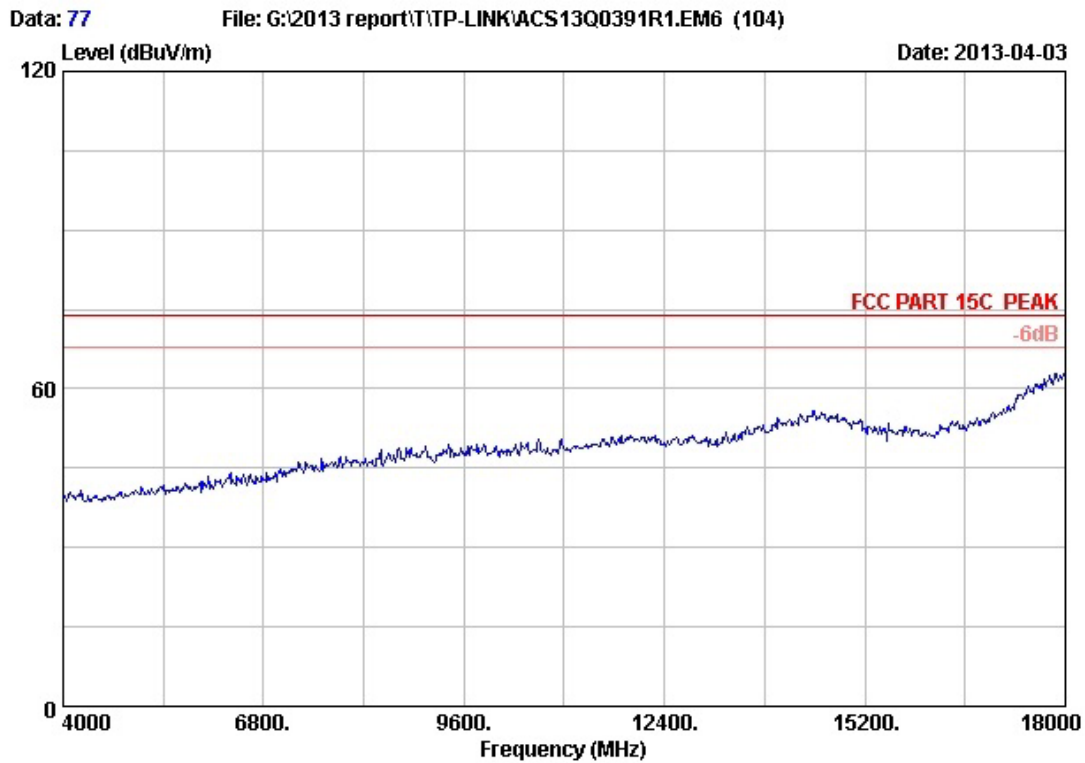


Site no. : 3m Chamber Data no. : 76  
 Dis. / Ant. : 3m 2012 3115 (4580) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : SafeSteram™ Wireless N Gigabit Broadband VPN Router  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11nHT20 CH11 2462MHz Tx  
 M/N : TL-ER604W  
 :

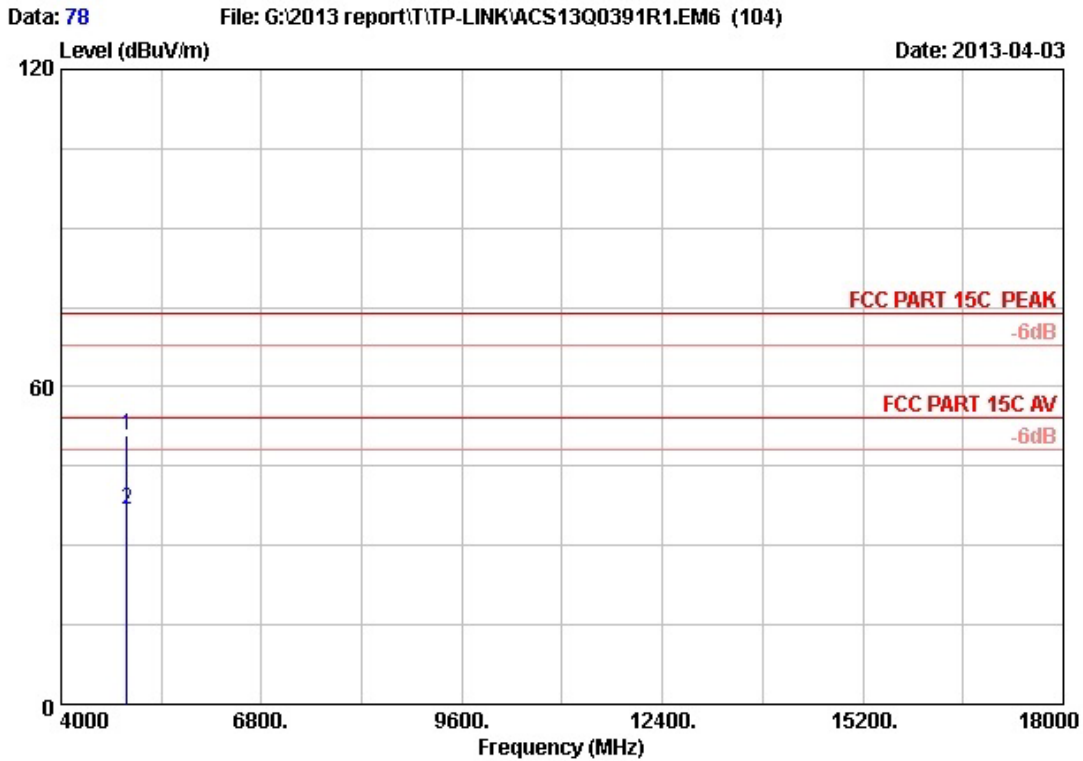
|             | Ant.          | Cable     | Amp.        | Emission       |                |                 |             |         |  |
|-------------|---------------|-----------|-------------|----------------|----------------|-----------------|-------------|---------|--|
| Freq. (MHz) | Factor (dB/m) | loss (dB) | Factor (dB) | Reading (dBuV) | Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Remark  |  |
| 1 4924.000  | 32.73         | 8.78      | 35.68       | 44.81          | 50.64          | 74.00           | 23.36       | Peak    |  |
| 2 4924.000  | 32.73         | 8.78      | 35.68       | 30.55          | 36.38          | 54.00           | 17.62       | 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. : 77  
Dis. / Ant. : 3m 2012 3115 (4580) Ant. pol. : VERTICAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54% Engineer : Leo-Li  
EUT : SafeSteram™ Wireless N Gigabit Broadband VPN Router  
Power supply : DC 12V From Adapter Input AC 120V/60Hz  
Test mode : IEEE802.11nHT20 CH11 2462MHz Tx  
M/N : TL-ER604W  
:

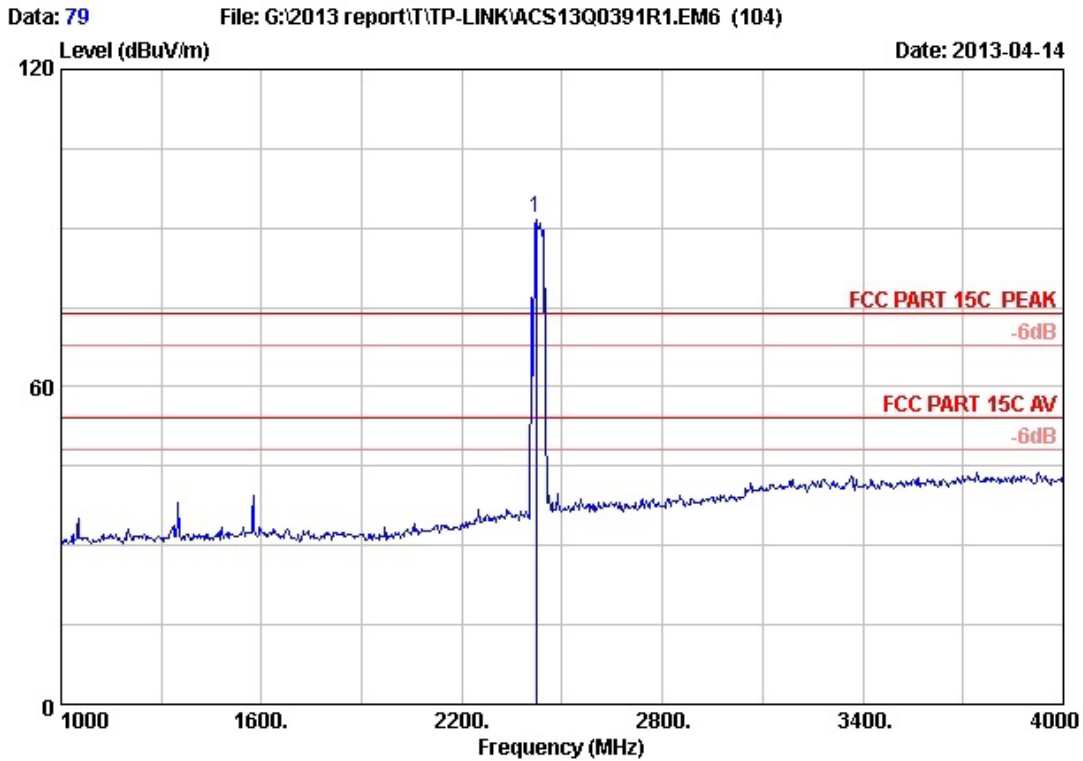


Site no. : 3m Chamber Data no. : 78  
 Dis. / Ant. : 3m 2012 3115 (4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : SafeSteram™ Wireless N Gigabit Broadband VPN Router  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11nHT20 CH11 2462MHz Tx  
 M/N : TL-ER604W

|   | 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 | 4924.000    | 32.73              | 8.78            | 35.68            | 45.13          | 50.96                   | 74.00           | 23.04       | Peak    |
| 2 | 4924.000    | 32.73              | 8.78            | 35.68            | 30.98          | 36.81                   | 54.00           | 17.19       | 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.

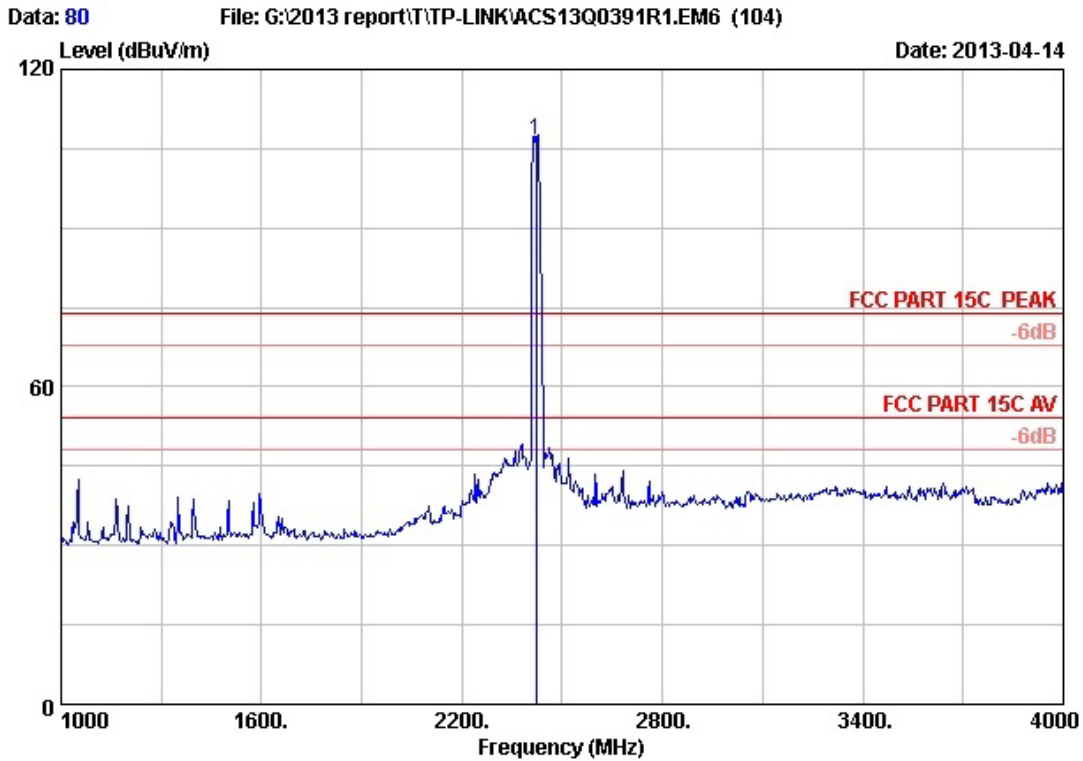


Site no. : 3m Chamber Data no. : 79  
 Dis. / Ant. : 3m 2012 3115 (4580) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : SafeSteram™ Wireless N Gigabit Broadband VPN Router  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11nHT40 CH1 2422MHz Tx  
 M/N : TL-ER604W  
 :

|             | Ant.          | Cable     | Amp.        | Emission       |                |                 |             |        |
|-------------|---------------|-----------|-------------|----------------|----------------|-----------------|-------------|--------|
| Freq. (MHz) | Factor (dB/m) | loss (dB) | Factor (dB) | Reading (dBuV) | Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Remark |
| 1 2422.000  | 26.90         | 6.05      | 35.92       | 94.79          | 91.82          | 74.00           | -17.82      | 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.

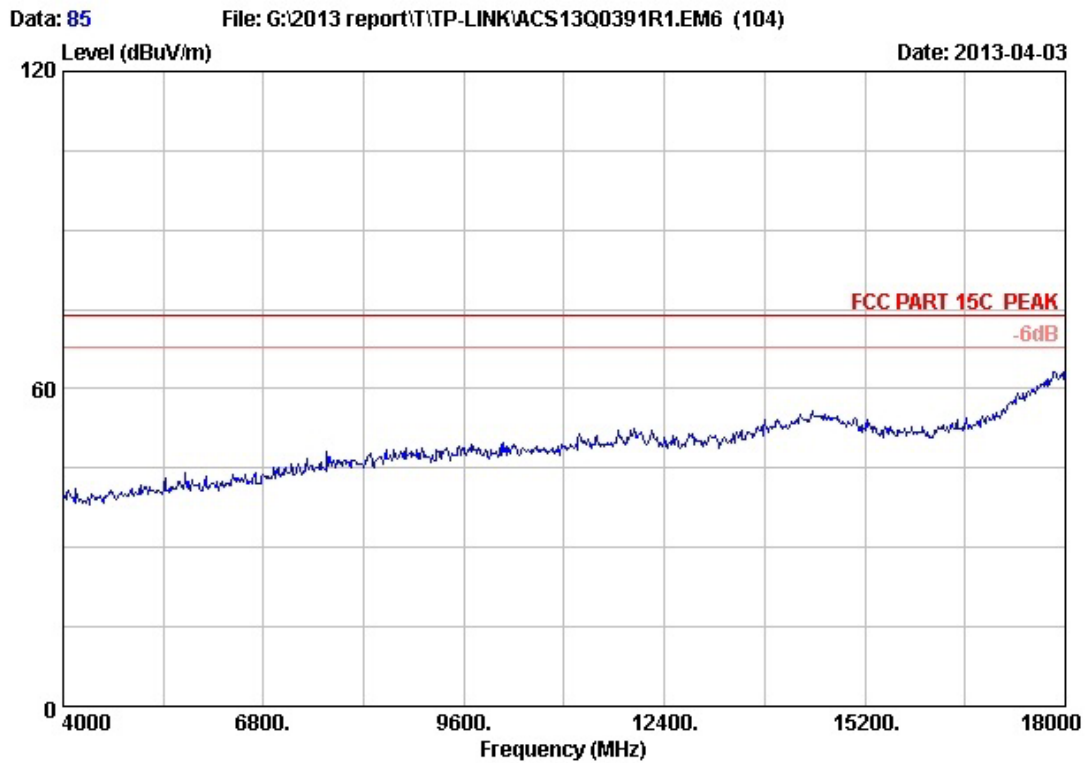


Site no. : 3m Chamber Data no. : 80  
 Dis. / Ant. : 3m 2012 3115 (4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : SafeSteram™ Wireless N Gigabit Broadband VPN Router  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11nHT40 CH4 2422MHz Tx  
 M/N : TL-ER604W  
 :

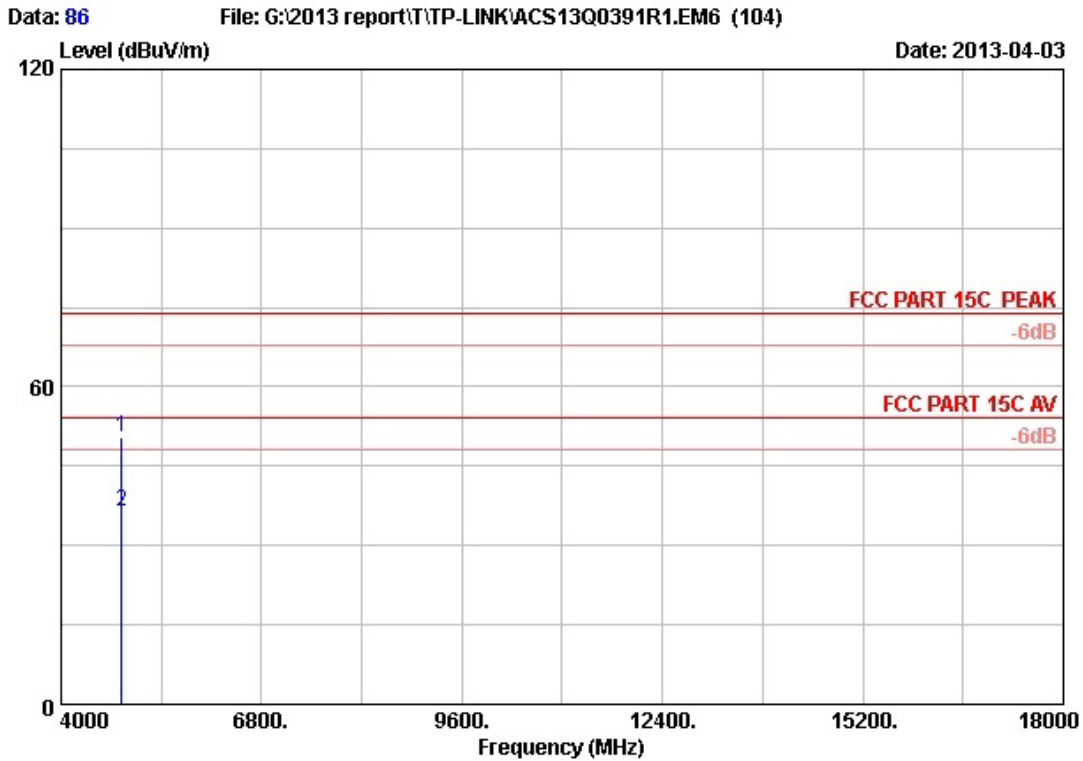
|             | Ant.          | Cable     | Amp.        | Emission       |                |                 |             |        |
|-------------|---------------|-----------|-------------|----------------|----------------|-----------------|-------------|--------|
| Freq. (MHz) | Factor (dB/m) | loss (dB) | Factor (dB) | Reading (dBuV) | Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Remark |
| 1 2422.000  | 26.90         | 6.05      | 35.92       | 109.45         | 106.48         | 74.00           | -32.48      | 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. : 85  
Dis. / Ant. : 3m 2012 3115 (4580) Ant. pol. : VERTICAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54% Engineer : Leo-Li  
EUT : SafeSteram™ Wireless N Gigabit Broadband VPN Router  
Power supply : DC 12V From Adapter Input AC 120V/60Hz  
Test mode : IEEE802.11nHT40 CH1 2422MHz Tx  
M/N : TL-ER604W  
:

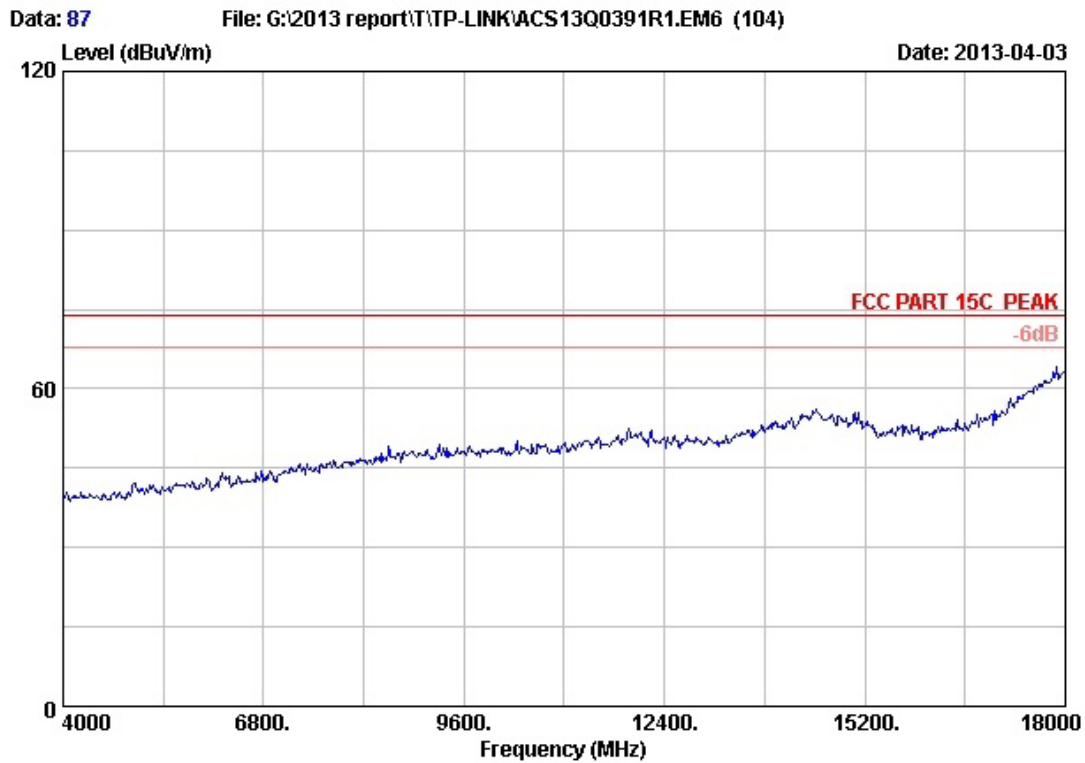


Site no. : 3m Chamber Data no. : 86  
 Dis. / Ant. : 3m 2012 3115 (4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : SafeSteram™ Wireless N Gigabit Broadband VPN Router  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11nHT40 CH1 2422MHz Tx  
 M/N : TL-ER604W  
 :

|   | 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 | 4844.000    | 32.56              | 8.70            | 35.70            | 44.83          | 50.39                   | 74.00           | 23.61       | Peak    |
| 2 | 4844.000    | 32.56              | 8.70            | 35.70            | 30.75          | 36.31                   | 54.00           | 17.69       | Average |

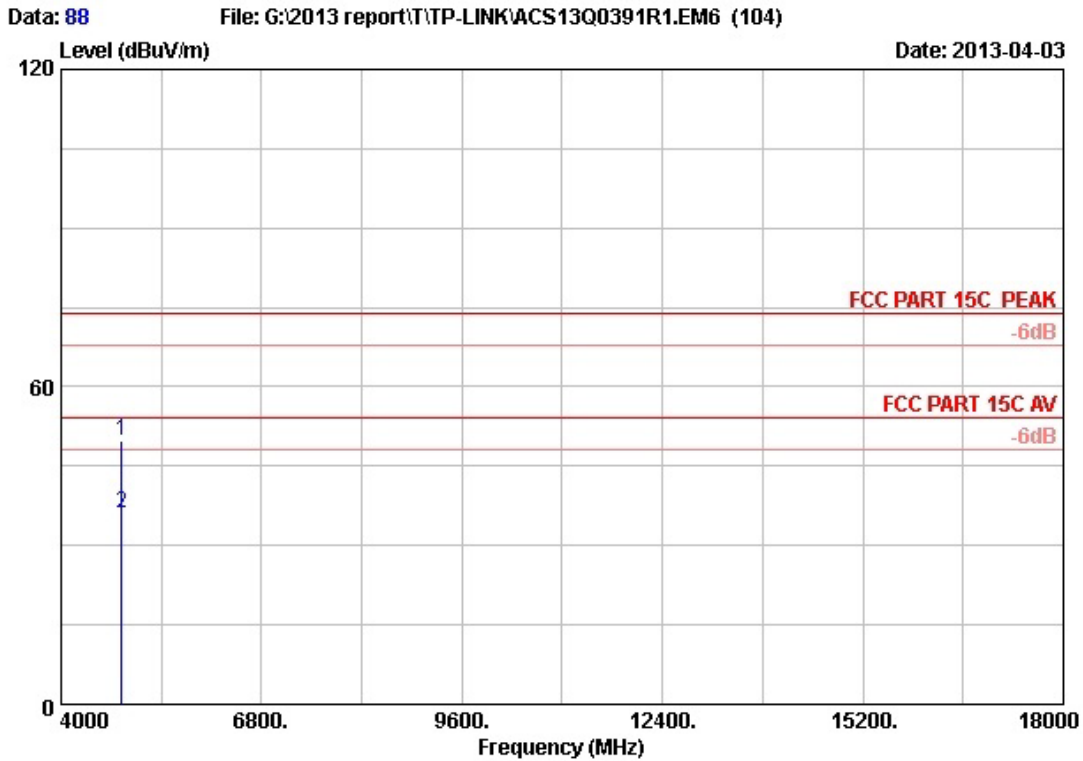
Remarks:

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. : 87  
Dis. / Ant. : 3m 2012 3115 (4580) Ant. pol. : HORIZONTAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54% Engineer : Leo-Li  
EUT : SafeSteram™ Wireless N Gigabit Broadband VPN Router  
Power supply : DC 12V From Adapter Input AC 120V/60Hz  
Test mode : IEEE802.11nHT40 CH1 2422MHz Tx  
M/N : TL-ER604W  
:



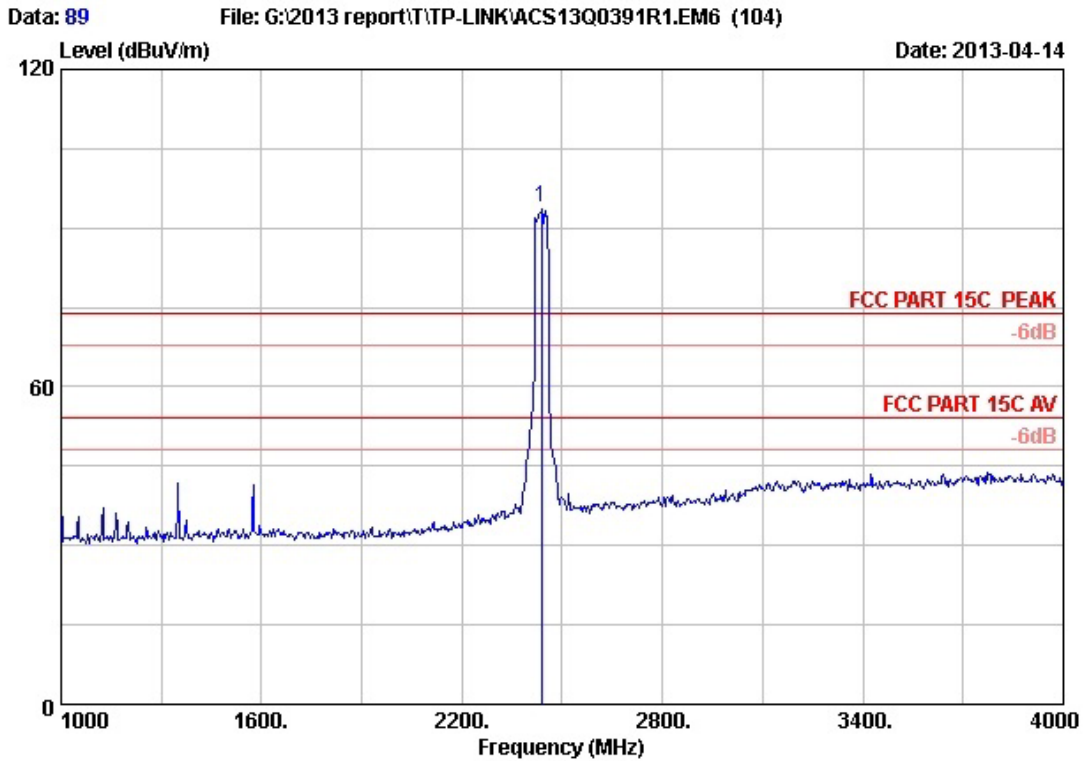


Site no. : 3m Chamber Data no. : 88  
 Dis. / Ant. : 3m 2012 3115 (4580) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : SafeSteram™ Wireless N Gigabit Broadband VPN Router  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11nHT40 CH1 2422MHz Tx  
 M/N : TL-ER604W  
 :

|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>loss<br>(dB) | Amp.<br>Factor<br>(dB) | Reading<br>(dBuV) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark  |
|---|----------------|--------------------------|-----------------------|------------------------|-------------------|-------------------------------|--------------------|----------------|---------|
| 1 | 4844.000       | 32.56                    | 8.70                  | 35.70                  | 44.38             | 49.94                         | 74.00              | 24.06          | Peak    |
| 2 | 4844.000       | 32.56                    | 8.70                  | 35.70                  | 30.51             | 36.07                         | 54.00              | 17.93          | 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.



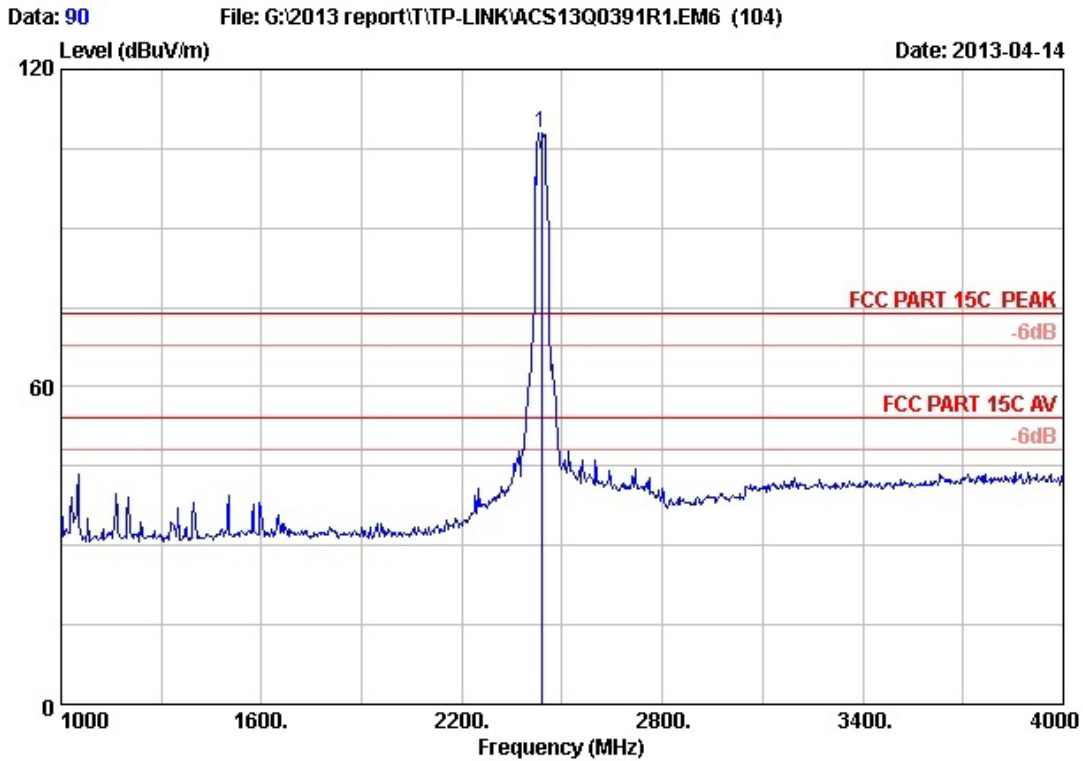
```

Site no.      : 3m Chamber                Data no.   : 89
Dis. / Ant.  : 3m 2012 3115 (4580)       Ant. pol.  : HORIZONTAL
Limit        : FCC PART 15C PEAK
Env. / Ins.  : 23°C/54%                  Engineer   : Leo-Li
EUT          : SafeSteram™ Wireless N Gigabit Broadband VPN Router
Power supply : DC 12V From Adapter Input AC 120V/60Hz
Test mode    : IEEE802.11nHT40 CH4 2437MHz Tx
M/N          : TL-ER604W
    
```

|             | Ant.          | Cable     | Amp.        | Emission       |                |                 |             |        |
|-------------|---------------|-----------|-------------|----------------|----------------|-----------------|-------------|--------|
| Freq. (MHz) | Factor (dB/m) | loss (dB) | Factor (dB) | Reading (dBuV) | Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Remark |
| 1 2437.000  | 27.00         | 6.08      | 35.92       | 96.65          | 93.81          | 74.00           | -19.81      | 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.

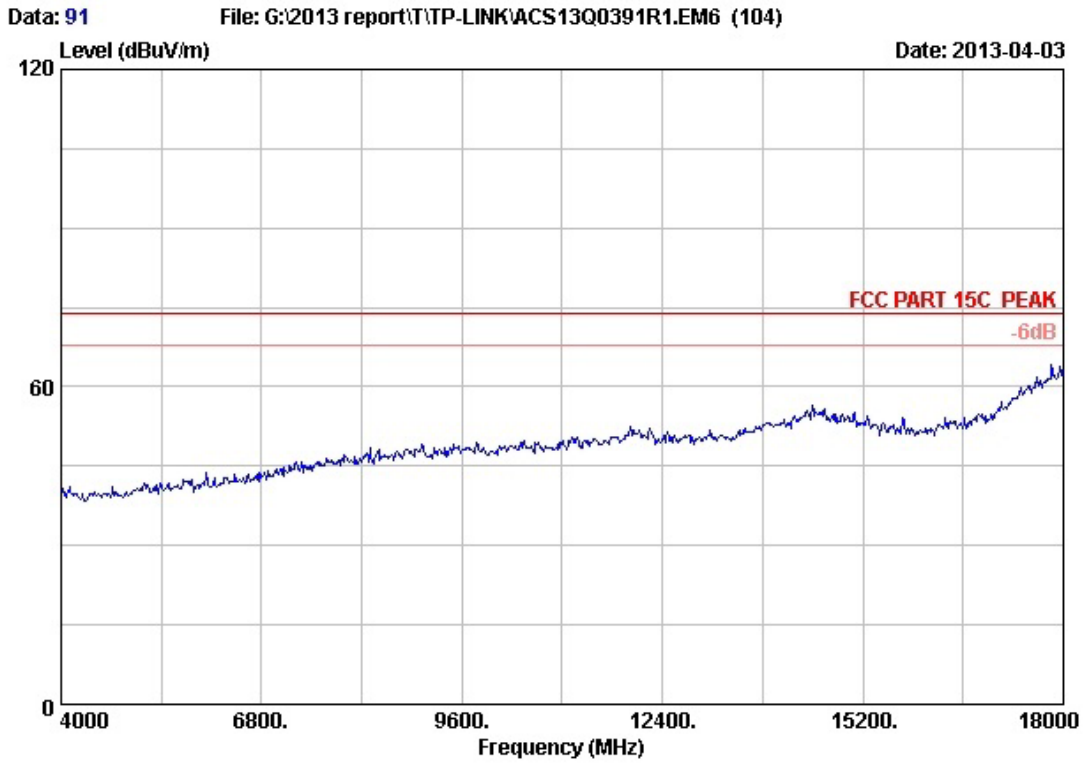


Site no. : 3m Chamber Data no. : 90  
 Dis. / Ant. : 3m 2012 3115 (4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : SafeSteram™ Wireless N Gigabit Broadband VPN Router  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11nHT40 CH4 2437MHz Tx  
 M/N : TL-ER604W

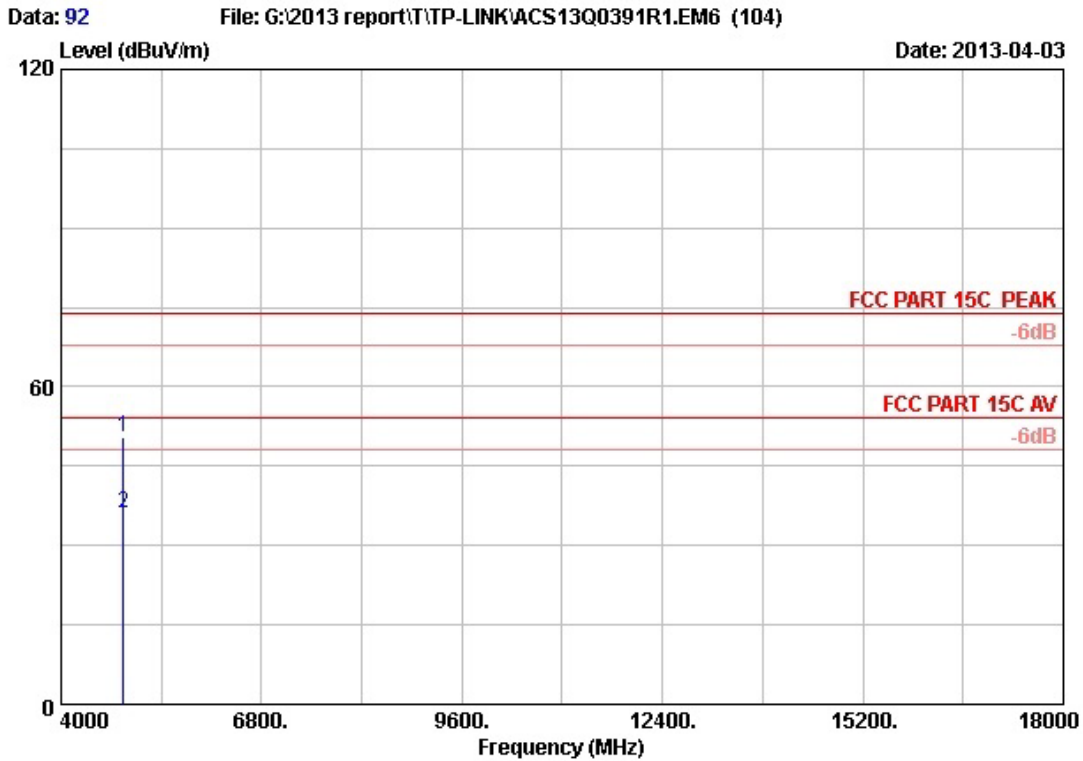
|             | Ant.          | Cable     | Amp.        | Emission       |                |                 |             |        |
|-------------|---------------|-----------|-------------|----------------|----------------|-----------------|-------------|--------|
| Freq. (MHz) | Factor (dB/m) | loss (dB) | Factor (dB) | Reading (dBuV) | Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Remark |
| 1 2437.000  | 27.00         | 6.08      | 35.92       | 110.84         | 108.00         | 74.00           | -34.00      | Peak   |

Remarks:

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



Site no. : 3m Chamber Data no. : 91  
Dis. / Ant. : 3m 2012 3115 (4580) Ant. pol. : HORIZONTAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54% Engineer : Leo-Li  
EUT : SafeSteram™ Wireless N Gigabit Broadband VPN Router  
Power supply : DC 12V From Adapter Input AC 120V/60Hz  
Test mode : IEEE802.11nHT40 CH4 2437MHz Tx  
M/N : TL-ER604W  
:

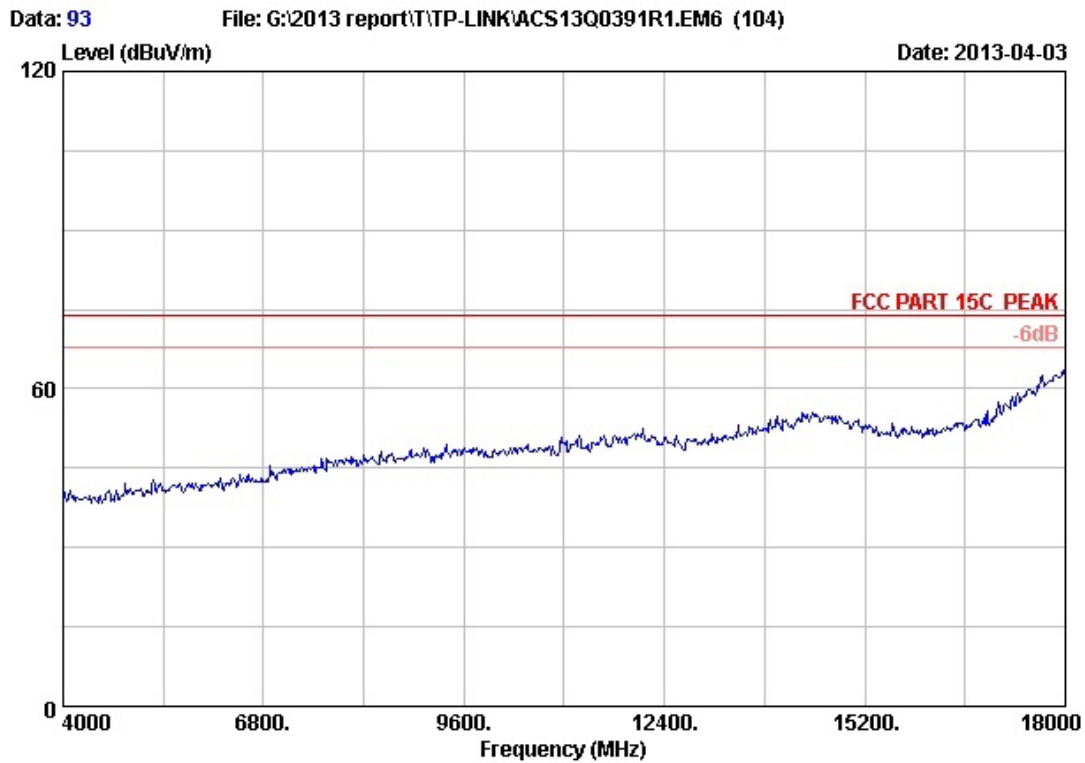


Site no. : 3m Chamber Data no. : 92  
 Dis. / Ant. : 3m 2012 3115 (4580) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : SafeSteram™ Wireless N Gigabit Broadband VPN Router  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11nHT40 CH4 2437MHz Tx  
 M/N : TL-ER604W  
 :

