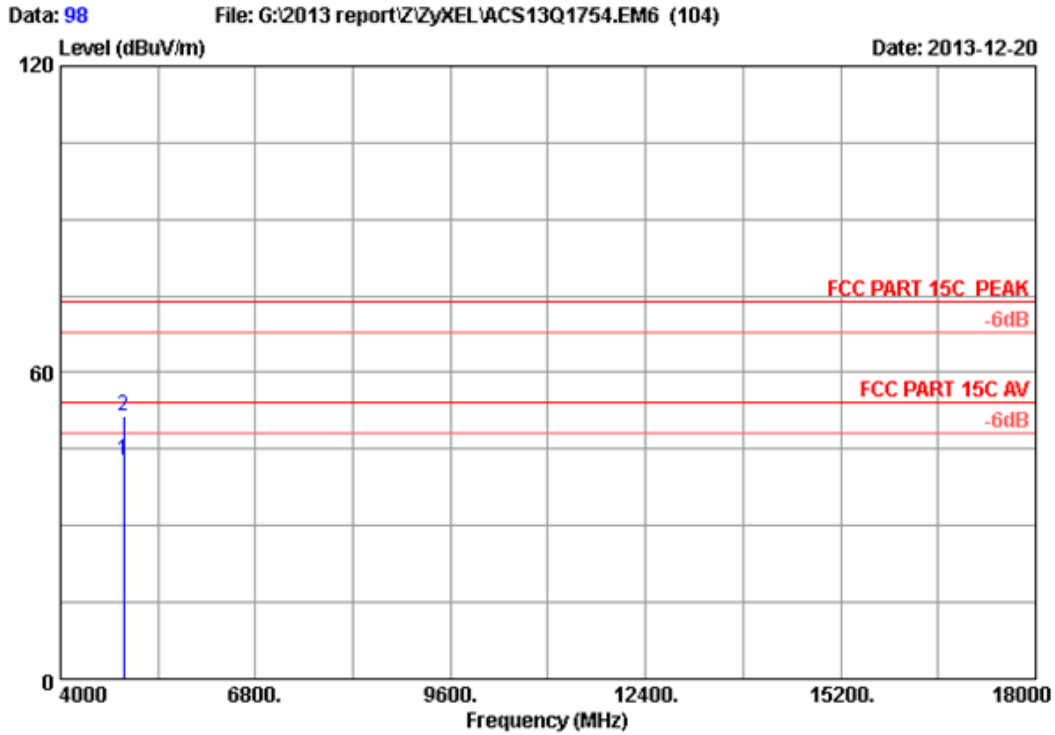
Remarks:

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. : 97  
Dis. / Ant. : 3m 2013 3115 (4580)      Ant. pol. : VERTICAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54%      Engineer : Leo-Li  
EUT : Wireless N300 4-port USB Ethernet Gateway  
Power supply : DC 12V From Adapter Input AC 120V/60Hz  
Test mode : IEEE802.11n HT40 CH9 2452MHz Tx Mode  
M/N : EMG1312-R10A

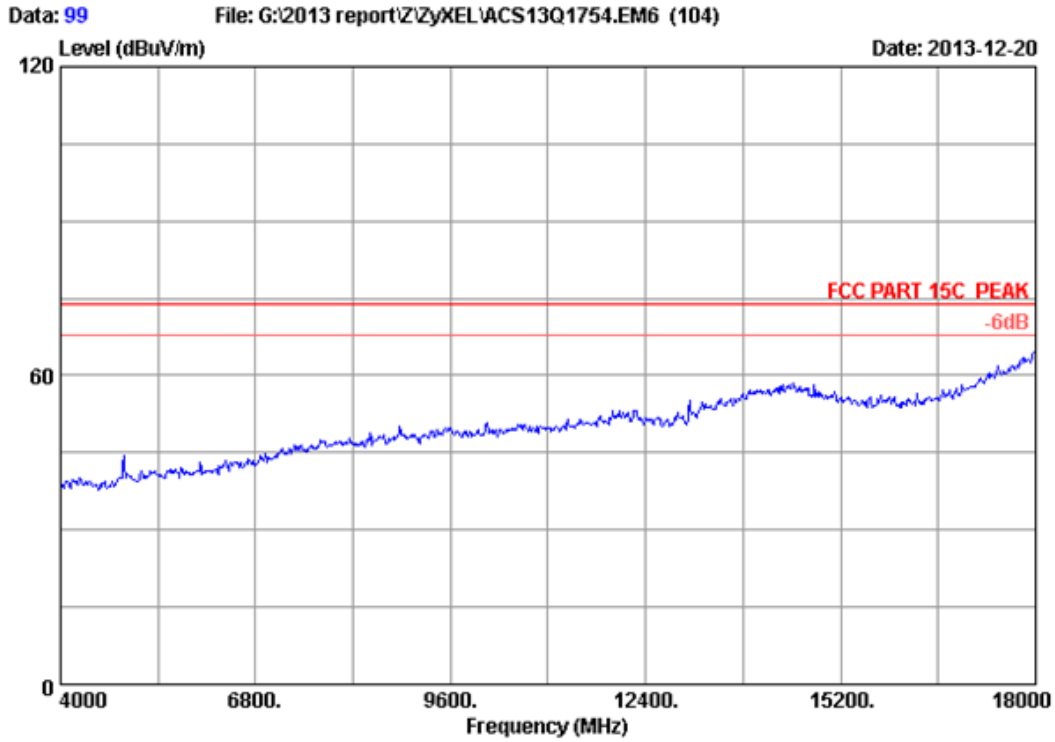


Site no. : 3m Chamber Data no. : 98  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N300 4-port USB Ethernet Gateway  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11n HT40 CH9 2452MHz Tx Mode  
 M/N : EMG1312-R10A

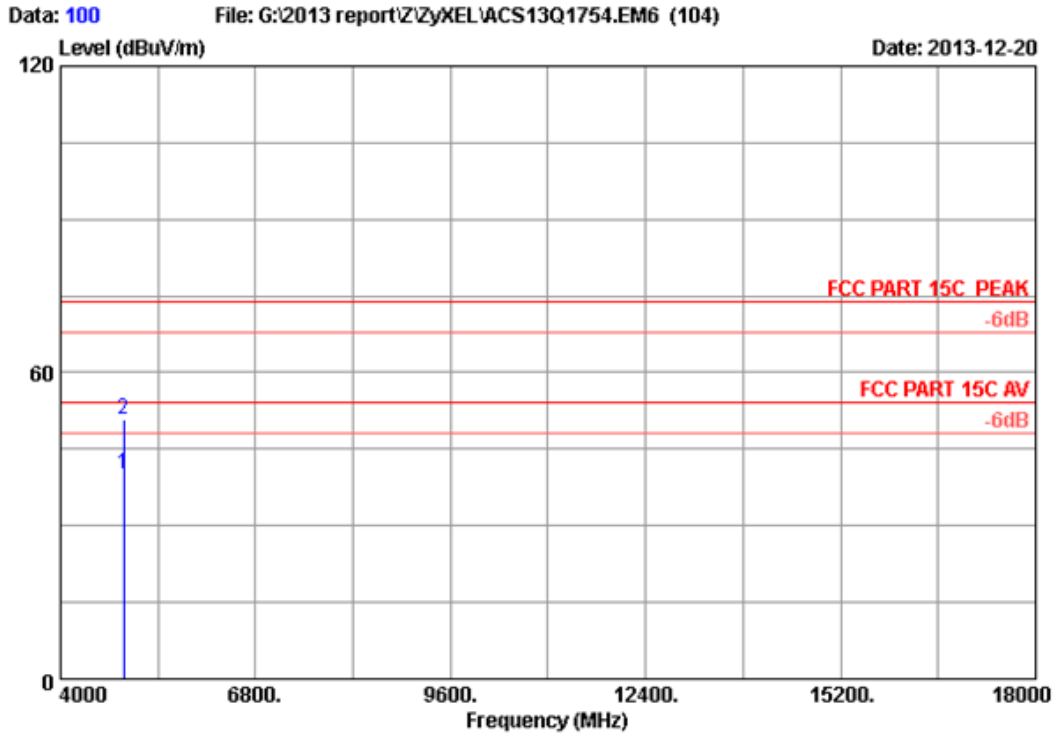
	Freq.	Ant.	Cable	Amp.	Emission				Remark
	(MHz)	Factor	loss	Factor	Reading	Level	Limits	Margin	
		(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	4904.000	33.03	8.66	35.70	36.88	42.87	54.00	11.13	Average
2	4904.000	33.03	8.66	35.70	45.60	51.59	74.00	22.41	Peak

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. : 99  
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54% Engineer : Leo-Li  
EUT : Wireless N300 4-port USB Ethernet Gateway  
Power supply : DC 12V From Adapter Input AC 120V/60Hz  
Test mode : IEEE802.11n HT40 CH9 2452MHz Tx Mode  
M/N : EMG1312-R10A



Site no. : 3m Chamber Data no. : 100  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N300 4-port USB Ethernet Gateway  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11n HT40 CH9 2452MHz Tx Mode  
 M/N : EMG1312-R10A

Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission			
					Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 4904.000	33.03	8.66	35.70	34.27	40.26	54.00	13.74	Average
2 4904.000	33.03	8.66	35.70	44.70	50.69	74.00	23.31	Peak

Remarks:

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

## 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, 13	1 Year
2.	Attenuator	Agilent	8491B	MY39262165	May.08,13	1 Year
3.	RF Cable	Hubersuhner	SUCOFLEX102	28618/2	May.08,13	1 Year

### 5.2. Limit

In any 100kHz bandwidth outside the frequency bands in which the spread spectrum intentional radiator is 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

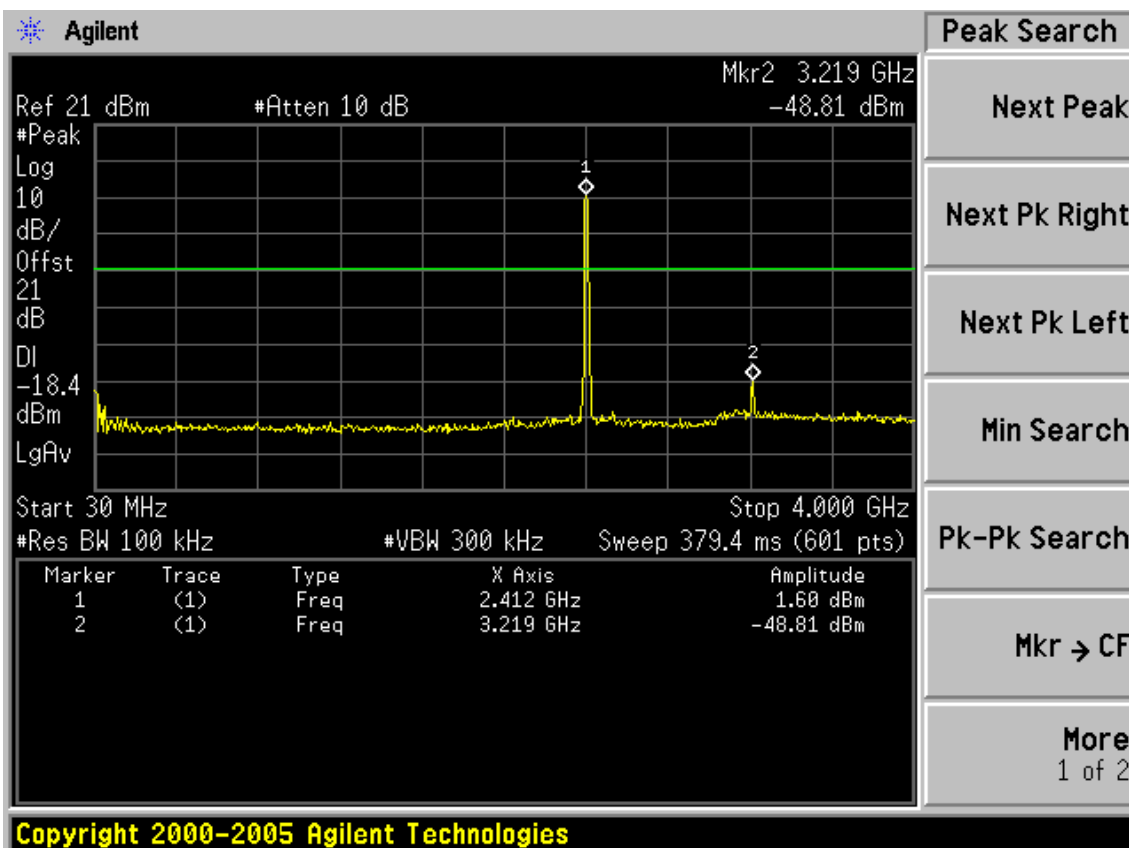
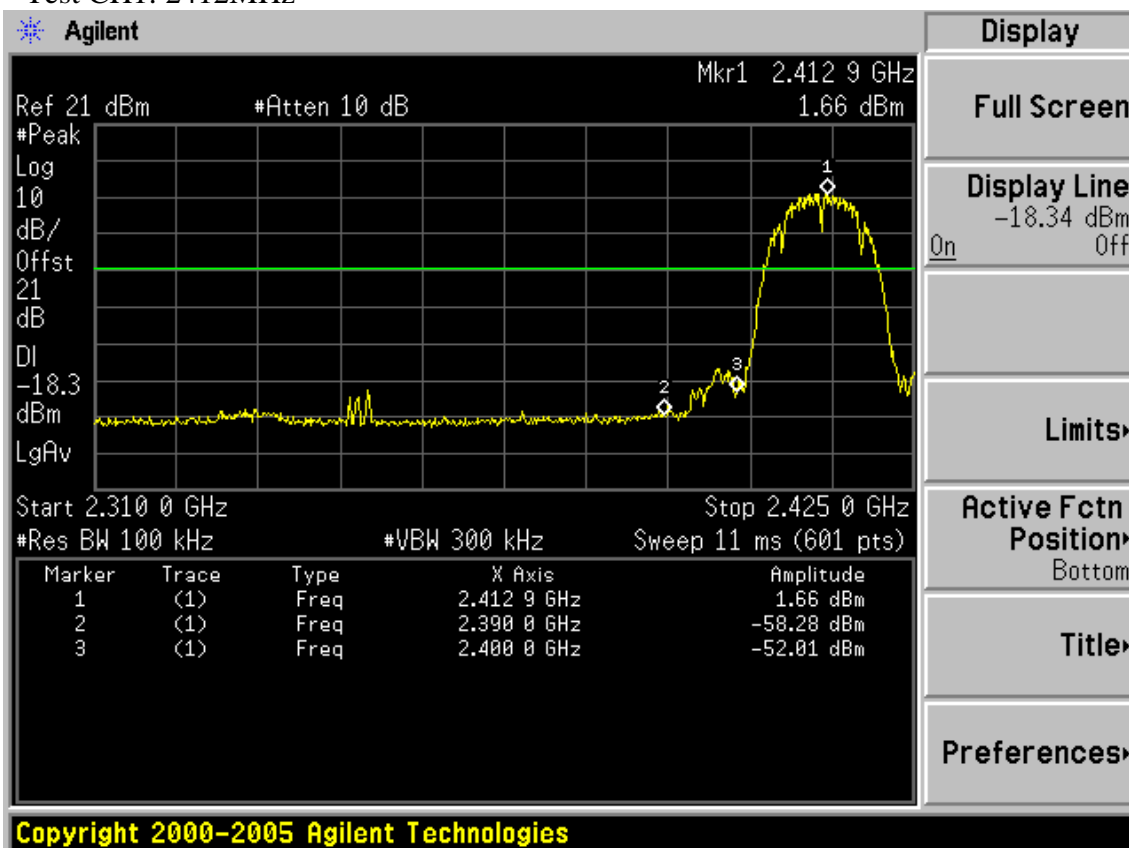
The transmitter output was connected to a spectrum analyzer, The resolution bandwidth is set to 100 kHz, The video bandwidth is set to 300 kHz and measure all the emissions detected.

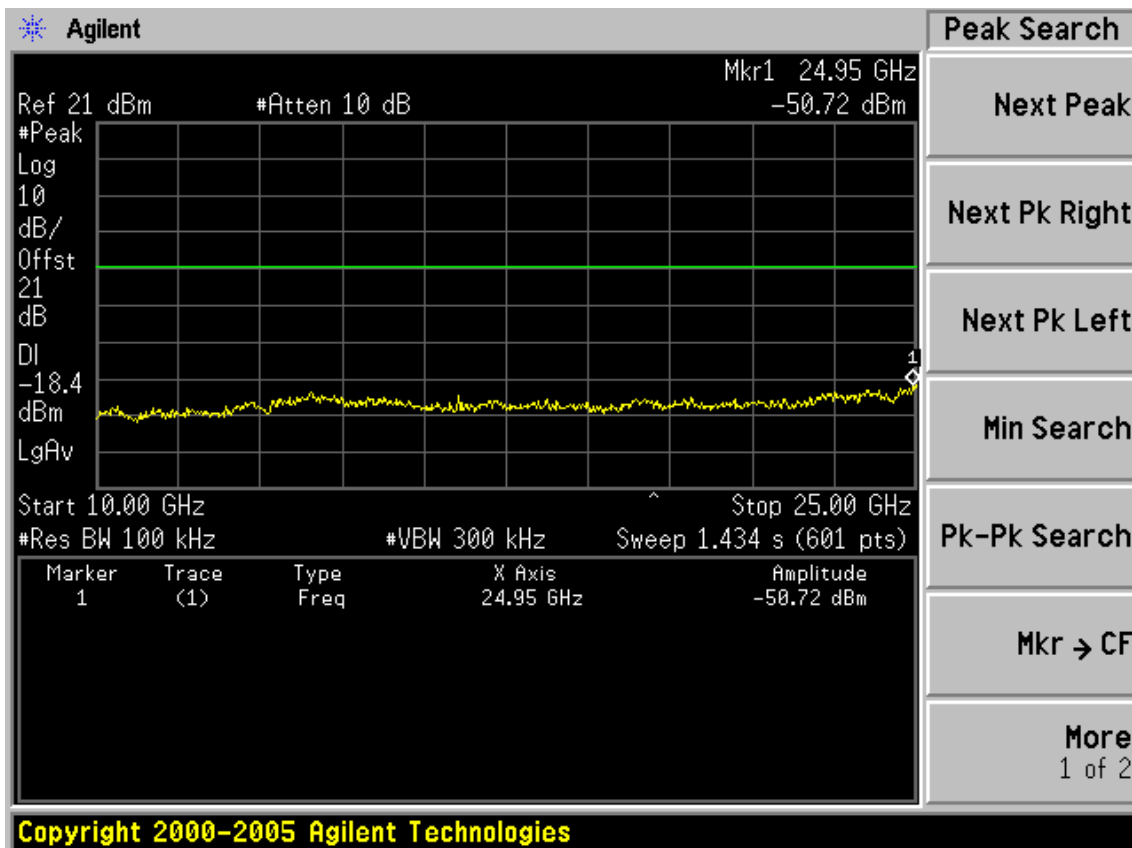
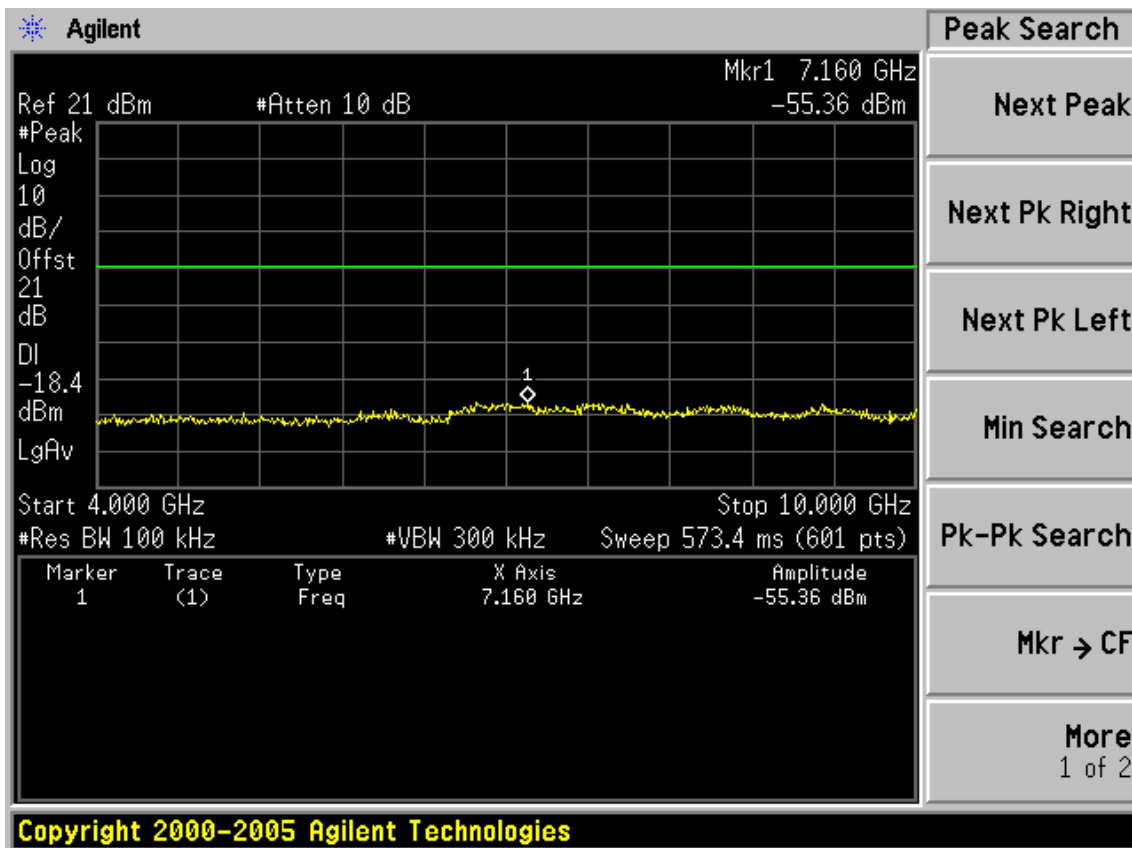
### 5.4. Test result

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

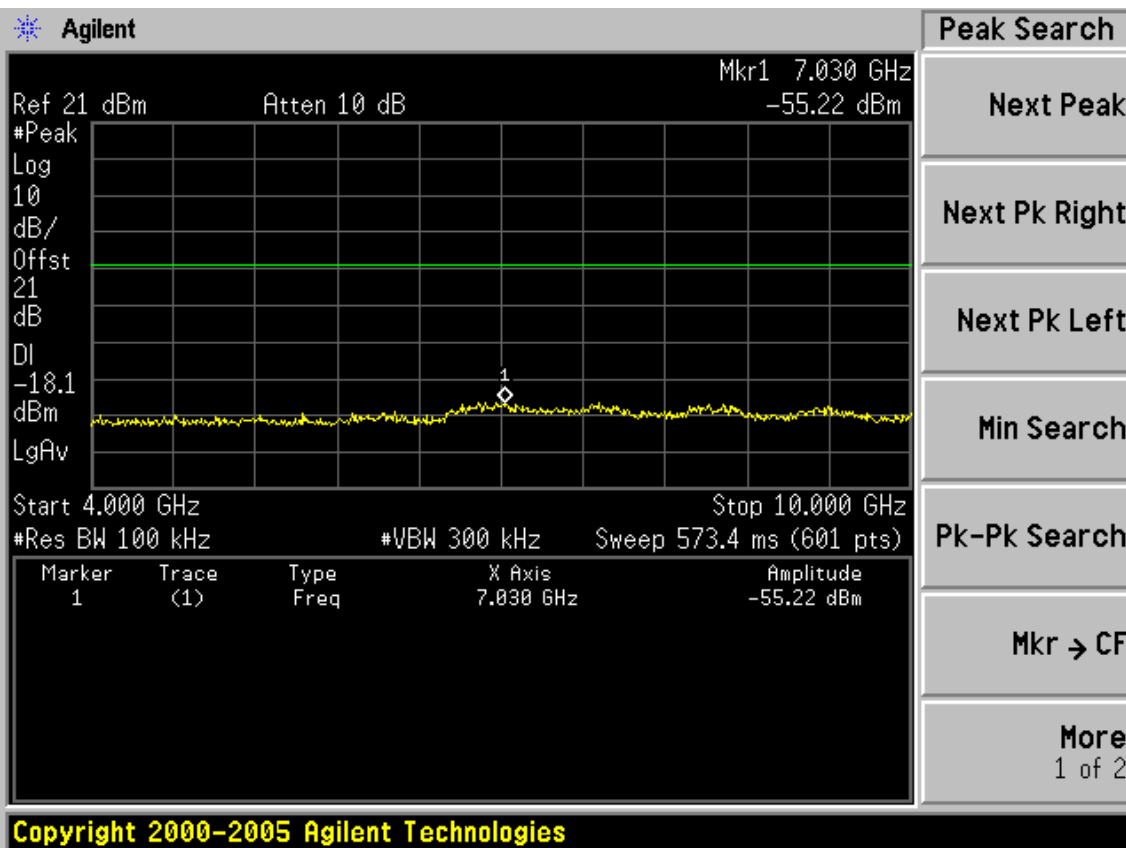
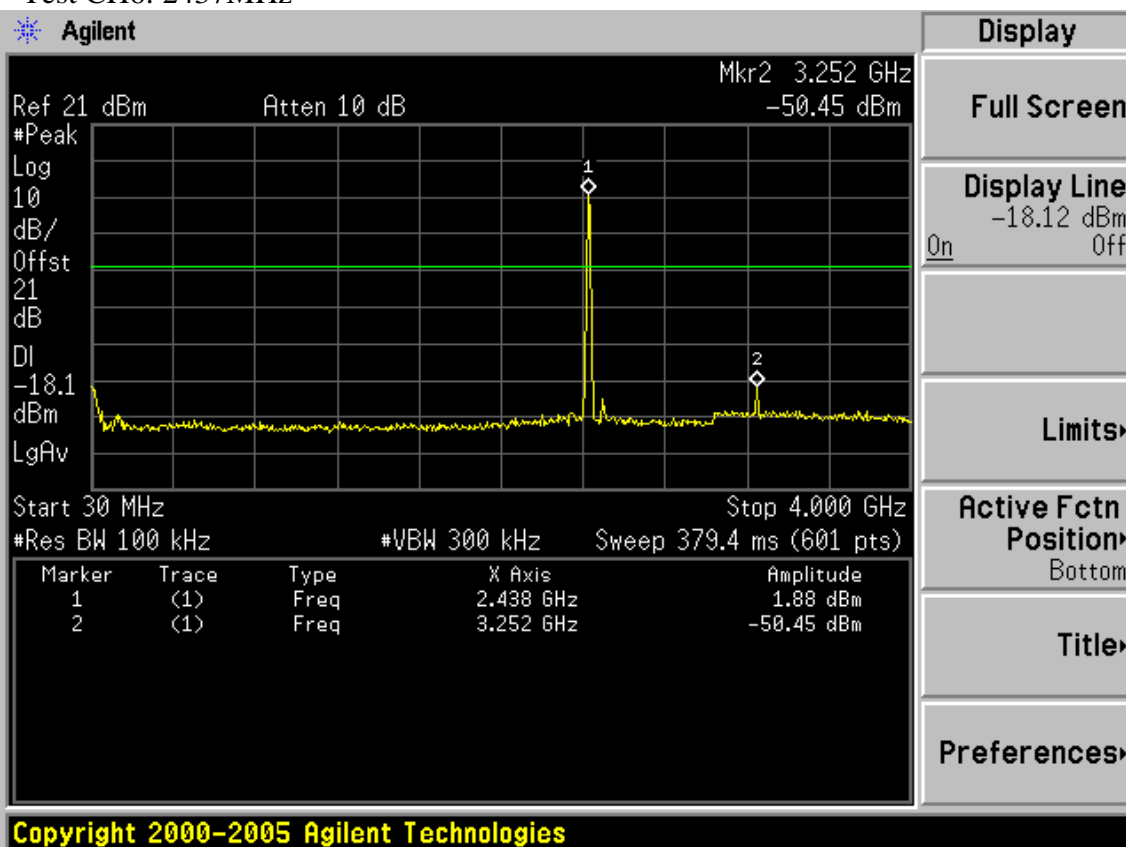
**Conducted emission test data:**

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

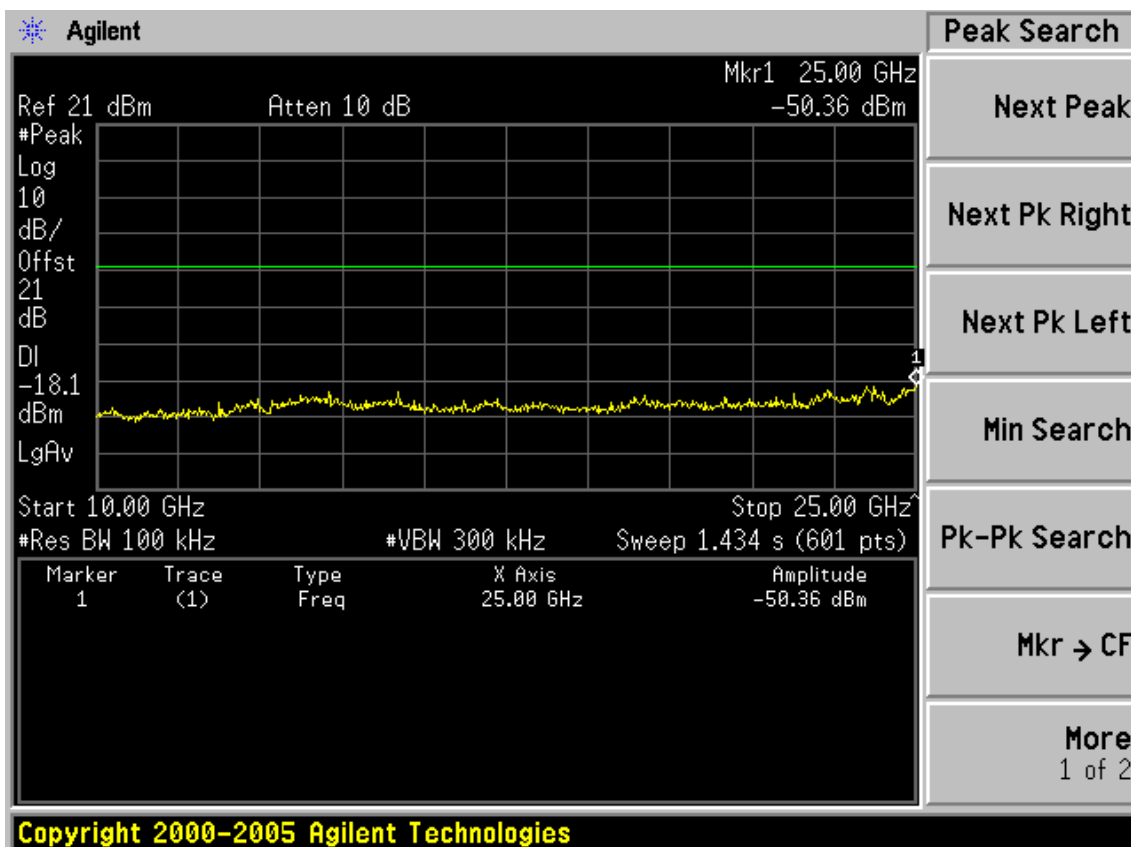




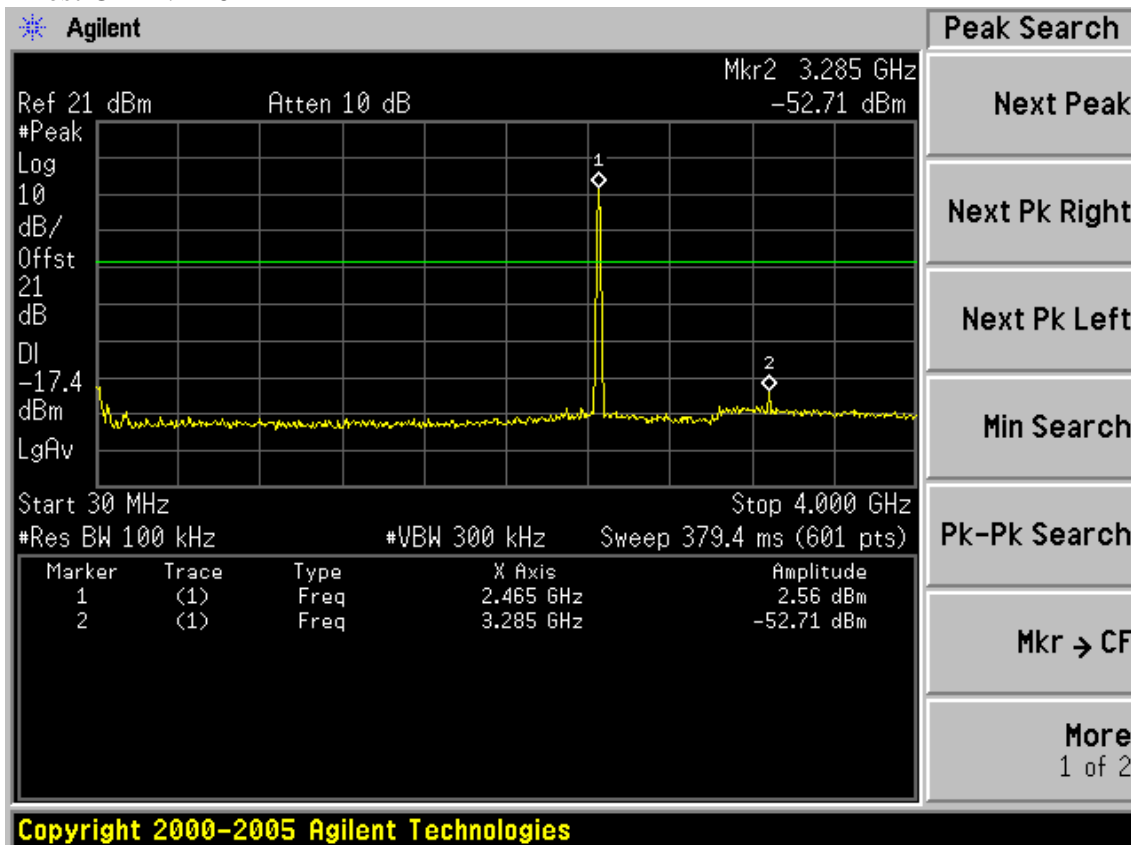
Test CH6: 2437MHz

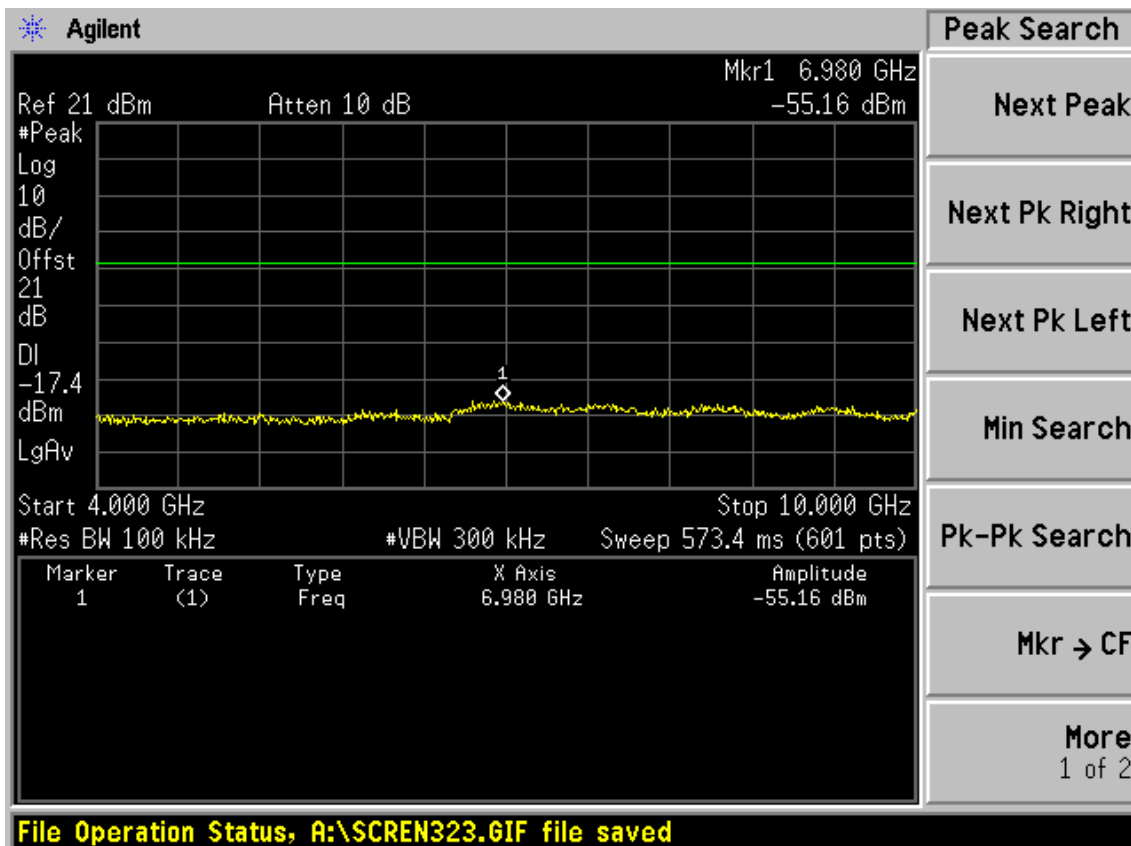
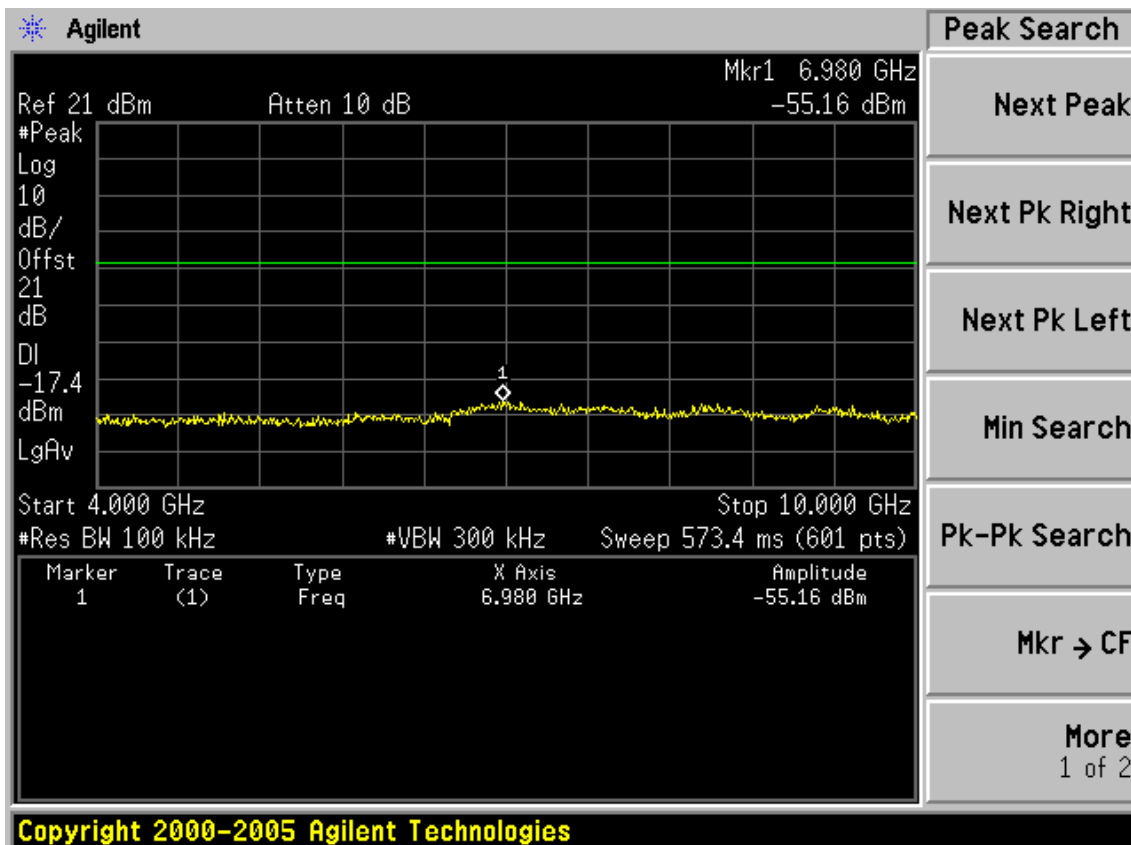


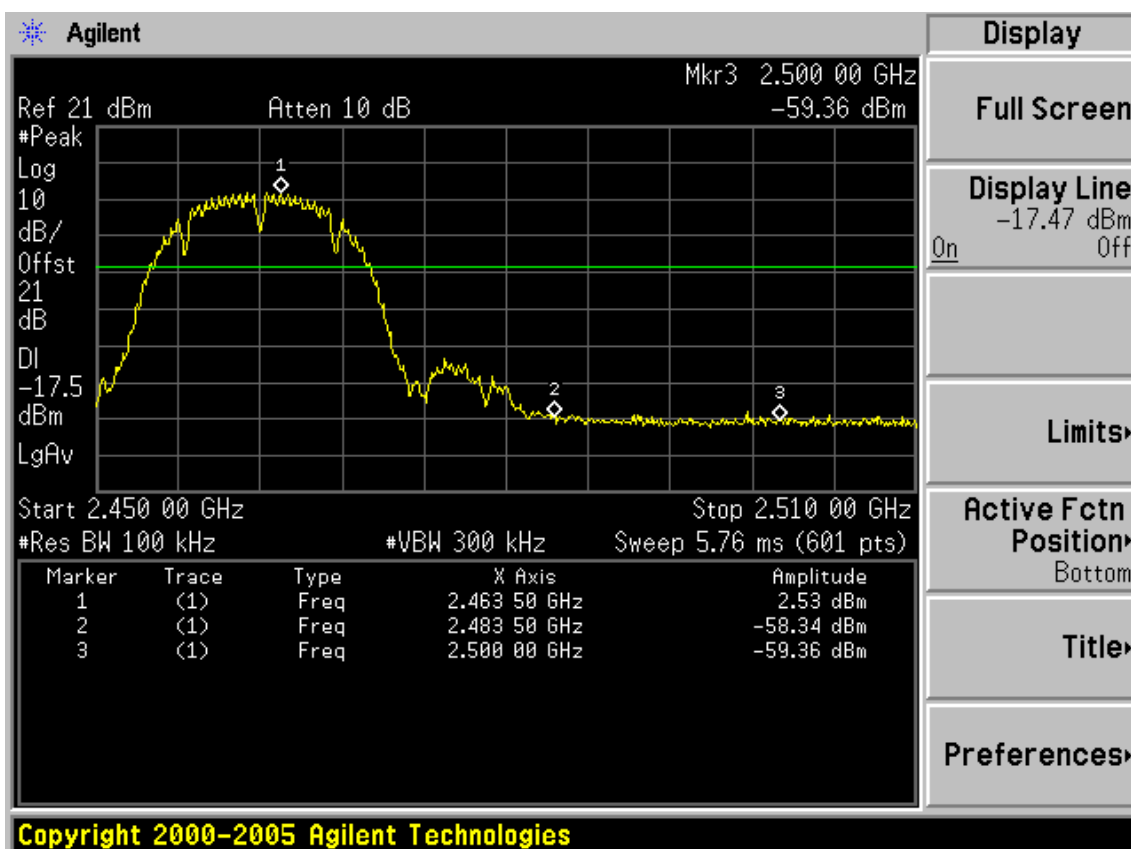




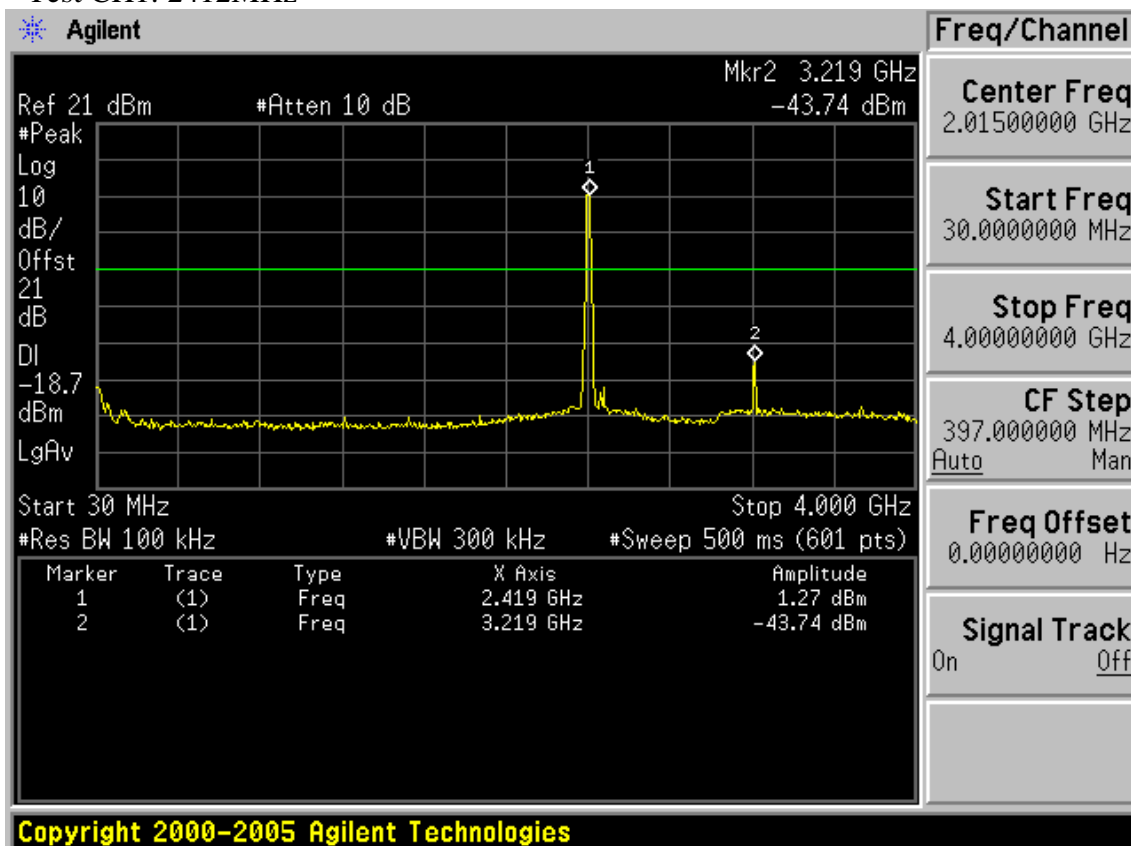
Test CH11: 2462MHz

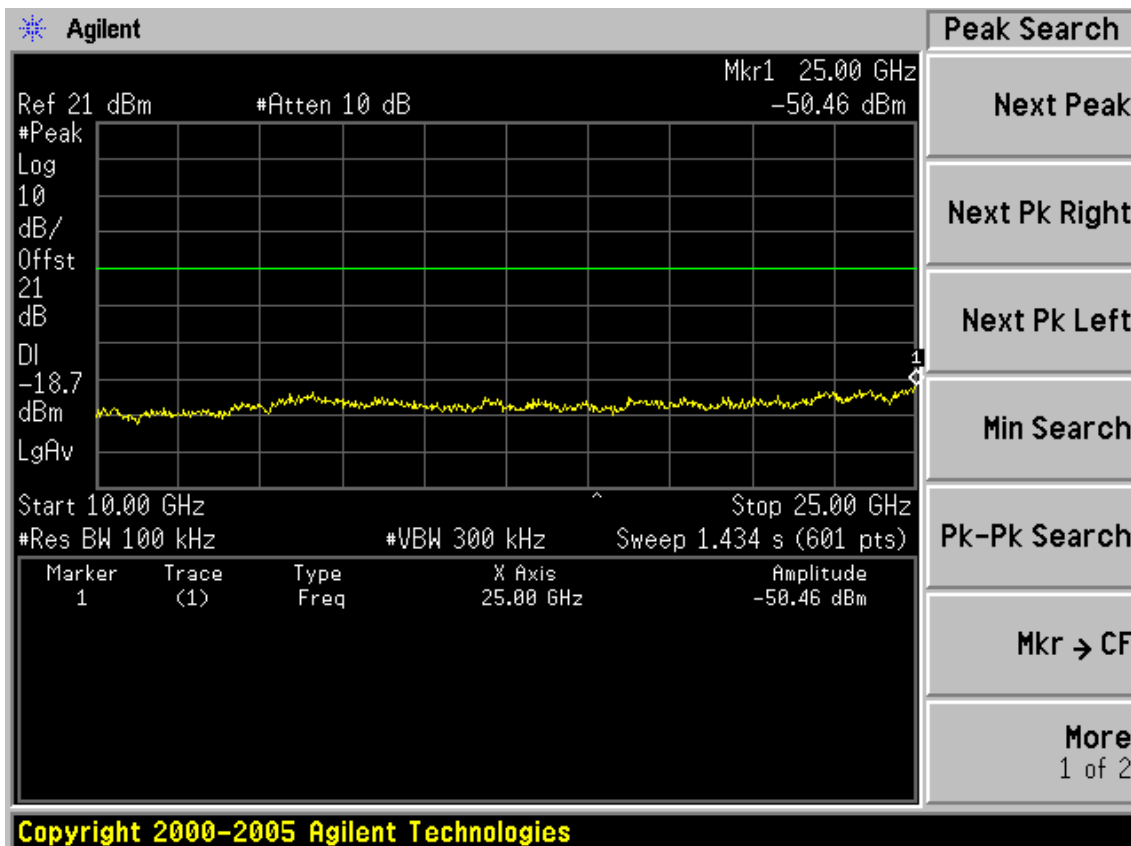
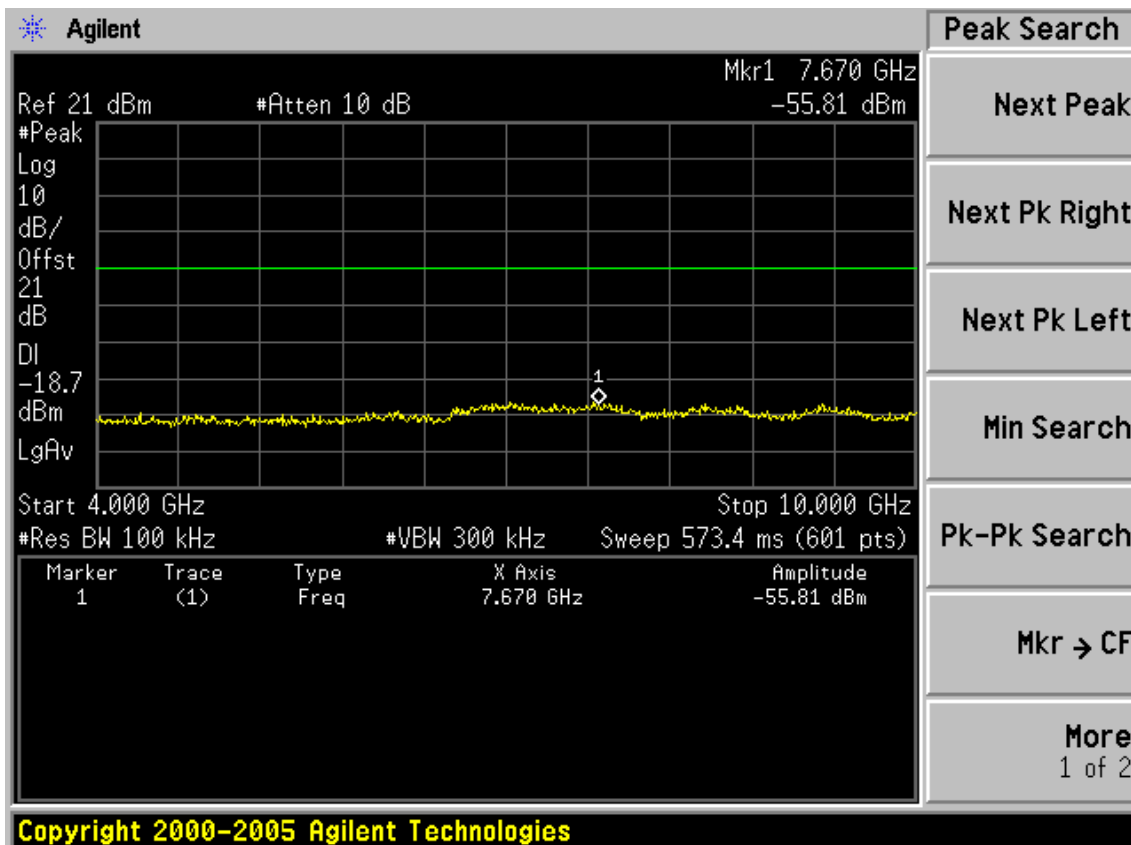


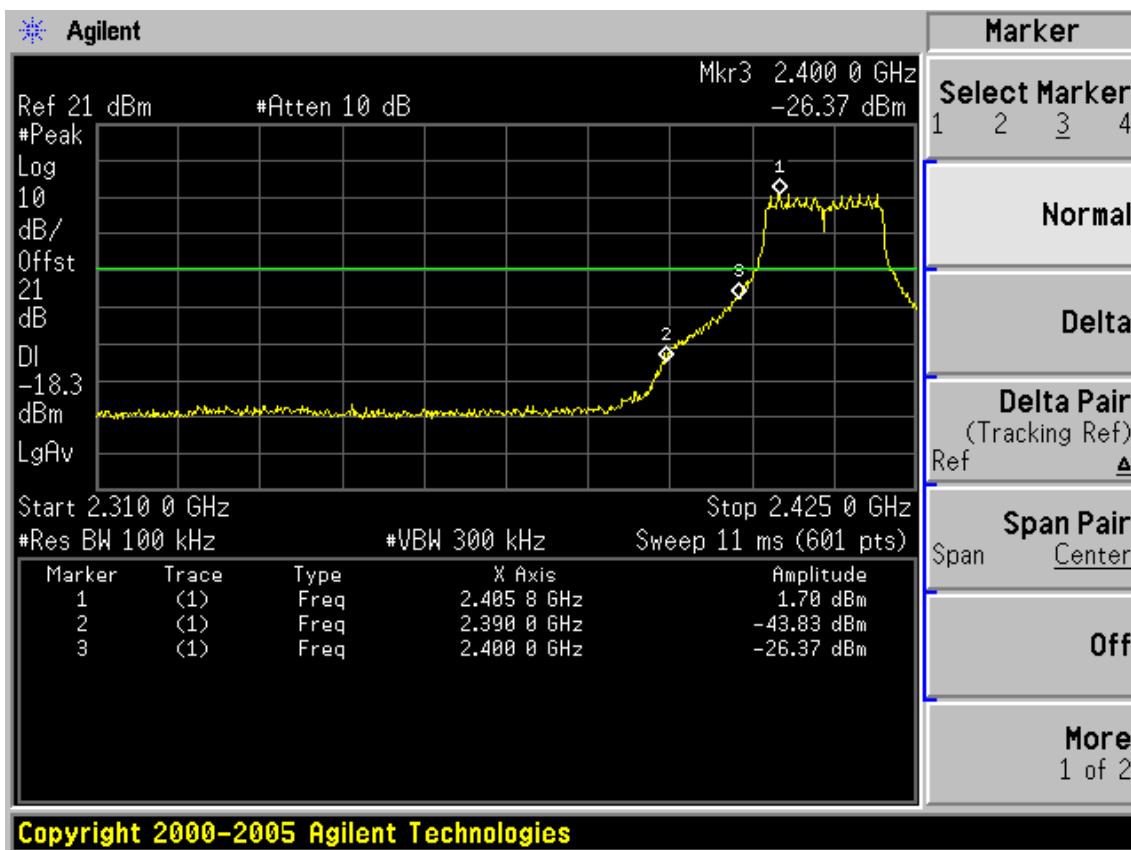




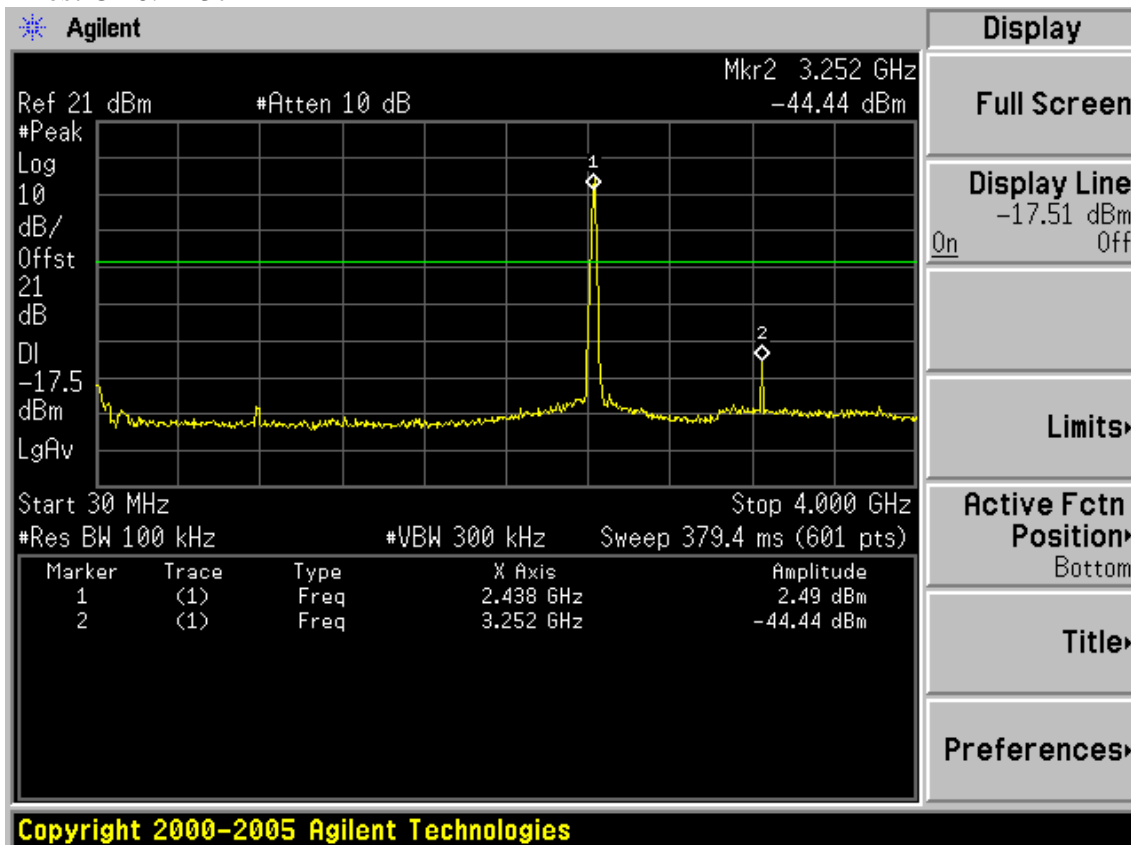
Test Mode: IEEE 802.11g TX  
 Test CH1: 2412MHz

