



## 6. 6dB Bandwidth Measurement Data

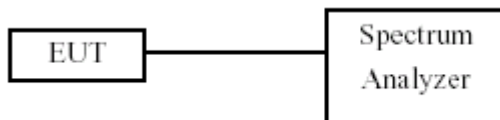
### 6.1 Test Limit

The minimum of 6dB Bandwidth Measurement is 0.5 MHz.

### 6.2 Test Procedures

- The transmitter output was connected to the spectrum analyzer.
- Set RBW of spectrum analyzer to 1~5% of the emission bandwidth and  $VBW \geq 3 \times RBW$ .
- The 6 dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 6 dB.
- The 6dB Bandwidth was measured and recorded.

### 6.3 Test Setup Layout



### 6.4 Measurement Equipment

| Instrument/Ancillary | Manufacturer | Model No. | Serial No. | Calibration Date | Valid Date |
|----------------------|--------------|-----------|------------|------------------|------------|
| Spectrum Analyzer    | R&S          | FSP40     | 100047     | 2012/03/01       | 2013/02/28 |



## 6.5 Test Result and Data

Test Date: Jan. 23, 2013

Temperature: 22°C

Atmospheric pressure: 1020 hPa

Humidity: 65%

| Modulation Standard     | Channel | Frequency (MHz) | 6dB Bandwidth (MHz) |       |       |
|-------------------------|---------|-----------------|---------------------|-------|-------|
|                         |         |                 | ANT R               | ANT M | ANT L |
| 802.11b (1Mbps)         | 01      | 2412            | 8.0                 | 8.0   | 8.1   |
|                         | 06      | 2437            | 8.0                 | 8.0   | 8.0   |
|                         | 11      | 2462            | 8.0                 | 8.0   | 8.1   |
| 802.11g (6Mbps)         | 01      | 2412            | 16.4                | 16.4  | 16.4  |
|                         | 06      | 2437            | 16.4                | 16.4  | 16.4  |
|                         | 11      | 2462            | 16.4                | 16.4  | 16.4  |
| 802.11n HT20 (6.5Mbps)  | 01      | 2412            | 17.7                | 17.6  | 17.6  |
|                         | 06      | 2437            | 17.6                | 17.7  | 17.6  |
|                         | 11      | 2462            | 17.6                | 17.6  | 17.6  |
| 802.11n HT40 (13.5Mbps) | 03      | 2422            | 35.8                | 35.8  | 35.8  |
|                         | 06      | 2437            | 36.2                | 36.2  | 36.2  |
|                         | 09      | 2452            | 35.8                | 36.2  | 36.2  |

Test Date: Jan. 22, 2013

Temperature: 22°C

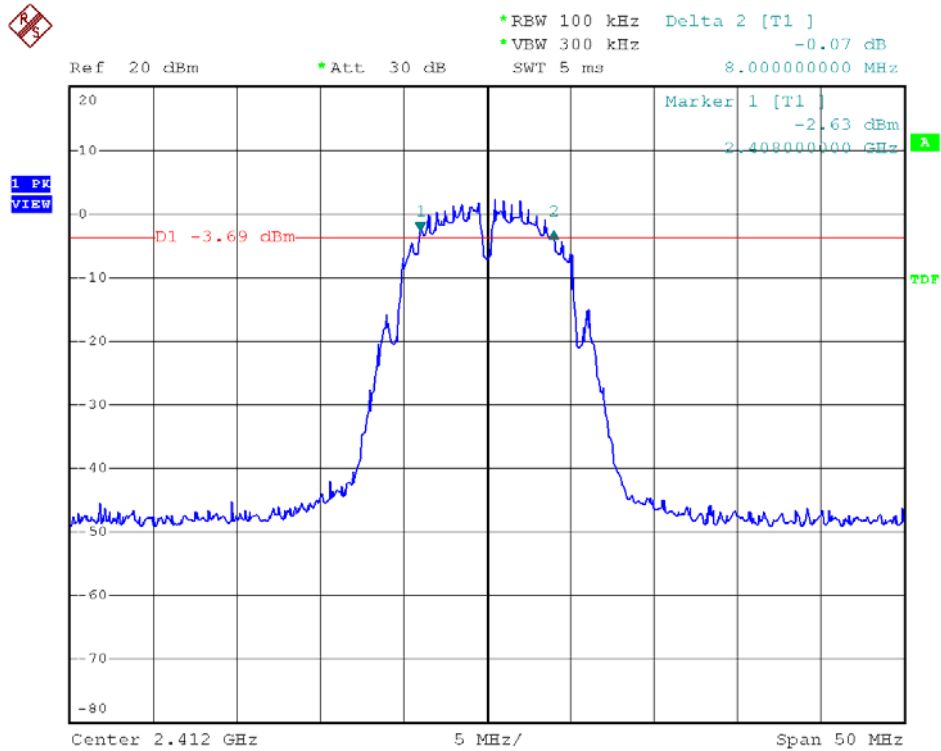
Atmospheric pressure: 1020 hPa

Humidity: 65%

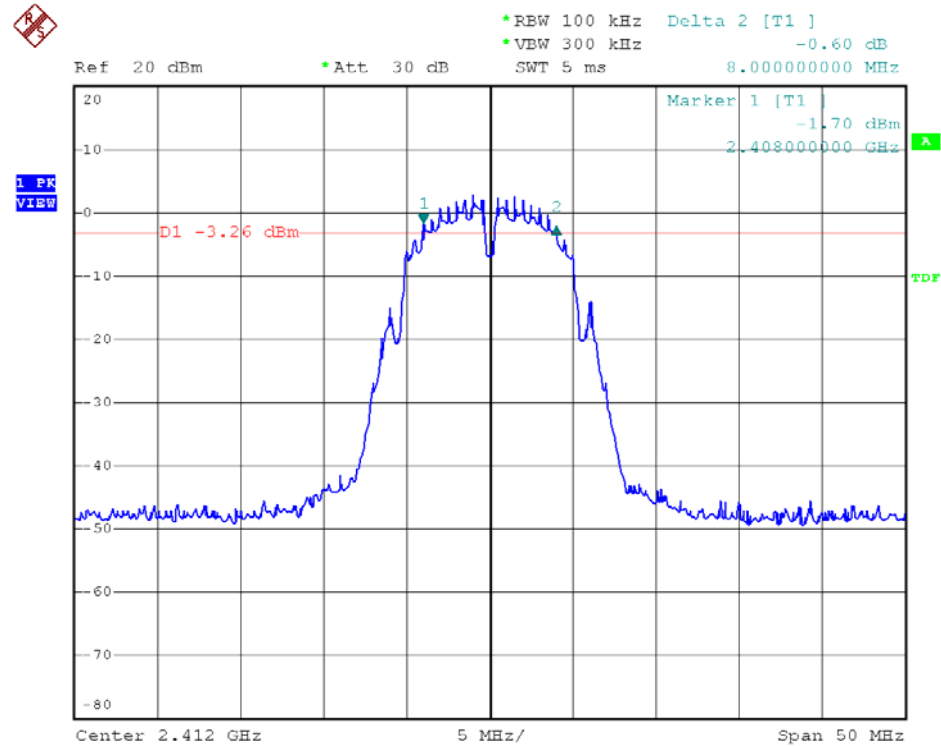
| Modulation Standard       | Channel | Frequency (MHz) | 6dB Bandwidth (MHz) |       |       |
|---------------------------|---------|-----------------|---------------------|-------|-------|
|                           |         |                 | ANT R               | ANT M | ANT L |
| 802.11ac VHT20 (6.5Mbps)  | 149     | 5745            | 17.6                | 17.6  | 17.6  |
|                           | 157     | 5785            | 17.6                | 17.6  | 17.7  |
|                           | 165     | 5825            | 17.6                | 17.6  | 17.6  |
| 802.11ac VHT40 (13.5Mbps) | 151     | 5755            | 36.4                | 36.4  | 36.4  |
|                           | 159     | 5795            | 36.4                | 36.4  | 36.4  |
| 802.11ac VHT80 (29.3Mbps) | 155     | 5755            | 76.0                | 76.4  | 76.0  |



Modulation Standard: 802.11b (1Mbps), ANT R  
Channel: 01

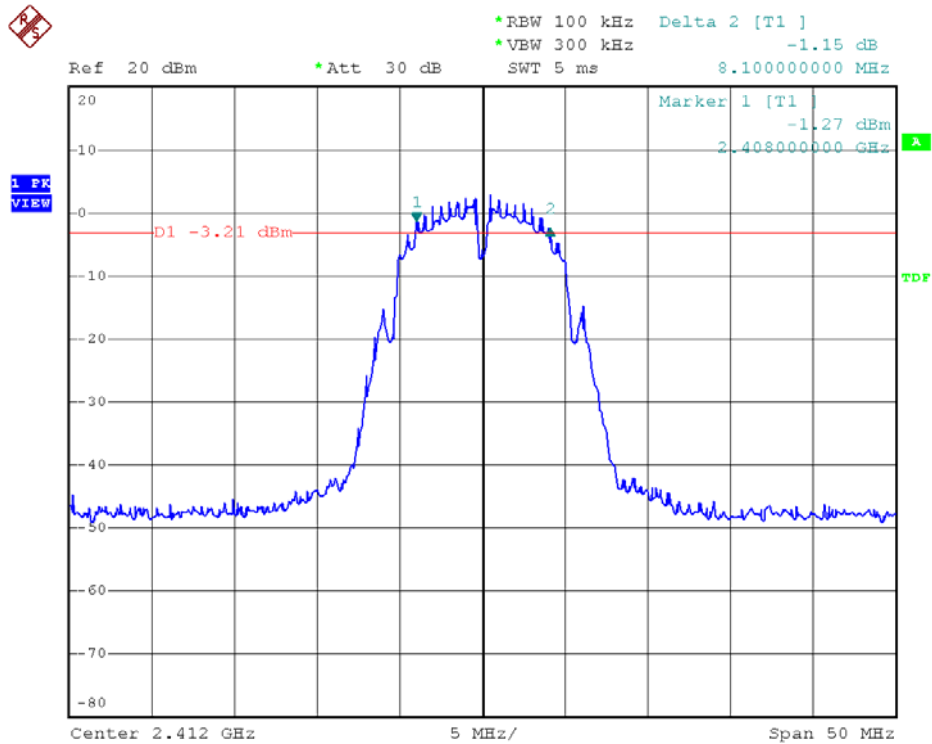


Modulation Standard: 802.11b (1Mbps), ANT M  
Channel: 01

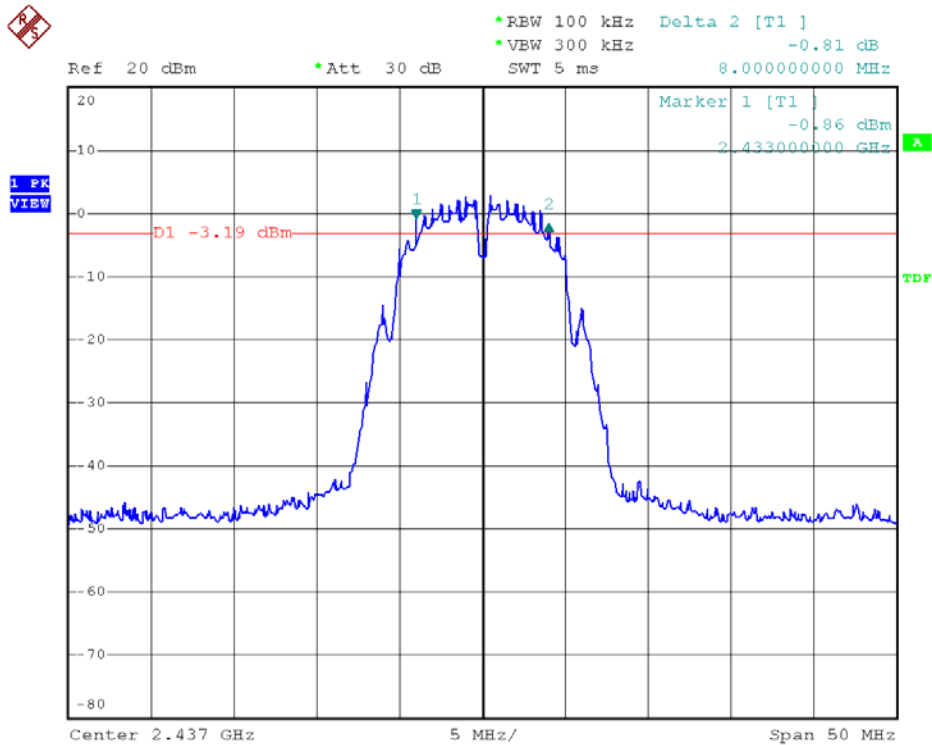




Modulation Standard: 802.11b (1Mbps), ANT L  
Channel: 01

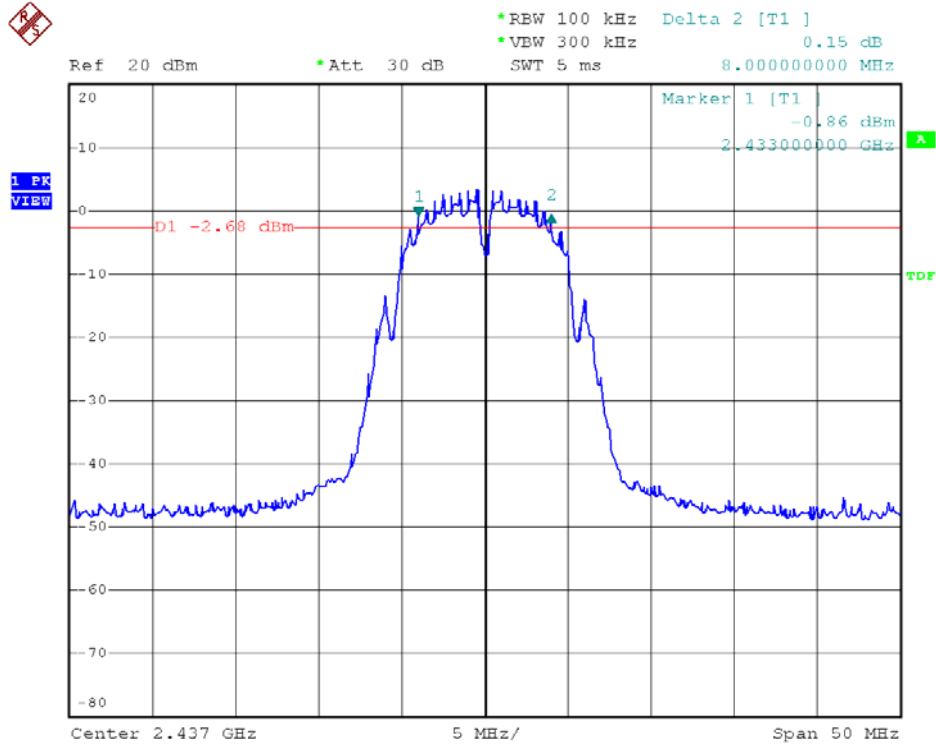


Modulation Standard: 802.11b (1Mbps), ANT R  
Channel: 06

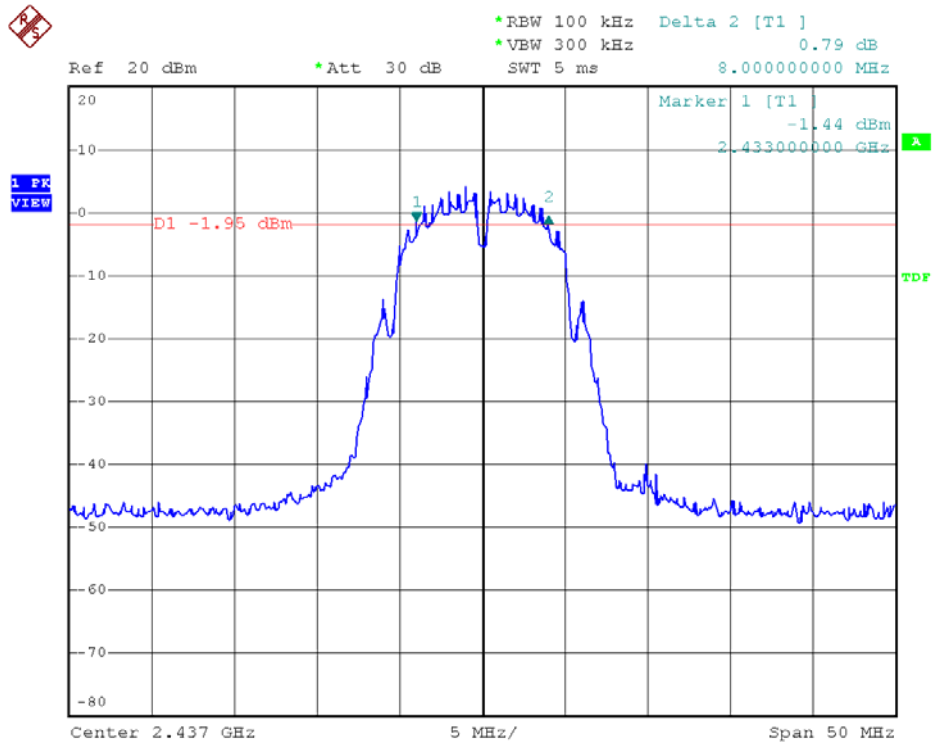




Modulation Standard: 802.11b (1Mbps), ANT M  
Channel: 06

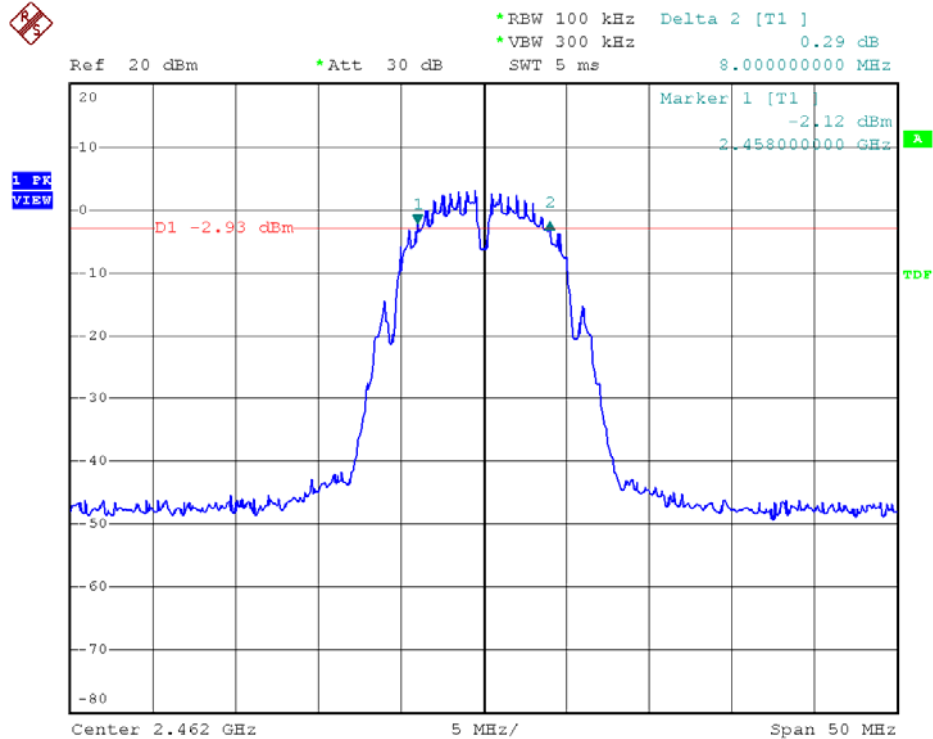


Modulation Standard: 802.11b (1Mbps), ANT L  
Channel: 06

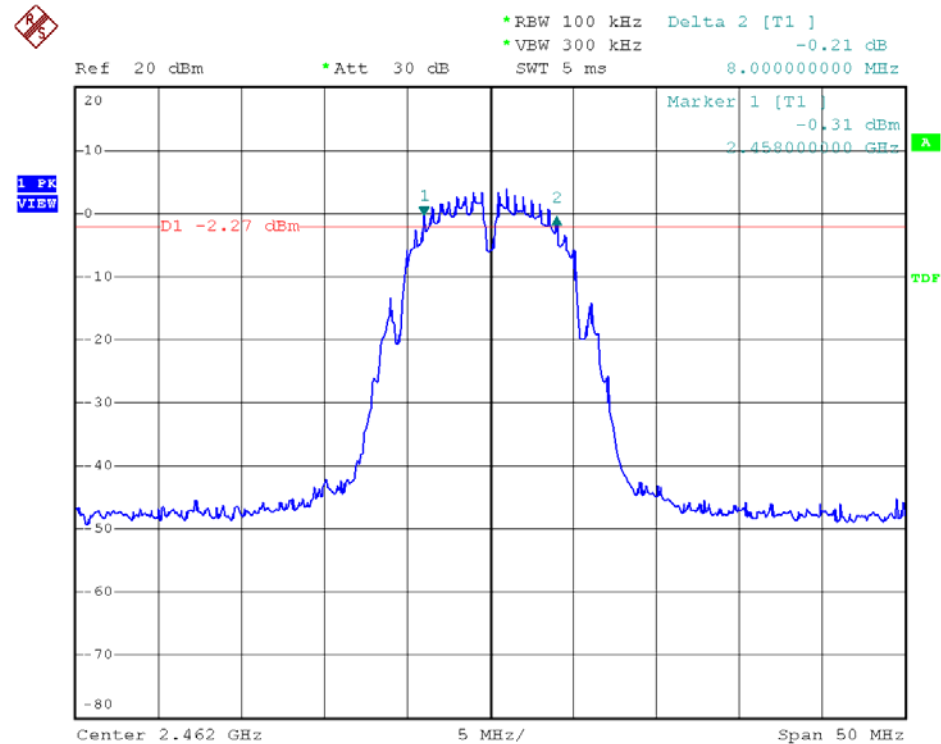




Modulation Standard: 802.11b (1Mbps), ANT R  
Channel: 11

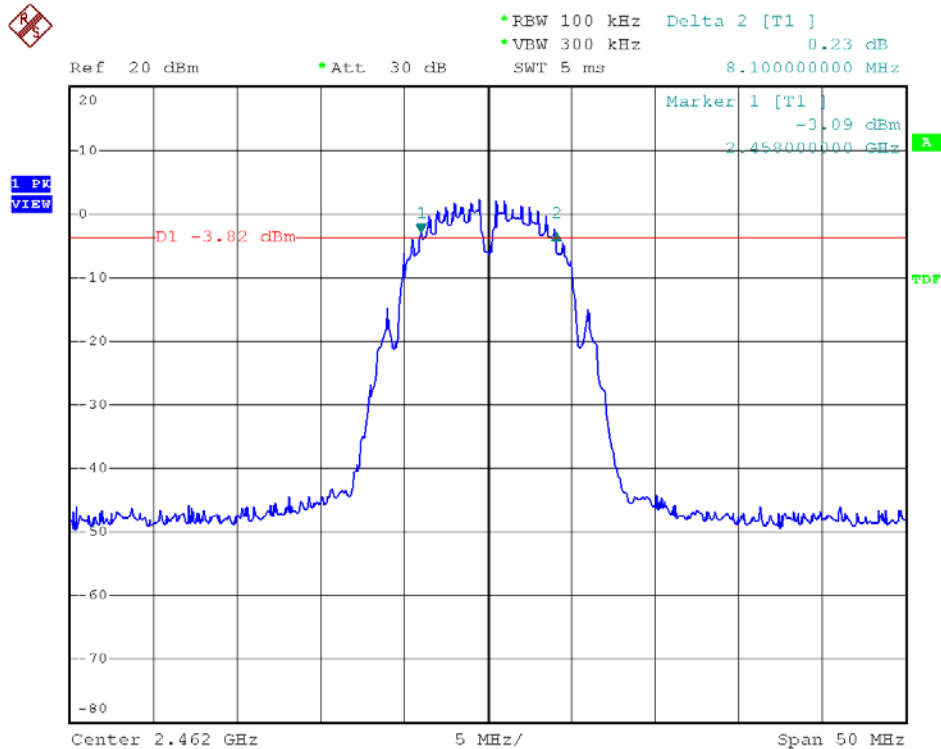


Modulation Standard: 802.11b (1Mbps), ANT M  
Channel: 11

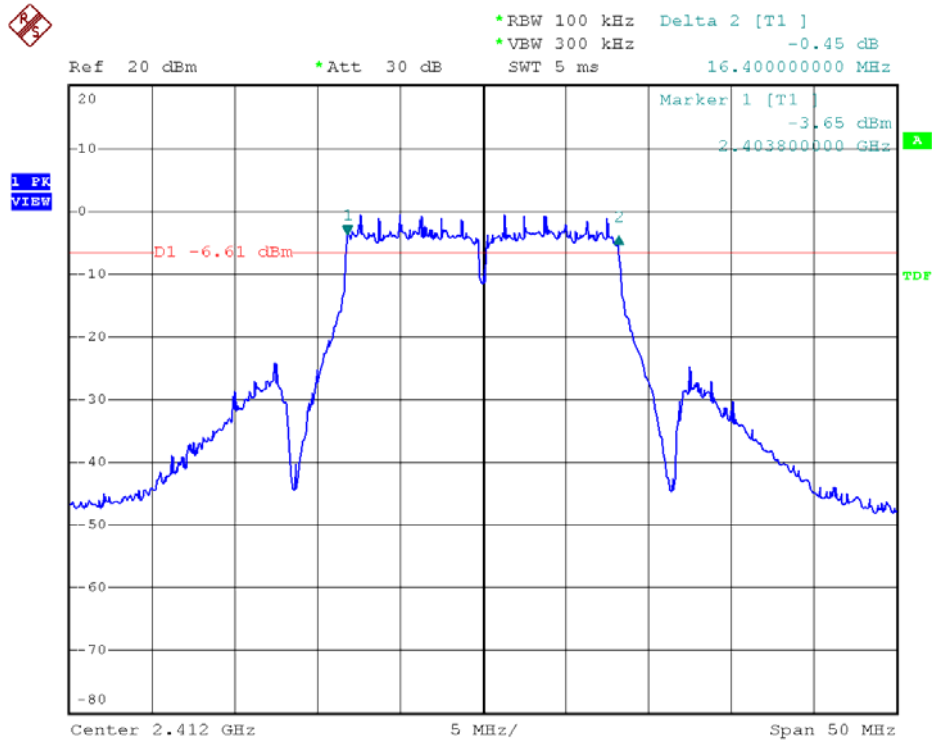




Modulation Standard: 802.11b (1Mbps), ANT L  
Channel: 11

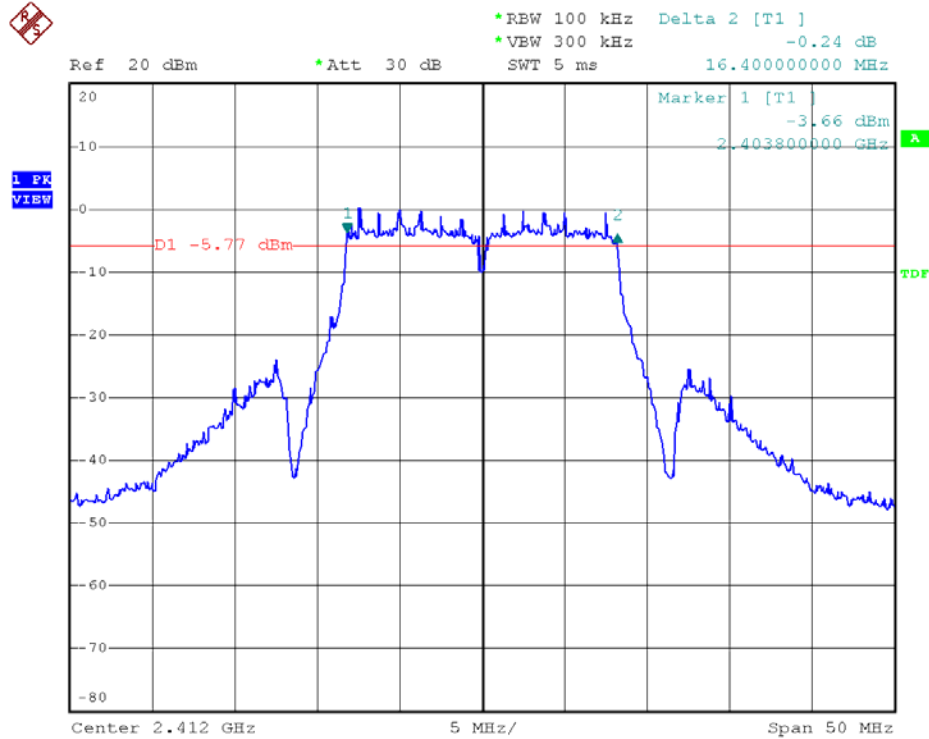


Modulation Standard: 802.11g (6Mbps), ANT R  
Channel: 01

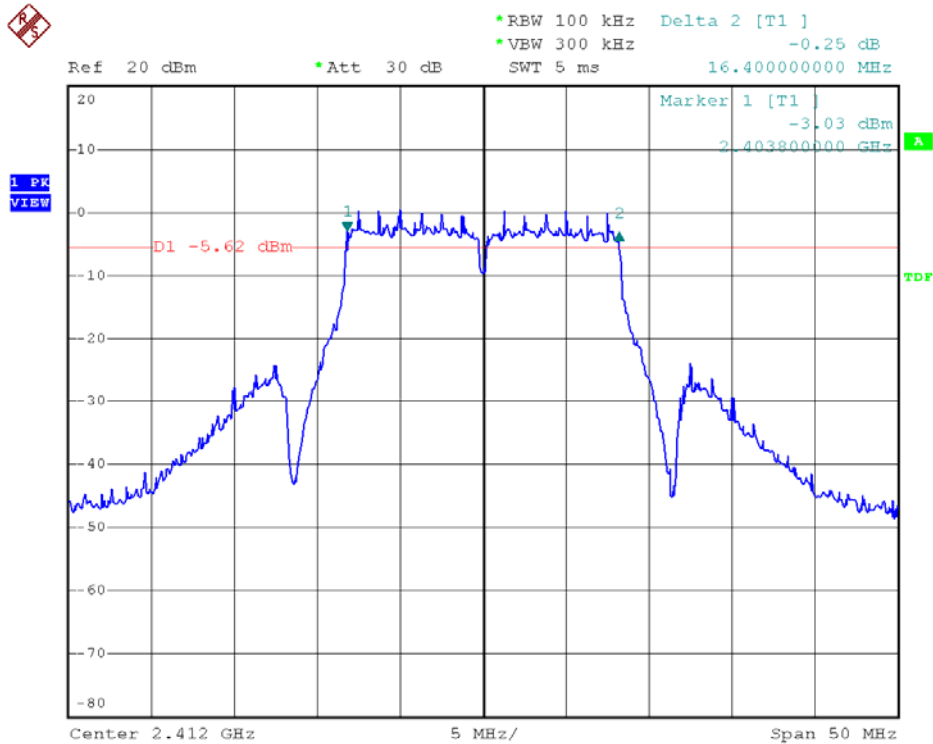




Modulation Standard: 802.11g (6Mbps), ANT M  
Channel: 01



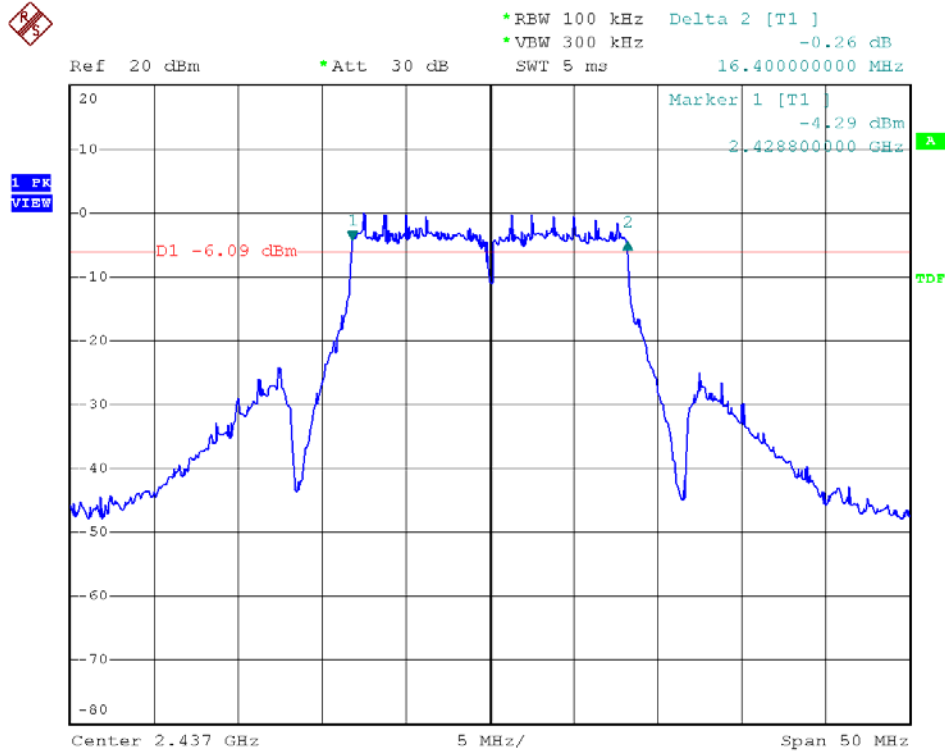
Modulation Standard: 802.11g (6Mbps), ANT L  
Channel: 01



