



166 South Carter, Genoa City, WI 53128

|                |                             |
|----------------|-----------------------------|
| Company:       | Cambium Networks            |
| Model Tested:  | C024900P021A & C024900P031A |
| Report Number: | 19738                       |
| DLS Project:   | 6334                        |

## **Code of Federal Regulations 47 Part 15 – Radio Frequency Devices**

### **Subpart C – Intentional Radiators**

#### **Section 15.247**

Operation within the bands 902 - 928 MHz,  
2400 - 2483.5 MHz, 5725 - 5875 MHz,  
and 24.0 - 24.25 GHz.

**PART 1 - thru Section B6.0**

**THE FOLLOWING MEETS THE ABOVE TEST SPECIFICATION**

|                     |   |
|---------------------|---|
| Formal Name:        | EPMP Station 2.4 GHz OFDM MIMO Radio  |
| Kind of Equipment:  | Point-to-Point or Point-to-Multipoint Digital Transmission Transceiver  |
| Frequency Range:    | 2412 to 2462 MHz (20 MHz bandwidth)<br>2427 to 2452 MHz (40 MHz bandwidth)<br><i>Please see the Users' Manual for the channel specifications for use with the Dish antenna.</i> |
| Test Configuration: | Stand-alone   |
| Model Number(s):    | Connectorized: C024900P021A, C024900A021A<br>Integrated: C024900P031A, C024900C031A   |
| Model(s) Tested:    | Connectorized: C024900P021A<br>Integrated: C024900P031A   |
| Serial Number(s):   | Connectorized: MAC Address: 000456C2CE92<br>Integrated: MAC Address: 000456C2CE05   |
| Date of Tests:      | January to March, 2014 (non-consecutive days)   |
| Test Conducted For: | Cambium Networks<br>3800 Golf Road, Suite 360<br>Rolling Meadows, IL 60008, USA   |

**NOTICE:** “This test report relates only to the items tested and must not be used by the client to claim product endorsement by NVLAP or any agency of the U.S. Government”. Please see the "Description of Test Sample" page listed inside of this report.

© Copyright 1983 – 2014, D.L.S. Electronic Systems, Inc.

#### **COPYRIGHT NOTICE**

This report must not be reproduced (except in full), without the approval of D.L.S. Electronic Systems, Inc.



166 South Carter, Genoa City, WI 53128

Company:  
Model Tested:  
Report Number:  
DLS Project:

Cambium Networks  
C024900P021A & C024900P031A  
19738  
6334

## SIGNATURE PAGE

Tested By:

Craig Brandt  
Senior Test Engineer

Reviewed By:

William Stumpf  
OATS Manager

Approved By:

Brian Mattson  
General Manager



166 South Carter, Genoa City, WI 53128

Company:

Model Tested:

Report Number:

DLS Project:

Cambium Networks

C024900P021A & C024900P031A

19738

6334

## Table of Contents

|   |    |
|---|----|
| i. Cover Page.....  | 1  |
| ii. Signature Page.....   | 2  |
| iii. Table of Contents .....  | 3  |
| iv. NVLAP Certificate of Accreditation.....   | 5  |
| 1.0 Summary of Test Report .....  | 6  |
| 2.0 Introduction .....  | 7  |
| 3.0 Test Facilities .....   | 7  |
| 4.0 Description of Test Sample .....  | 7  |
| 5.0 Test Equipment.....   | 9  |
| 6.0 Test Arrangements .....   | 10 |
| 7.0 Test Conditions.....  | 10 |
| 8.0 Modifications Made To EUT for Compliance .....  | 11 |
| 9.0 Additional Descriptions.....  | 11 |
| 10.0 Results .....  | 11 |
| 11.0 Conclusion.....  | 11 |
| Appendix A – Test Photos.....   | 12 |
| Appendix B – Measurement Data .....   | 17 |
| B1.0 DTS Bandwidth – 6 dB bandwidth - Conducted .....                                       | 17 |
| B1.0a - with Omni Antenna .....   | 18 |
| B1.0b - w-Integral Patch using power settings from radiated output power measurements ..... | 24 |
| B2.0 Fundamental Emission Output Power - Conducted.....                                     | 30 |
| B2.0a - with Omni Antenna .....   | 31 |
| B2.0b - with Integral Patch Antenna .....   | 37 |
| B2.0c - with Sector Antenna .....   | 51 |
| B2.0d - with Panel Antenna.....   | 58 |
| B2.0e - with Dish Antenna .....   | 64 |
| B3.0 Fundamental Emission Output Power - Radiated with 12 dBi integral Patch antenna .....  | 70 |
| B3.0a – with Integral Patch Antenna only .....  | 71 |
| B4.0 Maximum Power Spectral Density – Conducted.....  | 85 |
| B4.0a – for Omni, Sector, Panel & Dish Antennas .....                                       | 86 |
| B4.0b – for Integral Patch Antenna .....  | 92 |
| B5.0 Maximum Unwanted Emission Levels (not in restricted bands) – Conducted .....           | 98 |
| B5.0a – with Omni Antenna, 20MHz Channel BW .....   | 99 |



166 South Carter, Genoa City, WI 53128

Company: Cambium Networks  
Model Tested: C024900P021A & C024900P031A  
Report Number: 19738  
DLS Project: 6334

|   |     |
|---|-----|
| B5.0b – with Omni Antenna, 40MHz Channel BW .....   | 114 |
| B5.0c – with Integral Patch Antenna, 20MHz Channel BW .....   | 129 |
| B5.0d – with Integral Patch Antenna, 40MHz Channel BW .....   | 149 |
| B5.0e – with Sector Antenna, 20MHz Channel BW .....   | 164 |
| B5.0f – with Sector Antenna, 40MHz Channel BW .....   | 184 |
| B5.0g – with Panel Antenna, 20MHz Channel BW .....  | 199 |
| B5.0h – with Panel Antenna, 40MHz Channel BW .....  | 214 |
| B5.0i – with Dish Antenna, 20MHz Channel BW .....   | 229 |
| B5.0j – with Dish Antenna, 40MHz Channel BW .....   | 244 |
| <br>  |     |
| B6.0 Maximum Unwanted Emission Levels – Conducted Operating Band-Edge .....   | 259 |
| B6.0a – with Omni Antenna .....   | 260 |
| B6.0b – with Integral Patch Antenna .....   | 266 |
| B6.0c – with Sector Antenna .....   | 274 |
| B6.0d – with Panel Antenna .....  | 280 |
| B6.0e – with Dish Antenna .....   | 286 |
| <br>  |     |
| B7.0 Maximum Unwanted Emission Levels into Restricted Frequency Bands - Radiated .....                                    | 292 |
| B7.0a – with Integrated Patch, 30 to 1000 MHz .....   | 293 |
| B7.0b – with Integrated Patch, 1 to 4.5 GHz, 20MHz Channel BW .....   | 299 |
| B7.0c – with Integrated Patch, 1 to 4.5 GHz, 40MHz Channel BW .....   | 315 |
| B7.0d – with Integrated Patch, 4.5 to 25 GHz .....  | 327 |
| <br>  |     |
| B8.0 Conducted Measurements for Radiated Restricted Band-Edge Compliance - for .....                                      | 328 |
| Sector, Panel, and Dish antennas .....  | 328 |
| B8.0a – with Omni Antenna, 20 MHz Channel BW .....  | 329 |
| B8.0b – with Omni Antenna, 40 MHz Channel BW .....  | 356 |
| B8.0c – with Sector Antenna, 20 MHz Channel BW .....  | 383 |
| B8.0d – with Sector Antenna, 40 MHz Channel BW .....  | 423 |
| B8.0e – with Panel Antenna .....  | 454 |
| B8.0f – with Dish Antenna .....   | 458 |
| <br>  |     |
| B9.0 Radiated Restricted Band-Edge Compliance - radiated with Omni & Patch Antennas .....                                 | 460 |
| B9.0a – with Omni Antenna .....   | 461 |
| B9.0b – with Integral Patch Antenna .....   | 485 |
| <br>  |     |
| B10.0 Conducted Measurements for Radiated Restricted Band-Edge Compliance - for Sector, Panel,<br>and Dish Antennas ..... | 509 |
| B10.0a – with Sector Antenna .....  | 510 |
| B10.0b – with Panel Antenna .....   | 542 |
| B10.0c – with Dish Antenna .....  | 574 |
| <br>  |     |
| B11.0 Duty Cycle of Test Unit .....   | 606 |
| <br>  |     |
| B12.0 AC Line Conducted Emissions .....   | 609 |



166 South Carter, Genoa City, WI 53128

Company:  
Model Tested:  
Report Number:  
DLS Project:

Cambium Networks  
C024900P021A & C024900P031A  
19738  
6334

United States Department of Commerce  
National Institute of Standards and Technology



## Certificate of Accreditation to ISO/IEC 17025:2005

NVLAP LAB CODE: 100276-0

**D.L.S. Electronic Systems, Inc.**  
Wheeling, IL

is accredited by the National Voluntary Laboratory Accreditation Program for specific services  
listed on the Scope of Accreditation, for:

### ELECTROMAGNETIC COMPATIBILITY AND TELECOMMUNICATIONS

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005.  
This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality  
management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).



*Mr. R. M. L.*

For the National Institute of Standards and Technology

2013-10-01 through 2014-09-30

Effective dates

NVLAP-01C (REV. 2009-01-28)



166 South Carter, Genoa City, WI 53128

Company: Cambium Networks  
 Model Tested: C024900P021A & C024900P031A  
 Report Number: 19738  
 DLS Project: 6334

## 1.0 Summary of Test Report

It was determined that the Cambium Networks EPMP Station 2.4 GHz OFDM MIMO Radio, Models C024900P021A & C024900P031A, complies with the requirements of CFR 47 Part 15 Subpart C Section 15.247.

### Applicable Technical Requirements Tested:

| Section               | Description  | Procedure   | Note | Compliant? |
|-----------------------|--|---|------|------------|
| 15.247(a)(2)          | DTS Bandwidth - 6 dB bandwidth - Conducted   | FCC Publication<br>KDB 558074 D01 DTS Meas<br>Guidance v03r01<br>Section 8.1 Option 1                     | 1    | Yes        |
| 15.247(b)(3) & (4)(i) | Fundamental Emission Output Power – Conducted  | FCC Publication<br>KDB 558074 D01 DTS Meas<br>Guidance v03r01<br>Section 9.2.3.1-AVGPM                    | 1    | Yes        |
| 15.247(b)(3) & (4)(i) | Fundamental Emission Output Power – Radiated with Integral Patch Antenna                                 | FCC Publication<br>KDB 558074 D01 DTS Meas<br>Guidance v03r01<br>Section 9.2.2.2-AVGSA-1                  | 2    | Yes        |
| 15.247(e)             | Maximum Power Spectral Density - Conducted   | FCC Publication<br>KDB 558074 D01 DTS Meas<br>Guidance v03r01<br>Section 10.3-AVGPSD-1                    | 1    | Yes        |
| 15.247(d)             | Maximum Unwanted Emission Levels (not in restricted bands) – Conducted                                   | FCC Publication<br>KDB 558074 D01 DTS Meas<br>Guidance v03r01<br>Section 11.0                             | 1    | Yes        |
| 15.247(d)             | Maximum Unwanted Emission Levels - Conducted Operating Band-Edge   | FCC Publication<br>KDB 558074 D01 DTS Meas<br>Guidance v03r01<br>Section 11.0                             | 1    | Yes        |
| 15.205                | Maximum Unwanted Emission Levels into Restricted Frequency Bands - Radiated                              | FCC Publication<br>KDB 558074 D01 DTS Meas<br>Guidance v03r01<br>Sections 12.0 & 12.1                     | 2    | Yes        |
| 15.205                | Conducted Measurements for Radiated Restricted Band Compliance - for Omni, Sector, Panel & Dish Antennas | FCC Publication<br>KDB 558074 D01 DTS Meas<br>Guidance v03r01<br>Sections 12.1, 12.2.2, 12.2.4 & 12.2.5.1 | 1    | Yes        |
| 15.205                | Radiated Restricted Band-Edge Compliance - Radiated with Omni & Integral Patch Antennas                  | FCC Publication<br>KDB 558074 D01 DTS Meas<br>Guidance v03r01<br>Sections 12.0 & 12.1                     | 2    | Yes        |
| 15.205                | Conducted Measurements for Radiated Restricted Band-Edge Compliance - for Sector, Panel & Dish Antennas  | FCC Publication<br>KDB 558074 D01 DTS Meas<br>Guidance v03r01<br>Sections 12.1 & 12.2.2                   | 1    | Yes        |
| 15.35(c)              | Duty Cycle of Test Unit  | ANSI C63.10-2009<br>Section 7.5   | 1    | NA         |
| 15.207                | AC Line Conducted Emissions  | ANSI C63.10-2009 Section 6.2  |      | Yes        |

Note 1: RF conducted measurement.

Note 2: Radiated emission measurement.



166 South Carter, Genoa City, WI 53128

|                |                             |
|----------------|-----------------------------|
| Company:       | Cambium Networks            |
| Model Tested:  | C024900P021A & C024900P031A |
| Report Number: | 19738                       |
| DLS Project:   | 6334                        |

## 2.0 Introduction

From January 20<sup>th</sup> through March 17<sup>th</sup>, 2014 the EPMP Station 2.4 GHz OFDM MIMO Radio, Models C024900P021A & C024900P031A, as provided from Cambium Networks, was tested to the requirements of CFR 47 Part 15 Subpart C Section 15.247. To meet these requirements, the procedures contained within this report were performed by personnel of D.L.S Electronic Systems, Inc.

## 3.0 Test Facilities

D.L.S. Electronic Systems, Inc. is a full service EMC/Safety Testing Laboratory accredited to ISO 17025. NVLAP Certificate and Scope can be viewed at <http://www.dlsemc.com/certificate>. Our facilities are registered with the FCC, Industry Canada, and VCCI.

### Wisconsin Test Facility:

D.L.S. Electronic Systems, Inc.  
166 S. Carter Street  
Genoa City, Wisconsin 53128

### Wheeling Test Facility:

D.L.S. Electronic Systems, Inc.  
1250 Peterson Drive  
Wheeling, IL 60090

## 4.0 Description of Test Sample

### Description:

Point-to-Point or Point-to-Multipoint 2.4 GHz DTS Transceiver with either integrated Patch (12 dBi) antenna, or connectorized with OMNI (8 dBi) or Sectorized (17dBi) or Panel (19 dBi) or Dish (25 dBi) antenna. 20 MHz or 40 MHz channel bandwidth. OFDM modulation.

### Type of Equipment / Frequency Range:

Stand-Alone / 2412 to 2462 MHz (20 MHz bandwidth)

2427 to 2452 MHz (40 MHz bandwidth)

Please see the Users' Manual for the channel specifications for use with the Dish antenna.

### Physical Dimensions of Equipment Under Test:

Connectorized: Length: 8.5 in. Width: 3 in. Height: 1 in.

Integrated: Length: 10 in. Width: 4 in. Height: 2 in.

### Power Source:

30 VDC (Power Over Ethernet to Radio)

120 Vac, 60 Hz using Power supply model: PSA-15M-300 (SM)

### Internal Frequencies:

940-1000kHz (Switching Power Supply Frequencies)

40 MHz, 25 MHz



166 South Carter, Genoa City, WI 53128

Company: Cambium Networks  
Model Tested: C024900P021A & C024900P031A  
Report Number: 19738  
DLS Project: 6334

### Transmit Frequencies Used For Test Purpose:

20 MHz Channel Bandwidth: Low channel: 2412 MHz  
Middle channel: 2437 MHz  
High channel: 2462 MHz

40 MHz Channel Bandwidth: Low channel: 2427 MHz  
Middle channel: 2437 MHz  
High channel: 2452 MHz  
High Channel with Dish antenna: 2447 MHz

### Type of Modulations:

OFDM: MCS15 (worst case) used for testing

### Description of Circuit Board(s) / Part Number:

|   |                                |
|---|--------------------------------|
| Cambium Networks PC Board - connectorized | P005354                        |
| Cambium Networks PC Board - integrated    | P005152                        |
| 8 dBi OMNI antenna                        | AFR-SP(2400-2500)-8-2A         |
| 12 dBi Patch antenna                      | integrated on PC Board P005152 |
| 17 dBi Sector antenna                     | Laird SKS240045-18-CA1         |
| 19 dBi Panel antenna                      | MA-WA25-DP19B                  |
| 25 dBi Dish antenna                       | MA-WP2556-DP12                 |
| Connector x 2                             | PMP090003                      |
| 1 dB cable x 2                            | LMR E203950                    |





166 South Carter, Genoa City, WI 53128

Company: Cambium Networks  
 Model Tested: C024900P021A & C024900P031A  
 Report Number: 19738  
 DLS Project: 6334

## 5.0 Test Equipment

A list of the equipment used can be found in the table below. All primary equipment was calibrated against known reference standards with a verified traceable path to NIST.

### D.L.S. Wisconsin

| Description          | Manufacturer       | Model Number             | Serial Number          | Frequency Range  | Cal Dates | Cal Due Dates |
|----------------------|--------------------|--------------------------|------------------------|------------------|-----------|---------------|
| Receiver             | Rohde & Schwarz    | ESI 40                   | 837808/005             | 20 Hz – 40 GHz   | 7-23-13   | 7-23-14       |
| LISN                 | Solar              | 9252-50-R-24-BNC         | 961019                 | 9 kHz – 30 MHz   | 5-24-13   | 5-24-14       |
| Filter- High-Pass    | SOLAR              | 7930-120                 | 090702                 | 120 kHz – 30 MHz | 1-3-14    | 1-3-15        |
| Limiter              | Electro-Metrics    | EM-7600                  | 706                    | 9 kHz – 30 MHz   | 1-3-14    | 1-3-15        |
| Preamp               | Miteq              | AMF-7D-01001800-22-10P   | 1809602                | 1GHz-18GHz       | 5-29-13   | 5-29-14       |
| Horn Antenna         | EMCO               | 3115                     | 9502-4451              | 1-18GHz          | 3-18-13   | 3-18-15       |
| Filter- High-Pass    | Q-Microwave        | 100462                   | 2                      | 4.2GHz-18GHz     | 5-28-13   | 5-28-14       |
| Preamp               | Miteq              | AMF-8B-180265-40-10P-H/S | 438727                 | 18GHz-26GHz      | 8-12-13   | 8-12-14       |
| Horn Antenna         | EMCO               | 3116                     | 2549                   | 18 – 40GHz       | 9-6-12    | 9-6-14        |
| High Pass Filter     | Planar             | CL22500-9000-CD-SS       | PF1229/0728            | 15-40 GHz        | 8-14-13   | 8-14-14       |
| 20 dB attenuator     | Aeroflex/weinschel | 75A-20-12                | 1071                   | DC – 40 GHz      | 8-14-13   | 8-14-14       |
| 10 dB attenuator     | Pasternack         | PE7014-10                | DLS#198                | DC – 18 GHz      | 3-16-13   | 3-16-14       |
| Preamplifier         | Rohde & Schwarz    | TS-PR10                  | 032001/005             | 9 kHz – 1 GHz    | 1-4-14    | 1-4-15        |
| Antenna              | EMCO               | 3104C                    | 97014785               | 20 MHz – 200 MHz | 8-22-12   | 8-22-14       |
| Antenna              | EMCO               | 3146                     | 97024895               | 200 MHz – 1 GHz  | 9-6-12    | 9-6-14        |
| Filter- Low-Pass     | Mini-Circuits      | VLFX1125                 | RUU92600920            | 30 - 1000 MHz    | 8-13-13   | 8-13-14       |
| Thermal Power Sensor | Rohde & Schwarz    | NRP-Z51                  | 1138.0005.03-104290-Wq | DC - 18GHz       | 12-12-13  | 12-12-14      |
| 20 dB attenuator     | Anritsu            | 42N50-20                 | 000451                 | DC – 18 GHz      | 3-16-13   | 3-16-14       |
| Spectrum Analyzer    | Agilent            | E4440A                   | MY46186619             | 3Hz - 26.5GHz    | 6-23-12   | 6-23-14       |



166 South Carter, Genoa City, WI 53128

|                |                             |
|----------------|-----------------------------|
| Company:       | Cambium Networks            |
| Model Tested:  | C024900P021A & C024900P031A |
| Report Number: | 19738                       |
| DLS Project:   | 6334                        |

## 6.0 Test Arrangements

### Radiated Emissions Measurement Arrangement:

All radiated emission measurements were performed at D.L.S. Electronic Systems, Inc. and set up according to ANSI C63.10-2009, unless otherwise noted. Description of procedures and measurements can be found in Appendix B – Measurement Data. See Appendix A for additional photos of the test set up.

Unless otherwise noted, the bandwidth of the measuring receiver / analyzer used during testing is shown below.

| Frequency Range   | Bandwidth (-6 dB) |
|-------------------|-------------------|
| 10 to 150 kHz     | 200 Hz            |
| 150 kHz to 30 MHz | 9 kHz             |
| 30 MHz to 1 GHz   | 120 kHz           |
| Above 1 GHz       | 1 MHz             |

### RF Conducted Emissions Measurement Arrangement:

All RF conducted emission measurements were performed at D.L.S. Electronic Systems, Inc. and set up according to FCC Publication KDB 558074 D01 DTS Meas Guidance v03r01 and ANSI C63.10-2009, unless otherwise noted. Description of procedures and measurements can be found in Appendix B – Measurement Data. See Appendix A for additional photos of the test set up.

## 7.0 Test Conditions

### Normal Test Conditions:

#### Temperature and Humidity:

72°F at 21% RH (or as noted on test data)

#### Supply Voltage:

30 VDC (Power Over Ethernet to Radio)  
120 Vac, 60 Hz using Phihong power supply model: PSA-15M-300 (SM)



166 South Carter, Genoa City, WI 53128

|                |                             |
|----------------|-----------------------------|
| Company:       | Cambium Networks            |
| Model Tested:  | C024900P021A & C024900P031A |
| Report Number: | 19738                       |
| DLS Project:   | 6334                        |

## 8.0 Modifications Made To EUT for Compliance

No modifications were needed for the OFDM transmitters.

## 9.0 Additional Descriptions

Mode of operation: Measurements were taken for MCS15 modulation (as worst case) at the lowest, middle, and highest channels of operation. Port 0 & Port 1 were tested. Port 1 was tested as representative of Port 0. Port 1 was equal to/or worst case over Port 0. 20 and 40 MHz channel bandwidths were tested. EUT was set to transmit continuously (at various power settings) with 100% duty cycle.

Tested in scanning and in transmitting modes of operation.  
The Ethernet communications cable was left unterminated. It is a setup & diagnostics port only.

Emission Designators: 20M0X1D, 40M0X1D

Please see the Users' Manual for the channel specifications for use with the Dish antenna.

## 10.0 Results

Measurements were performed in accordance with FCC Publication KDB 558074 D01 DTS Meas Guidance v03r01 and ANSI C63.10-2009. Graphical and tabular data can be found in Appendix B at the end of this report.

## 11.0 Conclusion

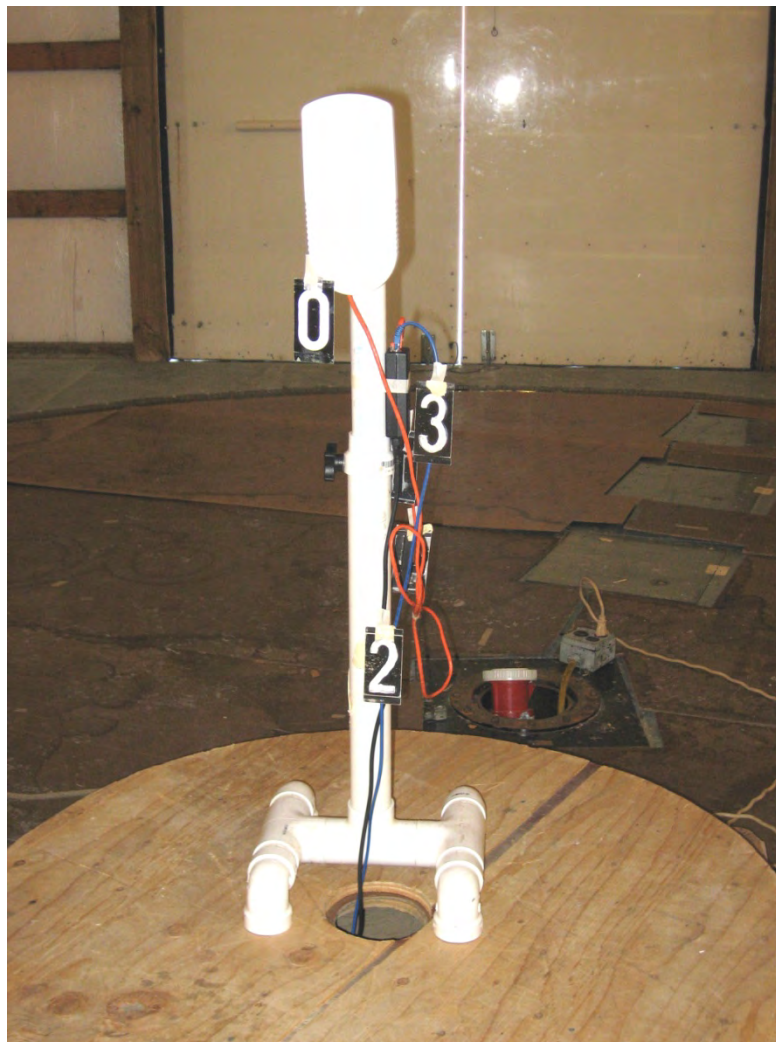
The EPMP Station 2.4 GHz OFDM MIMO Radio, Models C024900P021A & C024900P031A, as provided from Cambium Networks tested from January 20<sup>th</sup> to March 17<sup>th</sup>, 2014 **meets** the requirements of CFR 47 Part 15 Subpart C Section 15.247.

## Appendix A – Test Photos

### Photo Information and Test Setup:

- Item0: Cambium Networks EPMP Station 2.4 GHz OFDM MIMO Radio,  
Model C024900P021A or C024900P031A
- Item1: Philhong Power Supply PSA-15M-300(SM)
- Item2: Unshielded AC Power Cord to Power Supply - .9 meters long
- Item3: Unshielded CAT 5e Ethernet Cable - not terminated - 8 meters long
- Item4: Unshielded CAT 5e POE Cable - 1.5 meters long

### Radiated - Front, below 1 GHz



## Appendix A – Test Photos

### Radiated - Back, below 1 GHz







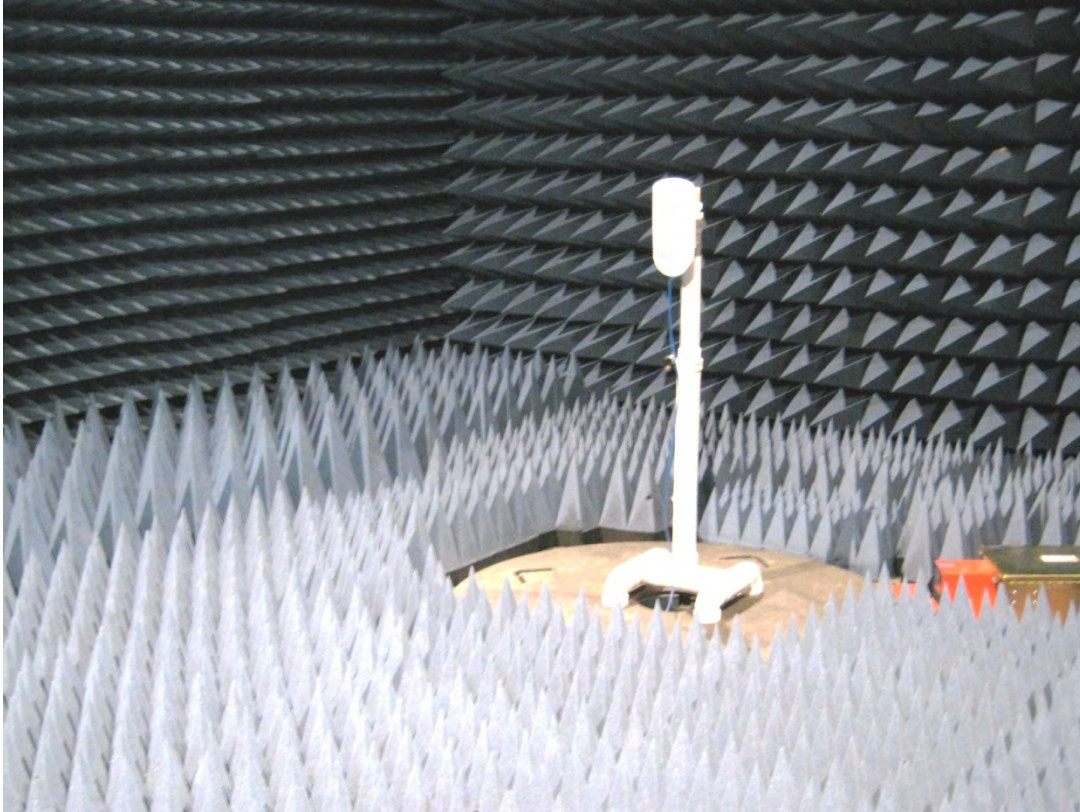
166 South Carter, Genoa City, WI 53128

Company:  
Model Tested:  
Report Number:  
DLS Project:

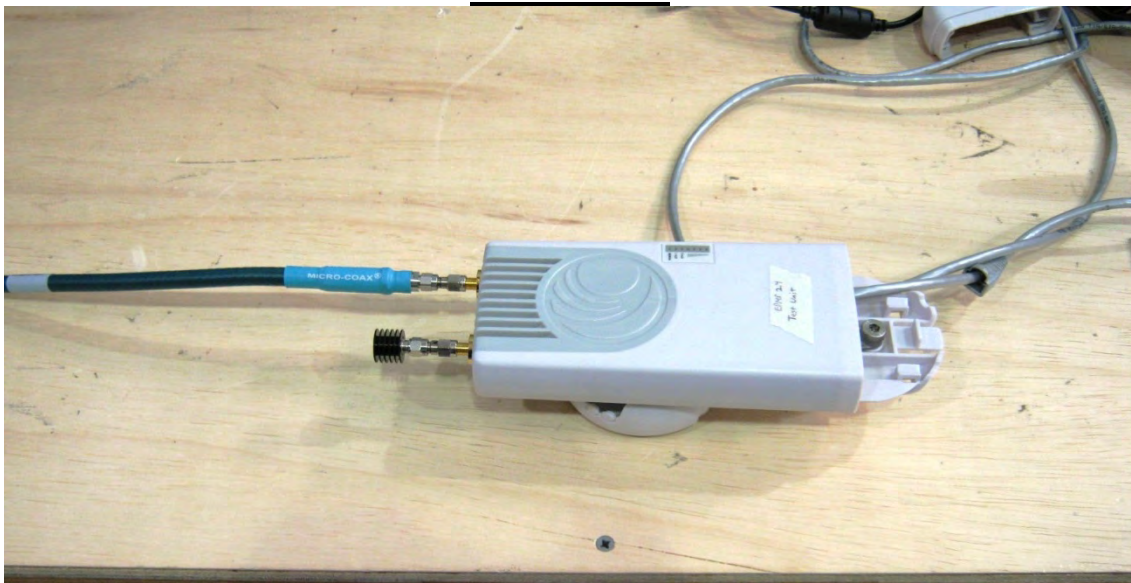
Cambium Networks  
C024900P021A & C024900P031A  
19738  
6334

## Appendix A – Test Photos

### Radiated - above 1 GHz



### RF Conducted





166 South Carter, Genoa City, WI 53128

Company:  
Model Tested:  
Report Number:  
DLS Project:

Cambium Networks  
C024900P021A & C024900P031A  
19738  
6334

## Appendix A – Test Photos

AC Line Conducted - Front







166 South Carter, Genoa City, WI 53128

Company:  
Model Tested:  
Report Number:  
DLS Project:

Cambium Networks  
C024900P021A & C024900P031A  
19738  
6334

## Appendix A – Test Photos

**AC Line Conducted - Back**







166 South Carter, Genoa City, WI 53128

|                |                             |
|----------------|-----------------------------|
| Company:       | Cambium Networks            |
| Model Tested:  | C024900P021A & C024900P031A |
| Report Number: | 19738                       |
| DLS Project:   | 6334                        |

## Appendix B – Measurement Data

### B1.0 DTS Bandwidth – 6 dB bandwidth - Conducted

**Rule Section:** FCC 15.247(a)(2)

**Test Procedure:** FCC KDB 558074 D01 DTS Meas Guidance v03r01 – *Guidance for Performing Compliance Measurements on Digital Transmission Systems (DTS) Operating Under §15.247*

Section 8.1 Option 1

**Description:** RBW = 100kHz  
VBW  $\geq 3 \times$  RBW  
Detector = Peak  
Trace mode = max hold  
Sweep = auto couple

Measure the maximum width of the emission between the lower and upper frequencies that measure 6 dB below the maximum level of the in-band emission.

Measurements were taken for OFDM MCS15 with 20 MHz and 40 MHz channel bandwidths at the low, middle and high channels of operation. EUT was set to transmit continuously with a 100% duty cycle.

Since output port 1 measured a slightly higher output power than port 0, measurements for this test were made on port 1 only.

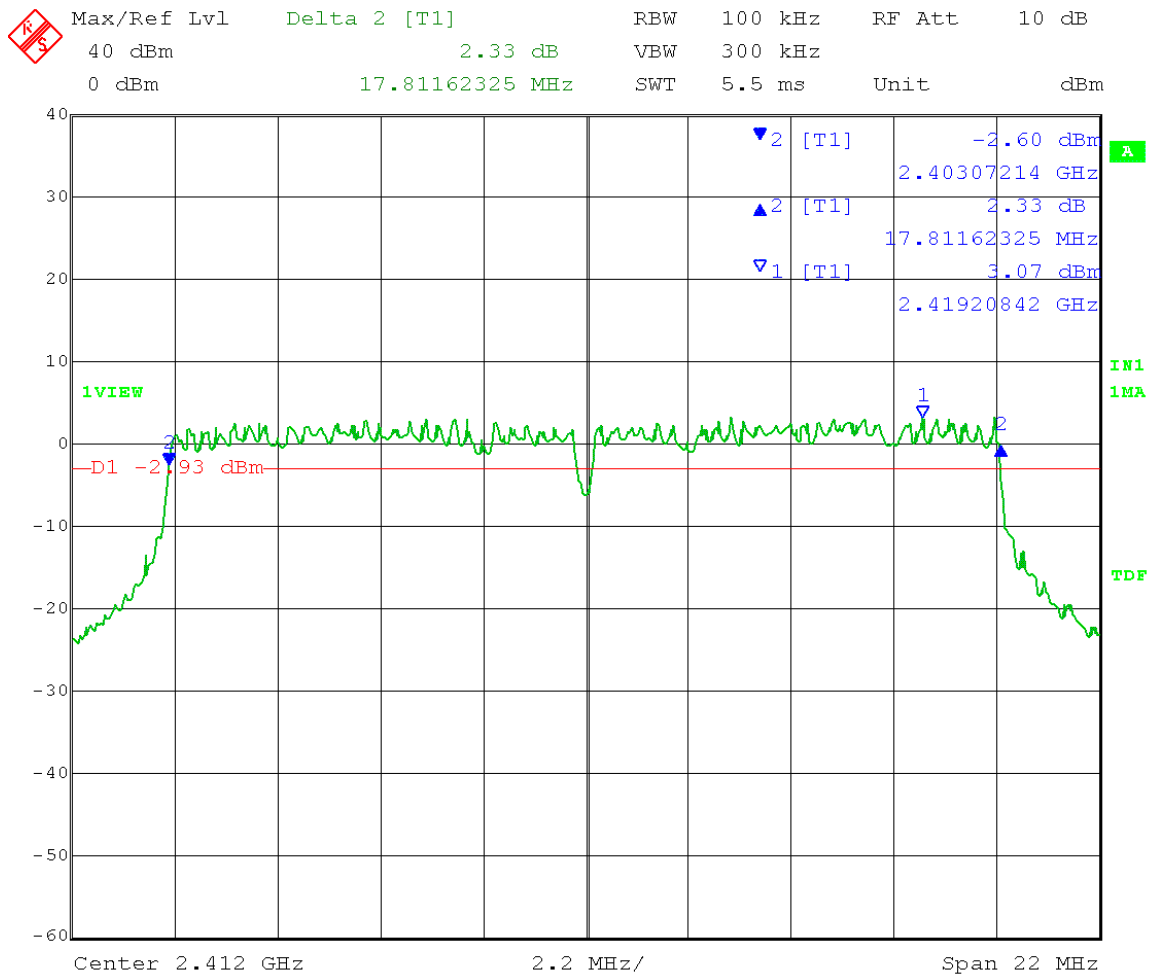
**Limit:** DTS Bandwidth shall be at least 500 kHz

**Results:** Passed

Test Date: 03-05-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Emission Bandwidth (6 dB) - Conducted  
Operator: Craig B

Comment: Low Channel: Transmit = 2.412 GHz  
Output power setting: 18 20 MHz channel BW  
Output port 1 Modulation: OFDM MCS15

6 dB Emission Bandwidth = 17.81 MHz

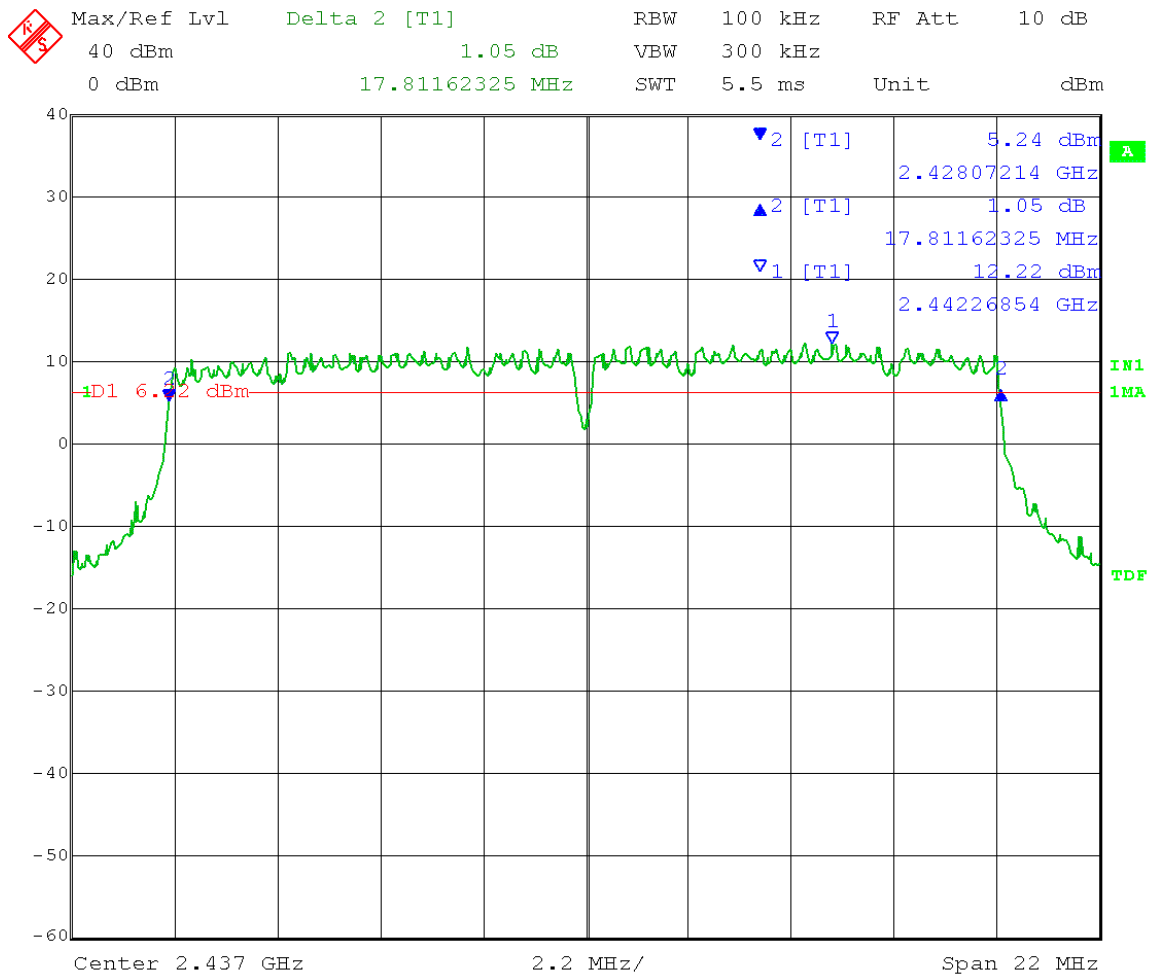


Date: 5.MAR.2014 14:33:13

Test Date: 03-05-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Emission Bandwidth (6 dB) - Conducted  
Operator: Craig B

Comment: Mid Channel: Transmit = 2.437 GHz  
Output power setting: 26.5 20 MHz channel BW  
Output port 1 Modulation: OFDM MCS15

6 dB Emission Bandwidth = 17.81 MHz

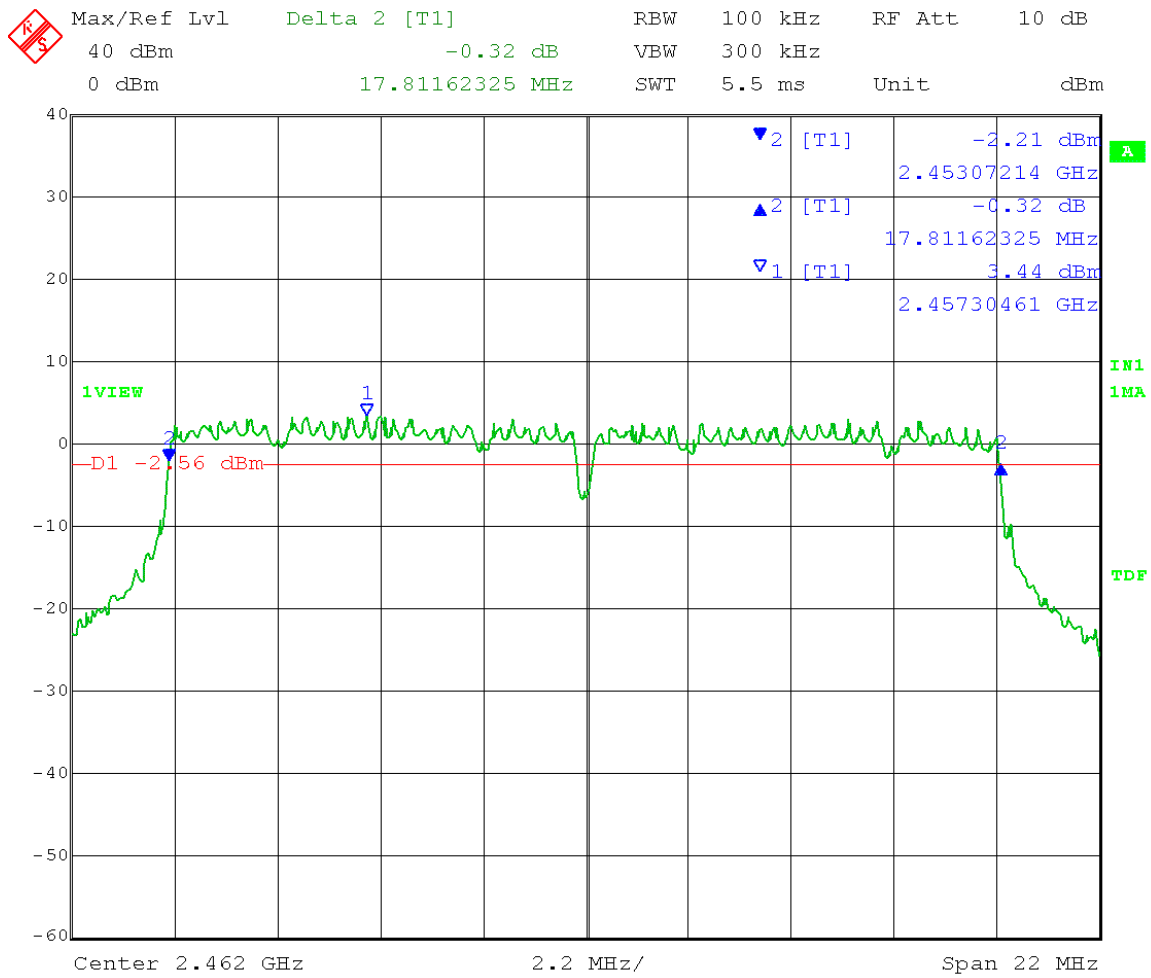


Date: 5.MAR.2014 14:28:59

Test Date: 03-05-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Emission Bandwidth (6 dB) - Conducted  
Operator: Craig B

Comment: High Channel: Transmit = 2.462 GHz  
Output power setting: 18 20 MHz channel BW  
Output port 1 Modulation: OFDM MCS15

6 dB Emission Bandwidth = 17.81 MHz

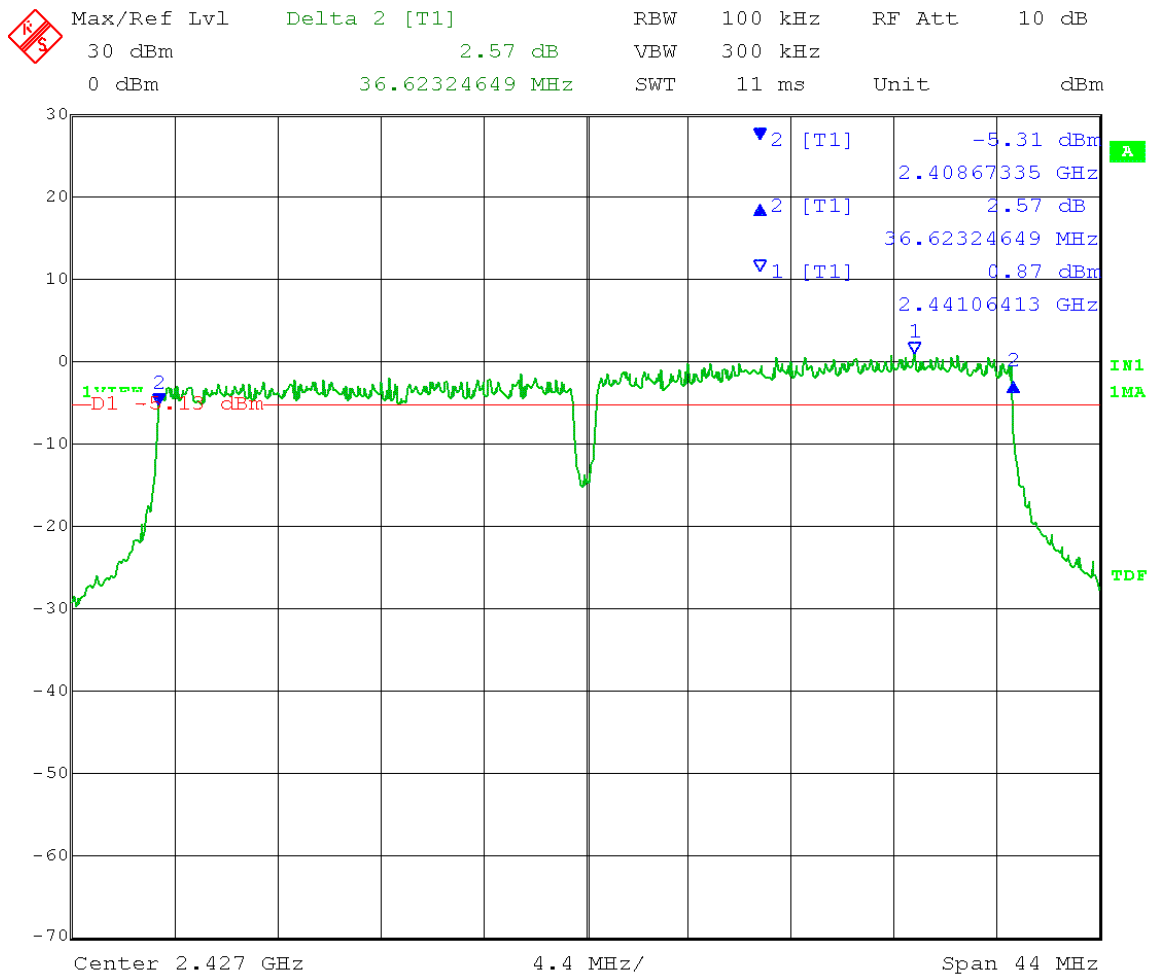


Date: 5.MAR.2014 14:36:30

Test Date: 03-05-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Emission Bandwidth (6 dB) - Conducted  
Operator: Craig B

Comment: Low Channel: Transmit = 2.427 GHz  
Output power setting: 15.5 40 MHz channel BW  
Output port 1 Modulation: OFDM MCS15

6 dB Emission Bandwidth = 36.62 MHz

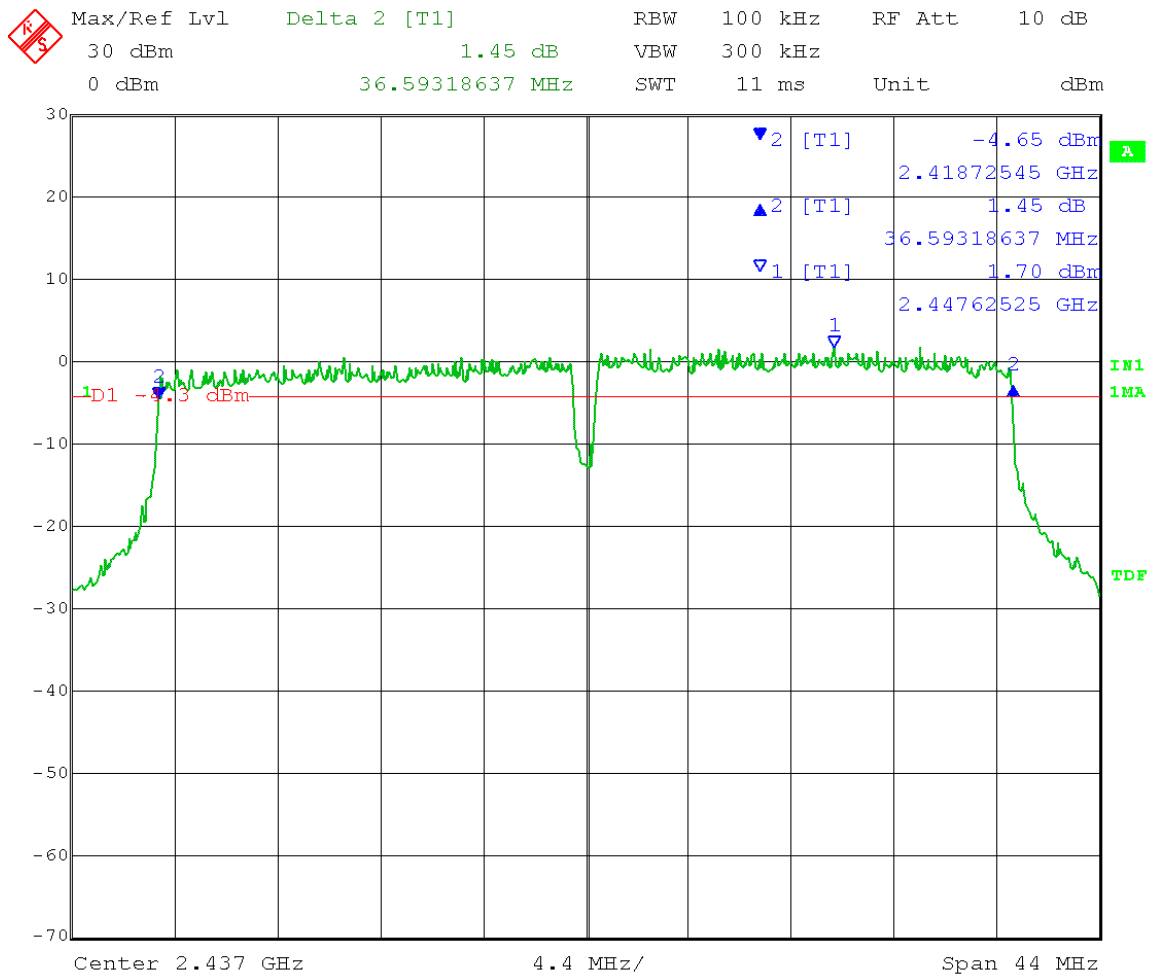


Date: 5.MAR.2014 14:43:37

Test Date: 03-05-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Emission Bandwidth (6 dB) - Conducted  
Operator: Craig B

Comment: Mid Channel: Transmit = 2.437 GHz  
Output power setting: 18 40 MHz channel BW  
Output port 1 Modulation: OFDM MCS15

6 dB Emission Bandwidth = 36.59 MHz



Date: 5.MAR.2014 14:40:03

Comment: High Channel: Transmit = 2.452 GHz  
Output power setting: 15.5 40 MHz channel BW  
Output port 1 Modulation: OFDM MCS15

Max/Ref Lvl 30 dBm Delta 2 [T1] -2.24 dB RBW 100 kHz RF Att 10 dB

0 dBm 36.63527054 MHz SWT 11 ms Unit dBm

▼2 [T1] -4.67 dBm 2.43370341 GHz

▲2 [T1] -2.24 dB 36.63527054 MHz

▽1 [T1] -6.76 dBm 2.43723046 GHz

1VIEW 2 -6.76 dBm

D1

IN1

1MA

TDF

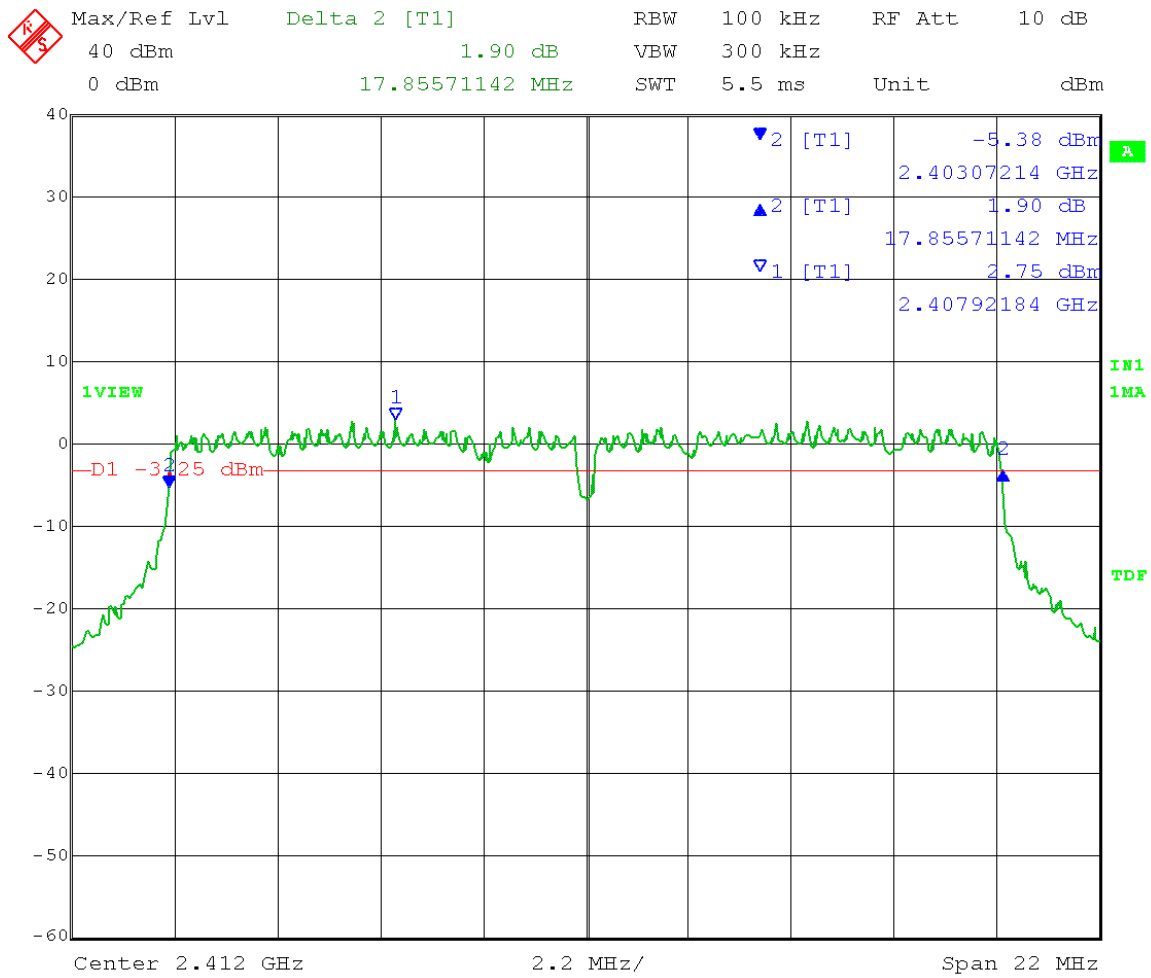
Center 2.452 GHz 4.4 MHz/ Span 44 MHz

Date: 5.MAR.2014 14:55:03

Test Date: 03-11-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Emission Bandwidth (6 dB) - Conducted  
Operator: Craig B

Comment: Low Channel: Transmit = 2.412 GHz  
Output power setting: 15 20 MHz channel BW  
Output port 1 Modulation: OFDM MCS15

6 dB Emission Bandwidth = 17.86 MHz



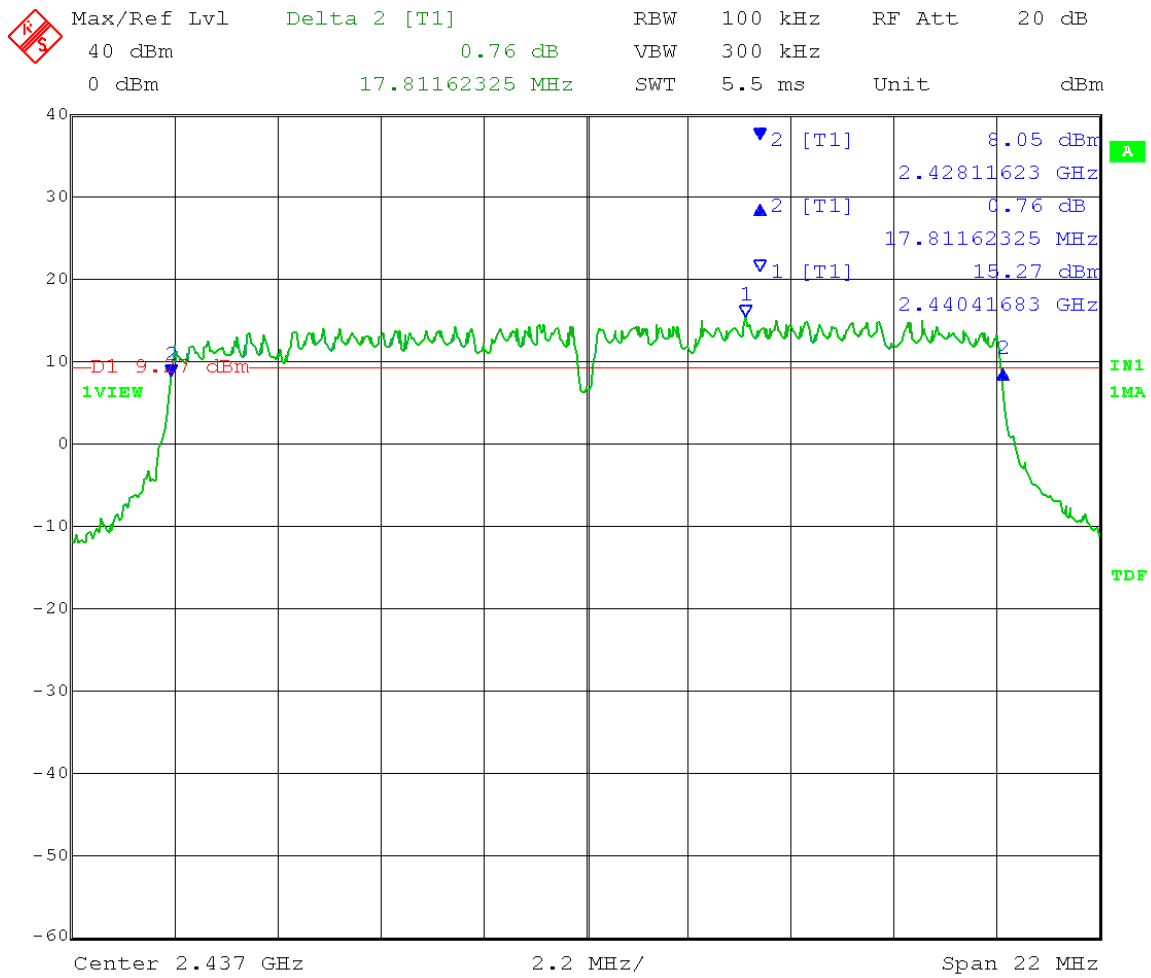
Date: 11.MAR.2014 07:56:44



Test Date: 03-11-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Emission Bandwidth (6 dB) - Conducted  
Operator: Craig B

Comment: Mid Channel: Transmit = 2.437 GHz  
Output power setting: 27 20 MHz channel BW  
Output port 1 Modulation: OFDM MCS15

6 dB Emission Bandwidth = 17.81 MHz

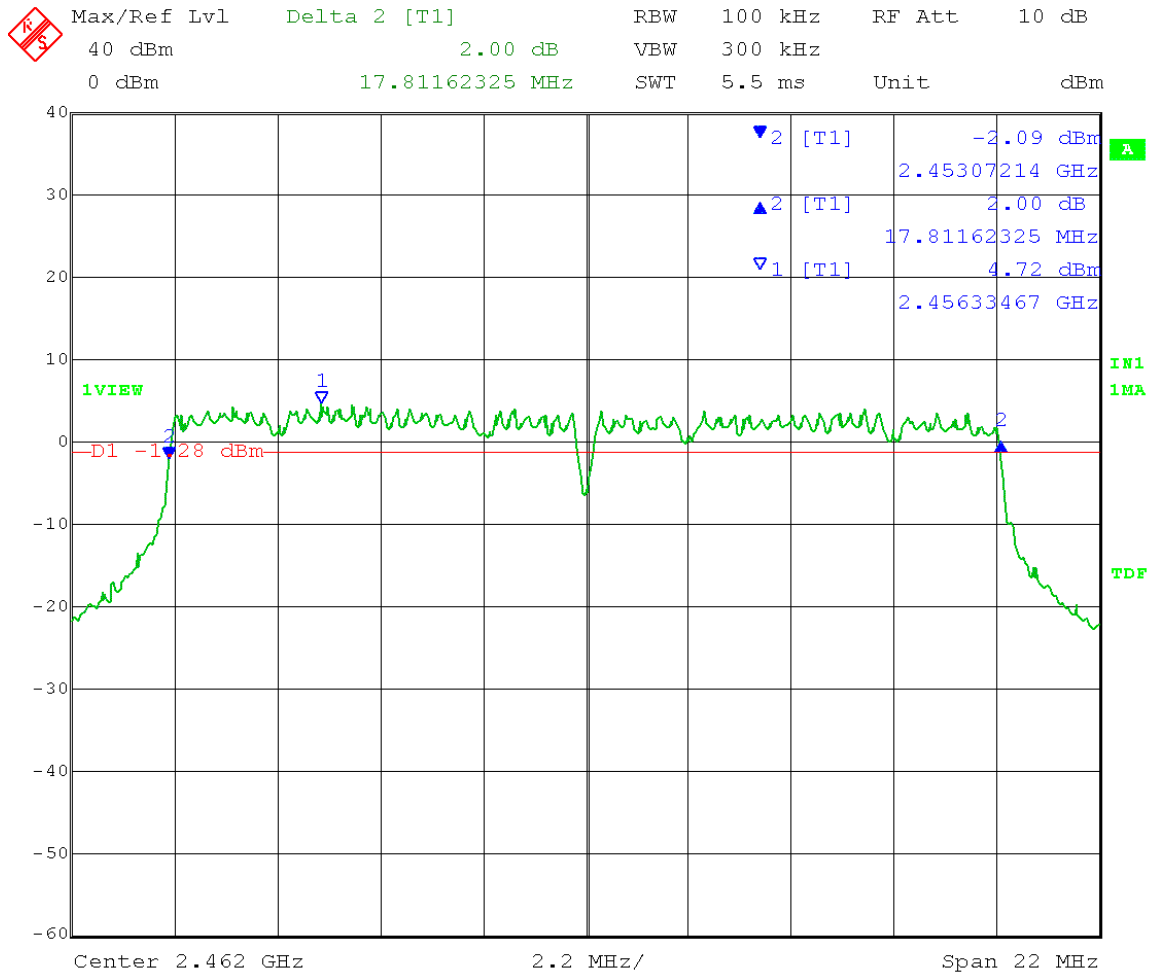


Date: 11.MAR.2014 07:53:18

Test Date: 03-11-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Emission Bandwidth (6 dB) - Conducted  
Operator: Craig B

Comment: High Channel: Transmit = 2.462 GHz  
Output power setting: 17 20 MHz channel BW  
Output port 1 Modulation: OFDM MCS15

6 dB Emission Bandwidth = 17.81 MHz

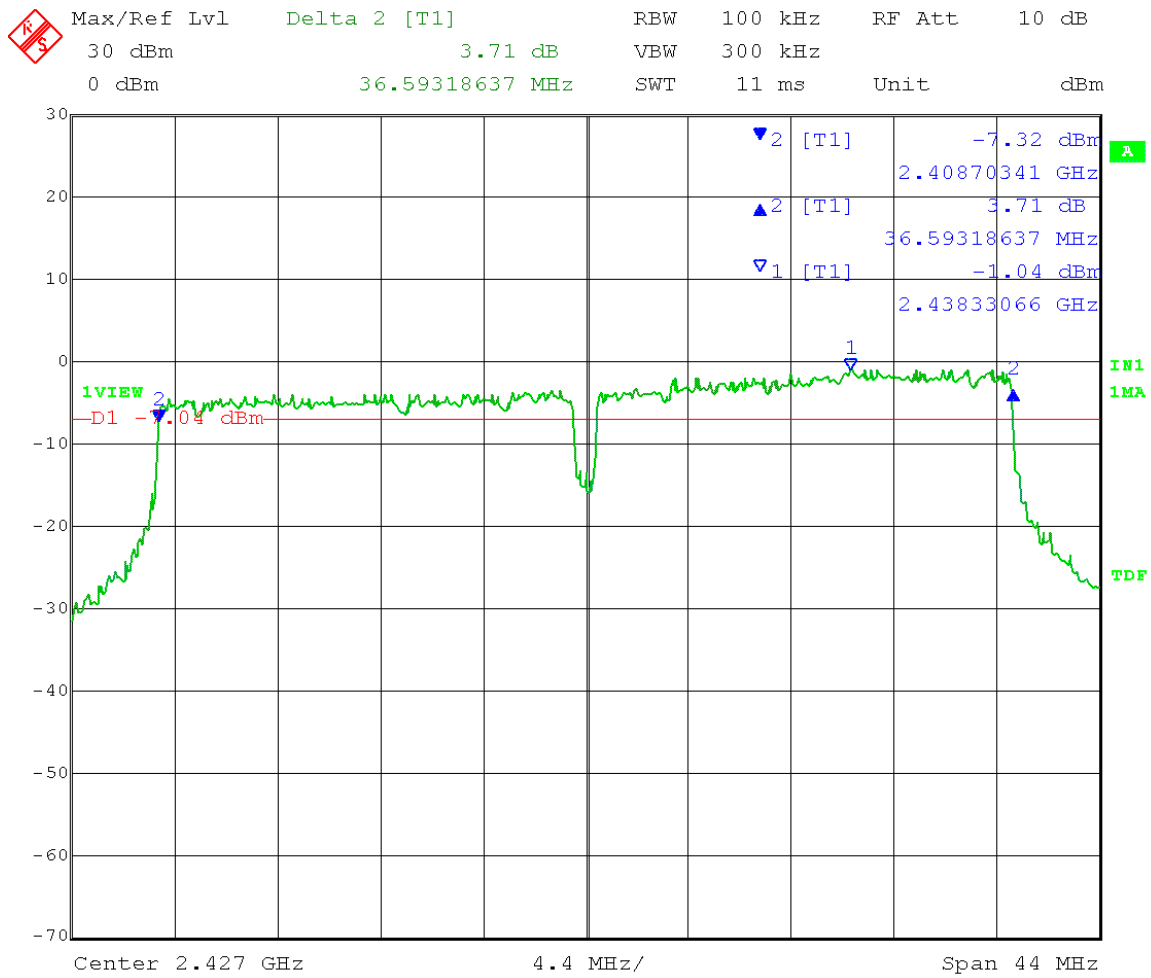


Date: 11.MAR.2014 08:00:58

Test Date: 03-11-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Emission Bandwidth (6 dB) - Conducted  
Operator: Craig B

Comment: Low Channel: Transmit = 2.427 GHz  
Output power setting: 12.5 40 MHz channel BW  
Output port 1 Modulation: OFDM MCS15

6 dB Emission Bandwidth = 36.59 MHz

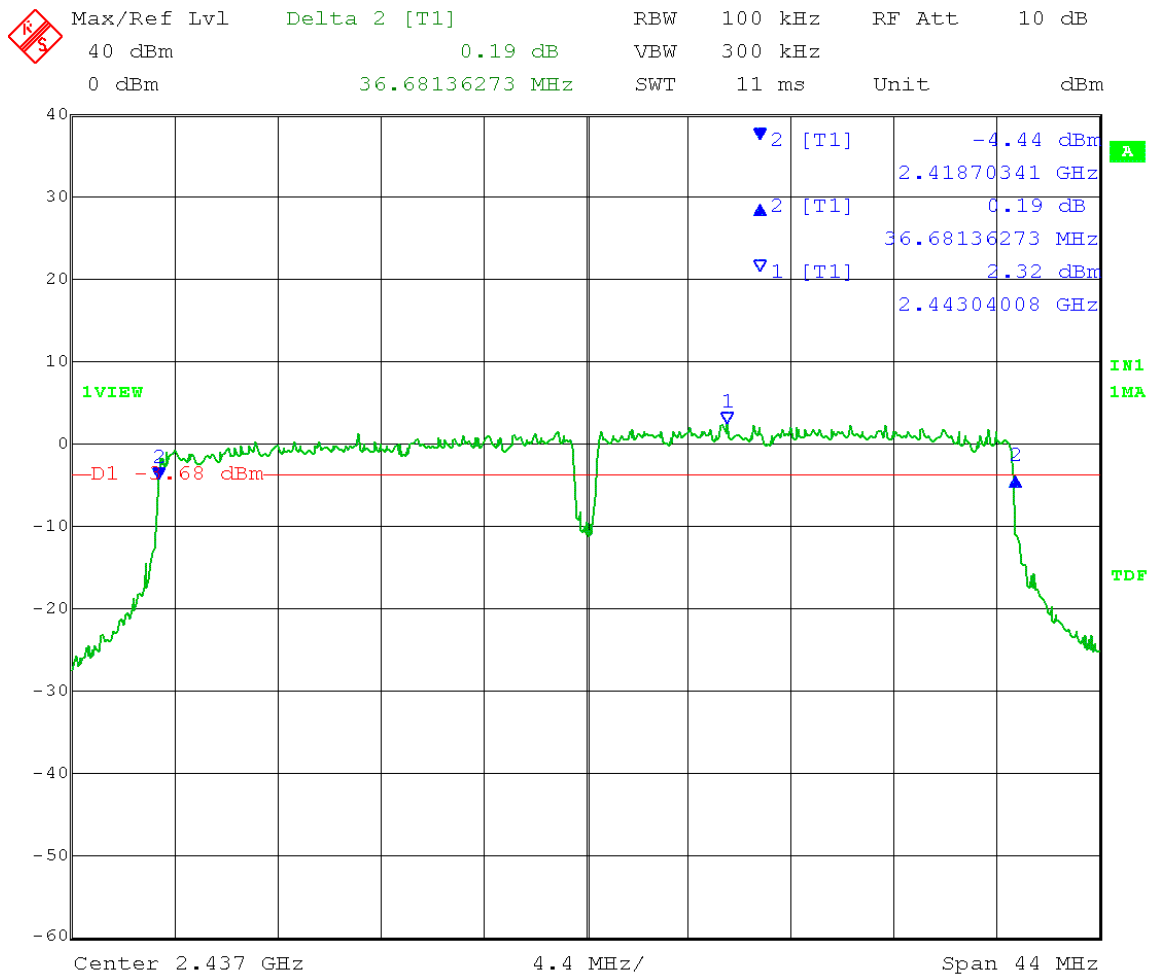


Date: 11.MAR.2014 08:11:33

Test Date: 03-11-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Emission Bandwidth (6 dB) - Conducted  
Operator: Craig B

Comment: Mid Channel: Transmit = 2.437 GHz  
Output power setting: 17 40 MHz channel BW  
Output port 1 Modulation: OFDM MCS15

6 dB Emission Bandwidth = 36.68 MHz

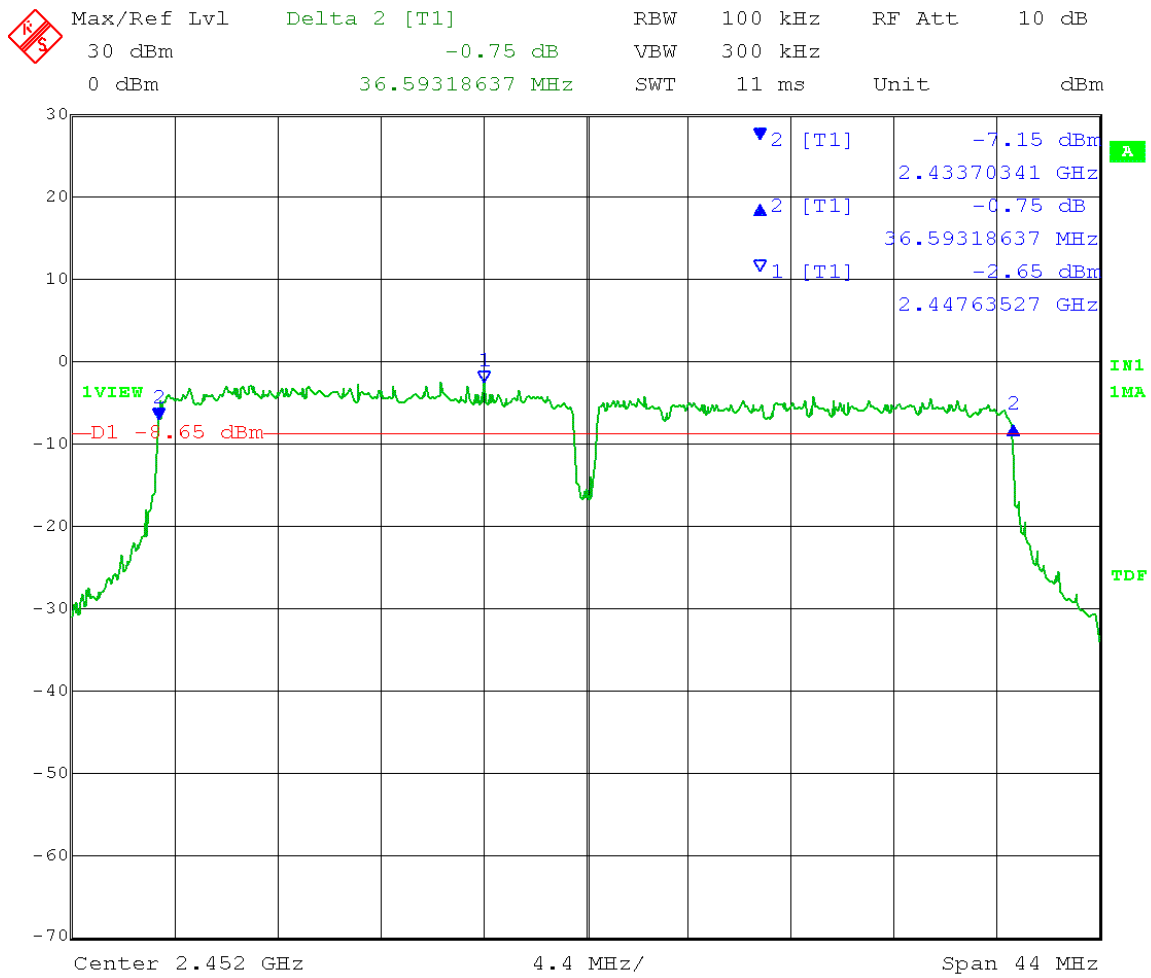


Date: 11.MAR.2014 08:05:56

Test Date: 03-11-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Emission Bandwidth (6 dB) - Conducted  
Operator: Craig B

Comment: High Channel: Transmit = 2.452 GHz  
Output power setting: 13.5 40 MHz channel BW  
Output port 1 Modulation: OFDM MCS15

6 dB Emission Bandwidth = 36.59 MHz



Date: 11.MAR.2014 08:15:02



166 South Carter, Genoa City, WI 53128

|                |                             |
|----------------|-----------------------------|
| Company:       | Cambium Networks            |
| Model Tested:  | C024900P021A & C024900P031A |
| Report Number: | 19738                       |
| DLS Project:   | 6334                        |

## Appendix B – Measurement Data

### B2.0 Fundamental Emission Output Power - Conducted

**Rule Section:** FCC 15.247(b)(3) and (4)(i)

**Test Procedure:** FCC KDB 558074 D01 DTS Meas Guidance v03r01 – *Guidance for Performing Compliance Measurements on Digital Transmission Systems (DTS) Operating Under §15.247*

Section 9.2.3.1 – AVGPM (Measurement using an RF average power meter with a thermocouple detector)

**Description:** Measurements were performed using a wideband RF power meter with a thermocouple detector. The EUT was transmitting continuously with a 100% duty cycle. The average power of the transmitter was measured.

Measurements were taken for OFDM MCS15 with 20 MHz and 40 MHz channel bandwidths at the low, middle and high channels of operation.

**Limit:** Limit with 8 dBi Omni antenna: [15.247(b)(3)&(4)]: 30 dBm (1 Watt) – 2 dB (antenna gain is 2 dB greater than the 6 dB allowed) = 28 dBm conducted.

Limit with 12 dBi integral patch antenna: [15.247(b)(3)&(4)]: 30 dBm (1 Watt) – 6 dB (antenna gain is 6 dB greater than the 6 dB allowed) = 24 dBm conducted.

Limit with 12 dBi integral patch antenna (Point-to-Point mode):

[15.247(b)(3)&(c)(1)(i)]: 30 dBm conducted with 6 dBi antenna gain allowed.

Conducted limit is lowered 1 dB for every 3 dB antenna gain exceeds 6 dB.

Antenna gain exceeds 6 dBi by 6 dB, therefore RF conducted power limit is reduced by 2 dB. RF conducted limit = 28 dBm.

Limit with 17 dBi Sector antenna: [15.247(b)(3)&(4)]: 30 dBm (1 Watt) – 11 dB (antenna gain is 11 dB greater than the 6 dB allowed) = 19 dBm conducted.

Limit with 17 dBi Sector antenna (Point-to-Point mode):

[15.247(b)(3)&(c)(1)(i)]: 30 dBm conducted with 6 dBi antenna gain allowed.

Conducted limit is lowered 1 dB for every 3 dB antenna gain exceeds 6 dB.

Antenna gain exceeds 6 dBi by 11 dB, therefore RF conducted power limit is reduced by 4 dB. RF conducted limit = 26 dBm.

Limit with 19 dBi Panel antenna: [15.247(b)(3)&(4)]: 30 dBm (1 Watt) – 13 dB (antenna gain is 13 dB greater than the 6 dB allowed) = 17 dBm conducted.

Limit with 25 dBi Dish antenna: [15.247(b)(3)&(4)]: 30 dBm (1 Watt) – 19 dB (antenna gain is 19 dB greater than the 6 dB allowed) = 11 dBm conducted.

**Results:** Passed

**Notes:** Although the Panel and Dish antennas can be used in point-to-point operation, the output power is limited (by restricted band edge compliance) to a level that is under the point-to-multipoint power limit.

Measure-and-sum technique for MIMO with Cross-Polarized antenna:

Measure and add  $10 \log(N)$  dB, where N is the number of outputs.

=  $10 \log(2)$  = 3 dB. 3 dB was added to power measurements to account for MIMO cross-polarized operation.

The fundamental output power setting was limited in order to pass near-by restricted band emission limits. Since output port 1 measured a slightly higher output power than port 0, measurements for this test were made on port 1 only.

Test Date: 03-05-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: AVERAGE Fundamental Emission Output Power – Conducted  
Procedure: FCC KDB D01 DTS Meas Guidance v03r01  
Section 9.2.3.1 – AVGPM (Measurement using an RF average power meter with a thermocouple detector)  
Operator: Craig B

EUT nominal channel bandwidth: 20 MHz  
Output port: Channel 1; Low Channel Frequency: 2.412 GHz  
Test software power setting: 18  
Modulation Type: OFDM MCS15  
Antenna gain: 8 dBi Omni antenna; Point-to-Multipoint operation

Limit: [15.247(b)(3)&(4)]: 30 dBm (1 Watt) – 2 dB (antenna gain is 2 dB greater than the 6 dB allowed) = 28 dBm conducted.

MIMO MATRIX A: Measure-and-sum technique for MIMO with Cross-Polarized antenna:  
Measure and add 10 log(N) dB, where N is the number of outputs.  
= 10 log(2) = 3 dB

Correction for duty cycle = 100%

Fundamental Emission AVERAGE Output Power = 15.99 dBm + 3 dB (MIMO Cross-Pole)  
= 18.99 dBm



Test Date: 03-05-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: AVERAGE Fundamental Emission Output Power – Conducted  
Procedure: FCC KDB D01 DTS Meas Guidance v03r01  
Section 9.2.3.1 – AVGPM (Measurement using an RF average power meter with a thermocouple detector)  
Operator: Craig B

EUT nominal channel bandwidth: 20 MHz  
Output port: Channel 1; Mid Channel Frequency: 2.437 GHz  
Test software power setting: 26.5  
Modulation Type: OFDM MCS15  
Antenna gain: 8 dBi Omni antenna; Point-to-Multipoint operation

Limit: [15.247(b)(3)&(4)]: 30 dBm (1 Watt) – 2 dB (antenna gain is 2 dB greater than the 6 dB allowed) = 28 dBm conducted.

MIMO MATRIX A: Measure-and-sum technique for MIMO with Cross-Polarized antenna:  
Measure and add 10 log(N) dB, where N is the number of outputs.  
= 10 log(2) = 3 dB

Correction for duty cycle = 100%

Fundamental Emission AVERAGE Output Power = 24.53 dBm + 3 dB (MIMO Cross-Pole)  
= 27.53 dBm





Test Date: 03-05-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: AVERAGE Fundamental Emission Output Power – Conducted  
Procedure: FCC KDB D01 DTS Meas Guidance v03r01  
Section 9.2.3.1 – AVGPM (Measurement using an RF average power meter with a thermocouple detector)  
Operator: Craig B

EUT nominal channel bandwidth: 20 MHz  
Output port: Channel 1; High Channel Frequency: 2.462 GHz  
Test software power setting: 18  
Modulation Type: OFDM MCS15  
Antenna gain: 8 dBi Omni antenna; Point-to-Multipoint operation

Limit: [15.247(b)(3)&(4)]: 30 dBm (1 Watt) – 2 dB (antenna gain is 2 dB greater than the 6 dB allowed) = 28 dBm conducted.

MIMO MATRIX A: Measure-and-sum technique for MIMO with Cross-Polarized antenna:  
Measure and add 10 log(N) dB, where N is the number of outputs.  
= 10 log(2) = 3 dB

Correction for duty cycle = 100%

Fundamental Emission AVERAGE Output Power = 17.44 dBm + 3 dB (MIMO Cross-Pole)  
= 20.44 dBm



Test Date: 03-05-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: AVERAGE Fundamental Emission Output Power – Conducted  
Procedure: FCC KDB D01 DTS Meas Guidance v03r01  
Section 9.2.3.1 – AVGPM (Measurement using an RF average power meter with a thermocouple detector)  
Operator: Craig B

EUT nominal channel bandwidth: 40 MHz  
Output port: Channel 1; Low Channel Frequency: 2.427 GHz  
Test software power setting: 15.5  
Modulation Type: OFDM MCS15  
Antenna gain: 8 dBi Omni antenna; Point-to-Multipoint operation

Limit: [15.247(b)(3)&(4)]: 30 dBm (1 Watt) – 2 dB (antenna gain is 2 dB greater than the 6 dB allowed) = 28 dBm conducted.

MIMO MATRIX A: Measure-and-sum technique for MIMO with Cross-Polarized antenna:  
Measure and add 10 log(N) dB, where N is the number of outputs.  
= 10 log(2) = 3 dB

Correction for duty cycle = 100%

Fundamental Emission AVERAGE Output Power = 13.58 dBm + 3 dB (MIMO Cross-Pole)  
= 16.58 dBm



Test Date: 03-05-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: AVERAGE Fundamental Emission Output Power – Conducted  
Procedure: FCC KDB D01 DTS Meas Guidance v03r01  
Section 9.2.3.1 – AVGPM (Measurement using an RF average power meter with a thermocouple detector)  
Operator: Craig B

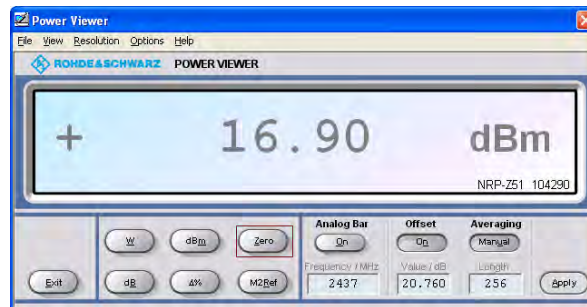
EUT nominal channel bandwidth: 40 MHz  
Output port: Channel 1; Mid Channel Frequency: 2.437 GHz  
Test software power setting: 18  
Modulation Type: OFDM MCS15  
Antenna gain: 8 dBi Omni antenna; Point-to-Multipoint operation

Limit: [15.247(b)(3)&(4)]: 30 dBm (1 Watt) – 2 dB (antenna gain is 2 dB greater than the 6 dB allowed) = 28 dBm conducted.

MIMO MATRIX A: Measure-and-sum technique for MIMO with Cross-Polarized antenna:  
Measure and add 10 log(N) dB, where N is the number of outputs.  
= 10 log(2) = 3 dB

Correction for duty cycle = 100%

Fundamental Emission AVERAGE Output Power = 16.90 dBm + 3 dB (MIMO Cross-Pole)  
= 19.90 dBm



Test Date: 03-05-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: AVERAGE Fundamental Emission Output Power – Conducted  
Procedure: FCC KDB D01 DTS Meas Guidance v03r01  
Section 9.2.3.1 – AVGPM (Measurement using an RF average power meter with a thermocouple detector)  
Operator: Craig B

EUT nominal channel bandwidth: 40 MHz  
Output port: Channel 1; High Channel Frequency: 2.452 GHz  
Test software power setting: 15.5  
Modulation Type: OFDM MCS15  
Antenna gain: 8 dBi Omni antenna; Point-to-Multipoint operation

Limit: [15.247(b)(3)&(4)]: 30 dBm (1 Watt) – 2 dB (antenna gain is 2 dB greater than the 6 dB allowed) = 28 dBm conducted.

MIMO MATRIX A: Measure-and-sum technique for MIMO with Cross-Polarized antenna:  
Measure and add 10 log(N) dB, where N is the number of outputs.  
= 10 log(2) = 3 dB

Correction for duty cycle = 100%

Fundamental Emission AVERAGE Output Power = 14.80 dBm + 3 dB (MIMO Cross-Pole)  
= 17.80 dBm



Test Date: 01-20-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C2CE05  
 Test: AVERAGE Fundamental Emission Output Power – Radiated  
 Procedure: FCC KDB D01 DTS Meas Guidance v03r01  
 Section 9.2.2.2 – AVGSA-1 (trace averaging with the EUT transmitting at full power throughout each sweep)  
 Operator: Craig B

POINT – TO – POINT &  
POINT – TO – MULTIPOINT OPERATION

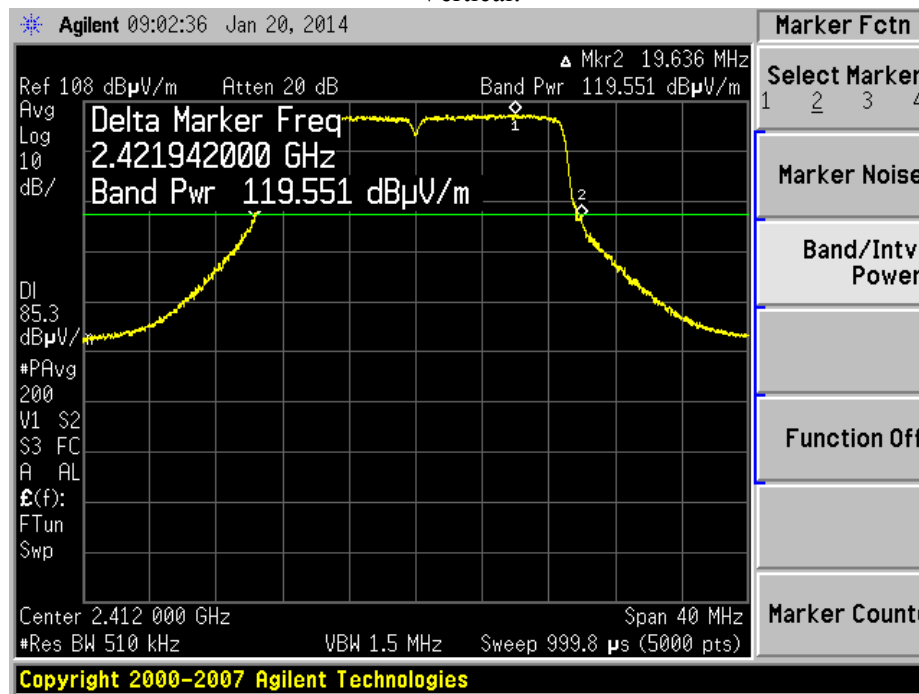
EUT nominal channel bandwidth: 20 MHz  
 Both output chains active; Low Channel Frequency: 2.412 GHz  
 Test software setting: 15  
 Modulation Type: OFDM MCS15  
 Antenna gain: 12 dBi  
 Duty cycle = 100%

Limit: [15.247(b)(3)&(4)]: 30 dBm (1 Watt) – 6 dB (antenna gain is 6 dB greater than the 6 dB allowed) = 24 dBm conducted.

Per FCC KDB 662911 D02 v01, where radiated measurements are used for compliance with conducted limits, sum the powers or PSDs across the two polarizations.

$$\begin{aligned}
 \text{EIRP} &= E + 20\log(3 \text{ meters}) - 104.8 \\
 &= 119.551 + 20\log(3) - 104.8 \\
 &= 24.29 \text{ dBm for Vertical polarization}
 \end{aligned}$$

Fundamental Emission AVERAGE Output Power  
Vertical:



Test Date: 01-20-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C2CE05  
 Test: AVERAGE Fundamental Emission Output Power – Radiated  
 Procedure: FCC KDB D01 DTS Meas Guidance v03r01  
 Section 9.2.2.2 – AVGSA-1 (trace averaging with the EUT transmitting at full power throughout each sweep)  
 Operator: Craig B

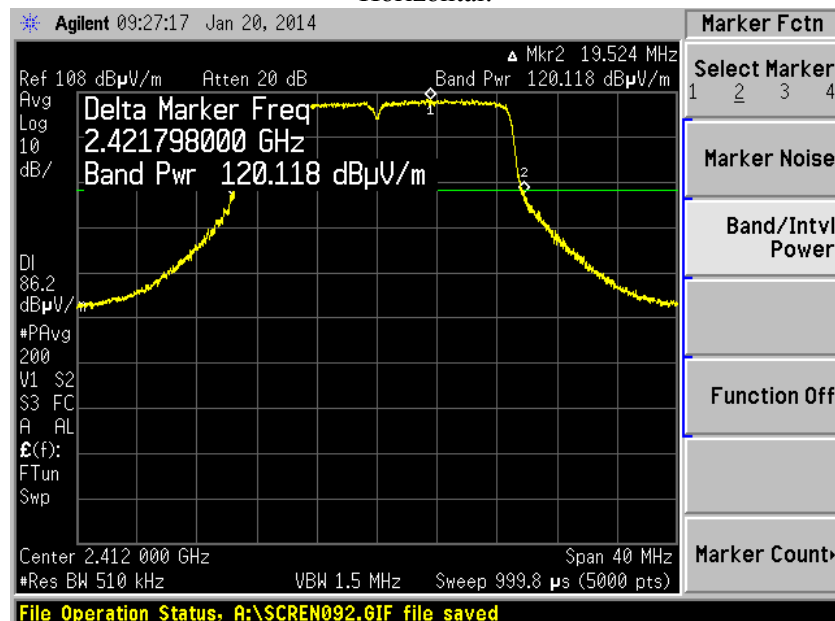
POINT – TO – POINT &  
POINT – TO – MULTIPOINT OPERATION

EUT nominal channel bandwidth: 20 MHz  
 Both output chains active; Low Channel Frequency: 2.412 GHz  
 Test software setting: **15**  
 Modulation Type: OFDM MCS15  
 Antenna gain: 12 dBi  
 Duty cycle = 100%

Limit: [15.247(b)(3)&(4)]: 30 dBm (1 Watt) – 6 dB (antenna gain is 6 dB greater than the 6 dB allowed) = 24 dBm conducted.

Per FCC KDB 662911 D02 v01, where radiated measurements are used for compliance with conducted limits, sum the powers or PSDs across the two polarizations.

$$\begin{aligned} \text{EIRP} &= E + 20\log(3 \text{ meters}) - 104.8 \\ &= 120.118 + 20\log(3) - 104.8 \\ &= 24.86 \text{ dBm for Horizontal polarization} \end{aligned}$$
 Fundamental Emission AVERAGE Output Power  
 Horizontal:



24.29 dBm Vertical = 268.5344446 mW  
 24.86 dBm Horizontal = 306.1963434 mW  
 Total = 268.5344446 + 306.1963434 = 574.730788 mW = **27.60 dBm e.i.r.p.**  
 Total RF Conducted output power = 27.60 dBm – 12 dBi = **15.60 dBm conducted**

Test Date: 01-17-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C2CE05  
 Test: AVERAGE Fundamental Emission Output Power – Radiated  
 Procedure: FCC KDB D01 DTS Meas Guidance v03r01  
 Section 9.2.2.2 – AVGSA-1 (trace averaging with the EUT transmitting at full power throughout each sweep)  
 Operator: Craig B

#### POINT – TO – POINT OPERATION

EUT nominal channel bandwidth: 20 MHz  
 Both output chains active; Mid Channel Frequency: 2.437 GHz  
 Test software setting: 27  
 Modulation Type: OFDM MCS15  
 Antenna gain: 12 dBi  
 Duty cycle = 100%

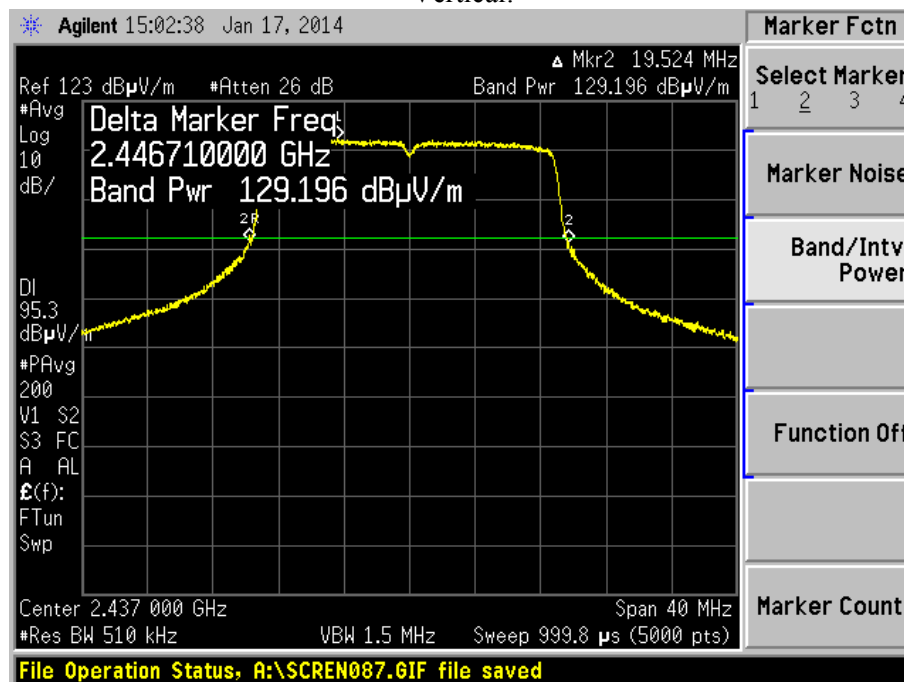
Limit: [15.247(b)(3)&(c)(1)(i)]: 30 dBm conducted with 6 dBi antenna gain allowed. Conducted limit is lowered 1 dB for every 3 dB antenna gain exceeds 6 dB. Antenna gain exceeds 6 dBi by 6 dB, therefore RF conducted power limit is reduced by 2 dB.  
 RF conducted limit = 28 dBm.

Per FCC KDB 662911 D02 v01, where radiated measurements are used for compliance with conducted limits, sum the powers or PSDs across the two polarizations.

$$\begin{aligned}
 \text{EIRP} &= E + 20\log(3 \text{ meters}) - 104.8 \\
 &= 129.196 + 20\log(3) - 104.8 \\
 &= 33.94 \text{ dBm for Vertical polarization}
 \end{aligned}$$

Fundamental Emission AVERAGE Output Power

Vertical:



Test Date: 01-17-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C2CE05  
 Test: AVERAGE Fundamental Emission Output Power – Radiated  
 Procedure: FCC KDB D01 DTS Meas Guidance v03r01  
 Section 9.2.2.2 – AVGSA-1 (trace averaging with the EUT transmitting at full power throughout each sweep)  
 Operator: Craig B

#### POINT – TO – POINT OPERATION

EUT nominal channel bandwidth: 20 MHz  
 Both output chains active; Mid Channel Frequency: 2.437 GHz  
 Test software setting: 27  
 Modulation Type: OFDM MCS15  
 Antenna gain: 12 dBi  
 Duty cycle = 100%

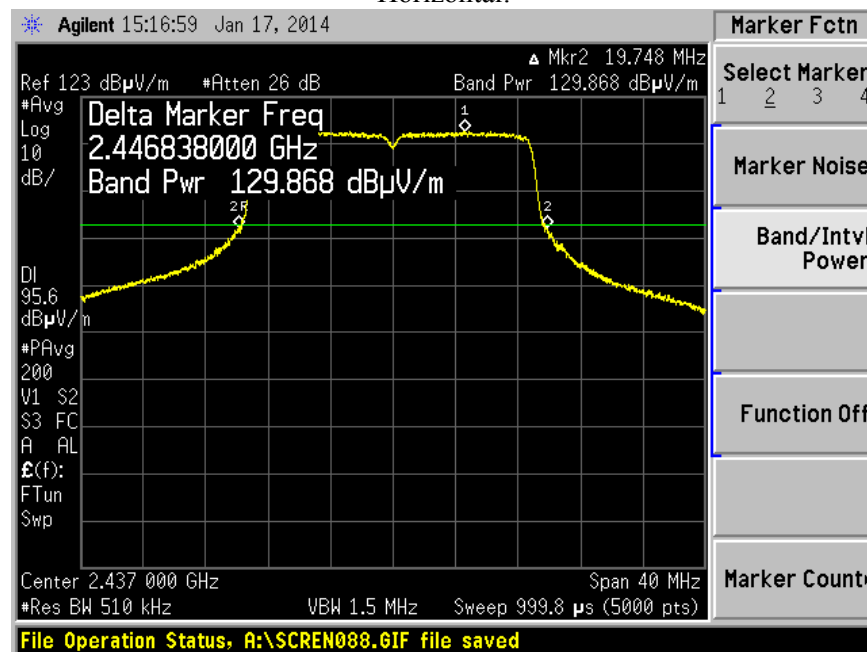
Limit: [15.247(b)(3)&(c)(1)(i)]: 30 dBm conducted with 6 dBi antenna gain allowed. Conducted limit is lowered 1 dB for every 3 dB antenna gain exceeds 6 dB. Antenna gain exceeds 6 dBi by 6 dB, therefore RF conducted power limit is reduced by 2 dB.  
 RF conducted limit = 28 dBm.

Per FCC KDB 662911 D02 v01, where radiated measurements are used for compliance with conducted limits, sum the powers or PSDs across the two polarizations.

$$\begin{aligned}
 \text{EIRP} &= E + 20\log(3 \text{ meters}) - 104.8 \\
 &= 129.868 + 20\log(3) - 104.8 \\
 &= 34.61 \text{ dBm for Horizontal polarization}
 \end{aligned}$$

Fundamental Emission AVERAGE Output Power

Horizontal:



33.94 dBm Vertical = 2477.422058 mW  
 34.61 dBm Horizontal = 2890.679882 mW  
 Total = 2477.422058 + 2890.679882 = 5368.10194 mW = **37.30 dBm e.i.r.p.**  
 Total RF Conducted output power = 37.30 dBm – 12 dBi = **25.30 dBm conducted**



Test Date: 01-16-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C2CE05  
 Test: AVERAGE Fundamental Emission Output Power – Radiated  
 Procedure: FCC KDB D01 DTS Meas Guidance v03r01  
 Section 9.2.2.2 – AVGSA-1 (trace averaging with the EUT transmitting at full power throughout each sweep)  
 Operator: Craig B

#### POINT – TO – MULTIPOINT OPERATION

EUT nominal channel bandwidth: 20 MHz  
 Both output chains active; Mid Channel Frequency: 2.437 GHz  
 Test software setting: 24.5  
 Modulation Type: OFDM MCS15  
 Antenna gain: 12 dBi  
 Duty cycle = 100%

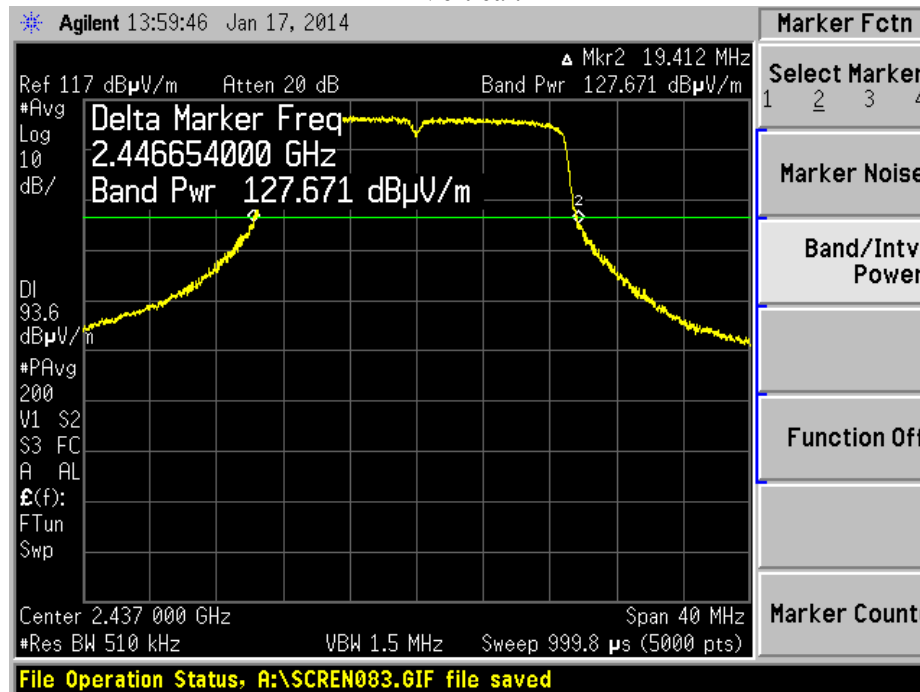
Limit: [15.247(b)(3)&(4)]: 30 dBm (1 Watt) – 6 dB (antenna gain is 6 dB greater than the 6 dB allowed) = 24 dBm conducted.

Per FCC KDB 662911 D02 v01, where radiated measurements are used for compliance with conducted limits, sum the powers or PSDs across the two polarizations.

$$\begin{aligned}
 \text{EIRP} &= E + 20\log(3 \text{ meters}) - 104.8 \\
 &= 127.671 + 20\log(3) - 104.8 \\
 &= 32.41 \text{ dBm for Vertical polarization}
 \end{aligned}$$

Fundamental Emission AVERAGE Output Power

Vertical:



Test Date: 01-16-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C2CE05  
 Test: AVERAGE Fundamental Emission Output Power – Radiated  
 Procedure: FCC KDB D01 DTS Meas Guidance v03r01  
 Section 9.2.2.2 – AVGSA-1 (trace averaging with the EUT transmitting at full power throughout each sweep)  
 Operator: Craig B

#### POINT – TO – MULTIPOINT OPERATION

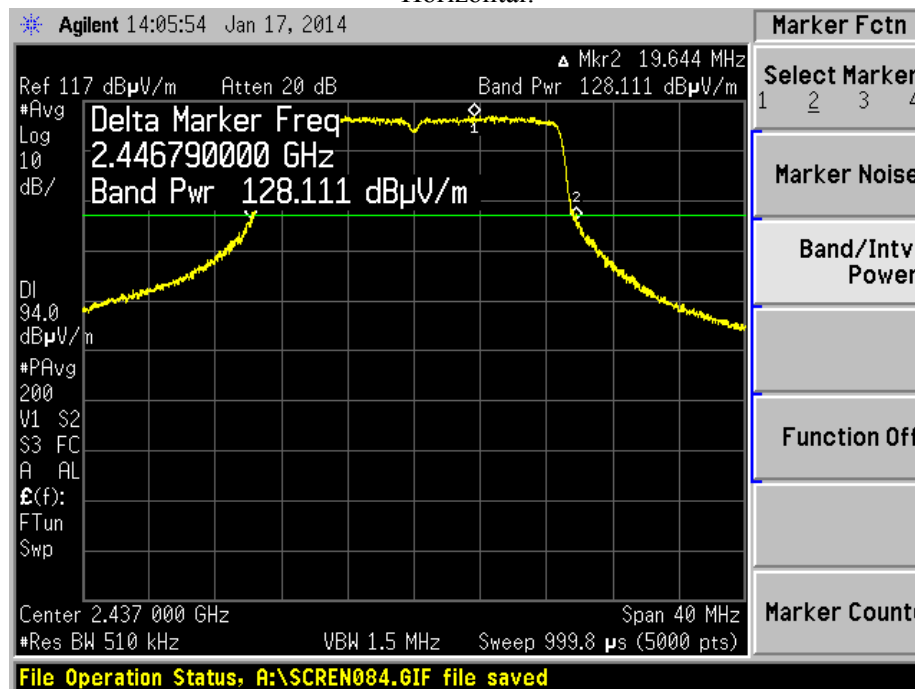
EUT nominal channel bandwidth: 20 MHz  
 Both output chains active; Mid Channel Frequency: 2.437 GHz  
 Test software setting: 24.5  
 Modulation Type: OFDM MCS15  
 Antenna gain: 12 dBi  
 Duty cycle = 100%

Limit: [15.247(b)(3)&(4)]: 30 dBm (1 Watt) – 6 dB (antenna gain is 6 dB greater than the 6 dB allowed) = 24 dBm conducted.

Per FCC KDB 662911 D02 v01, where radiated measurements are used for compliance with conducted limits, sum the powers or PSDs across the two polarizations.

$$\begin{aligned}
 \text{EIRP} &= E + 20\log(3 \text{ meters}) - 104.8 \\
 &= 128.11 + 20\log(3) - 104.8 \\
 &= 32.85 \text{ dBm for Horizontal polarization}
 \end{aligned}$$

Fundamental Emission AVERAGE Output Power  
Horizontal:



32.41 dBm Vertical = 1741.806873 mW  
 32.85 dBm Horizontal = 1927.524913 mW  
 Total = 1741.806873 + 1927.524913 = 3669.331786 mW = **35.65 dBm e.i.r.p.**  
 Total RF Conducted output power = 35.65 dBm – 12 dBi = **23.65 dBm conducted**

Test Date: 01-20-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C2CE05  
Test: AVERAGE Fundamental Emission Output Power – Radiated  
Procedure: FCC KDB D01 DTS Meas Guidance v03r01  
Section 9.2.2.2 – AVGSA-1 (trace averaging with the EUT transmitting at full power throughout each sweep)  
Operator: Craig B

POINT – TO – POINT &  
POINT – TO – MULTIPOINT OPERATION

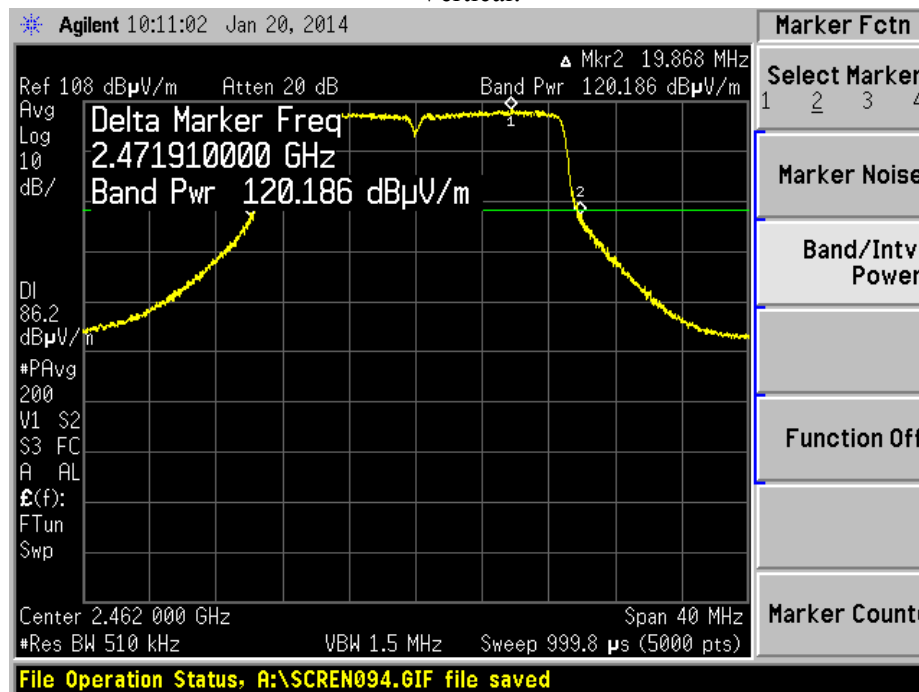
EUT nominal channel bandwidth: 20 MHz  
Both output chains active; High Channel Frequency: 2.462 GHz  
Test software setting: 17  
Modulation Type: OFDM MCS15  
Antenna gain: 12 dBi  
Duty cycle = 100%

Limit: [15.247(b)(3)&(4)]: 30 dBm (1 Watt) – 6 dB (antenna gain is 6 dB greater than the 6 dB allowed) = 24 dBm conducted.

Per FCC KDB 662911 D02 v01, where radiated measurements are used for compliance with conducted limits, sum the powers or PSDs across the two polarizations.

$$\begin{aligned} \text{EIRP} &= E + 20\log(3 \text{ meters}) - 104.8 \\ &= 120.186 + 20\log(3) - 104.8 \\ &= 24.93 \text{ dBm for Vertical polarization} \end{aligned}$$

Fundamental Emission AVERAGE Output Power  
Vertical:



Test Date: 01-20-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C2CE05  
 Test: AVERAGE Fundamental Emission Output Power – Radiated  
 Procedure: FCC KDB D01 DTS Meas Guidance v03r01  
 Section 9.2.2.2 – AVGSA-1 (trace averaging with the EUT transmitting at full power throughout each sweep)  
 Operator: Craig B

POINT – TO – POINT &  
POINT – TO – MULTIPOINT OPERATION

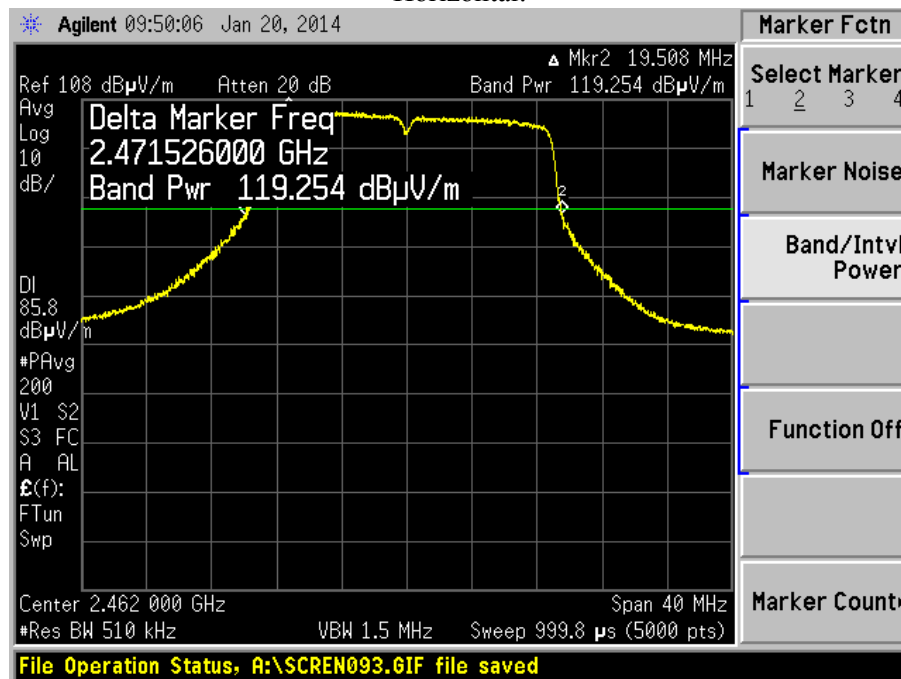
EUT nominal channel bandwidth: 20 MHz  
 Both output chains active; High Channel Frequency: 2.462 GHz  
 Test software setting: **17**  
 Modulation Type: OFDM MCS15  
 Antenna gain: 12 dBi  
 Duty cycle = 100%

Limit: [15.247(b)(3)&(4)]: 30 dBm (1 Watt) – 6 dB (antenna gain is 6 dB greater than the 6 dB allowed) = 24 dBm conducted.

Per FCC KDB 662911 D02 v01, where radiated measurements are used for compliance with conducted limits, sum the powers or PSDs across the two polarizations.

$$\begin{aligned}
 \text{EIRP} &= E + 20\log(3 \text{ meters}) - 104.8 \\
 &= 119.254 + 20\log(3) - 104.8 \\
 &= 24.00 \text{ dBm for Horizontal polarization}
 \end{aligned}$$

Fundamental Emission AVERAGE Output Power  
Horizontal:



24.93 dBm Vertical = 311.1716337 mW  
 24.00 dBm Horizontal = 251.1886432 mW  
 Total = 311.1716337 + 251.1886432 = 562.3602769 mW = **27.50 dBm e.i.r.p.**  
 Total RF Conducted output power = 27.50 dBm – 12 dBi = **15.50 dBm conducted**

Test Date: 01-20-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C2CE05  
 Test: AVERAGE Fundamental Emission Output Power – Radiated  
 Procedure: FCC KDB D01 DTS Meas Guidance v03r01  
 Section 9.2.2.2 – AVGSA-1 (trace averaging with the EUT transmitting at full power throughout each sweep)  
 Operator: Craig B

POINT – TO – POINT &  
POINT – TO – MULTIPOINT OPERATION

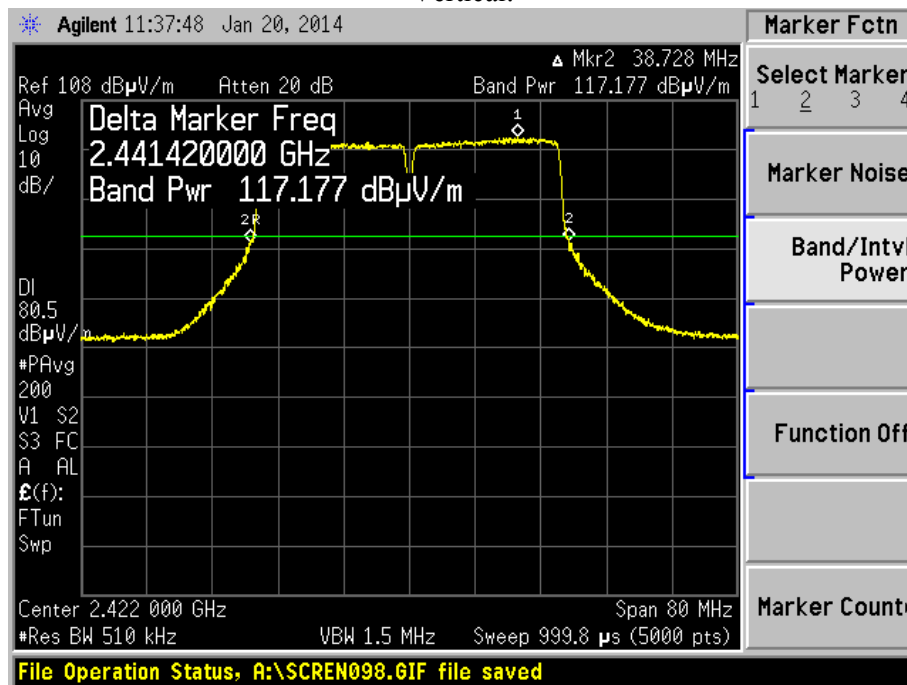
EUT nominal channel bandwidth: 40 MHz  
 Both output chains active; Low Channel Frequency: 2.422 GHz  
 Test software setting: 12.5  
 Modulation Type: OFDM MCS15  
 Antenna gain: 12 dBi  
 Duty cycle = 100%

Limit: [15.247(b)(3)&(4)]: 30 dBm (1 Watt) – 6 dB (antenna gain is 6 dB greater than the 6 dB allowed) = 24 dBm conducted.

Per FCC KDB 662911 D02 v01, where radiated measurements are used for compliance with conducted limits, sum the powers or PSDs across the two polarizations.

$$\begin{aligned}
 \text{EIRP} &= E + 20\log(3 \text{ meters}) - 104.8 \\
 &= 117.177 + 20\log(3) - 104.8 \\
 &= 21.92 \text{ dBm for Vertical polarization}
 \end{aligned}$$

Fundamental Emission AVERAGE Output Power  
Vertical:



Test Date: 01-20-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C2CE05  
 Test: AVERAGE Fundamental Emission Output Power – Radiated  
 Procedure: FCC KDB D01 DTS Meas Guidance v03r01  
 Section 9.2.2.2 – AVGSA-1 (trace averaging with the EUT transmitting at full power throughout each sweep)  
 Operator: Craig B

POINT – TO – POINT &  
POINT – TO – MULTIPOINT OPERATION

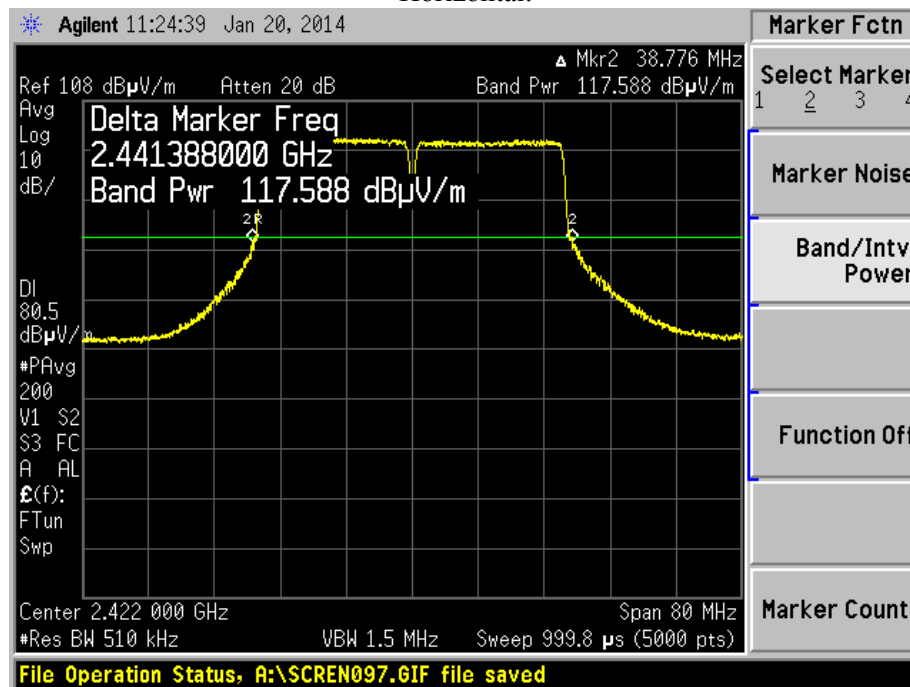
EUT nominal channel bandwidth: 40 MHz  
 Both output chains active; Low Channel Frequency: 2.422 GHz  
 Test software setting: 12.5  
 Modulation Type: OFDM MCS15  
 Antenna gain: 12 dBi  
 Duty cycle = 100%

Limit: [15.247(b)(3)&(4)]: 30 dBm (1 Watt) – 6 dB (antenna gain is 6 dB greater than the 6 dB allowed) = 24 dBm conducted.

Per FCC KDB 662911 D02 v01, where radiated measurements are used for compliance with conducted limits, sum the powers or PSDs across the two polarizations.

$$\begin{aligned}
 \text{EIRP} &= E + 20\log(3 \text{ meters}) - 104.8 \\
 &= 117.588 + 20\log(3) - 104.8 \\
 &= 22.33 \text{ dBm for Horizontal polarization}
 \end{aligned}$$

Fundamental Emission AVERAGE Output Power  
Horizontal:



21.92 dBm Vertical = 155.5965632 mW  
 22.33 dBm Horizontal = 171.0015315 mW  
 Total = 155.5965632 + 171.0015315 = 326.5980947 mW = **25.14 dBm e.i.r.p.**  
 Total RF Conducted output power = 25.14 dBm – 12 dBi = **13.14 dBm conducted**

Test Date: 01-17-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C2CE05  
 Test: AVERAGE Fundamental Emission Output Power – Radiated  
 Procedure: FCC KDB D01 DTS Meas Guidance v03r01  
 Section 9.2.2.2 – AVGSA-1 (trace averaging with the EUT transmitting at full power throughout each sweep)  
 Operator: Craig B

POINT – TO – POINT &  
POINT – TO – MULTIPOINT OPERATION

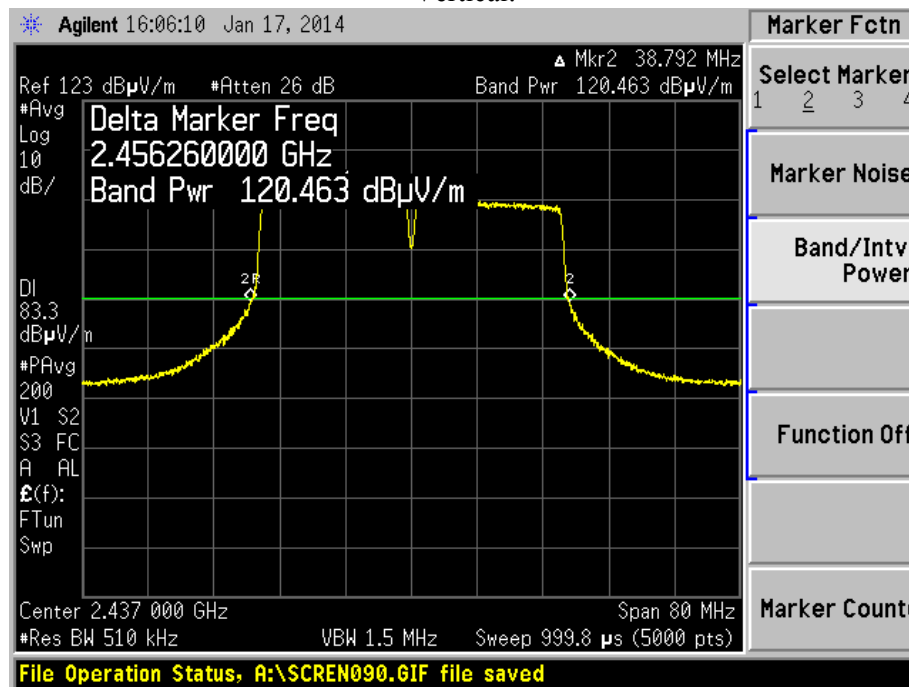
EUT nominal channel bandwidth: 40 MHz  
 Both output chains active; Mid Channel Frequency: 2.437 GHz  
 Test software setting: 17  
 Modulation Type: OFDM MCS15  
 Antenna gain: 12 dBi  
 Duty cycle = 100%

Limit: [15.247(b)(3)&(4)]: 30 dBm (1 Watt) – 6 dB (antenna gain is 6 dB greater than the 6 dB allowed) = 24 dBm conducted.