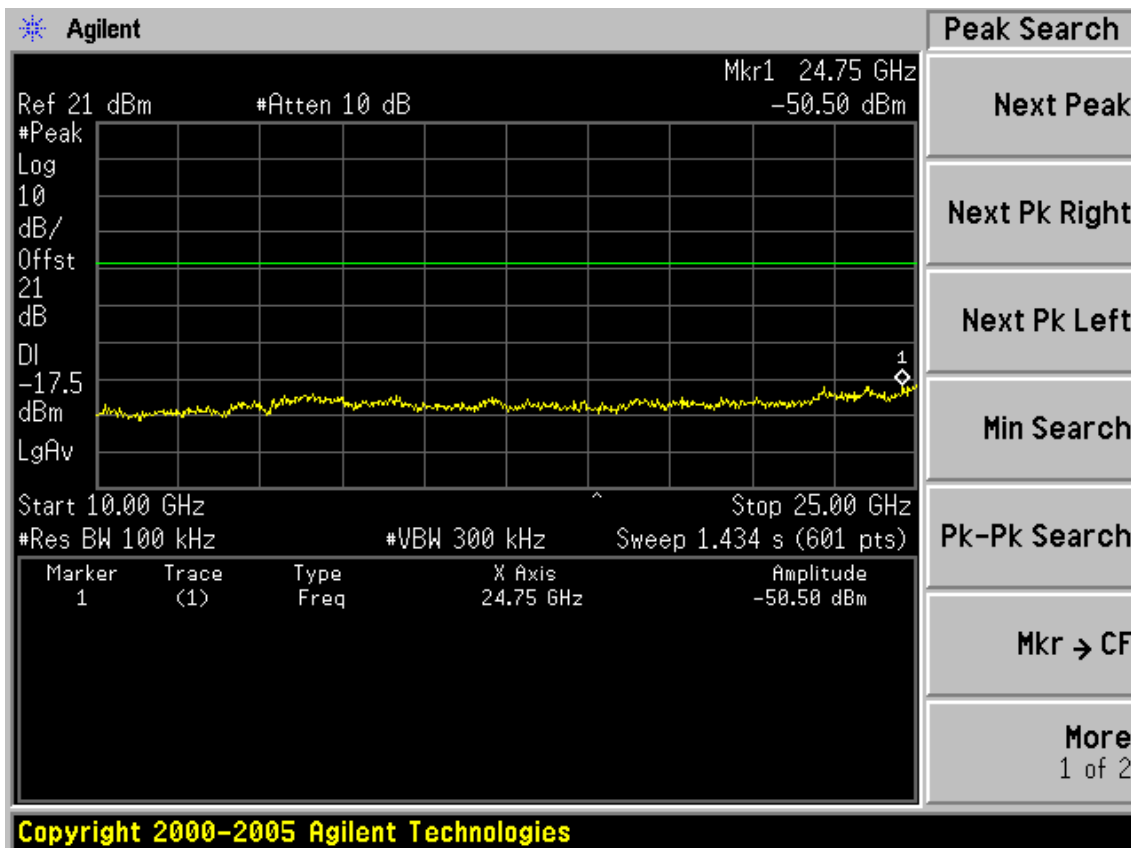
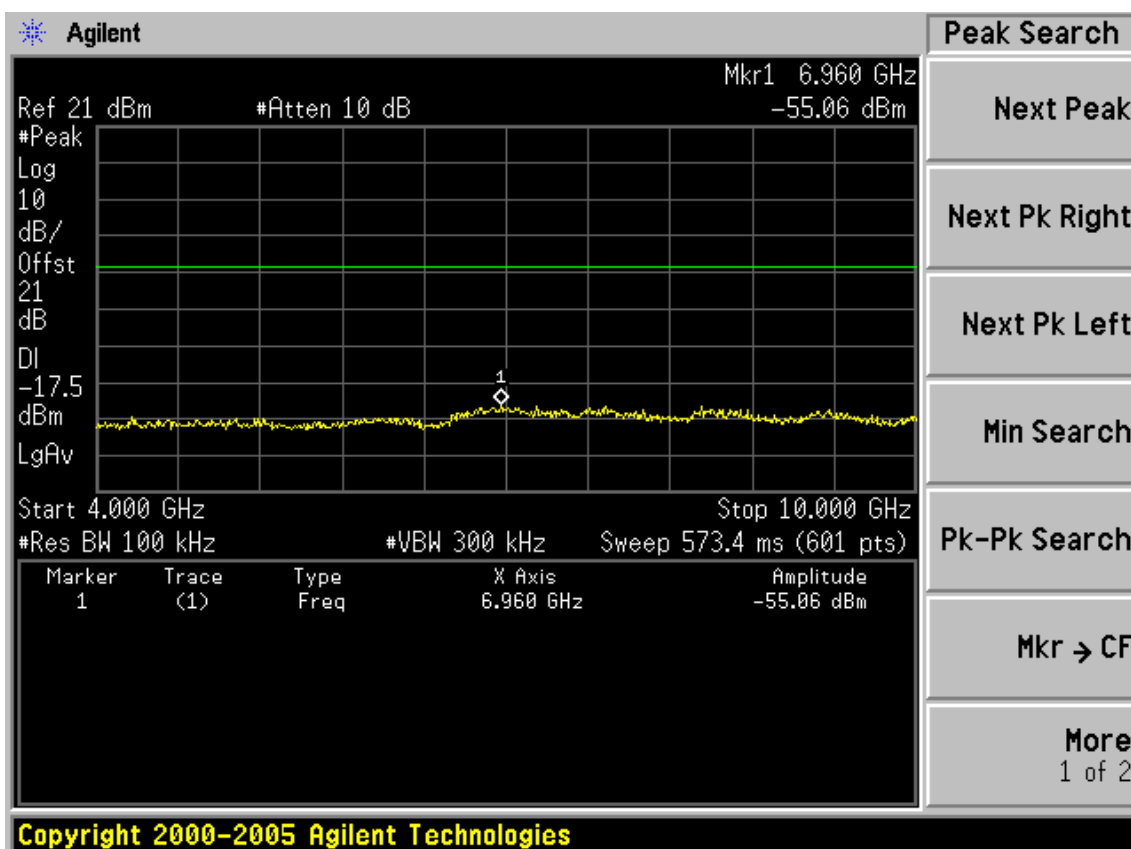




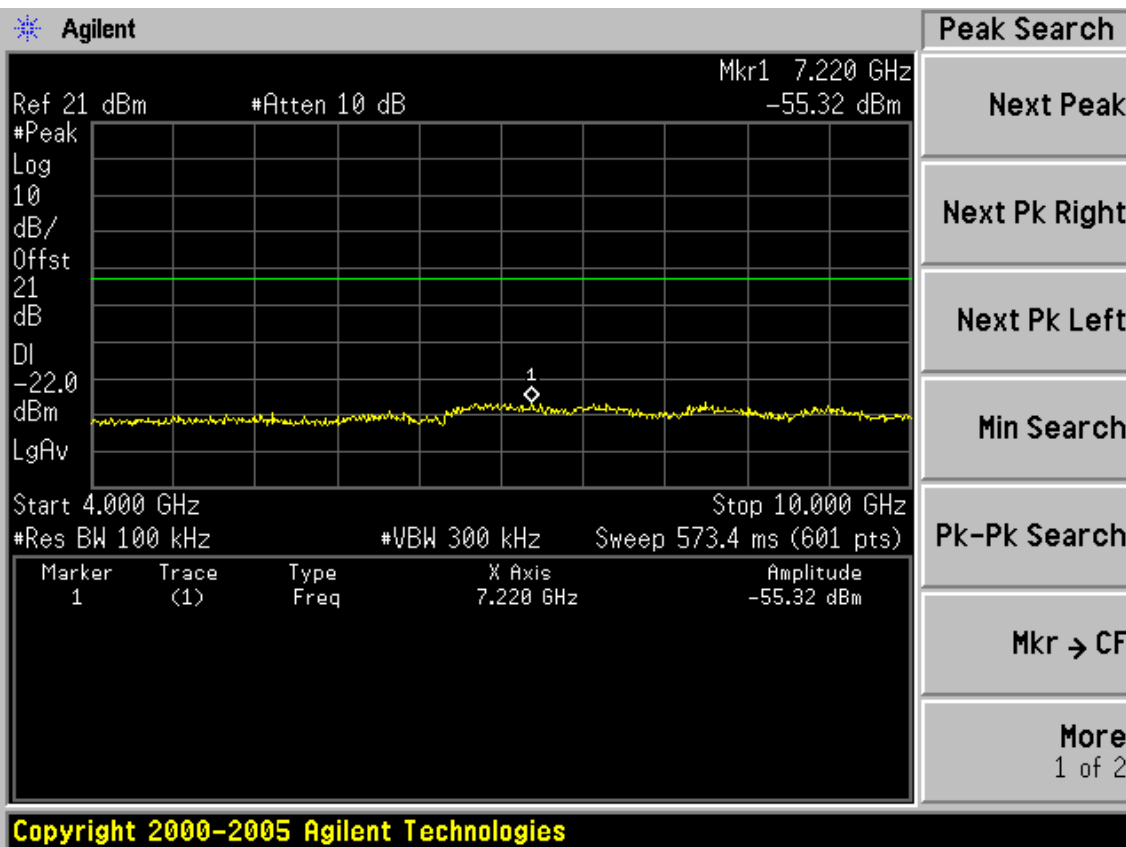
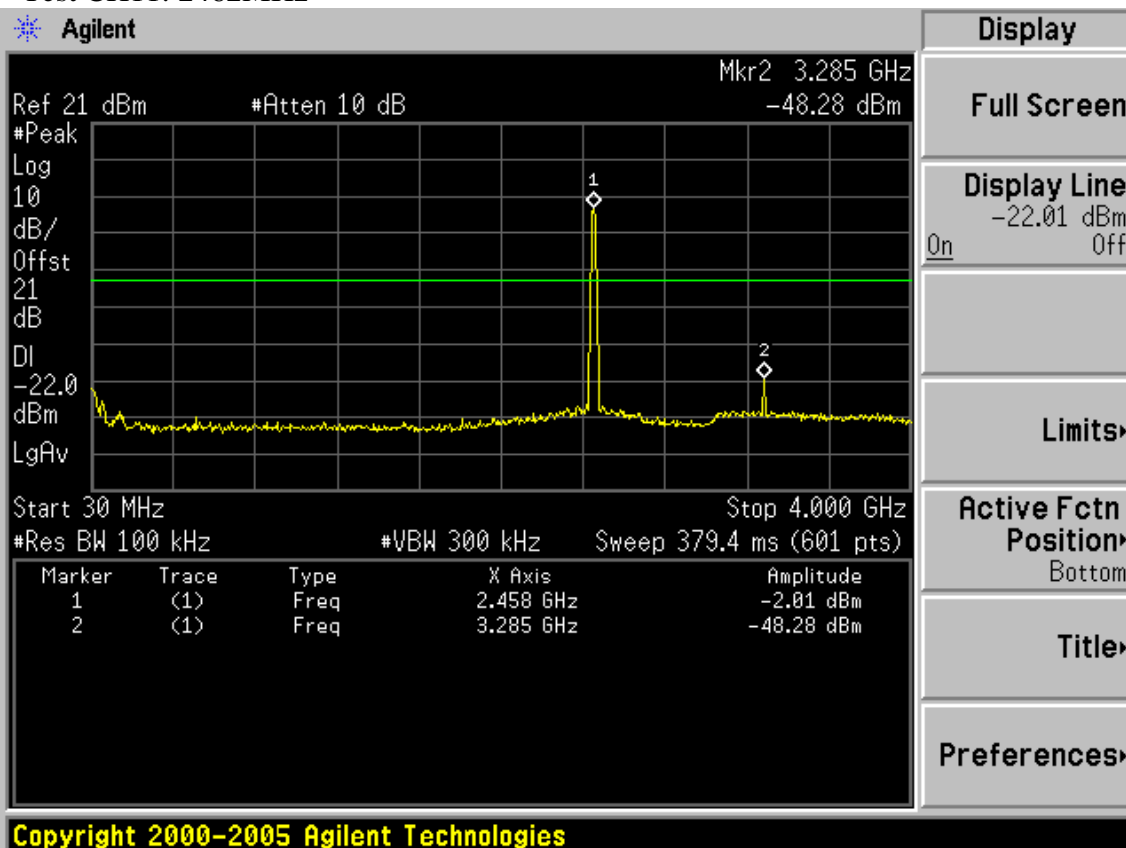


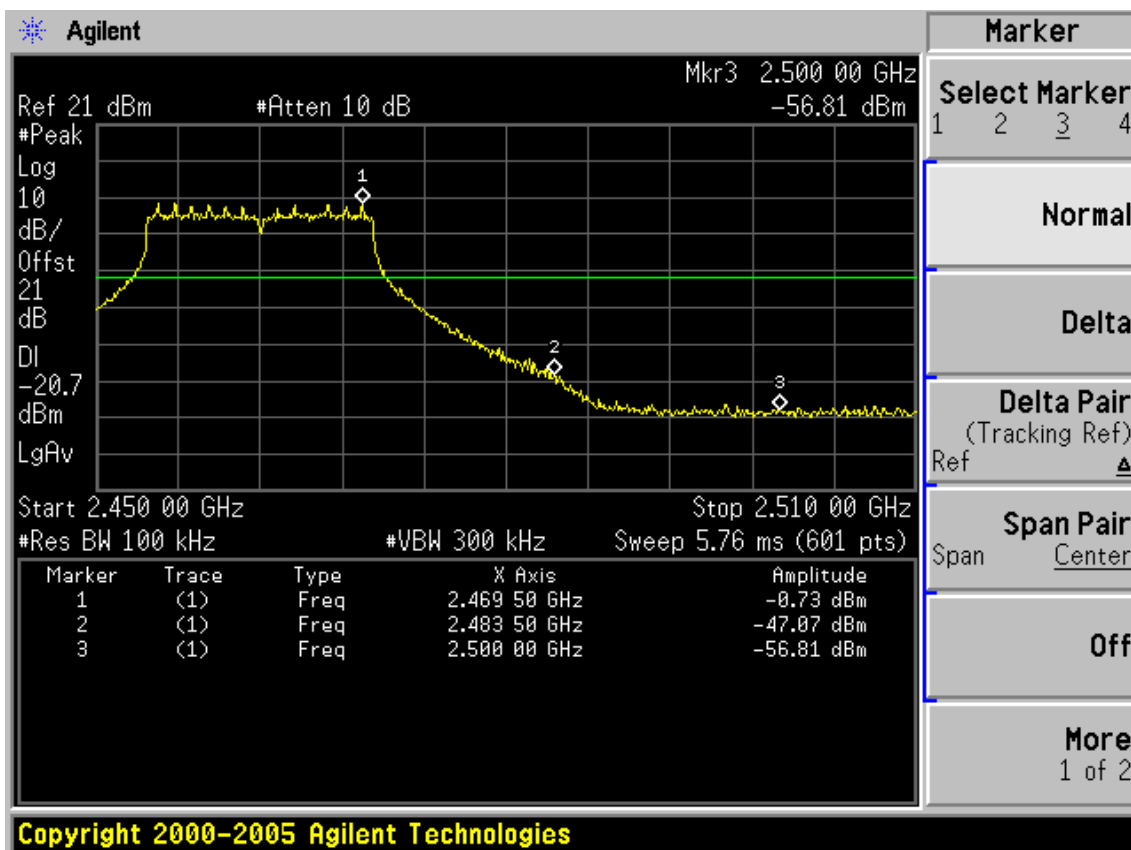
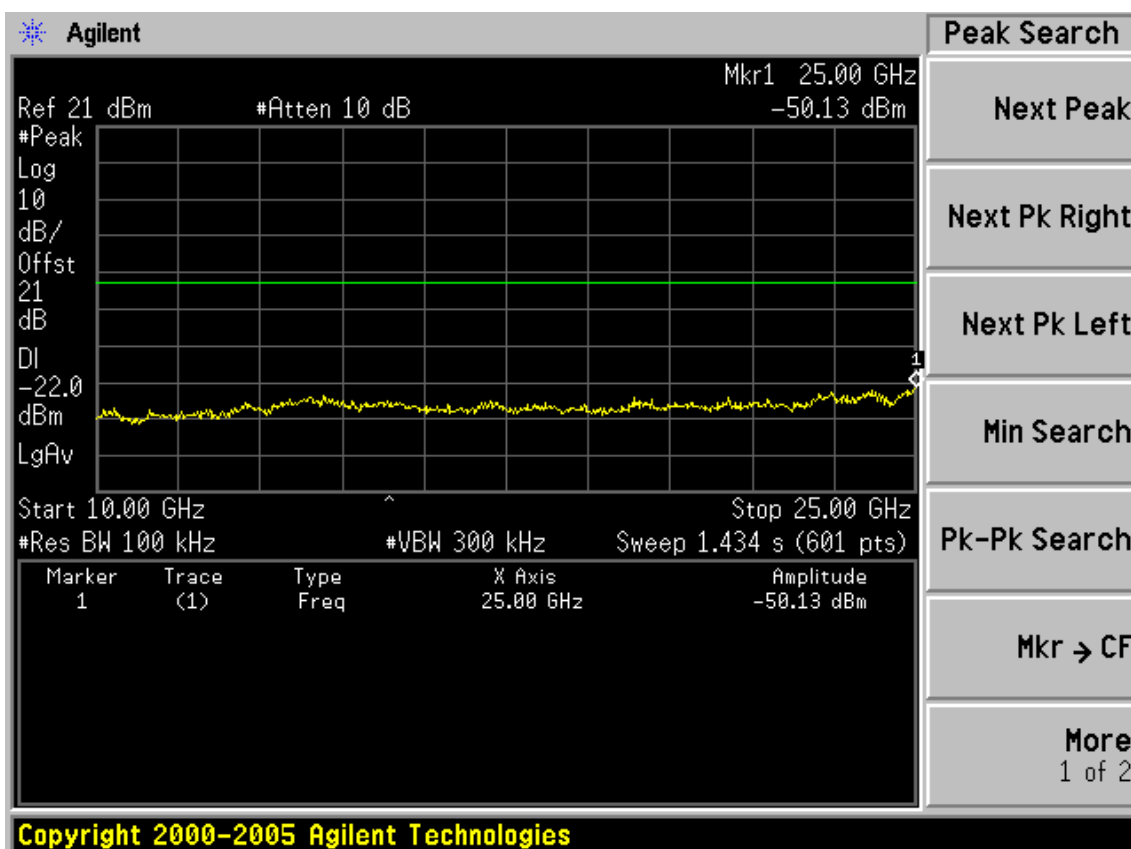
Test CH6: 2437MHz





Test CH11: 2462MHz

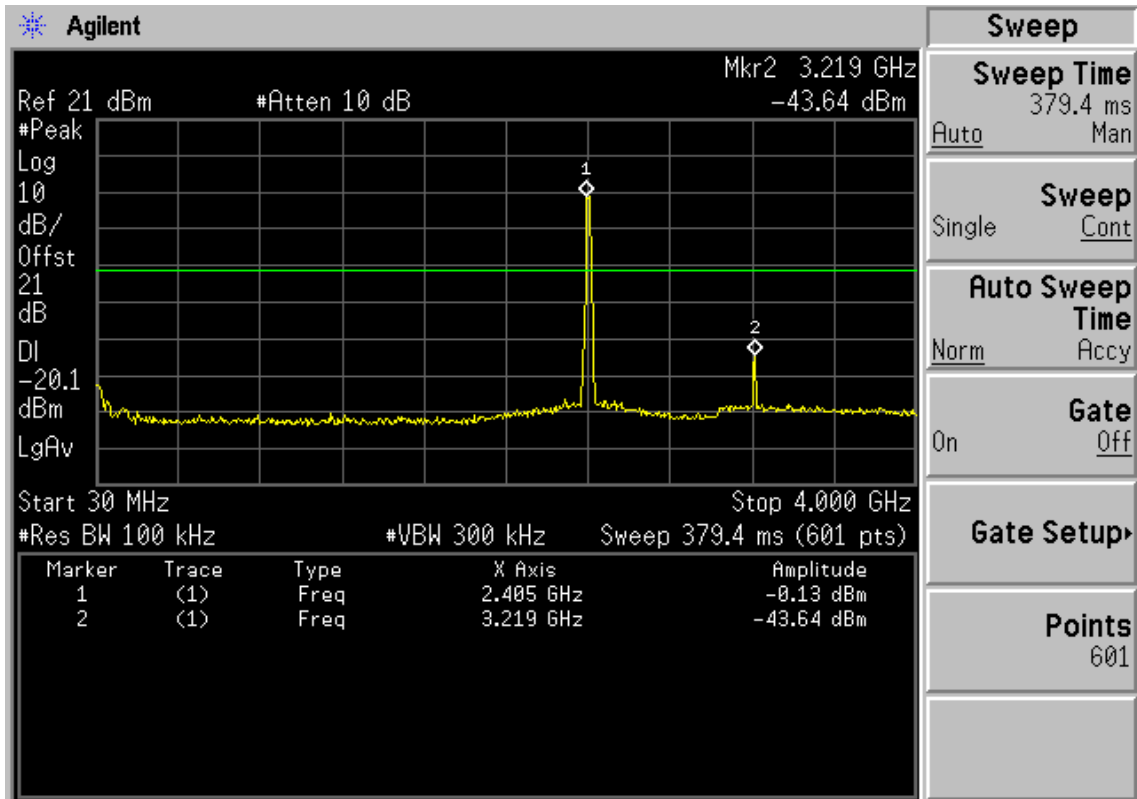




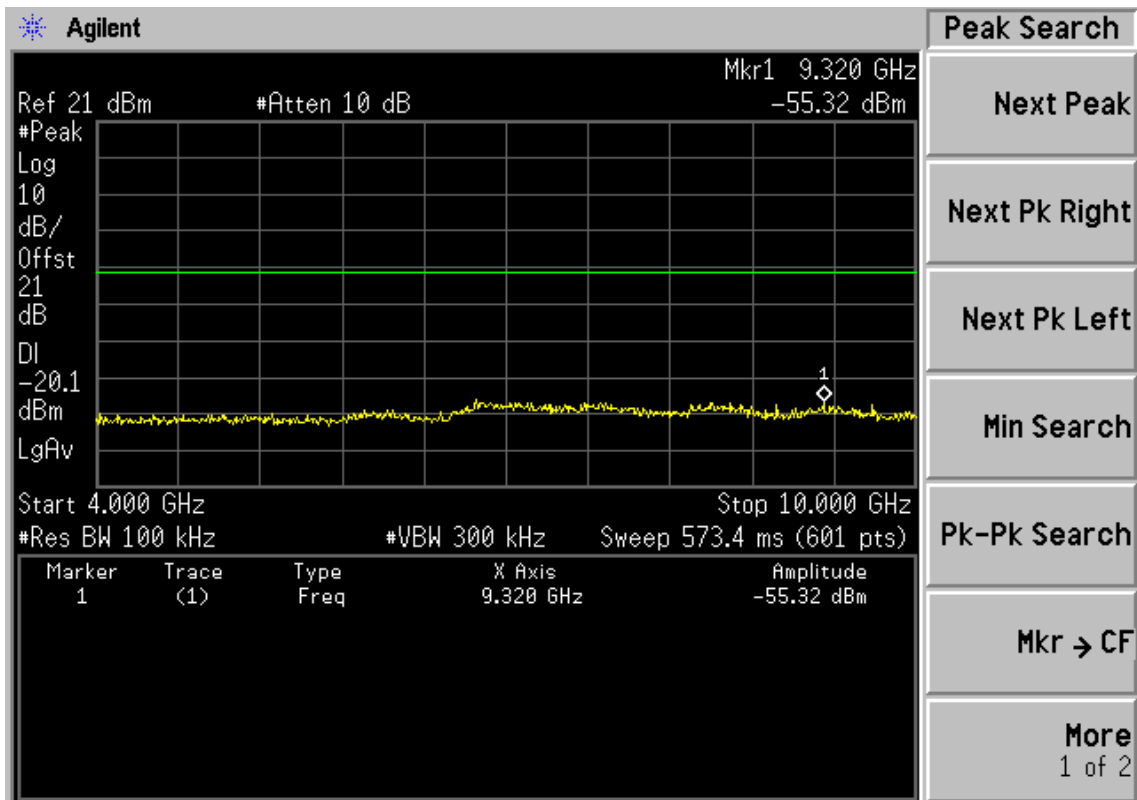


Test Mode: IEEE 11nTH20

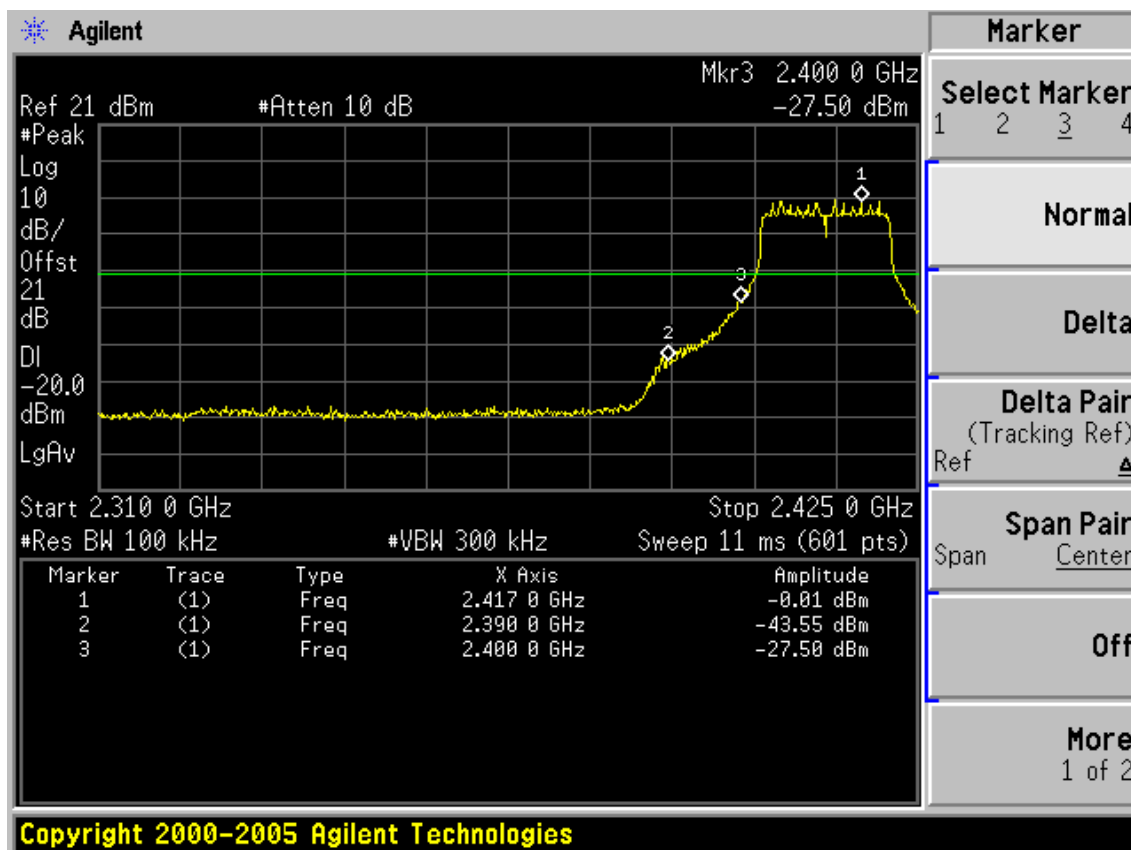
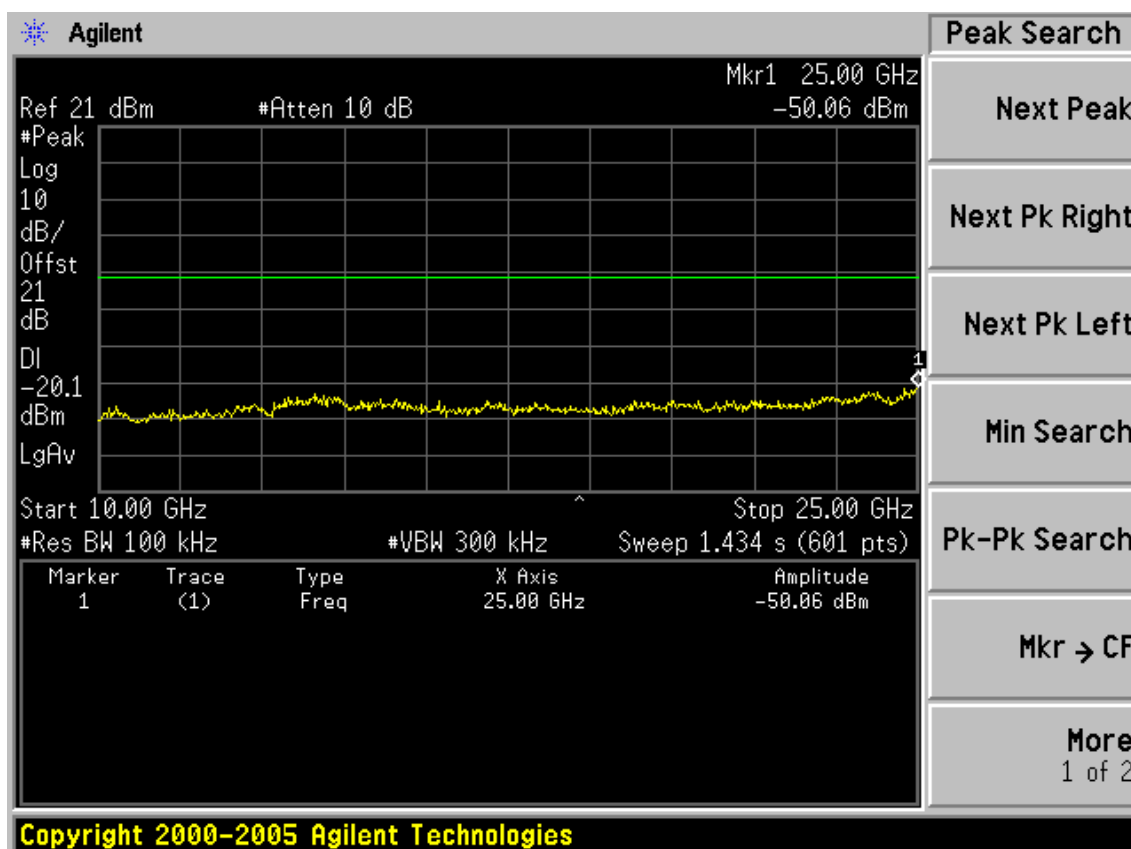
Test CH1: 2412MHz



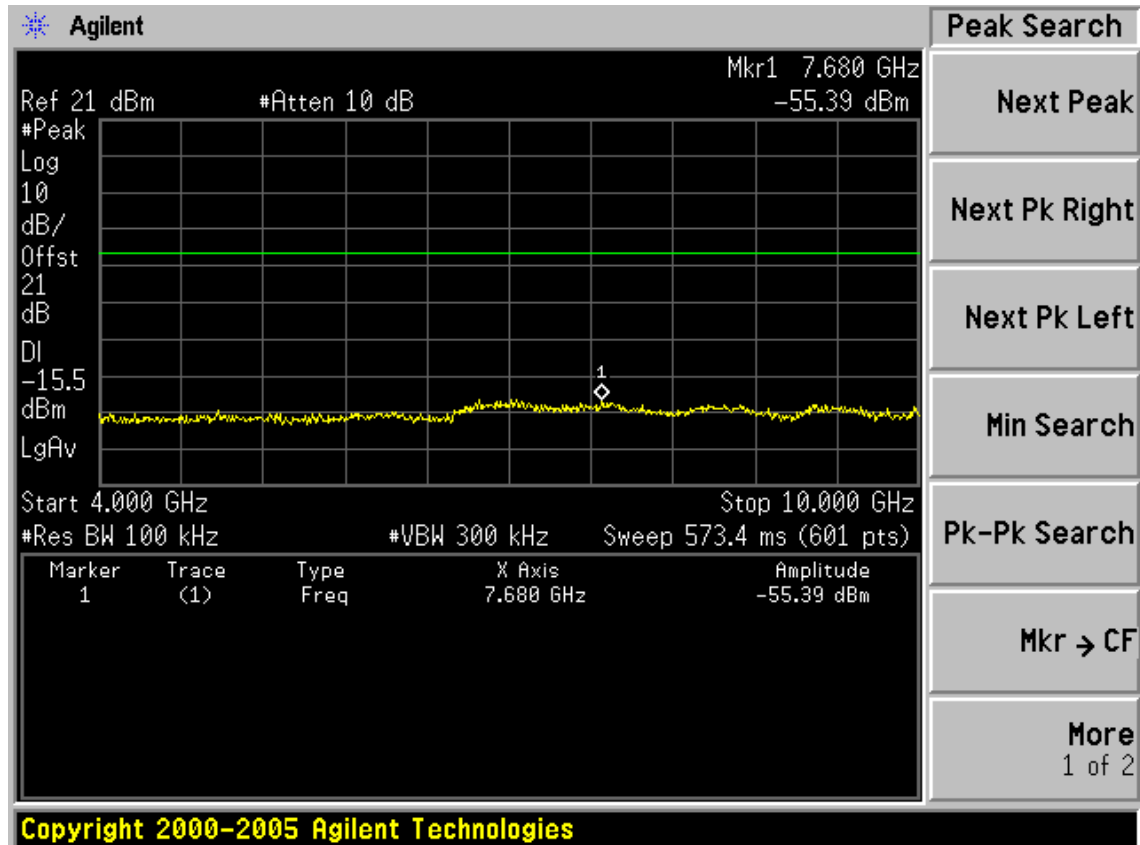
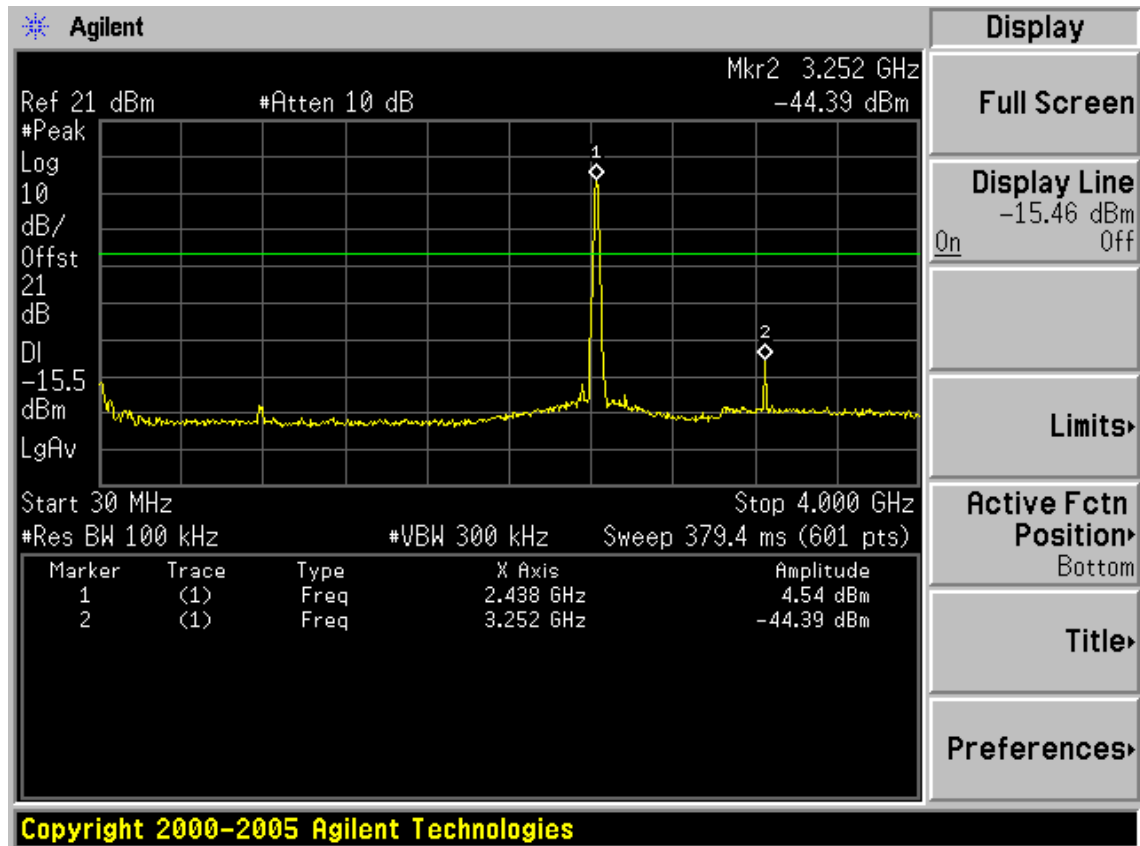
File Operation Status, A:\SCREN308.GIF file saved

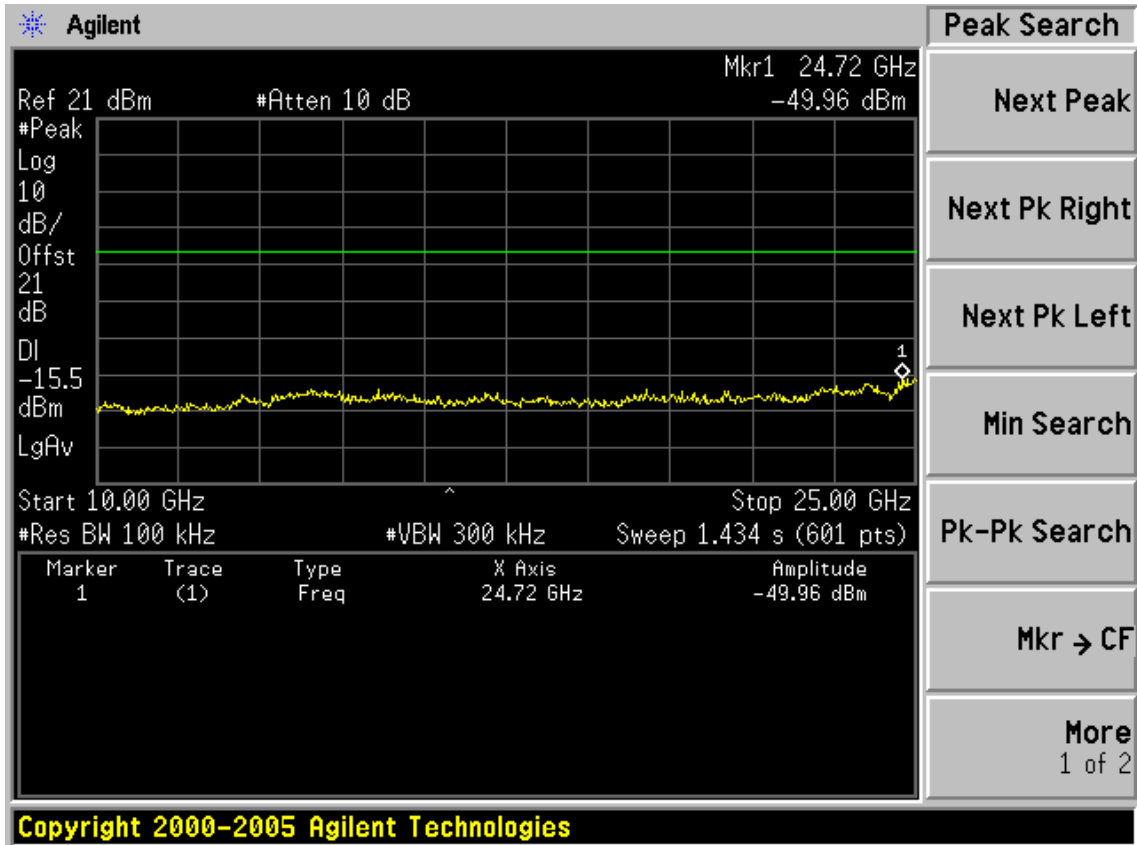


Copyright 2000-2005 Agilent Technologies

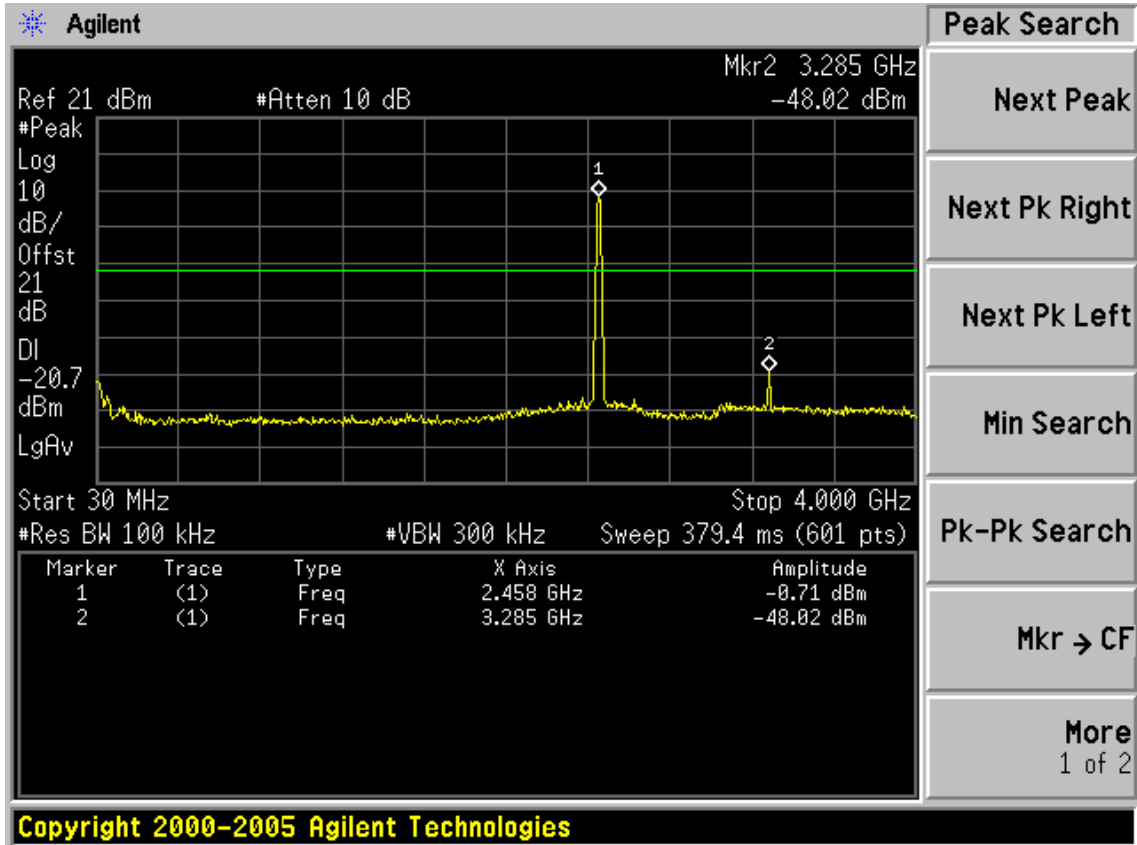


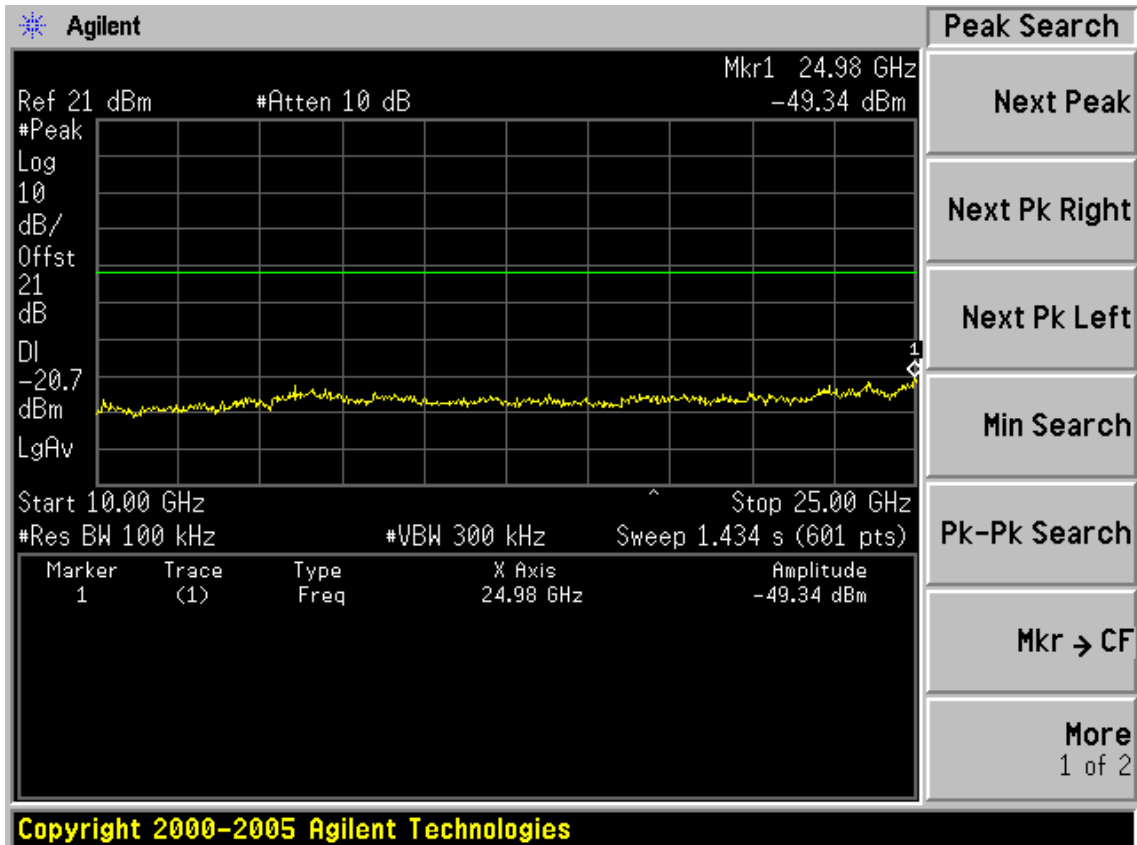
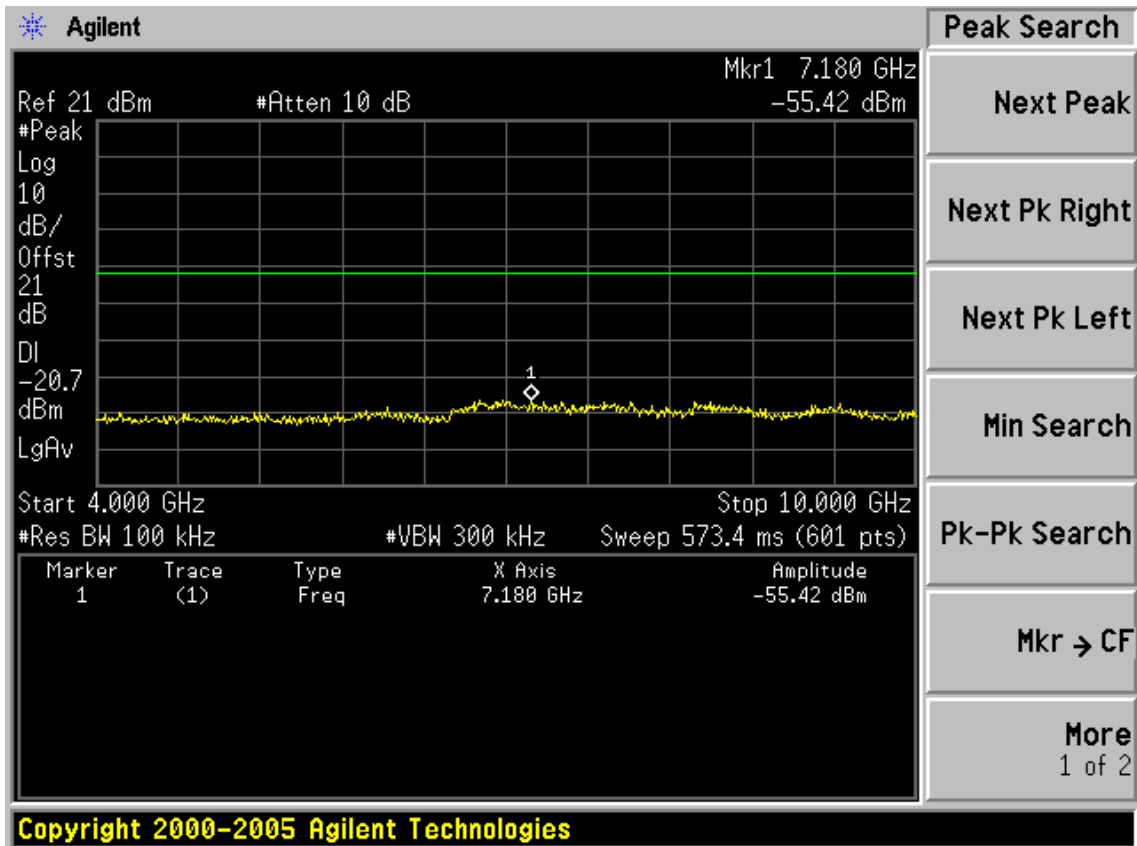
Test CH6: 2437MHz

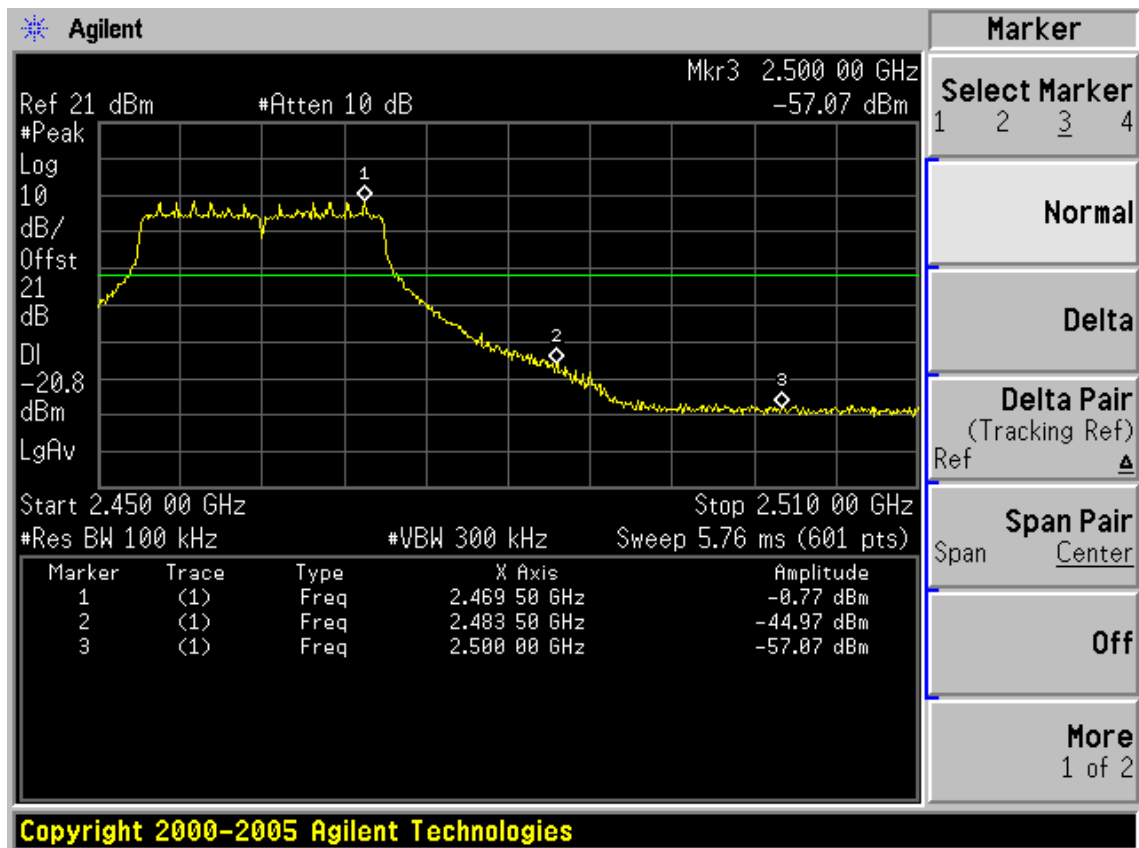




Test CH11: 2462MHz

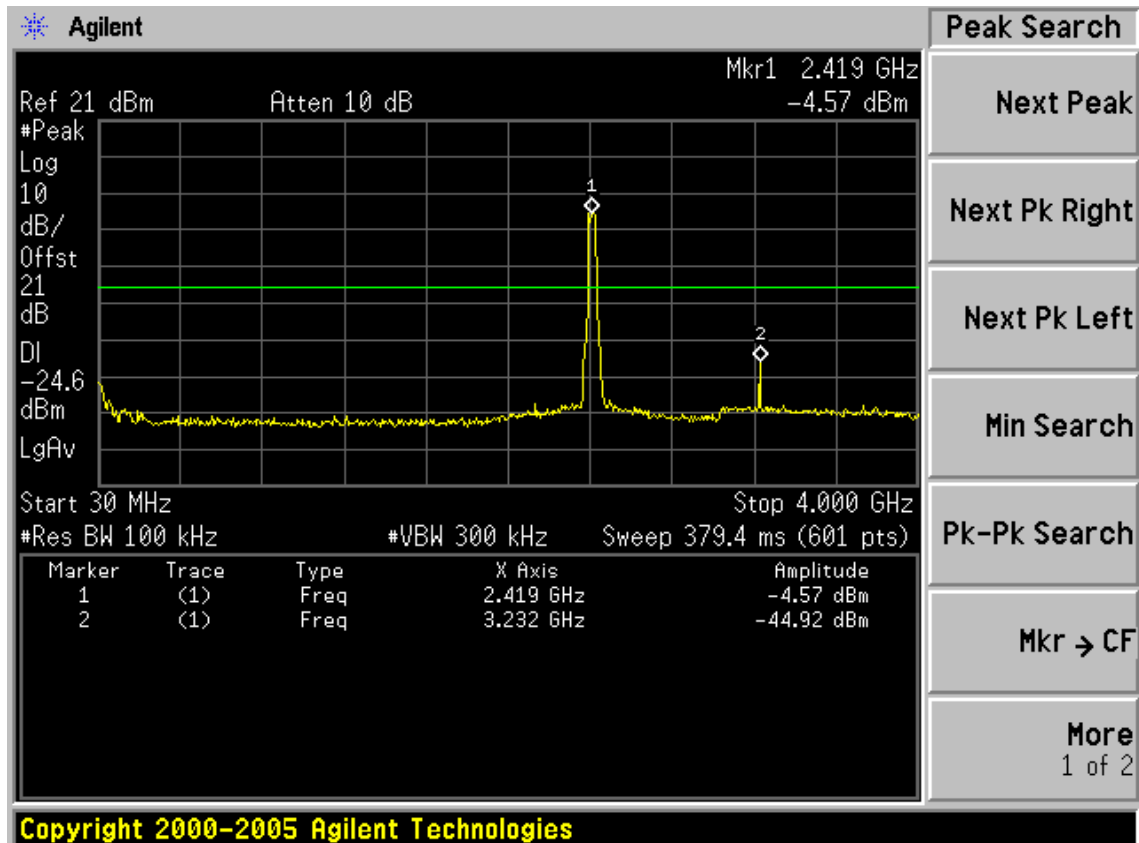


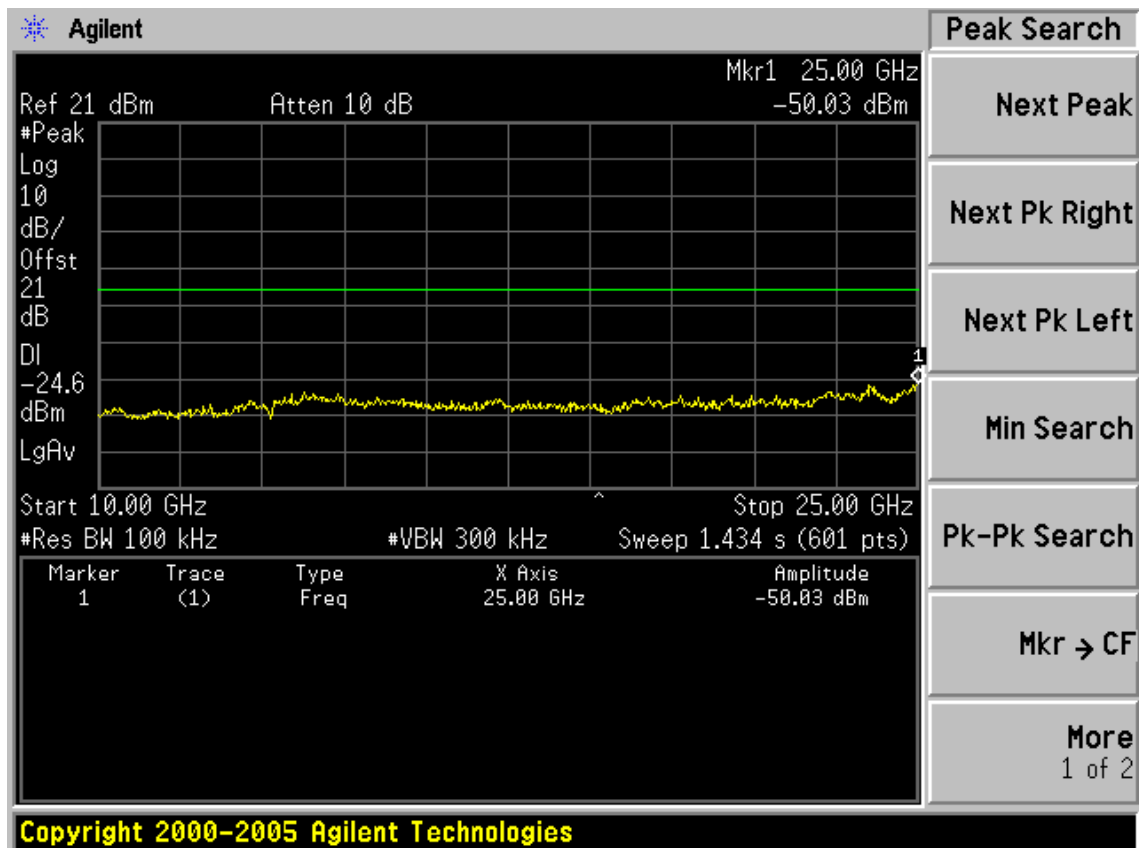
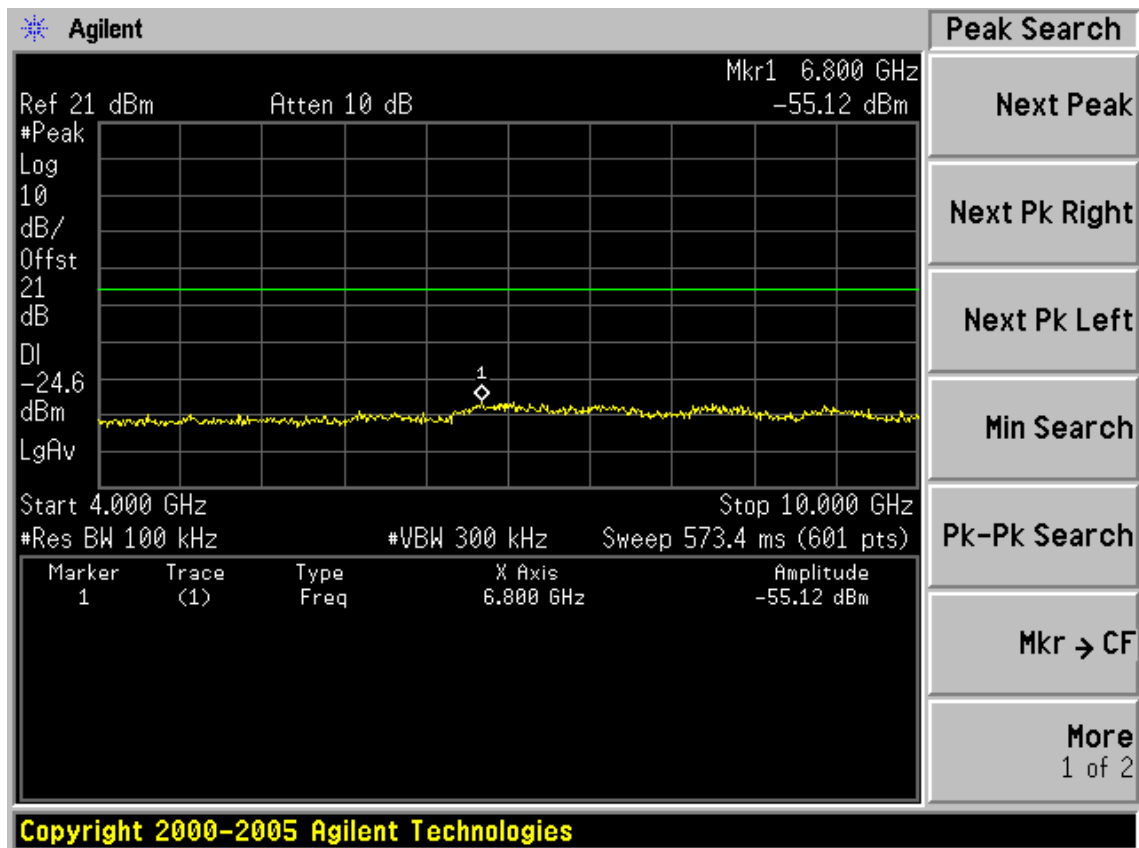


