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) 2427 to 2452 MHz (40 MHz bandwidth)

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

Test Configuration:	Stand-alone
Model Number(s):	Connectorized: C024900P021A, C024900A021A Integrated: C024900P031A, C024900C031A
Model(s) Tested:	Connectorized: C024900P021A Integrated: C024900P031A
Serial Number(s):	Connectorized: MAC Address: 000456C2CE92 Integrated: MAC Address: 000456C2CE05
Date of Tests:	January to March, 2014 (non-consecutive days)
Test Conducted For:	Cambium Networks 3800 Golf Road, Suite 360 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.

SIGNATURE PAGE

Tested By:

Craig Brandt
Senior Test Engineer

Reviewed By:

William Stumpf
OATS Manager

Approved By:

Brian Mattson
General Manager

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

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

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

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

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

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

B10.0 Conducted Measurements for Radiated Restricted Band-Edge Compliance - for Sector, Panel, and Dish Antennas 509
B10.0a – with Sector Antenna 510
B10.0b – with Panel Antenna 542
B10.0c – with Dish Antenna 574

B11.0 Duty Cycle of Test Unit 606

B12.0 AC Line Conducted Emissions 609

United States Department of Commerce
National Institute of Standards and Technology

NVLAP®

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).

2013-10-01 through 2014-09-30
Effective dates

For the National Institute of Standards and Technology

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

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 KDB 558074 D01 DTS Meas Guidance v03r01 Section 8.1 Option 1	1	Yes
15.247(b)(3) & (4)(i)	Fundamental Emission Output Power – Conducted	FCC Publication KDB 558074 D01 DTS Meas Guidance v03r01 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 KDB 558074 D01 DTS Meas Guidance v03r01 Section 9.2.2.2-AVGSA-1	2	Yes
15.247(e)	Maximum Power Spectral Density - Conducted	FCC Publication KDB 558074 D01 DTS Meas Guidance v03r01 Section 10.3-AVGPSD-1	1	Yes
15.247(d)	Maximum Unwanted Emission Levels (not in restricted bands) – Conducted	FCC Publication KDB 558074 D01 DTS Meas Guidance v03r01 Section 11.0	1	Yes
15.247(d)	Maximum Unwanted Emission Levels - Conducted Operating Band-Edge	FCC Publication KDB 558074 D01 DTS Meas Guidance v03r01 Section 11.0	1	Yes
15.205	Maximum Unwanted Emission Levels into Restricted Frequency Bands - Radiated	FCC Publication KDB 558074 D01 DTS Meas Guidance v03r01 Sections 12.0 & 12.1	2	Yes
15.205	Conducted Measurements for Radiated Restricted Band Compliance - for Omni, Sector, Panel & Dish Antennas	FCC Publication KDB 558074 D01 DTS Meas Guidance v03r01 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 KDB 558074 D01 DTS Meas Guidance v03r01 Sections 12.0 & 12.1	2	Yes
15.205	Conducted Measurements for Radiated Restricted Band-Edge Compliance - for Sector, Panel & Dish Antennas	FCC Publication KDB 558074 D01 DTS Meas Guidance v03r01 Sections 12.1 & 12.2.2	1	Yes
15.35(c)	Duty Cycle of Test Unit	ANSI C63.10-2009 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.

2.0 Introduction

From January 20th through March 17th, 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

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

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

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)

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

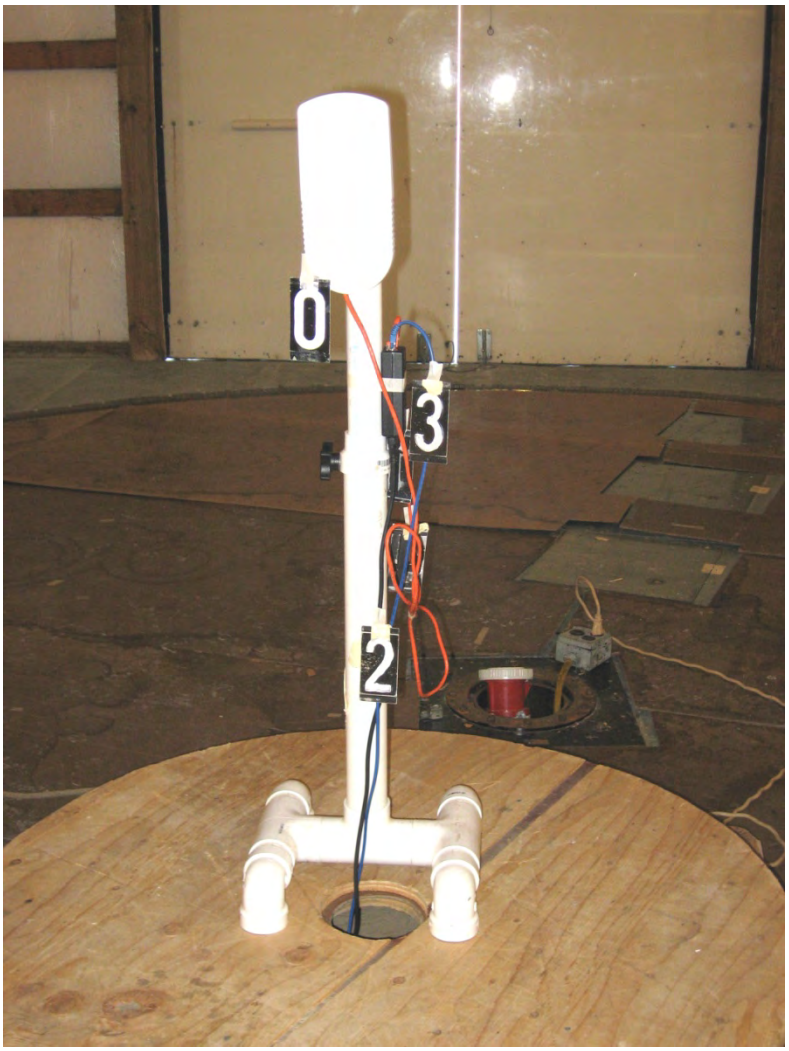
The EPMP Station 2.4 GHz OFDM MIMO Radio, Models C024900P021A & C024900P031A, as provided from Cambium Networks tested from January 20th to March 17th, 2014 **meets** the requirements of CFR 47 Part 15 Subpart C Section 15.247.

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: Phihong 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

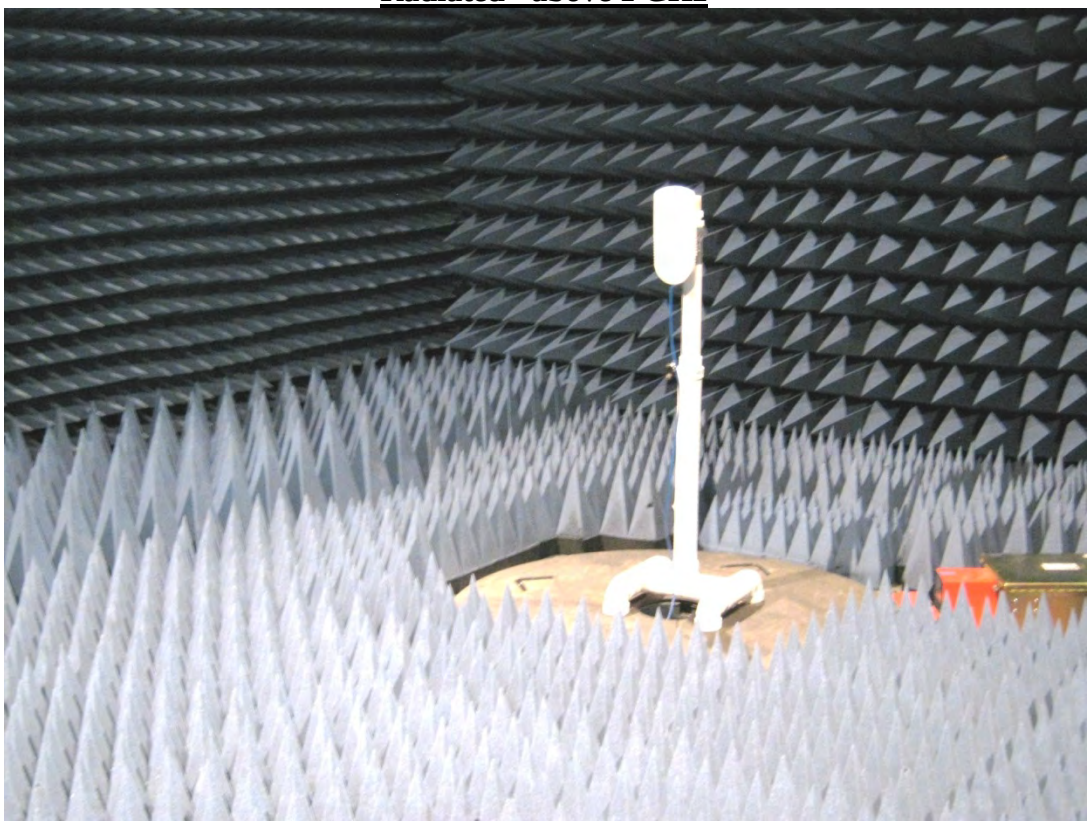


Appendix A – Test Photos

Radiated - Back, below 1 GHz

Appendix A – Test Photos

Radiated - above 1 GHz



RF Conducted

Appendix A – Test Photos

AC Line Conducted - Front

Appendix A – Test Photos

AC Line Conducted - Back

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 ≥ 3 x 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.

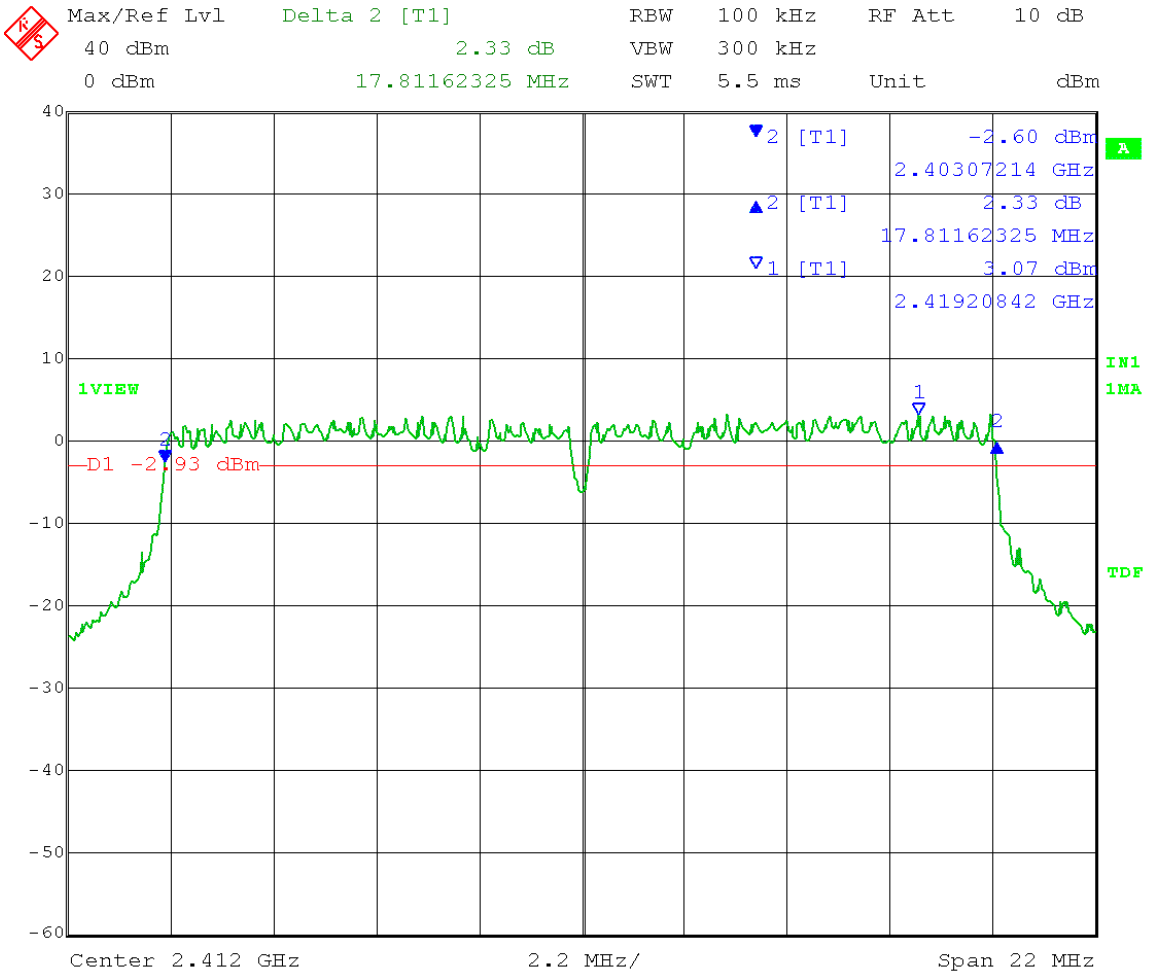
Limit: DTS Bandwidth shall be at least 500 kHz