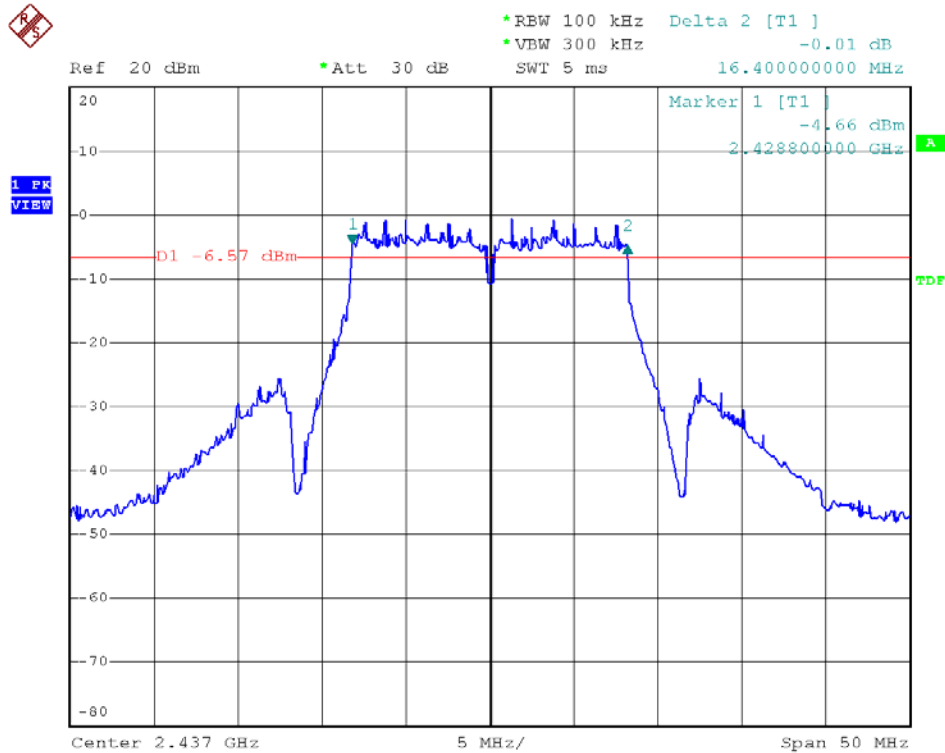




Modulation Standard: 802.11g (6Mbps), ANT R  
Channel: 06

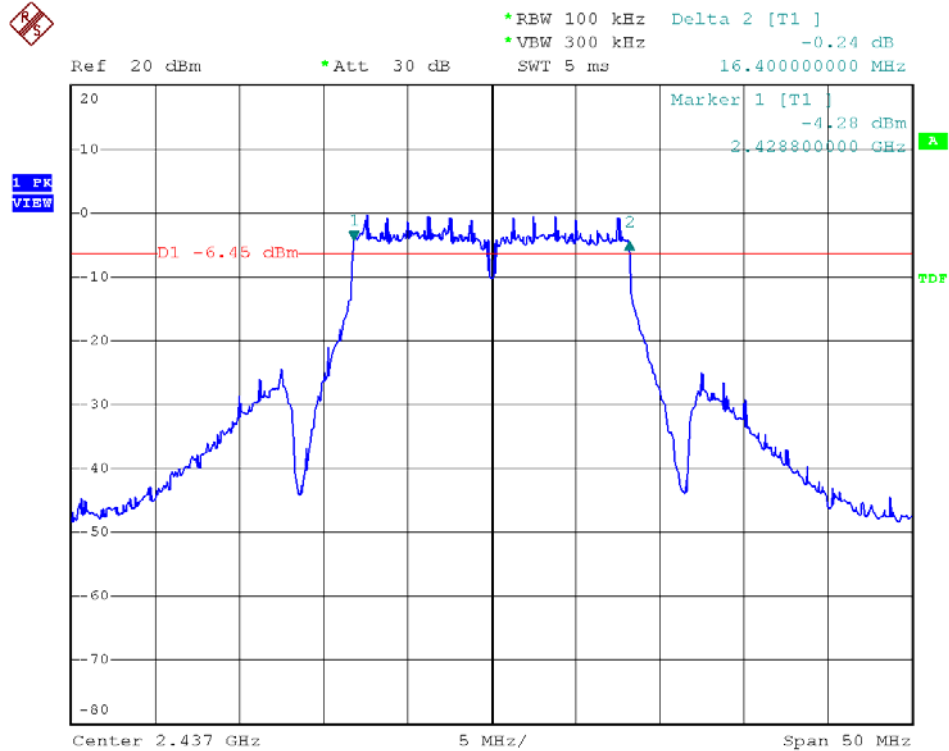


Modulation Standard: 802.11g (6Mbps), ANT M  
Channel: 06

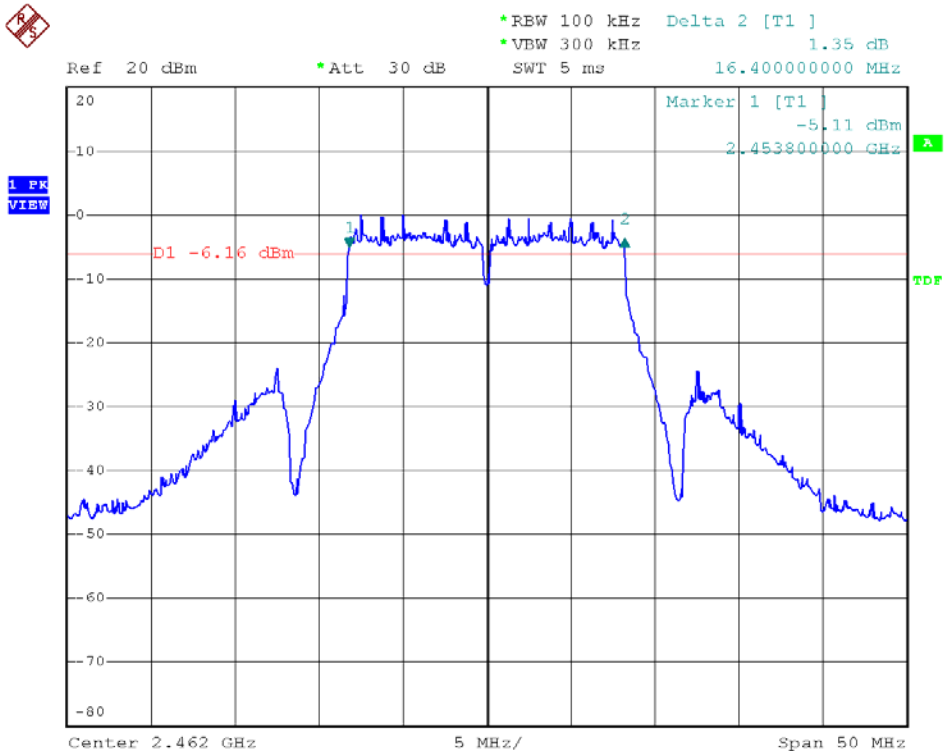




Modulation Standard: 802.11g (6Mbps), ANT L  
Channel: 06

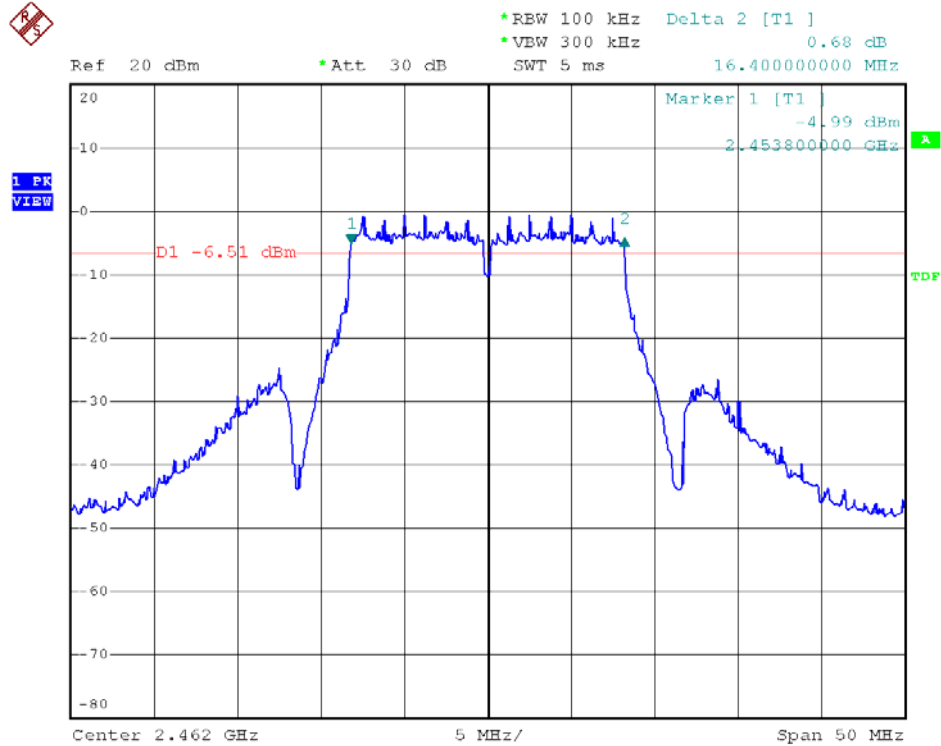


Modulation Standard: 802.11g (6Mbps), ANT R  
Channel: 11

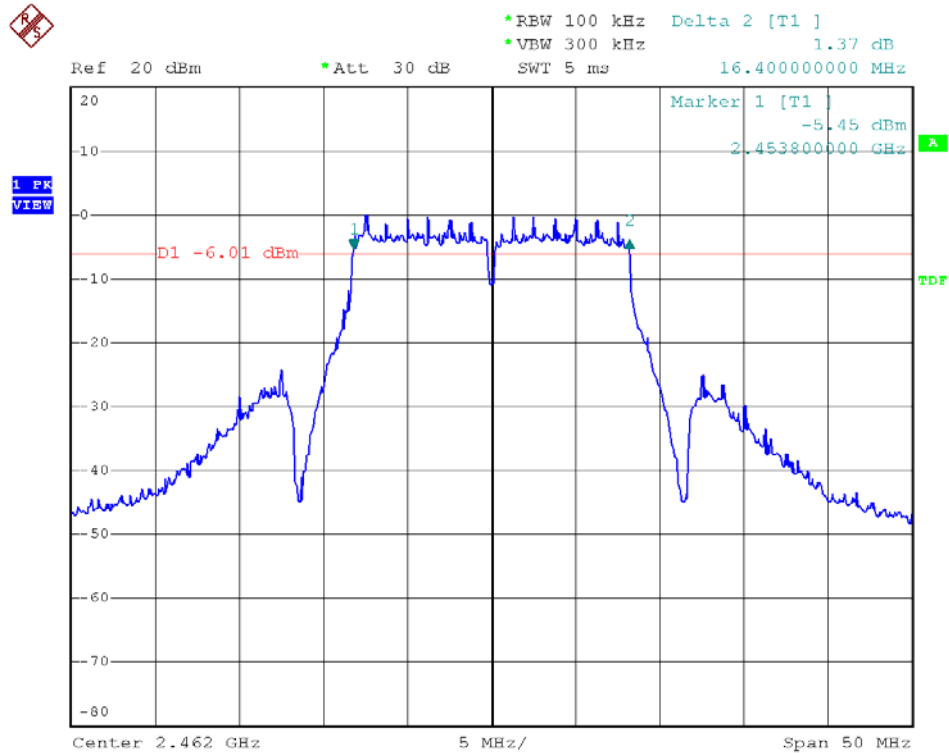




Modulation Standard: 802.11g (6Mbps), ANT M  
Channel: 11

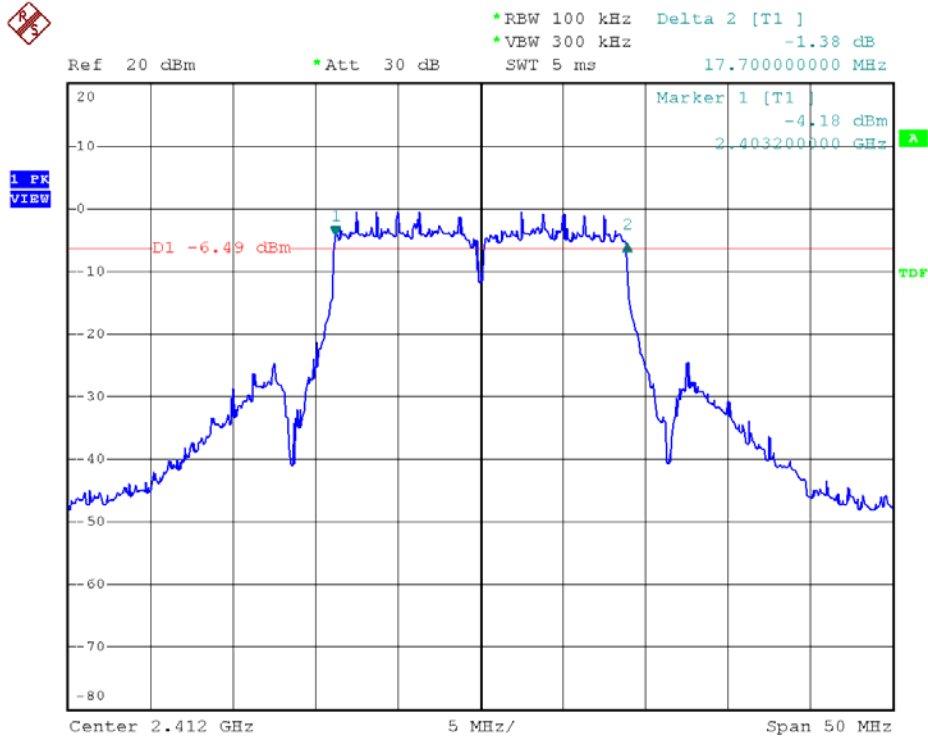


Modulation Standard: 802.11g (6Mbps), ANT L  
Channel: 11

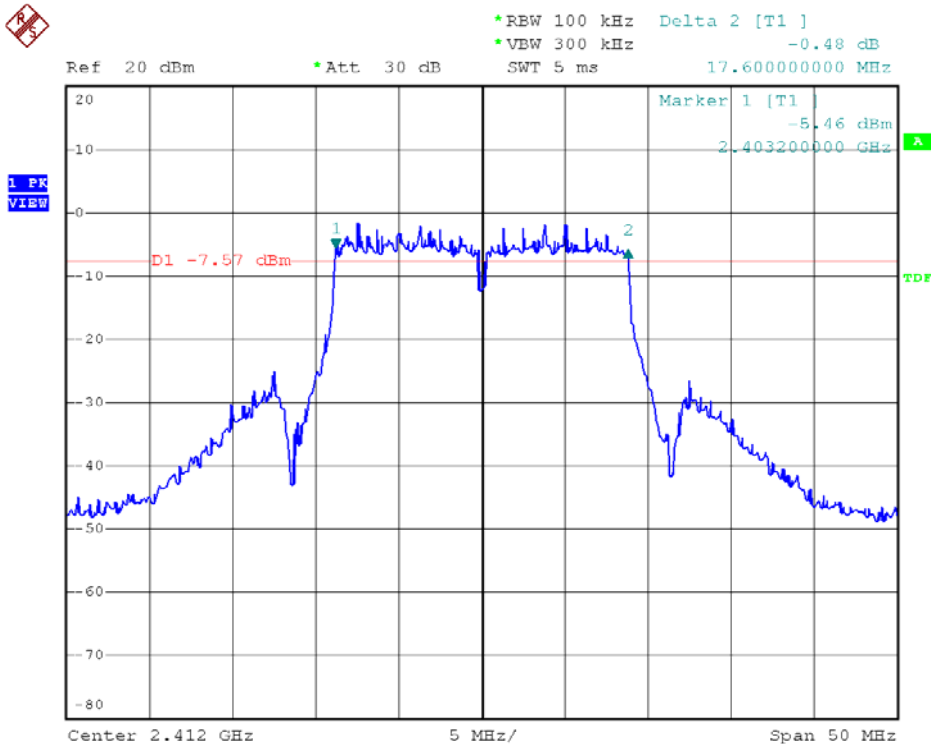




Modulation Standard: 802.11n HT20 (6.5Mbps), ANT R  
Channel: 01

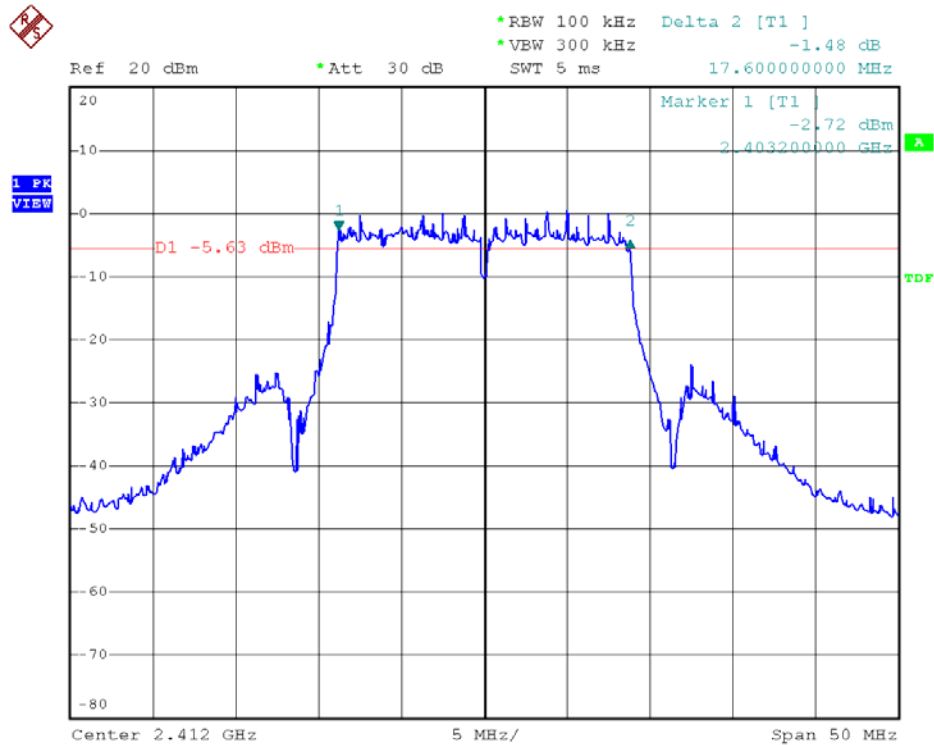


Modulation Standard: 802.11n HT20 (6.5Mbps), ANT M  
Channel: 01

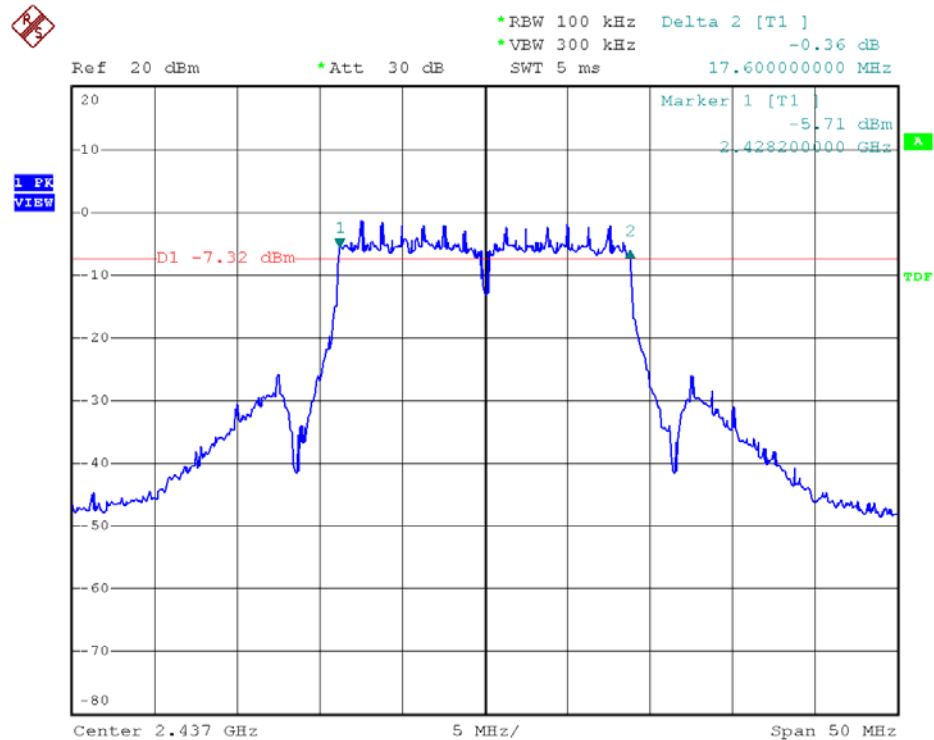




Modulation Standard: 802.11n HT20 (6.5Mbps), ANT L  
Channel: 01

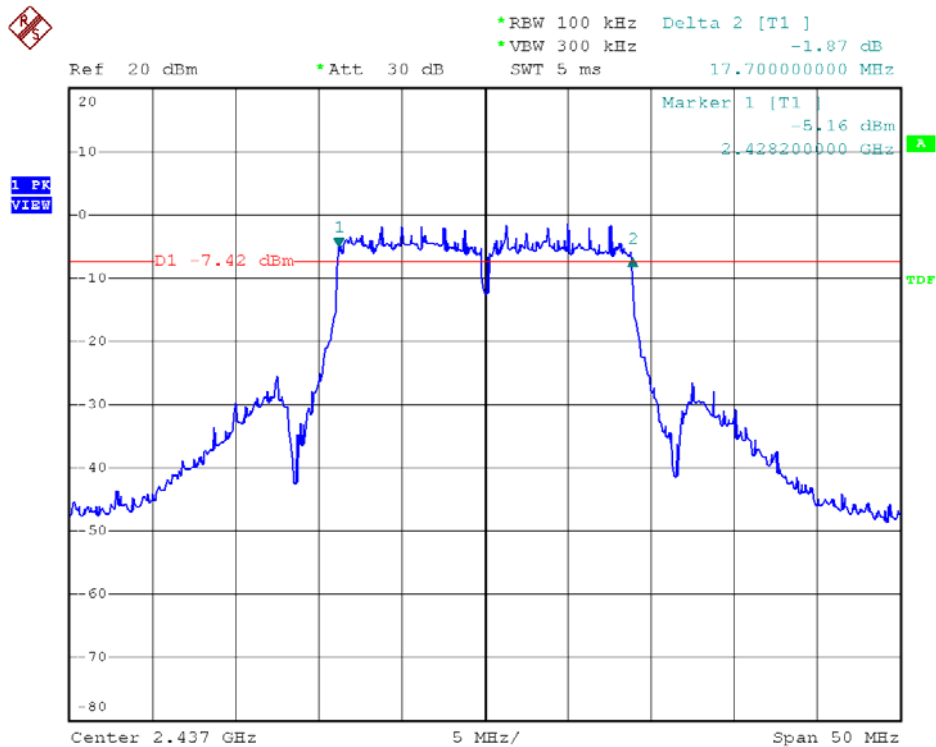


Modulation Standard: 802.11n HT20 (6.5Mbps), ANT R  
Channel: 06

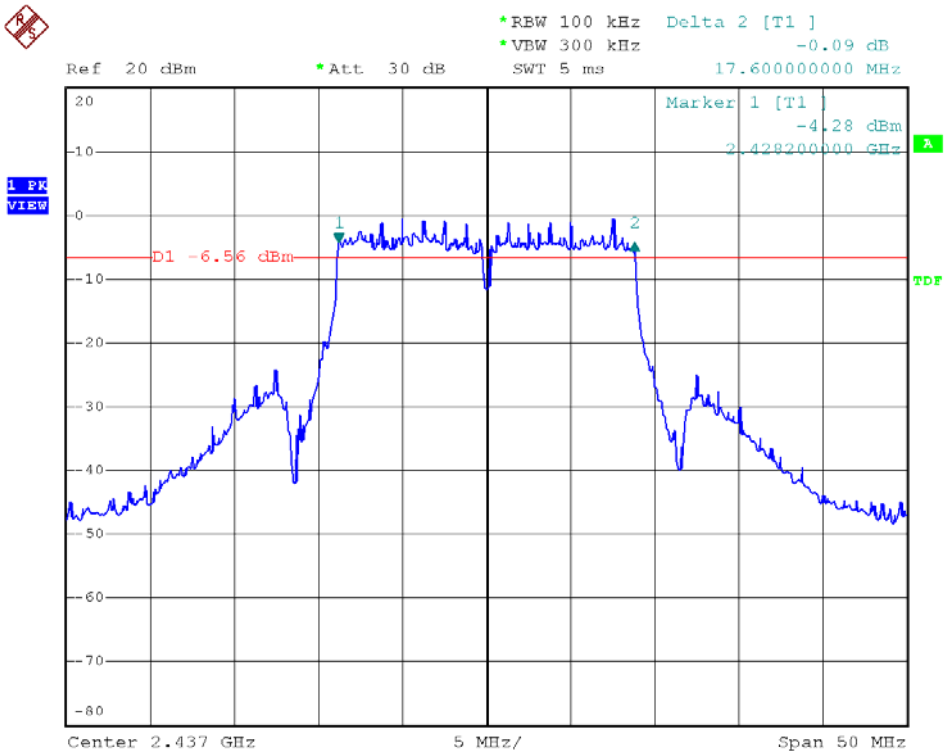




Modulation Standard: 802.11n HT20 (6.5Mbps), ANT M  
Channel: 06

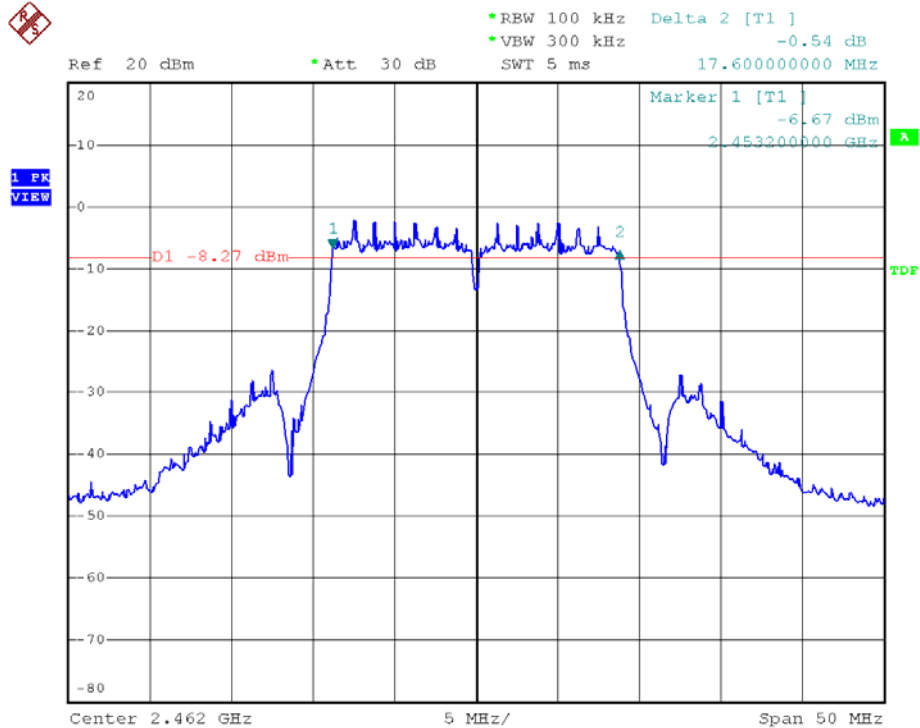


Modulation Standard: 802.11n HT20 (6.5Mbps), ANT L  
Channel: 06

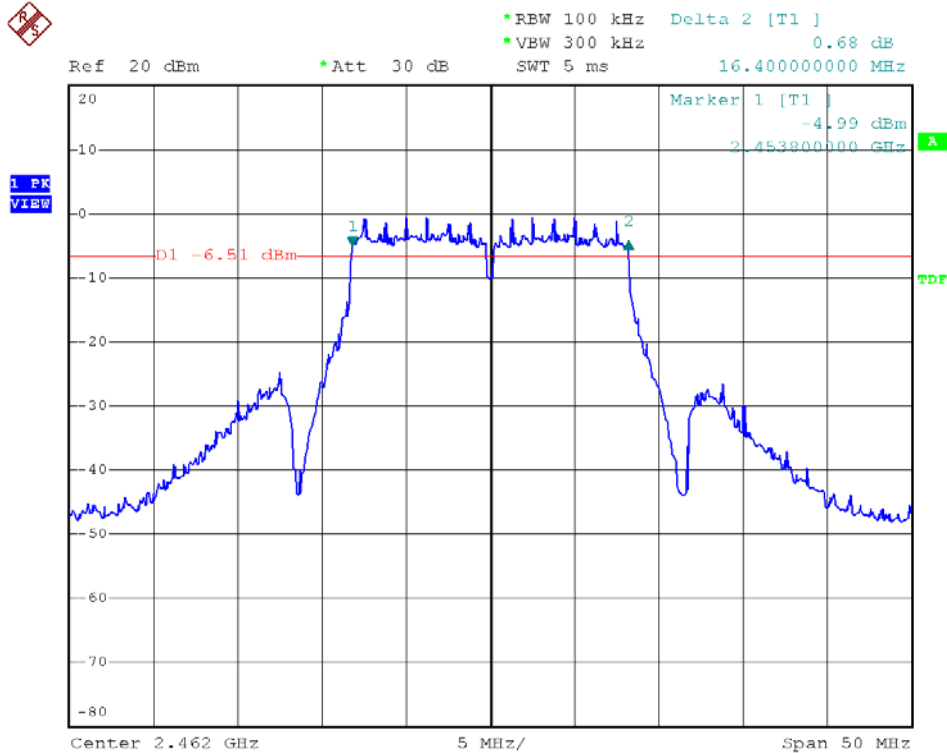




Modulation Standard: 802.11n HT20 (6.5Mbps), ANT R  
Channel: 11

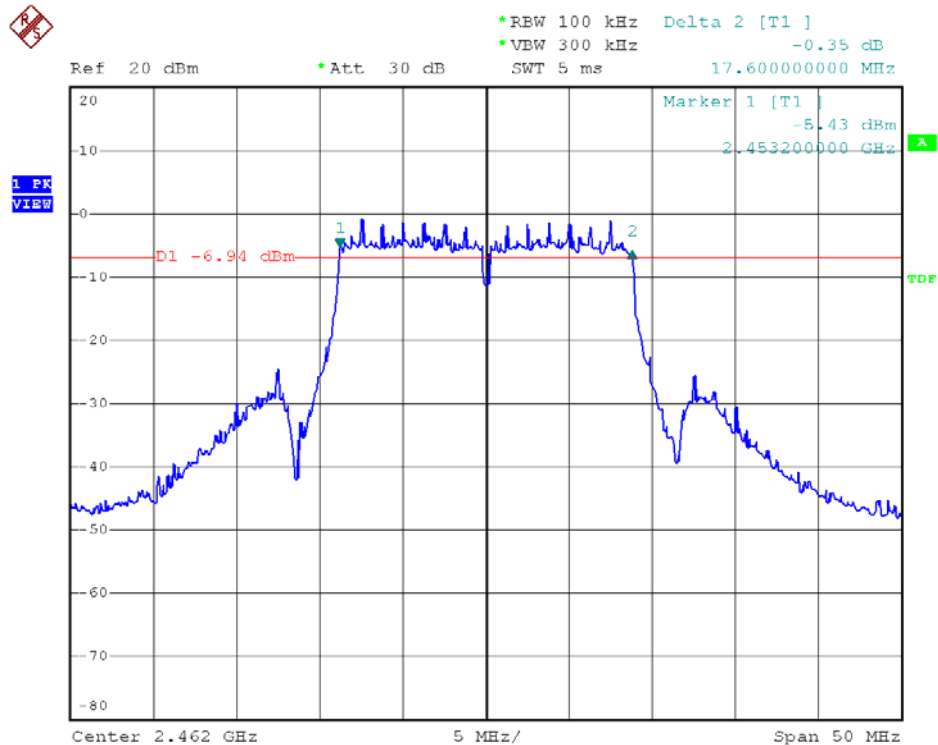


Modulation Standard: 802.11n HT20 (6.5Mbps), ANT M  
Channel: 11

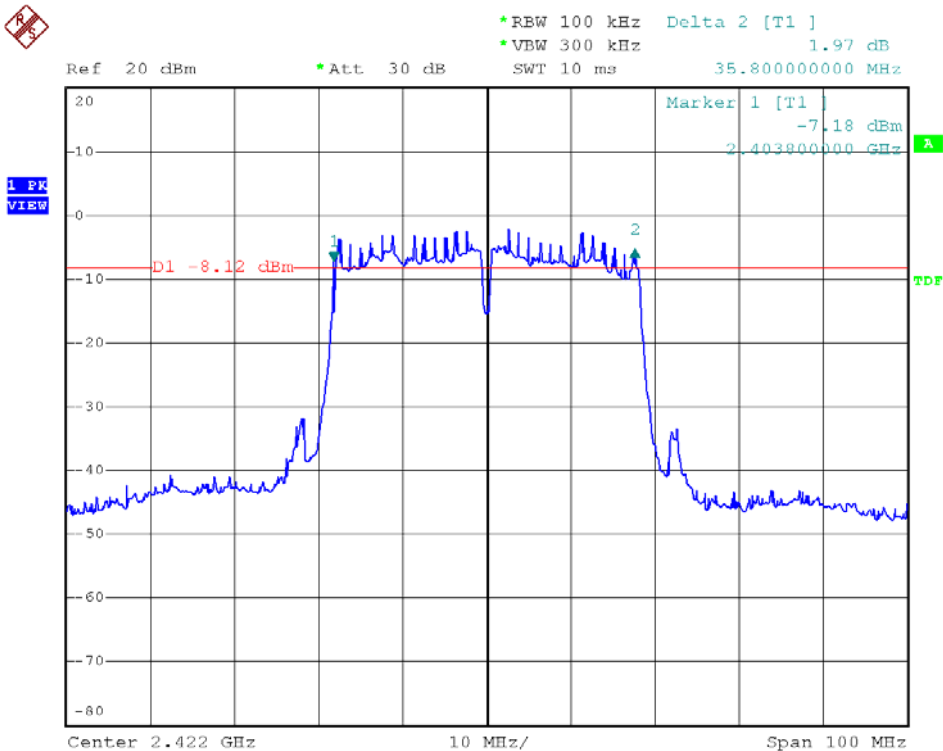




Modulation Standard: 802.11n HT20 (6.5Mbps), ANT L  
Channel: 11



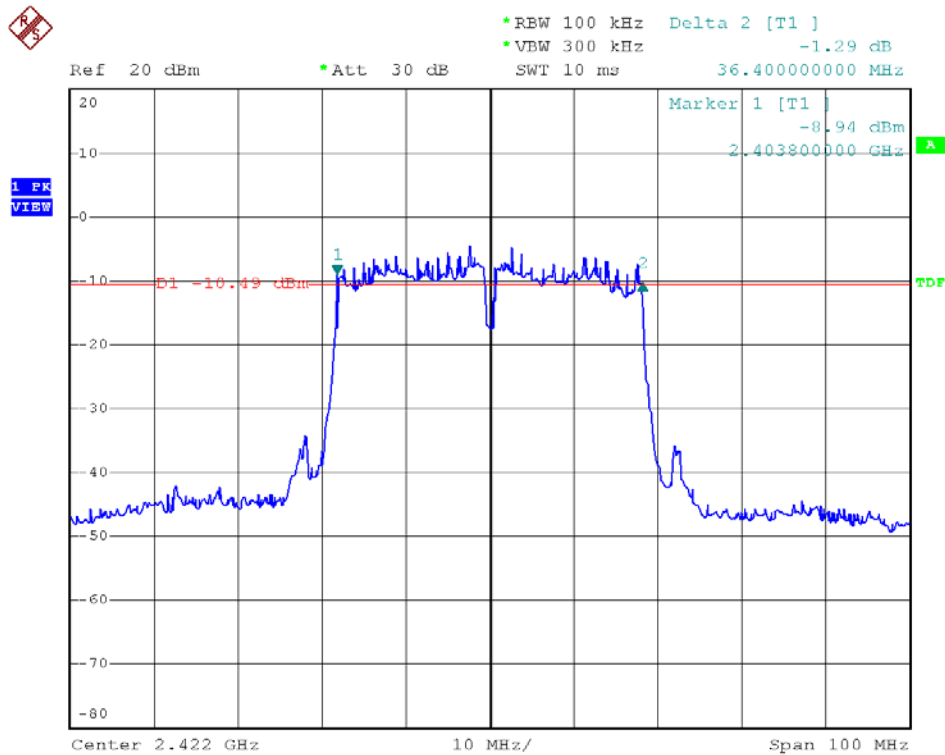
Modulation Standard: 802.11n HT40 (13.5Mbps), ANT R  
Channel: 03



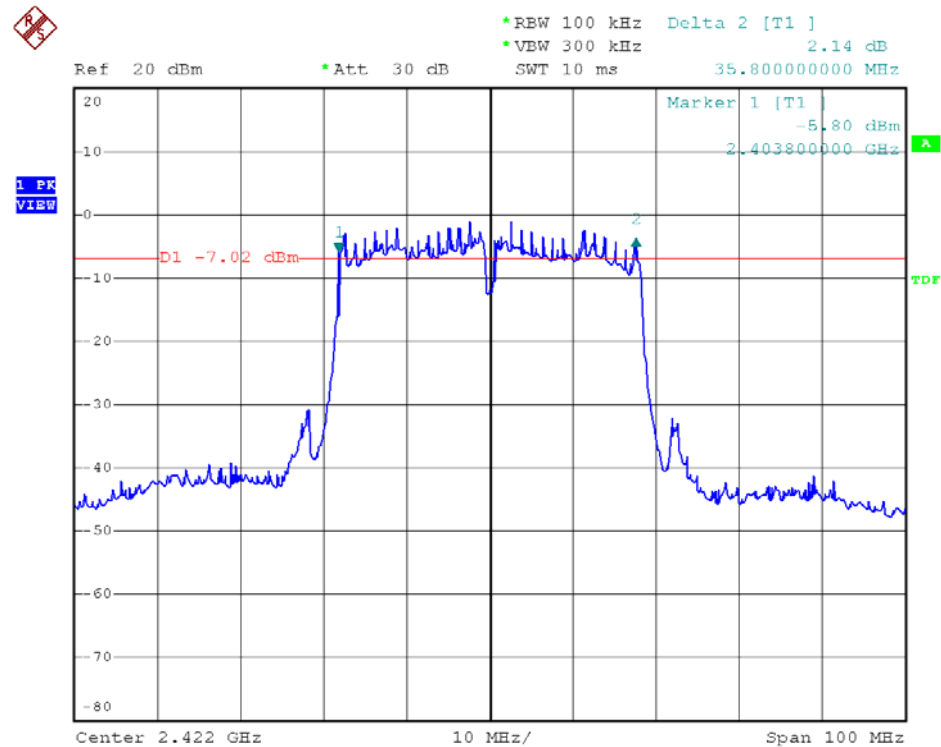




Modulation Standard: 802.11n HT40 (13.5Mbps), ANT M  
Channel: 03

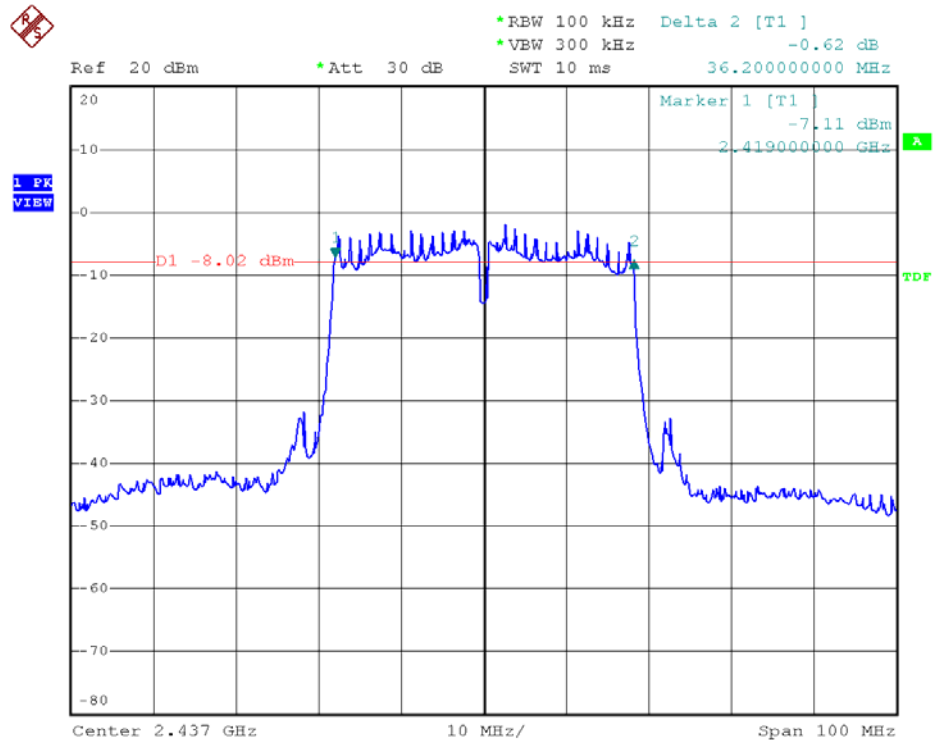


Modulation Standard: 802.11n HT40 (13.5Mbps), ANT L  
Channel: 03

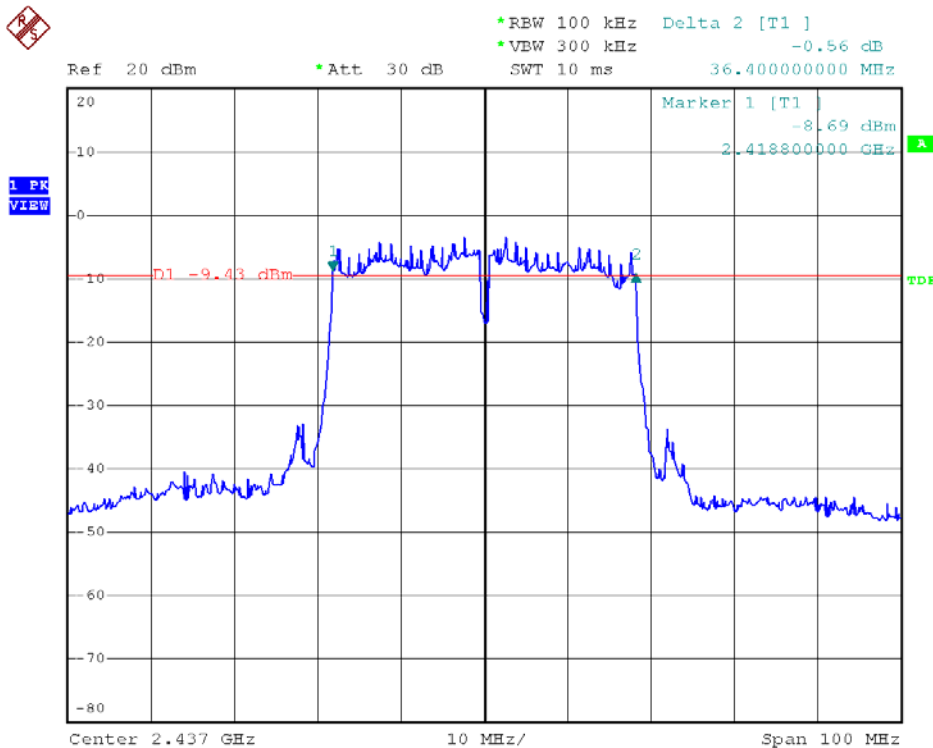




Modulation Standard: 802.11n HT40 (13.5Mbps), ANT R  
Channel: 06

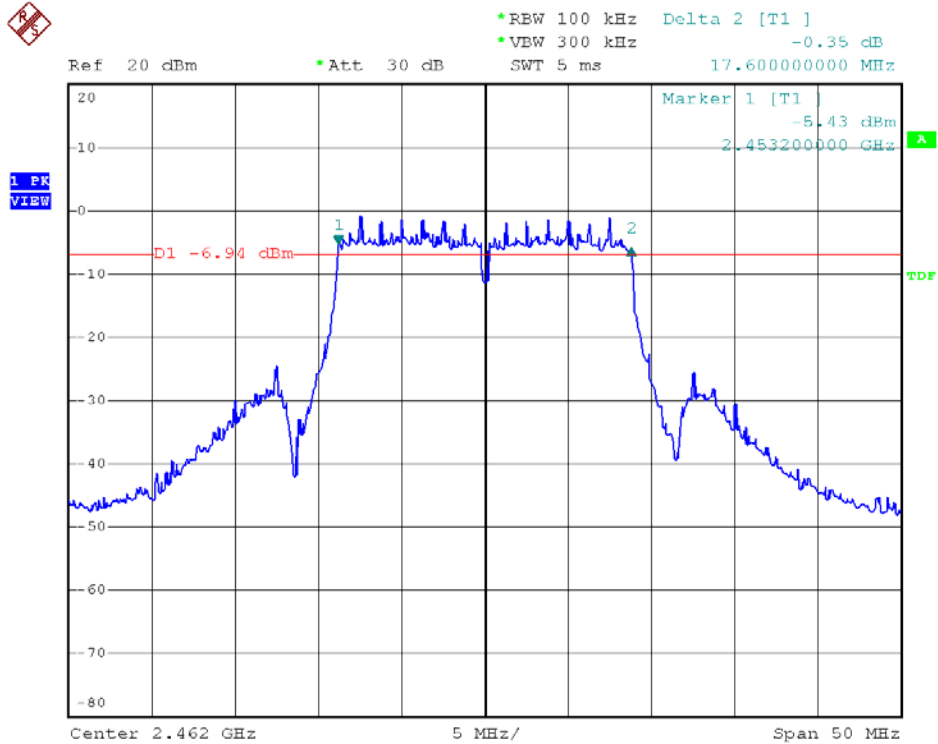


Modulation Standard: 802.11n HT40 (13.5Mbps), ANT M  
Channel: 06

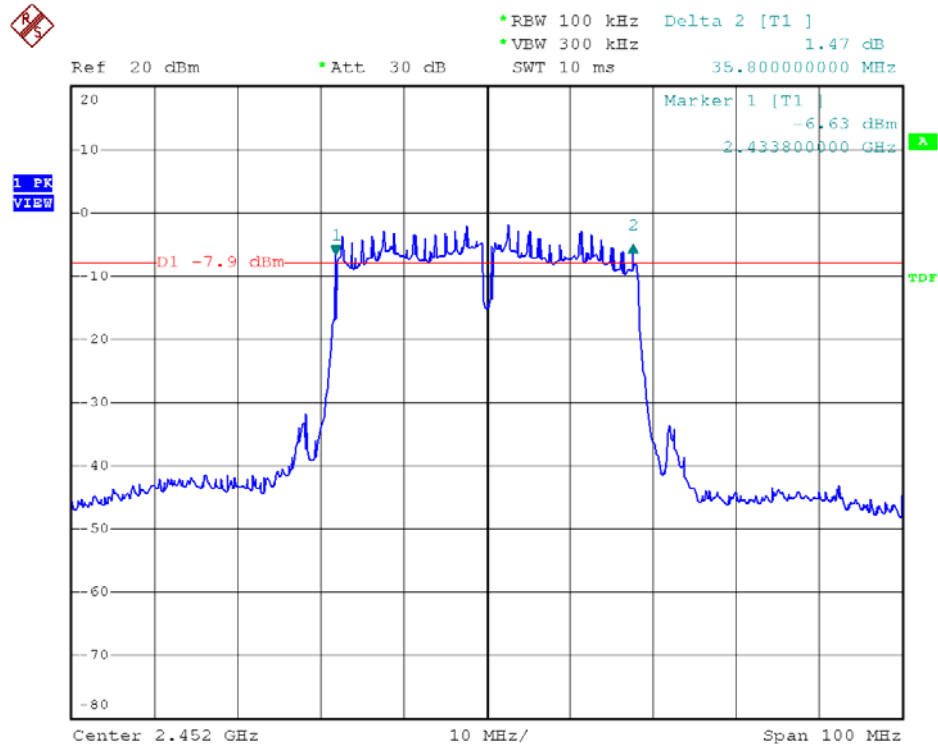




Modulation Standard: 802.11n HT40 (13.5Mbps), ANT L  
Channel: 06

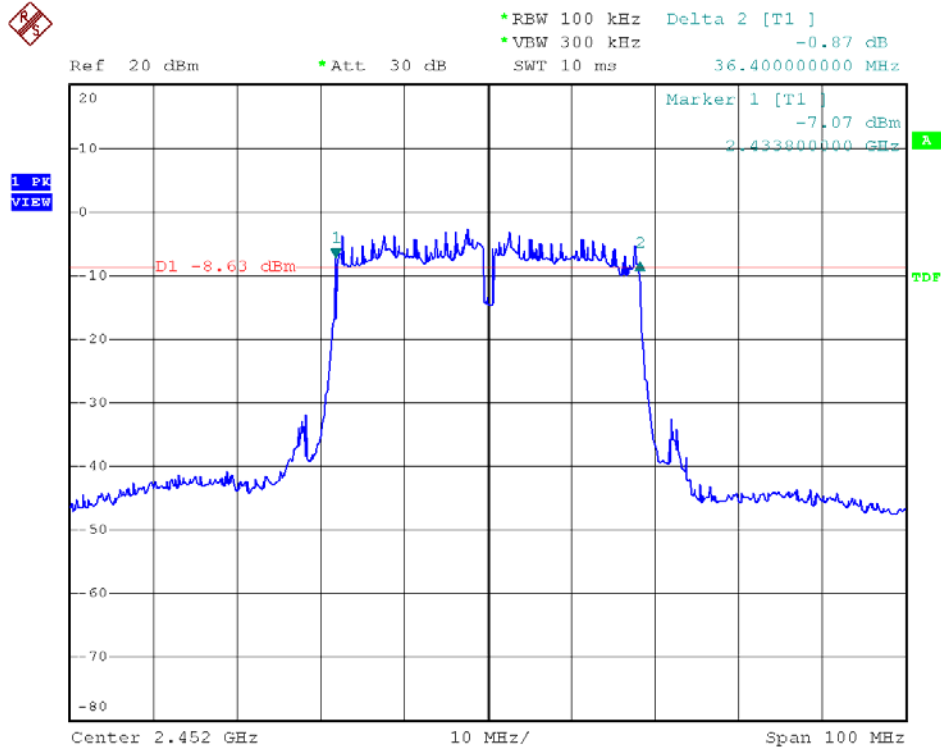


Modulation Standard: 802.11n HT40 (13.5Mbps), ANT R  
Channel: 09

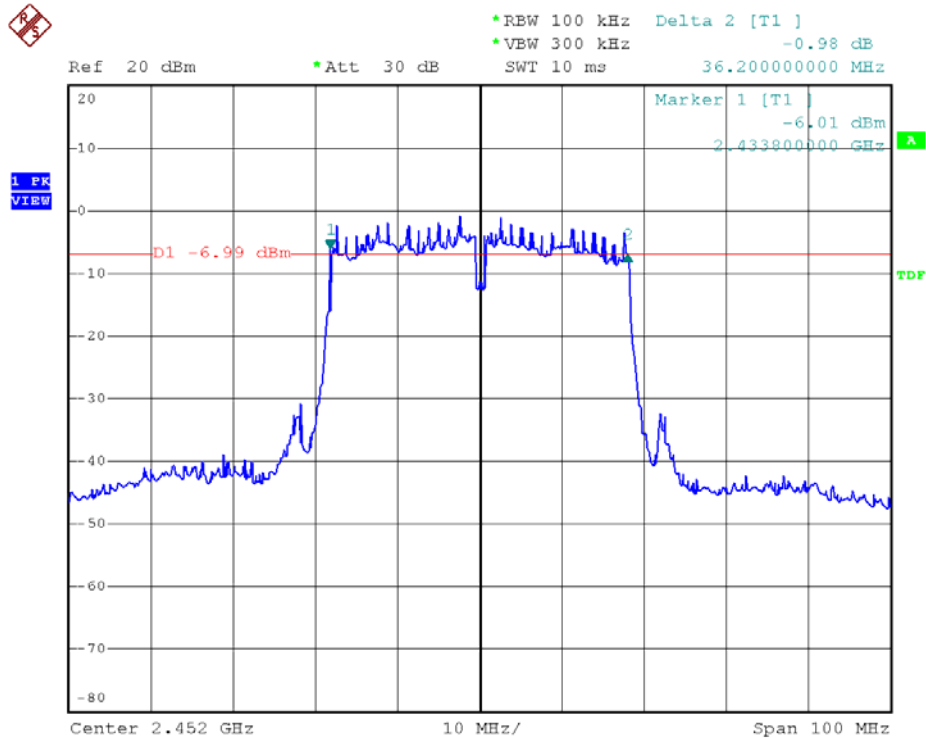




Modulation Standard: 802.11n HT40 (13.5Mbps), ANT M  
Channel: 09

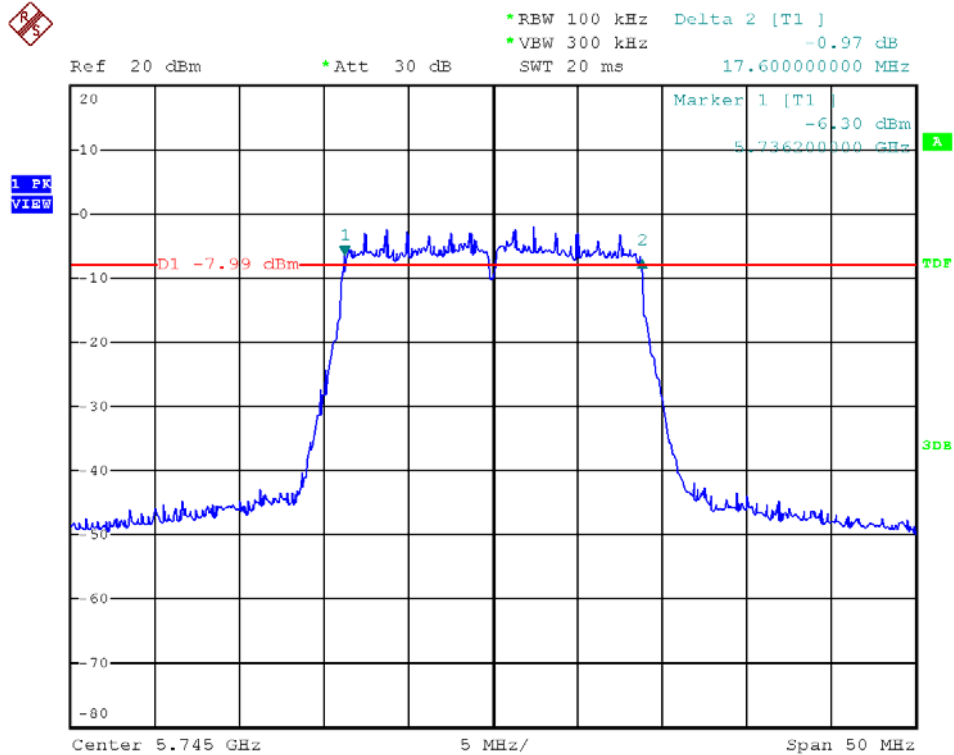


Modulation Standard: 802.11n HT40 (13.5Mbps), ANT L  
Channel: 09

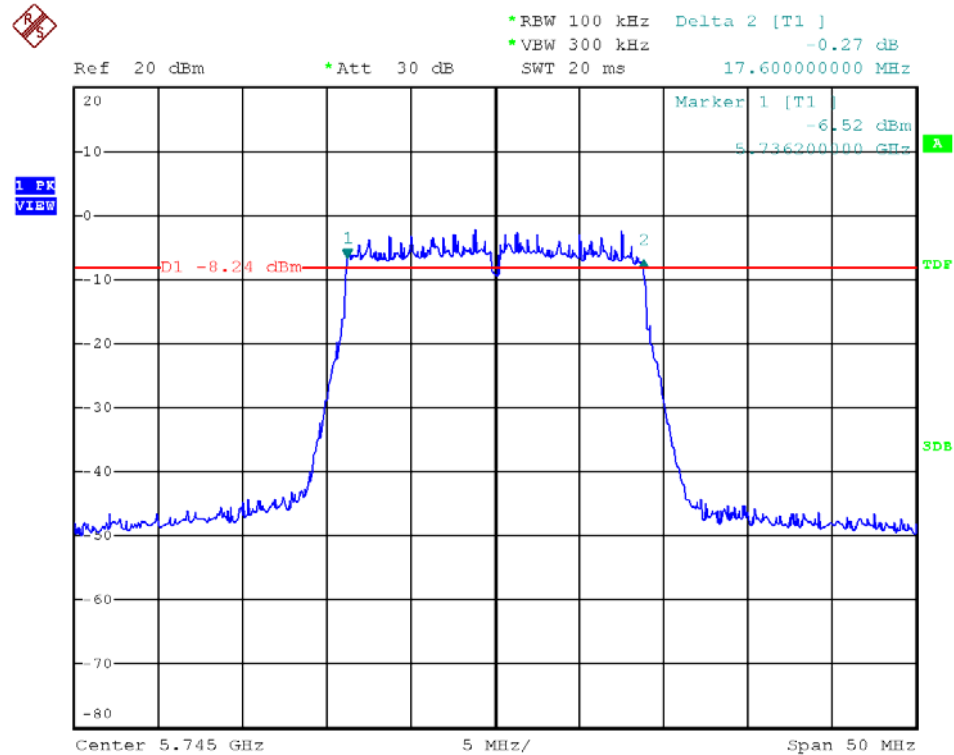




Modulation Standard: 802.11ac VHT20 (6.5Mbps), ANT R  
Channel: 149

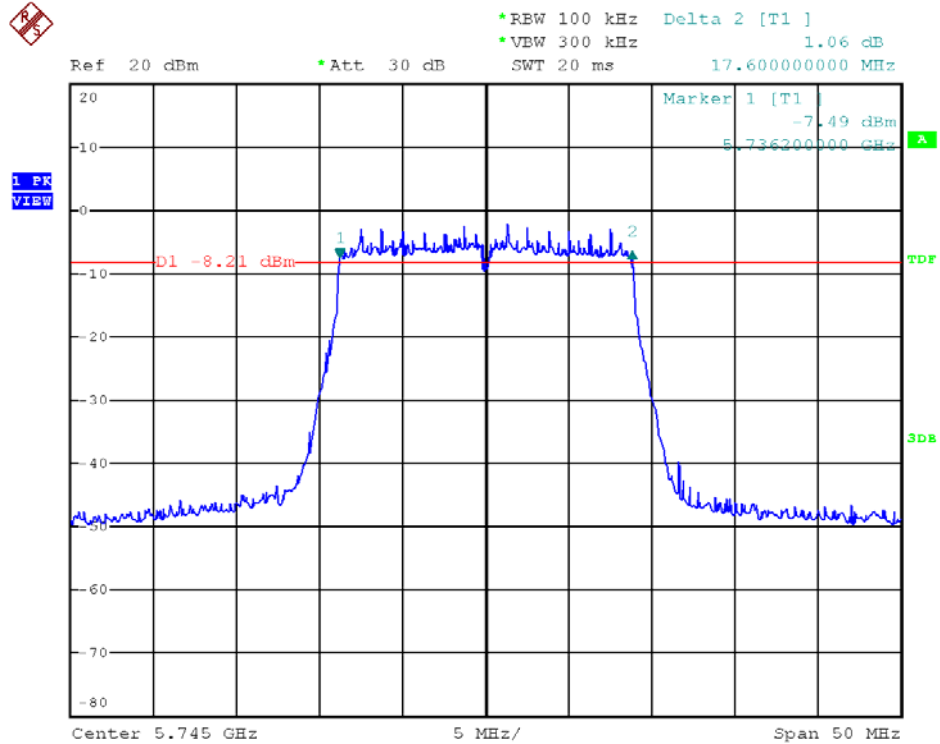


Modulation Standard: 802.11ac VHT20 (6.5Mbps), ANT M  
Channel: 149

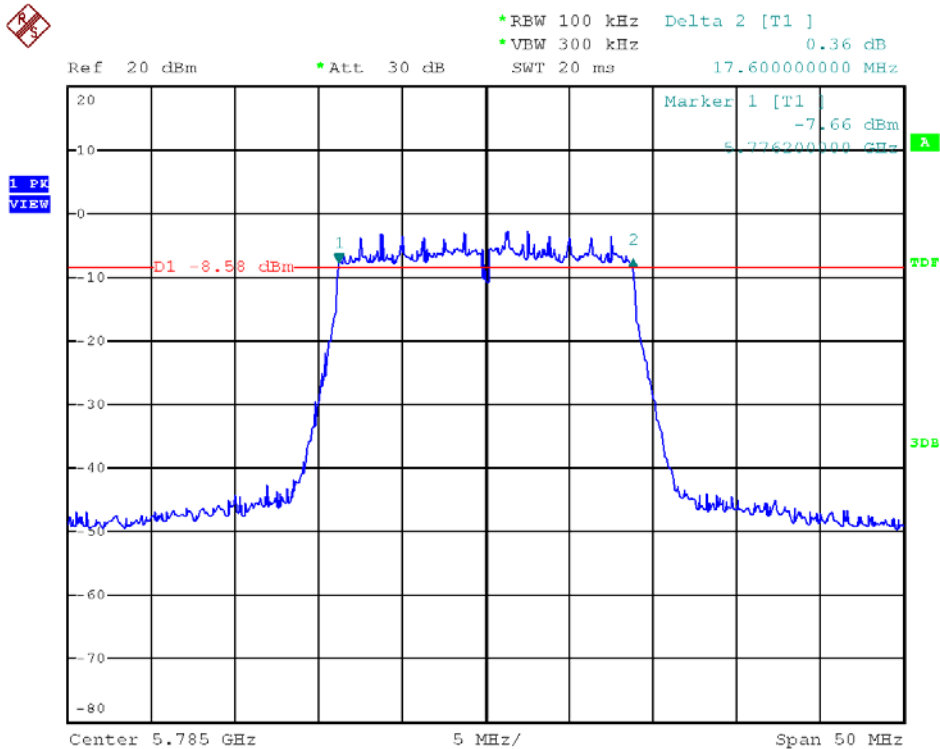




Modulation Standard: 802.11ac VHT20 (6.5Mbps), ANT L  
Channel: 149

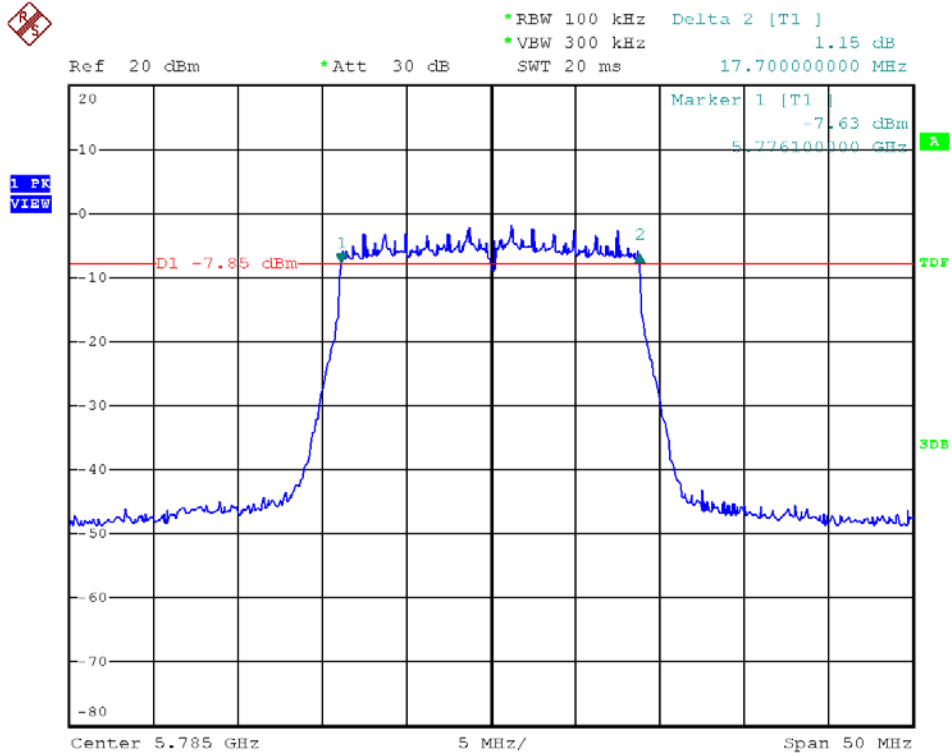


Modulation Standard: 802.11ac VHT20 (6.5Mbps), ANT R  
Channel: 157

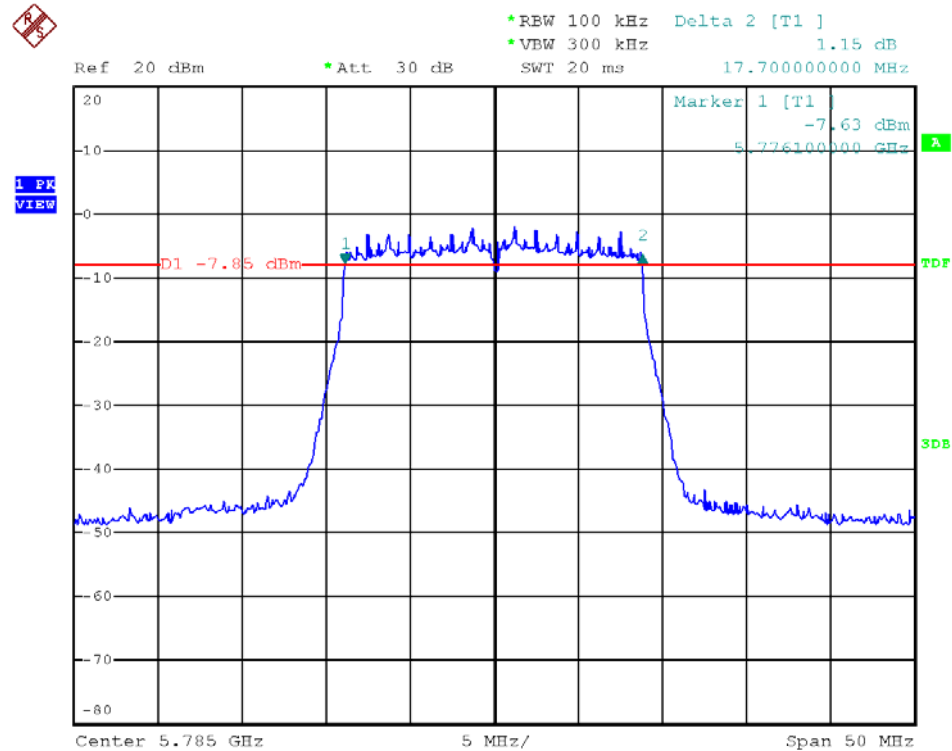




Modulation Standard: 802.11ac VHT20 (6.5Mbps), ANT M  
Channel: 157

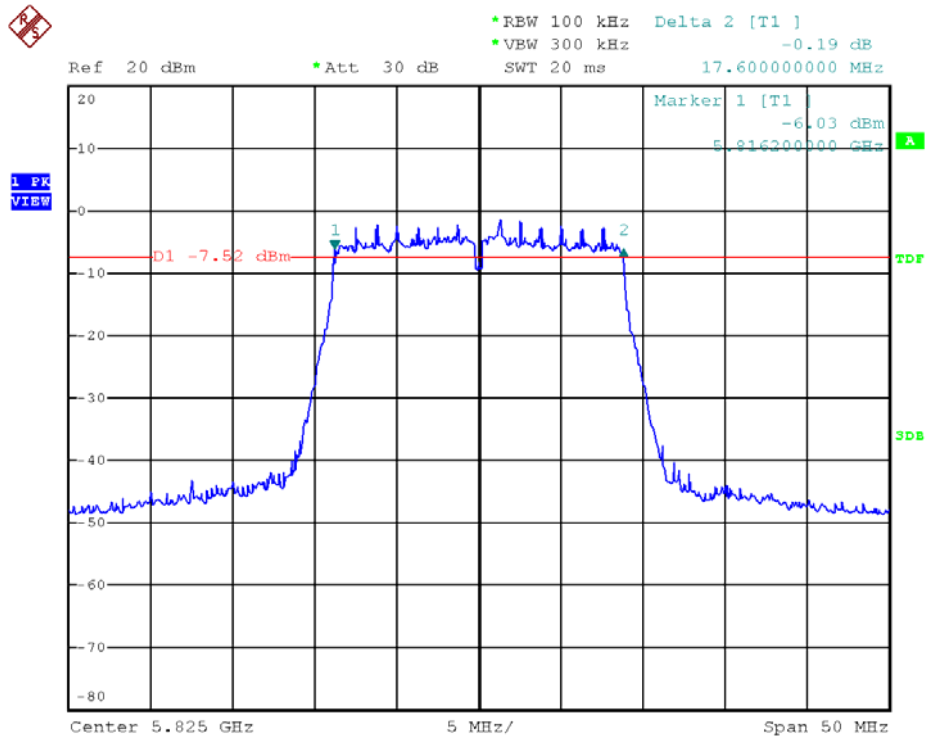


Modulation Standard: 802.11ac VHT20 (6.5Mbps), ANT L  
Channel: 157

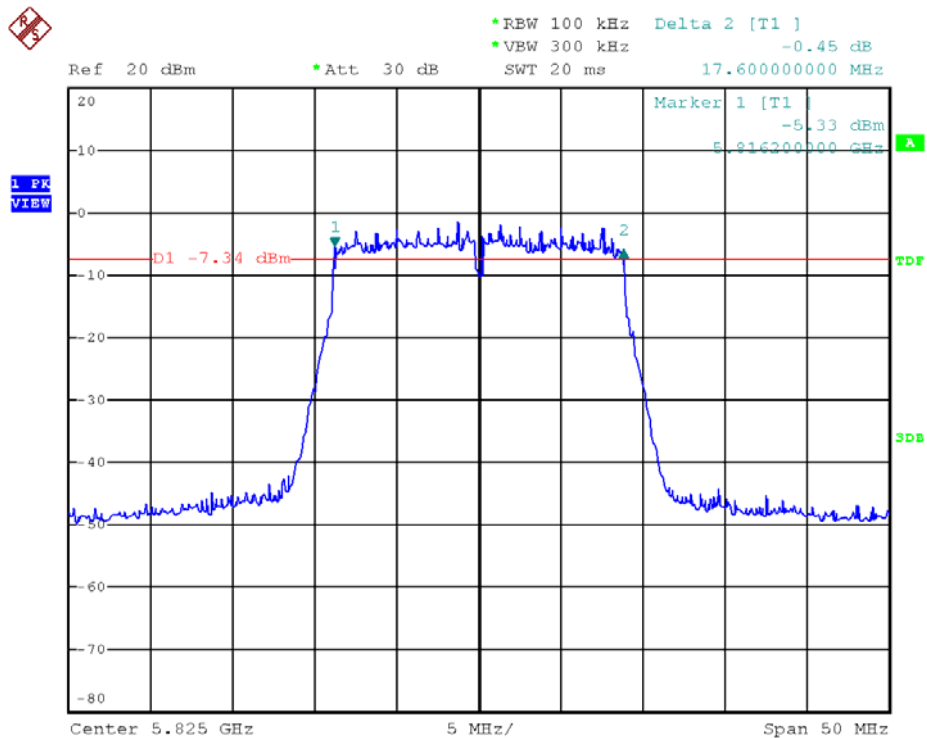




Modulation Standard: 802.11ac VHT20 (6.5Mbps), ANT R  
Channel: 165



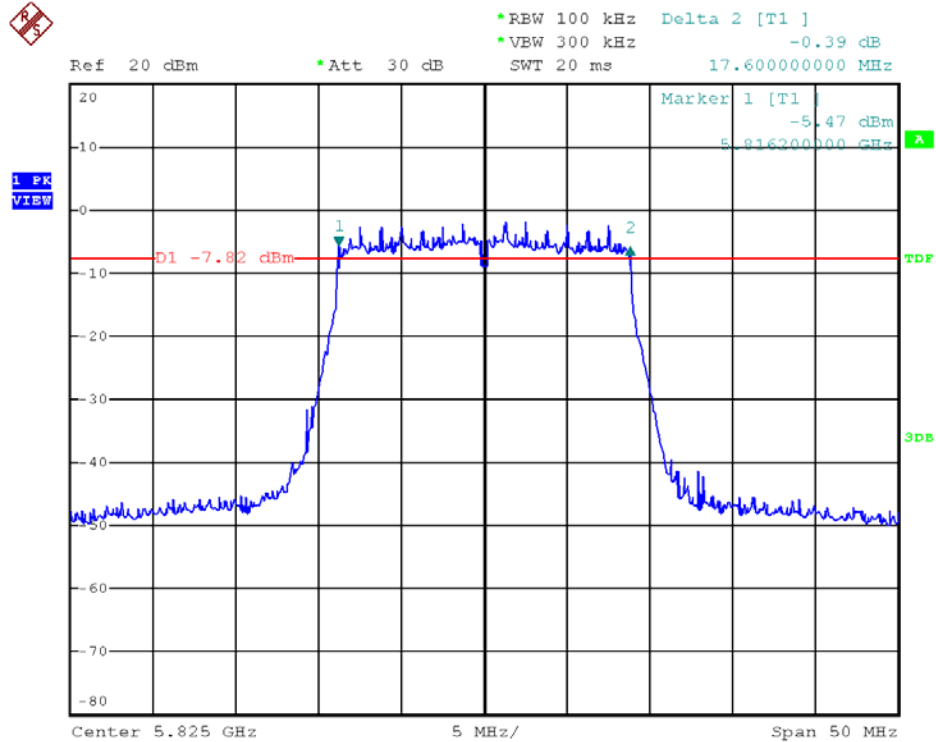
Modulation Standard: 802.11ac VHT20 (6.5Mbps), ANT M  
Channel: 165



