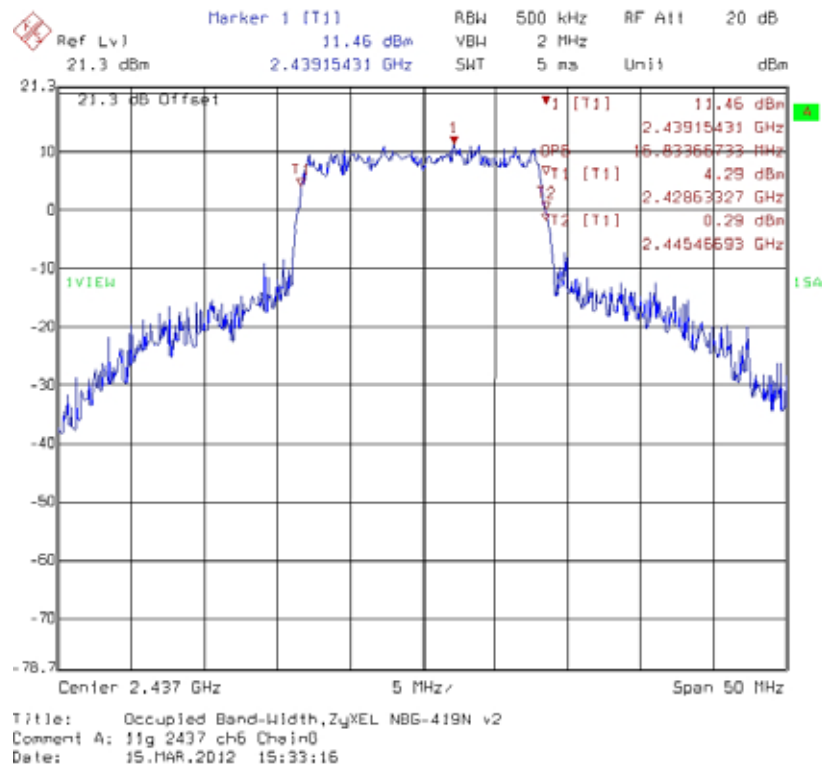
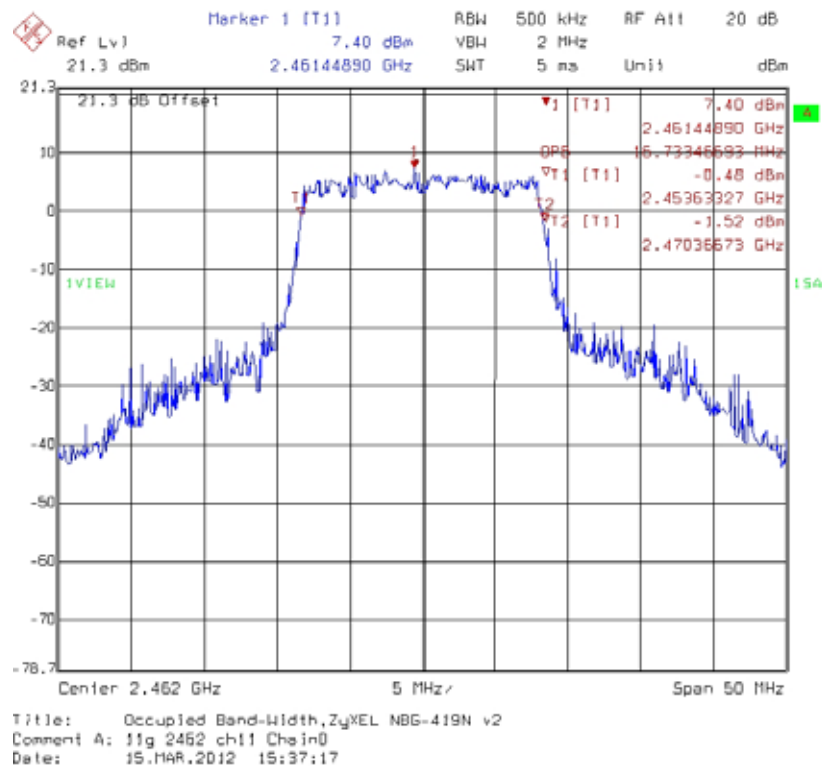


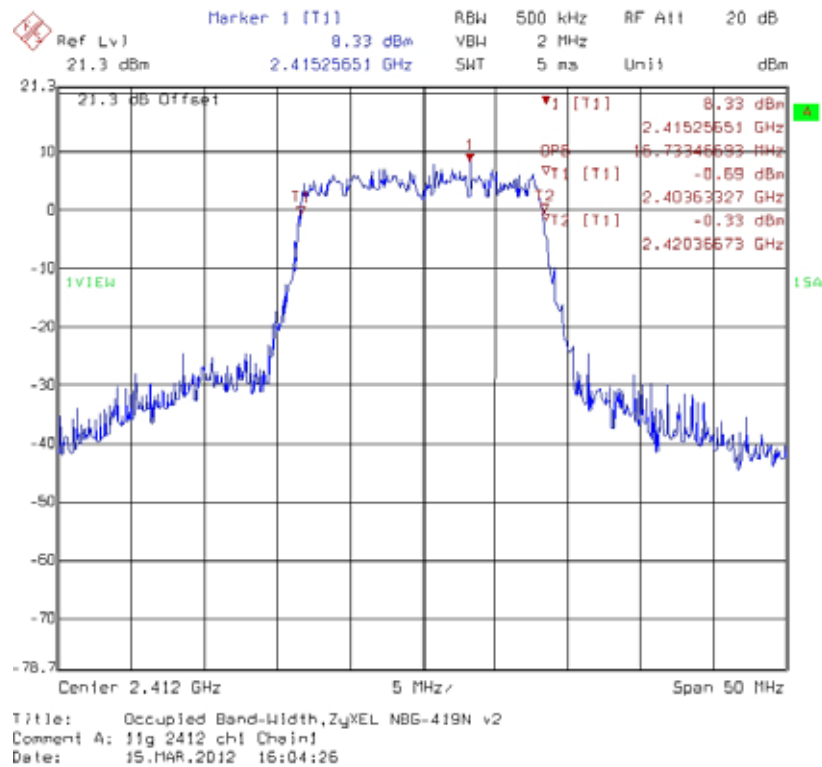
**Invax 5 dBi Antenna: Chain 0: 99 % Occupied Bandwidth @ 802.11g mode channel 6**



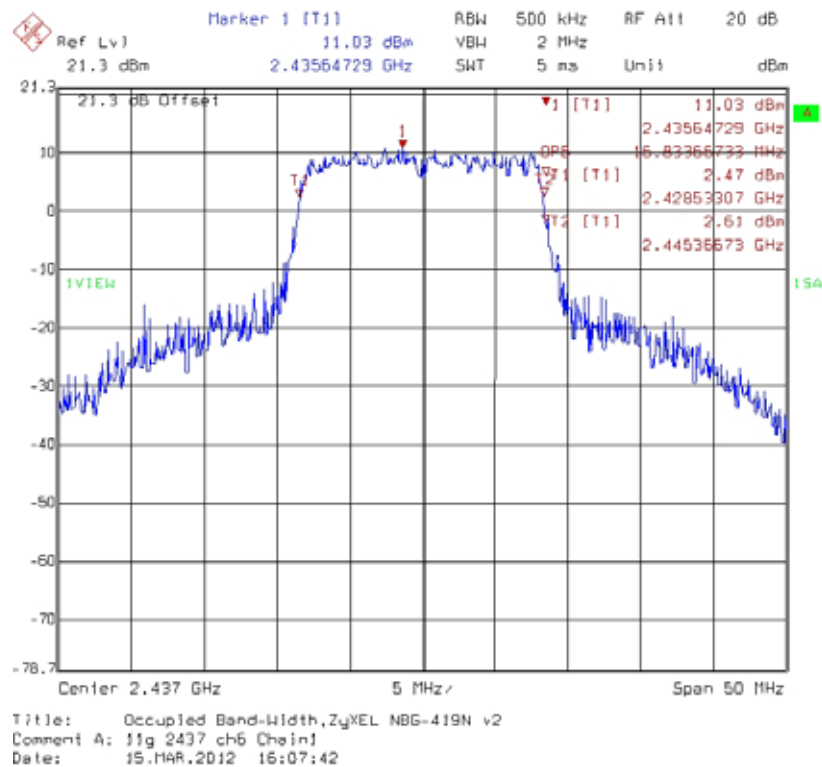
**Invax 5 dBi Antenna: Chain 0: 99 % Occupied Bandwidth @ 802.11g mode channel 11**



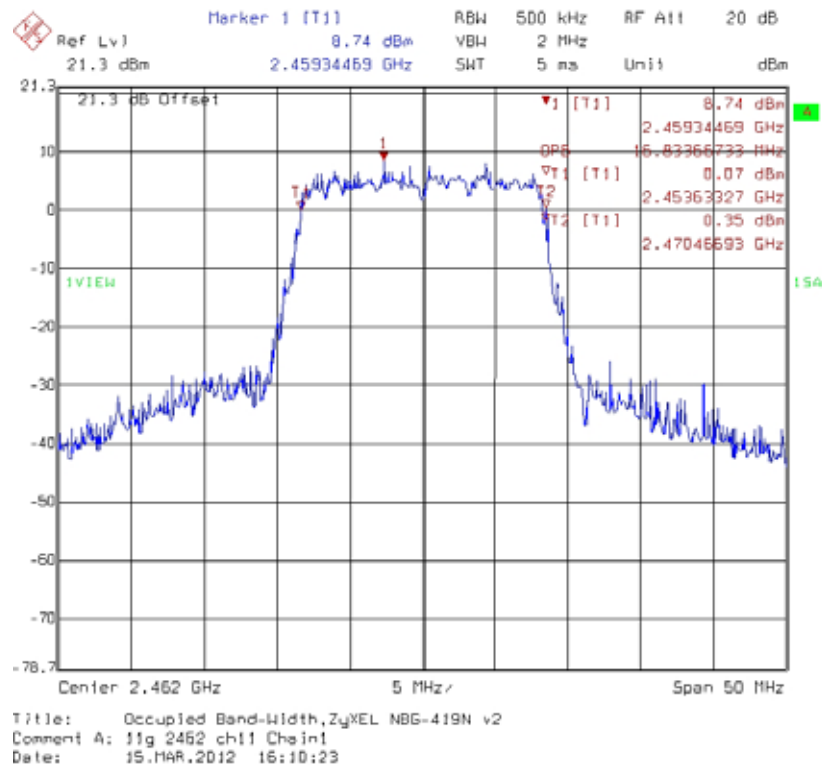
**Invax 5 dBi Antenna: Chain 1: 99 % Occupied Bandwidth @ 802.11g mode channel 1**



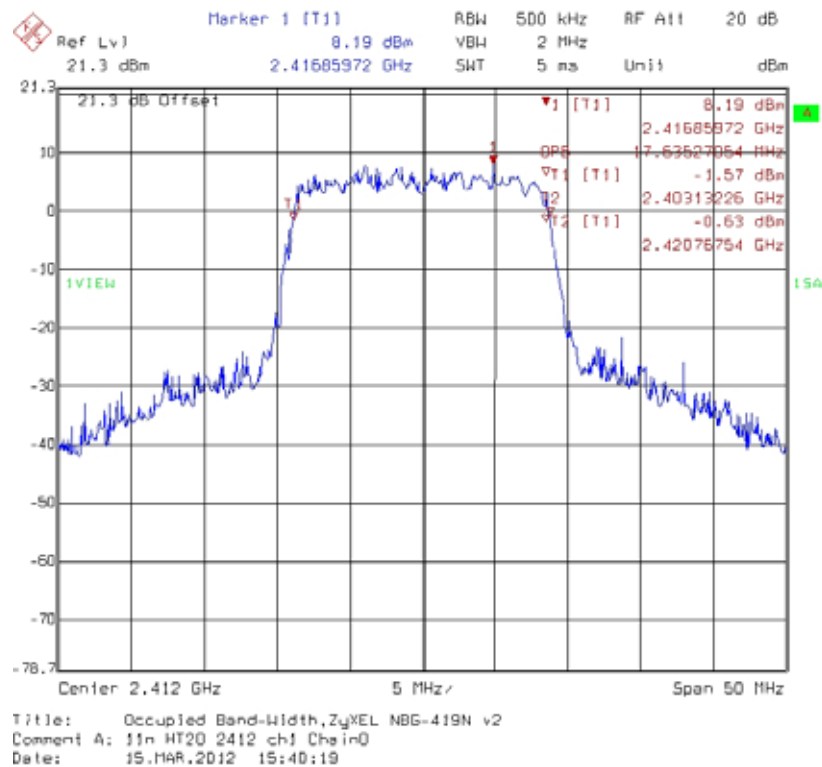
**Invax 5 dBi Antenna: Chain 1: 99 % Occupied Bandwidth @ 802.11g mode channel 6**



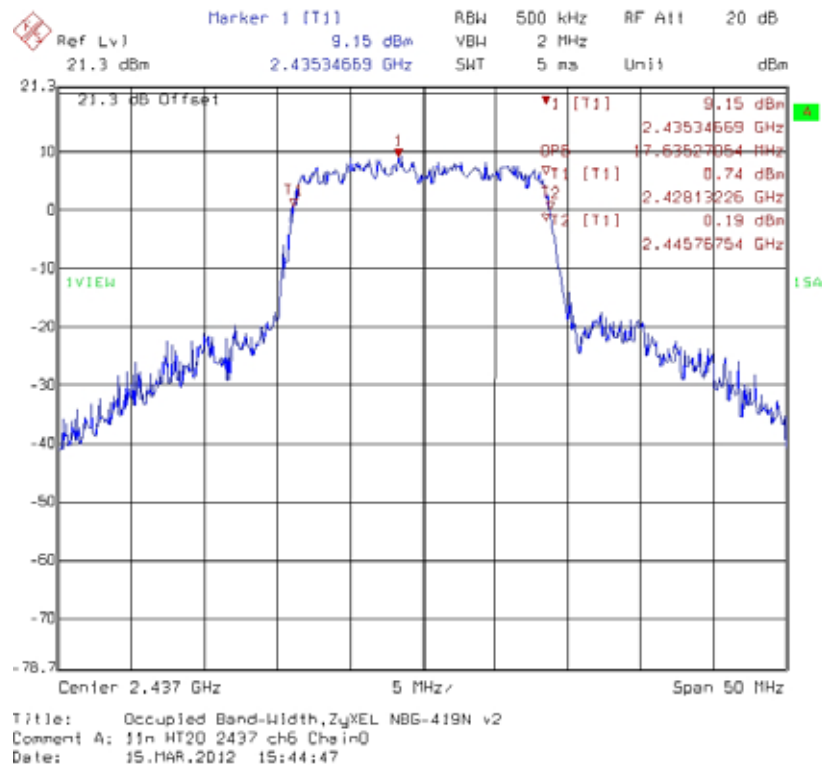
**Invax 5 dBi Antenna: Chain 1: 99 % Occupied Bandwidth @ 802.11g mode channel 11**



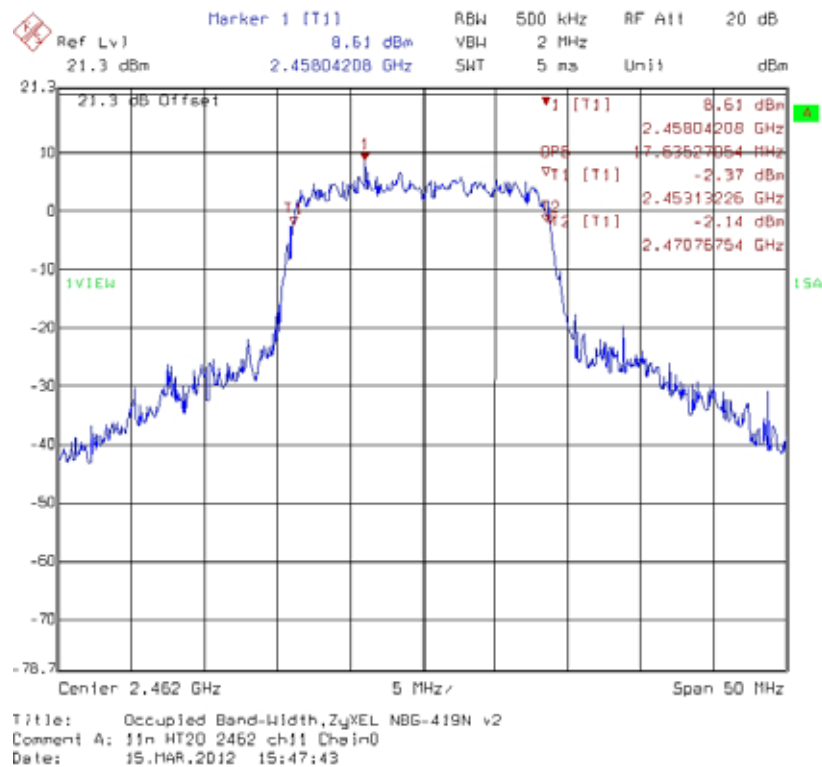
**Invax 5 dBi Antenna: Chain 0: 99 % Occupied Bandwidth @ 802.11n HT20 mode channel 1**



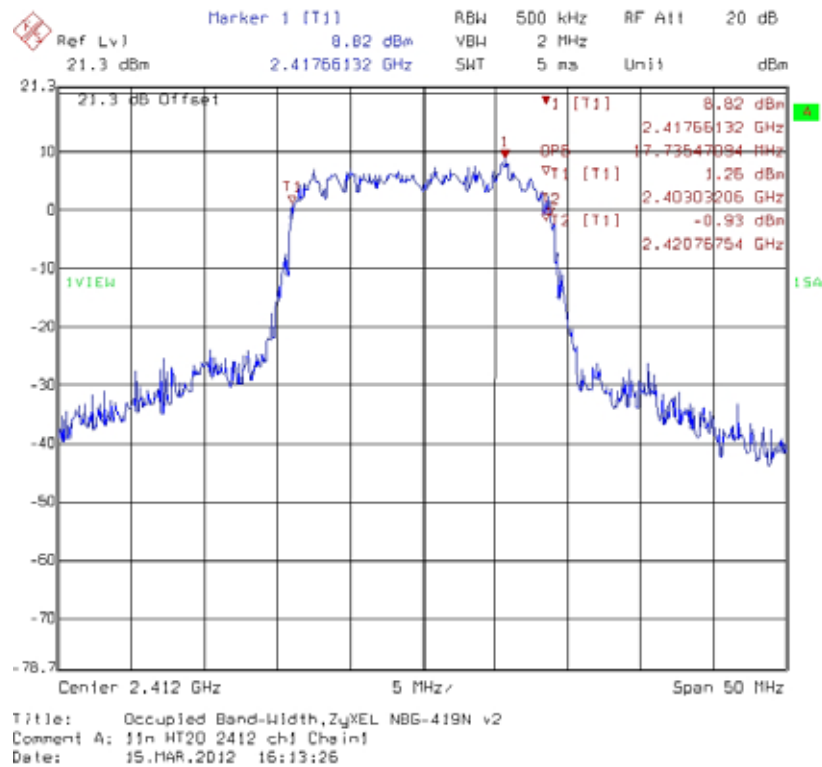
## Invax 5 dBi Antenna: Chain 0: 99 % Occupied Bandwidth @ 802.11n HT20 mode channel 6



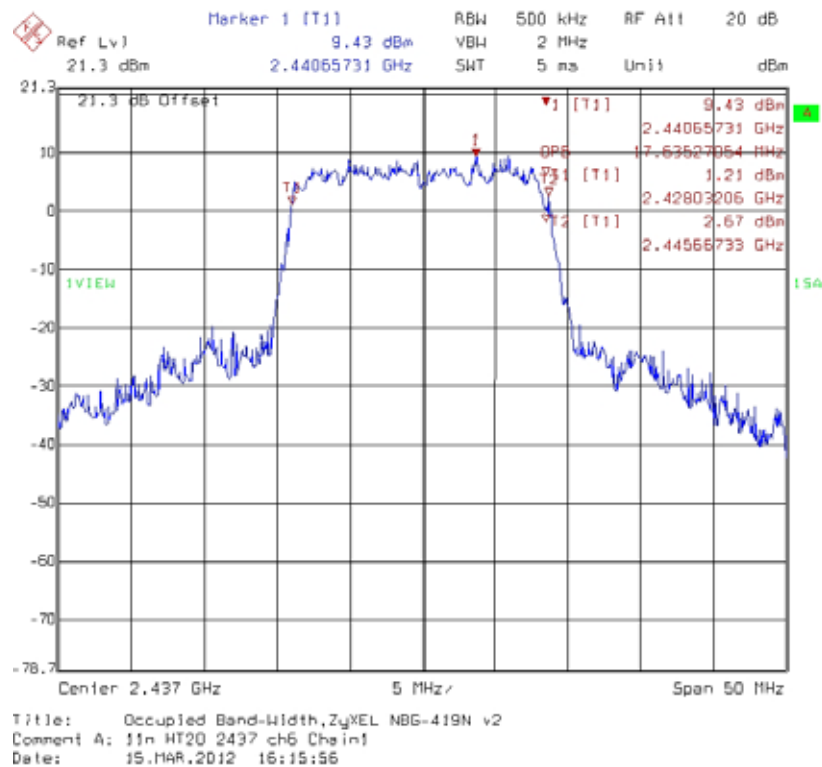
## Invax 5 dBi Antenna: Chain 0: 99 % Occupied Bandwidth@802.11n HT20 mode channel 11



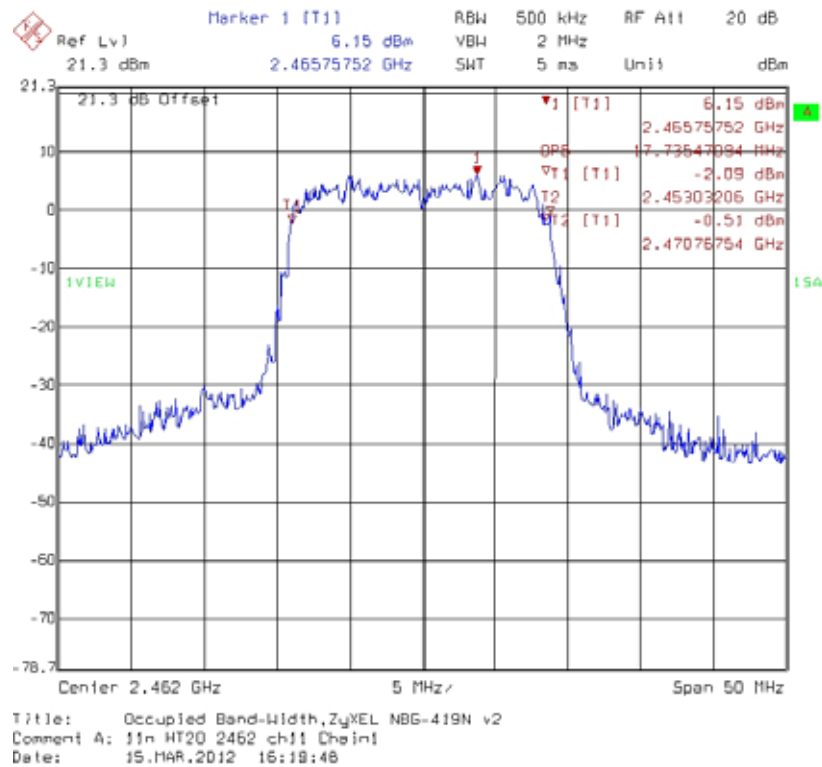
## Invax 5 dBi Antenna: Chain 1: 99 % Occupied Bandwidth @ 802.11n HT20 mode channel 1



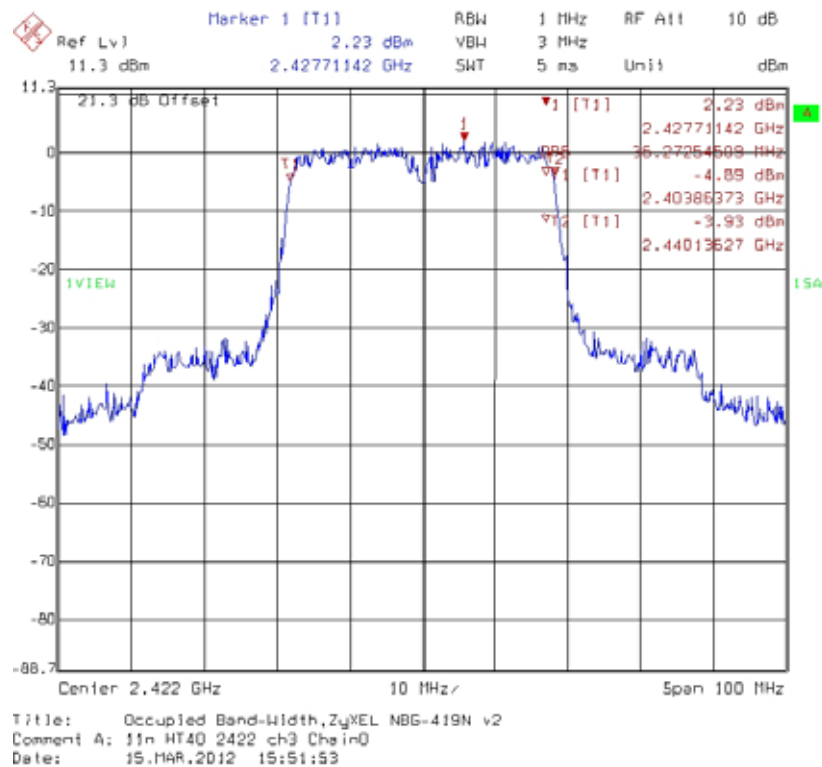
## Invax 5 dBi Antenna: Chain 1: 99 % Occupied Bandwidth @ 802.11n HT20 mode channel 6



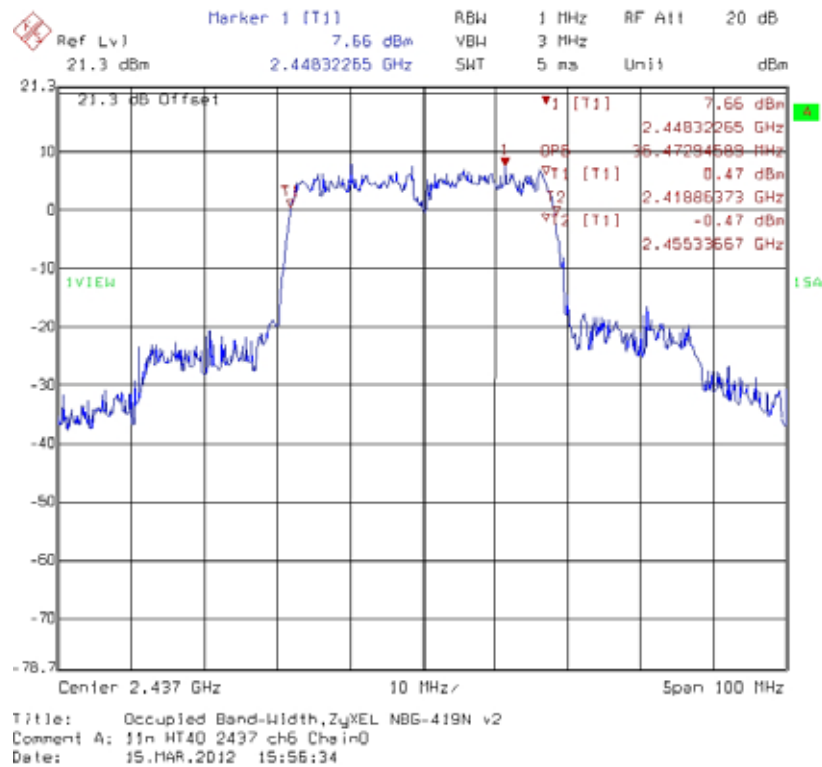
**Invax 5 dBi Antenna: Chain 1: 99 % Occupied Bandwidth@802.11n HT20 mode channel 11**



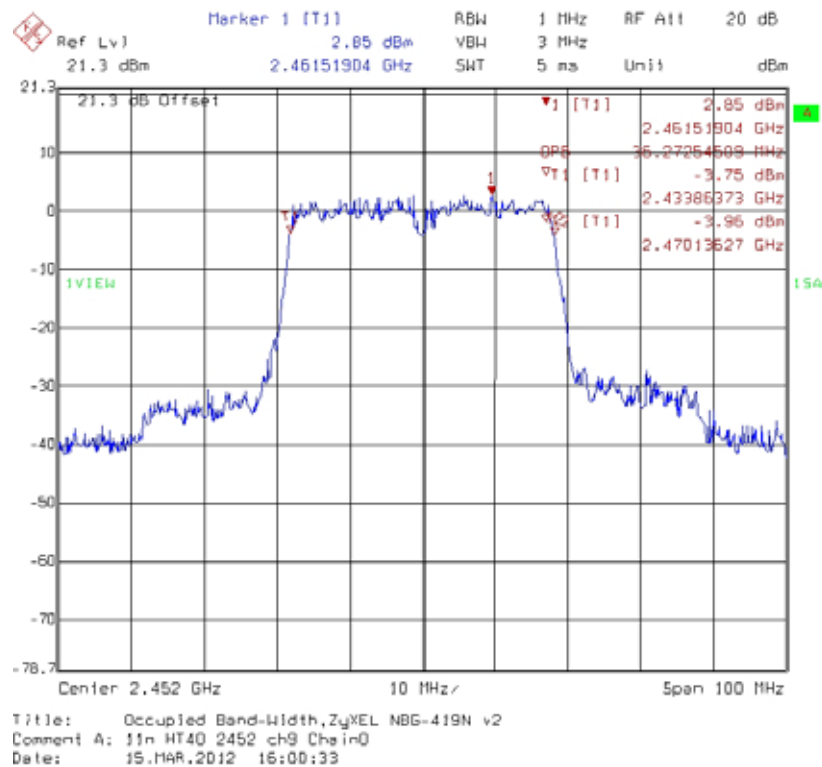
**Invax 5 dBi Antenna: Chain 0: 99 % Occupied Bandwidth @ 802.11n HT40 mode channel 3**



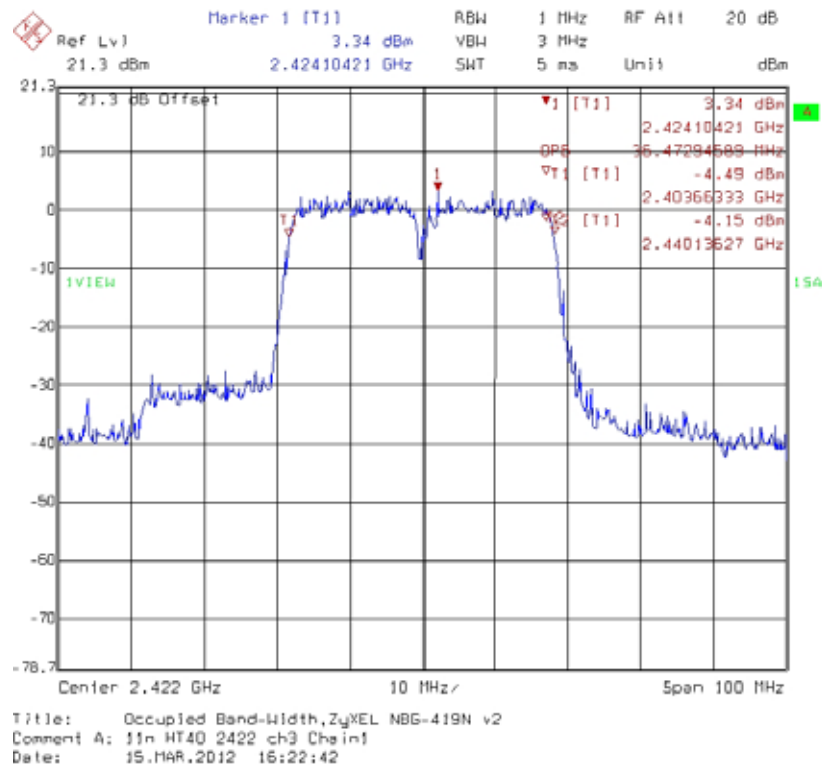
## Invax 5 dBi Antenna: Chain 0: 99 % Occupied Bandwidth @ 802.11n HT40 mode channel 6



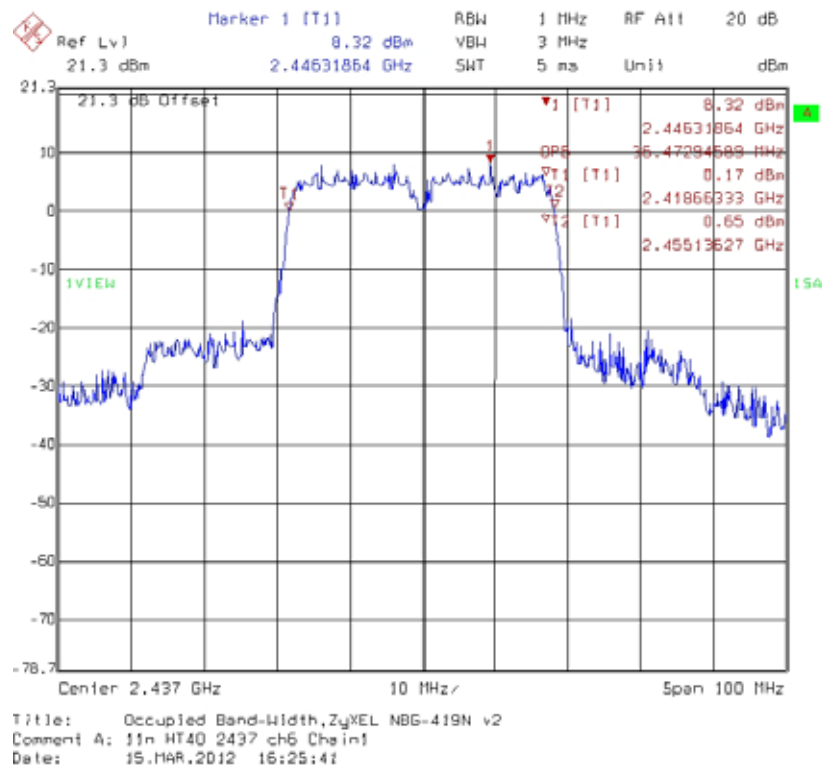
## Invax 5 dBi Antenna: Chain 0: 99 % Occupied Bandwidth @ 802.11n HT40 mode channel 9



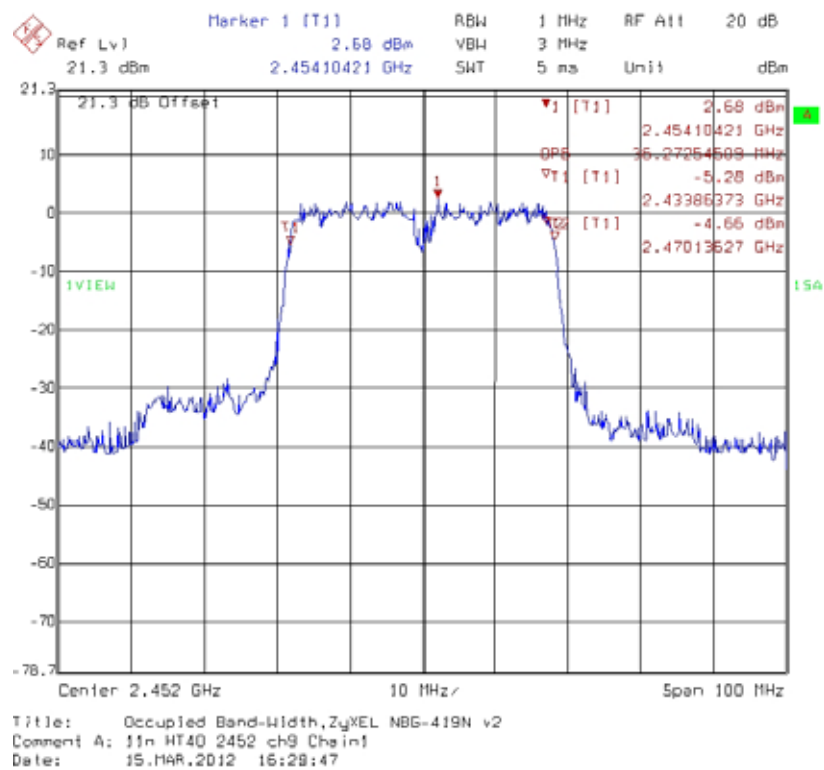
## Invax 5 dBi Antenna: Chain 1: 99 % Occupied Bandwidth @ 802.11n HT40 mode channel 3



## Invax 5 dBi Antenna: Chain 1: 99 % Occupied Bandwidth @ 802.11n HT40 mode channel 6



**Invax 5 dBi Antenna: Chain 1: 99 % Occupied Bandwidth @ 802.11n HT40 mode channel 9**



## 5. Maximum Output Power

|                      |                      |
|----------------------|----------------------|
| <b>Name of Test</b>  | Maximum output power |
| <b>Base Standard</b> | FCC 15.247(b)        |

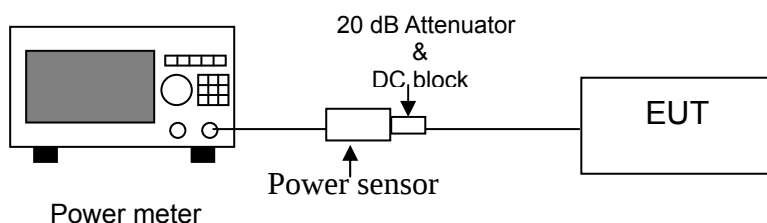
**Measurement Uncertainty:**  $\pm 0.392$  dB (k=2)  
**Test Result:** Complies  
**Measurement Data:** See Table below

### Method of Measurement:

#### Reference FCC document: KDB558074

The power output was measured on the EUT using a 50 ohm SMA Cable connected to peak power meter via power sensor. Connect 20 dB attenuator and DC block at the input port of the power sensor. Measure conducted transmit power of at each antenna port ,besides another ports were terminated by 50 ohm and sum these power in linear power units,Power output was measured with the maximum rated input level.