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

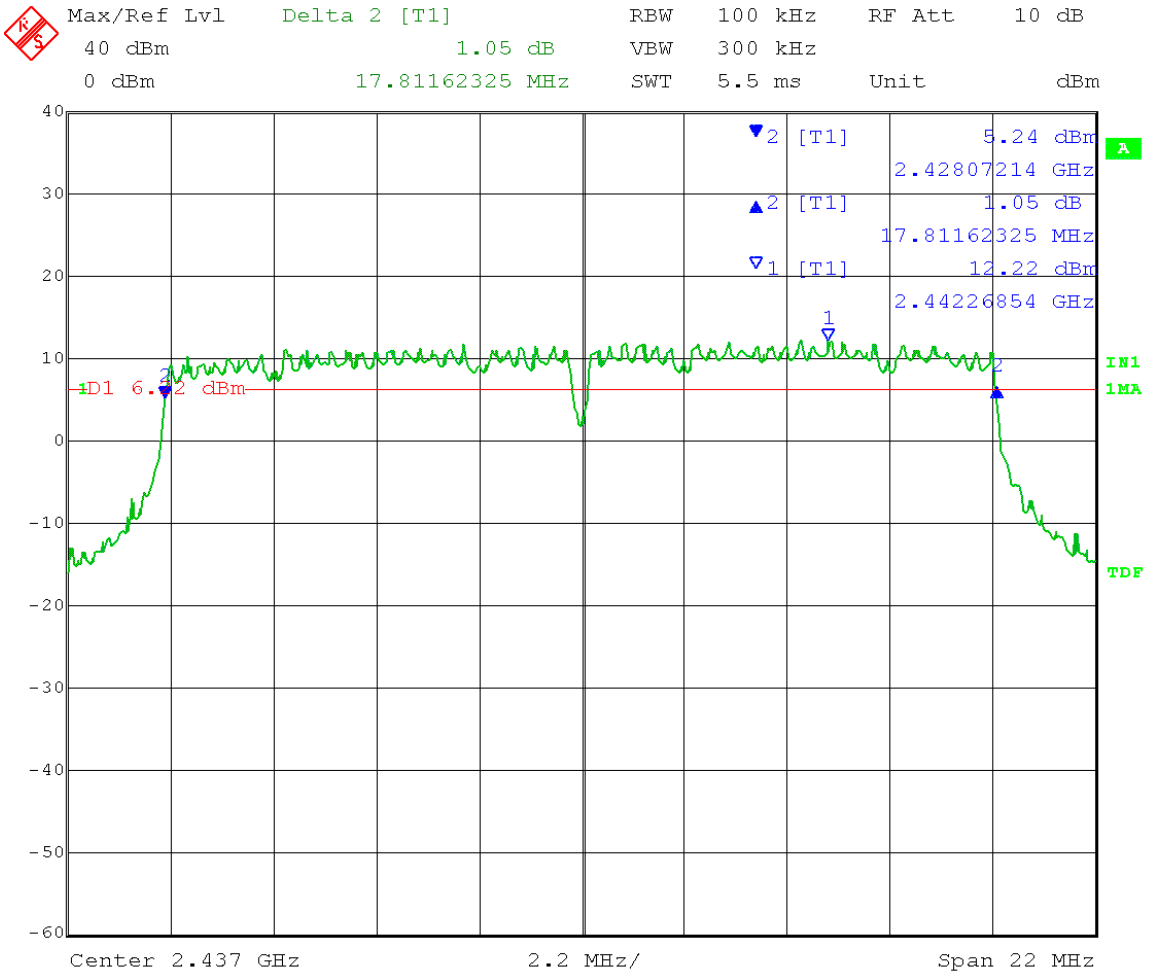


Date: 5.MAR.2014 14:33:13

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

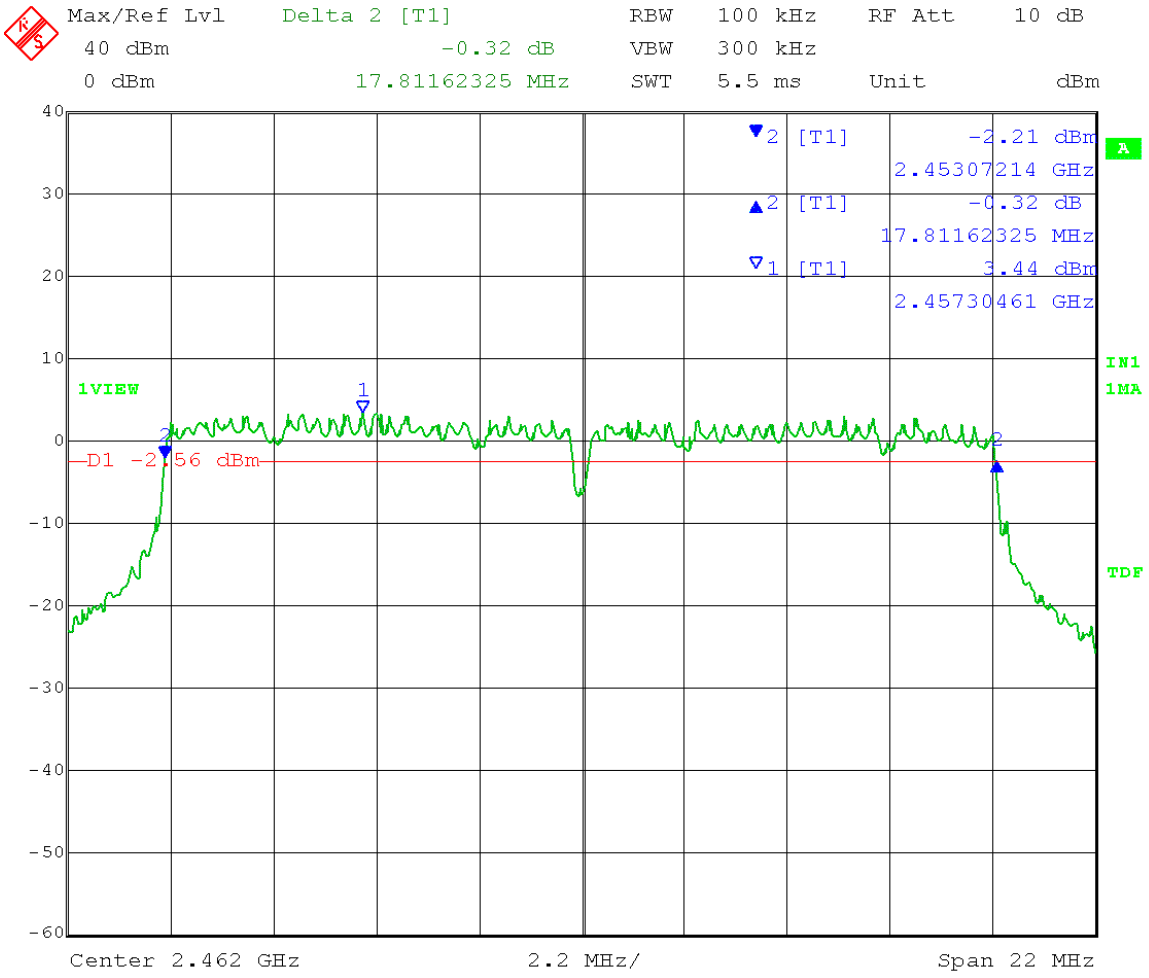


Date: 5.MAR.2014 14:28:59

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

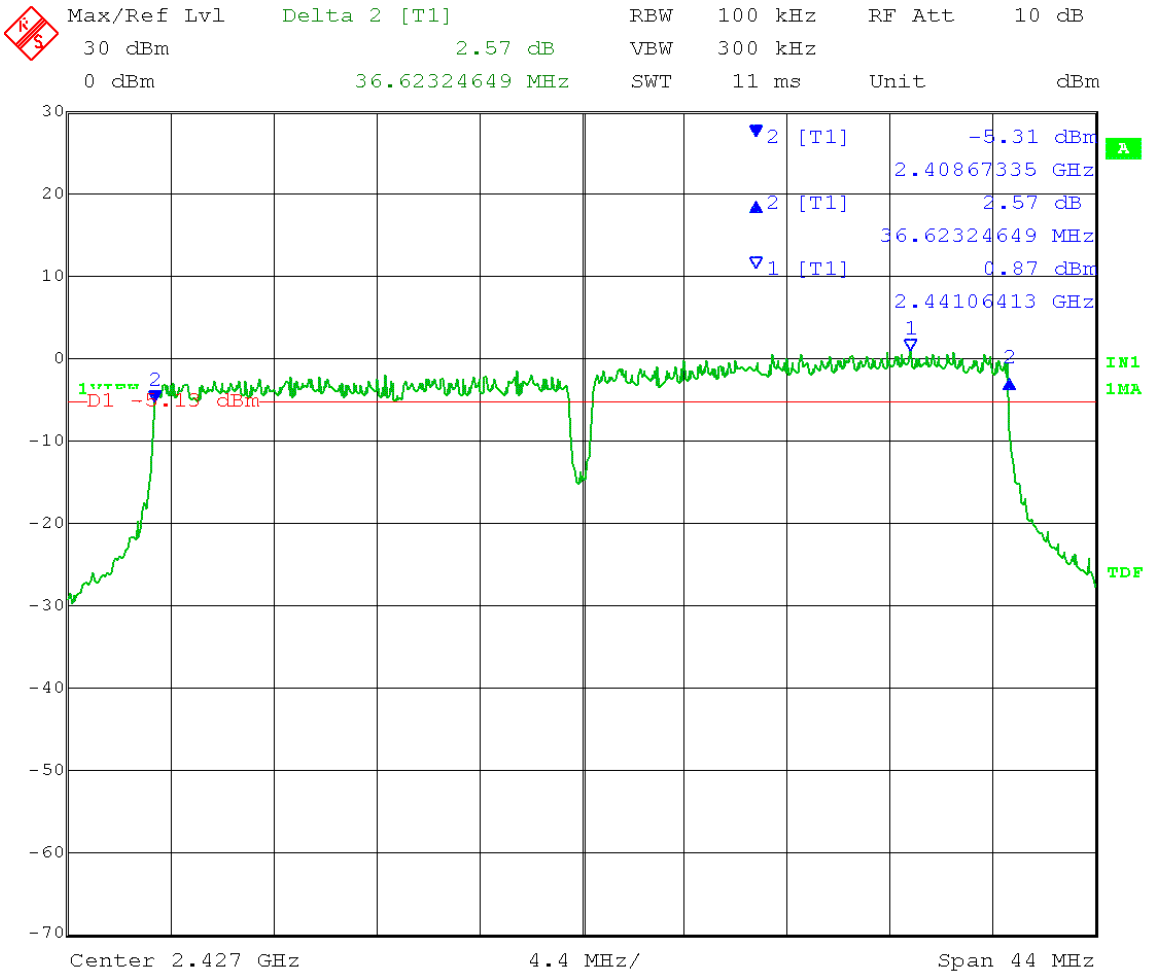


Date: 5.MAR.2014 14:36:30

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

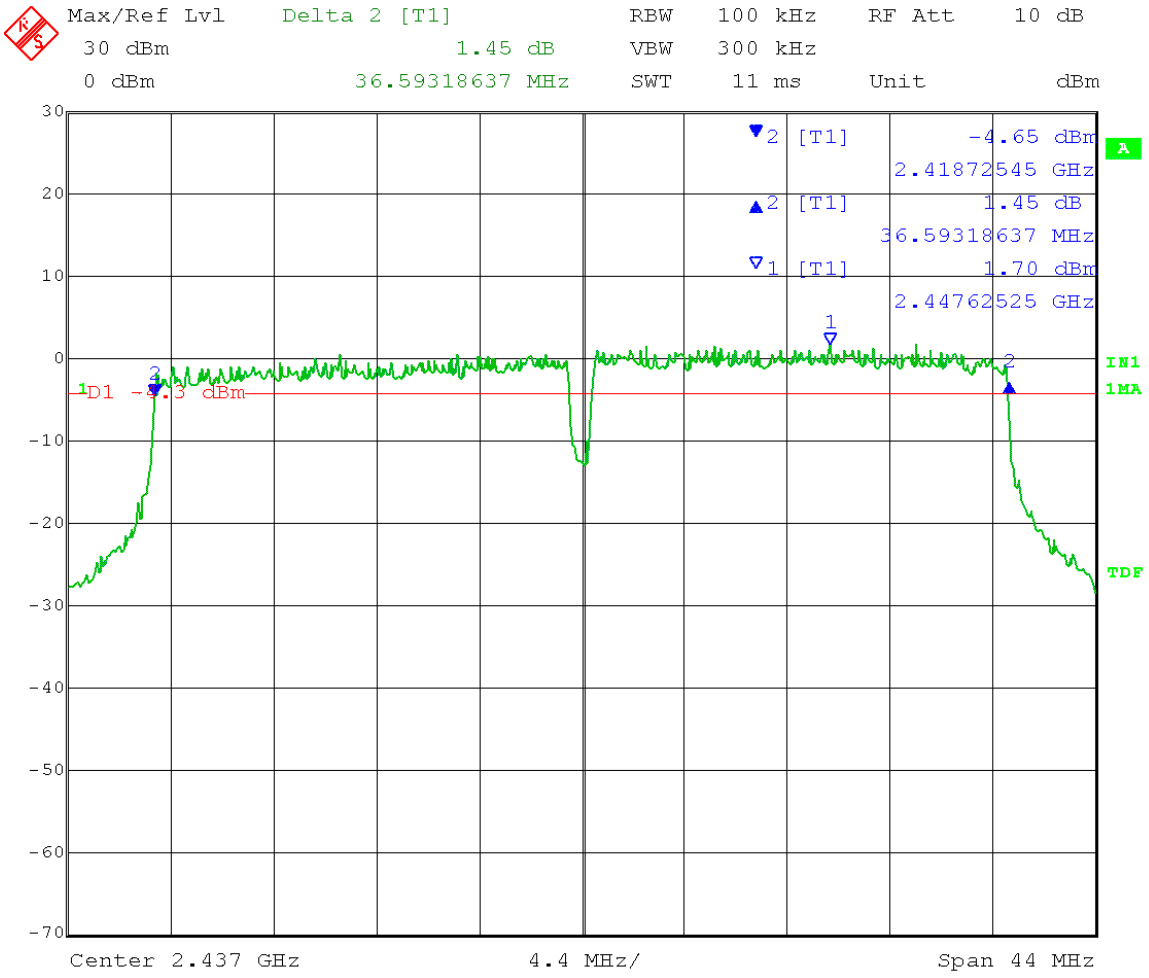


Date: 5.MAR.2014 14:43:37

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

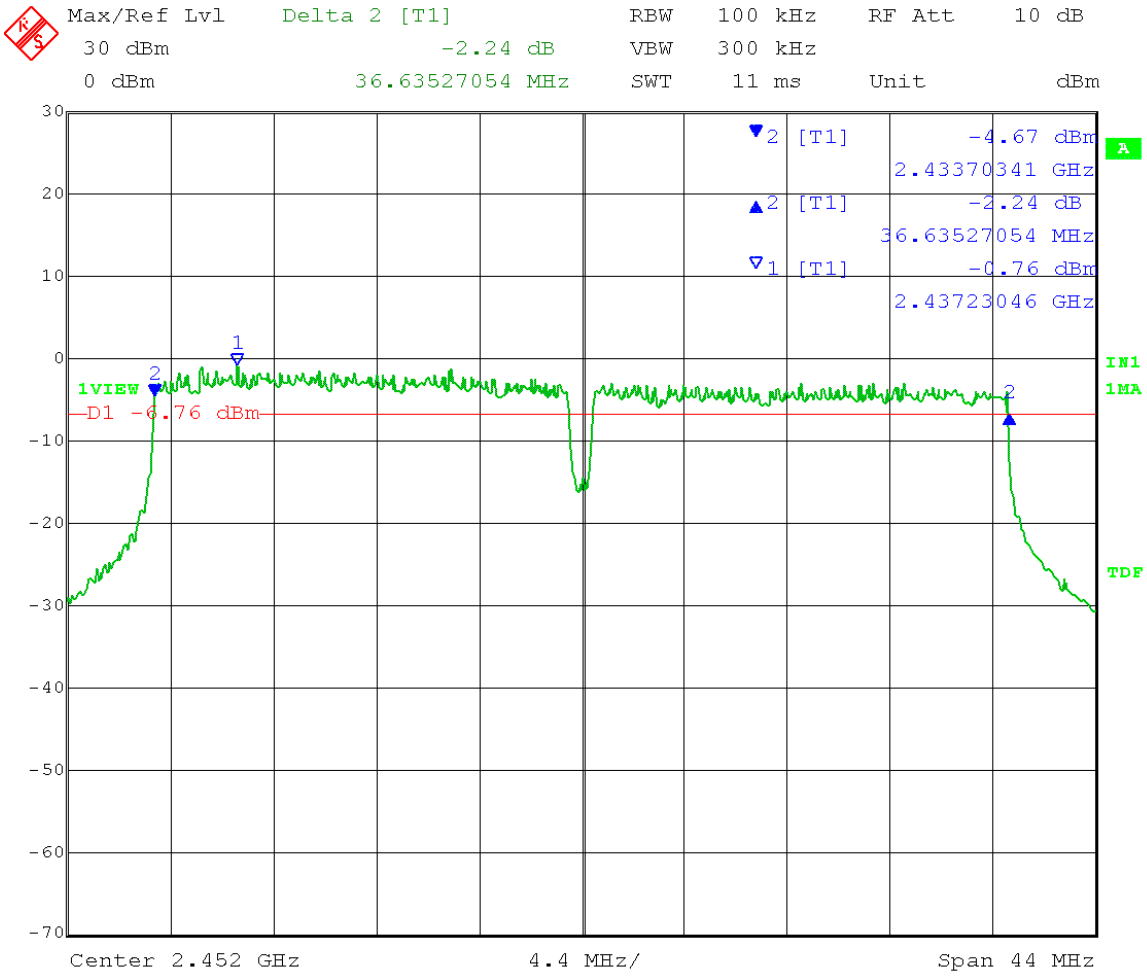


Date: 5.MAR.2014 14:40:03

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

6 dB Emission Bandwidth = 36.63 MHz

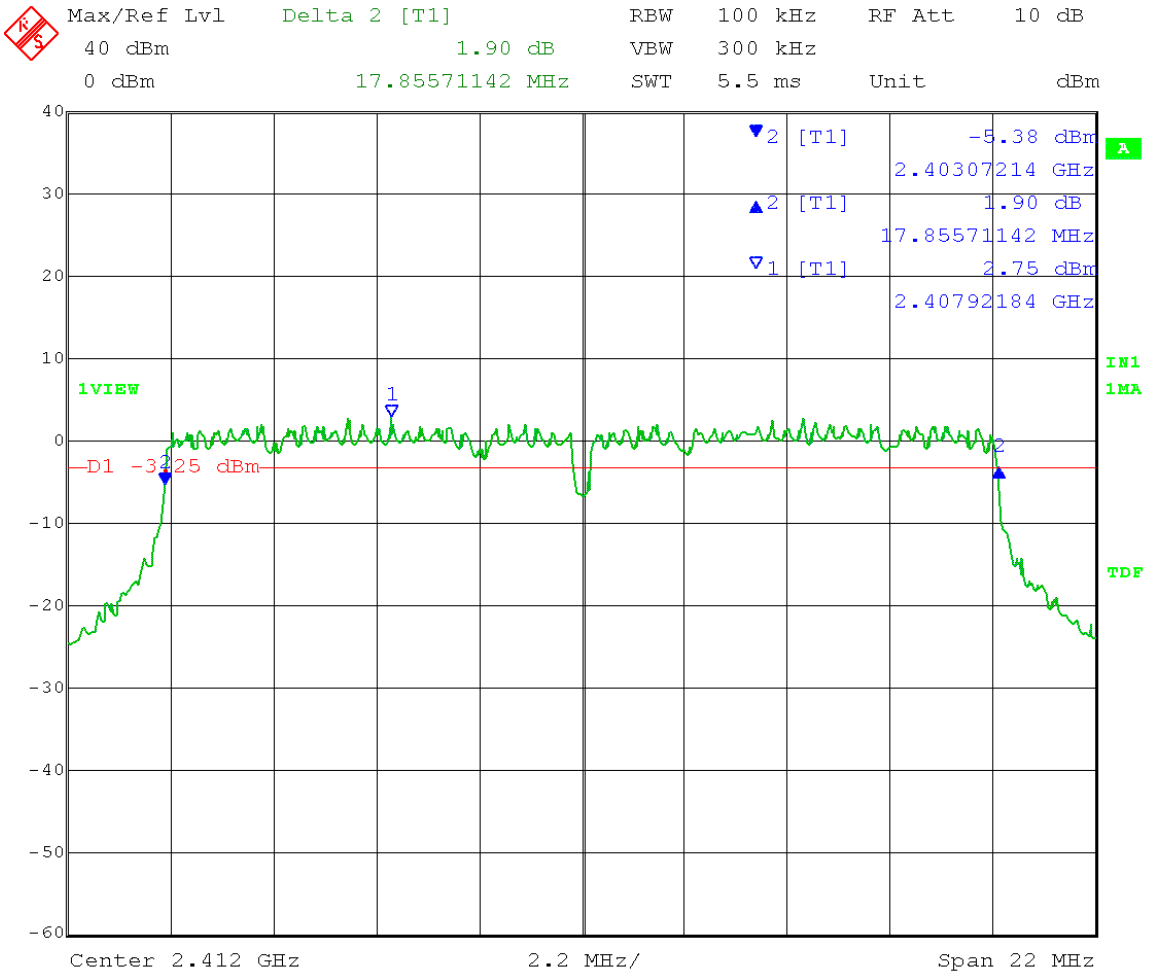


Date: 5.MAR.2014 14:55:03

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

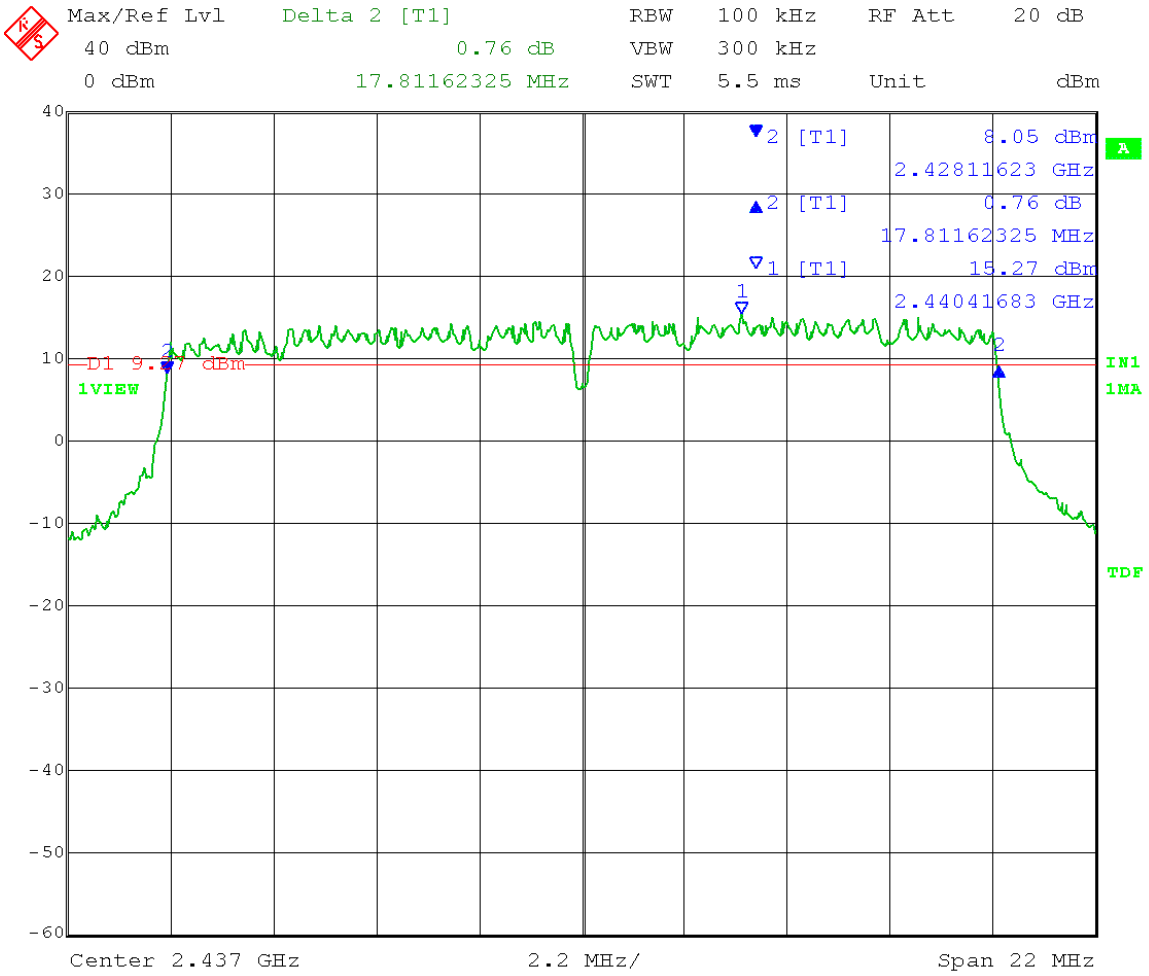


Date: 11.MAR.2014 07:56:44

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

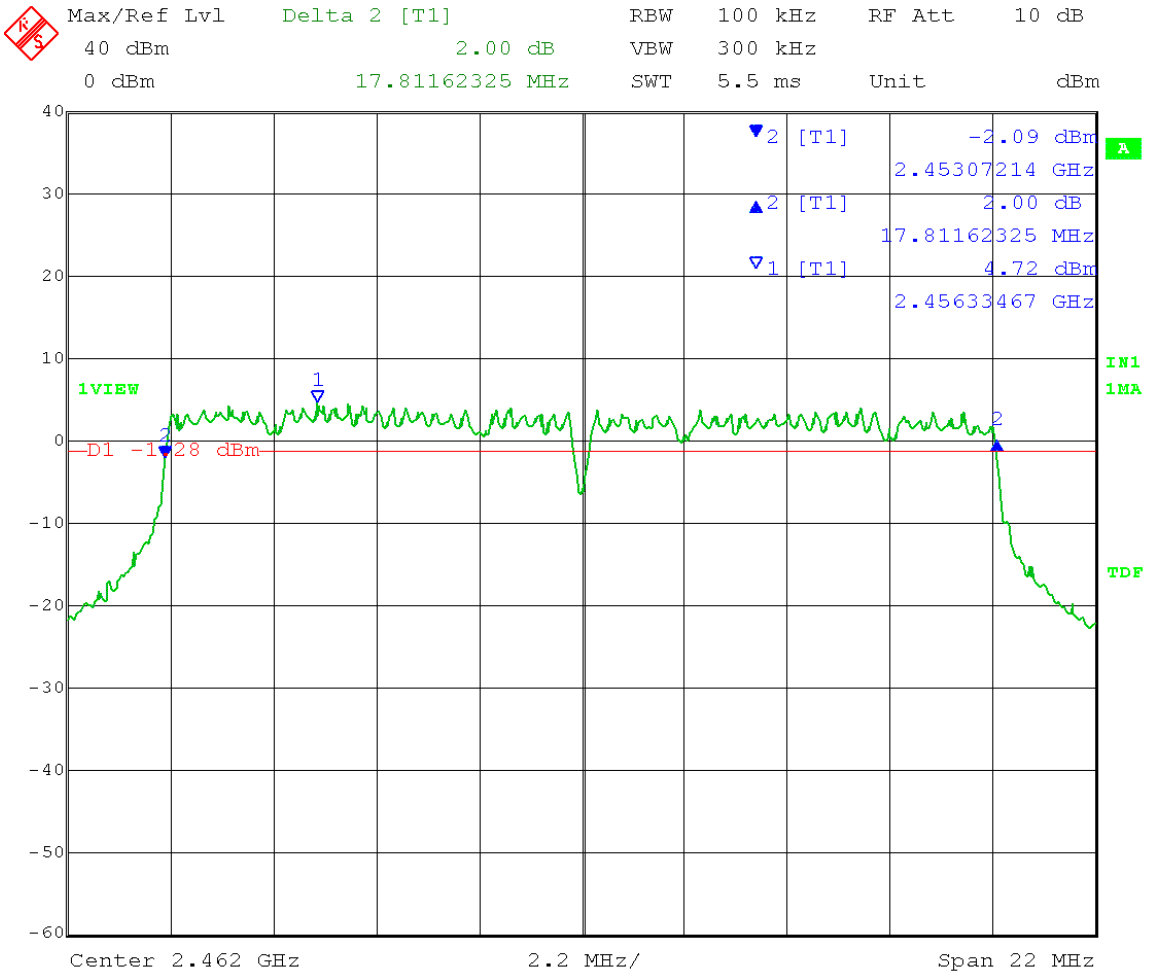


Date: 11.MAR.2014 07:53:18

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

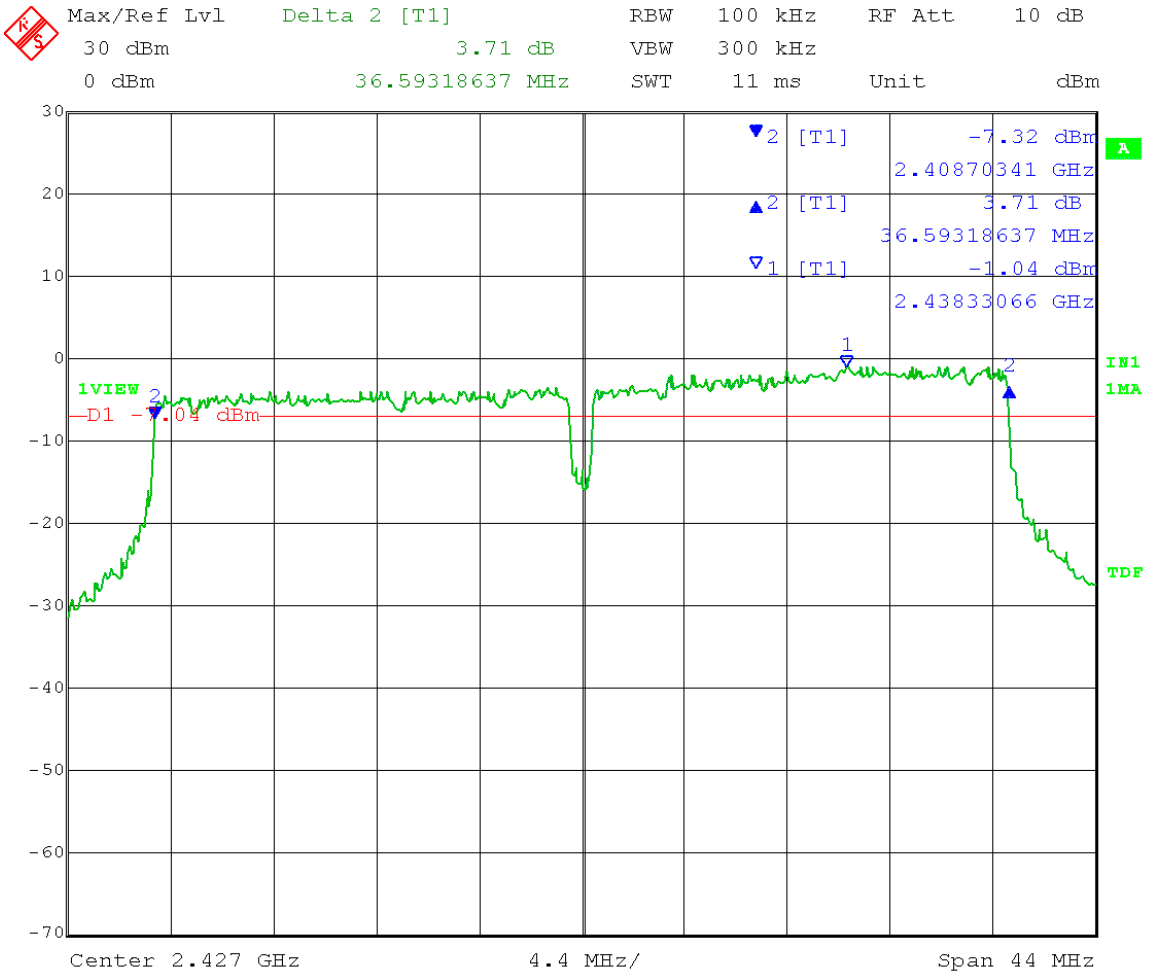


Date: 11.MAR.2014 08:00:58

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

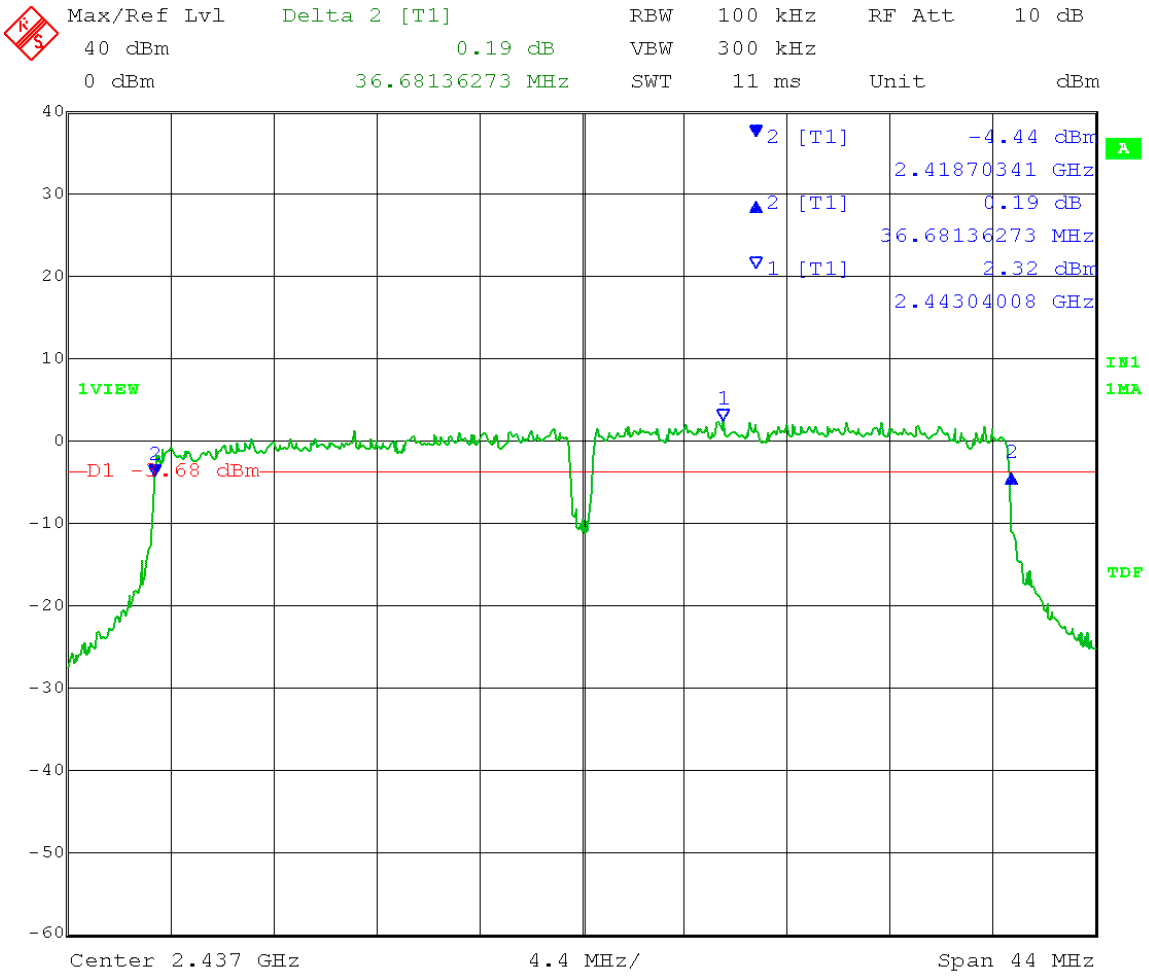


Date: 11.MAR.2014 08:11:33

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

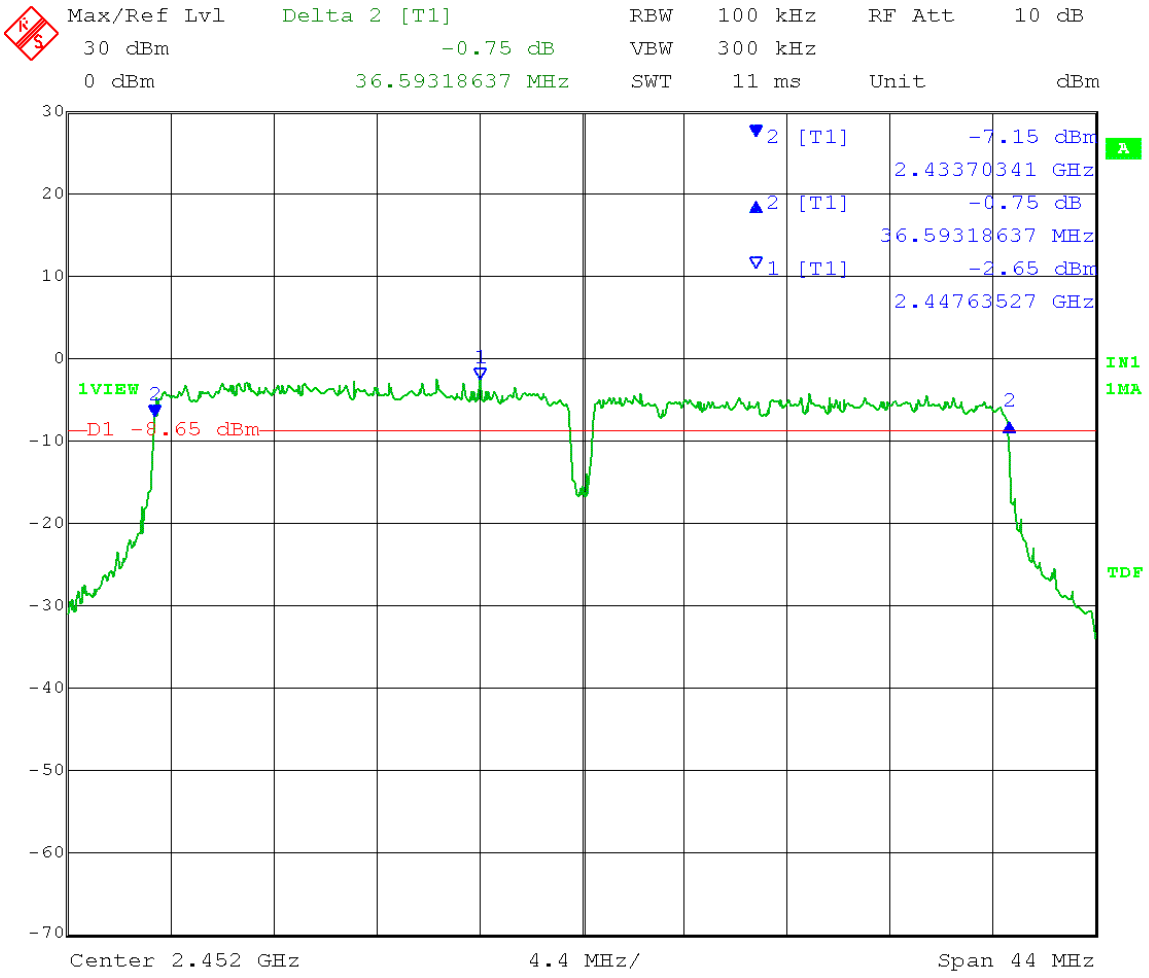


Date: 11.MAR.2014 08:05:56

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

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

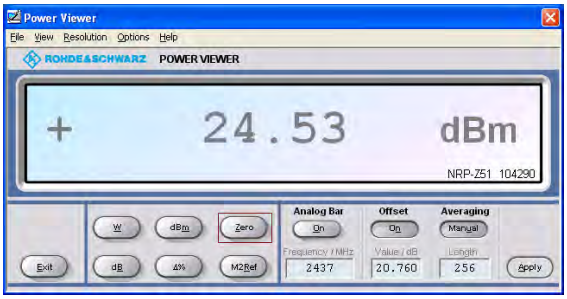
EUT nominal channel bandwidth: 20 MHz
Output port: Channel 1; Mid Channel Frequency: 2.437 GHz
Test software power setting: 26.5
Modulation Type: OFDM MCS15
Antenna gain: 8 dBi Omni antenna; Point-to-Multipoint operation

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

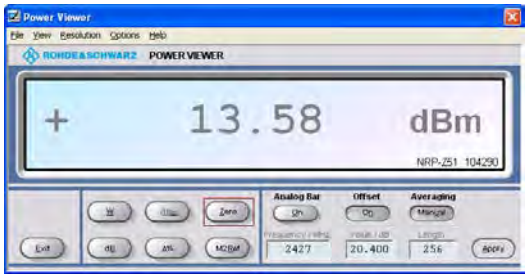
EUT nominal channel bandwidth: 40 MHz
Output port: Channel 1; Low Channel Frequency: 2.427 GHz
Test software power setting: 15.5
Modulation Type: OFDM MCS15
Antenna gain: 8 dBi Omni antenna; Point-to-Multipoint operation

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

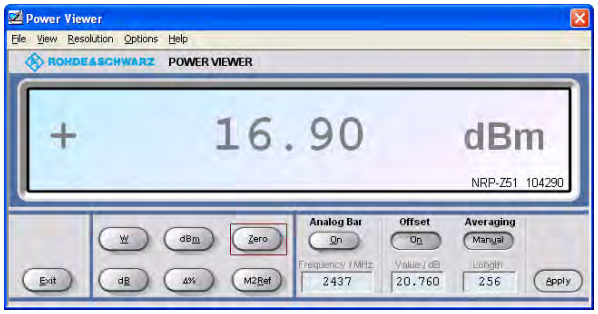
EUT nominal channel bandwidth: 40 MHz
Output port: Channel 1; Mid Channel Frequency: 2.437 GHz
Test software power setting: 18
Modulation Type: OFDM MCS15
Antenna gain: 8 dBi Omni antenna; Point-to-Multipoint operation

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

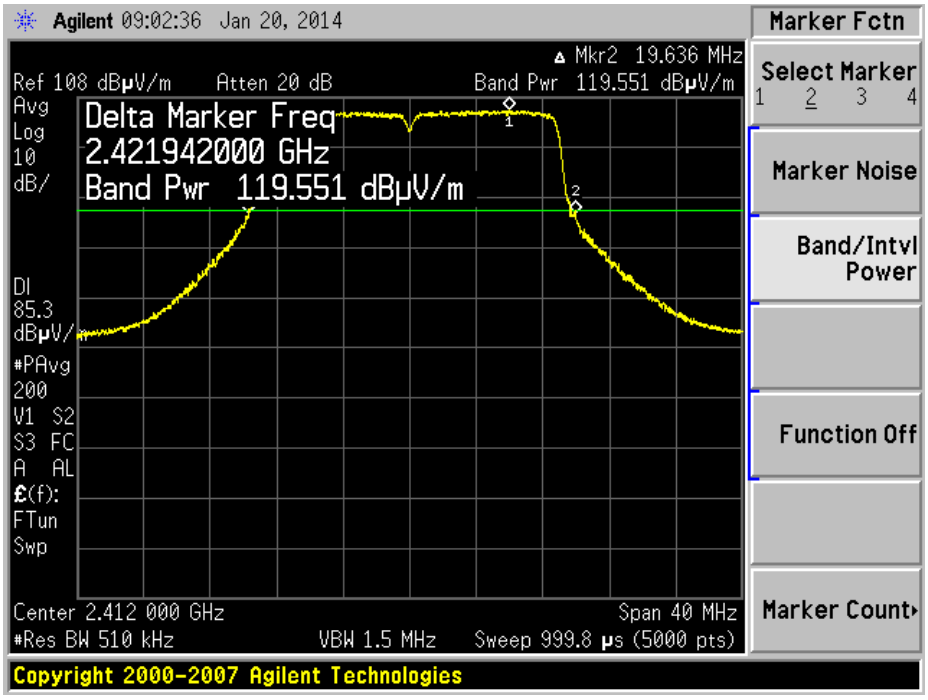