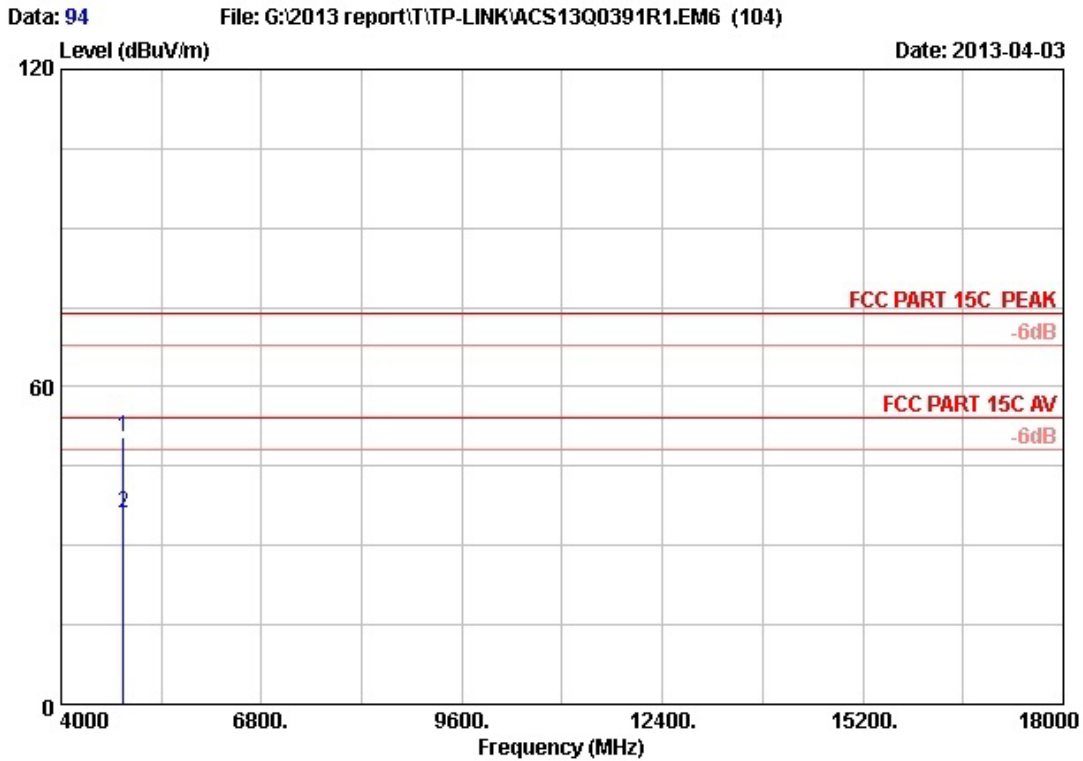
|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>loss<br>(dB) | Amp.<br>Factor<br>(dB) | Reading<br>(dBuV) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark  |
|---|----------------|--------------------------|-----------------------|------------------------|-------------------|-------------------------------|--------------------|----------------|---------|
| 1 | 4874.000       | 32.62                    | 8.73                  | 35.69                  | 44.78             | 50.44                         | 74.00              | 23.56          | Peak    |
| 2 | 4874.000       | 32.62                    | 8.73                  | 35.69                  | 30.59             | 36.25                         | 54.00              | 17.75          | 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. : 93  
Dis. / Ant. : 3m 2012 3115 (4580) Ant. pol. : VERTICAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54% Engineer : Leo-Li  
EUT : SafeSteram™ Wireless N Gigabit Broadband VPN Router  
Power supply : DC 12V From Adapter Input AC 120V/60Hz  
Test mode : IEEE802.11nHT40 CH4 2437MHz Tx  
M/N : TL-ER604W  
:

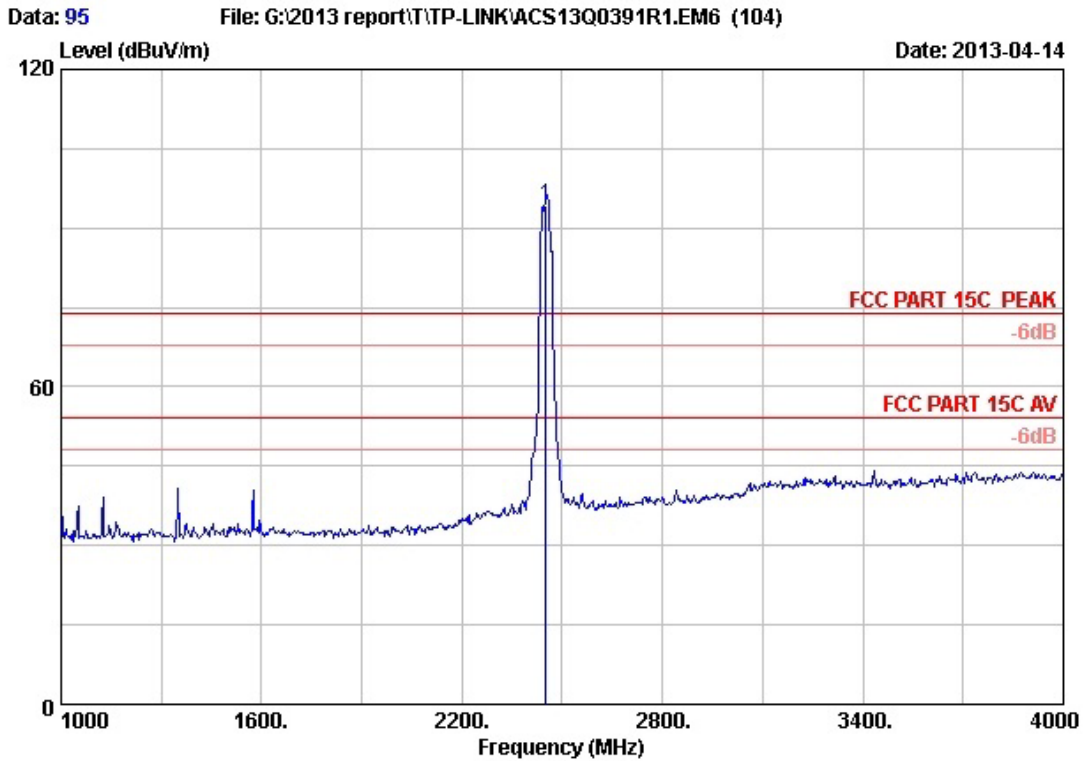


Site no. : 3m Chamber Data no. : 94  
 Dis. / Ant. : 3m 2012 3115 (4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : SafeSteram™ Wireless N Gigabit Broadband VPN Router  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11nHT40 CH4 2437MHz Tx  
 M/N : TL-ER604W  
 :

|             | Ant.          | Cable     | Amp.        | Emission       |                |                 |             |         |  |
|-------------|---------------|-----------|-------------|----------------|----------------|-----------------|-------------|---------|--|
| Freq. (MHz) | Factor (dB/m) | loss (dB) | Factor (dB) | Reading (dBuV) | Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Remark  |  |
| 1 4874.000  | 32.62         | 8.73      | 35.69       | 44.69          | 50.35          | 74.00           | 23.65       | Peak    |  |
| 2 4874.000  | 32.62         | 8.73      | 35.69       | 30.51          | 36.17          | 54.00           | 17.83       | Average |  |

Remarks:

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



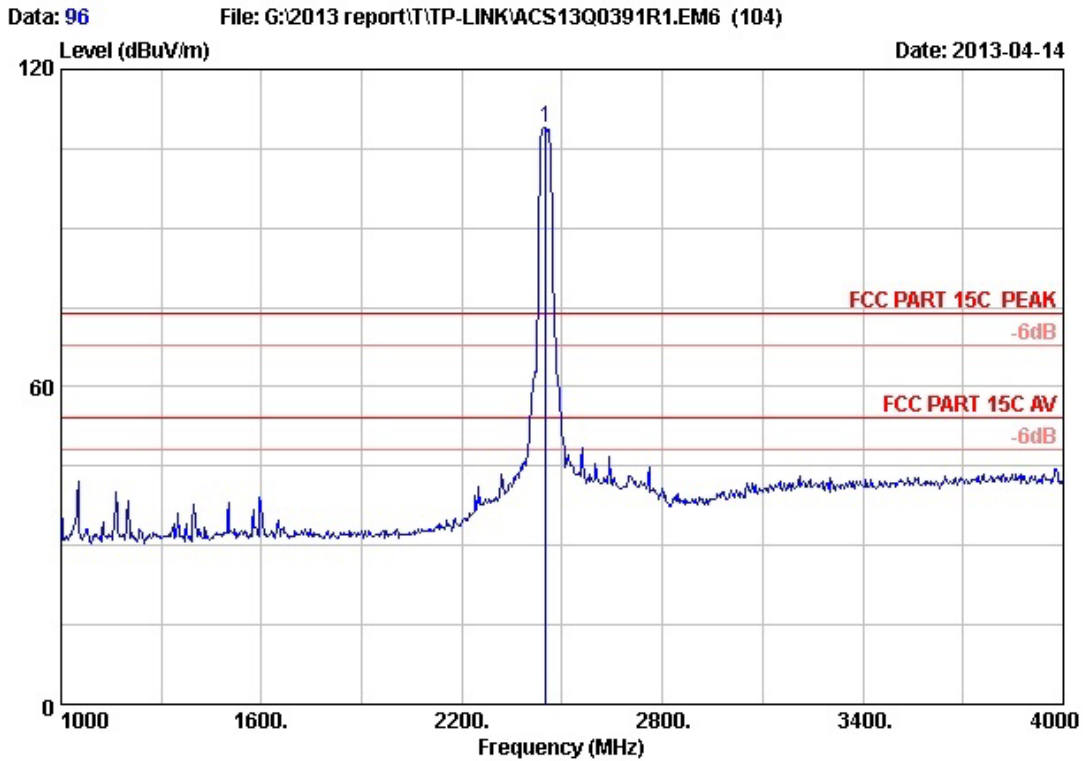
Site no. : 3m Chamber Data no. : 95  
 Dis. / Ant. : 3m 2012 3115 (4580) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : SafeSteram™ Wireless N Gigabit Broadband VPN Router  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11nHT40 CH7 2452MHz Tx  
 M/N : TL-ER604W  
 :

|             | Ant.          | Cable     | Amp.        | Emission       |                |                 |             |        |
|-------------|---------------|-----------|-------------|----------------|----------------|-----------------|-------------|--------|
| Freq. (MHz) | Factor (dB/m) | loss (dB) | Factor (dB) | Reading (dBuV) | Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Remark |
| 1 2452.000  | 27.09         | 6.11      | 35.92       | 96.89          | 94.17          | 74.00           | -20.17      | 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.



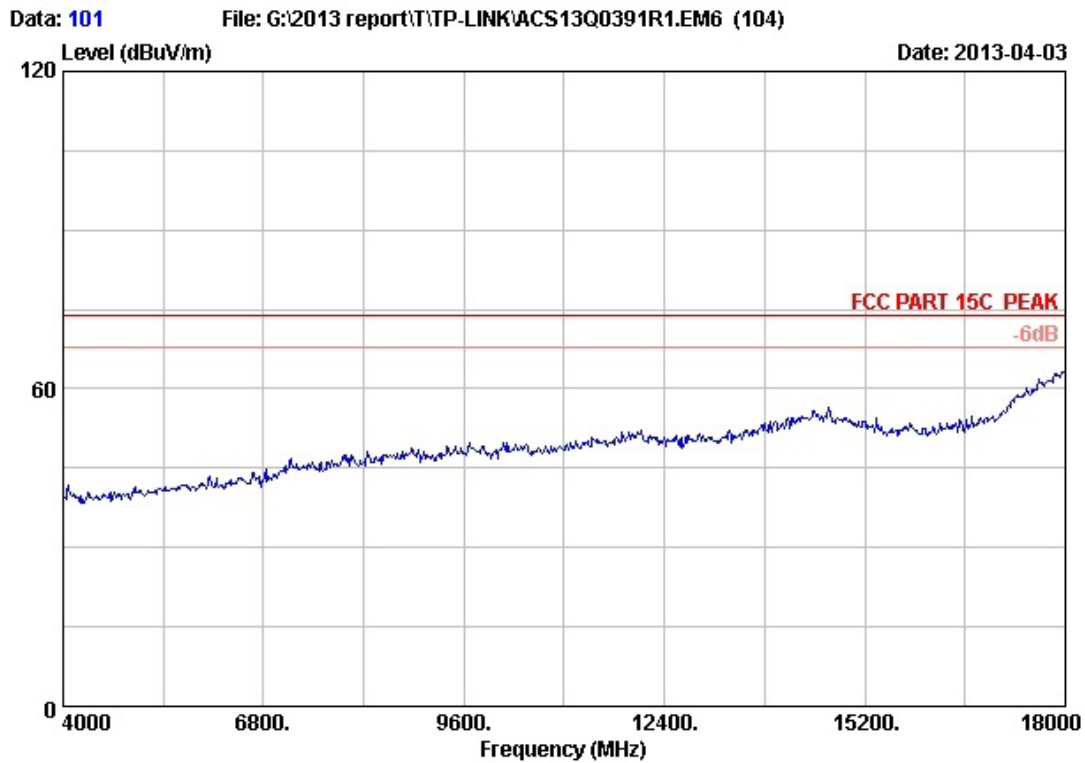


Site no. : 3m Chamber Data no. : 96  
 Dis. / Ant. : 3m 2012 3115 (4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : SafeSteram™ Wireless N Gigabit Broadband VPN Router  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11nHT40 CH7 2452MHz Tx  
 M/N : TL-ER604W

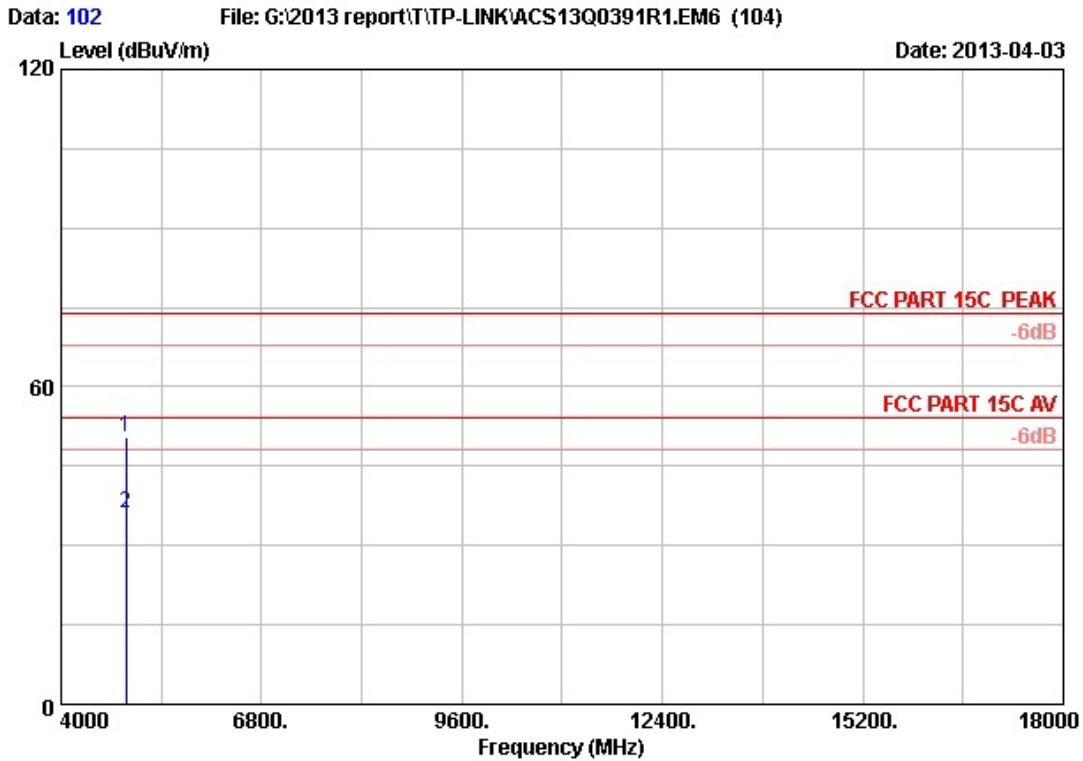
|             | Ant.          | Cable     | Amp.        | Emission       |                |                 |             |        |
|-------------|---------------|-----------|-------------|----------------|----------------|-----------------|-------------|--------|
| Freq. (MHz) | Factor (dB/m) | loss (dB) | Factor (dB) | Reading (dBuV) | Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Remark |
| 1 2452.000  | 27.09         | 6.11      | 35.92       | 111.56         | 108.84         | 74.00           | -34.84      | 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. : 101  
Dis. / Ant. : 3m 2012 3115 (4580) Ant. pol. : VERTICAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54% Engineer : Leo-Li  
EUT : SafeSteram™ Wireless N Gigabit Broadband VPN Router  
Power supply : DC 12V From Adapter Input AC 120V/60Hz  
Test mode : IEEE802.11nHT40 CH7 2452MHz Tx  
M/N : TL-ER604W  
:

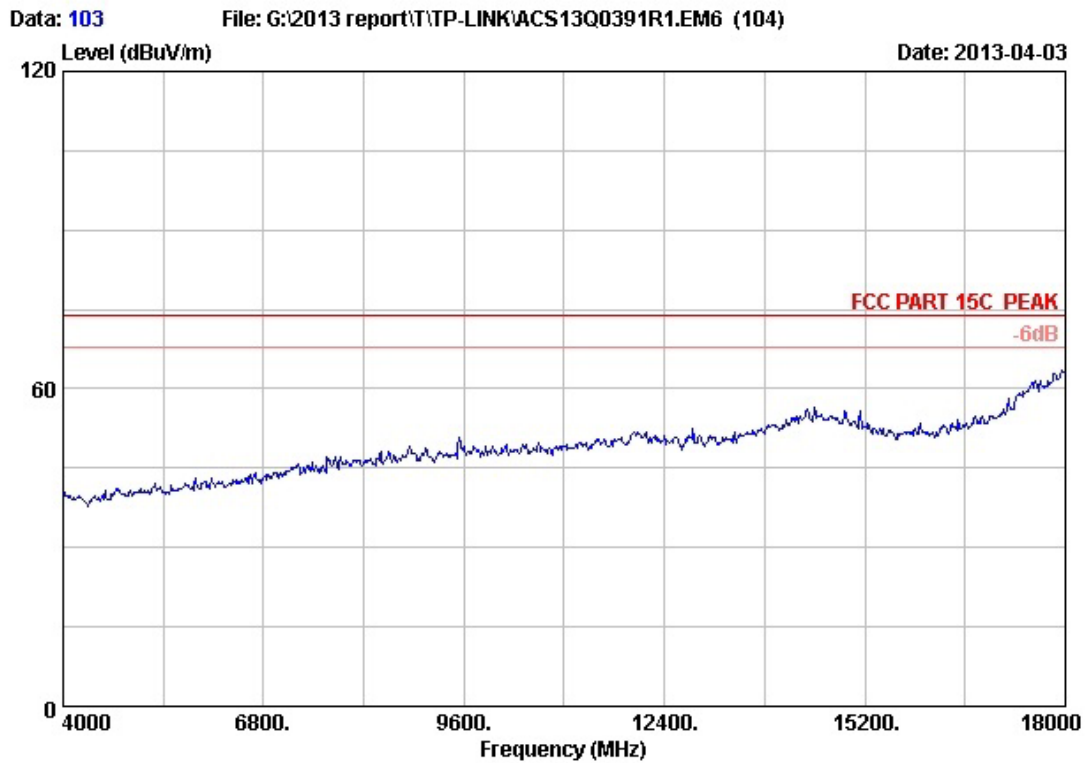


Site no. : 3m Chamber Data no. : 102  
 Dis. / Ant. : 3m 2012 3115 (4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : SafeSteram™ Wireless N Gigabit Broadband VPN Router  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11nHT40 CH7 2452MHz Tx  
 M/N : TL-ER604W  
 :

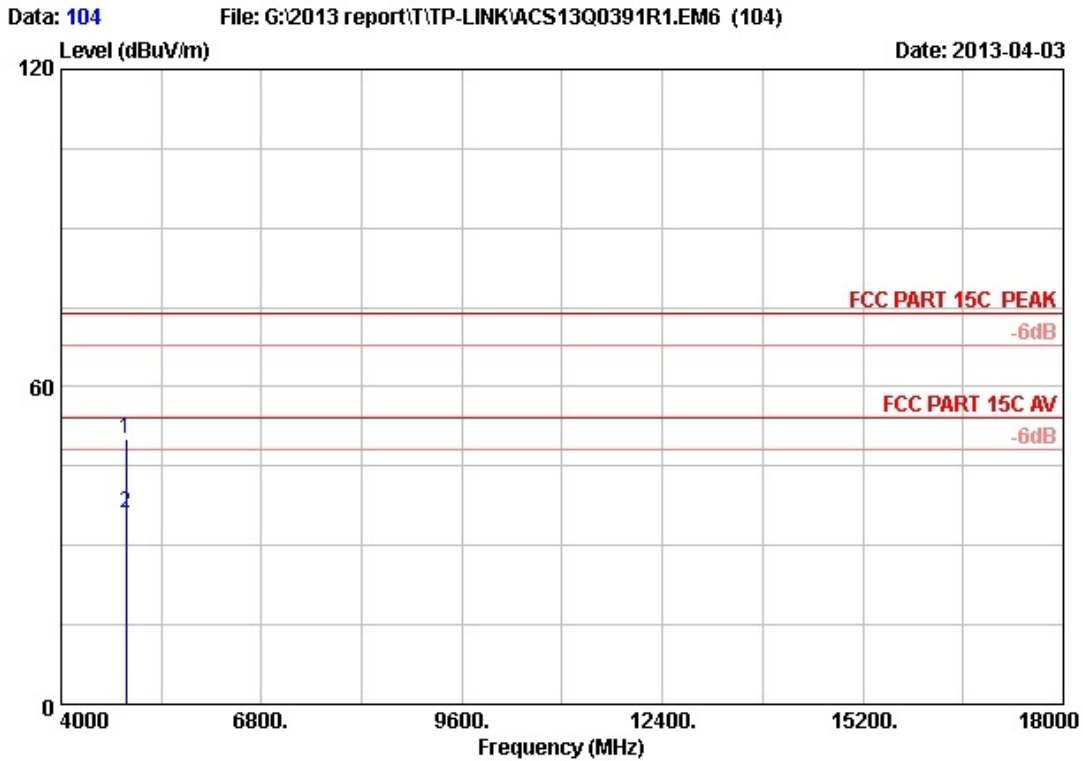
|   | Ant. Factor (dB/m) | Cable loss (dB) | Amp. Factor (dB) | Reading (dBuV) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Remark  |
|---|--------------------|-----------------|------------------|----------------|-------------------------|-----------------|-------------|---------|
| 1 | 32.69              | 8.76            | 35.68            | 44.72          | 50.49                   | 74.00           | 23.51       | Peak    |
| 2 | 32.69              | 8.76            | 35.68            | 30.36          | 36.13                   | 54.00           | 17.87       | 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. : 103  
Dis. / Ant. : 3m 2012 3115 (4580) Ant. pol. : HORIZONTAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54% Engineer : Leo-Li  
EUT : SafeSteram™ Wireless N Gigabit Broadband VPN Router  
Power supply : DC 12V From Adapter Input AC 120V/60Hz  
Test mode : IEEE802.11nHT40 CH7 2452MHz Tx  
M/N : TL-ER604W  
:



Site no. : 3m Chamber Data no. : 104  
 Dis. / Ant. : 3m 2012 3115 (4580) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : SafeSteram™ Wireless N Gigabit Broadband VPN Router  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11nHT40 CH7 2452MHz Tx  
 M/N : TL-ER604W  
 :

|             | Ant.          | Cable     | Amp.        | Emission       |                |                 |             |         |  |
|-------------|---------------|-----------|-------------|----------------|----------------|-----------------|-------------|---------|--|
| Freq. (MHz) | Factor (dB/m) | loss (dB) | Factor (dB) | Reading (dBuV) | Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Remark  |  |
| 1 4904.000  | 32.69         | 8.76      | 35.68       | 44.35          | 50.12          | 74.00           | 23.88       | Peak    |  |
| 2 4904.000  | 32.69         | 8.76      | 35.68       | 30.18          | 35.95          | 54.00           | 18.05       | 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.

## 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         |
| 4.   | Spectrum Analyzer | Agilent      | N9030A      | MY51380221 | May.08,12 | 1Year         |

### 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.

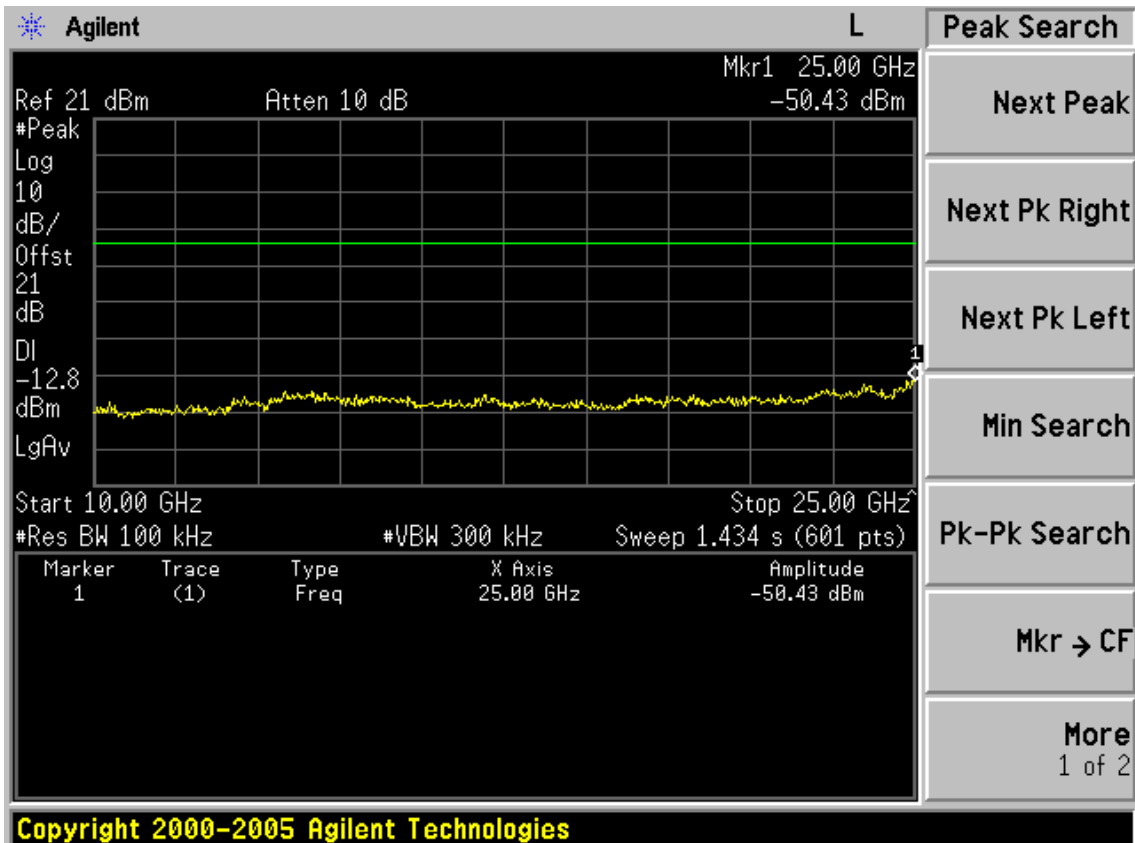
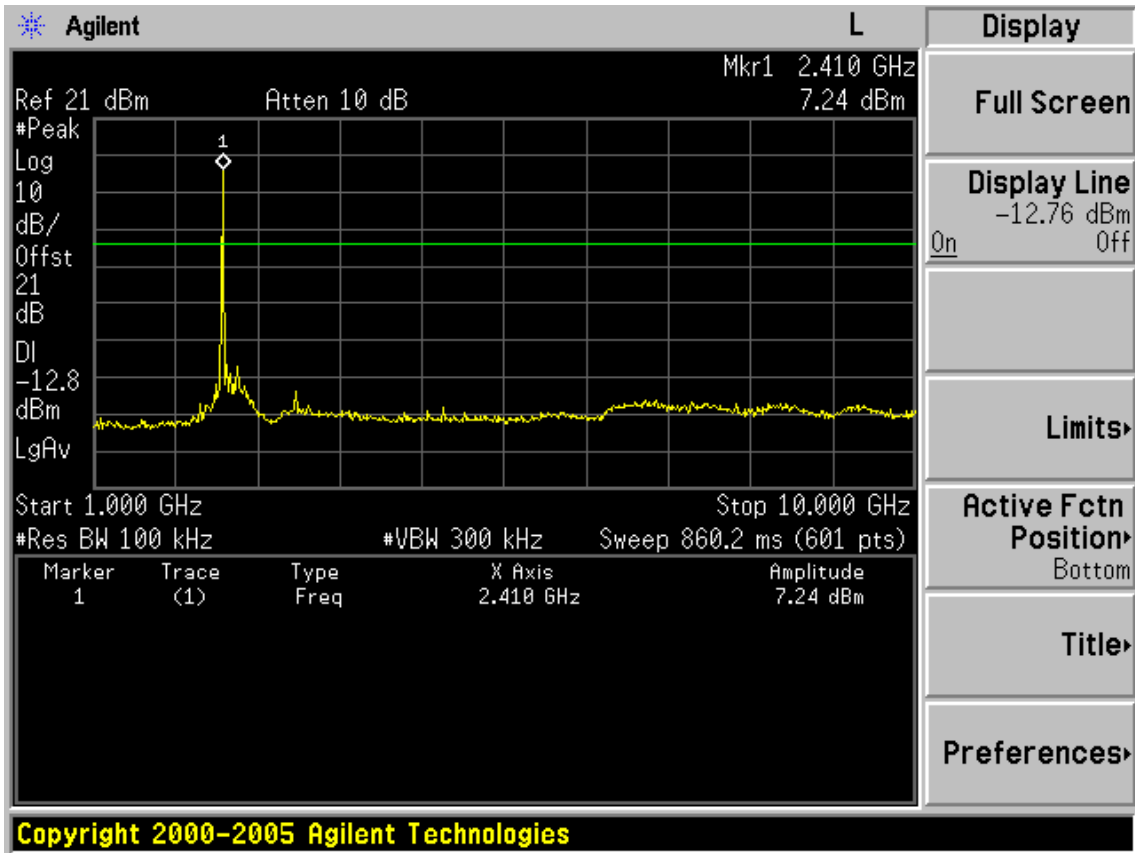
### 5.4. Test result

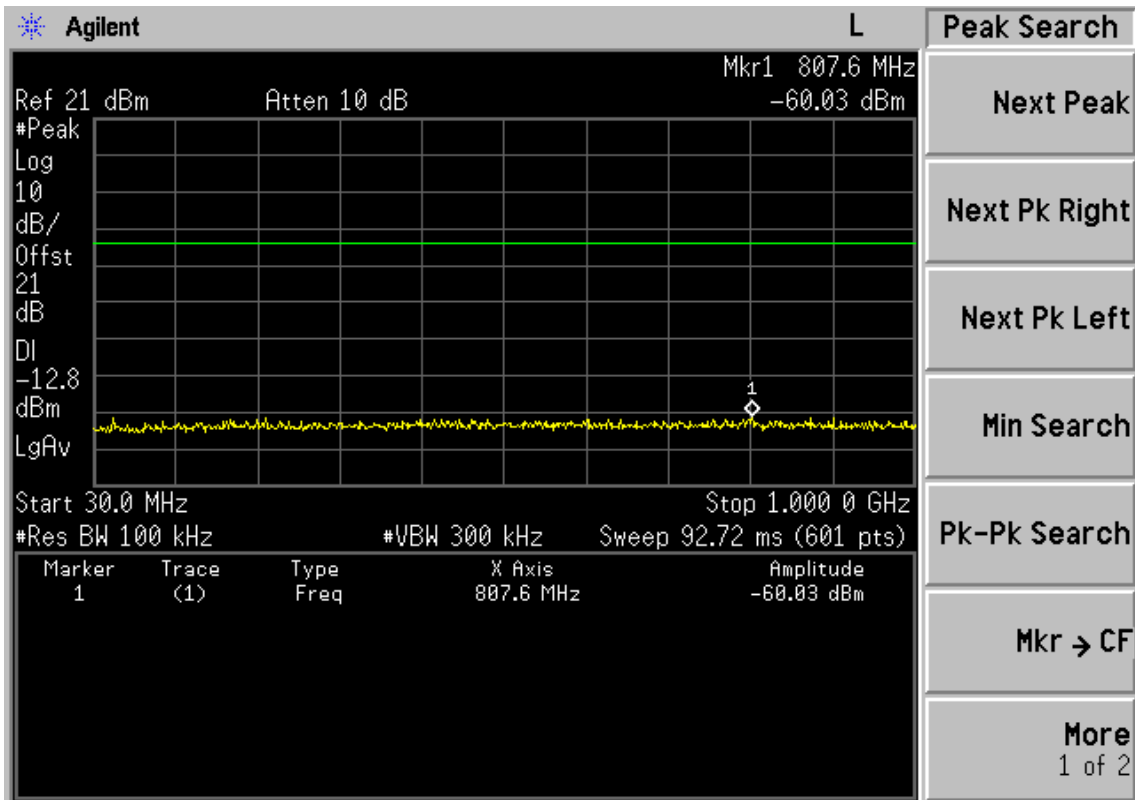
**PASS** (The testing data was attached in the next pages.)

**Chain 0**

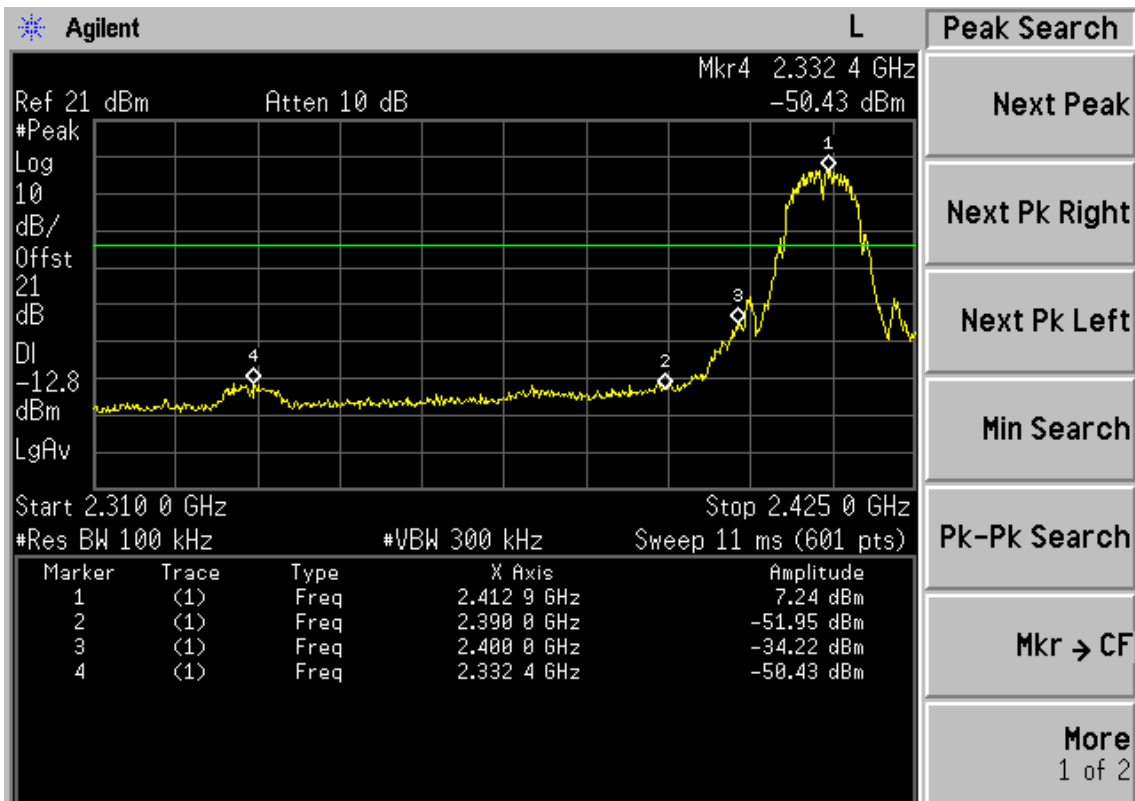
Test Mode: IEEE 802.11b TX

Test CH1: 2412MHz





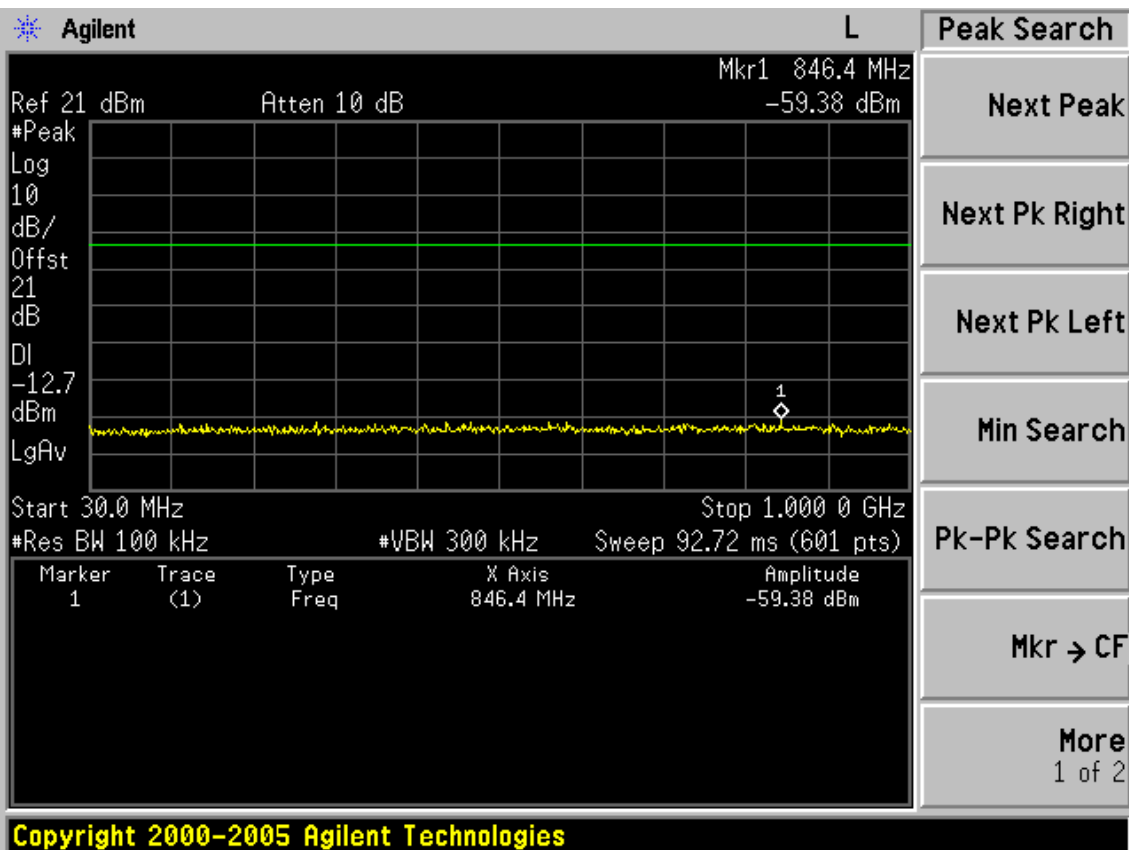
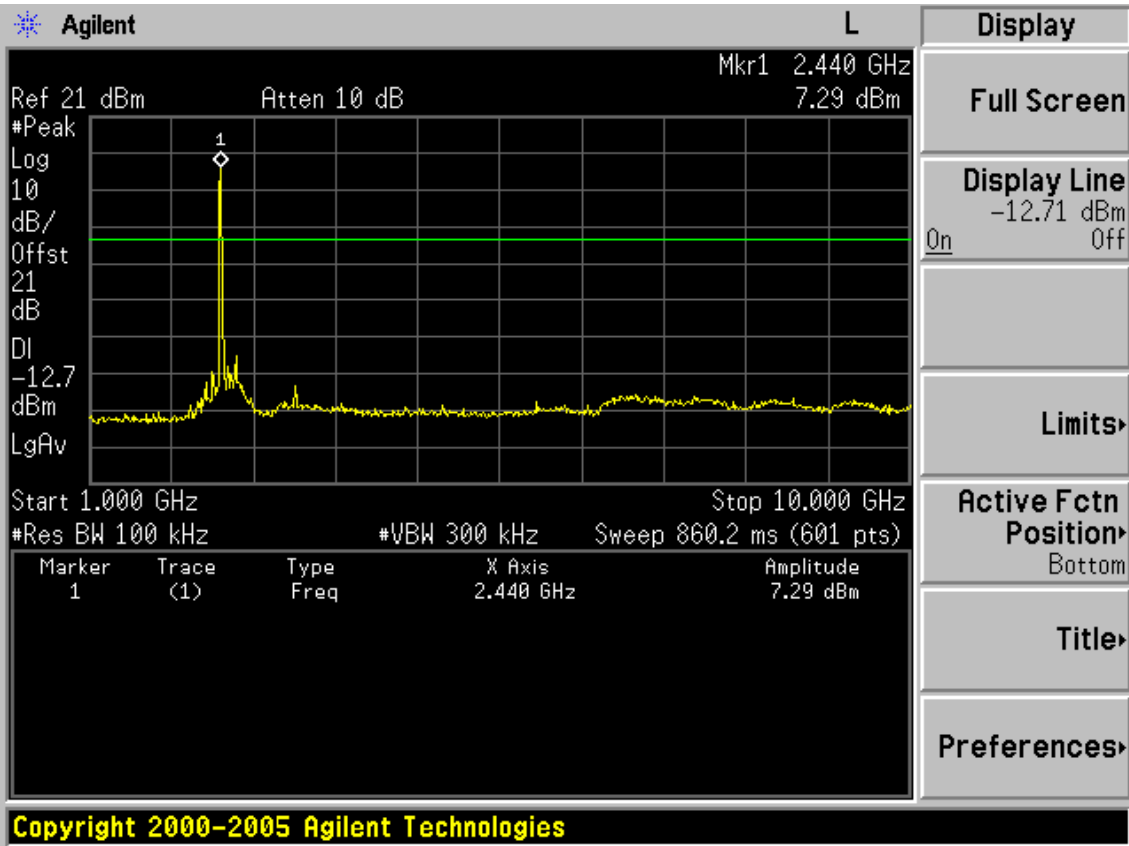
Copyright 2000-2005 Agilent Technologies

