

6. Radiated Emission Band Edge

6.1. Test Equipment

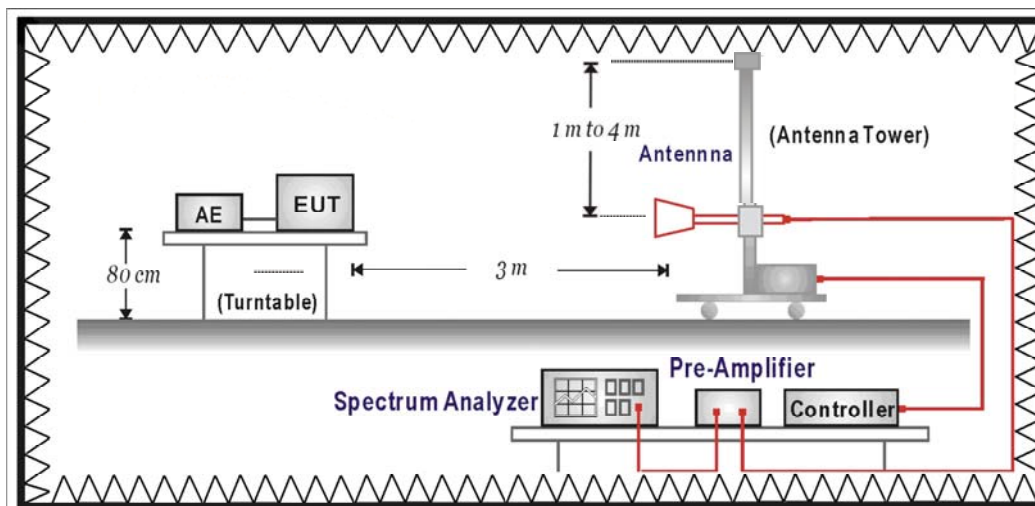
The following test equipments are used during the test:

Radiated Emission Band Edge / CB1

| Instrument                       | Manufacturer    | Model No.    | Serial No  | Next Cal. Date |
|----------------------------------|-----------------|--------------|------------|----------------|
| Double Ridged Guide Horn Antenna | Schwarzback     | BBHA 9120D   | 743        | 2013/02/02     |
| Spectrum Analyzer                | Agilent         | E4440A       | MY46187335 | 2013/02/07     |
| Coaxial Cable                    | Huber+Suhner AG | Sucoflex 102 | 25623/2    | 2013/03/04     |

Note: 1. All equipments that need to calibrate are with calibration period of 1 year.

6.2. Test Setup



**6.3. Limits**

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 20dB below the level of the fundamental or to the general radiated emission limits in paragraph 15.209, whichever is the lesser attenuation.

**6.4. Test Procedure**

The EUT was setup according to ANSI C63.4: 2009 and tested according to DTS test procedure of Jan. 2012 KDB558074 for compliance to FCC 47CFR 15.247 requirements. The EUT and its simulators are placed on a turn table which is 0.8 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.

The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level.

Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.4: 2009 on radiated measurement.

**6.5. Test Specification**

According to FCC Part 15 Subpart C Paragraph 15.247: 2011

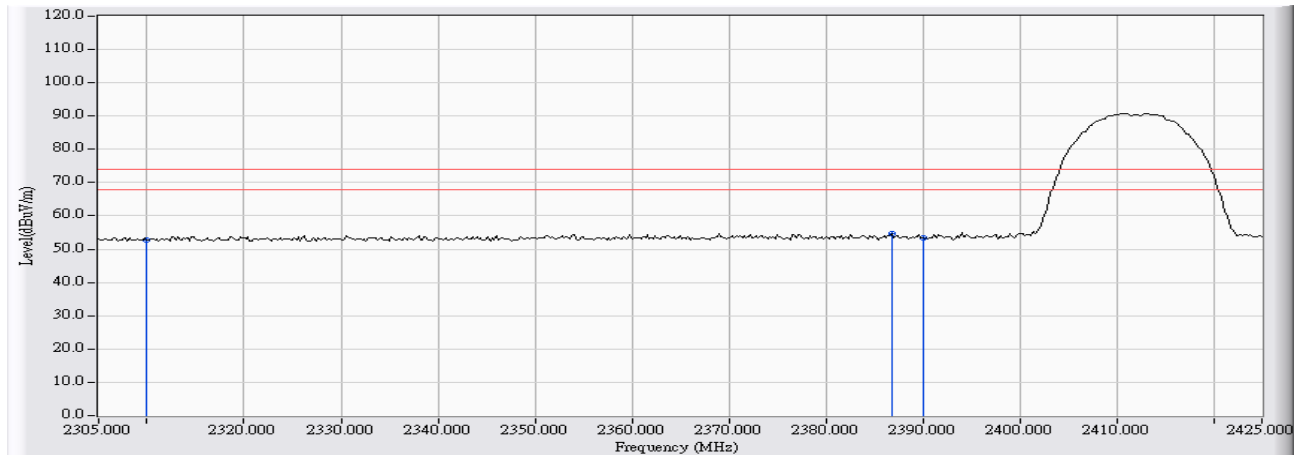
**6.6. Uncertainty**

The measurement uncertainty  
 $\pm 3.9$  dB above 1GHz

6.7. Test Result

Radiated is defined as

|  |                           |
|--|---------------------------|
| Site : CB1   | Time : 2012/08/29 - 14:38 |
| Limit : FCC_SpartC_15.209_03M_PK   | Margin : 6                |
| Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL  | Power : AC 120V / 60Hz    |
| EUT : PowerLine AV 500 Wireless N Mini Extender/<br>PowerLine AV+ Wireless N Mini Extender | Note : 802.11b_2412MHz    |

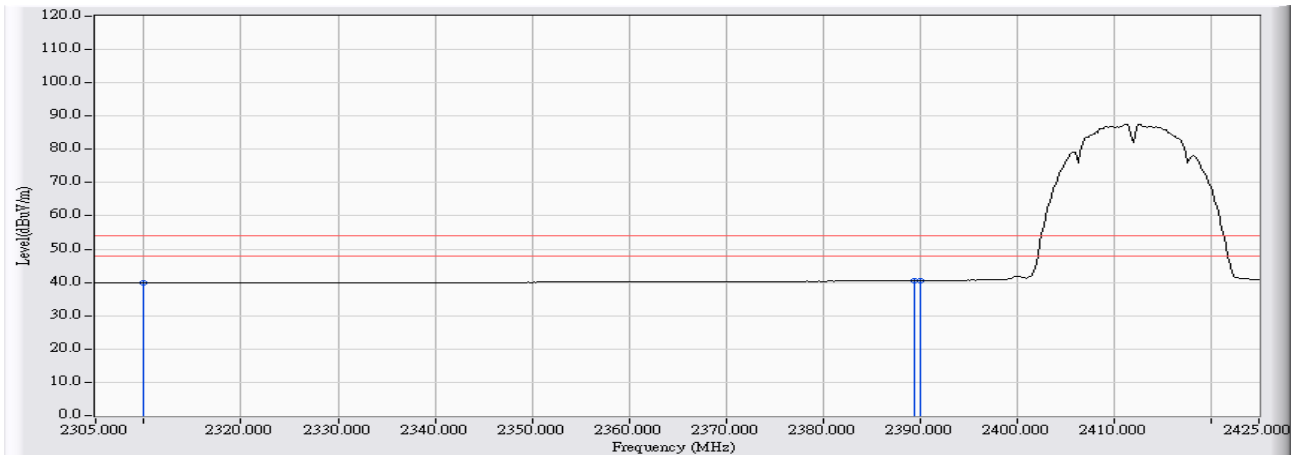


|   | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | 2310.000        | 28.263              | 24.558               | 52.821                 | -21.179     | 74.000         | PEAK          |
| 2 | * 2386.800      | 28.563              | 26.036               | 54.599                 | -19.401     | 74.000         | PEAK          |
| 3 | 2390.000        | 28.575              | 24.834               | 53.409                 | -20.591     | 74.000         | PEAK          |

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ \* ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

|  |                           |
|--|---------------------------|
| Site : CB1   | Time : 2012/08/29 - 14:39 |
| Limit : FCC_SpartC_15.209_03M_AV   | Margin : 6                |
| Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL  | Power : AC 120V / 60Hz    |
| EUT : PowerLine AV 500 Wireless N Mini Extender/<br>PowerLine AV+ Wireless N Mini Extender | Note : 802.11b_2412MHz    |

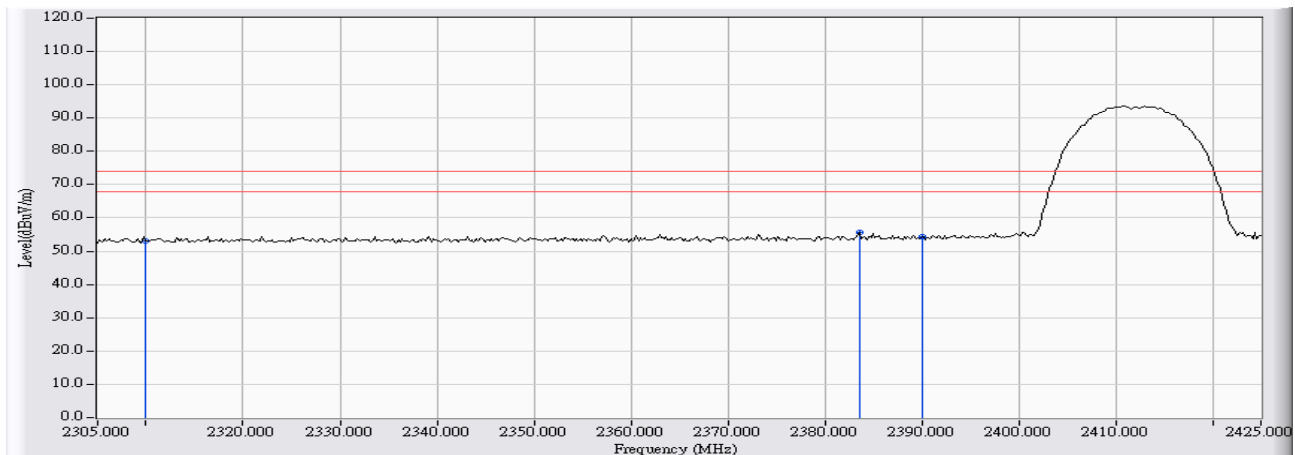


|   | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | 2310.000        | 28.263              | 11.500               | 39.763                 | -14.237     | 54.000         | AVERAGE       |
| 2 | 2389.400        | 28.573              | 11.960               | 40.533                 | -13.467     | 54.000         | AVERAGE       |
| 3 | * 2390.000      | 28.575              | 11.993               | 40.568                 | -13.432     | 54.000         | AVERAGE       |

**Note:**

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ \* ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

|  |                           |
|--|---------------------------|
| Site : CB1   | Time : 2012/08/29 - 14:45 |
| Limit : FCC_SpartC_15.209_03M_PK   | Margin : 6                |
| Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL  | Power : AC 120V / 60Hz    |
| EUT : PowerLine AV 500 Wireless N Mini Extender/<br>PowerLine AV+ Wireless N Mini Extender | Note : 802.11b_2412MHz    |

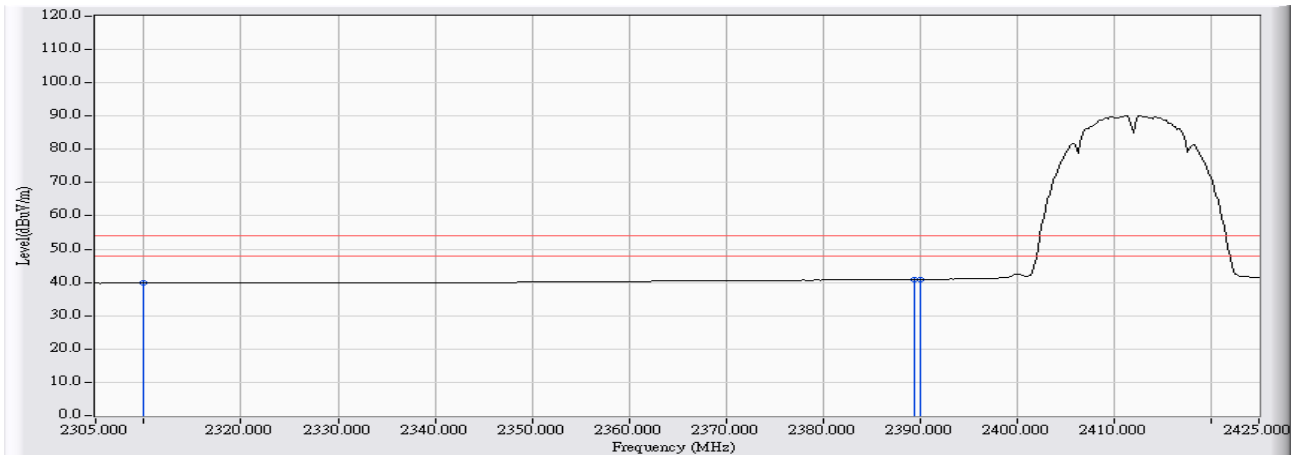


|   | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | 2310.000        | 28.263              | 24.792               | 53.055                 | -20.945     | 74.000         | PEAK          |
| 2 | * 2383.600      | 28.550              | 27.031               | 55.581                 | -18.419     | 74.000         | PEAK          |
| 3 | 2390.000        | 28.575              | 25.642               | 54.217                 | -19.783     | 74.000         | PEAK          |

**Note:**

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ \* ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

|  |                           |
|--|---------------------------|
| Site : CB1   | Time : 2012/08/29 - 14:46 |
| Limit : FCC_SpartC_15.209_03M_AV   | Margin : 6                |
| Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL  | Power : AC 120V / 60Hz    |
| EUT : PowerLine AV 500 Wireless N Mini Extender/<br>PowerLine AV+ Wireless N Mini Extender | Note : 802.11b_2412MHz    |

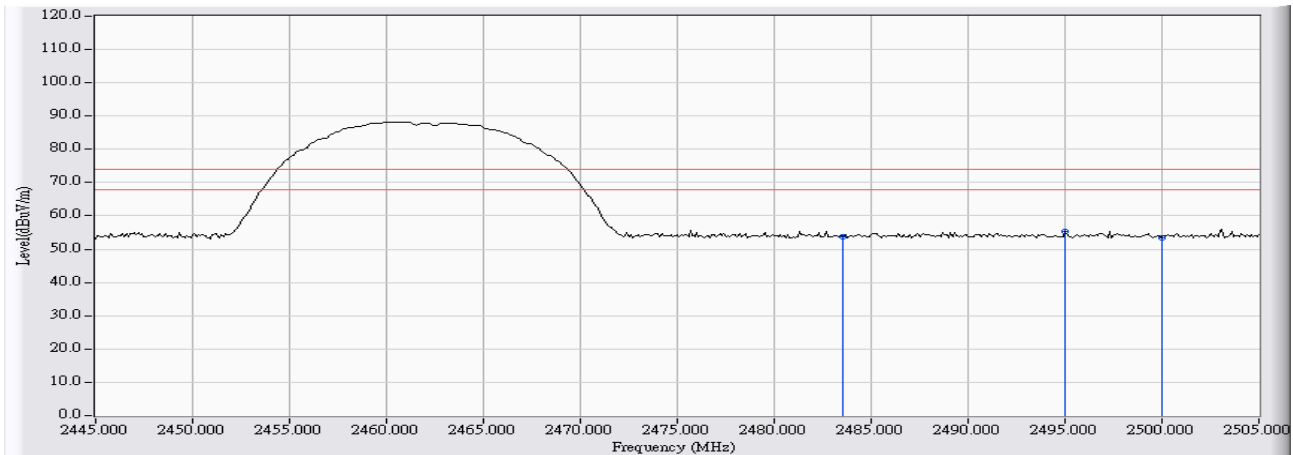


|   | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | 2310.000        | 28.263              | 11.564               | 39.827                 | -14.173     | 54.000         | AVERAGE       |
| 2 | 2389.400        | 28.573              | 12.323               | 40.896                 | -13.104     | 54.000         | AVERAGE       |
| 3 | * 2390.000      | 28.575              | 12.384               | 40.959                 | -13.041     | 54.000         | AVERAGE       |

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " \* ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

|  |                           |
|--|---------------------------|
| Site : CB1   | Time : 2012/08/29 - 14:52 |
| Limit : FCC_SpartC_15.209_03M_PK   | Margin : 6                |
| Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL  | Power : AC 120V / 60Hz    |
| EUT : PowerLine AV 500 Wireless N Mini Extender/<br>PowerLine AV+ Wireless N Mini Extender | Note : 802.11b_2462MHz    |

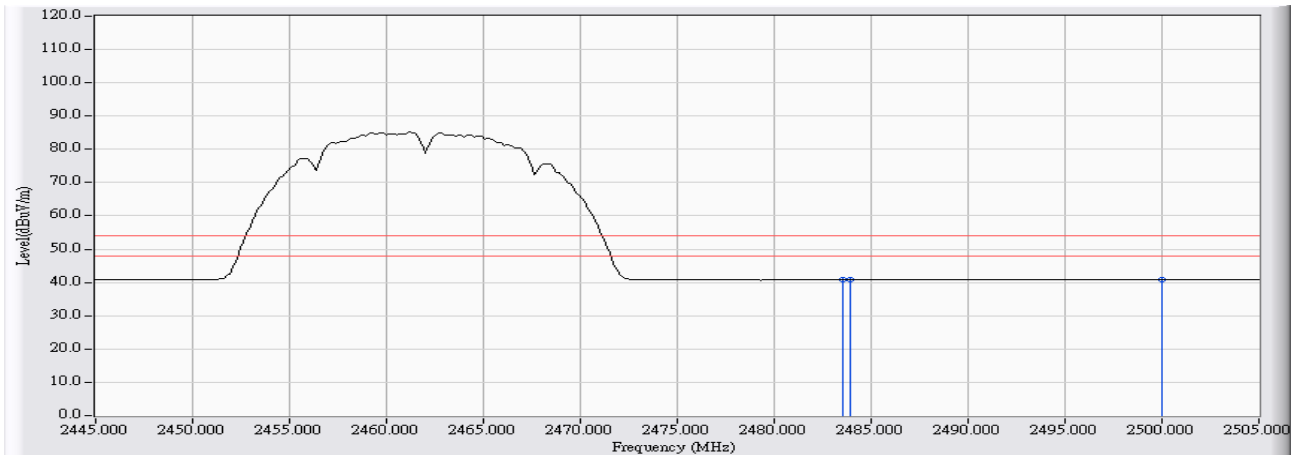


|   | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | 2483.500        | 28.716              | 25.171               | 53.887                 | -20.113     | 74.000         | PEAK          |
| 2 | * 2495.000      | 28.726              | 26.691               | 55.416                 | -18.584     | 74.000         | PEAK          |
| 3 | 2500.000        | 28.729              | 24.769               | 53.498                 | -20.502     | 74.000         | PEAK          |

**Note:**

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ \* ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

|  |                           |
|--|---------------------------|
| Site : CB1   | Time : 2012/08/29 - 14:54 |
| Limit : FCC_SpartC_15.209_03M_AV   | Margin : 6                |
| Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL  | Power : AC 120V / 60Hz    |
| EUT : PowerLine AV 500 Wireless N Mini Extender/<br>PowerLine AV+ Wireless N Mini Extender | Note : 802.11b_2462MHz    |



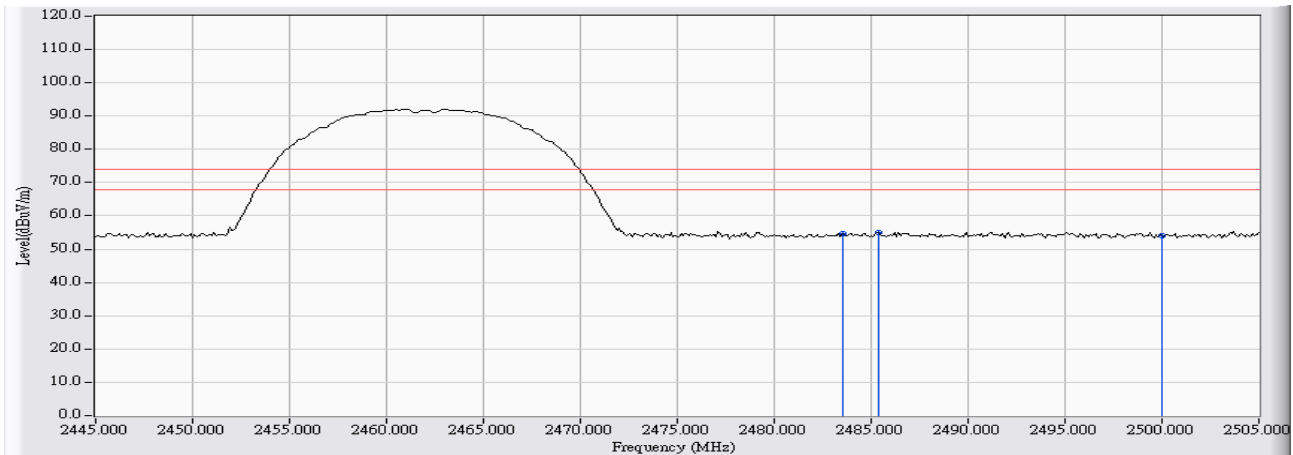
|   |   | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | * | 2483.500        | 28.716              | 12.108               | 40.824                 | -13.176     | 54.000         | AVERAGE       |
| 2 |   | 2483.900        | 28.716              | 12.096               | 40.813                 | -13.187     | 54.000         | AVERAGE       |
| 3 |   | 2500.000        | 28.729              | 12.035               | 40.764                 | -13.236     | 54.000         | AVERAGE       |

**Note:**

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ \* ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.



|  |                           |
|--|---------------------------|
| Site : CB1   | Time : 2012/08/29 - 14:58 |
| Limit : FCC_SpartC_15.209_03M_PK   | Margin : 6                |
| Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL  | Power : AC 120V / 60Hz    |
| EUT : PowerLine AV 500 Wireless N Mini Extender/<br>PowerLine AV+ Wireless N Mini Extender | Note : 802.11b_2462MHz    |

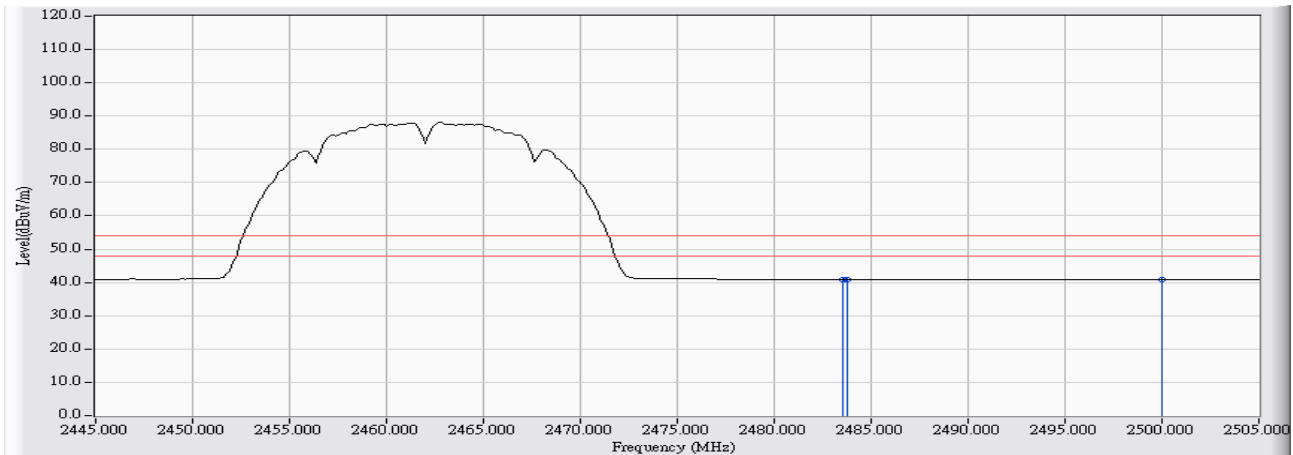


|   | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | 2483.500        | 28.716              | 25.821               | 54.537                 | -19.463     | 74.000         | PEAK          |
| 2 | * 2485.400      | 28.718              | 26.452               | 55.170                 | -18.830     | 74.000         | PEAK          |
| 3 | 2500.000        | 28.729              | 25.278               | 54.007                 | -19.993     | 74.000         | PEAK          |

**Note:**

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ \* ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

|  |                           |
|--|---------------------------|
| Site : CB1   | Time : 2012/08/29 - 14:59 |
| Limit : FCC_SpartC_15.209_03M_AV   | Margin : 6                |
| Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL  | Power : AC 120V / 60Hz    |
| EUT : PowerLine AV 500 Wireless N Mini Extender/<br>PowerLine AV+ Wireless N Mini Extender | Note : 802.11b_2462MHz    |

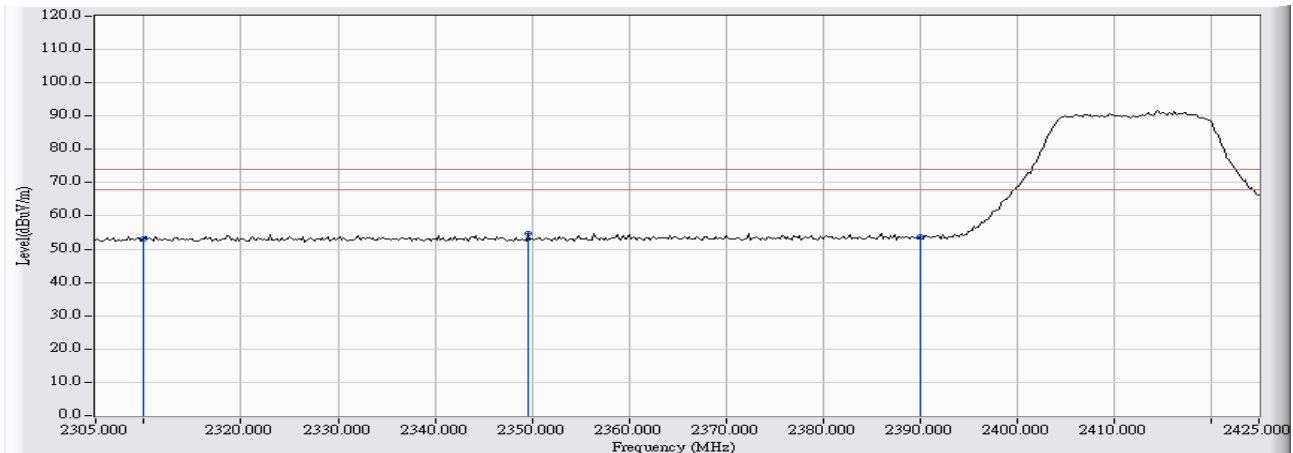


|   |   | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | * | 2483.500        | 28.716              | 12.240               | 40.956                 | -13.044     | 54.000         | AVERAGE       |
| 2 |   | 2483.800        | 28.716              | 12.238               | 40.955                 | -13.045     | 54.000         | AVERAGE       |
| 3 |   | 2500.000        | 28.729              | 12.175               | 40.904                 | -13.096     | 54.000         | AVERAGE       |

**Note:**

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ \* ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

|  |                           |
|--|---------------------------|
| Site : CB1   | Time : 2012/08/29 - 14:26 |
| Limit : FCC_SpartC_15.209_03M_PK   | Margin : 6                |
| Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL  | Power : AC 120V / 60Hz    |
| EUT : PowerLine AV 500 Wireless N Mini Extender/<br>PowerLine AV+ Wireless N Mini Extender | Note : 802.11g_2412MHz    |

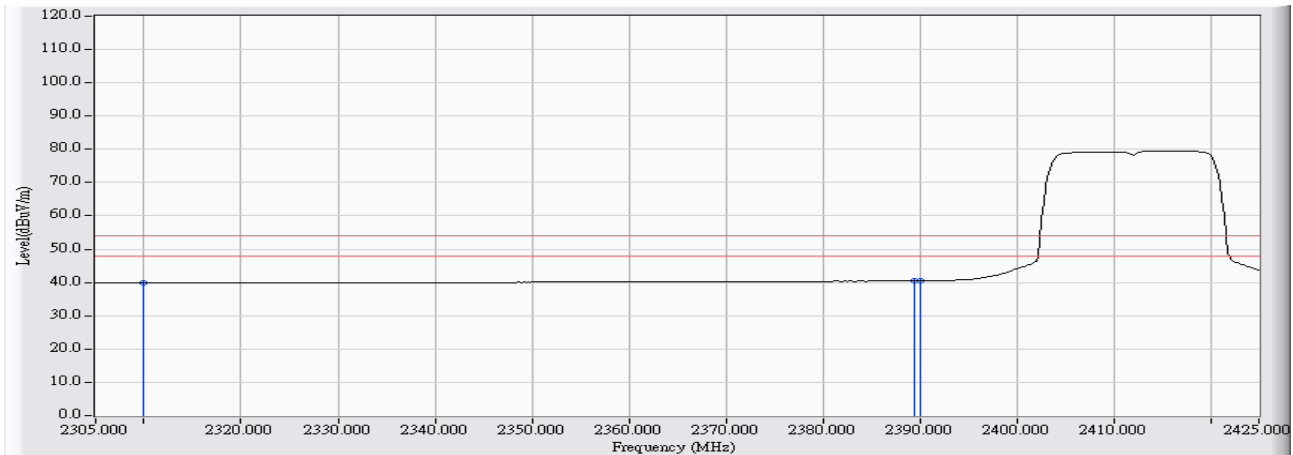


|   | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | 2310.000        | 28.263              | 24.822               | 53.085                 | -20.915     | 74.000         | PEAK          |
| 2 | * 2349.600      | 28.418              | 26.241               | 54.659                 | -19.341     | 74.000         | PEAK          |
| 3 | 2390.000        | 28.575              | 25.044               | 53.619                 | -20.381     | 74.000         | PEAK          |

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ \* ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

|  |                           |
|--|---------------------------|
| Site : CB1   | Time : 2012/08/29 - 14:28 |
| Limit : FCC_SpartC_15.209_03M_AV   | Margin : 6                |
| Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL  | Power : AC 120V / 60Hz    |
| EUT : PowerLine AV 500 Wireless N Mini Extender/<br>PowerLine AV+ Wireless N Mini Extender | Note : 802.11g_2412MHz    |