EUT nominal channel bandwidth: 20 MHz
Both output chains active; Low Channel Frequency: 2.412 GHz
Test software setting: 15
Modulation Type: OFDM MCS15
Antenna gain: 12 dBi
Duty cycle = 100%

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.

EIRP = E + 20log (3 meters) – 104.8
= 119.551 + 20log(3) – 104.8
= 24.29 dBm for Vertical polarization

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

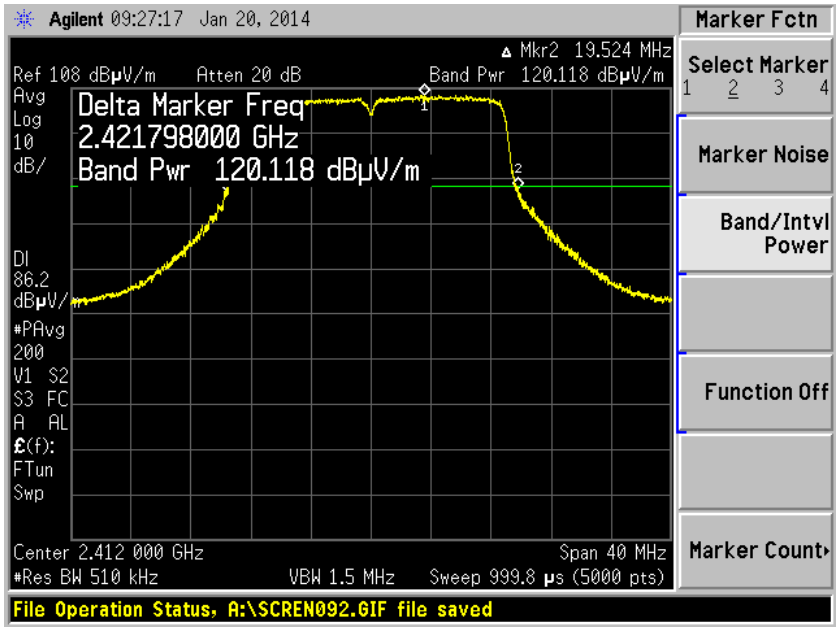
EUT nominal channel bandwidth: 20 MHz
Both output chains active; Low Channel Frequency: 2.412 GHz
Test software setting: 15
Modulation Type: OFDM MCS15
Antenna gain: 12 dBi
Duty cycle = 100%

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.

EIRP = E + 20log (3 meters) – 104.8
= 120.118 + 20log(3) – 104.8
= 24.86 dBm for Horizontal polarization

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

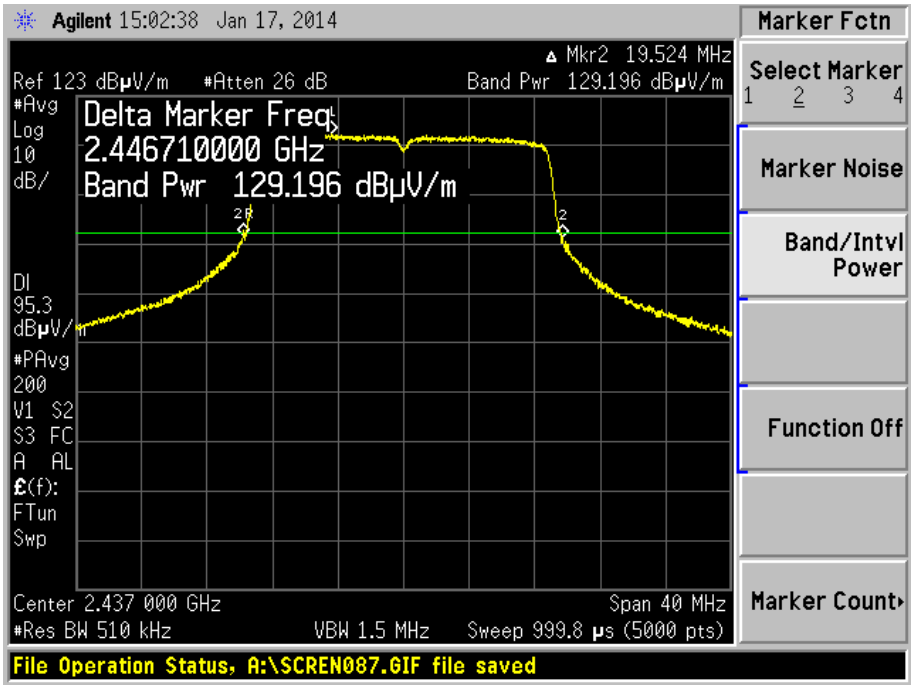
EUT nominal channel bandwidth: 20 MHz
Both output chains active; Mid Channel Frequency: 2.437 GHz
Test software setting: 27
Modulation Type: OFDM MCS15
Antenna gain: 12 dBi
Duty cycle = 100%

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.

EIRP = E + 20log (3 meters) – 104.8
= 129.196 + 20log(3) – 104.8
= 33.94 dBm for Vertical polarization

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

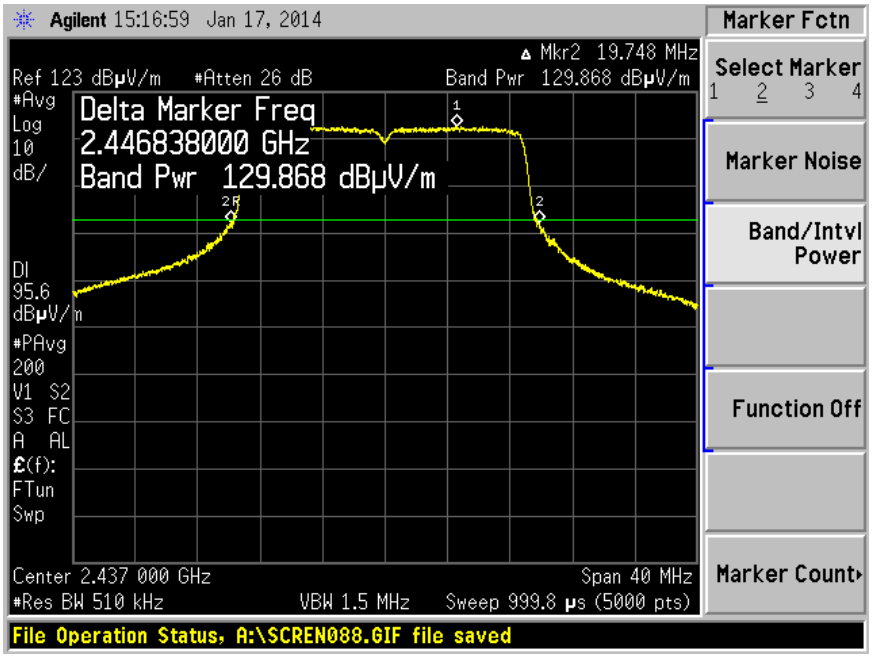
EUT nominal channel bandwidth: 20 MHz
Both output chains active; Mid Channel Frequency: 2.437 GHz
Test software setting: 27
Modulation Type: OFDM MCS15
Antenna gain: 12 dBi
Duty cycle = 100%

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.

EIRP = E + 20log (3 meters) – 104.8
= 129.868 + 20log(3) – 104.8
= 34.61 dBm for Horizontal polarization

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

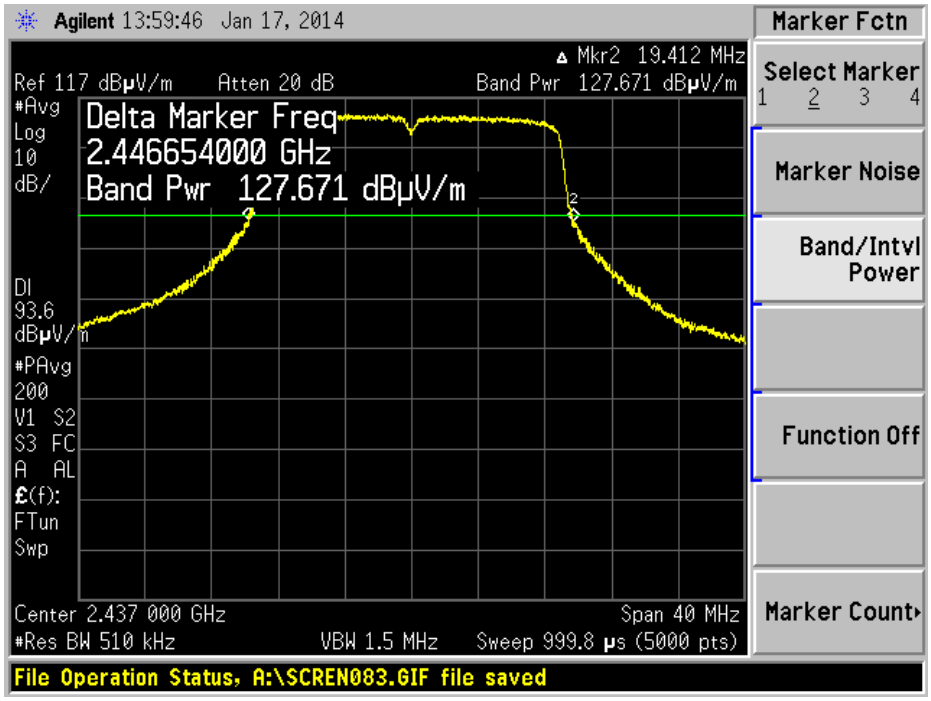
EUT nominal channel bandwidth: 20 MHz
Both output chains active; Mid Channel Frequency: 2.437 GHz
Test software setting: 24.5
Modulation Type: OFDM MCS15
Antenna gain: 12 dBi
Duty cycle = 100%

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.

EIRP = E + 20log (3 meters) – 104.8
= 127.671 + 20log(3) – 104.8
= 32.41 dBm for Vertical polarization

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

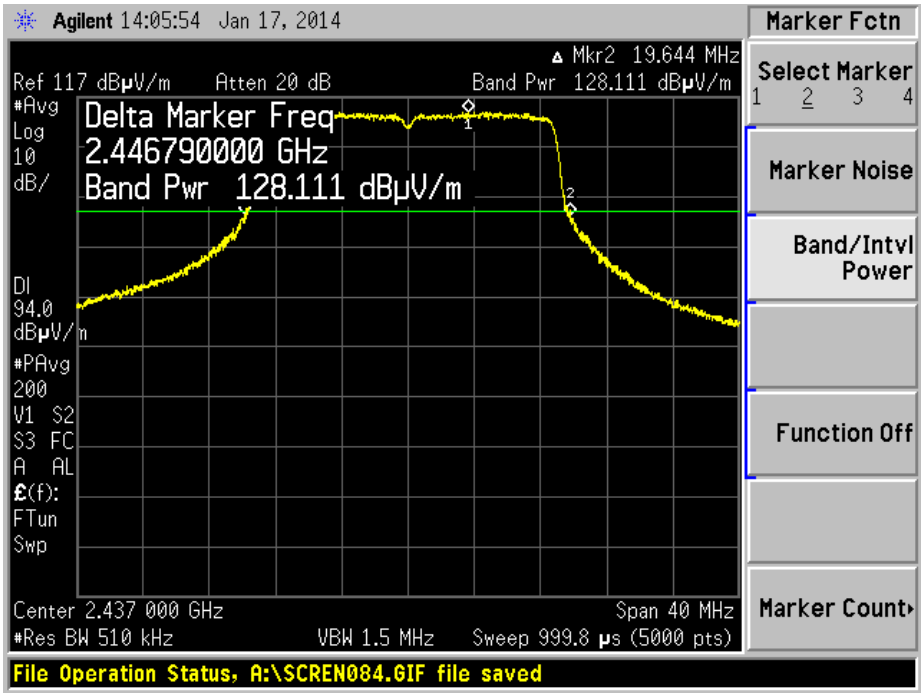
EUT nominal channel bandwidth: 20 MHz
Both output chains active; Mid Channel Frequency: 2.437 GHz
Test software setting: 24.5
Modulation Type: OFDM MCS15
Antenna gain: 12 dBi
Duty cycle = 100%

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.