### Test Diagram:



**Note 1:** §15.247 (b) (4) Except as shown in paragraphs (b)(3) (i), (ii) and (iii) of this section, if transmitting antennas of directional gain greater than 6 dBi are used the peak output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1) or (b)(2) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Table: Maximum output power

| Invax 2 dBi Antenna |         |                    |                       |         |                             |       |                |                |
|---------------------|---------|--------------------|-----------------------|---------|-----------------------------|-------|----------------|----------------|
| Mode                | Channel | Frequency<br>(MHz) | Output Power<br>(dBm) |         | Calculated<br>Power<br>(mW) |       | Limit<br>(dBm) | Margin<br>(dB) |
|                     |         |                    | PK                    |         |                             |       |                |                |
| 802.11b             | 1       | 2412               | 17.43                 |         | 55.34                       |       | 30             | -12.57         |
|                     | 6       | 2437               | 21.24                 |         | 133.05                      |       | 30             | -8.76          |
|                     | 11      | 2462               | 18.44                 |         | 69.82                       |       | 30             | -11.56         |
| 802.11g<br>Chain 0  | 1       | 2412               | 21.38                 |         | 137.40                      |       | 30             | -8.62          |
|                     | 6       | 2437               | 22.41                 |         | 174.18                      |       | 30             | -7.59          |
|                     | 11      | 2462               | 19.30                 |         | 85.11                       |       | 30             | -10.70         |
| 802.11g<br>Chain 1  | 1       | 2412               | 22.87                 |         | 193.64                      |       | 30             | -7.13          |
|                     | 6       | 2437               | 22.62                 |         | 182.81                      |       | 30             | -7.38          |
|                     | 11      | 2462               | 20.98                 |         | 125.31                      |       | 30             | -9.02          |
| Mode                | Channel | Frequency<br>(MHz) | Output Power<br>(dBm) |         | Total Calculated<br>Power   |       | Limit<br>(dBm) | Margin<br>(dB) |
|                     |         |                    | Chain 0               | Chain 1 | (mW)                        | (dBm) |                |                |
| 802.11n<br>HT20     | 1       | 2412               | 21.44                 | 22.15   | 303.37                      | 24.82 | 30             | -5.18          |
|                     | 6       | 2437               | 22.01                 | 22.62   | 341.66                      | 25.34 | 30             | -4.66          |
|                     | 11      | 2462               | 20.41                 | 20.64   | 225.78                      | 23.54 | 30             | -6.46          |
| 802.11n<br>HT40     | 3       | 2422               | 17.38                 | 18.06   | 118.68                      | 20.74 | 30             | -9.26          |
|                     | 6       | 2437               | 21.43                 | 21.88   | 293.17                      | 24.67 | 30             | -5.33          |
|                     | 9       | 2452               | 18.46                 | 18.19   | 136.06                      | 21.34 | 30             | -8.66          |

| SAYTEC 2 dBi Antenna |         |                    |                       |         |                             |       |                |                |
|----------------------|---------|--------------------|-----------------------|---------|-----------------------------|-------|----------------|----------------|
| Mode                 | Channel | Frequency<br>(MHz) | Output Power<br>(dBm) |         | Calculated<br>Power<br>(mW) |       | Limit<br>(dBm) | Margin<br>(dB) |
|                      |         |                    | PK                    |         |                             |       |                |                |
| 802.11b              | 1       | 2412               | 18.41                 |         | 69.34                       |       | 30             | -11.59         |
|                      | 6       | 2437               | 20.81                 |         | 120.50                      |       | 30             | -9.19          |
|                      | 11      | 2462               | 17.01                 |         | 50.23                       |       | 30             | -12.99         |
| 802.11g<br>Chain 0   | 1       | 2412               | 23.03                 |         | 200.91                      |       | 30             | -6.97          |
|                      | 6       | 2437               | 22.47                 |         | 176.60                      |       | 30             | -7.53          |
|                      | 11      | 2462               | 19.29                 |         | 84.92                       |       | 30             | -10.71         |
| 802.11g<br>Chain 1   | 1       | 2412               | 22.35                 |         | 171.79                      |       | 30             | -7.65          |
|                      | 6       | 2437               | 23.27                 |         | 212.32                      |       | 30             | -6.73          |
|                      | 11      | 2462               | 21.20                 |         | 131.83                      |       | 30             | -8.80          |
| Mode                 | Channel | Frequency<br>(MHz) | Output Power<br>(dBm) |         | Total Calculated<br>Power   |       | Limit<br>(dBm) | Margin<br>(dB) |
|                      |         |                    | Chain 0               | Chain 1 | (mW)                        | (dBm) |                |                |
| 802.11n<br>HT20      | 1       | 2412               | 22.14                 | 23.15   | 370.22                      | 25.68 | 30             | -4.32          |
|                      | 6       | 2437               | 21.98                 | 22.37   | 330.34                      | 25.19 | 30             | -4.81          |
|                      | 11      | 2462               | 20.27                 | 20.53   | 219.39                      | 23.41 | 30             | -6.59          |
| 802.11n<br>HT40      | 3       | 2422               | 16.94                 | 18.17   | 115.05                      | 20.61 | 30             | -9.39          |
|                      | 6       | 2437               | 21.03                 | 21.59   | 270.98                      | 24.33 | 30             | -5.67          |
|                      | 9       | 2452               | 16.25                 | 17.39   | 97.00                       | 19.87 | 30             | -10.13         |

| Invax 5 dBi Antenna |         |                    |                       |         |                             |       |                |                |
|---------------------|---------|--------------------|-----------------------|---------|-----------------------------|-------|----------------|----------------|
| Mode                | Channel | Frequency<br>(MHz) | Output Power<br>(dBm) |         | Calculated<br>Power<br>(mW) |       | Limit<br>(dBm) | Margin<br>(dB) |
|                     |         |                    | PK                    |         |                             |       |                |                |
| 802.11b             | 1       | 2412               | 17.09                 |         | 51.17                       |       | 30             | -12.91         |
|                     | 6       | 2437               | 19.56                 |         | 90.36                       |       | 30             | -10.44         |
|                     | 11      | 2462               | 18.62                 |         | 72.78                       |       | 30             | -11.38         |
| 802.11g<br>Chain 0  | 1       | 2412               | 20.58                 |         | 114.29                      |       | 30             | -9.42          |
|                     | 6       | 2437               | 21.80                 |         | 151.36                      |       | 30             | -8.20          |
|                     | 11      | 2462               | 20.70                 |         | 117.49                      |       | 30             | -9.30          |
| 802.11g<br>Chain 1  | 1       | 2412               | 21.01                 |         | 126.18                      |       | 30             | -8.99          |
|                     | 6       | 2437               | 22.05                 |         | 160.32                      |       | 30             | -7.95          |
|                     | 11      | 2462               | 20.27                 |         | 106.41                      |       | 30             | -9.73          |
| Mode                | Channel | Frequency<br>(MHz) | Output Power<br>(dBm) |         | Total Calculated<br>Power   |       | Limit<br>(dBm) | Margin<br>(dB) |
|                     |         |                    | Chain 0               | Chain 1 | (mW)                        | (dBm) |                |                |
| 802.11n<br>HT20     | 1       | 2412               | 20.33                 | 21.01   | 234.08                      | 23.69 | 30             | -6.31          |
|                     | 6       | 2437               | 21.76                 | 22.44   | 325.36                      | 25.12 | 30             | -4.88          |
|                     | 11      | 2462               | 19.72                 | 20.28   | 200.42                      | 23.02 | 30             | -6.98          |
| 802.11n<br>HT40     | 3       | 2422               | 16.56                 | 18.22   | 111.66                      | 20.48 | 30             | -9.52          |
|                     | 6       | 2437               | 21.54                 | 22.02   | 301.78                      | 24.80 | 30             | -5.20          |
|                     | 9       | 2452               | 17.15                 | 17.85   | 112.83                      | 20.52 | 30             | -9.48          |

## 6. Power Spectral Density

|                      |                        |
|----------------------|------------------------|
| <b>Name of Test</b>  | Power Spectral Density |
| <b>Base Standard</b> | FCC 15.247(e)          |

**Test Result:** Complies  
**Measurement Data:** See Table & plots below

### Method of Measurement:

#### Reference FCC document: KDB558074

The power spectrum density was measured from the antenna port of the EUT using a 50 ohm spectrum analyzer. Locate and zoom in on emission peak(s) within the passband. Set RBW = 3 kHz, VBW >RBW, sweep= 500s. The peak level measured must be no greater than + 8 dBm. Power spectrum density was read directly and cable loss (1 dB)/external attenuator (20 dB) correction was added to the reading to obtain power at the EUT antenna terminals.

### Test Diagram:

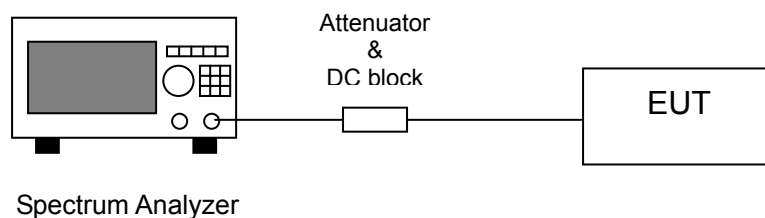


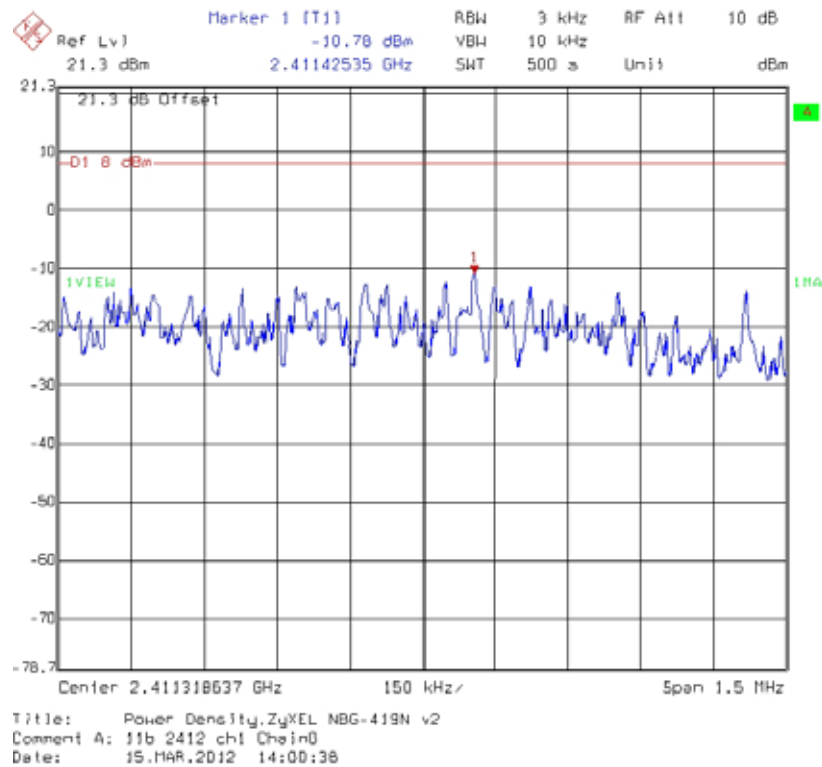
Table: Power Spectral Density

| Invax 2 dBi Antenna |         |                    |              |        |                   |        |                |                |
|---------------------|---------|--------------------|--------------|--------|-------------------|--------|----------------|----------------|
| Mode                | Channel | Frequency<br>(MHz) | PSD<br>(dBm) |        | Total PSD<br>(mW) |        | Limit<br>(dBm) | Margin<br>(dB) |
| 802.11b             | 1       | 2412               | -10.78       |        | 0.08              |        | 8              | -18.78         |
|                     | 6       | 2437               | -6.66        |        | 0.22              |        | 8              | -14.66         |
|                     | 11      | 2462               | -10.68       |        | 0.09              |        | 8              | -18.68         |
| 802.11g<br>Chain 0  | 1       | 2412               | -10.49       |        | 0.09              |        | 8              | -18.49         |
|                     | 6       | 2437               | -8.92        |        | 0.13              |        | 8              | -16.92         |
|                     | 11      | 2462               | -9.97        |        | 0.10              |        | 8              | -17.97         |
| 802.11g<br>Chain 1  | 1       | 2412               | -10.62       |        | 0.09              |        | 8              | -18.62         |
|                     | 6       | 2437               | -6.56        |        | 0.22              |        | 8              | -14.56         |
|                     | 11      | 2462               | -8.80        |        | 0.13              |        | 8              | -16.80         |
| Mode                | Channel | Frequency<br>(MHz) | PSD<br>(dBm) |        | Total PSD         |        | Limit<br>(dBm) | Margin<br>(dB) |
|                     |         |                    | Chain0       | Chain1 | mW                | dBm    |                |                |
| 802.11n<br>HT20     | 1       | 2412               | -7.91        | -6.54  | 0.38              | -4.16  | 8              | -12.16         |
|                     | 6       | 2437               | -5.45        | -7.49  | 0.46              | -3.34  | 8              | -11.34         |
|                     | 11      | 2462               | -7.00        | -9.82  | 0.30              | -5.17  | 8              | -13.17         |
| 802.11n<br>HT40     | 3       | 2422               | -22.71       | -17.51 | 0.02              | -16.36 | 8              | -24.36         |
|                     | 6       | 2437               | -13.83       | -10.93 | 0.12              | -9.13  | 8              | -17.13         |
|                     | 9       | 2452               | -19.68       | -18.39 | 0.03              | -15.98 | 8              | -23.98         |

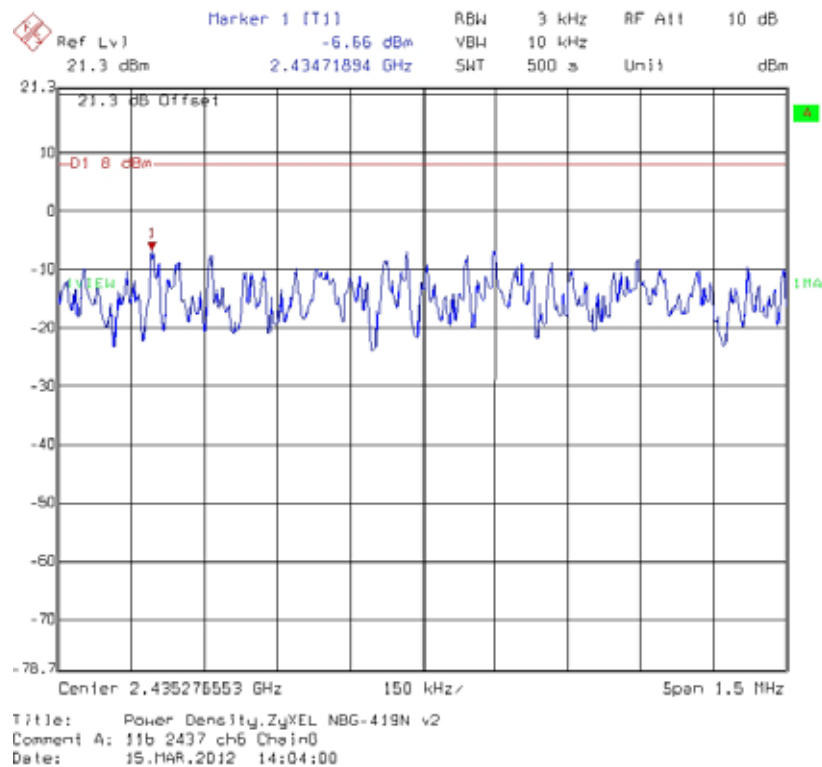
| SAYTEC 2 dBi Antenna |         |                    |              |        |                   |        |                |                |
|----------------------|---------|--------------------|--------------|--------|-------------------|--------|----------------|----------------|
| Mode                 | Channel | Frequency<br>(MHz) | PSD<br>(dBm) |        | Total PSD<br>(mW) |        | Limit<br>(dBm) | Margin<br>(dB) |
| 802.11b              | 1       | 2412               | -9.04        |        | 0.12              |        | 8              | -17.04         |
|                      | 6       | 2437               | -5.62        |        | 0.27              |        | 8              | -13.62         |
|                      | 11      | 2462               | -11.19       |        | 0.08              |        | 8              | -19.19         |
| 802.11g<br>Chain 0   | 1       | 2412               | -9.29        |        | 0.12              |        | 8              | -17.29         |
|                      | 6       | 2437               | -6.74        |        | 0.21              |        | 8              | -14.74         |
|                      | 11      | 2462               | -12.46       |        | 0.06              |        | 8              | -20.46         |
| 802.11g<br>Chain 1   | 1       | 2412               | -9.73        |        | 0.11              |        | 8              | -17.73         |
|                      | 6       | 2437               | -9.46        |        | 0.11              |        | 8              | -17.46         |
|                      | 11      | 2462               | -10.46       |        | 0.09              |        | 8              | -18.46         |
| Mode                 | Channel | Frequency<br>(MHz) | PSD<br>(dBm) |        | Total PSD         |        | Limit<br>(dBm) | Margin<br>(dB) |
|                      |         |                    | Chain0       | Chain1 | mW                | dBm    |                |                |
| 802.11n<br>HT20      | 1       | 2412               | -12.42       | -9.36  | 0.17              | -7.62  | 8              | -15.62         |
|                      | 6       | 2437               | -11.19       | -7.58  | 0.25              | -6.01  | 8              | -14.01         |
|                      | 11      | 2462               | -11.17       | -4.27  | 0.45              | -3.46  | 8              | -11.46         |
| 802.11n<br>HT40      | 3       | 2422               | -18.67       | -18.98 | 0.03              | -15.81 | 8              | -23.81         |
|                      | 6       | 2437               | -14.13       | -16.11 | 0.06              | -12.00 | 8              | -20.00         |
|                      | 9       | 2452               | -19.39       | -19.86 | 0.02              | -16.61 | 8              | -24.61         |

| Invax 5 dBi Antenna |         |                 |           |        |                |        |             |             |
|---------------------|---------|-----------------|-----------|--------|----------------|--------|-------------|-------------|
| Mode                | Channel | Frequency (MHz) | PSD (dBm) |        | Total PSD (mW) |        | Limit (dBm) | Margin (dB) |
| 802.11b             | 1       | 2412            | -10.97    |        | 0.08           |        | 8           | -18.97      |
|                     | 6       | 2437            | -7.42     |        | 0.18           |        | 8           | -15.42      |
|                     | 11      | 2462            | -7.83     |        | 0.16           |        | 8           | -15.83      |
| 802.11g<br>Chain 0  | 1       | 2412            | -9.71     |        | 0.11           |        | 8           | -17.71      |
|                     | 6       | 2437            | -7.10     |        | 0.19           |        | 8           | -15.10      |
|                     | 11      | 2462            | -9.93     |        | 0.10           |        | 8           | -17.93      |
| 802.11g<br>Chain 1  | 1       | 2412            | -9.89     |        | 0.10           |        | 8           | -17.89      |
|                     | 6       | 2437            | -8.32     |        | 0.15           |        | 8           | -16.32      |
|                     | 11      | 2462            | -10.86    |        | 0.08           |        | 8           | -18.86      |
| Mode                | Channel | Frequency (MHz) | PSD (dBm) |        | Total PSD      |        | Limit (dBm) | Margin (dB) |
|                     |         |                 | Chain0    | Chain1 | mW             | dBm    |             |             |
| 802.11n<br>HT20     | 1       | 2412            | -10.14    | -10.98 | 0.18           | -7.53  | 8           | -15.53      |
|                     | 6       | 2437            | -8.60     | -9.38  | 0.25           | -5.96  | 8           | -13.96      |
|                     | 11      | 2462            | -11.92    | -12.71 | 0.12           | -9.29  | 8           | -17.29      |
| 802.11n<br>HT40     | 3       | 2422            | -17.96    | -18.99 | 0.03           | -15.43 | 8           | -23.43      |
|                     | 6       | 2437            | -12.78    | -11.94 | 0.12           | -9.33  | 8           | -17.33      |
|                     | 9       | 2452            | -18.47    | -19.84 | 0.02           | -16.09 | 8           | -24.09      |

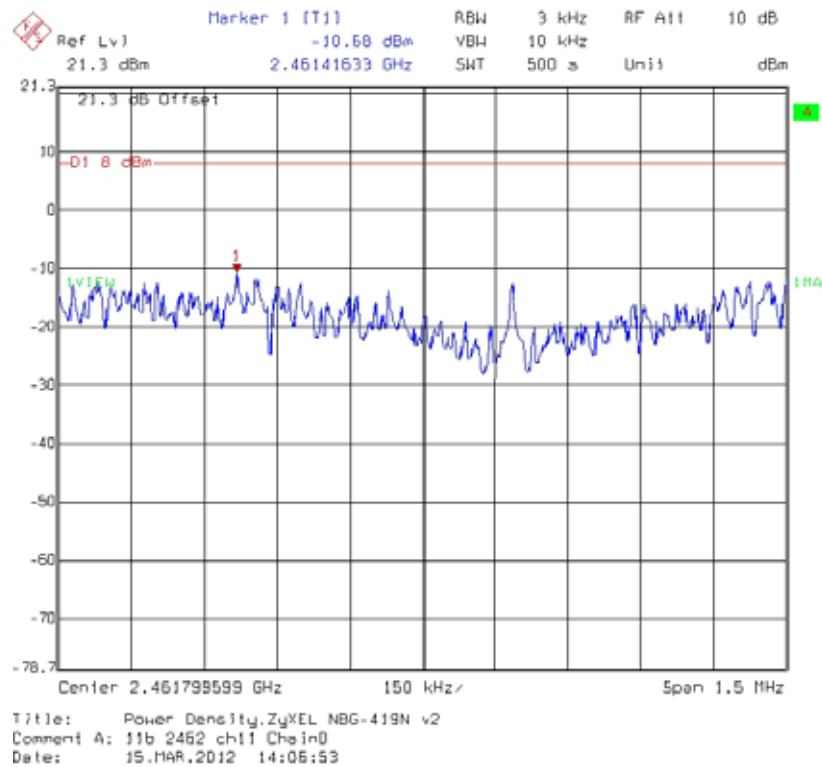
**Invax 2 dBi Antenna: Power Spectral Density @ 802.11b mode channel 1**



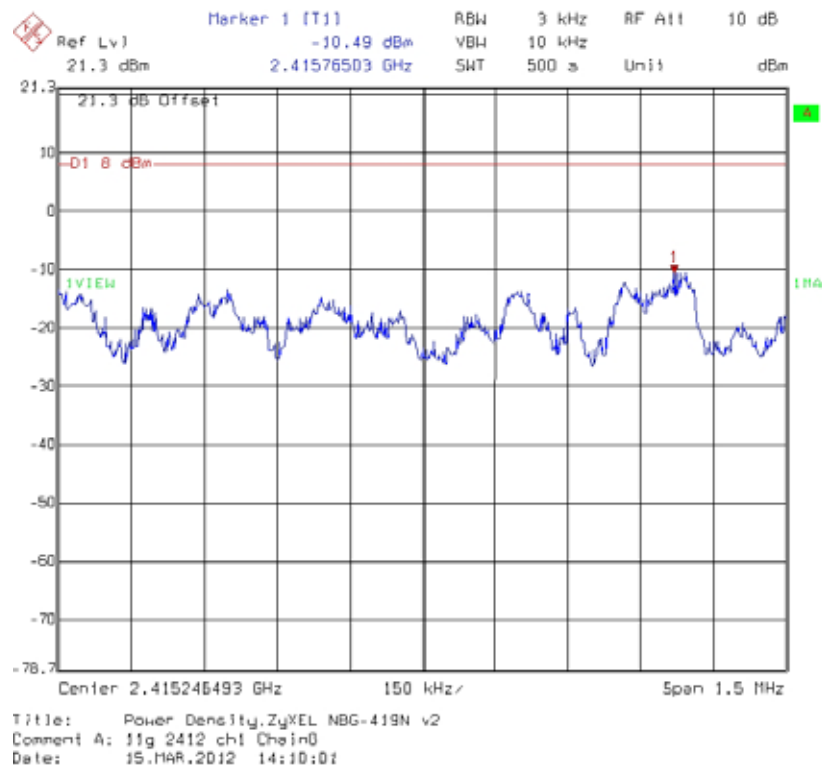
**Invax 2 dBi Antenna: Power Spectral Density @ 802.11b mode channel 6**



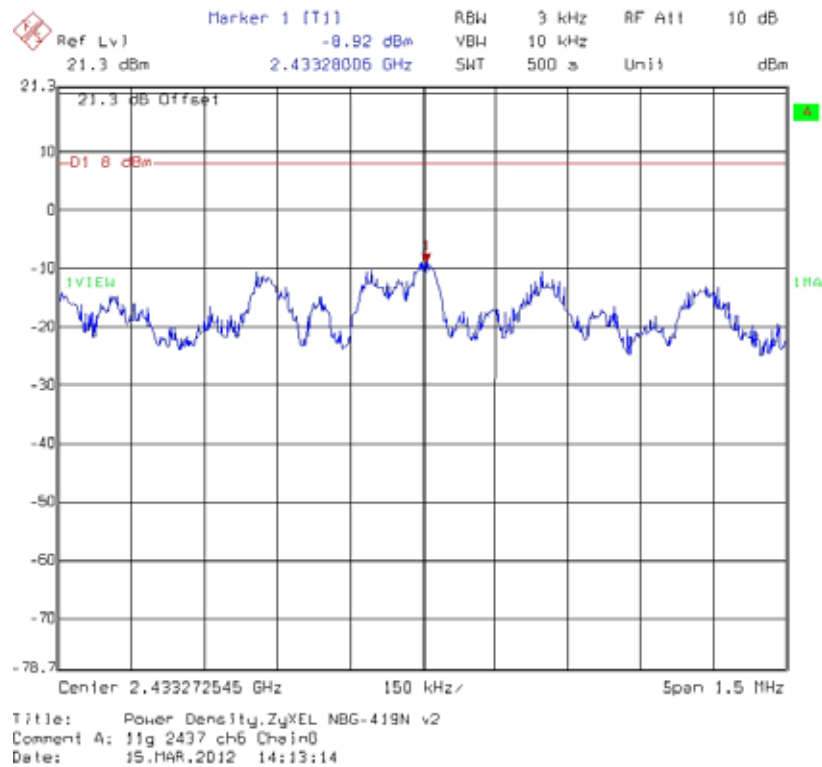
**Invax 2 dBi Antenna: Power Spectral Density @ 802.11b mode channel 11**



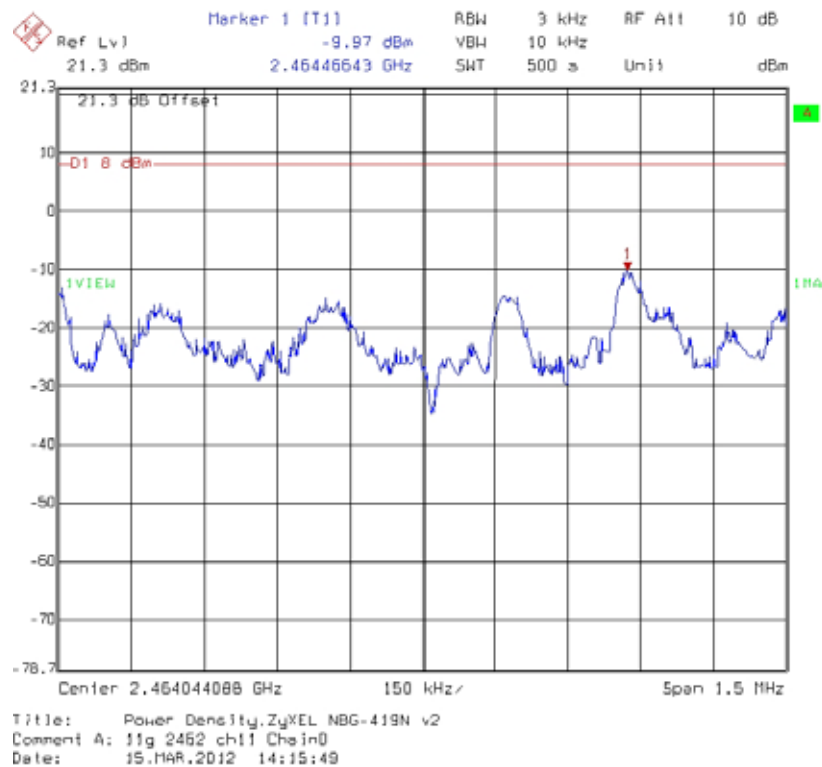
**Invax 2 dBi Antenna: Chain 0: Power Spectral Density @ 802.11g mode channel 1**



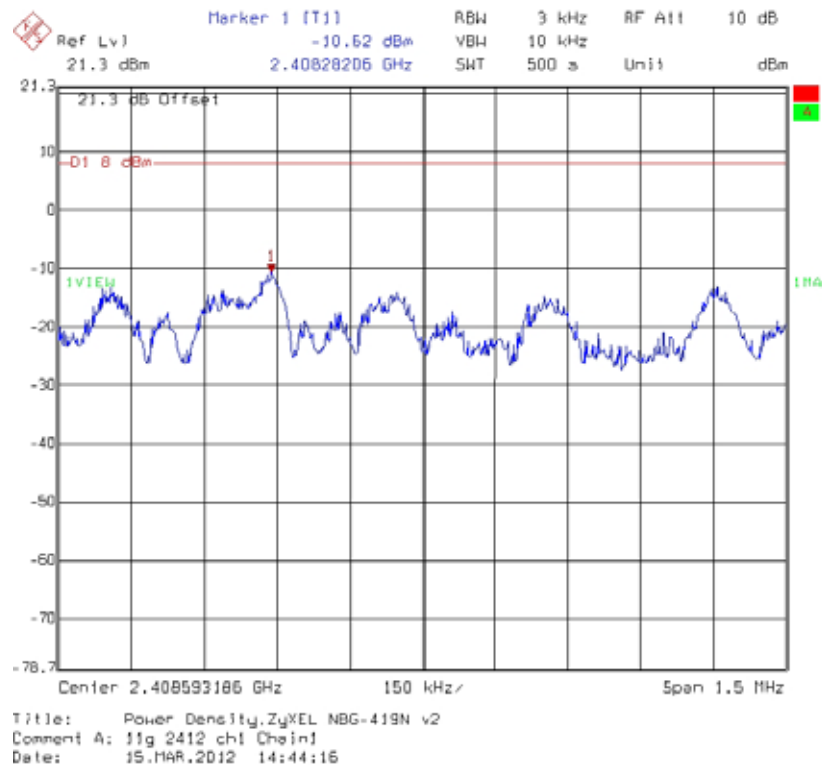
**Invax 2 dBi Antenna: Chain 0: Power Spectral Density @ 802.11g mode channel 6**