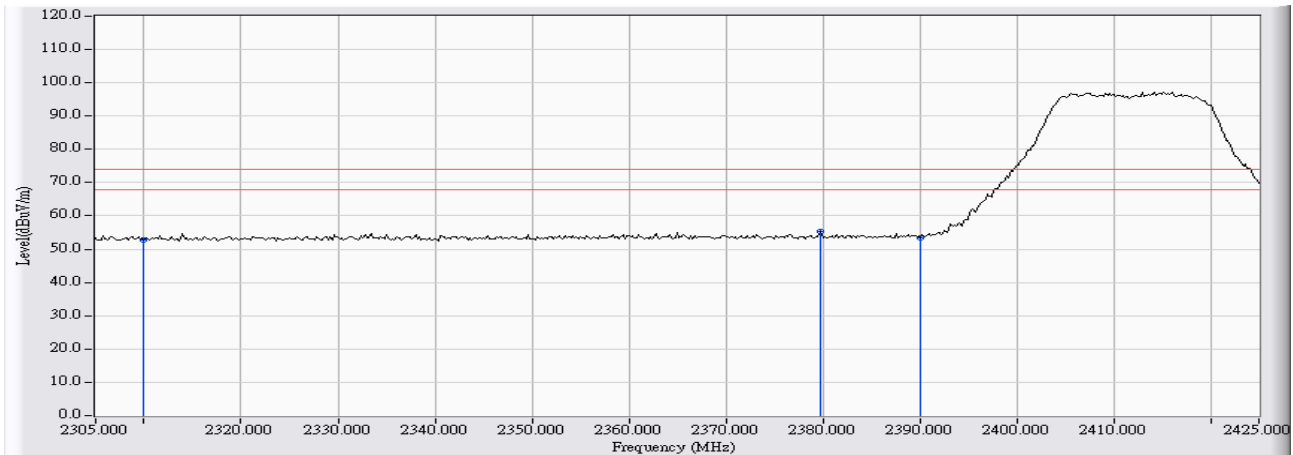


|   | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | 2310.000        | 28.263              | 11.569               | 39.832                 | -14.168     | 54.000         | AVERAGE       |
| 2 | 2389.400        | 28.573              | 11.871               | 40.444                 | -13.556     | 54.000         | AVERAGE       |
| 3 | * 2390.000      | 28.575              | 11.910               | 40.485                 | -13.515     | 54.000         | AVERAGE       |

**Note:**

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " \* ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

|  |                           |
|--|---------------------------|
| Site : CB1   | Time : 2012/08/29 - 14:32 |
| Limit : FCC_SpartC_15.209_03M_PK   | Margin : 6                |
| Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL  | Power : AC 120V / 60Hz    |
| EUT : PowerLine AV 500 Wireless N Mini Extender/<br>PowerLine AV+ Wireless N Mini Extender | Note : 802.11g_2412MHz    |

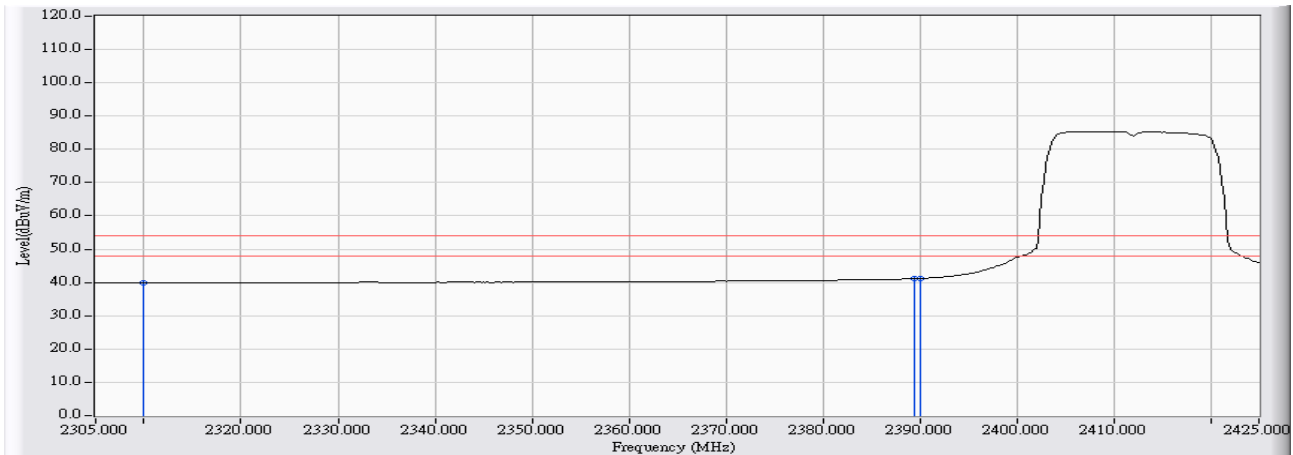


|   | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | 2310.000        | 28.263              | 24.602               | 52.865                 | -21.135     | 74.000         | PEAK          |
| 2 | * 2379.800      | 28.535              | 26.873               | 55.408                 | -18.592     | 74.000         | PEAK          |
| 3 | 2390.000        | 28.575              | 24.897               | 53.472                 | -20.528     | 74.000         | PEAK          |

**Note:**

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ \* ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

|  |                           |
|--|---------------------------|
| Site : CB1   | Time : 2012/08/29 - 14:33 |
| Limit : FCC_SpartC_15.209_03M_AV   | Margin : 6                |
| Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL  | Power : AC 120V / 60Hz    |
| EUT : PowerLine AV 500 Wireless N Mini Extender/<br>PowerLine AV+ Wireless N Mini Extender | Note : 802.11g_2412MHz    |

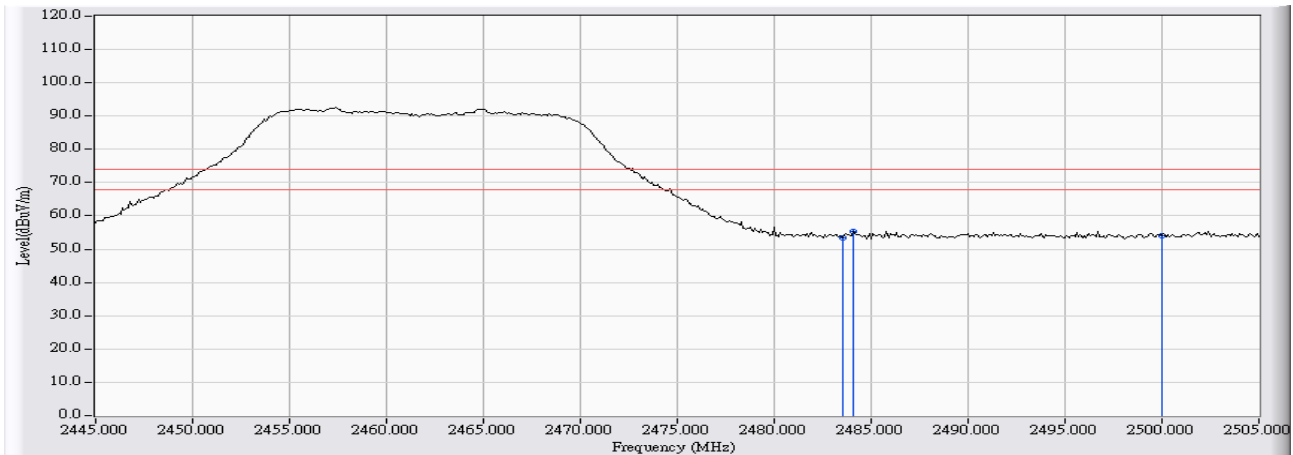


|   | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | 2310.000        | 28.263              | 11.591               | 39.854                 | -14.146     | 54.000         | AVERAGE       |
| 2 | 2389.400        | 28.573              | 12.554               | 41.127                 | -12.873     | 54.000         | AVERAGE       |
| 3 | * 2390.000      | 28.575              | 12.642               | 41.217                 | -12.783     | 54.000         | AVERAGE       |

**Note:**

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " \* ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

|  |                           |
|--|---------------------------|
| Site : CB1   | Time : 2012/08/29 - 15:05 |
| Limit : FCC_SpartC_15.209_03M_PK   | Margin : 6                |
| Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL  | Power : AC 120V / 60Hz    |
| EUT : PowerLine AV 500 Wireless N Mini Extender/<br>PowerLine AV+ Wireless N Mini Extender | Note : 802.11g_2462MHz    |

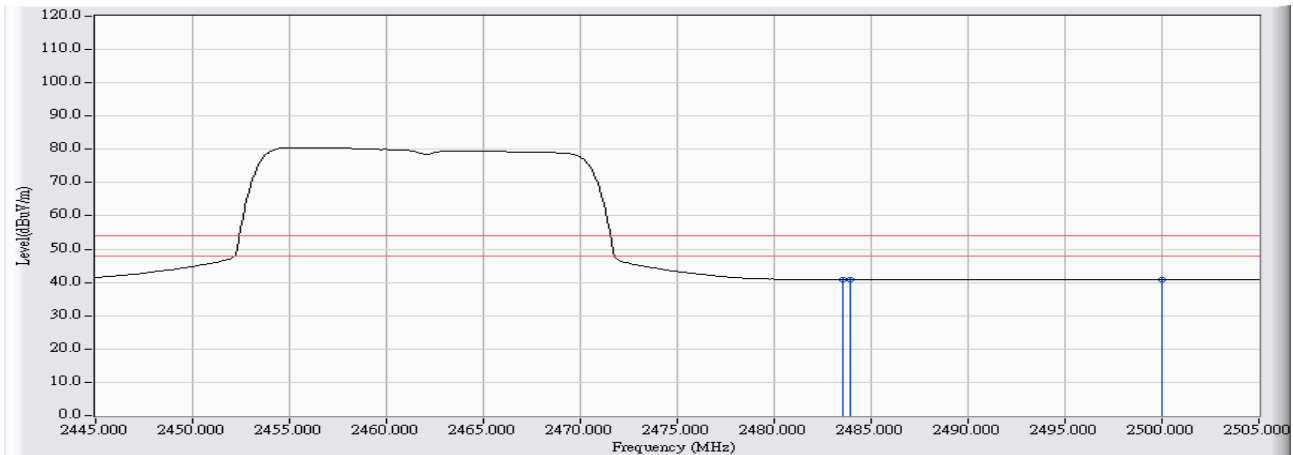


|   | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | 2483.500        | 28.716              | 24.793               | 53.509                 | -20.491     | 74.000         | PEAK          |
| 2 | * 2484.100      | 28.716              | 26.759               | 55.476                 | -18.524     | 74.000         | PEAK          |
| 3 | 2500.000        | 28.729              | 25.292               | 54.021                 | -19.979     | 74.000         | PEAK          |

**Note:**

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " \* ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

|  |                           |
|--|---------------------------|
| Site : CB1   | Time : 2012/08/29 - 15:06 |
| Limit : FCC_SpartC_15.209_03M_AV   | Margin : 6                |
| Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL  | Power : AC 120V / 60Hz    |
| EUT : PowerLine AV 500 Wireless N Mini Extender/<br>PowerLine AV+ Wireless N Mini Extender | Note : 802.11g_2462MHz    |



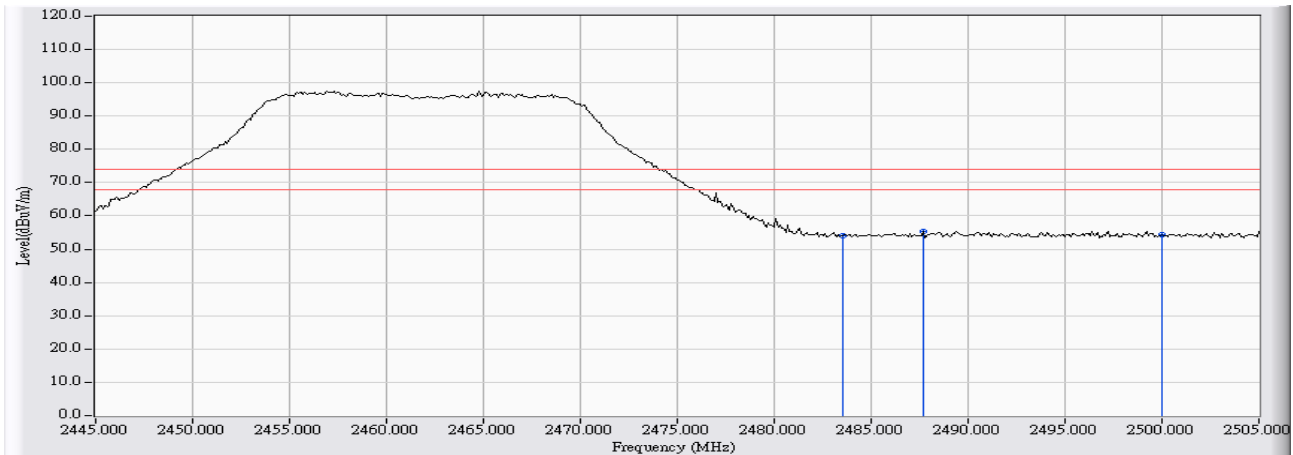
|   | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | 2483.500        | 28.716              | 12.123               | 40.839                 | -13.161     | 54.000         | AVERAGE       |
| 2 | * 2483.900      | 28.716              | 12.142               | 40.859                 | -13.141     | 54.000         | AVERAGE       |
| 3 | 2500.000        | 28.729              | 12.013               | 40.742                 | -13.258     | 54.000         | AVERAGE       |

**Note:**

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " \* ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.



|  |                           |
|--|---------------------------|
| Site : CB1   | Time : 2012/08/29 - 15:13 |
| Limit : FCC_SpartC_15.209_03M_PK   | Margin : 6                |
| Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL  | Power : AC 120V / 60Hz    |
| EUT : PowerLine AV 500 Wireless N Mini Extender/<br>PowerLine AV+ Wireless N Mini Extender | Note : 802.11g_2462MHz    |

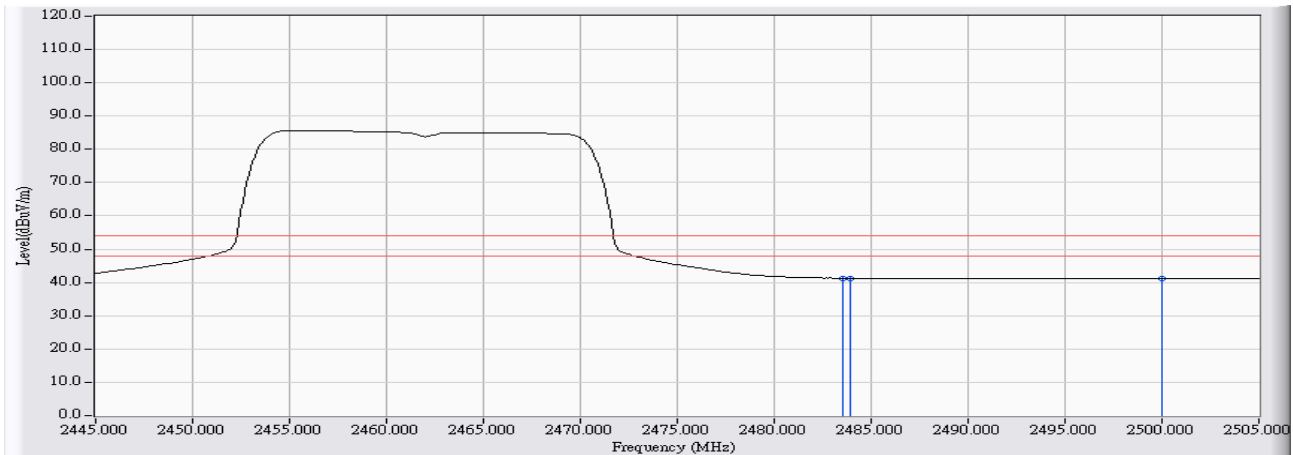


|   | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | 2483.500        | 28.716              | 25.365               | 54.081                 | -19.919     | 74.000         | PEAK          |
| 2 | * 2487.700      | 28.720              | 26.574               | 55.294                 | -18.706     | 74.000         | PEAK          |
| 3 | 2500.000        | 28.729              | 25.657               | 54.386                 | -19.614     | 74.000         | PEAK          |

**Note:**

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ \* ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

|  |                           |
|--|---------------------------|
| Site : CB1   | Time : 2012/08/29 - 15:13 |
| Limit : FCC_SpartC_15.209_03M_AV   | Margin : 6                |
| Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL  | Power : AC 120V / 60Hz    |
| EUT : PowerLine AV 500 Wireless N Mini Extender/<br>PowerLine AV+ Wireless N Mini Extender | Note : 802.11g_2462MHz    |

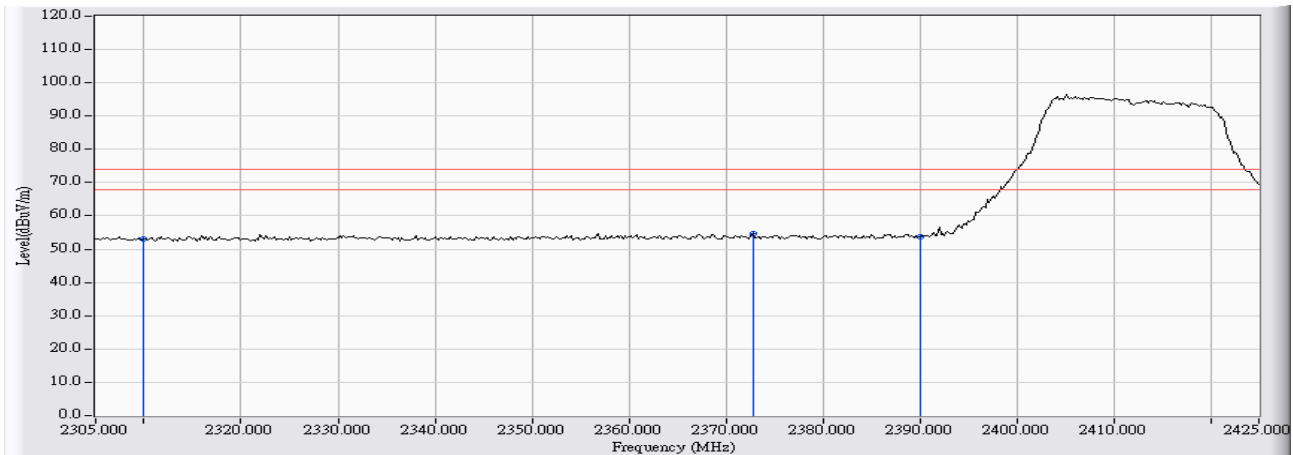


|   |   | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | * | 2483.500        | 28.716              | 12.566               | 41.282                 | -12.718     | 54.000         | AVERAGE       |
| 2 |   | 2483.900        | 28.716              | 12.541               | 41.258                 | -12.742     | 54.000         | AVERAGE       |
| 3 |   | 2500.000        | 28.729              | 12.367               | 41.096                 | -12.904     | 54.000         | AVERAGE       |

**Note:**

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ \* ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

|  |                               |
|--|-------------------------------|
| Site : CB1   | Time : 2012/08/29 - 14:04     |
| Limit : FCC_SpartC_15.209_03M_PK   | Margin : 6                    |
| Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL  | Power : AC 120V / 60Hz        |
| EUT : PowerLine AV 500 Wireless N Mini Extender/<br>PowerLine AV+ Wireless N Mini Extender | Note : 802.11n(20MHz) 2412MHz |

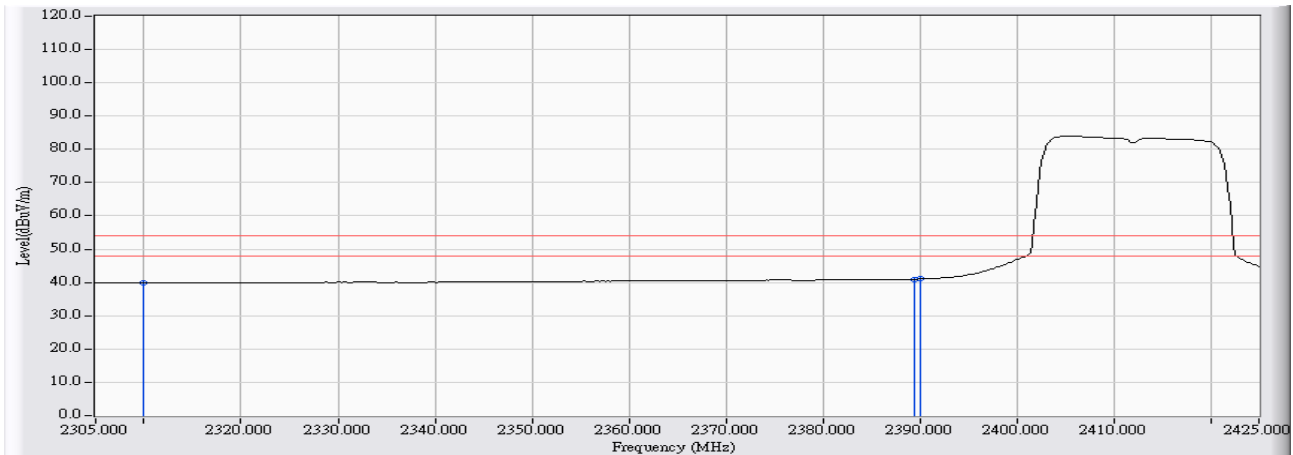


|   | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | 2310.000        | 28.263              | 24.799               | 53.062                 | -20.938     | 74.000         | PEAK          |
| 2 | * 2372.800      | 28.509              | 26.261               | 54.769                 | -19.231     | 74.000         | PEAK          |
| 3 | 2390.000        | 28.575              | 25.111               | 53.686                 | -20.314     | 74.000         | PEAK          |

**Note:**

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ \* ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

|  |                               |
|--|-------------------------------|
| Site : CB1   | Time : 2012/08/29 - 14:05     |
| Limit : FCC_SpartC_15.209_03M_AV   | Margin : 6                    |
| Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL  | Power : AC 120V / 60Hz        |
| EUT : PowerLine AV 500 Wireless N Mini Extender/<br>PowerLine AV+ Wireless N Mini Extender | Note : 802.11n(20MHz) 2412MHz |

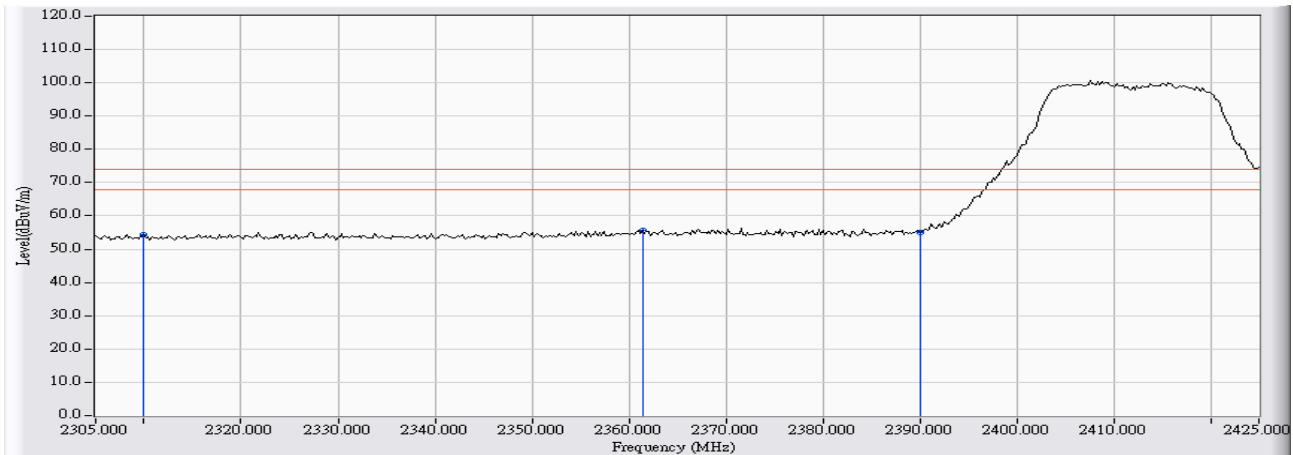


|   | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | 2310.000        | 28.263              | 11.575               | 39.838                 | -14.162     | 54.000         | AVERAGE       |
| 2 | 2389.400        | 28.573              | 12.378               | 40.951                 | -13.049     | 54.000         | AVERAGE       |
| 3 | * 2390.000      | 28.575              | 12.453               | 41.028                 | -12.972     | 54.000         | AVERAGE       |

**Note:**

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " \* ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

|  |                               |
|--|-------------------------------|
| Site : CB1   | Time : 2012/08/29 - 14:21     |
| Limit : FCC_SpartC_15.209_03M_PK   | Margin : 6                    |
| Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL  | Power : AC 120V / 60Hz        |
| EUT : PowerLine AV 500 Wireless N Mini Extender/<br>PowerLine AV+ Wireless N Mini Extender | Note : 802.11n(20MHz) 2412MHz |

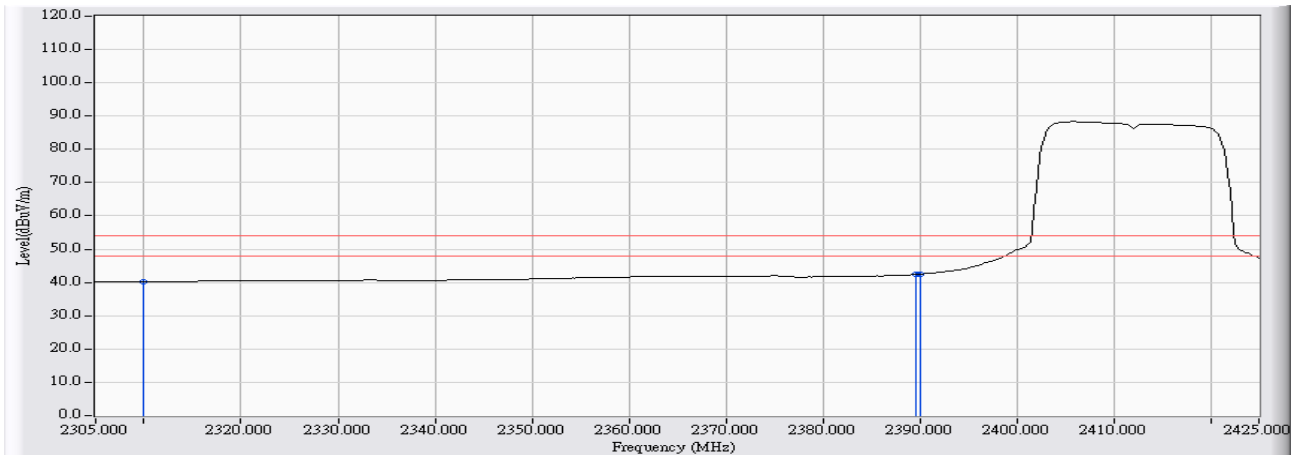


|   | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | 2310.000        | 28.263              | 26.189               | 54.452                 | -19.548     | 74.000         | PEAK          |
| 2 | * 2361.400      | 28.464              | 27.330               | 55.794                 | -18.206     | 74.000         | PEAK          |
| 3 | 2390.000        | 28.575              | 26.484               | 55.059                 | -18.941     | 74.000         | PEAK          |

**Note:**

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ \* ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

|  |                               |
|--|-------------------------------|
| Site : CB1   | Time : 2012/08/29 - 14:23     |
| Limit : FCC_SpartC_15.209_03M_AV   | Margin : 6                    |
| Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL  | Power : AC 120V / 60Hz        |
| EUT : PowerLine AV 500 Wireless N Mini Extender/<br>PowerLine AV+ Wireless N Mini Extender | Note : 802.11n(20MHz) 2412MHz |

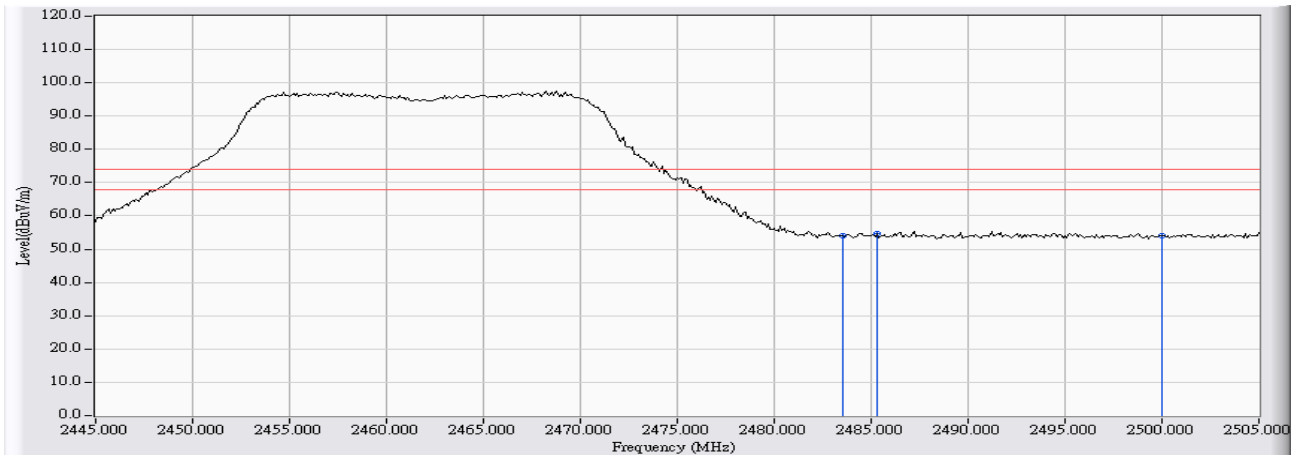


|   | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | 2310.000        | 28.263              | 12.018               | 40.281                 | -13.719     | 54.000         | AVERAGE       |
| 2 | 2389.600        | 28.574              | 13.829               | 42.403                 | -11.597     | 54.000         | AVERAGE       |
| 3 | * 2390.000      | 28.575              | 13.940               | 42.515                 | -11.485     | 54.000         | AVERAGE       |