Per FCC KDB 662911 D02 v01, where radiated measurements are used for compliance with conducted limits, sum the powers or PSDs across the two polarizations.

$$\begin{aligned}
 \text{EIRP} &= E + 20\log(3 \text{ meters}) - 104.8 \\
 &= 120.463 + 20\log(3) - 104.8 \\
 &= 25.21 \text{ dBm for Vertical polarization}
 \end{aligned}$$

Fundamental Emission AVERAGE Output Power  
Vertical:



Test Date: 01-17-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C2CE05  
 Test: AVERAGE Fundamental Emission Output Power – Radiated  
 Procedure: FCC KDB D01 DTS Meas Guidance v03r01  
 Section 9.2.2.2 – AVGSA-1 (trace averaging with the EUT transmitting at full power throughout each sweep)  
 Operator: Craig B

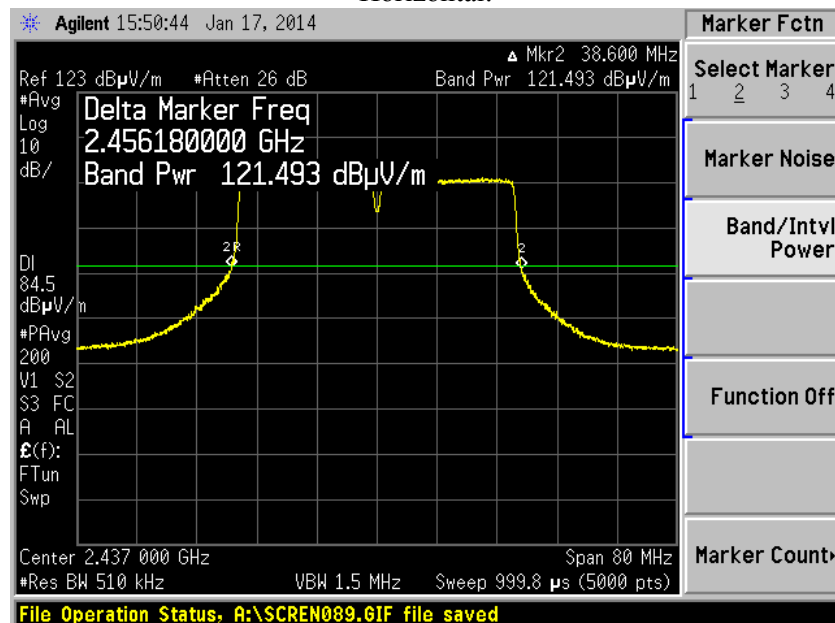
POINT – TO – POINT &  
POINT – TO – MULTIPOINT OPERATION

EUT nominal channel bandwidth: 40 MHz  
 Both output chains active; Mid Channel Frequency: 2.437 GHz  
 Test software setting: 17  
 Modulation Type: OFDM MCS15  
 Antenna gain: 12 dBi  
 Duty cycle = 100%

Limit: [15.247(b)(3)&(4)]: 30 dBm (1 Watt) – 6 dB (antenna gain is 6 dB greater than the 6 dB allowed) = 24 dBm conducted.

Per FCC KDB 662911 D02 v01, where radiated measurements are used for compliance with conducted limits, sum the powers or PSDs across the two polarizations.

$EIRP = E + 20\log(3 \text{ meters}) - 104.8$   
 $= 121.493 + 20\log(3) - 104.8$   
 $= 26.24 \text{ dBm for Horizontal polarization}$   
 Fundamental Emission AVERAGE Output Power  
 Horizontal:



25.21 dBm Vertical = 331.8944576 mW  
 26.24 dBm Horizontal = 420.7266284 mW  
 Total = 331.8944576 + 420.7266284 = 752.621086 mW = **28.77 dBm e.i.r.p.**  
 Total RF Conducted output power = 28.77 dBm – 12 dBi = **16.77 dBm conducted**



Test Date: 01-20-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C2CE05  
Test: AVERAGE Fundamental Emission Output Power – Radiated  
Procedure: FCC KDB D01 DTS Meas Guidance v03r01  
Section 9.2.2.2 – AVGSA-1 (trace averaging with the EUT transmitting at full power throughout each sweep)  
Operator: Craig B

POINT – TO – POINT &  
POINT – TO – MULTIPOINT OPERATION

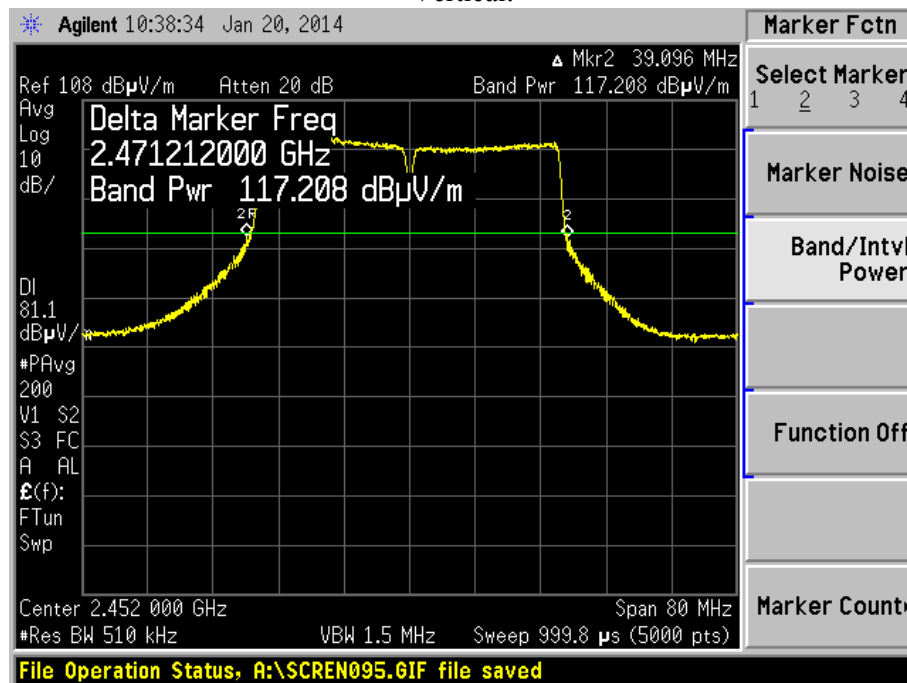
EUT nominal channel bandwidth: 40 MHz  
Both output chains active; High Channel Frequency: 2.452 GHz  
Test software setting: 13.5  
Modulation Type: OFDM MCS15  
Antenna gain: 12 dBi  
Duty cycle = 100%

Limit: [15.247(b)(3)&(4)]: 30 dBm (1 Watt) – 6 dB (antenna gain is 6 dB greater than the 6 dB allowed) = 24 dBm conducted.

Per FCC KDB 662911 D02 v01, where radiated measurements are used for compliance with conducted limits, sum the powers or PSDs across the two polarizations.

$$\begin{aligned}\text{EIRP} &= E + 20\log(3 \text{ meters}) - 104.8 \\ &= 117.208 + 20\log(3) - 104.8 \\ &= 21.95 \text{ dBm for Vertical polarization}\end{aligned}$$

Fundamental Emission AVERAGE Output Power  
Vertical:



Test Date: 01-20-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C2CE05  
 Test: AVERAGE Fundamental Emission Output Power – Radiated  
 Procedure: FCC KDB D01 DTS Meas Guidance v03r01  
 Section 9.2.2.2 – AVGSA-1 (trace averaging with the EUT transmitting at full power throughout each sweep)  
 Operator: Craig B

POINT – TO – POINT &  
POINT – TO – MULTIPOINT OPERATION

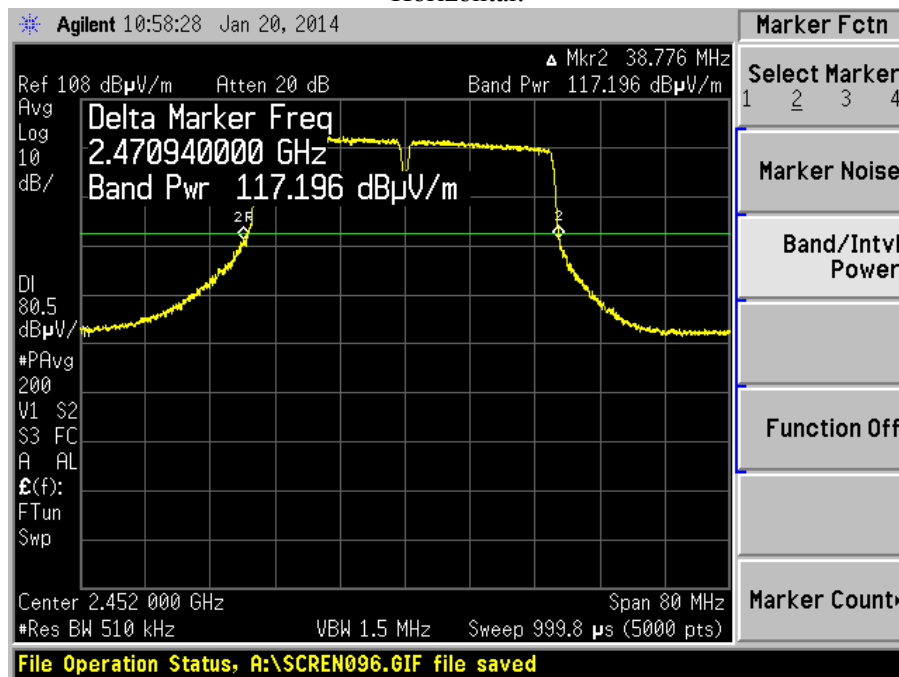
EUT nominal channel bandwidth: 40 MHz  
 Both output chains active; High Channel Frequency: 2.452 GHz  
 Test software setting: **13.5**  
 Modulation Type: OFDM MCS15  
 Antenna gain: 12 dBi  
 Duty cycle = 100%

Limit: [15.247(b)(3)&(4)]: 30 dBm (1 Watt) – 6 dB (antenna gain is 6 dB greater than the 6 dB allowed) = 24 dBm conducted.

Per FCC KDB 662911 D02 v01, where radiated measurements are used for compliance with conducted limits, sum the powers or PSDs across the two polarizations.

$$\begin{aligned}
 \text{EIRP} &= E + 20\log(3 \text{ meters}) - 104.8 \\
 &= 117.196 + 20\log(3) - 104.8 \\
 &= 21.94 \text{ dBm for Horizontal polarization}
 \end{aligned}$$

Fundamental Emission AVERAGE Output Power  
Horizontal:



21.95 dBm Vertical = 156.6751070 mW  
 21.94 dBm Horizontal = 156.3147643 mW  
 Total = 156.6751070 + 156.3147643 = 312.9898713 mW = **24.96 dBm e.i.r.p.**  
 Total RF Conducted output power = 24.96 dBm – 12 dBi = **12.96 dBm conducted**

Test Date: 03-12-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: AVERAGE Fundamental Emission Output Power – Conducted  
Procedure: FCC KDB D01 DTS Meas Guidance v03r01  
Section 9.2.3.1 – AVGPM (Measurement using an RF average power meter with a thermocouple detector)  
Operator: Craig B

EUT nominal channel bandwidth: 20 MHz  
Output port: Channel 1; Low Channel Frequency: 2.412 GHz  
Test software power setting: 11.5  
Modulation Type: OFDM MCS15  
Antenna gain: 17 dBi Sector antenna; Point-to-Point & Point-to-Multipoint operation

Limit: [15.247(b)(3)&(4)]: 30 dBm (1 Watt) – 11 dB (antenna gain is 11 dB greater than the 6 dB allowed) = 19 dBm conducted.

MIMO MATRIX A: Measure-and-sum technique for MIMO with Cross-Polarized antenna:  
Measure and add 10 log(N) dB, where N is the number of outputs.  
= 10 log(2) = 3 dB

Duty cycle = 100%

Fundamental Emission AVERAGE Output Power = 9.61 dBm + 3 dB (MIMO Cross-Pole)  
= 12.61 dBm



Test Date: 03-12-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: AVERAGE Fundamental Emission Output Power – Conducted  
Procedure: FCC KDB D01 DTS Meas Guidance v03r01  
Section 9.2.3.1 – AVGPM (Measurement using an RF average power meter with a thermocouple detector)  
Operator: Craig B

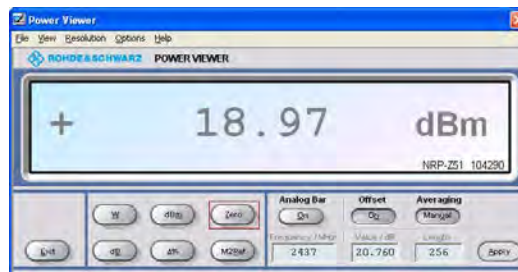
EUT nominal channel bandwidth: 20 MHz  
Output port: Channel 1; Mid Channel Frequency: 2.437 GHz  
Test software power setting: 20.5  
Modulation Type: OFDM MCS15  
Antenna gain: 17 dBi Sector antenna; Point-to-Point operation

Limit: [15.247(b)(3)&(c)(1)(i)]: 30 dBm conducted with 6 dBi antenna gain allowed. Conducted limit is lowered 1 dB for every 3 dB antenna gain exceeds 6 dB. Antenna gain exceeds 6 dBi by 11 dB, therefore RF conducted power limit is reduced by 4 dB.  
RF conducted limit = 26 dBm.

MIMO MATRIX A: Measure-and-sum technique for MIMO with Cross-Polarized antenna:  
Measure and add  $10 \log(N)$  dB, where N is the number of outputs.  
 $= 10 \log(2) = 3 \text{ dB}$

Duty cycle = 100%

Fundamental Emission AVERAGE Output Power = 18.97 dBm + 3 dB (MIMO Cross-Pole)  
= 21.97 dBm



Test Date: 03-11-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: AVERAGE Fundamental Emission Output Power – Conducted  
Procedure: FCC KDB D01 DTS Meas Guidance v03r01  
Section 9.2.3.1 – AVGPM (Measurement using an RF average power meter with a thermocouple detector)  
Operator: Craig B

EUT nominal channel bandwidth: 20 MHz  
Output port: Channel 1; Mid Channel Frequency: 2.437 GHz  
Test software power setting: 18.0  
Modulation Type: OFDM MCS15  
Antenna gain: 17 dBi Sector antenna; Point-to-Multipoint operation

Limit: [15.247(b)(3)&(4)]: 30 dBm (1 Watt) – 11 dB (antenna gain is 11 dB greater than the 6 dB allowed) = 19 dBm conducted.

MIMO MATRIX A: Measure-and-sum technique for MIMO with Cross-Polarized antenna:  
Measure and add 10 log(N) dB, where N is the number of outputs.  
= 10 log(2) = 3 dB

Duty cycle = 100%

Fundamental Emission AVERAGE Output Power = 15.96 dBm + 3 dB (MIMO Cross-Pole)  
= 18.96 dBm





Test Date: 03-12-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: AVERAGE Fundamental Emission Output Power – Conducted  
Procedure: FCC KDB D01 DTS Meas Guidance v03r01  
Section 9.2.3.1 – AVGPM (Measurement using an RF average power meter with a thermocouple detector)  
Operator: Craig B

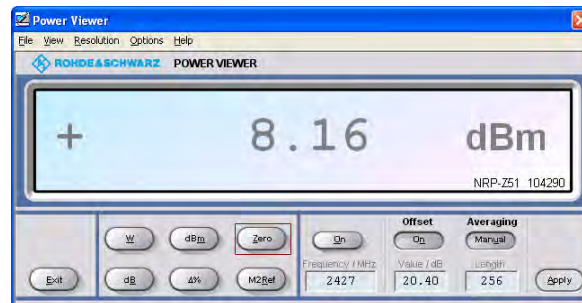
EUT nominal channel bandwidth: 40 MHz  
Output port: Channel 1; Low Channel Frequency: 2.427 GHz  
Test software power setting: 10  
Modulation Type: OFDM MCS15  
Antenna gain: 17 dBi Sector antenna; Point-to-Point & Point-to-Multipoint operation

Limit: [15.247(b)(3)&(4)]: 30 dBm (1 Watt) – 11 dB (antenna gain is 11 dB greater than the 6 dB allowed) = 19 dBm conducted.

MIMO MATRIX A: Measure-and-sum technique for MIMO with Cross-Polarized antenna:  
Measure and add 10 log(N) dB, where N is the number of outputs.  
= 10 log(2) = 3 dB

Duty cycle = 100%

Fundamental Emission AVERAGE Output Power = 8.16 dBm + 3 dB (MIMO Cross-Pole)  
= 11.16 dBm



Test Date: 03-12-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: AVERAGE Fundamental Emission Output Power – Conducted  
Procedure: FCC KDB D01 DTS Meas Guidance v03r01  
Section 9.2.3.1 – AVGPM (Measurement using an RF average power meter with a thermocouple detector)  
Operator: Craig B

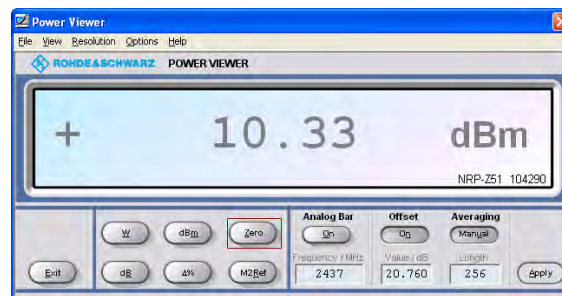
EUT nominal channel bandwidth: 40 MHz  
Output port: Channel 1; Mid Channel Frequency: 2.437 GHz  
Test software power setting: 11.5  
Modulation Type: OFDM MCS15  
Antenna gain: 17 dBi Sector antenna; Point-to-Point & Point-to-Multipoint operation

Limit: [15.247(b)(3)&(4)]: 30 dBm (1 Watt) – 11 dB (antenna gain is 11 dB greater than the 6 dB allowed) = 19 dBm conducted.

MIMO MATRIX A: Measure-and-sum technique for MIMO with Cross-Polarized antenna:  
Measure and add  $10 \log(N)$  dB, where N is the number of outputs.  
 $= 10 \log(2) = 3$  dB

Duty cycle = 100%

Fundamental Emission AVERAGE Output Power = 10.33 dBm + 3 dB (MIMO Cross-Pole)  
= 13.33 dBm





Test Date: 03-12-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: AVERAGE Fundamental Emission Output Power – Conducted  
Procedure: FCC KDB D01 DTS Meas Guidance v03r01  
Section 9.2.3.1 – AVGPM (Measurement using an RF average power meter with a thermocouple detector)  
Operator: Craig B

EUT nominal channel bandwidth: 40 MHz  
Output port: Channel 1; High Channel Frequency: 2.452 GHz  
Test software power setting: 6.5  
Modulation Type: OFDM MCS15  
Antenna gain: 17 dBi Sector antenna; Point-to-Point & Point-to-Multipoint operation

Limit: [15.247(b)(3)&(4)]: 30 dBm (1 Watt) – 11 dB (antenna gain is 11 dB greater than the 6 dB allowed) = 19 dBm conducted.

MIMO MATRIX A: Measure-and-sum technique for MIMO with Cross-Polarized antenna:  
Measure and add  $10 \log(N)$  dB, where N is the number of outputs.  
 $= 10 \log(2) = 3$  dB

Duty cycle = 100%

Fundamental Emission AVERAGE Output Power = 6.07 dBm + 3 dB (MIMO Cross-Pole)  
= 9.07 dBm



Test Date: 03-15-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: AVERAGE Fundamental Emission Output Power – Conducted  
Procedure: FCC KDB D01 DTS Meas Guidance v03r01  
Section 9.2.3.1 – AVGPM (Measurement using an RF average power meter with a thermocouple detector)  
Operator: Craig B

EUT nominal channel bandwidth: 20 MHz  
Output port: Channel 1; Low Channel Frequency: 2.412 GHz  
Test software power setting: 10.5  
Modulation Type: OFDM MCS15  
Antenna gain: 19 dBi Panel antenna; Point-to-Point & Point-to-Multipoint operation

Limit: [15.247(b)(3)&(4)]: 30 dBm (1 Watt) – 13 dB (antenna gain is 13 dB greater than the 6 dB allowed) = 17 dBm conducted.

MIMO MATRIX A: Measure-and-sum technique for MIMO with Cross-Polarized antenna:  
Measure and add  $10 \log(N)$  dB, where N is the number of outputs.  
 $= 10 \log(2) = 3$  dB

Duty cycle = 100%

Fundamental Emission AVERAGE Output Power = 8.80 dBm + 3 dB (MIMO Cross-Pole)  
= 11.80 dBm



Test Date: 03-15-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: AVERAGE Fundamental Emission Output Power – Conducted  
Procedure: FCC KDB D01 DTS Meas Guidance v03r01  
Section 9.2.3.1 – AVGPM (Measurement using an RF average power meter with a thermocouple detector)  
Operator: Craig B

EUT nominal channel bandwidth: 20 MHz  
Output port: Channel 1; Mid Channel Frequency: 2.437 GHz  
Test software power setting: 15.0  
Modulation Type: OFDM MCS15  
Antenna gain: 19 dBi Panel antenna; Point-to-Point & Point-to-Multipoint operation

Limit: [15.247(b)(3)&(4)]: 30 dBm (1 Watt) – 13 dB (antenna gain is 13 dB greater than the 6 dB allowed) = 17 dBm conducted.

MIMO MATRIX A: Measure-and-sum technique for MIMO with Cross-Polarized antenna:  
Measure and add 10 log(N) dB, where N is the number of outputs.  
= 10 log(2) = 3 dB

Duty cycle = 100%

Fundamental Emission AVERAGE Output Power = 13.97 dBm + 3 dB (MIMO Cross-Pole)  
= 16.97 dBm



Test Date: 03-15-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: AVERAGE Fundamental Emission Output Power – Conducted  
Procedure: FCC KDB D01 DTS Meas Guidance v03r01  
Section 9.2.3.1 – AVGPM (Measurement using an RF average power meter with a thermocouple detector)  
Operator: Craig B

EUT nominal channel bandwidth: 20 MHz  
Output port: Channel 1; High Channel Frequency: 2.462 GHz  
Test software power setting: 9  
Modulation Type: OFDM MCS15  
Antenna gain: 19 dBi Panel antenna; Point-to-Point & Point-to-Multipoint operation

Limit: [15.247(b)(3)&(4)]: 30 dBm (1 Watt) – 13 dB (antenna gain is 13 dB greater than the 6 dB allowed) = 17 dBm conducted.

MIMO MATRIX A: Measure-and-sum technique for MIMO with Cross-Polarized antenna:  
Measure and add 10 log(N) dB, where N is the number of outputs.  
= 10 log(2) = 3 dB

Duty cycle = 100%

Fundamental Emission AVERAGE Output Power = 8.52 dBm + 3 dB (MIMO Cross-Pole)  
= 11.52 dBm



Test Date: 03-15-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: AVERAGE Fundamental Emission Output Power – Conducted  
Procedure: FCC KDB D01 DTS Meas Guidance v03r01  
Section 9.2.3.1 – AVGPM (Measurement using an RF average power meter with a thermocouple detector)  
Operator: Craig B

EUT nominal channel bandwidth: 40 MHz  
Output port: Channel 1; Low Channel Frequency: 2.427 GHz  
Test software power setting: 9  
Modulation Type: OFDM MCS15  
Antenna gain: 19 dBi Panel antenna; Point-to-Point & Point-to-Multipoint operation

Limit: [15.247(b)(3)&(4)]: 30 dBm (1 Watt) – 13 dB (antenna gain is 13 dB greater than the 6 dB allowed) = 17 dBm conducted.

MIMO MATRIX A: Measure-and-sum technique for MIMO with Cross-Polarized antenna:  
Measure and add 10 log(N) dB, where N is the number of outputs.  
= 10 log(2) = 3 dB

Duty cycle = 100%

Fundamental Emission AVERAGE Output Power = 7.74 dBm + 3 dB (MIMO Cross-Pole)  
= 10.74 dBm



Test Date: 03-15-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: AVERAGE Fundamental Emission Output Power – Conducted  
Procedure: FCC KDB D01 DTS Meas Guidance v03r01  
Section 9.2.3.1 – AVGPM (Measurement using an RF average power meter with a thermocouple detector)  
Operator: Craig B

EUT nominal channel bandwidth: 40 MHz  
Output port: Channel 1; Mid Channel Frequency: 2.437 GHz  
Test software power setting: 10  
Modulation Type: OFDM MCS15  
Antenna gain: 19 dBi Panel antenna; Point-to-Point & Point-to-Multipoint operation

Limit: [15.247(b)(3)&(4)]: 30 dBm (1 Watt) – 13 dB (antenna gain is 13 dB greater than the 6 dB allowed) = 17 dBm conducted.

MIMO MATRIX A: Measure-and-sum technique for MIMO with Cross-Polarized antenna:  
Measure and add  $10 \log(N)$  dB, where N is the number of outputs.  
 $= 10 \log(2) = 3 \text{ dB}$

Duty cycle = 100%

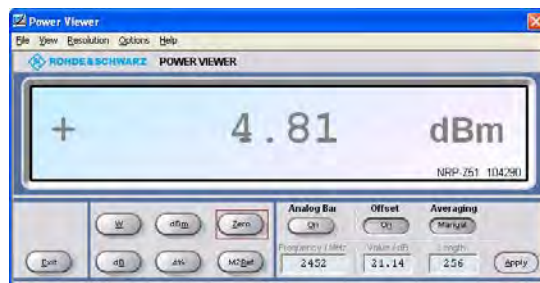
Fundamental Emission AVERAGE Output Power = 9.4 dBm + 3 dB (MIMO Cross-Pole)  
= 12.4 dBm



|                                     |  |
|-------------------------------------|--|
| EUT nominal channel bandwidth:      | 40 MHz   |
| Output port: Channel 1;             | High Channel Frequency: 2.452 GHz              |
| Test software power setting:        | 4.5  |
| Modulation Type:                    | OFDM MCS15                                     |
| Antenna gain: 19 dBi Panel antenna; | Point-to-Point & Point-to-Multipoint operation |

MIMO MATRIX A: Measure-and-sum technique for MIMO with Cross-Polarized antenna:  
 Measure and add  $10 \log(N)$  dB, where N is the number of outputs.  
 $= 10 \log(2) = 3$  dB

Fundamental Emission AVERAGE Output Power = 4.81 dBm + 3 dB (MIMO Cross-Pole)  
= 7.81 dBm



Test Date: 03-17-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: AVERAGE Fundamental Emission Output Power – Conducted  
Procedure: FCC KDB D01 DTS Meas Guidance v03r01  
Section 9.2.3.1 – AVGPM (Measurement using an RF average power meter with a thermocouple detector)  
Operator: Craig B

EUT nominal channel bandwidth: 20 MHz  
Output port: Channel 1; Low Channel Frequency: 2.412 GHz  
Test software power setting: 7  
Modulation Type: OFDM MCS15  
Antenna gain: 19 dBi Dish antenna; Point-to-Point & Point-to-Multipoint operation

Limit: [15.247(b)(3)&(4)]: 30 dBm (1 Watt) – 19 dB (antenna gain is 19 dB greater than the 6 dB allowed) = 11 dBm conducted.

MIMO MATRIX A: Measure-and-sum technique for MIMO with Cross-Polarized antenna:  
Measure and add 10 log(N) dB, where N is the number of outputs.  
= 10 log(2) = 3 dB

Duty cycle = 100%

Fundamental Emission AVERAGE Output Power = 5.65 dBm + 3 dB (MIMO Cross-Pole)  
= 8.65 dBm





Test Date: 03-17-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: AVERAGE Fundamental Emission Output Power – Conducted  
Procedure: FCC KDB D01 DTS Meas Guidance v03r01  
Section 9.2.3.1 – AVGPM (Measurement using an RF average power meter with a thermocouple detector)  
Operator: Craig B

EUT nominal channel bandwidth: 20 MHz  
Output port: Channel 1; Mid Channel Frequency: 2.437 GHz  
Test software power setting: 7  
Modulation Type: OFDM MCS15  
Antenna gain: 25 dBi Dish antenna; Point-to-Point & Point-to-Multipoint operation

Limit: [15.247(b)(3)&(4)]: 30 dBm (1 Watt) – 19 dB (antenna gain is 19 dB greater than the 6 dB allowed) = 11 dBm conducted.

MIMO MATRIX A: Measure-and-sum technique for MIMO with Cross-Polarized antenna:  
Measure and add 10 log(N) dB, where N is the number of outputs.  
= 10 log(2) = 3 dB

Duty cycle = 100%

Fundamental Emission AVERAGE Output Power = 6.37 dBm + 3 dB (MIMO Cross-Pole)  
= 9.37 dBm



Test Date: 03-17-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: AVERAGE Fundamental Emission Output Power – Conducted  
Procedure: FCC KDB D01 DTS Meas Guidance v03r01  
Section 9.2.3.1 – AVGPM (Measurement using an RF average power meter with a thermocouple detector)  
Operator: Craig B

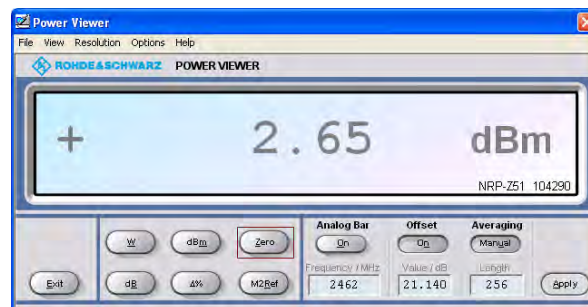
EUT nominal channel bandwidth: 20 MHz  
Output port: Channel 1; High Channel Frequency: 2.462 GHz  
Test software power setting: 2.5  
Modulation Type: OFDM MCS15  
Antenna gain: 25 dBi Dish antenna; Point-to-Point & Point-to-Multipoint operation

Limit: [15.247(b)(3)&(4)]: 30 dBm (1 Watt) – 19 dB (antenna gain is 19 dB greater than the 6 dB allowed) = 11 dBm conducted.

MIMO MATRIX A: Measure-and-sum technique for MIMO with Cross-Polarized antenna:  
Measure and add  $10 \log(N)$  dB, where N is the number of outputs.  
 $= 10 \log(2) = 3$  dB

Duty cycle = 100%

Fundamental Emission AVERAGE Output Power = 2.65 dBm + 3 dB (MIMO Cross-Pole)  
= 5.65 dBm



Test Date: 03-17-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: AVERAGE Fundamental Emission Output Power – Conducted  
Procedure: FCC KDB D01 DTS Meas Guidance v03r01  
Section 9.2.3.1 – AVGPM (Measurement using an RF average power meter with a thermocouple detector)  
Operator: Craig B

EUT nominal channel bandwidth: 40 MHz  
Output port: Channel 1; Low Channel Frequency: 2.427 GHz  
Test software power setting: 4.5  
Modulation Type: OFDM MCS15  
Antenna gain: 25 dBi Dish antenna; Point-to-Point & Point-to-Multipoint operation

Limit: [15.247(b)(3)&(4)]: 30 dBm (1 Watt) – 19 dB (antenna gain is 19 dB greater than the 6 dB allowed) = 11 dBm conducted.

MIMO MATRIX A: Measure-and-sum technique for MIMO with Cross-Polarized antenna:  
Measure and add  $10 \log(N)$  dB, where N is the number of outputs.  
 $= 10 \log(2) = 3 \text{ dB}$

Duty cycle = 100%

Fundamental Emission AVERAGE Output Power = 3.75 dBm + 3 dB (MIMO Cross-Pole)  
= 6.75 dBm



Test Date: 03-17-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: AVERAGE Fundamental Emission Output Power – Conducted  
Procedure: FCC KDB D01 DTS Meas Guidance v03r01  
Section 9.2.3.1 – AVGPM (Measurement using an RF average power meter with a thermocouple detector)  
Operator: Craig B

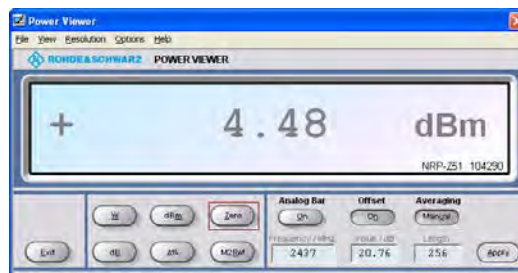
EUT nominal channel bandwidth: 40 MHz  
Output port: Channel 1; Mid Channel Frequency: 2.437 GHz  
Test software power setting: 4.5  
Modulation Type: OFDM MCS15  
Antenna gain: 25 dBi Dish antenna; Point-to-Point & Point-to-Multipoint operation

Limit: [15.247(b)(3)&(4)]: 30 dBm (1 Watt) – 19 dB (antenna gain is 19 dB greater than the 6 dB allowed) = 11 dBm conducted.

MIMO MATRIX A: Measure-and-sum technique for MIMO with Cross-Polarized antenna:  
Measure and add  $10 \log(N)$  dB, where N is the number of outputs.  
 $= 10 \log(2) = 3$  dB

Duty cycle = 100%

Fundamental Emission AVERAGE Output Power = 4.48 dBm + 3 dB (MIMO Cross-Pole)  
= 7.48 dBm



Test Date: 03-17-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: AVERAGE Fundamental Emission Output Power – Conducted  
Procedure: FCC KDB D01 DTS Meas Guidance v03r01  
Section 9.2.3.1 – AVGPM (Measurement using an RF average power meter with a thermocouple detector)  
Operator: Craig B

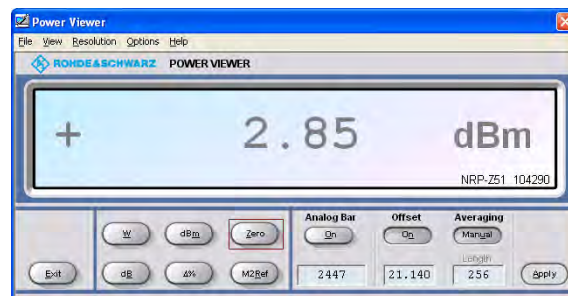
EUT nominal channel bandwidth: 40 MHz  
Output port: Channel 1; High Channel Frequency: 2.447 GHz  
Test software power setting: 2.5  
Modulation Type: OFDM MCS15  
Antenna gain: 25 dBi Dish antenna; Point-to-Point & Point-to-Multipoint operation

Limit: [15.247(b)(3)&(4)]: 30 dBm (1 Watt) – 19 dB (antenna gain is 19 dB greater than the 6 dB allowed) = 11 dBm conducted.

MIMO MATRIX A: Measure-and-sum technique for MIMO with Cross-Polarized antenna:  
Measure and add  $10 \log(N)$  dB, where N is the number of outputs.  
 $= 10 \log(2) = 3$  dB

Duty cycle = 100%

Fundamental Emission AVERAGE Output Power = 2.85 dBm + 3 dB (MIMO Cross-Pole)  
= 5.85 dBm





166 South Carter, Genoa City, WI 53128

|                |                             |
|----------------|-----------------------------|
| Company:       | Cambium Networks            |
| Model Tested:  | C024900P021A & C024900P031A |
| Report Number: | 19738                       |
| DLS Project:   | 6334                        |

## Appendix B – Measurement Data

### B3.0 Fundamental Emission Output Power - Radiated with 12 dBi integral Patch antenna

**Rule Section:** FCC 15.247(b)(3) and (4)(i)

**Test Procedure:** FCC KDB 558074 D01 DTS Meas Guidance v03r01 – *Guidance for Performing Compliance Measurements on Digital Transmission Systems (DTS) Operating Under §15.247*

Section 9.2.2.2 – AVGSA-1 (trace averaging with the EUT transmitting at full power throughout each sweep)

**Description:** The field strength of the fundamental was measured at a distance of 3 meters. The RBW was set between 1% and 5% of the occupied bandwidth, and the field strength was integrated across the occupied bandwidth of the signal using the spectrum analyzer's band power function. Vertical and Horizontal polarizations were measured. The field strengths were converted into EIRP values using the equation in section 12.2.2(e) relating EIRP levels to equivalent electric field strength levels.

Per FCC KDB 662911 D02 v01, where radiated measurements are used for compliance with conducted limits, sum the powers or PSDs across the two polarizations.

The EUT was transmitting continuously with a 100% duty cycle.  
The average power of the transmitter was measured.

Measurements were taken for OFDM MCS15 with 20 MHz and 40 MHz channel bandwidths at the low, middle and high channels of operation.

**Limit:** Limit with 12 dBi integral patch antenna (Point-to-Point mode): [15.247(b)(3)&(c)(1)(i)]: 30 dBm conducted with 6 dBi antenna gain allowed. Conducted limit is lowered 1 dB for every 3 dB antenna gain exceeds 6 dB. Antenna gain exceeds 6 dBi by 6 dB, therefore RF conducted power limit is reduced by 2 dB. RF conducted limit = 28 dBm.

Limit with 12 dBi integral patch antenna (Point-to-Multipoint mode): [15.247(b)(3)&(4)]: 30 dBm (1 Watt) – 6 dB (antenna gain is 6 dB greater than the 6 dB allowed) = 24 dBm conducted.

**Results:** Passed

**Notes:** The fundamental output power setting was limited in order to pass near-by restricted band emission limits.

Test Date: 01-20-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C2CE05  
Test: AVERAGE Fundamental Emission Output Power – Radiated  
Procedure: FCC KDB D01 DTS Meas Guidance v03r01  
Section 9.2.2.2 – AVGSA-1 (trace averaging with the EUT transmitting at full power throughout each sweep)  
Operator: Craig B

POINT – TO – POINT &  
POINT – TO – MULTIPOINT OPERATION

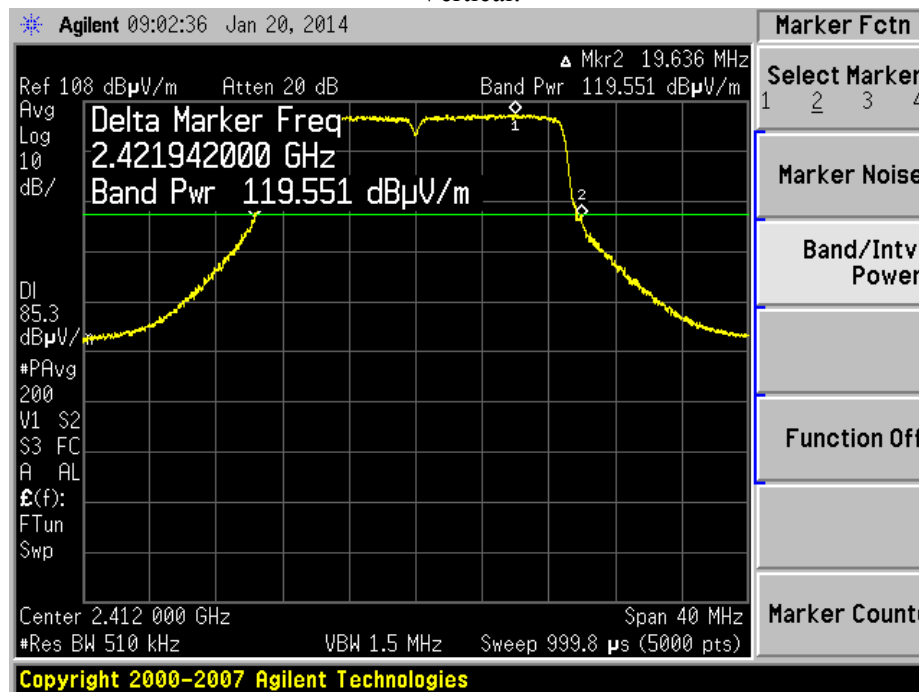
EUT nominal channel bandwidth: 20 MHz  
Both output chains active; Low Channel Frequency: 2.412 GHz  
Test software setting: 15  
Modulation Type: OFDM MCS15  
Antenna gain: 12 dBi  
Duty cycle = 100%

Limit: [15.247(b)(3)&(4)]: 30 dBm (1 Watt) – 6 dB (antenna gain is 6 dB greater than the 6 dB allowed) = 24 dBm conducted.

Per FCC KDB 662911 D02 v01, where radiated measurements are used for compliance with conducted limits, sum the powers or PSDs across the two polarizations.

$$\begin{aligned}\text{EIRP} &= E + 20\log(3 \text{ meters}) - 104.8 \\ &= 119.551 + 20\log(3) - 104.8 \\ &= 24.29 \text{ dBm for Vertical polarization}\end{aligned}$$

Fundamental Emission AVERAGE Output Power  
Vertical:



Test Date: 01-20-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C2CE05  
 Test: AVERAGE Fundamental Emission Output Power – Radiated  
 Procedure: FCC KDB D01 DTS Meas Guidance v03r01  
 Section 9.2.2.2 – AVGSA-1 (trace averaging with the EUT transmitting at full power throughout each sweep)  
 Operator: Craig B

POINT – TO – POINT &  
POINT – TO – MULTIPOINT OPERATION

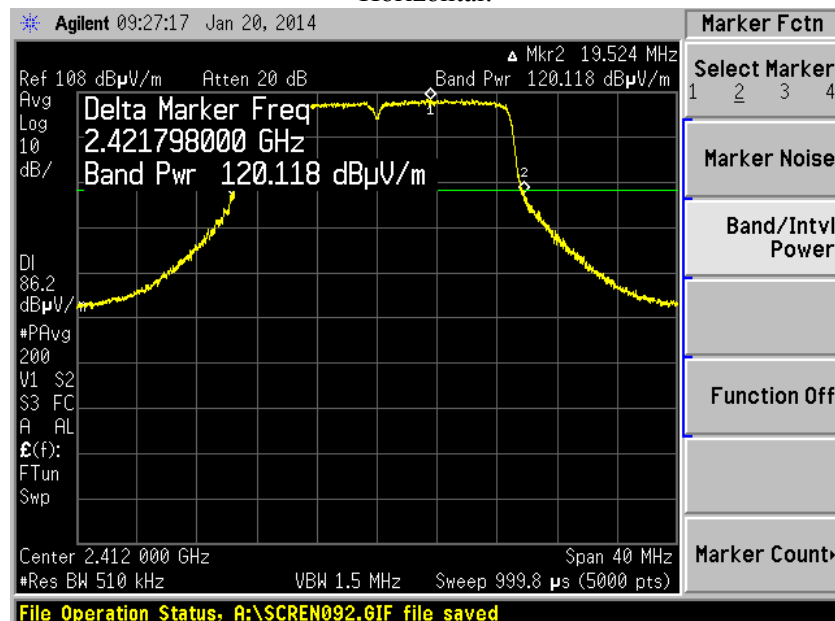
EUT nominal channel bandwidth: 20 MHz  
 Both output chains active; Low Channel Frequency: 2.412 GHz  
 Test software setting: **15**  
 Modulation Type: OFDM MCS15  
 Antenna gain: 12 dBi  
 Duty cycle = 100%

Limit: [15.247(b)(3)&(4)]: 30 dBm (1 Watt) – 6 dB (antenna gain is 6 dB greater than the 6 dB allowed) = 24 dBm conducted.

Per FCC KDB 662911 D02 v01, where radiated measurements are used for compliance with conducted limits, sum the powers or PSDs across the two polarizations.

$$\begin{aligned}
 \text{EIRP} &= E + 20\log(3 \text{ meters}) - 104.8 \\
 &= 120.118 + 20\log(3) - 104.8 \\
 &= 24.86 \text{ dBm for Horizontal polarization}
 \end{aligned}$$

Fundamental Emission AVERAGE Output Power  
Horizontal:



24.29 dBm Vertical = 268.5344446 mW  
 24.86 dBm Horizontal = 306.1963434 mW  
 Total = 268.5344446 + 306.1963434 = 574.730788 mW = **27.60 dBm e.i.r.p.**  
 Total RF Conducted output power = 27.60 dBm – 12 dBi = **15.60 dBm conducted**



Test Date: 01-17-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C2CE05  
 Test: AVERAGE Fundamental Emission Output Power – Radiated  
 Procedure: FCC KDB D01 DTS Meas Guidance v03r01  
 Section 9.2.2.2 – AVGSA-1 (trace averaging with the EUT transmitting at full power throughout each sweep)  
 Operator: Craig B

#### POINT – TO – POINT OPERATION

EUT nominal channel bandwidth: 20 MHz  
 Both output chains active; Mid Channel Frequency: 2.437 GHz  
 Test software setting: 27  
 Modulation Type: OFDM MCS15  
 Antenna gain: 12 dBi  
 Duty cycle = 100%

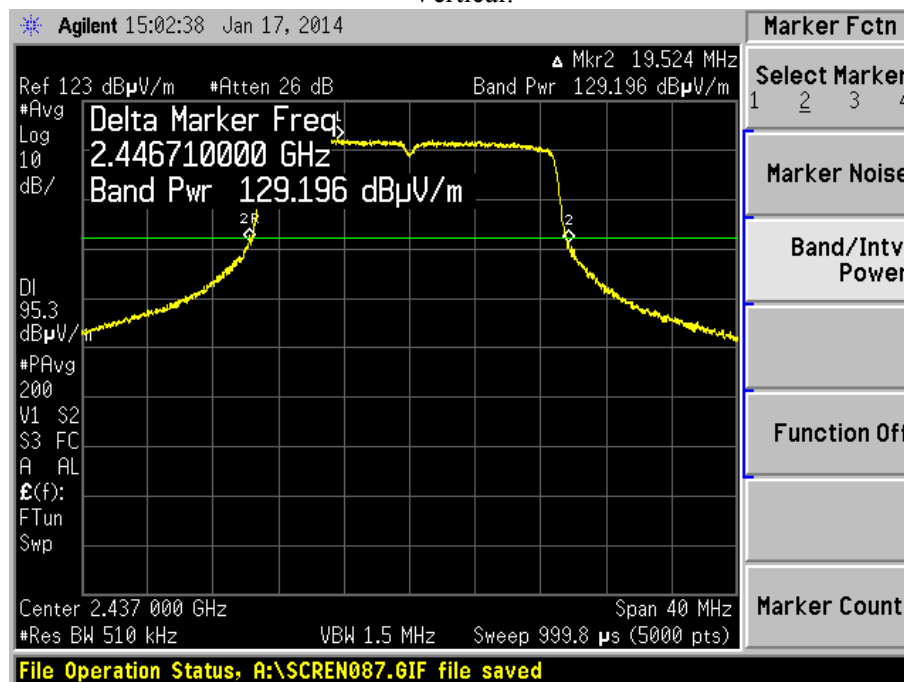
Limit: [15.247(b)(3)&(c)(1)(i)]: 30 dBm conducted with 6 dBi antenna gain allowed. Conducted limit is lowered 1 dB for every 3 dB antenna gain exceeds 6 dB. Antenna gain exceeds 6 dBi by 6 dB, therefore RF conducted power limit is reduced by 2 dB.  
 RF conducted limit = 28 dBm.

Per FCC KDB 662911 D02 v01, where radiated measurements are used for compliance with conducted limits, sum the powers or PSDs across the two polarizations.

$$\begin{aligned}
 \text{EIRP} &= E + 20\log(3 \text{ meters}) - 104.8 \\
 &= 129.196 + 20\log(3) - 104.8 \\
 &= 33.94 \text{ dBm for Vertical polarization}
 \end{aligned}$$

Fundamental Emission AVERAGE Output Power

Vertical:



Test Date: 01-17-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C2CE05  
 Test: AVERAGE Fundamental Emission Output Power – Radiated  
 Procedure: FCC KDB D01 DTS Meas Guidance v03r01  
 Section 9.2.2.2 – AVGSA-1 (trace averaging with the EUT transmitting at full power throughout each sweep)  
 Operator: Craig B

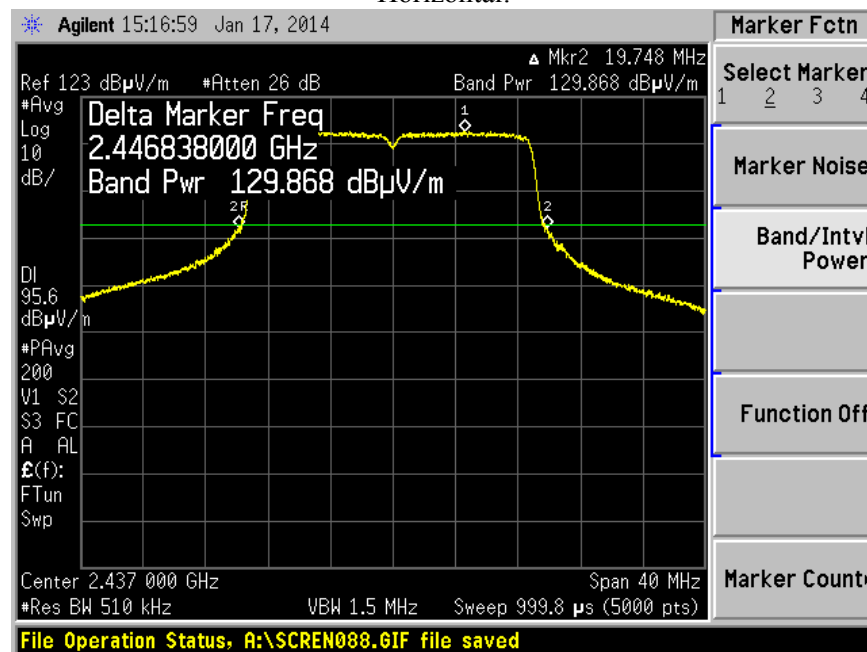
#### POINT – TO – POINT OPERATION

EUT nominal channel bandwidth: 20 MHz  
 Both output chains active; Mid Channel Frequency: 2.437 GHz  
 Test software setting: 27  
 Modulation Type: OFDM MCS15  
 Antenna gain: 12 dBi  
 Duty cycle = 100%

Limit: [15.247(b)(3)&(c)(1)(i)]: 30 dBm conducted with 6 dBi antenna gain allowed. Conducted limit is lowered 1 dB for every 3 dB antenna gain exceeds 6 dB. Antenna gain exceeds 6 dBi by 6 dB, therefore RF conducted power limit is reduced by 2 dB.  
 RF conducted limit = 28 dBm.

Per FCC KDB 662911 D02 v01, where radiated measurements are used for compliance with conducted limits, sum the powers or PSDs across the two polarizations.

$$\begin{aligned} \text{EIRP} &= E + 20\log(3 \text{ meters}) - 104.8 \\ &= 129.868 + 20\log(3) - 104.8 \\ &= 34.61 \text{ dBm for Horizontal polarization} \end{aligned}$$
 Fundamental Emission AVERAGE Output Power  
 Horizontal:



33.94 dBm Vertical = 2477.422058 mW  
 34.61 dBm Horizontal = 2890.679882 mW  
 Total = 2477.422058 + 2890.679882 = 5368.10194 mW = **37.30 dBm e.i.r.p.**  
 Total RF Conducted output power = 37.30 dBm – 12 dBi = **25.30 dBm conducted**

Test Date: 01-16-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C2CE05  
 Test: AVERAGE Fundamental Emission Output Power – Radiated  
 Procedure: FCC KDB D01 DTS Meas Guidance v03r01  
 Section 9.2.2.2 – AVGSA-1 (trace averaging with the EUT transmitting at full power throughout each sweep)  
 Operator: Craig B

#### POINT – TO – MULTIPOINT OPERATION

EUT nominal channel bandwidth: 20 MHz  
 Both output chains active; Mid Channel Frequency: 2.437 GHz  
 Test software setting: 24.5  
 Modulation Type: OFDM MCS15  
 Antenna gain: 12 dBi  
 Duty cycle = 100%

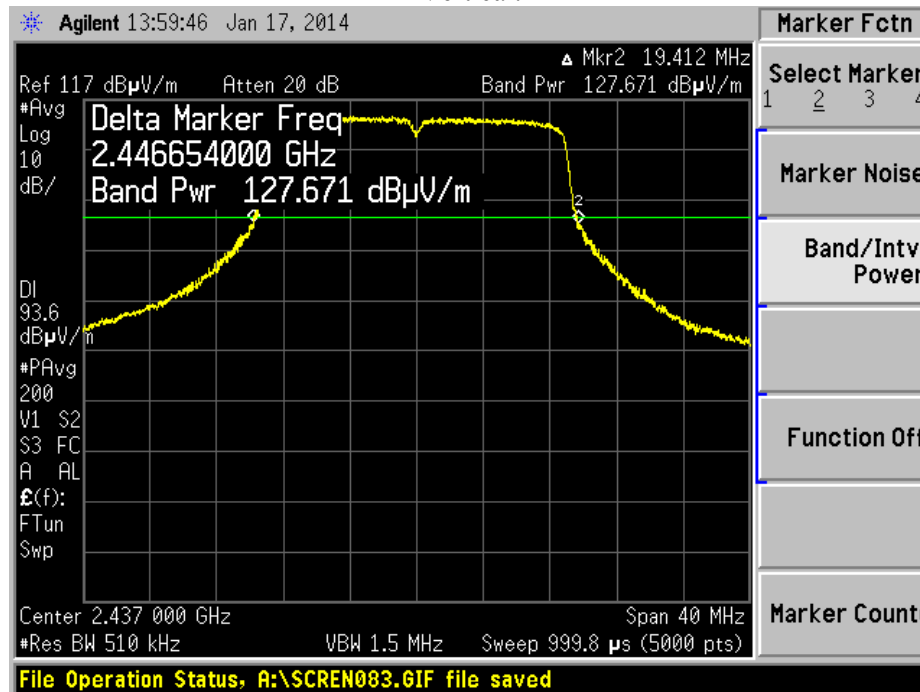
Limit: [15.247(b)(3)&(4)]: 30 dBm (1 Watt) – 6 dB (antenna gain is 6 dB greater than the 6 dB allowed) = 24 dBm conducted.

Per FCC KDB 662911 D02 v01, where radiated measurements are used for compliance with conducted limits, sum the powers or PSDs across the two polarizations.

$$\begin{aligned}
 \text{EIRP} &= E + 20\log(3 \text{ meters}) - 104.8 \\
 &= 127.671 + 20\log(3) - 104.8 \\
 &= 32.41 \text{ dBm for Vertical polarization}
 \end{aligned}$$

Fundamental Emission AVERAGE Output Power

Vertical:



Test Date: 01-16-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C2CE05  
 Test: AVERAGE Fundamental Emission Output Power – Radiated  
 Procedure: FCC KDB D01 DTS Meas Guidance v03r01  
 Section 9.2.2.2 – AVGSA-1 (trace averaging with the EUT transmitting at full power throughout each sweep)  
 Operator: Craig B

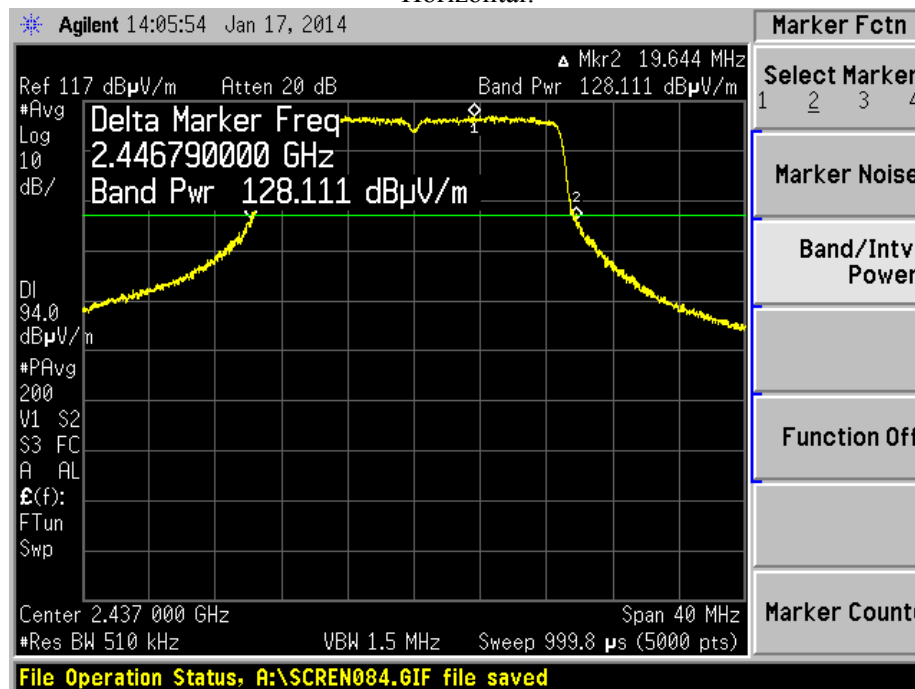
#### POINT – TO – MULTIPOINT OPERATION

EUT nominal channel bandwidth: 20 MHz  
 Both output chains active; Mid Channel Frequency: 2.437 GHz  
 Test software setting: 24.5  
 Modulation Type: OFDM MCS15  
 Antenna gain: 12 dBi  
 Duty cycle = 100%

Limit: [15.247(b)(3)&(4)]: 30 dBm (1 Watt) – 6 dB (antenna gain is 6 dB greater than the 6 dB allowed) = 24 dBm conducted.

Per FCC KDB 662911 D02 v01, where radiated measurements are used for compliance with conducted limits, sum the powers or PSDs across the two polarizations.

$$\begin{aligned} \text{EIRP} &= E + 20\log(3 \text{ meters}) - 104.8 \\ &= 128.11 + 20\log(3) - 104.8 \\ &= 32.85 \text{ dBm for Horizontal polarization} \end{aligned}$$
 Fundamental Emission AVERAGE Output Power  
 Horizontal:



32.41 dBm Vertical = 1741.806873 mW  
 32.85 dBm Horizontal = 1927.524913 mW  
 Total = 1741.806873 + 1927.524913 = 3669.331786 mW = **35.65 dBm e.i.r.p.**  
 Total RF Conducted output power = 35.65 dBm – 12 dBi = **23.65 dBm conducted**

Test Date: 01-20-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C2CE05  
Test: AVERAGE Fundamental Emission Output Power – Radiated  
Procedure: FCC KDB D01 DTS Meas Guidance v03r01  
Section 9.2.2.2 – AVGSA-1 (trace averaging with the EUT transmitting at full power throughout each sweep)  
Operator: Craig B

POINT – TO – POINT &  
POINT – TO – MULTIPOINT OPERATION

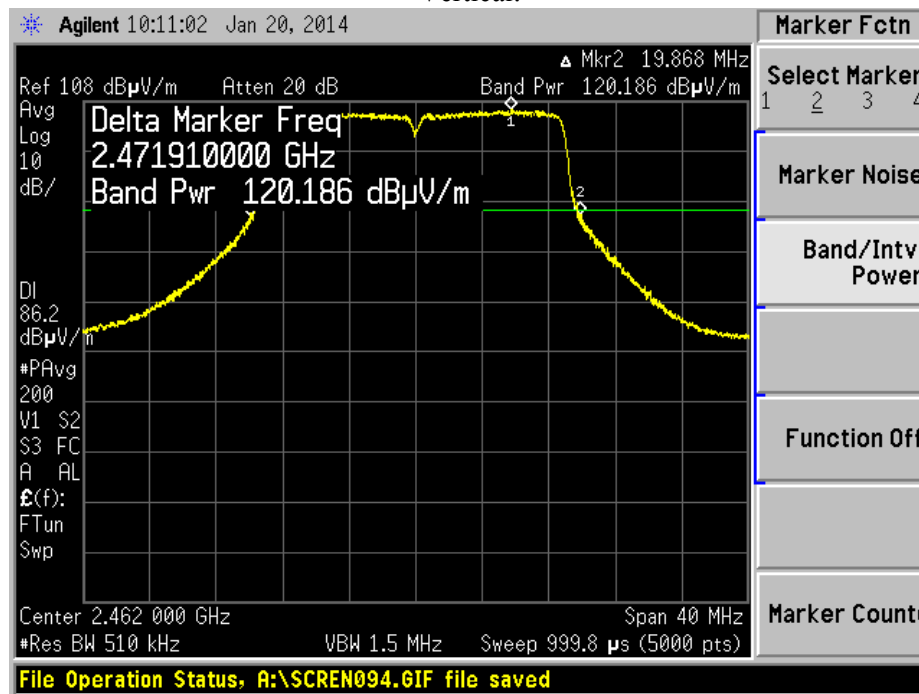
EUT nominal channel bandwidth: 20 MHz  
Both output chains active; High Channel Frequency: 2.462 GHz  
Test software setting: 17  
Modulation Type: OFDM MCS15  
Antenna gain: 12 dBi  
Duty cycle = 100%

Limit: [15.247(b)(3)&(4)]: 30 dBm (1 Watt) – 6 dB (antenna gain is 6 dB greater than the 6 dB allowed) = 24 dBm conducted.

Per FCC KDB 662911 D02 v01, where radiated measurements are used for compliance with conducted limits, sum the powers or PSDs across the two polarizations.

$$\begin{aligned}\text{EIRP} &= E + 20\log(3 \text{ meters}) - 104.8 \\ &= 120.186 + 20\log(3) - 104.8 \\ &= 24.93 \text{ dBm for Vertical polarization}\end{aligned}$$

Fundamental Emission AVERAGE Output Power  
Vertical:



Test Date: 01-20-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C2CE05  
 Test: AVERAGE Fundamental Emission Output Power – Radiated  
 Procedure: FCC KDB D01 DTS Meas Guidance v03r01  
 Section 9.2.2.2 – AVGSA-1 (trace averaging with the EUT transmitting at full power throughout each sweep)  
 Operator: Craig B

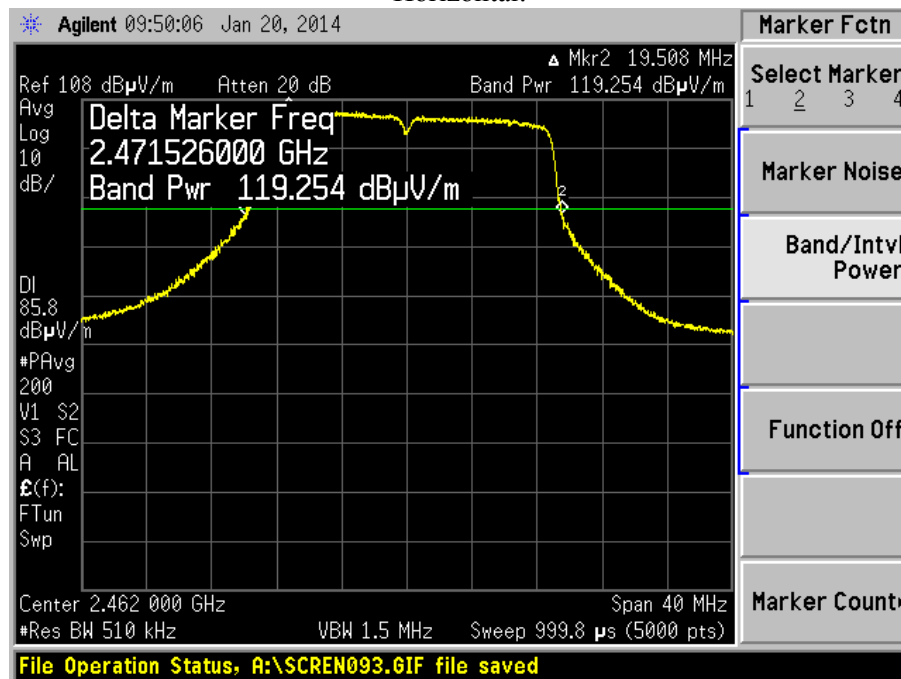
POINT – TO – POINT &  
POINT – TO – MULTIPOINT OPERATION

EUT nominal channel bandwidth: 20 MHz  
 Both output chains active; High Channel Frequency: 2.462 GHz  
 Test software setting: **17**  
 Modulation Type: OFDM MCS15  
 Antenna gain: 12 dBi  
 Duty cycle = 100%

Limit: [15.247(b)(3)&(4)]: 30 dBm (1 Watt) – 6 dB (antenna gain is 6 dB greater than the 6 dB allowed) = 24 dBm conducted.

Per FCC KDB 662911 D02 v01, where radiated measurements are used for compliance with conducted limits, sum the powers or PSDs across the two polarizations.

$$\begin{aligned}
 \text{EIRP} &= E + 20\log(3 \text{ meters}) - 104.8 \\
 &= 119.254 + 20\log(3) - 104.8 \\
 &= 24.00 \text{ dBm for Horizontal polarization} \\
 &\quad \text{Fundamental Emission AVERAGE Output Power} \\
 &\quad \text{Horizontal:}
 \end{aligned}$$



24.93 dBm Vertical = 311.1716337 mW  
 24.00 dBm Horizontal = 251.1886432 mW  
 Total = 311.1716337 + 251.1886432 = 562.3602769 mW = **27.50 dBm e.i.r.p.**  
 Total RF Conducted output power = 27.50 dBm – 12 dBi = **15.50 dBm conducted**

Test Date: 01-20-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C2CE05  
 Test: AVERAGE Fundamental Emission Output Power – Radiated  
 Procedure: FCC KDB D01 DTS Meas Guidance v03r01  
 Section 9.2.2.2 – AVGSA-1 (trace averaging with the EUT transmitting at full power throughout each sweep)  
 Operator: Craig B

POINT – TO – POINT &  
POINT – TO – MULTIPOINT OPERATION

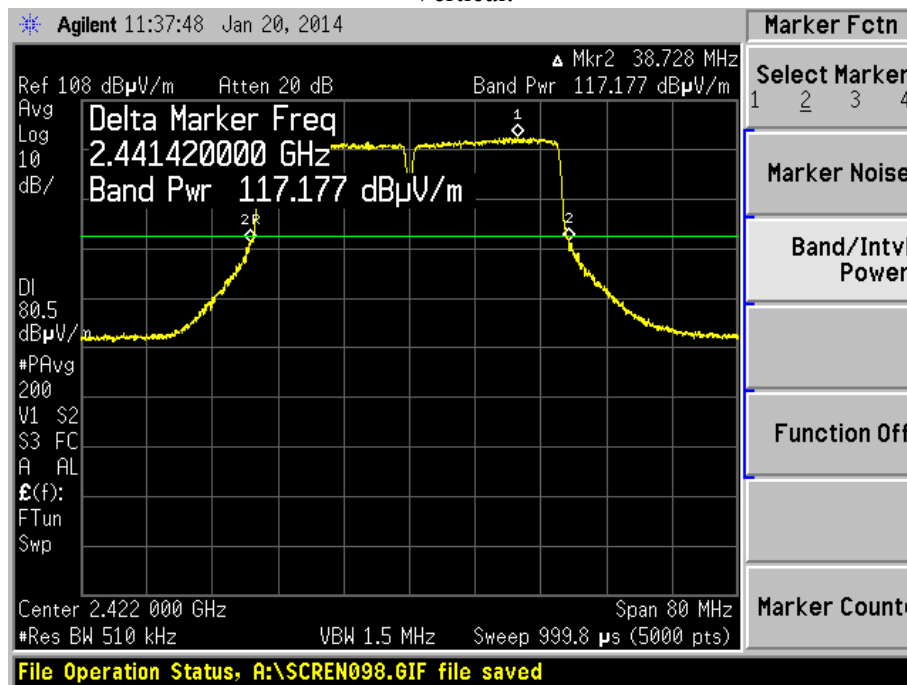
EUT nominal channel bandwidth: 40 MHz  
 Both output chains active; Low Channel Frequency: 2.422 GHz  
 Test software setting: 12.5  
 Modulation Type: OFDM MCS15  
 Antenna gain: 12 dBi  
 Duty cycle = 100%

Limit: [15.247(b)(3)&(4)]: 30 dBm (1 Watt) – 6 dB (antenna gain is 6 dB greater than the 6 dB allowed) = 24 dBm conducted.

Per FCC KDB 662911 D02 v01, where radiated measurements are used for compliance with conducted limits, sum the powers or PSDs across the two polarizations.

$$\begin{aligned}
 \text{EIRP} &= E + 20\log(3 \text{ meters}) - 104.8 \\
 &= 117.177 + 20\log(3) - 104.8 \\
 &= 21.92 \text{ dBm for Vertical polarization}
 \end{aligned}$$

Fundamental Emission AVERAGE Output Power  
Vertical:



Test Date: 01-20-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C2CE05  
 Test: AVERAGE Fundamental Emission Output Power – Radiated  
 Procedure: FCC KDB D01 DTS Meas Guidance v03r01  
 Section 9.2.2.2 – AVGSA-1 (trace averaging with the EUT transmitting at full power throughout each sweep)  
 Operator: Craig B

POINT – TO – POINT &  
POINT – TO – MULTIPOINT OPERATION

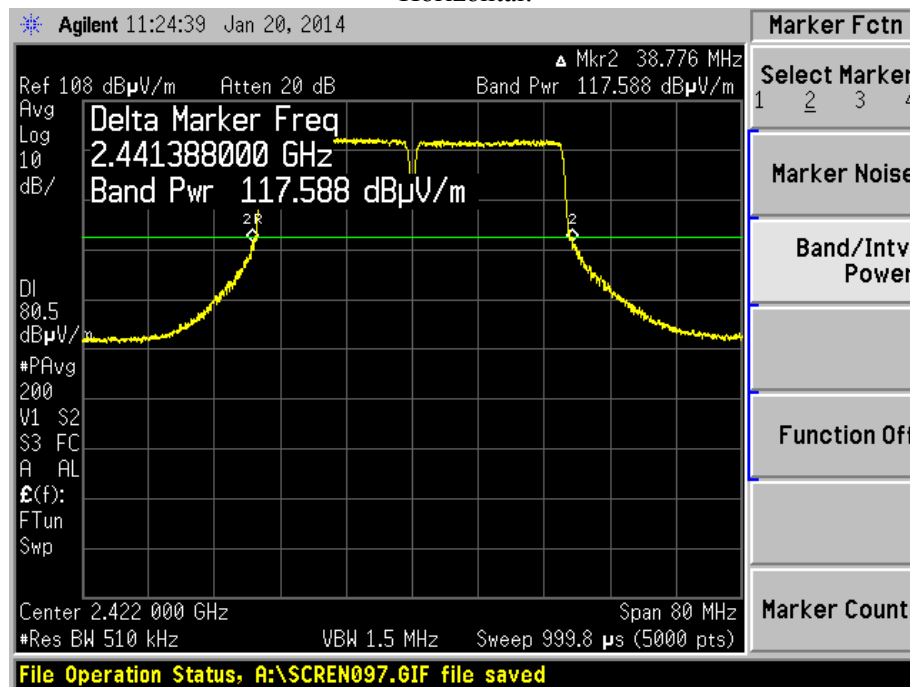
EUT nominal channel bandwidth: 40 MHz  
 Both output chains active; Low Channel Frequency: 2.422 GHz  
 Test software setting: 12.5  
 Modulation Type: OFDM MCS15  
 Antenna gain: 12 dBi  
 Duty cycle = 100%

Limit: [15.247(b)(3)&(4)]: 30 dBm (1 Watt) – 6 dB (antenna gain is 6 dB greater than the 6 dB allowed) = 24 dBm conducted.

Per FCC KDB 662911 D02 v01, where radiated measurements are used for compliance with conducted limits, sum the powers or PSDs across the two polarizations.

$$\begin{aligned}
 \text{EIRP} &= E + 20\log(3 \text{ meters}) - 104.8 \\
 &= 117.588 + 20\log(3) - 104.8 \\
 &= 22.33 \text{ dBm for Horizontal polarization}
 \end{aligned}$$

Fundamental Emission AVERAGE Output Power  
Horizontal:



21.92 dBm Vertical = 155.5965632 mW  
 22.33 dBm Horizontal = 171.0015315 mW  
 Total = 155.5965632 + 171.0015315 = 326.5980947 mW = **25.14 dBm e.i.r.p.**  
 Total RF Conducted output power = 25.14 dBm – 12 dBi = **13.14 dBm conducted**



Test Date: 01-17-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C2CE05  
 Test: AVERAGE Fundamental Emission Output Power – Radiated  
 Procedure: FCC KDB D01 DTS Meas Guidance v03r01  
 Section 9.2.2.2 – AVGSA-1 (trace averaging with the EUT transmitting at full power throughout each sweep)  
 Operator: Craig B

POINT – TO – POINT &  
POINT – TO – MULTIPOINT OPERATION

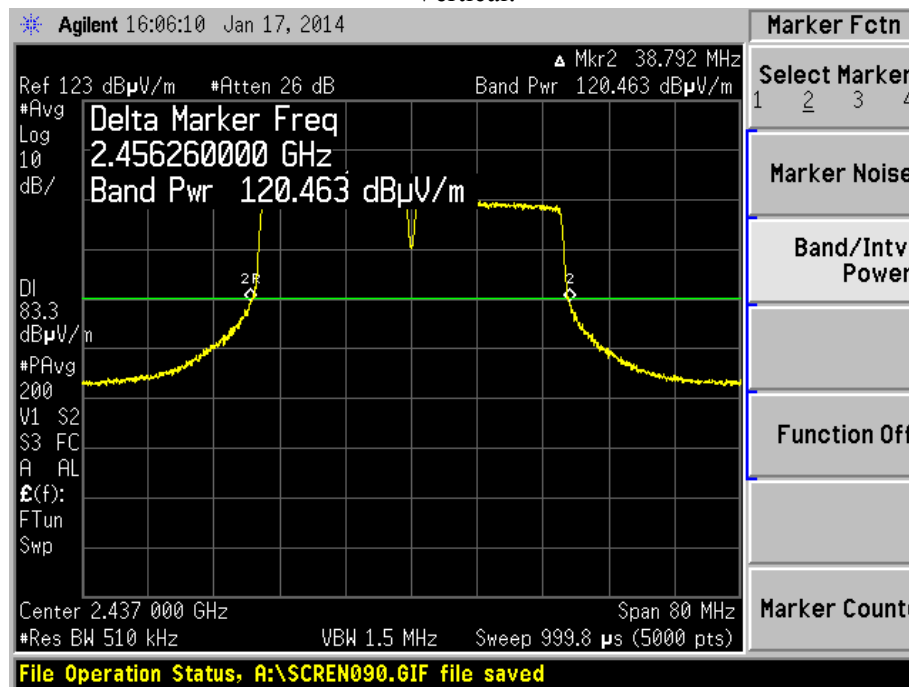
EUT nominal channel bandwidth: 40 MHz  
 Both output chains active; Mid Channel Frequency: 2.437 GHz  
 Test software setting: 17  
 Modulation Type: OFDM MCS15  
 Antenna gain: 12 dBi  
 Duty cycle = 100%

Limit: [15.247(b)(3)&(4)]: 30 dBm (1 Watt) – 6 dB (antenna gain is 6 dB greater than the 6 dB allowed) = 24 dBm conducted.

Per FCC KDB 662911 D02 v01, where radiated measurements are used for compliance with conducted limits, sum the powers or PSDs across the two polarizations.

$$\begin{aligned}
 \text{EIRP} &= E + 20\log(3 \text{ meters}) - 104.8 \\
 &= 120.463 + 20\log(3) - 104.8 \\
 &= 25.21 \text{ dBm for Vertical polarization}
 \end{aligned}$$

Fundamental Emission AVERAGE Output Power  
Vertical:



Test Date: 01-17-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C2CE05  
 Test: AVERAGE Fundamental Emission Output Power – Radiated  
 Procedure: FCC KDB D01 DTS Meas Guidance v03r01  
 Section 9.2.2.2 – AVGSA-1 (trace averaging with the EUT transmitting at full power throughout each sweep)  
 Operator: Craig B

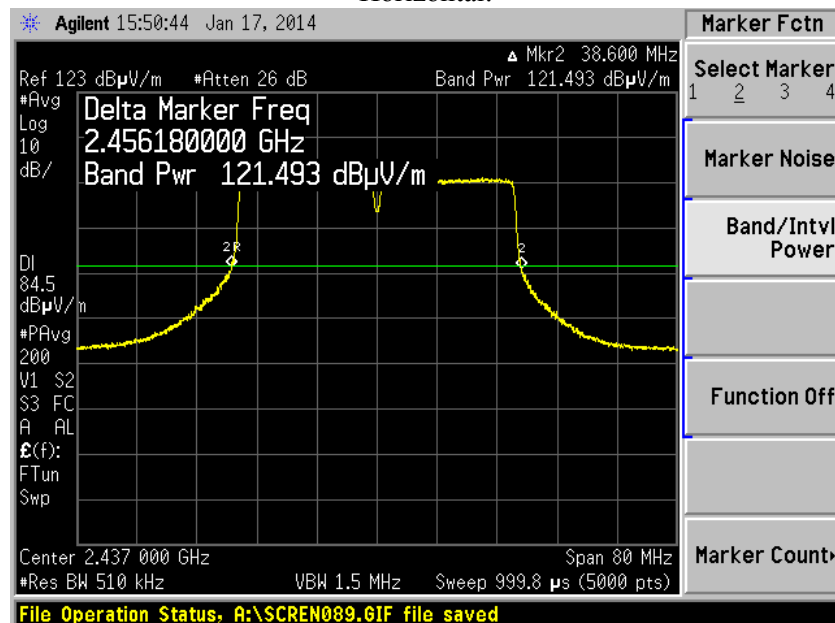
POINT – TO – POINT &  
POINT – TO – MULTIPOINT OPERATION

EUT nominal channel bandwidth: 40 MHz  
 Both output chains active; Mid Channel Frequency: 2.437 GHz  
 Test software setting: **17**  
 Modulation Type: OFDM MCS15  
 Antenna gain: 12 dBi  
 Duty cycle = 100%

Limit: [15.247(b)(3)&(4)]: 30 dBm (1 Watt) – 6 dB (antenna gain is 6 dB greater than the 6 dB allowed) = 24 dBm conducted.

Per FCC KDB 662911 D02 v01, where radiated measurements are used for compliance with conducted limits, sum the powers or PSDs across the two polarizations.

$EIRP = E + 20\log(3 \text{ meters}) - 104.8$   
 $= 121.493 + 20\log(3) - 104.8$   
 $= 26.24 \text{ dBm for Horizontal polarization}$   
 Fundamental Emission AVERAGE Output Power  
 Horizontal:



25.21 dBm Vertical = 331.8944576 mW  
 26.24 dBm Horizontal = 420.7266284 mW  
 Total = 331.8944576 + 420.7266284 = 752.621086 mW = **28.77 dBm e.i.r.p.**  
 Total RF Conducted output power = 28.77 dBm – 12 dBi = **16.77 dBm conducted**

Test Date: 01-20-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C2CE05  
 Test: AVERAGE Fundamental Emission Output Power – Radiated  
 Procedure: FCC KDB D01 DTS Meas Guidance v03r01  
 Section 9.2.2.2 – AVGSA-1 (trace averaging with the EUT transmitting at full power throughout each sweep)  
 Operator: Craig B

POINT – TO – POINT &  
POINT – TO – MULTIPOINT OPERATION

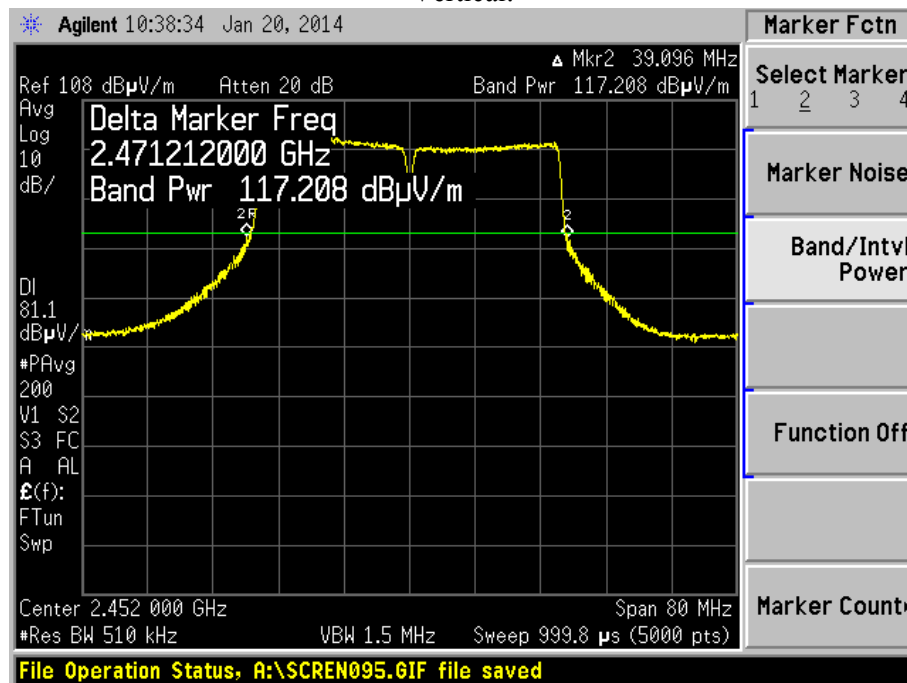
EUT nominal channel bandwidth: 40 MHz  
 Both output chains active; High Channel Frequency: 2.452 GHz  
 Test software setting: 13.5  
 Modulation Type: OFDM MCS15  
 Antenna gain: 12 dBi  
 Duty cycle = 100%

Limit: [15.247(b)(3)&(4)]: 30 dBm (1 Watt) – 6 dB (antenna gain is 6 dB greater than the 6 dB allowed) = 24 dBm conducted.

Per FCC KDB 662911 D02 v01, where radiated measurements are used for compliance with conducted limits, sum the powers or PSDs across the two polarizations.

$$\begin{aligned}
 \text{EIRP} &= E + 20\log(3 \text{ meters}) - 104.8 \\
 &= 117.208 + 20\log(3) - 104.8 \\
 &= 21.95 \text{ dBm for Vertical polarization}
 \end{aligned}$$

Fundamental Emission AVERAGE Output Power  
Vertical:



Test Date: 01-20-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C2CE05  
 Test: AVERAGE Fundamental Emission Output Power – Radiated  
 Procedure: FCC KDB D01 DTS Meas Guidance v03r01  
 Section 9.2.2.2 – AVGSA-1 (trace averaging with the EUT transmitting at full power throughout each sweep)  
 Operator: Craig B

POINT – TO – POINT &  
POINT – TO – MULTIPOINT OPERATION

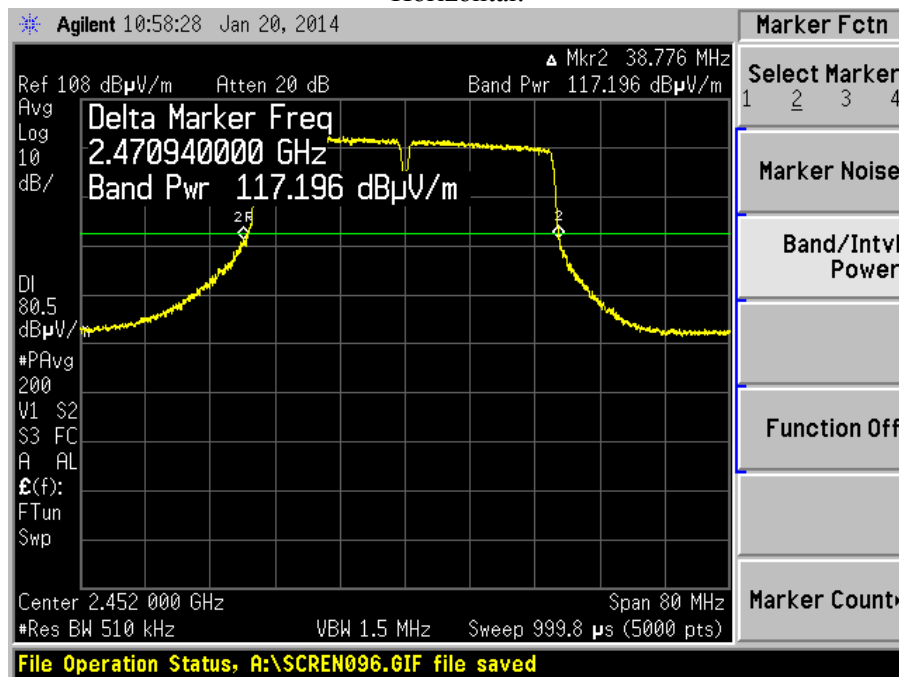
EUT nominal channel bandwidth: 40 MHz  
 Both output chains active; High Channel Frequency: 2.452 GHz  
 Test software setting: **13.5**  
 Modulation Type: OFDM MCS15  
 Antenna gain: 12 dBi  
 Duty cycle = 100%

Limit: [15.247(b)(3)&(4)]: 30 dBm (1 Watt) – 6 dB (antenna gain is 6 dB greater than the 6 dB allowed) = 24 dBm conducted.

Per FCC KDB 662911 D02 v01, where radiated measurements are used for compliance with conducted limits, sum the powers or PSDs across the two polarizations.

$$\begin{aligned}
 \text{EIRP} &= E + 20\log(3 \text{ meters}) - 104.8 \\
 &= 117.196 + 20\log(3) - 104.8 \\
 &= 21.94 \text{ dBm for Horizontal polarization}
 \end{aligned}$$

Fundamental Emission AVERAGE Output Power  
Horizontal:



21.95 dBm Vertical = 156.6751070 mW  
 21.94 dBm Horizontal = 156.3147643 mW  
 Total = 156.6751070 + 156.3147643 = 312.9898713 mW = **24.96 dBm e.i.r.p.**  
 Total RF Conducted output power = 24.96 dBm – 12 dBi = **12.96 dBm conducted**



166 South Carter, Genoa City, WI 53128

|                |                             |
|----------------|-----------------------------|
| Company:       | Cambium Networks            |
| Model Tested:  | C024900P021A & C024900P031A |
| Report Number: | 19738                       |
| DLS Project:   | 6334                        |

## Appendix B – Measurement Data

### B4.0 Maximum Power Spectral Density – Conducted

**Rule Section:** FCC 15.247(e)

**Test Procedure:** FCC KDB 558074 D01 DTS Meas Guidance v03r01 – *Guidance for Performing Compliance Measurements on Digital Transmission Systems (DTS) Operating Under §15.247*

10.3 Method AVGPSD-1 (trace averaging with EUT transmitting at full power throughout each sweep)

**Description:** Set instrument center frequency to DTS channel center frequency.  
Set span to at least 1.5 times the OBW.  
Set RBW to:  $3 \text{ kHz} \leq \text{RBW} \leq 100 \text{ kHz}$ .  
Set VBW  $\geq 3 \times \text{RBW}$   
Detector = power averaging (RMS).  
Ensure that the number of measurement points in the sweep  $\geq 2 \times \text{span/RBW}$ .  
Sweep time = auto couple.  
Trace mode: trace average 200 traces  
Use the peak marker function to determine the maximum amplitude level.  
If necessary, zoom in on the emission of interest in order to meet the minimum measurement point requirement.

**Limit:** 8 dBm in any 3 kHz band segment within the fundamental EBW during any time interval of continuous transmission.

**Results:** Passed

**Notes:** Measurements were taken for OFDM MCS15 with 20 MHz and 40 MHz channel bandwidths at the low, middle and high channels of operation. EUT was set to transmit continuously with a 100% duty cycle.

Measurements were taken using the power settings used with the 8 dBi and 12 dBi gain antennas (highest usable conducted output power).

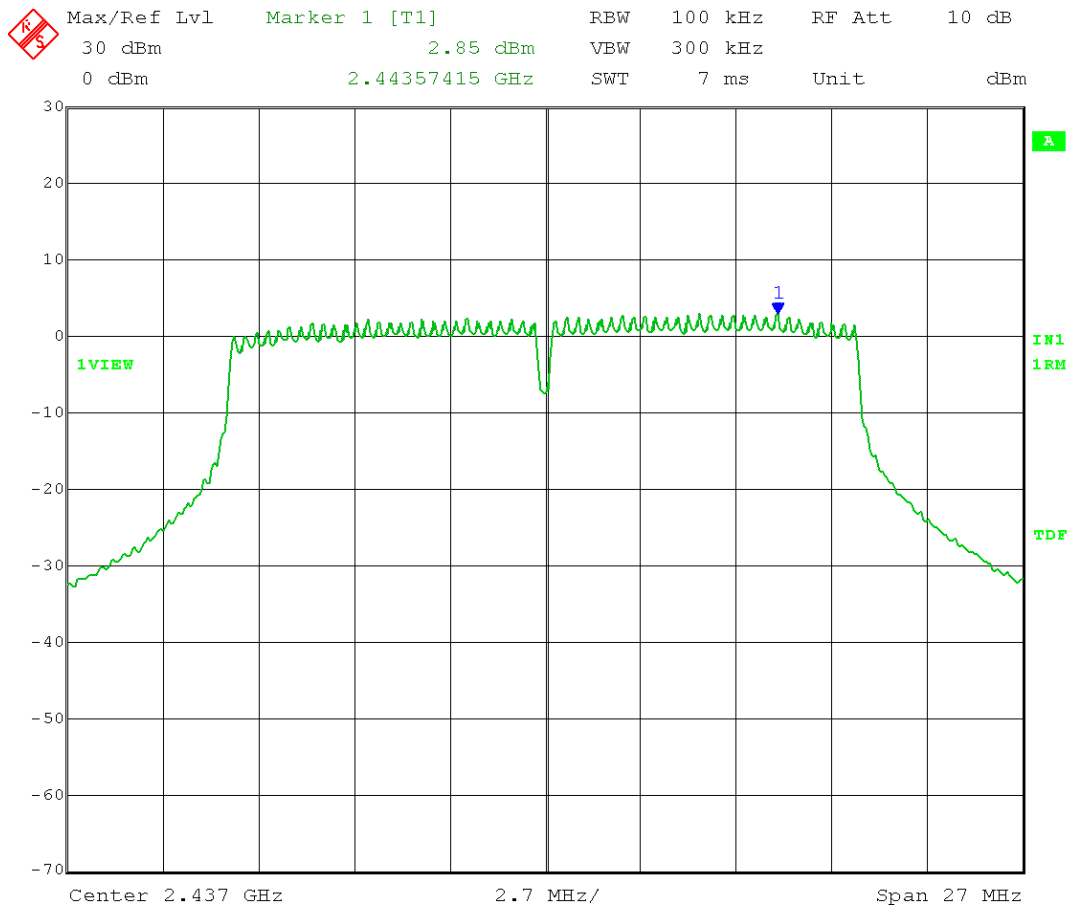
Since output port 1 measured a slightly higher output power than port 0, measurements for this test were made on port 1 only.

Date: 5.MAR.2014 13:57:18

Test Date: 03-05-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
 Test: Maximum Power Spectral Density level in the fundamental emission  
 Operator: Craig B  
 Comment: Mid Channel: Frequency = 2437 MHz  
           Output Power Setting = 26.5           20 MHz channel BW  
           RBW = 100 kHz                        VBW = 300 kHz  
           Span = 1.5 x DTS bandwidth        Detector = RMS  
           Sweep = auto couple                Trace mode: average 200 traces  
           Output port 1  
           Limit: +8 dBm / 3 kHz

MIMO MATRIX A: Measure-and-sum technique for MIMO with Cross-Polarized antenna:  
 Measure and add  $10 \log(N)$  dB, where N is the number of outputs.  
                      $= 10 \log(2) = 3$  dB

$$\text{PSD} = 2.85 \text{ dBm} + 3 \text{ dB (MIMO)} = 5.85 \text{ dBm} / 100 \text{ kHz}$$



Date: 5.MAR.2014 14:01:01

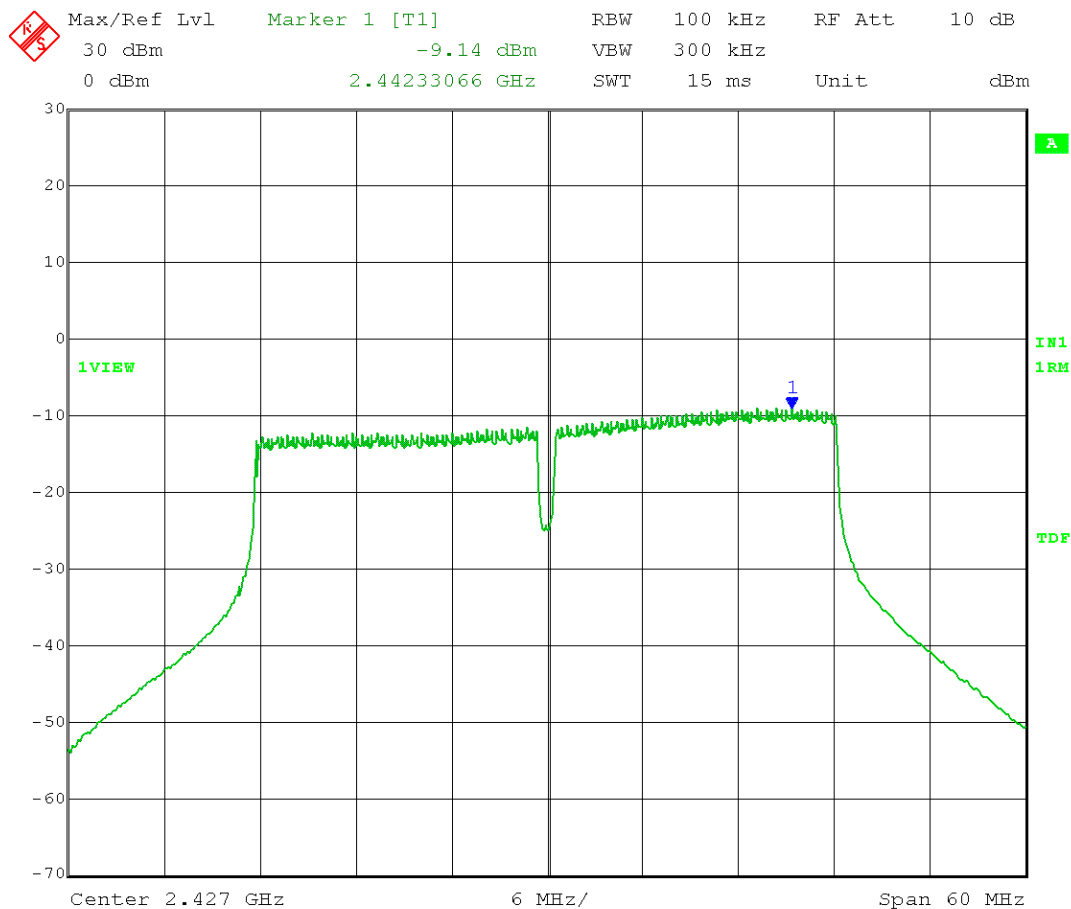
Date: 5.MAR.2014 13:54:08



Test Date: 03-05-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
 Test: Maximum Power Spectral Density level in the fundamental emission  
 Operator: Craig B  
 Comment: Low Channel: Frequency = 2427 MHz  
           Output Power Setting = 15.5           40 MHz channel BW  
           RBW = 100 kHz                        VBW = 300 kHz  
           Span = 1.5 x DTS bandwidth        Detector = RMS  
           Sweep = auto couple                Trace mode: average 200 traces  
           Output port 1  
           Limit: +8 dBm / 3 kHz

MIMO MATRIX A: Measure-and-sum technique for MIMO with Cross-Polarized antenna:  
 Measure and add  $10 \log(N)$  dB, where N is the number of outputs.  
                    $= 10 \log(2) = 3$  dB

$$\text{PSD} = -9.14 \text{ dBm} + 3 \text{ dB (MIMO)} = -6.14 \text{ dBm} / 100 \text{ kHz}$$

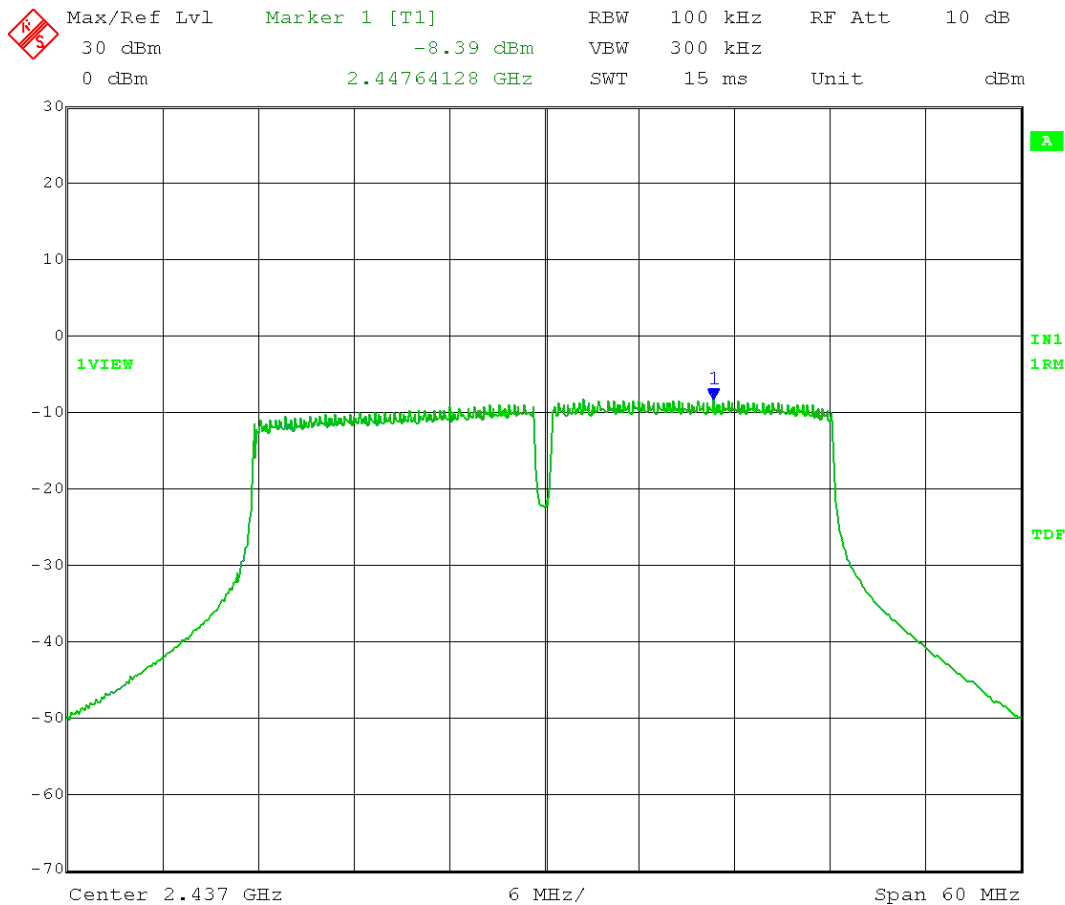


Date: 5.MAR.2014 14:12:08

Test Date: 03-05-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
 Test: Maximum Power Spectral Density level in the fundamental emission  
 Operator: Craig B  
 Comment: Mid Channel: Frequency = 2437 MHz  
 Output Power Setting = 18      40 MHz channel BW  
 RBW = 100 kHz      VBW = 300 kHz  
 Span = 1.5 x DTS bandwidth      Detector = RMS  
 Sweep = auto couple      Trace mode: average 200 traces  
 Output port 1  
 Limit: +8 dBm / 3 kHz

MIMO MATRIX A: Measure-and-sum technique for MIMO with Cross-Polarized antenna:  
 Measure and add  $10 \log(N)$  dB, where N is the number of outputs.  
 $= 10 \log(2) = 3 \text{ dB}$

$$\text{PSD} = -8.39 \text{ dBm} + 3 \text{ dB (MIMO)} = -5.39 \text{ dBm} / 100 \text{ kHz}$$

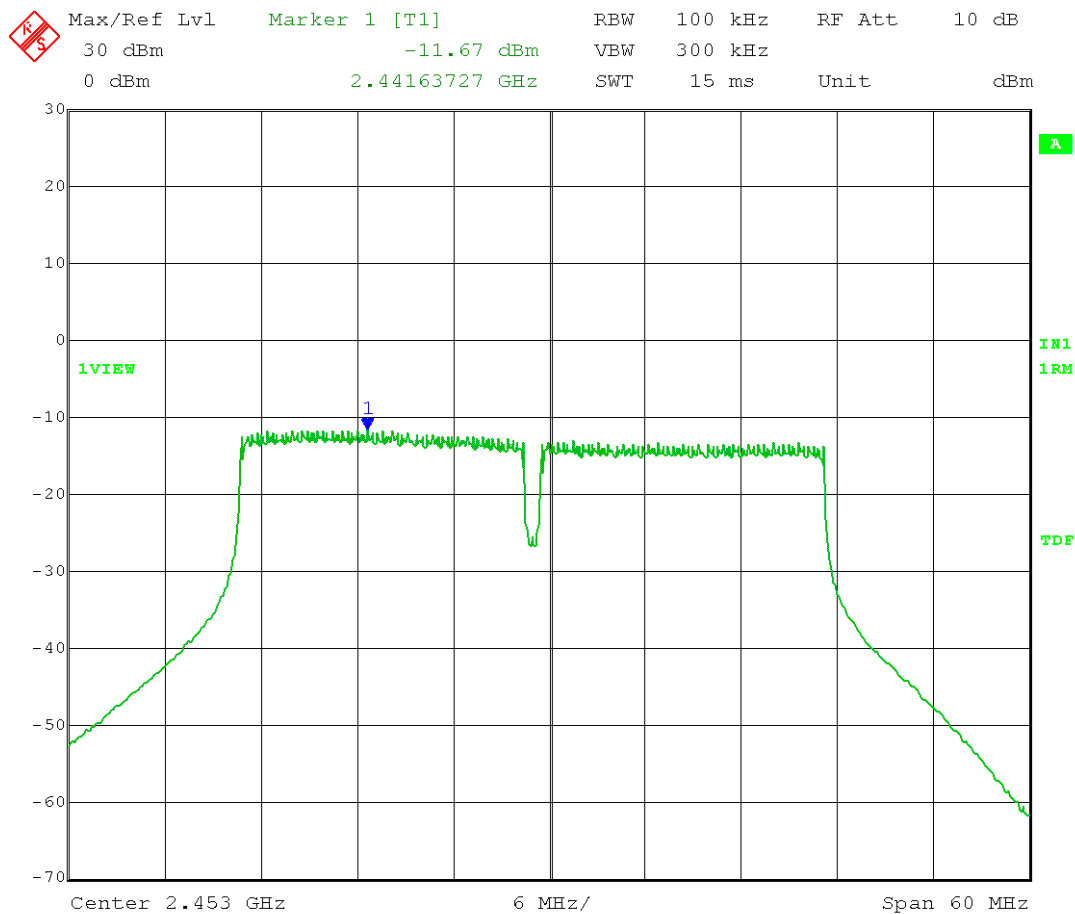


Date: 5.MAR.2014 14:15:58

Test Date: 03-05-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
 Test: Maximum Power Spectral Density level in the fundamental emission  
 Operator: Craig B  
 Comment: High Channel: Frequency = 2452 MHz  
           Output Power Setting = 15.5           40 MHz channel BW  
           RBW = 100 kHz                        VBW = 300 kHz  
           Span = 1.5 x DTS bandwidth        Detector = RMS  
           Sweep = auto couple                Trace mode: average 200 traces  
           Output port 1  
           Limit: +8 dBm / 3 kHz

MIMO MATRIX A: Measure-and-sum technique for MIMO with Cross-Polarized antenna:  
 Measure and add  $10 \log(N)$  dB, where N is the number of outputs.  
                      $= 10 \log(2) = 3$  dB

$$\text{PSD} = -11.67 \text{ dBm} + 3 \text{ dB (MIMO)} = -8.67 \text{ dBm} / 100 \text{ kHz}$$



Date: 5.MAR.2014 14:09:09



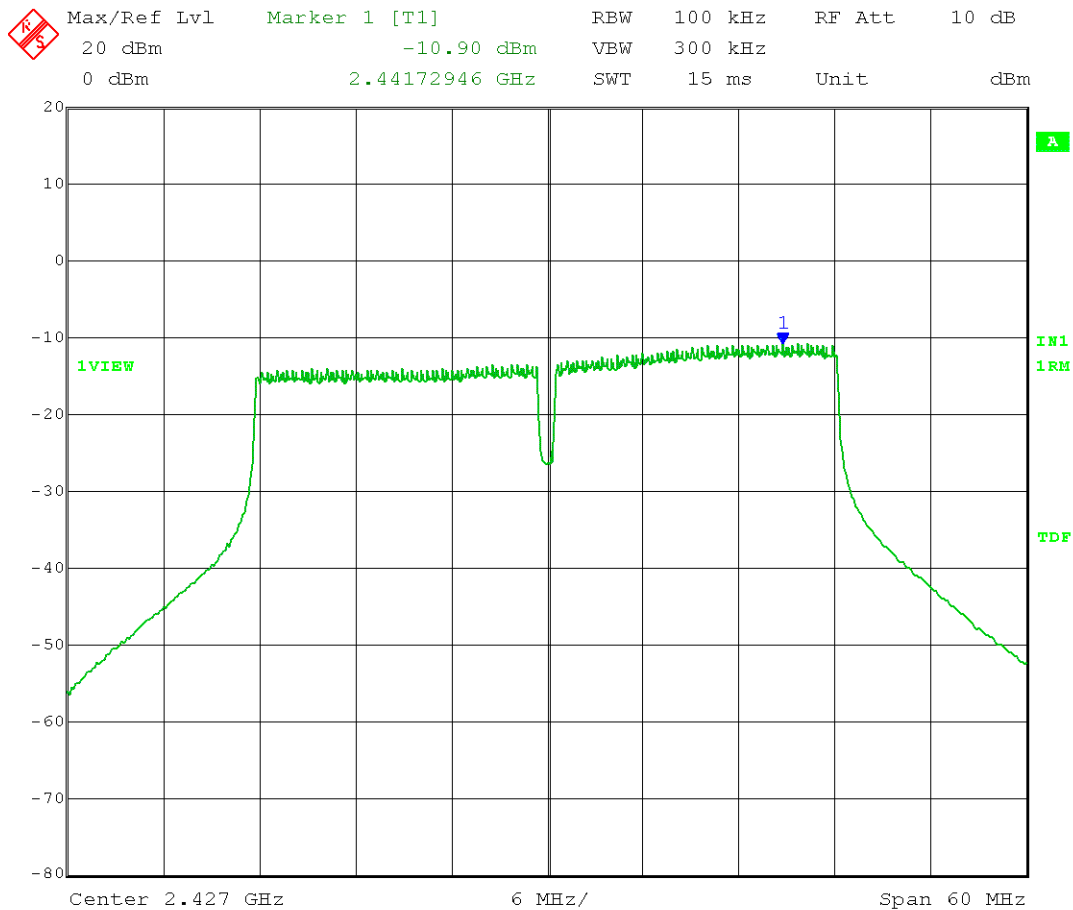
Date: 11.MAR.2014 08:50:23

Date: 11.MAR.2014 08:48:20

Test Date: 03-11-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
 Test: Maximum Power Spectral Density level in the fundamental emission  
 Operator: Craig B  
 Comment: Low Channel: Frequency = 2427 MHz  
           Output Power Setting = 12.5           40 MHz channel BW  
           RBW = 100 kHz                        VBW = 300 kHz  
           Span = 1.5 x DTS bandwidth        Detector = RMS  
           Sweep = auto couple                Trace mode: average 200 traces  
           Output port 1  
           Limit: +8 dBm / 3 kHz

MIMO MATRIX A: Measure-and-sum technique for MIMO with Cross-Polarized antenna:  
 Measure and add  $10 \log(N)$  dB, where N is the number of outputs.  
                      $= 10 \log(2) = 3$  dB

$$\text{PSD} = -10.90 \text{ dBm} + 3 \text{ dB (MIMO)} = -7.90 \text{ dBm} / 100 \text{ kHz}$$



Date: 11.MAR.2014 09:07:03

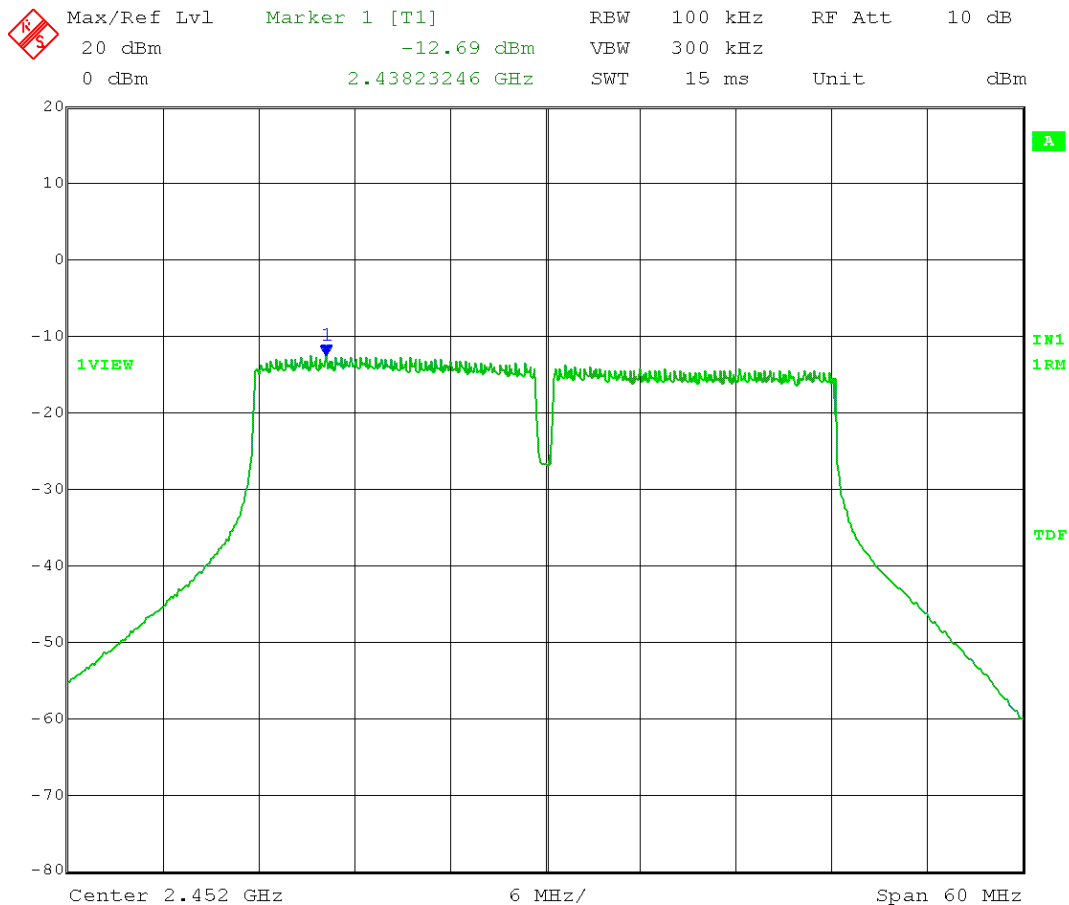
Date: 11.MAR.2014 09:09:35



Test Date: 03-11-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
 Test: Maximum Power Spectral Density level in the fundamental emission  
 Operator: Craig B  
 Comment: High Channel: Frequency = 2452 MHz  
           Output Power Setting = 13.5           40 MHz channel BW  
           RBW = 100 kHz                        VBW = 300 kHz  
           Span = 1.5 x DTS bandwidth        Detector = RMS  
           Sweep = auto couple                Trace mode: average 200 traces  
           Output port 1  
           Limit: +8 dBm / 3 kHz

MIMO MATRIX A: Measure-and-sum technique for MIMO with Cross-Polarized antenna:  
 Measure and add  $10 \log(N)$  dB, where N is the number of outputs.  
                    $= 10 \log(2) = 3$  dB

PSD = -12.69 dBm + 3 dB (MIMO) = -9.69 dBm / 100 kHz



Date: 11.MAR.2014 09:04:12



166 South Carter, Genoa City, WI 53128

|                |                             |
|----------------|-----------------------------|
| Company:       | Cambium Networks            |
| Model Tested:  | C024900P021A & C024900P031A |
| Report Number: | 19738                       |
| DLS Project:   | 6334                        |

## Appendix B – Measurement Data

### B5.0 Maximum Unwanted Emission Levels (not in restricted bands) – Conducted

**Rule Section:** FCC 15.247(d)

**Test Procedure:** FCC KDB 558074 D01 DTS Meas Guidance v03r01 – *Guidance for Performing Compliance Measurements on Digital Transmission Systems (DTS) Operating Under §15.247*

11.0 Emissions in non-restricted frequency bands

**Description:** RBW = 100 kHz  
VBW  $\geq$  300 kHz  
Span to  $\geq$  1.5 times the *DTS bandwidth* (Reference Level)  
Set the center frequency and span to encompass frequency range to be measured. (Emission Level)  
Detector = peak  
Sweep = auto couple  
Trace mode = max hold

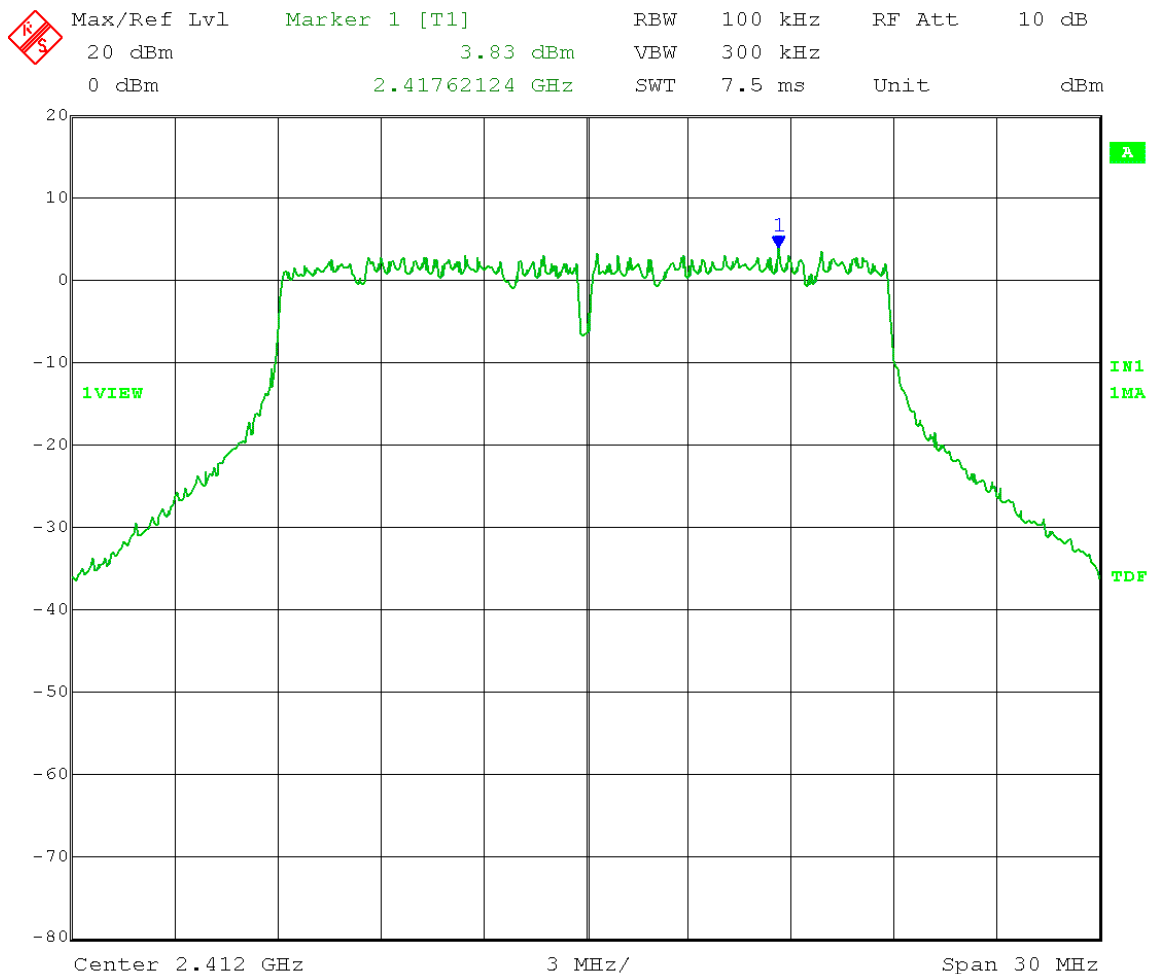
Measurements were taken for OFDM MCS15 with 20 MHz and 40 MHz channel bandwidths at the low, middle and high channels of operation. EUT was set to transmit continuously with a 100% duty cycle.

**Limit:** 30 dB below maximum in-band average PSD level (maximum level in any 100 kHz band). Average output power procedure was used to measure the fundamental emission power.

**Results:** Passed

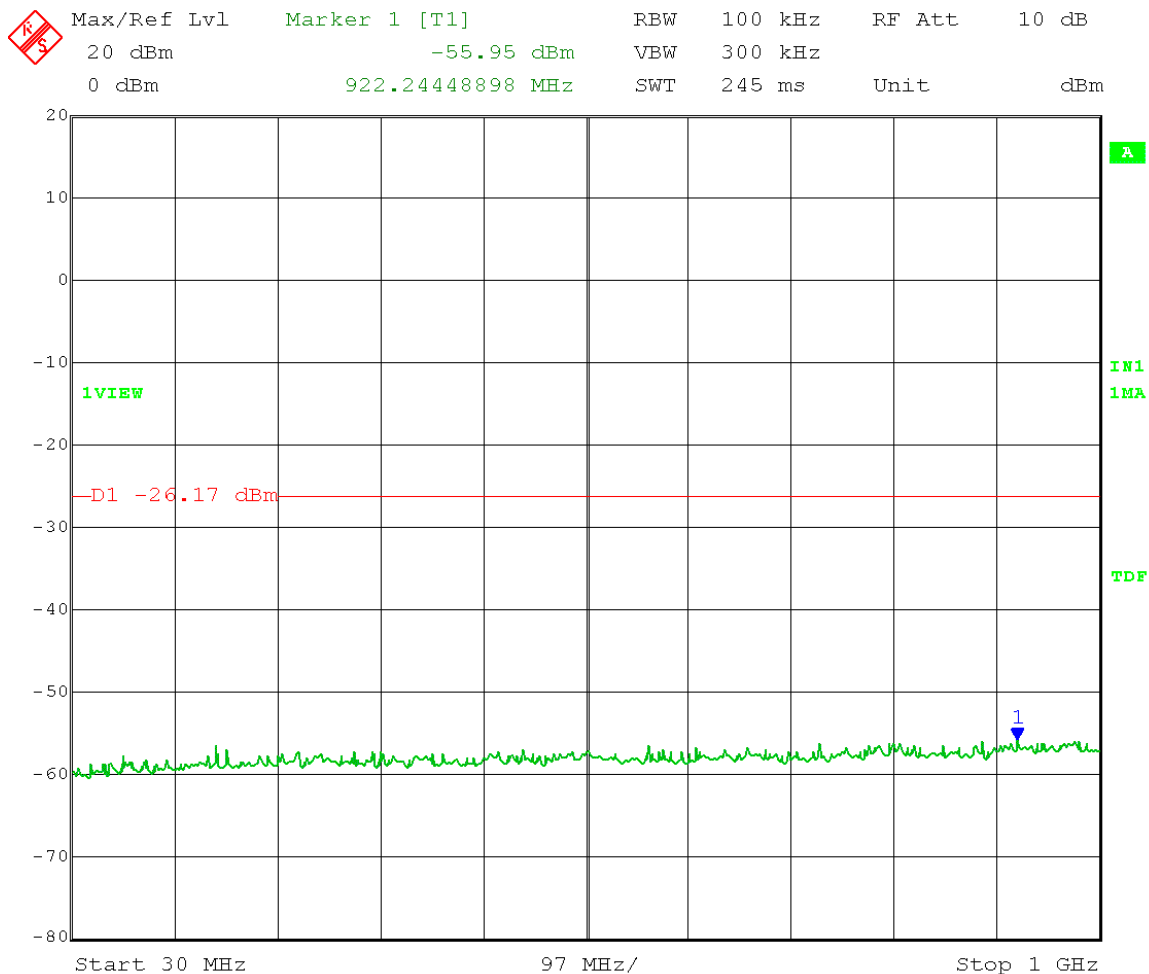
**Notes:** Since output port 1 measured a slightly higher output power than port 0, measurements for this test were made on port 1 only.