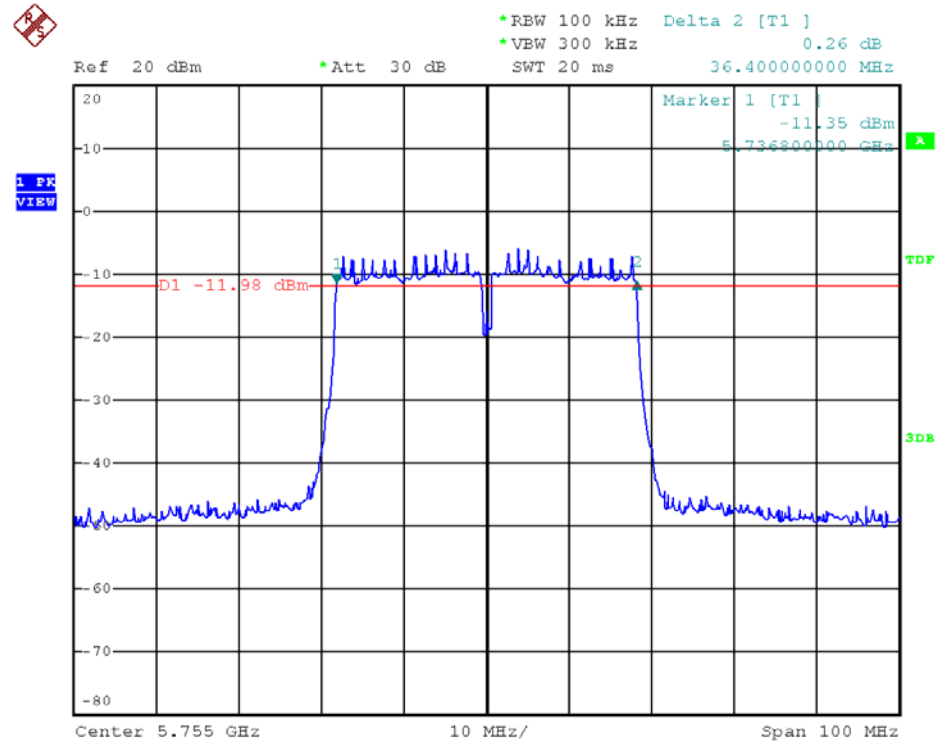




Modulation Standard: 802.11ac VHT20 (6.5Mbps), ANT L  
Channel: 165

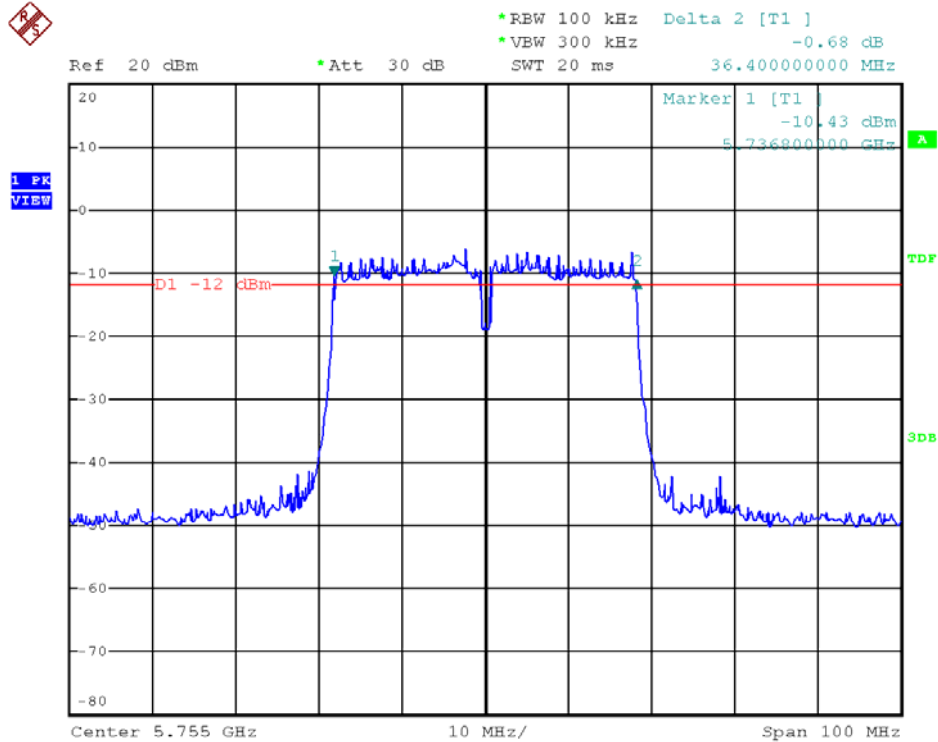


Modulation Standard: 802.11ac VHT40 (13.5Mbps), ANT R  
Channel: 151

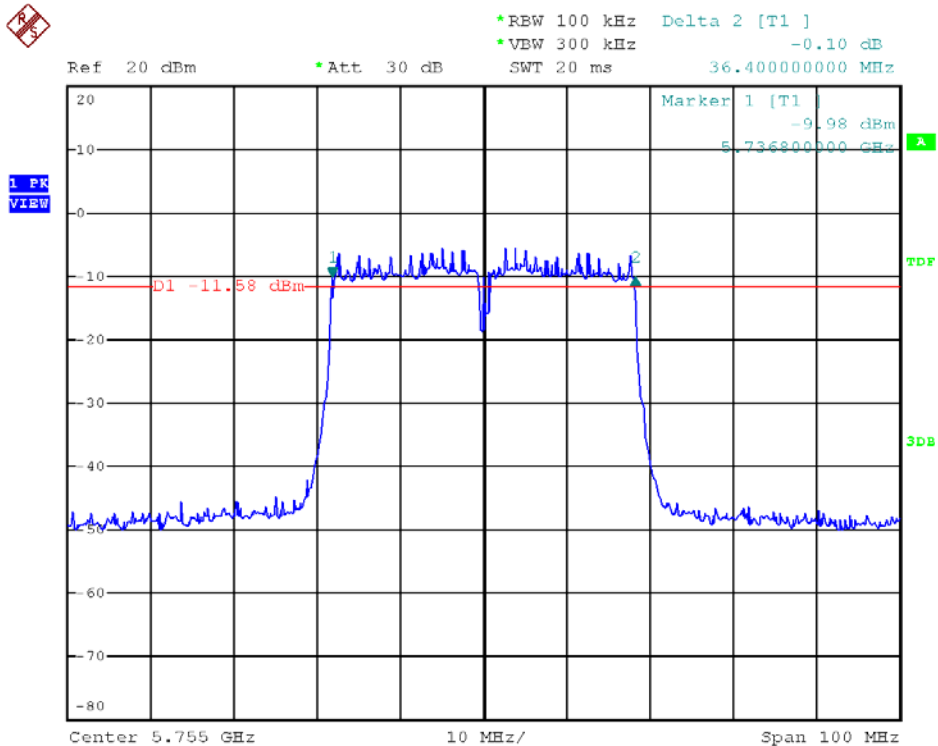




Modulation Standard: 802.11ac VHT40 (13.5Mbps), ANT M  
Channel: 151

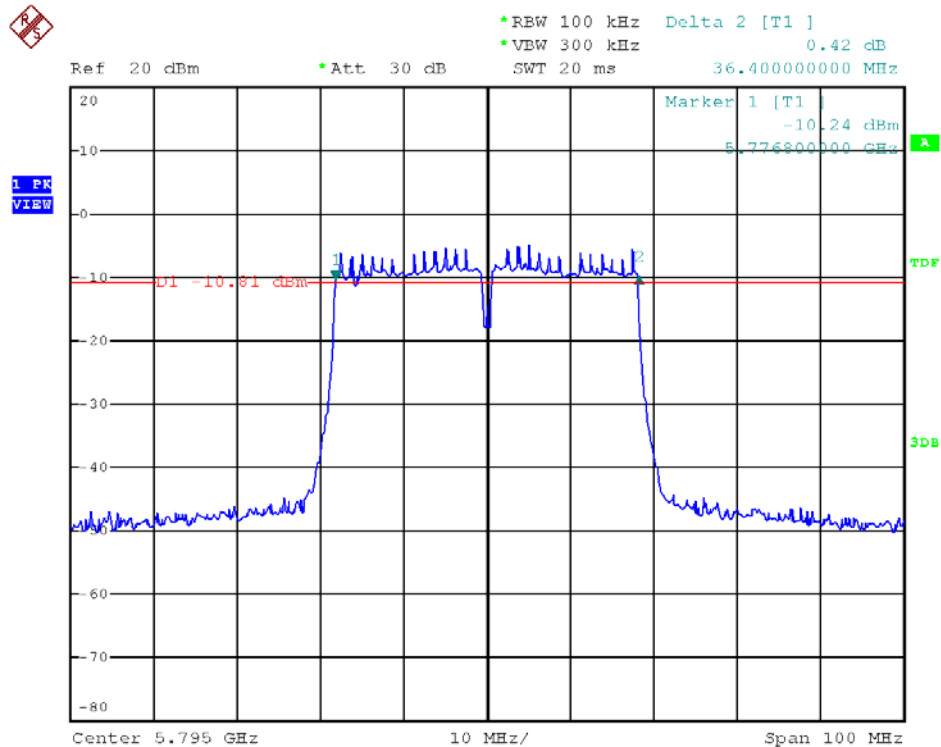


Modulation Standard: 802.11ac VHT40 (13.5Mbps), ANT L  
Channel: 151

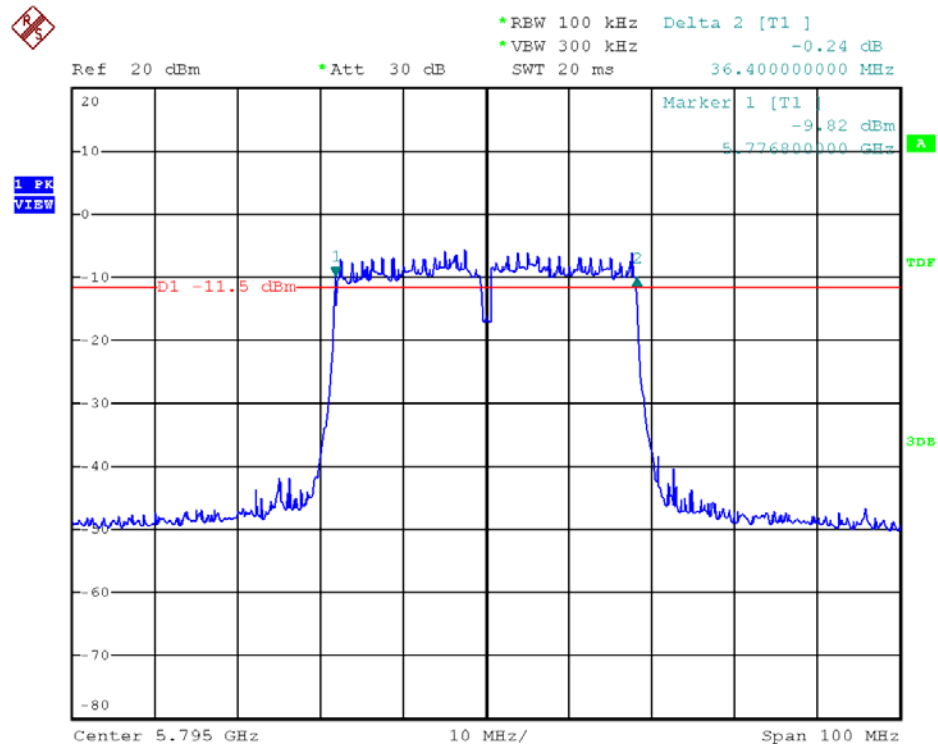




Modulation Standard: 802.11ac VHT40 (13.5Mbps), ANT R  
Channel: 159

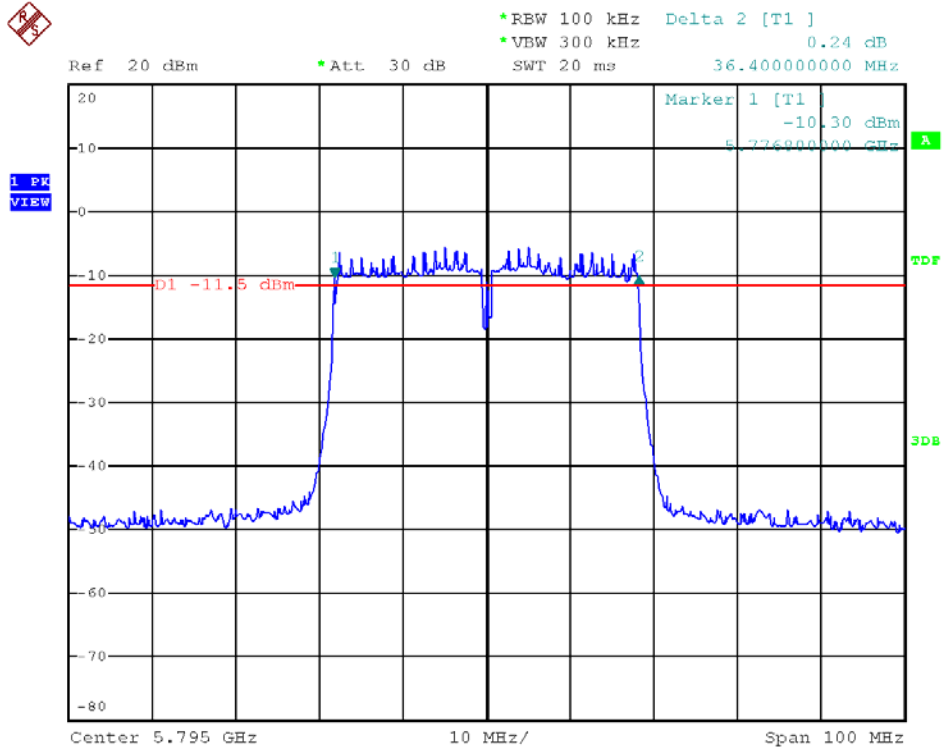


Modulation Standard: 802.11ac VHT40 (13.5Mbps), ANT M  
Channel: 159

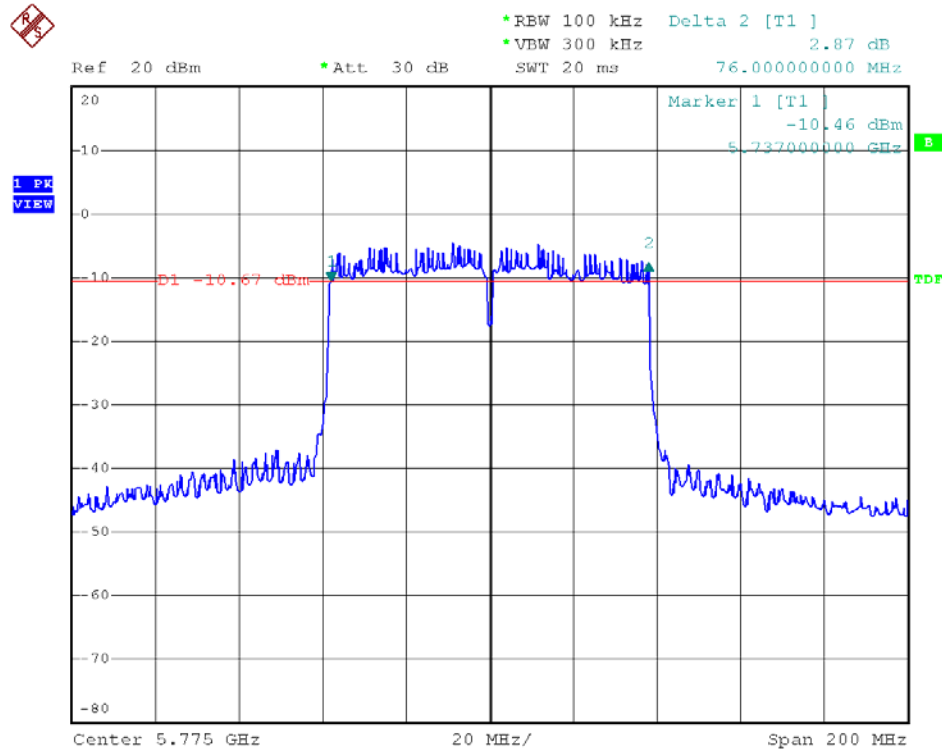




Modulation Standard: 802.11ac VHT40 (13.5Mbps), ANT L  
Channel: 159

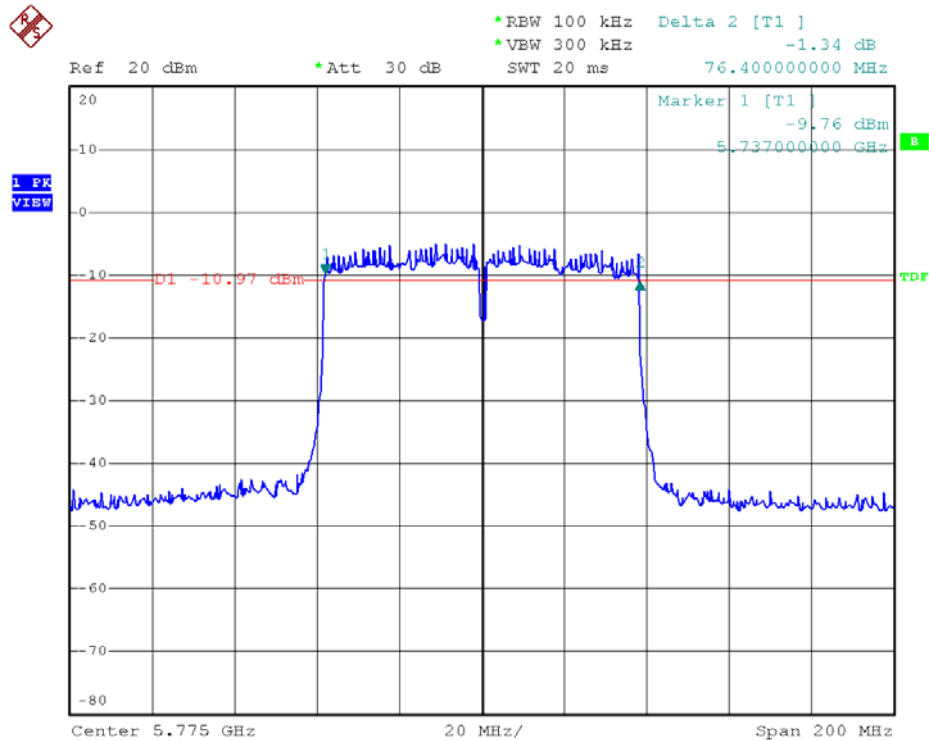


Modulation Standard: 802.11ac VHT80 (29.3Mbps), ANT R  
Channel: 155

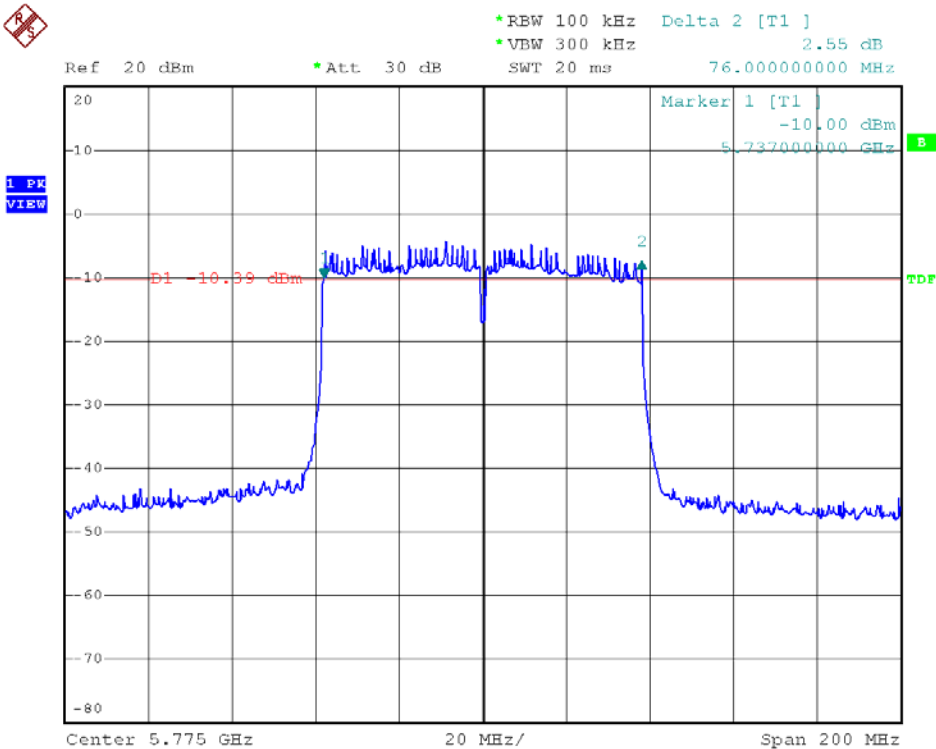




Modulation Standard: 802.11ac VHT80 (29.3Mbps), ANT M  
Channel: 155



Modulation Standard: 802.11ac VHT80 (29.3Mbps), ANT L  
Channel: 155





## 7. Maximum Peak and Average Output Power

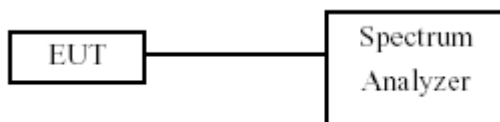
### 7.1 Test Limit

The Maximum Peak Output Power Measurement is 25.23dBm.

### 7.2 Test Procedures

- The transmitter output was connected to the spectrum analyzer.
- Set RBW of spectrum analyzer to 1MHz and VBW to 3MHz.
- Set detector mode to peak (for peak output power) or set detector mode to RMS (for average output power).
- Use the spectrum analyzer's integrated band power measurement function with band limits set equal to the EBW band edges.
- The maximum peak and average output power was measured and recorded.

### 7.3 Test Setup Layout



### 7.4 Measurement Equipment

| Instrument/Ancillary  | Manufacturer | Model No. | Serial No. | Calibration Date | Valid Date |
|-----------------------|--------------|-----------|------------|------------------|------------|
| Spectrum Analyzer     | R&S          | FSP40     | 100047     | 2012/03/01       | 2013/02/28 |
| SERIES<br>POWER METER | ANRITSU      | ML2495A   | 1224005    | 2012/06/22       | 2013/06/21 |
| POWER SENSOR          | ANRITSU      | MA2411B   | 1207295    | 2012/07/09       | 2013/07/08 |



## 7.5 Test Result and Data

Test Date: Jan. 13, 2013

Temperature: 22°C

Atmospheric pressure: 1020 hPa

Humidity: 65%

| Modulation Standard | Channel | Frequency (MHz) | Peak Power Output (dBm) |       |       |       | Peak Power Output (mW) |
|---------------------|---------|-----------------|-------------------------|-------|-------|-------|------------------------|
|                     |         |                 | ANT R                   | ANT M | ANT L | Total | Total                  |
| 802.11b (1Mbps)     | 01      | 2412            | 16.60                   | 16.48 | 16.44 | 21.28 | 134.23                 |
|                     | 06      | 2437            | 16.44                   | 16.36 | 16.46 | 21.19 | 131.57                 |
|                     | 11      | 2462            | 16.70                   | 16.55 | 16.30 | 21.29 | 134.62                 |
| 802.11g (6Mbps)     | 01      | 2412            | 19.86                   | 19.80 | 20.40 | 24.80 | 301.97                 |
|                     | 06      | 2437            | 19.88                   | 19.75 | 20.30 | 24.75 | 298.83                 |
|                     | 11      | 2462            | 19.92                   | 19.60 | 20.25 | 24.70 | 295.30                 |

| Modulation Standard     | Channel | Frequency (MHz) | Peak Power Output (dBm) |       |       |       | Peak Power Output (mW) |
|-------------------------|---------|-----------------|-------------------------|-------|-------|-------|------------------------|
|                         |         |                 | ANT R                   | ANT M | ANT L | Total | Total                  |
| 802.11n HT20 (6.5Mbps)  | 01      | 2412            | 19.90                   | 18.03 | 21.35 | 24.74 | 297.72                 |
|                         | 06      | 2437            | 20.50                   | 19.05 | 20.14 | 24.71 | 295.83                 |
|                         | 11      | 2462            | 18.22                   | 19.00 | 20.06 | 23.93 | 247.20                 |
| 802.11n HT40 (13.5Mbps) | 03      | 2422            | 19.05                   | 19.50 | 20.88 | 24.65 | 291.94                 |
|                         | 06      | 2437            | 19.14                   | 19.45 | 20.69 | 24.58 | 287.36                 |
|                         | 09      | 2452            | 19.01                   | 19.30 | 20.99 | 24.63 | 290.33                 |

Test Date: Jan. 22, 2013

Temperature: 22°C

Atmospheric pressure: 1020 hPa

Humidity: 65%

| Modulation Standard       | Channel | Frequency (MHz) | Peak Power Output (dBm) |       |       |       | Peak Power Output (mW) |
|---------------------------|---------|-----------------|-------------------------|-------|-------|-------|------------------------|
|                           |         |                 | ANT R                   | ANT M | ANT L | Total | Total                  |
| 802.11ac VHT20 (6Mbps)    | 149     | 5745            | 20.34                   | 20.30 | 20.55 | 25.17 | 328.80                 |
|                           | 157     | 5785            | 20.00                   | 20.24 | 20.30 | 24.95 | 312.83                 |
|                           | 165     | 5825            | 20.02                   | 20.30 | 20.04 | 24.89 | 308.54                 |
| 802.11ac VHT40 (13.5Mbps) | 151     | 5755            | 19.85                   | 19.54 | 20.24 | 24.66 | 292.24                 |
|                           | 159     | 5795            | 19.95                   | 19.64 | 20.10 | 24.67 | 293.23                 |
| 802.11ac VHT80 (29.3Mbps) | 155     | 5775            | 19.20                   | 19.89 | 20.15 | 24.54 | 284.19                 |



Test Date: Jan. 13, 2013

Temperature: 22°C

Atmospheric pressure: 1020 hPa

Humidity: 65%

| Modulation Standard | Channel | Frequency (MHz) | Average Power Output (dBm) |       |       |       | Average Power Output (mW) |
|---------------------|---------|-----------------|----------------------------|-------|-------|-------|---------------------------|
|                     |         |                 | ANT R                      | ANT M | ANT L | Total | Total                     |
| 802.11b (1Mbps)     | 01      | 2412            | 12.48                      | 12.44 | 12.37 | 17.20 | 52.60                     |
|                     | 06      | 2437            | 12.51                      | 12.35 | 12.42 | 17.20 | 52.46                     |
|                     | 11      | 2462            | 12.60                      | 12.57 | 12.27 | 17.25 | 53.13                     |
| 802.11g (6Mbps)     | 01      | 2412            | 9.88                       | 9.91  | 10.46 | 14.86 | 30.64                     |
|                     | 06      | 2437            | 9.99                       | 9.88  | 10.43 | 14.88 | 30.75                     |
|                     | 11      | 2462            | 9.99                       | 9.90  | 10.43 | 14.88 | 30.79                     |

| Modulation Standard     | Channel | Frequency (MHz) | Peak Power Output (dBm) |       |       |       | Peak Power Output (mW) |
|-------------------------|---------|-----------------|-------------------------|-------|-------|-------|------------------------|
|                         |         |                 | ANT R                   | ANT M | ANT L | Total | Total                  |
| 802.11n HT20 (6.5Mbps)  | 01      | 2412            | 10.13                   | 8.07  | 11.40 | 14.85 | 30.52                  |
|                         | 06      | 2437            | 10.51                   | 9.06  | 10.19 | 14.73 | 29.75                  |
|                         | 11      | 2462            | 8.30                    | 8.95  | 10.15 | 13.97 | 24.96                  |
| 802.11n HT40 (13.5Mbps) | 03      | 2422            | 9.02                    | 9.40  | 10.67 | 14.53 | 28.36                  |
|                         | 06      | 2437            | 9.02                    | 9.28  | 10.59 | 14.46 | 27.91                  |
|                         | 09      | 2452            | 8.86                    | 9.42  | 11.01 | 14.63 | 29.06                  |

Test Date: Jan. 22, 2013

Temperature: 22°C

Atmospheric pressure: 1020 hPa

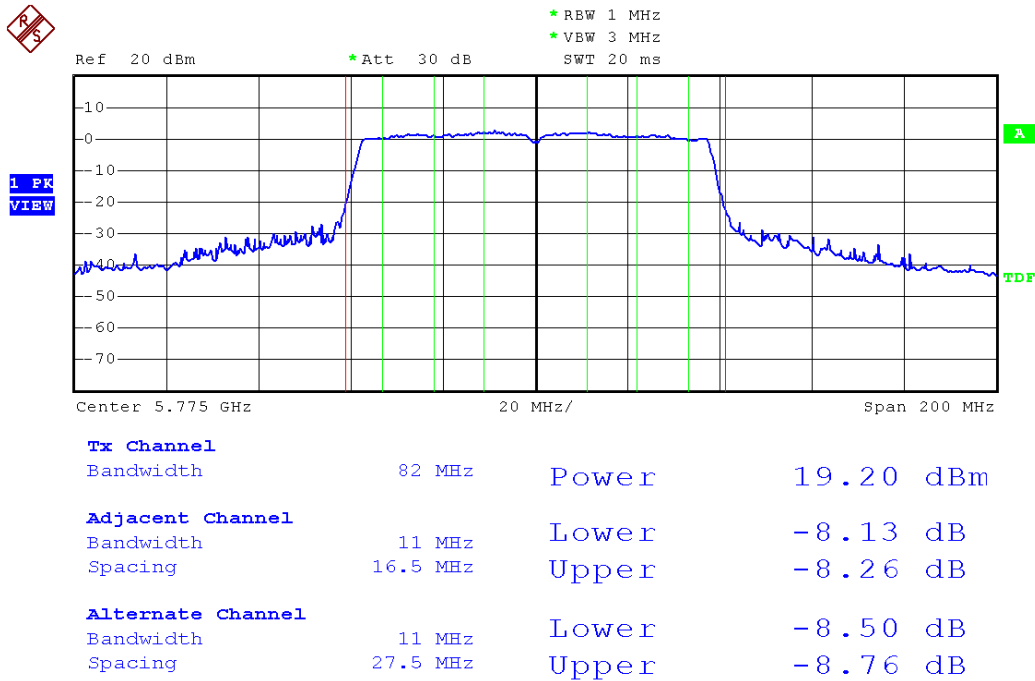
Humidity: 65%

| Modulation Standard       | Channel | Frequency (MHz) | Peak Power Output (dBm) |       |       |       | Peak Power Output (mW) |
|---------------------------|---------|-----------------|-------------------------|-------|-------|-------|------------------------|
|                           |         |                 | ANT R                   | ANT M | ANT L | Total | Total                  |
| 802.11ac VHT20 (6Mbps)    | 149     | 5745            | 10.79                   | 10.70 | 10.95 | 15.59 | 36.19                  |
|                           | 157     | 5785            | 10.51                   | 10.47 | 10.65 | 15.32 | 34.00                  |
|                           | 165     | 5825            | 10.54                   | 10.61 | 10.45 | 15.31 | 33.92                  |
| 802.11ac VHT40 (13.5Mbps) | 151     | 5755            | 10.17                   | 9.87  | 10.38 | 14.92 | 31.02                  |
|                           | 159     | 5795            | 10.12                   | 10.10 | 10.26 | 14.93 | 31.13                  |
| 802.11ac VHT80 (29.3Mbps) | 155     | 5775            | 11.96                   | 11.83 | 11.93 | 16.68 | 46.54                  |

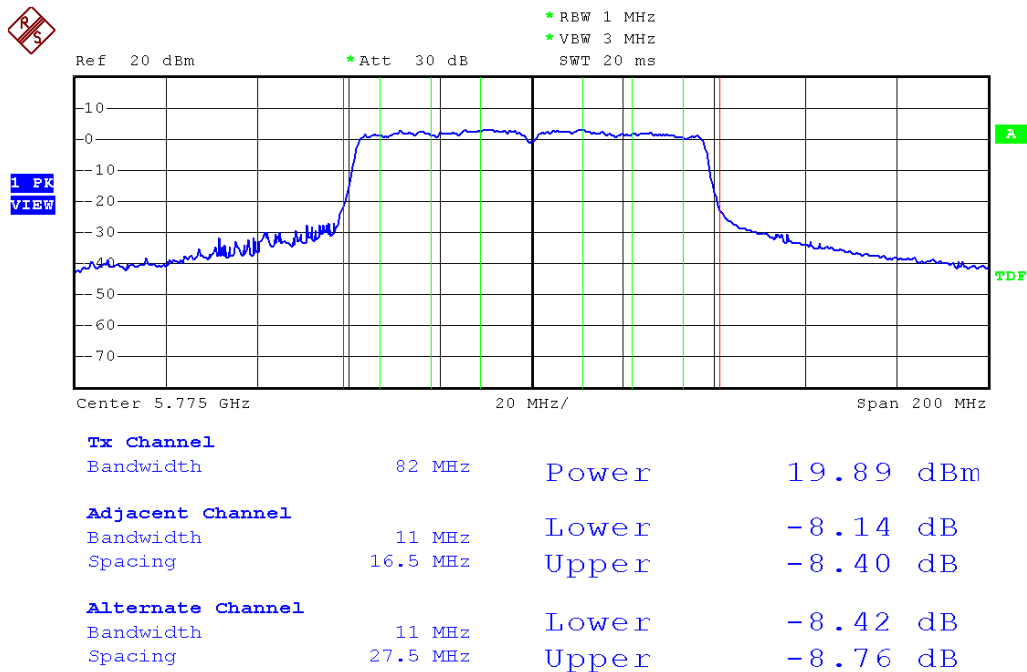




Modulation Standard: 802.11ac VHT80 (29.3Mbps), ANT R, Peak Output Power  
Channel: 155

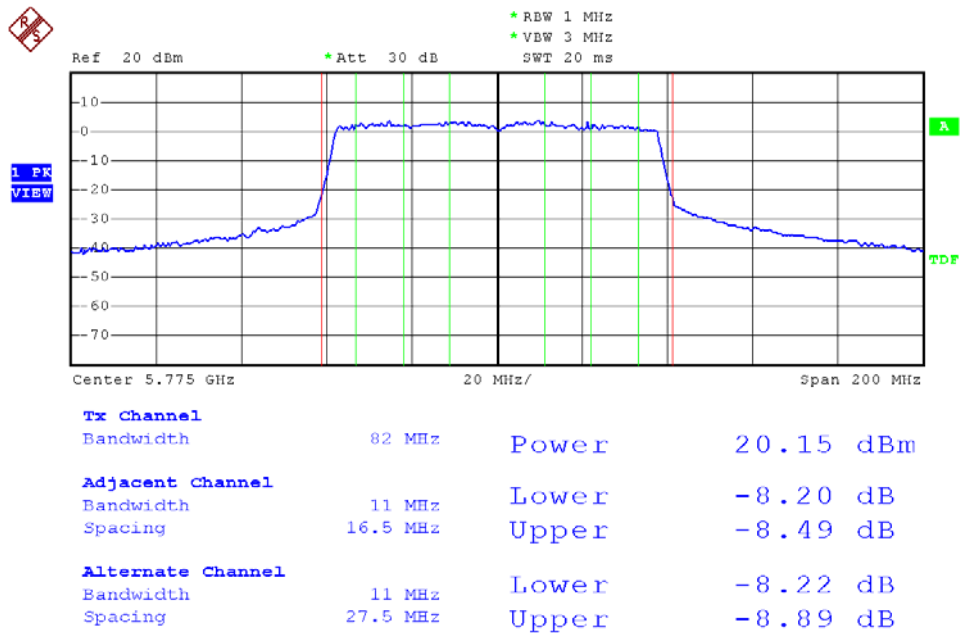


Modulation Standard: 802.11ac VHT80 (29.3Mbps), ANT M, Peak Output Power  
Channel: 155

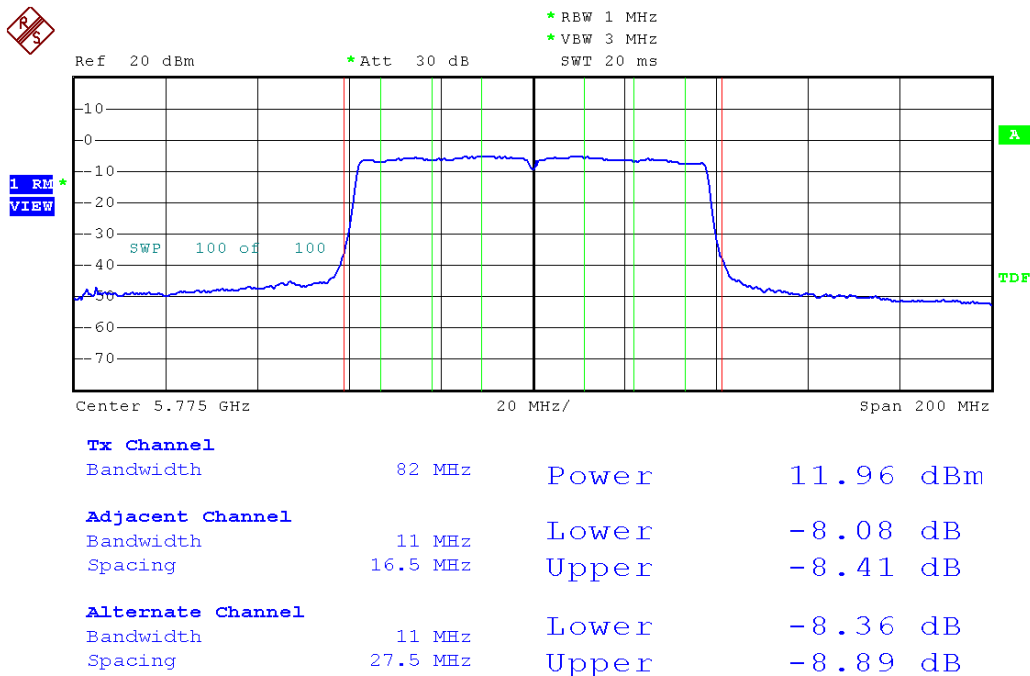




Modulation Standard: 802.11ac VHT80 (29.3Mbps), ANT L, Peak Output Power  
Channel: 155

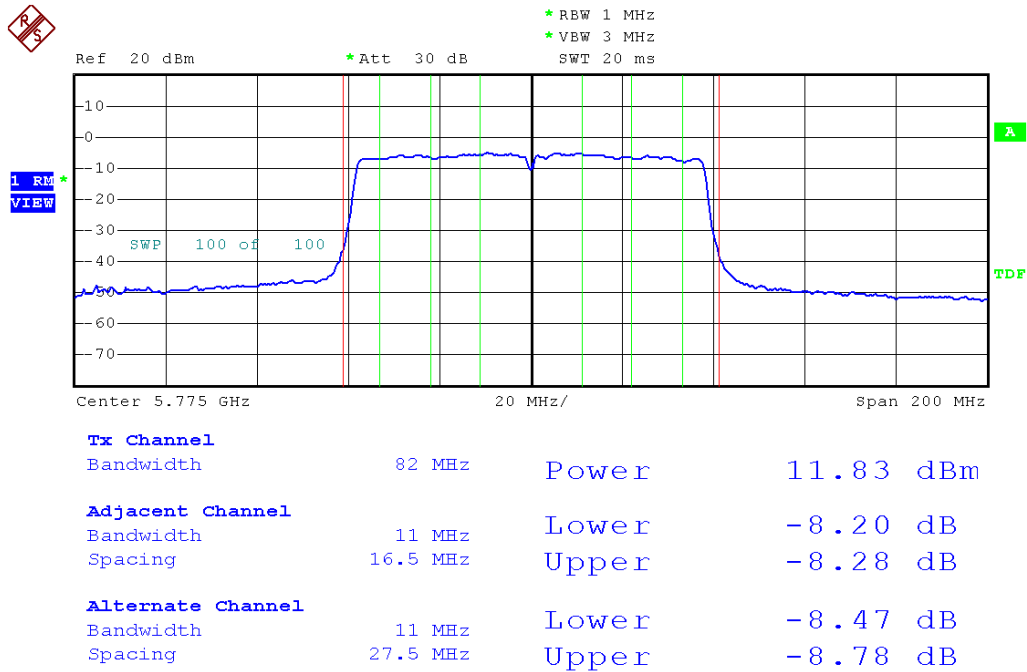


Modulation Standard: 802.11ac VHT80 (29.3Mbps), ANT R, Average Output Power  
Channel: 155

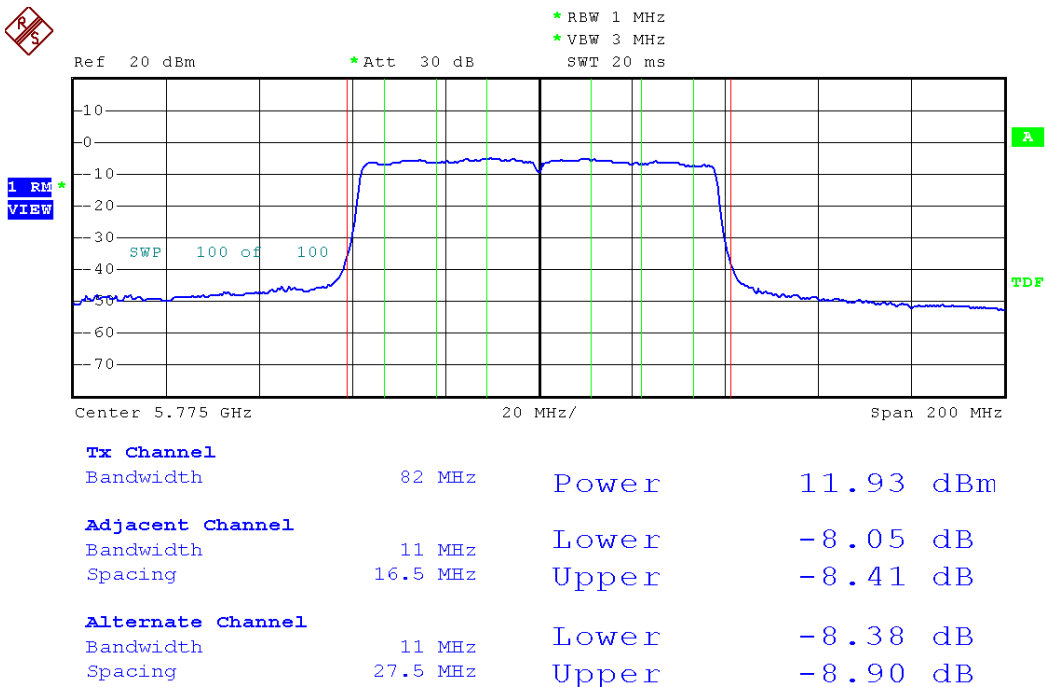




Modulation Standard: 802.11ac VHT80 (29.3Mbps), ANT M, Average Output Power  
Channel: 155



Modulation Standard: 802.11ac VHT80 (29.3Mbps), ANT L, Average Output Power  
Channel: 155





## 8. Power Spectral Density

### 8.1 Test Limit

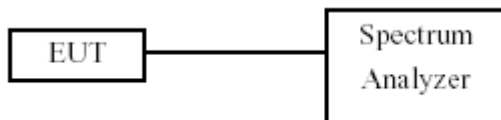
The Maximum of Power Spectral Density Measurement is 3.23dBm.

(Limit= 8dBm-(10.77dBi - 6dBi) = 3.23dBm)

### 8.2 Test Procedures

- The transmitter output was connected to spectrum analyzer.
- The spectrum analyzer's resolution bandwidth were set at 100KHz RBW and 300KHz VBW as that of the fundamental frequency. Set the sweep time=auto couple.
- The power spectral density was measured and recorded.

### 8.3 Test Setup Layout



### 8.4 Measurement Equipment

| Instrument/Ancillary | Manufacturer | Model No. | Serial No. | Calibration Date | Valid Date |
|----------------------|--------------|-----------|------------|------------------|------------|
| Spectrum Analyzer    | R&S          | FSP40     | 100047     | 2012/03/01       | 2013/02/28 |



## 8.5 Test Result and Data

Test Date: Jan. 23, 2013

Temperature: 22°C

Atmospheric pressure: 1020 hPa

Humidity: 65%

| Modulation Standard | Channel | Frequency (MHz) | Maximum Power Density of 3 kHz Bandwidth (dBm) |        |        |
|---------------------|---------|-----------------|------------------------------------------------|--------|--------|
|                     |         |                 | ANT R                                          | ANT M  | ANT L  |
| 802.11b (1Mbps)     | 01      | 2412            | -12.63                                         | -10.61 | -11.43 |
|                     | 06      | 2437            | -12.32                                         | -10.95 | -11.99 |
|                     | 11      | 2462            | -11.74                                         | -11.07 | -12.27 |
| 802.11g (6Mbps)     | 01      | 2412            | -14.82                                         | -14.99 | -14.48 |
|                     | 06      | 2437            | -15.21                                         | -15.02 | -16.87 |
|                     | 11      | 2462            | -15.45                                         | -14.05 | -15.63 |

| Modulation Standard     | Channel | Frequency (MHz) | Maximum Power Density of 3 kHz Bandwidth (dBm) |        |        |        |
|-------------------------|---------|-----------------|------------------------------------------------|--------|--------|--------|
|                         |         |                 | ANT R                                          | ANT M  | ANT L  | Total  |
| 802.11n HT20 (6.5Mbps)  | 01      | 2412            | -14.88                                         | -16.52 | -15.16 | -10.69 |
|                         | 06      | 2437            | -15.17                                         | -16.90 | -15.16 | -10.90 |
|                         | 11      | 2462            | -16.95                                         | -16.77 | -15.50 | -11.59 |
| 802.11n HT40 (13.5Mbps) | 03      | 2422            | -17.51                                         | -16.78 | -14.67 | -11.38 |
|                         | 06      | 2437            | -15.84                                         | -18.24 | -16.09 | -11.83 |
|                         | 09      | 2452            | -17.02                                         | -20.31 | -15.65 | -12.49 |

Test Date: Jan. 22, 2013

Temperature: 22°C

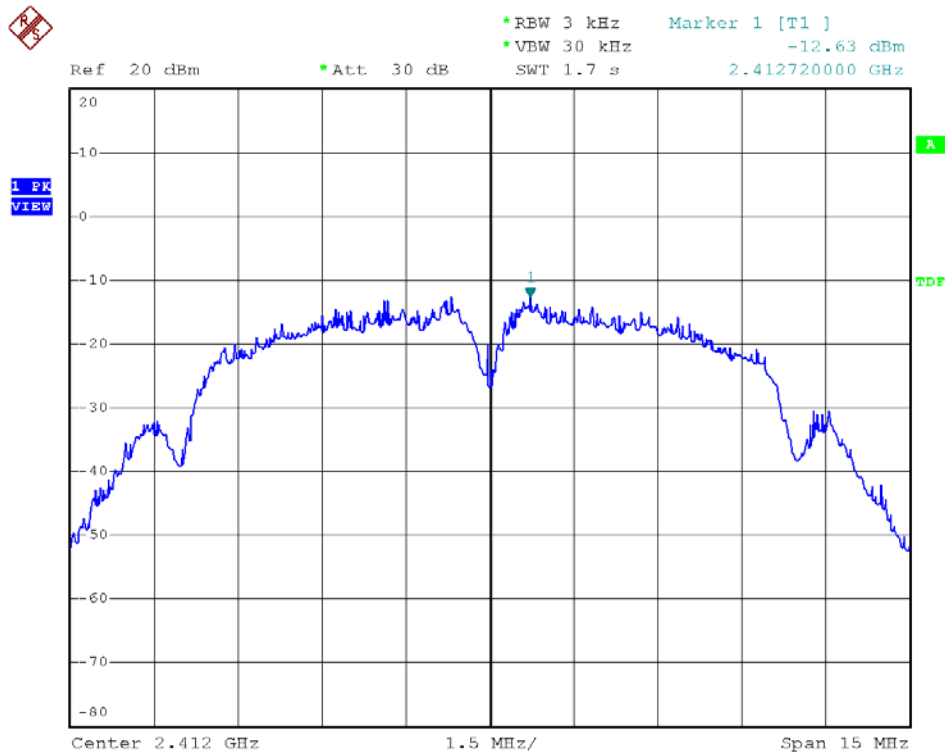
Atmospheric pressure: 1020 hPa

Humidity: 65%

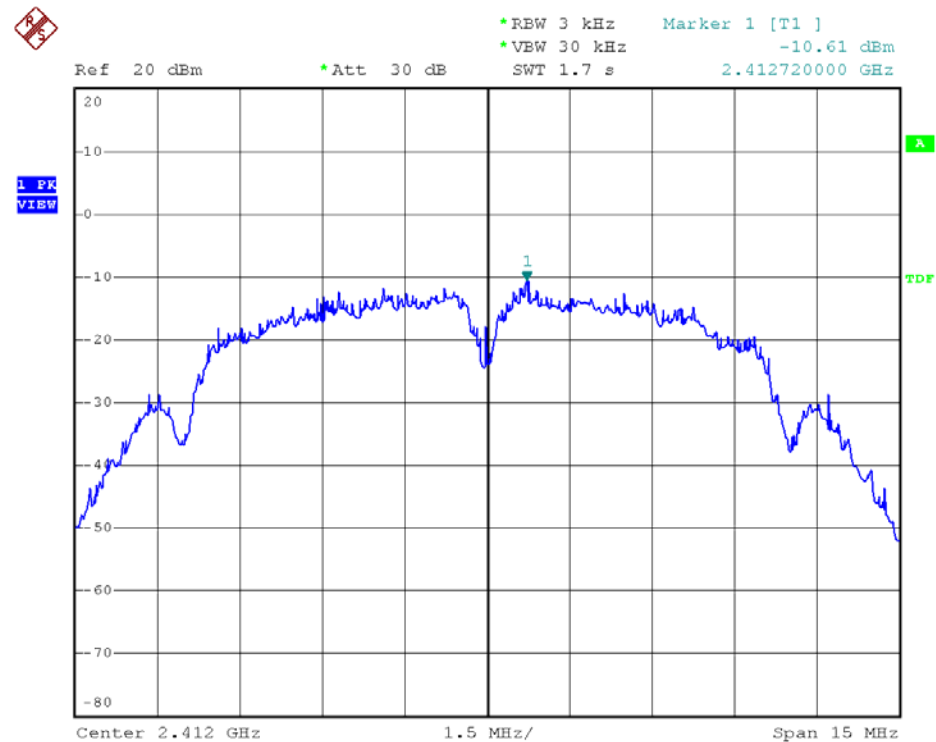
| Modulation Standard       | Channel | Frequency (MHz) | Maximum Power Density of 3 kHz Bandwidth (dBm) |        |        |        |
|---------------------------|---------|-----------------|------------------------------------------------|--------|--------|--------|
|                           |         |                 | ANT R                                          | ANT M  | ANT L  | Total  |
| 802.11ac VHT20 (6.5Mbps)  | 149     | 5745            | -16.15                                         | -14.90 | -11.84 | -9.13  |
|                           | 157     | 5785            | -15.43                                         | -15.32 | -11.11 | -8.68  |
|                           | 165     | 5825            | -15.45                                         | -15.00 | -13.94 | -9.98  |
| 802.11ac VHT40 (13.5Mbps) | 151     | 5755            | -17.33                                         | -19.09 | -12.80 | -10.79 |
|                           | 159     | 5795            | -18.49                                         | -19.52 | -13.67 | -11.66 |
| 802.11ac VHT80 (29.3Mbps) | 155     | 5775            | -19.92                                         | -18.84 | -15.09 | -12.66 |



Modulation Standard: 802.11b (1Mbps), ANT R  
Channel: 01

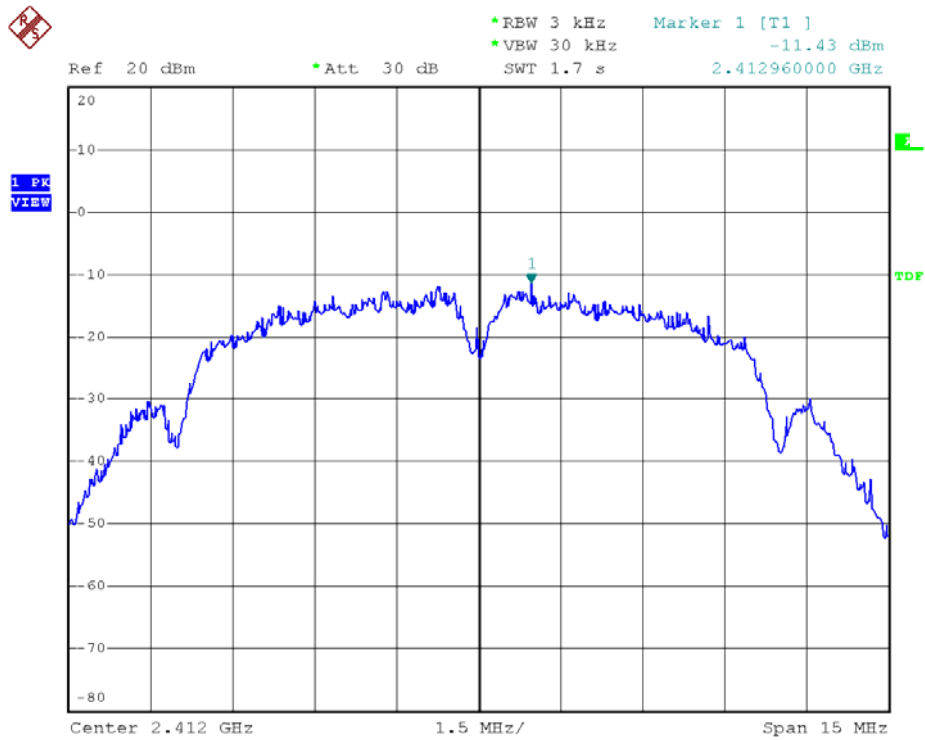


Modulation Standard: 802.11b (1Mbps), ANT M  
Channel: 01

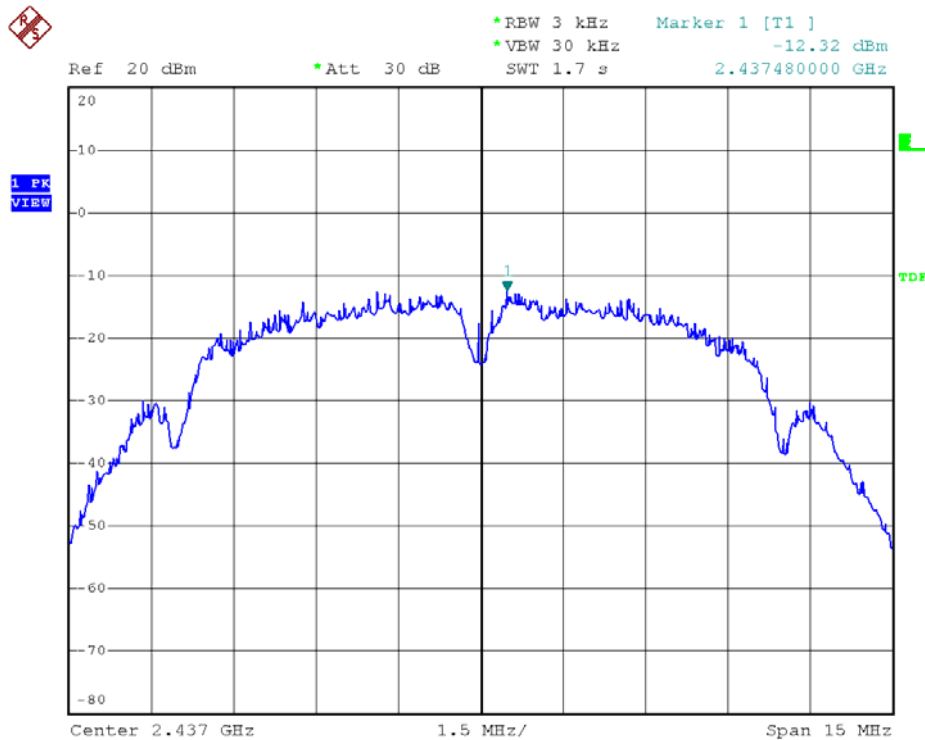




Modulation Standard: 802.11b (1Mbps), ANT L  
Channel: 01

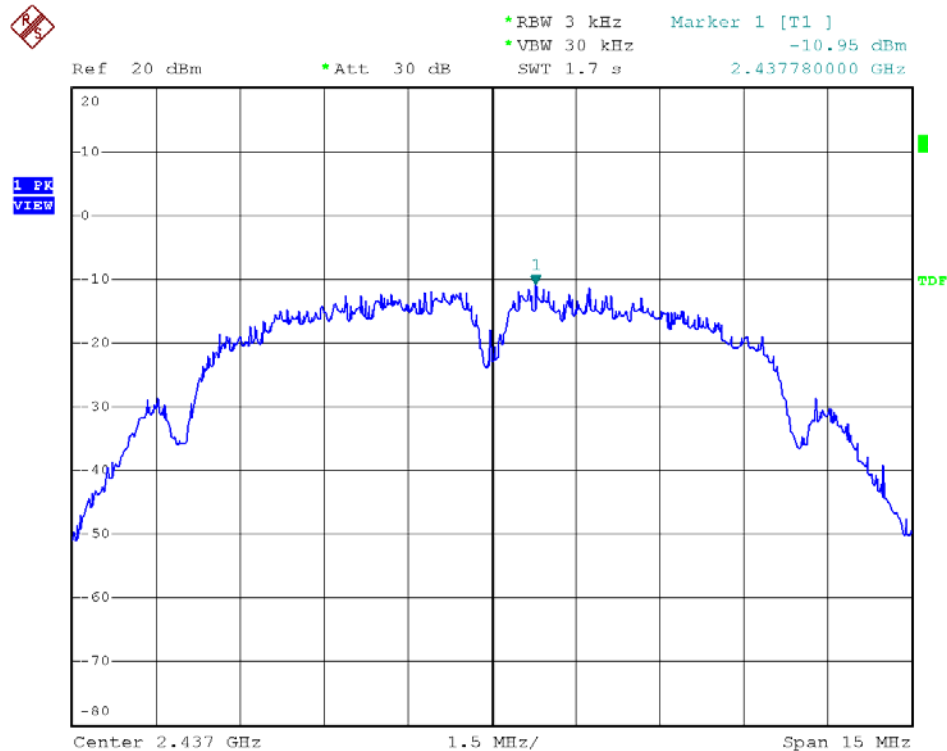


Modulation Standard: 802.11b (1Mbps), ANT R  
Channel: 06

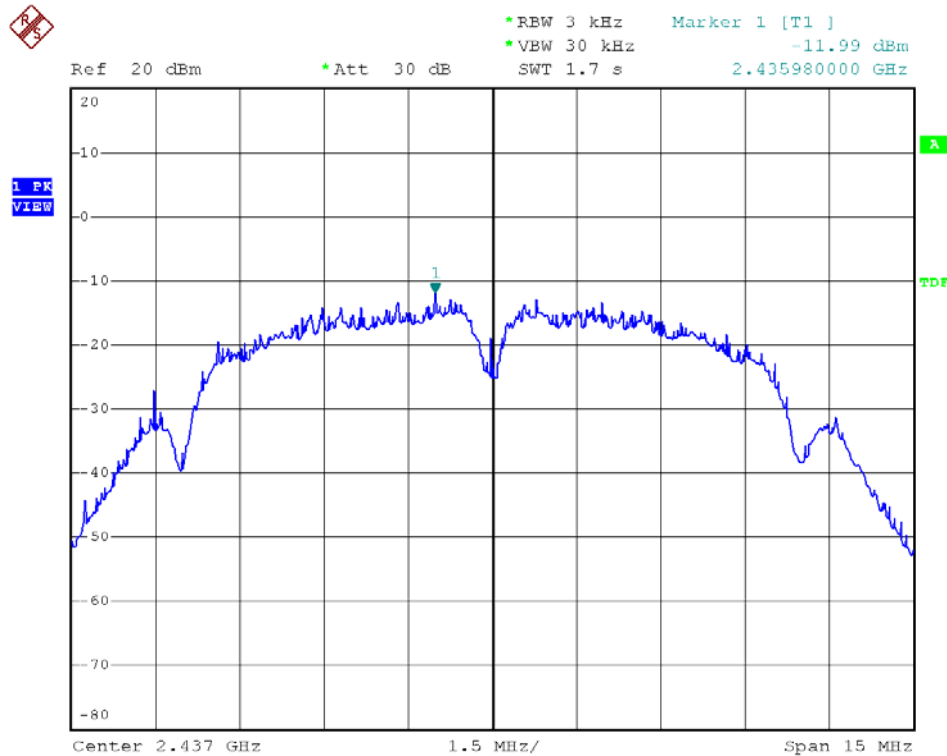




Modulation Standard: 802.11b (1Mbps), ANT M  
Channel: 06



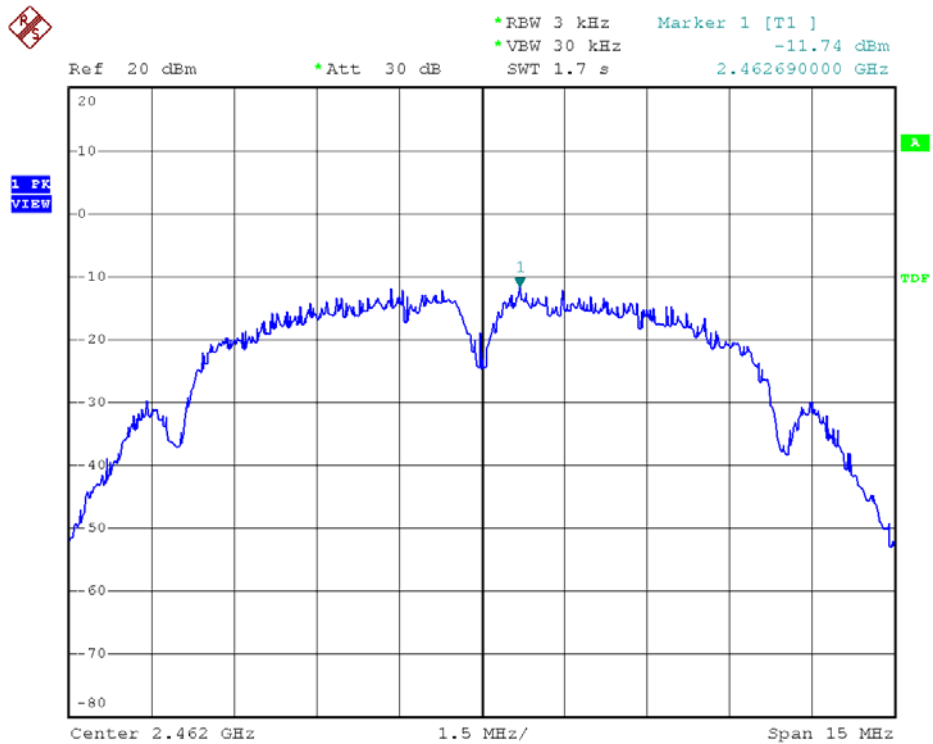
Modulation Standard: 802.11b (1Mbps), ANT L  
Channel: 06