**Note:**

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ \* ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

|  |                               |
|--|-------------------------------|
| Site : CB1   | Time : 2012/08/29 - 15:28     |
| Limit : FCC_SpartC_15.209_03M_PK   | Margin : 6                    |
| Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL  | Power : AC 120V / 60Hz        |
| EUT : PowerLine AV 500 Wireless N Mini Extender/<br>PowerLine AV+ Wireless N Mini Extender | Note : 802.11n(20MHz) 2462MHz |

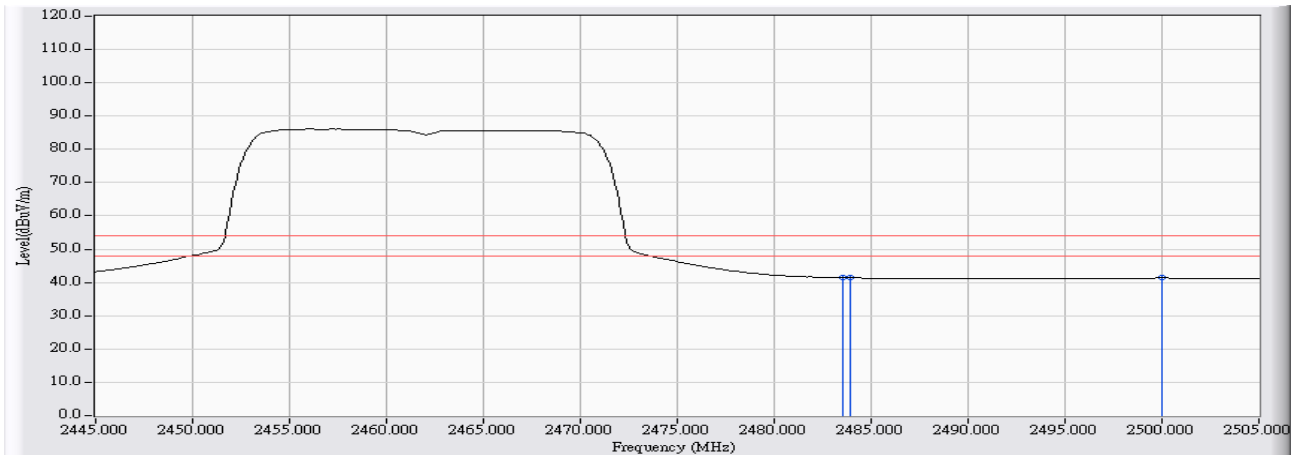


|   | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | 2483.500        | 28.716              | 25.297               | 54.013                 | -19.987     | 74.000         | PEAK          |
| 2 | * 2485.300      | 28.718              | 26.074               | 54.792                 | -19.208     | 74.000         | PEAK          |
| 3 | 2500.000        | 28.729              | 25.230               | 53.959                 | -20.041     | 74.000         | PEAK          |

**Note:**

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ \* ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

|  |                               |
|--|-------------------------------|
| Site : CB1   | Time : 2012/08/29 - 15:40     |
| Limit : FCC_SpartC_15.209_03M_AV   | Margin : 6                    |
| Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL  | Power : AC 120V / 60Hz        |
| EUT : PowerLine AV 500 Wireless N Mini Extender/<br>PowerLine AV+ Wireless N Mini Extender | Note : 802.11n(20MHz) 2462MHz |



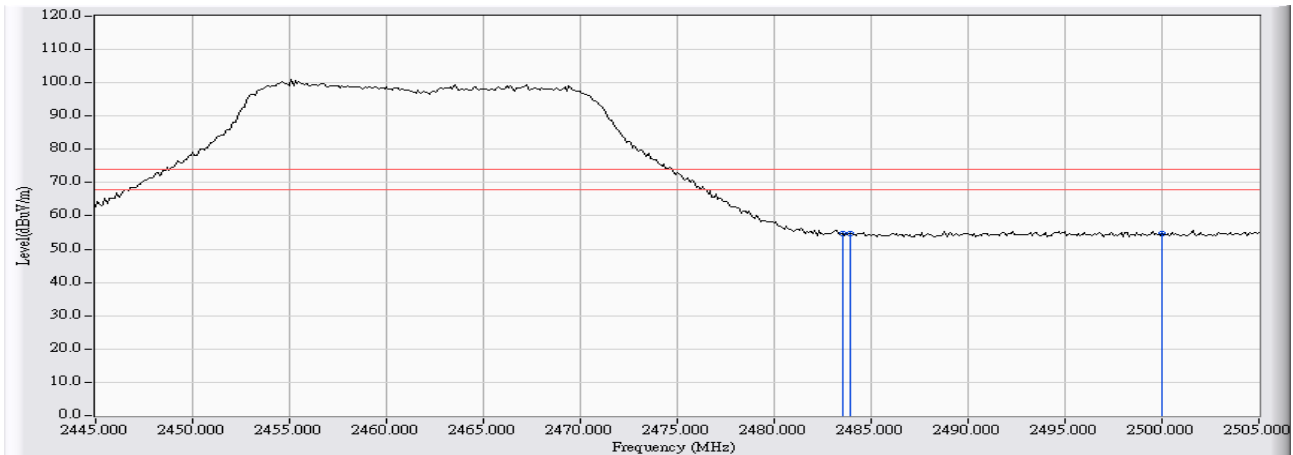
|   | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | 2483.500        | 28.716              | 12.730               | 41.446                 | -12.554     | 54.000         | AVERAGE       |
| 2 | 2483.900        | 28.716              | 12.687               | 41.404                 | -12.596     | 54.000         | AVERAGE       |
| 3 | * 2500.000      | 28.729              | 12.720               | 41.449                 | -12.551     | 54.000         | AVERAGE       |

**Note:**

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ \* ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.



|  |                               |
|--|-------------------------------|
| Site : CB1   | Time : 2012/08/29 - 15:46     |
| Limit : FCC_SpartC_15.209_03M_PK   | Margin : 6                    |
| Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL  | Power : AC 120V / 60Hz        |
| EUT : PowerLine AV 500 Wireless N Mini Extender/<br>PowerLine AV+ Wireless N Mini Extender | Note : 802.11n(20MHz) 2462MHz |

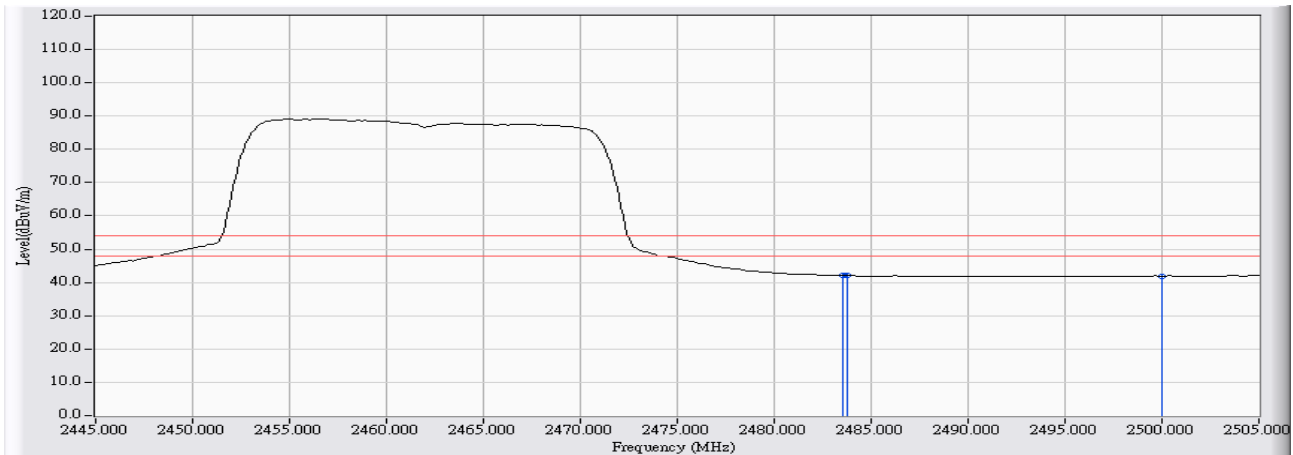


|   | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | 2483.500        | 28.716              | 25.993               | 54.709                 | -19.291     | 74.000         | PEAK          |
| 2 | * 2483.900      | 28.716              | 26.093               | 54.810                 | -19.190     | 74.000         | PEAK          |
| 3 | 2500.000        | 28.729              | 25.957               | 54.686                 | -19.314     | 74.000         | PEAK          |

**Note:**

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ \* ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

|  |                               |
|--|-------------------------------|
| Site : CB1   | Time : 2012/08/29 - 15:47     |
| Limit : FCC_SpartC_15.209_03M_AV   | Margin : 6                    |
| Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL  | Power : AC 120V / 60Hz        |
| EUT : PowerLine AV 500 Wireless N Mini Extender/<br>PowerLine AV+ Wireless N Mini Extender | Note : 802.11n(20MHz) 2462MHz |

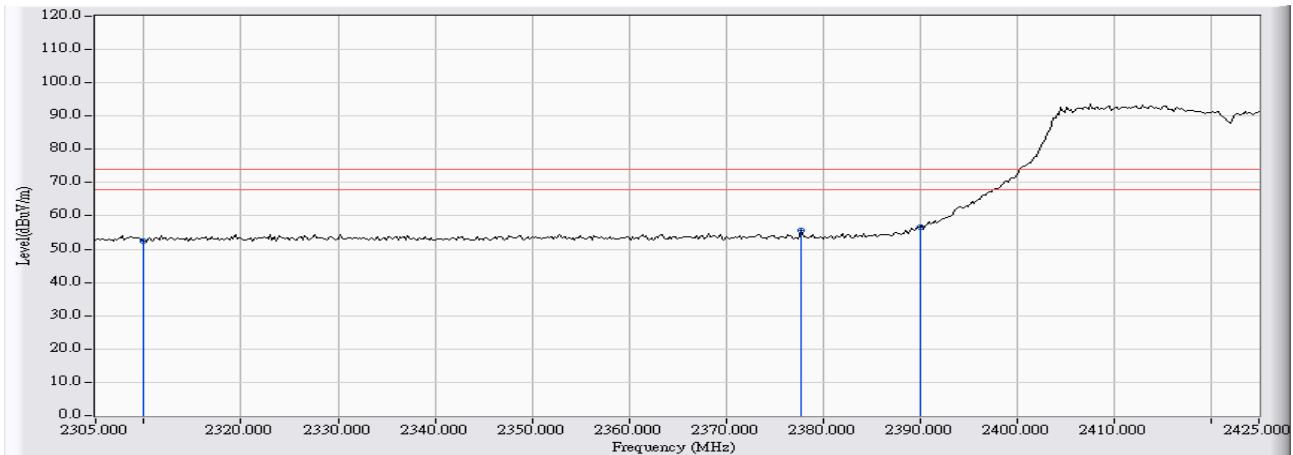


|   |   | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | * | 2483.500        | 28.716              | 13.432               | 42.148                 | -11.852     | 54.000         | AVERAGE       |
| 2 |   | 2483.800        | 28.716              | 13.380               | 42.097                 | -11.903     | 54.000         | AVERAGE       |
| 3 |   | 2500.000        | 28.729              | 13.190               | 41.919                 | -12.081     | 54.000         | AVERAGE       |

**Note:**

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ \* ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

|  |                               |
|--|-------------------------------|
| Site : CB1   | Time : 2012/08/29 - 13:43     |
| Limit : FCC_SpartC_15.209_03M_PK   | Margin : 6                    |
| Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL  | Power : AC 120V / 60Hz        |
| EUT : PowerLine AV 500 Wireless N Mini Extender/<br>PowerLine AV+ Wireless N Mini Extender | Note : 802.11n(40MHz) 2422MHz |

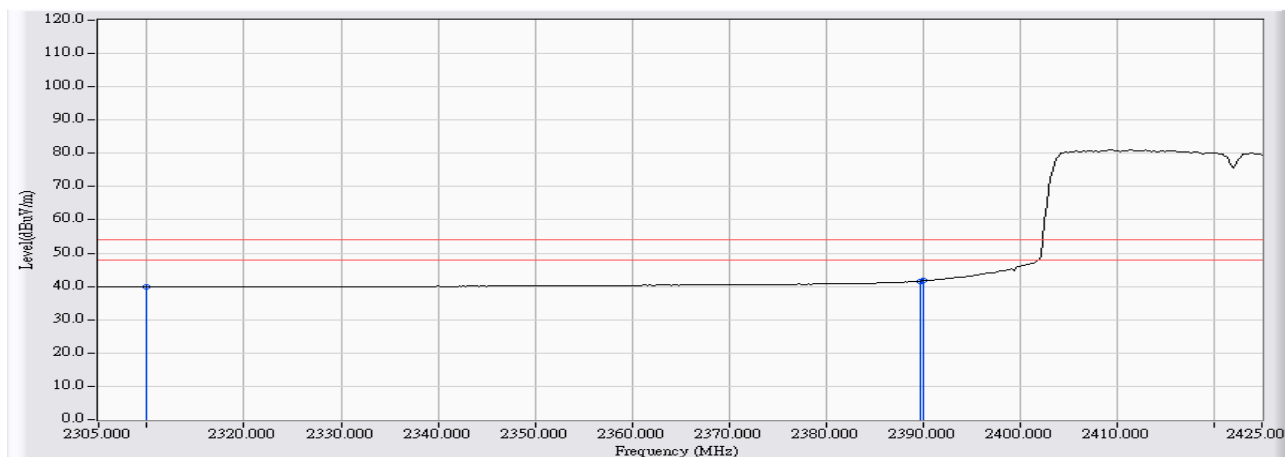


|   | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | 2310.000        | 28.263              | 24.320               | 52.583                 | -21.417     | 74.000         | PEAK          |
| 2 | 2377.800        | 28.528              | 27.104               | 55.632                 | -18.368     | 74.000         | PEAK          |
| 3 | * 2390.000      | 28.575              | 28.155               | 56.730                 | -17.270     | 74.000         | PEAK          |

**Note:**

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " \* ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

|  |                               |
|--|-------------------------------|
| Site : CB1   | Time : 2012/08/29 - 13:44     |
| Limit : FCC_SpartC_15.209_03M_AV   | Margin : 6                    |
| Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL  | Power : AC 120V / 60Hz        |
| EUT : PowerLine AV 500 Wireless N Mini Extender/<br>PowerLine AV+ Wireless N Mini Extender | Note : 802.11n(40MHz) 2422MHz |

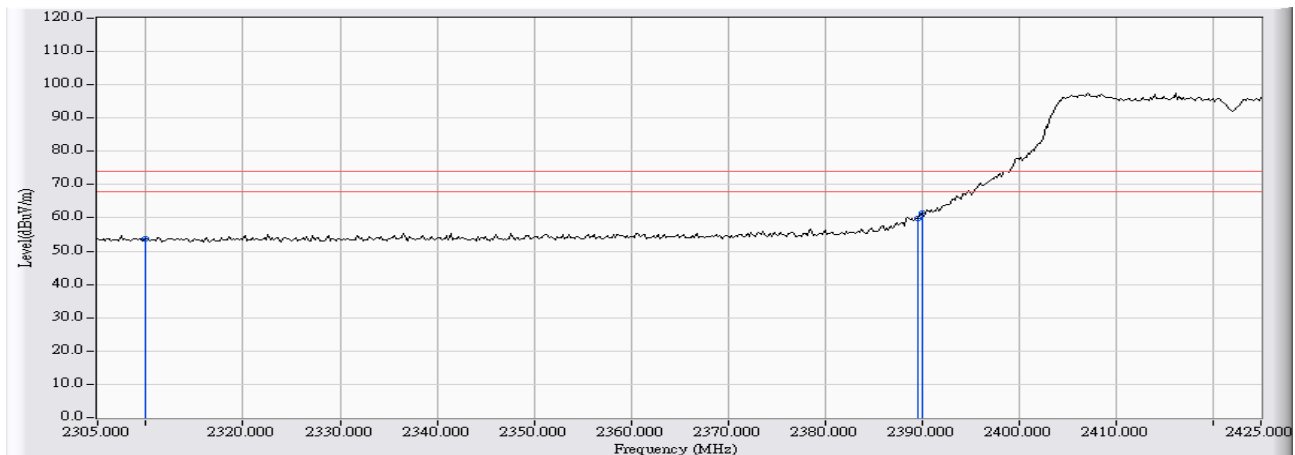


|   | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | 2310.000        | 28.263              | 11.561               | 39.824                 | -14.176     | 54.000         | AVERAGE       |
| 2 | 2389.800        | 28.574              | 13.083               | 41.657                 | -12.343     | 54.000         | AVERAGE       |
| 3 | * 2390.000      | 28.575              | 13.144               | 41.719                 | -12.281     | 54.000         | AVERAGE       |

**Note:**

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ \* ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

|  |                               |
|--|-------------------------------|
| Site : CB1   | Time : 2012/08/29 - 13:53     |
| Limit : FCC_SpartC_15.209_03M_PK   | Margin : 6                    |
| Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL  | Power : AC 120V / 60Hz        |
| EUT : PowerLine AV 500 Wireless N Mini Extender/<br>PowerLine AV+ Wireless N Mini Extender | Note : 802.11n(40MHz) 2422MHz |



|   | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | 2310.000        | 28.263              | 25.348               | 53.611                 | -20.389     | 74.000         | PEAK          |
| 2 | 2389.600        | 28.574              | 31.323               | 59.897                 | -14.103     | 74.000         | PEAK          |
| 3 | * 2390.000      | 28.575              | 32.778               | 61.353                 | -12.647     | 74.000         | PEAK          |

**Note:**

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ \* ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

|  |                               |
|--|-------------------------------|
| Site : CB1   | Time : 2012/08/29 - 14:00     |
| Limit : FCC_SpartC_15.209_03M_AV   | Margin : 6                    |
| Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL  | Power : AC 120V / 60Hz        |
| EUT : PowerLine AV 500 Wireless N Mini Extender/<br>PowerLine AV+ Wireless N Mini Extender | Note : 802.11n(40MHz) 2422MHz |

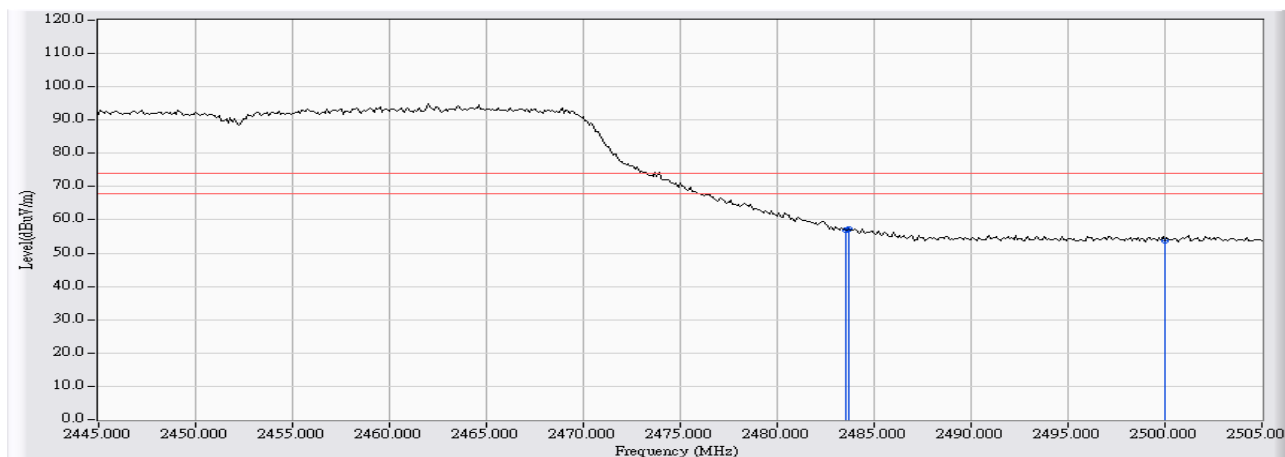


|   | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | 2310.000        | 28.263              | 12.170               | 40.433                 | -13.567     | 54.000         | AVERAGE       |
| 2 | 2389.600        | 28.574              | 15.880               | 44.454                 | -9.546      | 54.000         | AVERAGE       |
| 3 | * 2390.000      | 28.575              | 16.034               | 44.609                 | -9.391      | 54.000         | AVERAGE       |

**Note:**

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ \* ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

|  |                               |
|--|-------------------------------|
| Site : CB1   | Time : 2012/08/29 - 16:11     |
| Limit : FCC_SpartC_15.209_03M_PK   | Margin : 6                    |
| Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL  | Power : AC 120V / 60Hz        |
| EUT : PowerLine AV 500 Wireless N Mini Extender/<br>PowerLine AV+ Wireless N Mini Extender | Note : 802.11n(40MHz) 2452MHz |

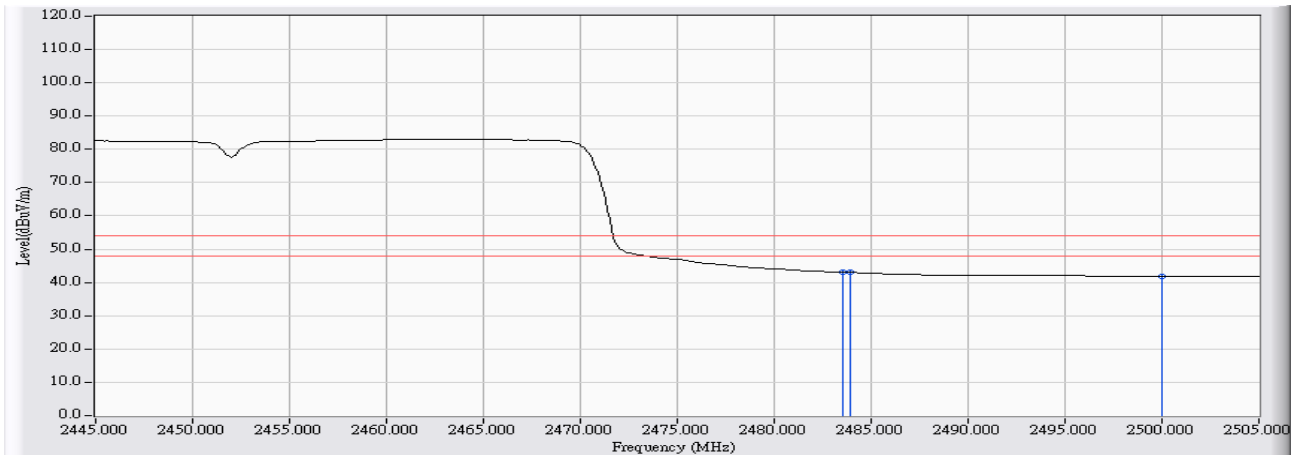


|   | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | 2483.500        | 28.716              | 28.147               | 56.863                 | -17.137     | 74.000         | PEAK          |
| 2 | * 2483.700      | 28.716              | 28.530               | 57.246                 | -16.754     | 74.000         | PEAK          |
| 3 | 2500.000        | 28.729              | 25.097               | 53.826                 | -20.174     | 74.000         | PEAK          |

**Note:**

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ \* ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

|  |                               |
|--|-------------------------------|
| Site : CB1   | Time : 2012/08/29 - 16:19     |
| Limit : FCC_SpartC_15.209_03M_AV   | Margin : 6                    |
| Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL  | Power : AC 120V / 60Hz        |
| EUT : PowerLine AV 500 Wireless N Mini Extender/<br>PowerLine AV+ Wireless N Mini Extender | Note : 802.11n(40MHz) 2452MHz |



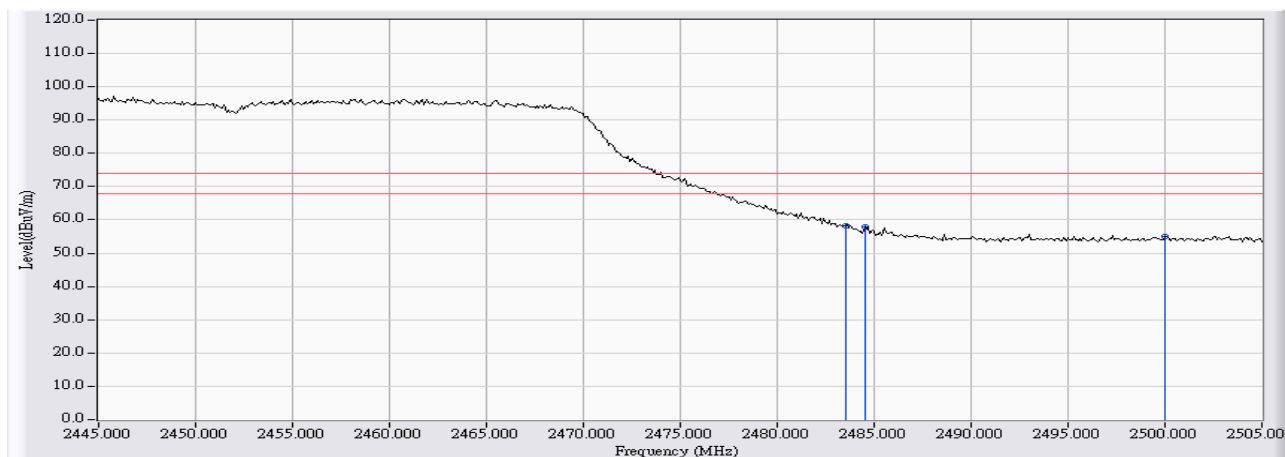
|   |   | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | * | 2483.500        | 28.716              | 14.356               | 43.072                 | -10.928     | 54.000         | AVERAGE       |
| 2 |   | 2483.900        | 28.716              | 14.285               | 43.002                 | -10.998     | 54.000         | AVERAGE       |
| 3 |   | 2500.000        | 28.729              | 13.186               | 41.915                 | -12.085     | 54.000         | AVERAGE       |

**Note:**

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ \* ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.



|  |                               |
|--|-------------------------------|
| Site : CB1   | Time : 2012/08/29 - 16:22     |
| Limit : FCC_SpartC_15.209_03M_PK   | Margin : 6                    |
| Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL  | Power : AC 120V / 60Hz        |
| EUT : PowerLine AV 500 Wireless N Mini Extender/<br>PowerLine AV+ Wireless N Mini Extender | Note : 802.11n(40MHz) 2452MHz |

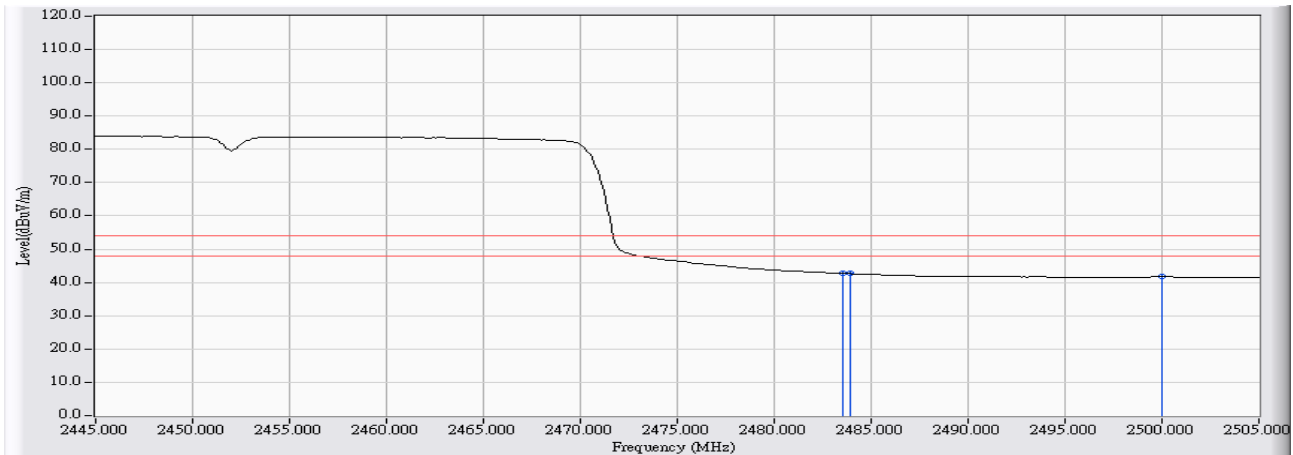


|   |   | Frequency<br>(MHz) | Correct Factor<br>(dB) | Reading Level<br>(dBuV) | Measure Level<br>(dBuV/m) | Margin<br>(dB) | Limit<br>(dBuV/m) | Detector Type |
|---|---|--------------------|------------------------|-------------------------|---------------------------|----------------|-------------------|---------------|
| 1 | * | 2483.500           | 28.716                 | 29.409                  | 58.125                    | -15.875        | 74.000            | PEAK          |
| 2 |   | 2484.500           | 28.717                 | 29.249                  | 57.966                    | -16.034        | 74.000            | PEAK          |
| 3 |   | 2500.000           | 28.729                 | 26.380                  | 55.109                    | -18.891        | 74.000            | PEAK          |

**Note:**

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ \* ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

|  |                               |
|--|-------------------------------|
| Site : CB1   | Time : 2012/08/29 - 16:22     |
| Limit : FCC_SpartC_15.209_03M_AV   | Margin : 6                    |
| Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL  | Power : AC 120V / 60Hz        |
| EUT : PowerLine AV 500 Wireless N Mini Extender/<br>PowerLine AV+ Wireless N Mini Extender | Note : 802.11n(40MHz) 2452MHz |



|   |   | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | * | 2483.500        | 28.716              | 13.999               | 42.715                 | -11.285     | 54.000         | AVERAGE       |
| 2 |   | 2483.900        | 28.716              | 13.917               | 42.634                 | -11.366     | 54.000         | AVERAGE       |
| 3 |   | 2500.000        | 28.729              | 13.081               | 41.810                 | -12.190     | 54.000         | AVERAGE       |

**Note:**

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ \* ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

**7. Occupied Bandwidth**

**7.1. Test Equipment**

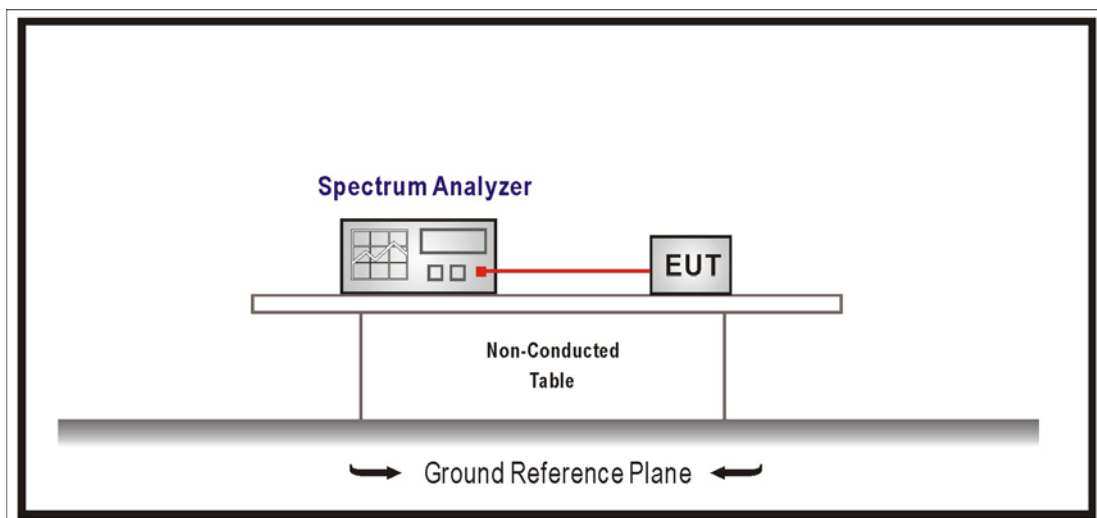
The following test equipments are used during the test:

**Occupied Bandwidth / SR7**

| Instrument        | Manufacturer | Model No. | Serial No | Next Cal. Date |
|-------------------|--------------|-----------|-----------|----------------|
| Spectrum Analyzer | R&S          | FSP       | 100561    | 2013/02/19     |

Note: 1. All equipments that need to calibrate are with calibration period of 1 year.