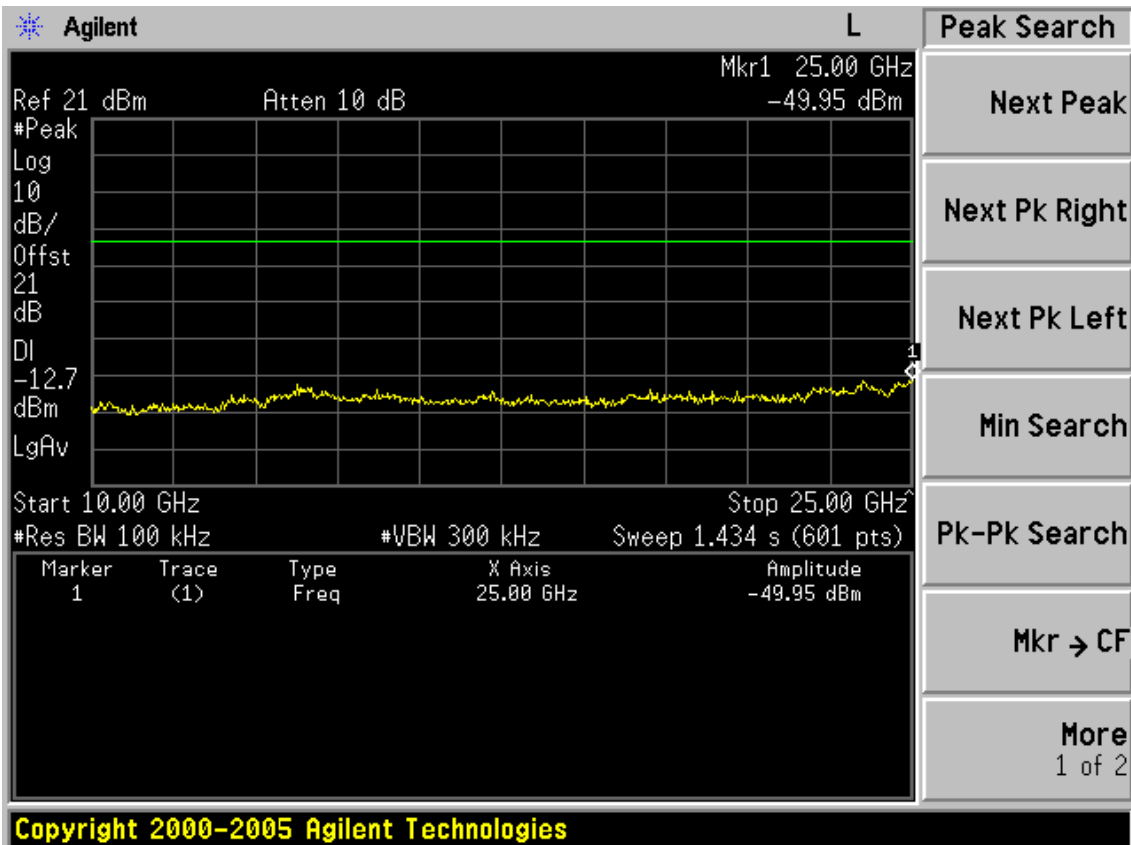


Copyright 2000-2005 Agilent Technologies

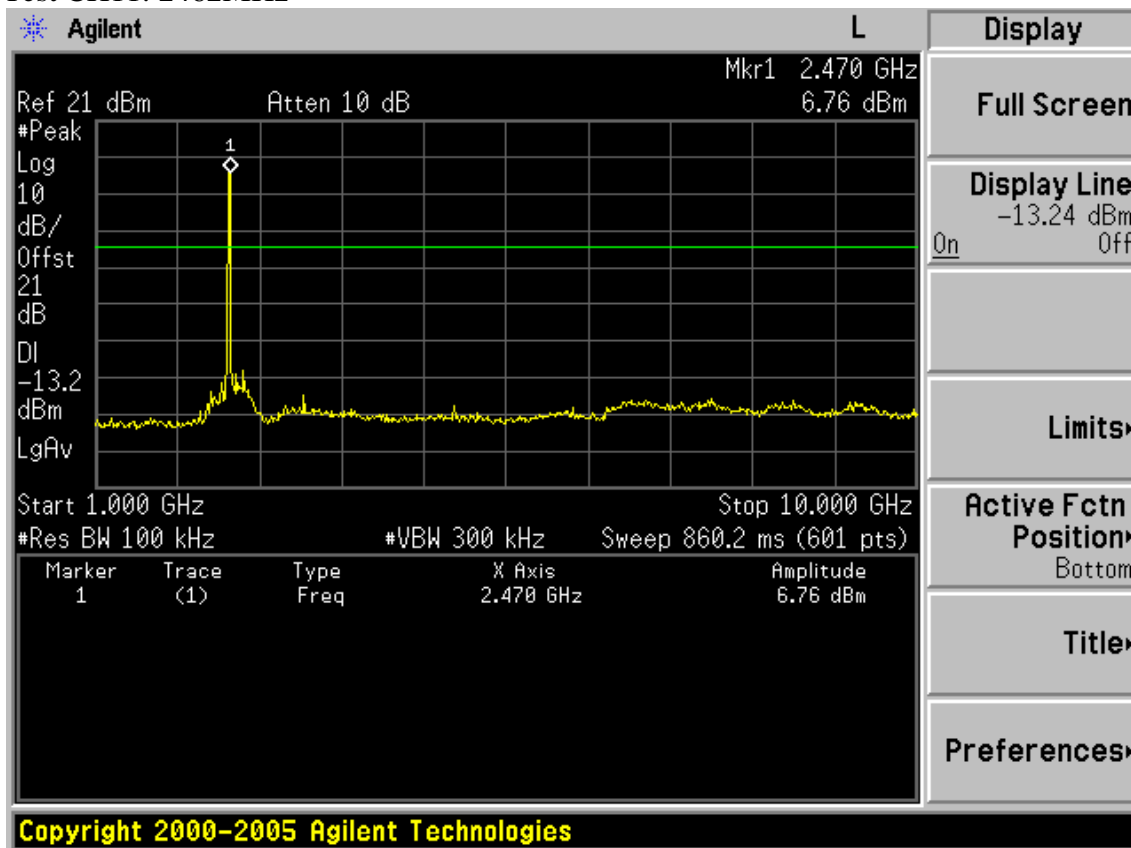


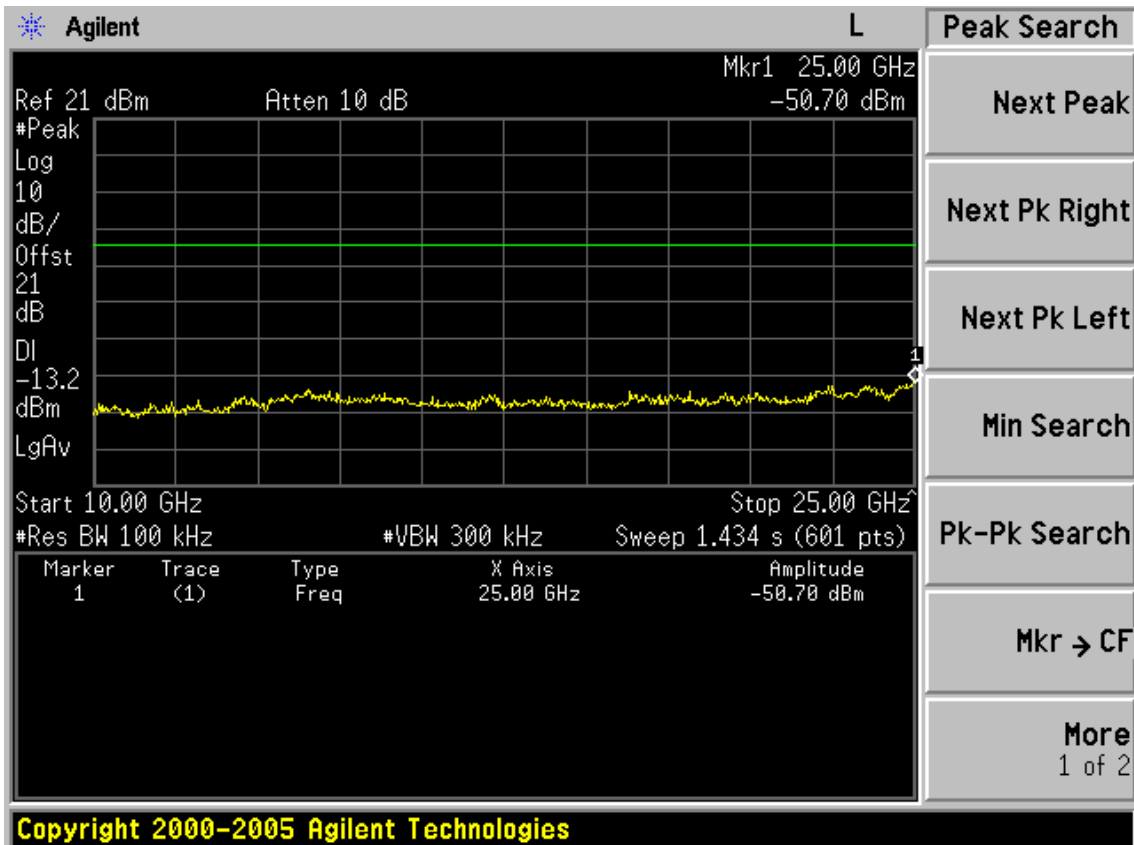
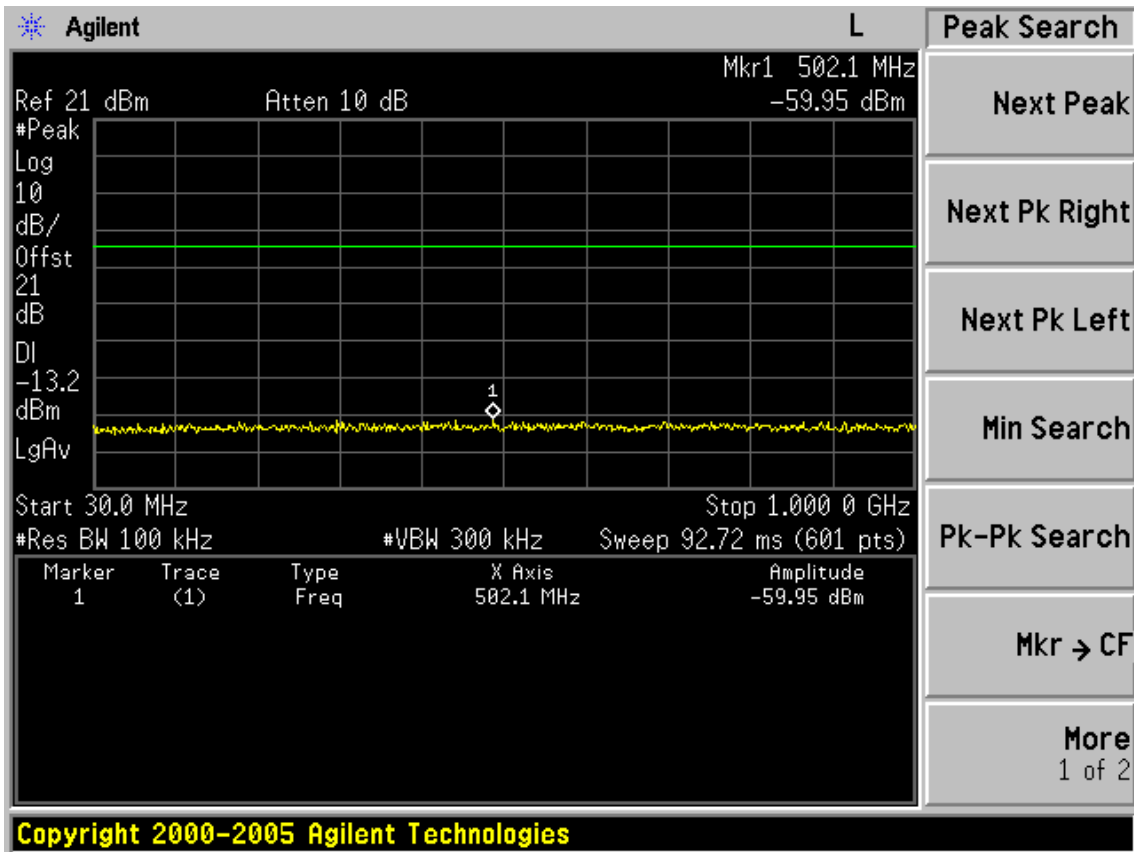
Test CH6: 2437MHz

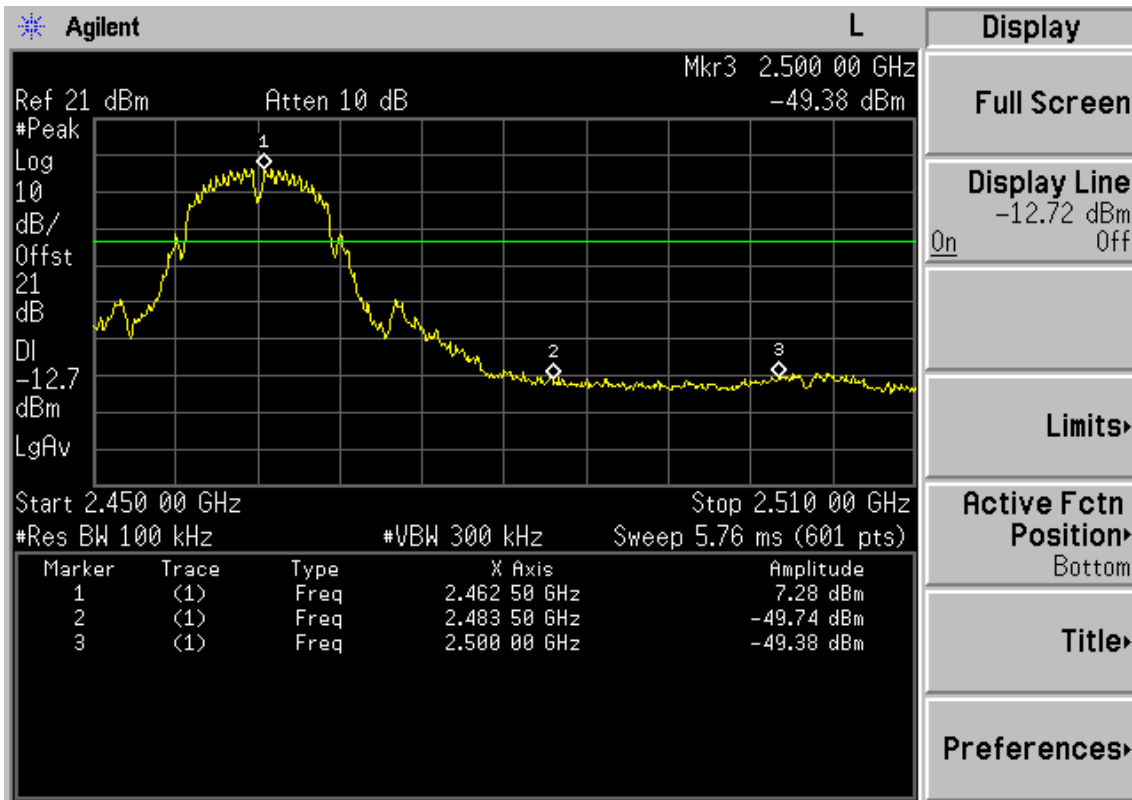




Test CH11: 2462MHz

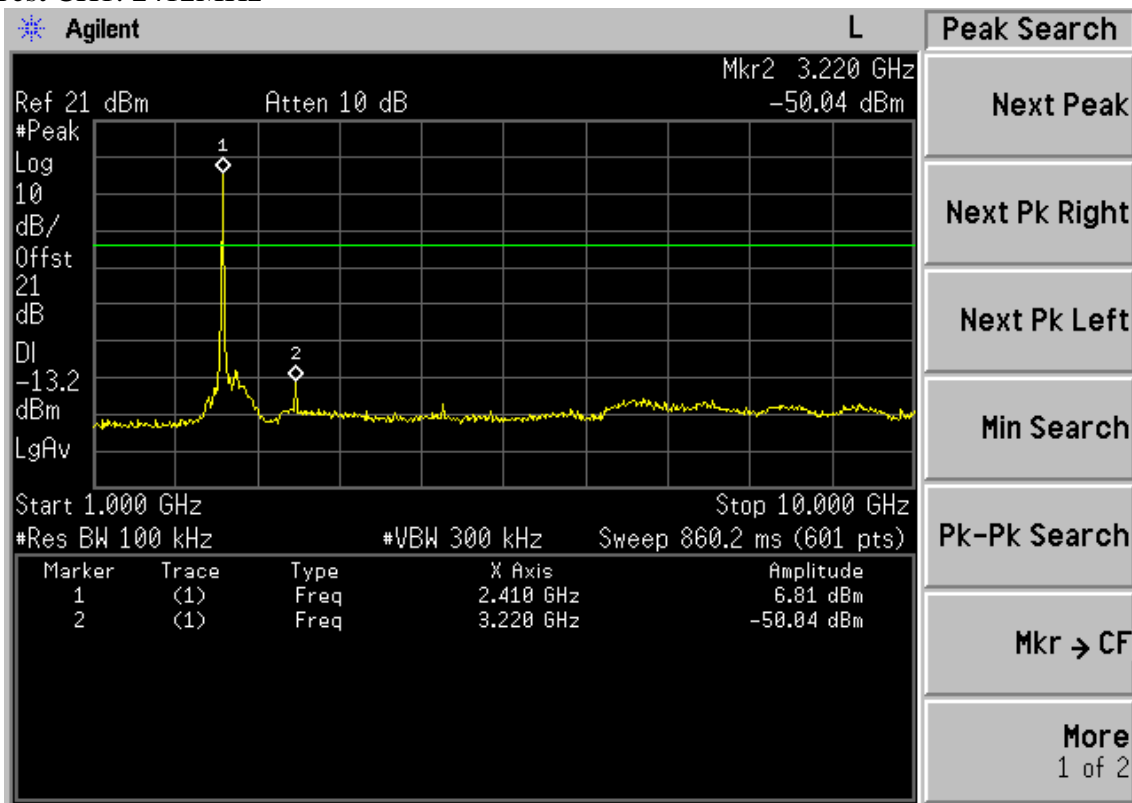




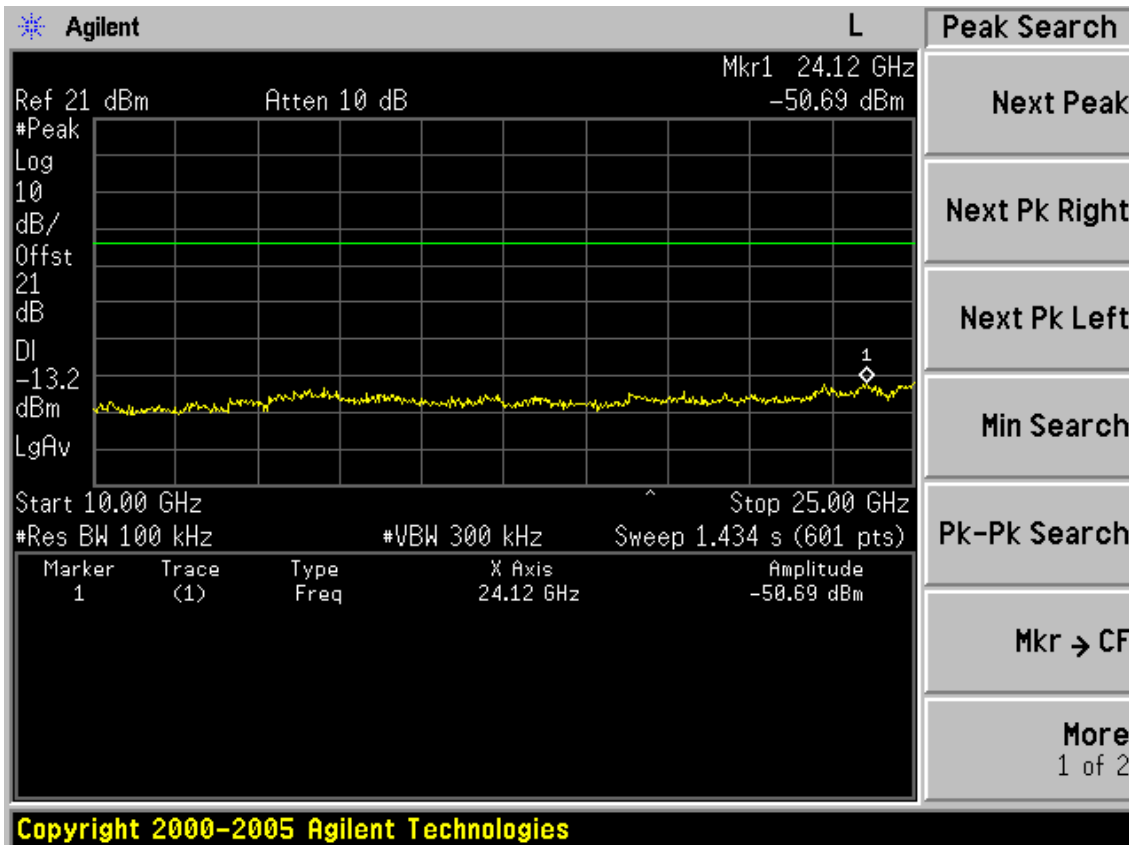
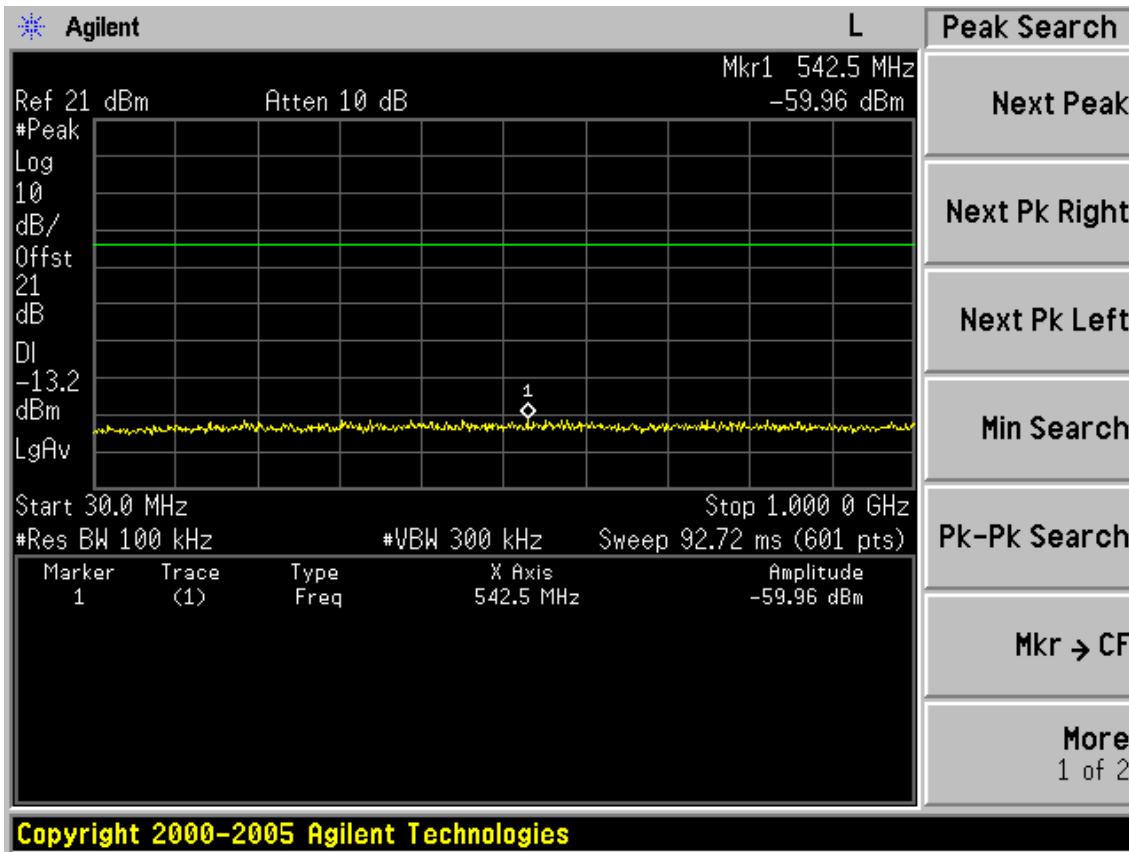


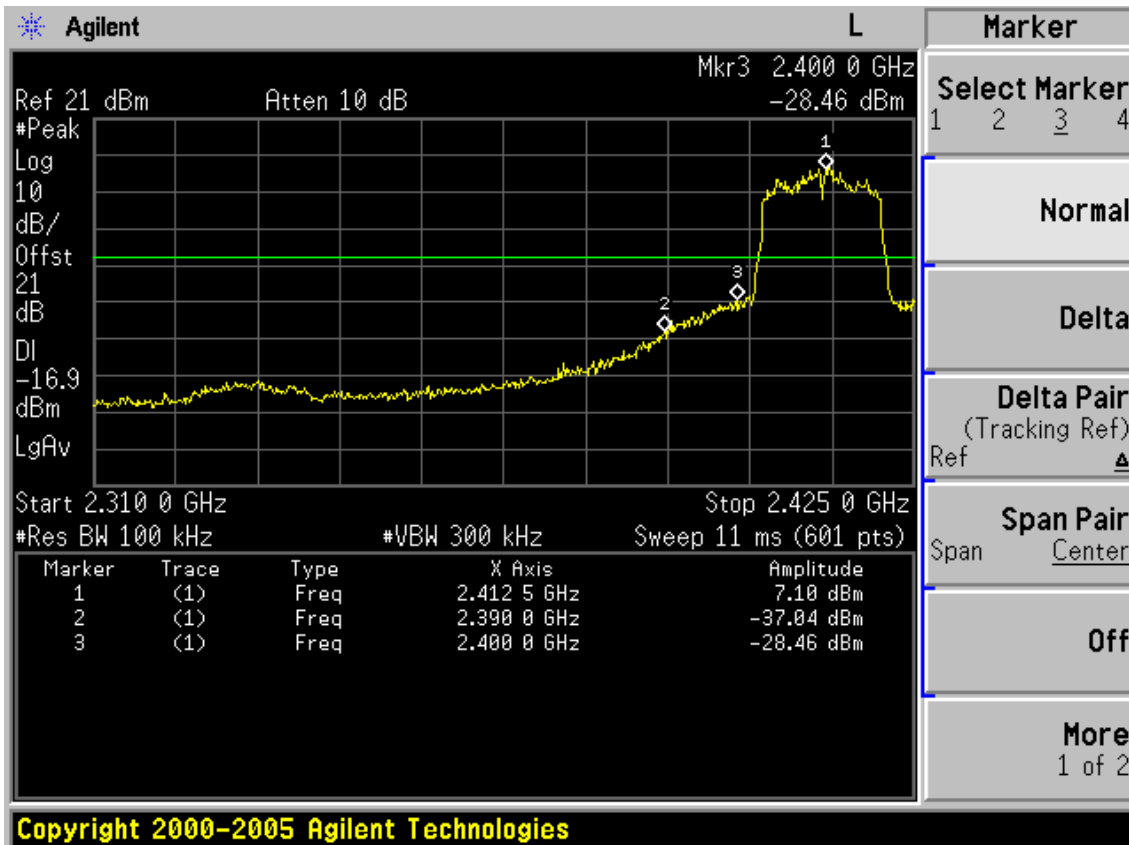
Copyright 2000-2005 Agilent Technologies

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

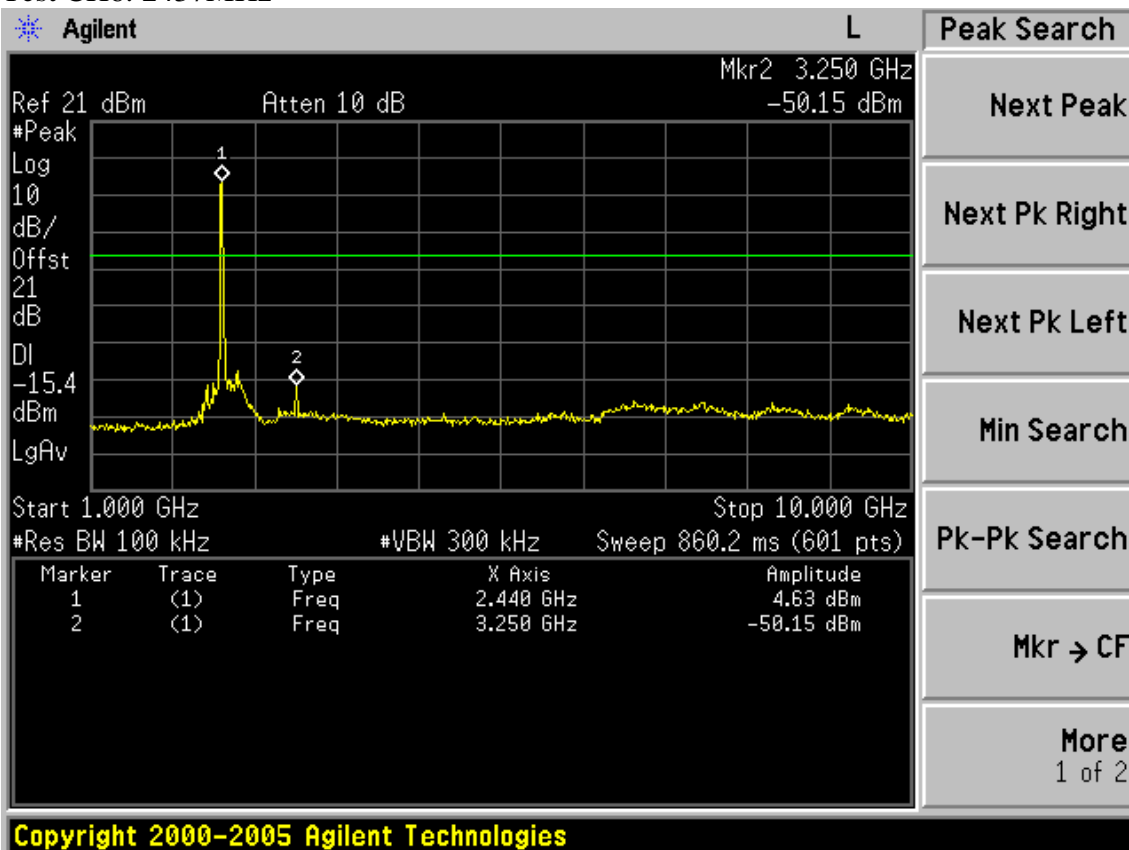


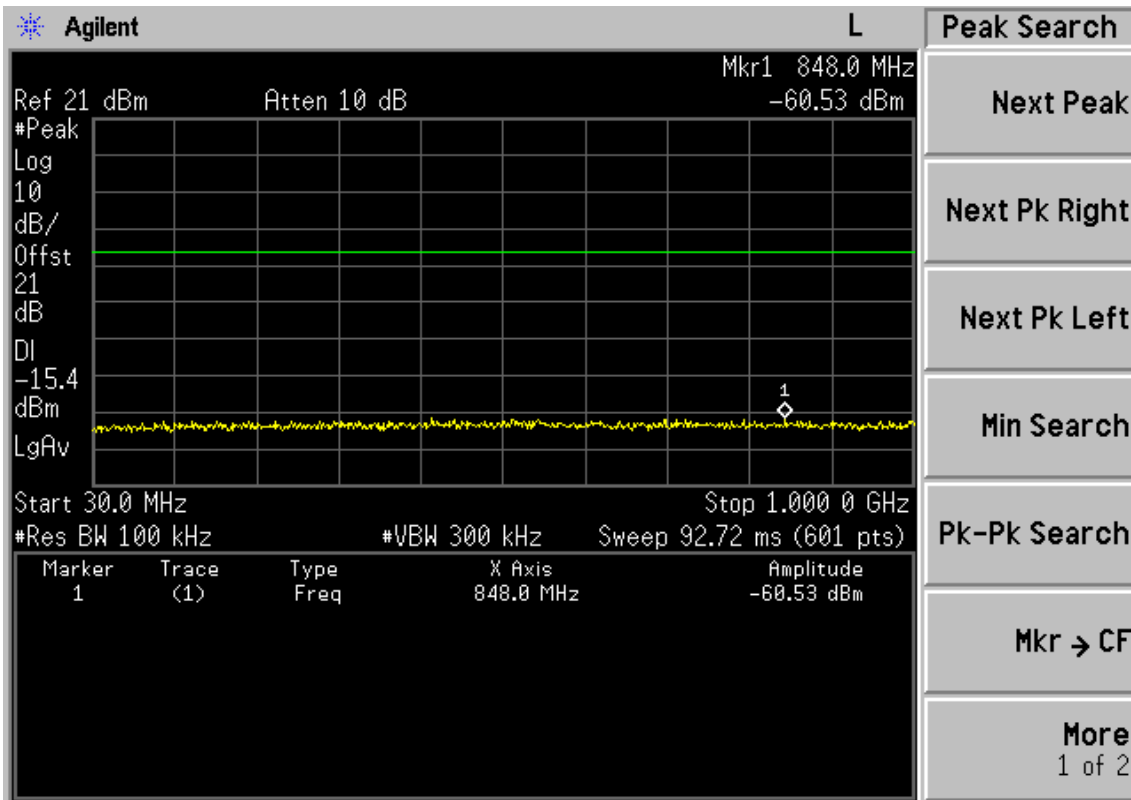
Copyright 2000-2005 Agilent Technologies



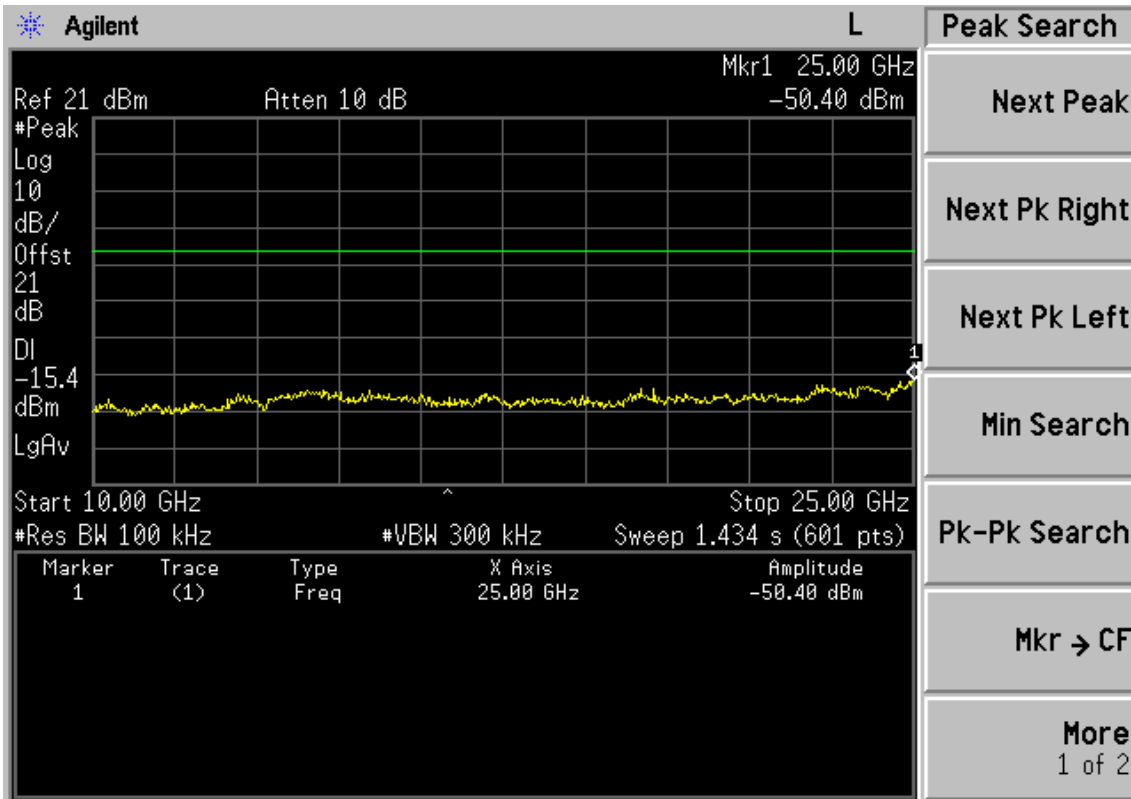


Test CH6: 2437MHz



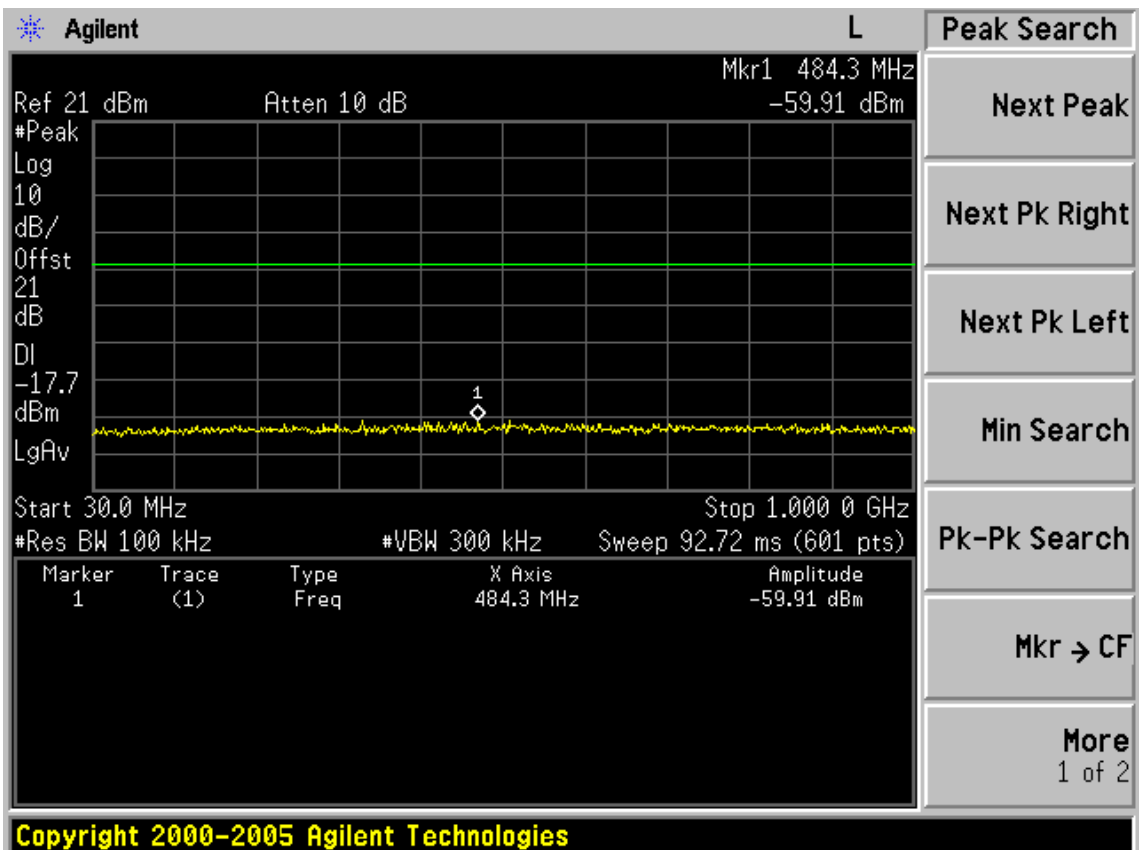
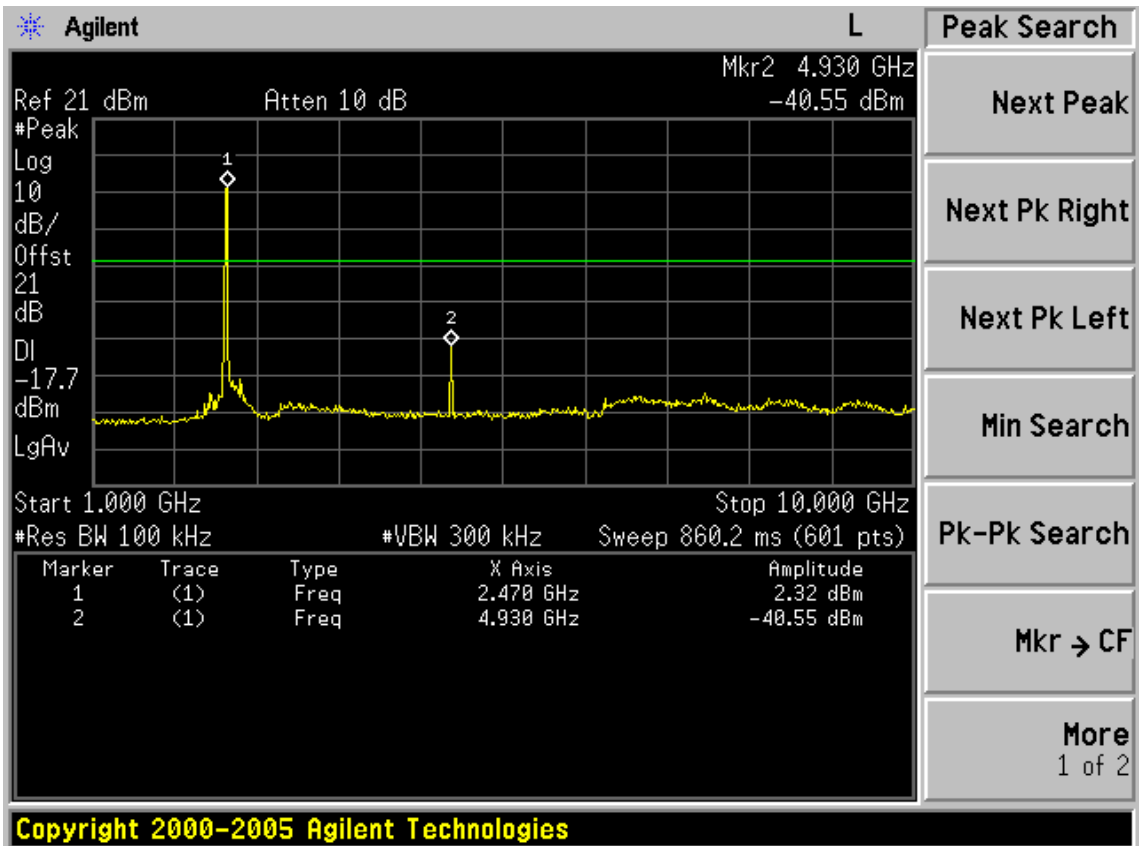