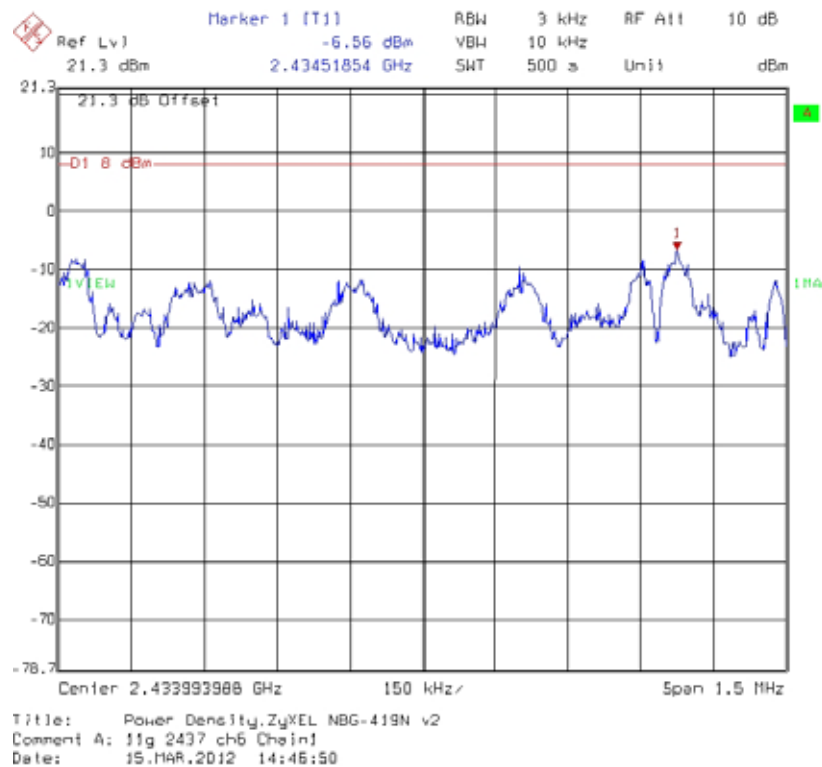
**Invax 2 dBi Antenna: Chain 0: Power Spectral Density @ 802.11g mode channel 11**



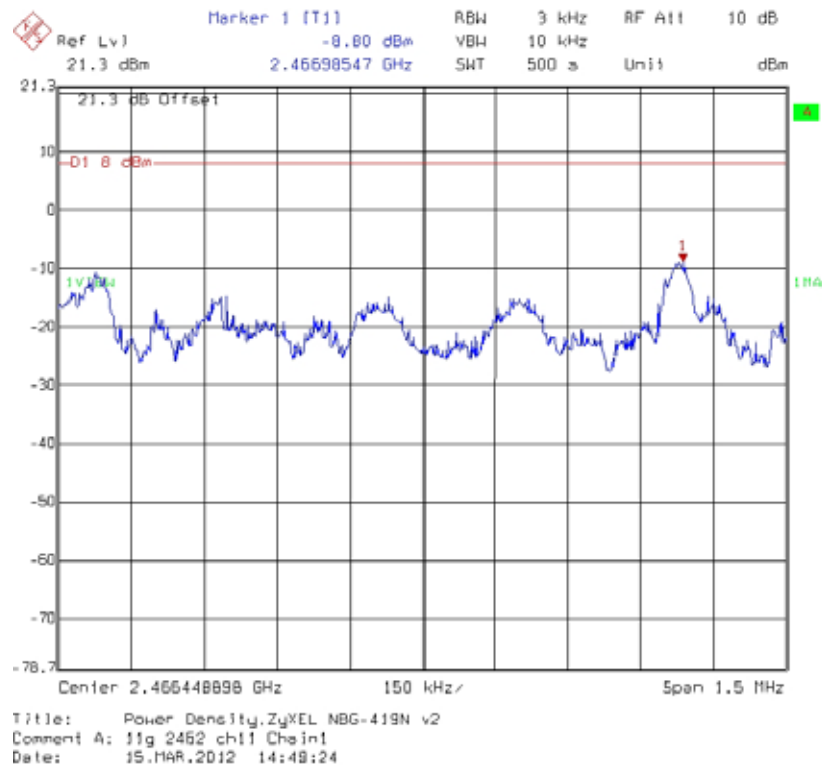
**Invax 2 dBi Antenna: Chain 1: Power Spectral Density @ 802.11g mode channel 1**



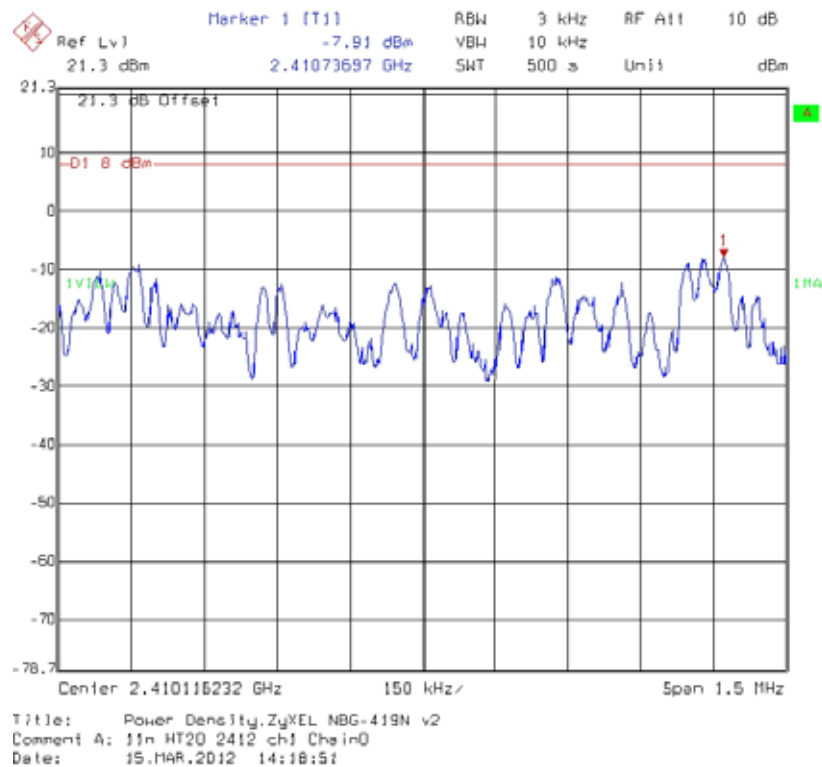
**Invax 2 dBi Antenna: Chain 1: Power Spectral Density @ 802.11g mode channel 6**



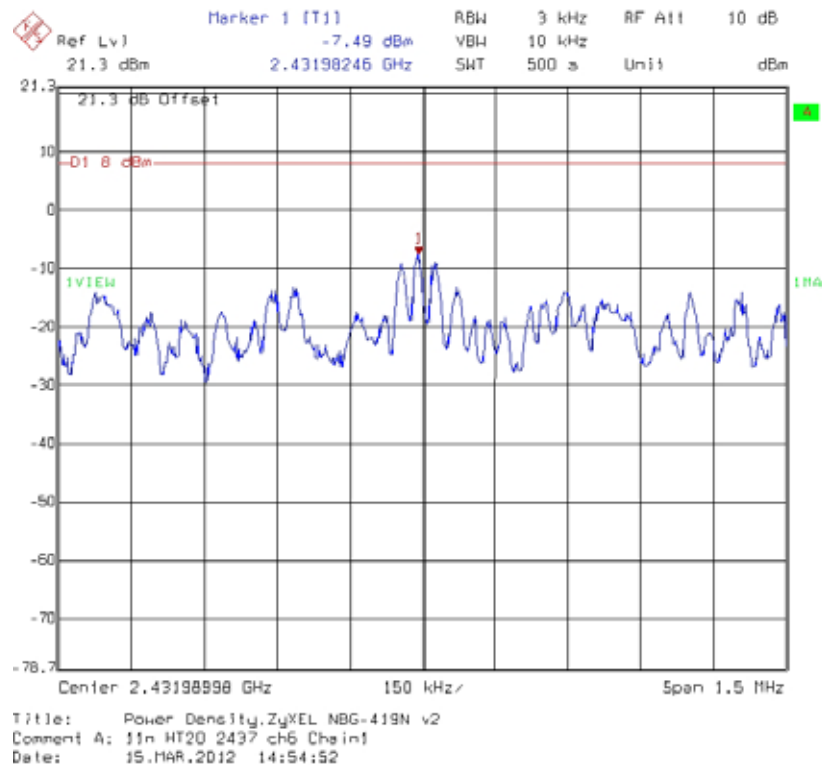
**Invax 2 dBi Antenna: Chain 1: Power Spectral Density @ 802.11g mode channel 11**



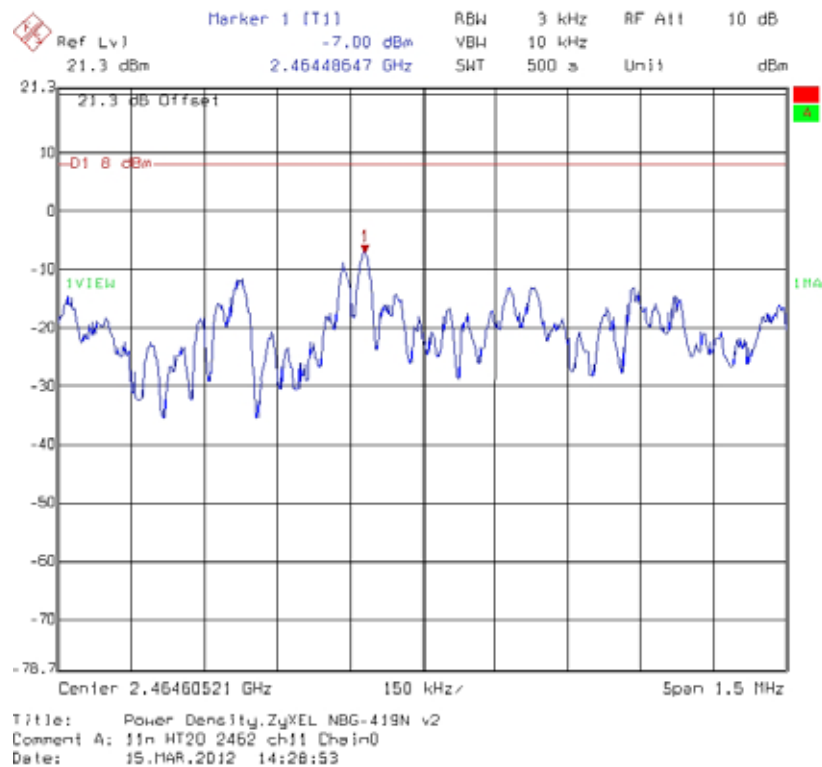
**Invax 2 dBi Antenna: Chain 0: Power Spectral Density @ 802.11n HT20 mode channel 1**



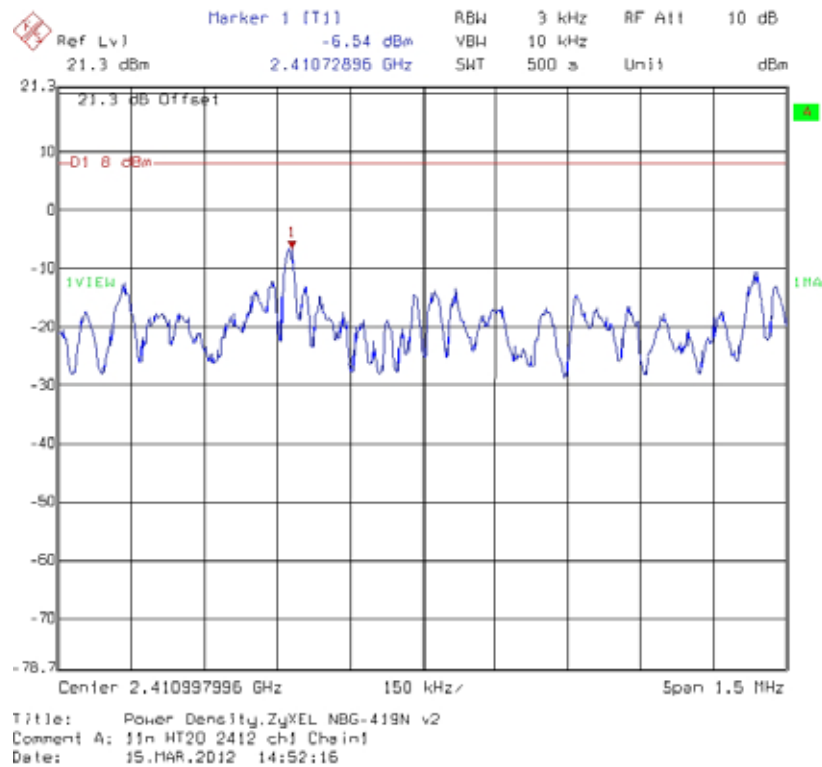
**Invax 2 dBi Antenna: Chain 0: Power Spectral Density @ 802.11n HT20 mode channel 6**



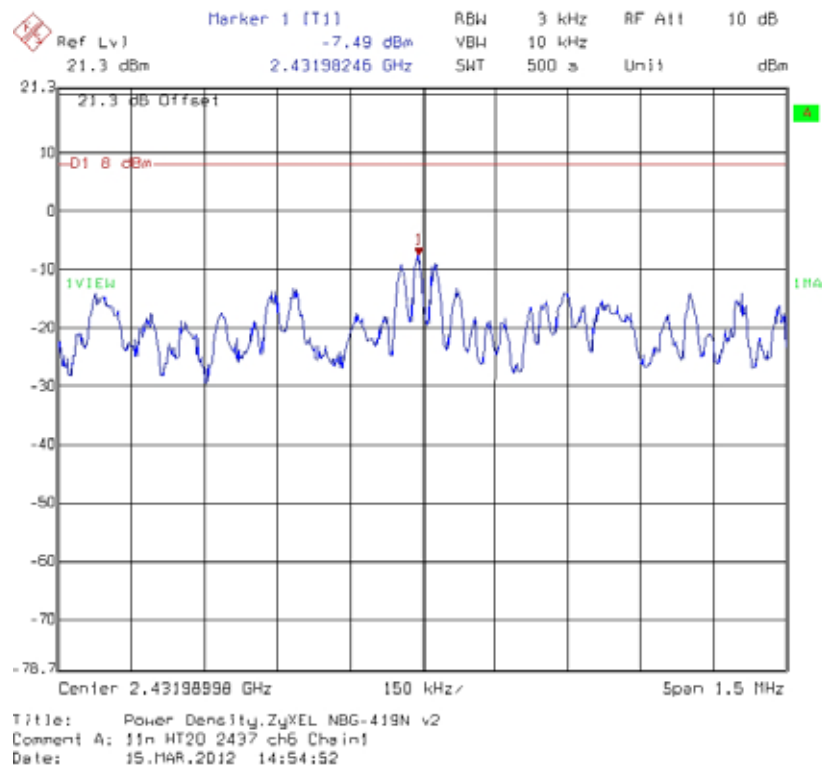
**Invax 2 dBi Antenna: Chain 0: Power Spectral Density @ 802.11n HT20 mode channel 11**



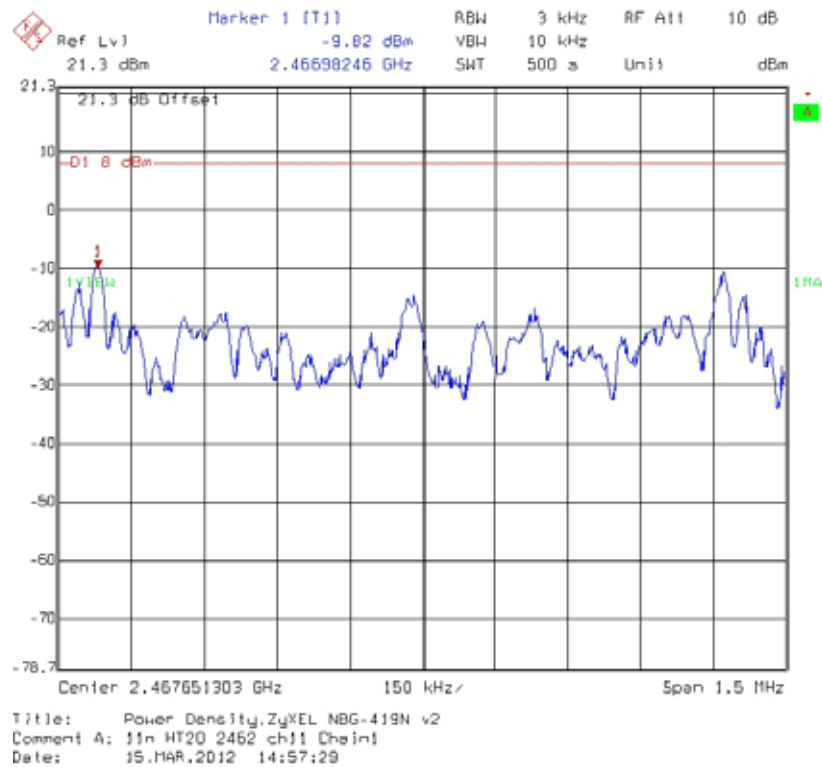
## Invax 2 dBi Antenna: Chain 1: Power Spectral Density @ 802.11n HT20 mode channel 1



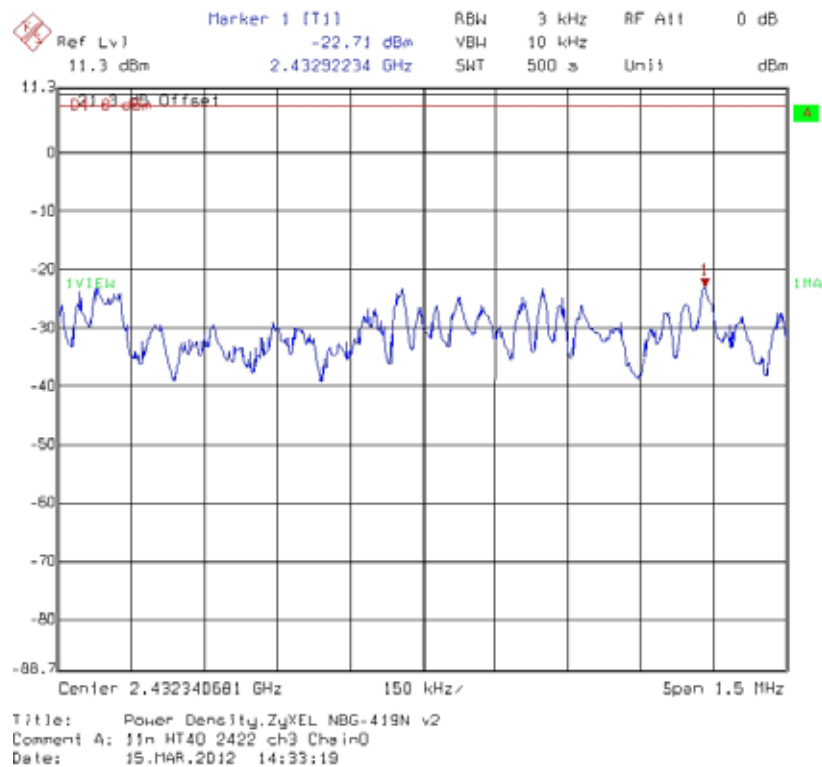
## Invax 2 dBi Antenna: Chain 1: Power Spectral Density @ 802.11n HT20 mode channel 6



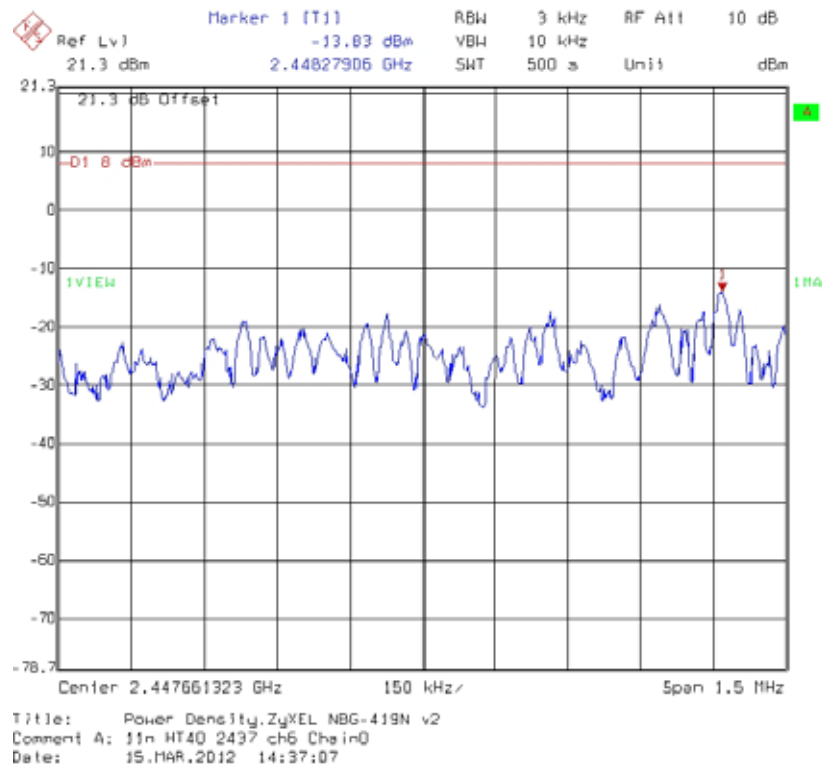
**Invax 2 dBi Antenna: Chain 1: Power Spectral Density @ 802.11n HT20 mode channel 11**



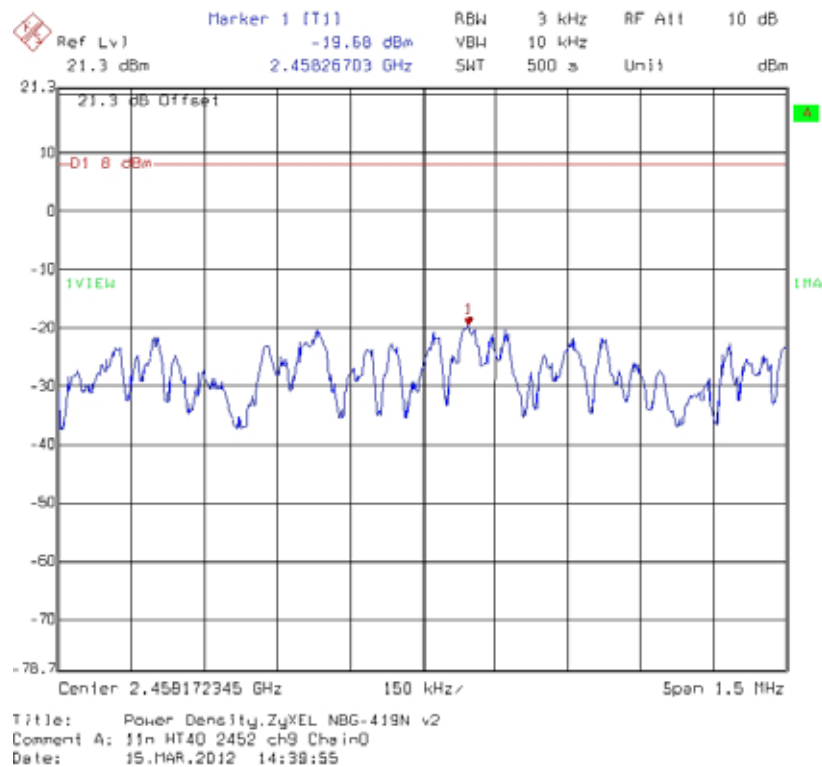
**Invax 2 dBi Antenna: Chain 0: Power Spectral Density @ 802.11n HT40 mode channel 3**



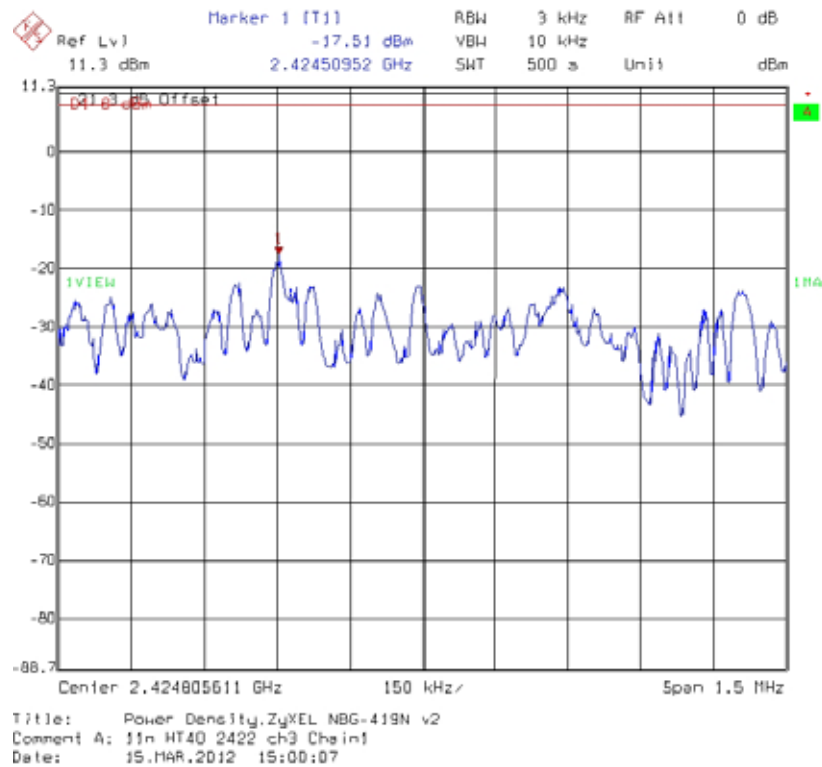
**Invax 2 dBi Antenna: Chain 0: Power Spectral Density @ 802.11n HT40 mode channel 6**



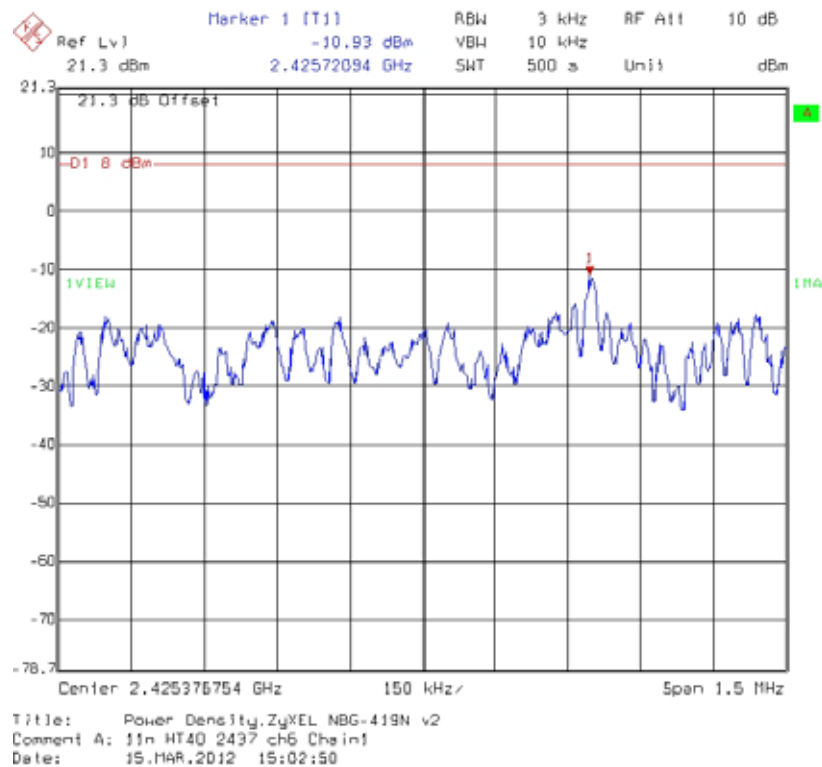
**Invax 2 dBi Antenna: Chain 0: Power Spectral Density @ 802.11n HT40 mode channel 9**



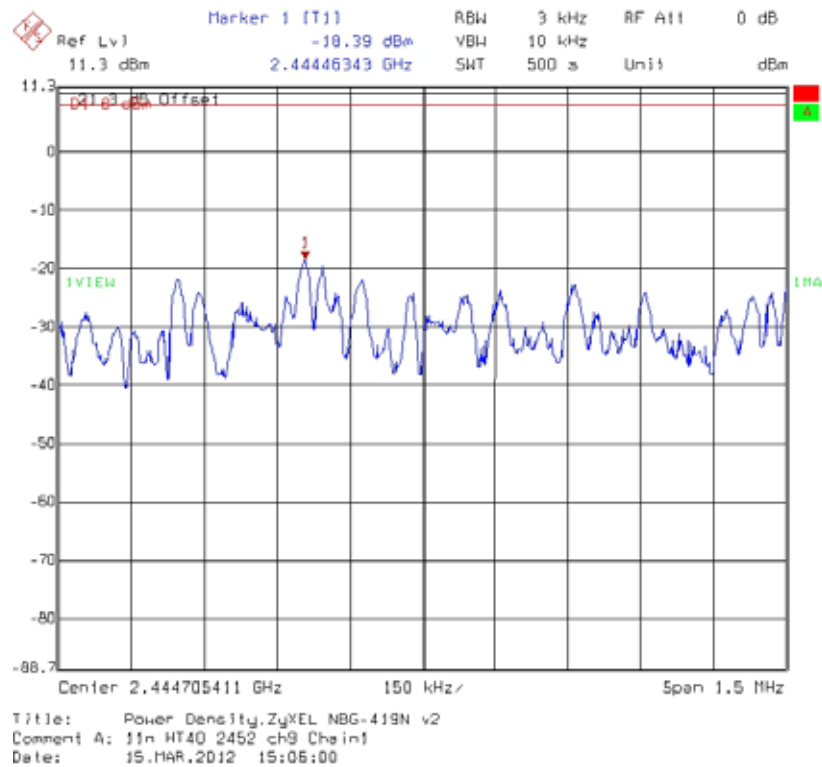
## Invax 2 dBi Antenna: Chain 1: Power Spectral Density @ 802.11n HT40 mode channel 3



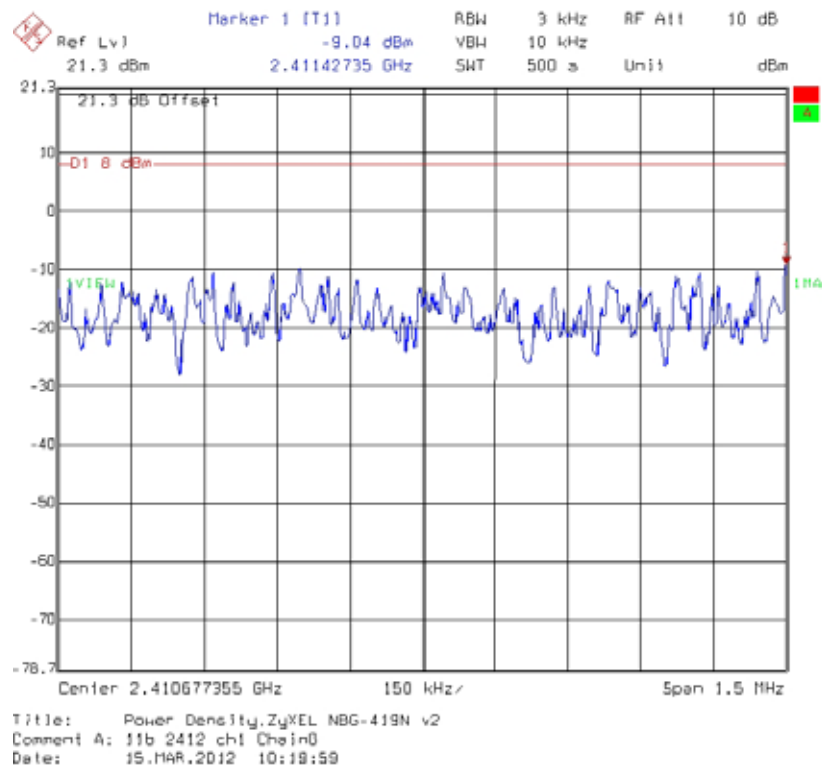
## Invax 2 dBi Antenna: Chain 1: Power Spectral Density @ 802.11n HT40 mode channel 6



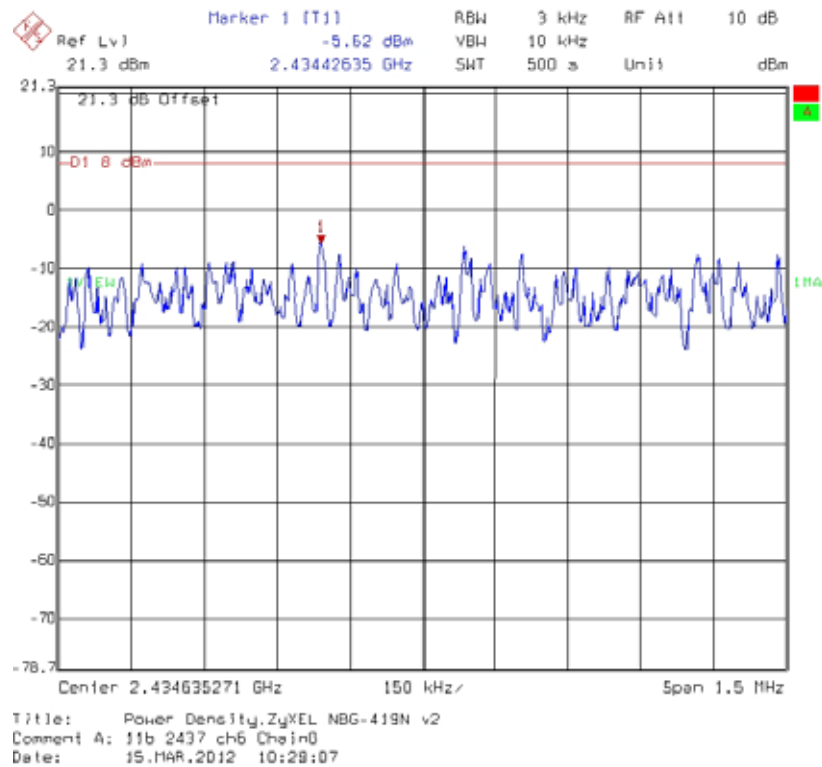
**Invax 2 dBi Antenna: Chain 1: Power Spectral Density @ 802.11n HT40 mode channel 9**