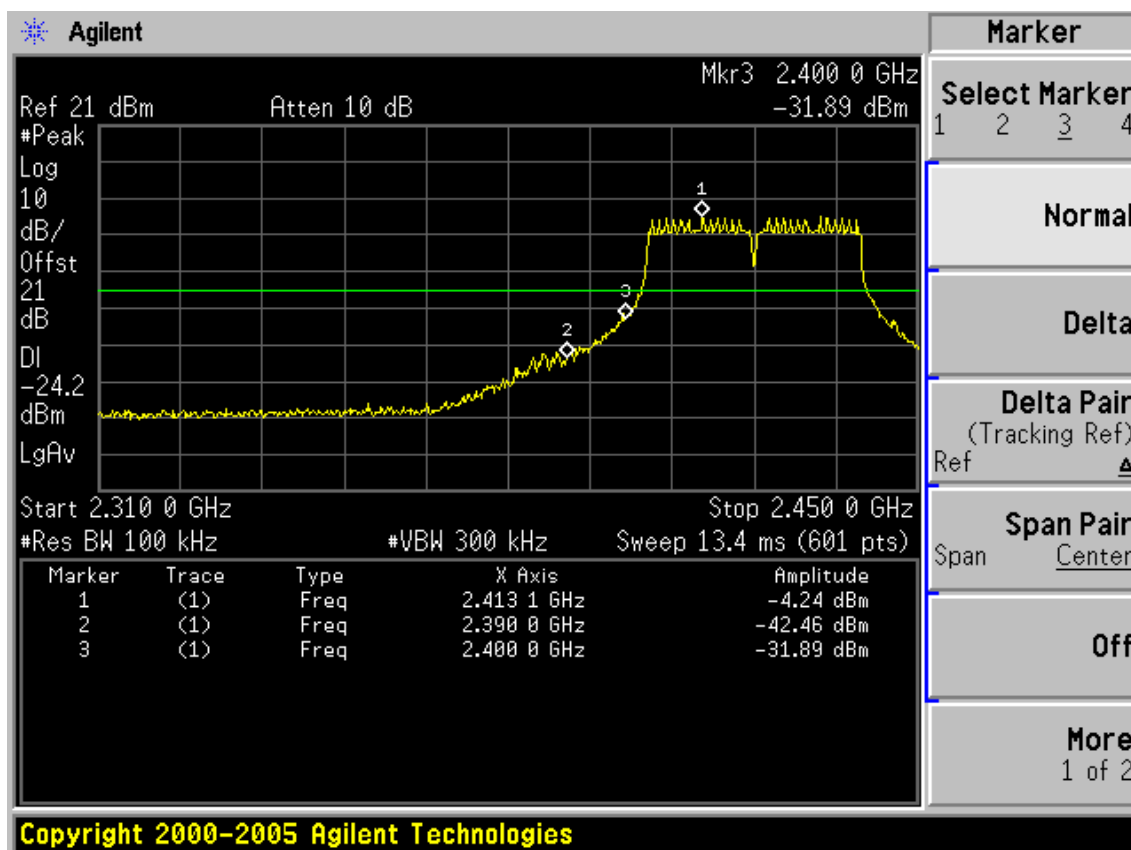


Test Mode: IEEE 11nTH40

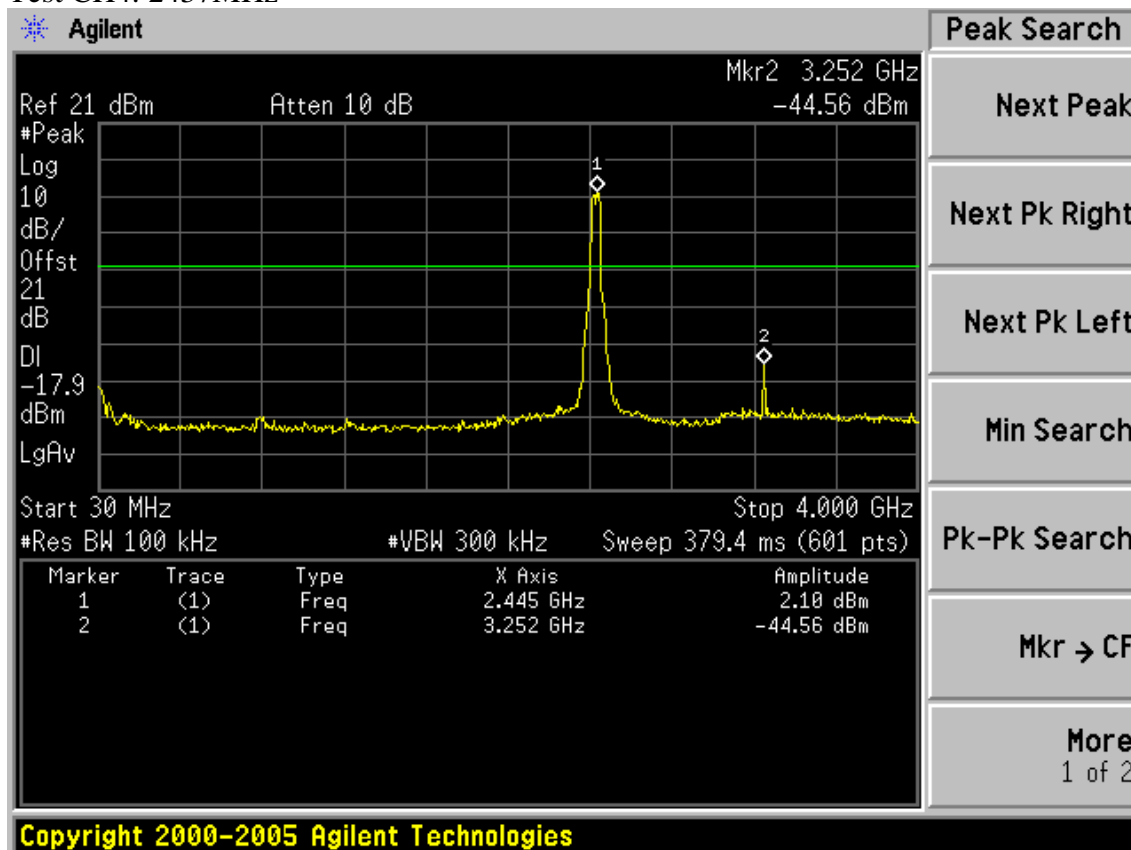
Test CH1: 2422MHz



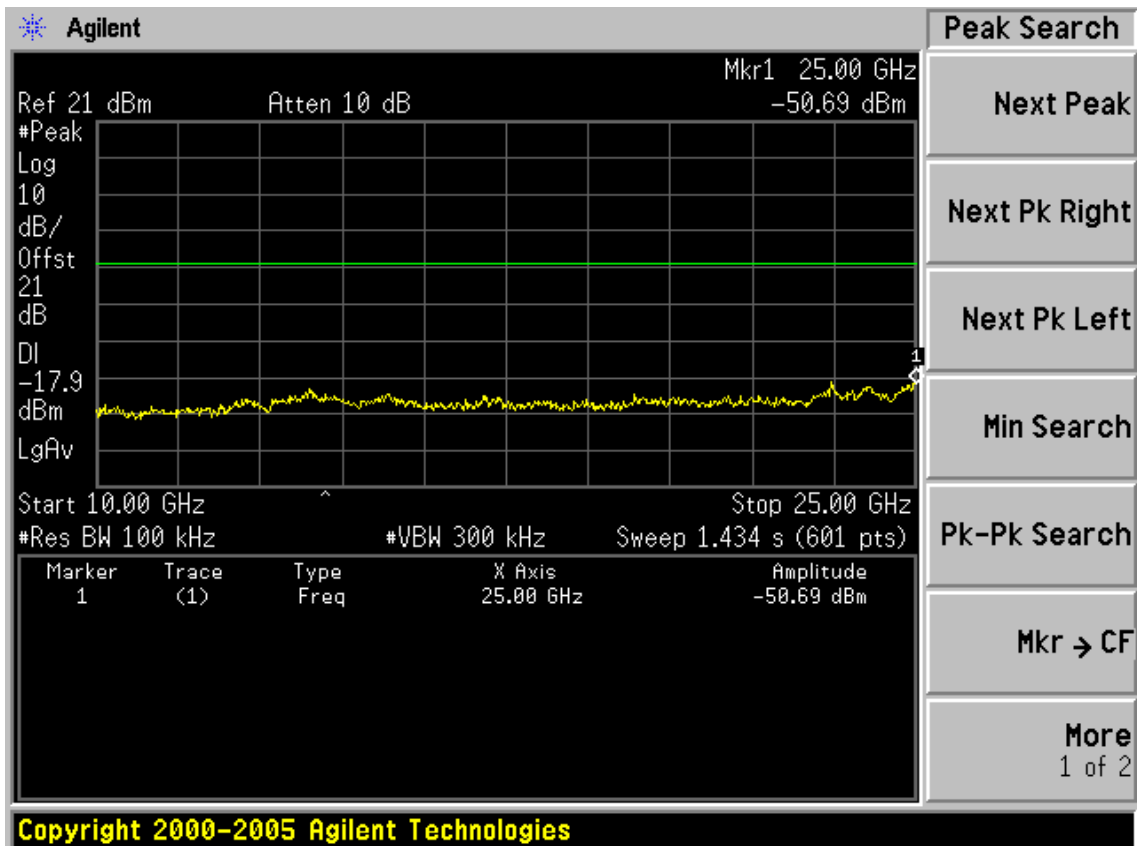
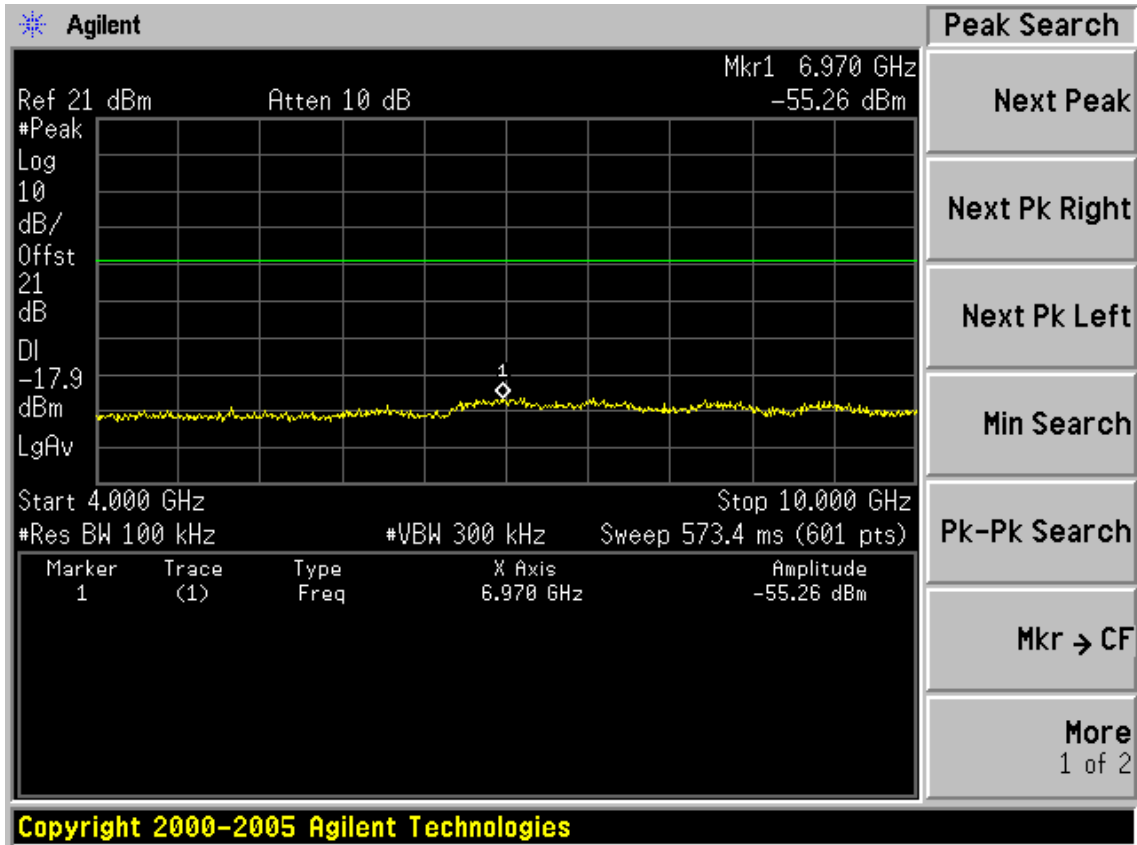




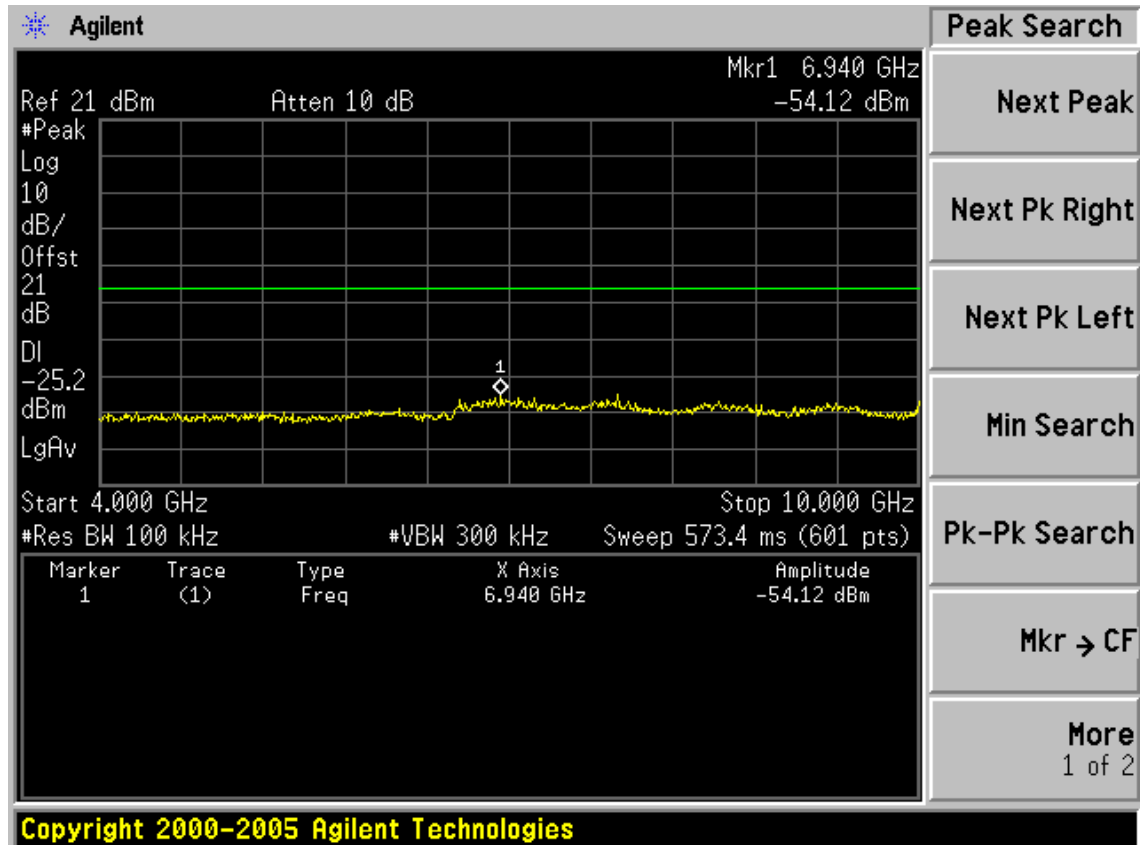
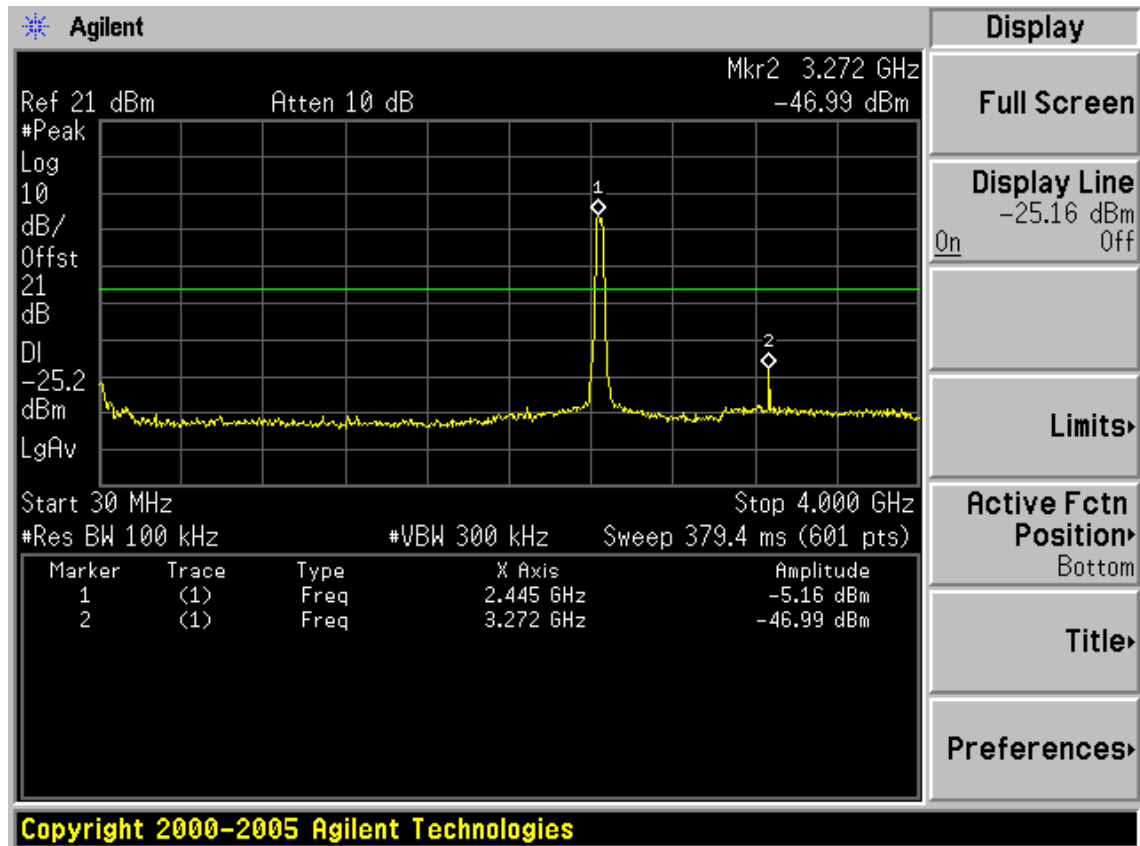
Test CH4: 2437MHz

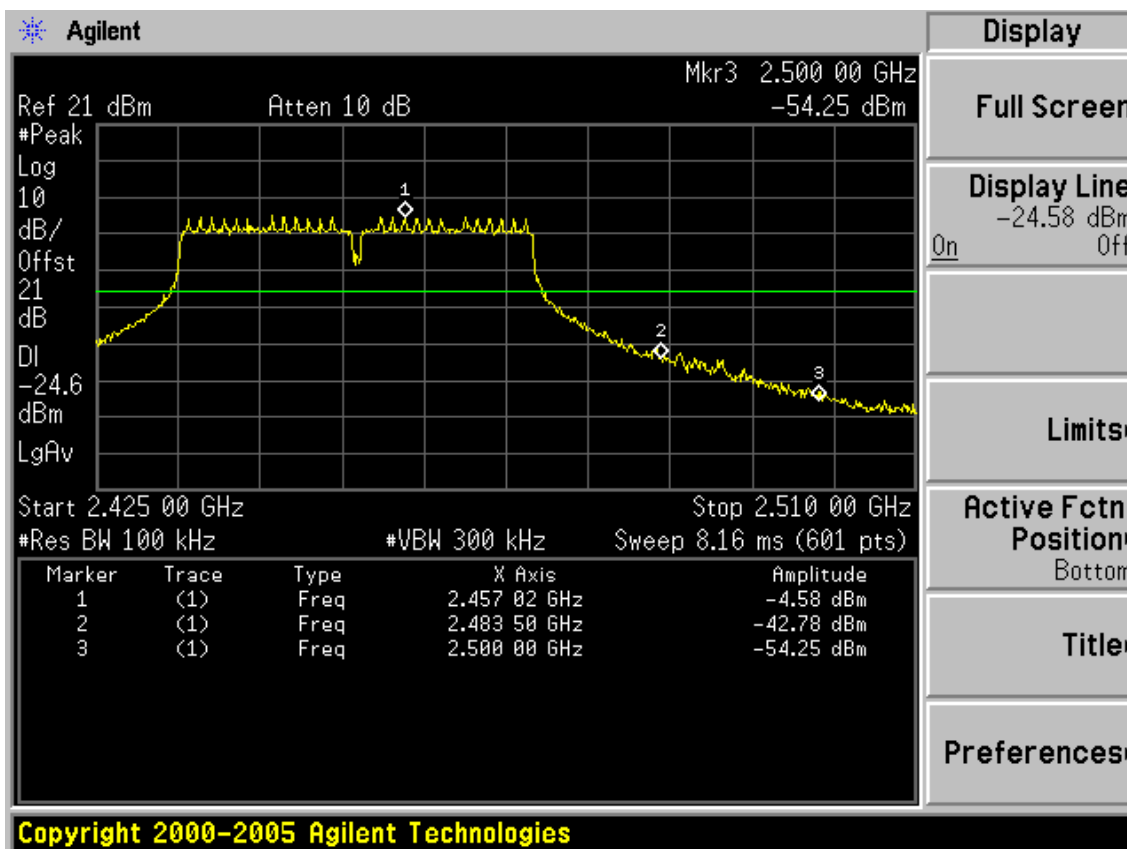
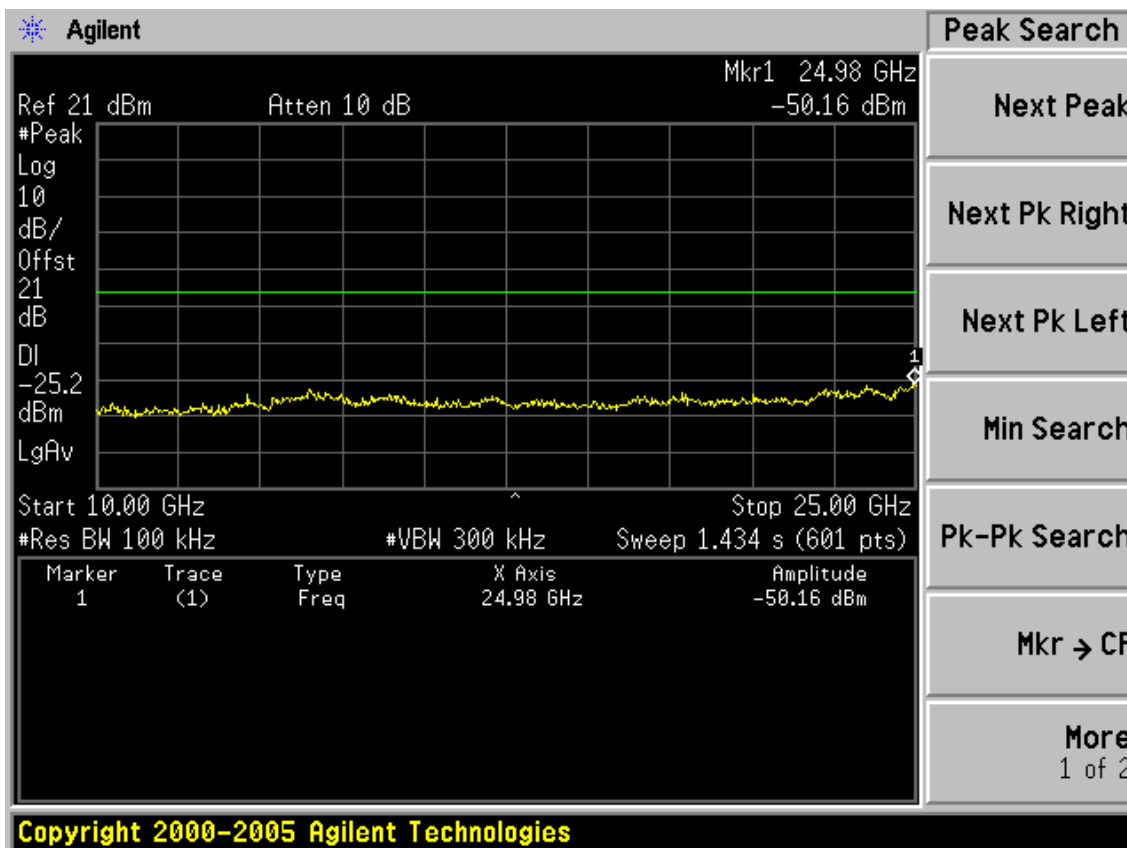




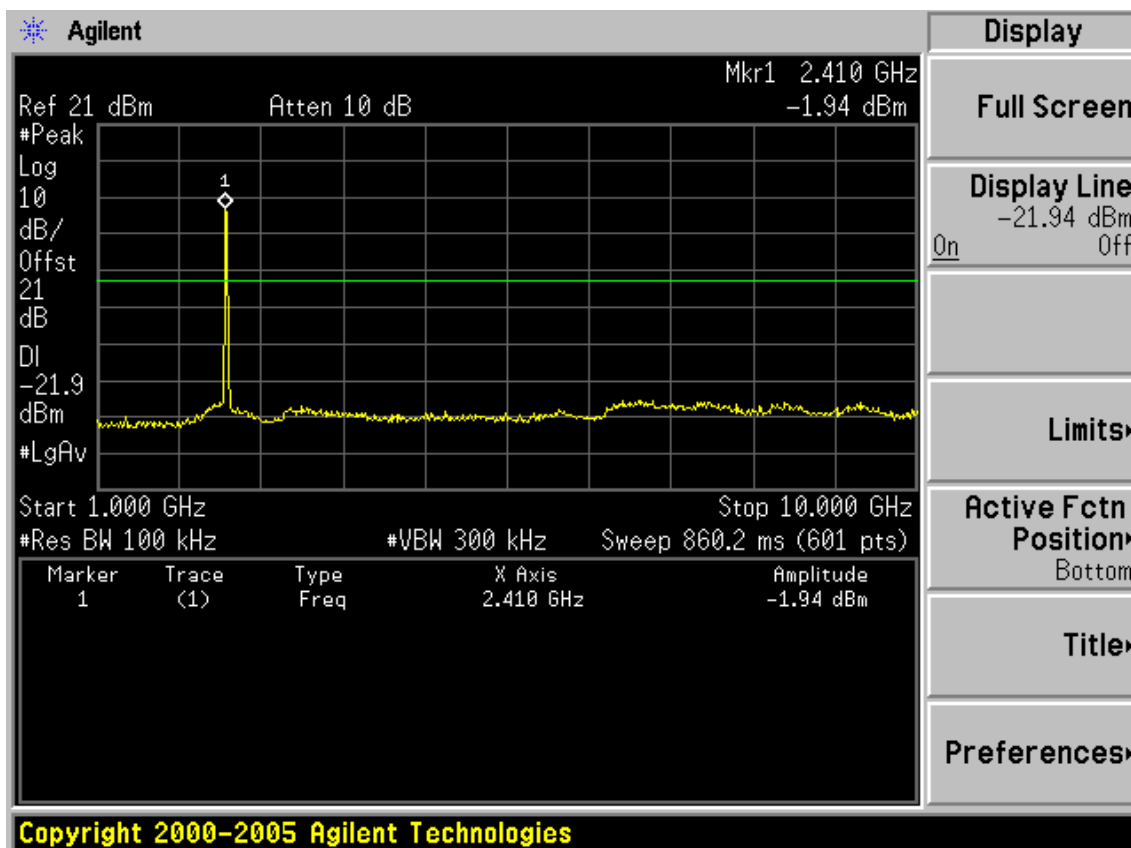
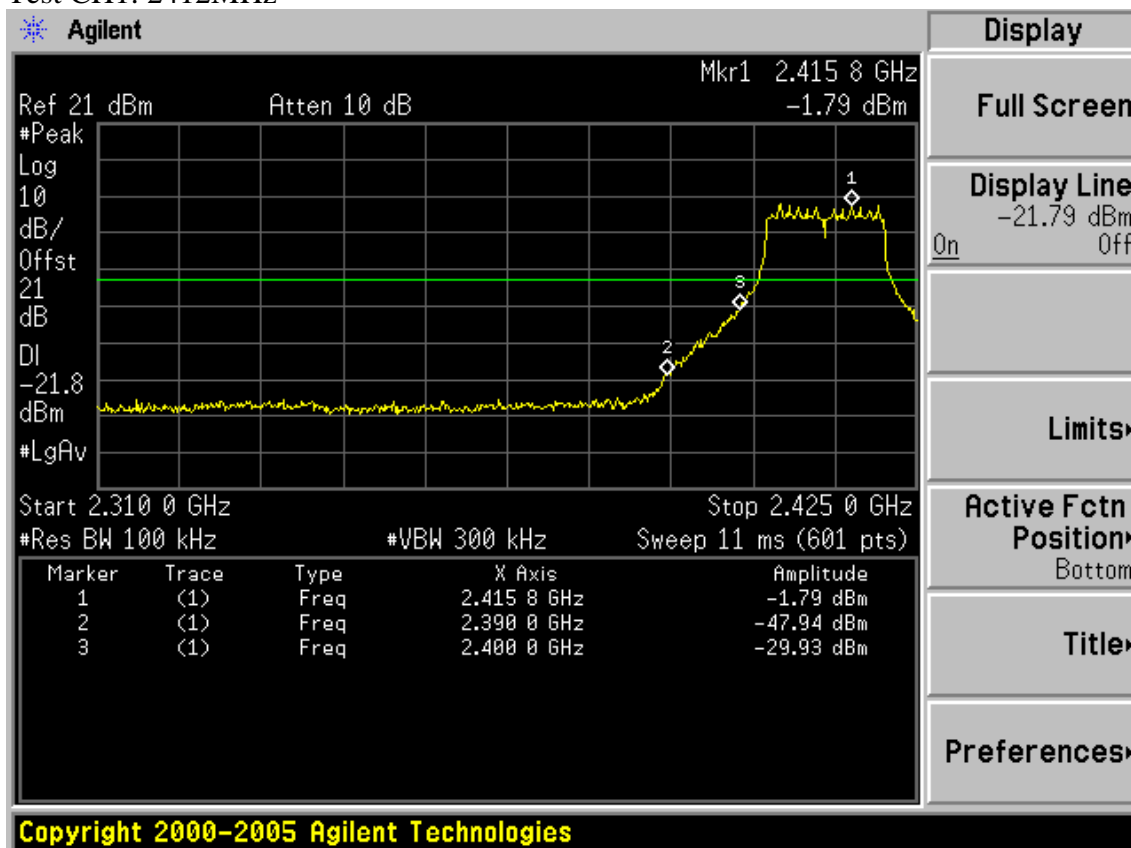


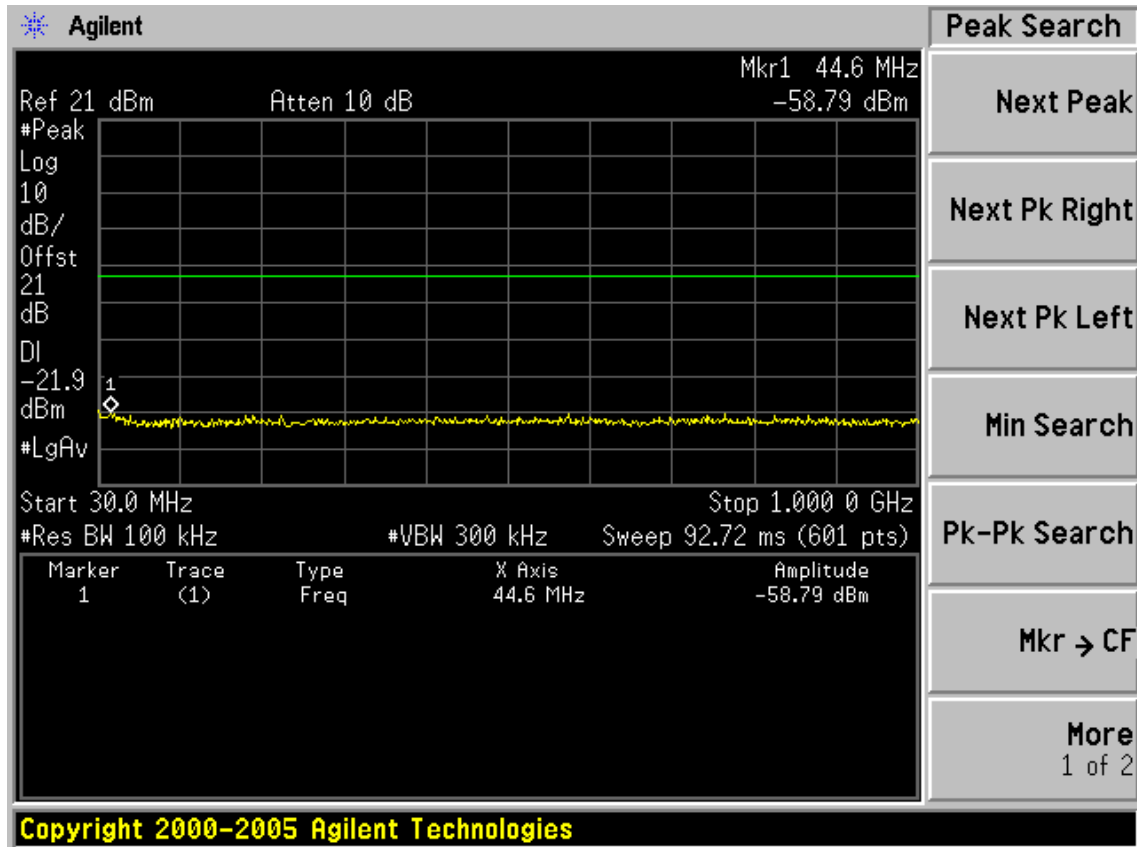
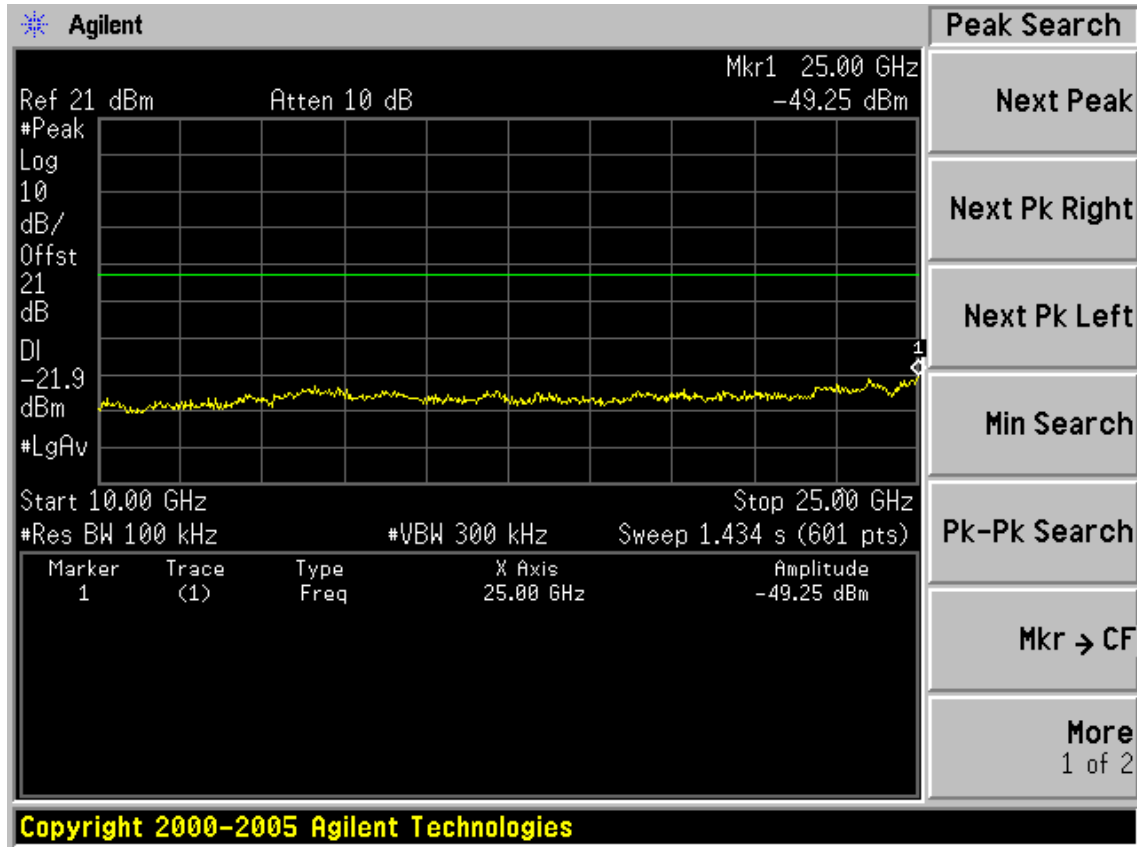
Test CH7: 2452MHz



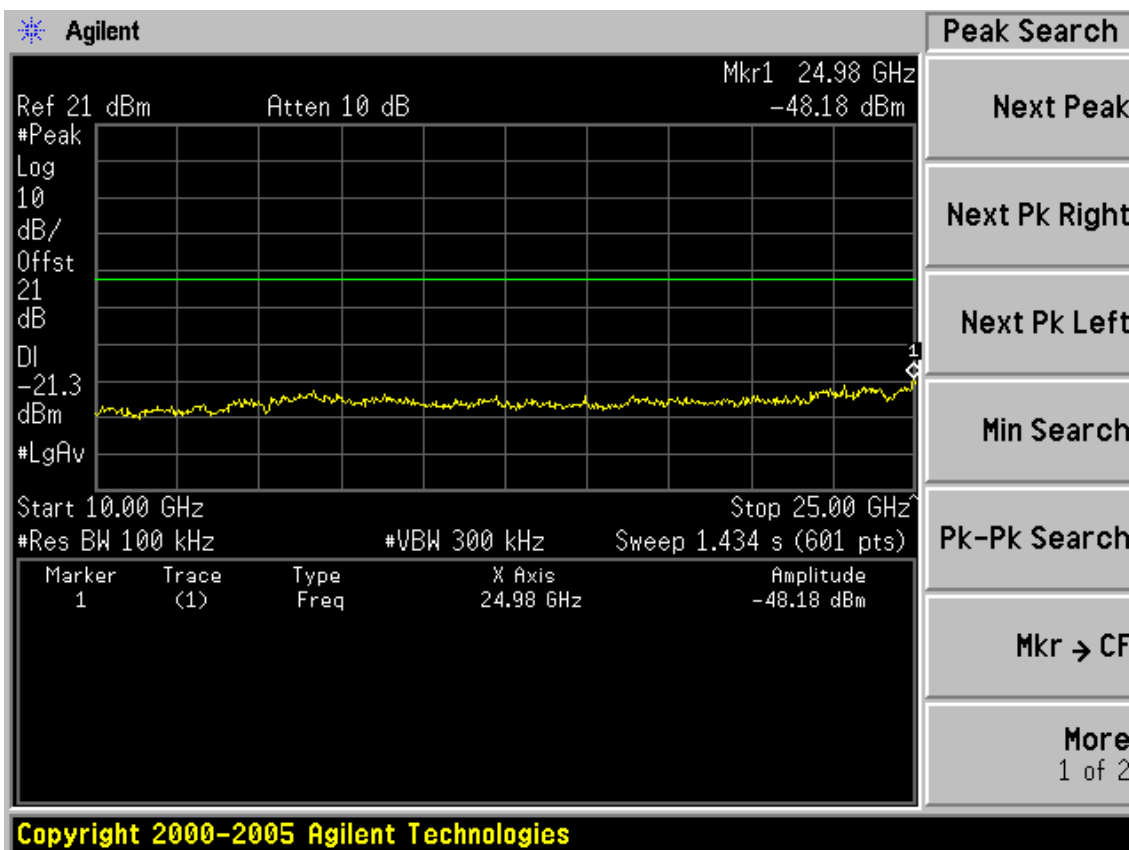
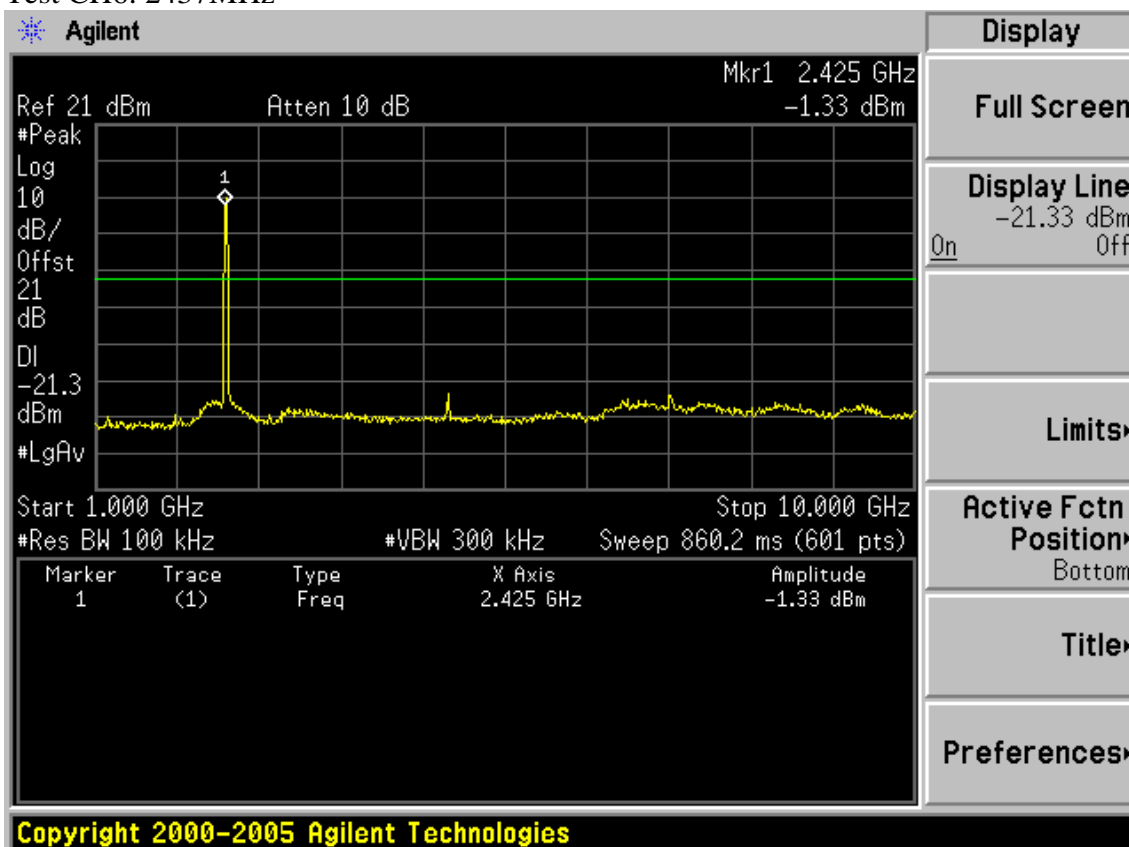


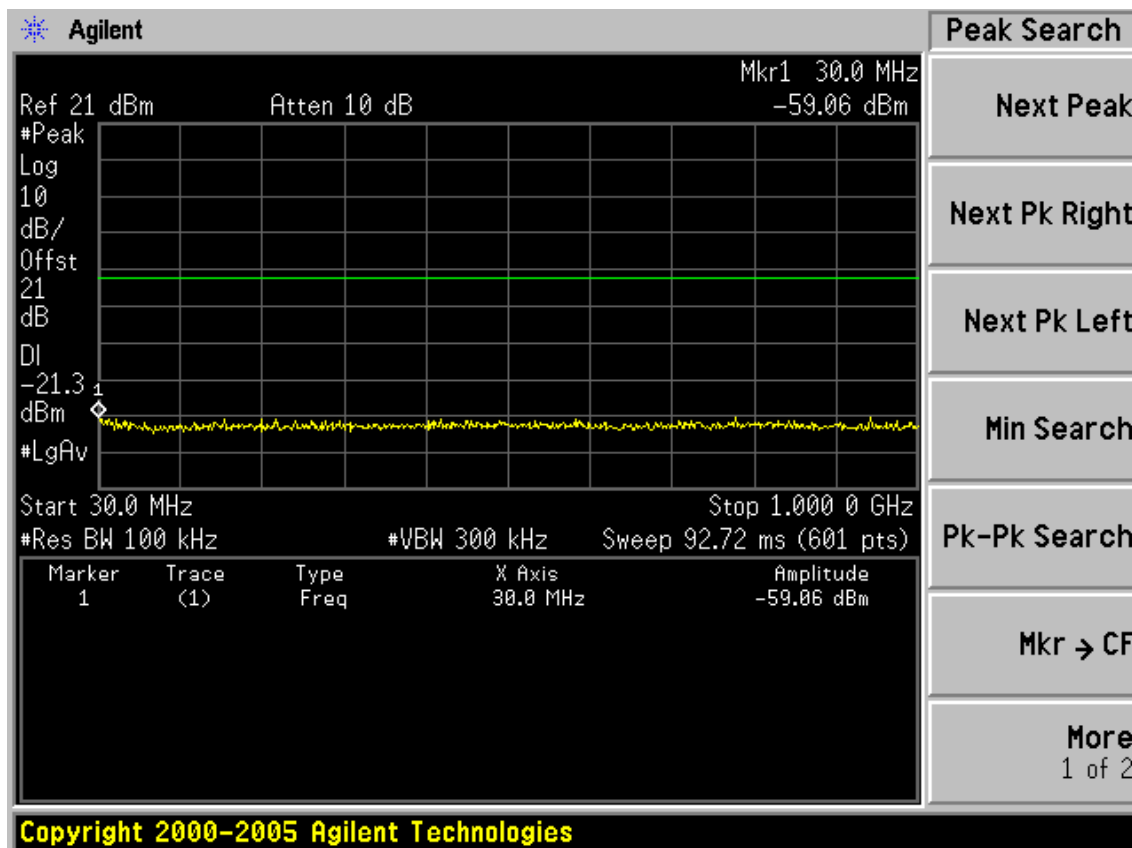
ANT 1  
 Test Mode: IEEE 802.11g TX  
 Test CH1: 2412MHz



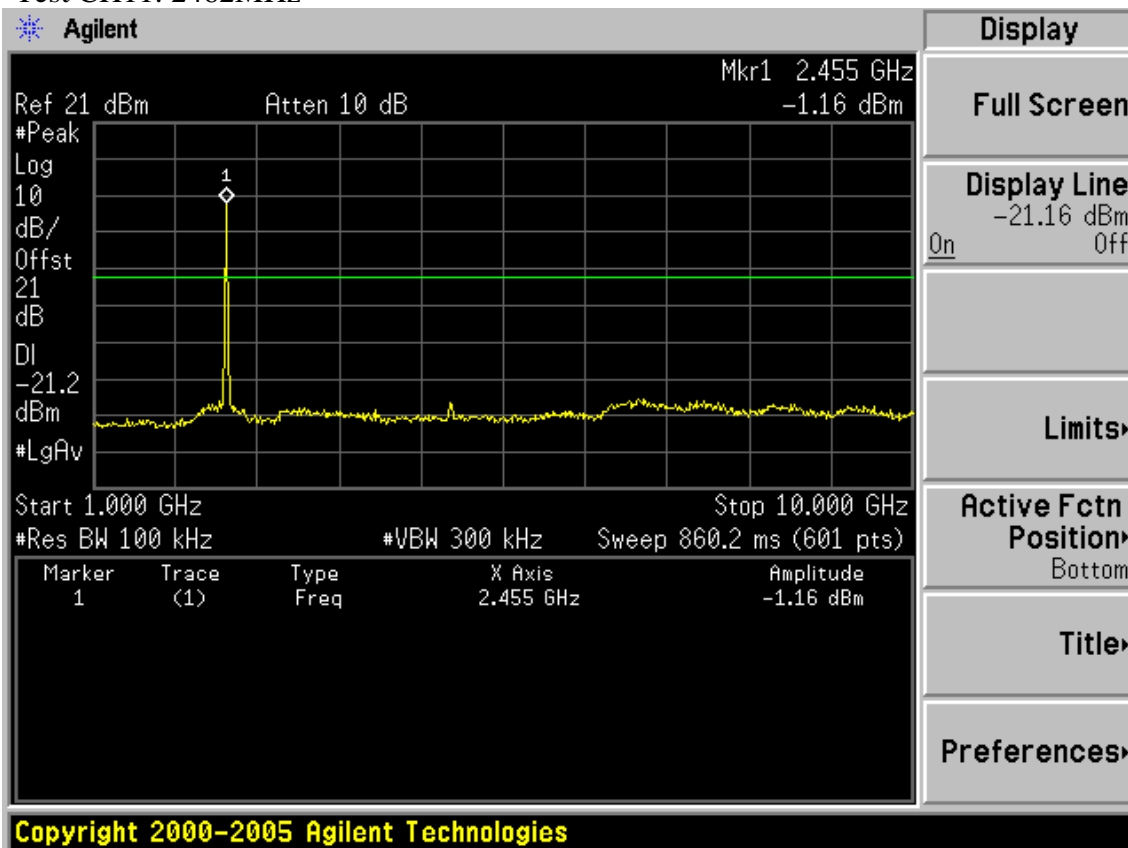


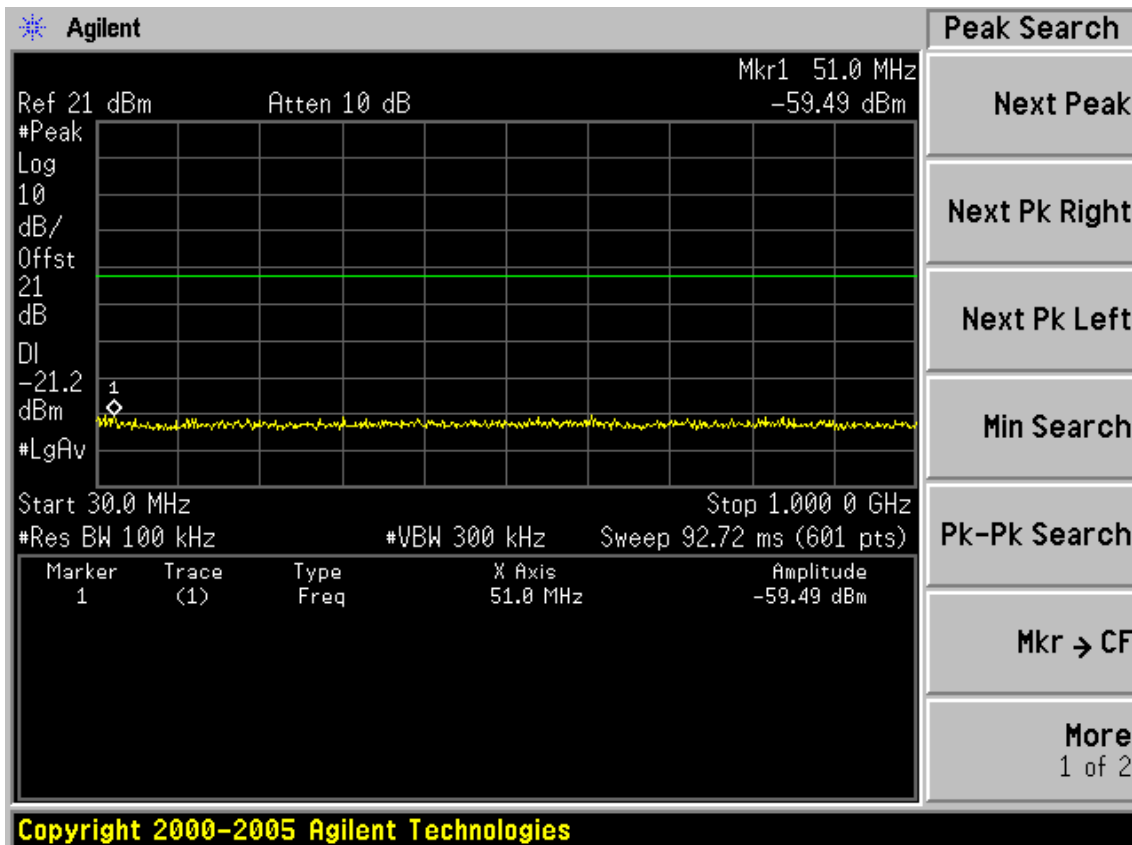
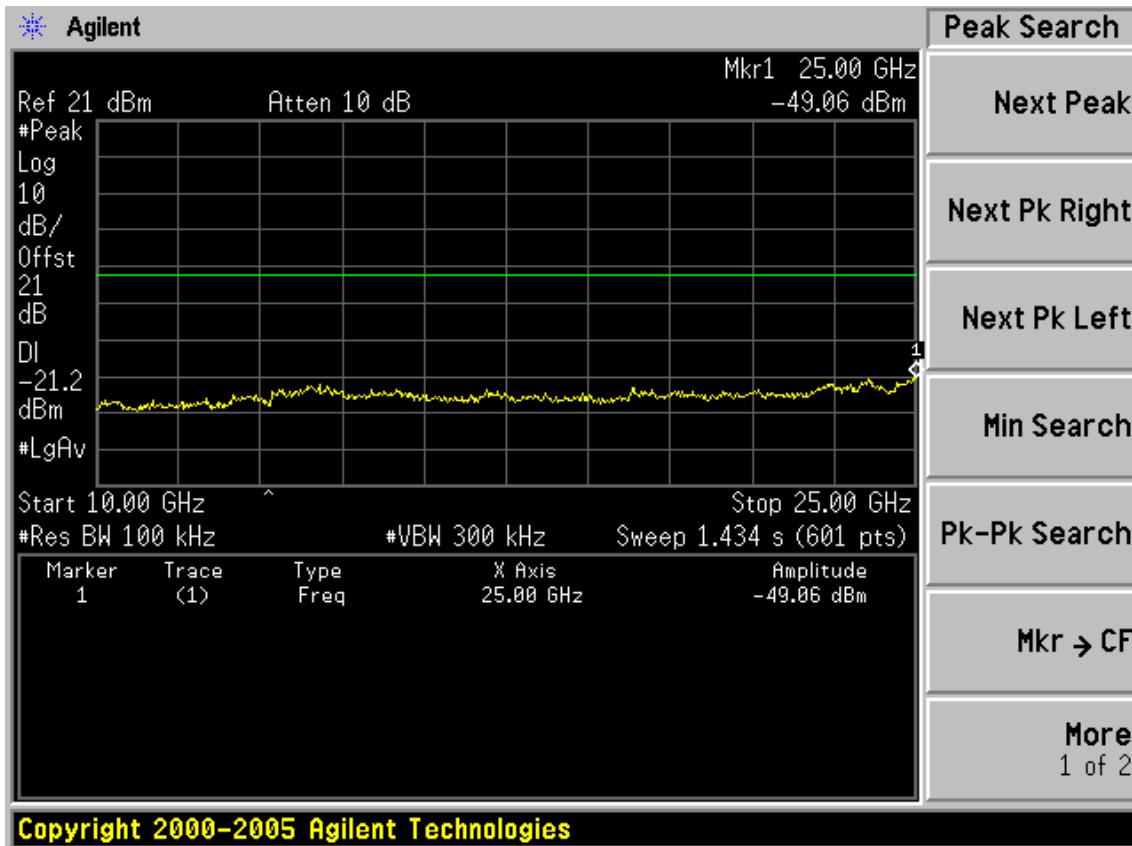
Test CH6: 2437MHz



