



#### 7.4.5. TEST RESULTS

No non-compliance noted

##### Test Data

###### Test mode: IEEE 802.11b (Antenna 0)

| Channel | Frequency (MHz) | Output Power (dBm) | Output Power (W) | Limit (W) | Result |
|---------|-----------------|--------------------|------------------|-----------|--------|
| Low     | 2412            | 26.37              | 0.43351          | 1         | PASS   |
| Mid     | 2437            | 26.59              | 0.45604          |           | PASS   |
| High    | 2462            | 26.31              | 0.42756          |           | PASS   |

###### Test mode: IEEE 802.11b (Antenna 1)

| Channel | Frequency (MHz) | Output Power (dBm) | Output Power (W) | Limit (W) | Result |
|---------|-----------------|--------------------|------------------|-----------|--------|
| Low     | 2412            | 25.67              | 0.36898          | 1         | PASS   |
| Mid     | 2437            | 25.25              | 0.33497          |           | PASS   |
| High    | 2462            | 24.46              | 0.27925          |           | PASS   |

###### Test mode: IEEE 802.11g (Antenna 0)

| Channel | Frequency (MHz) | Output Power (dBm) | Output Power (W) | Limit (W) | Result |
|---------|-----------------|--------------------|------------------|-----------|--------|
| Low     | 2412            | 23.04              | 0.20137          | 1         | PASS   |
| Mid     | 2437            | 23.13              | 0.20559          |           | PASS   |
| High    | 2462            | 23.17              | 0.20749          |           | PASS   |

###### Test mode: IEEE 802.11g (Antenna 1)

| Channel | Frequency (MHz) | Output Power (dBm) | Output Power (W) | Limit (W) | Result |
|---------|-----------------|--------------------|------------------|-----------|--------|
| Low     | 2412            | 22.71              | 0.18664          | 1         | PASS   |
| Mid     | 2437            | 22.55              | 0.17989          |           | PASS   |
| High    | 2462            | 22.05              | 0.16032          |           | PASS   |

**Test mode: IEEE 802.11n HT20 MHz(Combine with Antenna 0 and Antenna 1)**

| Channel | Frequency<br>(MHz) | Output Power<br>(dBm) |         |       | Output<br>Power<br>mW | Limit<br>(W) | Result |
|---------|--------------------|-----------------------|---------|-------|-----------------------|--------------|--------|
|         |                    | Chain 0               | Chain 1 | Total |                       |              |        |
| Low     | 2412               | 19.65                 | 20.01   | 22.84 | 0.19249               | 1            | PASS   |
| Mid     | 2437               | 20.12                 | 19.65   | 22.90 | 0.19506               |              | PASS   |
| High    | 2462               | 19.69                 | 18.74   | 22.25 | 0.16793               |              | PASS   |

**Test mode: IEEE 802.11n HT40 MHz(Combine with Antenna 0 and Antenna 1)**

| Channel | Frequency<br>(MHz) | Output Power<br>(dBm) |         |       | Output<br>Power<br>mW | Limit<br>(W) | Result |
|---------|--------------------|-----------------------|---------|-------|-----------------------|--------------|--------|
|         |                    | Chain 0               | Chain 1 | Total |                       |              |        |
| Low     | 2422               | 19.80                 | 19.80   | 22.81 | 0.19100               | 1            | PASS   |
| Mid     | 2437               | 19.65                 | 19.85   | 22.76 | 0.18886               |              | PASS   |
| High    | 2452               | 18.80                 | 18.83   | 21.83 | 0.15224               |              | PASS   |



## 7.5. BAND EDGES MEASUREMENT

### 7.5.1. LIMITS

According to §15.247(d), in any 100 kHz 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 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in 15.209(a) (see Section 15.205(c)).

### 7.5.2. TEST INSTRUMENTS

| Radiated Emission Test Site 966 (2) |                |                    |               |                  |                 |
|-------------------------------------|----------------|--------------------|---------------|------------------|-----------------|
| Name of Equipment                   | Manufacturer   | Model Number       | Serial Number | Last Calibration | Due Calibration |
| Spectrum Analyzer                   | Agilent        | N9010A             | MY52221469    | 10/25/2013       | 10/24/2014      |
| Spectrum Analyzer                   | Agilent        | E4446A             | US44300399    | 03/01/2014       | 03/01/2015      |
| EMI TEST RECEIVER                   | ROHDE&SCHWARZ  | ESCI               | 100783        | 03/09/2014       | 03/08/2015      |
| Amplifier                           | MITEQ          | AM-1604-3000       | 1123808       | 03/18/2015       | 03/18/2015      |
| High Noise Amplifier                | Agilent        | 8449B              | 3008A01838    | 03/18/2015       | 03/18/2015      |
| Board-Band Horn Antenna             | Schwarzbeck    | BBHA 9170          | 9170-497      | 07/10/2014       | 07/09/2015      |
| Bilog Antenna                       | SCHAFFNER      | CBL6143            | 5082          | 03/01/2014       | 03/01/2015      |
| Horn Antenna                        | SCHWARZBECK    | BBHA9120           | D286          | 03/01/2014       | 03/01/2015      |
| Loop Antenna                        | COM-POWER      | AL-130             | 121044        | 09/27/2013       | 09/26/2014      |
| Turn Table                          | N/A            | N/A                | N/A           | N.C.R            | N.C.R           |
| Controller                          | Sunol Sciences | SC104V             | 022310-1      | N.C.R            | N.C.R           |
| Controller                          | CT             | N/A                | N/A           | N.C.R            | N.C.R           |
| Temp. / Humidity Meter              | Anymetre       | JR913              | N/A           | 02/28/2014       | 02/28/2015      |
| Antenna Tower                       | SUNOL          | TLT2               | N/A           | N.C.R            | N.C.R           |
| Test S/W                            | FARAD          | LZ-RF / CCS-SZ-3A2 |               |                  |                 |

**NOTE:** 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

2. The FCC Site Registration number is 101879.

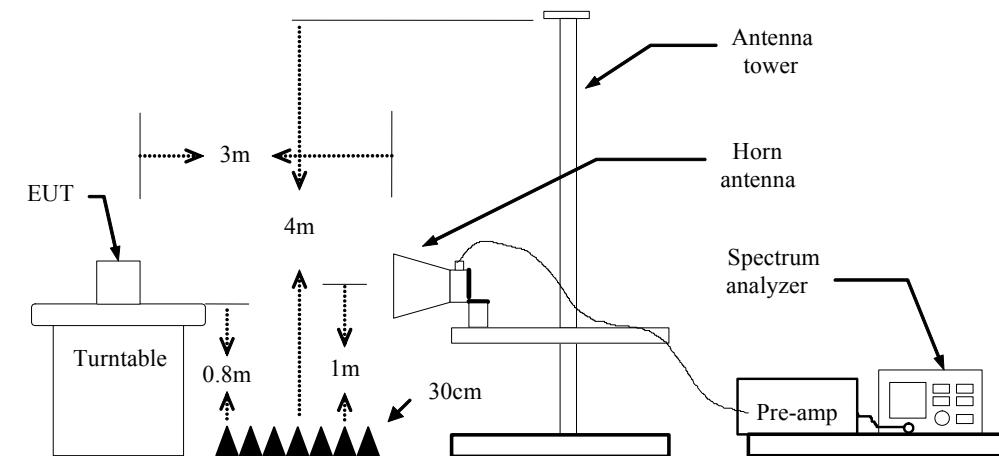
3. N.C.R = No Calibration Required.



### 7.5.3. TEST PROCEDURES (please refer to measurement standard)

1. The EUT is placed on a turntable, which is 0.8m above the ground plane.
2. The turntable shall be 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=VBW=1MHz / Sweep=AUTO
  - (b) AVERAGE: RBW=1MHz / VBW=10Hz / Sweep=AUTO
5. Repeat the procedures until all the PEAK and AVERAGE versus POLARIZATION are

### 7.5.4. TEST SETUP



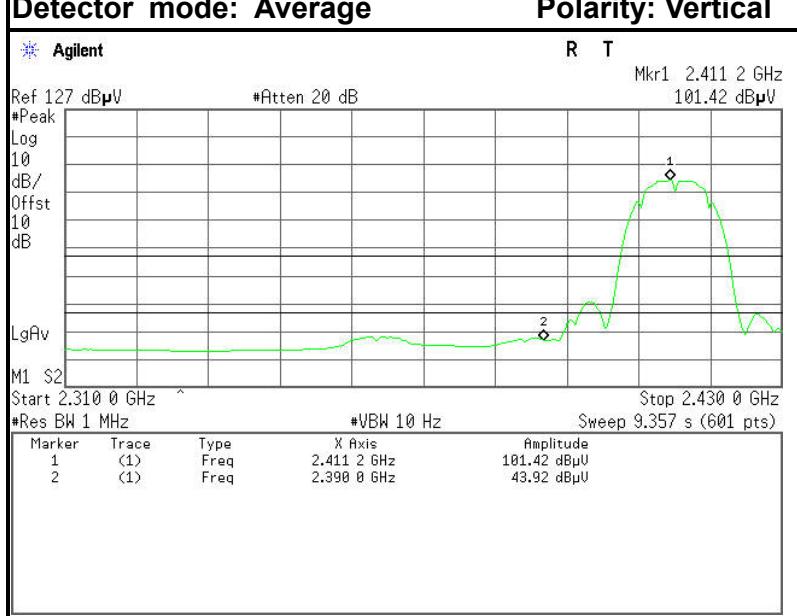
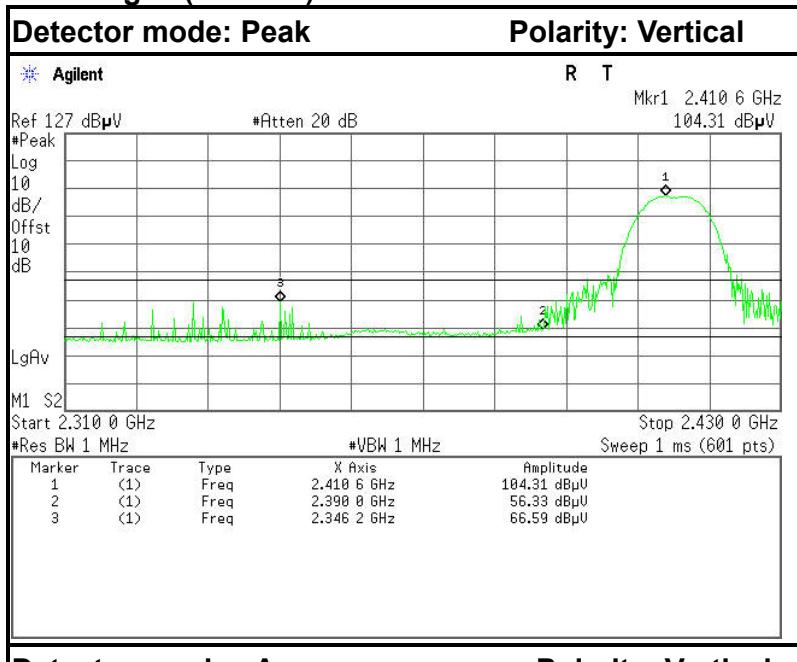


### 7.5.5. TEST RESULTS

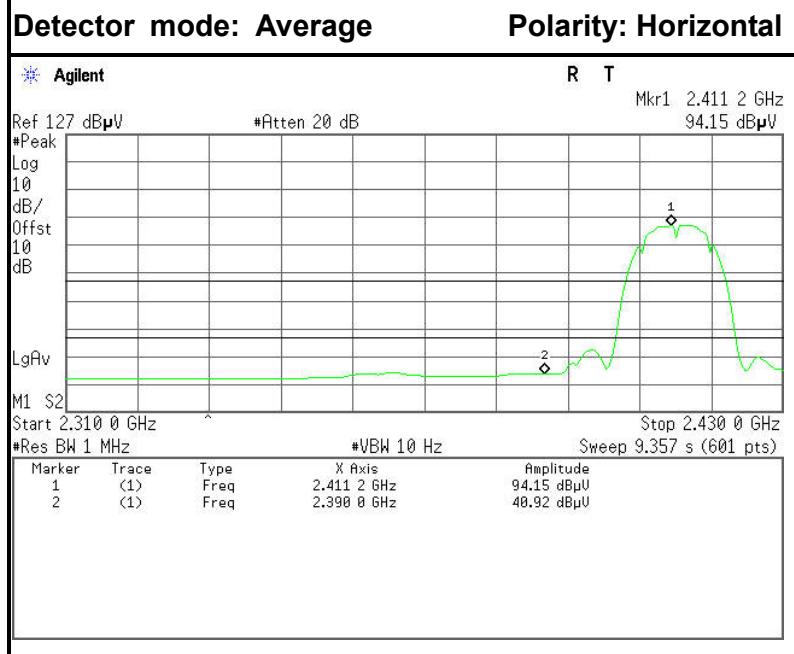
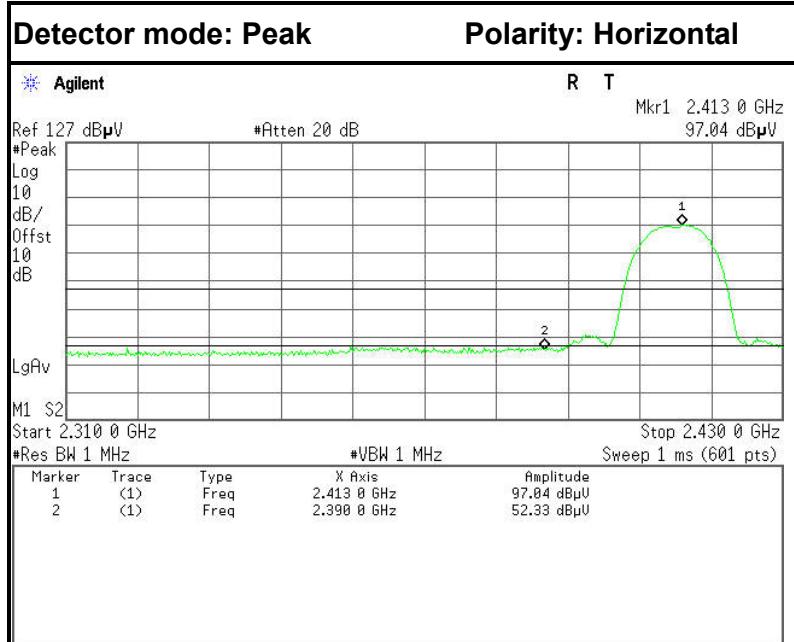
#### Test Plot

##### IEEE 802.11b mode (Antenna 0)

###### Band Edges (CH Low)



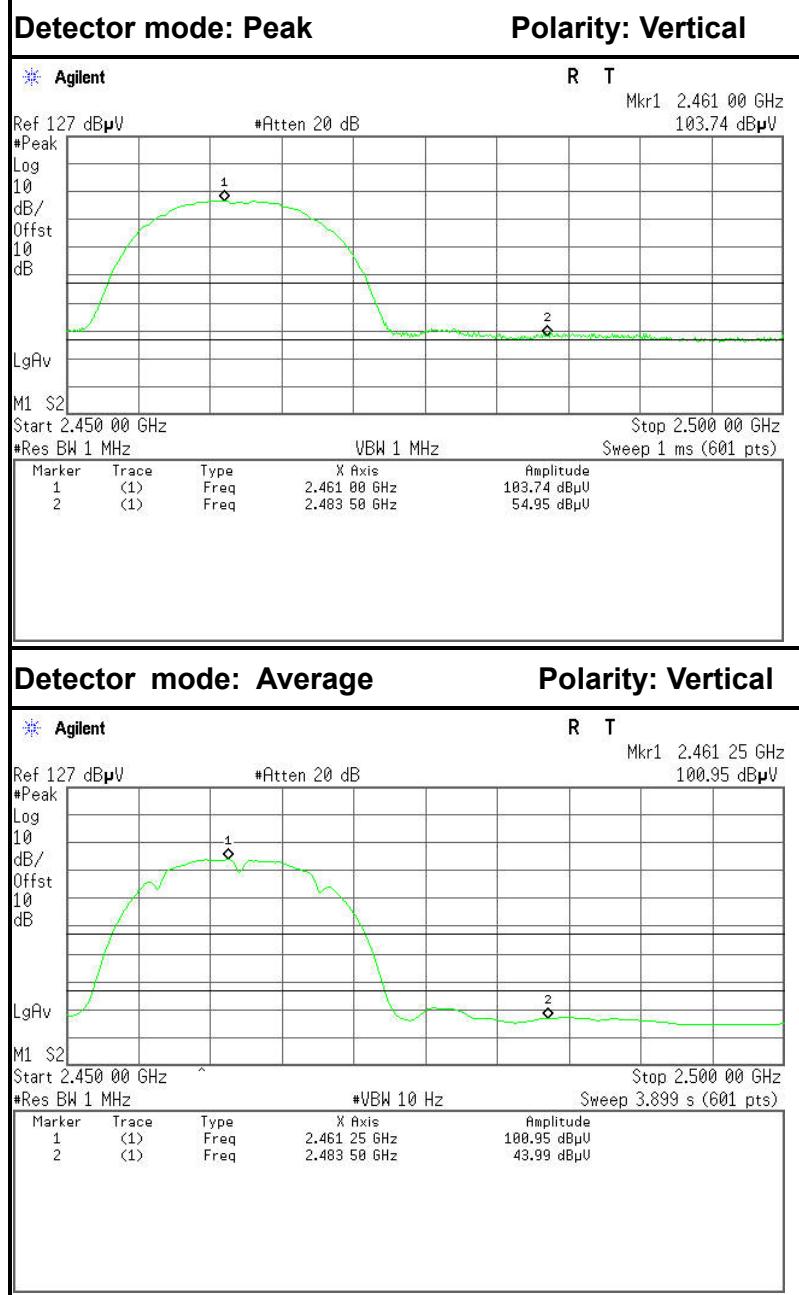
| No. | Frequency (MHz) | Reading (dB $\mu$ V) | Corrected (dB) | Result (dB $\mu$ V) | Limit (dB $\mu$ V) | Margin (dB) | Detector | Antenna Pole |
|-----|-----------------|----------------------|----------------|---------------------|--------------------|-------------|----------|--------------|
| 1   | 2390.0000       | 49.73                | -6.60          | 56.33               | 74.00              | -17.67      | Peak     | Vertical     |
| 2   | 2390.0000       | 37.32                | -6.60          | 43.92               | 54.00              | -10.08      | Average  | Vertical     |