Test Date: 03-07-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold Low Channel Transmit = 2412 MHz  
POINT-TO-MULTIPOINT OPERATION  
Output Power Setting 18 Antenna gain: 8 dBi  
Channel bandwidth: 20 MHz  
Output port: 1 OFDM MCS15  
**Reference Level** Measurement  
Limit = 3.83 dBm – 30 dB = -26.17 dBm



Date: 7.MAR.2014 09:49:46

Test Date: 03-07-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
 Test: Maximum Unwanted Emission Levels - Conducted  
 Operator: Craig B  
 Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
 Detector = Peak Sweep = Auto Couple  
 Trace = Max Hold Low Channel Transmit = 2412 MHz  
 POINT-TO-MULTIPOINT OPERATION  
 Output Power Setting 18 Antenna gain: 8 dBi  
 Channel bandwidth: 20 MHz  
 Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
 Limit = 3.83 dBm – 30 dB = -26.17 dBm  
 Frequency range: 30 – 1000 MHz



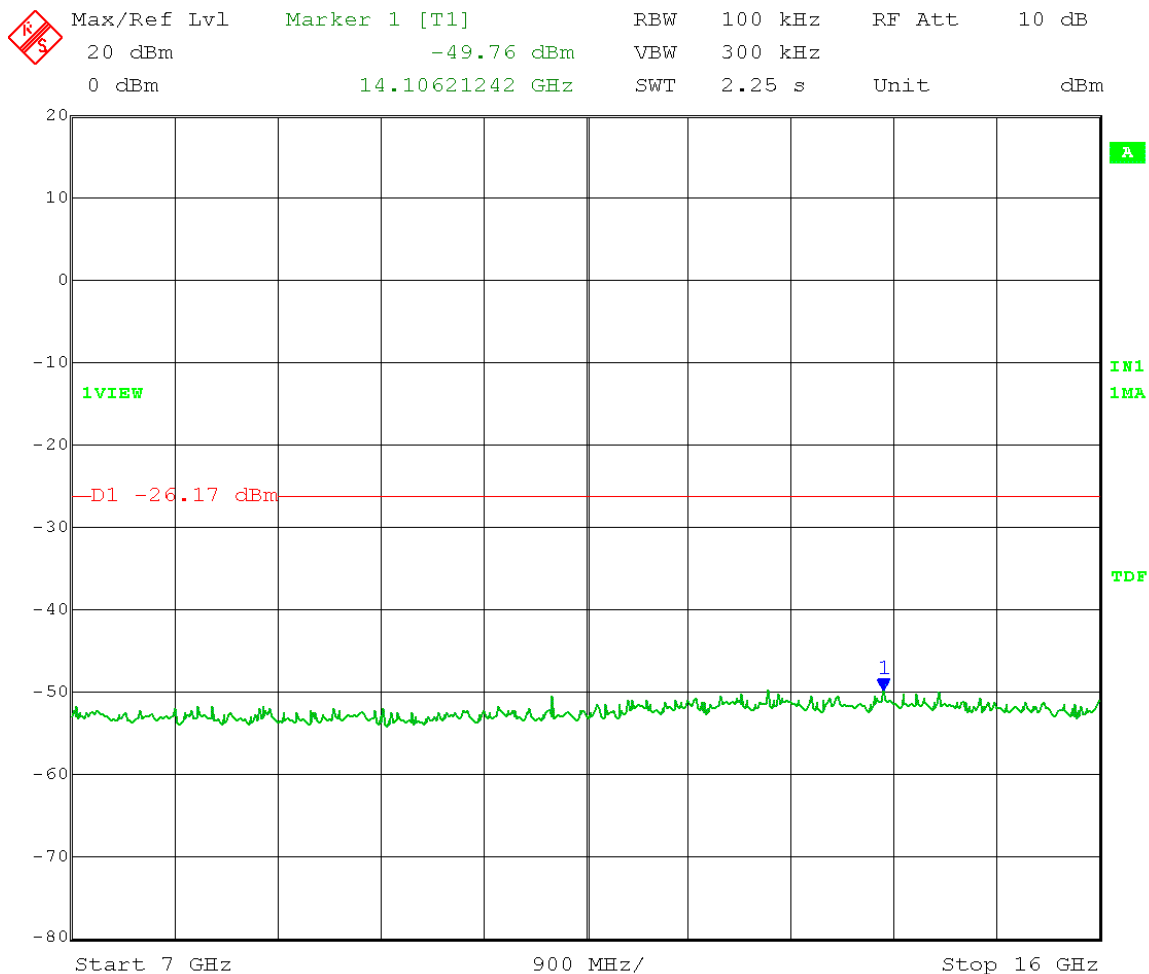
Date: 7.MAR.2014 09:56:20

Test Date: 03-07-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold Low Channel Transmit = 2412 MHz  
POINT-TO-MULTIPOINT OPERATION  
Output Power Setting 18 Antenna gain: 8 dBi  
Channel bandwidth: 20 MHz  
Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
Limit = 3.83 dBm – 30 dB = -26.17 dBm  
Frequency range: 1 – 7 GHz



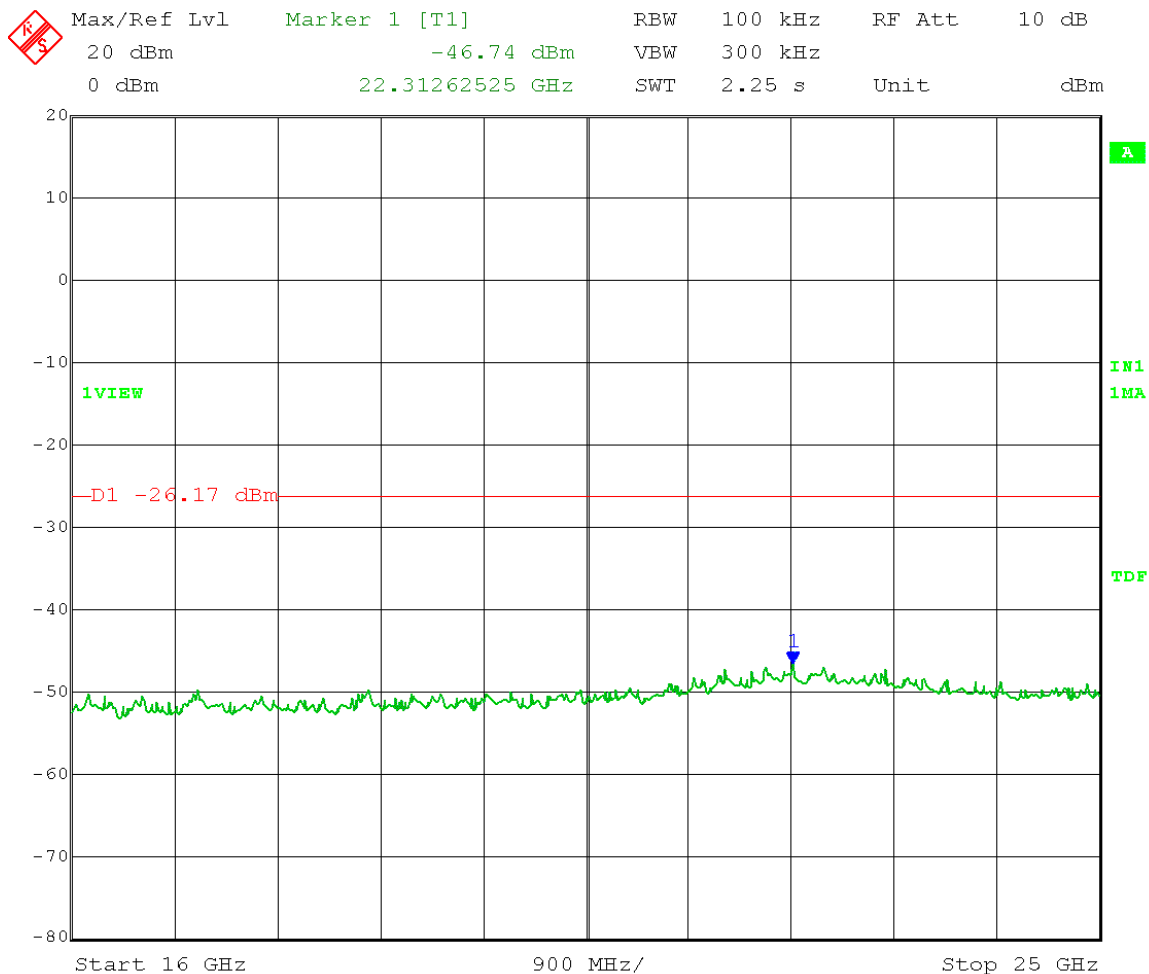
Date: 7.MAR.2014 09:51:48

Test Date: 03-07-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold Low Channel Transmit = 2412 MHz  
POINT-TO-MULTIPOINT OPERATION  
Output Power Setting 18 Antenna gain: 8 dBi  
Channel bandwidth: 20 MHz  
Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
Limit = 3.83 dBm – 30 dB = -26.17 dBm  
Frequency range: 7 – 16 GHz



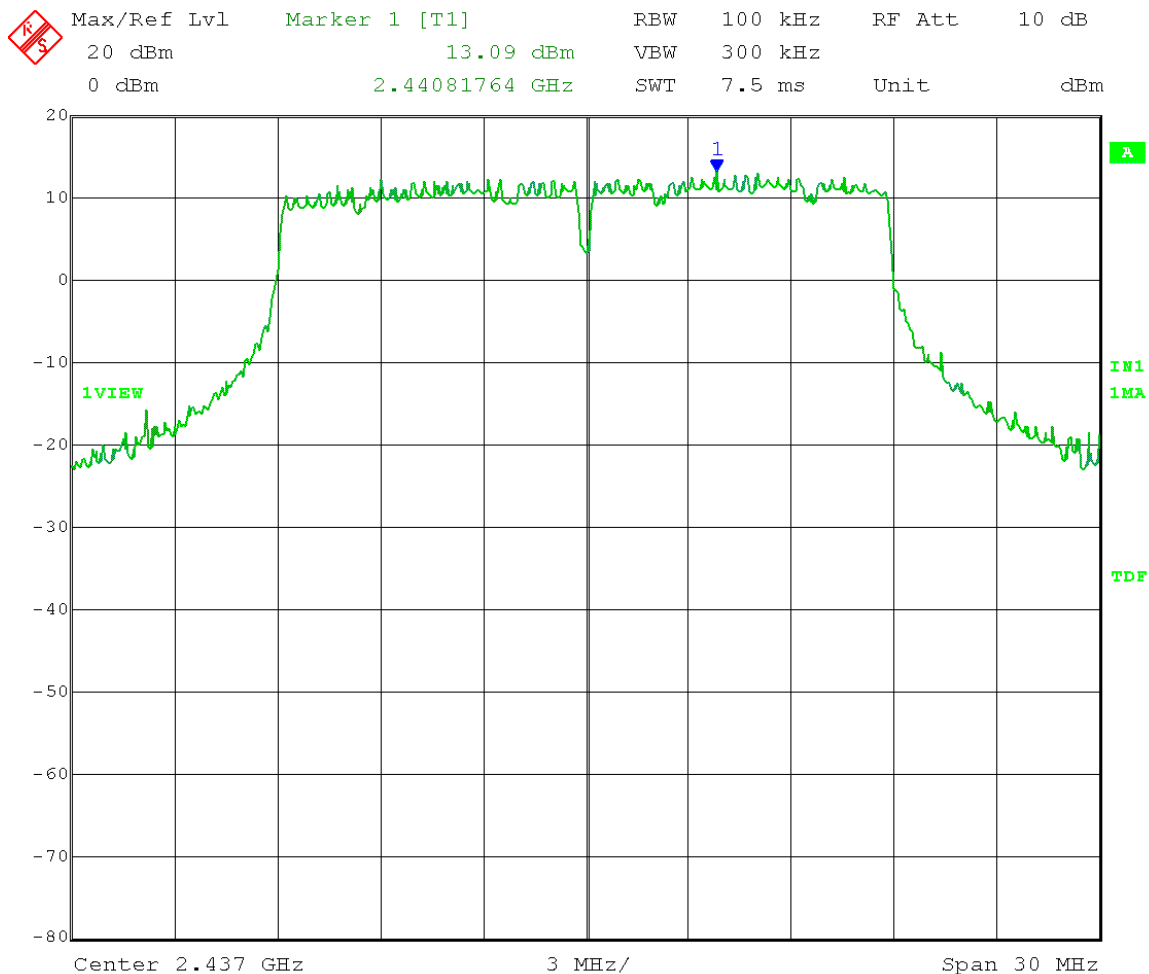
Date: 7.MAR.2014 09:53:33

Test Date: 03-07-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold Low Channel Transmit = 2412 MHz  
POINT-TO-MULTIPOINT OPERATION  
Output Power Setting 18 Antenna gain: 8 dBi  
Channel bandwidth: 20 MHz  
Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
Limit = 3.83 dBm – 30 dB = -26.17 dBm  
Frequency range: 16 – 25 GHz



Date: 7.MAR.2014 09:54:49

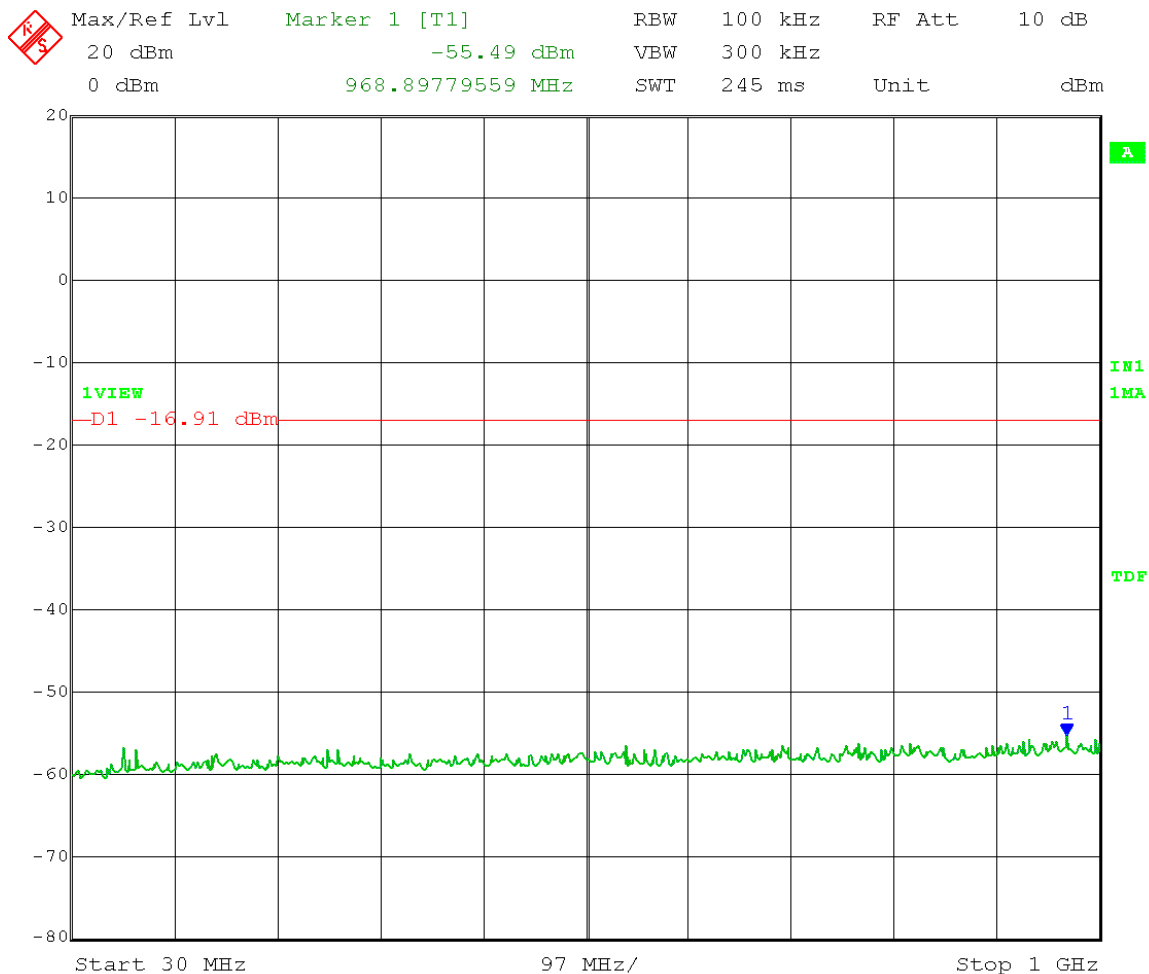
Test Date: 03-07-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold Mid Channel Transmit = 2437 MHz  
POINT-TO-MULTIPOINT OPERATION  
Output Power Setting 26.5 Antenna gain: 8 dBi  
Channel bandwidth: 20 MHz  
Output port: 1 OFDM MCS15  
**Reference Level Measurement**  
Limit = 13.09 dBm – 30 dB = -16.91 dBm



Date: 7.MAR.2014 09:32:46

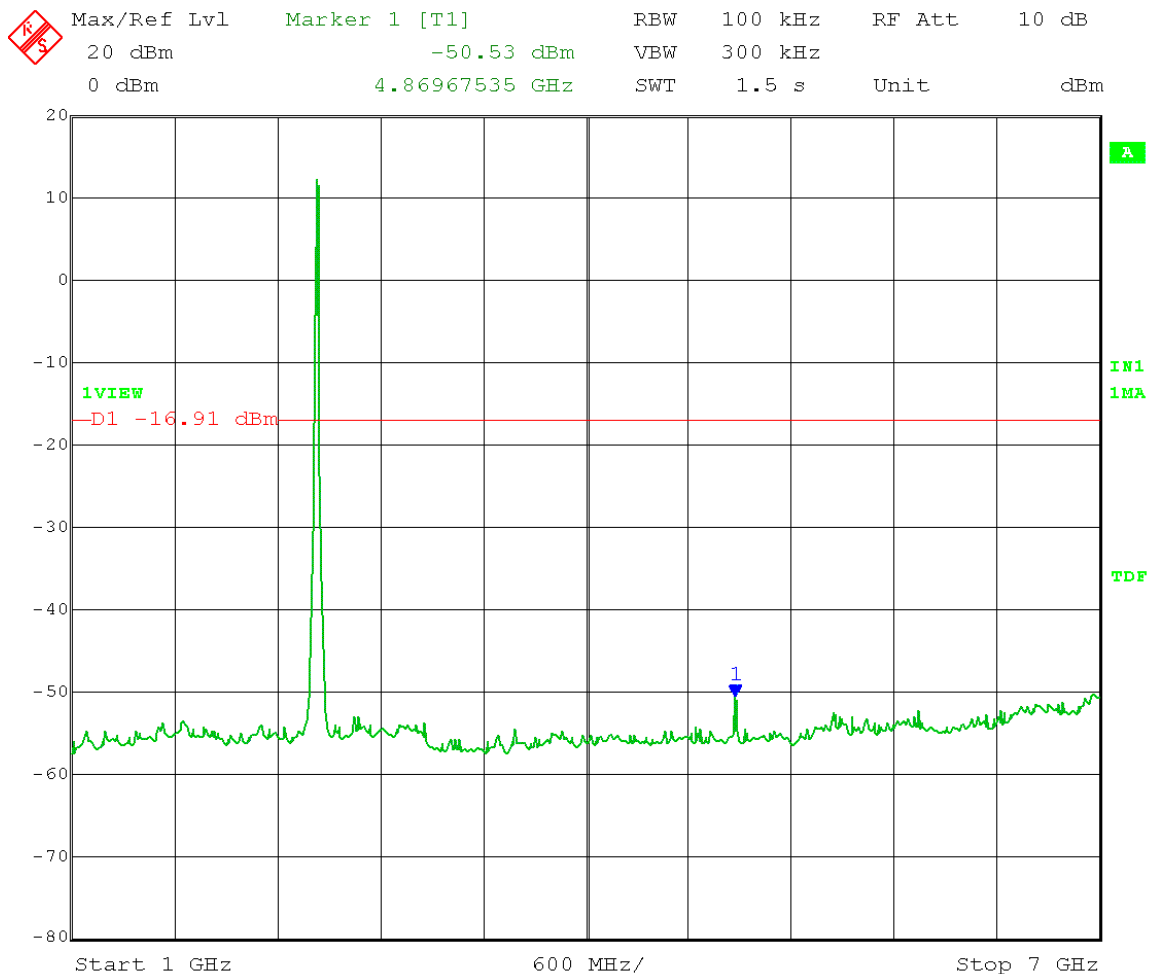


Test Date: 03-07-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
 Test: Maximum Unwanted Emission Levels - Conducted  
 Operator: Craig B  
 Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
 Detector = Peak Sweep = Auto Couple  
 Trace = Max Hold Mid Channel Transmit = 2437 MHz  
 POINT-TO-MULTIPOINT OPERATION  
 Output Power Setting 26.5 Antenna gain: 8 dBi  
 Channel bandwidth: 20 MHz  
 Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
 Limit = 13.09 dBm – 30 dB = -16.91 dBm  
 Frequency range: 30 – 1000 MHz



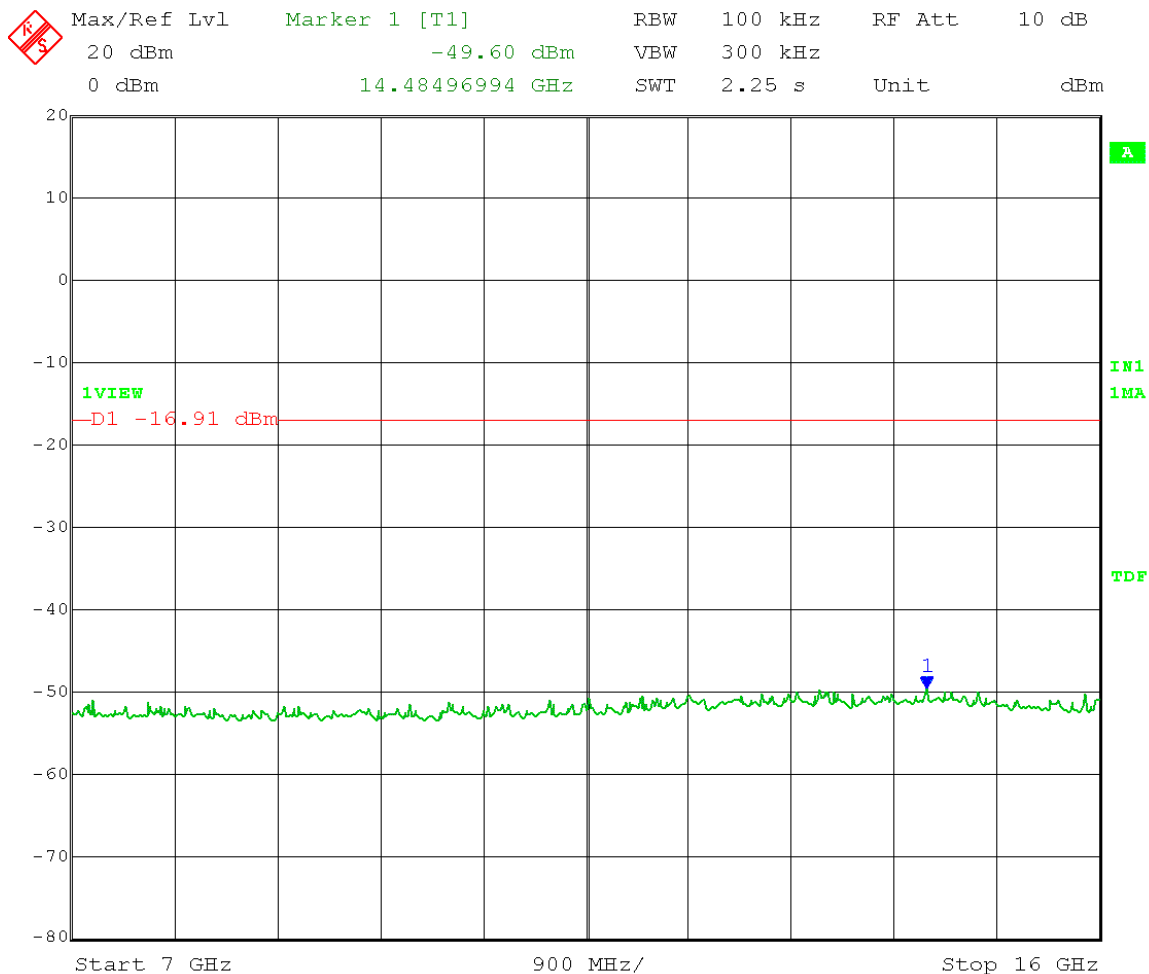
Date: 7.MAR.2014 09:45:27

Test Date: 03-07-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold Mid Channel Transmit = 2437 MHz  
POINT-TO-MULTIPOINT OPERATION  
Output Power Setting 26.5 Antenna gain: 8 dBi  
Channel bandwidth: 20 MHz  
Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
Limit = 13.09 dBm – 30 dB = -16.91 dBm  
Frequency range: 1 – 7 GHz



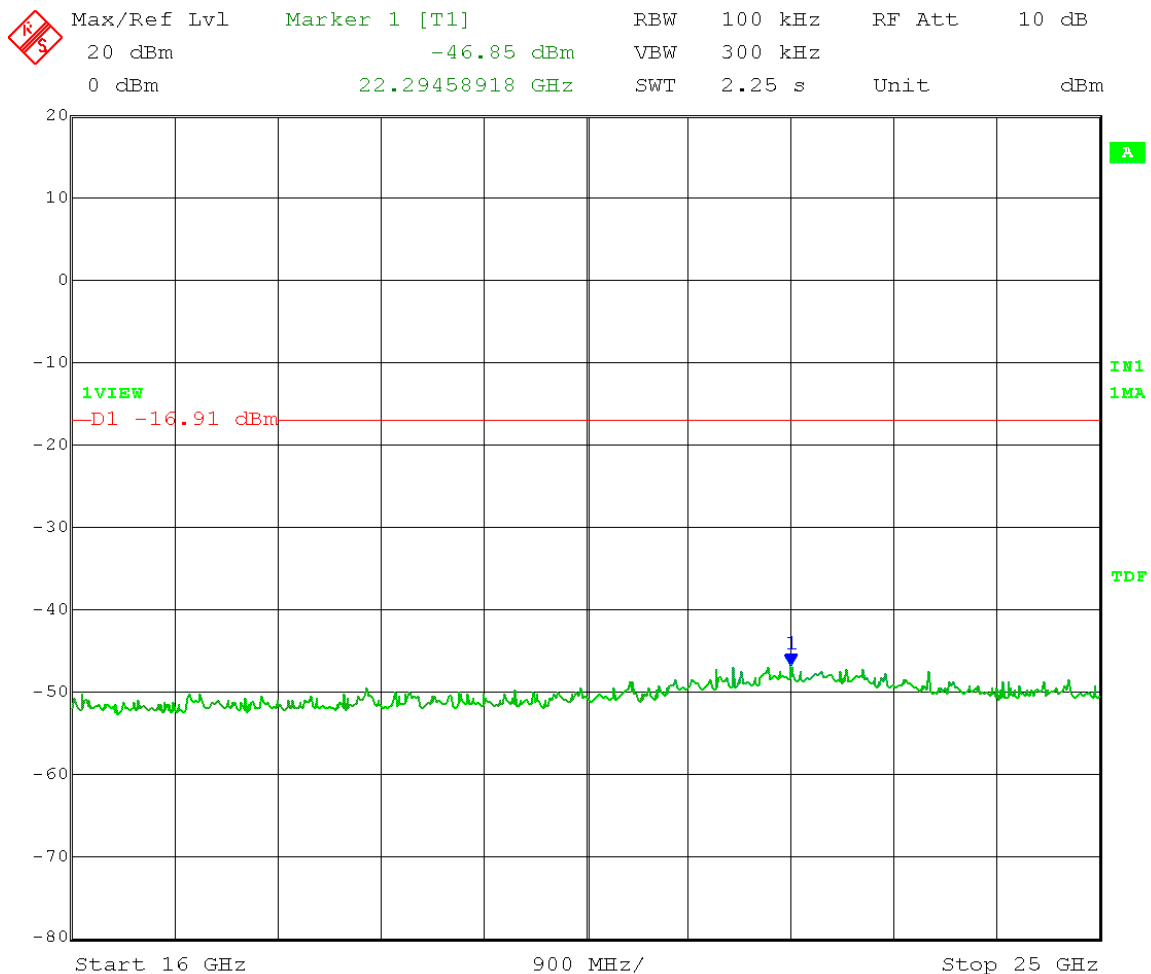
Date: 7.MAR.2014 09:38:59

Test Date: 03-07-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
 Test: Maximum Unwanted Emission Levels - Conducted  
 Operator: Craig B  
 Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
 Detector = Peak Sweep = Auto Couple  
 Trace = Max Hold Mid Channel Transmit = 2437 MHz  
 POINT-TO-MULTIPOINT OPERATION  
 Output Power Setting 26.5 Antenna gain: 8 dBi  
 Channel bandwidth: 20 MHz  
 Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
 Limit = 13.09 dBm – 30 dB = -16.91 dBm  
 Frequency range: 7 – 16 GHz



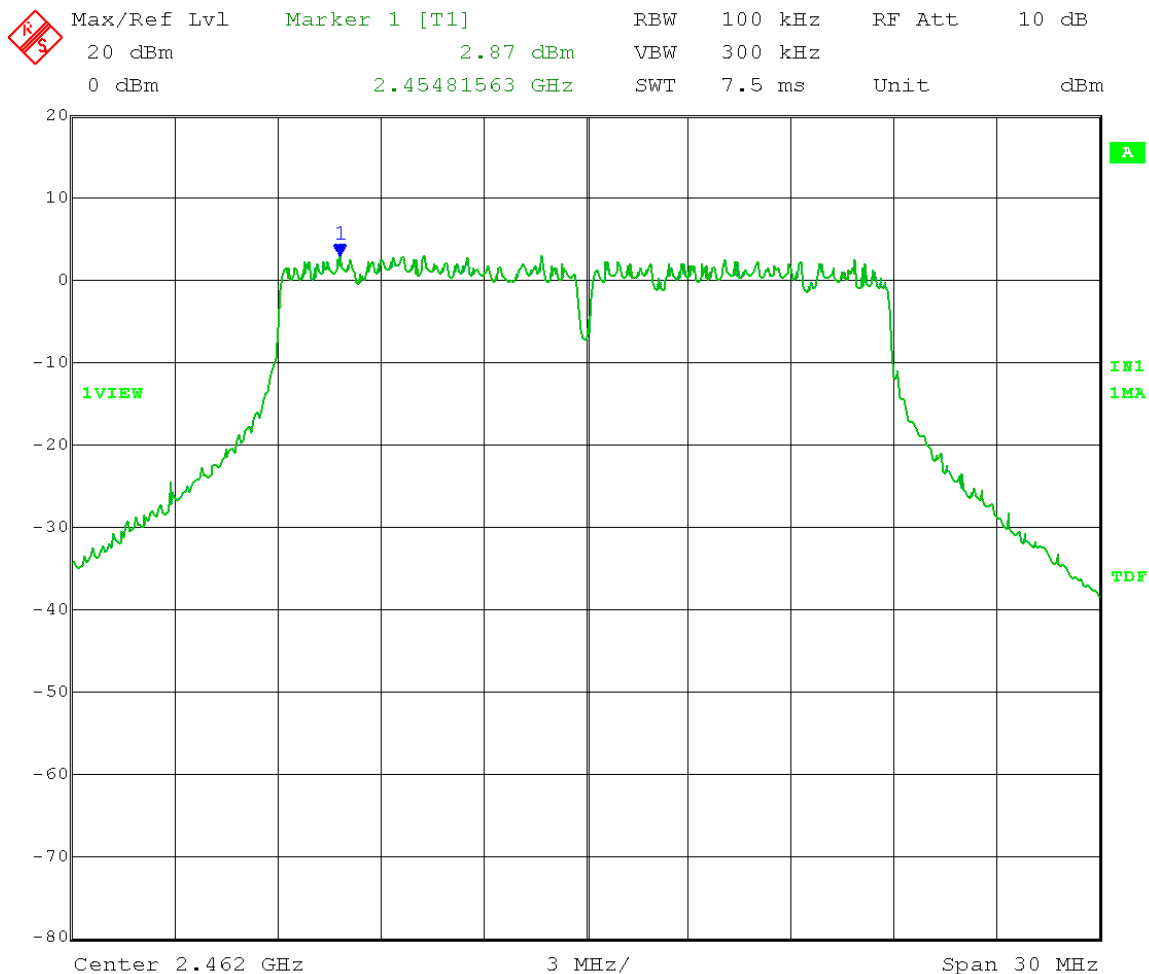
Date: 7.MAR.2014 09:41:46

Test Date: 03-07-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
 Test: Maximum Unwanted Emission Levels - Conducted  
 Operator: Craig B  
 Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
 Detector = Peak Sweep = Auto Couple  
 Trace = Max Hold Mid Channel Transmit = 2437 MHz  
 POINT-TO-MULTIPOINT OPERATION  
 Output Power Setting 26.5 Antenna gain: 8 dBi  
 Channel bandwidth: 20 MHz  
 Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
 Limit = 13.09 dBm – 30 dB = -16.91 dBm  
 Frequency range: 16 – 25 GHz



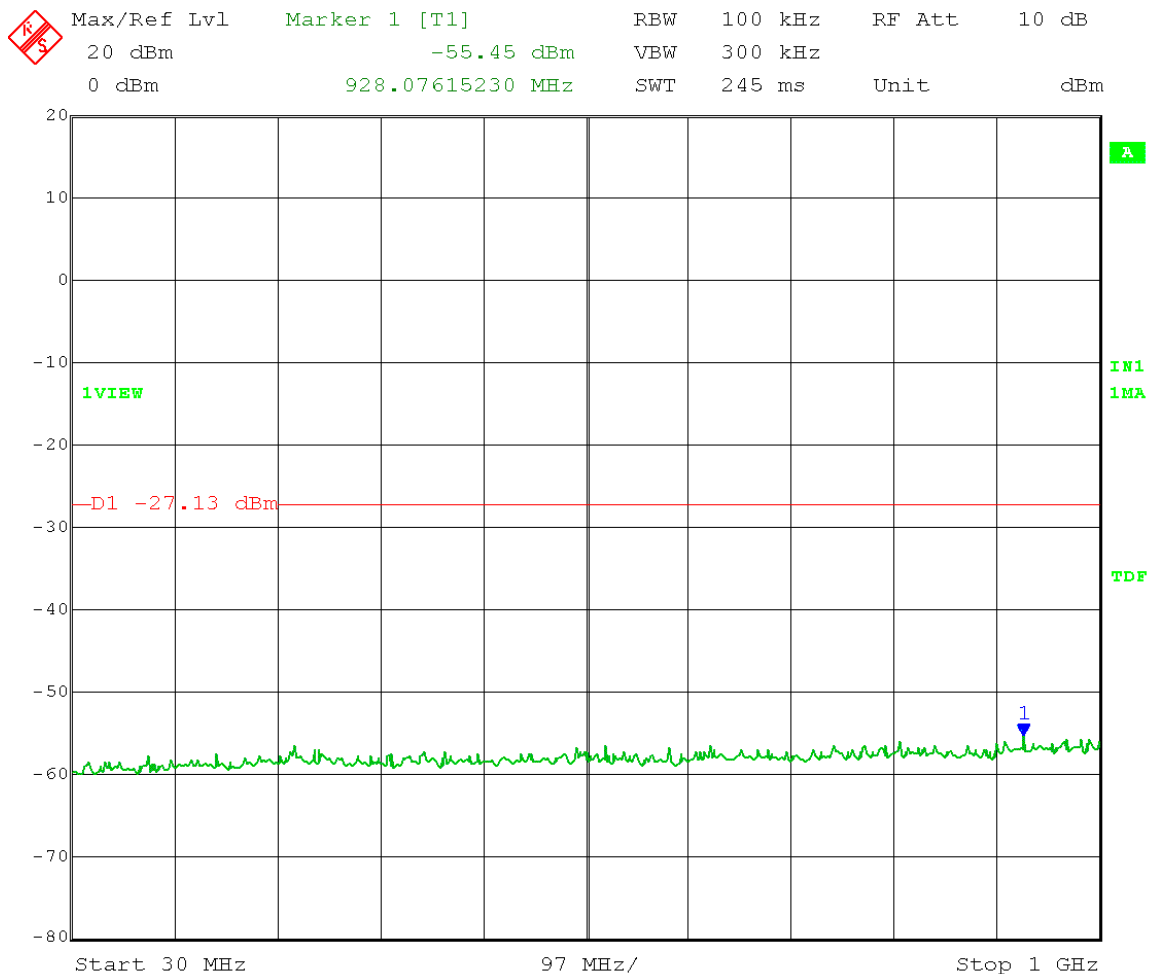
Date: 7.MAR.2014 09:43:47

Test Date: 03-07-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold High Channel Transmit = 2462 MHz  
POINT-TO-MULTIPOINT OPERATION  
Output Power Setting 18 Antenna gain: 8 dBi  
Channel bandwidth: 20 MHz  
Output port: 1 OFDM MCS15  
**Reference Level Measurement**  
Limit = 2.87 dBm – 30 dB = -27.13 dBm



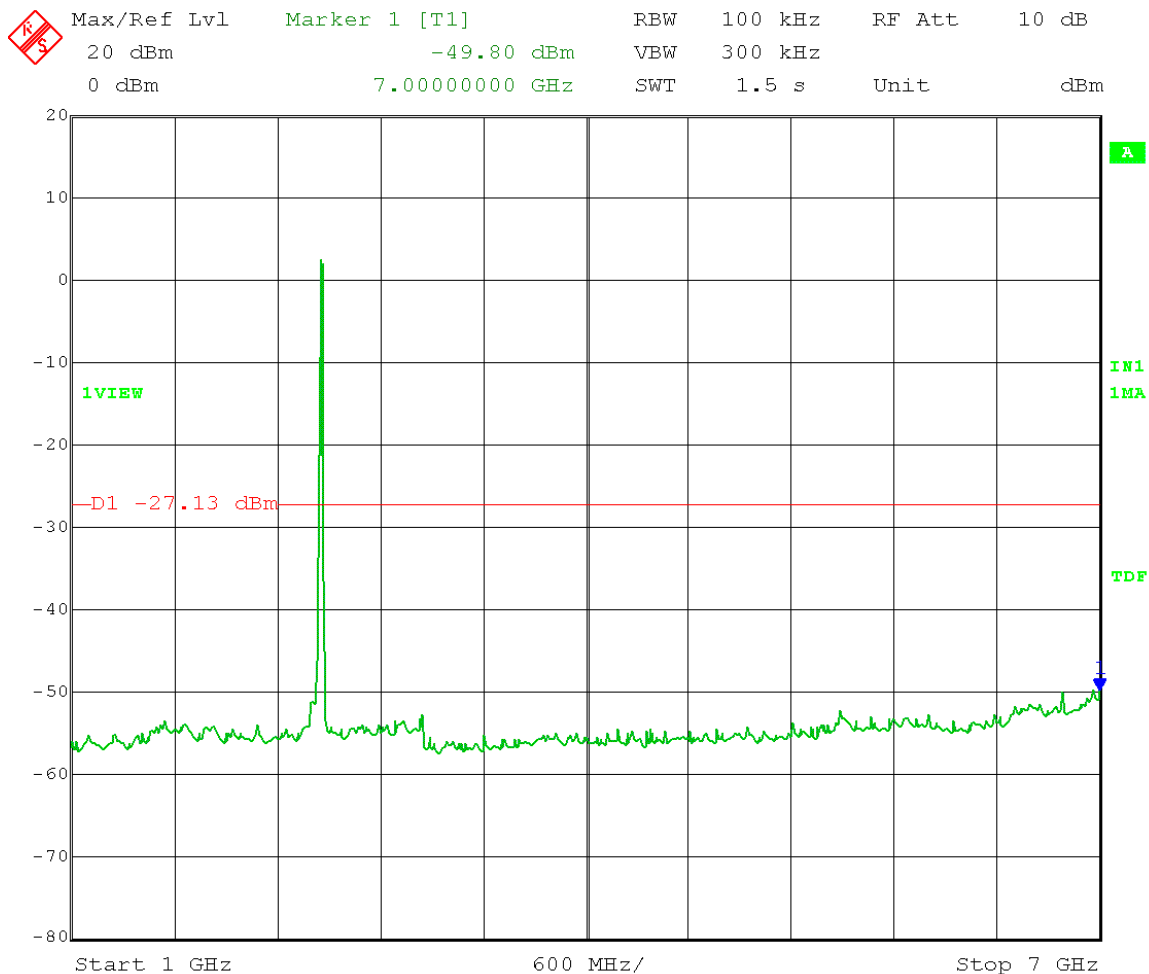
Date: 7.MAR.2014 09:58:41

Test Date: 03-07-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold High Channel Transmit = 2462 MHz  
POINT-TO-MULTIPOINT OPERATION  
Output Power Setting 18 Antenna gain: 8 dBi  
Channel bandwidth: 20 MHz  
Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
Limit = 2.87 dBm – 30 dB = -27.13 dBm  
Frequency range: 30 – 1000 MHz



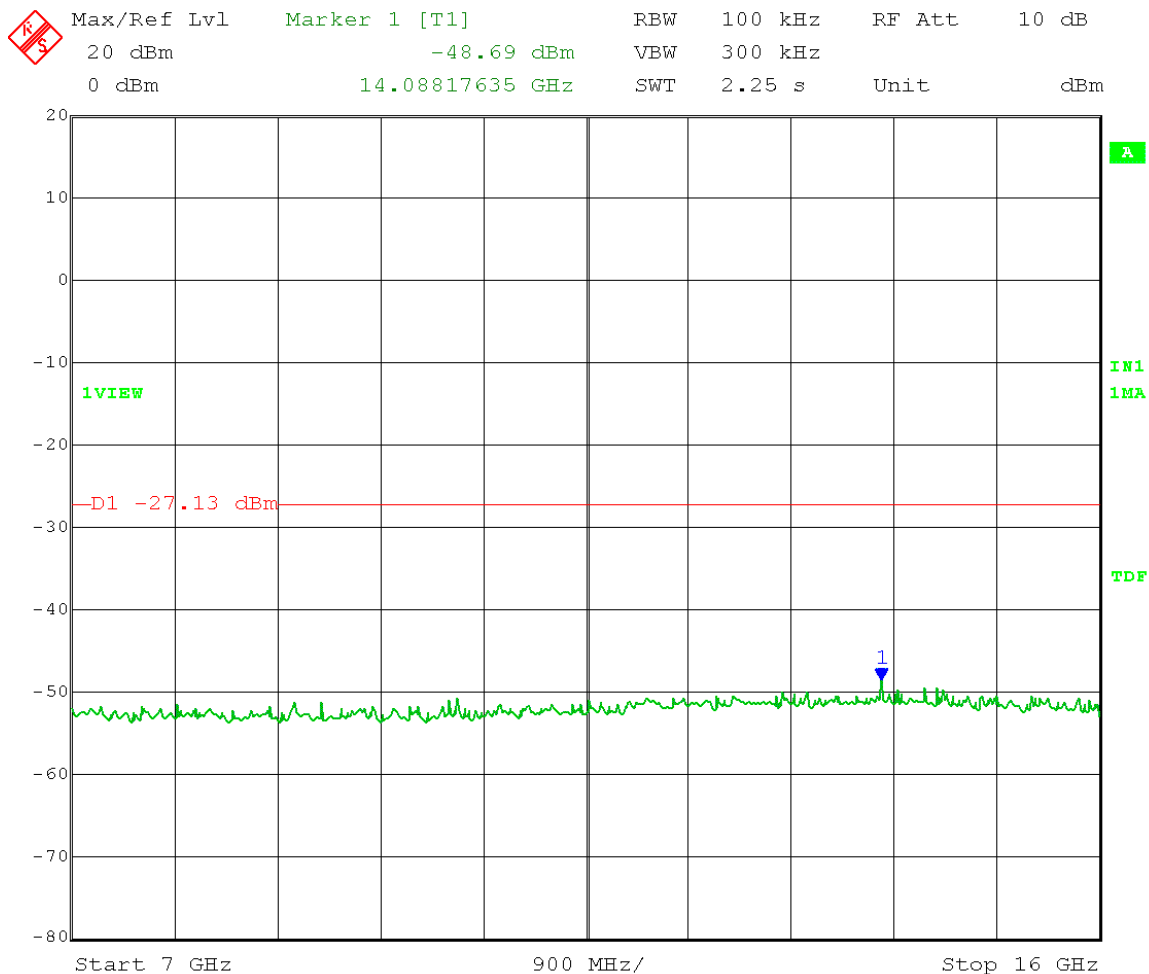
Date: 7.MAR.2014 10:06:08

Test Date: 03-07-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold High Channel Transmit = 2462 MHz  
POINT-TO-MULTIPOINT OPERATION  
Output Power Setting 18 Antenna gain: 8 dBi  
Channel bandwidth: 20 MHz  
Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
Limit = 2.87 dBm – 30 dB = -27.13 dBm  
Frequency range: 1 – 7 GHz



Date: 7.MAR.2014 10:01:13

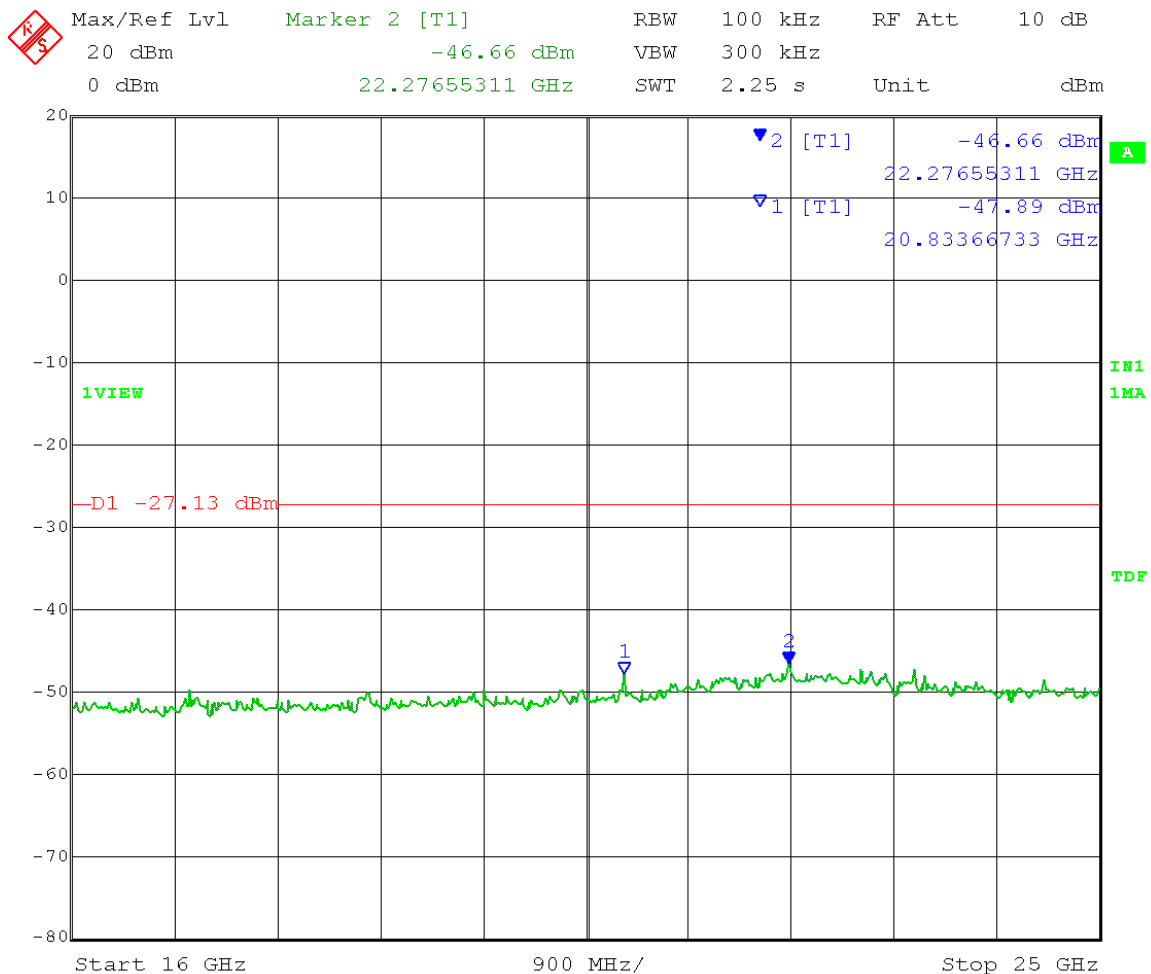
Test Date: 03-07-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold High Channel Transmit = 2462 MHz  
POINT-TO-MULTIPOINT OPERATION  
Output Power Setting 18 Antenna gain: 8 dBi  
Channel bandwidth: 20 MHz  
Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
Limit = 2.87 dBm – 30 dB = -27.13 dBm  
Frequency range: 7 – 16 GHz



Date: 7.MAR.2014 10:03:09

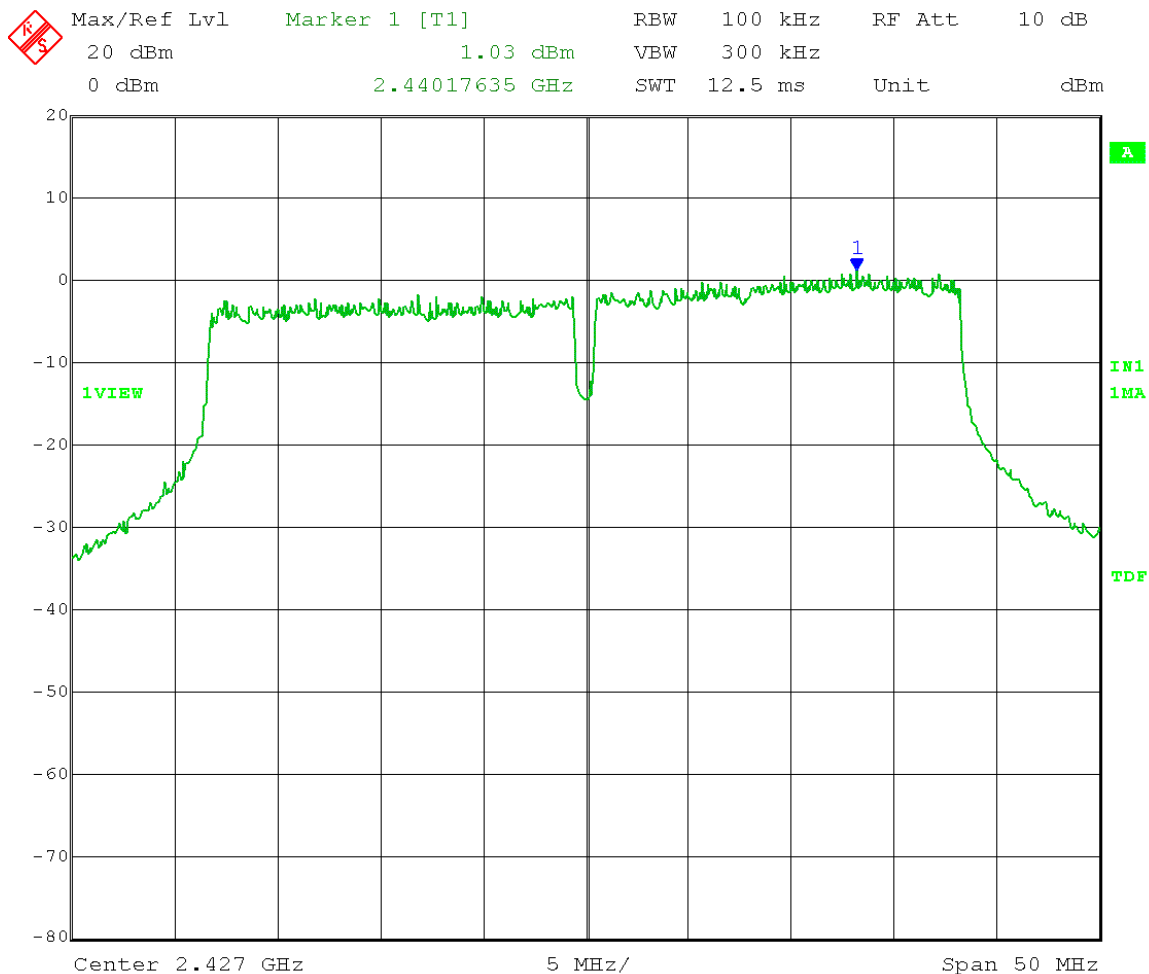


Test Date: 03-07-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold High Channel Transmit = 2462 MHz  
POINT-TO-MULTIPOINT OPERATION  
Output Power Setting 18 Antenna gain: 8 dBi  
Channel bandwidth: 20 MHz  
Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
Limit = 2.87 dBm – 30 dB = -27.13 dBm  
Frequency range: 16 – 25 GHz



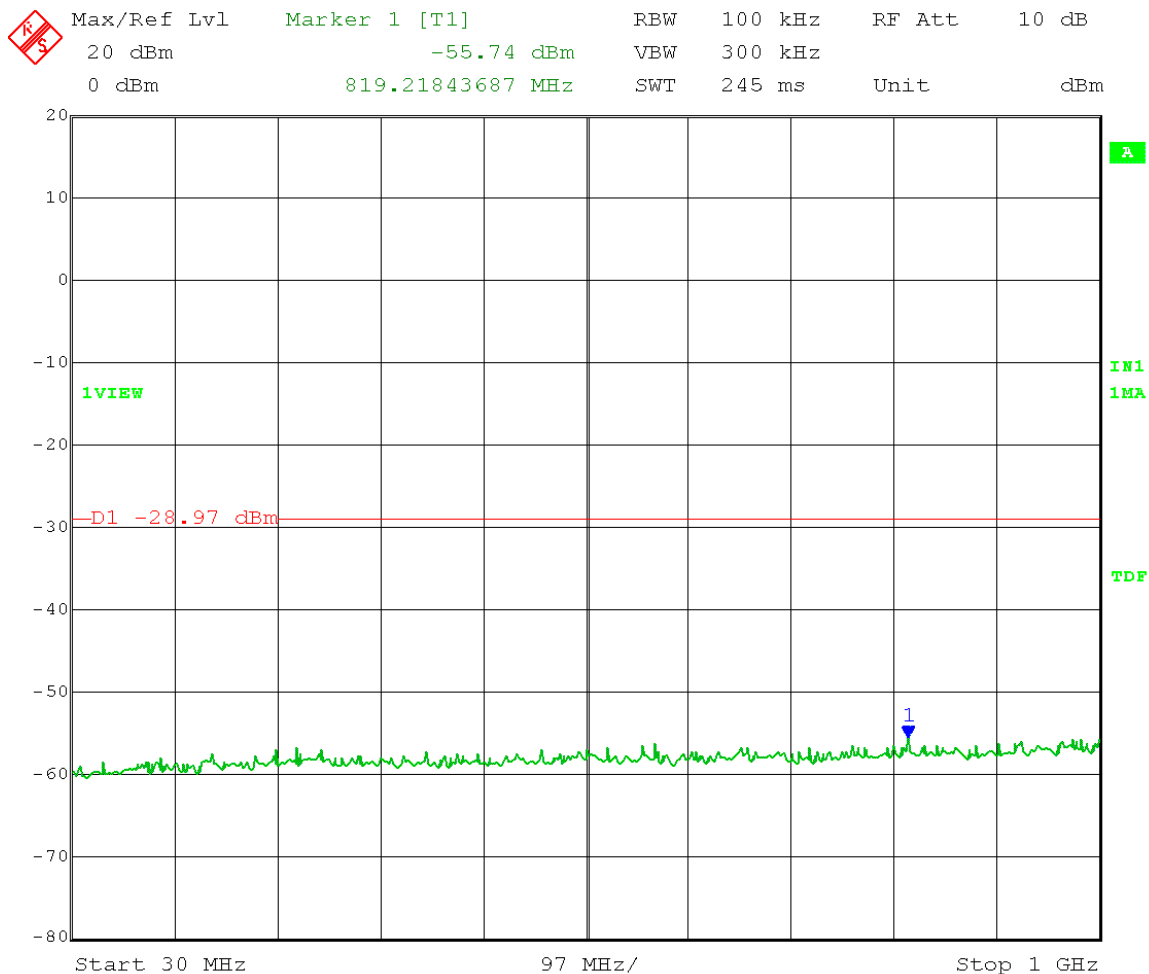
Date: 7.MAR.2014 10:04:32

Test Date: 03-07-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold Low Channel Transmit = 2427 MHz  
POINT-TO-MULTIPOINT OPERATION  
Output Power Setting 15.5 Antenna gain: 8 dBi  
Channel bandwidth: 40 MHz  
Output port: 1 OFDM MCS15  
**Reference Level** Measurement  
Limit = 1.03 dBm – 30 dB = -28.97 dBm



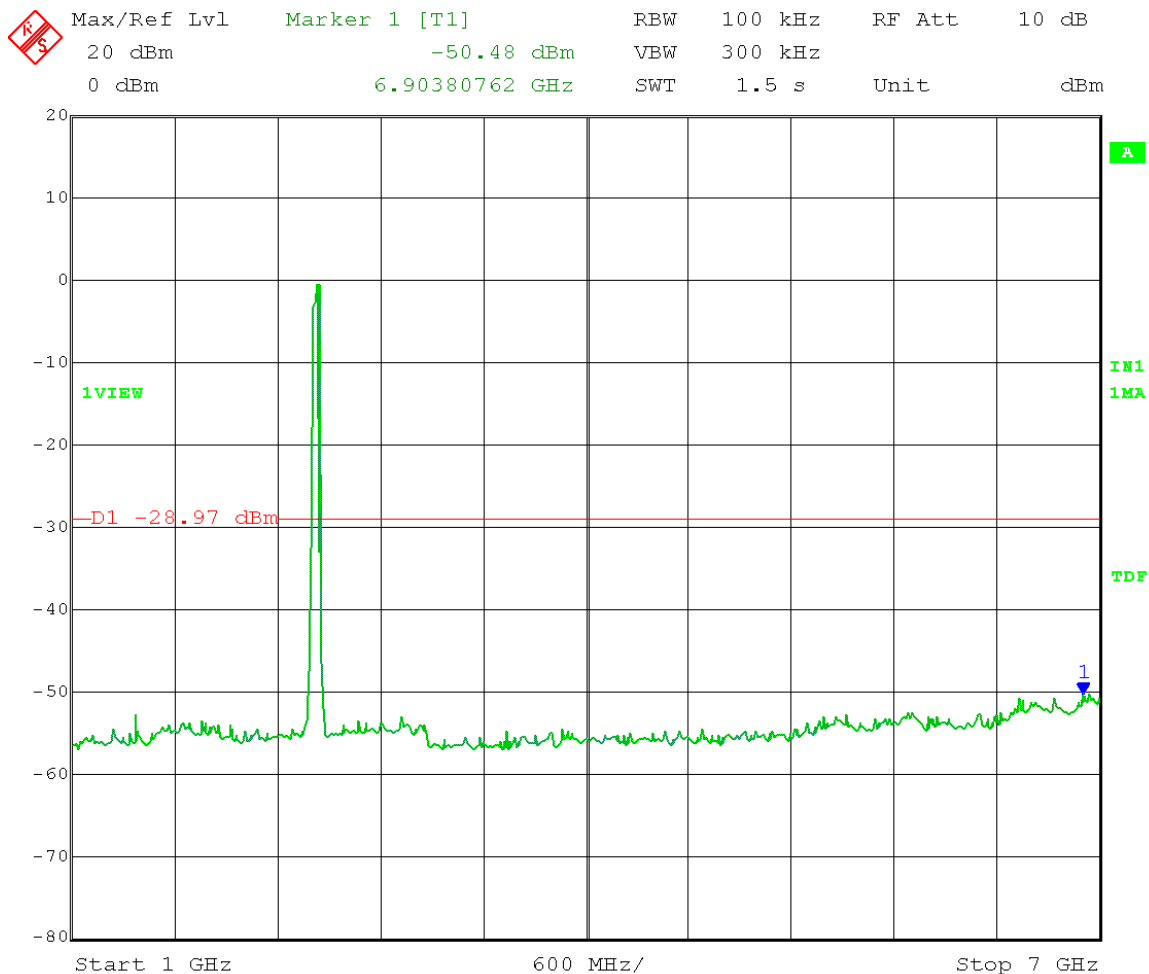
Date: 7.MAR.2014 10:20:40

Test Date: 03-07-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold Low Channel Transmit = 2427 MHz  
POINT-TO-MULTIPOINT OPERATION  
Output Power Setting 15.5 Antenna gain: 8 dBi  
Channel bandwidth: 40 MHz  
Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
Limit = 1.03 dBm – 30 dB = -28.97 dBm  
Frequency range: 30 – 1000 MHz



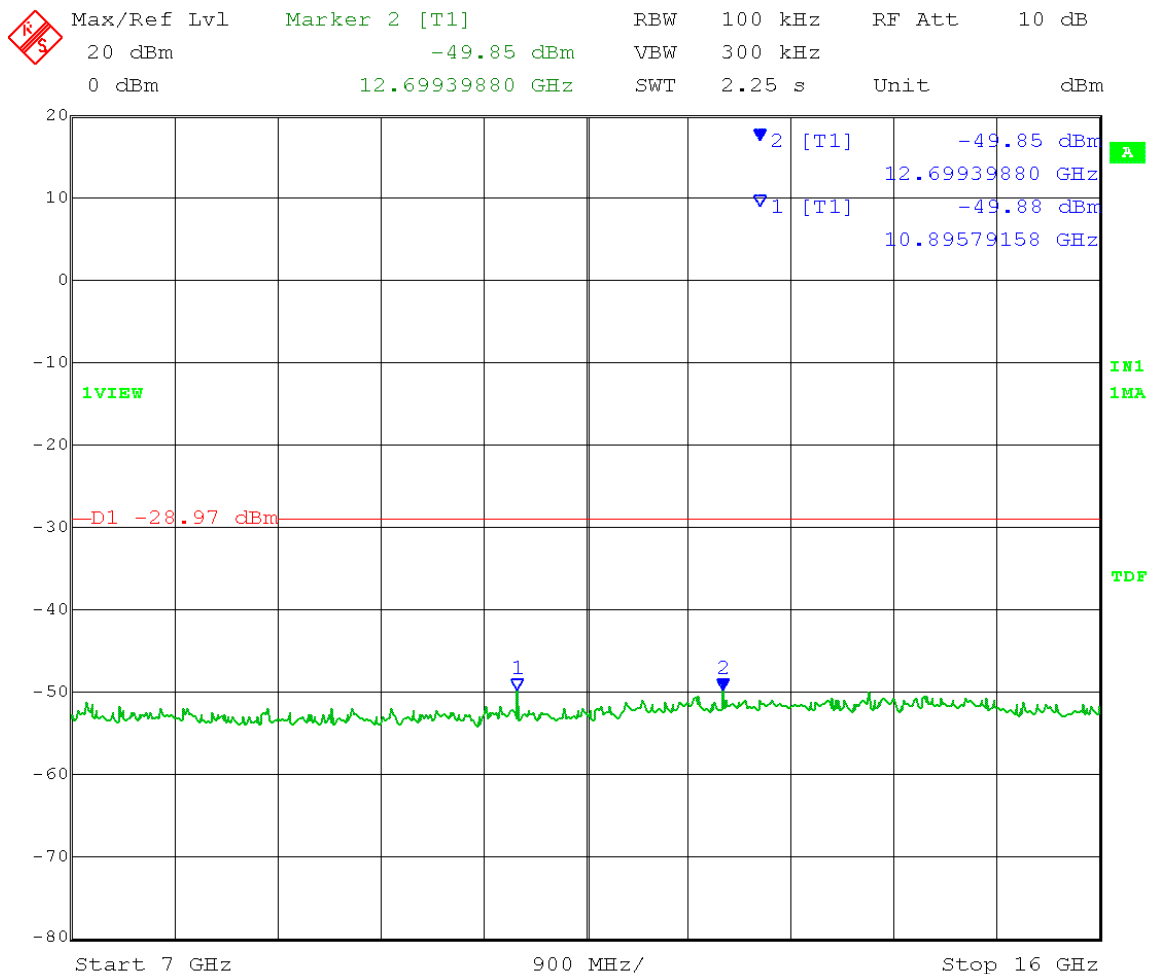
Date: 7.MAR.2014 10:27:16

Test Date: 03-07-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold Low Channel Transmit = 2427 MHz  
POINT-TO-MULTIPOINT OPERATION  
Output Power Setting 15.5 Antenna gain: 8 dBi  
Channel bandwidth: 40 MHz  
Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
Limit = 1.03 dBm - 30 dB = -28.97 dBm  
Frequency range: 1 - 7 GHz



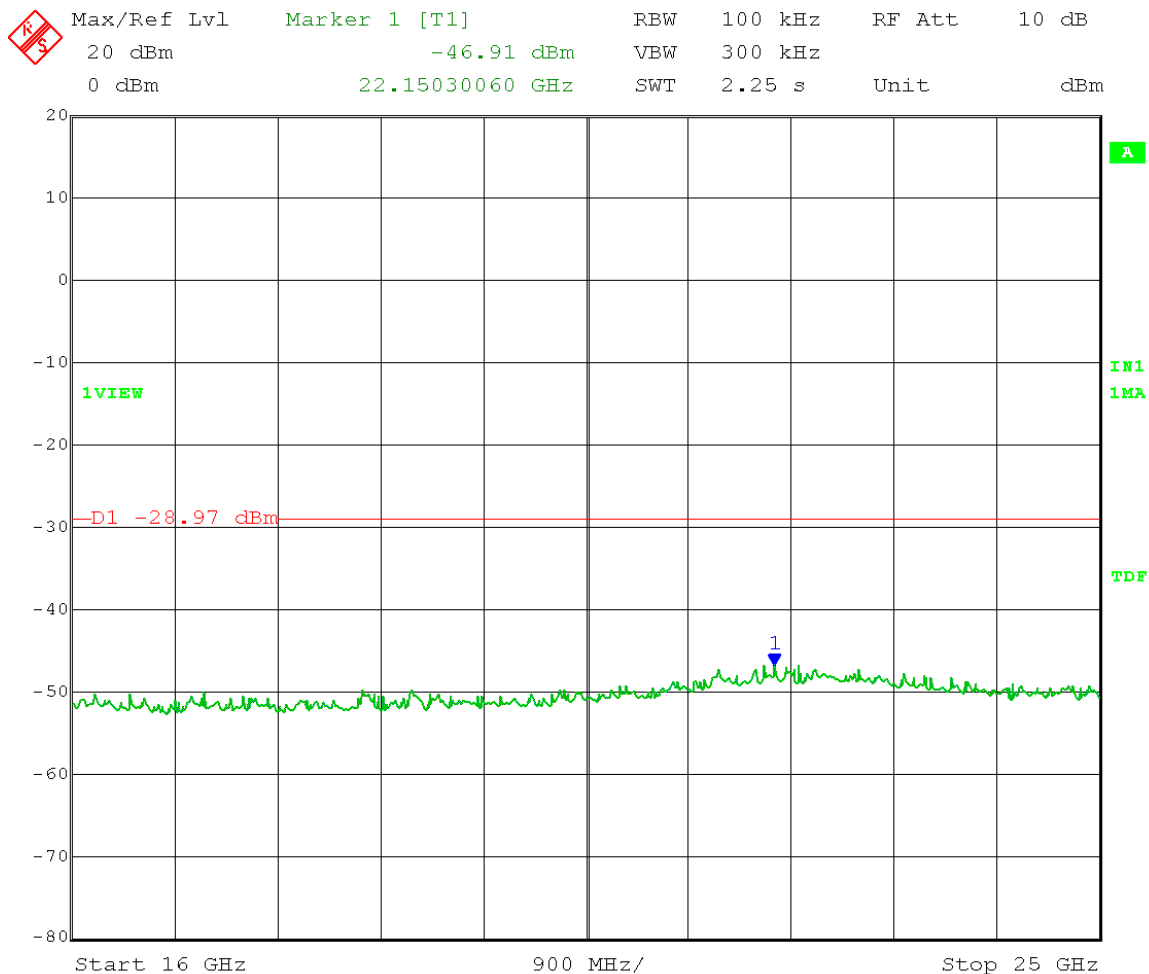
Date: 7.MAR.2014 10:22:55

Test Date: 03-07-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold Low Channel Transmit = 2427 MHz  
POINT-TO-MULTIPOINT OPERATION  
Output Power Setting 15.5 Antenna gain: 8 dBi  
Channel bandwidth: 40 MHz  
Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
Limit = 1.03 dBm – 30 dB = -28.97 dBm  
Frequency range: 7 – 16 GHz



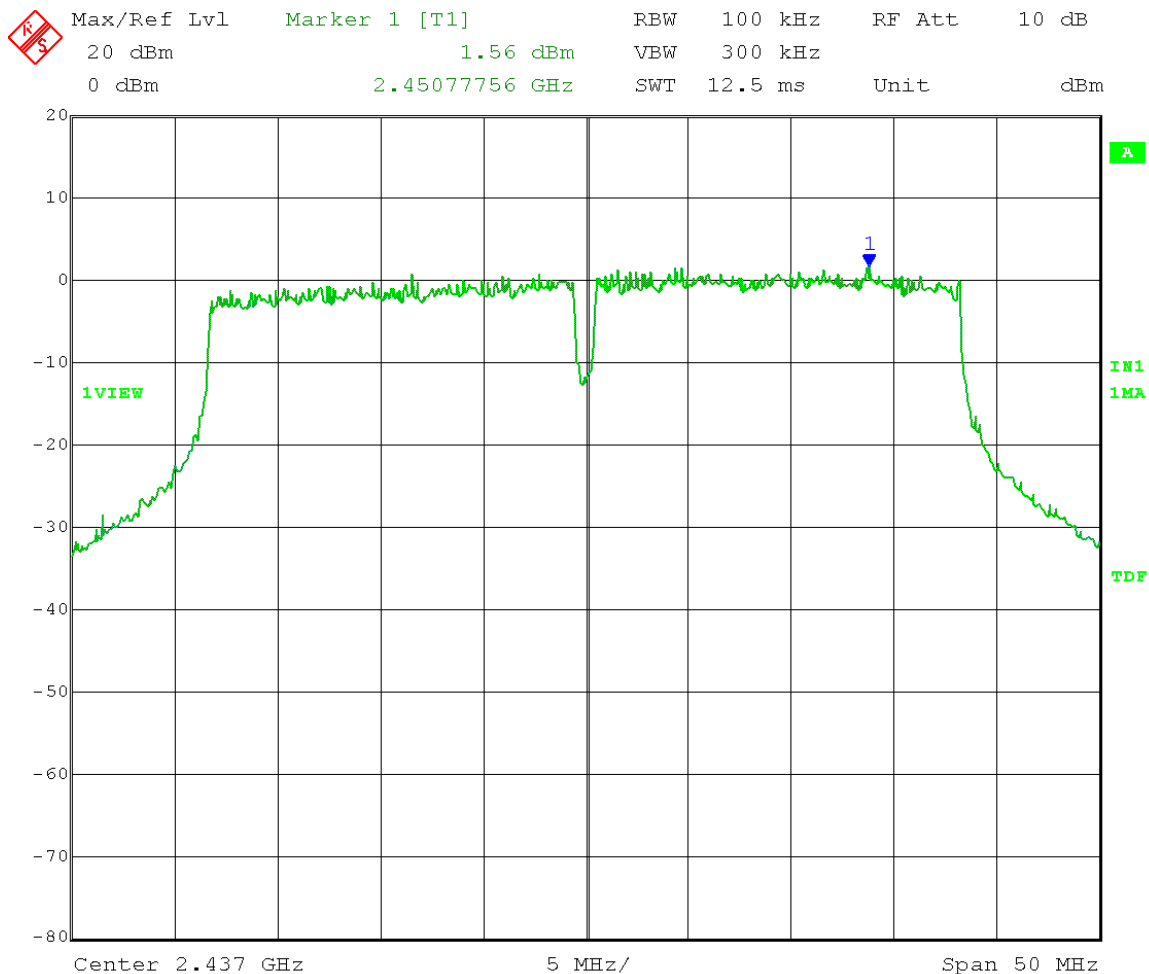
Date: 7.MAR.2014 10:24:15

Test Date: 03-07-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
 Test: Maximum Unwanted Emission Levels - Conducted  
 Operator: Craig B  
 Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
 Detector = Peak Sweep = Auto Couple  
 Trace = Max Hold Low Channel Transmit = 2427 MHz  
 POINT-TO-MULTIPOINT OPERATION  
 Output Power Setting 15.5 Antenna gain: 8 dBi  
 Channel bandwidth: 40 MHz  
 Output port: 1 OFDM MCS15  
**Emission Level** Measurement  
 Limit = 1.03 dBm – 30 dB = -28.97 dBm  
 Frequency range: 16 – 25 GHz



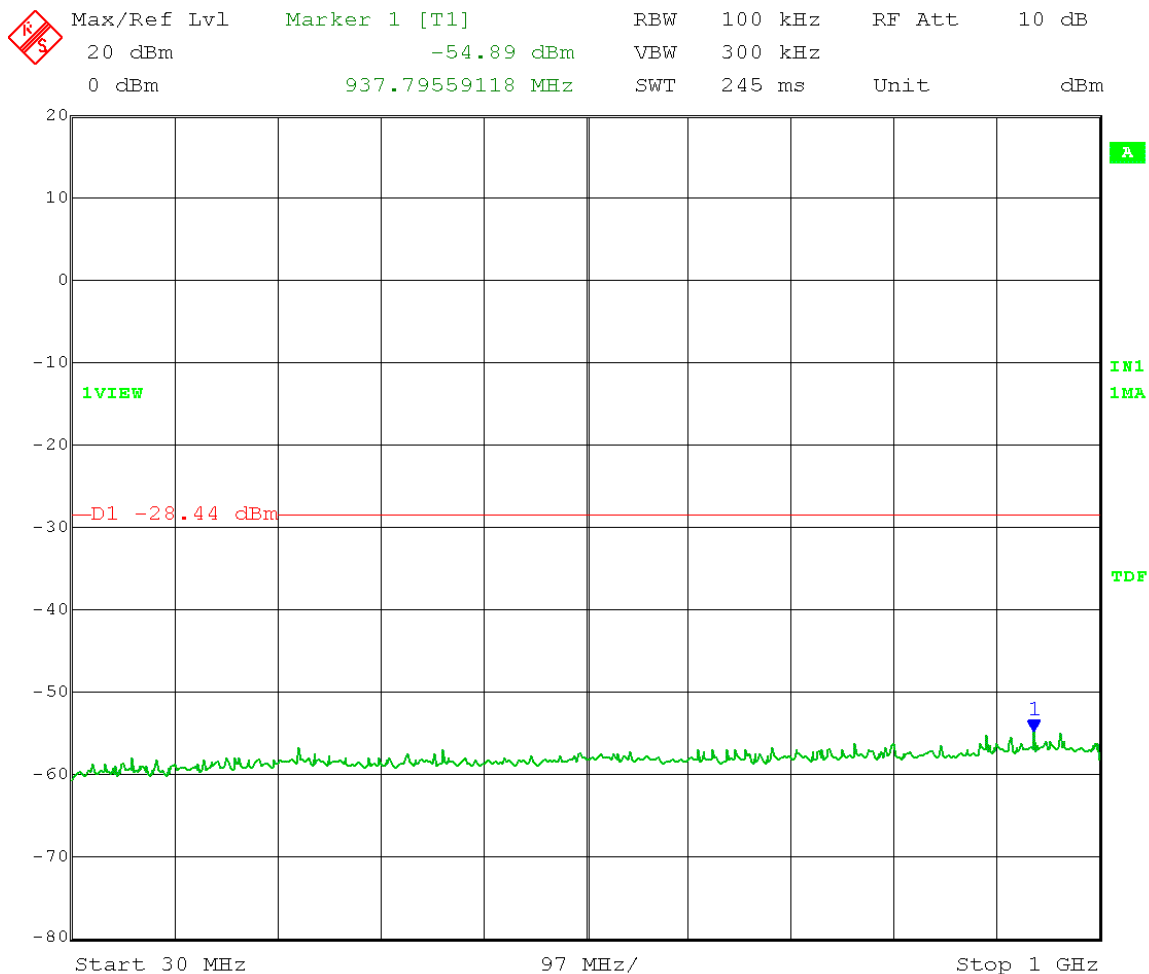
Date: 7.MAR.2014 10:25:52

Test Date: 03-07-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold Mid Channel Transmit = 2437 MHz  
POINT-TO-MULTIPOINT OPERATION  
Output Power Setting 18 Antenna gain: 8 dBi  
Channel bandwidth: 40 MHz  
Output port: 1 OFDM MCS15  
**Reference Level Measurement**  
Limit = 1.56 dBm – 30 dB = -28.44 dBm



Date: 7.MAR.2014 10:11:01

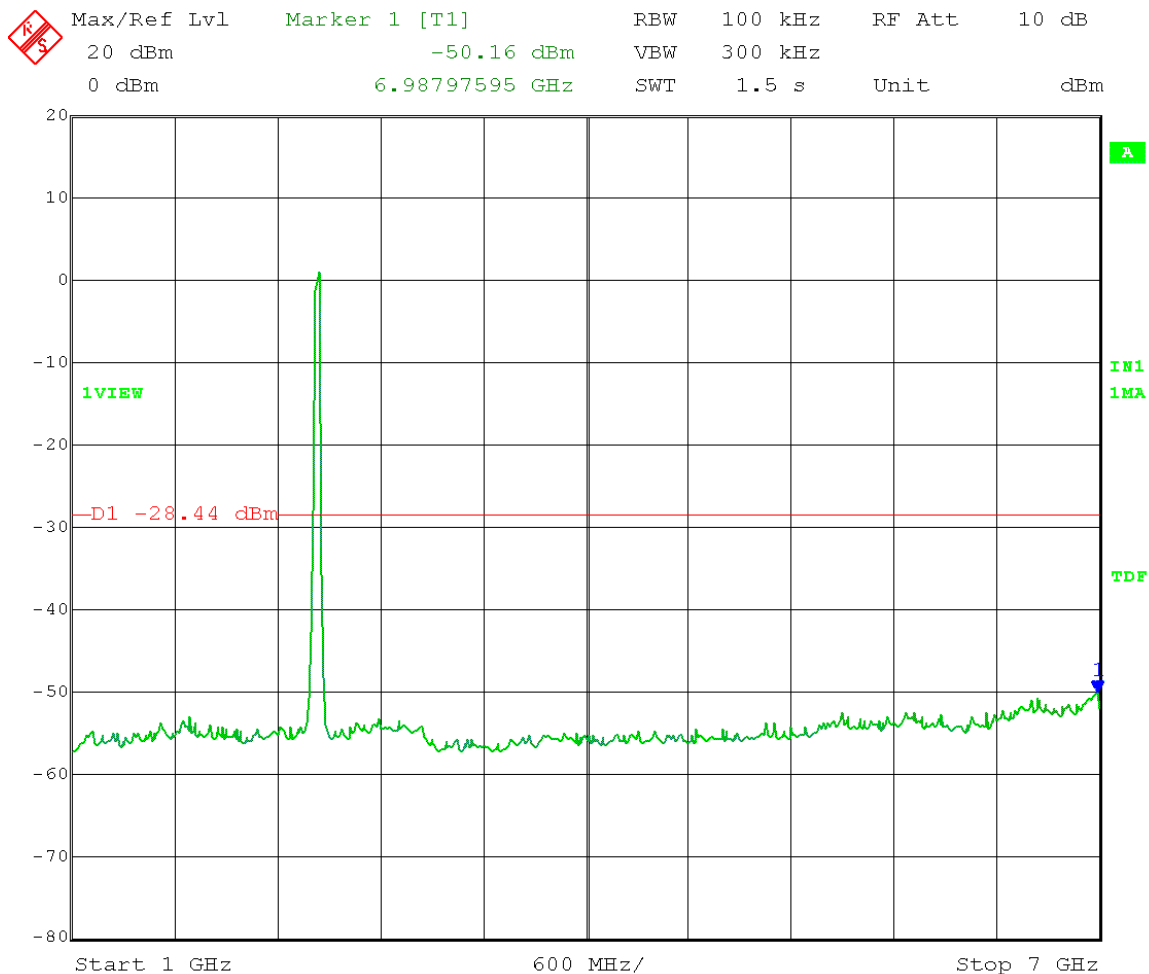
Test Date: 03-07-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
 Test: Maximum Unwanted Emission Levels - Conducted  
 Operator: Craig B  
 Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
 Detector = Peak Sweep = Auto Couple  
 Trace = Max Hold Mid Channel Transmit = 2437 MHz  
 POINT-TO-MULTIPOINT OPERATION  
 Output Power Setting 18 Antenna gain: 8 dBi  
 Channel bandwidth: 40 MHz  
 Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
 Limit = 1.56 dBm – 30 dB = -28.44 dBm  
 Frequency range: 30 – 1000 MHz



Date: 7.MAR.2014 10:16:36

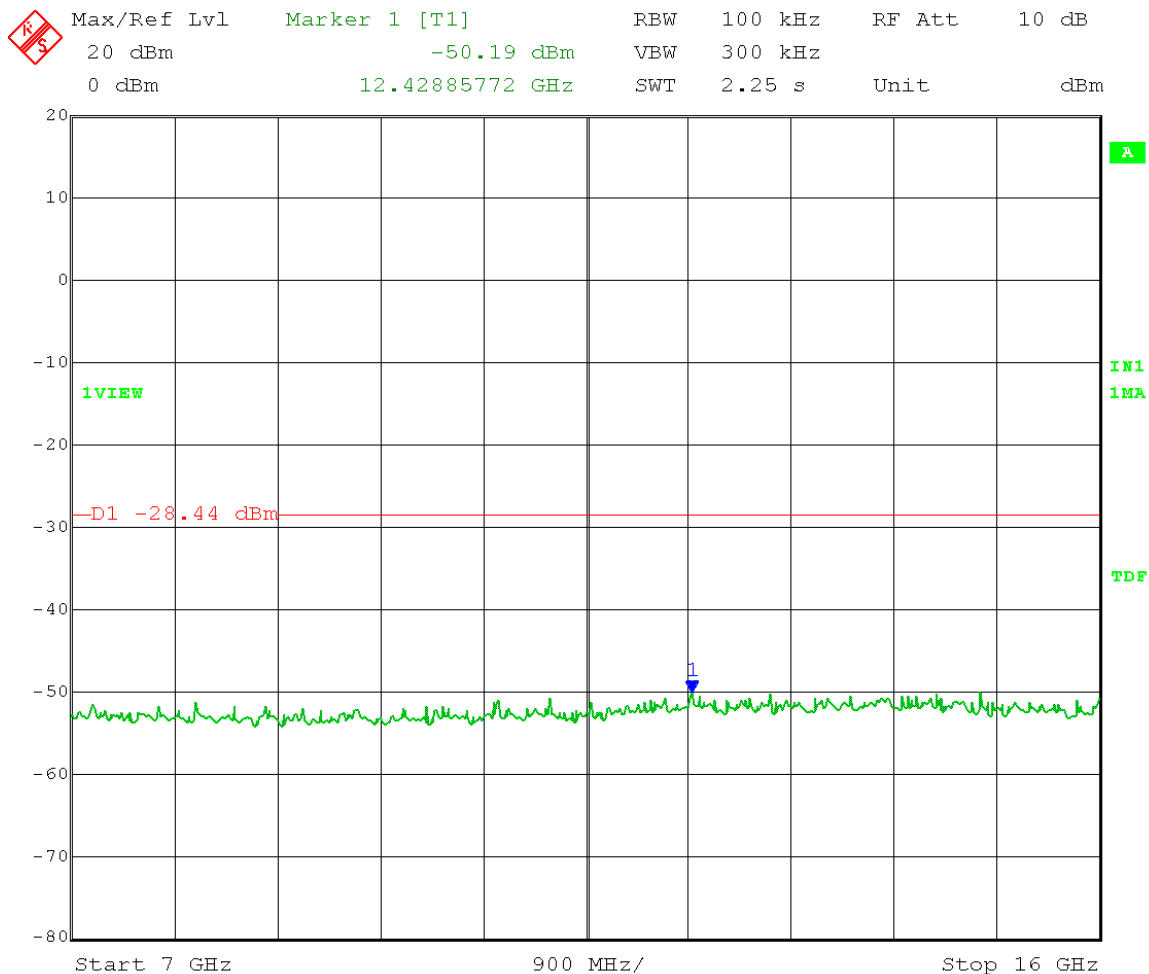


Test Date: 03-07-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold Mid Channel Transmit = 2437 MHz  
POINT-TO-MULTIPOINT OPERATION  
Output Power Setting 18 Antenna gain: 8 dBi  
Channel bandwidth: 40 MHz  
Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
Limit = 1.56 dBm – 30 dB = -28.44 dBm  
Frequency range: 1 – 7 GHz



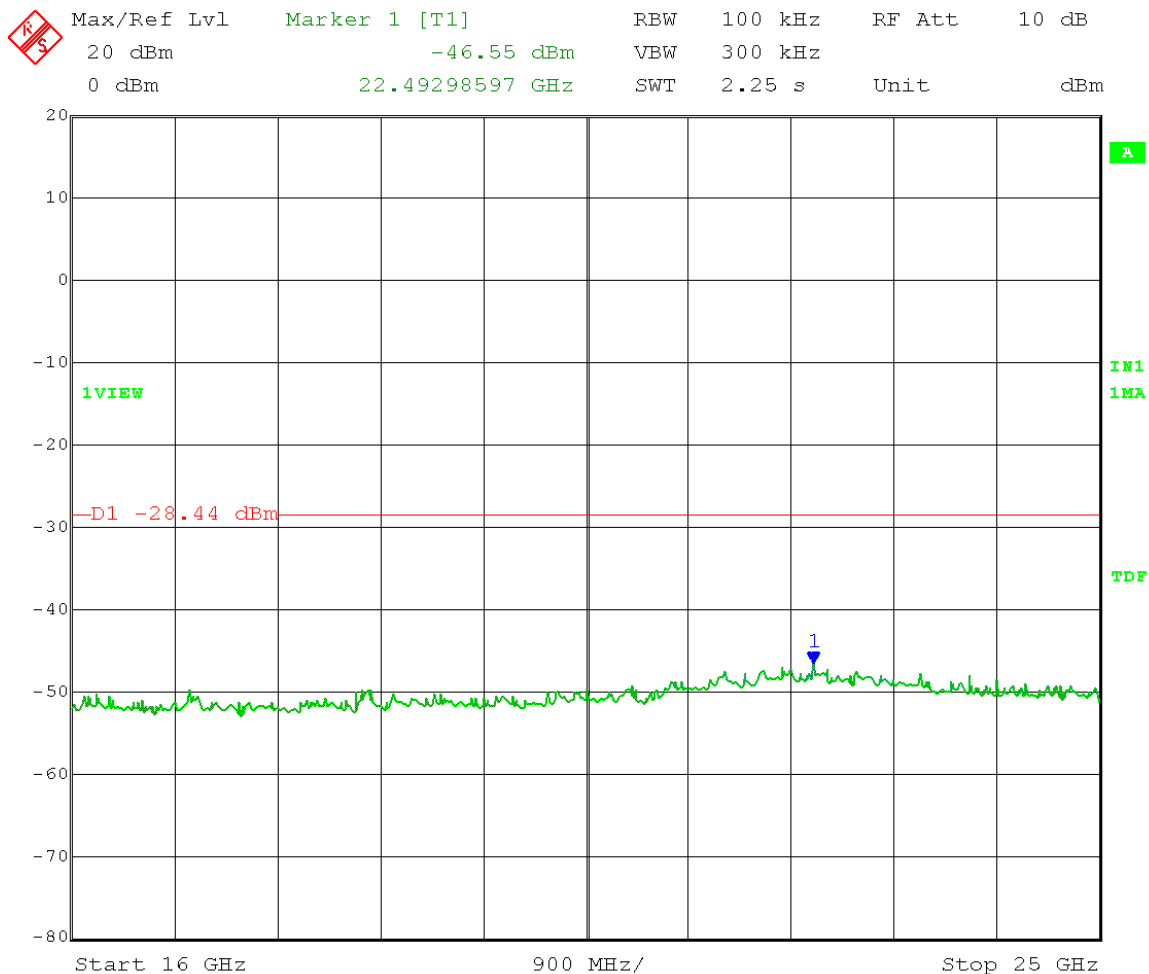
Date: 7.MAR.2014 10:12:53

Test Date: 03-07-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
 Test: Maximum Unwanted Emission Levels - Conducted  
 Operator: Craig B  
 Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
 Detector = Peak Sweep = Auto Couple  
 Trace = Max Hold Mid Channel Transmit = 2437 MHz  
 POINT-TO-MULTIPOINT OPERATION  
 Output Power Setting 18 Antenna gain: 8 dBi  
 Channel bandwidth: 40 MHz  
 Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
 Limit = 1.56 dBm – 30 dB = -28.44 dBm  
 Frequency range: 7 – 16 GHz



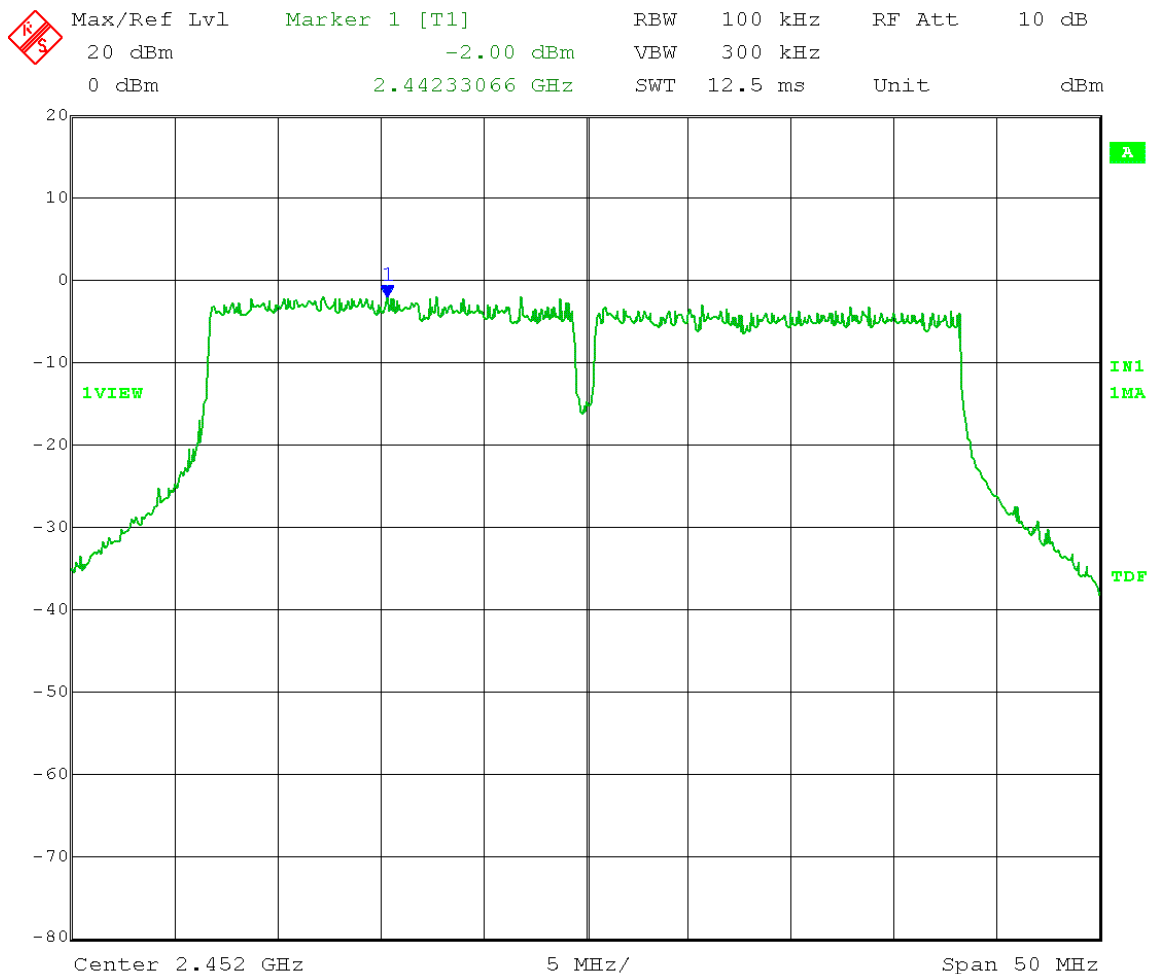
Date: 7.MAR.2014 10:14:00

Test Date: 03-07-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
 Test: Maximum Unwanted Emission Levels - Conducted  
 Operator: Craig B  
 Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
 Detector = Peak Sweep = Auto Couple  
 Trace = Max Hold Mid Channel Transmit = 2437 MHz  
 POINT-TO-MULTIPOINT OPERATION  
 Output Power Setting 18 Antenna gain: 8 dBi  
 Channel bandwidth: 40 MHz  
 Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
 Limit = 1.56 dBm – 30 dB = -28.44 dBm  
 Frequency range: 16 – 25 GHz



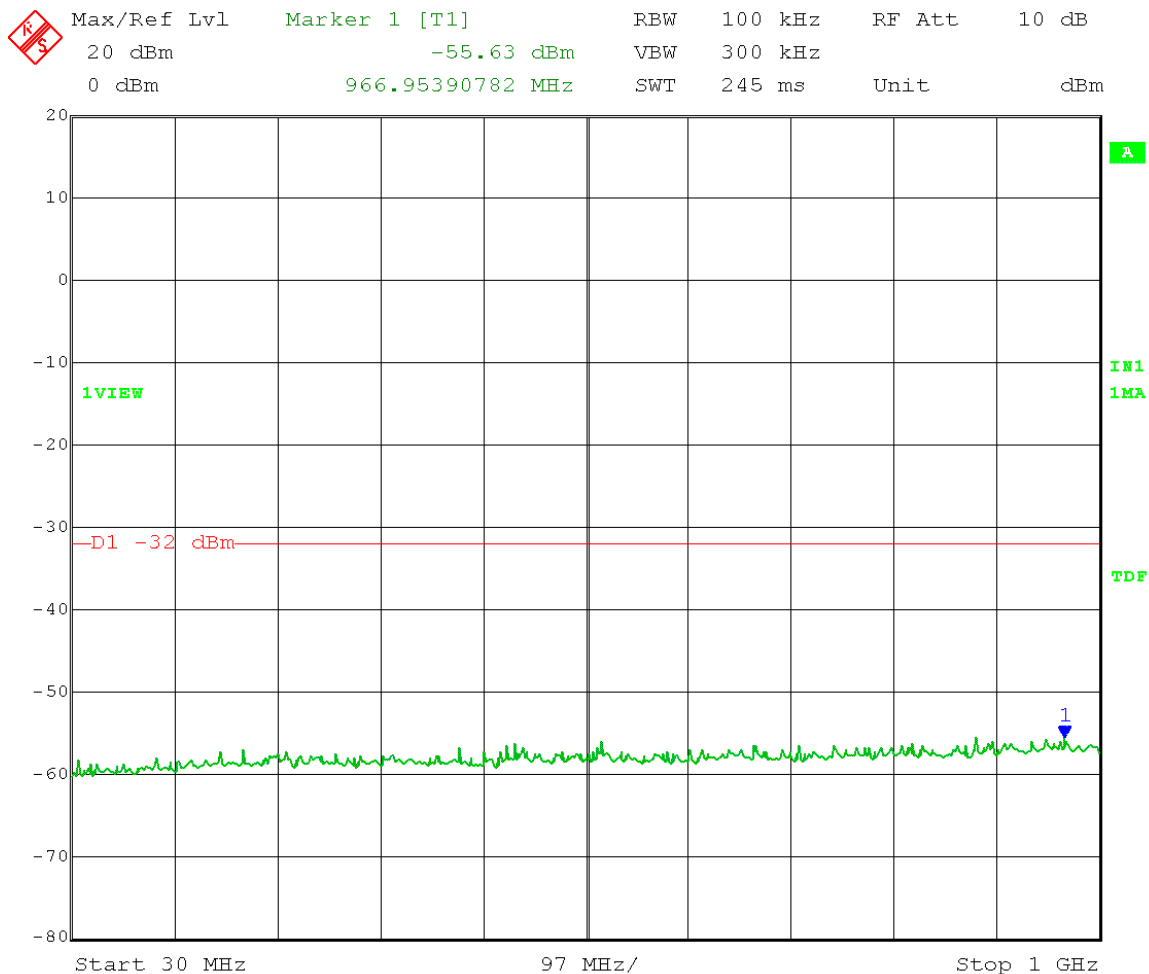
Date: 7.MAR.2014 10:15:24

Test Date: 03-07-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold High Channel Transmit = 2452 MHz  
POINT-TO-MULTIPOINT OPERATION  
Output Power Setting 15.5 Antenna gain: 8 dBi  
Channel bandwidth: 40 MHz  
Output port: 1 OFDM MCS15  
**Reference Level Measurement**  
Limit = -2.00 dBm – 30 dB = -32.00 dBm



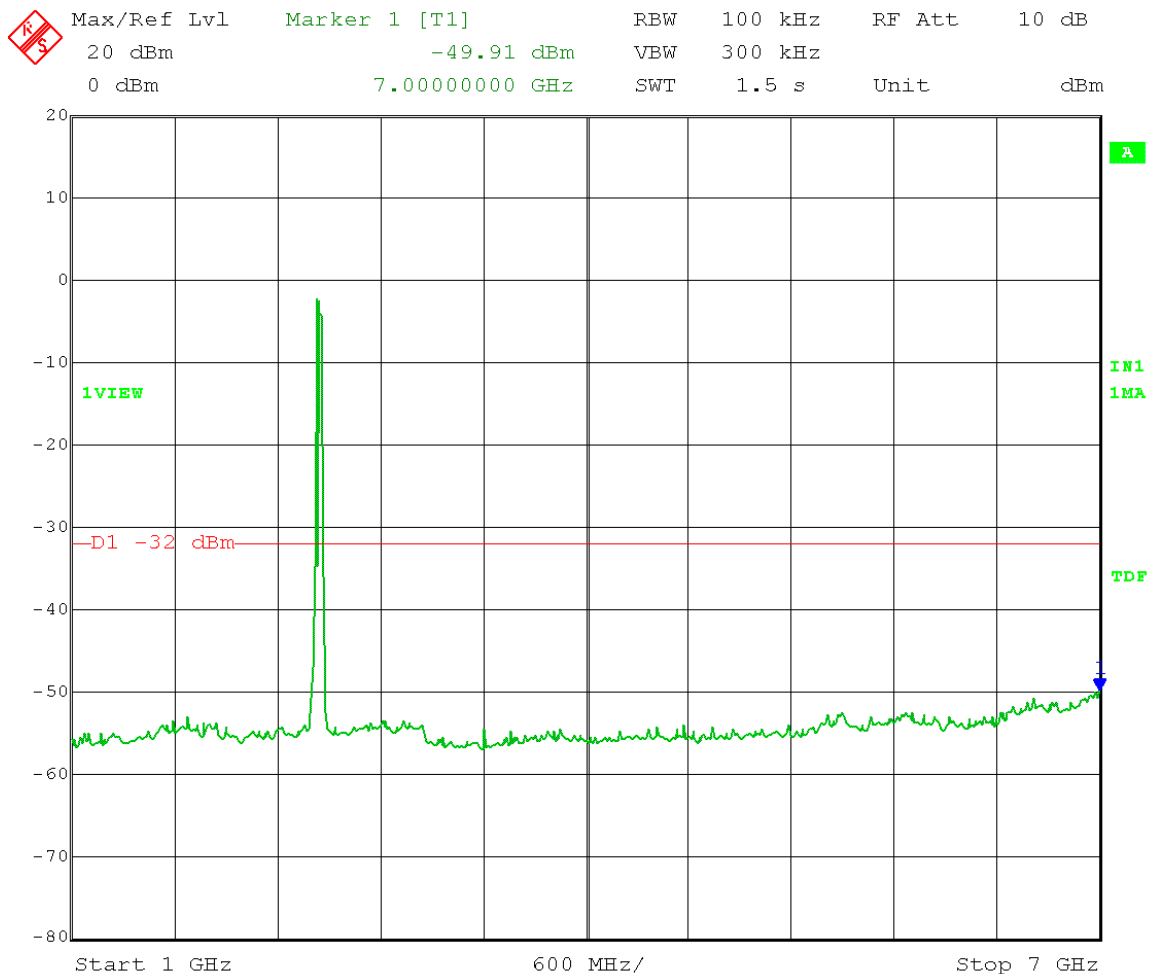
Date: 7.MAR.2014 10:30:19

Test Date: 03-07-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
 Test: Maximum Unwanted Emission Levels - Conducted  
 Operator: Craig B  
 Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
 Detector = Peak Sweep = Auto Couple  
 Trace = Max Hold High Channel Transmit = 2452 MHz  
 POINT-TO-MULTIPOINT OPERATION  
 Output Power Setting 15.5 Antenna gain: 8 dBi  
 Channel bandwidth: 40 MHz  
 Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
 Limit = -2.00 dBm – 30 dB = -32.00 dBm  
 Frequency range: 30 – 1000 MHz



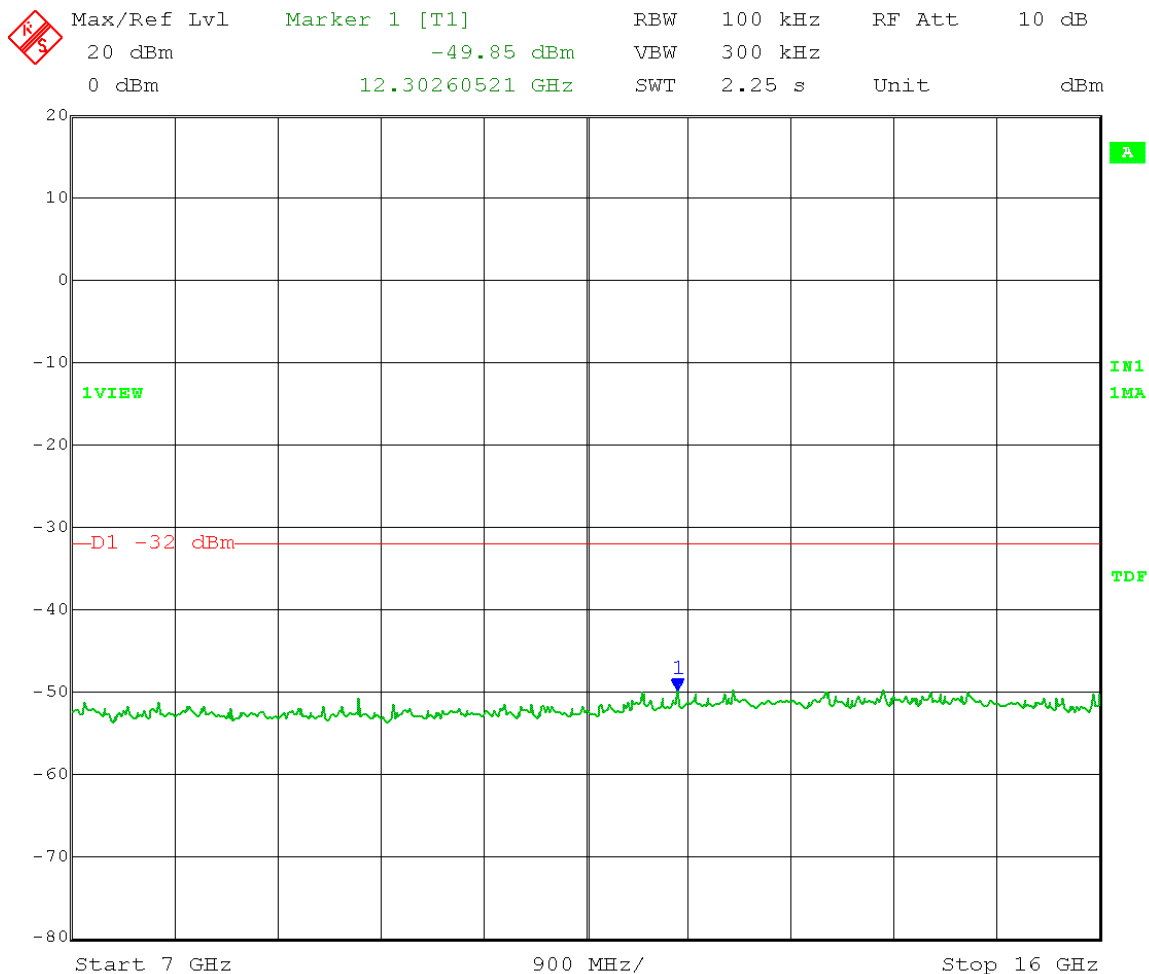
Date: 7.MAR.2014 10:36:59

Test Date: 03-07-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold High Channel Transmit = 2452 MHz  
POINT-TO-MULTIPOINT OPERATION  
Output Power Setting 15.5 Antenna gain: 8 dBi  
Channel bandwidth: 40 MHz  
Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
Limit = -2.00 dBm - 30 dB = -32.00 dBm  
Frequency range: 1 - 7 GHz



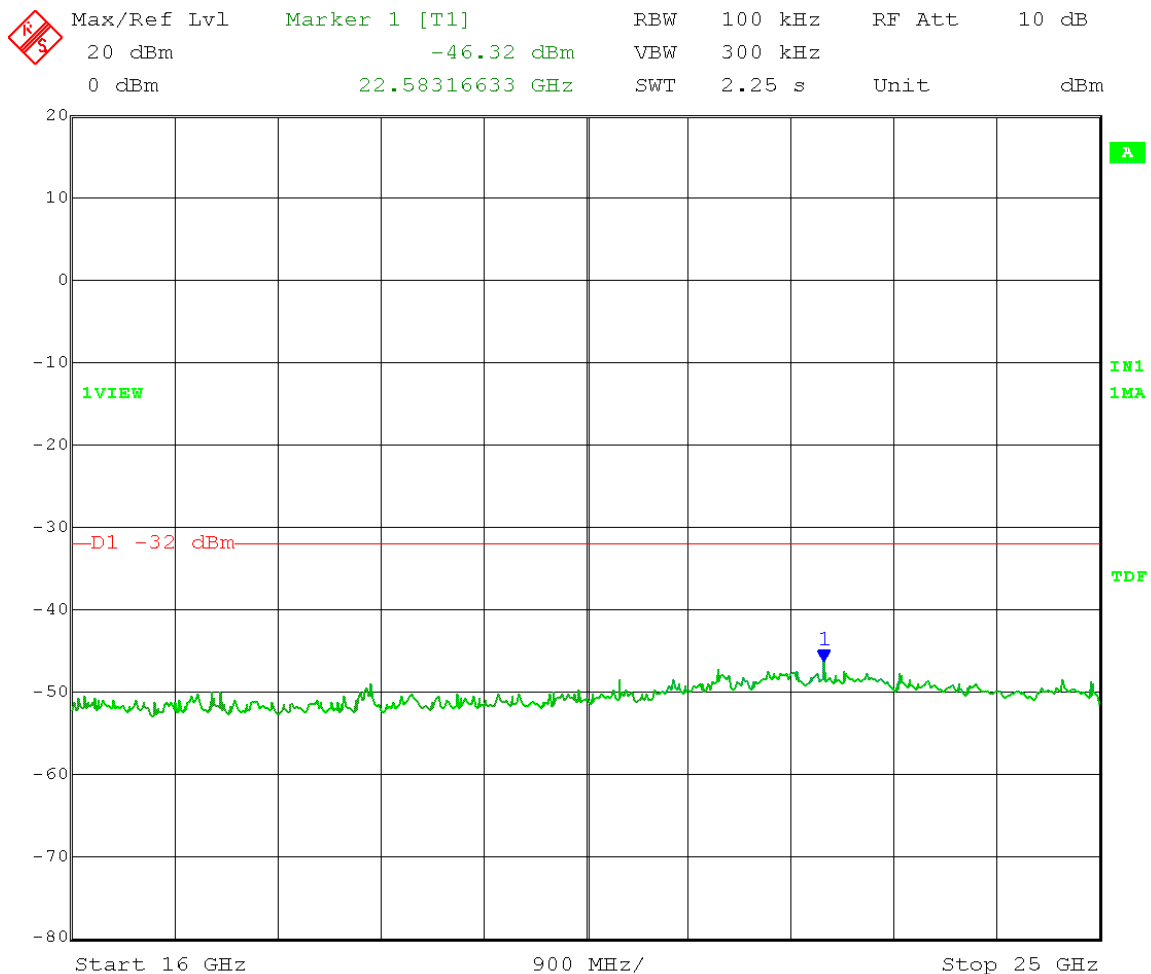
Date: 7.MAR.2014 10:32:46

Test Date: 03-07-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
 Test: Maximum Unwanted Emission Levels - Conducted  
 Operator: Craig B  
 Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
 Detector = Peak Sweep = Auto Couple  
 Trace = Max Hold High Channel Transmit = 2452 MHz  
 POINT-TO-MULTIPOINT OPERATION  
 Output Power Setting 15.5 Antenna gain: 8 dBi  
 Channel bandwidth: 40 MHz  
 Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
 Limit = -2.00 dBm - 30 dB = -32.00 dBm  
 Frequency range: 7 - 16 GHz



Date: 7.MAR.2014 10:34:32

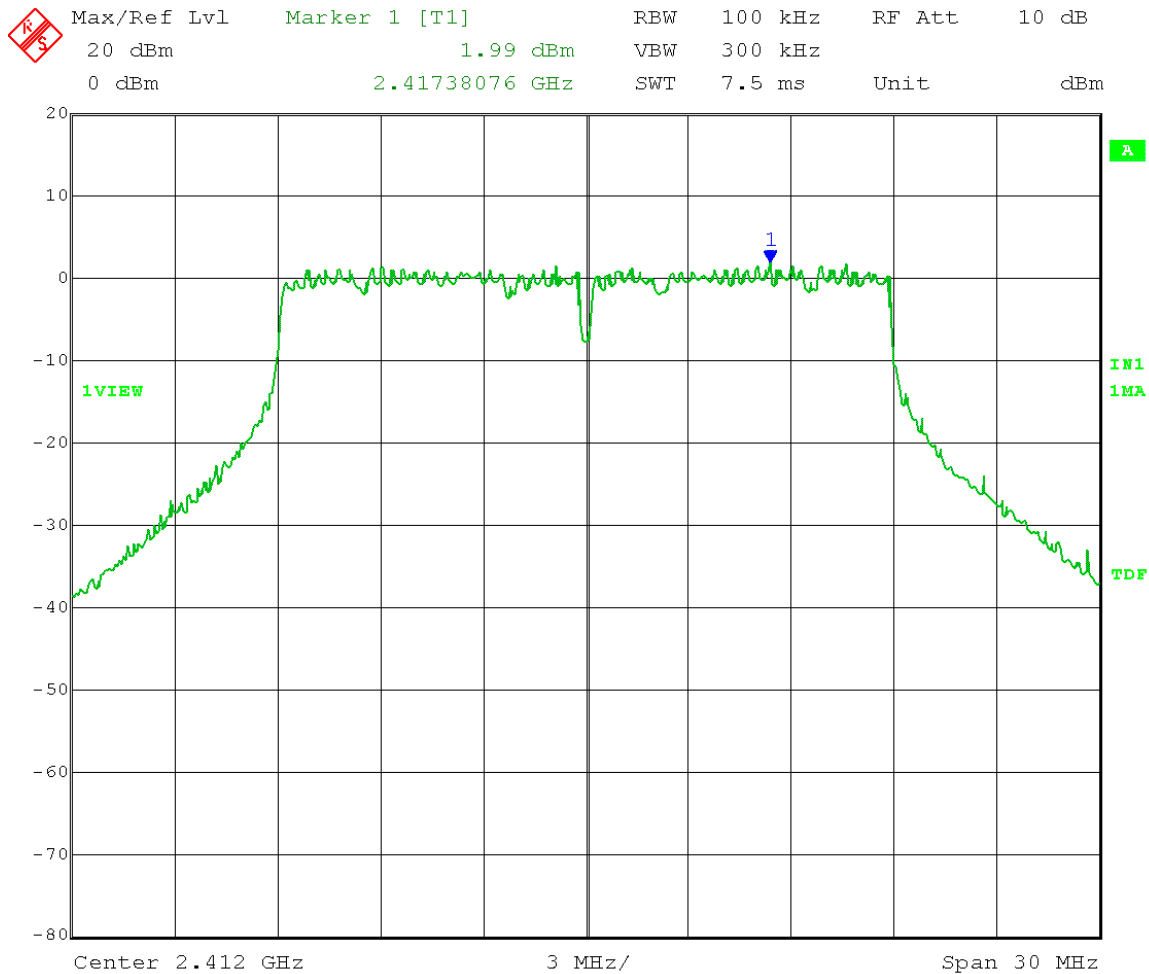
Test Date: 03-07-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold High Channel Transmit = 2452 MHz  
POINT-TO-MULTIPOINT OPERATION  
Output Power Setting 15.5 Antenna gain: 8 dBi  
Channel bandwidth: 40 MHz  
Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
Limit = -2.00 dBm - 30 dB = -32.00 dBm  
Frequency range: 16 - 25 GHz



Date: 7.MAR.2014 10:35:42

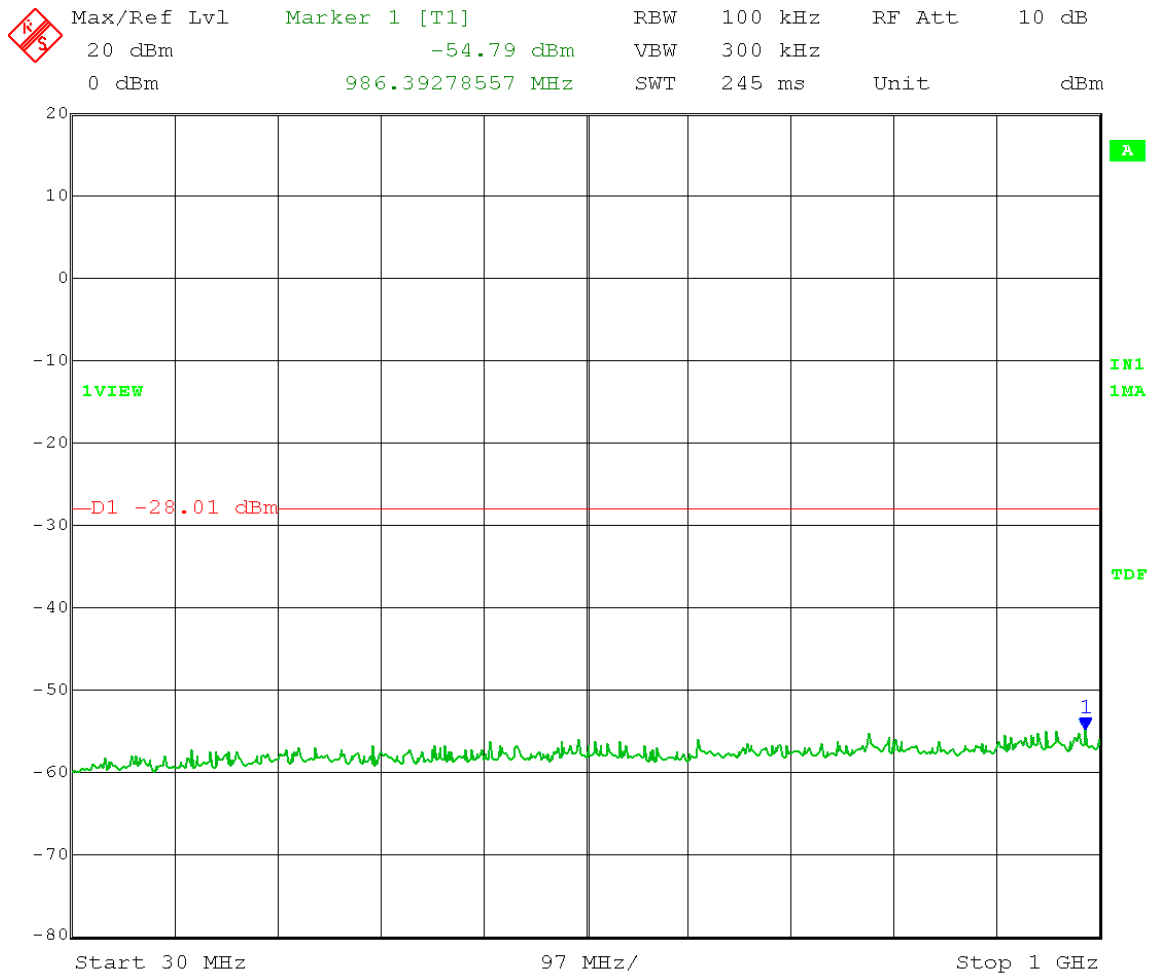


Test Date: 03-11-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold Low Channel Transmit = 2412 MHz  
POINT-TO-POINT & POINT-TO-MULTIPOINT OPERATION  
Output Power Setting 15 Channel bandwidth: 20 MHz  
Output port: 1 OFDM MCS15  
**Reference Level Measurement**  
Limit = 1.99 dBm – 30 dB = -28.01 dBm



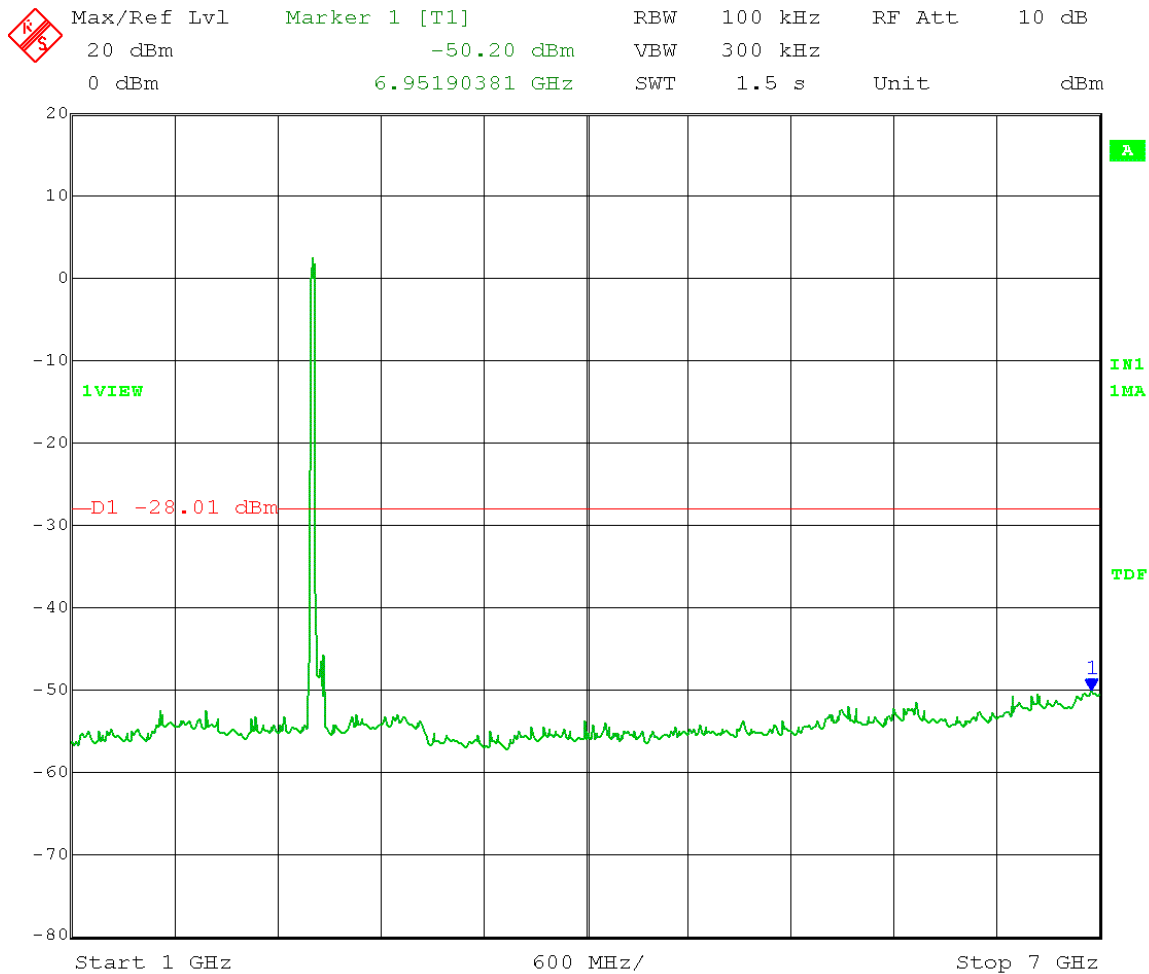
Date: 11.MAR.2014 09:50:03

Test Date: 03-11-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
 Test: Maximum Unwanted Emission Levels - Conducted  
 Operator: Craig B  
 Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
 Detector = Peak Sweep = Auto Couple  
 Trace = Max Hold Low Channel Transmit = 2412 MHz  
 POINT-TO-POINT & POINT-TO-MULTIPOINT OPERATION  
 Output Power Setting 15 Channel bandwidth: 20 MHz  
 Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
 Limit = 1.99 dBm – 30 dB = -28.01 dBm  
 Frequency Range: 30 – 1000 MHz



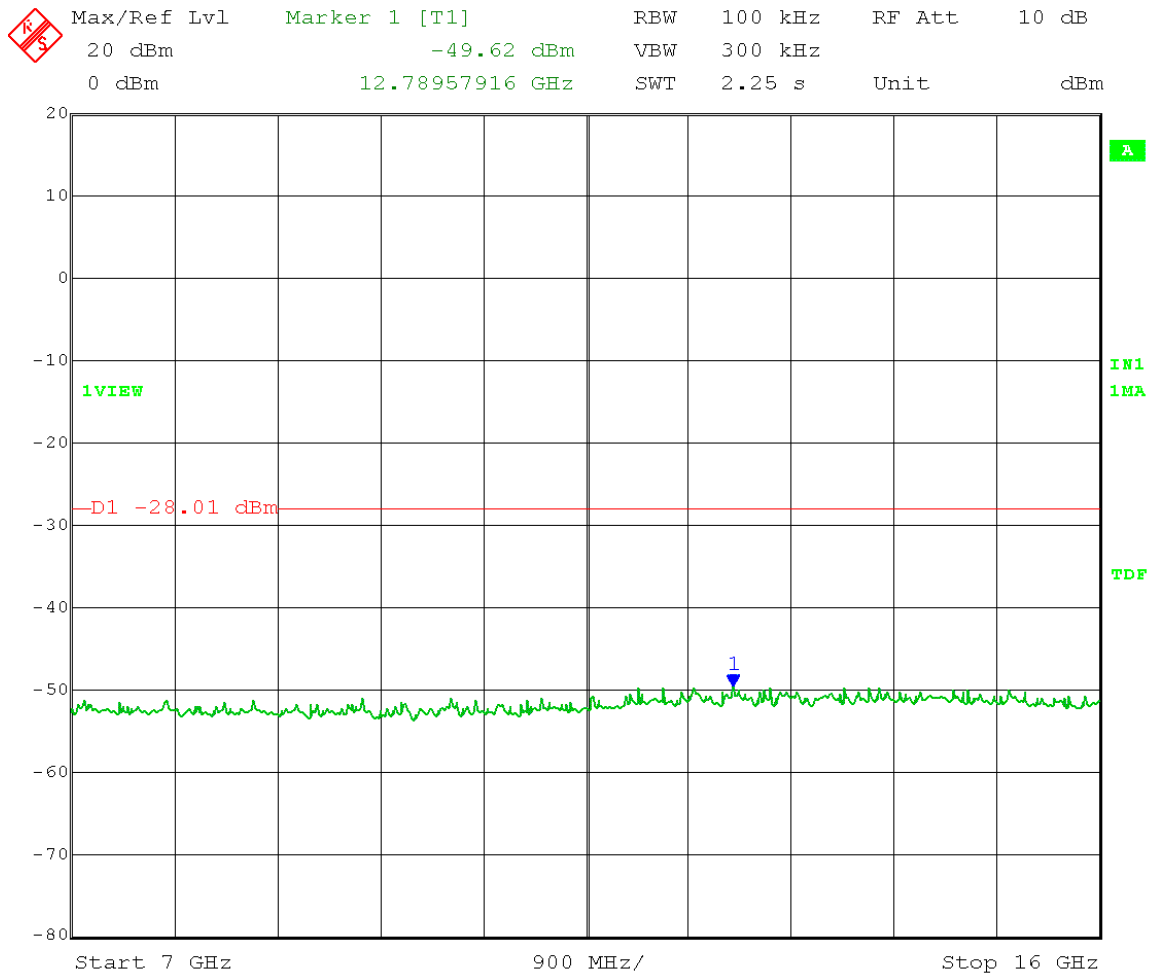
Date: 11.MAR.2014 10:27:02

Test Date: 03-11-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
 Test: Maximum Unwanted Emission Levels - Conducted  
 Operator: Craig B  
 Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
 Detector = Peak Sweep = Auto Couple  
 Trace = Max Hold Low Channel Transmit = 2412 MHz  
 POINT-TO-POINT & POINT-TO-MULTIPOINT OPERATION  
 Output Power Setting 15 Channel bandwidth: 20 MHz  
 Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
 Limit = 1.99 dBm – 30 dB = -28.01 dBm  
 Frequency Range: 1 – 7 GHz

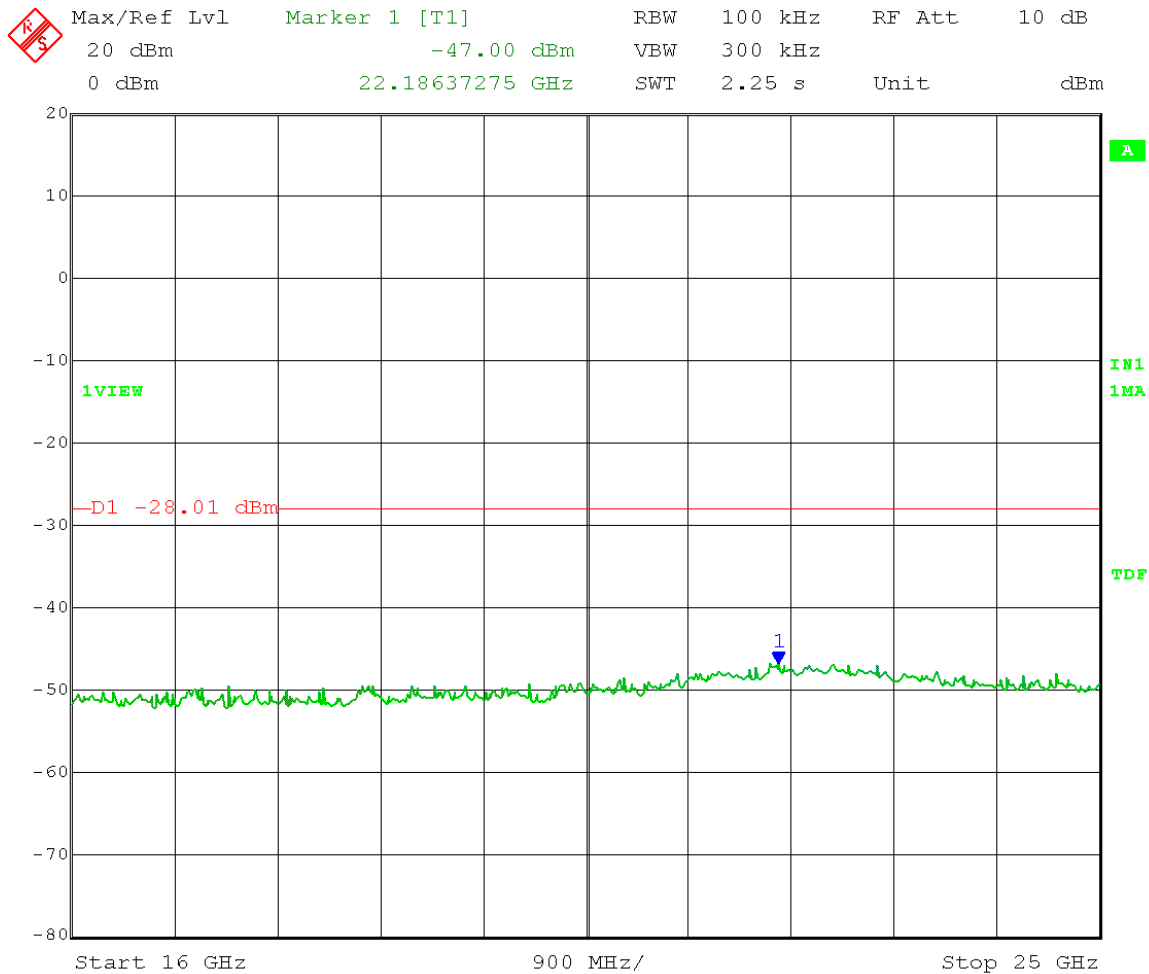


Date: 11.MAR.2014 10:21:08

Test Date: 03-11-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
 Test: Maximum Unwanted Emission Levels - Conducted  
 Operator: Craig B  
 Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
 Detector = Peak Sweep = Auto Couple  
 Trace = Max Hold Low Channel Transmit = 2412 MHz  
 POINT-TO-POINT & POINT-TO-MULTIPOINT OPERATION  
 Output Power Setting 15 Channel bandwidth: 20 MHz  
 Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
 Limit = 1.99 dBm – 30 dB = -28.01 dBm  
 Frequency Range: 7 – 16 GHz

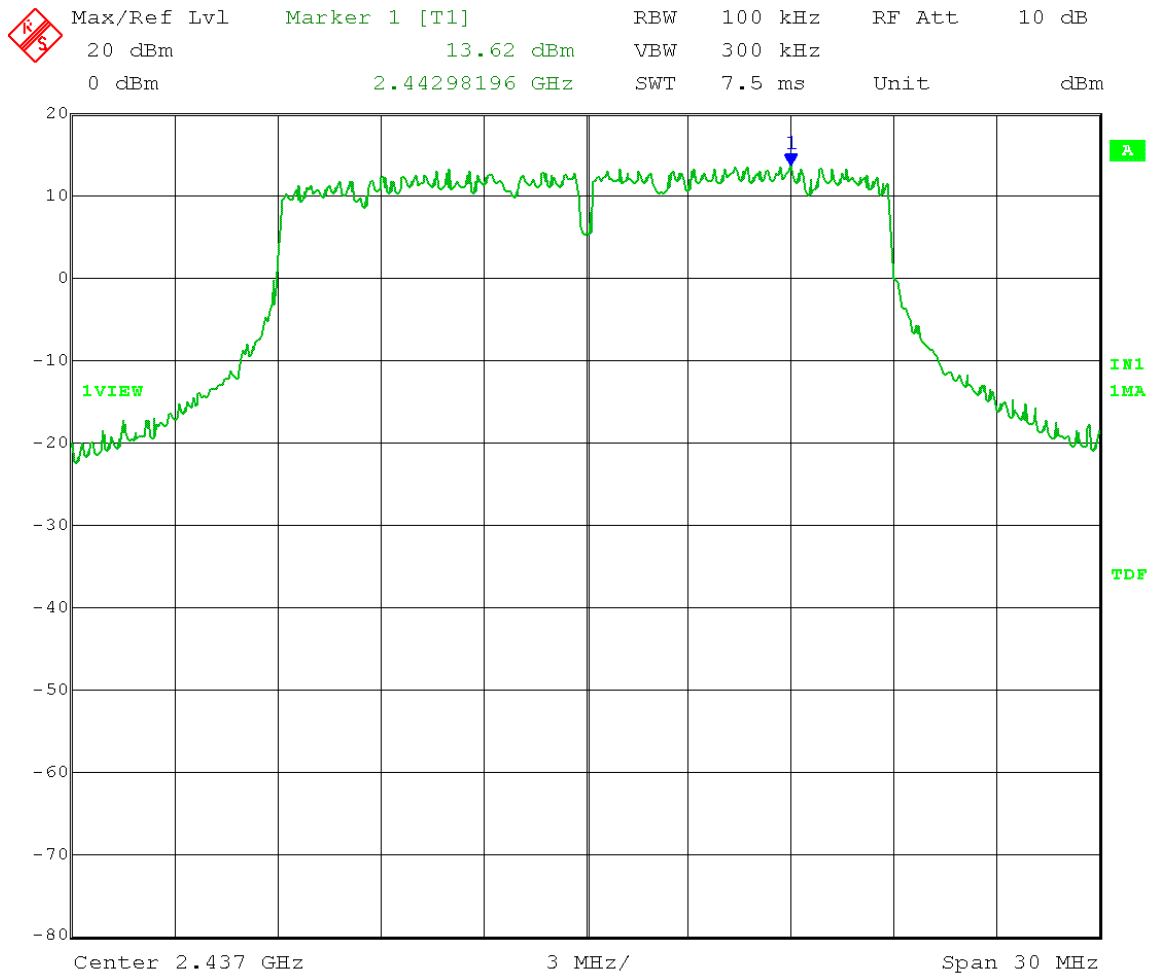


Test Date: 03-11-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold Low Channel Transmit = 2412 MHz  
POINT-TO-POINT & POINT-TO-MULTIPOINT OPERATION  
Output Power Setting 15 Channel bandwidth: 20 MHz  
Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
Limit = 1.99 dBm – 30 dB = -28.01 dBm  
Frequency Range: 16 – 25 GHz



