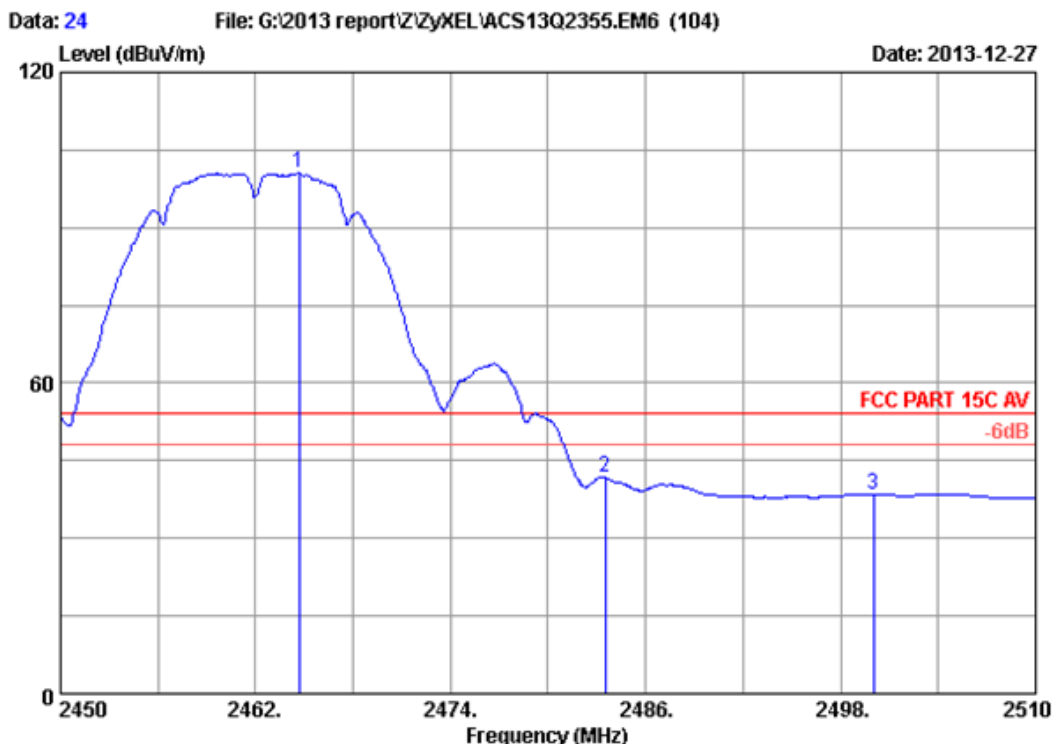


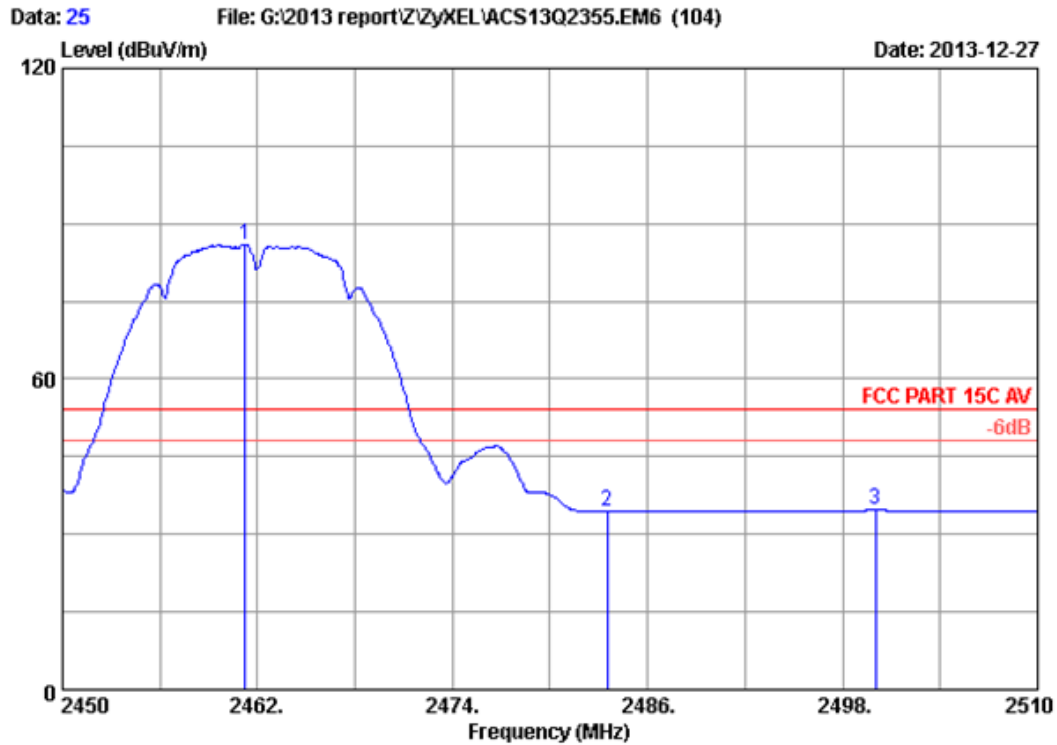


Site no. : 3m Chamber Data no. : 24  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N ADSL2+ 4-port Gateway with USB  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11b CH11 2462MHz Tx  
 M/N : AMG1312-T10B

|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>loss<br>(dB) | Amp.<br>Factor<br>(dB) | Reading<br>(dBuV) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark  |
|---|----------------|--------------------------|-----------------------|------------------------|-------------------|-------------------------------|--------------------|----------------|---------|
| 1 | 2464.700       | 28.32                    | 5.89                  | 35.70                  | 101.99            | 100.50                        | 54.00              | -46.50         | Average |
| 2 | 2483.500       | 28.36                    | 5.92                  | 35.70                  | 43.17             | 41.75                         | 54.00              | 12.25          | Average |
| 3 | 2500.000       | 28.40                    | 5.94                  | 35.70                  | 39.71             | 38.35                         | 54.00              | 15.65          | Average |

Remarks:

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

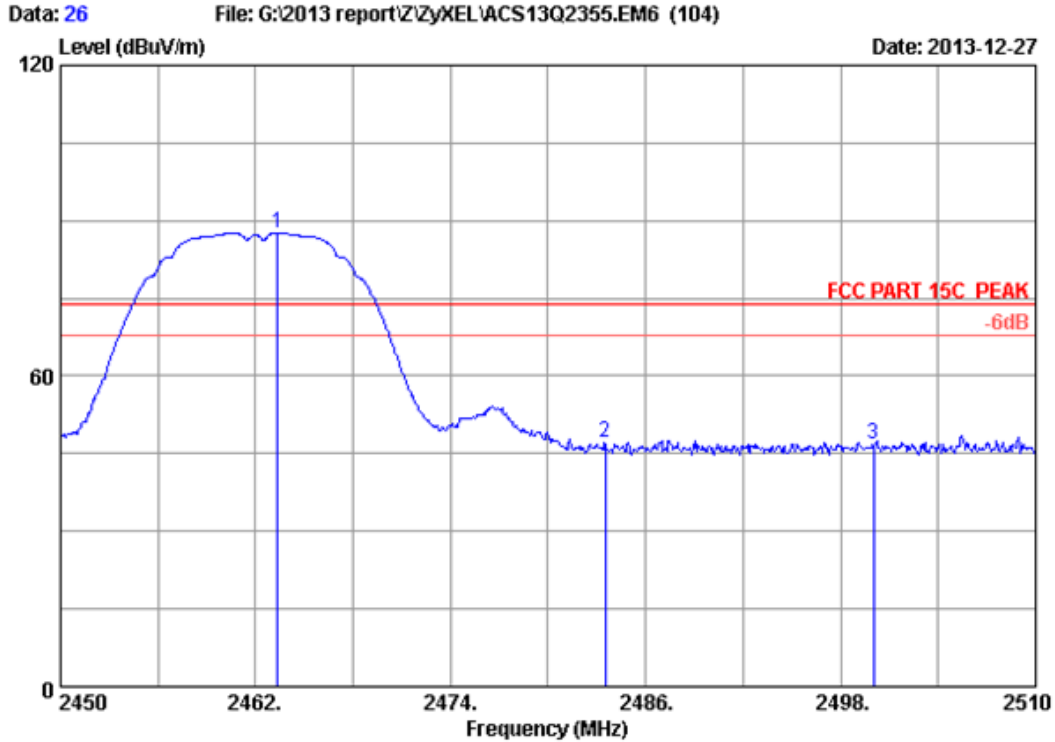


Site no. : 3m Chamber Data no. : 25  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N ADSL2+ 4-port Gateway with USB  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11b CH11 2462MHz Tx  
 M/N : AMG1312-T10B

|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>loss<br>(dB) | Amp.<br>Factor<br>(dB) | Reading<br>(dBuV) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark  |
|---|----------------|--------------------------|-----------------------|------------------------|-------------------|-------------------------------|--------------------|----------------|---------|
| 1 | 2461.220       | 28.31                    | 5.89                  | 35.70                  | 87.54             | 86.04                         | 54.00              | -32.04         | Average |
| 2 | 2483.500       | 28.36                    | 5.92                  | 35.70                  | 35.92             | 34.50                         | 54.00              | 19.50          | Average |
| 3 | 2500.000       | 28.40                    | 5.94                  | 35.70                  | 36.20             | 34.84                         | 54.00              | 19.16          | Average |

Remarks:

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

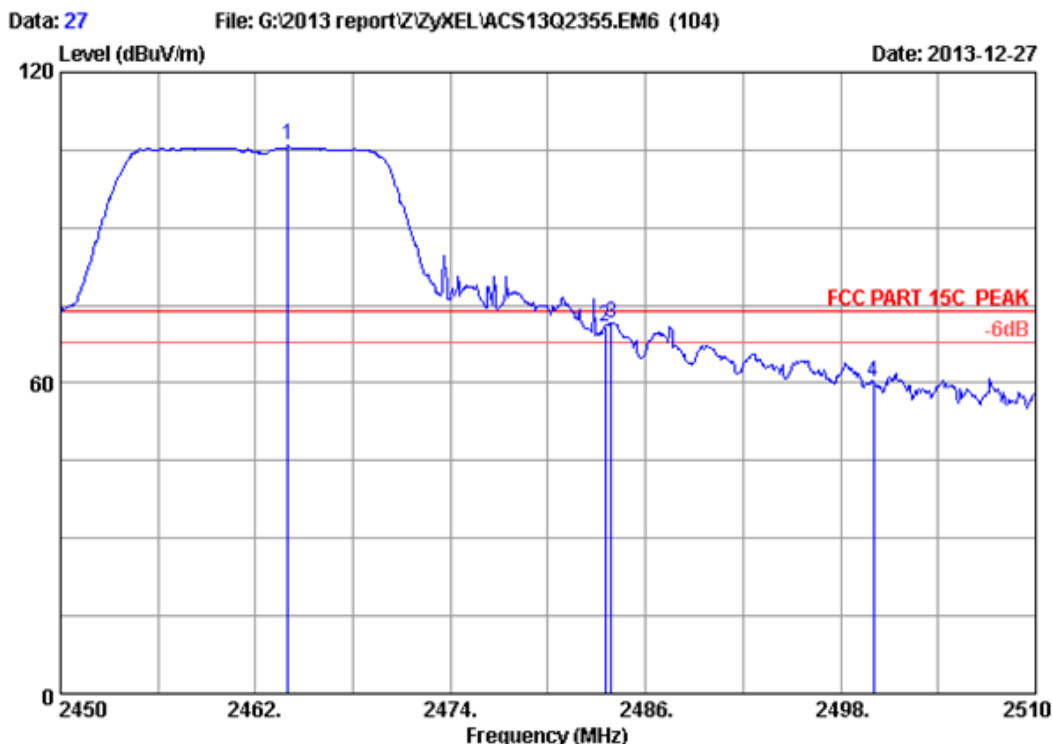


Site no. : 3m Chamber Data no. : 26  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N ADSL2+ 4-port Gateway with USB  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11b CH11 2462MHz Tx  
 M/N : AMG1312-T10B

|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>loss<br>(dB) | Amp.<br>Factor<br>(dB) | Reading<br>(dBUV) | Emission<br>Level<br>(dBUV/m) | Limits<br>(dBUV/m) | Margin<br>(dB) | Remark |
|---|----------------|--------------------------|-----------------------|------------------------|-------------------|-------------------------------|--------------------|----------------|--------|
| 1 | 2463.380       | 28.32                    | 5.89                  | 35.70                  | 89.15             | 87.66                         | 74.00              | -13.66         | Peak   |
| 2 | 2483.500       | 28.36                    | 5.92                  | 35.70                  | 48.49             | 47.07                         | 74.00              | 26.93          | Peak   |
| 3 | 2500.000       | 28.40                    | 5.94                  | 35.70                  | 48.15             | 46.79                         | 74.00              | 27.21          | Peak   |

Remarks:

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

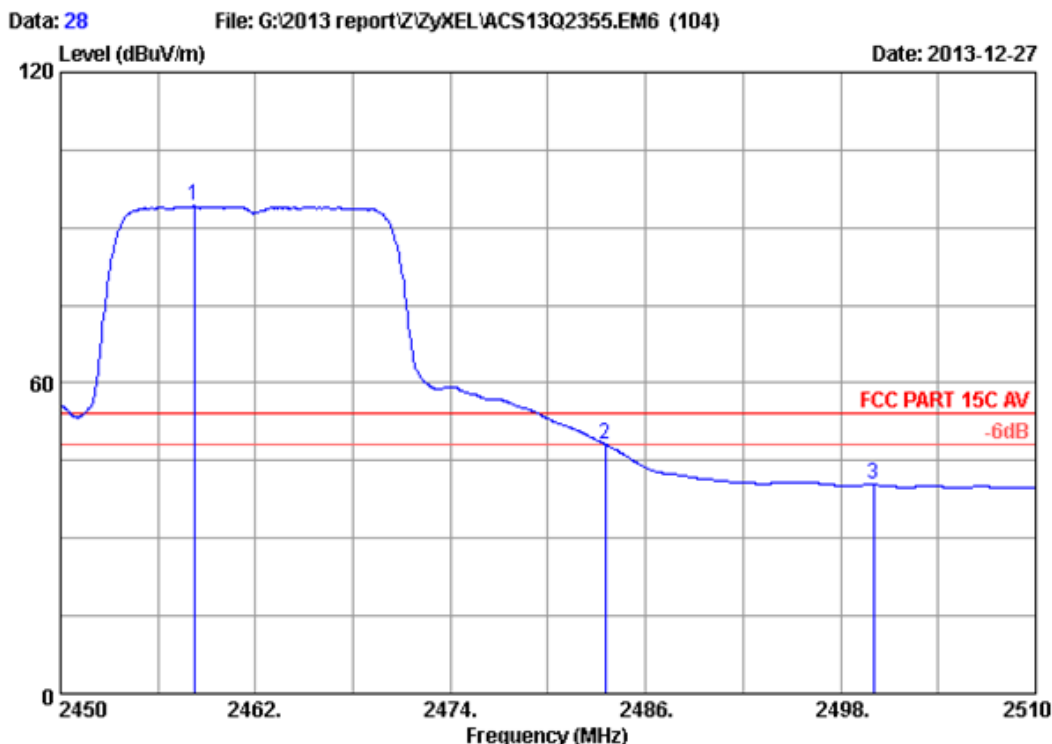


Site no. : 3m Chamber Data no. : 27  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N ADSL2+ 4-port Gateway with USB  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11g CH11 2462MHz Tx  
 M/N : AMG1312-T10B

|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>loss<br>(dB) | Amp.<br>Factor<br>(dB) | Reading<br>(dBuV) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark |
|---|----------------|--------------------------|-----------------------|------------------------|-------------------|-------------------------------|--------------------|----------------|--------|
| 1 | 2463.980       | 28.32                    | 5.89                  | 35.70                  | 107.42            | 105.93                        | 74.00              | -31.93         | Peak   |
| 2 | 2483.500       | 28.36                    | 5.92                  | 35.70                  | 72.37             | 70.95                         | 74.00              | 3.05           | Peak   |
| 3 | 2483.900       | 28.36                    | 5.92                  | 35.70                  | 72.99             | 71.57                         | 74.00              | 2.43           | Peak   |
| 4 | 2500.000       | 28.40                    | 5.94                  | 35.70                  | 61.68             | 60.32                         | 74.00              | 13.68          | Peak   |

Remarks:

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

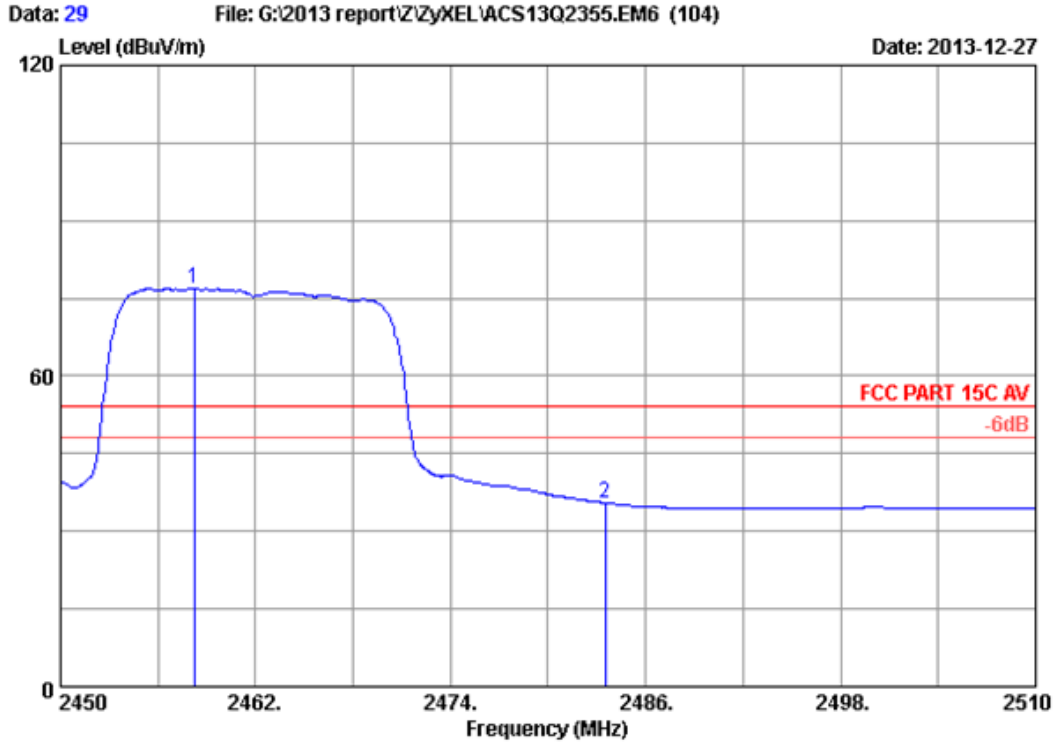


Site no. : 3m Chamber Data no. : 28  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N ADSL2+ 4-port Gateway with USB  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11g CH11 2462MHz Tx  
 M/N : AMG1312-T10B

|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>loss<br>(dB) | Amp.<br>Factor<br>(dB) | Reading<br>(dBuV) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark  |
|---|----------------|--------------------------|-----------------------|------------------------|-------------------|-------------------------------|--------------------|----------------|---------|
| 1 | 2458.220       | 28.31                    | 5.88                  | 35.70                  | 95.63             | 94.12                         | 54.00              | -40.12         | Average |
| 2 | 2483.500       | 28.36                    | 5.92                  | 35.70                  | 49.61             | 48.19                         | 54.00              | 5.81           | Average |
| 3 | 2500.000       | 28.40                    | 5.94                  | 35.70                  | 41.69             | 40.33                         | 54.00              | 13.67          | Average |

Remarks:

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

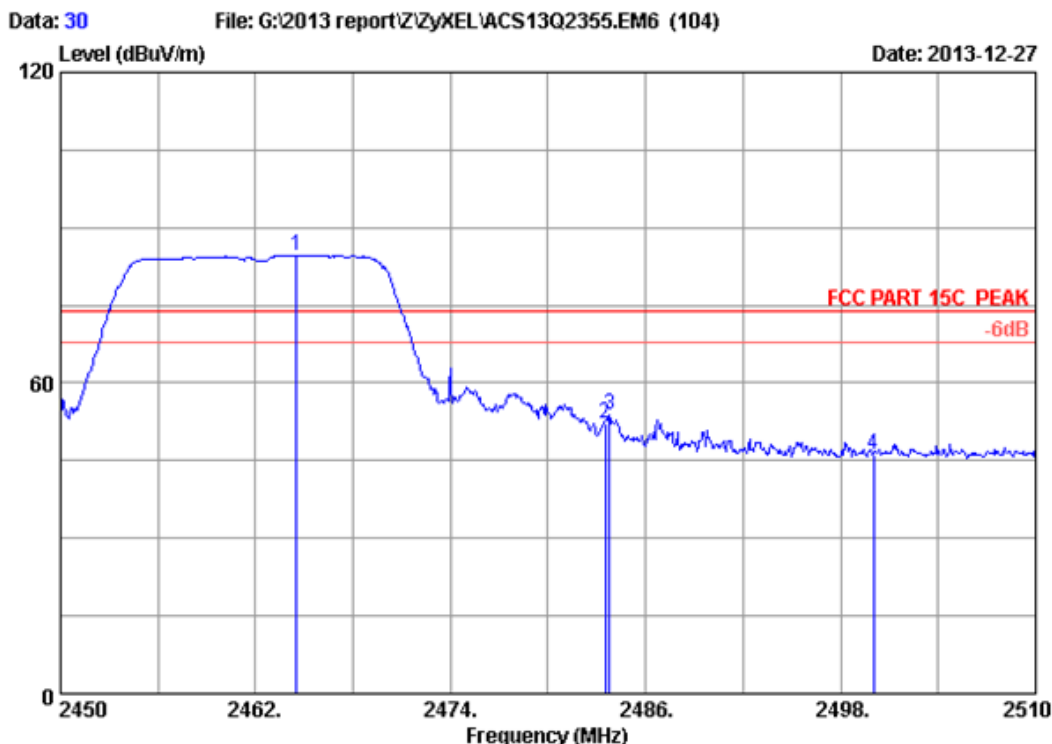


Site no. : 3m Chamber Data no. : 29  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N ADSL2+ 4-port Gateway with USB  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11g CH11 2462MHz Tx  
 M/N : AMG1312-T10B

|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>loss<br>(dB) | Amp.<br>Factor<br>(dB) | Reading<br>(dBuV) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark  |
|---|----------------|--------------------------|-----------------------|------------------------|-------------------|-------------------------------|--------------------|----------------|---------|
| 1 | 2458.220       | 28.31                    | 5.88                  | 35.70                  | 78.43             | 76.92                         | 54.00              | -22.92         | Average |
| 2 | 2483.500       | 28.36                    | 5.92                  | 35.70                  | 36.90             | 35.48                         | 54.00              | 18.52          | Average |