**7.2. Test Setup**



**7.3. Test Procedures**

The EUT was setup according to ANSI C63.4: 2009; tested according to DTS test procedure of Jan. 2012 KDB558074 for compliance to FCC 47CFR 15.247 requirements. Set RBW = 1% of EBW, Span greater than RBW.

**7.4. Limits**

The 6 dB bandwidth must be greater than 500 kHz.

**7.5. Test Specification**

According to FCC Part 15 Subpart C Paragraph 15.247: 2011

**7.6. Uncertainty**

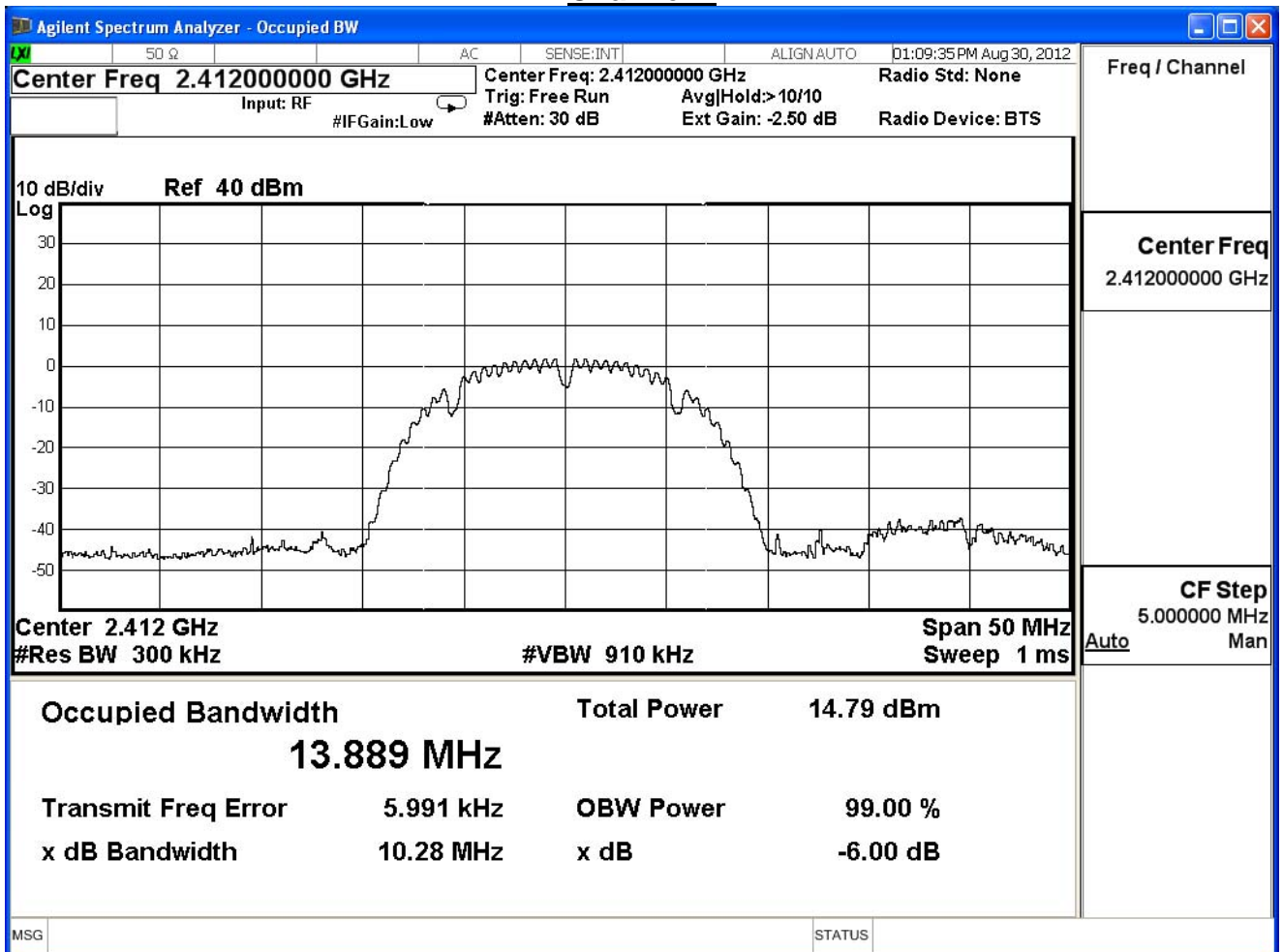
The measurement uncertainty is defined as  $\pm 150\text{Hz}$

## 7.7. Test Result

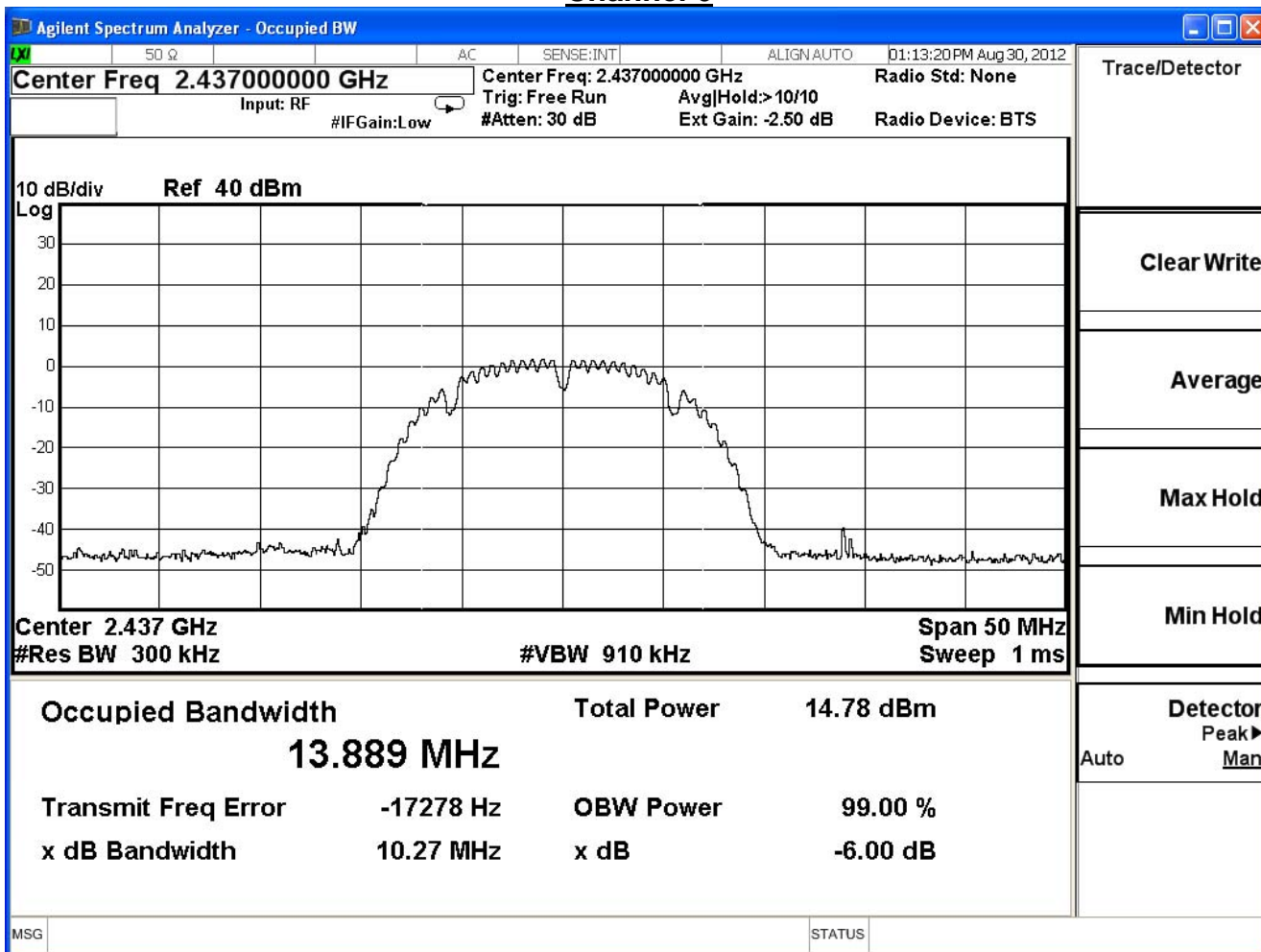
|              |   |           |     |
|--------------|---|-----------|-----|
| Product      | PowerLine AV 500 Wireless N Mini Extender/ PowerLine AV+ Wireless N Mini Extender |           |     |
| Test Item    | Occupied Bandwidth  |           |     |
| Test Mode    | Mode 1: Transmit  |           |     |
| Date of Test | 2012/09/19  | Test Site | SR7 |

| Channel No. | Frequency (MHz) | Measurement Level (MHz) | Required Limit (MHz) | Result |
|-------------|-----------------|-------------------------|----------------------|--------|
| 1           | 2412            | 10.280                  | $\geq 0.5$           | Pass   |
| 6           | 2437            | 10.270                  | $\geq 0.5$           | Pass   |
| 11          | 2462            | 10.270                  | $\geq 0.5$           | Pass   |

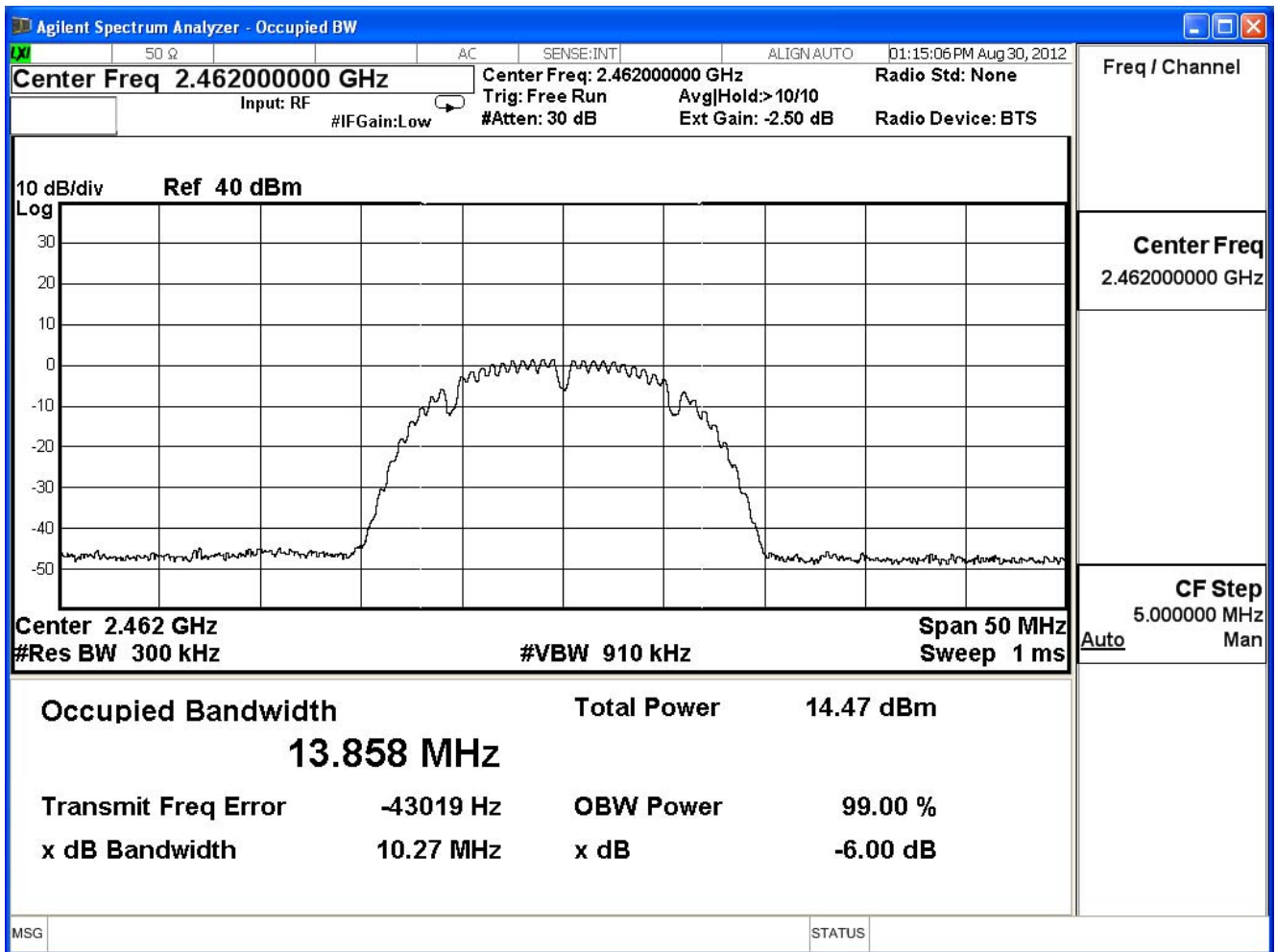
### Channel 1



## Channel 6



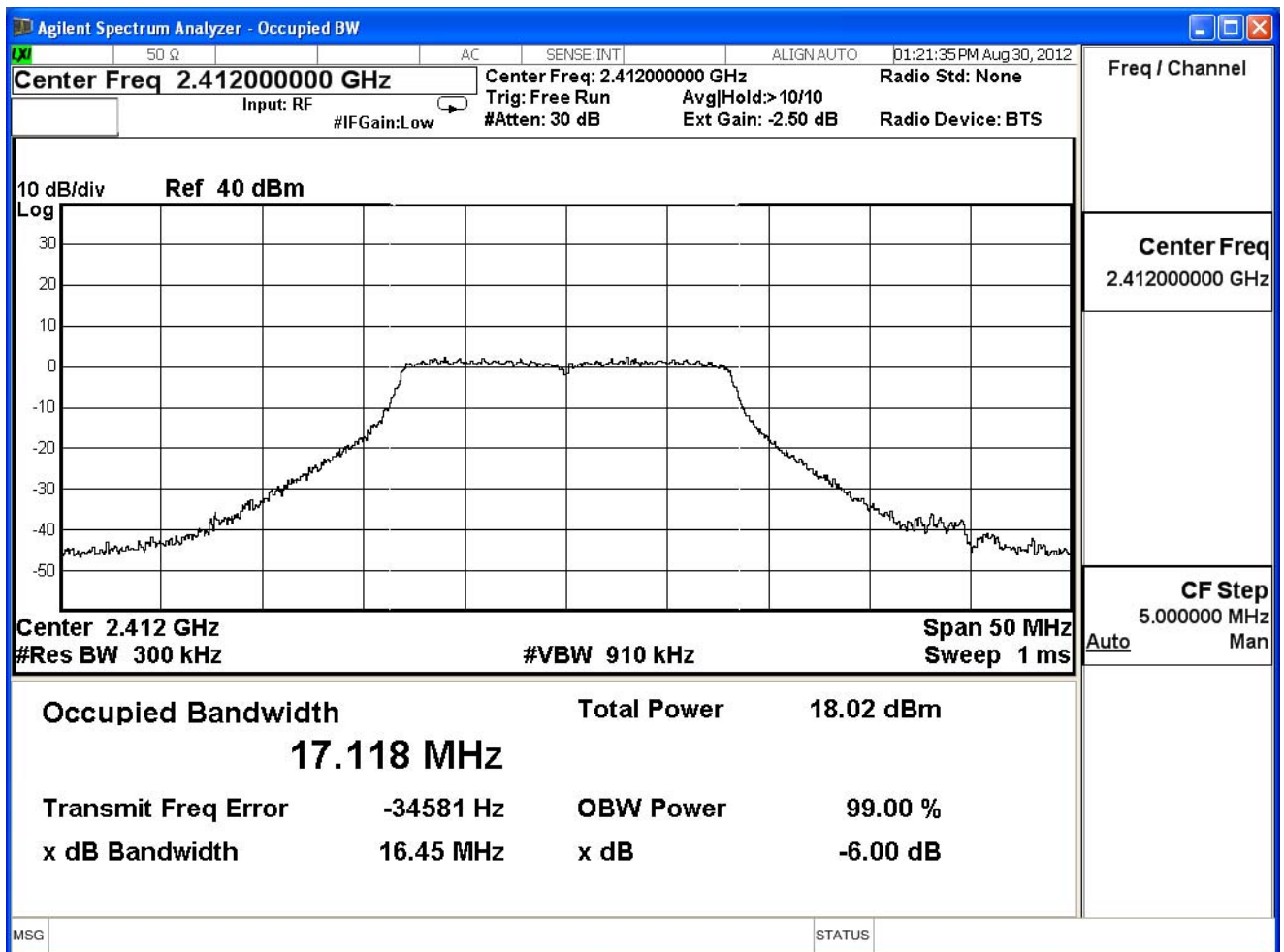
Channel 11



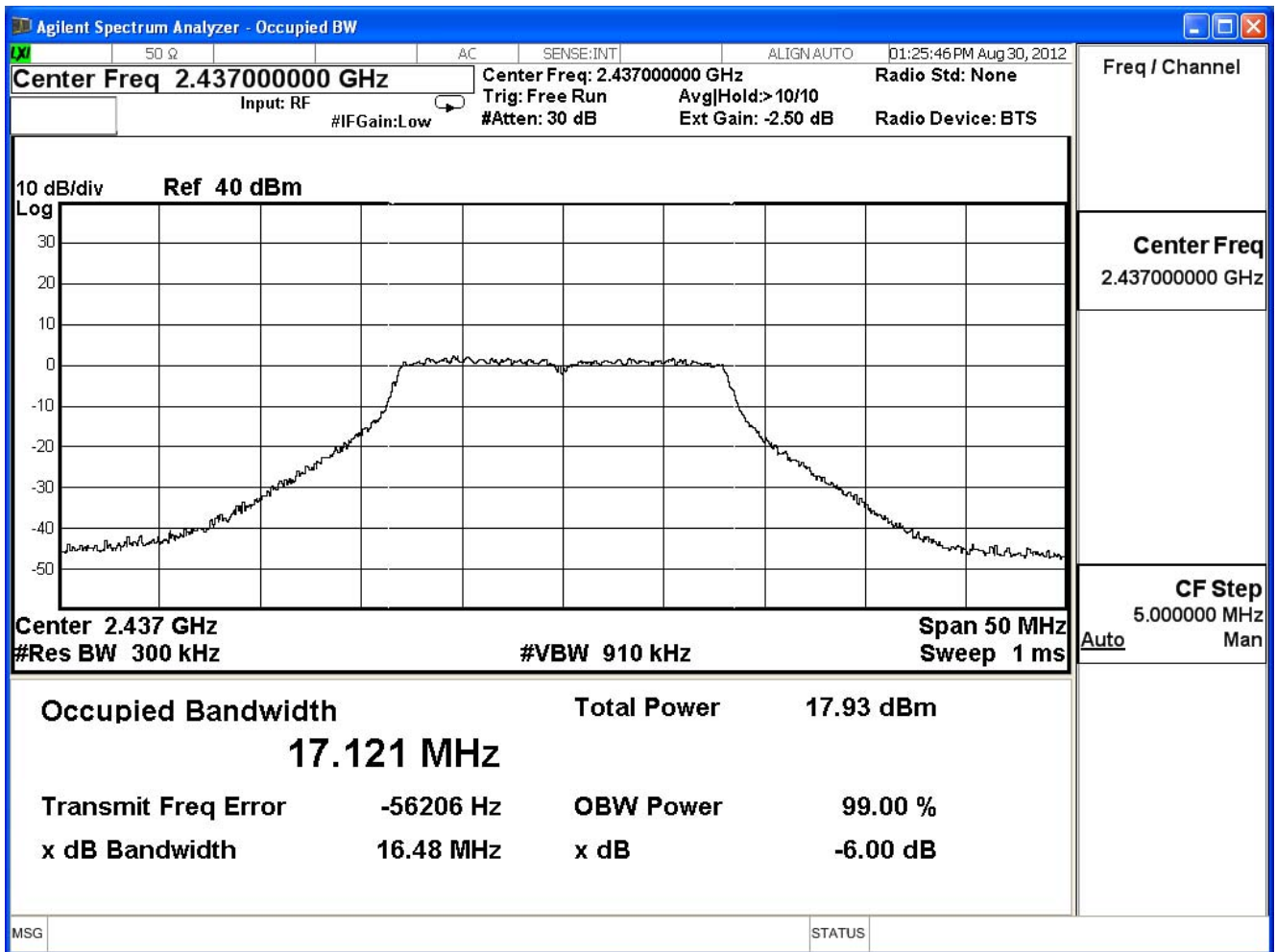
|              |   |           |     |
|--------------|---|-----------|-----|
| Product      | PowerLine AV 500 Wireless N Mini Extender/ PowerLine AV+ Wireless N Mini Extender |           |     |
| Test Item    | Occupied Bandwidth  |           |     |
| Test Mode    | Mode 1: Transmit  |           |     |
| Date of Test | 2012/09/19  | Test Site | SR7 |

| IEEE 802.11g |                 |                         |                      |        |
|--------------|-----------------|-------------------------|----------------------|--------|
| Channel No.  | Frequency (MHz) | Measurement Level (MHz) | Required Limit (MHz) | Result |
| 1            | 2412            | 16.450                  | $\geq 0.5$           | Pass   |
| 6            | 2437            | 16.480                  | $\geq 0.5$           | Pass   |
| 11           | 2462            | 16.450                  | $\geq 0.5$           | Pass   |

