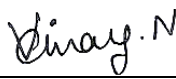


**Produkte**  
*Products*

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                              |                                                                                                                                                                               |                                                  |                                              |                                                                                       |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|----------------------------------------------|---------------------------------------------------------------------------------------|
| <b>Prüfbericht - Nr.:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                              | <b>01200051 002</b>                                                                                                                                                           |                                                  | <b>Seite 1 von 77</b>                        |                                                                                       |
| <i>Test Report No.:</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                              |                                                                                                                                                                               |                                                  | <i>Page 1 of 77</i>                          |                                                                                       |
| <b>Auftraggeber:</b><br><i>Client:</i>                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                              | <b>Matsunichi, Inc.</b><br><b>47745 Fremont Blvd</b><br><b>Fremont, California 94538</b><br><b>United States</b>                                                              |                                                  |                                              |                                                                                       |
| <b>Gegenstand der Prüfung:</b><br><i>Test item:</i>                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                              | <b>Android Tablet PC</b>                                                                                                                                                      |                                                  |                                              |                                                                                       |
| <b>Bezeichnung:</b><br><i>Identification:</i>                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                              | <b>MP977</b>                                                                                                                                                                  | <b>Serien-Nr.:</b><br><i>Serial No.</i>          |                                              | <b>Engineering Sample</b>                                                             |
| <b>Wareneingangs-Nr.:</b><br><i>Receipt No.:</i>                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                              | <b>1403019767</b>                                                                                                                                                             | <b>Eingangsdatum:</b><br><i>Date of receipt:</i> |                                              | <b>14.05.2012</b>                                                                     |
| <b>Prüfort:</b><br><i>Testing location:</i>                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                              | <b>Refer Page 4 of 77 for test facilities</b>                                                                                                                                 |                                                  |                                              |                                                                                       |
| <b>Prüfgrundlage:</b><br><i>Test specification:</i>                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                              | <b>FCC Part 15: Subpart C Section 15.247</b><br><b>ANSI C63.4-2003</b>                                                                                                        |                                                  |                                              |                                                                                       |
| <b>Prüfergebnis:</b><br><i>Test Result:</i>                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                              | <b>Der Prüfgegenstand entspricht oben genannter Prüfgrundlage(n).</b><br><i>The test items passed the test specification(s).</i>                                              |                                                  |                                              |                                                                                       |
| <b>Prüflaboratorium:</b><br><i>Testing Laboratory:</i>                                                                                                                                                                                                                                                                                                                                                                                                                              |                                              | <b>TÜV Rheinland (India) Pvt. Ltd.</b><br>82/A, 3rd Main, West Wing, Electronic City Phase 1<br>Hosur Road, Bangalore – 560 100. India<br><b>FCC Registration No.: 176555</b> |                                                  |                                              |                                                                                       |
| <b>geprüft / tested by:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                              |                                                                                                                                                                               | <b>kontrolliert / reviewed by:</b>               |                                              |                                                                                       |
| 03.12.2012                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Vinay N<br>Test Engineer                     |                                                                                            | 06.12.2012                                       | Raghavendra Kulkarni<br>Manager              |  |
| <b>Datum</b><br><i>Date</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <b>Name/Stellung</b><br><i>Name/Position</i> | <b>Unterschrift</b><br><i>Signature</i>                                                                                                                                       | <b>Datum</b><br><i>Date</i>                      | <b>Name/Stellung</b><br><i>Name/Position</i> | <b>Unterschrift</b><br><i>Signature</i>                                               |
| <b>Sonstiges / Other Aspects:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                              | <b>FCC ID : OC5-FTC97700</b><br><b>This ID also contains Bluetooth Transmitter with test report number 01200038 001 by TUV Rheinland</b>                                      |                                                  |                                              |                                                                                       |
| <b>Abkürzungen:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                              | <b>P(ass) = entspricht Prüfgrundlage</b><br><b>F(ail) = entspricht nicht Prüfgrundlage</b><br><b>N/A = nicht anwendbar</b><br><b>N/T = nicht getestet</b>                     |                                                  | <b>Abbreviations:</b>                        |                                                                                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                              | <b>P(ass) = passed</b><br><b>F(ail) = failed</b><br><b>N/A = not applicable</b><br><b>N/T = not tested</b>                                                                    |                                                  |                                              |                                                                                       |
| <b>Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens.</b><br><i>This test report relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any safety mark on this or similar products.</i> |                                              |                                                                                                                                                                               |                                                  |                                              |                                                                                       |

**Test Result Summary**

| Clause                  | Test Item                                                     | Result |
|-------------------------|---------------------------------------------------------------|--------|
| FCC 15.247(b) (3)       | Maximum Conducted Output Power                                | Pass   |
| FCC 15.247(a) (2)       | 6dB Bandwidth                                                 | Pass   |
| FCC 15.247(e)           | Power Spectral Density                                        | Pass   |
| FCC 15.247(d)           | Band-edge compliance                                          | Pass   |
| FCC 15.209 / FCC 15.205 | Spurious Radiated Emissions and Restricted Bands of Operation | Pass   |
| FCC 15.207              | AC Power Line Conducted Emissions                             | Pass   |

**Test Report Revision History**

| Revision | Description                                    | Test Report No.: |
|----------|------------------------------------------------|------------------|
| Rev.0    | Original Report                                | 01200051 001     |
| Rev.1    | IEEE 802.11 n protocol test results were added | 01200051 002     |

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## List of Test and Measurement Instruments

TUV Rheinland (India) Pvt. Ltd. , Bangalore

### List of Test and Measurement Instruments

| Equipment                            | Manufacturer   | Model  | S/N        | Calibration Due Date |
|--------------------------------------|----------------|--------|------------|----------------------|
| EMI Test Receiver                    | Rohde &Schwarz | ESU 40 | 100288     | 21.06.5013           |
| Hybrid Log Periodic antenna          | ETS Lindgren   | 3142D  | 00081354   | 26.06.5013           |
| Broadband Horn Antenna               | Frankonia      | HAX-18 | HAX18-802  | 23.03.2013           |
| Double-Ridged Waveguide Horn Antenna | ETS Lindgren   | 116794 | 00133356   | 01-09-2013           |
| Emission Horn Antenna                | ETS Lindgren   | 116706 | 00107323   | 24-08-2013           |
| Active Loop Antenna                  | Frankonia      | LAX-10 | LAX-10-800 | 11-04-2013           |

### Testing Facilities:

- 1) TUV Rheinland (India) Private Limited  
No. 108, West Wing  
Electronic city Phase I  
Bangalore – 560100

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## General Product Information

### Product Function and Intended Use

Tablet PC is a handheld multimedia entertainment unit used for below functions

1. Browsing the web
2. Audio/Video Playback
3. Personal Digital assistant
4. Playing 2D/3D games
5. Teleconferencing
6. GPS Navigation

### Ratings and System Details

|                          |                                                                                                                    |           |
|--------------------------|--------------------------------------------------------------------------------------------------------------------|-----------|
| Operating Frequency      | 2400MHz – 2483.50MHz                                                                                               |           |
| No. of channel           | Please refer Table of Carrier Frequencies                                                                          |           |
| Channel Spacing          | 5MHz                                                                                                               |           |
| Transmitted Power        | 802.11b                                                                                                            | 17.47dBm  |
|                          | 802.11g                                                                                                            | 16.52 dBm |
|                          | 802.11n                                                                                                            | 15.36 dBm |
| Data Rate                | 802.11b: 1,2, 5.5,11 Mbps<br>802.11a: 6, 9, 12, 18, 24, 36, 48, 54 Mbps<br>802.11n: 6.5,13,19.5,26,39,52,58,65Mbps |           |
| Antenna Type             | Multilayer Chip Antenna                                                                                            |           |
| Number of antenna        | One                                                                                                                |           |
| Antenna Gain             | 1.5 dBi                                                                                                            |           |
| Supply Voltage to Module | 3.3V and +1.8V for Digital Interface                                                                               |           |
| Dimensions of Product    | 241.3mm x 190.5mm x 12.446mm                                                                                       |           |
| Environmental            | Environmental (Storage ):-40°C to 85°C<br>Operational conditions: -30°C to 75° C                                   |           |

### Test Conditions:

Supply Voltage: 110V AC, 60Hz

### Environmental conditions:

Temperature: +23 °C      RH: 62%

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## Operation Descriptions

Tablet PC runs on Android 4.0.3 operating system(Ice cream sandwich),It has a 9.7 inch LED backlit LCD display and primarily operated by Touch screen interface which has Multi-touch capabilities for recognizing multiple simultaneous finger touches. In addition to this, dedicated hardware keys are provided for Power On/Off and Volume Increase/Decrease functionality; the device has Wifi and Bluetooth capabilities that allow it to connect wirelessly to the internet and transfer data to other compatible devices. The Device also has a GPS receiver that can be used for personal navigation when used with appropriate software. The Tablet is powered by a Li-Polymer rechargeable battery. The Battery can be charged using the provided Wall mount charger.

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## Test Set-up and Operation Mode

### Principle of Configuration Selection

**Emission:** The test was performed under continuous transmission to obtain the maximum emissions.

### Test Operation and Test Software

Continuous transmission was enabled through test software and Channel / data rate selection was done with the software

### Special Accessories and Auxiliary Equipment

- None

### Countermeasures to achieve EMC Compliance

- None

### Test Modes – Data Rates and Modulations

For Radiated spurious emissions, the tests were performed for all data rates and only worst results are reported in this report.

### Table of carrier frequencies

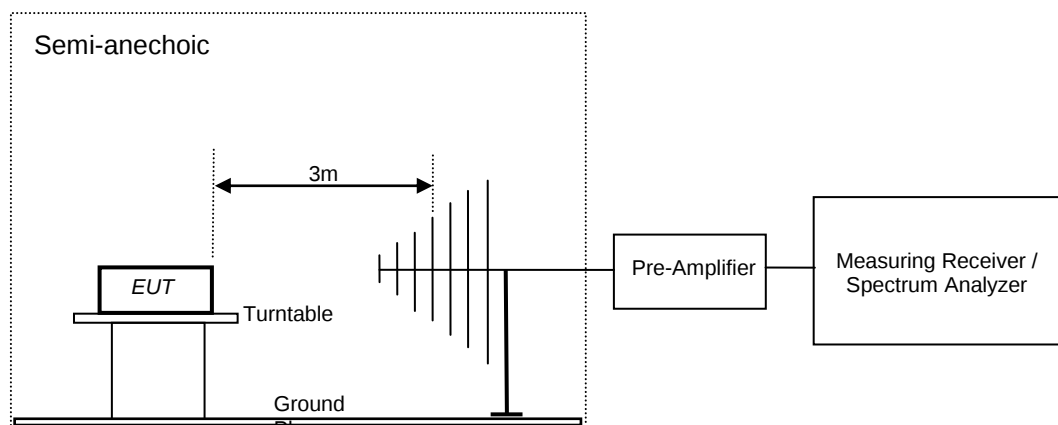
| Frequency Band    | Channel No. | Frequency (MHz) |
|-------------------|-------------|-----------------|
| 2400 – 2483.5 MHz | 1           | 2412            |
|                   | 2           | 2417            |
|                   | 3           | 2422            |
|                   | 4           | 2427            |
|                   | 5           | 2432            |
|                   | 6           | 2437            |
|                   | 7           | 2442            |
|                   | 8           | 2447            |
|                   | 9           | 2452            |
|                   | 10          | 2457            |
|                   | 11          | 2462            |

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## Test Methodology

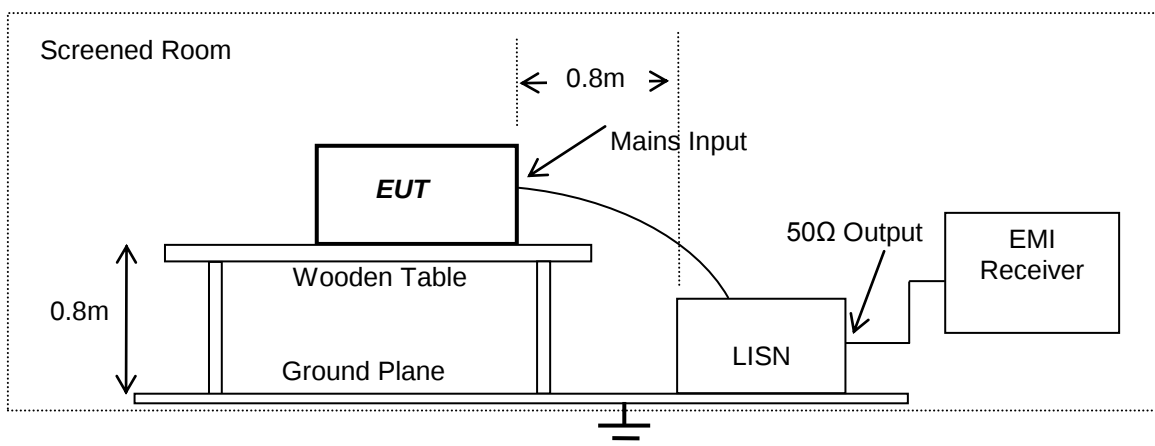
### Radiated Emission Test

The radiated emission measurement was performed according to the procedures in ANSI C63.4-2003. The equipment under test (EUT) was placed at the middle of the 80 cm high turntable, and the EUT is 3 meters far from the measuring antenna. The turntable was rotated 360° for obtaining the maximum emission. The height of the measuring antennas was scanned between 1m and 4m, and the antenna rotated to repeat the measurements for both the horizontal and vertical antenna polarizations. Repeat the measurement steps until the maximum emissions were obtained. The measurement above 1000MHz was performed by horn antenna. The measurement below 30MHz was performed by loop antenna. The EUT was rotated around the X-, Y-, and Z-Axis and the results from worst case axis are recorded.



### Conducted Emission Test on a.c. mains line

The equipment under test (EUT) was placed on a wooden table 80cm above the ground plane, the LISN was placed 80cm away from the EUT. The test was performed in accordance with ANSI C63.4: 2003, with the following: an initial measurement was performed in peak and average detection mode on the live and neutral lines. The pre-scan was performed by peak detection on both live and neutral conductors. Any emissions recorded within 20dB of the relevant limit line were re-measured using quasi-peak and average detections, the 6 worst cases were recorded in the table of results.



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## Test Results

**Maximum Conducted Output Power**

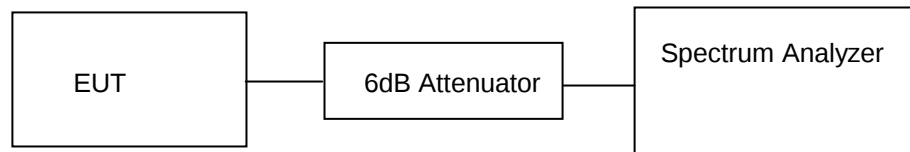
**Section 15.247(b) (3)**

**Result**

**Pass**

|                             |                       |
|-----------------------------|-----------------------|
| Test Specification          | FCC Part 15 Subpart C |
| Measurement Bandwidth (RBW) | 1 MHz                 |
| Requirement                 | <1 watt (30dBm).      |

**Test Method:**

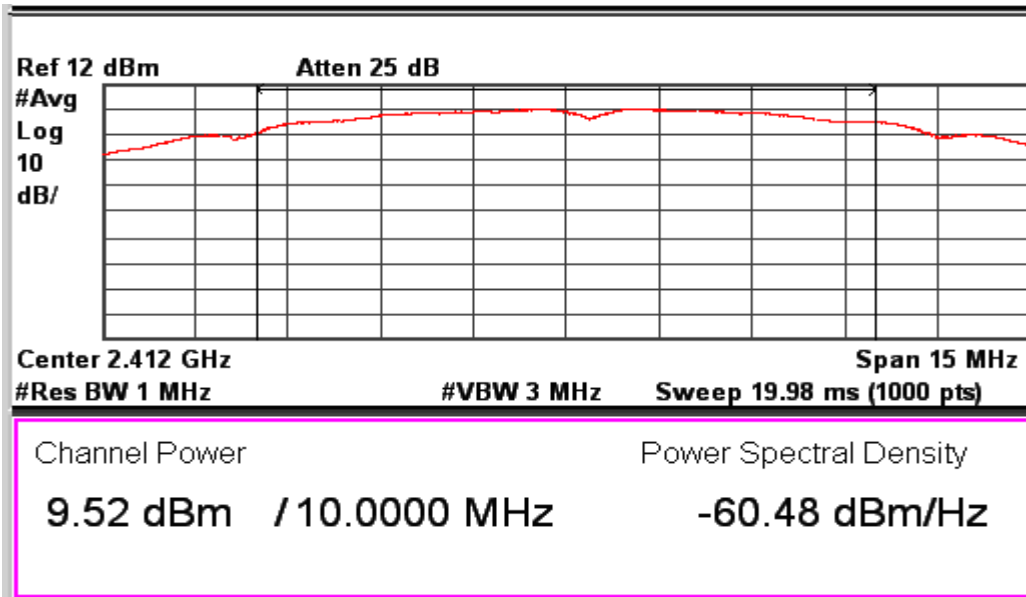


Cable Loss: 0.68 dB + 1.2dB

**Total Correction Factor: Cable Loss+ Attenuator = 1.88dB + 6dB = 7.88 dB**

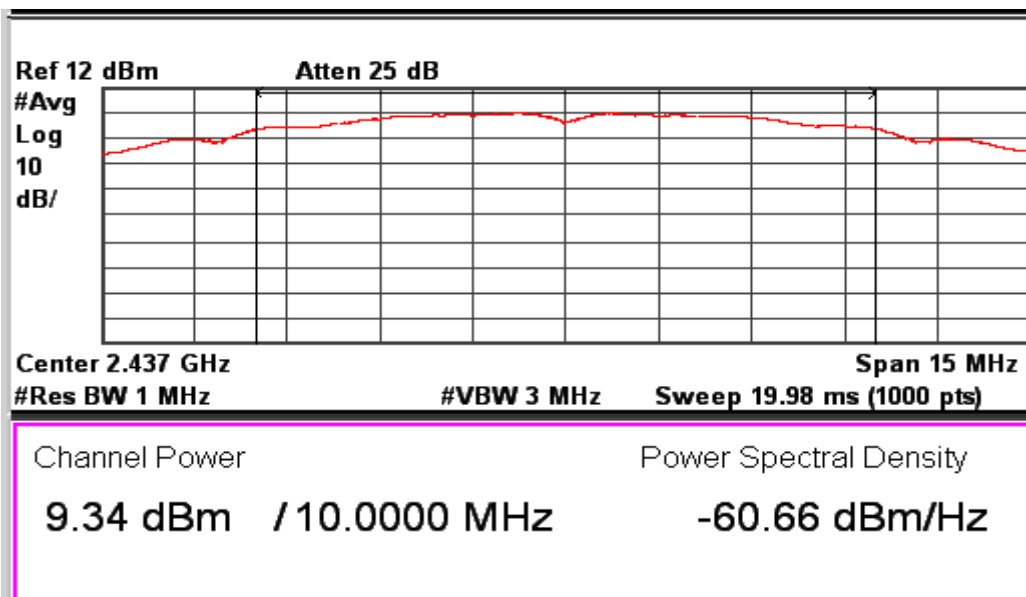
**Test Result:**

| 802.11 Protocol | Data Rate (Mbps) | Frequency (MHz) | Measured Power (dBm) | Attenuator + Cable Loss (dB) | Total Power (dBm) | Limit (dBm) | Margin (dB) |
|-----------------|------------------|-----------------|----------------------|------------------------------|-------------------|-------------|-------------|
| b               | 1                | 2412            | 9.52                 | 7.88                         | 17.40             | 30.00       | -12.60      |
|                 |                  | 2437            | 9.34                 | 7.88                         | 16.52             | 30.00       | -12.78      |
|                 |                  | 2462            | 9.46                 | 7.88                         | 17.34             | 30.00       | -12.66      |
|                 | 11               | 2412            | 9.59                 | 7.88                         | 17.47             | 30.00       | -12.53      |
|                 |                  | 2437            | 9.40                 | 7.88                         | 16.58             | 30.00       | -12.72      |
|                 |                  | 2462            | 9.46                 | 7.88                         | 17.34             | 30.00       | -12.66      |



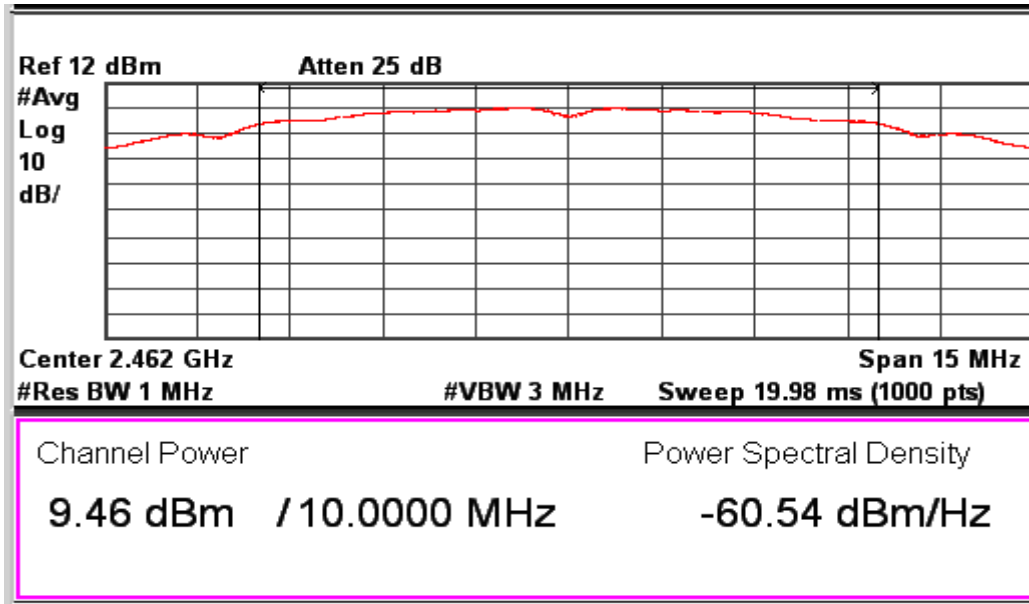
Data rate: 1 Mbps

Channel Frequency: 2412 MHz



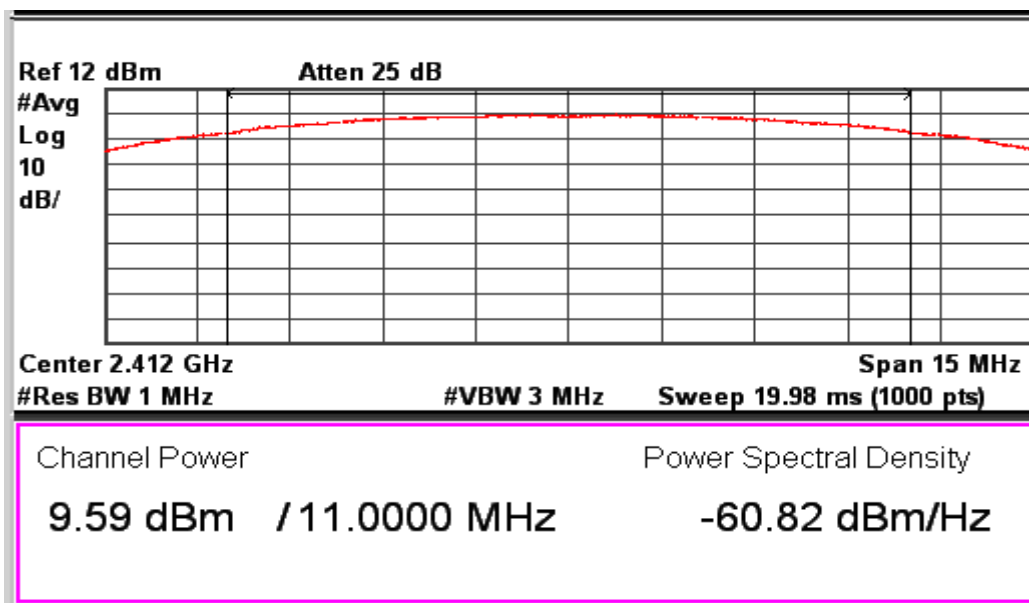
Data rate: 1 Mbps

Channel Frequency: 2437 MHz



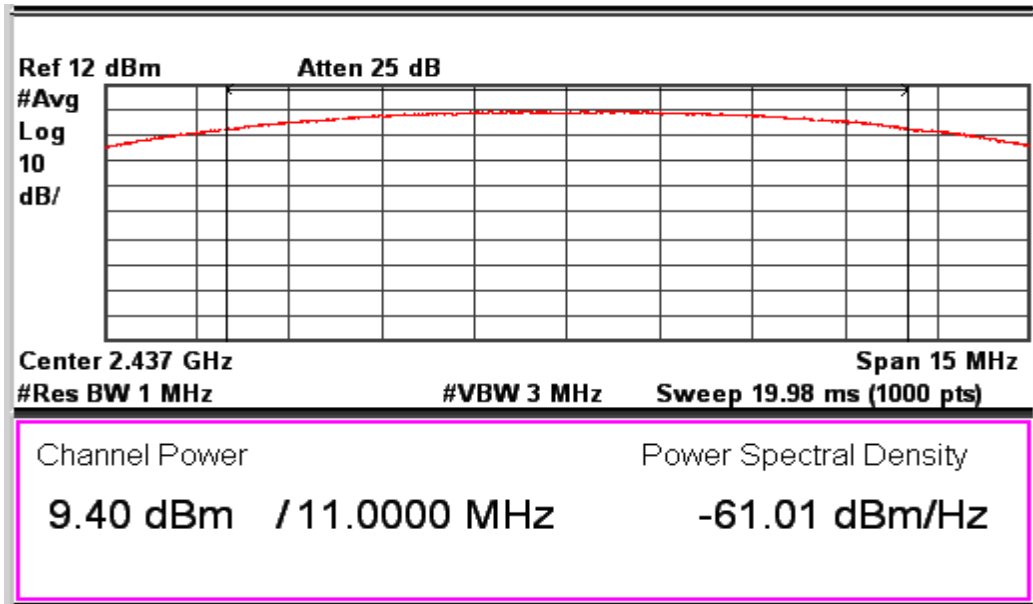
Data rate: 1 Mbps

Channel Frequency: 2462 MHz



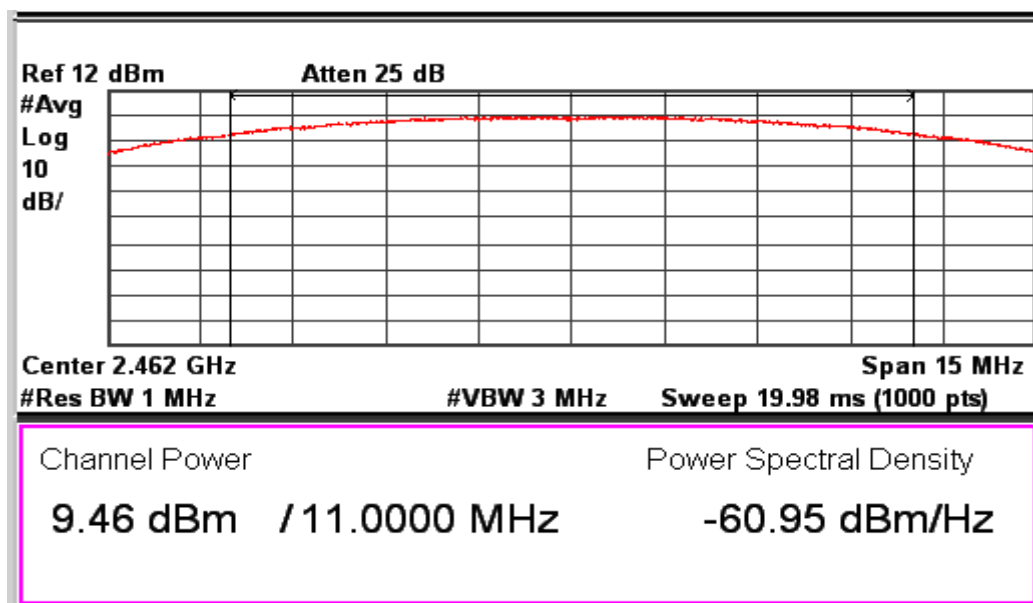
Data rate: 11 Mbps

Channel Frequency: 2412 MHz



Data rate: 11 Mbps

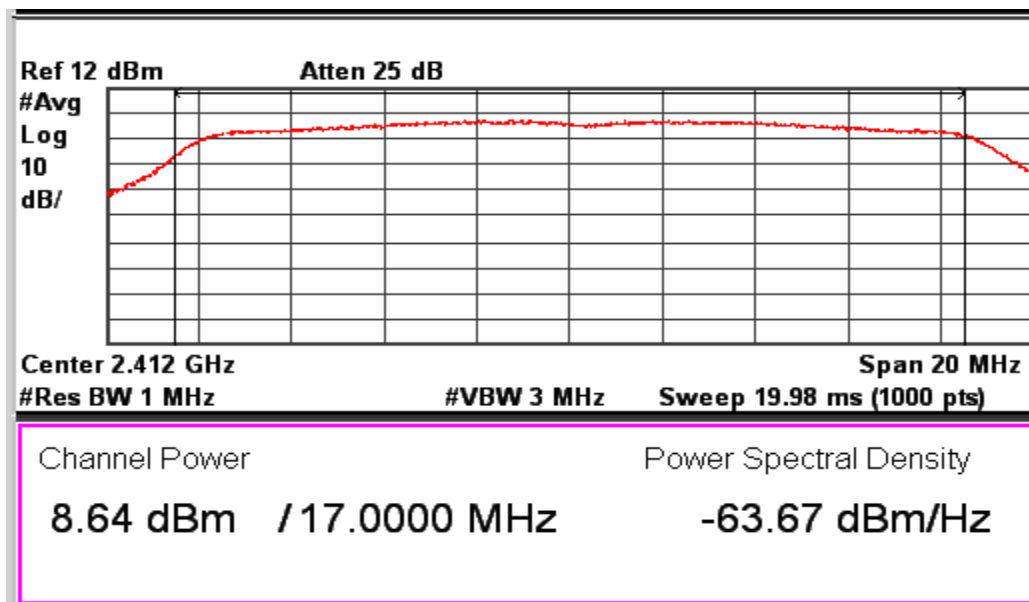
Channel Frequency: 2437 MHz



Data rate: 11 Mbps

Channel Frequency: 2462 MHz

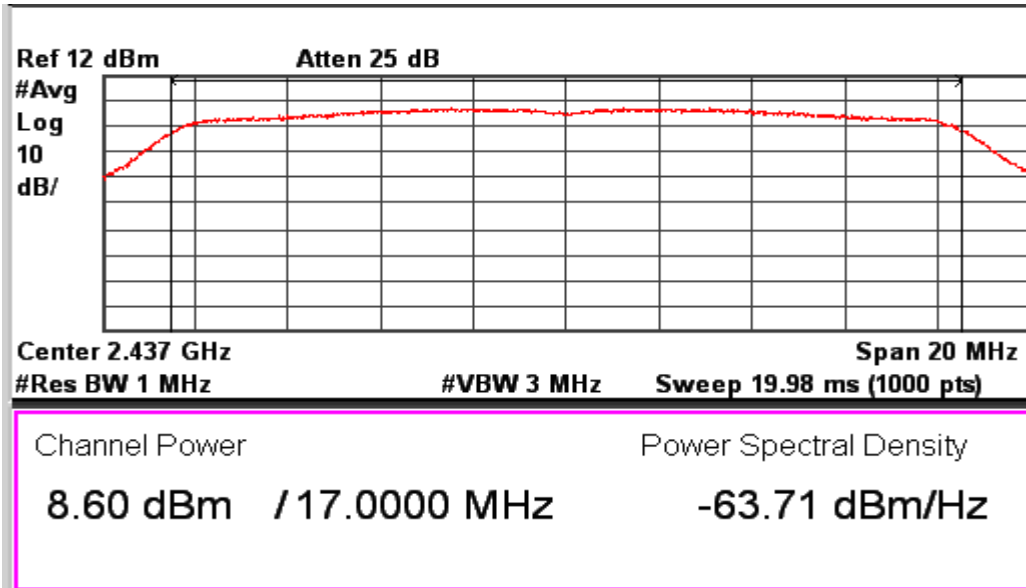
| 802.11 Protocol | Data Rate (Mbps) | Frequency (MHz) | Measured Power (dBm) | Attenuator + Cable Loss (dB) | Total Power (dBm) | Limit (dBm) | Margin (dB) |
|-----------------|------------------|-----------------|----------------------|------------------------------|-------------------|-------------|-------------|
| g               | 6                | 2412            | 8.64                 | 7.88                         | 16.52             | 30.00       | -13.48      |
|                 |                  | 2437            | 8.60                 | 7.88                         | 16.48             | 30.00       | -13.52      |
|                 |                  | 2462            | 8.56                 | 7.88                         | 16.44             | 30.00       | -13.56      |
|                 | 54               | 2412            | 4.22                 | 7.88                         | 12.10             | 30.00       | -17.90      |
|                 |                  | 2437            | 4.09                 | 7.88                         | 11.97             | 30.00       | -18.03      |
|                 |                  | 2462            | 3.96                 | 7.88                         | 11.84             | 30.00       | -18.16      |



Data rate: 6 Mbps

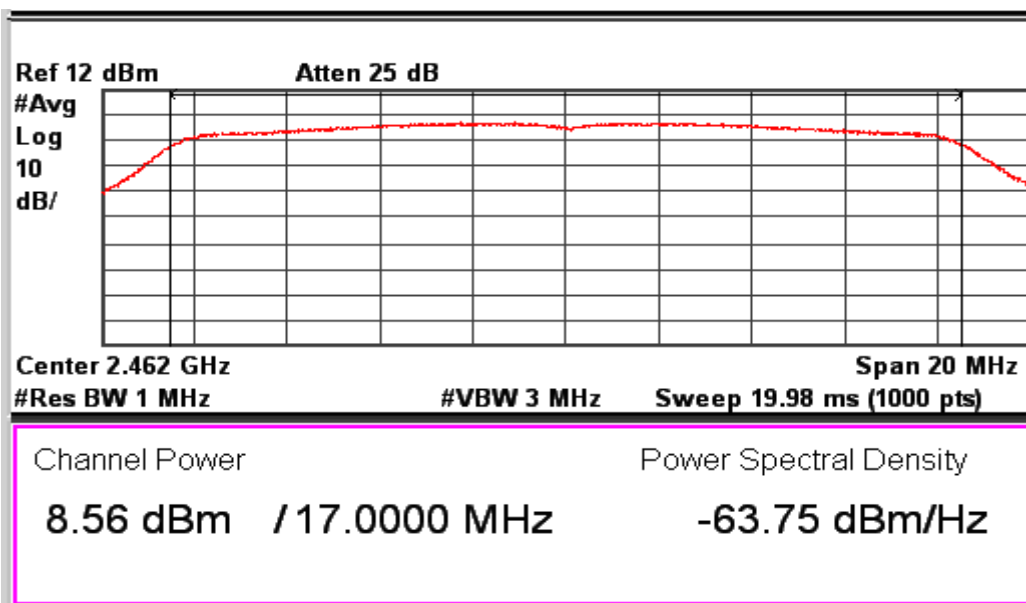
Channel Frequency: 2412 MHz

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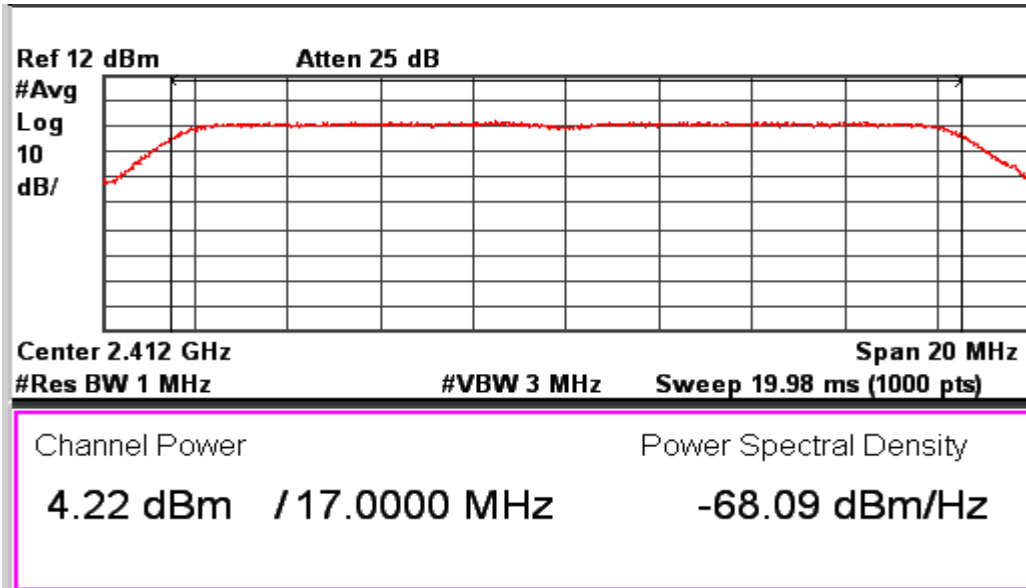
Data rate: 6 Mbps