Copyright 2000-2005 Agilent Technologies

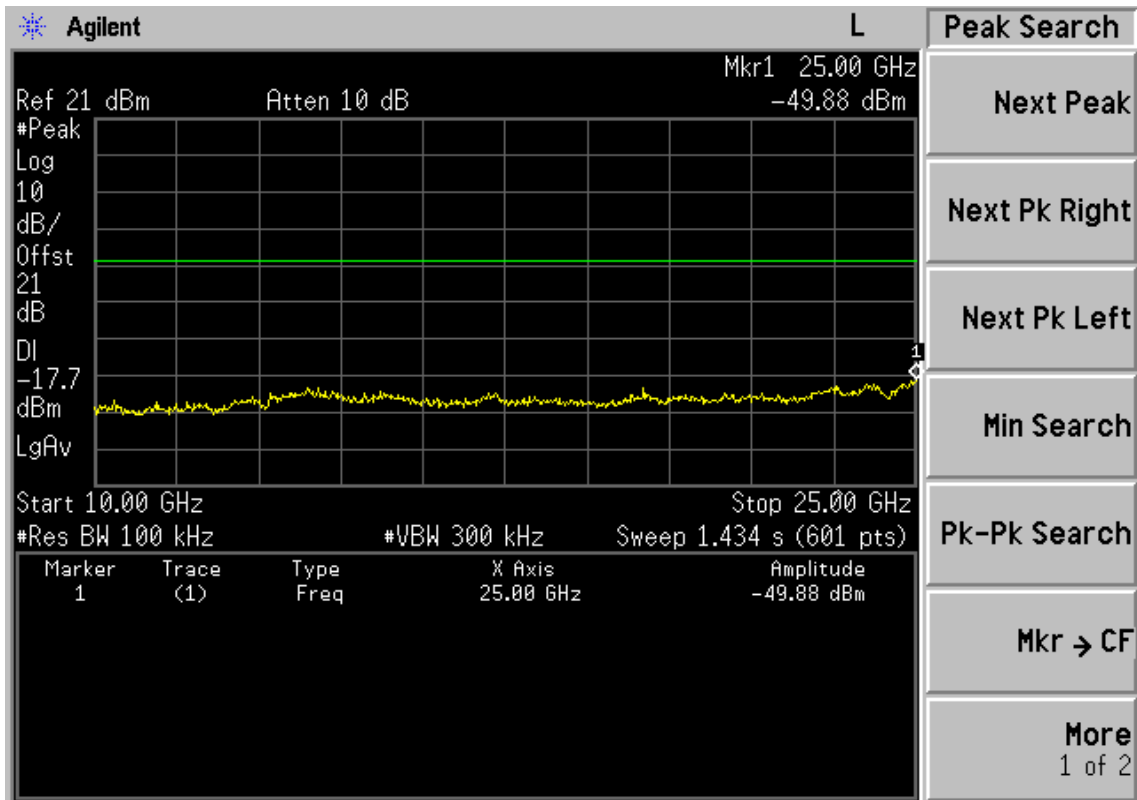


Copyright 2000-2005 Agilent Technologies

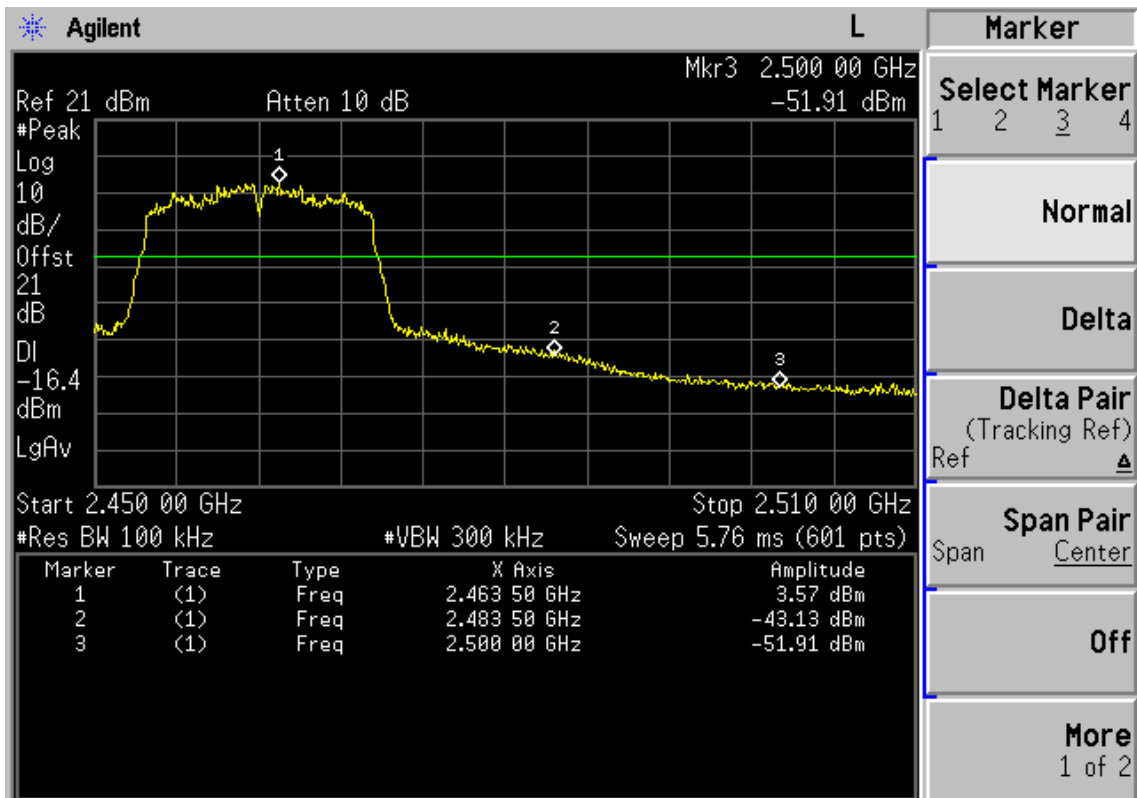
Test CH11: 2462MHz







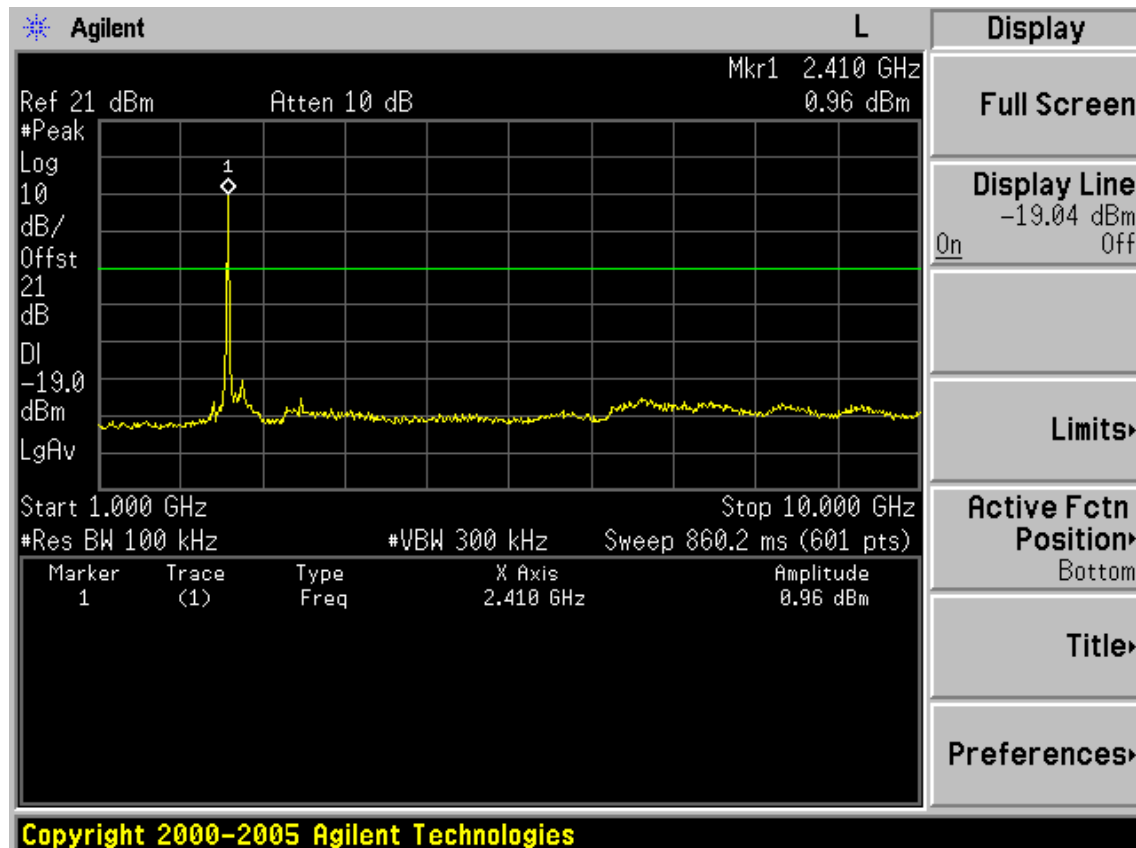
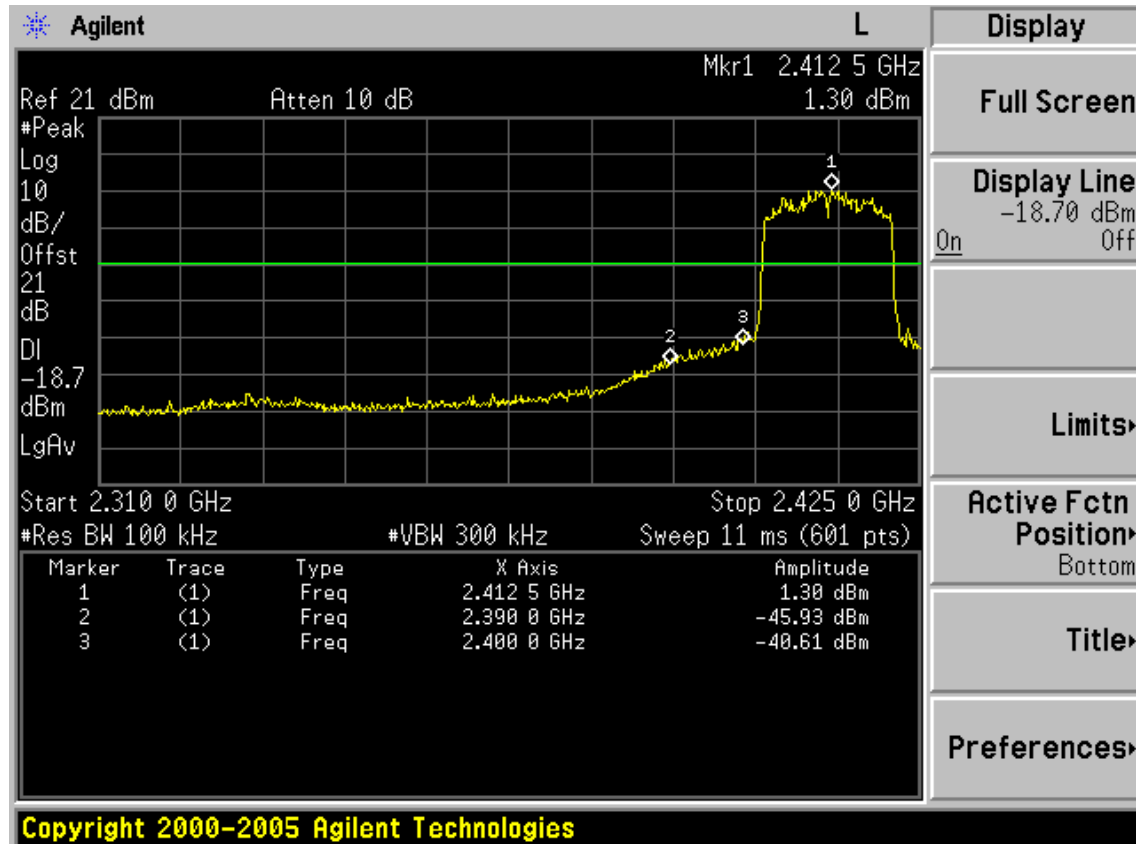
Copyright 2000-2005 Agilent Technologies

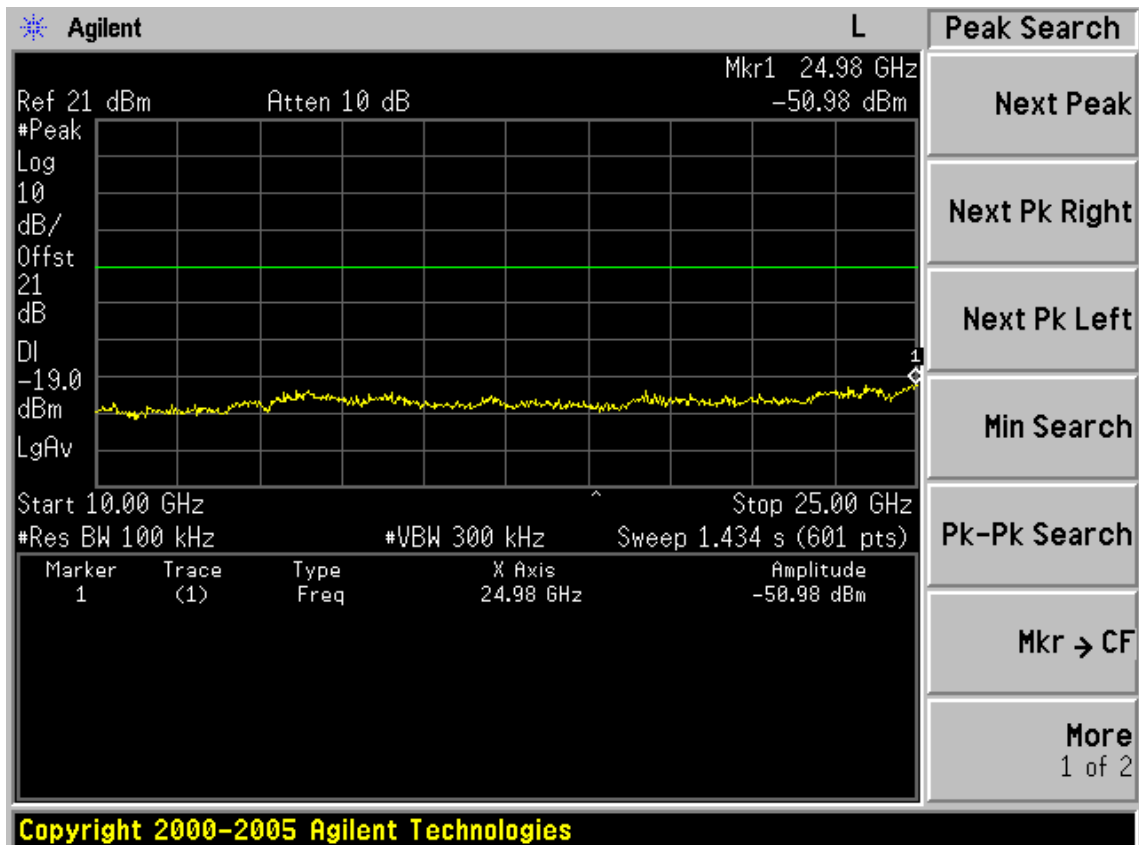
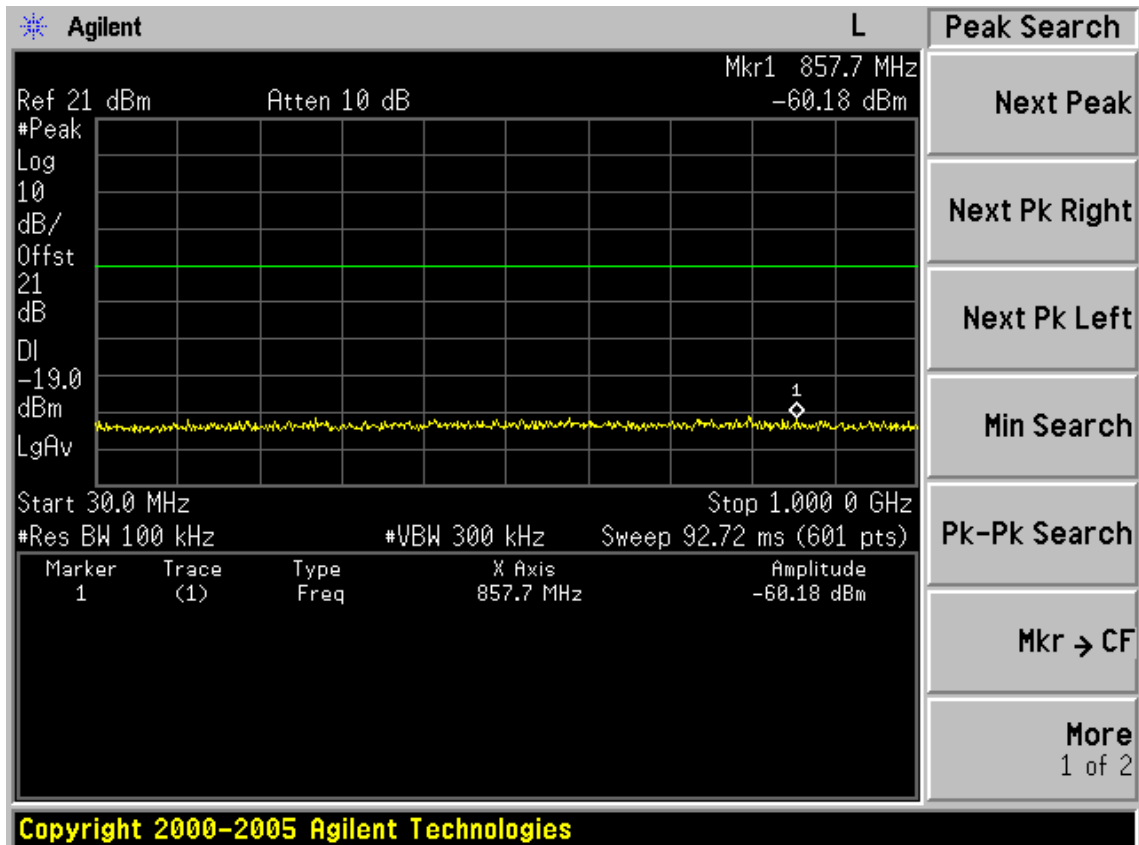


Copyright 2000-2005 Agilent Technologies

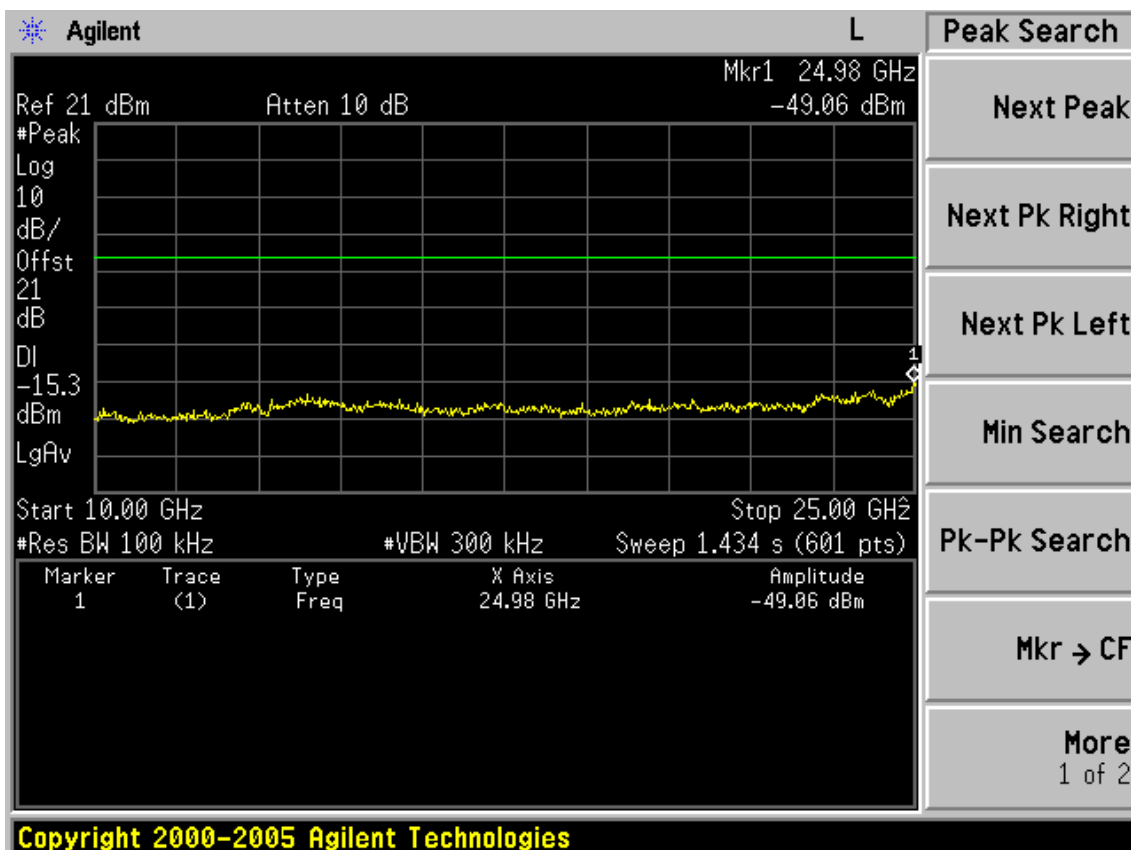
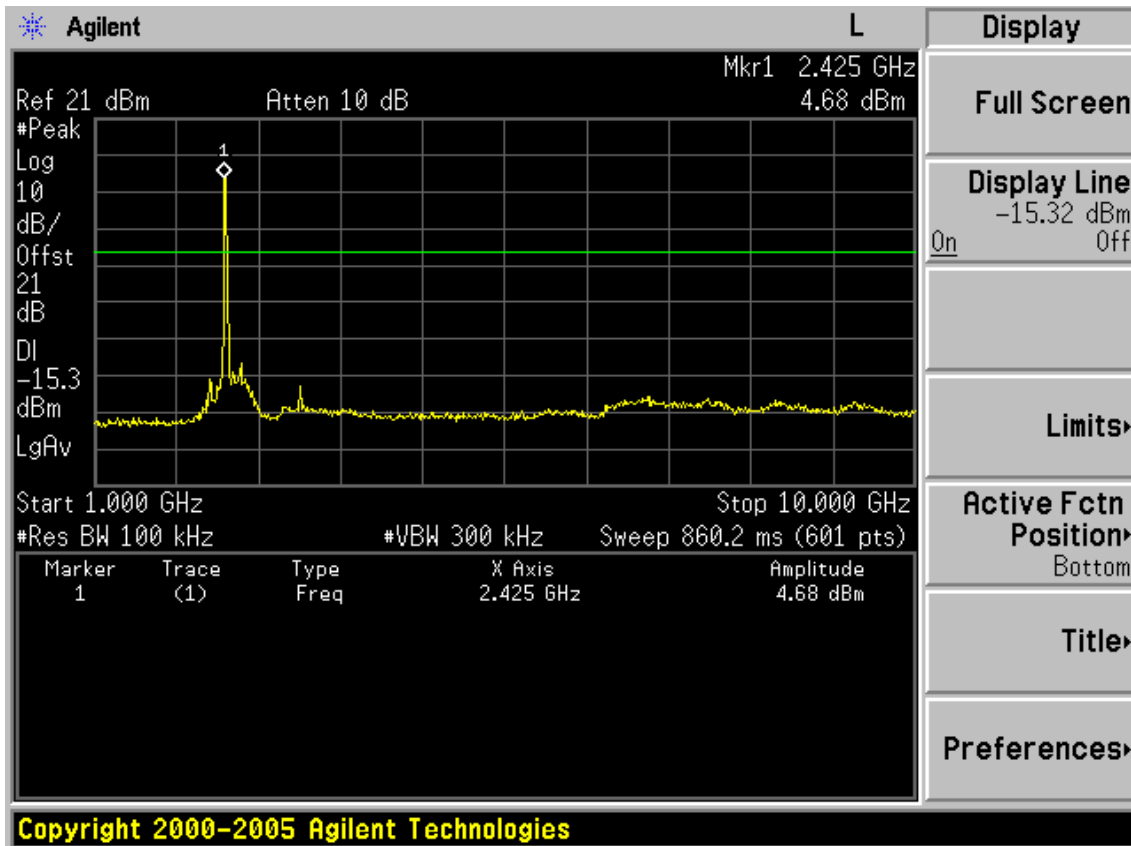
Test Mode: IEEE 802.11n HT20 TX

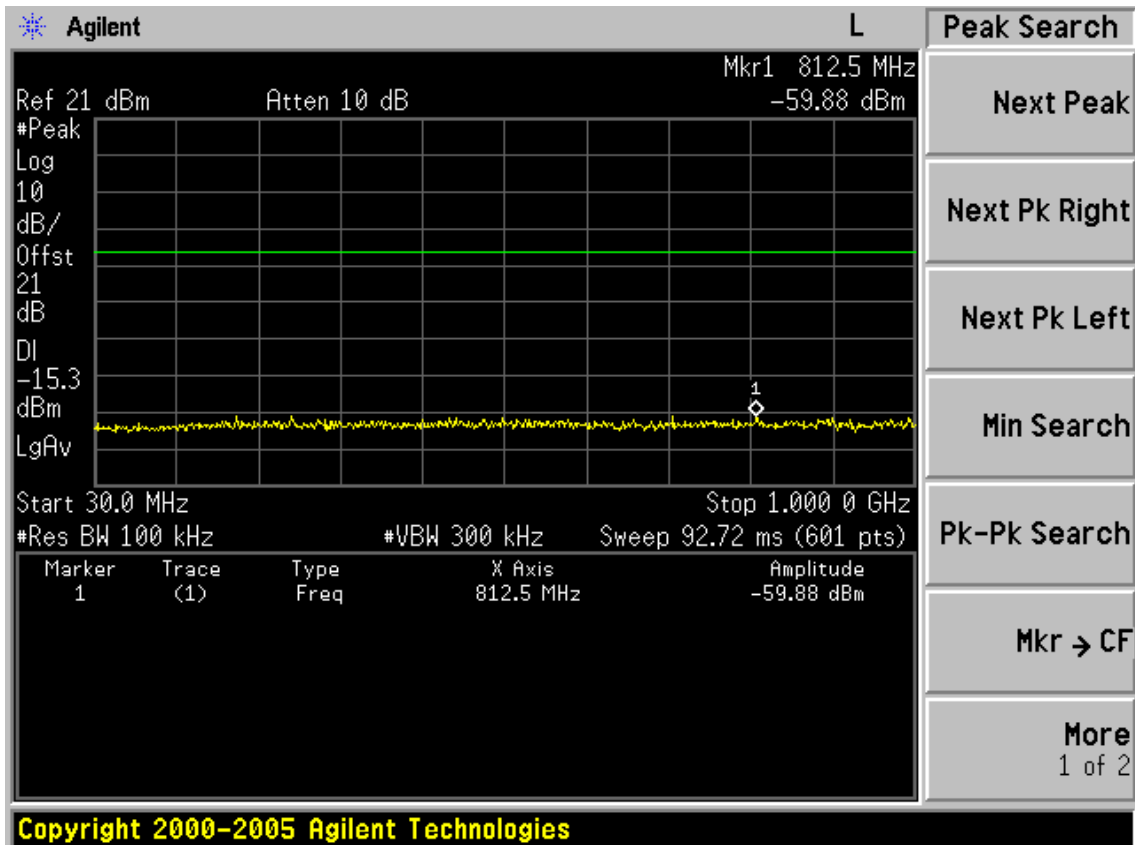
Test CH1: 2412MHz



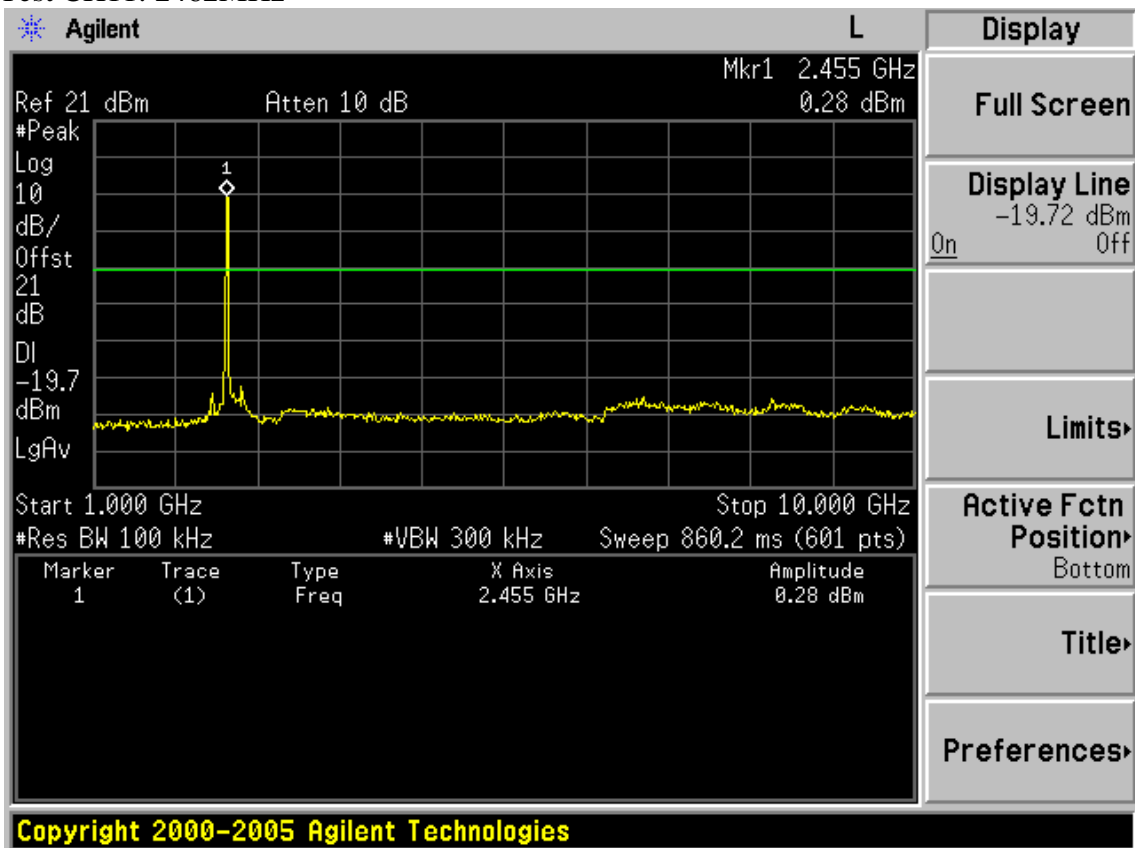


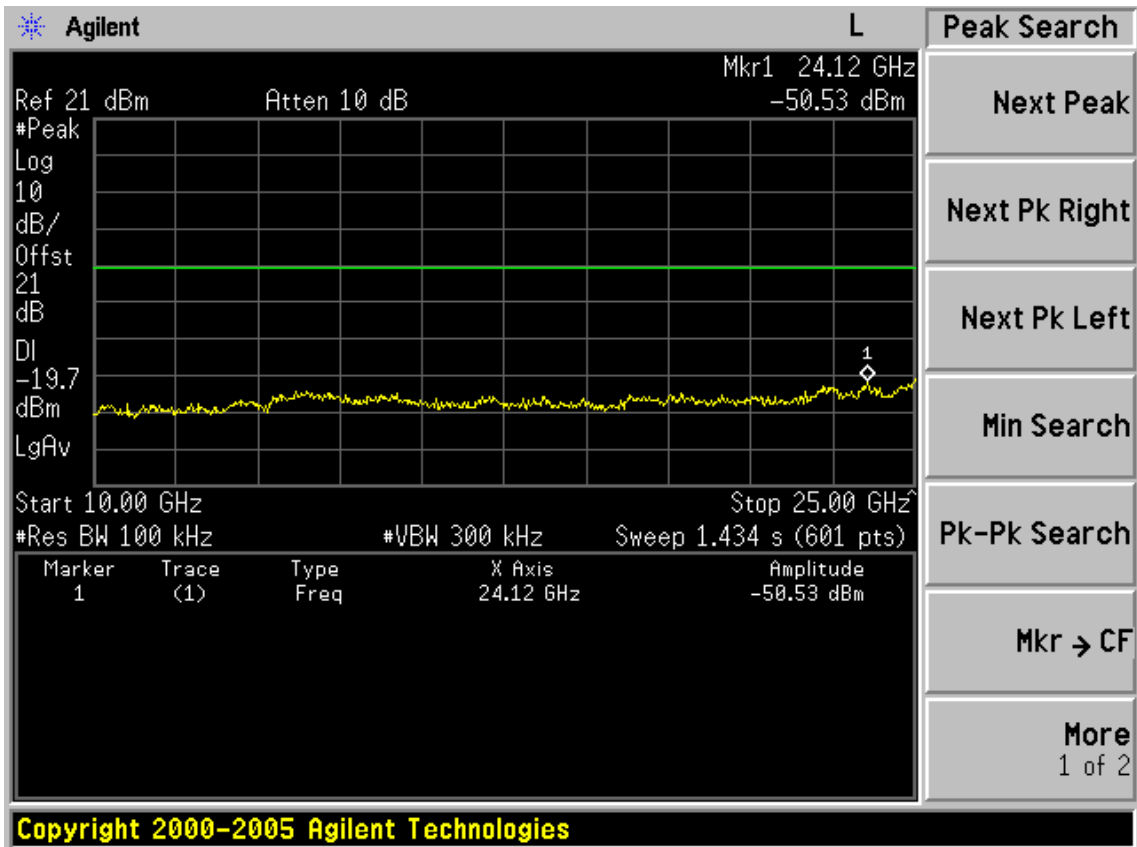
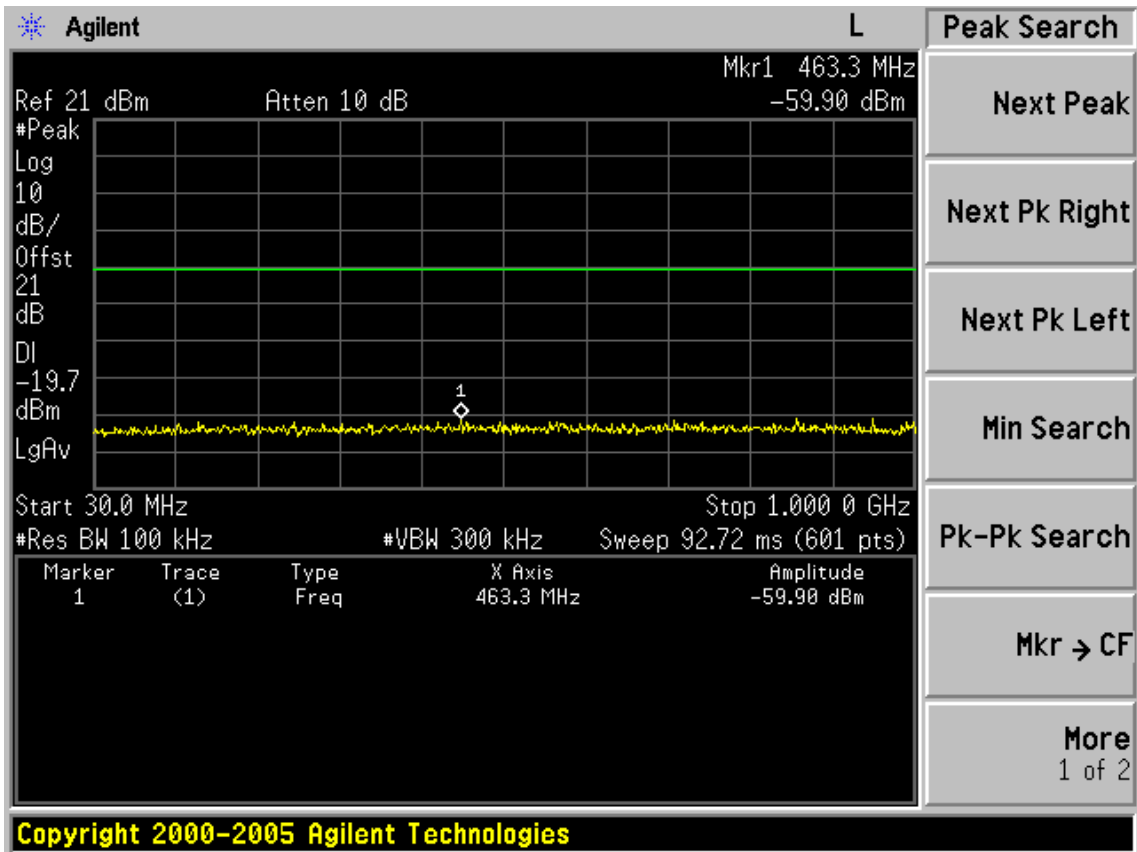
Test CH6: 2437MHz

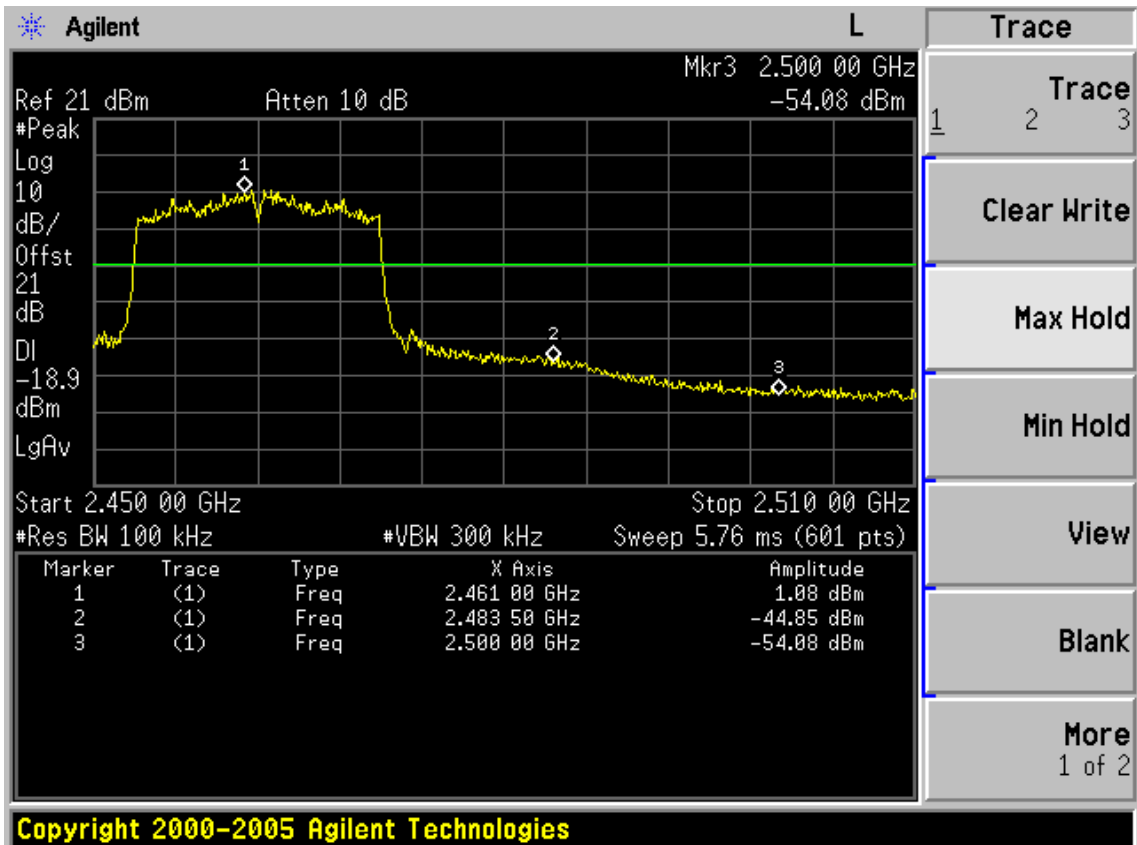




Test CH11: 2462MHz

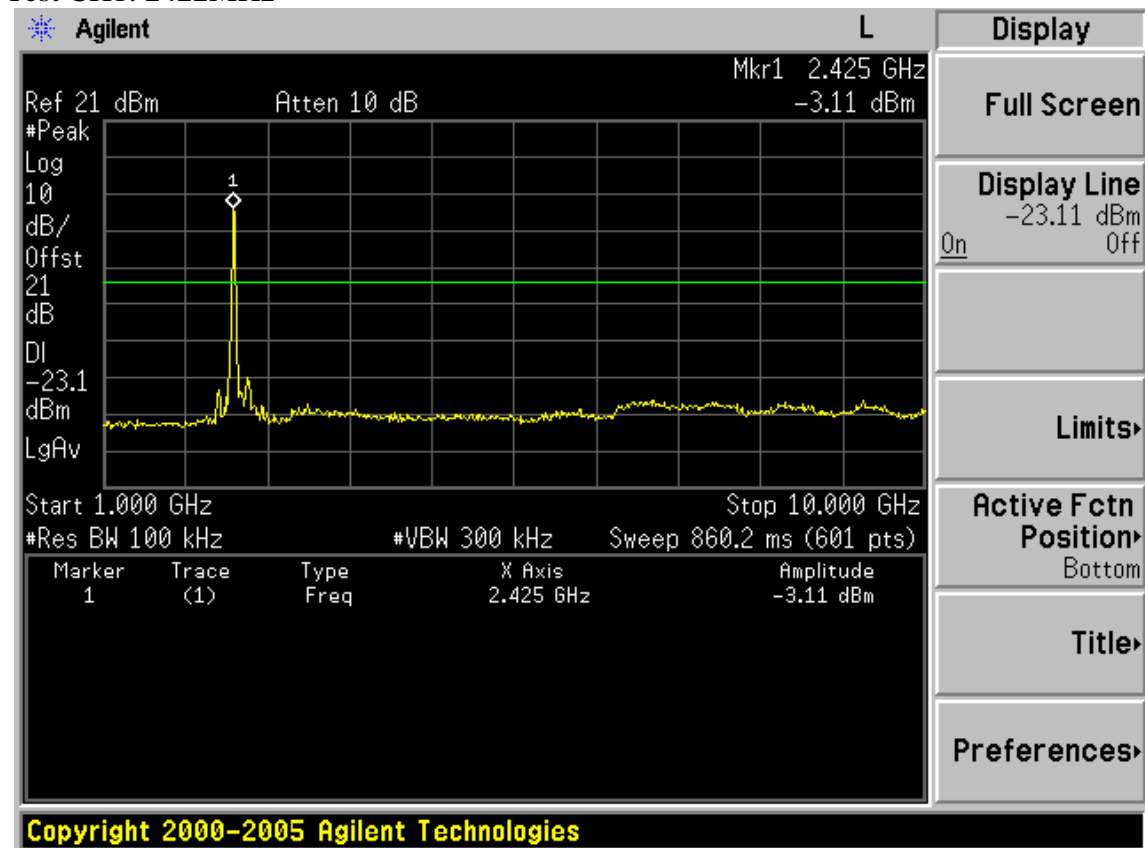


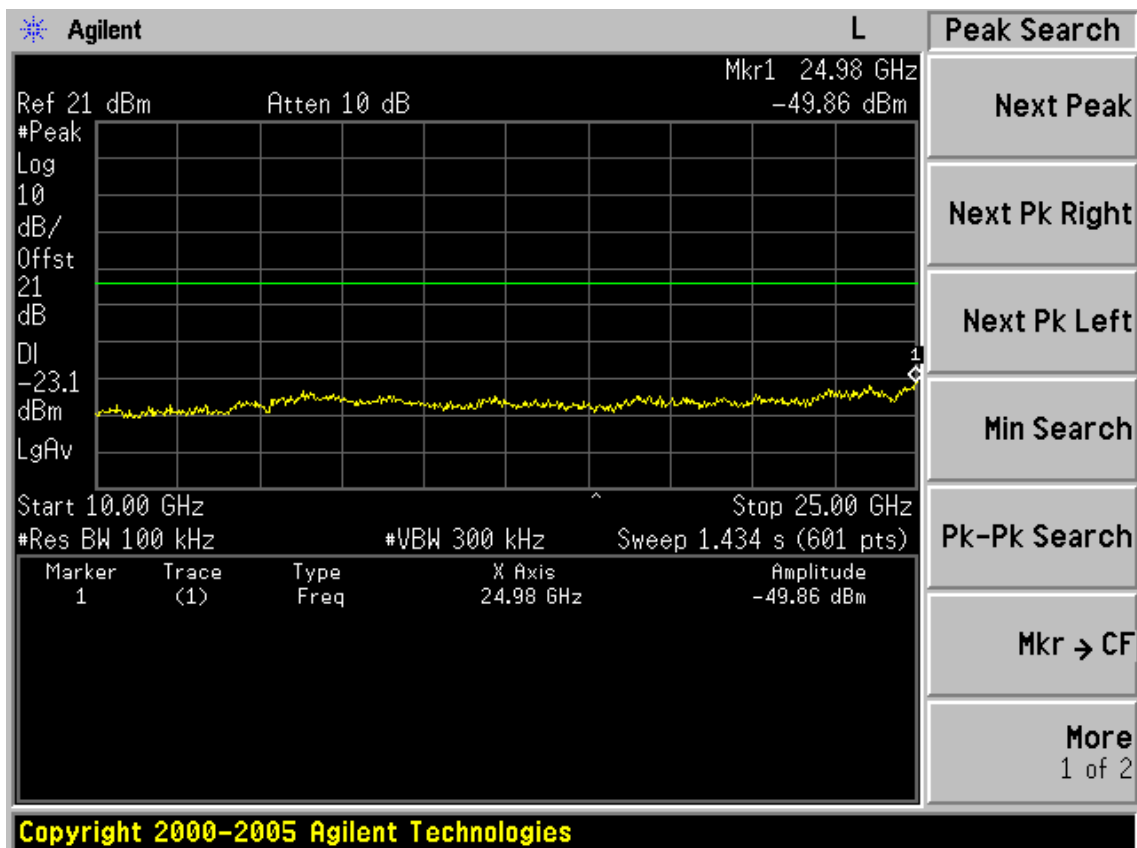
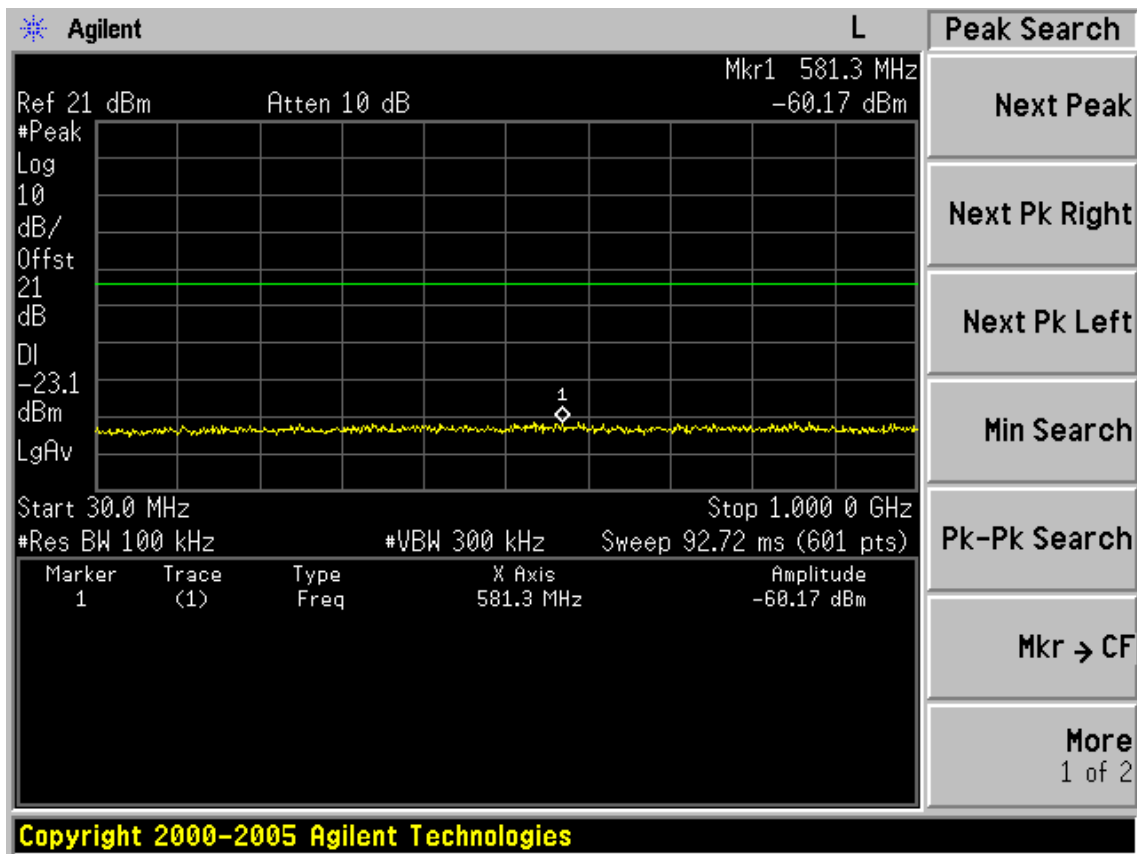