Remarks:

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

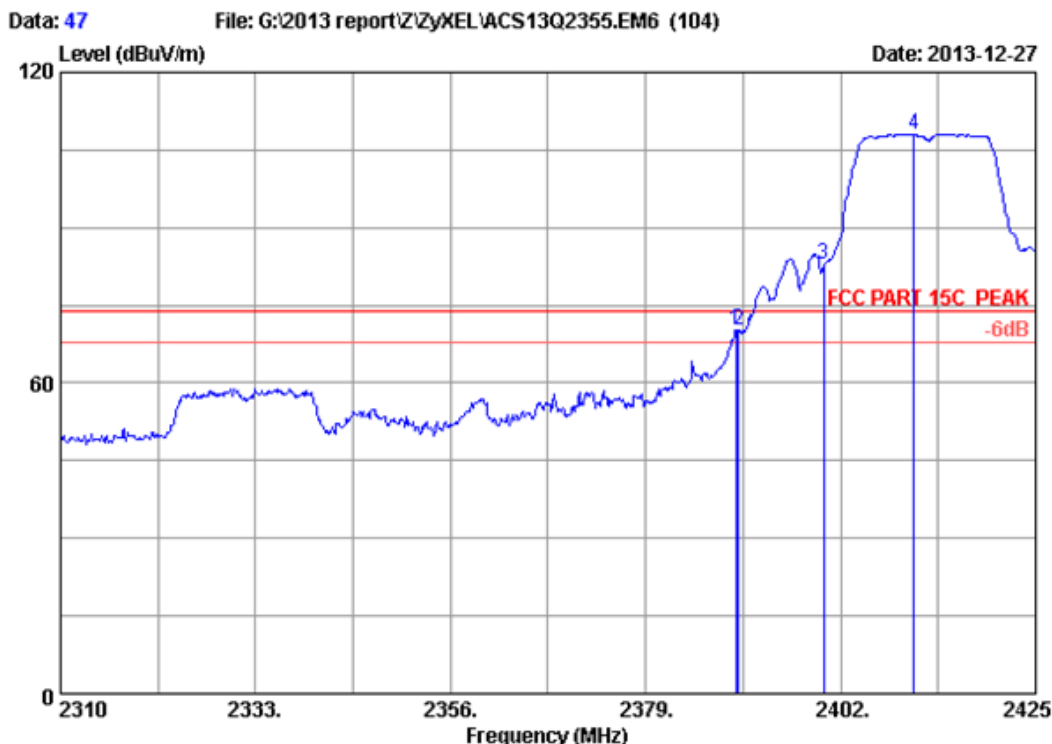


Site no. : 3m Chamber Data no. : 30  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N ADSL2+ 4-port Gateway with USB  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11g CH11 2462MHz Tx  
 M/N : AMG1312-T10B

|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>loss<br>(dB) | Amp.<br>Factor<br>(dB) | Reading<br>(dBuV) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark |
|---|----------------|--------------------------|-----------------------|------------------------|-------------------|-------------------------------|--------------------|----------------|--------|
| 1 | 2464.520       | 28.32                    | 5.89                  | 35.70                  | 86.16             | 84.67                         | 74.00              | -10.67         | Peak   |
| 2 | 2483.500       | 28.36                    | 5.92                  | 35.70                  | 53.50             | 52.08                         | 74.00              | 21.92          | Peak   |
| 3 | 2483.780       | 28.36                    | 5.92                  | 35.70                  | 55.37             | 53.95                         | 74.00              | 20.05          | Peak   |
| 4 | 2500.000       | 28.40                    | 5.94                  | 35.70                  | 47.57             | 46.21                         | 74.00              | 27.79          | Peak   |

Remarks:

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

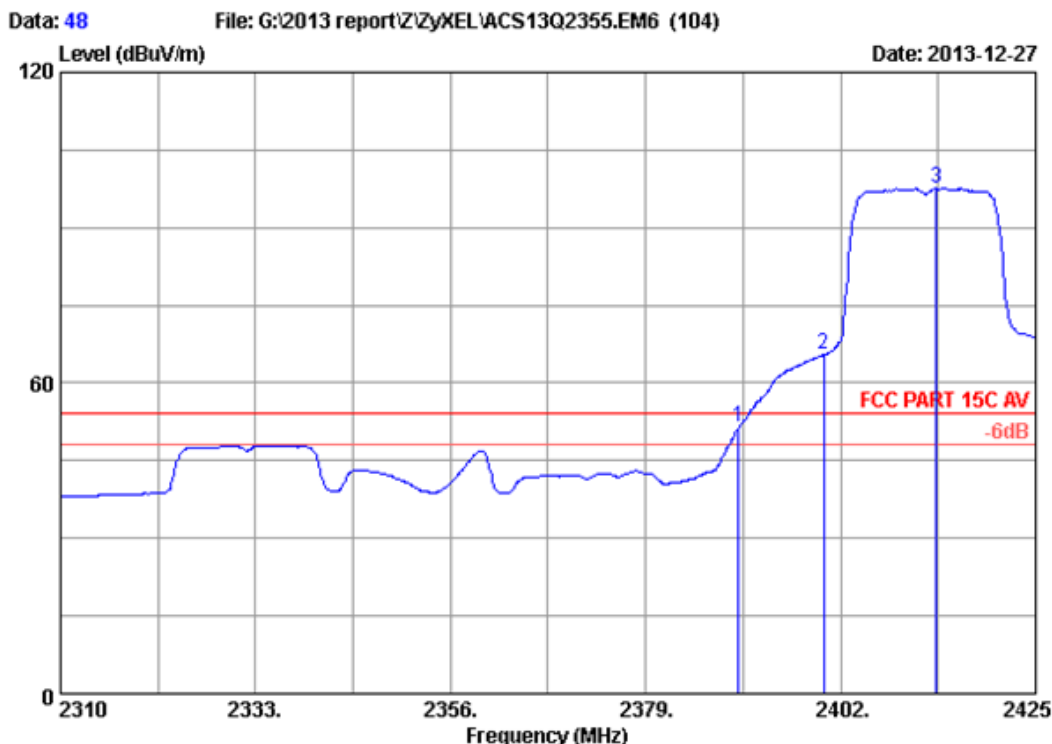


Site no. : 3m Chamber Data no. : 47  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N ADSL2+ 4-port Gateway with USB  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11g CH1 2412MHz Tx  
 M/N : AMG1312-T10B

|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>loss<br>(dB) | Amp.<br>Factor<br>(dB) | Reading<br>(dBuV) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark |
|---|----------------|--------------------------|-----------------------|------------------------|-------------------|-------------------------------|--------------------|----------------|--------|
| 1 | 2389.695       | 28.16                    | 5.78                  | 35.70                  | 71.95             | 70.19                         | 74.00              | 3.81           | Peak   |
| 2 | 2390.000       | 28.16                    | 5.78                  | 35.70                  | 71.83             | 70.07                         | 74.00              | 3.93           | Peak   |
| 3 | 2400.000       | 28.18                    | 5.80                  | 35.70                  | 84.57             | 82.85                         | 74.00              | -8.85          | Peak   |
| 4 | 2410.625       | 28.20                    | 5.81                  | 35.70                  | 109.76            | 108.07                        | 74.00              | -34.07         | Peak   |

Remarks:

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

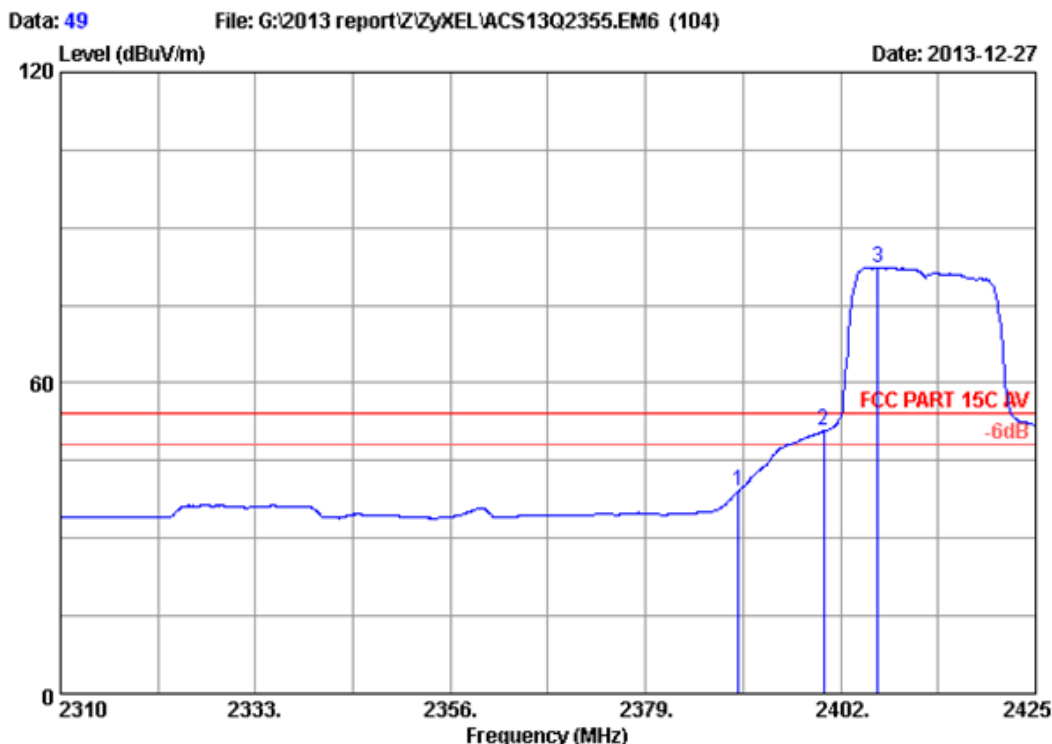


Site no. : 3m Chamber Data no. : 48  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N ADSL2+ 4-port Gateway with USB  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11g CH1 2412MHz Tx  
 M/N : AMG1312-T10B

|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>loss<br>(dB) | Amp.<br>Factor<br>(dB) | Reading<br>(dBuV) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark  |
|---|----------------|--------------------------|-----------------------|------------------------|-------------------|-------------------------------|--------------------|----------------|---------|
| 1 | 2390.000       | 28.16                    | 5.78                  | 35.70                  | 53.14             | 51.38                         | 54.00              | 2.62           | Average |
| 2 | 2400.000       | 28.18                    | 5.80                  | 35.70                  | 67.28             | 65.56                         | 54.00              | -11.56         | Average |
| 3 | 2413.270       | 28.21                    | 5.82                  | 35.70                  | 99.28             | 97.61                         | 54.00              | -43.61         | Average |

**Remarks:**

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

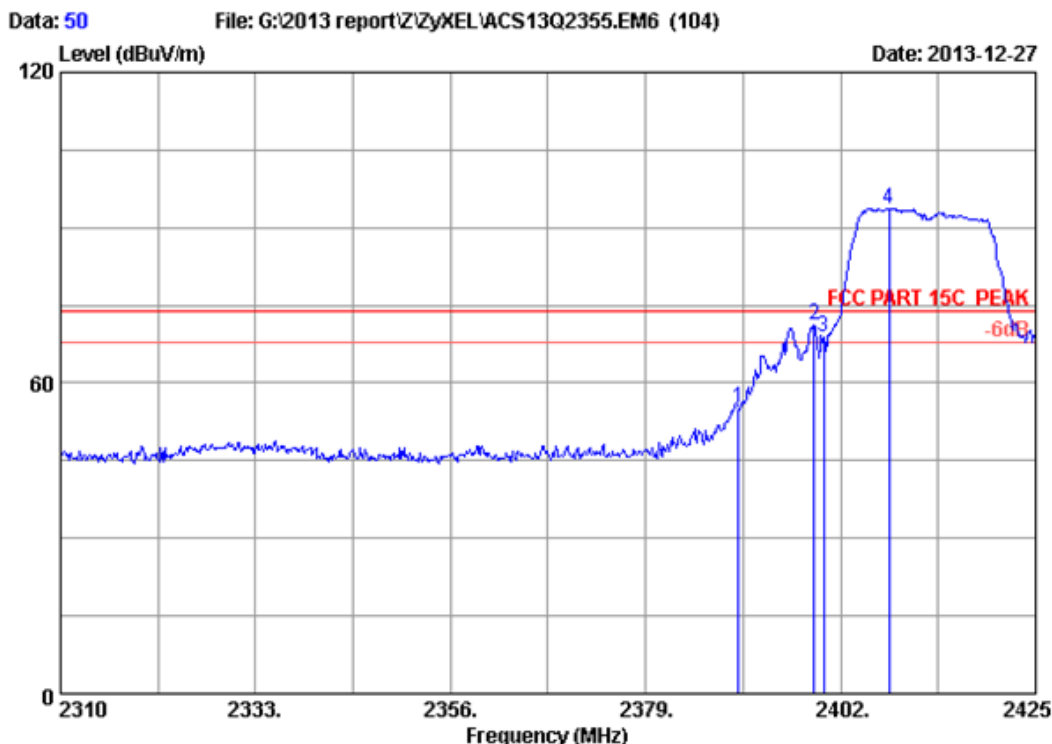


Site no. : 3m Chamber Data no. : 49  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N ADSL2+ 4-port Gateway with USB  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11g CH1 2412MHz Tx  
 M/N : AMG1312-T10B

|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>loss<br>(dB) | Amp.<br>Factor<br>(dB) | Reading<br>(dBuV) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark  |
|---|----------------|--------------------------|-----------------------|------------------------|-------------------|-------------------------------|--------------------|----------------|---------|
| 1 | 2390.000       | 28.16                    | 5.78                  | 35.70                  | 40.94             | 39.18                         | 54.00              | 14.82          | Average |
| 2 | 2400.000       | 28.18                    | 5.80                  | 35.70                  | 52.45             | 50.73                         | 54.00              | 3.27           | Average |
| 3 | 2406.370       | 28.19                    | 5.81                  | 35.70                  | 84.03             | 82.33                         | 54.00              | -28.33         | Average |

Remarks:

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

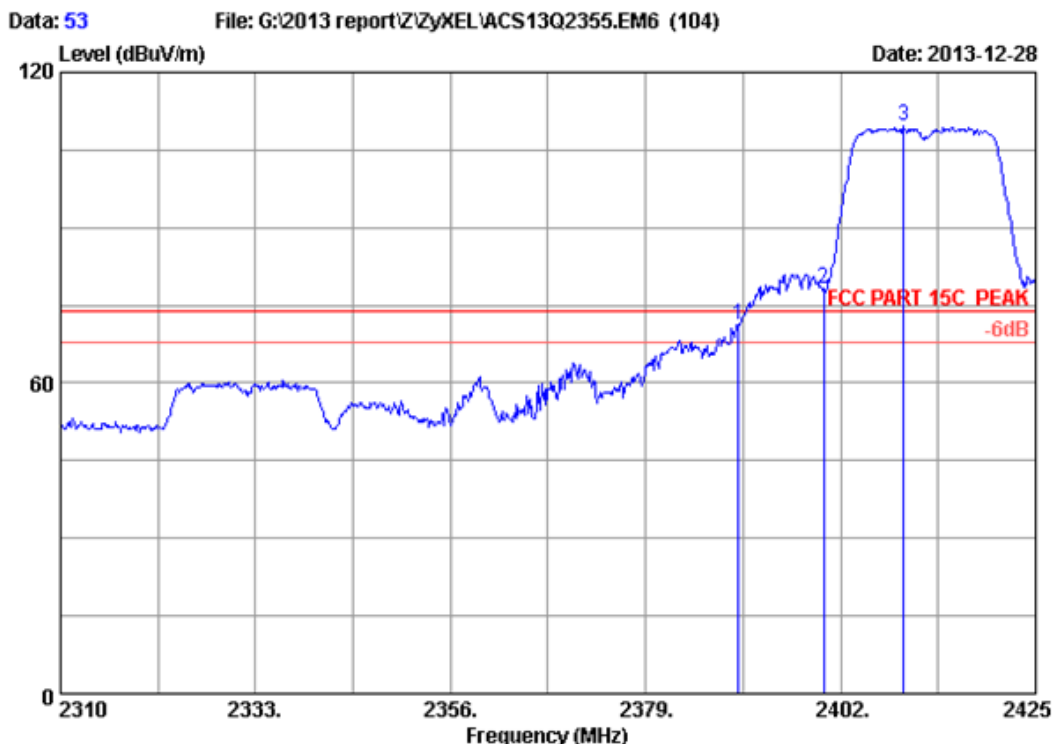


Site no. : 3m Chamber Data no. : 50  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N ADSL2+ 4-port Gateway with USB  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11g CH1 2412MHz Tx  
 M/N : AMG1312-T10B

|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>loss<br>(dB) | Amp.<br>Factor<br>(dB) | Reading<br>(dBuV) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark |
|---|----------------|--------------------------|-----------------------|------------------------|-------------------|-------------------------------|--------------------|----------------|--------|
| 1 | 2390.000       | 28.16                    | 5.78                  | 35.70                  | 57.07             | 55.31                         | 74.00              | 18.69          | Peak   |
| 2 | 2398.895       | 28.18                    | 5.80                  | 35.70                  | 73.04             | 71.32                         | 74.00              | 2.68           | Peak   |
| 3 | 2400.000       | 28.18                    | 5.80                  | 35.70                  | 70.48             | 68.76                         | 74.00              | 5.24           | Peak   |
| 4 | 2407.750       | 28.20                    | 5.81                  | 35.70                  | 95.40             | 93.71                         | 74.00              | -19.71         | Peak   |

Remarks:

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

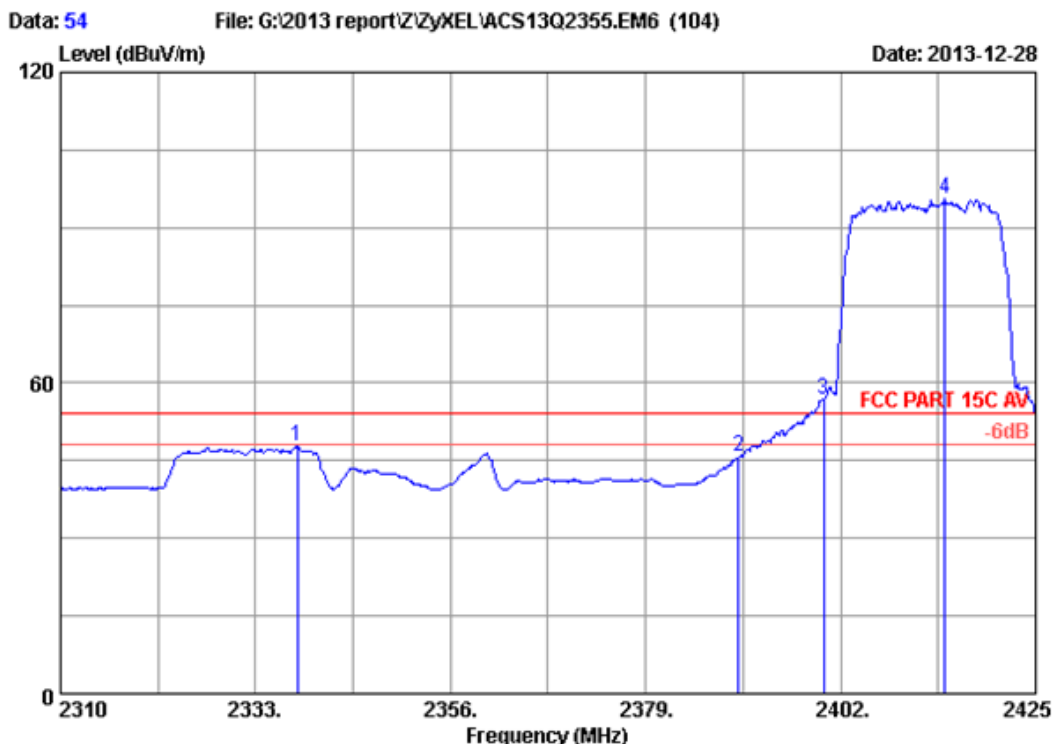


Site no. : 3m Chamber Data no. : 53  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N ADSL2+ 4-port Gateway with USB  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11n HT20 CH1 2412MHz Tx  
 M/N : AMG1312-T10B

|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>loss<br>(dB) | Amp.<br>Factor<br>(dB) | Reading<br>(dBuV) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark |
|---|----------------|--------------------------|-----------------------|------------------------|-------------------|-------------------------------|--------------------|----------------|--------|
| 1 | 2390.000       | 28.16                    | 5.78                  | 35.70                  | 73.07             | 71.31                         | 74.00              | 2.69           | Peak   |
| 2 | 2400.000       | 28.18                    | 5.80                  | 35.70                  | 80.00             | 78.28                         | 74.00              | -4.28          | Peak   |
| 3 | 2409.475       | 28.20                    | 5.81                  | 35.70                  | 111.19            | 109.50                        | 74.00              | -35.50         | Peak   |