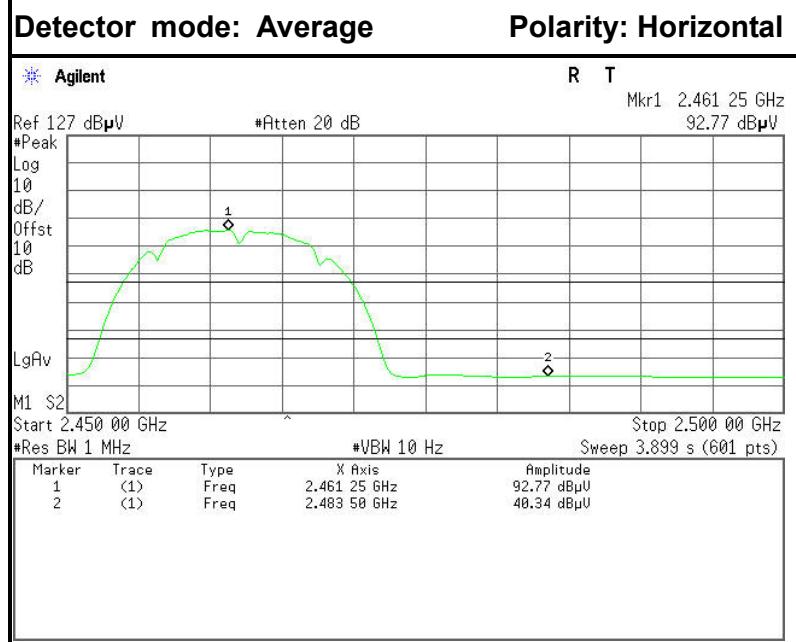
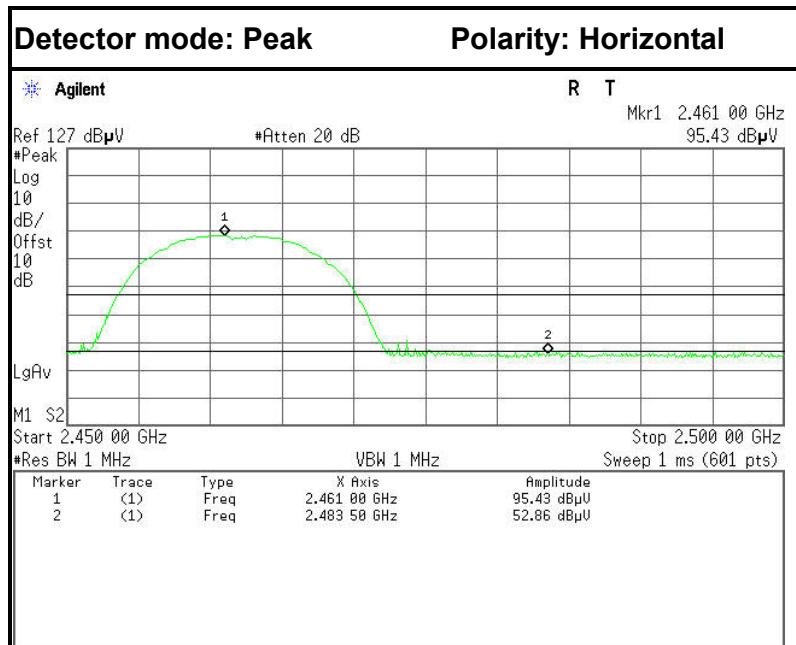
| No. | Frequency (MHz) | Reading (dB $\mu$ V) | Corrected (dB) | Result (dB $\mu$ V) | Limit (dB $\mu$ V) | Margin (dB) | Detector | Antenna Pole |
|-----|-----------------|----------------------|----------------|---------------------|--------------------|-------------|----------|--------------|
| 1   | 2390.0000       | 45.73                | -6.60          | 52.33               | 74.00              | -21.67      | Peak     | Horizontal   |
| 2   | 2390.0000       | 34.32                | -6.60          | 40.92               | 54.00              | -13.08      | Average  | Horizontal   |



## Band Edges (CH High)



| No. | Frequency (MHz) | Reading (dB $\mu$ V) | Corrected (dB) | Result (dB $\mu$ V) | Limit (dB $\mu$ V) | Margin (dB) | Detector | Antenna Pole |
|-----|-----------------|----------------------|----------------|---------------------|--------------------|-------------|----------|--------------|
| 1   | 2483.5000       | 48.71                | -6.24          | 54.95               | 74.00              | -19.05      | Peak     | Vertical     |
| 2   | 2483.5000       | 37.75                | -6.24          | 43.99               | 54.00              | -10.01      | Average  | Vertical     |

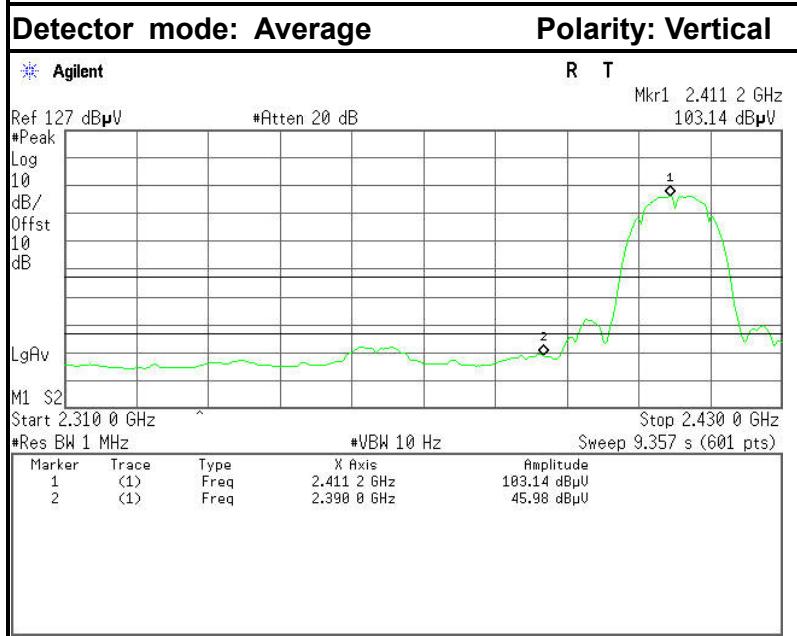
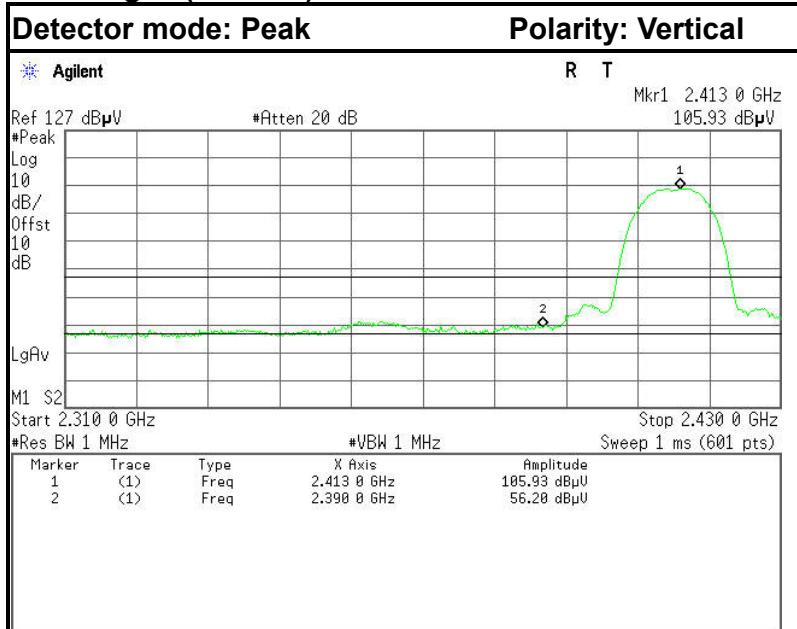


| No. | Frequency (MHz) | Reading (dB $\mu$ V) | Corrected (dB) | Result (dB $\mu$ V) | Limit (dB $\mu$ V) | Margin (dB) | Detector | Antenna Pole |
|-----|-----------------|----------------------|----------------|---------------------|--------------------|-------------|----------|--------------|
| 1   | 2483.5000       | 46.62                | -6.24          | 52.86               | 74.00              | -21.14      | Peak     | Horizontal   |
| 2   | 2483.5000       | 34.10                | -6.24          | 40.34               | 54.00              | -13.66      | Average  | Horizontal   |

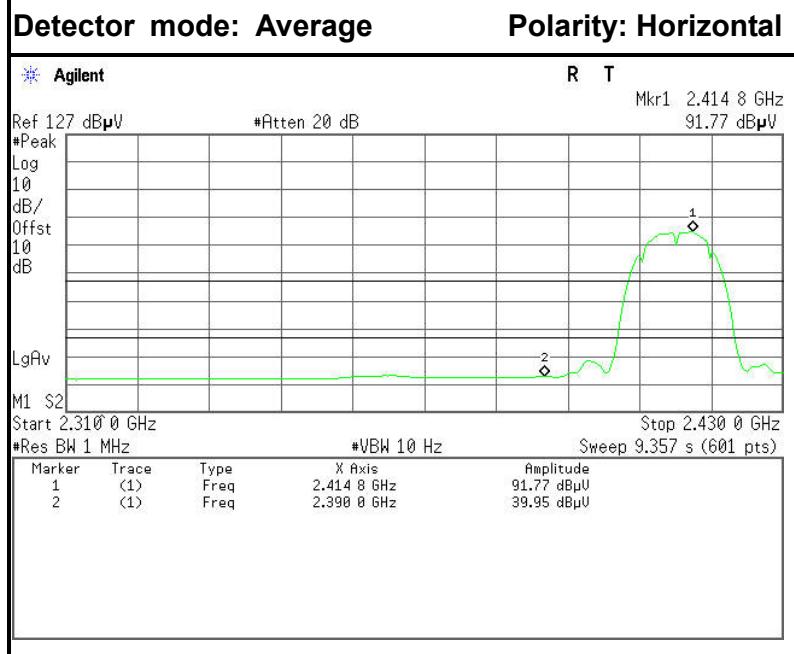
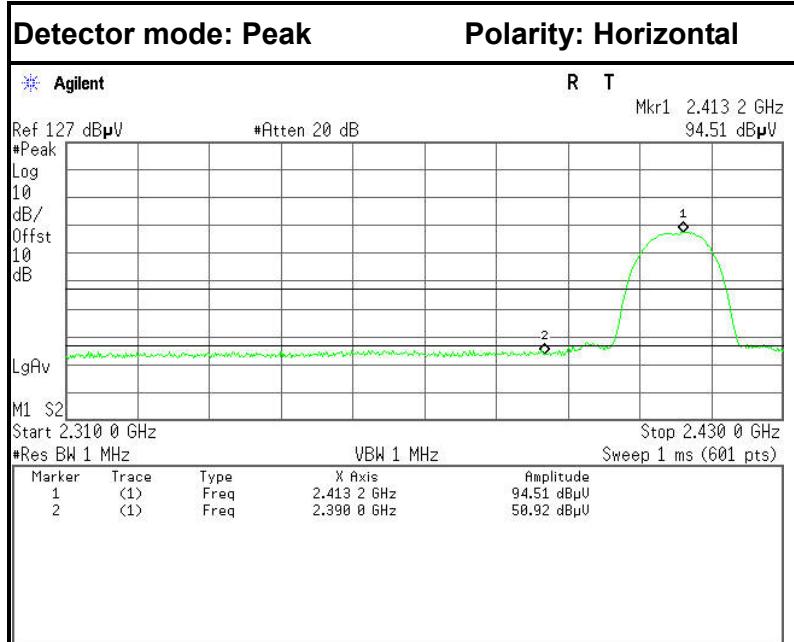


## IEEE 802.11b mode (Antenna 1)

## Band Edges (CH Low)



| No. | Frequency (MHz) | Reading (dB $\mu$ V) | Corrected (dB) | Result (dB $\mu$ V) | Limit (dB $\mu$ V) | Margin (dB) | Detector | Antenna Pole |
|-----|-----------------|----------------------|----------------|---------------------|--------------------|-------------|----------|--------------|
| 1   | 2390.0000       | 49.60                | -6.60          | 56.20               | 74.00              | -17.80      | Peak     | Vertical     |
| 2   | 2390.0000       | 39.38                | -6.60          | 45.98               | 54.00              | -8.02       | Average  | Vertical     |



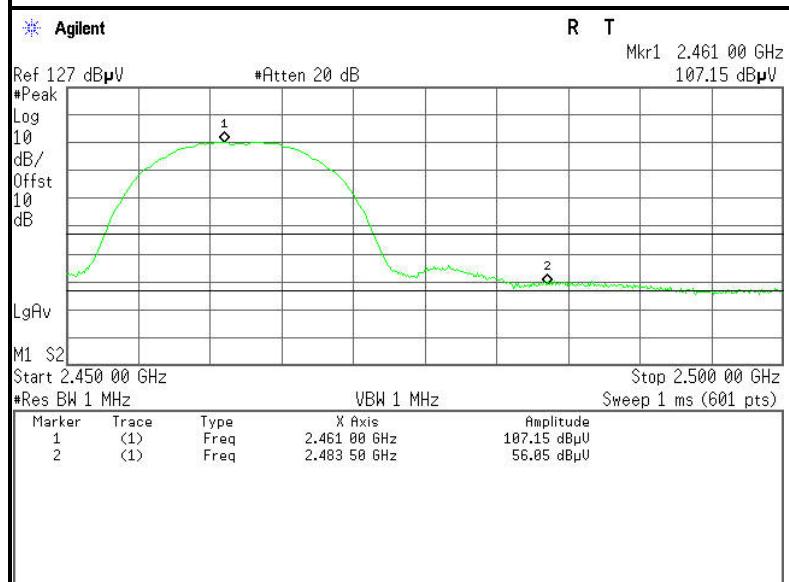
| No. | Frequency (MHz) | Reading (dB $\mu$ V) | Corrected (dB) | Result (dB $\mu$ V) | Limit (dB $\mu$ V) | Margin (dB) | Detector | Antenna Pole |
|-----|-----------------|----------------------|----------------|---------------------|--------------------|-------------|----------|--------------|
| 1   | 2390.0000       | 44.32                | -6.60          | 50.92               | 74.00              | -23.08      | Peak     | Horizontal   |
| 2   | 2390.0000       | 33.35                | -6.60          | 39.95               | 54.00              | -14.05      | Average  | Horizontal   |