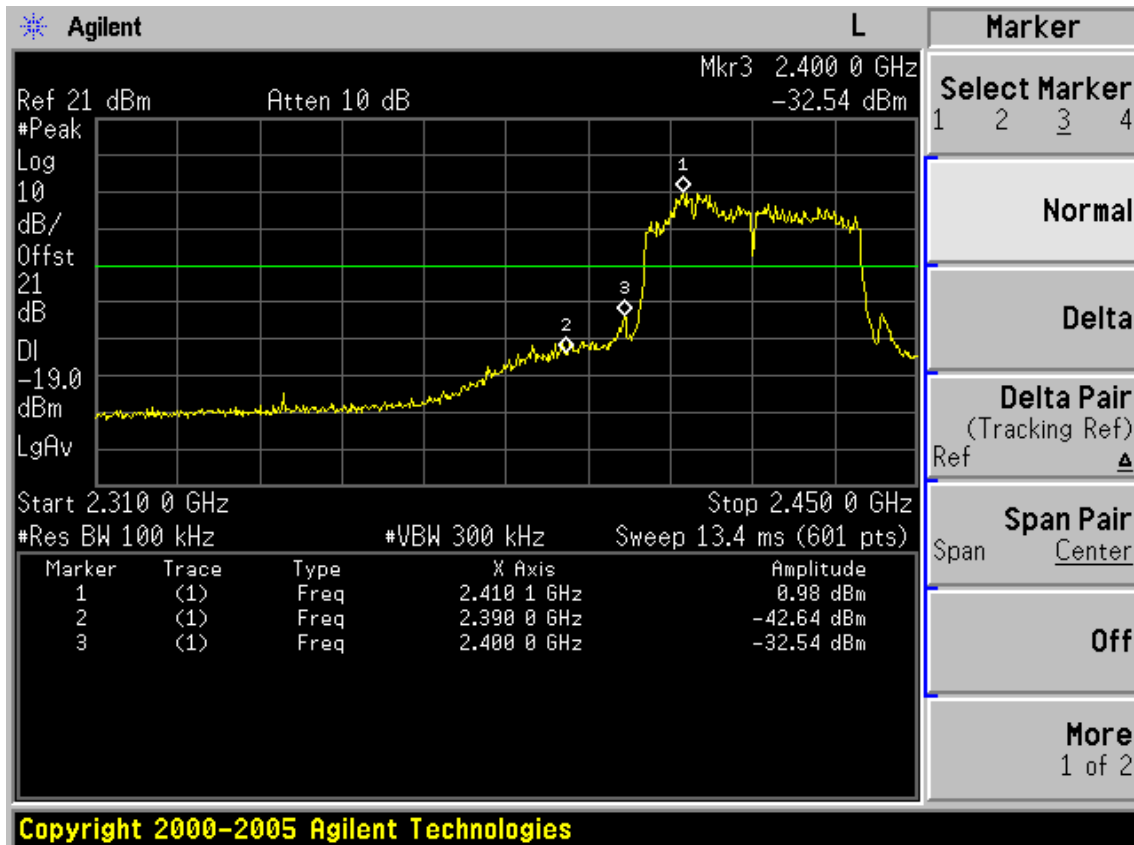
Test Mode: IEEE 802.11n HT40 TX

Test CH1: 2422MHz

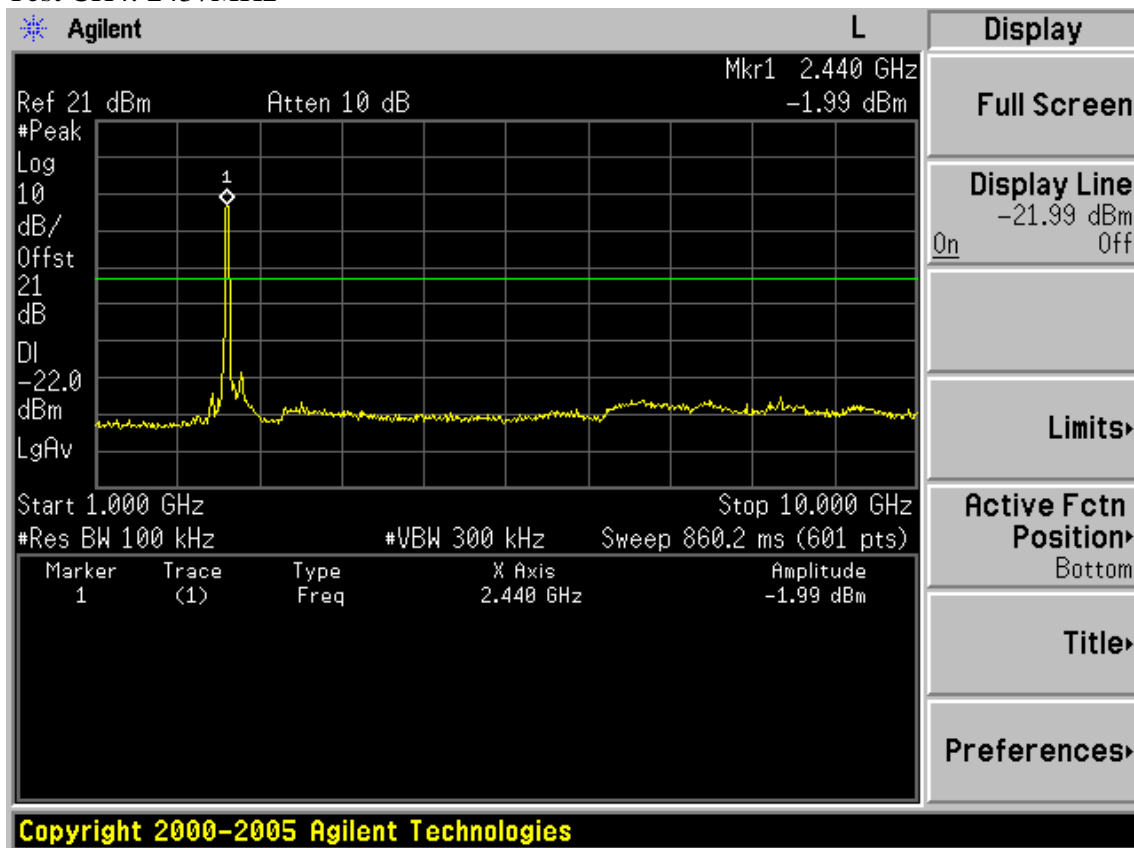


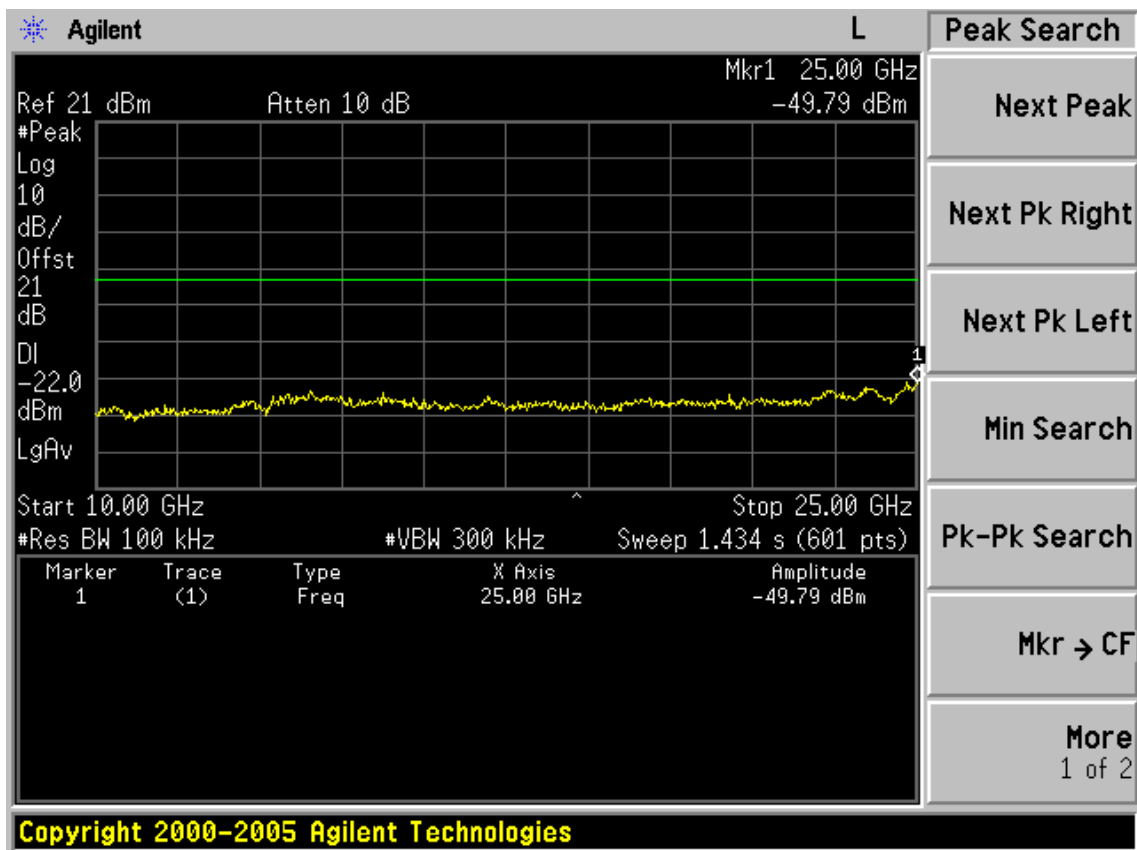
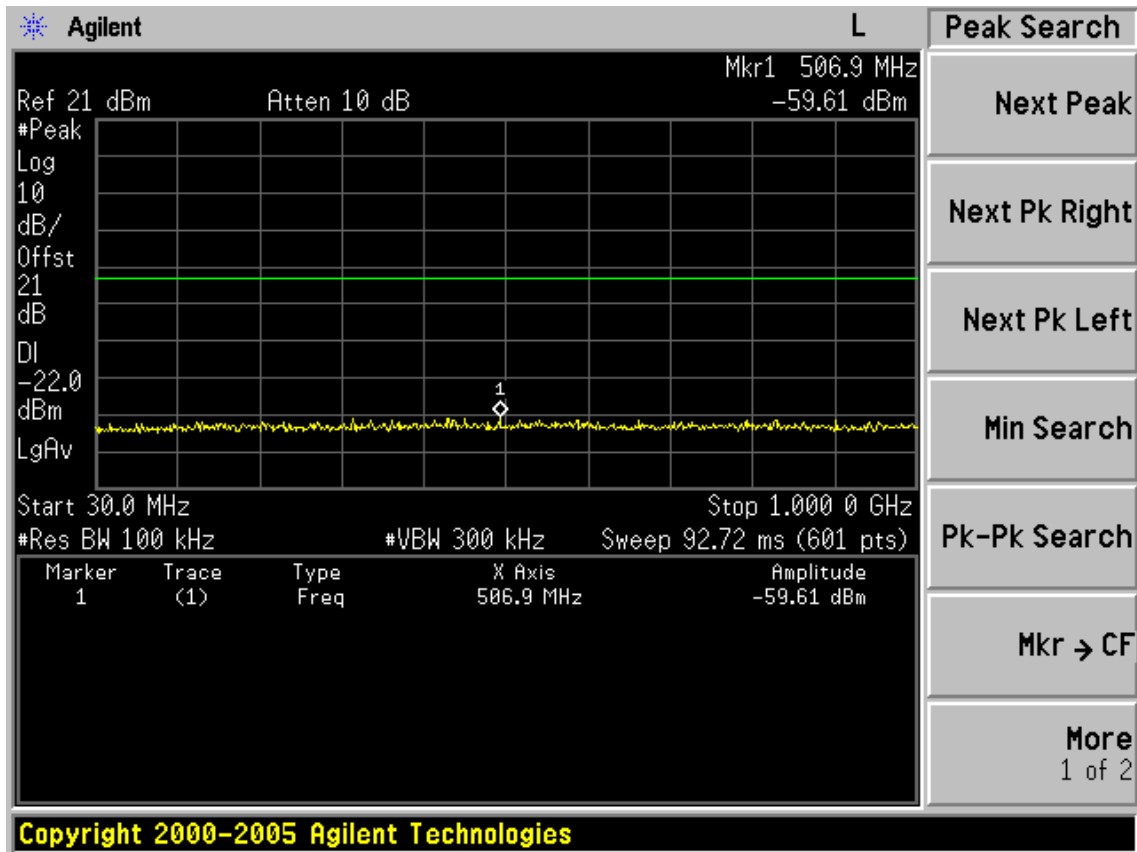




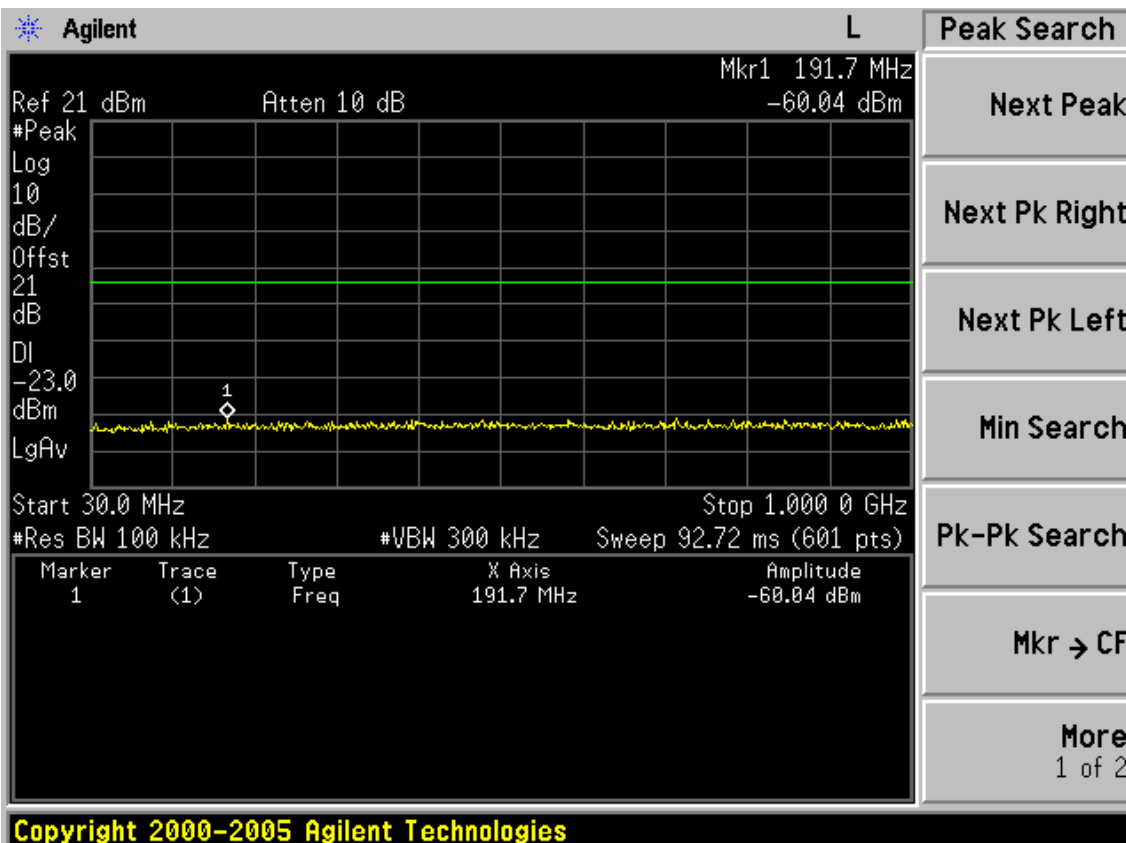
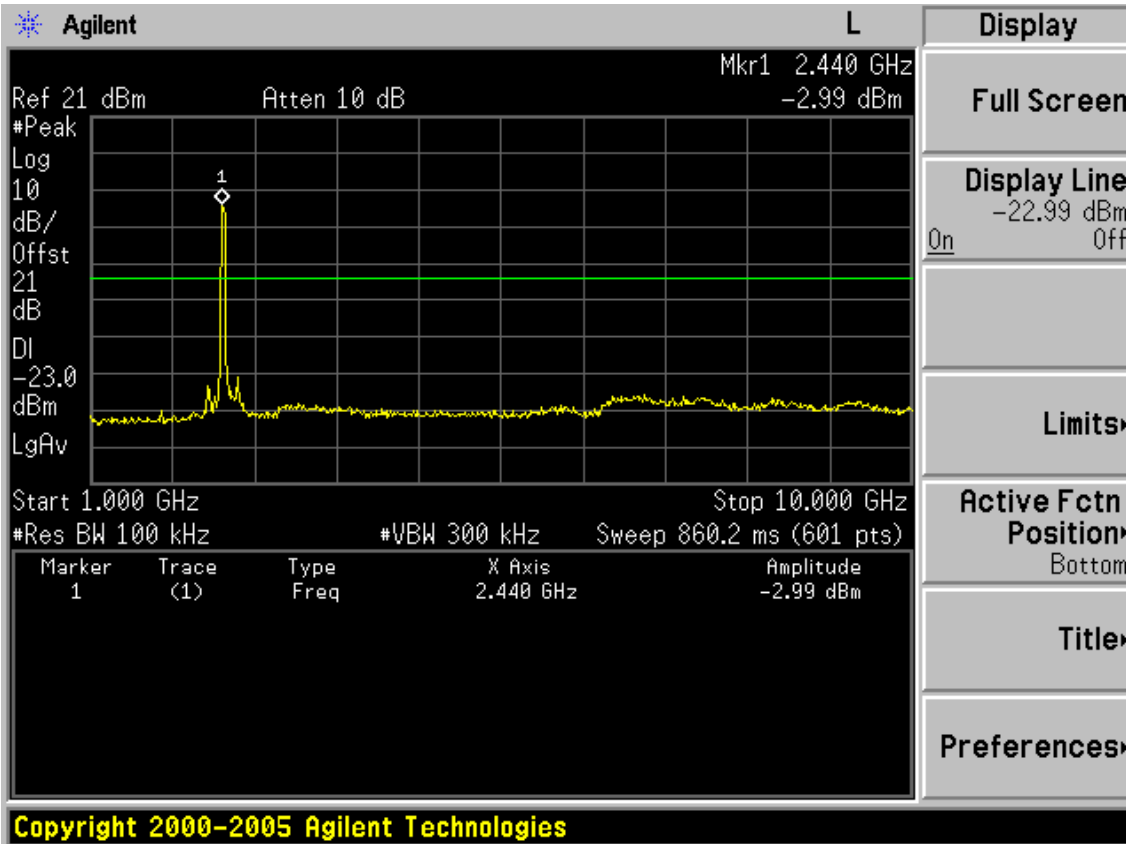


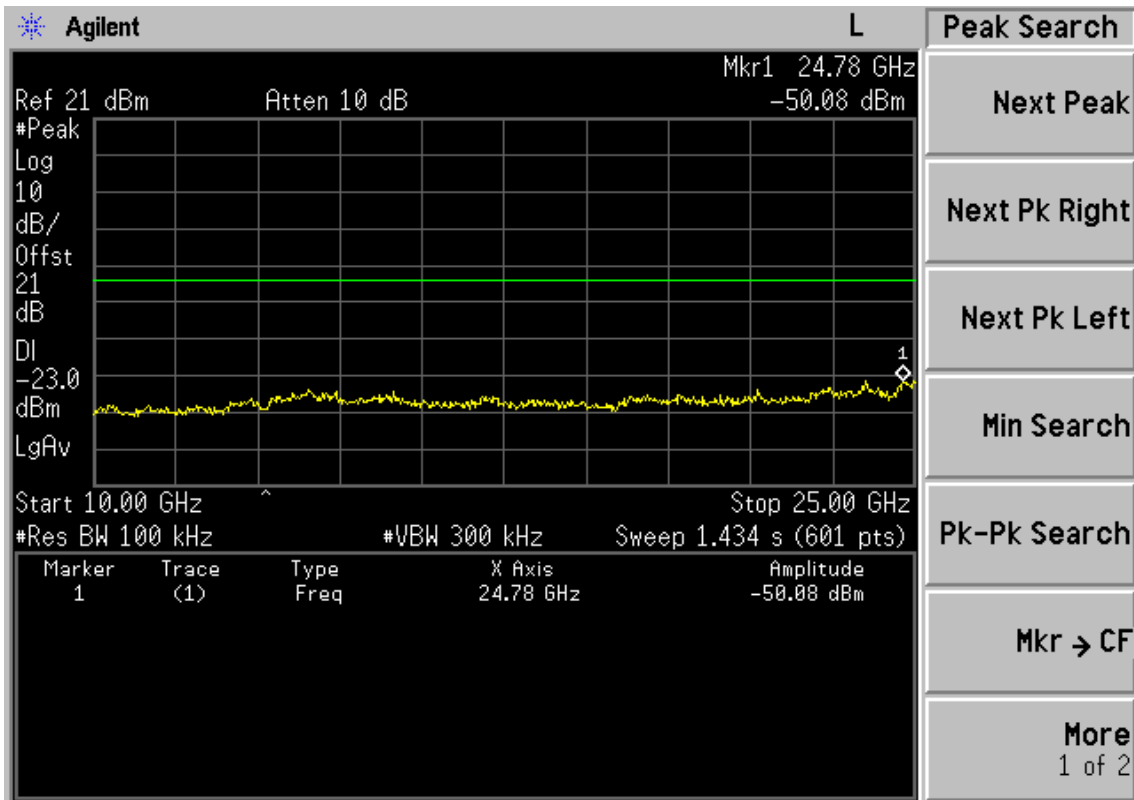
Test CH4: 2437MHz



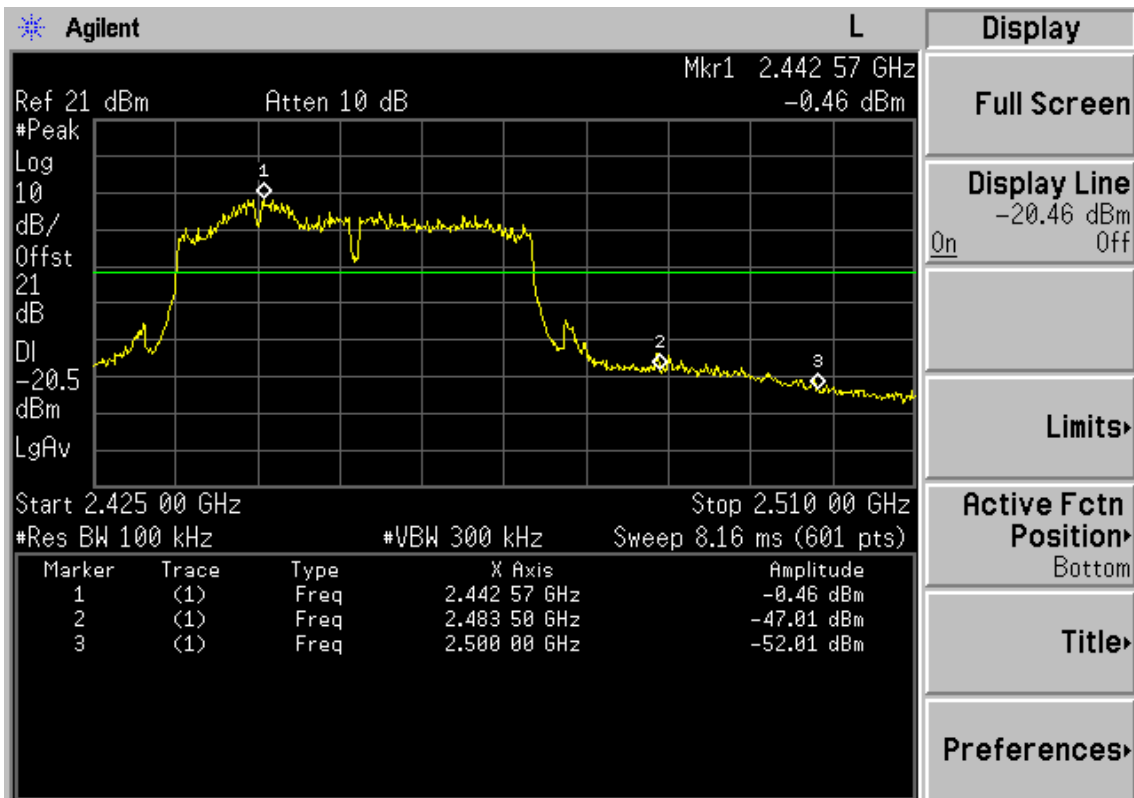


Test CH7: 2452MHz





Copyright 2000-2005 Agilent Technologies

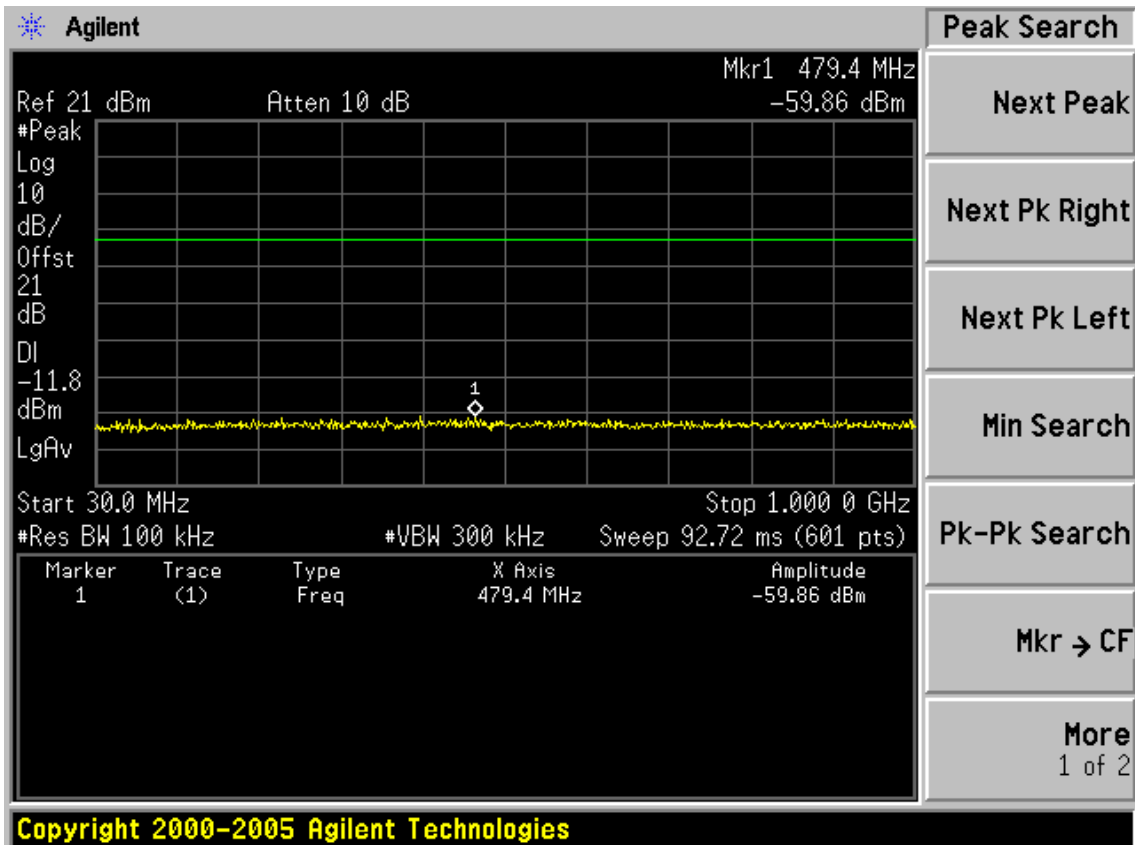
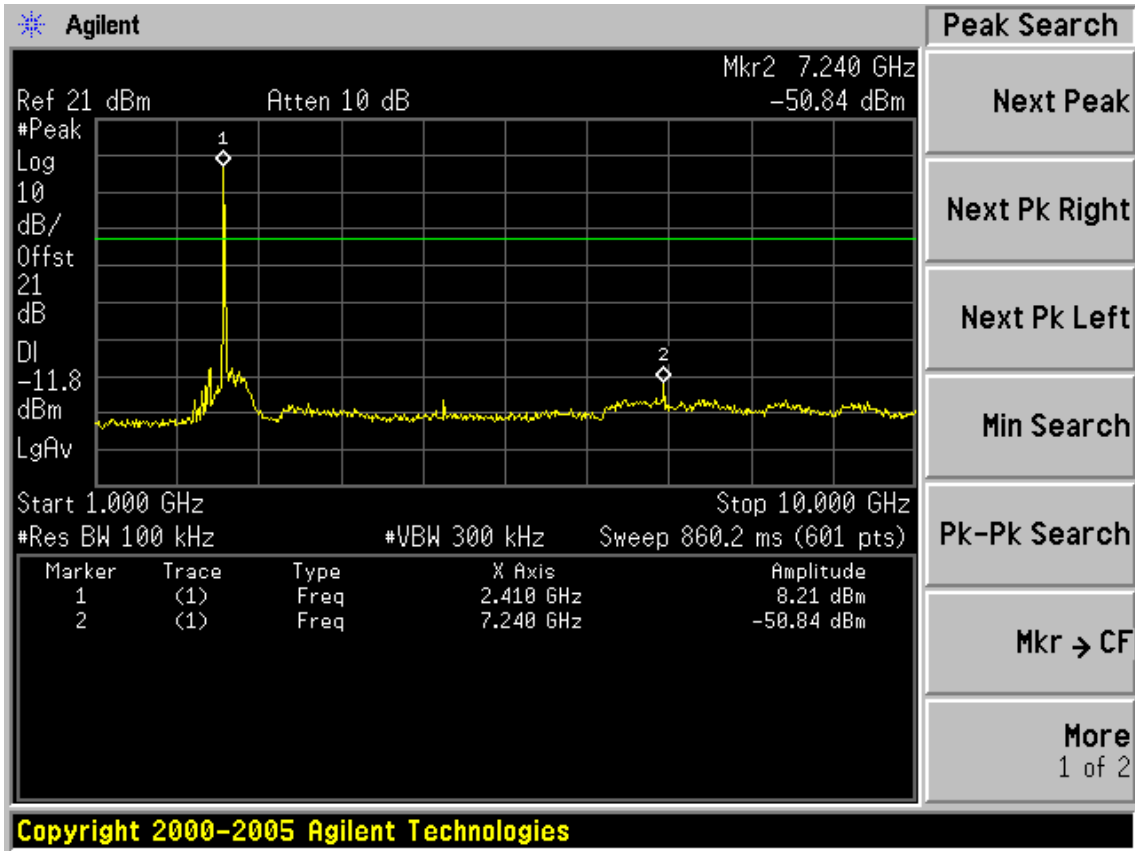


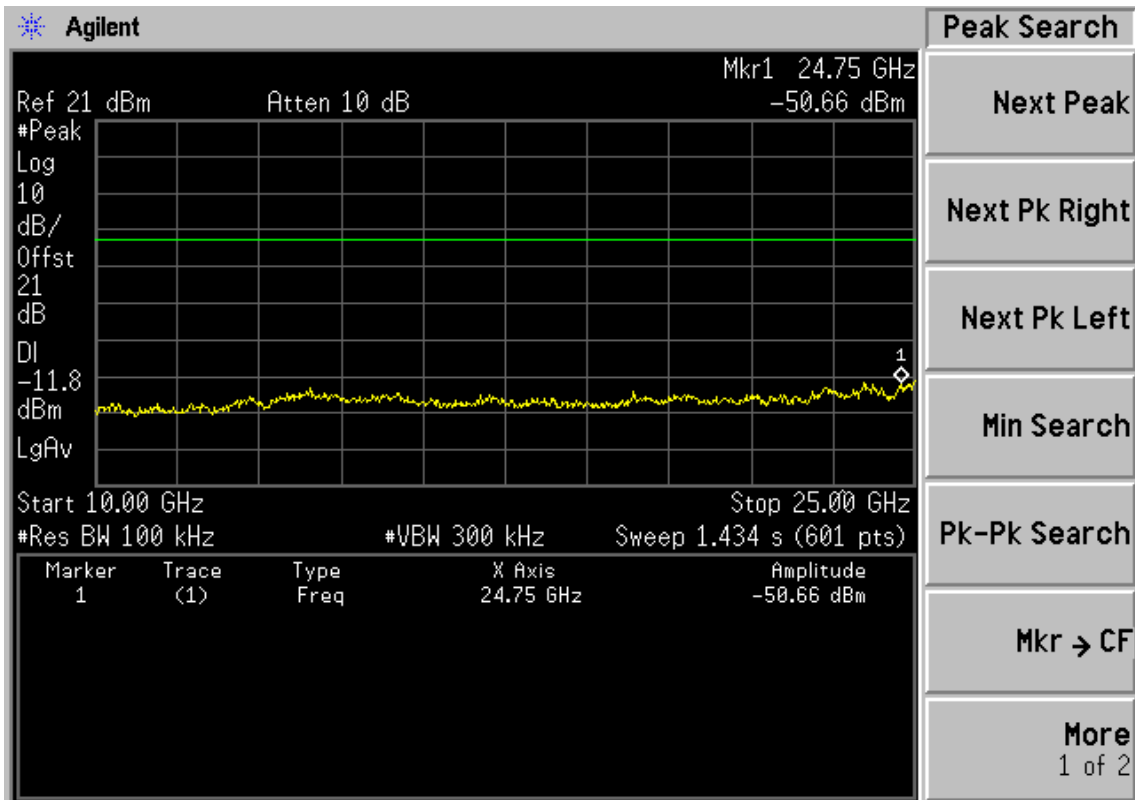
Copyright 2000-2005 Agilent Technologies

**Chain 1**

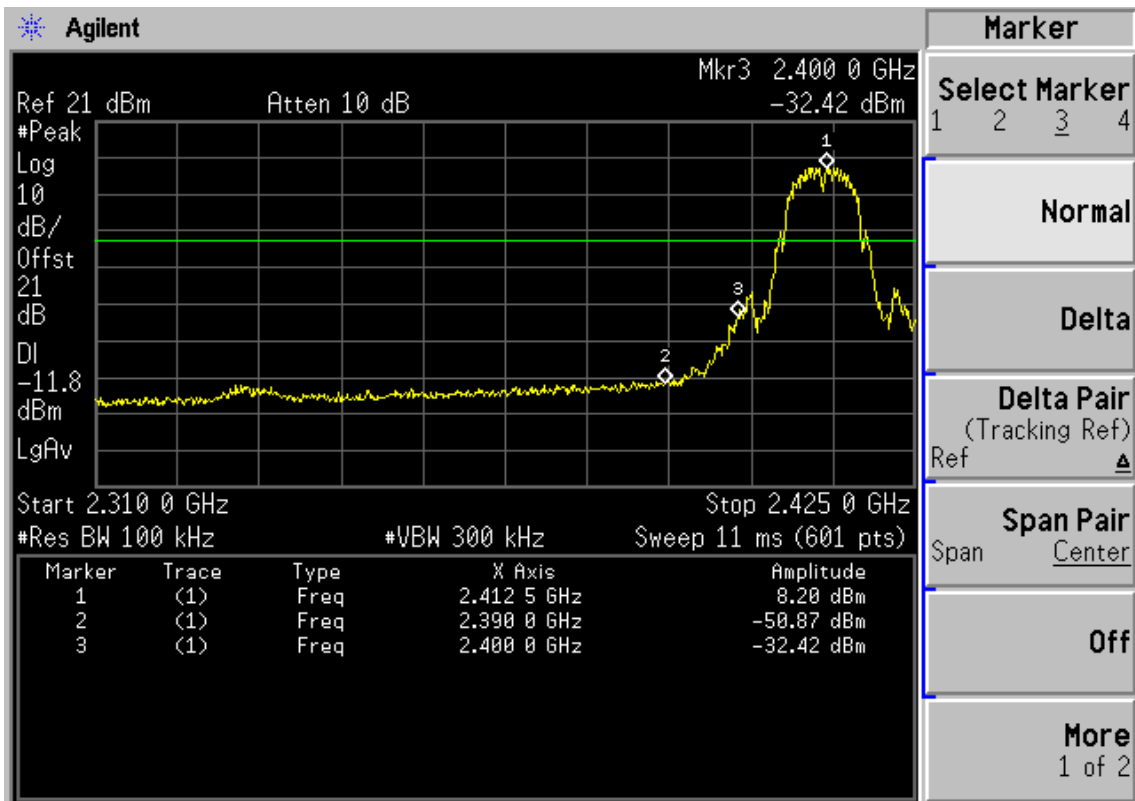
Test Mode: IEEE 802.11b TX

Test CH1: 2412MHz



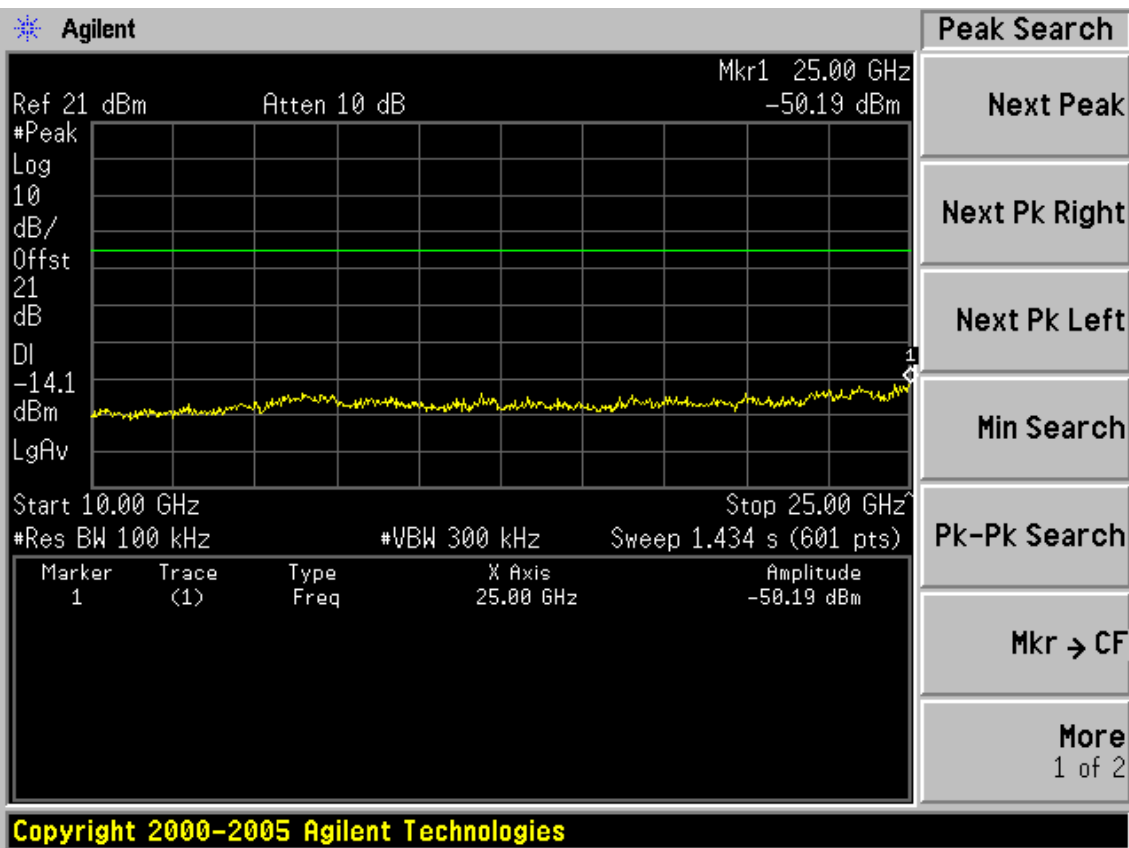
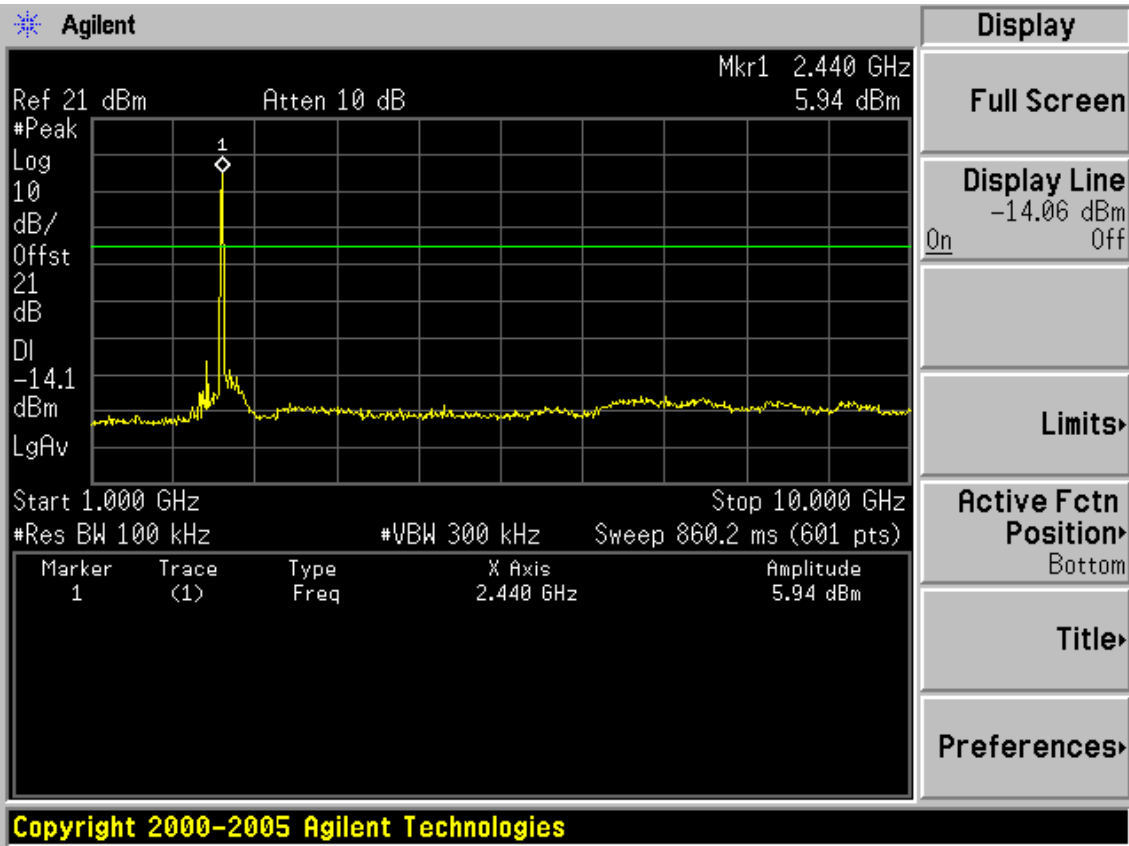