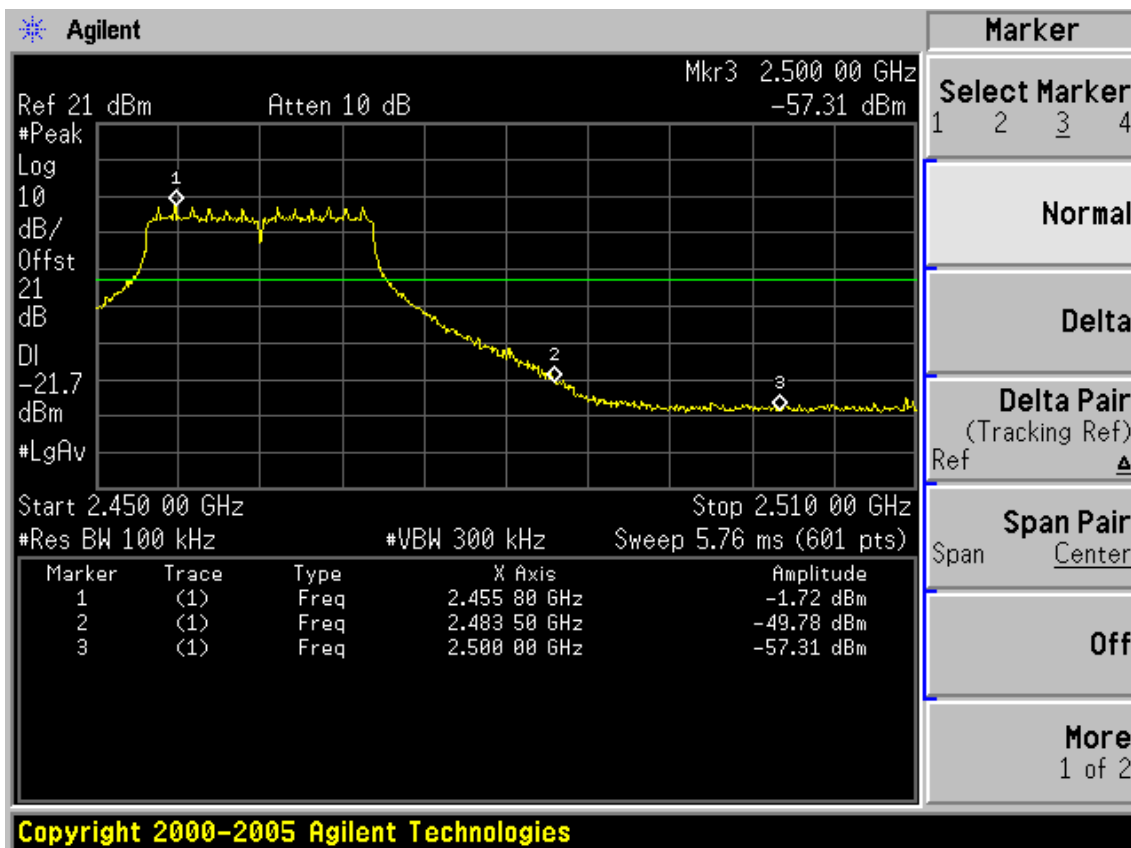


Test CH11: 2462MHz



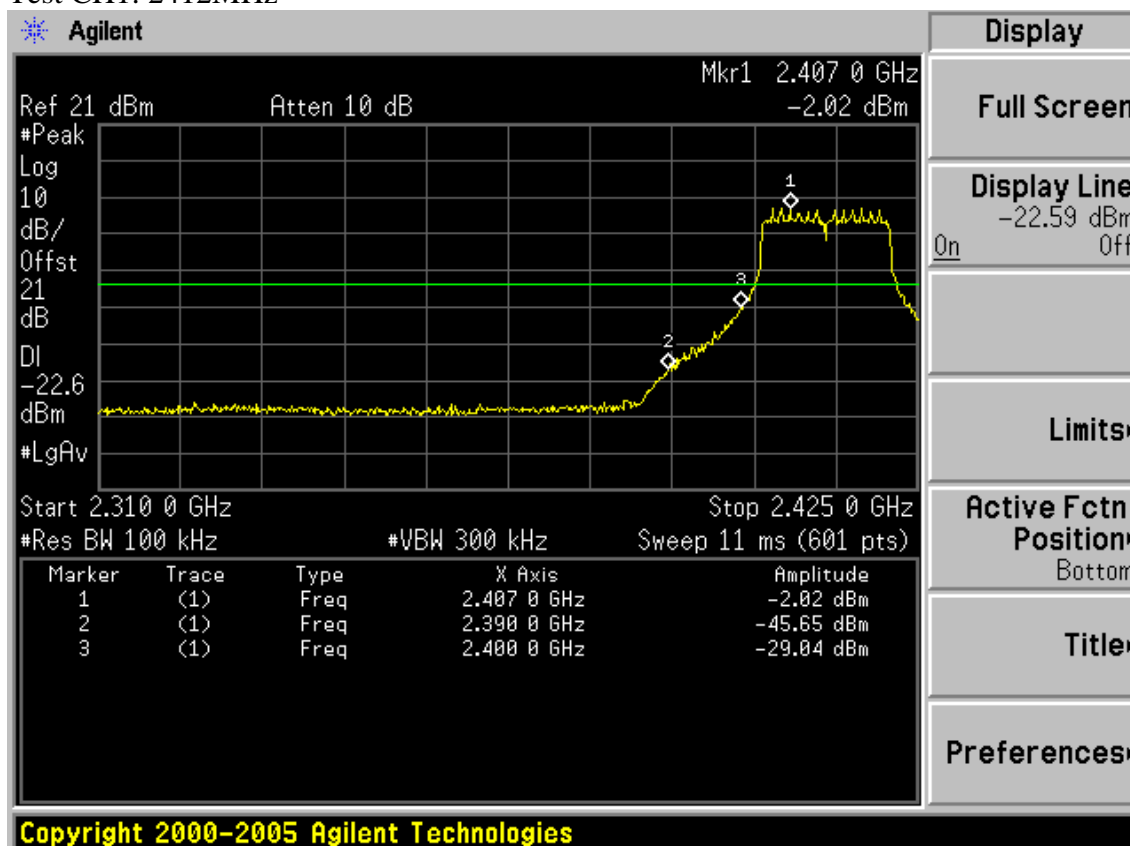


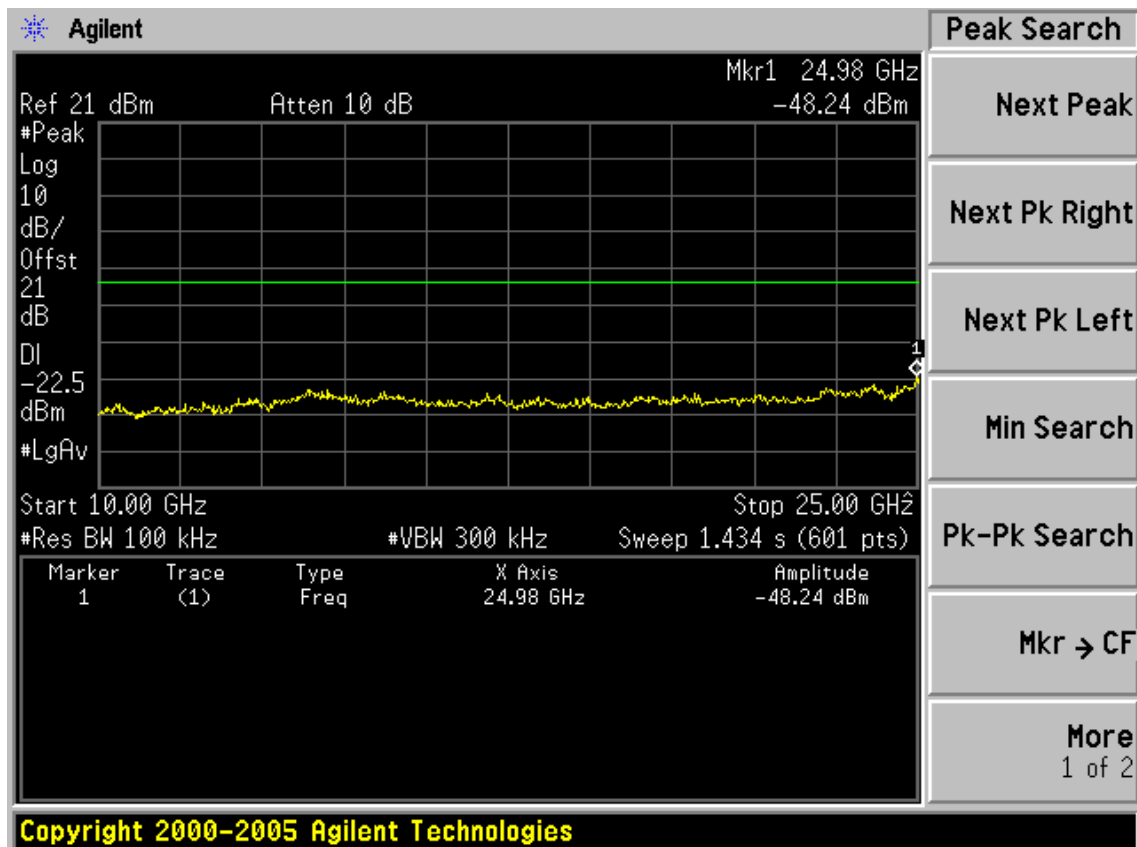
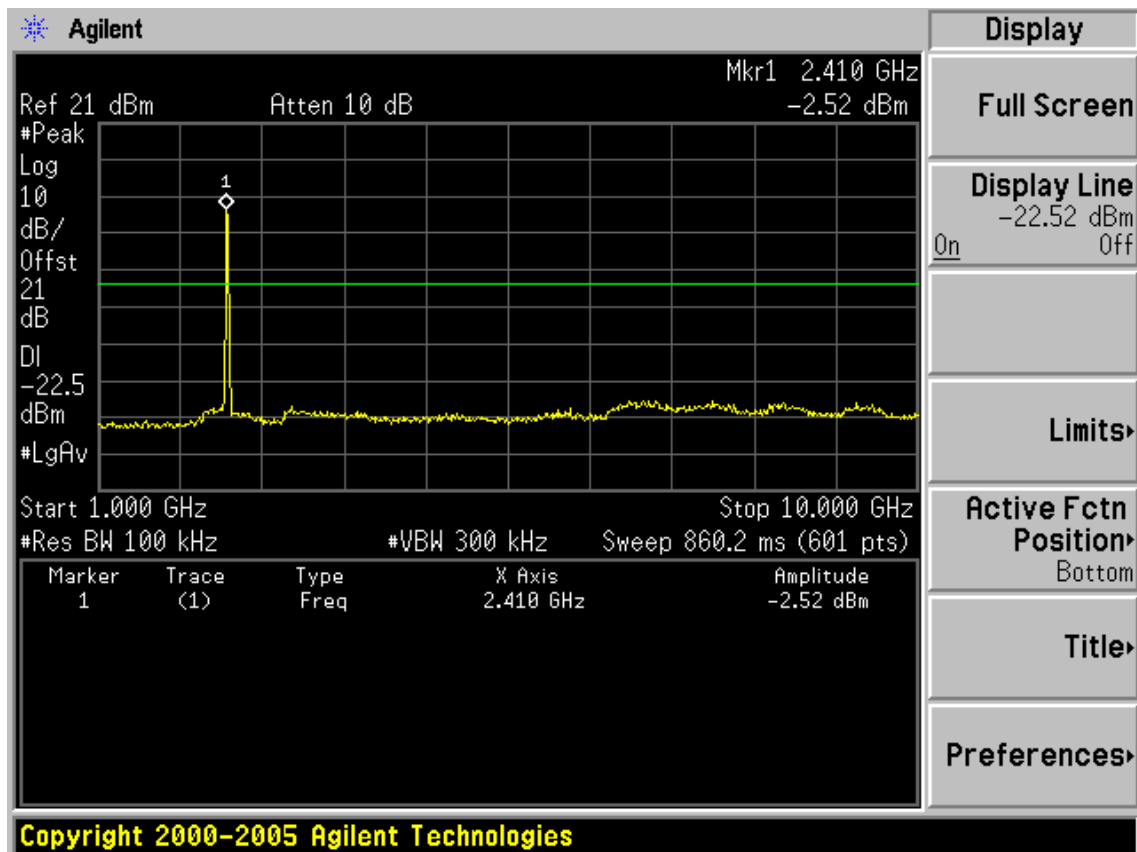


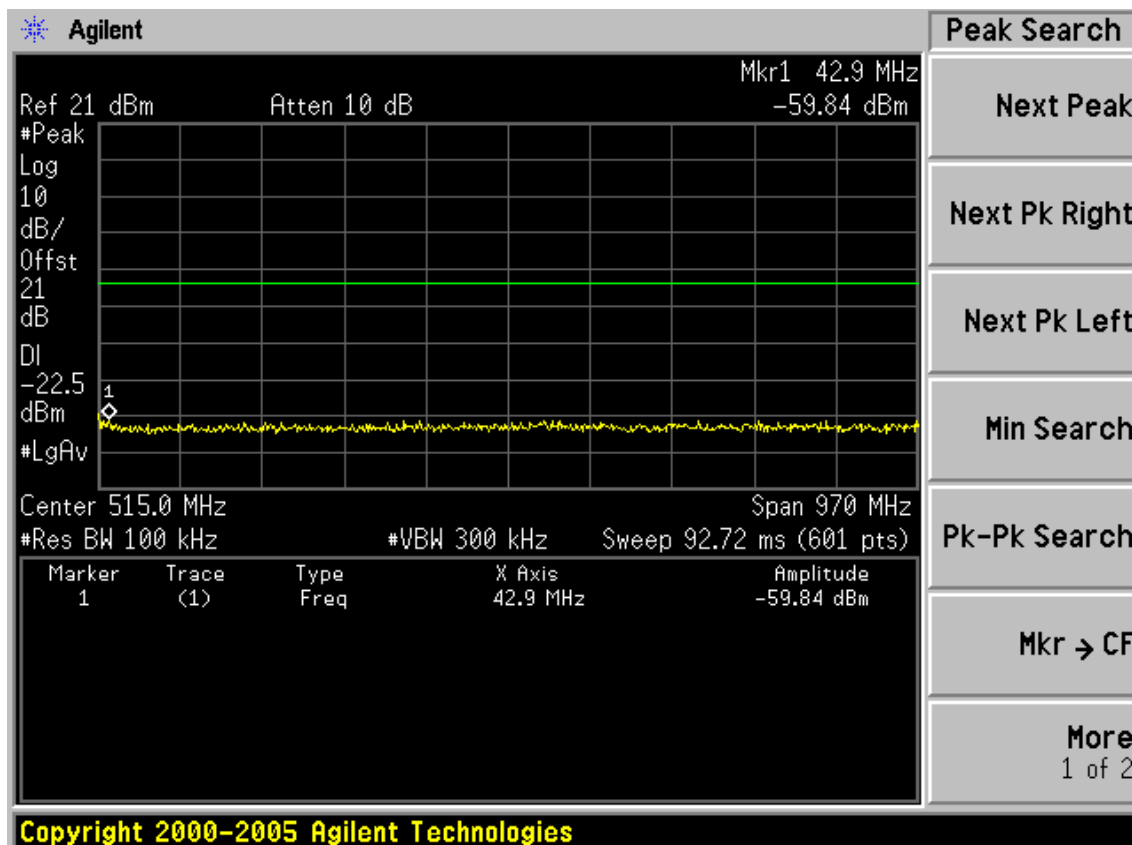


Test Mode: IEEE 11nHT20

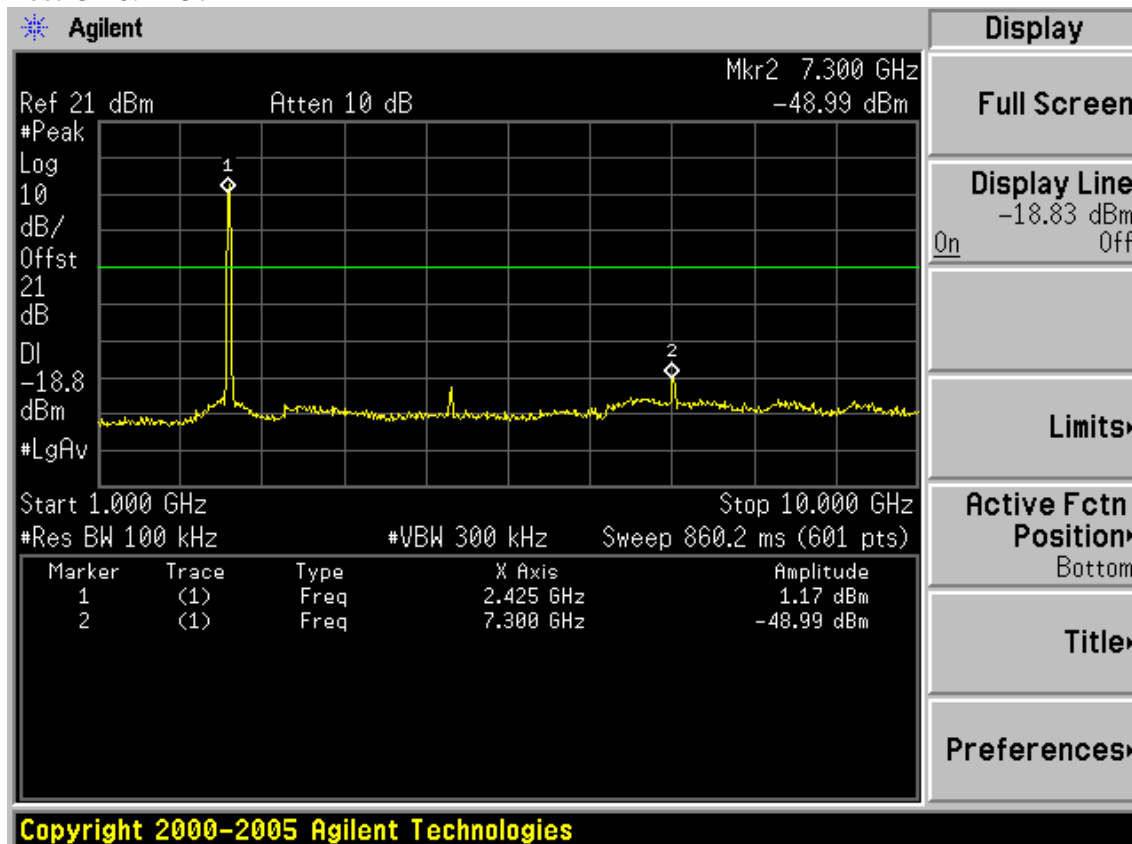
Test CH1: 2412MHz

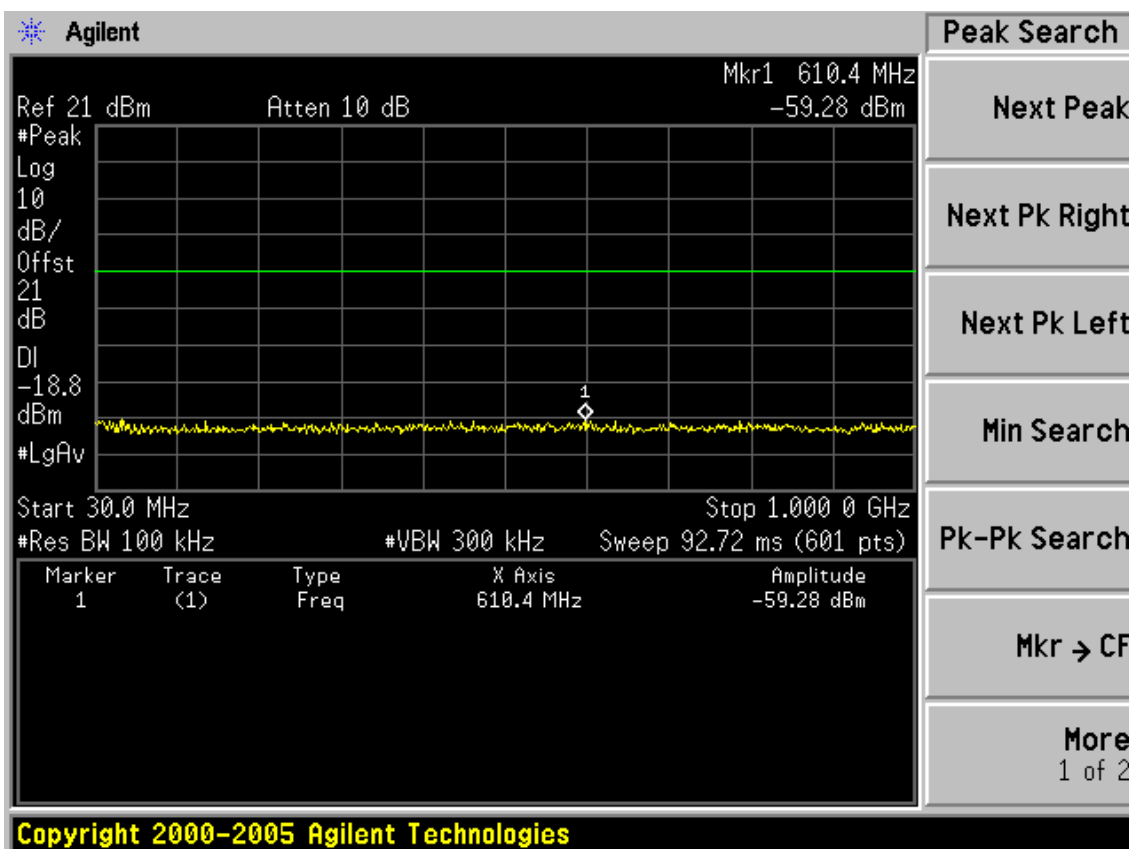
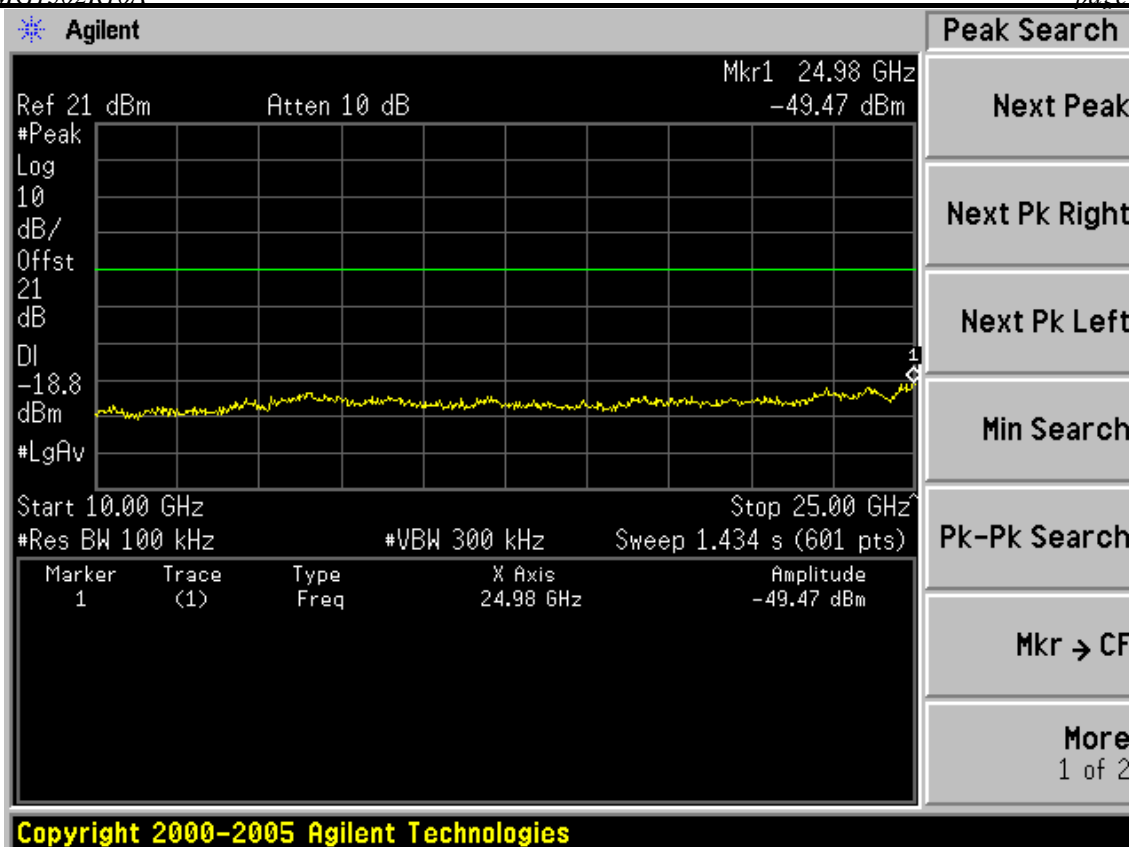




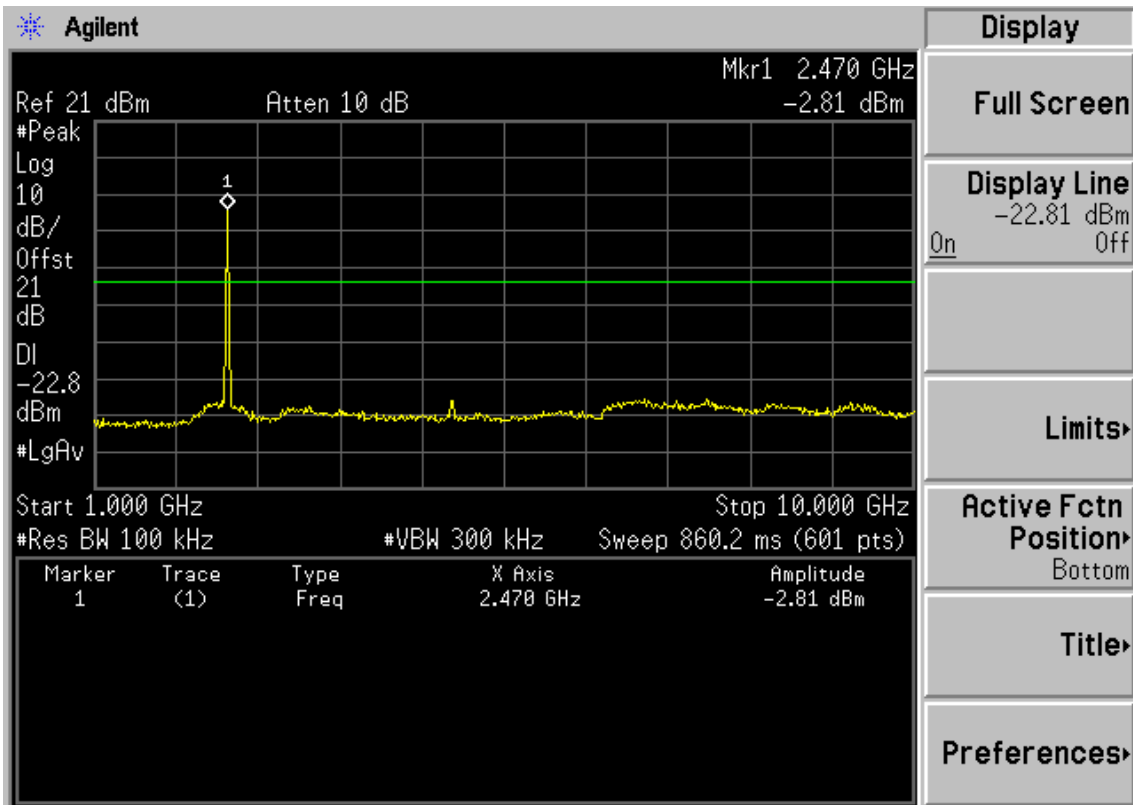


Test CH6: 2437MHz

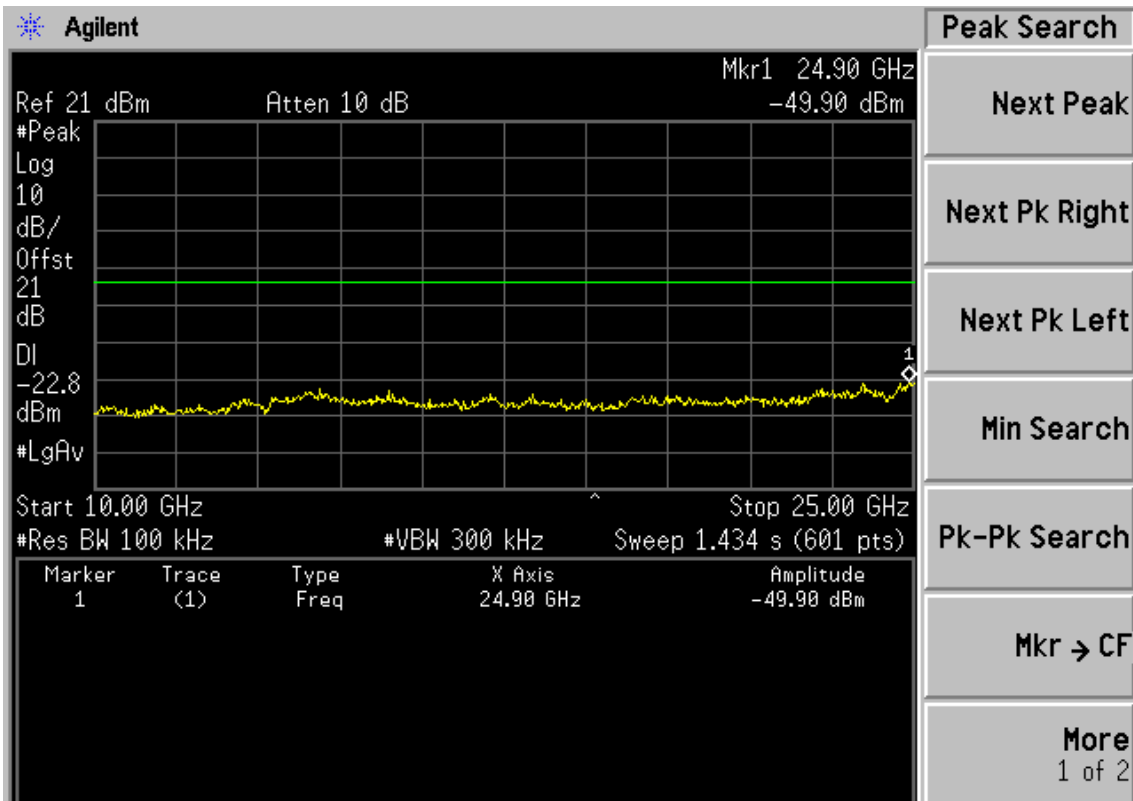




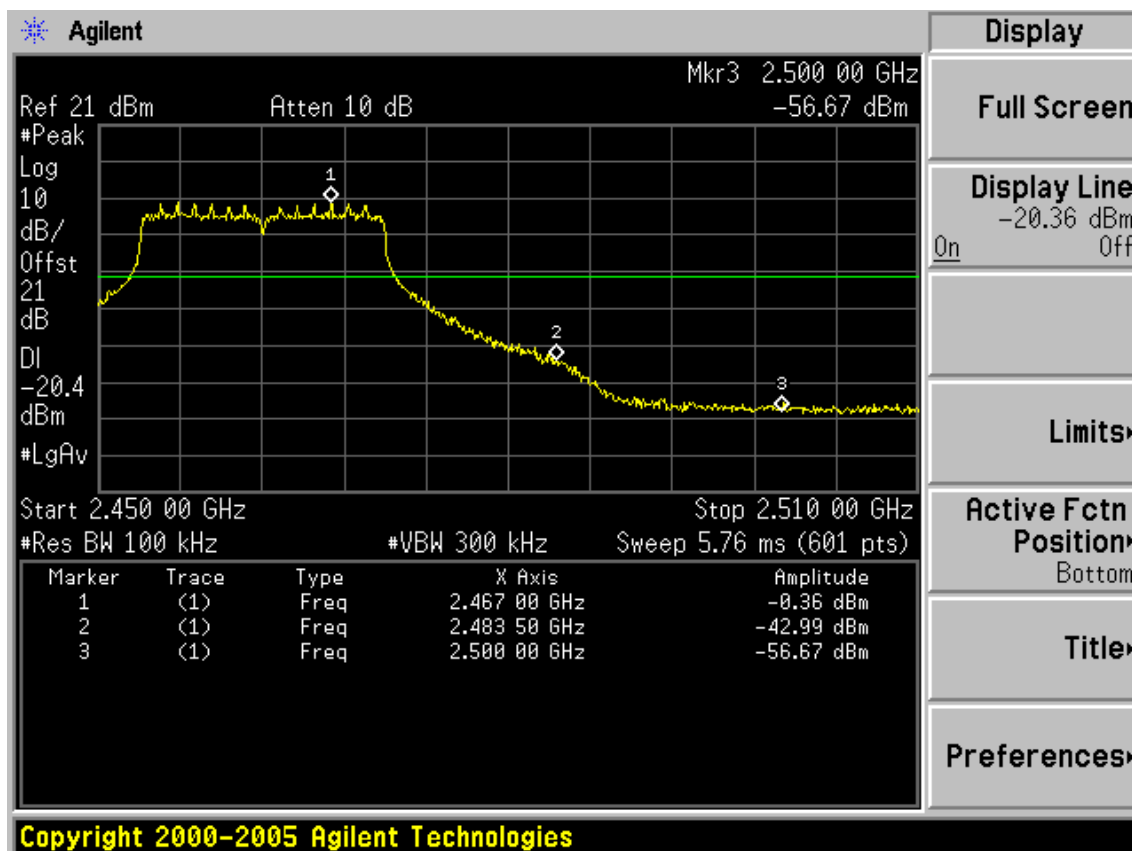
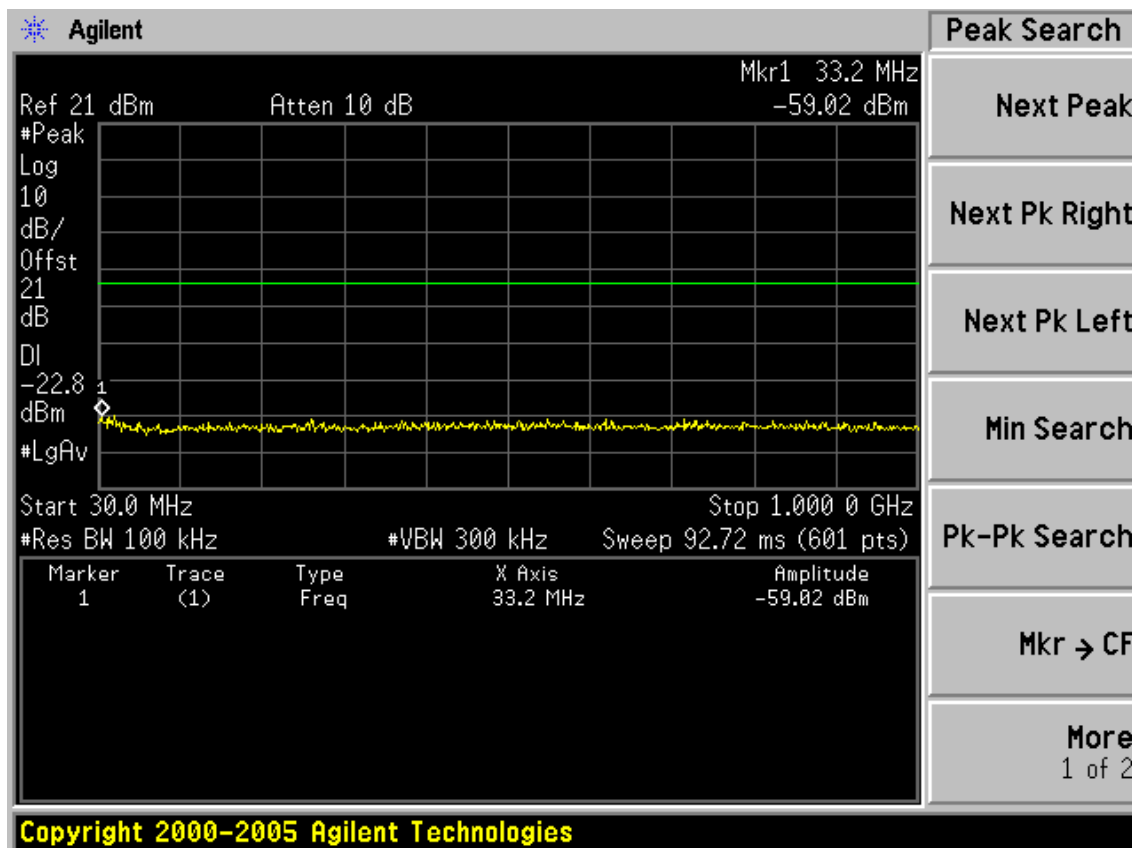
Test CH11: 2462MHz



Copyright 2000-2005 Agilent Technologies

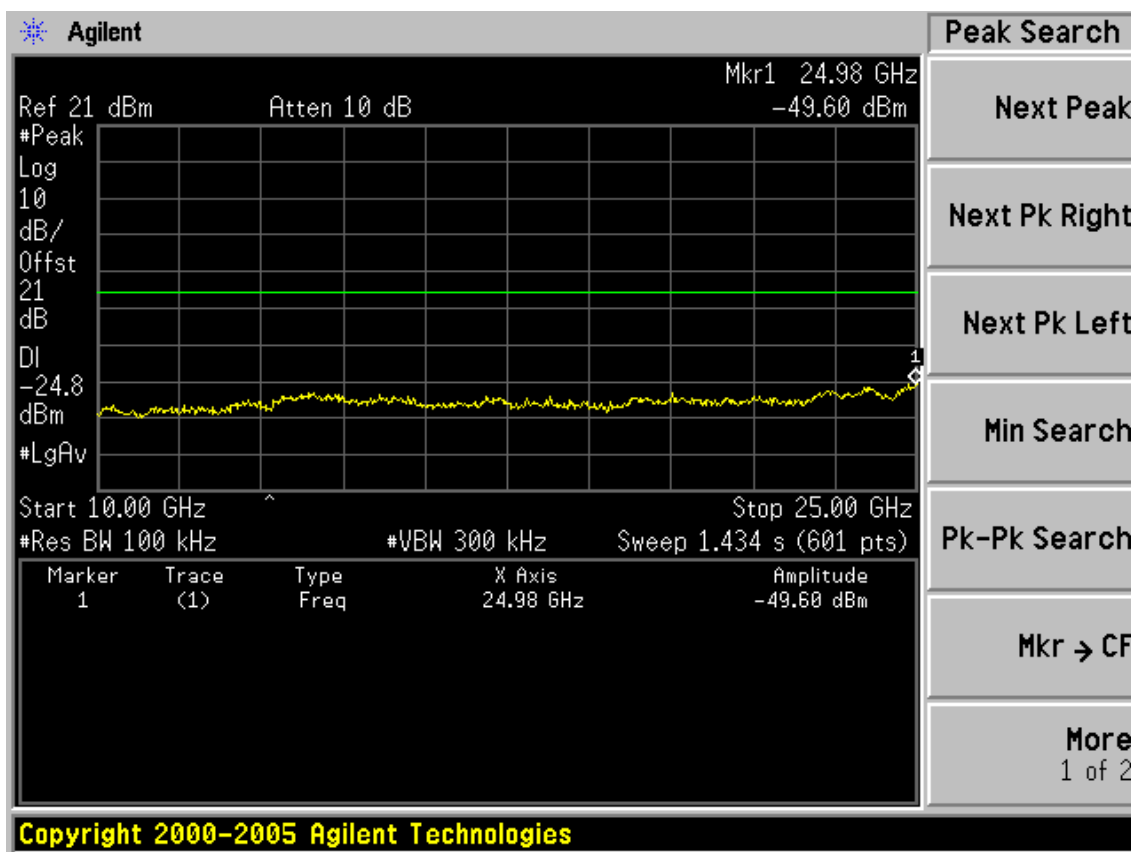
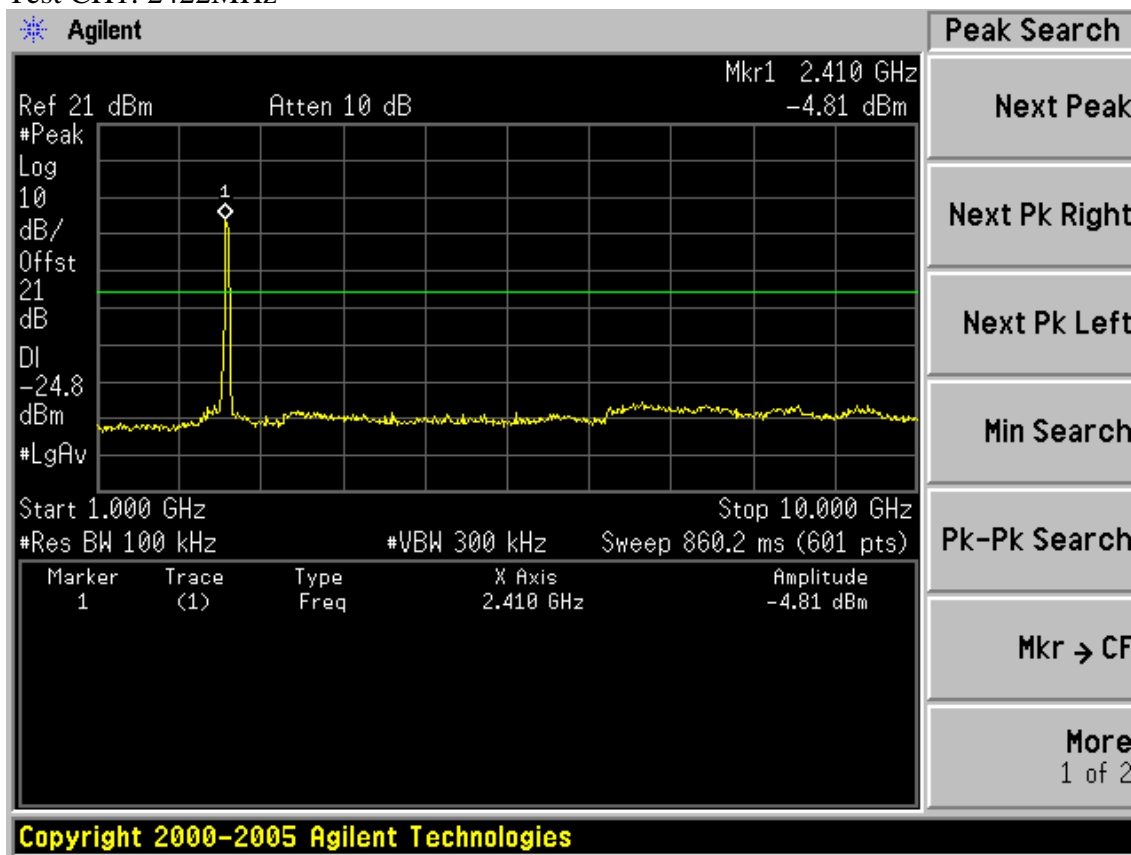


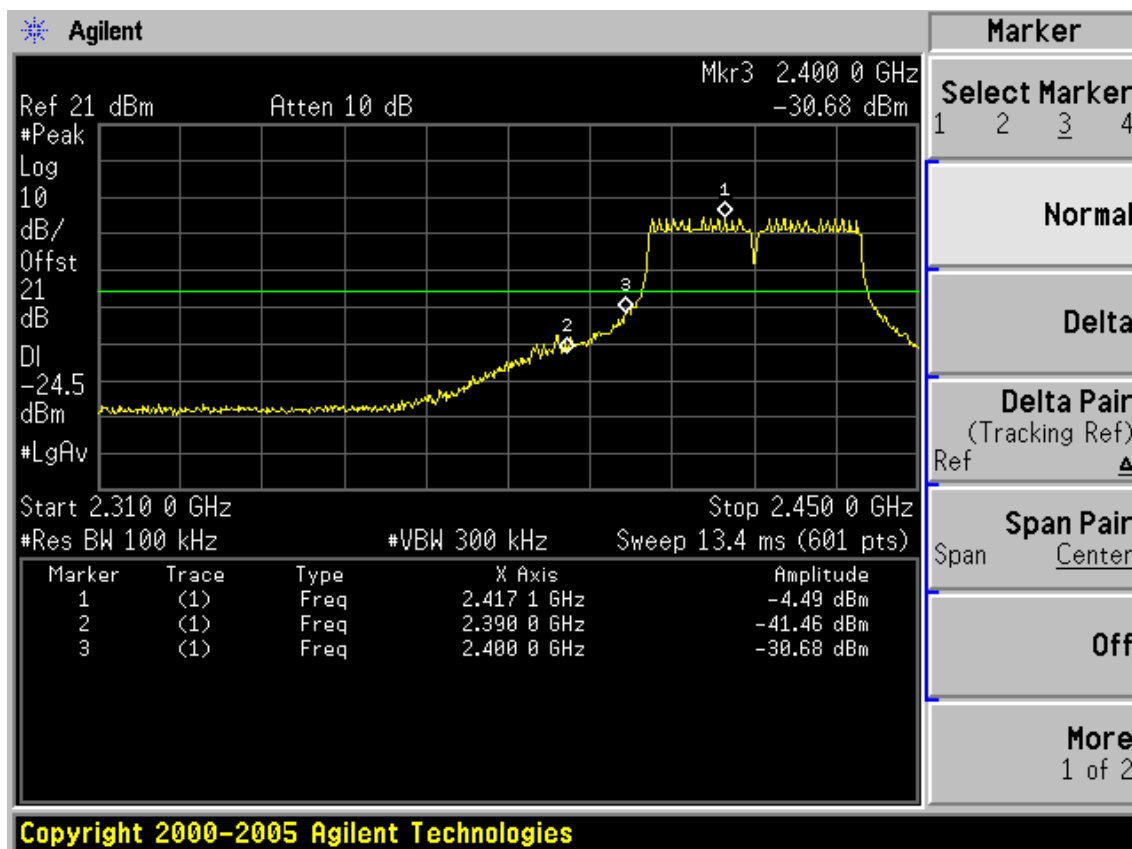
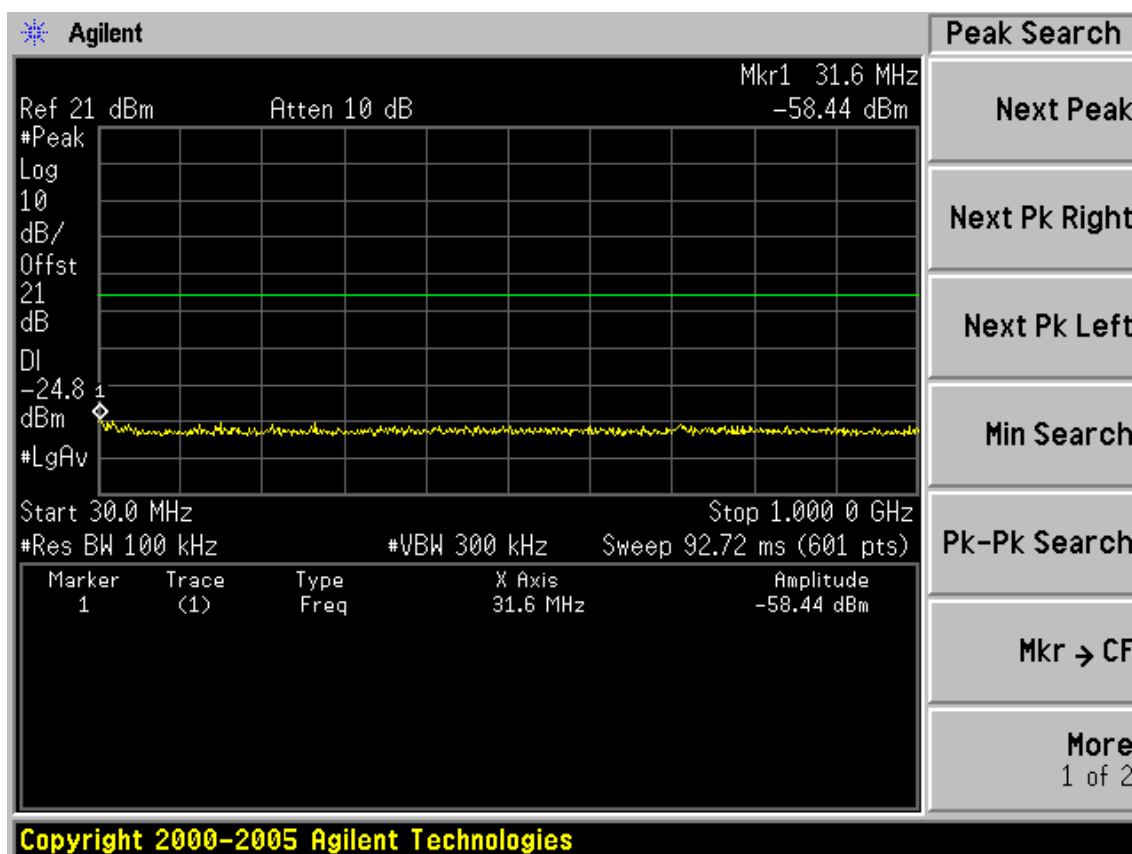
Copyright 2000-2005 Agilent Technologies



Test Mode: IEEE 11nHT40

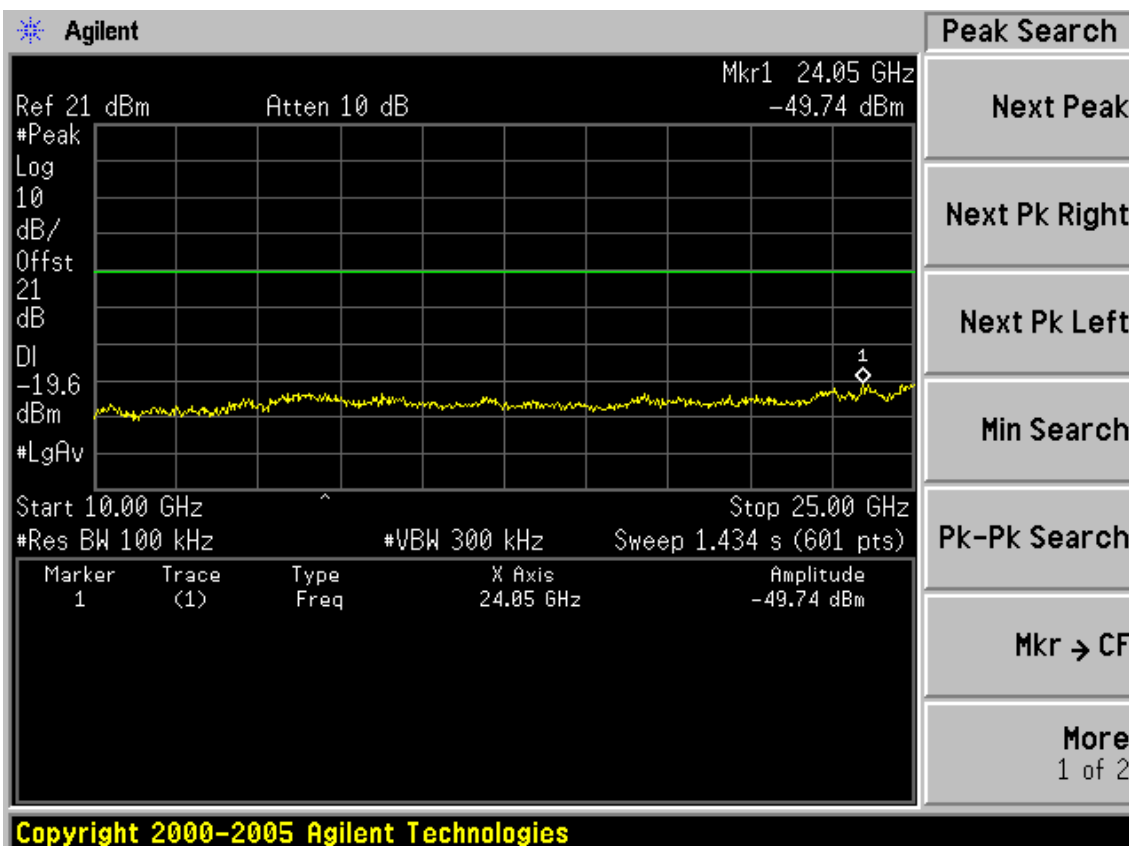
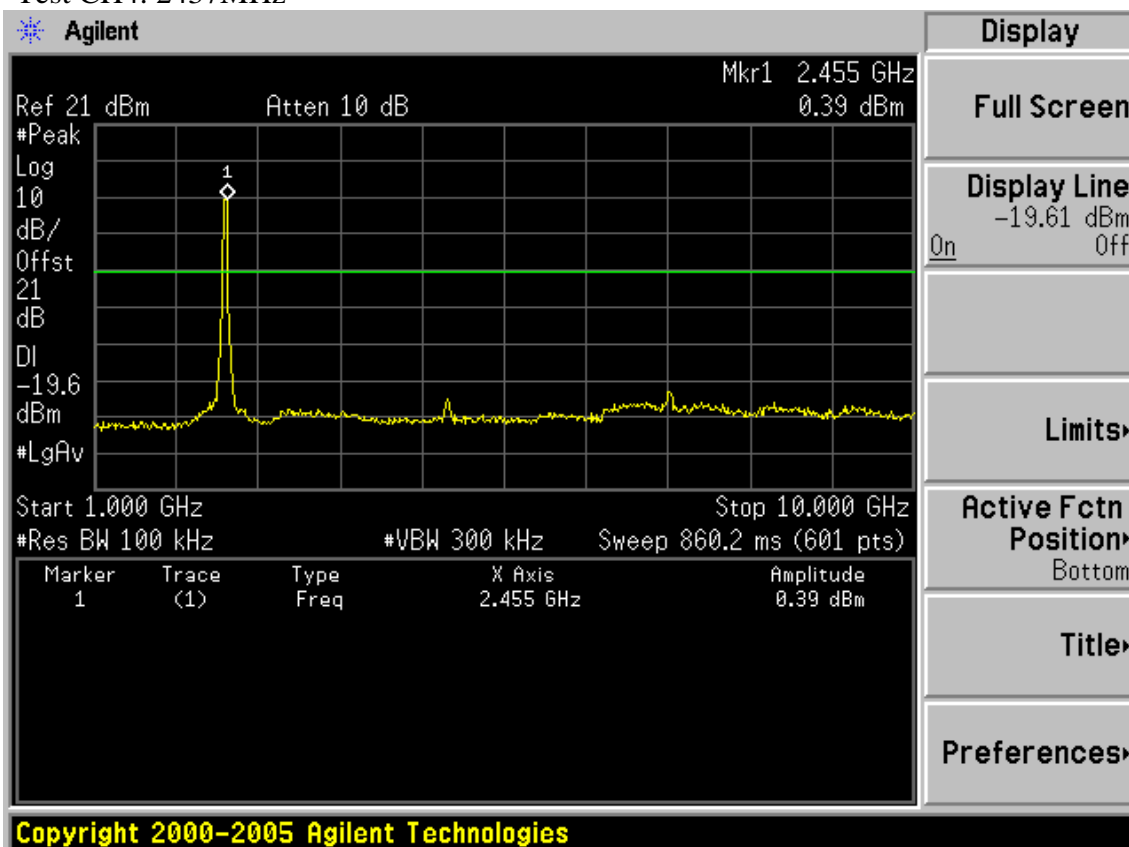
Test CH1: 2422MHz