### Channel 1

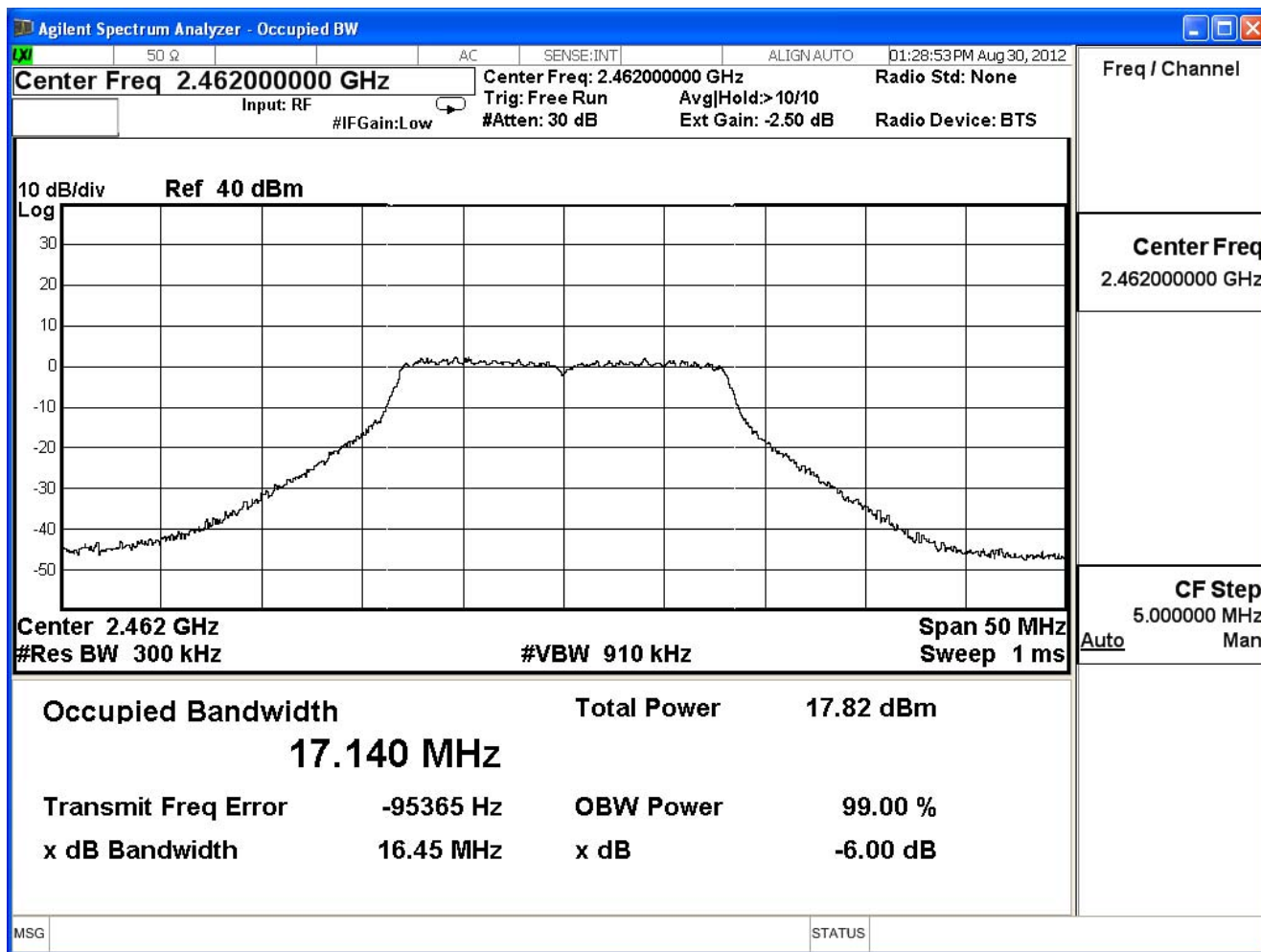


**Channel 6**





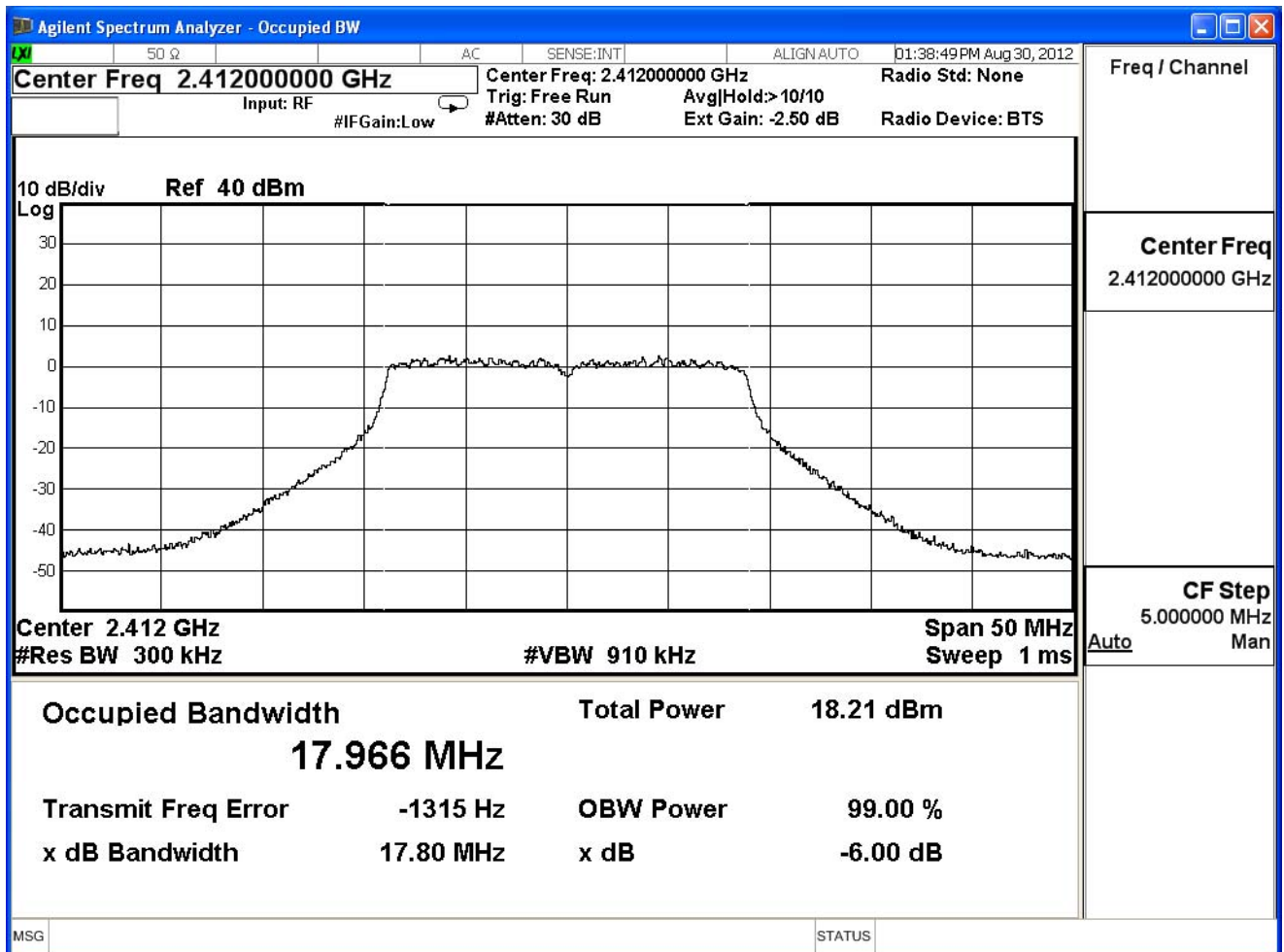
## Channel 11



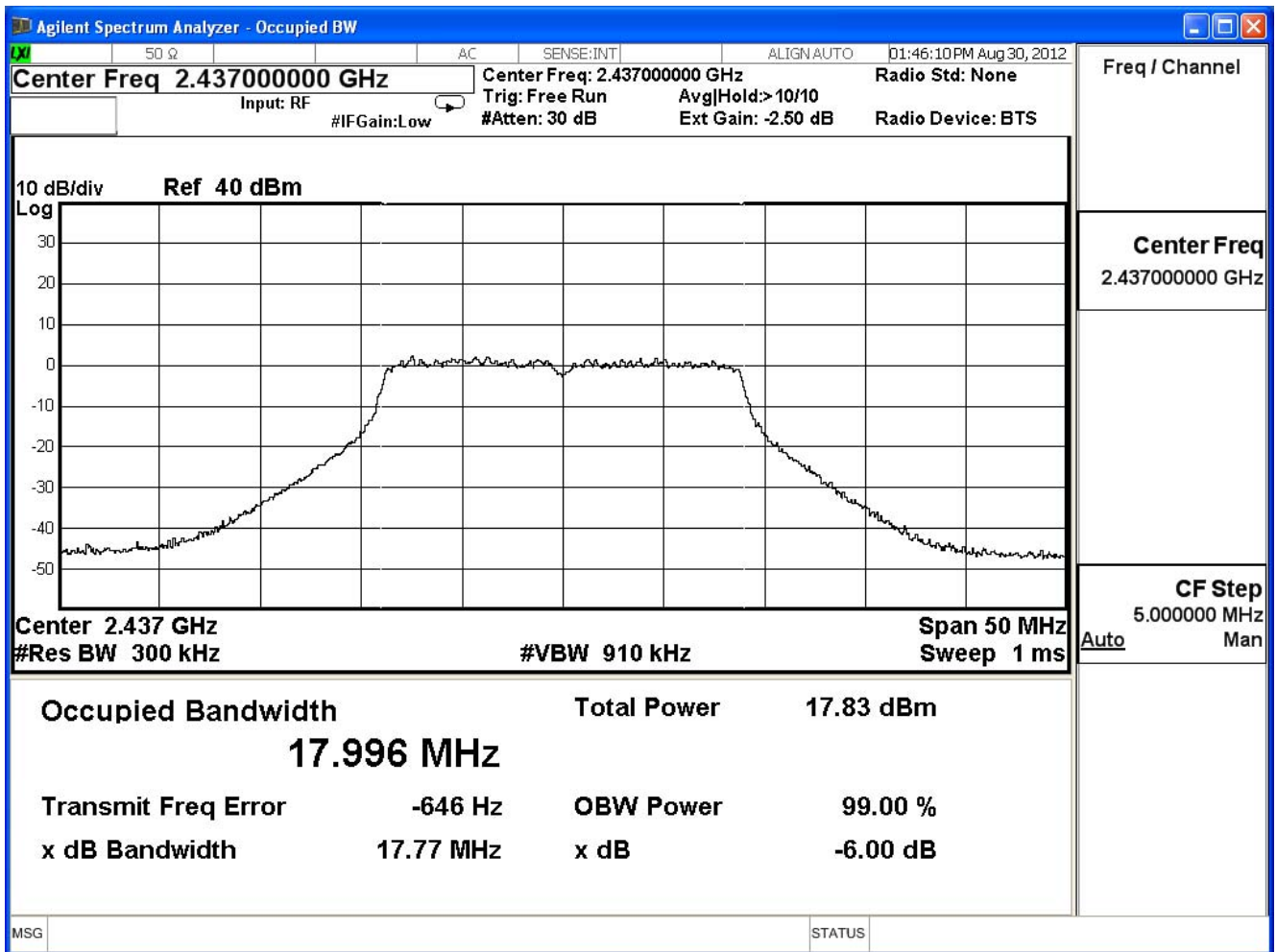
|              |   |           |     |
|--------------|---|-----------|-----|
| Product      | PowerLine AV 500 Wireless N Mini Extender/ PowerLine AV+ Wireless N Mini Extender |           |     |
| Test Item    | Occupied Bandwidth  |           |     |
| Test Mode    | Mode 1: Transmit  |           |     |
| Date of Test | 2012/09/19  | Test Site | SR7 |

| IEEE 802.11n (20MHz)(ANT 0) |                 |                         |                      |        |
|-----------------------------|-----------------|-------------------------|----------------------|--------|
| Channel No.                 | Frequency (MHz) | Measurement Level (MHz) | Required Limit (MHz) | Result |
| 1                           | 2412            | 17.800                  | ≥ 0.5                | Pass   |
| 6                           | 2437            | 17.770                  | ≥ 0.5                | Pass   |
| 11                          | 2462            | 17.750                  | ≥ 0.5                | Pass   |

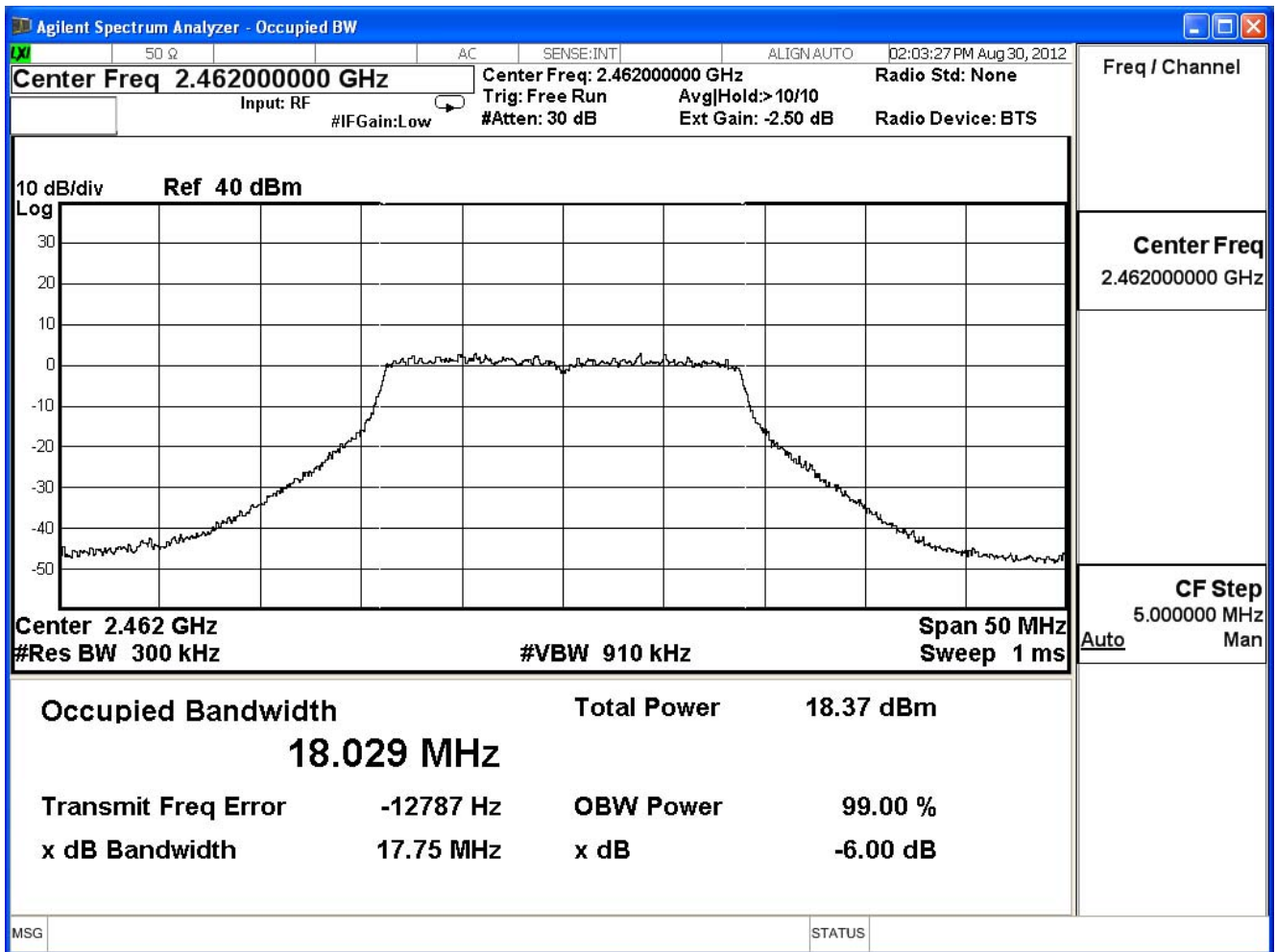
### Channel 1



**Channel 6**



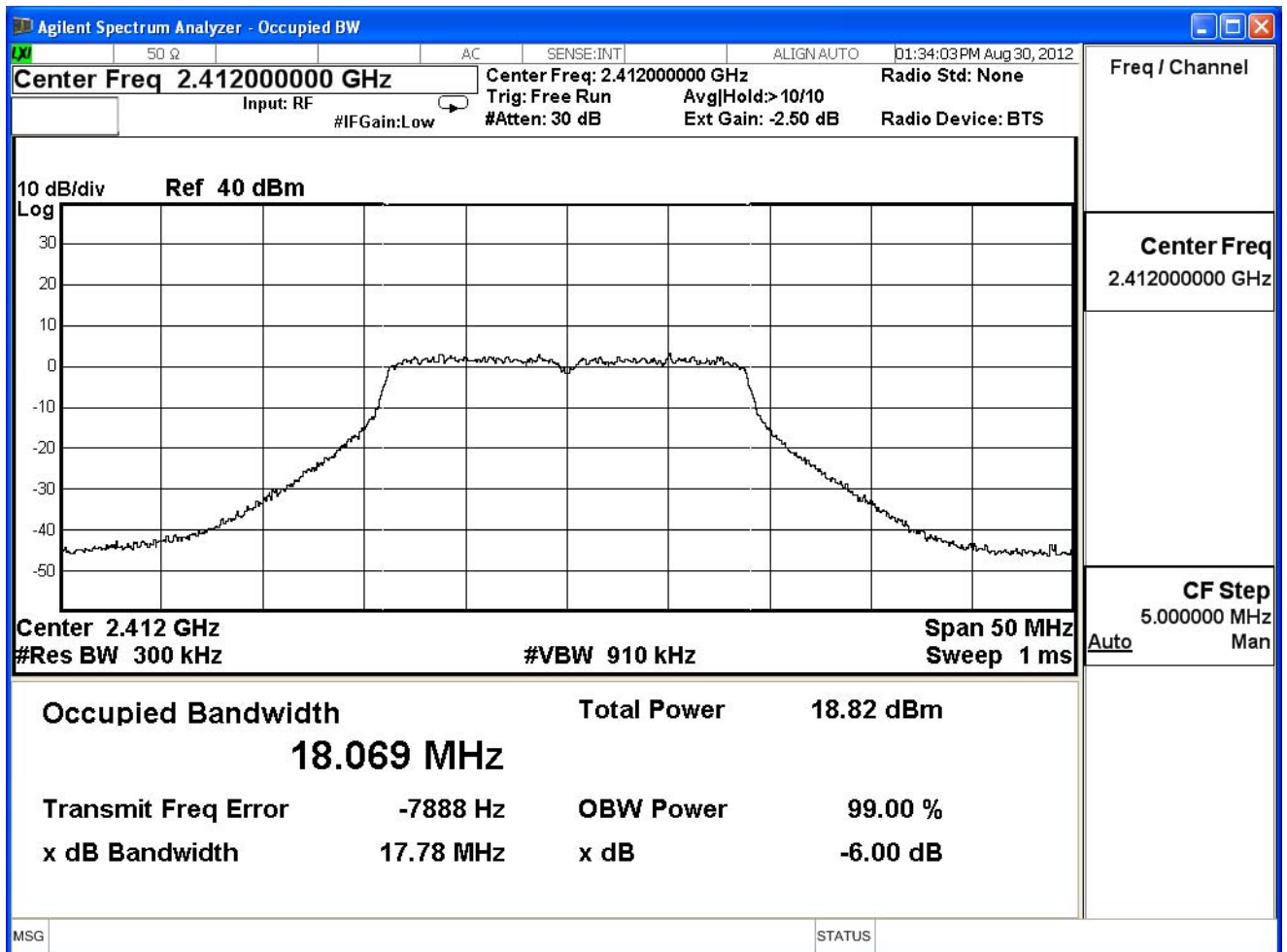
Channel 11



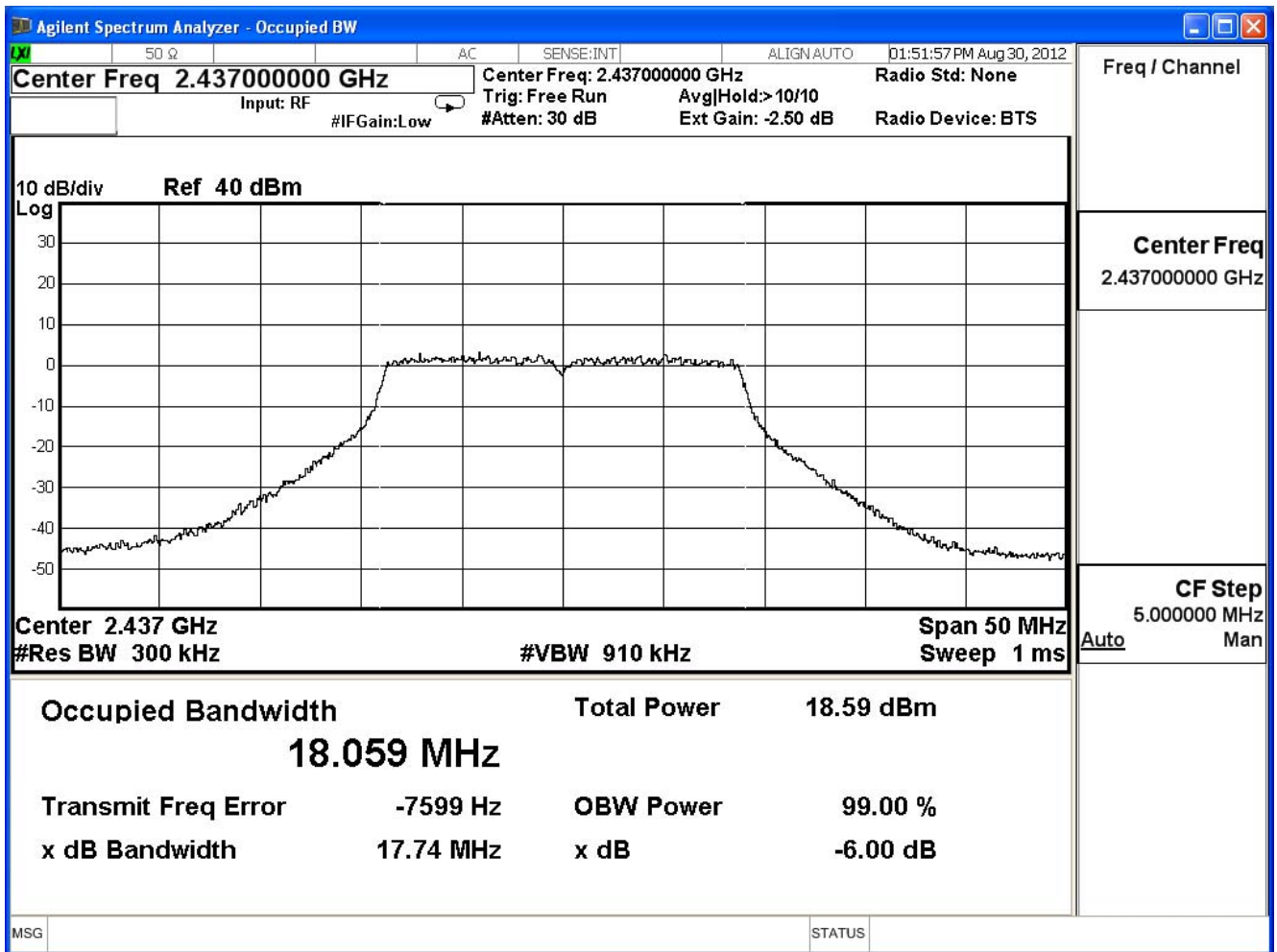
|              |   |           |     |
|--------------|---|-----------|-----|
| Product      | PowerLine AV 500 Wireless N Mini Extender/ PowerLine AV+ Wireless N Mini Extender |           |     |
| Test Item    | Occupied Bandwidth  |           |     |
| Test Mode    | Mode 1: Transmit  |           |     |
| Date of Test | 2012/09/19  | Test Site | SR7 |

| IEEE 802.11n (20MHz)(ANT 1) |                 |                         |                      |        |
|-----------------------------|-----------------|-------------------------|----------------------|--------|
| Channel No.                 | Frequency (MHz) | Measurement Level (MHz) | Required Limit (MHz) | Result |
| 1                           | 2412            | 17.780                  | ≥ 0.5                | Pass   |
| 6                           | 2437            | 17.740                  | ≥ 0.5                | Pass   |
| 11                          | 2462            | 17.760                  | ≥ 0.5                | Pass   |

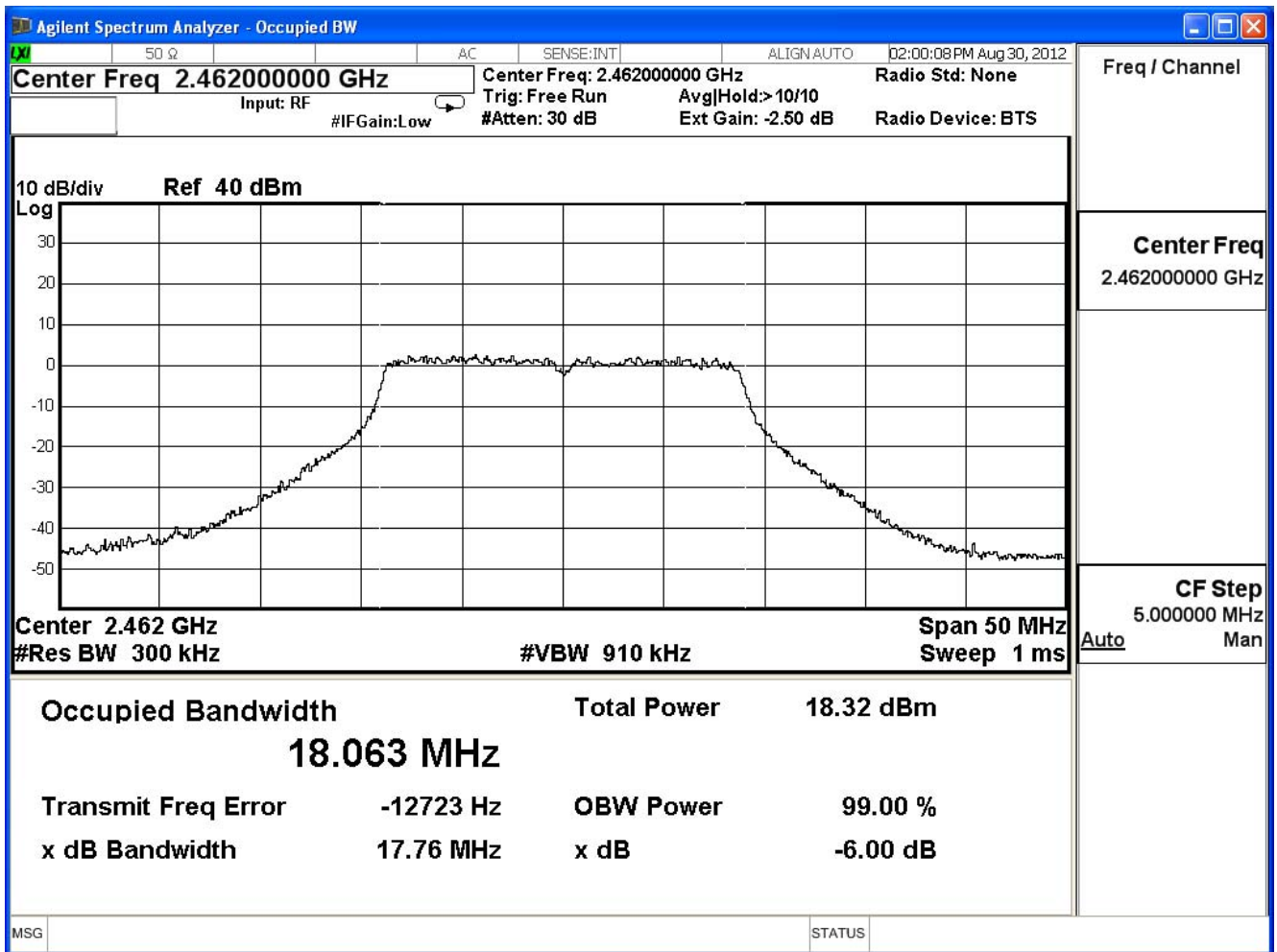
### Channel 1



**Channel 6**



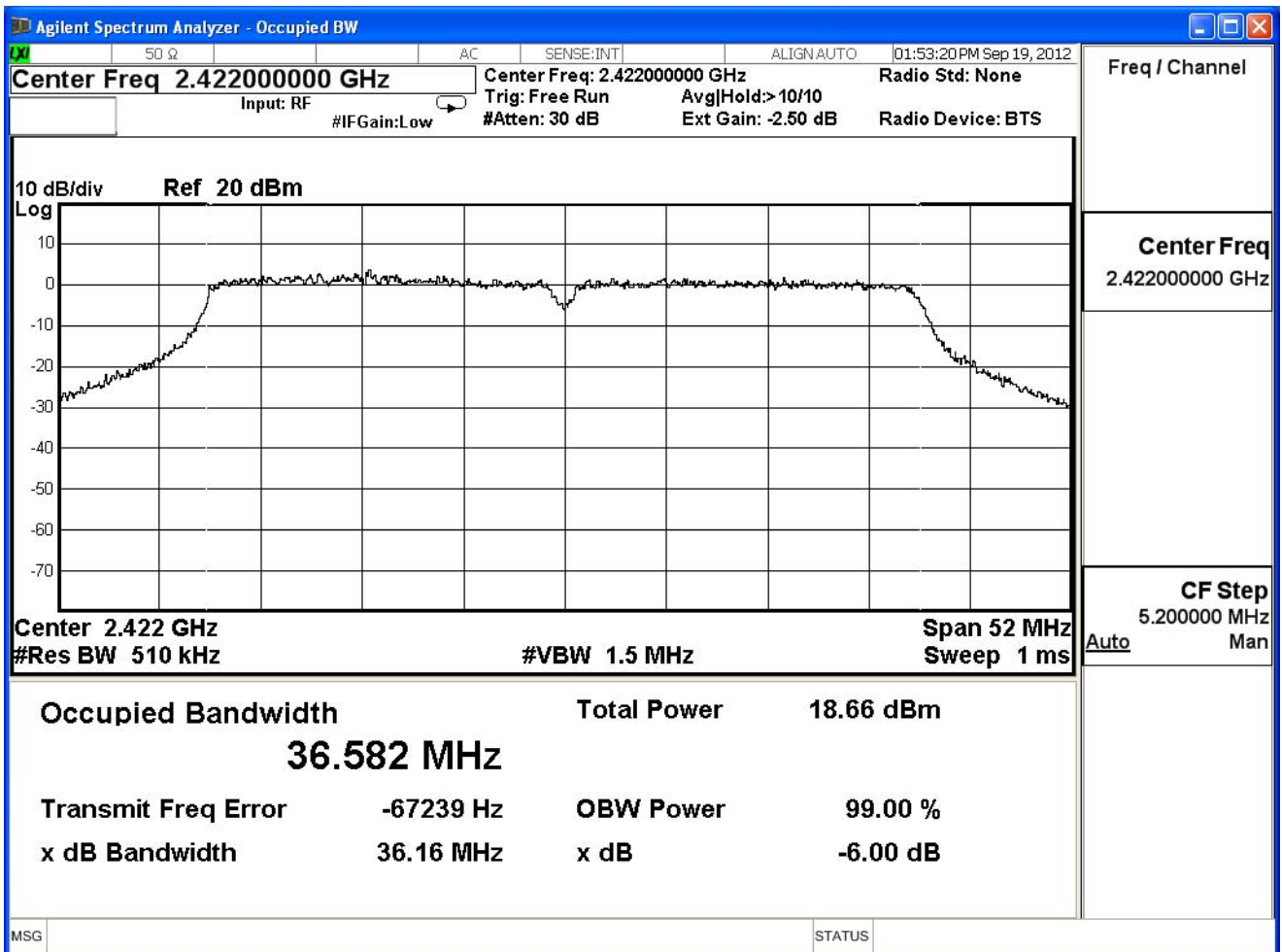
Channel 11



|              |   |           |     |
|--------------|---|-----------|-----|
| Product      | PowerLine AV 500 Wireless N Mini Extender/ PowerLine AV+ Wireless N Mini Extender |           |     |
| Test Item    | Occupied Bandwidth  |           |     |
| Test Mode    | Mode 1: Transmit  |           |     |
| Date of Test | 2012/09/19  | Test Site | SR7 |

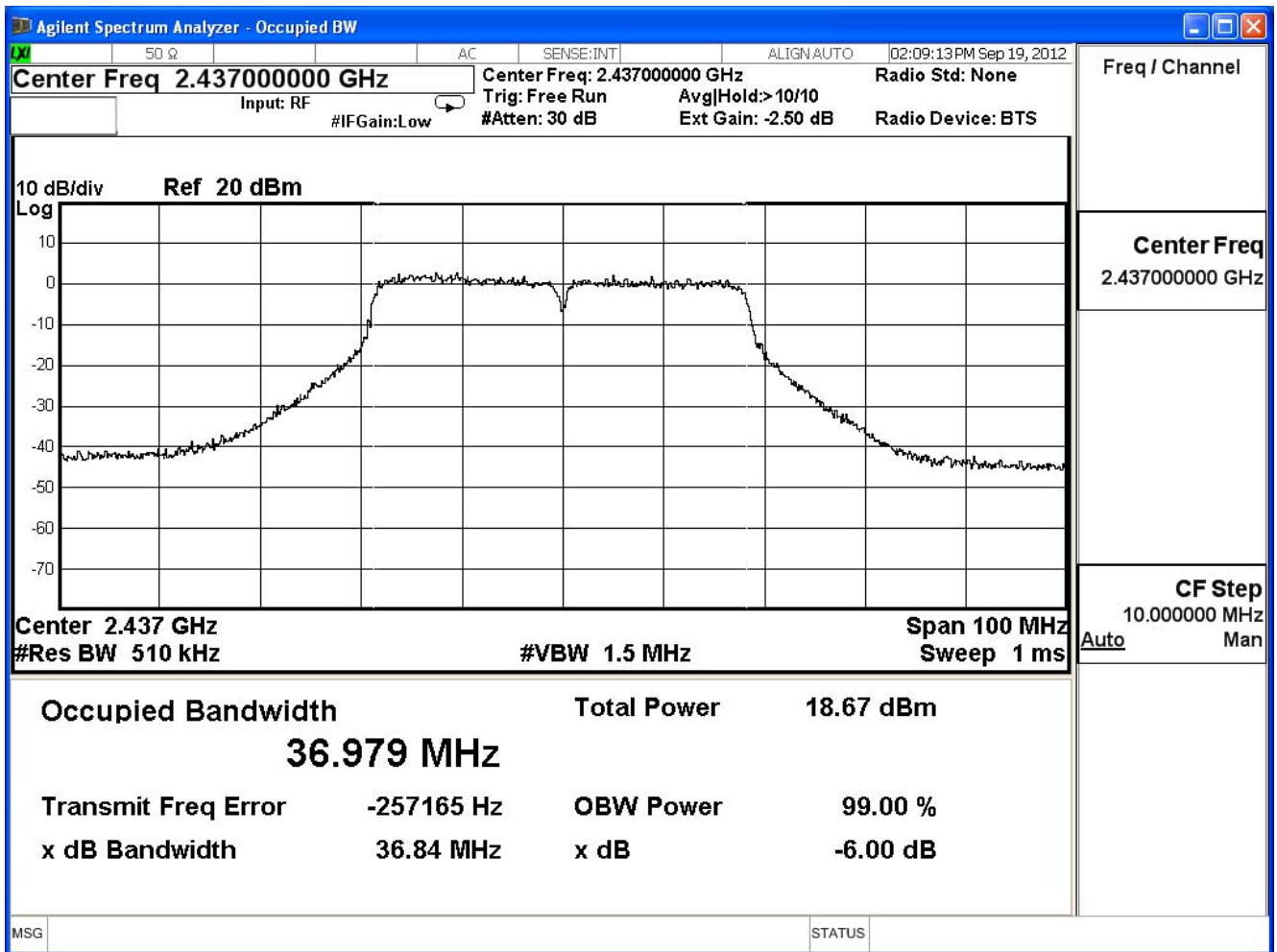
| IEEE 802.11n (40MHz)(ANT 0) |                 |                         |                      |        |
|-----------------------------|-----------------|-------------------------|----------------------|--------|
| Channel No.                 | Frequency (MHz) | Measurement Level (MHz) | Required Limit (MHz) | Result |
| 3                           | 2422            | 36.450                  | ≥ 0.5                | Pass   |
| 6                           | 2437            | 36.840                  | ≥ 0.5                | Pass   |
| 9                           | 2452            | 36.390                  | ≥ 0.5                | Pass   |