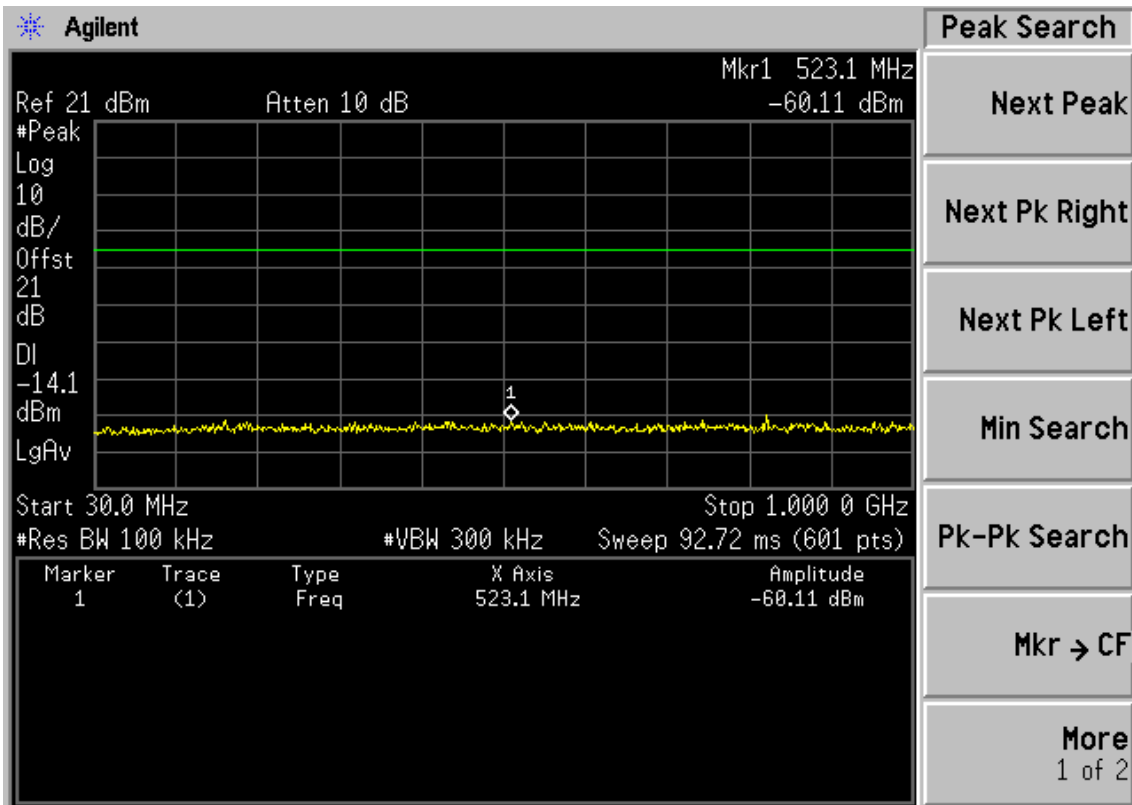
Copyright 2000-2005 Agilent Technologies



Copyright 2000-2005 Agilent Technologies

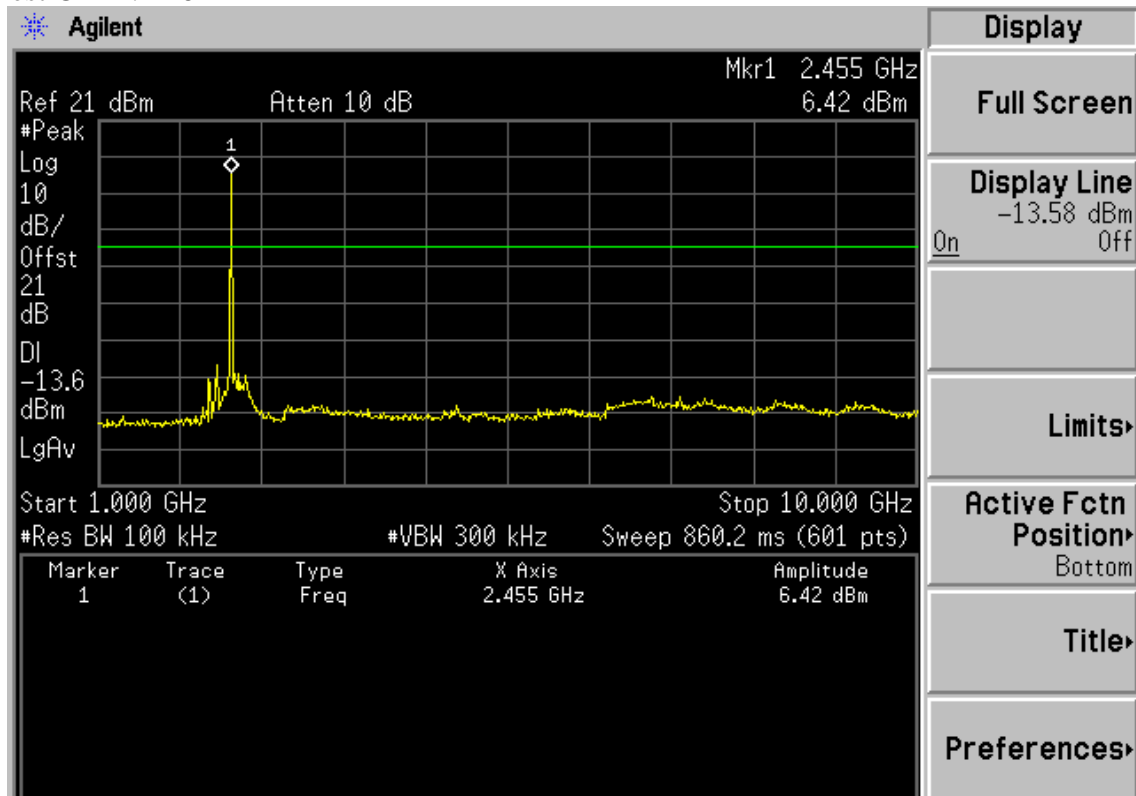
Test CH6: 2437MHz





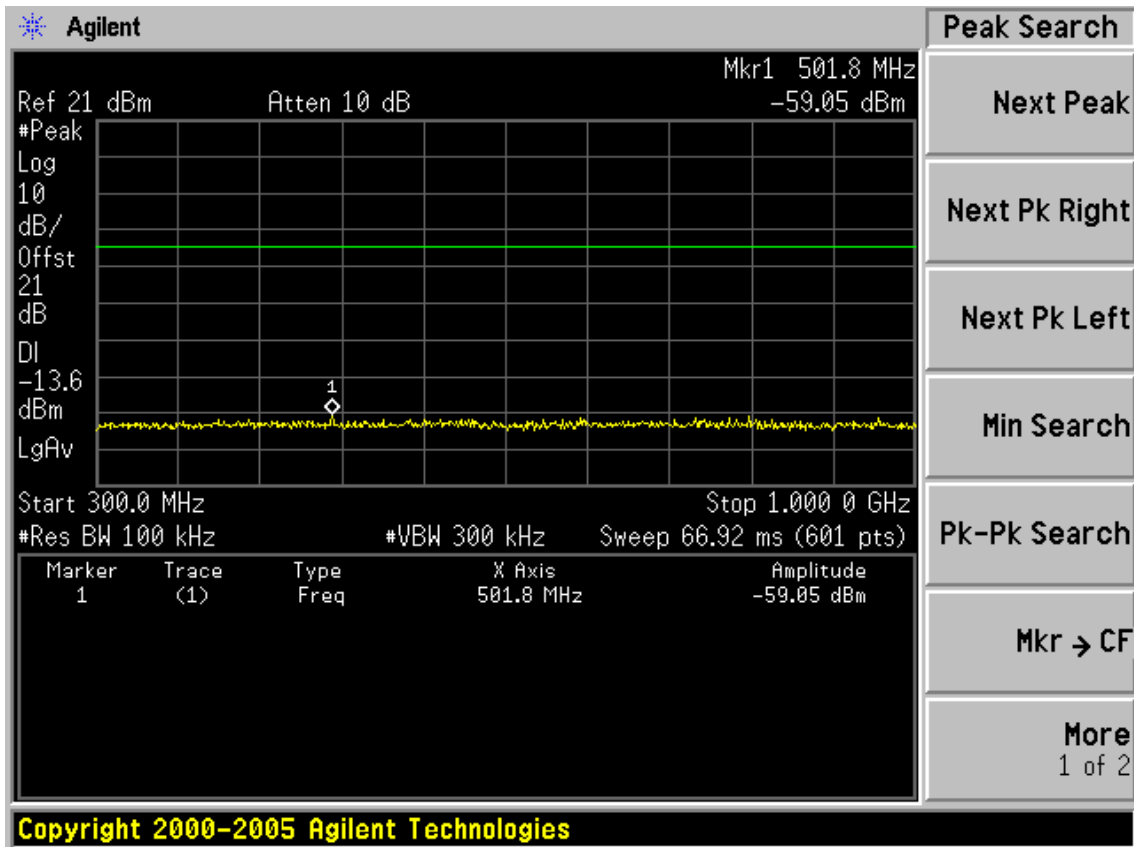
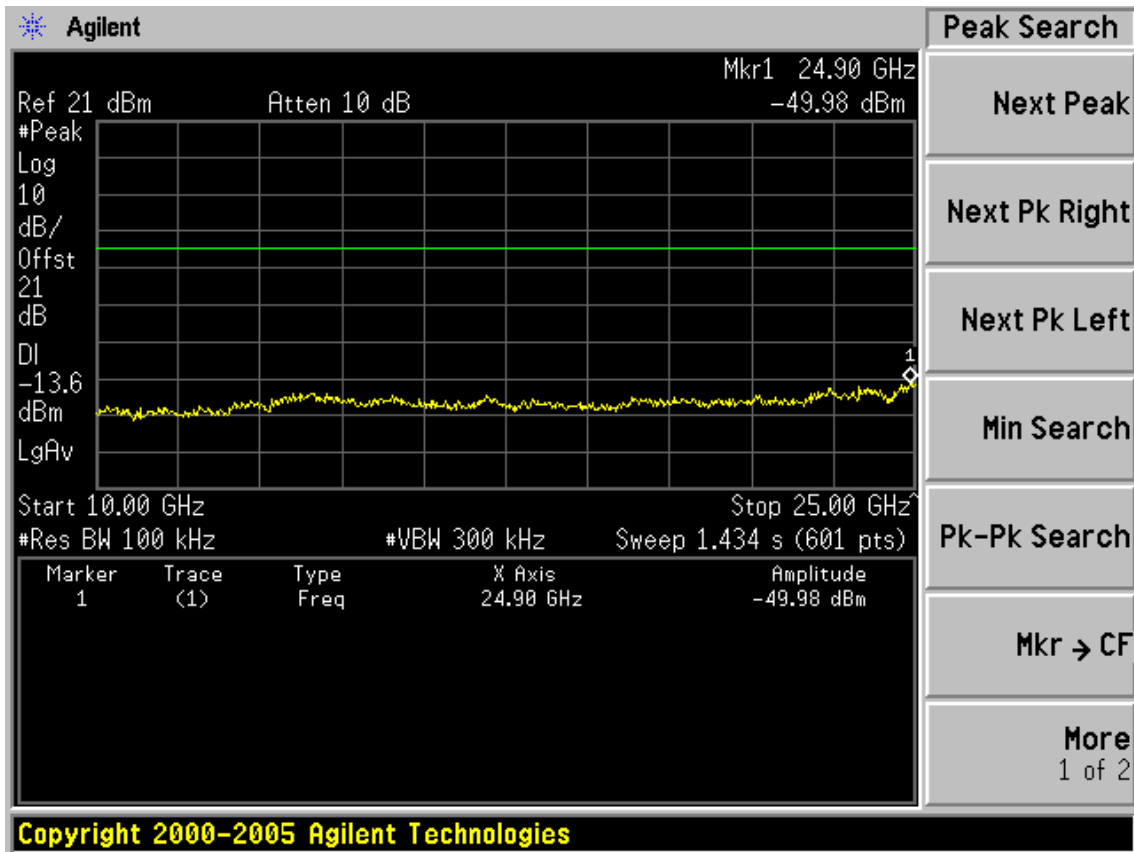
Copyright 2000-2005 Agilent Technologies

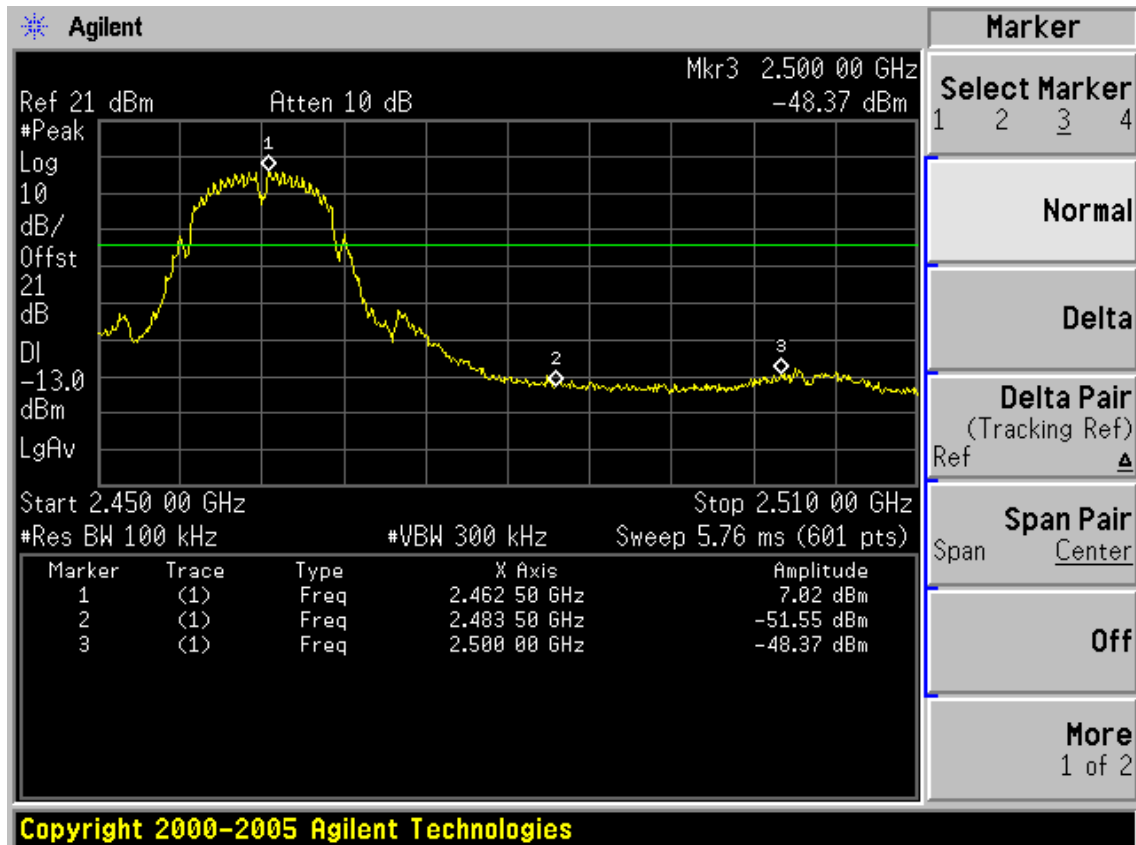
Test CH11: 2462MHz



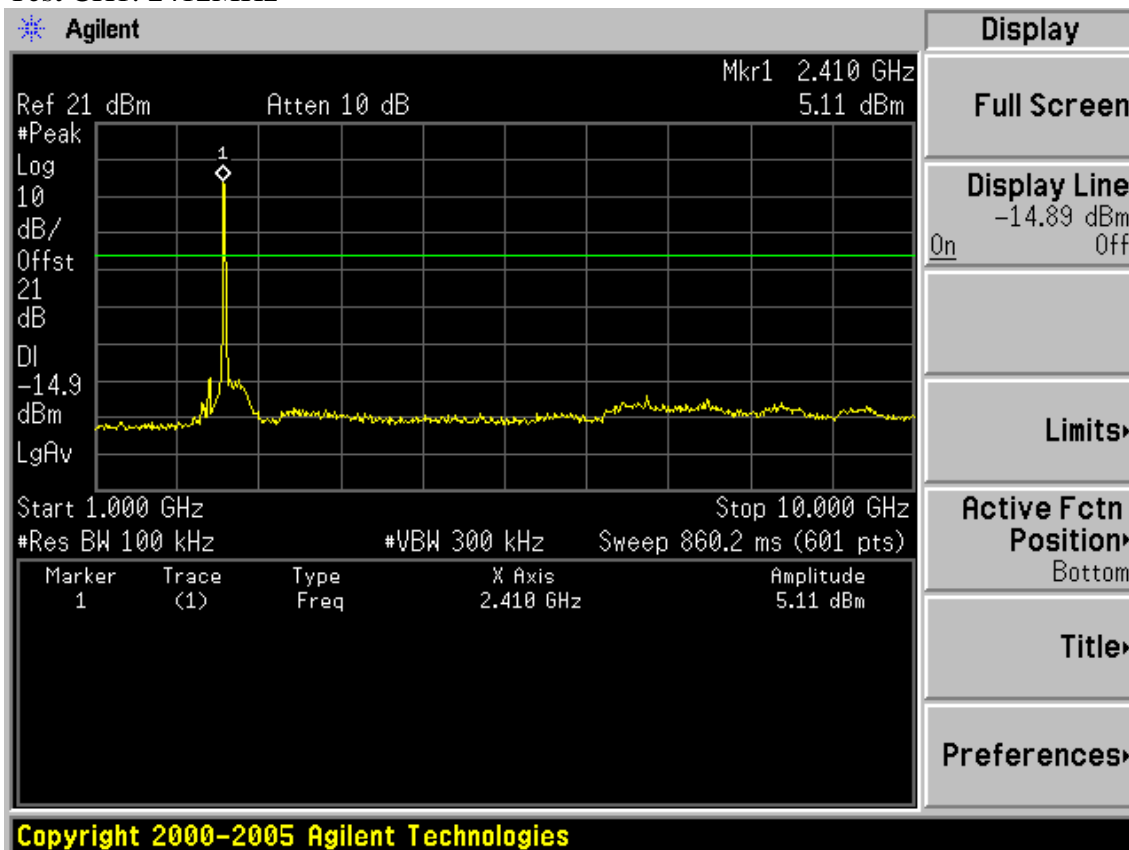
Copyright 2000-2005 Agilent Technologies

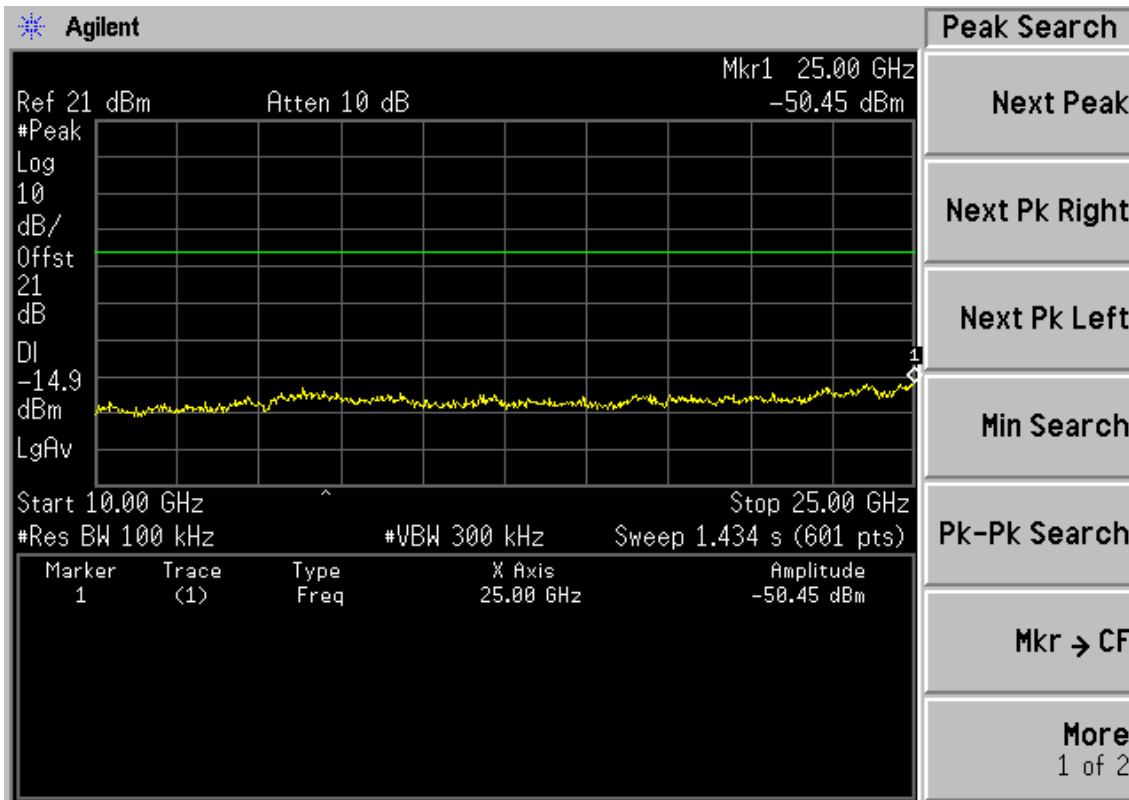




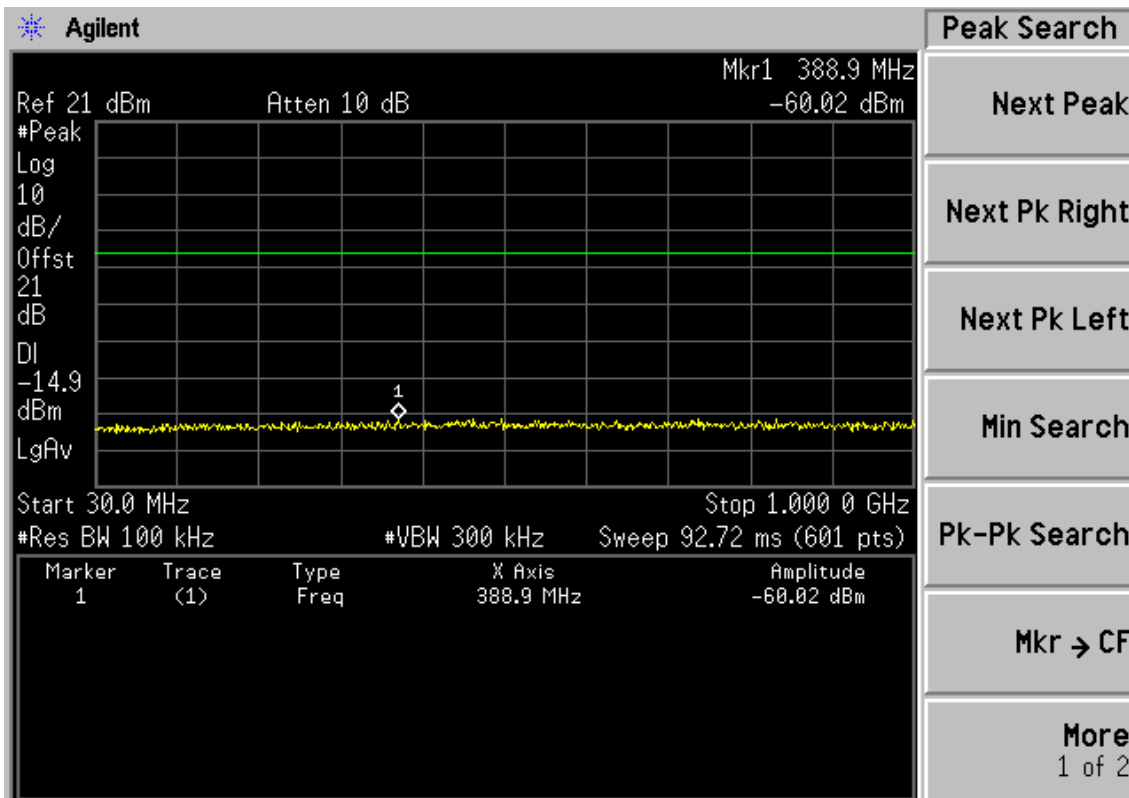


Test Mode: IEEE 802.11g TX  
 Test CH1: 2412MHz

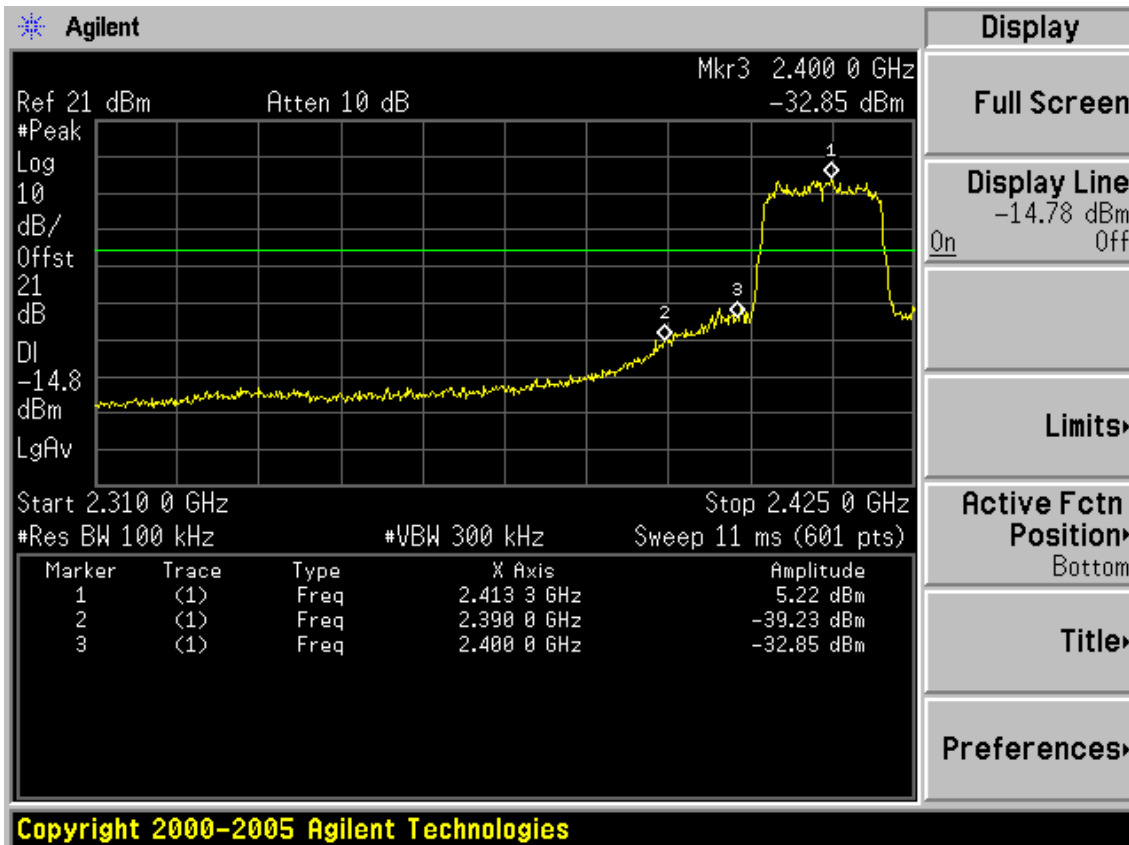




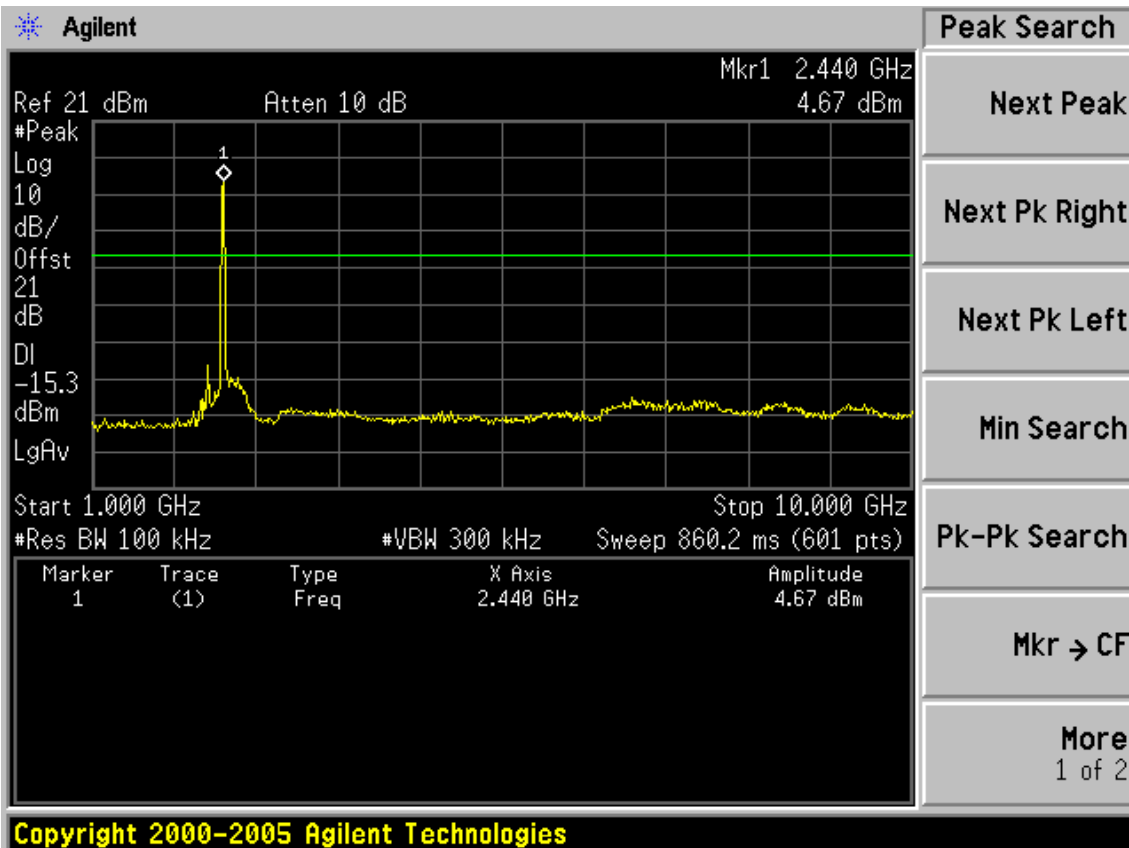
Copyright 2000-2005 Agilent Technologies

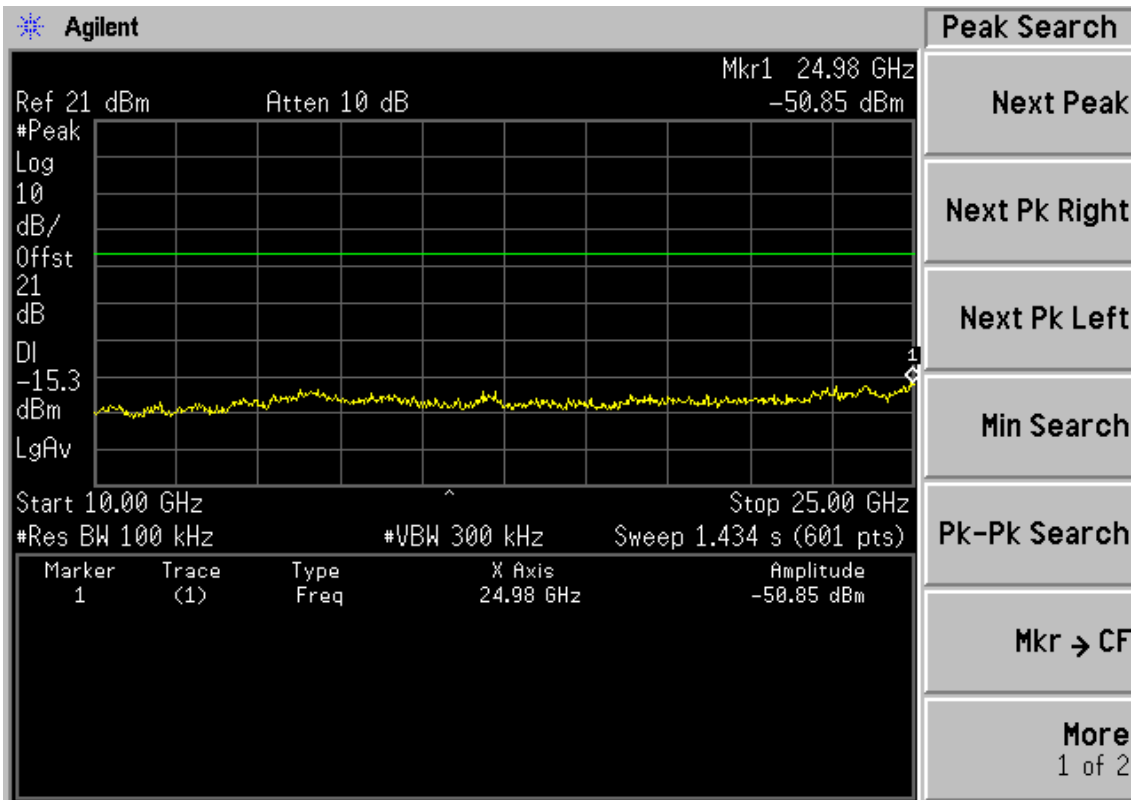


Copyright 2000-2005 Agilent Technologies

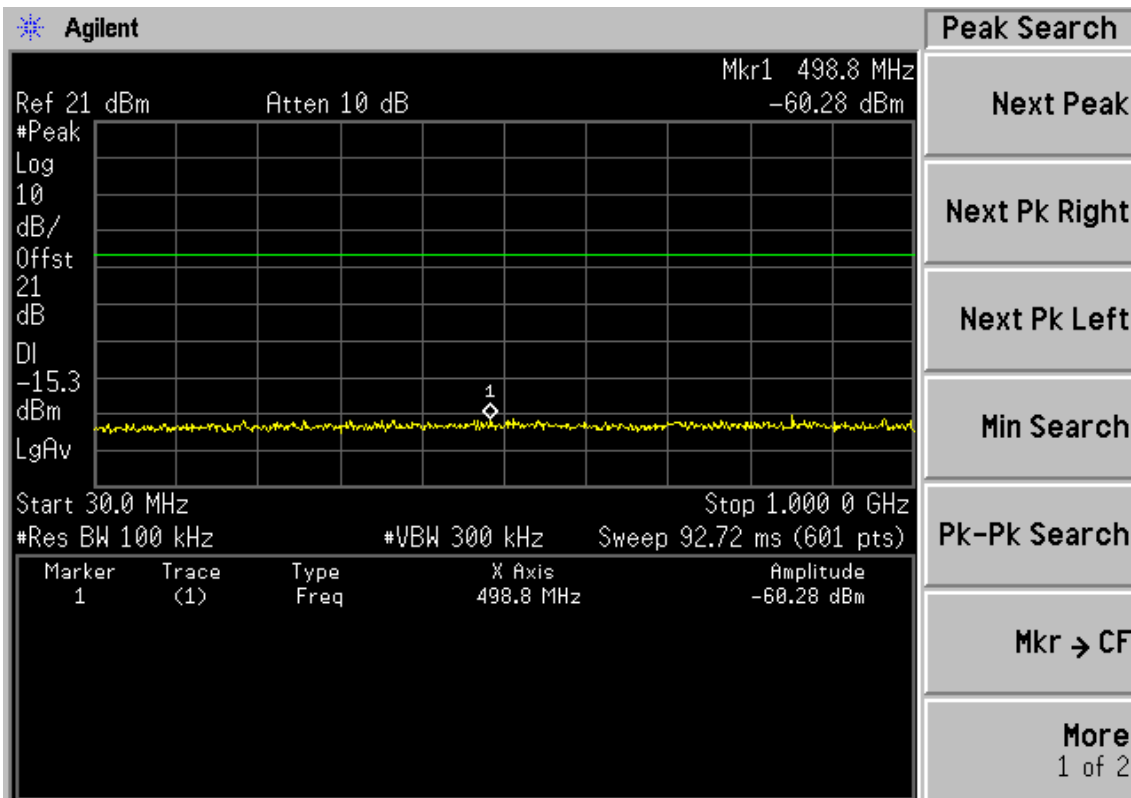


Test CH6: 2437MHz



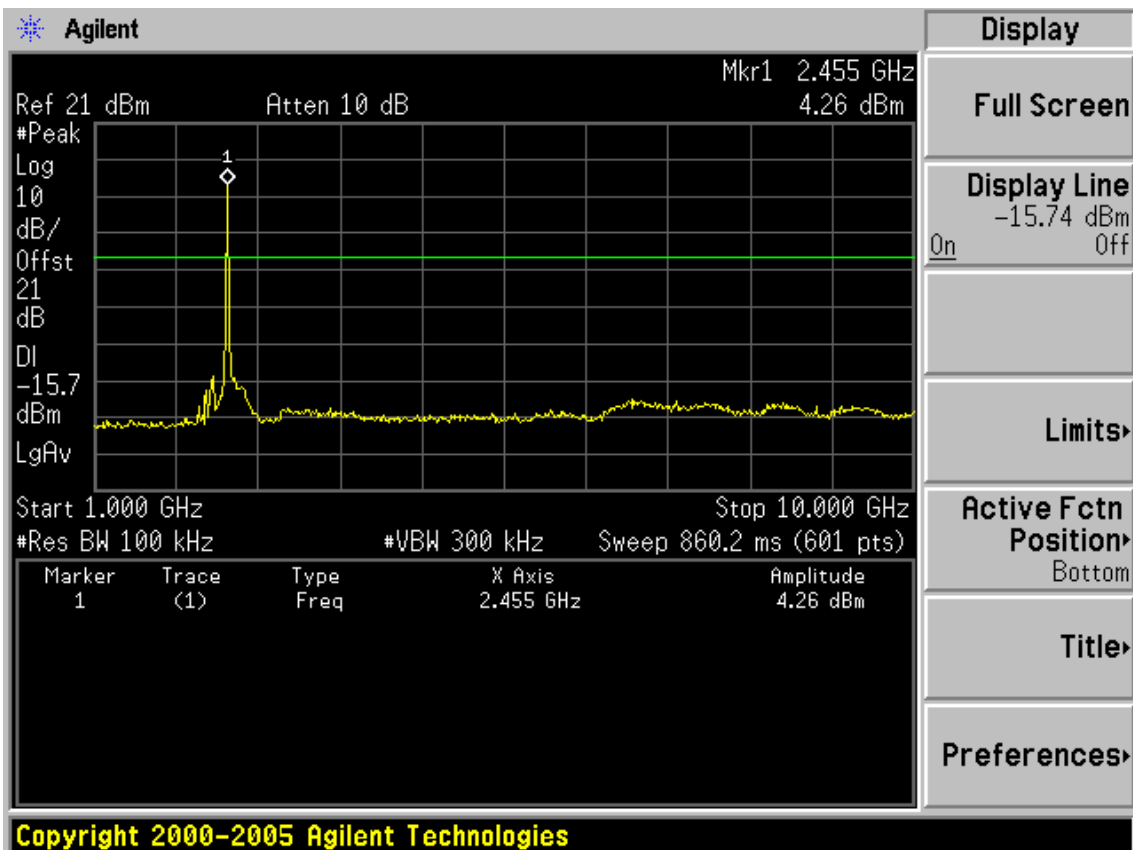
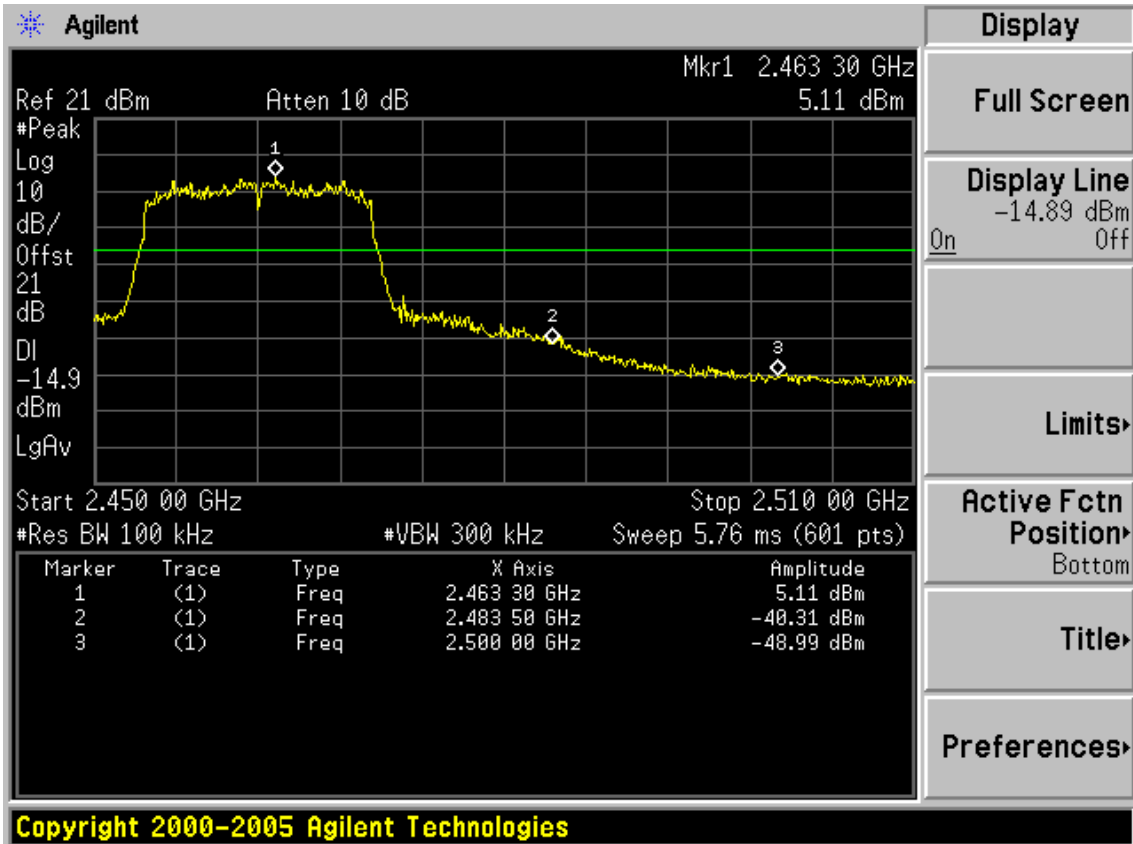