Channel Frequency: 2437 MHz



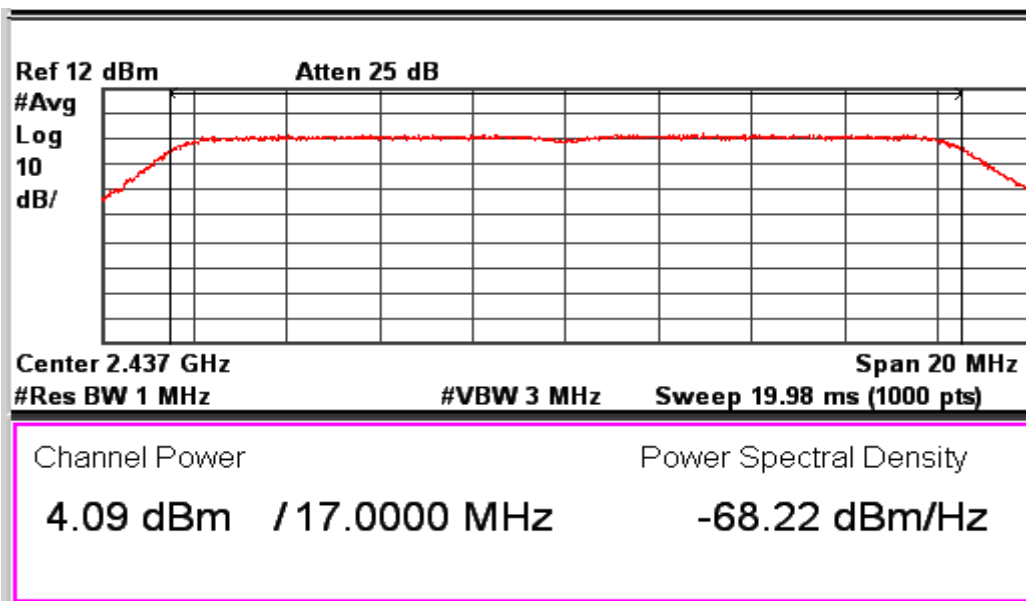
Data rate: 6 Mbps

Channel Frequency: 2462 MHz



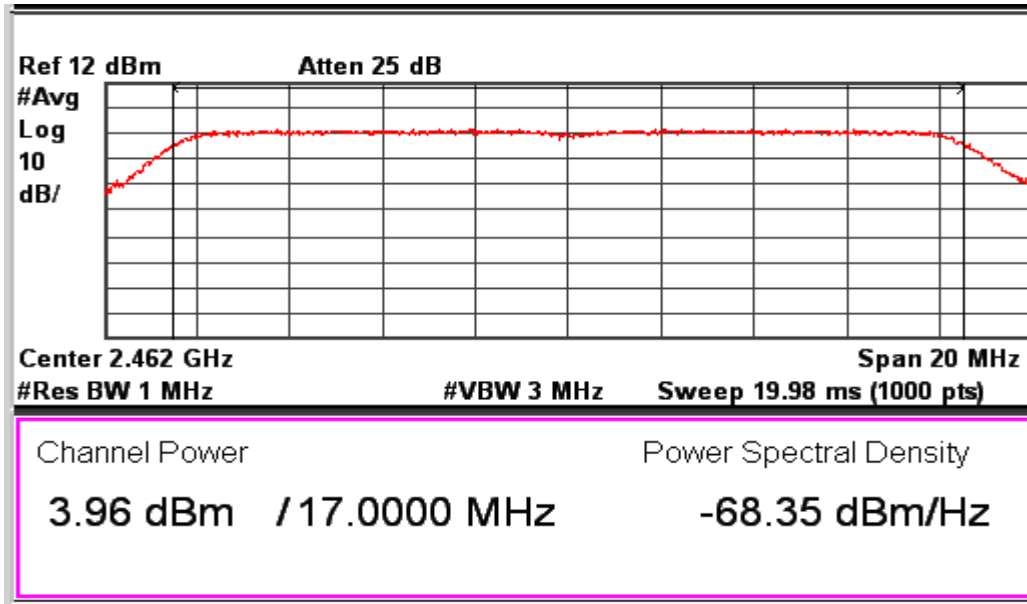
Data rate: 54 Mbps

Channel Frequency: 2412 MHz



Data rate: 54 Mbps

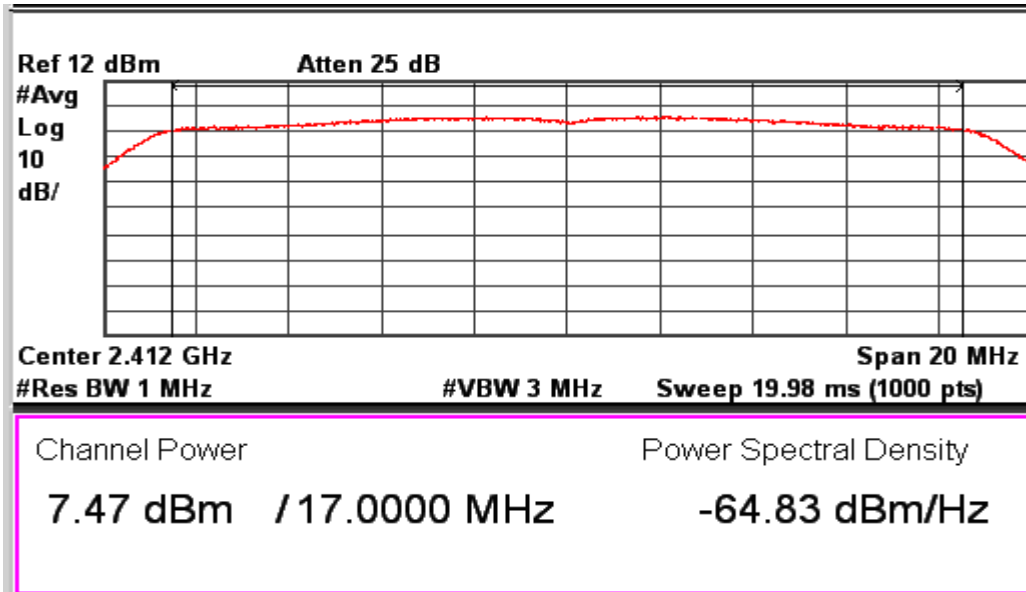
Channel Frequency: 2437 MHz



Data rate: 54 Mbps

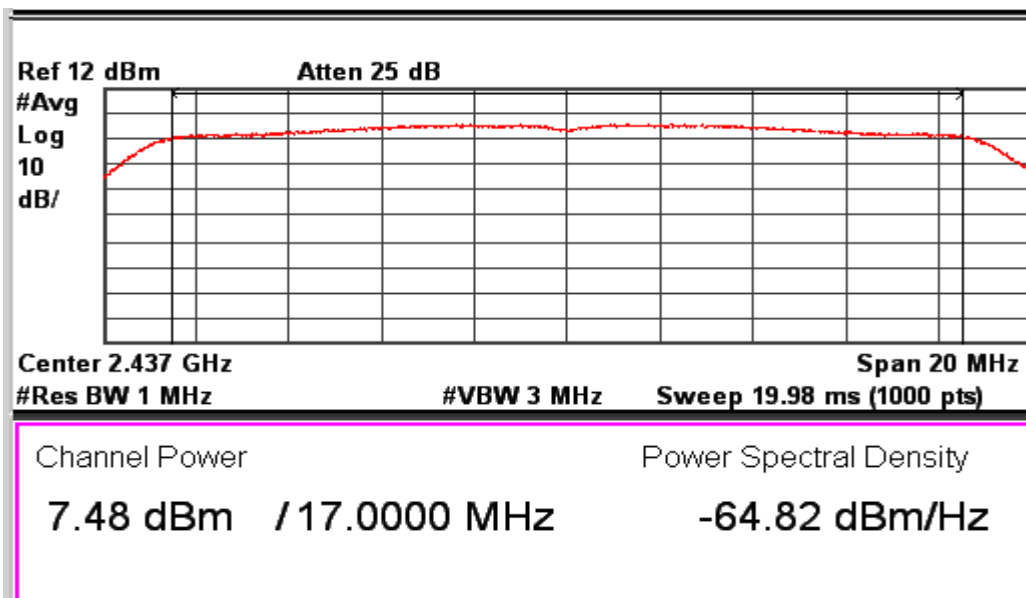
Channel Frequency: 2462 MHz

| 802.11 Protocol | Data Rate (Mbps) | Frequency (MHz) | Measured Power (dBm) | Attenuator + Cable Loss (dB) | Total Power (dBm) | Limit (dBm) | Margin (dB) |
|-----------------|------------------|-----------------|----------------------|------------------------------|-------------------|-------------|-------------|
| n               | 6.5              | 2412            | 7.47                 | 7.88                         | 15.35             | 30.00       | -14.65      |
|                 |                  | 2437            | 7.48                 | 7.88                         | 15.36             | 30.00       | -14.64      |
|                 |                  | 2462            | 7.33                 | 7.88                         | 15.21             | 30.00       | -14.79      |
|                 | 65               | 2412            | 3.10                 | 7.88                         | 10.98             | 30.00       | -19.02      |
|                 |                  | 2437            | 2.94                 | 7.88                         | 10.82             | 30.00       | -19.18      |
|                 |                  | 2462            | 2.91                 | 7.88                         | 10.79             | 30.00       | -19.21      |



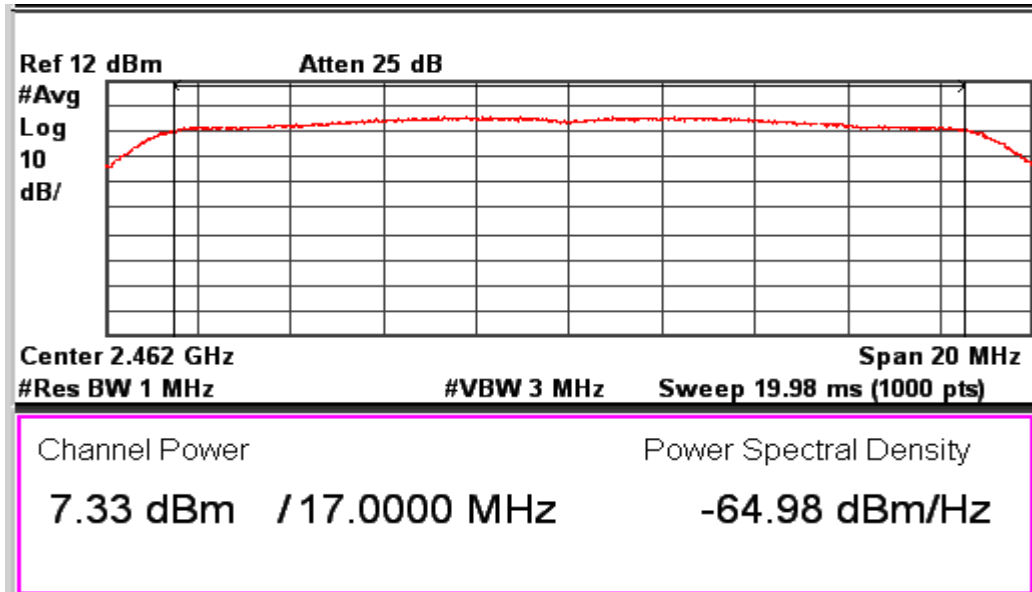
Data Rate: 6.5Mbps

Channel Frequency: 2412 MHz



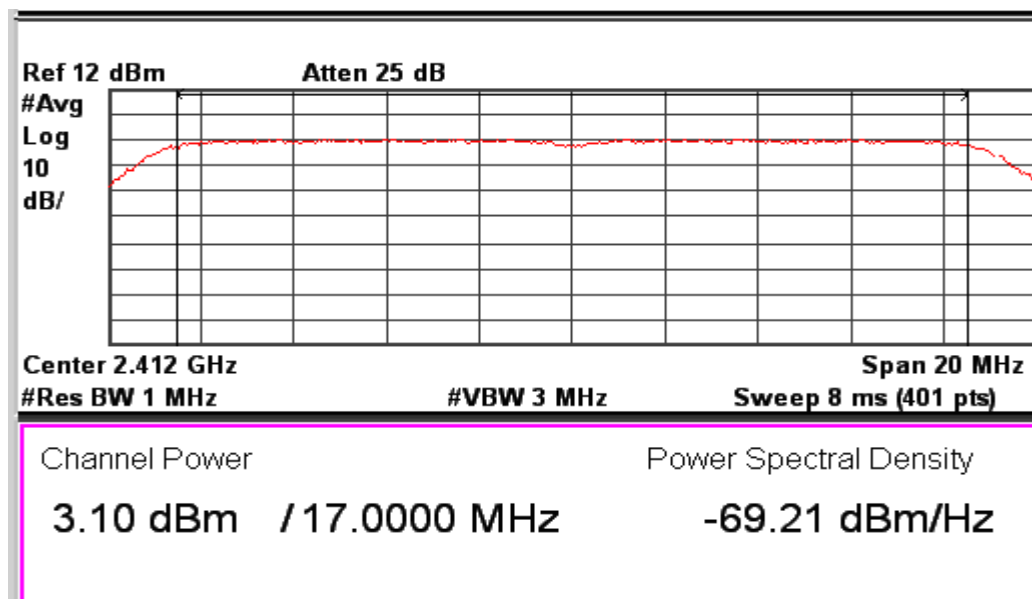
Data Rate: 6.5Mbps

Channel Frequency: 2437 MHz



Data Rate: 6.5Mbps

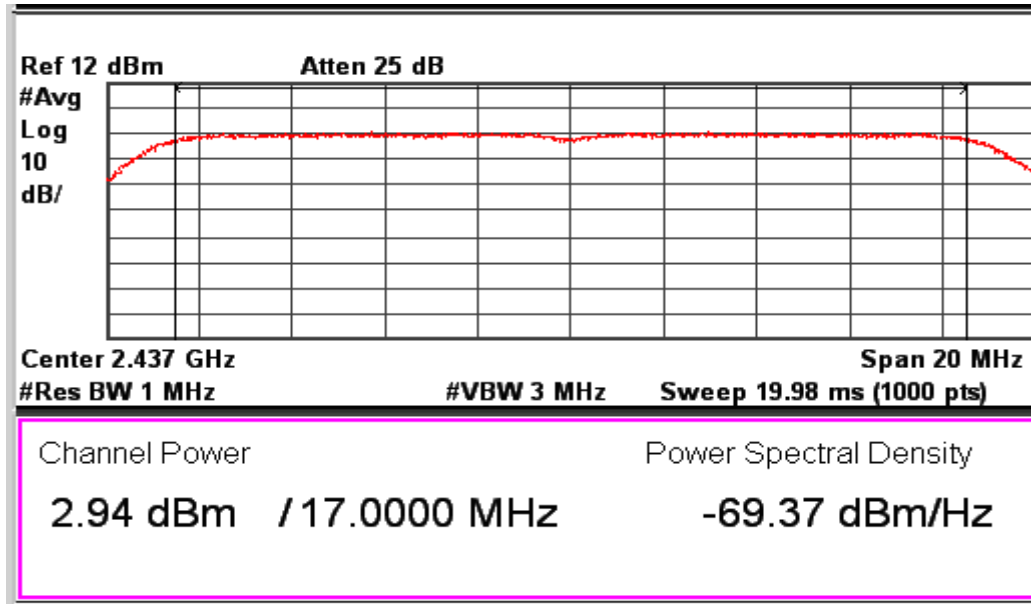
Channel Frequency: 2462 MHz



Data Rate: 65Mbps

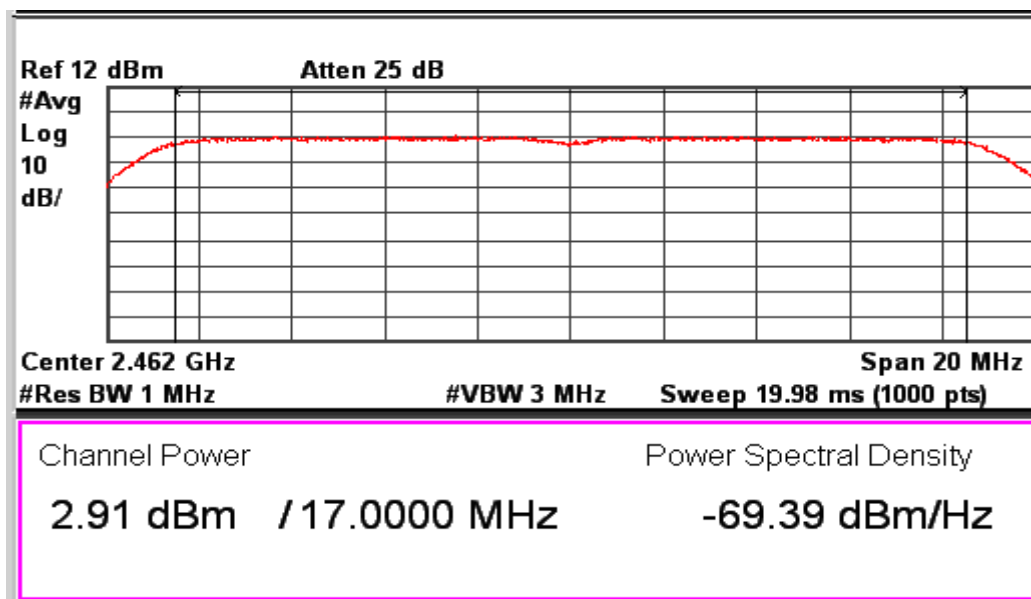
Channel Frequency: 2412 MHz

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Data Rate: 65Mbps

Channel Frequency: 2437 MHz



Data Rate: 65Mbps

Channel Frequency: 2462 MHz

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## Power Spectral Density

Section 15.247(e)

Result

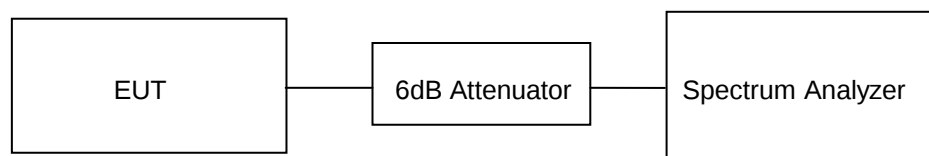
Pass

Test Specification  
Detector Function  
Requirement

FCC Part 15 Section 15.247 (e)  
Average

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm.

### Test Method:



Cable Loss: 0.68 dB + 1.2dB

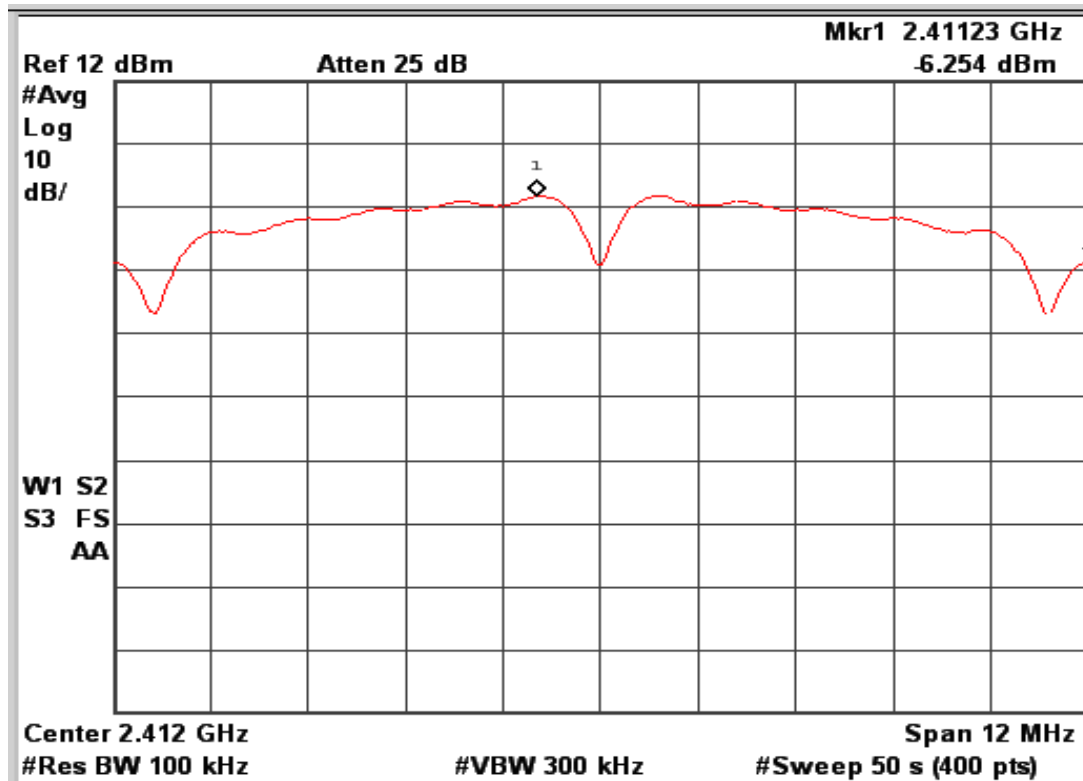
Total Correction Factor: Cable Loss+ Attenuator = 1.88dB + 6dB = 7.88 dB

### Test Result:

| 802.11 Protocol | Data Rate (Mbps) | Frequency (MHz) | Measured PSD (dBm) | Cable Loss (dB) | BWCF * (dB) | Total PSD (dBm) | Limit (dBm) | Margin (dB) |
|-----------------|------------------|-----------------|--------------------|-----------------|-------------|-----------------|-------------|-------------|
| b               | 1                | 2412            | -6.25              | 7.88            | -15.20      | -13.57          | 8.00        | -21.57      |
|                 |                  | 2437            | -6.38              | 7.88            | -15.20      | -13.70          | 8.00        | -21.70      |
|                 |                  | 2462            | -6.44              | 7.88            | -15.20      | -13.76          | 8.00        | -21.76      |
|                 | 11               | 2412            | -7.64              | 7.88            | -15.20      | -14.96          | 8.00        | -22.96      |
|                 |                  | 2437            | -7.81              | 7.88            | -15.20      | -15.13          | 8.00        | -23.13      |
|                 |                  | 2462            | -7.75              | 7.88            | -15.20      | -15.07          | 8.00        | -23.07      |