## Band Edges (CH High)

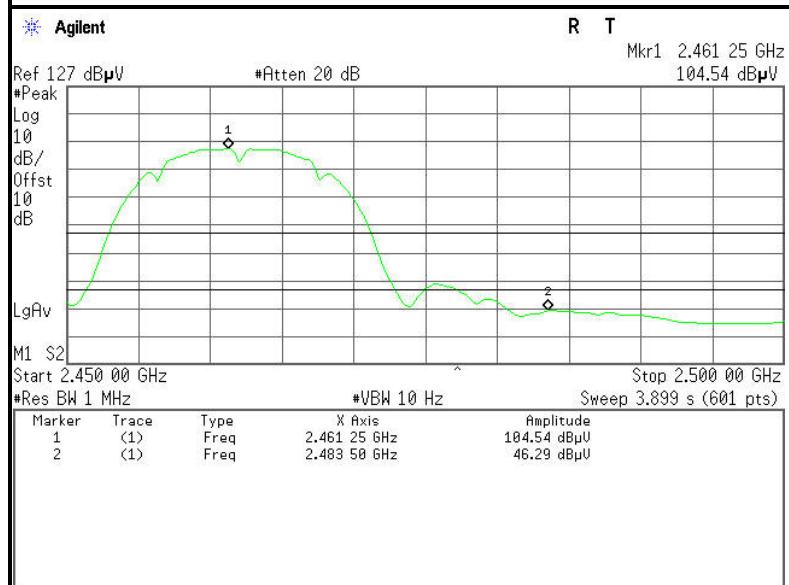
Detector mode: Peak

Polarity: Vertical

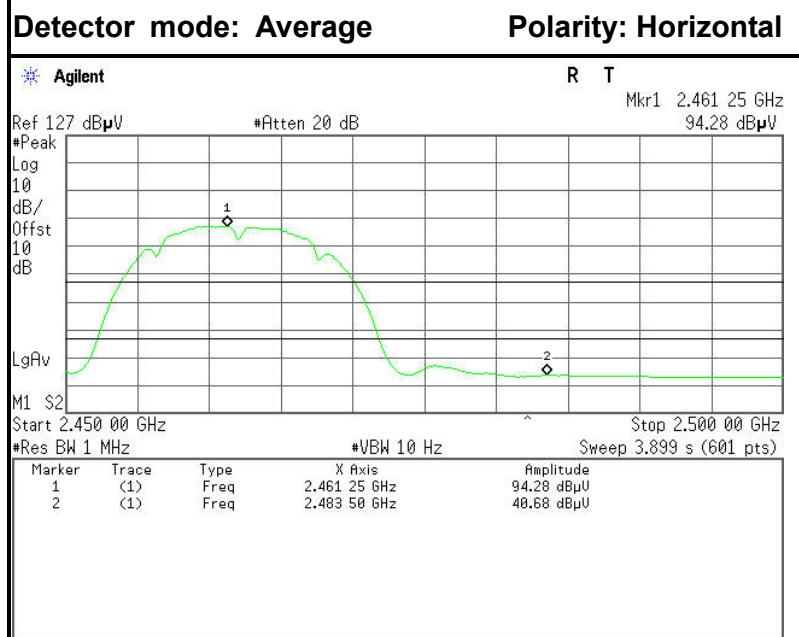
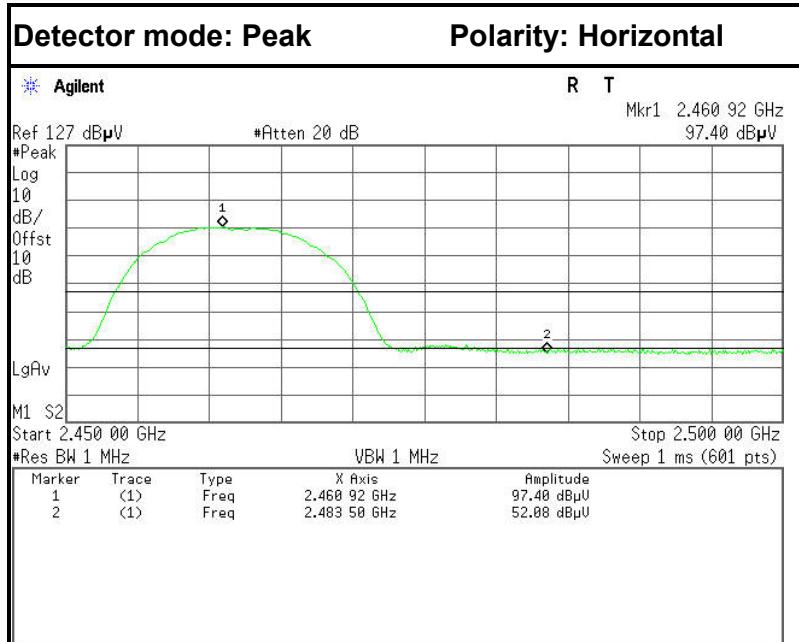


Detector mode: Average

Polarity: Vertical



| No. | Frequency (MHz) | Reading (dB $\mu$ V) | Corrected (dB) | Result (dB $\mu$ V) | Limit (dB $\mu$ V) | Margin (dB) | Detector | Antenna Pole |
|-----|-----------------|----------------------|----------------|---------------------|--------------------|-------------|----------|--------------|
| 1   | 2483.5000       | 49.81                | -6.24          | 56.05               | 74.00              | -17.95      | Peak     | Vertical     |
| 2   | 2483.5000       | 40.05                | -6.24          | 46.29               | 54.00              | -7.71       | Average  | Vertical     |



| No. | Frequency (MHz) | Reading (dB $\mu$ V) | Corrected (dB) | Result (dB $\mu$ V) | Limit (dB $\mu$ V) | Margin (dB) | Detector | Antenna Pole |
|-----|-----------------|----------------------|----------------|---------------------|--------------------|-------------|----------|--------------|
| 1   | 2483.5000       | 45.84                | -6.24          | 52.08               | 74.00              | -21.92      | Peak     | Horizontal   |
| 2   | 2483.5000       | 34.44                | -6.24          | 40.68               | 54.00              | -13.32      | Average  | Horizontal   |

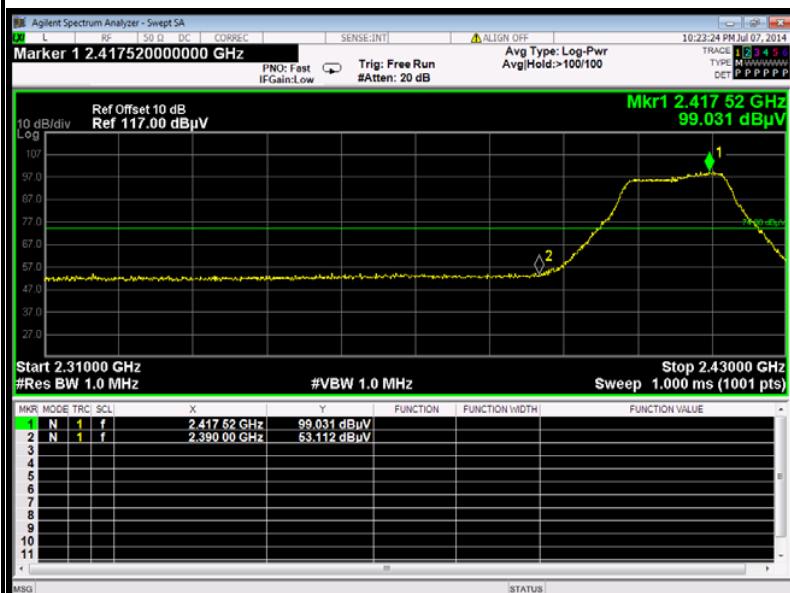


## IEEE 802.11g mode (Antenna 0)

## Band Edges (CH Low)

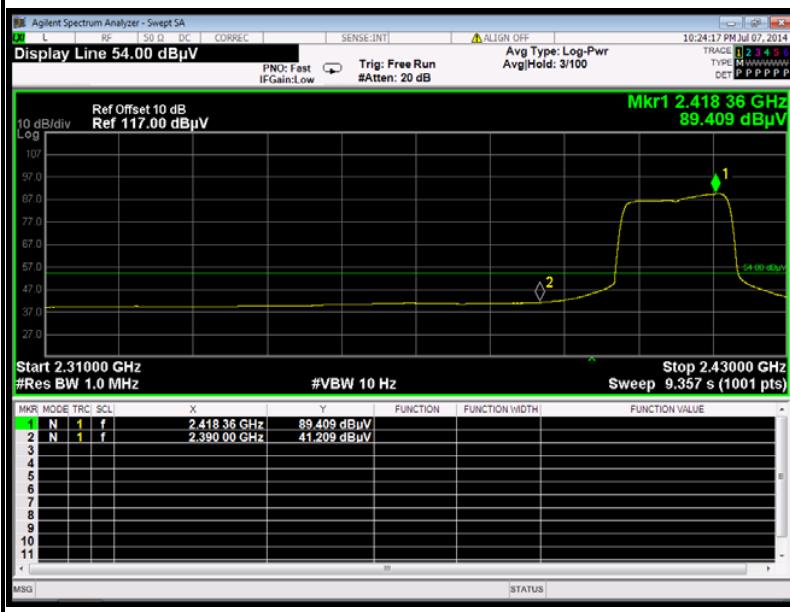
Detector mode: Peak

Polarity: Vertical

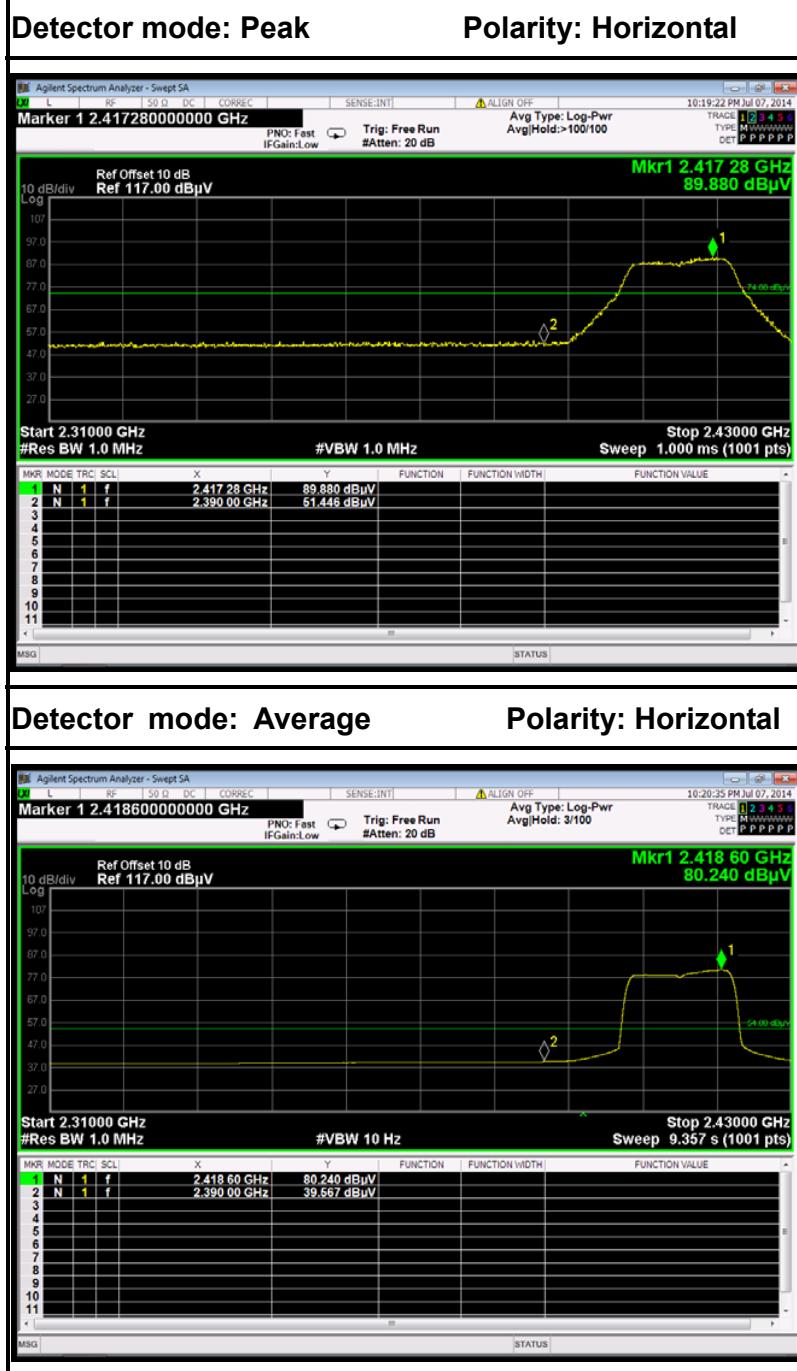


Detector mode: Average

Polarity: Vertical



| No. | Frequency (MHz) | Reading (dBµV) | Corrected (dB) | Result (dBµV) | Limit (dBµV) | Margin (dB) | Detector | Antenna Pole |
|-----|-----------------|----------------|----------------|---------------|--------------|-------------|----------|--------------|
| 1   | 2390.0000       | 46.51          | -6.60          | 53.11         | 74.00        | -20.89      | Peak     | Vertical     |
| 2   | 2390.0000       | 34.61          | -6.60          | 41.21         | 54.00        | -12.79      | Average  | Vertical     |



| No. | Frequency (MHz) | Reading (dB $\mu$ V) | Corrected (dB) | Result (dB $\mu$ V) | Limit (dB $\mu$ V) | Margin (dB) | Detector | Antenna Pole |
|-----|-----------------|----------------------|----------------|---------------------|--------------------|-------------|----------|--------------|
| 1   | 2390.0000       | 44.85                | -6.60          | 51.45               | 74.00              | -22.55      | Peak     | Horizontal   |
| 2   | 2390.0000       | 32.97                | -6.60          | 39.57               | 54.00              | -14.43      | Average  | Horizontal   |



## Band Edges (CH High)

Detector mode: Peak

Polarity: Vertical

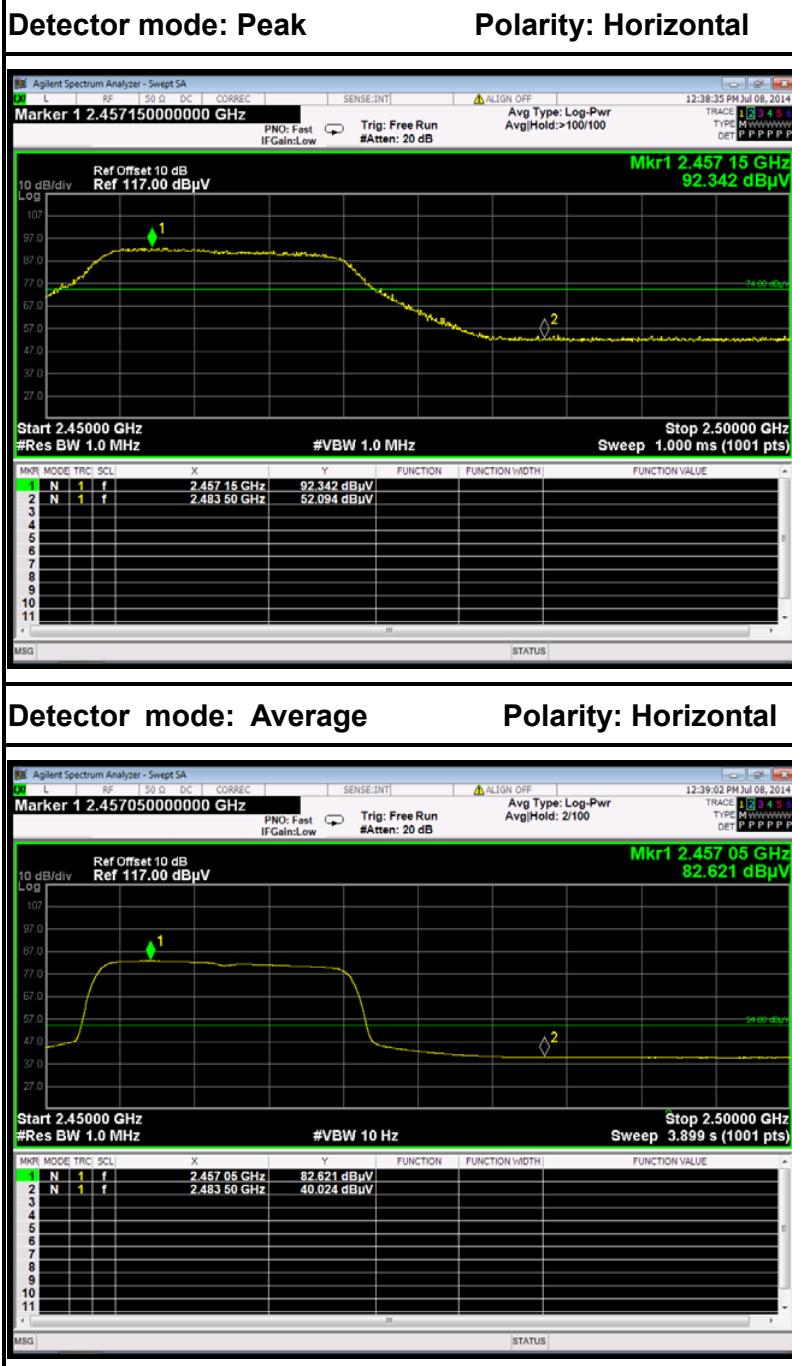


Detector mode: Average

Polarity: Vertical



| No. | Frequency (MHz) | Reading (dB $\mu$ V) | Corrected (dB) | Result (dB $\mu$ V) | Limit (dB $\mu$ V) | Margin (dB) | Detector | Antenna Pole |
|-----|-----------------|----------------------|----------------|---------------------|--------------------|-------------|----------|--------------|
| 1   | 2483.5000       | 47.03                | -6.24          | 53.27               | 74.00              | -20.73      | Peak     | Vertical     |
| 2   | 2483.5000       | 45.85                | -6.24          | 52.09               | 54.00              | -1.91       | Average  | Vertical     |



| No. | Frequency (MHz) | Reading (dB $\mu$ V) | Corrected (dB) | Result (dB $\mu$ V) | Limit (dB $\mu$ V) | Margin (dB) | Detector | Antenna Pole |
|-----|-----------------|----------------------|----------------|---------------------|--------------------|-------------|----------|--------------|
| 1   | 2483.5000       | 45.85                | -6.24          | 52.09               | 74.00              | -21.91      | Peak     | Horizontal   |
| 2   | 2483.5000       | 33.78                | -6.24          | 40.02               | 54.00              | -13.98      | Average  | Horizontal   |