### Channel 3

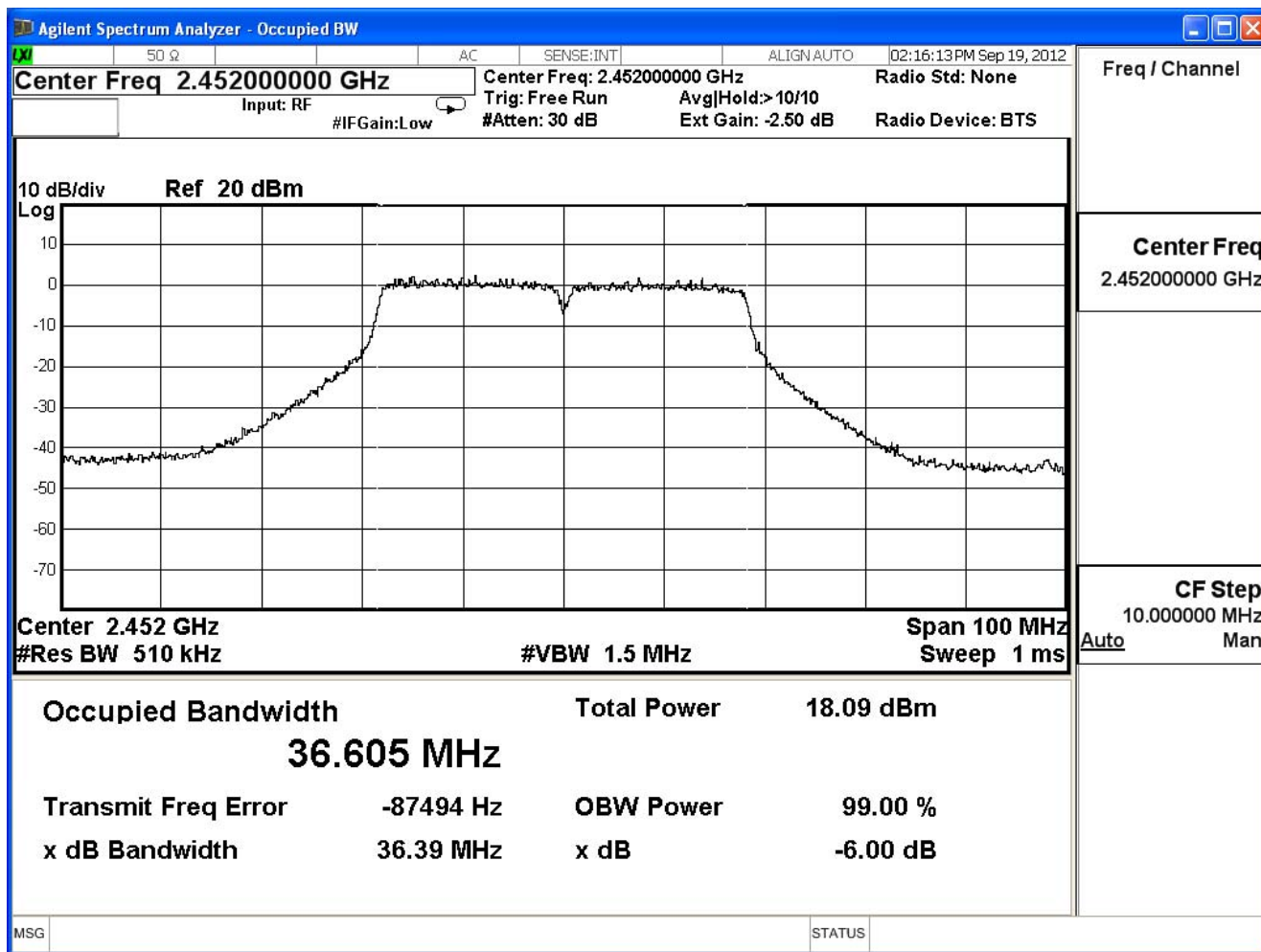




Channel 6



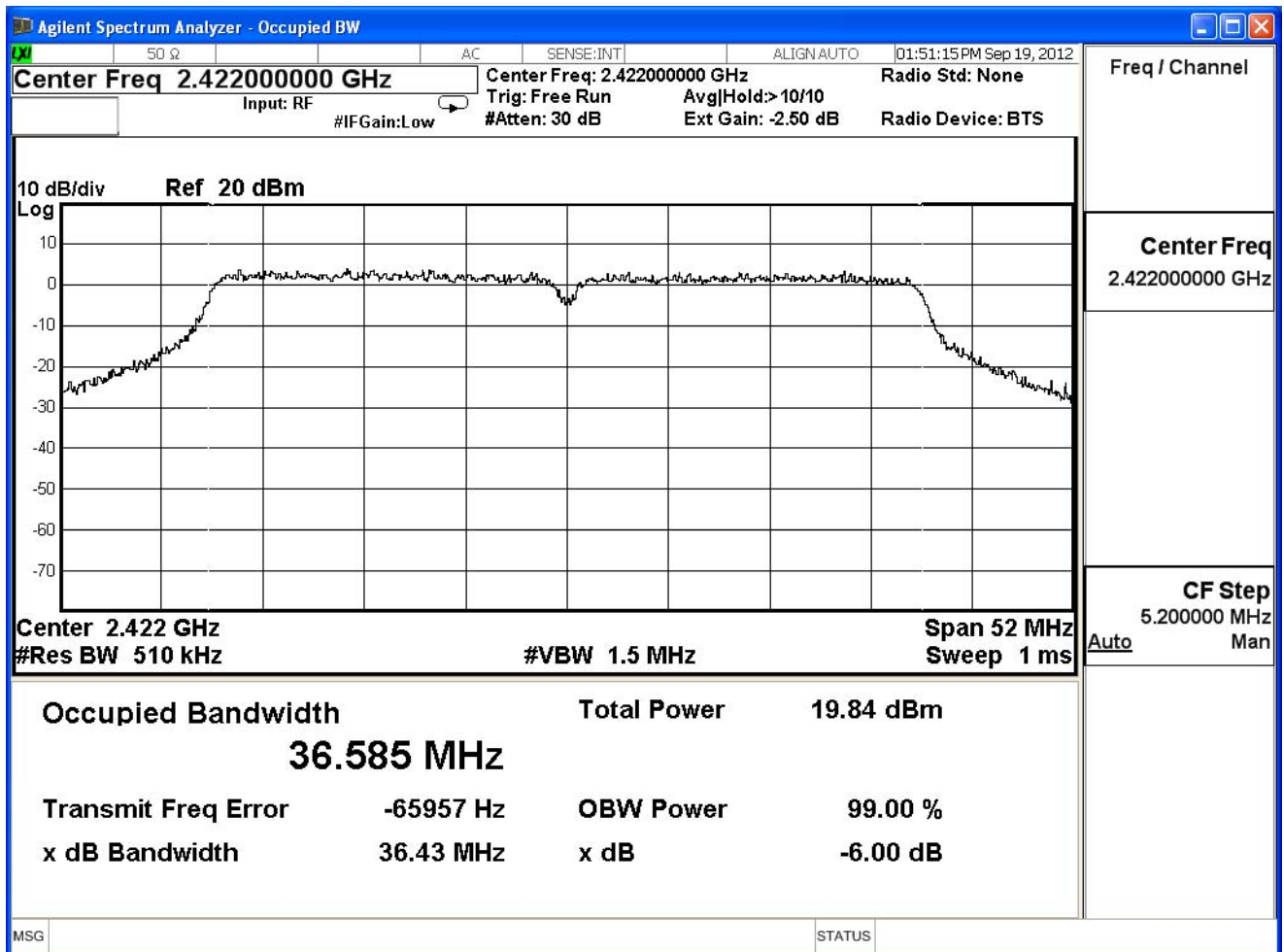
## Channel 9



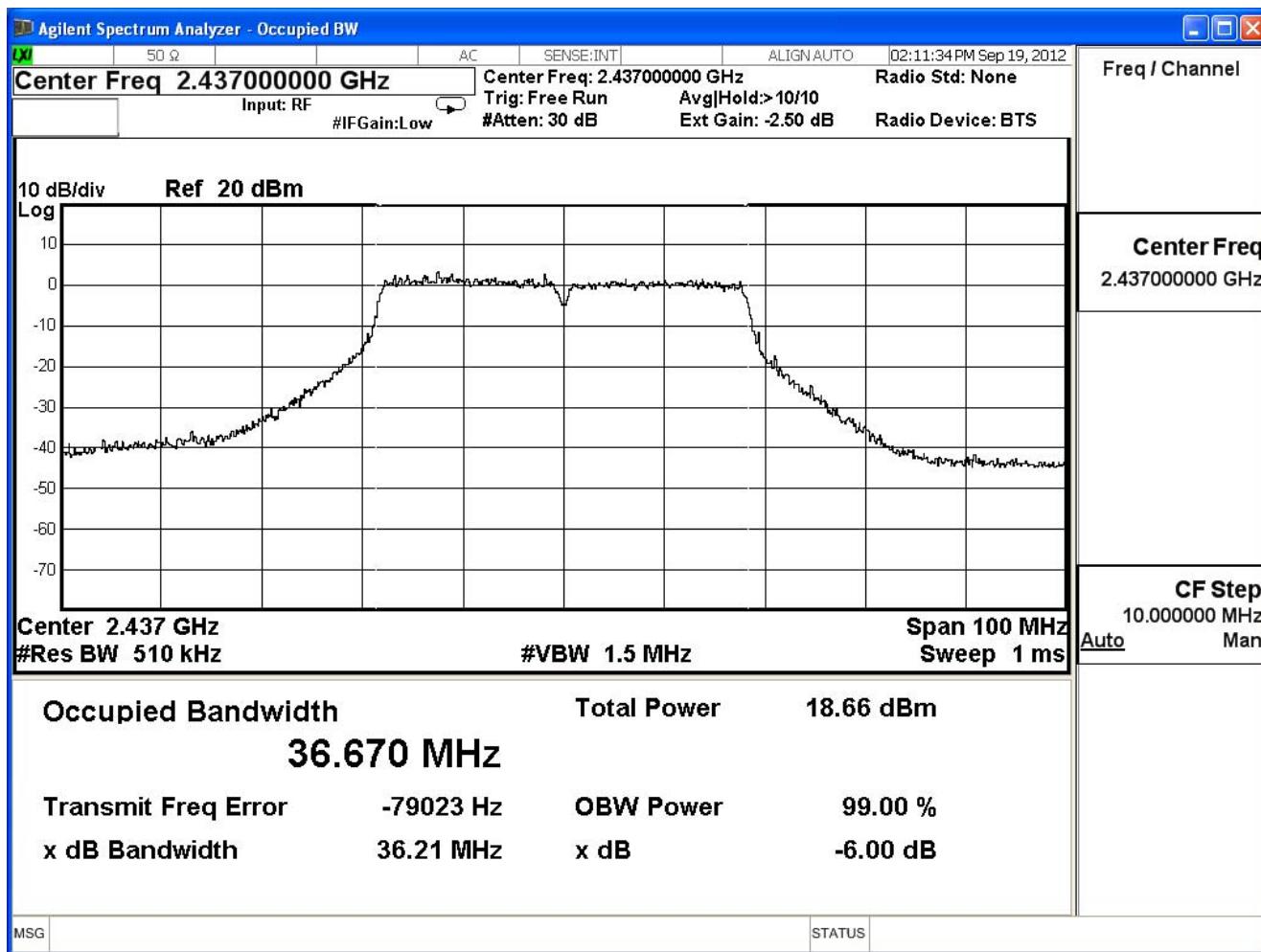
|              |   |           |     |
|--------------|---|-----------|-----|
| Product      | PowerLine AV 500 Wireless N Mini Extender/ PowerLine AV+ Wireless N Mini Extender |           |     |
| Test Item    | Occupied Bandwidth  |           |     |
| Test Mode    | Mode 1: Transmit  |           |     |
| Date of Test | 2012/09/19  | Test Site | SR7 |

| IEEE 802.11n (40MHz)(ANT 1) |                 |                         |                      |        |
|-----------------------------|-----------------|-------------------------|----------------------|--------|
| Channel No.                 | Frequency (MHz) | Measurement Level (MHz) | Required Limit (MHz) | Result |
| 3                           | 2422            | 36.330                  | ≥ 0.5                | Pass   |
| 6                           | 2437            | 36.210                  | ≥ 0.5                | Pass   |
| 9                           | 2452            | 36.370                  | ≥ 0.5                | Pass   |

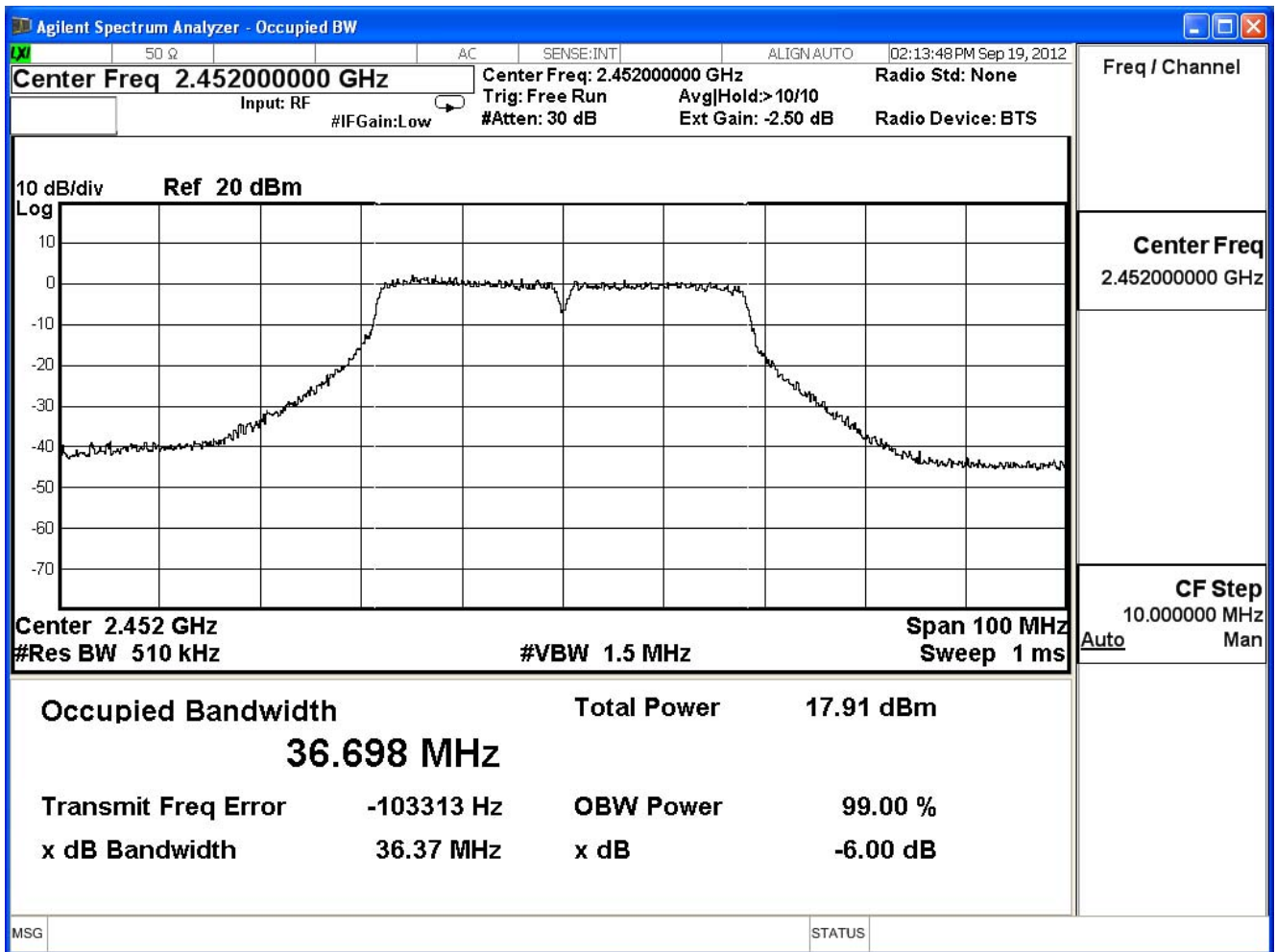
### Channel 3



## Channel 6



Channel 9



**8. Power Density**

**8.1. Test Equipment**

The following test equipment is used during the test:

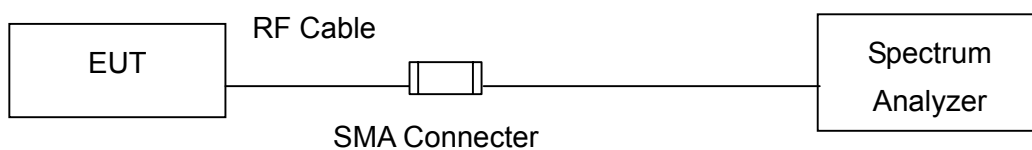
**Power Density / SR7**

| Instrument        | Manufacturer | Model No. | Serial No | Next Cal. Date |
|-------------------|--------------|-----------|-----------|----------------|
| Spectrum Analyzer | R&S          | FSP       | 100561    | 2013/02/19     |

Note: 1. All equipments that need to calibrate are with calibration period of 1 year.

**8.2. Test Setup**

IEEE 802.11 b / g / a / n ( 20M / 40M ) MODE



**8.3. Limits**

The peak power spectral density conducted from the intentional radiated to the antenna shall not be greater than +8dBm in any 3kHz band during any time interval of continuous transmission.

**8.4. Test Procedures**

The EUT was setup according to ANSI C63.4: 2009; tested according to DTS test procedure of Jan. 2012 KDB558074 for compliance to FCC 47CFR 15.247 requirements.

Set RBW= 100 kHz, Set VBW= 300 kHz, Sweep time=Auto, Set detector=Peak detector

**8.5. Test Specification**

According to FCC Part 15 Subpart C Paragraph 15.247: 2011

**8.6. Uncertainty**

The measurement uncertainty is defined as  $\pm 1.27$ dB.

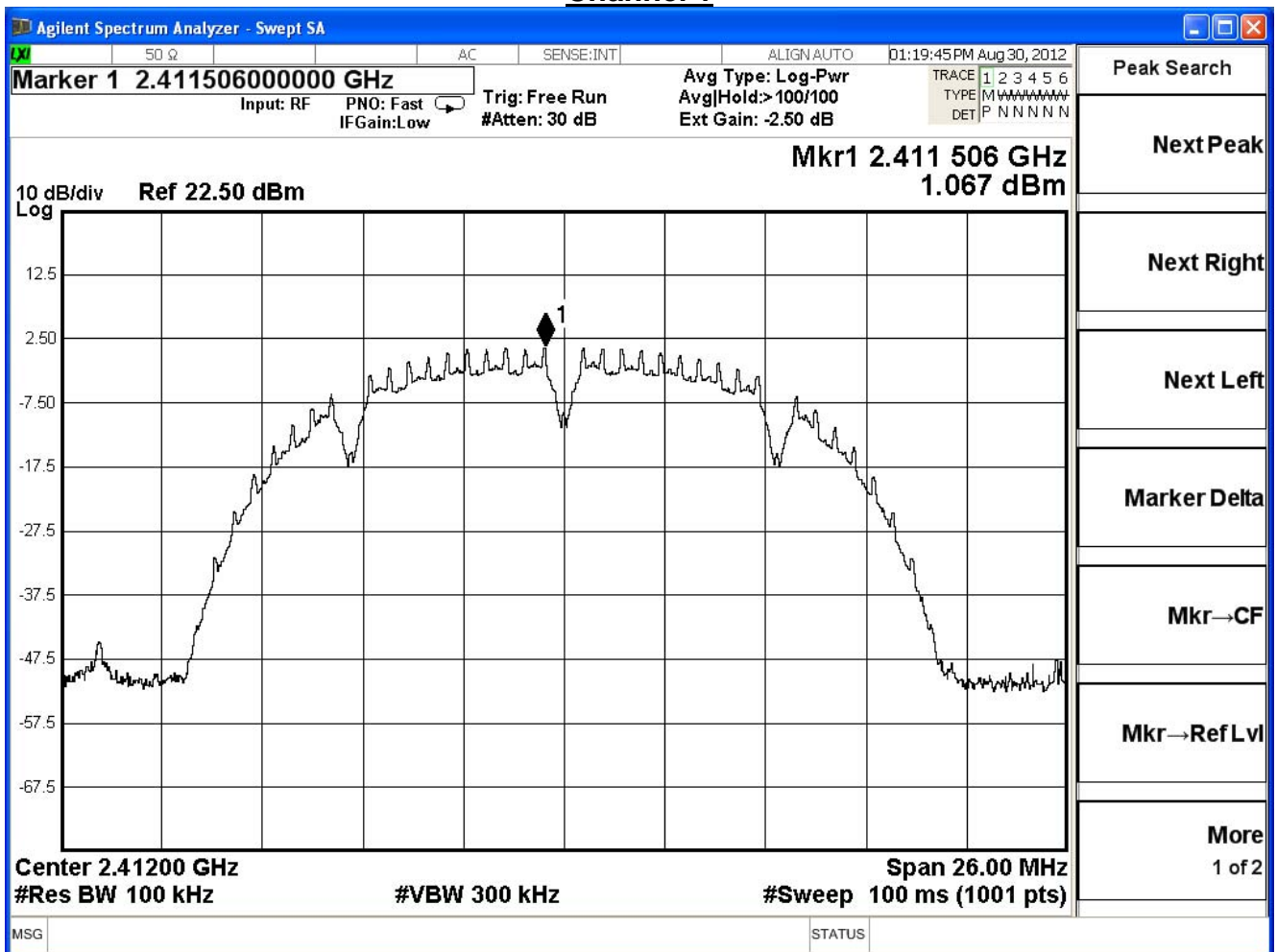
## 8.7. Test Result

|              |   |           |     |
|--------------|---|-----------|-----|
| Product      | PowerLine AV 500 Wireless N Mini Extender/ PowerLine AV+ Wireless N Mini Extender |           |     |
| Test Item    | Power Density   |           |     |
| Test Mode    | Mode 1: Transmit  |           |     |
| Date of Test | 2012/08/30  | Test Site | SR7 |

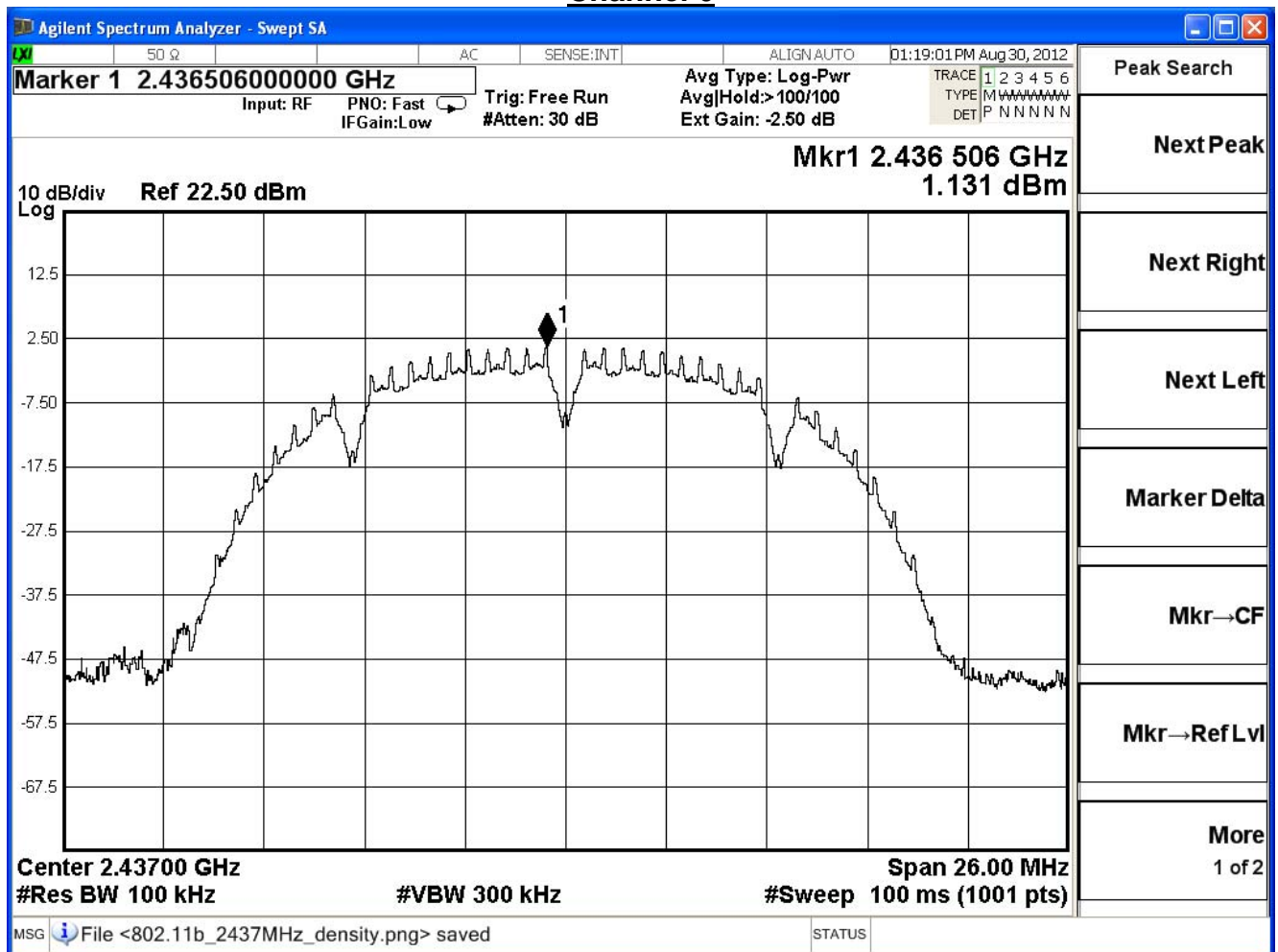
| IEEE 802.11b |                 |                     |                     |             |        |
|--------------|-----------------|---------------------|---------------------|-------------|--------|
| Channel No.  | Frequency (MHz) | Reading Level (dBm) | Measure Level (dBm) | Limit (dBm) | Result |
| 1            | 2412            | 1.067               | -14.133             | ≤ 8         | Pass   |
| 6            | 2437            | 1.131               | -14.069             | ≤ 8         | Pass   |
| 11           | 2462            | 0.743               | -14.457             | ≤ 8         | Pass   |

Note: Measure Level = Reading level + BWCF = Reading level -15.2 dB  
 Bandwidth correction factor (BWCF) = 10log (3 kHz/100kHz)