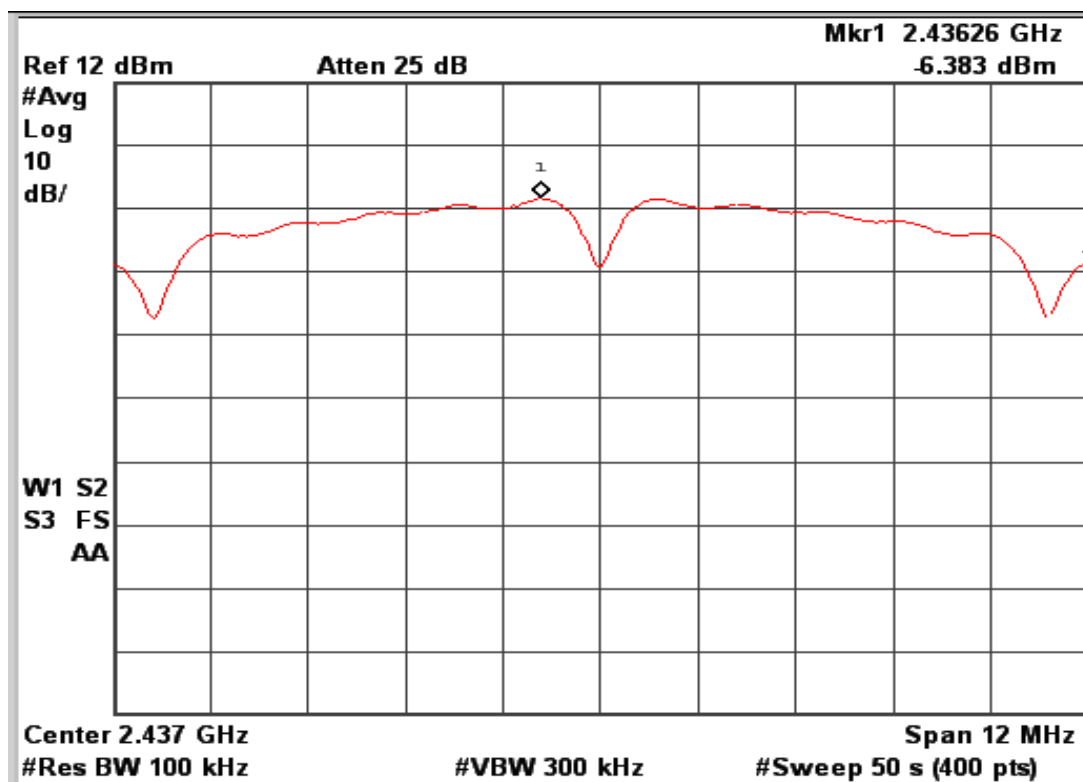
\* →BWCF = Bandwidth Correction Factor

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Data rate: 1 Mbps

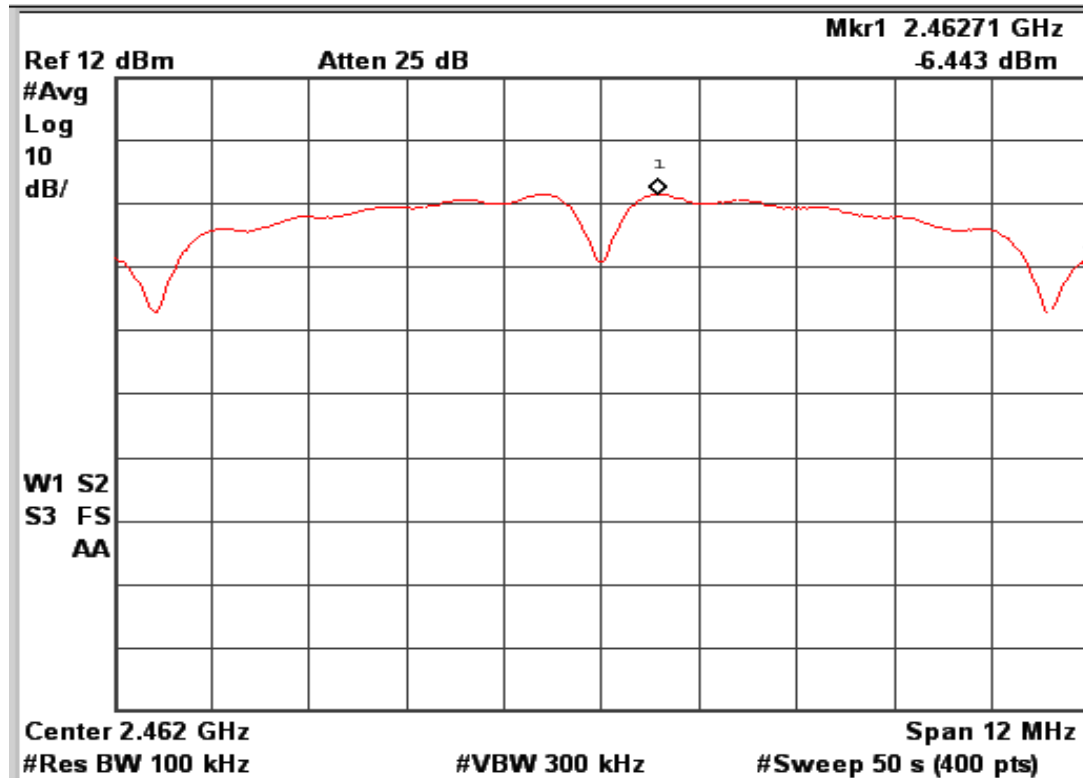
Channel Frequency: 2412 MHz



Data rate: 1 Mbps

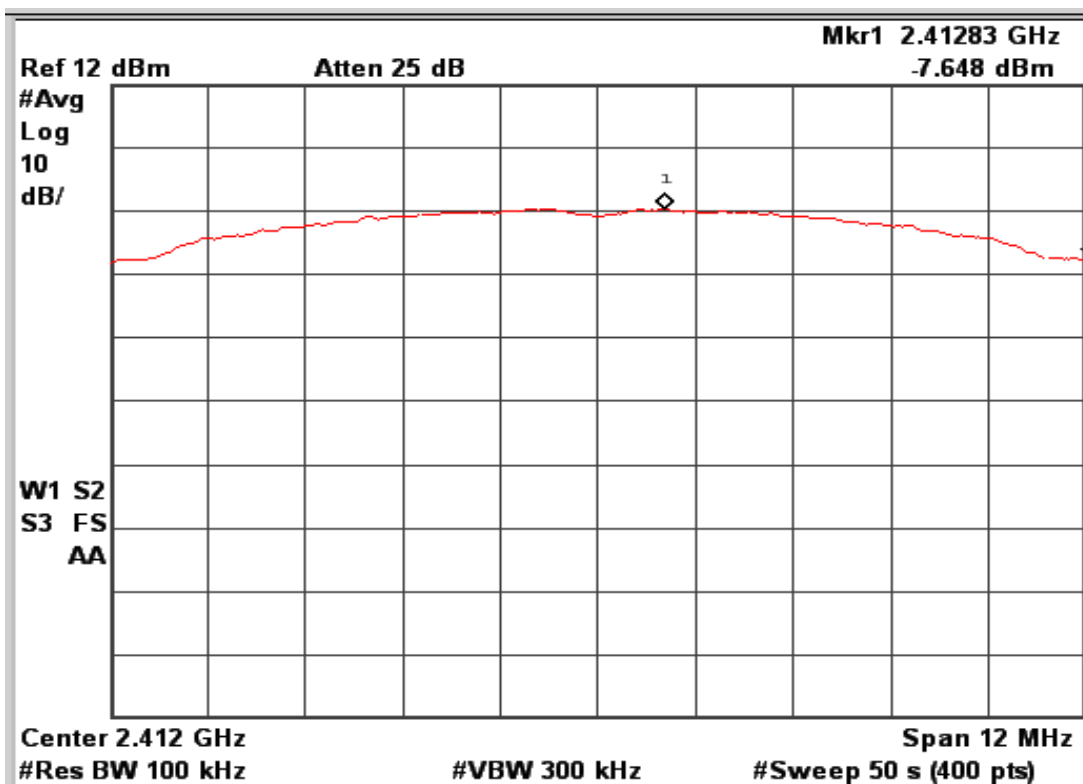
Channel Frequency: 2437 MHz

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Data rate: 1 Mbps

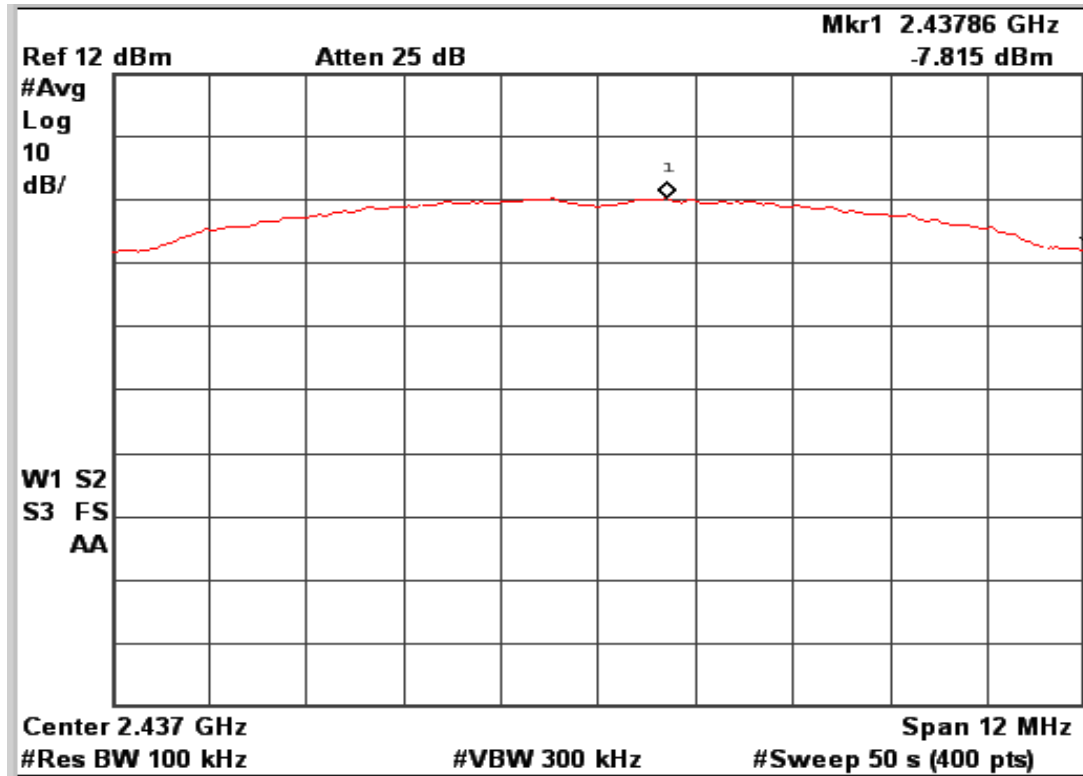
Channel Frequency: 2462 MHz



Data rate: 11 Mbps

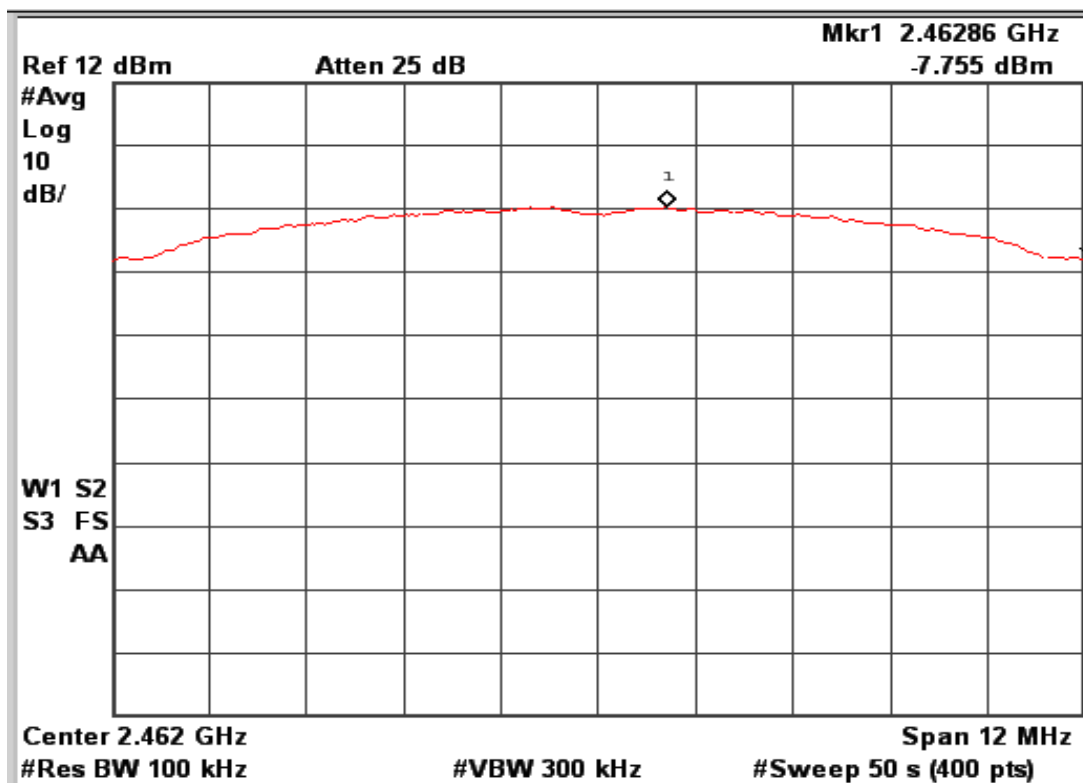
Channel Frequency: 2412 MHz

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Data rate: 11 Mbps

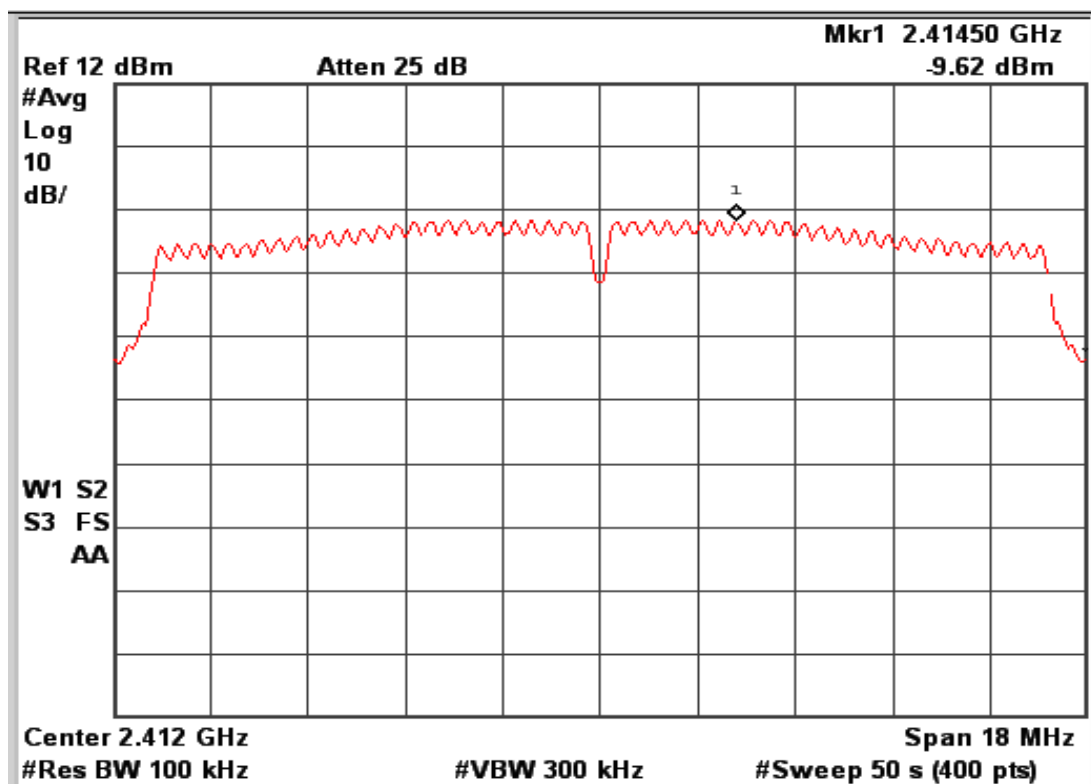
Channel Frequency: 2437 MHz



Data rate: 11 Mbps

Channel Frequency: 2462 MHz

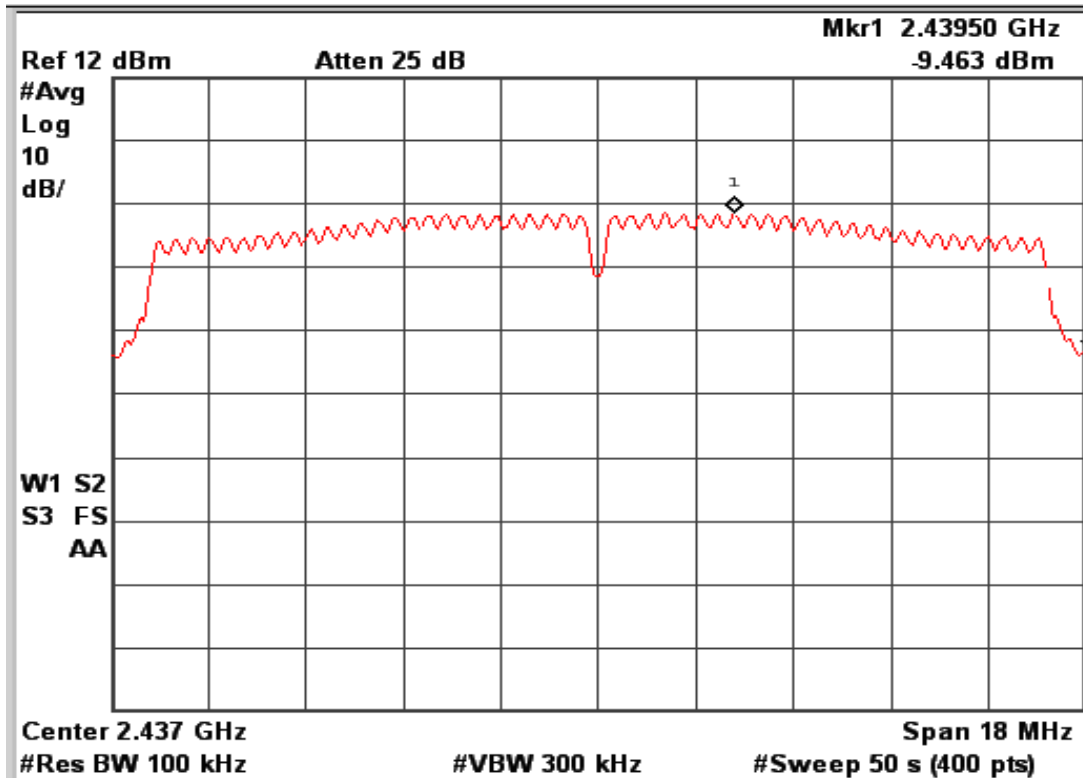
| 802.11 Protocol | Data Rate (Mbps) | Frequency (MHz) | Measured PSD (dBm) | Cable Loss (dB) | BWCF (dB) | Total PSD (dBm) | Limit (dBm) | Margin (dB) |
|-----------------|------------------|-----------------|--------------------|-----------------|-----------|-----------------|-------------|-------------|
| g               | 6                | 2412            | -9.62              | 7.88            | -15.20    | -16.94          | 8.00        | -24.94      |
|                 |                  | 2437            | -9.46              | 7.88            | -15.20    | -16.78          | 8.00        | -24.78      |
|                 |                  | 2462            | -9.75              | 7.88            | -15.20    | -17.07          | 8.00        | -25.07      |
|                 | 54               | 2412            | -14.47             | 7.88            | -15.20    | -21.79          | 8.00        | -29.79      |
|                 |                  | 2437            | -14.37             | 7.88            | -15.20    | -21.69          | 8.00        | -29.69      |
|                 |                  | 2462            | -14.52             | 7.88            | -15.20    | -21.84          | 8.00        | -29.84      |



Data rate: 6 Mbps

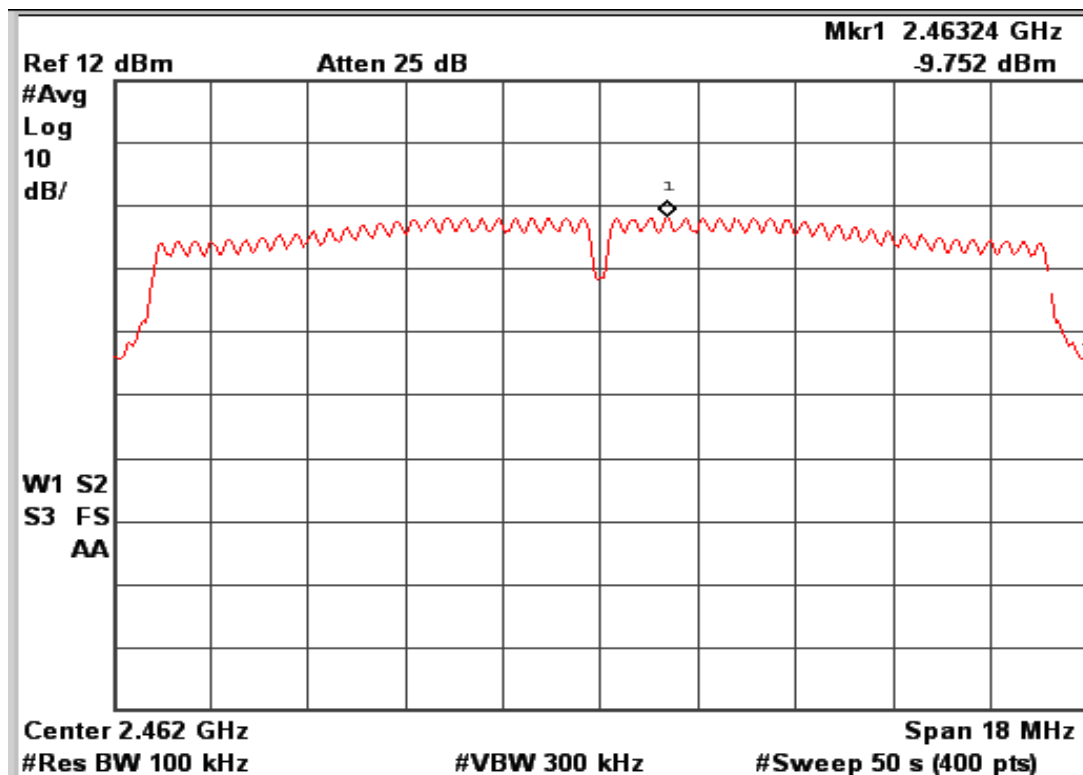
Channel Frequency: 2412 MHz

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Data rate: 6 Mbps

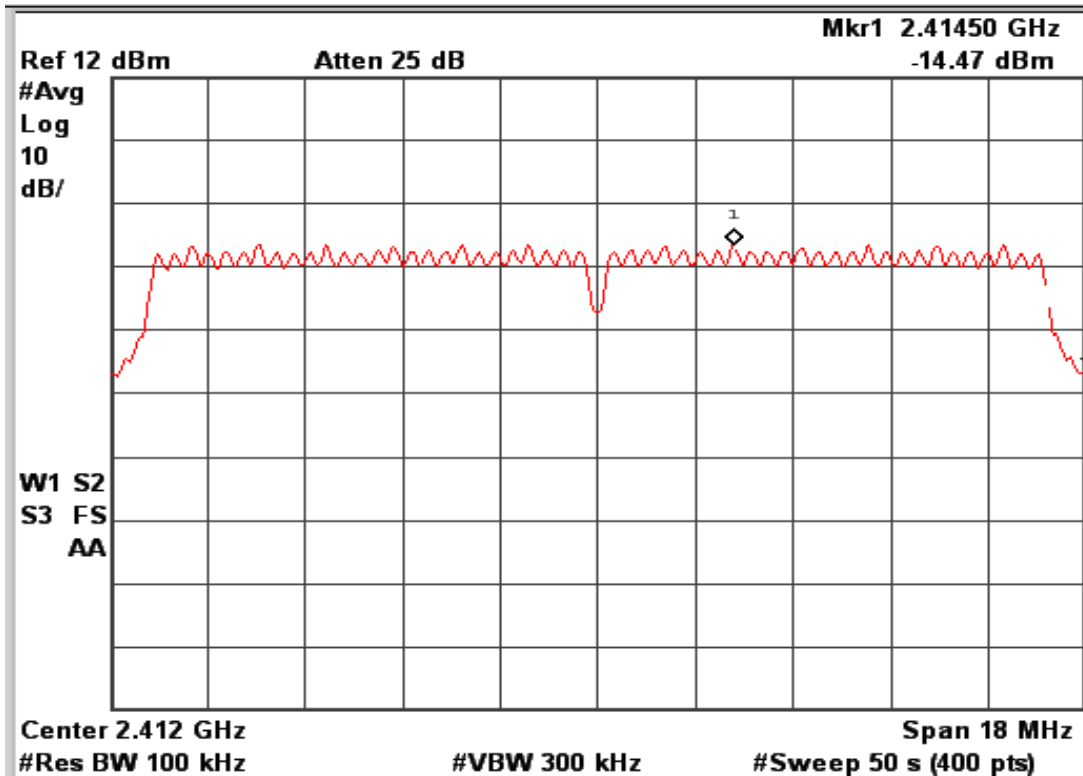
Channel Frequency: 2437 MHz



Data rate: 6 Mbps

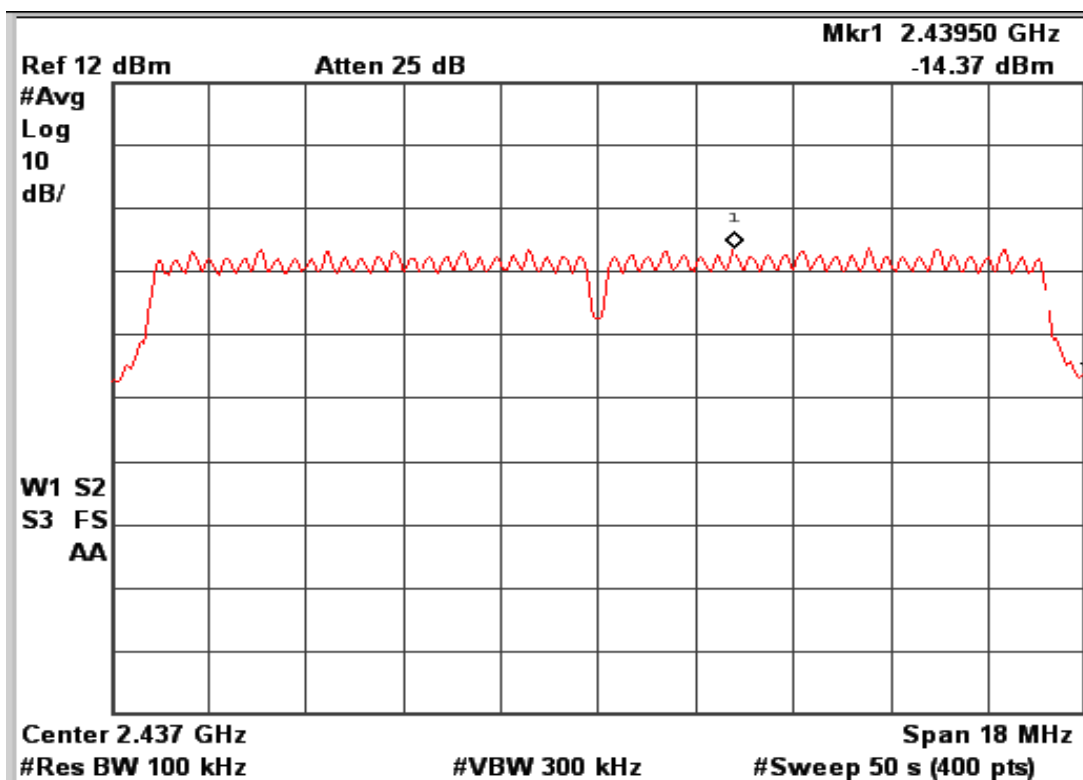
Channel Frequency: 2462 MHz

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Data rate: 54 Mbps

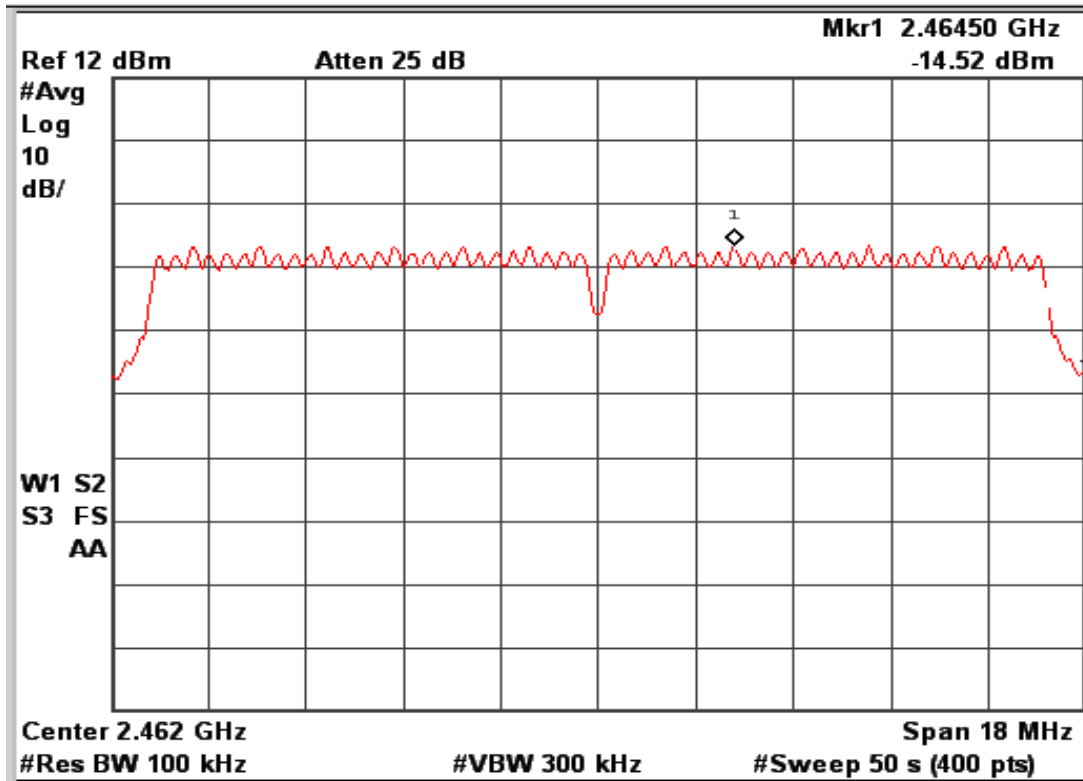
Channel Frequency: 2412 MHz



Data rate: 54 Mbps

Channel Frequency: 2437 MHz

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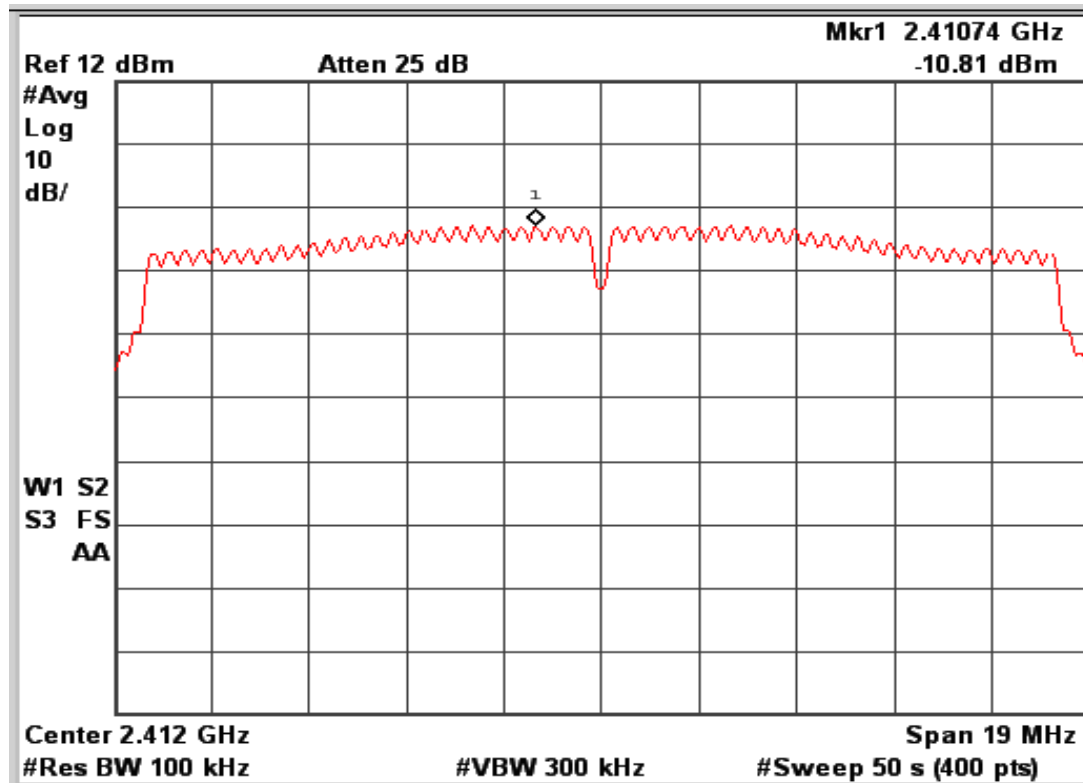


Data rate: 54 Mbps

Channel Frequency: 2462 MHz

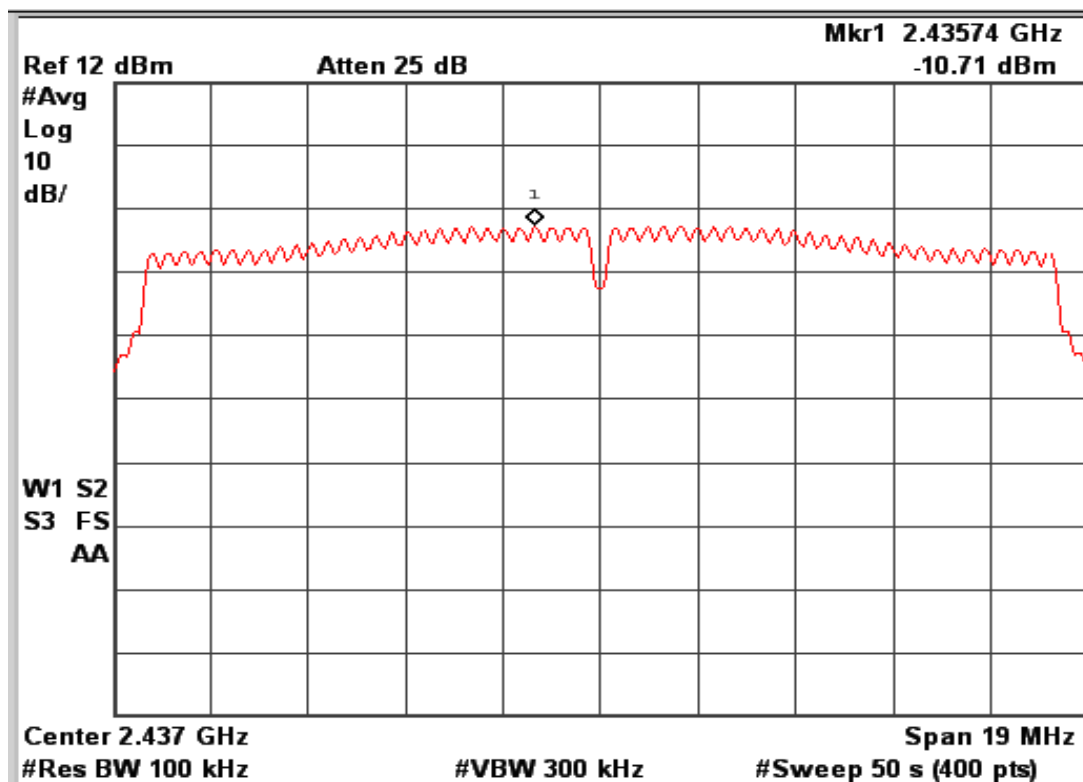
| 802.11 Protocol | Data Rate (Mbps) | Frequency (MHz) | Measured PSD (dBm) | Cable Loss (dB) | BWCF (dB) | Total PSD (dBm) | Limit (dBm) | Margin (dB) |
|-----------------|------------------|-----------------|--------------------|-----------------|-----------|-----------------|-------------|-------------|
| n               | 6.5              | 2412            | -10.81             | 7.88            | -15.20    | -18.13          | 8.00        | -26.13      |
|                 |                  | 2437            | -10.71             | 7.88            | -15.20    | -18.03          | 8.00        | -26.03      |
|                 |                  | 2462            | -10.90             | 7.88            | -15.20    | -18.22          | 8.00        | -26.22      |
|                 | 65               | 2412            | -14.99             | 7.88            | -15.20    | -22.31          | 8.00        | -30.31      |
|                 |                  | 2437            | -15.01             | 7.88            | -15.20    | -22.33          | 8.00        | -30.33      |
|                 |                  | 2462            | -15.17             | 7.88            | -15.20    | -22.49          | 8.00        | -30.49      |

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Data rate: 6.5 Mbps

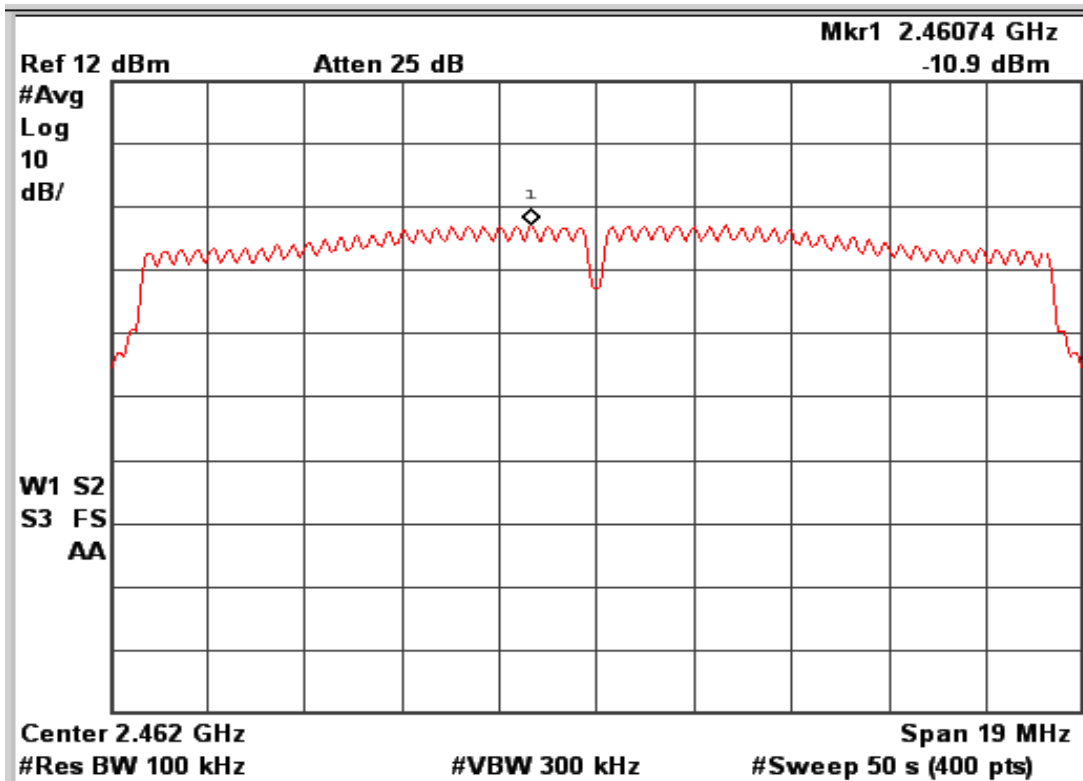
Channel Frequency: 2412 MHz



Data rate: 6.5 Mbps

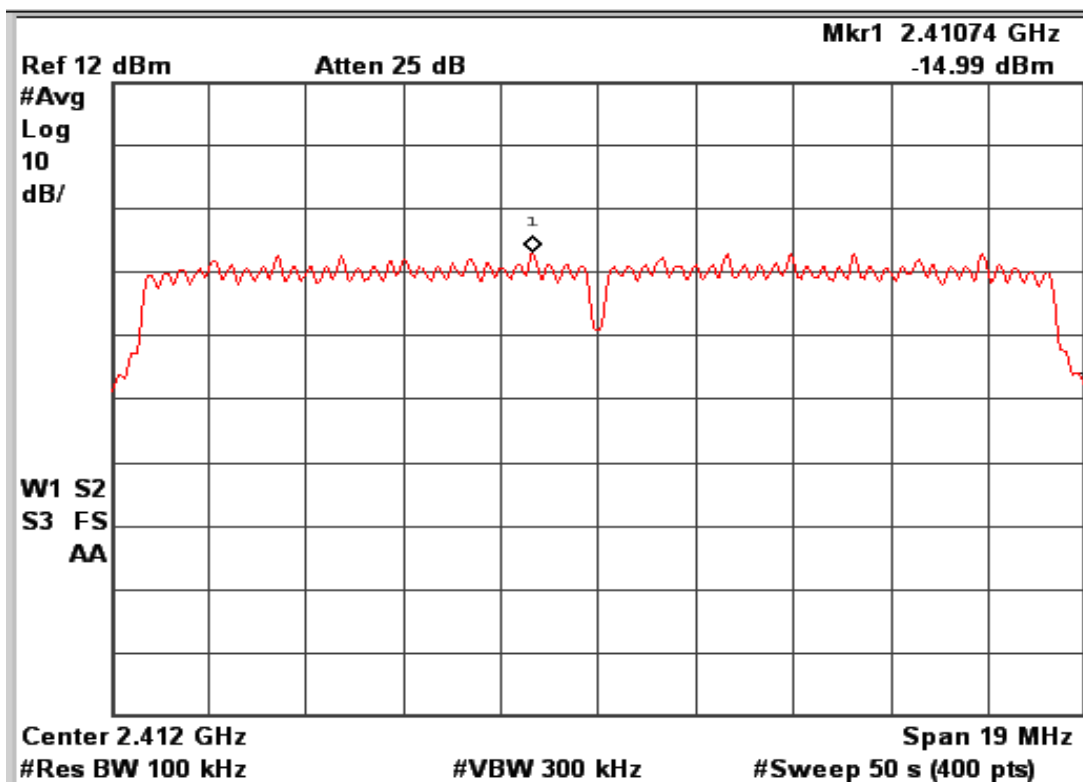
Channel Frequency: 2437 MHz

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Data rate: 6.5 Mbps

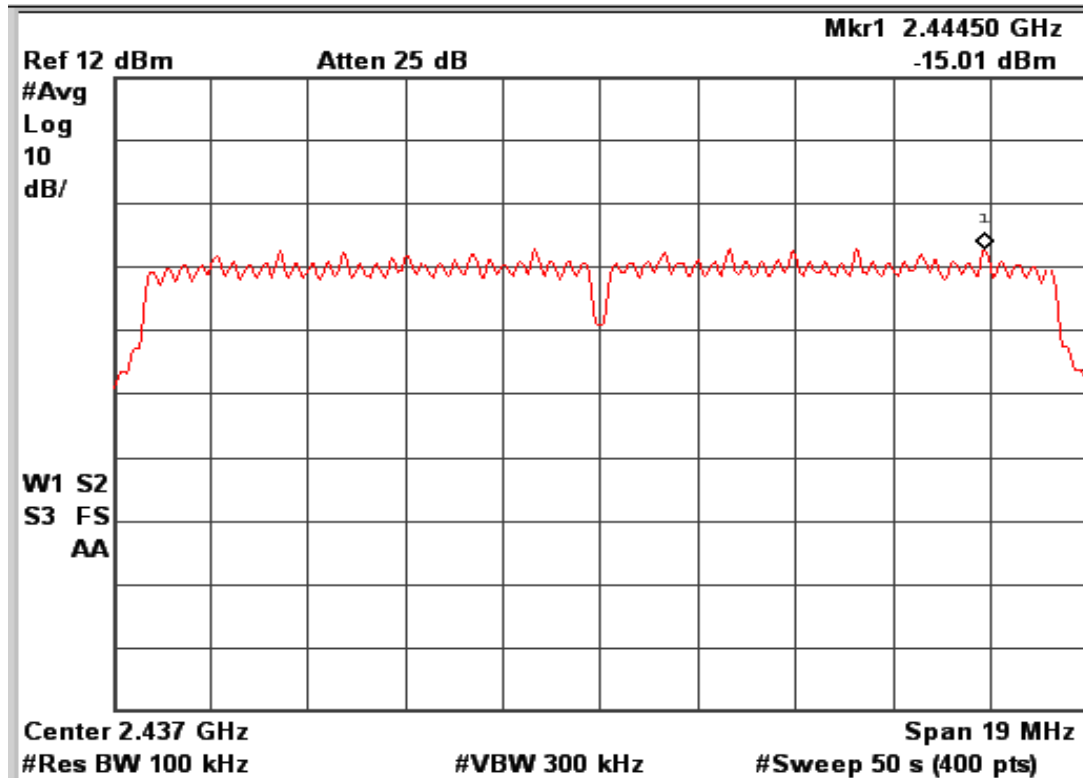
Channel Frequency: 2462 MHz



Data rate: 65 Mbps

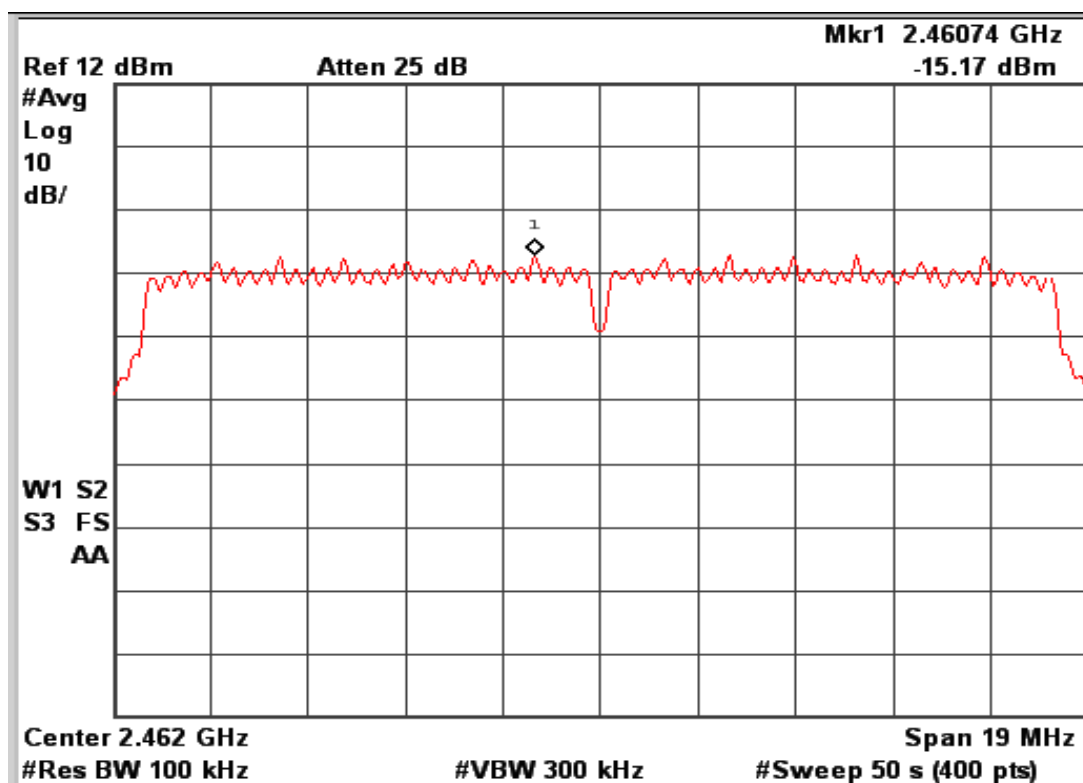
Channel Frequency: 2412 MHz

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Data rate: 65Mbps

Channel Frequency: 2437 MHz



Data rate: 65Mbps

Channel Frequency: 2462 MHz

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# 6 dB Bandwidth

Section 15.247(a) (2)

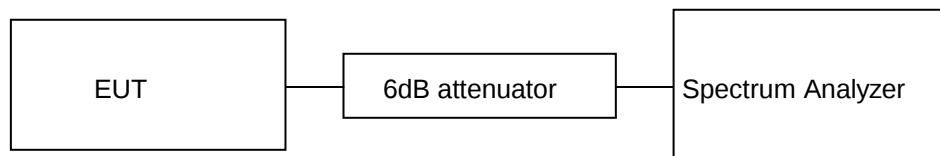
Result

Pass

Test Specification  
Requirement

FCC Part 15 Section 15.247 (a) (2)  
The minimum 6 dB bandwidth shall be at least 500 kHz.