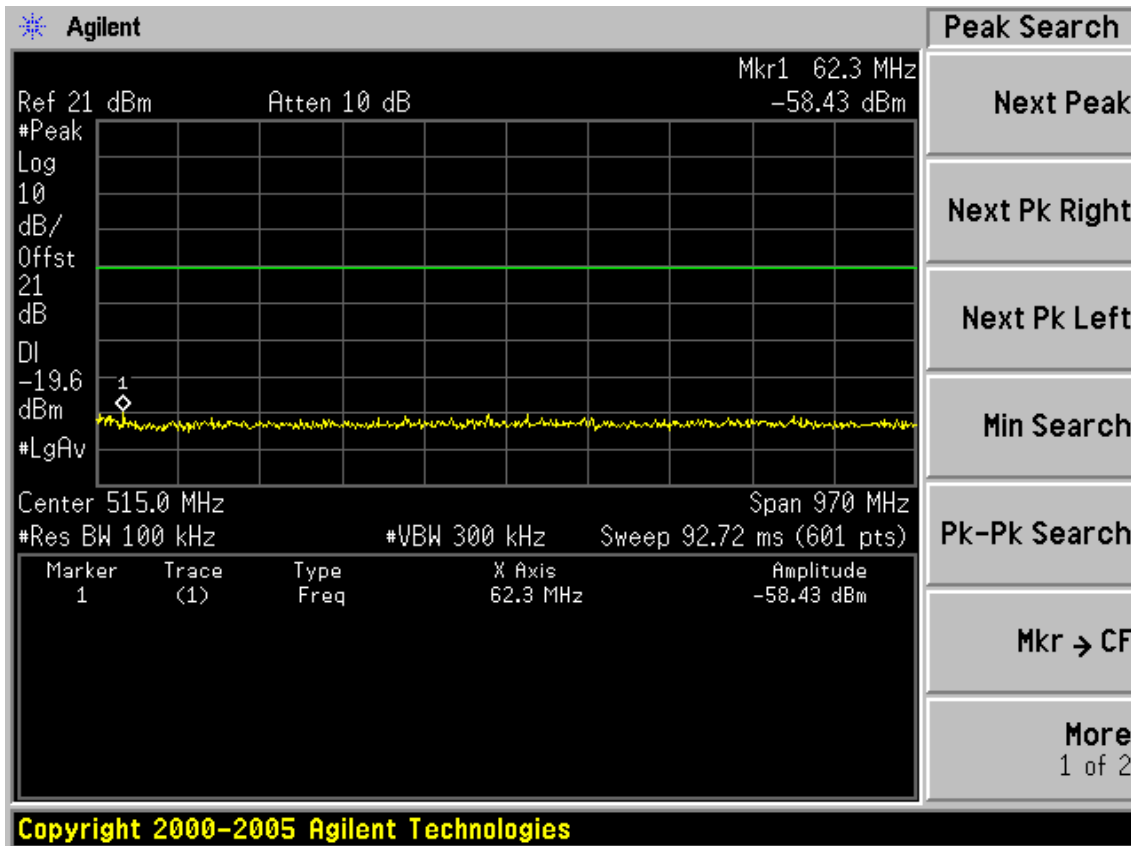




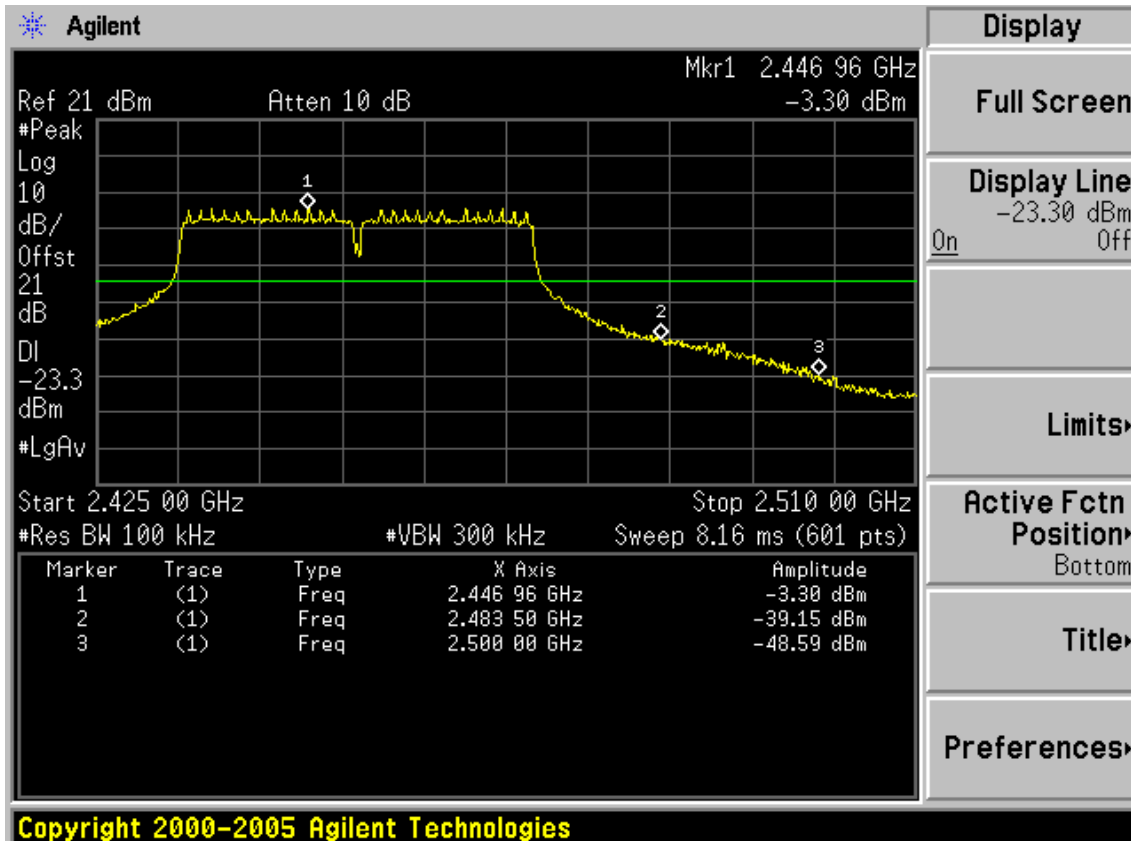


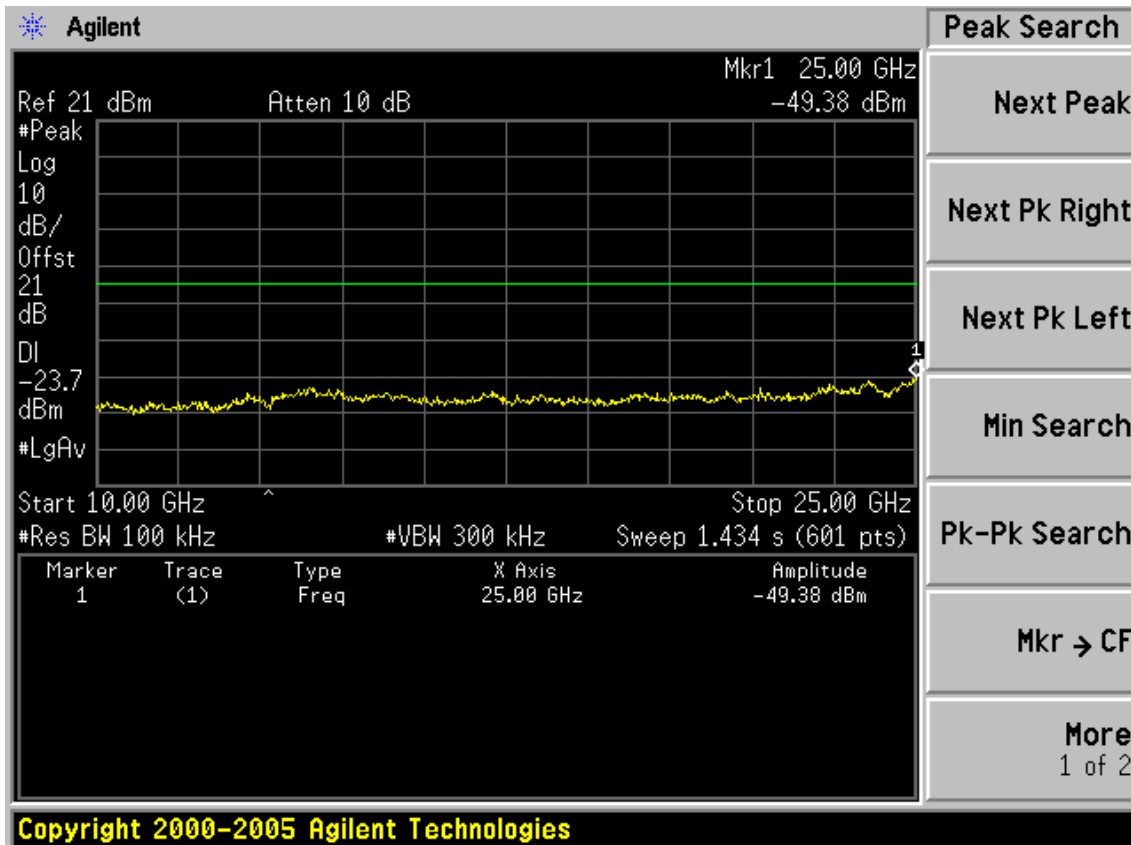
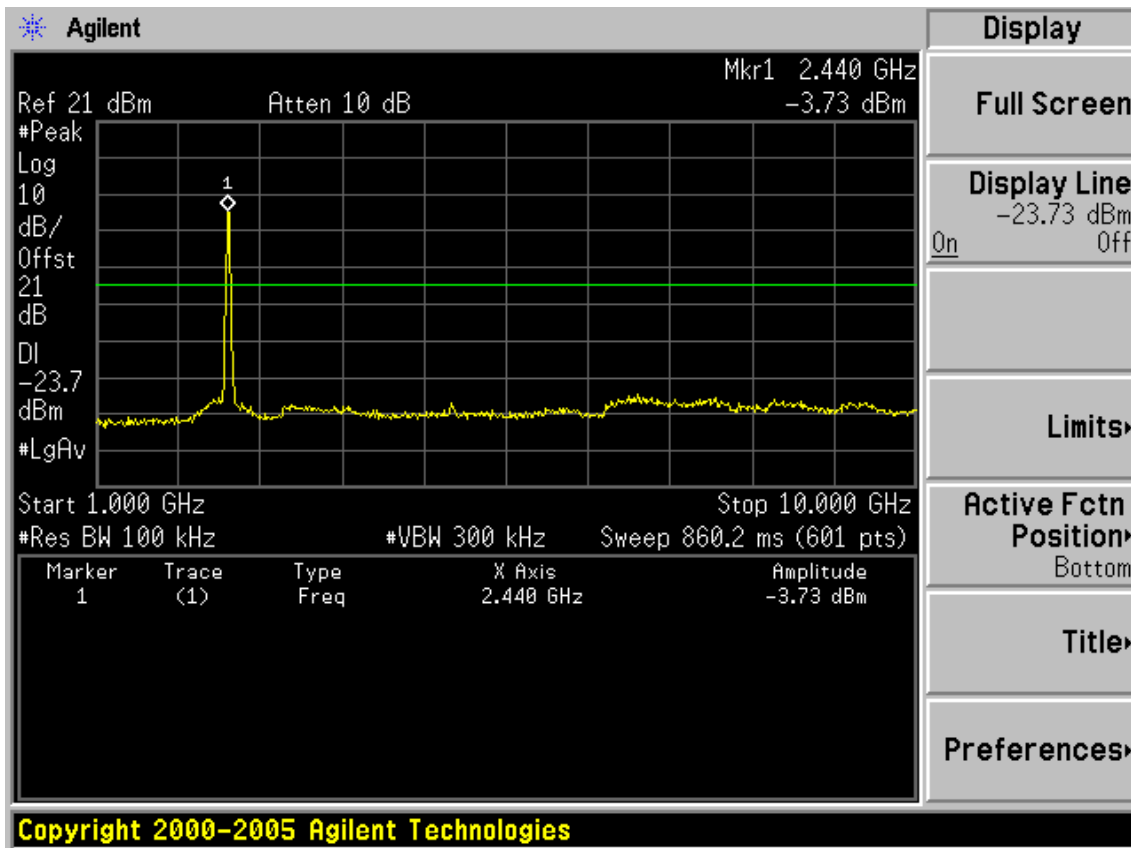
Test CH4: 2437MHz

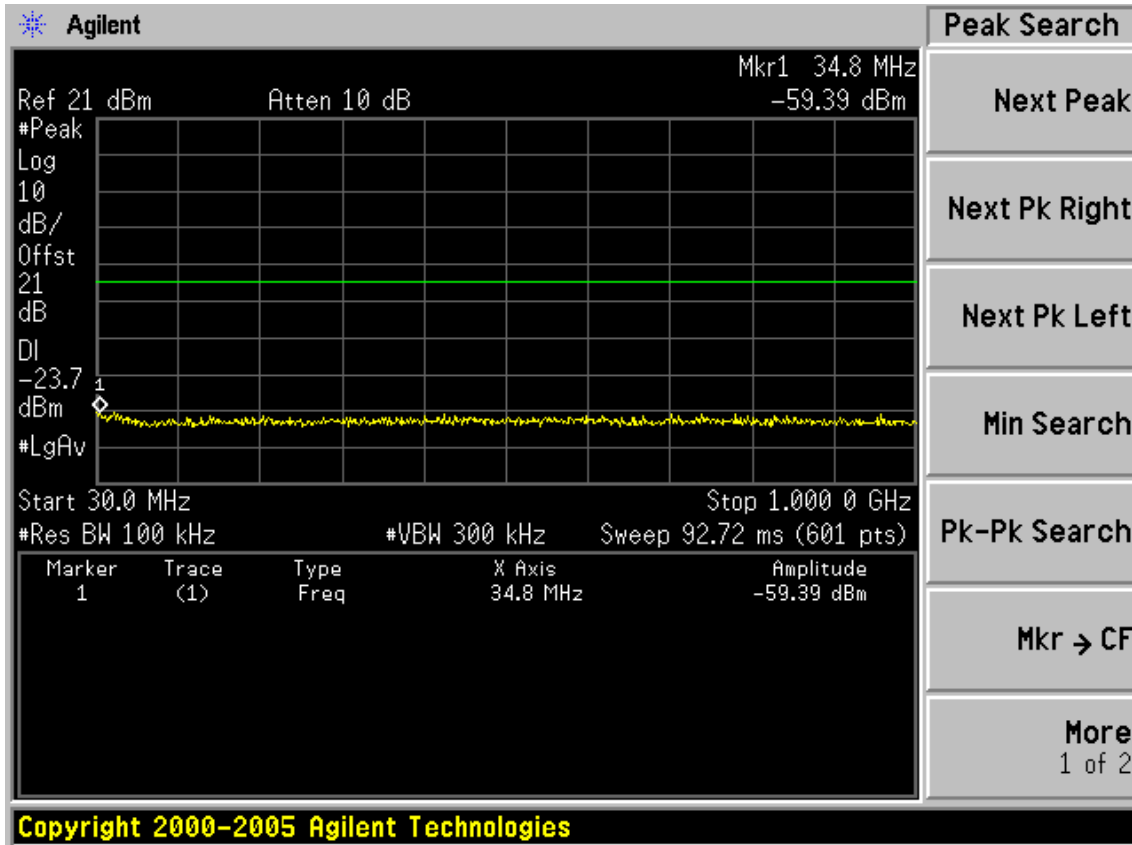




Test CH7: 2452MHz







## 6. BAND EDGE COMPLIANCE TEST

### 6.1. Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum	Agilent	E4446A	US44300459	May.08, 13	1 Year
2.	Amp	HP	8449B	3008A08495	May.08, 13	1 Year
3.	Antenna	EMCO	3115	9607-4580	May.08, 13	1 Year
4.	HF Cable	Hubersuhne	Sucoflex104	-	May.08, 13	1 Year

### 6.2. Limit

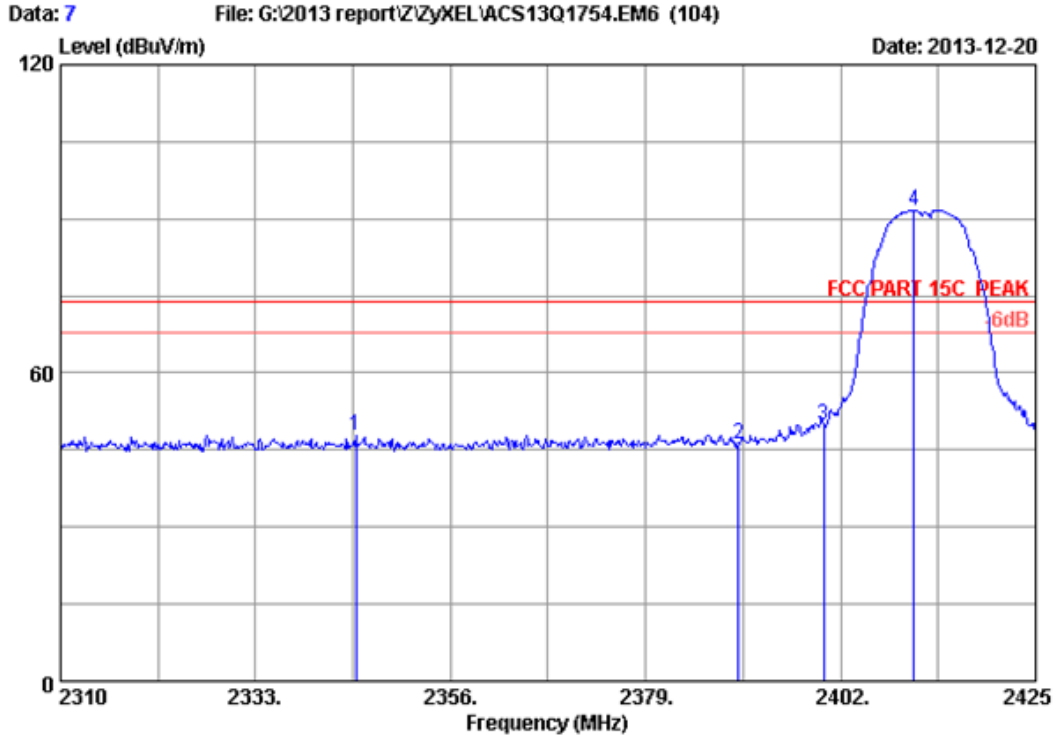
All the lower and upper band-edges emissions appearing within 2310MHz to 2390MHz and 2483.5MHz to 2500MHz restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions outside operation frequency band 2400MHz to 2483.5MHz shall be at least 20dB below the fundamental 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 upper band-edges of the emission:
  - (a) PEAK: RBW=1MHz; VBW=3MHz; Sweep=AUTO
  - (b) AVERAGE: RBW=1MHz; VBW=10Hz; Sweep=AUTO

### 6.4. Test Results

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

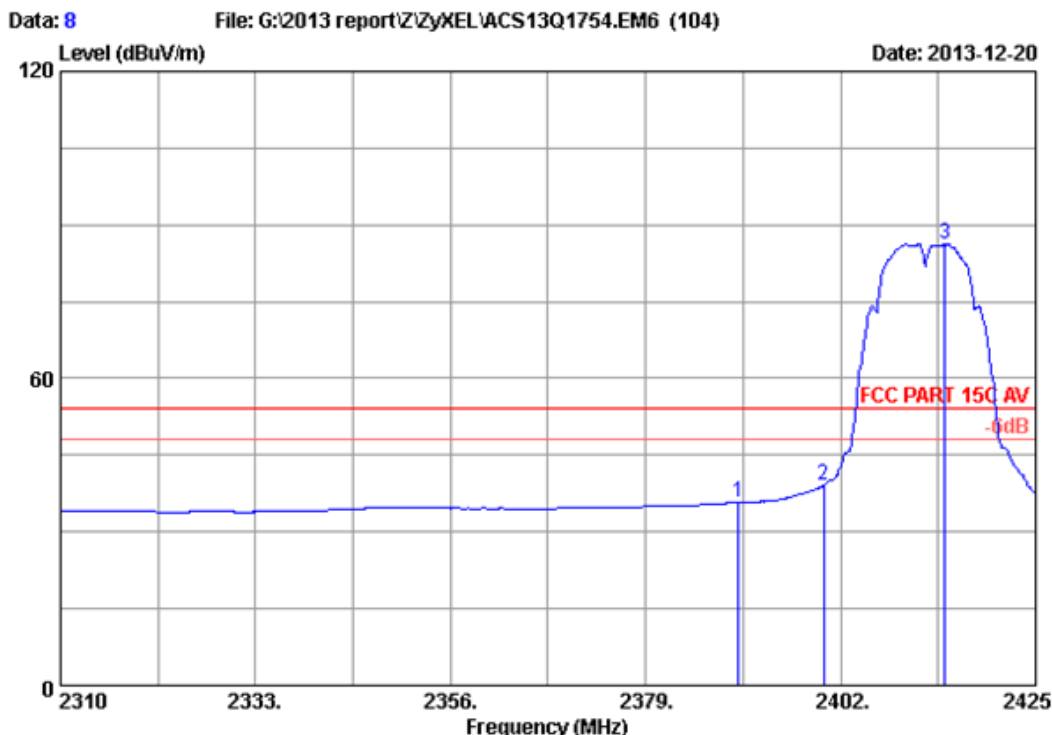


Site no. : 3m Chamber Data no. : 7  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N300 4-port USB Ethernet Gateway  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11b CH1 2412MHz Tx Mode  
 M/N : EMG1312-R10A

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBUV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Remark
1	2344.845	28.06	5.72	35.70	49.86	47.94	74.00	26.06	Peak
2	2390.000	28.16	5.78	35.70	48.01	46.25	74.00	27.75	Peak
3	2400.000	28.18	5.80	35.70	51.39	49.67	74.00	24.33	Peak
4	2410.625	28.20	5.81	35.70	93.44	91.75	74.00	-17.75	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.

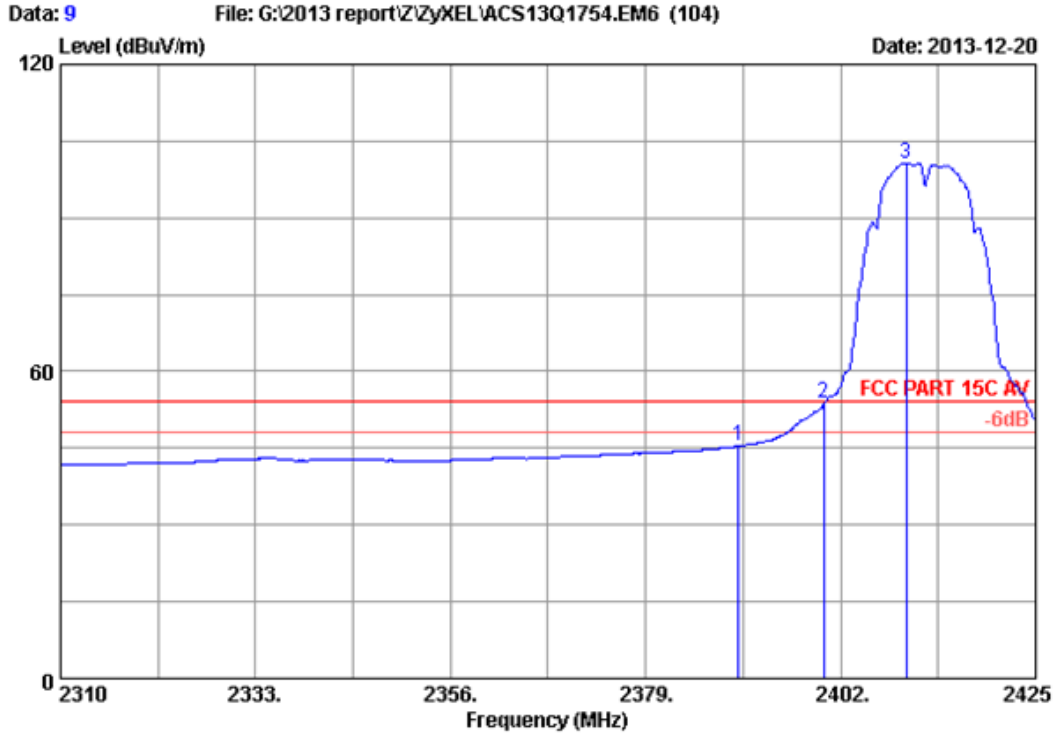


Site no. : 3m Chamber Data no. : 8  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N300 4-port USB Ethernet Gateway  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11b CH1 2412MHz Tx Mode  
 M/N : EMG1312-R10A

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBUV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Remark
1	2390.000	28.16	5.78	35.70	37.54	35.78	54.00	18.22	Average
2	2400.000	28.18	5.80	35.70	40.94	39.22	54.00	14.78	Average
3	2414.305	28.21	5.82	35.70	87.86	86.19	54.00	-32.19	Average

Remarks:

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



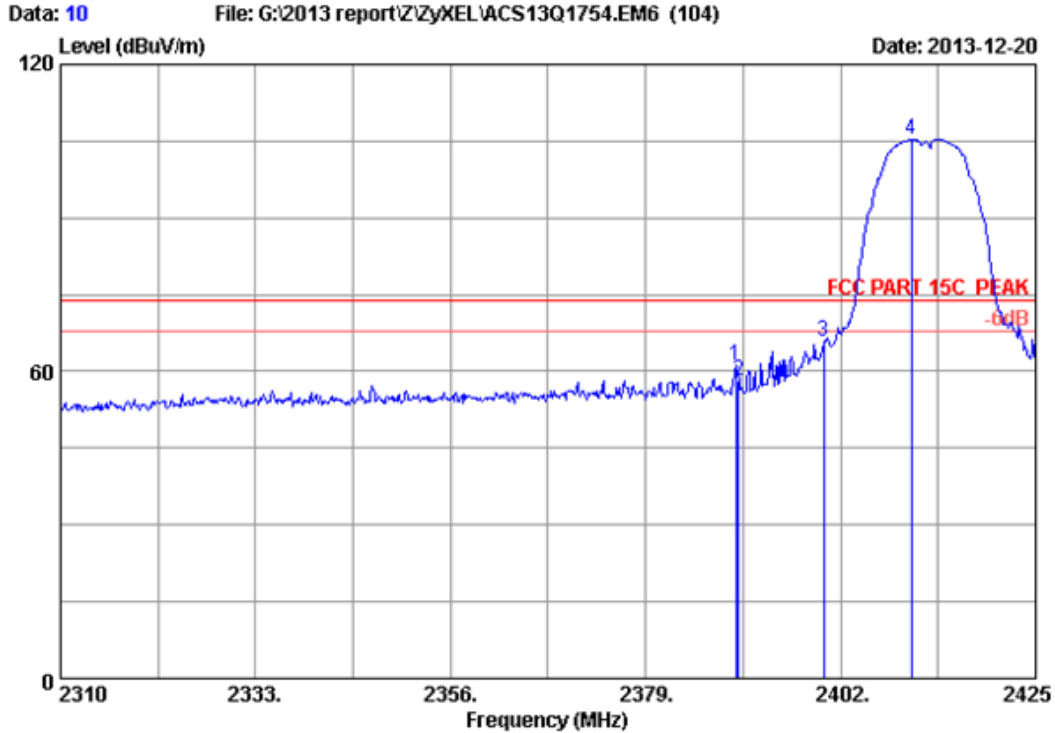
Site no. : 3m Chamber Data no. : 9  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N300 4-port USB Ethernet Gateway  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11b CH1 2412MHz Tx Mode  
 M/N : EMG1312-R10A

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.000	28.16	5.78	35.70	47.17	45.41	54.00	8.59	Average
2	2400.000	28.18	5.80	35.70	55.43	53.71	54.00	0.29	Average
3	2409.705	28.20	5.81	35.70	102.40	100.71	54.00	-46.71	Average

Remarks:

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



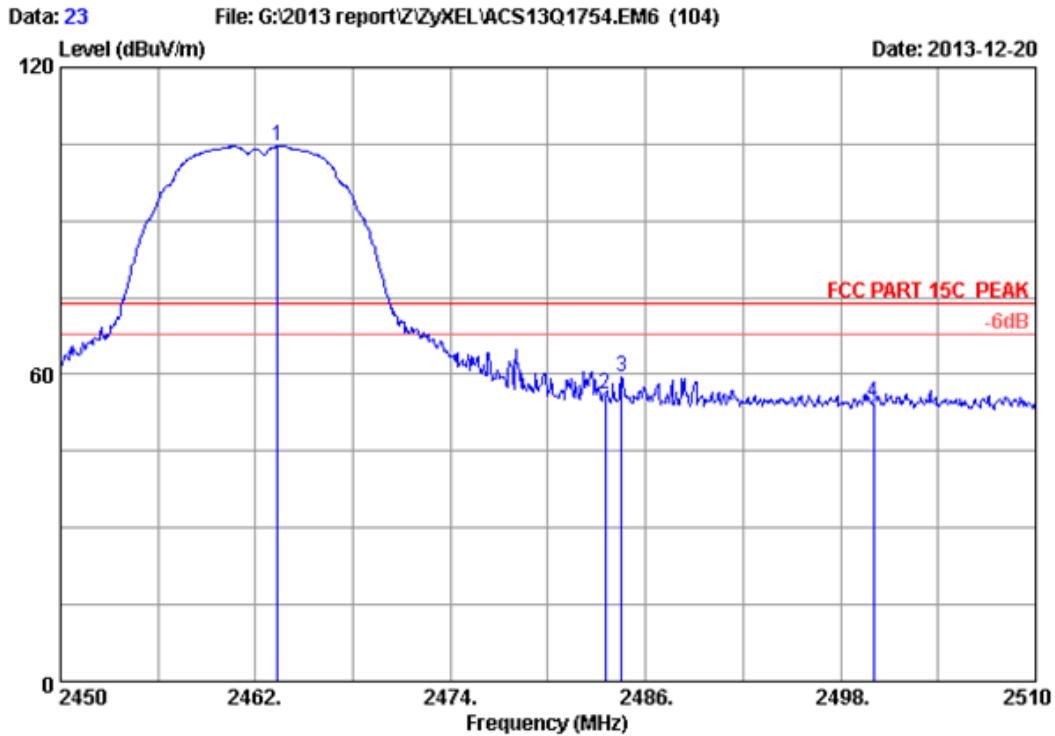


Site no. : 3m Chamber Data no. : 10  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N300 4-port USB Ethernet Gateway  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11b CH1 2412MHz Tx Mode  
 M/N : EMG1312-R10A

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBUV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Remark
1	2389.695	28.16	5.78	35.70	62.90	61.14	74.00	12.86	Peak
2	2390.000	28.16	5.78	35.70	59.93	58.17	74.00	15.83	Peak
3	2400.000	28.18	5.80	35.70	67.56	65.84	74.00	8.16	Peak
4	2410.395	28.20	5.81	35.70	107.09	105.40	74.00	-31.40	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.

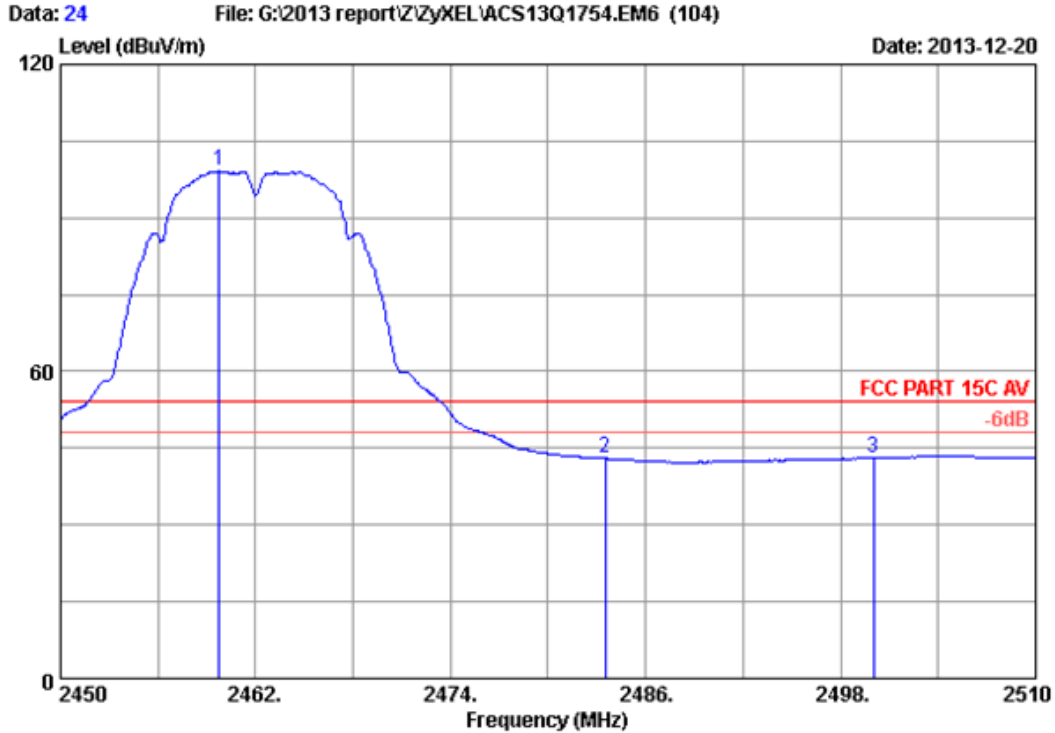


Site no. : 3m Chamber Data no. : 23  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N300 4-port USB Ethernet Gateway  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11b CH11 2462MHz Tx Mode  
 M/N : EMG1312-R10A

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2463.380	28.32	5.89	35.70	106.04	104.55	74.00	-30.55	Peak
2	2483.500	28.36	5.92	35.70	57.43	56.01	74.00	17.99	Peak
3	2484.500	28.37	5.92	35.70	60.90	59.49	74.00	14.51	Peak
4	2500.000	28.40	5.94	35.70	55.86	54.50	74.00	19.50	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.

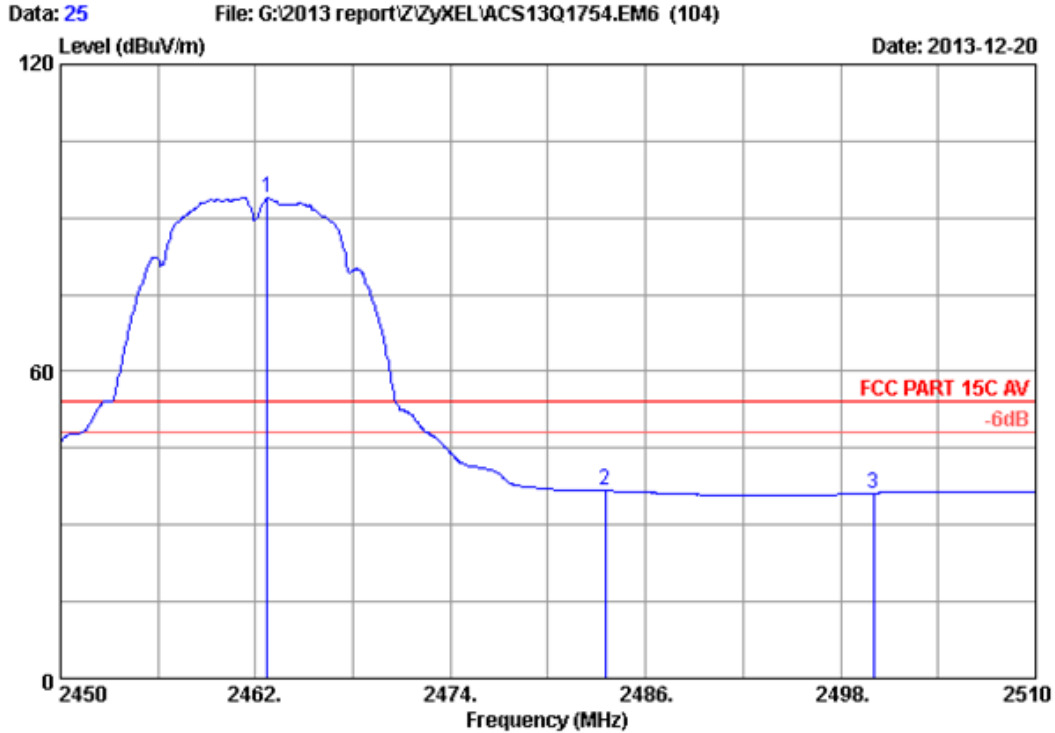


Site no. : 3m Chamber Data no. : 24  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N300 4-port USB Ethernet Gateway  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11b CH11 2462MHz Tx Mode  
 M/N : EMG1312-R10A

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2459.780	28.31	5.88	35.70	100.63	99.12	54.00	-45.12	Average
2	2483.500	28.36	5.92	35.70	44.41	42.99	54.00	11.01	Average
3	2500.000	28.40	5.94	35.70	44.51	43.15	54.00	10.85	Average

Remarks:

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

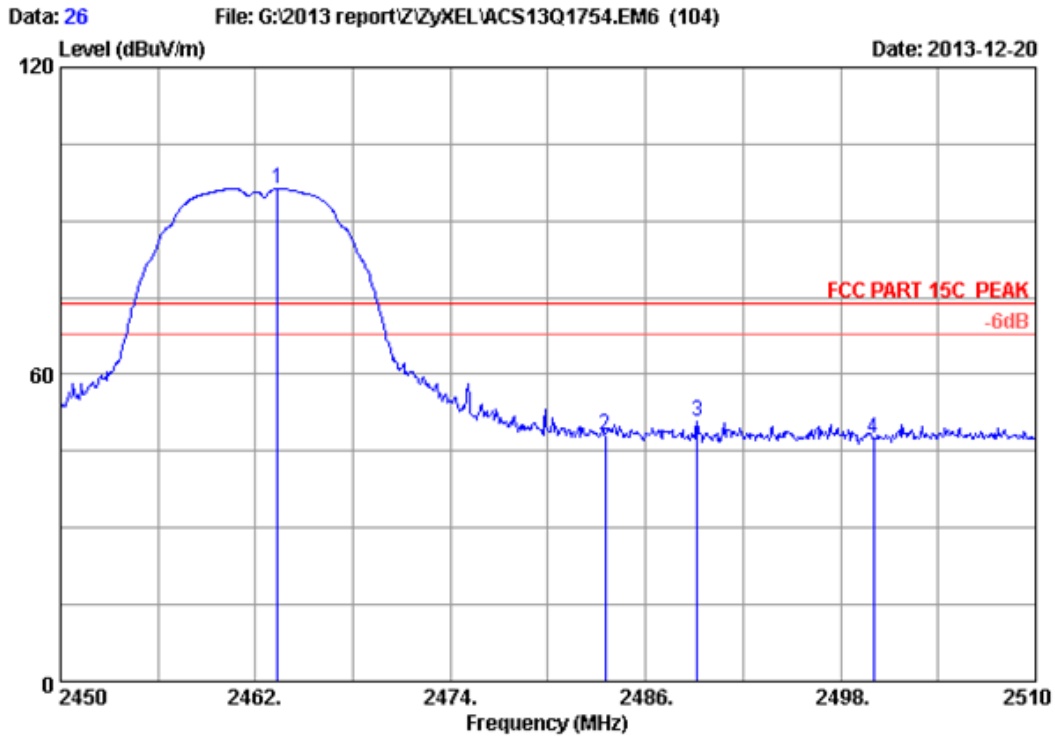


Site no. : 3m Chamber Data no. : 25  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N300 4-port USB Ethernet Gateway  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11b CH11 2462MHz Tx Mode  
 M/N : EMG1312-R10A

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2462.720	28.32	5.89	35.70	95.43	93.94	54.00	-39.94	Average
2	2483.500	28.36	5.92	35.70	38.04	36.62	54.00	17.38	Average
3	2500.000	28.40	5.94	35.70	37.60	36.24	54.00	17.76	Average

Remarks:

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

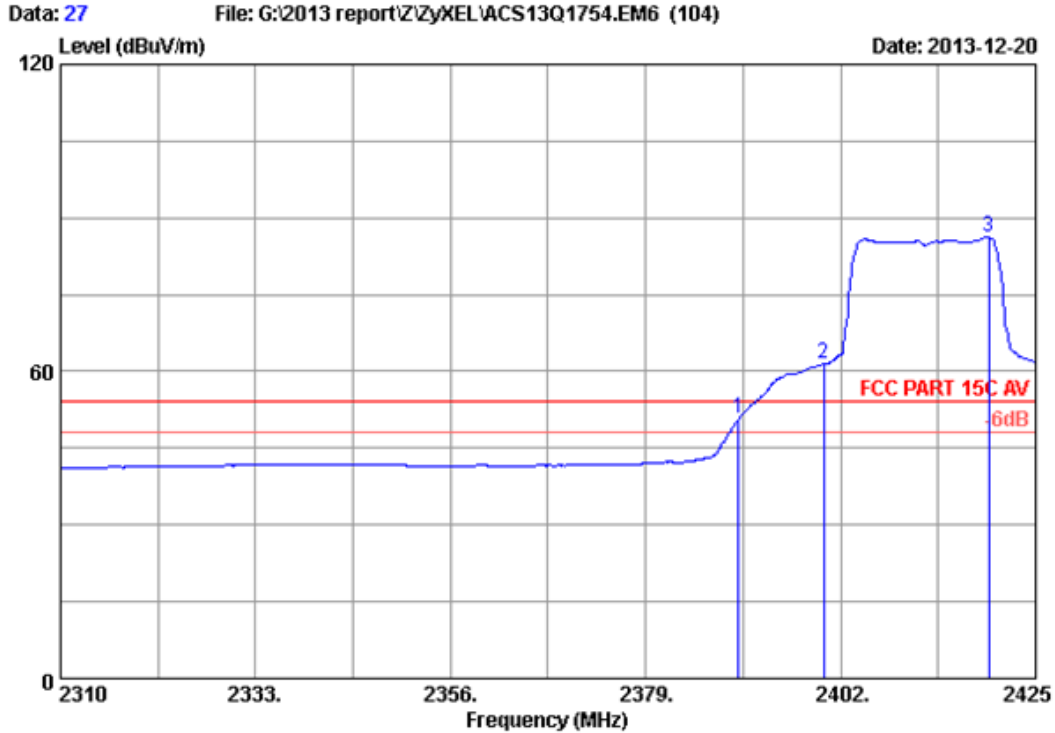


Site no. : 3m Chamber Data no. : 26  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N300 4-port USB Ethernet Gateway  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11b CH11 2462MHz Tx Mode  
 M/N : EMG1312-R10A

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBUV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Remark
1	2463.380	28.32	5.89	35.70	97.75	96.26	74.00	-22.26	Peak
2	2483.500	28.36	5.92	35.70	49.47	48.05	74.00	25.95	Peak
3	2489.180	28.38	5.93	35.70	52.05	50.66	74.00	23.34	Peak
4	2500.000	28.40	5.94	35.70	48.95	47.59	74.00	26.41	Peak

Remarks:

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

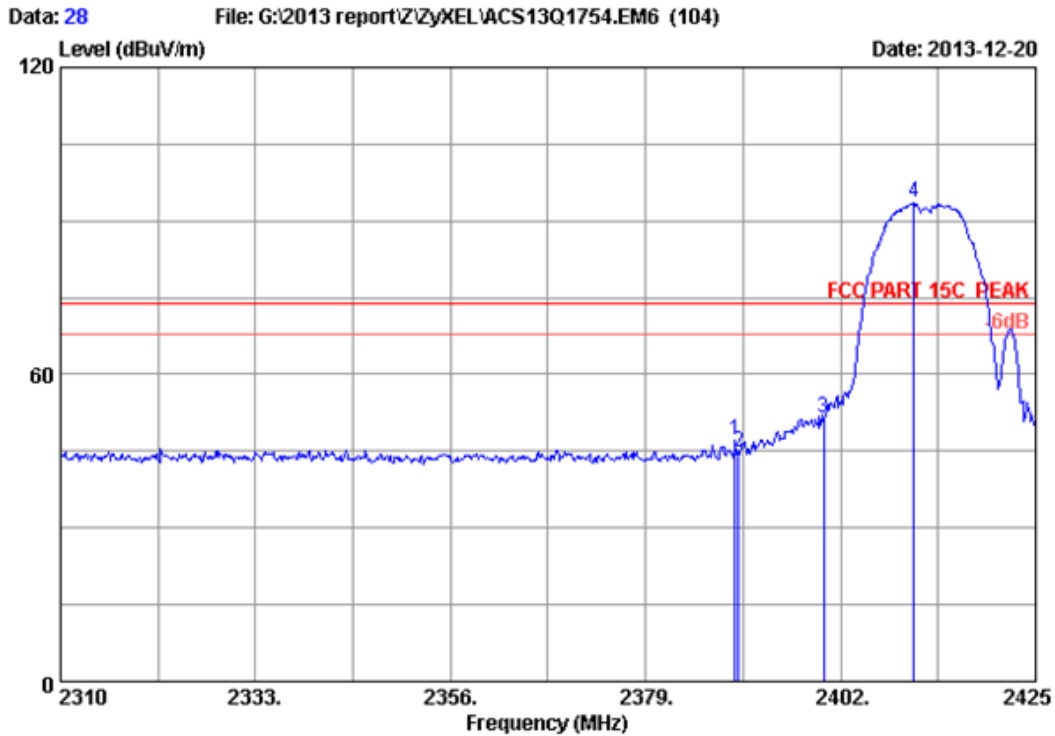


Site no. : 3m Chamber Data no. : 27  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N300 4-port USB Ethernet Gateway  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11g CH1 2412MHz Tx Mode  
 M/N : EMG1312-R10A

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.000	28.16	5.78	35.70	52.50	50.74	54.00	3.26	Average
2	2400.000	28.18	5.80	35.70	63.19	61.47	54.00	-7.47	Average
3	2419.480	28.22	5.83	35.70	87.86	86.21	54.00	-32.21	Average

Remarks:

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

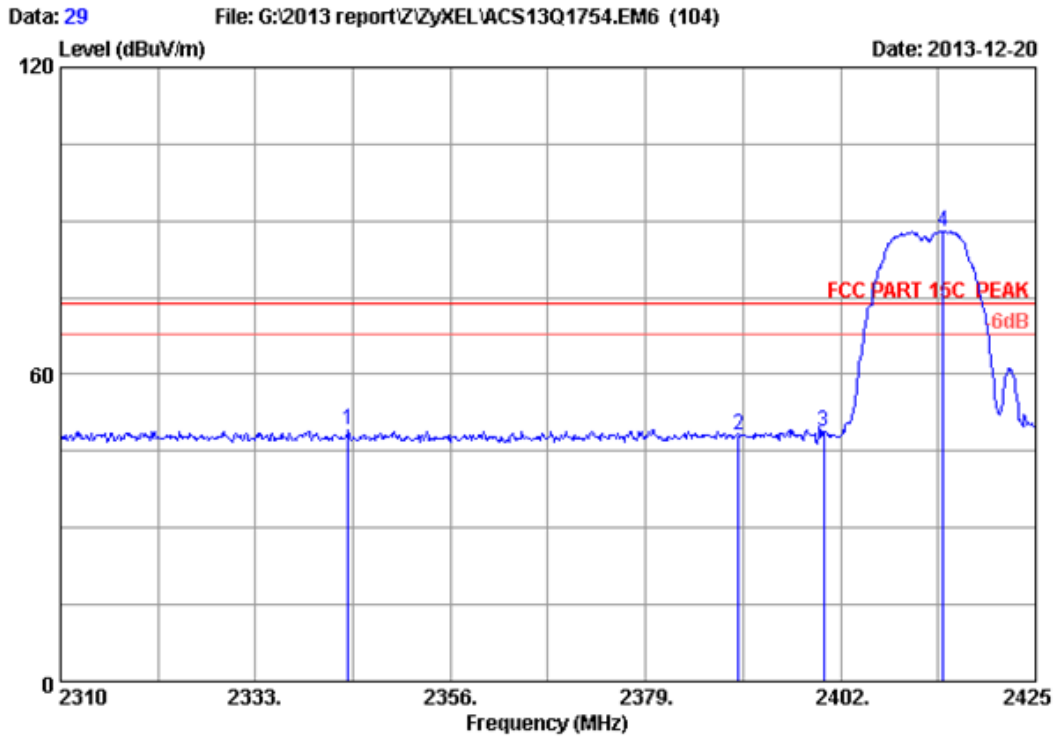


Site no. : 3m Chamber Data no. : 28  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N300 4-port USB Ethernet Gateway  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11g CH1 2412MHz Tx Mode  
 M/N : EMG1312-R10A

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2389.580	28.16	5.78	35.70	48.93	47.17	74.00	26.83	Peak
2	2390.000	28.16	5.78	35.70	46.48	44.72	74.00	29.28	Peak
3	2400.000	28.18	5.80	35.70	53.26	51.54	74.00	22.46	Peak
4	2410.625	28.20	5.81	35.70	95.13	93.44	74.00	-19.44	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.



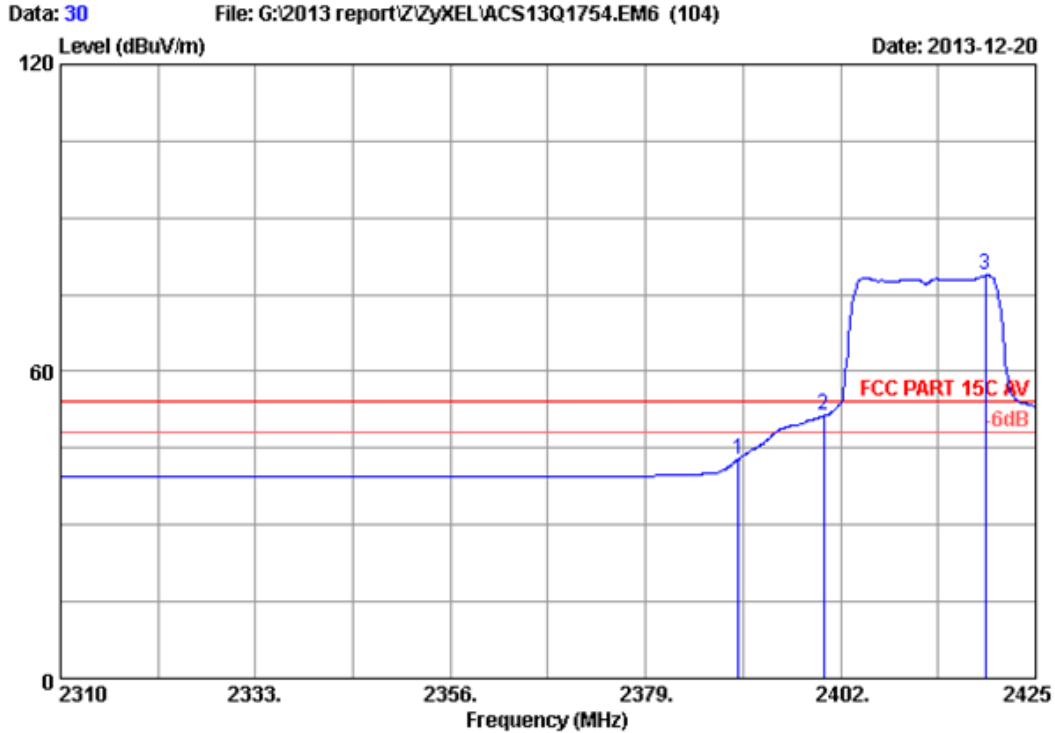
Site no. : 3m Chamber Data no. : 29  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N300 4-port USB Ethernet Gateway  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11g CH1 2412MHz Tx Mode  
 M/N : EMG1312-R10A

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBUV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Remark
1	2343.925	28.06	5.72	35.70	51.06	49.14	74.00	24.86	Peak
2	2390.000	28.16	5.78	35.70	49.98	48.22	74.00	25.78	Peak
3	2400.000	28.18	5.80	35.70	50.36	48.64	74.00	25.36	Peak
4	2414.075	28.21	5.82	35.70	89.60	87.93	74.00	-13.93	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.



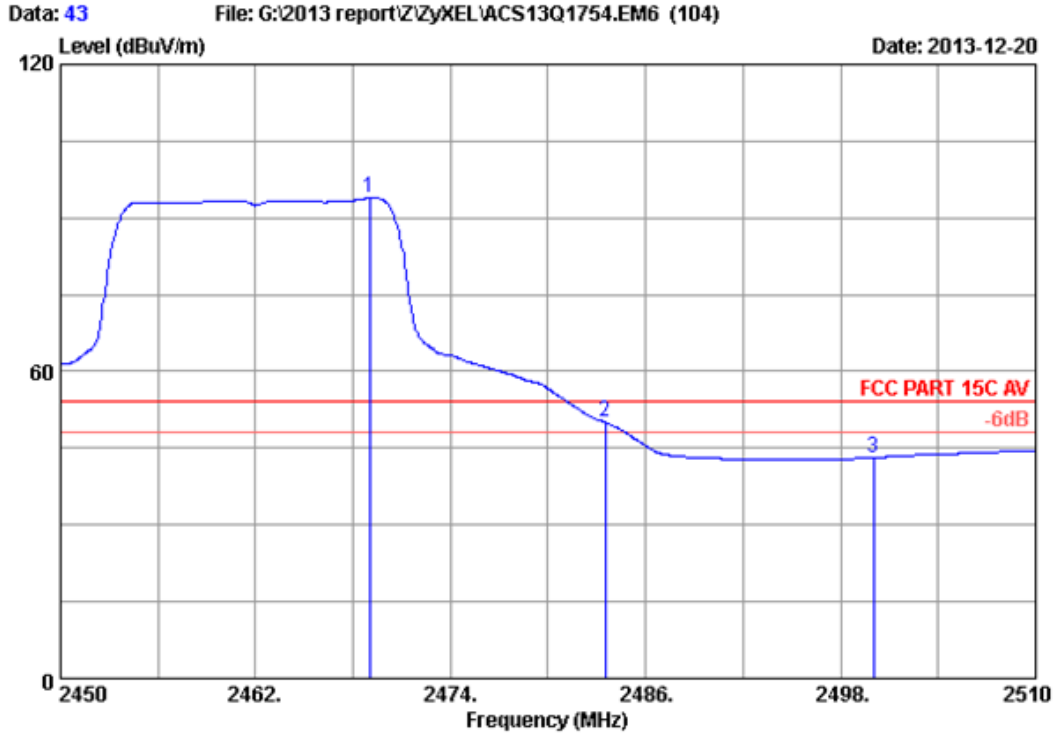


Site no. : 3m Chamber Data no. : 30  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N300 4-port USB Ethernet Gateway  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11g CH1 2412MHz Tx Mode  
 M/N : EMG1312-R10A

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBUV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Remark
1	2390.000	28.16	5.78	35.70	44.68	42.92	54.00	11.08	Average
2	2400.000	28.18	5.80	35.70	53.12	51.40	54.00	2.60	Average
3	2419.020	28.22	5.82	35.70	80.48	78.82	54.00	-24.82	Average

Remarks:

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

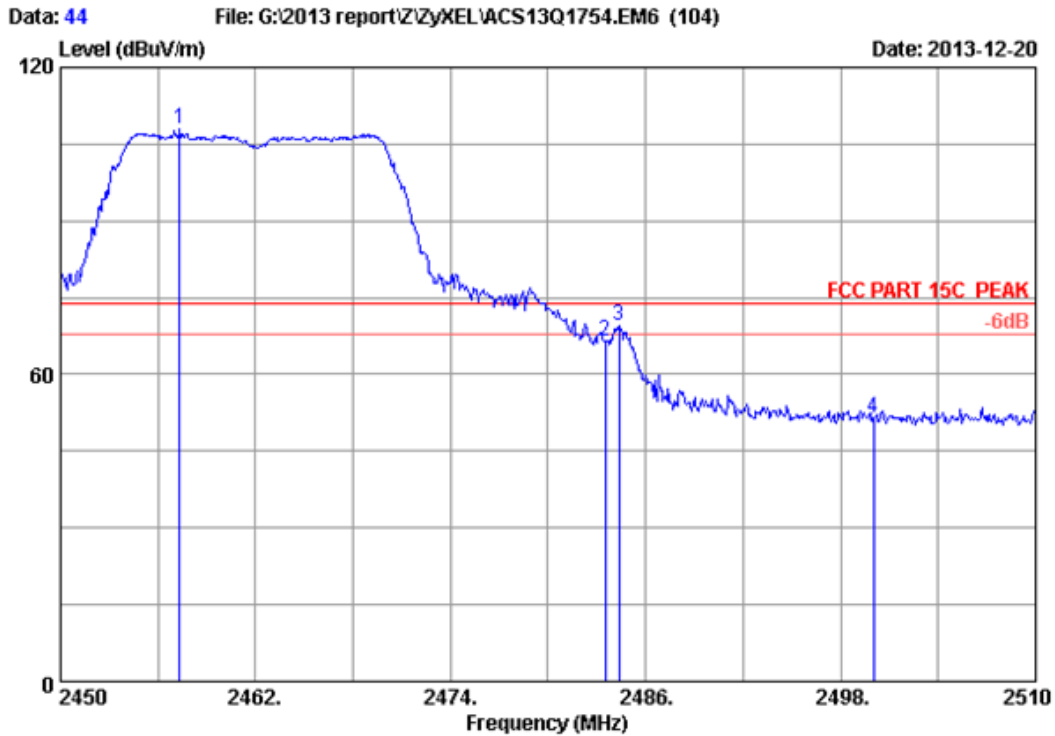


Site no. : 3m Chamber Data no. : 43  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N300 4-port USB Ethernet Gateway  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11g CH11 2462MHz Tx Mode  
 M/N : EMG1312-R10A

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2469.020	28.33	5.90	35.70	95.36	93.89	54.00	-39.89	Average
2	2483.500	28.36	5.92	35.70	51.56	50.14	54.00	3.86	Average
3	2500.000	28.40	5.94	35.70	44.56	43.20	54.00	10.80	Average

Remarks:

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

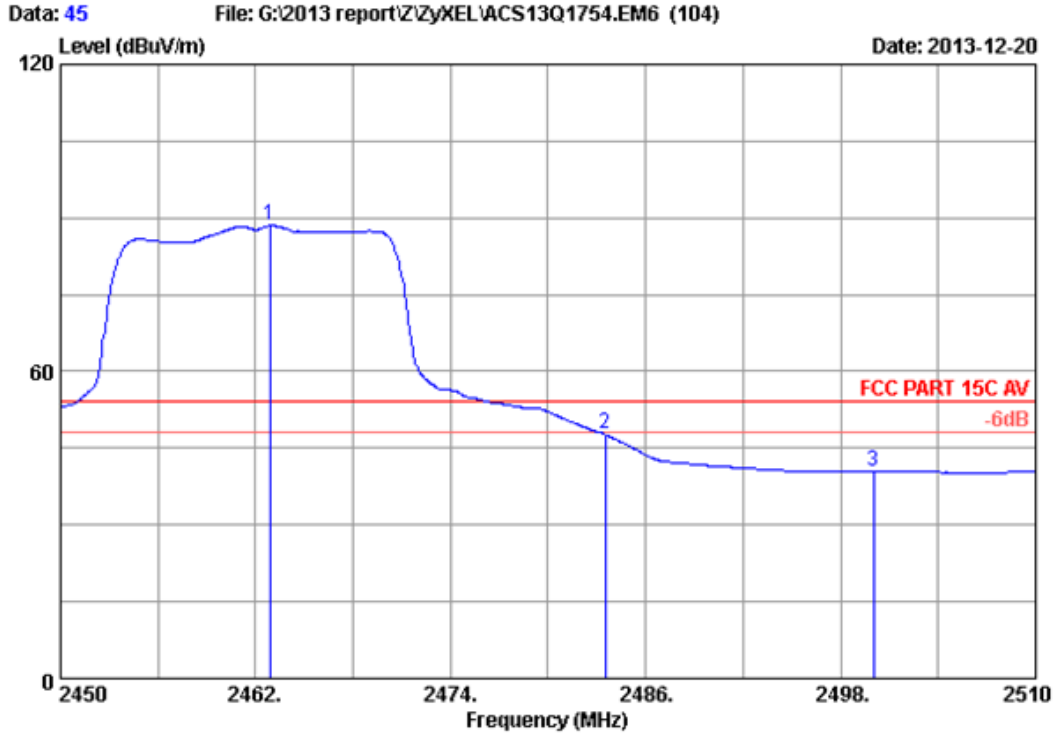


Site no. : 3m Chamber Data no. : 44  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N300 4-port USB Ethernet Gateway  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11g CH11 2462MHz Tx Mode  
 M/N : EMG1312-R10A

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2457.320	28.31	5.88	35.70	109.43	107.92	74.00	-33.92	Peak
2	2483.500	28.36	5.92	35.70	67.86	66.44	74.00	7.56	Peak
3	2484.380	28.37	5.92	35.70	70.88	69.47	74.00	4.53	Peak
4	2500.000	28.40	5.94	35.70	52.70	51.34	74.00	22.66	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.