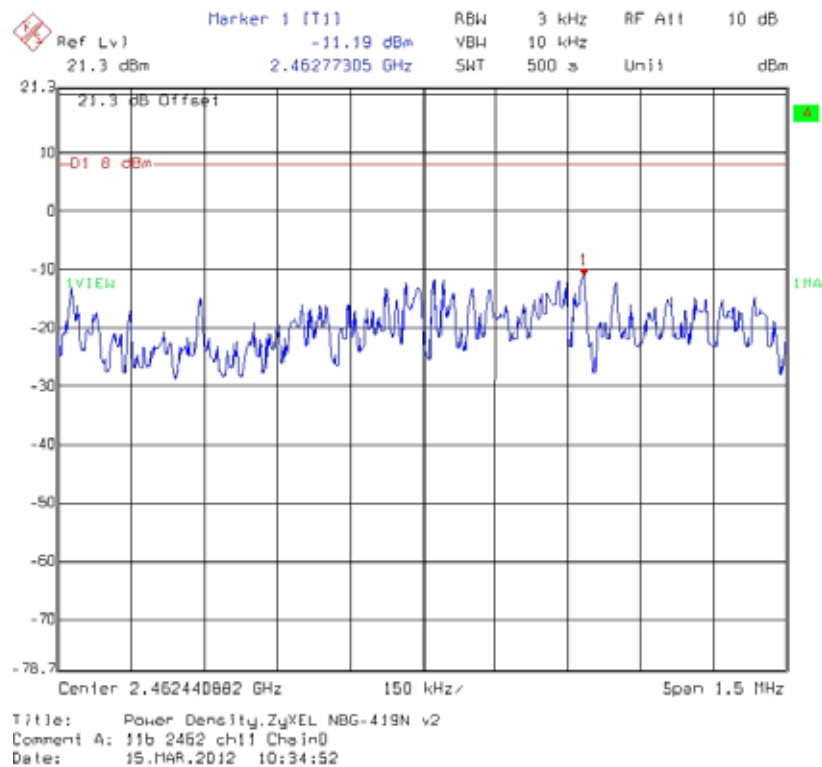
**SAYTEC 2 dBi Antenna: Power Spectral Density @ 802.11b mode channel 1**



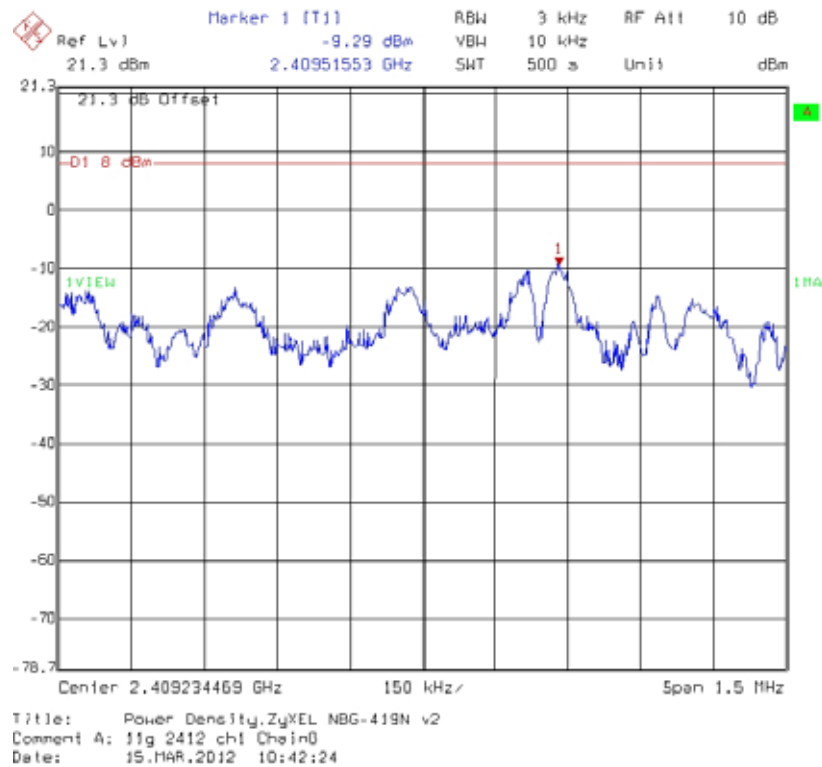
## SAYTEC 2 dBi Antenna: Power Spectral Density @ 802.11b mode channel 6



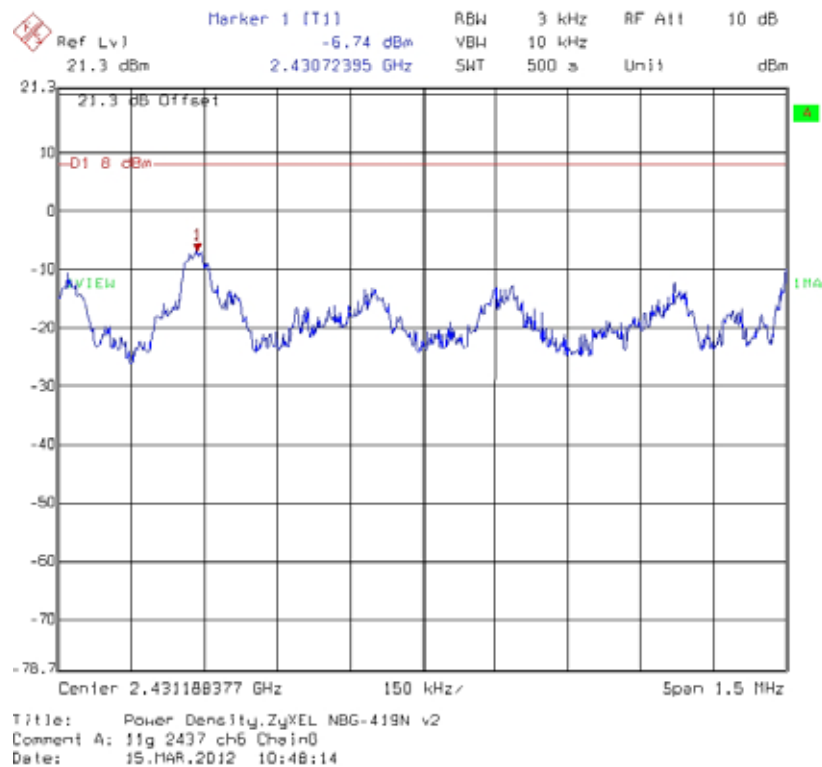
## SAYTEC 2 dBi Antenna: Power Spectral Density @ 802.11b mode channel 11



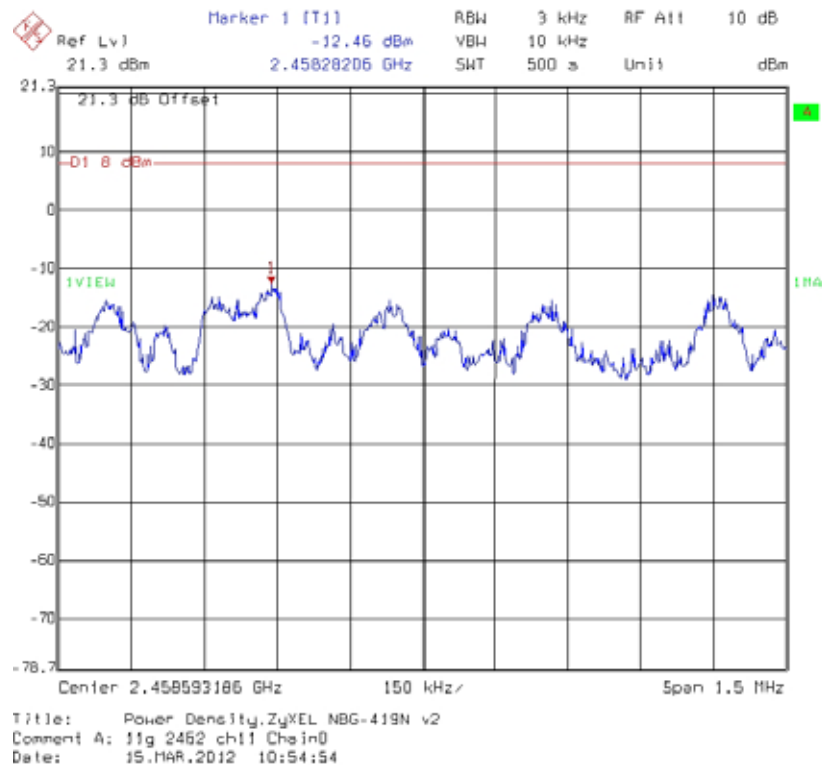
**SAYTEC 2 dBi Antenna: Chain 0: Power Spectral Density @ 802.11g mode channel 1**



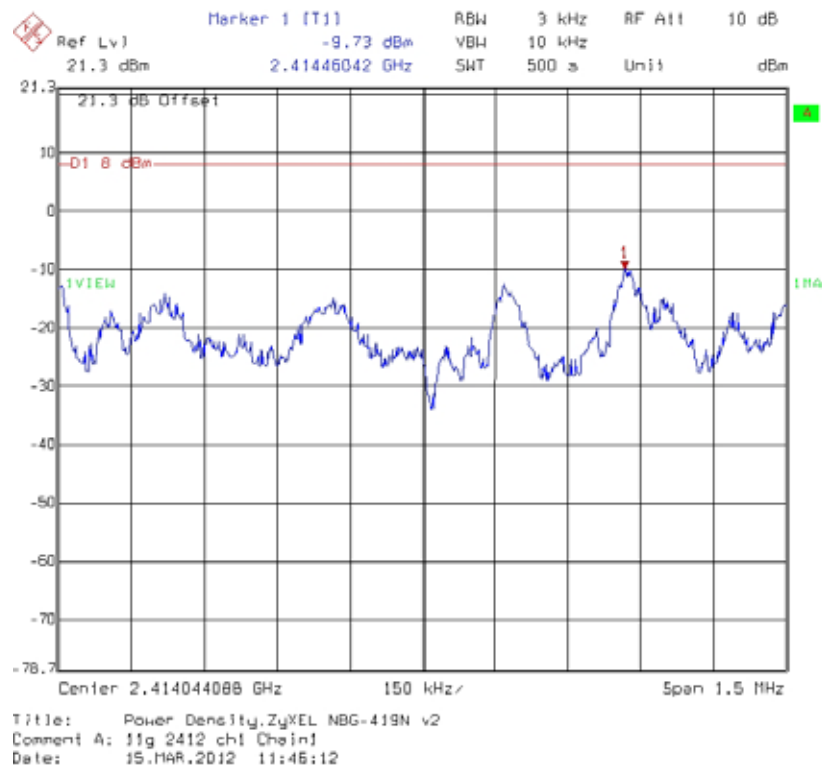
**SAYTEC 2 dBi Antenna: Chain 0: Power Spectral Density @ 802.11g mode channel 6**



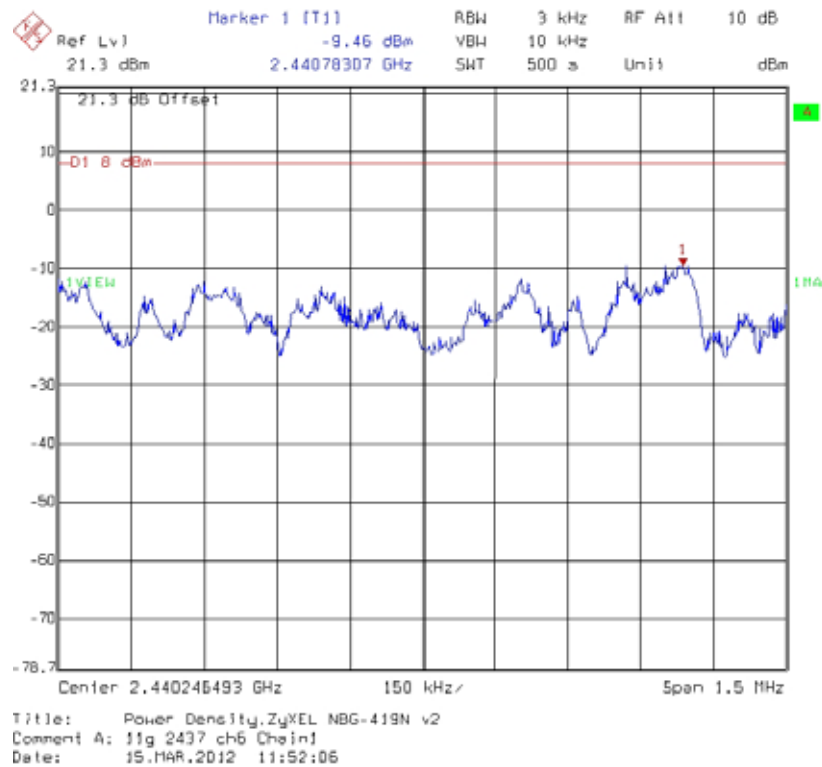
**SAYTEC 2 dBi Antenna: Chain 0: Power Spectral Density @ 802.11g mode channel 11**



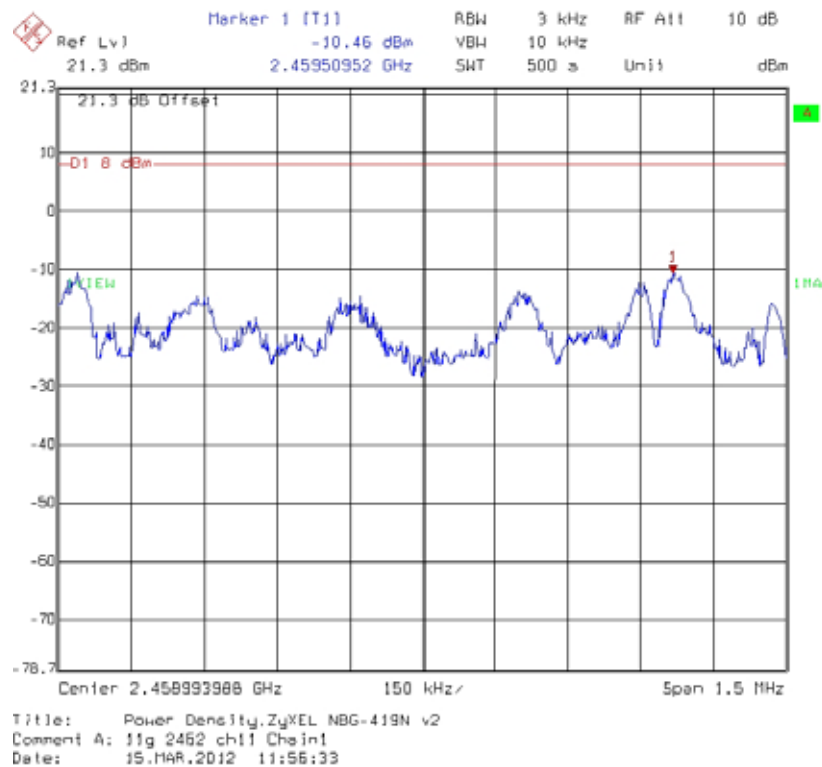
**SAYTEC 2 dBi Antenna: Chain 1: Power Spectral Density @ 802.11g mode channel 1**



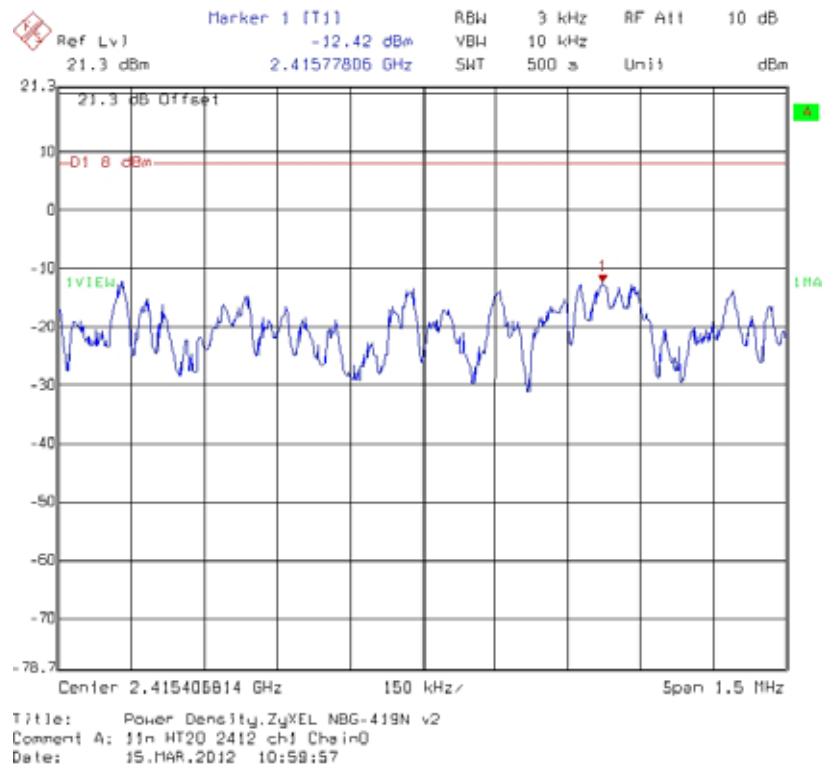
## SAYTEC 2 dBi Antenna: Chain 1: Power Spectral Density @ 802.11g mode channel 6



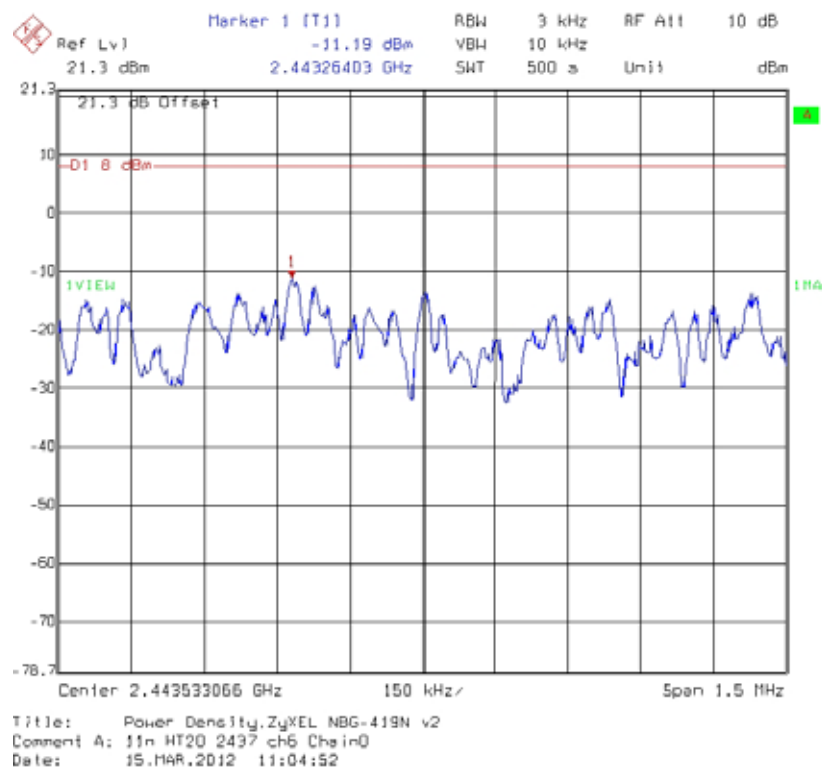
## SAYTEC 2 dBi Antenna: Chain 1: Power Spectral Density @ 802.11g mode channel 11



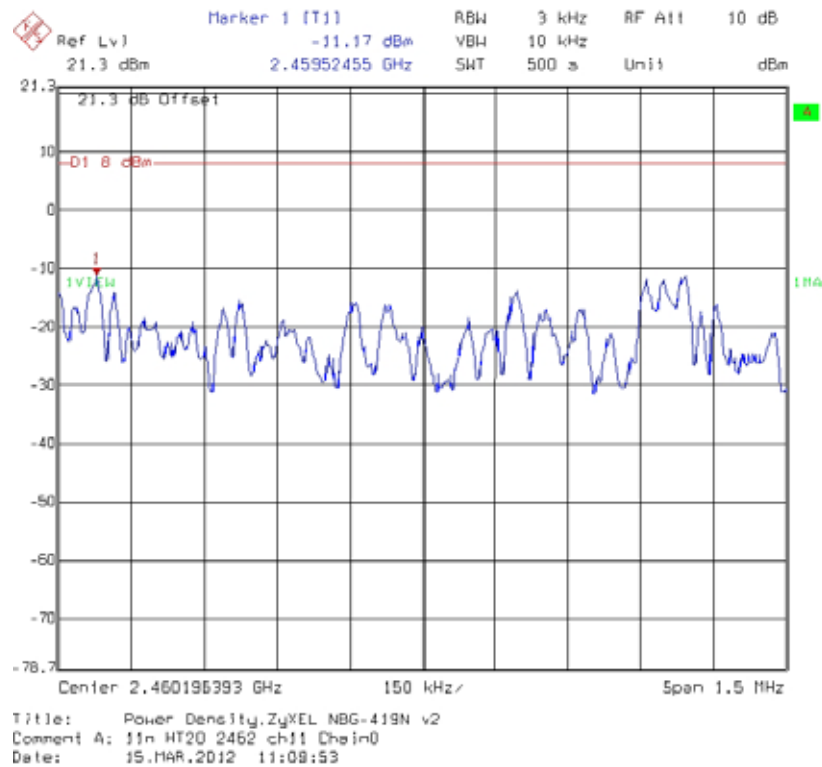
## SAYTEC 2 dBi Antenna: Chain 0: Power Spectral Density @ 802.11n HT20 mode channel 1



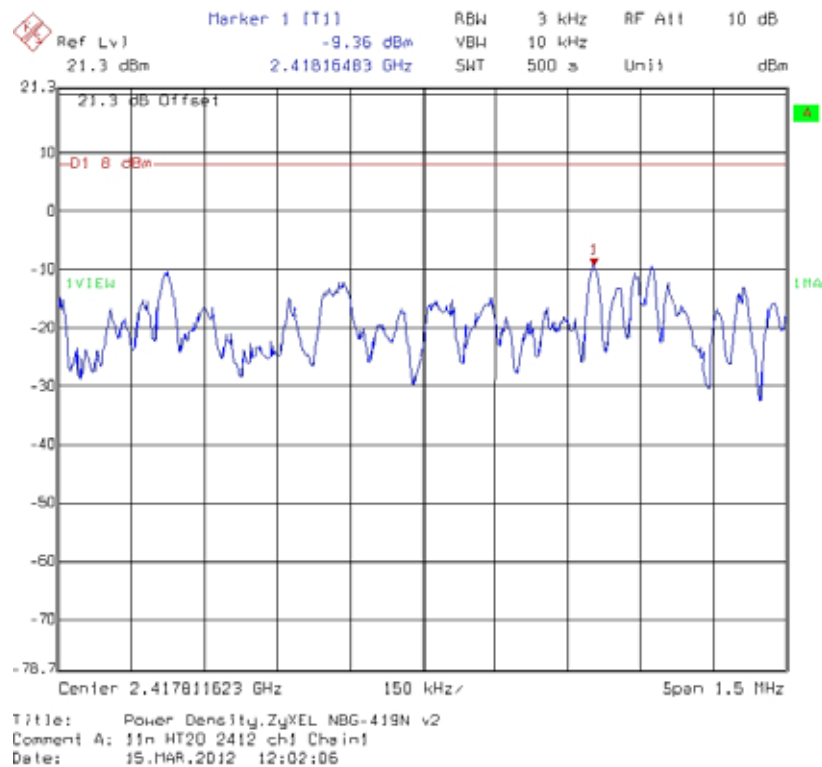
## SAYTEC 2 dBi Antenna: Chain 0: Power Spectral Density @ 802.11n HT20 mode channel 6



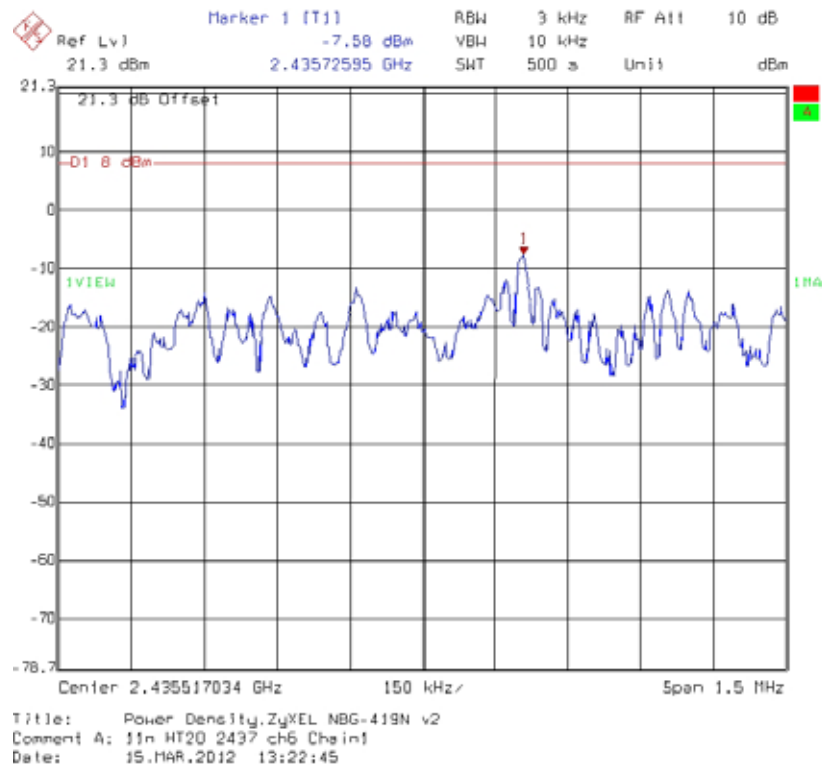
**SAYTEC 2 dBi Antenna: Chain 0: Power Spectral Density @ 802.11n HT20 mode channel 11**



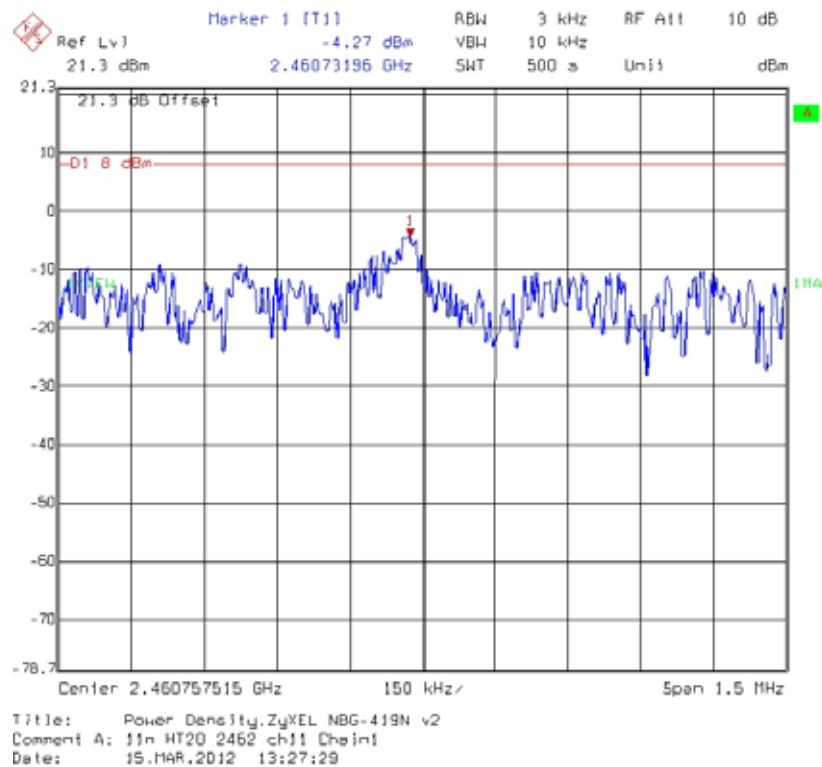
**SAYTEC 2 dBi Antenna: Chain 1: Power Spectral Density @ 802.11n HT20 mode channel 1**



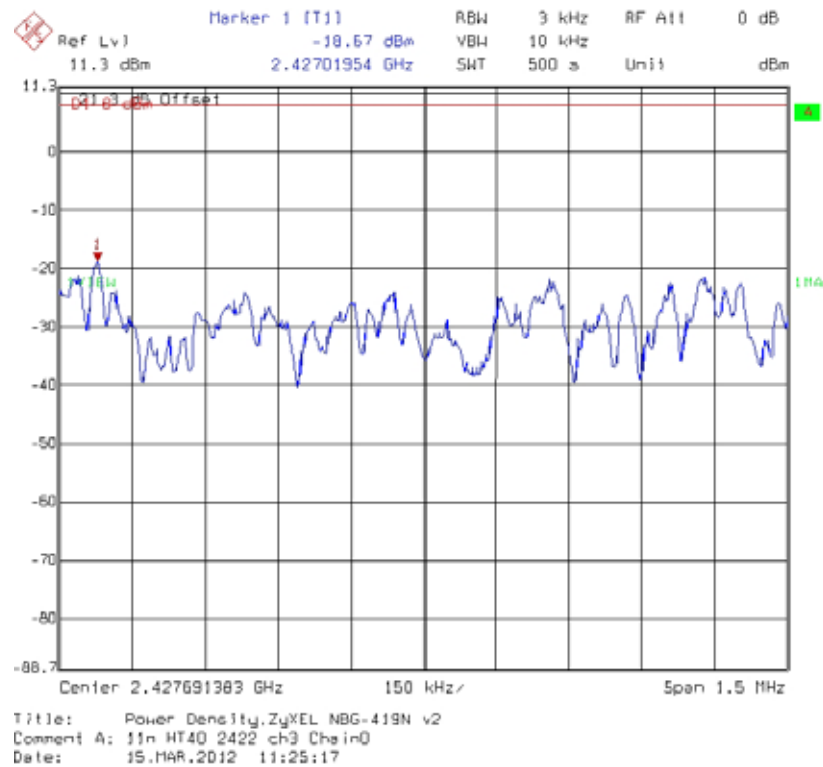
**SAYTEC 2 dBi Antenna: Chain 1: Power Spectral Density @ 802.11n HT20 mode channel 6**



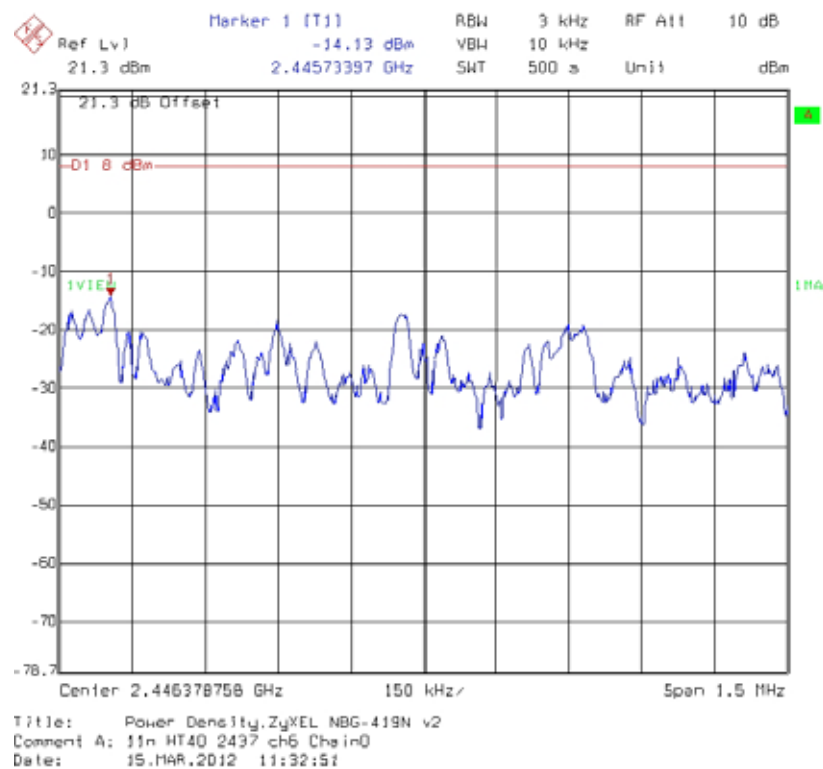
**SAYTEC 2 dBi Antenna: Chain 1: Power Spectral Density @ 802.11n HT20 mode channel 11**



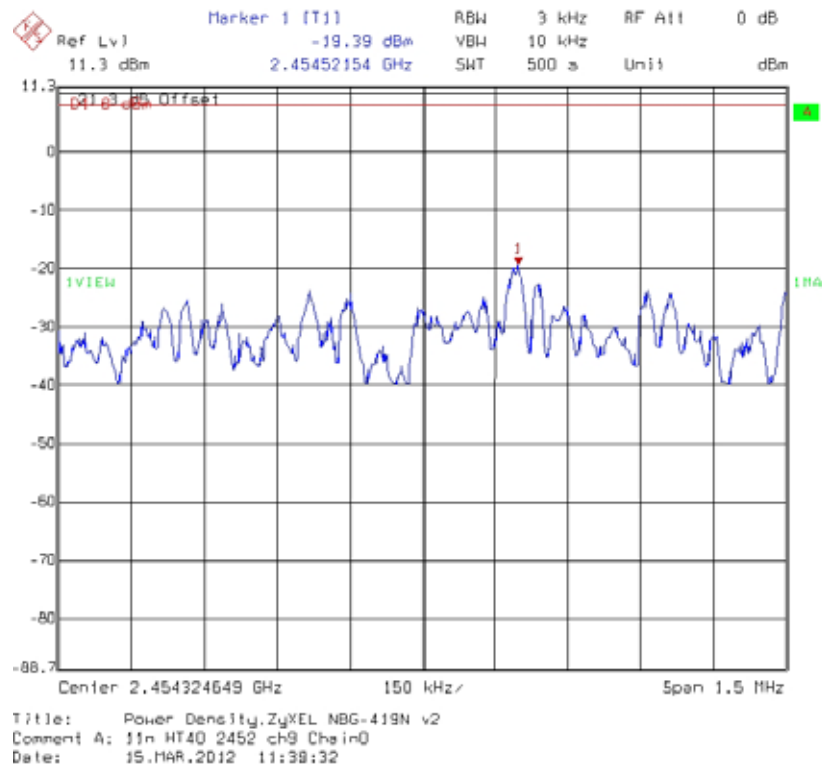
**SAYTEC 2 dBi Antenna: Chain 0: Power Spectral Density @ 802.11n HT40 mode channel 3**