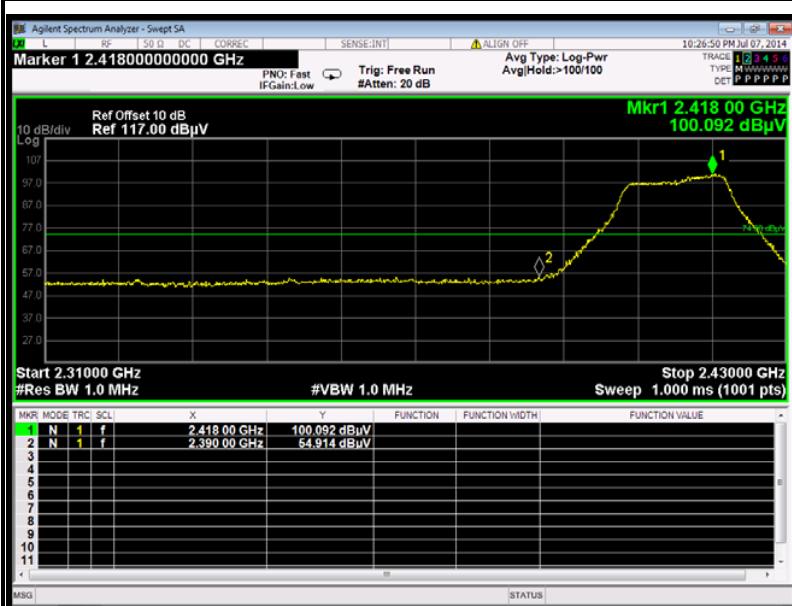


## IEEE 802.11g mode (Antenna 1)

## Band Edges (CH Low)

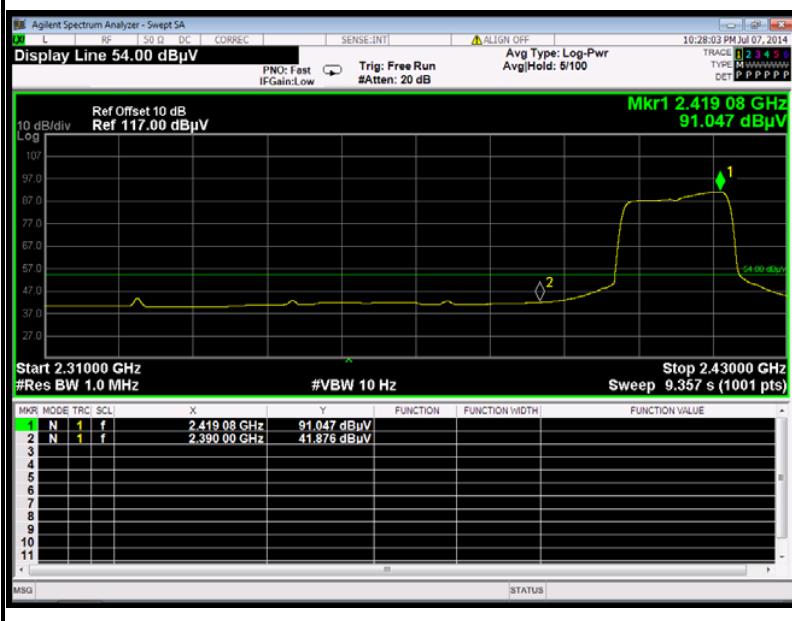
Detector mode: Peak

Polarity: Vertical

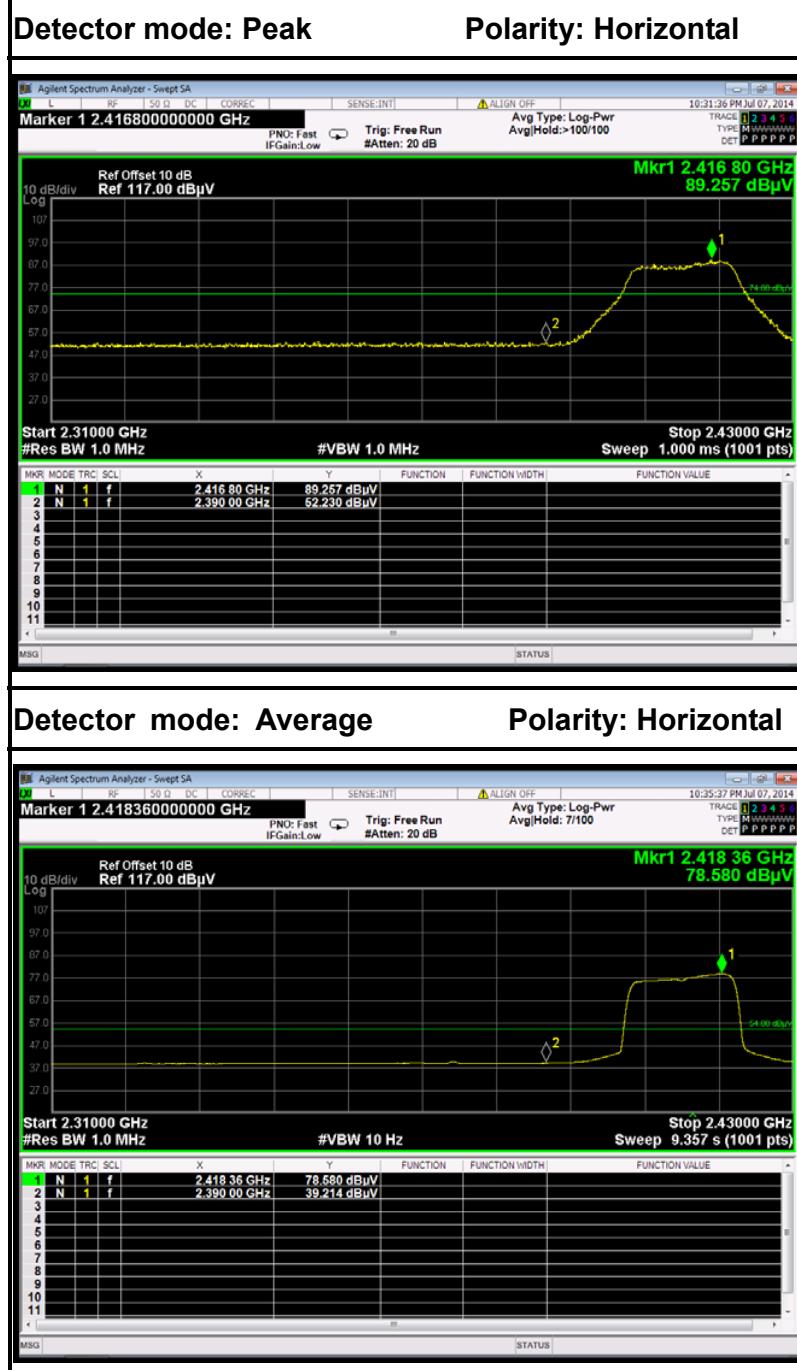


Detector mode: Average

Polarity: Vertical



| No. | Frequency (MHz) | Reading (dBuV) | Corrected (dB) | Result (dBuV) | Limit (dBuV) | Margin (dB) | Detector | Antenna Pole |
|-----|-----------------|----------------|----------------|---------------|--------------|-------------|----------|--------------|
| 1   | 2390.0000       | 48.31          | -6.60          | 54.91         | 74.00        | -19.09      | Peak     | Vertical     |
| 2   | 2390.0000       | 35.28          | -6.60          | 41.88         | 54.00        | -12.12      | Average  | Vertical     |



| No. | Frequency (MHz) | Reading (dB $\mu$ V) | Corrected (dB) | Result (dB $\mu$ V) | Limit (dB $\mu$ V) | Margin (dB) | Detector | Antenna Pole |
|-----|-----------------|----------------------|----------------|---------------------|--------------------|-------------|----------|--------------|
| 1   | 2390.0000       | 45.63                | -6.60          | 52.23               | 74.00              | -21.77      | Peak     | Horizontal   |
| 2   | 2390.0000       | 32.61                | -6.60          | 39.21               | 54.00              | -14.79      | Average  | Horizontal   |



## Band Edges (CH High)

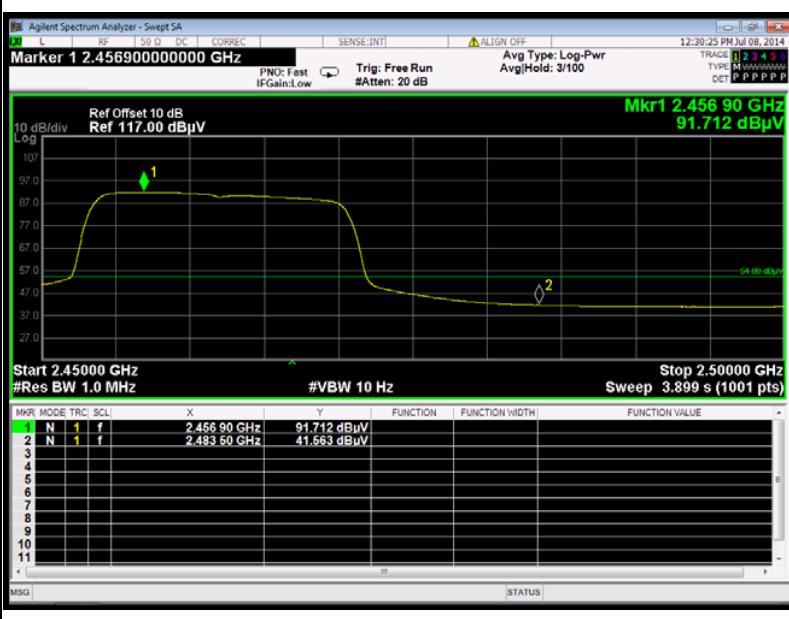
Detector mode: Peak

Polarity: Vertical



Detector mode: Average

Polarity: Vertical



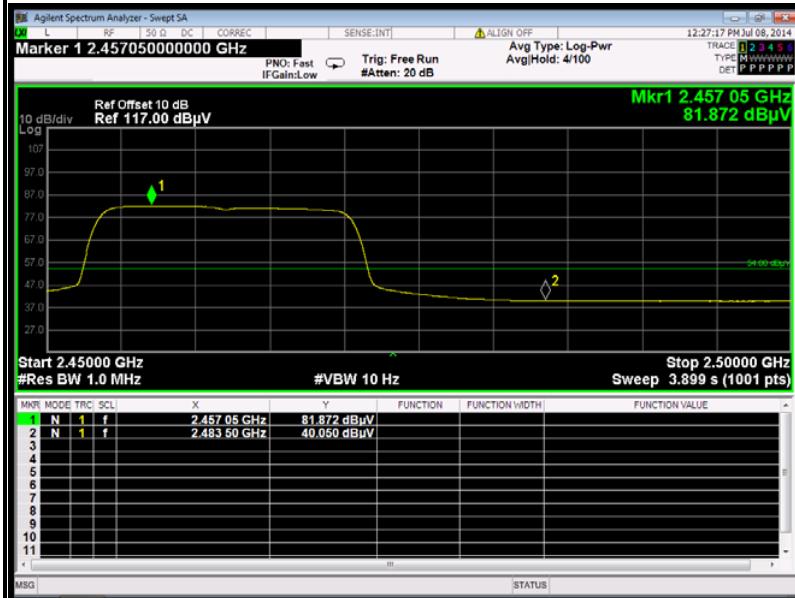
| No. | Frequency (MHz) | Reading (dB $\mu$ V) | Corrected (dB) | Result (dB $\mu$ V) | Limit (dB $\mu$ V) | Margin (dB) | Detector | Antenna Pole |
|-----|-----------------|----------------------|----------------|---------------------|--------------------|-------------|----------|--------------|
| 1   | 2483.5000       | 48.63                | -6.24          | 54.87               | 74.00              | -19.14      | Peak     | Vertical     |
| 2   | 2483.5000       | 35.32                | -6.24          | 41.56               | 54.00              | -12.44      | Average  | Vertical     |



## Detector mode: Peak      Polarity: Horizontal



## Detector mode: Average      Polarity: Horizontal

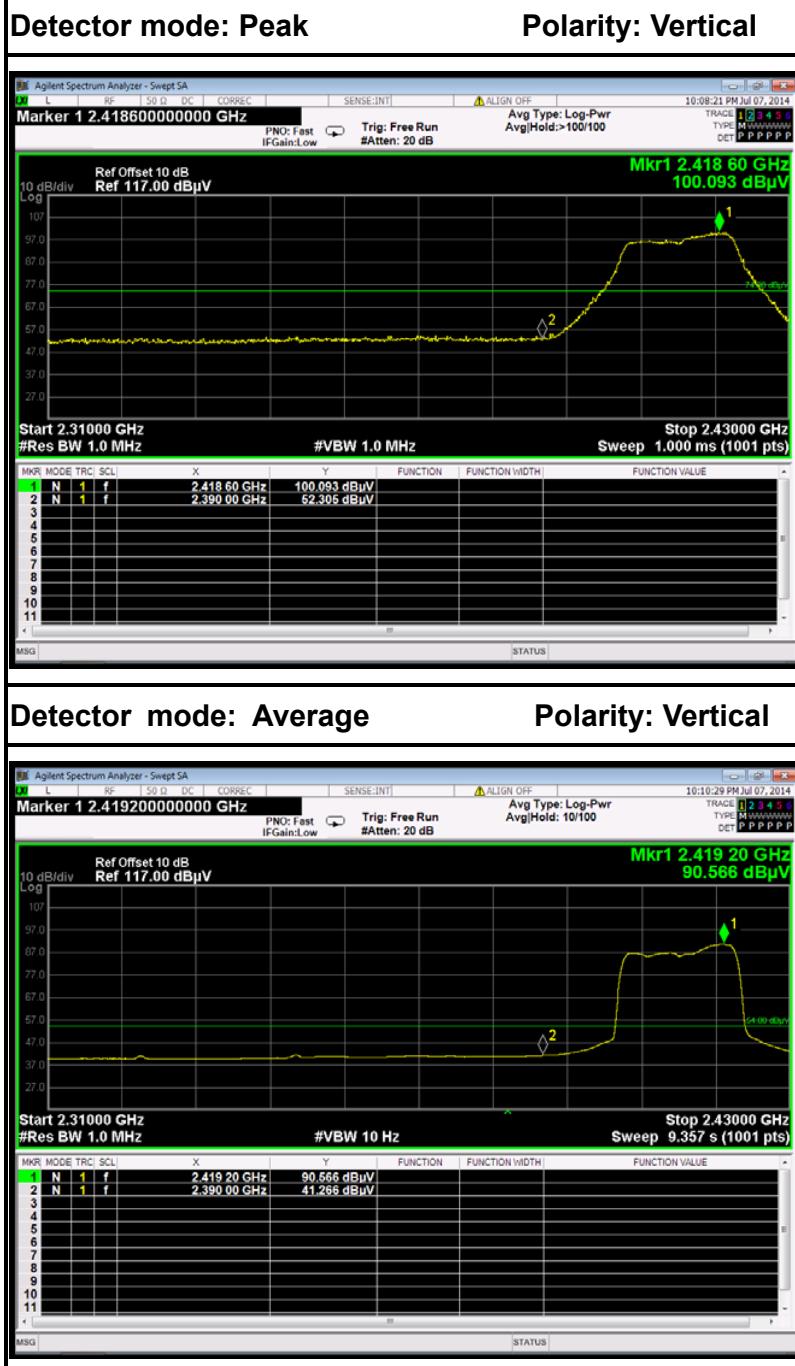


| No. | Frequency (MHz) | Reading (dB $\mu$ V) | Corrected (dB) | Result (dB $\mu$ V) | Limit (dB $\mu$ V) | Margin (dB) | Detector | Antenna Pole |
|-----|-----------------|----------------------|----------------|---------------------|--------------------|-------------|----------|--------------|
| 1   | 2483.5000       | 45.21                | -6.24          | 51.45               | 74.00              | -22.55      | Peak     | Horizontal   |
| 2   | 2483.5000       | 33.81                | -6.24          | 40.05               | 54.00              | -13.95      | Average  | Horizontal   |