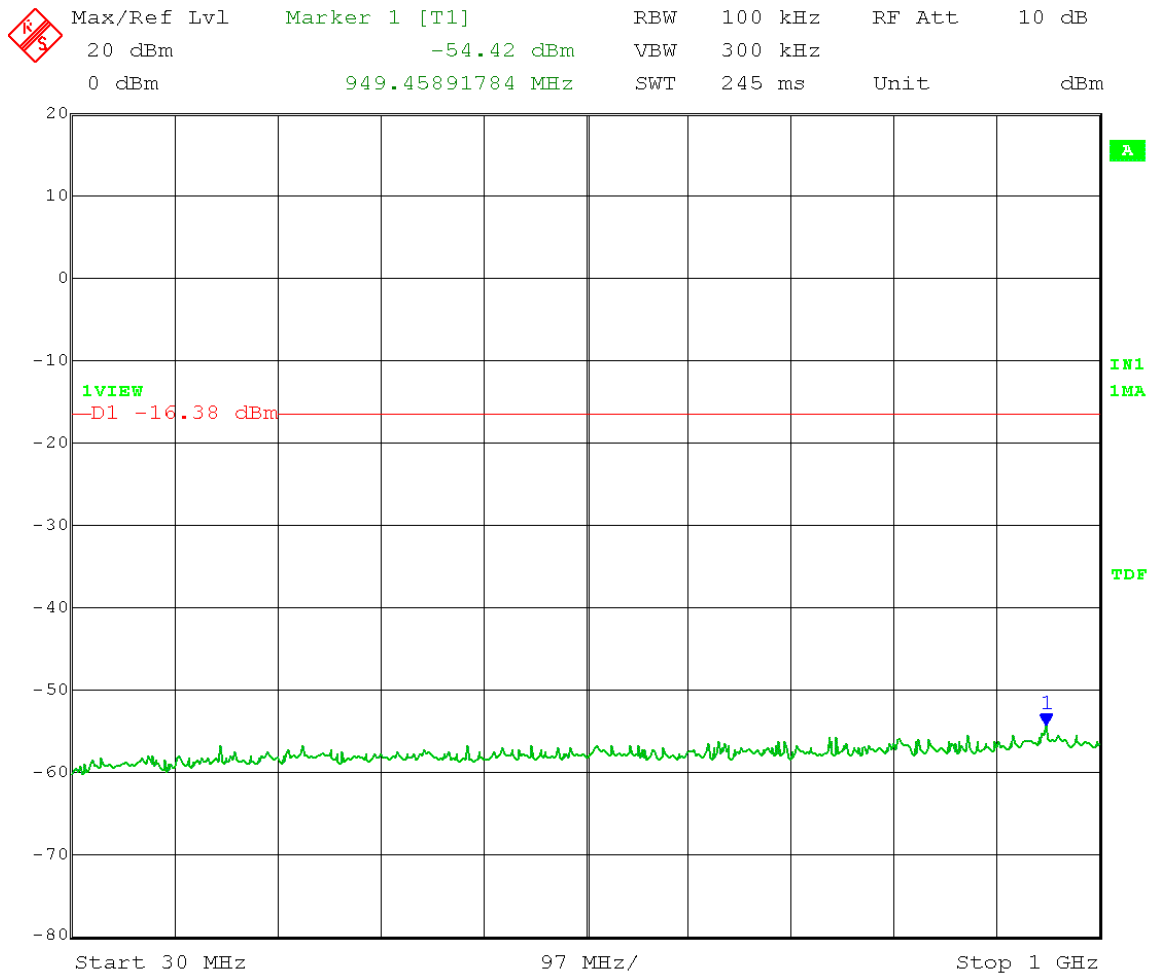
Date: 11.MAR.2014 10:24:39

Test Date: 03-11-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold Mid Channel Transmit = 2437 MHz  
POINT-TO-POINT OPERATION  
Output Power Setting 27 Channel bandwidth: 20 MHz  
Output port: 1 OFDM MCS15  
**Reference Level Measurement**  
Limit = 13.62 dBm – 30 dB = -16.38 dBm



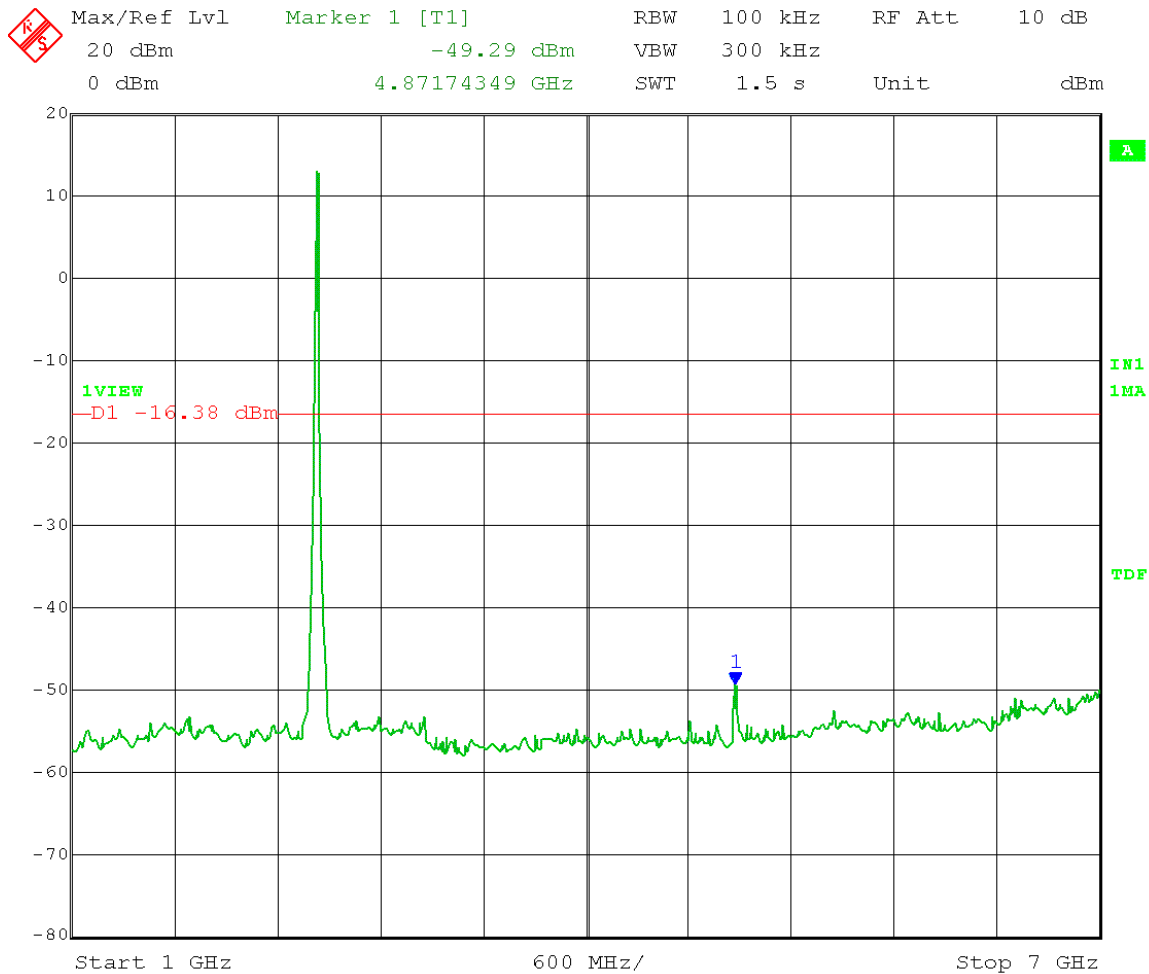
Date: 11.MAR.2014 10:45:51

Test Date: 03-11-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
 Test: Maximum Unwanted Emission Levels - Conducted  
 Operator: Craig B  
 Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
 Detector = Peak Sweep = Auto Couple  
 Trace = Max Hold Mid Channel Transmit = 2437 MHz  
 POINT-TO-POINT OPERATION  
 Output Power Setting 27 Channel bandwidth: 20 MHz  
 Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
 Limit = 13.62 dBm – 30 dB = -16.38 dBm  
 Frequency Range: 30 – 1000 MHz



Date: 11.MAR.2014 11:54:36

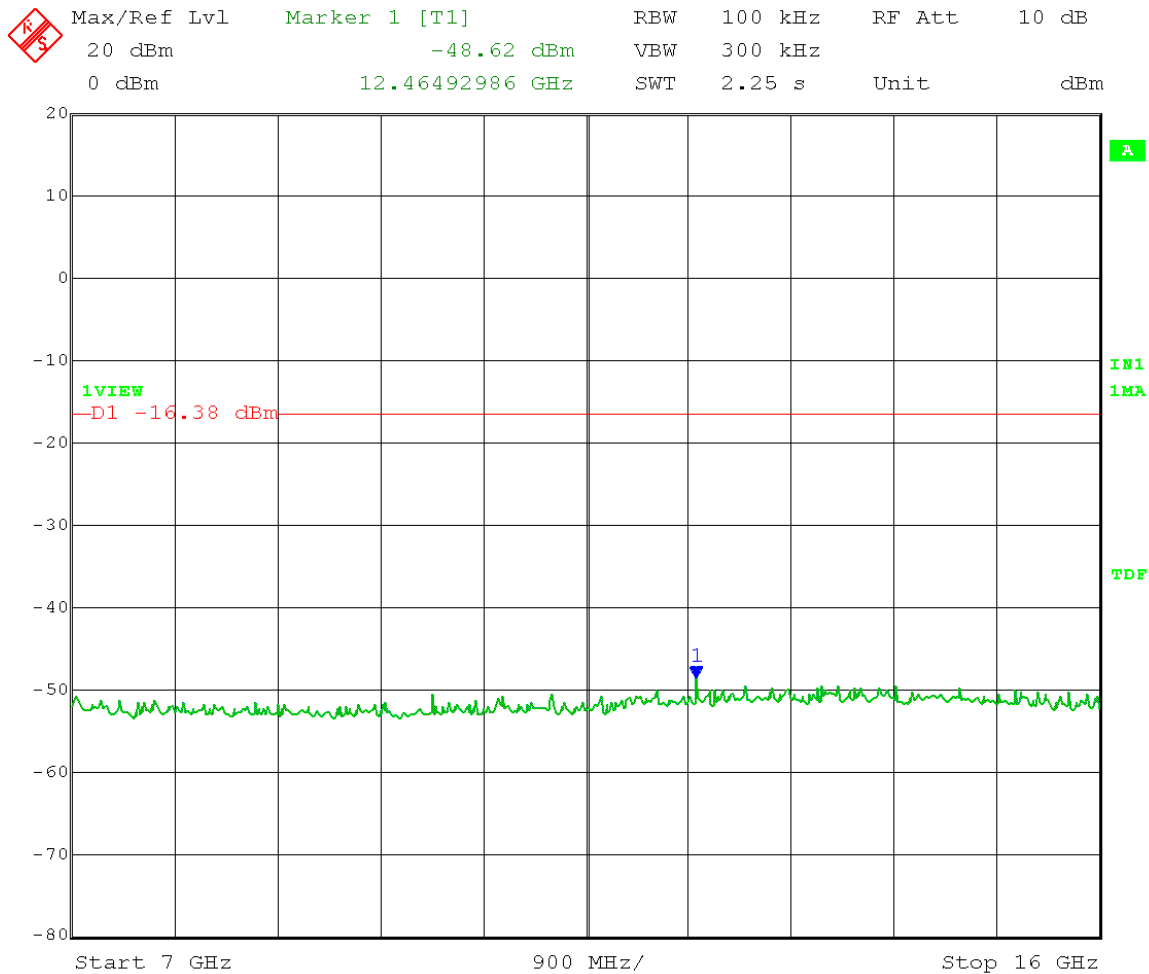
Test Date: 03-11-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold Mid Channel Transmit = 2437 MHz  
POINT-TO-POINT OPERATION  
Output Power Setting 27 Channel bandwidth: 20 MHz  
Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
Limit = 13.62 dBm – 30 dB = -16.38 dBm  
Frequency Range: 1 – 7 GHz



Date: 11.MAR.2014 11:49:59

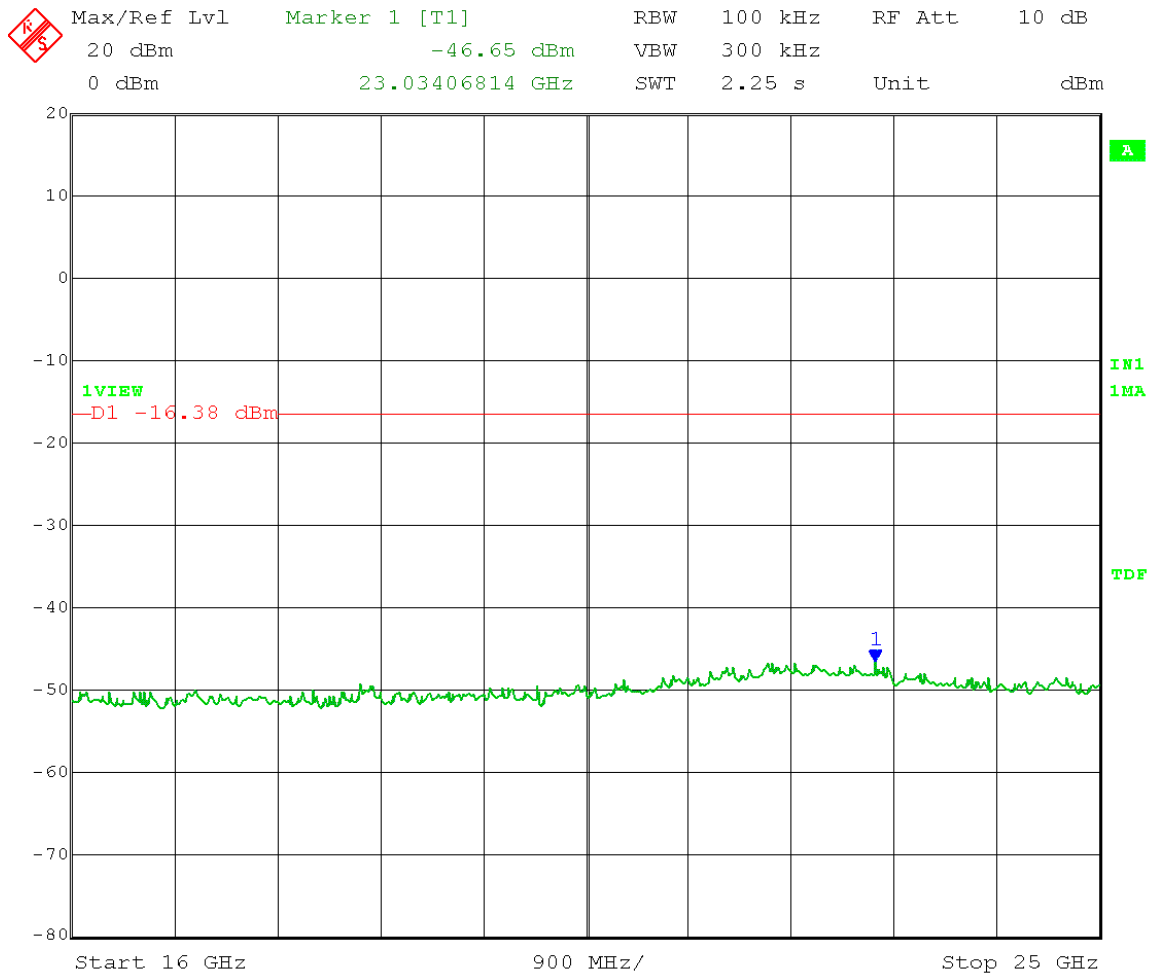


Test Date: 03-11-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
 Test: Maximum Unwanted Emission Levels - Conducted  
 Operator: Craig B  
 Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
 Detector = Peak Sweep = Auto Couple  
 Trace = Max Hold Mid Channel Transmit = 2437 MHz  
 POINT-TO-POINT OPERATION  
 Output Power Setting 27 Channel bandwidth: 20 MHz  
 Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
 Limit = 13.62 dBm – 30 dB = -16.38 dBm  
 Frequency Range: 7 – 16 GHz



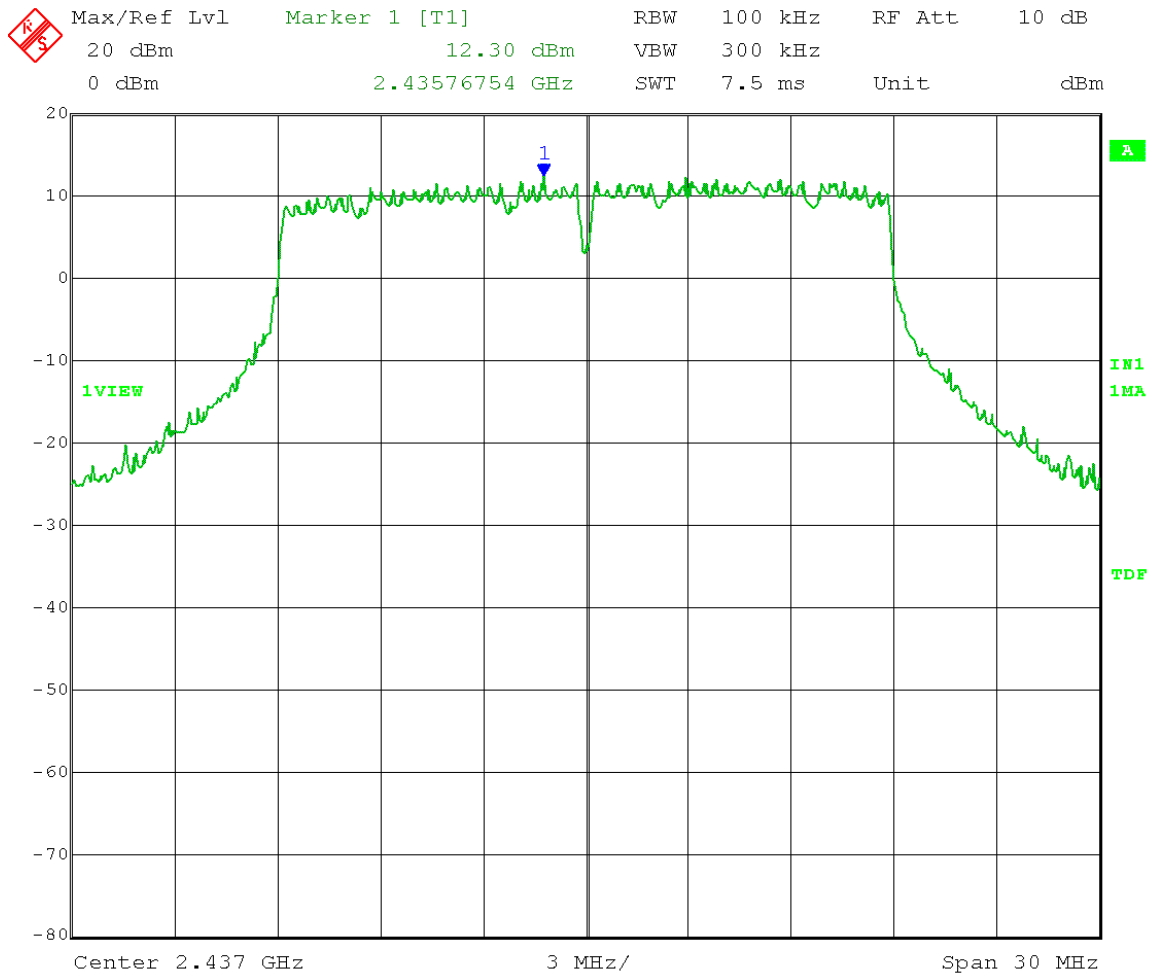
Date: 11.MAR.2014 11:51:20

Test Date: 03-11-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
 Test: Maximum Unwanted Emission Levels - Conducted  
 Operator: Craig B  
 Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
 Detector = Peak Sweep = Auto Couple  
 Trace = Max Hold Mid Channel Transmit = 2437 MHz  
 POINT-TO-POINT OPERATION  
 Output Power Setting 27 Channel bandwidth: 20 MHz  
 Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
 Limit = 13.62 dBm – 30 dB = -16.38 dBm  
 Frequency Range: 16 – 25 GHz



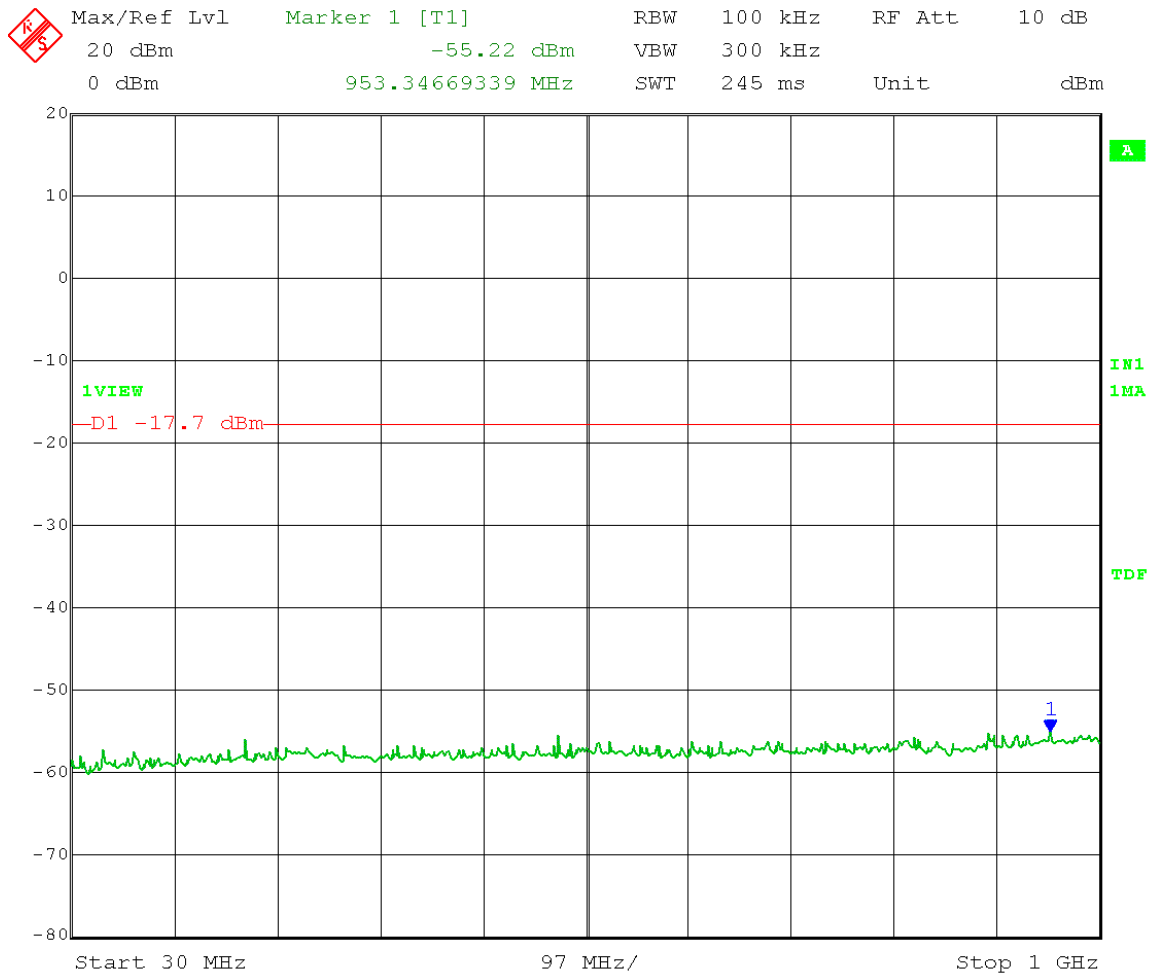
Date: 11.MAR.2014 11:52:42

Test Date: 03-11-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
 Test: Maximum Unwanted Emission Levels - Conducted  
 Operator: Craig B  
 Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
 Detector = Peak Sweep = Auto Couple  
 Trace = Max Hold Mid Channel Transmit = 2437 MHz  
 POINT-TO-MULTIPOINT OPERATION  
 Output Power Setting 24.5 Channel bandwidth: 20 MHz  
 Output port: 1 OFDM MCS15  
**Reference Level Measurement**  
 Limit = 12.30 dBm – 30 dB = -17.70 dBm



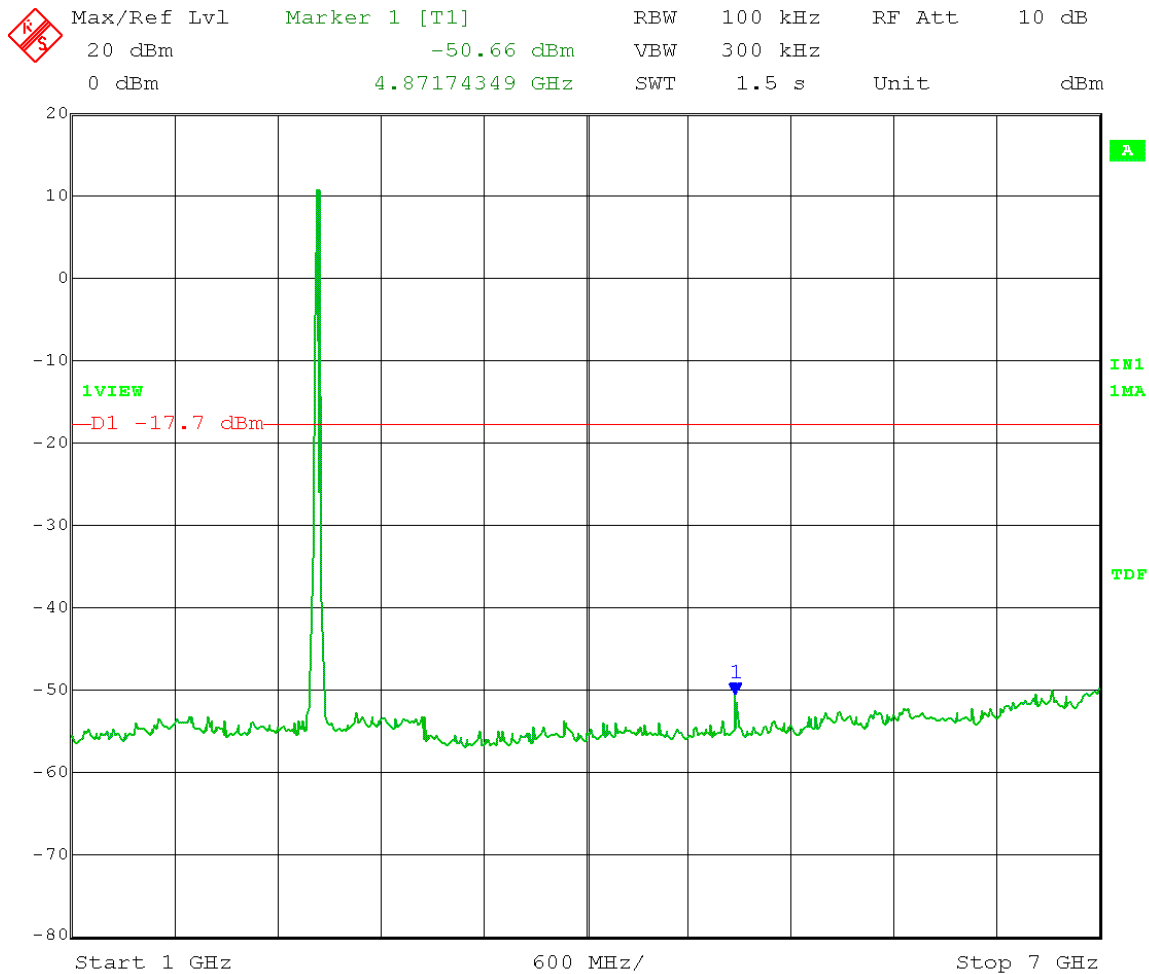
Date: 11.MAR.2014 10:33:58

Test Date: 03-11-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
 Test: Maximum Unwanted Emission Levels - Conducted  
 Operator: Craig B  
 Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
 Detector = Peak Sweep = Auto Couple  
 Trace = Max Hold Mid Channel Transmit = 2437 MHz  
 POINT-TO-MULTIPOINT OPERATION  
 Output Power Setting 24.5 Channel bandwidth: 20 MHz  
 Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
 Limit = 12.30 dBm – 30 dB = -17.70 dBm  
 Frequency Range: 30 – 1000 MHz



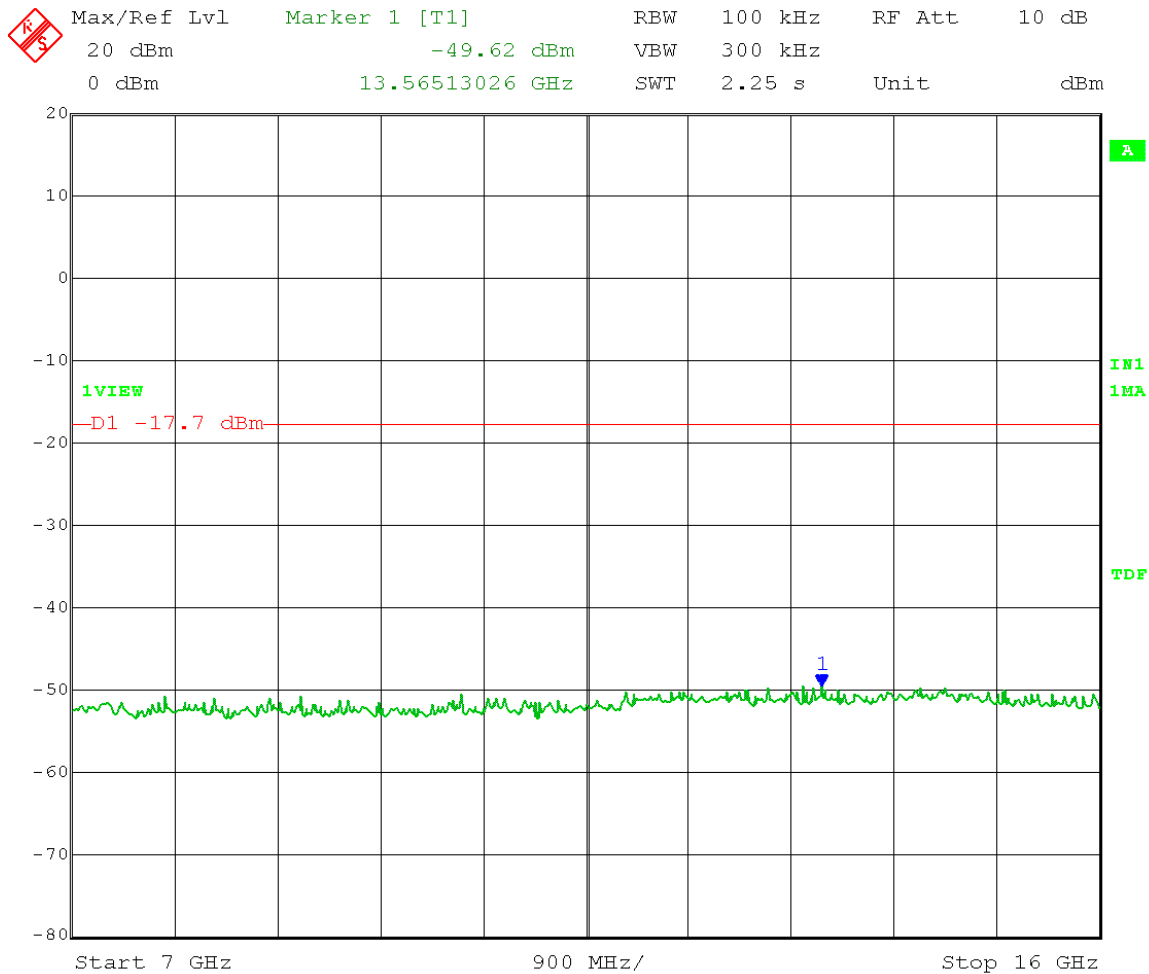
Date: 11.MAR.2014 10:43:18

Test Date: 03-11-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
 Test: Maximum Unwanted Emission Levels - Conducted  
 Operator: Craig B  
 Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
 Detector = Peak Sweep = Auto Couple  
 Trace = Max Hold Mid Channel Transmit = 2437 MHz  
 POINT-TO-MULTIPOINT OPERATION  
 Output Power Setting 24.5 Channel bandwidth: 20 MHz  
 Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
 Limit = 12.30 dBm – 30 dB = -17.70 dBm  
 Frequency Range: 1 – 7 GHz



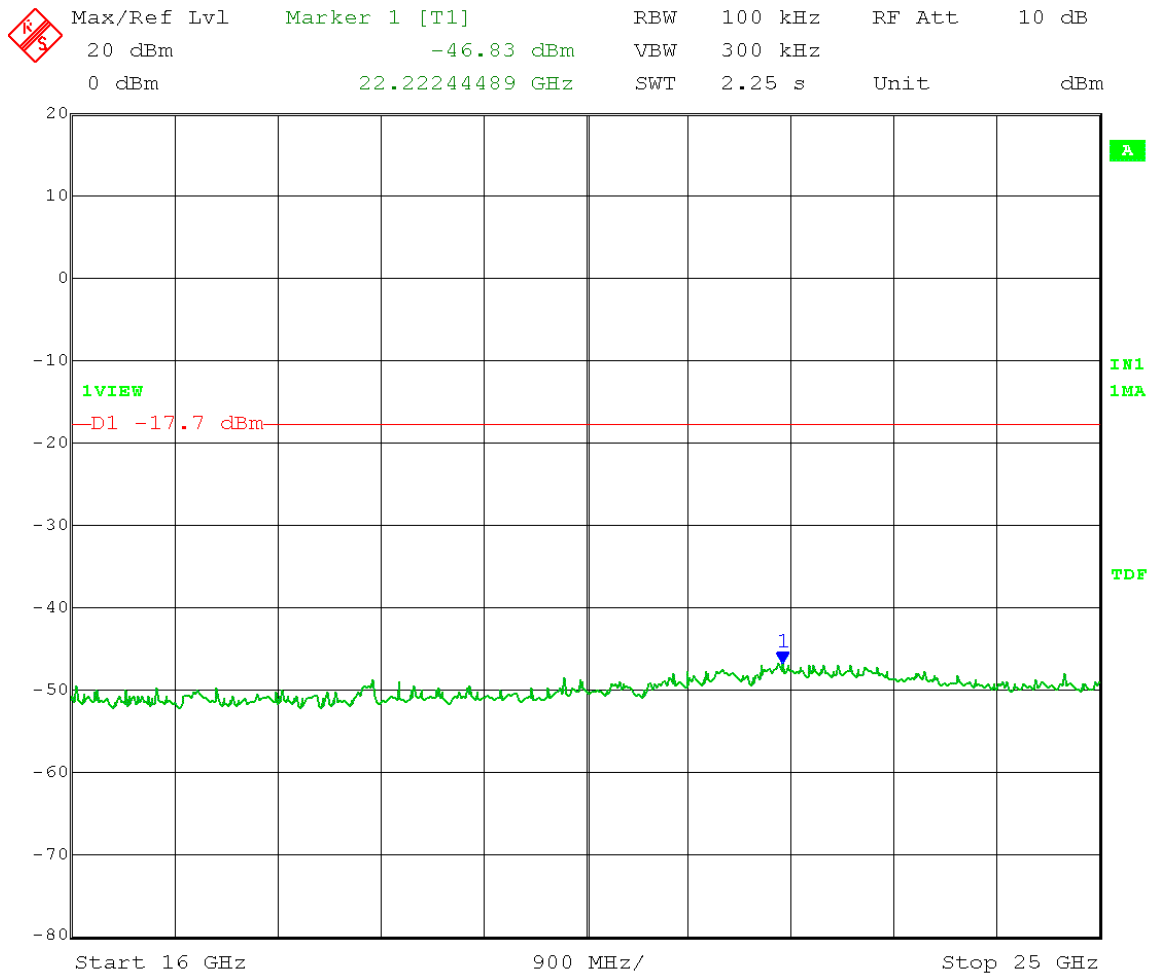
Date: 11.MAR.2014 10:37:11

Test Date: 03-11-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
 Test: Maximum Unwanted Emission Levels - Conducted  
 Operator: Craig B  
 Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
 Detector = Peak Sweep = Auto Couple  
 Trace = Max Hold Mid Channel Transmit = 2437 MHz  
 POINT-TO-MULTIPOINT OPERATION  
 Output Power Setting 24.5 Channel bandwidth: 20 MHz  
 Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
 Limit = 12.30 dBm – 30 dB = -17.70 dBm  
 Frequency Range: 7 – 16 GHz



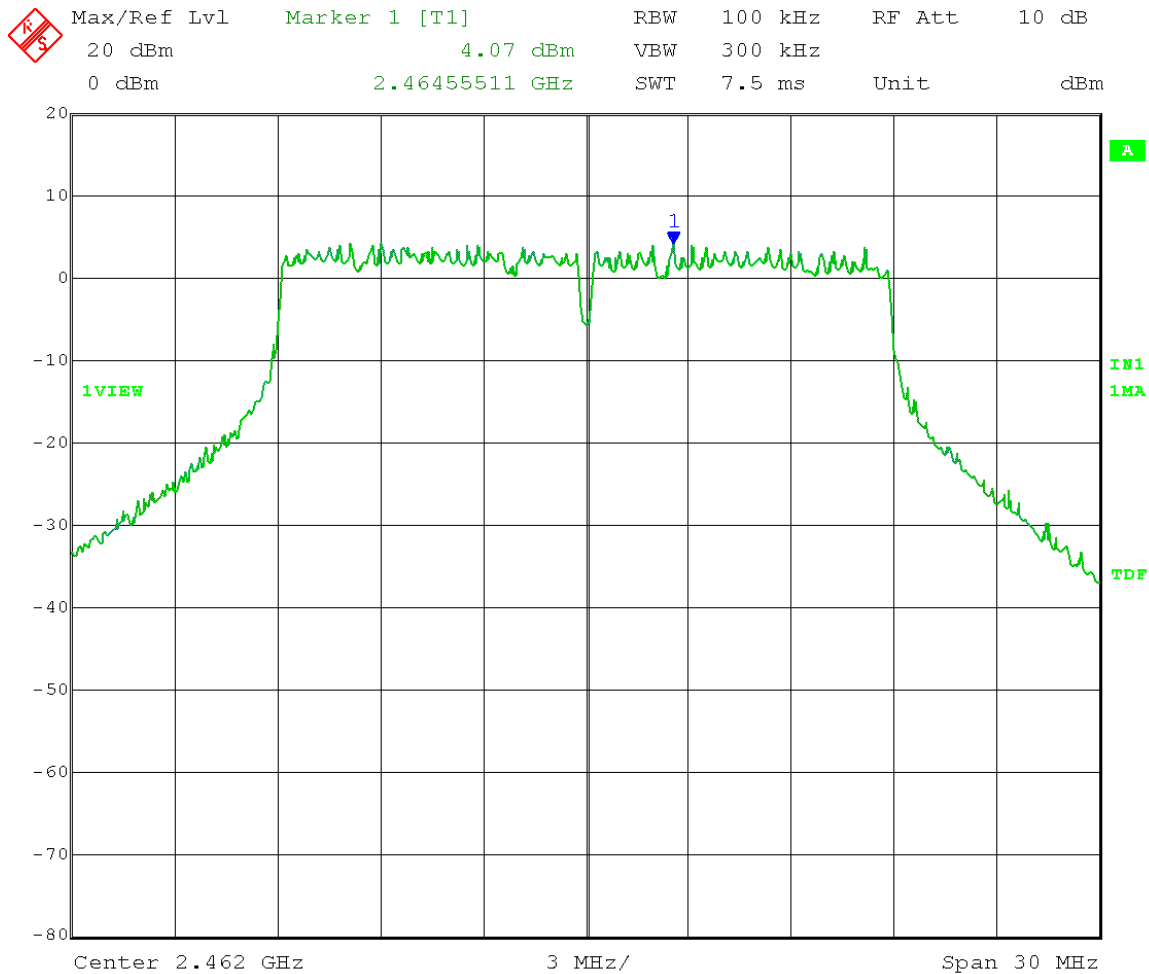
Date: 11.MAR.2014 10:39:38

Test Date: 03-11-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
 Test: Maximum Unwanted Emission Levels - Conducted  
 Operator: Craig B  
 Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
 Detector = Peak Sweep = Auto Couple  
 Trace = Max Hold Mid Channel Transmit = 2437 MHz  
 POINT-TO-MULTIPOINT OPERATION  
 Output Power Setting 24.5 Channel bandwidth: 20 MHz  
 Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
 Limit = 12.30 dBm – 30 dB = -17.70 dBm  
 Frequency Range: 16 – 25 GHz



Date: 11.MAR.2014 10:41:15

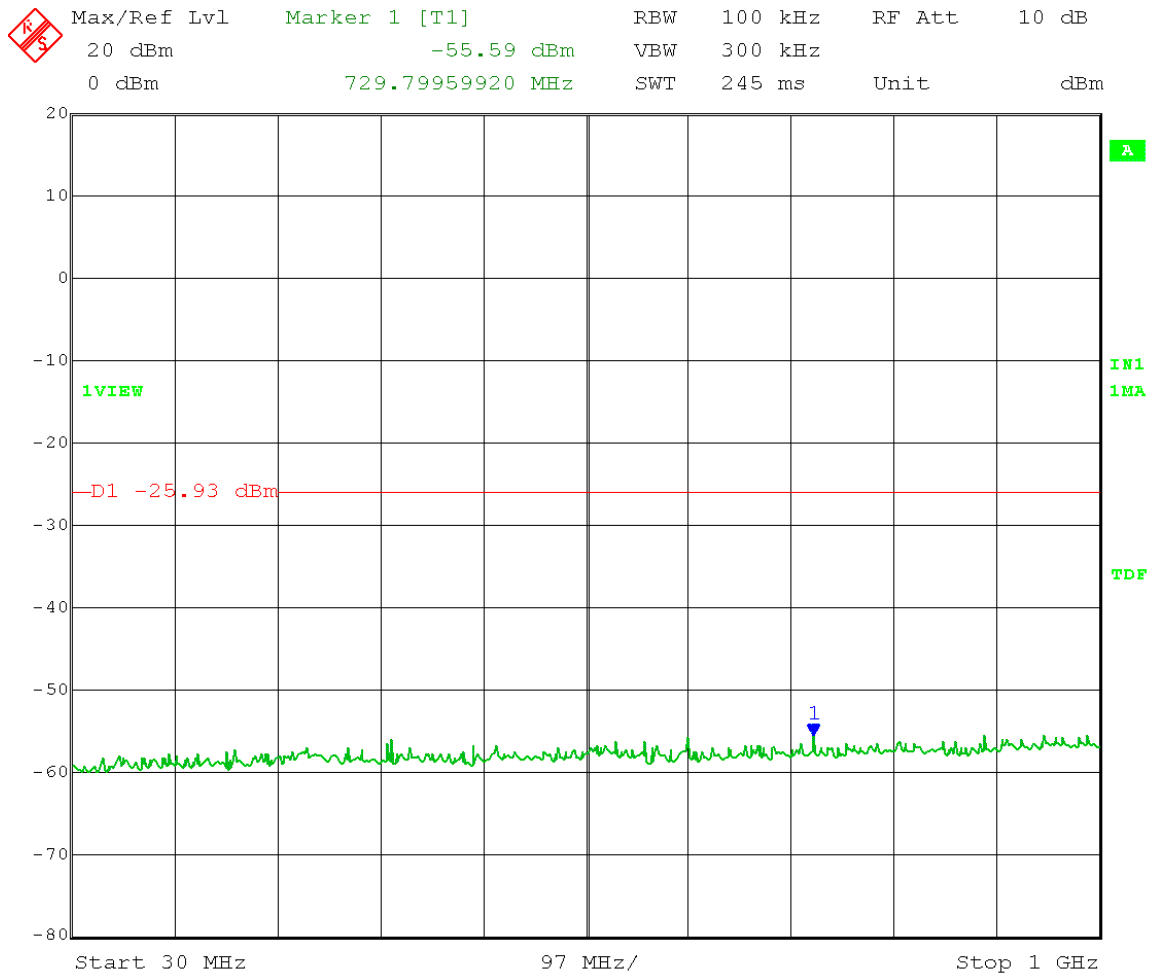
Test Date: 03-11-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold High Channel Transmit = 2462 MHz  
POINT-TO-POINT & POINT-TO-MULTIPOINT OPERATION  
Output Power Setting 17 Channel bandwidth: 20 MHz  
Output port: 1 OFDM MCS15  
**Reference Level Measurement**  
Limit = 4.07 dBm – 30 dB = -25.93 dBm



Date: 11.MAR.2014 09:27:34

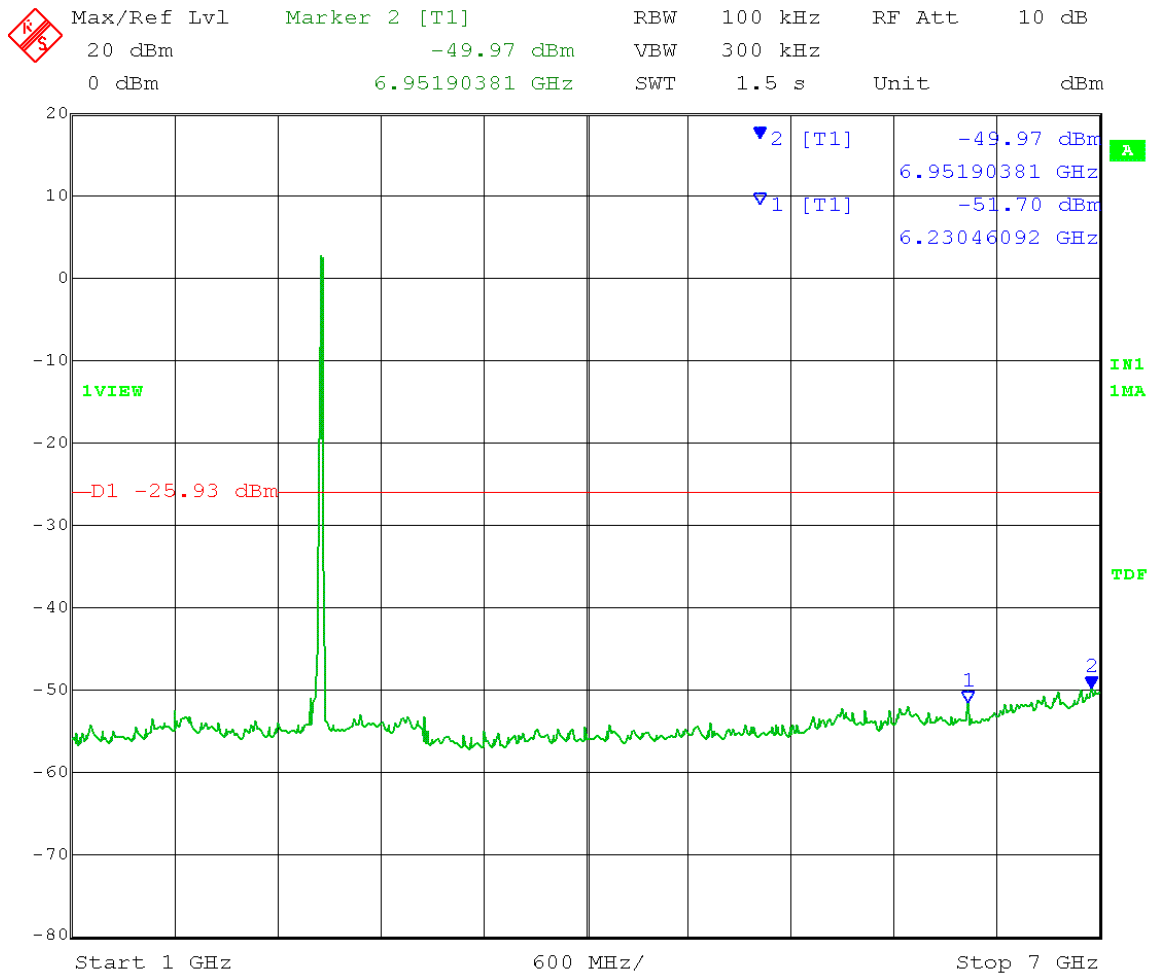


Test Date: 03-11-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
 Test: Maximum Unwanted Emission Levels - Conducted  
 Operator: Craig B  
 Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
 Detector = Peak Sweep = Auto Couple  
 Trace = Max Hold High Channel Transmit = 2462 MHz  
 POINT-TO-POINT & POINT-TO-MULTIPOINT OPERATION  
 Output Power Setting 17 Channel bandwidth: 20 MHz  
 Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
 Limit = 4.07 dBm – 30 dB = -25.93 dBm  
 Frequency Range: 30 – 1000 MHz



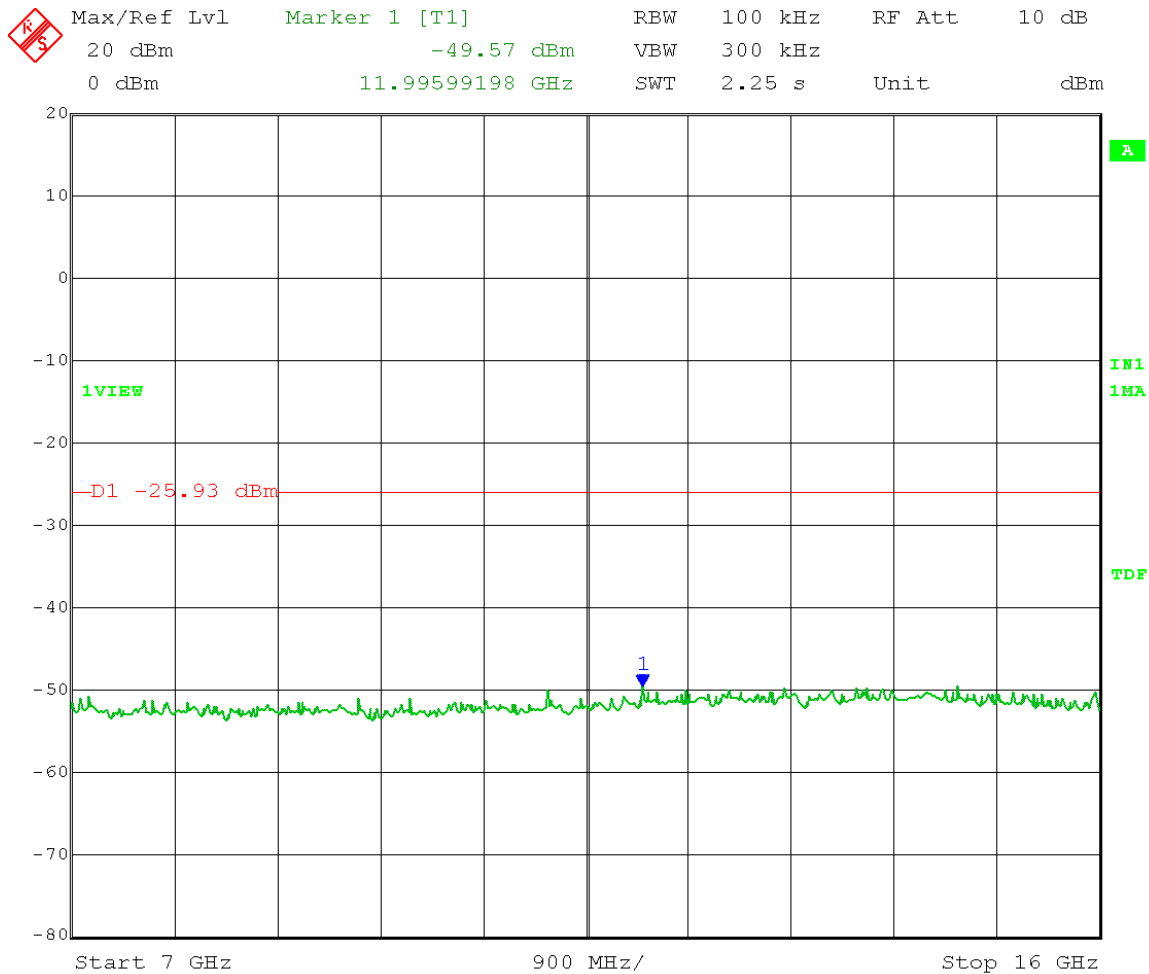
Date: 11.MAR.2014 09:35:19

Test Date: 03-11-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
 Test: Maximum Unwanted Emission Levels - Conducted  
 Operator: Craig B  
 Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
 Detector = Peak Sweep = Auto Couple  
 Trace = Max Hold High Channel Transmit = 2462 MHz  
 POINT-TO-POINT & POINT-TO-MULTIPOINT OPERATION  
 Output Power Setting 17 Channel bandwidth: 20 MHz  
 Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
 Limit = 4.07 dBm – 30 dB = -25.93 dBm  
 Frequency Range: 1 – 7 GHz



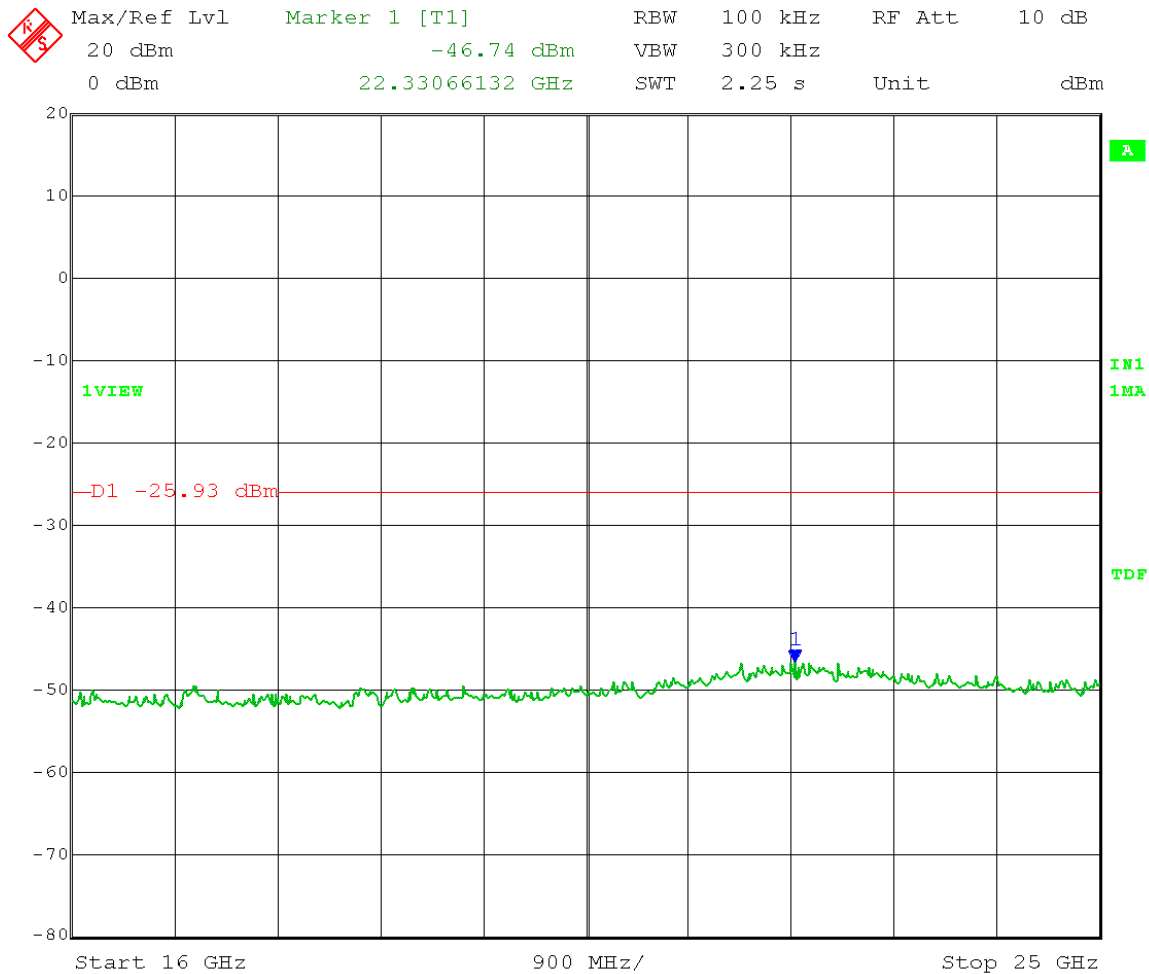
Date: 11.MAR.2014 09:31:13

Test Date: 03-11-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
 Test: Maximum Unwanted Emission Levels - Conducted  
 Operator: Craig B  
 Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
 Detector = Peak Sweep = Auto Couple  
 Trace = Max Hold High Channel Transmit = 2462 MHz  
 POINT-TO-POINT & POINT-TO-MULTIPOINT OPERATION  
 Output Power Setting 17 Channel bandwidth: 20 MHz  
 Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
 Limit = 4.07 dBm – 30 dB = -25.93 dBm  
 Frequency Range: 7 – 16 GHz



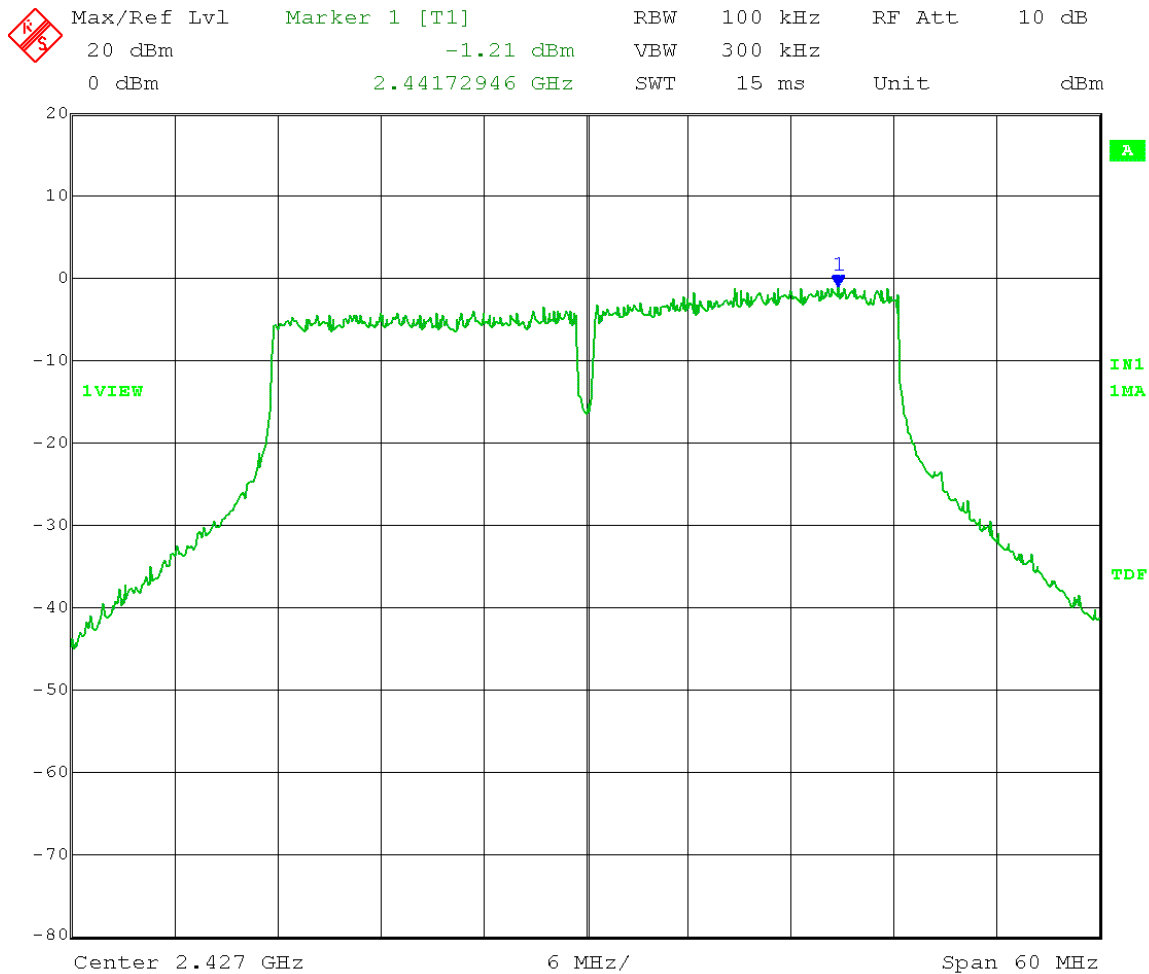
Date: 11.MAR.2014 09:32:47

Test Date: 03-11-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
 Test: Maximum Unwanted Emission Levels - Conducted  
 Operator: Craig B  
 Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
 Detector = Peak Sweep = Auto Couple  
 Trace = Max Hold High Channel Transmit = 2462 MHz  
 POINT-TO-POINT & POINT-TO-MULTIPOINT OPERATION  
 Output Power Setting 17 Channel bandwidth: 20 MHz  
 Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
 Limit = 4.07 dBm – 30 dB = -25.93 dBm  
 Frequency Range: 16 – 25 GHz



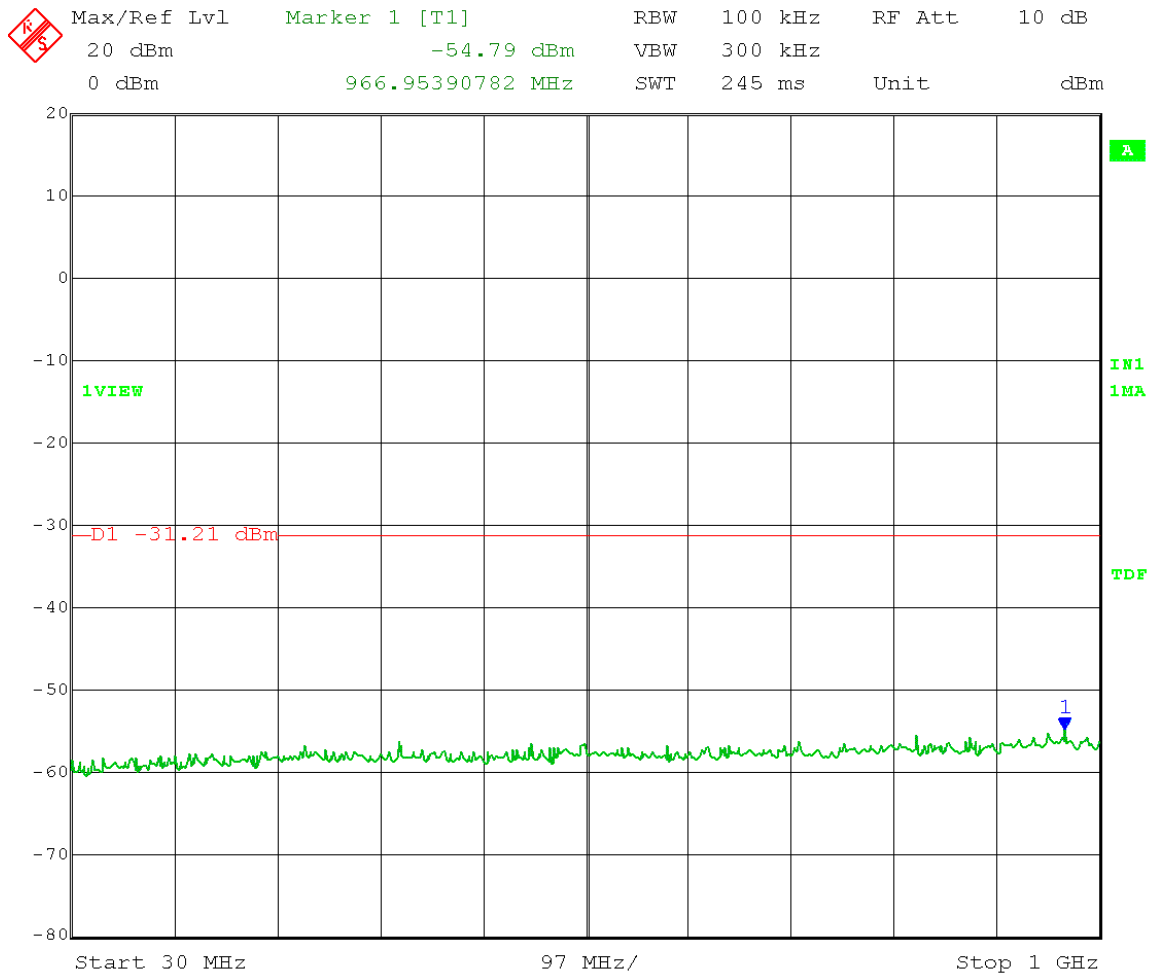
Date: 11.MAR.2014 09:34:12

Test Date: 03-11-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
 Test: Maximum Unwanted Emission Levels - Conducted  
 Operator: Craig B  
 Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
 Detector = Peak Sweep = Auto Couple  
 Trace = Max Hold Low Channel Transmit = 2427 MHz  
 POINT-TO-POINT & POINT-TO-MULTIPOINT OPERATION  
 Output Power Setting 12.5 Channel bandwidth: 40 MHz  
 Output port: 1 OFDM MCS15  
**Reference Level Measurement**  
 Limit = -1.21 dBm – 30 dB = -31.21 dBm



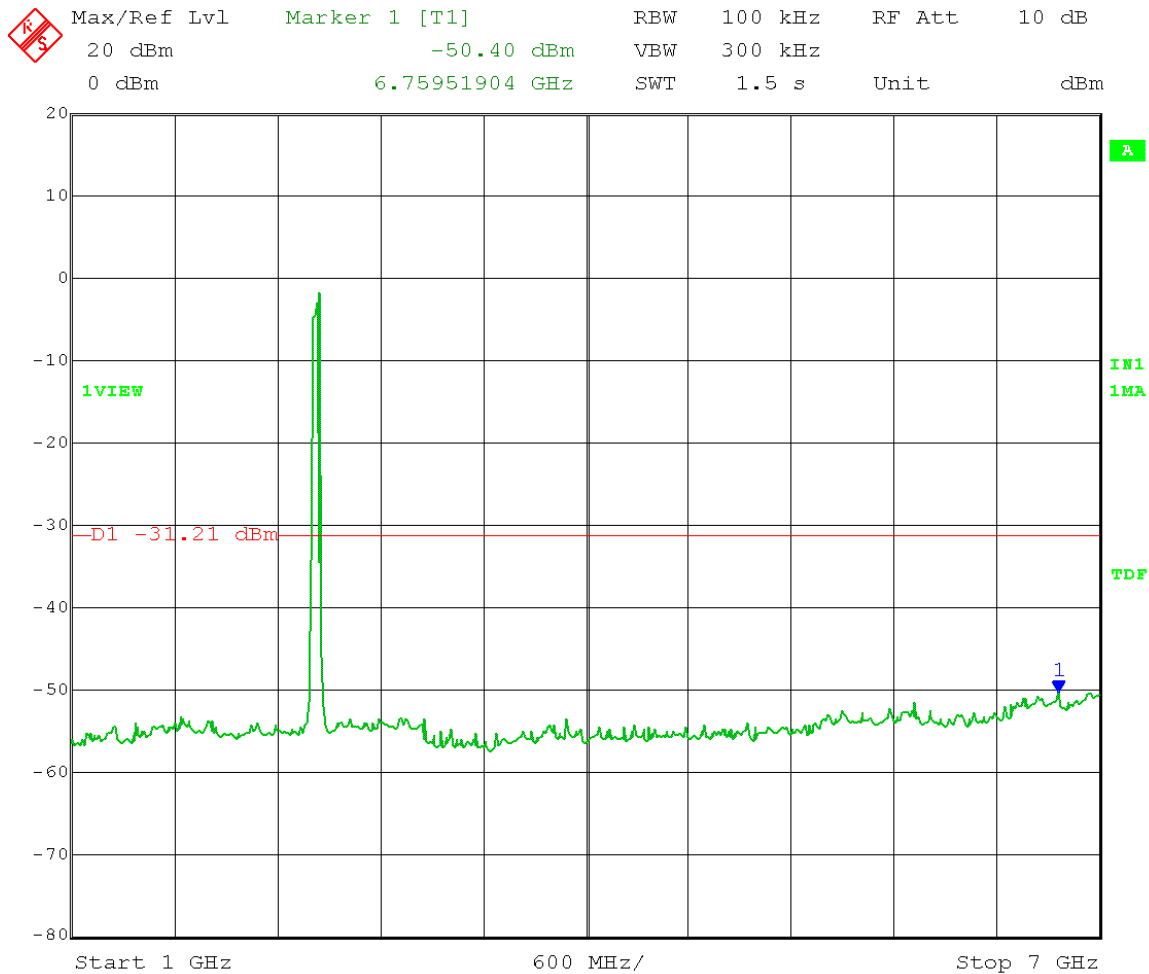
Date: 11.MAR.2014 12:07:48

Test Date: 03-11-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
 Test: Maximum Unwanted Emission Levels - Conducted  
 Operator: Craig B  
 Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
 Detector = Peak Sweep = Auto Couple  
 Trace = Max Hold Low Channel Transmit = 2427 MHz  
 POINT-TO-POINT & POINT-TO-MULTIPOINT OPERATION  
 Output Power Setting 12.5 Channel bandwidth: 40 MHz  
 Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
 Limit = -1.21 dBm - 30 dB = -31.21 dBm  
 Frequency Range: 30 - 1000 MHz



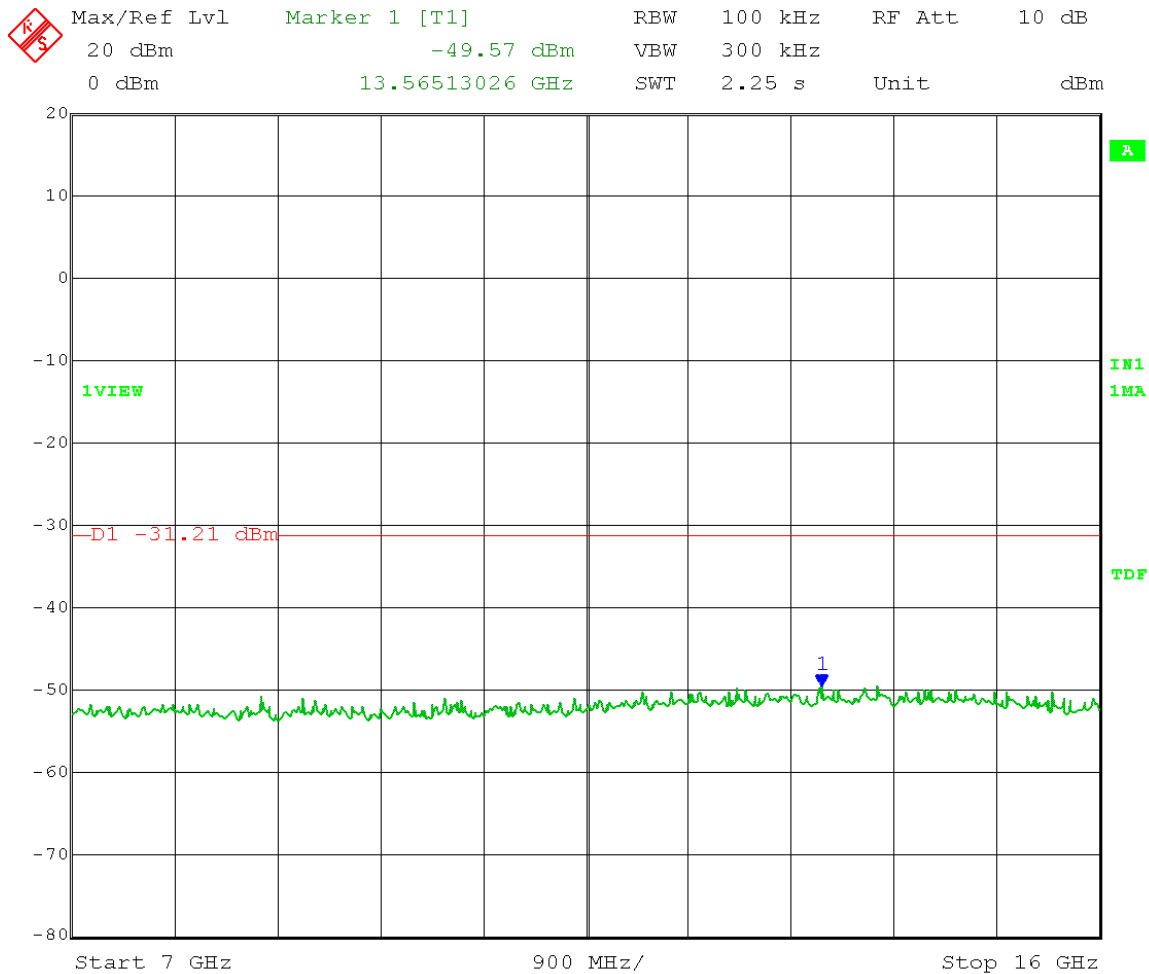
Date: 11.MAR.2014 12:17:06

Test Date: 03-11-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
 Test: Maximum Unwanted Emission Levels - Conducted  
 Operator: Craig B  
 Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
 Detector = Peak Sweep = Auto Couple  
 Trace = Max Hold Low Channel Transmit = 2427 MHz  
 POINT-TO-POINT & POINT-TO-MULTIPOINT OPERATION  
 Output Power Setting 12.5 Channel bandwidth: 40 MHz  
 Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
 Limit = -1.21 dBm - 30 dB = -31.21 dBm  
 Frequency Range: 1 - 7 GHz



Date: 11.MAR.2014 12:09:58

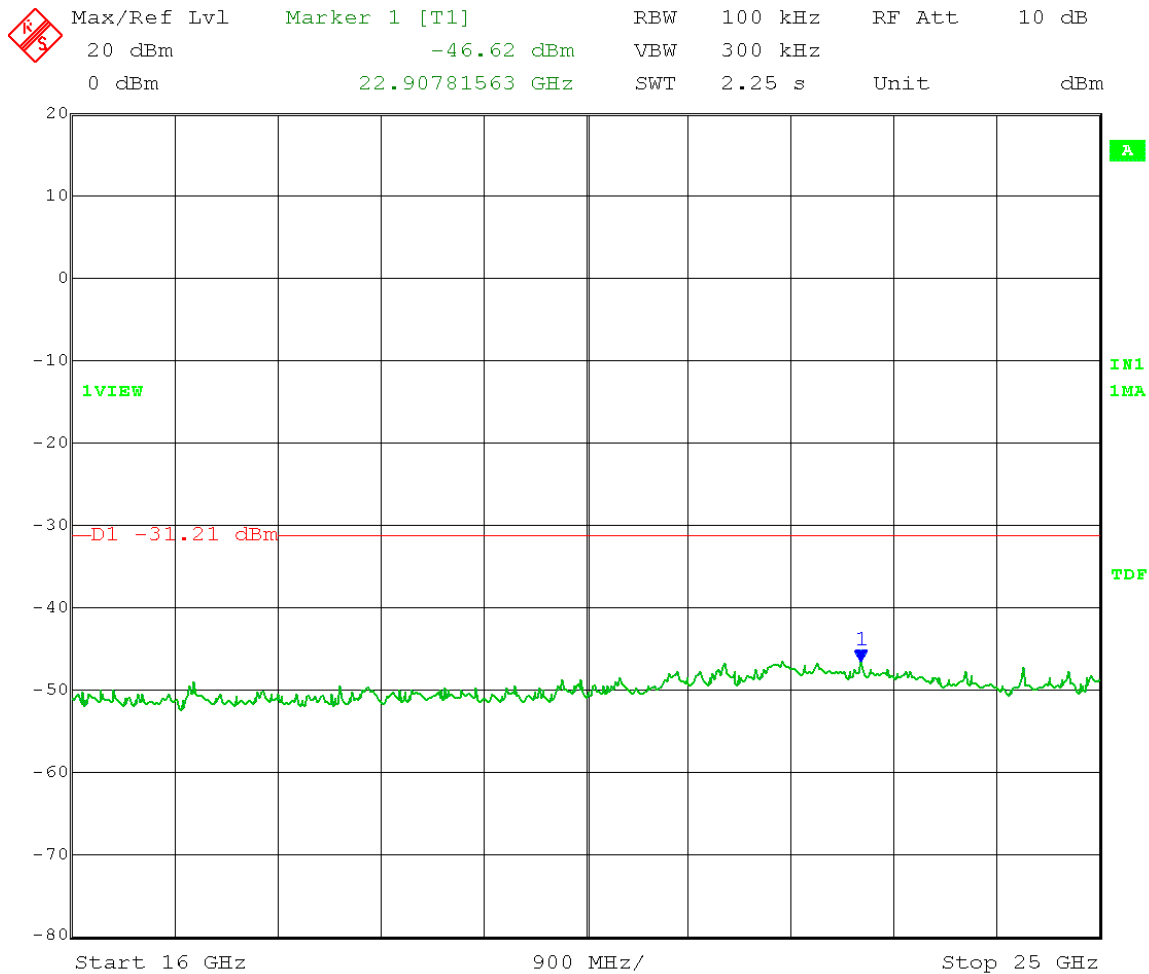
Test Date: 03-11-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
 Test: Maximum Unwanted Emission Levels - Conducted  
 Operator: Craig B  
 Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
 Detector = Peak Sweep = Auto Couple  
 Trace = Max Hold Low Channel Transmit = 2427 MHz  
 POINT-TO-POINT & POINT-TO-MULTIPOINT OPERATION  
 Output Power Setting 12.5 Channel bandwidth: 40 MHz  
 Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
 Limit = -1.21 dBm - 30 dB = -31.21 dBm  
 Frequency Range: 7 - 16 GHz



Date: 11.MAR.2014 12:10:53

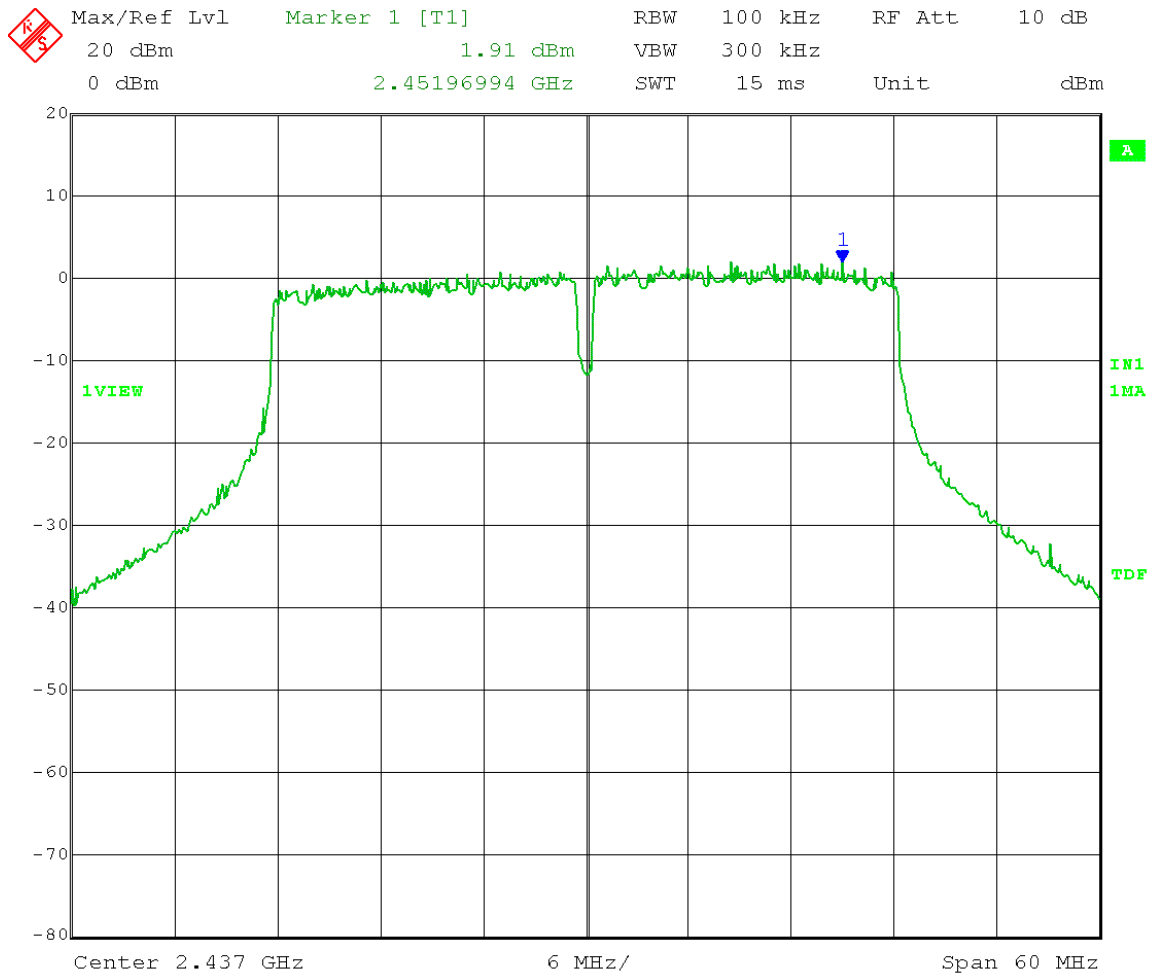


Test Date: 03-11-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
 Test: Maximum Unwanted Emission Levels - Conducted  
 Operator: Craig B  
 Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
 Detector = Peak Sweep = Auto Couple  
 Trace = Max Hold Low Channel Transmit = 2427 MHz  
 POINT-TO-POINT & POINT-TO-MULTIPOINT OPERATION  
 Output Power Setting 12.5 Channel bandwidth: 40 MHz  
 Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
 Limit = -1.21 dBm - 30 dB = -31.21 dBm  
 Frequency Range: 16 - 25 GHz



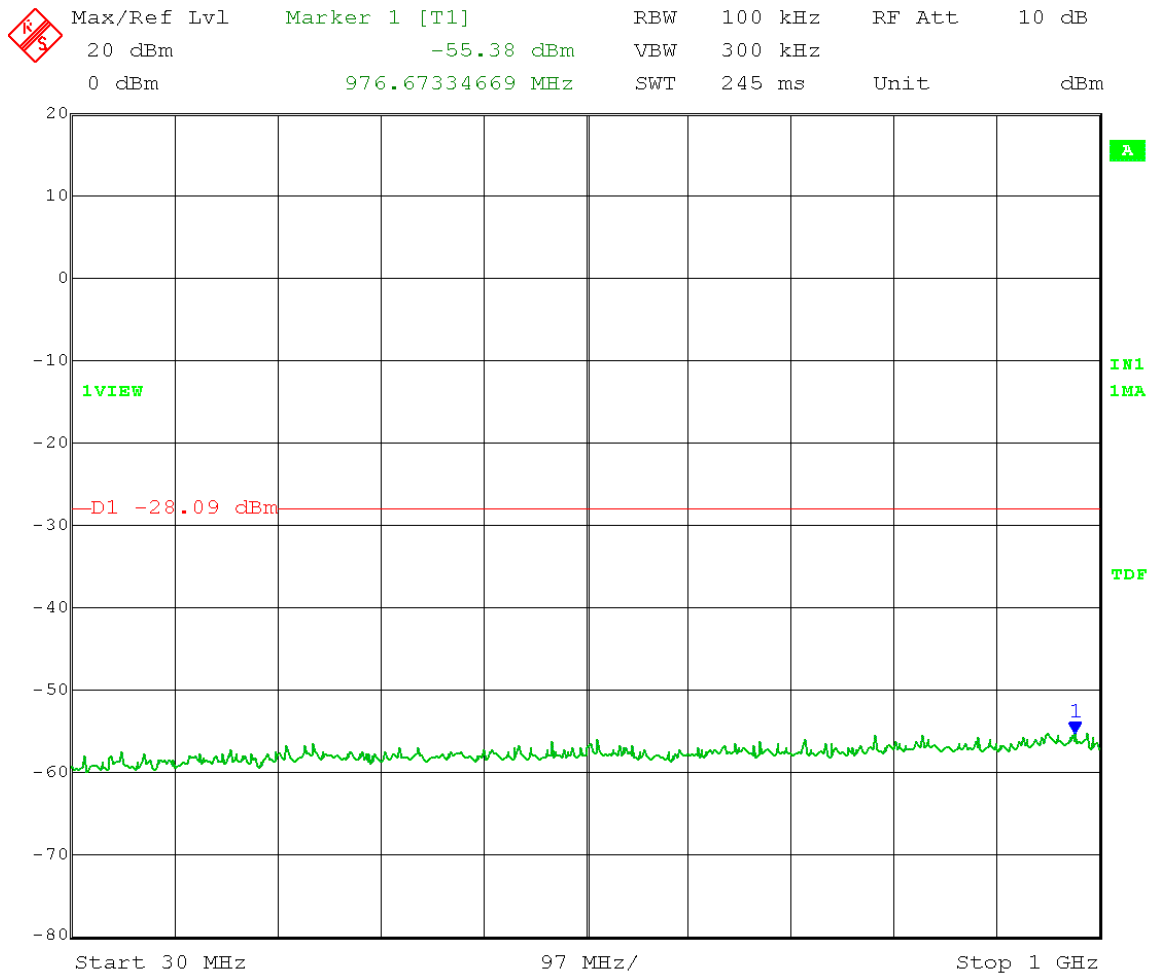
Date: 11.MAR.2014 12:12:21

Test Date: 03-11-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
 Test: Maximum Unwanted Emission Levels - Conducted  
 Operator: Craig B  
 Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
 Detector = Peak Sweep = Auto Couple  
 Trace = Max Hold Mid Channel Transmit = 2437 MHz  
 POINT-TO-POINT & POINT-TO-MULTIPOINT OPERATION  
 Output Power Setting 17 Channel bandwidth: 40 MHz  
 Output port: 1 OFDM MCS15  
**Reference Level Measurement**  
 Limit = 1.91 dBm – 30 dB = -28.09 dBm



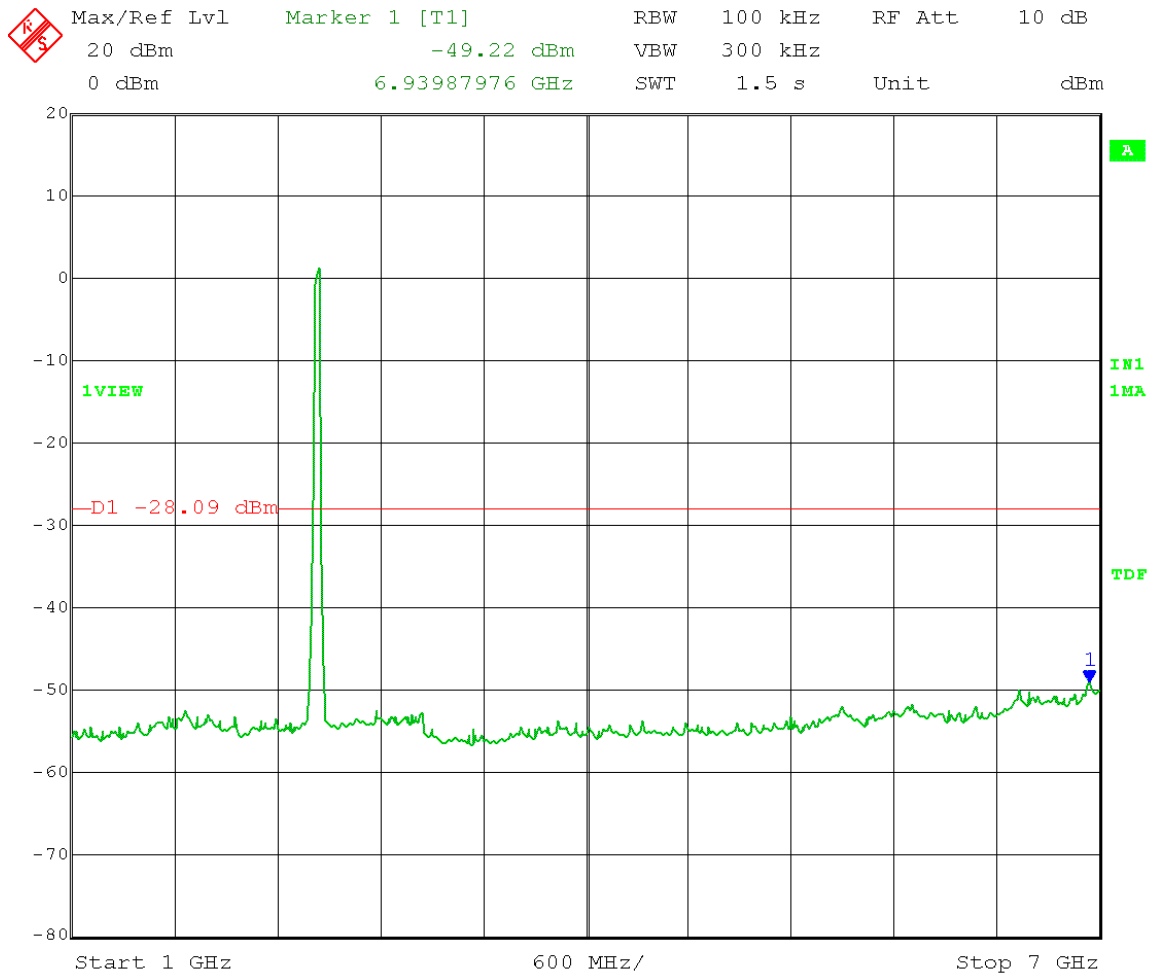
Date: 11.MAR.2014 12:19:23

Test Date: 03-11-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
 Test: Maximum Unwanted Emission Levels - Conducted  
 Operator: Craig B  
 Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
 Detector = Peak Sweep = Auto Couple  
 Trace = Max Hold Mid Channel Transmit = 2437 MHz  
 POINT-TO-POINT & POINT-TO-MULTIPOINT OPERATION  
 Output Power Setting 17 Channel bandwidth: 40 MHz  
 Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
 Limit = 1.91 dBm – 30 dB = -28.09 dBm  
 Frequency Range: 30 – 1000 MHz



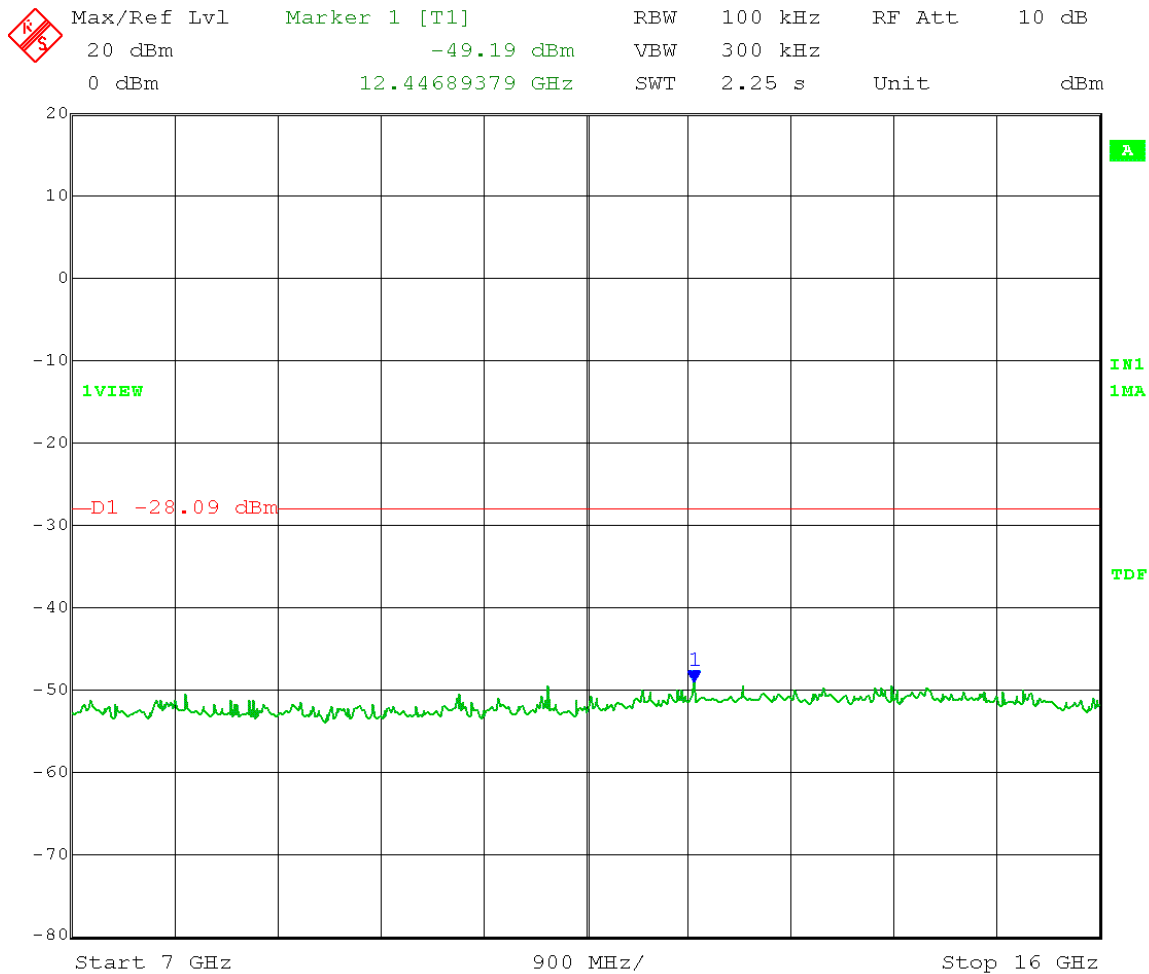
Date: 11.MAR.2014 12:26:58

Test Date: 03-11-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
 Test: Maximum Unwanted Emission Levels - Conducted  
 Operator: Craig B  
 Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
 Detector = Peak Sweep = Auto Couple  
 Trace = Max Hold Mid Channel Transmit = 2437 MHz  
 POINT-TO-POINT & POINT-TO-MULTIPOINT OPERATION  
 Output Power Setting 17 Channel bandwidth: 40 MHz  
 Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
 Limit = 1.91 dBm – 30 dB = -28.09 dBm  
 Frequency Range: 1 – 7 GHz



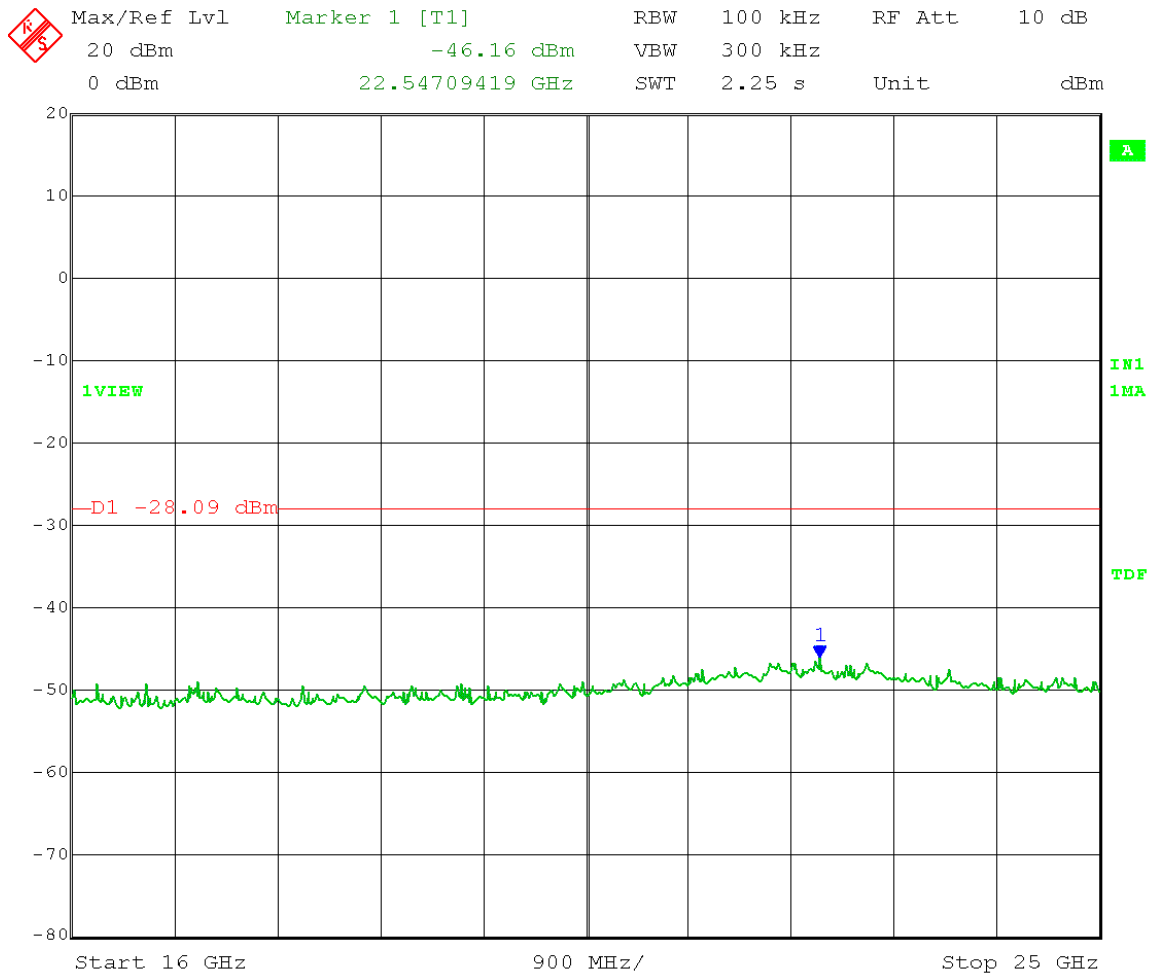
Date: 11.MAR.2014 12:22:09

Test Date: 03-11-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
 Test: Maximum Unwanted Emission Levels - Conducted  
 Operator: Craig B  
 Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
 Detector = Peak Sweep = Auto Couple  
 Trace = Max Hold Mid Channel Transmit = 2437 MHz  
 POINT-TO-POINT & POINT-TO-MULTIPOINT OPERATION  
 Output Power Setting 17 Channel bandwidth: 40 MHz  
 Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
 Limit = 1.91 dBm – 30 dB = -28.09 dBm  
 Frequency Range: 7 – 16 GHz



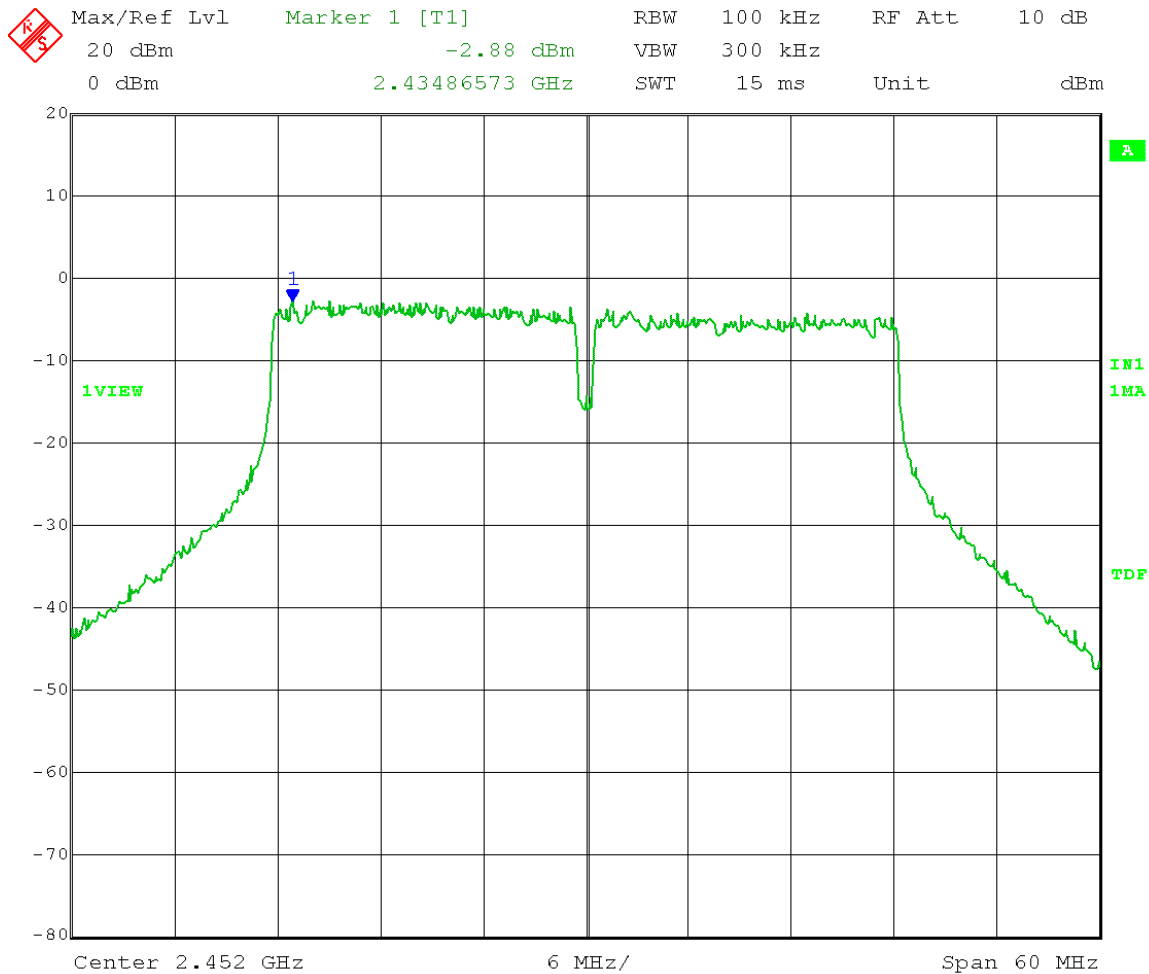
Date: 11.MAR.2014 12:23:25

Test Date: 03-11-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
 Test: Maximum Unwanted Emission Levels - Conducted  
 Operator: Craig B  
 Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
 Detector = Peak Sweep = Auto Couple  
 Trace = Max Hold Mid Channel Transmit = 2437 MHz  
 POINT-TO-POINT & POINT-TO-MULTIPOINT OPERATION  
 Output Power Setting 17 Channel bandwidth: 40 MHz  
 Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
 Limit = 1.91 dBm – 30 dB = -28.09 dBm  
 Frequency Range: 16 – 25 GHz



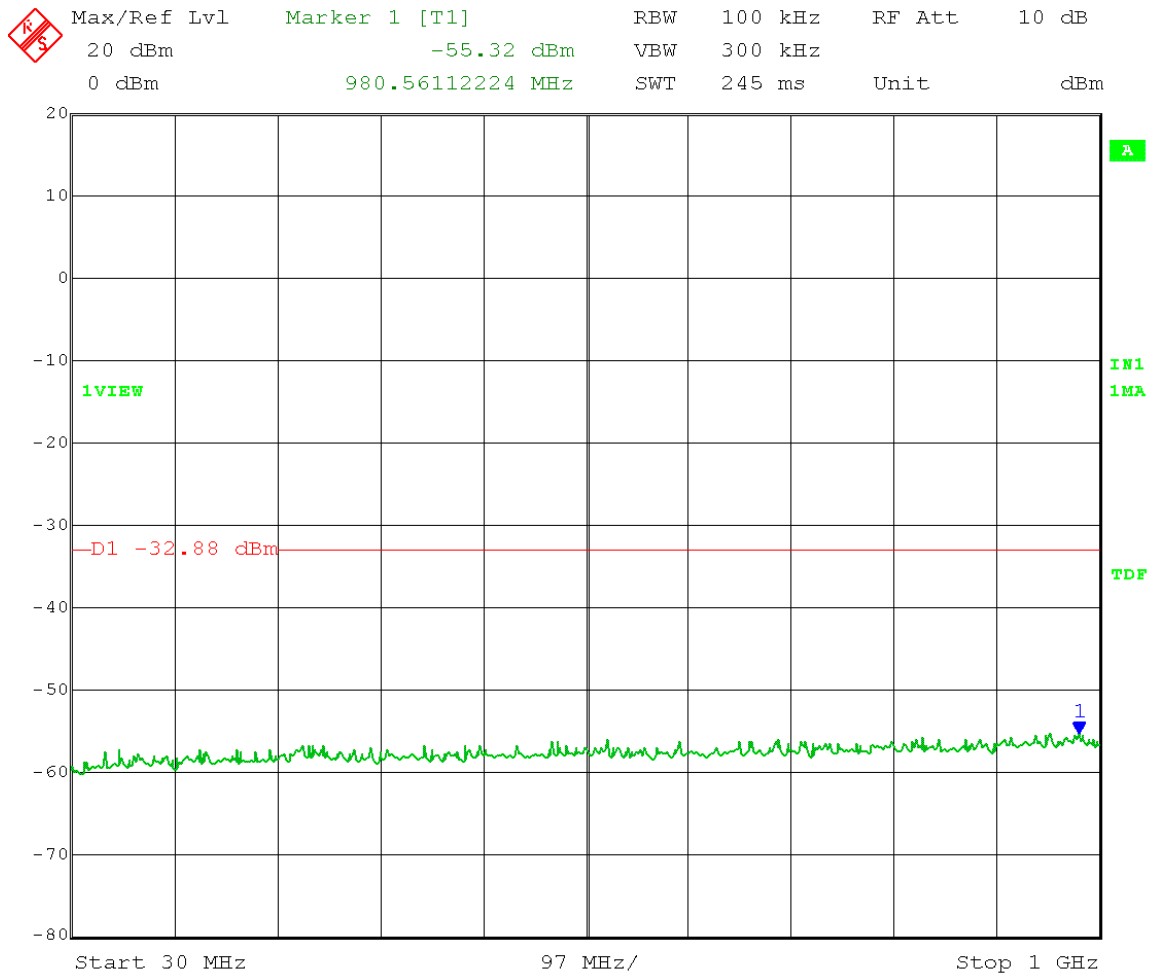
Date: 11.MAR.2014 12:24:57

Test Date: 03-11-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
 Test: Maximum Unwanted Emission Levels - Conducted  
 Operator: Craig B  
 Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
 Detector = Peak Sweep = Auto Couple  
 Trace = Max Hold High Channel Transmit = 2452 MHz  
 POINT-TO-POINT & POINT-TO-MULTIPOINT OPERATION  
 Output Power Setting 13.5 Channel bandwidth: 40 MHz  
 Output port: 1 OFDM MCS15  
**Reference Level Measurement**  
 Limit = -2.88 dBm – 30 dB = -32.88 dBm



Date: 11.MAR.2014 11:58:56

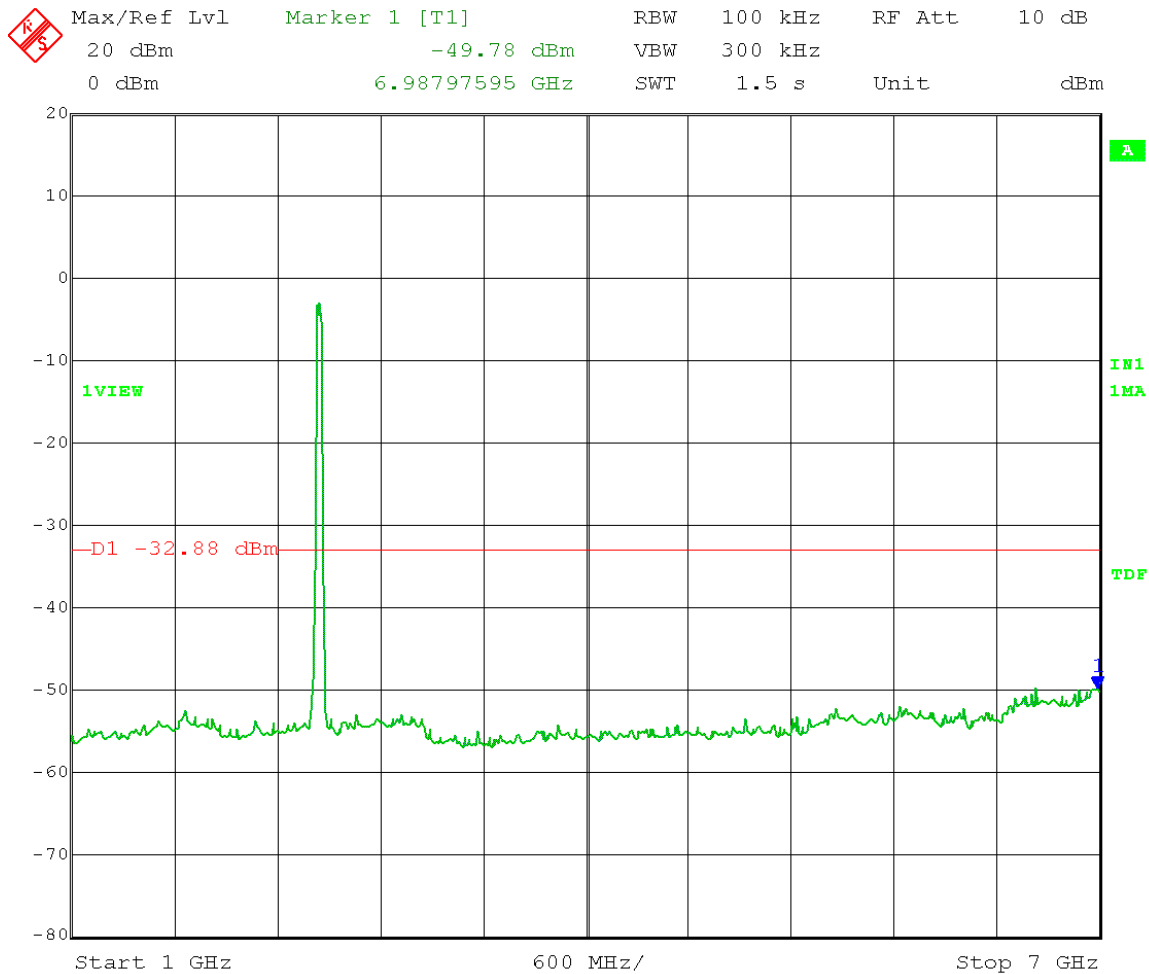
Test Date: 03-11-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
 Test: Maximum Unwanted Emission Levels - Conducted  
 Operator: Craig B  
 Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
 Detector = Peak Sweep = Auto Couple  
 Trace = Max Hold High Channel Transmit = 2452 MHz  
 POINT-TO-POINT & POINT-TO-MULTIPOINT OPERATION  
 Output Power Setting 13.5 Channel bandwidth: 40 MHz  
 Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
 Limit = -2.88 dBm – 30 dB = -32.88 dBm  
 Frequency Range: 30 – 1000 MHz



Date: 11.MAR.2014 12:05:21

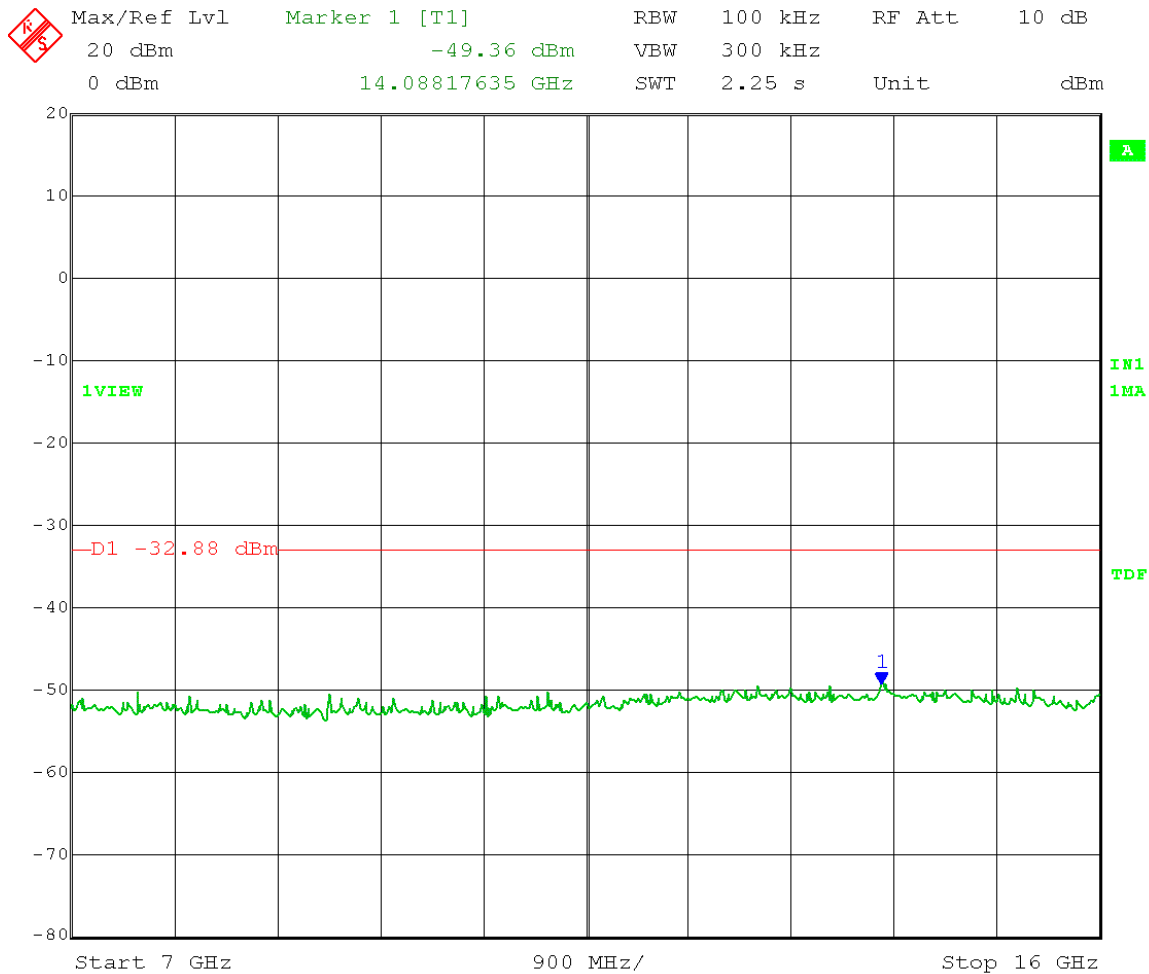


Test Date: 03-11-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold High Channel Transmit = 2452 MHz  
POINT-TO-POINT & POINT-TO-MULTIPOINT OPERATION  
Output Power Setting 13.5 Channel bandwidth: 40 MHz  
Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
Limit = -2.88 dBm - 30 dB = -32.88 dBm  
Frequency Range: 1 - 7 GHz



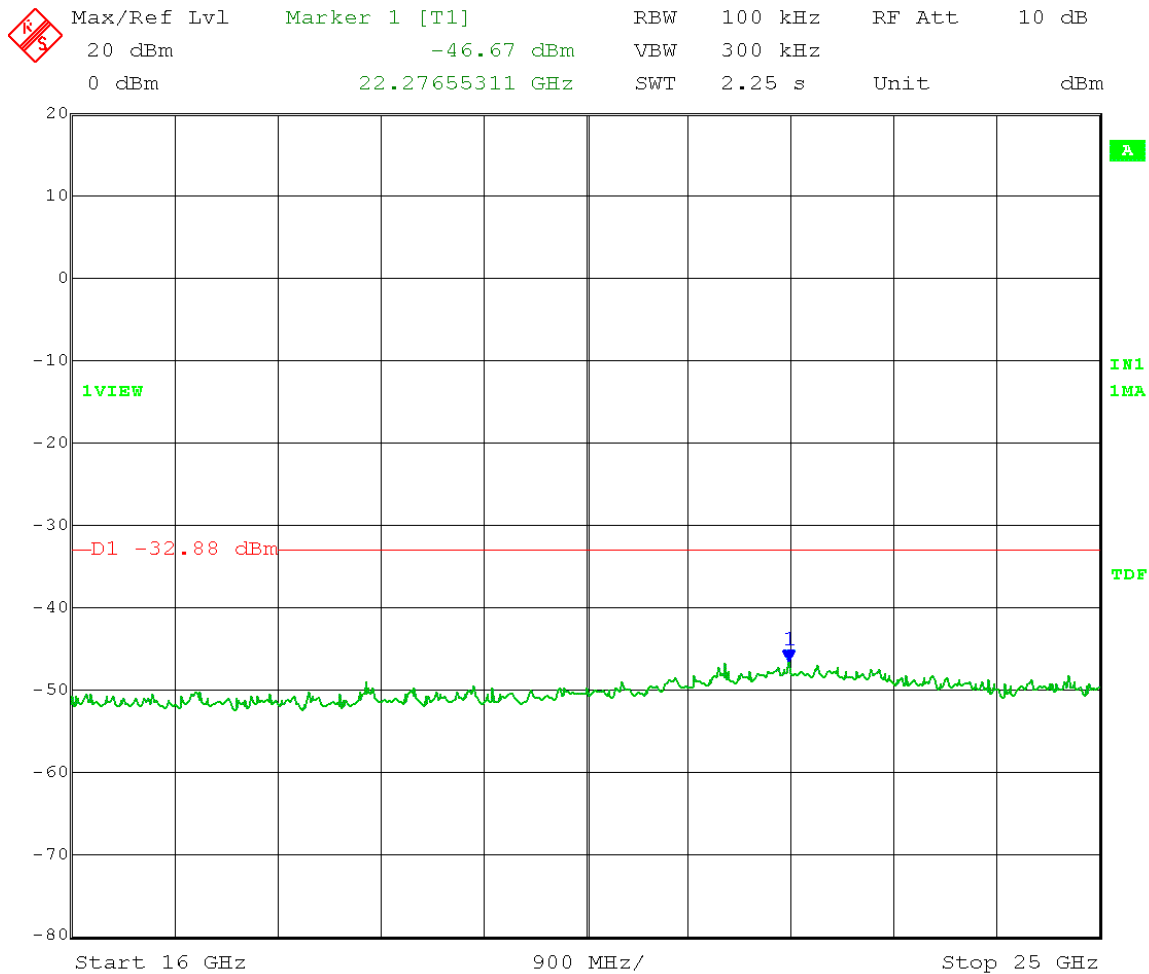
Date: 11.MAR.2014 12:01:17

Test Date: 03-11-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
 Test: Maximum Unwanted Emission Levels - Conducted  
 Operator: Craig B  
 Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
 Detector = Peak Sweep = Auto Couple  
 Trace = Max Hold High Channel Transmit = 2452 MHz  
 POINT-TO-POINT & POINT-TO-MULTIPOINT OPERATION  
 Output Power Setting 13.5 Channel bandwidth: 40 MHz  
 Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
 Limit = -2.88 dBm – 30 dB = -32.88 dBm  
 Frequency Range: 7 – 16 GHz



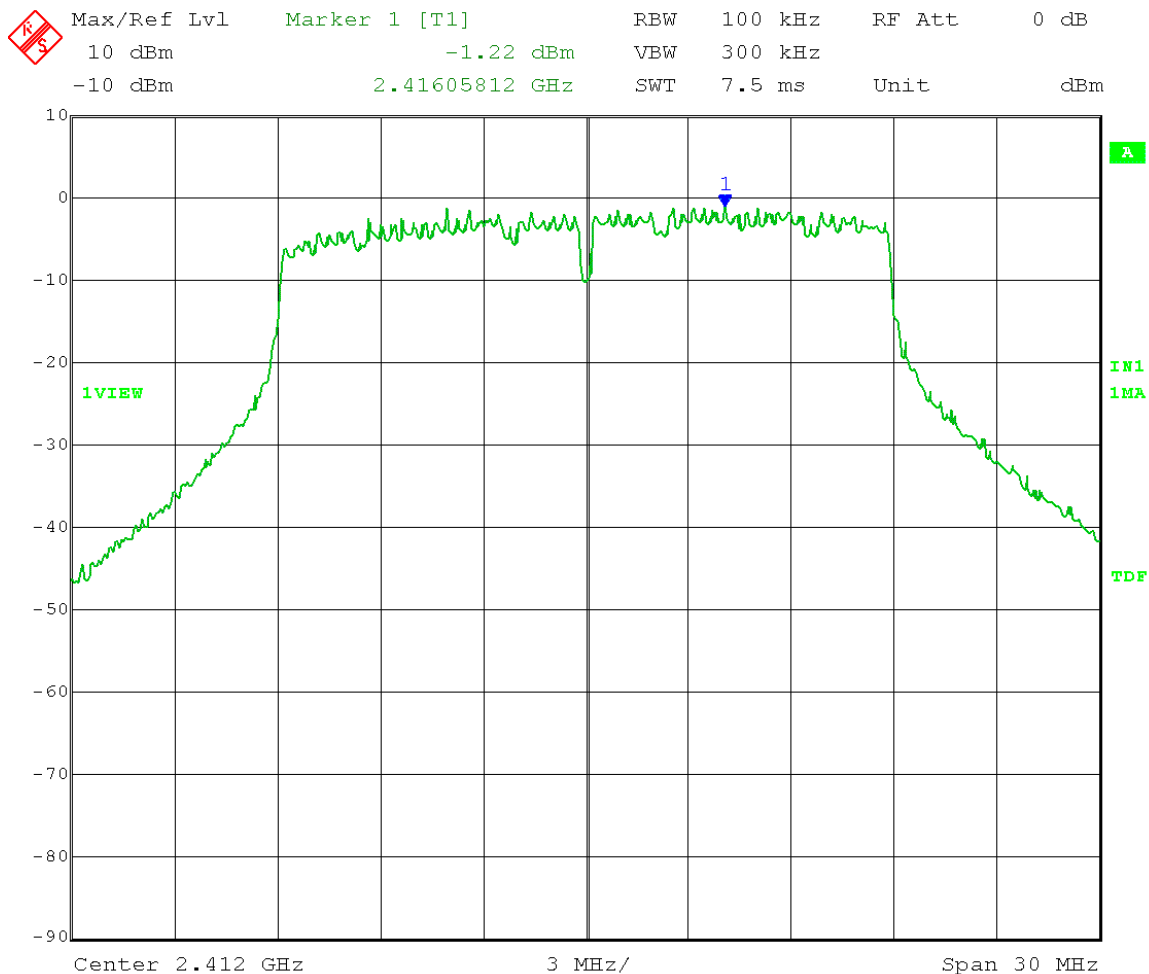
Date: 11.MAR.2014 12:02:25

Test Date: 03-11-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
 Test: Maximum Unwanted Emission Levels - Conducted  
 Operator: Craig B  
 Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
 Detector = Peak Sweep = Auto Couple  
 Trace = Max Hold High Channel Transmit = 2452 MHz  
 POINT-TO-POINT & POINT-TO-MULTIPOINT OPERATION  
 Output Power Setting 13.5 Channel bandwidth: 40 MHz  
 Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
 Limit = -2.88 dBm – 30 dB = -32.88 dBm  
 Frequency Range: 16 – 25 GHz



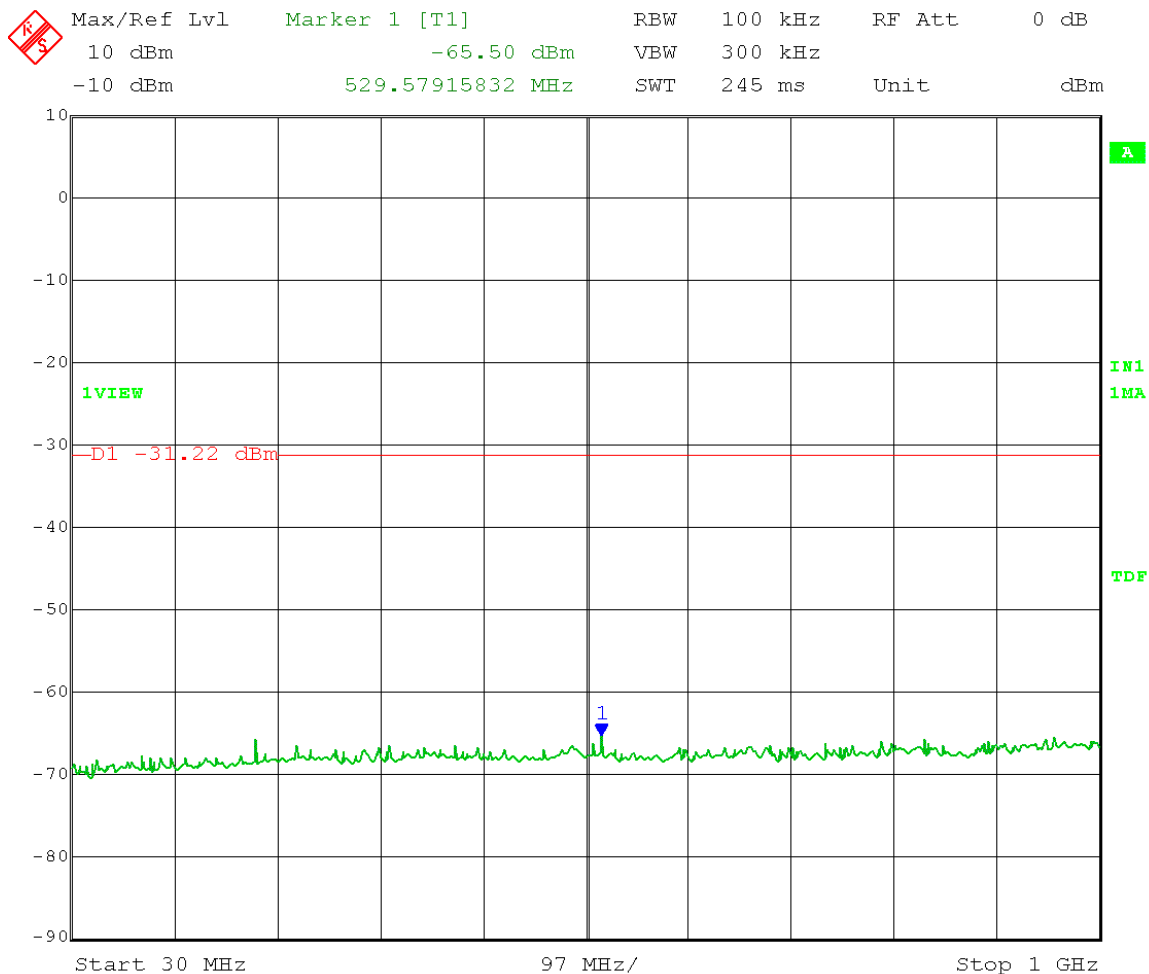
Date: 11.MAR.2014 12:03:28

Test Date: 03-13-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold Low Channel Transmit = 2412 MHz  
Point-to-Point & Point-to-Multipoint operation  
Output Power Setting 11.5 Antenna gain: 17 dBi  
Channel bandwidth: 20 MHz  
Output port: 1 OFDM MCS15  
**Reference Level Measurement**  
Limit = -1.22 dBm – 30 dB = -31.22 dBm