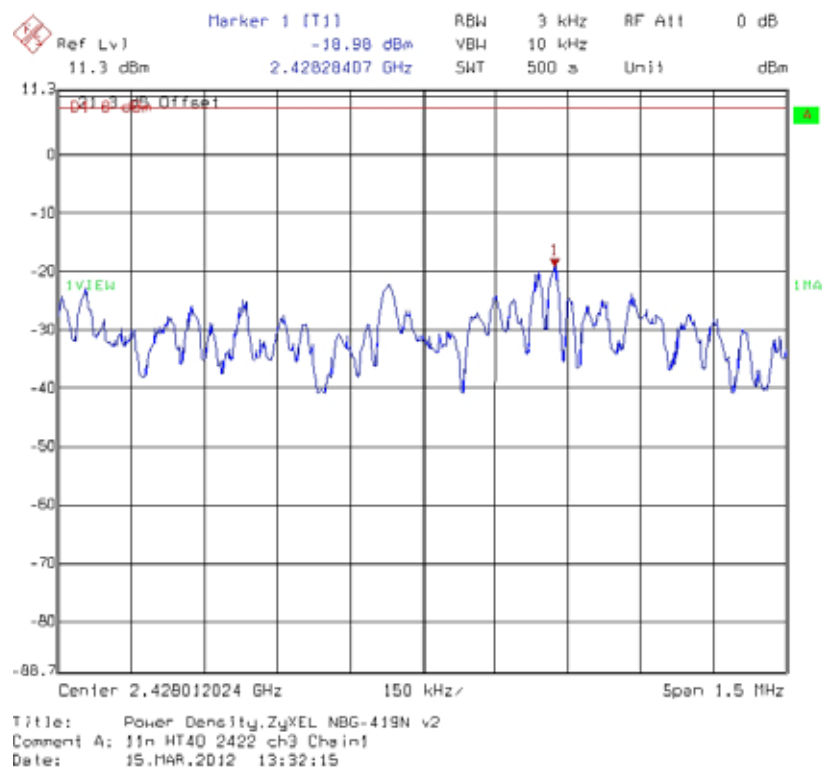
**SAYTEC 2 dBi Antenna: Chain 0: Power Spectral Density @ 802.11n HT40 mode channel 6**



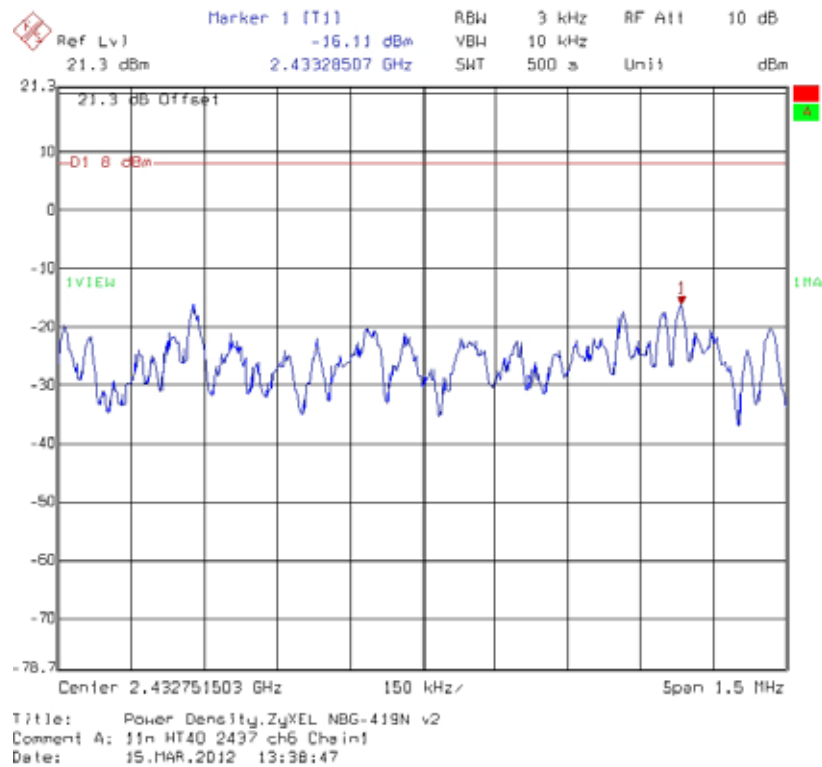
**SAYTEC 2 dBi Antenna: Chain 0: Power Spectral Density @ 802.11n HT40 mode channel 9**



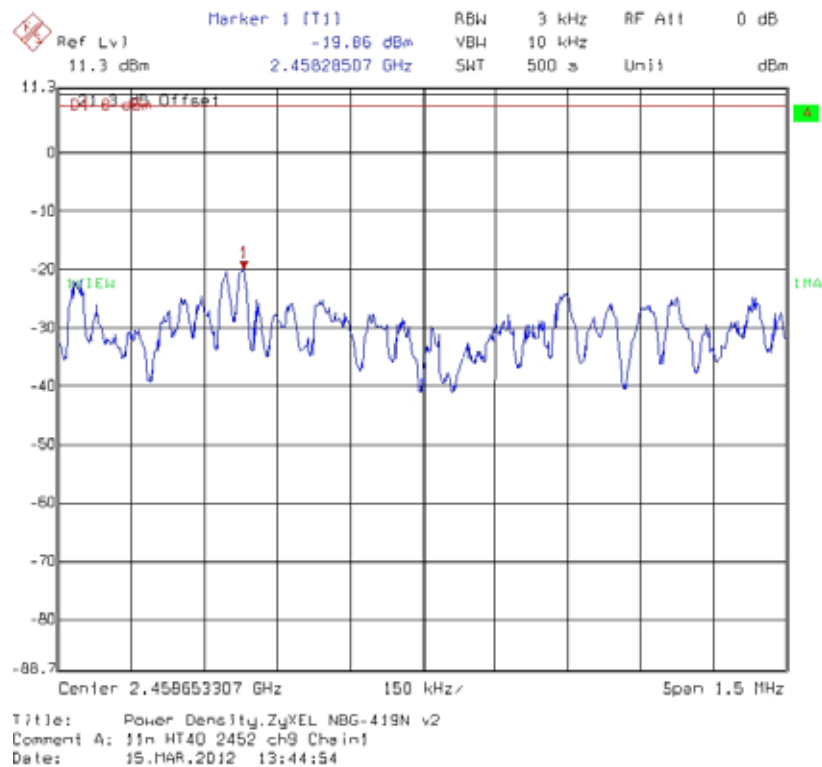
**SAYTEC 2 dBi Antenna: Chain 1: Power Spectral Density @ 802.11n HT40 mode channel 3**



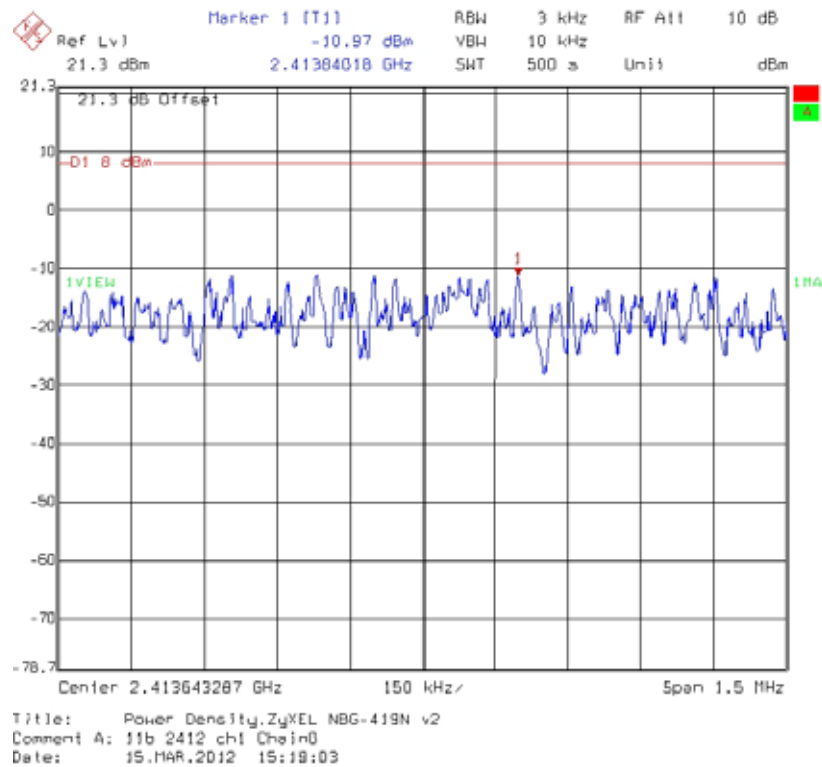
**SAYTEC 2 dBi Antenna: Chain 1: Power Spectral Density @ 802.11n HT40 mode channel 6**



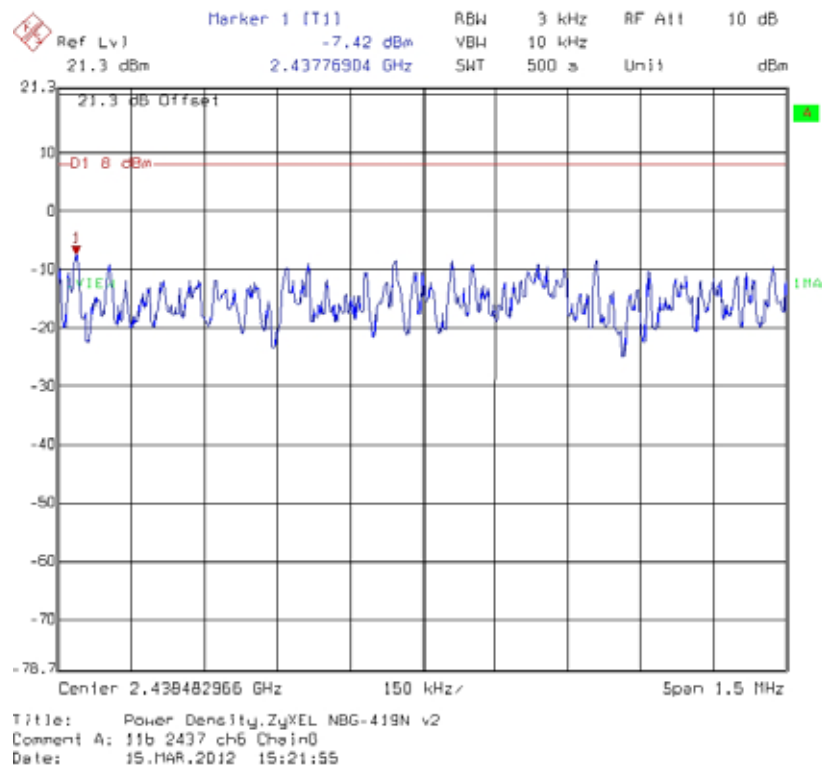
**SAYTEC 2 dBi Antenna: Chain 1: Power Spectral Density @ 802.11n HT40 mode channel 9**



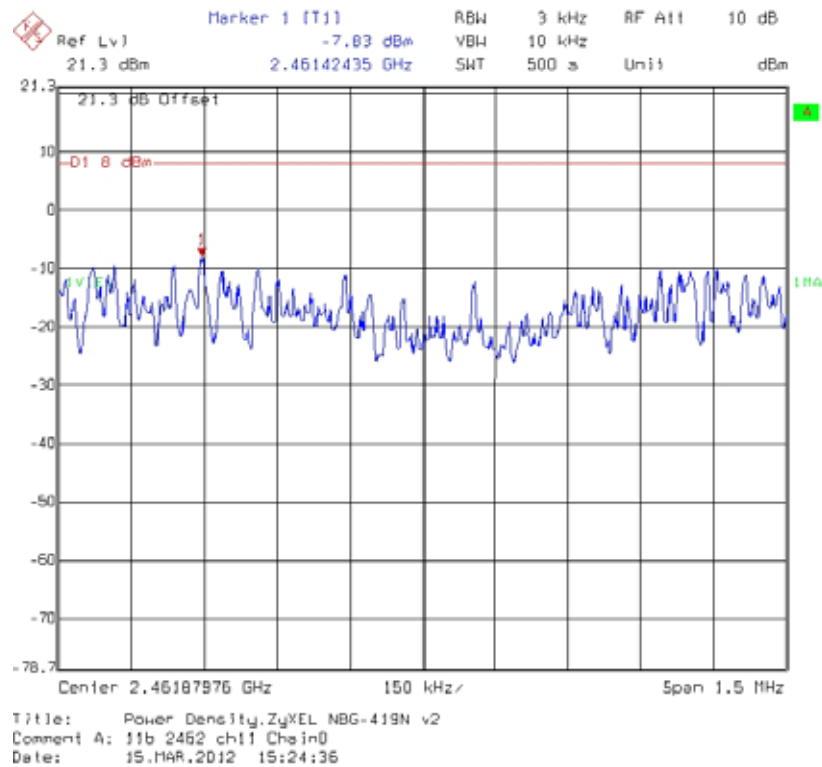
**Invax 5 dBi Antenna: Power Spectral Density @ 802.11b mode channel 1**



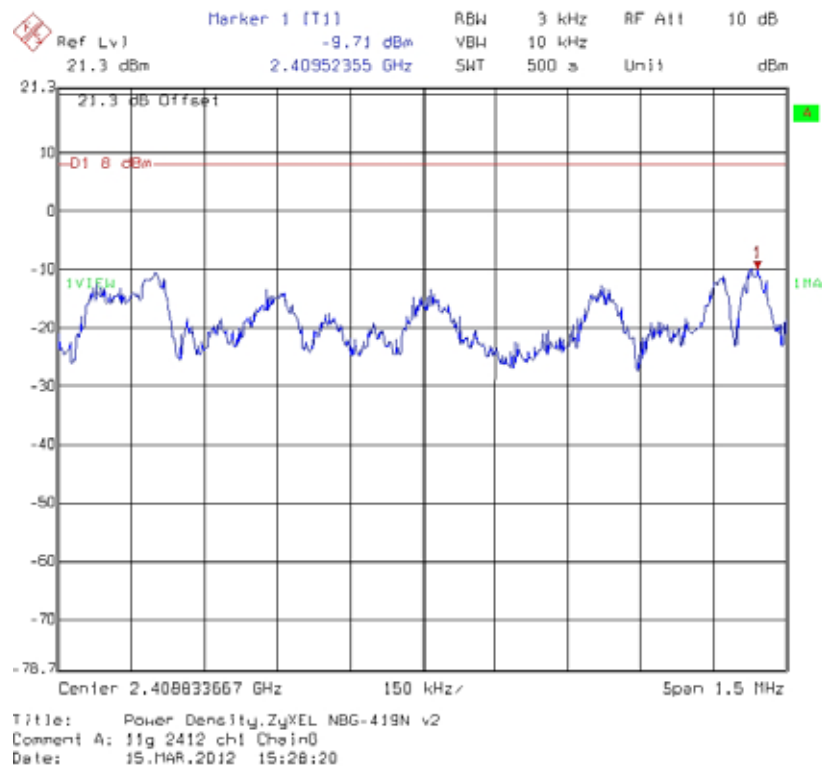
**Invax 5 dBi Antenna: Power Spectral Density @ 802.11b mode channel 6**



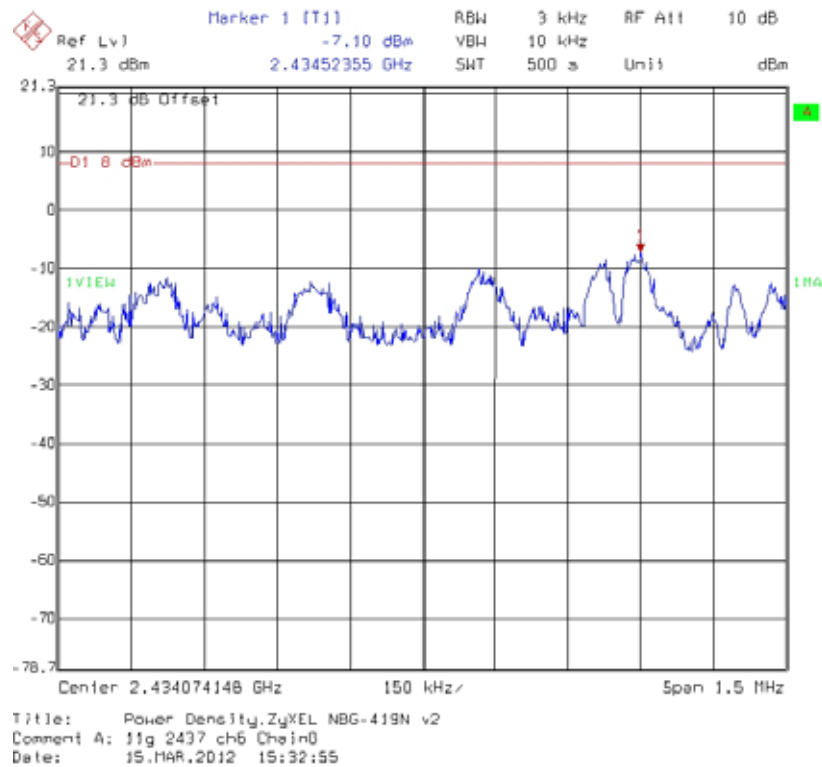
**Invax 5 dBi Antenna: Power Spectral Density @ 802.11b mode channel 11**



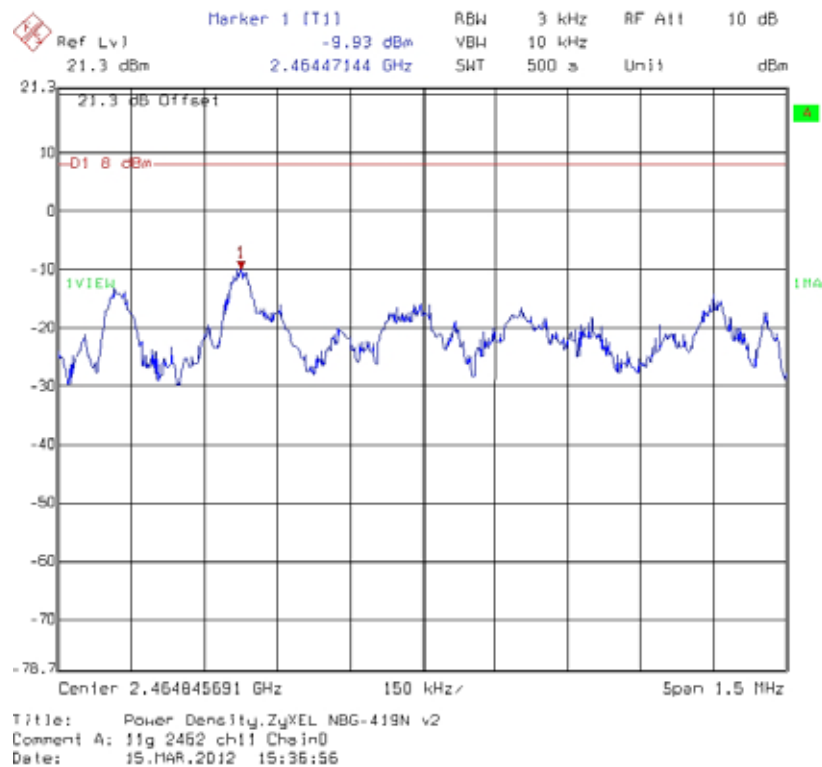
**Invax 5 dBi Antenna: Chain 0: Power Spectral Density @ 802.11g mode channel 1**



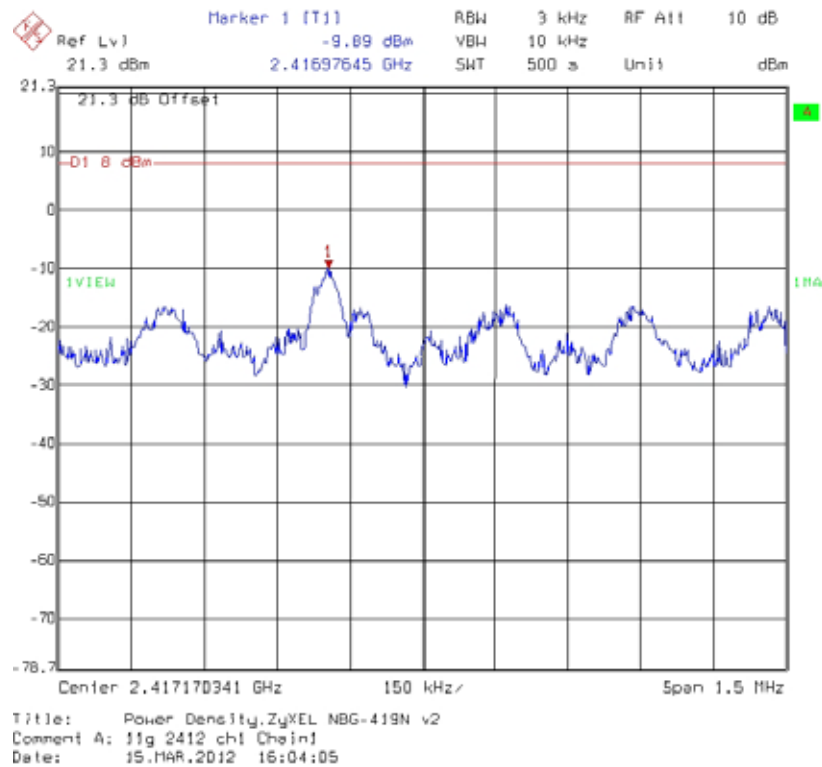
**Invax 5 dBi Antenna: Chain 0: Power Spectral Density @ 802.11g mode channel 6**



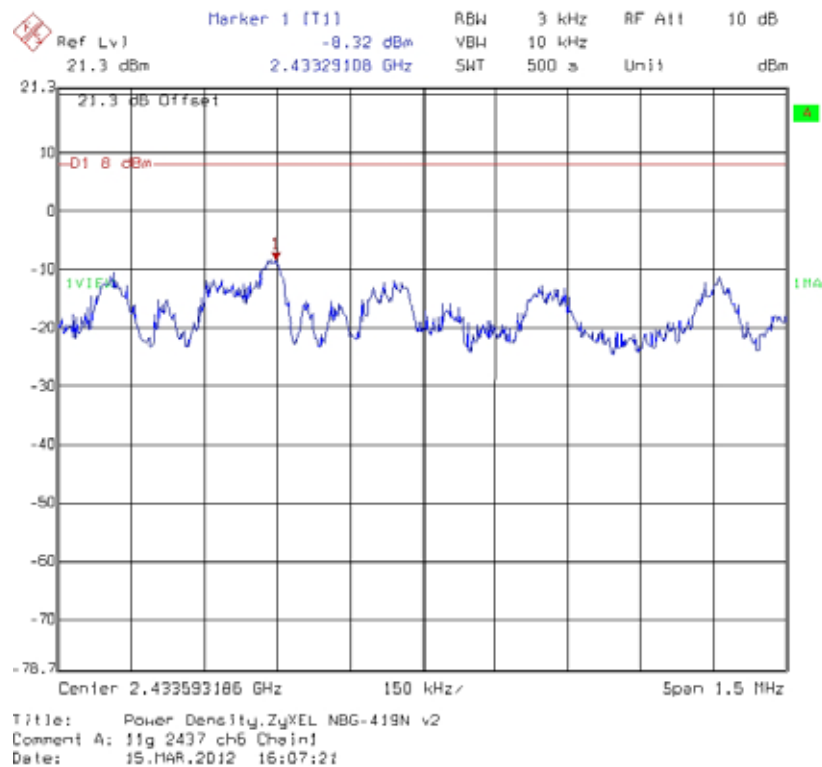
**Invax 5 dBi Antenna: Chain 0: Power Spectral Density @ 802.11g mode channel 11**



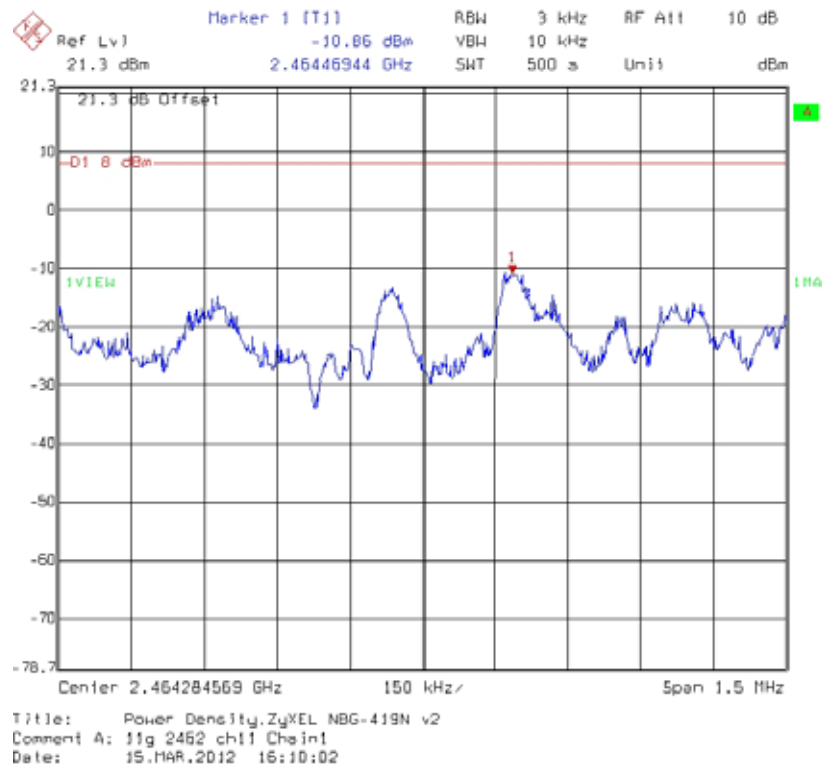
**Invax 5 dBi Antenna: Chain 1: Power Spectral Density @ 802.11g mode channel 1**



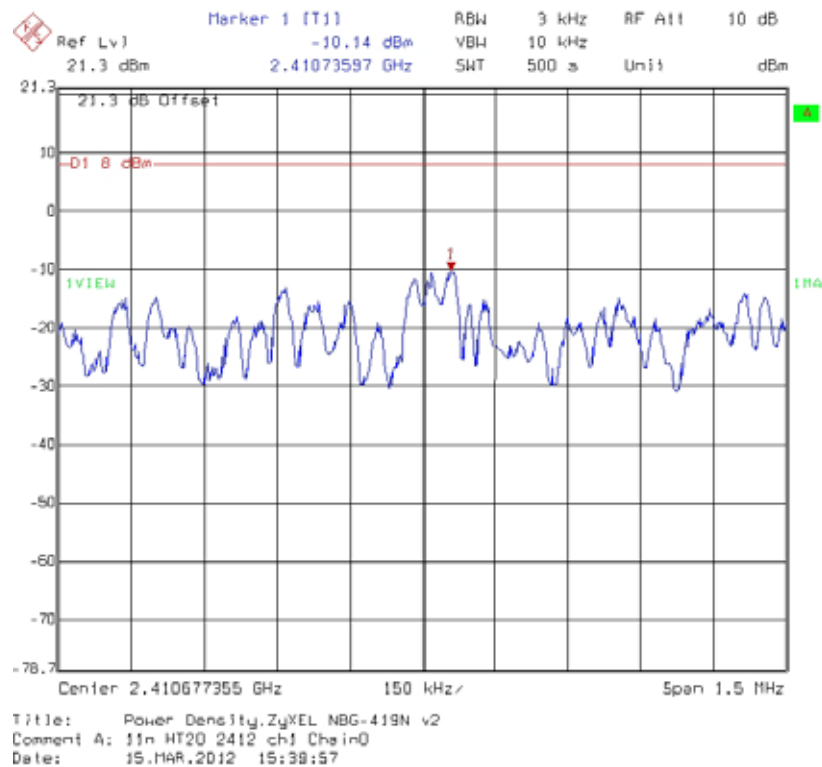
**Invax 5 dBi Antenna: Chain 1: Power Spectral Density @ 802.11g mode channel 6**



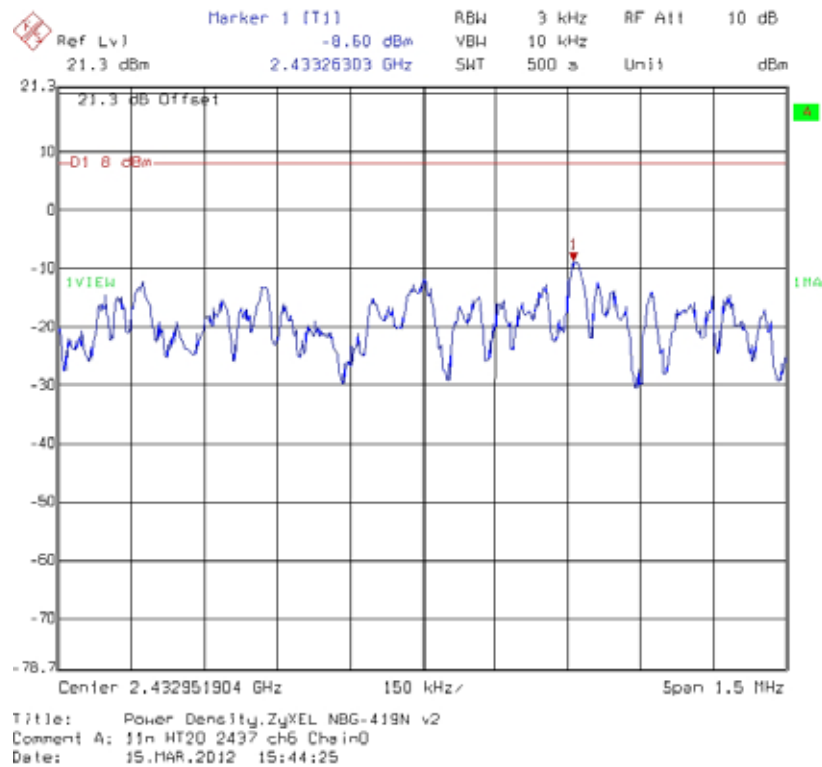
**Invax 5 dBi Antenna: Chain 1: Power Spectral Density @ 802.11g mode channel 11**



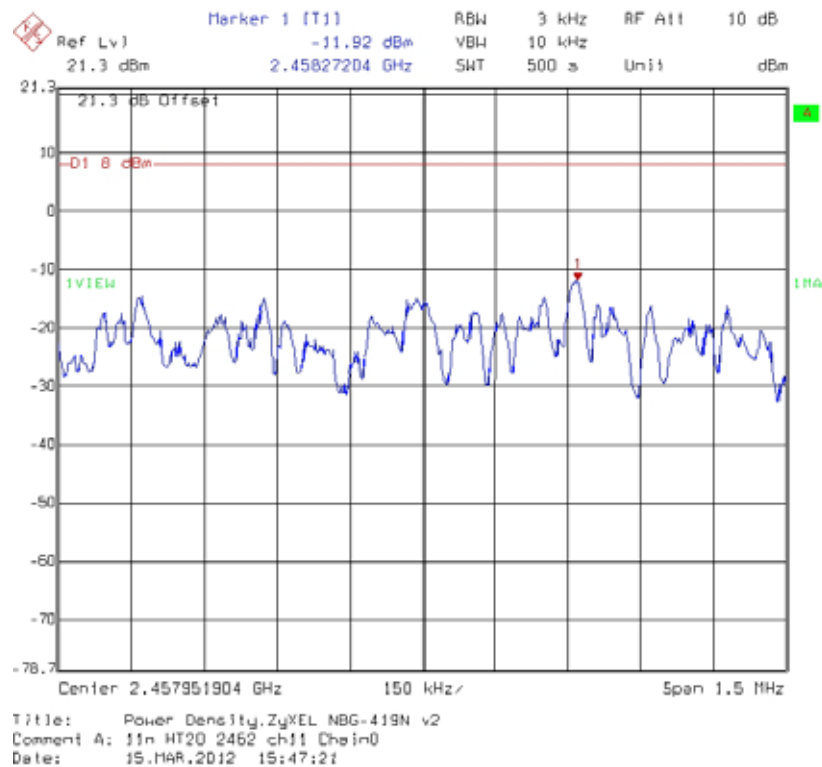
**Invax 5 dBi Antenna: Chain 0: Power Spectral Density @ 802.11n HT20 mode channel 1**



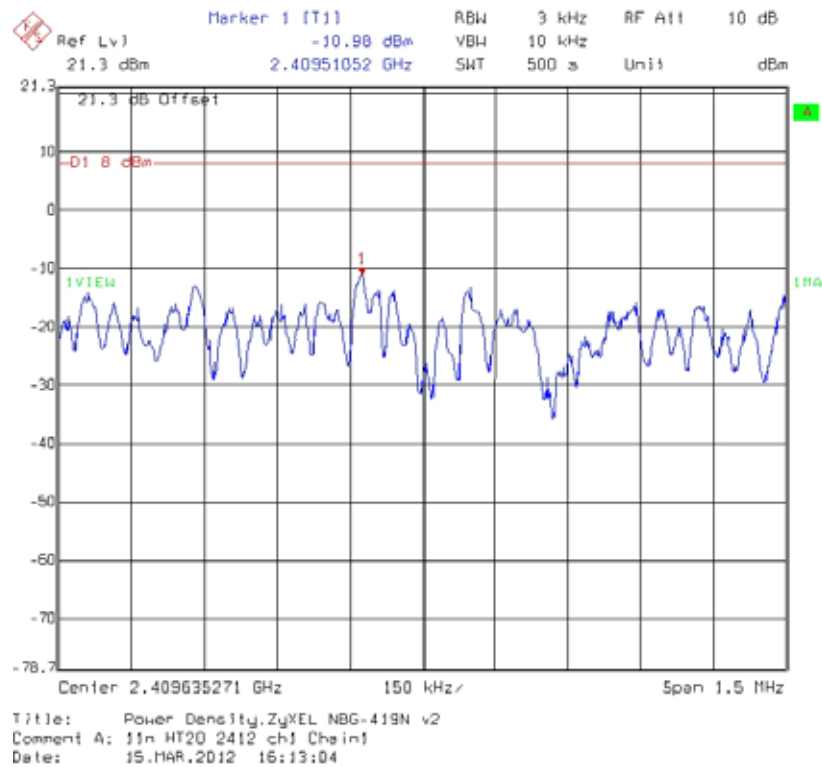
## Invax 5 dBi Antenna: Chain 0: Power Spectral Density @ 802.11n HT20 mode channel 6