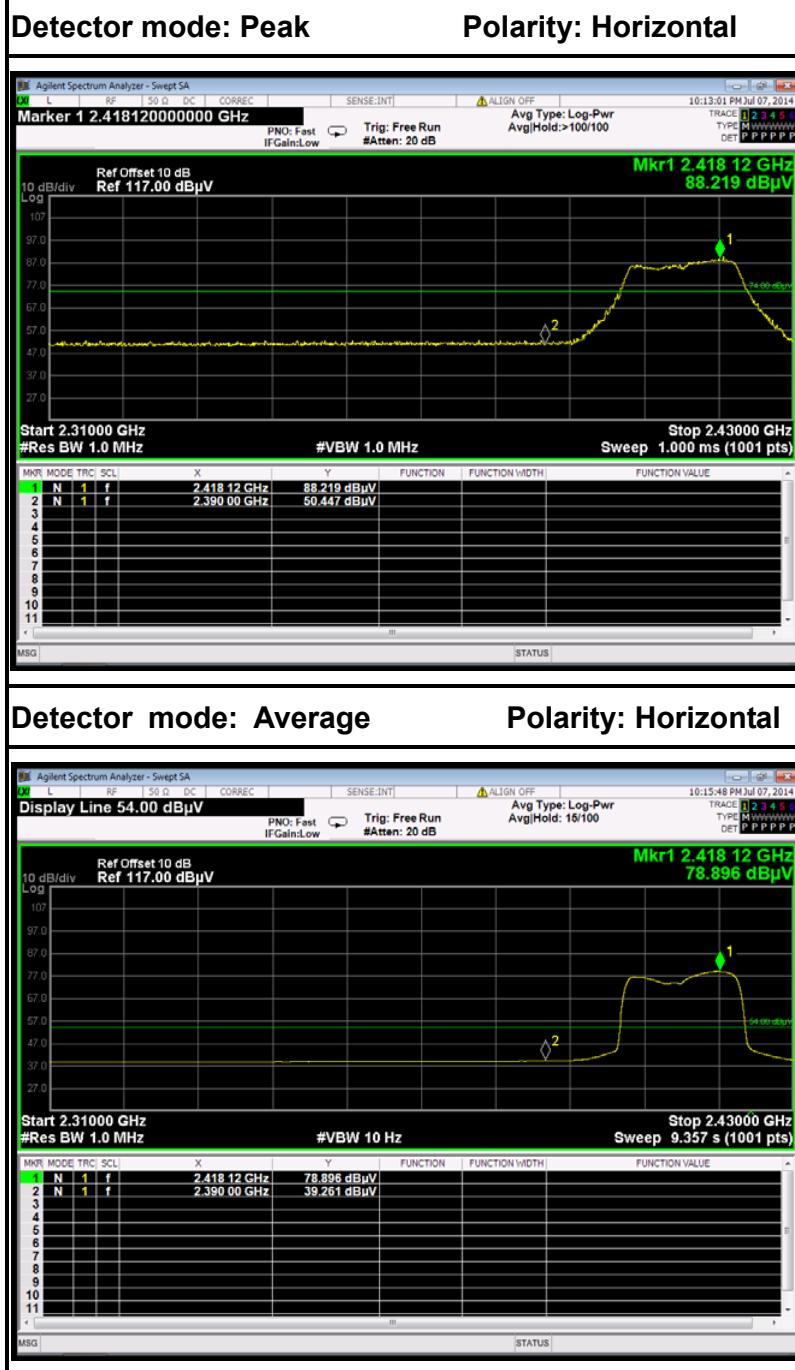


## IEEE 802.11n HT20 MHz mode (Combine with Antenna 0 and Antenna 1)

## Band Edges (CH Low)



| No. | Frequency (MHz) | Reading (dBuV) | Corrected (dB) | Result (dBuV) | Limit (dBuV) | Margin (dB) | Detector | Antenna Pole |
|-----|-----------------|----------------|----------------|---------------|--------------|-------------|----------|--------------|
| 1   | 2390.0000       | 45.71          | -6.60          | 52.31         | 74.00        | -21.70      | Peak     | Vertical     |
| 2   | 2390.0000       | 34.67          | -6.60          | 41.27         | 54.00        | -12.73      | Average  | Vertical     |



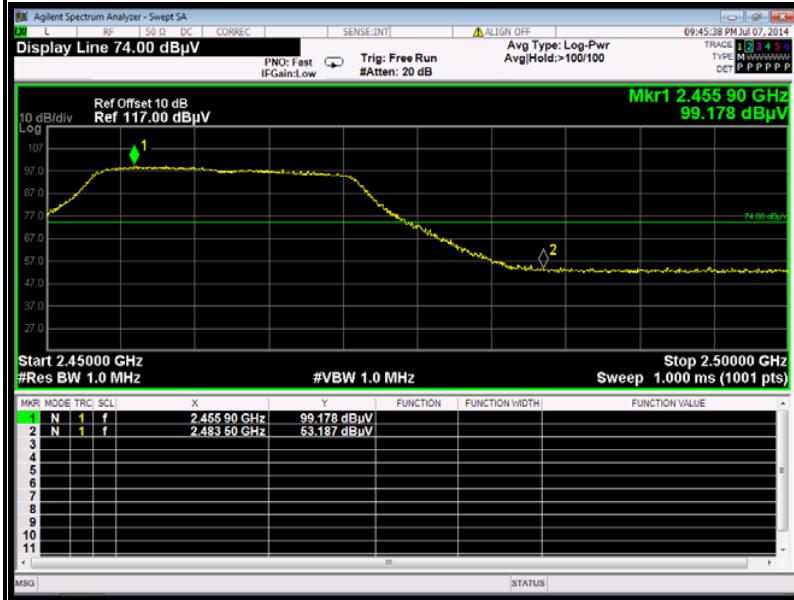
| No. | Frequency (MHz) | Reading (dB $\mu$ V) | Corrected (dB) | Result (dB $\mu$ V) | Limit (dB $\mu$ V) | Margin (dB) | Detector | Antenna Pole |
|-----|-----------------|----------------------|----------------|---------------------|--------------------|-------------|----------|--------------|
| 1   | 2390.0000       | 43.85                | -6.60          | 50.45               | 74.00              | -23.55      | Peak     | Horizontal   |
| 2   | 2390.0000       | 32.66                | -6.60          | 39.26               | 54.00              | -14.74      | Average  | Horizontal   |



## Band Edges (CH High)

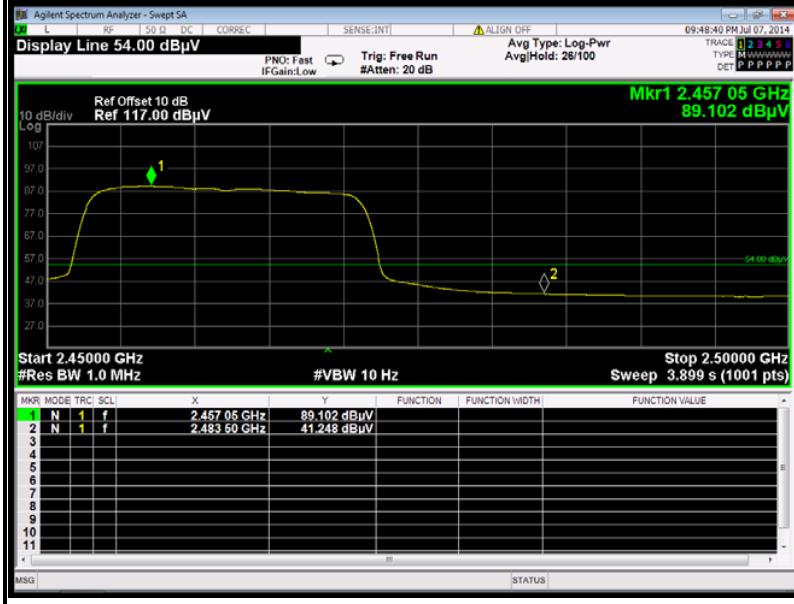
Detector mode: Peak

Polarity: Vertical



Detector mode: Average

Polarity: Vertical



| No. | Frequency (MHz) | Reading (dB $\mu$ V) | Corrected (dB) | Result (dB $\mu$ V) | Limit (dB $\mu$ V) | Margin (dB) | Detector | Antenna Pole |
|-----|-----------------|----------------------|----------------|---------------------|--------------------|-------------|----------|--------------|
| 1   | 2483.5000       | 46.95                | -6.24          | 53.19               | 74.00              | -20.81      | Peak     | Vertical     |
| 2   | 2483.5000       | 35.01                | -6.24          | 41.25               | 54.00              | -12.75      | Average  | Vertical     |



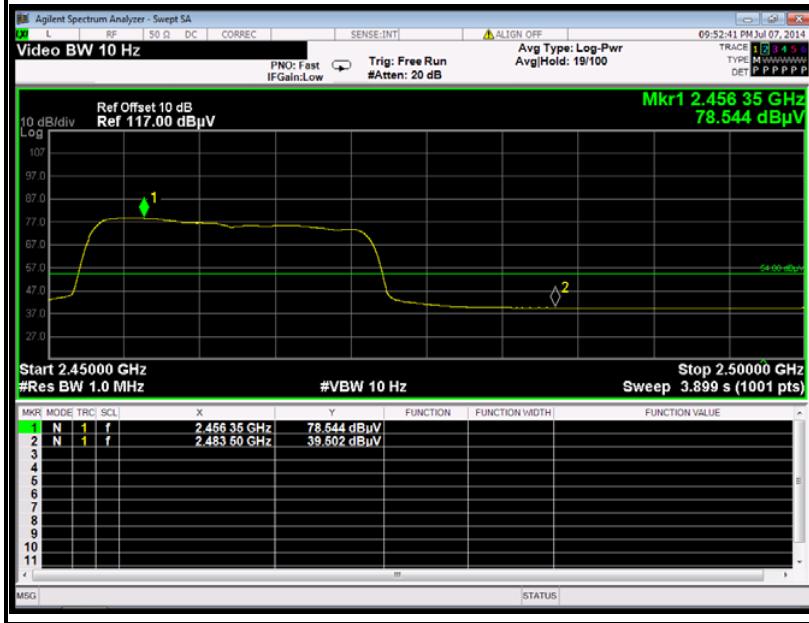
## Detector mode: Peak

## Polarity: Horizontal



## Detector mode: Average

## Polarity: Horizontal

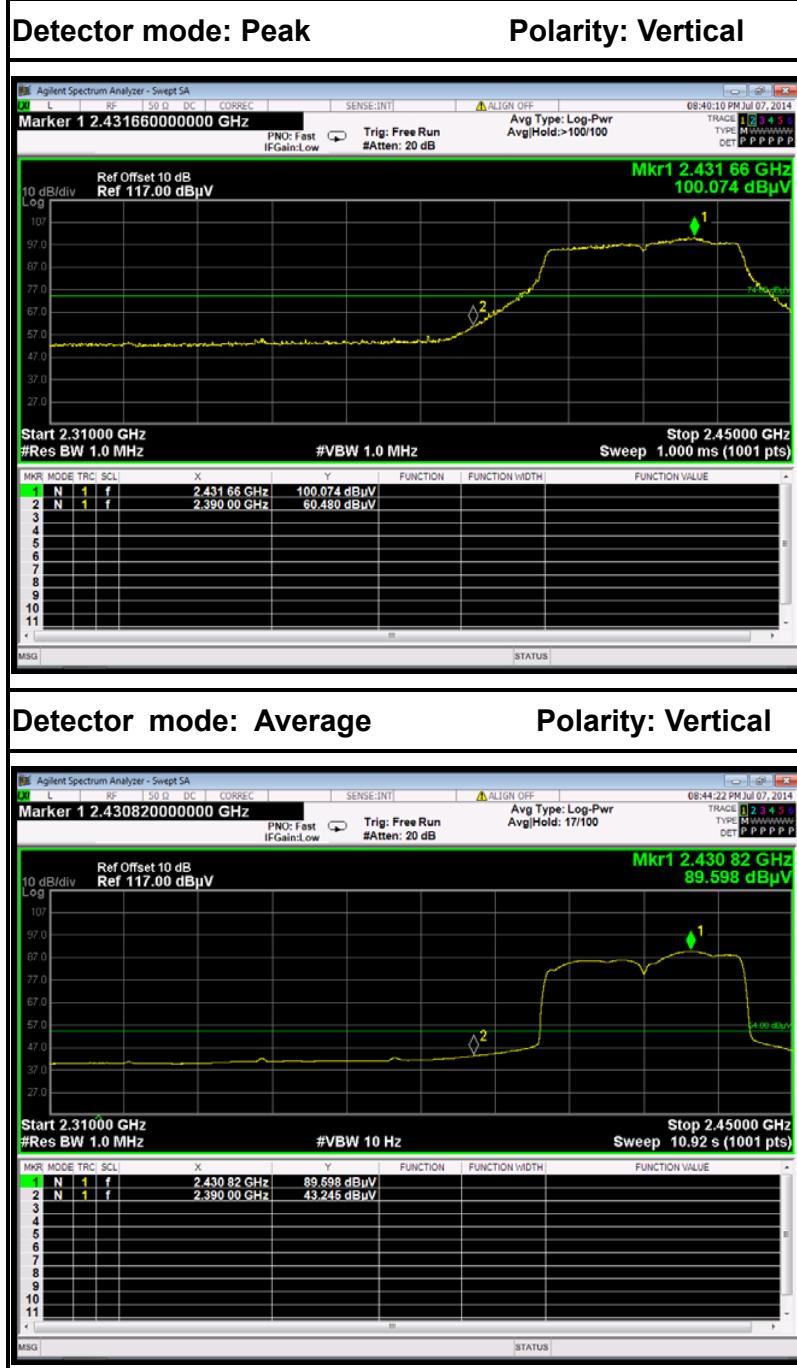


| No. | Frequency (MHz) | Reading (dB $\mu$ V) | Corrected (dB) | Result (dB $\mu$ V) | Limit (dB $\mu$ V) | Margin (dB) | Detector | Antenna Pole |
|-----|-----------------|----------------------|----------------|---------------------|--------------------|-------------|----------|--------------|
| 1   | 2483.5000       | 44.96                | -6.24          | 51.20               | 74.00              | -22.80      | Peak     | Horizontal   |
| 2   | 2483.5000       | 33.26                | -6.24          | 39.50               | 54.00              | -14.50      | Average  | Horizontal   |