### Remarks:

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

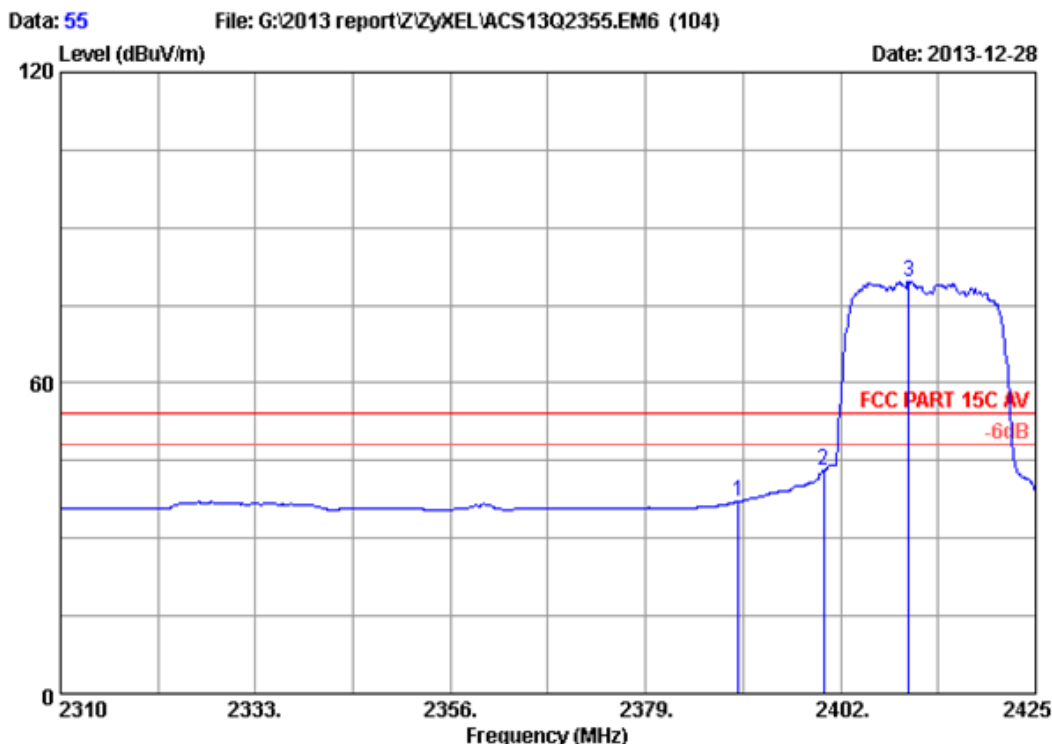


Site no. : 3m Chamber Data no. : 54  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N ADSL2+ 4-port Gateway with USB  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11n HT20 CH1 2412MHz Tx  
 M/N : AMG1312-T10B

|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>loss<br>(dB) | Amp.<br>Factor<br>(dB) | Reading<br>(dBuV) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark  |
|---|----------------|--------------------------|-----------------------|------------------------|-------------------|-------------------------------|--------------------|----------------|---------|
| 1 | 2337.945       | 28.04                    | 5.71                  | 35.70                  | 49.74             | 47.79                         | 54.00              | 6.21           | Average |
| 2 | 2390.000       | 28.16                    | 5.78                  | 35.70                  | 47.48             | 45.72                         | 54.00              | 8.28           | Average |
| 3 | 2400.000       | 28.18                    | 5.80                  | 35.70                  | 58.67             | 56.95                         | 54.00              | -2.95          | Average |
| 4 | 2414.305       | 28.21                    | 5.82                  | 35.70                  | 97.19             | 95.52                         | 54.00              | -41.52         | Average |

### Remarks:

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

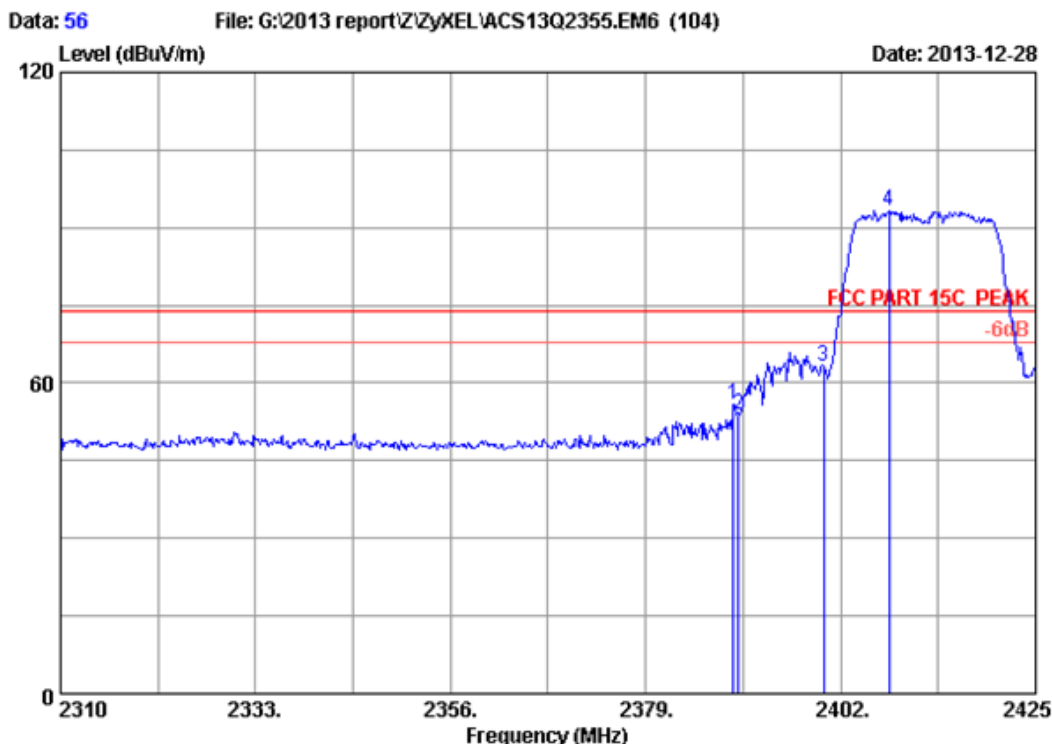


Site no. : 3m Chamber Data no. : 55  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N ADSL2+ 4-port Gateway with USB  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11n HT20 CH1 2412MHz Tx  
 M/N : AMG1312-T10B

|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>loss<br>(dB) | Amp.<br>Factor<br>(dB) | Reading<br>(dBuV) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark  |
|---|----------------|--------------------------|-----------------------|------------------------|-------------------|-------------------------------|--------------------|----------------|---------|
| 1 | 2390.000       | 28.16                    | 5.78                  | 35.70                  | 38.92             | 37.16                         | 54.00              | 16.84          | Average |
| 2 | 2400.000       | 28.18                    | 5.80                  | 35.70                  | 44.88             | 43.16                         | 54.00              | 10.84          | Average |
| 3 | 2410.050       | 28.20                    | 5.81                  | 35.70                  | 81.32             | 79.63                         | 54.00              | -25.63         | Average |

**Remarks:**

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

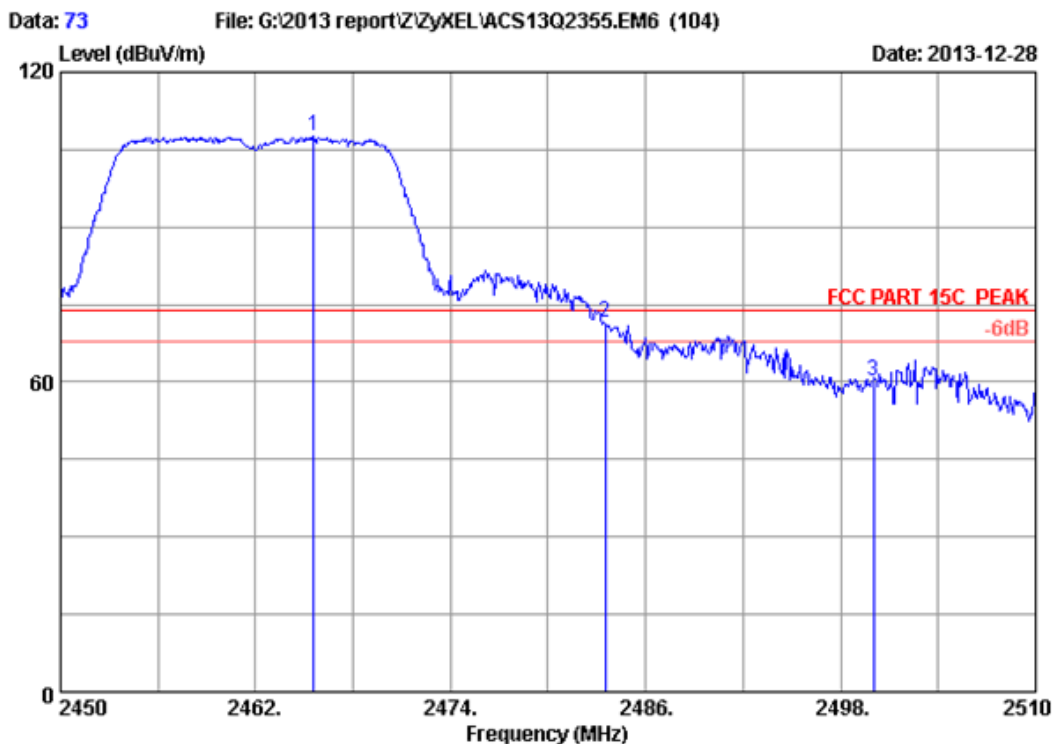


Site no. : 3m Chamber Data no. : 56  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N ADSL2+ 4-port Gateway with USB  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11n HT20 CH1 2412MHz Tx  
 M/N : AMG1312-T10B

|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>loss<br>(dB) | Amp.<br>Factor<br>(dB) | Reading<br>(dBUV) | Emission<br>Level<br>(dBUV/m) | Limits<br>(dBUV/m) | Margin<br>(dB) | Remark |
|---|----------------|--------------------------|-----------------------|------------------------|-------------------|-------------------------------|--------------------|----------------|--------|
| 1 | 2389.350       | 28.16                    | 5.78                  | 35.70                  | 57.57             | 55.81                         | 74.00              | 18.19          | Peak   |
| 2 | 2390.000       | 28.16                    | 5.78                  | 35.70                  | 55.72             | 53.96                         | 74.00              | 20.04          | Peak   |
| 3 | 2400.000       | 28.18                    | 5.80                  | 35.70                  | 64.92             | 63.20                         | 74.00              | 10.80          | Peak   |
| 4 | 2407.750       | 28.20                    | 5.81                  | 35.70                  | 94.98             | 93.29                         | 74.00              | -19.29         | Peak   |

### Remarks:

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

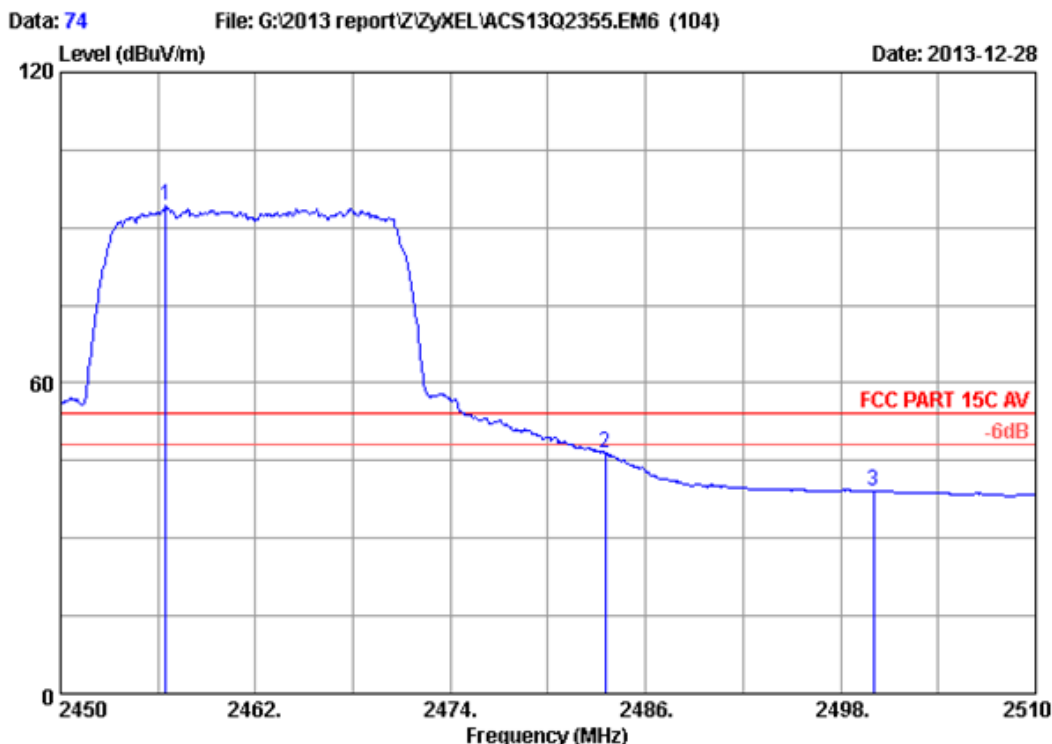


Site no. : 3m Chamber Data no. : 73  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N ADSL2+ 4-port Gateway with USB  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11n HT20 CH11 2462MHz Tx  
 M/N : AMG1312-T10B

|   | Freq.    | Ant.   | Cable | Amp.   |         | Emission |          |        |        |
|---|----------|--------|-------|--------|---------|----------|----------|--------|--------|
|   | (MHz)    | Factor | loss  | Factor | Reading | Level    | Limits   | Margin | Remark |
|   |          | (dB/m) | (dB)  | (dB)   | (dBuV)  | (dBuV/m) | (dBuV/m) | (dB)   |        |
| 1 | 2465.600 | 28.32  | 5.89  | 35.70  | 108.96  | 107.47   | 74.00    | -33.47 | Peak   |
| 2 | 2483.500 | 28.36  | 5.92  | 35.70  | 72.98   | 71.56    | 74.00    | 2.44   | Peak   |
| 3 | 2500.000 | 28.40  | 5.94  | 35.70  | 61.65   | 60.29    | 74.00    | 13.71  | Peak   |

Remarks:

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

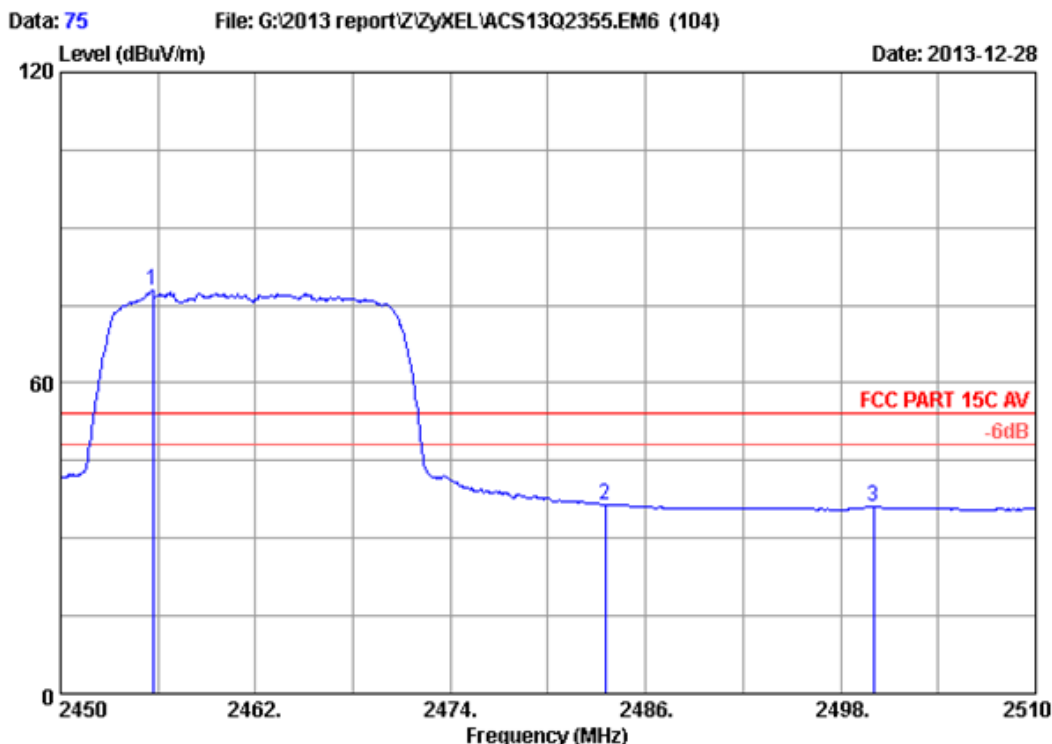


Site no. : 3m Chamber Data no. : 74  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N ADSL2+ 4-port Gateway with USB  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11n HT20 CH11 2462MHz Tx  
 M/N : AMG1312-T10B

|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>loss<br>(dB) | Amp.<br>Factor<br>(dB) | Reading<br>(dBuV) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark  |
|---|----------------|--------------------------|-----------------------|------------------------|-------------------|-------------------------------|--------------------|----------------|---------|
| 1 | 2456.480       | 28.30                    | 5.88                  | 35.70                  | 95.85             | 94.33                         | 54.00              | -40.33         | Average |
| 2 | 2483.500       | 28.36                    | 5.92                  | 35.70                  | 48.00             | 46.58                         | 54.00              | 7.42           | Average |
| 3 | 2500.000       | 28.40                    | 5.94                  | 35.70                  | 40.50             | 39.14                         | 54.00              | 14.86          | Average |

Remarks:

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

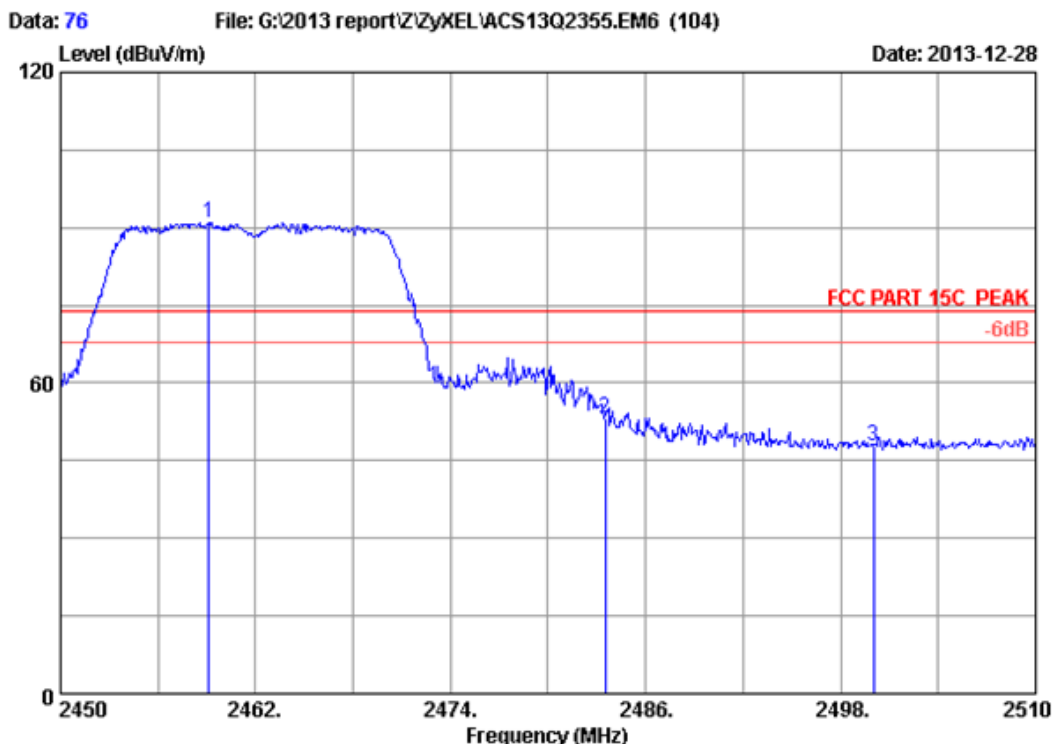


Site no. : 3m Chamber Data no. : 75  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N ADSL2+ 4-port Gateway with USB  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11n HT20 CH11 2462MHz Tx  
 M/N : AMG1312-T10B

|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>loss<br>(dB) | Amp.<br>Factor<br>(dB) | Reading<br>(dBuV) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark  |
|---|----------------|--------------------------|-----------------------|------------------------|-------------------|-------------------------------|--------------------|----------------|---------|
| 1 | 2455.700       | 28.30                    | 5.88                  | 35.70                  | 79.54             | 78.02                         | 54.00              | -24.02         | Average |
| 2 | 2483.500       | 28.36                    | 5.92                  | 35.70                  | 37.92             | 36.50                         | 54.00              | 17.50          | Average |
| 3 | 2500.000       | 28.40                    | 5.94                  | 35.70                  | 37.58             | 36.22                         | 54.00              | 17.78          | Average |

Remarks:

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

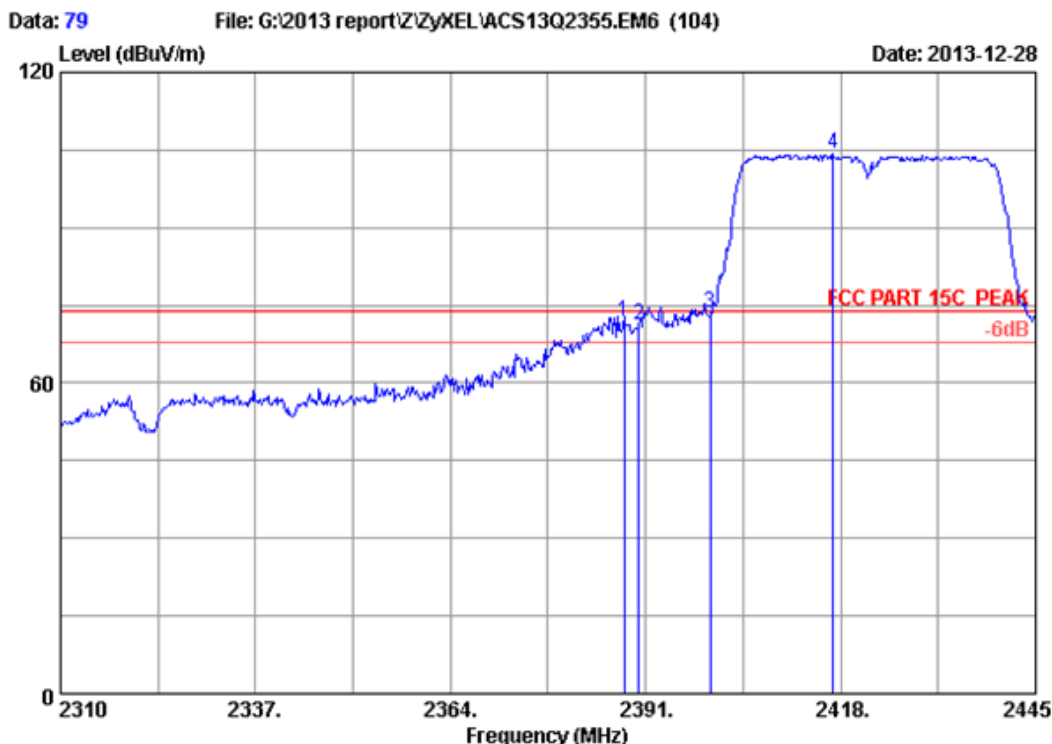


Site no. : 3m Chamber Data no. : 76  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N ADSL2+ 4-port Gateway with USB  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11n HT20 CH11 2462MHz Tx  
 M/N : AMG1312-T10B

|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>loss<br>(dB) | Amp.<br>Factor<br>(dB) | Reading<br>(dBUV) | Emission<br>Level<br>(dBUV/m) | Limits<br>(dBUV/m) | Margin<br>(dB) | Remark |
|---|----------------|--------------------------|-----------------------|------------------------|-------------------|-------------------------------|--------------------|----------------|--------|
| 1 | 2459.120       | 28.31                    | 5.88                  | 35.70                  | 92.40             | 90.89                         | 74.00              | -16.89         | Peak   |
| 2 | 2483.500       | 28.36                    | 5.92                  | 35.70                  | 54.46             | 53.04                         | 74.00              | 20.96          | Peak   |
| 3 | 2500.000       | 28.40                    | 5.94                  | 35.70                  | 49.18             | 47.82                         | 74.00              | 26.18          | Peak   |