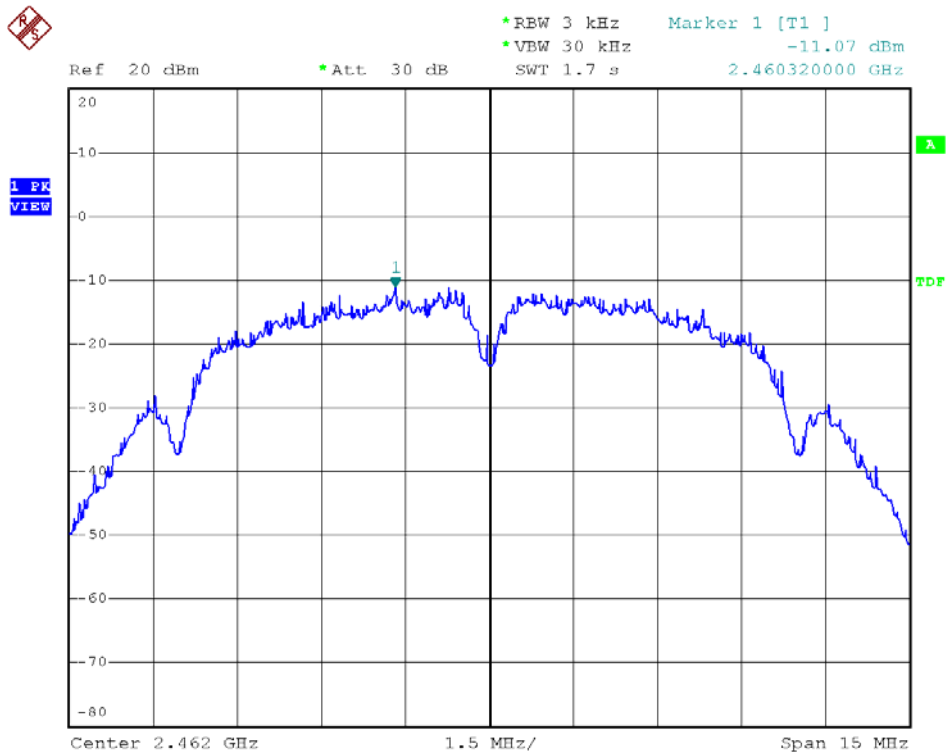




Modulation Standard: 802.11b (1Mbps), ANT R  
Channel: 11

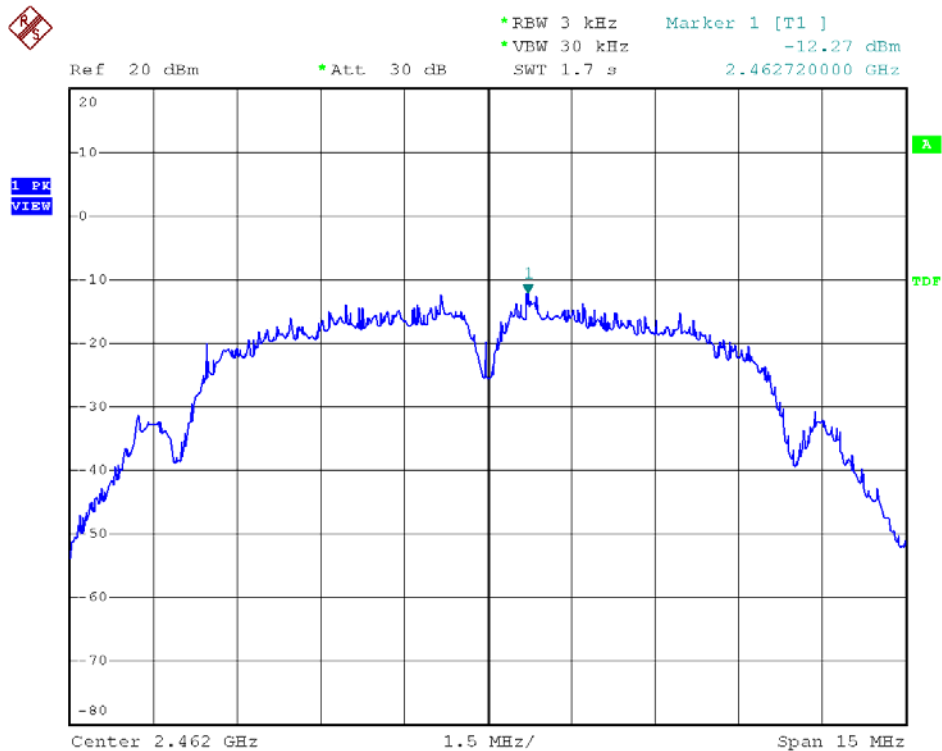


Modulation Standard: 802.11b (1Mbps), ANT M  
Channel: 11

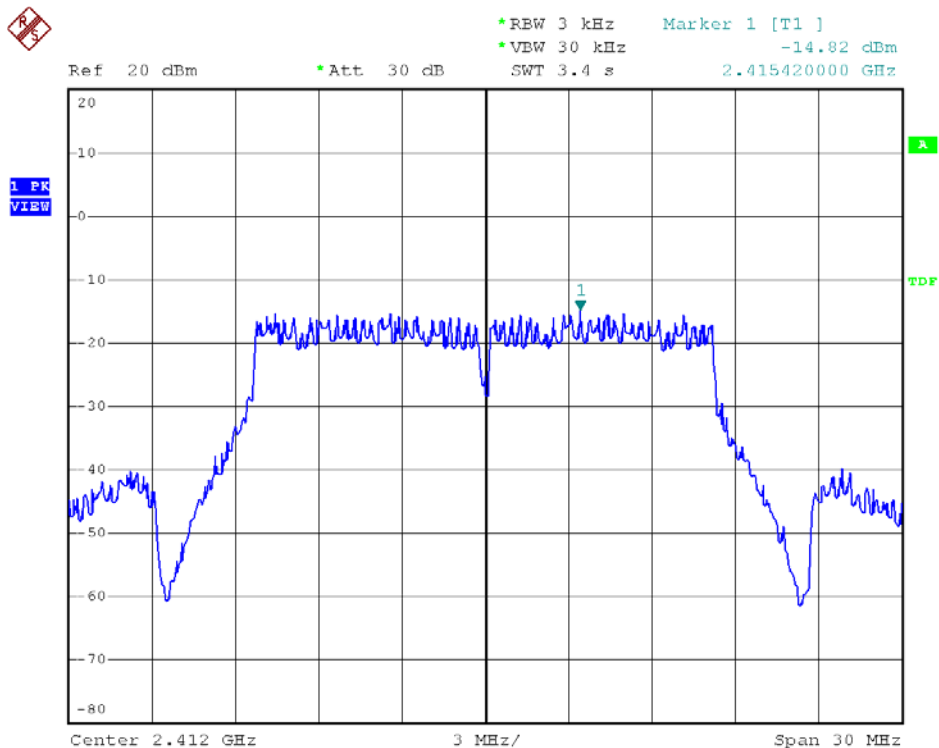




Modulation Standard: 802.11b (1Mbps), ANT L  
Channel: 11

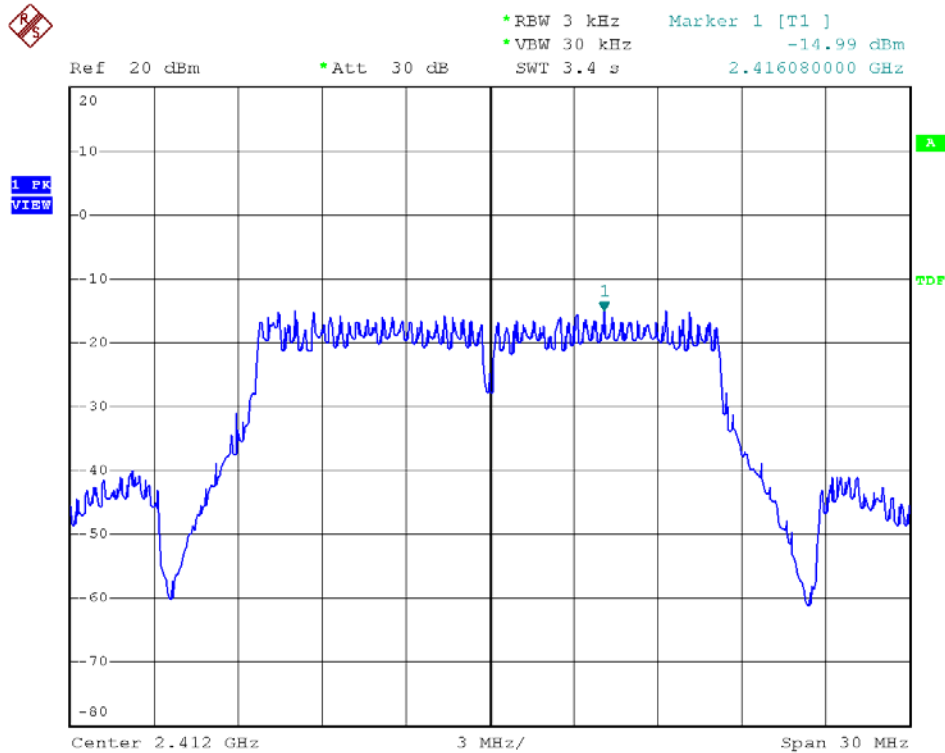


Modulation Standard: 802.11g (6Mbps), ANT R  
Channel: 01

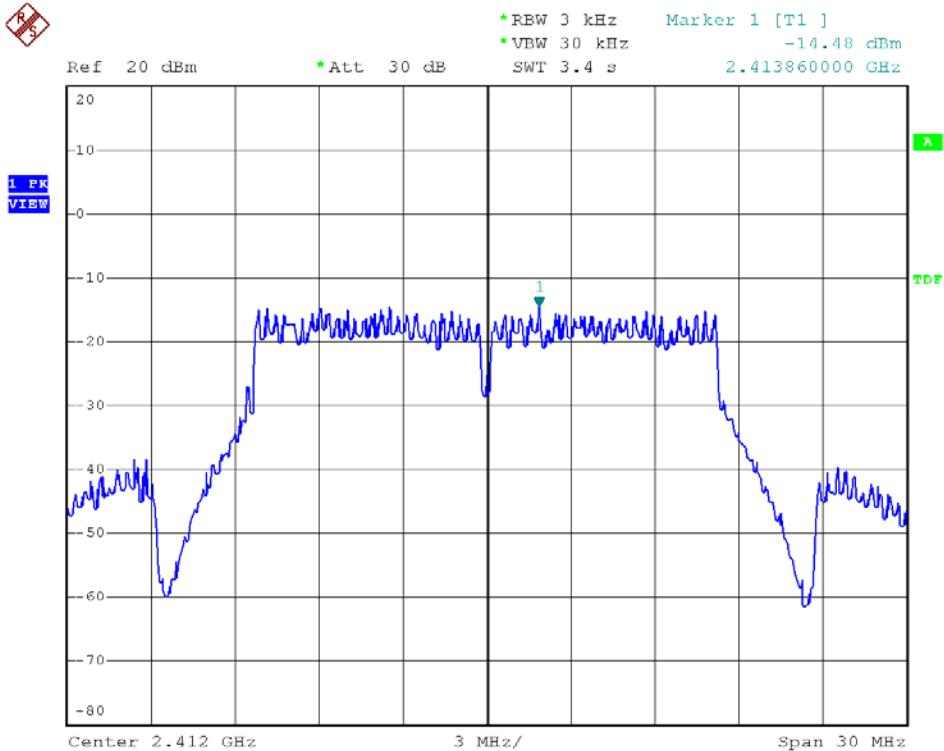




Modulation Standard: 802.11g (6Mbps), ANT M  
Channel: 01

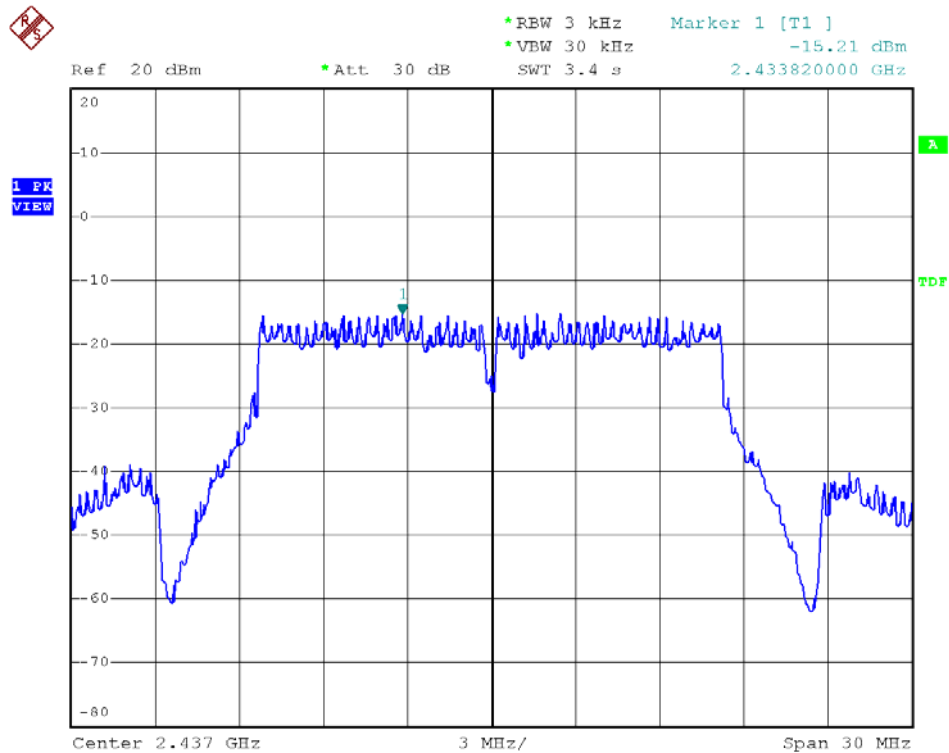


Modulation Standard: 802.11g (6Mbps), ANT L  
Channel: 01

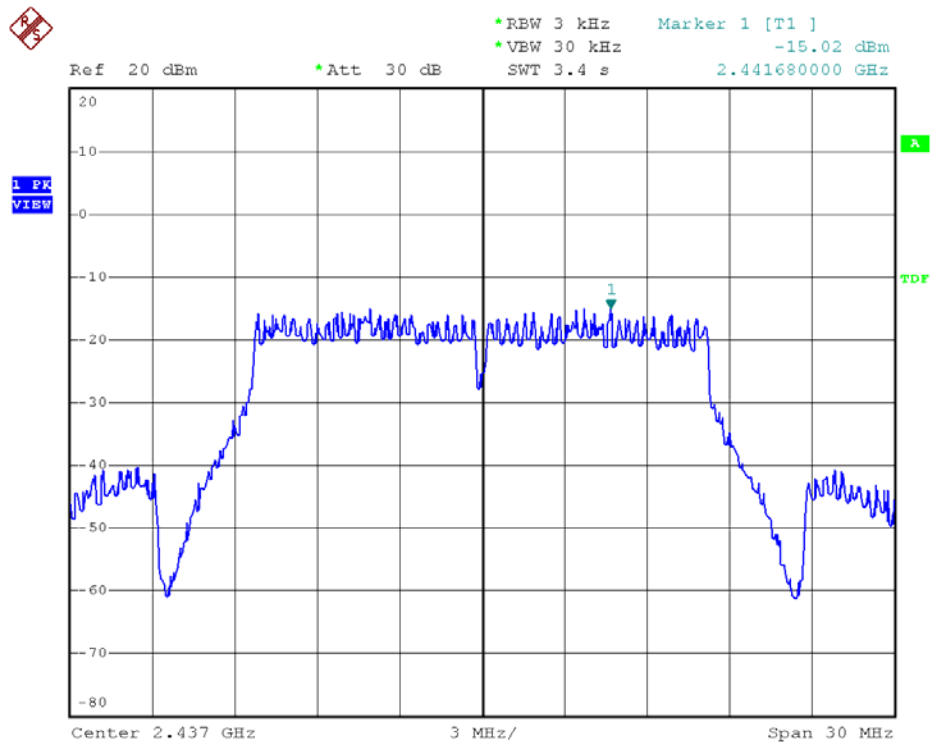




Modulation Standard: 802.11g (6Mbps), ANT R  
Channel: 06

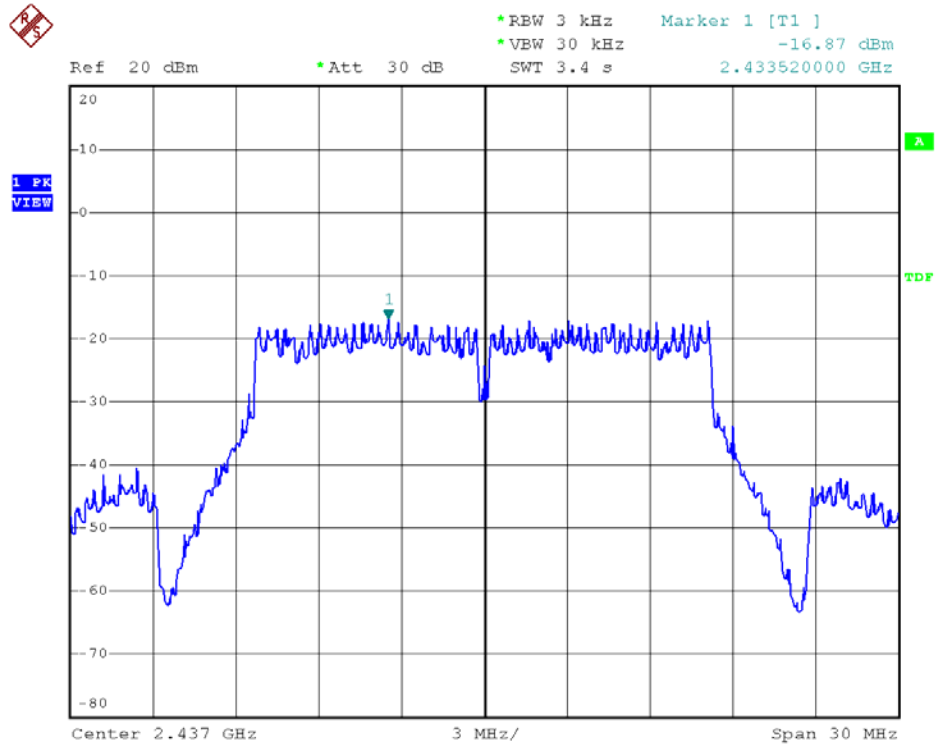


Modulation Standard: 802.11g (6Mbps), ANT M  
Channel: 06

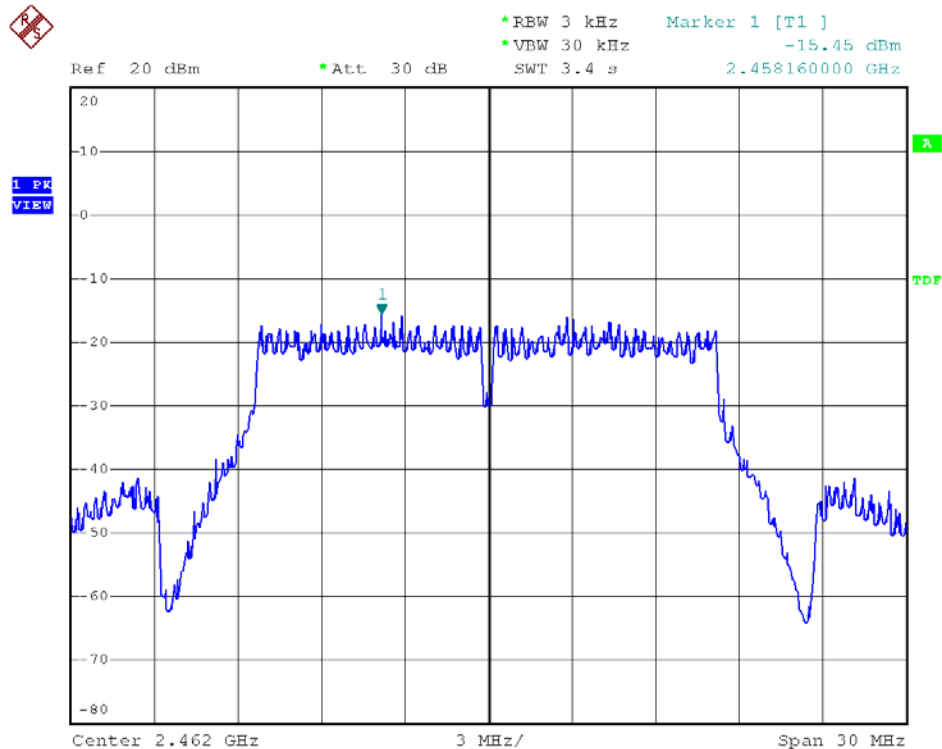




Modulation Standard: 802.11g (6Mbps), ANT L  
Channel: 06

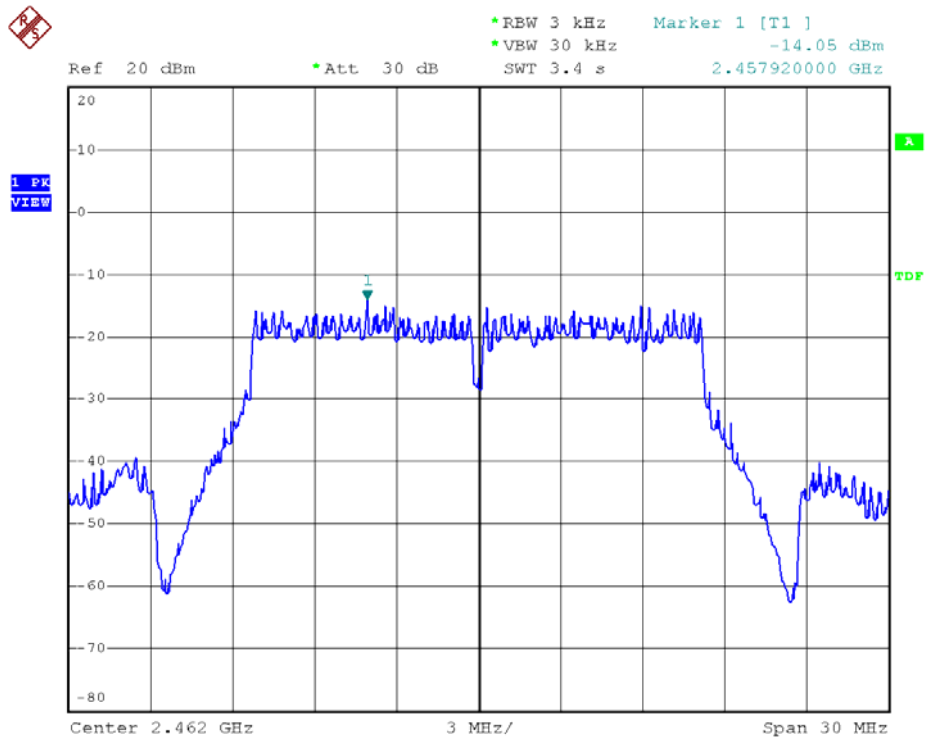


Modulation Standard: 802.11g (6Mbps), ANT R  
Channel: 11

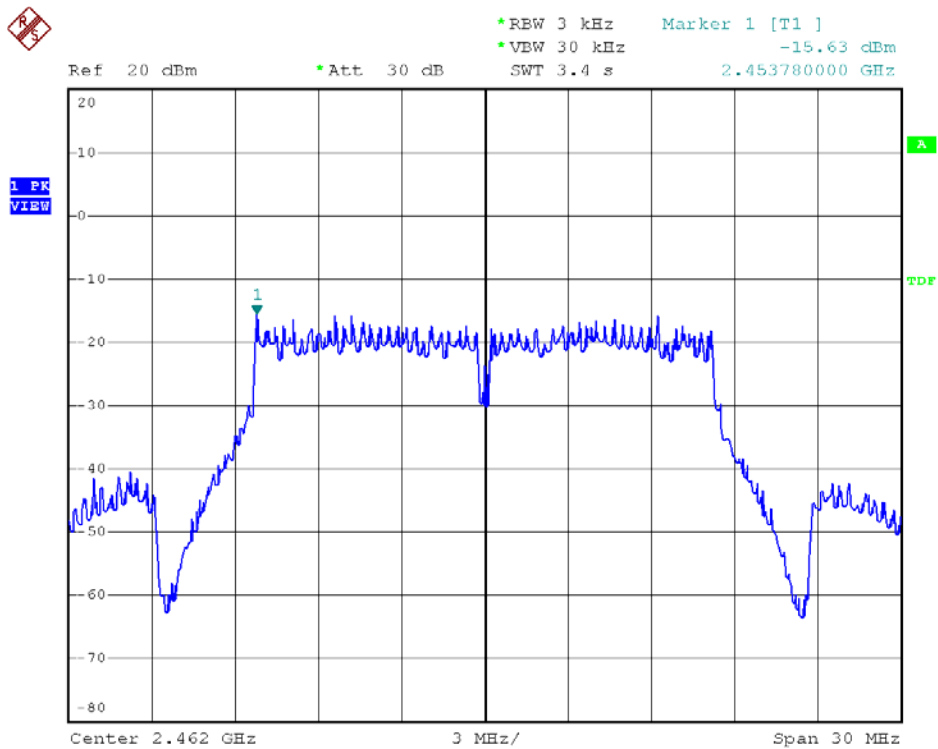




Modulation Standard: 802.11g (6Mbps), ANT M  
Channel: 11

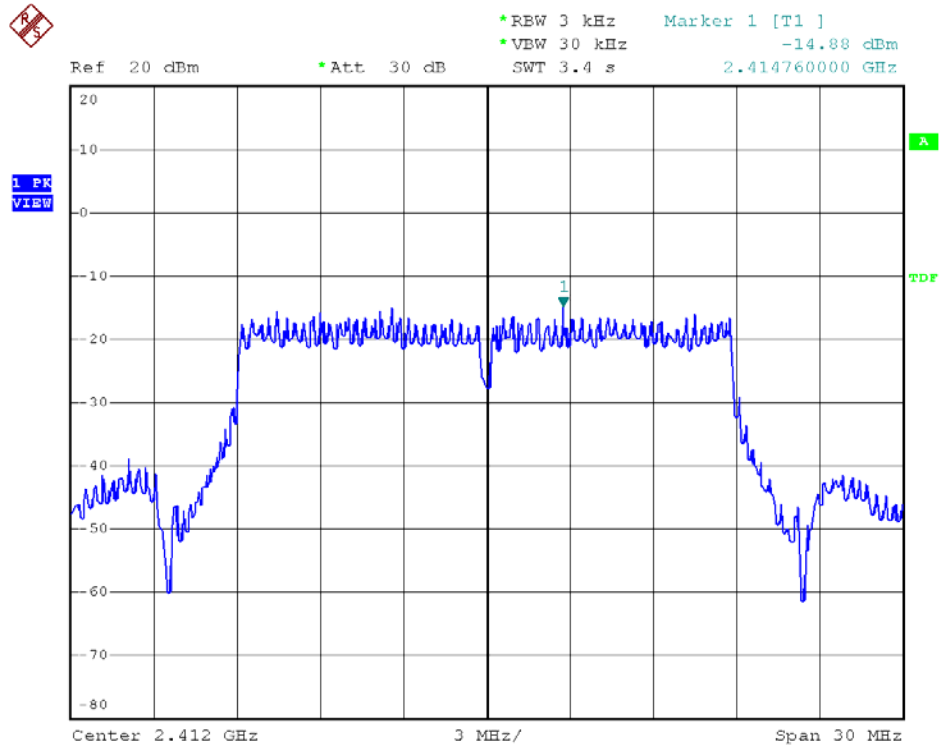


Modulation Standard: 802.11g (6Mbps), ANT L  
Channel: 11

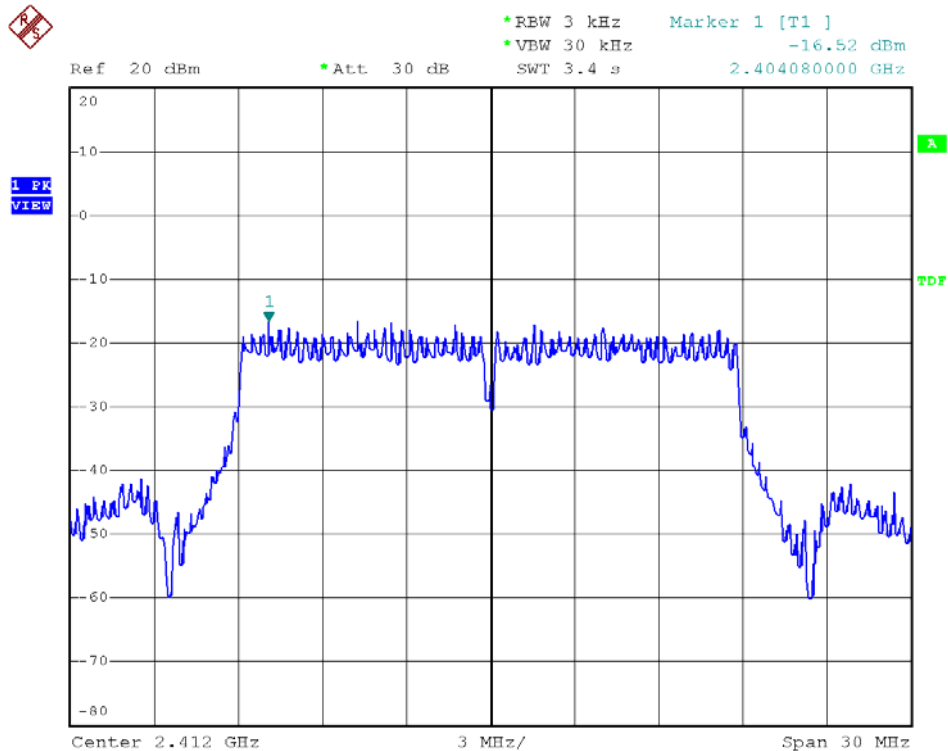




Modulation Standard: 802.11n HT20 (6.5Mbps), ANT R  
Channel: 01

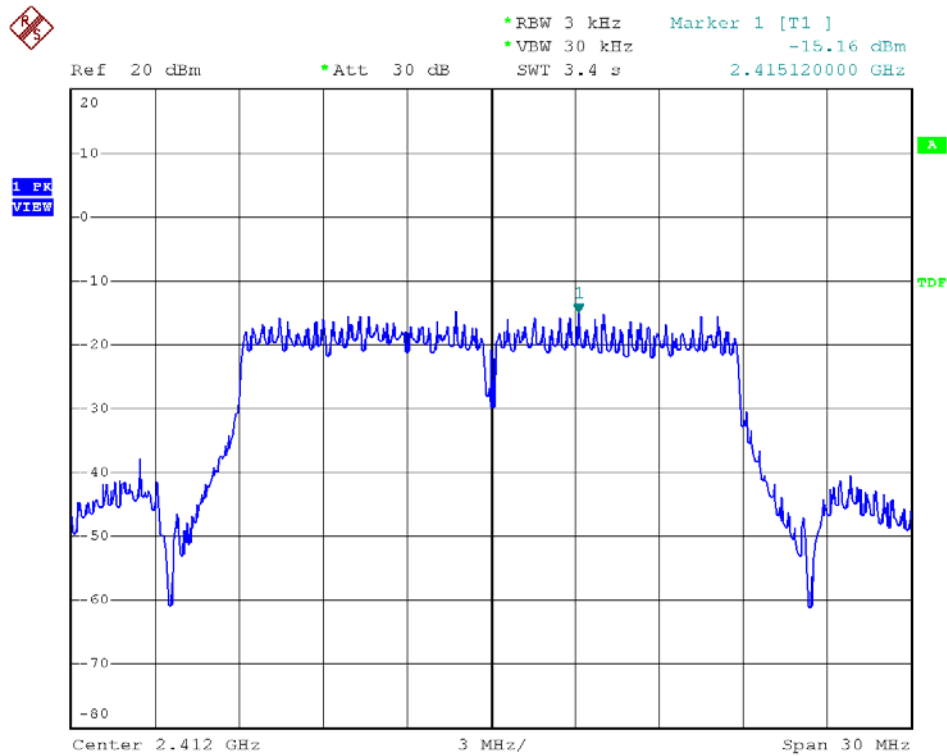


Modulation Standard: 802.11n HT20 (6.5Mbps), ANT M  
Channel: 01

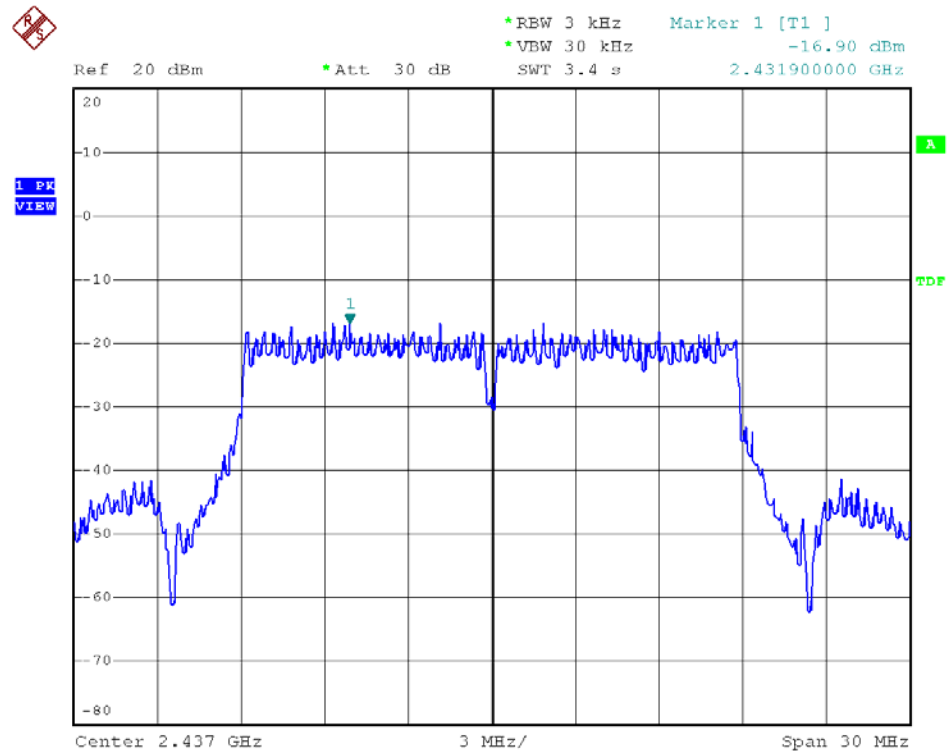




Modulation Standard: 802.11n HT20 (6.5Mbps), ANT L  
Channel: 01



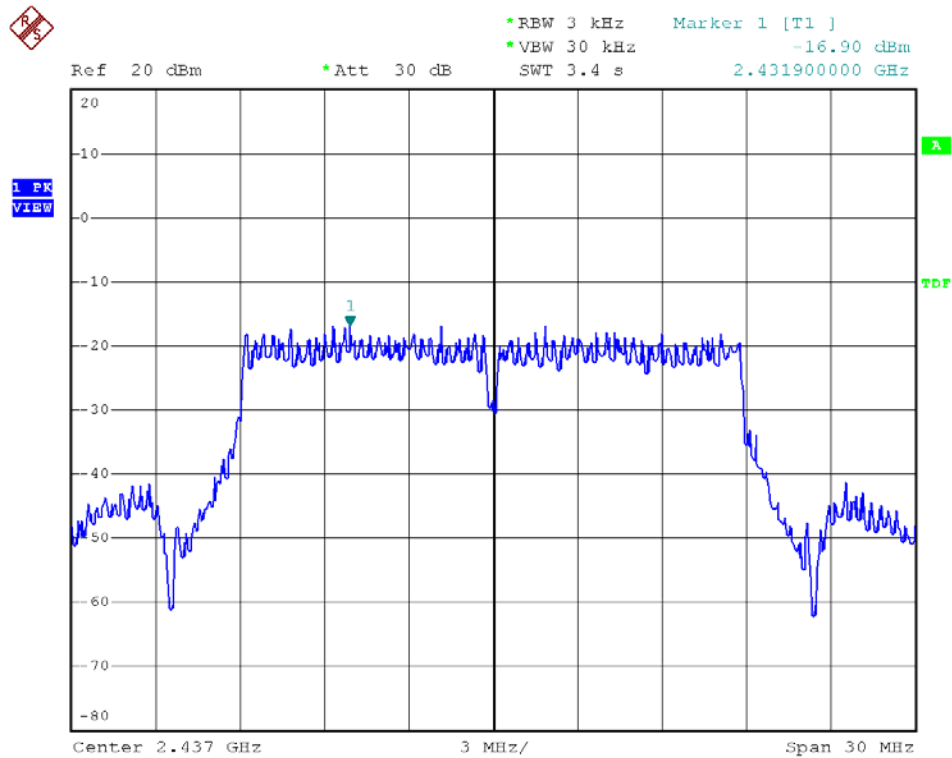
Modulation Standard: 802.11n HT20 (6.5Mbps), ANT R  
Channel: 06