Test Method:



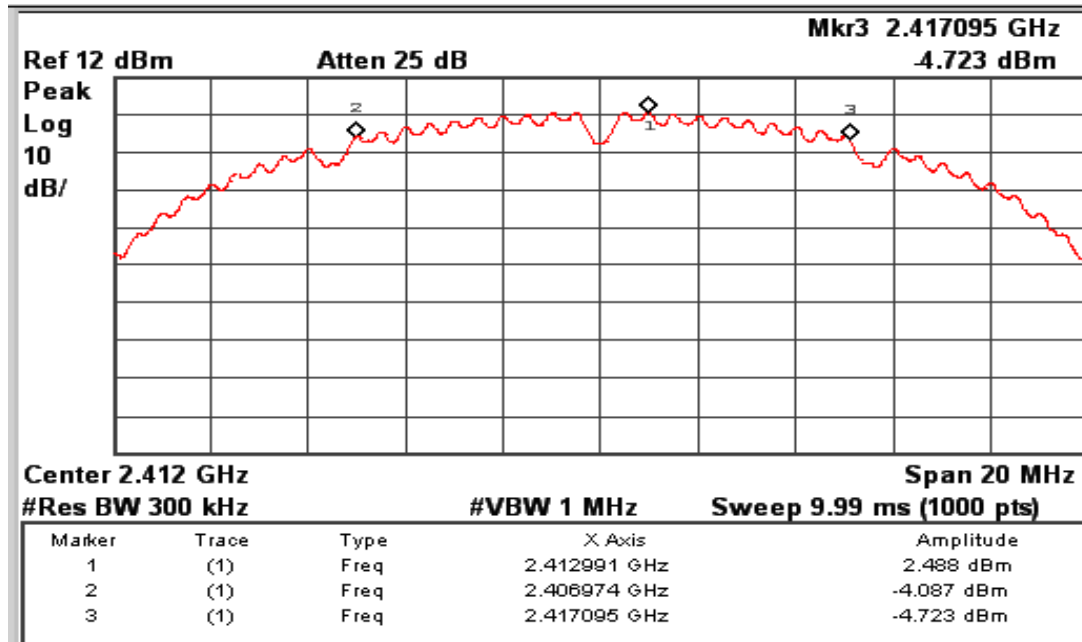
Cable Loss: 0.68 dB + 1.2dB

Total Correction Factor: Cable Loss+ Attenuator = 1.88dB + 6dB = 7.88 dB

Test Result:

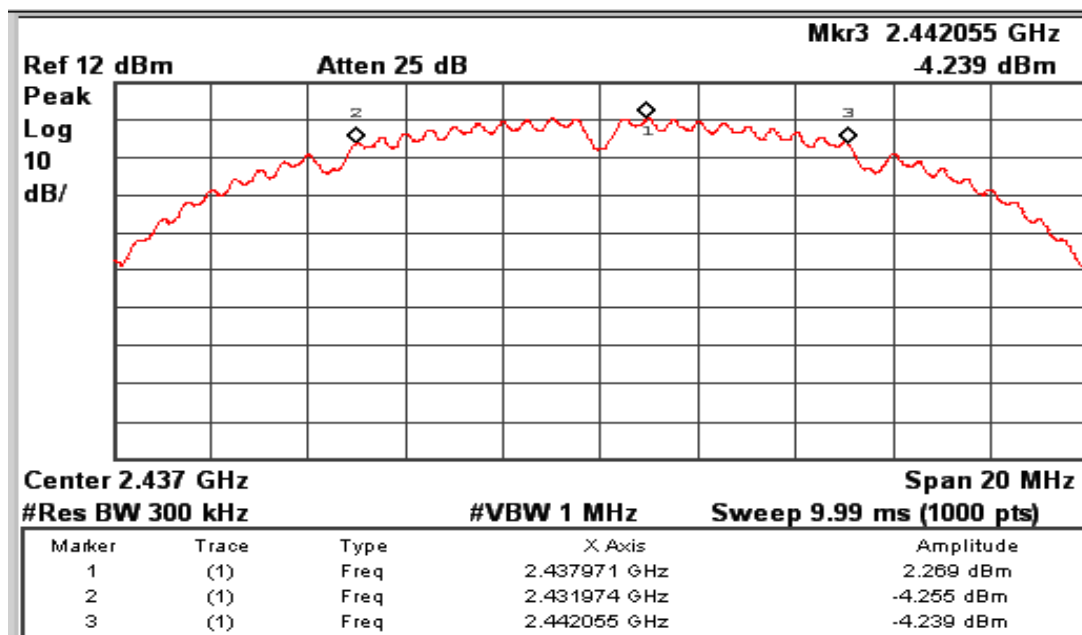
| 802.11 Protocol | Data Rate (Mbps) | Frequency (MHz) | Lower Frequency (MHz) | Upper Frequency (MHz) | 6 dB Bandwidth (MHz) | 99% OBW (MHz) |
|-----------------|------------------|-----------------|-----------------------|-----------------------|----------------------|---------------|
| b               | 1                | 2412            | 2406.97               | 2417.09               | 10.12                | 14.05         |
|                 |                  | 2437            | 2431.97               | 2442.05               | 10.08                | 14.13         |
|                 |                  | 2462            | 2456.95               | 2467.05               | 10.10                | 14.13         |
|                 | 11               | 2412            | 2406.71               | 2417.33               | 10.62                | 13.96         |
|                 |                  | 2437            | 2431.33               | 2442.53               | 11.20                | 14.34         |
|                 |                  | 2462            | 2456.91               | 2466.99               | 10.08                | 14.81         |

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Data Rate: 1 Mbps

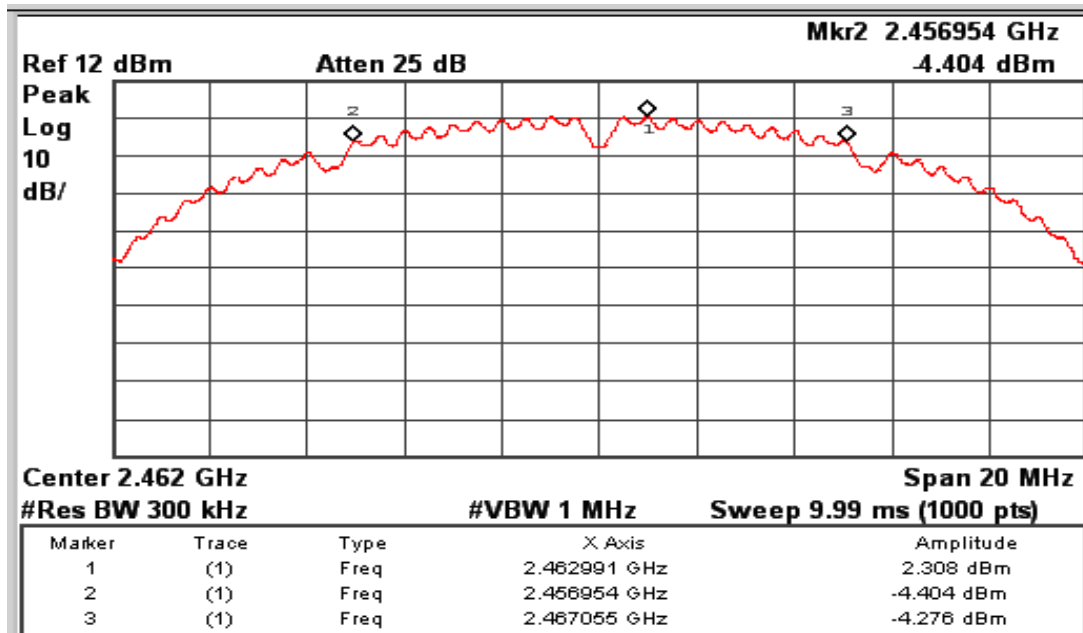
Channel frequency: 2412 MHz



Data Rate: 1 Mbps

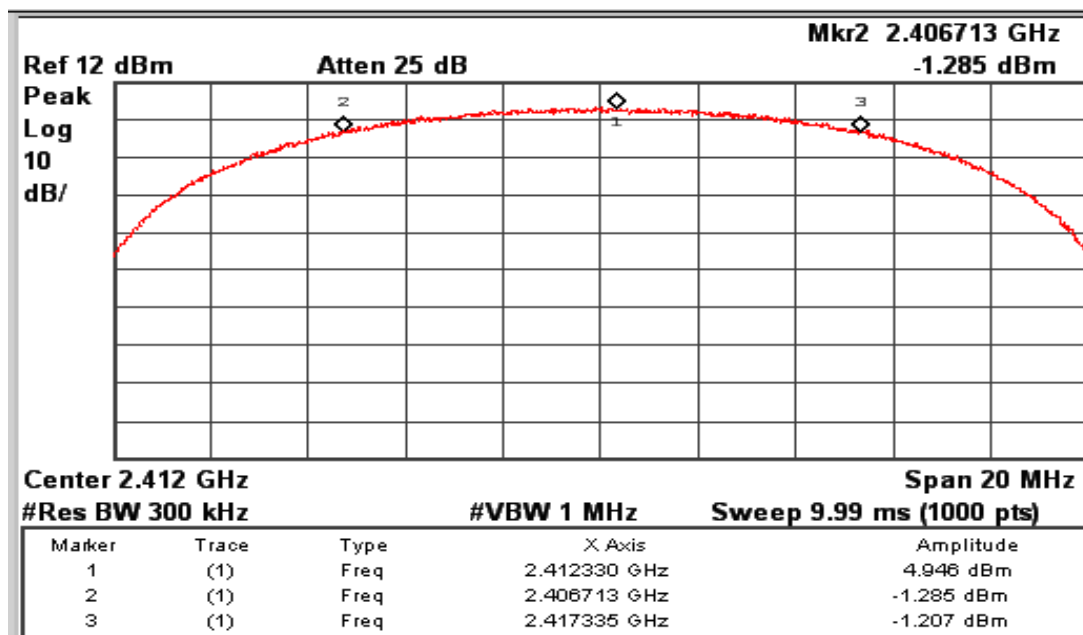
Channel frequency: 2437 MHz

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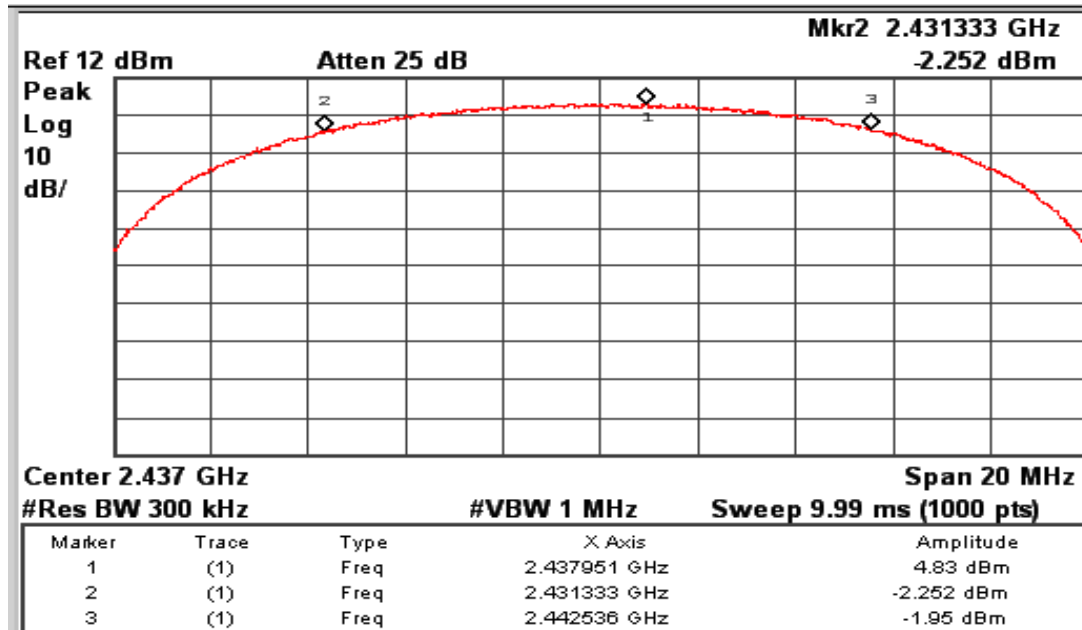
Data Rate: 1 Mbps

Channel frequency: 2462 MHz



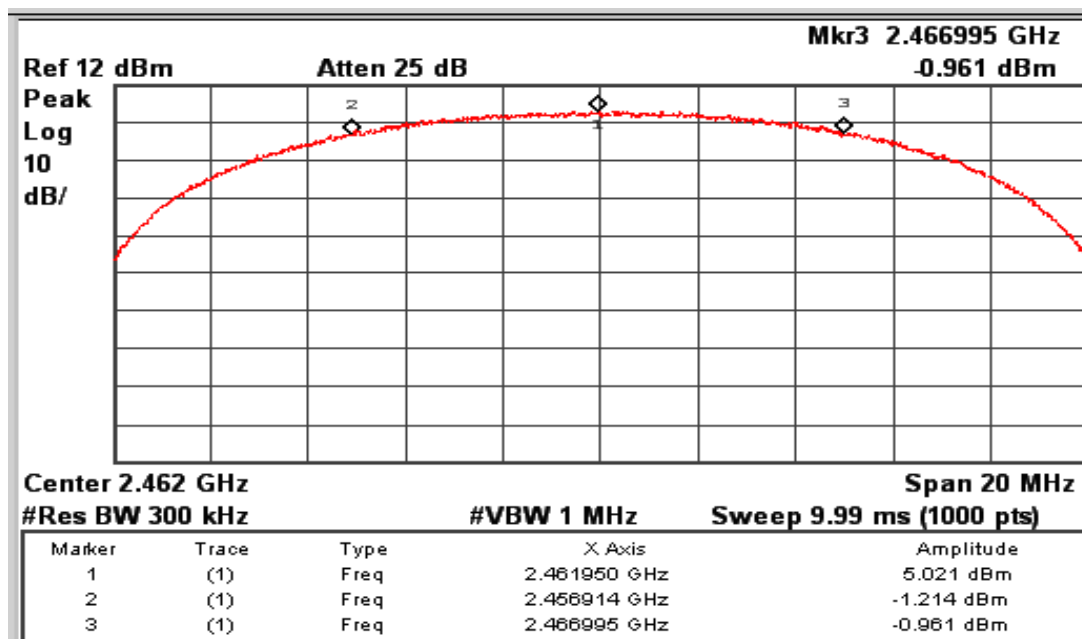
Data Rate: 11 Mbps

Channel frequencies: 2412 MHz



Data Rate: 11 Mbps

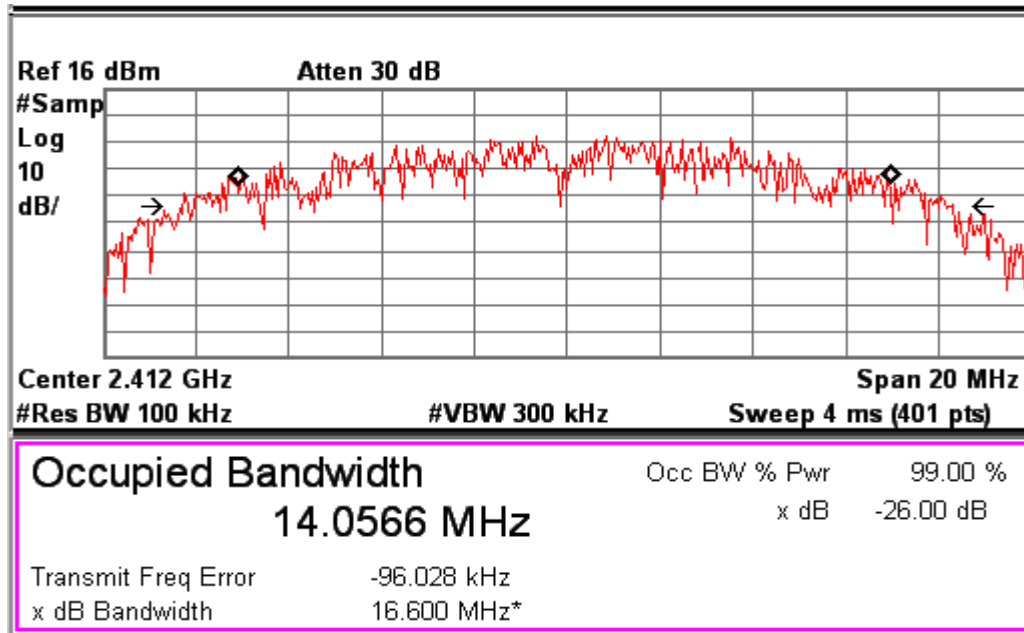
Channel frequency: 2437 MHz



Data Rate: 11 Mbps

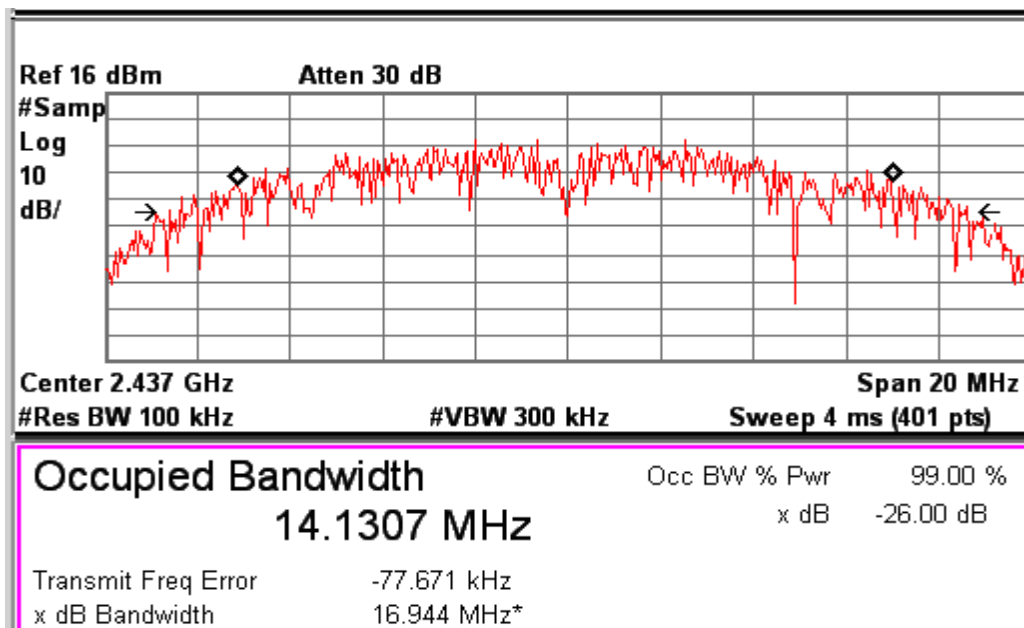
Channel frequency: 2462 MHz

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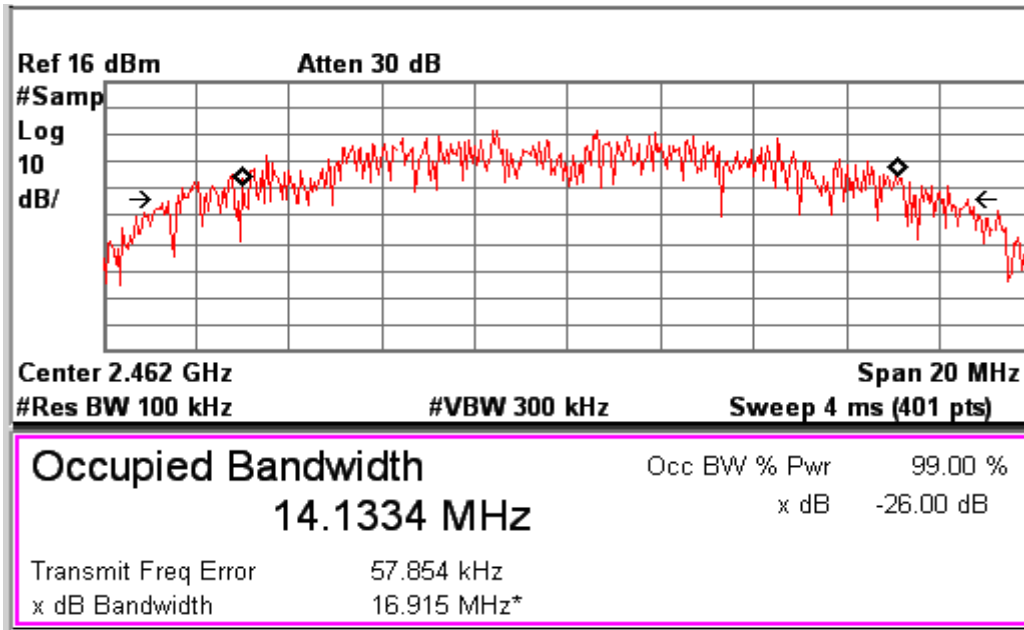
Data rate: 1 Mbps

99% Occupied Bandwidth: Channel 2412MHz



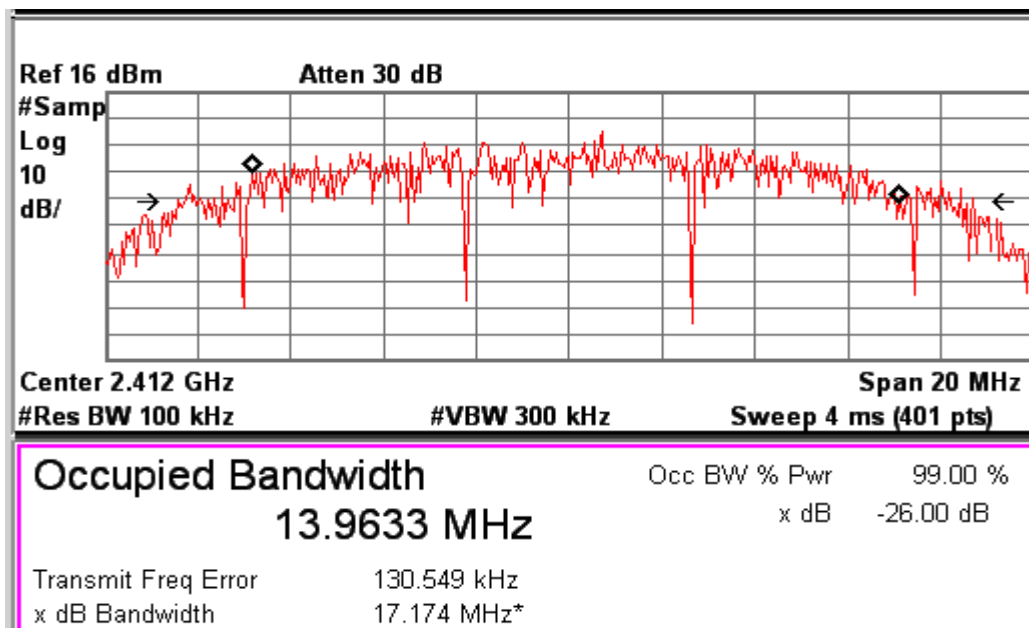
Data rate: 1 Mbps

99% Occupied Bandwidth: Channel 2442MHz



Data rate: 1 Mbps

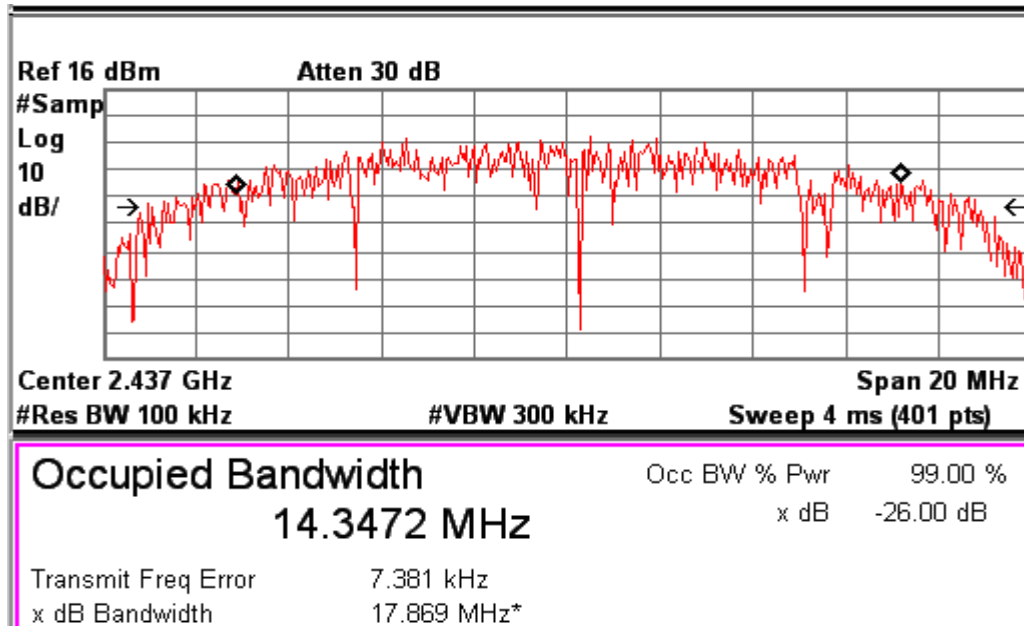
99% Occupied Bandwidth: Channel 2462MHz



Data rate: 11 Mbps

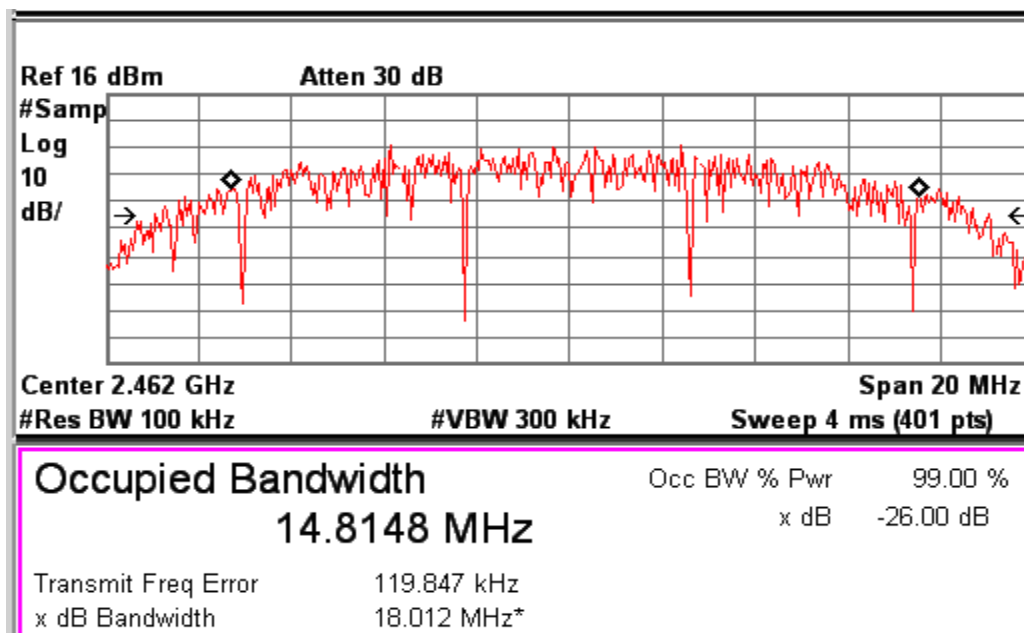
99% Occupied Bandwidth: Channel 2412MHz

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Data rate: 11 Mbps

99% Occupied Bandwidth: Channel 2437MHz

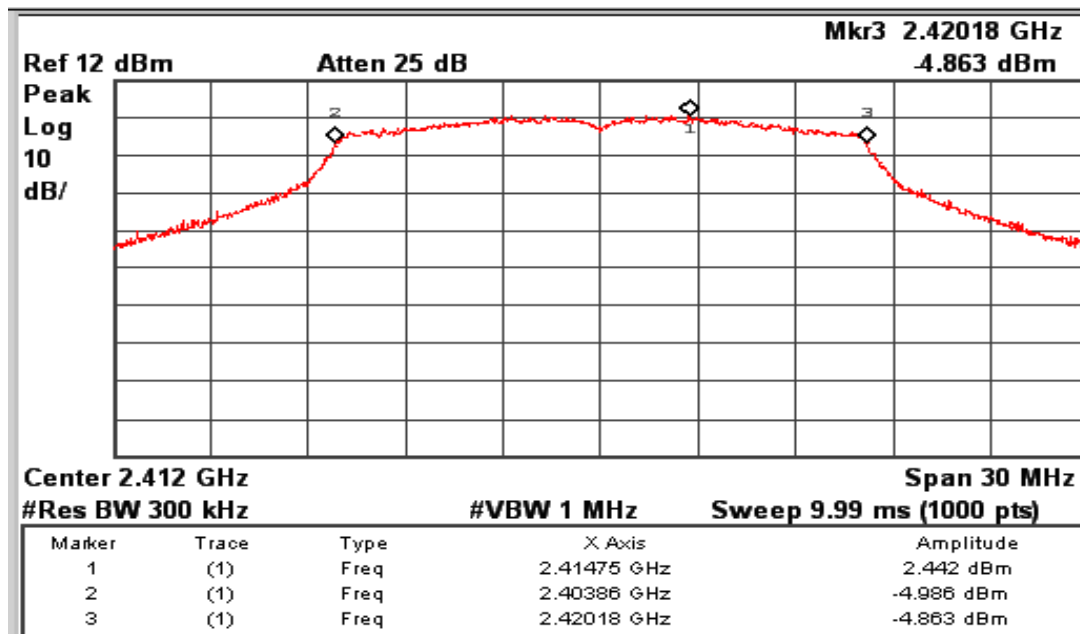


Data rate: 11 Mbps

99% Occupied Bandwidth: Channel 2462MHz

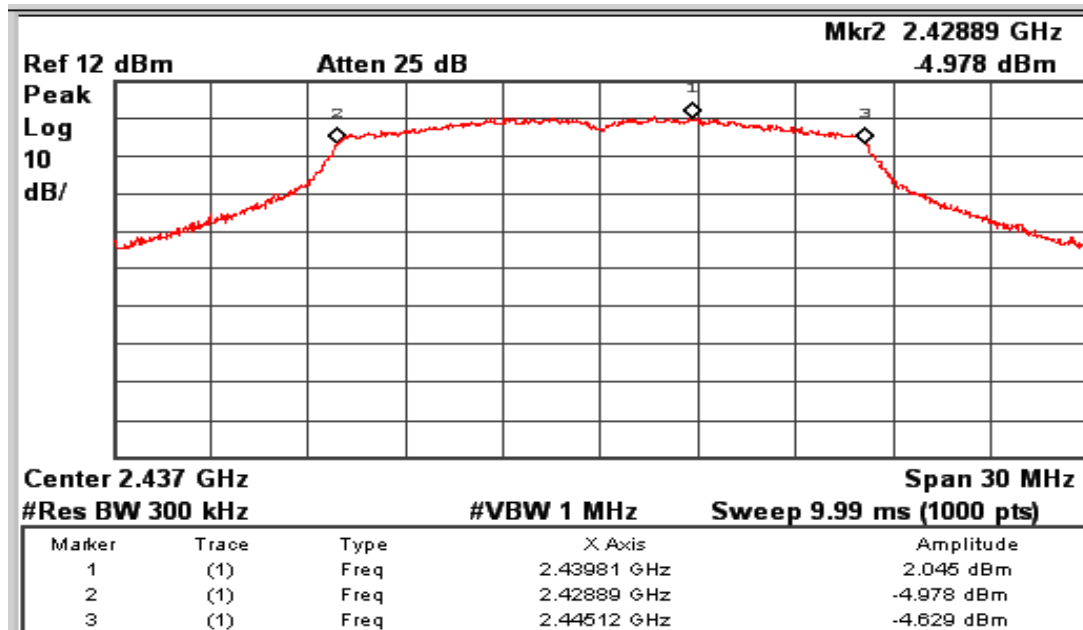
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| 802.11 Protocol | Data Rate (Mbps) | Frequency (MHz) | Lower Frequency (MHz) | Upper Frequency (MHz) | 6 dB Bandwidth (MHz) | 99% OBW (MHz) |
|-----------------|------------------|-----------------|-----------------------|-----------------------|----------------------|---------------|
| g               | 6                | 2412            | 2403.86               | 2420.18               | 16.32                | 16.32         |
|                 |                  | 2437            | 2428.89               | 2445.12               | 16.23                | 16.30         |
|                 |                  | 2462            | 2403.86               | 2420.18               | 16.32                | 16.32         |
|                 | 54               | 2412            | 2403.71               | 2420.30               | 16.59                | 16.43         |
|                 |                  | 2437            | 2428.74               | 2445.33               | 16.59                | 16.45         |
|                 |                  | 2462            | 2453.68               | 2470.36               | 16.68                | 16.42         |