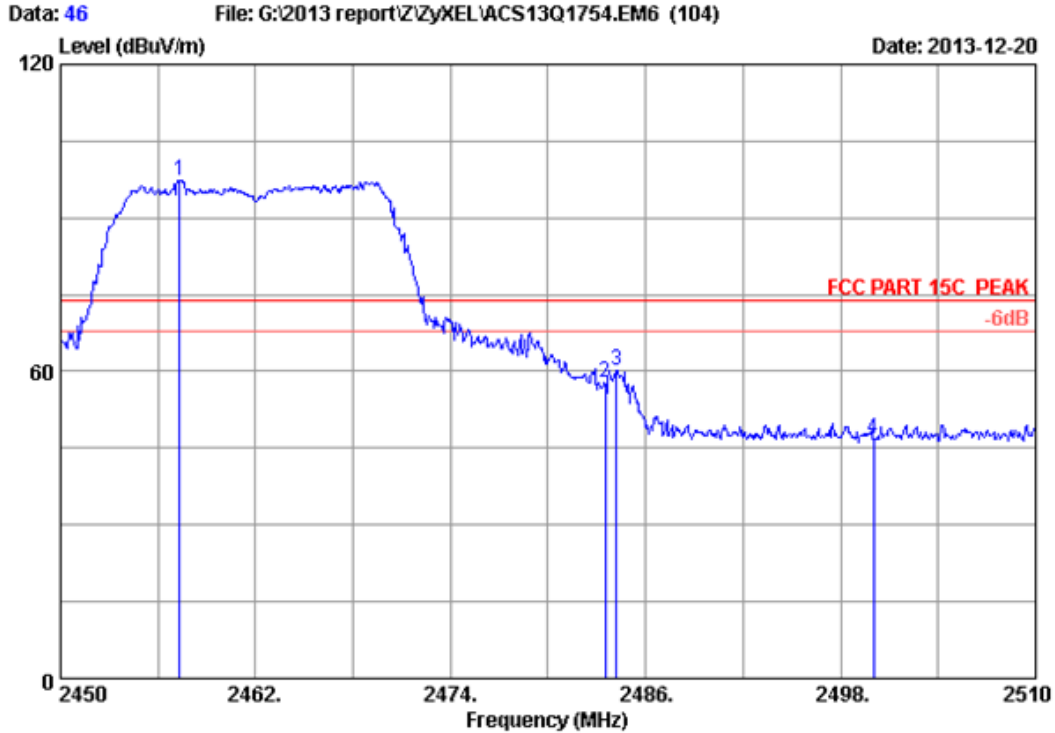


Site no. : 3m Chamber Data no. : 45  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N300 4-port USB Ethernet Gateway  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11g CH11 2462MHz Tx Mode  
 M/N : EMG1312-R10A

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBUV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Remark
1	2462.900	28.32	5.89	35.70	89.95	88.46	54.00	-34.46	Average
2	2483.500	28.36	5.92	35.70	49.07	47.65	54.00	6.35	Average
3	2500.000	28.40	5.94	35.70	41.75	40.39	54.00	13.61	Average

Remarks:

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

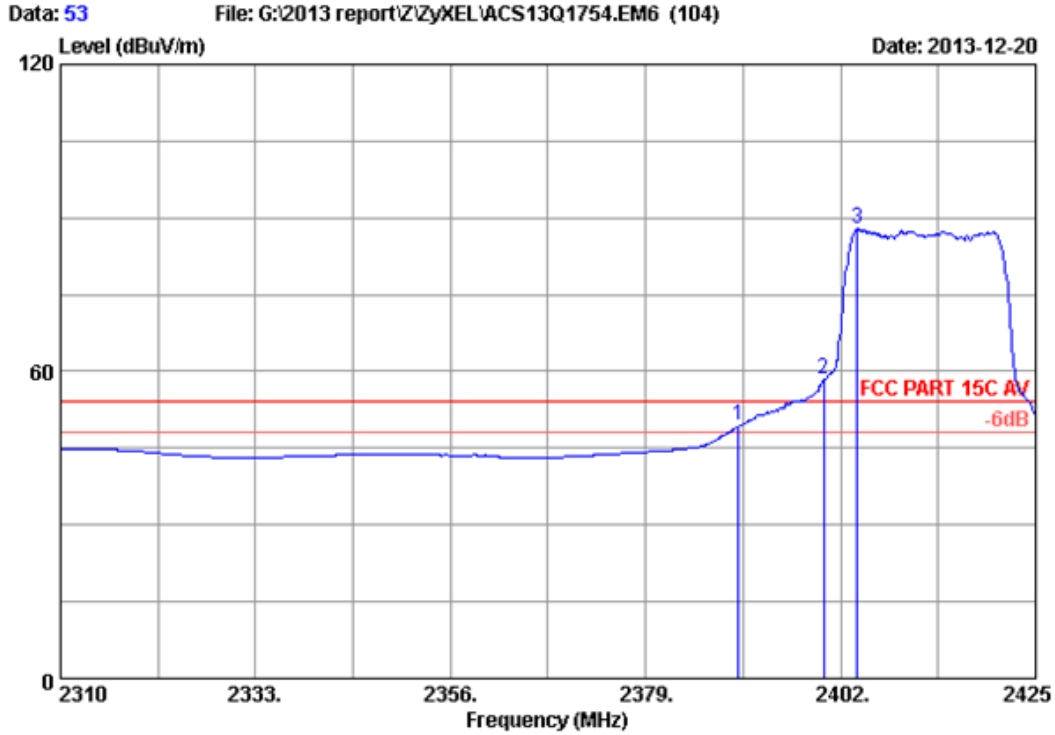


Site no. : 3m Chamber Data no. : 46  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N300 4-port USB Ethernet Gateway  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11g CH11 2462MHz Tx Mode  
 M/N : EMG1312-R10A

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2457.320	28.31	5.88	35.70	98.87	97.36	74.00	-23.36	Peak
2	2483.500	28.36	5.92	35.70	59.36	57.94	74.00	16.06	Peak
3	2484.200	28.37	5.92	35.70	61.67	60.26	74.00	13.74	Peak
4	2500.000	28.40	5.94	35.70	48.26	46.90	74.00	27.10	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.

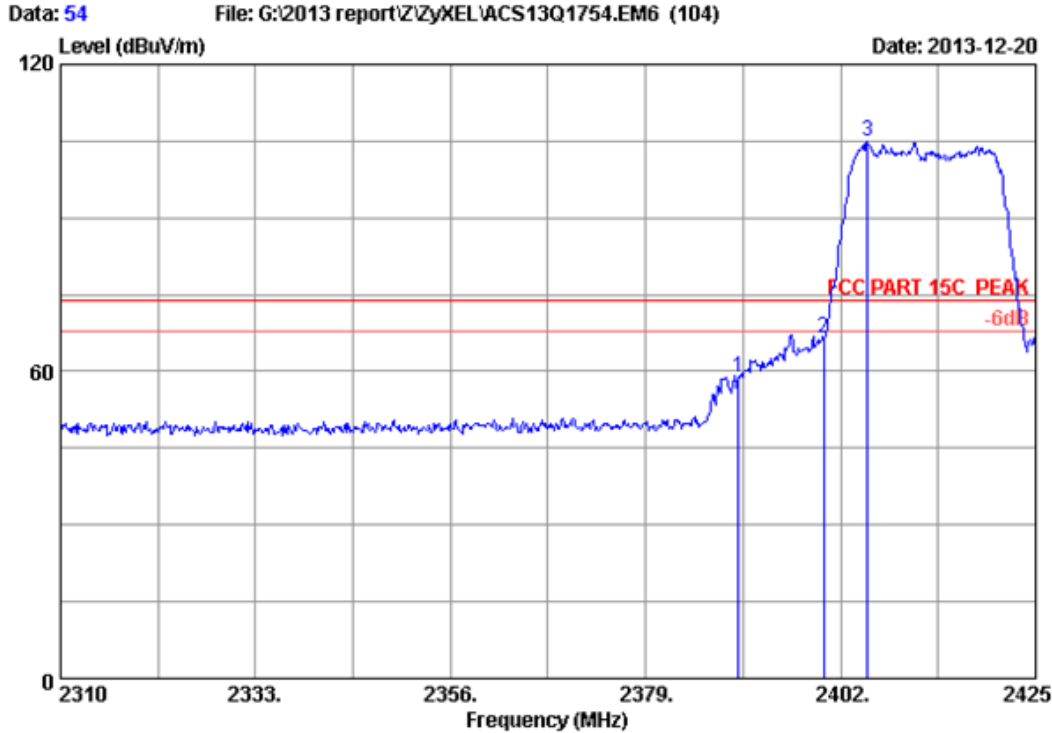


Site no. : 3m Chamber Data no. : 53  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N300 4-port USB Ethernet Gateway  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11n HT20 CH1 2412MHz Tx Mode  
 M/N : EMG1312-R10A

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.000	28.16	5.78	35.70	51.08	49.32	54.00	4.68	Average
2	2400.000	28.18	5.80	35.70	60.07	58.35	54.00	-4.35	Average
3	2403.955	28.19	5.80	35.70	89.55	87.84	54.00	-33.84	Average

Remarks:

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

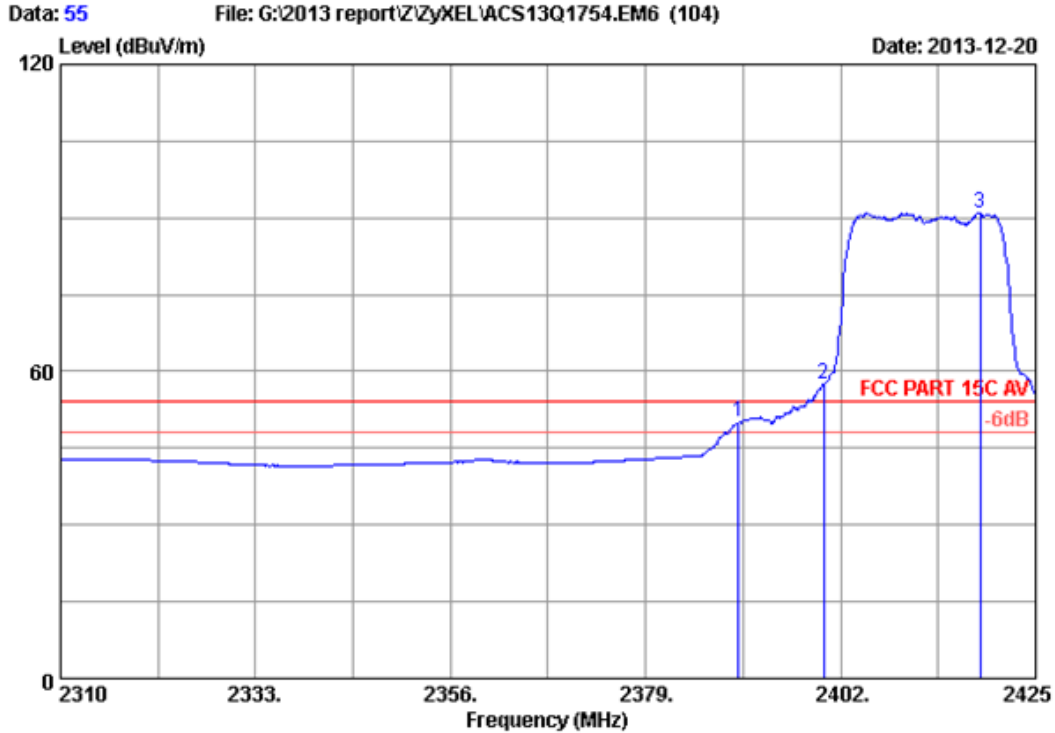


Site no. : 3m Chamber Data no. : 54  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N300 4-port USB Ethernet Gateway  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11n HT20 CH1 2412MHz Tx Mode  
 M/N : EMG1312-R10A

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBUV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Remark
1	2390.000	28.16	5.78	35.70	60.49	58.73	74.00	15.27	Peak
2	2400.000	28.18	5.80	35.70	68.22	66.50	74.00	7.50	Peak
3	2405.220	28.19	5.80	35.70	106.55	104.84	74.00	-30.84	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.



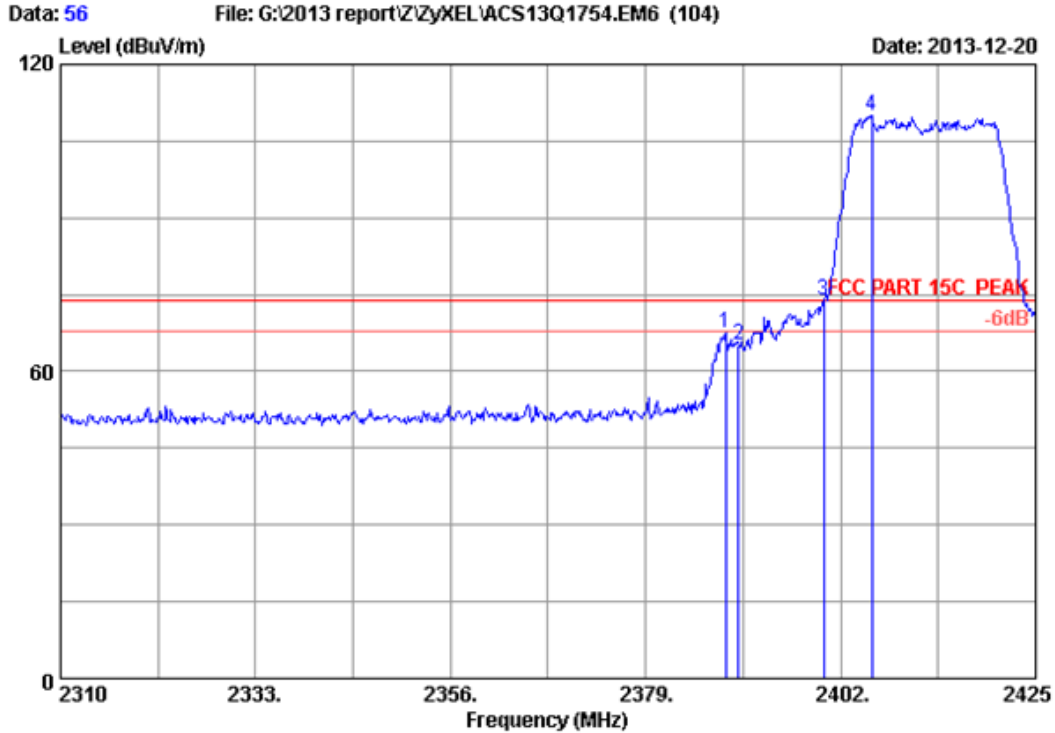
Site no. : 3m Chamber Data no. : 55  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N300 4-port USB Ethernet Gateway  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11n HT20 CH1 2412MHz Tx Mode  
 M/N : EMG1312-R10A

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.000	28.16	5.78	35.70	51.76	50.00	54.00	4.00	Average
2	2400.000	28.18	5.80	35.70	59.28	57.56	54.00	-3.56	Average
3	2418.445	28.22	5.82	35.70	92.65	90.99	54.00	-36.99	Average

Remarks:

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



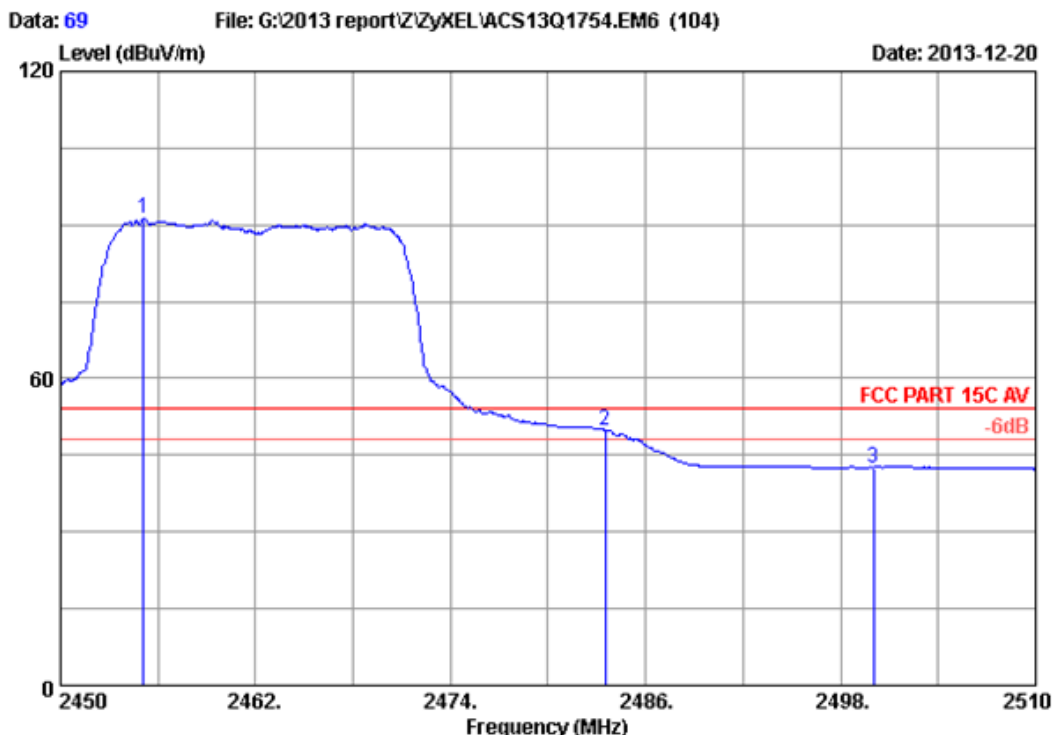


Site no. : 3m Chamber Data no. : 56  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N300 4-port USB Ethernet Gateway  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11n HT20 CH1 2412MHz Tx Mode  
 M/N : EMG1312-R10A

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBUV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Remark
1	2388.430	28.15	5.78	35.70	69.41	67.64	74.00	6.36	Peak
2	2390.000	28.16	5.78	35.70	67.09	65.33	74.00	8.67	Peak
3	2400.000	28.18	5.80	35.70	75.69	73.97	74.00	0.03	Peak
4	2405.680	28.19	5.81	35.70	111.63	109.93	74.00	-35.93	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.

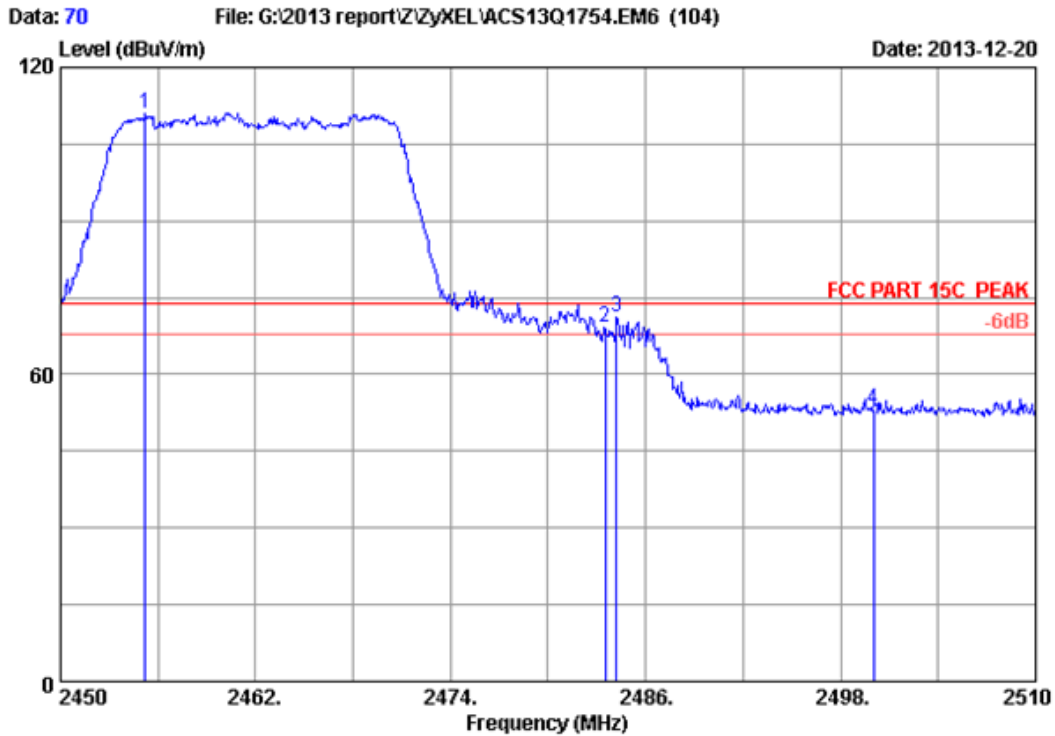


Site no. : 3m Chamber Data no. : 69  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N300 4-port USB Ethernet Gateway  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11n HT20 CH11 2462MHz Tx Mode  
 M/N : EMG1312-R10A

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2455.100	28.30	5.88	35.70	92.90	91.38	54.00	-37.38	Average
2	2483.500	28.36	5.92	35.70	51.09	49.67	54.00	4.33	Average
3	2500.000	28.40	5.94	35.70	43.98	42.62	54.00	11.38	Average

Remarks:

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

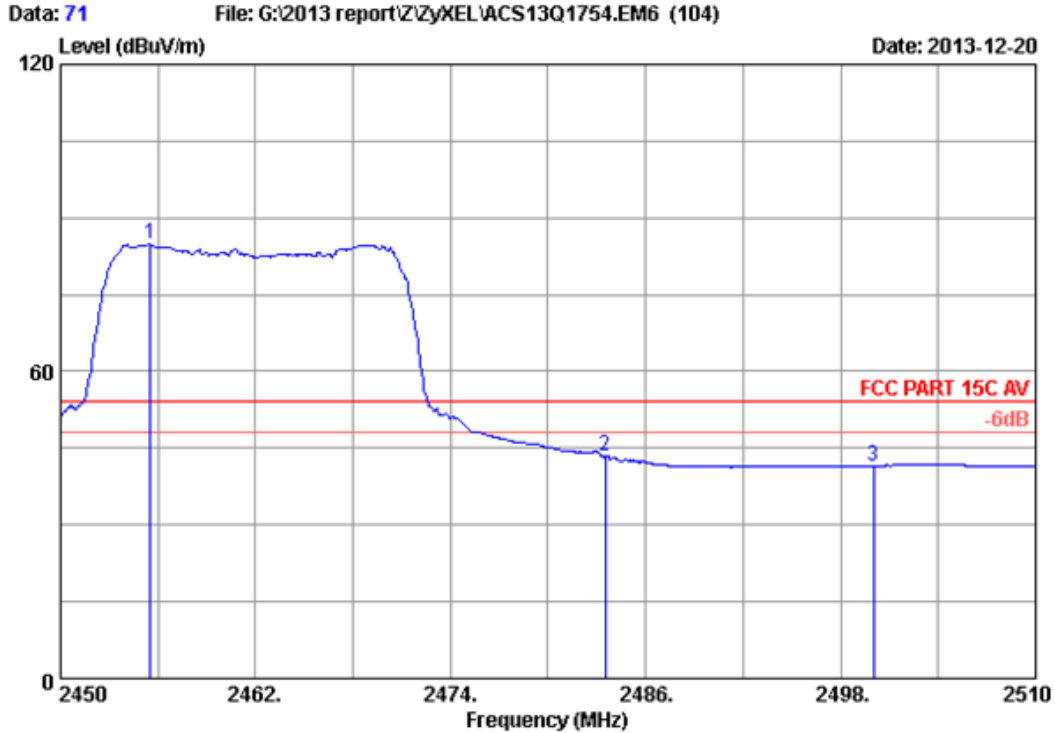


Site no. : 3m Chamber Data no. : 70  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N300 4-port USB Ethernet Gateway  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11n HT20 CH11 2462MHz Tx Mode  
 M/N : EMG1312-R10A

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2455.220	28.30	5.88	35.70	112.47	110.95	74.00	-36.95	Peak
2	2483.500	28.36	5.92	35.70	70.47	69.05	74.00	4.95	Peak
3	2484.200	28.37	5.92	35.70	72.48	71.07	74.00	2.93	Peak
4	2500.000	28.40	5.94	35.70	54.65	53.29	74.00	20.71	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.

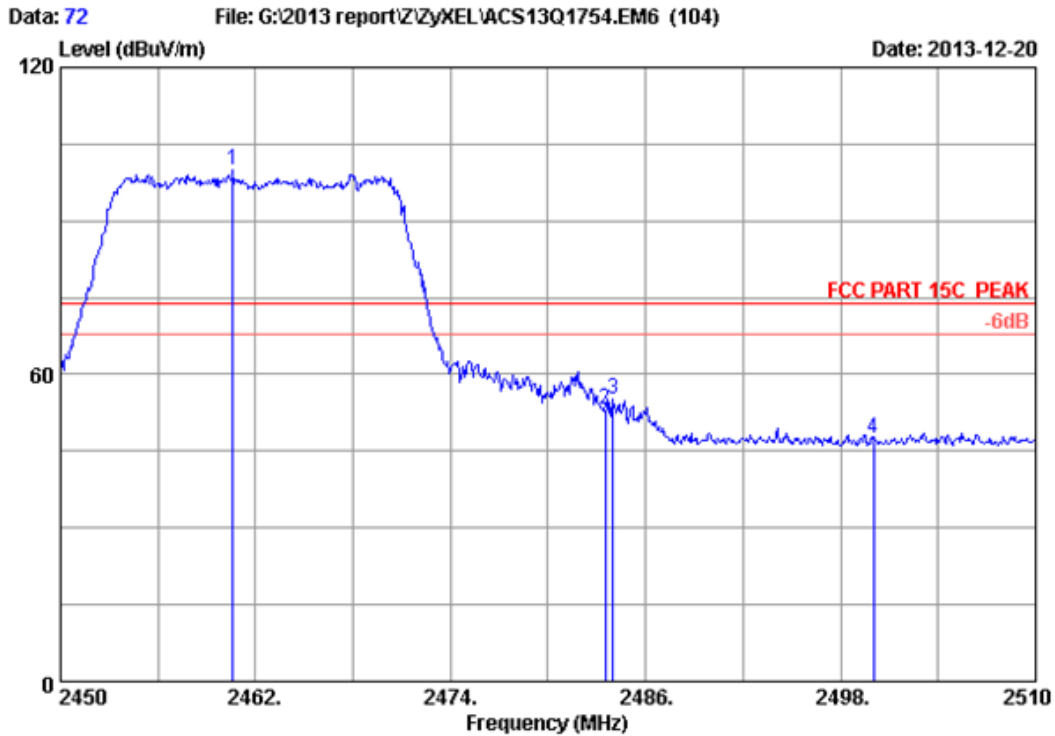


Site no. : 3m Chamber Data no. : 71  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N300 4-port USB Ethernet Gateway  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11n HT20 CH11 2462MHz Tx Mode  
 M/N : EMG1312-R10A

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBUV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Remark
1	2455.520	28.30	5.88	35.70	86.34	84.82	54.00	-30.82	Average
2	2483.500	28.36	5.92	35.70	44.86	43.44	54.00	10.56	Average
3	2500.000	28.40	5.94	35.70	42.89	41.53	54.00	12.47	Average

Remarks:

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

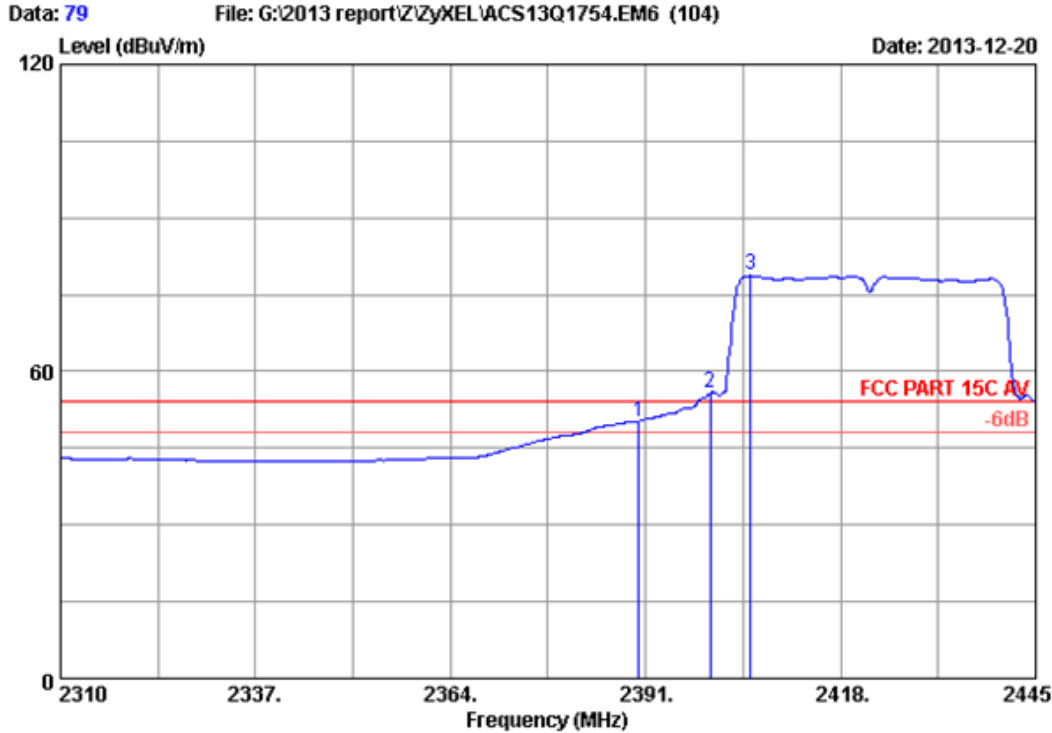


Site no. : 3m Chamber Data no. : 72  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N300 4-port USB Ethernet Gateway  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11n HT20 CH11 2462MHz Tx Mode  
 M/N : EMG1312-R10A

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2460.620	28.31	5.89	35.70	101.54	100.04	74.00	-26.04	Peak
2	2483.500	28.36	5.92	35.70	54.58	53.16	74.00	20.84	Peak
3	2484.020	28.36	5.92	35.70	56.70	55.28	74.00	18.72	Peak
4	2500.000	28.40	5.94	35.70	48.90	47.54	74.00	26.46	Peak

Remarks:

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

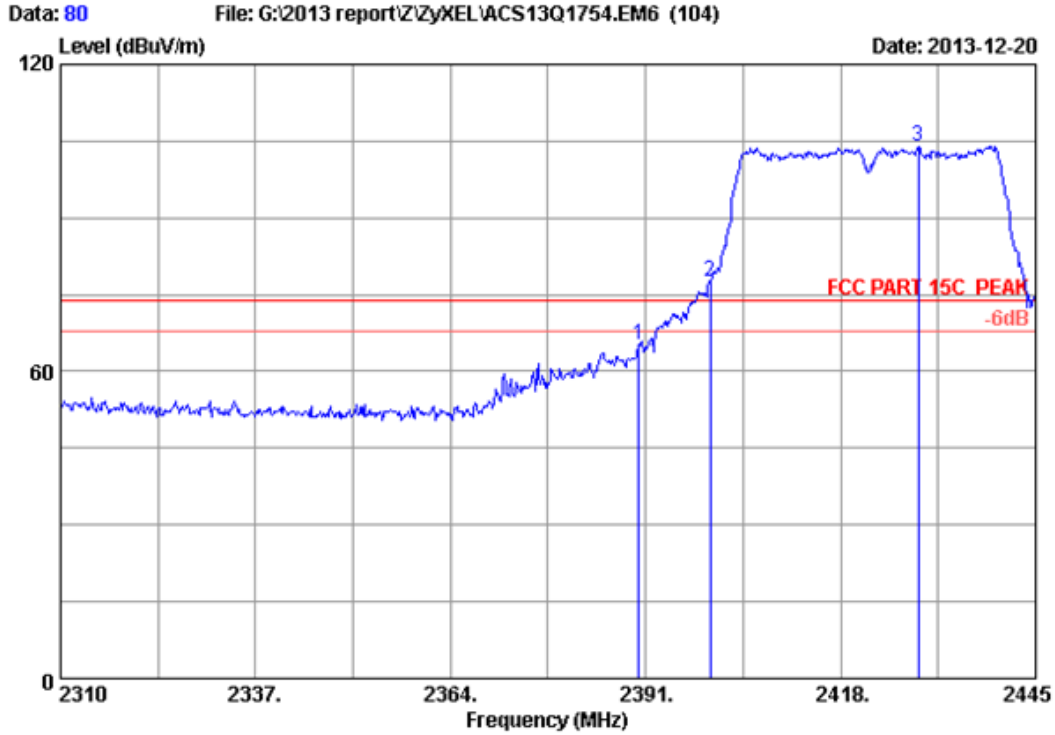


Site no. : 3m Chamber Data no. : 79  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N300 4-port USB Ethernet Gateway  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11n HT40 CH3 2422MHz Tx Mode  
 M/N : EMG1312-R10A

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBUV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Remark
1	2390.000	28.16	5.78	35.70	52.03	50.27	54.00	3.73	Average
2	2400.000	28.18	5.80	35.70	57.60	55.88	54.00	-1.88	Average
3	2405.580	28.19	5.81	35.70	80.43	78.73	54.00	-24.73	Average

Remarks:

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

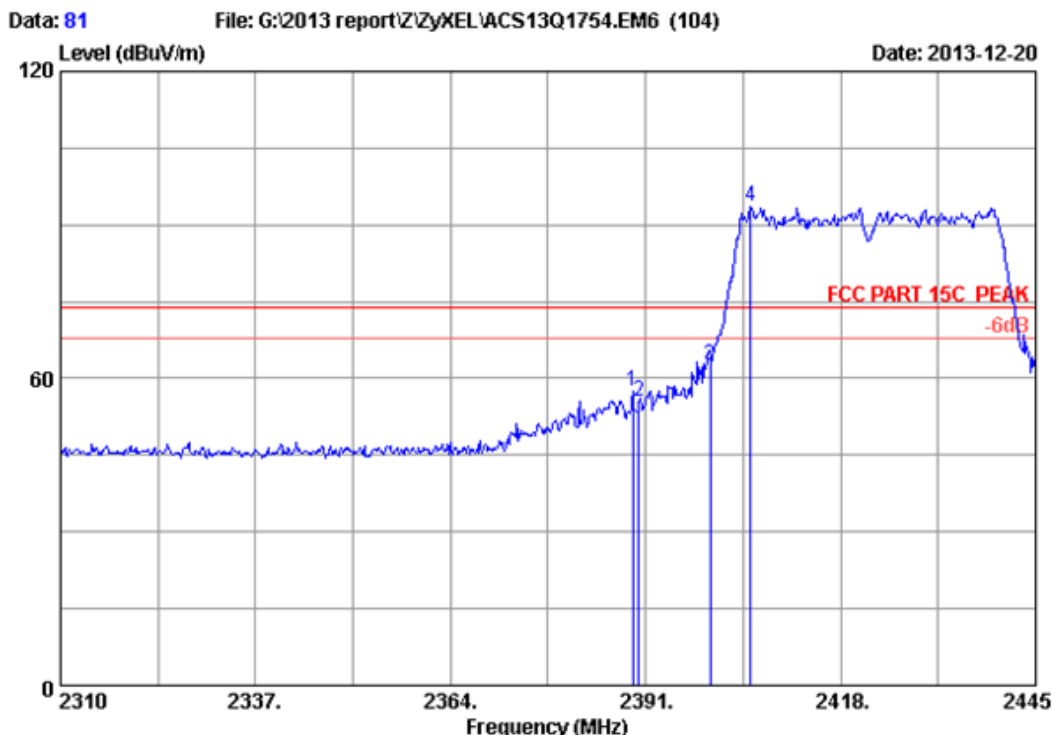


Site no. : 3m Chamber Data no. : 80  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N300 4-port USB Ethernet Gateway  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11n HT40 CH3 2422MHz Tx Mode  
 M/N : EMG1312-R10A

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBUV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Remark
1	2390.000	28.16	5.78	35.70	66.88	65.12	74.00	8.88	Peak
2	2400.000	28.18	5.80	35.70	79.21	77.49	74.00	-3.49	Peak
3	2428.800	28.24	5.84	35.70	105.57	103.95	74.00	-29.95	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.



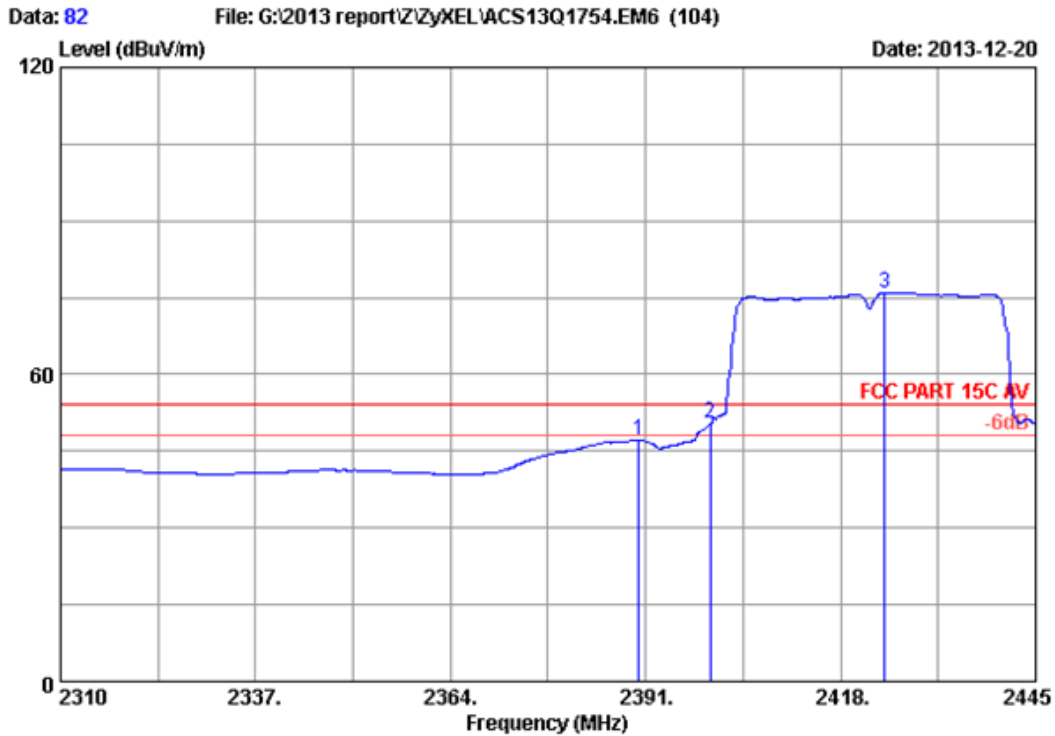
Site no. : 3m Chamber Data no. : 81  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N300 4-port USB Ethernet Gateway  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11n HT40 CH3 2422MHz Tx Mode  
 M/N : EMG1312-R10A

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2389.245	28.16	5.78	35.70	59.36	57.60	74.00	16.40	Peak
2	2390.000	28.16	5.78	35.70	57.16	55.40	74.00	18.60	Peak
3	2400.000	28.18	5.80	35.70	64.39	62.67	74.00	11.33	Peak
4	2405.580	28.19	5.81	35.70	95.30	93.60	74.00	-19.60	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.



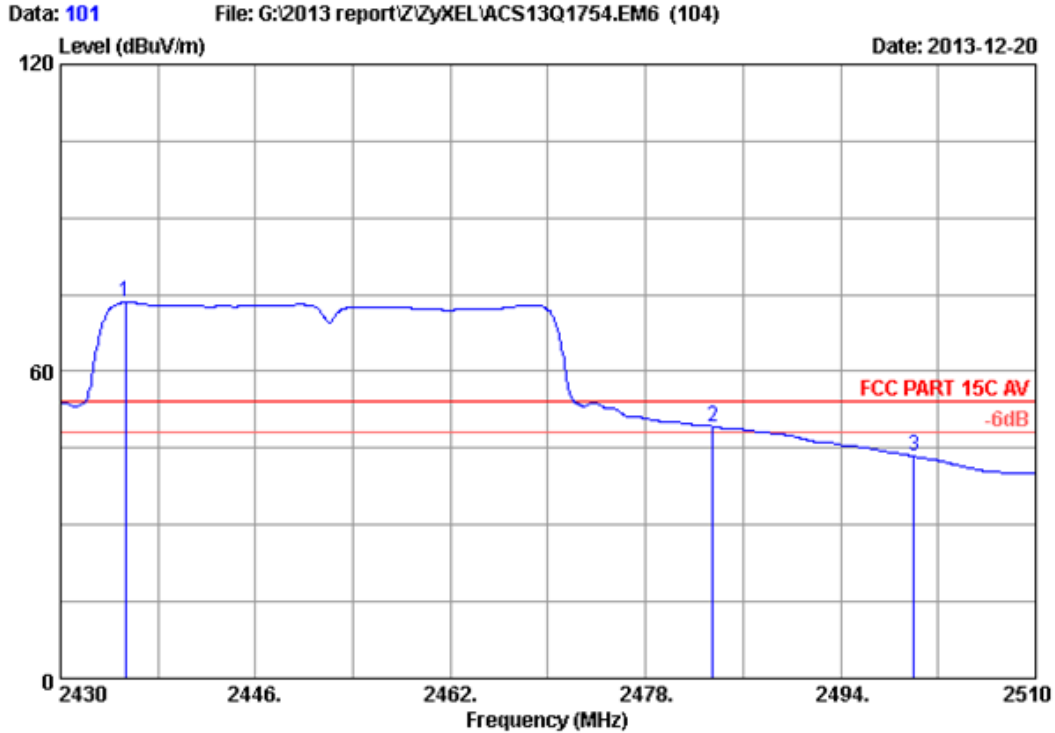


Site no. : 3m Chamber Data no. : 82  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N300 4-port USB Ethernet Gateway  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11n HT40 CH3 2422MHz Tx Mode  
 M/N : EMG1312-R10A

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.000	28.16	5.78	35.70	48.79	47.03	54.00	6.97	Average
2	2400.000	28.18	5.80	35.70	52.13	50.41	54.00	3.59	Average
3	2424.075	28.23	5.83	35.70	77.68	76.04	54.00	-22.04	Average

Remarks:

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

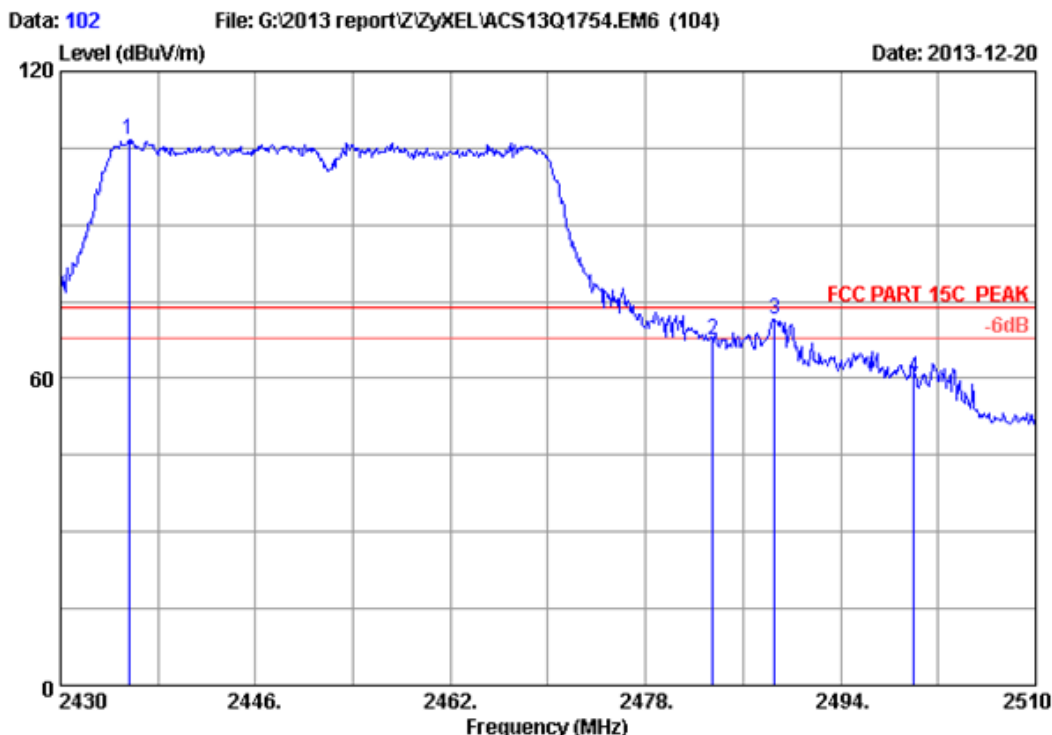


Site no. : 3m Chamber Data no. : 101  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N300 4-port USB Ethernet Gateway  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11n HT40 CH9 2452MHz Tx Mode  
 M/N : EMG1312-R10A

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2435.360	28.26	5.85	35.70	75.07	73.48	54.00	-19.48	Average
2	2483.500	28.36	5.92	35.70	50.67	49.25	54.00	4.75	Average
3	2500.000	28.40	5.94	35.70	44.78	43.42	54.00	10.58	Average

Remarks:

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

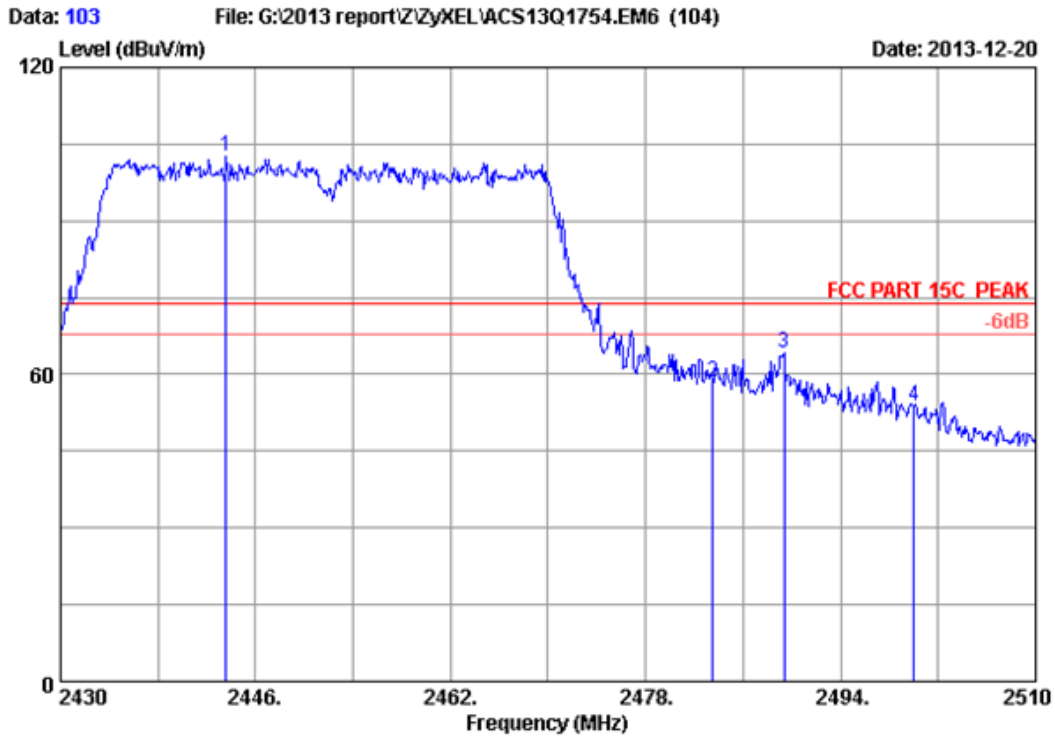


Site no. : 3m Chamber Data no. : 102  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N300 4-port USB Ethernet Gateway  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11n HT40 CH9 2452MHz Tx Mode  
 M/N : EMG1312-R10A

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBUV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Remark
1	2435.600	28.26	5.85	35.70	108.29	106.70	74.00	-32.70	Peak
2	2483.500	28.36	5.92	35.70	68.96	67.54	74.00	6.46	Peak
3	2488.560	28.37	5.93	35.70	72.89	71.49	74.00	2.51	Peak
4	2500.000	28.40	5.94	35.70	61.65	60.29	74.00	13.71	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.

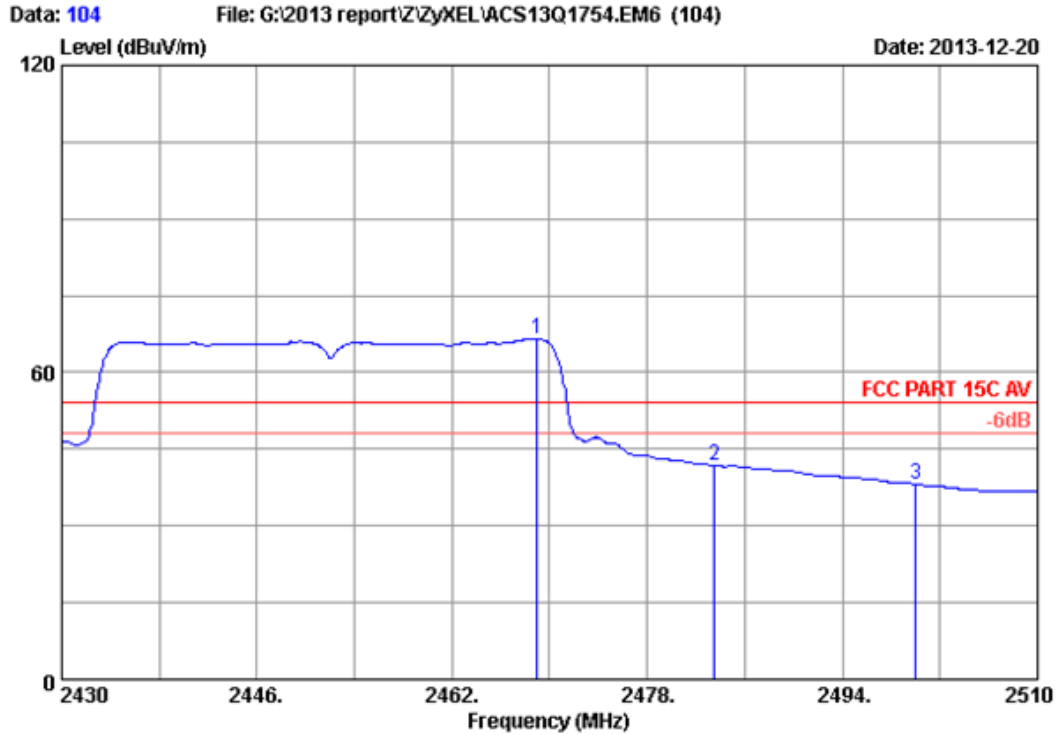


Site no. : 3m Chamber Data no. : 103  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N300 4-port USB Ethernet Gateway  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11n HT40 CH9 2452MHz Tx Mode  
 M/N : EMG1312-R10A

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBUV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Remark
1	2443.600	28.28	5.86	35.70	104.13	102.57	74.00	-28.57	Peak
2	2483.500	28.36	5.92	35.70	59.87	58.45	74.00	15.55	Peak
3	2489.360	28.38	5.93	35.70	65.64	64.25	74.00	9.75	Peak
4	2500.000	28.40	5.94	35.70	55.05	53.69	74.00	20.31	Peak

Remarks:

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



Site no. : 3m Chamber Data no. : 104  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N300 4-port USB Ethernet Gateway  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11n HT40 CH9 2452MHz Tx Mode  
 M/N : EMG1312-R10A

	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 2468.960	28.33	5.90	35.70	68.00	66.53	54.00	-12.53	Peak	
2 2483.500	28.36	5.92	35.70	43.23	41.81	54.00	12.19	Peak	
3 2500.000	28.40	5.94	35.70	39.49	38.13	54.00	15.87	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.