### Channel 1

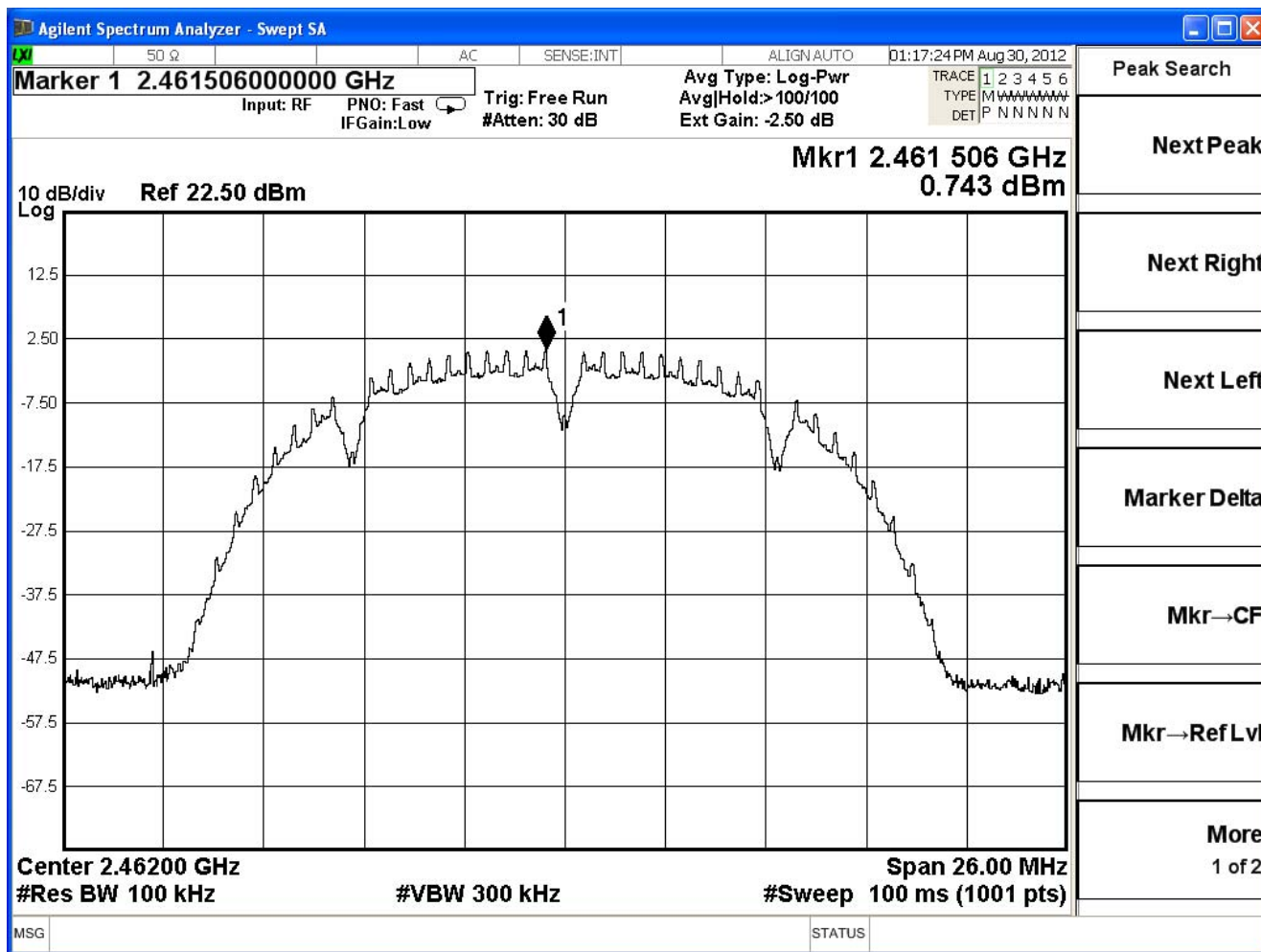


Channel 6





Channel 11

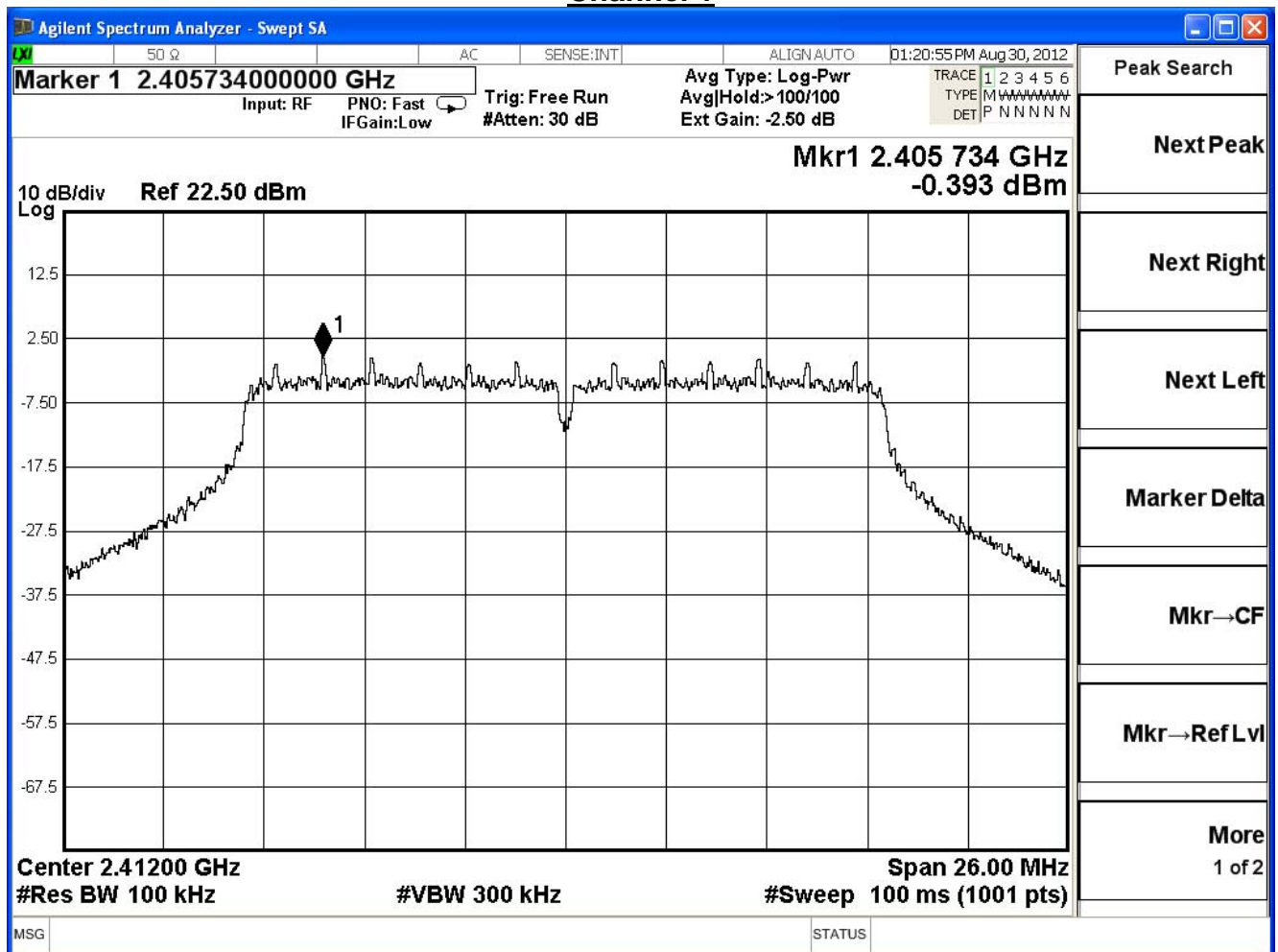


|              |   |           |     |
|--------------|---|-----------|-----|
| Product      | PowerLine AV 500 Wireless N Mini Extender/ PowerLine AV+ Wireless N Mini Extender |           |     |
| Test Item    | Power Density   |           |     |
| Test Mode    | Mode 1: Transmit  |           |     |
| Date of Test | 2012/08/30  | Test Site | SR7 |

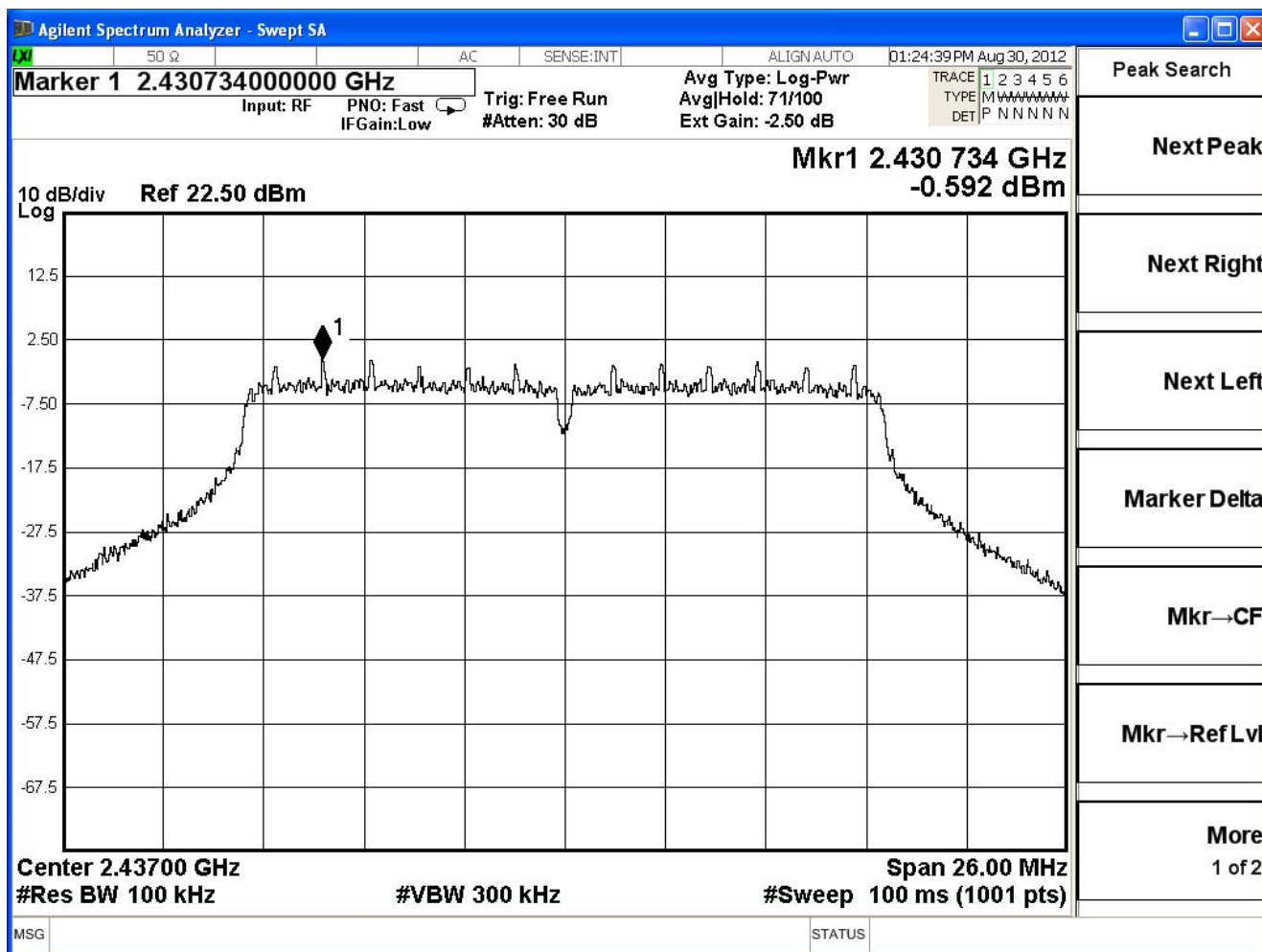
| IEEE 802.11g |                 |                     |                   |             |        |
|--------------|-----------------|---------------------|-------------------|-------------|--------|
| Channel No.  | Frequency (MHz) | Reading Level (dBm) | Measurement (dBm) | Limit (dBm) | Result |
| 1            | 2412            | -0.393              | -15.593           | ≤ 8         | Pass   |
| 6            | 2437            | -0.592              | -15.792           | ≤ 8         | Pass   |
| 11           | 2462            | -0.651              | -15.851           | ≤ 8         | Pass   |

Note: Measure Level = Reading level + BWCF = Reading level -15.2 dB  
 Bandwidth correction factor (BWCF) = 10log (3 kHz/100kHz)

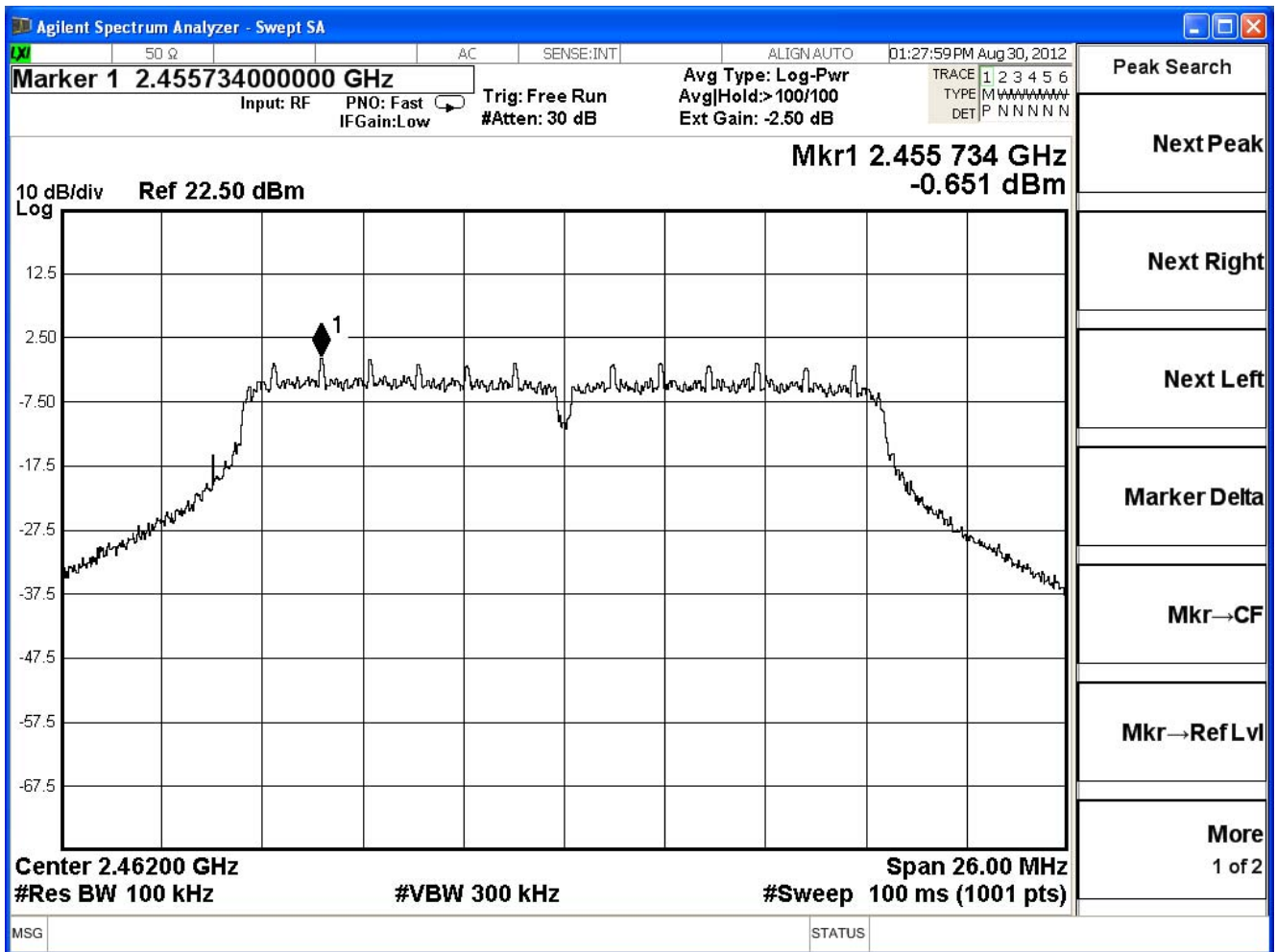
### Channel 1



**Channel 6**



## Channel 11

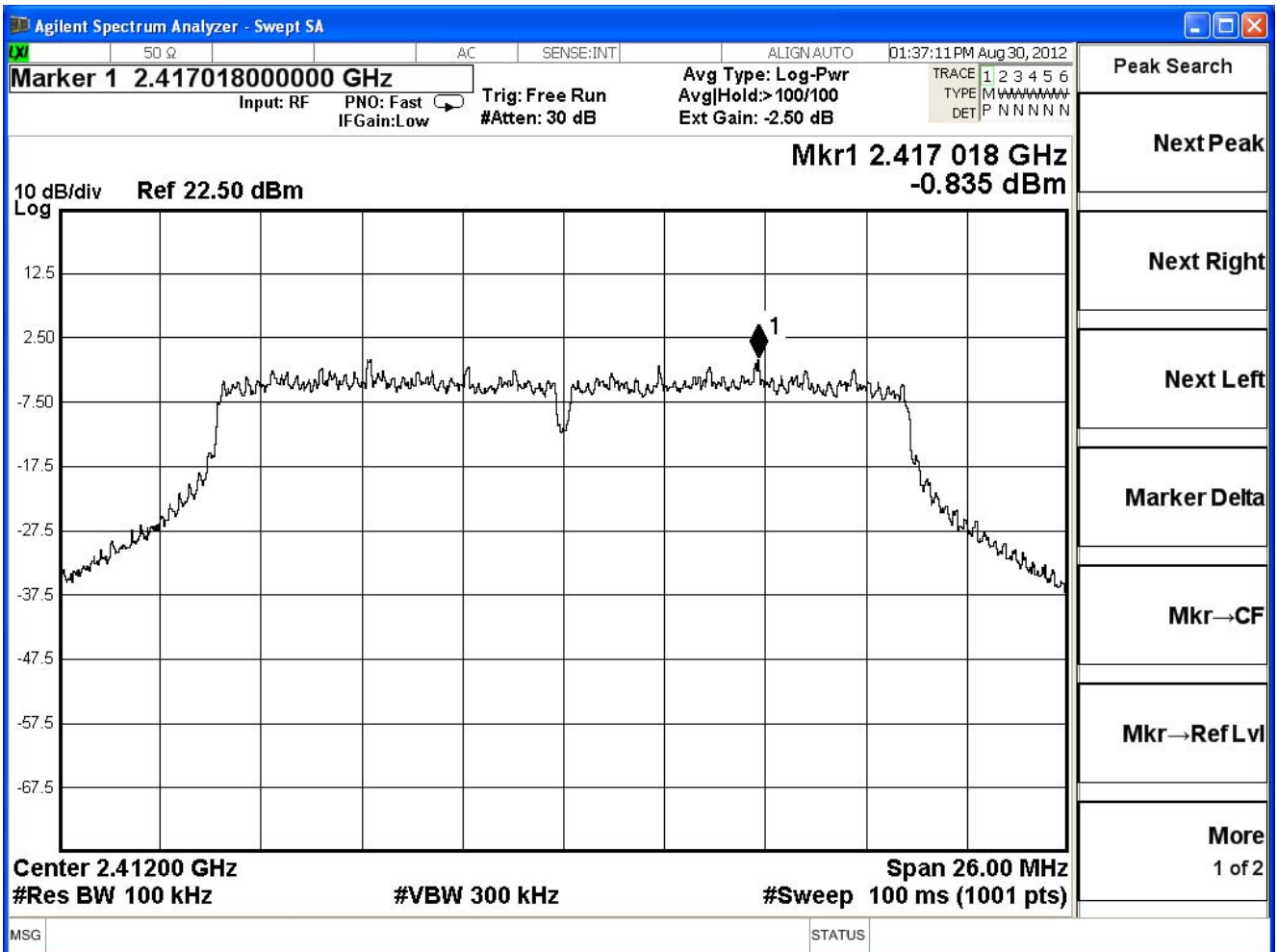


|              |   |           |     |
|--------------|---|-----------|-----|
| Product      | PowerLine AV 500 Wireless N Mini Extender/ PowerLine AV+ Wireless N Mini Extender |           |     |
| Test Item    | Power Density   |           |     |
| Test Mode    | Mode 1: Transmit  |           |     |
| Date of Test | 2012/08/30  | Test Site | SR7 |

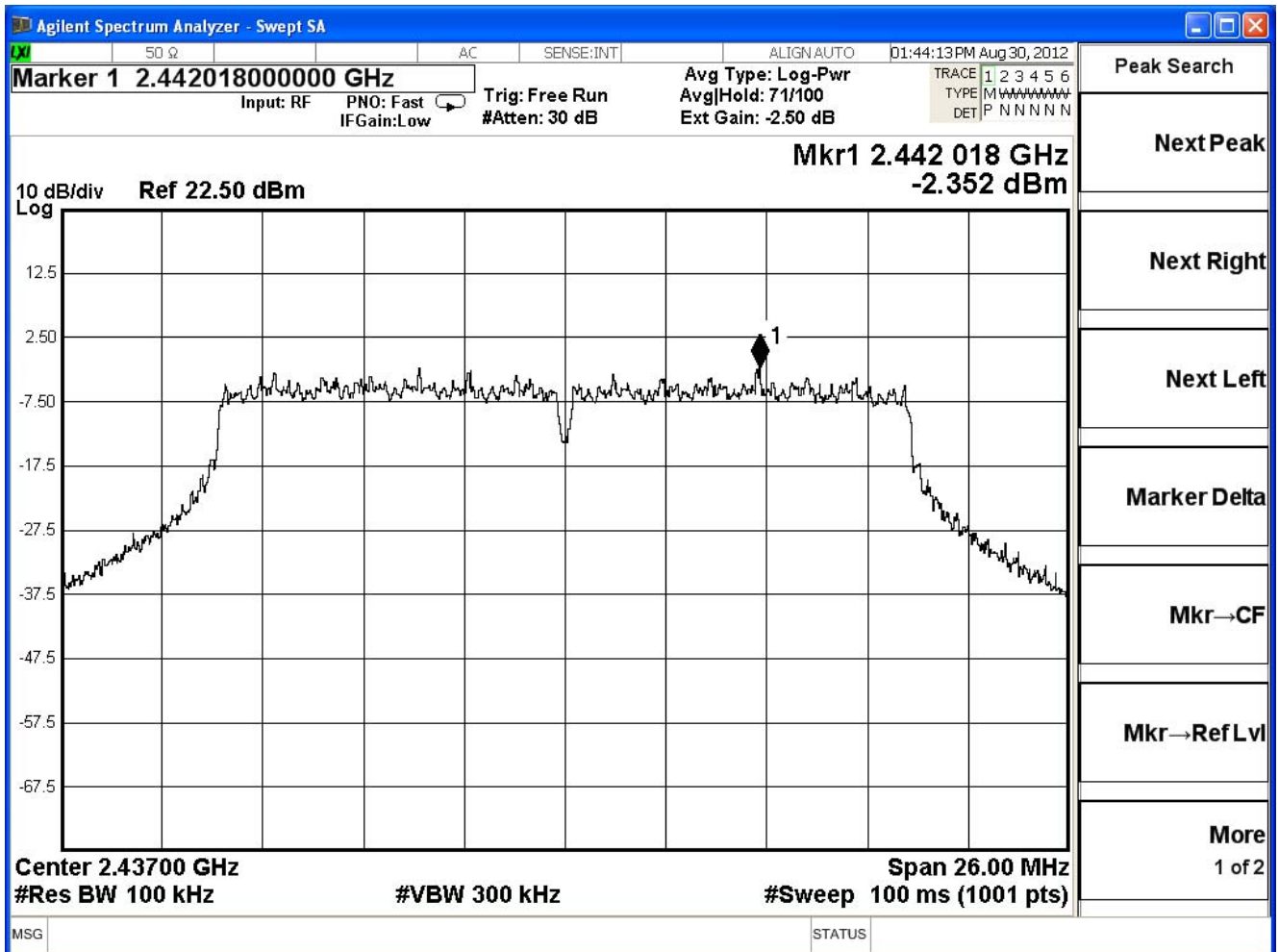
| IEEE802.11n_20MHz_(ANT 0) |                 |                     |                     |             |        |
|---------------------------|-----------------|---------------------|---------------------|-------------|--------|
| Channel No.               | Frequency (MHz) | Reading Level (dBm) | Measure Level (dBm) | Limit (dBm) | Result |
| 1                         | 2412.00         | -0.835              | -16.035             | ≤ 8         | Pass   |
| 6                         | 2437.00         | -2.352              | -17.552             | ≤ 8         | Pass   |
| 11                        | 2462.00         | -0.934              | -16.134             | ≤ 8         | Pass   |

Note: Measure Level = Reading level + BWCF = Reading level -15.2 dB  
 Bandwidth correction factor (BWCF) = 10log (3 kHz/100kHz)

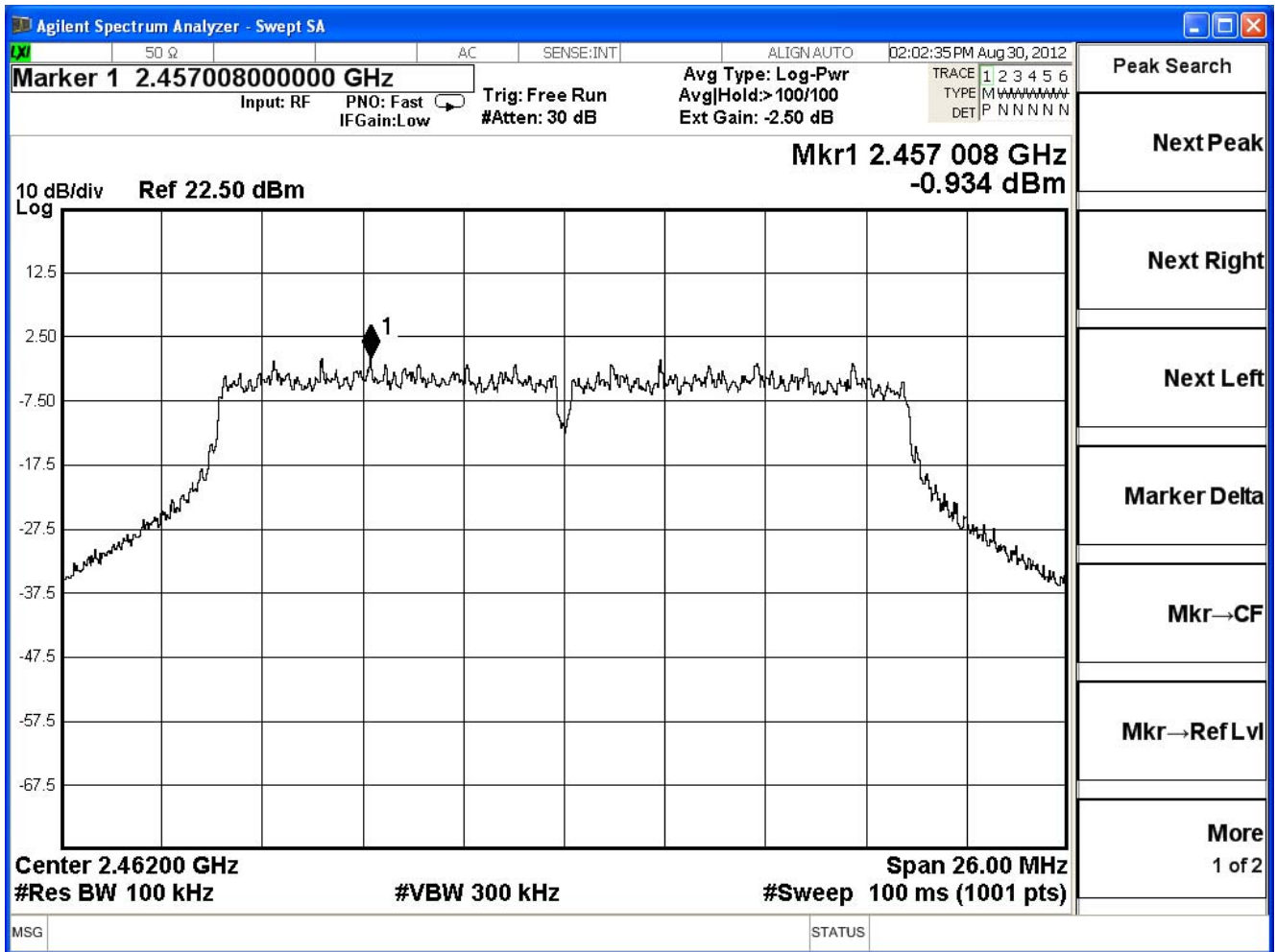
### Channel 1



Channel 6



**Channel 11**

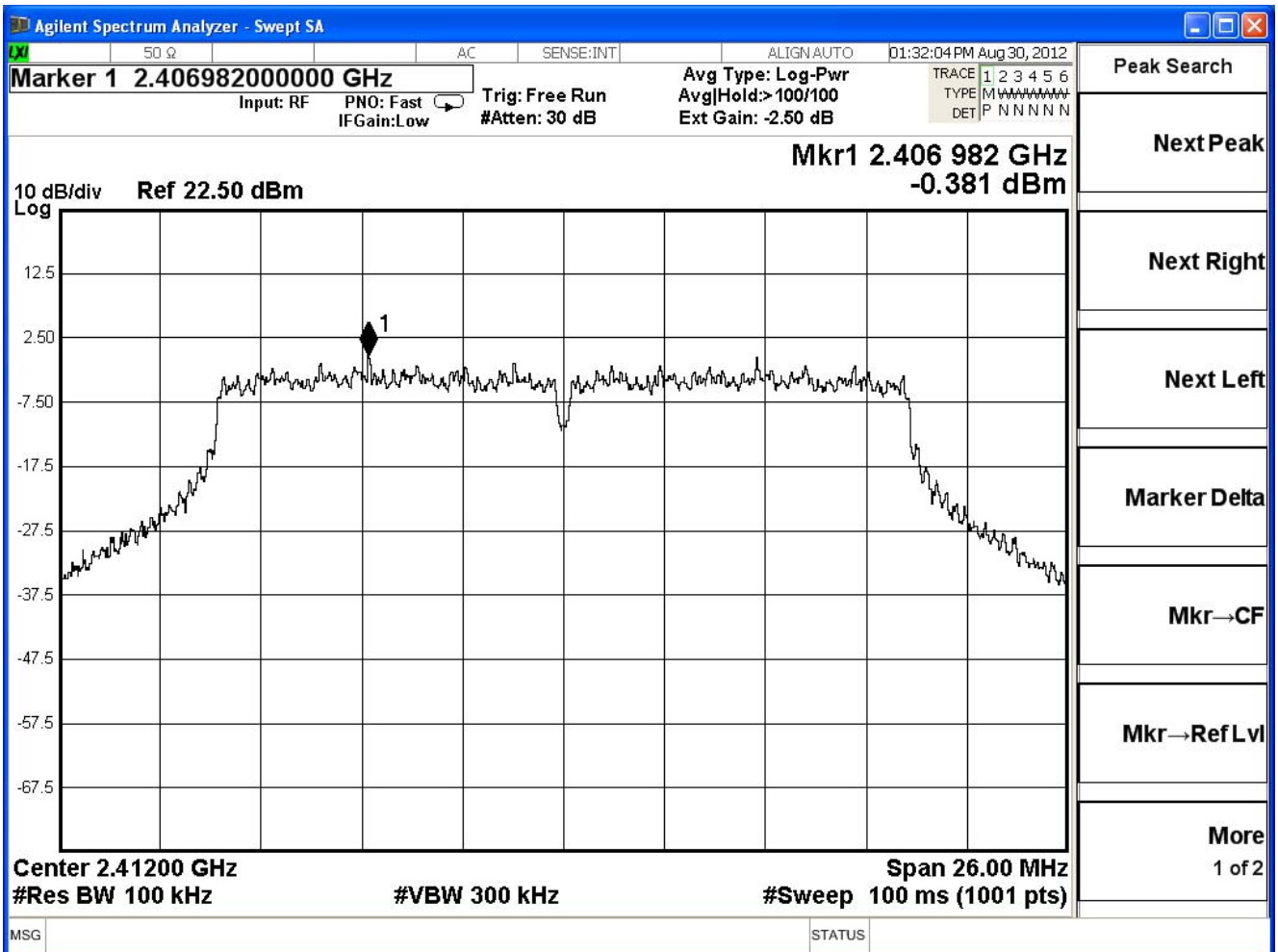


|              |   |           |     |
|--------------|---|-----------|-----|
| Product      | PowerLine AV 500 Wireless N Mini Extender/ PowerLine AV+ Wireless N Mini Extender |           |     |
| Test Item    | Power Density   |           |     |
| Test Mode    | Mode 1: Transmit  |           |     |
| Date of Test | 2012/08/30  | Test Site | SR7 |

| IEEE802.11n_20MHz_(ANT 1) |                 |                     |                   |             |        |
|---------------------------|-----------------|---------------------|-------------------|-------------|--------|
| Channel No.               | Frequency (MHz) | Reading Level (dBm) | Measurement (dBm) | Limit (dBm) | Result |
| 1                         | 2412.00         | -0.381              | -15.581           | ≤ 8         | Pass   |
| 6                         | 2437.00         | -1.351              | -16.551           | ≤ 8         | Pass   |
| 11                        | 2462.00         | -1.602              | -16.802           | ≤ 8         | Pass   |