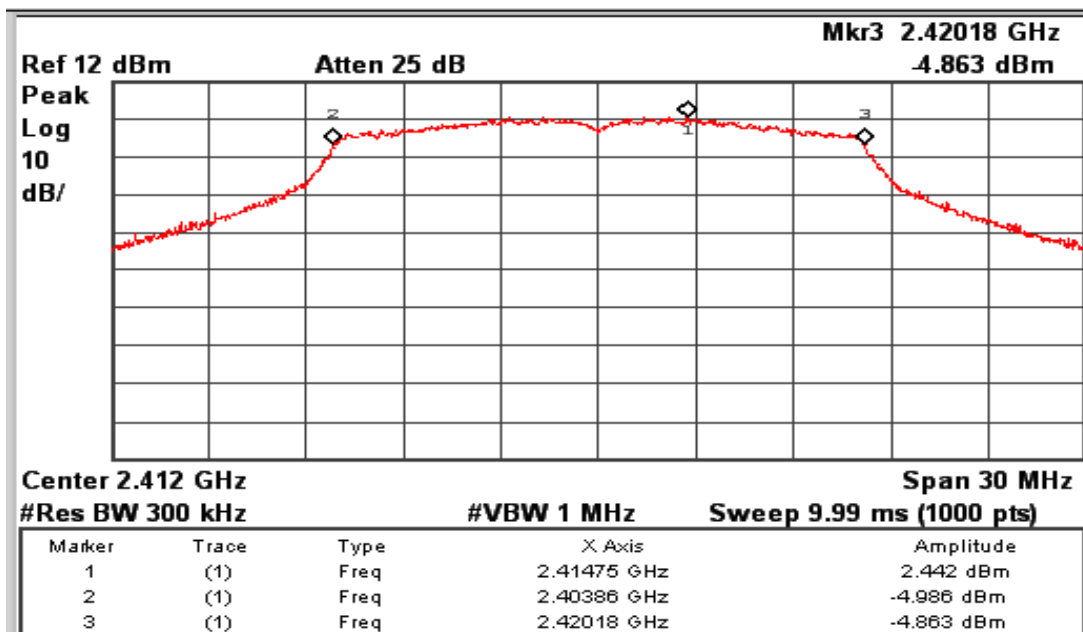
Data Rate: 6 Mbps

Channel frequencies: 2412 MHz



Data Rate: 6 Mbps

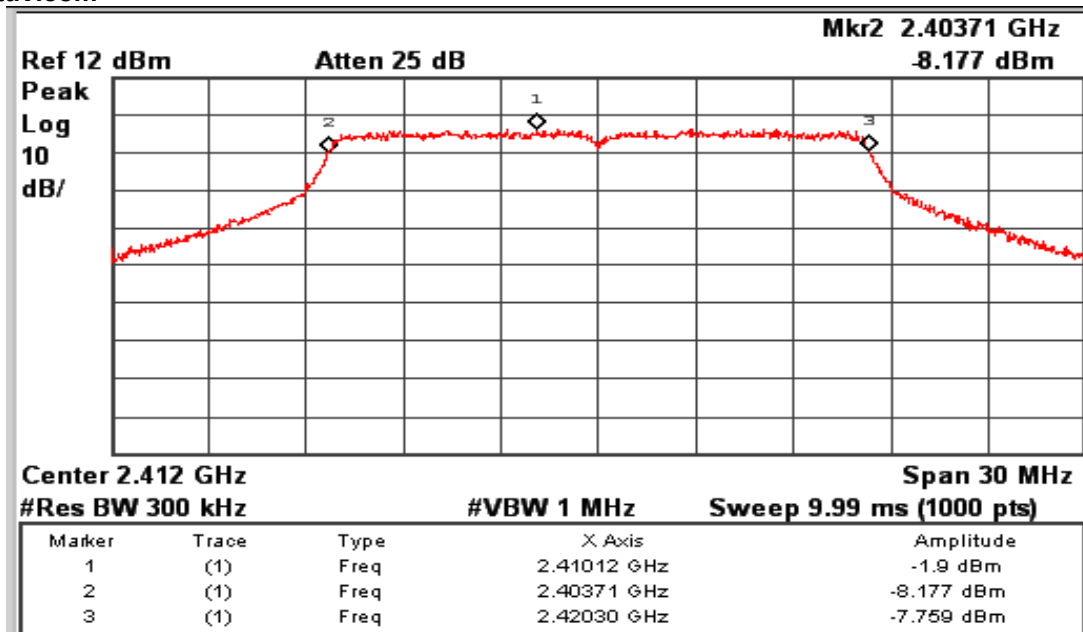
Channel frequencies: 2437 MHz



Data Rate: 6 Mbps

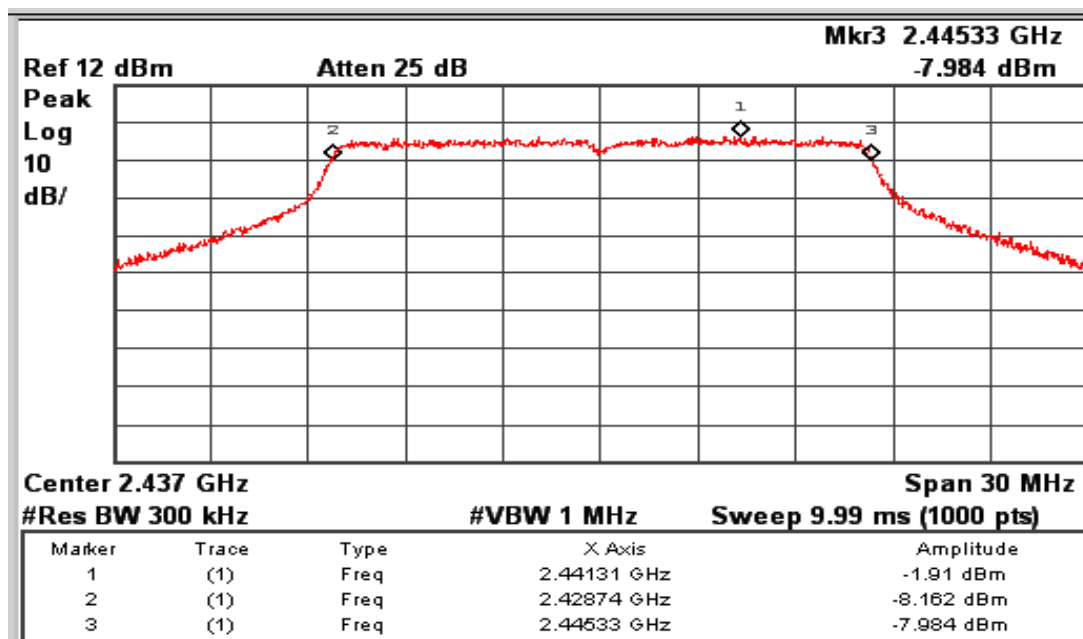
Channel frequencies: 2462 MHz

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Data Rate: 54 Mbps

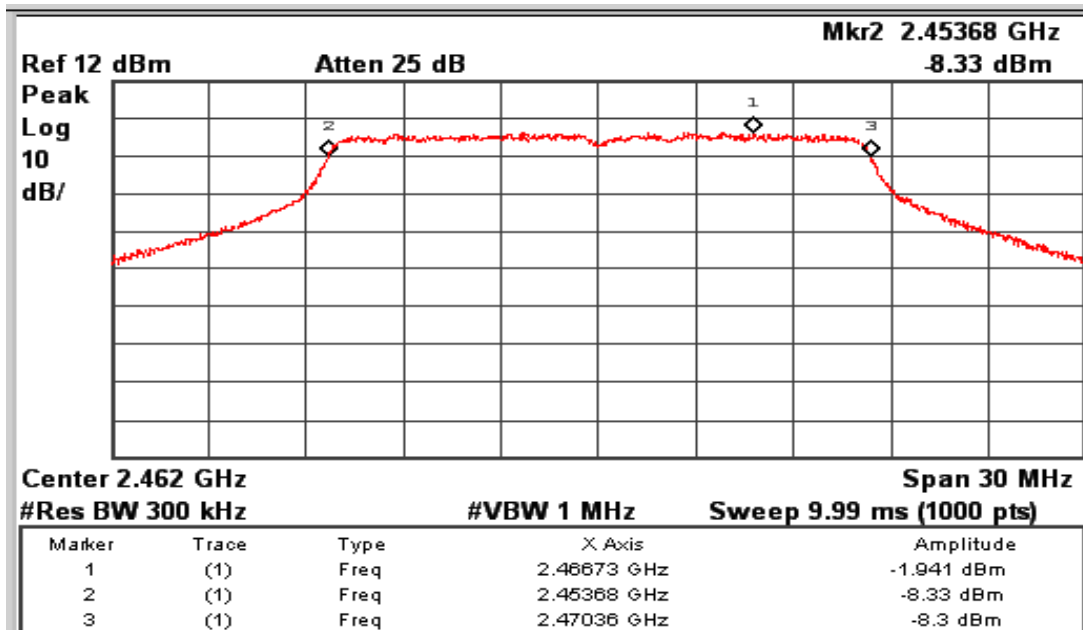
Channel frequencies: 2412 MHz



Data Rate: 54 Mbps

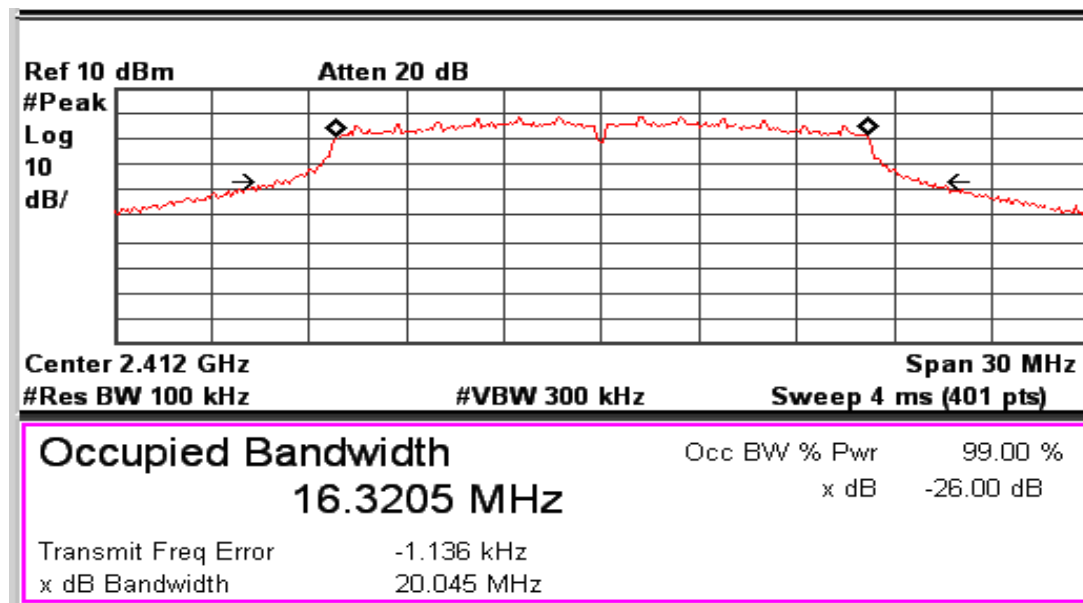
Channel frequencies: 2437MHz

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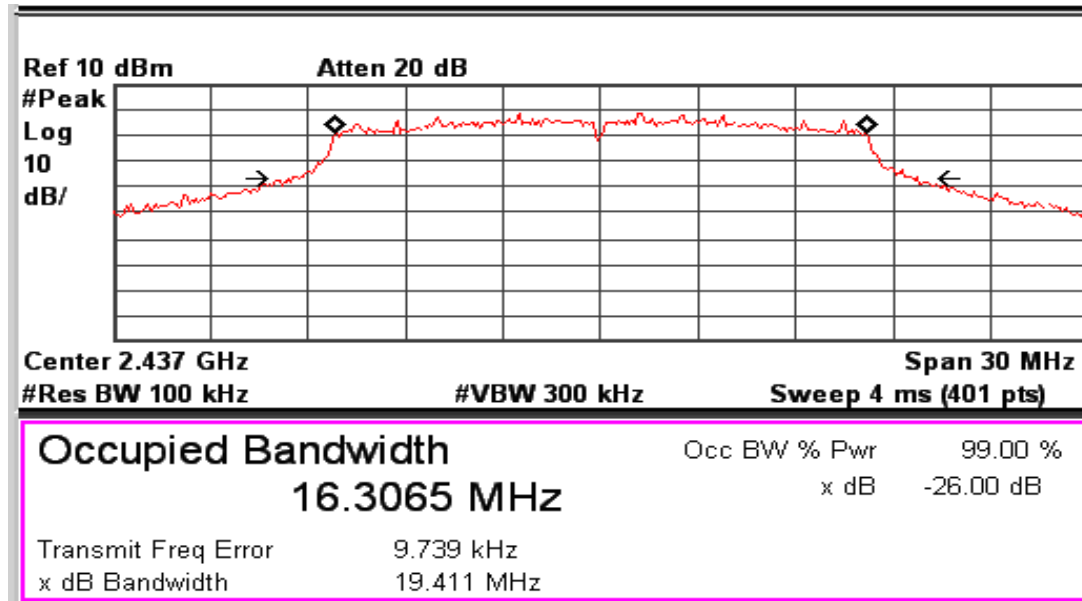
Data Rate: 54 Mbps

Channel frequencies: 2462 MHz



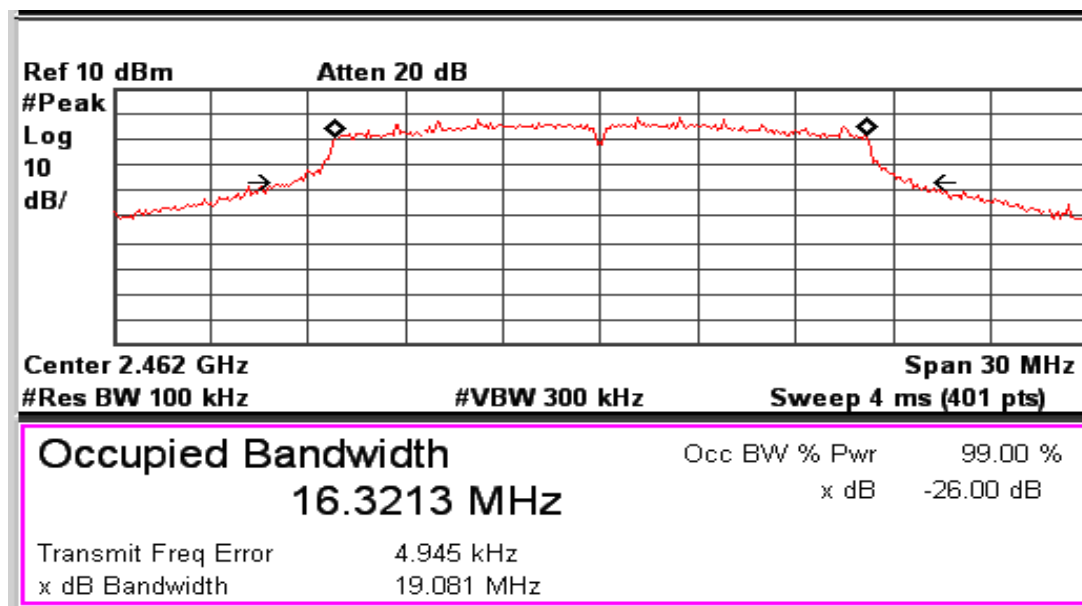
Data Rate: 6 Mbps

99% Occupied Bandwidth: Channel 2412MHz



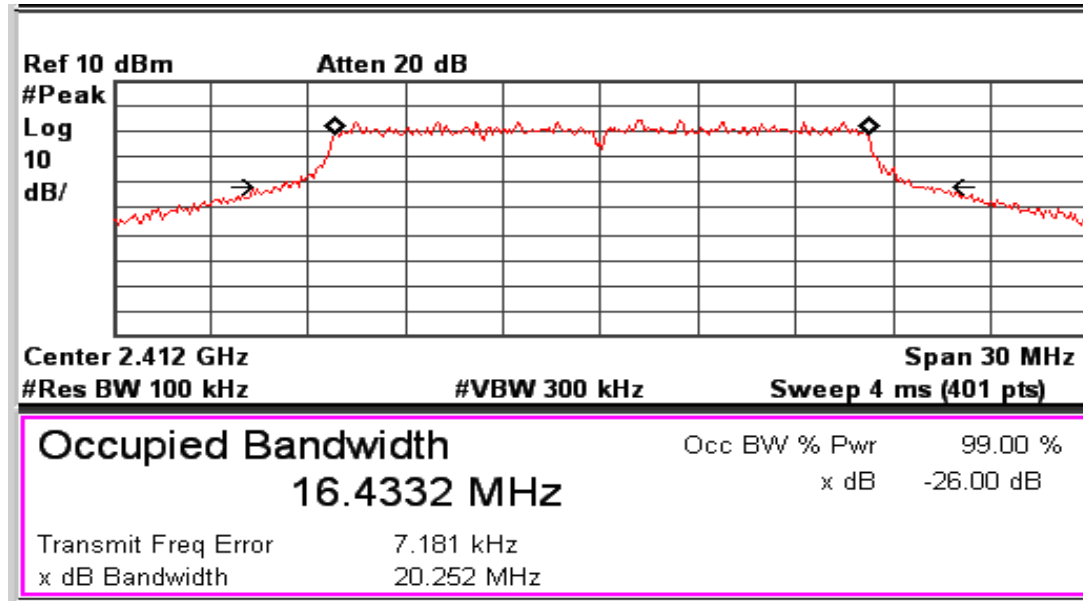
Data Rate: 6 Mbps

99% Occupied Bandwidth: Channel 2437MHz



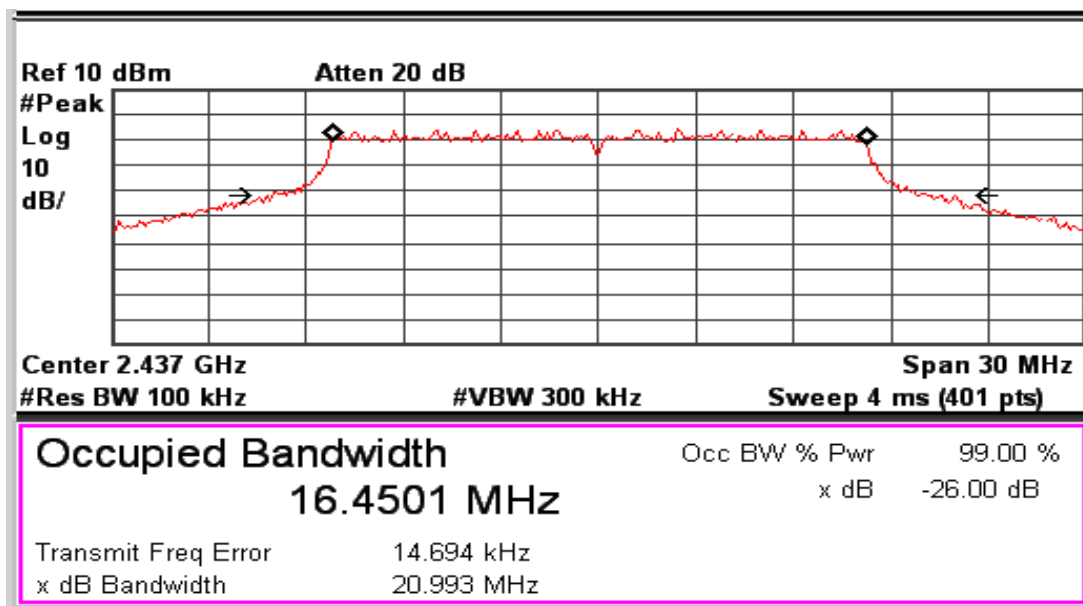
Data Rate: 6 Mbps

99% Occupied Bandwidth: Channel 2462MHz



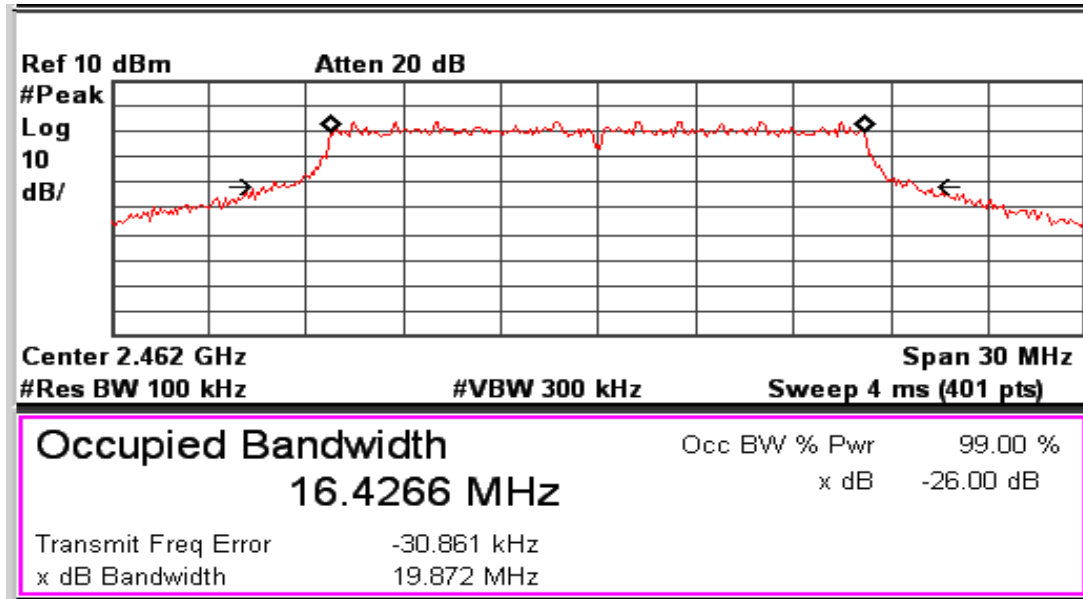
Data Rate: 54 Mbps

99% Occupied Bandwidth: Channel 2412MHz



Data Rate: 54 Mbps

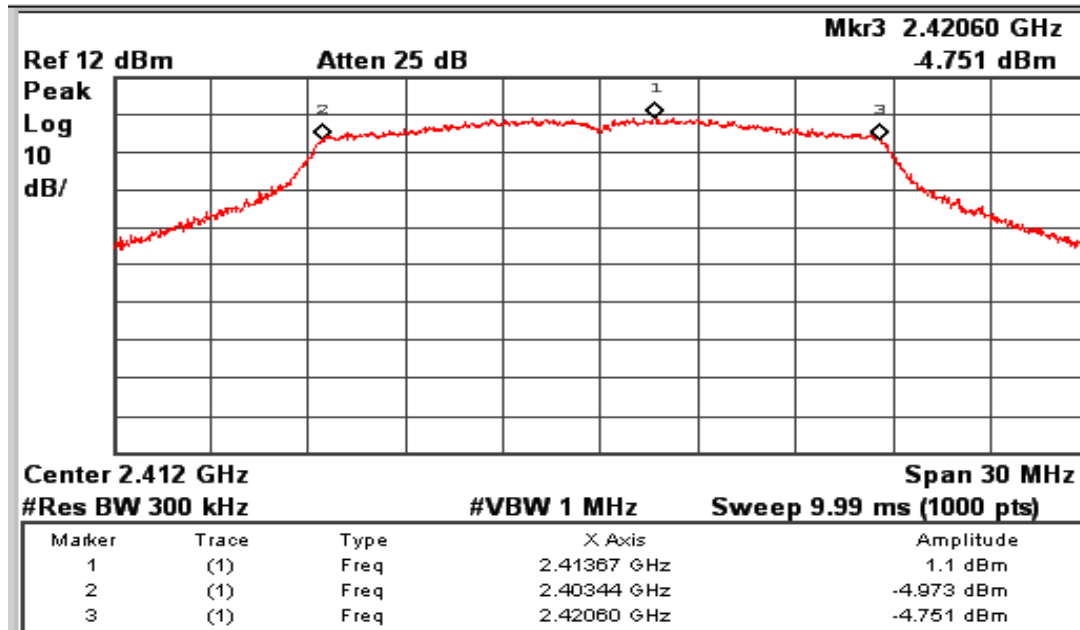
99% Occupied Bandwidth: Channel 2437MHz



Data Rate: 54 Mbps

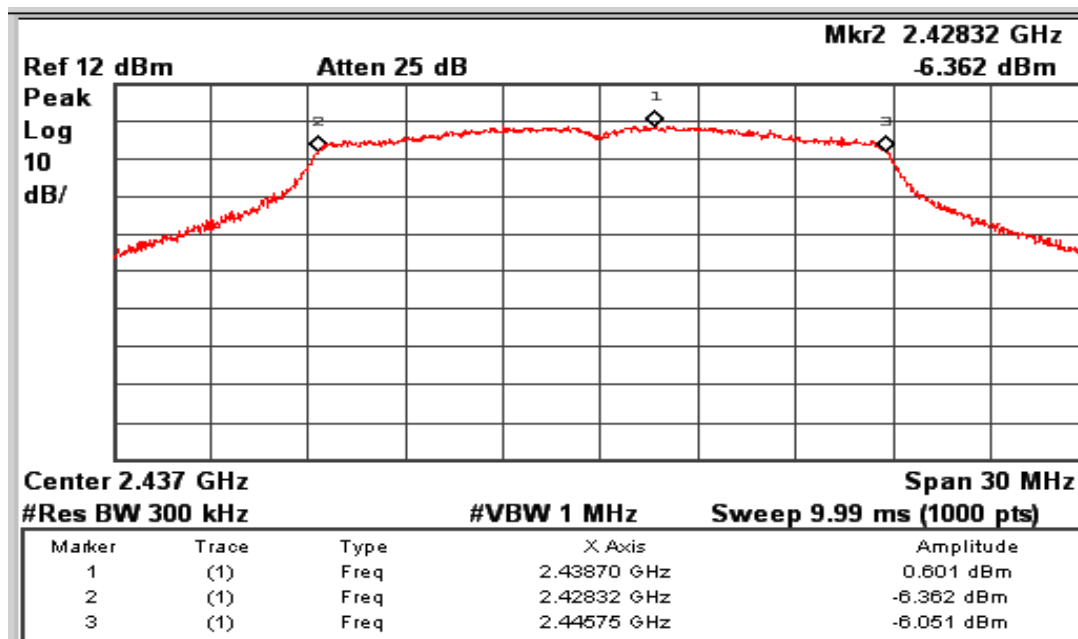
99% Occupied Bandwidth: Channel 2462MHz

| 802.11 Protocol | Data Rate (Mbps) | Frequency (MHz) | Lower Frequency (MHz) | Upper Frequency (MHz) | 6 dB Bandwidth (MHz) | 99% OBW (MHz) |
|-----------------|------------------|-----------------|-----------------------|-----------------------|----------------------|---------------|
| n               | 6.5              | 2412            | 2403.44               | 2420.60               | 17.16                | 17.50         |
|                 |                  | 2437            | 2428.32               | 2445.75               | 17.43                | 17.50         |
|                 |                  | 2462            | 2453.22               | 2470.63               | 17.41                | 17.50         |
|                 | 65               | 2412            | 2403.08               | 2420.90               | 17.82                | 17.66         |
|                 |                  | 2437            | 2428.11               | 2445.90               | 17.79                | 17.65         |
|                 |                  | 2462            | 2453.05               | 2470.93               | 17.88                | 17.65         |



Data Rate: 6.5 Mbps

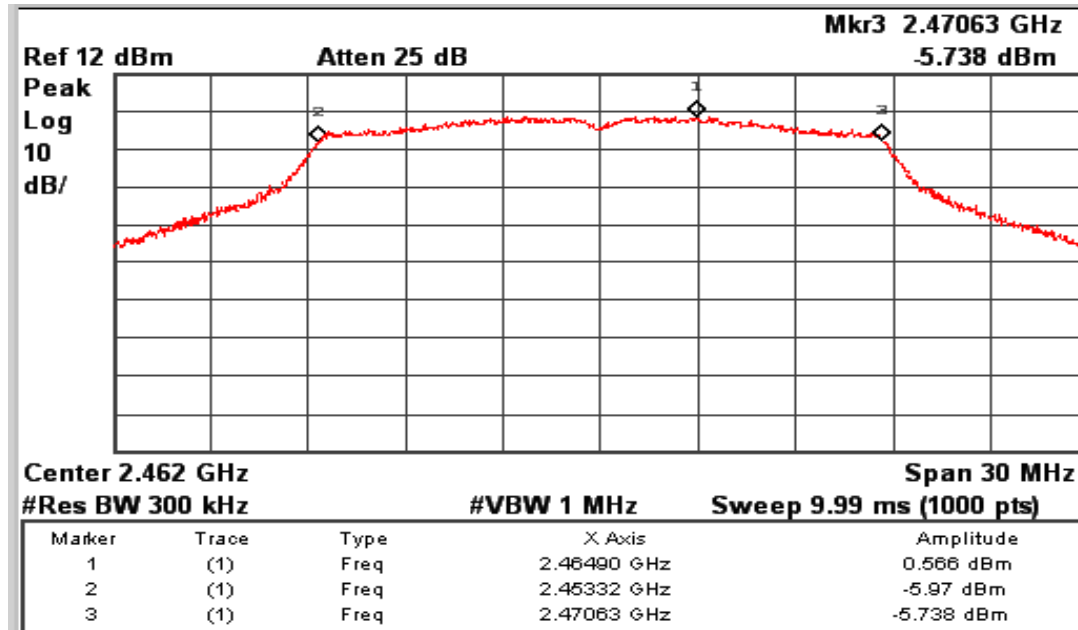
Channel frequencies: 2412 MHz



Data Rate: 6.5 Mbps

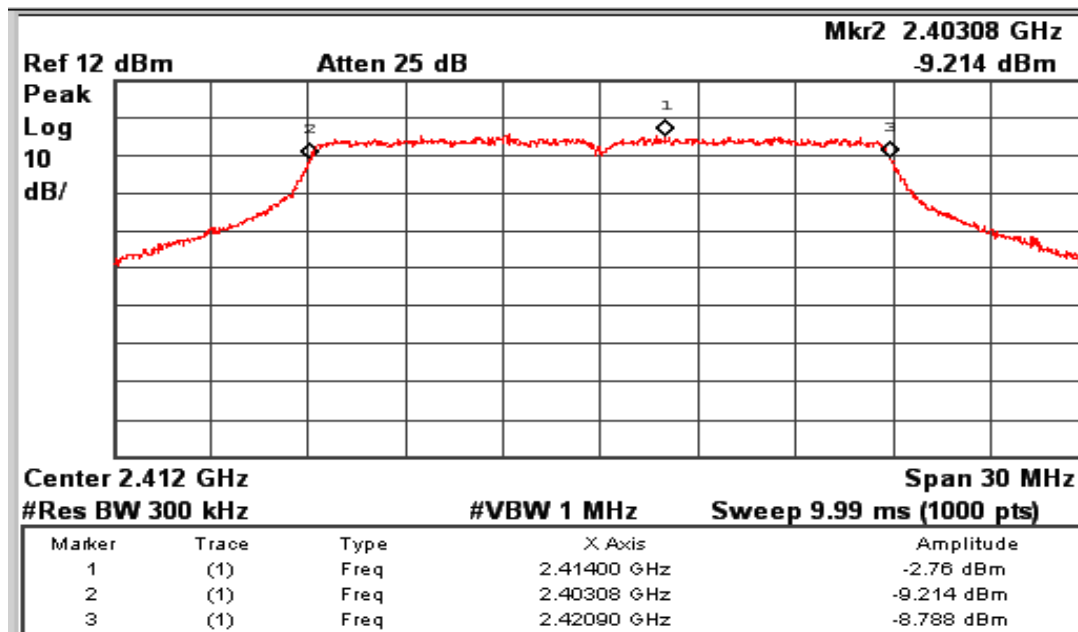
Channel frequencies: 2437 MHz

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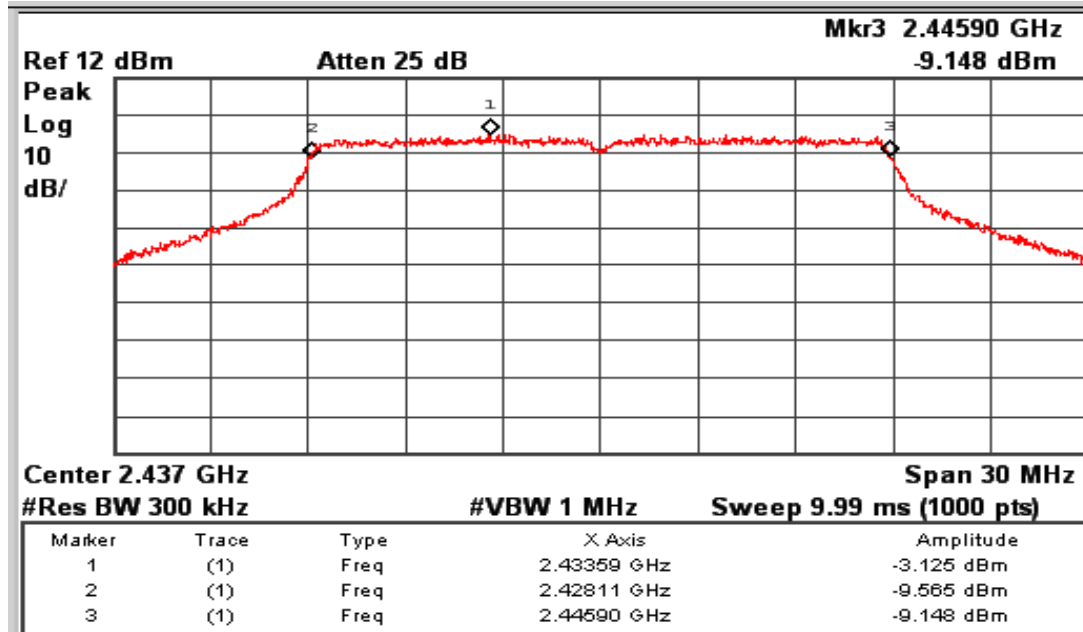
Data Rate: 6.5 Mbps