**Remarks:**

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

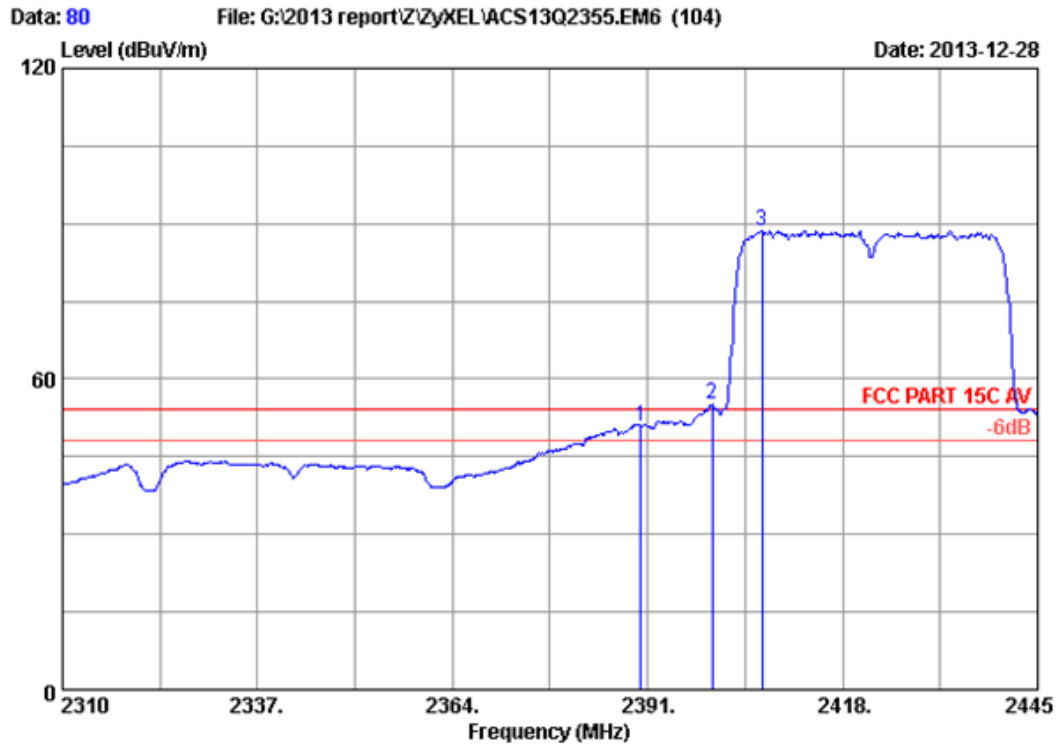


Site no. : 3m Chamber Data no. : 79  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N ADSL2+ 4-port Gateway with USB  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11n HT40 CH1 2422MHz Tx  
 M/N : AMG1312-T10B

|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>loss<br>(dB) | Amp.<br>Factor<br>(dB) | Reading<br>(dBUV) | Emission<br>Level<br>(dBUV/m) | Limits<br>(dBUV/m) | Margin<br>(dB) | Remark |
|---|----------------|--------------------------|-----------------------|------------------------|-------------------|-------------------------------|--------------------|----------------|--------|
| 1 | 2388.030       | 28.15                    | 5.78                  | 35.70                  | 73.58             | 71.81                         | 74.00              | 2.19           | Peak   |
| 2 | 2390.000       | 28.16                    | 5.78                  | 35.70                  | 72.84             | 71.08                         | 74.00              | 2.92           | Peak   |
| 3 | 2400.000       | 28.18                    | 5.80                  | 35.70                  | 75.12             | 73.40                         | 74.00              | 0.60           | Peak   |
| 4 | 2416.920       | 28.22                    | 5.82                  | 35.70                  | 105.82            | 104.16                        | 74.00              | -30.16         | Peak   |

### Remarks:

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

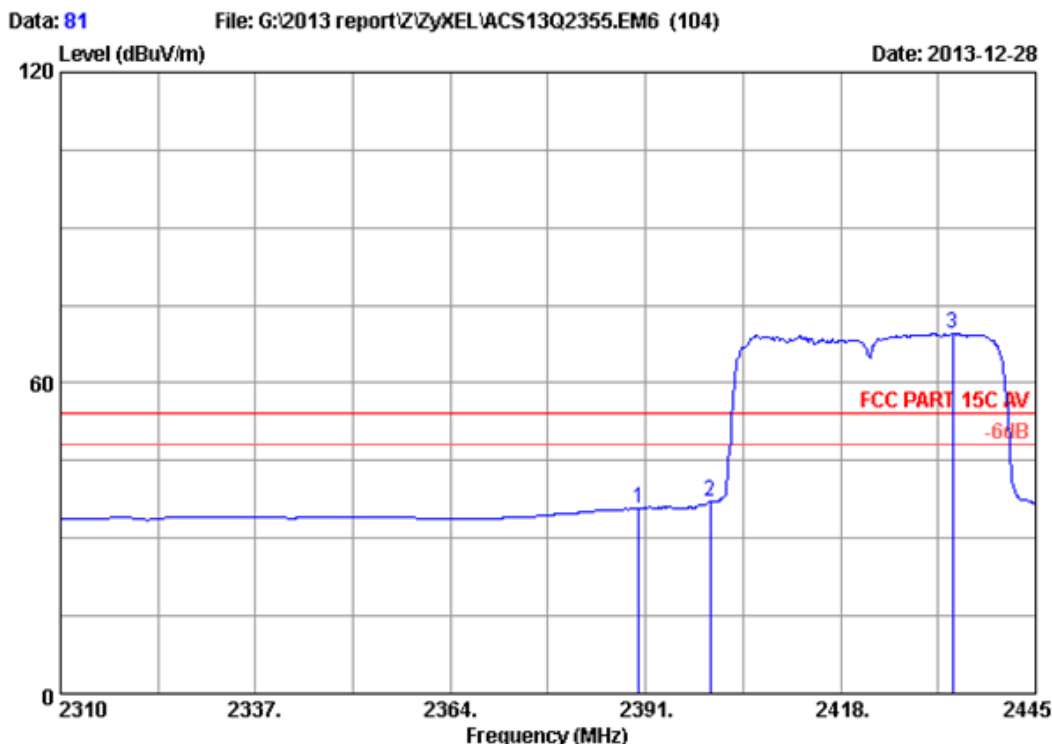


Site no. : 3m Chamber Data no. : 80  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N ADSL2+ 4-port Gateway with USB  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11n HT40 CH1 2422MHz Tx  
 M/N : AMG1312-T10B

|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>loss<br>(dB) | Amp.<br>Factor<br>(dB) | Reading<br>(dBUV) | Emission<br>Level<br>(dBUV/m) | Limits<br>(dBUV/m) | Margin<br>(dB) | Remark  |
|---|----------------|--------------------------|-----------------------|------------------------|-------------------|-------------------------------|--------------------|----------------|---------|
| 1 | 2390.000       | 28.16                    | 5.78                  | 35.70                  | 52.51             | 50.75                         | 54.00              | 3.25           | Average |
| 2 | 2400.000       | 28.18                    | 5.80                  | 35.70                  | 56.72             | 55.00                         | 54.00              | -1.00          | Average |
| 3 | 2406.795       | 28.19                    | 5.81                  | 35.70                  | 90.31             | 88.61                         | 54.00              | -34.61         | Average |

Remarks:

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

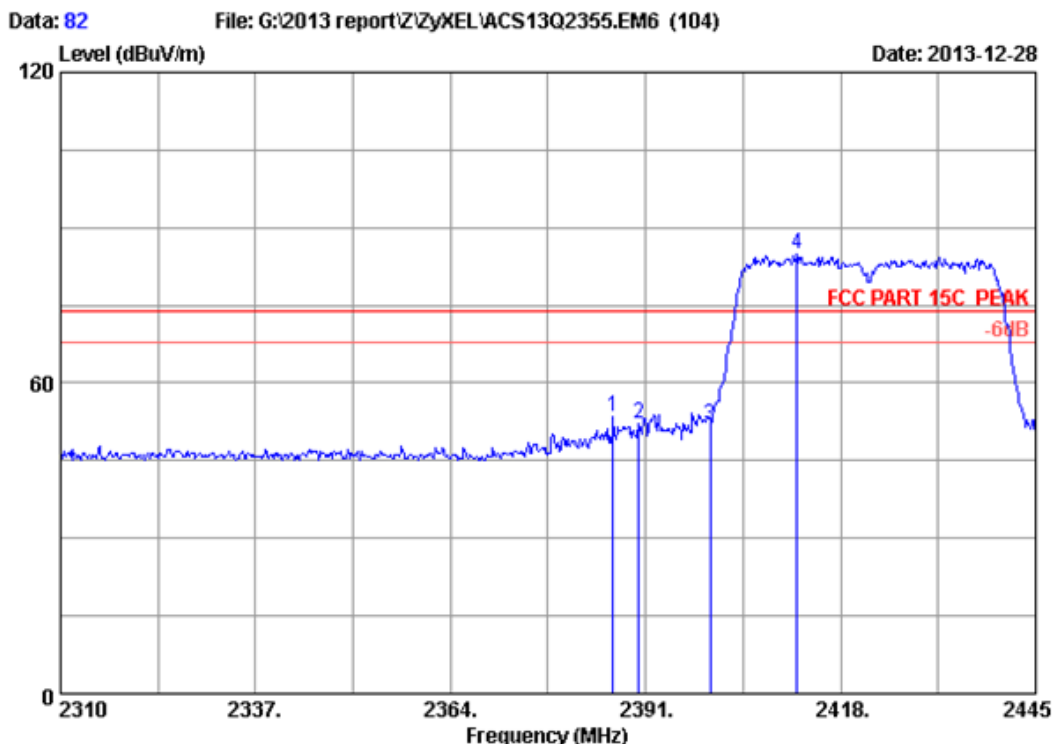


Site no. : 3m Chamber Data no. : 81  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N ADSL2+ 4-port Gateway with USB  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11n HT40 CH1 2422MHz Tx  
 M/N : AMG1312-T10B

|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>loss<br>(dB) | Amp.<br>Factor<br>(dB) | Reading<br>(dBuV) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark  |
|---|----------------|--------------------------|-----------------------|------------------------|-------------------|-------------------------------|--------------------|----------------|---------|
| 1 | 2390.000       | 28.16                    | 5.78                  | 35.70                  | 37.62             | 35.86                         | 54.00              | 18.14          | Average |
| 2 | 2400.000       | 28.18                    | 5.80                  | 35.70                  | 38.85             | 37.13                         | 54.00              | 16.87          | Average |
| 3 | 2433.525       | 28.25                    | 5.85                  | 35.70                  | 71.19             | 69.59                         | 54.00              | -15.59         | Average |

Remarks:

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

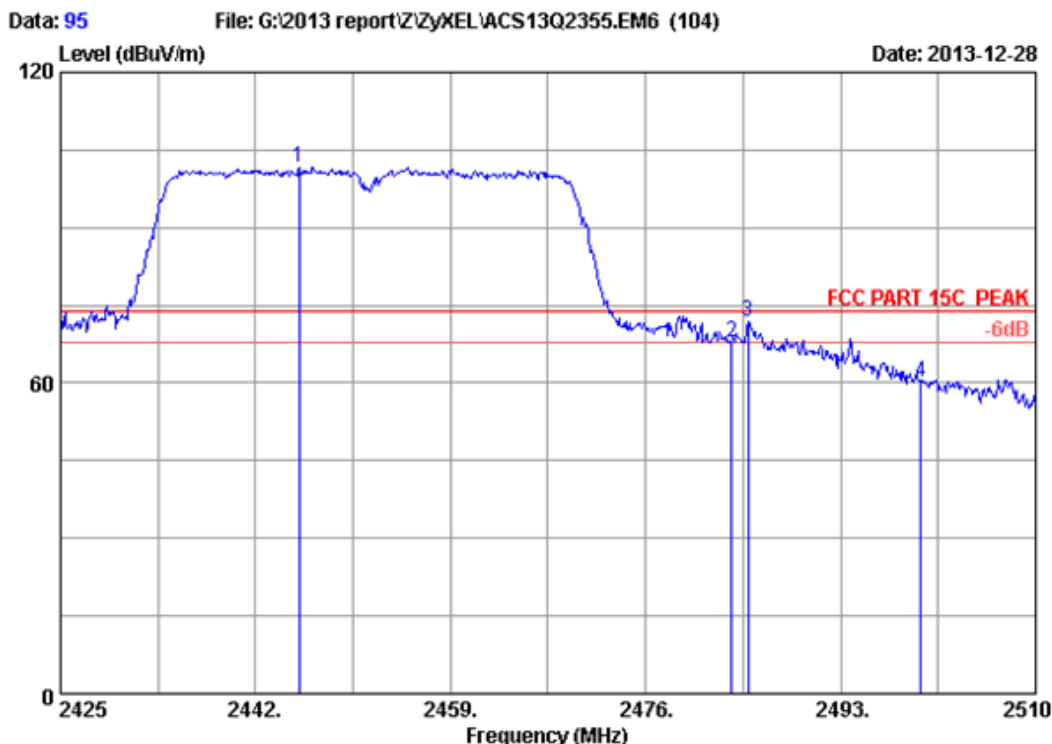


Site no. : 3m Chamber Data no. : 82  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N ADSL2+ 4-port Gateway with USB  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11n HT40 CH1 2422MHz Tx  
 M/N : AMG1312-T10B

|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>loss<br>(dB) | Amp.<br>Factor<br>(dB) | Reading<br>(dBUV) | Emission<br>Level<br>(dBUV/m) | Limits<br>(dBUV/m) | Margin<br>(dB) | Remark |
|---|----------------|--------------------------|-----------------------|------------------------|-------------------|-------------------------------|--------------------|----------------|--------|
| 1 | 2386.545       | 28.15                    | 5.78                  | 35.70                  | 55.29             | 53.52                         | 74.00              | 20.48          | Peak   |
| 2 | 2390.000       | 28.16                    | 5.78                  | 35.70                  | 53.91             | 52.15                         | 74.00              | 21.85          | Peak   |
| 3 | 2400.000       | 28.18                    | 5.80                  | 35.70                  | 53.47             | 51.75                         | 74.00              | 22.25          | Peak   |
| 4 | 2411.925       | 28.21                    | 5.81                  | 35.70                  | 86.58             | 84.90                         | 74.00              | -10.90         | Peak   |

**Remarks:**

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

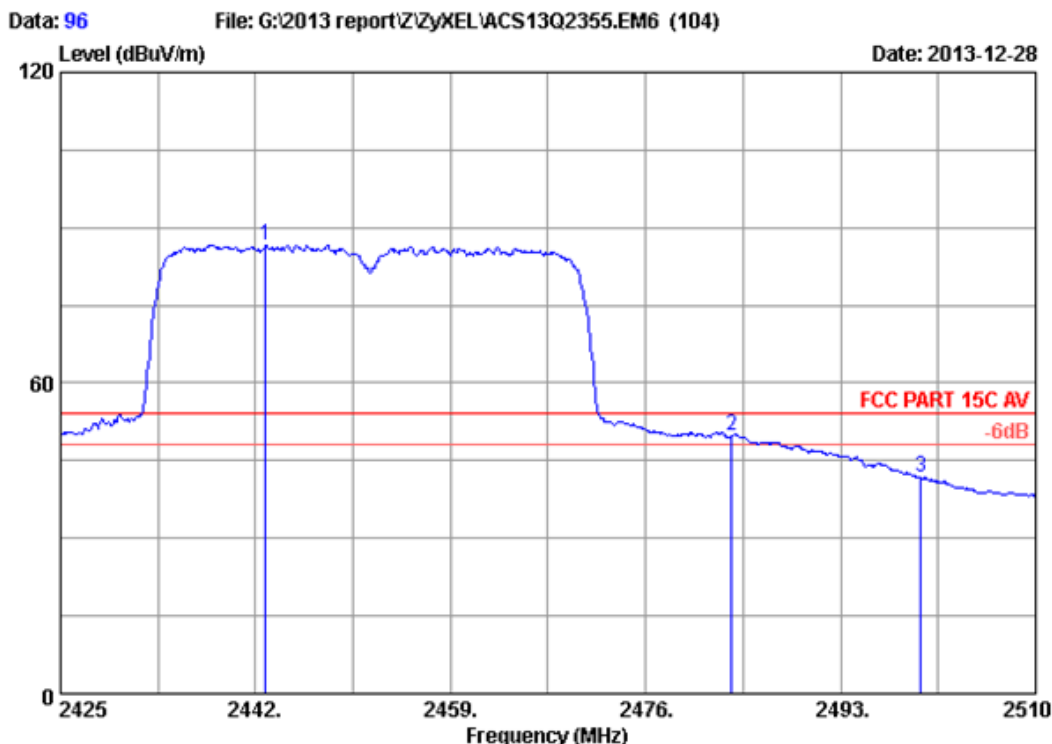


Site no. : 3m Chamber Data no. : 95  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N ADSL2+ 4-port Gateway with USB  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11n HT40 CH7 2452MHz Tx  
 M/N : AMG1312-T10B

|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>loss<br>(dB) | Amp.<br>Factor<br>(dB) | Reading<br>(dBuV) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark |
|---|----------------|--------------------------|-----------------------|------------------------|-------------------|-------------------------------|--------------------|----------------|--------|
| 1 | 2445.825       | 28.28                    | 5.86                  | 35.70                  | 103.30            | 101.74                        | 74.00              | -27.74         | Peak   |
| 2 | 2483.500       | 28.36                    | 5.92                  | 35.70                  | 69.38             | 67.96                         | 74.00              | 6.04           | Peak   |
| 3 | 2484.925       | 28.37                    | 5.92                  | 35.70                  | 73.21             | 71.80                         | 74.00              | 2.20           | Peak   |
| 4 | 2500.000       | 28.40                    | 5.94                  | 35.70                  | 61.59             | 60.23                         | 74.00              | 13.77          | Peak   |

Remarks:

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

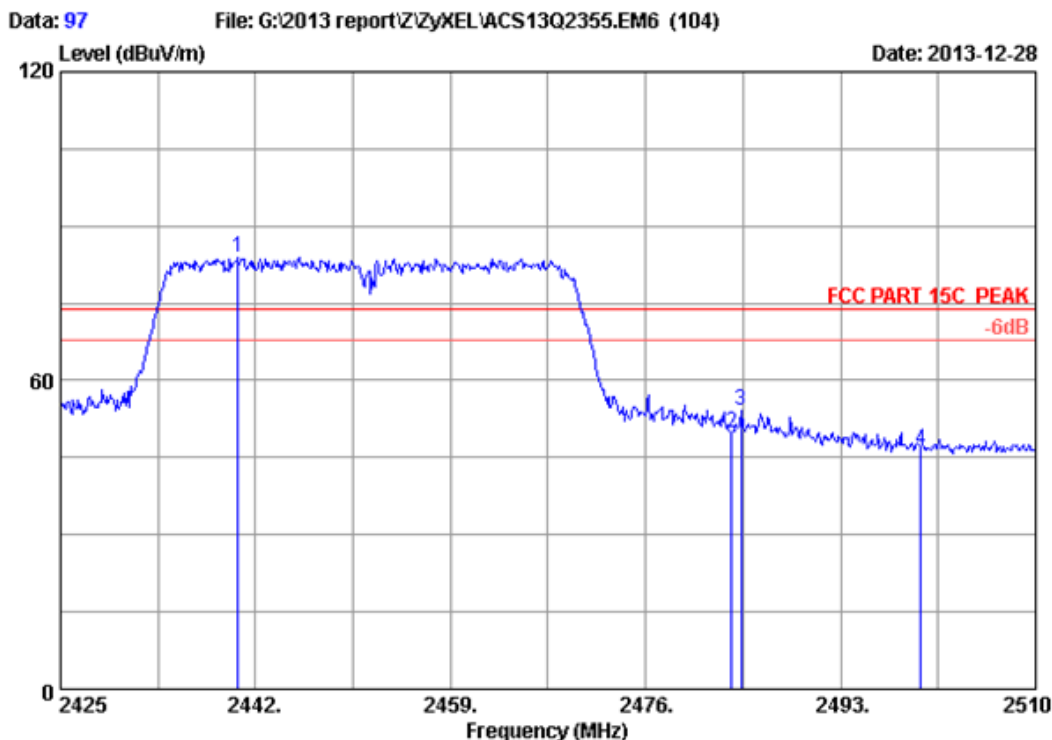


Site no. : 3m Chamber Data no. : 96  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N ADSL2+ 4-port Gateway with USB  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11n HT40 CH7 2452MHz Tx  
 M/N : AMG1312-T10B

|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>loss<br>(dB) | Amp.<br>Factor<br>(dB) | Reading<br>(dBuV) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark  |
|---|----------------|--------------------------|-----------------------|------------------------|-------------------|-------------------------------|--------------------|----------------|---------|
| 1 | 2442.850       | 28.27                    | 5.86                  | 35.70                  | 88.27             | 86.70                         | 54.00              | -32.70         | Average |
| 2 | 2483.500       | 28.36                    | 5.92                  | 35.70                  | 51.13             | 49.71                         | 54.00              | 4.29           | Average |
| 3 | 2500.000       | 28.40                    | 5.94                  | 35.70                  | 42.99             | 41.63                         | 54.00              | 12.37          | Average |

Remarks:

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

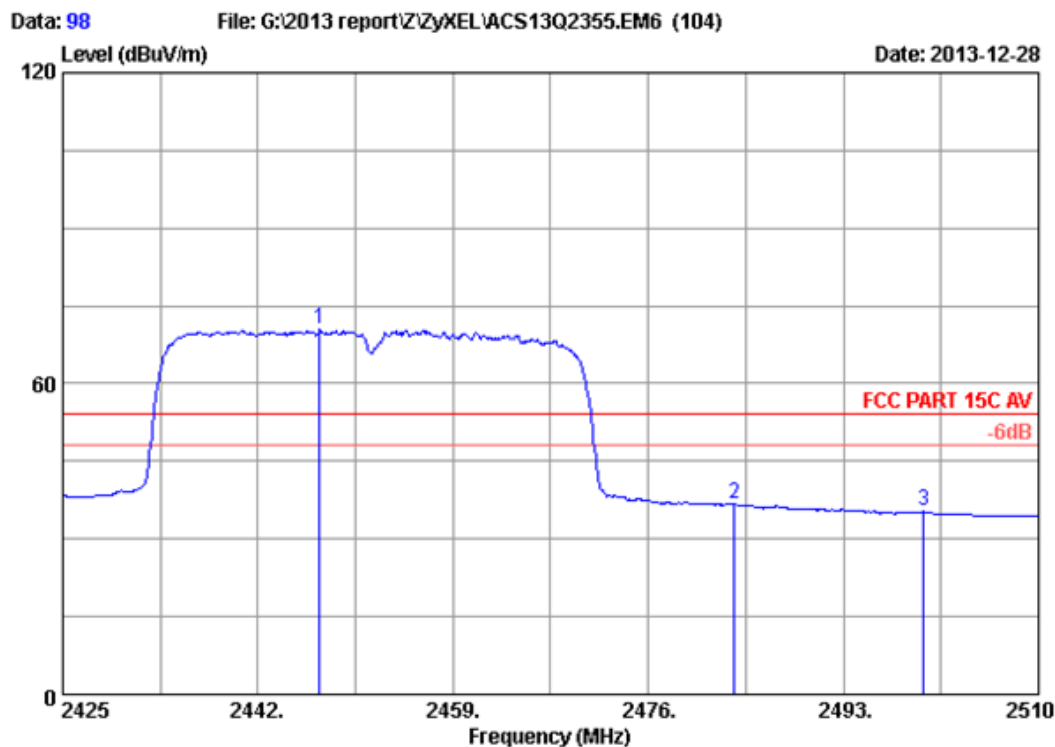


Site no. : 3m Chamber Data no. : 97  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N ADSL2+ 4-port Gateway with USB  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11n HT40 CH7 2452MHz Tx  
 M/N : AMG1312-T10B

|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>loss<br>(dB) | Amp.<br>Factor<br>(dB) | Reading<br>(dBuV) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark |
|---|----------------|--------------------------|-----------------------|------------------------|-------------------|-------------------------------|--------------------|----------------|--------|
| 1 | 2440.470       | 28.27                    | 5.86                  | 35.70                  | 85.51             | 83.94                         | 74.00              | -9.94          | Peak   |
| 2 | 2483.500       | 28.36                    | 5.92                  | 35.70                  | 51.33             | 49.91                         | 74.00              | 24.09          | Peak   |
| 3 | 2484.330       | 28.37                    | 5.92                  | 35.70                  | 55.68             | 54.27                         | 74.00              | 19.73          | Peak   |
| 4 | 2500.000       | 28.40                    | 5.94                  | 35.70                  | 47.88             | 46.52                         | 74.00              | 27.48          | Peak   |

Remarks:

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



Site no. : 3m Chamber Data no. : 98  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : Wireless N ADSL2+ 4-port Gateway with USB  
 Power supply : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11n HT40 CH7 2452MHz Tx  
 M/N : AMG1312-T10B

|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>loss<br>(dB) | Amp.<br>Factor<br>(dB) | Reading<br>(dBuV) | Emission          |                    |                |         |
|---|----------------|--------------------------|-----------------------|------------------------|-------------------|-------------------|--------------------|----------------|---------|
|   |                |                          |                       |                        |                   | Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark  |
| 1 | 2447.355       | 28.28                    | 5.87                  | 35.70                  | 71.93             | 70.38             | 54.00              | -16.38         | Average |
| 2 | 2483.500       | 28.36                    | 5.92                  | 35.70                  | 38.07             | 36.65             | 54.00              | 17.35          | Average |
| 3 | 2500.000       | 28.40                    | 5.94                  | 35.70                  | 36.66             | 35.30             | 54.00              | 18.70          | Average |

**Remarks:**

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

## 7. 6dB Bandwidth Test

### 7.1. Test Equipment

| Item | Equipment         | Manufacturer | Model No.   | Serial No. | Last Cal.  | Cal. Interval |
|------|-------------------|--------------|-------------|------------|------------|---------------|
| 1.   | Spectrum Analyzer | Agilent      | N9030A      | MY51380221 | Oct.31, 13 | 1 Year        |
| 2.   | Amp               | HP           | 8449B       | 3008A08495 | May.08, 13 | 1 Year        |
| 3.   | Antenna           | EMCO         | 3115        | 9510-4580  | May.08, 13 | 1 Year        |
| 4.   | HF Cable          | Hubersuhner  | Sucoflex104 | -          | May.08, 13 | 1 Year        |

### 7.2. Limit

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

### 7.3. Test Procedure

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

### 7.4. Test Results

|                                                |                         |                          |
|------------------------------------------------|-------------------------|--------------------------|
| EUT: Wireless N ADSL2+ 4-port Gateway with USB |                         |                          |
| M/N: AMG1312-T10B                              |                         |                          |
| Test date: 2013-12-28                          | Pressure: 101.3±1.0 kpa | Humidity: 51.2±3.0%      |
| Tested by: Leo-Li                              | Test site: RF site      | Temperature: 20.7±0.6 °C |

| Cable loss: 1 dB  |      | Attenuator loss: 20 dB   |        |                |
|-------------------|------|--------------------------|--------|----------------|
| Test Mode         | CH   | 6dB bandwidth<br>( MHz ) |        | Limit<br>(KHz) |
|                   |      | Chain0                   | Chain1 |                |
| 11b               | CH1  | 11.10                    | N/A    | >500           |
|                   | CH6  | 10.19                    | N/A    | >500           |
|                   | CH11 | 11.08                    | N/A    | >500           |
| 11g               | CH1  | 16.33                    | N/A    | >500           |
|                   | CH6  | 16.33                    | N/A    | >500           |
|                   | CH11 | 16.33                    | N/A    | >500           |
| 11n<br>HT20       | CH1  | 16.99                    | 17.07  | >500           |
|                   | CH6  | 17.09                    | 16.81  | >500           |
|                   | CH11 | 17.07                    | 16.91  | >500           |
| 11n<br>HT40       | CH1  | 35.99                    | 36.04  | >500           |
|                   | CH4  | 35.92                    | 35.94  | >500           |
|                   | CH7  | 36.01                    | 35.94  | >500           |
| Conclusion : PASS |      |                          |        |                |