EIRP = E + 20log (3 meters) – 104.8
= 128.11 + 20log(3) – 104.8
= 32.85 dBm for Horizontal polarization

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

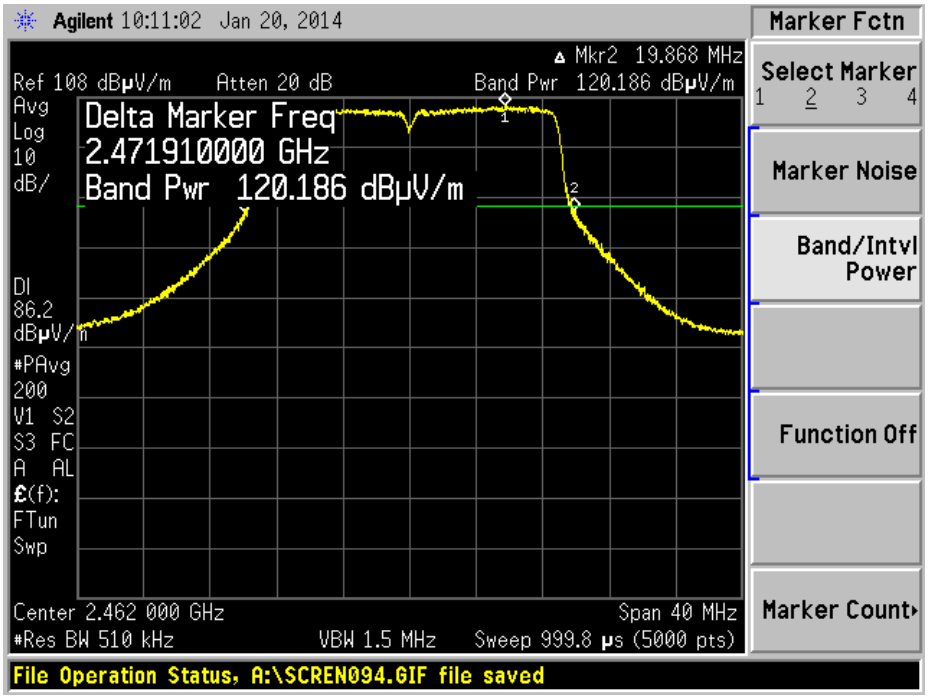
EUT nominal channel bandwidth: 20 MHz
Both output chains active; High Channel Frequency: 2.462 GHz
Test software setting: 17
Modulation Type: OFDM MCS15
Antenna gain: 12 dBi
Duty cycle = 100%

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.

EIRP = E + 20log (3 meters) – 104.8
= 120.186 + 20log(3) – 104.8
= 24.93 dBm for Vertical polarization

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

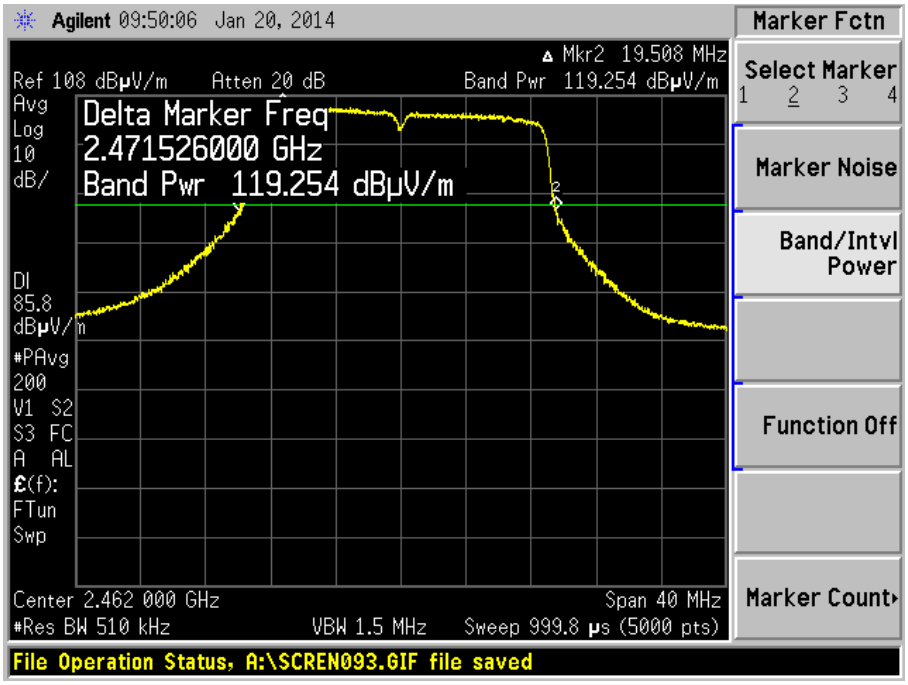
EUT nominal channel bandwidth: 20 MHz
Both output chains active; High Channel Frequency: 2.462 GHz
Test software setting: 17
Modulation Type: OFDM MCS15
Antenna gain: 12 dBi
Duty cycle = 100%

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.

EIRP = E + 20log (3 meters) – 104.8
= 119.254 + 20log(3) – 104.8
= 24.00 dBm for Horizontal polarization

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

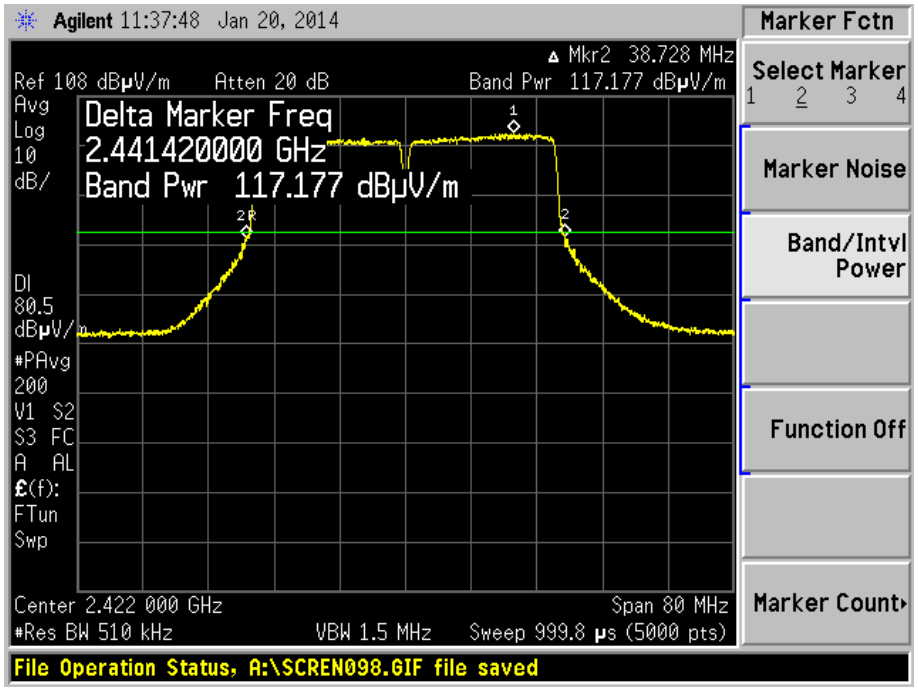
EUT nominal channel bandwidth: 40 MHz
Both output chains active; Low Channel Frequency: 2.422 GHz
Test software setting: 12.5
Modulation Type: OFDM MCS15
Antenna gain: 12 dBi
Duty cycle = 100%

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.

EIRP = E + 20log (3 meters) – 104.8
= 117.177 + 20log(3) – 104.8
= 21.92 dBm for Vertical polarization

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

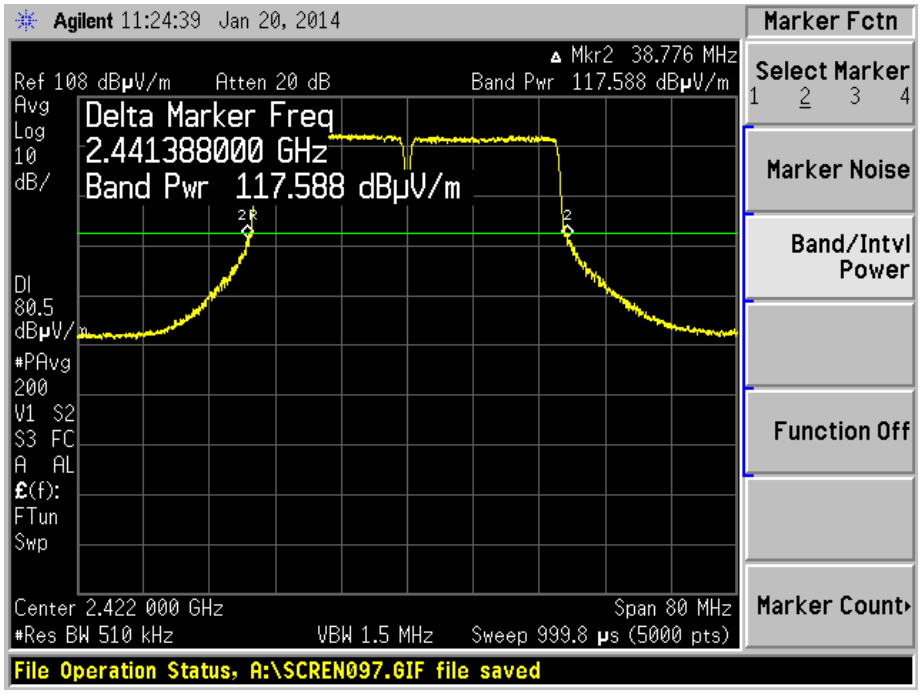
EUT nominal channel bandwidth: 40 MHz
Both output chains active; Low Channel Frequency: 2.422 GHz
Test software setting: 12.5
Modulation Type: OFDM MCS15
Antenna gain: 12 dBi
Duty cycle = 100%

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.

EIRP = E + 20log (3 meters) – 104.8
= 117.588 + 20log(3) – 104.8
= 22.33 dBm for Horizontal polarization

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

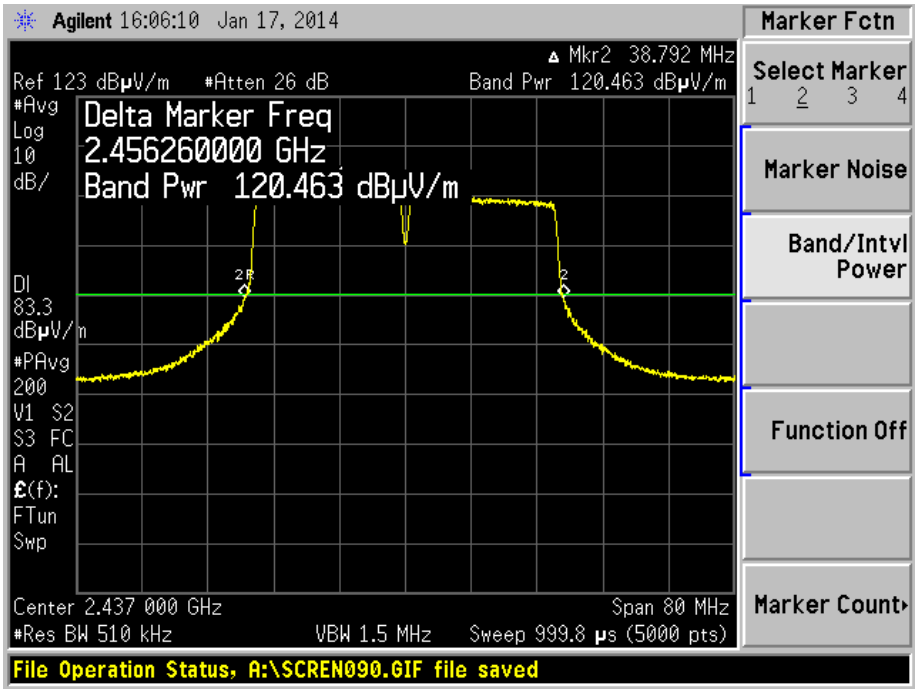
EUT nominal channel bandwidth: 40 MHz
Both output chains active; Mid Channel Frequency: 2.437 GHz
Test software setting: 17
Modulation Type: OFDM MCS15
Antenna gain: 12 dBi
Duty cycle = 100%

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.

EIRP = E + 20log (3 meters) – 104.8
= 120.463 + 20log(3) – 104.8
= 25.21 dBm for Vertical polarization

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

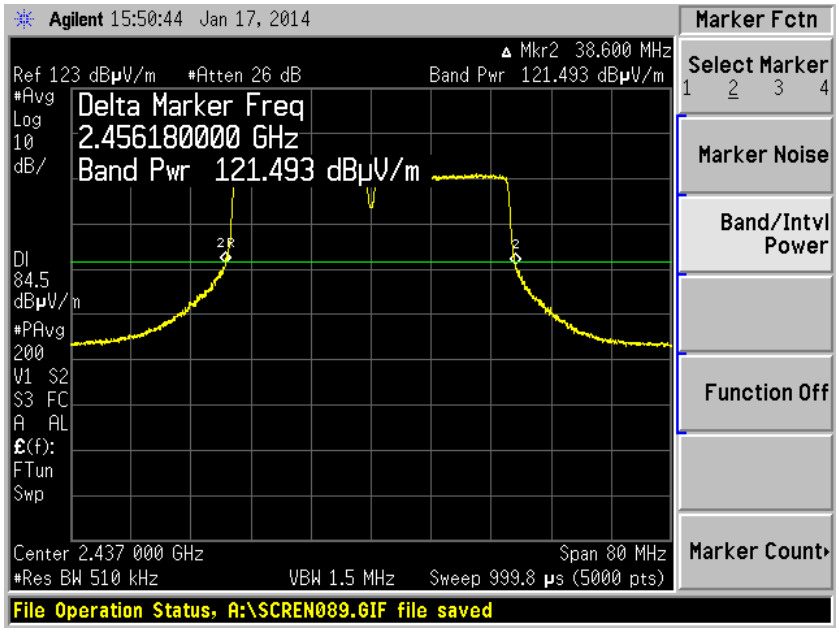
EUT nominal channel bandwidth: 40 MHz
Both output chains active; Mid Channel Frequency: 2.437 GHz
Test software setting: 17
Modulation Type: OFDM MCS15
Antenna gain: 12 dBi
Duty cycle = 100%

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 + 20log (3 meters) – 104.8
= 121.493 + 20log(3) – 104.8
= 26.24 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

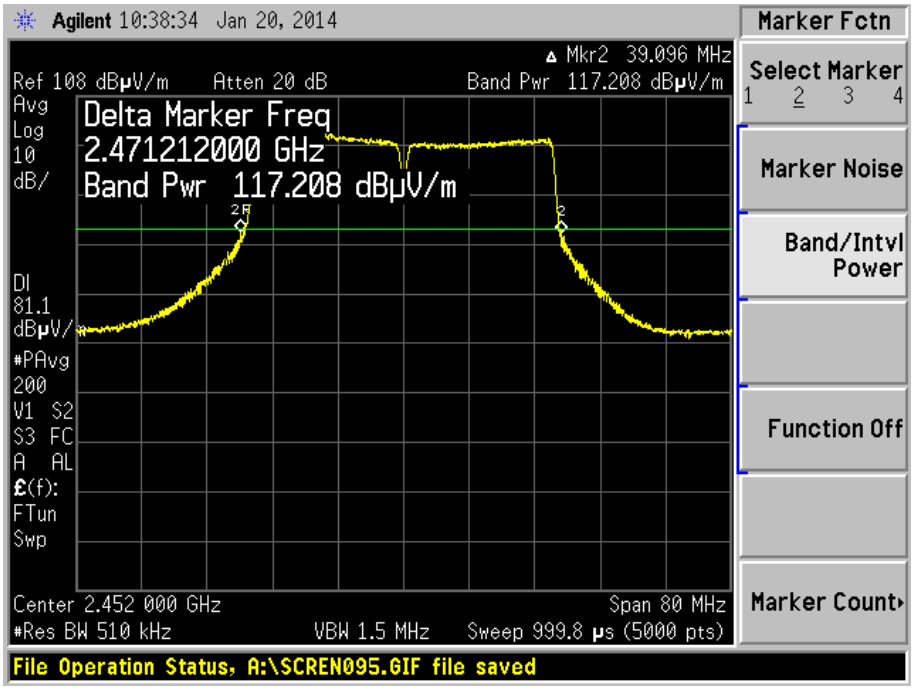
EUT nominal channel bandwidth: 40 MHz
Both output chains active; High Channel Frequency: 2.452 GHz
Test software setting: 13.5
Modulation Type: OFDM MCS15
Antenna gain: 12 dBi
Duty cycle = 100%

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.

EIRP = E + 20log (3 meters) – 104.8
= 117.208 + 20log(3) – 104.8
= 21.95 dBm for Vertical polarization

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

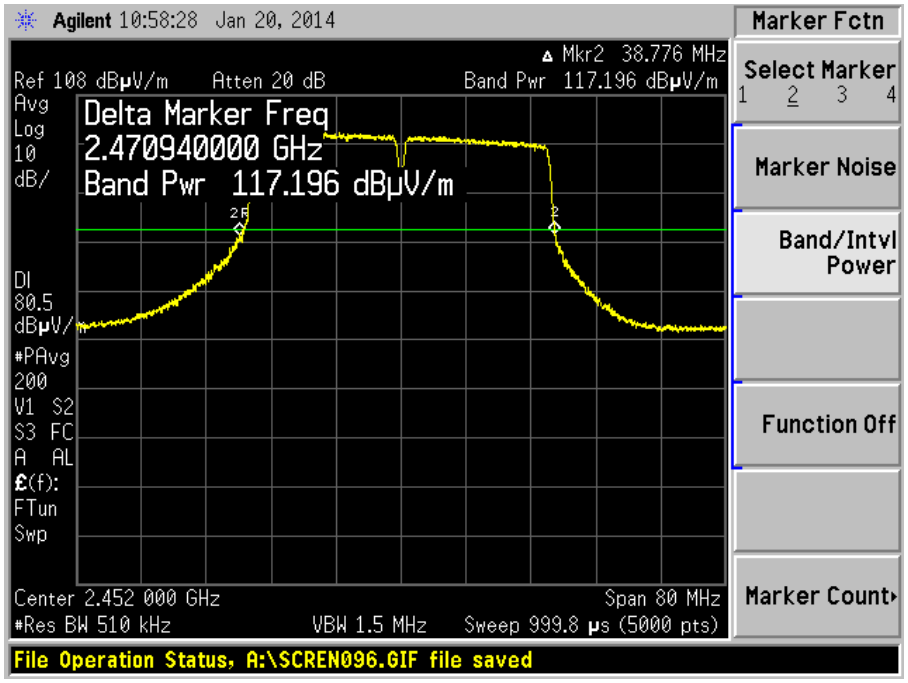
EUT nominal channel bandwidth: 40 MHz
Both output chains active; High Channel Frequency: 2.452 GHz
Test software setting: 13.5
Modulation Type: OFDM MCS15
Antenna gain: 12 dBi
Duty cycle = 100%

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.