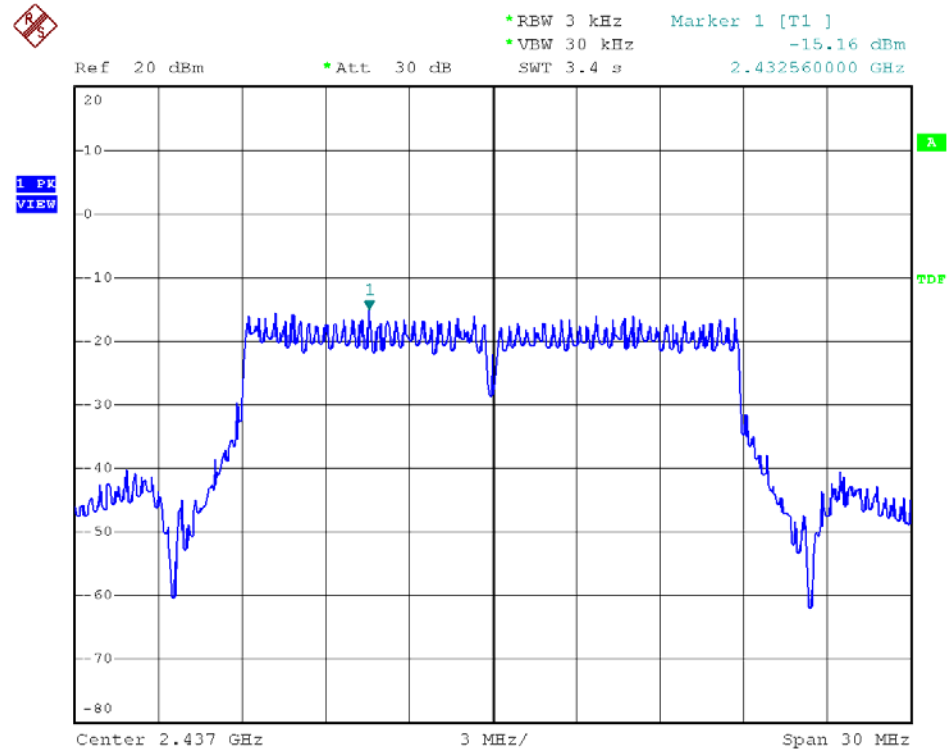




Modulation Standard: 802.11n HT20 (6.5Mbps), ANT M  
Channel: 06

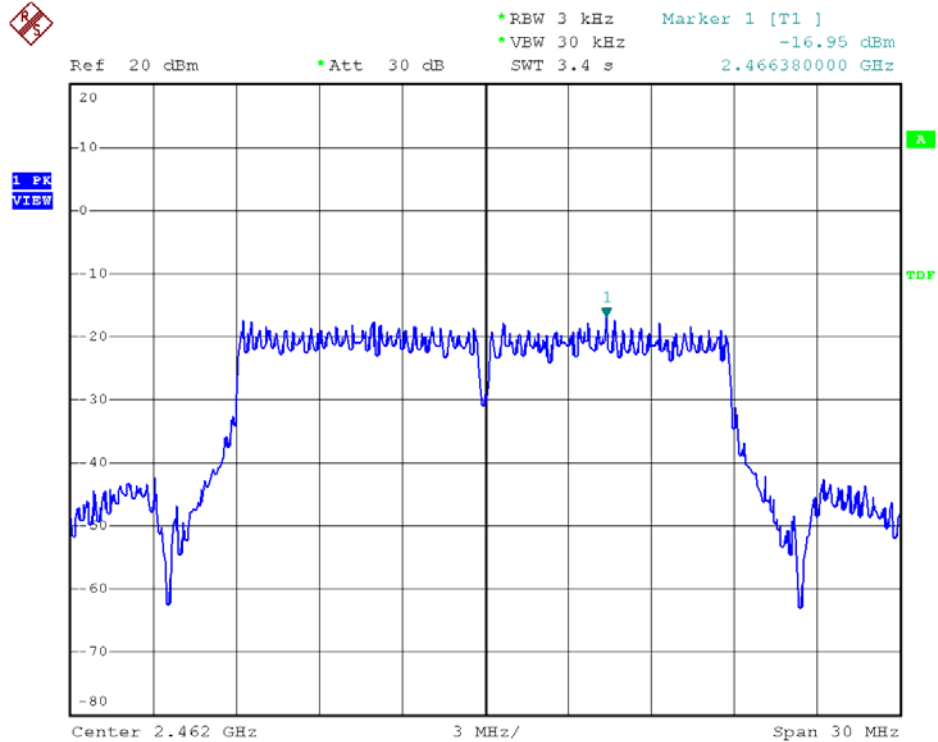


Modulation Standard: 802.11n HT20 (6.5Mbps), ANT L  
Channel: 06

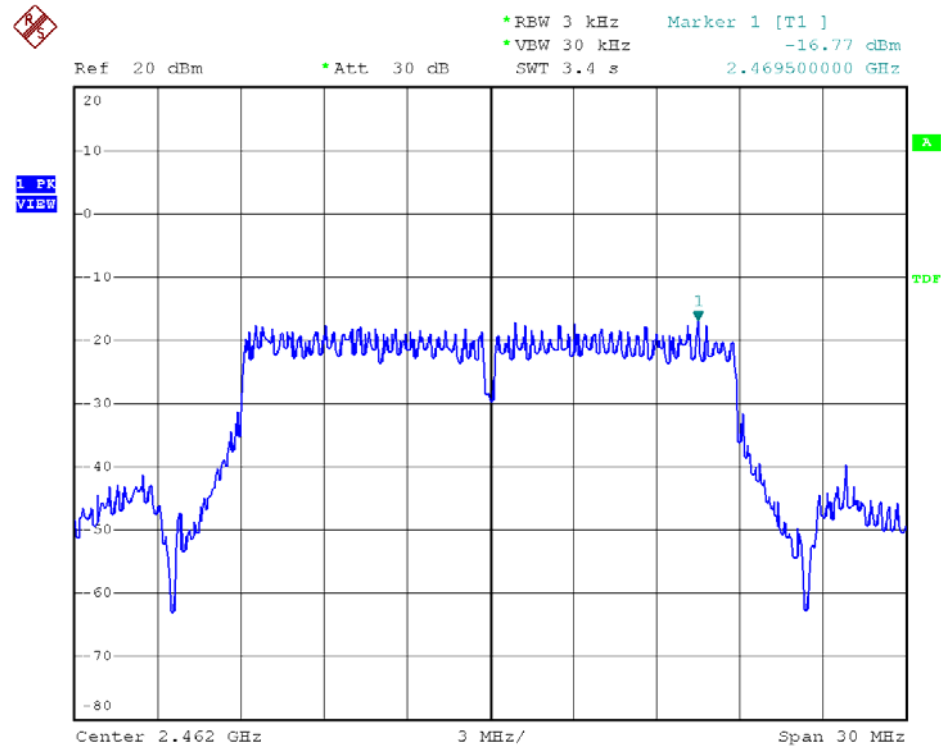




Modulation Standard: 802.11n HT20 (6.5Mbps), ANT R  
Channel: 11

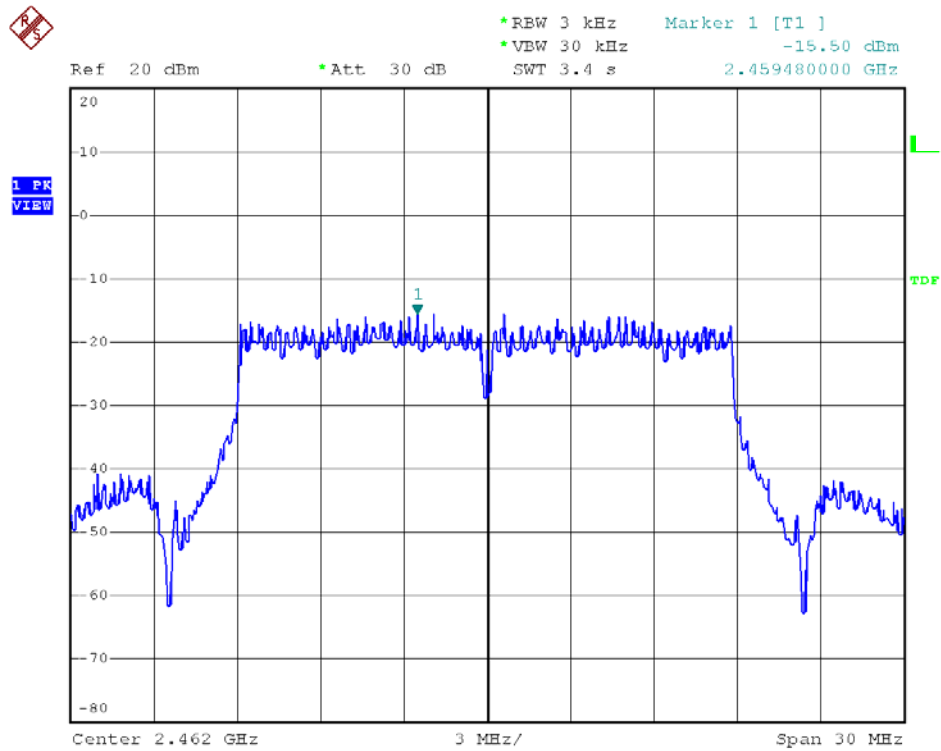


Modulation Standard: 802.11n HT20 (6.5Mbps), ANT M  
Channel: 11

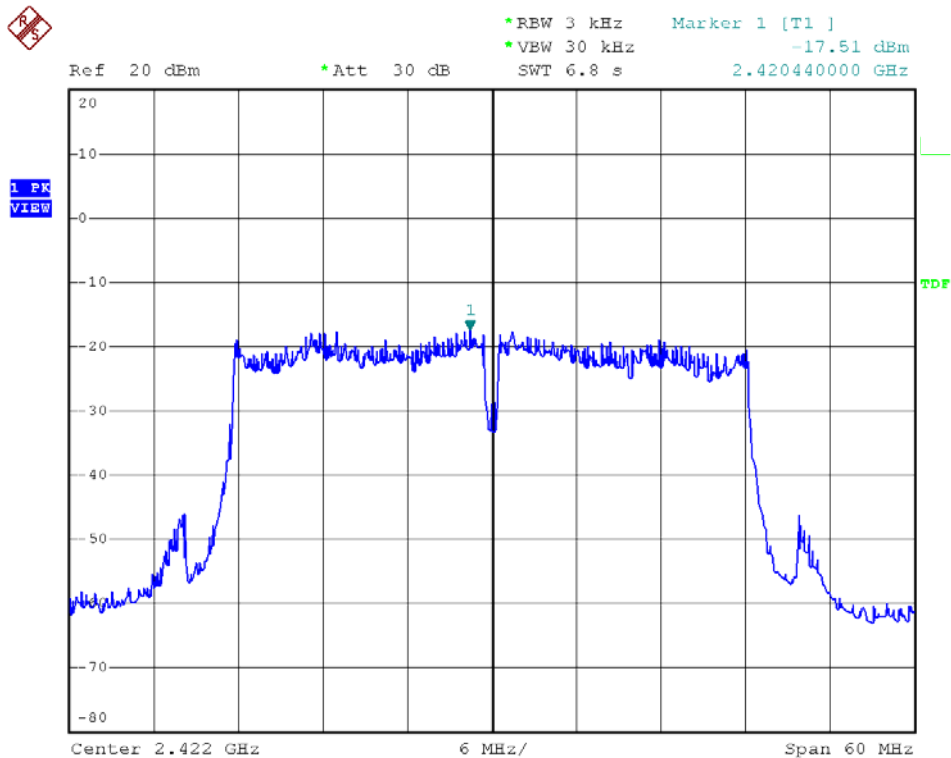




Modulation Standard: 802.11n HT20 (6.5Mbps), ANT L  
Channel: 11

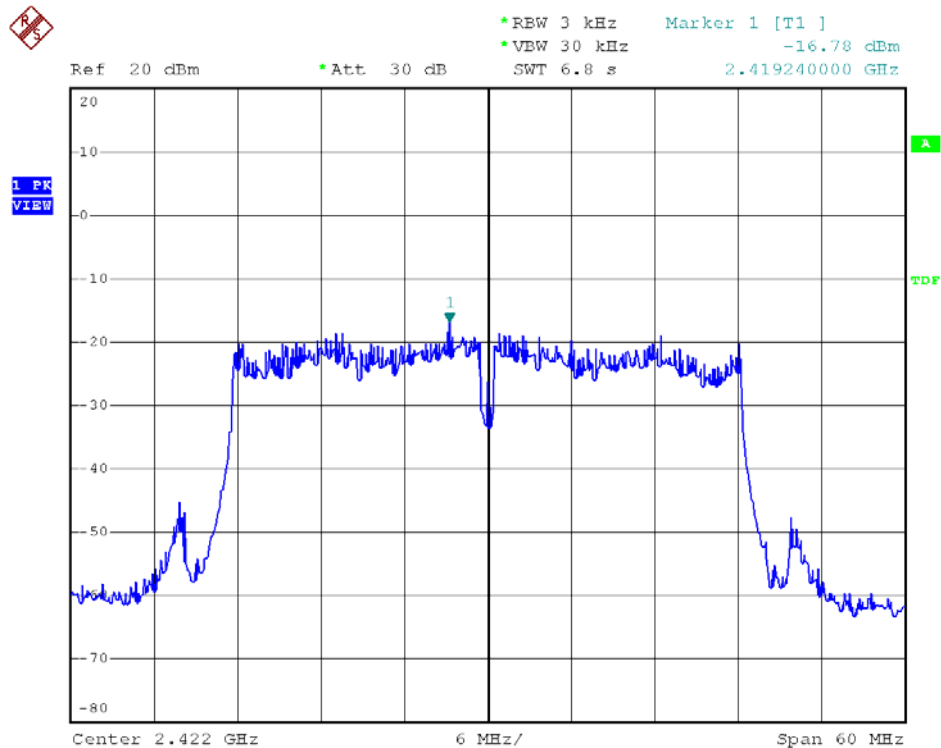


Modulation Standard: 802.11n HT40 (13.5Mbps), ANT R  
Channel: 03

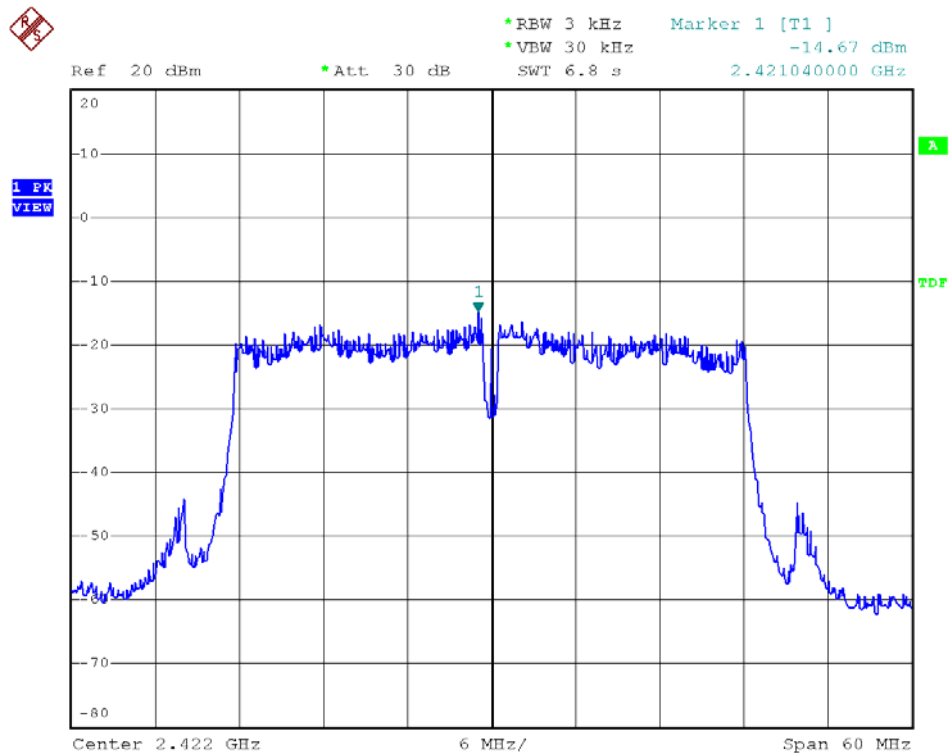




Modulation Standard: 802.11n HT40 (13.5Mbps), ANT M  
Channel: 03

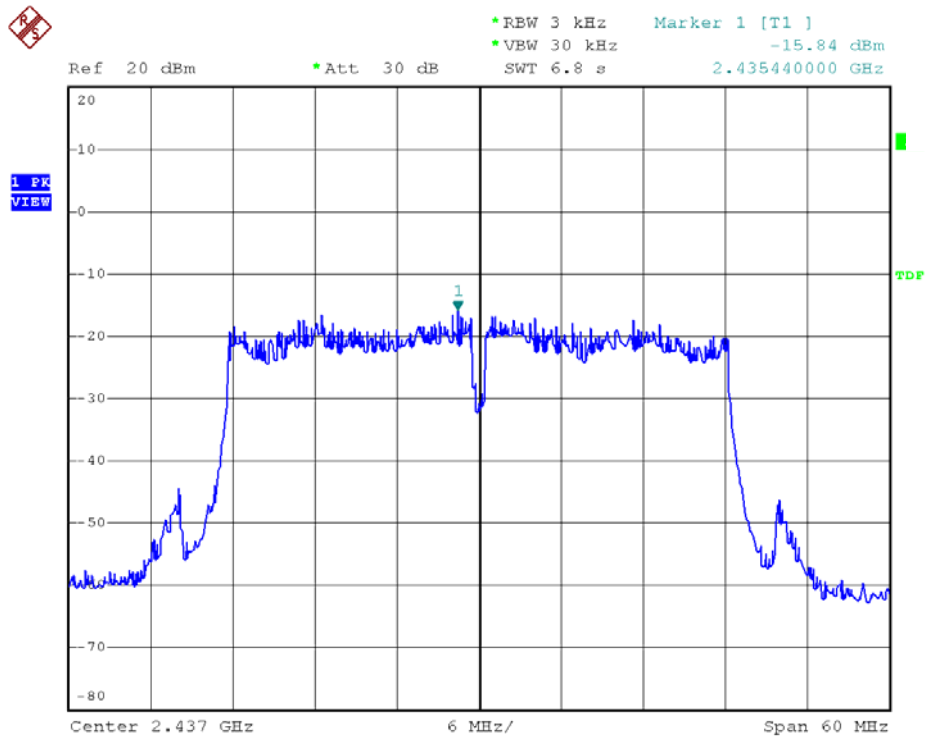


Modulation Standard: 802.11n HT40 (13.5Mbps), ANT L  
Channel: 03

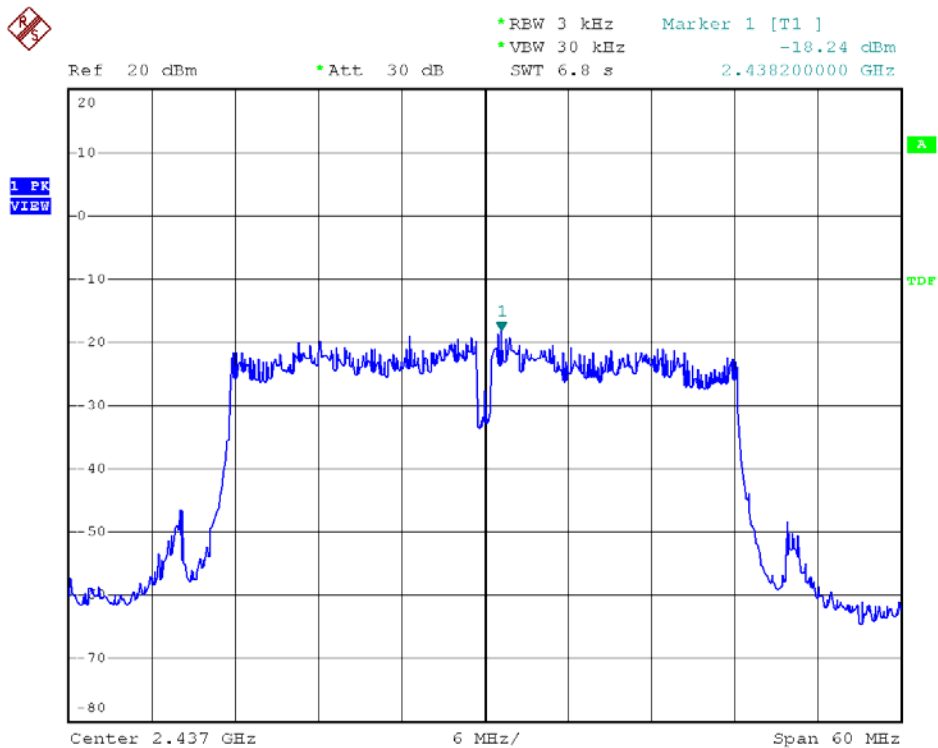




Modulation Standard: 802.11n HT40 (13.5Mbps), ANT R  
Channel: 06

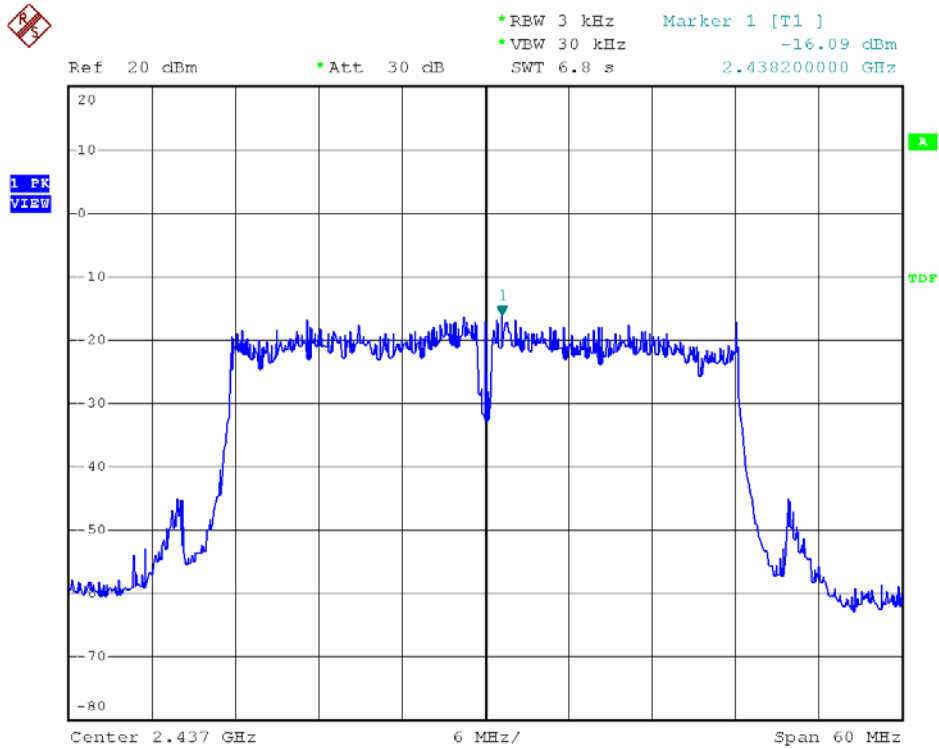


Modulation Standard: 802.11n HT40 (13.5Mbps), ANT M  
Channel: 06

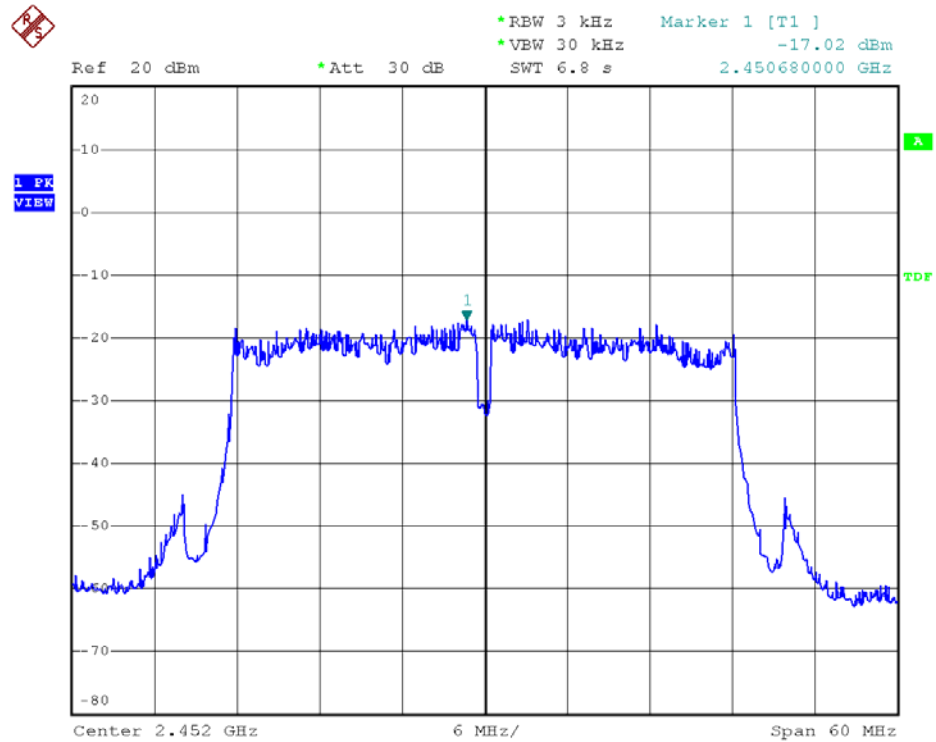




Modulation Standard: 802.11n HT40 (13.5Mbps), ANT L  
Channel: 06

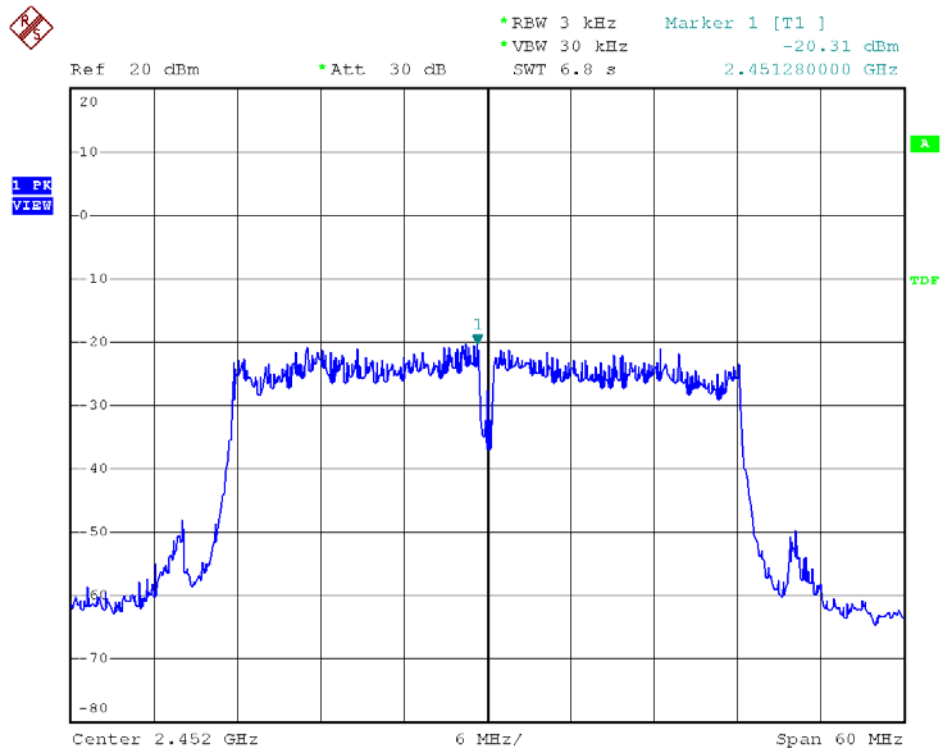


Modulation Standard: 802.11n HT40 (13.5Mbps), ANT R  
Channel: 09

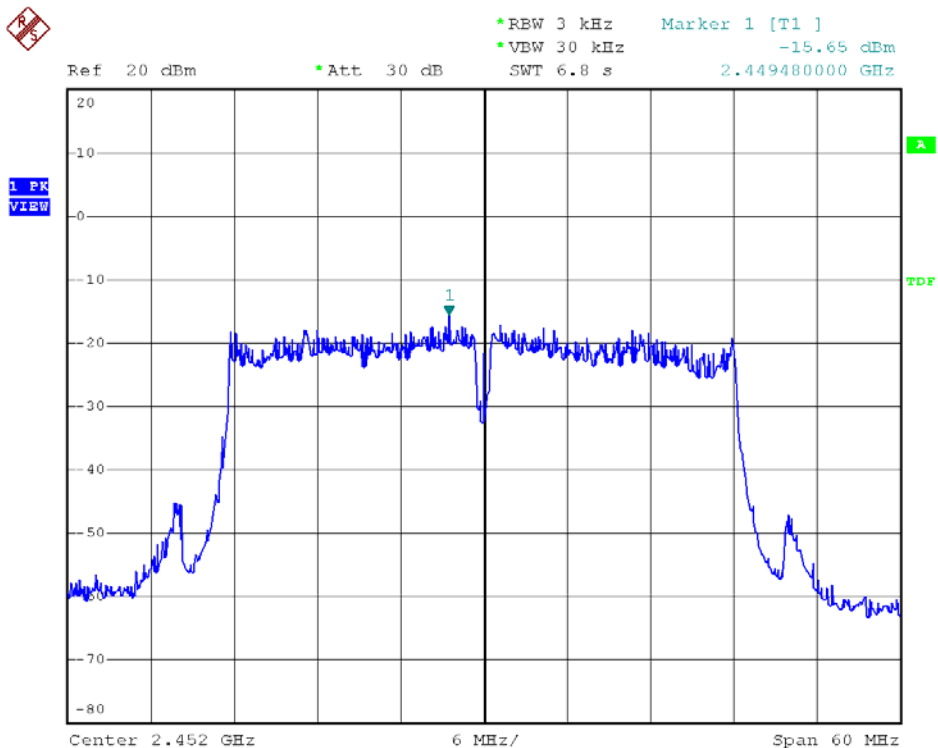




Modulation Standard: 802.11n HT40 (13.5Mbps), ANT M  
Channel: 09

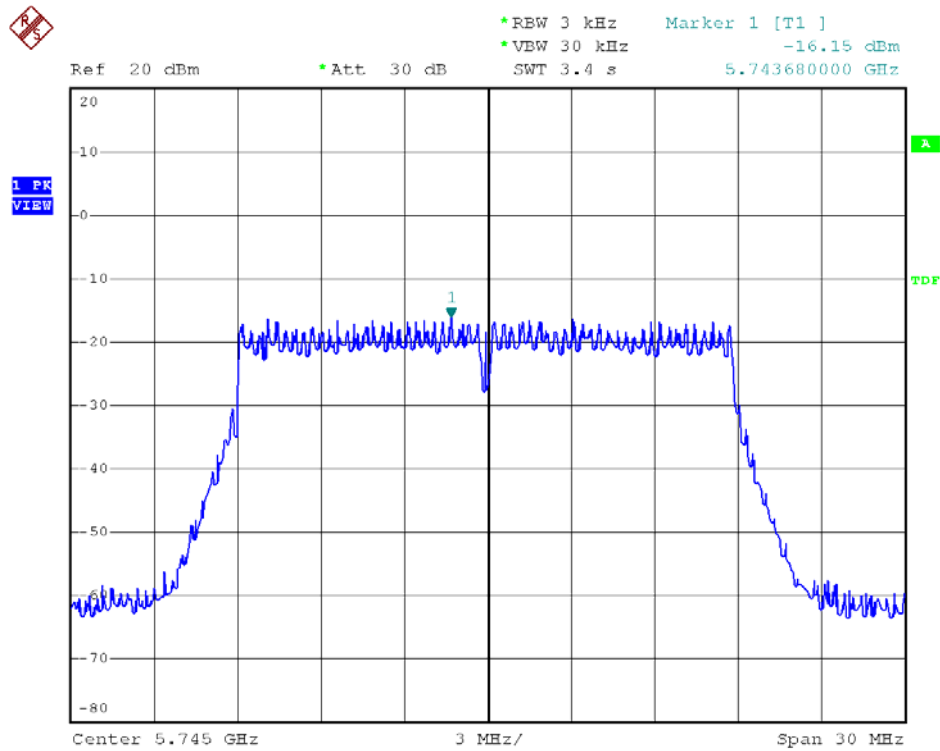


Modulation Standard: 802.11n HT40 (13.5Mbps), ANT L  
Channel: 09

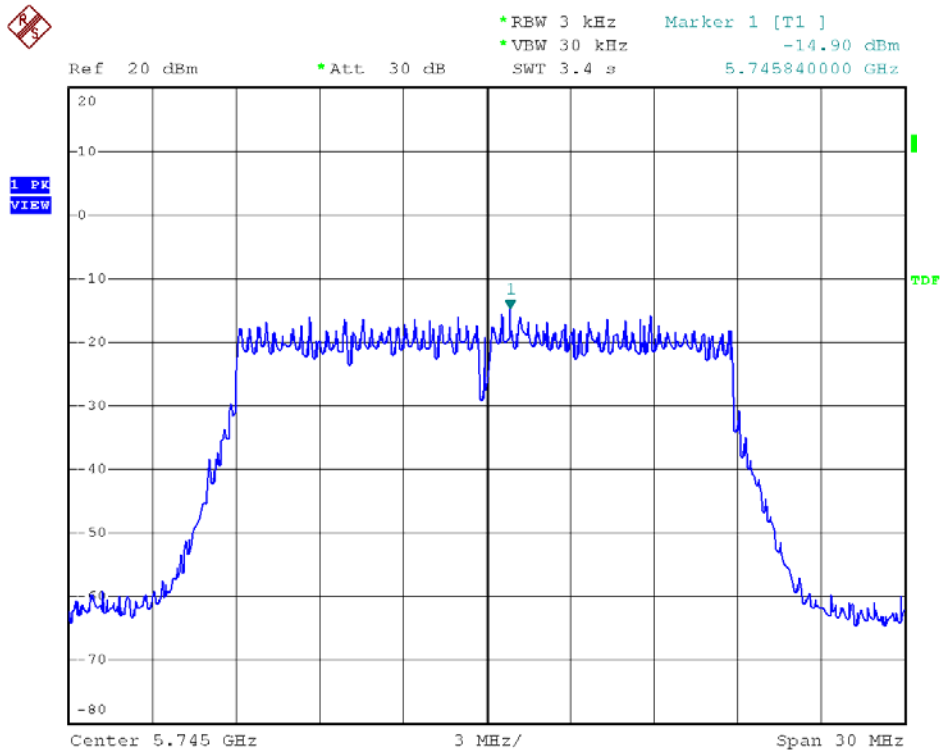




Modulation Standard: 802.11ac VHT20 (6.5Mbps), ANT R  
Channel: 149



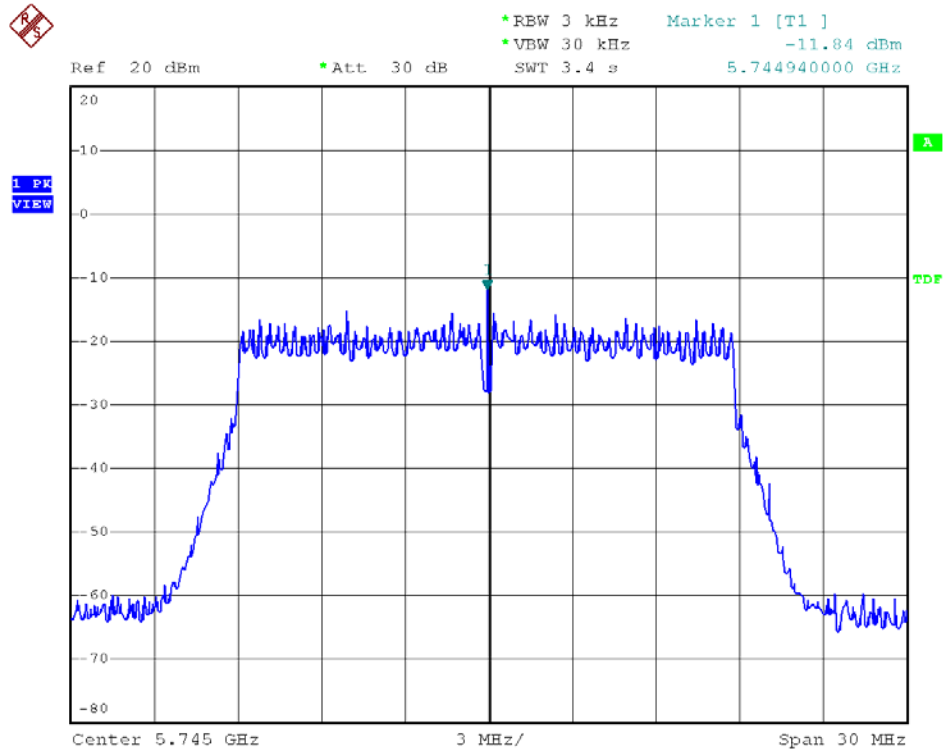
Modulation Standard: 802.11ac VHT20 (6.5Mbps), ANT M  
Channel: 149



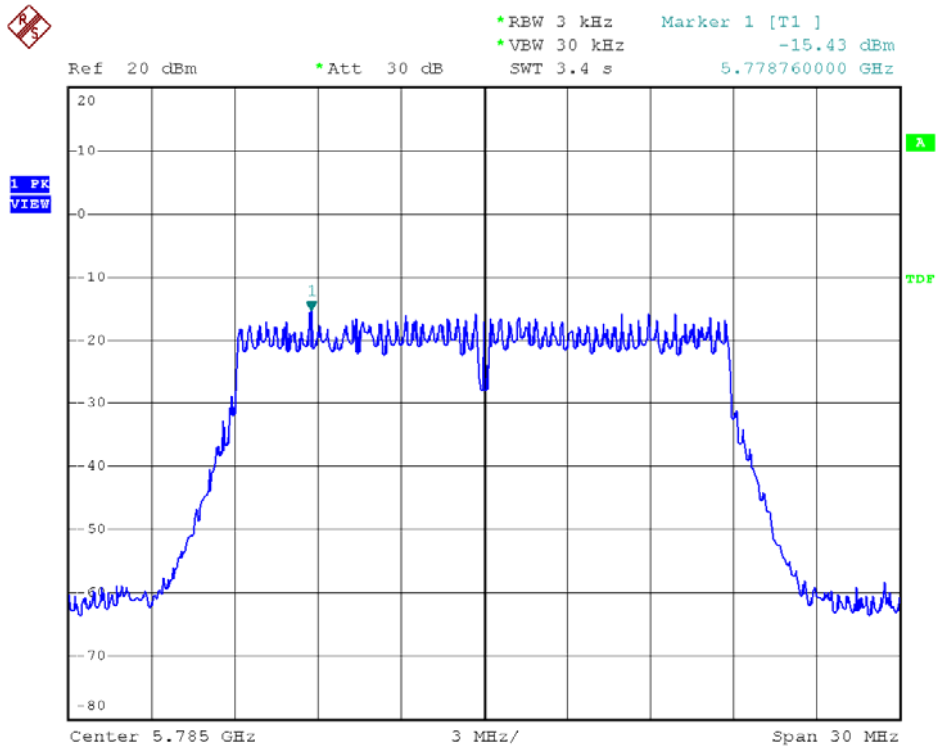




Modulation Standard: 802.11ac VHT20 (6.5Mbps), ANT L  
Channel: 149

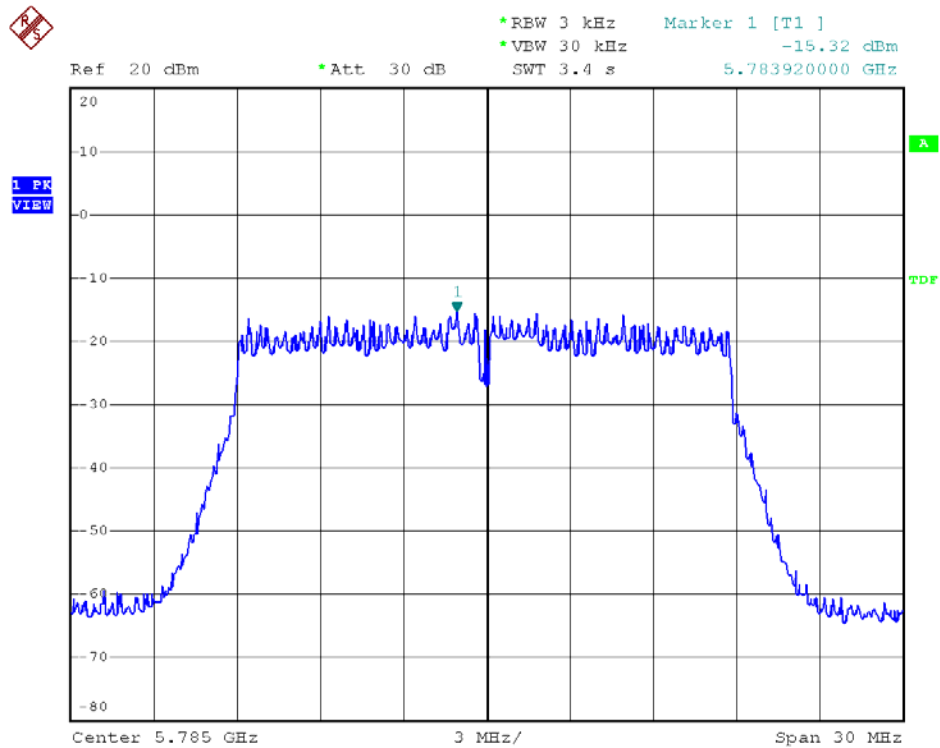


Modulation Standard: 802.11ac VHT20 (6.5Mbps), ANT R  
Channel: 157

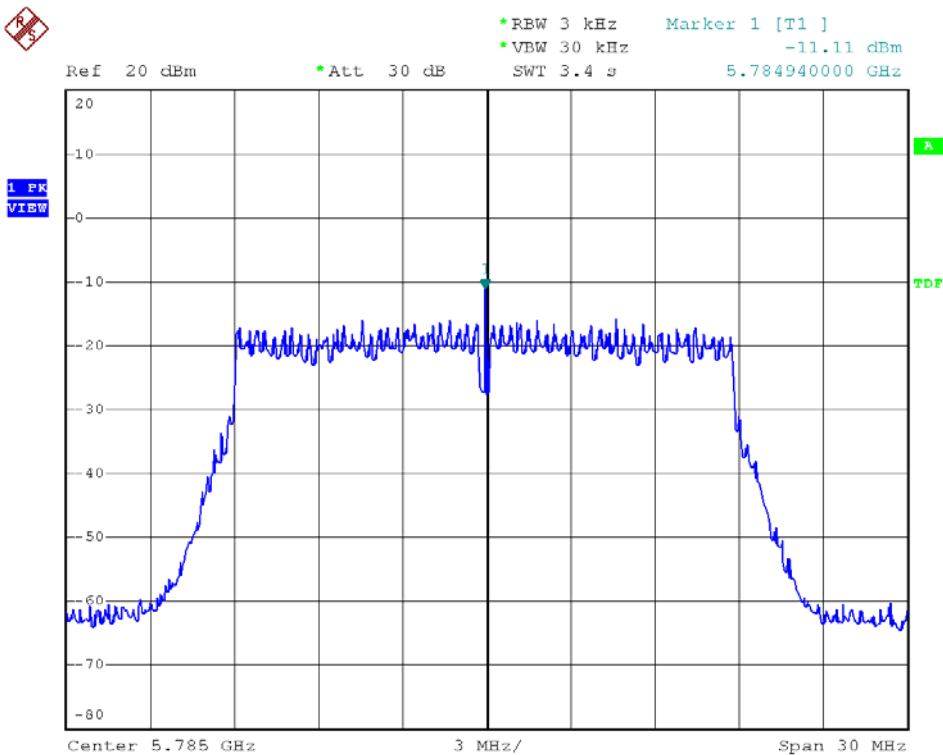




Modulation Standard: 802.11ac VHT20 (6.5Mbps), ANT M  
Channel: 157

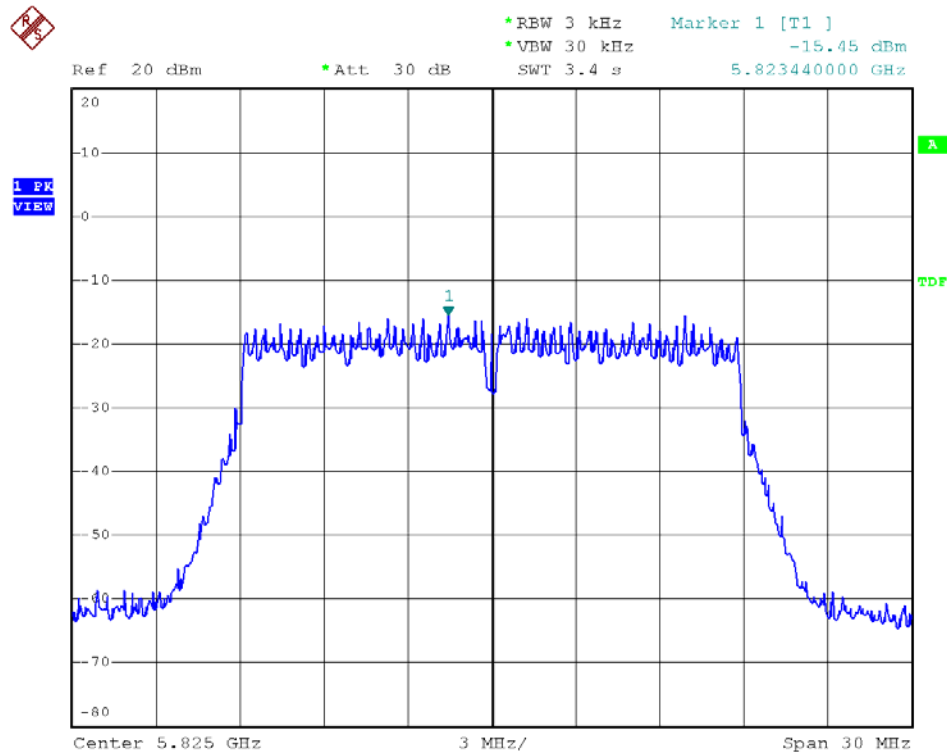


Modulation Standard: 802.11ac VHT20 (6.5Mbps), ANT L  
Channel: 157

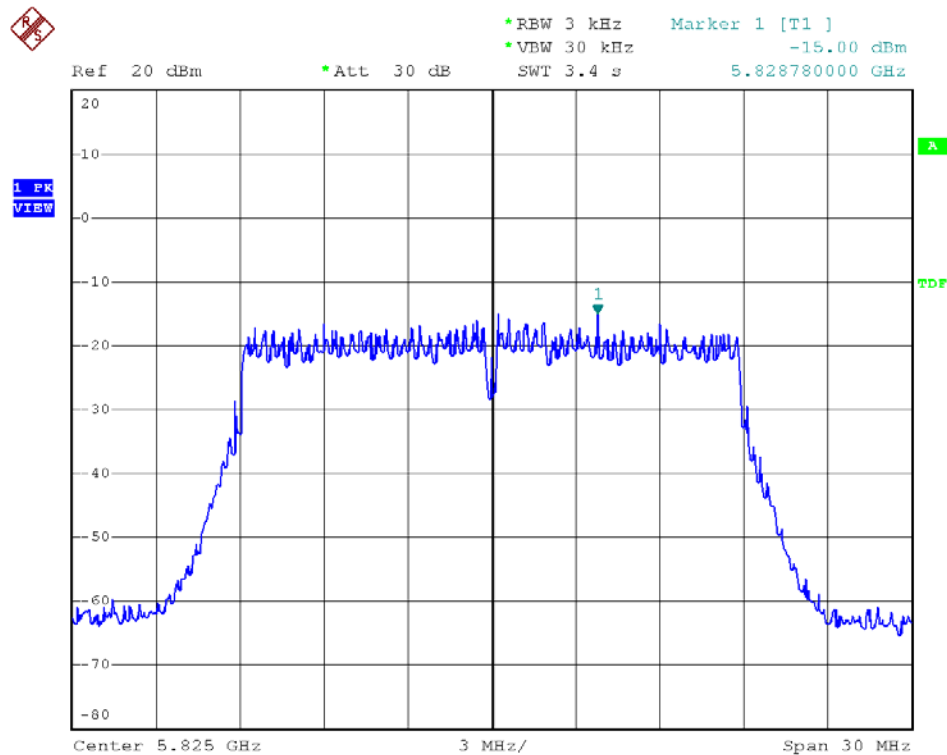




Modulation Standard: 802.11ac VHT20 (6.5Mbps), ANT R  
Channel: 165

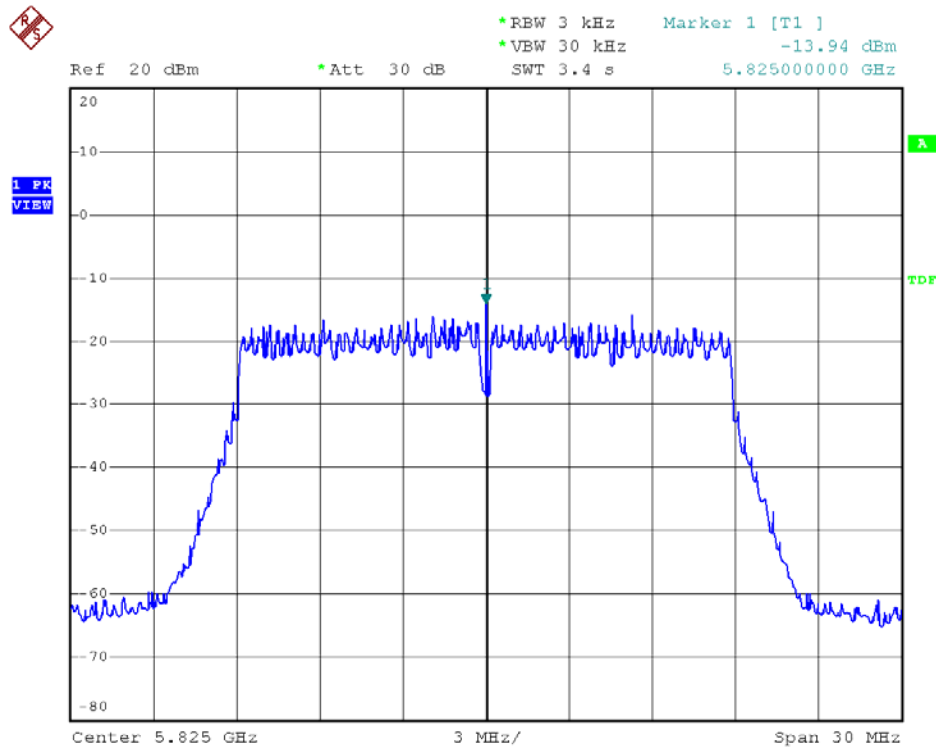


Modulation Standard: 802.11ac VHT20 (6.5Mbps), ANT M  
Channel: 165

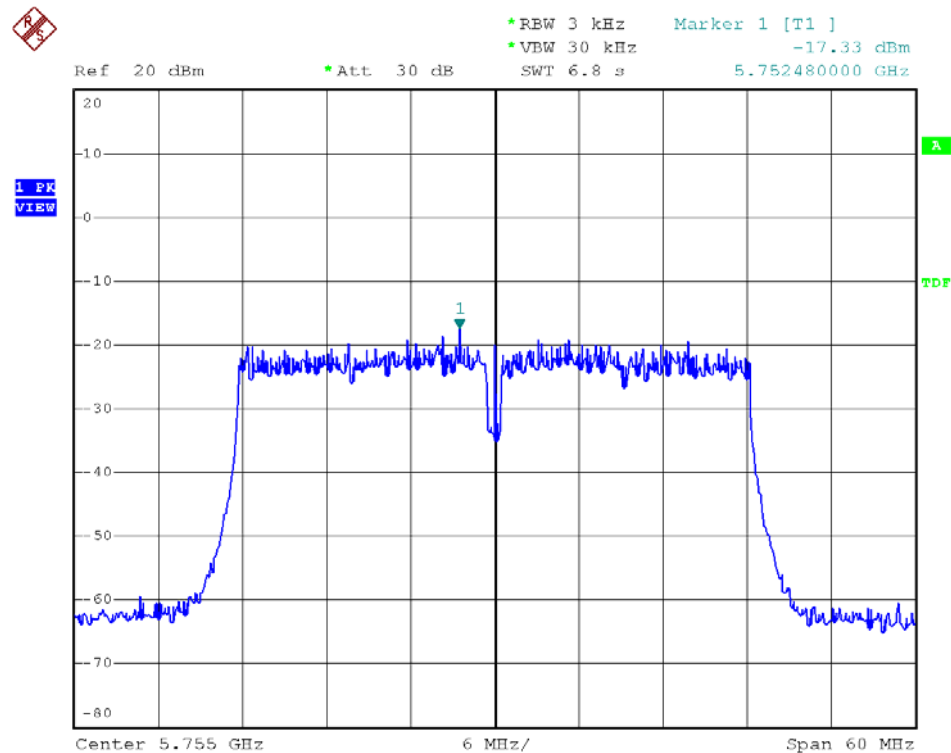




Modulation Standard: 802.11ac VHT20 (6.5Mbps), ANT L  
Channel: 165

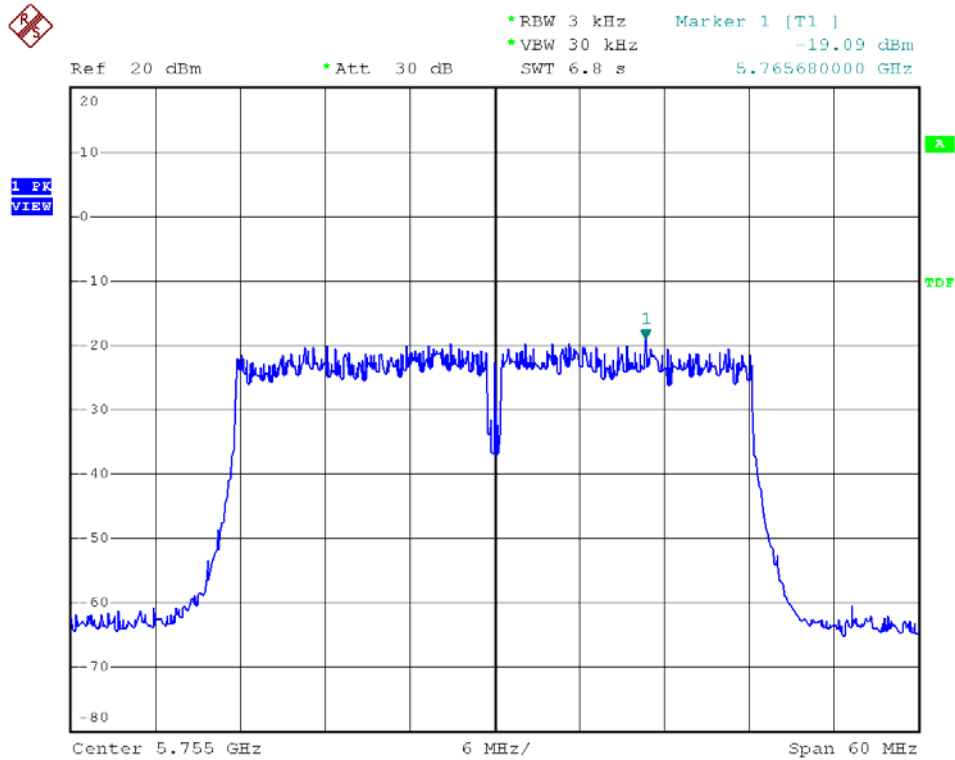


Modulation Standard: 802.11ac VHT40 (13.5Mbps), ANT R  
Channel: 151

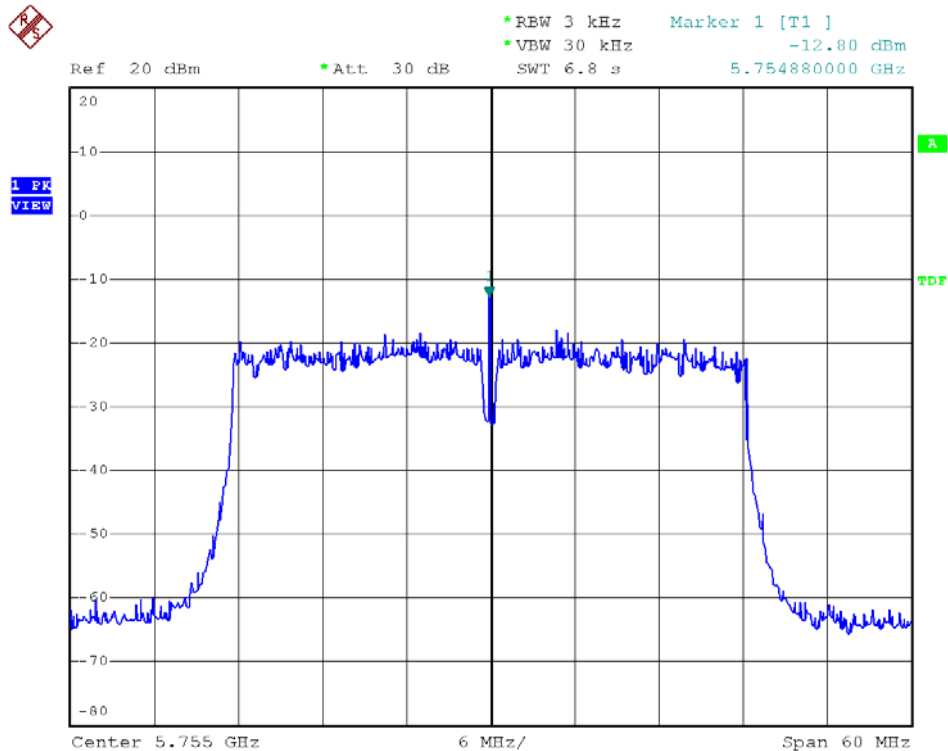




Modulation Standard: 802.11ac VHT40 (13.5Mbps), ANT M  
Channel: 151

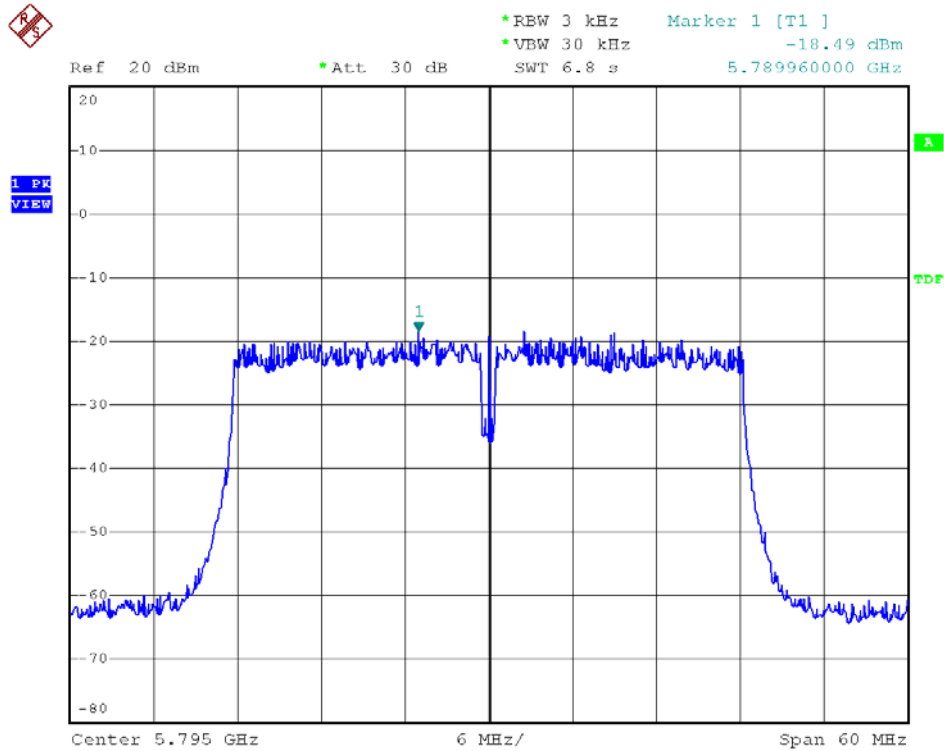


Modulation Standard: 802.11ac VHT40 (13.5Mbps), ANT L  
Channel: 151

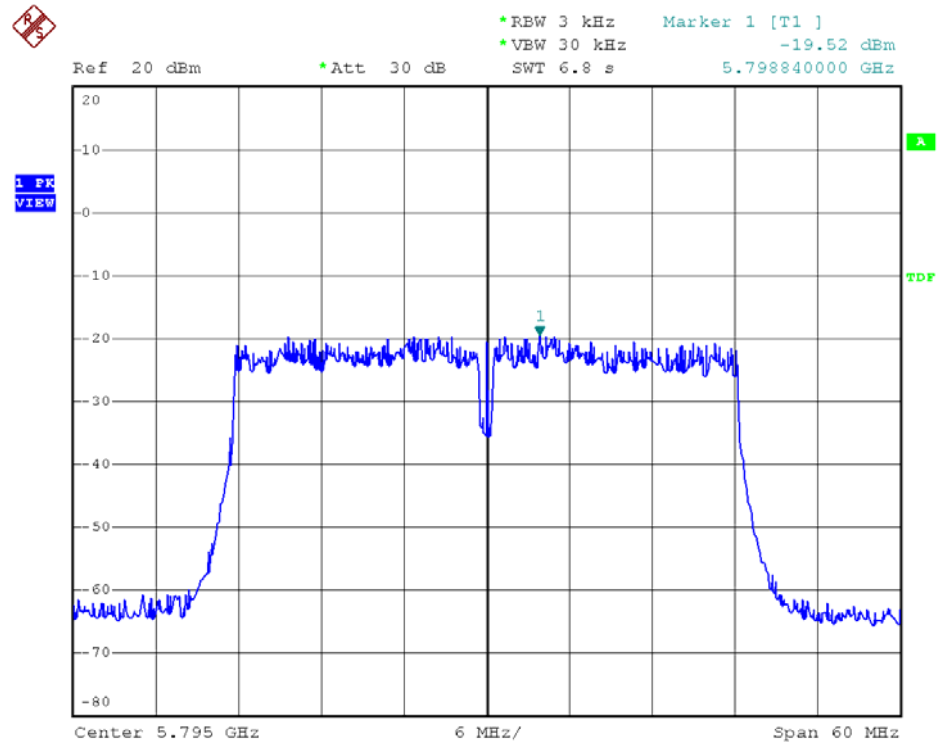




Modulation Standard: 802.11ac VHT40 (13.5Mbps), ANT R  
Channel: 159

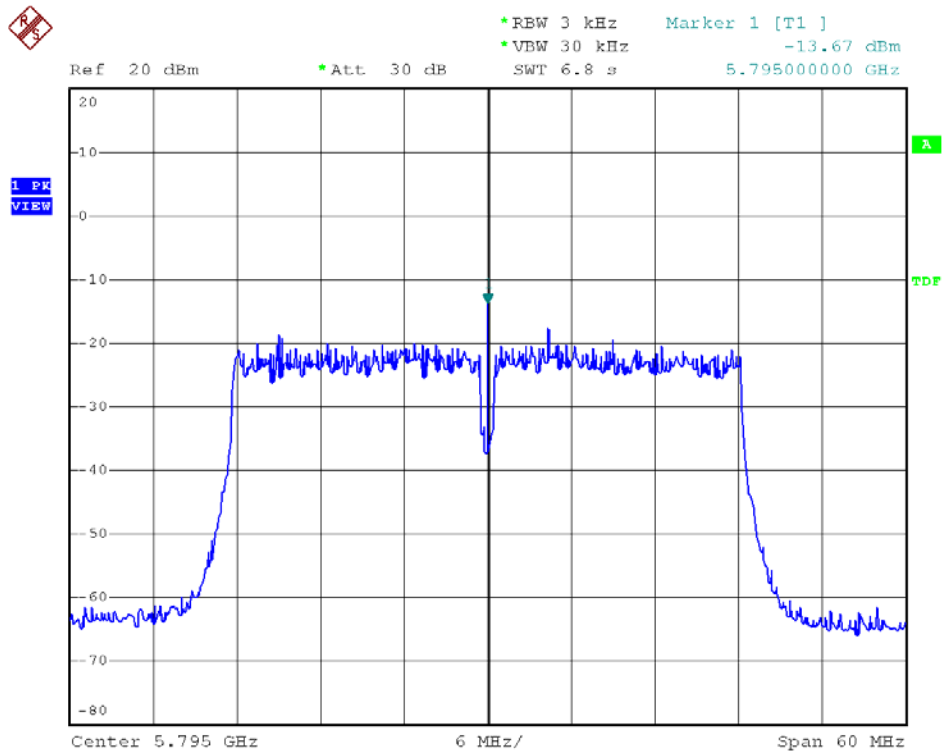


Modulation Standard: 802.11ac VHT40 (13.5Mbps), ANT M  
Channel: 159

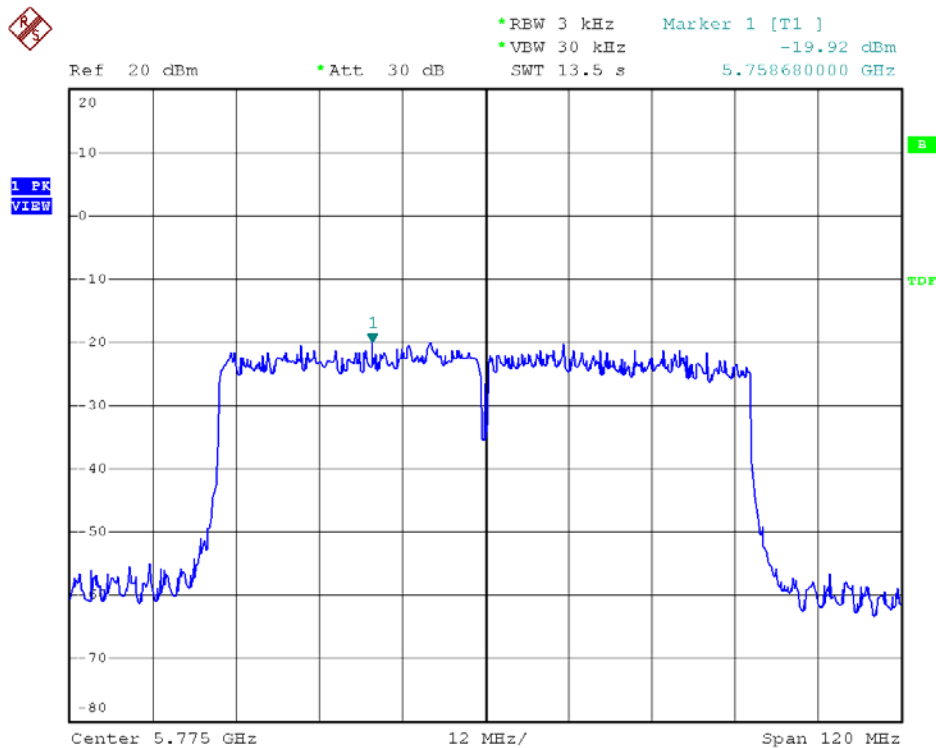




Modulation Standard: 802.11ac VHT40 (13.5Mbps), ANT L  
Channel: 159

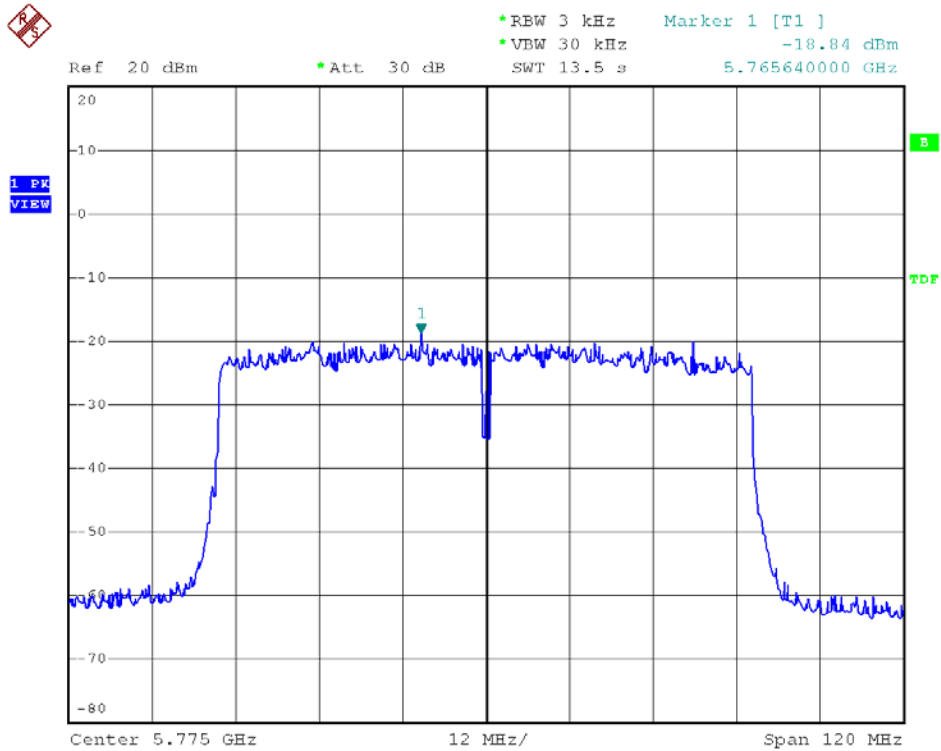


Modulation Standard: 802.11ac VHT80 (29.3Mbps), ANT R  
Channel: 155

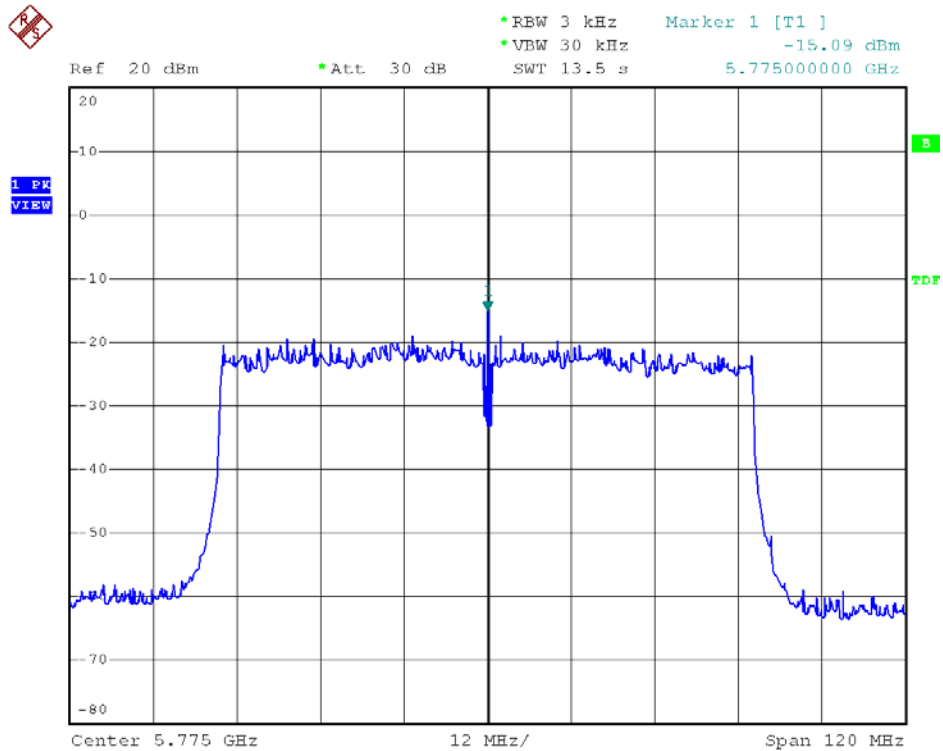




Modulation Standard: 802.11ac VHT80 (29.3Mbps), ANT M  
Channel: 155



Modulation Standard: 802.11ac VHT80 (29.3Mbps), ANT R  
Channel: 155







## 9. Band Edges Measurement

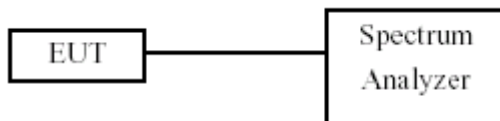
### 9.1 Test Limit

Below -20dB of the highest emission level of operating band (In 100 kHz Resolution Bandwidth)

### 9.2 Test Procedure

- The transmitter output was connected to the spectrum analyzer via a low lose cable.
- Set RBW of spectrum analyzer to 100 KHz and VBW of spectrum analyzer to 300 KHz with convenient frequency span including 100 KHz bandwidth from band edge.
- The band edges was measured and recorded.