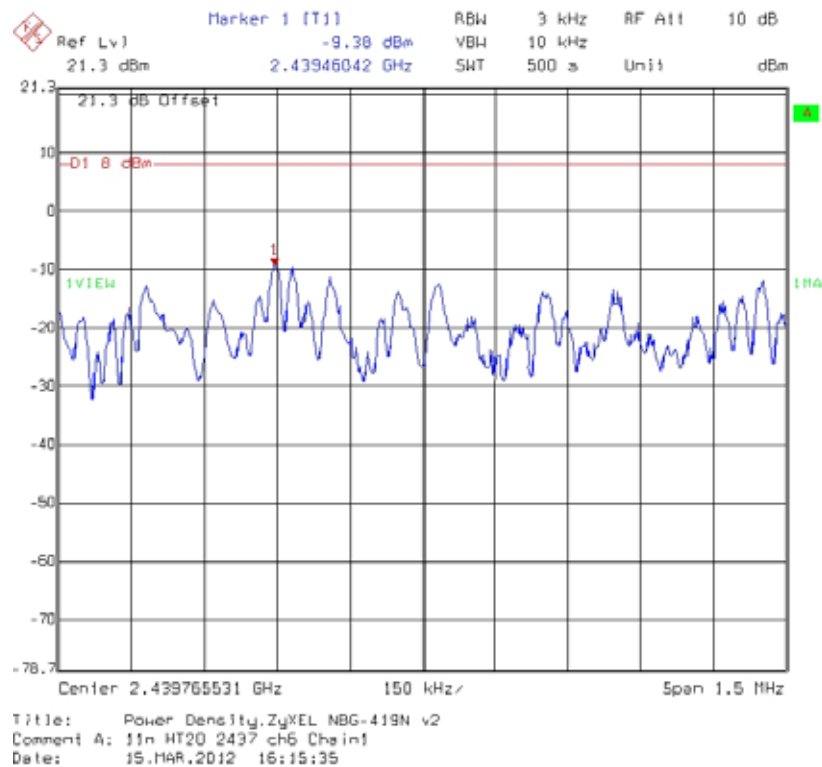
## Invax 5 dBi Antenna: Chain 0: Power Spectral Density @ 802.11n HT20 mode channel 11



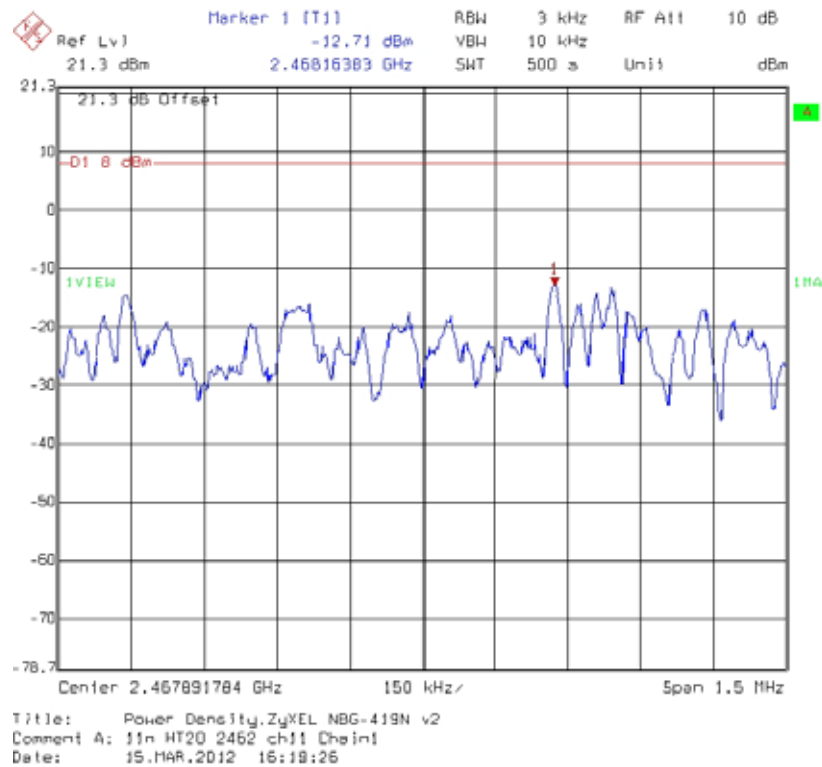
**Invax 5 dBi Antenna: Chain 1: Power Spectral Density @ 802.11n HT20 mode channel 1**



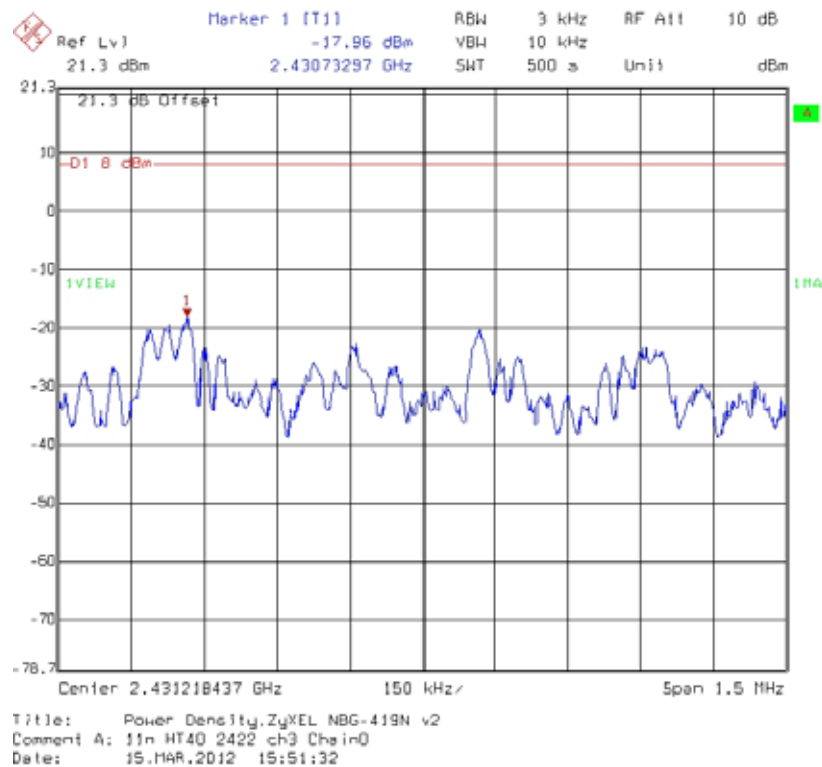
**Invax 5 dBi Antenna: Chain 1: Power Spectral Density @ 802.11n HT20 mode channel 6**



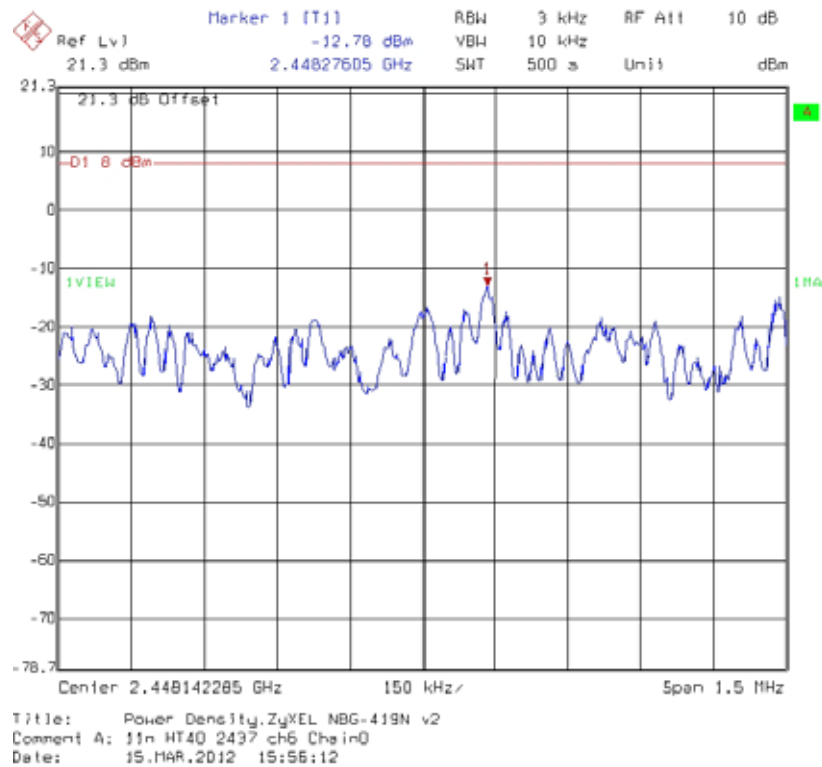
**Invax 5 dBi Antenna: Chain 1: Power Spectral Density @ 802.11n HT20 mode channel 11**



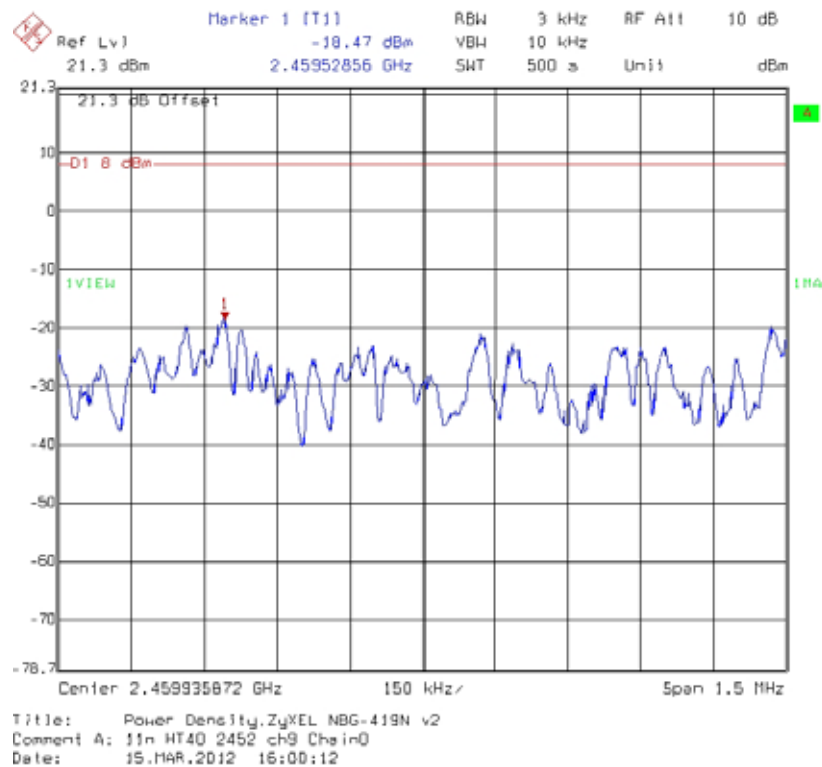
**Invax 5 dBi Antenna: Chain 0: Power Spectral Density @ 802.11n HT40 mode channel 3**



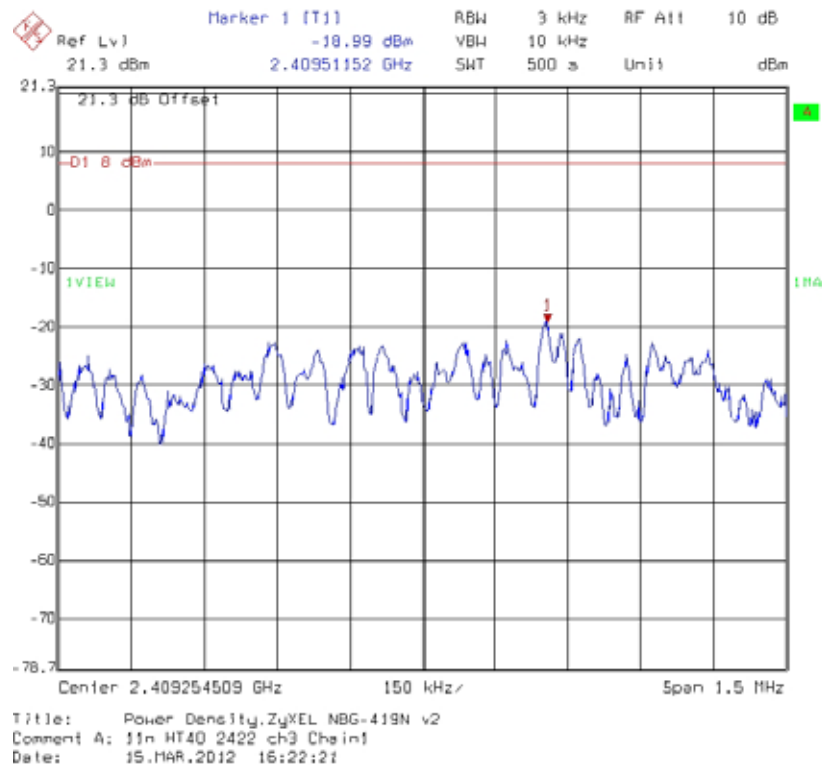
## Invax 5 dBi Antenna: Chain 0: Power Spectral Density @ 802.11n HT40 mode channel 6



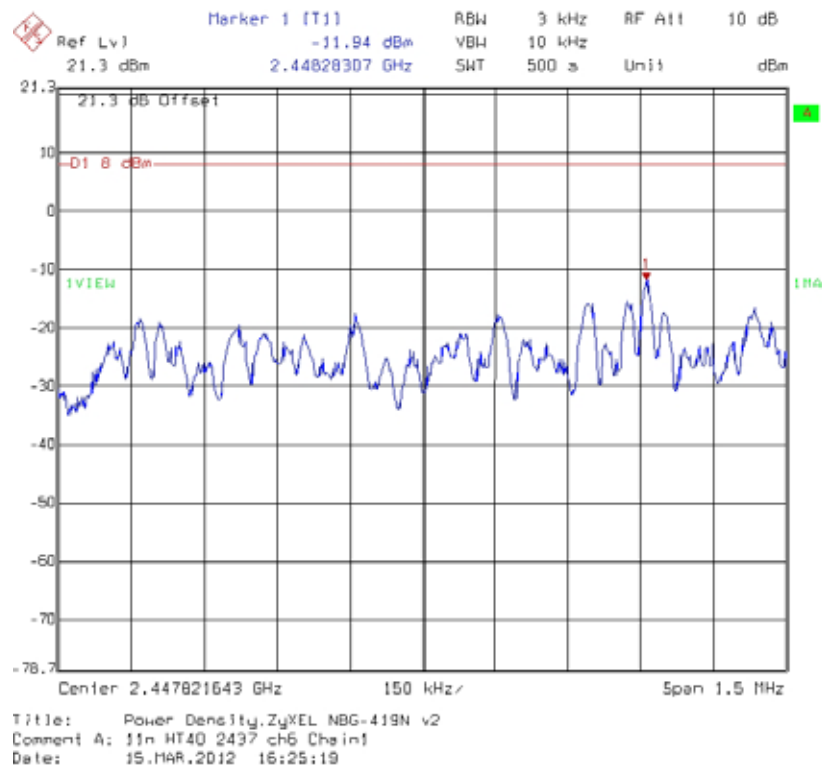
## Invax 5 dBi Antenna: Chain 0: Power Spectral Density @ 802.11n HT40 mode channel 9



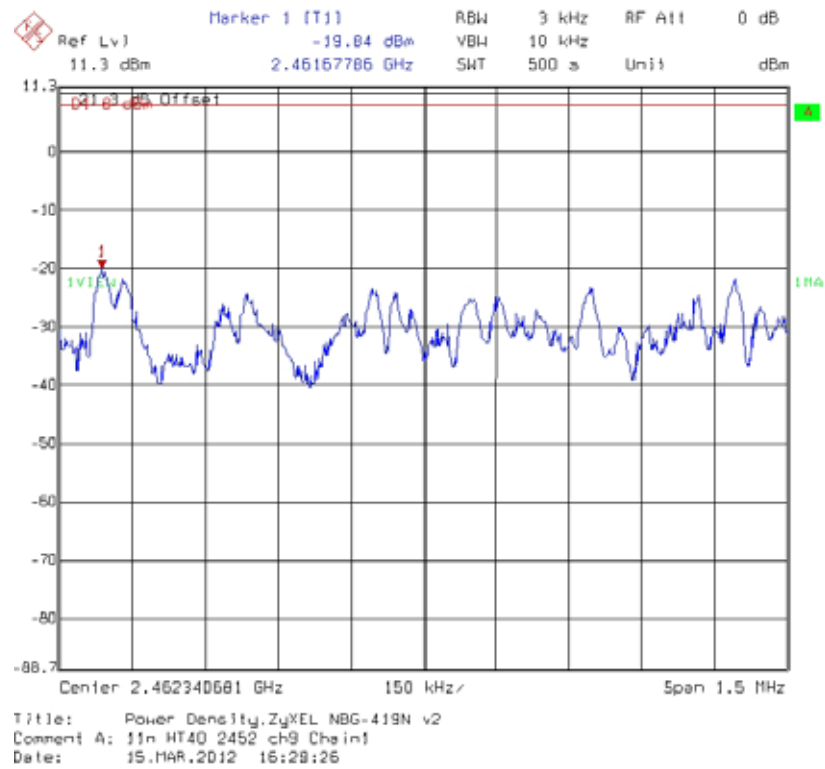
**Invax 5 dBi Antenna: Chain 1: Power Spectral Density @ 802.11n HT40 mode channel 3**



**Invax 5 dBi Antenna: Chain 1: Power Spectral Density @ 802.11n HT40 mode channel 6**



**Invax 5 dBi Antenna: Chain 1: Power Spectral Density @ 802.11n HT40 mode channel 9**



## 7. RF Antenna conducted Spurious

|                      |                               |
|----------------------|-------------------------------|
| <b>Name of Test</b>  | RF Antenna Conducted Spurious |
| <b>Base Standard</b> | FCC 15.247(d)                 |

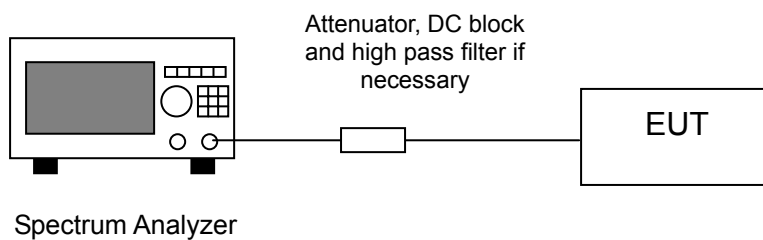
**Test Result:** Complies  
**Measurement Data:** See plots below

### Method of Measurement:

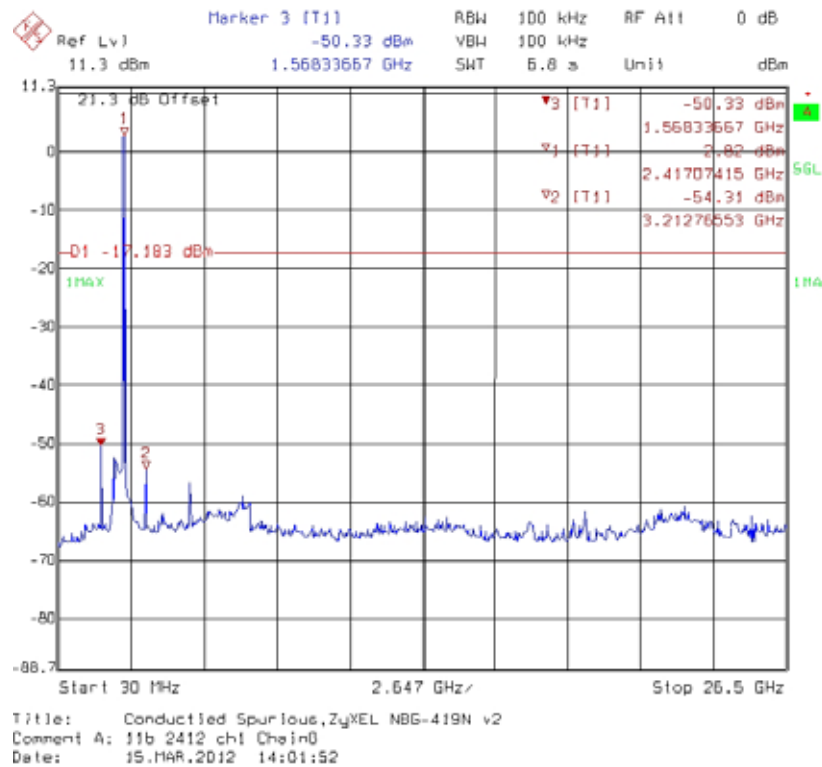
#### Reference FCC document: KDB558074

The measurements were performed from 30 MHz to 25 GHz RF antenna conducted per FCC 15.247 (d) was measured from the EUT antenna port using a 50 ohm spectrum analyzer with the resolution bandwidth set at 100 kHz, and the video bandwidth set at 100 kHz. Harmonics and spurious noise must be at least 20 dB down from the highest emission level within the authorized band as measured with a 100 kHz RBW. The table below is the results from the highest emission for each channel within the authorized band. This table was used to determine the spurious limits for each channel.

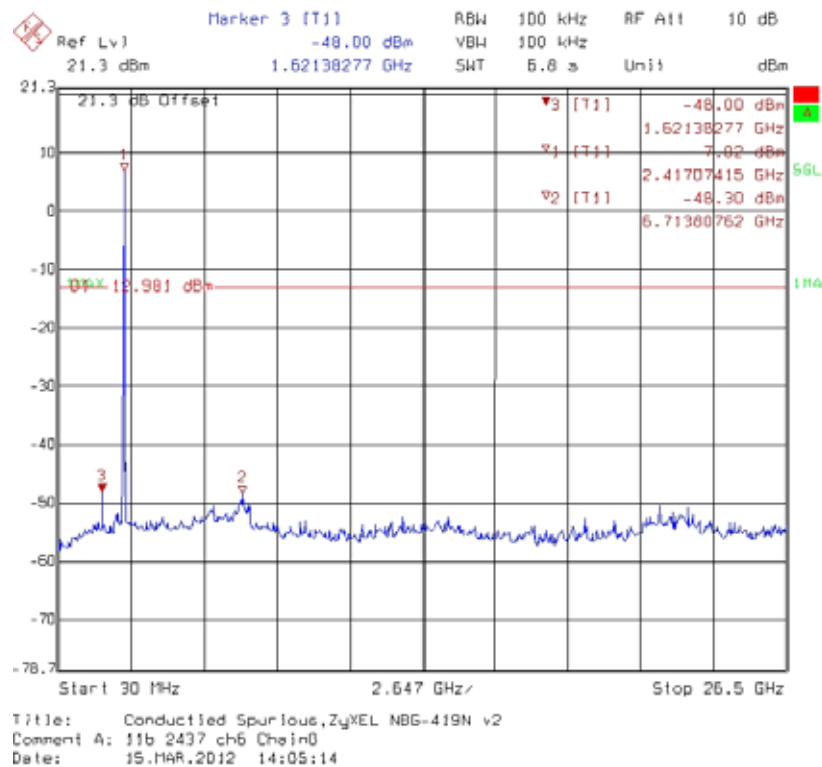
### Test Diagram:



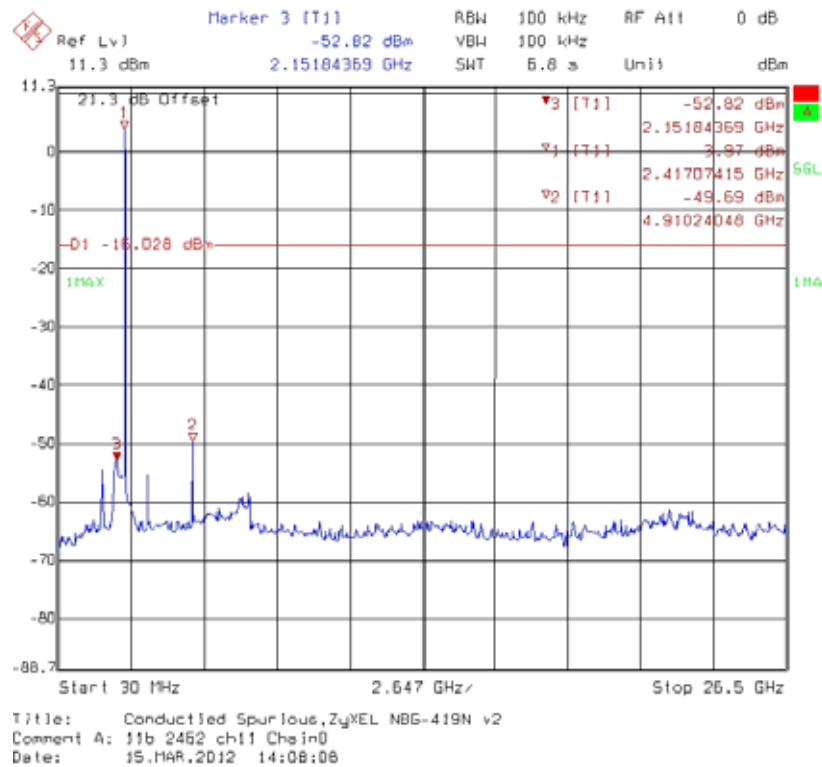
**Invax 2 dBi Antenna: Conducted spurious @ 802.11b mode channel 1**



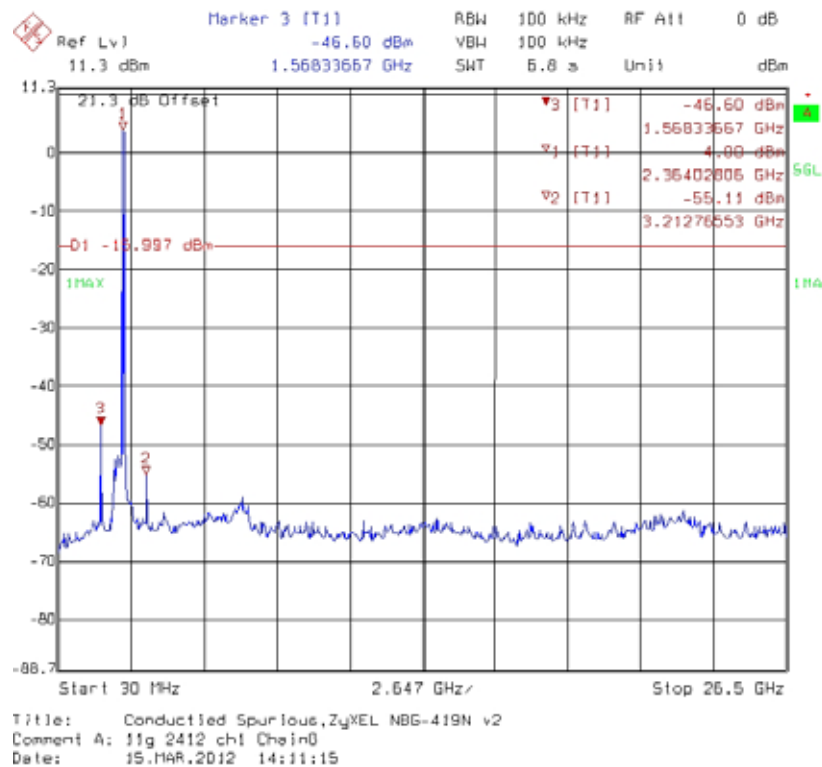
**Invax 2 dBi Antenna: Conducted spurious @ 802.11b mode channel 6**



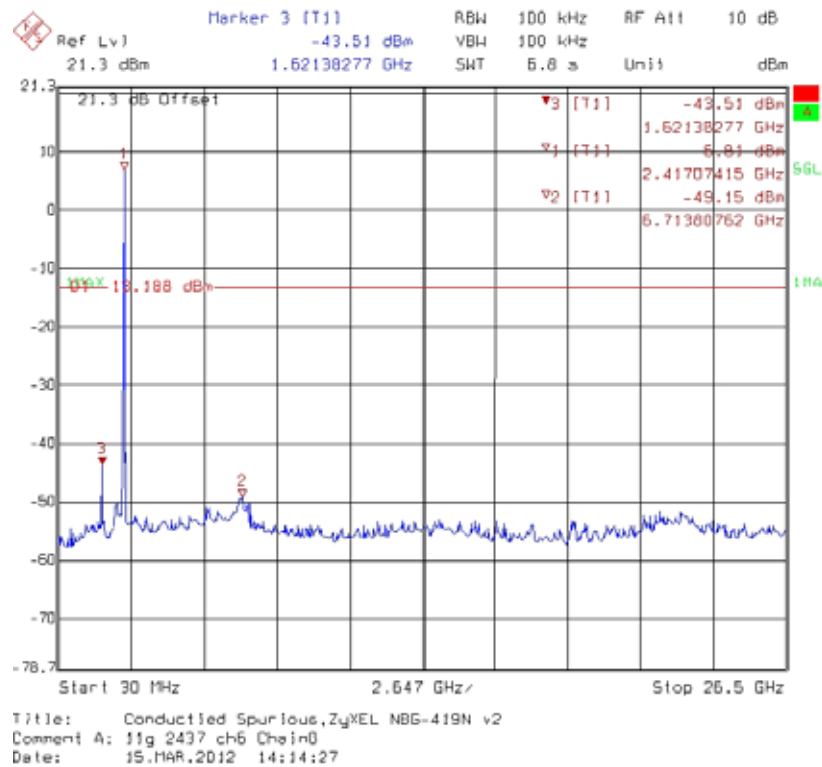
**Invax 2 dBi Antenna: Conducted spurious @ 802.11b mode channel 11**



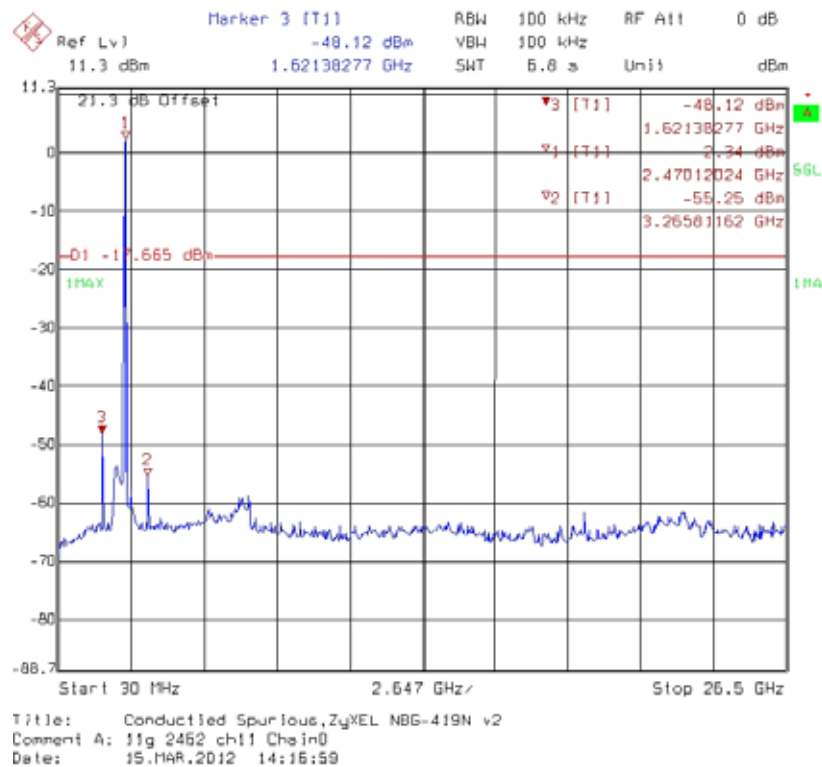
**Invax 2 dBi Antenna: Chain 0: Conducted spurious @ 802.11g mode channel 1**



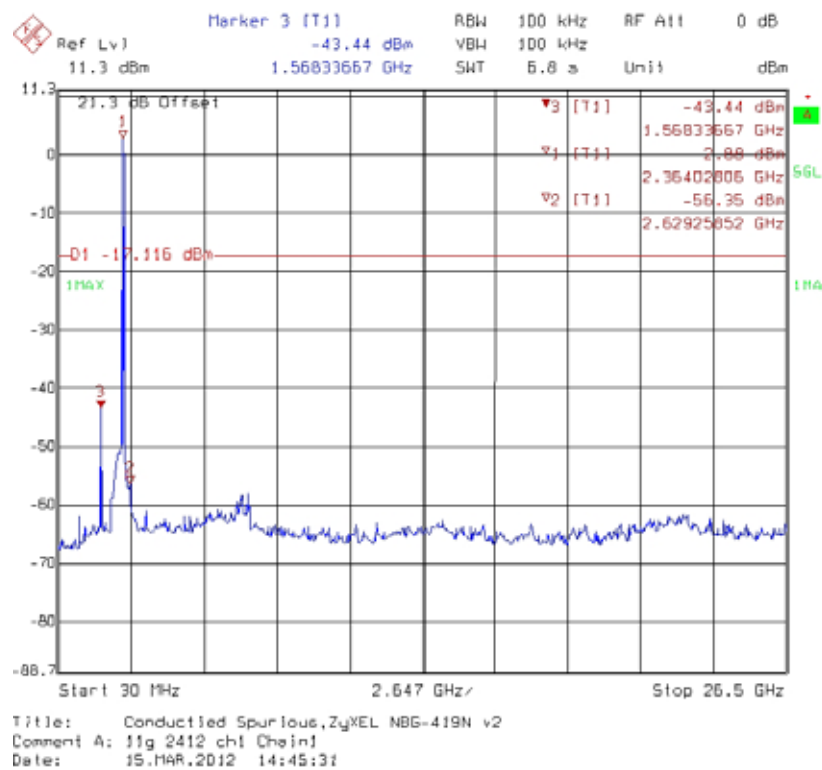
**Invax 2 dBi Antenna: Chain 0: Conducted spurious @ 802.11g mode channel 6**