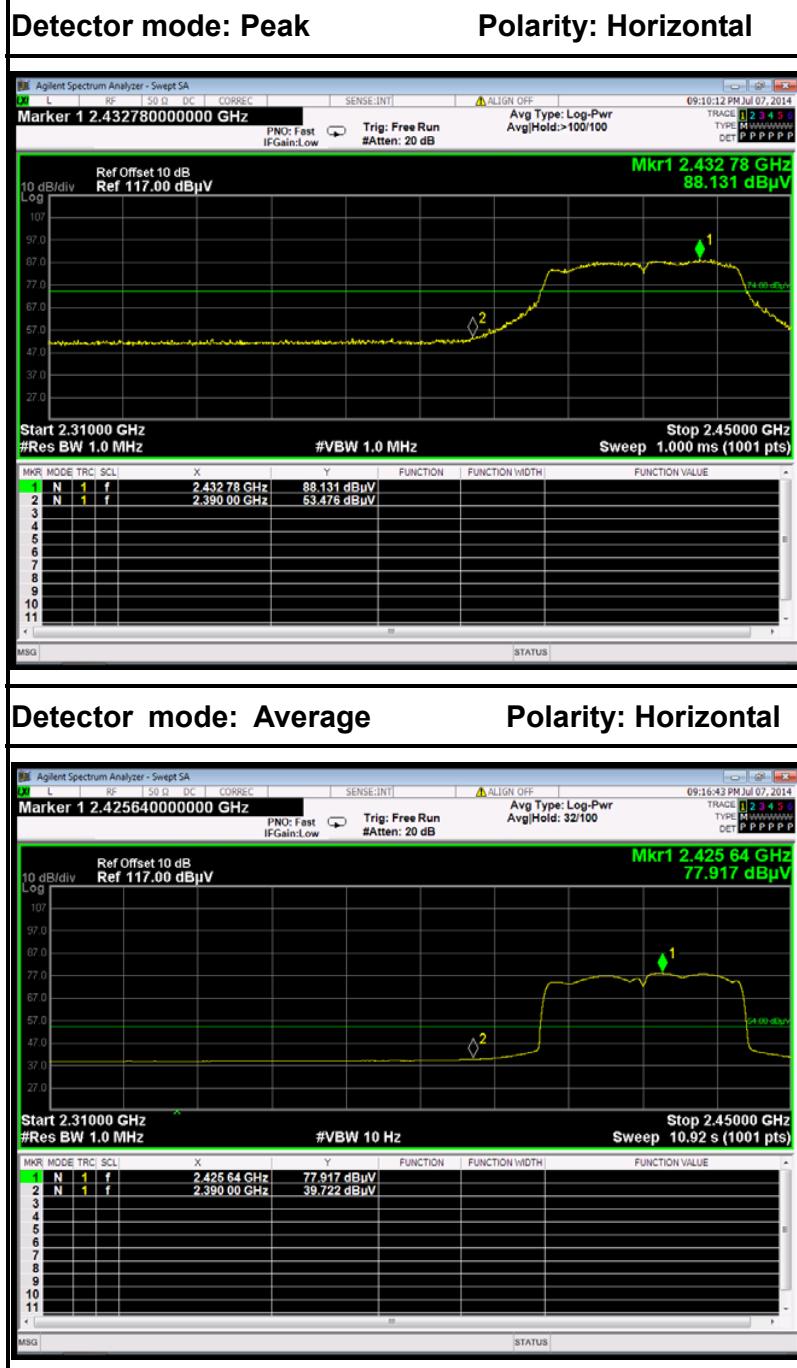


## IEEE 802.11n HT40 MHz mode (Combine with Antenna 0 and Antenna 1)

## Band Edges (CH Low)



| No. | Frequency (MHz) | Reading (dB $\mu$ V) | Corrected (dB) | Result (dB $\mu$ V) | Limit (dB $\mu$ V) | Margin (dB) | Detector | Antenna Pole |
|-----|-----------------|----------------------|----------------|---------------------|--------------------|-------------|----------|--------------|
| 1   | 2390.0000       | 53.88                | -6.60          | 60.48               | 74.00              | -13.52      | Peak     | Vertical     |
| 2   | 2390.0000       | 36.65                | -6.60          | 43.25               | 54.00              | -10.76      | Average  | Vertical     |



| No. | Frequency (MHz) | Reading (dB $\mu$ V) | Corrected (dB) | Result (dB $\mu$ V) | Limit (dB $\mu$ V) | Margin (dB) | Detector | Antenna Pole |
|-----|-----------------|----------------------|----------------|---------------------|--------------------|-------------|----------|--------------|
| 1   | 2390.0000       | 46.88                | -6.60          | 53.48               | 74.00              | -20.52      | Peak     | Horizontal   |
| 2   | 2390.0000       | 33.12                | -6.60          | 39.72               | 54.00              | -14.28      | Average  | Horizontal   |



## Band Edges (CH High)

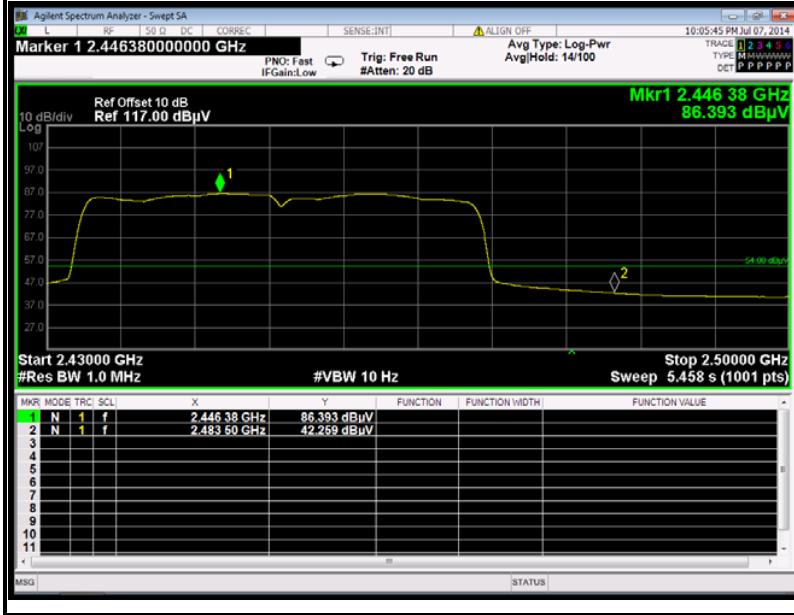
Detector mode: Peak

Polarity: Vertical

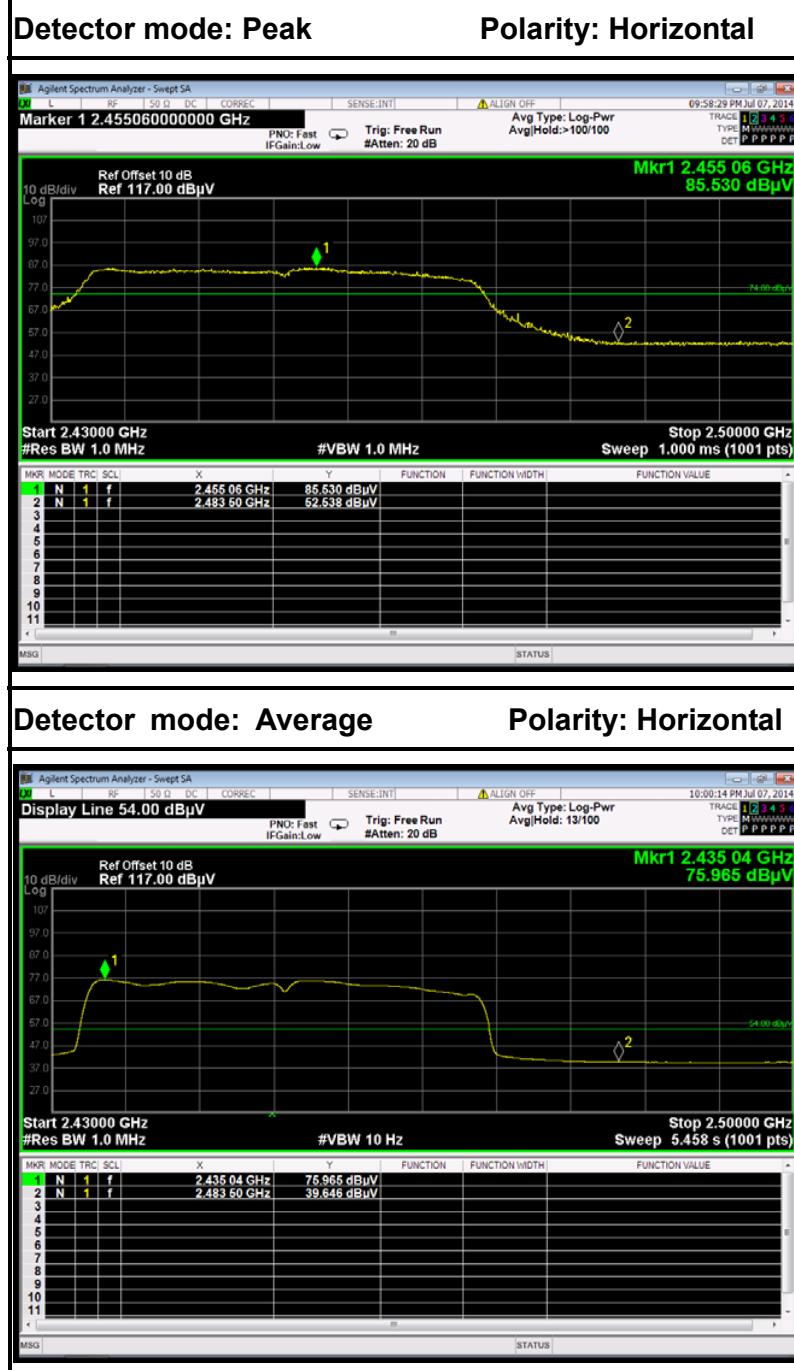


Detector mode: Average

Polarity: Vertical



| No. | Frequency (MHz) | Reading (dB $\mu$ V) | Corrected (dB) | Result (dB $\mu$ V) | Limit (dB $\mu$ V) | Margin (dB) | Detector | Antenna Pole |
|-----|-----------------|----------------------|----------------|---------------------|--------------------|-------------|----------|--------------|
| 1   | 2483.5000       | 51.98                | -6.24          | 58.22               | 74.00              | -15.78      | Peak     | Vertical     |
| 2   | 2483.5000       | 36.02                | -6.24          | 42.26               | 54.00              | -11.74      | Average  | Vertical     |



| No. | Frequency (MHz) | Reading (dB $\mu$ V) | Corrected (dB) | Result (dB $\mu$ V) | Limit (dB $\mu$ V) | Margin (dB) | Detector | Antenna Pole |
|-----|-----------------|----------------------|----------------|---------------------|--------------------|-------------|----------|--------------|
| 1   | 2483.5000       | 46.30                | -6.24          | 52.54               | 74.00              | -21.46      | Peak     | Horizontal   |
| 2   | 2483.5000       | 33.41                | -6.24          | 39.65               | 54.00              | -14.35      | Average  | Horizontal   |



## 7.6. PEAK POWER SPECTRAL DENSITY MEASUREMENT

### 7.6.1. LIMITS

According to §15.247(e), for digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

According to §15.247(f), the digital modulation operation of the hybrid system, with the frequency hopping turned off, shall comply with the power density requirements of paragraph (d) of this section.

### 7.6.2. TEST INSTRUMENTS

| Name of Equipment | Manufacturer | Model  | Serial Number | Last Calibration | Calibration Due |
|-------------------|--------------|--------|---------------|------------------|-----------------|
| Spectrum Analyzer | R&S          | FSU    | 200409        | 09/23/2013       | 09/22/2014      |
| Spectrum Analyzer | Agilent      | E4446A | US44300399    | 03/01/2014       | 03/01/2015      |

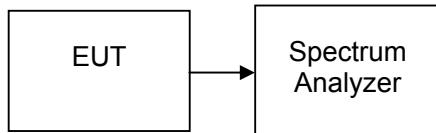
### 7.6.3. TEST PROCEDURES (please refer to measurement standard)

§15.247(e) specifies a conducted power spectral density (PSD) limit of 8 dBm in any 3 kHz band segment within the fundamental EBW during any time interval of continuous transmission. The same method as used to determine the conducted output power shall be used to determine the power spectral density (i.e., if peak-detected fundamental power was measured then use the peak PSD procedure and if average fundamental power was measured then use the average PSD procedure).

#### 10.2 Method PKPSD (peak PSD)

1. Set analyzer center frequency to DTS channel center frequency.
2. Set the span to 1.5 times the DTS bandwidth.
3. Set the RBW to:  $3 \text{ kHz} \leq \text{RBW} \leq 100 \text{ kHz}$ .
4. Set the VBW  $\geq 3 \times \text{RBW}$ .
5. Detector = peak.
6. Sweep time = auto couple.
7. Trace mode = max hold.
8. Allow trace to fully stabilize.
9. Use the peak marker function to determine the maximum amplitude level within the RBW.
10. If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

### 7.6.4. TEST SETUP





### 7.6.5. TEST RESULTS

No non-compliance noted

#### Test Data

##### Test mode: IEEE 802.11b (Antenna 0)

| Channel | Frequency (MHz) | PPSD (dBm) | Limit (dBm) | Test Result |
|---------|-----------------|------------|-------------|-------------|
| Low     | 2412            | 0.88       | 8           | PASS        |
| Mid     | 2437            | 0.65       |             | PASS        |
| High    | 2462            | 0.79       |             | PASS        |

##### Test mode: IEEE 802.11b (Antenna 1)

| Channel | Frequency (MHz) | PPSD (dBm) | Limit (dBm) | Test Result |
|---------|-----------------|------------|-------------|-------------|
| Low     | 2412            | -0.24      | 8           | PASS        |
| Mid     | 2437            | -0.22      |             | PASS        |
| High    | 2462            | -1.49      |             | PASS        |

##### Test mode: IEEE 802.11g (Antenna 0)

| Channel | Frequency (MHz) | PPSD (dBm) | Limit (dBm) | Test Result |
|---------|-----------------|------------|-------------|-------------|
| Low     | 2412            | -11.09     | 8           | PASS        |
| Mid     | 2437            | -11.14     |             | PASS        |
| High    | 2462            | -11.89     |             | PASS        |

##### Test mode: IEEE 802.11g (Antenna 1)

| Channel | Frequency (MHz) | PPSD (dBm) | Limit (dBm) | Test Result |
|---------|-----------------|------------|-------------|-------------|
| Low     | 2412            | -12.05     | 8           | PASS        |
| Mid     | 2437            | -10.77     |             | PASS        |
| High    | 2462            | -12.23     |             | PASS        |

##### Test mode: IEEE 802.11n HT20 MHz (Combine with Antenna 0 and Antenna 1)

| Channel | Frequency (MHz) | PPSD (dBm) |           |        | Limit (dBm) | Test Result |
|---------|-----------------|------------|-----------|--------|-------------|-------------|
|         |                 | Antenna 0  | Antenna 1 | Total  |             |             |
| Low     | 2412            | -14.84     | -14.16    | -11.48 | 8           | PASS        |
| Mid     | 2437            | -13.79     | -14.85    | -11.28 |             | PASS        |
| High    | 2462            | -14.74     | -14.82    | -11.77 |             | PASS        |

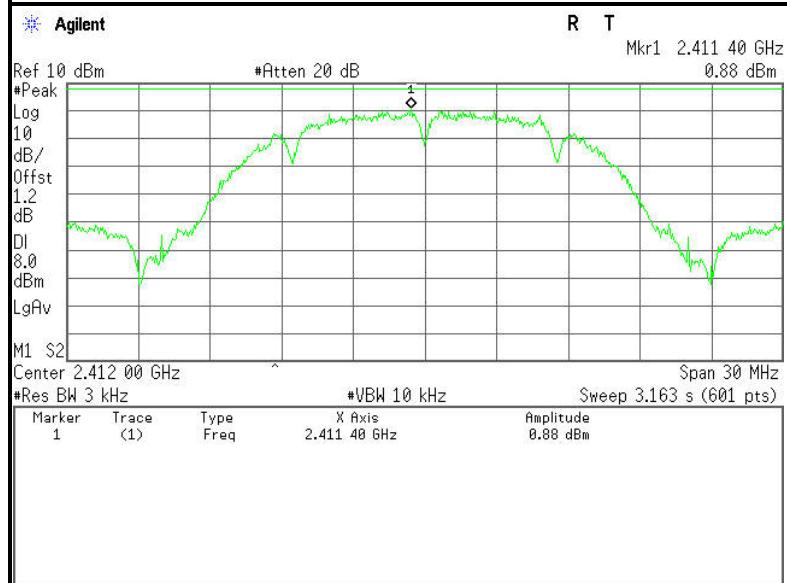
##### Test mode: IEEE 802.11n HT40 MHz (Combine with Antenna 0 and Antenna 1)

| Channel | Frequency (MHz) | PPSD (dBm) |           |        | Limit (dBm) | Test Result |
|---------|-----------------|------------|-----------|--------|-------------|-------------|
|         |                 | Antenna 0  | Antenna 1 | Total  |             |             |
| Low     | 2422            | -14.68     | -17.53    | -12.86 | 8           | PASS        |
| Mid     | 2437            | -17.54     | -17.53    | -14.52 |             | PASS        |
| High    | 2452            | -17.91     | -18.31    | -15.10 |             | PASS        |