### 9.3 Test Setup Layout



### 9.4 Measurement Equipment

| Instrument/Ancillary | Manufacturer | Model No. | Serial No. | Calibration Date | Valid Date |
|----------------------|--------------|-----------|------------|------------------|------------|
| Spectrum Analyzer    | R&S          | FSP40     | 100047     | 2012/03/01       | 2013/02/28 |



## 9.5 Test Result and Data

Test Date: Jan. 23, 2013

Temperature: 22°C

Atmospheric pressure: 1020 hPa

Humidity: 65%

| Modulation Standard     | Channel | Frequency (MHz) | maximum value in frequency (MHz) |         |         | maximum value (dBm) |        |        |
|-------------------------|---------|-----------------|----------------------------------|---------|---------|---------------------|--------|--------|
|                         |         |                 | ANT R                            | ANT M   | ANT L   | ANT R               | ANT M  | ANT L  |
| 802.11b (1Mbps)         | 01      | 2412            | 2371.06                          | 2357.60 | 2371.00 | -45.90              | -45.48 | -45.53 |
|                         | 11      | 2462            | 2531.10                          | 2522.10 | 2492.70 | -45.29              | -44.64 | -46.12 |
| 802.11g (6Mbps)         | 01      | 2412            | 2399.60                          | 2398.20 | 2399.60 | -24.81              | -26.90 | -24.81 |
|                         | 11      | 2462            | 2500.10                          | 2483.90 | 2483.90 | -45.16              | -44.27 | -45.19 |
| 802.11n HT20 (6.5Mbps)  | 01      | 2412            | 2399.60                          | 2399.60 | 2399.60 | -24.64              | -25.91 | -26.13 |
|                         | 11      | 2462            | 2500.10                          | 2503.30 | 2484.10 | -44.69              | -46.38 | -44.43 |
| 802.11n HT40 (13.5Mbps) | 03      | 2422            | 2400.00                          | 2400.00 | 2400.00 | -31.90              | -33.02 | -32.53 |
|                         | 09      | 2452            | 2490.50                          | 2492.30 | 2491.10 | -43.76              | -44.22 | -42.56 |

Test Date: Jan. 22, 2013

Temperature: 22°C

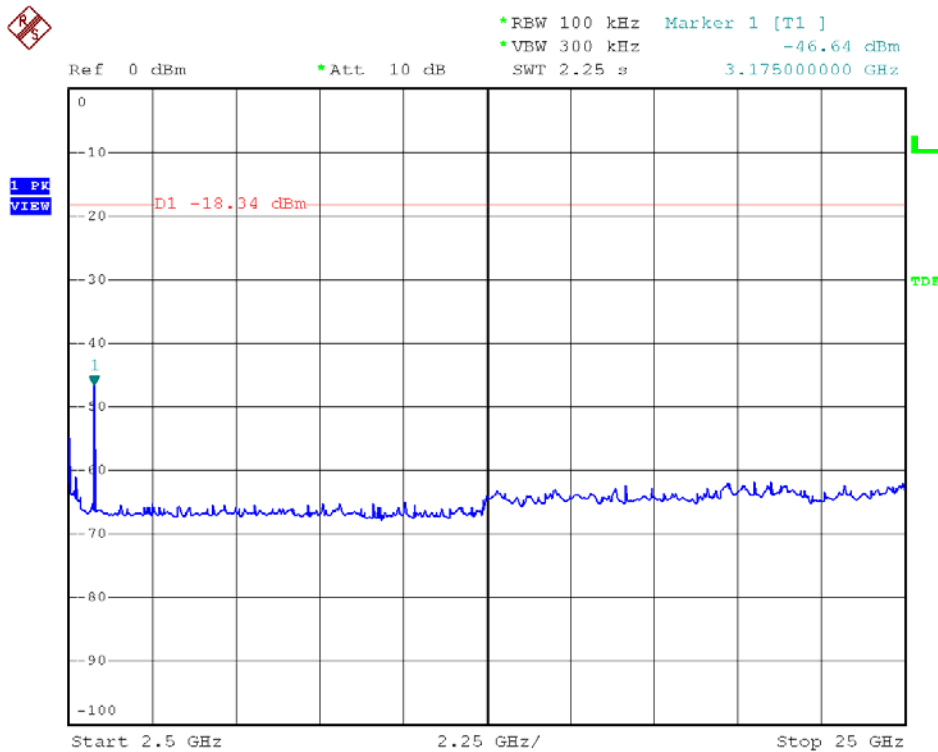
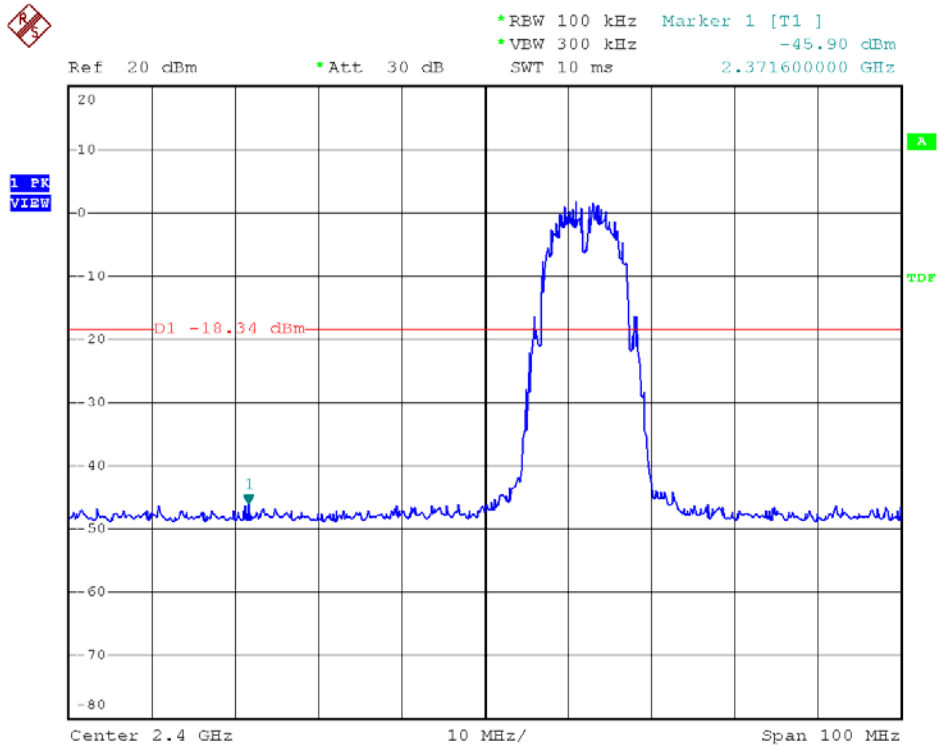
Atmospheric pressure: 1020 hPa

Humidity: 65%

| Modulation Standard      | Channel | Frequency (MHz) | maximum value in frequency (MHz) |         |         | maximum value (dBm) |        |        |
|--------------------------|---------|-----------------|----------------------------------|---------|---------|---------------------|--------|--------|
|                          |         |                 | ANT R                            | ANT M   | ANT L   | ANT R               | ANT M  | ANT L  |
| 802.11a (6.5Mbps)        | 165     | 5825            | 5897.80                          | 5891.00 | 5898.20 | -44.84              | -45.50 | -46.32 |
| 802.11an HT20 (13.5Mbps) | 159     | 5795            | 5892.00                          | 5886.80 | 5865.20 | -45.20              | -45.90 | -45.87 |
| 802.11an HT40 (29.3Mbps) | 155     | 5775            | 5854.00                          | 5861.00 | 5876.50 | -44.90              | -44.29 | -45.06 |

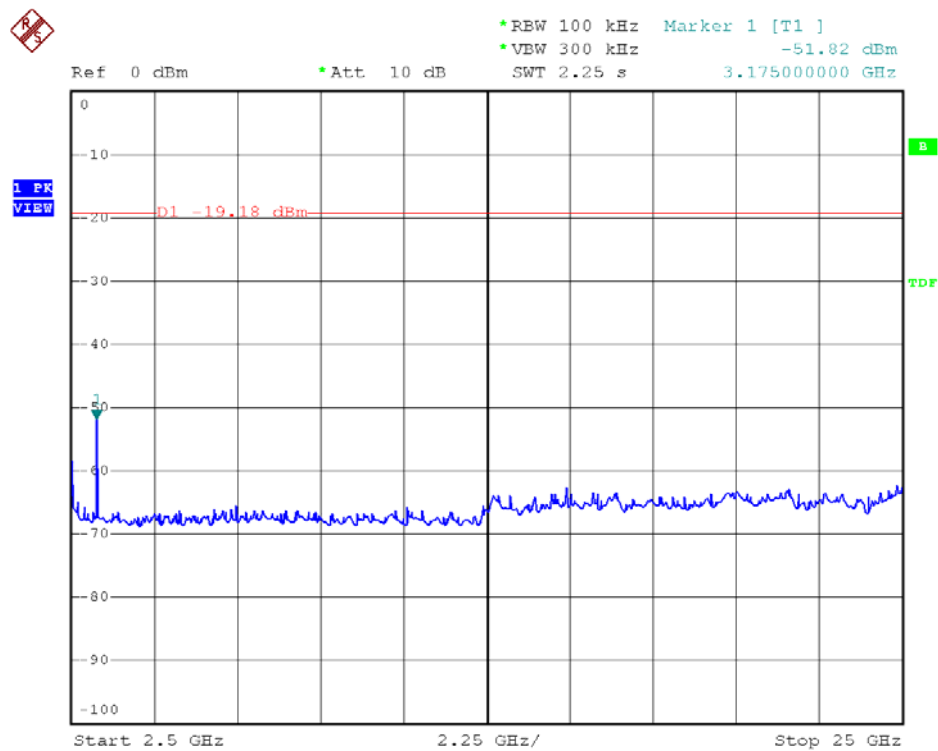
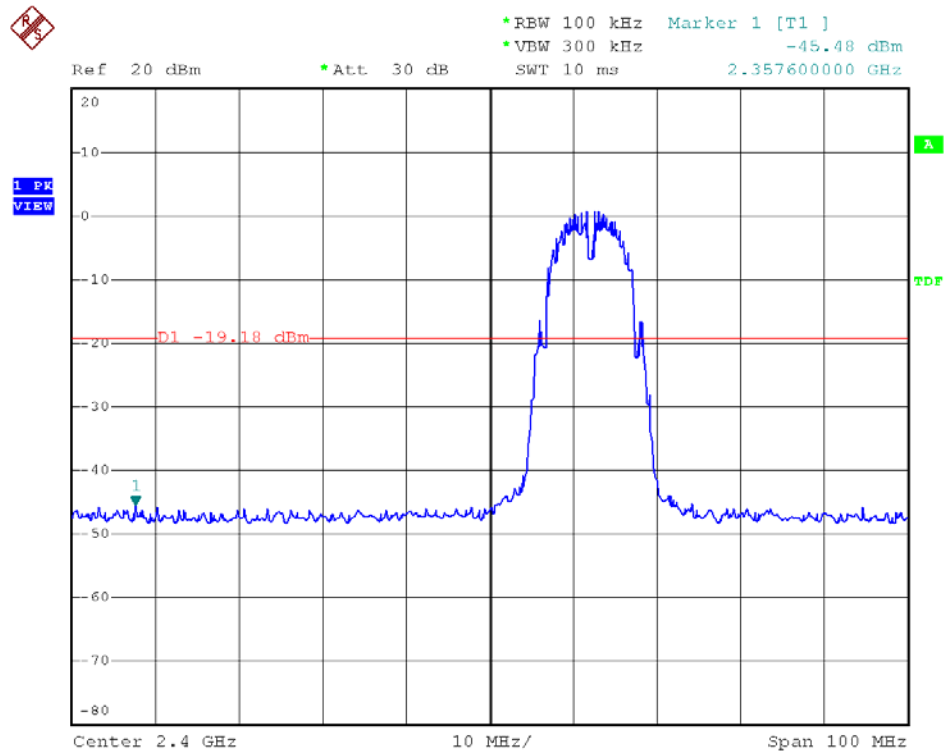


Modulation Standard: 802.11b (1Mbps), ANT R  
Channel: 01



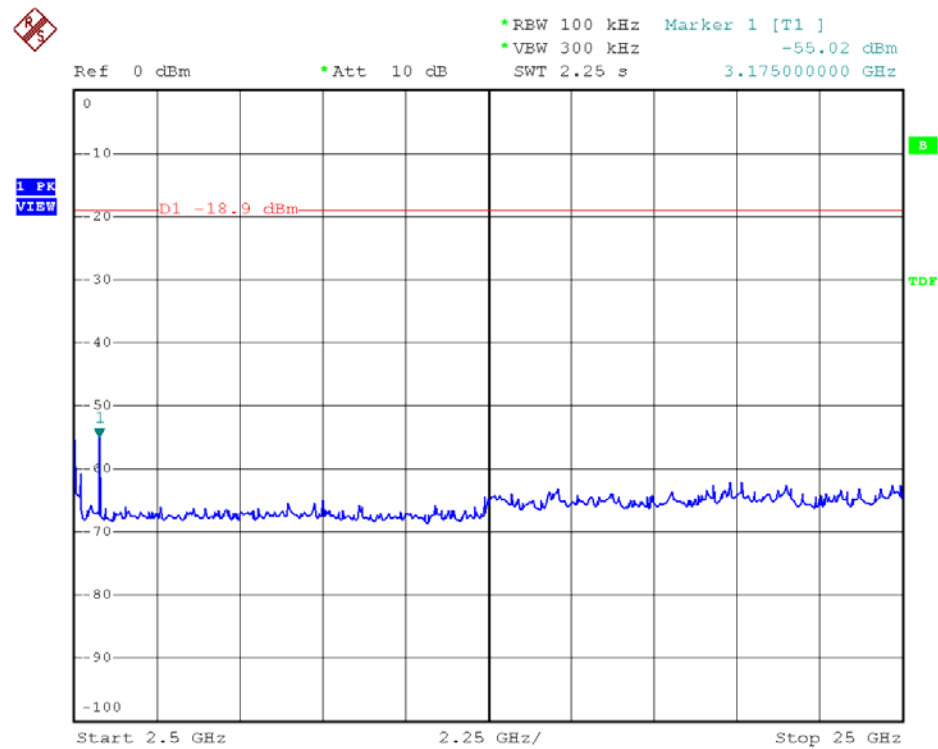
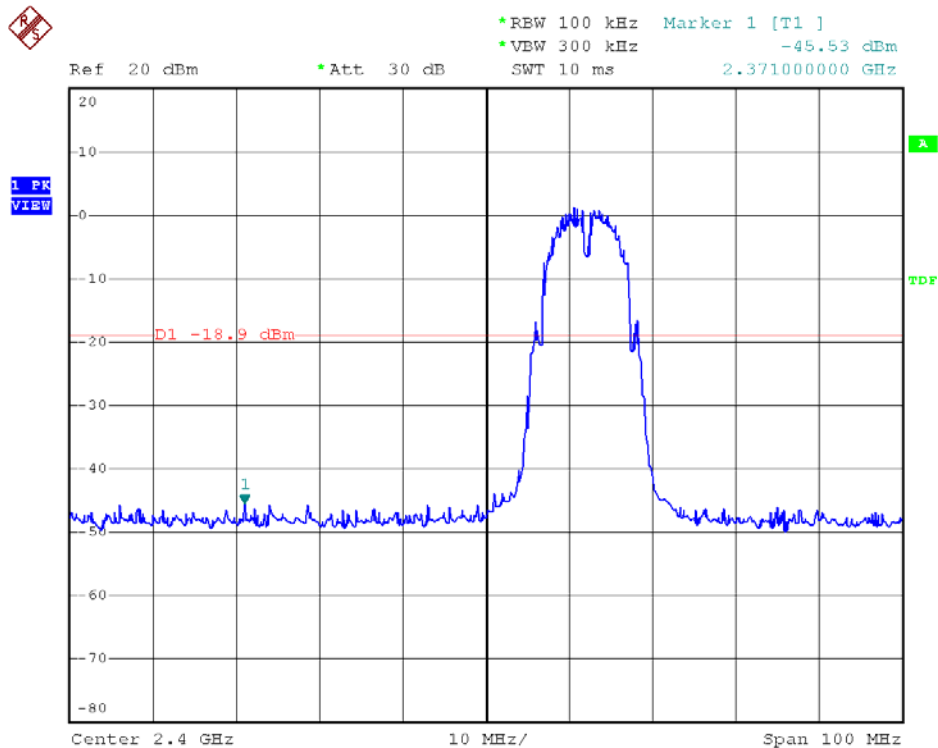


Modulation Standard: 802.11b (1Mbps), ANT M  
Channel: 01



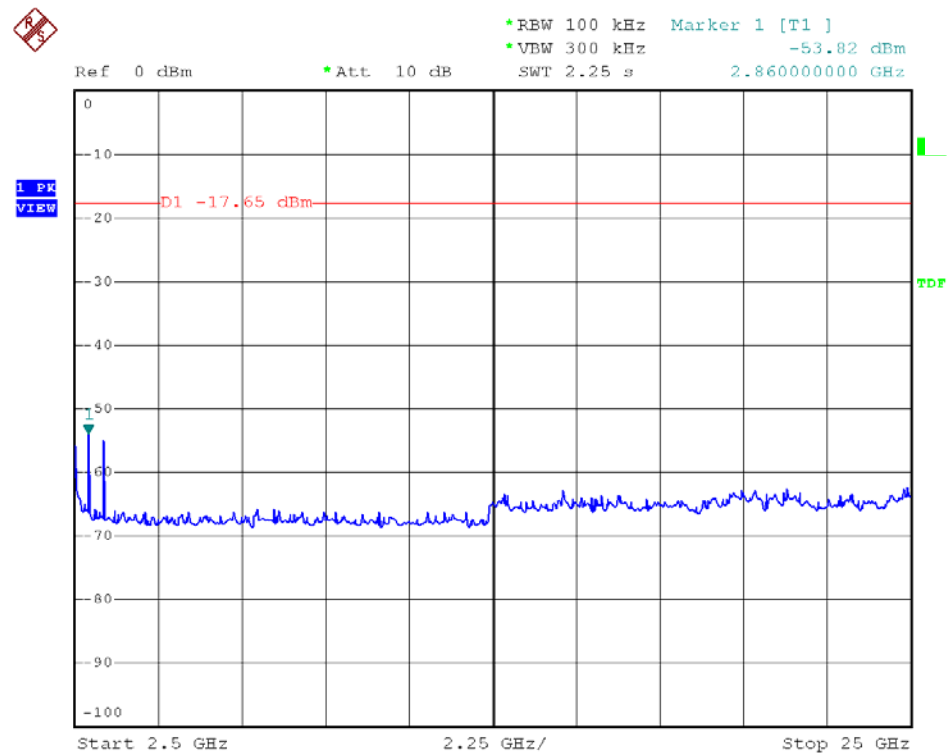
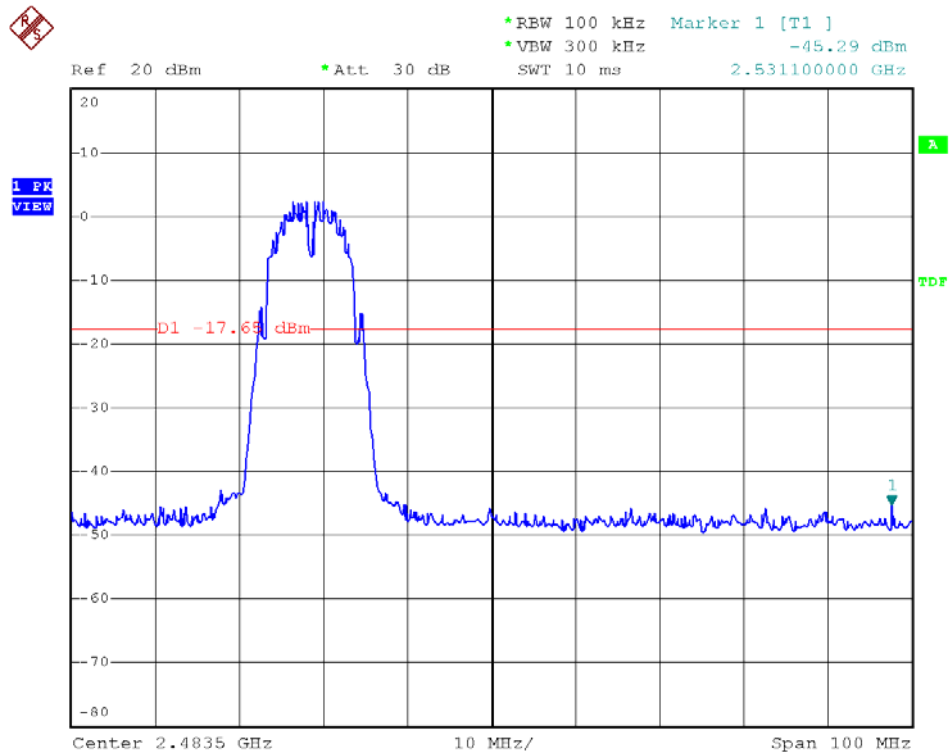


Modulation Standard: 802.11b (1Mbps), ANT L  
Channel: 01



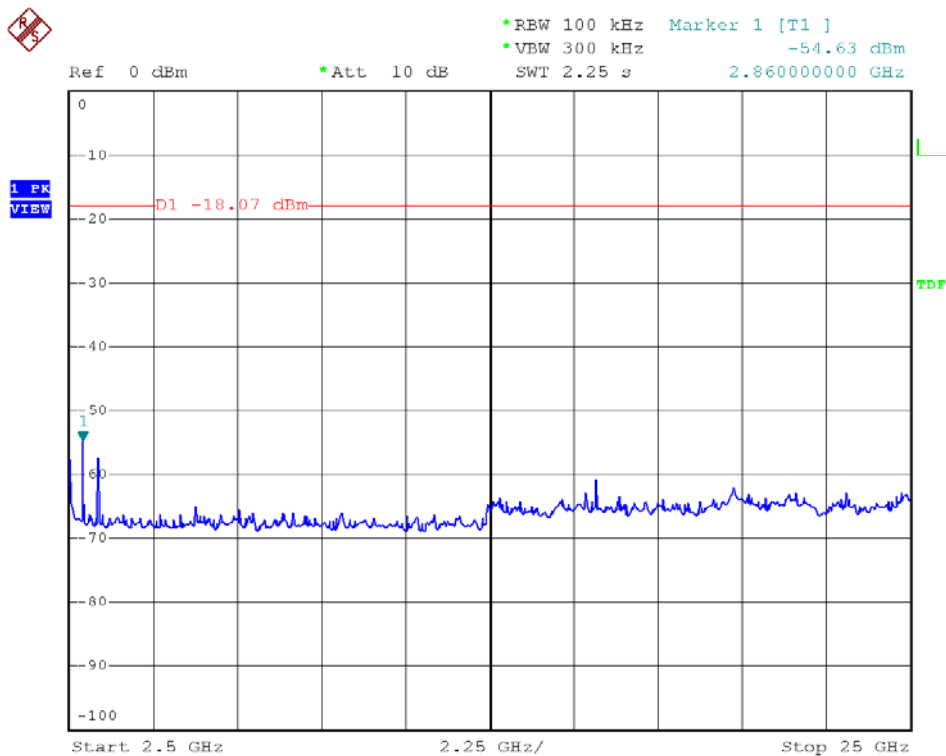
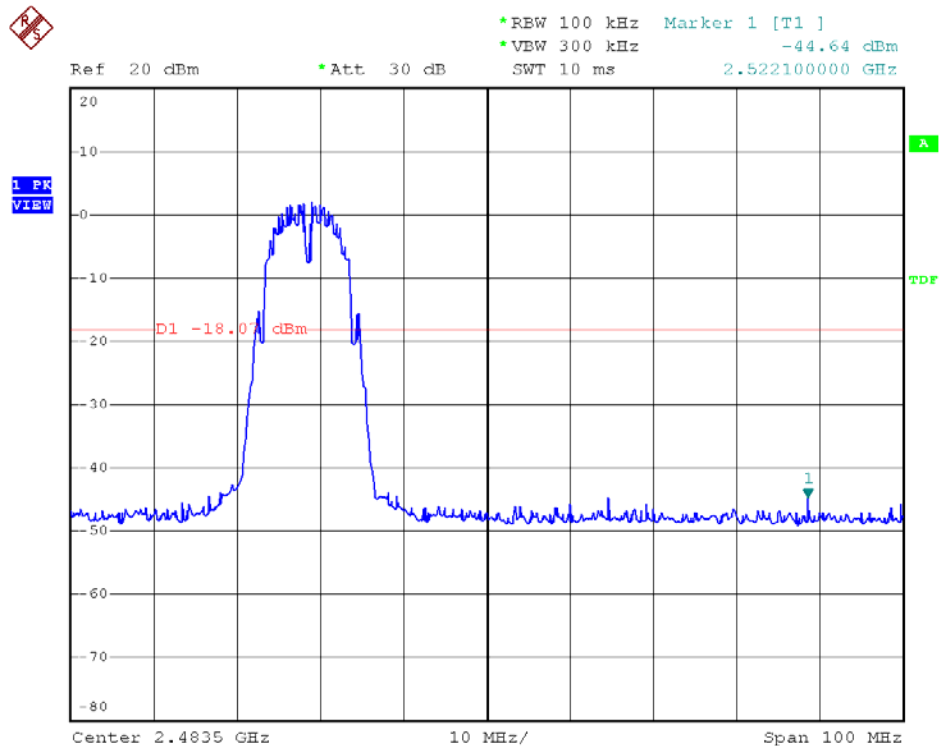


Modulation Standard: 802.11b (1Mbps), ANT R  
Channel: 11



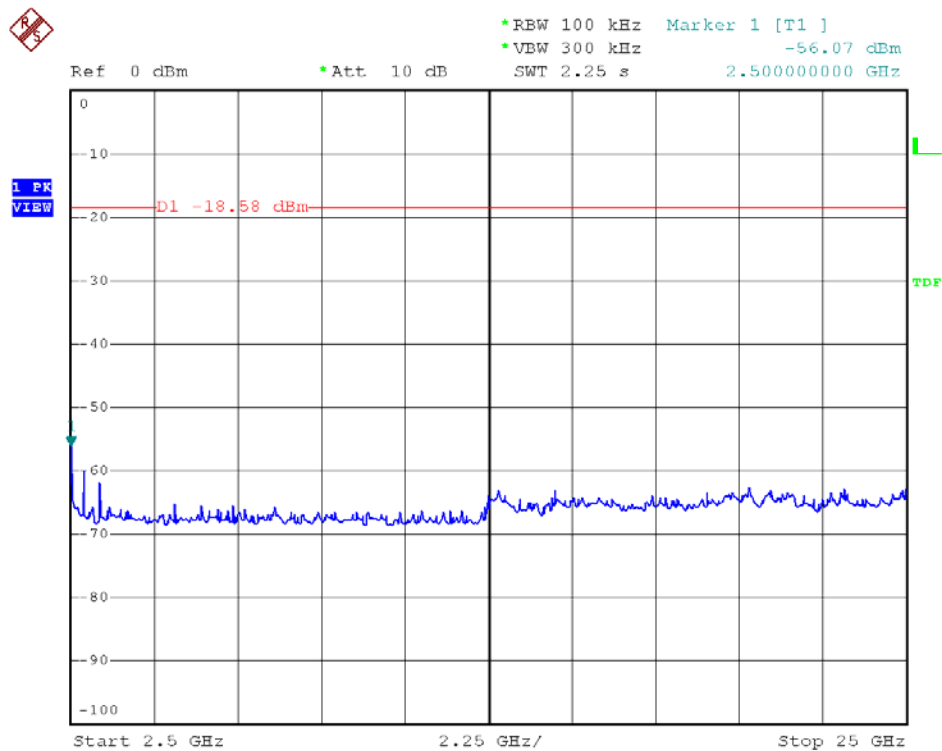
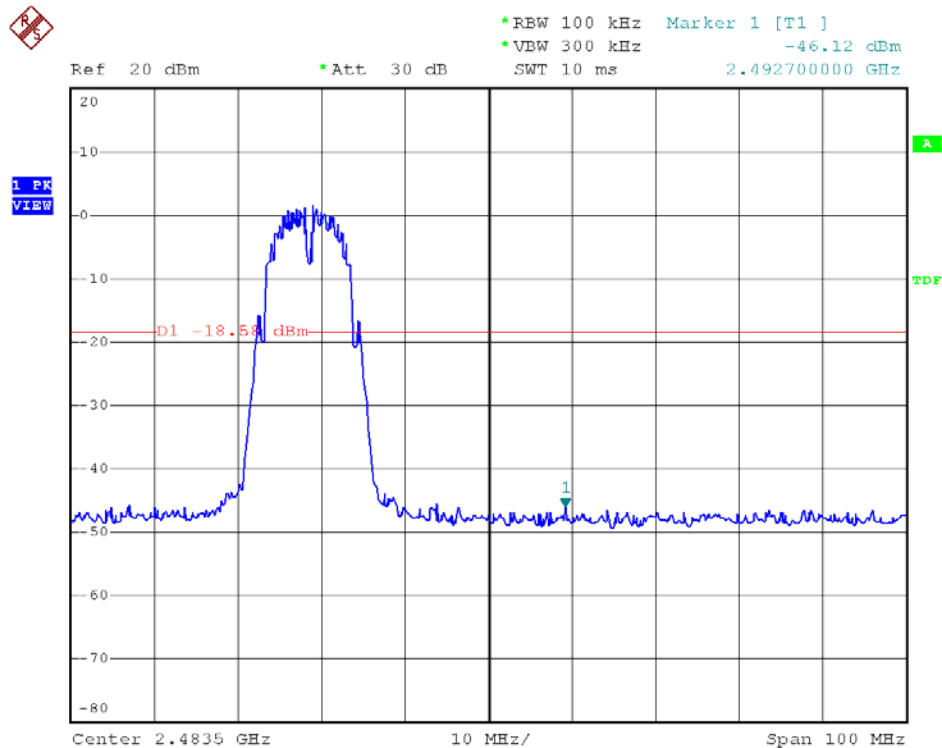


Modulation Standard: 802.11b (1Mbps), ANT M  
Channel: 11





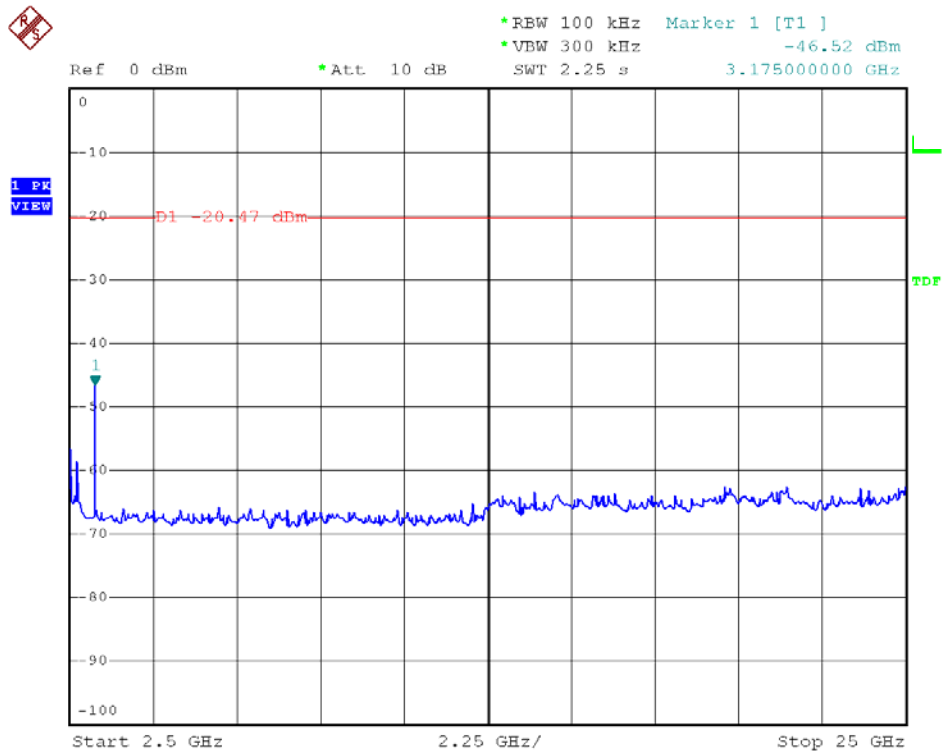
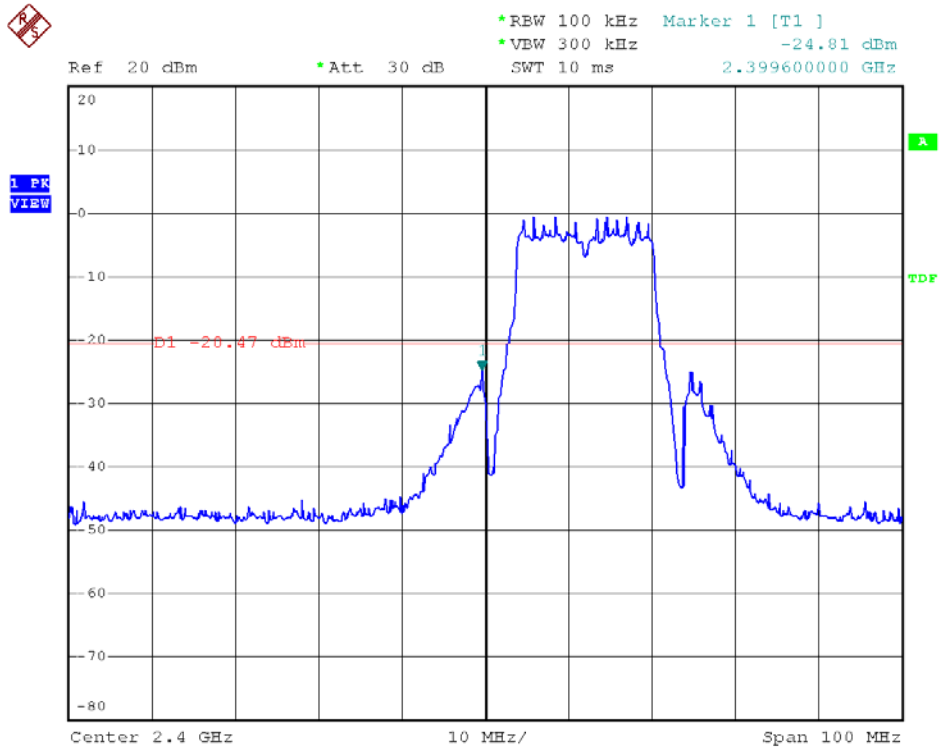
Modulation Standard: 802.11b (1Mbps), ANT L  
Channel: 11





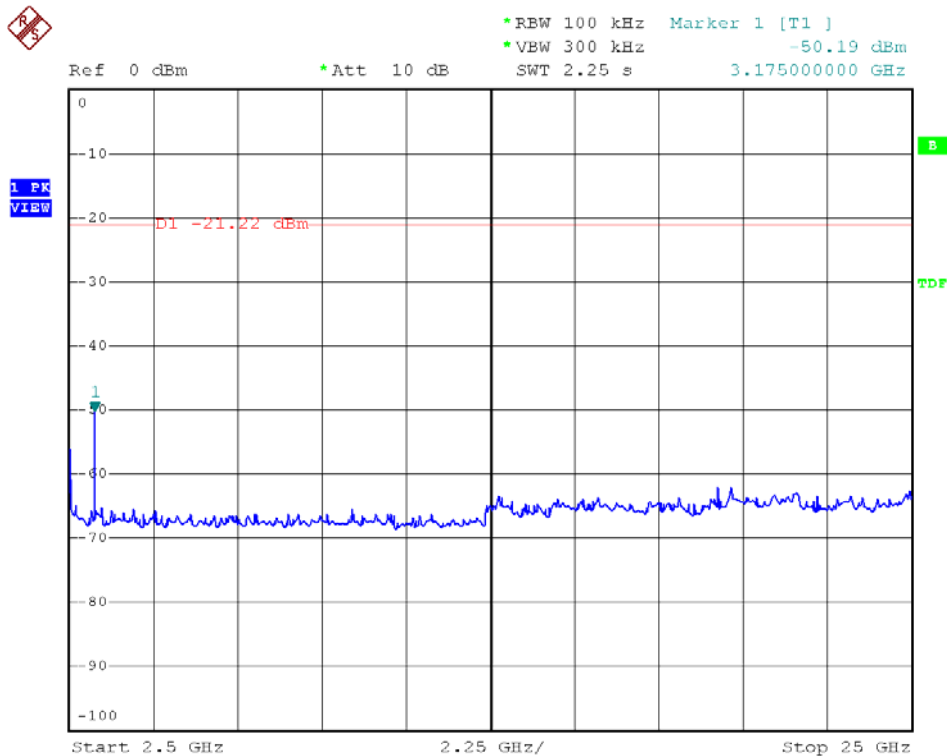
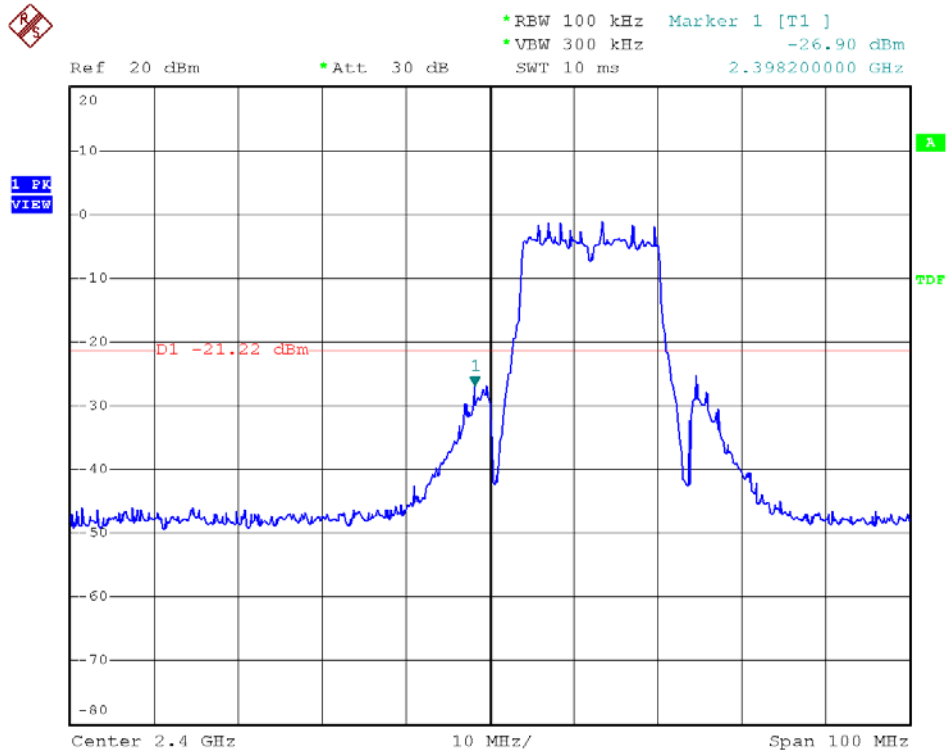


Modulation Standard: 802.11g (6Mbps), ANT R  
Channel: 01



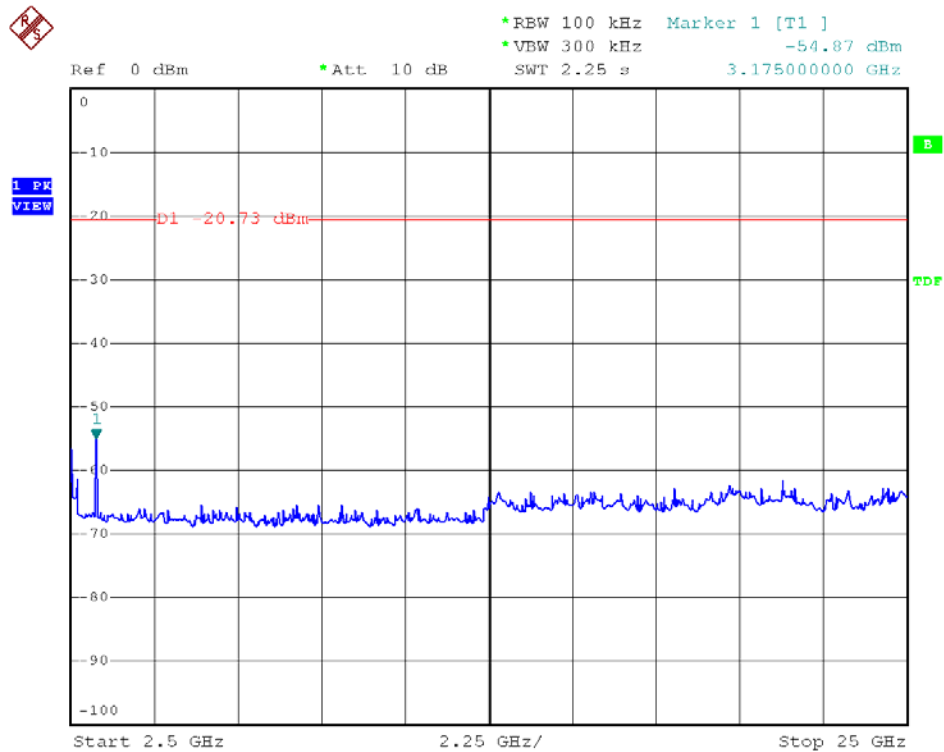
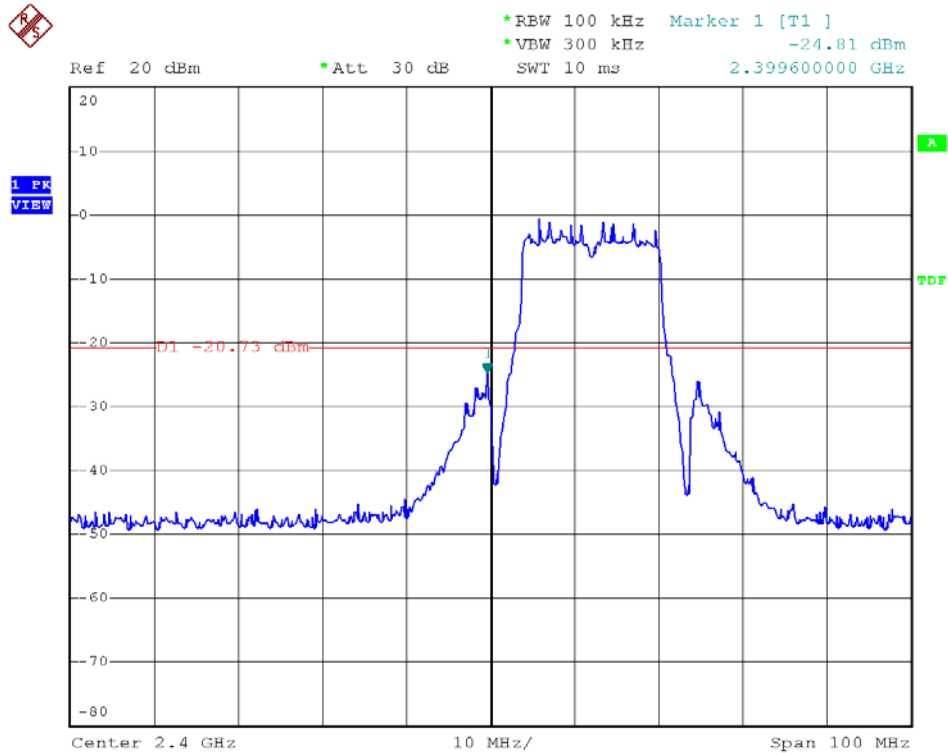


Modulation Standard: 802.11g (6Mbps), ANT M  
Channel: 01



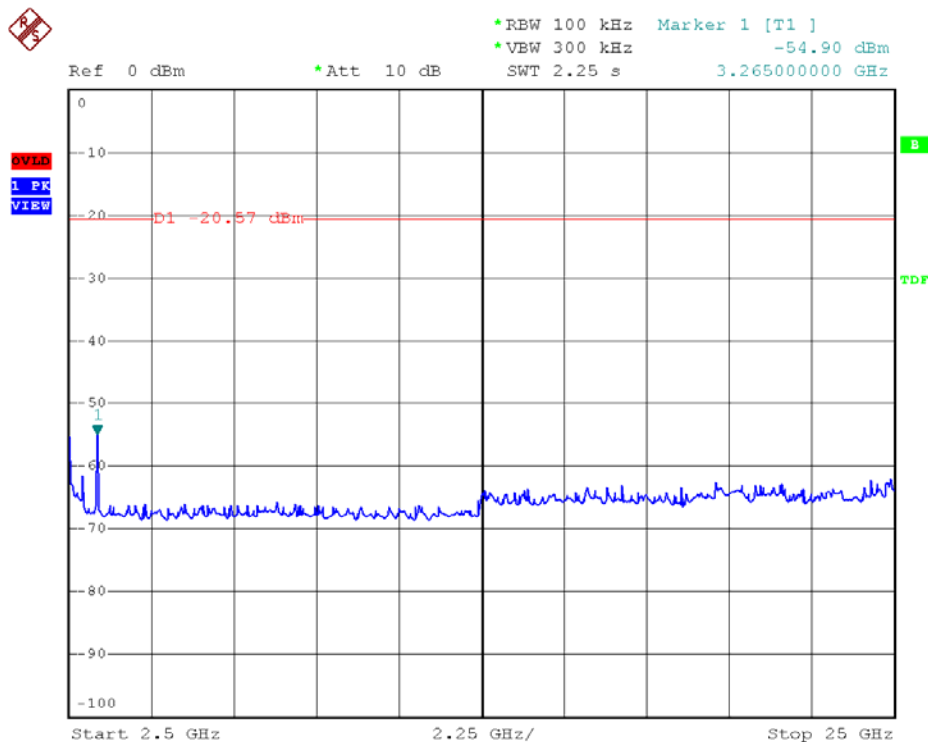
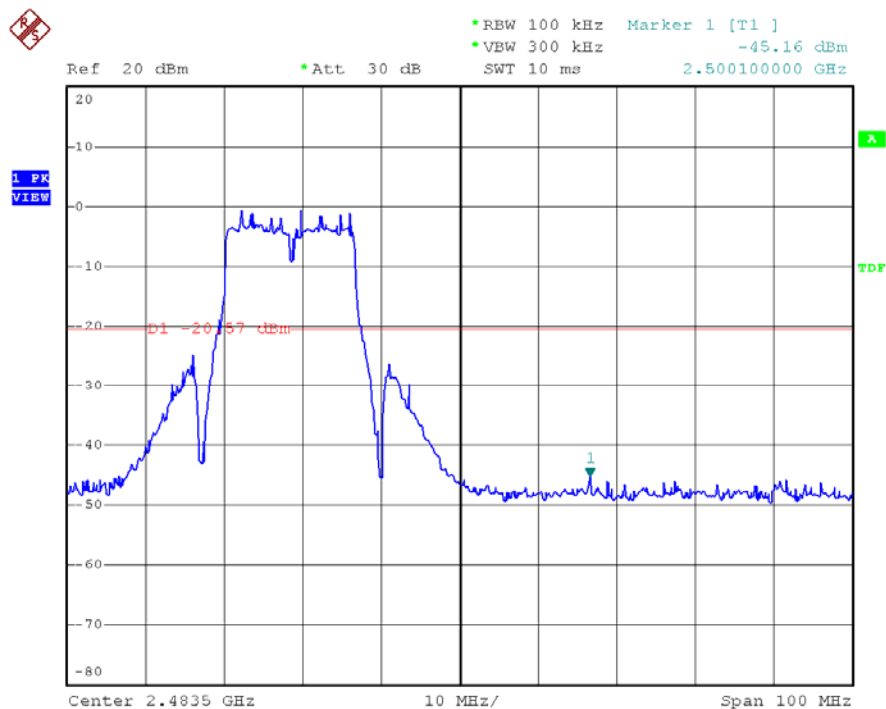


Modulation Standard: 802.11g (6Mbps), ANT L  
Channel: 01



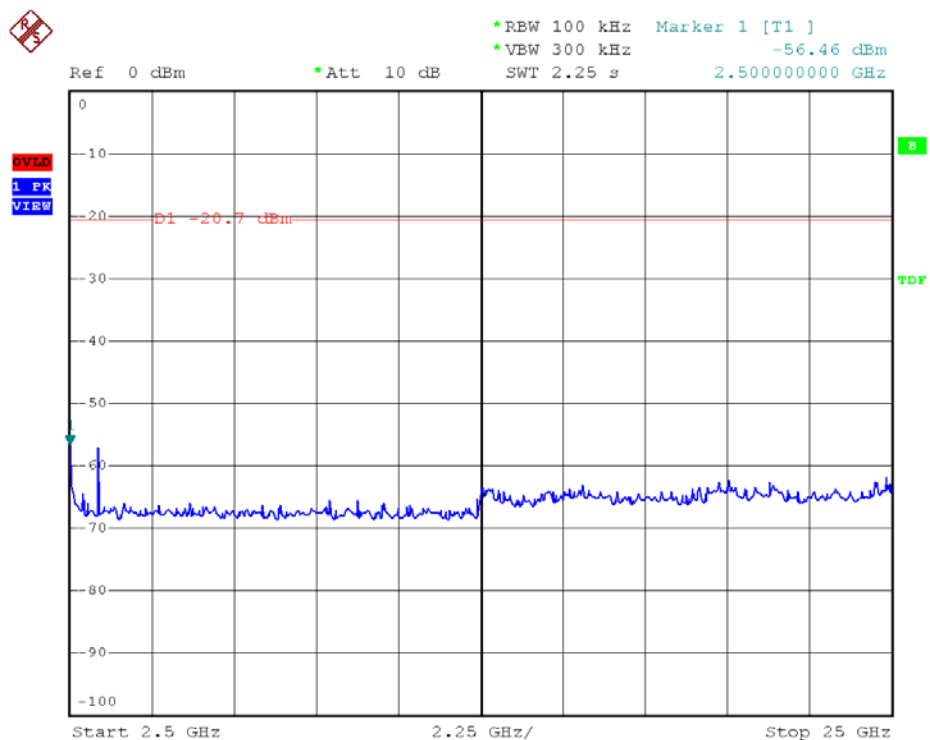
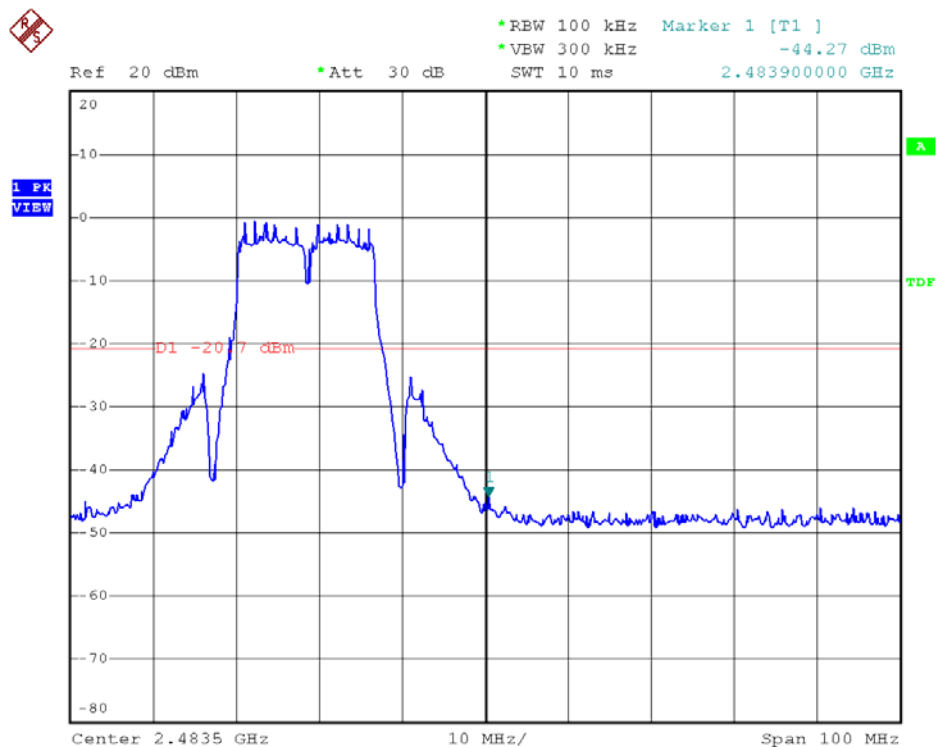


Modulation Standard: 802.11g (6Mbps), ANT R  
Channel: 11



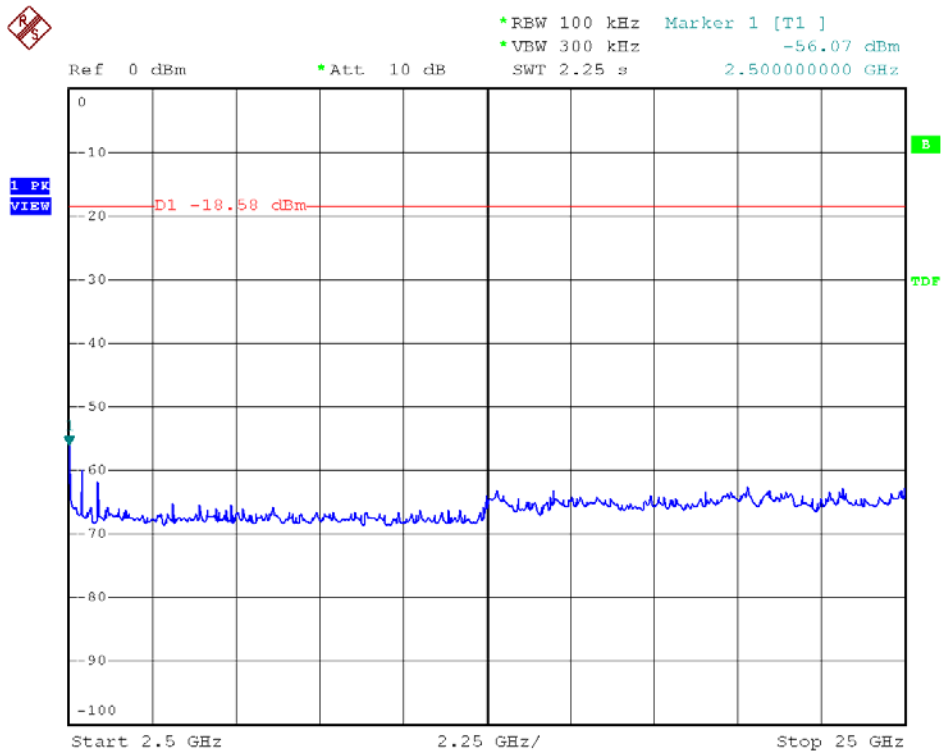
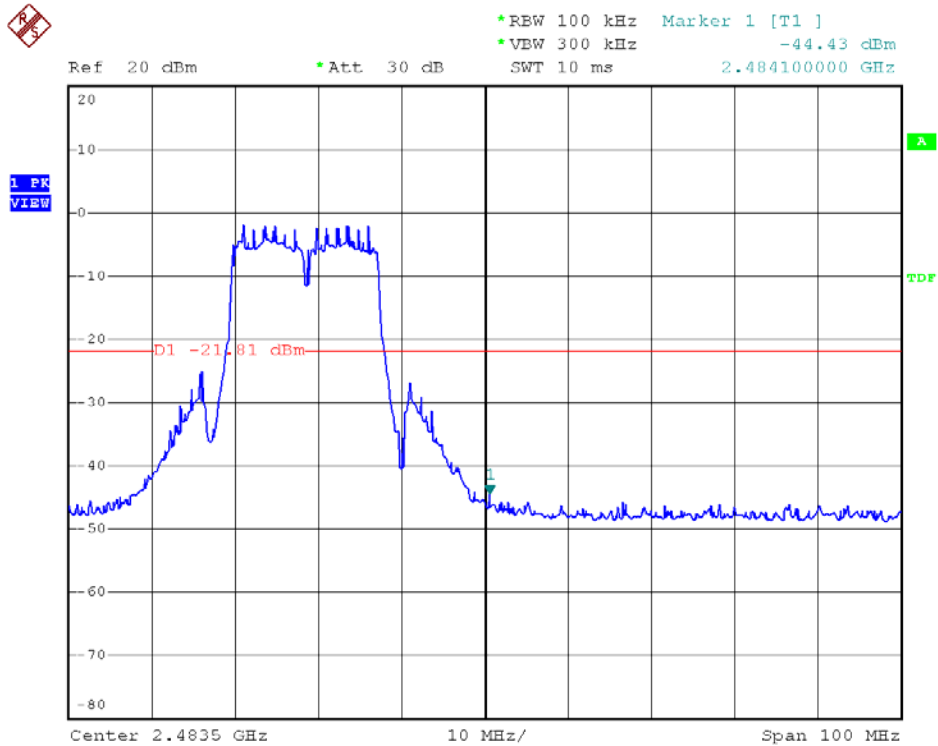


Modulation Standard: 802.11g (6Mbps), ANT M  
Channel: 11



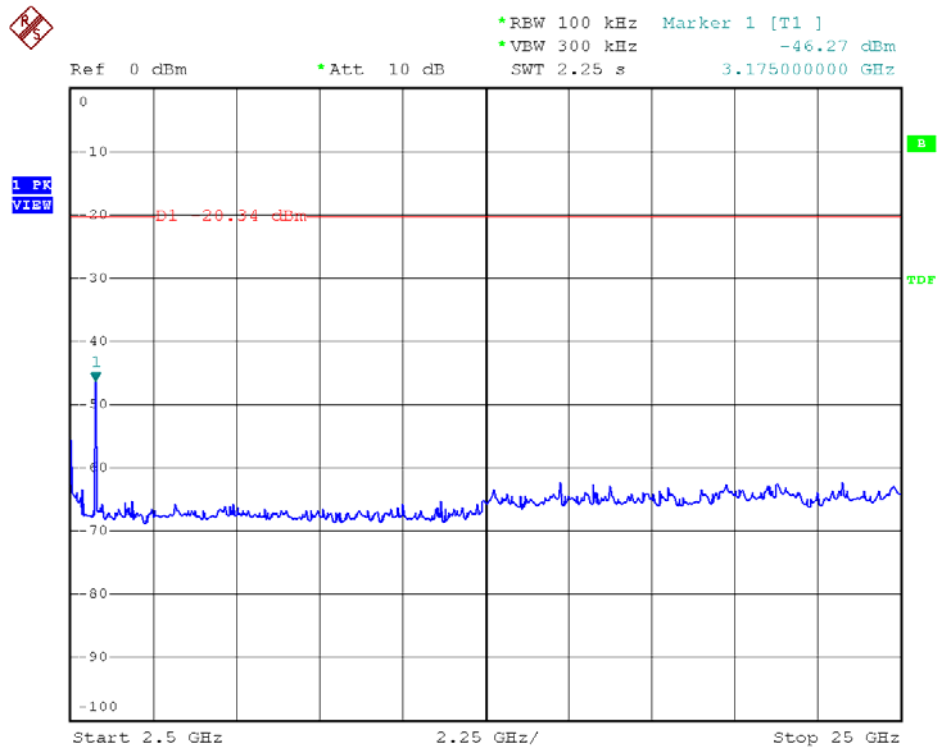
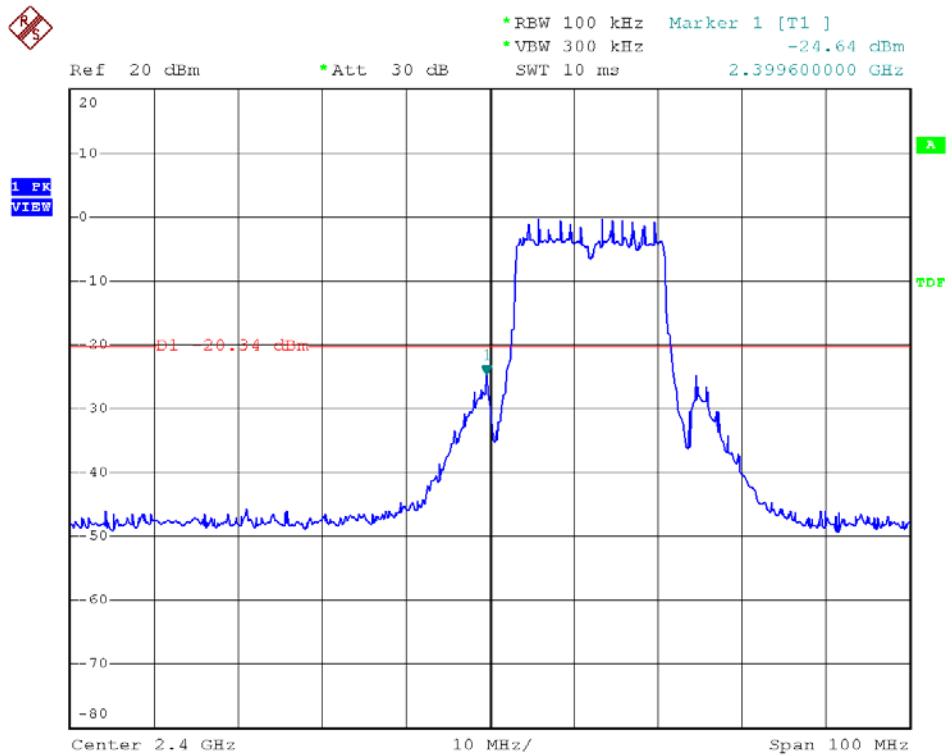