## ANT 0

Test Mode: IEEE 802.11b TX

Test CH1: 2412MHz



Test CH6: 2437MHz

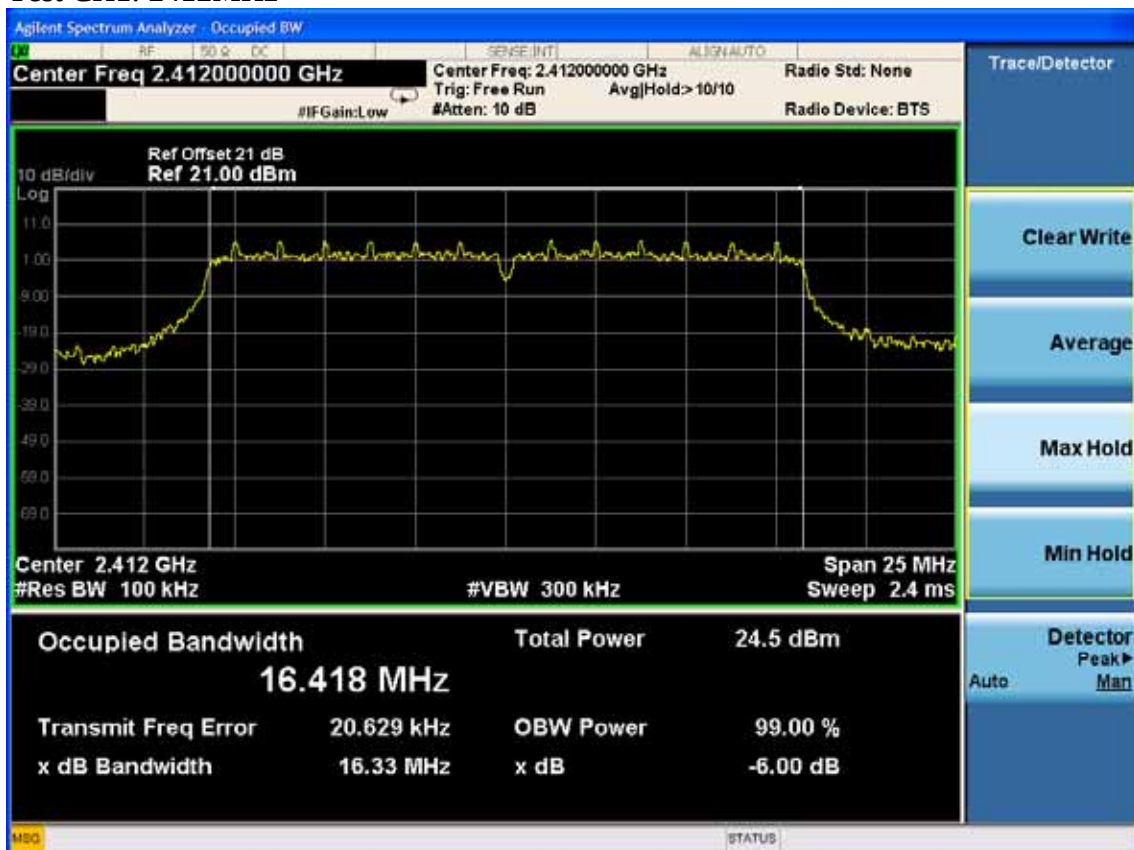


Test CH11: 2462MHz

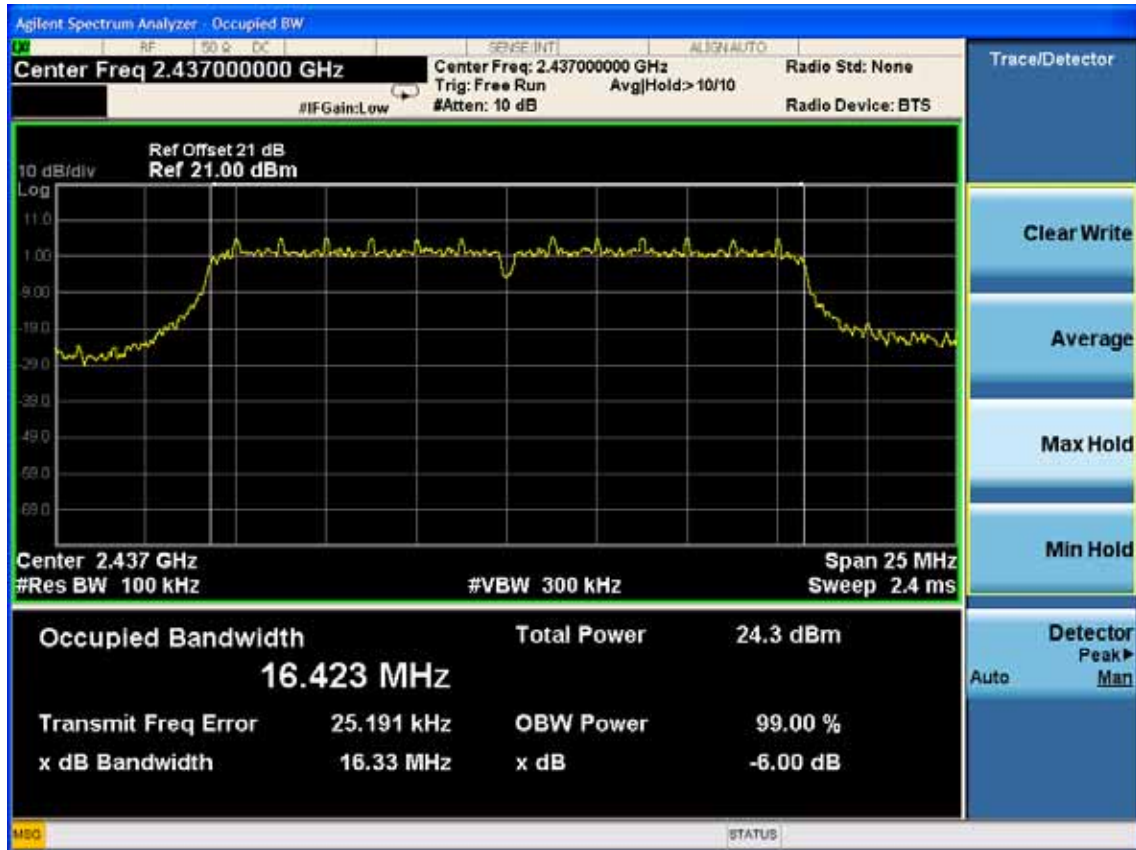


Test Mode: IEEE 802.11g TX

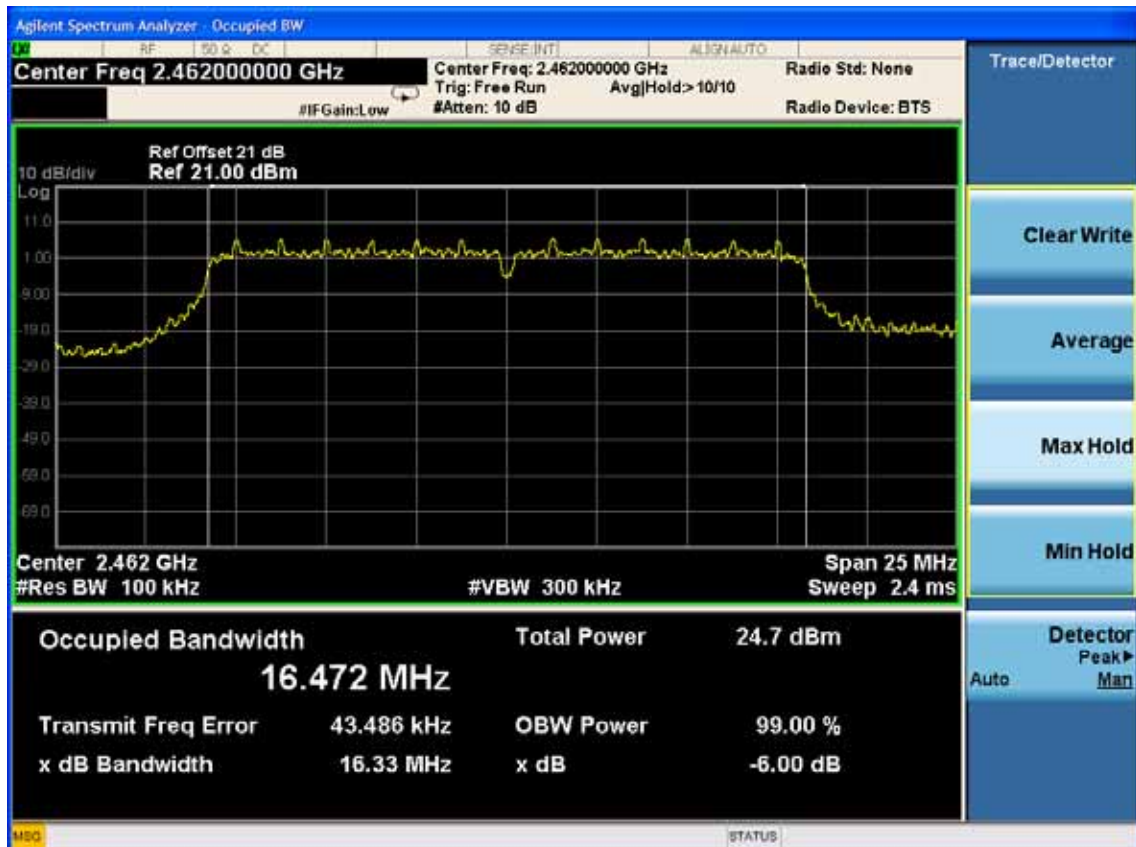
Test CH1: 2412MHz



Test CH6: 2437MHz

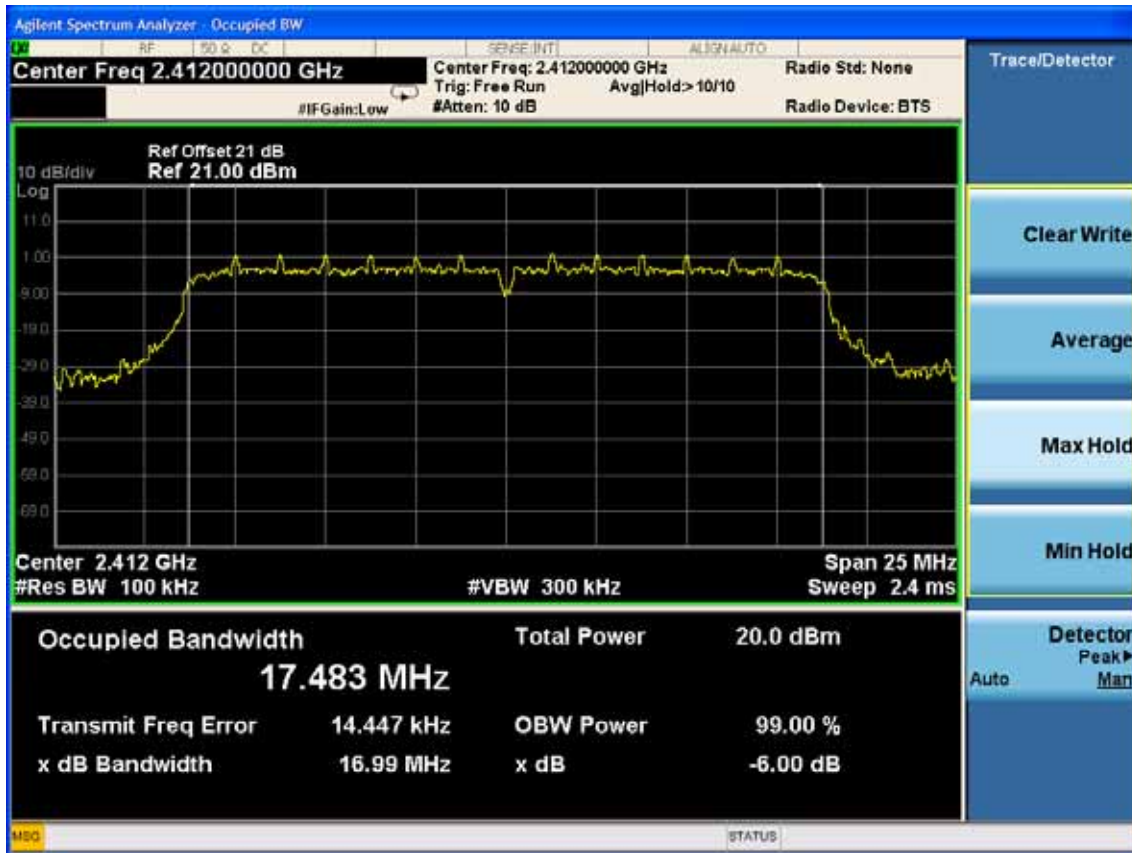


Test CH11: 2462MHz

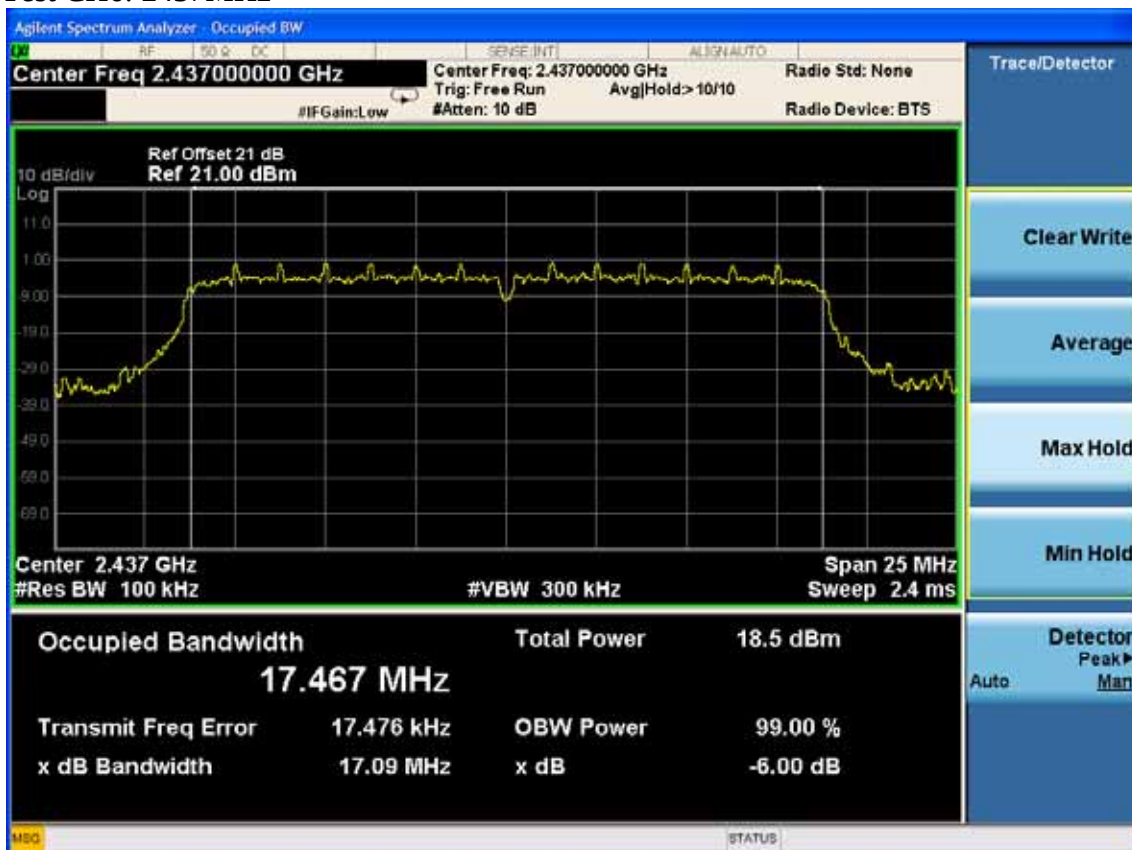


Test Mode: IEEE 11nHT20

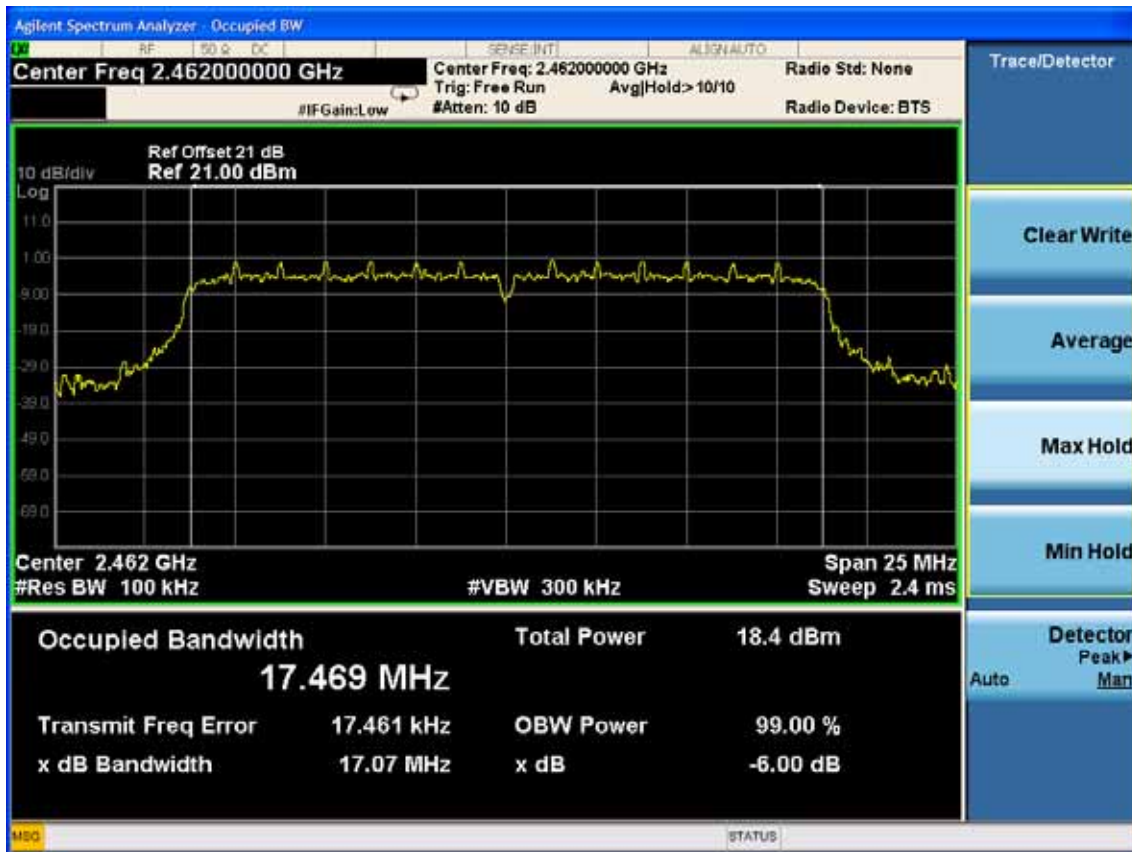
Test CH1: 2412MHz



Test CH6: 2437MHz

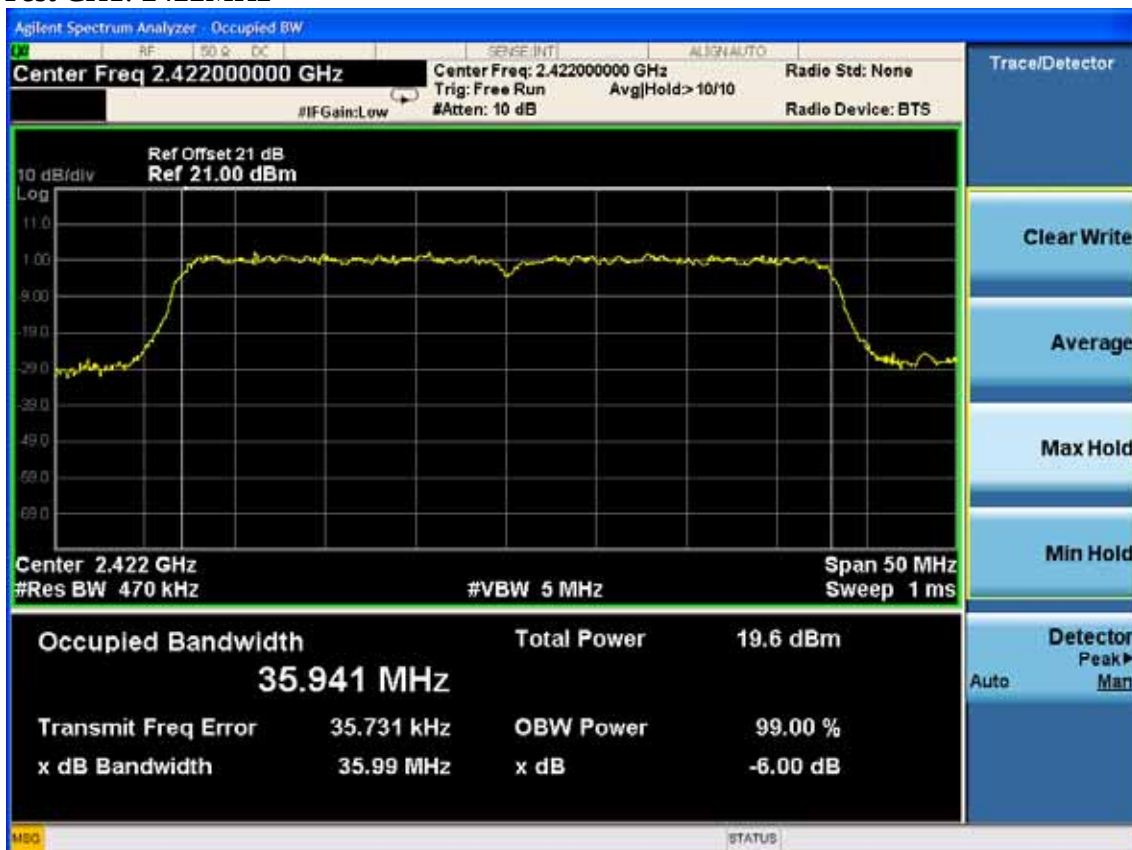


Test CH11: 2462MHz

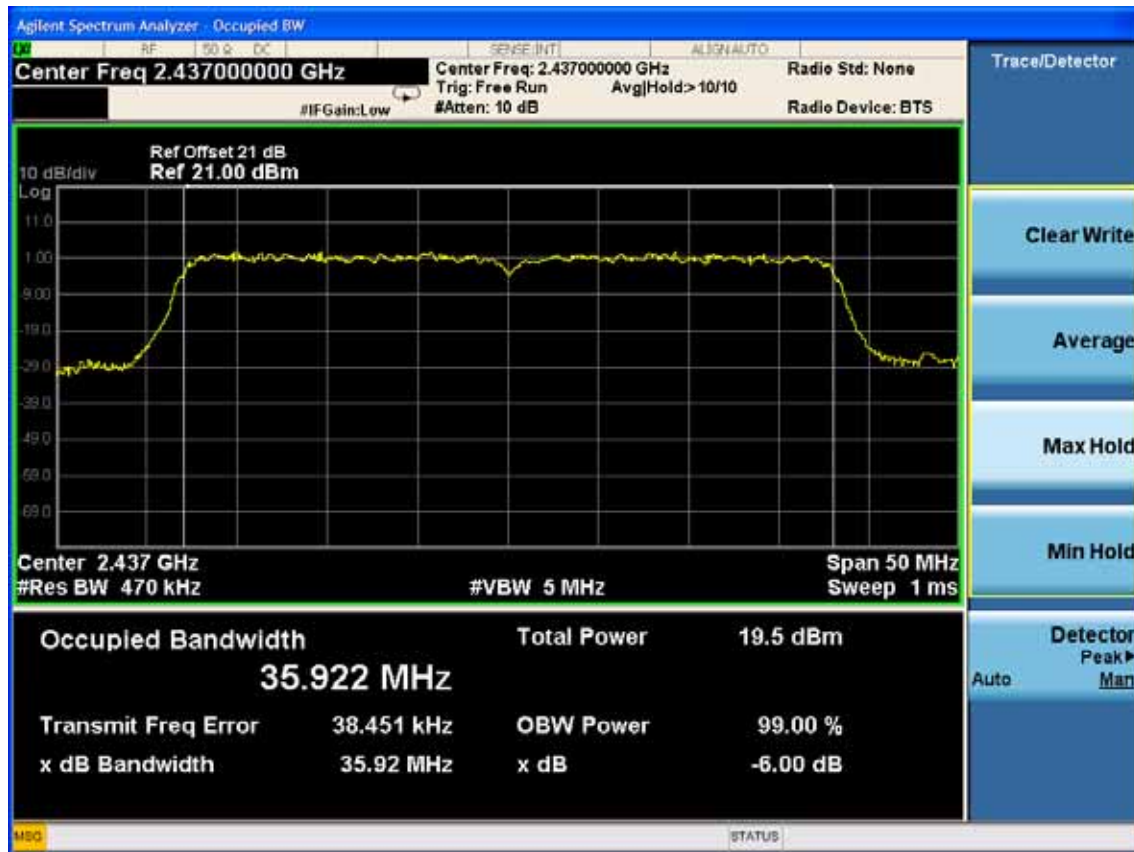


Test Mode: IEEE 11nHT40

Test CH1: 2422MHz



Test CH4: 2437MHz



Test CH7: 2452MHz



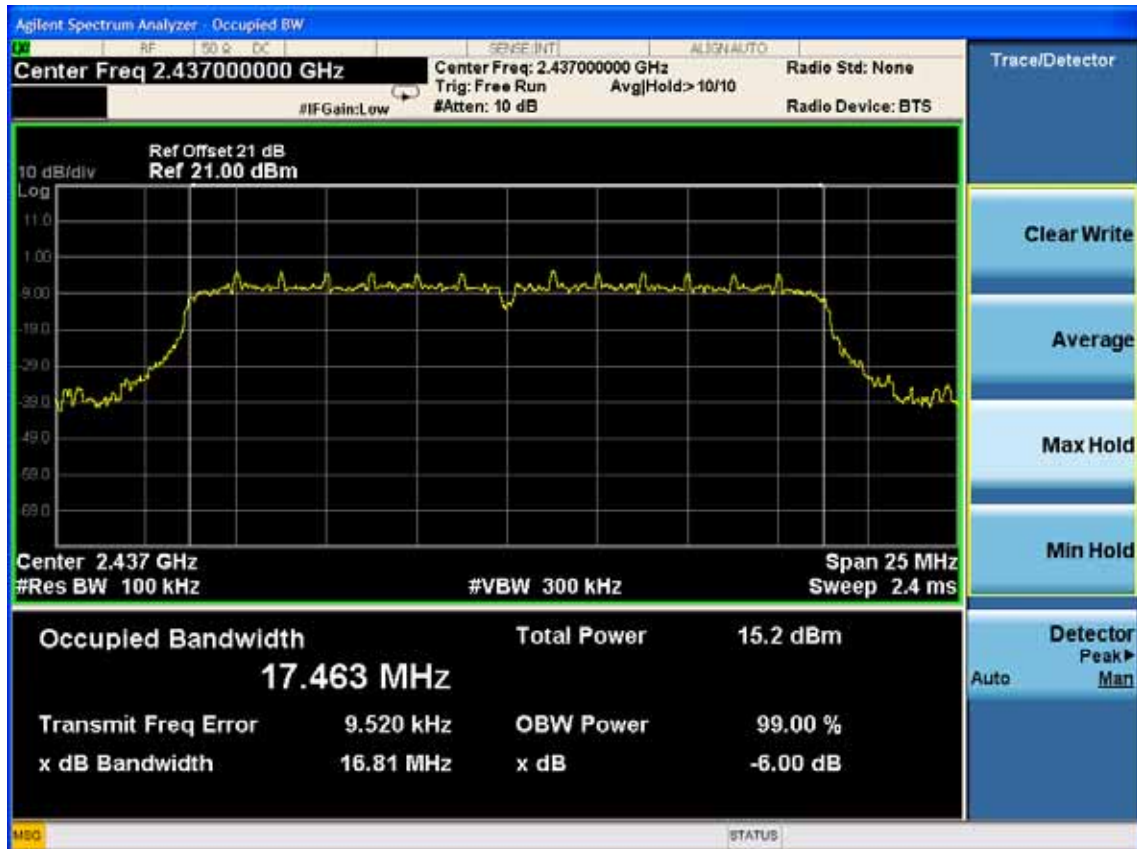
### ANT 1

Test Mode: IEEE 11nHT20

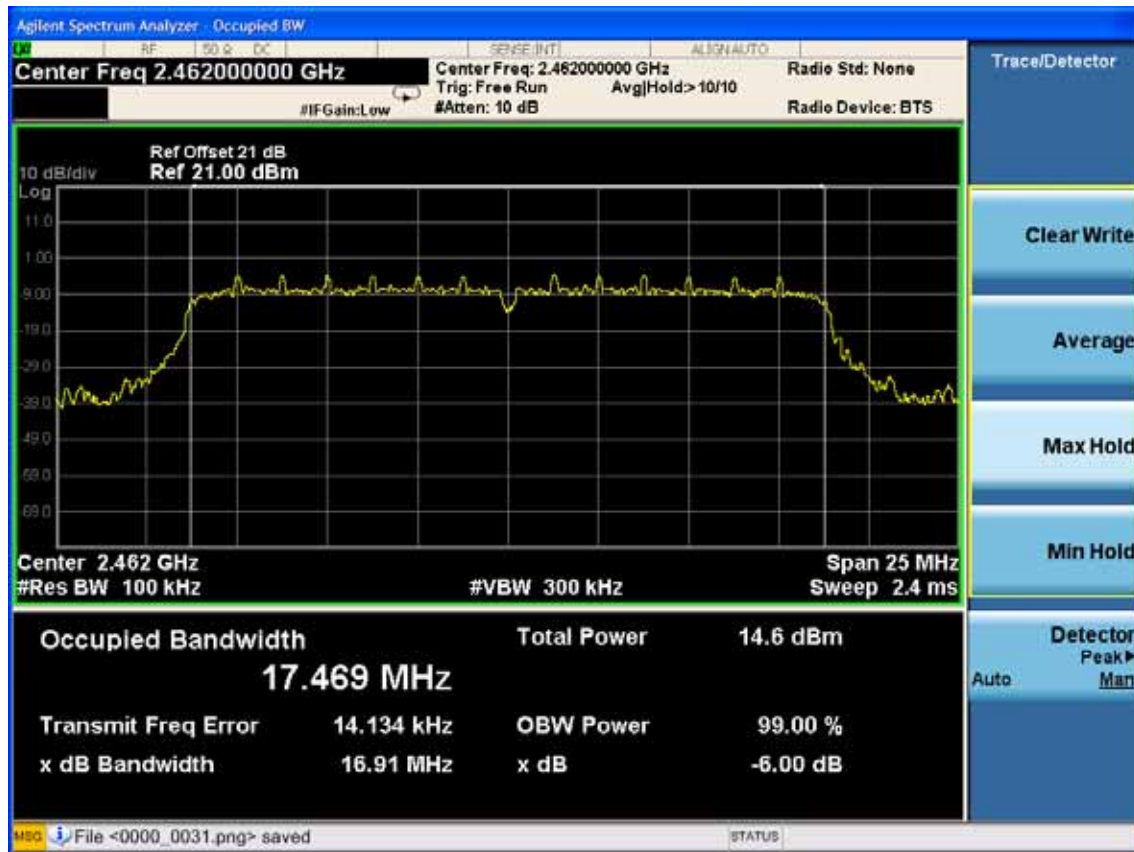
Test CH1: 2412MHz



Test CH6: 2437MHz



Test CH11: 2462MHz

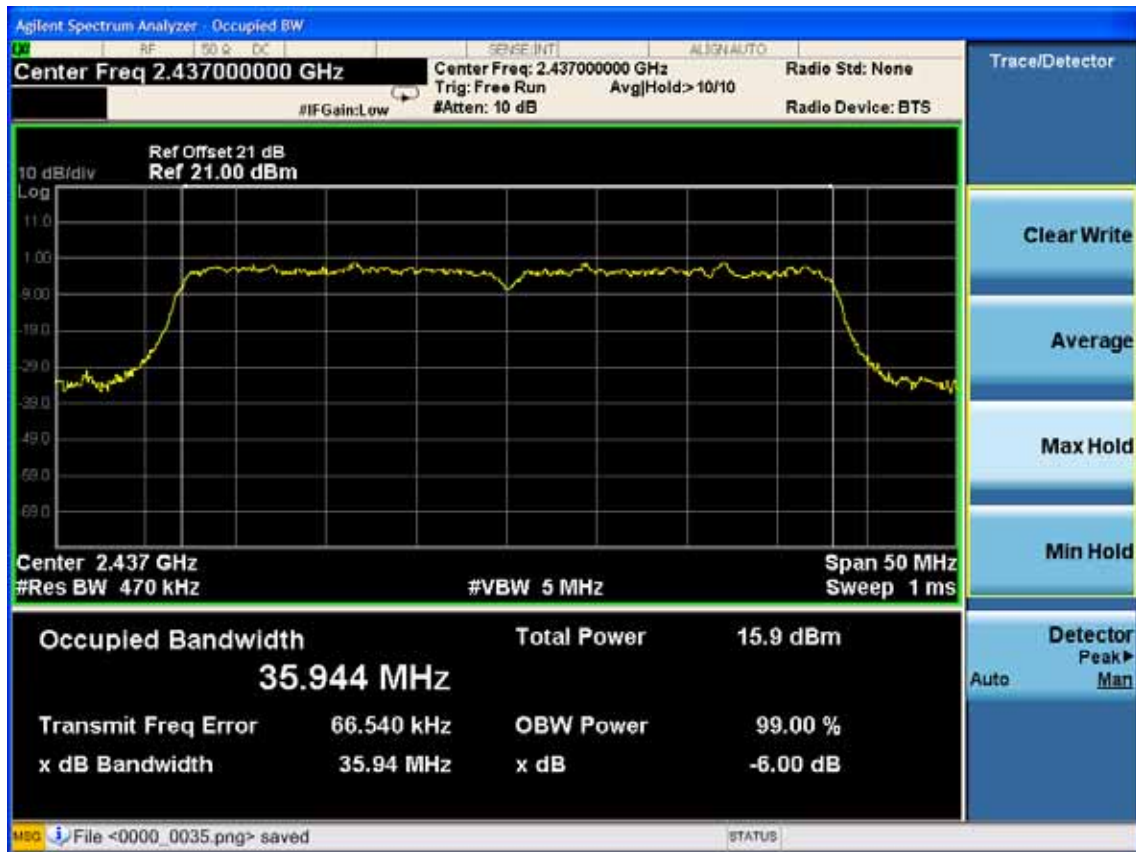


Test Mode: IEEE 11nHT40

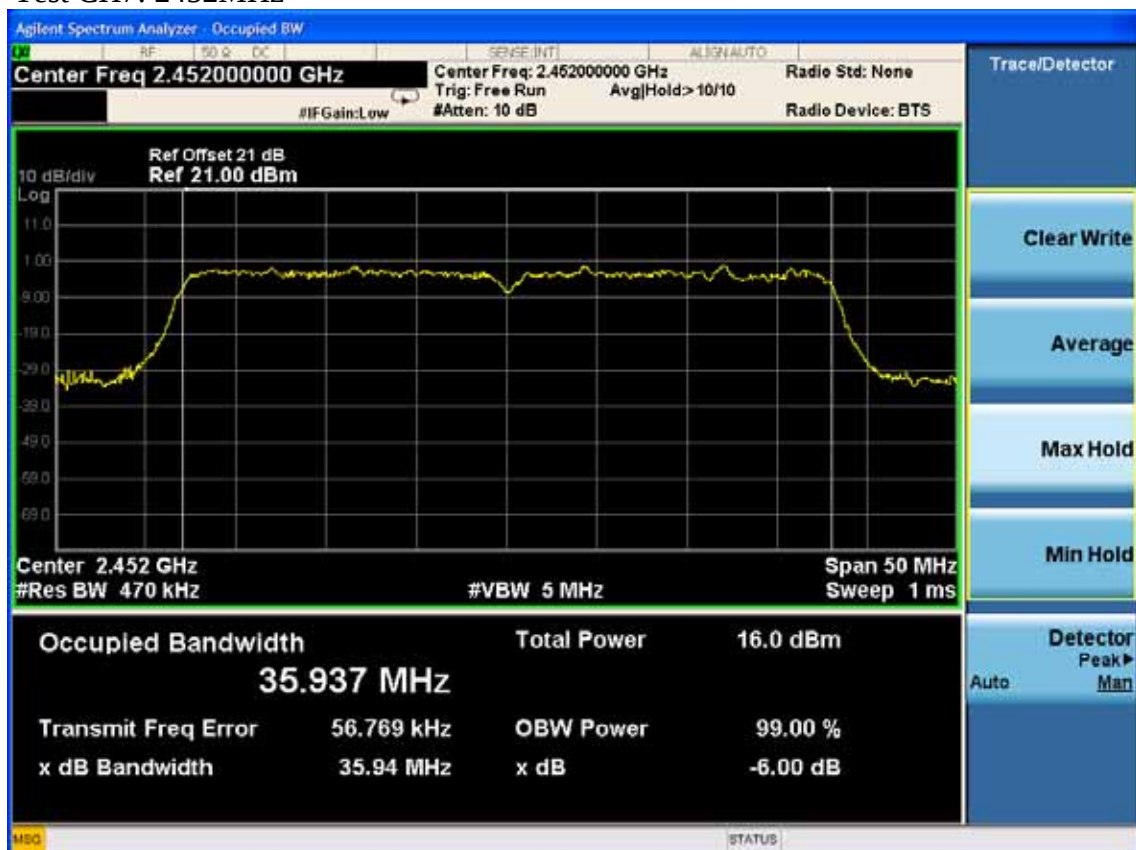
Test CH1: 2422MHz



Test CH4: 2437MHz



Test CH7: 2452MHz



## 8. OUTPUT POWER TEST

### 8.1. Test Equipment

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

### 8.2. Limit (FCC Part 15C 15.247 b(3))

For systems using digital modulation in the 2400—2483.5MHz, The Peak out put Power shall not exceed 1W(30dBm)