EIRP = E + 20log (3 meters) – 104.8
= 117.196 + 20log(3) – 104.8
= 21.94 dBm for Horizontal polarization

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

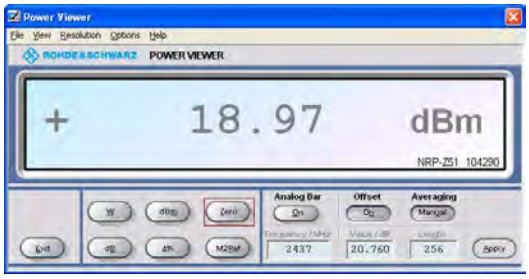
EUT nominal channel bandwidth: 20 MHz
Output port: Channel 1; Mid Channel Frequency: 2.437 GHz
Test software power setting: 20.5
Modulation Type: OFDM MCS15
Antenna gain: 17 dBi Sector antenna; Point-to-Point operation

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 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

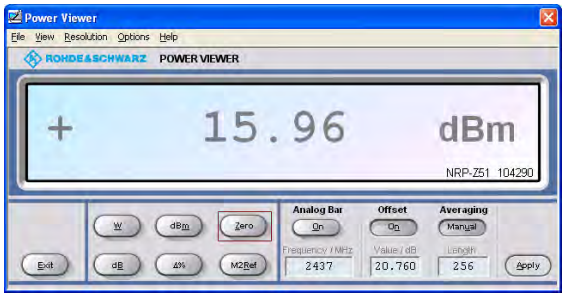
EUT nominal channel bandwidth: 20 MHz
Output port: Channel 1; Mid Channel Frequency: 2.437 GHz
Test software power setting: 18.0
Modulation Type: OFDM MCS15
Antenna gain: 17 dBi Sector antenna; Point-to-Multipoint operation

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

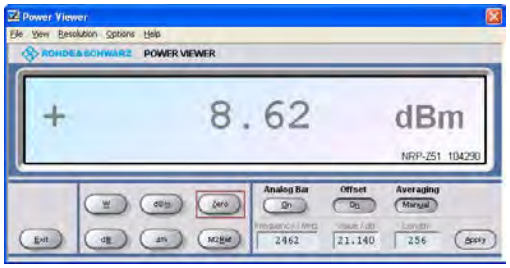
EUT nominal channel bandwidth: 20 MHz
Output port: Channel 1; High Channel Frequency: 2.462 GHz
Test software power setting: 10
Modulation Type: OFDM MCS15
Antenna gain: 17 dBi Sector antenna; Point-to-Point & Point-to-Multipoint operation

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 = 8.62 dBm + 3 dB (MIMO Cross-Pole)
= 11.62 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

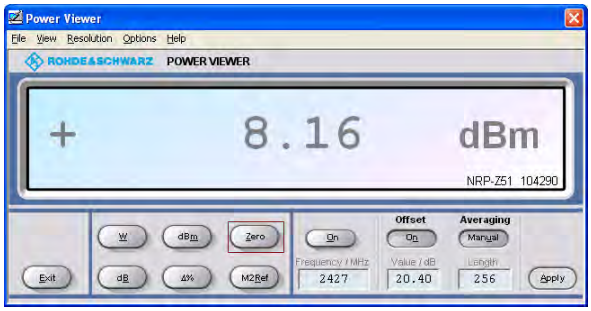
EUT nominal channel bandwidth: 40 MHz
Output port: Channel 1; Low Channel Frequency: 2.427 GHz
Test software power setting: 10
Modulation Type: OFDM MCS15
Antenna gain: 17 dBi Sector antenna; Point-to-Point & Point-to-Multipoint operation

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

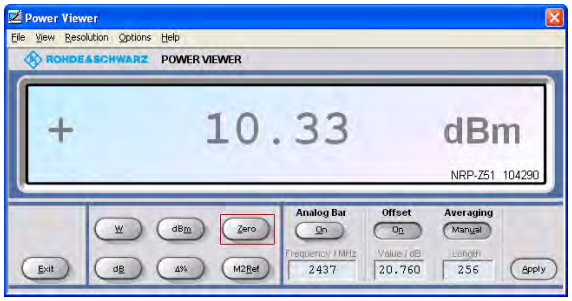
EUT nominal channel bandwidth: 40 MHz
Output port: Channel 1; Mid Channel Frequency: 2.437 GHz
Test software power setting: 11.5
Modulation Type: OFDM MCS15
Antenna gain: 17 dBi Sector antenna; Point-to-Point & Point-to-Multipoint operation

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

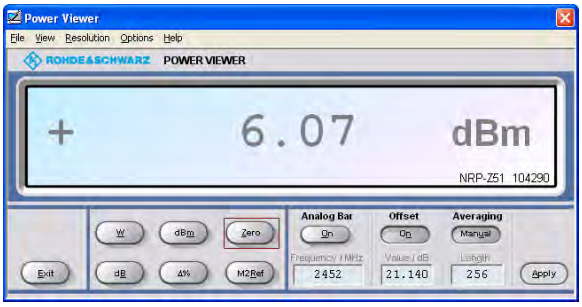
EUT nominal channel bandwidth: 40 MHz
Output port: Channel 1; High Channel Frequency: 2.452 GHz
Test software power setting: 6.5
Modulation Type: OFDM MCS15
Antenna gain: 17 dBi Sector antenna; Point-to-Point & Point-to-Multipoint operation

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

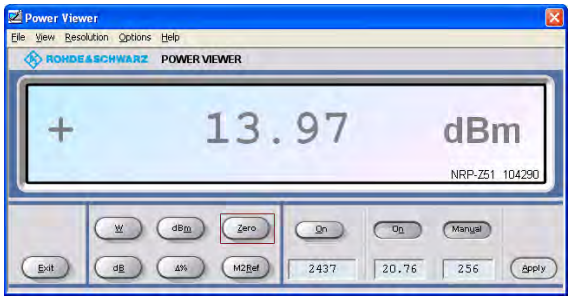
EUT nominal channel bandwidth: 20 MHz
Output port: Channel 1; Mid Channel Frequency: 2.437 GHz
Test software power setting: 15.0
Modulation Type: OFDM MCS15
Antenna gain: 19 dBi Panel antenna; Point-to-Point & Point-to-Multipoint operation

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

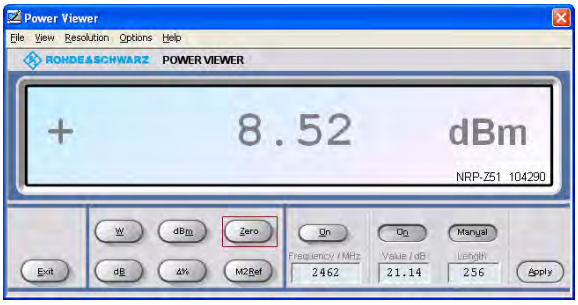
EUT nominal channel bandwidth: 20 MHz
Output port: Channel 1; High Channel Frequency: 2.462 GHz
Test software power setting: 9
Modulation Type: OFDM MCS15
Antenna gain: 19 dBi Panel antenna; Point-to-Point & Point-to-Multipoint operation

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

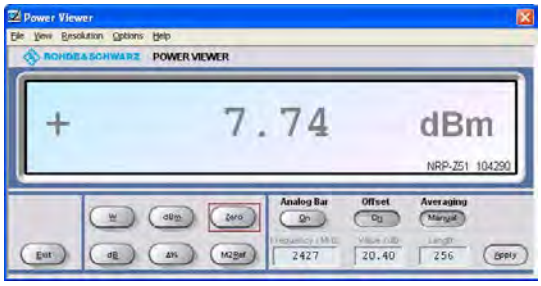
EUT nominal channel bandwidth: 40 MHz
Output port: Channel 1; Low Channel Frequency: 2.427 GHz
Test software power setting: 9
Modulation Type: OFDM MCS15
Antenna gain: 19 dBi Panel antenna; Point-to-Point & Point-to-Multipoint operation

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 dB

Duty cycle = 100%

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

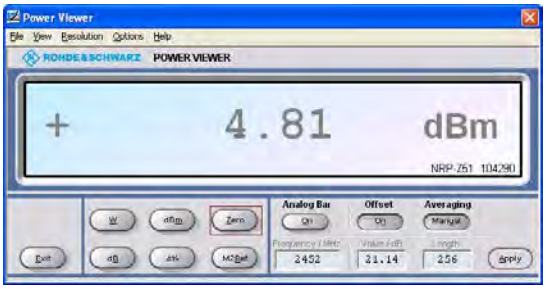
EUT nominal channel bandwidth: 40 MHz
Output port: Channel 1; High Channel Frequency: 2.452 GHz
Test software power setting: 4.5
Modulation Type: OFDM MCS15
Antenna gain: 19 dBi Panel antenna; Point-to-Point & Point-to-Multipoint operation

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 = 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

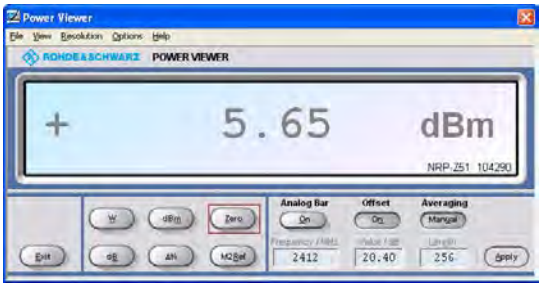
EUT nominal channel bandwidth: 20 MHz
Output port: Channel 1; Low Channel Frequency: 2.412 GHz
Test software power setting: 7
Modulation Type: OFDM MCS15
Antenna gain: 19 dBi Dish antenna; Point-to-Point & Point-to-Multipoint operation

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

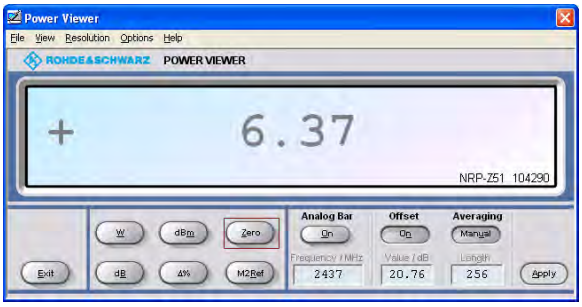
EUT nominal channel bandwidth: 20 MHz
Output port: Channel 1; Mid Channel Frequency: 2.437 GHz
Test software power setting: 7
Modulation Type: OFDM MCS15
Antenna gain: 25 dBi Dish antenna; Point-to-Point & Point-to-Multipoint operation

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

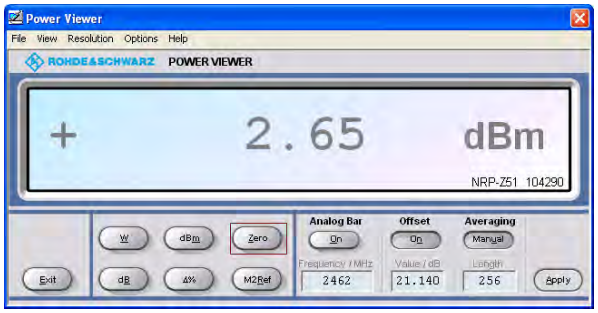
EUT nominal channel bandwidth: 20 MHz
Output port: Channel 1; High Channel Frequency: 2.462 GHz
Test software power setting: 2.5
Modulation Type: OFDM MCS15
Antenna gain: 25 dBi Dish antenna; Point-to-Point & Point-to-Multipoint operation

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

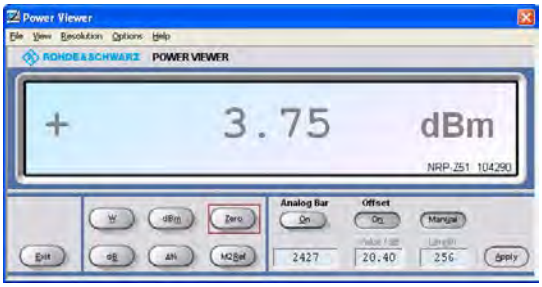
EUT nominal channel bandwidth: 40 MHz
Output port: Channel 1; Low Channel Frequency: 2.427 GHz
Test software power setting: 4.5
Modulation Type: OFDM MCS15
Antenna gain: 25 dBi Dish antenna; Point-to-Point & Point-to-Multipoint operation

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 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

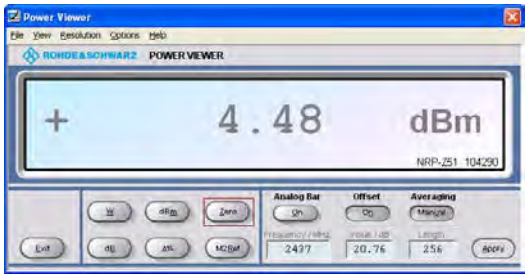
EUT nominal channel bandwidth: 40 MHz
Output port: Channel 1; Mid Channel Frequency: 2.437 GHz
Test software power setting: 4.5
Modulation Type: OFDM MCS15
Antenna gain: 25 dBi Dish antenna; Point-to-Point & Point-to-Multipoint operation

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

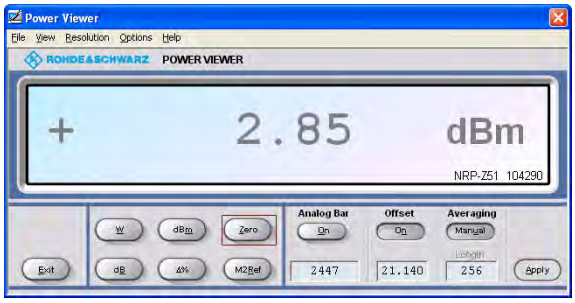
EUT nominal channel bandwidth: 40 MHz
Output port: Channel 1; High Channel Frequency: 2.447 GHz
Test software power setting: 2.5
Modulation Type: OFDM MCS15
Antenna gain: 25 dBi Dish antenna; Point-to-Point & Point-to-Multipoint operation

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



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

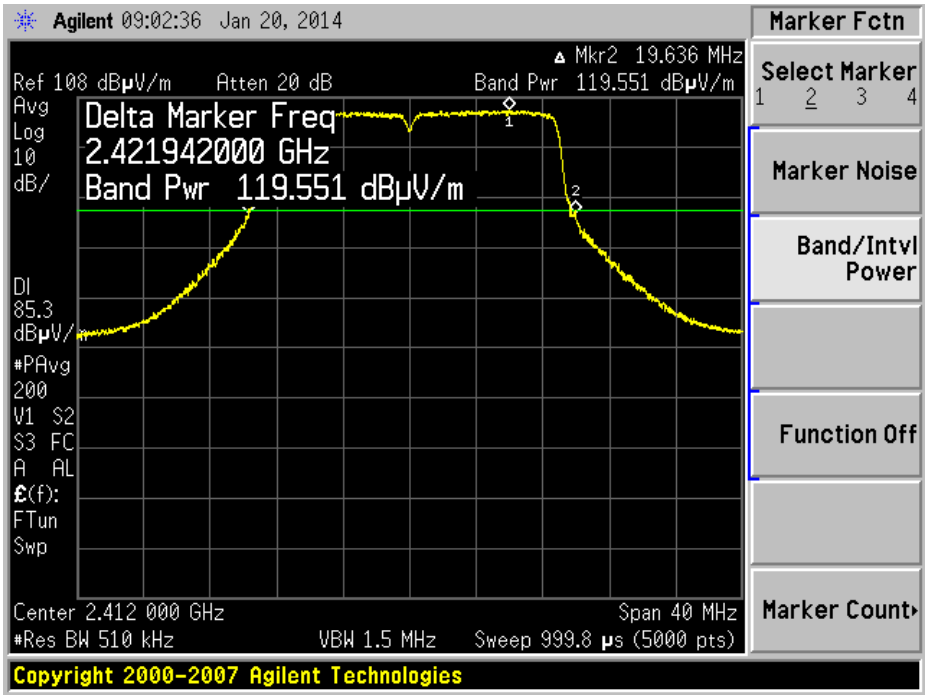
EUT nominal channel bandwidth: 20 MHz
Both output chains active; Low Channel Frequency: 2.412 GHz
Test software setting: 15
Modulation Type: OFDM MCS15
Antenna gain: 12 dBi
Duty cycle = 100%

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.

EIRP = E + 20log (3 meters) – 104.8
= 119.551 + 20log(3) – 104.8
= 24.29 dBm for Vertical polarization

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

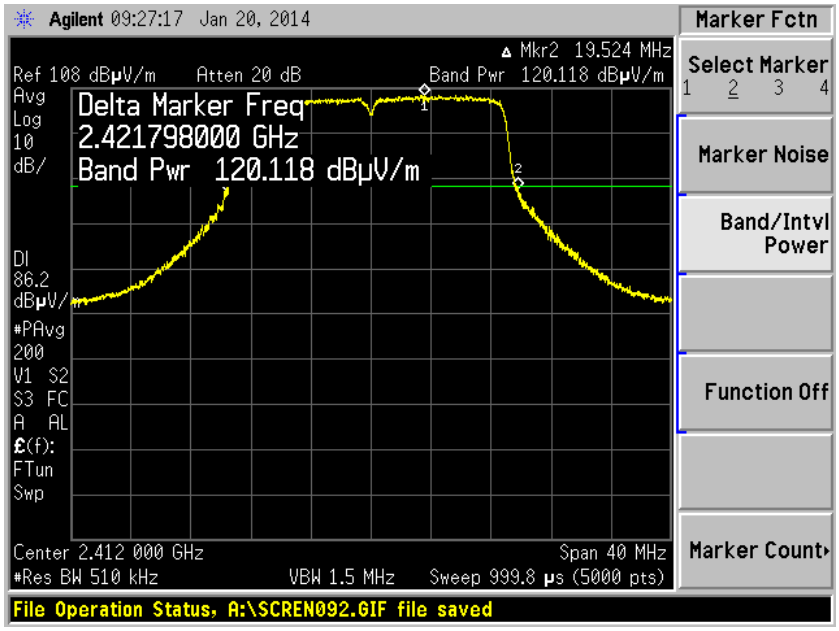
EUT nominal channel bandwidth: 20 MHz
Both output chains active; Low Channel Frequency: 2.412 GHz
Test software setting: 15
Modulation Type: OFDM MCS15
Antenna gain: 12 dBi
Duty cycle = 100%

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.

EIRP = E + 20log (3 meters) – 104.8
= 120.118 + 20log(3) – 104.8
= 24.86 dBm for Horizontal polarization

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

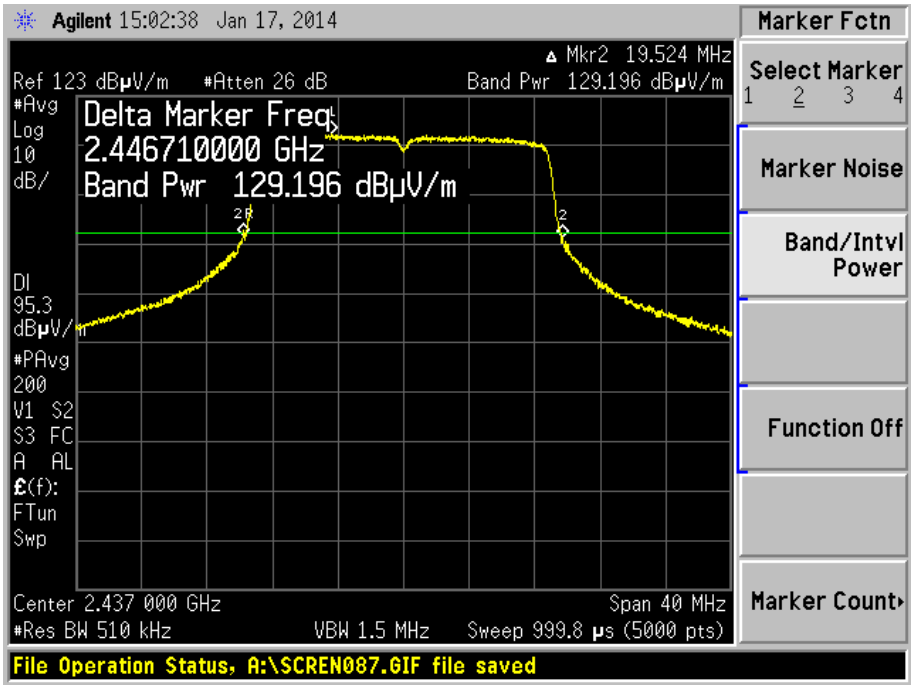
EUT nominal channel bandwidth: 20 MHz
Both output chains active; Mid Channel Frequency: 2.437 GHz
Test software setting: 27
Modulation Type: OFDM MCS15
Antenna gain: 12 dBi
Duty cycle = 100%

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.

EIRP = E + 20log (3 meters) – 104.8
= 129.196 + 20log(3) – 104.8
= 33.94 dBm for Vertical polarization

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

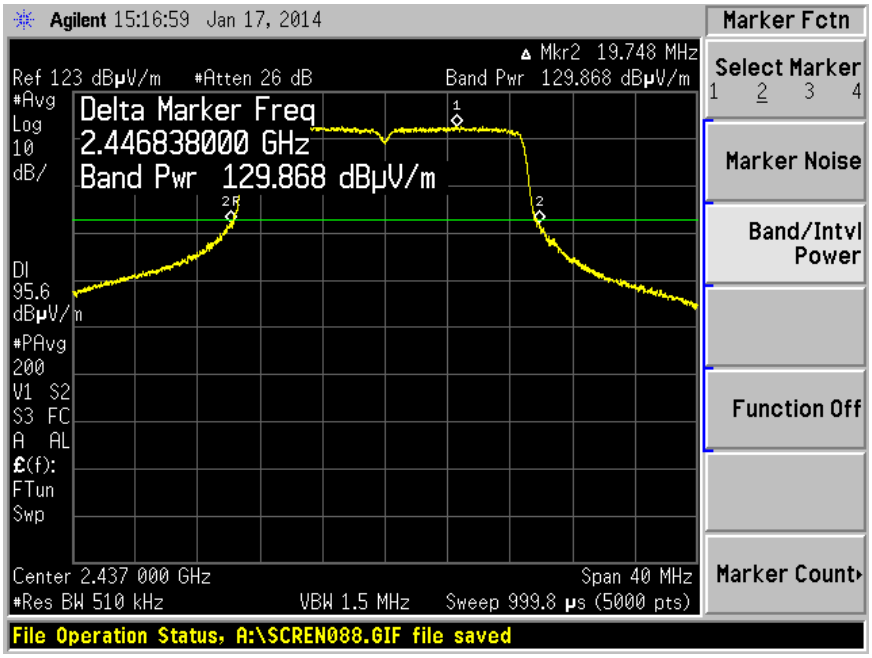
EUT nominal channel bandwidth: 20 MHz
Both output chains active; Mid Channel Frequency: 2.437 GHz
Test software setting: 27
Modulation Type: OFDM MCS15
Antenna gain: 12 dBi
Duty cycle = 100%

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.

EIRP = E + 20log (3 meters) – 104.8
= 129.868 + 20log(3) – 104.8
= 34.61 dBm for Horizontal polarization

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

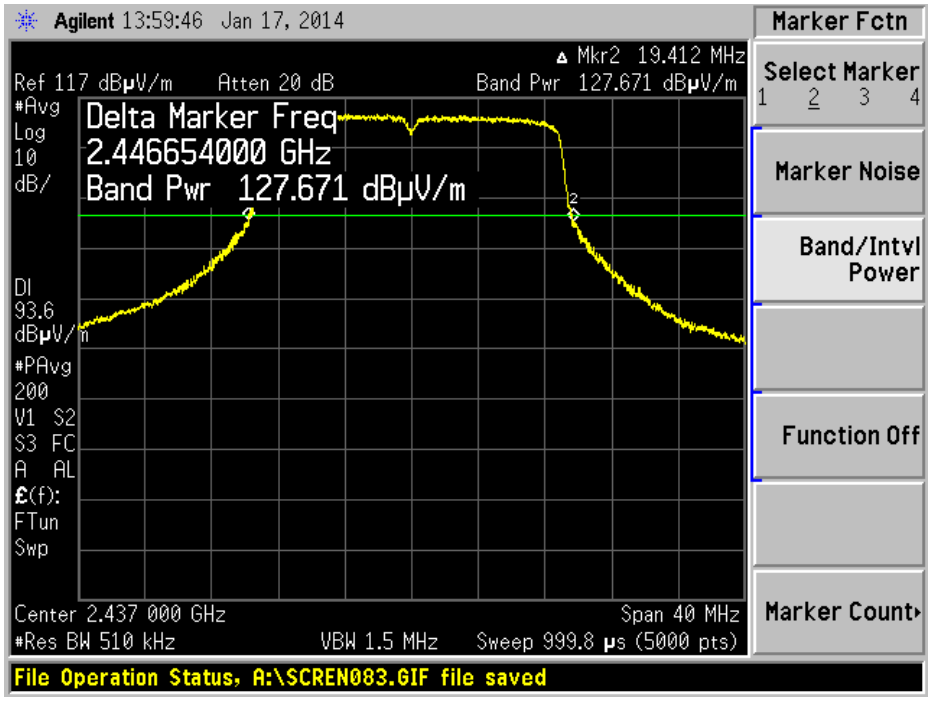
EUT nominal channel bandwidth: 20 MHz
Both output chains active; Mid Channel Frequency: 2.437 GHz
Test software setting: 24.5
Modulation Type: OFDM MCS15
Antenna gain: 12 dBi
Duty cycle = 100%

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.