Modulation Standard: 802.11g (6Mbps), ANT L  
Channel: 11



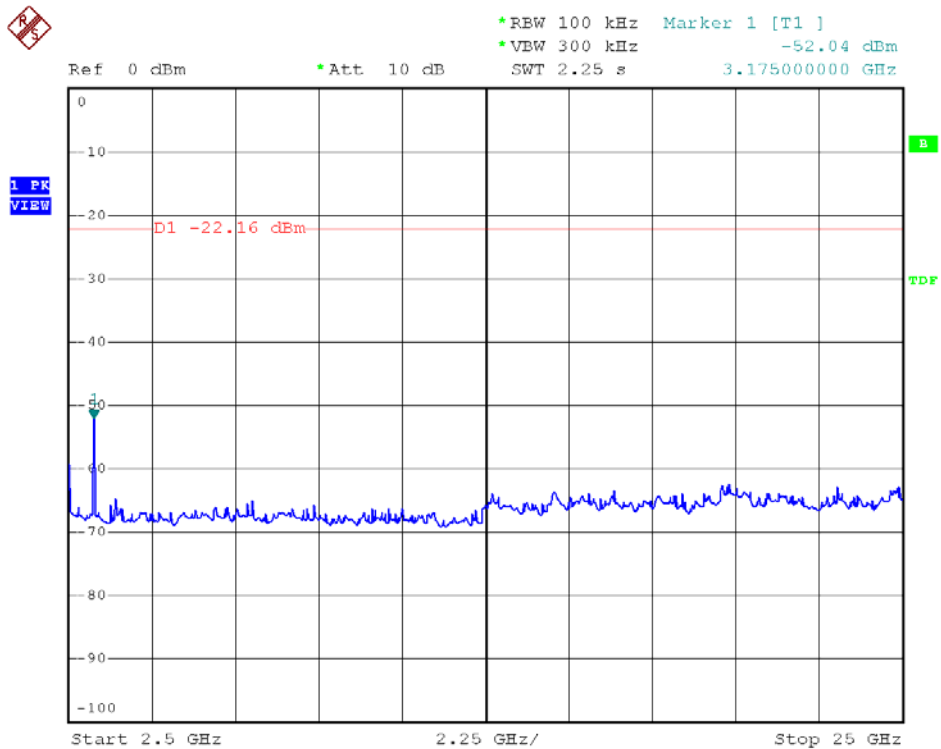
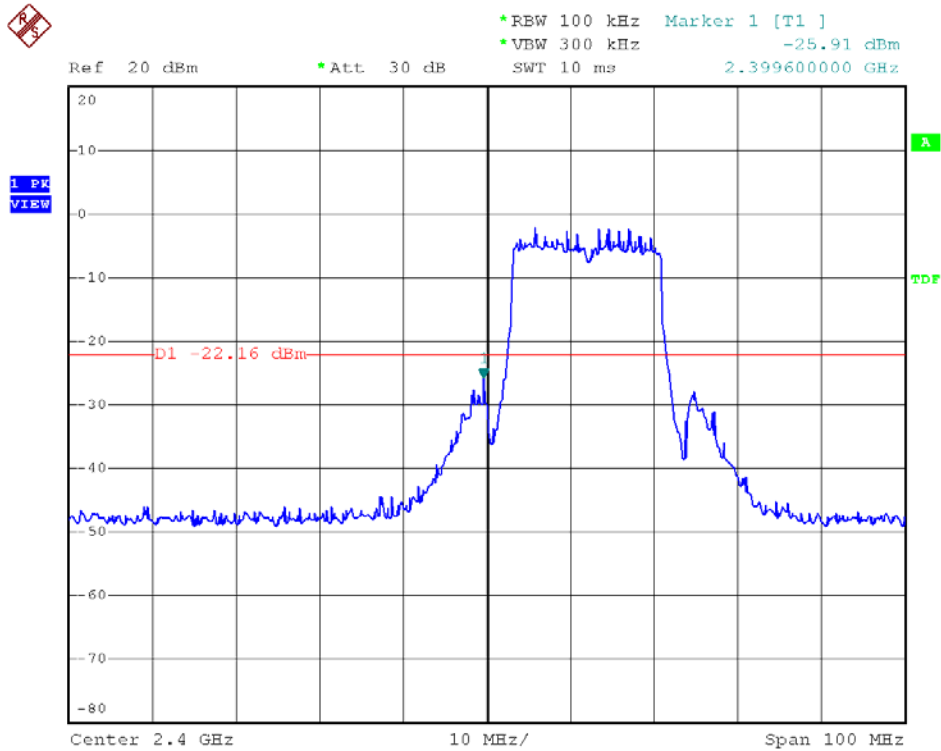


Modulation Standard: 802.11n HT20 (6.5Mbps), ANT R  
Channel: 01





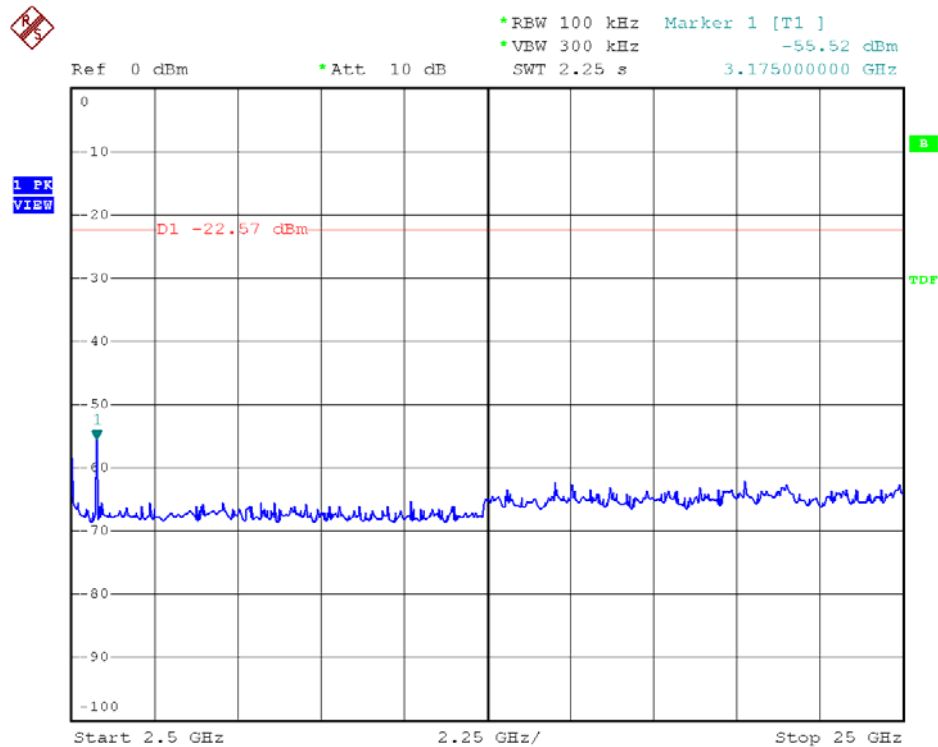
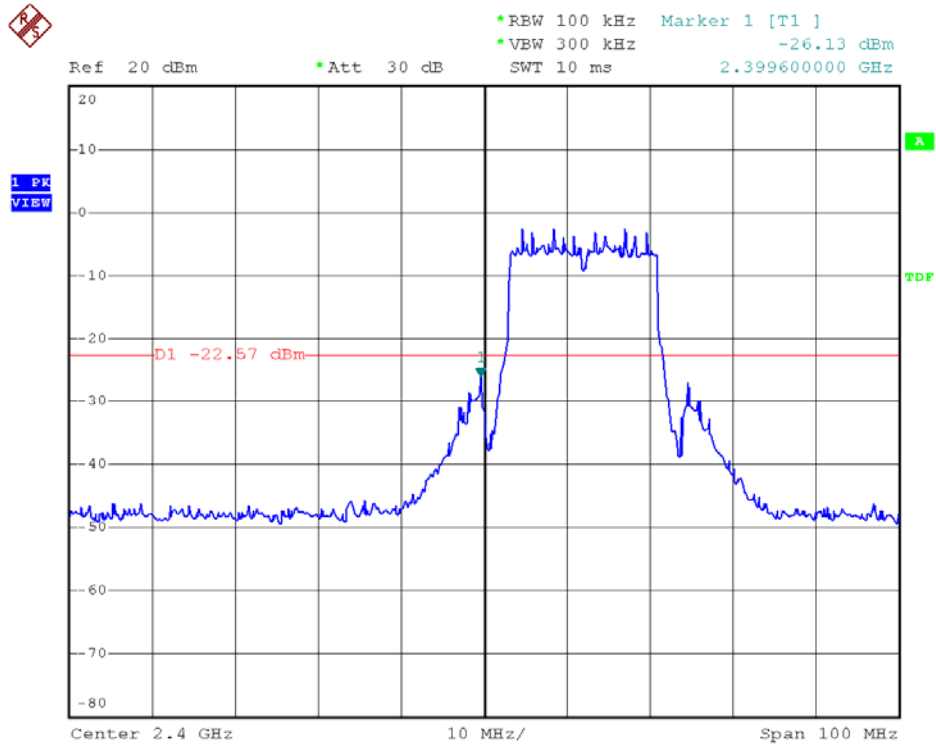
Modulation Standard: 802.11n HT20 (6.5Mbps), ANT M  
Channel: 01





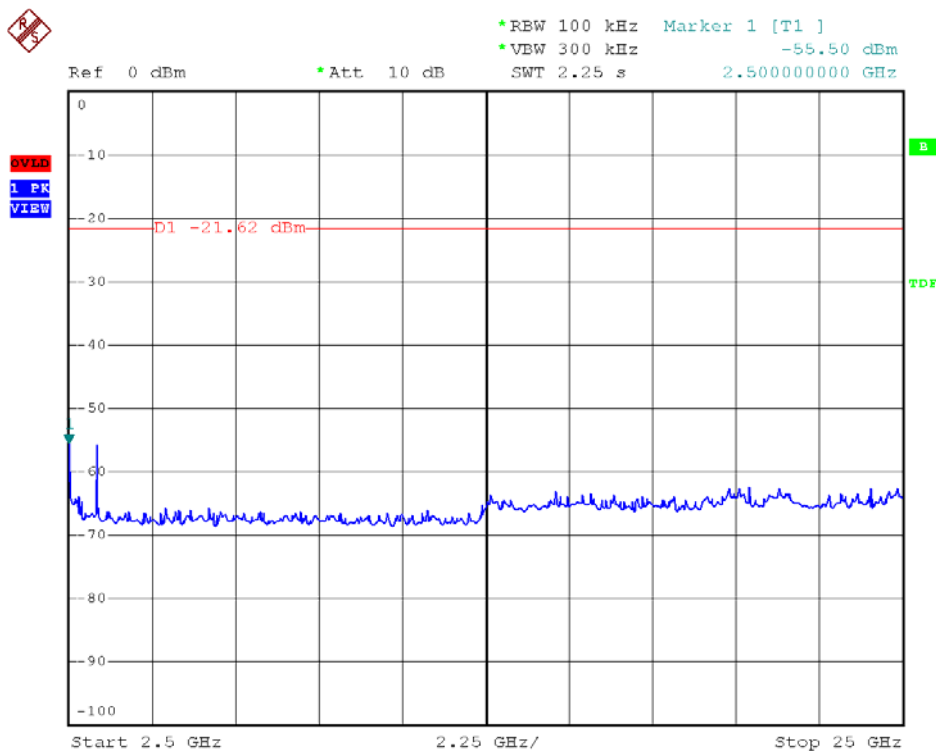
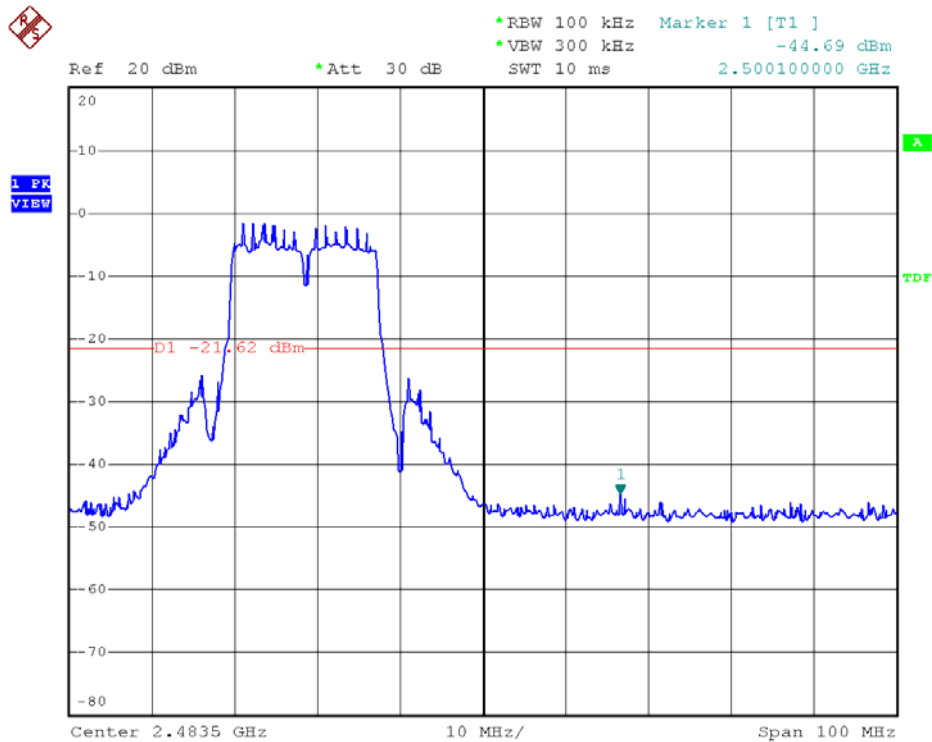


Modulation Standard: 802.11n HT20 (6.5Mbps), ANT L  
Channel: 01



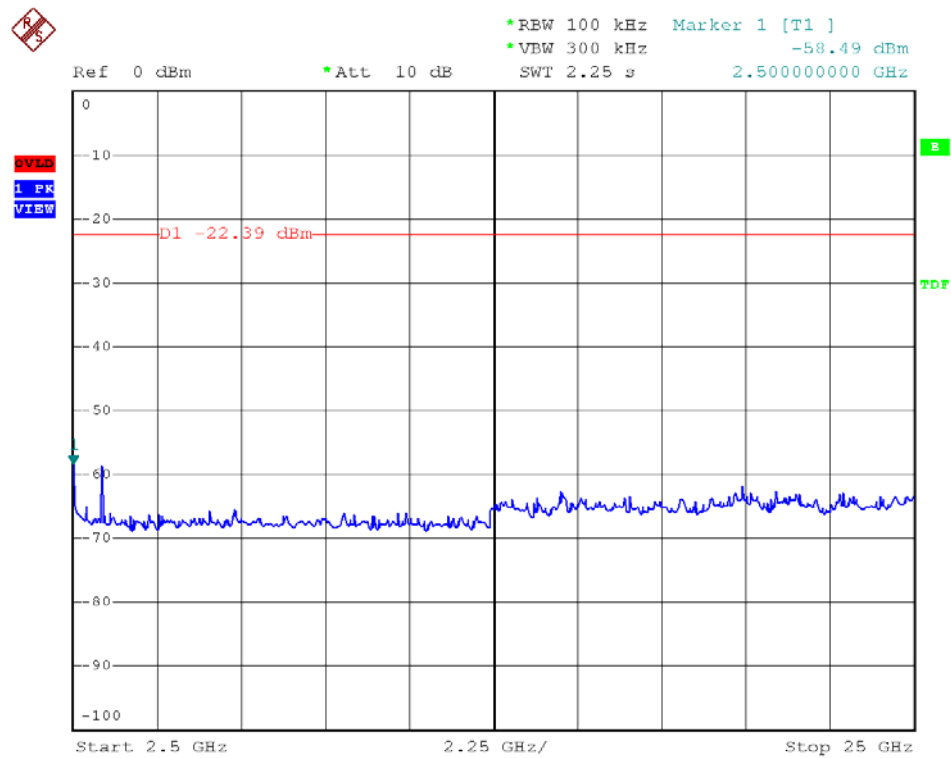
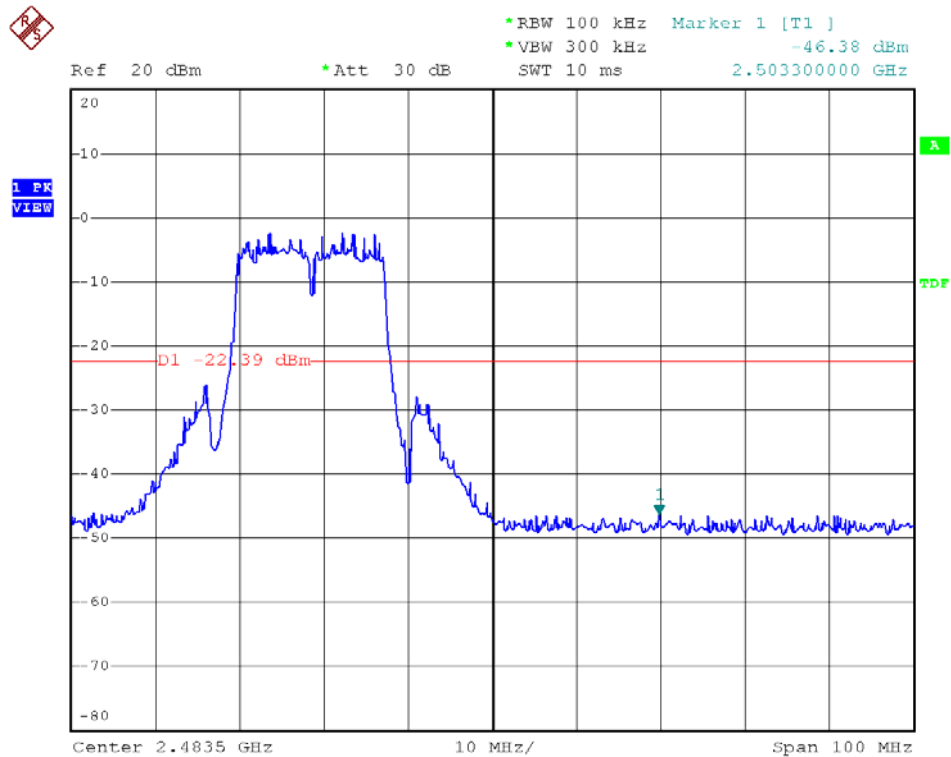


Modulation Standard: 802.11n HT20 (6.5Mbps), ANT R  
Channel: 11



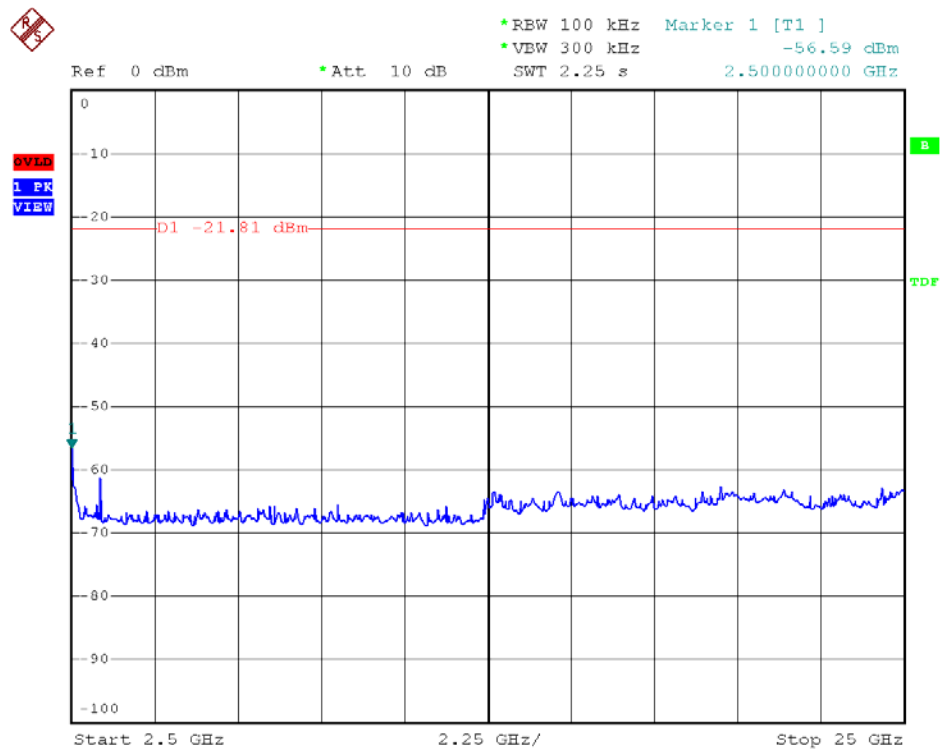
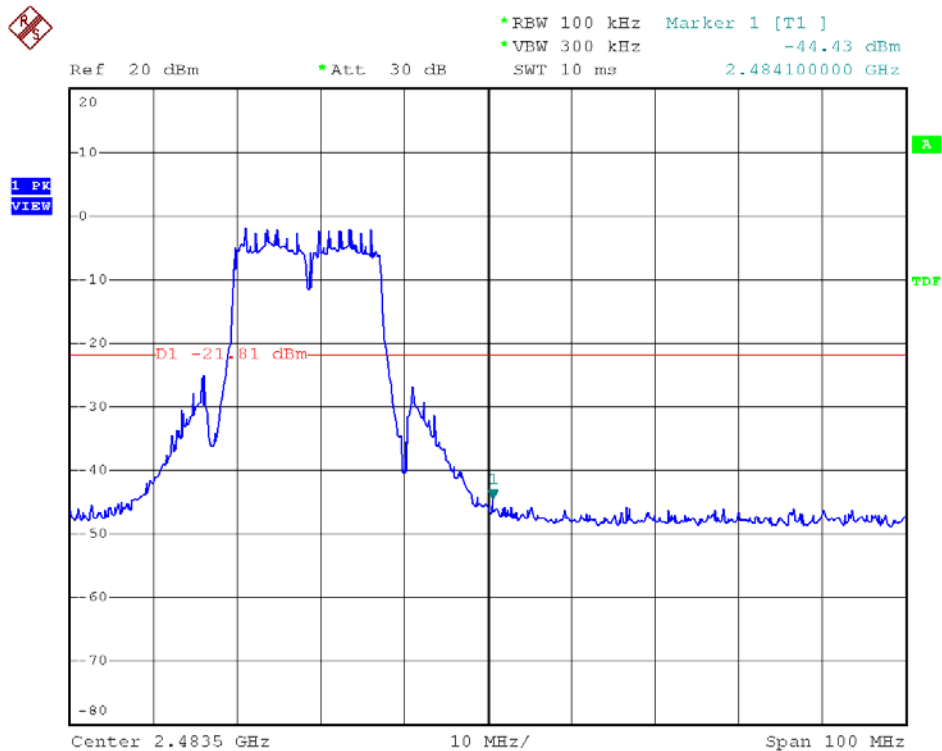


Modulation Standard: 802.11n HT20 (6.5Mbps), ANT M  
Channel: 11



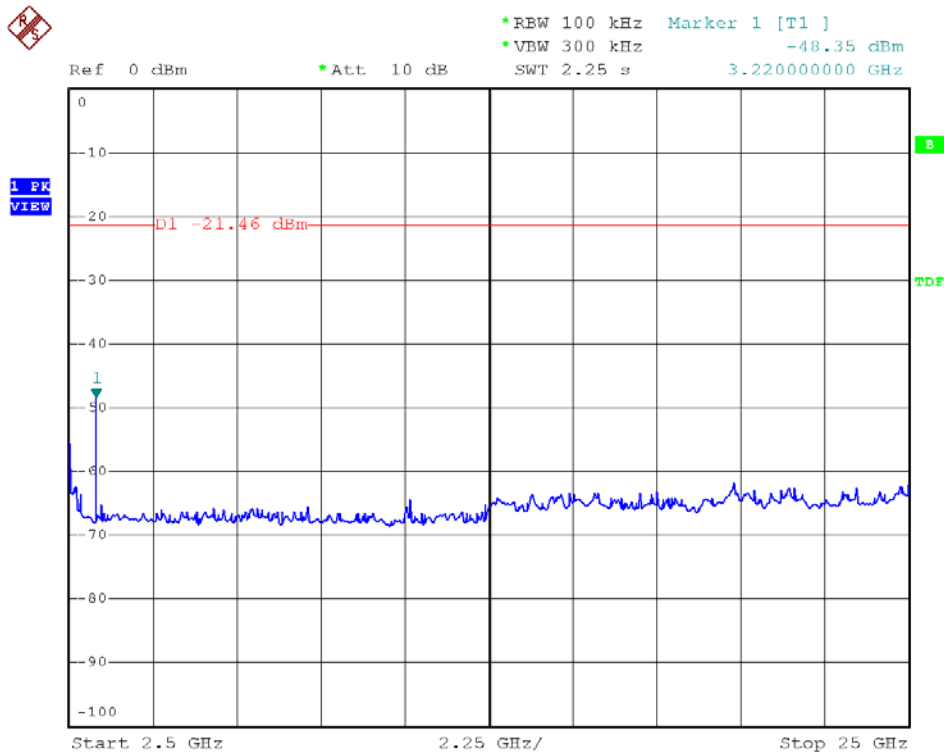
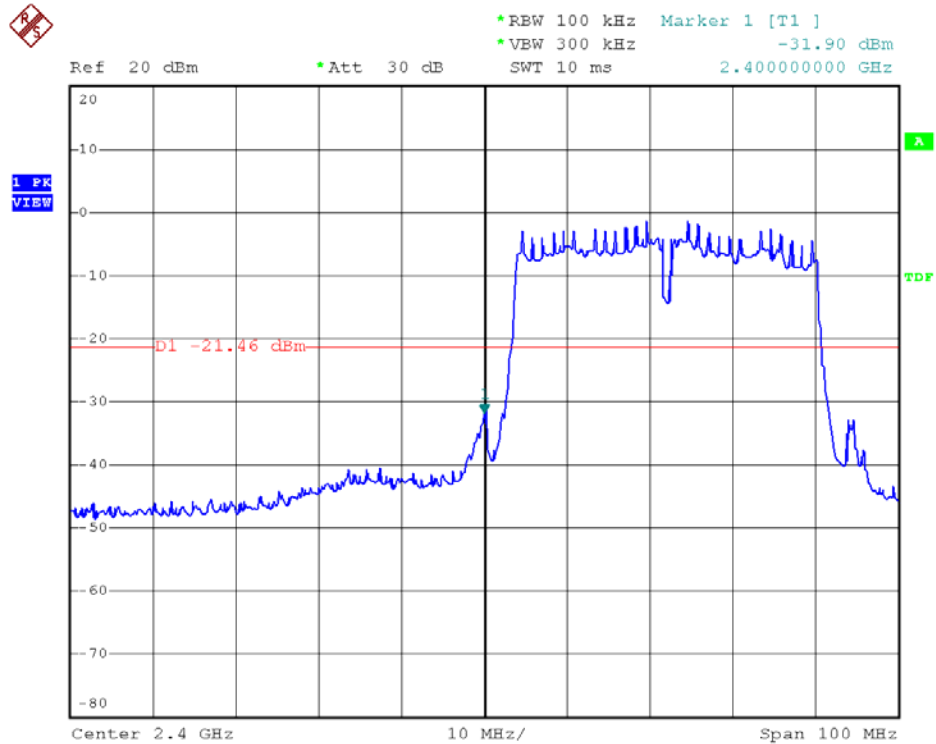


Modulation Standard: 802.11n HT20 (6.5Mbps), ANT L  
Channel: 11



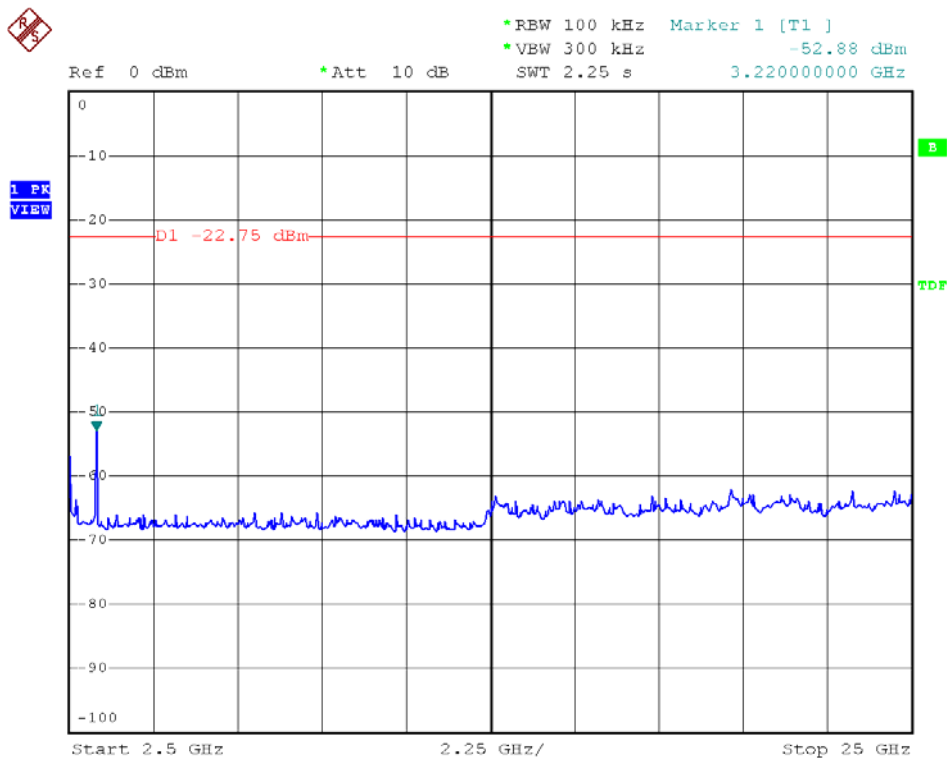
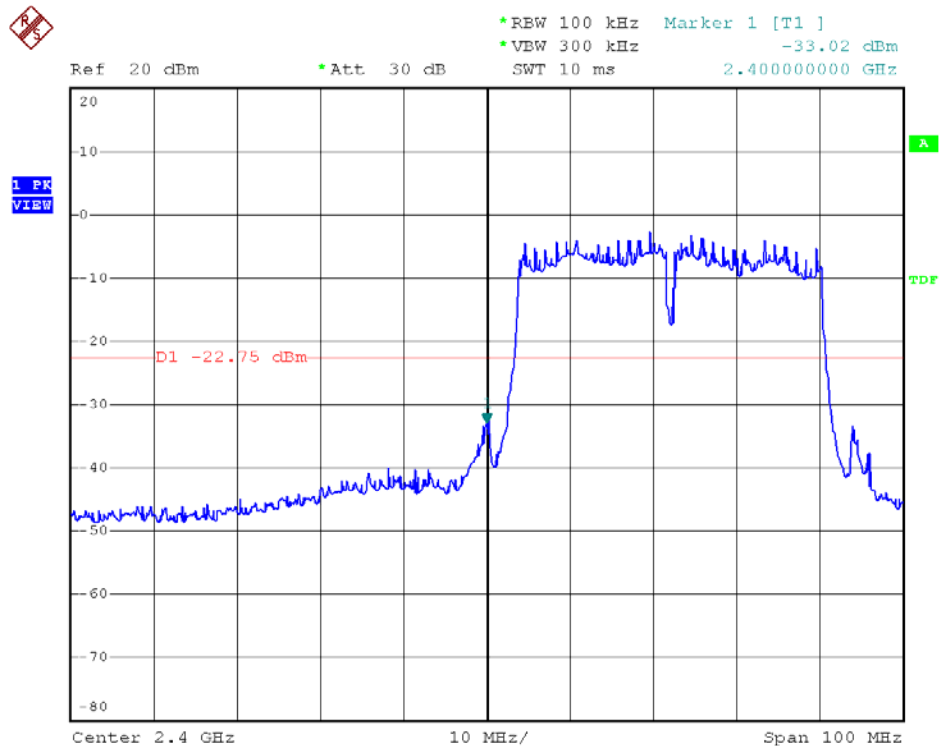


Modulation Standard: 802.11n HT40 (13.5Mbps), ANT R  
Channel: 03



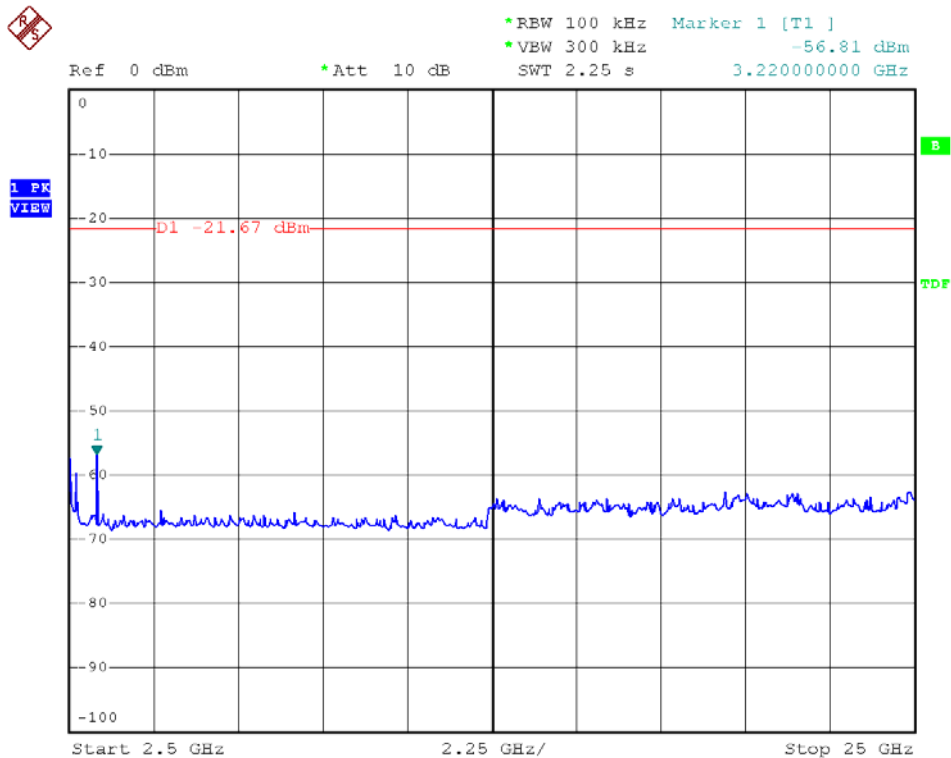
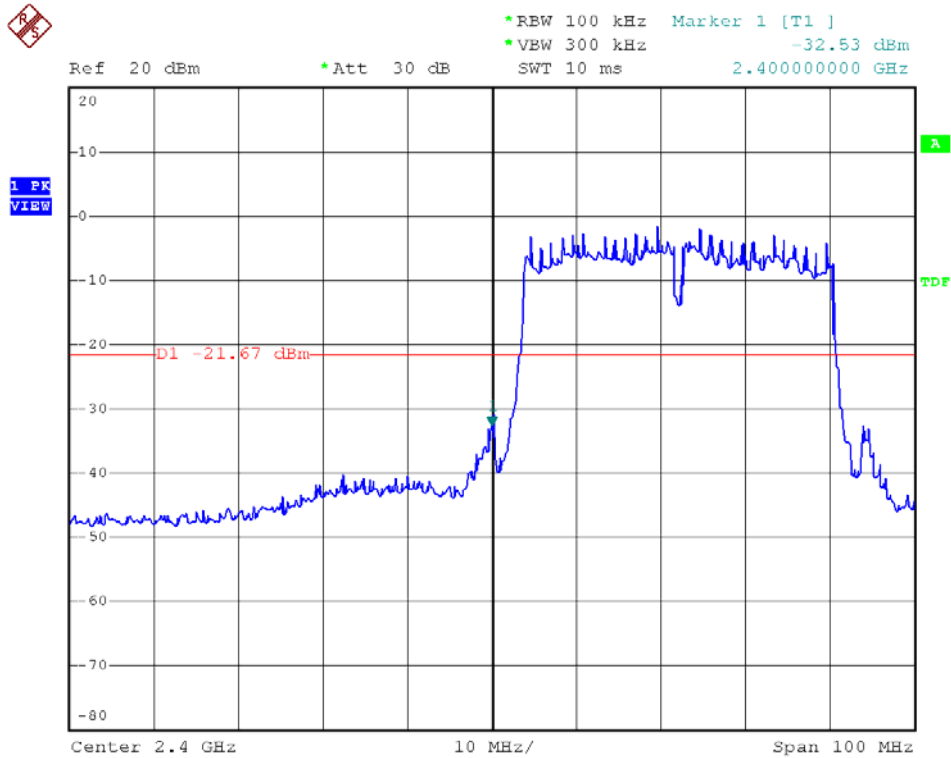


Modulation Standard: 802.11n HT40 (13.5Mbps), ANT M  
Channel: 03



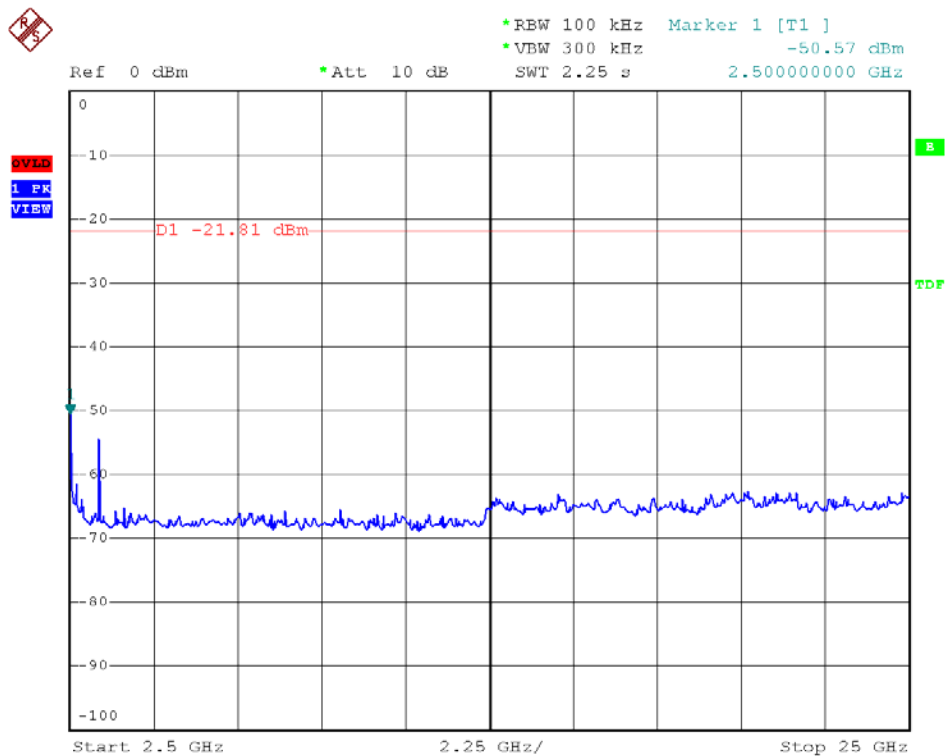
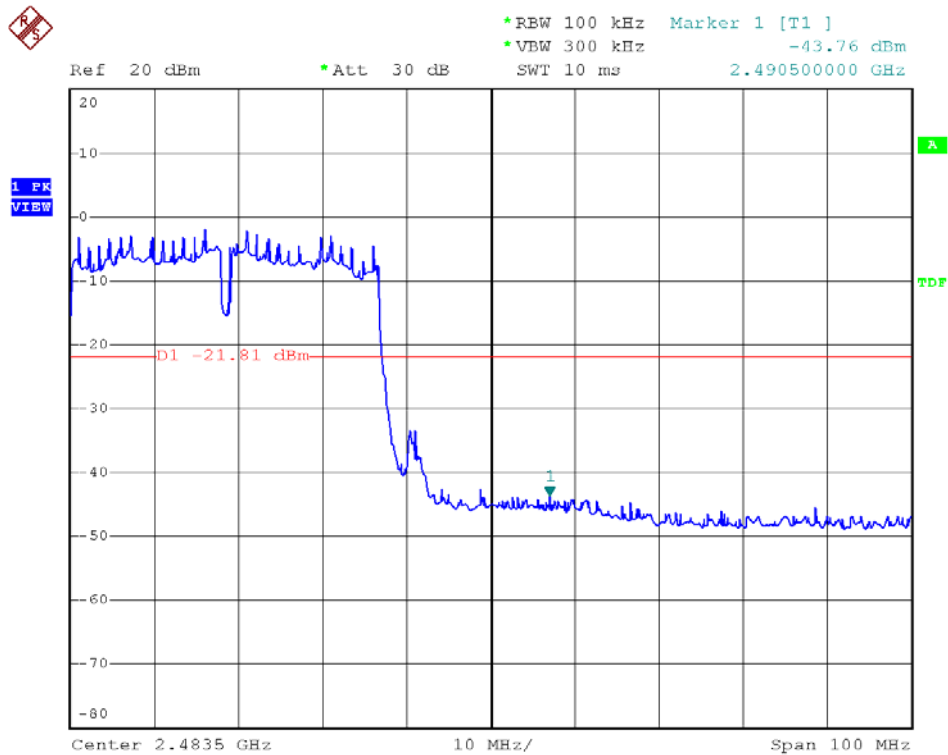


Modulation Standard: 802.11n HT40 (13.5Mbps), ANT L  
Channel: 03





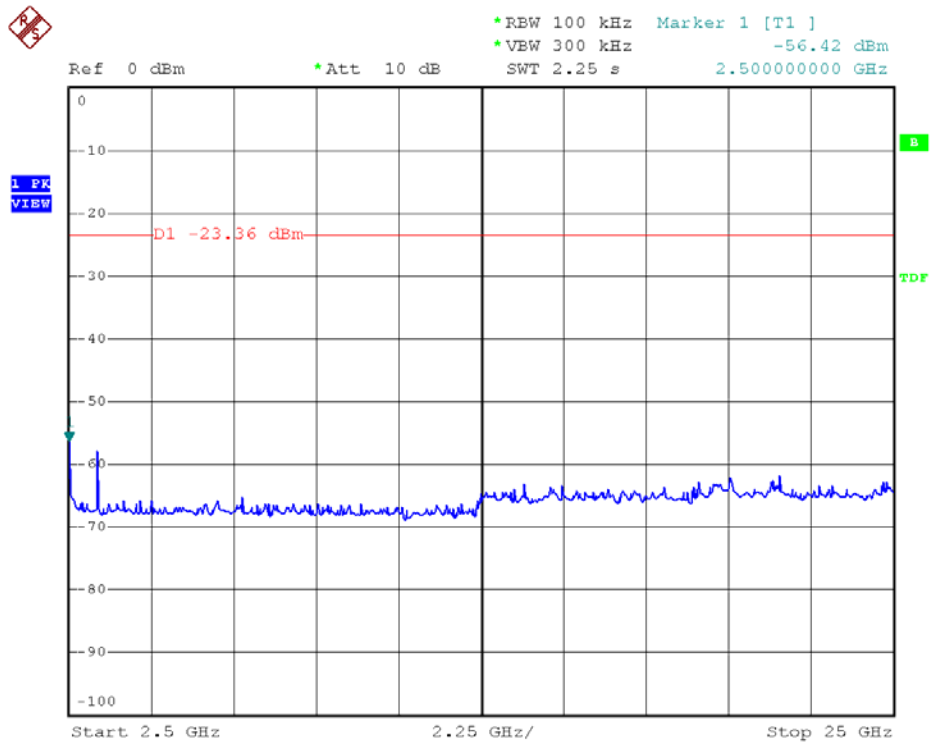
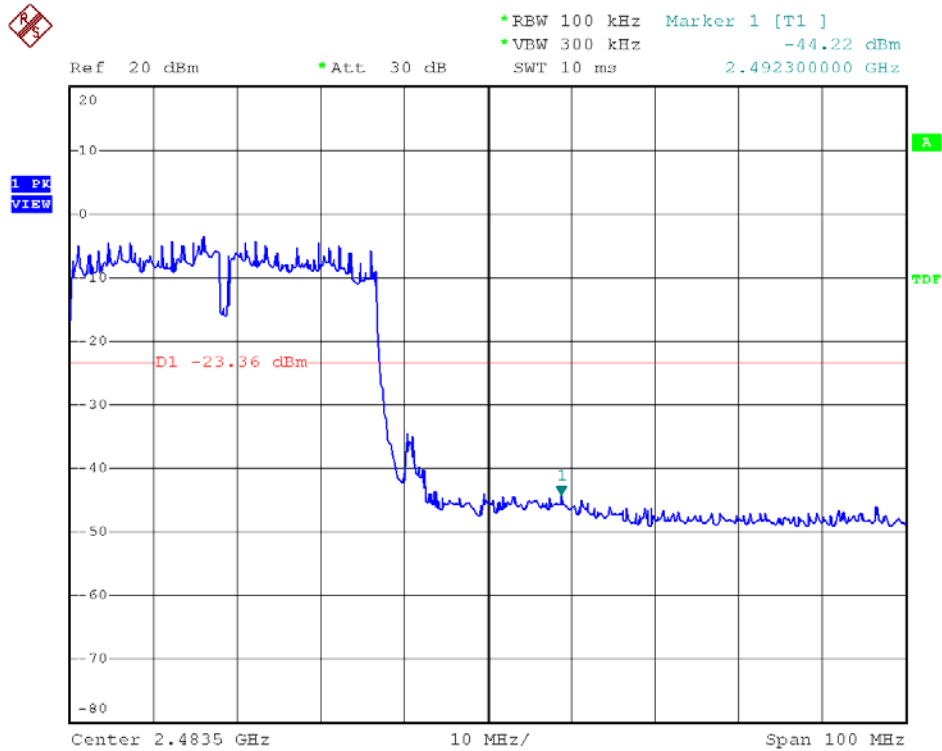
Modulation Standard: 802.11n HT40 (13.5Mbps), ANT R  
Channel: 09





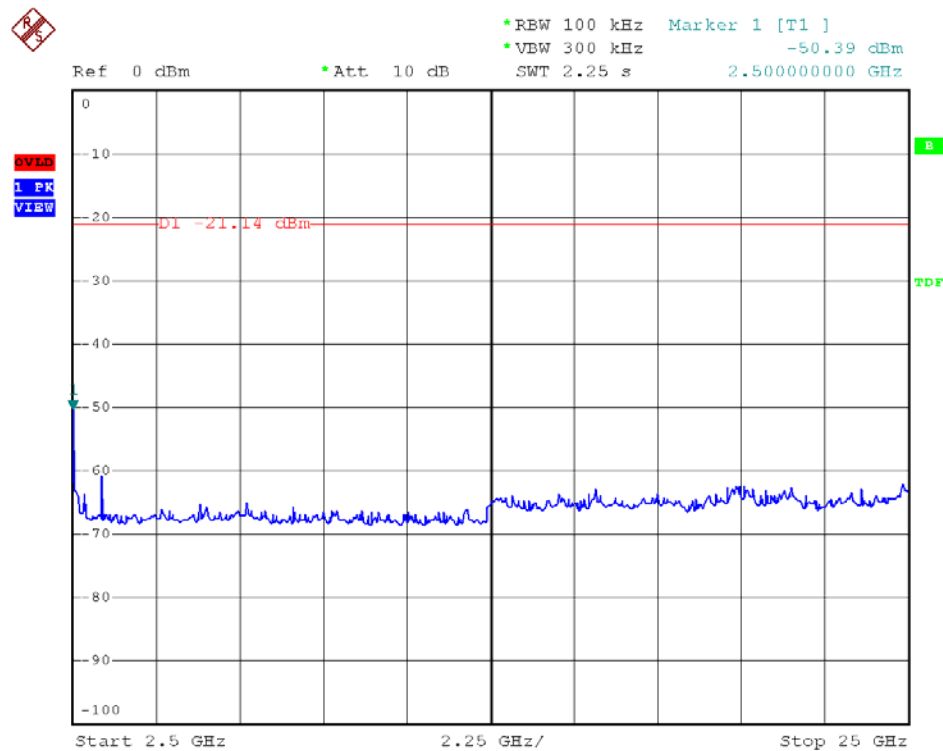
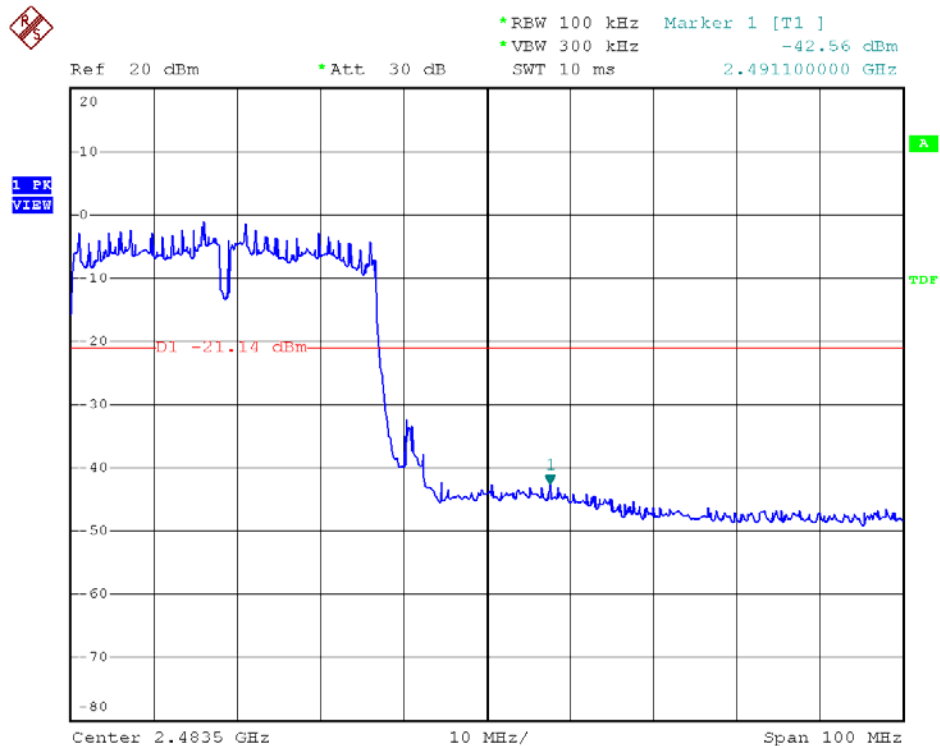


Modulation Standard: 802.11n HT40 (13.5Mbps), ANT M  
Channel: 09



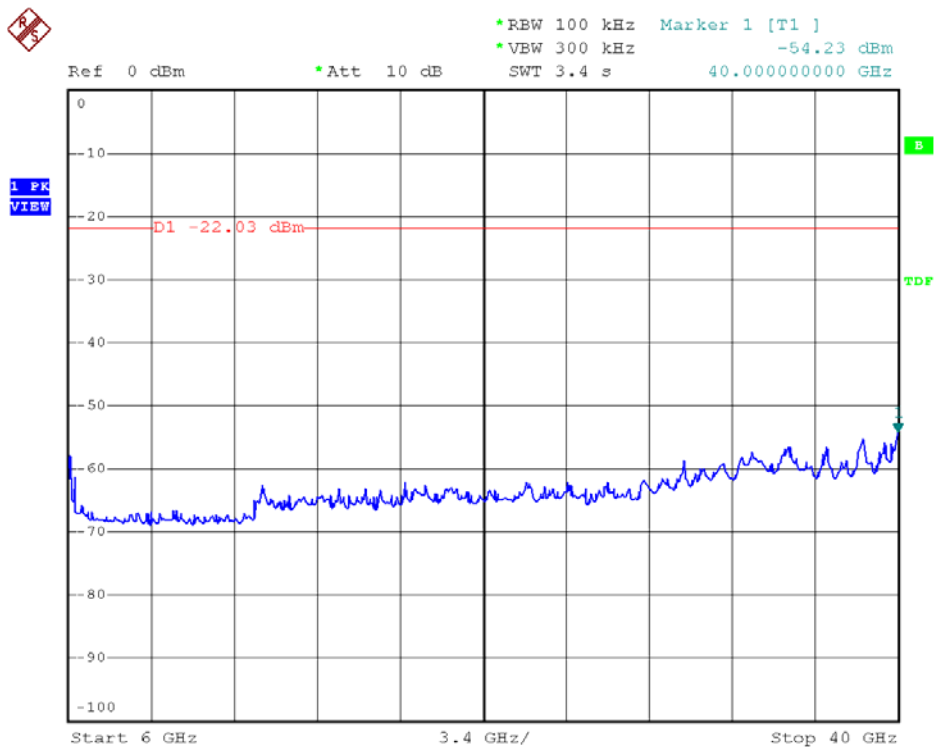
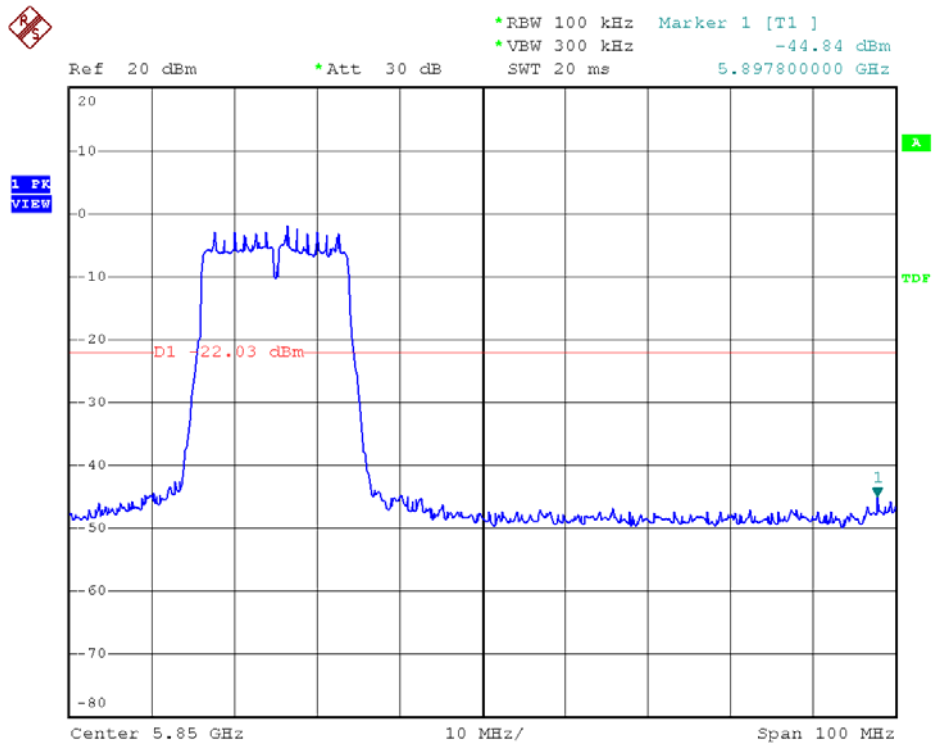