Channel frequencies: 2462 MHz



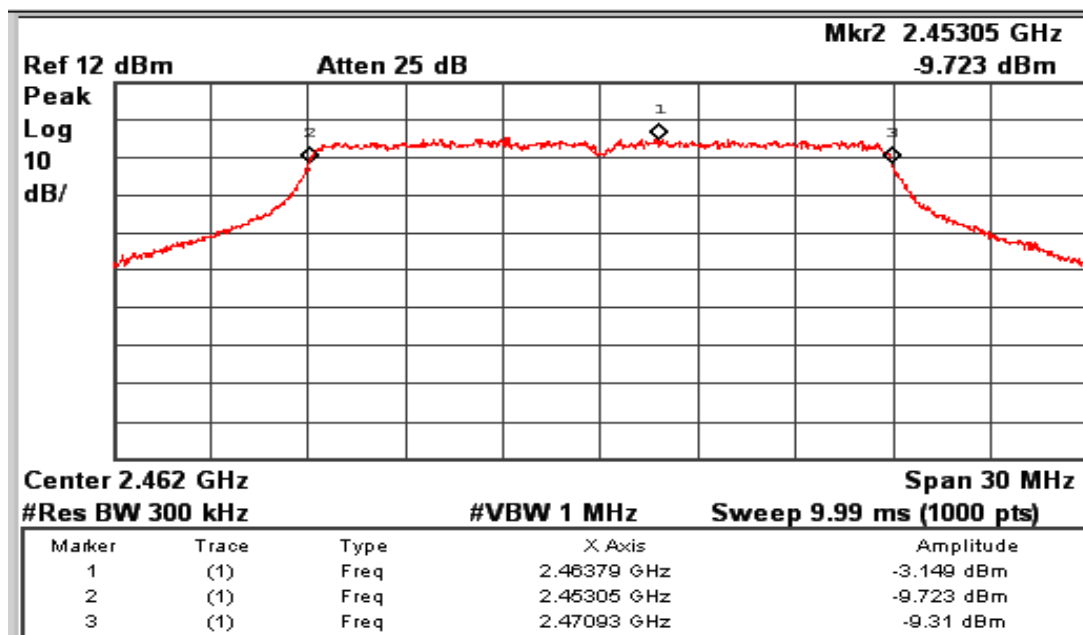
Data Rate: 65Mbps

Channel frequencies: 2412 MHz



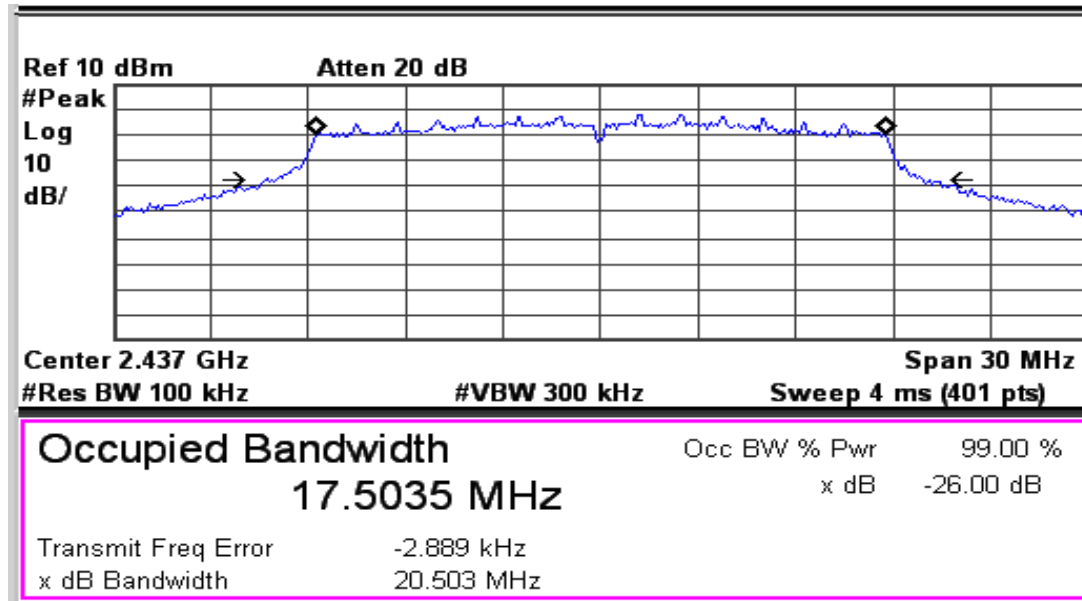
Data Rate: 65 Mbps

Channel frequencies: 2437MHz



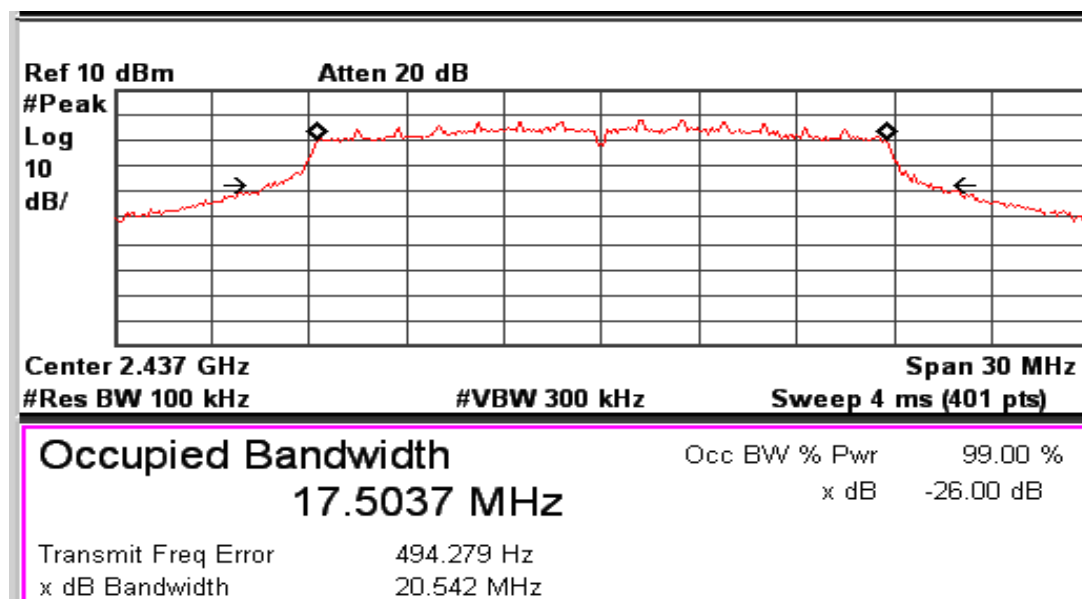
Data Rate: 65Mbps

Channel frequencies: 2462 MHz



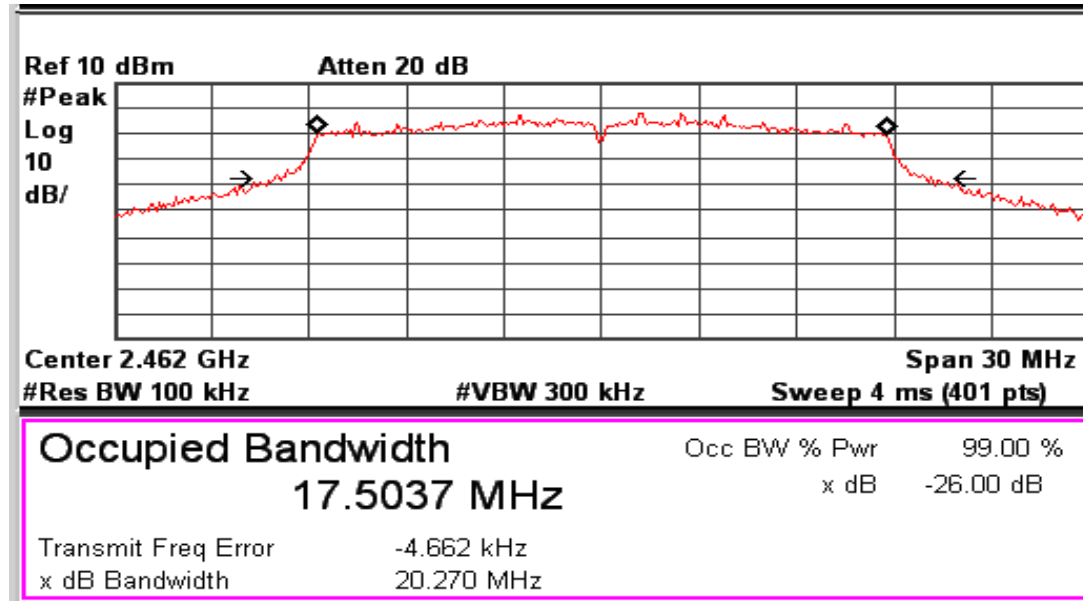
Data Rate: 6.5 Mbps

99% Occupied Bandwidth: Channel 2412MHz



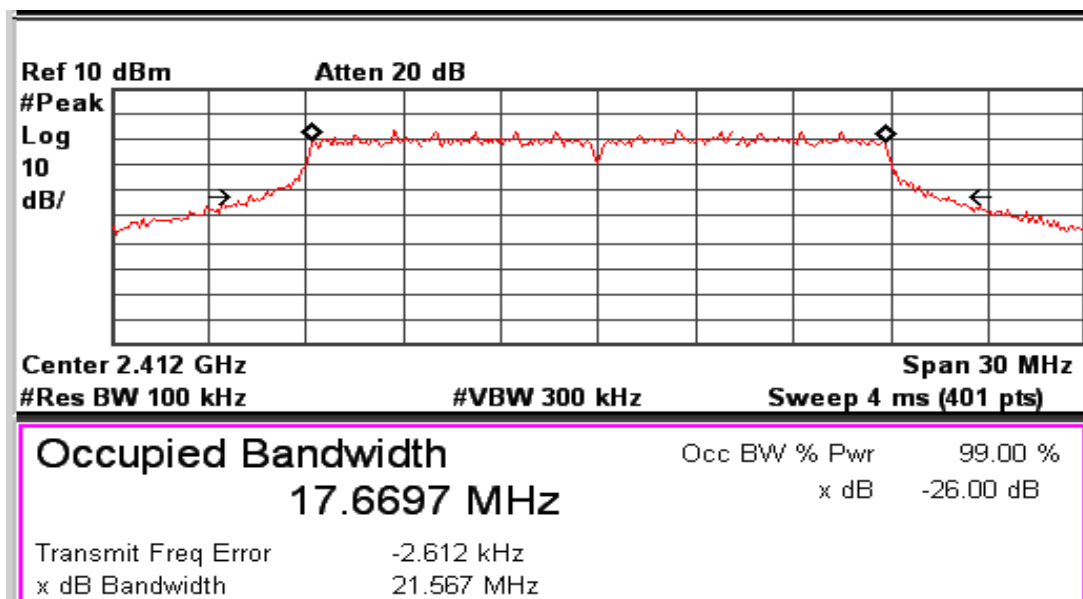
Data Rate: 6.5 Mbps

99% Occupied Bandwidth: Channel 2437MHz



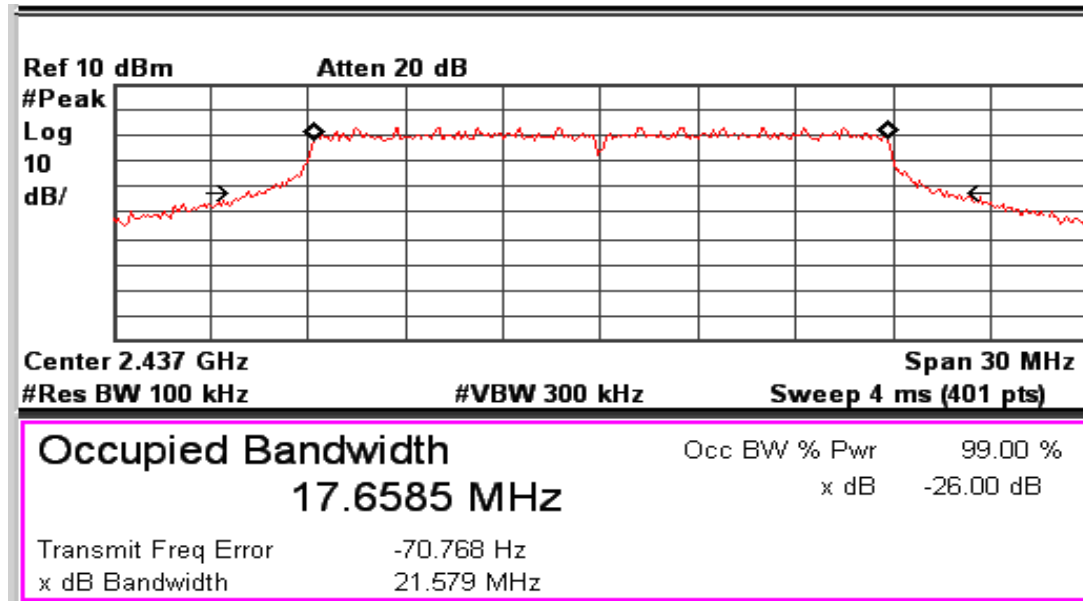
Data Rate: 6.5 Mbps

99% Occupied Bandwidth: Channel 2462MHz



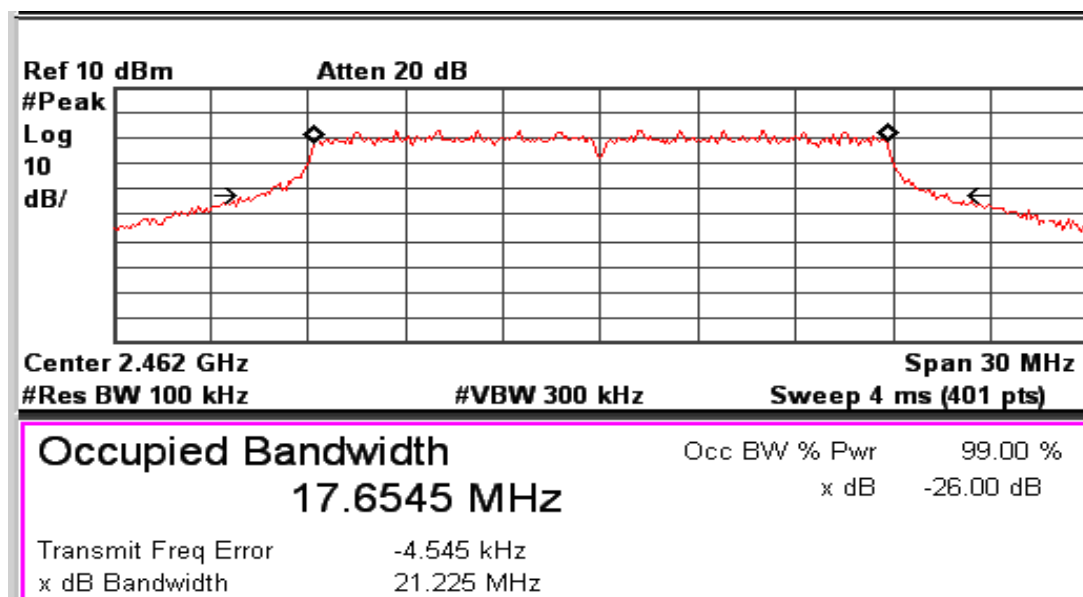
Data Rate: 65 Mbps

99% Occupied Bandwidth: Channel 2412MHz



Data Rate: 65Mbps

99% Occupied Bandwidth: Channel 2437MHz



Data Rate: 65Mbps

99% Occupied Bandwidth: Channel 2462MHz

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## Band-edge Compliance

Section 15.247(d)

Result

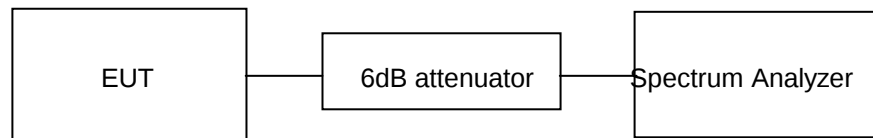
Pass

Test Specification  
Detector Function  
Requirement

FCC Part 15 Section 15.247(d)  
Peak

In any 100kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits.

Test Method:

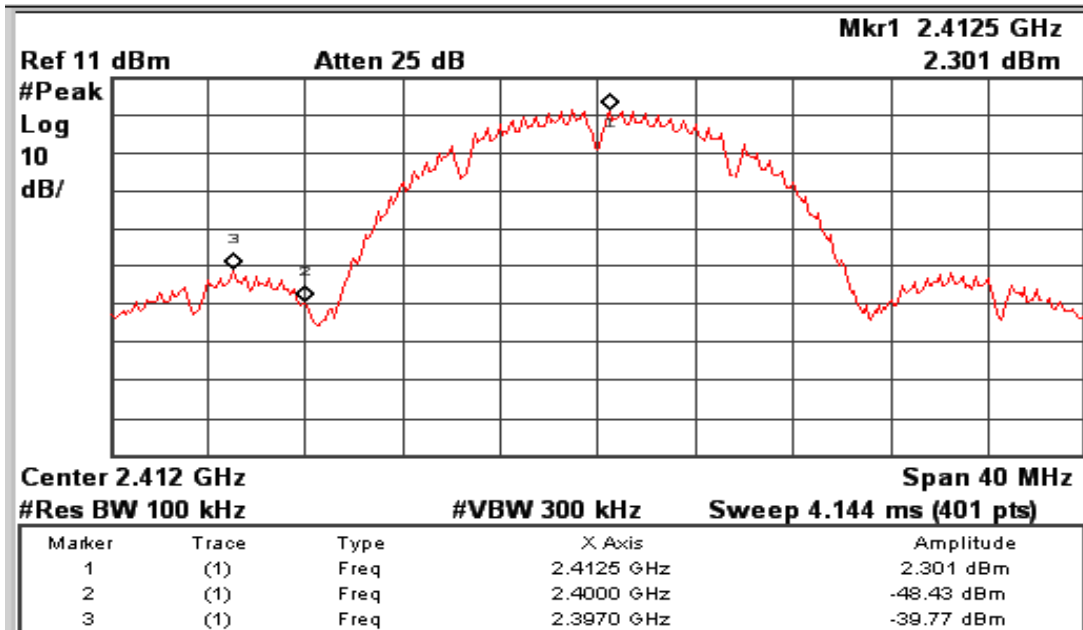


Cable Loss: 0.68 dB + 1.2dB

Total Correction Factor: Cable Loss+ Attenuator = 1.88dB + 6dB = 7.88 dB

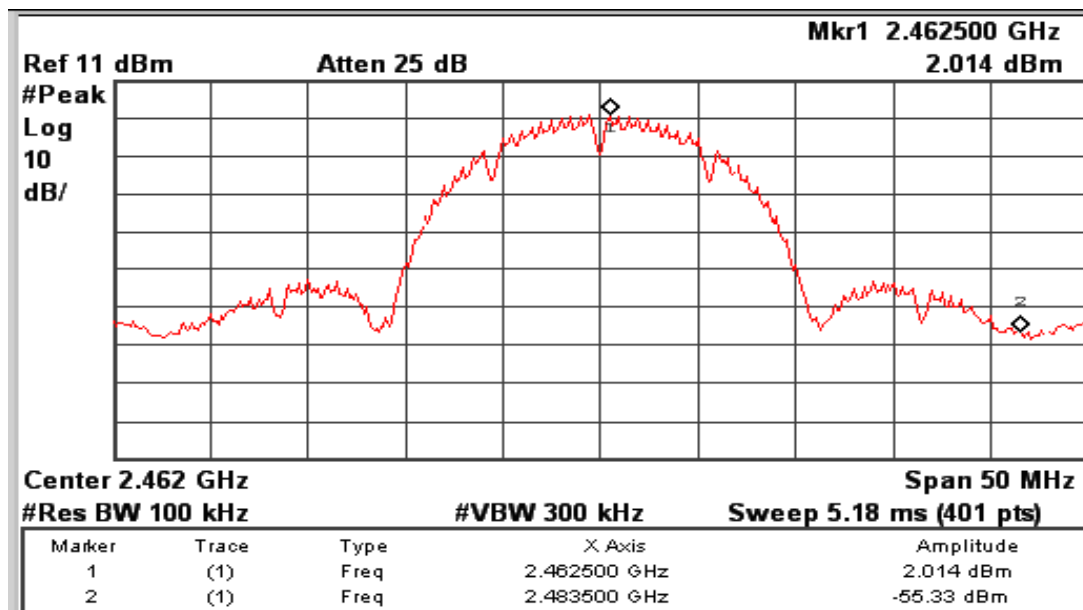
Test Result:

| 802.11 Protocol | Data Rate (Mbps) | Frequency (MHz) | Value at Band Edge |             | Limit (dB) |
|-----------------|------------------|-----------------|--------------------|-------------|------------|
|                 |                  |                 | Frequency (MHz)    | Value (dBc) |            |
| b               | 1                | 2412            | 2397.00            | -42.07      | -30.00     |
|                 |                  | 2462            | 2483.50            | -57.34      | -30.00     |
|                 | 11               | 2412            | 2397.00            | -42.72      | -30.00     |
|                 |                  | 2462            | 2483.50            | -55.34      | -30.00     |



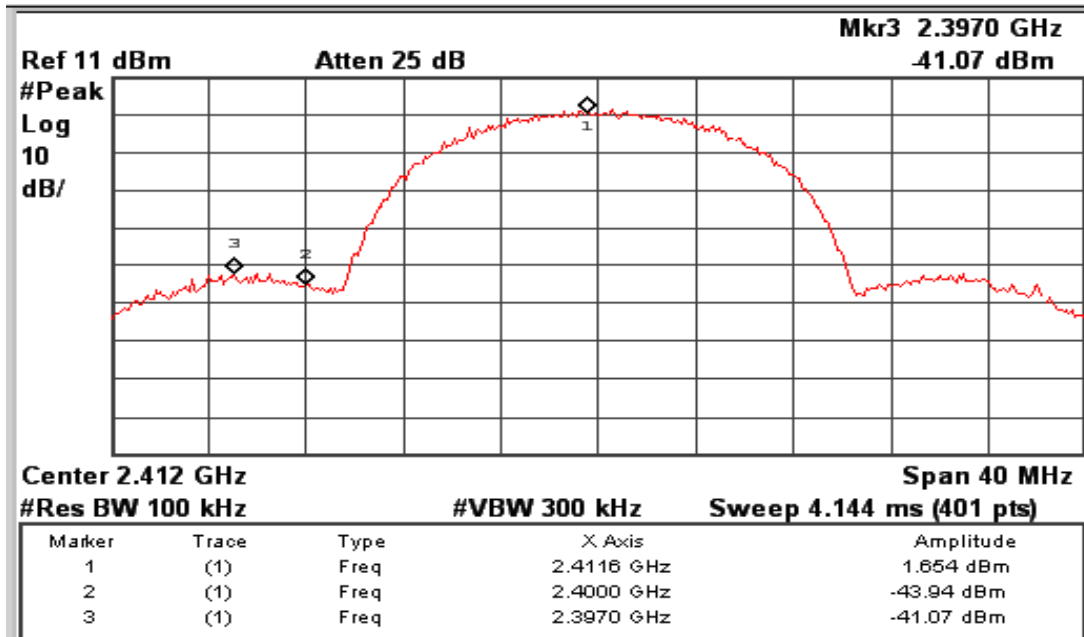
Data Rate: 1 Mbps

Channel frequency: 2412 MHz



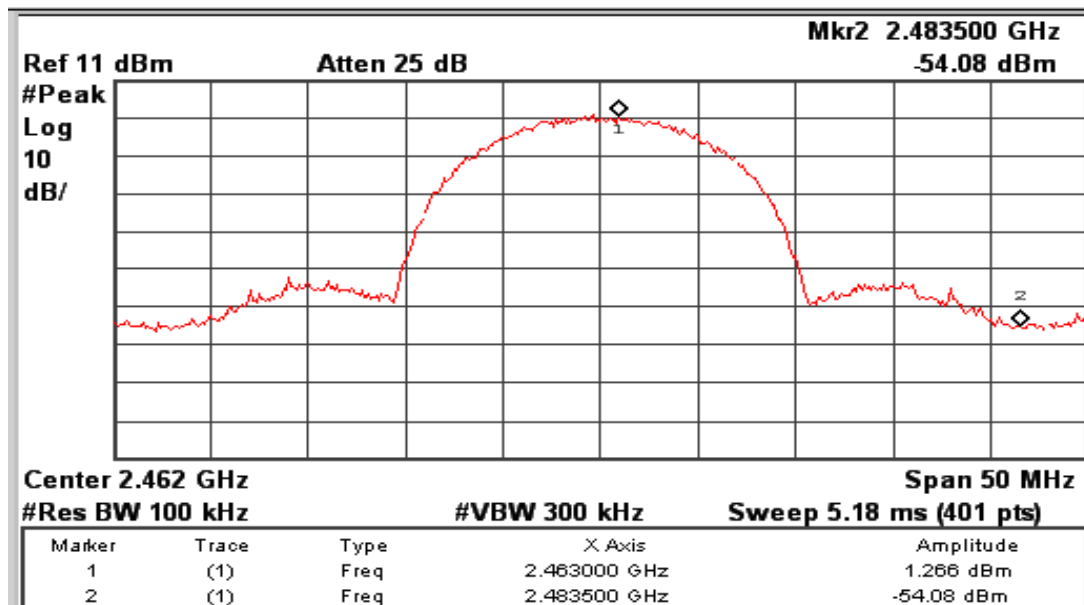
Data Rate: 1 Mbps

Channel frequency: 2462 MHz



Data Rate: 11 Mbps

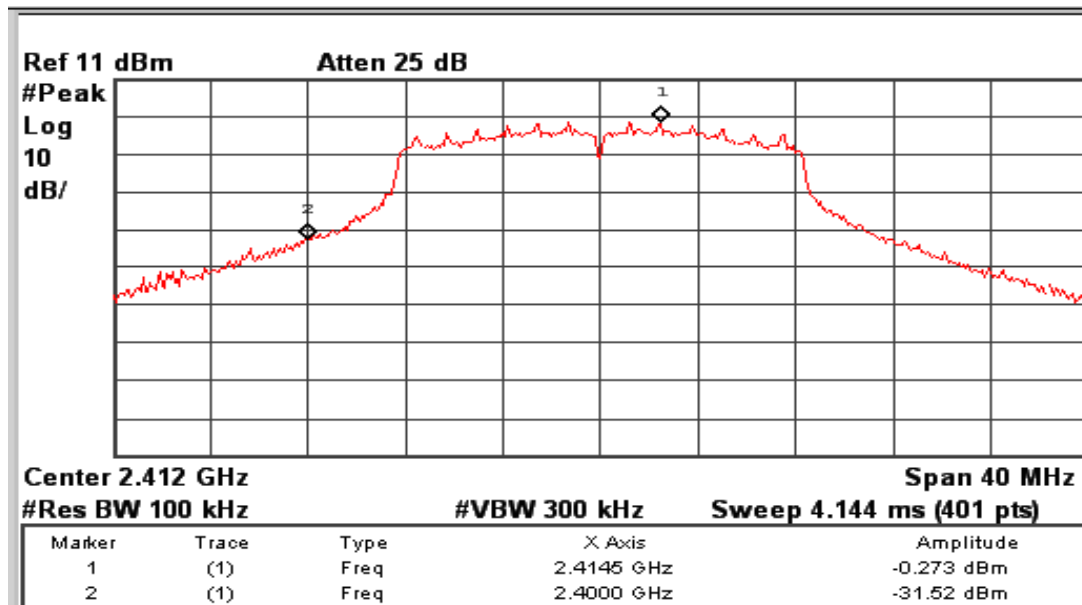
Channel frequency: 2412 MHz



Data Rate: 11 Mbps

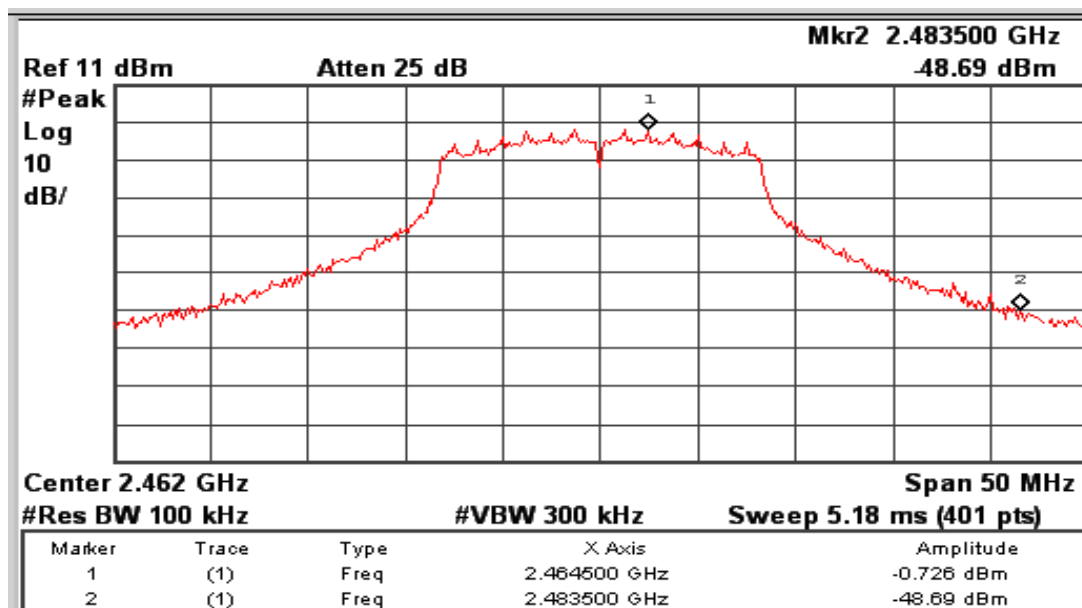
Channel frequency: 2462 MHz

| 802.11 Protocol | Data Rate (Mbps) | Frequency (MHz) | Value at Bande Edge |             | Limit (dB) |
|-----------------|------------------|-----------------|---------------------|-------------|------------|
|                 |                  |                 | Frequency (MHz)     | Value (dBc) |            |
| g               | 6                | 2412            | 2400.00             | -31.25      | -30.00     |
|                 |                  | 2462            | 2483.50             | -47.96      | -30.00     |
|                 | 54               | 2412            | 2379.00             | -30.95      | -30.00     |
|                 |                  | 2462            | 2483.50             | -47.04      | -30.00     |



Data Rate: 6 Mbps

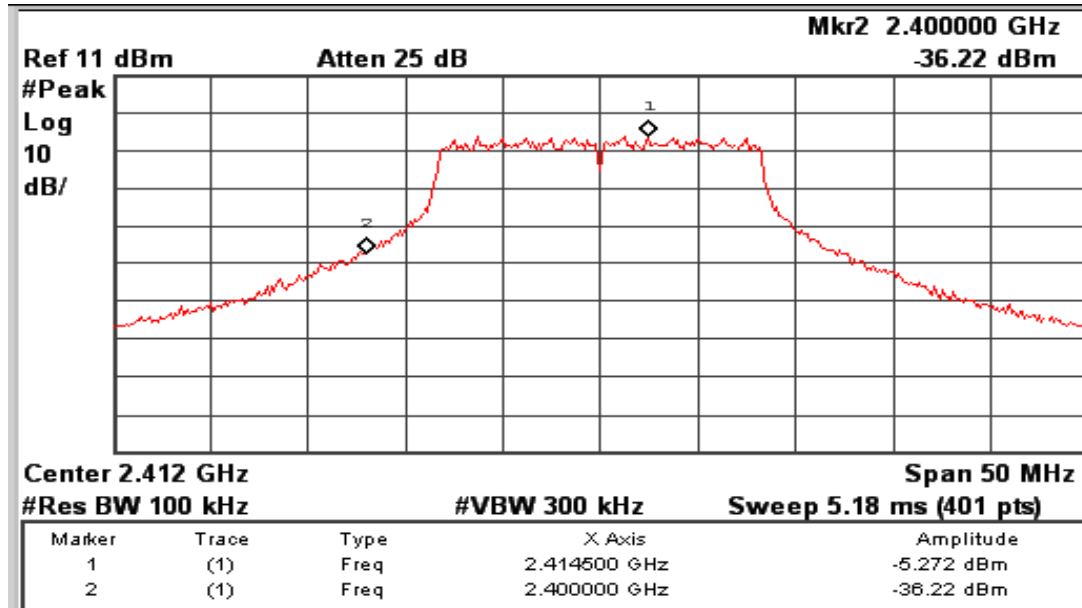
Channel frequency: 2412 MHz



Data Rate: 6 Mbps

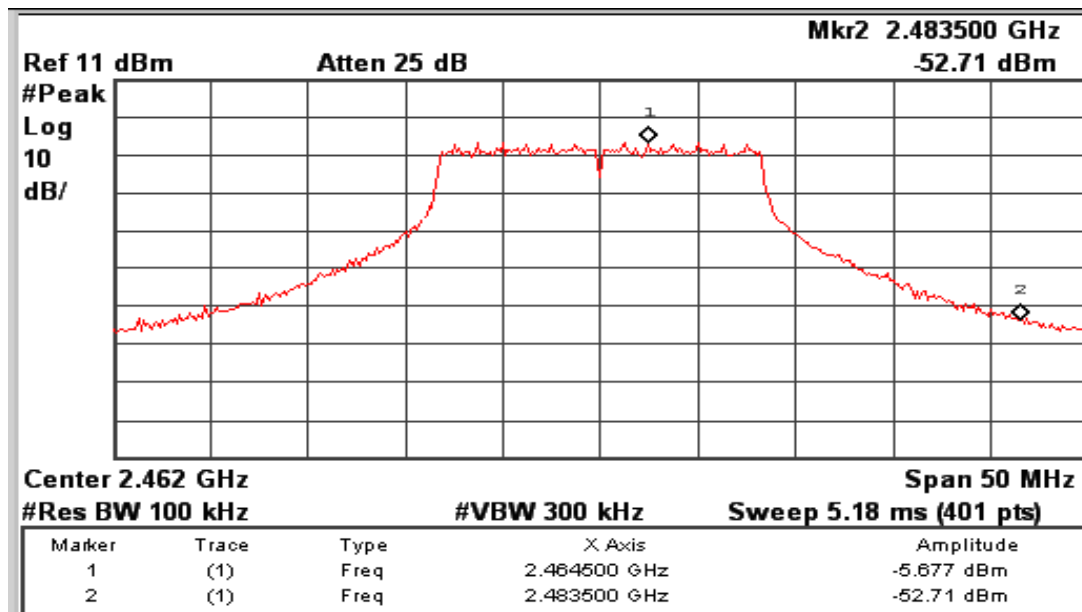
Channel frequency: 2462 MHz

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Data Rate: 54 Mbps

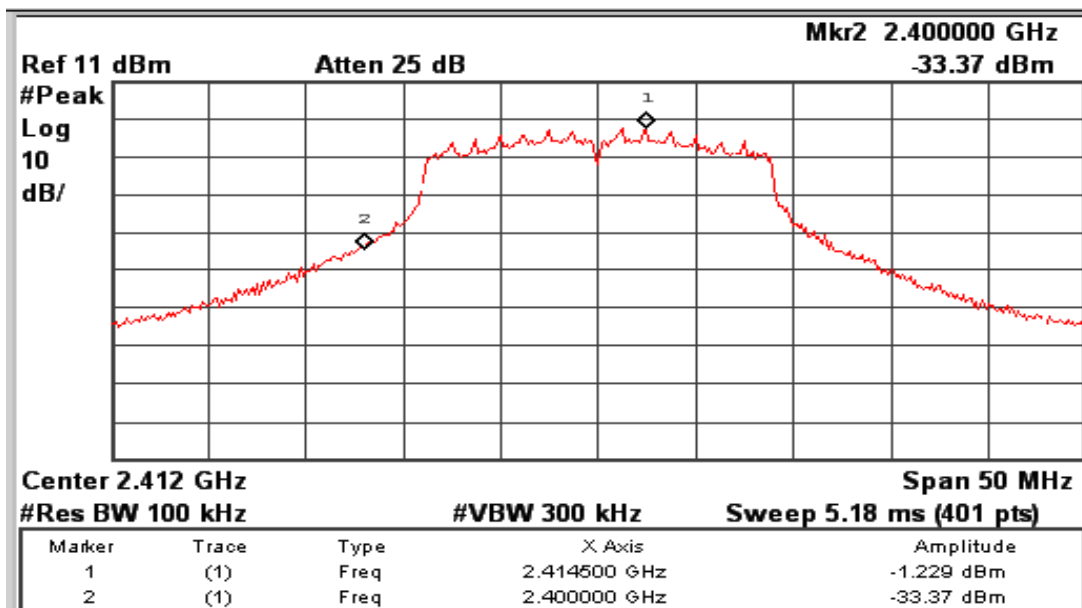
Channel frequency: 2412 MHz



Data Rate: 54 Mbps

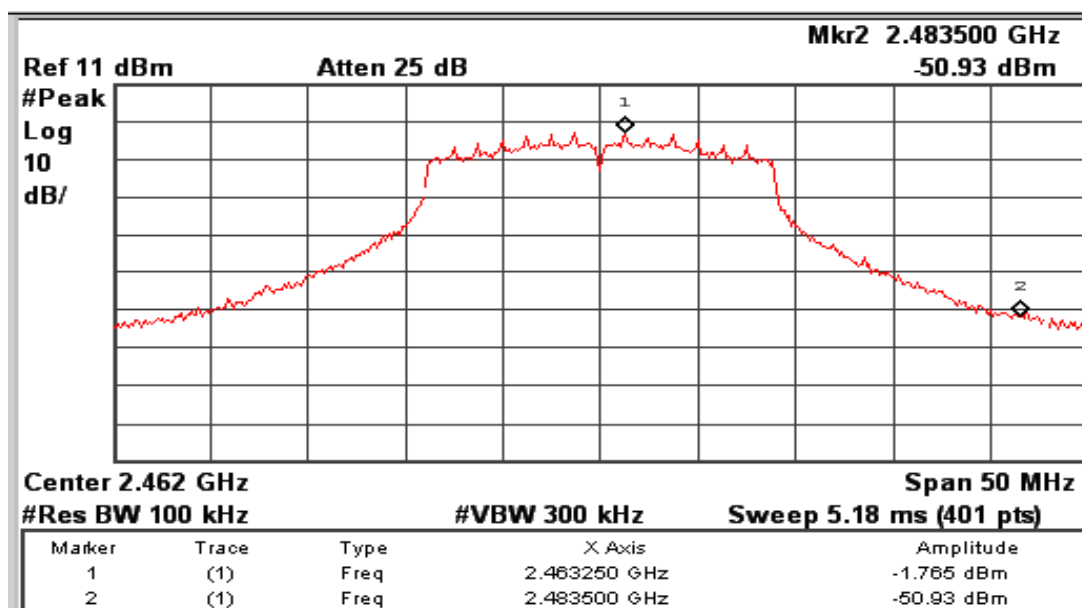
Channel frequency: 2462 MHz

| 802.11 Protocol | Data Rate (Mbps) | Frequency (MHz) | Value at Bande Edge |             | Limit (dB) |
|-----------------|------------------|-----------------|---------------------|-------------|------------|
|                 |                  |                 | Frequency (MHz)     | Value (dBc) |            |
| n               | 6.5              | 2412            | 2397.00             | -32.15      | -30.00     |
|                 |                  | 2462            | 2483.50             | -49.17      | -30.00     |
|                 | 65               | 2412            | 2400.00             | -30.17      | -30.00     |
|                 |                  | 2462            | 2483.50             | -45.67      | -30.00     |