EIRP = E + 20log (3 meters) – 104.8
= 127.671 + 20log(3) – 104.8
= 32.41 dBm for Vertical polarization

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

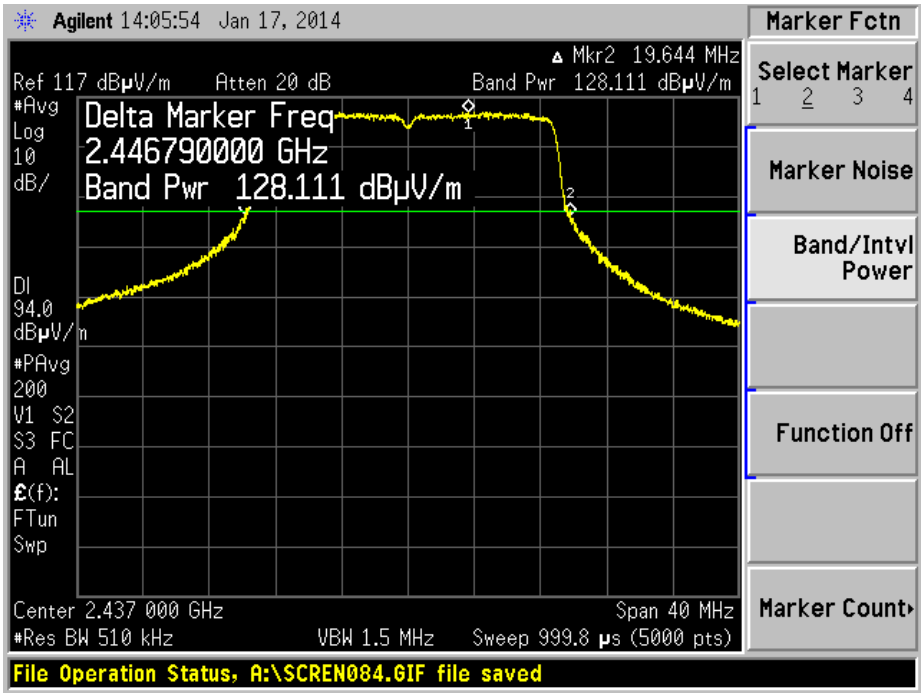
EUT nominal channel bandwidth: 20 MHz
Both output chains active; Mid Channel Frequency: 2.437 GHz
Test software setting: 24.5
Modulation Type: OFDM MCS15
Antenna gain: 12 dBi
Duty cycle = 100%

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.

EIRP = E + 20log (3 meters) – 104.8
= 128.11 + 20log(3) – 104.8
= 32.85 dBm for Horizontal polarization

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

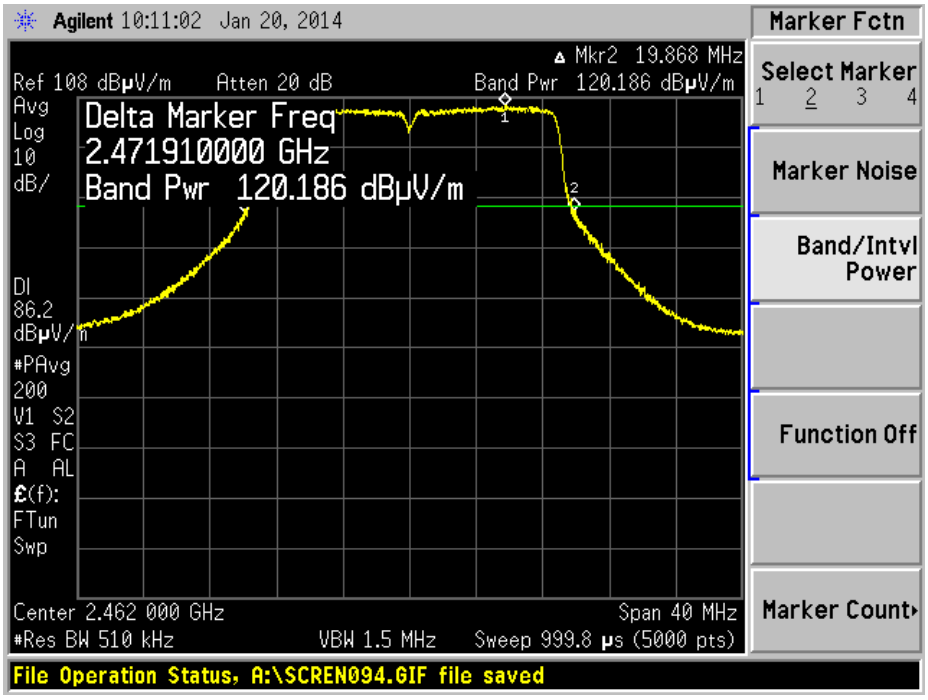
EUT nominal channel bandwidth: 20 MHz
Both output chains active; High Channel Frequency: 2.462 GHz
Test software setting: 17
Modulation Type: OFDM MCS15
Antenna gain: 12 dBi
Duty cycle = 100%

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.

EIRP = E + 20log (3 meters) – 104.8
= 120.186 + 20log(3) – 104.8
= 24.93 dBm for Vertical polarization

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

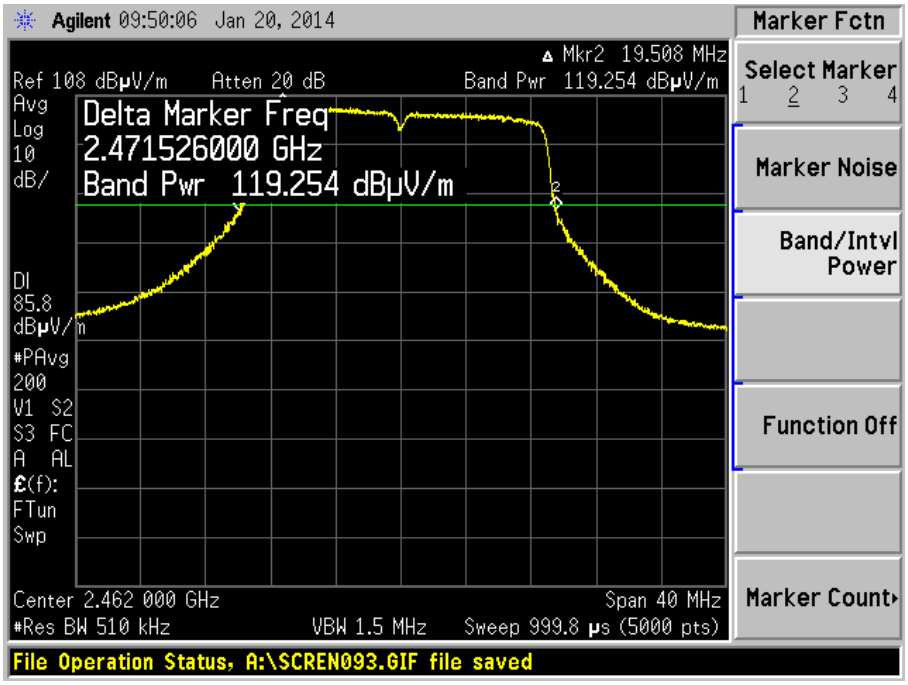
EUT nominal channel bandwidth: 20 MHz
Both output chains active; High Channel Frequency: 2.462 GHz
Test software setting: 17
Modulation Type: OFDM MCS15
Antenna gain: 12 dBi
Duty cycle = 100%

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.

EIRP = E + 20log (3 meters) – 104.8
= 119.254 + 20log(3) – 104.8
= 24.00 dBm for Horizontal polarization

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

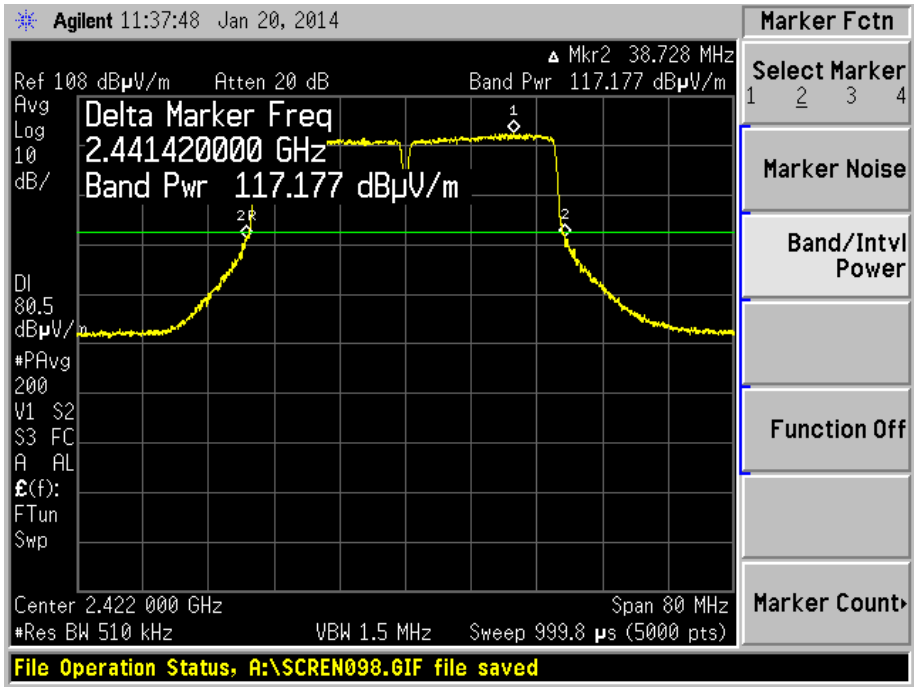
EUT nominal channel bandwidth: 40 MHz
Both output chains active; Low Channel Frequency: 2.422 GHz
Test software setting: 12.5
Modulation Type: OFDM MCS15
Antenna gain: 12 dBi
Duty cycle = 100%

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.

EIRP = E + 20log (3 meters) – 104.8
= 117.177 + 20log(3) – 104.8
= 21.92 dBm for Vertical polarization

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

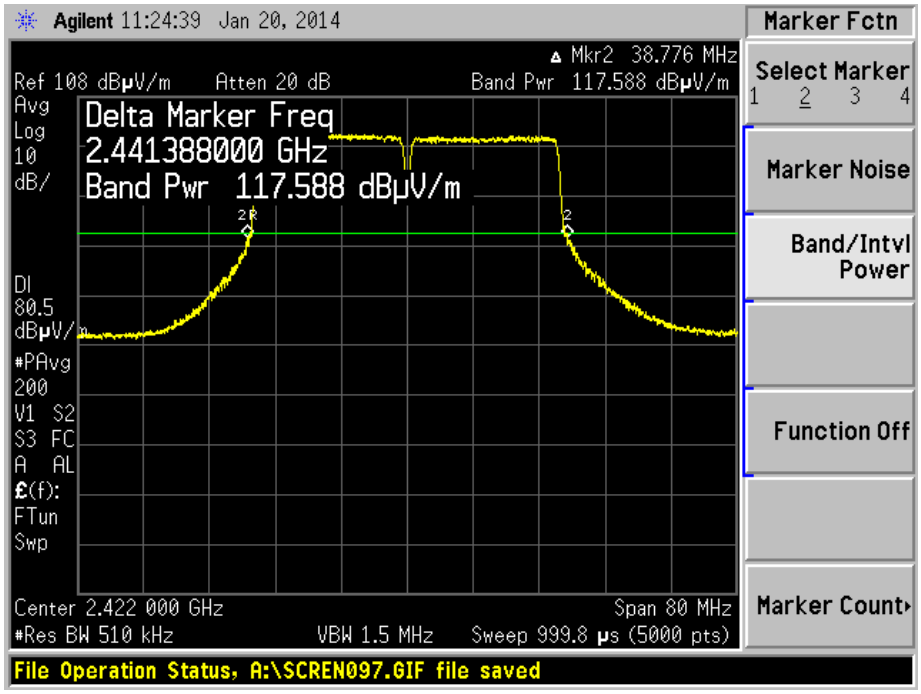
EUT nominal channel bandwidth: 40 MHz
Both output chains active; Low Channel Frequency: 2.422 GHz
Test software setting: 12.5
Modulation Type: OFDM MCS15
Antenna gain: 12 dBi
Duty cycle = 100%

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.

EIRP = E + 20log (3 meters) – 104.8
= 117.588 + 20log(3) – 104.8
= 22.33 dBm for Horizontal polarization

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

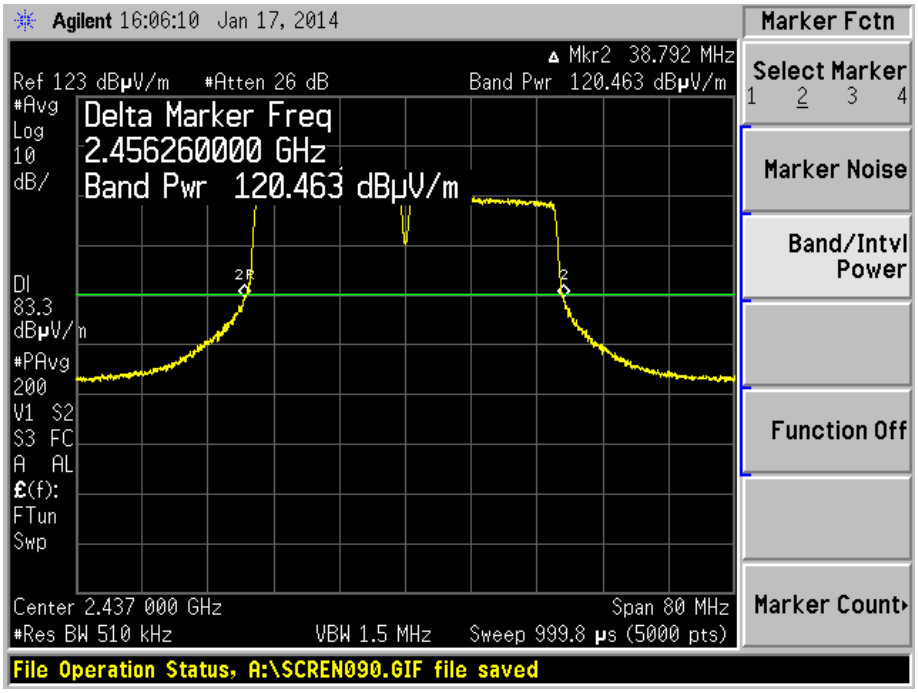
EUT nominal channel bandwidth: 40 MHz
Both output chains active; Mid Channel Frequency: 2.437 GHz
Test software setting: 17
Modulation Type: OFDM MCS15
Antenna gain: 12 dBi
Duty cycle = 100%

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.

EIRP = E + 20log (3 meters) – 104.8
= 120.463 + 20log(3) – 104.8
= 25.21 dBm for Vertical polarization

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

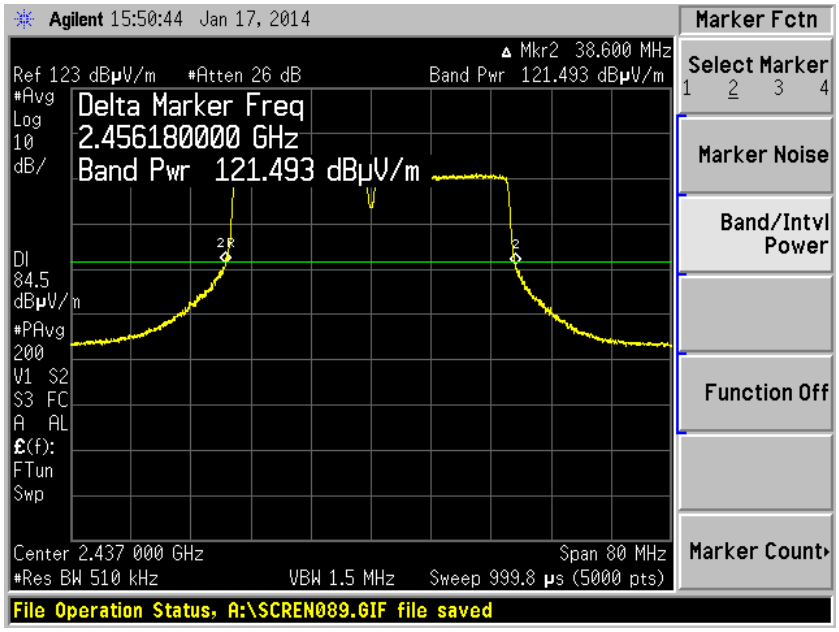
EUT nominal channel bandwidth: 40 MHz
Both output chains active; Mid Channel Frequency: 2.437 GHz
Test software setting: 17
Modulation Type: OFDM MCS15
Antenna gain: 12 dBi
Duty cycle = 100%

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 + 20log (3 meters) – 104.8
= 121.493 + 20log(3) – 104.8
= 26.24 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

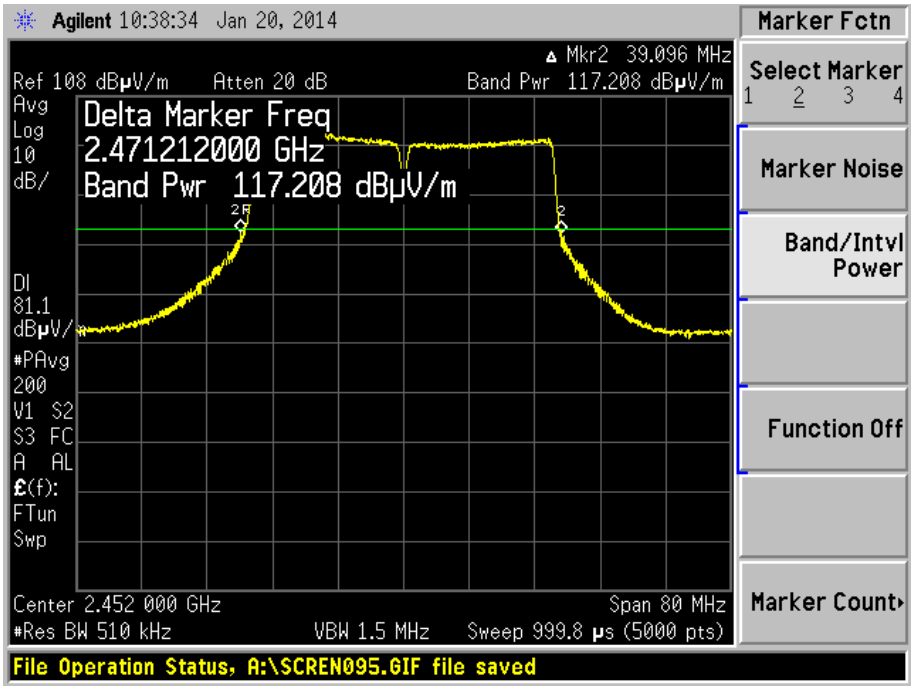
EUT nominal channel bandwidth: 40 MHz
Both output chains active; High Channel Frequency: 2.452 GHz
Test software setting: 13.5
Modulation Type: OFDM MCS15
Antenna gain: 12 dBi
Duty cycle = 100%

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.

EIRP = E + 20log (3 meters) – 104.8
= 117.208 + 20log(3) – 104.8
= 21.95 dBm for Vertical polarization

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

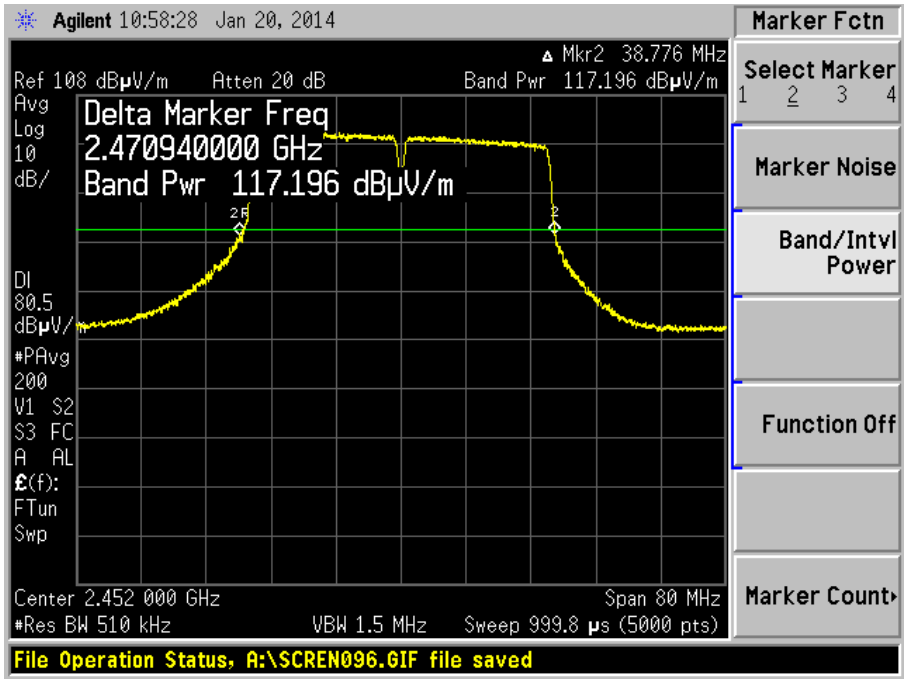
EUT nominal channel bandwidth: 40 MHz
Both output chains active; High Channel Frequency: 2.452 GHz
Test software setting: 13.5
Modulation Type: OFDM MCS15
Antenna gain: 12 dBi
Duty cycle = 100%

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.

EIRP = E + 20log (3 meters) – 104.8
= 117.196 + 20log(3) – 104.8
= 21.94 dBm for Horizontal polarization

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**

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 kHz ≤ RBW ≤ 100 kHz.
Set VBW ≥ 3 x RBW
Detector = power averaging (RMS).
Ensure that the number of measurement points in the sweep ≥ 2 x 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.