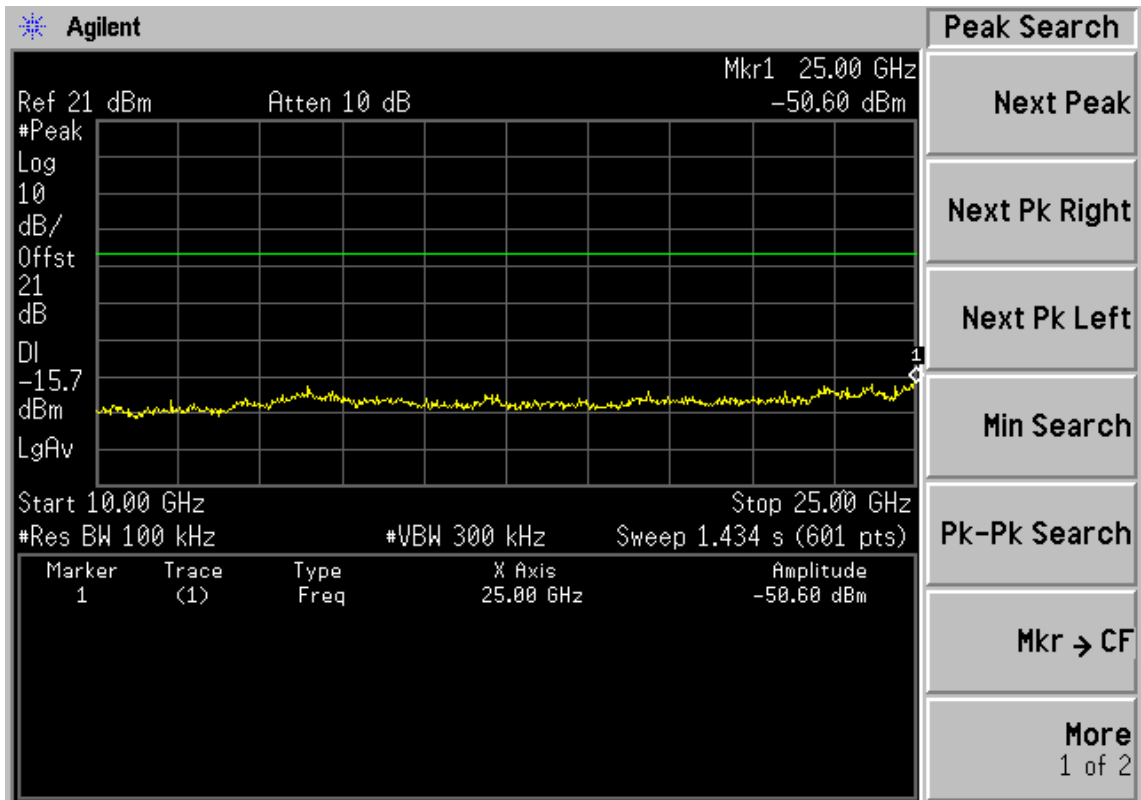
Copyright 2000-2005 Agilent Technologies



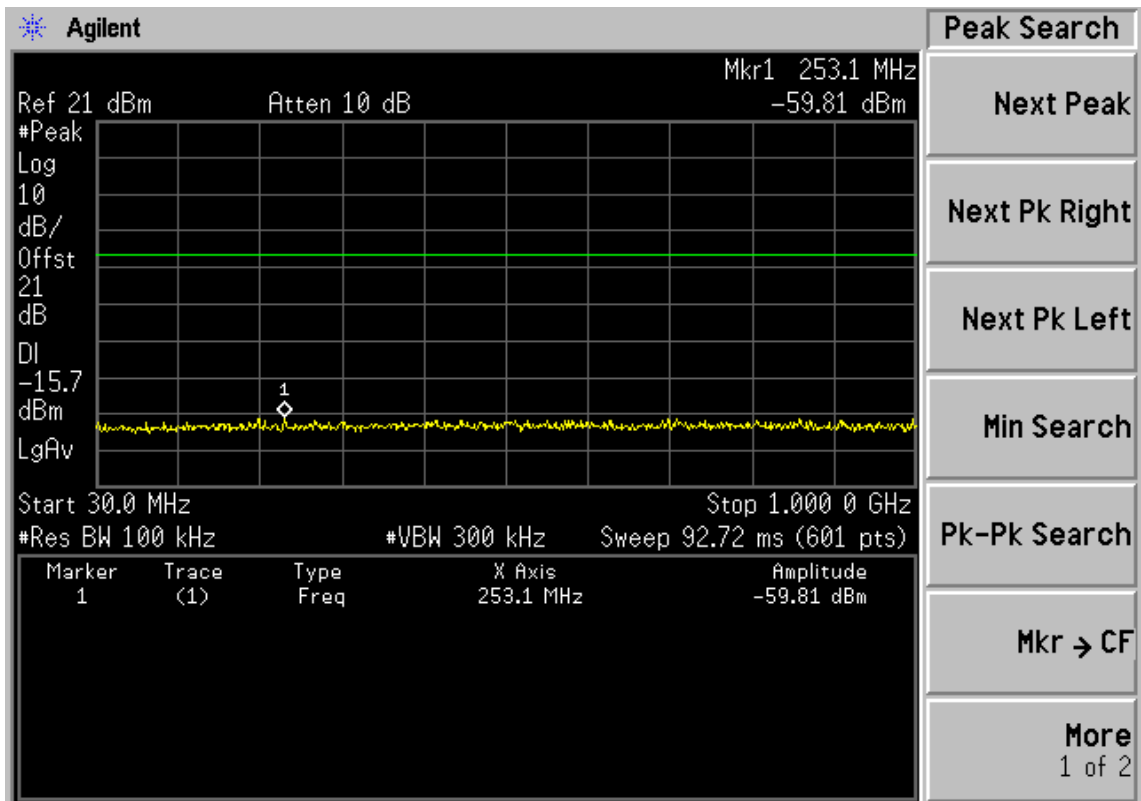
Copyright 2000-2005 Agilent Technologies

Test CH11: 2462MHz





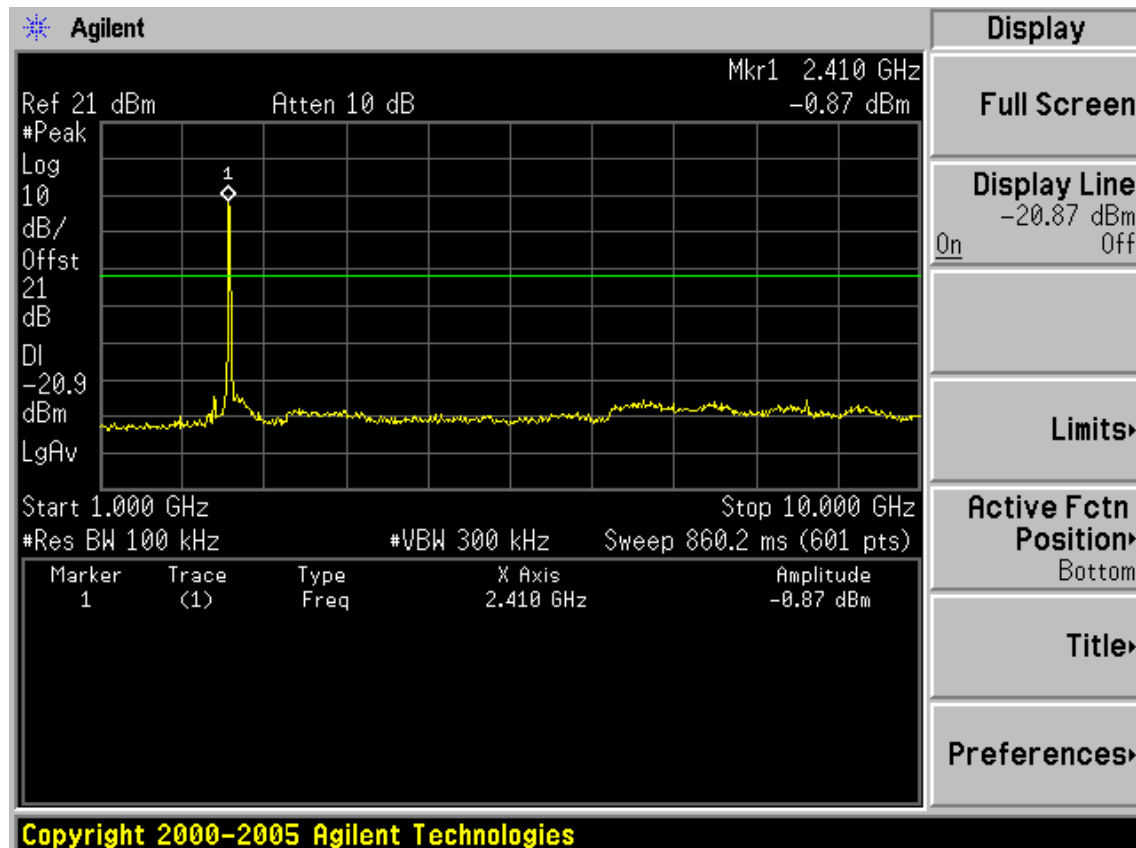
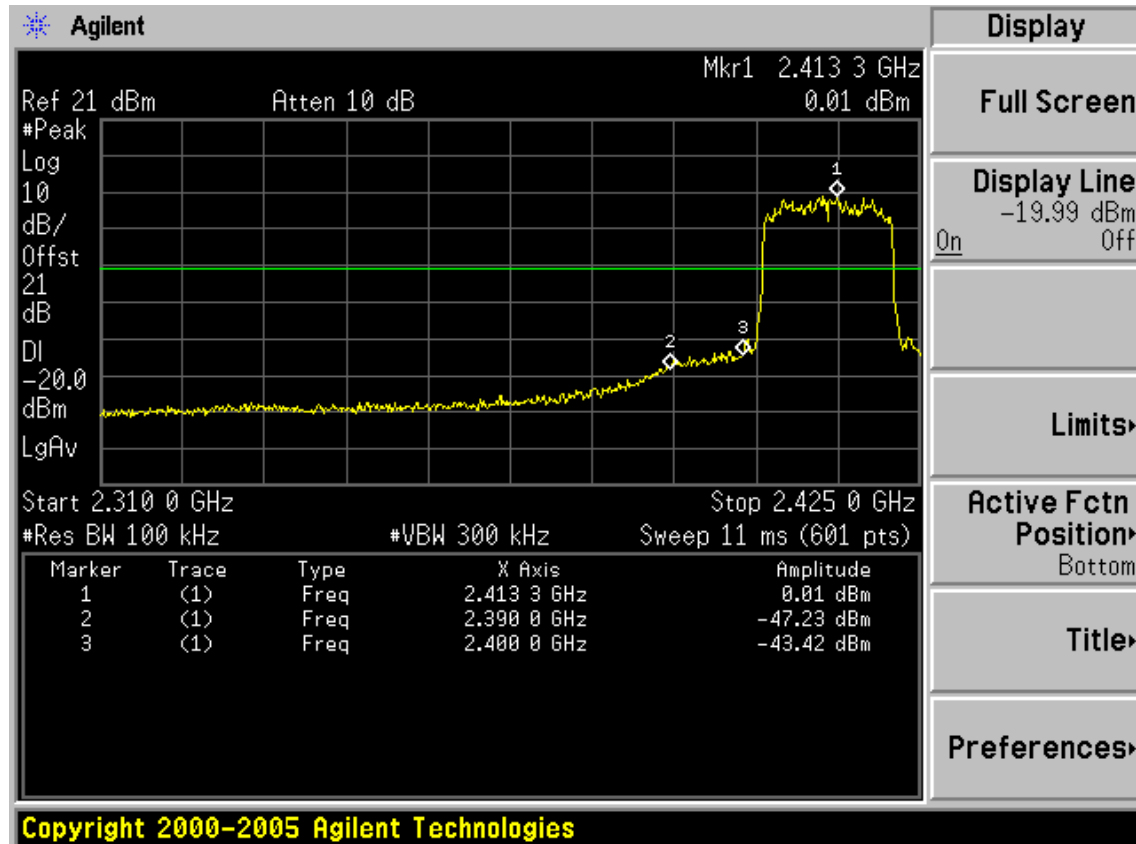
Copyright 2000-2005 Agilent Technologies



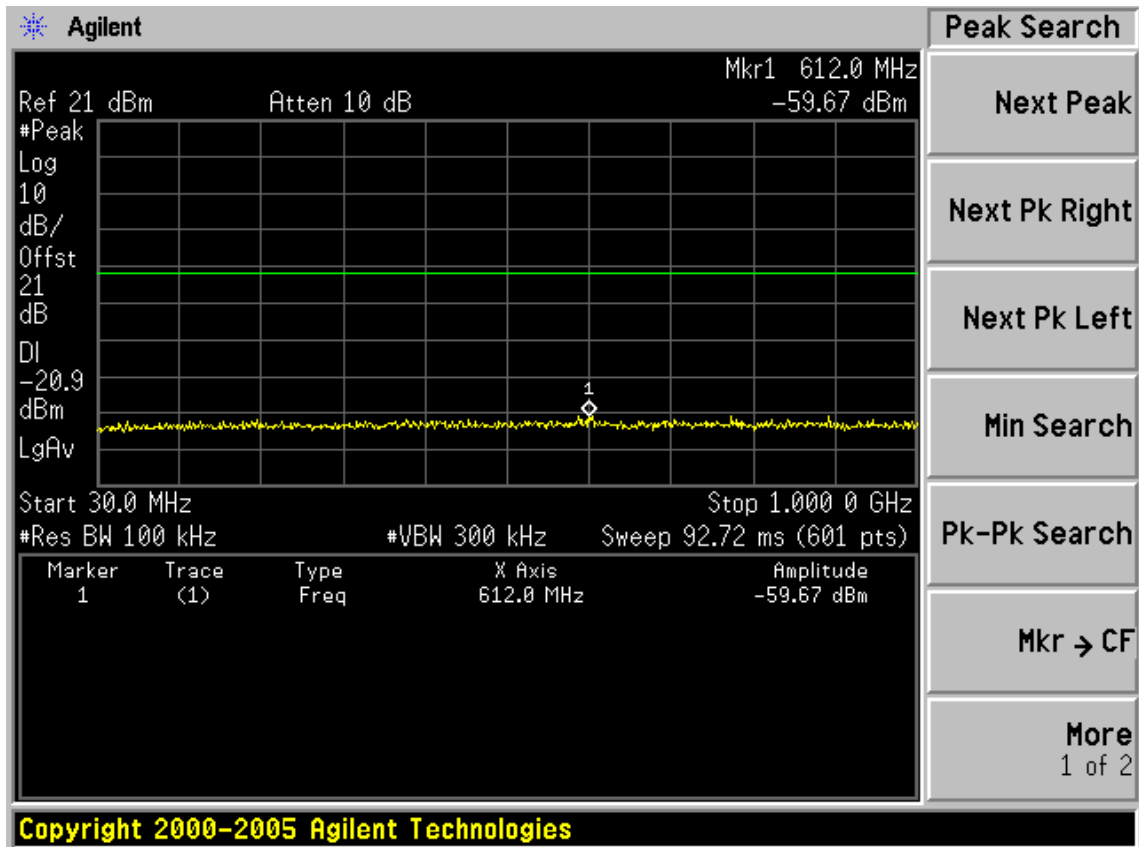
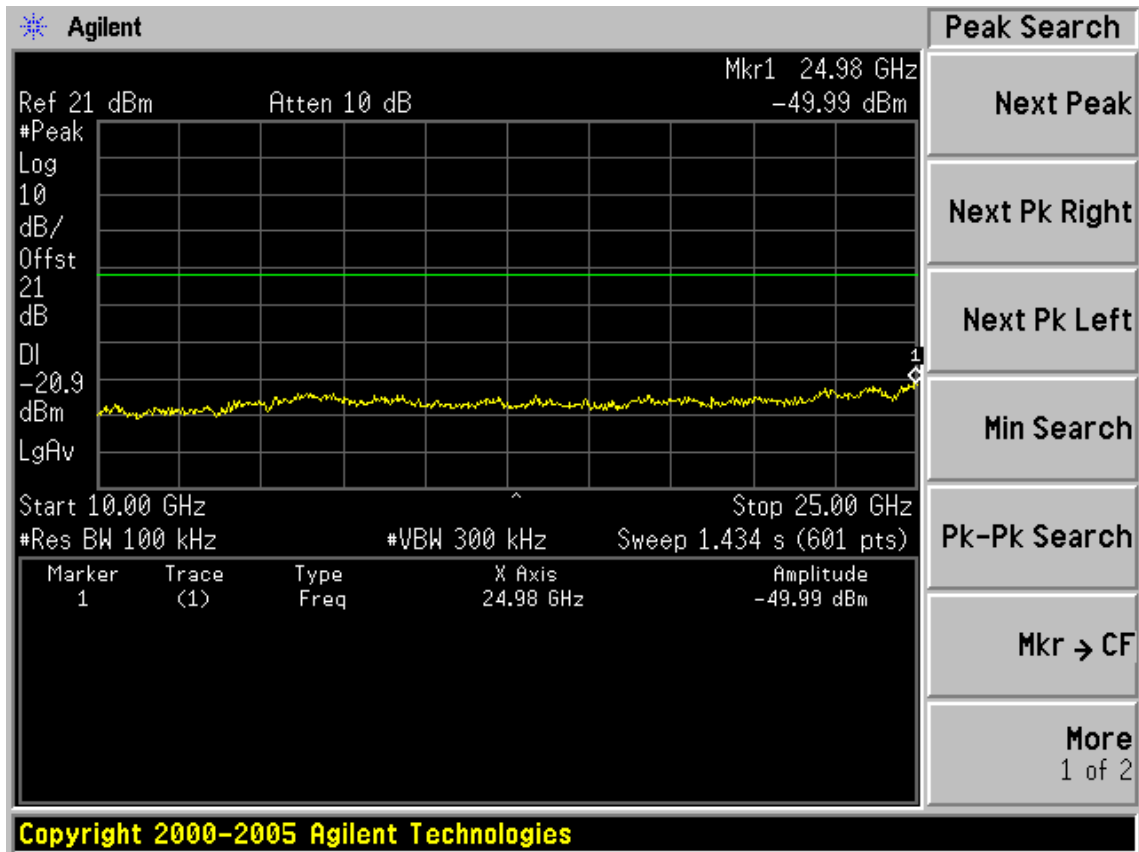
Copyright 2000-2005 Agilent Technologies

Test Mode: IEEE 802.11n HT20 TX

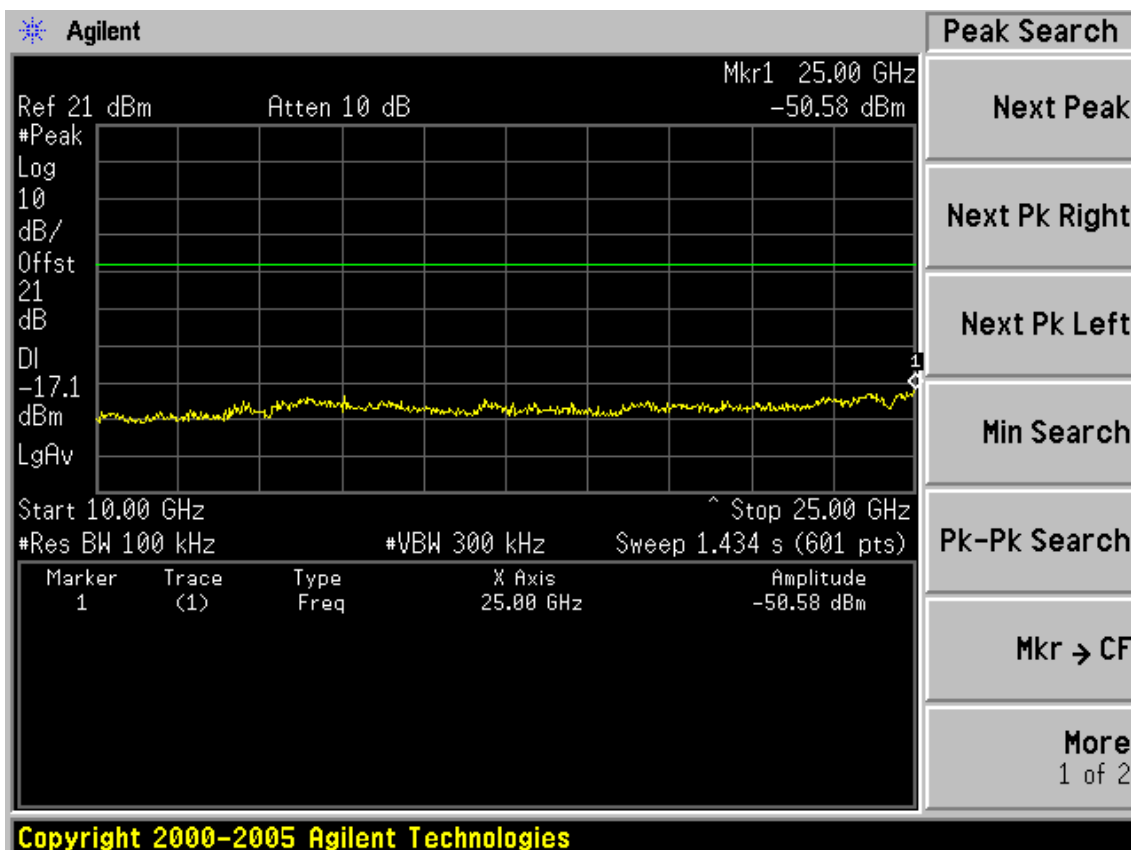
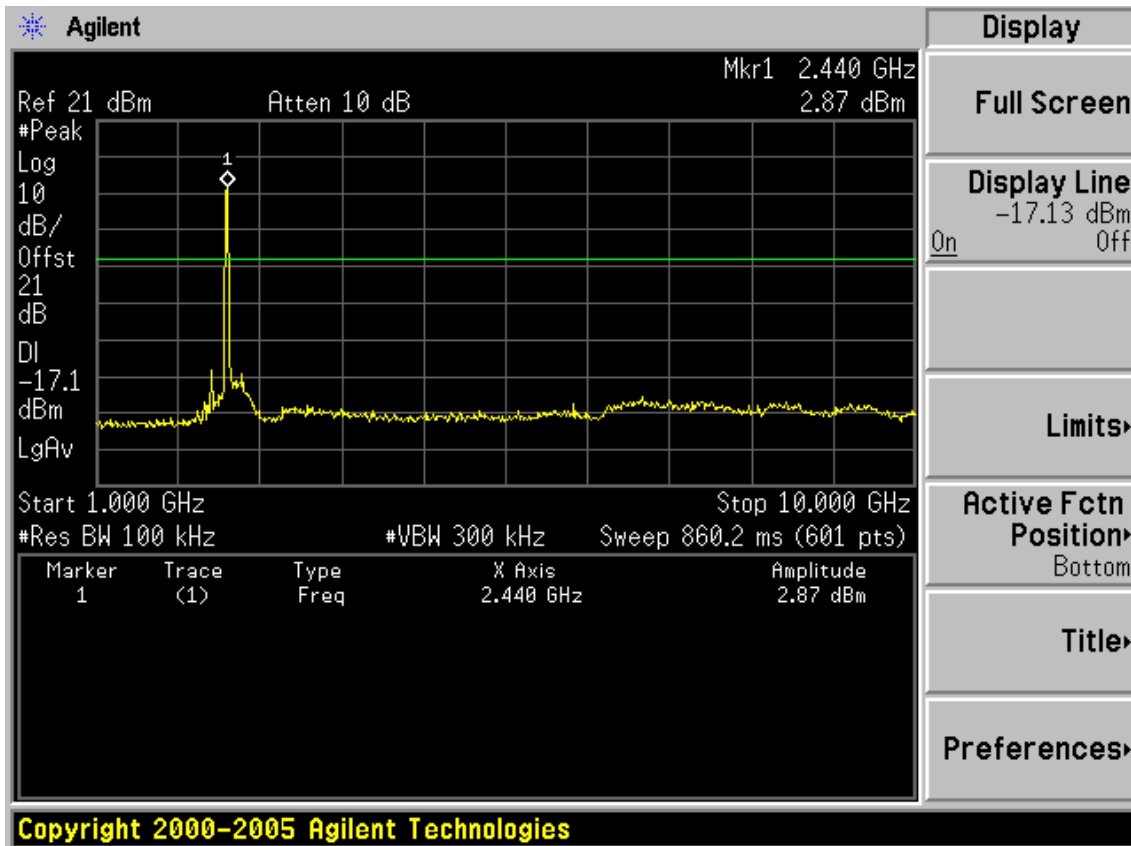
Test CH1: 2412MHz

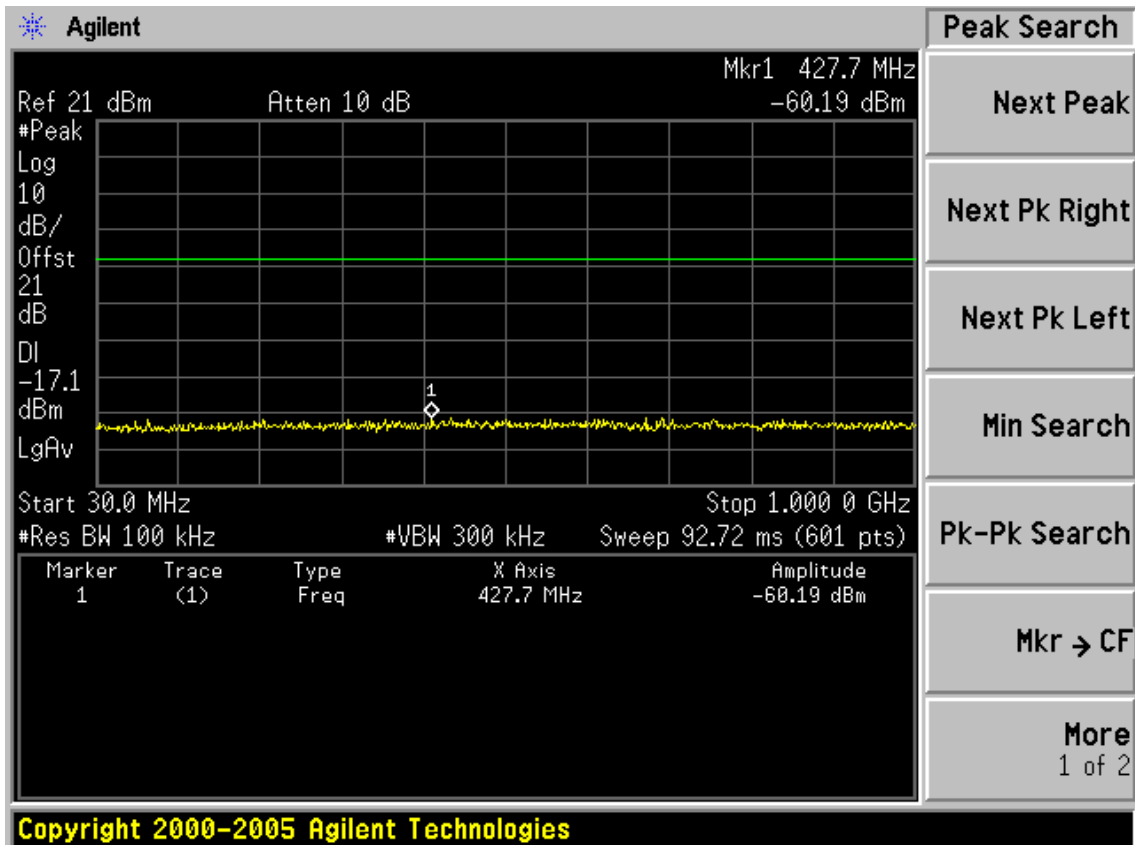




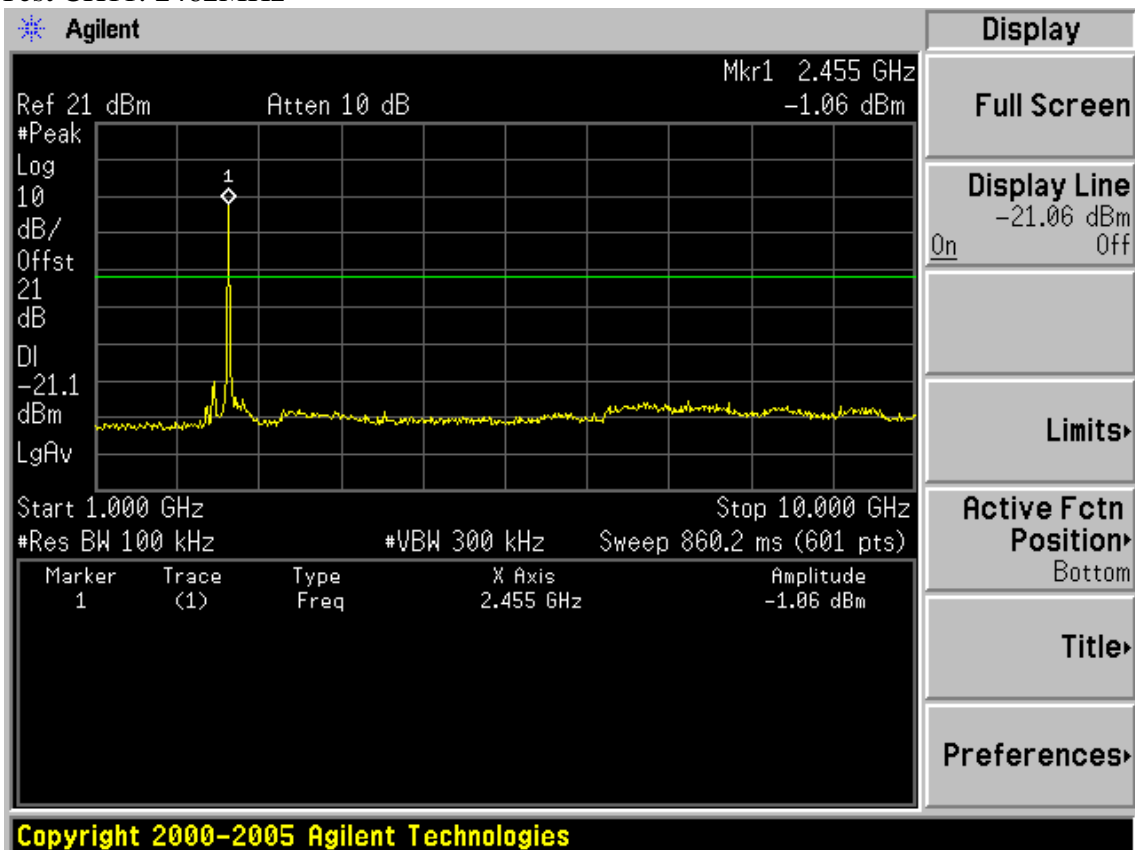


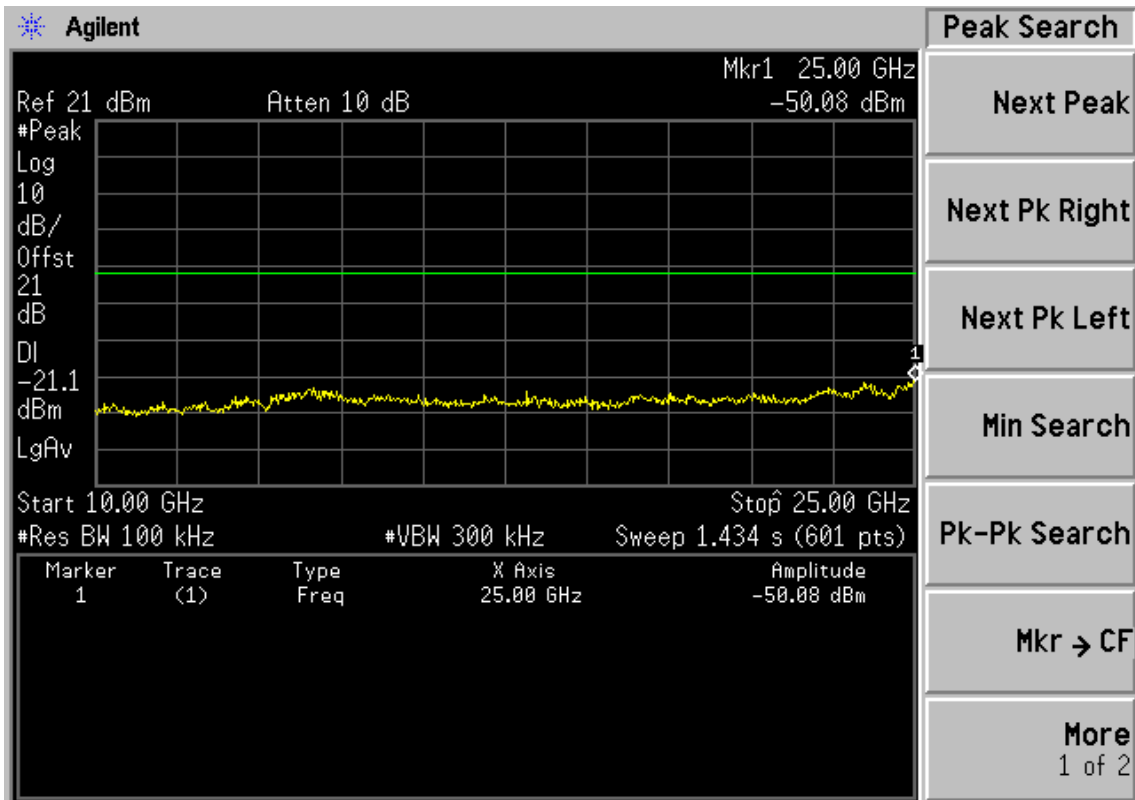
Test CH6: 2437MHz



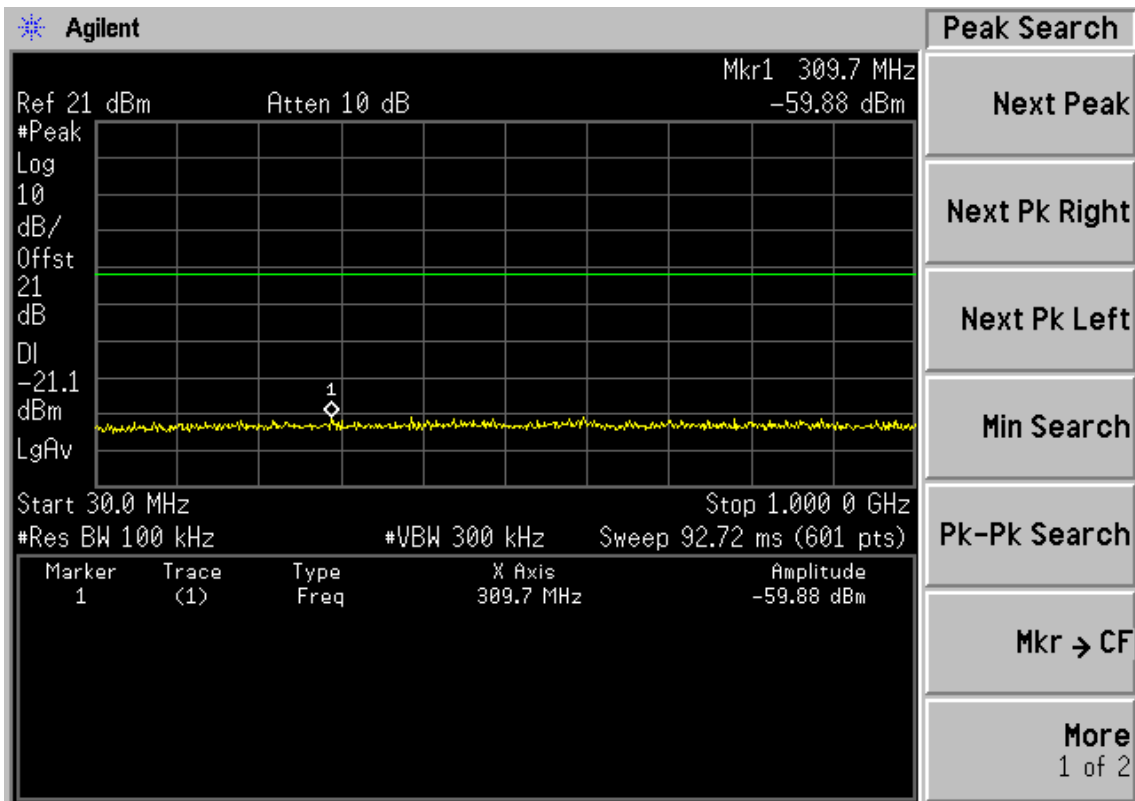


Test CH11: 2462MHz

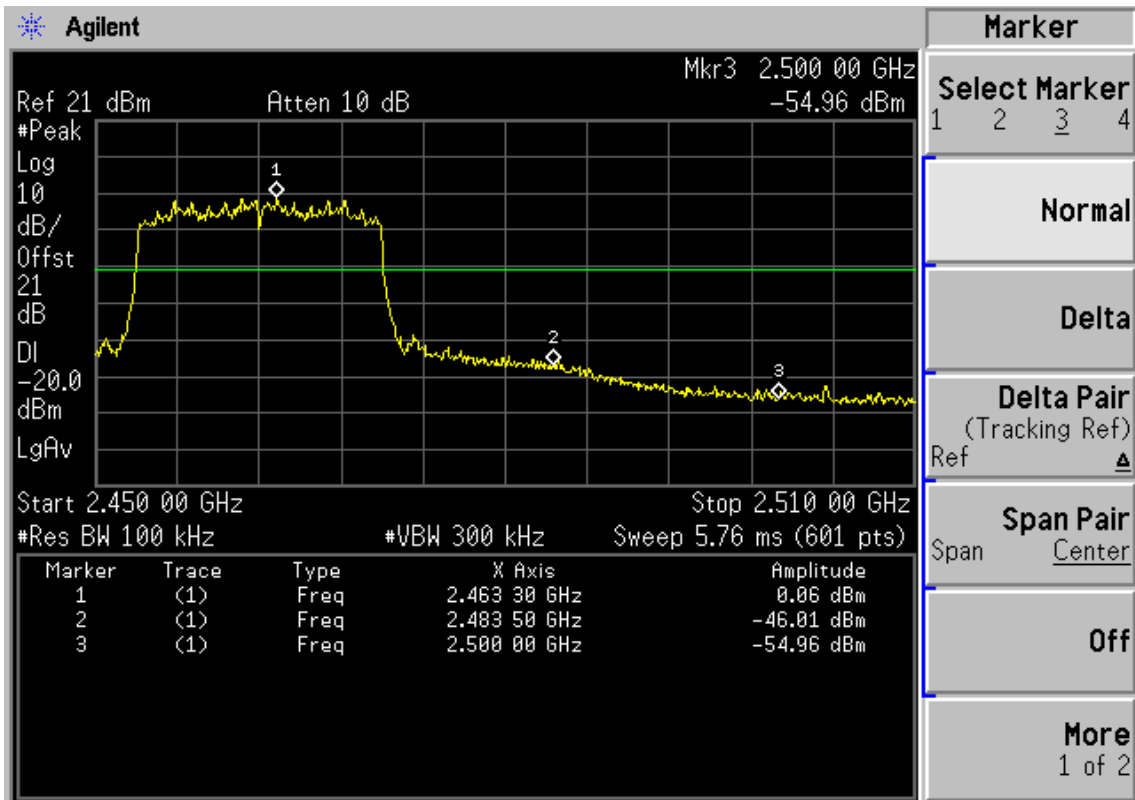




Copyright 2000-2005 Agilent Technologies



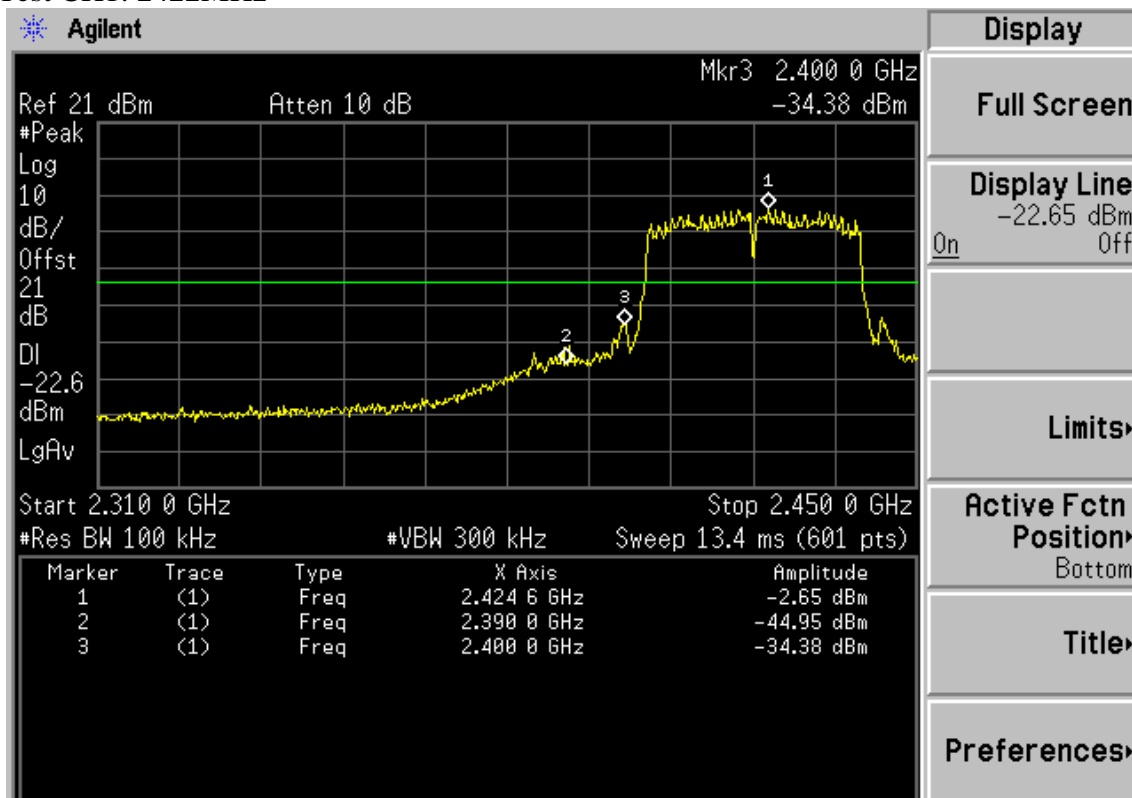
Copyright 2000-2005 Agilent Technologies