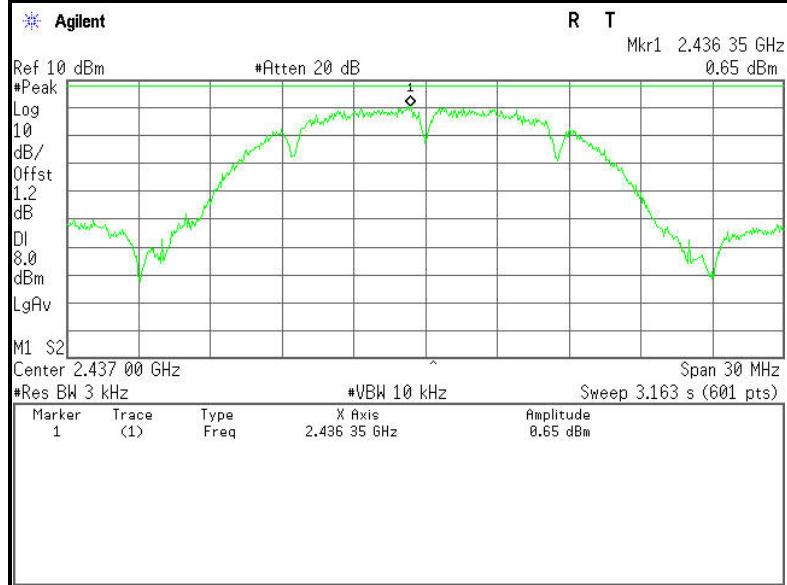
Test Plot

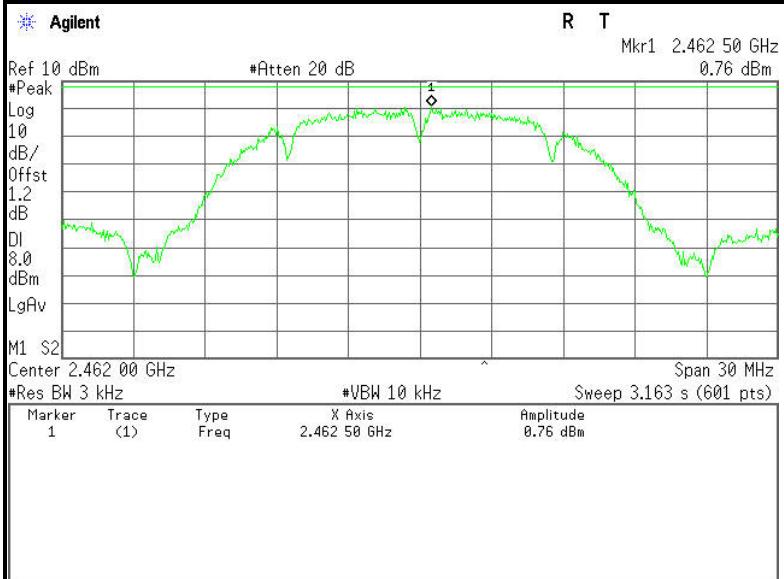
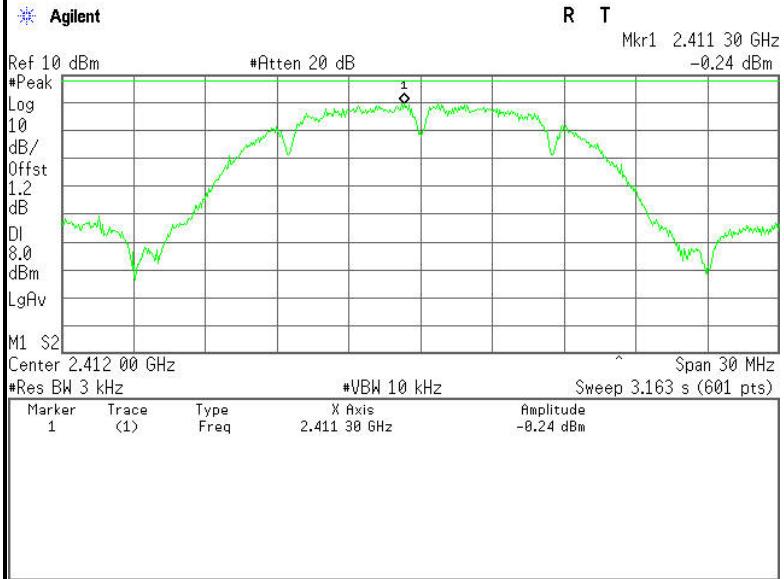
## IEEE 802.11b mode (Antenna 0)

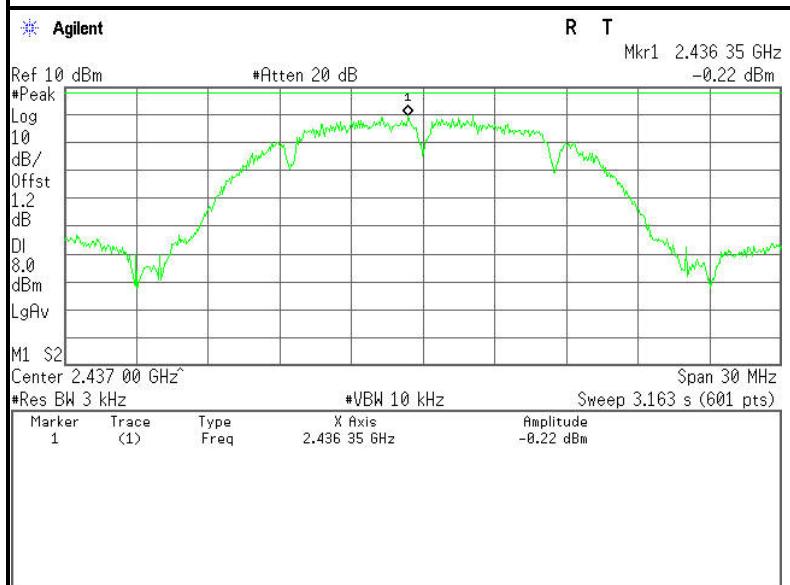
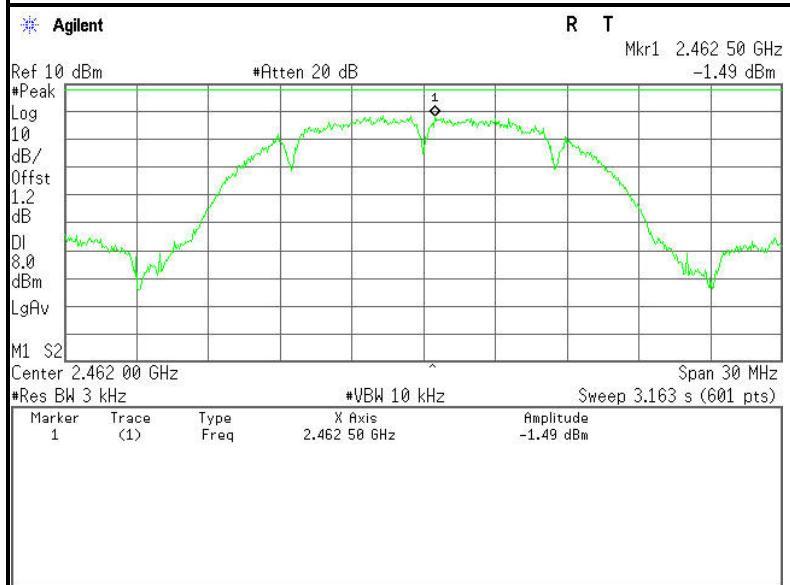
## PPSD (CH Low)



## PPSD (CH Mid)



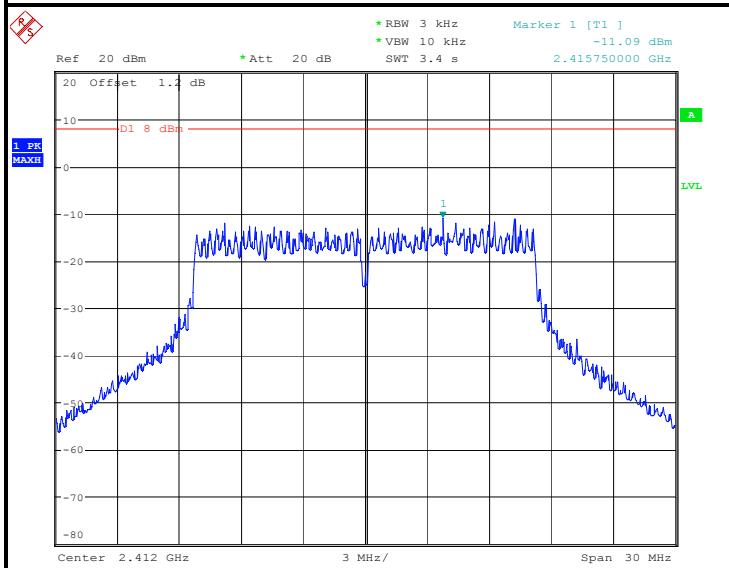
**PPSD (CH High)****IEEE 802.11b mode (Antenna 1)****PPSD (CH Low)**

**PPSD (CH Low)****PPSD (CH High)**



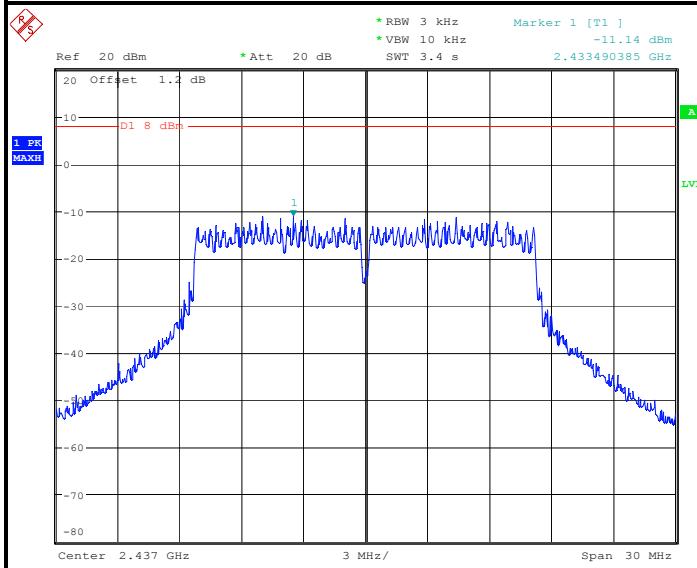
## IEEE 802.11g mode (Antenna 0)

## PPSD (CH Low)



Date: 8.JUL.2014 10:34:37

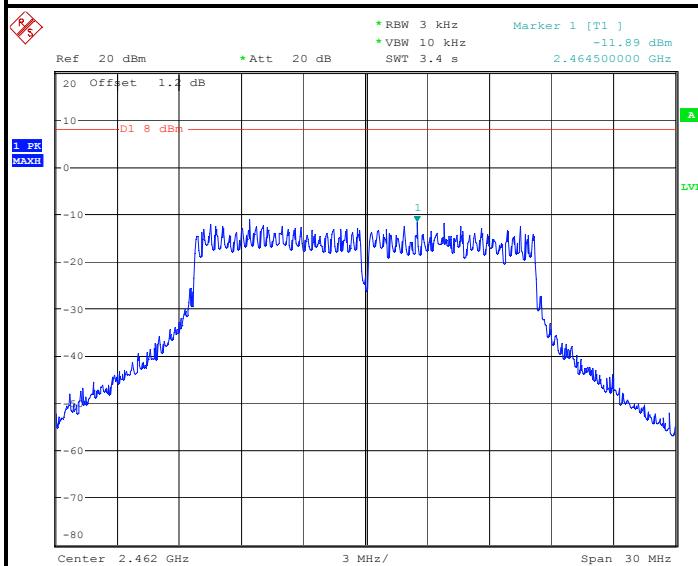
## PPSD (CH Mid)



Date: 8.JUL.2014 10:33:50



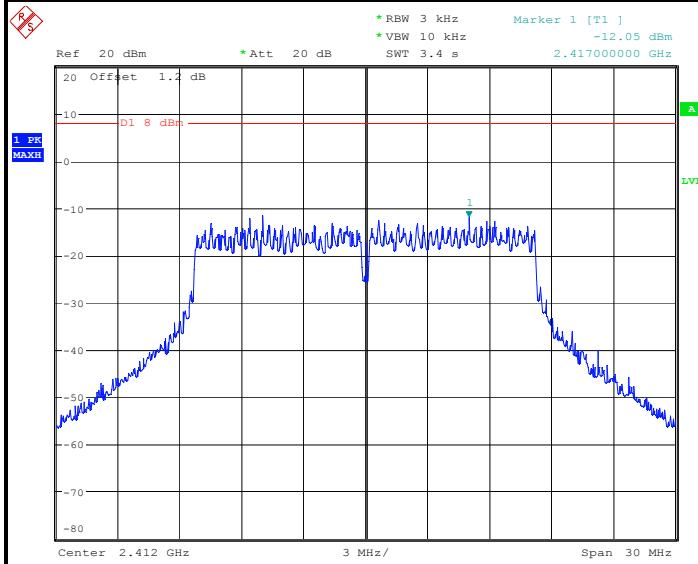
## PPSD (CH High)



Date: 8.JUL.2014 10:33:06

## IEEE 802.11g mode (Antenna 1)

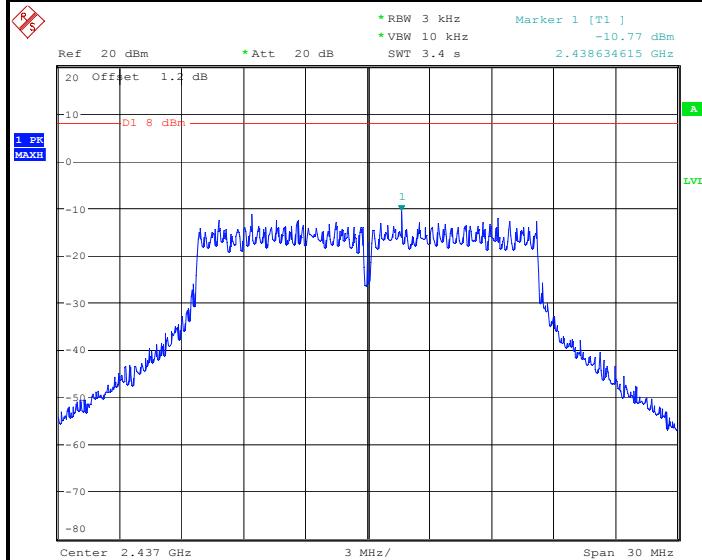
## PPSD (CH Low)