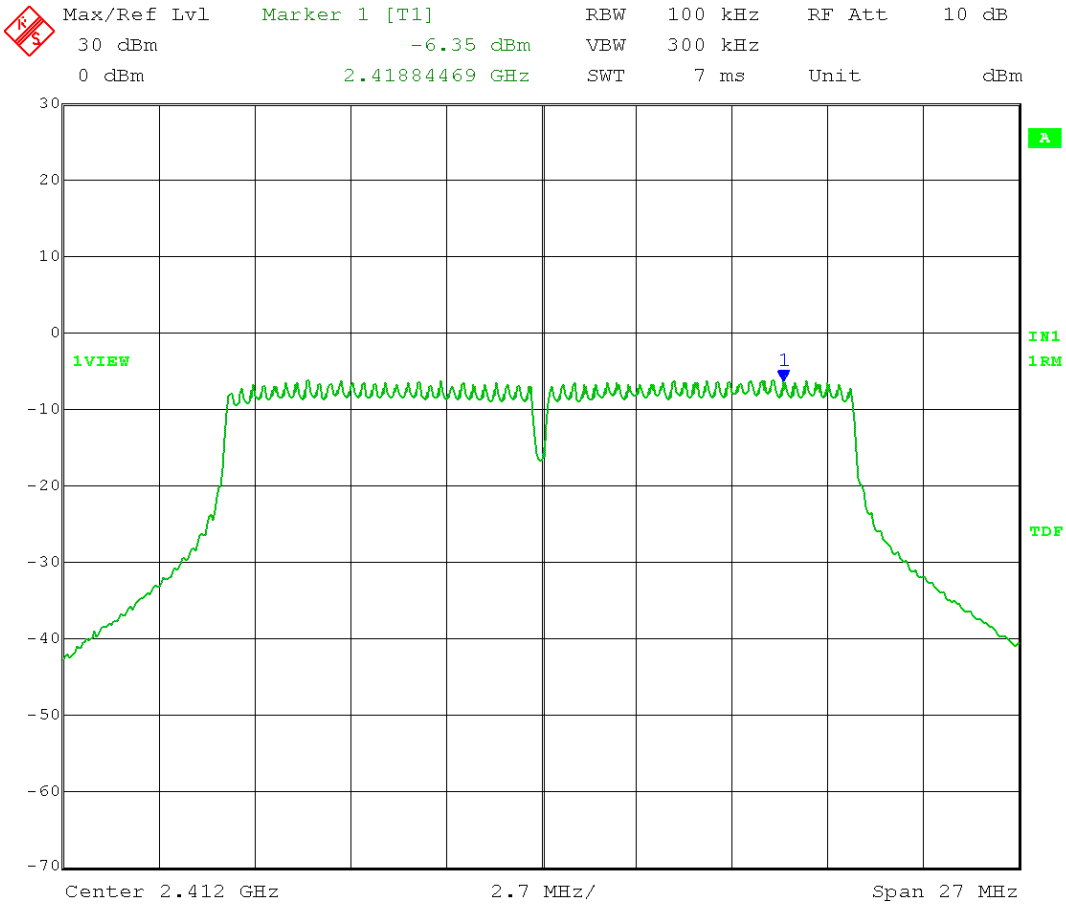
Test Date: 03-05-2014
Company: Cambium Networks
EUT: EPMP 2.4 GHz STA MAC: 000456C69680
Test: Maximum Power Spectral Density level in the fundamental emission
Operator: Craig B
Comment: Low Channel: Frequency = 2412 MHz

Output Power Setting = 18	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

PSD = -6.35 dBm + 3 dB (MIMO) = -3.35 dBm / 100 kHz

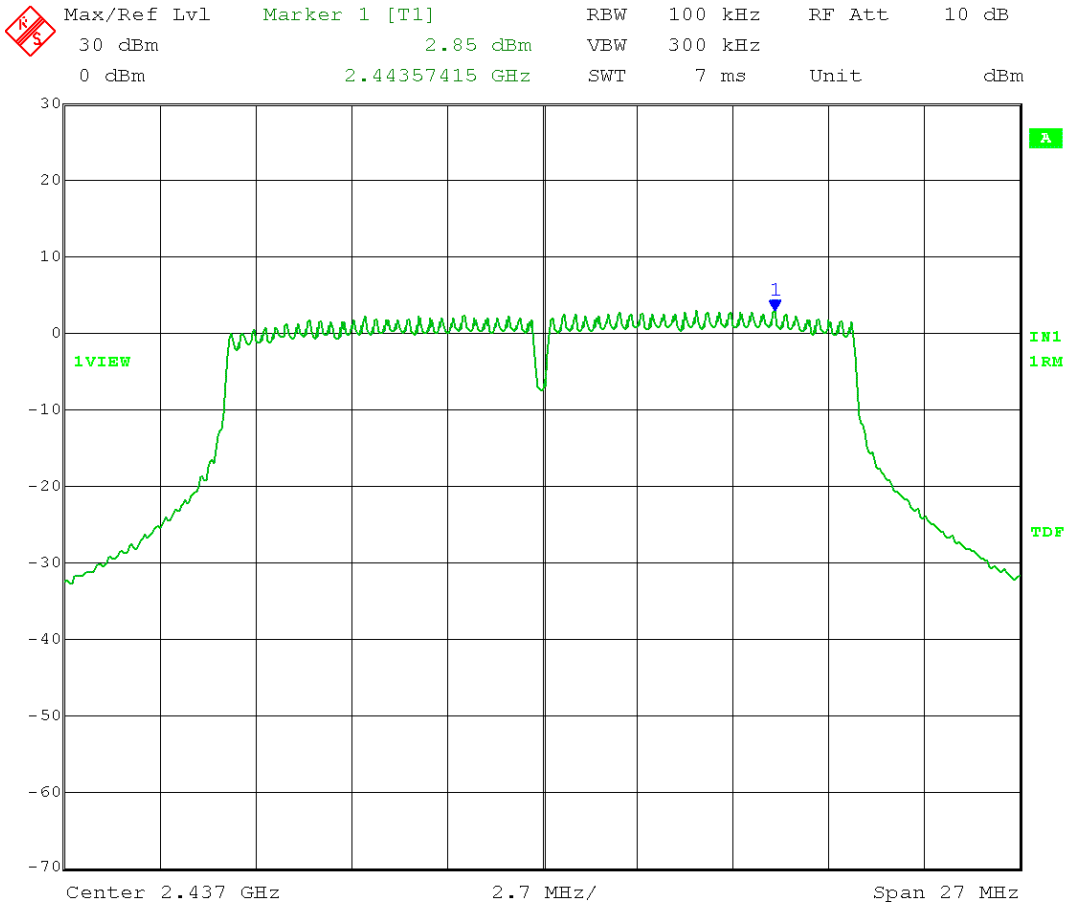


Date: 5.MAR.2014 13:57:18

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

PSD = 2.85 dBm + 3 dB (MIMO) = 5.85 dBm / 100 kHz



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

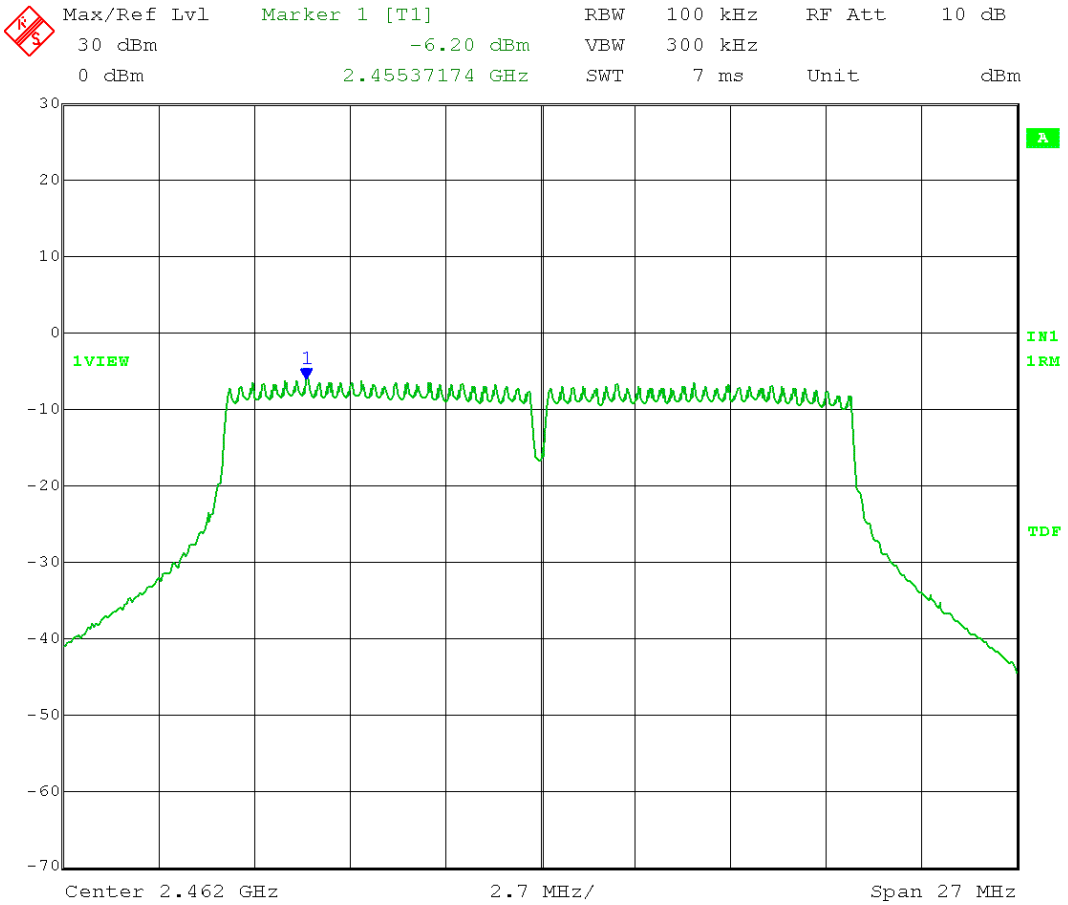
Test Date: 03-05-2014
Company: Cambium Networks
EUT: EPMP 2.4 GHz STA MAC: 000456C69680
Test: Maximum Power Spectral Density level in the fundamental emission
Operator: Craig B
Comment: High Channel: Frequency = 2462 MHz

Output Power Setting = 18	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

PSD = -6.20 dBm + 3 dB (MIMO) = -3.20 dBm / 100 kHz



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

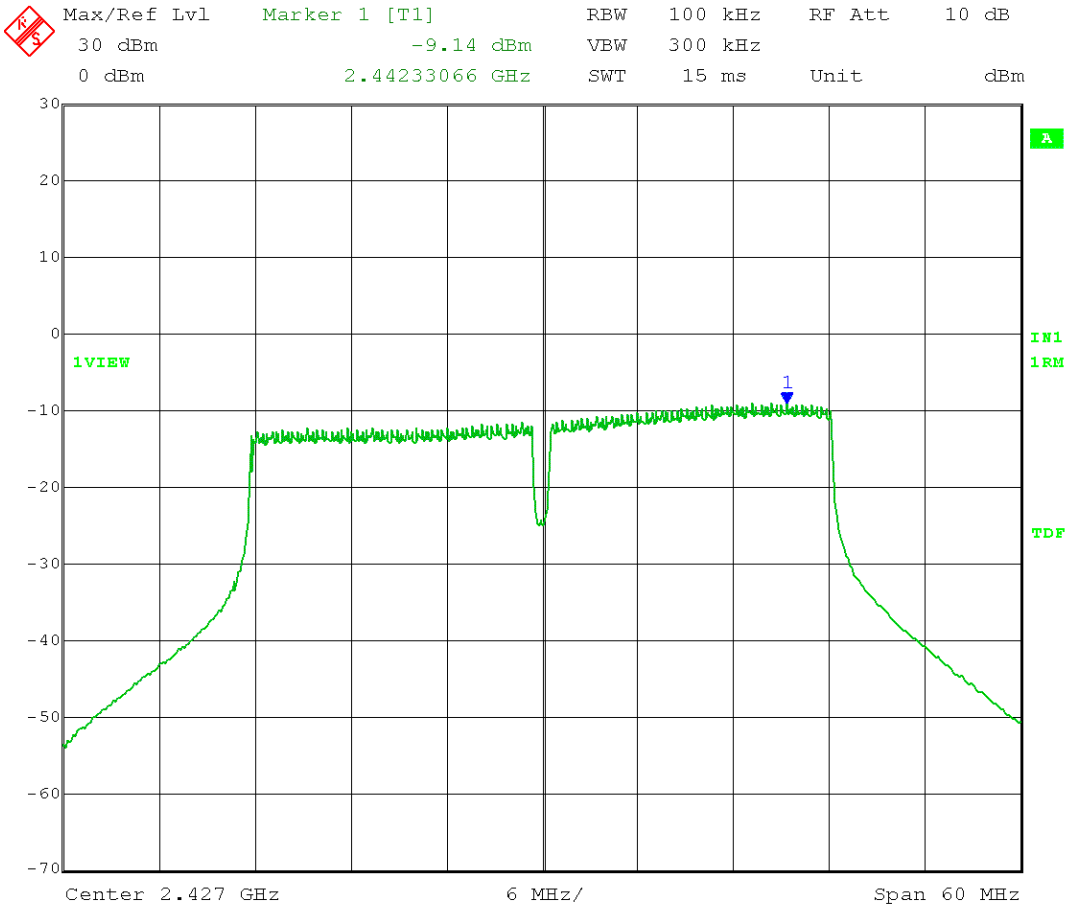
Test Date: 03-05-2014
Company: Cambium Networks
EUT: EPMP 2.4 GHz STA MAC: 000456C69680
Test: Maximum Power Spectral Density level in the fundamental emission
Operator: Craig B
Comment: Low Channel: Frequency = 2427 MHz

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

PSD = -9.14 dBm + 3 dB (MIMO) = -6.14 dBm / 100 kHz

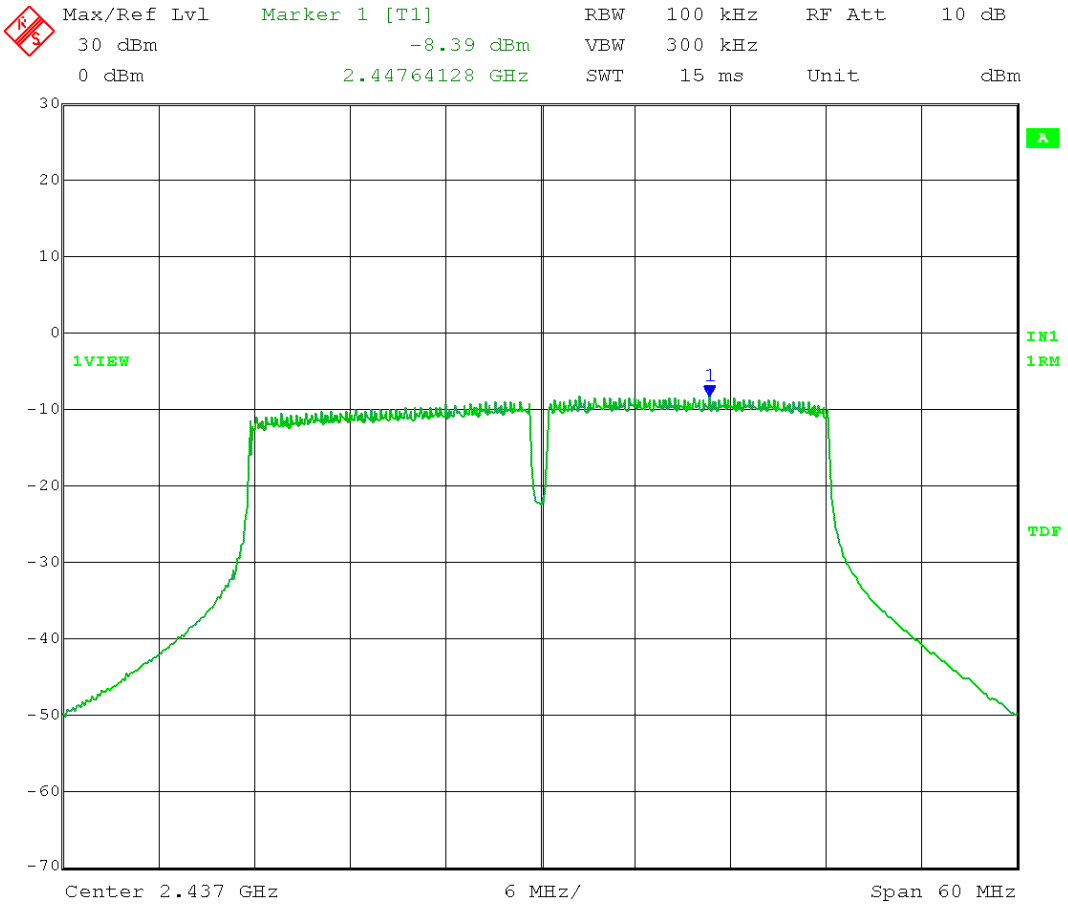


Date: 5.MAR.2014 14:12:08

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 dB

PSD = -8.39 dBm + 3 dB (MIMO) = -5.39 dBm / 100 kHz



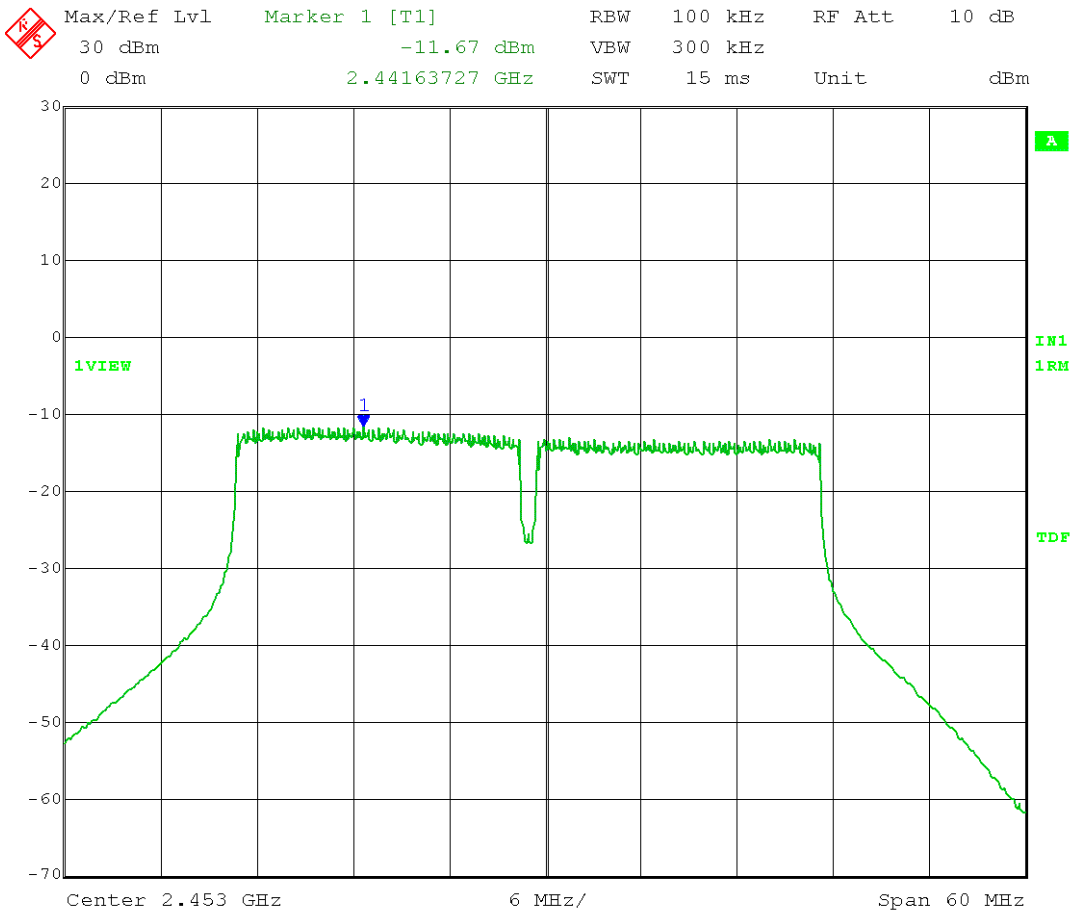
Date: 5.MAR.2014 14:15:58

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

PSD = -11.67 dBm + 3 dB (MIMO) = -8.67 dBm / 100 kHz



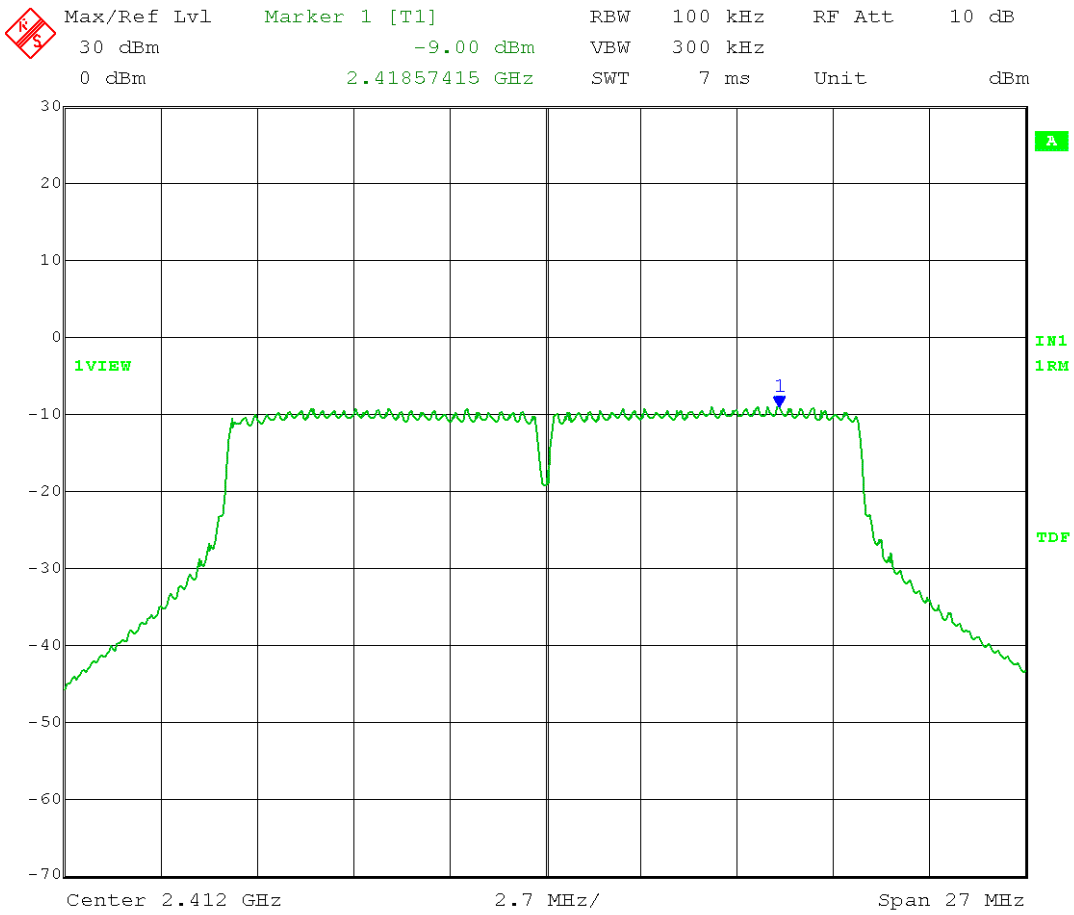
Date: 5.MAR.2014 14:09:09

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 = 2412 MHz

Output Power Setting = 15	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

PSD = -9.00 dBm + 3 dB (MIMO) = -6.00 dBm / 100 kHz

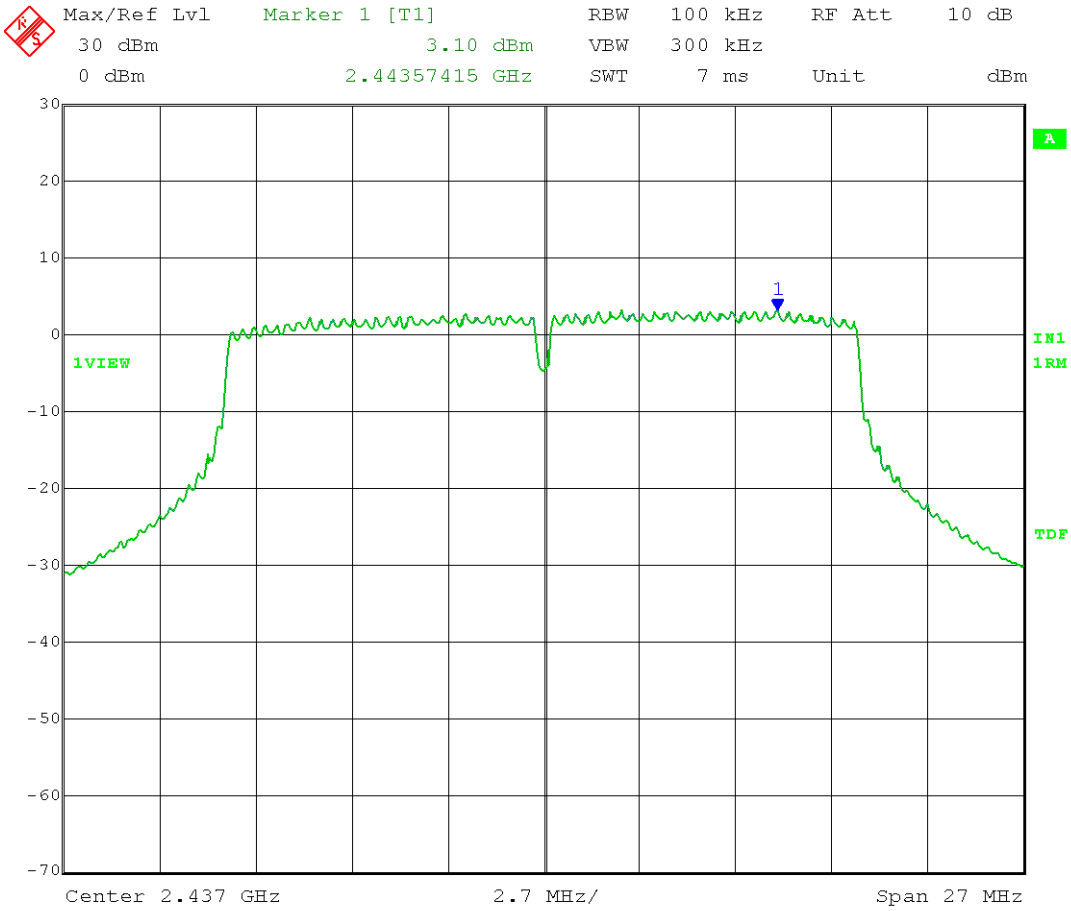


Date: 11.MAR.2014 08:46:40

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: Mid Channel: Frequency = 2437 MHz
Output Power Setting = 27 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