### 8.3. Test Procedure

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

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

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

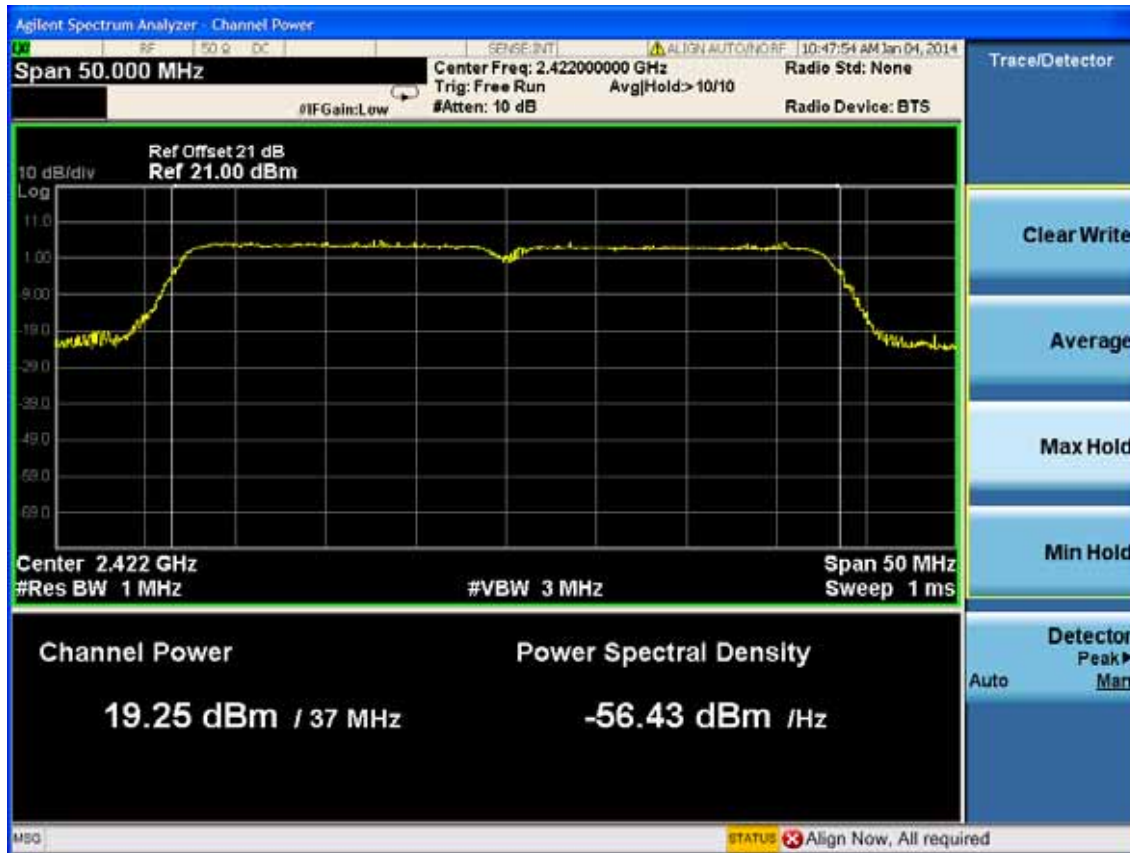
#### 8.4. Test Results

| EUT: Wireless N ADSL2+ 4-port Gateway with USB |          |                           |        |                         |             |
|------------------------------------------------|----------|---------------------------|--------|-------------------------|-------------|
| M/N: AMG1312-T10B                              |          |                           |        |                         |             |
| Test date: 2013-12-28                          |          | Pressure: 101.3±1.0 kpa   |        | Humidity: 51.5±3.0%     |             |
| Tested by: Leo-Li                              |          | Test site: RF site        |        | Temperature:21.5±0.6 °C |             |
|                                                |          |                           |        |                         |             |
| Cable loss: 1 dB                               |          | Attenuator loss: 20 dB    |        |                         |             |
| Test Mode                                      | CH (MHz) | Peak output Power ( dBm ) |        |                         | Limit (dBm) |
|                                                |          | Chain0                    | Chain1 | Total                   |             |
| 11b                                            | CH1      | 25. 57                    | N/A    | N/A                     | 30          |
|                                                | CH6      | 24.55                     | N/A    | N/A                     | 30          |
|                                                | CH11     | 23.88                     | N/A    | N/A                     | 30          |
| 11g                                            | CH1      | 27.45                     | N/A    | N/A                     | 30          |
|                                                | CH6      | 28. 27                    | N/A    | N/A                     | 30          |
|                                                | CH11     | 23. 74                    | N/A    | N/A                     | 30          |
| 11nHT20                                        | CH1      | 20. 43                    | 19. 32 | 22. 92                  | 30          |
|                                                | CH6      | 24.18                     | 24. 19 | 27. 20                  | 30          |
|                                                | CH11     | 21.44                     | 20. 42 | 23. 97                  | 30          |
| 11nHT40                                        | CH1      | 19. 25                    | 18. 37 | 21. 84                  | 30          |
|                                                | CH4      | 23. 12                    | 22. 20 | 25. 69                  | 30          |
|                                                | CH7      | 20. 17                    | 18. 67 | 22. 49                  | 30          |
| Conclusion: PASS                               |          |                           |        |                         |             |

### ANT 0

Test Mode: IEEE 11nHT40

Test CH1: 2422MHz



Test CH4: 2437MHz



Test CH7: 2452MHz



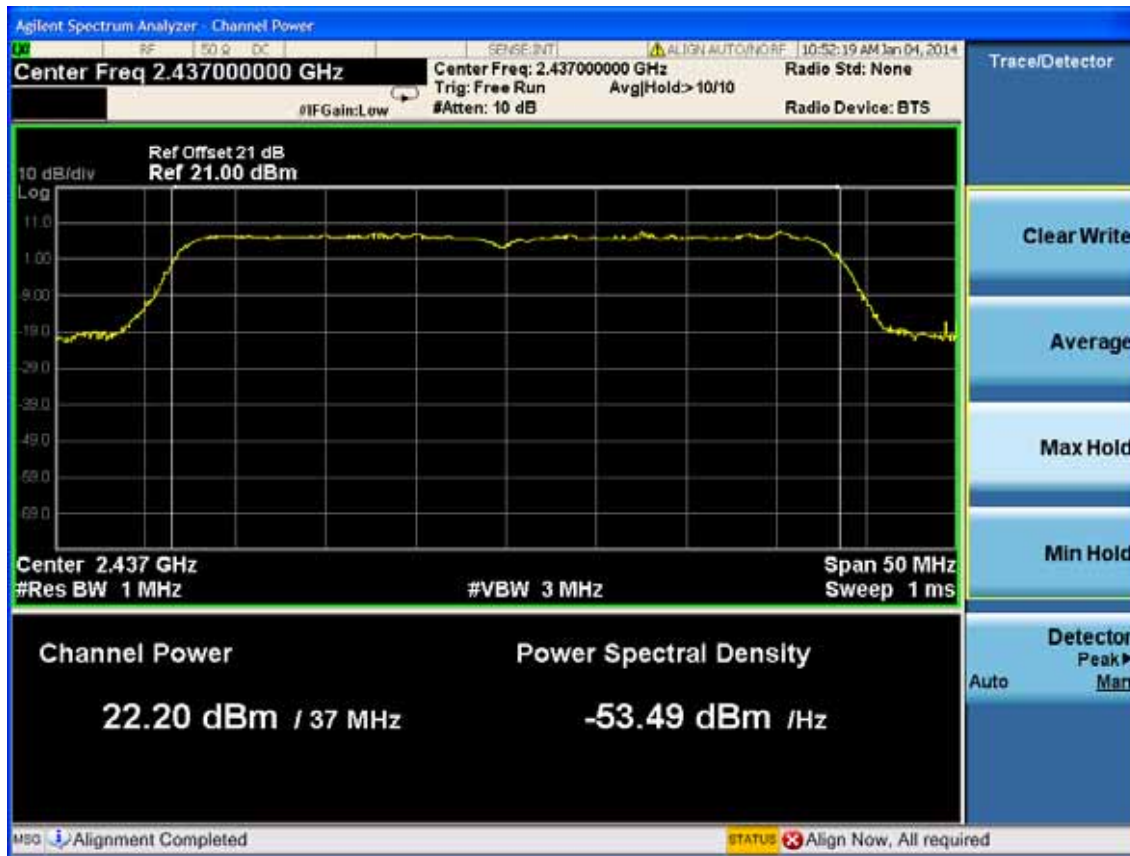
ANT 1

Test Mode: IEEE 11nHT40

Test CH1: 2422MHz



Test CH4: 2437MHz



Test CH7: 2452MHz



## 9. POWER SPECTRAL DENSITY TEST

### 9.1. Test Equipment

| Item | Equipment         | Manufacturer | Model No.   | Serial No. | Last Cal.  | Cal. Interval |
|------|-------------------|--------------|-------------|------------|------------|---------------|
| 1.   | Spectrum Analyzer | Agilent      | N9030A      | MY51380221 | Oct.31, 13 | 1 Year        |
| 2.   | Amp               | HP           | 8449B       | 3008A08495 | May.08, 13 | 1 Year        |
| 3.   | Antenna           | EMCO         | 3115        | 9607-4580  | Aug.28, 13 | 1 Year        |
| 4.   | HF Cable          | Hubersuhne   | Sucoflex104 | -          | May.08, 13 | 1 Year        |

### 9.2. Limit

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

### 9.3. Test Procedure

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

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

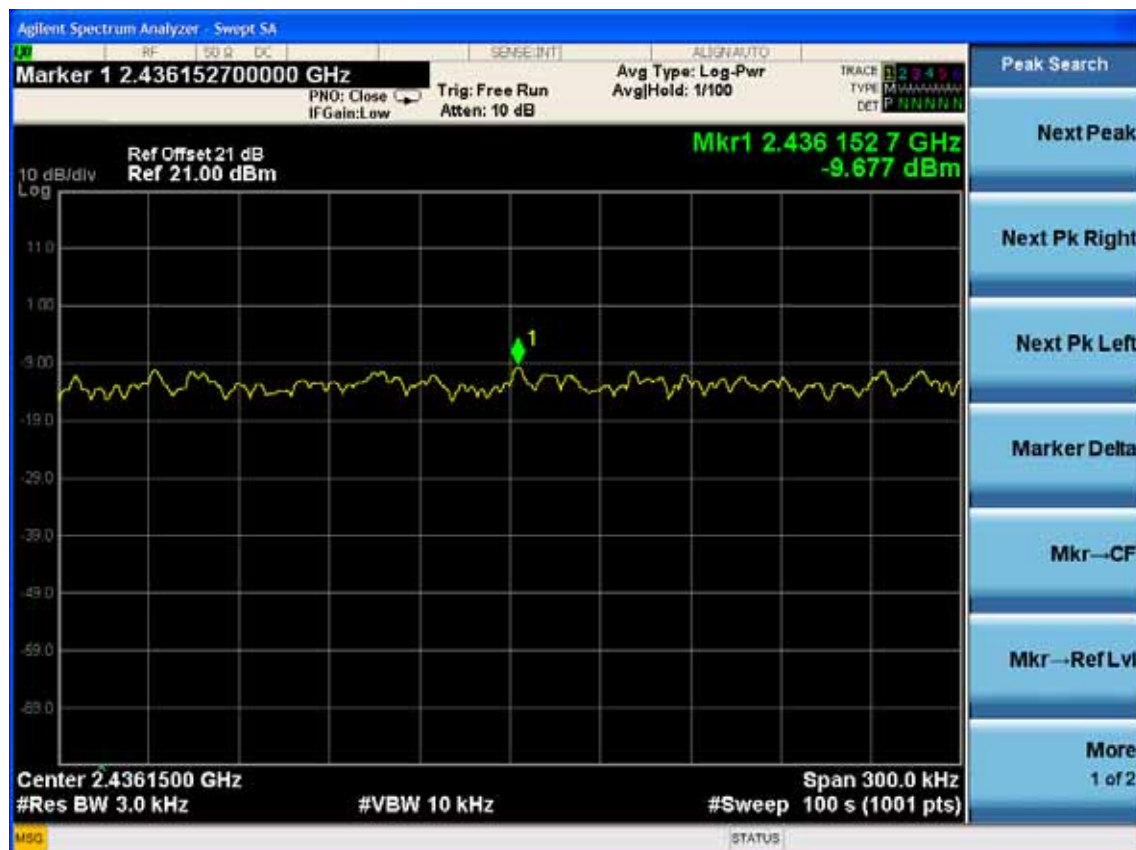
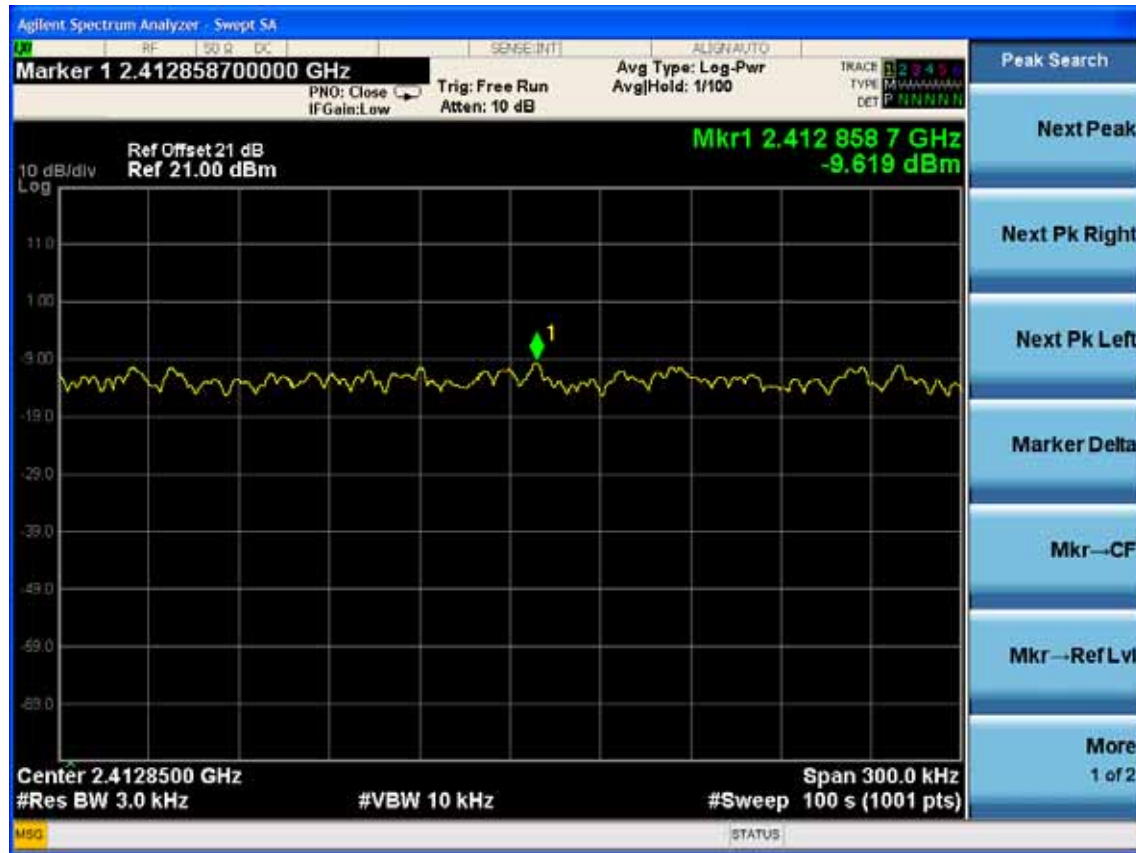
## 9.4. Test Results

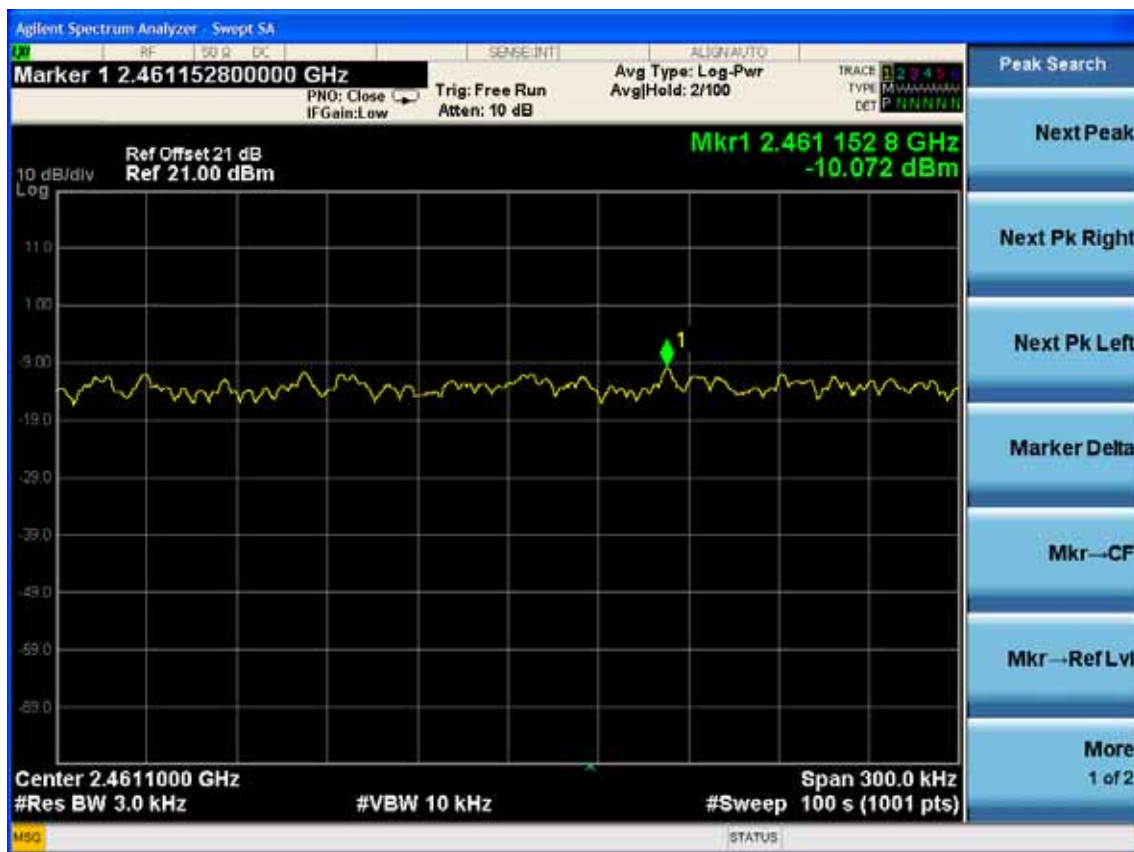
|                                                |                         |                         |
|------------------------------------------------|-------------------------|-------------------------|
| EUT: Wireless N ADSL2+ 4-port Gateway with USB |                         |                         |
| M/N: AMG1312-T10B                              |                         |                         |
| Test date: 2013-12-30                          | Pressure: 101.4±1.0 kpa | Humidity: 50.8±3.0%     |
| Tested by: Leo-Li                              | Test site: RF Site      | Temperature : 20.7±0.6℃ |

| Cable loss: 1 dB  |      | Attenuator loss: 20 dB     |         |          |                  |
|-------------------|------|----------------------------|---------|----------|------------------|
| Test Mode         | CH   | Power density ( dBm/3KHz ) |         |          | Limit (dBm/3KHz) |
|                   |      | ANT 0                      | ANT 1   | Total    |                  |
| 11b               | CH1  | -9.619                     | N/A     | N/A      | 8                |
|                   | CH6  | -9.677                     | N/A     | N/A      | 8                |
|                   | CH11 | -10.072                    | N/A     | N/A      | 8                |
| 11g               | CH1  | -12.704                    | N/A     | N/A      | 8                |
|                   | CH6  | -12.729                    | N/A     | N/A      | 8                |
|                   | CH11 | -12.045                    | N/A     | N/A      | 8                |
| 11n<br>HT20       | CH1  | -13.104                    | -16.353 | -11.423  | 8                |
|                   | CH6  | -12.637                    | -18.665 | -11.665  | 8                |
|                   | CH11 | -12.989                    | -20.289 | -12.246  | 8                |
| 11n<br>HT40       | CH1  | -16.247                    | -20.079 | -14.747  | 8                |
|                   | CH4  | -18.084                    | -21.102 | -16.325  | 8                |
|                   | CH7  | -15.893                    | -20.528 | -16.4604 | 8                |
| Conclusion : PASS |      |                            |         |          |                  |