Modulation Standard: 802.11n HT40 (13.5Mbps), ANT L  
Channel: 09



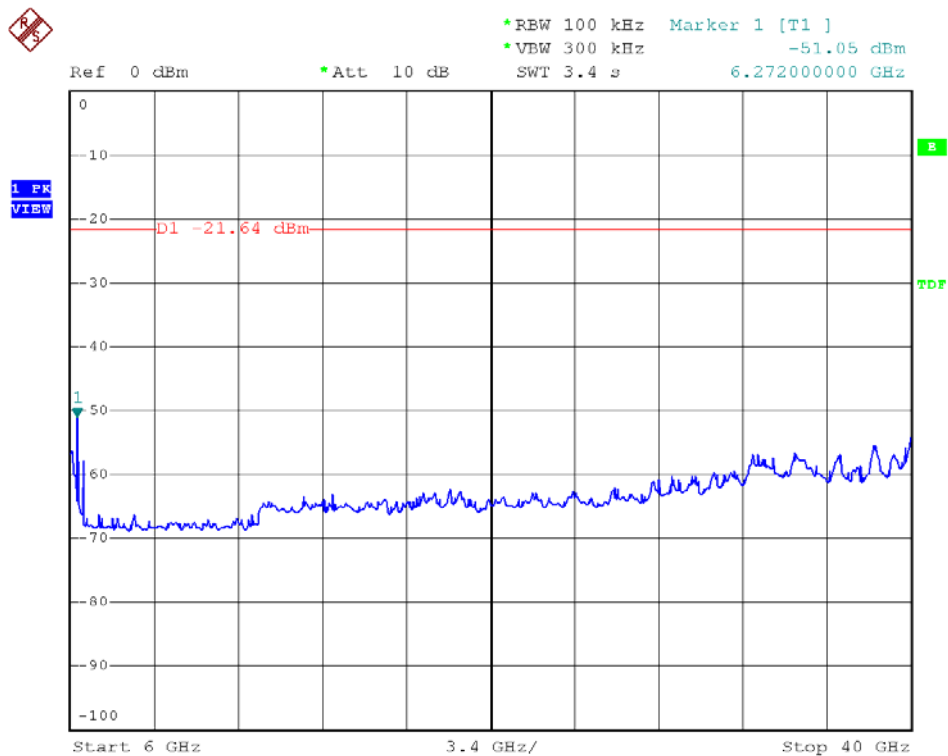
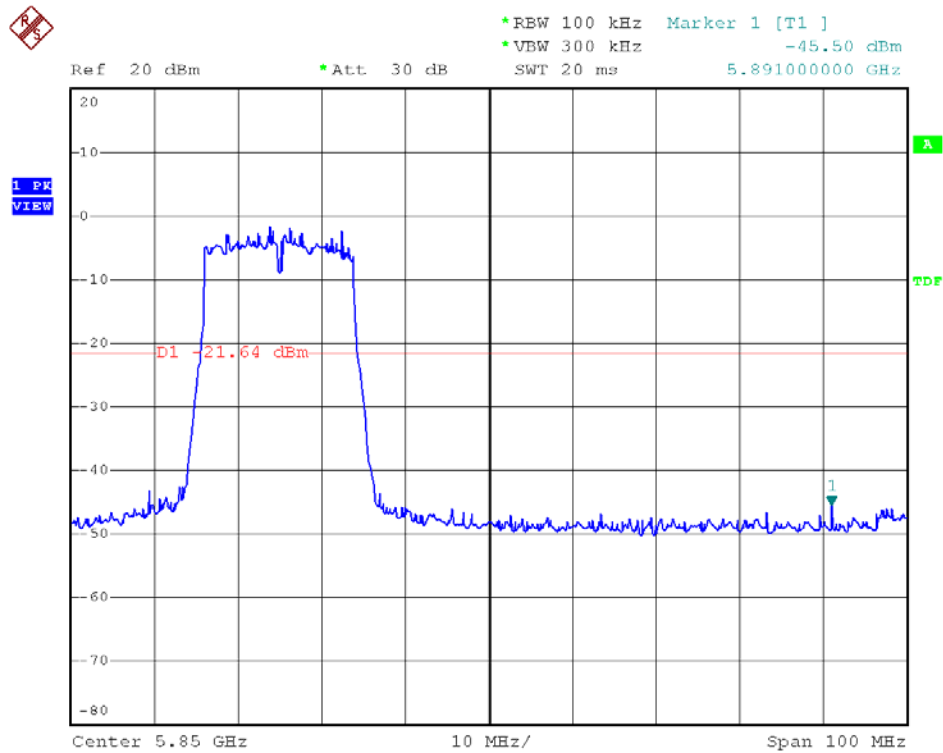


Modulation Standard: 802.11ac VHT20 (6.5Mbps), ANT R  
Channel: 165



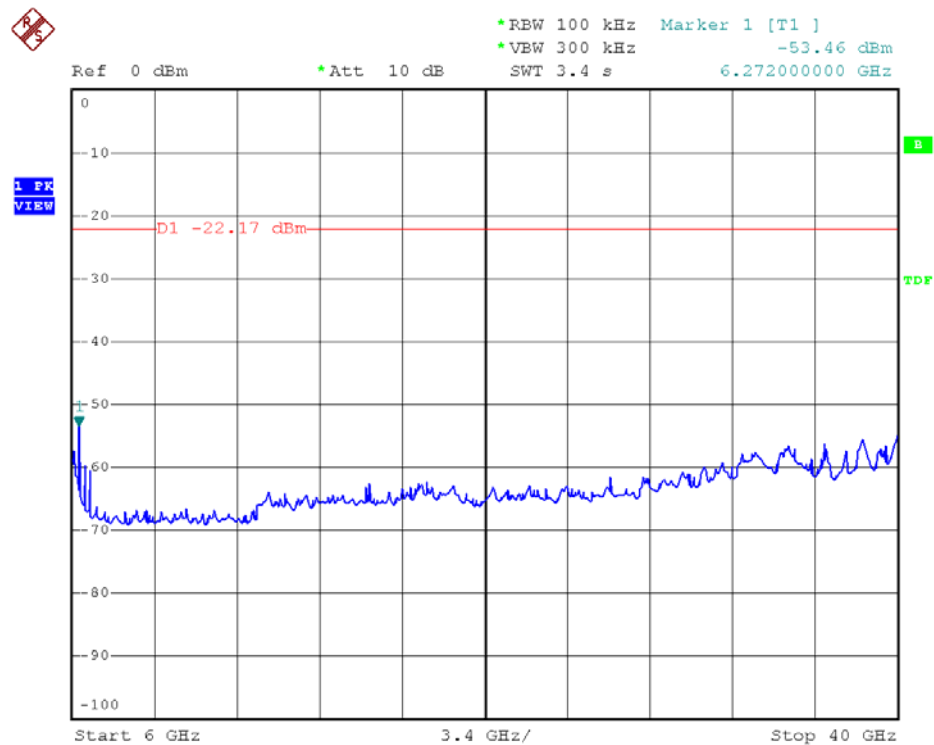
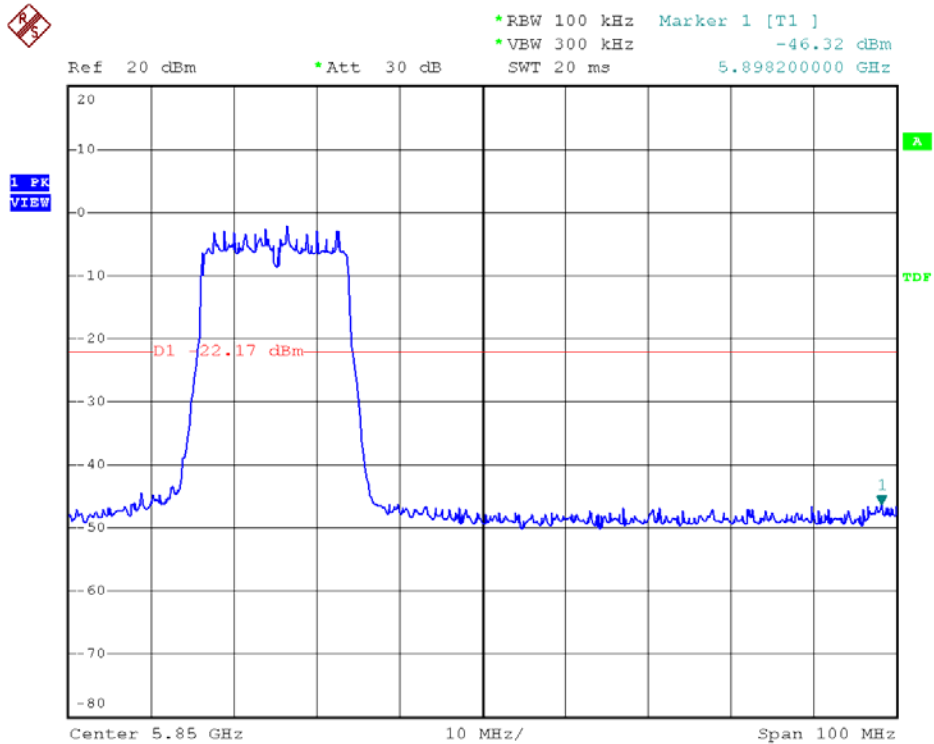


Modulation Standard: 802.11ac VHT20 (6.5Mbps), ANT M  
Channel: 165



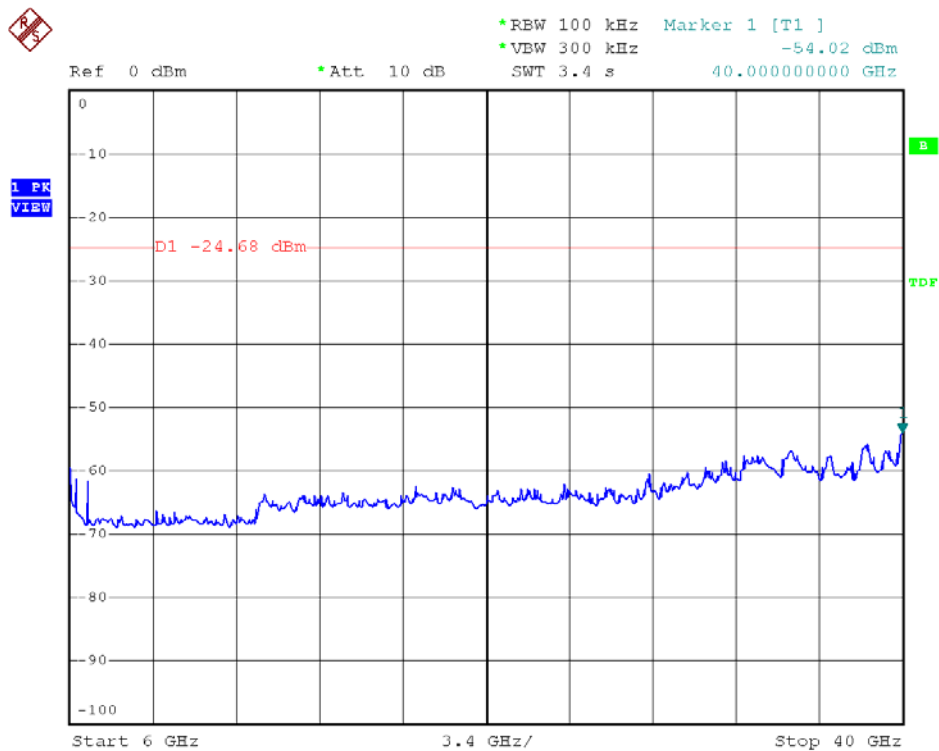
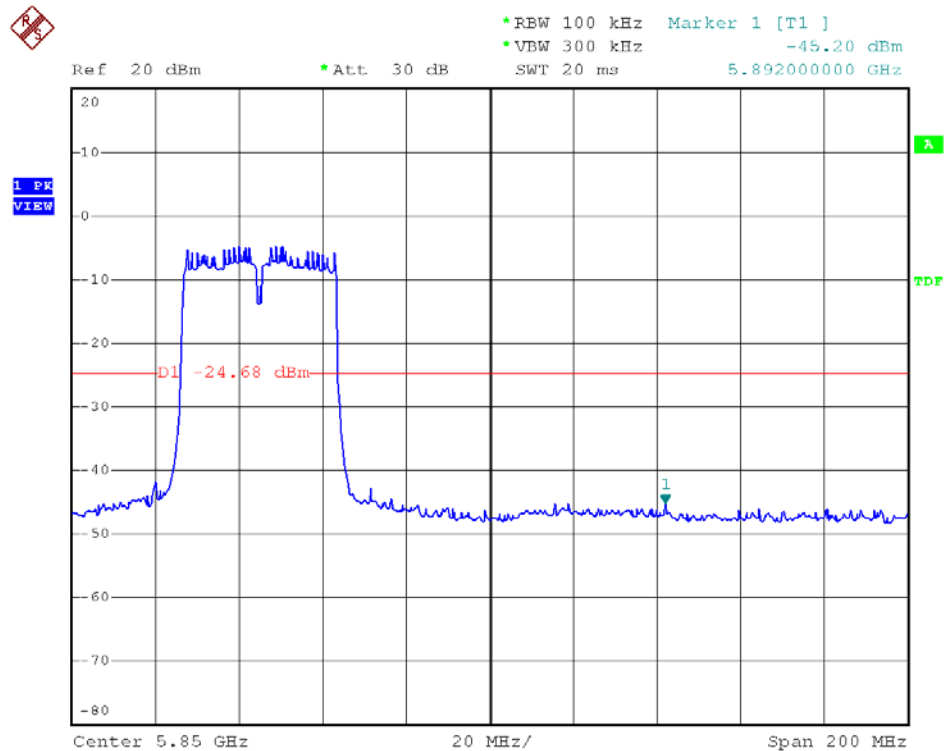


Modulation Standard: 802.11ac VHT20 (6.5Mbps), ANT L  
Channel: 165



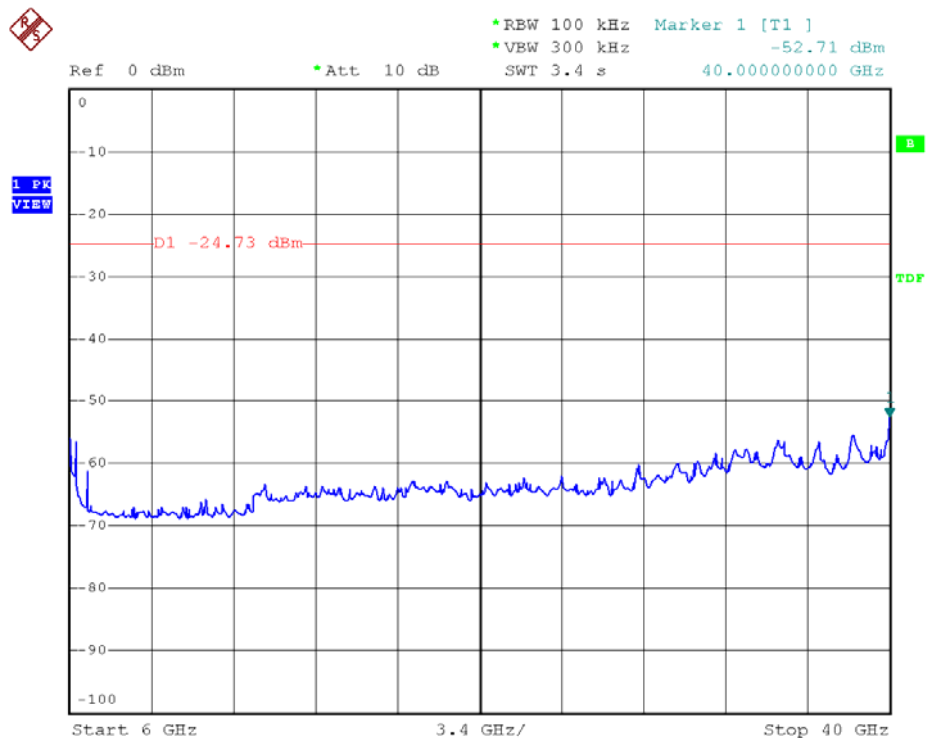
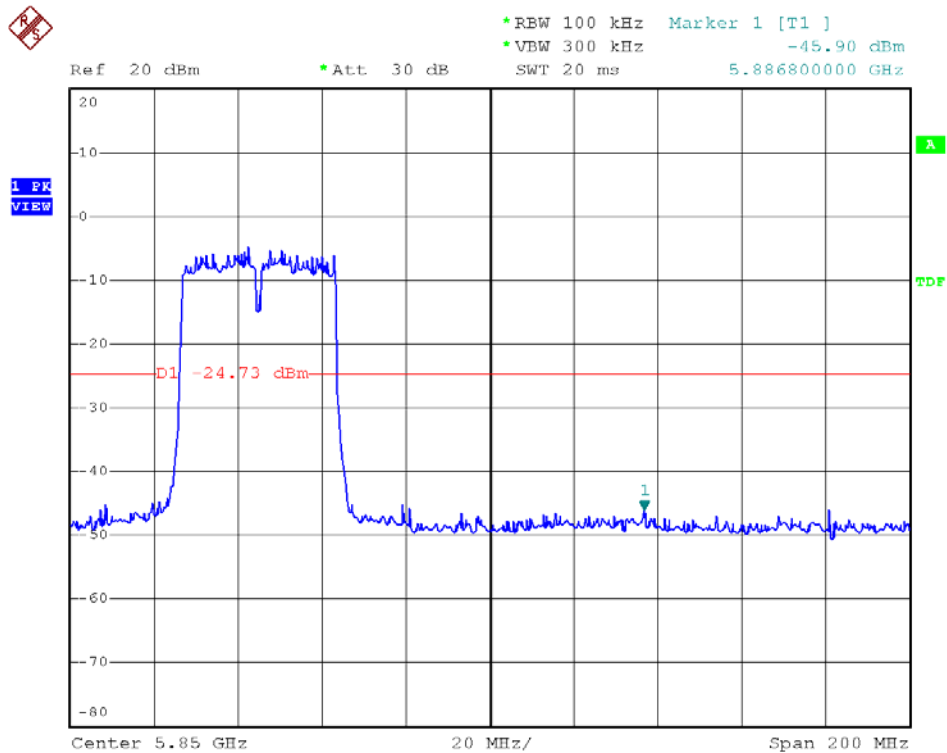


Modulation Standard: 802.11ac VHT40 (13.5Mbps), ANT R  
Channel: 159



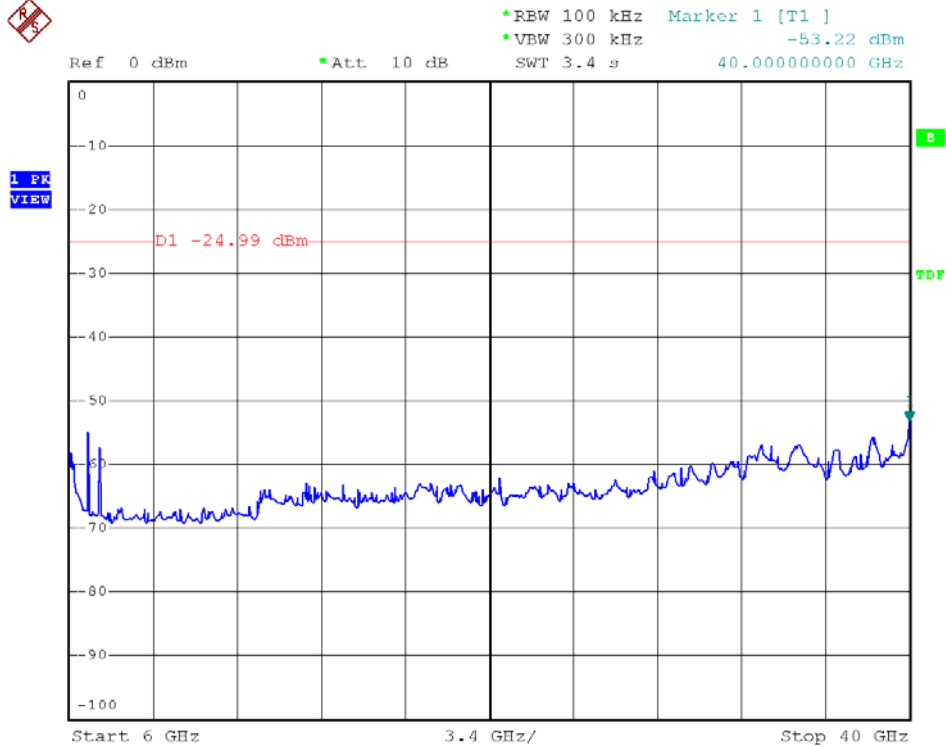
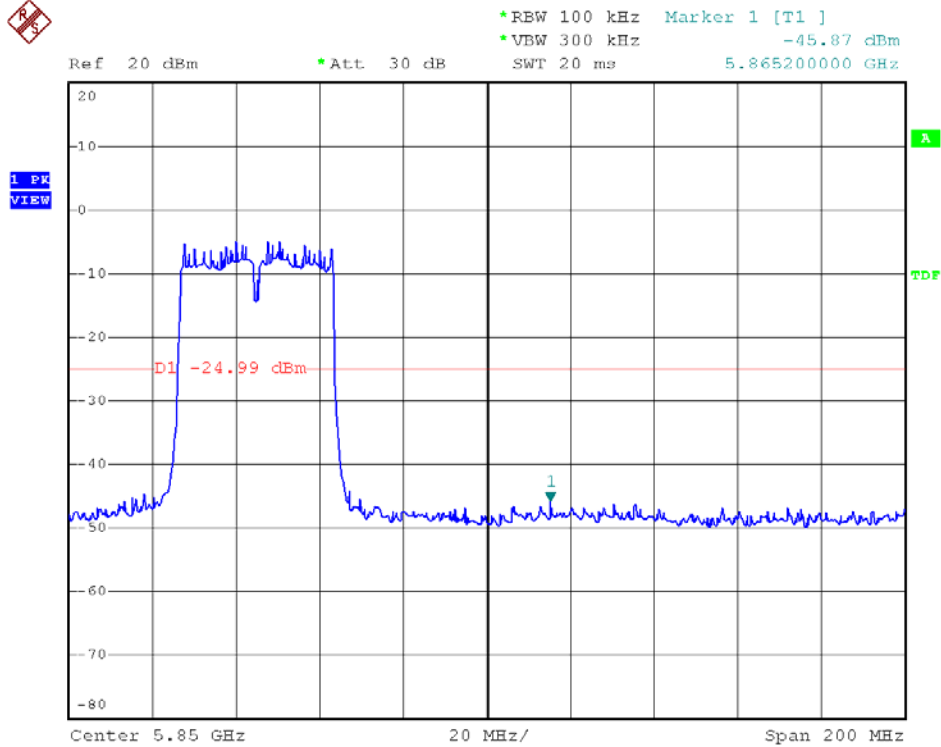


Modulation Standard: 802.11ac VHT40 (13.5Mbps), ANT M  
Channel: 159





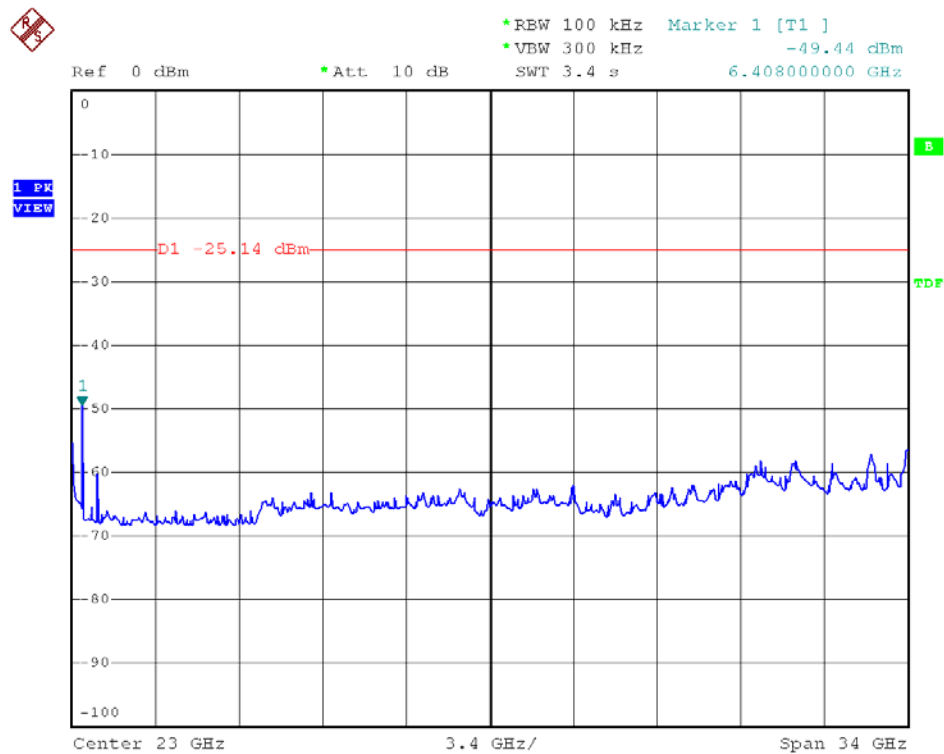
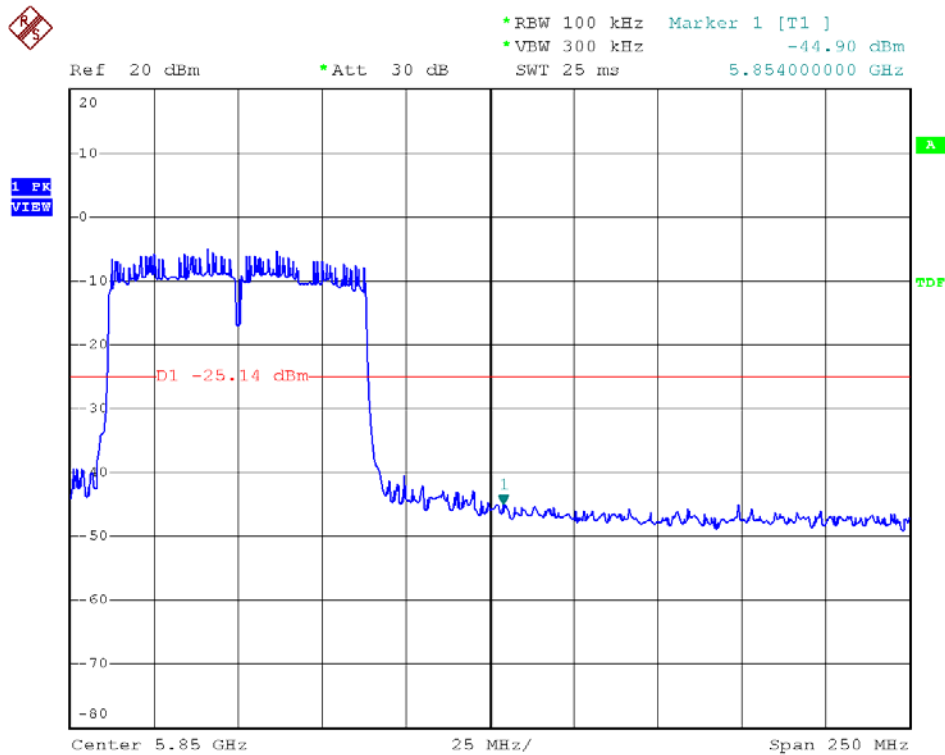
Modulation Standard: 802.11ac VHT40 (13.5Mbps), ANT L  
Channel: 159





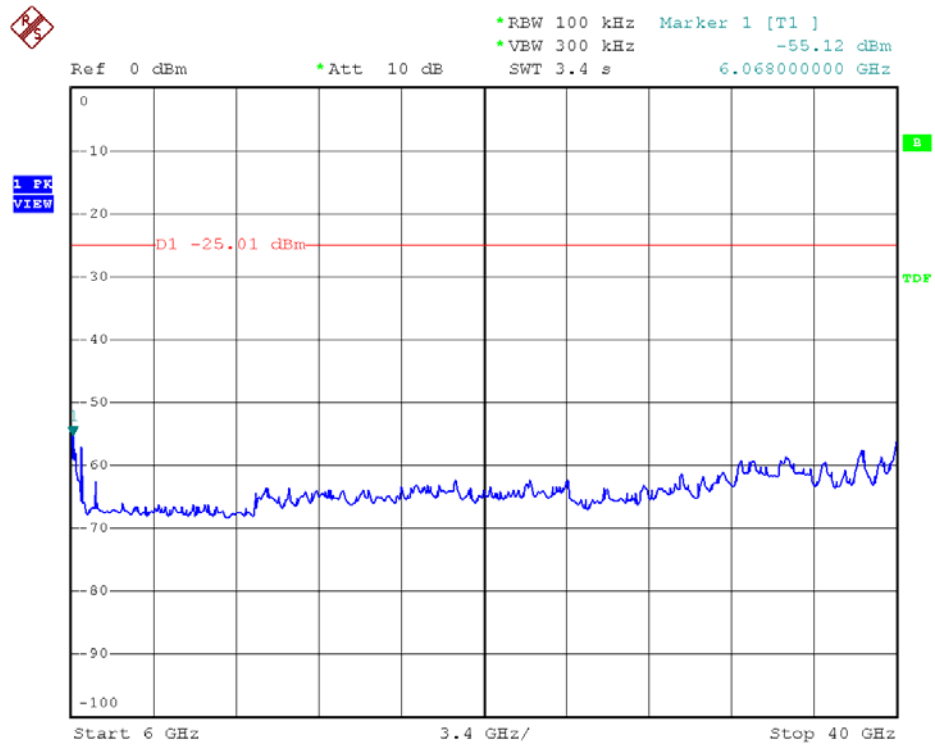
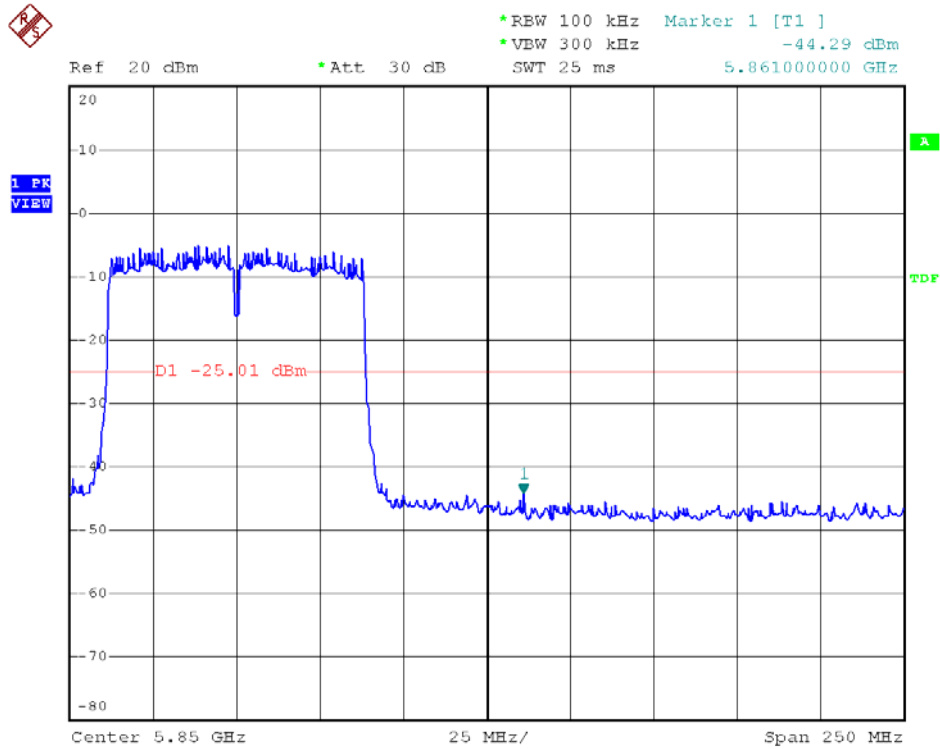


Modulation Standard: 802.11ac VHT80 (29.3Mbps), ANT R  
Channel: 155



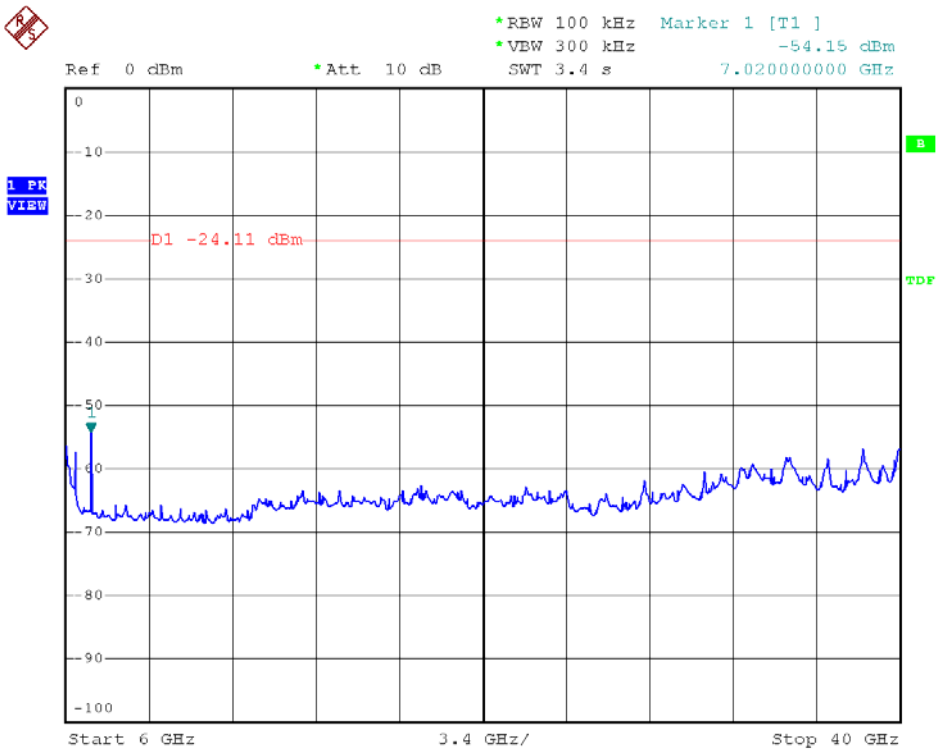
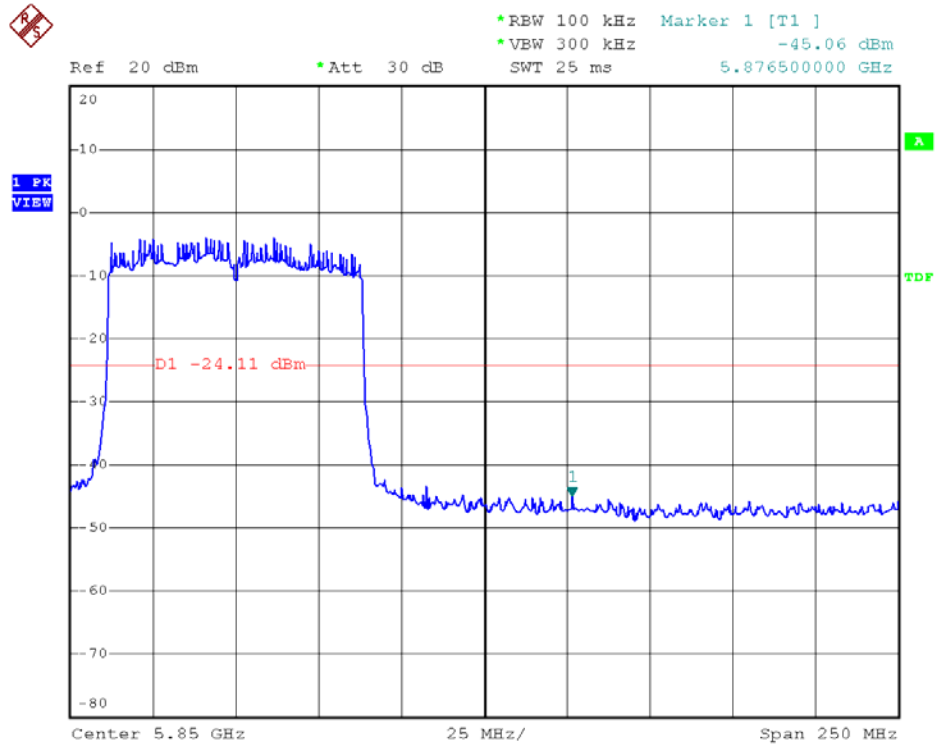


Modulation Standard: 802.11ac VHT80 (29.3Mbps), ANT M  
Channel: 155





Modulation Standard: 802.11ac VHT80 (29.3Mbps), ANT L  
Channel: 155





## 9.6 Restrict Band Emission Measurement Data

Test Date: Mar. 19, 2013

Temperature: 22 °C

Atmospheric pressure: 1020 hPa

Humidity: 65 %

Model No.: UAP-AC

Modulation Standard: IEEE 802.11b (1Mbps)

| Channel 1       |             |                      |                       |                 |        | Fundamental Frequency: 2412 MHz |     |             |            |              |
|-----------------|-------------|----------------------|-----------------------|-----------------|--------|---------------------------------|-----|-------------|------------|--------------|
| Frequency (MHz) | Ant-Pol H/V | Meter Reading (dBuV) | Corrected Factor (dB) | Result (dBuV/m) | Remark | Limit (dBuV/m)                  |     | Margin (dB) | Table Deg. | Ant High (m) |
|                 |             |                      |                       |                 |        | Peak                            | Ave |             |            |              |
| 2376.09         | H           | 50.62                | 1.49                  | 52.11           | Peak   | 74                              | 54  | -21.89      | 153        | 1.00         |
| ---             | H           | ---                  | ---                   | ---             | Ave    | 74                              | 54  | ---         | ---        | ---          |
| 2331.62         | V           | 51.88                | 3.05                  | 54.93           | Peak   | 74                              | 54  | -19.07      | 117        | 1.00         |
| 2331.93         | V           | 40.91                | 3.04                  | 43.95           | Ave    | 74                              | 54  | -10.05      | 117        | 1.00         |
| Channel 11      |             |                      |                       |                 |        | Fundamental Frequency: 2462 MHz |     |             |            |              |
| Frequency (MHz) | Ant-Pol H/V | Meter Reading (dBuV) | Corrected Factor (dB) | Result (dBuV/m) | Remark | Limit (dBuV/m)                  |     | Margin (dB) | Table Deg. | Ant High (m) |
|                 |             |                      |                       |                 |        | Peak                            | Ave |             |            |              |
| 2483.66         | H           | 50.04                | 0.10                  | 50.14           | Peak   | 74                              | 54  | -23.86      | 154        | 1.00         |
| ---             | H           | ---                  | ---                   | ---             | Ave    | 74                              | 54  | ---         | ---        | ---          |
| 2484.04         | V           | 51.83                | -2.57                 | 49.26           | Peak   | 74                              | 54  | -24.74      | 113        | 1.00         |
| ---             | V           | ---                  | ---                   | ---             | Ave    | 74                              | 54  | ---         | ---        | ---          |

Modulation Standard: IEEE 802.11g (6Mbps)

| Channel 1       |             |                      |                       |                 |        | Fundamental Frequency: 2412 MHz |     |             |            |              |
|-----------------|-------------|----------------------|-----------------------|-----------------|--------|---------------------------------|-----|-------------|------------|--------------|
| Frequency (MHz) | Ant-Pol H/V | Meter Reading (dBuV) | Corrected Factor (dB) | Result (dBuV/m) | Remark | Limit (dBuV/m)                  |     | Margin (dB) | Table Deg. | Ant High (m) |
|                 |             |                      |                       |                 |        | Peak                            | Ave |             |            |              |
| 2387.31         | H           | 50.47                | 1.44                  | 51.91           | Peak   | 74                              | 54  | -22.09      | 153        | 1.00         |
| ---             | H           | ---                  | ---                   | ---             | Ave    | 74                              | 54  | ---         | ---        | ---          |
| 2389.86         | V           | 53.73                | 2.07                  | 55.80           | Peak   | 74                              | 54  | -18.20      | 118        | 1.00         |
| 2389.81         | V           | 41.66                | 2.07                  | 43.73           | Ave    | 74                              | 54  | -10.27      | 118        | 1.00         |
| Channel 11      |             |                      |                       |                 |        | Fundamental Frequency: 2462 MHz |     |             |            |              |
| Frequency (MHz) | Ant-Pol H/V | Meter Reading (dBuV) | Corrected Factor (dB) | Result (dBuV/m) | Remark | Limit (dBuV/m)                  |     | Margin (dB) | Table Deg. | Ant High (m) |
|                 |             |                      |                       |                 |        | Peak                            | Ave |             |            |              |
| 2484.11         | H           | 51.23                | 0.10                  | 51.33           | Peak   | 74                              | 54  | -22.67      | 150        | 1.00         |
| ---             | H           | ---                  | ---                   | ---             | Ave    | 74                              | 54  | ---         | ---        | ---          |
| 2483.54         | V           | 54.60                | -2.54                 | 52.86           | Peak   | 74                              | 54  | -21.94      | 114        | 1.00         |
| ---             | V           | ---                  | ---                   | ---             | Ave    | 74                              | 54  | ---         | ---        | ---          |



Modulation Standard: IEEE 802.11n HT20 (6.5Mbps)

| Channel 1       |             |                      |                       |                 |        | Fundamental Frequency: 2412 MHz |     |             |            |              |
|-----------------|-------------|----------------------|-----------------------|-----------------|--------|---------------------------------|-----|-------------|------------|--------------|
| Frequency (MHz) | Ant-Pol H/V | Meter Reading (dBuV) | Corrected Factor (dB) | Result (dBuV/m) | Remark | Limit (dBuV/m)                  |     | Margin (dB) | Table Deg. | Ant High (m) |
|                 |             |                      |                       |                 |        | Peak                            | Ave |             |            |              |
| 2389.86         | H           | 50.94                | 1.44                  | 52.38           | Peak   | 74                              | 54  | -21.62      | 155        | 1.00         |
| ---             | H           | ---                  | ---                   | ---             | Ave    | 74                              | 54  | ---         | ---        | ---          |
| 2389.56         | V           | 58.14                | 2.08                  | 60.22           | Peak   | 74                              | 54  | -13.78      | 124        | 1.00         |
| 2389.81         | V           | 44.77                | 2.07                  | 46.84           | Ave    | 74                              | 54  | -7.16       | 124        | 1.00         |
| Channel 11      |             |                      |                       |                 |        | Fundamental Frequency: 2462 MHz |     |             |            |              |
| Frequency (MHz) | Ant-Pol H/V | Meter Reading (dBuV) | Corrected Factor (dB) | Result (dBuV/m) | Remark | Limit (dBuV/m)                  |     | Margin (dB) | Table Deg. | Ant High (m) |
|                 |             |                      |                       |                 |        | Peak                            | Ave |             |            |              |
| 2483.73         | H           | 51.28                | 0.10                  | 51.38           | Peak   | 74                              | 54  | -22.62      | 156        | 1.00         |
| ---             | H           | ---                  | ---                   | ---             | Ave    | 74                              | 54  | ---         | ---        | ---          |
| 2484.72         | V           | 60.01                | -2.61                 | 57.40           | Peak   | 74                              | 54  | -16.60      | 186        | 1.00         |
| 2483.94         | V           | 46.14                | -2.56                 | 42.58           | Ave    | 74                              | 54  | -11.42      | 186        | 1.00         |

Modulation Standard: IEEE 802.11n HT40 (13.5Mbps)

| Channel 3       |             |                      |                       |                 |        | Fundamental Frequency: 2422 MHz |     |             |            |              |
|-----------------|-------------|----------------------|-----------------------|-----------------|--------|---------------------------------|-----|-------------|------------|--------------|
| Frequency (MHz) | Ant-Pol H/V | Meter Reading (dBuV) | Corrected Factor (dB) | Result (dBuV/m) | Remark | Limit (dBuV/m)                  |     | Margin (dB) | Table Deg. | Ant High (m) |
|                 |             |                      |                       |                 |        | Peak                            | Ave |             |            |              |
| 2383.64         | H           | 56.42                | 1.46                  | 57.88           | Peak   | 74                              | 54  | -16.12      | 138        | 1.00         |
| 2385.73         | H           | 41.58                | 1.45                  | 43.03           | Ave    | 74                              | 54  | -10.97      | 138        | 1.00         |
| 2388.74         | V           | 65.76                | 2.10                  | 67.86           | Peak   | 74                              | 54  | -6.14       | 188        | 1.00         |
| 2384.97         | V           | 48.33                | 2.15                  | 50.48           | Ave    | 74                              | 54  | -3.52       | 188        | 1.00         |
| Channel 9       |             |                      |                       |                 |        | Fundamental Frequency: 2452 MHz |     |             |            |              |
| Frequency (MHz) | Ant-Pol H/V | Meter Reading (dBuV) | Corrected Factor (dB) | Result (dBuV/m) | Remark | Limit (dBuV/m)                  |     | Margin (dB) | Table Deg. | Ant High (m) |
|                 |             |                      |                       |                 |        | Peak                            | Ave |             |            |              |
| 2491.33         | H           | 54.88                | -0.02                 | 54.86           | Peak   | 74                              | 54  | -19.14      | 200        | 1.00         |
| ---             | H           | ---                  | ---                   | ---             | Ave    | 74                              | 54  | ---         | ---        | ---          |
| 2485.10         | V           | 65.77                | -2.63                 | 63.14           | Peak   | 74                              | 54  | -10.86      | 115        | 1.00         |
| 2488.12         | V           | 46.68                | -2.78                 | 43.90           | Ave    | 74                              | 54  | -10.10      | 115        | 1.00         |

Notes:

1. Result = Meter Reading + Factor
2. Factor = Antenna Factor + Cable Loss – Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3 MHz (detector peak mode) for Peak detection at frequency above 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3 MHz (detector sample mode) for Average detection at frequency above 1GHz.



Test Date: Mar. 19, 2013

Temperature: 22 °C

Atmospheric pressure: 1020 hPa

Humidity: 65 %

Model No.: UAP-AC Outdoor

Modulation Standard: IEEE 802.11b (1Mbps)

| Channel 1       |             |                      |                       |                 |        | Fundamental Frequency: 2412 MHz |     |             |            |              |
|-----------------|-------------|----------------------|-----------------------|-----------------|--------|---------------------------------|-----|-------------|------------|--------------|
| Frequency (MHz) | Ant-Pol H/V | Meter Reading (dBuV) | Corrected Factor (dB) | Result (dBuV/m) | Remark | Limit (dBuV/m)                  |     | Margin (dB) | Table Deg. | Ant High (m) |
|                 |             |                      |                       |                 |        | Peak                            | Ave |             |            |              |
| 2321.42         | H           | 47.50                | 1.74                  | 49.24           | Peak   | 74                              | 54  | -24.76      | 209        | 1.00         |
| ---             | H           | ---                  | ---                   | ---             | Ave    | 74                              | 54  | ---         | ---        | ---          |
| 2387.31         | V           | 60.79                | 2.10                  | 62.89           | Peak   | 74                              | 54  | -11.11      | 244        | 1.00         |
| 2389.81         | V           | 48.11                | 2.07                  | 50.18           | Ave    | 74                              | 54  | -3.82       | 244        | 1.00         |
| Channel 11      |             |                      |                       |                 |        | Fundamental Frequency: 2462 MHz |     |             |            |              |
| Frequency (MHz) | Ant-Pol H/V | Meter Reading (dBuV) | Corrected Factor (dB) | Result (dBuV/m) | Remark | Limit (dBuV/m)                  |     | Margin (dB) | Table Deg. | Ant High (m) |
|                 |             |                      |                       |                 |        | Peak                            | Ave |             |            |              |
| 2483.96         | H           | 49.25                | 0.10                  | 49.35           | Peak   | 74                              | 54  | -24.65      | 182        | 1.00         |
| ---             | H           | ---                  | ---                   | ---             | Ave    | 74                              | 54  | ---         | ---        | ---          |
| 2483.96         | V           | 56.61                | -2.57                 | 54.04           | Peak   | 74                              | 54  | -19.96      | 251        | 1.00         |
| 2483.56         | V           | 45.07                | -2.54                 | 42.53           | Ave    | 74                              | 54  | -11.47      | 251        | 1.00         |

Modulation Standard: IEEE 802.11g (6Mbps)

| Channel 1       |             |                      |                       |                 |        | Fundamental Frequency: 2412 MHz |     |             |            |              |
|-----------------|-------------|----------------------|-----------------------|-----------------|--------|---------------------------------|-----|-------------|------------|--------------|
| Frequency (MHz) | Ant-Pol H/V | Meter Reading (dBuV) | Corrected Factor (dB) | Result (dBuV/m) | Remark | Limit (dBuV/m)                  |     | Margin (dB) | Table Deg. | Ant High (m) |
|                 |             |                      |                       |                 |        | Peak                            | Ave |             |            |              |
| 2389.35         | H           | 49.59                | 1.44                  | 51.03           | Peak   | 74                              | 54  | -22.97      | 205        | 1.00         |
| ---             | H           | ---                  | ---                   | ---             | Ave    | 74                              | 54  | ---         | ---        | ---          |
| 2389.35         | V           | 60.44                | 2.08                  | 62.52           | Peak   | 74                              | 54  | -11.48      | 242        | 1.00         |
| 2389.81         | V           | 48.28                | 2.07                  | 50.35           | Ave    | 74                              | 54  | -3.65       | 242        | 1.00         |
| Channel 11      |             |                      |                       |                 |        | Fundamental Frequency: 2462 MHz |     |             |            |              |
| Frequency (MHz) | Ant-Pol H/V | Meter Reading (dBuV) | Corrected Factor (dB) | Result (dBuV/m) | Remark | Limit (dBuV/m)                  |     | Margin (dB) | Table Deg. | Ant High (m) |
|                 |             |                      |                       |                 |        | Peak                            | Ave |             |            |              |
| 2483.58         | H           | 50.34                | 0.11                  | 50.45           | Peak   | 74                              | 54  | -23.55      | 183        | 1.00         |
| ---             | H           | ---                  | ---                   | ---             | Ave    | 74                              | 54  | ---         | ---        | ---          |
| 2483.96         | V           | 62.01                | -2.57                 | 59.44           | Peak   | 74                              | 54  | -14.56      | 253        | 1.00         |
| 2483.56         | V           | 49.06                | -2.54                 | 46.52           | Ave    | 74                              | 54  | -7.48       | 253        | 1.00         |



Modulation Standard: IEEE 802.11n HT20 (6.5Mbps)

| Channel 1       |             |                      |                       |                 |        | Fundamental Frequency: 2412 MHz |     |             |            |              |
|-----------------|-------------|----------------------|-----------------------|-----------------|--------|---------------------------------|-----|-------------|------------|--------------|
| Frequency (MHz) | Ant-Pol H/V | Meter Reading (dBuV) | Corrected Factor (dB) | Result (dBuV/m) | Remark | Limit (dBuV/m)                  |     | Margin (dB) | Table Deg. | Ant High (m) |
|                 |             |                      |                       |                 |        | Peak                            | Ave |             |            |              |
| 2389.56         | H           | 63.70                | 1.44                  | 65.14           | Peak   | 74                              | 54  | -8.86       | 141        | 1.00         |
| 2389.81         | H           | 46.00                | 1.44                  | 47.44           | Ave    | 74                              | 54  | -6.56       | 141        | 1.00         |
| 2389.35         | V           | 61.77                | 2.08                  | 63.85           | Peak   | 74                              | 54  | -10.15      | 244        | 1.00         |
| 2389.81         | V           | 48.54                | 2.07                  | 50.61           | Ave    | 74                              | 54  | -3.39       | 244        | 1.00         |
| Channel 11      |             |                      |                       |                 |        | Fundamental Frequency: 2462 MHz |     |             |            |              |
| Frequency (MHz) | Ant-Pol H/V | Meter Reading (dBuV) | Corrected Factor (dB) | Result (dBuV/m) | Remark | Limit (dBuV/m)                  |     | Margin (dB) | Table Deg. | Ant High (m) |
|                 |             |                      |                       |                 |        | Peak                            | Ave |             |            |              |
| 2483.96         | H           | 63.53                | 0.10                  | 63.63           | Peak   | 74                              | 54  | -10.37      | 186        | 1.00         |
| 2483.56         | H           | 48.71                | 0.11                  | 48.82           | Ave    | 74                              | 54  | -5.18       | 186        | 1.00         |
| 2483.58         | V           | 60.69                | -2.54                 | 58.15           | Peak   | 74                              | 54  | -15.85      | 254        | 1.00         |
| 2483.56         | V           | 47.85                | -2.54                 | 45.31           | Ave    | 74                              | 54  | -8.69       | 254        | 1.00         |

Modulation Standard: IEEE 802.11n HT40 (13.5Mbps)

| Channel 3       |             |                      |                       |                 |        | Fundamental Frequency: 2422 MHz |     |             |            |              |
|-----------------|-------------|----------------------|-----------------------|-----------------|--------|---------------------------------|-----|-------------|------------|--------------|
| Frequency (MHz) | Ant-Pol H/V | Meter Reading (dBuV) | Corrected Factor (dB) | Result (dBuV/m) | Remark | Limit (dBuV/m)                  |     | Margin (dB) | Table Deg. | Ant High (m) |
|                 |             |                      |                       |                 |        | Peak                            | Ave |             |            |              |
| 2483.96         | H           | 63.53                | 0.10                  | 63.63           | Peak   | 74                              | 54  | -10.37      | 186        | 1.00         |
| 2483.56         | H           | 48.71                | 0.11                  | 48.82           | Ave    | 74                              | 54  | -5.18       | 186        | 1.00         |
| 2483.58         | V           | 60.69                | -2.54                 | 58.15           | Peak   | 74                              | 54  | -15.85      | 254        | 1.00         |
| 2483.56         | V           | 47.85                | -2.54                 | 45.31           | Ave    | 74                              | 54  | -8.69       | 254        | 1.00         |
| Channel 9       |             |                      |                       |                 |        | Fundamental Frequency: 2452 MHz |     |             |            |              |
| Frequency (MHz) | Ant-Pol H/V | Meter Reading (dBuV) | Corrected Factor (dB) | Result (dBuV/m) | Remark | Limit (dBuV/m)                  |     | Margin (dB) | Table Deg. | Ant High (m) |
|                 |             |                      |                       |                 |        | Peak                            | Ave |             |            |              |
| 2483.58         | H           | 69.55                | 0.11                  | 69.66           | Peak   | 74                              | 54  | -4.34       | 150        | 1.00         |
| 2488.79         | H           | 50.81                | 0.03                  | 50.84           | Ave    | 74                              | 54  | -3.16       | 150        | 1.00         |
| 2485.56         | V           | 69.67                | -2.66                 | 67.01           | Peak   | 74                              | 54  | -6.99       | 179        | 1.00         |
| 2487.46         | V           | 50.03                | -2.76                 | 47.27           | Ave    | 74                              | 54  | -6.73       | 179        | 1.00         |

Notes:

1. Result = Meter Reading + Factor
2. Factor = Antenna Factor + Cable Loss – Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3 MHz (detector peak mode) for Peak detection at frequency above 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3 MHz (detector sample mode) for Average detection at frequency above 1GHz.



## 10. Restricted Bands of Operation

Only spurious emissions are permitted in any of the frequency bands listed below:

| MHz                 | MHz                   | MHz             | GHz             |
|---------------------|-----------------------|-----------------|-----------------|
| 0.09000 – 0.11000   | 16.42000 – 16.42300   | 399.9 – 410.0   | 4.500 – 5.250   |
| 0.49500 – 0.505**   | 16.69475 – 16.69525   | 608.0 – 614.0   | 5.350 – 5.460   |
| 2.17350 – 2.19050   | 16.80425 – 16.80475   | 960.0 – 1240.0  | 7.250 – 7.750   |
| 4.12500 – 4.12800   | 25.50000 – 25.67000   | 1300.0 – 1427.0 | 8.025 – 8.500   |
| 4.17725 – 4.17775   | 37.50000 – 38.25000   | 1435.0 – 1626.5 | 9.000 – 9.200   |
| 4.20725 – 4.20775   | 73.00000 – 74.60000   | 1645.5 – 1646.5 | 9.300 – 9.500   |
| 6.21500 – 6.21800   | 74.80000 – 75.20000   | 1660.0 – 1710.0 | 10.600 – 12.700 |
| 6.26775 – 6.26825   | 108.00000 – 121.94000 | 1718.8 – 1722.2 | 13.250 – 13.400 |
| 6.31175 – 6.31225   | 123.00000 – 138.00000 | 2200.0 – 2300.0 | 14.470 – 14.500 |
| 8.29100 – 8.29400   | 149.90000 – 150.05000 | 2310.0 – 2390.0 | 15.350 – 16.200 |
| 8.36200 – 8.36600   | 156.52475 – 156.52525 | 2483.5 – 2500.0 | 17.700 – 21.400 |
| 8.37625 – 8.38675   | 156.70000 – 156.90000 | 2655.0 – 2900.0 | 22.010 – 23.120 |
| 8.41425 – 8.41475   | 162.01250 – 167.17000 | 3260.0 – 3267.0 | 23.600 – 24.000 |
| 12.29000 – 12.29300 | 167.72000 – 173.20000 | 3332.0 – 3339.0 | 31.200 – 31.800 |
| 12.51975 – 12.52025 | 240.00000 – 285.00000 | 3345.8 – 3358.0 | 36.430 – 36.500 |
| 12.57675 – 12.57725 | 322.00000 – 335.40000 | 3600.0 – 4400.0 | Above 38.6      |
| 13.36000 – 13.41000 |                       |                 |                 |

\*\* : Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz

### 10.1 Labeling Requirement

The device shall bear the following statement in a conspicuous location on the device:

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.