Data Rate: 6.5 Mbps

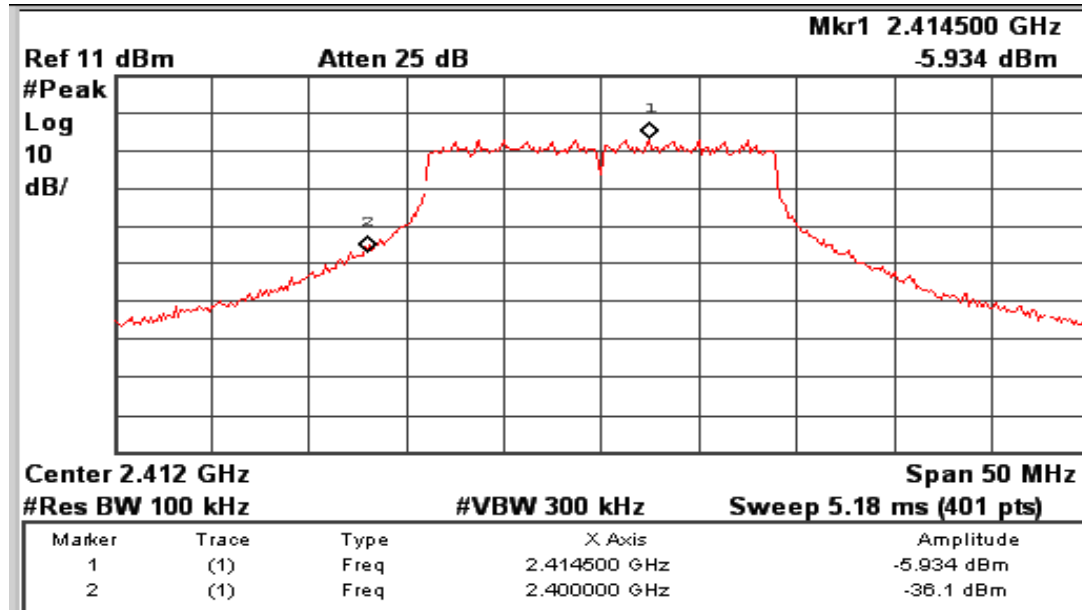
Channel frequency: 2412 MHz



Data Rate: 6.5 Mbps

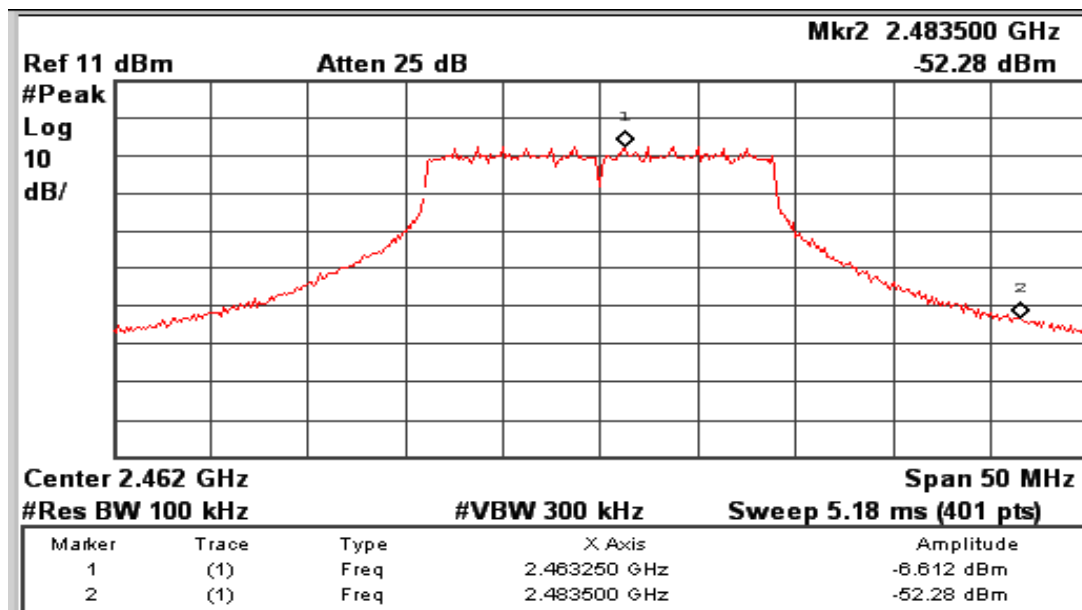
Channel frequency: 2462 MHz

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Data Rate: 65 Mbps

Channel frequency: 2412 MHz

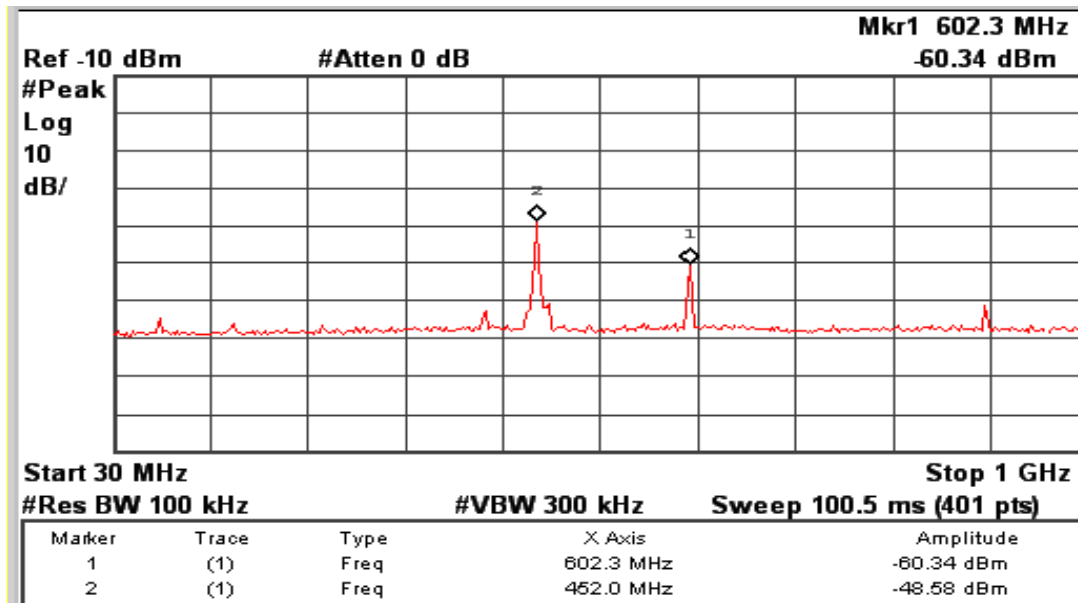


Data Rate: 65 Mbps

Channel frequency: 2462 MHz

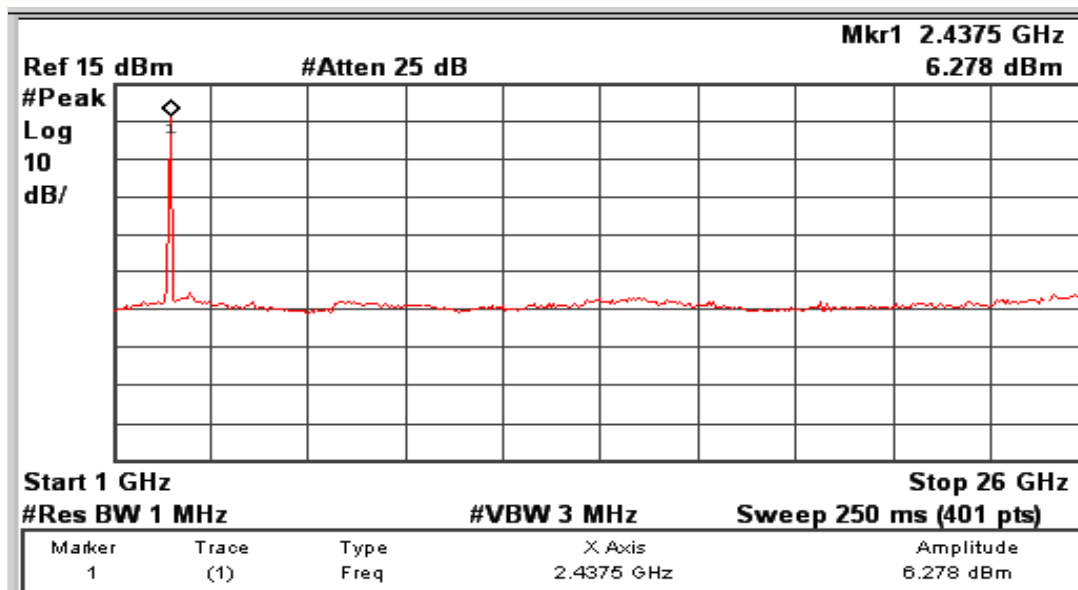
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# Conducted Spurious Emission



Data Rate: 1Mbps

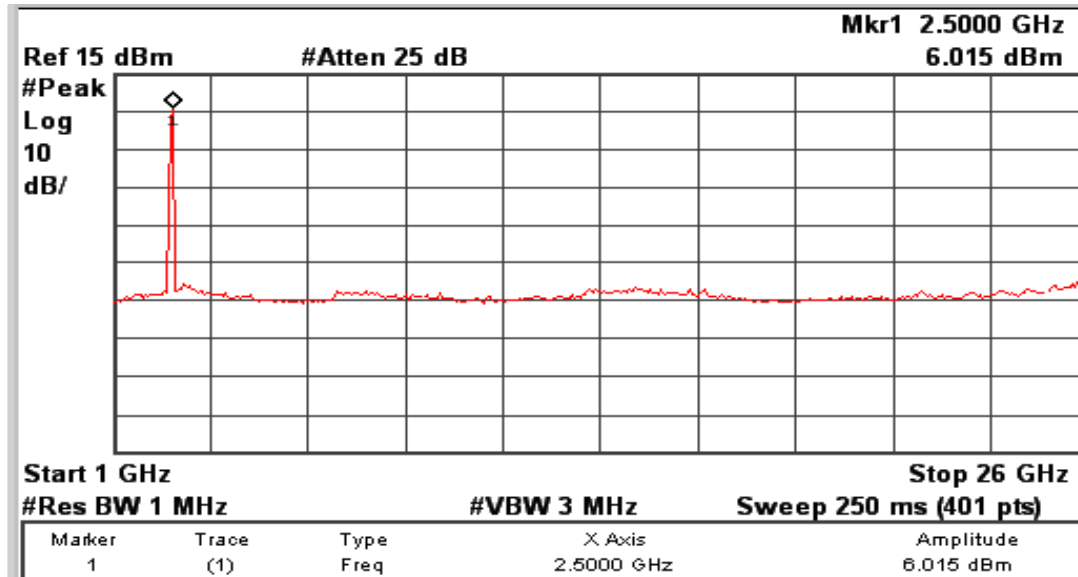
30MHz – 1GHz



Data Rate: 1Mbps

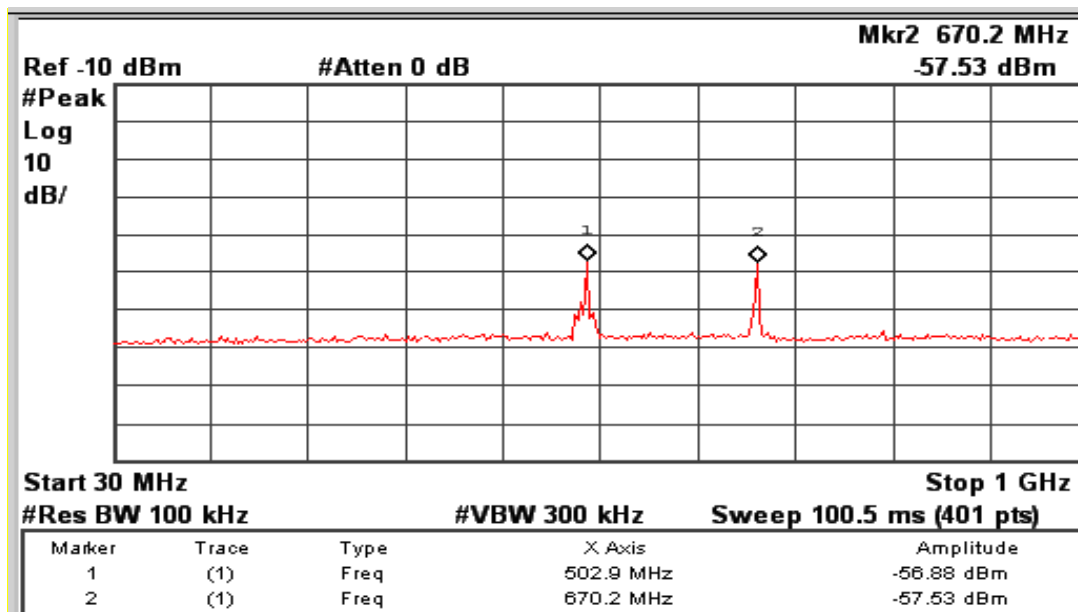
Channel Low

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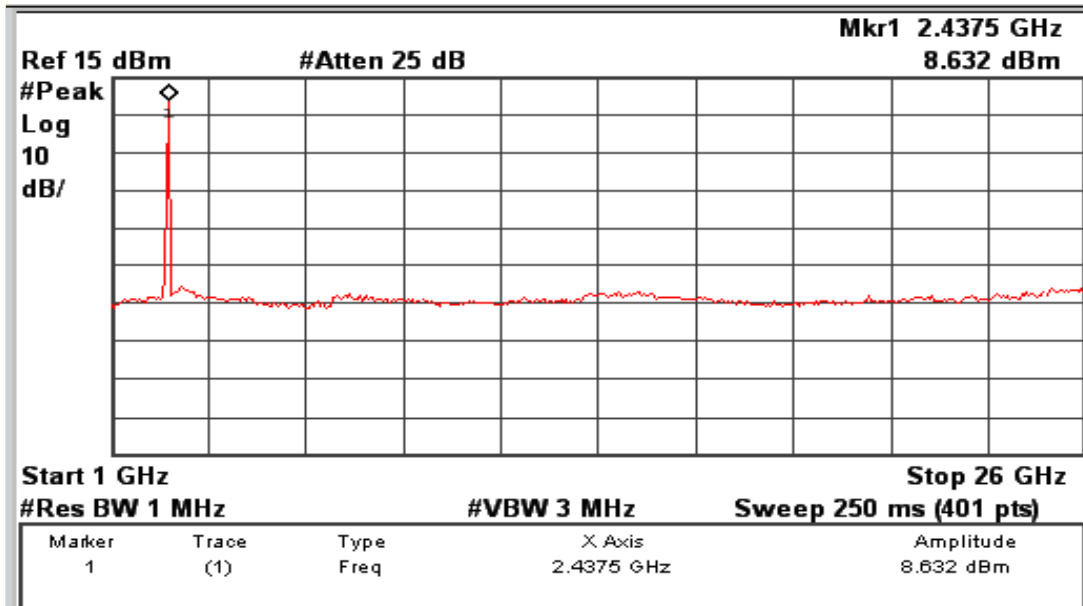
Data Rate: 1Mbps

Channel High



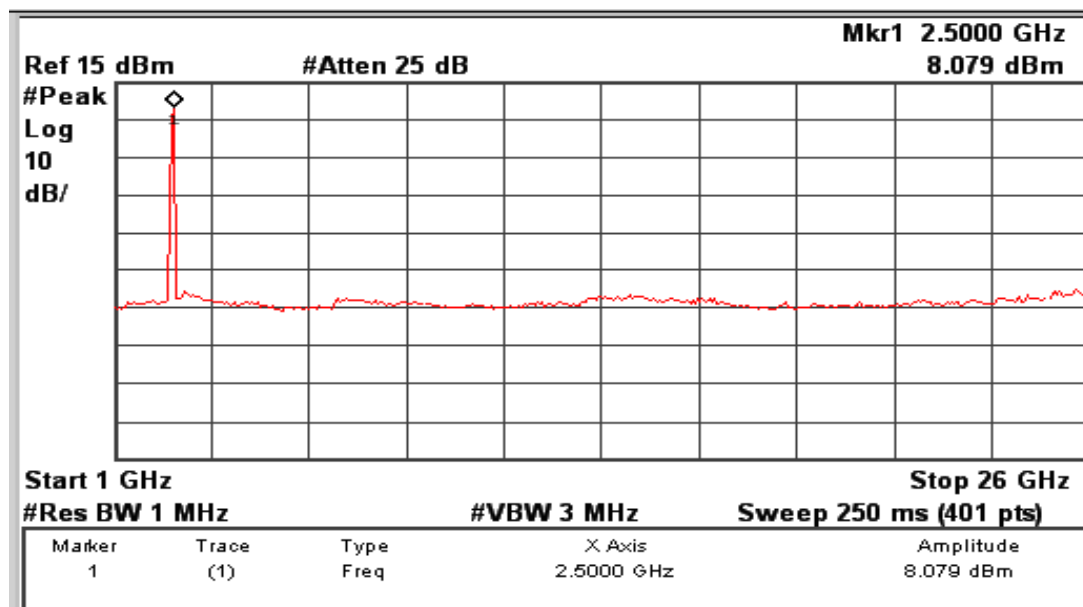
Data Rate: 11Mbps

30MHz – 1GHz



Data Rate: 11Mbps

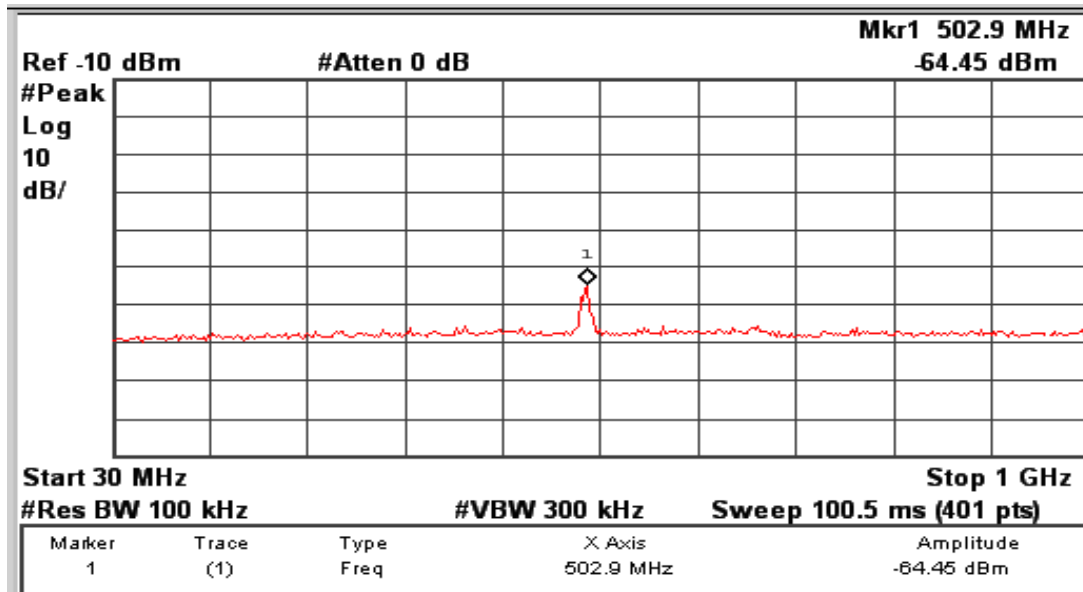
Channel Low



Data Rate: 11Mbps

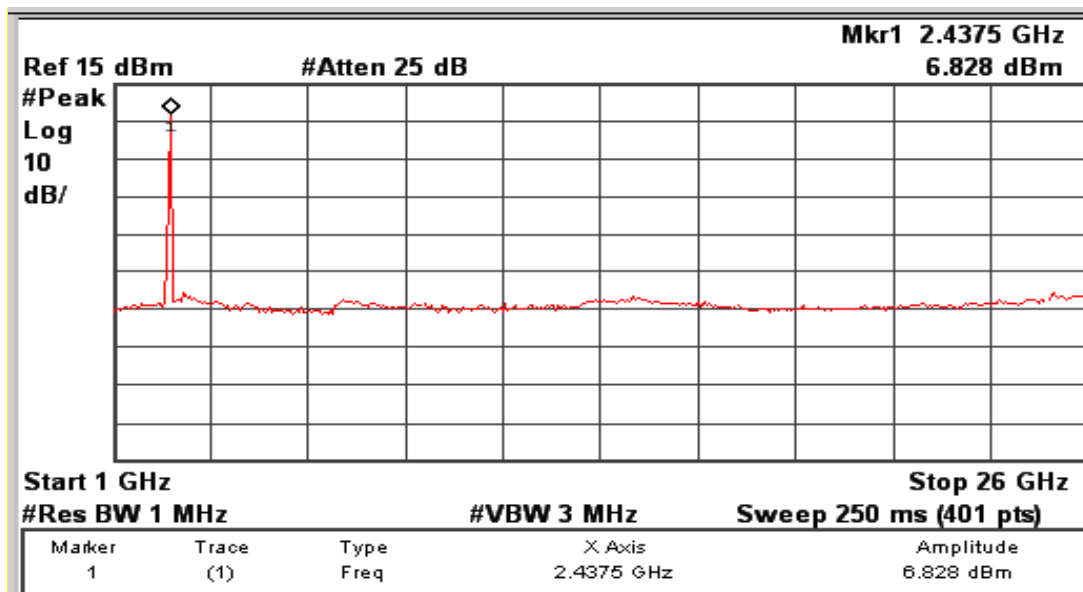
Channel High

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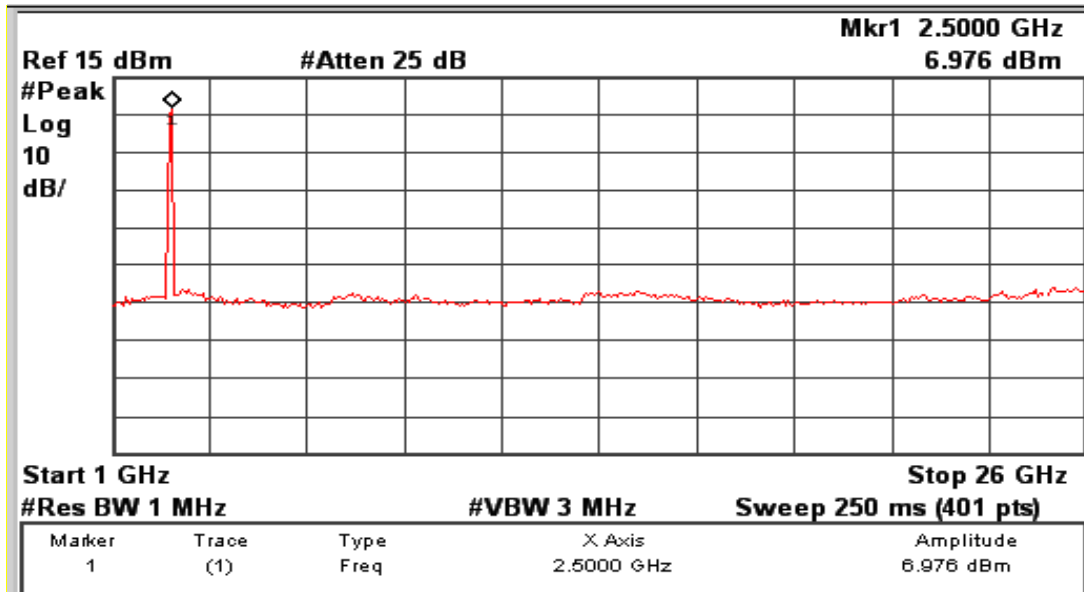
Data Rate: 6Mbps

30MHz – 1GHz



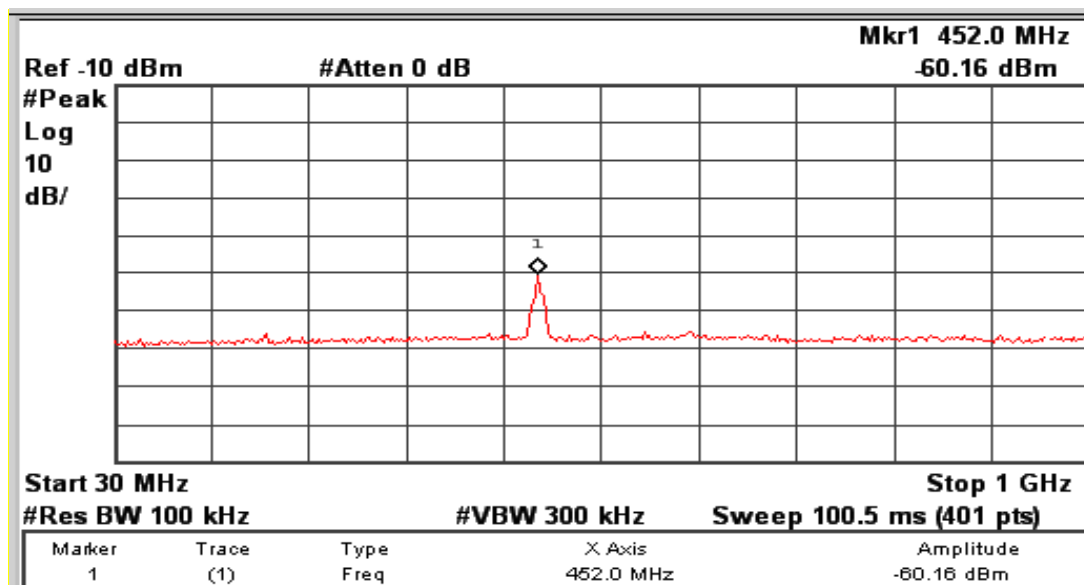
Data Rate: 6Mbps

Channel Low



Data Rate: 6Mbps

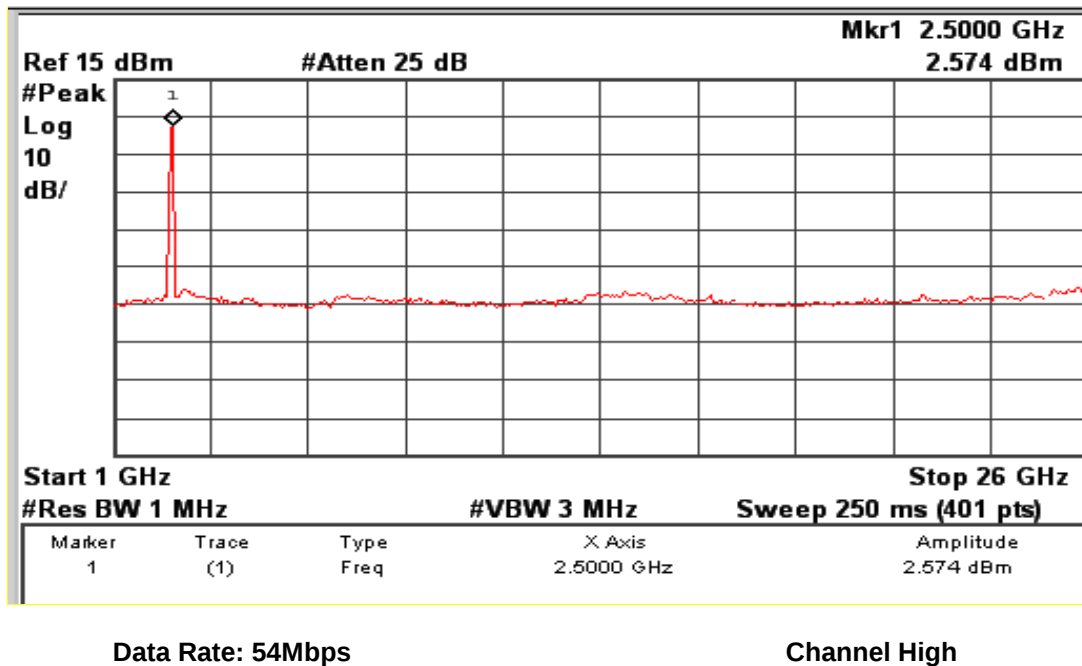
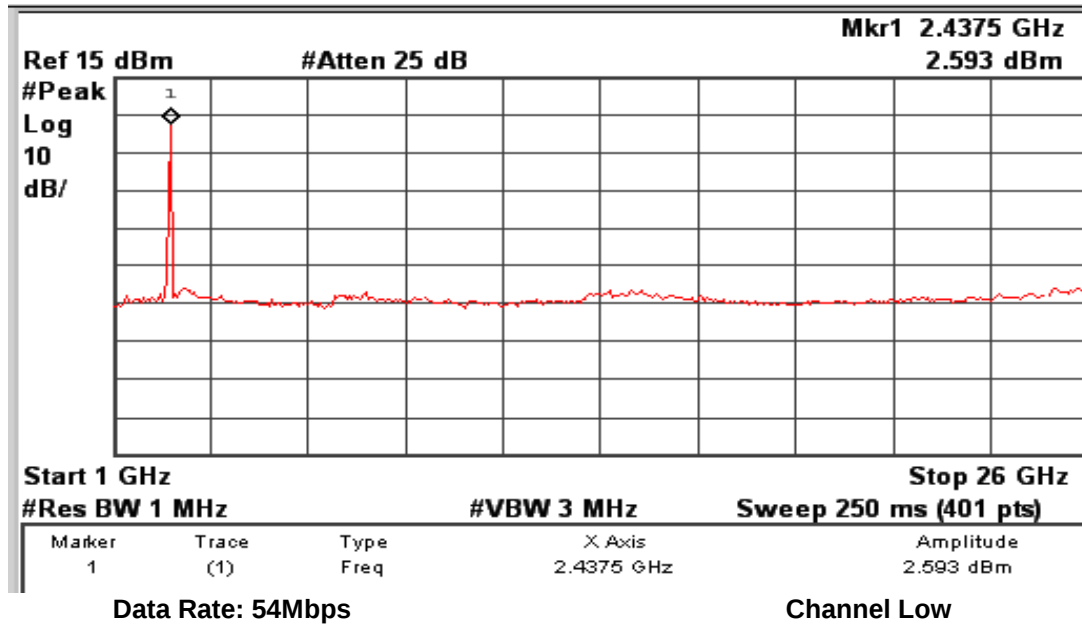
Channel High

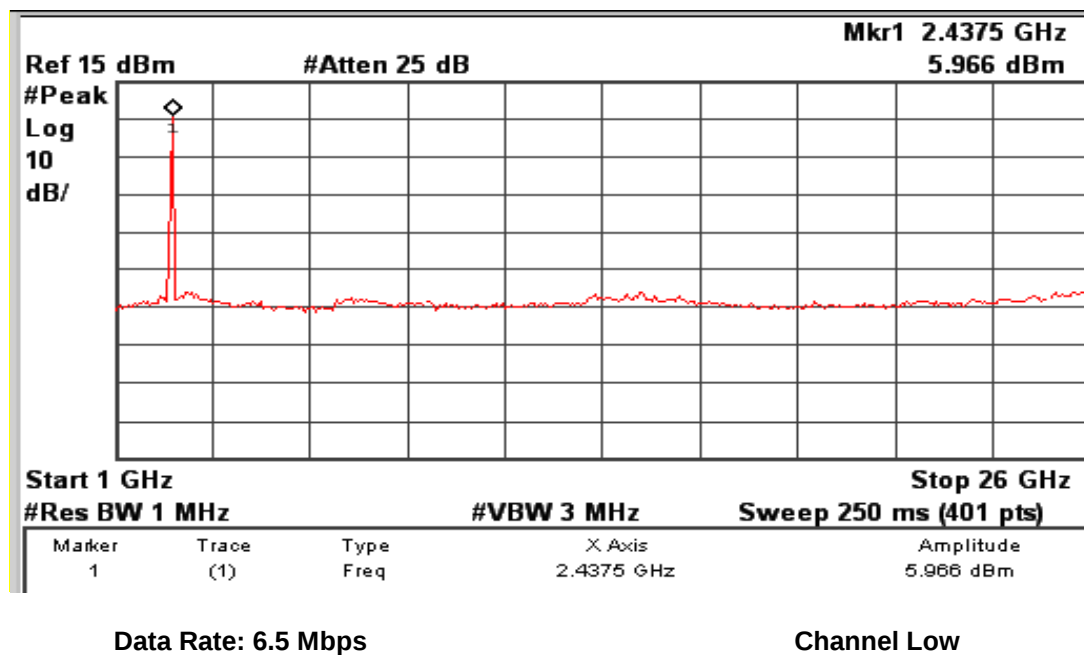
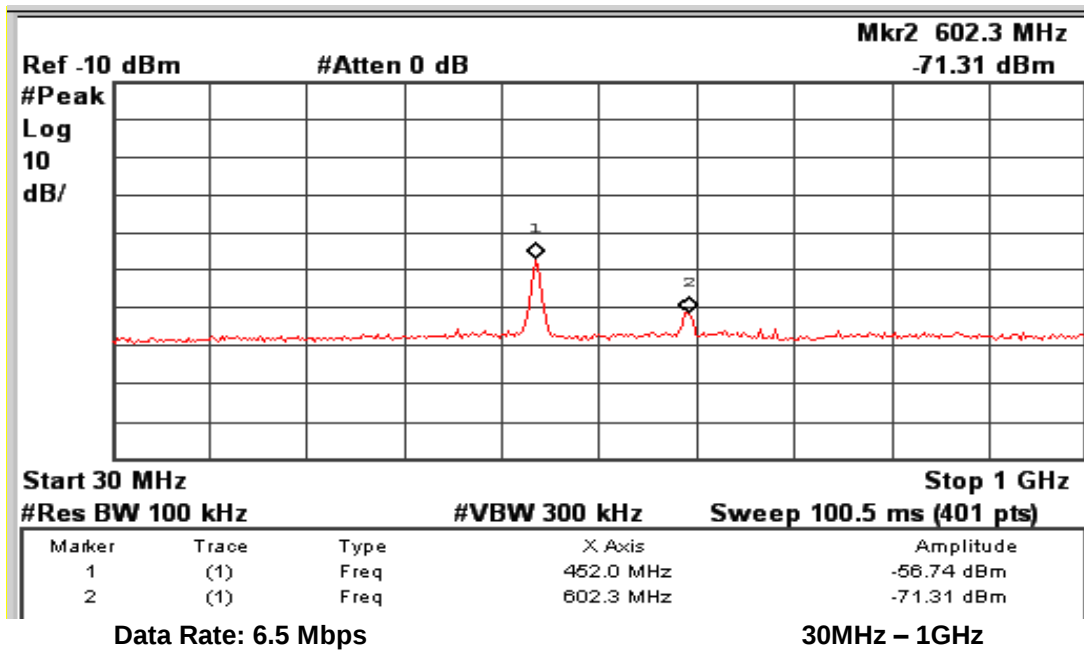


Data Rate: 54Mbps

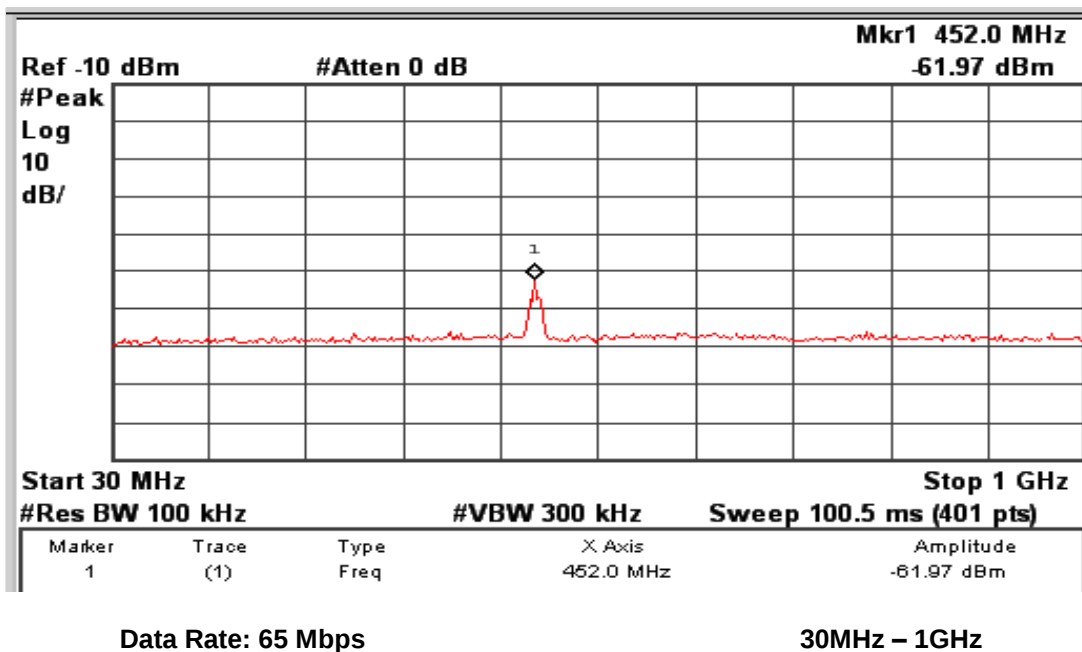
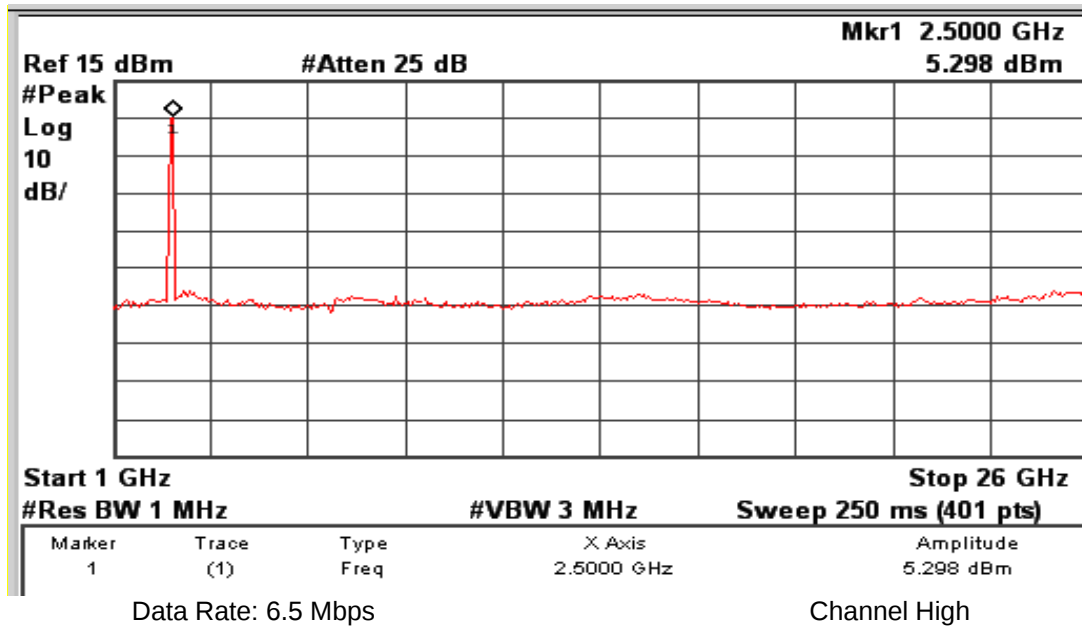
30MHz – 1GHz