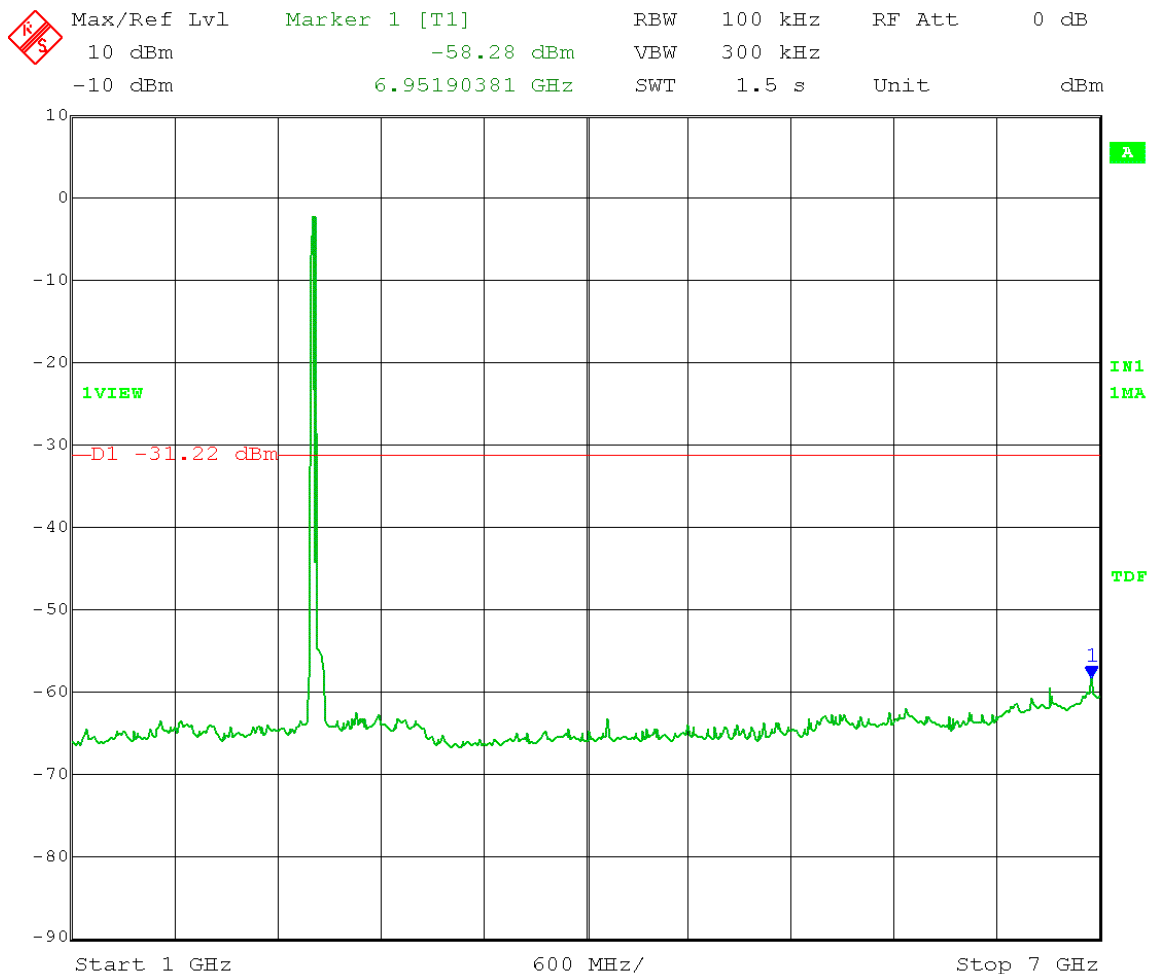
Date: 13.MAR.2014 09:31:10

Test Date: 03-13-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold Low Channel Transmit = 2412 MHz  
Point-to-Point & Point-to-Multipoint operation  
Output Power Setting 11.5 Antenna gain: 17 dBi  
Channel bandwidth: 20 MHz  
Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
Limit = -1.22 dBm - 30 dB = -31.22 dBm  
Frequency Range: 30 - 1000 MHz



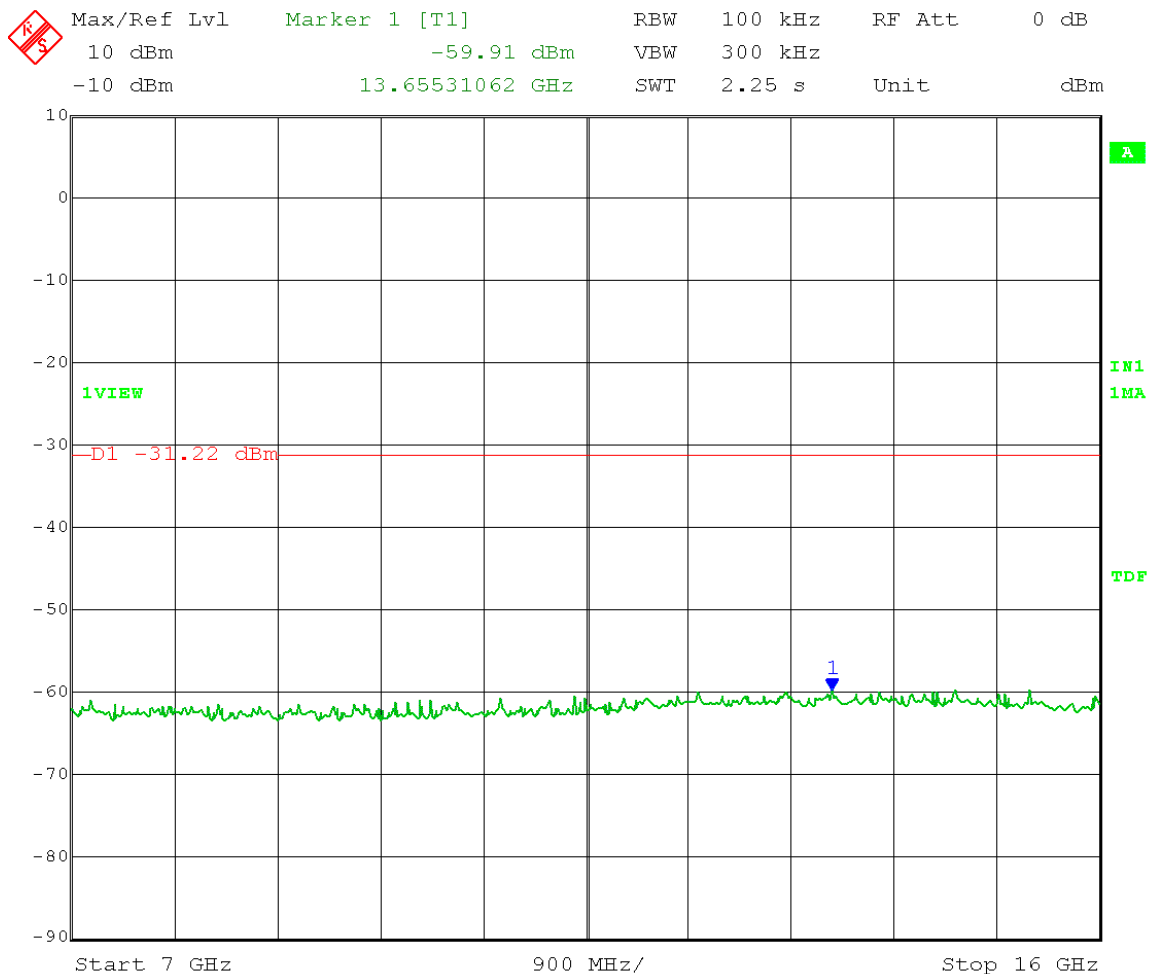
Date: 13.MAR.2014 09:37:20

Test Date: 03-13-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold Low Channel Transmit = 2412 MHz  
Point-to-Point & Point-to-Multipoint operation  
Output Power Setting 11.5 Antenna gain: 17 dBi  
Channel bandwidth: 20 MHz  
Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
Limit = -1.22 dBm - 30 dB = -31.22 dBm  
Frequency Range: 1 - 7 GHz



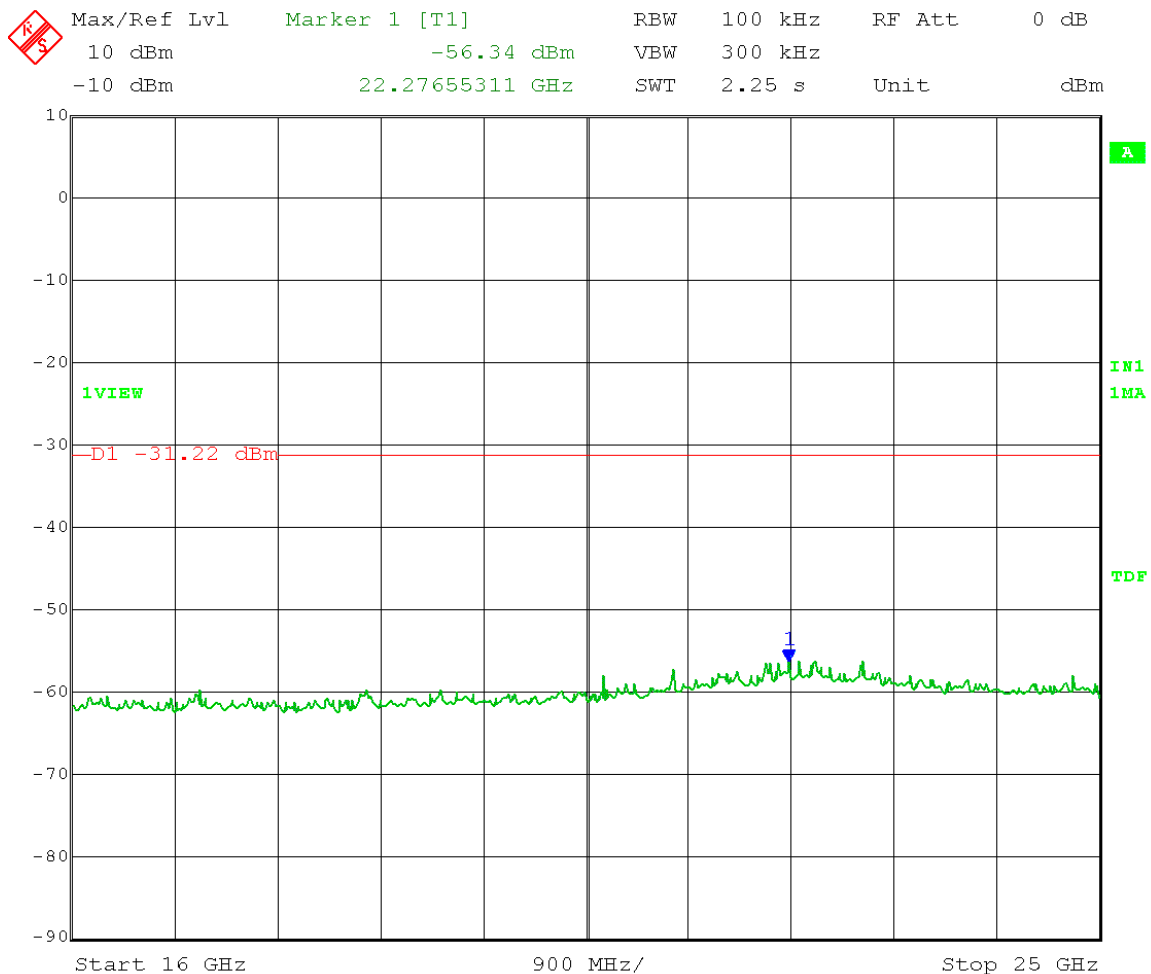
Date: 13.MAR.2014 09:33:00

Test Date: 03-13-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold Low Channel Transmit = 2412 MHz  
Point-to-Point & Point-to-Multipoint operation  
Output Power Setting 11.5 Antenna gain: 17 dBi  
Channel bandwidth: 20 MHz  
Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
Limit = -1.22 dBm - 30 dB = -31.22 dBm  
Frequency Range: 7 - 16 GHz



Date: 13.MAR.2014 09:34:28

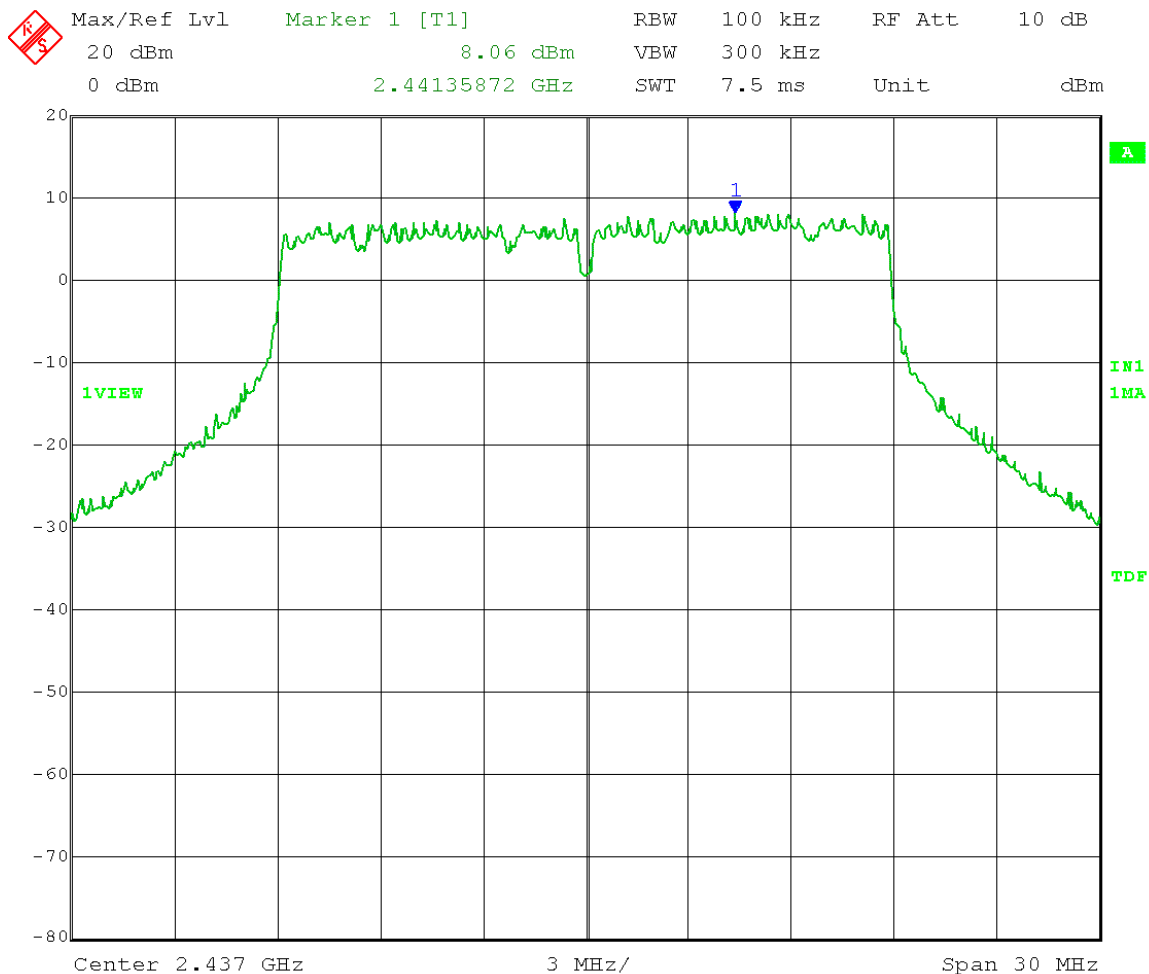
Test Date: 03-13-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold Low Channel Transmit = 2412 MHz  
Point-to-Point & Point-to-Multipoint operation  
Output Power Setting 11.5 Antenna gain: 17 dBi  
Channel bandwidth: 20 MHz  
Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
Limit = -1.22 dBm - 30 dB = -31.22 dBm  
Frequency Range: 16 - 25 GHz



Date: 13.MAR.2014 09:35:52

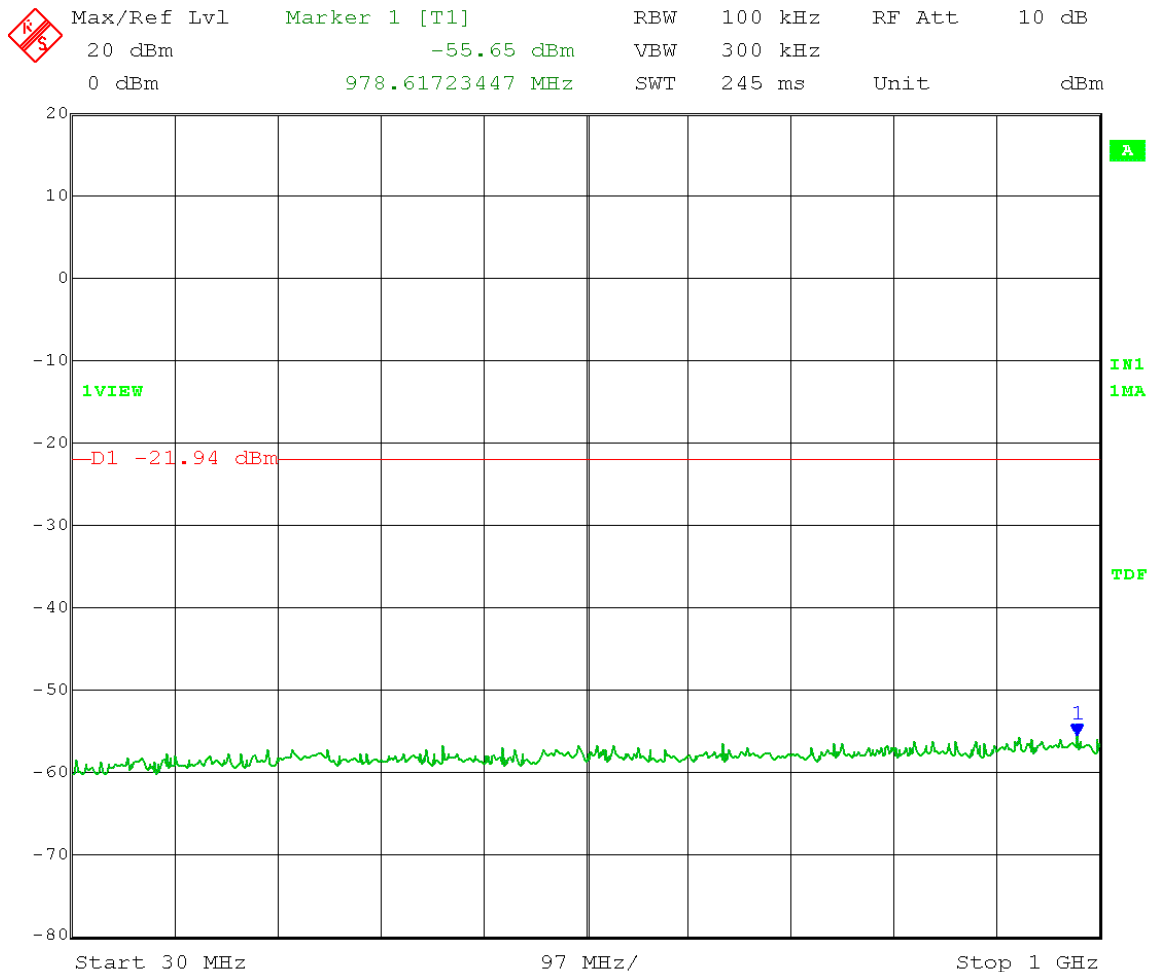


Test Date: 03-13-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold Mid Channel Transmit = 2437 MHz  
Point-to-Point operation  
Output Power Setting 20.5 Antenna gain: 17 dBi  
Channel bandwidth: 20 MHz  
Output port: 1 OFDM MCS15  
**Reference Level Measurement**  
Limit = 8.06 dBm – 30 dB = -21.94 dBm



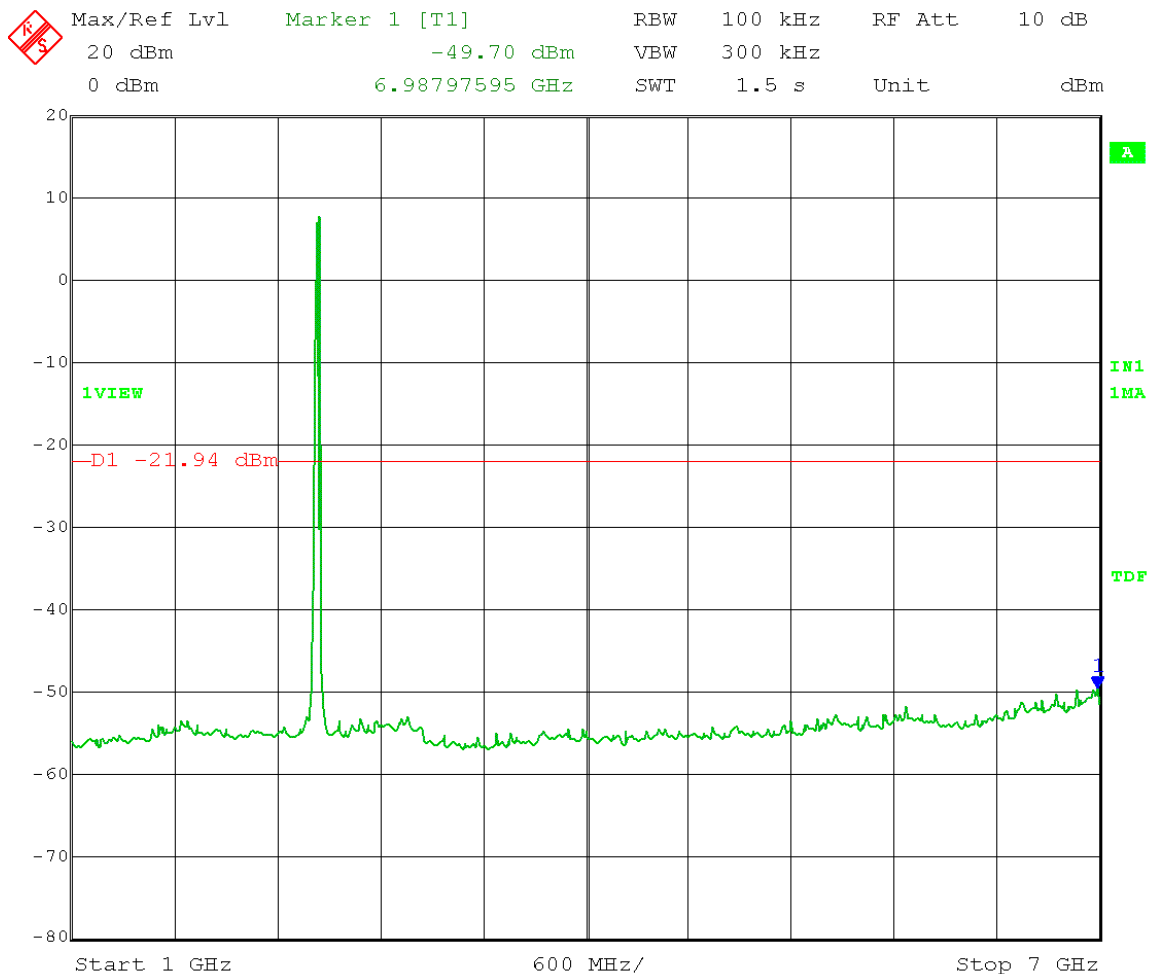
Date: 13.MAR.2014 09:12:44

Test Date: 03-13-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
 Test: Maximum Unwanted Emission Levels - Conducted  
 Operator: Craig B  
 Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
 Detector = Peak Sweep = Auto Couple  
 Trace = Max Hold Mid Channel Transmit = 2437 MHz  
 Point-to-Point operation  
 Output Power Setting 20.5 Antenna gain: 17 dBi  
 Channel bandwidth: 20 MHz  
 Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
 Limit = 8.06 dBm – 30 dB = -21.94 dBm  
 Frequency Range: 30 – 1000 MHz



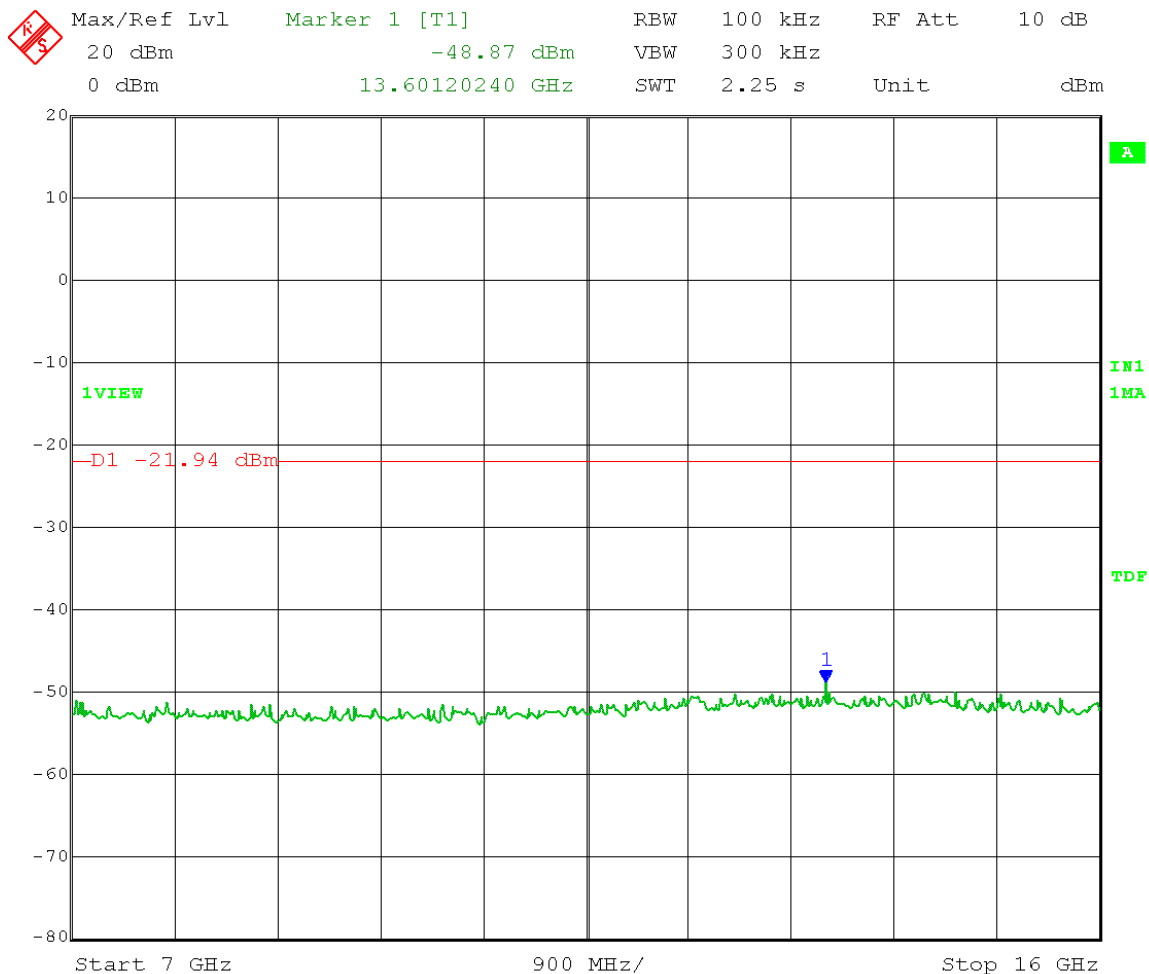
Date: 13.MAR.2014 09:18:10

Test Date: 03-13-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
 Test: Maximum Unwanted Emission Levels - Conducted  
 Operator: Craig B  
 Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
 Detector = Peak Sweep = Auto Couple  
 Trace = Max Hold Mid Channel Transmit = 2437 MHz  
 Point-to-Point operation  
 Output Power Setting 20.5 Antenna gain: 17 dBi  
 Channel bandwidth: 20 MHz  
 Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
 Limit = 8.06 dBm - 30 dB = -21.94 dBm  
 Frequency Range: 1 - 7 GHz



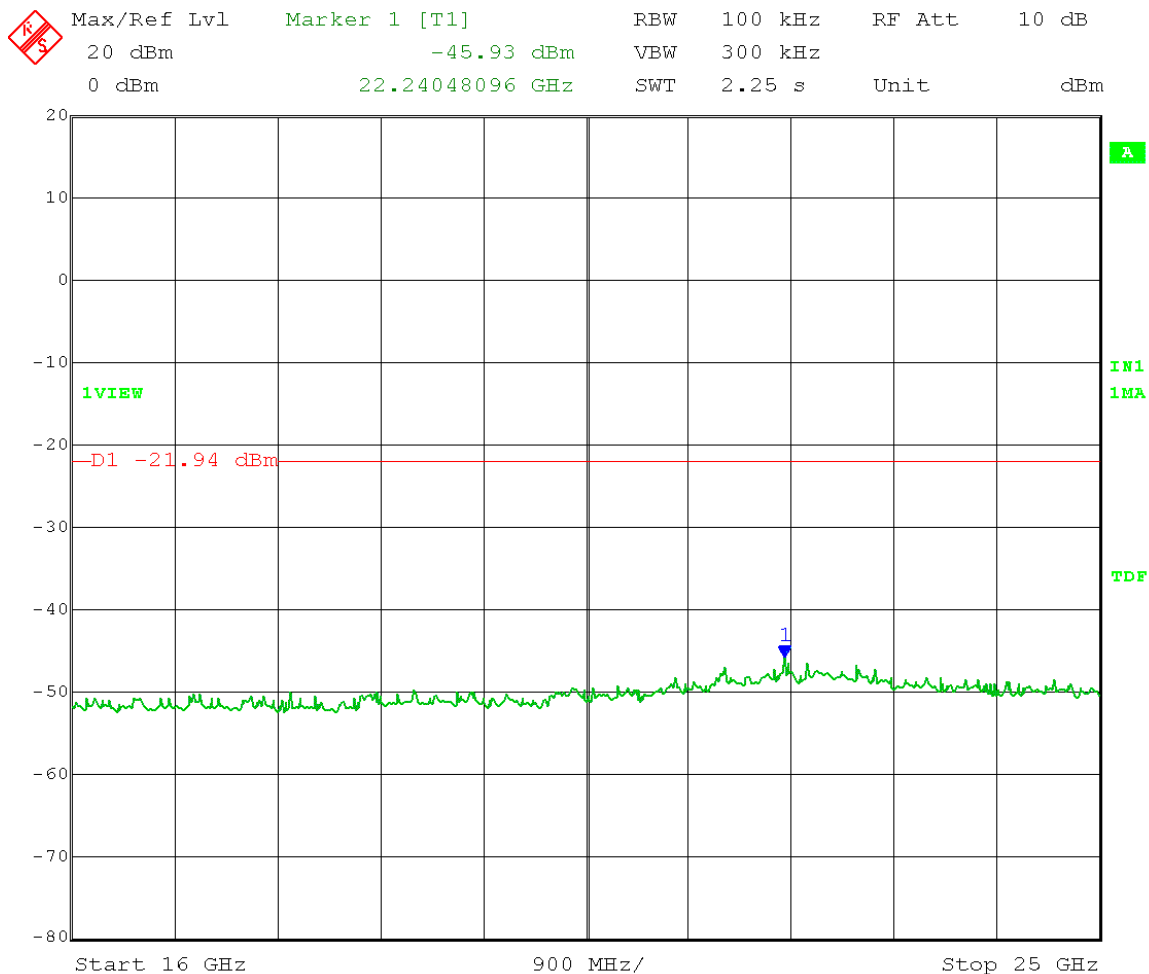
Date: 13.MAR.2014 09:14:53

Test Date: 03-13-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold Mid Channel Transmit = 2437 MHz  
Point-to-Point operation  
Output Power Setting 20.5 Antenna gain: 17 dBi  
Channel bandwidth: 20 MHz  
Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
Limit = 8.06 dBm – 30 dB = -21.94 dBm  
Frequency Range: 7 – 16 GHz



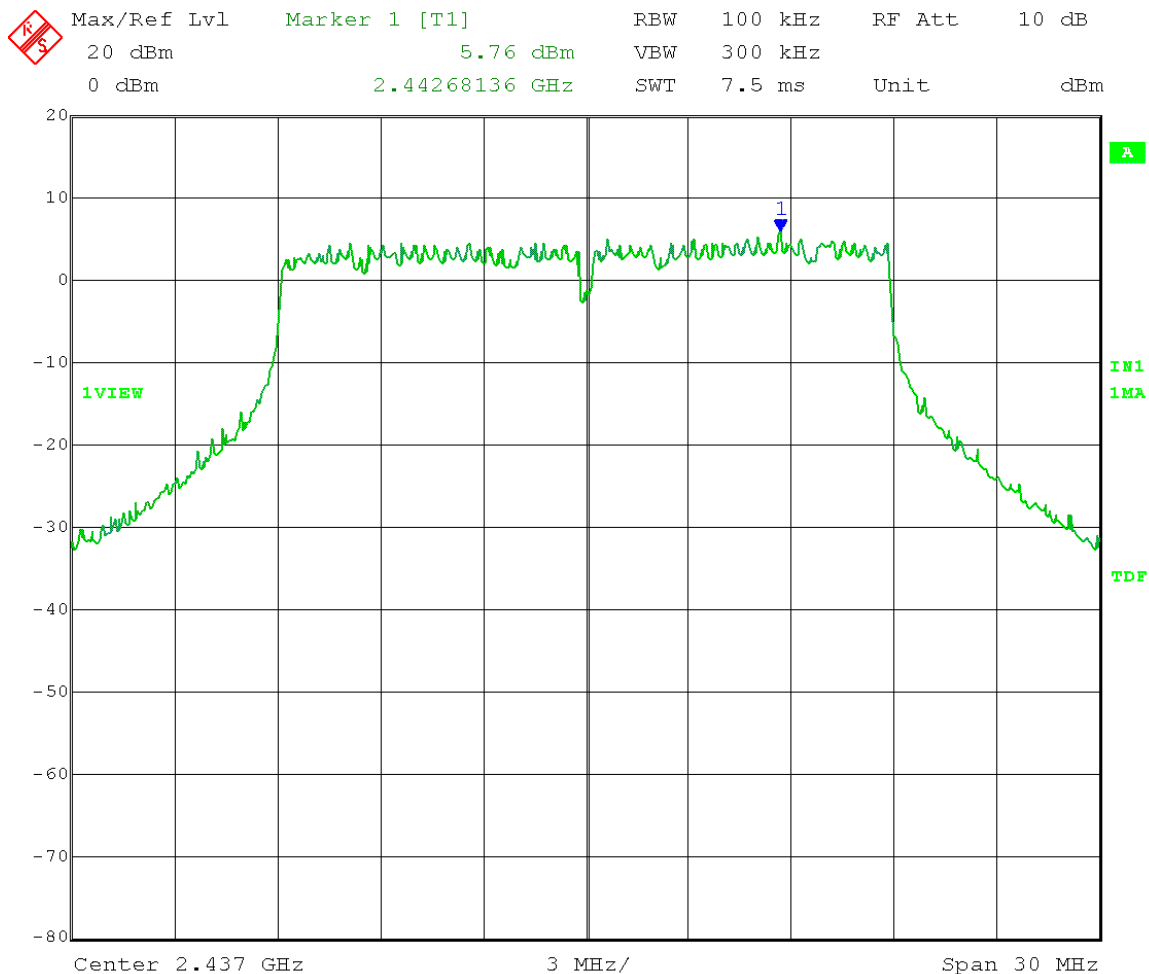
Date: 13.MAR.2014 09:15:55

Test Date: 03-13-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold Mid Channel Transmit = 2437 MHz  
Point-to-Point operation  
Output Power Setting 20.5 Antenna gain: 17 dBi  
Channel bandwidth: 20 MHz  
Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
Limit = 8.06 dBm – 30 dB = -21.94 dBm  
Frequency Range: 16 – 25 GHz



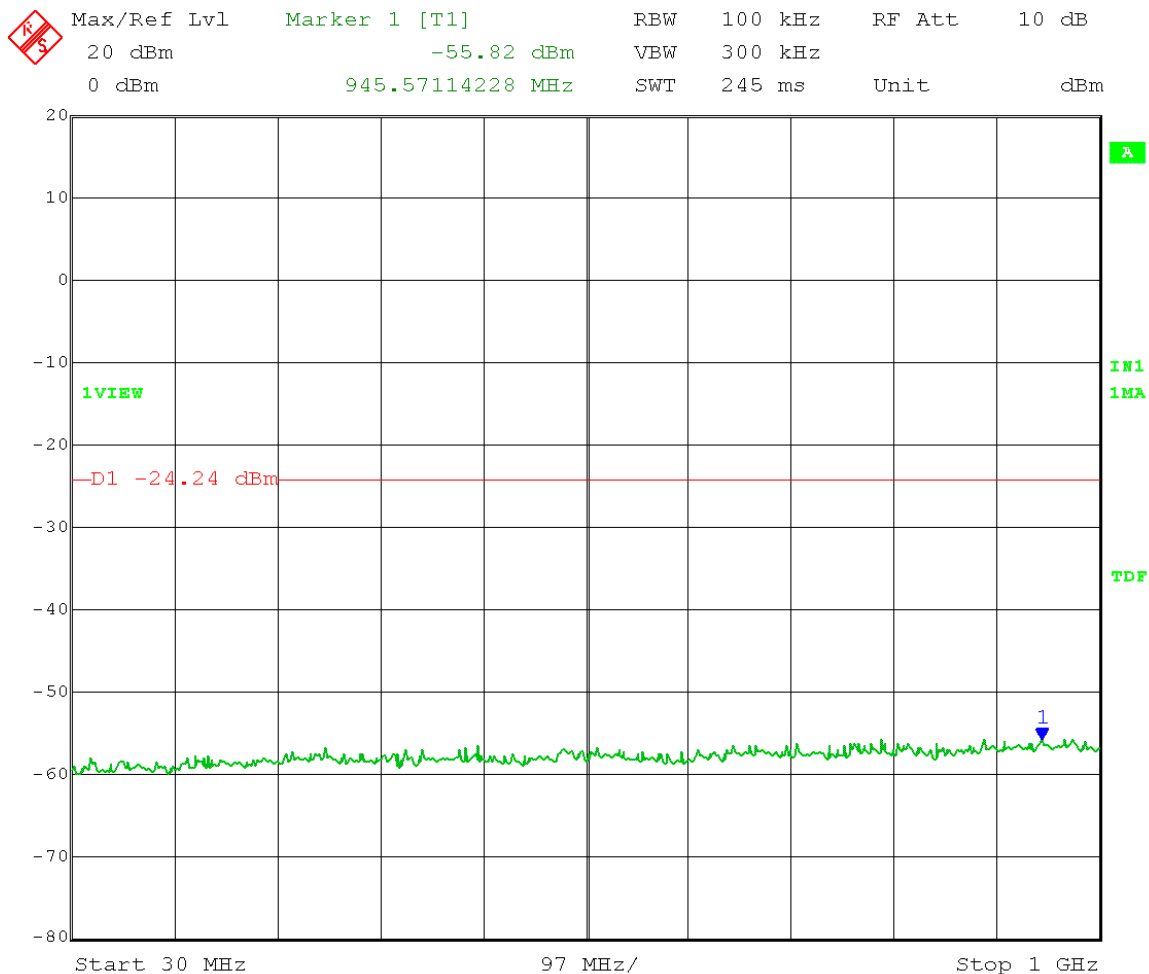
Date: 13.MAR.2014 09:17:03

Test Date: 03-13-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
 Test: Maximum Unwanted Emission Levels - Conducted  
 Operator: Craig B  
 Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
 Detector = Peak Sweep = Auto Couple  
 Trace = Max Hold Mid Channel Transmit = 2437 MHz  
 Point-to-Multipoint operation  
 Output Power Setting 18 Antenna gain: 17 dBi  
 Channel bandwidth: 20 MHz  
 Output port: 1 OFDM MCS15  
**Reference Level Measurement**  
 Limit = 5.76 dBm – 30 dB = -24.24 dBm



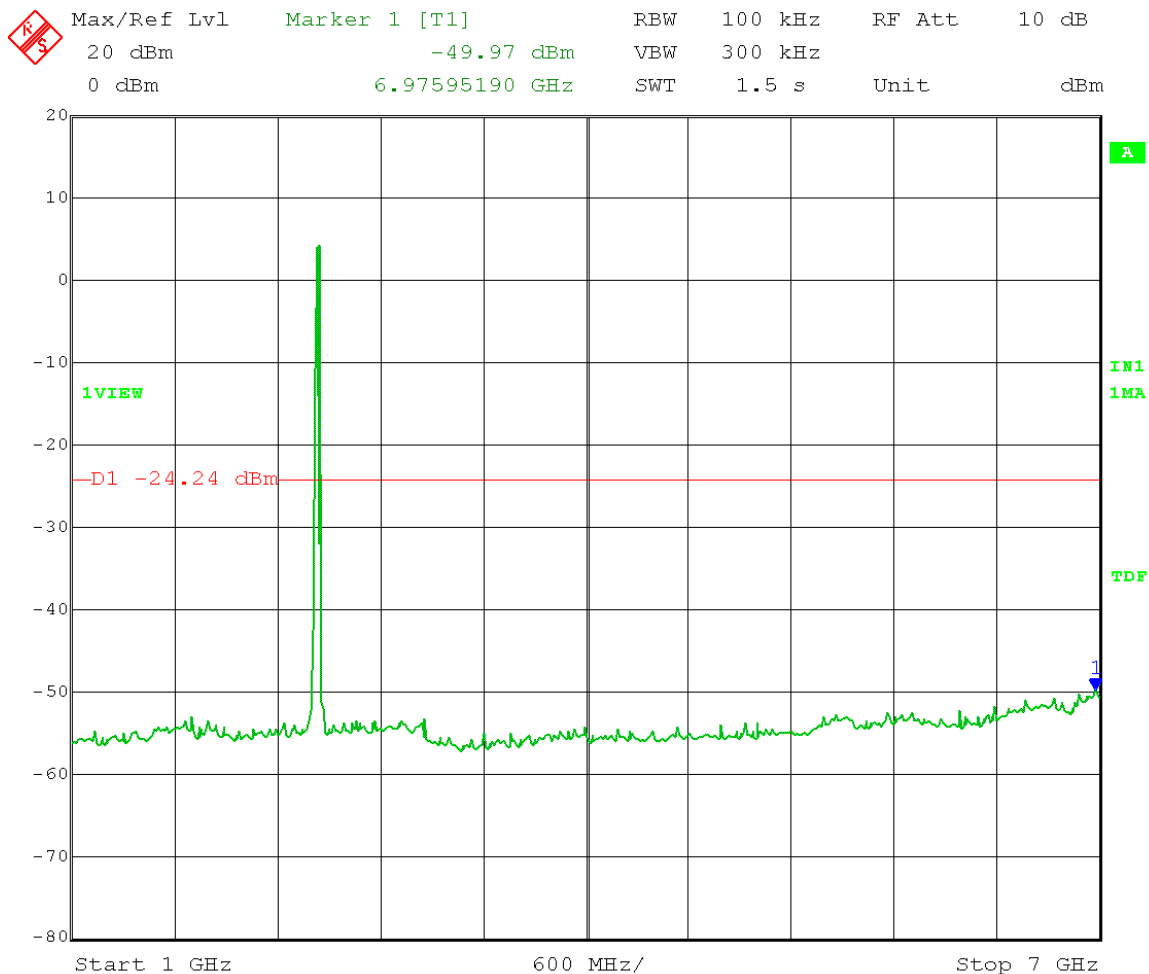
Date: 13.MAR.2014 09:21:31

Test Date: 03-13-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
 Test: Maximum Unwanted Emission Levels - Conducted  
 Operator: Craig B  
 Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
 Detector = Peak Sweep = Auto Couple  
 Trace = Max Hold Mid Channel Transmit = 2437 MHz  
 Point-to-Multipoint operation  
 Output Power Setting 18 Antenna gain: 17 dBi  
 Channel bandwidth: 20 MHz  
 Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
 Limit = 5.76 dBm – 30 dB = -24.24 dBm  
 Frequency Range: 30 – 1000 MHz



Date: 13.MAR.2014 09:27:11

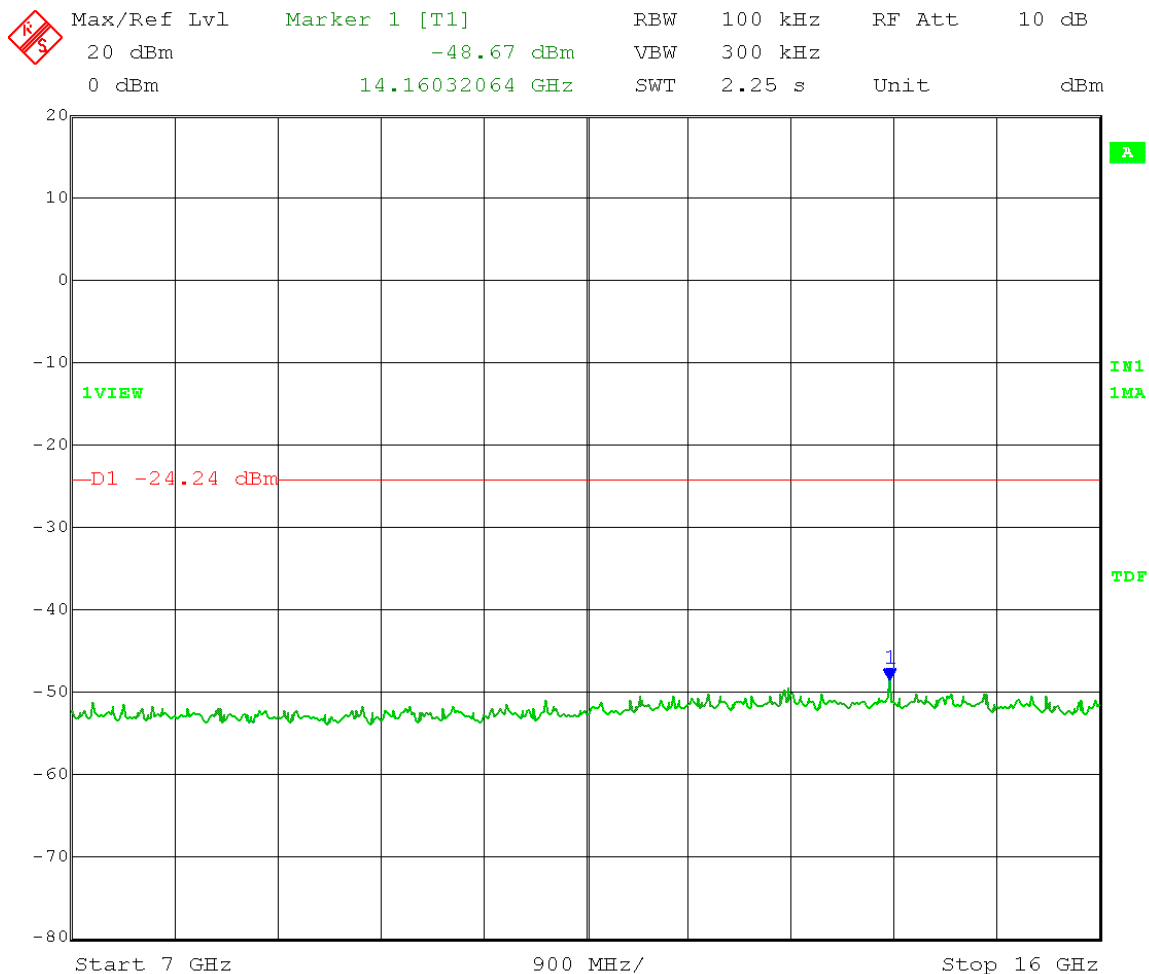
Test Date: 03-13-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold Mid Channel Transmit = 2437 MHz  
Point-to-Multipoint operation  
Output Power Setting 18 Antenna gain: 17 dBi  
Channel bandwidth: 20 MHz  
Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
Limit = 5.76 dBm – 30 dB = -24.24 dBm  
Frequency Range: 1 – 7 GHz



Date: 13.MAR.2014 09:23:30

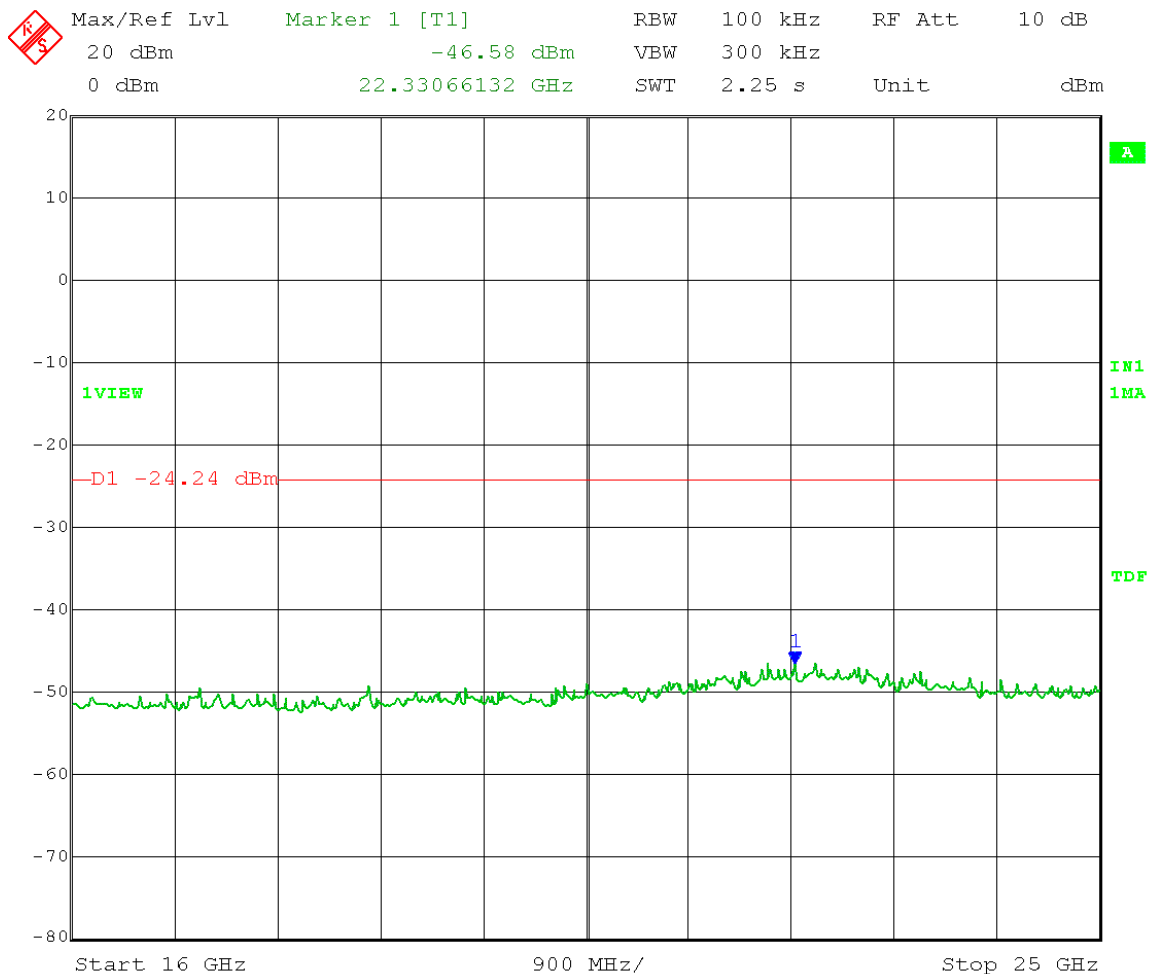


Test Date: 03-13-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
 Test: Maximum Unwanted Emission Levels - Conducted  
 Operator: Craig B  
 Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
 Detector = Peak Sweep = Auto Couple  
 Trace = Max Hold Mid Channel Transmit = 2437 MHz  
 Point-to-Multipoint operation  
 Output Power Setting 18 Antenna gain: 17 dBi  
 Channel bandwidth: 20 MHz  
 Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
 Limit = 5.76 dBm – 30 dB = -24.24 dBm  
 Frequency Range: 7 – 16 GHz



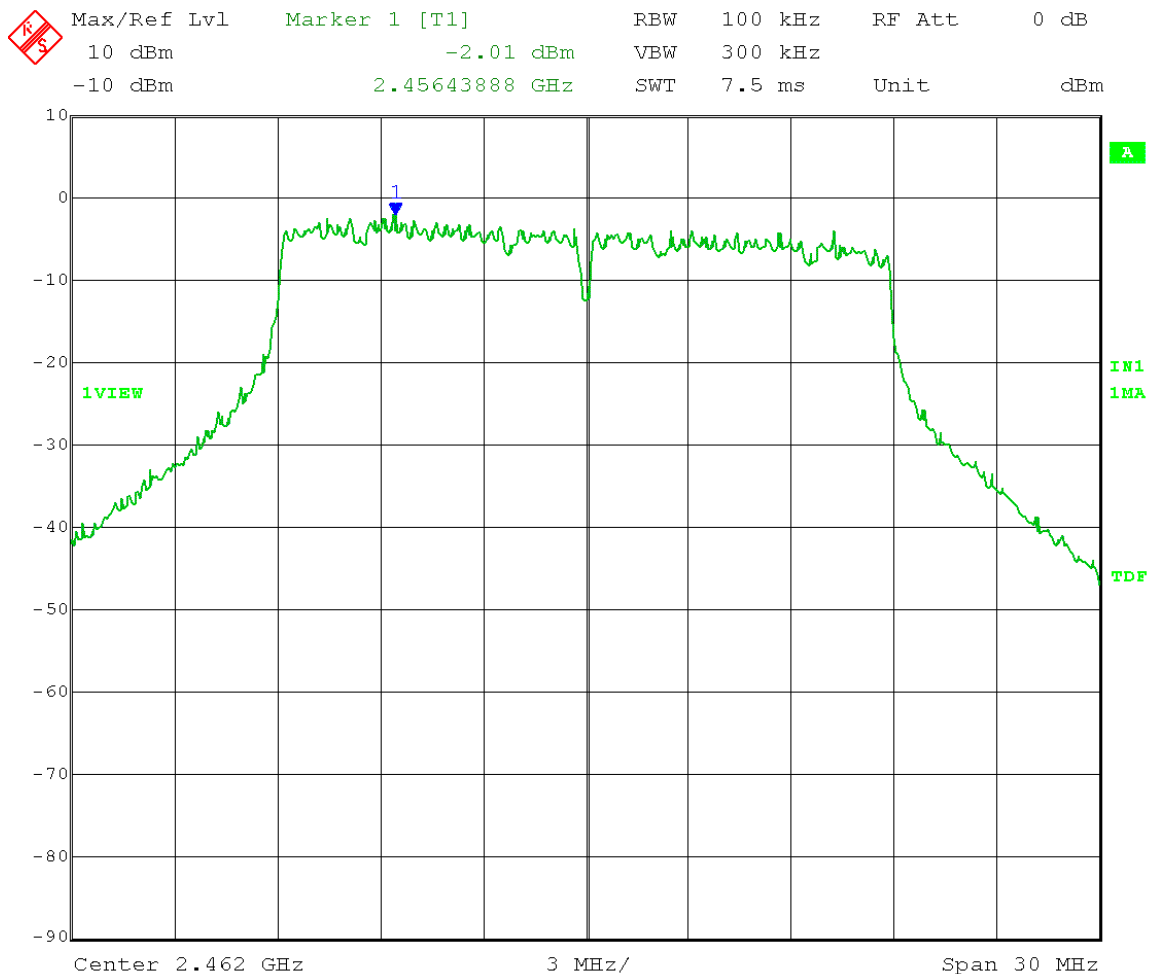
Date: 13.MAR.2014 09:24:30

Test Date: 03-13-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold Mid Channel Transmit = 2437 MHz  
Point-to-Multipoint operation  
Output Power Setting 18 Antenna gain: 17 dBi  
Channel bandwidth: 20 MHz  
Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
Limit = 5.76 dBm – 30 dB = -24.24 dBm  
Frequency Range: 16 – 25 GHz



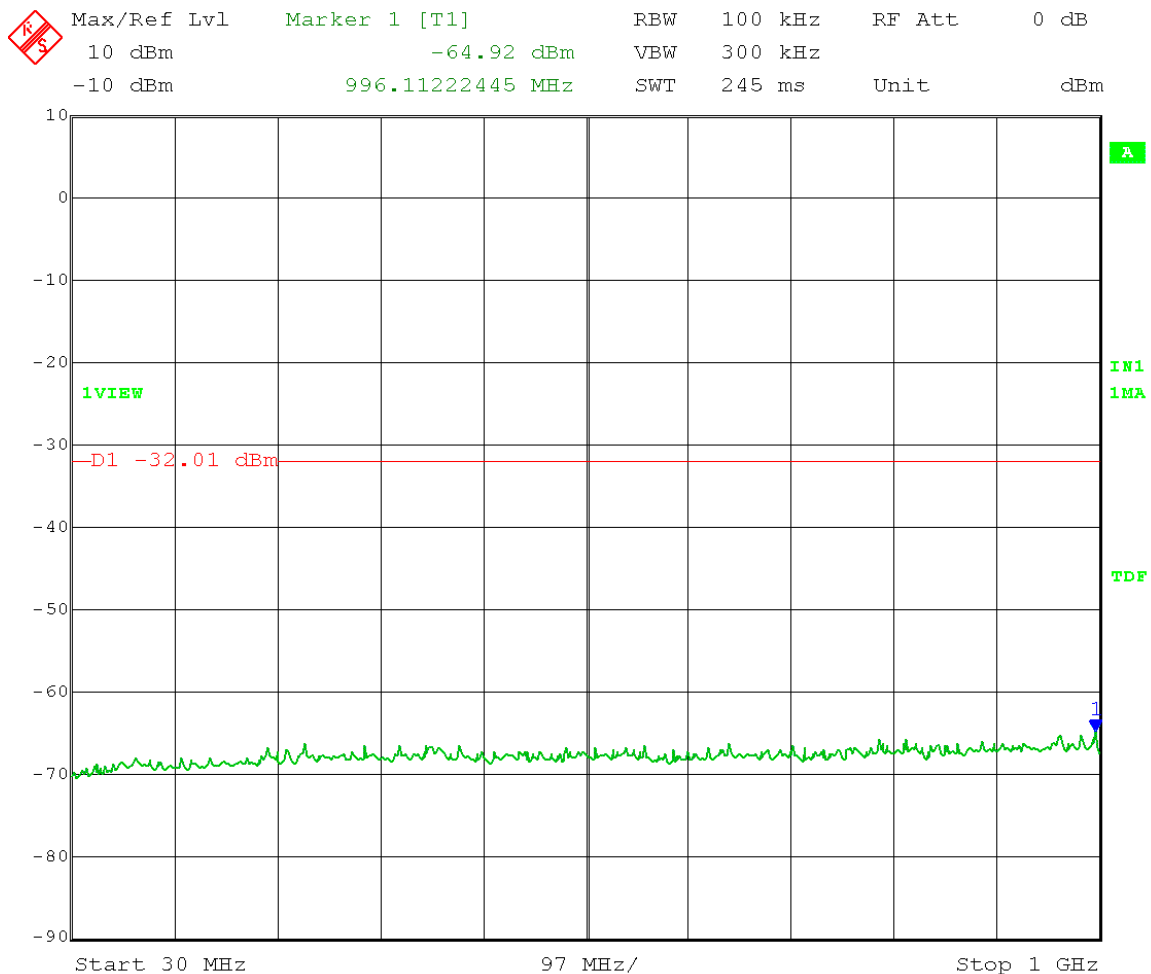
Date: 13.MAR.2014 09:25:43

Test Date: 03-13-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
 Test: Maximum Unwanted Emission Levels - Conducted  
 Operator: Craig B  
 Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
 Detector = Peak Sweep = Auto Couple  
 Trace = Max Hold High Channel Transmit = 2462 MHz  
 Point-to-Point & Point-to-Multipoint operation  
 Output Power Setting 10 Antenna gain: 17 dBi  
 Channel bandwidth: 20 MHz  
 Output port: 1 OFDM MCS15  
**Reference Level Measurement**  
 Limit = -2.01 dBm – 30 dB = -32.01 dBm



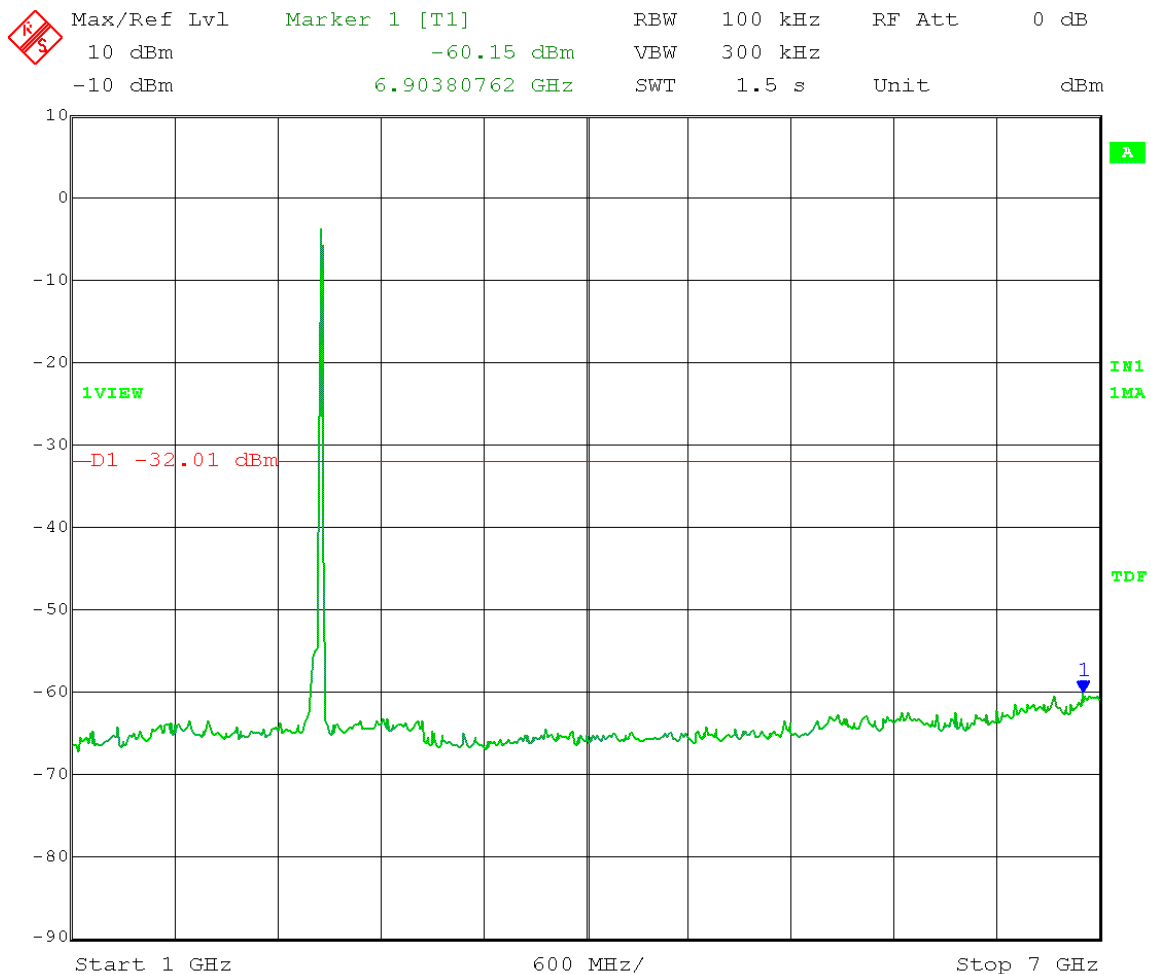
Date: 13.MAR.2014 09:40:49

Test Date: 03-13-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold High Channel Transmit = 2462 MHz  
Point-to-Point & Point-to-Multipoint operation  
Output Power Setting 10 Antenna gain: 17 dBi  
Channel bandwidth: 20 MHz  
Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
Limit = -2.01 dBm - 30 dB = -32.01 dBm  
Frequency Range: 30 - 1000 MHz



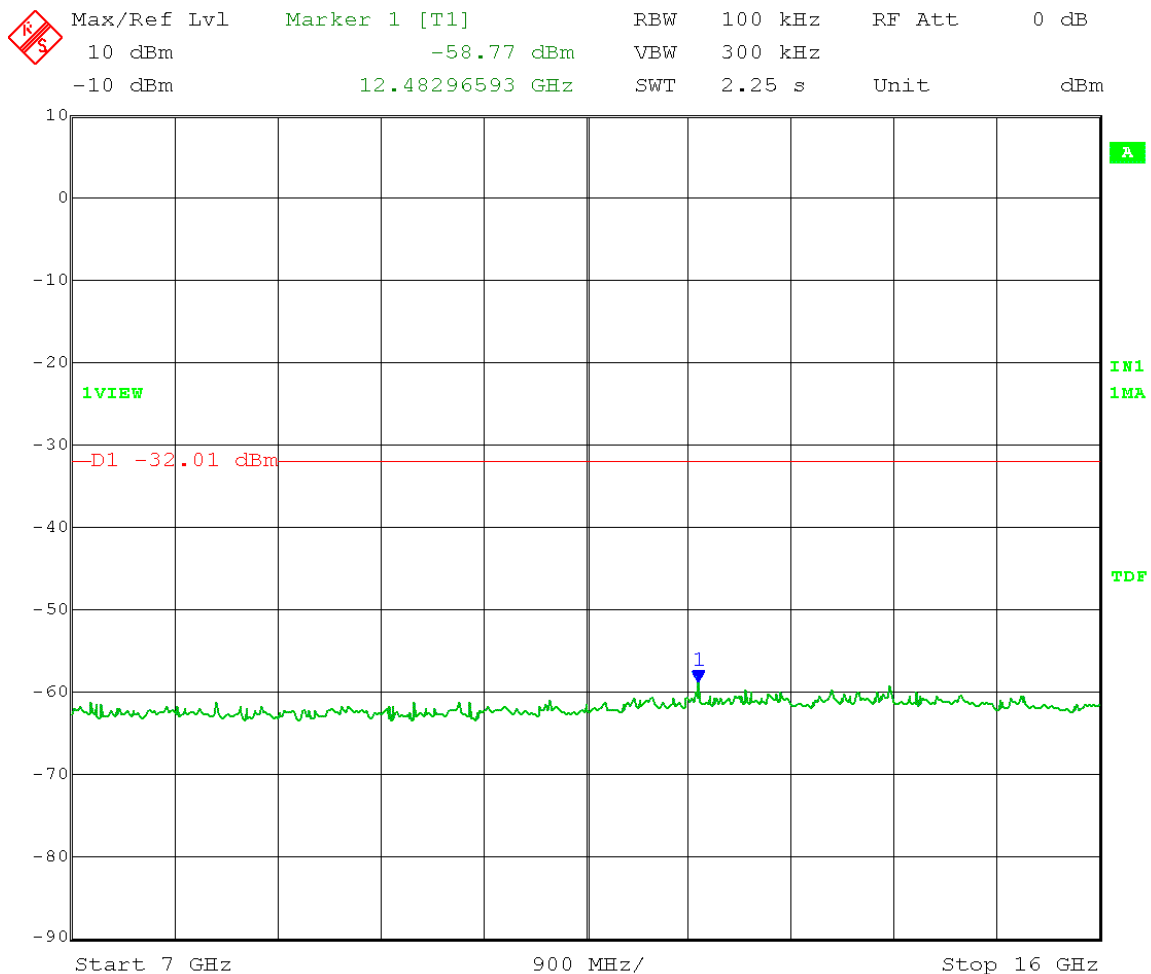
Date: 13.MAR.2014 09:47:23

Test Date: 03-13-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold High Channel Transmit = 2462 MHz  
Point-to-Point & Point-to-Multipoint operation  
Output Power Setting 10 Antenna gain: 17 dBi  
Channel bandwidth: 20 MHz  
Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
Limit = -2.01 dBm - 30 dB = -32.01 dBm  
Frequency Range: 1 - 7 GHz



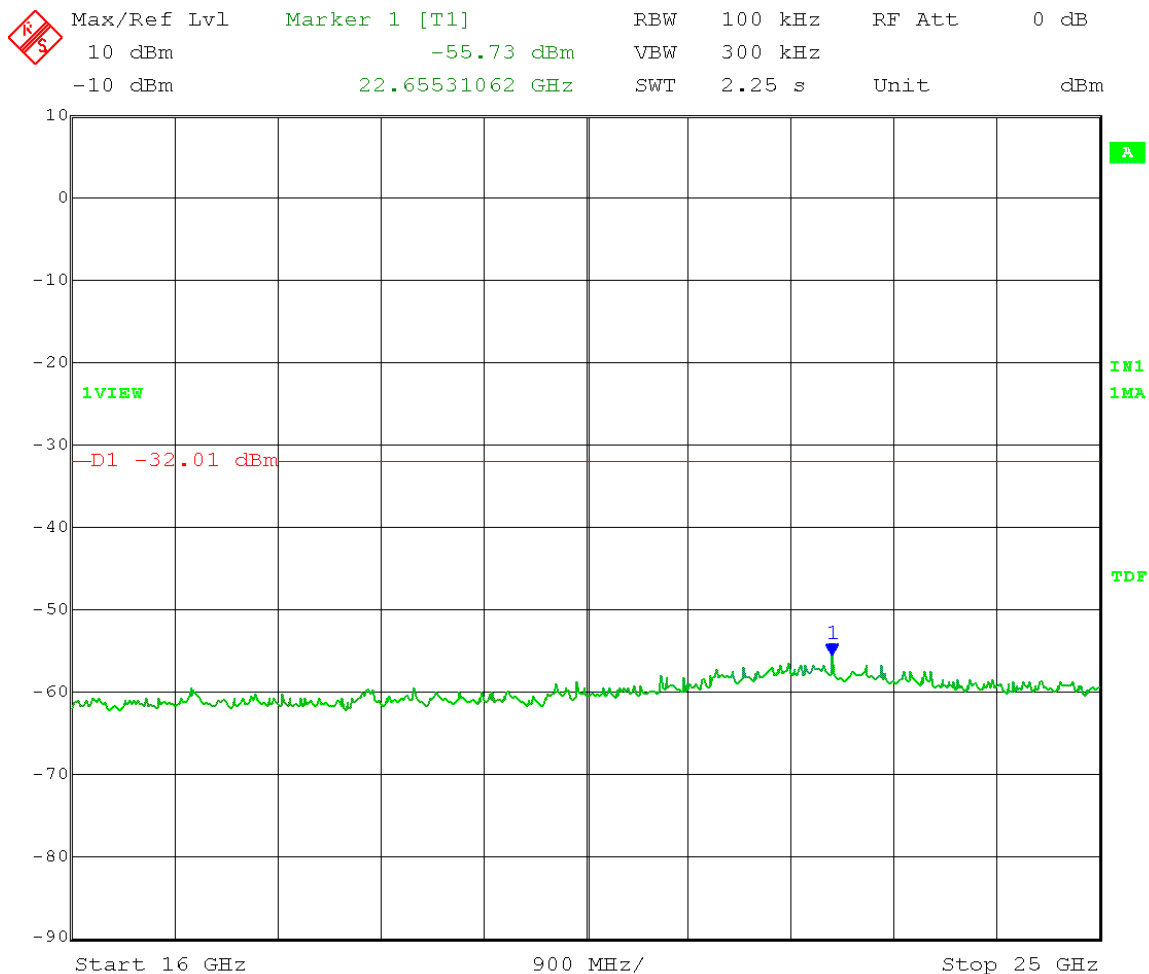
Date: 13.MAR.2014 09:42:48

Test Date: 03-13-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold High Channel Transmit = 2462 MHz  
Point-to-Point & Point-to-Multipoint operation  
Output Power Setting 10 Antenna gain: 17 dBi  
Channel bandwidth: 20 MHz  
Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
Limit = -2.01 dBm - 30 dB = -32.01 dBm  
Frequency Range: 7 - 16 GHz



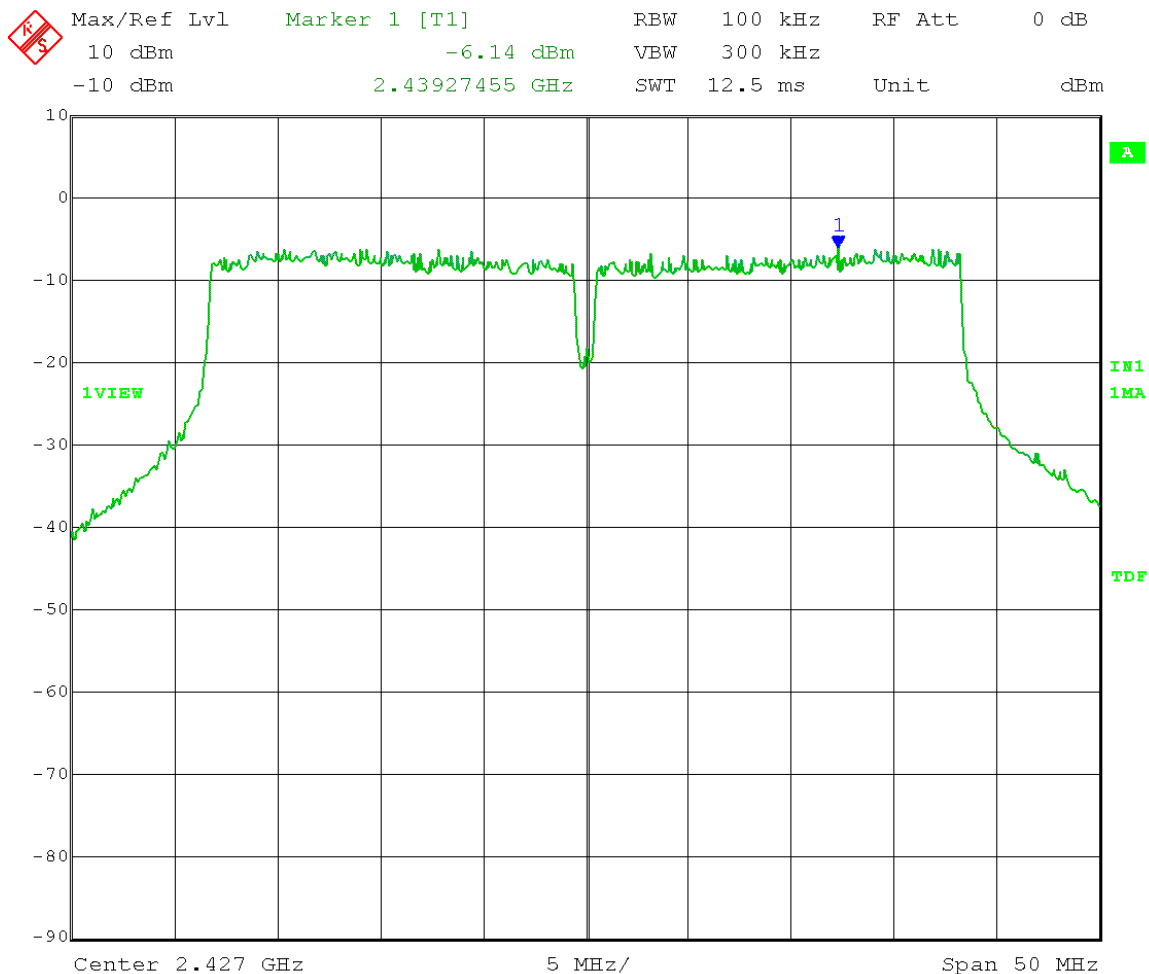
Date: 13.MAR.2014 09:44:07

Test Date: 03-13-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold High Channel Transmit = 2462 MHz  
Point-to-Point & Point-to-Multipoint operation  
Output Power Setting 10 Antenna gain: 17 dBi  
Channel bandwidth: 20 MHz  
Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
Limit = -2.01 dBm - 30 dB = -32.01 dBm  
Frequency Range: 16 - 25 GHz



Date: 13.MAR.2014 09:45:40

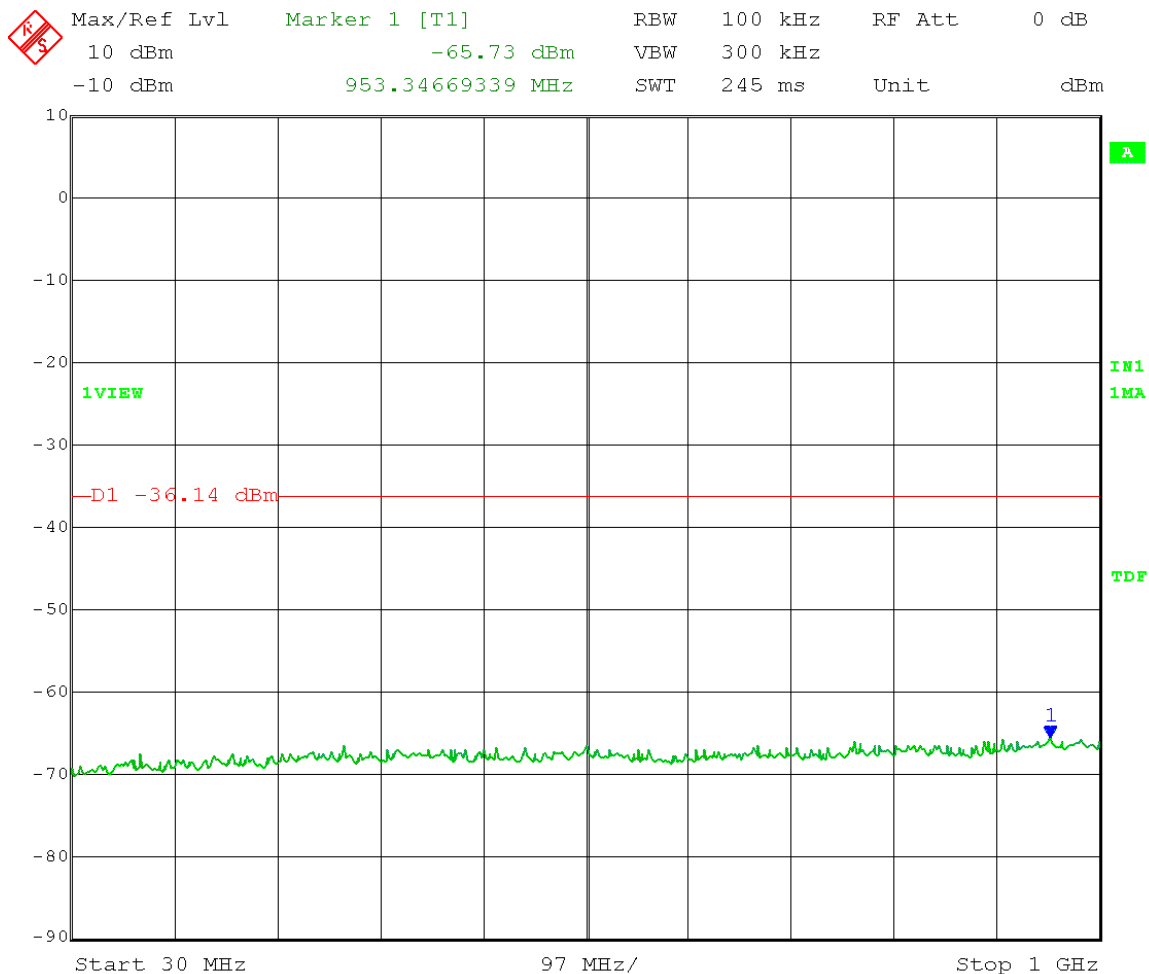
Test Date: 03-13-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
 Test: Maximum Unwanted Emission Levels - Conducted  
 Operator: Craig B  
 Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
 Detector = Peak Sweep = Auto Couple  
 Trace = Max Hold Low Channel Transmit = 2427 MHz  
 Point-to-Point & Point-to-Multipoint operation  
 Output Power Setting 10 Antenna gain: 17 dBi  
 Channel bandwidth: 40 MHz  
 Output port: 1 OFDM MCS15  
**Reference Level Measurement**  
 Limit = -6.14 dBm – 30 dB = -36.14 dBm



Date: 13.MAR.2014 10:14:16

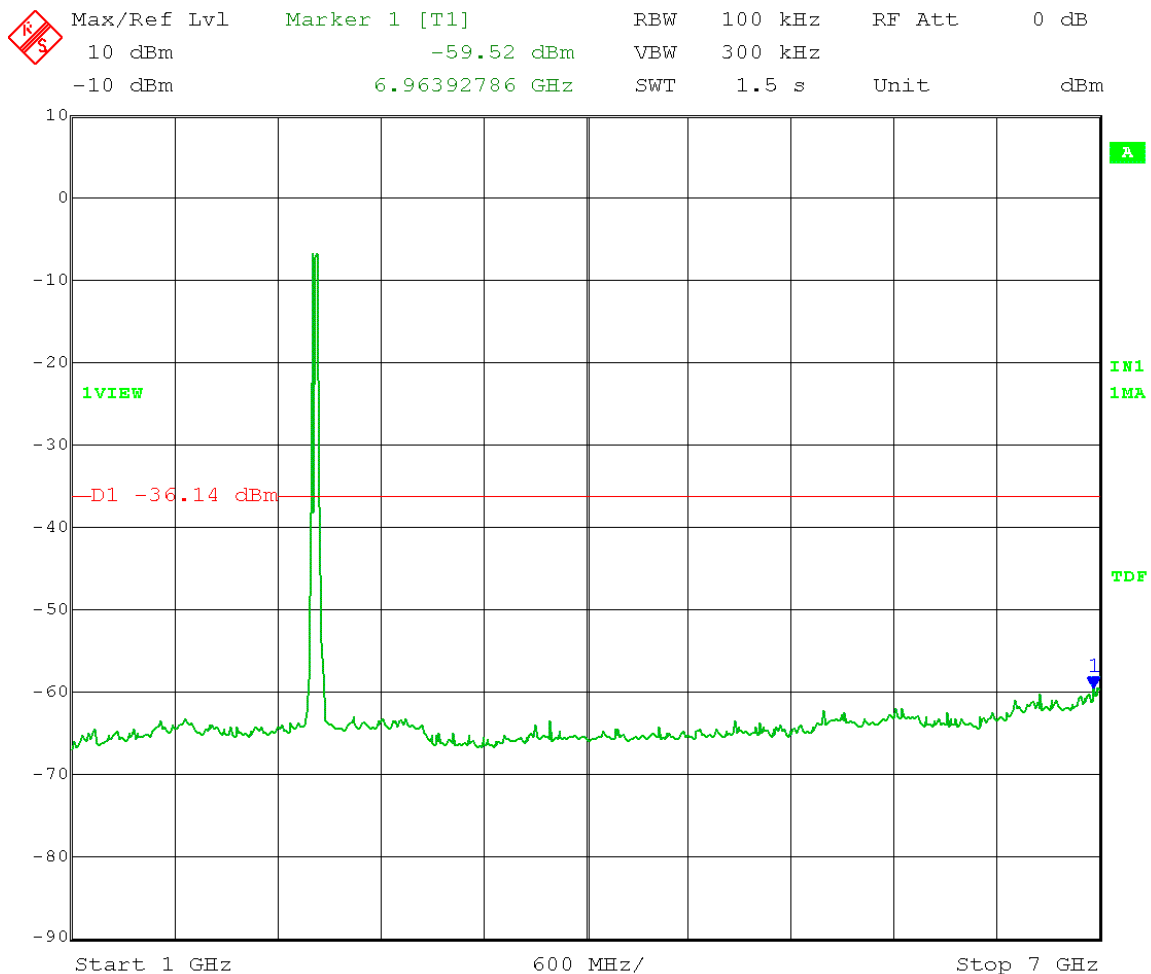


Test Date: 03-13-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
 Test: Maximum Unwanted Emission Levels - Conducted  
 Operator: Craig B  
 Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
 Detector = Peak Sweep = Auto Couple  
 Trace = Max Hold Low Channel Transmit = 2427 MHz  
 Point-to-Point & Point-to-Multipoint operation  
 Output Power Setting 10 Antenna gain: 17 dBi  
 Channel bandwidth: 40 MHz  
 Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
 Limit = -6.14 dBm - 30 dB = -36.14 dBm  
 Frequency Range: 30 - 1000 MHz



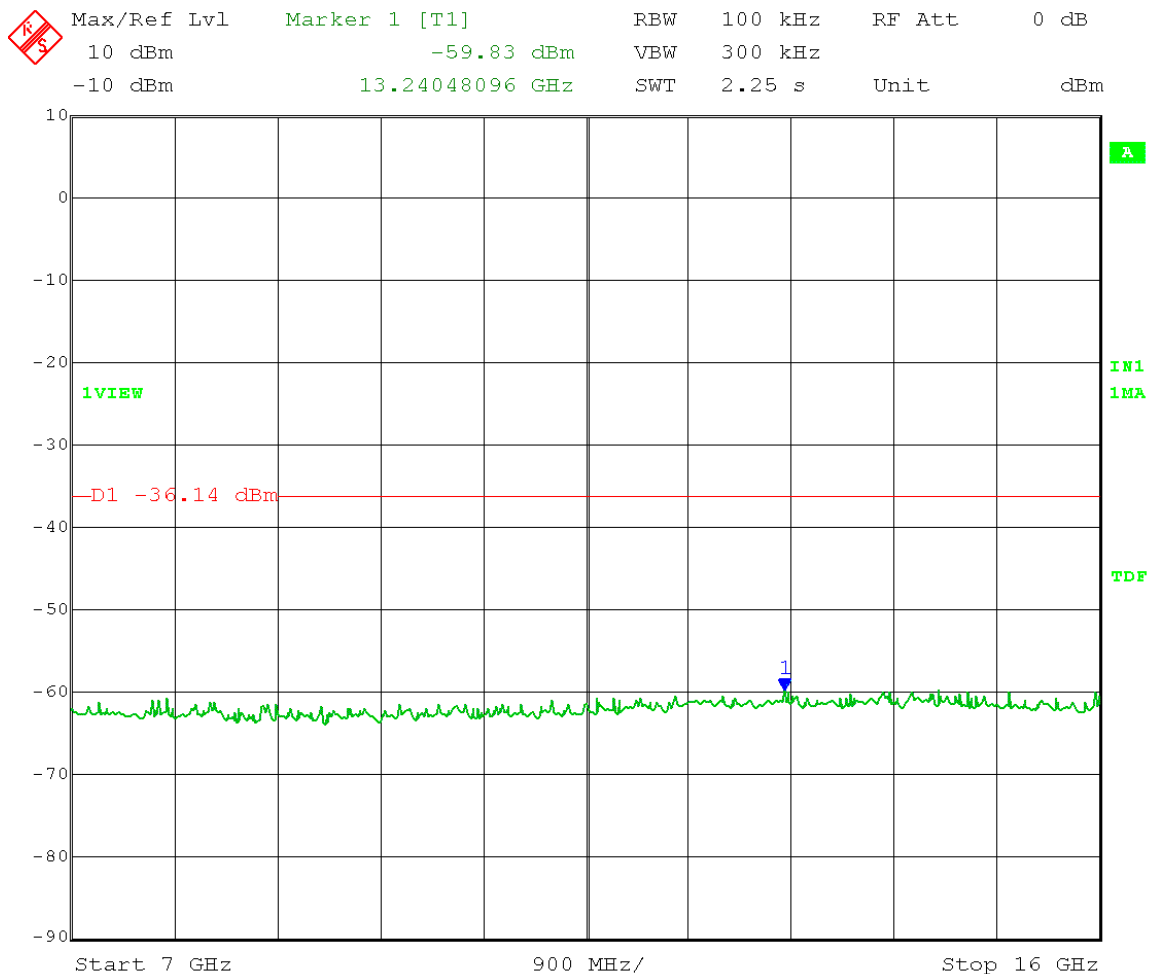
Date: 13.MAR.2014 10:20:13

Test Date: 03-13-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold Low Channel Transmit = 2427 MHz  
Point-to-Point & Point-to-Multipoint operation  
Output Power Setting 10 Antenna gain: 17 dBi  
Channel bandwidth: 40 MHz  
Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
Limit = -6.14 dBm - 30 dB = -36.14 dBm  
Frequency Range: 1 - 7 GHz



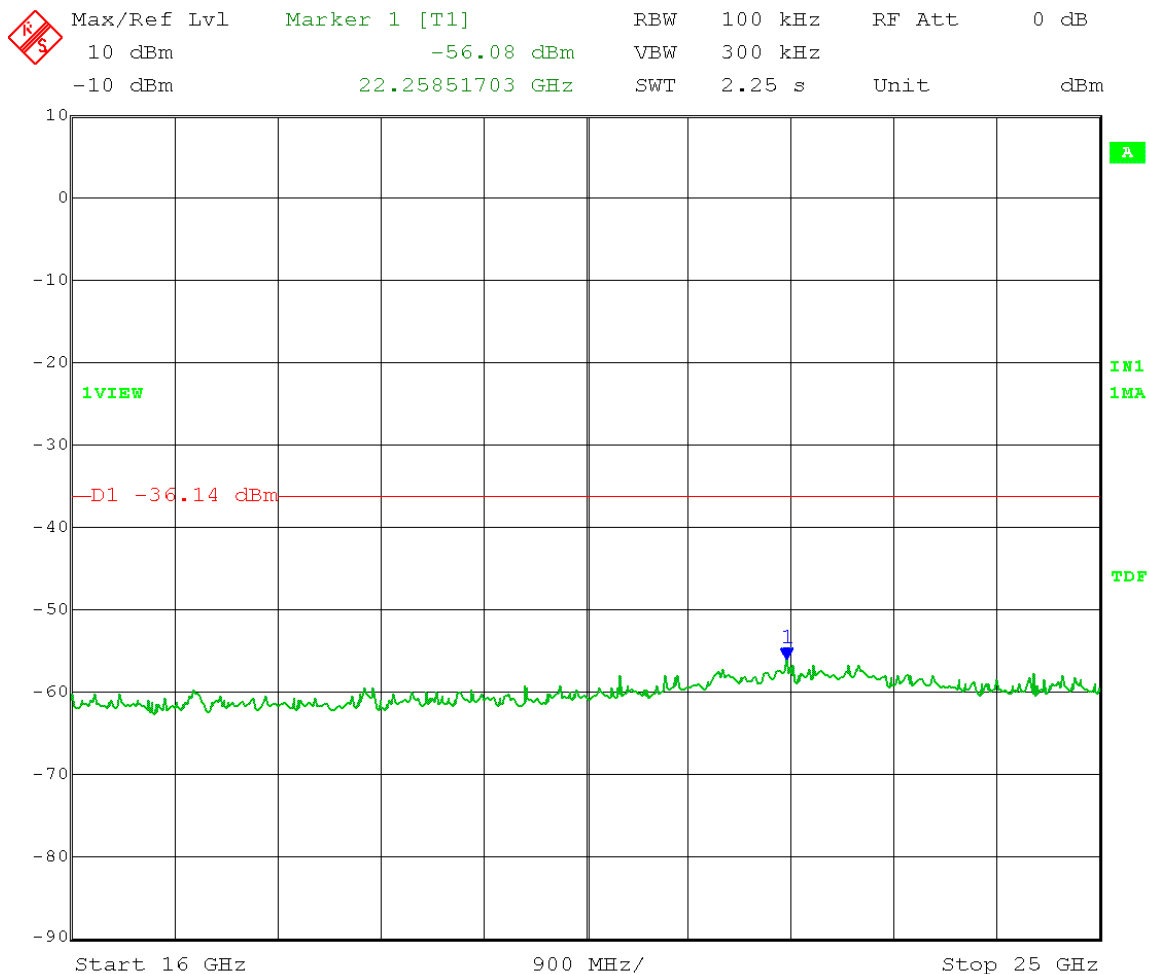
Date: 13.MAR.2014 10:16:29

Test Date: 03-13-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold Low Channel Transmit = 2427 MHz  
Point-to-Point & Point-to-Multipoint operation  
Output Power Setting 10 Antenna gain: 17 dBi  
Channel bandwidth: 40 MHz  
Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
Limit = -6.14 dBm - 30 dB = -36.14 dBm  
Frequency Range: 7 - 16 GHz



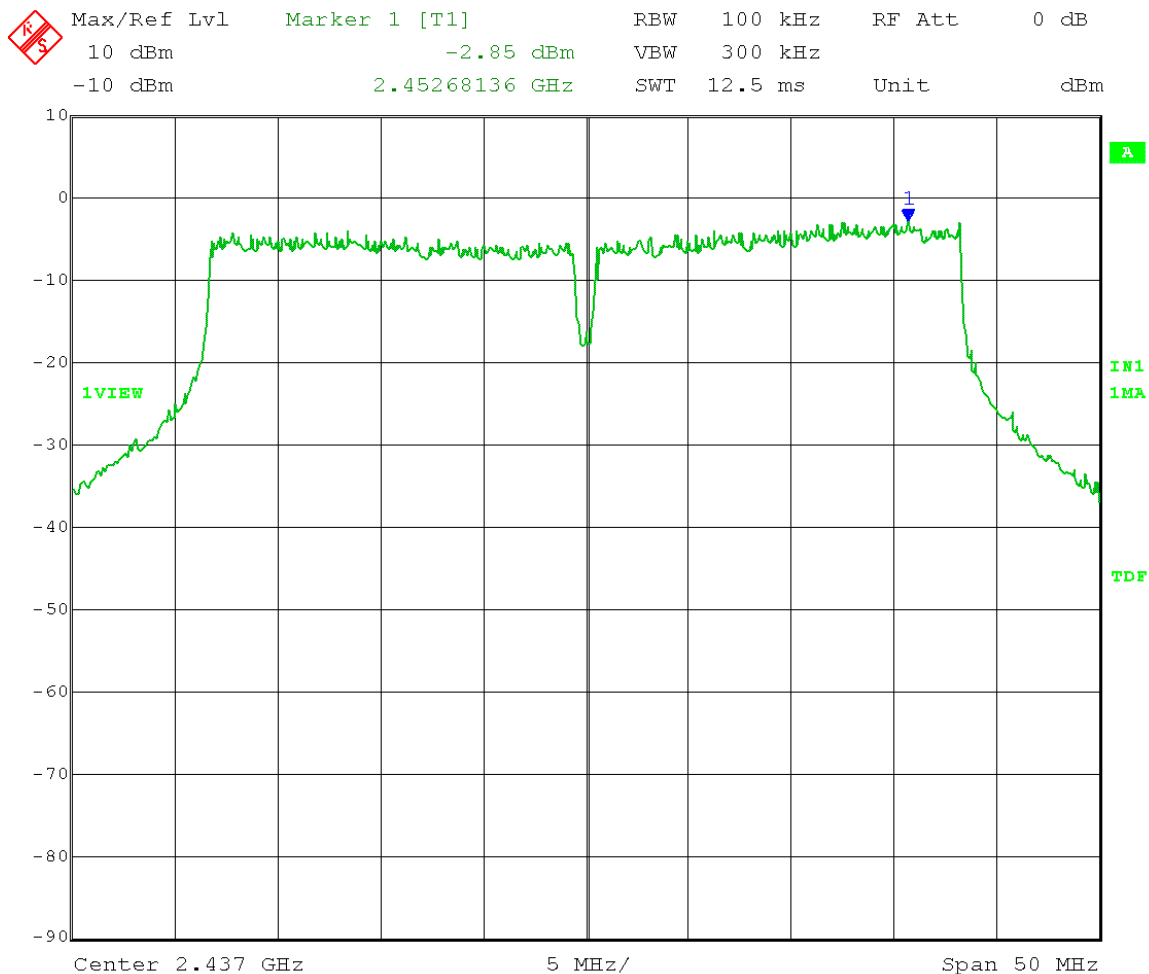
Date: 13.MAR.2014 10:17:43

Test Date: 03-13-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold Low Channel Transmit = 2427 MHz  
Point-to-Point & Point-to-Multipoint operation  
Output Power Setting 10 Antenna gain: 17 dBi  
Channel bandwidth: 40 MHz  
Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
Limit = -6.14 dBm - 30 dB = -36.14 dBm  
Frequency Range: 16 - 25 GHz



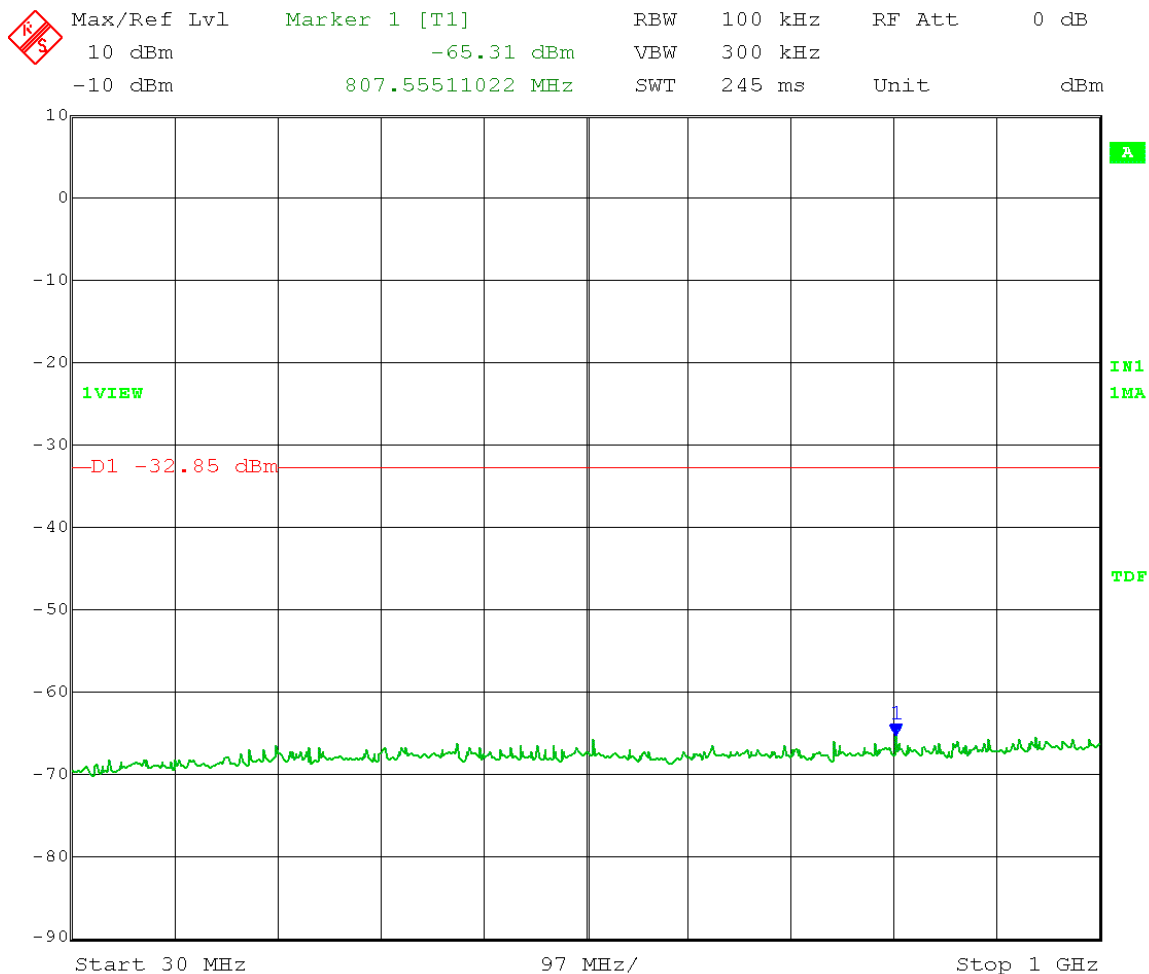
Date: 13.MAR.2014 10:18:49

Test Date: 03-13-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold Mid Channel Transmit = 2437 MHz  
Point-to-Point & Point-to-Multipoint operation  
Output Power Setting 11.5 Antenna gain: 17 dBi  
Channel bandwidth: 40 MHz  
Output port: 1 OFDM MCS15  
**Reference Level Measurement**  
Limit = -2.85 dBm – 30 dB = -32.85 dBm



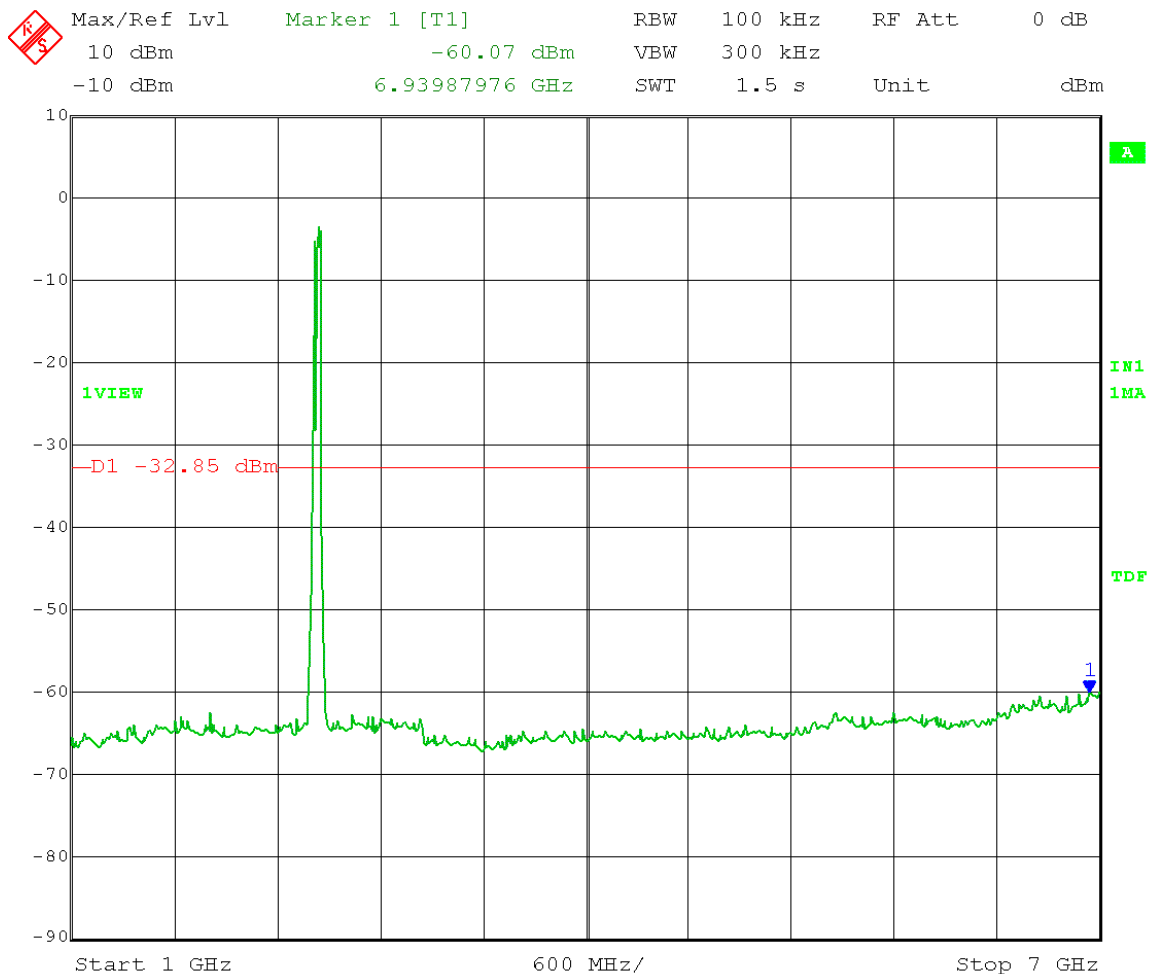
Date: 13.MAR.2014 10:01:29

Test Date: 03-13-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold Mid Channel Transmit = 2437 MHz  
Point-to-Point & Point-to-Multipoint operation  
Output Power Setting 11.5 Antenna gain: 17 dBi  
Channel bandwidth: 40 MHz  
Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
Limit = -2.85 dBm – 30 dB = -32.85 dBm  
Frequency Range: 30 – 1000 MHz



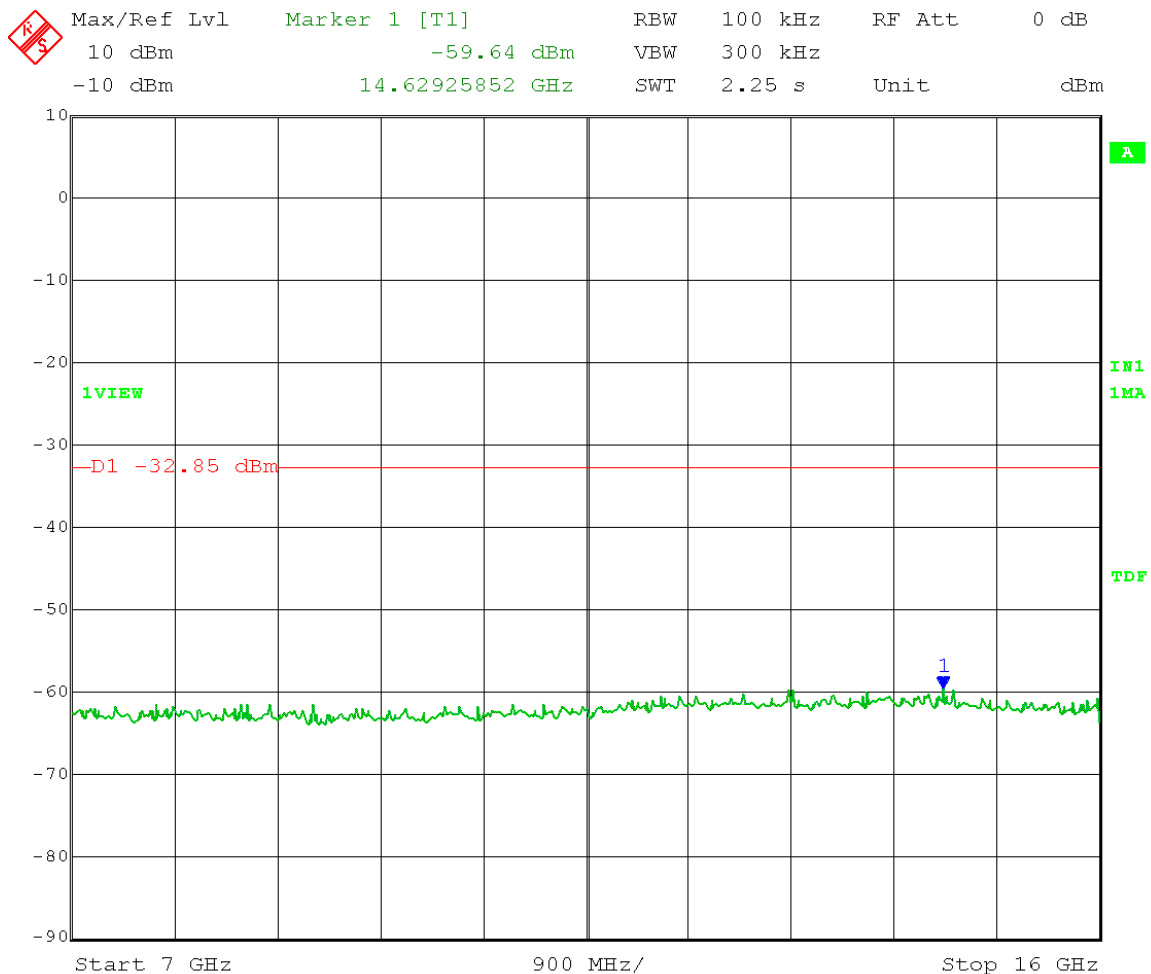
Date: 13.MAR.2014 10:08:53

Test Date: 03-13-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold Mid Channel Transmit = 2437 MHz  
Point-to-Point & Point-to-Multipoint operation  
Output Power Setting 11.5 Antenna gain: 17 dBi  
Channel bandwidth: 40 MHz  
Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
Limit = -2.85 dBm - 30 dB = -32.85 dBm  
Frequency Range: 1 - 7 GHz



Date: 13.MAR.2014 10:03:54

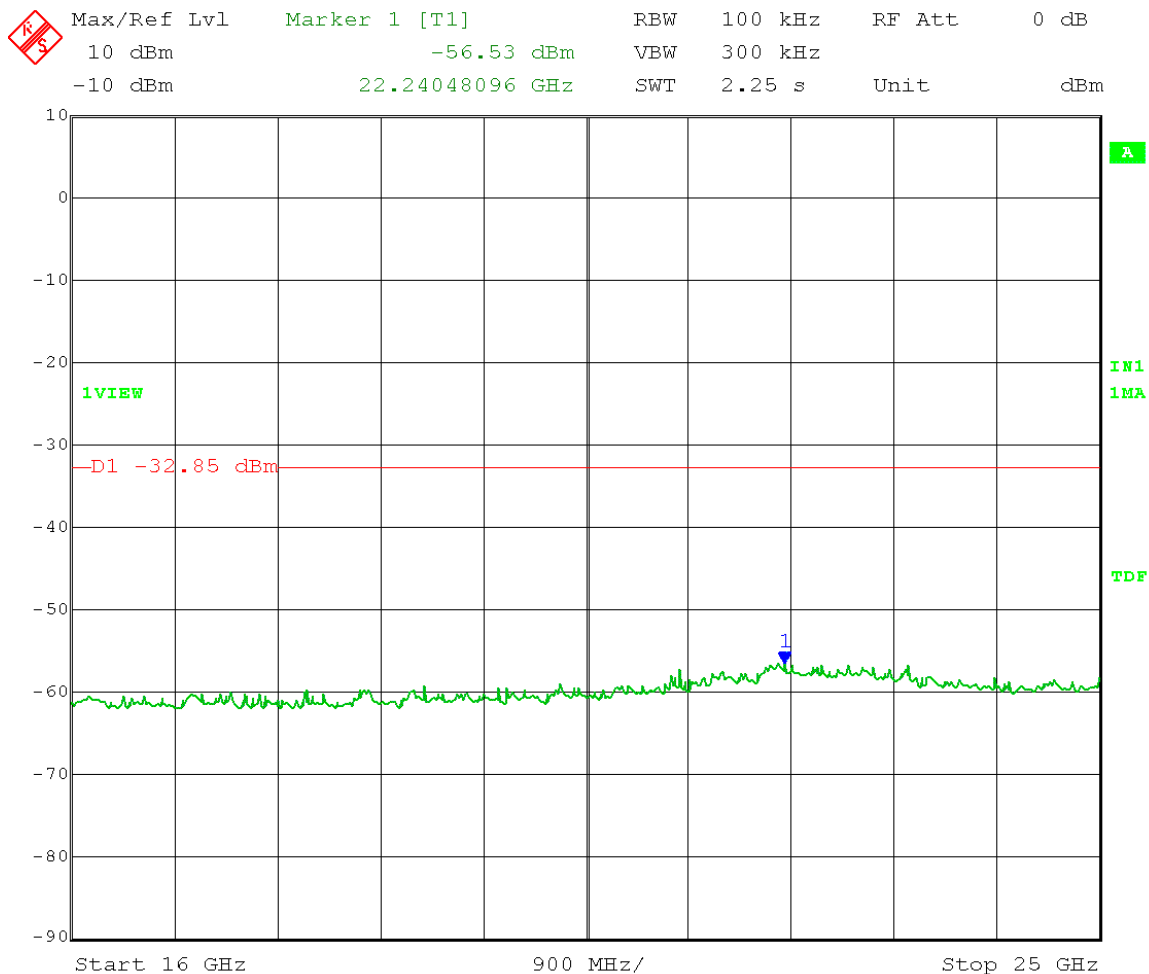
Test Date: 03-13-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold Mid Channel Transmit = 2437 MHz  
Point-to-Point & Point-to-Multipoint operation  
Output Power Setting 11.5 Antenna gain: 17 dBi  
Channel bandwidth: 40 MHz  
Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
Limit = -2.85 dBm - 30 dB = -32.85 dBm  
Frequency Range: 7 - 16 GHz



Date: 13.MAR.2014 10:05:39

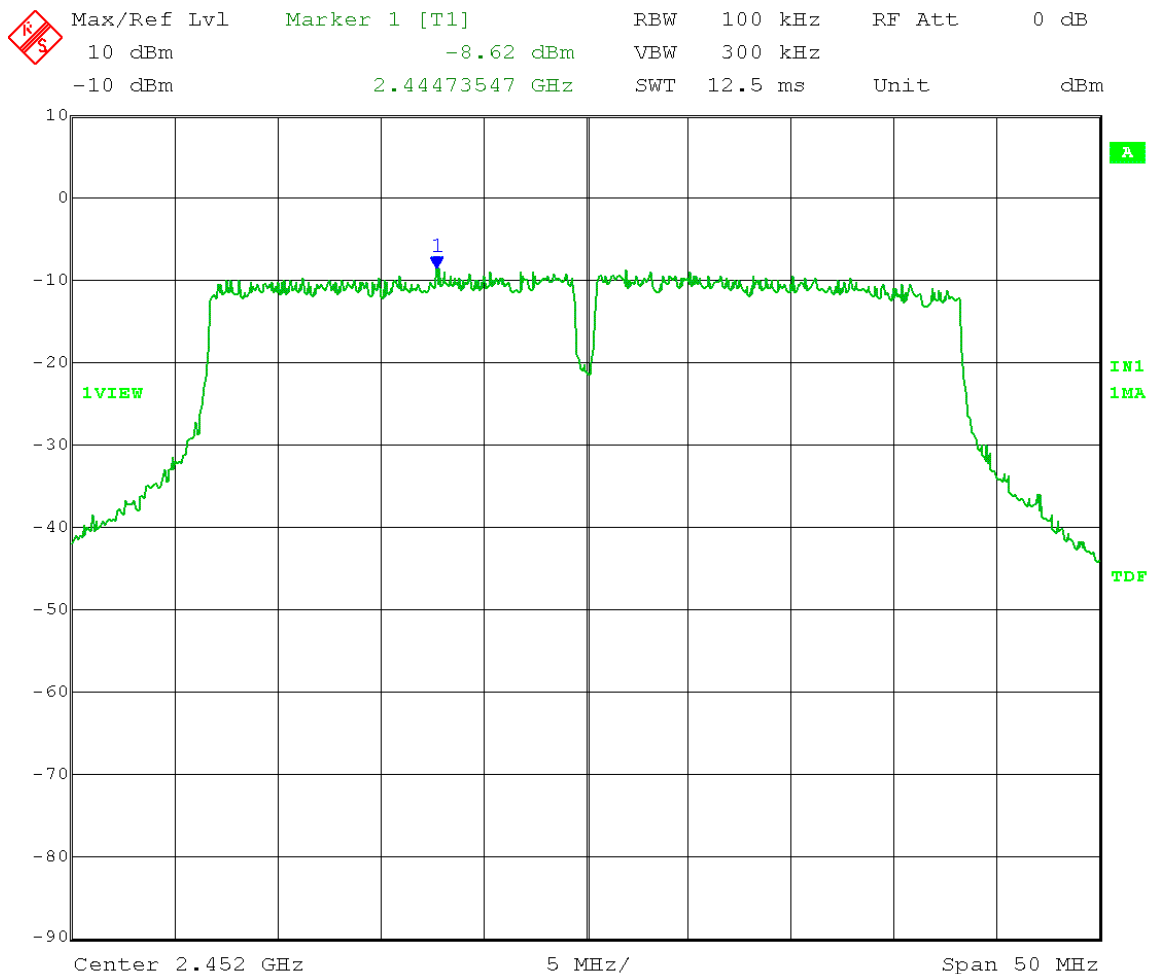


Test Date: 03-13-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold Mid Channel Transmit = 2437 MHz  
Point-to-Point & Point-to-Multipoint operation  
Output Power Setting 11.5 Antenna gain: 17 dBi  
Channel bandwidth: 40 MHz  
Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
Limit = -2.85 dBm - 30 dB = -32.85 dBm  
Frequency Range: 16 - 25 GHz



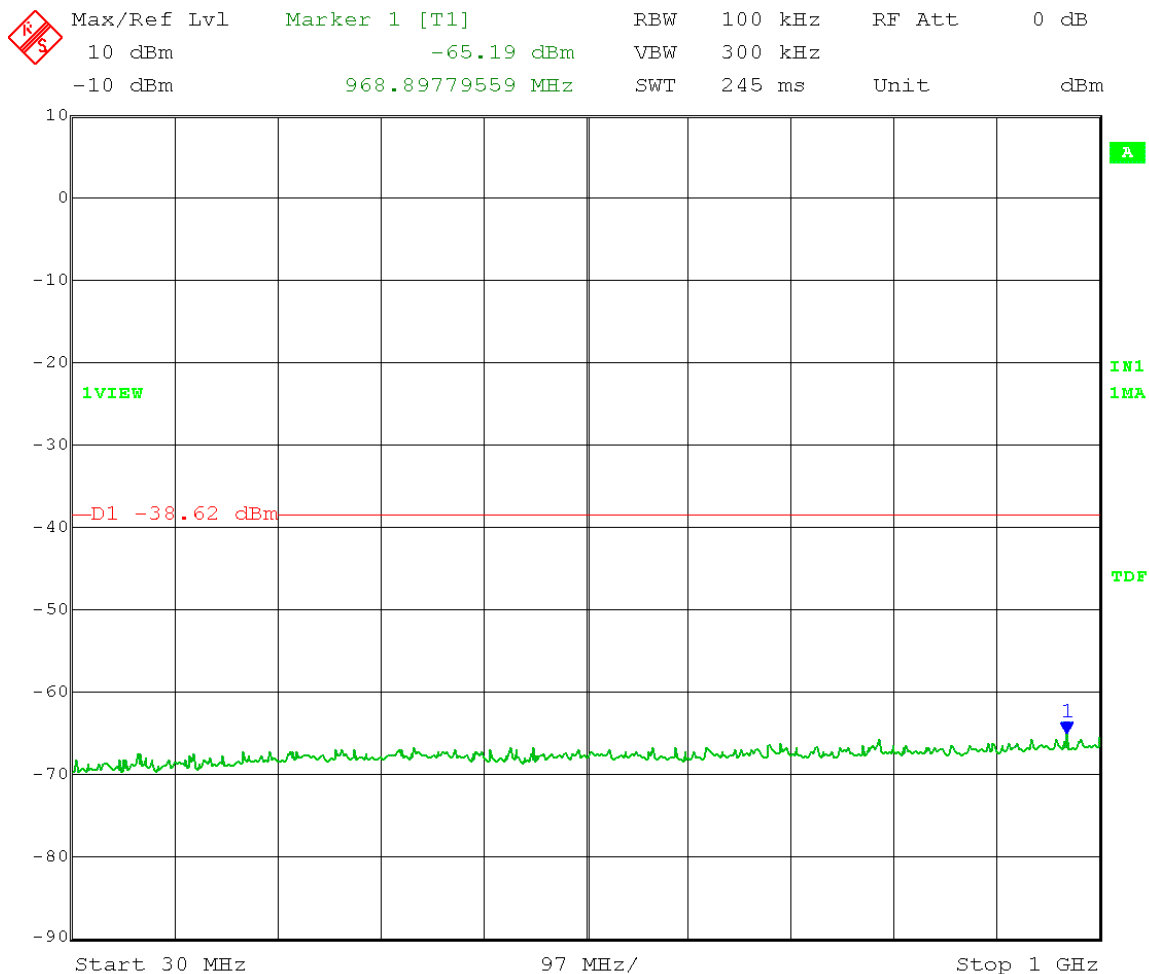
Date: 13.MAR.2014 10:07:24

Test Date: 03-13-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
 Test: Maximum Unwanted Emission Levels - Conducted  
 Operator: Craig B  
 Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
 Detector = Peak Sweep = Auto Couple  
 Trace = Max Hold High Channel Transmit = 2452 MHz  
 Point-to-Point & Point-to-Multipoint operation  
 Output Power Setting 6.5 Antenna gain: 17 dBi  
 Channel bandwidth: 40 MHz  
 Output port: 1 OFDM MCS15  
**Reference Level Measurement**  
 Limit = -8.62 dBm – 30 dB = -38.62 dBm



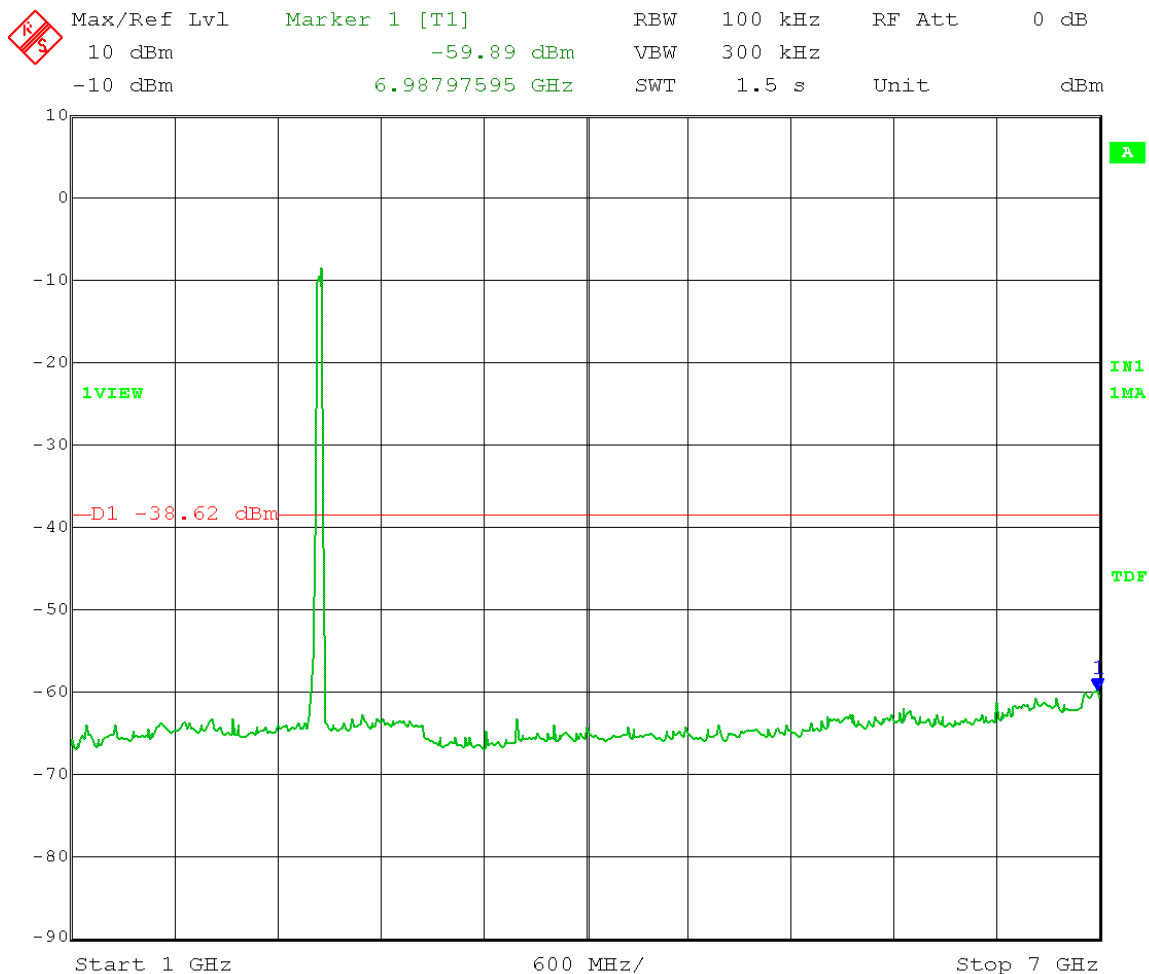
Date: 13.MAR.2014 10:24:00

Test Date: 03-13-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold High Channel Transmit = 2452 MHz  
Point-to-Point & Point-to-Multipoint operation  
Output Power Setting 6.5 Antenna gain: 17 dBi  
Channel bandwidth: 40 MHz  
Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
Limit = -8.62 dBm - 30 dB = -38.62 dBm  
Frequency Range: 30 - 1000 MHz