## 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, 13	1 Year
2.	Amp	HP	8449B	3008A08495	May.08, 13	1 Year
3.	Antenna	EMCO	3115	9510-4580	May.08, 13	1 Year
4.	HF Cable	Hubersuhner	Sucoflex104	-	May.08, 13	1 Year

### 7.2. Limit

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

### 7.3. Test Procedure

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

### 7.4. Test Results

EUT: Wireless N300 4-port USB Ethernet Gateway		
M/N: EMG1312-R10A		
Test date: 2013-12-29	Pressure: 101.2±1.0 kpa	Humidity: 50.8±3.0%
Tested by: Leo-Li	Test site: RF site	Temperature: 21.9±0.6 °C

Cable loss: 1 dB		Attenuator loss: 20 dB		
Test Mode	CH	6dB bandwidth ( MHz )		Limit (KHz)
		Chain0	Chain1	
11b	CH1	10.215	N/A	>500
	CH6	10.224	N/A	>500
	CH11	10.215	N/A	>500
11g	CH1	16.430	16.404	>500
	CH6	16.429	16.399	>500
	CH11	16.426	16.411	>500
11n HT20	CH1	17.636	17.631	>500
	CH6	17.597	17.640	>500
	CH11	17.636	17.597	>500
11n HT40	CH1	36.248	36.114	>500
	CH4	36.143	36.139	>500
	CH7	36.248	36.130	>500
Conclusion : PASS				

**ANT 0**

Test Mode: IEEE 802.11b TX

Test CH1: 2412MHz

Agilent
Freq/Channel

Ch Freq 2.412 GHz
Trig Free

Occupied Bandwidth

Center 2.412000000 GHz

Ref 21 dBm
Atten 10 dB

#Peak  
Log  
10  
dB/  
Offst  
21  
dB

Center 2.412 00 GHz  
#Res BW 300 kHz  
Span 30 MHz  
#VBW 1 MHz  
Sweep 1 ms (601 pts)

Occupied Bandwidth

14.8210 MHz

Occ BW % Pwr 99.00 %

x dB -6.00 dB

Transmit Freq Error 2.719 kHz

x dB Bandwidth 10.215 MHz

Copyright 2000-2005 Agilent Technologies

Center Freq 2.41200000 GHz

Start Freq 2.39700000 GHz

Stop Freq 2.42700000 GHz

CF Step 3.00000000 MHz
Auto Man

Freq Offset 0.00000000 Hz

Signal Track On Off

Test CH6: 2437MHz

Agilent
Freq/Channel

Ch Freq 2.437 GHz
Trig Free

Occupied Bandwidth

Center 2.437000000 GHz

Ref 21 dBm
Atten 10 dB

#Peak  
Log  
10  
dB/  
Offst  
21  
dB

Center 2.437 00 GHz  
#Res BW 300 kHz  
Span 30 MHz  
#VBW 1 MHz  
Sweep 1 ms (601 pts)

Occupied Bandwidth

14.9444 MHz

Occ BW % Pwr 99.00 %

x dB -6.00 dB

Transmit Freq Error -4.010 kHz

x dB Bandwidth 10.224 MHz

File Operation Status, A:\SCREN200.GIF file saved

Center Freq 2.43700000 GHz

Start Freq 2.42200000 GHz

Stop Freq 2.45200000 GHz

CF Step 3.00000000 MHz
Auto Man

Freq Offset 0.00000000 Hz

Signal Track On Off

Test CH11: 2462MHz

Agilent

Ch Freq 2.462 GHz Trig Free

Occupied Bandwidth

Center 2.462000000 GHz

Ref 21 dBm Atten 10 dB

#Peak

Log 10 dB/ Offst 21 dB

Center 2.462 00 GHz Span 30 MHz

#Res BW 300 kHz #VBW 1 MHz Sweep 1 ms (601 pts)

Occupied Bandwidth	Occ BW % Pwr	99.00 %
14.8386 MHz	x dB	-6.00 dB
Transmit Freq Error		-2.830 kHz
x dB Bandwidth		10.215 MHz

File Operation Status, A:\SCREN201.GIF file saved

Test Mode: IEEE 802.11g TX

Test CH1: 2412MHz

Agilent

Ch Freq 2.412 GHz Trig Free

Occupied Bandwidth

Center 2.412000000 GHz

Ref 21 dBm Atten 10 dB

#Peak

Log 10 dB/ Offst 21 dB

Center 2.412 00 GHz Span 30 MHz

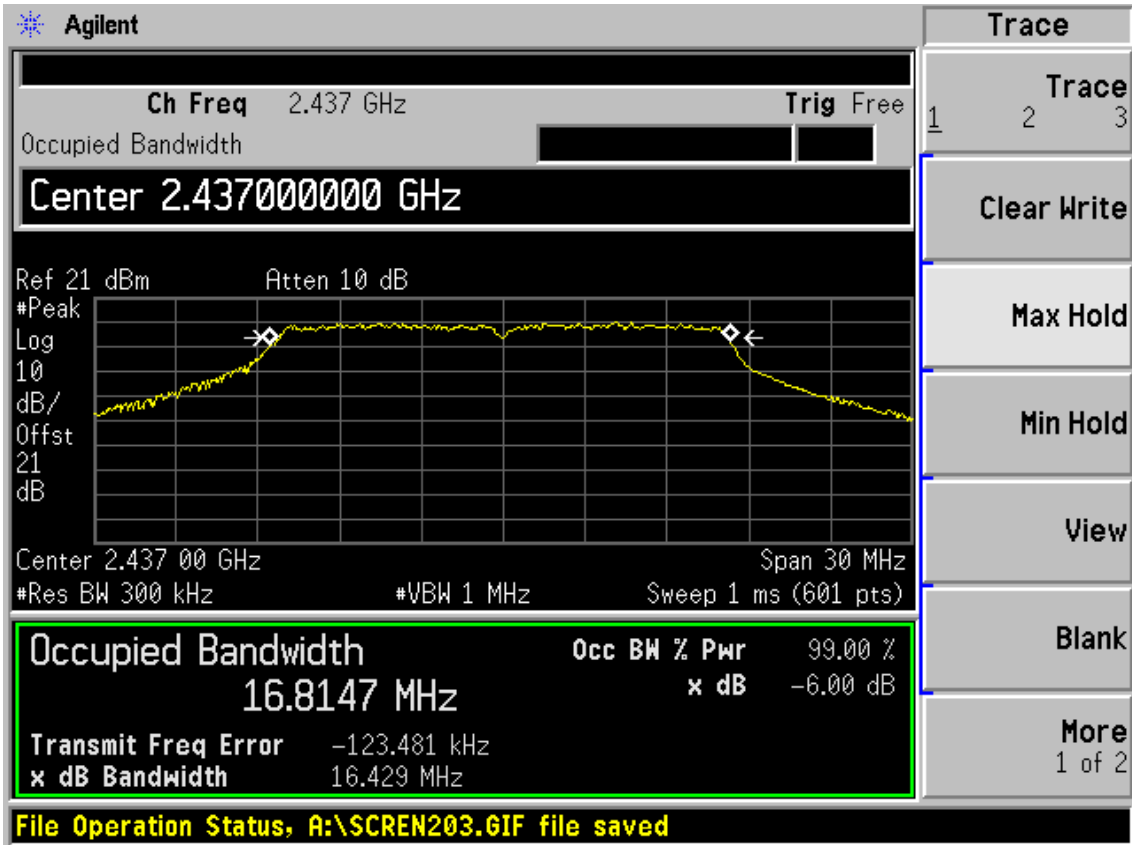
#Res BW 300 kHz #VBW 1 MHz Sweep 1 ms (601 pts)

Occupied Bandwidth	Occ BW % Pwr	99.00 %
16.7997 MHz	x dB	-6.00 dB
Transmit Freq Error		-102.623 kHz
x dB Bandwidth		16.430 MHz

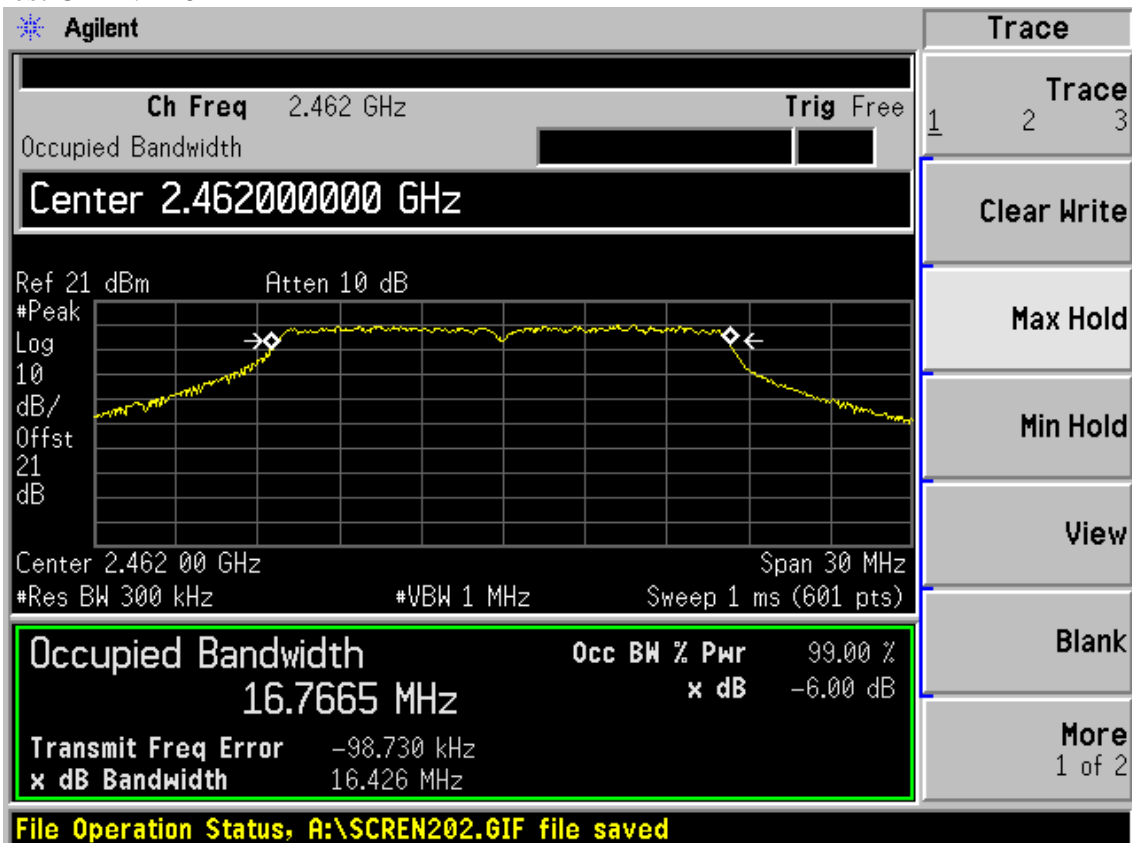
File Operation Status, A:\SCREN204.GIF file saved



Test CH6: 2437MHz

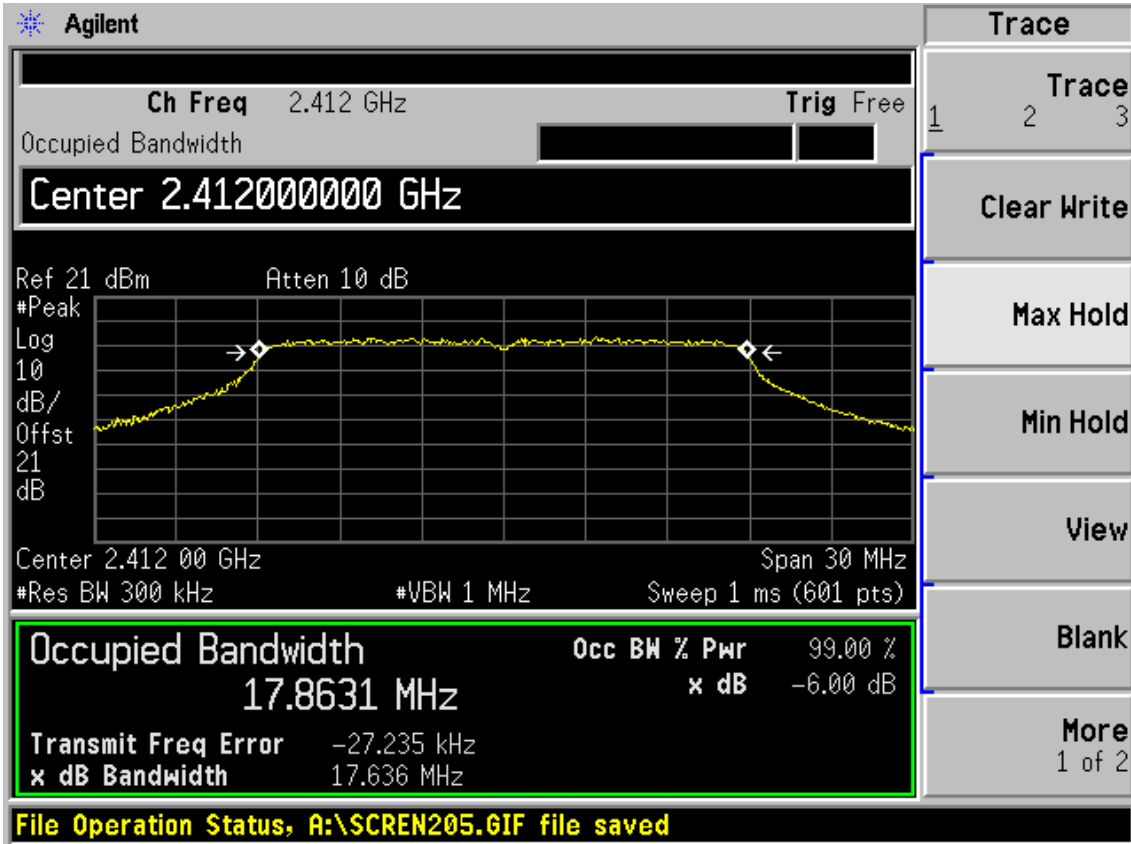


Test CH11: 2462MHz

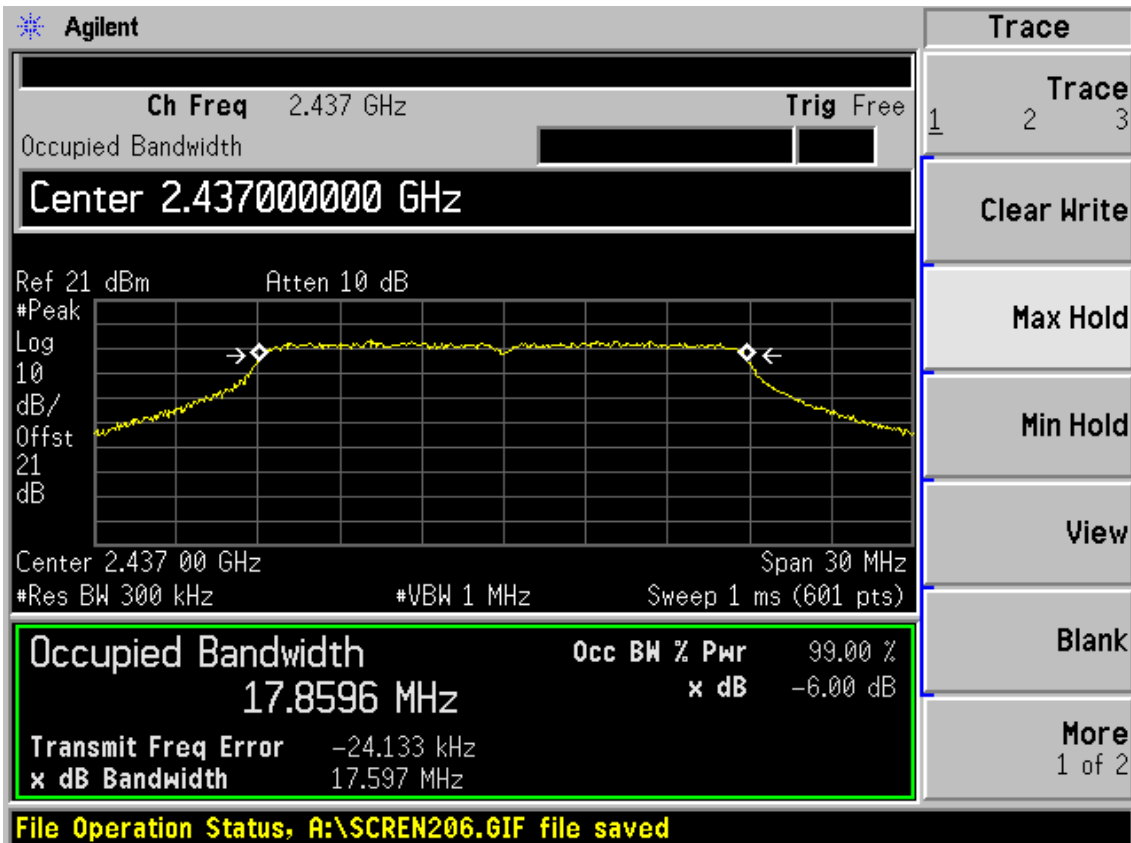


Test Mode: IEEE 11nHT20

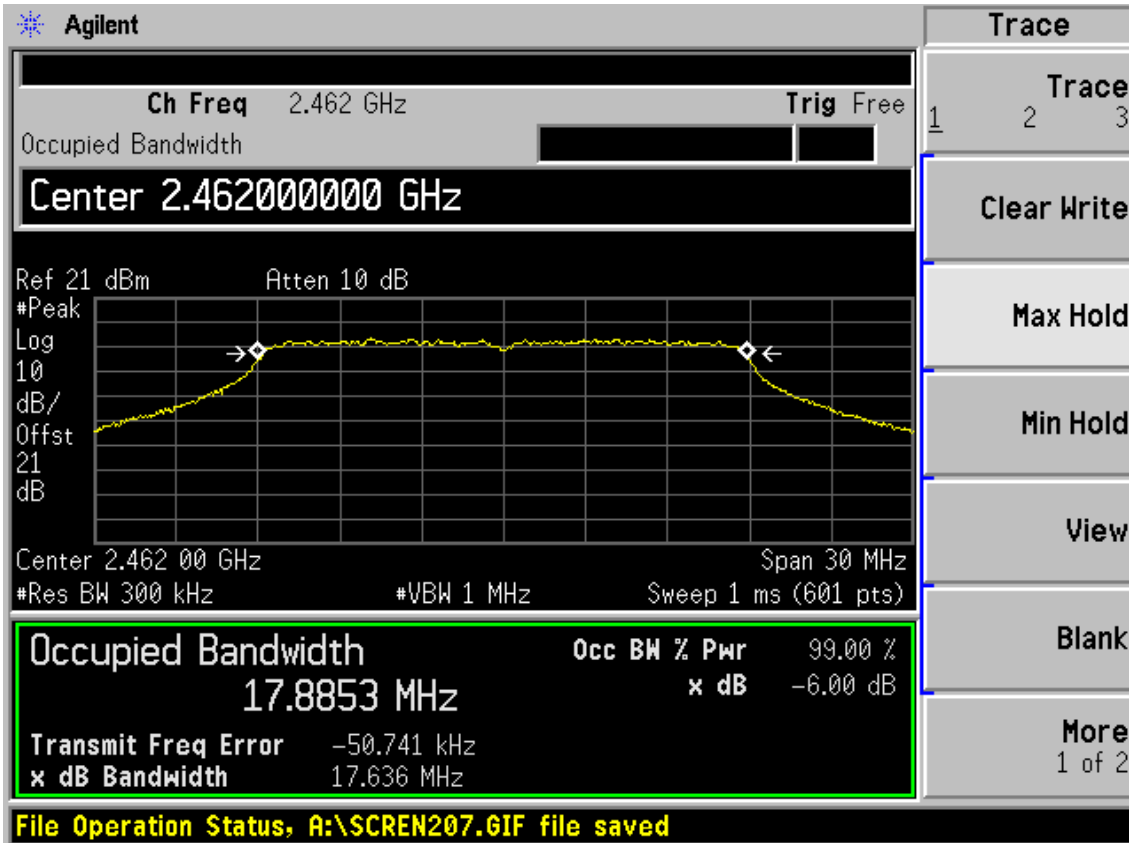
Test CH1: 2412MHz



Test CH6: 2437MHz

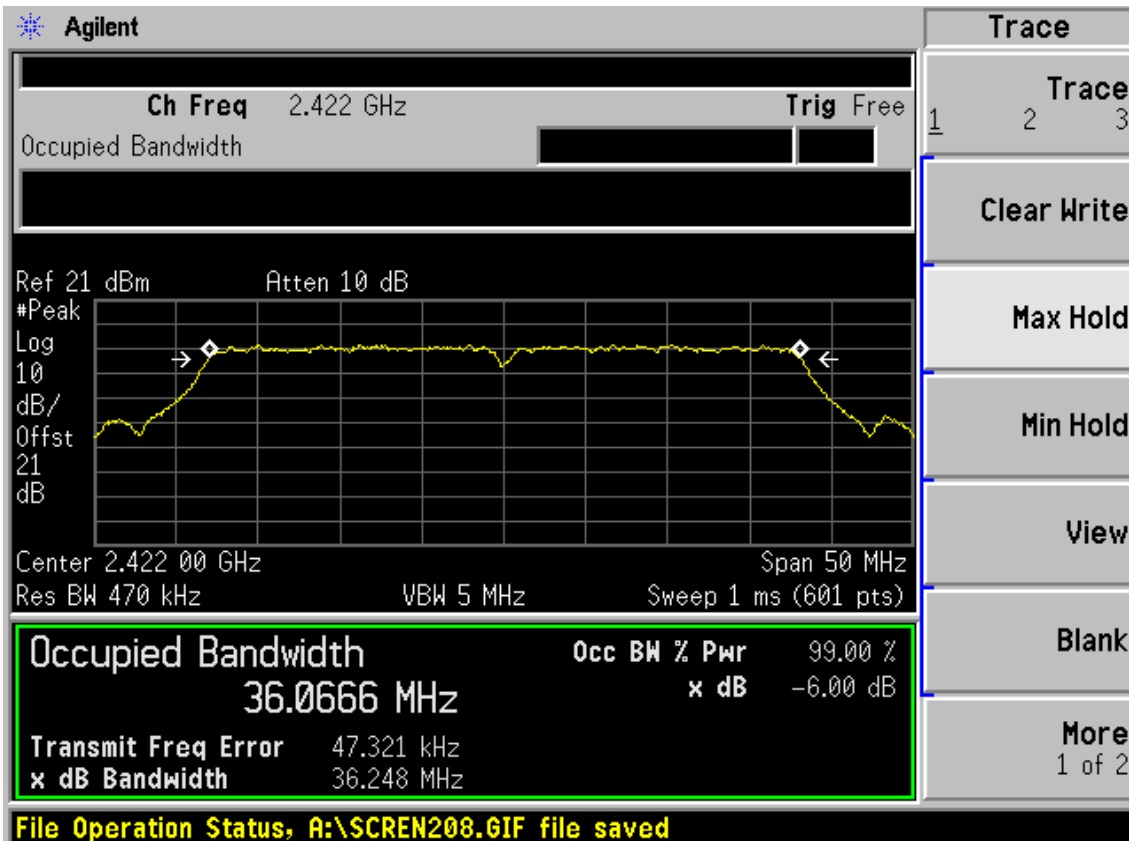


Test CH11: 2462MHz

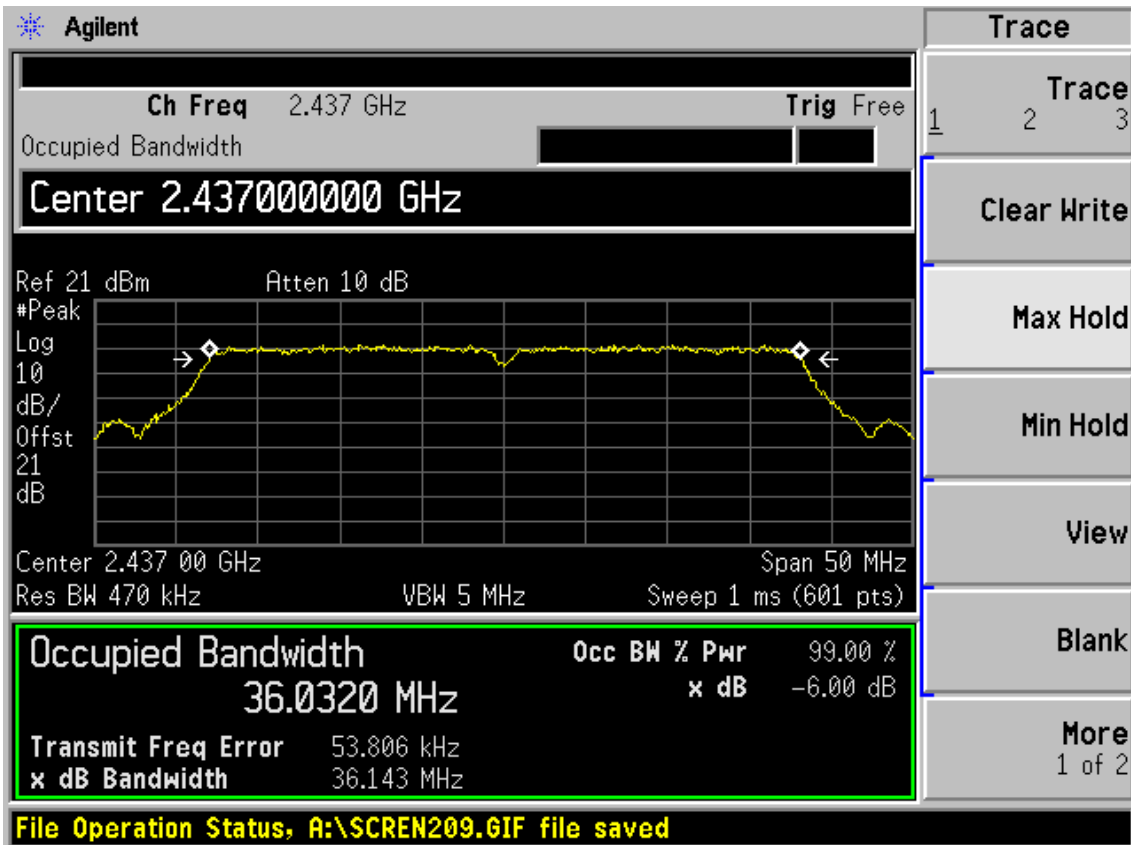


Test Mode: IEEE 11nHT40

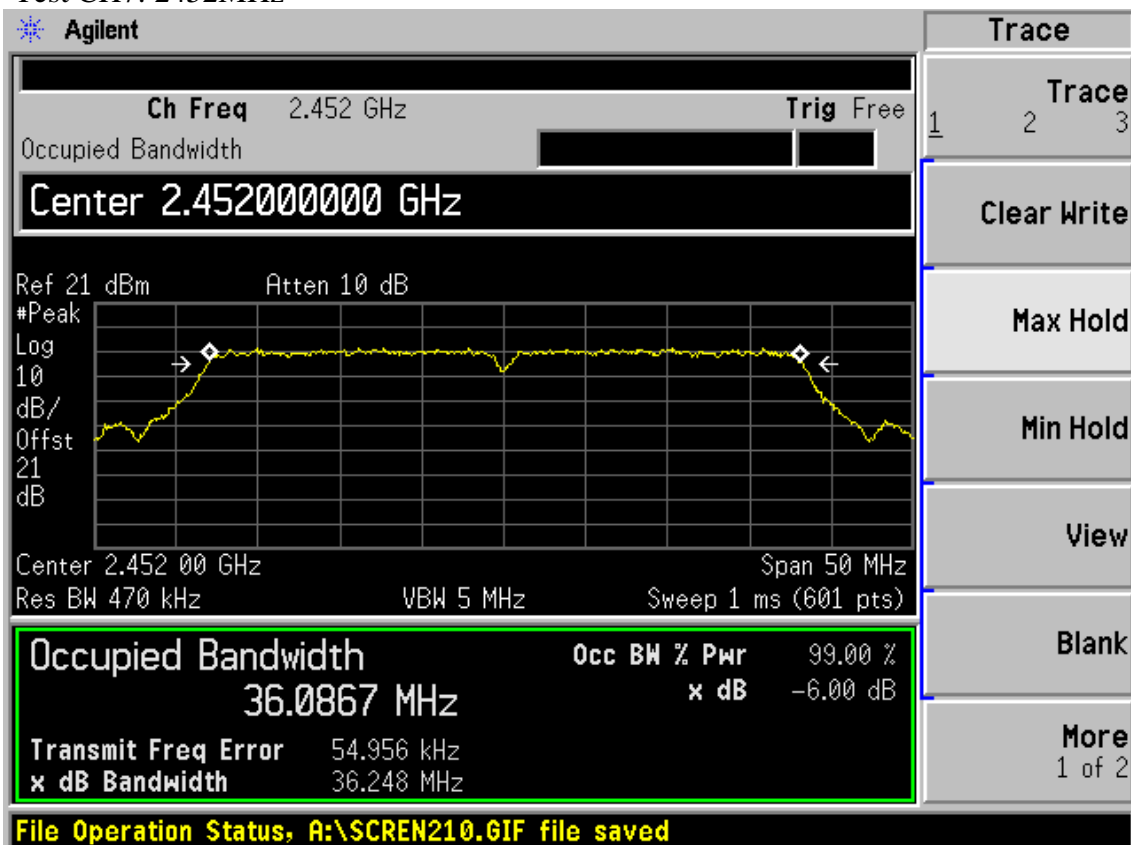
Test CH1: 2422MHz



Test CH4: 2437MHz



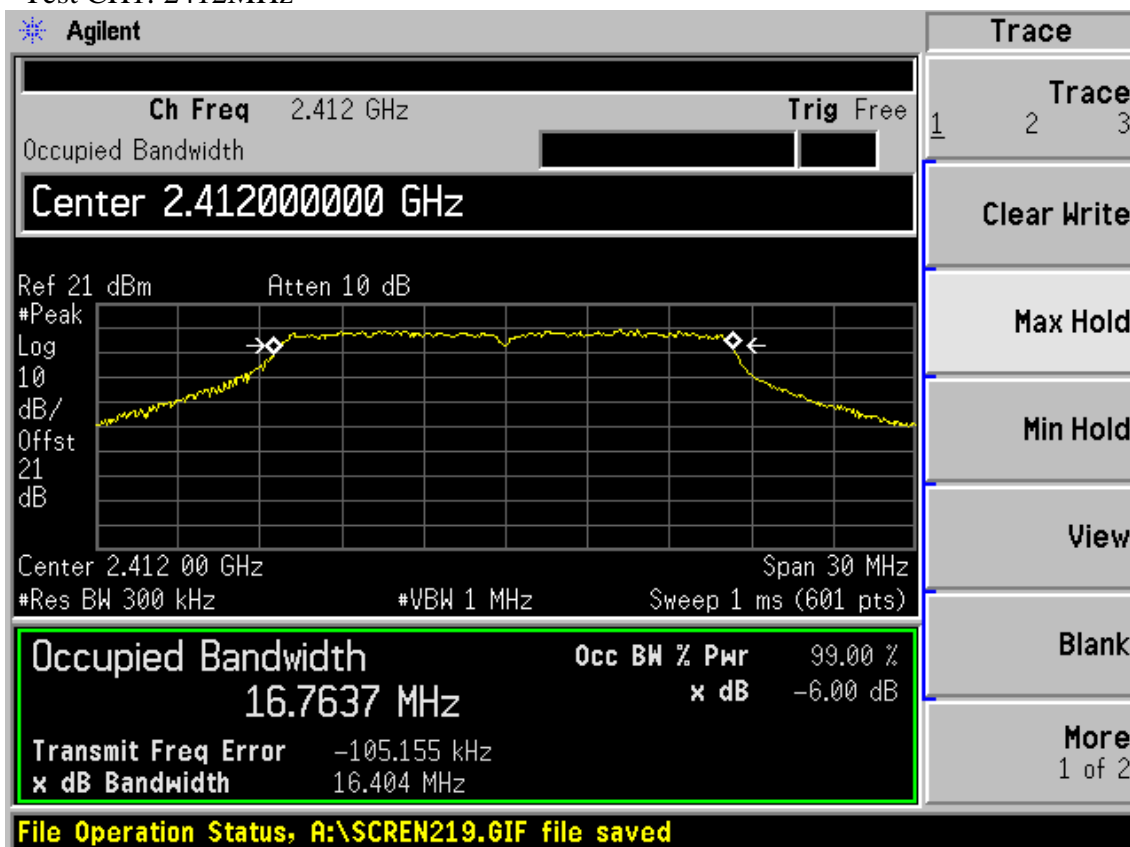
Test CH7: 2452MHz



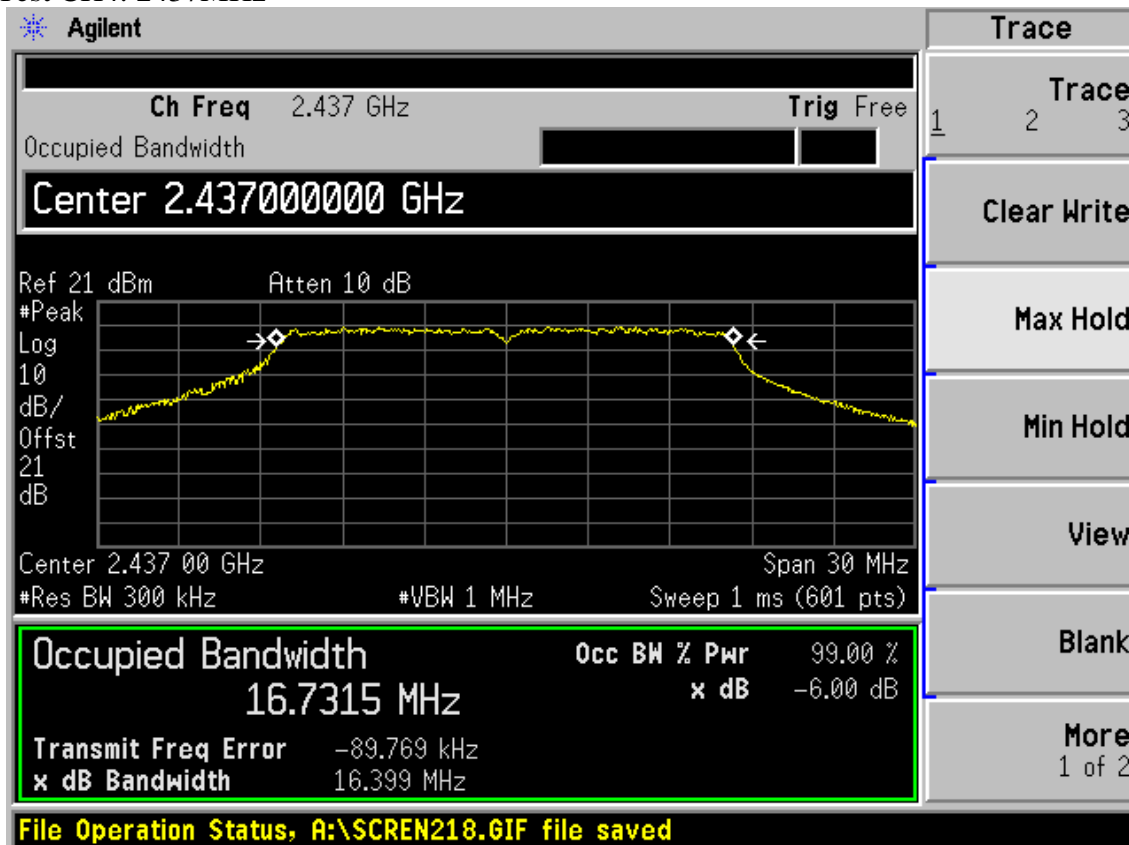
**ANT 1**

Test Mode: IEEE 802.11g TX

Test CH1: 2412MHz



Test CH4: 2437MHz



Test CH7: 2462MHz

**Agilent**

Ch Freq 2.462 GHz Trig Free

Occupied Bandwidth

**Center 2.46200000 GHz**

Ref 21 dBm Atten 10 dB

#Peak Log 10 dB/ Offst 21 dB

Center 2.462 00 GHz Span 30 MHz

#Res BW 300 kHz #VBW 1 MHz Sweep 1 ms (601 pts)

<b>Occupied Bandwidth</b>	<b>Occ BW % Pwr</b>	99.00 %
16.7228 MHz	x dB	-6.00 dB
<b>Transmit Freq Error</b>		-92.998 kHz
<b>x dB Bandwidth</b>		16.411 MHz

**File Operation Status, A:\SCREN217.GIF file saved**

**Trace**

Trace 1 2 3

Clear Write

Max Hold

Min Hold

View

Blank

More 1 of 2

Test Mode: IEEE 11nHT20

Test CH1: 2412MHz

**Agilent**

Ch Freq 2.412 GHz Trig Free

Occupied Bandwidth

**Center 2.41200000 GHz**

Ref 21 dBm Atten 10 dB

#Peak Log 10 dB/ Offst 21 dB

Center 2.412 00 GHz Span 30 MHz

#Res BW 300 kHz #VBW 1 MHz Sweep 1 ms (601 pts)

<b>Occupied Bandwidth</b>	<b>Occ BW % Pwr</b>	99.00 %
17.8101 MHz	x dB	-6.00 dB
<b>Transmit Freq Error</b>		-27.538 kHz
<b>x dB Bandwidth</b>		17.631 MHz

**File Operation Status, A:\SCREN214.GIF file saved**

**Freq/Channel**

**Center Freq** 2.41200000 GHz

**Start Freq** 2.39700000 GHz

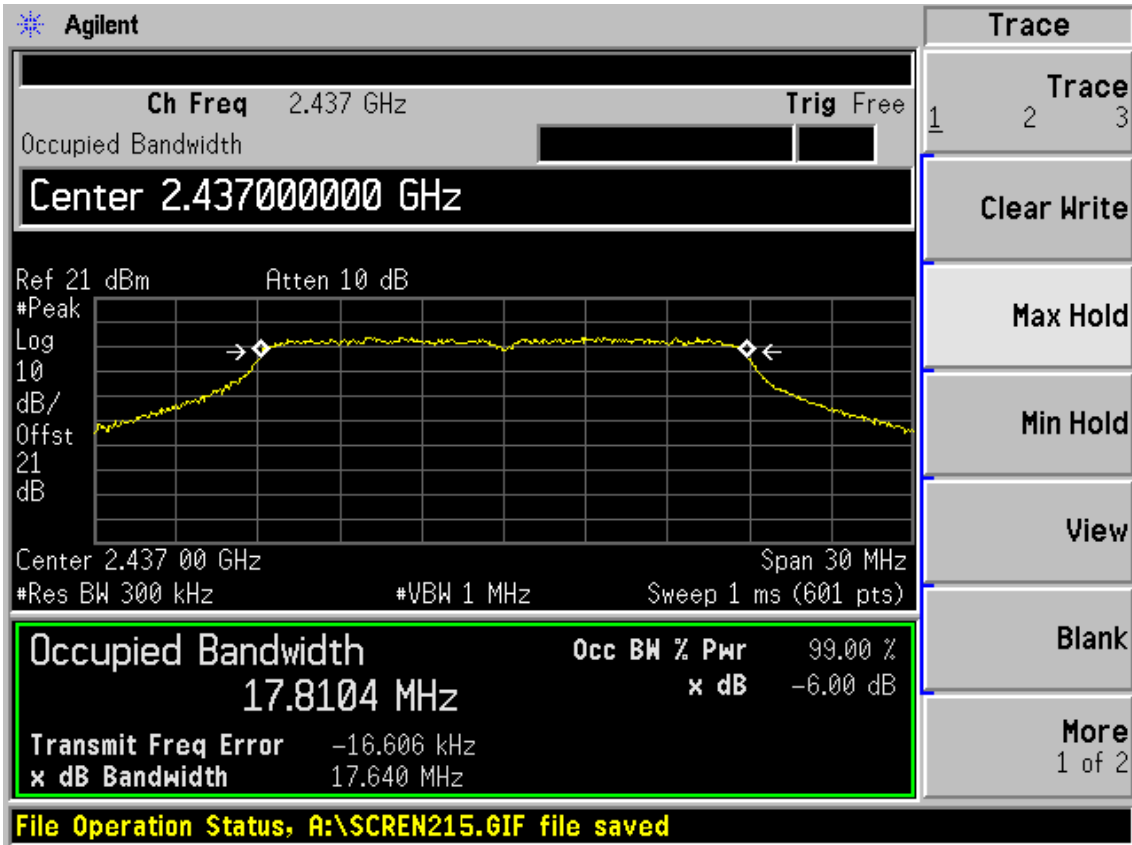
**Stop Freq** 2.42700000 GHz

**CF Step** 3.00000000 MHz  
Auto Man

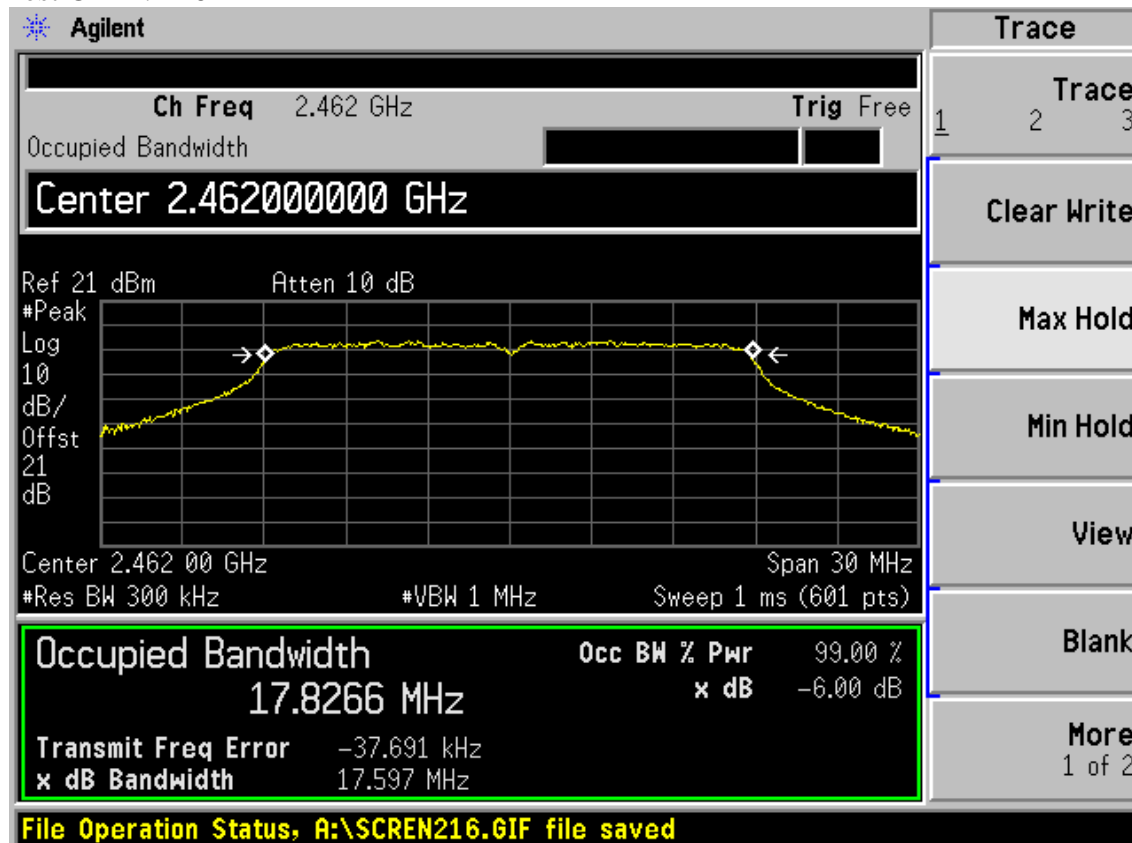
**Freq Offset** 0.00000000 Hz

**Signal Track** On Off

Test CH6: 2437MHz

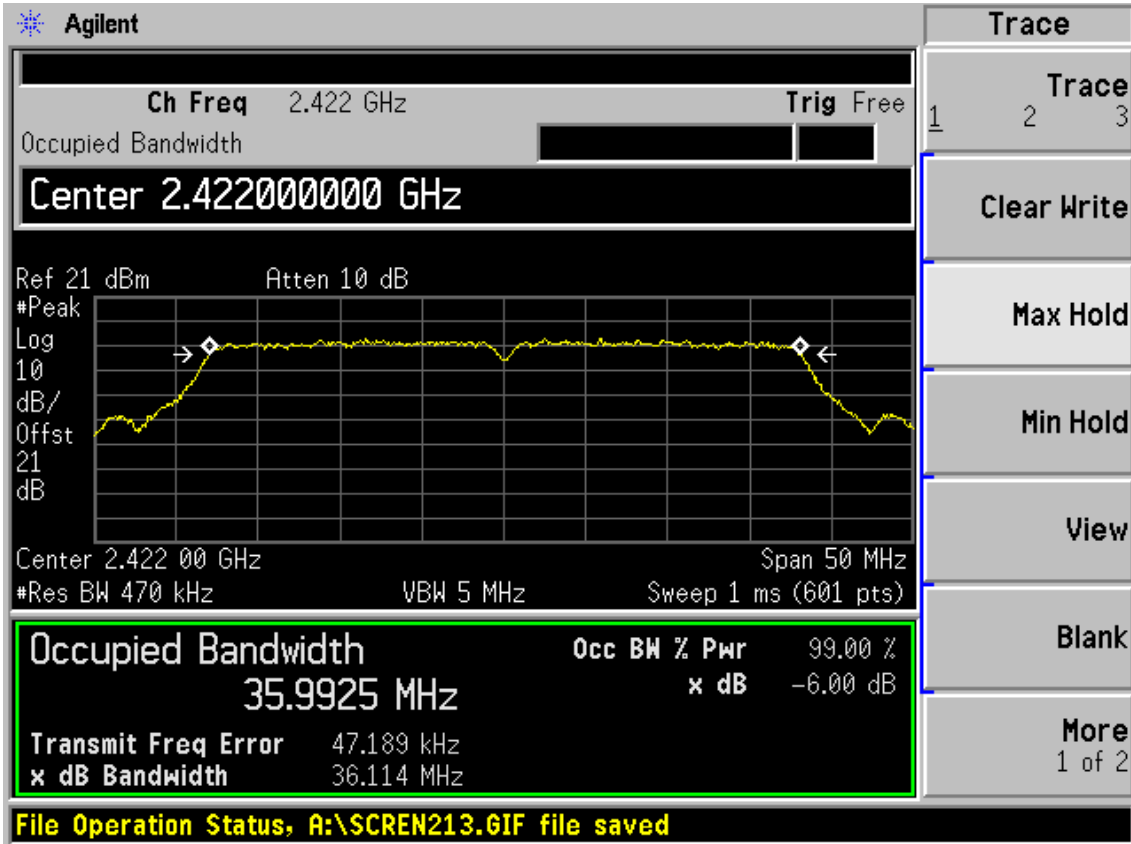


Test CH11: 2462MHz

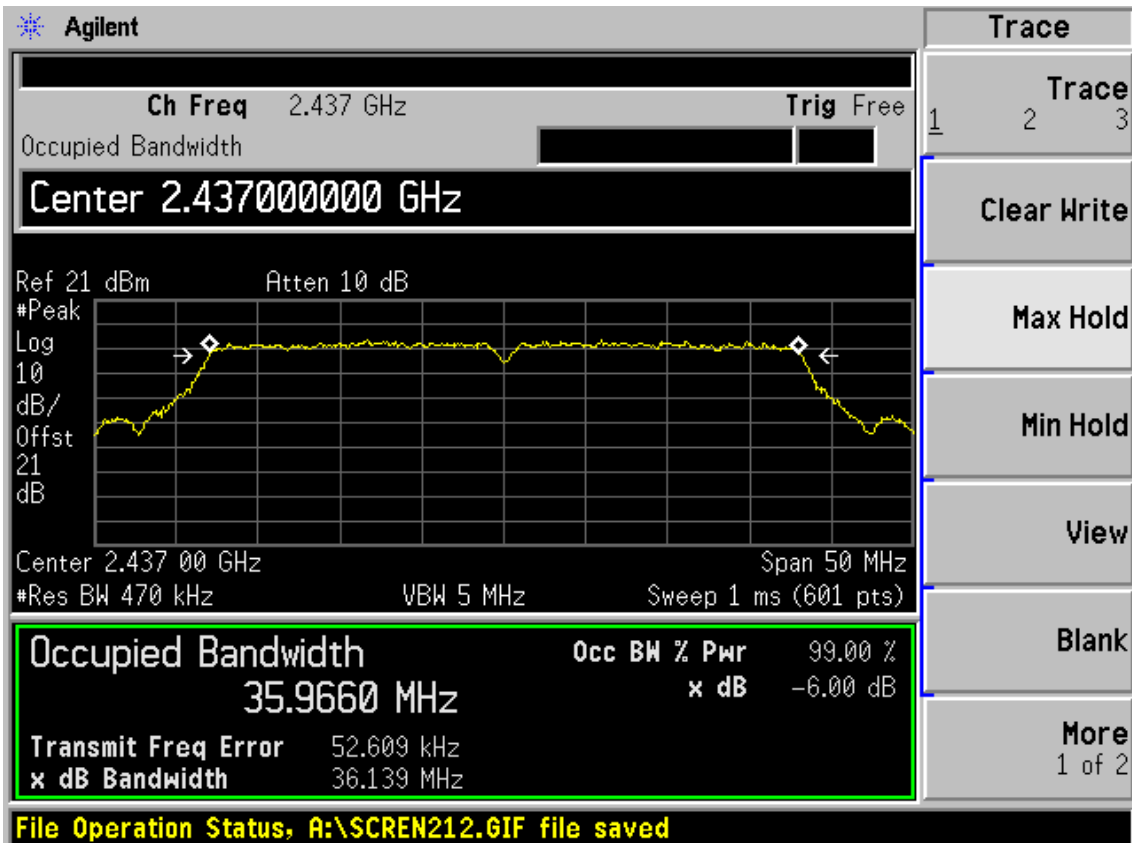


Test Mode: IEEE 11nHT40

Test CH1: 2422MHz

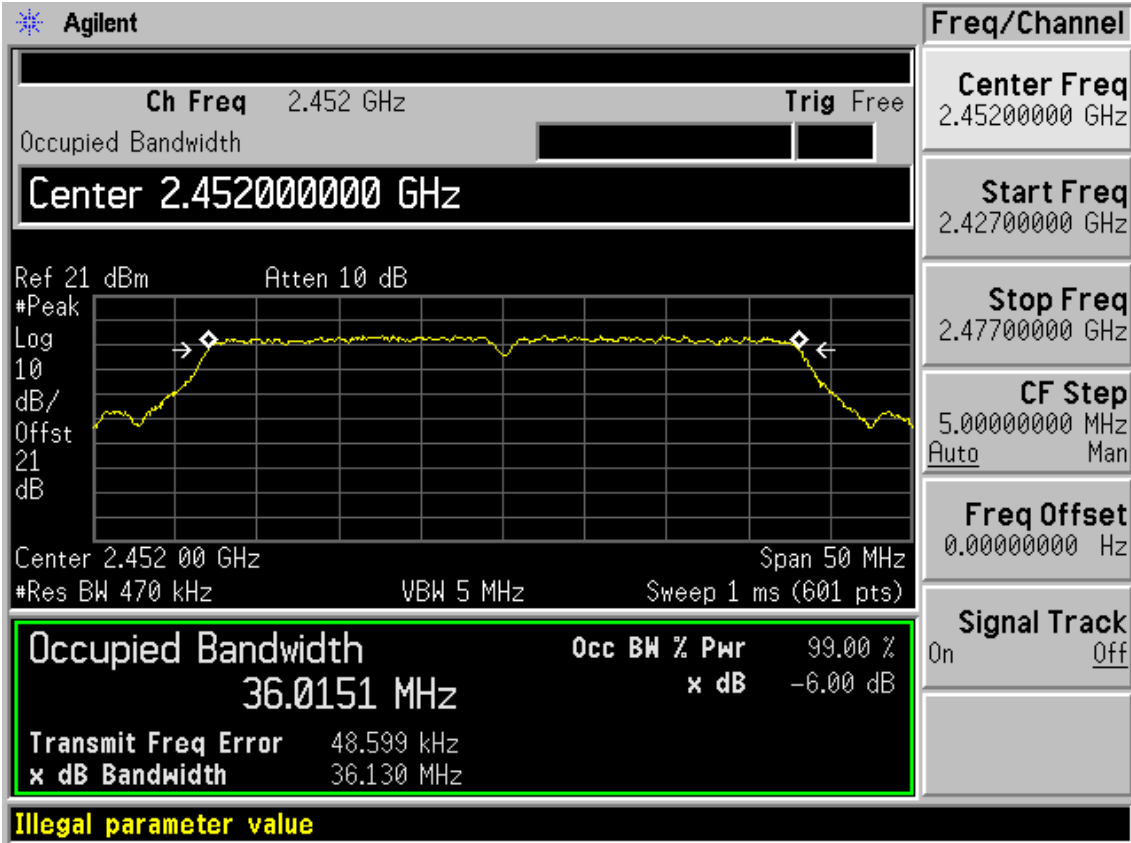


Test CH4: 2437MHz





Test CH7: 2452MHz



## 8. OUTPUT POWER TEST

### 8.1. Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum Analyzer	Agilent	N9030A	MY51380221	Oct.31, 13	1 Year
2.	Amp	HP	8449B	3008A08495	May.08, 13	1 Year
3.	Antenna	EMCO	3115	9510-4580	May.08, 13	1 Year
4.	HF Cable	Hubersuhne	Sucoflex104	-	May.08, 13	1 Year
5.	Power Meter	Anritsu	ML2487A	6K00002472	May.08, 13	1 Year
6.	Power Sensor	Anritsu	MA2491A	033005	May.08, 13	1 Year
7.	Spectrum Analyzer	Agilent	E4446A	US44300459	May.08, 13	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)

### 8.3. Test Procedure

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

Peak output power =measured power+ 10log[(26dB bandwidth of emission)/(analyzer RBW)]

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

### 8.4. Test Results

EUT: Wireless N300 4-port USB Ethernet Gateway					
M/N: EMG1312-R10A					
Test date: 2013-12-29		Pressure: 101.1±1.0 kpa		Humidity: 49.5±3.0%	
Tested by: Leo-Li		Test site: RF site		Temperature: 21.67±0.6 °C	
Cable loss: 1 dB			Attenuator loss: 20 dB		
Test Mode	CH (MHz)	Peak output Power (dBm)			Limit (dBm)
		Chain0	Chain1	Total	
11b	CH1	20.21	N/A	N/A	30
	CH6	19.54	N/A	N/A	30
	CH11	18.71	N/A	N/A	30
11g	CH1	25.26	25.38	N/A	30
	CH6	25.46	27.12	N/A	30
	CH11	25.14	25.15	N/A	30
11nHT20	CH1	22.61	22.39	25.51	30
	CH6	22.13	21.22	24.71	30
	CH11	21.90	22.28	25.10	30
11nHT40	CH1	23.37	22.89	26.15	30
	CH4	22.94	21.72	25.38	30
	CH7	22.35	22.42	25.40	30
Conclusion: PASS					

**ANT 0**

Test Mode: IEEE 11nHT40

Test CH1: 2422MHz



Test CH4: 2437MHz



Test CH7: 2452MHz



ANT 1

Test Mode: IEEE 11nHT40

Test CH1: 2422MHz



Test CH4: 2437MHz



Test CH7: 2452MHz





## 9. POWER SPECTRAL DENSITY TEST

### 9.1. Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum Analyzer	Agilent	E4446A	US44300459	May.08, 13	1 Year
2.	Amp	HP	8449B	3008A08495	May.08, 13	1 Year
3.	Antenna	EMCO	3115	9607-4580	Aug.28, 13	1 Year
4.	HF Cable	Hubersuhne	Sucoflex104	-	May.08, 13	1 Year

### 9.2. Limit

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

### 9.3. Test Procedure

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

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

**9.4. Test Results**

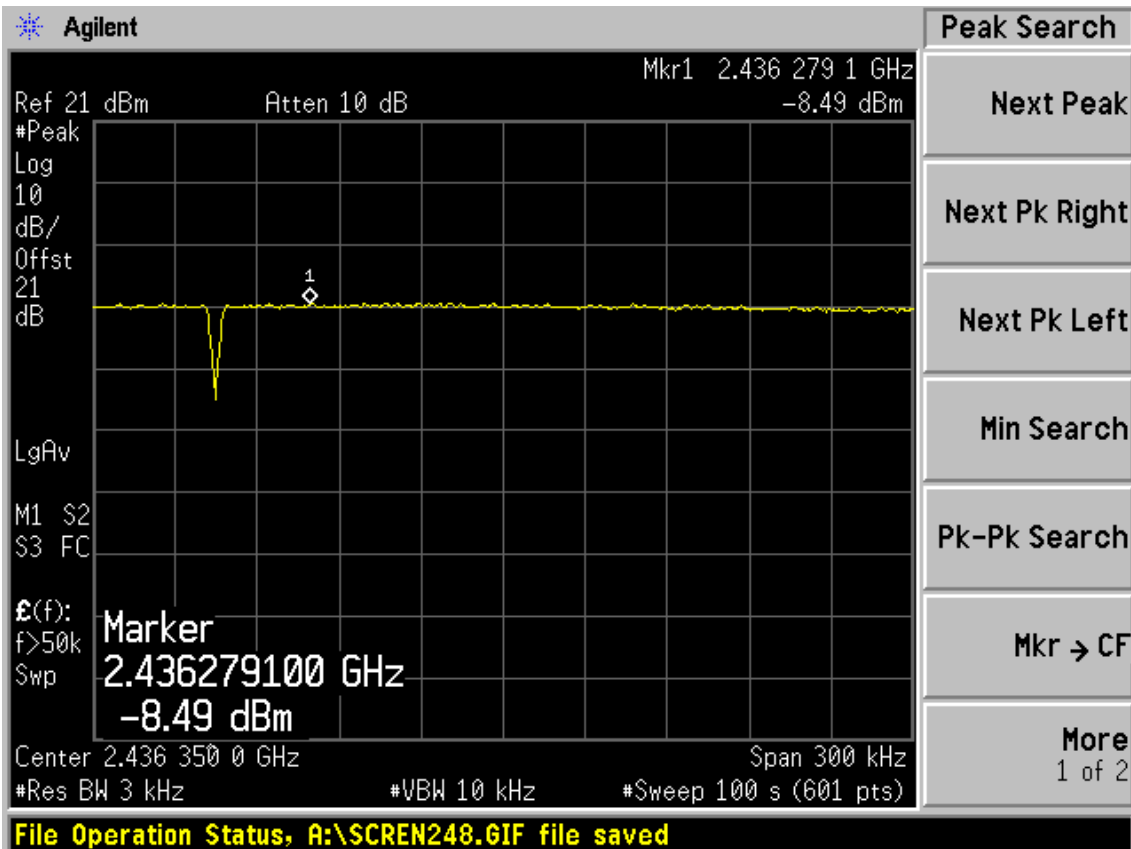
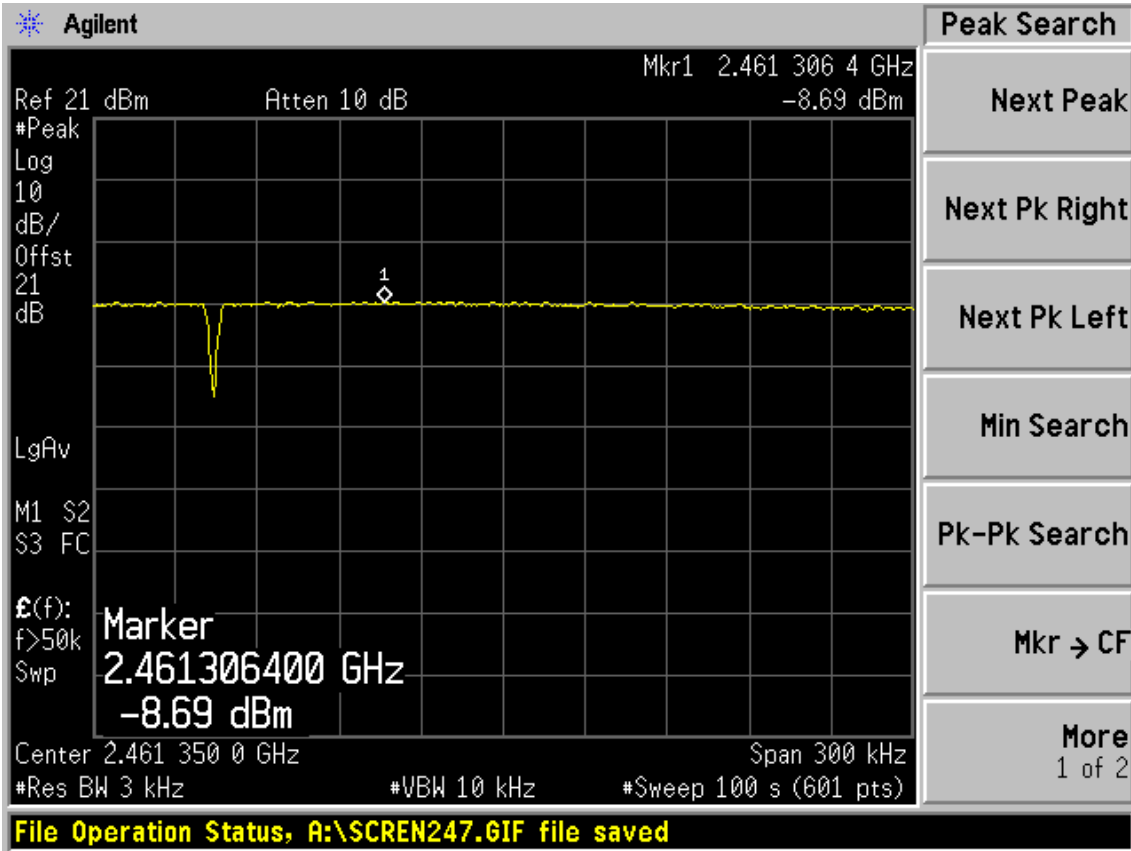
EUT: Wireless N300 4-port USB Ethernet Gateway		
M/N: EMG1312-R10A		
Test date: 2013-12-29	Pressure: 101.3±1.0 kpa	Humidity: 51.7±3.0%
Tested by: Leo-Li	Test site: RF Site	Temperature : 22.7±0.6°C

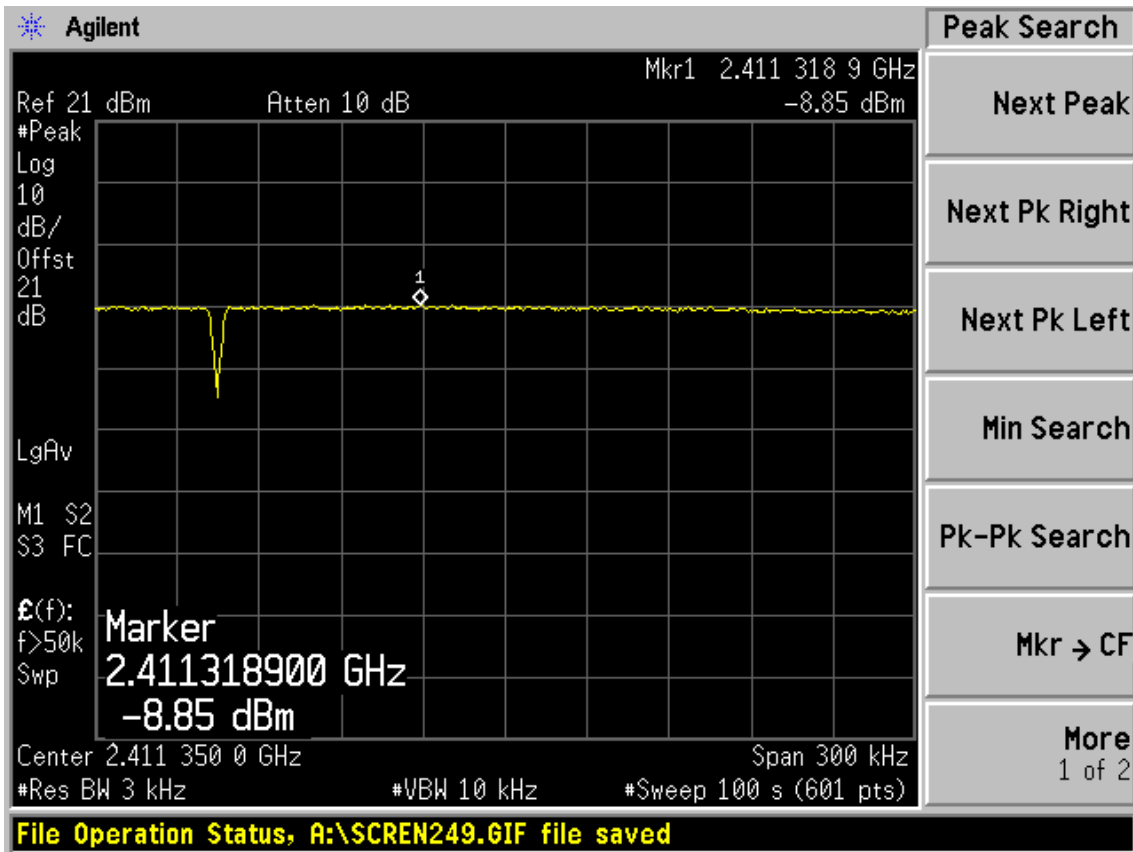
Cable loss: 1 dB		Attenuator loss: 20 dB			
Test Mode	CH	Power density ( dBm/3KHz )			Limit (dBm/3KHz)
		ANT 0	ANT 1	Total	
11b	CH1	-8.85	N/A	N/A	8
	CH6	-8.49	N/A	N/A	8
	CH11	-8.69	N/A	N/A	8
11g	CH1	-13.97	-10.27	N/A	8
	CH6	-13.00	-10.04	N/A	8
	CH11	-13.26	-11.99	N/A	8
11n HT20	CH1	-19.06	-17.62	-15.27	8
	CH6	-19.02	-17.27	-15.05	8
	CH11	-18.91	-17.58	-15.18	8
11n HT40	CH1	-21.77	-21.66	-18.70	8
	CH4	-19.98	-21.24	-17.55	8
	CH7	-18.66	-21.18	-16.73	8
Conclusion : PASS					