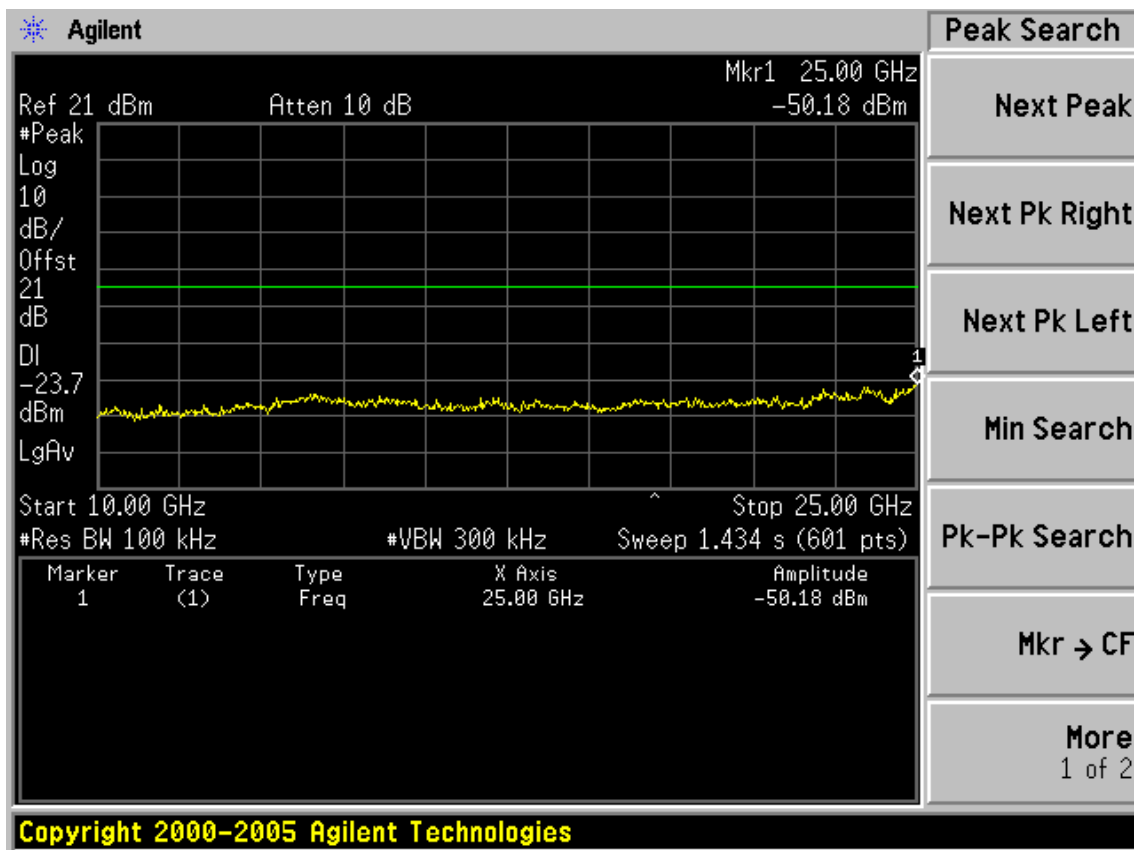
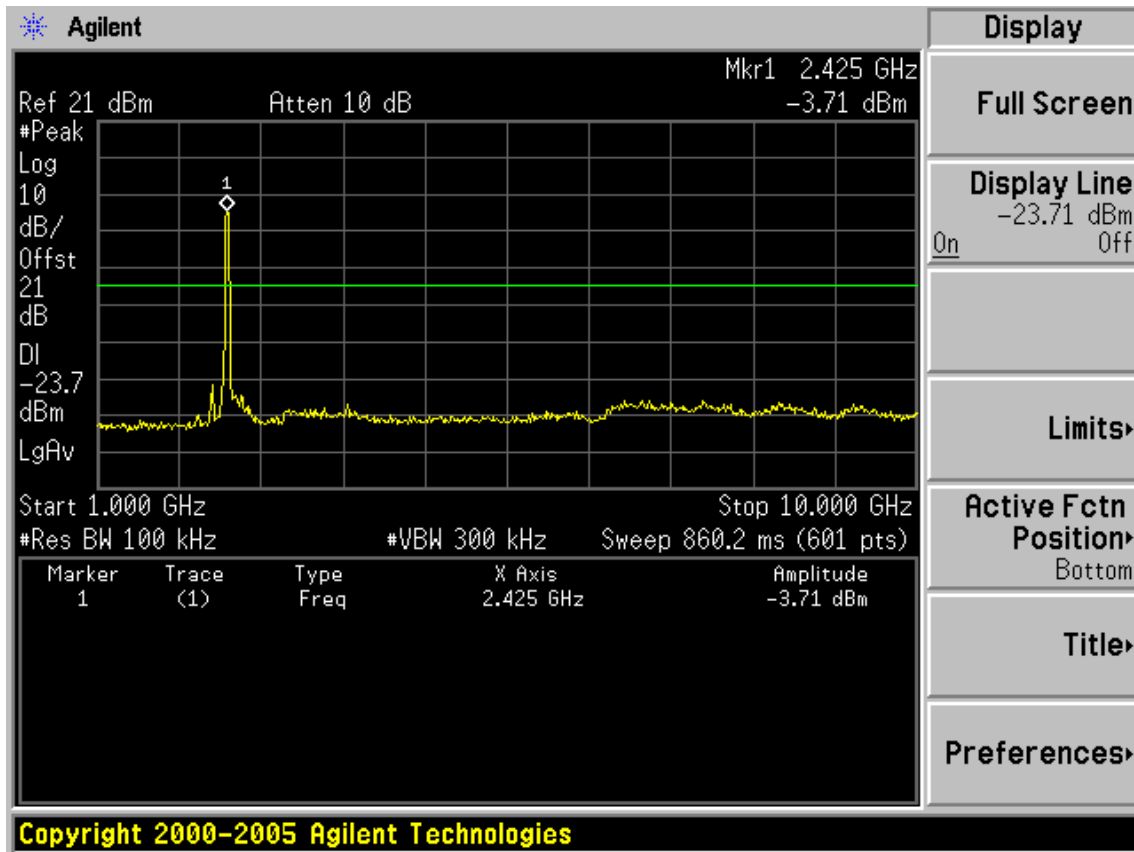
Copyright 2000-2005 Agilent Technologies

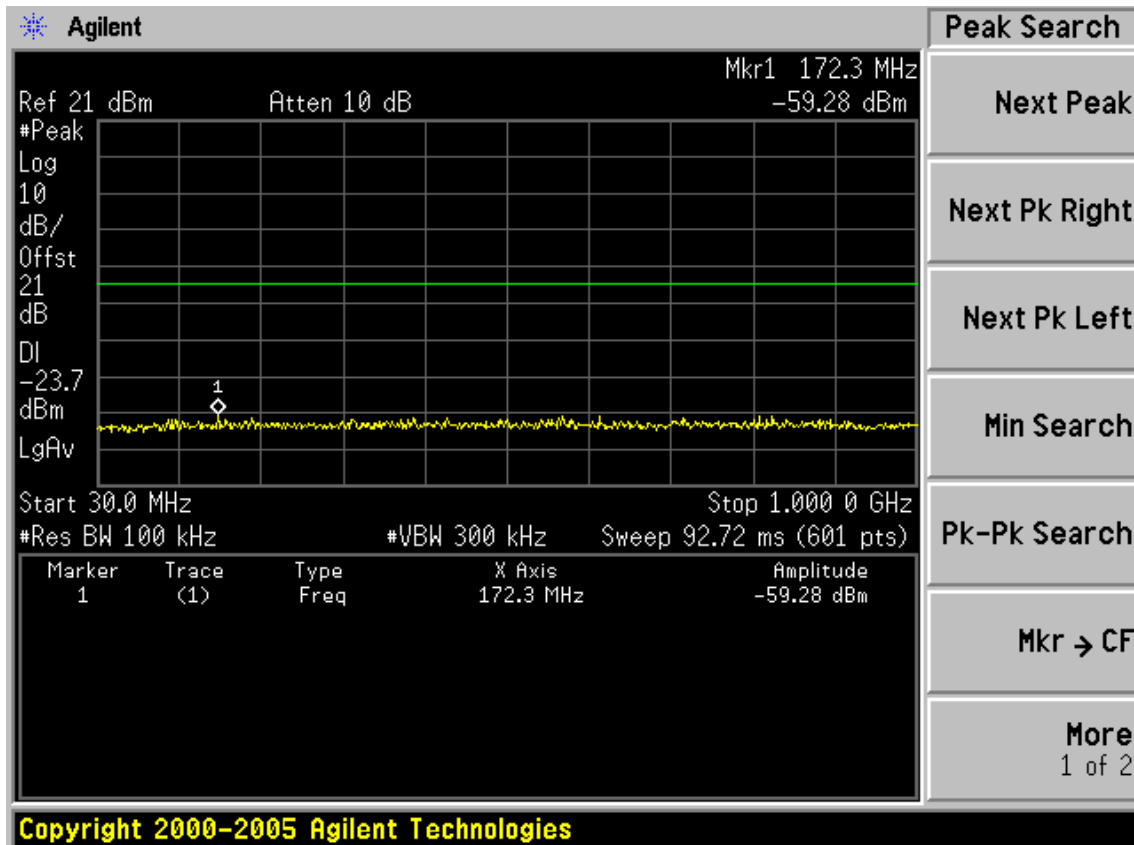
Test Mode: IEEE 802.11n HT40 TX

Test CH1: 2422MHz

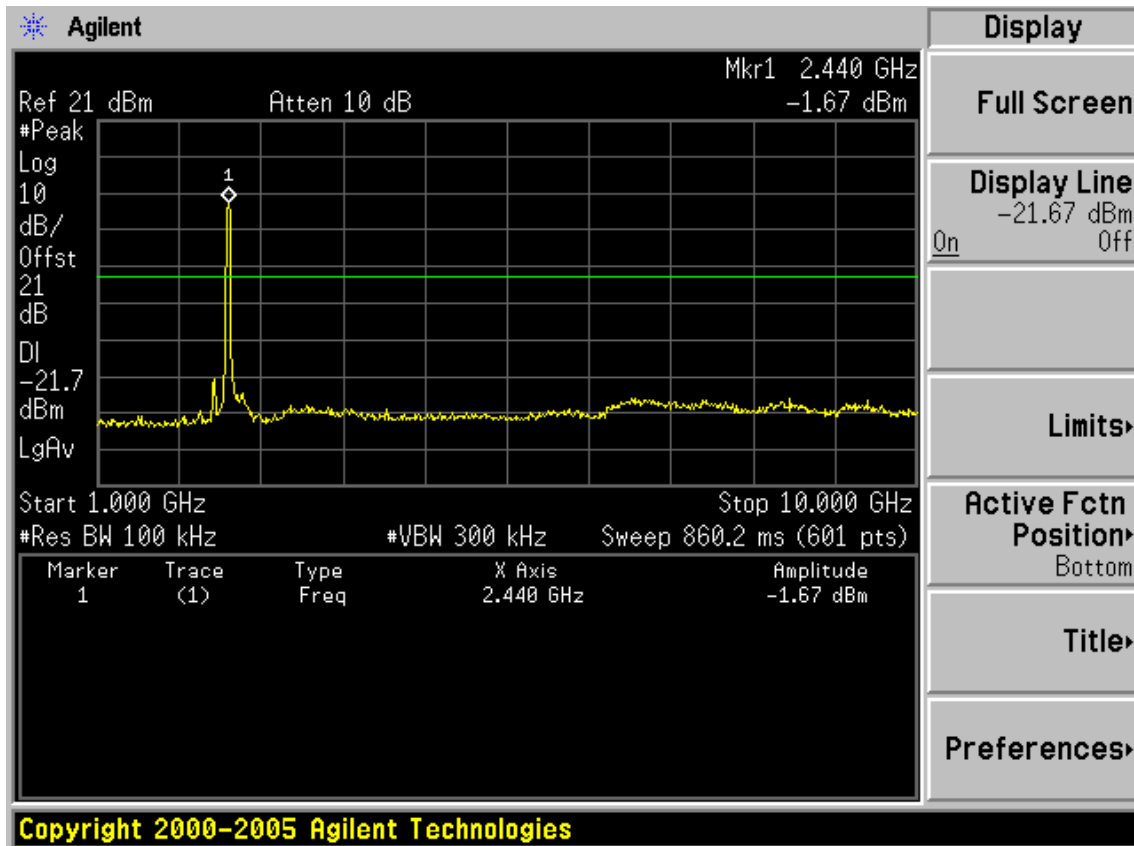


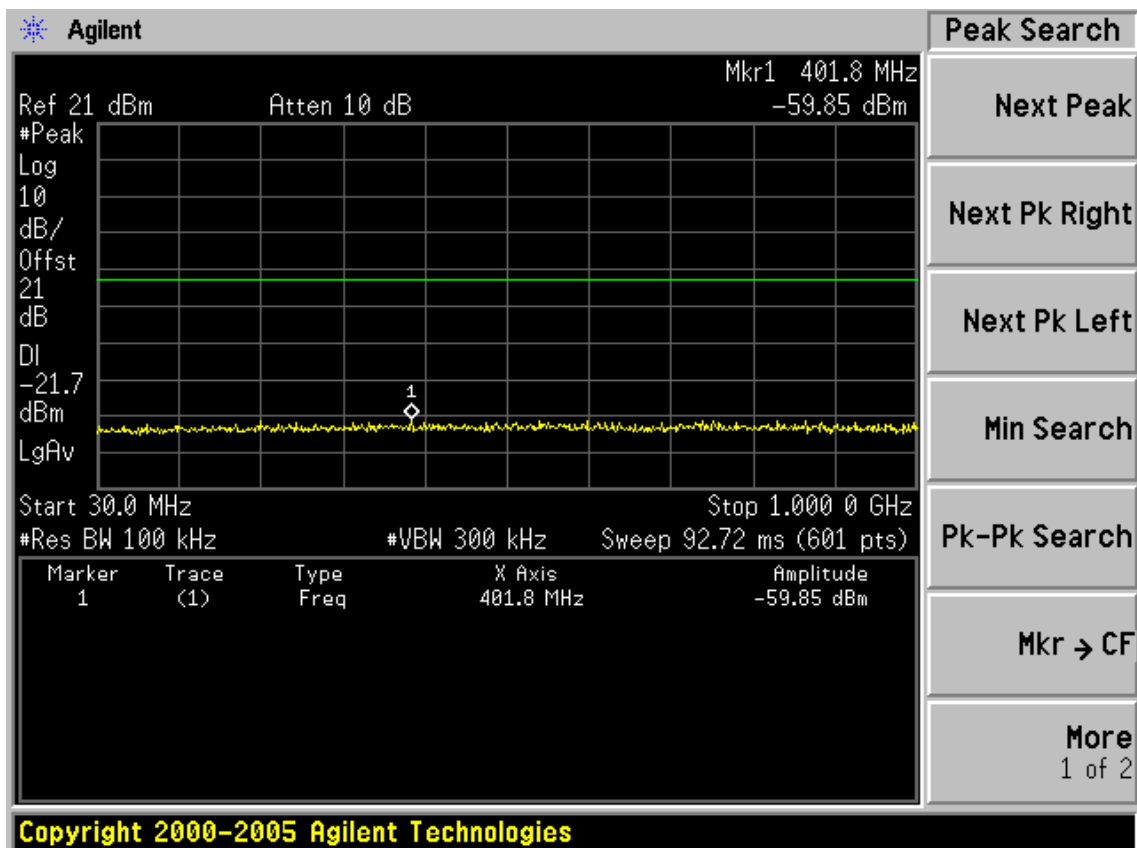
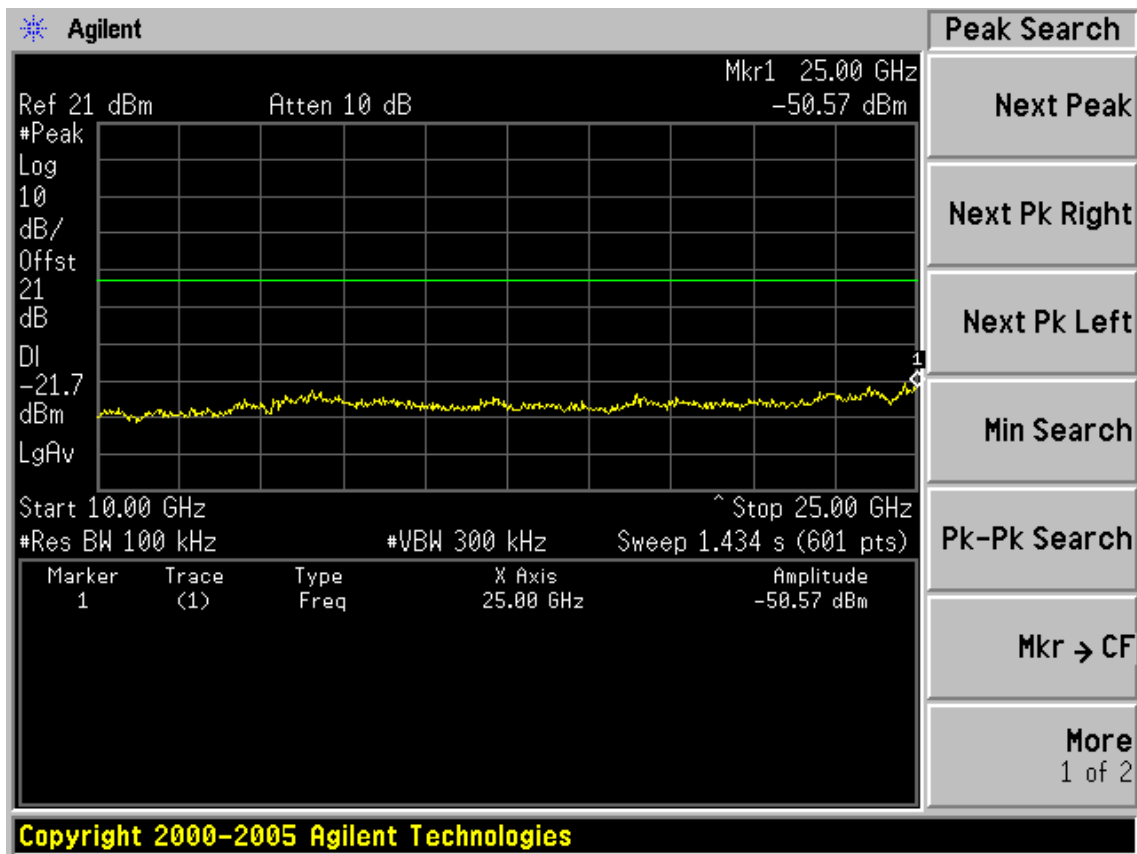
Copyright 2000-2005 Agilent Technologies





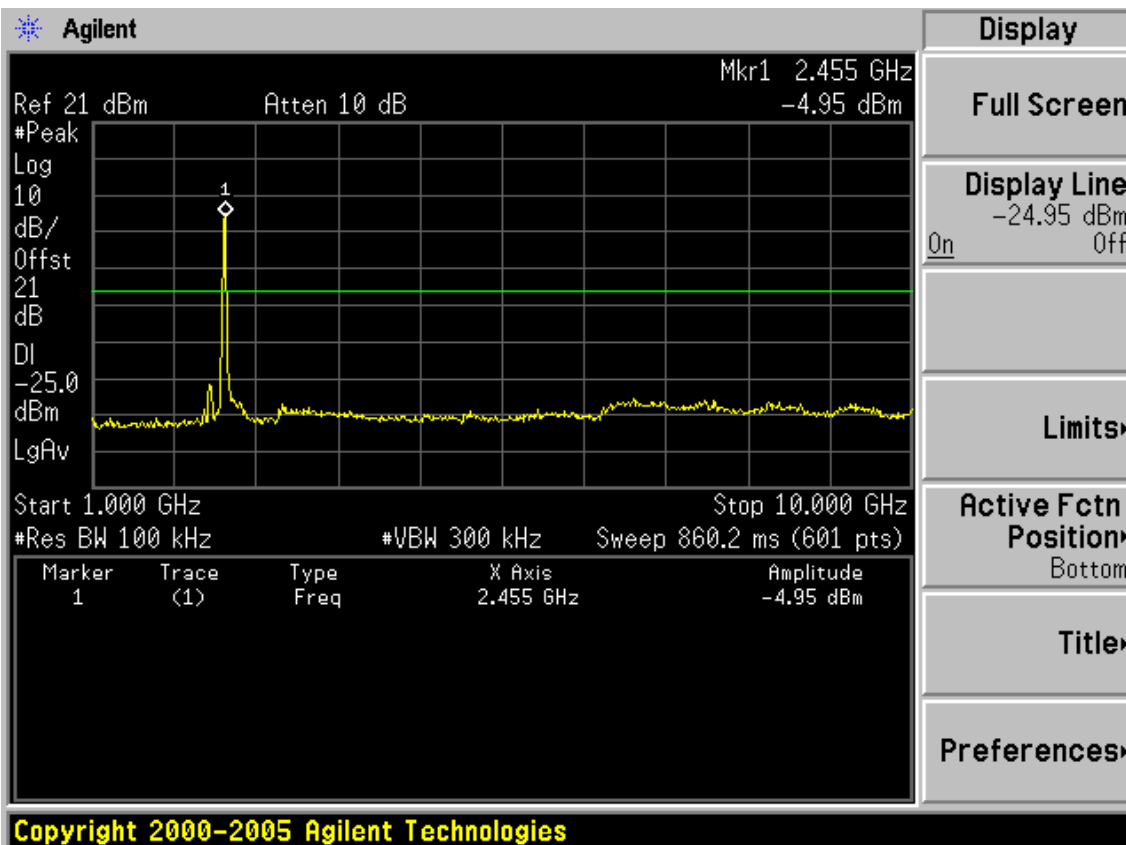
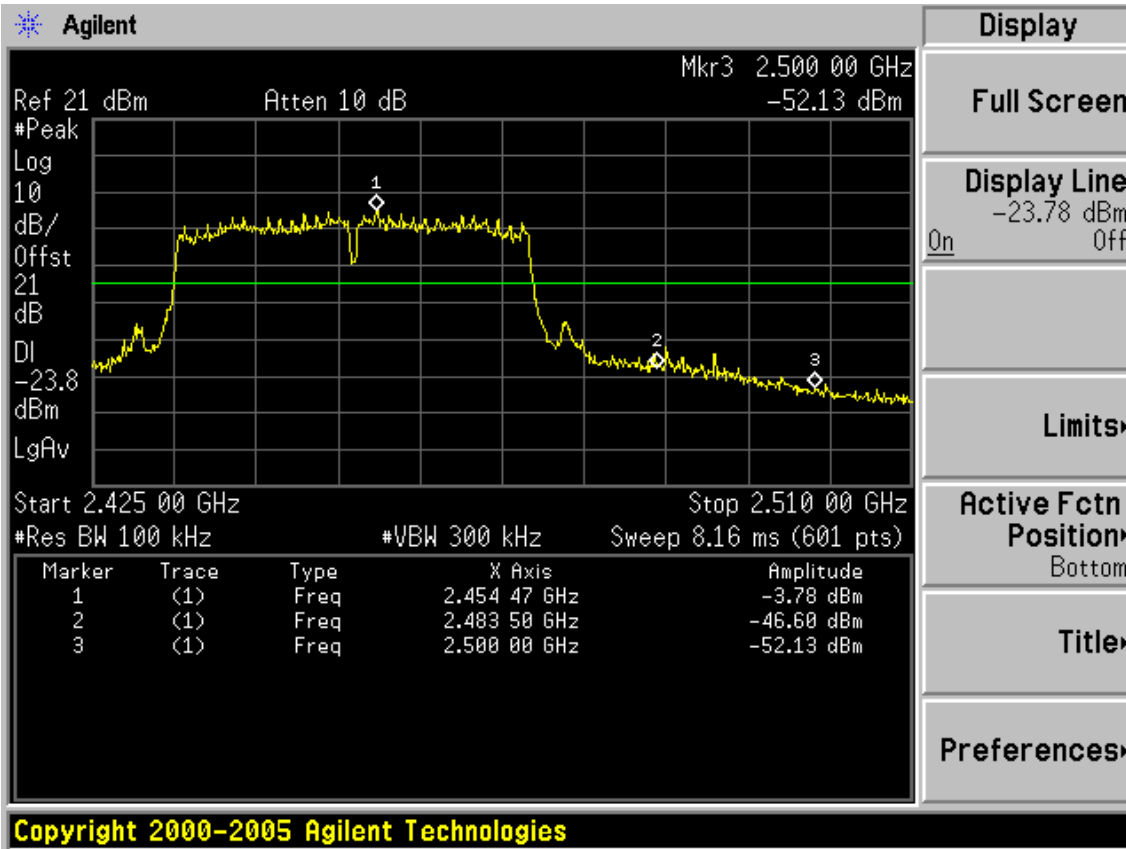
Test CH4: 2437MHz

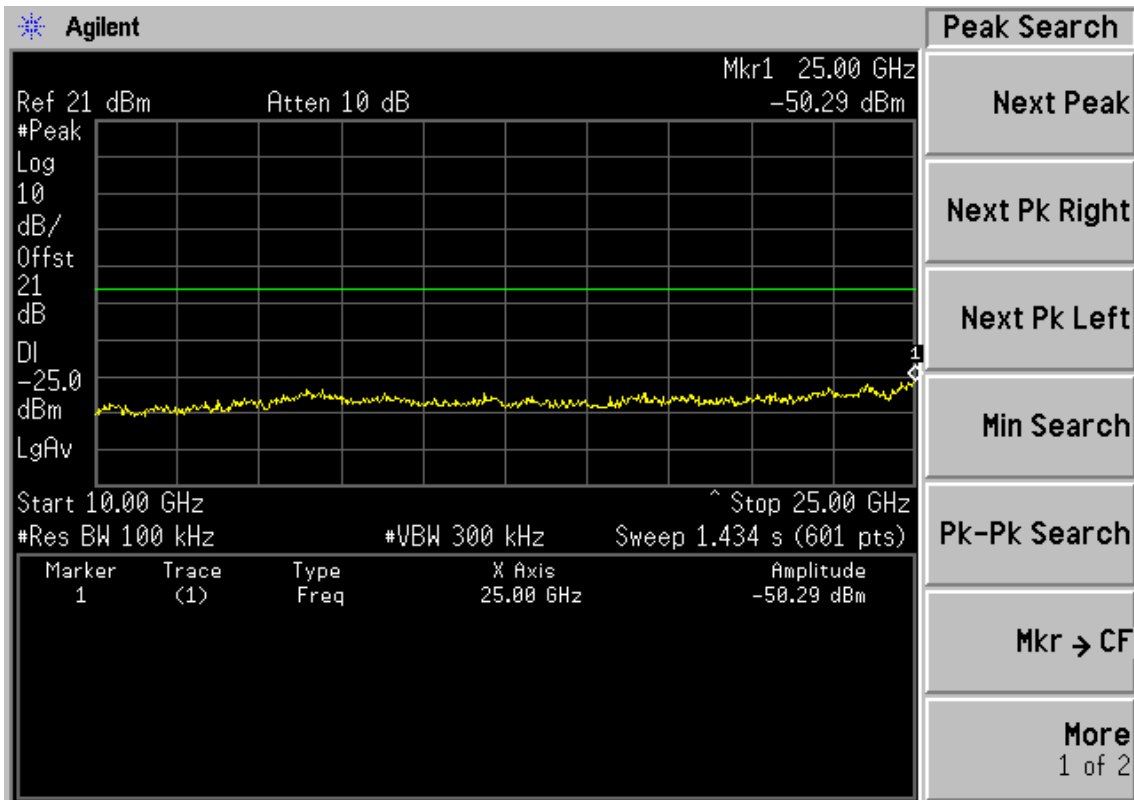




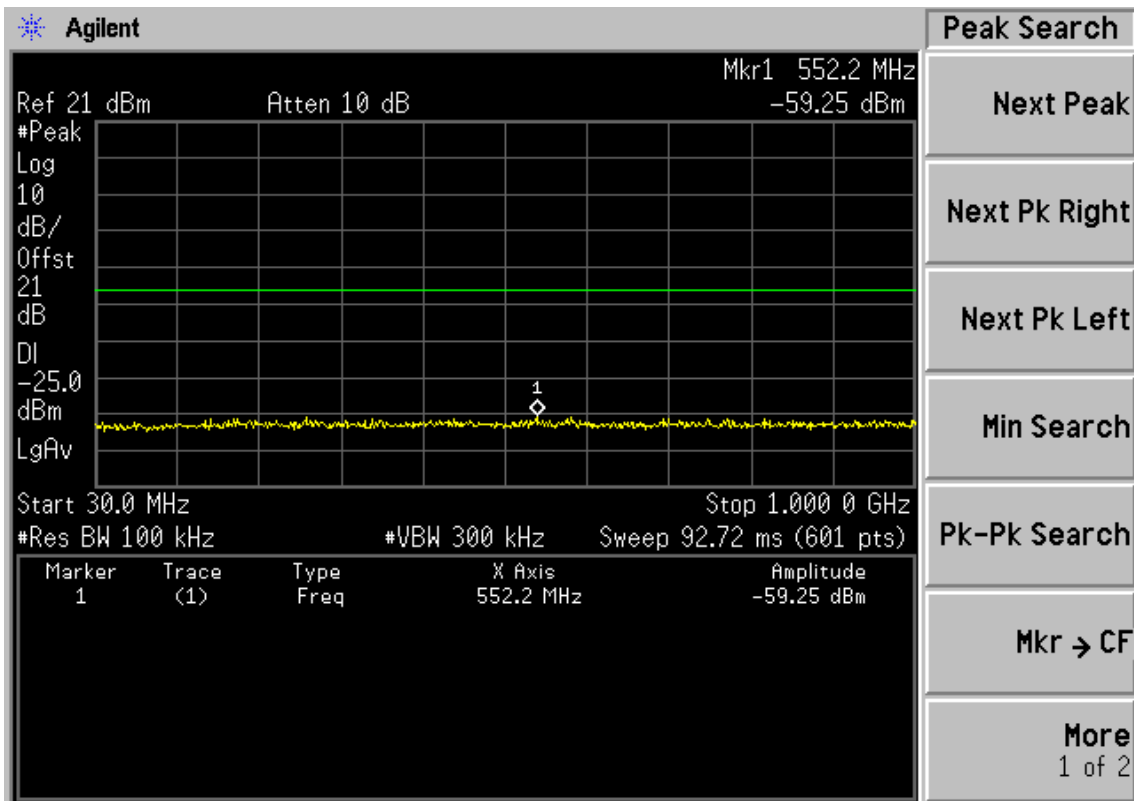


Test CH9: 2452MHz





Copyright 2000-2005 Agilent Technologies



Copyright 2000-2005 Agilent Technologies

## 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, 12 | 1 Year        |
| 2.   | Amp       | HP           | 8449B       | 3008A08495 | May.08, 12 | 1 Year        |
| 3.   | Antenna   | EMCO         | 3115        | 9510-4580  | May.08, 12 | 1 Year        |
| 4.   | HF Cable  | Hubersuhne   | Sucoflex104 | -          | May.08, 12 | 1 Year        |

### 6.2. Limit

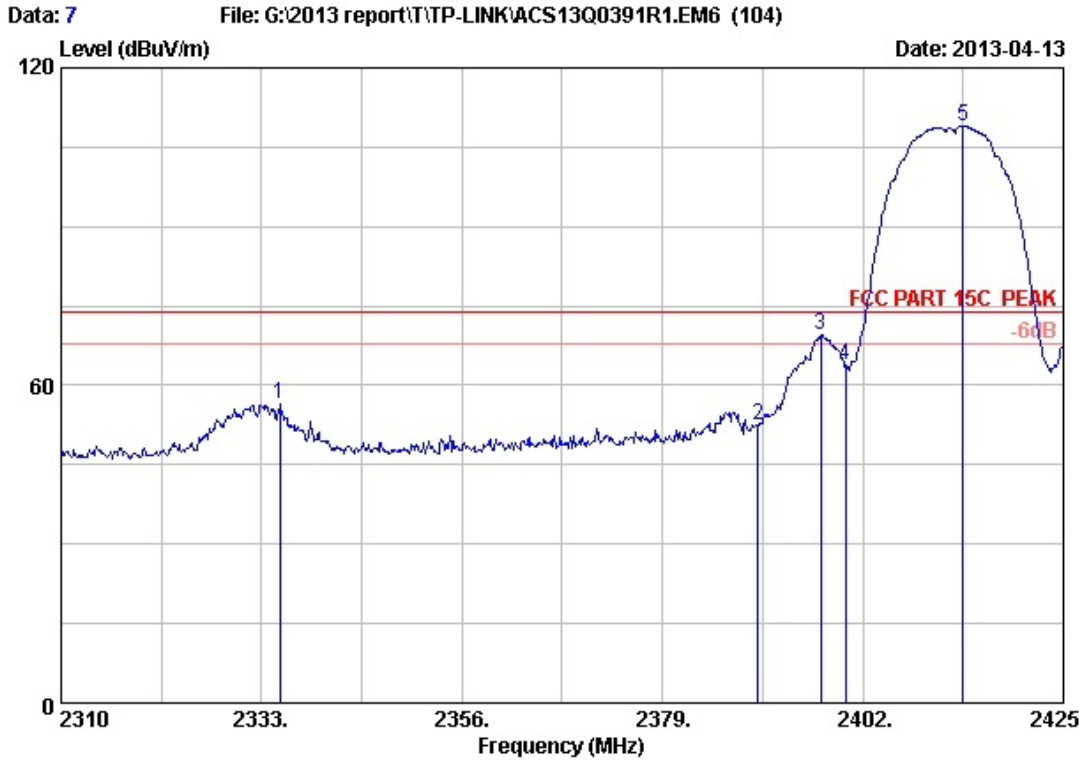
All the lower and upper band-edges emissions appearing within 2310MHz to 2390MHz and 2483.5MHz to 2500MHz restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions outside operation frequency band 2400MHz to 2483.5MHz shall be at least 20dB below the fundamental 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.)

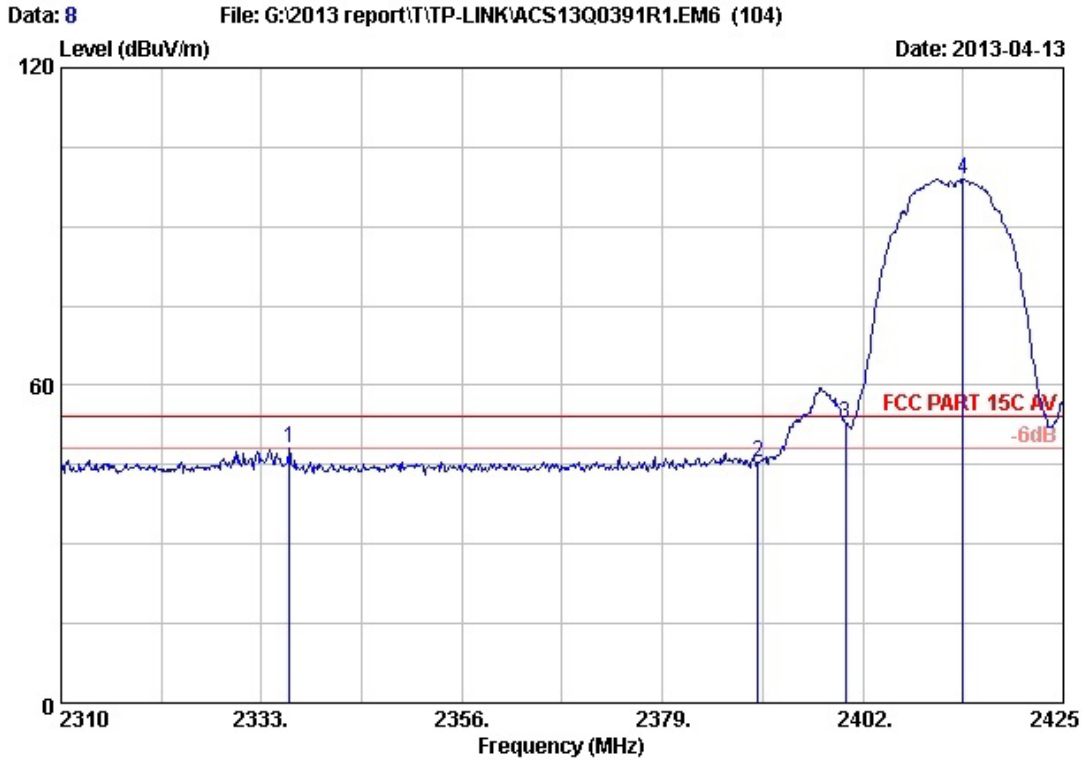


Site no. : 3m Chamber Data no. : 7  
 Dis. / Ant. : 3m 2012 3115 (4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : SafeSteram™ Wireless N Gigabit Broadband VPN Router  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11b CH1 2412MHz Tx  
 M/N : TL-ER604W  
 :

|                | Ant.             | Cable        | Amp.           | Emission          |                   |                    |                |        |      |
|----------------|------------------|--------------|----------------|-------------------|-------------------|--------------------|----------------|--------|------|
| Freq.<br>(MHz) | Factor<br>(dB/m) | loss<br>(dB) | Factor<br>(dB) | Reading<br>(dBuV) | Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark |      |
| 1              | 2335.070         | 26.34        | 5.91           | 35.92             | 60.26             | 56.59              | 74.00          | 17.41  | Peak |
| 2              | 2390.000         | 26.70        | 6.00           | 35.92             | 55.79             | 52.57              | 74.00          | 21.43  | Peak |
| 3              | 2397.170         | 26.74        | 6.01           | 35.92             | 72.55             | 69.38              | 74.00          | 4.62   | Peak |
| 4              | 2400.000         | 26.76        | 6.02           | 35.92             | 66.94             | 63.80              | 74.00          | 10.20  | Peak |
| 5              | 2413.500         | 26.85        | 6.04           | 35.92             | 112.08            | 109.05             | 74.00          | -35.05 | 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.

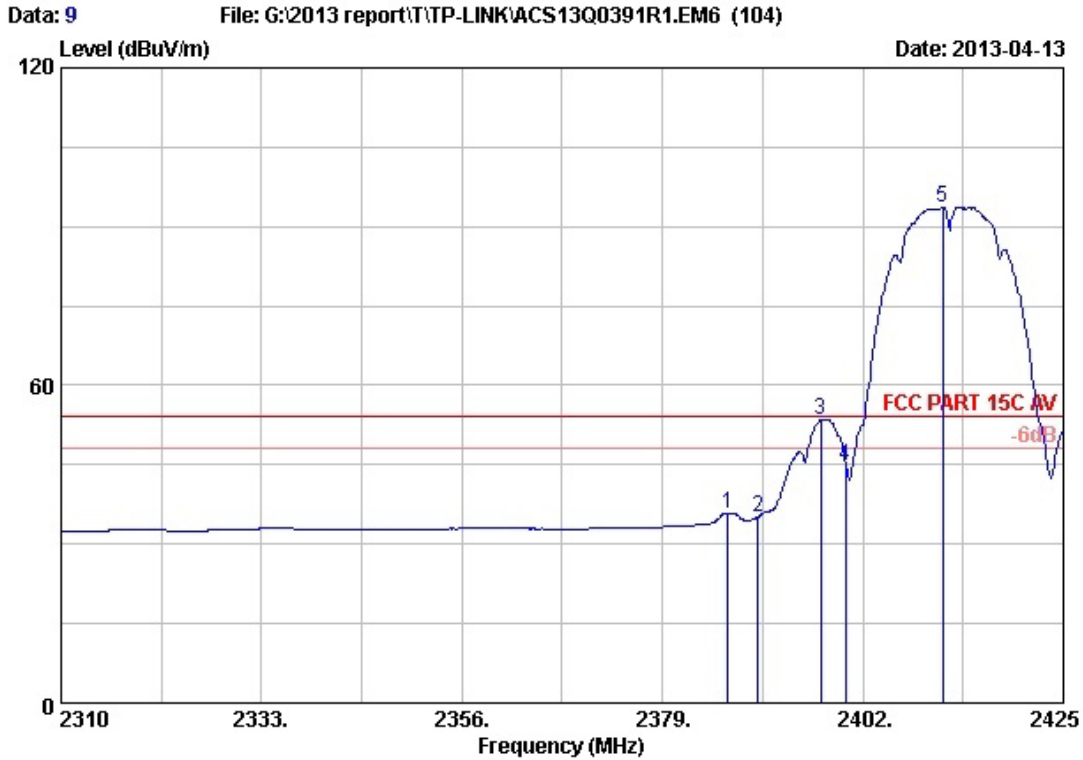


Site no. : 3m Chamber Data no. : 8  
 Dis. / Ant. : 3m 2012 3115 (4580) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : SafeSteram™ Wireless N Gigabit Broadband VPN Router  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11b CH1 2412MHz Tx  
 M/N : TL-ER604W

|             | Ant.          | Cable     | Amp.        | Emission       |                |                 |             |        |      |
|-------------|---------------|-----------|-------------|----------------|----------------|-----------------|-------------|--------|------|
| Freq. (MHz) | Factor (dB/m) | loss (dB) | Factor (dB) | Reading (dBuV) | Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Remark |      |
| 1           | 2336.220      | 26.35     | 5.91        | 35.92          | 51.67          | 48.01           | 74.00       | 25.99  | Peak |
| 2           | 2390.000      | 26.70     | 6.00        | 35.92          | 48.66          | 45.44           | 74.00       | 28.56  | Peak |
| 3           | 2400.000      | 26.76     | 6.02        | 35.92          | 56.06          | 52.92           | 74.00       | 21.08  | Peak |
| 4           | 2413.500      | 26.85     | 6.04        | 35.92          | 102.05         | 99.02           | 74.00       | -25.02 | Peak |

Remarks:

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



Site no. : 3m Chamber Data no. : 9  
 Dis. / Ant. : 3m 2012 3115 (4580) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : SafeSteram™ Wireless N Gigabit Broadband VPN Router  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11b CH1 2412MHz Tx  
 M/N : TL-ER604W  
 :

|       | 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     | 2386.475 | 26.67 | 5.99   | 35.92    | 39.16    | 35.90    | 54.00  | 18.10  | Average |
| 2     | 2390.000 | 26.70 | 6.00   | 35.92    | 38.40    | 35.18    | 54.00  | 18.82  | Average |
| 3     | 2397.170 | 26.74 | 6.01   | 35.92    | 56.81    | 53.64    | 54.00  | 0.36   | Average |
| 4     | 2400.000 | 26.76 | 6.02   | 35.92    | 47.79    | 44.65    | 54.00  | 9.35   | Average |
| 5     | 2411.200 | 26.83 | 6.04   | 35.92    | 96.75    | 93.70    | 54.00  | -39.70 | 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.