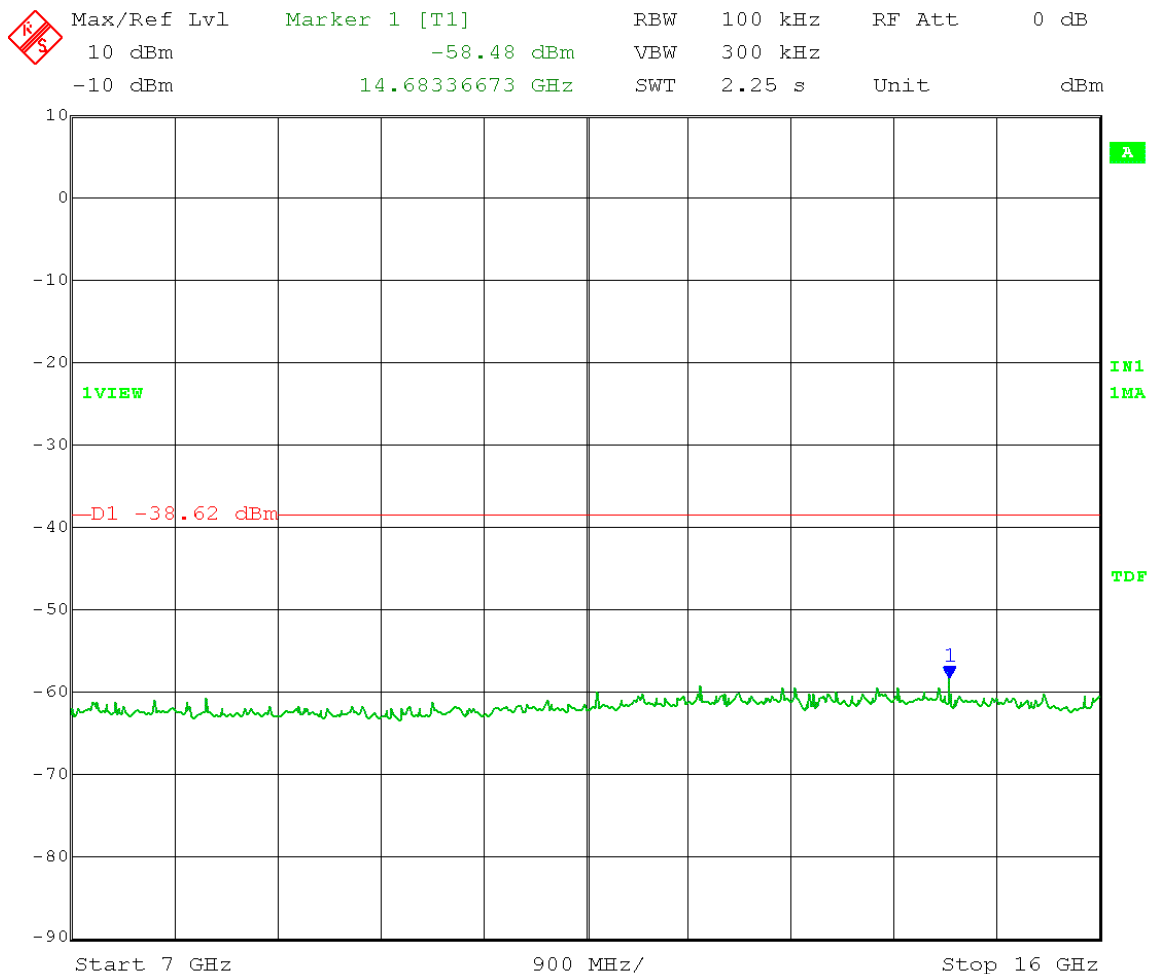
Date: 13.MAR.2014 10:31:32

Test Date: 03-13-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold High Channel Transmit = 2452 MHz  
Point-to-Point & Point-to-Multipoint operation  
Output Power Setting 6.5 Antenna gain: 17 dBi  
Channel bandwidth: 40 MHz  
Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
Limit = -8.62 dBm - 30 dB = -38.62 dBm  
Frequency Range: 1 - 7 GHz



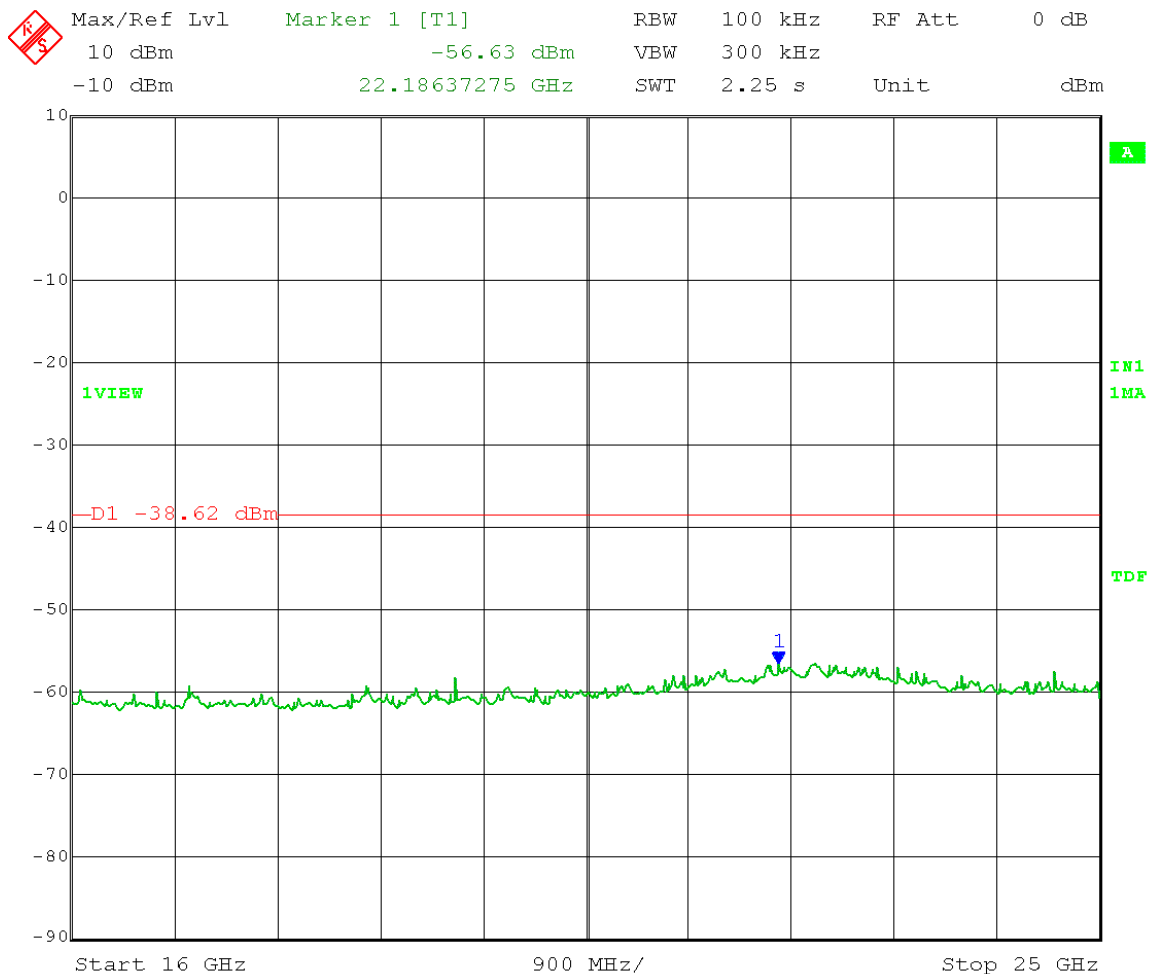
Date: 13.MAR.2014 10:26:44

Test Date: 03-13-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
 Test: Maximum Unwanted Emission Levels - Conducted  
 Operator: Craig B  
 Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
 Detector = Peak Sweep = Auto Couple  
 Trace = Max Hold High Channel Transmit = 2452 MHz  
 Point-to-Point & Point-to-Multipoint operation  
 Output Power Setting 6.5 Antenna gain: 17 dBi  
 Channel bandwidth: 40 MHz  
 Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
 Limit = -8.62 dBm - 30 dB = -38.62 dBm  
 Frequency Range: 7 - 16 GHz



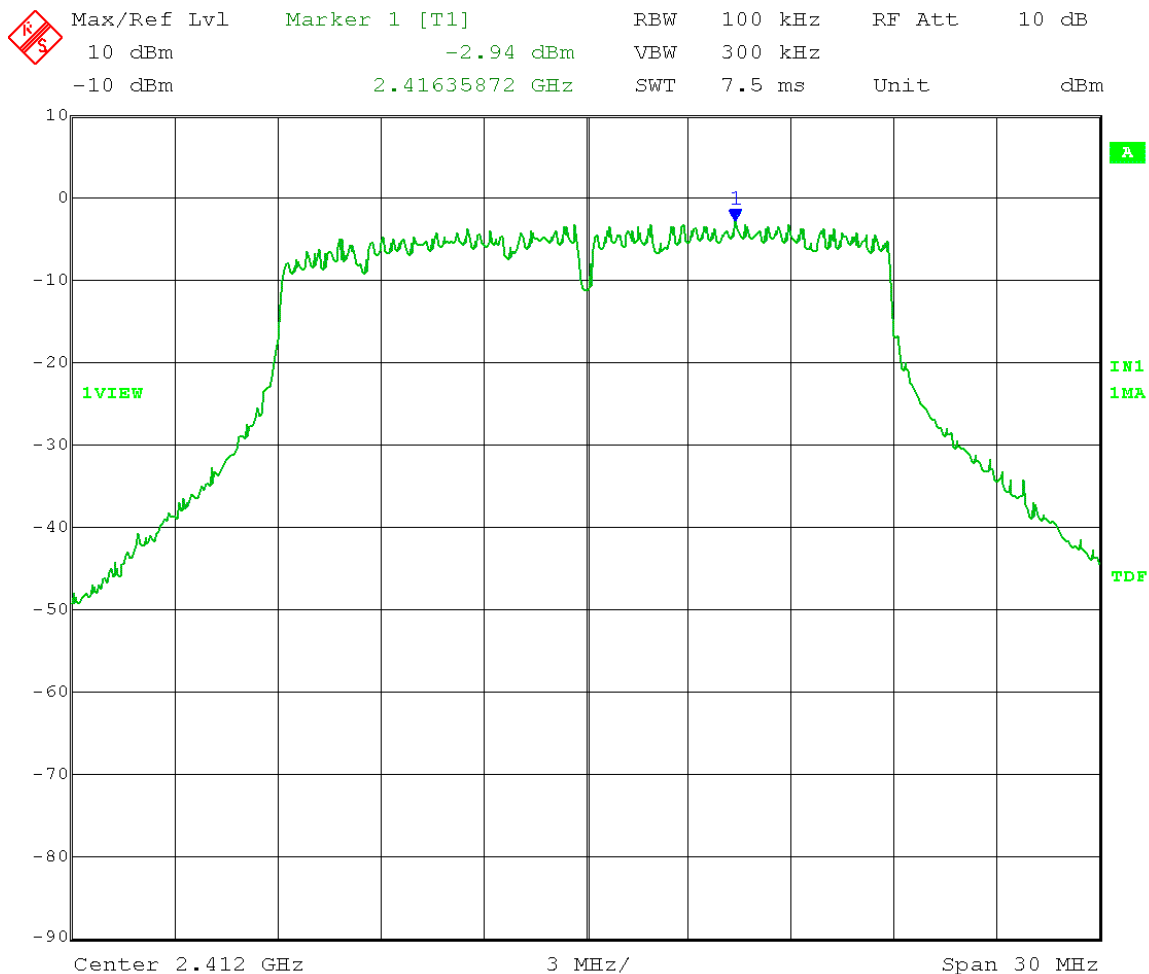
Date: 13.MAR.2014 10:28:33

Test Date: 03-13-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold High Channel Transmit = 2452 MHz  
Point-to-Point & Point-to-Multipoint operation  
Output Power Setting 6.5 Antenna gain: 17 dBi  
Channel bandwidth: 40 MHz  
Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
Limit = -8.62 dBm - 30 dB = -38.62 dBm  
Frequency Range: 16 - 25 GHz



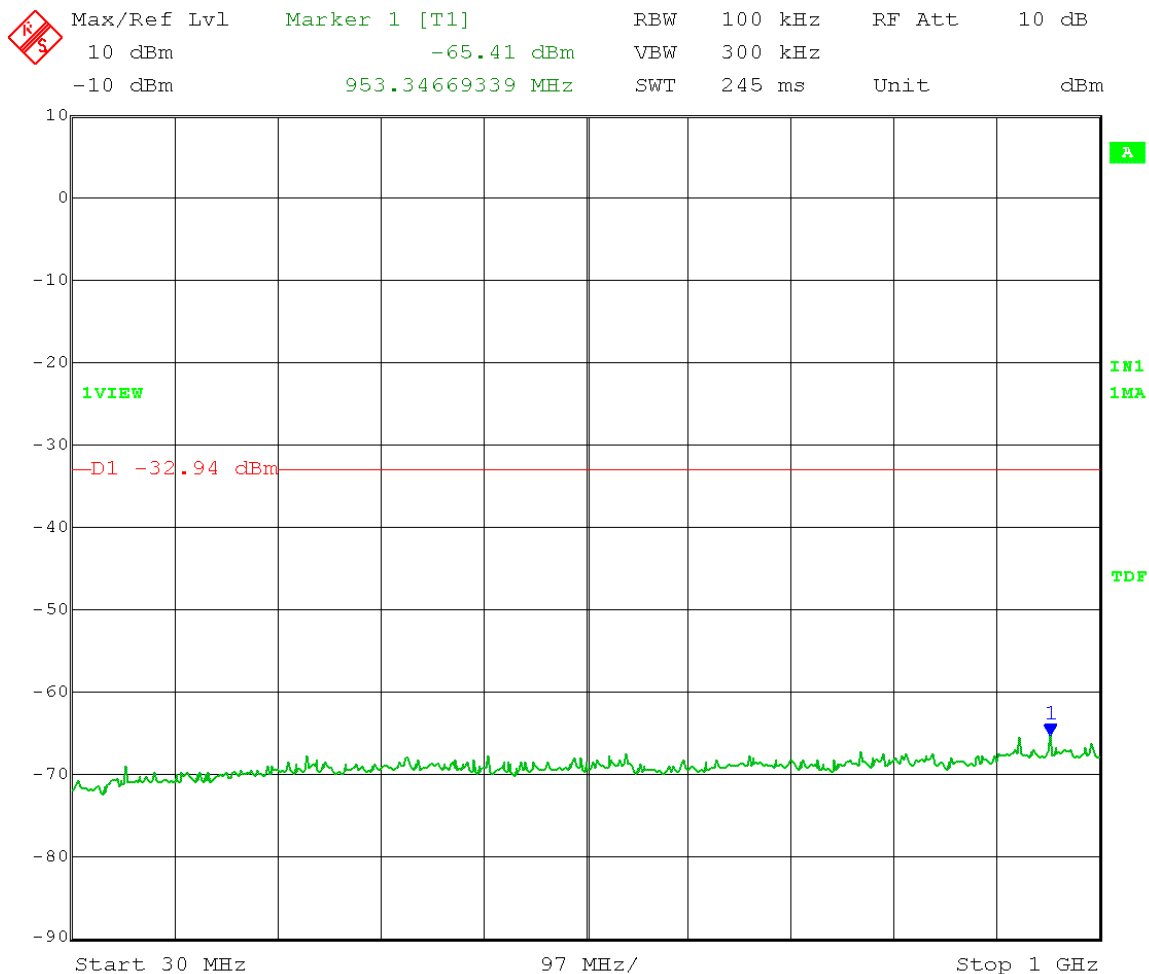
Date: 13.MAR.2014 10:29:59

Test Date: 03-15-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold Low Channel Transmit = 2412 MHz  
Point-to-Point & Point-to-Multipoint operation  
Output Power Setting 10.5 Antenna gain: 19 dBi  
Channel bandwidth: 20 MHz  
Output port: 1 OFDM MCS15  
**Reference Level Measurement**  
Limit = -2.94 dBm – 30 dB = -32.94 dBm



Date: 15.MAR.2014 11:25:48

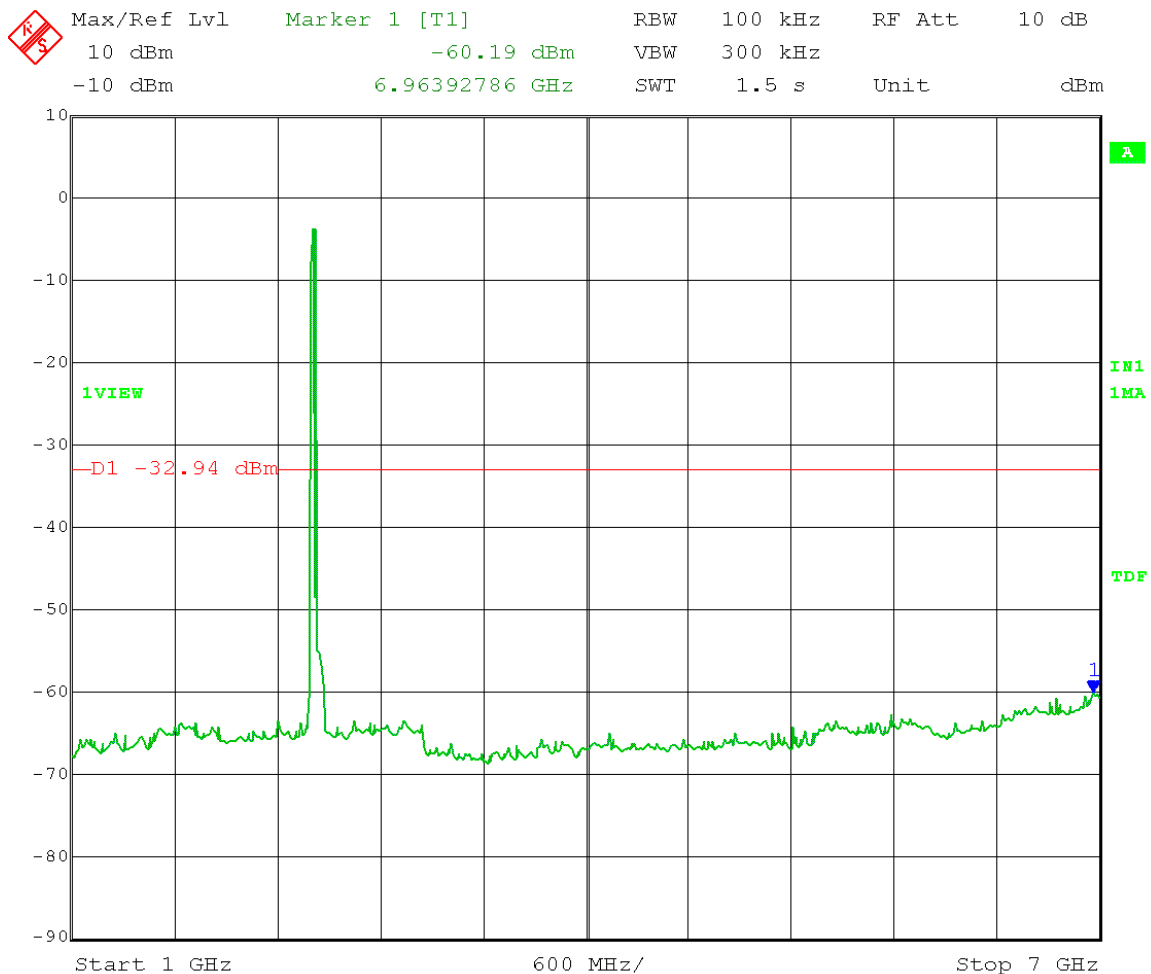
Test Date: 03-15-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold Low Channel Transmit = 2412 MHz  
Point-to-Point & Point-to-Multipoint operation  
Output Power Setting 10.5 Antenna gain: 19 dBi  
Channel bandwidth: 20 MHz  
Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
Limit = -2.94 dBm - 30 dB = -32.94 dBm  
Frequency Range: 30 - 1000 MHz



Date: 15.MAR.2014 11:31:47

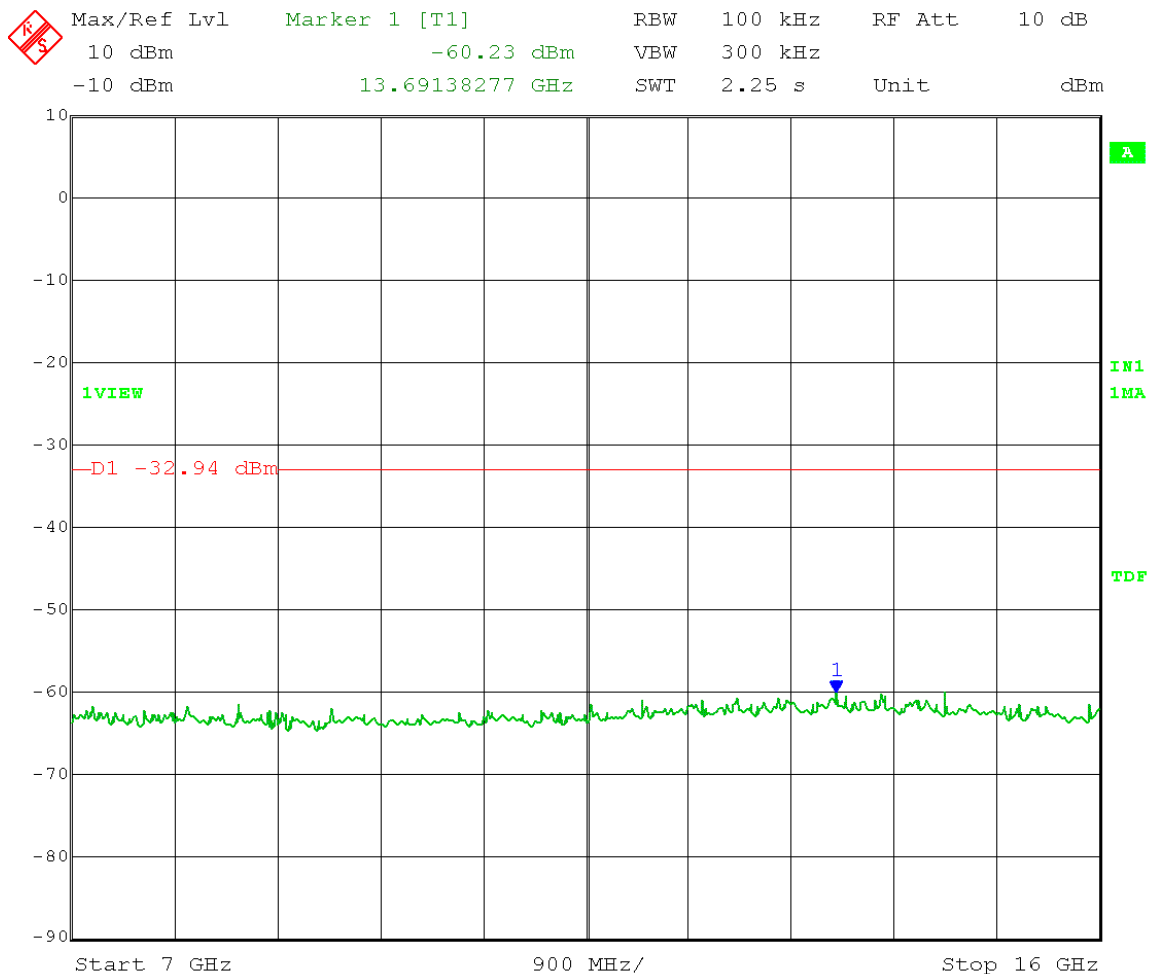


Test Date: 03-15-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold Low Channel Transmit = 2412 MHz  
Point-to-Point & Point-to-Multipoint operation  
Output Power Setting 10.5 Antenna gain: 19 dBi  
Channel bandwidth: 20 MHz  
Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
Limit = -2.94 dBm - 30 dB = -32.94 dBm  
Frequency Range: 1 - 7 GHz



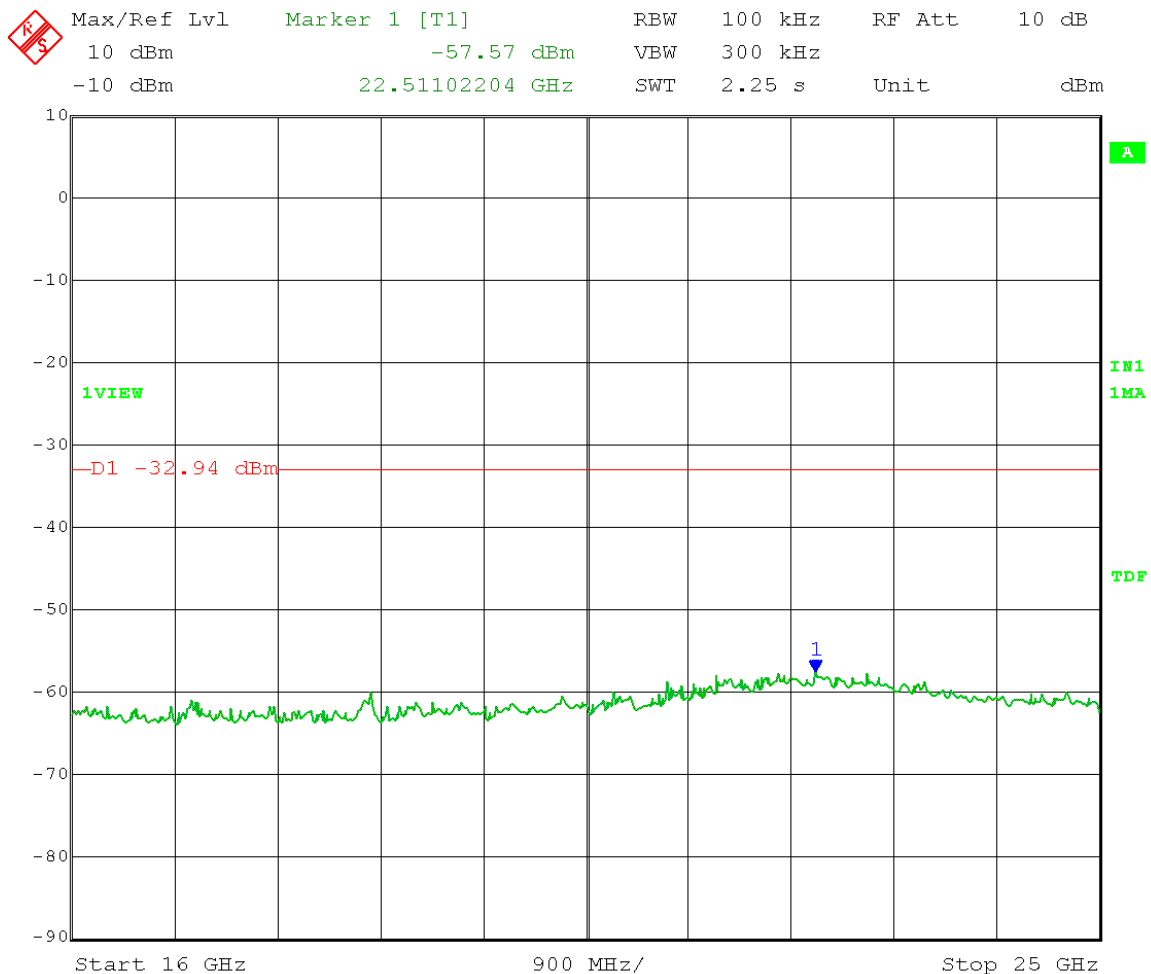
Date: 15.MAR.2014 11:27:39

Test Date: 03-15-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold Low Channel Transmit = 2412 MHz  
Point-to-Point & Point-to-Multipoint operation  
Output Power Setting 10.5 Antenna gain: 19 dBi  
Channel bandwidth: 20 MHz  
Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
Limit = -2.94 dBm - 30 dB = -32.94 dBm  
Frequency Range: 7 - 16 GHz



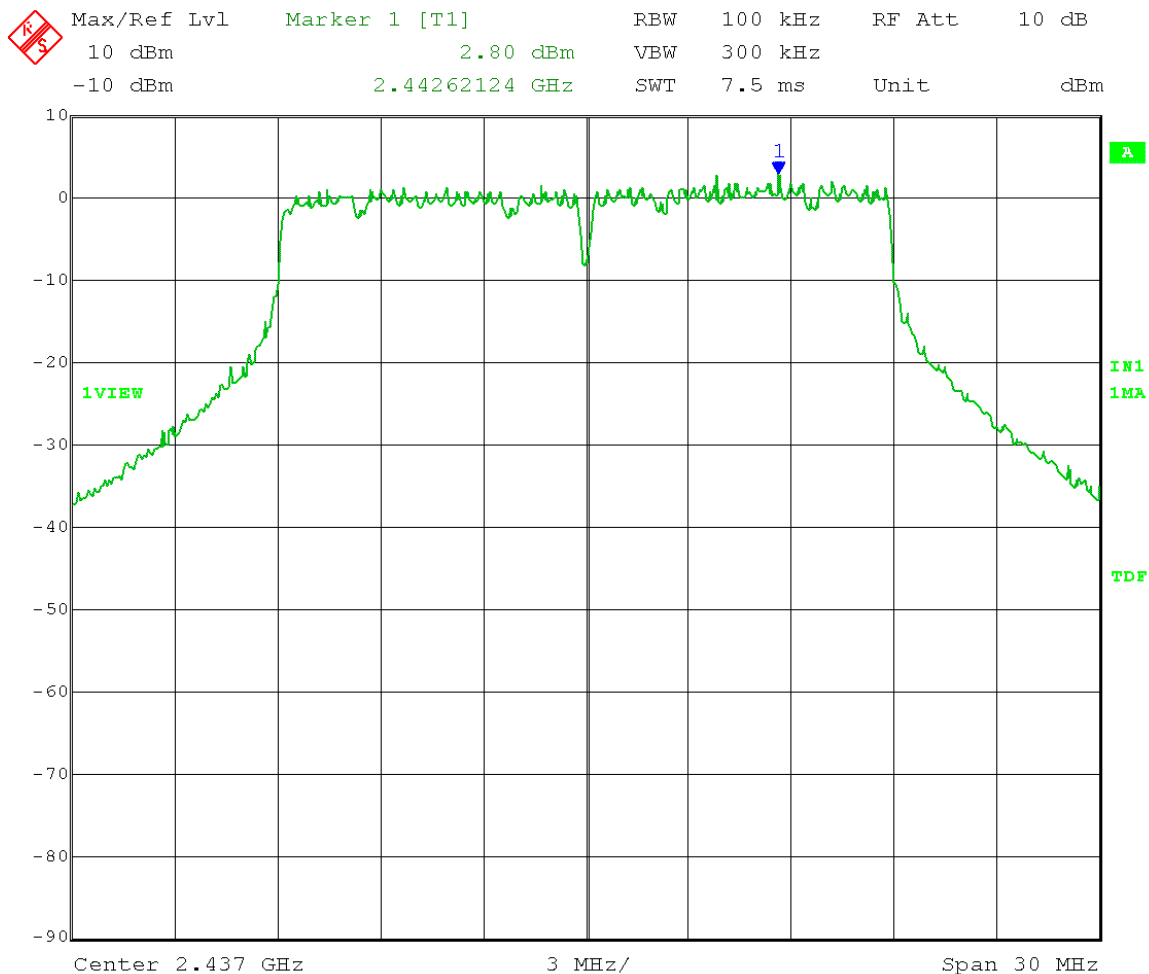
Date: 15.MAR.2014 11:29:05

Test Date: 03-15-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold Low Channel Transmit = 2412 MHz  
Point-to-Point & Point-to-Multipoint operation  
Output Power Setting 10.5 Antenna gain: 19 dBi  
Channel bandwidth: 20 MHz  
Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
Limit = -2.94 dBm - 30 dB = -32.94 dBm  
Frequency Range: 16 - 25 GHz



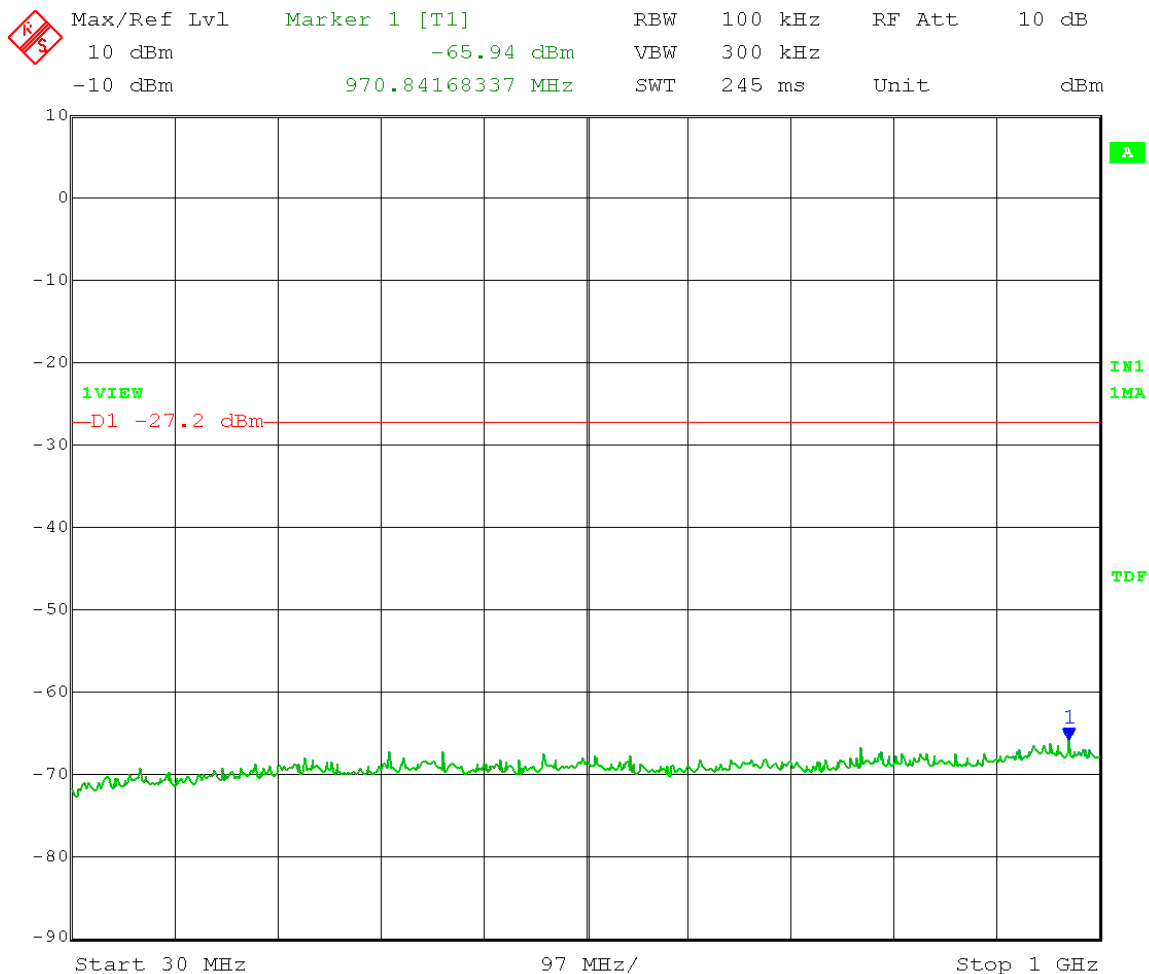
Date: 15.MAR.2014 11:30:15

Test Date: 03-15-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
 Test: Maximum Unwanted Emission Levels - Conducted  
 Operator: Craig B  
 Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
 Detector = Peak Sweep = Auto Couple  
 Trace = Max Hold Mid Channel Transmit = 2437 MHz  
 Point-to-Point & Point-to-Multipoint operation  
 Output Power Setting: 15 Antenna gain: 19 dBi  
 Channel bandwidth: 20 MHz  
 Output port: 1 OFDM MCS15  
**Reference Level Measurement**  
 Limit = 2.80 dBm – 30 dB = -27.2 dBm



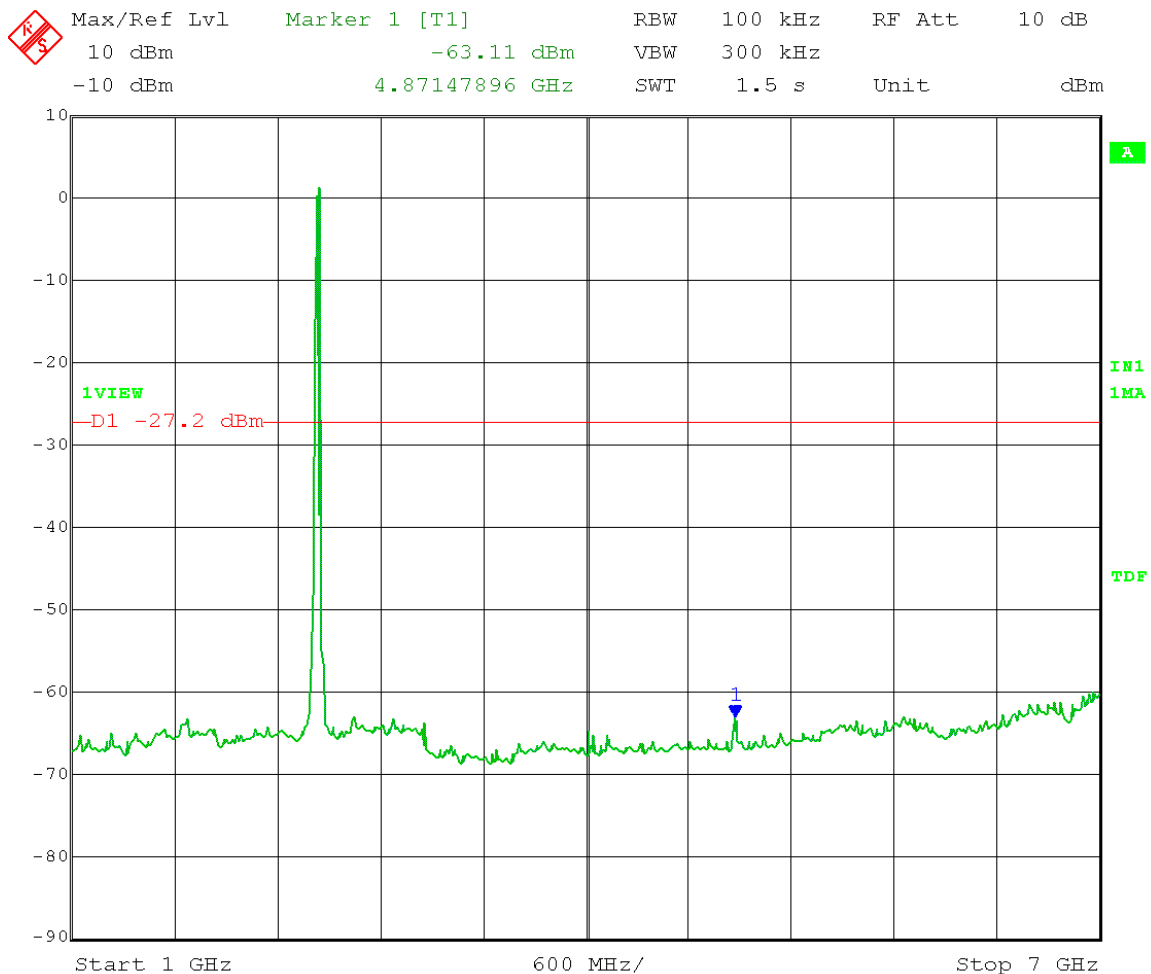
Date: 15.MAR.2014 11:07:58

Test Date: 03-15-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
 Test: Maximum Unwanted Emission Levels - Conducted  
 Operator: Craig B  
 Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
 Detector = Peak Sweep = Auto Couple  
 Trace = Max Hold Mid Channel Transmit = 2437 MHz  
 Point-to-Point & Point-to-Multipoint operation  
 Output Power Setting: 15 Antenna gain: 19 dBi  
 Channel bandwidth: 20 MHz  
 Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
 Limit = 2.80 dBm – 30 dB = -27.2 dBm  
 Frequency Range: 30 – 1000 MHz



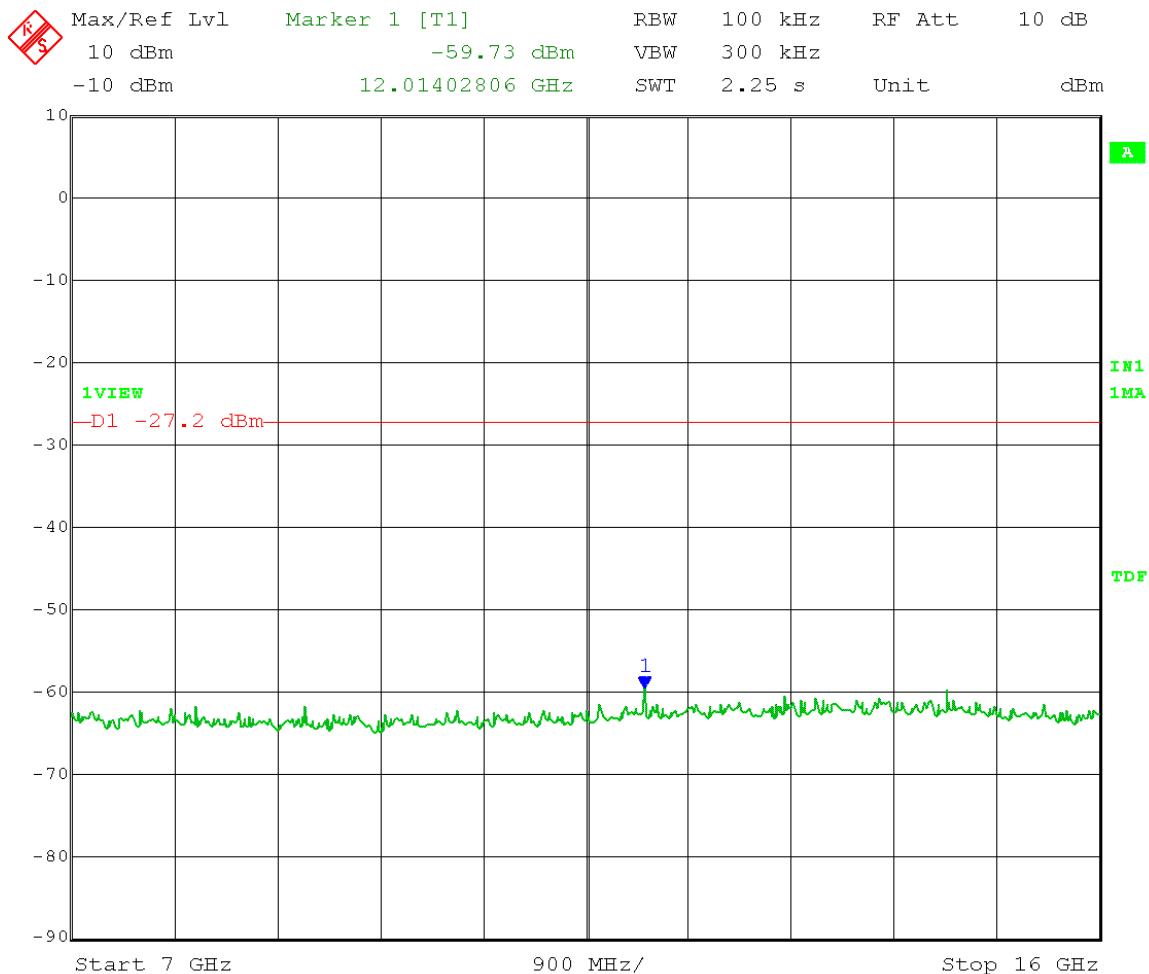
Date: 15.MAR.2014 11:14:08

Test Date: 03-15-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold Mid Channel Transmit = 2437 MHz  
Point-to-Point & Point-to-Multipoint operation  
Output Power Setting: 15 Antenna gain: 19 dBi  
Channel bandwidth: 20 MHz  
Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
Limit = 2.80 dBm - 30 dB = -27.2 dBm  
Frequency Range: 1 - 7 GHz



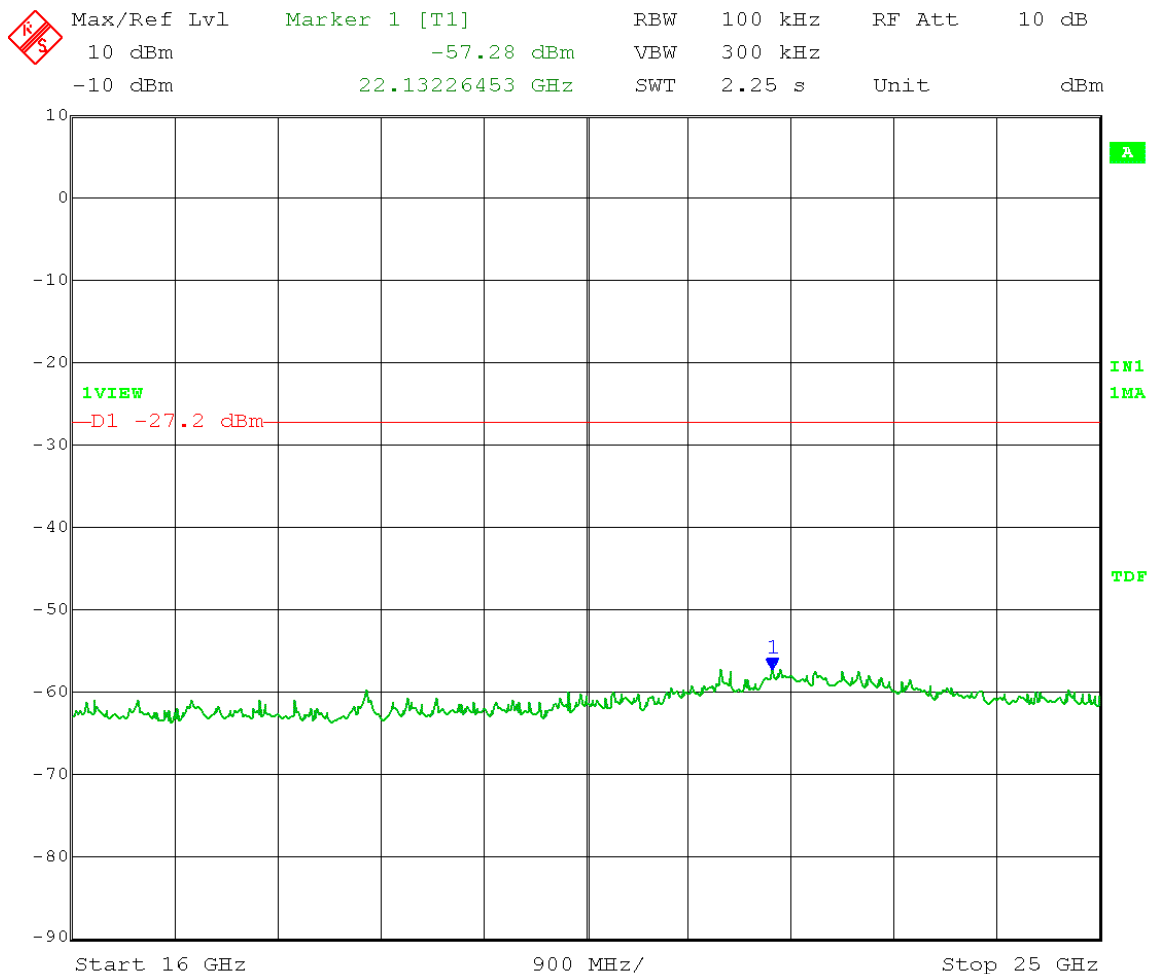
Date: 15.MAR.2014 11:09:49

Test Date: 03-15-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
 Test: Maximum Unwanted Emission Levels - Conducted  
 Operator: Craig B  
 Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
 Detector = Peak Sweep = Auto Couple  
 Trace = Max Hold Mid Channel Transmit = 2437 MHz  
 Point-to-Point & Point-to-Multipoint operation  
 Output Power Setting: 15 Antenna gain: 19 dBi  
 Channel bandwidth: 20 MHz  
 Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
 Limit = 2.80 dBm - 30 dB = -27.2 dBm  
 Frequency Range: 7 - 16 GHz



Date: 15.MAR.2014 11:11:11

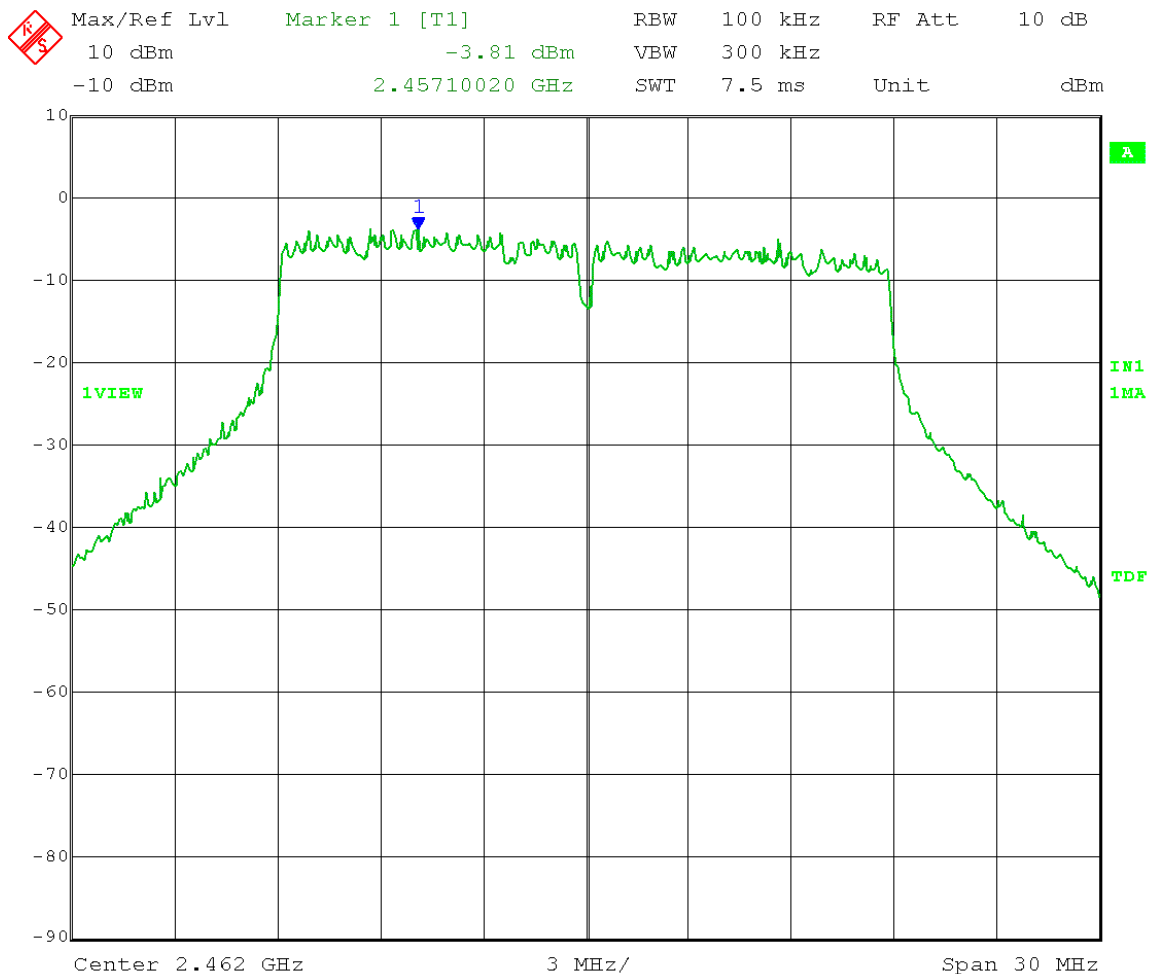
Test Date: 03-15-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold Mid Channel Transmit = 2437 MHz  
Point-to-Point & Point-to-Multipoint operation  
Output Power Setting: 15 Antenna gain: 19 dBi  
Channel bandwidth: 20 MHz  
Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
Limit = 2.80 dBm – 30 dB = -27.2 dBm  
Frequency Range: 16 – 25 GHz



Date: 15.MAR.2014 11:12:33

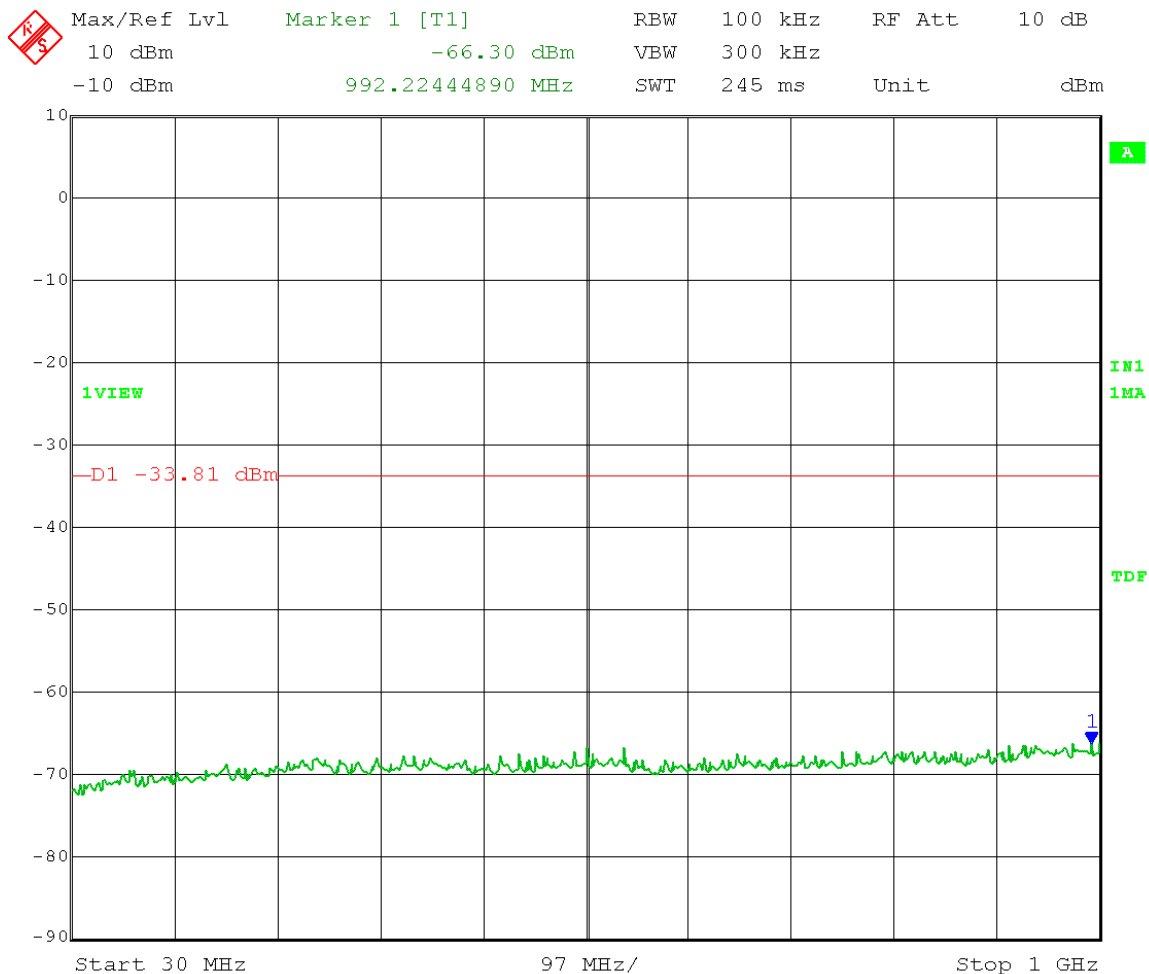


Test Date: 03-15-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
 Test: Maximum Unwanted Emission Levels - Conducted  
 Operator: Craig B  
 Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
 Detector = Peak Sweep = Auto Couple  
 Trace = Max Hold High Channel Transmit = 2462 MHz  
 Point-to-Point & Point-to-Multipoint operation  
 Output Power Setting 9 Antenna gain: 19 dBi  
 Channel bandwidth: 20 MHz  
 Output port: 1 OFDM MCS15  
**Reference Level Measurement**  
 Limit = -3.81 dBm – 30 dB = -33.81 dBm



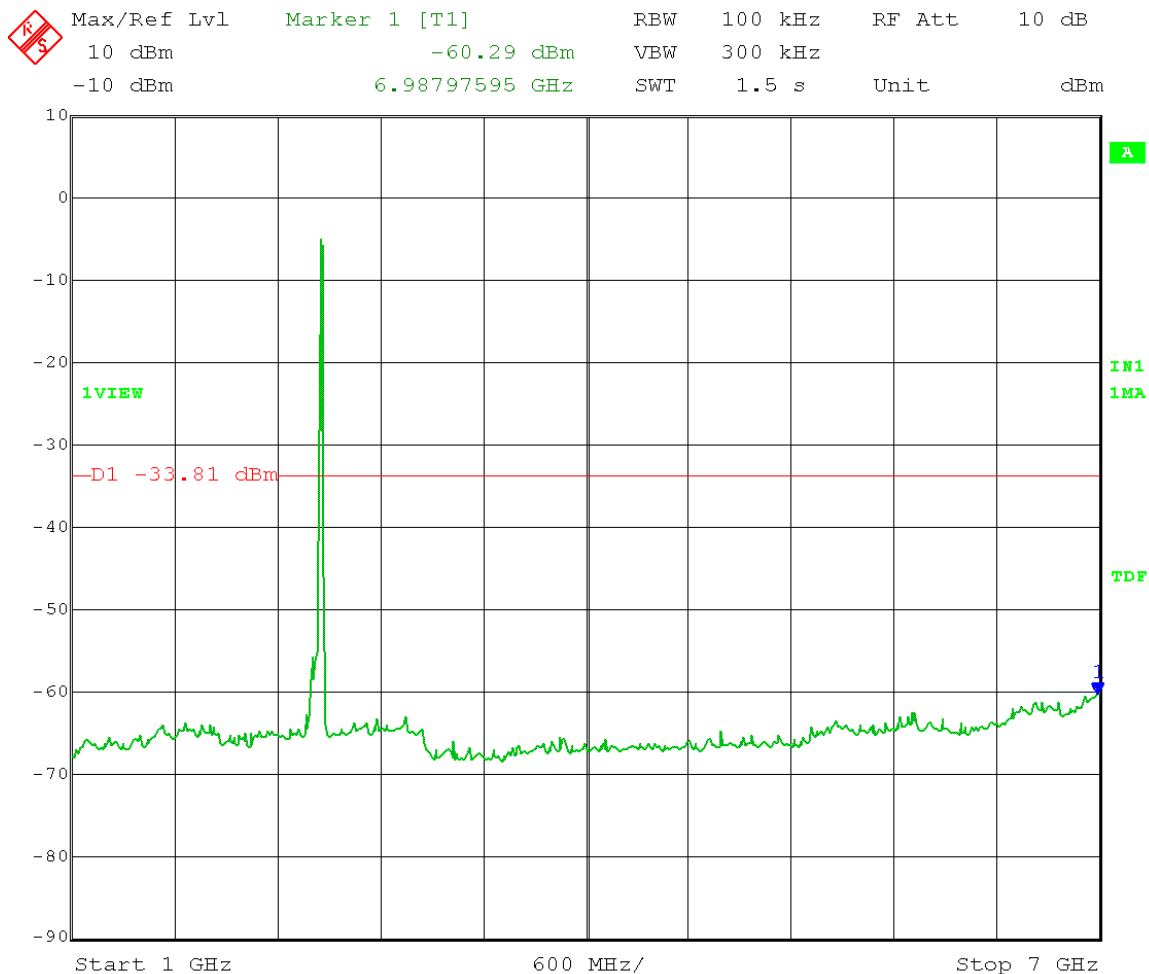
Date: 15.MAR.2014 11:34:56

Test Date: 03-15-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold High Channel Transmit = 2462 MHz  
Point-to-Point & Point-to-Multipoint operation  
Output Power Setting 9 Antenna gain: 19 dBi  
Channel bandwidth: 20 MHz  
Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
Limit = -3.81 dBm - 30 dB = -33.81 dBm  
Frequency Range: 30 - 1000 MHz



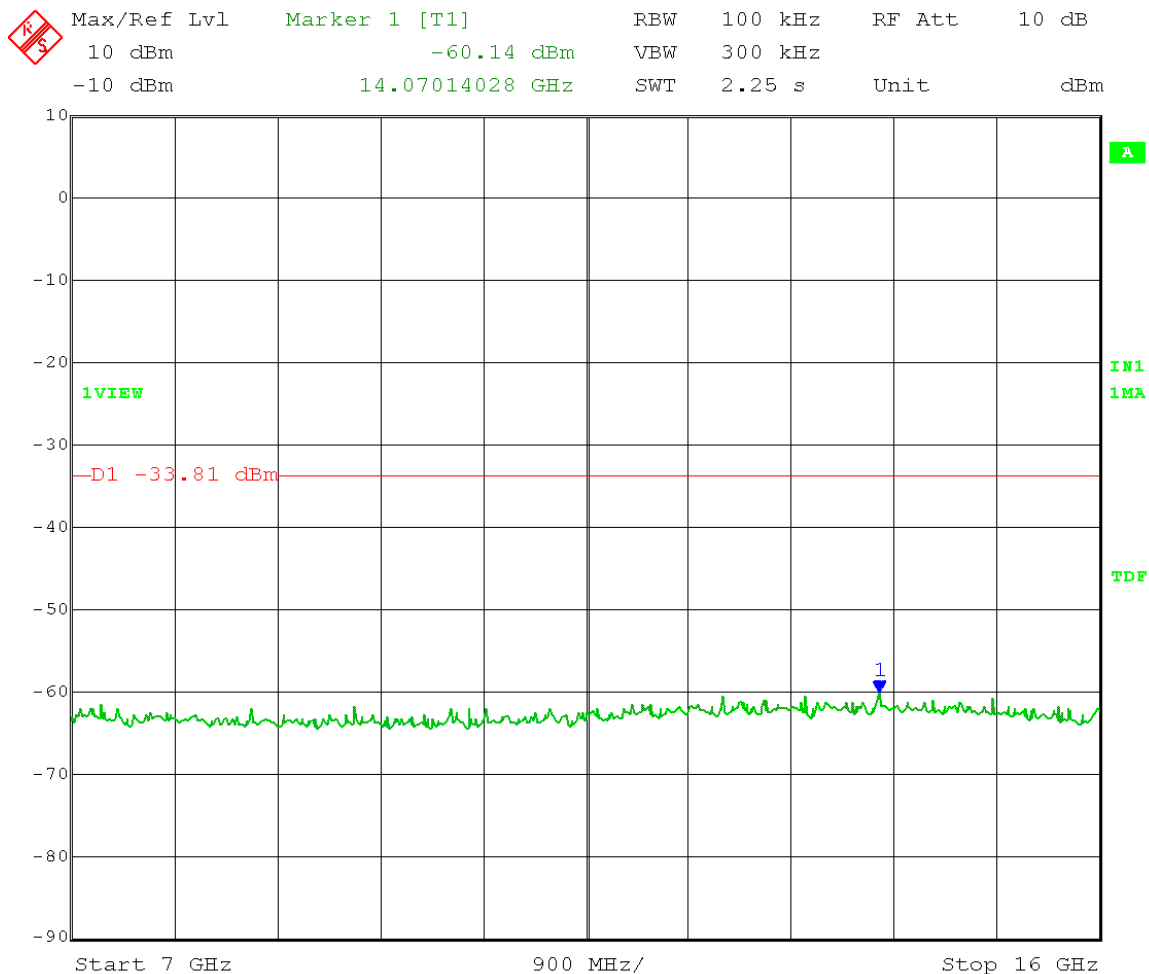
Date: 15.MAR.2014 11:42:35

Test Date: 03-15-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold High Channel Transmit = 2462 MHz  
Point-to-Point & Point-to-Multipoint operation  
Output Power Setting 9 Antenna gain: 19 dBi  
Channel bandwidth: 20 MHz  
Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
Limit = -3.81 dBm - 30 dB = -33.81 dBm  
Frequency Range: 1 - 7 GHz



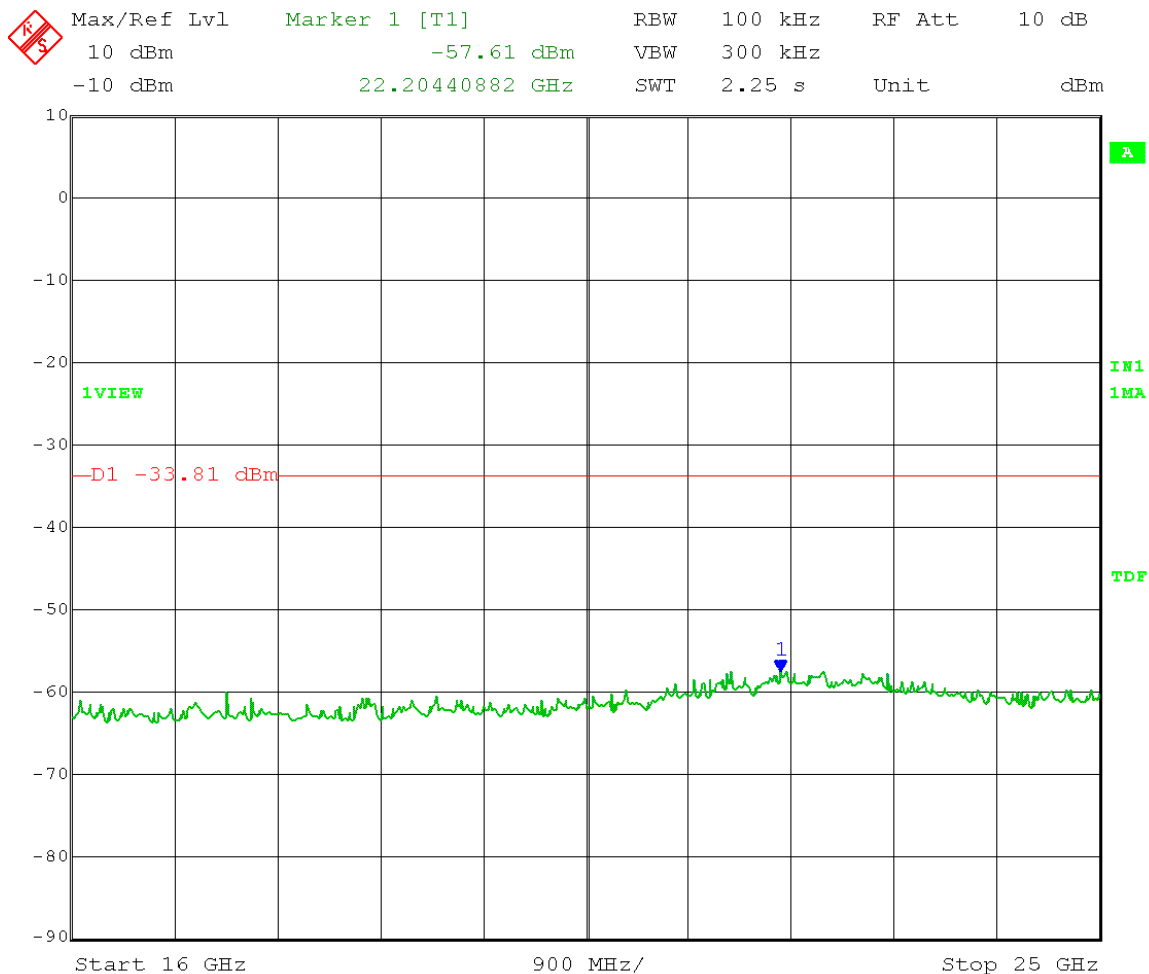
Date: 15.MAR.2014 11:37:41

Test Date: 03-15-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold High Channel Transmit = 2462 MHz  
Point-to-Point & Point-to-Multipoint operation  
Output Power Setting 9 Antenna gain: 19 dBi  
Channel bandwidth: 20 MHz  
Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
Limit = -3.81 dBm - 30 dB = -33.81 dBm  
Frequency Range: 7 - 16 GHz



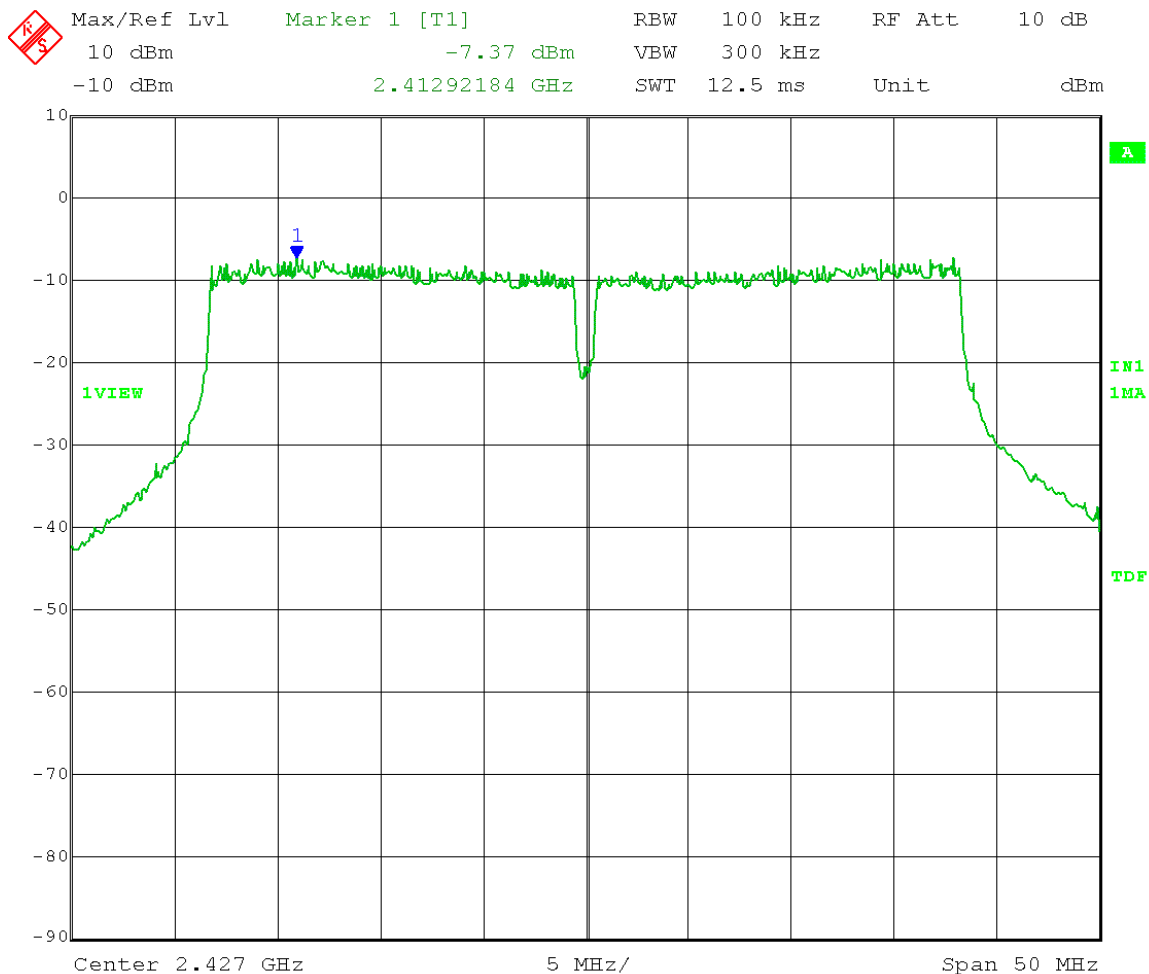
Date: 15.MAR.2014 11:39:16

Test Date: 03-15-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold High Channel Transmit = 2462 MHz  
Point-to-Point & Point-to-Multipoint operation  
Output Power Setting 9 Antenna gain: 19 dBi  
Channel bandwidth: 20 MHz  
Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
Limit = -3.81 dBm - 30 dB = -33.81 dBm  
Frequency Range: 16 - 25 GHz



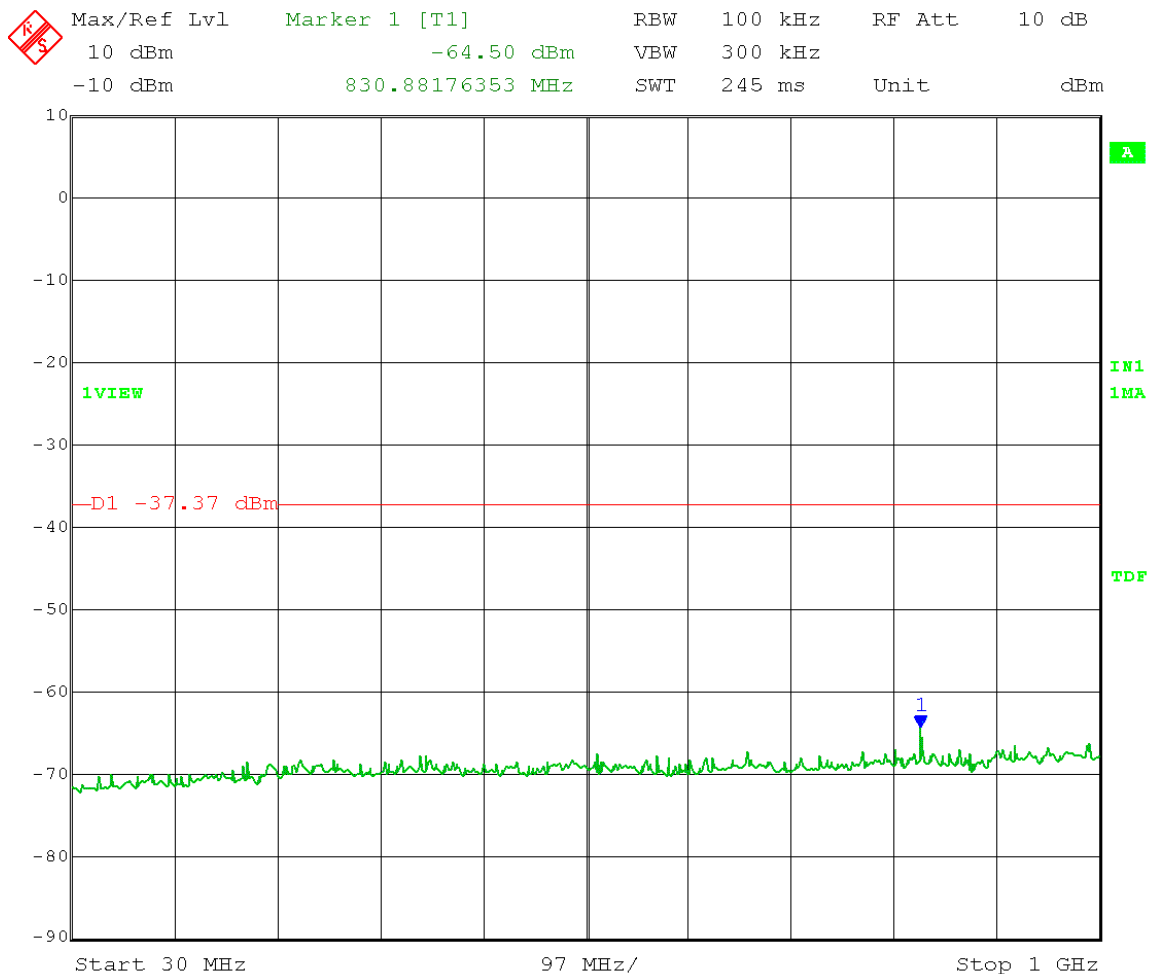
Date: 15.MAR.2014 11:40:33

Test Date: 03-15-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
 Test: Maximum Unwanted Emission Levels - Conducted  
 Operator: Craig B  
 Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
 Detector = Peak Sweep = Auto Couple  
 Trace = Max Hold Low Channel Transmit = 2427 MHz  
 Point-to-Point & Point-to-Multipoint operation  
 Output Power Setting 9 Antenna gain: 19 dBi  
 Channel bandwidth: 40 MHz  
 Output port: 1 OFDM MCS15  
**Reference Level Measurement**  
 Limit = -7.37 dBm – 30 dB = -37.37 dBm



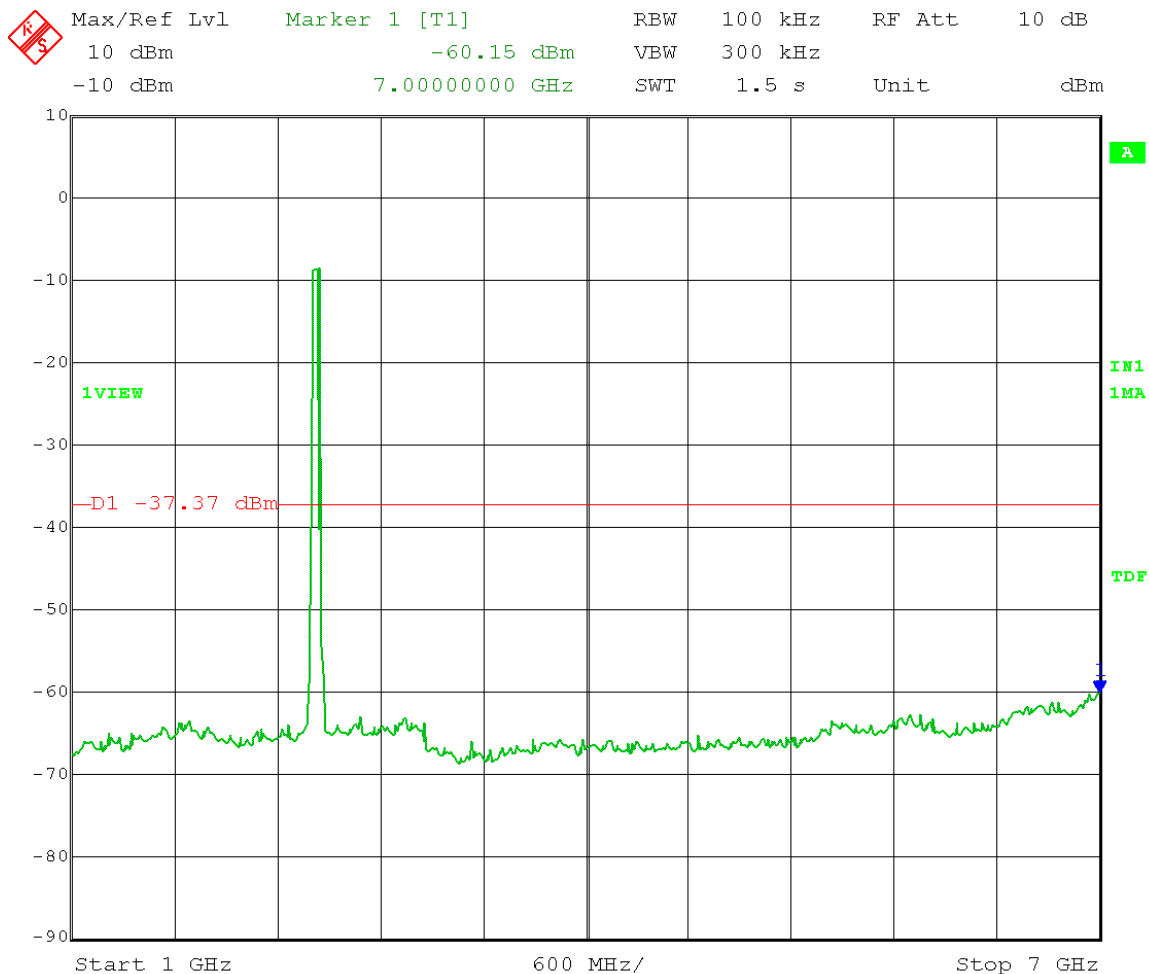
Date: 15.MAR.2014 12:06:53

Test Date: 03-15-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold Low Channel Transmit = 2427 MHz  
Point-to-Point & Point-to-Multipoint operation  
Output Power Setting 9 Antenna gain: 19 dBi  
Channel bandwidth: 40 MHz  
Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
Limit = -7.37 dBm - 30 dB = -37.37 dBm  
Frequency Range: 30 - 1000 MHz



Date: 15.MAR.2014 12:12:55

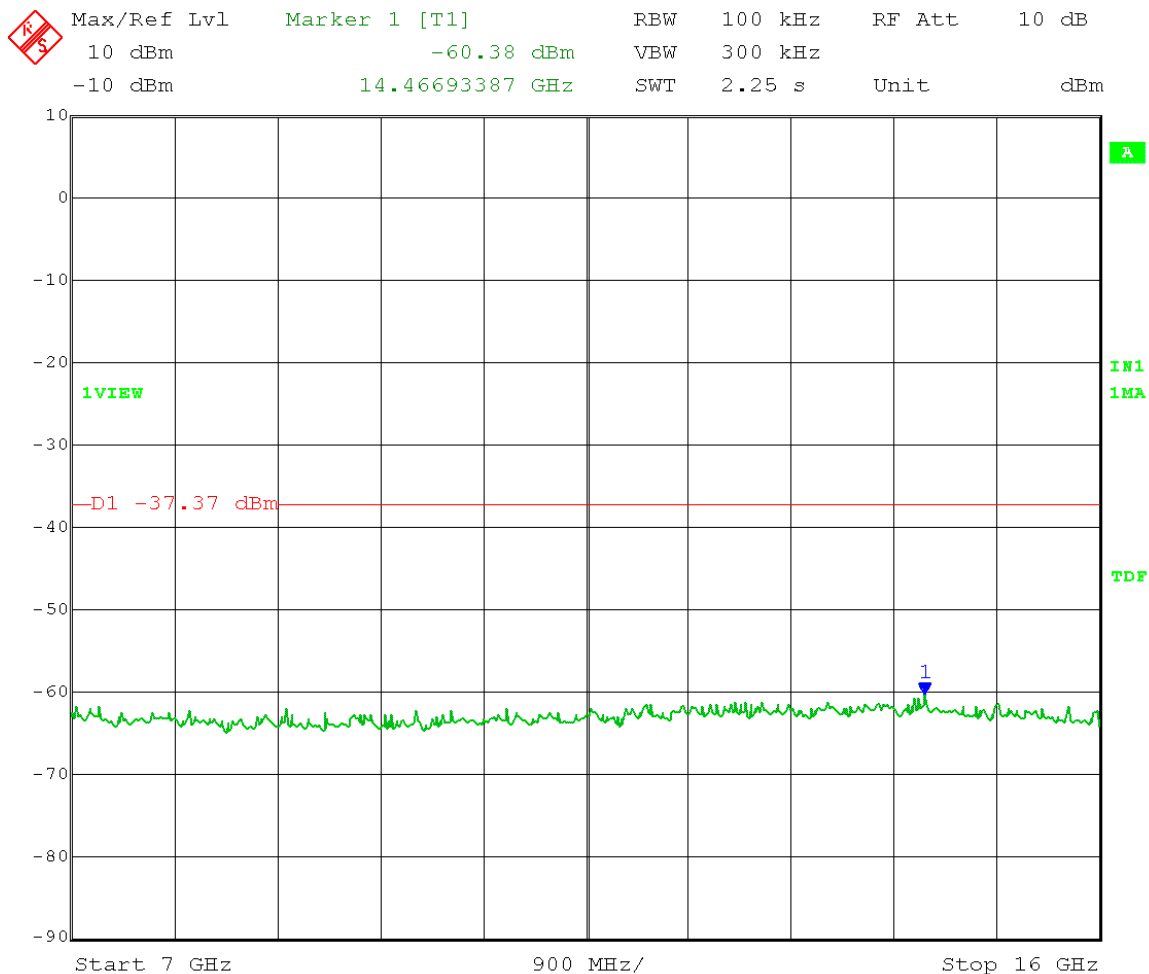
Test Date: 03-15-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold Low Channel Transmit = 2427 MHz  
Point-to-Point & Point-to-Multipoint operation  
Output Power Setting 9 Antenna gain: 19 dBi  
Channel bandwidth: 40 MHz  
Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
Limit = -7.37 dBm - 30 dB = -37.37 dBm  
Frequency Range: 1 - 7 GHz



Date: 15.MAR.2014 12:09:14

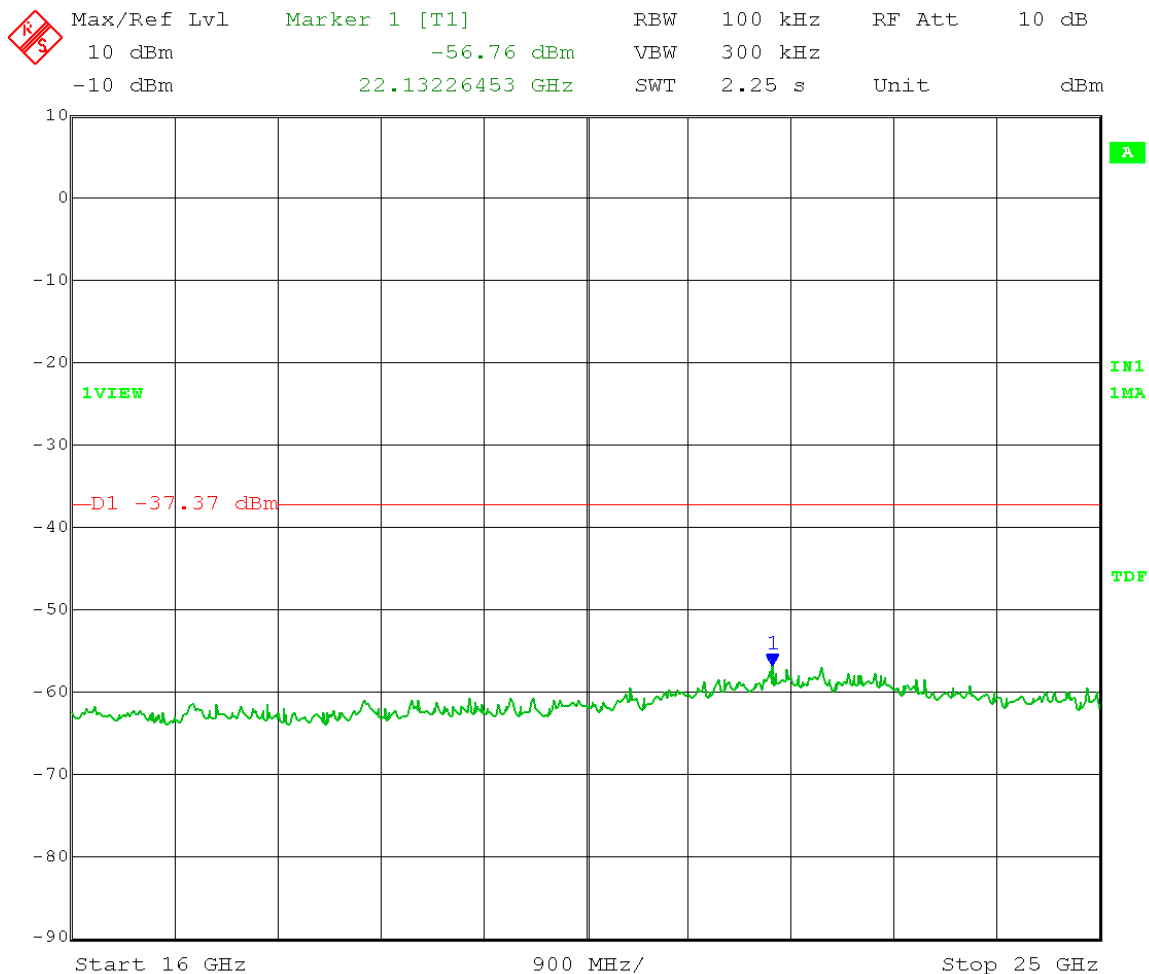


Test Date: 03-15-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold Low Channel Transmit = 2427 MHz  
Point-to-Point & Point-to-Multipoint operation  
Output Power Setting 9 Antenna gain: 19 dBi  
Channel bandwidth: 40 MHz  
Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
Limit = -7.37 dBm - 30 dB = -37.37 dBm  
Frequency Range: 7 - 16 GHz



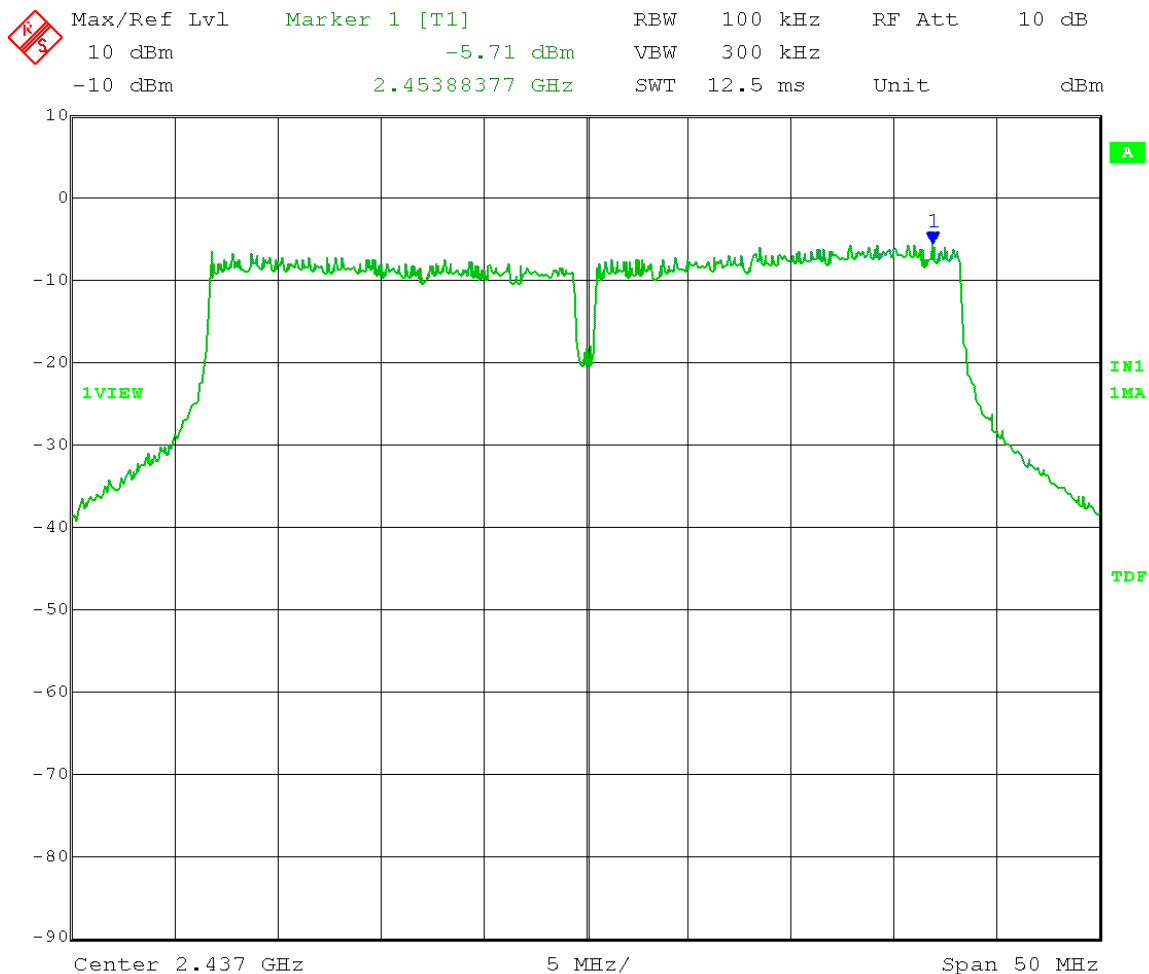
Date: 15.MAR.2014 12:10:28

Test Date: 03-15-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold Low Channel Transmit = 2427 MHz  
Point-to-Point & Point-to-Multipoint operation  
Output Power Setting 9 Antenna gain: 19 dBi  
Channel bandwidth: 40 MHz  
Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
Limit = -7.37 dBm - 30 dB = -37.37 dBm  
Frequency Range: 16 - 25 GHz



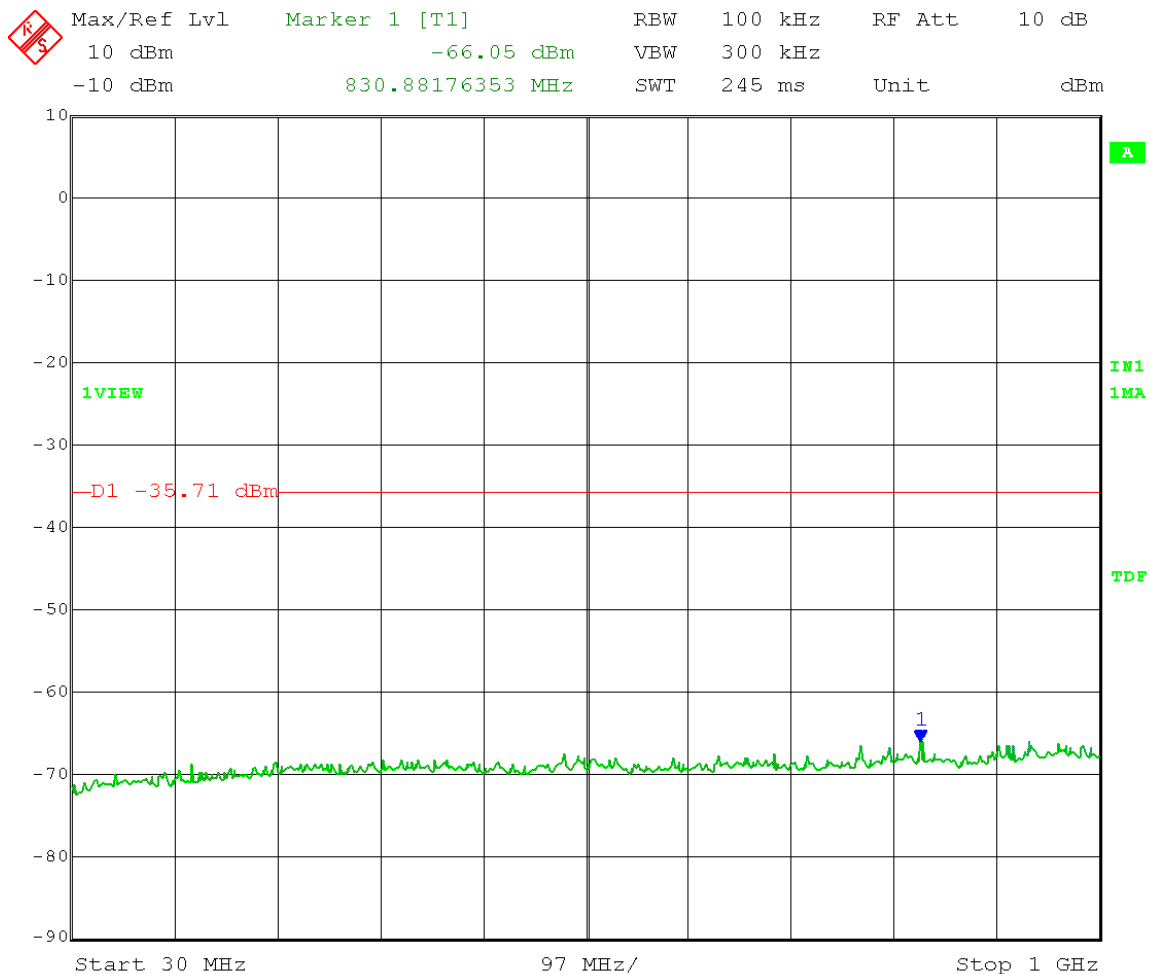
Date: 15.MAR.2014 12:11:44

Test Date: 03-15-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
 Test: Maximum Unwanted Emission Levels - Conducted  
 Operator: Craig B  
 Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
 Detector = Peak Sweep = Auto Couple  
 Trace = Max Hold Mid Channel Transmit = 2437 MHz  
 Point-to-Point & Point-to-Multipoint operation  
 Output Power Setting 10 Antenna gain: 19 dBi  
 Channel bandwidth: 40 MHz  
 Output port: 1 OFDM MCS15  
**Reference Level Measurement**  
 Limit = -5.71 dBm – 30 dB = -35.71 dBm



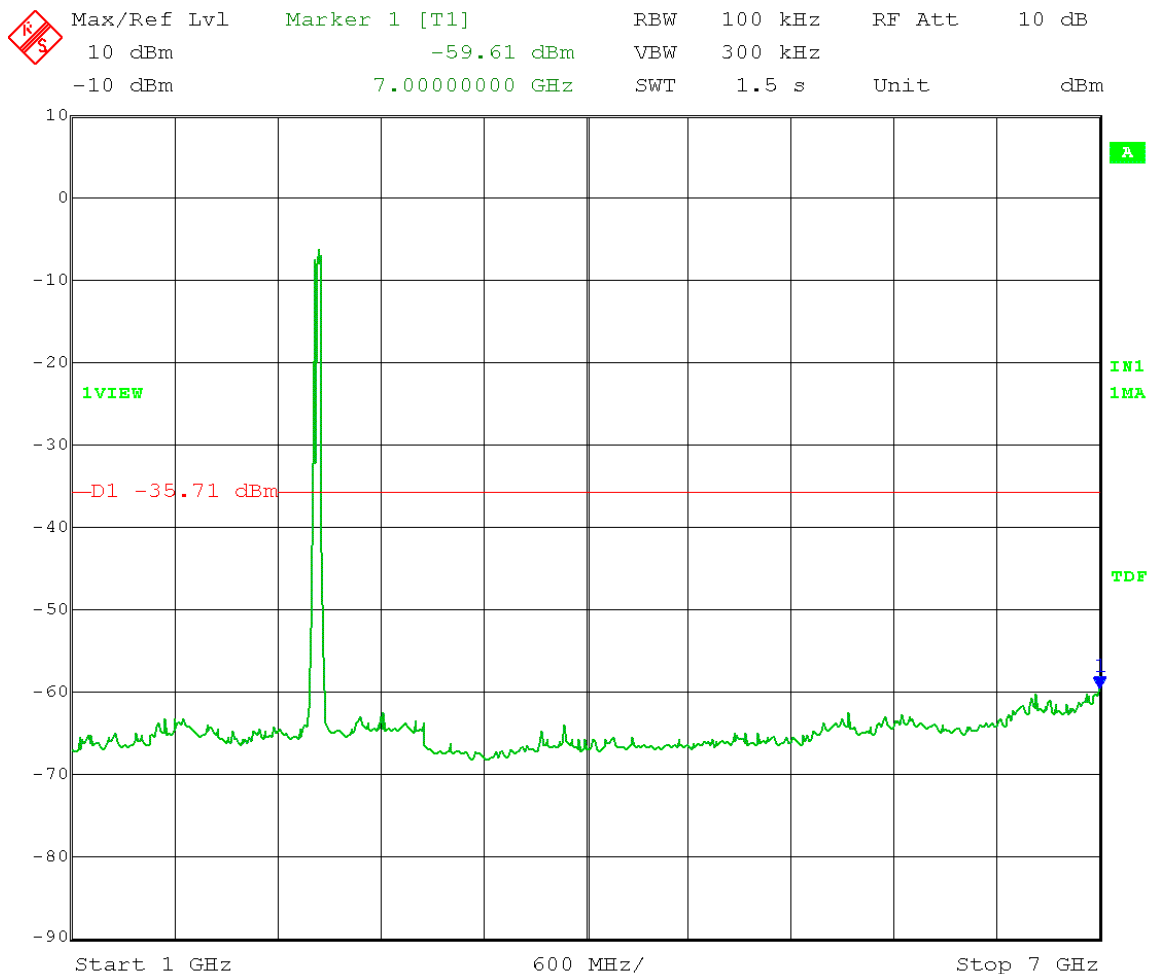
Date: 15.MAR.2014 11:46:16

Test Date: 03-15-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
 Test: Maximum Unwanted Emission Levels - Conducted  
 Operator: Craig B  
 Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
 Detector = Peak Sweep = Auto Couple  
 Trace = Max Hold Mid Channel Transmit = 2437 MHz  
 Point-to-Point & Point-to-Multipoint operation  
 Output Power Setting 10 Antenna gain: 19 dBi  
 Channel bandwidth: 40 MHz  
 Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
 Limit = -5.71 dBm - 30 dB = -35.71 dBm  
 Frequency Range: 30 - 1000 MHz



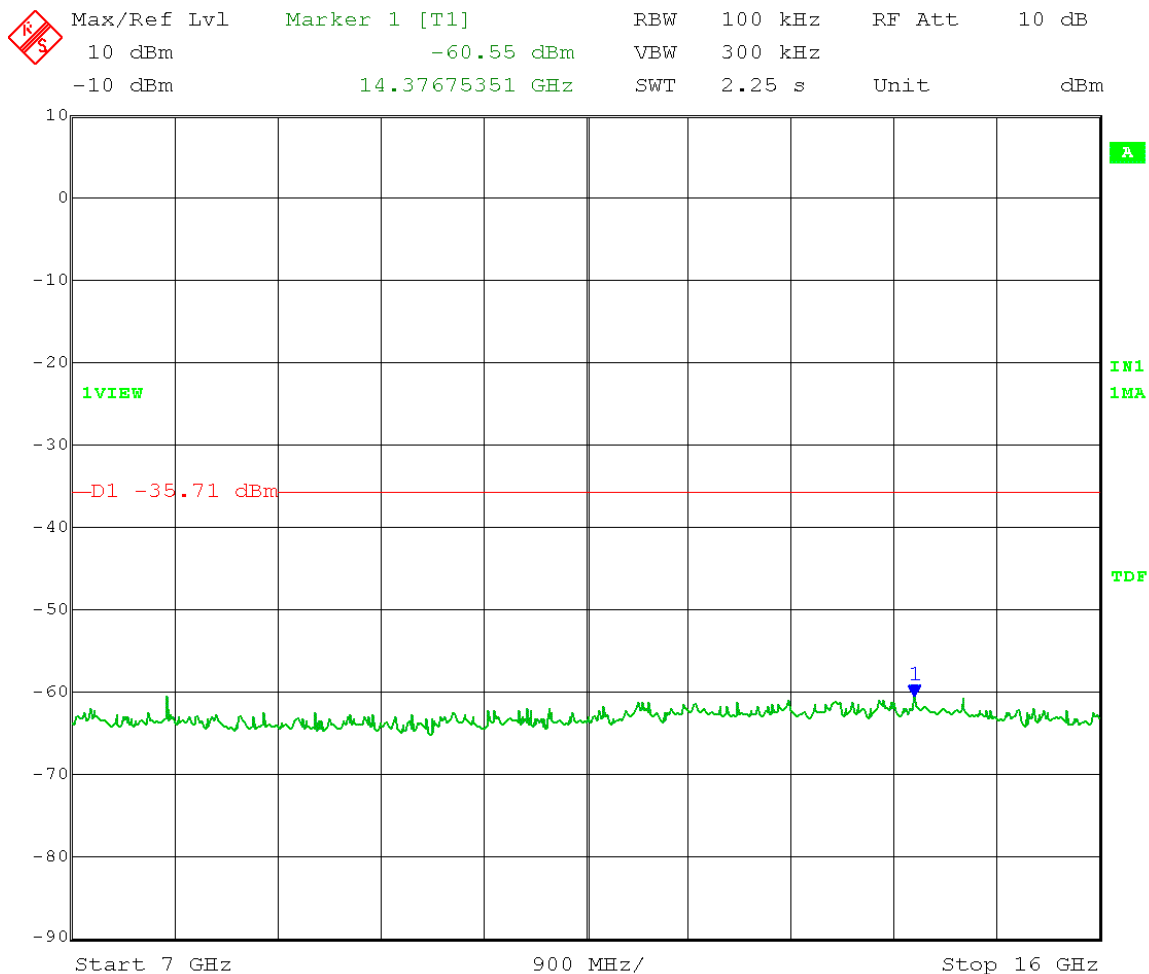
Date: 15.MAR.2014 11:53:45

Test Date: 03-15-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold Mid Channel Transmit = 2437 MHz  
Point-to-Point & Point-to-Multipoint operation  
Output Power Setting 10 Antenna gain: 19 dBi  
Channel bandwidth: 40 MHz  
Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
Limit = -5.71 dBm - 30 dB = -35.71 dBm  
Frequency Range: 1 - 7 GHz



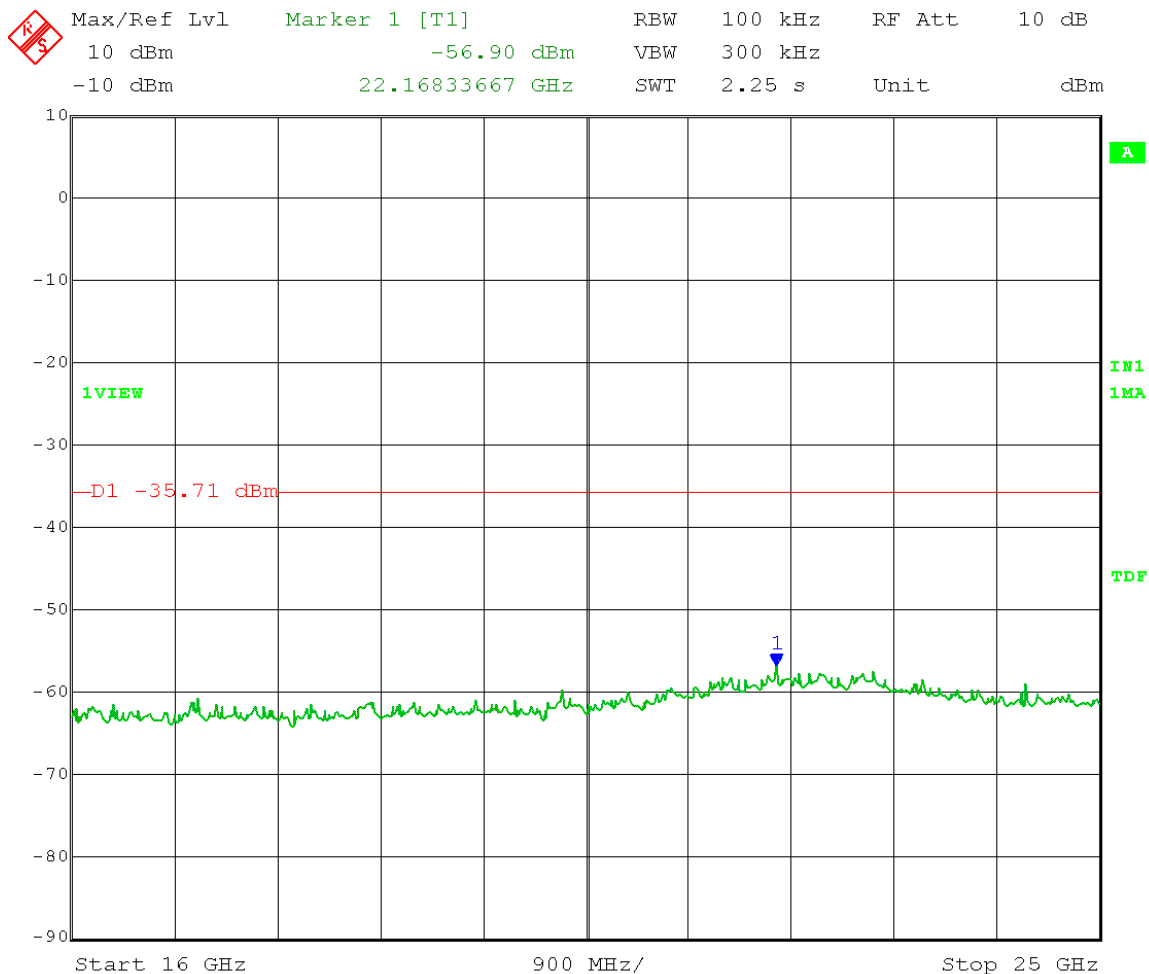
Date: 15.MAR.2014 11:49:33

Test Date: 03-15-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold Mid Channel Transmit = 2437 MHz  
Point-to-Point & Point-to-Multipoint operation  
Output Power Setting 10 Antenna gain: 19 dBi  
Channel bandwidth: 40 MHz  
Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
Limit = -5.71 dBm - 30 dB = -35.71 dBm  
Frequency Range: 7 - 16 GHz



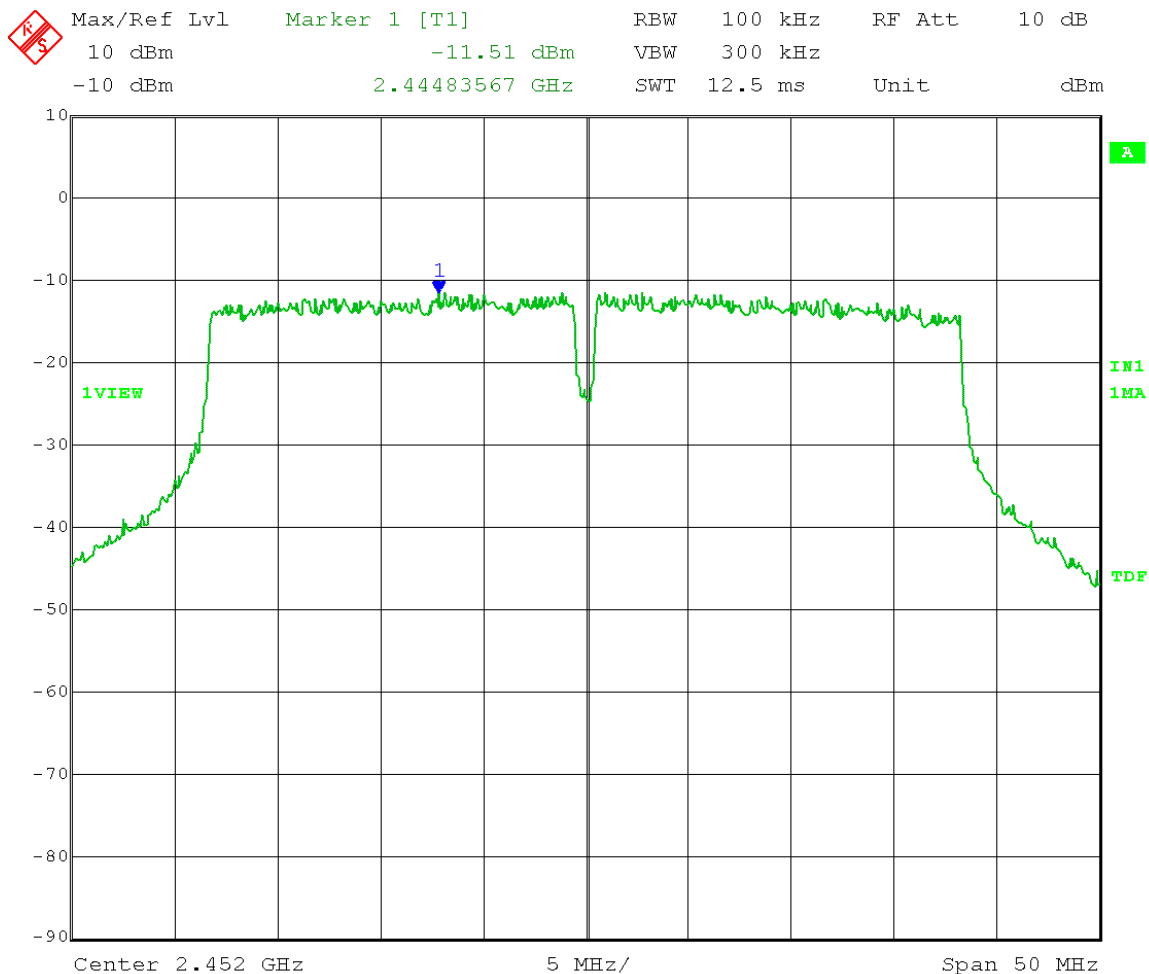
Date: 15.MAR.2014 11:50:41

Test Date: 03-15-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
 Test: Maximum Unwanted Emission Levels - Conducted  
 Operator: Craig B  
 Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
 Detector = Peak Sweep = Auto Couple  
 Trace = Max Hold Mid Channel Transmit = 2437 MHz  
 Point-to-Point & Point-to-Multipoint operation  
 Output Power Setting 10 Antenna gain: 19 dBi  
 Channel bandwidth: 40 MHz  
 Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
 Limit = -5.71 dBm - 30 dB = -35.71 dBm  
 Frequency Range: 16 - 25 GHz



Date: 15.MAR.2014 11:52:01

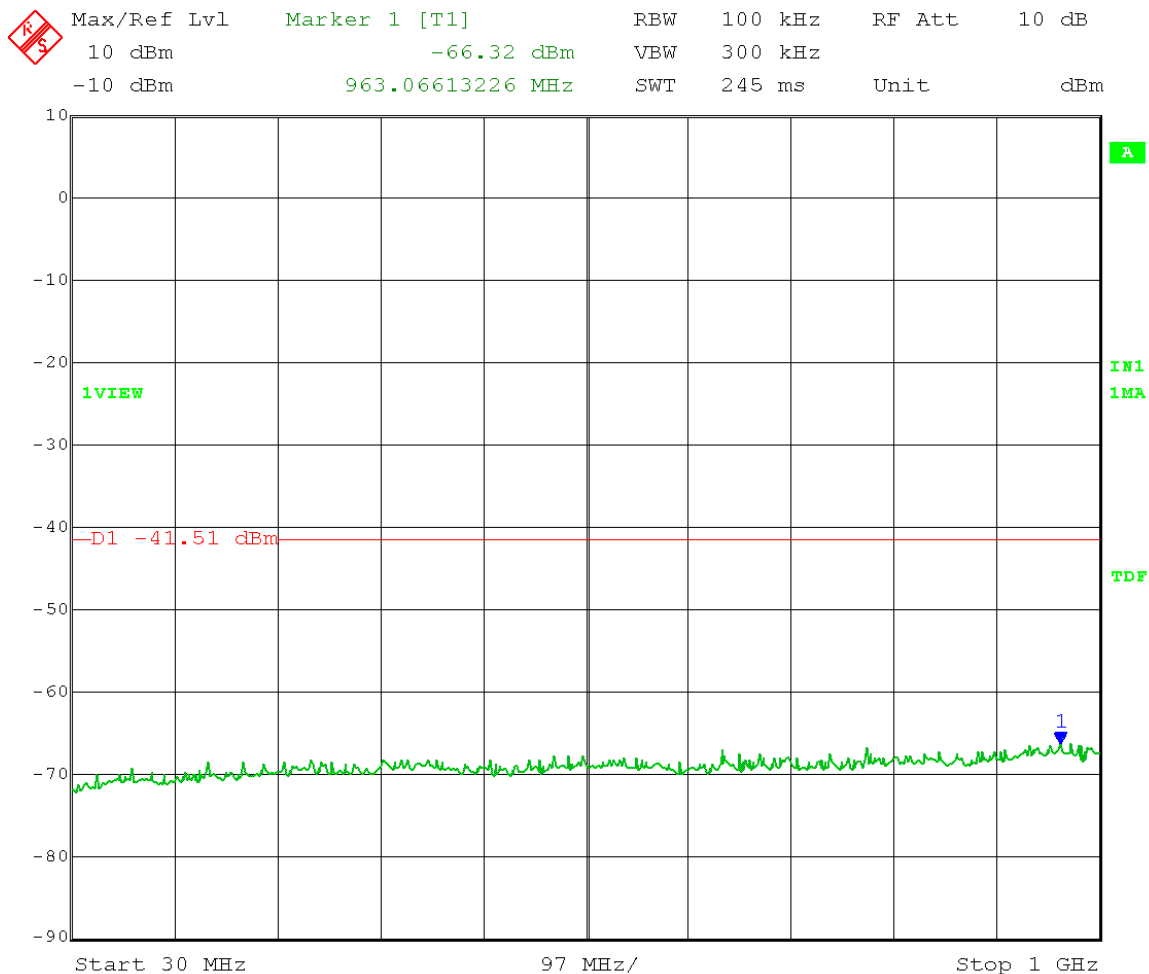
Test Date: 03-15-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold High Channel Transmit = 2452 MHz  
Point-to-Point & Point-to-Multipoint operation  
Output Power Setting 4.5 Antenna gain: 19 dBi  
Channel bandwidth: 40 MHz  
Output port: 1 OFDM MCS15  
**Reference Level Measurement**  
Limit = -11.51 dBm – 30 dB = -41.51 dBm



Date: 15.MAR.2014 12:15:18

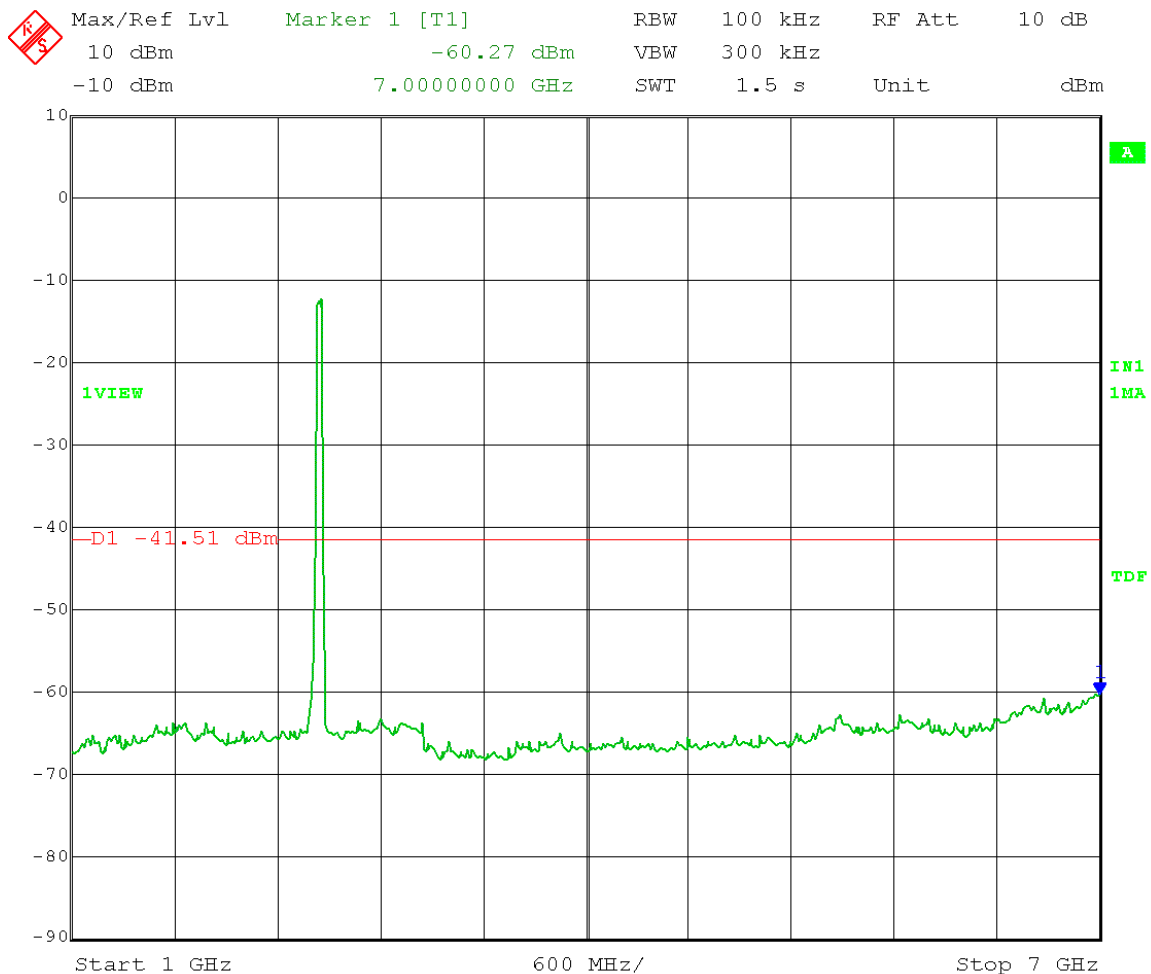


Test Date: 03-15-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold High Channel Transmit = 2452 MHz  
Point-to-Point & Point-to-Multipoint operation  
Output Power Setting 4.5 Antenna gain: 19 dBi  
Channel bandwidth: 40 MHz  
Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
Limit = -11.51 dBm - 30 dB = -41.51 dBm  
Frequency Range: 30 - 1000 MHz



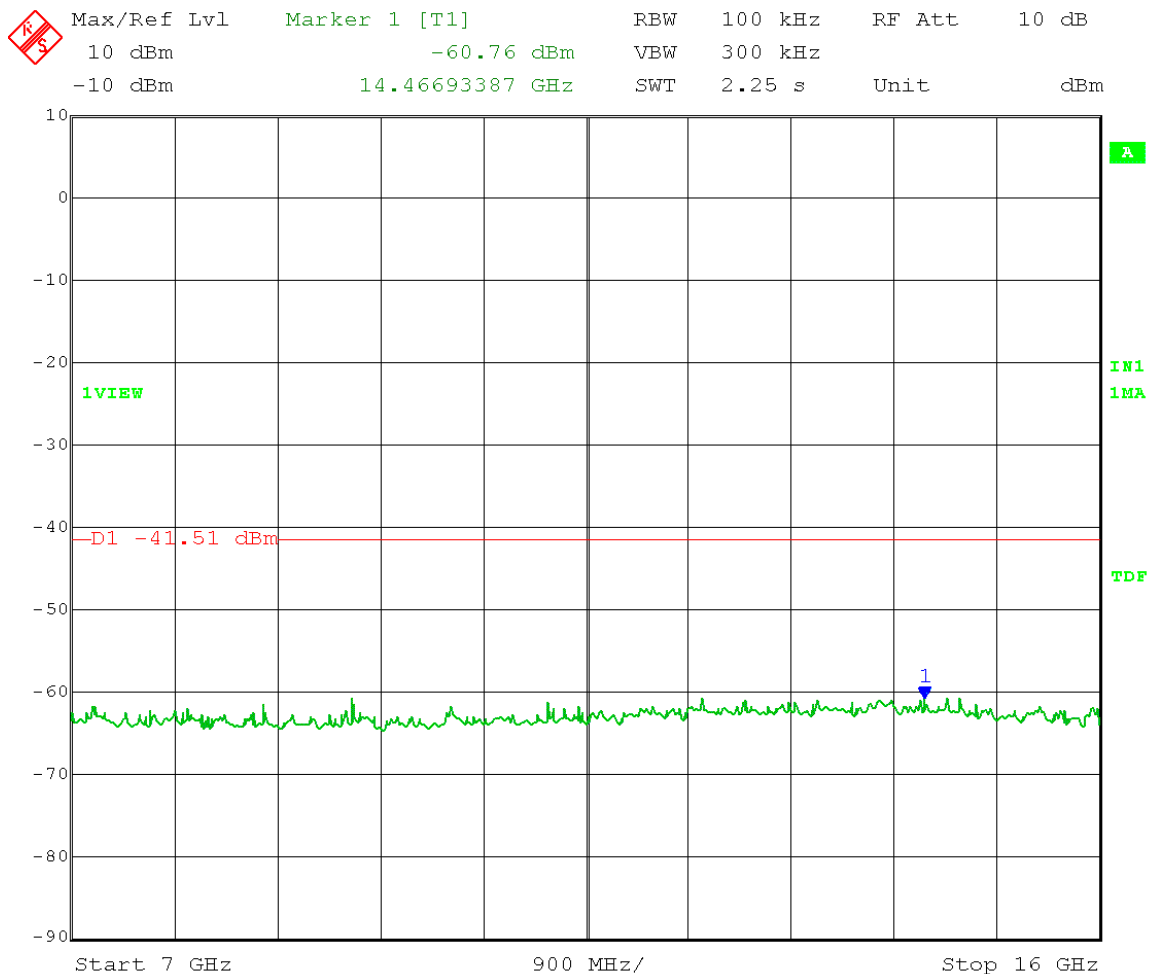
Date: 15.MAR.2014 12:22:03

Test Date: 03-15-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold High Channel Transmit = 2452 MHz  
Point-to-Point & Point-to-Multipoint operation  
Output Power Setting 4.5 Antenna gain: 19 dBi  
Channel bandwidth: 40 MHz  
Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
Limit = -11.51 dBm - 30 dB = -41.51 dBm  
Frequency Range: 1 - 7 GHz



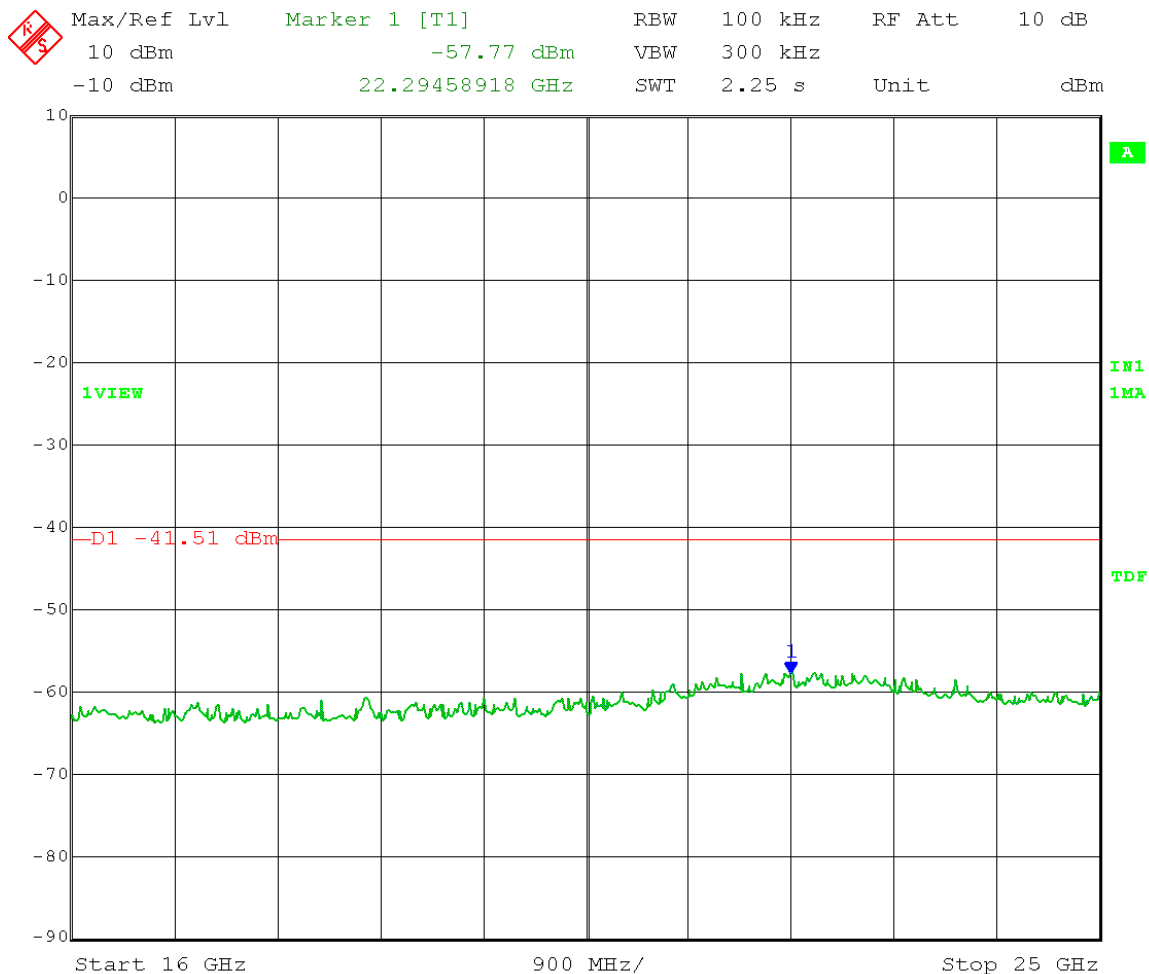
Date: 15.MAR.2014 12:17:37

Test Date: 03-15-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold High Channel Transmit = 2452 MHz  
Point-to-Point & Point-to-Multipoint operation  
Output Power Setting 4.5 Antenna gain: 19 dBi  
Channel bandwidth: 40 MHz  
Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
Limit = -11.51 dBm - 30 dB = -41.51 dBm  
Frequency Range: 7 - 16 GHz