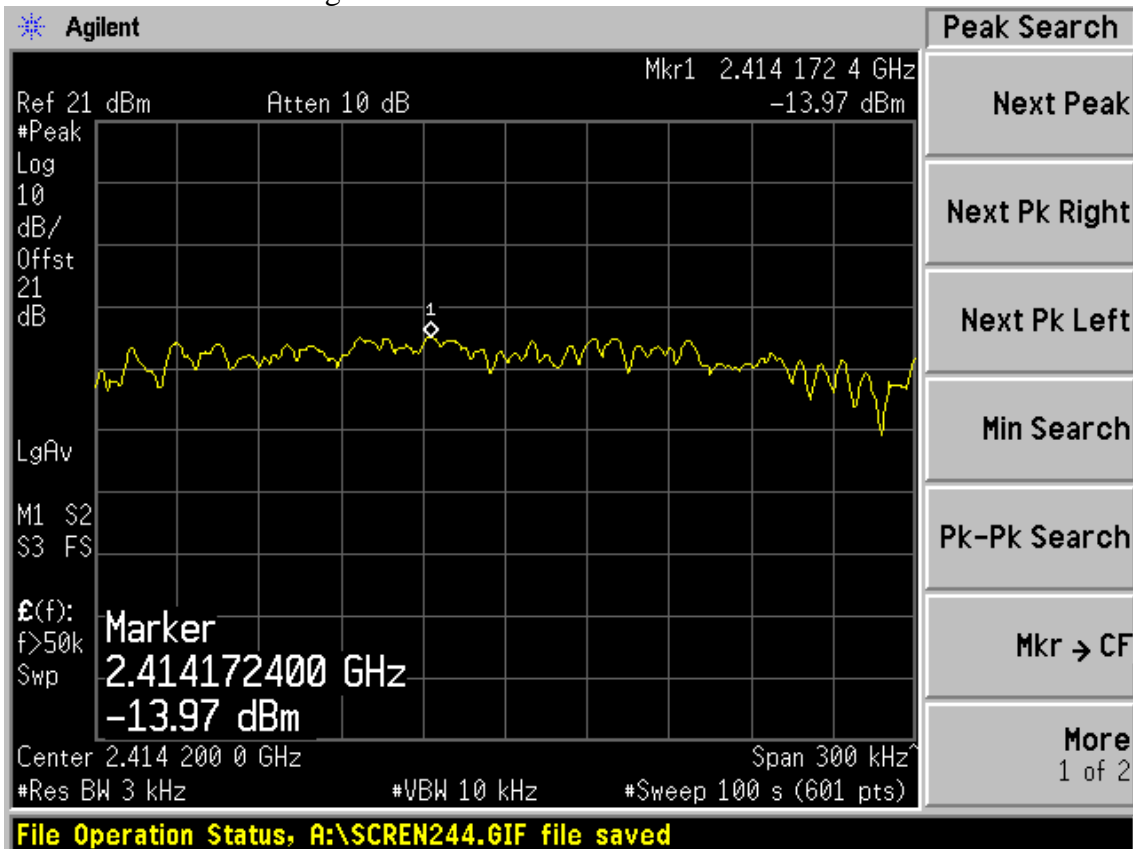
**ANT 0**

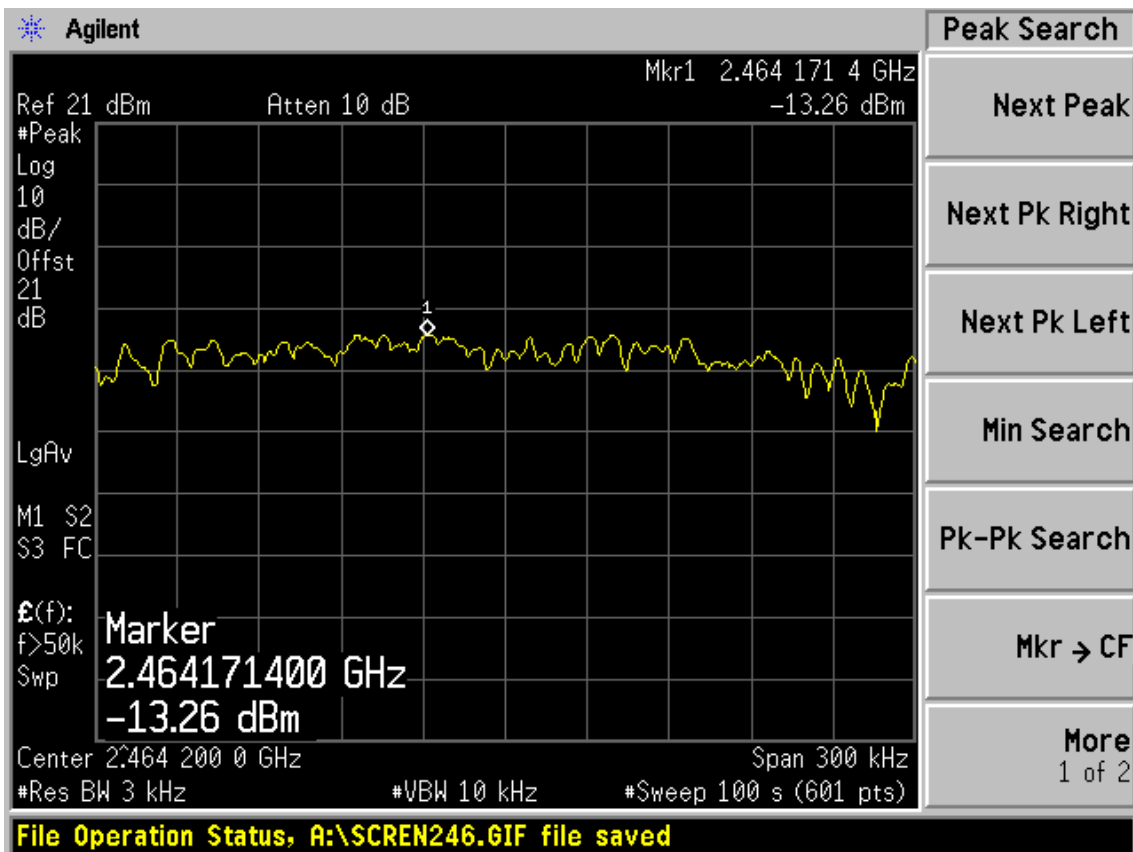
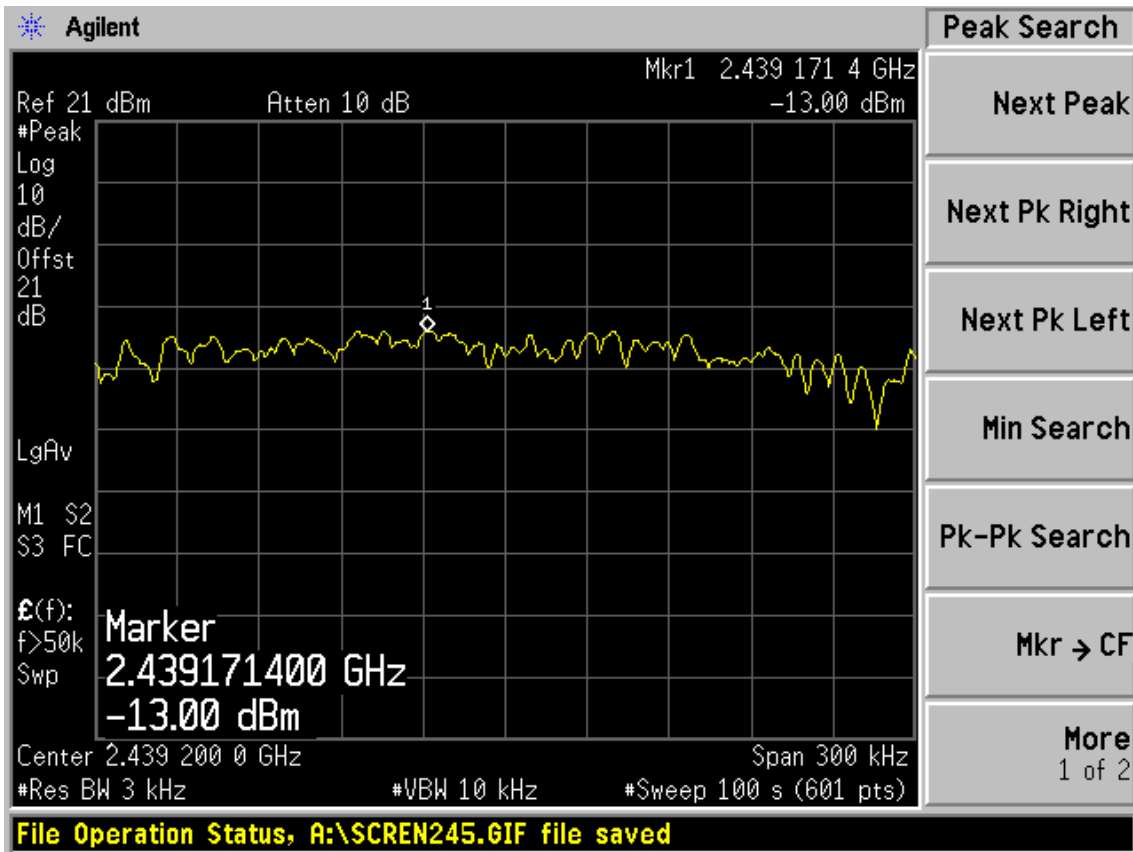
Test Mode: IEEE 802.11b TX



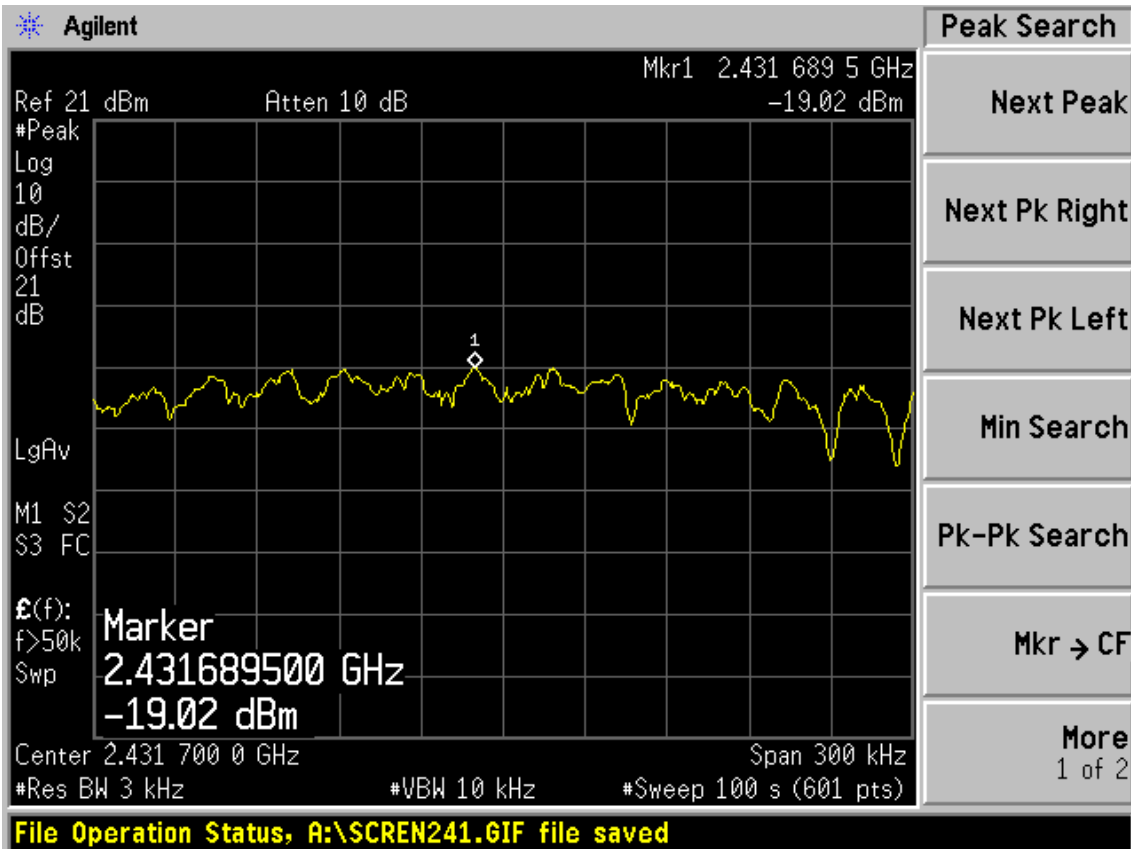
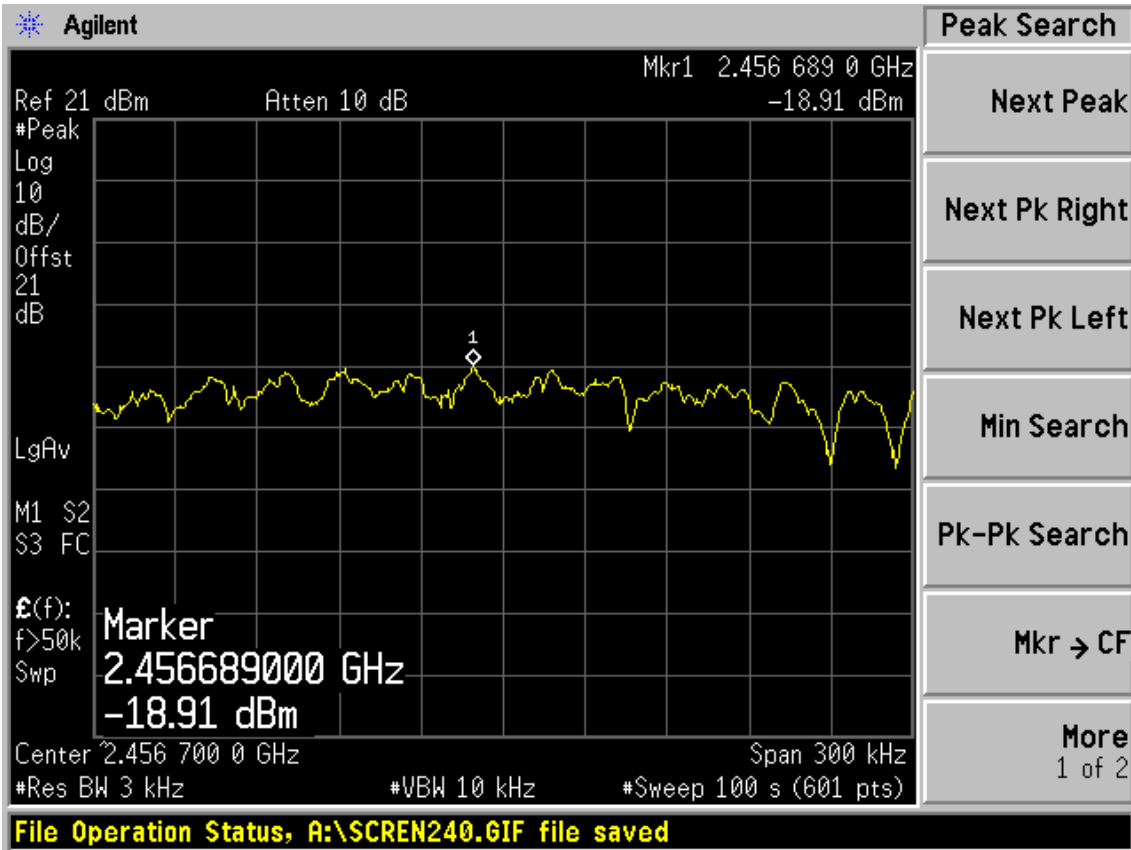


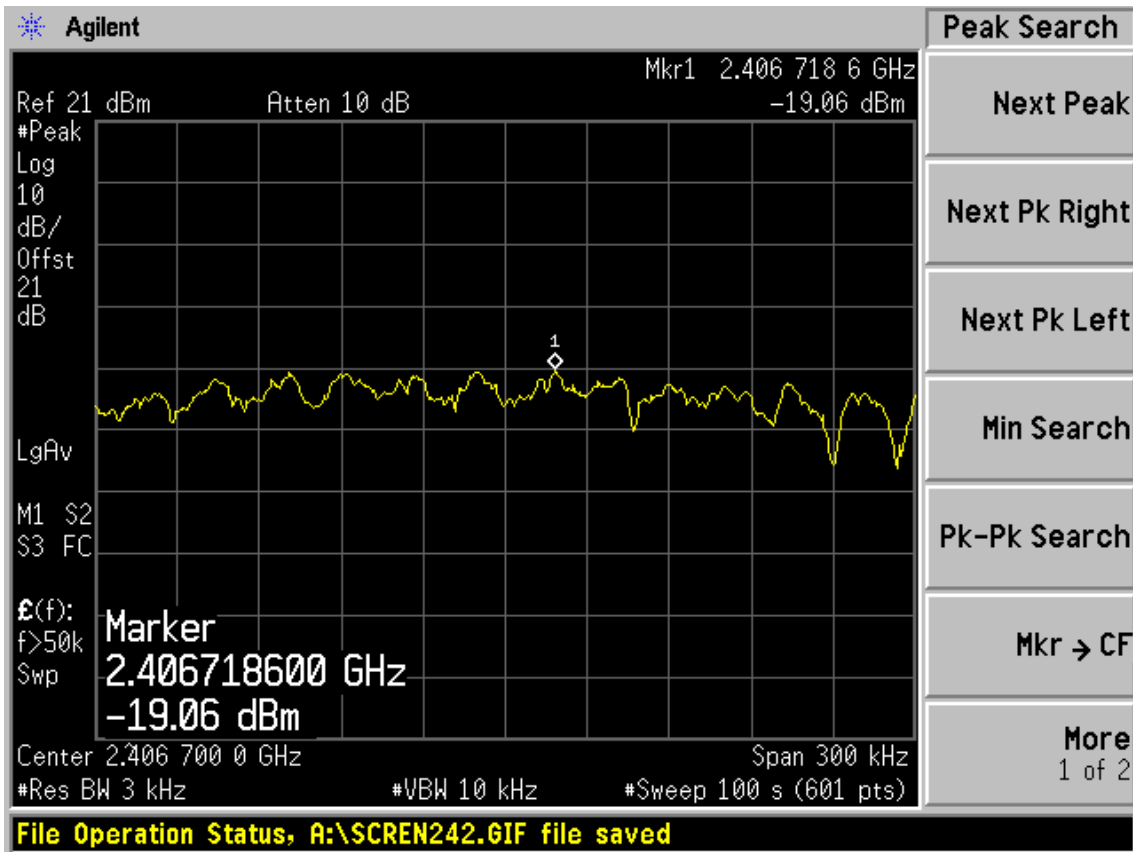
Test Mode: IEEE 802.11g TX



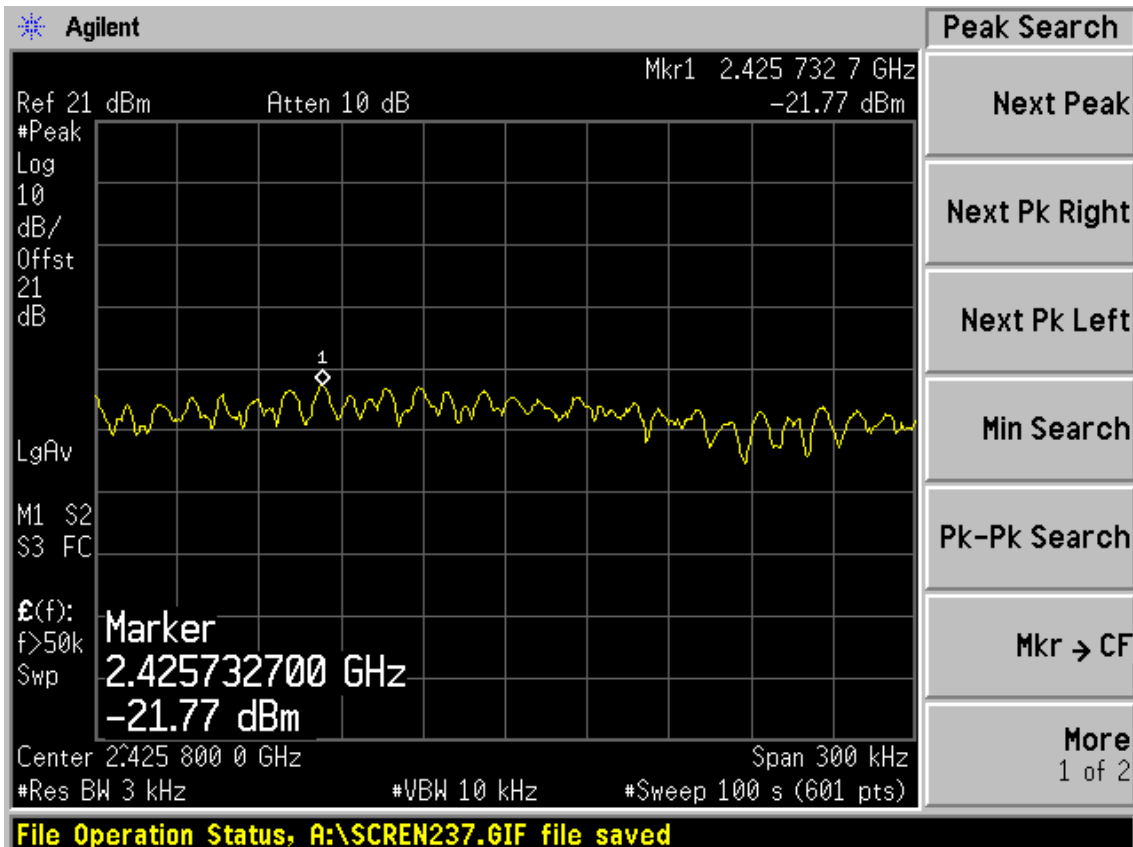


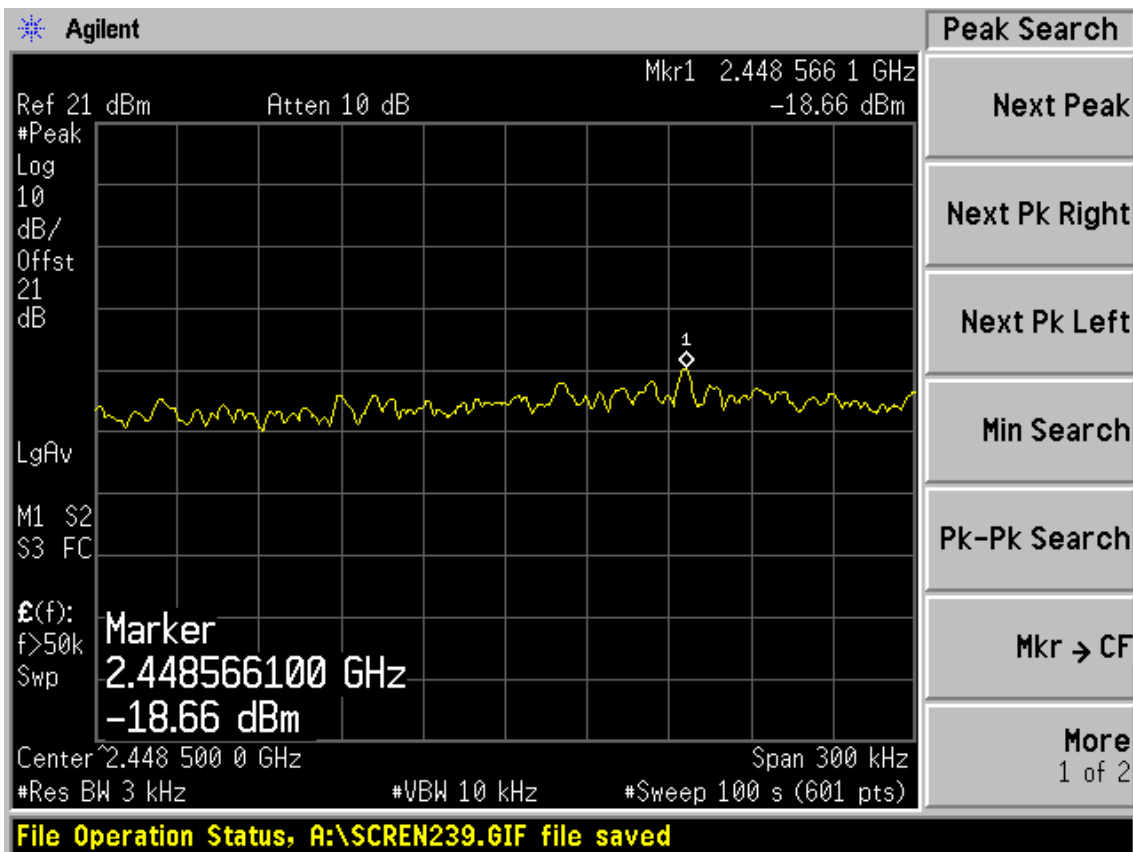
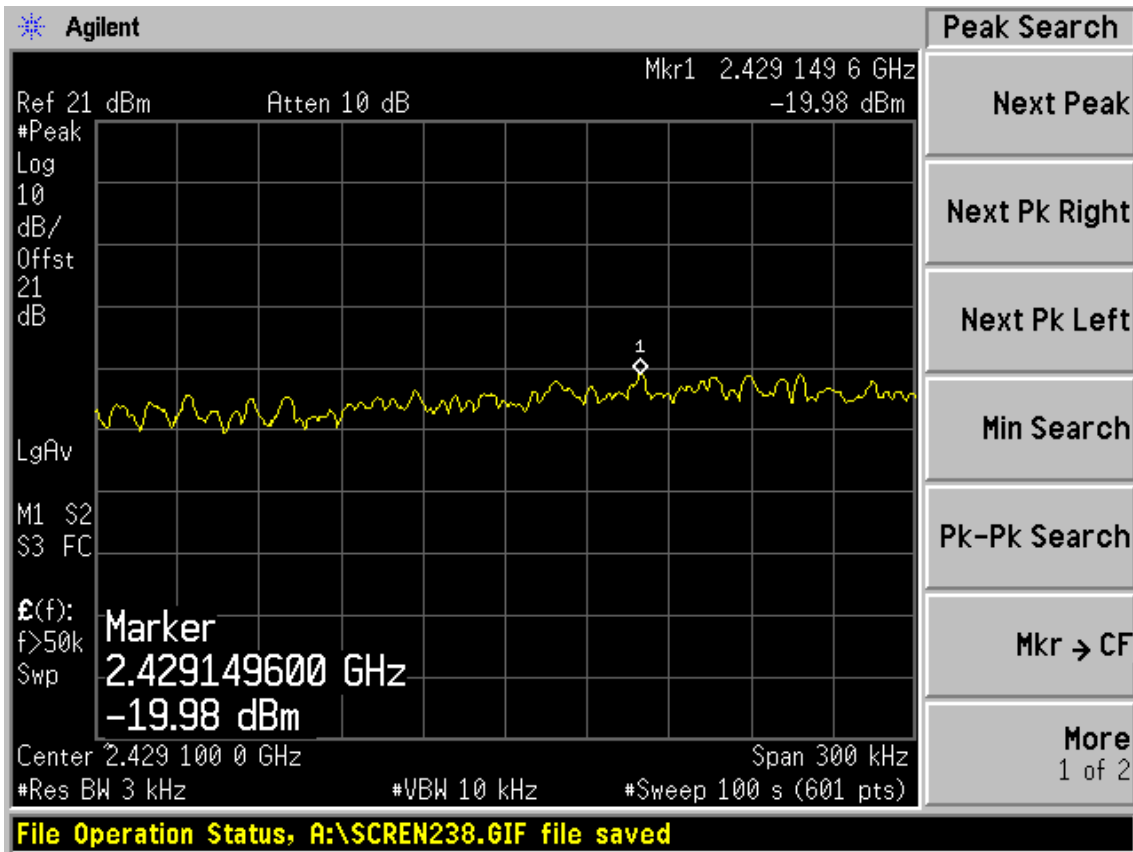
Test Mode: IEEE 11nHT20





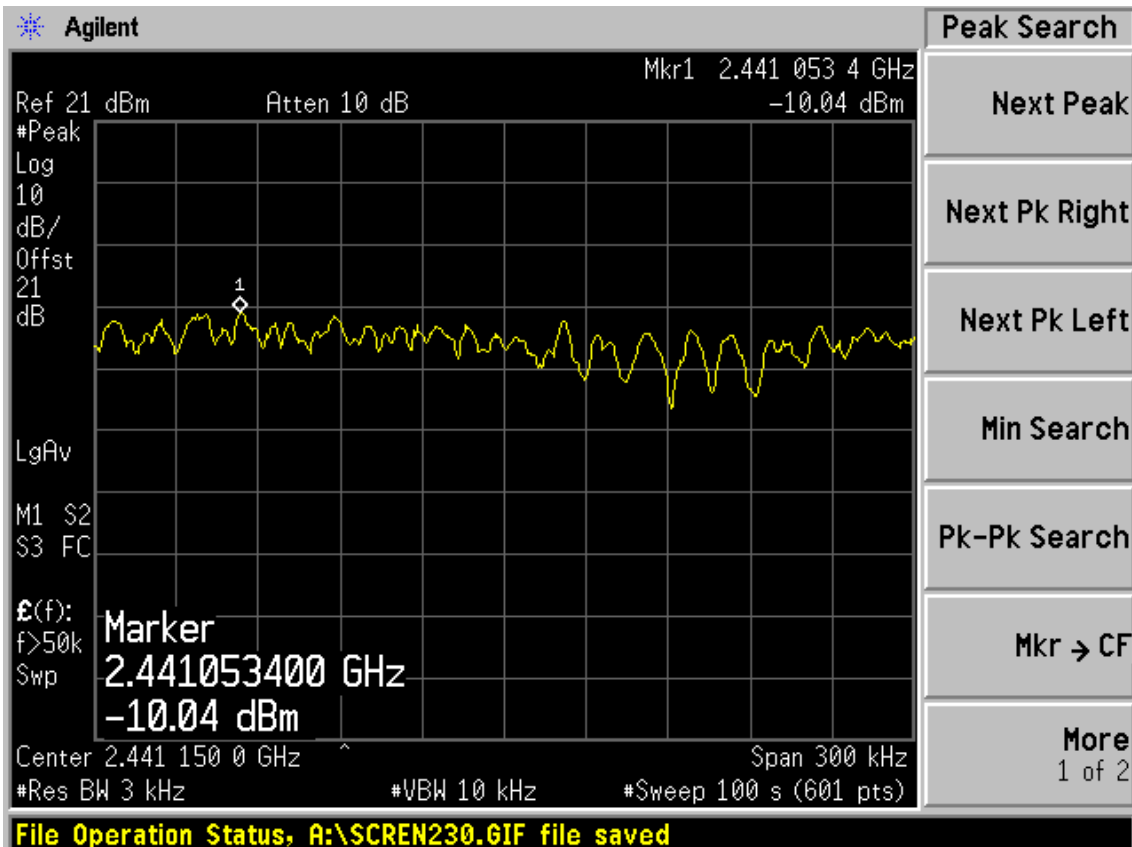
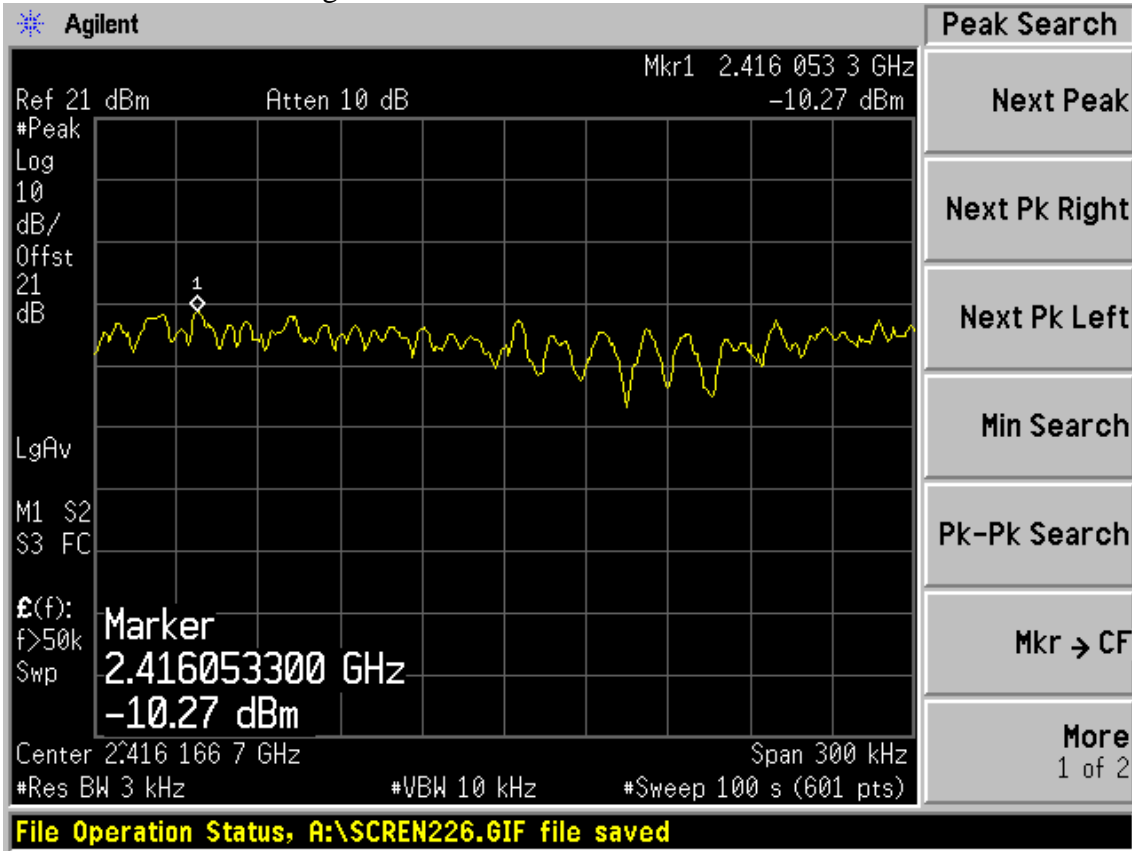
Test Mode: IEEE 11nHT40

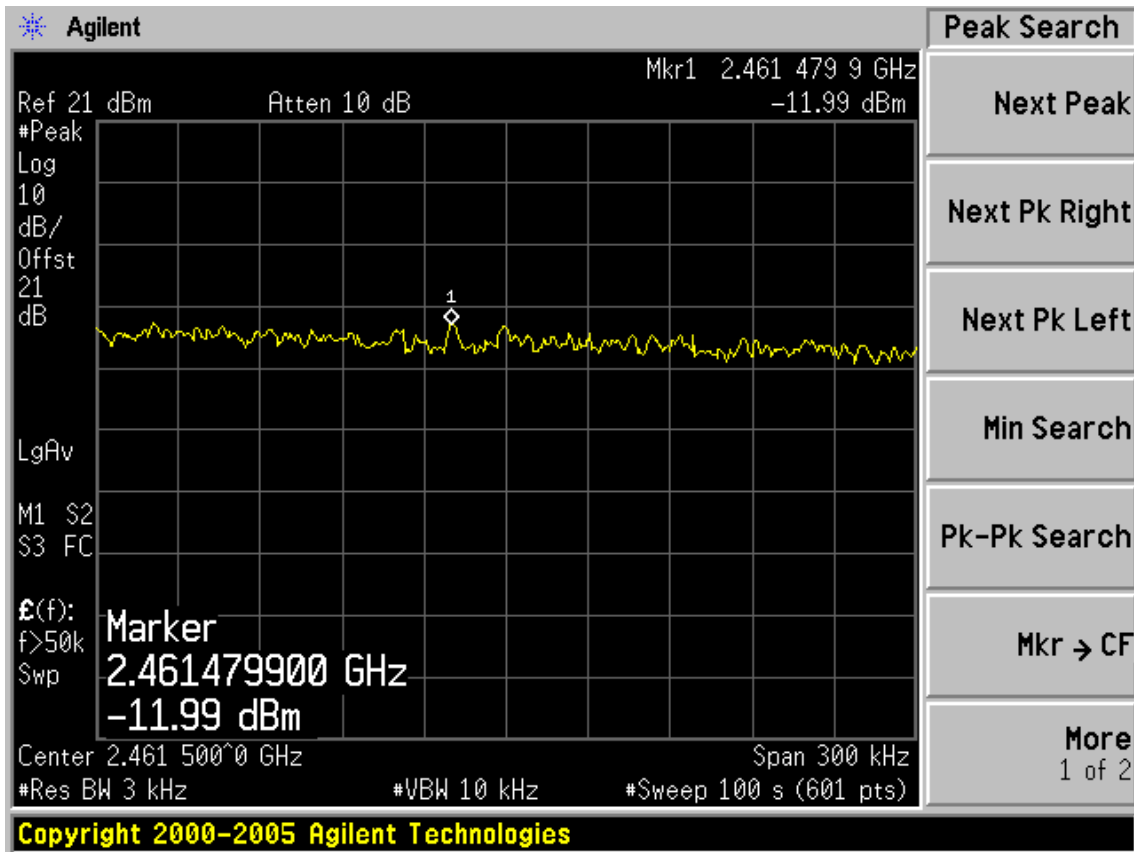




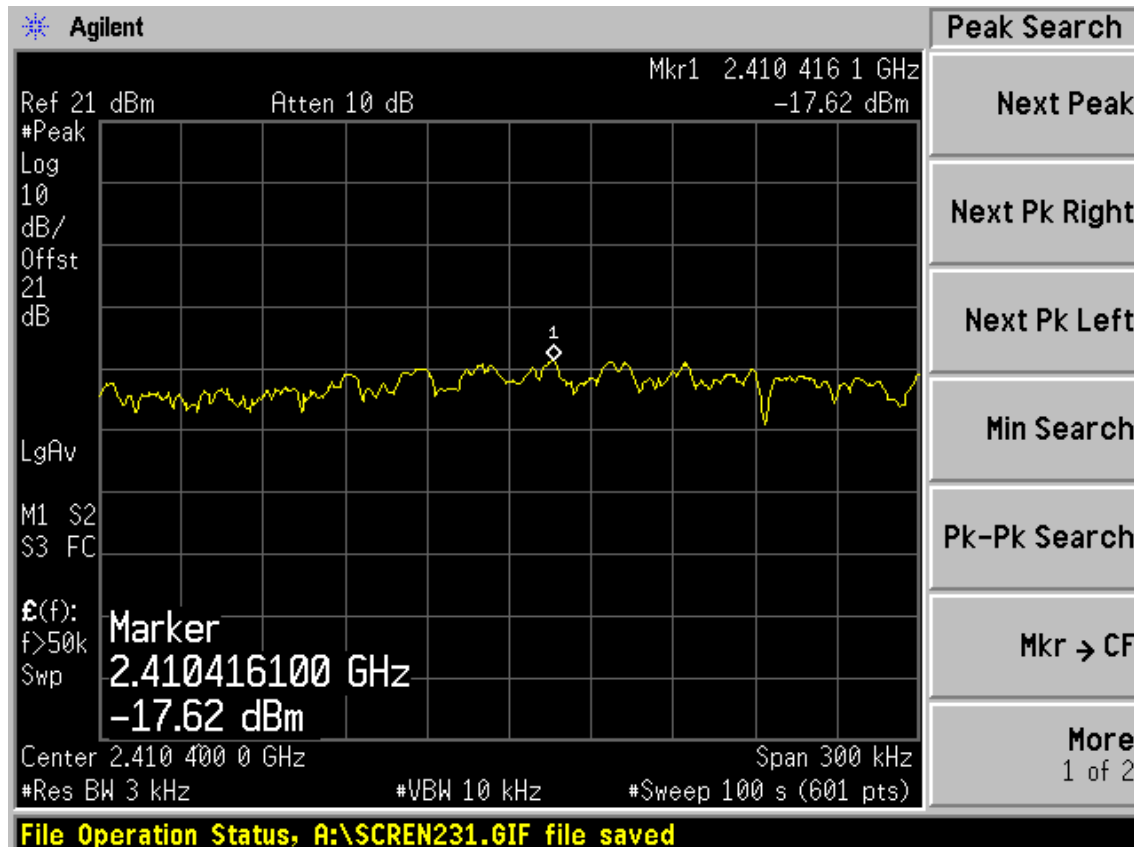
**ANT 1**

Test Mode: IEEE 802.11g TX

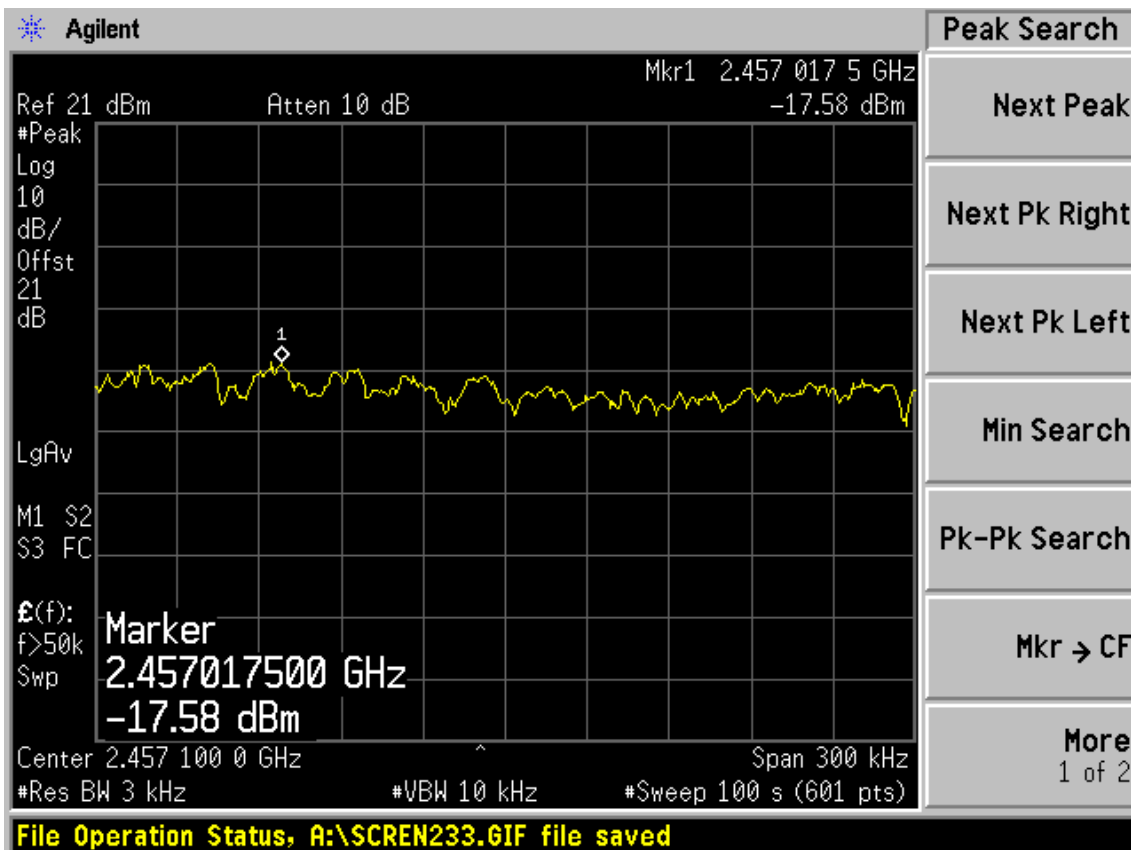
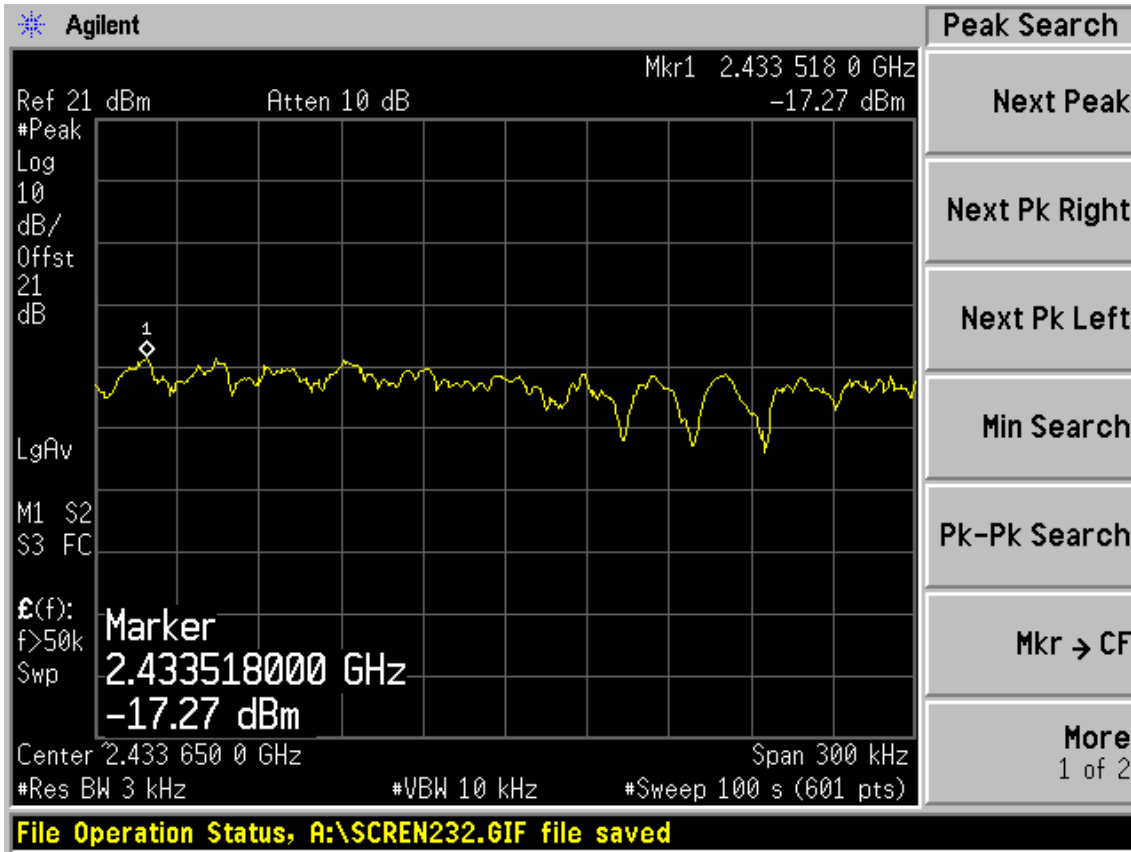




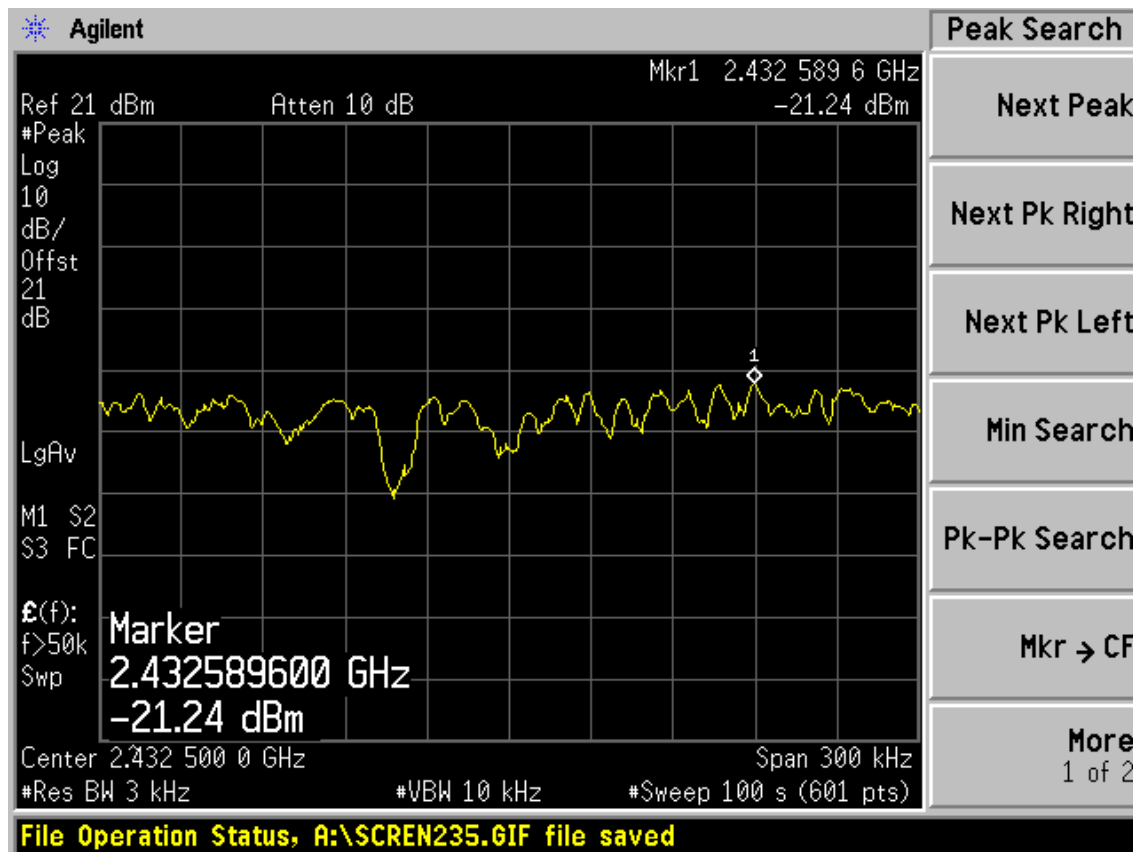
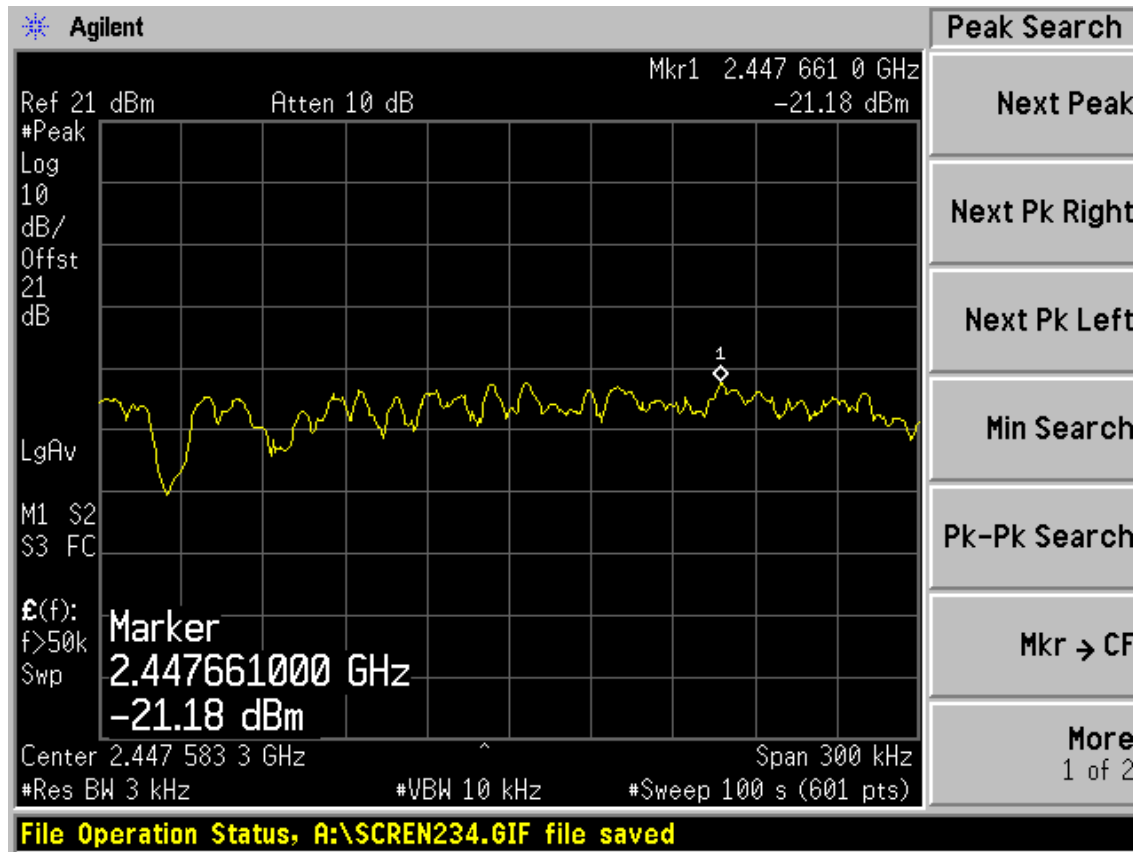
Test Mode: IEEE 11nHT20

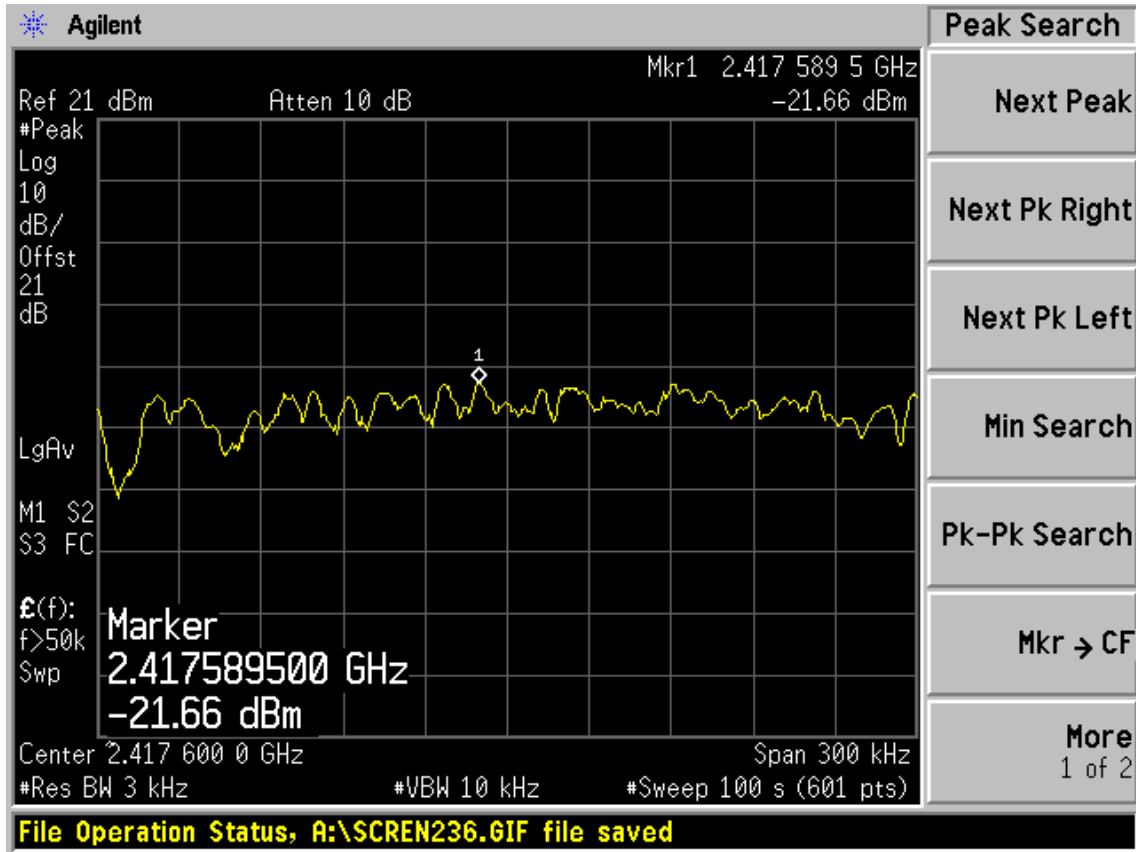






Test Mode: IEEE 11nHT40





## 10.MPE ESTIMATION

### 10.1.Limit for General Population/ Uncontrolled Exposures

Frequency	Power density (mW/ cm <sup>2</sup> )	Averaging time(minutes)
300MHz----1.5GHz	F/1500	30
1.5GHz---100GHz	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 Estimation Result

EUT: Wireless N300 4-port Ethernet Gateway with USB		
M/N: EMG1312-R10A		
Test date: 2013-12-29	Pressure: 101.1±1.0 kpa	Humidity: 52.2±3.0%
Tested by: Leo-Li	Test site: RF site	Temperature:21.6±0.6 °C

Cable loss: 1 dB		Attenuator loss: 20 dB				Antenna Gain: 5dBi	
Test Mode	CH	Frequency (MHz)	Peak Output Power (dBm)	Output Power (mW)	Antenna Gain (dBi)	Antenna Gain (Linear)	MPE
11b	CH1	2412	20.21	104.95	5	3.16	0.0661
	CH6	2437	19.54	89.95	5	3.16	0.0566
	CH11	2462	18.71	74.30	5	3.16	0.0468
11g	CH1	2412	25.38	345.14	5	3.16	0.2172
	CH6	2437	27.12	515.23	5	3.16	0.3243
	CH11	2462	25.15	327.34	5	3.16	0.2060
11n HT20	CH1	2412	25.51	355.63	5	3.16	0.2238
	CH6	2437	24.71	295.80	5	3.16	0.1862
	CH11	2462	25.10	323.59	5	3.16	0.2037
11n HT40	CH1	2422	26.15	412.10	5	3.16	0.2594
	CH4	2437	25.38	345.14	5	3.16	0.2172
	CH7	2452	25.40	346.74	5	3.16	0.2182

## **11. ANTENNA REQUIREMENT**

### **11.1. STANDARD APPLICABLE**

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

### **11.2. ANTENNA CONNECTED CONSTRUCTION**

The antennas used for this product are Dipole antenna that no antenna other than that furnished by the responsible party shall be used with the device, the maximum peak gain of the transmit antenna is 5dBi & 3dBi.

## 12. DEVIATION TO TEST SPECIFICATIONS

[ NONE ]