Date: 8.JUL.2014 11:10:27

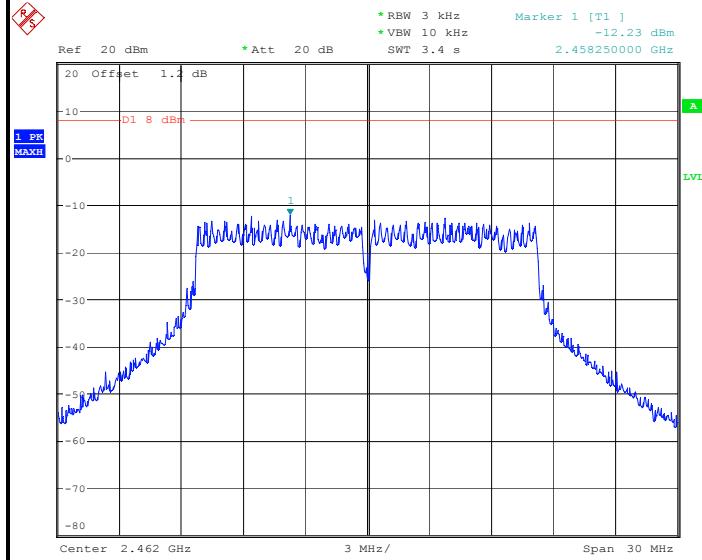


## PPSD (CH Mid)



Date: 8.JUL.2014 11:08:34

## PPSD (CH High)

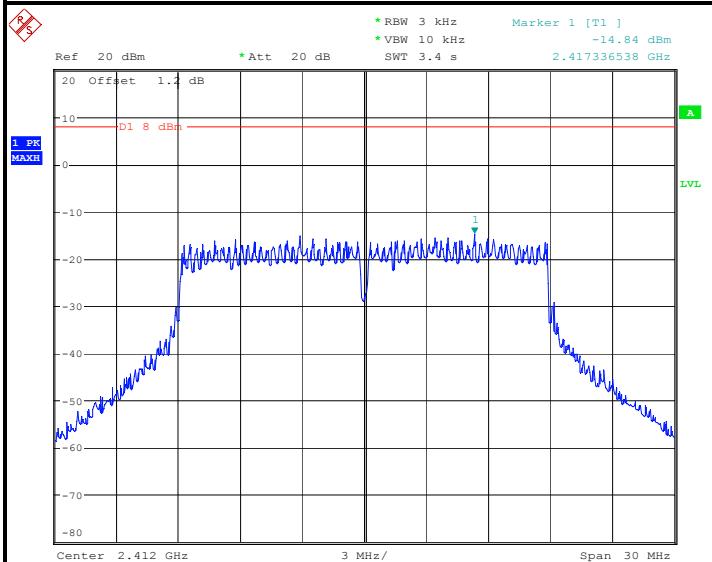


Date: 8.JUL.2014 11:09:39



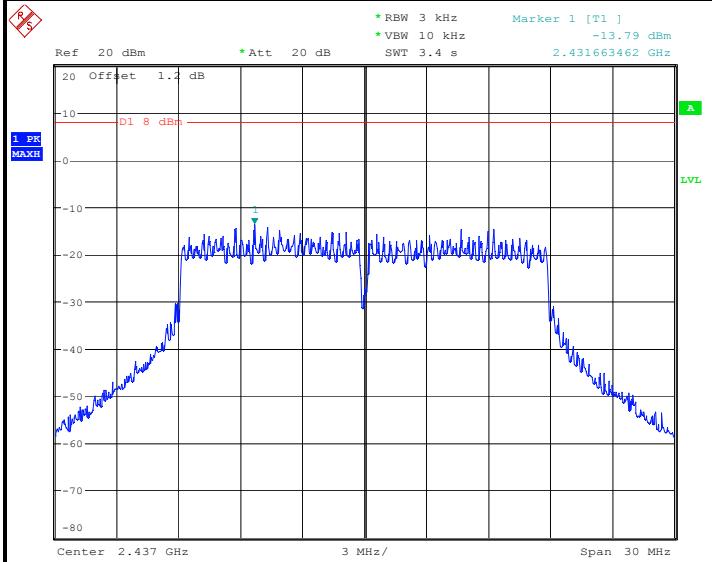
## IEEE 802.11n HT20 MHz mode (Antenna 0)

## PPSD (CH Low)



Date: 8.JUL.2014 10:37:02

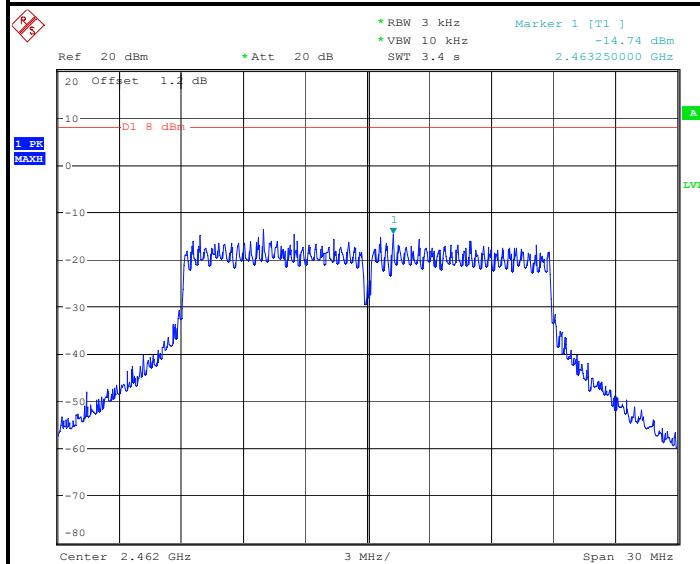
## PPSD (CH Mid)



Date: 8.JUL.2014 10:37:36



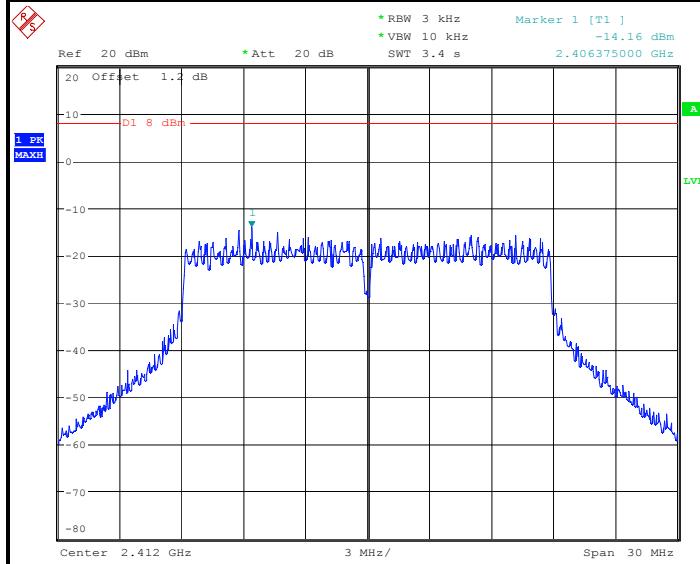
## PPSD (CH High)



Date: 8.JUL.2014 10:38:09

## IEEE 802.11n HT20 MHz mode (Antenna 1)

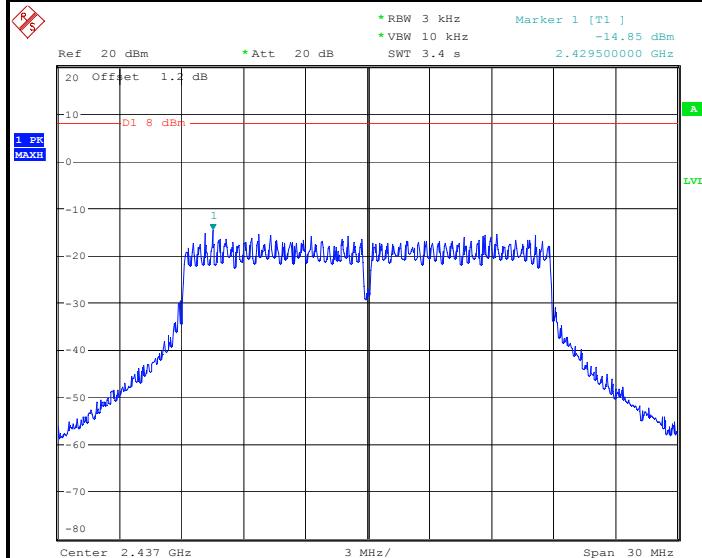
## PPSD (CH Low)



Date: 8.JUL.2014 10:59:29

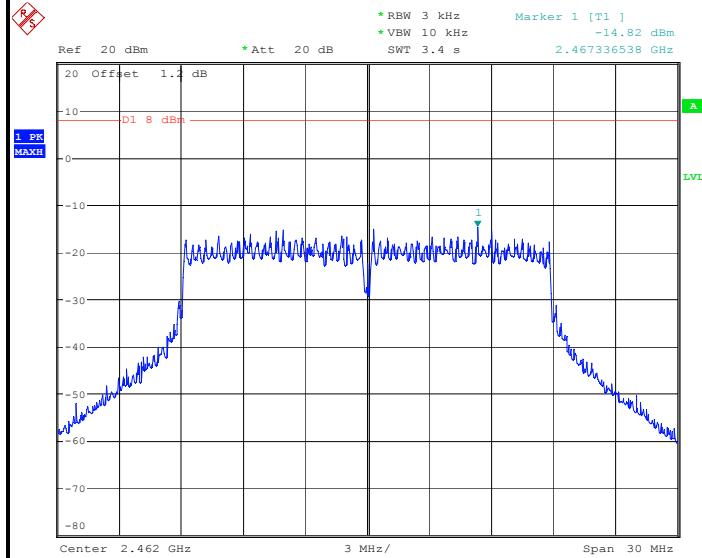


## PPSD (CH Mid)



Date: 8.JUL.2014 11:00:27

## PPSD (CH High)

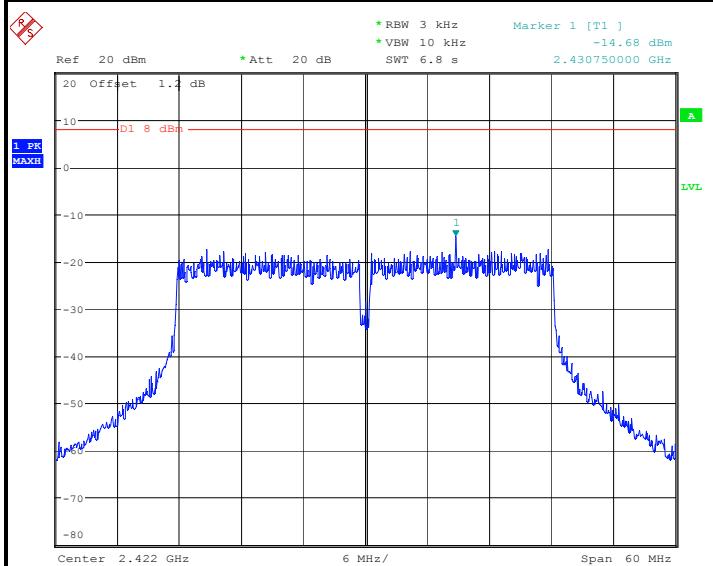


Date: 8.JUL.2014 11:01:10



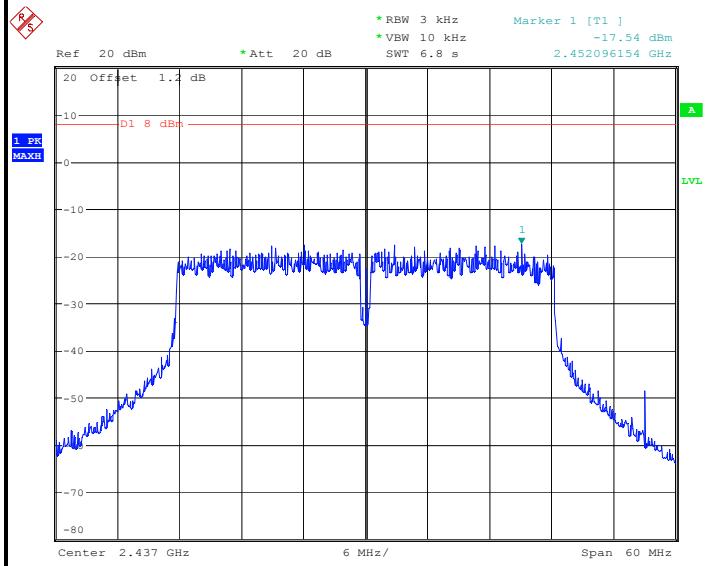
## IEEE 802.11n HT40 MHz mode (Antenna 0)

## PPSD (CH Low)



Date: 8.JUL.2014 10:54:17

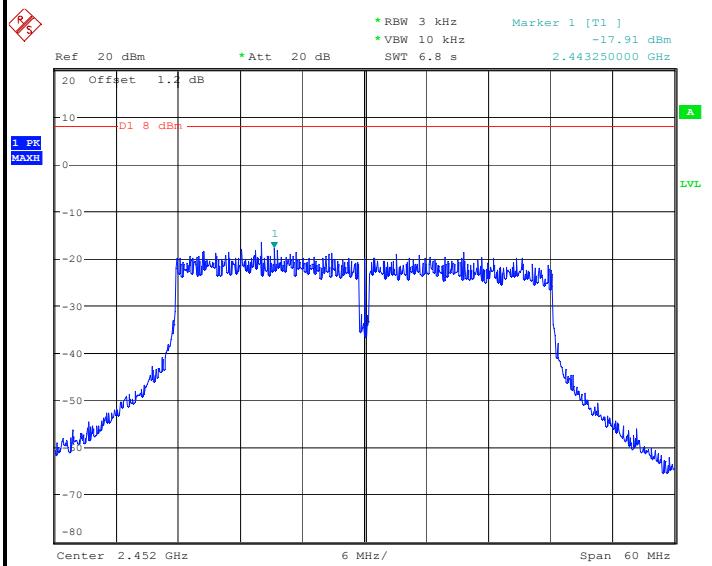
## PPSD (CH Mid)



Date: 8.JUL.2014 10:54:58



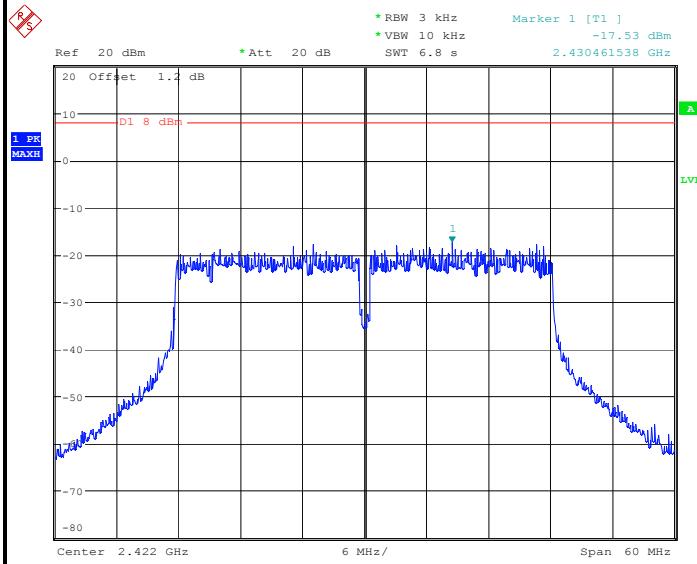
## PPSD (CH High)



Date: 8.JUL.2014 10:55:44

## IEEE 802.11n HT40 MHz mode (Antenna 1)

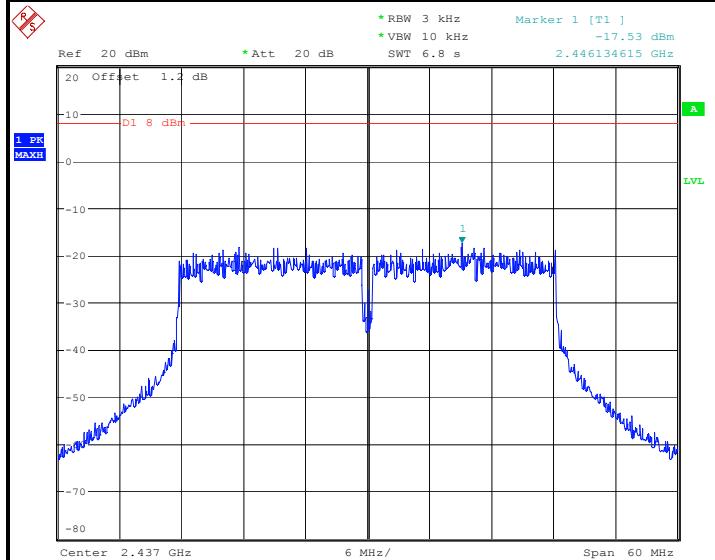
## PPSD (CH Low)



Date: 8.JUL.2014 10:58:43

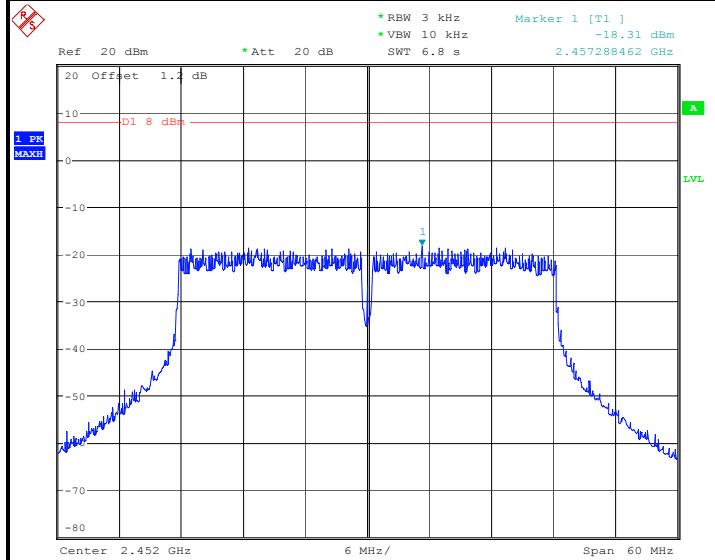


## PPSD (CH Mid)



Date: 8.JUL.2014 10:58:08

## PPSD (CH High)



Date: 8.JUL.2014 10:57:35