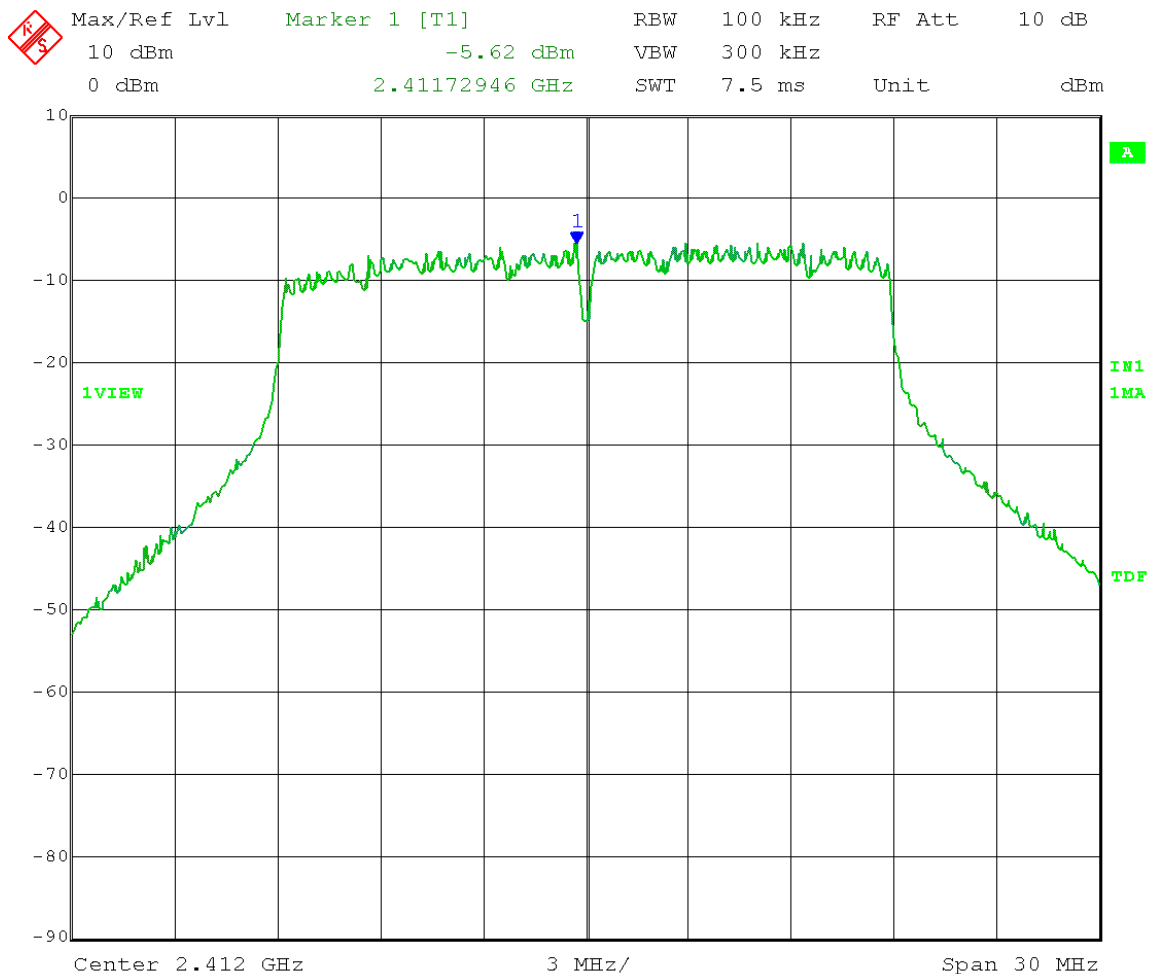
Date: 15.MAR.2014 12:18:52

Test Date: 03-15-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold High Channel Transmit = 2452 MHz  
Point-to-Point & Point-to-Multipoint operation  
Output Power Setting 4.5 Antenna gain: 19 dBi  
Channel bandwidth: 40 MHz  
Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
Limit = -11.51 dBm - 30 dB = -41.51 dBm  
Frequency Range: 16 - 25 GHz



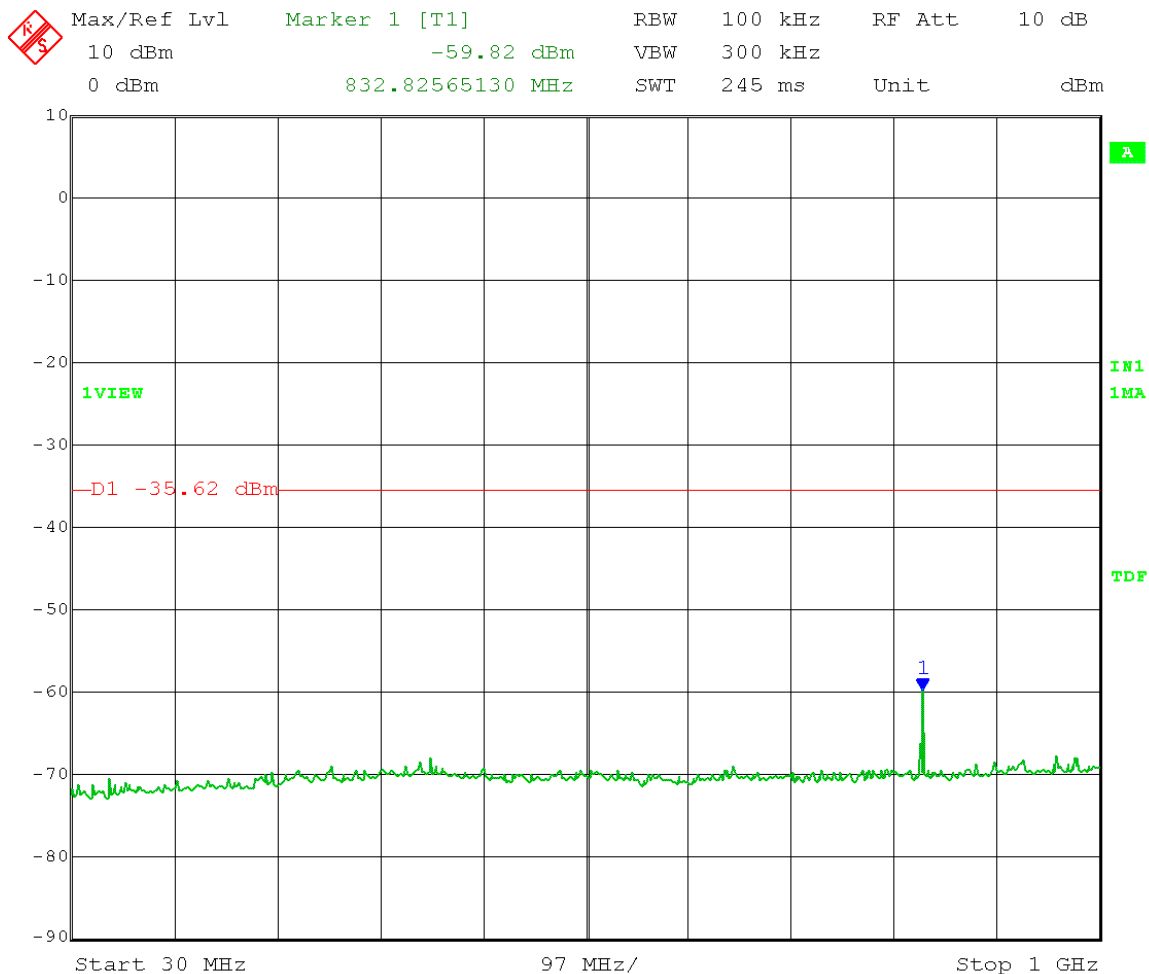
Date: 15.MAR.2014 12:20:12

Test Date: 03-17-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold Low Channel Transmit = 2412 MHz  
Point-to-Point & Point-to-Multipoint operation  
Output Power Setting: 7 Antenna gain: 25 dBi  
Channel bandwidth: 20 MHz  
Output port: 1 OFDM MCS15  
**Reference Level Measurement**  
Limit = -5.62 dBm – 30 dB = -35.62 dBm



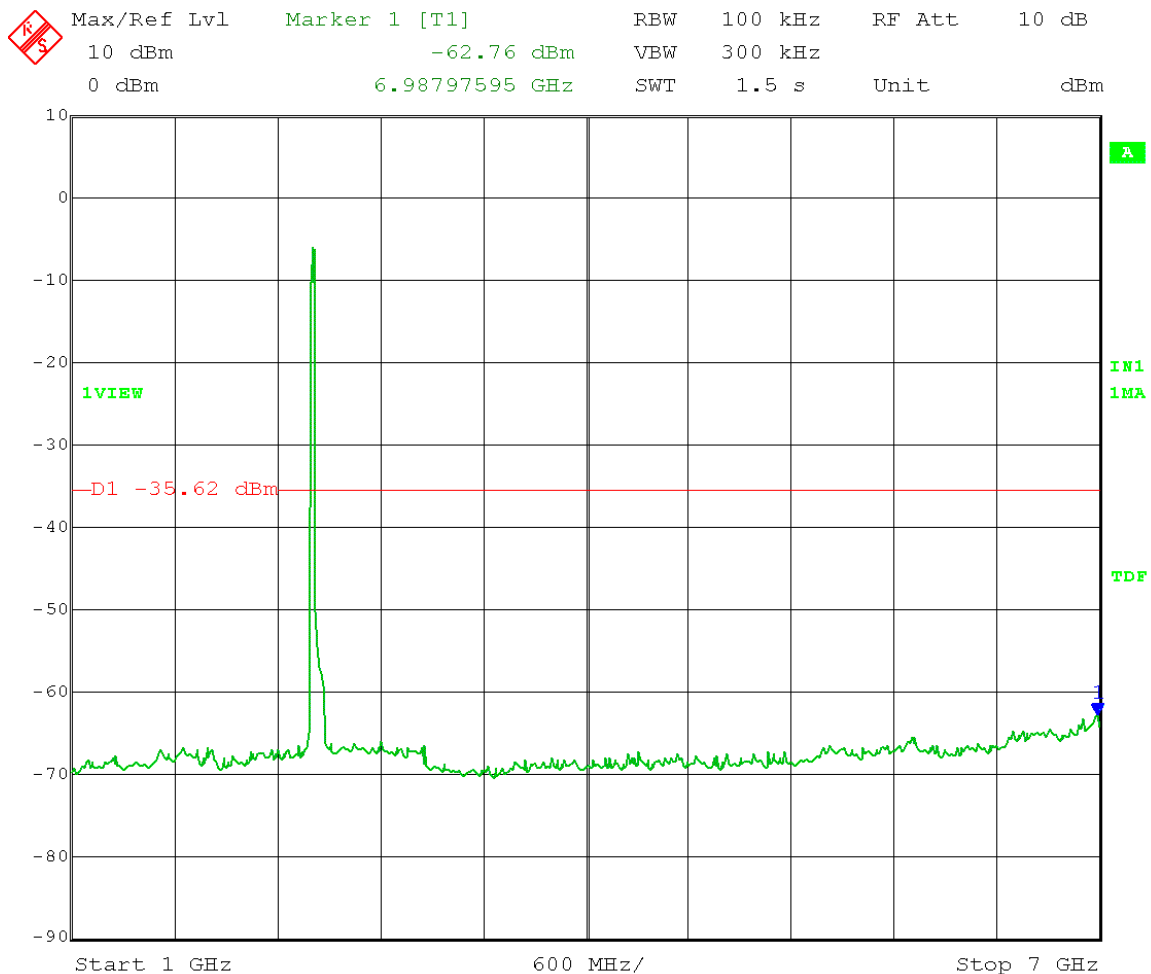
Date: 17.MAR.2014 10:17:02

Test Date: 03-17-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold Low Channel Transmit = 2412 MHz  
Point-to-Point & Point-to-Multipoint operation  
Output Power Setting: 7 Antenna gain: 25 dBi  
Channel bandwidth: 20 MHz  
Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
Limit = -5.62 dBm - 30 dB = -35.62 dBm  
Frequency Range: 30 - 1000 MHz



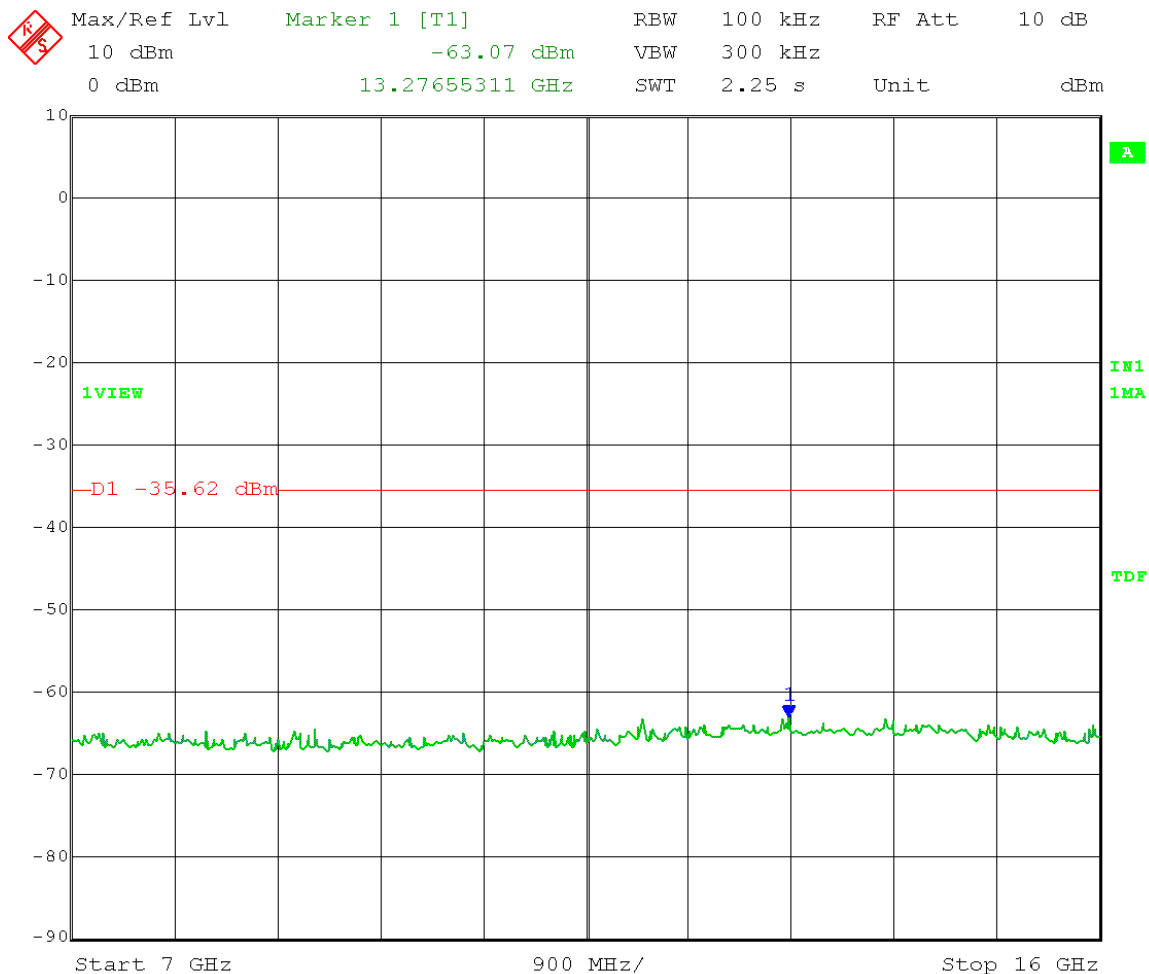
Date: 17.MAR.2014 10:26:30

Test Date: 03-17-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold Low Channel Transmit = 2412 MHz  
Point-to-Point & Point-to-Multipoint operation  
Output Power Setting: 7 Antenna gain: 25 dBi  
Channel bandwidth: 20 MHz  
Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
Limit = -5.62 dBm - 30 dB = -35.62 dBm  
Frequency Range: 1 - 7 GHz



Date: 17.MAR.2014 10:19:18

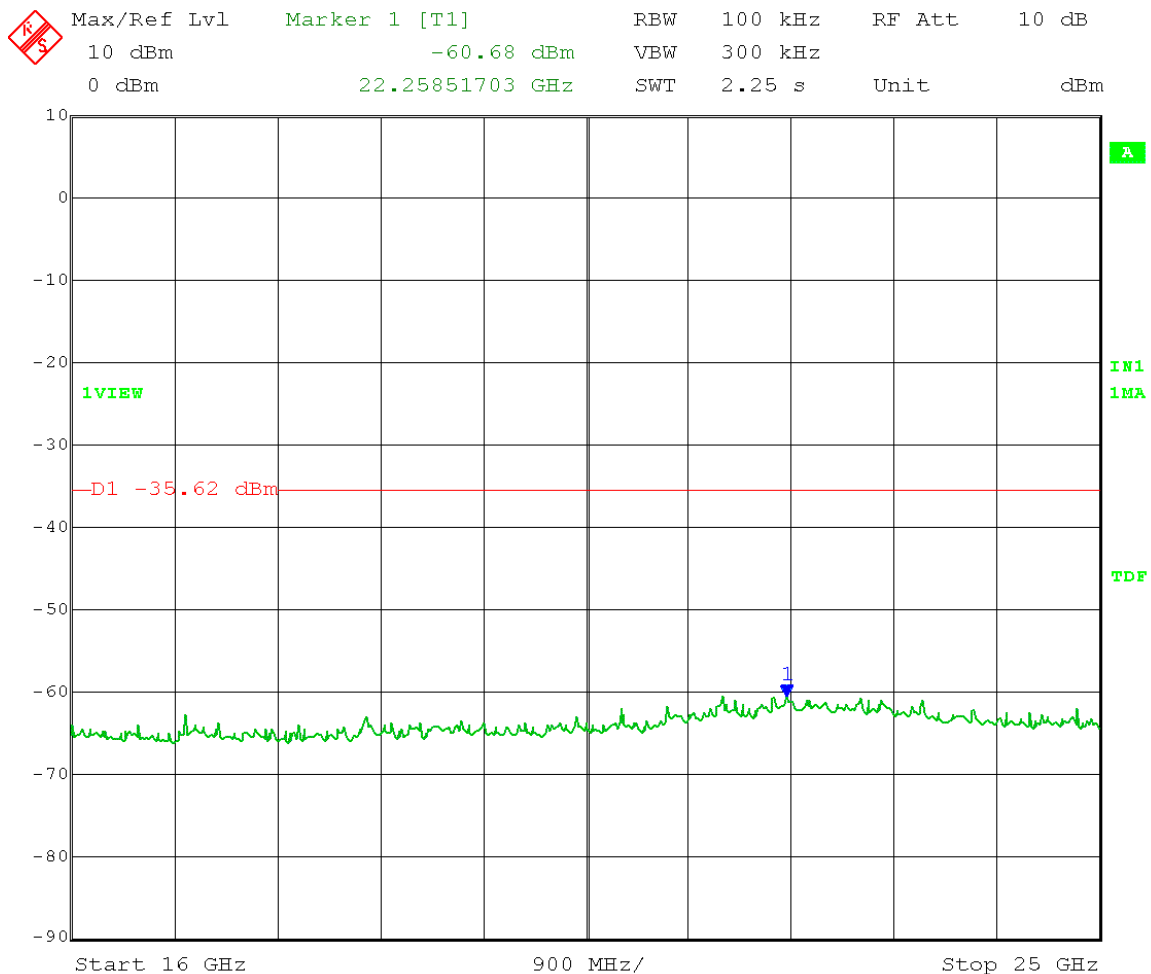
Test Date: 03-17-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold Low Channel Transmit = 2412 MHz  
Point-to-Point & Point-to-Multipoint operation  
Output Power Setting: 7 Antenna gain: 25 dBi  
Channel bandwidth: 20 MHz  
Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
Limit = -5.62 dBm - 30 dB = -35.62 dBm  
Frequency Range: 7 - 16 GHz



Date: 17.MAR.2014 10:20:51

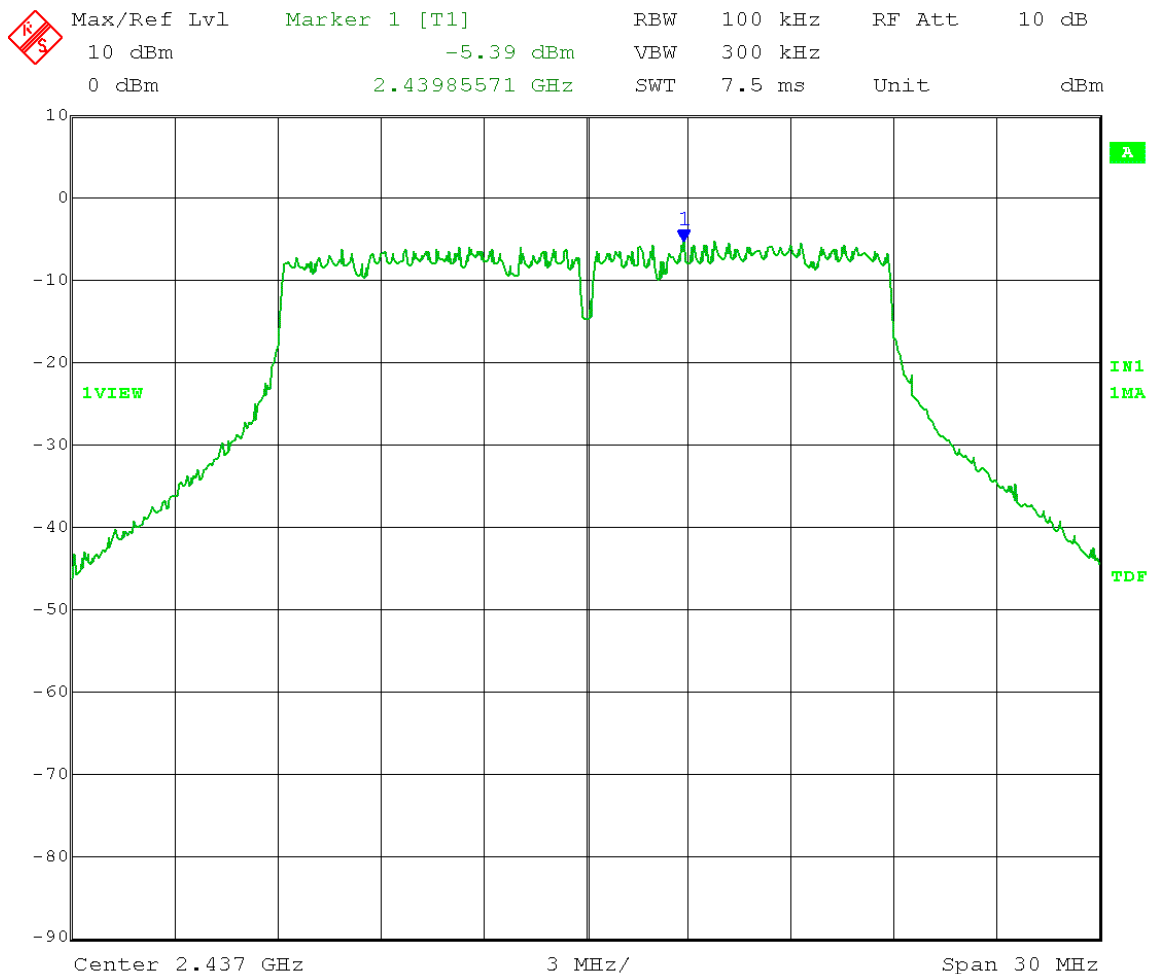


Test Date: 03-17-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold Low Channel Transmit = 2412 MHz  
Point-to-Point & Point-to-Multipoint operation  
Output Power Setting: 7 Antenna gain: 25 dBi  
Channel bandwidth: 20 MHz  
Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
Limit = -5.62 dBm - 30 dB = -35.62 dBm  
Frequency Range: 16 - 25 GHz



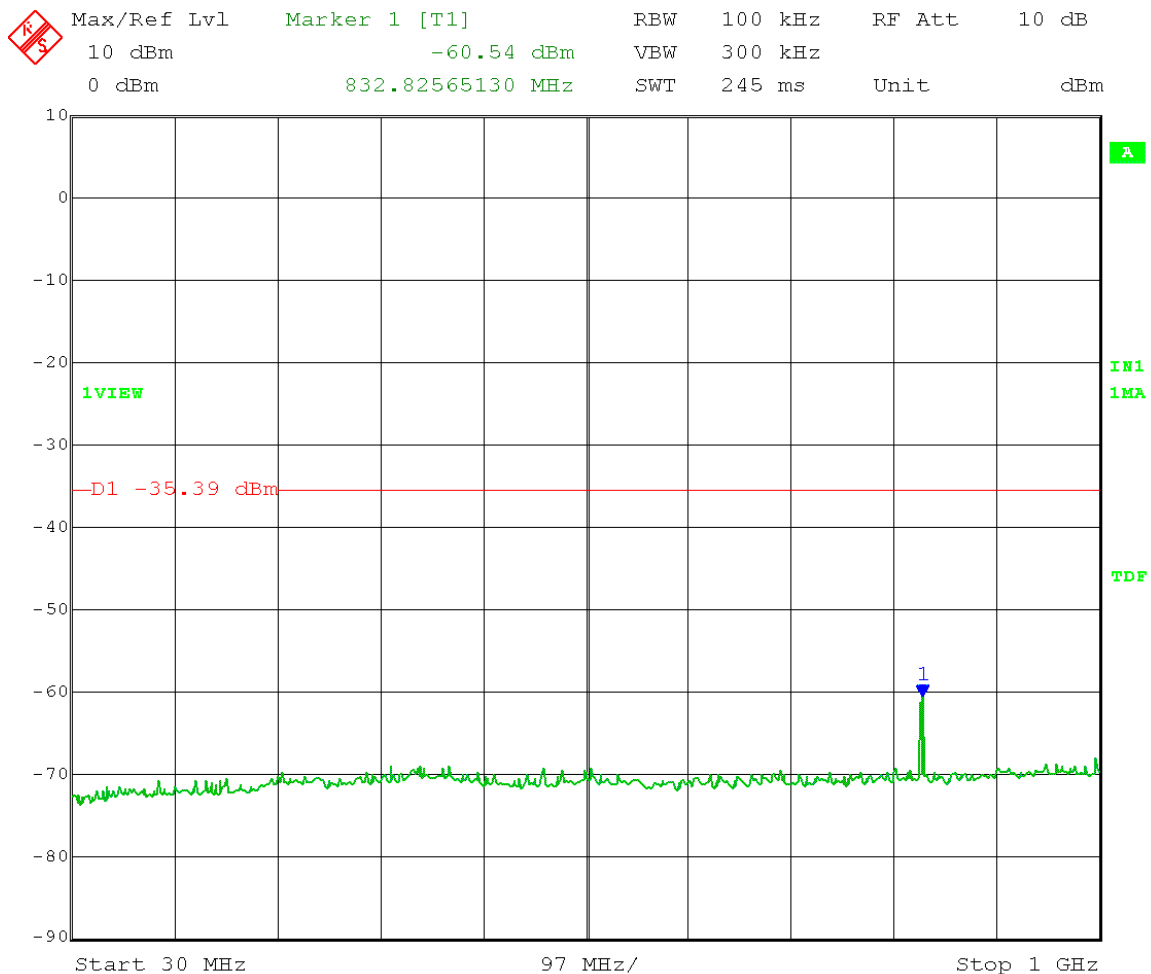
Date: 17.MAR.2014 10:22:19

Test Date: 03-17-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold Mid Channel Transmit = 2437 MHz  
Point-to-Point & Point-to-Multipoint operation  
Output Power Setting: 7 Antenna gain: 25 dBi  
Channel bandwidth: 20 MHz  
Output port: 1 OFDM MCS15  
**Reference Level Measurement**  
Limit = -5.39 dBm – 30 dB = -35.39 dBm



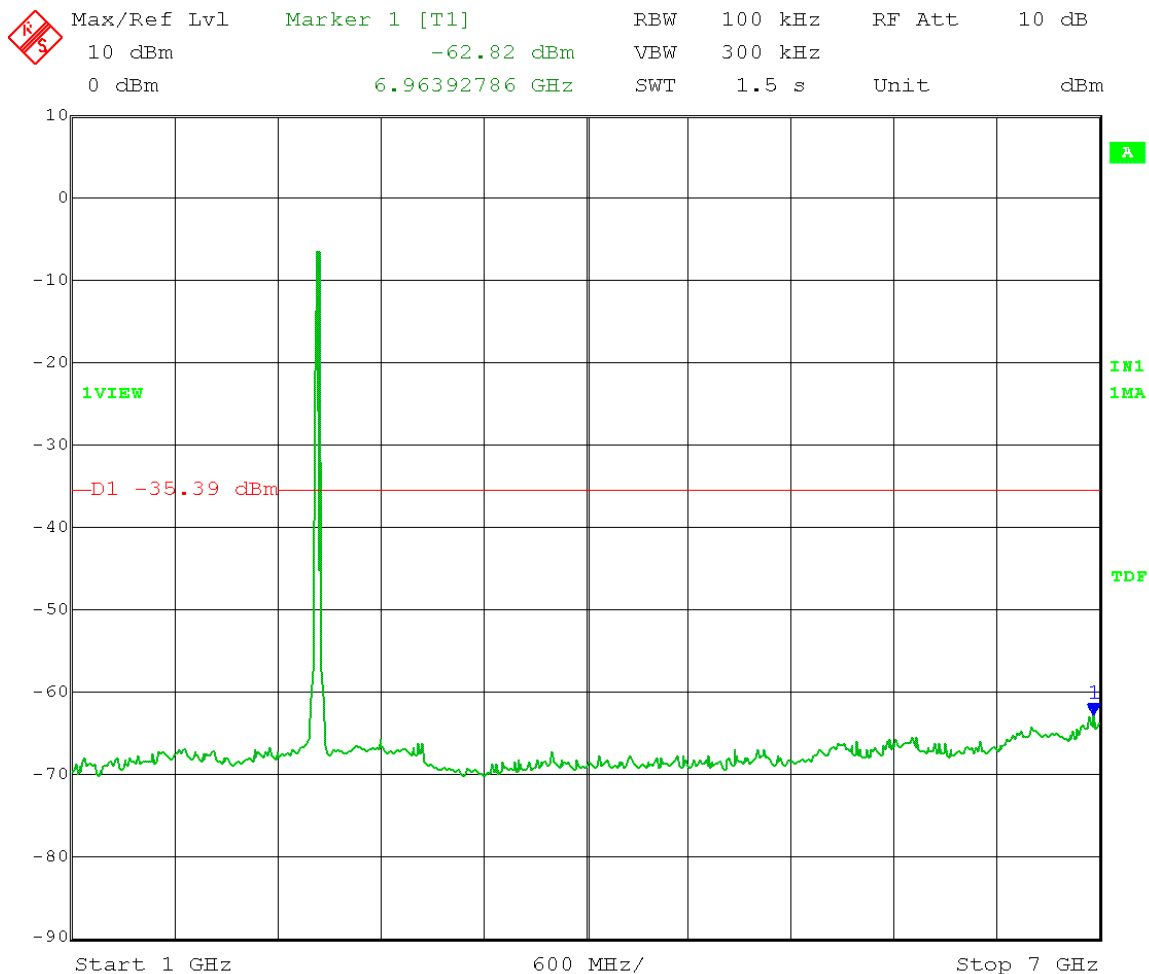
Date: 17.MAR.2014 10:01:46

Test Date: 03-17-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold Mid Channel Transmit = 2437 MHz  
Point-to-Point & Point-to-Multipoint operation  
Output Power Setting: 7 Antenna gain: 25 dBi  
Channel bandwidth: 20 MHz  
Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
Limit = -5.39 dBm - 30 dB = -35.39 dBm  
Frequency Range: 30 - 1000 MHz



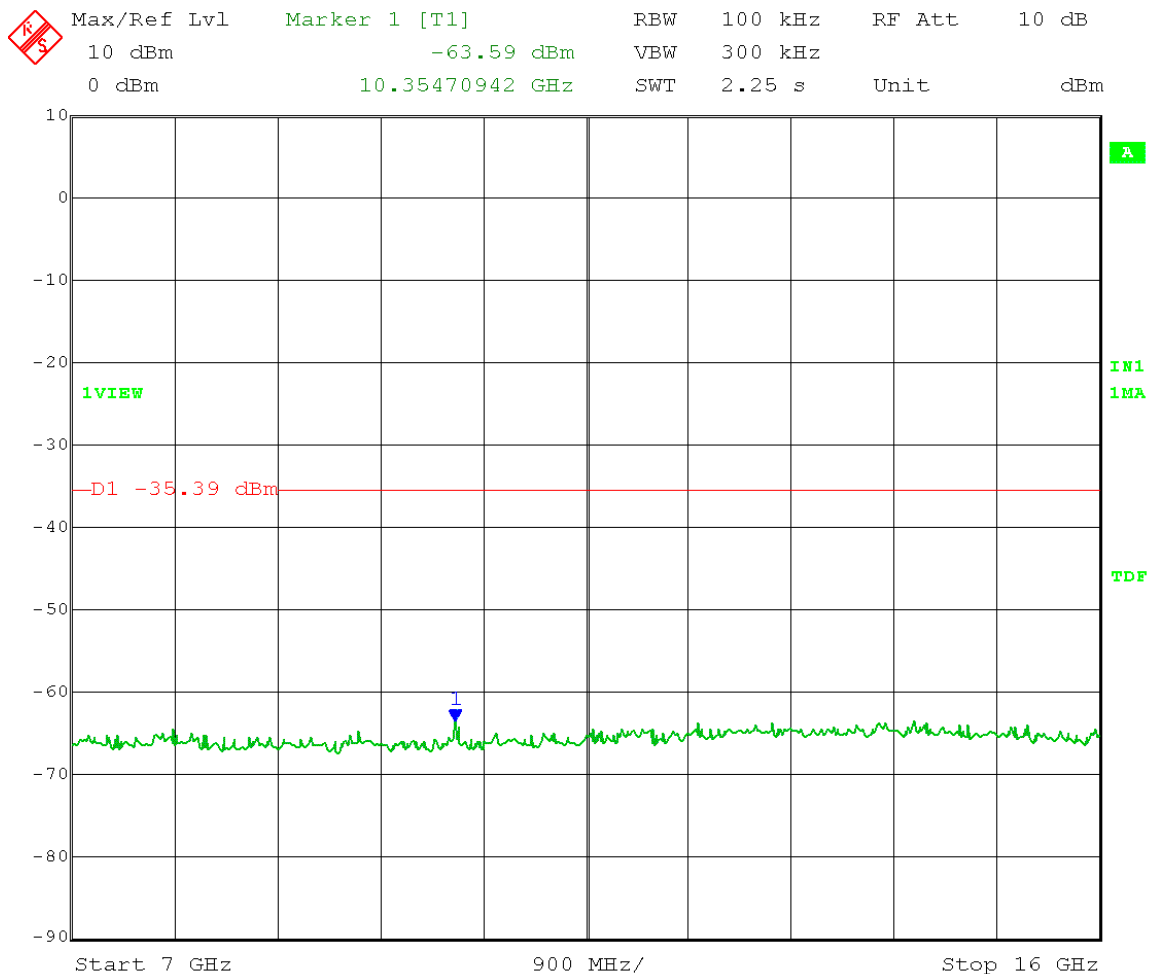
Date: 17.MAR.2014 10:08:26

Test Date: 03-17-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold Mid Channel Transmit = 2437 MHz  
Point-to-Point & Point-to-Multipoint operation  
Output Power Setting: 7 Antenna gain: 25 dBi  
Channel bandwidth: 20 MHz  
Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
Limit = -5.39 dBm – 30 dB = -35.39 dBm  
Frequency Range: 1 – 7 GHz



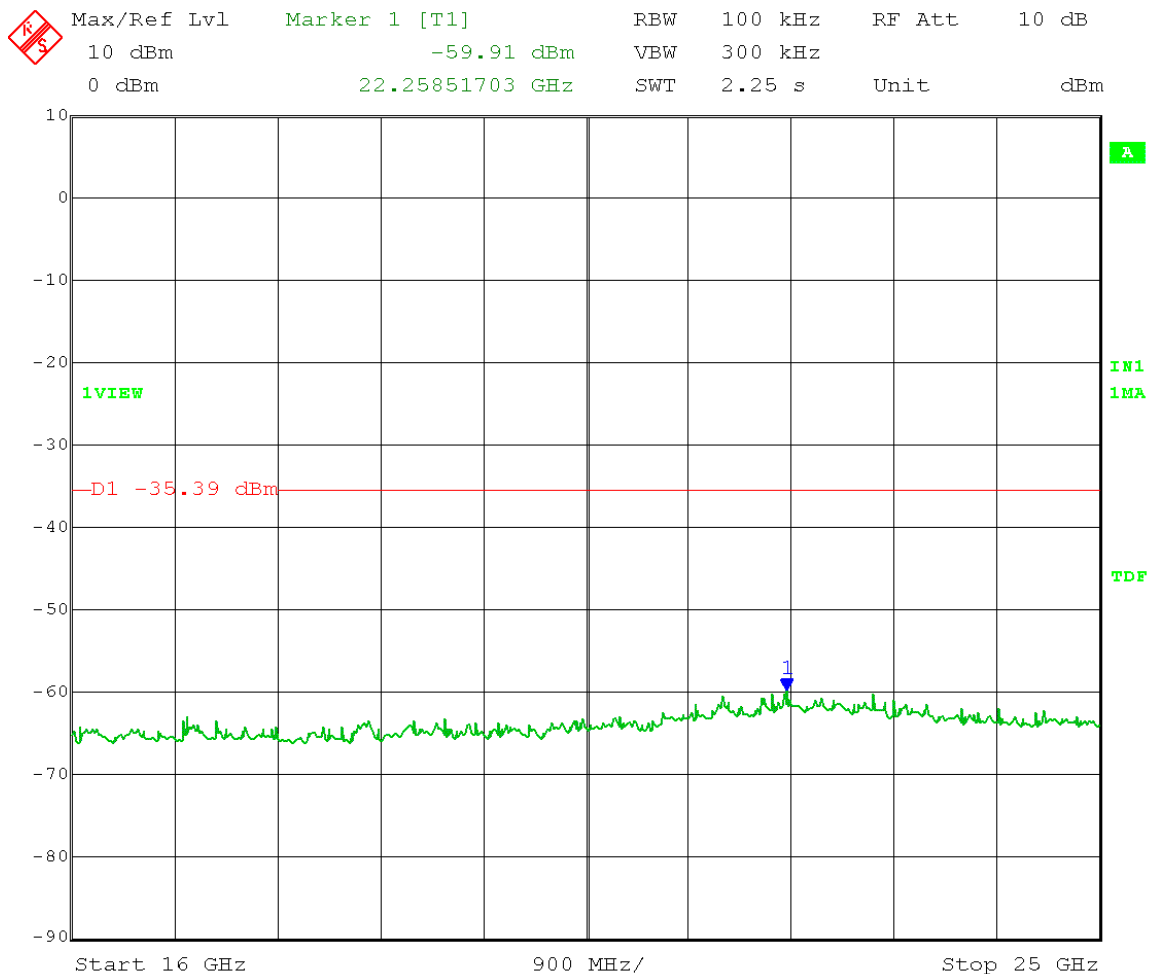
Date: 17.MAR.2014 10:04:00

Test Date: 03-17-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold Mid Channel Transmit = 2437 MHz  
Point-to-Point & Point-to-Multipoint operation  
Output Power Setting: 7 Antenna gain: 25 dBi  
Channel bandwidth: 20 MHz  
Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
Limit = -5.39 dBm – 30 dB = -35.39 dBm  
Frequency Range: 7 – 16 GHz



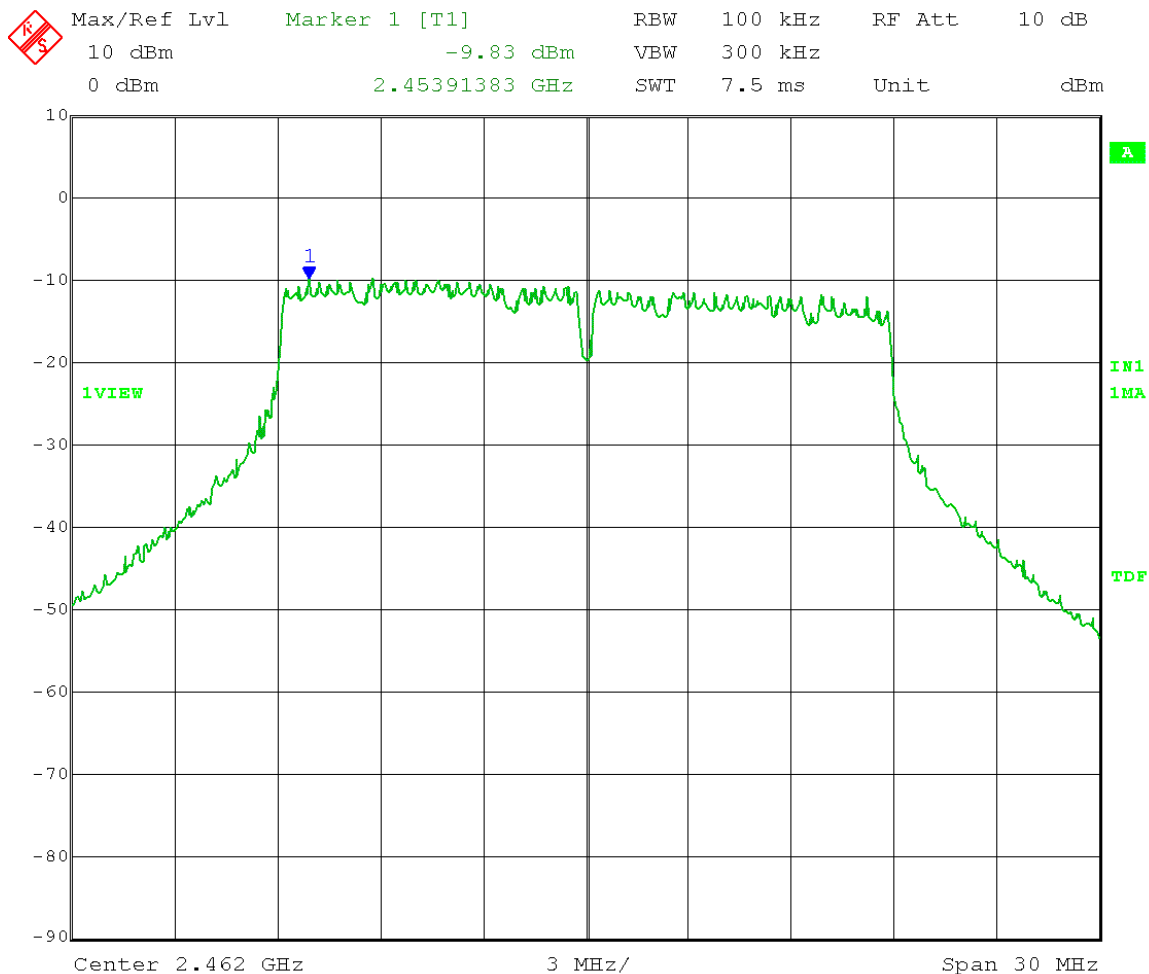
Date: 17.MAR.2014 10:05:24

Test Date: 03-17-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
 Test: Maximum Unwanted Emission Levels - Conducted  
 Operator: Craig B  
 Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
 Detector = Peak Sweep = Auto Couple  
 Trace = Max Hold Mid Channel Transmit = 2437 MHz  
 Point-to-Point & Point-to-Multipoint operation  
 Output Power Setting: 7 Antenna gain: 25 dBi  
 Channel bandwidth: 20 MHz  
 Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
 Limit = -5.39 dBm - 30 dB = -35.39 dBm  
 Frequency Range: 16 - 25 GHz



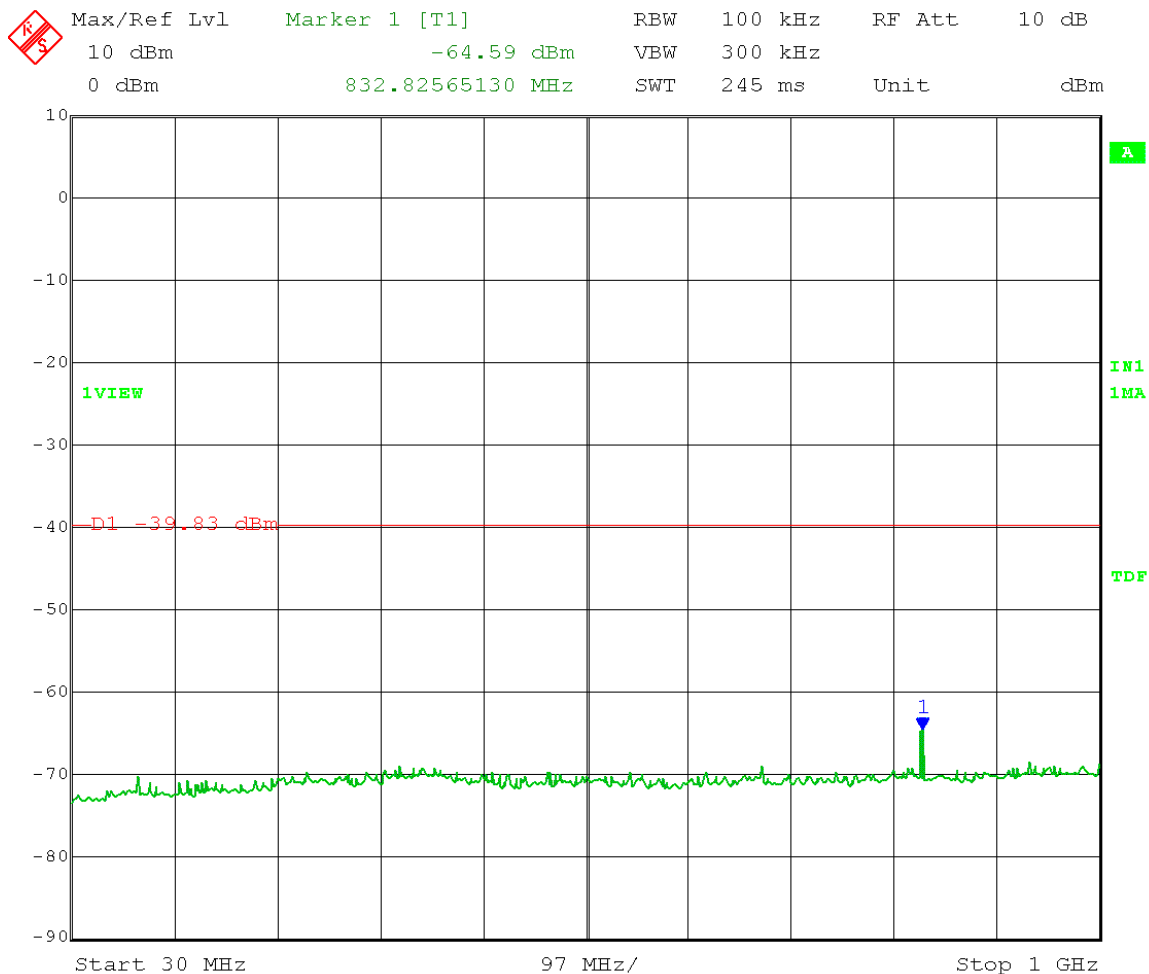
Date: 17.MAR.2014 10:06:39

Test Date: 03-17-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
 Test: Maximum Unwanted Emission Levels - Conducted  
 Operator: Craig B  
 Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
 Detector = Peak Sweep = Auto Couple  
 Trace = Max Hold High Channel Transmit = 2462 MHz  
 Point-to-Point & Point-to-Multipoint operation  
 Output Power Setting: 2.5 Antenna gain: 25 dBi  
 Channel bandwidth: 20 MHz  
 Output port: 1 OFDM MCS15  
**Reference Level Measurement**  
 Limit = -9.83 dBm – 30 dB = -39.83 dBm



Date: 17.MAR.2014 10:40:14

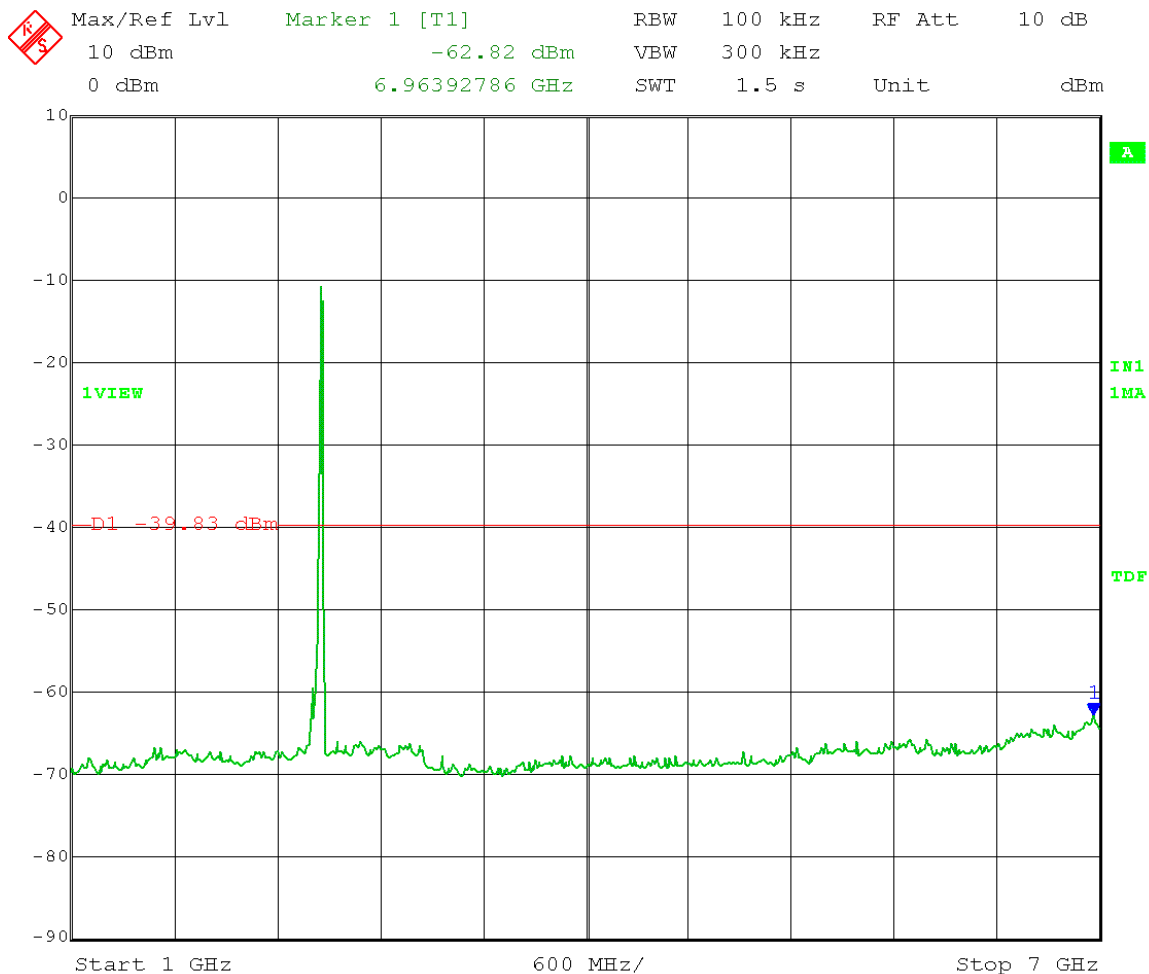
Test Date: 03-17-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold High Channel Transmit = 2462 MHz  
Point-to-Point & Point-to-Multipoint operation  
Output Power Setting: 2.5 Antenna gain: 25 dBi  
Channel bandwidth: 20 MHz  
Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
Limit = -9.83 dBm - 30 dB = -39.83 dBm  
Frequency Range: 30 - 1000 MHz



Date: 17.MAR.2014 10:47:55

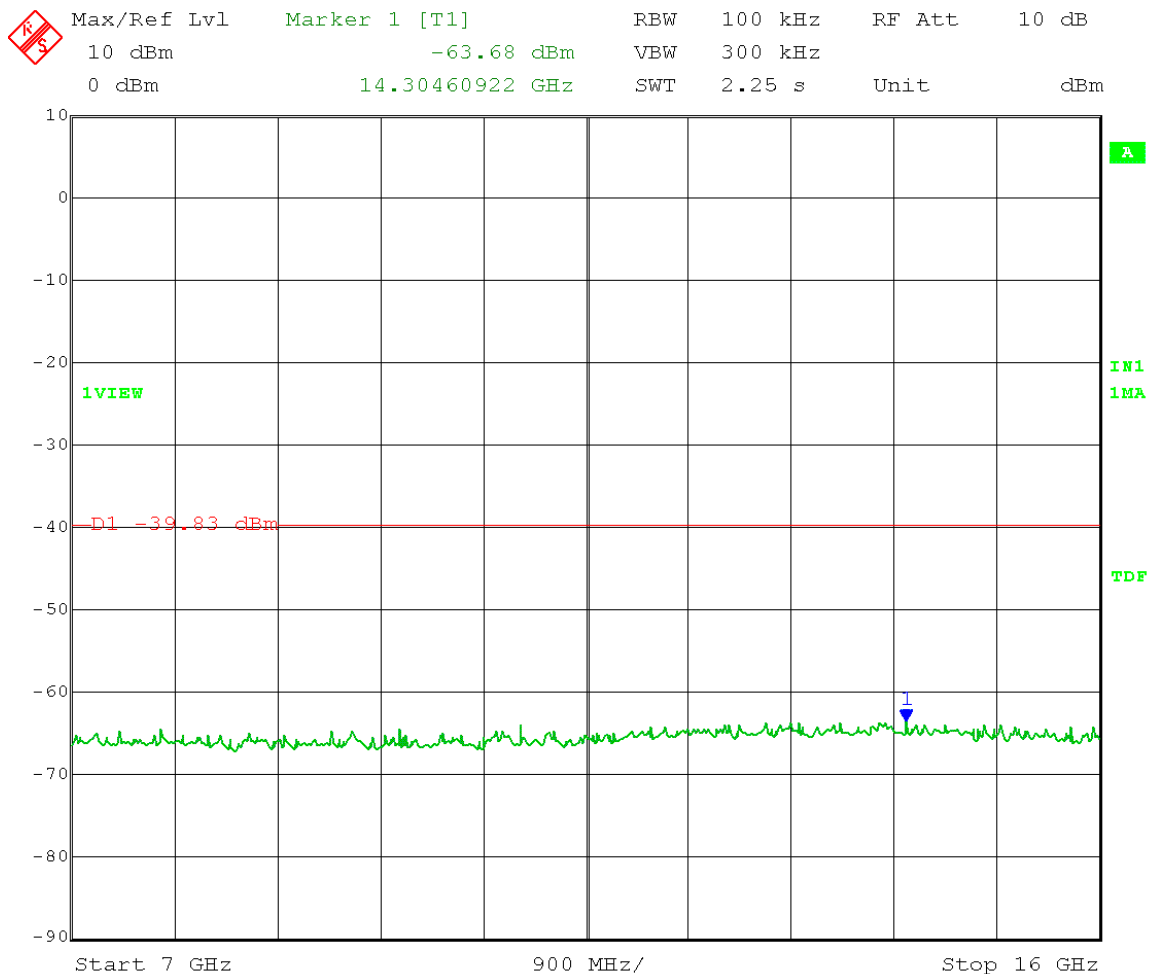


Test Date: 03-17-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold High Channel Transmit = 2462 MHz  
Point-to-Point & Point-to-Multipoint operation  
Output Power Setting: 2.5 Antenna gain: 25 dBi  
Channel bandwidth: 20 MHz  
Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
Limit = -9.83 dBm - 30 dB = -39.83 dBm  
Frequency Range: 1 - 7 GHz



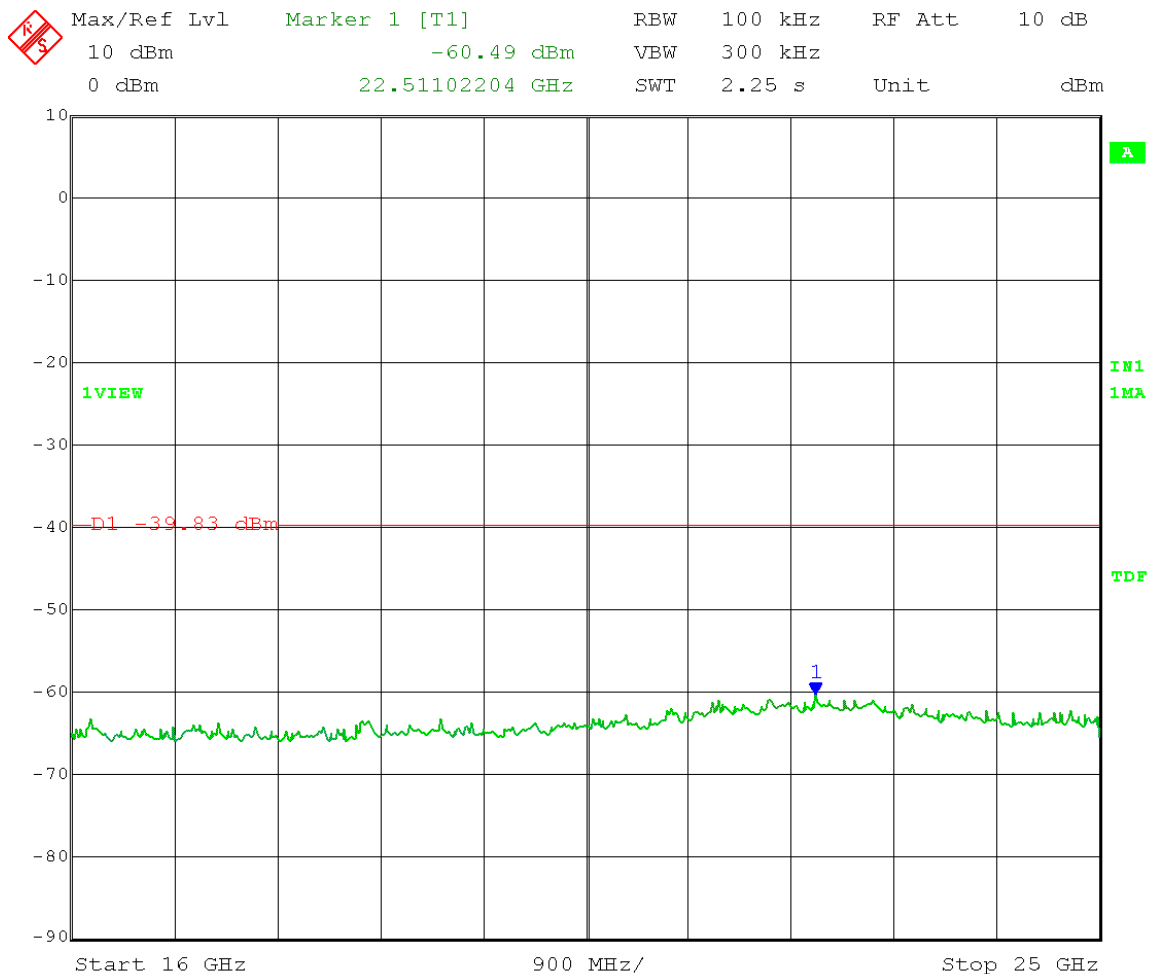
Date: 17.MAR.2014 10:42:49

Test Date: 03-17-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold High Channel Transmit = 2462 MHz  
Point-to-Point & Point-to-Multipoint operation  
Output Power Setting: 2.5 Antenna gain: 25 dBi  
Channel bandwidth: 20 MHz  
Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
Limit = -9.83 dBm - 30 dB = -39.83 dBm  
Frequency Range: 7 - 16 GHz



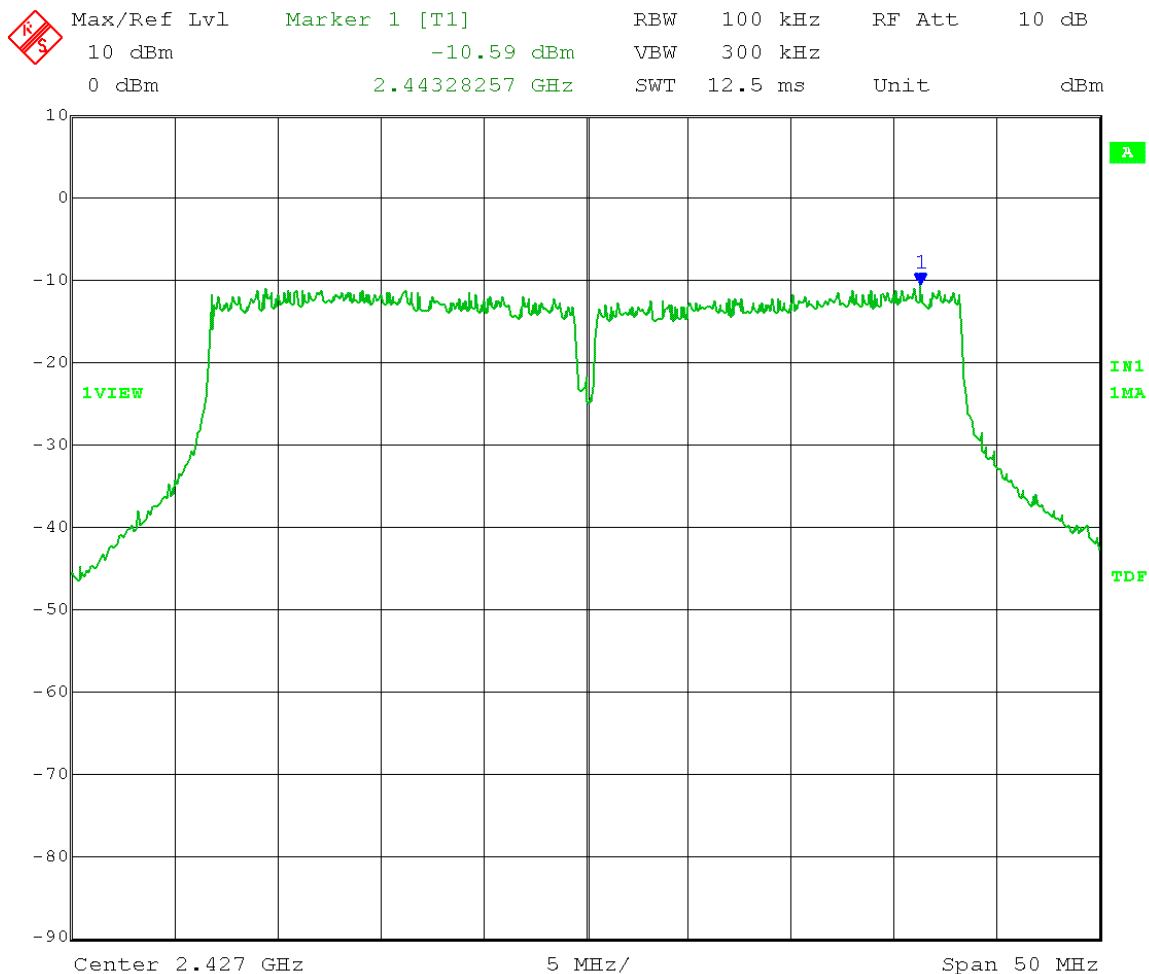
Date: 17.MAR.2014 10:44:33

Test Date: 03-17-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold High Channel Transmit = 2462 MHz  
Point-to-Point & Point-to-Multipoint operation  
Output Power Setting: 2.5 Antenna gain: 25 dBi  
Channel bandwidth: 20 MHz  
Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
Limit = -9.83 dBm - 30 dB = -39.83 dBm  
Frequency Range: 16 - 25 GHz



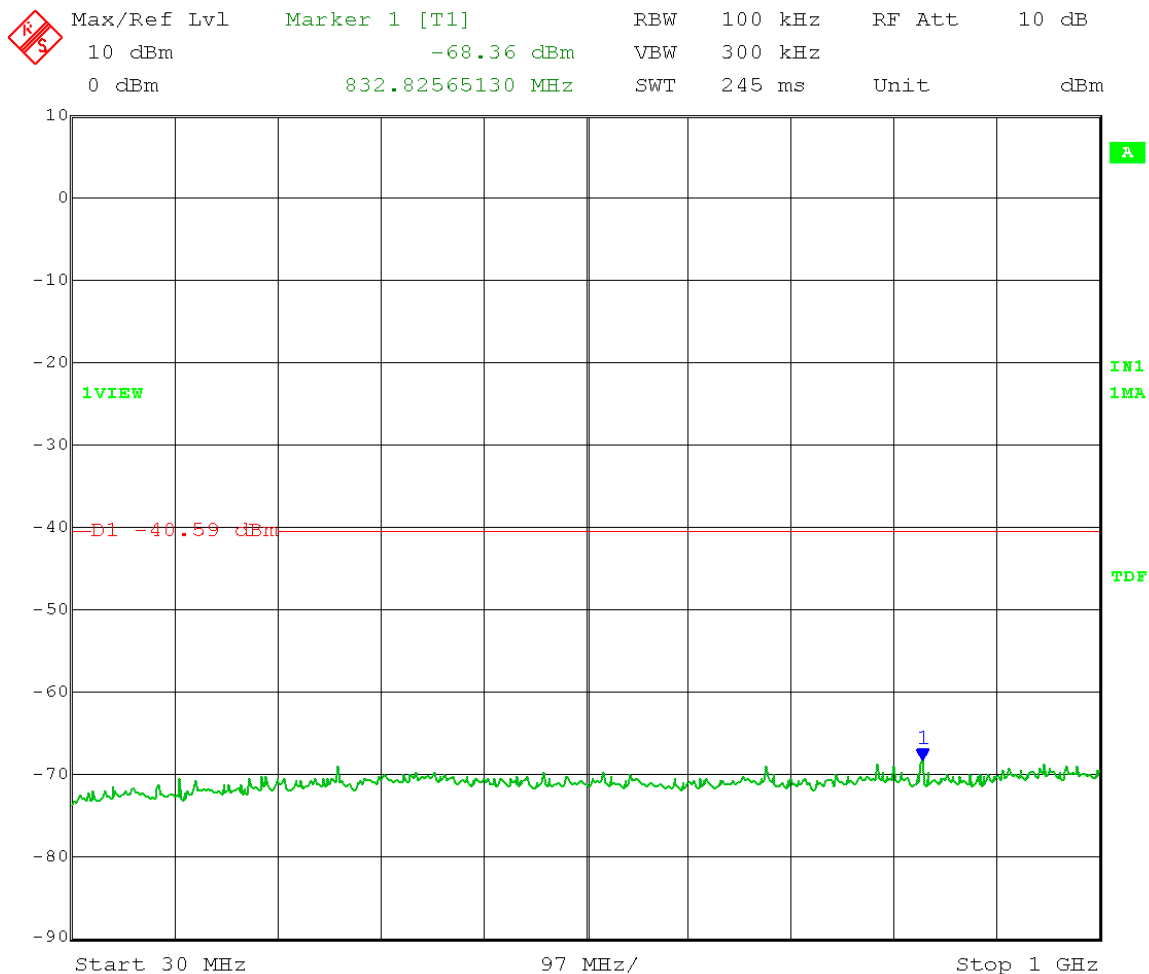
Date: 17.MAR.2014 10:46:10

Test Date: 03-17-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold Low Channel Transmit = 2427 MHz  
Point-to-Point & Point-to-Multipoint operation  
Output Power Setting 4.5 Antenna gain: 25 dBi  
Channel bandwidth: 40 MHz  
Output port: 1 OFDM MCS15  
**Reference Level Measurement**  
Limit = -10.59 dBm – 30 dB = -40.59 dBm



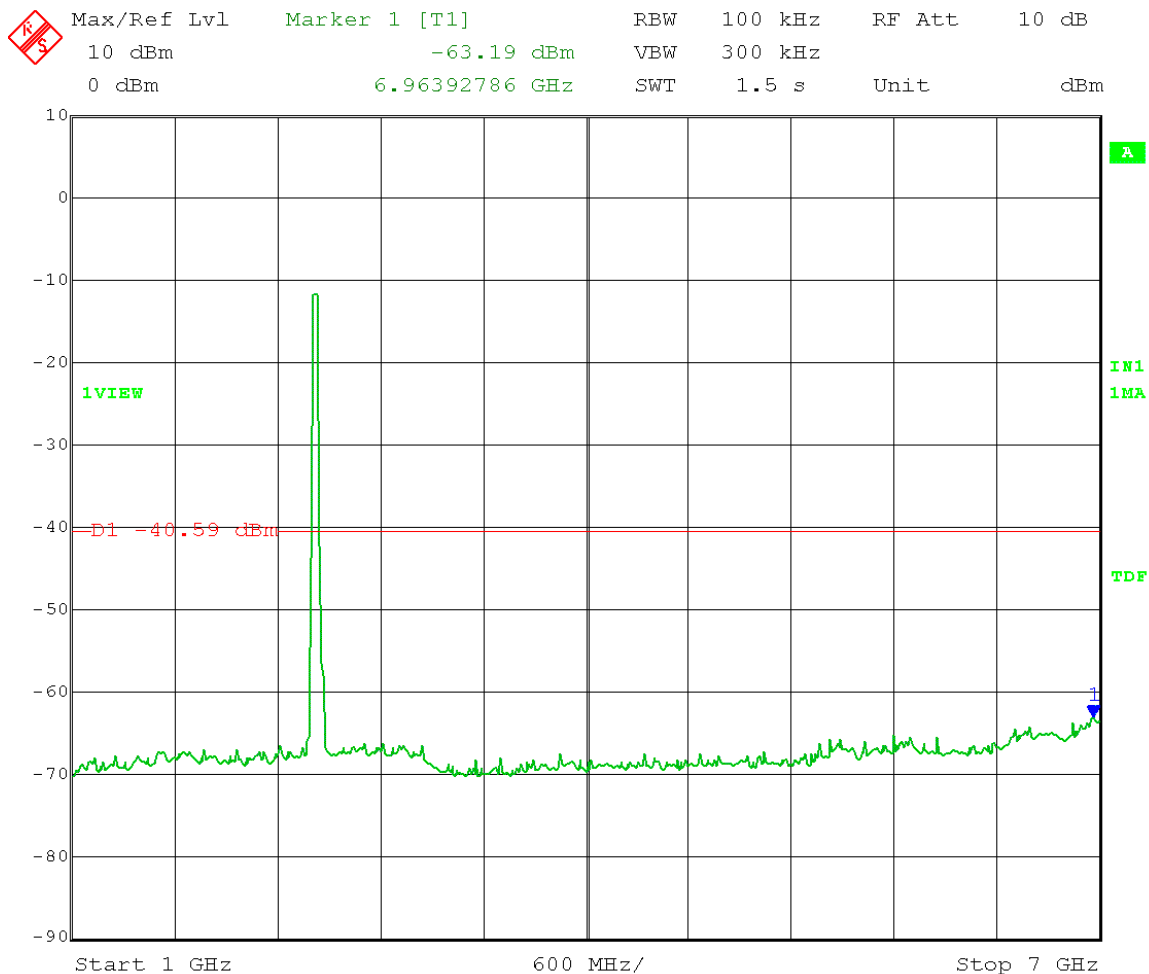
Date: 17.MAR.2014 11:07:01

Test Date: 03-17-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold Low Channel Transmit = 2427 MHz  
Point-to-Point & Point-to-Multipoint operation  
Output Power Setting 4.5 Antenna gain: 25 dBi  
Channel bandwidth: 40 MHz  
Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
Limit = -10.59 dBm - 30 dB = -40.59 dBm  
Frequency Range: 30 - 1000 MHz



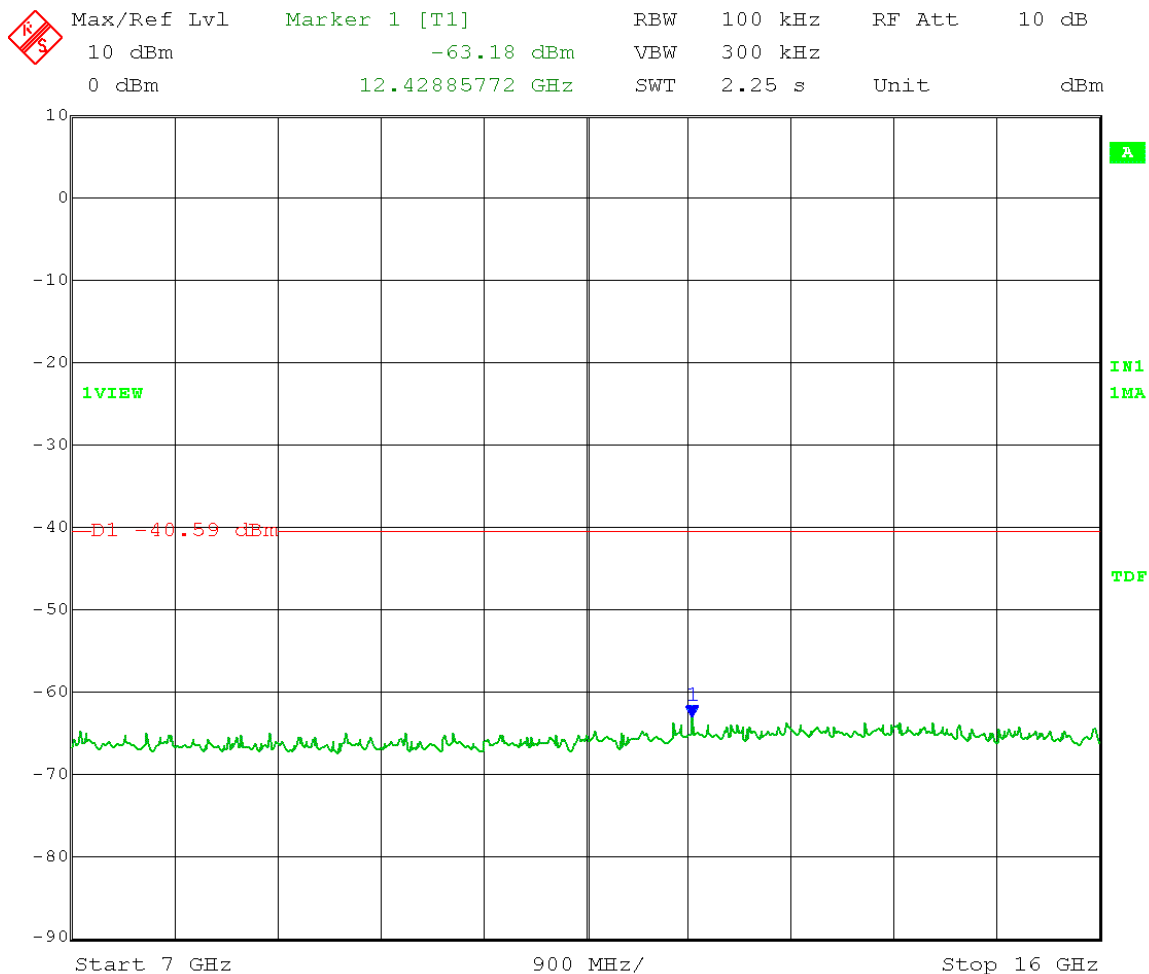
Date: 17.MAR.2014 11:13:02

Test Date: 03-17-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
 Test: Maximum Unwanted Emission Levels - Conducted  
 Operator: Craig B  
 Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
 Detector = Peak Sweep = Auto Couple  
 Trace = Max Hold Low Channel Transmit = 2427 MHz  
 Point-to-Point & Point-to-Multipoint operation  
 Output Power Setting 4.5 Antenna gain: 25 dBi  
 Channel bandwidth: 40 MHz  
 Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
 Limit = -10.59 dBm – 30 dB = -40.59 dBm  
 Frequency Range: 1 – 7 GHz



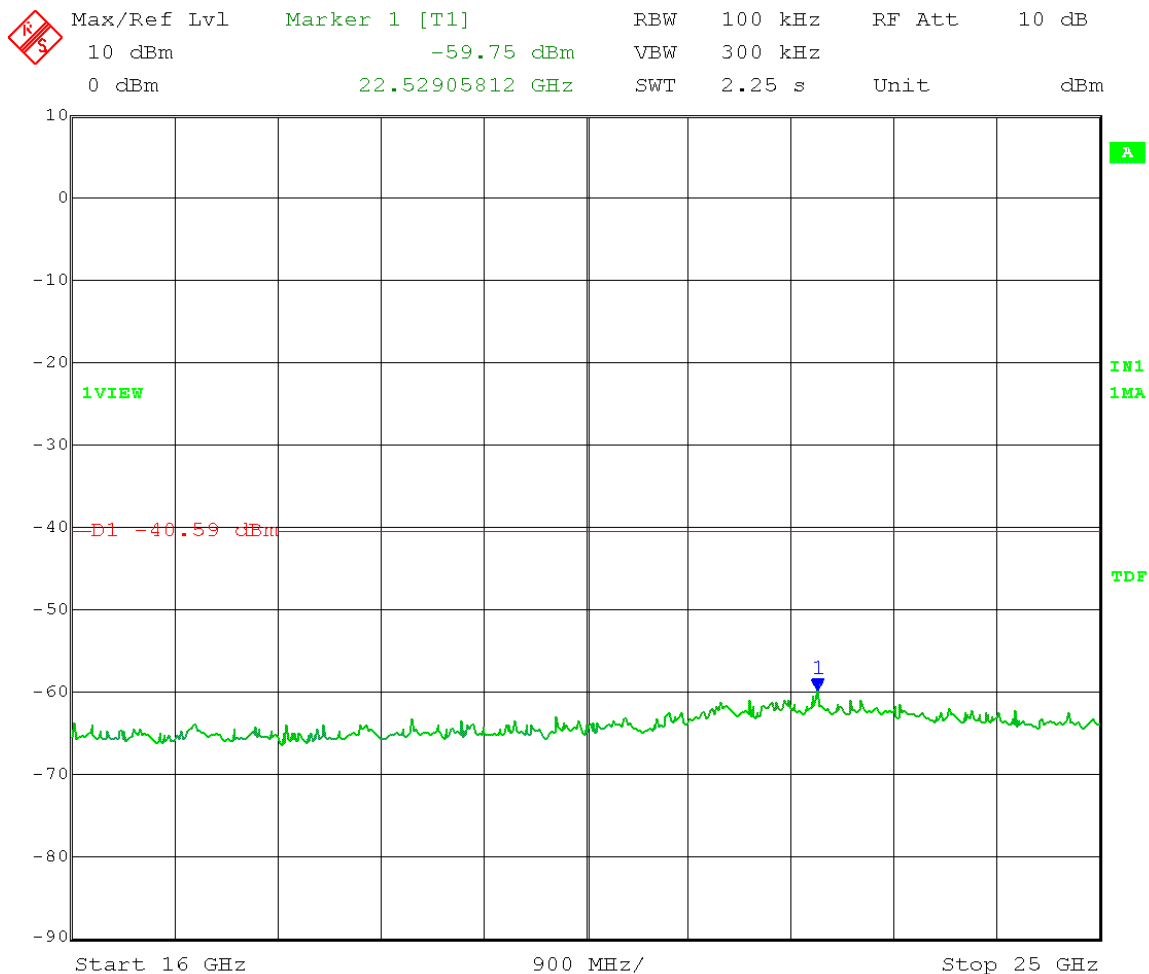
Date: 17.MAR.2014 11:09:14

Test Date: 03-17-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold Low Channel Transmit = 2427 MHz  
Point-to-Point & Point-to-Multipoint operation  
Output Power Setting 4.5 Antenna gain: 25 dBi  
Channel bandwidth: 40 MHz  
Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
Limit = -10.59 dBm - 30 dB = -40.59 dBm  
Frequency Range: 7 - 16 GHz



Date: 17.MAR.2014 11:10:21

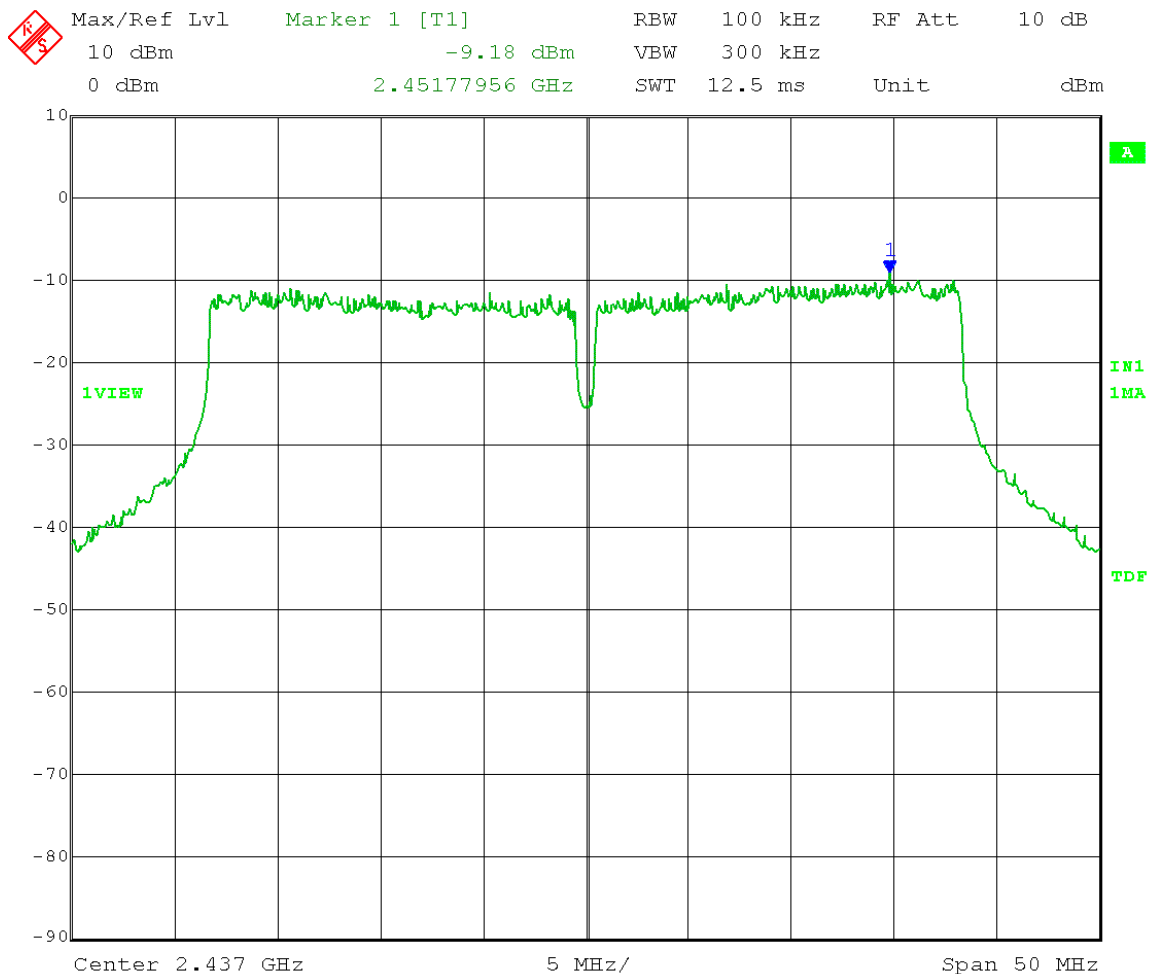
Test Date: 03-17-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold Low Channel Transmit = 2427 MHz  
Point-to-Point & Point-to-Multipoint operation  
Output Power Setting 4.5 Antenna gain: 25 dBi  
Channel bandwidth: 40 MHz  
Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
Limit = -10.59 dBm - 30 dB = -40.59 dBm  
Frequency Range: 16 - 25 GHz



Date: 17.MAR.2014 11:11:42

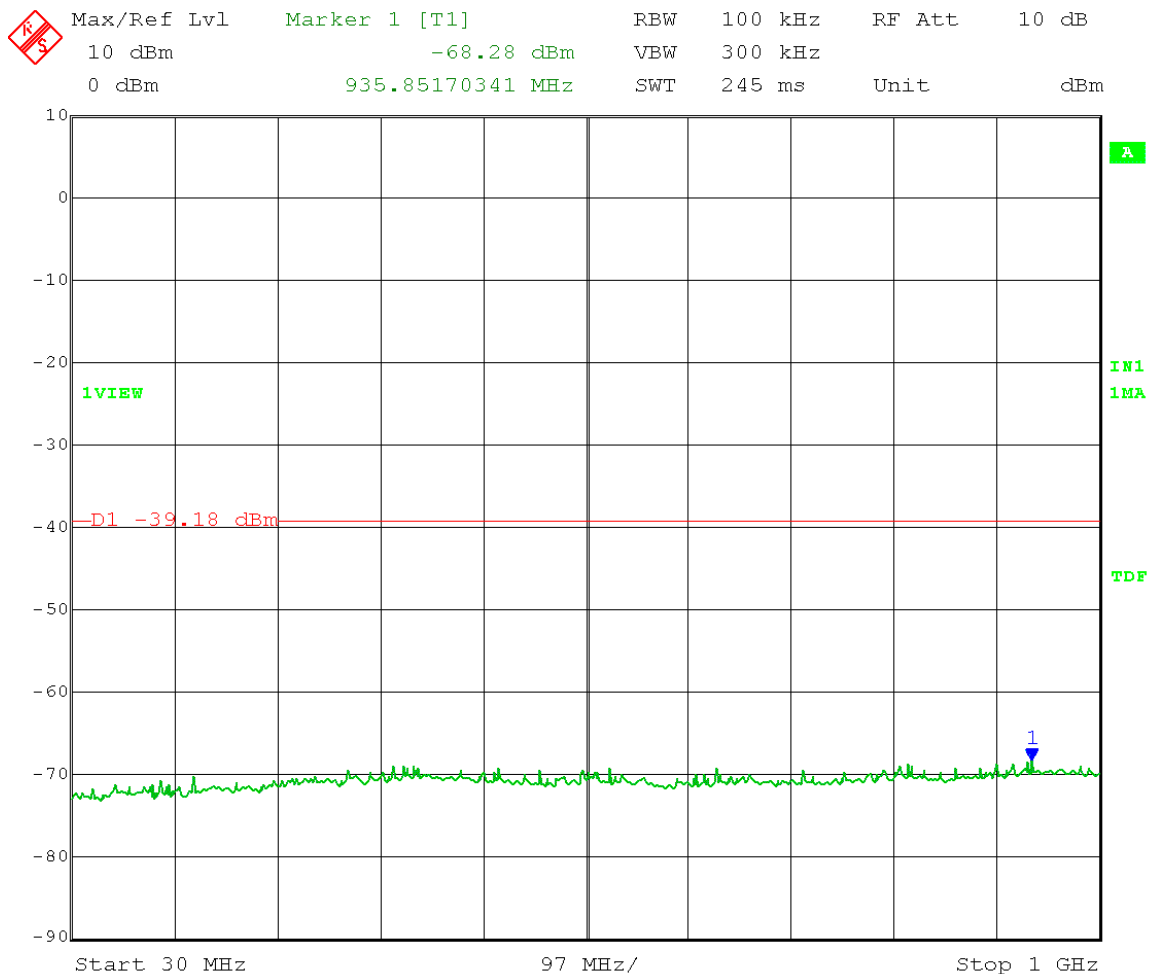


Test Date: 03-17-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold Mid Channel Transmit = 2437 MHz  
Point-to-Point & Point-to-Multipoint operation  
Output Power Setting 4.5 Antenna gain: 25 dBi  
Channel bandwidth: 40 MHz  
Output port: 1 OFDM MCS15  
**Reference Level Measurement**  
Limit = -9.18 dBm – 30 dB = -39.18 dBm



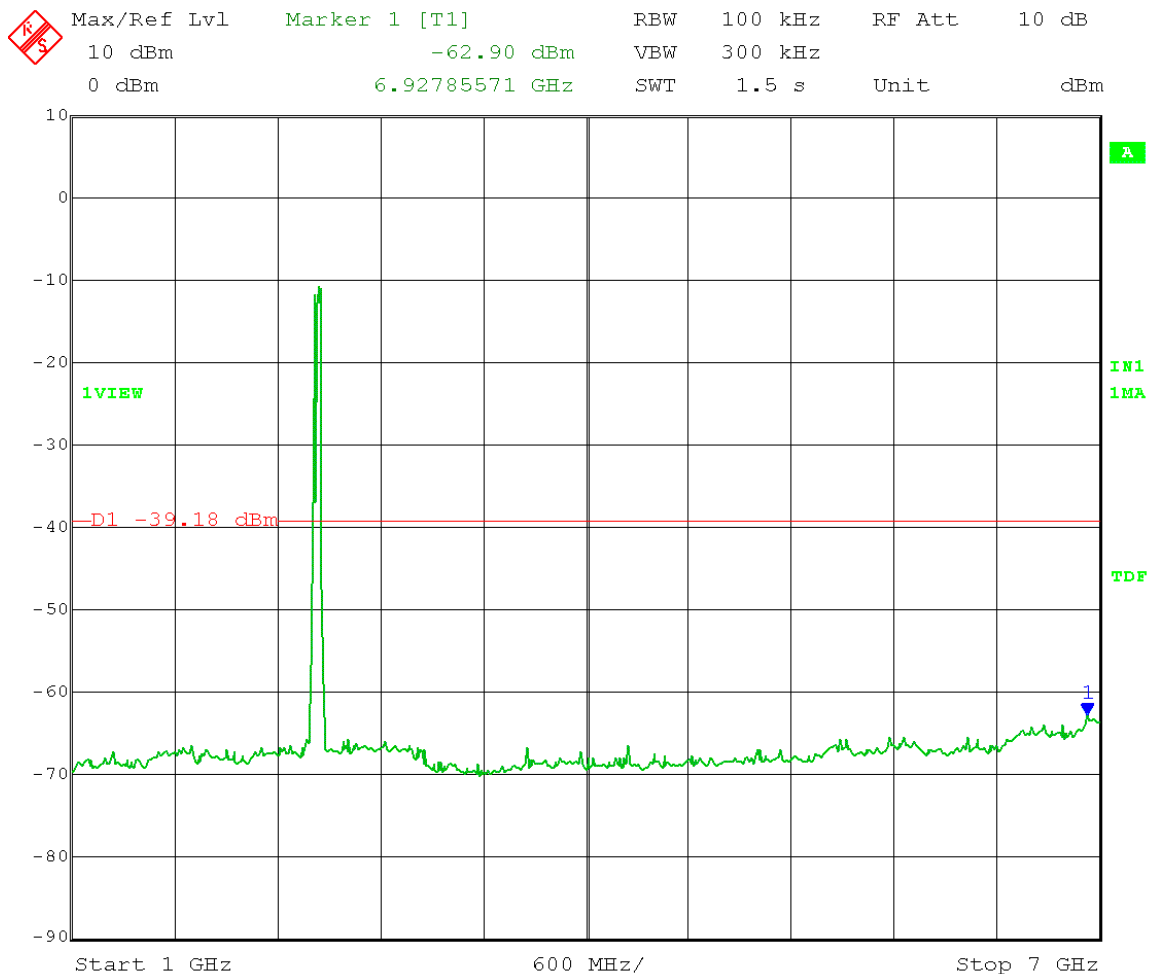
Date: 17.MAR.2014 10:52:15

Test Date: 03-17-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold Mid Channel Transmit = 2437 MHz  
Point-to-Point & Point-to-Multipoint operation  
Output Power Setting: 4.5 Antenna gain: 25 dBi  
Channel bandwidth: 40 MHz  
Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
Limit = -9.18 dBm - 30 dB = -39.18 dBm  
Frequency Range: 30 - 1000 MHz



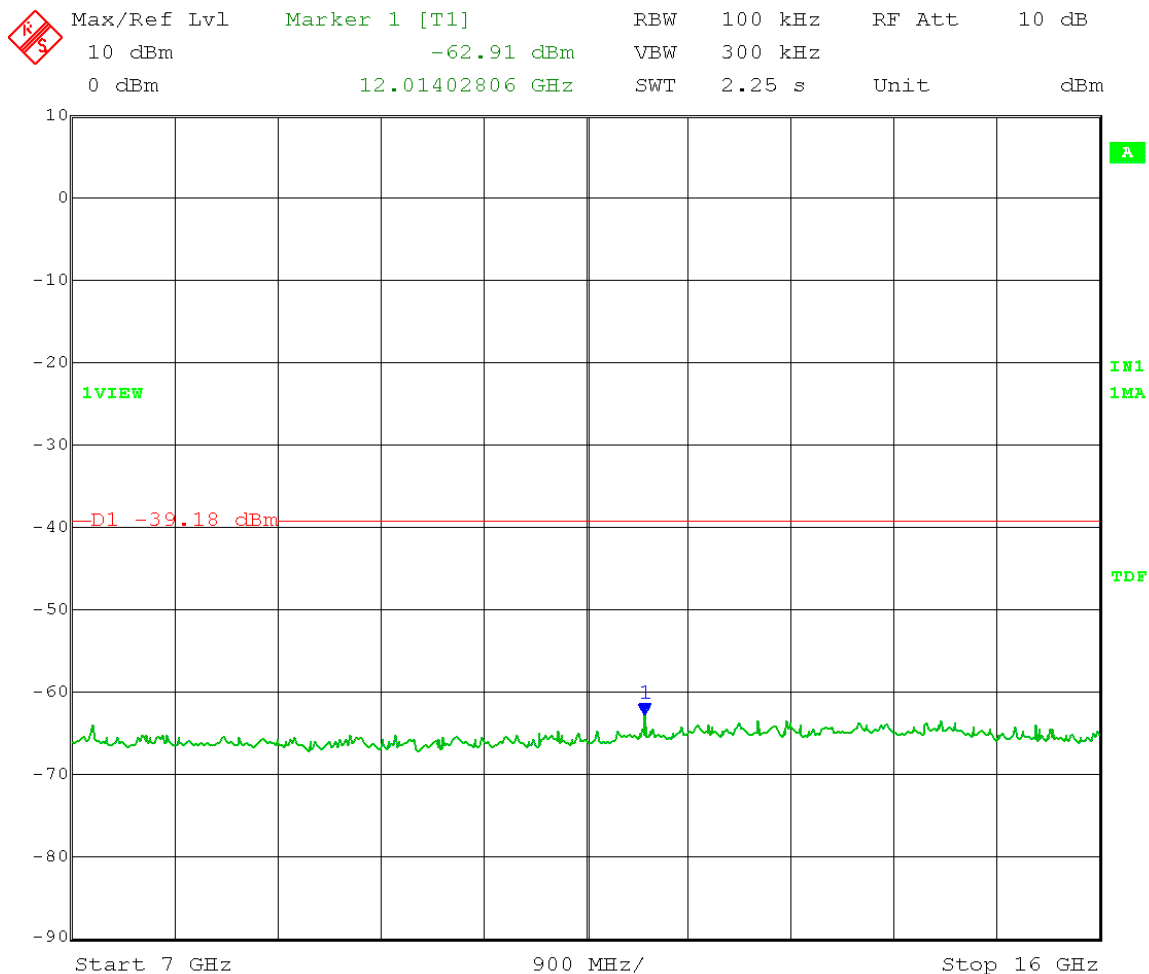
Date: 17.MAR.2014 11:02:47

Test Date: 03-17-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold Mid Channel Transmit = 2437 MHz  
Point-to-Point & Point-to-Multipoint operation  
Output Power Setting 4.5 Antenna gain: 25 dBi  
Channel bandwidth: 40 MHz  
Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
Limit = -9.18 dBm - 30 dB = -39.18 dBm  
Frequency Range: 1 - 7 GHz



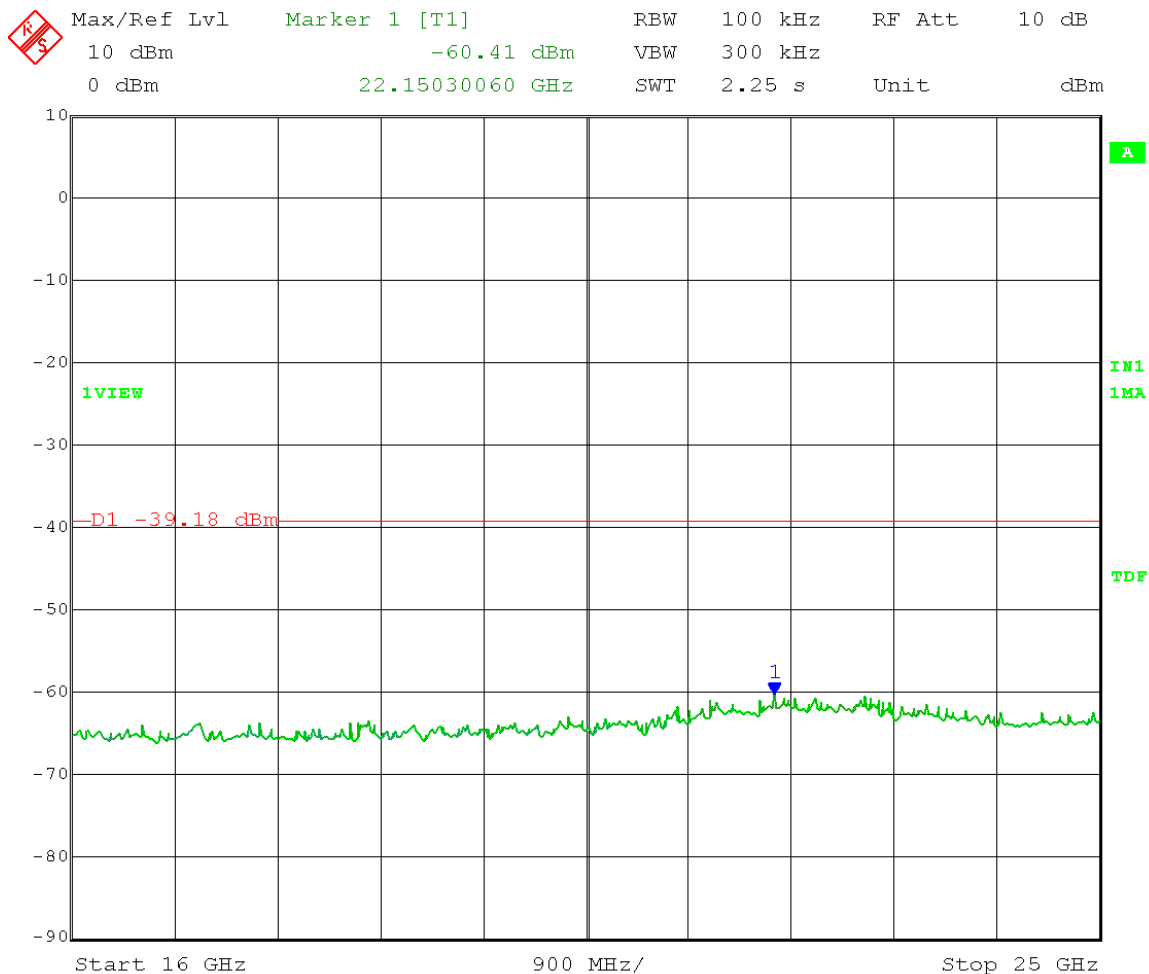
Date: 17.MAR.2014 10:55:33

Test Date: 03-17-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold Mid Channel Transmit = 2437 MHz  
Point-to-Point & Point-to-Multipoint operation  
Output Power Setting: 4.5 Antenna gain: 25 dBi  
Channel bandwidth: 40 MHz  
Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
Limit = -9.18 dBm - 30 dB = -39.18 dBm  
Frequency Range: 7 - 16 GHz



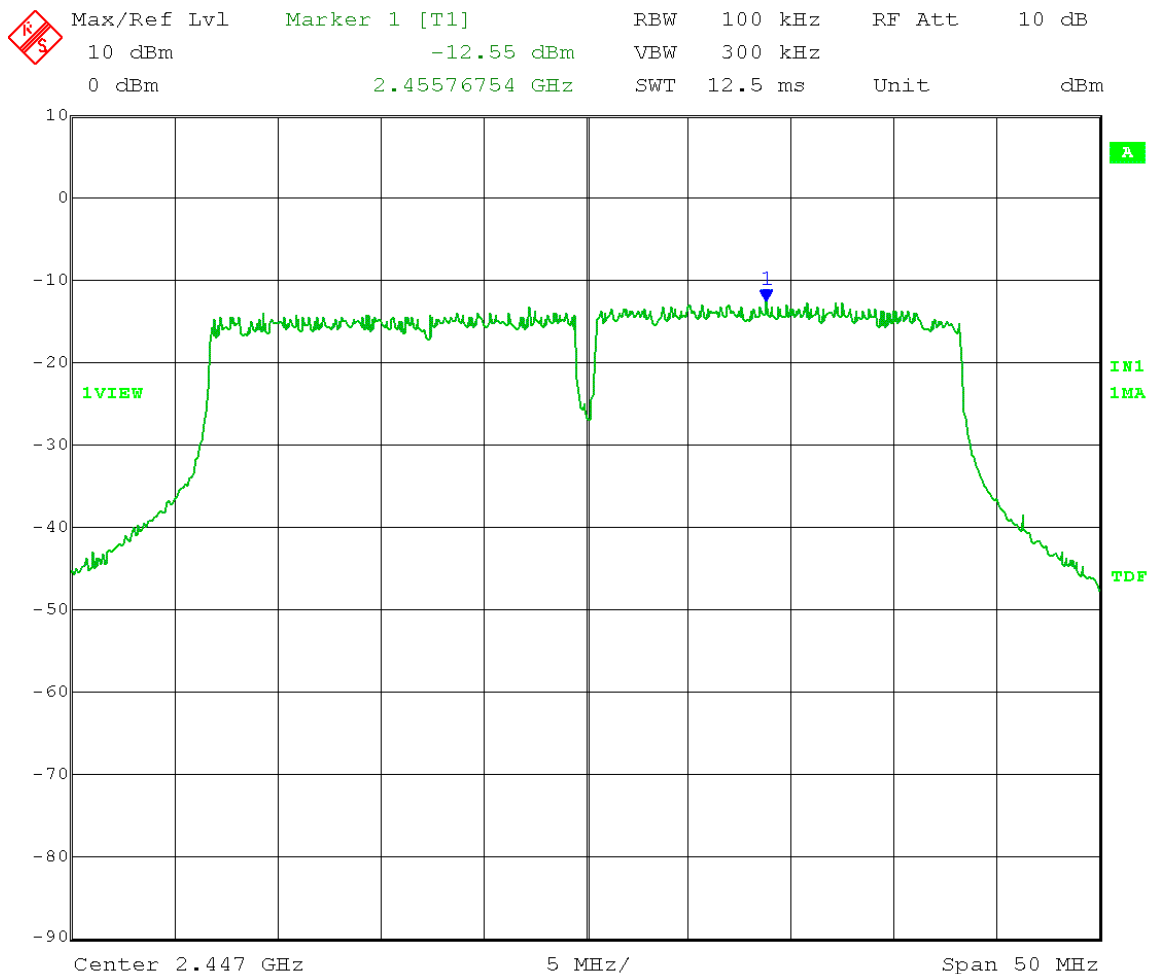
Date: 17.MAR.2014 10:59:14

Test Date: 03-17-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
 Test: Maximum Unwanted Emission Levels - Conducted  
 Operator: Craig B  
 Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
 Detector = Peak Sweep = Auto Couple  
 Trace = Max Hold Mid Channel Transmit = 2437 MHz  
 Point-to-Point & Point-to-Multipoint operation  
 Output Power Setting: 4.5 Antenna gain: 25 dBi  
 Channel bandwidth: 40 MHz  
 Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
 Limit = -9.18 dBm - 30 dB = -39.18 dBm  
 Frequency Range: 16 - 25 GHz



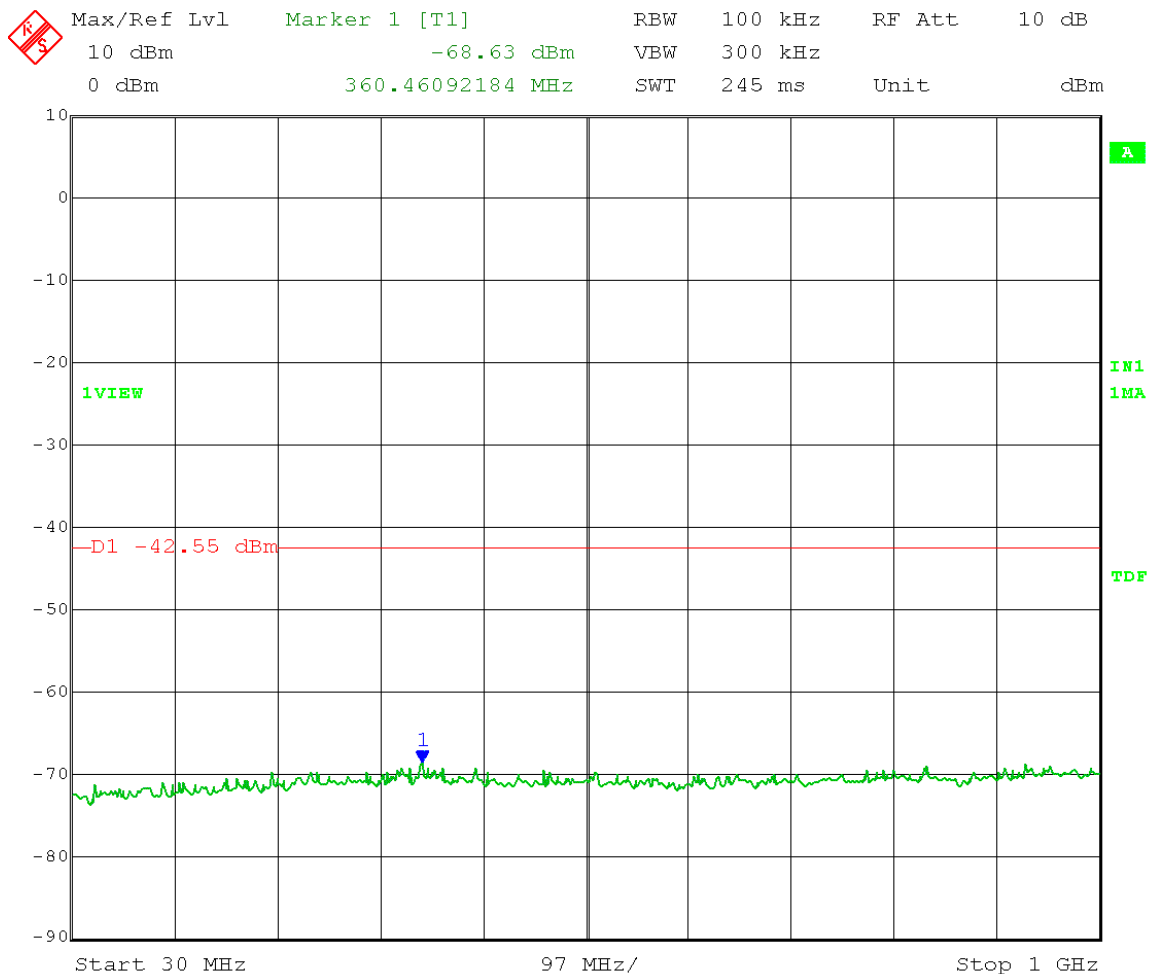
Date: 17.MAR.2014 11:00:52

Test Date: 03-17-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold High Channel Transmit = 2447 MHz  
Point-to-Point & Point-to-Multipoint operation  
Output Power Setting: 2.5 Antenna gain: 25 dBi  
Channel bandwidth: 40 MHz  
Output port: 1 OFDM MCS15  
**Reference Level Measurement**  
Limit = -12.55 dBm – 30 dB = -42.55 dBm



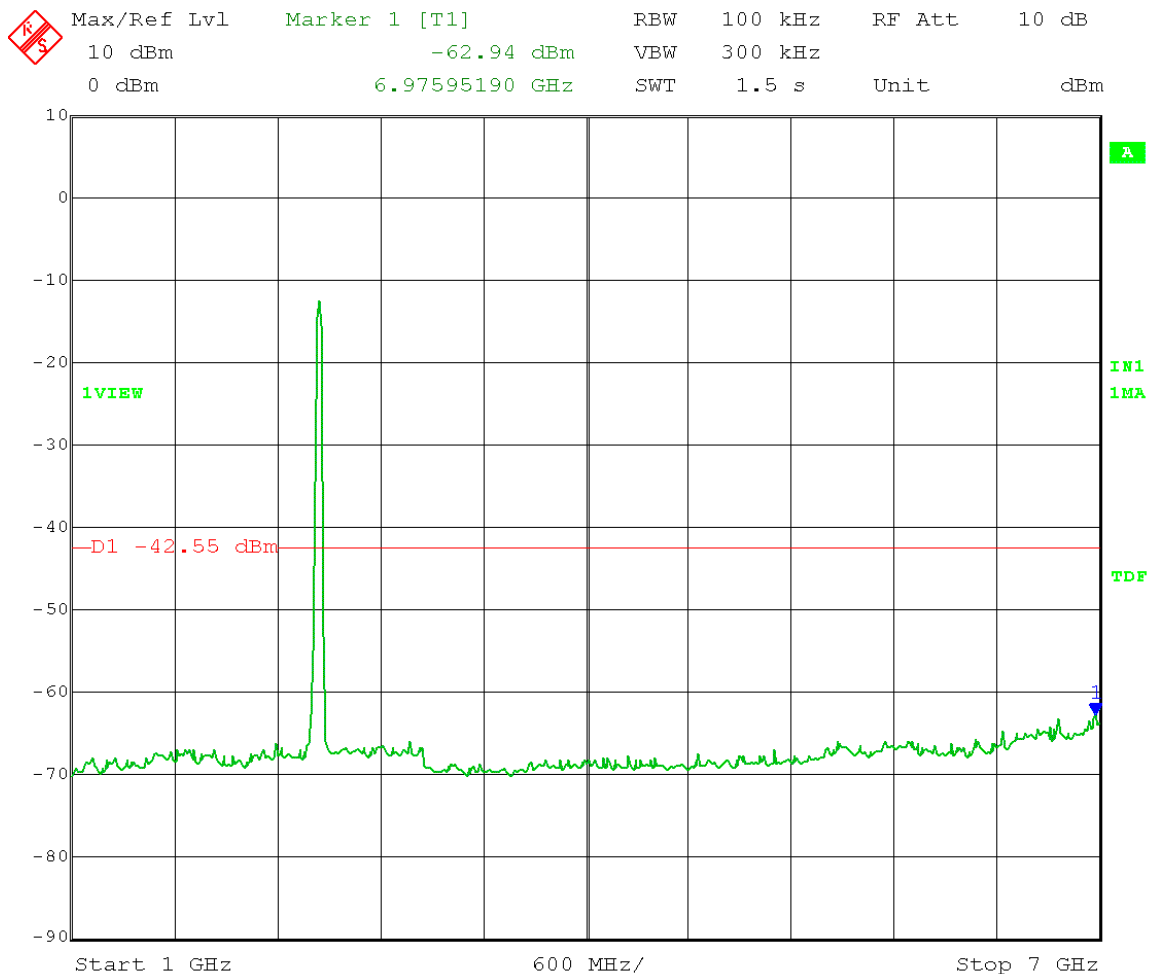
Date: 17.MAR.2014 11:16:56

Test Date: 03-17-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold High Channel Transmit = 2447 MHz  
Point-to-Point & Point-to-Multipoint operation  
Output Power Setting: 2.5 Antenna gain: 25 dBi  
Channel bandwidth: 40 MHz  
Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
Limit = -12.55 dBm – 30 dB = -42.55 dBm  
Frequency Range: 30 – 1000 MHz



Date: 17.MAR.2014 11:23:48

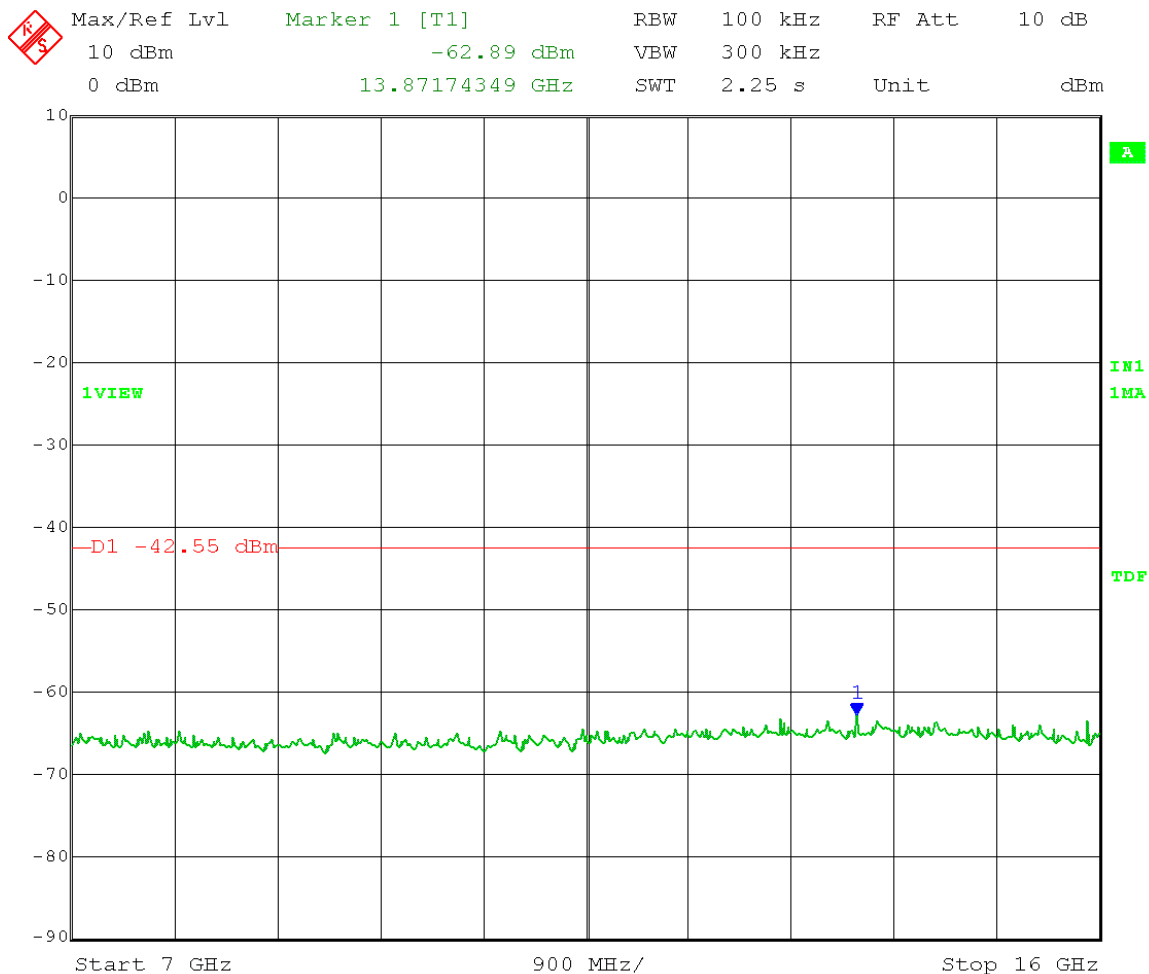
Test Date: 03-17-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold High Channel Transmit = 2447 MHz  
Point-to-Point & Point-to-Multipoint operation  
Output Power Setting: 2.5 Antenna gain: 25 dBi  
Channel bandwidth: 40 MHz  
Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
Limit = -12.55 dBm – 30 dB = -42.55 dBm  
Frequency Range: 1 – 7 GHz



Date: 17.MAR.2014 11:19:12

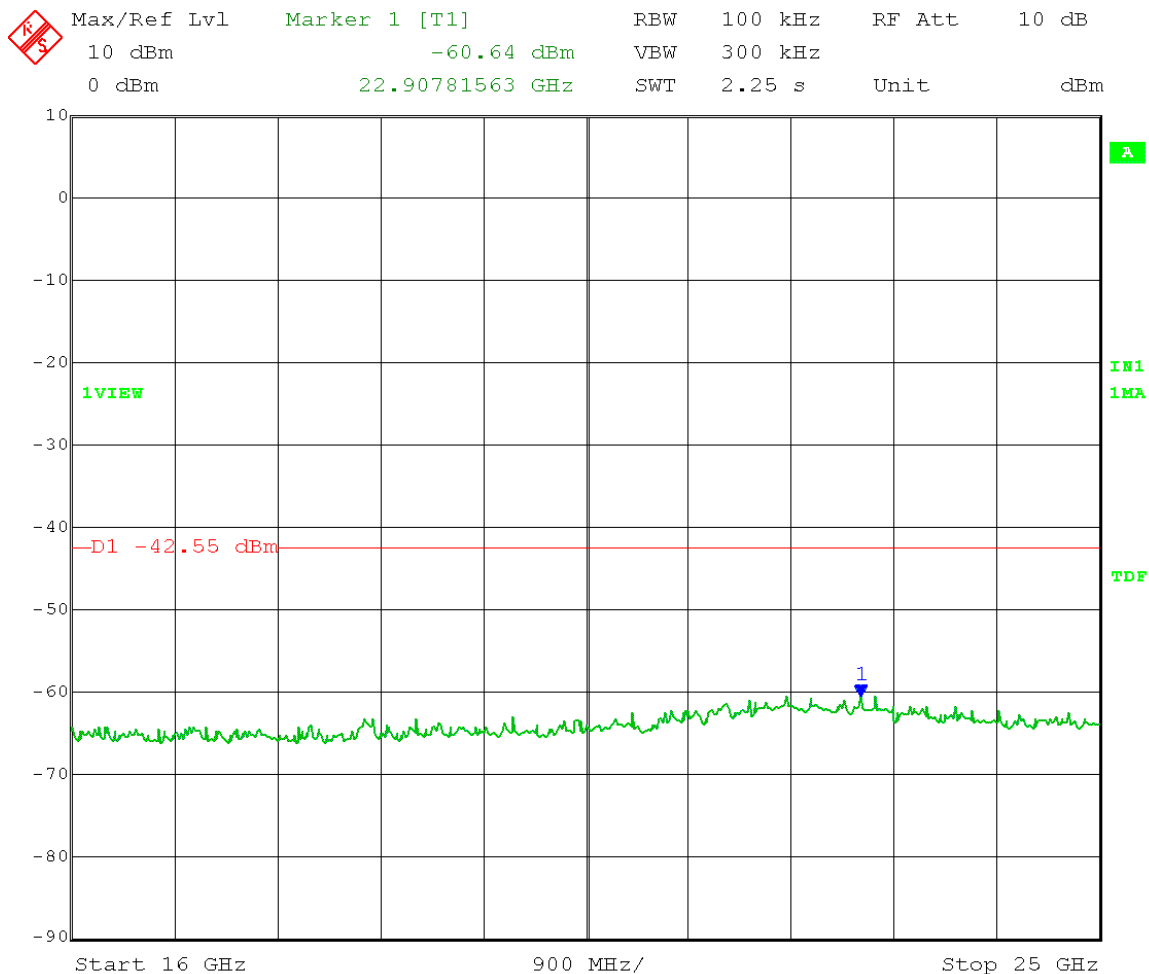


Test Date: 03-17-2014  
 Company: Cambium Networks  
 EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
 Test: Maximum Unwanted Emission Levels - Conducted  
 Operator: Craig B  
 Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
 Detector = Peak Sweep = Auto Couple  
 Trace = Max Hold High Channel Transmit = 2447 MHz  
 Point-to-Point & Point-to-Multipoint operation  
 Output Power Setting: 2.5 Antenna gain: 25 dBi  
 Channel bandwidth: 40 MHz  
 Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
 Limit = -12.55 dBm - 30 dB = -42.55 dBm  
 Frequency Range: 7 - 16 GHz



Date: 17.MAR.2014 11:20:35

Test Date: 03-17-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Maximum Unwanted Emission Levels - Conducted  
Operator: Craig B  
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = Auto Couple  
Trace = Max Hold High Channel Transmit = 2447 MHz  
Point-to-Point & Point-to-Multipoint operation  
Output Power Setting: 2.5 Antenna gain: 25 dBi  
Channel bandwidth: 40 MHz  
Output port: 1 OFDM MCS15  
**Emission Level Measurement**  
Limit = -12.55 dBm - 30 dB = -42.55 dBm  
Frequency Range: 16 - 25 GHz



Date: 17.MAR.2014 11:22:06



166 South Carter, Genoa City, WI 53128

|                |                             |
|----------------|-----------------------------|
| Company:       | Cambium Networks            |
| Model Tested:  | C024900P021A & C024900P031A |
| Report Number: | 19738                       |
| DLS Project:   | 6334                        |

## Appendix B – Measurement Data

### B6.0 Maximum Unwanted Emission Levels – Conducted Operating Band-Edge

**Rule Section:** FCC 15.247(d)

**Test Procedure:** FCC KDB 558074 D01 DTS Meas Guidance v03r01 – *Guidance for Performing Compliance Measurements on Digital Transmission Systems (DTS) Operating Under §15.247*

11.0 Emissions in non-restricted frequency bands

**Description:** RBW = 100 kHz  
VBW  $\geq$  300 kHz  
Detector = peak  
Sweep = auto couple  
Trace mode = max hold

Measurements were taken for OFDM MCS15 with 20 MHz and 40 MHz channel bandwidths at the low, middle and high channels of operation. EUT was set to transmit continuously with a 100% duty cycle.

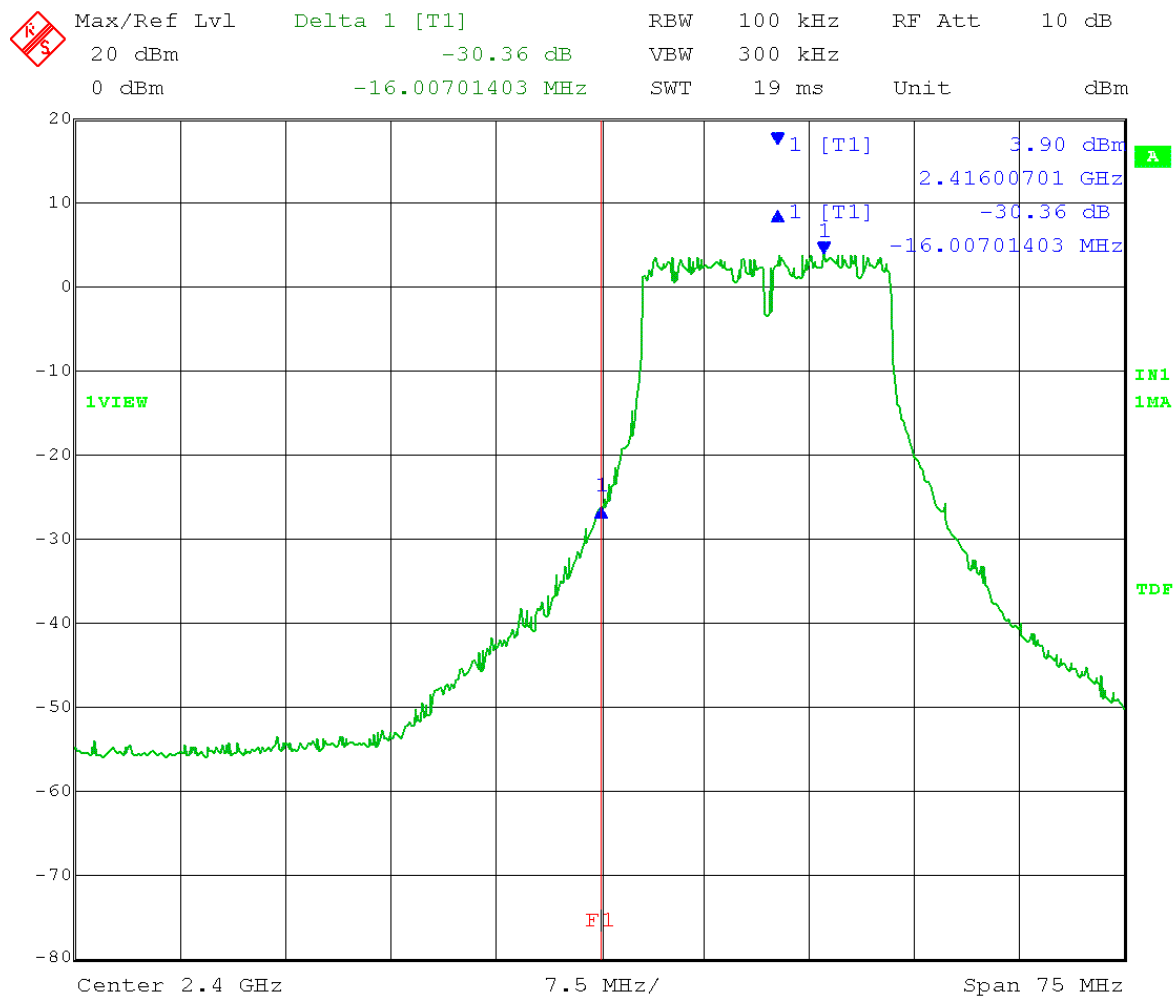
**Limit:** 30 dB below maximum in-band average PSD level (maximum level in any 100 kHz band). Average output power procedure was used to measure the fundamental emission power.

**Results:** Passed

**Notes:** Since output port 1 measured a slightly higher output power than port 0, measurements for this test were made on port 1 only.