# ANT 0

Test Mode: IEEE 802.11b TX





Test Mode: IEEE 802.11g TX



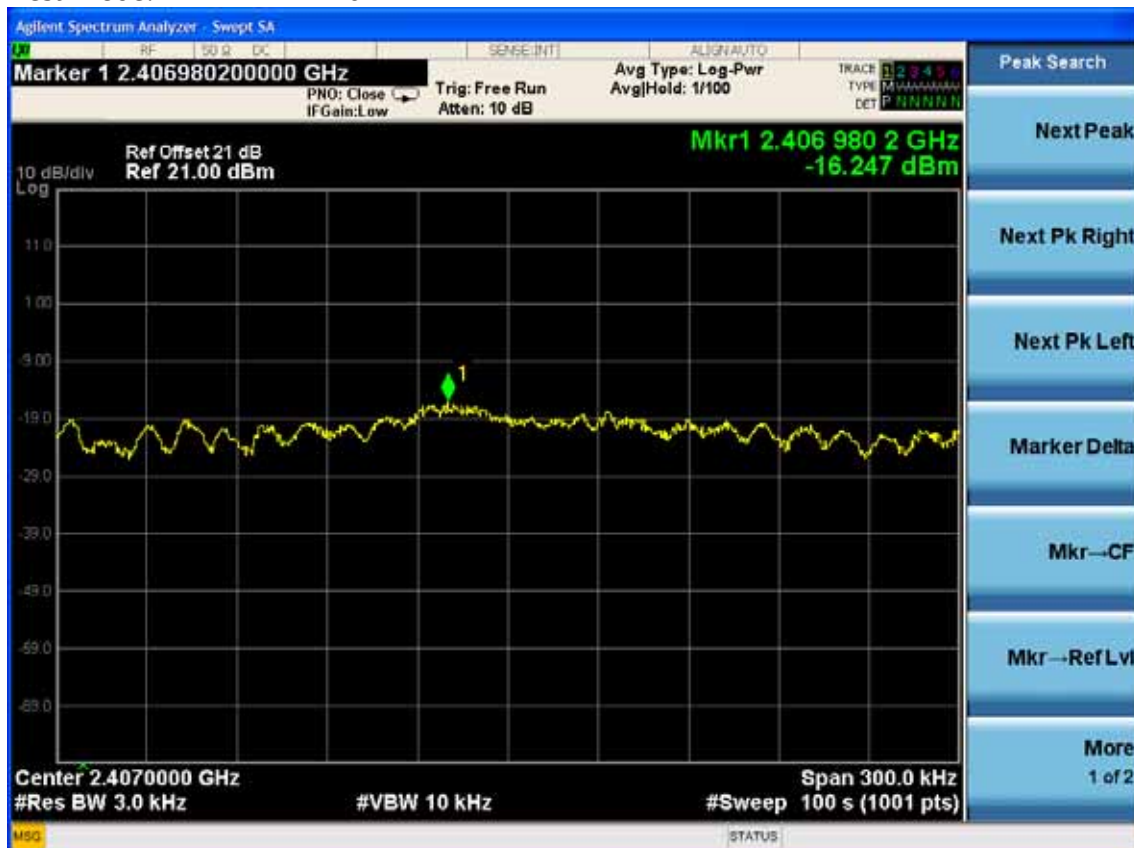


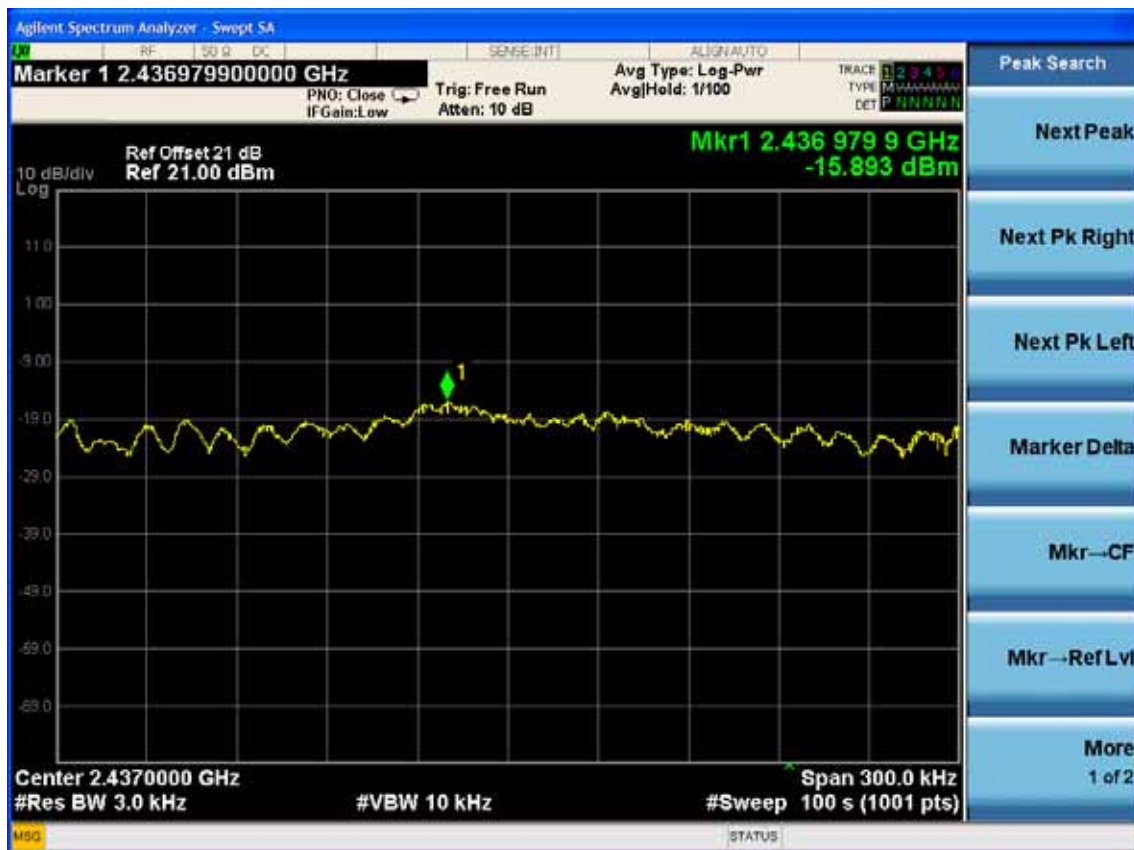
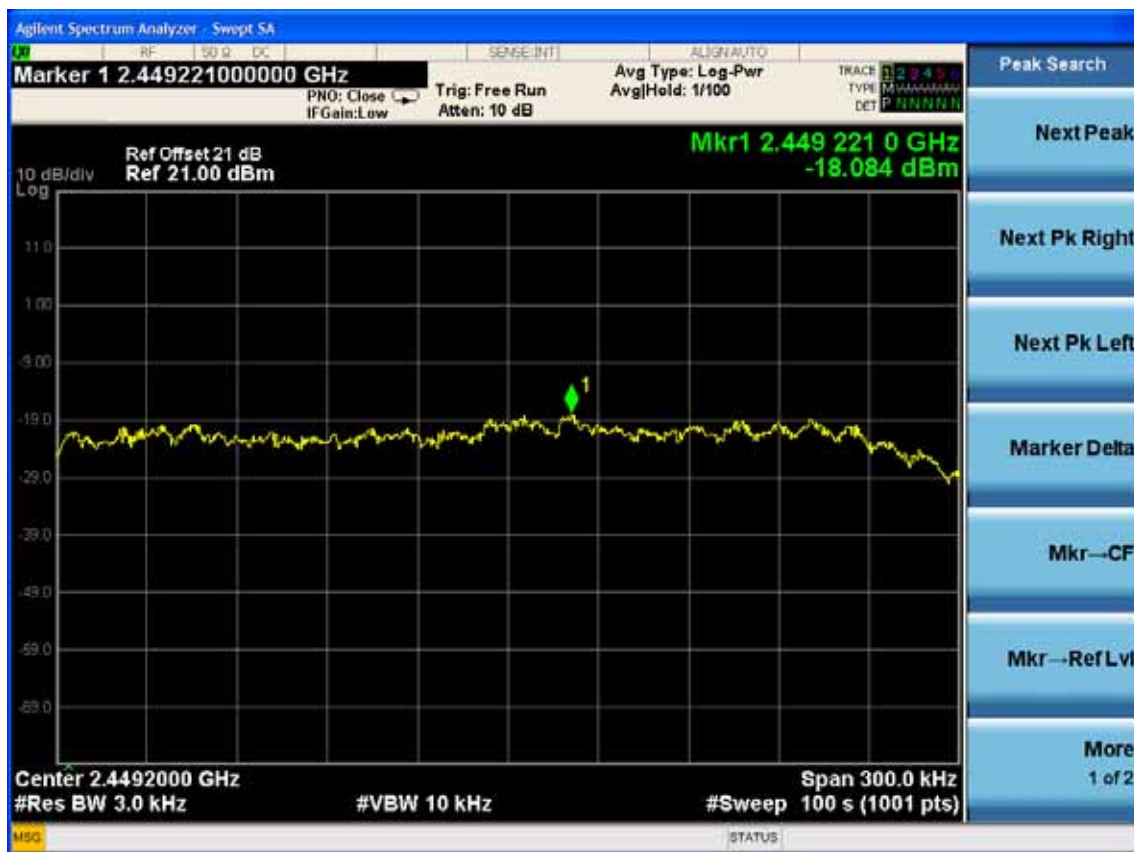
Test Mode: IEEE 11nHT20





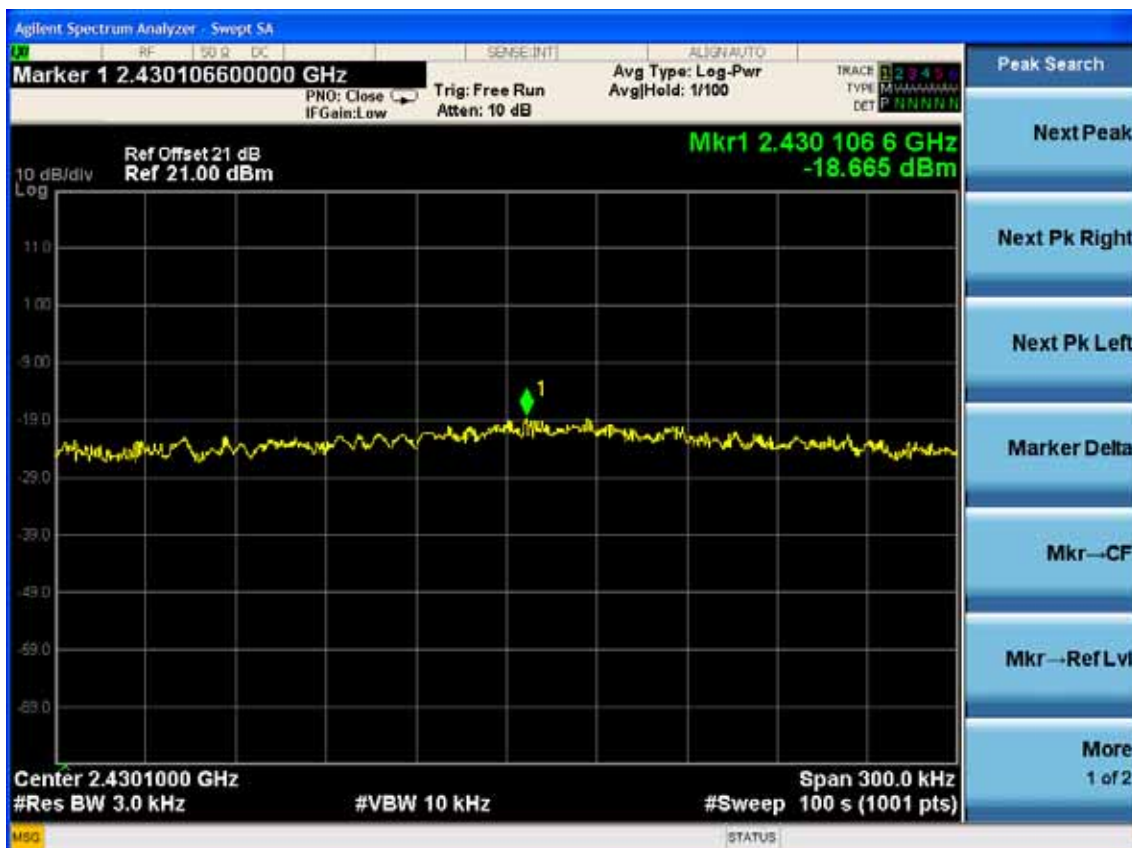
Test Mode: IEEE 11nHT40

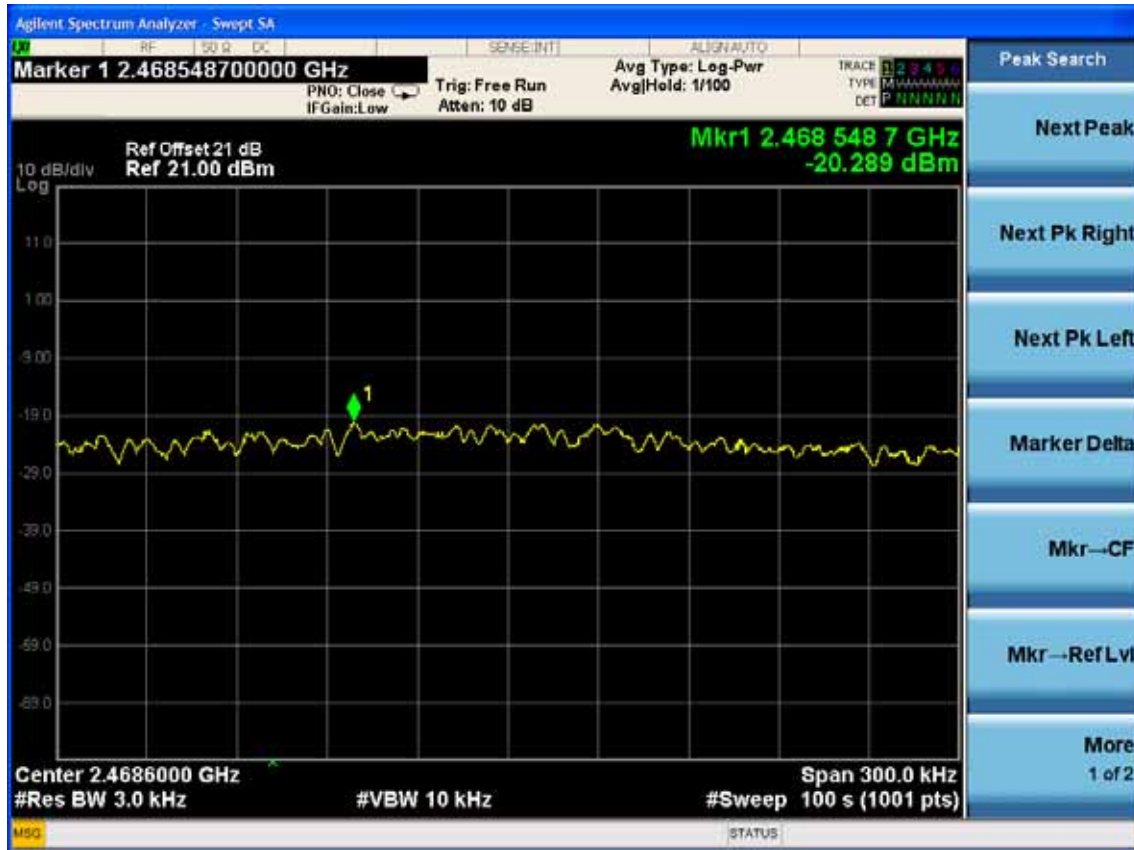




## ANT 1

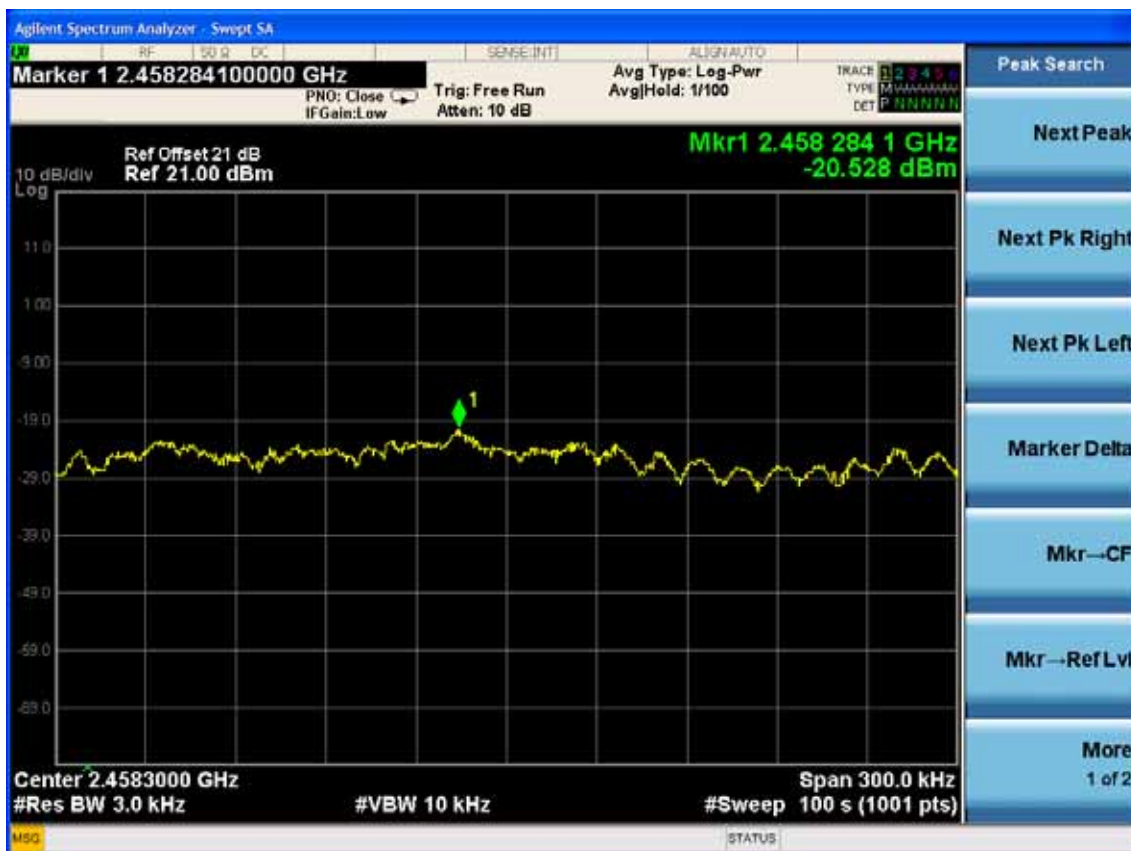
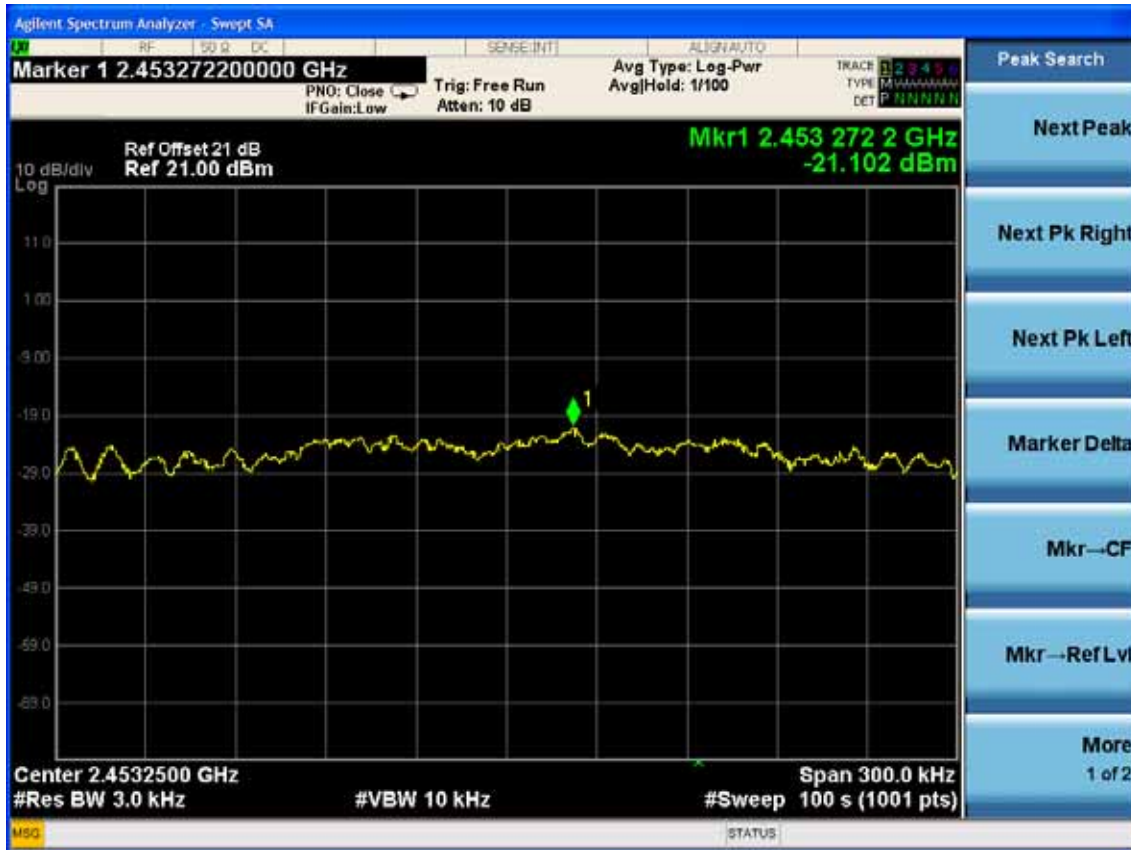
Test Mode: IEEE 11nHT20





Test Mode: IEEE 11nHT40





## 10.MPE ESTIMATION

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

| Frequency        | Power density (mW/ cm <sup>2</sup> ) | Averaging time(minutes) |
|------------------|--------------------------------------|-------------------------|
| 300MHz----1.5GHz | F/1500                               | 30                      |
| 1.5GHz---100GHz  | 1.0                                  | 30                      |

| Frequency(MHz) | Power density (mW/ cm <sup>2</sup> ) | Averaging time(minutes) |
|----------------|--------------------------------------|-------------------------|
| 2412           | 1                                    | 30                      |
| 2437           | 1                                    | 30                      |
| 2462           | 1                                    | 30                      |

Note: F= Frequency in MHz Estimation Result

|                                                |                         |                         |
|------------------------------------------------|-------------------------|-------------------------|
| EUT: Wireless N ADSL2+ 4-port Gateway with USB |                         |                         |
| M/N: AMG1312-T10B                              |                         |                         |
| Test date: 2013-12-30                          | Pressure: 101.1±1.0 kpa | Humidity: 52.5±3.0%     |
| Tested by: Leo-Li                              | Test site: RF site      | Temperature:22.7±0.6 °C |

| Cable loss: 1 dB |      | Attenuator loss: 20 dB |                         |                   |                    | Antenna Gain: 5dBi    |        |
|------------------|------|------------------------|-------------------------|-------------------|--------------------|-----------------------|--------|
| Test Mode        | CH   | Frequency ( MHz )      | Peak Output Power (dBm) | Output Power (mW) | Antenna Gain (dBi) | Antenna Gain (Linear) | MPE    |
| 11b              | CH1  | 2412                   | 25.57                   | 360.58            | 5                  | 3.16                  | 0.2270 |
|                  | CH6  | 2437                   | 24.55                   | 285.10            | 5                  | 3.16                  | 0.1795 |
|                  | CH11 | 2462                   | 23.88                   | 244.34            | 5                  | 3.16                  | 0.1538 |
| 11g              | CH1  | 2412                   | 27.45                   | 555.90            | 5                  | 3.16                  | 0.3499 |
|                  | CH6  | 2437                   | 28.27                   | 671.43            | 5                  | 3.16                  | 0.4226 |
|                  | CH11 | 2462                   | 23.74                   | 236.59            | 5                  | 3.16                  | 0.1489 |
| 11n HT20         | CH1  | 2412                   | 22.92                   | 195.88            | 5                  | 3.16                  | 0.1233 |
|                  | CH6  | 2437                   | 27.20                   | 524.81            | 5                  | 3.16                  | 0.3303 |
|                  | CH11 | 2462                   | 23.97                   | 249.46            | 5                  | 3.16                  | 0.1570 |
| 11n HT40         | CH1  | 2422                   | 21.84                   | 152.76            | 5                  | 3.16                  | 0.0962 |
|                  | CH4  | 2437                   | 25.69                   | 370.68            | 5                  | 3.16                  | 0.2333 |
|                  | CH7  | 2452                   | 22.49                   | 177.42            | 5                  | 3.16                  | 0.1117 |

## **11. ANTENNA REQUIREMENT**

### **11.1. STANDARD APPLICABLE**

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

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

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

## 12.DEVIATION TO TEST SPECIFICATIONS

[ NONE]