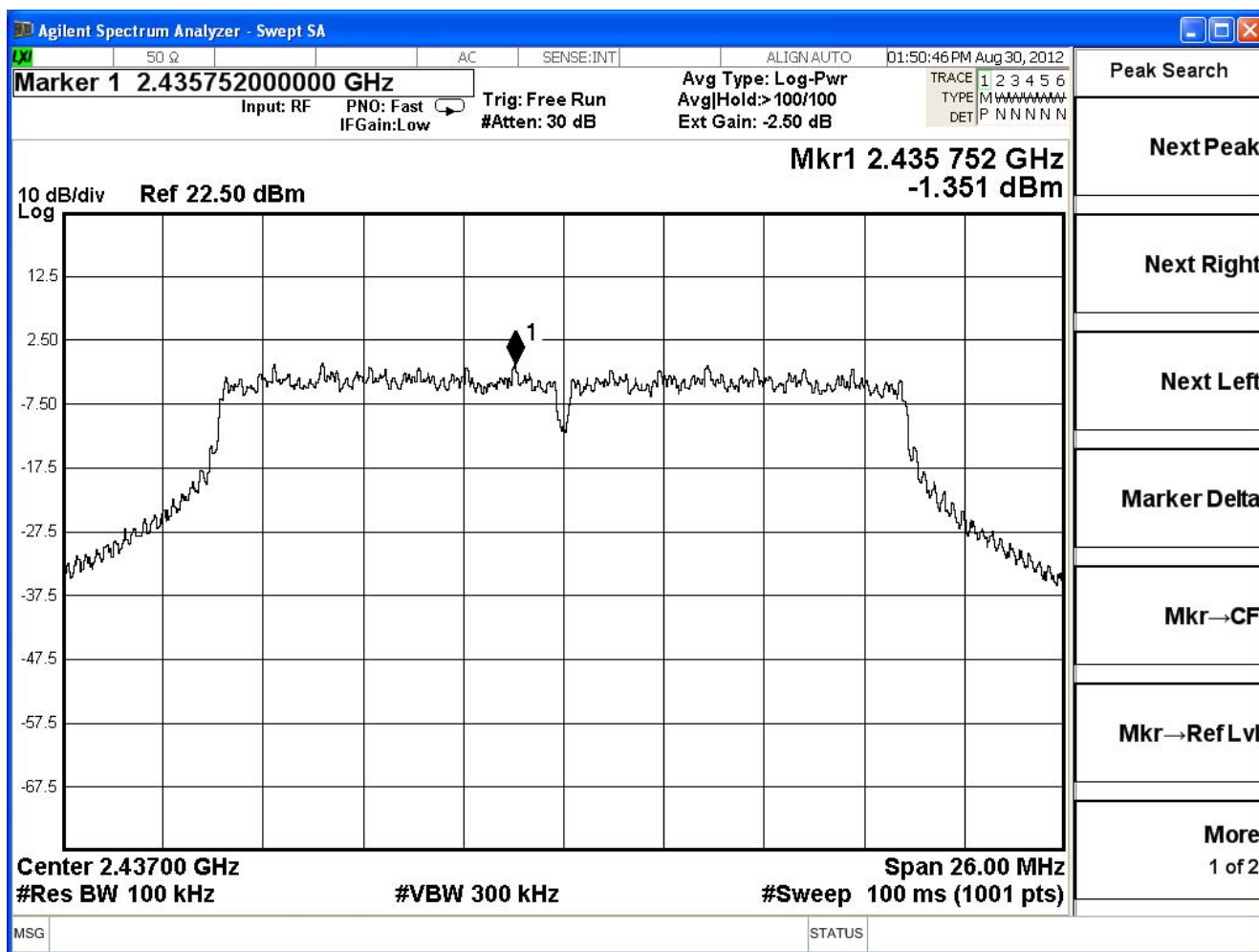
Note: Measure Level = Reading level + BWCF = Reading level -15.2 dB  
 Bandwidth correction factor (BWCF) = 10log (3 kHz/100kHz)

### Channel 1

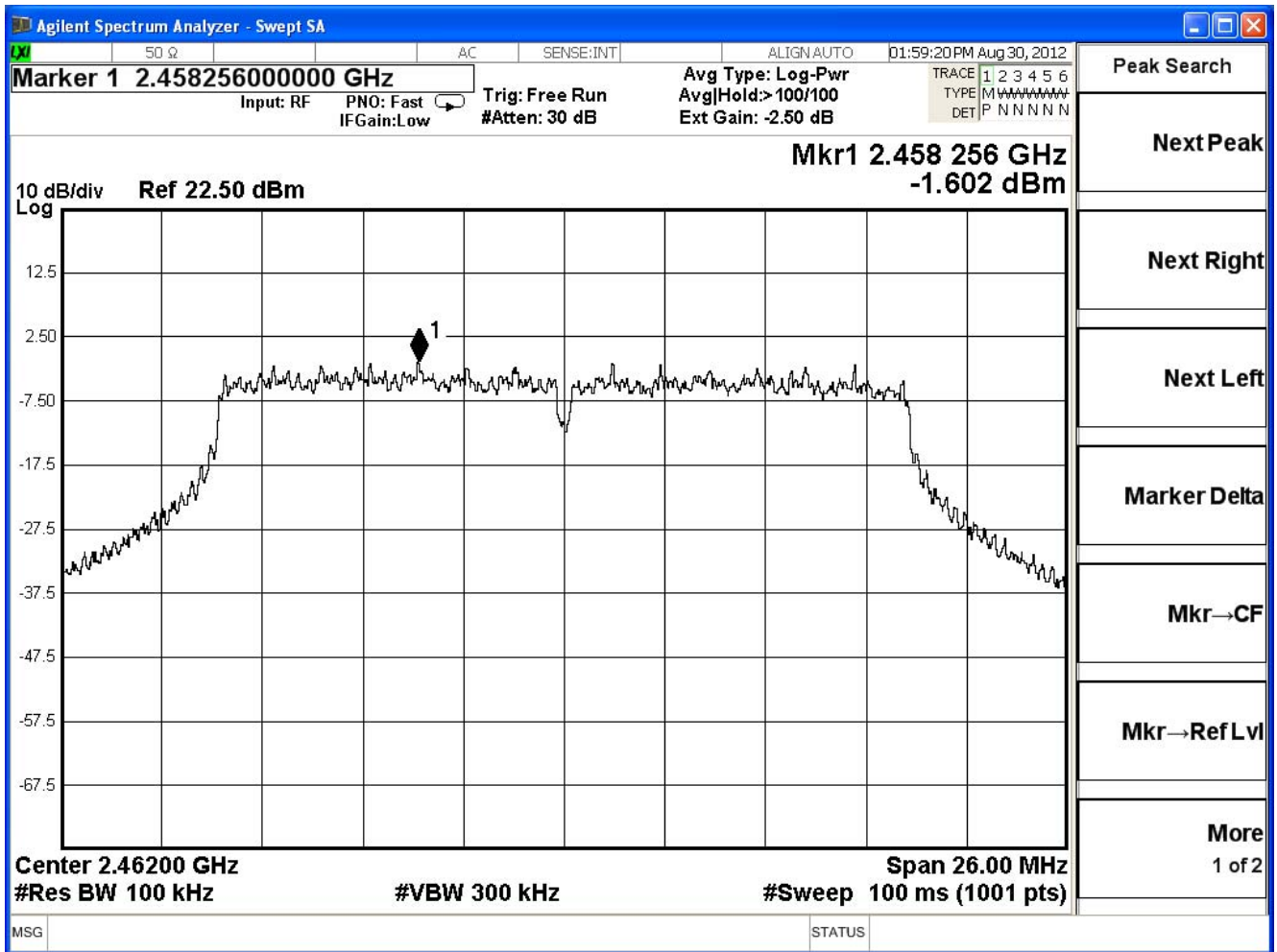




**Channel 6**



Channel 11



|              |   |           |     |
|--------------|---|-----------|-----|
| Product      | PowerLine AV 500 Wireless N Mini Extender/ PowerLine AV+ Wireless N Mini Extender |           |     |
| Test Item    | Power Density   |           |     |
| Test Mode    | Mode 1: Transmit  |           |     |
| Date of Test | 2012/08/30  | Test Site | SR7 |

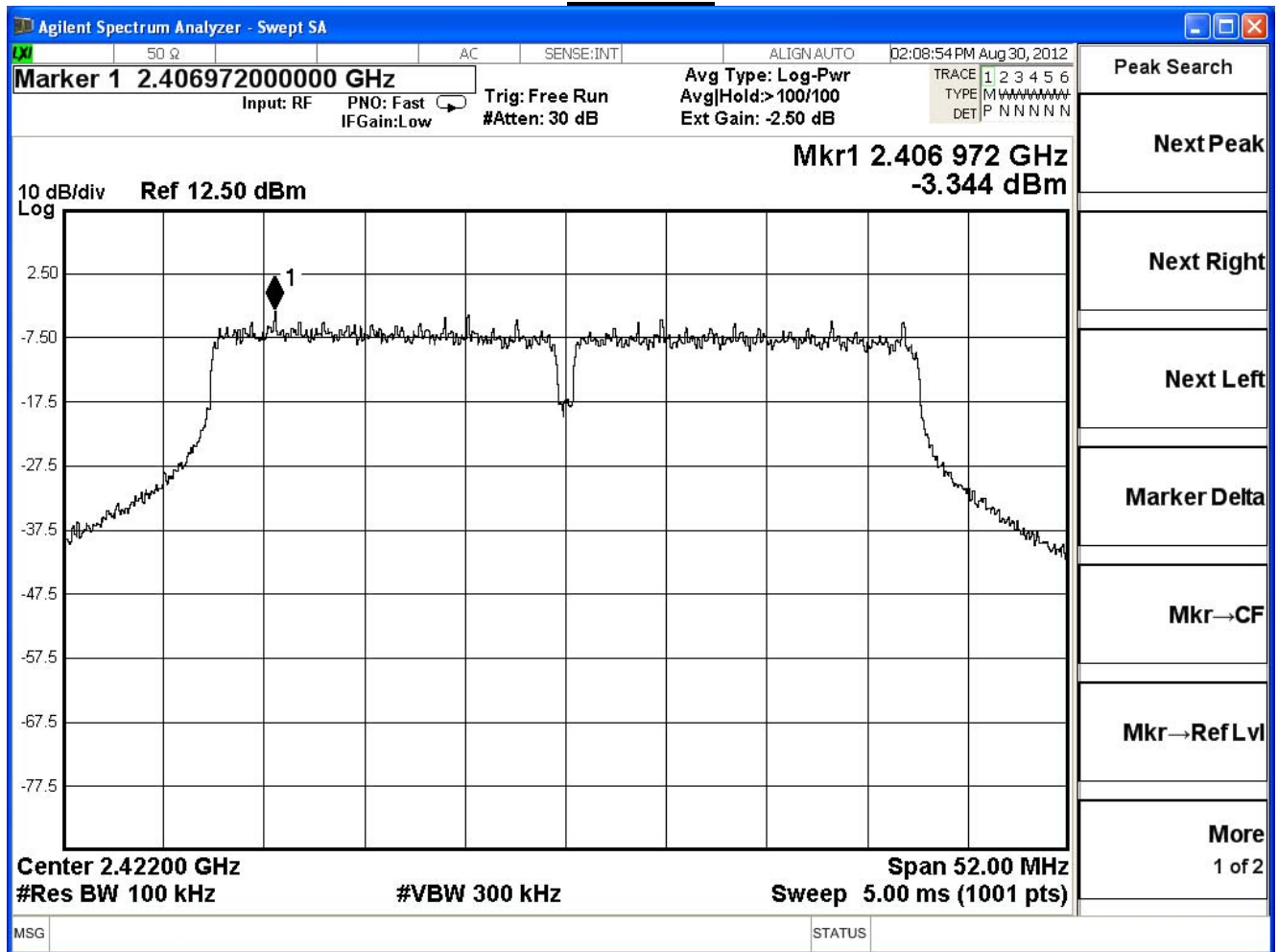
| IEEE802.11n 20MHz (ANT 0+1) |                 |                     |             |        |
|-----------------------------|-----------------|---------------------|-------------|--------|
| Channel No.                 | Frequency (MHz) | Measure Level (dBm) | Limit (dBm) | Result |
| 1                           | 2412.00         | -12.792             | ≤ 8         | Pass   |
| 6                           | 2437.00         | -14.012             | ≤ 8         | Pass   |
| 11                          | 2462.00         | -13.445             | ≤ 8         | Pass   |

|              |   |           |     |
|--------------|---|-----------|-----|
| Product      | PowerLine AV 500 Wireless N Mini Extender/ PowerLine AV+ Wireless N Mini Extender |           |     |
| Test Item    | Power Density   |           |     |
| Test Mode    | Mode 1: Transmit  |           |     |
| Date of Test | 2012/08/30  | Test Site | SR7 |

| IEEE 802.11n_40MHz (ANT 0) |                 |                     |                   |             |        |
|----------------------------|-----------------|---------------------|-------------------|-------------|--------|
| Channel No.                | Frequency (MHz) | Reading Level (dBm) | Measurement (dBm) | Limit (dBm) | Result |
| 3                          | 2422            | -3.344              | -18.544           | ≤ 8         | Pass   |
| 6                          | 2437            | -3.801              | -19.001           | ≤ 8         | Pass   |
| 9                          | 2452            | -4.337              | -19.537           | ≤ 8         | Pass   |

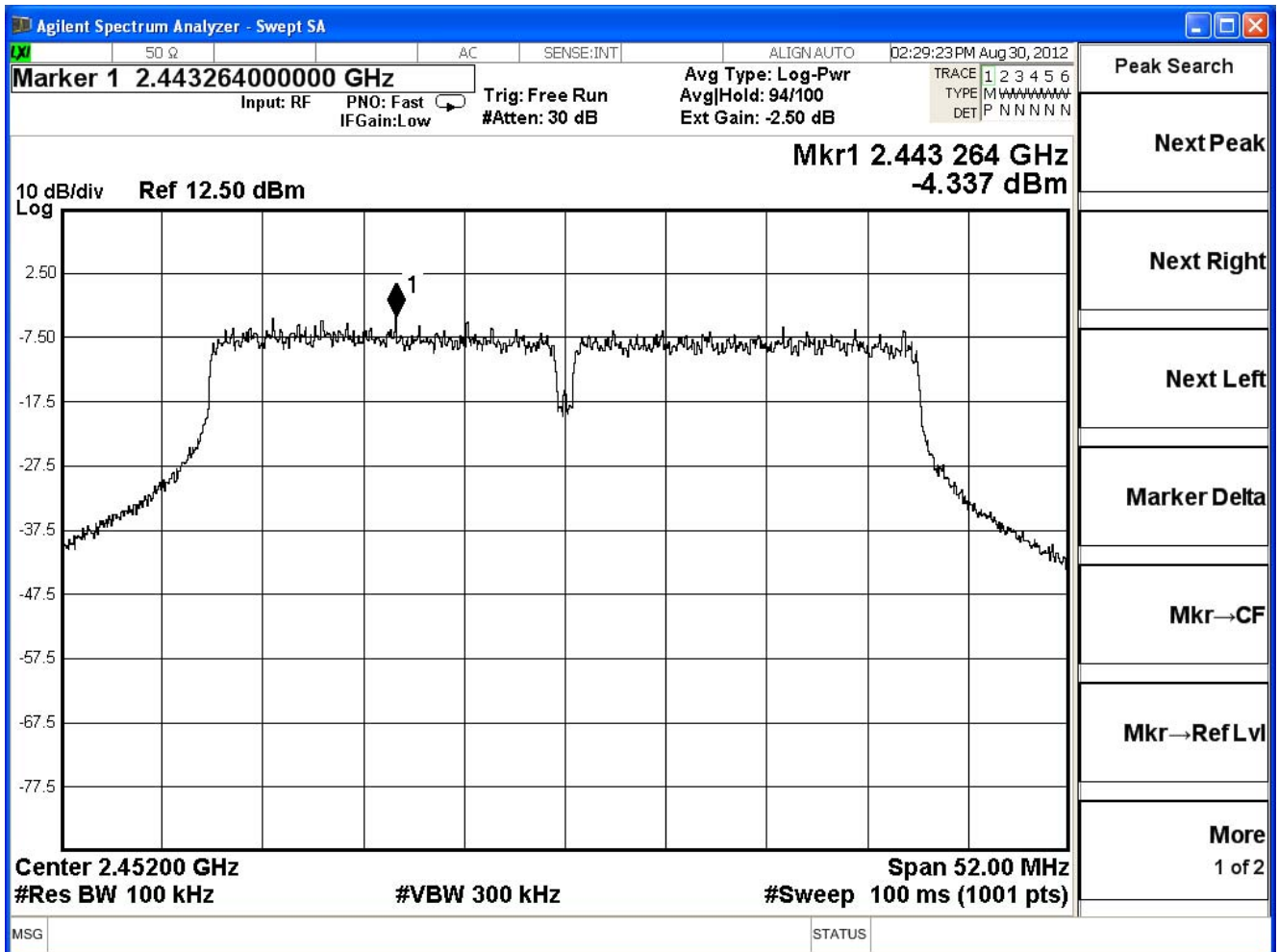
Note: Measure Level = Reading level + BWCF = Reading level -15.2 dB  
 Bandwidth correction factor (BWCF) = 10log (3 kHz/100kHz)

### Channel 3





**Channel 9**

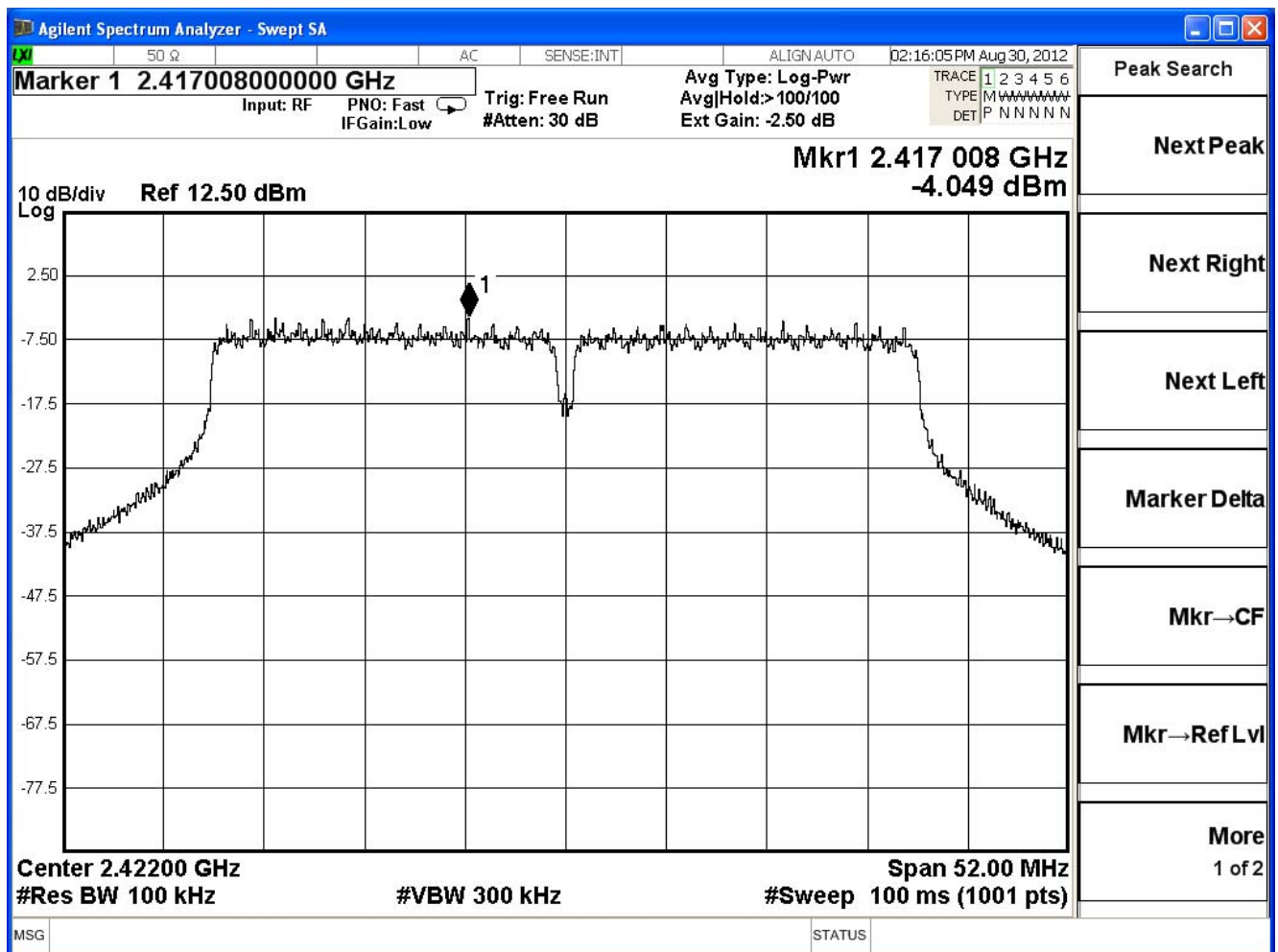


|              |   |           |     |
|--------------|---|-----------|-----|
| Product      | PowerLine AV 500 Wireless N Mini Extender/ PowerLine AV+ Wireless N Mini Extender |           |     |
| Test Item    | Power Density   |           |     |
| Test Mode    | Mode 1: Transmit  |           |     |
| Date of Test | 2012/08/30  | Test Site | SR7 |

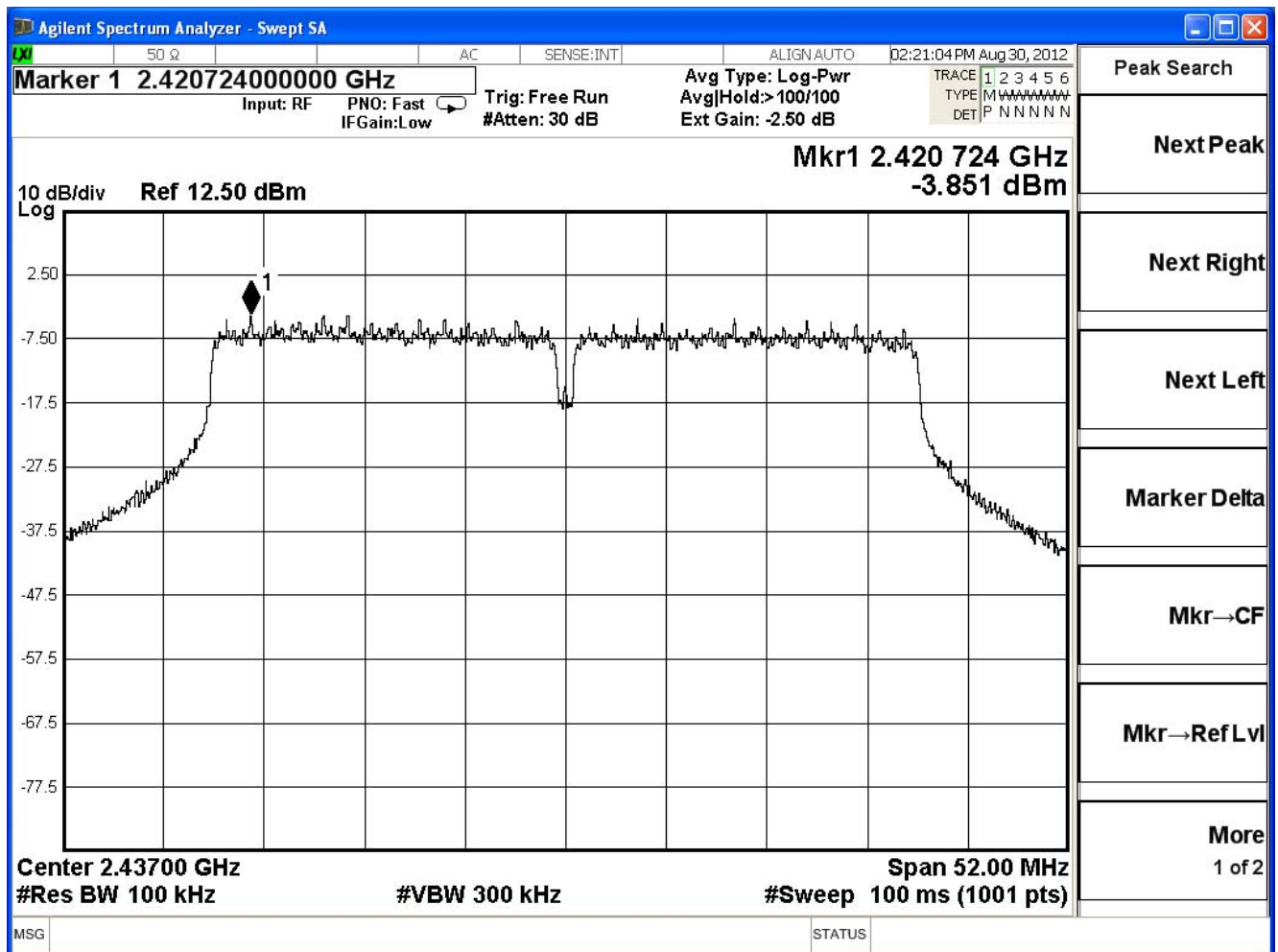
| IEEE 802.11n_40MHz (ANT 1) |                 |                     |                     |             |        |
|----------------------------|-----------------|---------------------|---------------------|-------------|--------|
| Channel No.                | Frequency (MHz) | Reading Level (dBm) | Measure Level (dBm) | Limit (dBm) | Result |
| 3                          | 2422            | -4.049              | -19.249             | ≤ 8         | Pass   |
| 6                          | 2437            | -3.851              | -19.051             | ≤ 8         | Pass   |
| 9                          | 2452            | -4.000              | -19.200             | ≤ 8         | Pass   |

Note: Measure Level = Reading level + BWCF = Reading level -15.2 dB  
 Bandwidth correction factor (BWCF) = 10log (3 kHz/100kHz)

### Channel 3

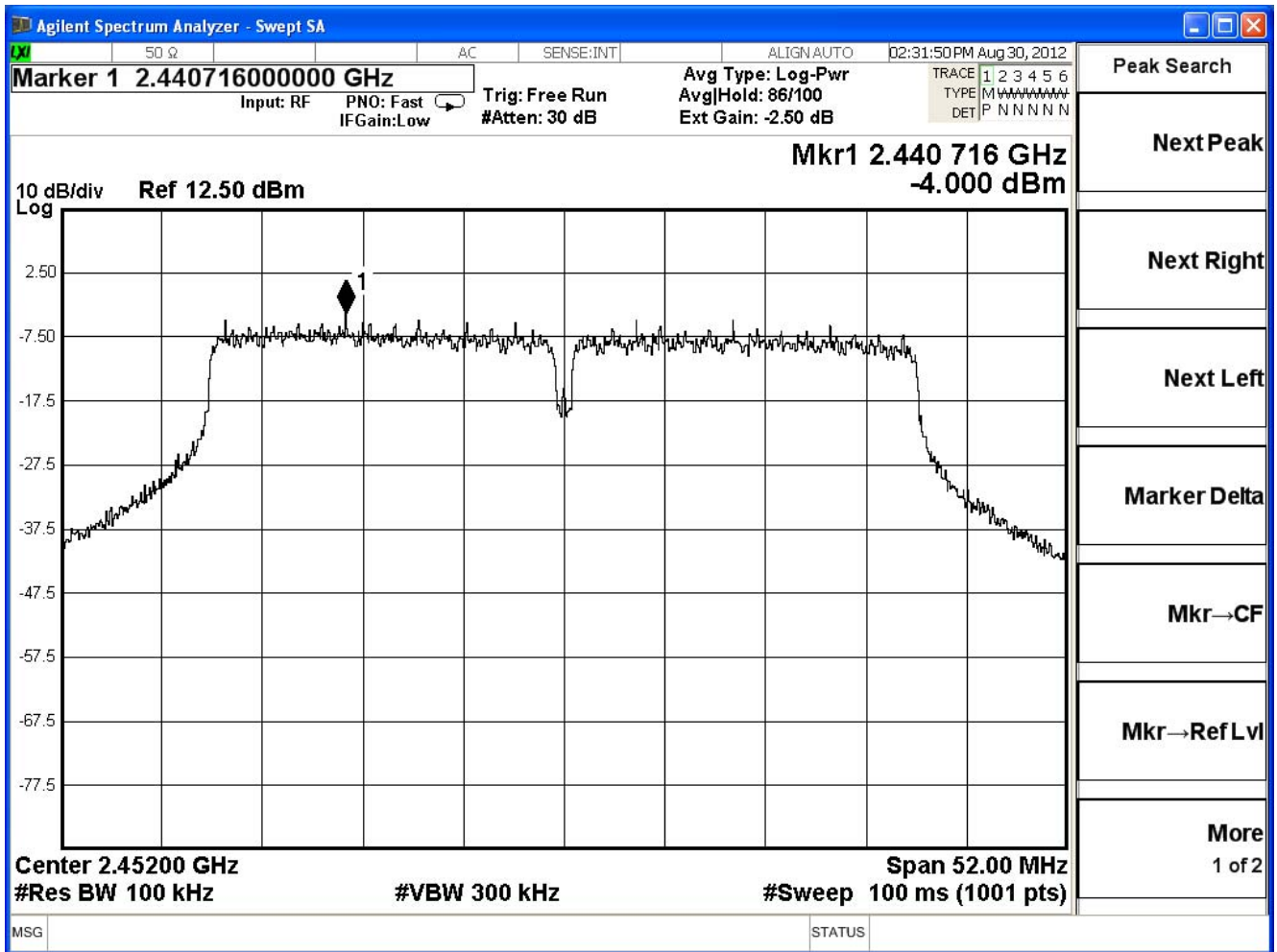


Channel 6





**Channel 9**



|              |   |           |     |
|--------------|---|-----------|-----|
| Product      | PowerLine AV 500 Wireless N Mini Extender/ PowerLine AV+ Wireless N Mini Extender |           |     |
| Test Item    | Power Density   |           |     |
| Test Mode    | Mode 1: Transmit  |           |     |
| Date of Test | 2012/08/30  | Test Site | SR7 |

IEEE802.11n 40MHz(ANT 0+1)

| Channel No. | Frequency (MHz) | Measure Level (dBm) | Limit (dBm) | Result |
|-------------|-----------------|---------------------|-------------|--------|
| 3           | 2422            | -15.872             | $\leq 8$    | Pass   |
| 6           | 2437            | -16.016             | $\leq 8$    | Pass   |
| 9           | 2452            | -16.355             | $\leq 8$    | Pass   |