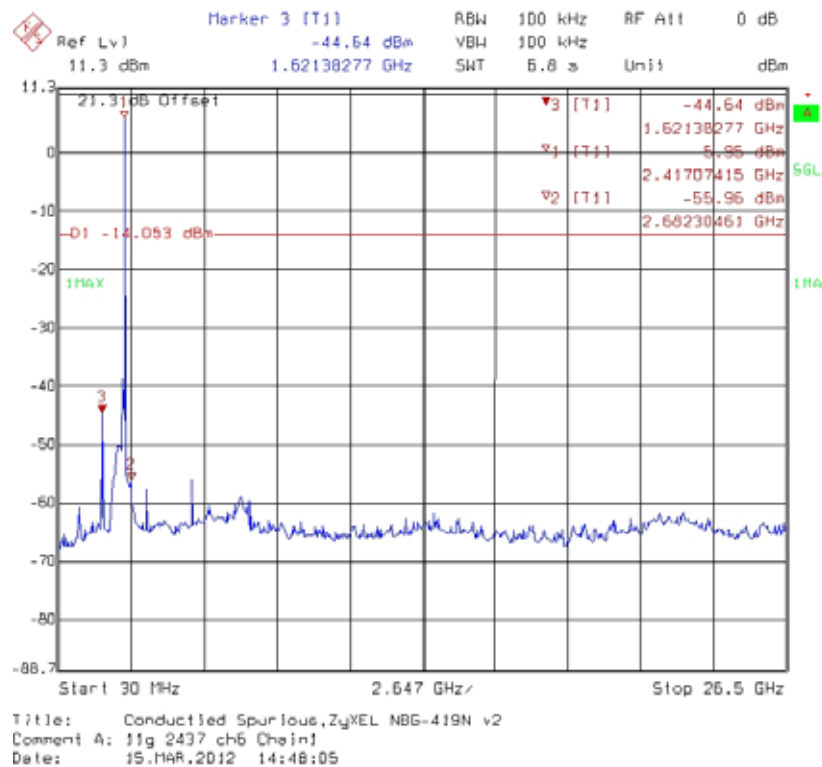
**Invax 2 dBi Antenna: Chain 0: Conducted spurious @ 802.11g mode channel 11**



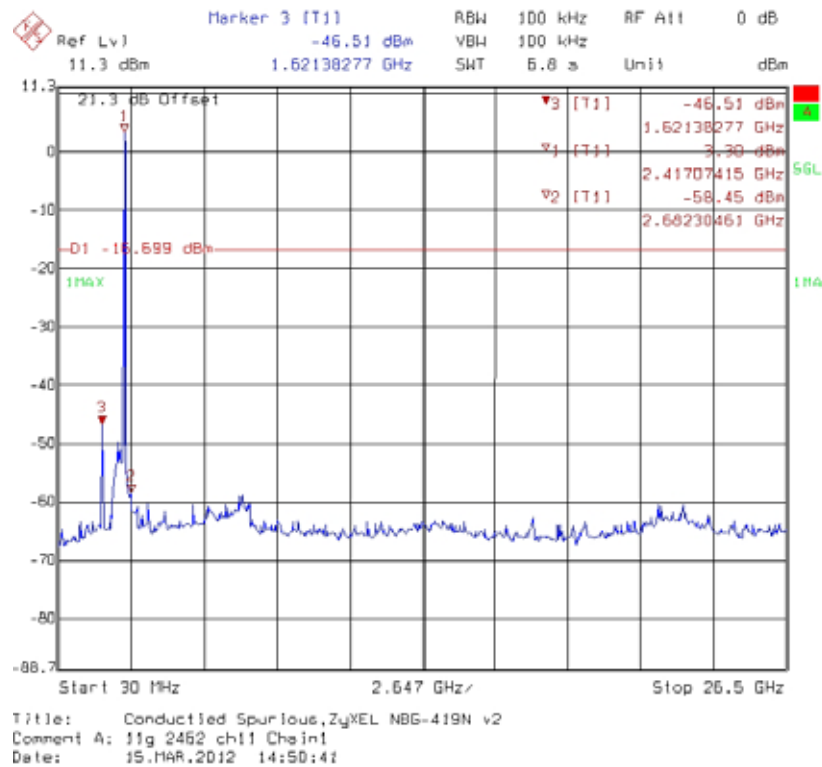
**Invax 2 dBi Antenna: Chain 1: Conducted spurious @ 802.11g mode channel 1**



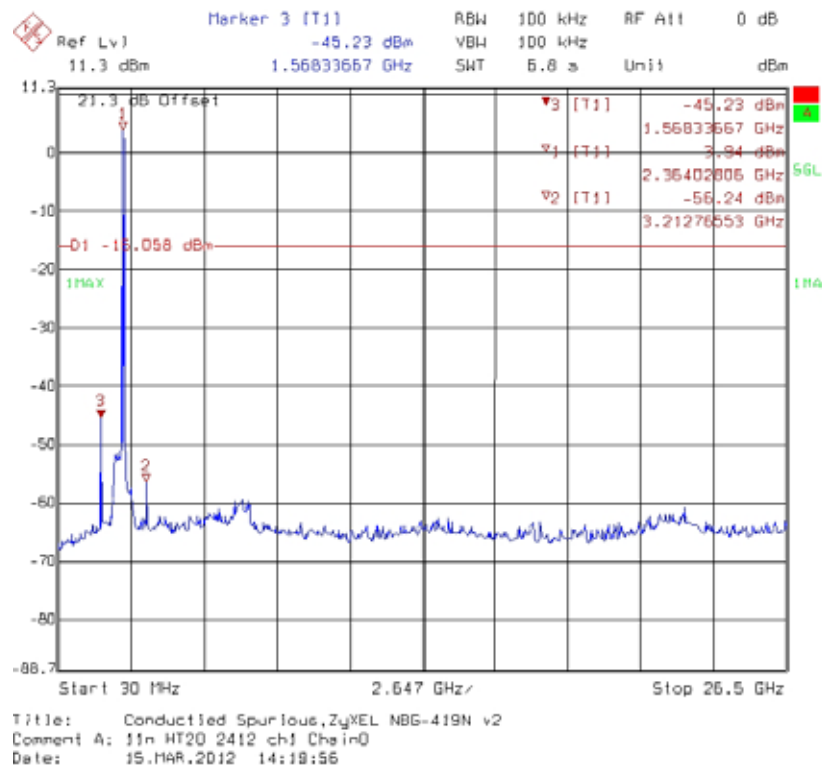
**Invax 2 dBi Antenna: Chain 1: Conducted spurious @ 802.11g mode channel 6**



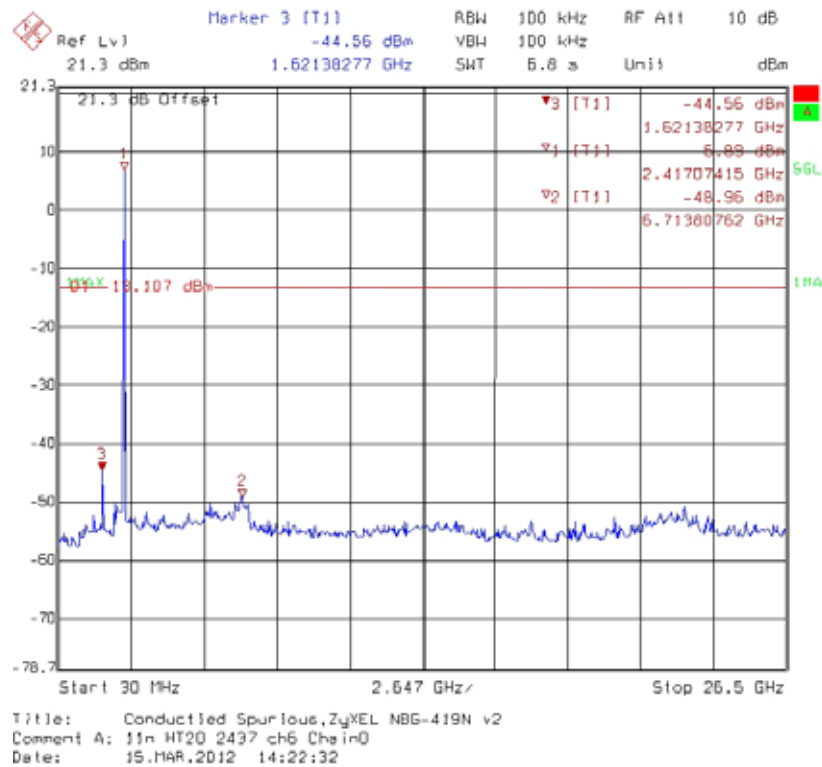
**Invax 2 dBi Antenna: Chain 1: Conducted spurious @ 802.11g mode channel 11**



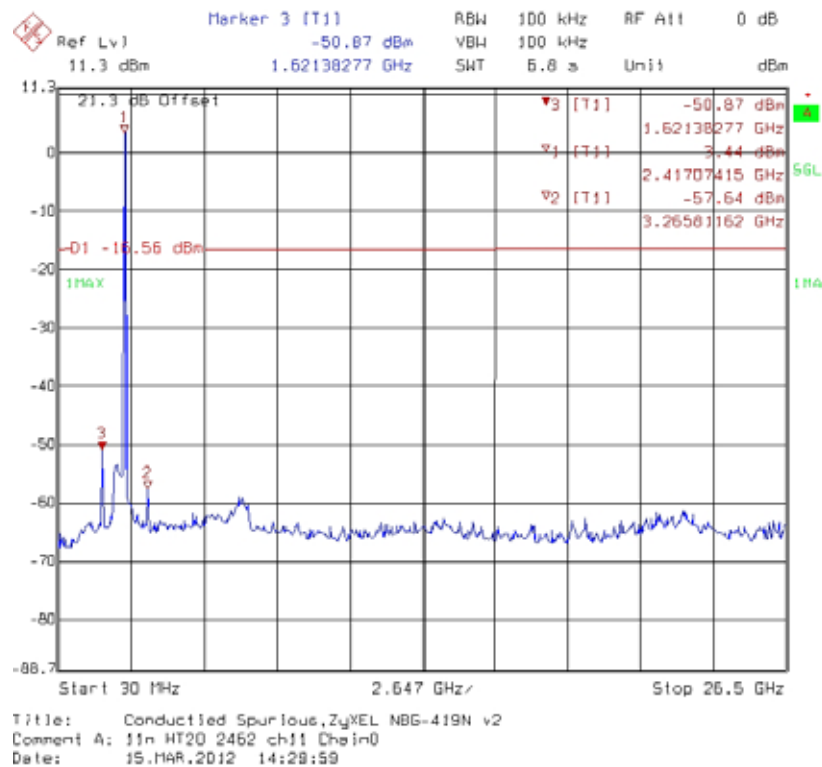
**Invax 2 dBi Antenna: Chain 0: Conducted spurious @ 802.11n HT20 mode channel 1**



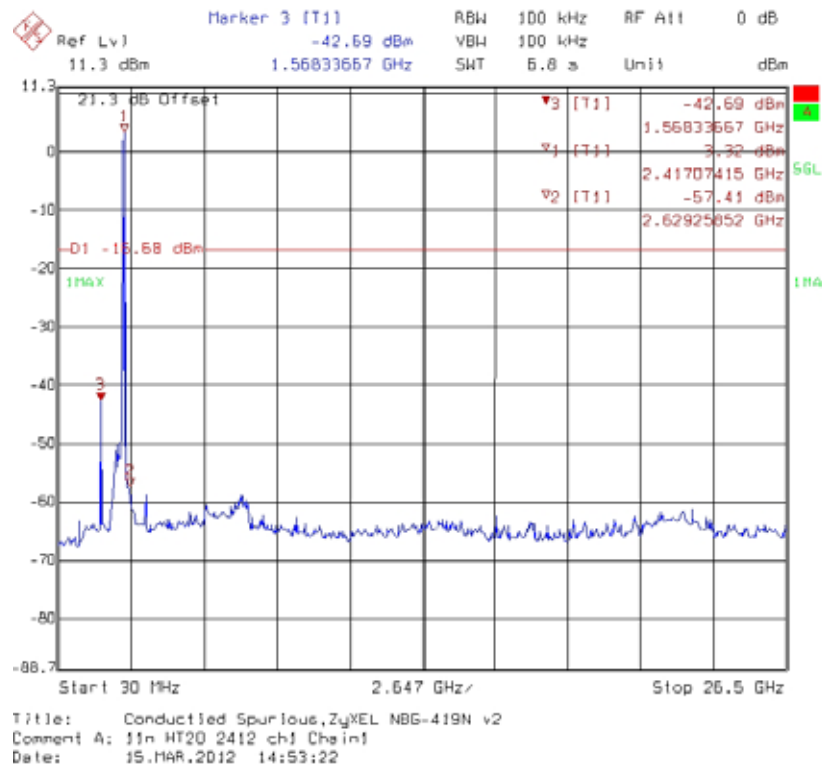
**Invx 2 dBi Antenna: Chain 0: Conducted spurious @ 802.11n HT20 mode channel 6**



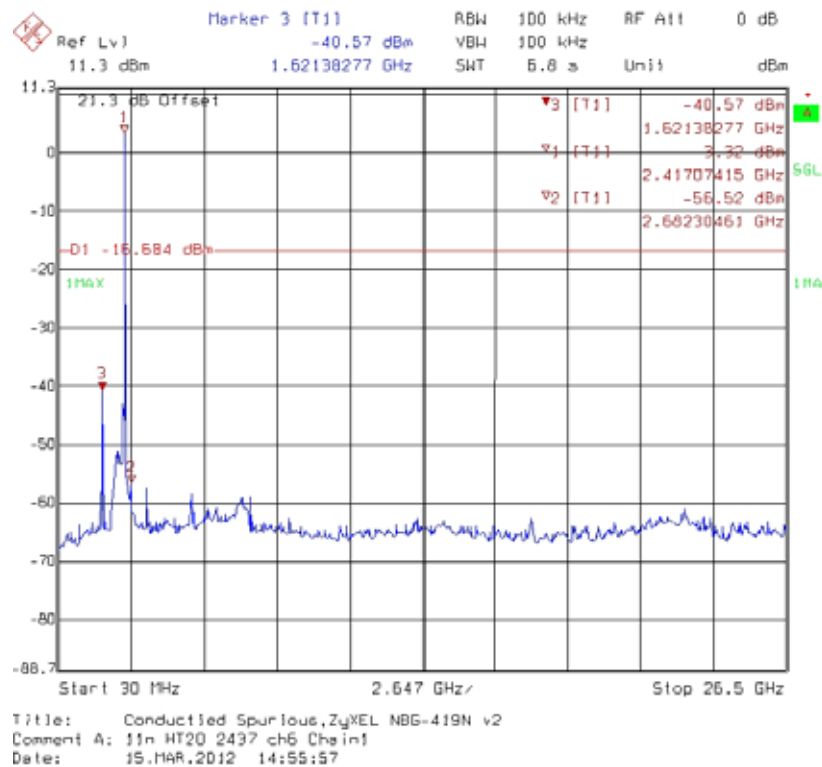
**Invx 2 dBi Antenna: Chain 0: Conducted spurious @ 802.11n HT20 mode channel 11**



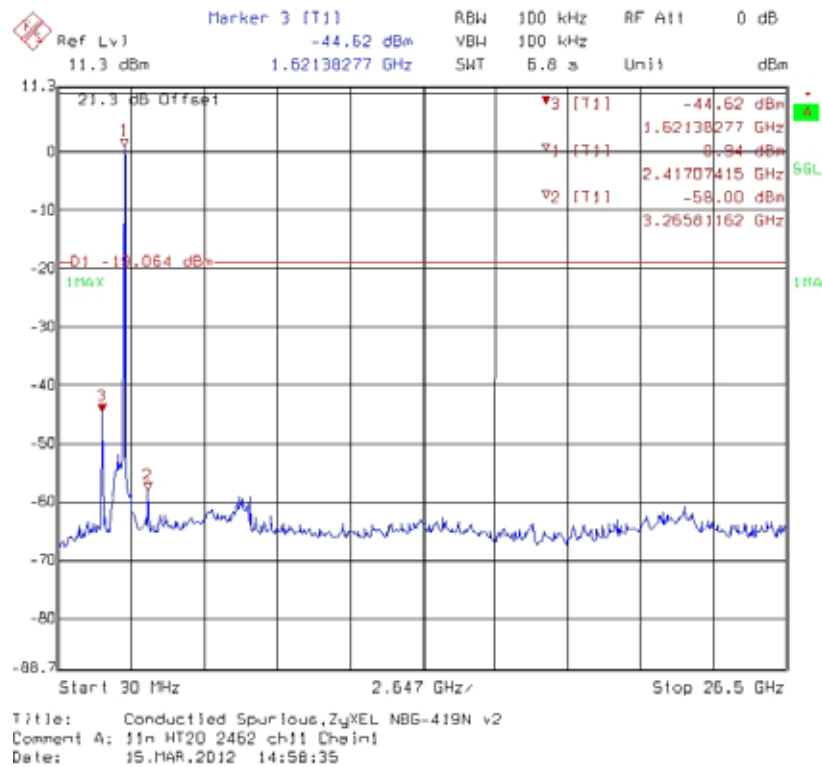
**Invax 2 dBi Antenna: Chain 1: Conducted spurious @ 802.11n HT20 mode channel 1**



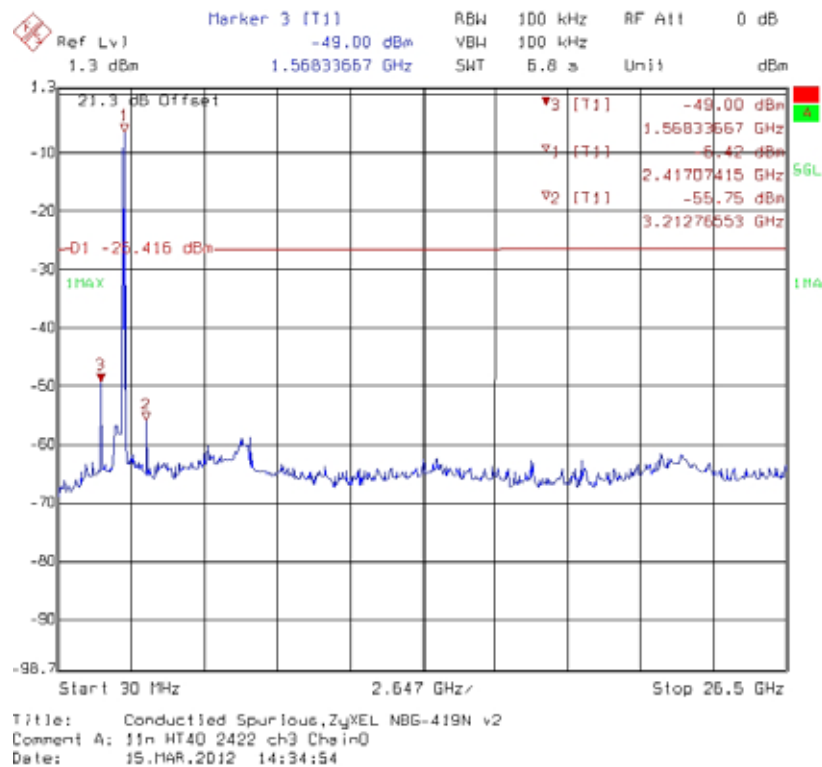
**Invax 2 dBi Antenna: Chain 1: Conducted spurious @ 802.11n HT20 mode channel 6**



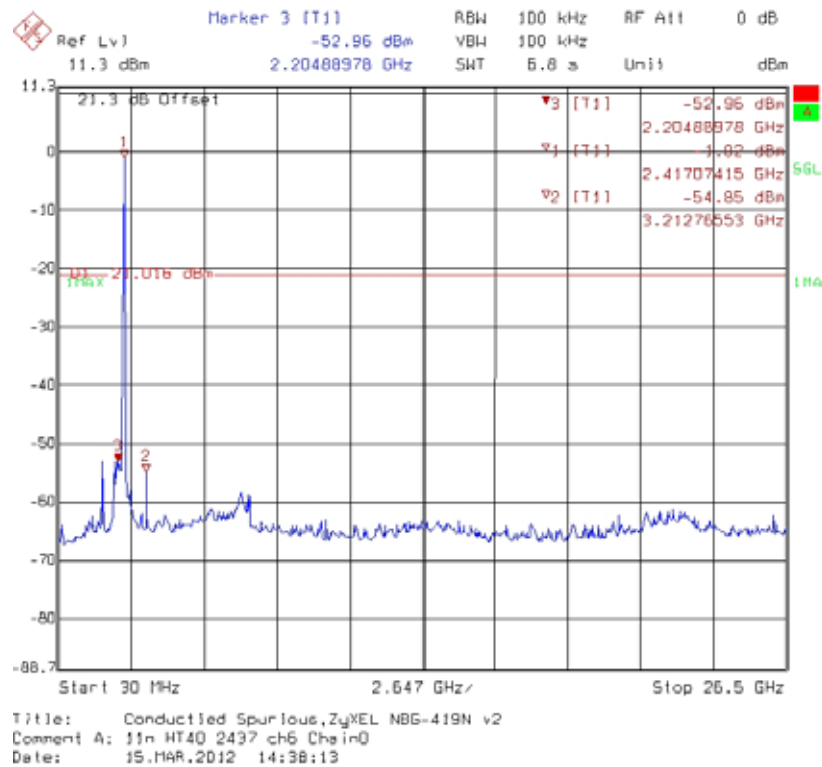
**Invax 2 dBi Antenna: Chain 1: Conducted spurious @ 802.11n HT20 mode channel 11**



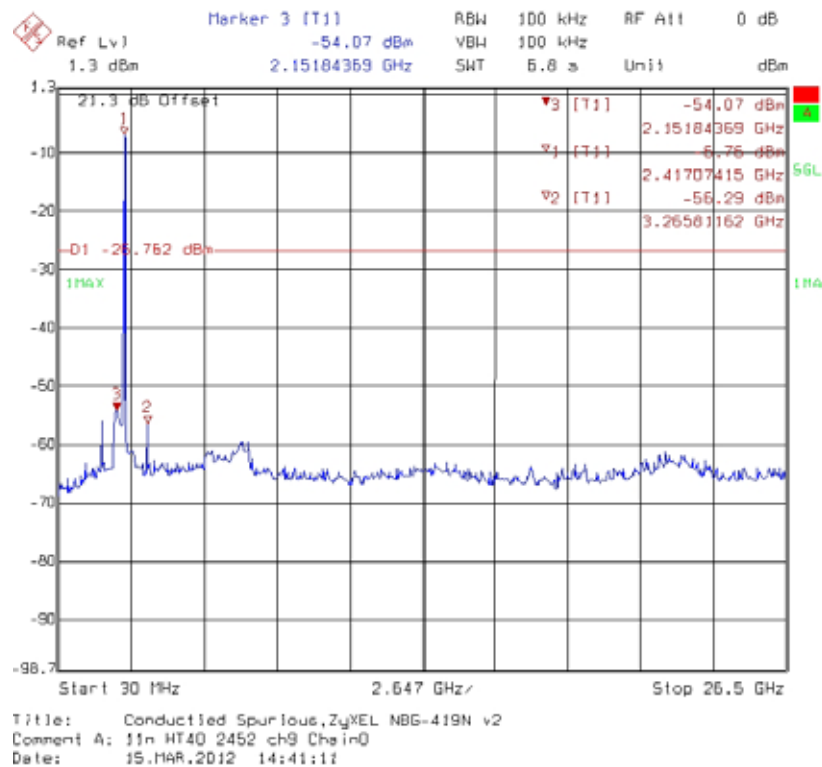
**Invax 2 dBi Antenna: Chain 0: Conducted spurious @ 802.11n HT40 mode channel 3**



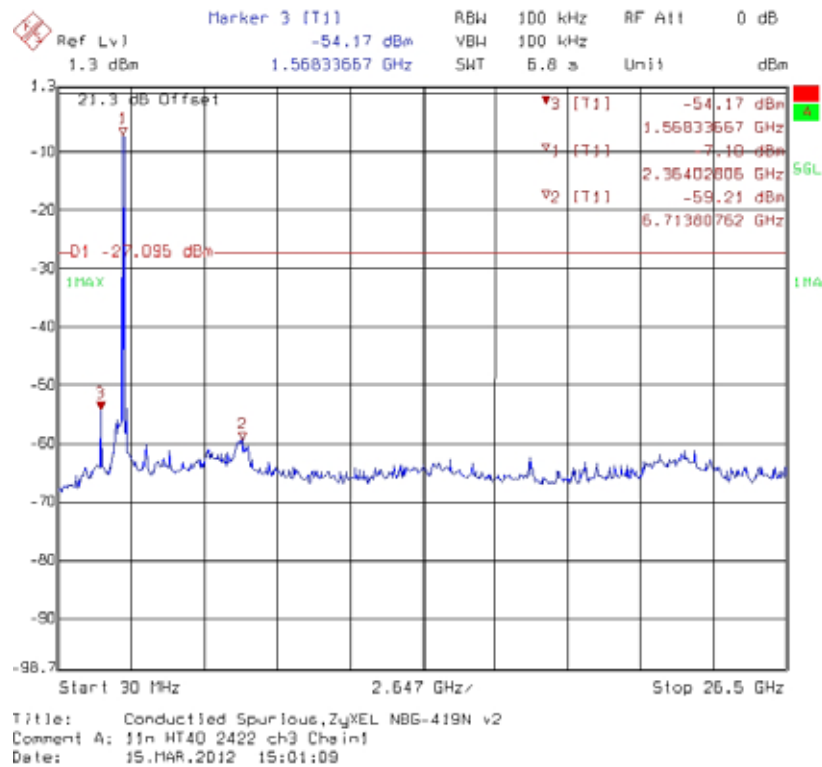
**Invax 2 dBi Antenna: Chain 0: Conducted spurious @ 802.11n HT40 mode channel 6**



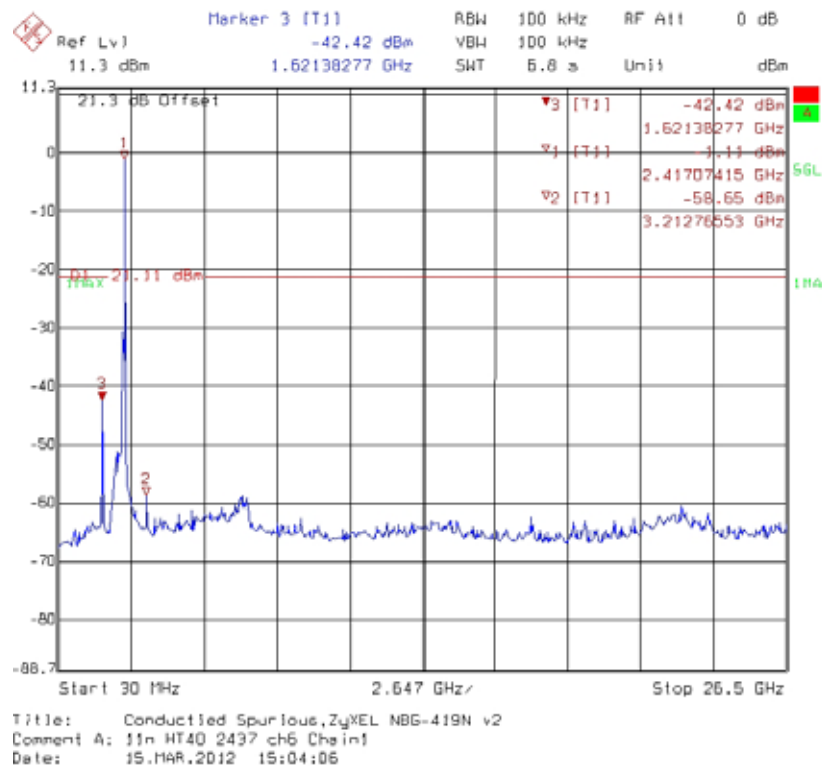
**Invax 2 dBi Antenna: Chain 0: Conducted spurious @ 802.11n HT40 mode channel 9**



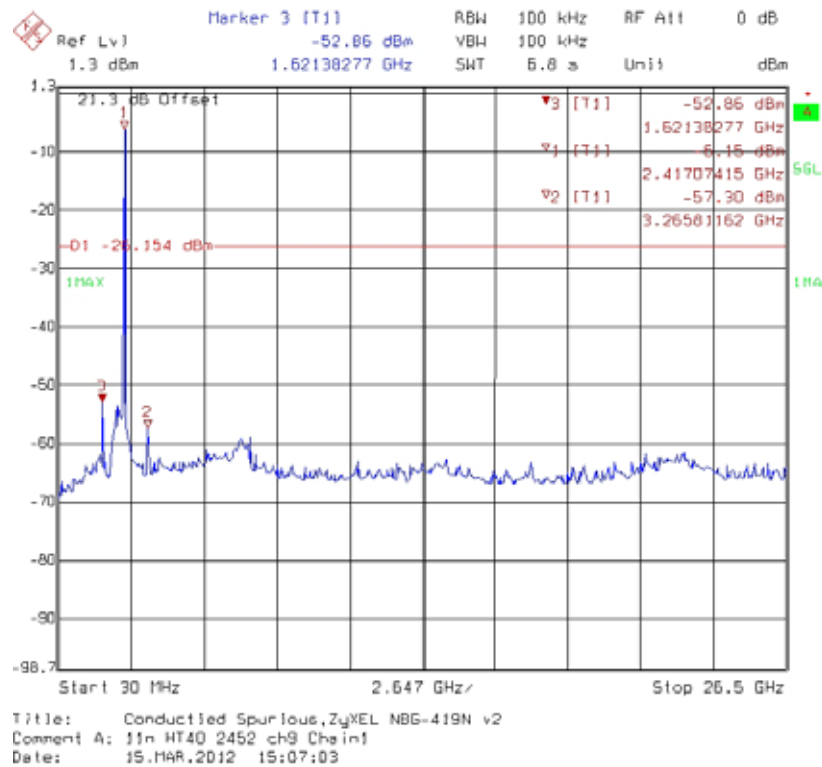
**Invax 2 dBi Antenna: Chain 1: Conducted spurious @ 802.11n HT40 mode channel 3**



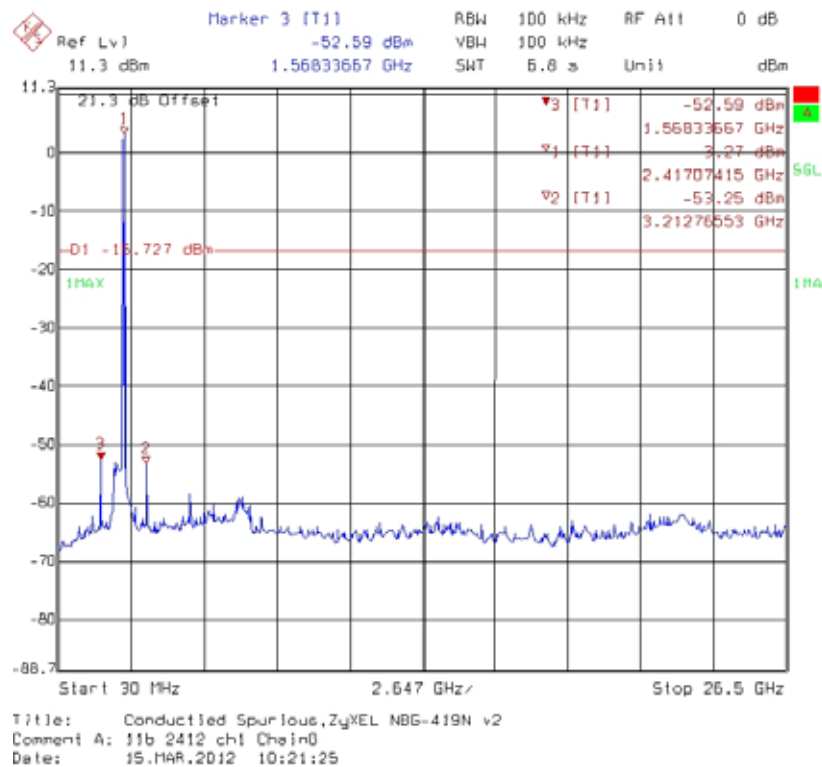
**Invax 2 dBi Antenna: Chain 1: Conducted spurious @ 802.11n HT40 mode channel 6**



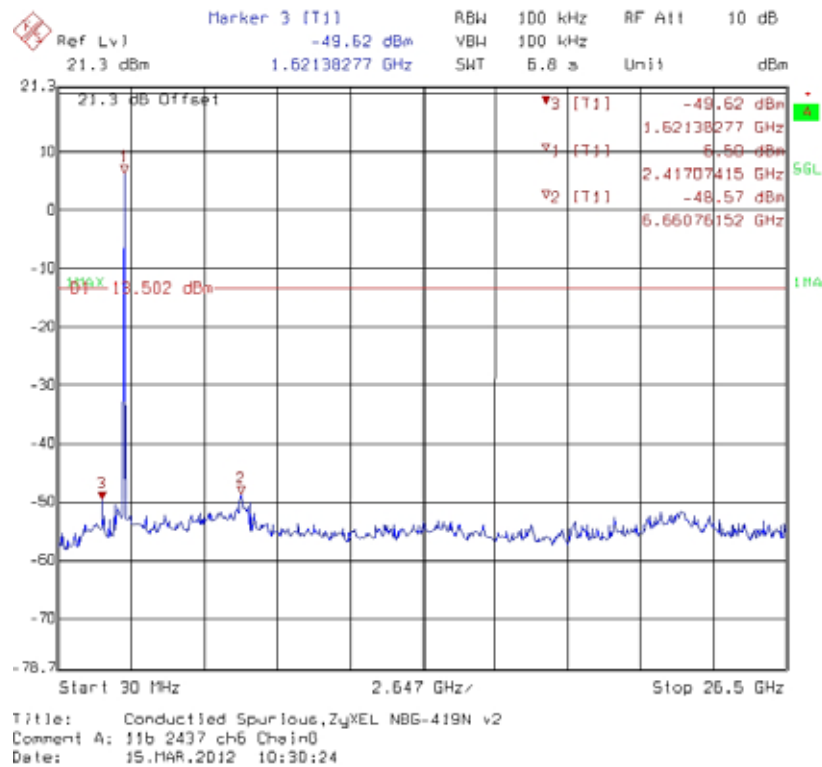
**Invax 2 dBi Antenna: Chain 1: Conducted spurious @ 802.11n HT40 mode channel 9**