Test Date: 03-05-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Band-Edge Measurements - Conducted  
Operator: Craig B

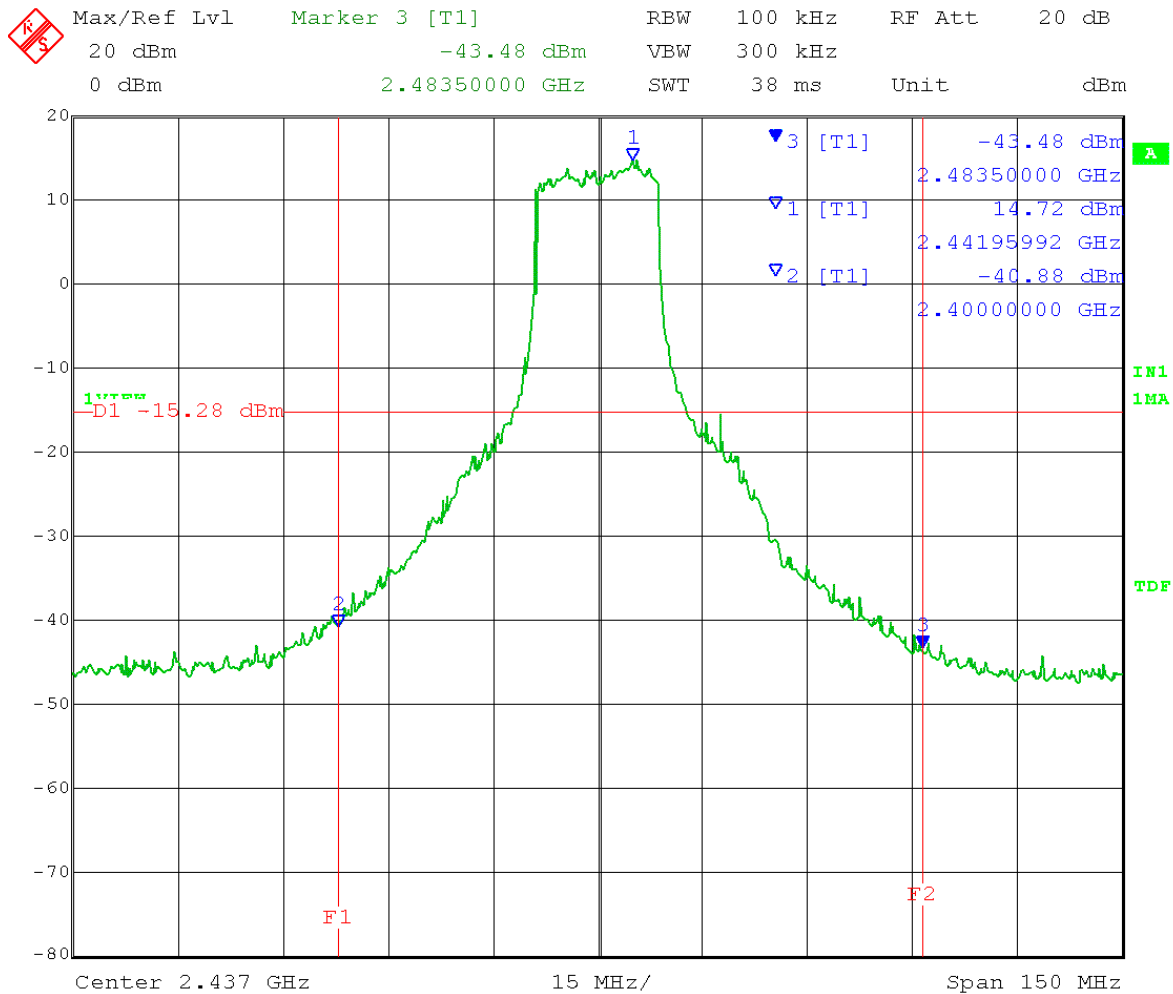
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = auto couple  
Trace = max hold  
Point-to-Multipoint operation  
Low Channel: Transmit = 2412 MHz Output power setting: 18  
Channel bandwidth: 20 MHz Output port: 1 Antenna gain: 8 dBi  
Lower band edge frequency = 2.4 GHz  
Limit: > 30 dB below Peak In-Band Emission



Date: 5.MAR.2014 13:31:25

Test Date: 03-05-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Band-Edge Measurements - Conducted  
Operator: Craig B

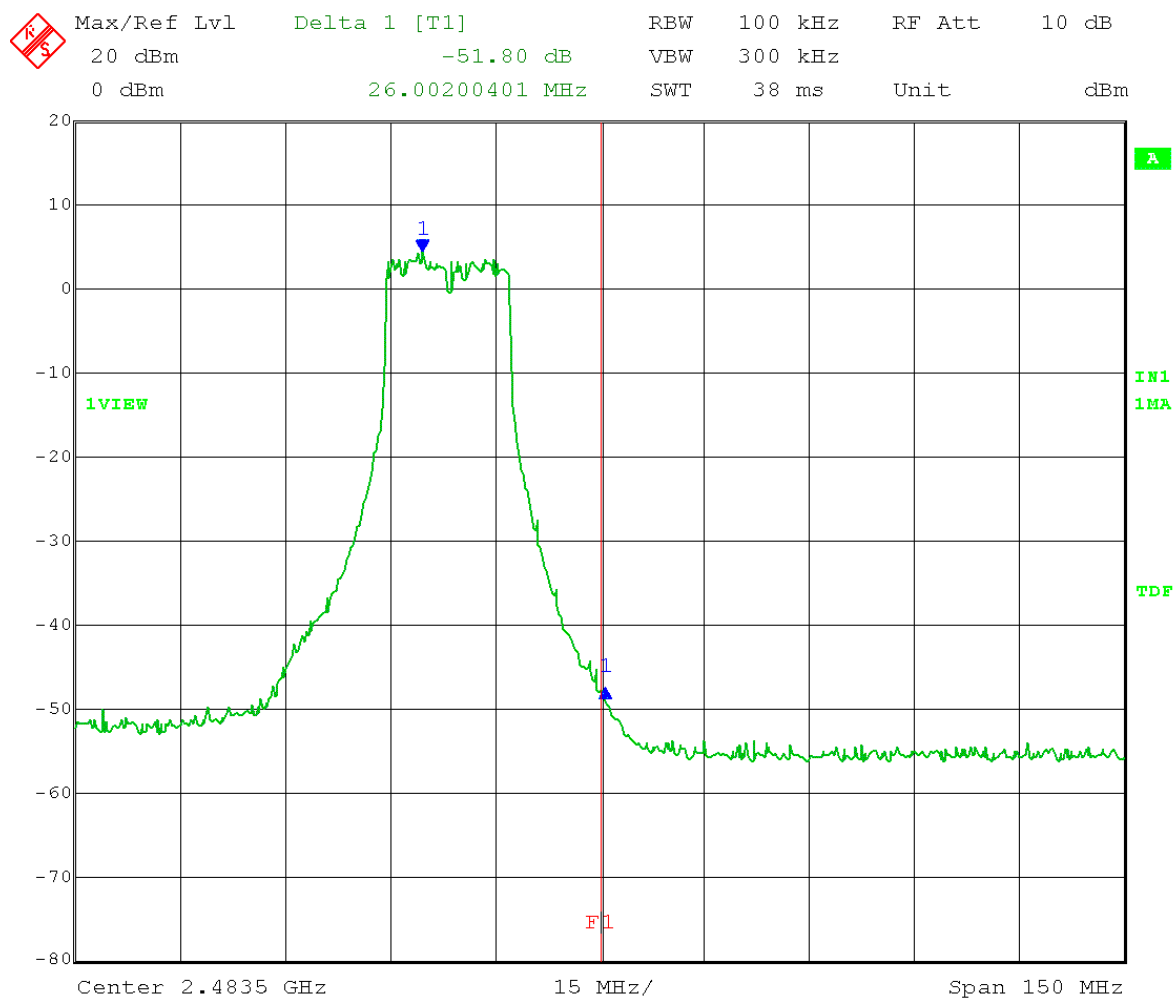
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = auto couple  
Trace = max hold  
Point-to-Multipoint operation  
Mid Channel: Transmit = 2437 MHz Output power setting: 26.5  
Channel bandwidth: 20 MHz Output port: 1 Antenna gain: 8 dBi  
Lower band edge frequency = 2.4 GHz  
Upper band edge frequency = 2.4835 GHz  
Limit: > 30 dB below Peak In-Band Emission



Date: 5.MAR.2014 12:56:46

Test Date: 03-05-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Band-Edge Measurements - Conducted  
Operator: Craig B

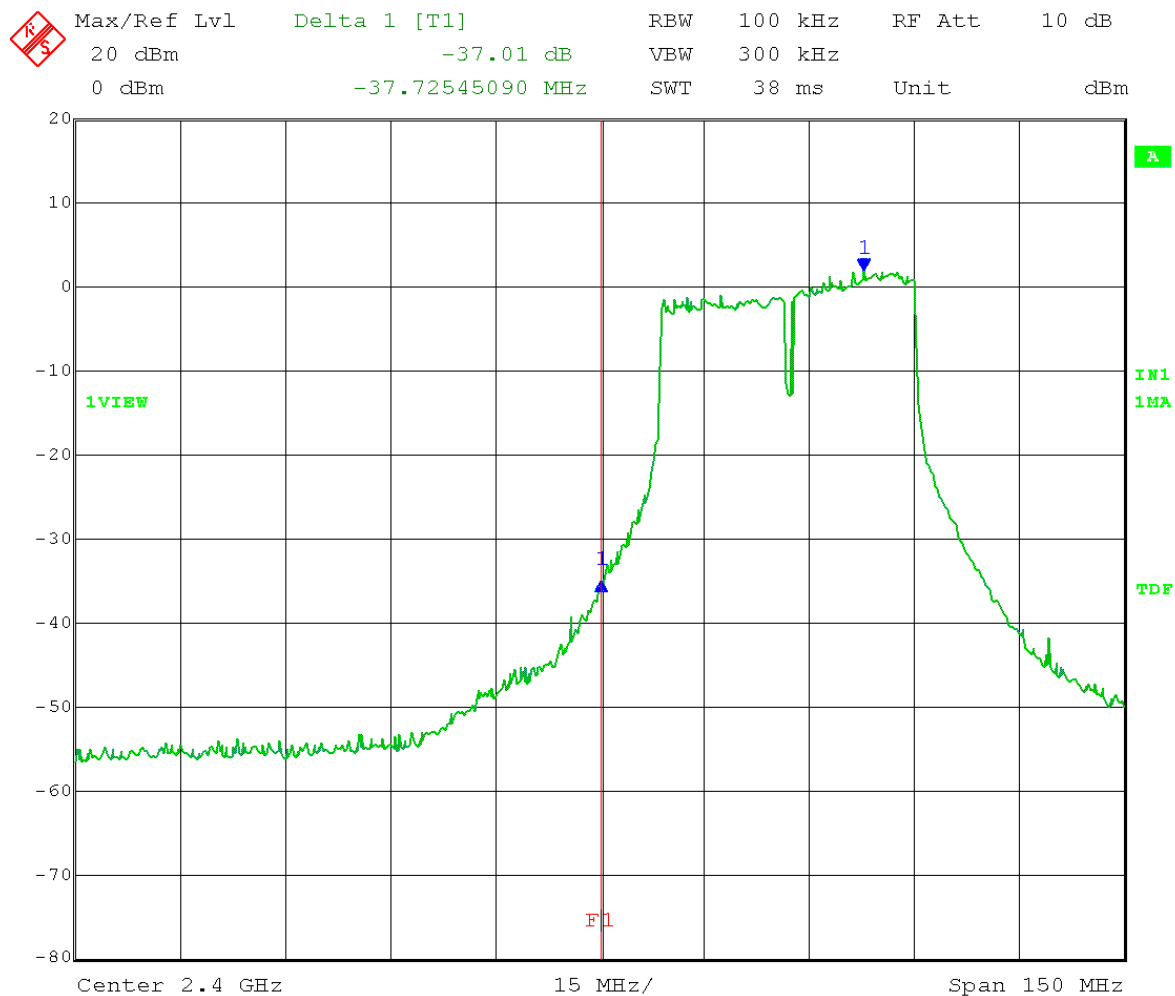
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = auto couple  
Trace = max hold  
Point-to-Multipoint operation  
High Channel: Transmit = 2462 MHz Output power setting: 18  
Channel bandwidth: 20 MHz Output port: 1 Antenna gain: 8 dBi  
Upper band edge frequency = 2.4835 GHz  
Limit: > 30 dB below Peak In-Band Emission



Date: 5.MAR.2014 13:27:06

Test Date: 03-05-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Band-Edge Measurements - Conducted  
Operator: Craig B

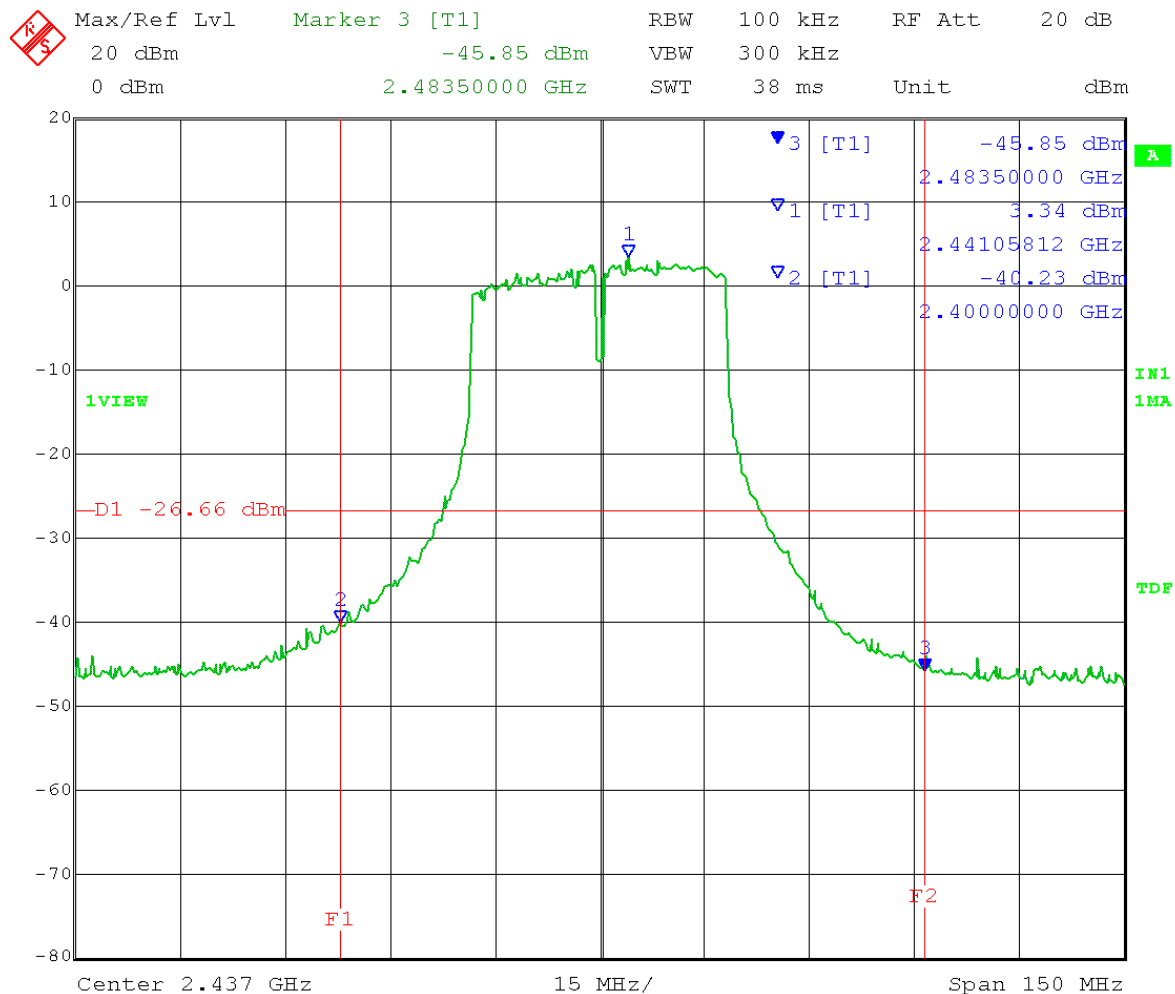
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = auto couple  
Trace = max hold  
Point-to-Multipoint operation  
Low Channel: Transmit = 2427 MHz Output power setting: 15.5  
Channel bandwidth: 40 MHz Output port: 1 Antenna gain: 8 dBi  
Lower band edge frequency = 2.4 GHz  
Limit: > 30 dB below Peak In-Band Emission



Date: 5.MAR.2014 13:04:44

Test Date: 03-05-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Band-Edge Measurements - Conducted  
Operator: Craig B

Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = auto couple  
Trace = max hold  
Point-to-Multipoint operation  
Mid Channel: Transmit = 2437 MHz Output power setting: 18  
Channel bandwidth: 40 MHz Output port: 1 Antenna gain: 8 dBi  
Lower band edge frequency = 2.4 GHz  
Upper band edge frequency = 2.4835 GHz  
Limit: > 30 dB below Peak In-Band Emission

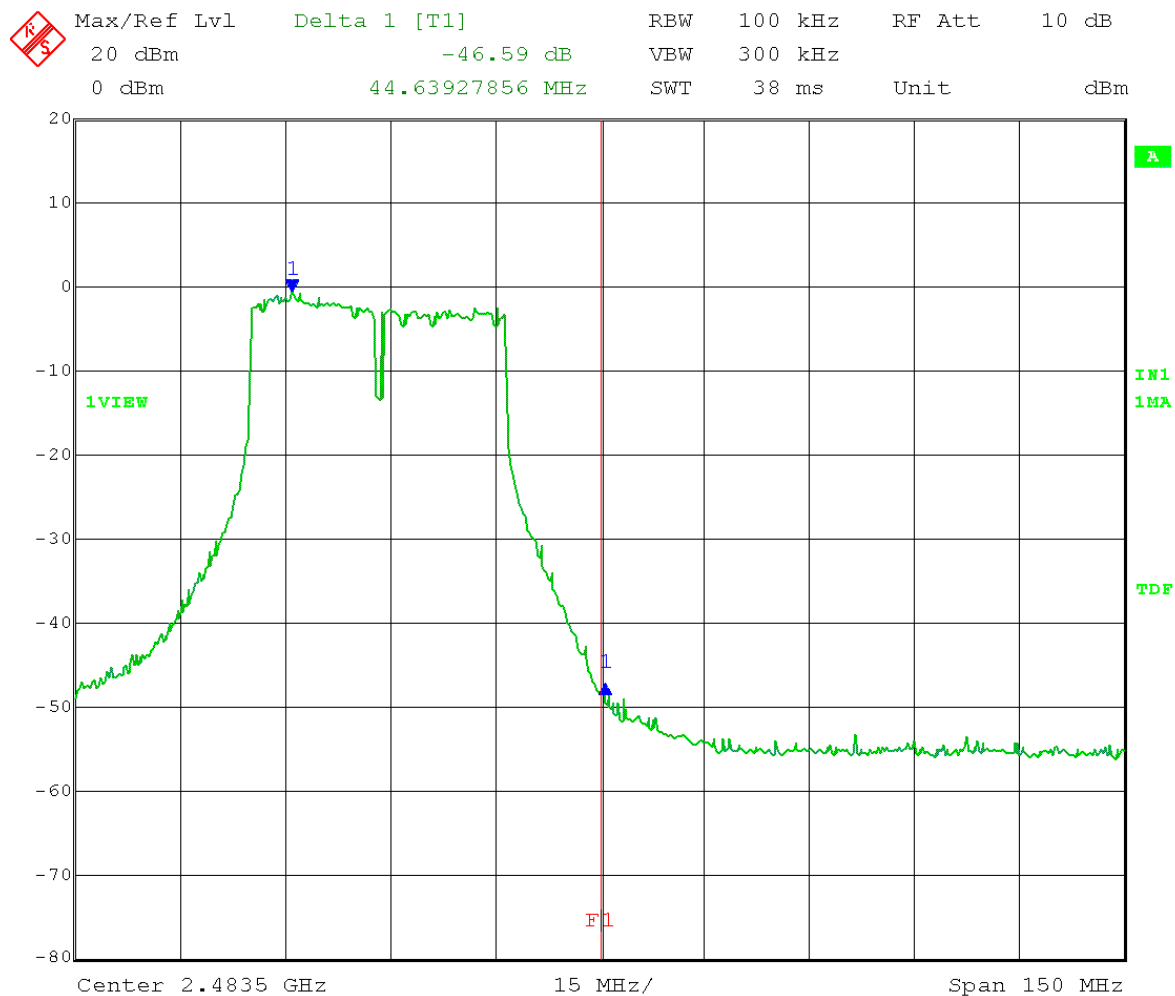


Date: 5.MAR.2014 13:00:21



Test Date: 03-05-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Band-Edge Measurements - Conducted  
Operator: Craig B

Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = auto couple  
Trace = max hold  
Point-to-Multipoint operation  
High Channel: Transmit = 2452 MHz Output power setting: 15.5  
Channel bandwidth: 40 MHz Output port: 1 Antenna gain: 8 dBi  
Upper band edge frequency = 2.4835 GHz  
Limit: > 30 dB below Peak In-Band Emission



Date: 5.MAR.2014 13:24:14

Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
 Detector = Peak Sweep = auto couple  
 Trace = max hold  
 POINT-TO-POINT & POINT-TO-MULTIPOINT OPERATION  
 Low Channel: Transmit = 2412 MHz Output power setting: 15  
 Channel bandwidth: 20 MHz Output port: 1 Antenna gain: 12 dBi  
 Lower band edge frequency = 2.4 GHz  
 Limit: > 30 dB below Peak In-Band Emission



Test Date: 03-11-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Band-Edge Measurements - Conducted  
Operator: Craig B

Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = auto couple  
Trace = max hold

POINT-TO-POINT OPERATION

Mid Channel: Transmit = 2437 MHz

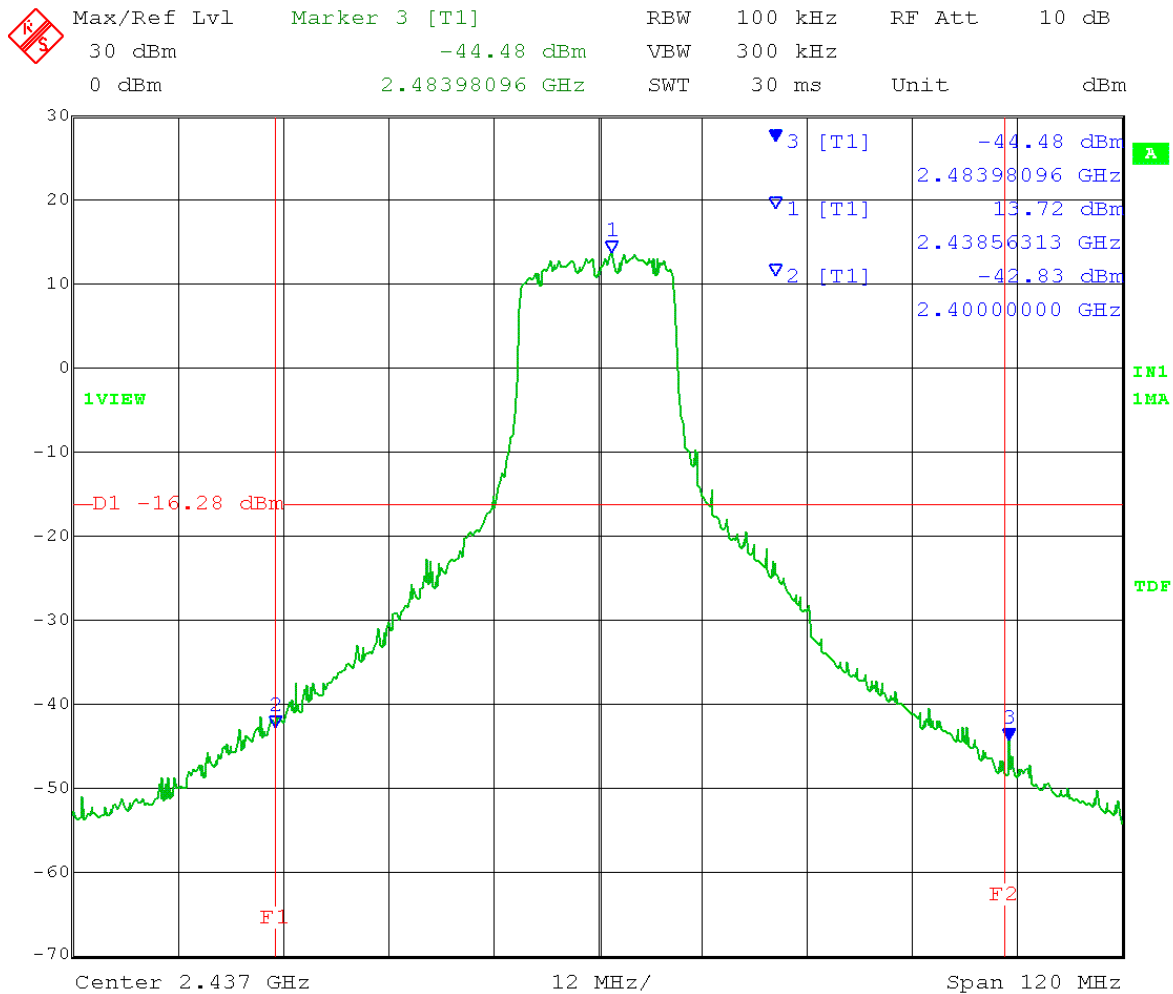
Output power setting: 27

Channel bandwidth: 20 MHz Output port: 1 Antenna gain: 12 dBi

Lower band edge frequency = 2.4 GHz

Upper band edge frequency = 2.4835 GHz

Limit: > 30 dB below Peak In-Band Emission



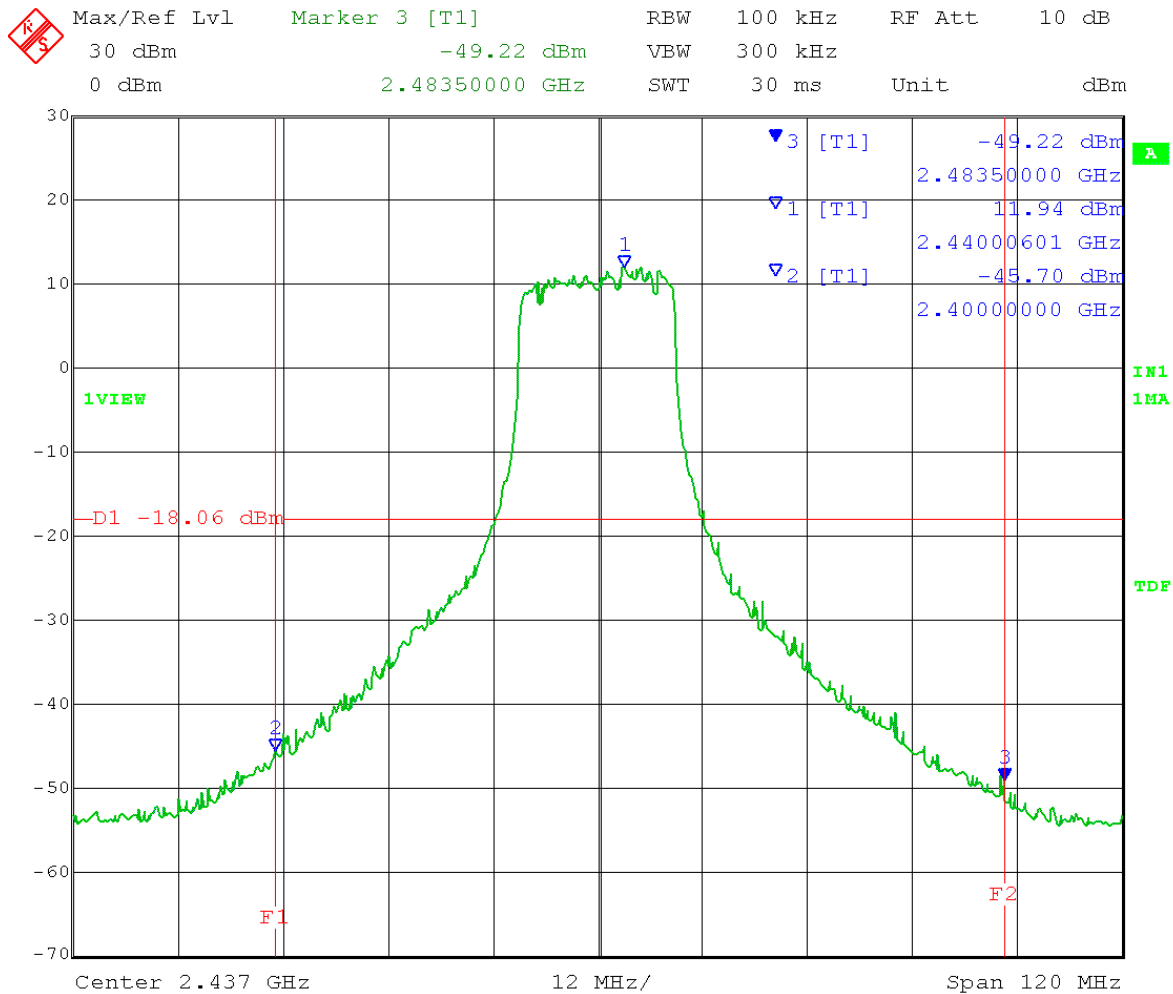
Date: 11.MAR.2014 08:22:46

Test Date: 03-11-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Band-Edge Measurements - Conducted  
Operator: Craig B

Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = auto couple  
Trace = max hold

POINT-TO-MULTIPOINT OPERATION

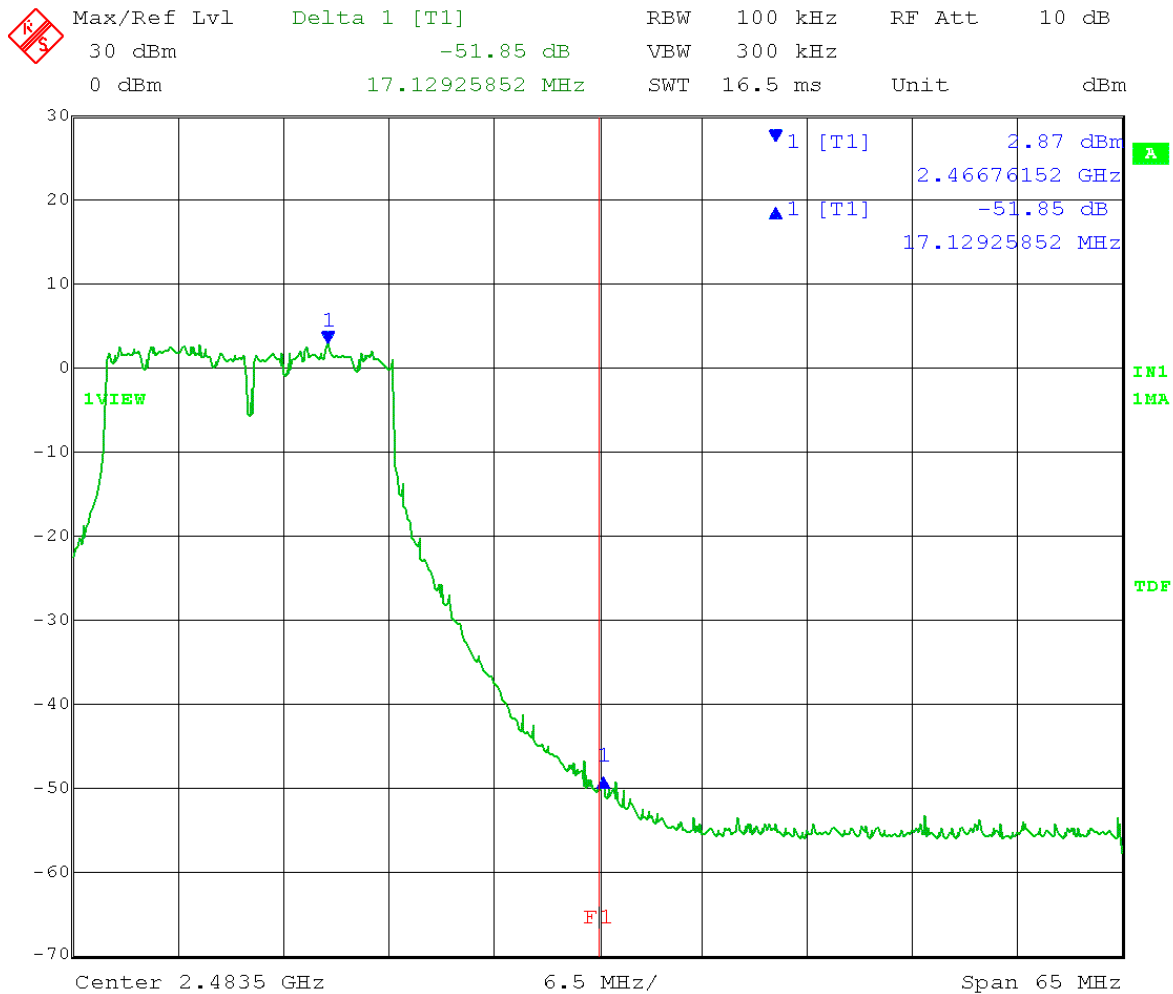
Mid Channel: Transmit = 2437 MHz Output power setting: 24.5  
Channel bandwidth: 20 MHz Output port: 1 Antenna gain: 12 dBi  
Lower band edge frequency = 2.4 GHz  
Upper band edge frequency = 2.4835 GHz  
Limit: > 30 dB below Peak In-Band Emission



Date: 11.MAR.2014 08:20:32

Test Date: 03-11-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Upper Band-Edge Measurements - Conducted  
Operator: Craig B

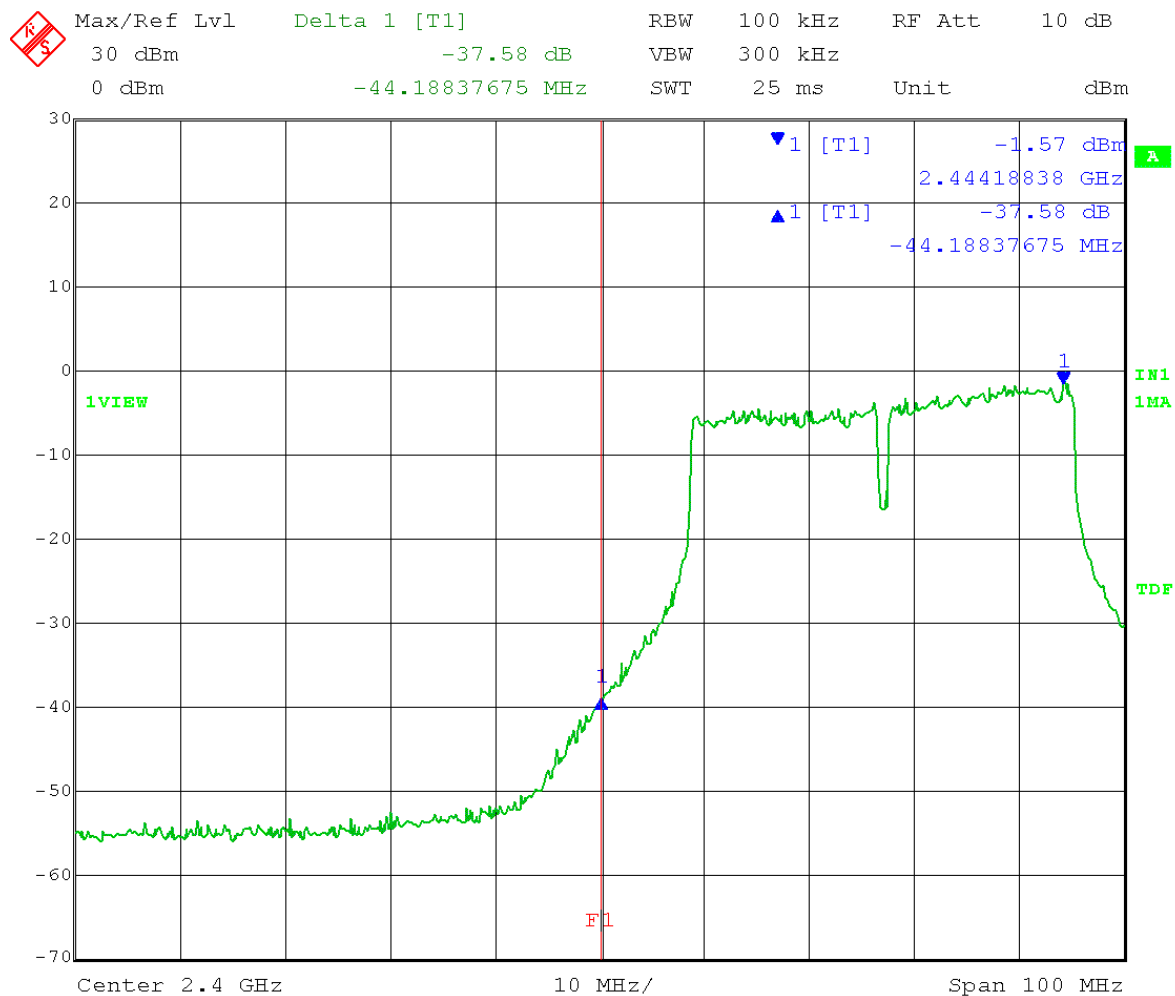
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = auto couple  
Trace = max hold  
POINT-TO-POINT & POINT-TO-MULTIPOINT OPERATION  
High Channel: Transmit = 2462 MHz Output power setting: 17  
Channel bandwidth: 20 MHz Output port: 1 Antenna gain: 12 dBi  
Upper band edge frequency = 2.4835 GHz  
Limit: > 30 dB below Peak In-Band Emission



Date: 11.MAR.2014 08:31:11

Test Date: 03-11-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Lower Band-Edge Measurements - Conducted  
Operator: Craig B

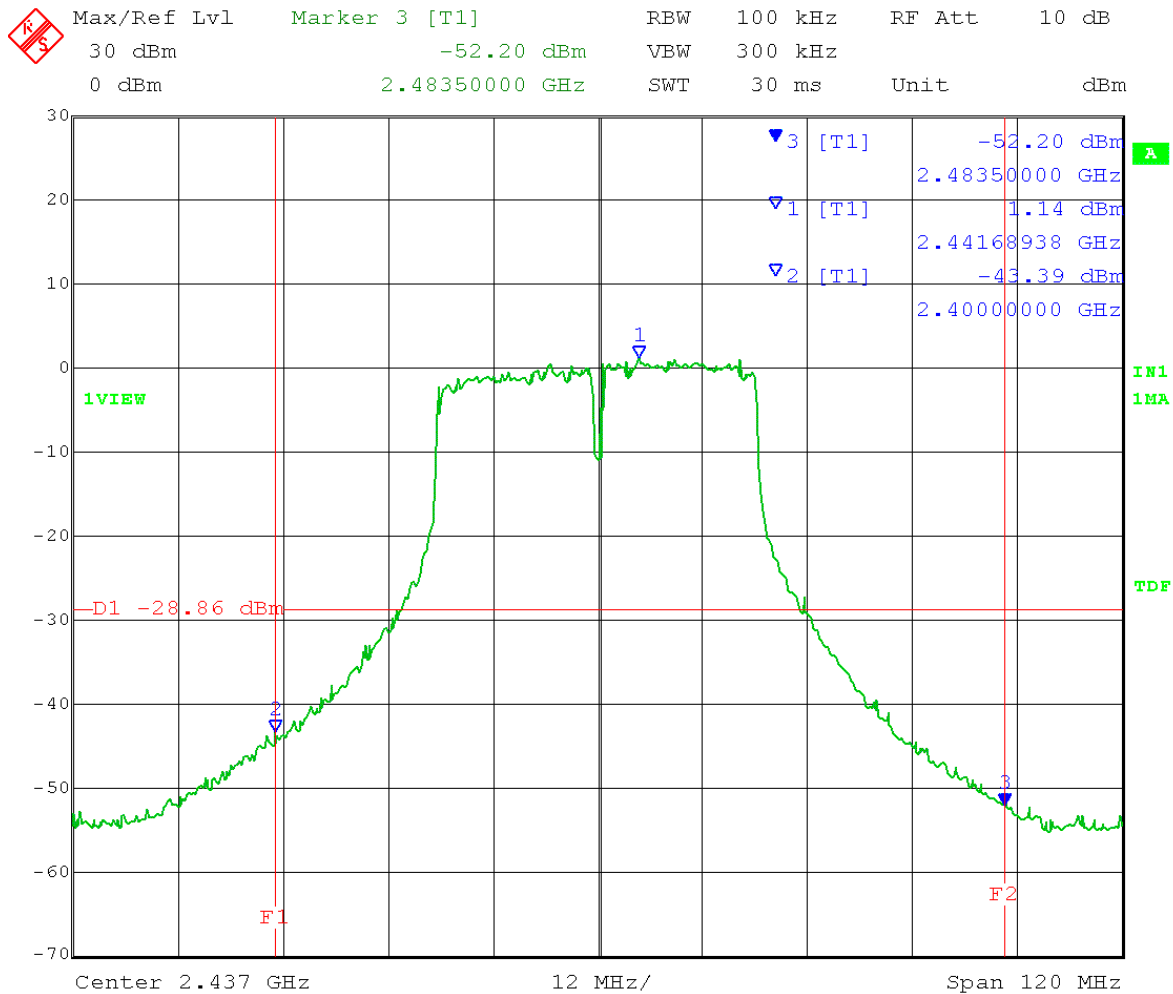
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = auto couple  
Trace = max hold  
POINT-TO-POINT & POINT-TO-MULTIPOINT OPERATION  
Low Channel: Transmit = 2427 MHz Output power setting: 12.5  
Channel bandwidth: 40 MHz Output port: 1 Antenna gain: 12 dBi  
Lower band edge frequency = 2.4 GHz  
Limit: > 30 dB below Peak In-Band Emission



Date: 11.MAR.2014 08:37:47

Test Date: 03-11-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Band-Edge Measurements - Conducted  
Operator: Craig B

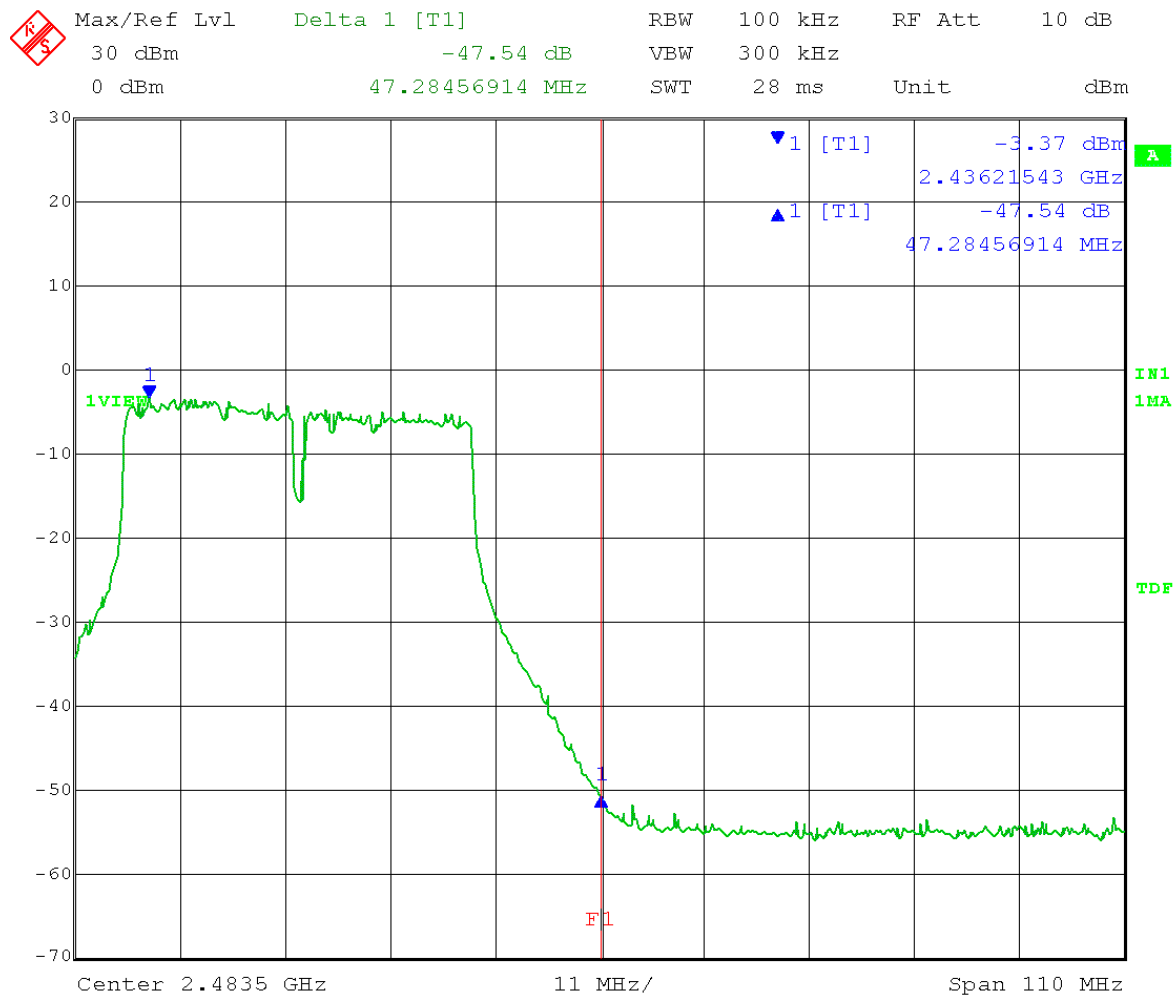
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = auto couple  
Trace = max hold  
POINT-TO-POINT & POINT-TO-MULTIPOINT OPERATION  
Mid Channel: Transmit = 2437 MHz Output power setting: 17  
Channel bandwidth: 40 MHz Output port: 1 Antenna gain: 12 dBi  
Lower band edge frequency = 2.4 GHz  
Upper band edge frequency = 2.4835 GHz  
Limit: > 30 dB below Peak In-Band Emission



Date: 11.MAR.2014 08:34:47

Test Date: 01-23-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C2CE92  
Test: Upper Band-Edge Measurements - Conducted  
Operator: Craig B

Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = auto couple  
Trace = max hold  
POINT-TO-POINT & POINT-TO-MULTIPOINT OPERATION  
High Channel: Transmit = 2452 MHz Output power setting: 13.5  
Channel bandwidth: 40 MHz Output port: 1 Antenna gain: 12 dBi  
Upper band edge frequency = 2.4835 GHz  
Limit: > 30 dB below Peak In-Band Emission

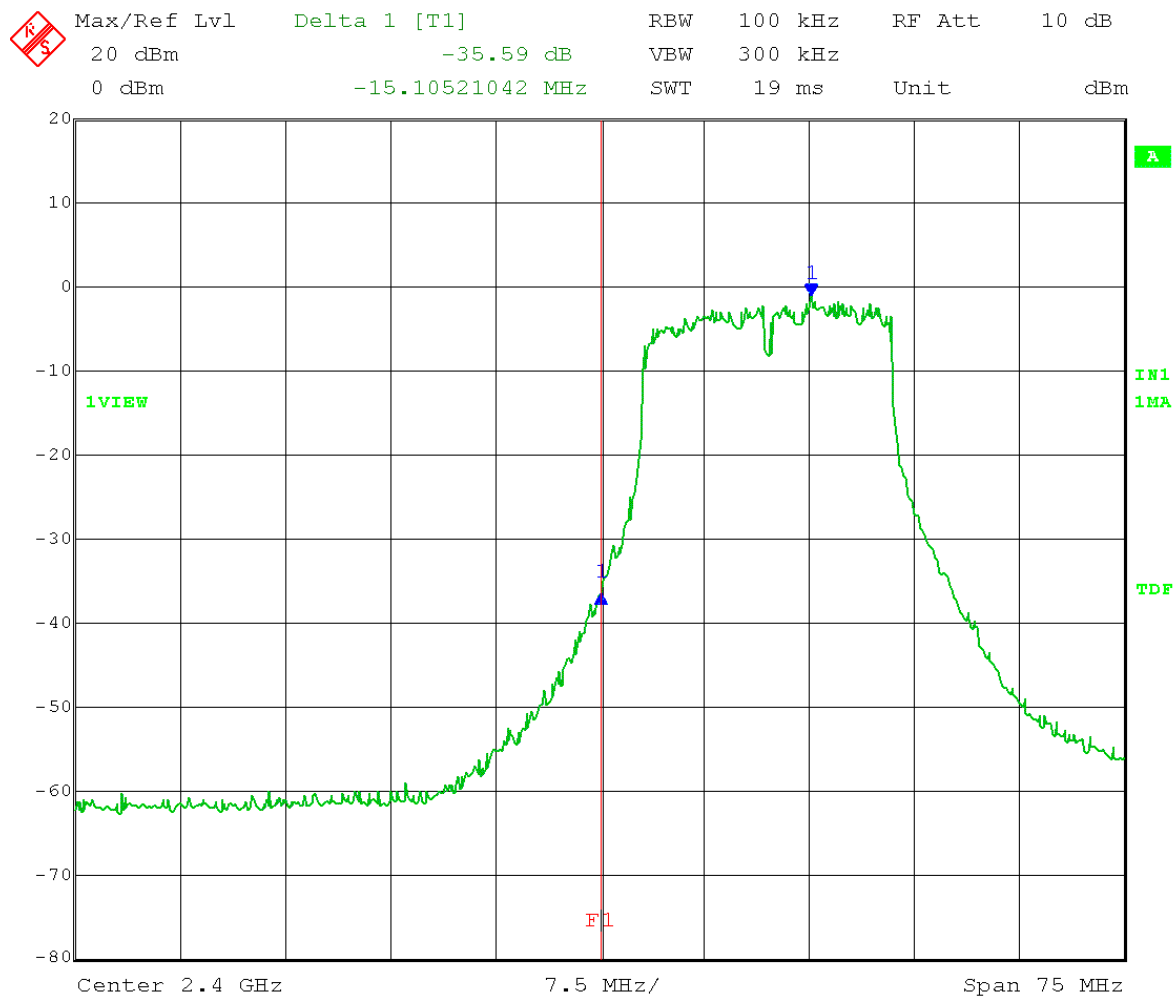


Date: 11.MAR.2014 08:40:46



Test Date: 03-13-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Band-Edge Measurements - Conducted  
Operator: Craig B

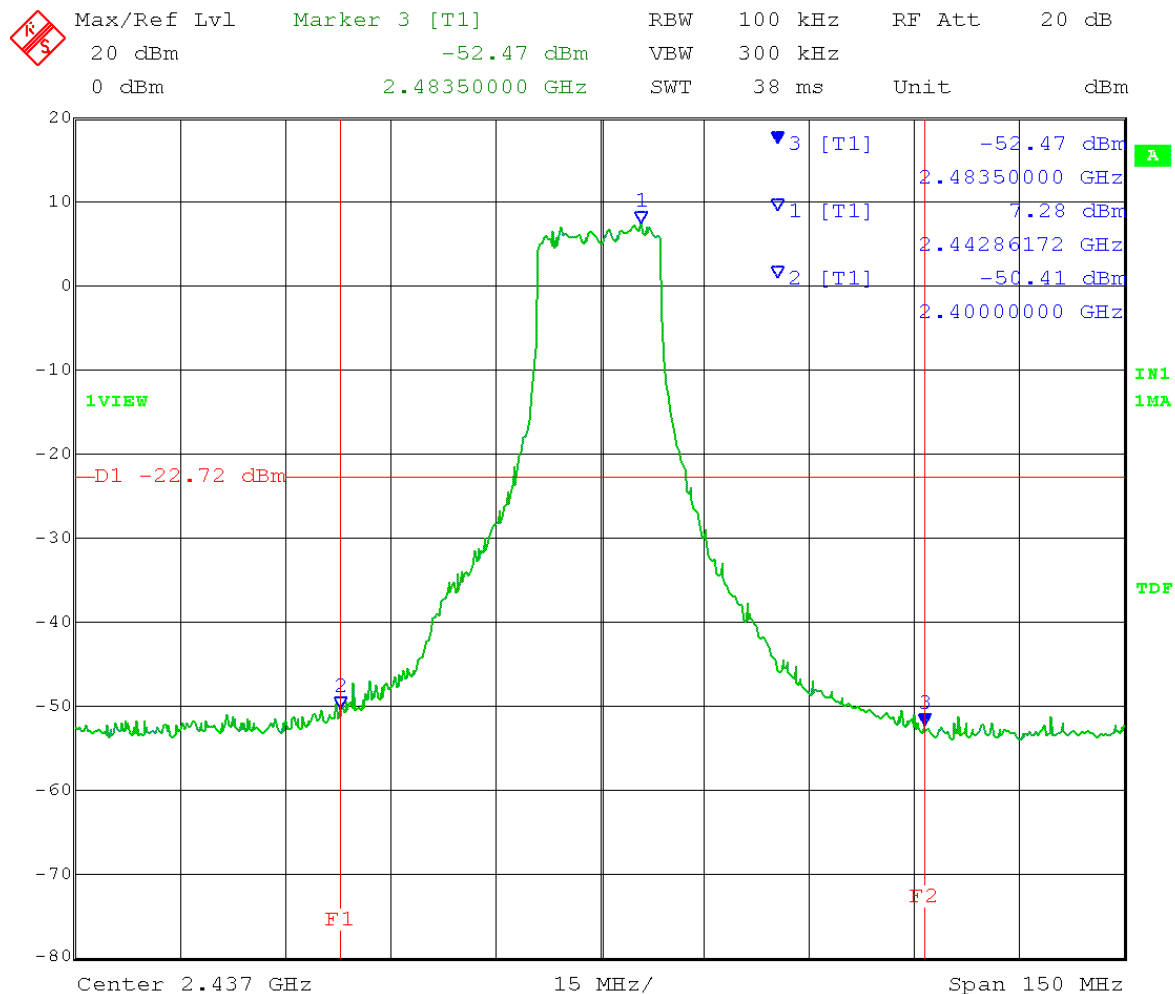
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = auto couple  
Trace = max hold  
Point-to-Point & Point-to-Multipoint operation  
Low Channel: Transmit = 2412 MHz Output power setting: 11.5  
Channel bandwidth: 20 MHz Output port: 1 Antenna gain: 17 dBi  
Lower band edge frequency = 2.4 GHz  
Limit: > 30 dB below Peak In-Band Emission



Date: 13.MAR.2014 08:36:55

Test Date: 03-13-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Band-Edge Measurements - Conducted  
Operator: Craig B

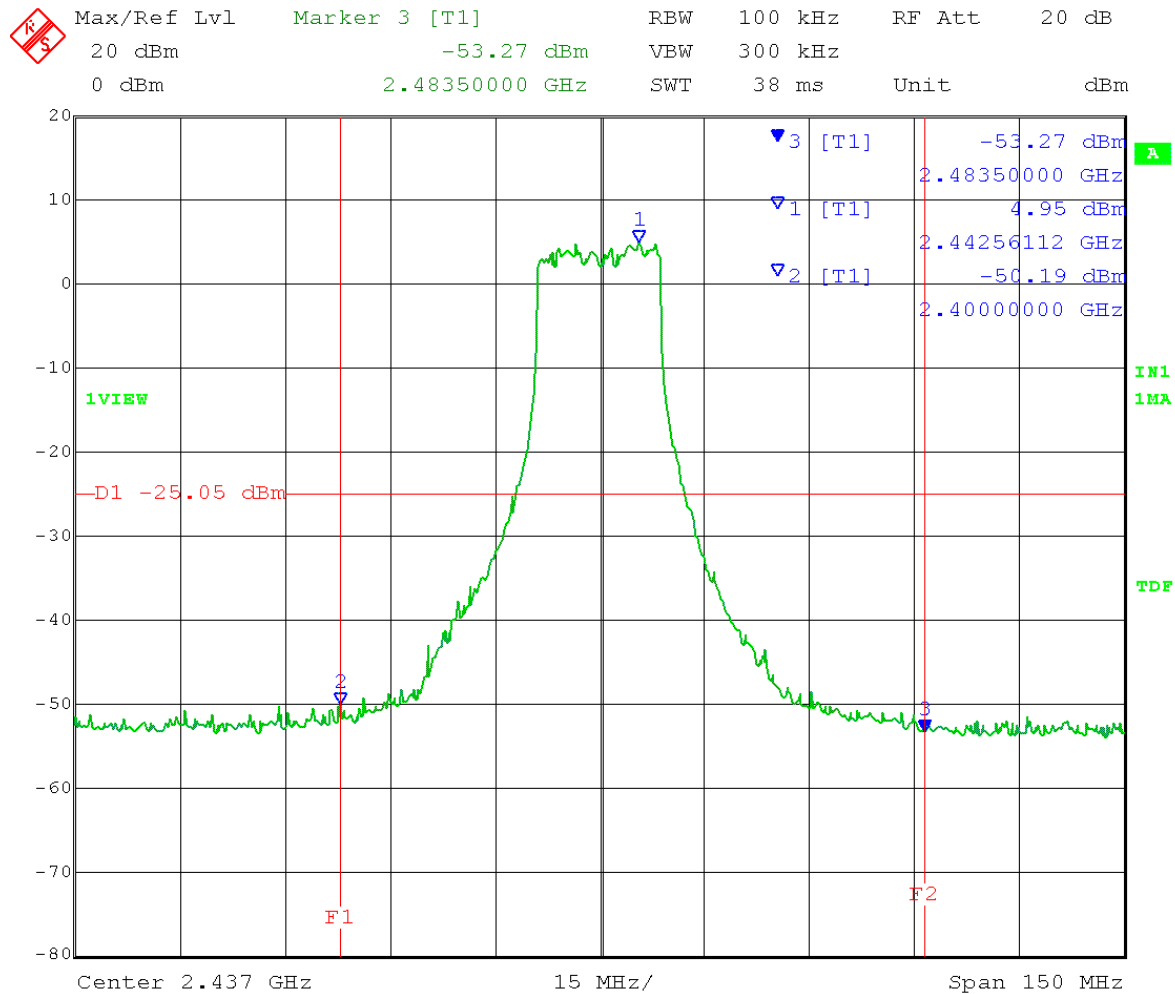
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = auto couple  
Trace = max hold  
Point-to-Point operation  
Mid Channel: Transmit = 2437 MHz Output power setting: 20.5  
Channel bandwidth: 20 MHz Output port: 1 Antenna gain: 17 dBi  
Lower band edge frequency = 2.4 GHz  
Upper band edge frequency = 2.4835 GHz  
Limit: > 30 dB below Peak In-Band Emission



Date: 13.MAR.2014 07:35:45

Test Date: 03-13-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Band-Edge Measurements - Conducted  
Operator: Craig B

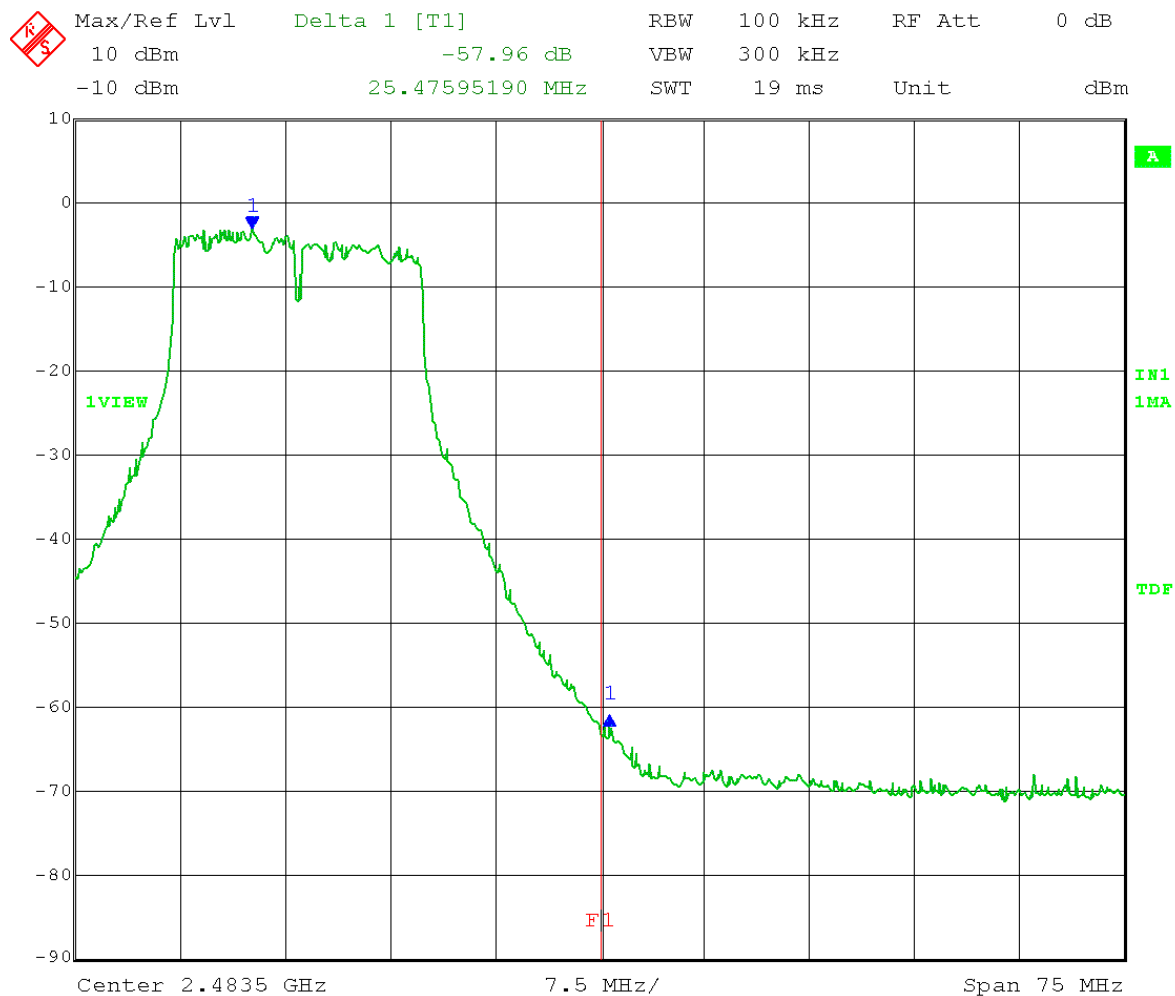
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = auto couple  
Trace = max hold  
Point-to-Multipoint operation  
Mid Channel: Transmit = 2437 MHz Output power setting: 18.0  
Channel bandwidth: 20 MHz Output port: 1 Antenna gain: 17 dBi  
Lower band edge frequency = 2.4 GHz  
Upper band edge frequency = 2.4835 GHz  
Limit: > 30 dB below Peak In-Band Emission



Date: 13.MAR.2014 07:38:19

Test Date: 03-13-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Band-Edge Measurements - Conducted  
Operator: Craig B

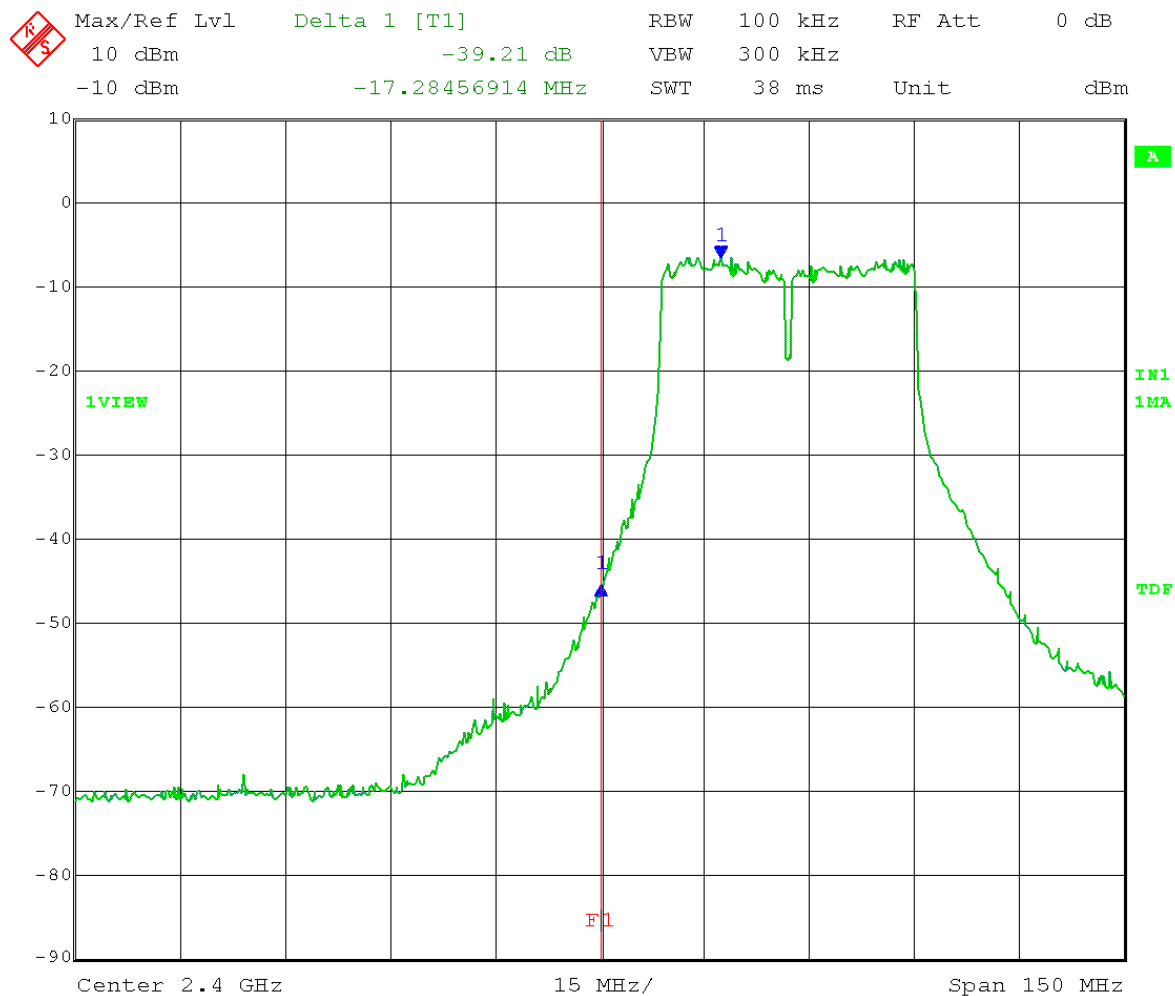
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = auto couple  
Trace = max hold  
Point-to-Point & Point-to-Multipoint operation  
High Channel: Transmit = 2462 MHz Output power setting: 10  
Channel bandwidth: 20 MHz Output port: 1 Antenna gain: 17 dBi  
Upper band edge frequency = 2.4835 GHz  
Limit: > 30 dB below Peak In-Band Emission



Date: 13.MAR.2014 08:41:21

Test Date: 03-13-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Band-Edge Measurements - Conducted  
Operator: Craig B

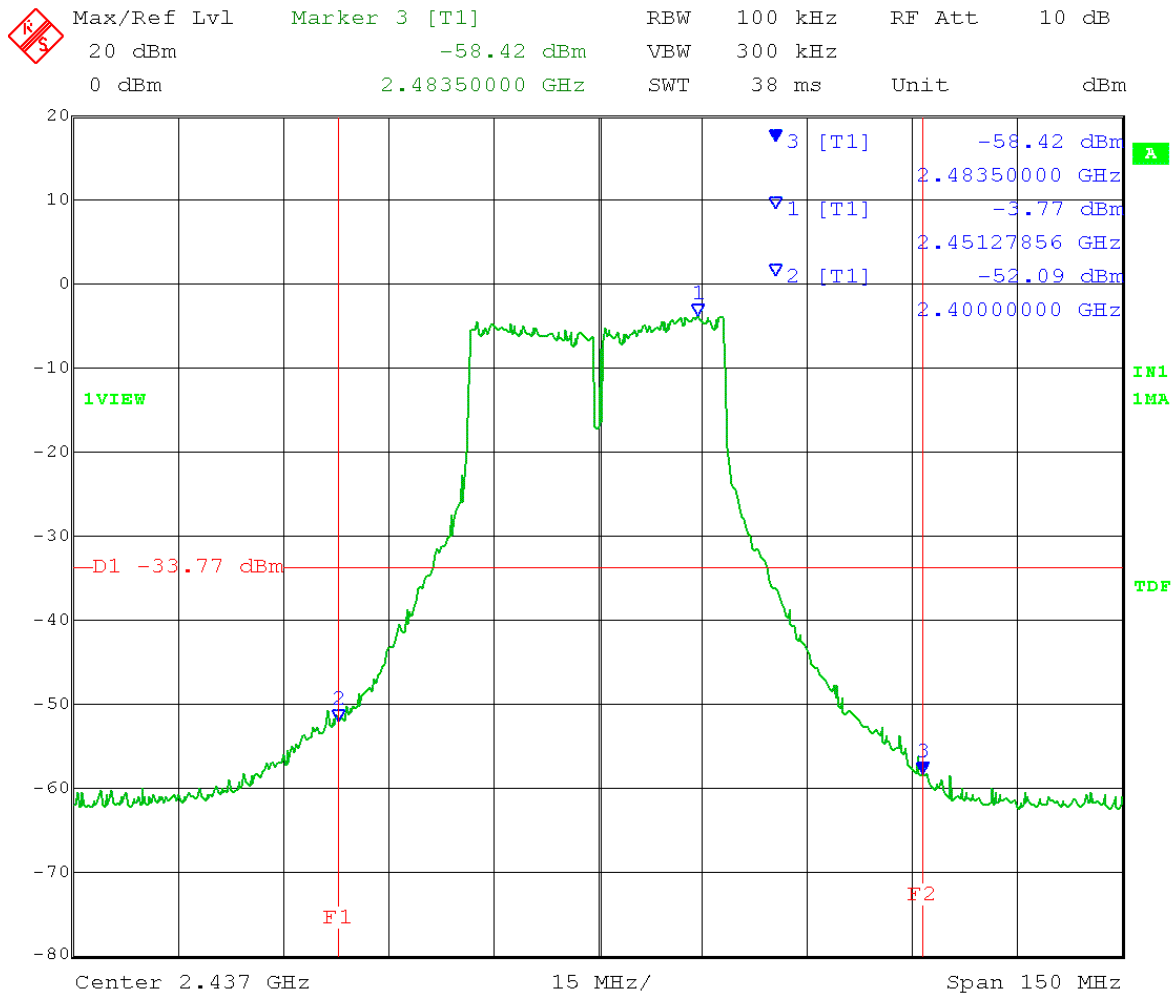
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = auto couple  
Trace = max hold  
Point-to-Point & Point-to-Multipoint operation  
Low Channel: Transmit = 2427 MHz Output power setting: 10  
Channel bandwidth: 40 MHz Output port: 1 Antenna gain: 17 dBi  
Lower band edge frequency = 2.4 GHz  
Limit: > 30 dB below Peak In-Band Emission



Date: 13.MAR.2014 08:47:43

Test Date: 03-13-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Band-Edge Measurements - Conducted  
Operator: Craig B

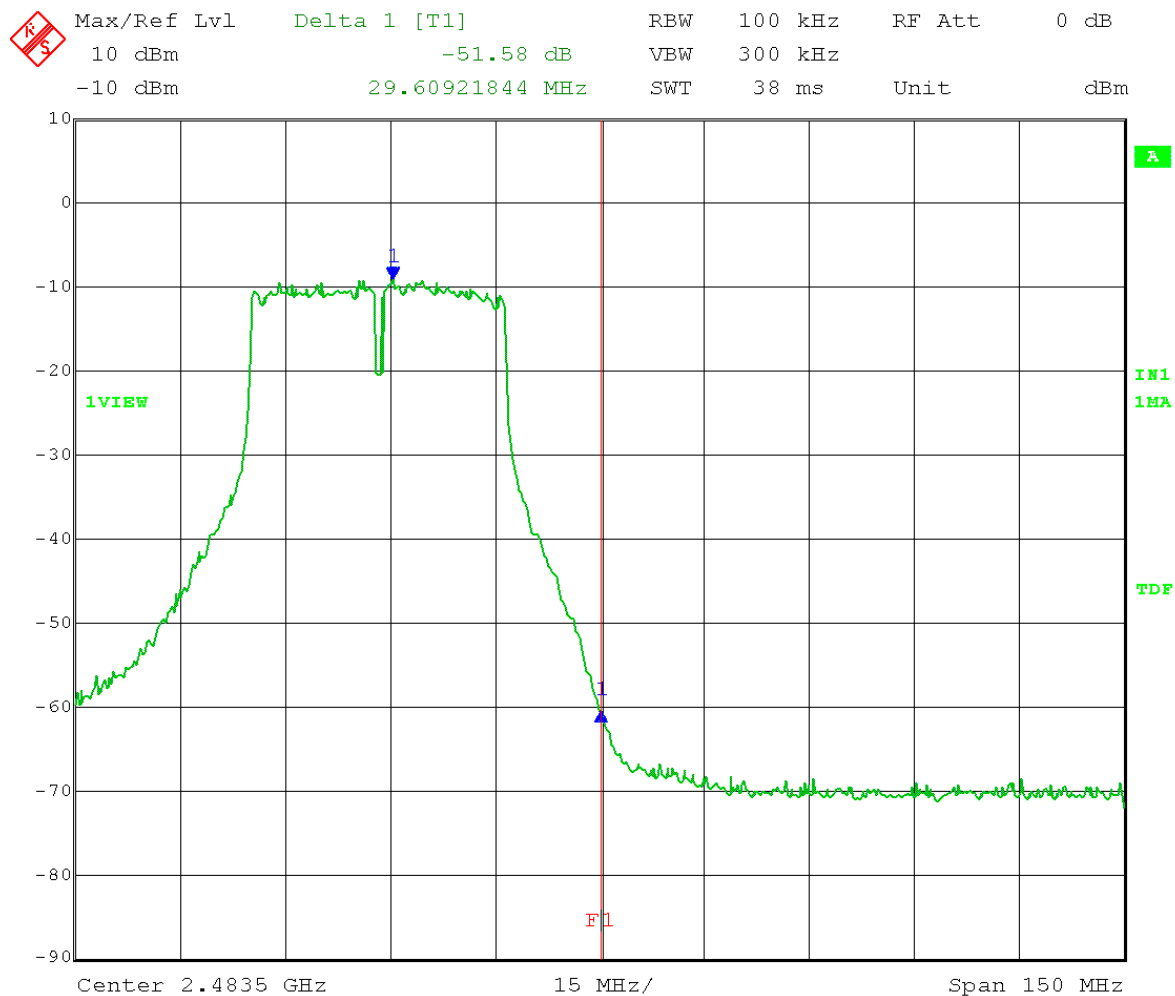
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = auto couple  
Trace = max hold  
Point-to-Point & Point-to-Multipoint operation  
Mid Channel: Transmit = 2437 MHz Output power setting: 11.5  
Channel bandwidth: 40 MHz Output port: 1 Antenna gain: 17 dBi  
Lower band edge frequency = 2.4 GHz  
Upper band edge frequency = 2.4835 GHz  
Limit: > 30 dB below Peak In-Band Emission



Date: 13.MAR.2014 07:42:14

Test Date: 03-13-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Band-Edge Measurements - Conducted  
Operator: Craig B

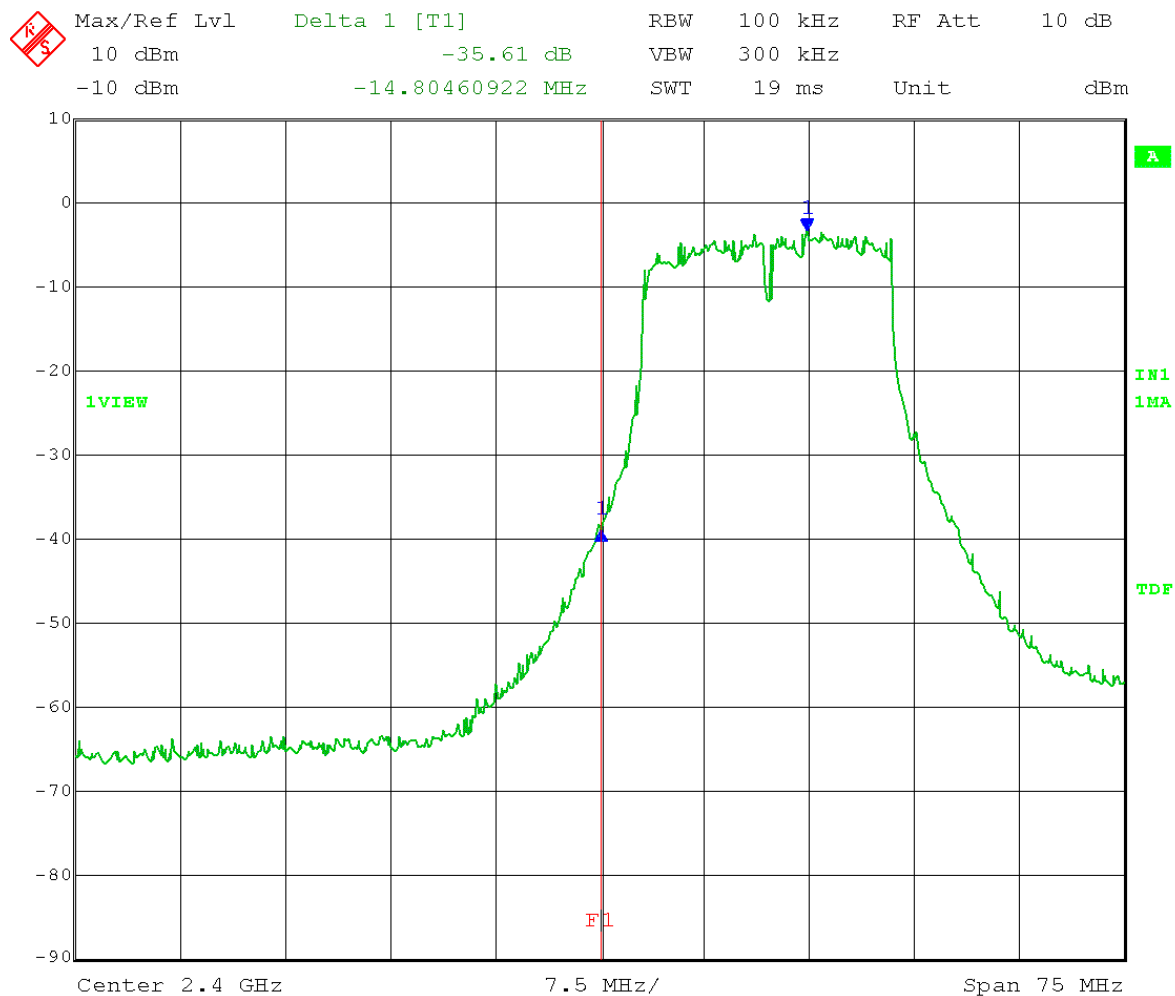
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = auto couple  
Trace = max hold  
Point-to-Point & Point-to-Multipoint operation  
High Channel: Transmit = 2452 MHz Output power setting: 6.5  
Channel bandwidth: 40 MHz Output port: 1 Antenna gain: 17 dBi  
Upper band edge frequency = 2.4835 GHz  
Limit: > 30 dB below Peak In-Band Emission



Date: 13.MAR.2014 08:44:49

Test Date: 03-15-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Band-Edge Measurements - Conducted  
Operator: Craig B

Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = auto couple  
Trace = max hold  
Point-to-Point & Point-to-Multipoint operation  
Low Channel: Transmit = 2412 MHz Output power setting: 10.5  
Channel bandwidth: 20 MHz Output port: 1 Antenna gain: 19 dBi  
Lower band edge frequency = 2.4 GHz  
Limit: > 30 dB below Peak In-Band Emission

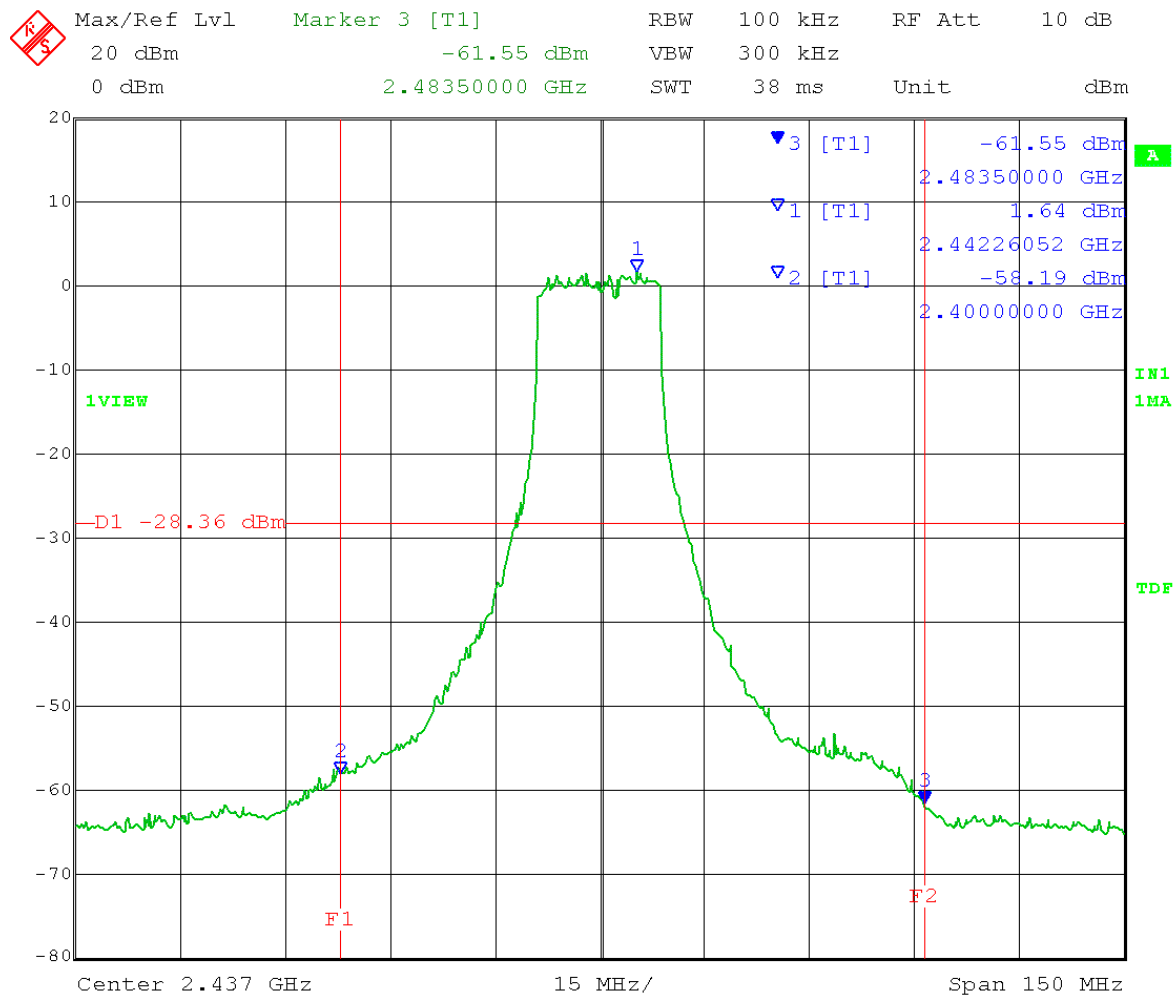


Date: 15.MAR.2014 10:41:15



Test Date: 03-15-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Band-Edge Measurements - Conducted  
Operator: Craig B

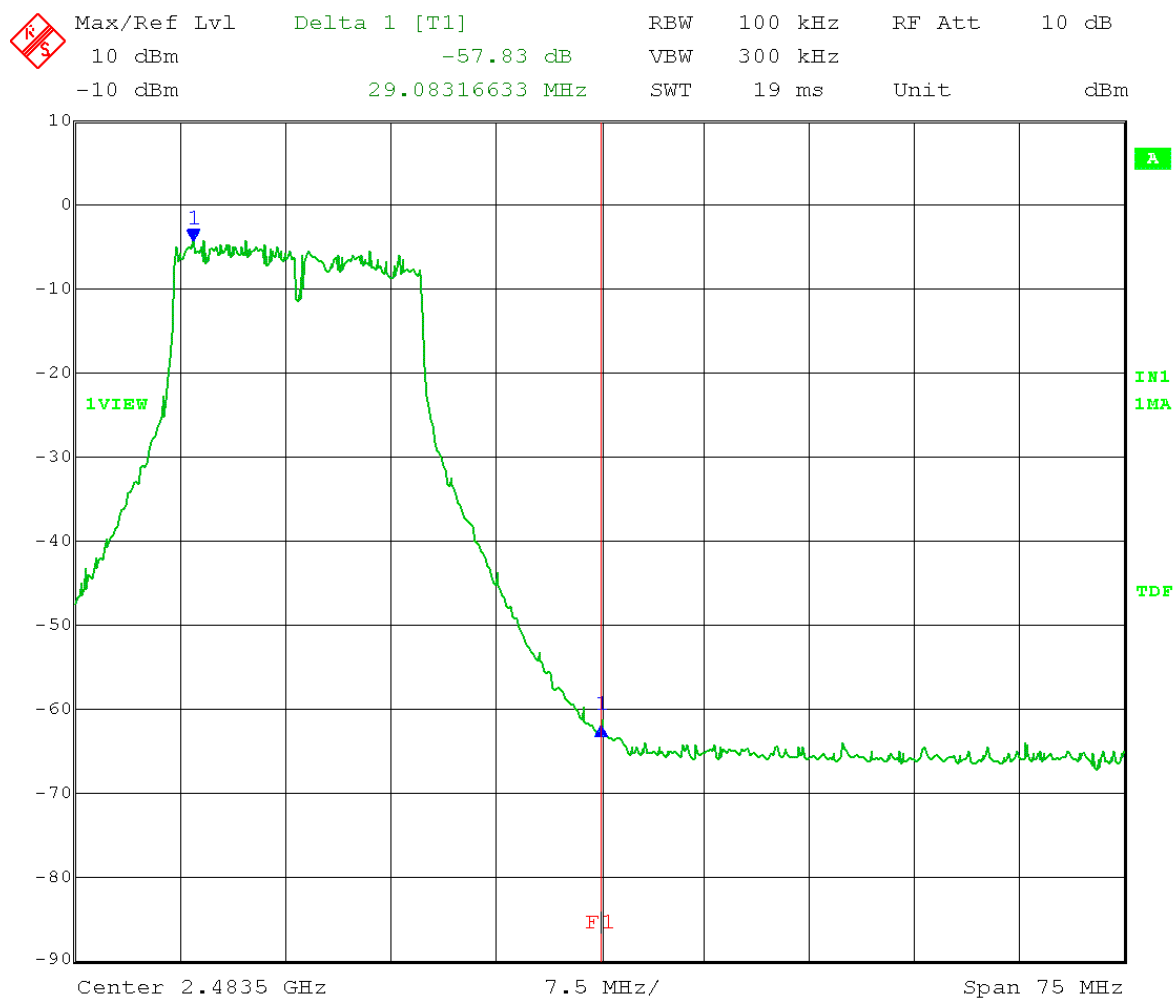
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = auto couple  
Trace = max hold  
Point-to-Point & Point-to-Multipoint operation  
Mid Channel: Transmit = 2437 MHz Output power setting: 15.0  
Channel bandwidth: 20 MHz Output port: 1 Antenna gain: 19 dBi  
Lower band edge frequency = 2.4 GHz  
Upper band edge frequency = 2.4835 GHz  
Limit: > 30 dB below Peak In-Band Emission



Date: 15.MAR.2014 10:33:46

Test Date: 03-15-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Band-Edge Measurements - Conducted  
Operator: Craig B

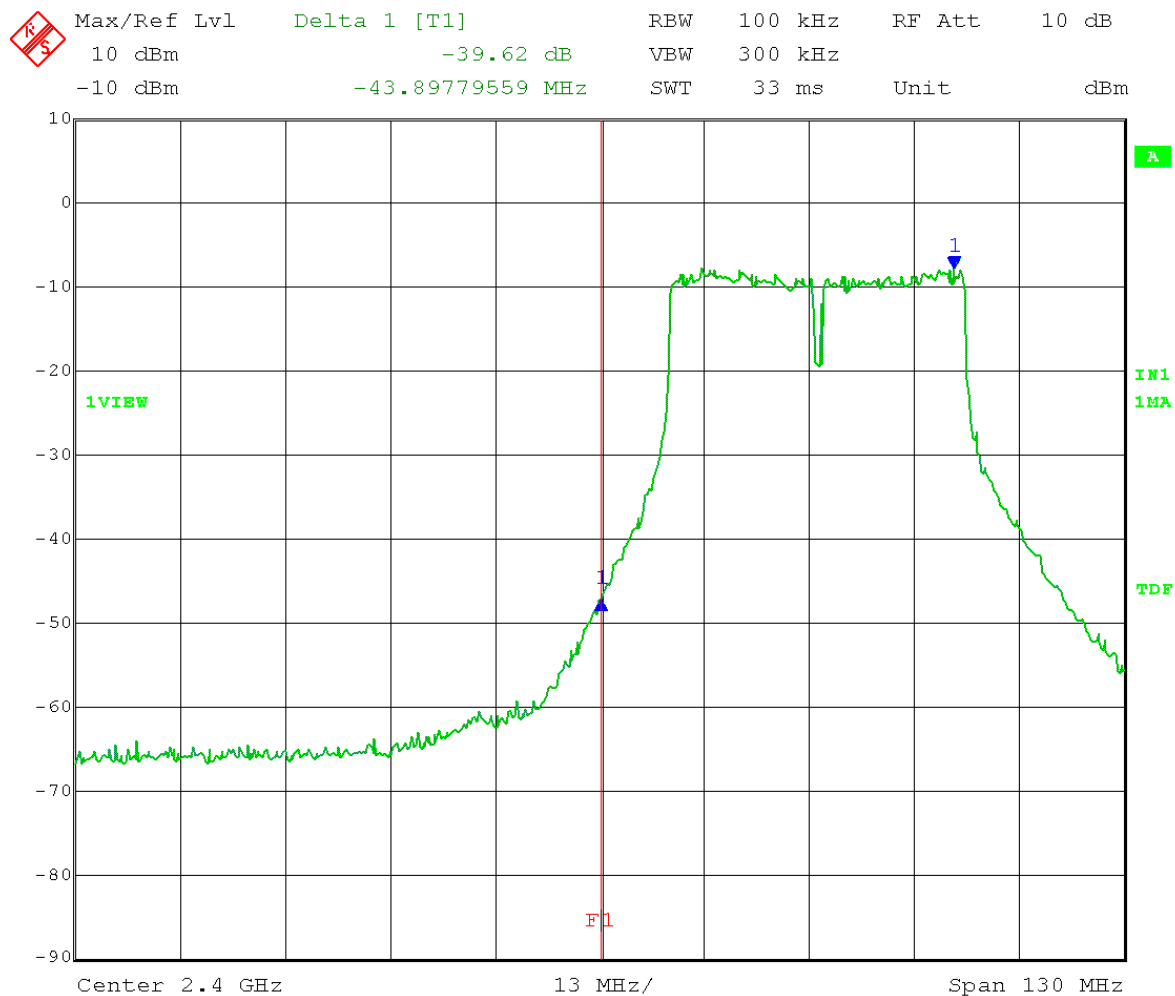
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = auto couple  
Trace = max hold  
Point-to-Point & Point-to-Multipoint operation  
High Channel: Transmit = 2462 MHz Output power setting: 9  
Channel bandwidth: 20 MHz Output port: 1 Antenna gain: 19 dBi  
Upper band edge frequency = 2.4835 GHz  
Limit: > 30 dB below Peak In-Band Emission



Date: 15.MAR.2014 10:49:24

Test Date: 03-15-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Band-Edge Measurements - Conducted  
Operator: Craig B

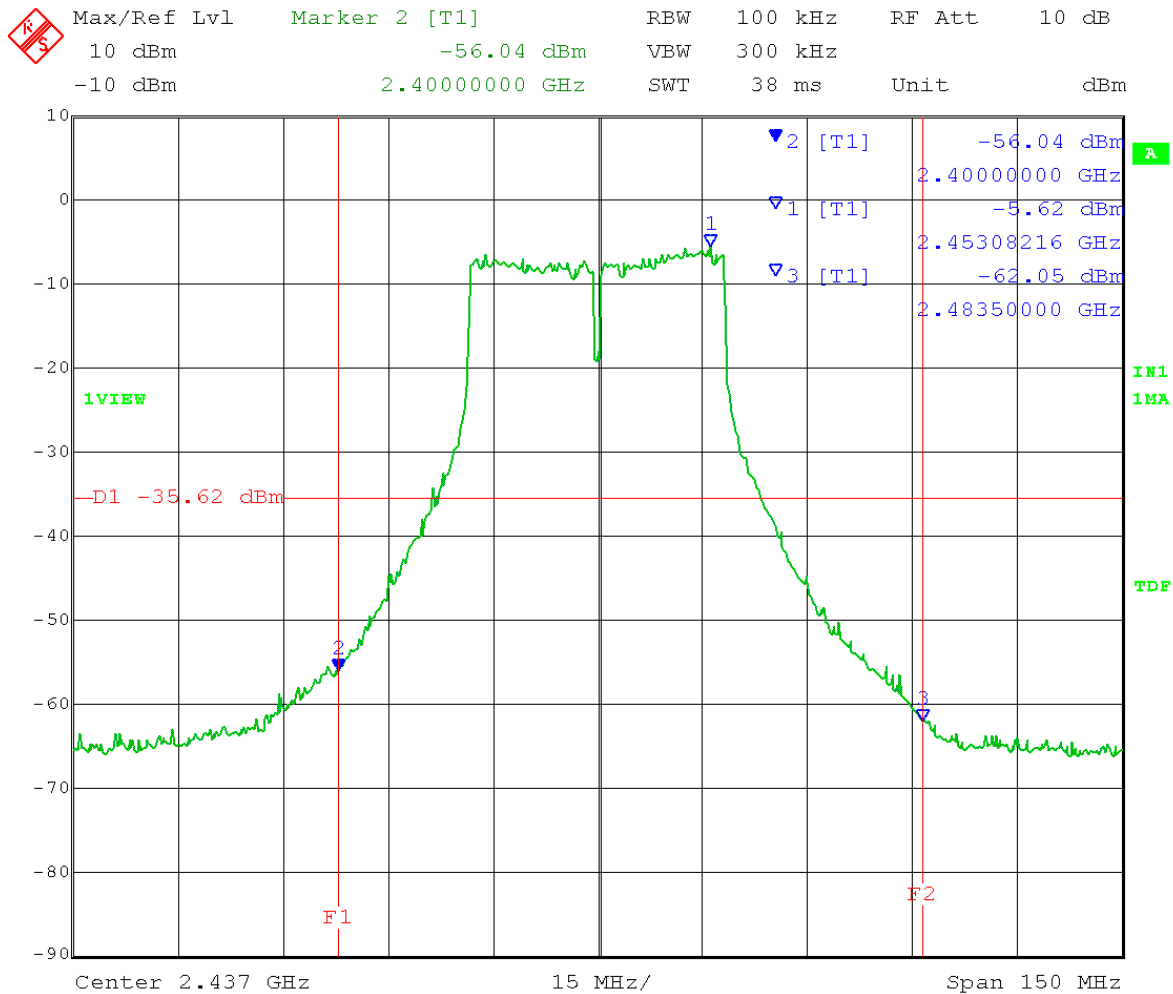
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = auto couple  
Trace = max hold  
Point-to-Point & Point-to-Multipoint operation  
Low Channel: Transmit = 2427 MHz Output power setting: 9  
Channel bandwidth: 40 MHz Output port: 1 Antenna gain: 19 dBi  
Lower band edge frequency = 2.4 GHz  
Limit: > 30 dB below Peak In-Band Emission



Date: 15.MAR.2014 10:44:22

Test Date: 03-15-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Band-Edge Measurements - Conducted  
Operator: Craig B

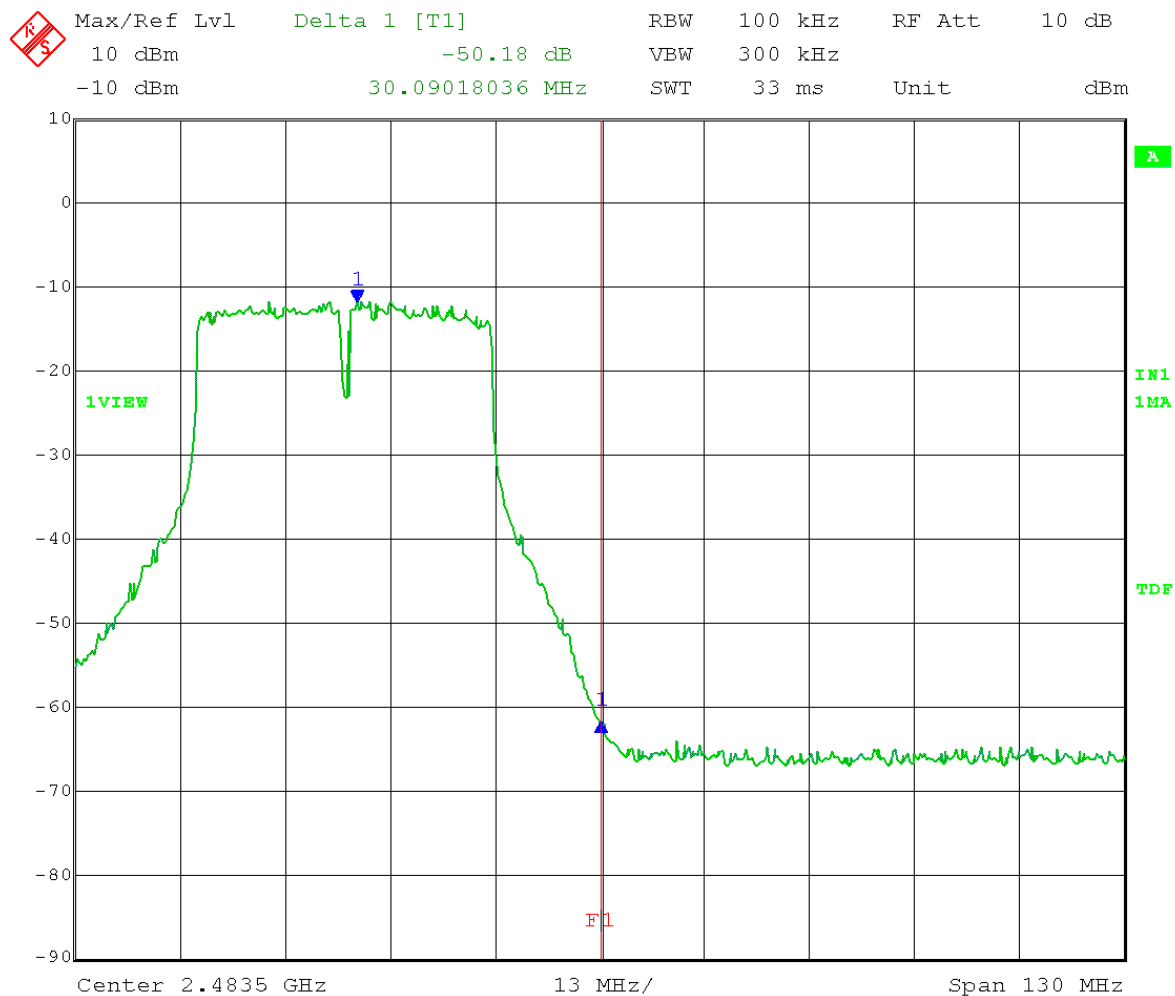
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = auto couple  
Trace = max hold  
Point-to-Point & Point-to-Multipoint operation  
**Mid Channel: Transmit = 2437 MHz** Output power setting: 10  
Channel bandwidth: 40 MHz Output port: 1 Antenna gain: 19 dBi  
Lower band edge frequency = 2.4 GHz  
Upper band edge frequency = 2.4835 GHz  
Limit: > 30 dB below Peak In-Band Emission



Date: 15.MAR.2014 10:37:07

Test Date: 03-15-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Band-Edge Measurements - Conducted  
Operator: Craig B

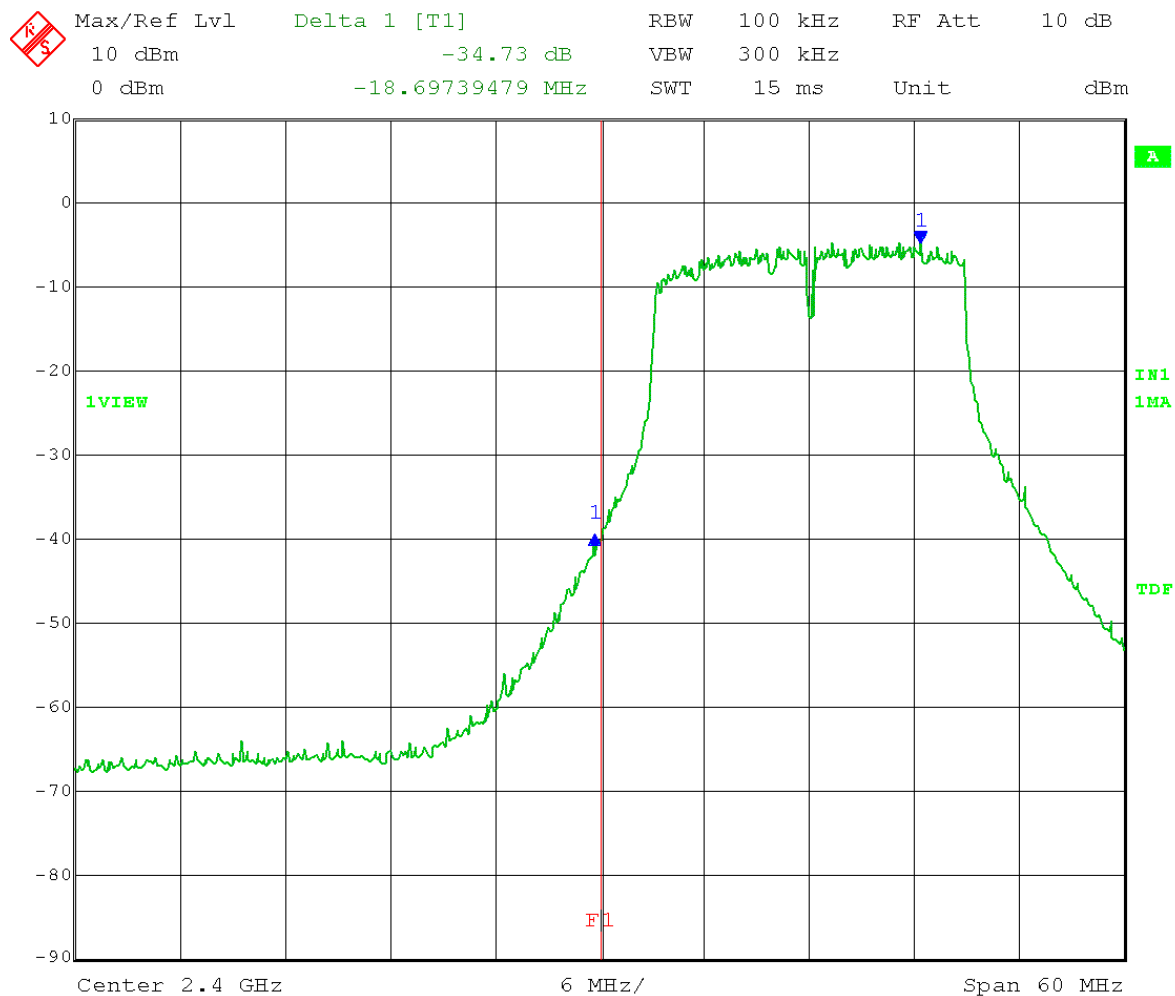
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = auto couple  
Trace = max hold  
Point-to-Point & Point-to-Multipoint operation  
High Channel: Transmit = 2452 MHz Output power setting: 4.5  
Channel bandwidth: 40 MHz Output port: 1 Antenna gain: 19 dBi  
Upper band edge frequency = 2.4835 GHz  
Limit: > 30 dB below Peak In-Band Emission



Date: 15.MAR.2014 10:46:29

Test Date: 03-17-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Band-Edge Measurements - Conducted  
Operator: Craig B

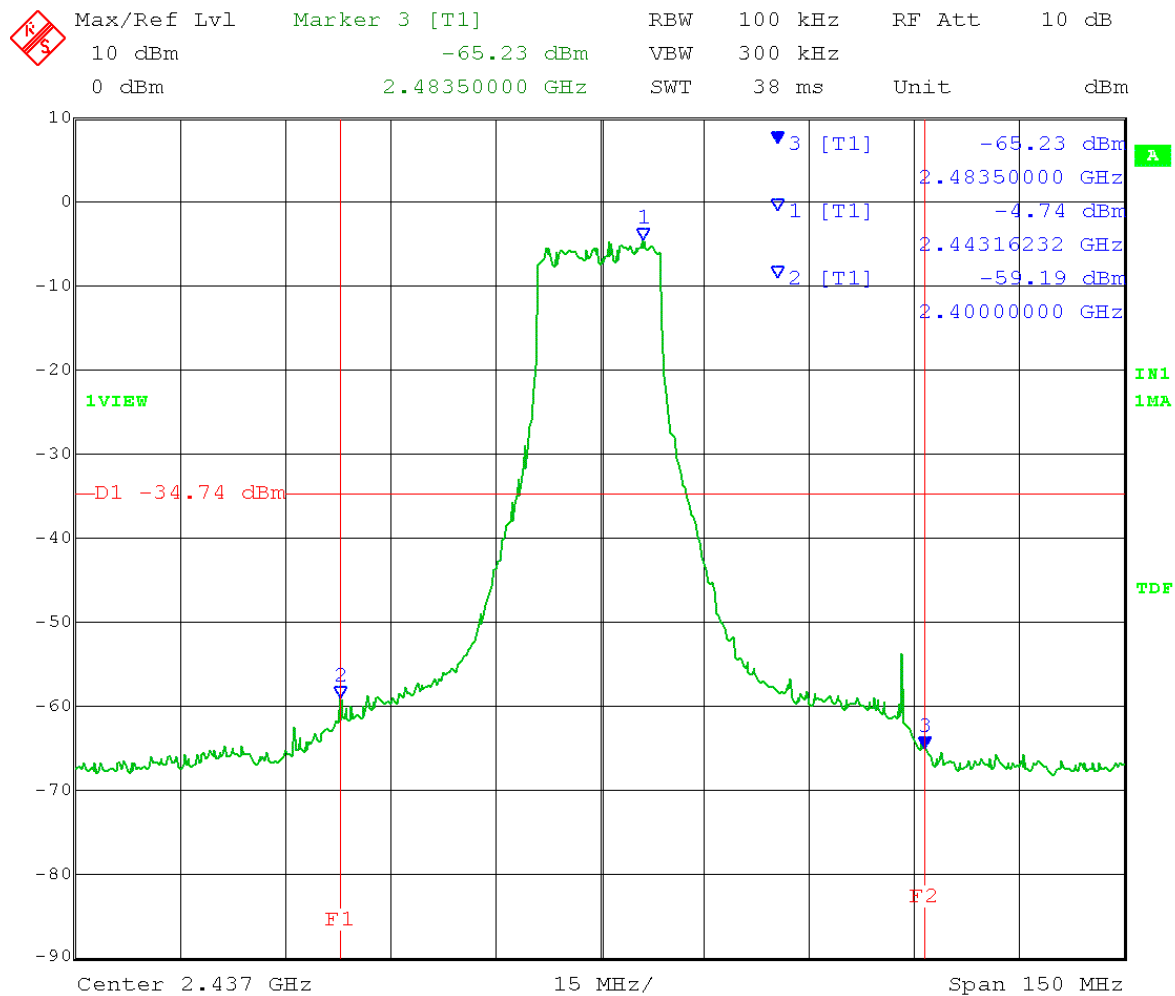
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = auto couple  
Trace = max hold  
Point-to-Point & Point-to-Multipoint operation  
Low Channel: Transmit = 2412 MHz Output power setting: 7  
Channel bandwidth: 20 MHz Output port: 1 Antenna gain: 25 dBi  
Lower band edge frequency = 2.4 GHz  
Limit: > 30 dB below Peak In-Band Emission



Date: 17.MAR.2014 09:46:01

Test Date: 03-17-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Band-Edge Measurements - Conducted  
Operator: Craig B

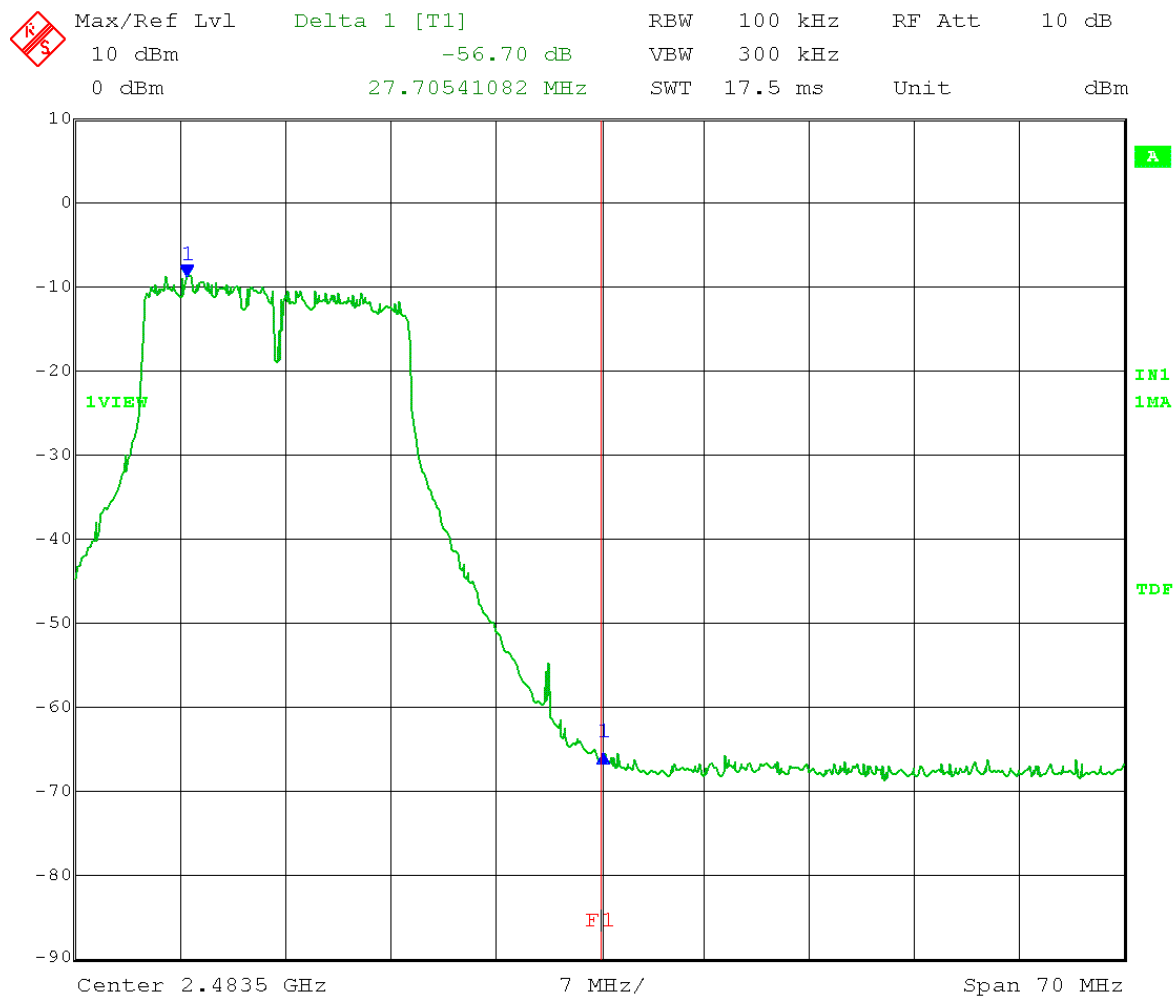
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = auto couple  
Trace = max hold  
Point-to-Point & Point-to-Multipoint operation  
Mid Channel: Transmit = 2437 MHz Output power setting: 7  
Channel bandwidth: 20 MHz Output port: 1 Antenna gain: 25 dBi  
Lower band edge frequency = 2.4 GHz  
Upper band edge frequency = 2.4835 GHz  
Limit: > 30 dB below Peak In-Band Emission



Date: 17.MAR.2014 09:40:29

Test Date: 03-17-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Band-Edge Measurements - Conducted  
Operator: Craig B

Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = auto couple  
Trace = max hold  
Point-to-Point & Point-to-Multipoint operation  
High Channel: Transmit = 2462 MHz Output power setting: 2.5  
Channel bandwidth: 20 MHz Output port: 1 Antenna gain: 25 dBi  
Upper band edge frequency = 2.4835 GHz  
Limit: > 30 dB below Peak In-Band Emission

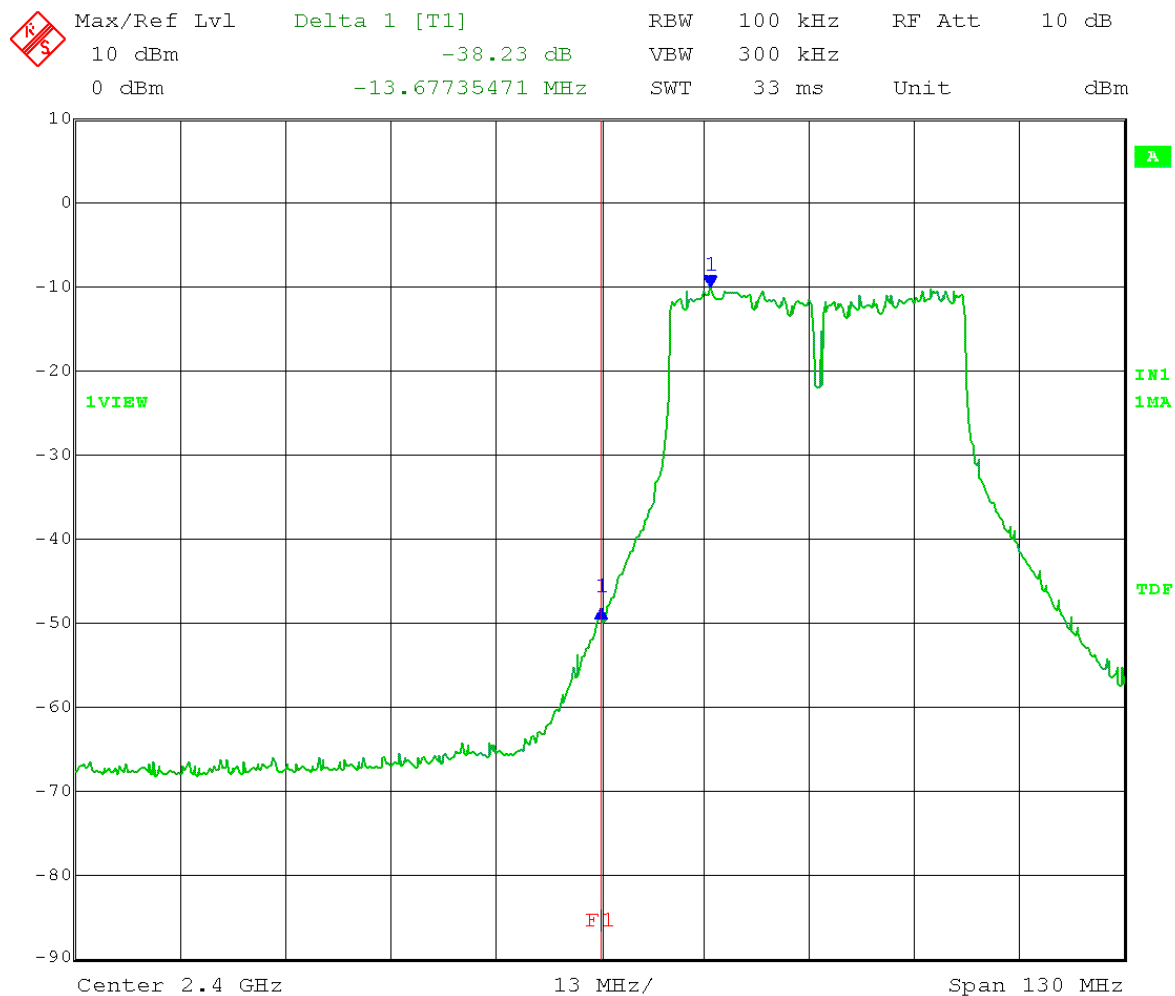


Date: 17.MAR.2014 09:49:23



Test Date: 03-17-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Band-Edge Measurements - Conducted  
Operator: Craig B

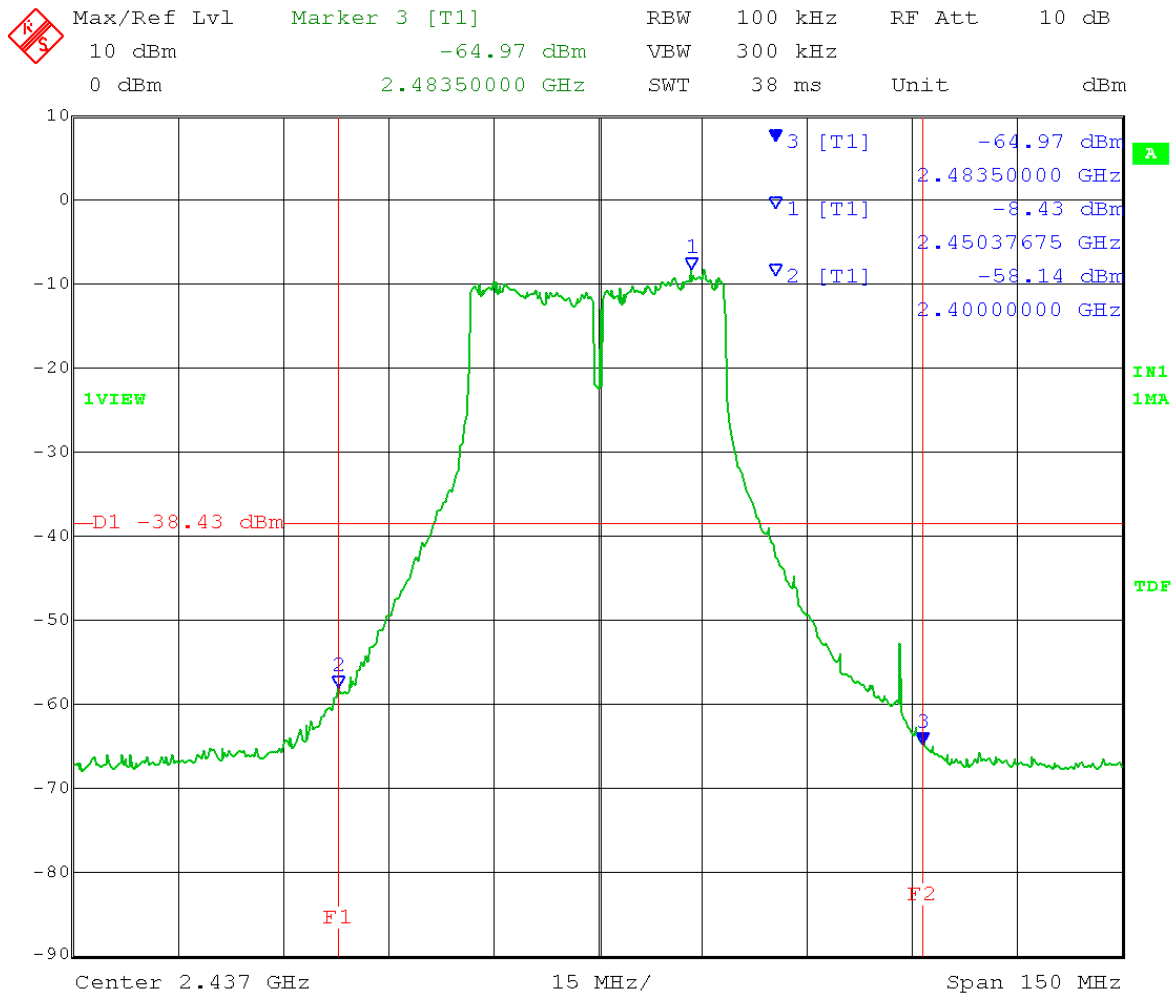
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = auto couple  
Trace = max hold  
Point-to-Point & Point-to-Multipoint operation  
Low Channel: Transmit = 2427 MHz Output power setting: 4.5  
Channel bandwidth: 40 MHz Output port: 1 Antenna gain: 25 dBi  
Lower band edge frequency = 2.4 GHz  
Limit: > 30 dB below Peak In-Band Emission



Date: 17.MAR.2014 09:56:10

Test Date: 03-17-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Band-Edge Measurements - Conducted  
Operator: Craig B

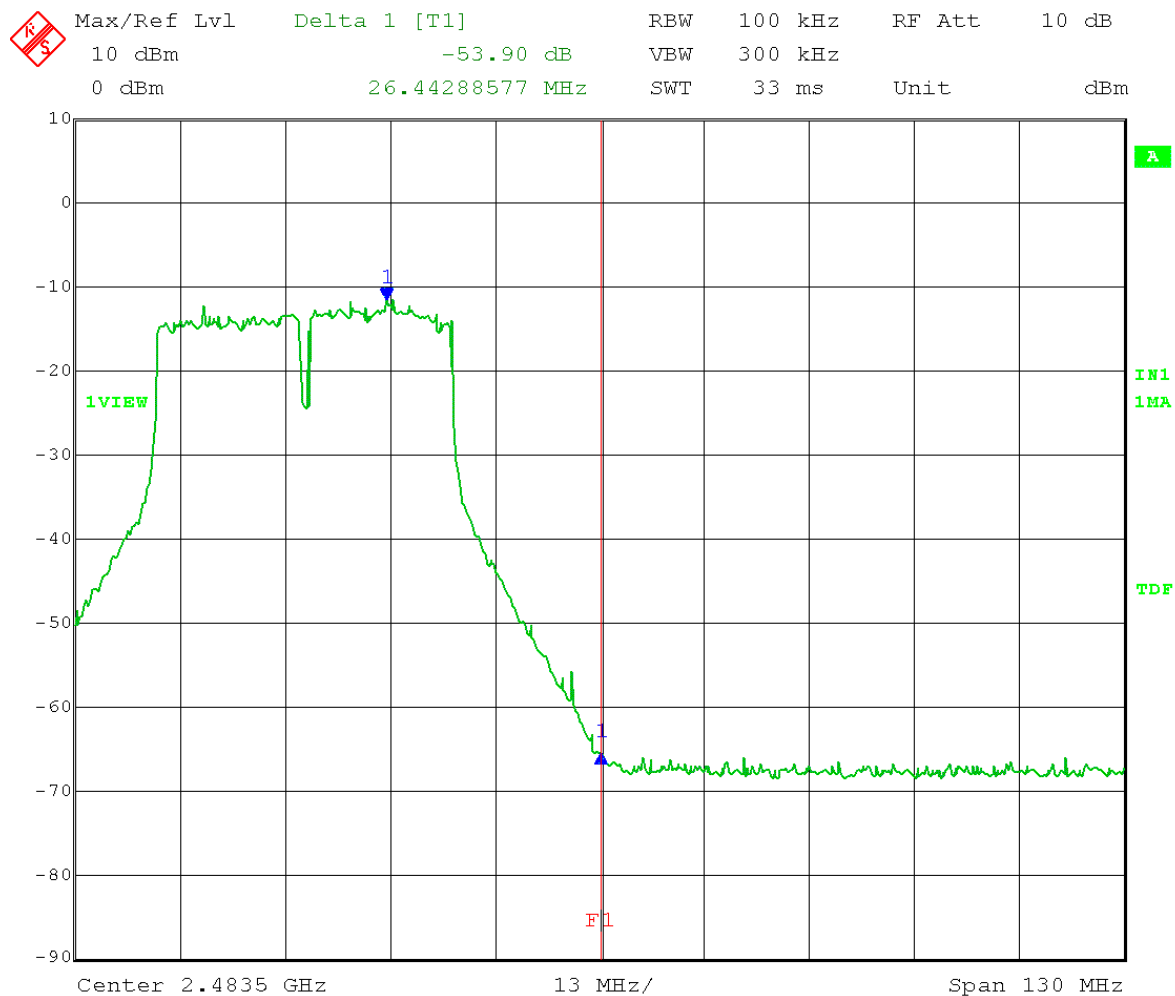
Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = auto couple  
Trace = max hold  
Point-to-Point & Point-to-Multipoint operation  
**Mid Channel: Transmit = 2437 MHz** Output power setting: 4.5  
Channel bandwidth: 40 MHz Output port: 1 Antenna gain: 25 dBi  
Lower band edge frequency = 2.4 GHz  
Upper band edge frequency = 2.4835 GHz  
Limit: > 30 dB below Peak In-Band Emission



Date: 17.MAR.2014 09:38:11

Test Date: 03-17-2014  
Company: Cambium Networks  
EUT: EPMP 2.4 GHz STA MAC: 000456C69680  
Test: Band-Edge Measurements - Conducted  
Operator: Craig B

Comment: RBW = 100 kHz VBW  $\geq$  300 kHz  
Detector = Peak Sweep = auto couple  
Trace = max hold  
Point-to-Point & Point-to-Multipoint operation  
High Channel: Transmit = 2447 MHz Output power setting: 2.5  
Channel bandwidth: 40 MHz Output port: 1 Antenna gain: 25 dBi  
Upper band edge frequency = 2.4835 GHz  
Limit: > 30 dB below Peak In-Band Emission



Date: 17.MAR.2014 09:52:31



166 South Carter, Genoa City, WI 53128

Company:

Model Tested:

Report Number:

DLS Project:

Cambium Networks

C024900P021A & C024900P031A

19738

6334

## END OF REPORT

| Revision # | Date       | Comments                  | By |
|------------|------------|---------------------------|----|
| 1.0        | 03-18-2014 | Preliminary Release       | JS |
| 1.1        | 03-18-2014 | Minor edits pgs 7, 11, 12 | JS |
|            |            |                           |    |
|            |            |                           |    |
|            |            |                           |    |