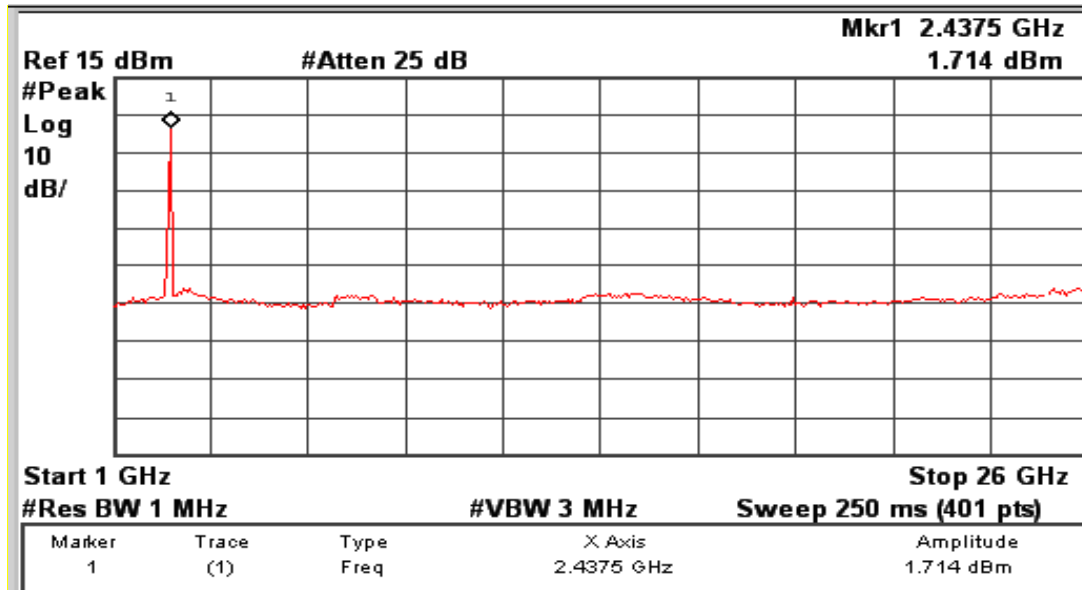
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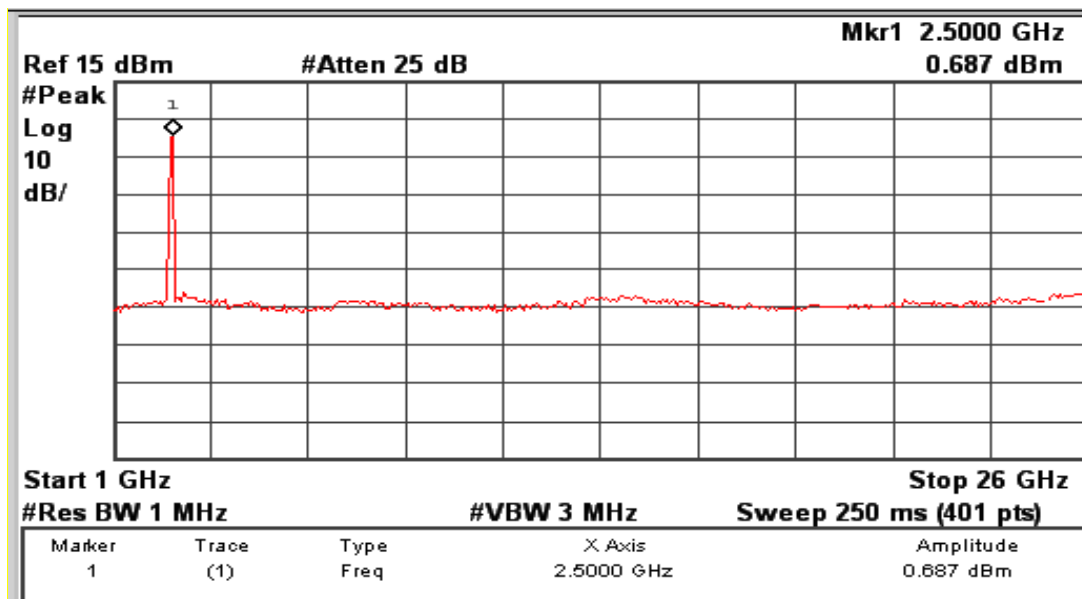
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Data Rate: 65 Mbps

Channel Low



Data Rate: 65 Mbps

Channel High

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**Spurious Radiated Emissions and**

**Restricted Bands of Operation**

**Section 15.209 and 15.205**

**Result**

**Pass**

|                      |                                                               |
|----------------------|---------------------------------------------------------------|
| Test Specification   | FCC Part 15 Section 15.209 & 15.205                           |
| Test Method          | ANSI C63.4-2003                                               |
| Measurement Location | Semi Anechoic Chamber                                         |
| Measuring Distance   | 3m                                                            |
| Detection            | QP for frequency below 1GHz, Average for frequency above 1GHz |
| Requirement          | As per the limits mentioned in the below table                |

**Limit for Radiated Emission of Section 15.209:**

| Frequency (MHz) | Field strength (μV/m) | Field strength (dBμV/m) | Distance of Measurement (m) |
|-----------------|-----------------------|-------------------------|-----------------------------|
| 0.009 – 0.490   | 2400/F(kHz)           | 48.50 – 13.80           | 300*                        |
| 0.490 – 1.705   | 24000/F(kHz)          | 33.80 – 23.00           | 30*                         |
| 1.705 -30       | 30                    | 29.54                   | 30*                         |
| 30-88           | 100                   | 40.0                    | 3                           |
| 88-216          | 150                   | 43.5                    | 3                           |
| 216-960         | 200                   | 46.0                    | 3                           |
| Above 960       | 500                   | 54.0                    | 3                           |

Remark: \* The limit shows in the table above of frequency range 0.009 – 0.490, 0.490 – 1.705 MHz and 1.705-30MHz is at 300 meter, 30 meter and 30 meter range respectively, which corresponds to 88.50 – 53.80, 53.80 – 43.00 and 49.5dBμV/m at 3m range by extrapolation calculation and the measurement of loop antenna.

The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9–90 kHz, 110–490 kHz and above 1000 MHz Radiated emission limits in these three bands are based on measurements employing an average detector.

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# Test result:

802.11b Protocol

| Data Rate (Mbps) | Channel | Polarization | Frequency (MHz)    | Measured Value (dBμV/m) | Limit (dBμV/m) | Margin (dBμV/m) |
|------------------|---------|--------------|--------------------|-------------------------|----------------|-----------------|
| 1                | Low     | V            | 31.22              | 34.03                   | 40             | -05.97          |
|                  |         |              | 46.38              | 26.82                   | 40             | -13.18          |
|                  |         |              | 2390 Pk            | 49.71                   | 74.00          | -24.29          |
|                  |         |              | 2390 Av            | 40.59                   | 54.00          | -13.41          |
|                  |         |              | 2412 Pk            | 100.02                  | *              | -               |
|                  |         |              | 2412 Av            | 97.64                   | *              | -               |
|                  |         |              | 4824.62 Pk         | 59.04                   | 74.00          | -14.96          |
|                  |         |              | 4823.84 Av         | 49.43                   | 54.00          | -04.57          |
|                  |         | H            | 99.98              | 23.50                   | 43.50          | -20.00          |
|                  |         |              | 2390 Pk            | 48.47                   | 74.00          | -25.53          |
|                  |         |              | 2390Av             | 40.63                   | 54.00          | -13.37          |
|                  |         |              | 2412 Pk            | 100.35                  | *              | -               |
|                  |         |              | 2412 Av            | 97.93                   | *              | -               |
|                  |         |              | No Harmonics Found |                         | 74.00          | -               |
|                  |         |              |                    |                         | 54.00          | -               |
|                  | Mid     | V            | 31.22              | 33.12                   | 40             | -06.88          |
|                  |         |              | 46.38              | 25.25                   | 40             | -14.75          |
|                  |         |              | 2437 Pk            | 99.85                   | *              | -               |
|                  |         |              | 2437 Av            | 97.62                   | *              | -               |
|                  |         |              | 4874.25 Pk         | 59.81                   | 74.00          | -14.19          |
|                  |         |              | 4874.16 Av         | 49.27                   | 54.00          | -04.73          |
|                  |         | H            | 99.98              | 23.31                   | 43.50          | -20.19          |
|                  |         |              | 2437 Pk            | 100.10                  | *              | -               |
|                  |         |              | 2437 Av            | 96.85                   | *              | -               |
|                  |         |              | No Harmonics Found |                         | 74.00          | -               |
|                  |         |              |                    |                         | 54.00          | -               |
|                  | High    | V            | 31.22              | 33.46                   | 40             | -06.54          |
|                  |         |              | 46.38              | 25.61                   | 40             | -14.39          |
|                  |         |              | 2462 Pk            | 99.76                   | *              | -               |
|                  |         |              | 2462 Av            | 97.31                   | *              | -               |
|                  |         |              | 2483.5 Pk          | 48.48                   | 74.00          | -25.52          |
|                  |         |              | 2483.5 Av          | 39.89                   | 54.00          | -14.11          |
|                  |         |              | 4924.61 Pk         | 60.13                   | 74.00          | -13.87          |
|                  |         |              | 4924.92 Av         | 49.00                   | 54.00          | -05.00          |
|                  |         | H            | 99.98              | 24.62                   | 43.50          | -18.88          |
|                  |         |              | 2462 Pk            | 100.03                  | *              | -               |
|                  |         |              | 2462 Av            | 97.62                   | *              | -               |
|                  |         |              | 2483.5 Pk          | 48.74                   | 74.00          | -25.26          |
|                  |         |              | 2483.5 Av          | 39.40                   | 54.00          | -14.60          |
|                  |         |              | No Harmonics Found |                         | 74.00          | -               |
|                  |         |              |                    |                         | 54.00          | -               |

\* - --> Fundamental Frequency

Pk--> Peak Detector

Av--> Average Detector

| Data Rate (Mbps) | Channel     | Polarization | Frequency (MHz)    | Measured Value (dBµV/m) | Limit (dBµV/m) | Margin (dBµV/m) |
|------------------|-------------|--------------|--------------------|-------------------------|----------------|-----------------|
| <b>11</b>        | <b>Low</b>  | <b>V</b>     | 31.22              | 34.03                   | 40.00          | -05.97          |
|                  |             |              | 46.38              | 26.82                   | 40.00          | -13.18          |
|                  |             |              | 2390 Pk            | 49.30                   | 74.00          | -24.70          |
|                  |             |              | 2390Av             | 38.18                   | 54.00          | -15.82          |
|                  |             |              | 2412 Pk            | 103.64                  | *              | -               |
|                  |             |              | 2412 Av            | 96.08                   | *              | -               |
|                  |             |              | 4824.26 Pk         | 59.00                   | 74.00          | -15.00          |
|                  |             |              | 4824.72 Av         | 46.74                   | 54.00          | -06.56          |
|                  |             | <b>H</b>     | 99.98              | 23.50                   | 43.50          | -20.00          |
|                  |             |              | 2390 Pk            | 48.72                   | 74.00          | -25.28          |
|                  |             |              | 2390Av             | 38.47                   | 54.00          | -15.53          |
|                  |             |              | 2412 Pk            | 103.79                  | *              | -               |
|                  |             |              | 2412 Av            | 96.28                   | *              | -               |
|                  |             |              | No Harmonics Found |                         | 74.00          | -               |
|                  |             |              |                    |                         | 54.00          | -               |
|                  | <b>Mid</b>  | <b>V</b>     | 31.22              | 33.12                   | 40.00          | -6.88           |
|                  |             |              | 46.38              | 25.25                   | 40.00          | -14.75          |
|                  |             |              | 2437 Pk            | 102.10                  | *              | -               |
|                  |             |              | 2437 Av            | 96.35                   | *              | -               |
|                  |             |              | 4874.61 Pk         | 59.42                   | 74.00          | -14.58          |
|                  |             |              | 4874.27 Av         | 47.49                   | 54.00          | -06.51          |
|                  |             | <b>H</b>     | 99.98              | 23.31                   | 43.50          | -20.19          |
|                  |             |              | 2412 Pk            | 102.34                  | *              | -               |
|                  |             |              | 2412 Av            | 95.40                   | *              | -               |
|                  |             |              | No Harmonics Found |                         | 74.00          | -               |
|                  |             |              |                    |                         | 54.00          | -               |
|                  | <b>High</b> | <b>V</b>     | 31.22              | 33.46                   | 40.00          | -06.54          |
|                  |             |              | 46.38              | 25.61                   | 40.00          | -14.39          |
|                  |             |              | 2462 Pk            | 103.00                  | *              | -               |
|                  |             |              | 2462 Av            | 95.41                   | *              | -               |
|                  |             |              | 2483.5 Pk          | 48.63                   | 74.00          | -25.37          |
|                  |             |              | 2483.5 Av          | 37.19                   | 54.00          | -16.81          |
|                  |             |              | 4924.62 Pk         | 59.98                   | 74.00          | -14.02          |
|                  |             |              | 4924.81 Av         | 47.55                   | 54.00          | -06.45          |
|                  |             | <b>H</b>     | 99.98              | 24.62                   | 43.50          | -18.88          |
|                  |             |              | 2462 Pk            | 104.86                  | *              | -               |
|                  |             |              | 2462 Av            | 96.99                   | *              | -               |
|                  |             |              | 2483.5 Pk          | 49.79                   | 74.00          | -24.21          |
|                  |             |              | 2483.5 Av          | 38.84                   | 54.00          | -15.16          |
|                  |             |              | No Harmonics Found |                         | 74.00          | -               |
|                  |             |              |                    |                         | 54.00          | -               |

\* - --> Fundamental Frequency  
Pk--> Peak Detector  
Av--> Average Detector

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802.11g/n Protocol  
Test Results

| Data Rate (Mbps) | Channel | Polarization | Frequency (MHz) | Measured Value (dBμV/m) | Limit (dBμV/m) | Margin (dBμV/m) |
|------------------|---------|--------------|-----------------|-------------------------|----------------|-----------------|
| 6                | Low     | V            | 2390 (Pk)       | 63.69                   | 74             | -10.31          |
|                  |         |              | 2390(Av)        | 44.04                   | 54             | -9.96           |
|                  |         |              | 2412(pk)        | 98.35                   | *              | -               |
|                  |         |              | 2412(Av)        | 89.6                    | *              | -               |
|                  |         |              | 4824(pk)        | 50.03                   | 74             | -23.97          |
|                  |         |              | 4824(Av)        | 36.28                   | 54             | -17.72          |
|                  |         | H            | 2390 (Pk)       | 66.9                    | 74             | -7.1            |
|                  |         |              | 2390(Av)        | 45.52                   | 54             | -8.48           |
|                  |         |              | 2412(pk)        | 99.59                   | *              | -               |
|                  |         |              | 2412(Av)        | 90.5                    | *              | -               |
|                  |         |              | 4824(pk)        | 50.38                   | 74             | -23.62          |
|                  |         |              | 4824(Av)        | 37.38                   | 54             | -16.62          |
|                  | Mid     | V            | 2437(pk)        | 98.92                   | *              | -               |
|                  |         |              | 2437(Av)        | 89.75                   | *              | -               |
|                  |         |              | 4874(pk)        | 48.25                   | 74             | -25.75          |
|                  |         |              | 4874(Av)        | 35.21                   | 54             | -18.79          |
|                  |         | H            | 2437(pk)        | 100.25                  | *              | -               |
|                  |         |              | 2437(Av)        | 90.36                   | *              | -               |
|                  |         |              | 4874(pk)        | 48.76                   | 74             | -25.24          |
|                  |         |              | 4874(Av)        | 36.1                    | 54             | -17.9           |
|                  | High    | V            | 2462(Pk)        | 99.38                   | *              | -               |
|                  |         |              | 2462(Av)        | 90.22                   | *              | -               |
|                  |         |              | 2483.5(Pk)      | 61.83                   | 74             | -12.17          |
|                  |         |              | 2483.5(Av)      | 41.79                   | 54             | -12.21          |
|                  |         |              | 4924(Pk)        | 49.35                   | 74             | -24.65          |
|                  |         |              | 4924(Av)        | 36.52                   | 54             | -17.48          |
|                  |         | H            | 2462(Pk)        | 101.45                  | *              | -               |
|                  |         |              | 2462(Av)        | 92.3                    | *              | -               |
|                  |         |              | 2483.5(Pk)      | 59.92                   | 74             | -14.08          |
|                  |         |              | 2483.5(Av)      | 42.35                   | 54             | -11.65          |
|                  |         |              | 4924(Pk)        | 50.83                   | 74             | -23.17          |
|                  |         |              | 4924(Av)        | 37.97                   | 54             | -16.03          |
| 24               | Low     | V            | 2390 (Pk)       | 50.08                   | 74             | -23.92          |
|                  |         |              | 2390(Av)        | 35.16                   | 54             | -18.84          |
|                  |         |              | 2412(pk)        | 96.63                   | *              | -               |
|                  |         |              | 2412(Av)        | 85.76                   | *              | -               |
|                  |         |              | 4824(pk)        | 47.56                   | 74             | -26.44          |
|                  |         |              | 4824(Av)        | 34.58                   | 54             | -19.42          |

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|    |      |   |            |       |    |        |
|----|------|---|------------|-------|----|--------|
|    |      | H | 2390 (Pk)  | 49.58 | 74 | -24.42 |
|    |      |   | 2390(Av)   | 35.51 | 54 | -18.49 |
|    |      |   | 2412(pk)   | 97.04 | *  | -      |
|    |      |   | 2412(Av)   | 86.37 | *  | -      |
|    |      |   | 4824(pk)   | 48.12 | 74 | -25.88 |
|    |      |   | 4824(Av)   | 35.06 | 54 | -18.94 |
|    | Mid  | V | 2437(pk)   | 97.12 | *  | -      |
|    |      |   | 2437(Av)   | 86.35 | *  | -      |
|    |      |   | 4874(pk)   | 48.92 | 74 | -25.08 |
|    |      |   | 4874(Av)   | 36.12 | 54 | -17.88 |
|    |      | H | 2437(pk)   | 97.98 | *  | -      |
|    |      |   | 2437(Av)   | 87.65 | *  | -      |
|    |      |   | 4874(pk)   | 48.31 | 74 | -25.69 |
|    |      |   | 4874(Av)   | 35.6  | 54 | -18.4  |
|    | High | V | 2462(Pk)   | 97.59 | *  | -      |
|    |      |   | 2462(Av)   | 87    | *  | -      |
|    |      |   | 2483.5(Pk) | 54.84 | 74 | -19.16 |
|    |      |   | 2483.5(Av) | 40.41 | 54 | -13.59 |
|    |      |   | 4924(Pk)   | 49.24 | 74 | -24.76 |
|    |      |   | 4924(Av)   | 36.42 | 54 | -17.58 |
|    |      | H | 2462(Pk)   | 98.85 | *  | -      |
|    |      |   | 2462(Av)   | 88.51 | *  | -      |
|    |      |   | 2483.5(Pk) | 55.12 | 74 | -18.88 |
|    |      |   | 2483.5(Av) | 40.87 | 54 | -13.13 |
|    |      |   | 4924(Pk)   | 50.26 | 74 | -23.74 |
|    |      |   | 4924(Av)   | 36.97 | 54 | -17.03 |
| 54 | Low  | V | 2390 (Pk)  | 52.6  | 74 | -21.4  |
|    |      |   | 2390(Av)   | 36.7  | 54 | -17.3  |
|    |      |   | 2412(pk)   | 95.19 | *  | -      |
|    |      |   | 2412(Av)   | 83.77 | *  | -      |
|    |      |   | 4824(pk)   | 49.43 | 74 | -24.57 |
|    |      |   | 4824(Av)   | 36.39 | 54 | -17.61 |
|    |      | H | 2390 (Pk)  | 53.33 | 74 | -20.67 |
|    |      |   | 2390(Av)   | 37.62 | 54 | -16.38 |
|    |      |   | 2412(pk)   | 95.62 | *  | -      |
|    |      |   | 2412(Av)   | 84.59 | *  | -      |
|    |      |   | 4824(pk)   | 49.52 | 74 | -24.48 |
|    |      |   | 4824(Av)   | 36.4  | 54 | -17.6  |
|    | Mid  | V | 2437(pk)   | 95.86 | *  | -      |
|    |      |   | 2437(Av)   | 84.48 | *  | -      |
|    |      |   | 4874(pk)   | 47.98 | 74 | -26.02 |
|    |      |   | 4874(Av)   | 35.31 | 54 | -18.69 |
|    |      | H | 2437(pk)   | 96.82 | *  | -      |

|     |      |   |            |        |    |        |
|-----|------|---|------------|--------|----|--------|
|     |      |   | 2437(Av)   | 85.36  | *  | -      |
|     |      |   | 4874(pk)   | 49.22  | 74 | -24.78 |
|     |      |   | 4874(Av)   | 36.46  | 54 | -17.54 |
|     | High | V | 2462(Pk)   | 96.01  | *  | -      |
|     |      |   | 2462(Av)   | 84.36  | *  | -      |
|     |      |   | 2483.5(Pk) | 53.87  | 74 | -20.13 |
|     |      |   | 2483.5(Av) | 38.5   | 54 | -15.5  |
|     |      |   | 4924(Pk)   | 48.18  | 74 | -25.82 |
|     |      |   | 4924(Av)   | 35.13  | 54 | -18.87 |
|     |      | H | 2462(Pk)   | 97.81  | *  | -      |
|     |      |   | 2462(Av)   | 86.23  | *  | -      |
|     |      |   | 2483.5(Pk) | 54.02  | 74 | -19.98 |
|     |      |   | 2483.5(Av) | 39.25  | 54 | -14.75 |
|     |      |   | 4924(Pk)   | 49.35  | 74 | -24.65 |
|     |      |   | 4924(Av)   | 36.32  | 54 | -17.68 |
| 6.5 | Low  | V | 2390 (Pk)  | 64.58  | 74 | -9.42  |
|     |      |   | 2390(Av)   | 42.08  | 54 | -11.92 |
|     |      |   | 2412(pk)   | 97.4   | *  | -      |
|     |      |   | 2412(Av)   | 88.67  | *  | -      |
|     |      |   | 4824(pk)   | 49.5   | 74 | -24.5  |
|     |      |   | 4824(Av)   | 36.08  | 54 | -17.92 |
|     |      | H | 2390 (Pk)  | 61.86  | 74 | -12.14 |
|     |      |   | 2390(Av)   | 42.08  | 54 | -11.92 |
|     |      |   | 2412(pk)   | 97.69  | *  | -      |
|     |      |   | 2412(Av)   | 88.88  | *  | -      |
|     |      |   | 4824(pk)   | 49.6   | 74 | -24.4  |
|     |      |   | 4824(Av)   | 36.84  | 54 | -17.16 |
|     | Mid  | V | 2437(pk)   | 98.06  | *  | -      |
|     |      |   | 2437(Av)   | 88.92  | *  | -      |
|     |      |   | 4874(pk)   | 48.32  | 74 | -25.68 |
|     |      |   | 4874(Av)   | 36.17  | 54 | -17.83 |
|     |      | H | 2437(pk)   | 99.12  | *  | -      |
|     |      |   | 2437(Av)   | 89.26  | *  | -      |
|     |      |   | 4874(pk)   | 49.46  | 74 | -24.54 |
|     |      |   | 4874(Av)   | 36.48  | 54 | -17.52 |
|     | High | V | 2462(Pk)   | 98.63  | *  | -      |
|     |      |   | 2462(Av)   | 89.11  | *  | -      |
|     |      |   | 2483.5(Pk) | 59.09  | 74 | -14.91 |
|     |      |   | 2483.5(Av) | 41.77  | 54 | -12.23 |
|     |      |   | 4924(Pk)   | 48.3   | 74 | -25.7  |
|     |      |   | 4924(Av)   | 36.47  | 54 | -17.53 |
|     |      | H | 2462(Pk)   | 100.04 | *  | -      |
|     |      |   | 2462(Av)   | 90.99  | *  | -      |

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|    |      |   |            |       |    |        |
|----|------|---|------------|-------|----|--------|
| 39 | Low  | V | 2483.5(Pk) | 56.89 | 74 | -17.11 |
|    |      |   | 2483.5(Av) | 42.37 | 54 | -11.63 |
|    |      |   | 4924(Pk)   | 50.13 | 74 | -23.87 |
|    |      |   | 4924(Av)   | 36.87 | 54 | -17.13 |
|    |      |   | 2390 (Pk)  | 59.09 | 74 | -14.91 |
|    |      |   | 2390(Av)   | 41.06 | 54 | -12.94 |
|    |      | H | 2412(pk)   | 96.87 | *  | -      |
|    |      |   | 2412(Av)   | 85.83 | *  | -      |
|    |      |   | 4824(pk)   | 49.45 | 74 | -24.55 |
|    |      |   | 4824(Av)   | 36.28 | 54 | -17.72 |
|    |      |   | 2390 (Pk)  | 60.7  | 74 | -13.3  |
|    |      |   | 2390(Av)   | 41.26 | 54 | -12.74 |
| 65 | Mid  | V | 2412(pk)   | 97.94 | *  | -      |
|    |      |   | 2412(Av)   | 86.35 | *  | -      |
|    |      |   | 4824(pk)   | 49.72 | 74 | -24.28 |
|    |      |   | 4824(Av)   | 36.64 | 54 | -17.36 |
|    |      | H | 2437(pk)   | 97.15 | *  | -      |
|    |      |   | 2437(Av)   | 85.98 | *  | -      |
|    |      |   | 4874(pk)   | 48.76 | 74 | -25.24 |
|    |      |   | 4874(Av)   | 36.35 | 54 | -17.65 |
|    | High | V | 2437(pk)   | 98.28 | *  | -      |
|    |      |   | 2437(Av)   | 87.02 | *  | -      |
|    |      |   | 4874(pk)   | 49.16 | 74 | -24.84 |
|    |      |   | 4874(Av)   | 35.25 | 54 | -18.75 |
|    |      | H | 2462(Pk)   | 97.5  | *  | -      |
|    |      |   | 2462(Av)   | 86.07 | *  | -      |
|    |      |   | 2483.5(Pk) | 56.94 | 74 | -17.06 |
|    |      |   | 2483.5(Av) | 40.03 | 54 | -13.97 |
|    |      |   | 4924(Pk)   | 48.86 | 74 | -25.14 |
|    |      |   | 4924(Av)   | 36.05 | 54 | -17.95 |
|    |      |   | 2462(Pk)   | 98.76 | *  | -      |
|    |      |   | 2462(Av)   | 87.78 | *  | -      |
|    |      |   | 2483.5(Pk) | 56.37 | 74 | -17.63 |
|    |      |   | 2483.5(Av) | 42.24 | 54 | -11.76 |
|    |      |   | 4924(Pk)   | 49.15 | 74 | -24.85 |
|    |      |   | 4924(Av)   | 35.85 | 54 | -18.15 |
| 65 | Low  | V | 2390 (Pk)  | 50.44 | 74 | -23.56 |
|    |      |   | 2390(Av)   | 37.68 | 54 | -16.32 |
|    |      |   | 2412(pk)   | 93.6  | *  | -      |
|    |      |   | 2412(Av)   | 82.32 | *  | -      |
|    |      |   | 4824(pk)   | 49.35 | 74 | -24.65 |
|    |      |   | 4824(Av)   | 36.05 | 54 | -17.95 |
|    |      | H | 2390 (Pk)  | 51.02 | 74 | -22.98 |

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|  |      |   |            |       |    |        |
|--|------|---|------------|-------|----|--------|
|  |      |   | 2390(Av)   | 37.87 | 54 | -16.13 |
|  |      |   | 2412(pk)   | 94.25 | *  | -      |
|  |      |   | 2412(Av)   | 83.02 | *  | -      |
|  |      |   | 4824(pk)   | 49.05 | 74 | -24.95 |
|  |      |   | 4824(Av)   | 36.25 | 54 | -17.75 |
|  | Mid  | V | 2437(pk)   | 94.11 | *  | -      |
|  |      |   | 2437(Av)   | 82.86 | *  | -      |
|  |      |   | 4874(pk)   | 49.41 | 74 | -24.59 |
|  |      |   | 4874(Av)   | 36.19 | 54 | -17.81 |
|  |      | H | 2437(pk)   | 95.58 | *  | -      |
|  |      |   | 2437(Av)   | 84.33 | *  | -      |
|  |      |   | 4874(pk)   | 49.52 | 74 | -24.48 |
|  |      |   | 4874(Av)   | 37.36 | 54 | -16.64 |
|  | High | V | 2462(Pk)   | 94.71 | *  | -      |
|  |      |   | 2462(Av)   | 83.14 | *  | -      |
|  |      |   | 2483.5(Pk) | 51.62 | 74 | -22.38 |
|  |      |   | 2483.5(Av) | 39.06 | 54 | -14.94 |
|  |      |   | 4924(Pk)   | 49.66 | 74 | -24.34 |
|  |      |   | 4924(Av)   | 36.49 | 54 | -17.51 |
|  |      | H | 2462(Pk)   | 96.39 | *  | -      |
|  |      |   | 2462(Av)   | 84.93 | *  | -      |
|  |      |   | 2483.5(Pk) | 51.26 | 74 | -22.74 |
|  |      |   | 2483.5(Av) | 39.33 | 54 | -14.67 |
|  |      |   | 4924(Pk)   | 49.04 | 74 | -24.96 |
|  |      |   | 4924(Av)   | 36.52 | 54 | -16.78 |

\* - --> Fundamental Frequency

Pk--> Peak Detector

Av--> Average Detector

**Result****Pass**

Test Specification : FCC Part 15 Section 15.207  
Test Method : ANSI C63.4-2003  
Testing Location : Screened room  
Measurement Bandwidth : 9kHz  
Frequency Range : 150kHz – 30MHz  
Supply Voltage : 110 Volt 60Hz AC

**Note:** The Product was tested with the Power adaptor with model No. WA-10L05RU by Asian Power Devices Inc.

**Limit of section 15.207**

| Frequency of emission<br>(MHz) | QP Limit<br>(dB $\mu$ V) | AV Limit<br>(dB $\mu$ V/m) |
|--------------------------------|--------------------------|----------------------------|
| 0.15 – 0.5                     | 66 – 56*                 | 56 – 46*                   |
| 0.5 – 5                        | 56                       | 46                         |
| 5 – 30                         | 60                       | 50                         |

\* Decreases with the logarithm of the frequency

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Test Result:



Plot: Neutral

| EDIT PEAK LIST (Final Measurement Results) |           |            |   |                |
|--------------------------------------------|-----------|------------|---|----------------|
| Trace1:                                    | FCC_B_QP  |            |   |                |
| Trace2:                                    | FCC_B_AV  |            |   |                |
| Trace3:                                    | ---       |            |   |                |
| TRACE                                      | FREQUENCY | LEVEL dBμV |   | DELTA LIMIT dB |
| 1 Quasi Peak                               | 334 kHz   | 45.23      | N | -14.11         |
| 1 Quasi Peak                               | 426 kHz   | 41.99      | N | -15.33         |
| 1 Quasi Peak                               | 154 kHz   | 49.21      | N | -16.56         |
| 1 Quasi Peak                               | 274 kHz   | 44.33      | N | -16.66         |
| 1 Quasi Peak                               | 494 kHz   | 38.41      | N | -17.69         |
| 1 Quasi Peak                               | 706 kHz   | 35.85      | N | -20.14         |
| 2 Average                                  | 326 kHz   | 28.79      | N | -20.75         |
| 1 Quasi Peak                               | 850 kHz   | 35.21      | N | -20.78         |
| 2 Average                                  | 154 kHz   | 34.22      | N | -21.55         |
| 2 Average                                  | 258 kHz   | 29.68      | N | -21.81         |
| 2 Average                                  | 494 kHz   | 23.78      | N | -22.31         |
| 2 Average                                  | 378 kHz   | 25.09      | N | -23.23         |
| 2 Average                                  | 190 kHz   | 29.69      | N | -24.34         |
| 1 Quasi Peak                               | 1.642 MHz | 29.96      | N | -26.03         |
| 2 Average                                  | 226 kHz   | 25.68      | N | -26.90         |
| 1 Quasi Peak                               | 8.334 MHz | 29.29      | N | -30.70         |

Table: Neutral



Plot: Line

| EDIT PEAK LIST (Final Measurement Results) |           |            |        |          |
|--------------------------------------------|-----------|------------|--------|----------|
| Trace1:                                    | FCC_B_QP  |            |        |          |
| Trace2:                                    | FCC_B_AV  |            |        |          |
| Trace3:                                    | ---       |            |        |          |
| TRACE                                      | FREQUENCY | LEVEL dBμV | DELTA  | LIMIT dB |
| 2 Average                                  | 3.842 MHz | 34.86 L1   | -11.13 |          |
| 2 Average                                  | 1.922 MHz | 32.02 L1   | -13.97 |          |
| 1 Quasi Peak                               | 514 kHz   | 41.50 L1   | -14.49 |          |
| 2 Average                                  | 518 kHz   | 30.99 L1   | -15.00 |          |
| 2 Average                                  | 386 kHz   | 32.87 L1   | -15.27 |          |
| 1 Quasi Peak                               | 338 kHz   | 42.84 L1   | -16.41 |          |
| 1 Quasi Peak                               | 450 kHz   | 40.21 L1   | -16.65 |          |
| 1 Quasi Peak                               | 250 kHz   | 44.88 L1   | -16.87 |          |
| 1 Quasi Peak                               | 186 kHz   | 47.02 L1   | -17.18 |          |
| 2 Average                                  | 322 kHz   | 32.30 L1   | -17.35 |          |
| 1 Quasi Peak                               | 1.066 MHz | 38.09 L1   | -17.91 |          |
| 1 Quasi Peak                               | 166 kHz   | 47.21 L1   | -17.93 |          |
| 2 Average                                  | 5.614 MHz | 30.94 L1   | -19.05 |          |
| 1 Quasi Peak                               | 1.758 MHz | 36.56 L1   | -19.43 |          |
| 2 Average                                  | 262 kHz   | 31.31 L1   | -20.05 |          |
| 1 Quasi Peak                               | 5.762 MHz | 39.58 L1   | -20.41 |          |
| 1 Quasi Peak                               | 150 kHz   | 45.39 L1   | -20.60 |          |
| 1 Quasi Peak                               | 7.298 MHz | 37.34 L1   | -22.65 |          |
| 2 Average                                  | 186 kHz   | 31.21 L1   | -23.00 |          |
| 2 Average                                  | 166 kHz   | 30.48 L1   | -24.67 |          |

Table: Line