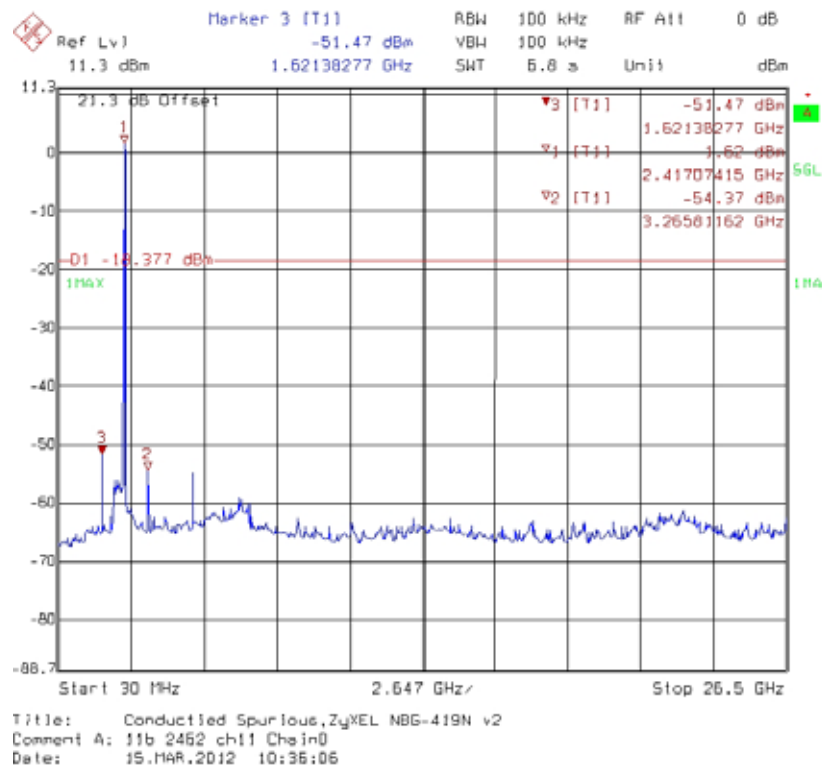
**SAYTEC 2 dBi Antenna: Conducted spurious @ 802.11b mode channel 1**



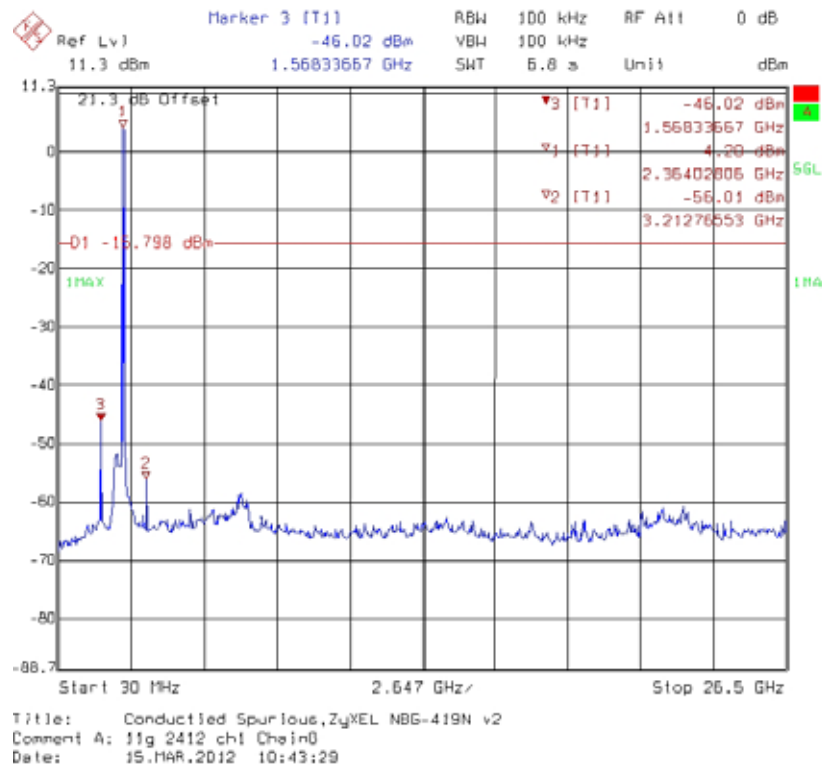
**SAYTEC 2 dBi Antenna: Conducted spurious @ 802.11b mode channel 6**



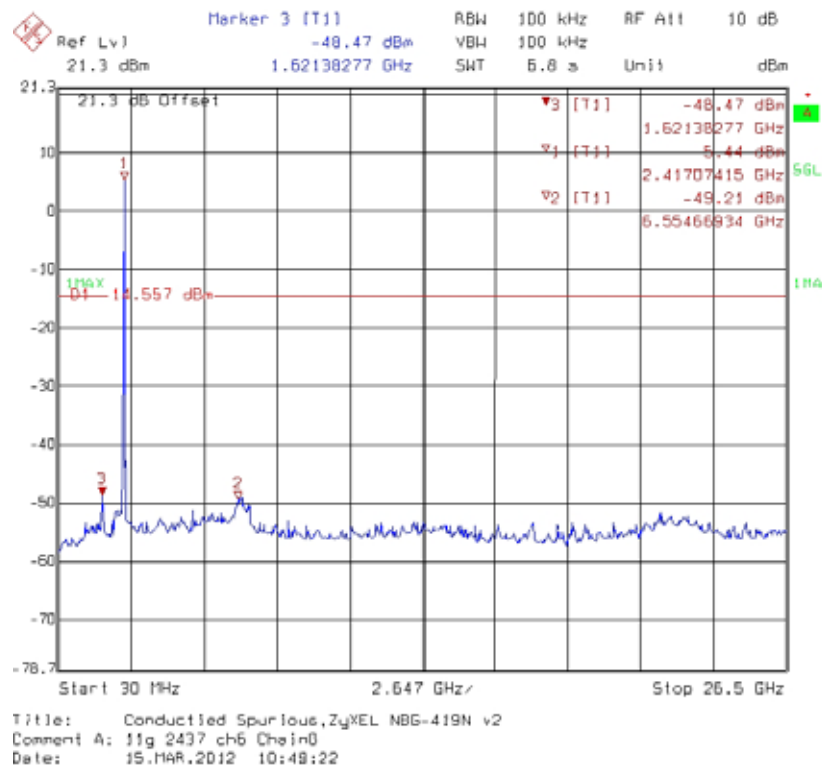
**SAYTEC 2 dBi Antenna: Conducted spurious @ 802.11b mode channel 11**



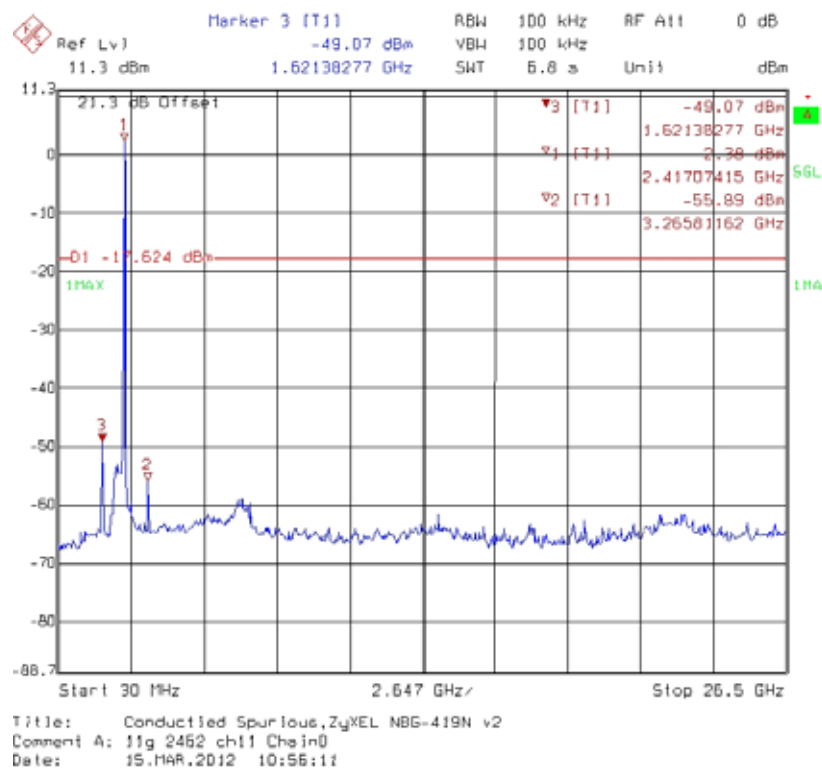
**SAYTEC 2 dBi Antenna: Chain 0: Conducted spurious @ 802.11g mode channel 1**



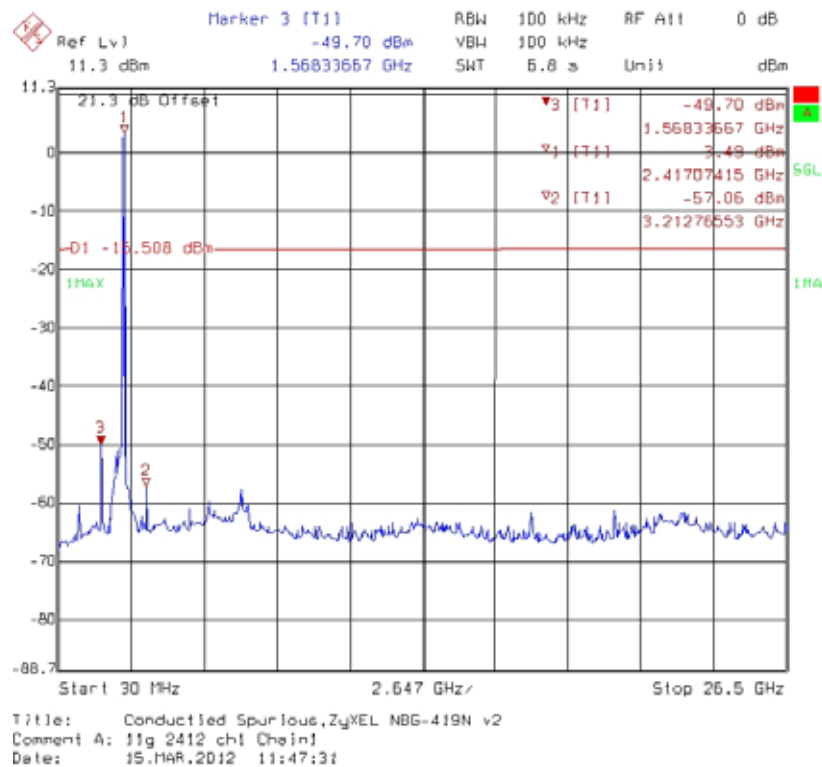
**SAYTEC 2 dBi Antenna: Chain 0: Conducted spurious @ 802.11g mode channel 6**



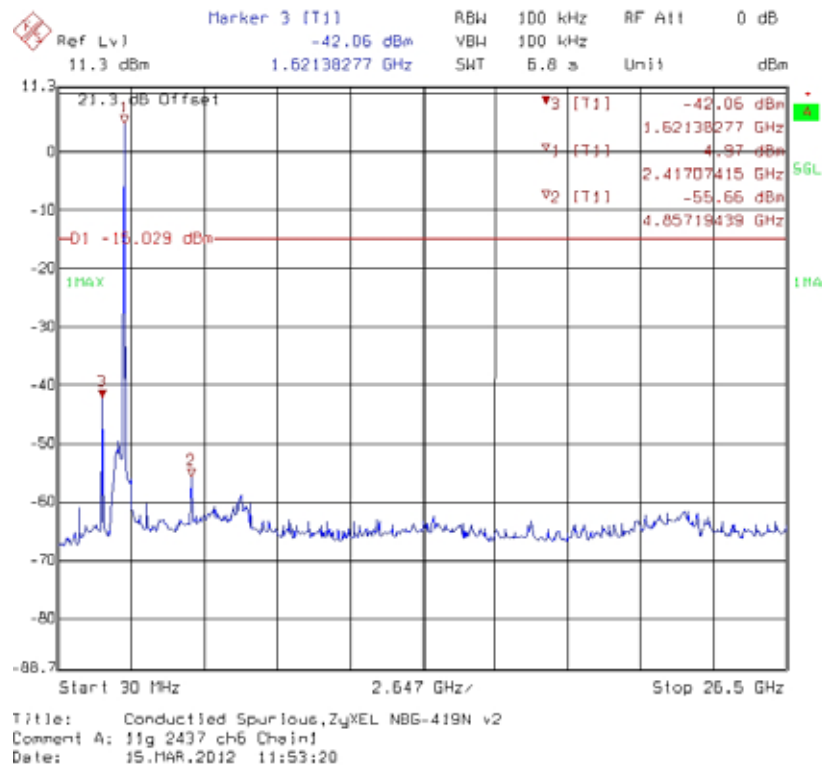
**SAYTEC 2 dBi Antenna: Chain 0: Conducted spurious @ 802.11g mode channel 11**



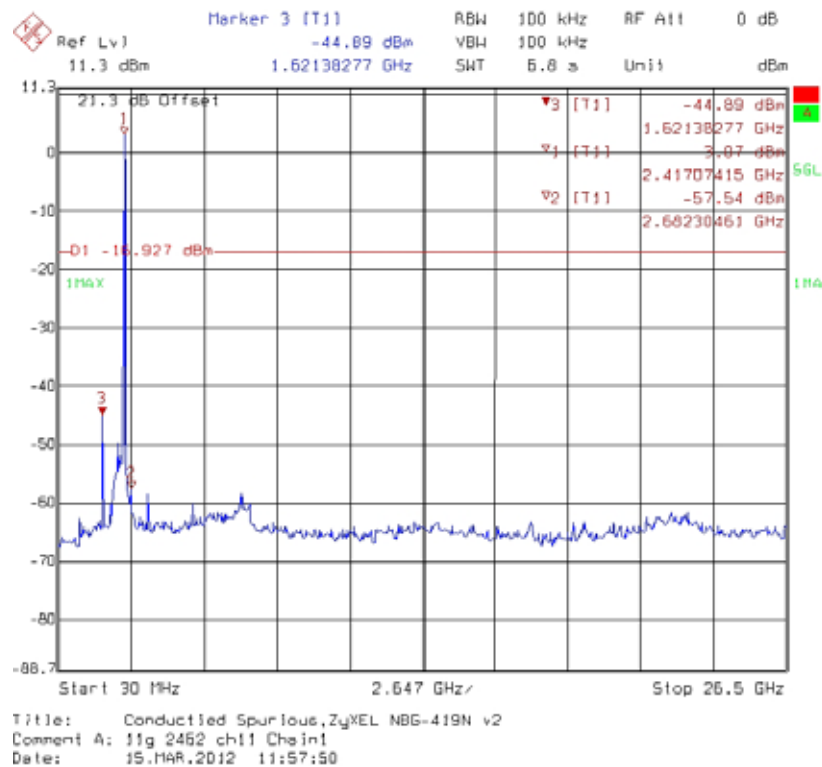
**SAYTEC 2 dBi Antenna: Chain 1: Conducted spurious @ 802.11g mode channel 1**



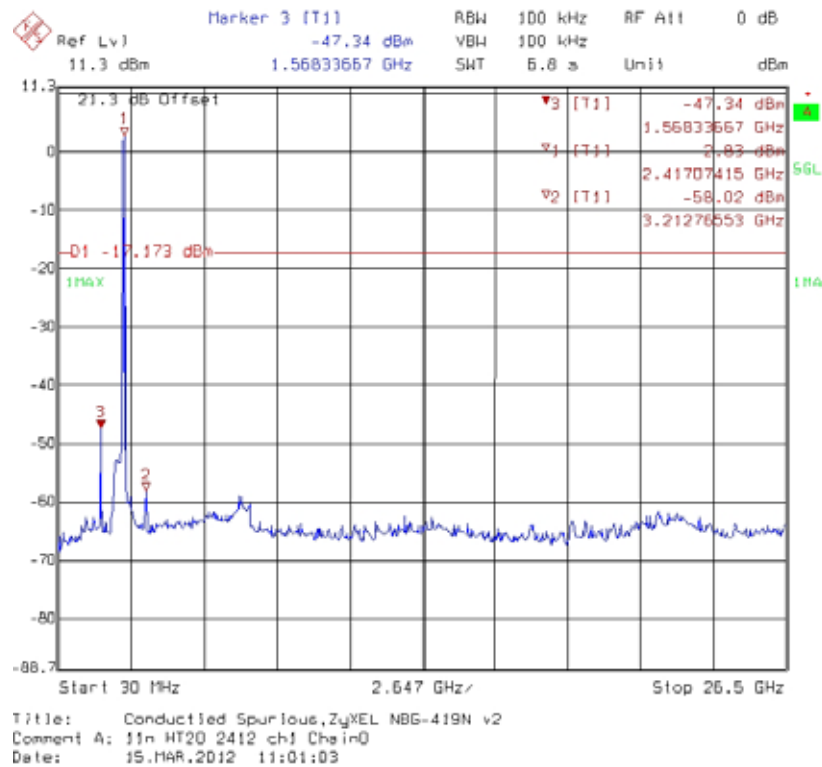
**SAYTEC 2 dBi Antenna: Chain 1: Conducted spurious @ 802.11g mode channel 6**



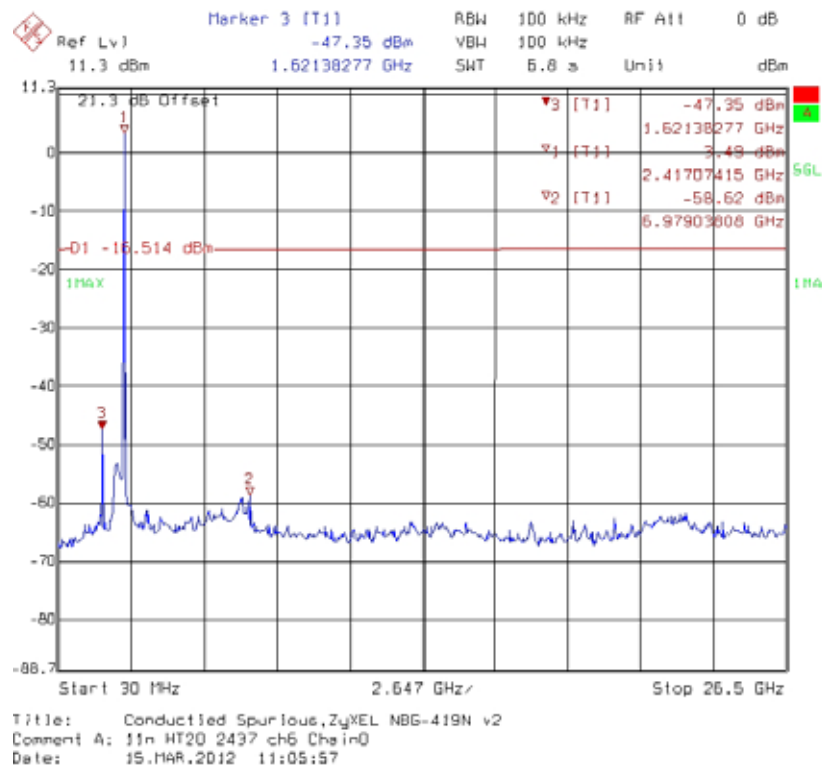
**SAYTEC 2 dBi Antenna: Chain 1: Conducted spurious @ 802.11g mode channel 11**



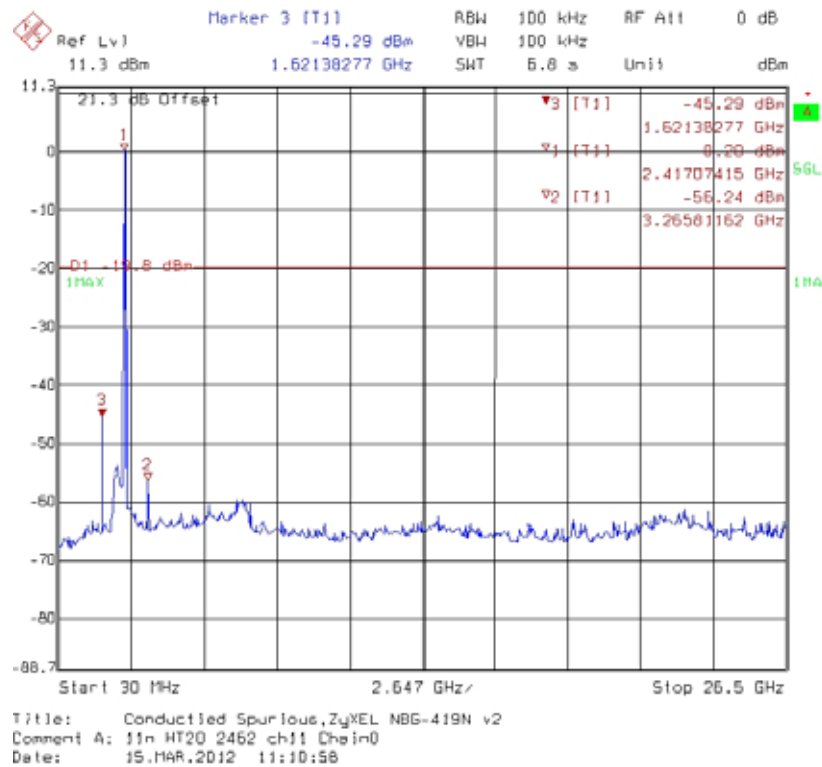
**SAYTEC 2 dBi Antenna: Chain 0: Conducted spurious @ 802.11n HT20 mode channel 1**



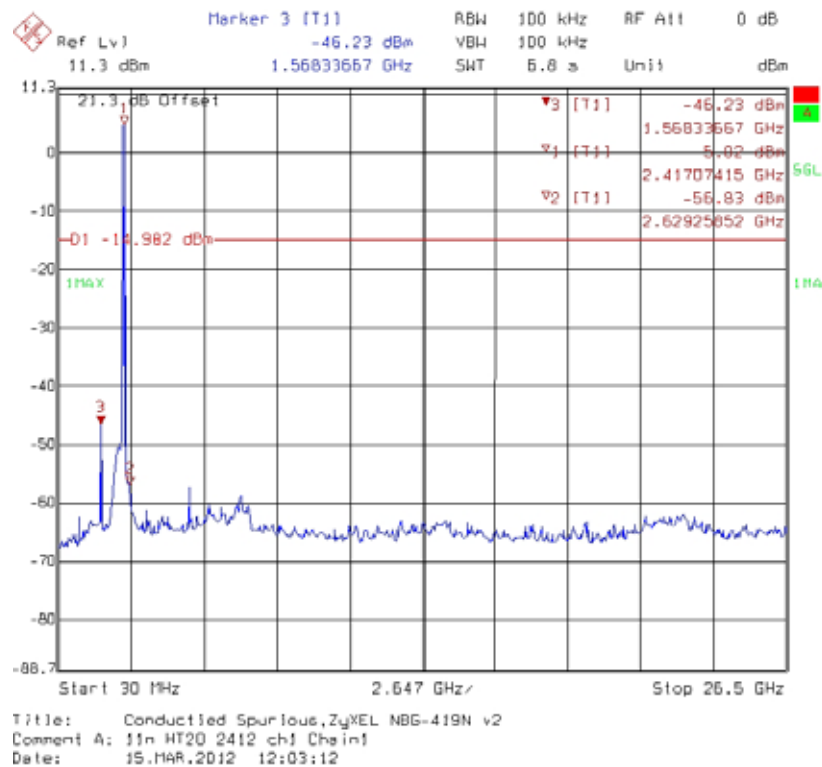
**SAYTEC 2 dBi Antenna: Chain 0: Conducted spurious @ 802.11n HT20 mode channel 6**



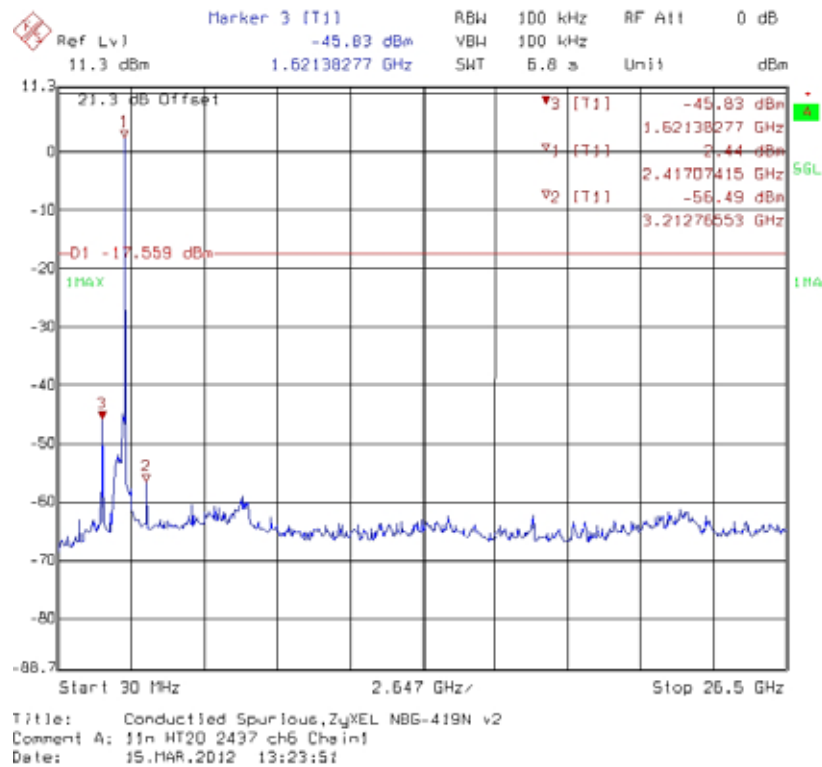
**SAYTEC 2 dBi Antenna: Chain 0: Conducted spurious @ 802.11n HT20 mode channel 11**



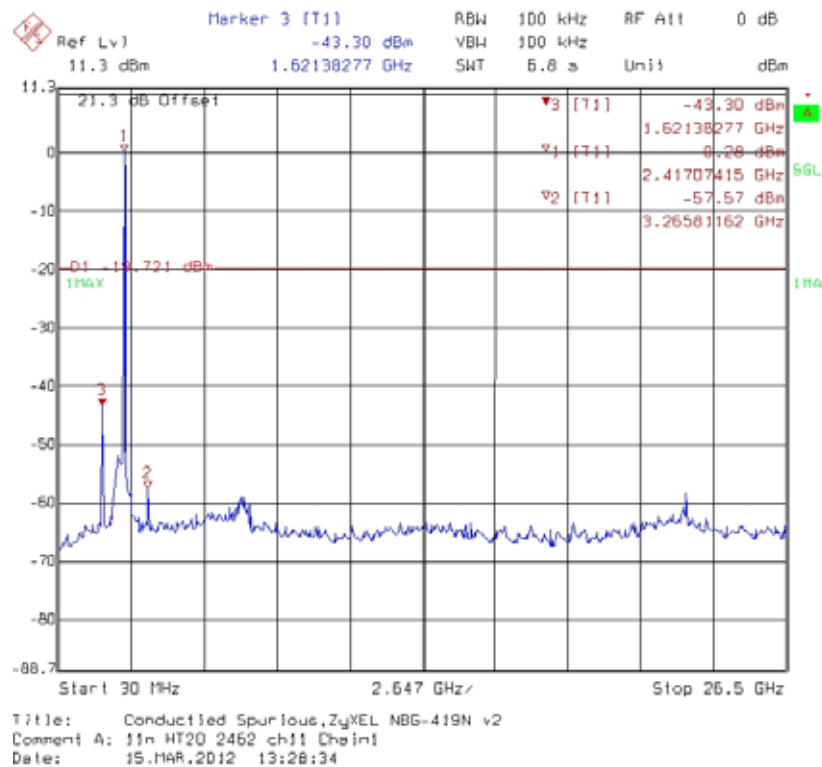
**SAYTEC 2 dBi Antenna: Chain 1: Conducted spurious @ 802.11n HT20 mode channel 1**



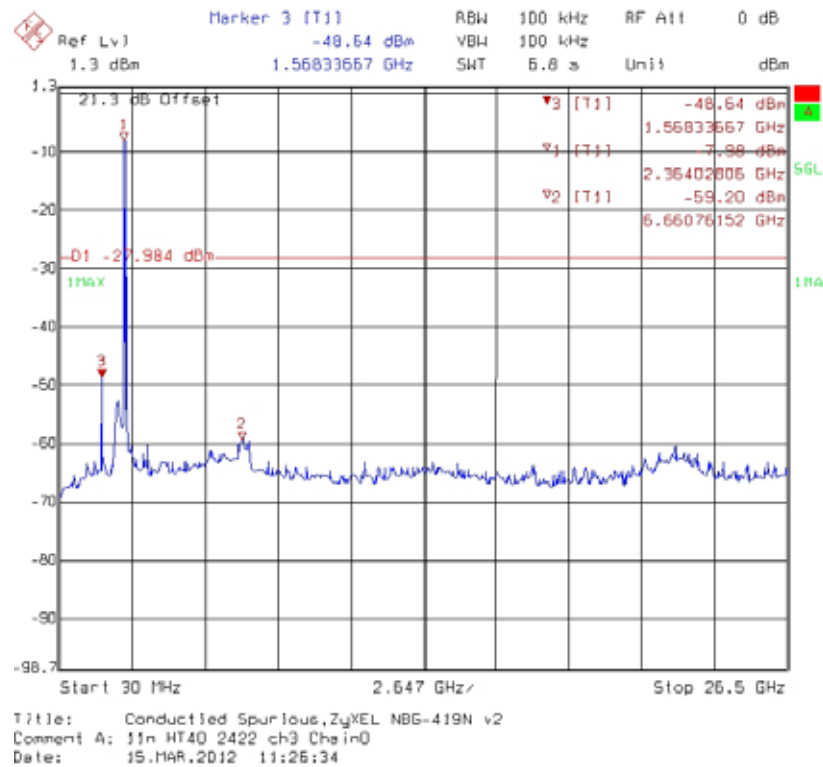
**SAYTEC 2 dBi Antenna: Chain 1: Conducted spurious @ 802.11n HT20 mode channel 6**



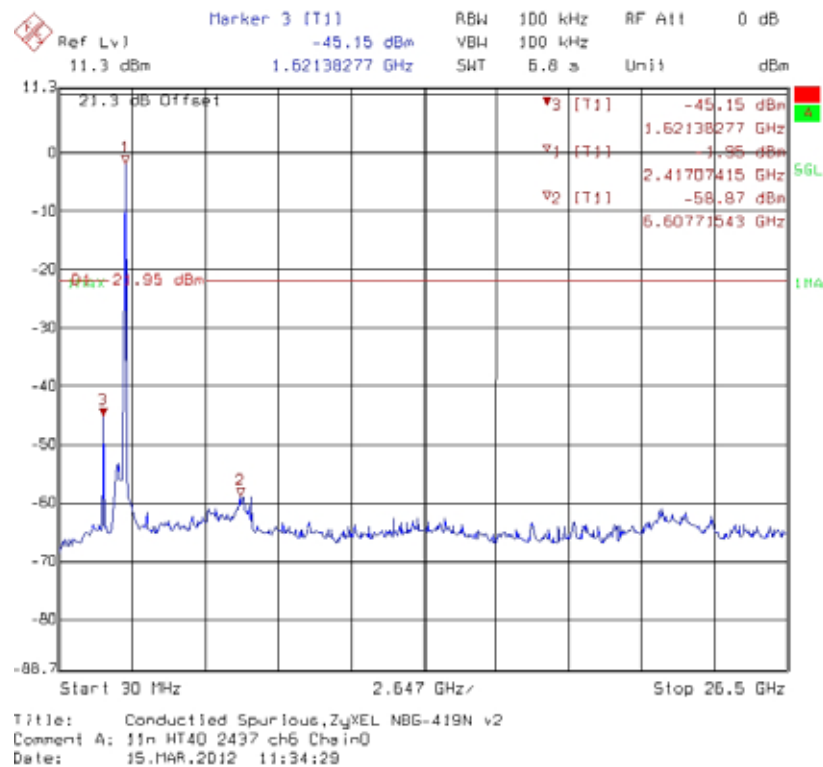
**SAYTEC 2 dBi Antenna: Chain 1: Conducted spurious @ 802.11n HT20 mode channel 11**



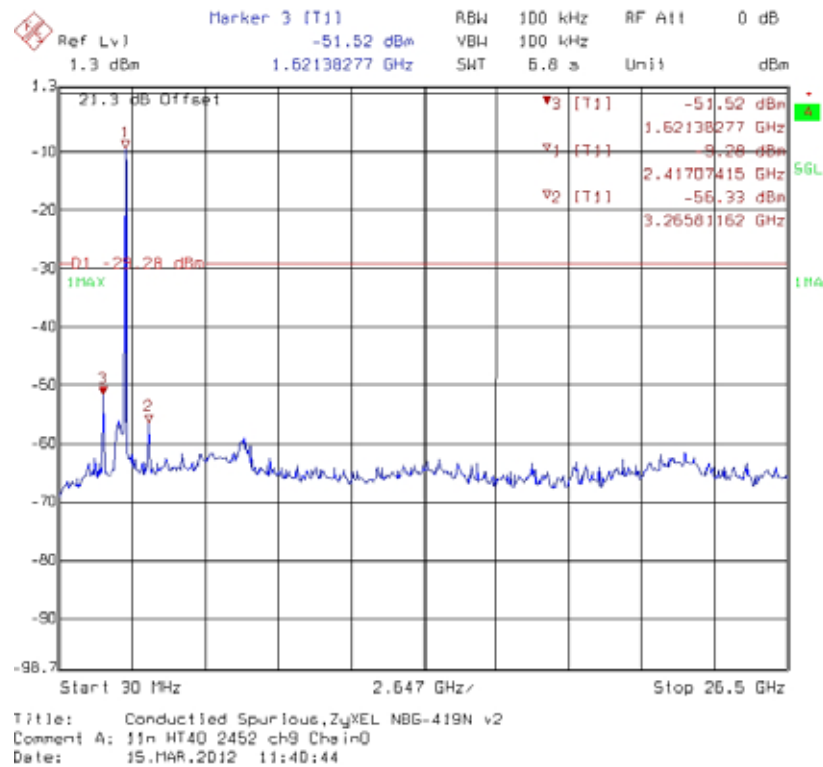
**SAYTEC 2 dBi Antenna: Chain 0: Conducted spurious @ 802.11n HT40 mode channel 3**



**SAYTEC 2 dBi Antenna: Chain 0: Conducted spurious @ 802.11n HT40 mode channel 6**



**SAYTEC 2 dBi Antenna: Chain 0: Conducted spurious @ 802.11n HT40 mode channel 9**



**SAYTEC 2 dBi Antenna: Chain 1: Conducted spurious @ 802.11n HT40 mode channel 3**