PSD = 3.10 dBm + 3 dB (MIMO) = 6.10 dBm / 100 kHz



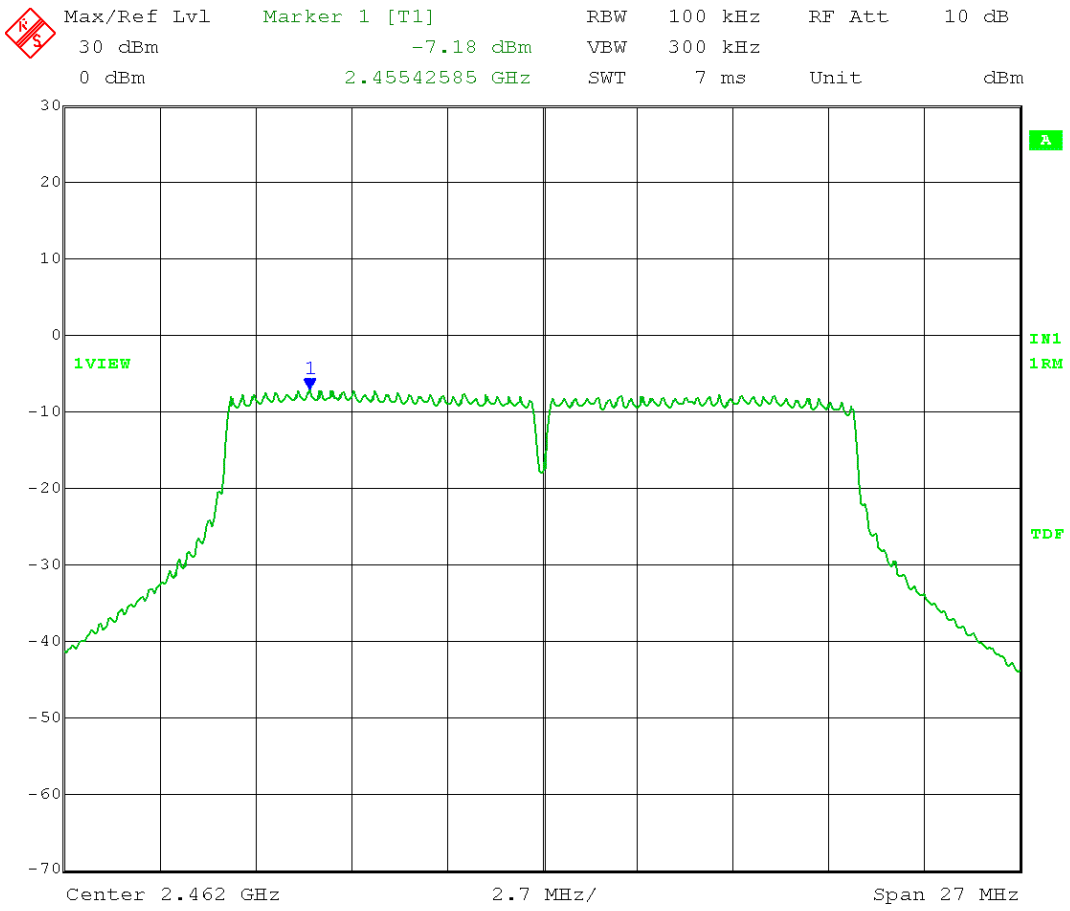
Date: 11.MAR.2014 08:50:23

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 = 2462 MHz

Output Power Setting = 17	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

PSD = -7.18 dBm + 3 dB (MIMO) = -4.18 dBm / 100 kHz



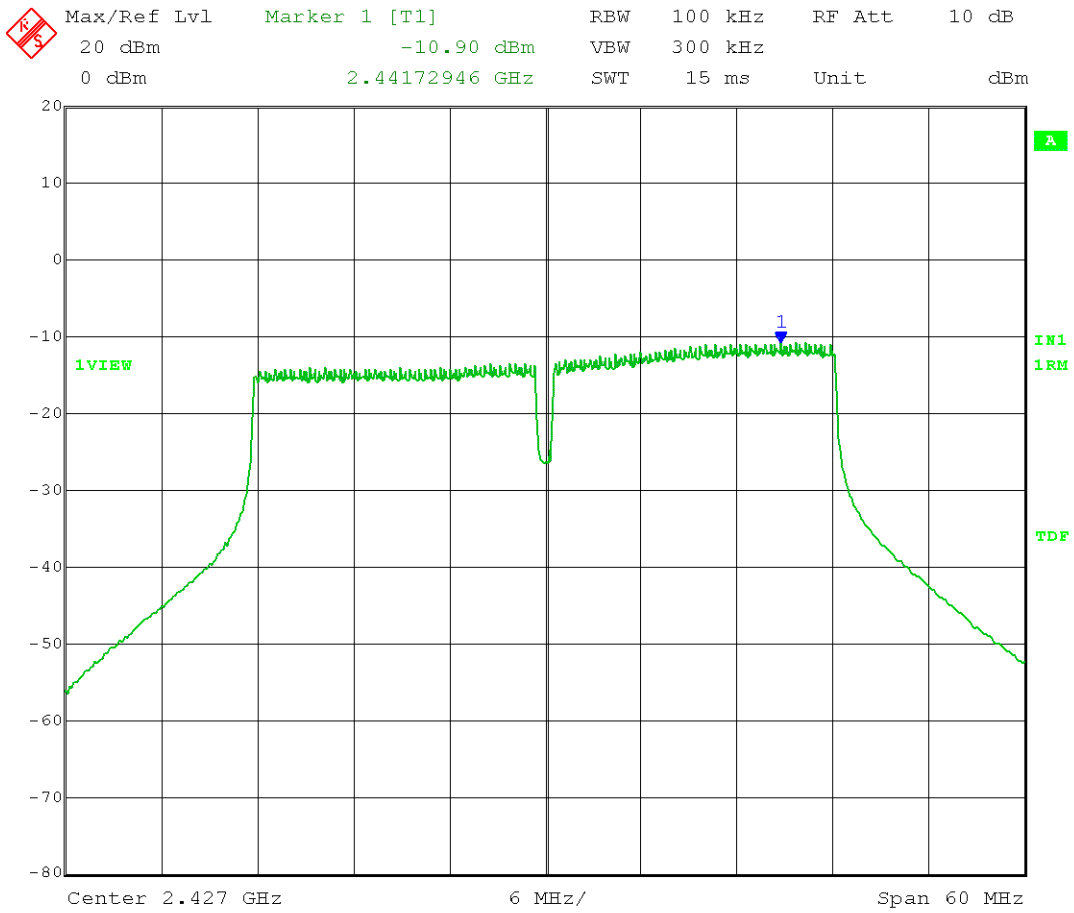
Date: 11.MAR.2014 08:48:20

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

PSD = -10.90 dBm + 3 dB (MIMO) = -7.90 dBm / 100 kHz

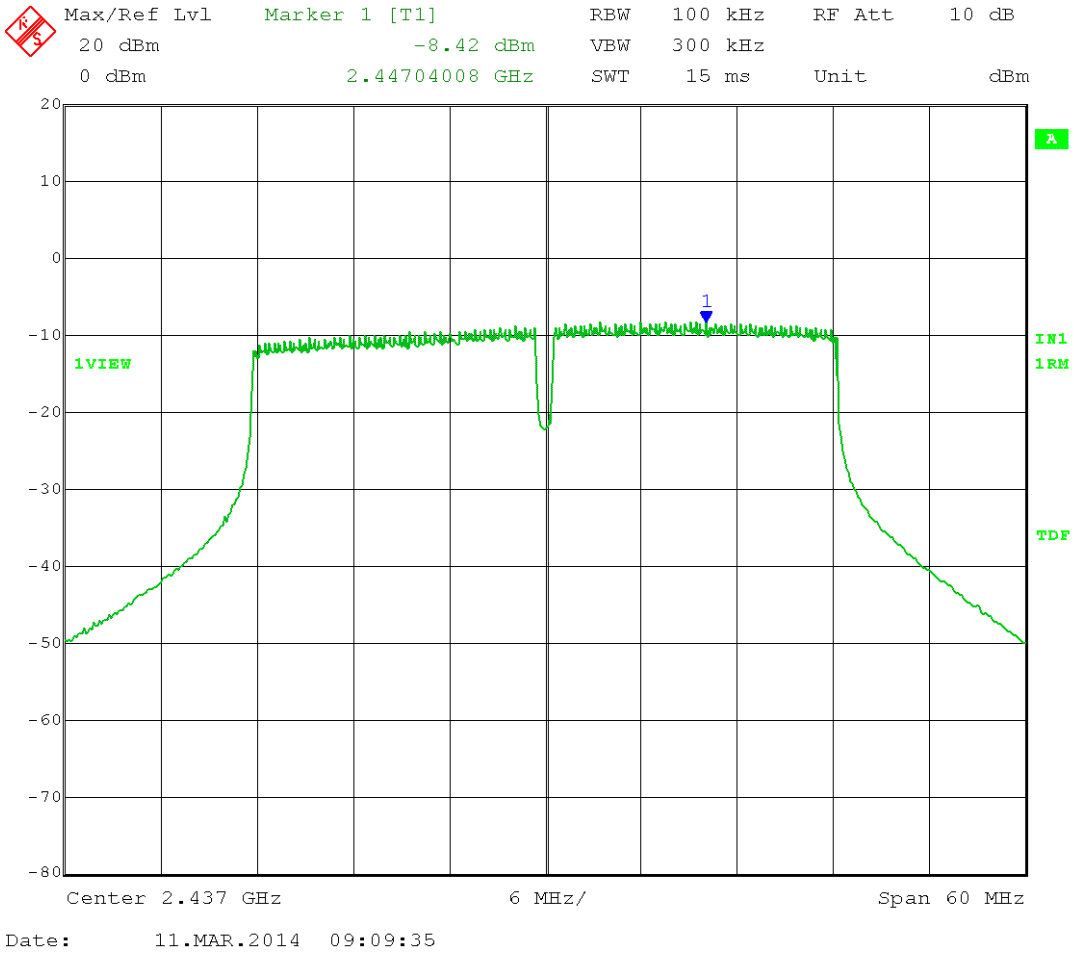


Date: 11.MAR.2014 09:07:03

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: Mid Channel: Frequency = 2437 MHz
Output Power Setting = 17 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

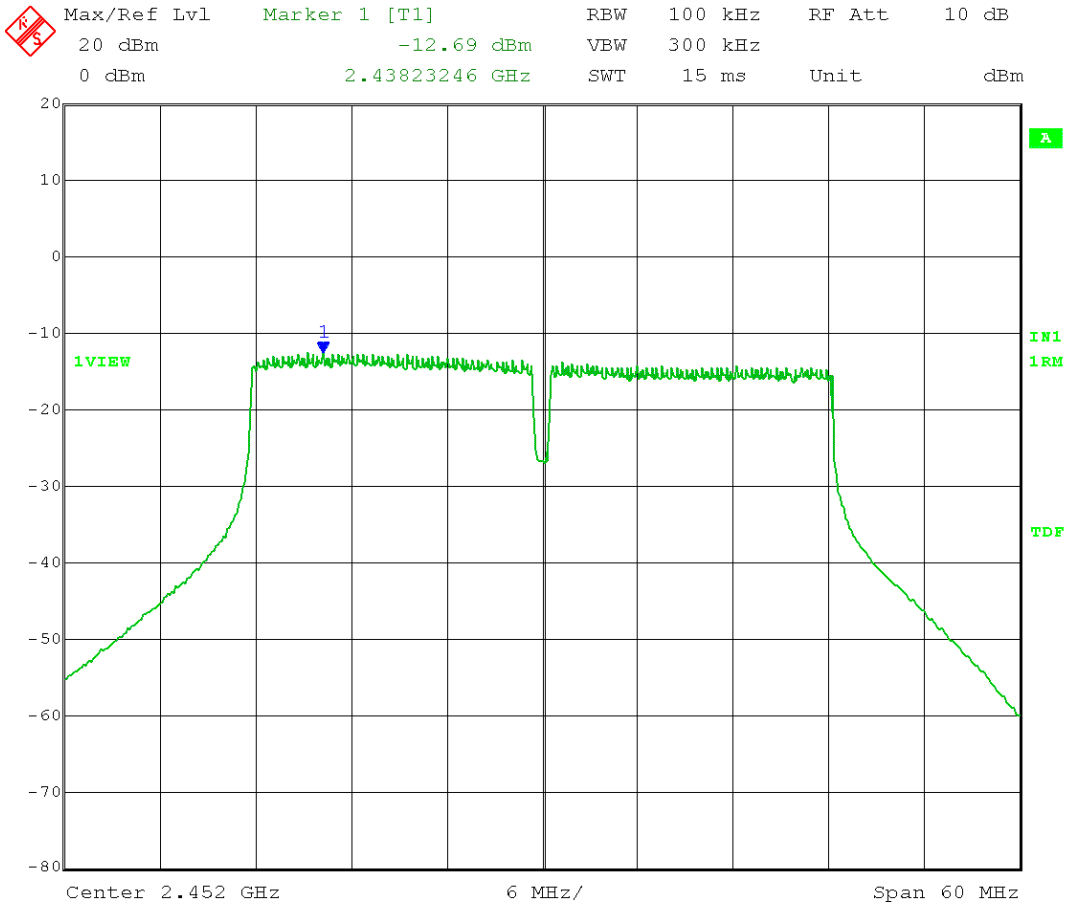
PSD = -8.42 dBm + 3 dB (MIMO) = -5.42 dBm / 100 kHz



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

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 ≥ 300 kHz
Span to ≥ 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

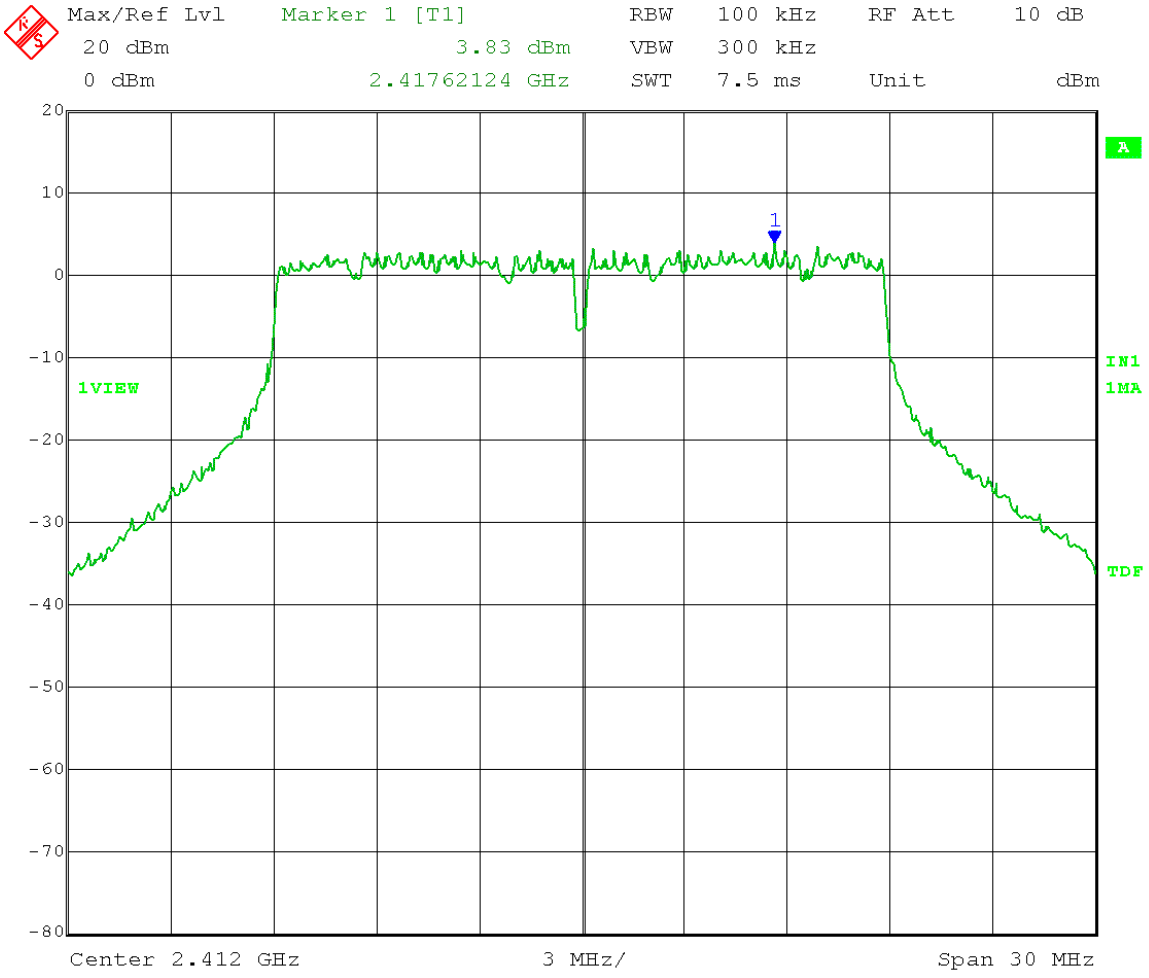
Measurements were taken for OFDM MCS15 with 20 MHz and 40 MHz channel bandwidths at the low, middle and high channels of operation. EUT was set to transmit continuously with a 100% duty cycle.

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

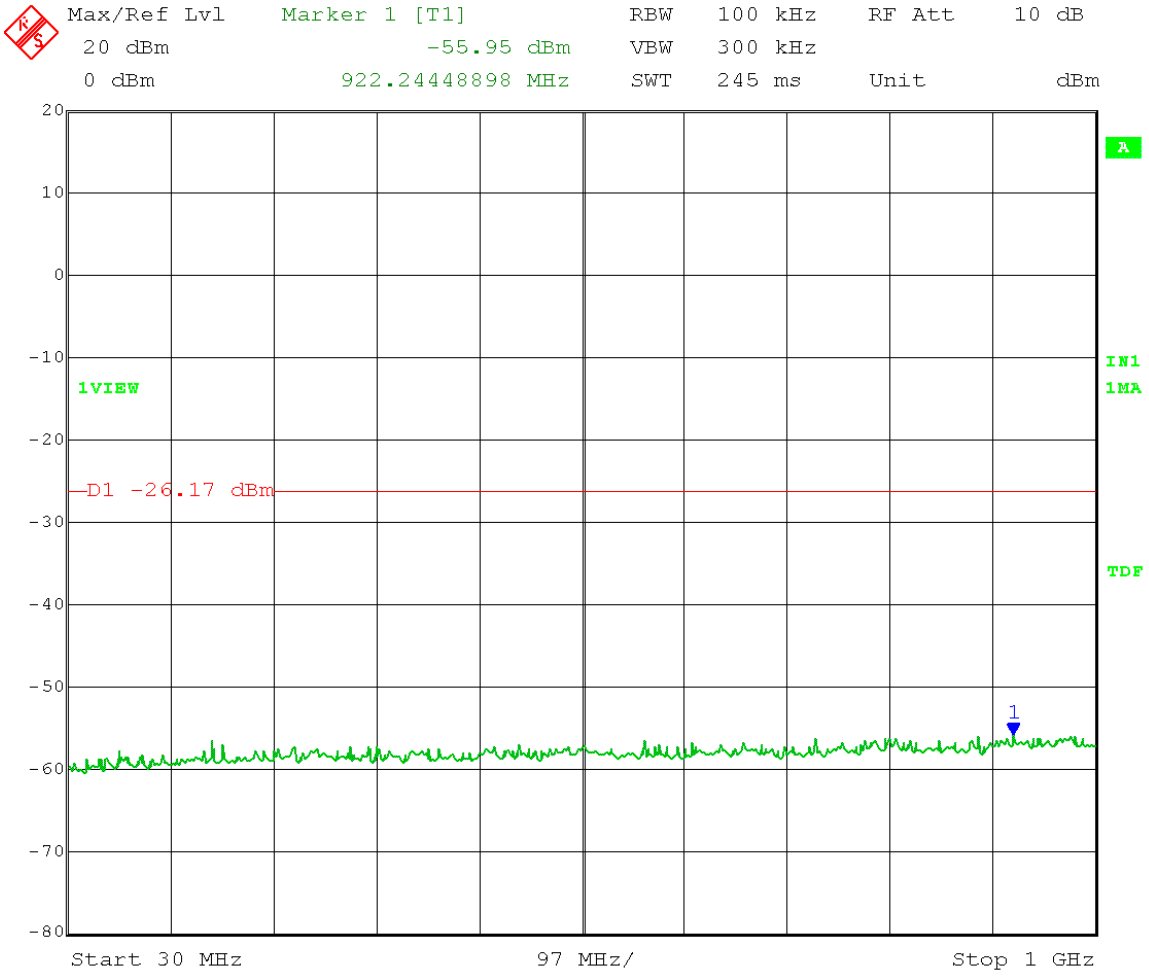
Notes: Since output port 1 measured a slightly higher output power than port 0, measurements for this test were made on port 1 only.

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 ≥ 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



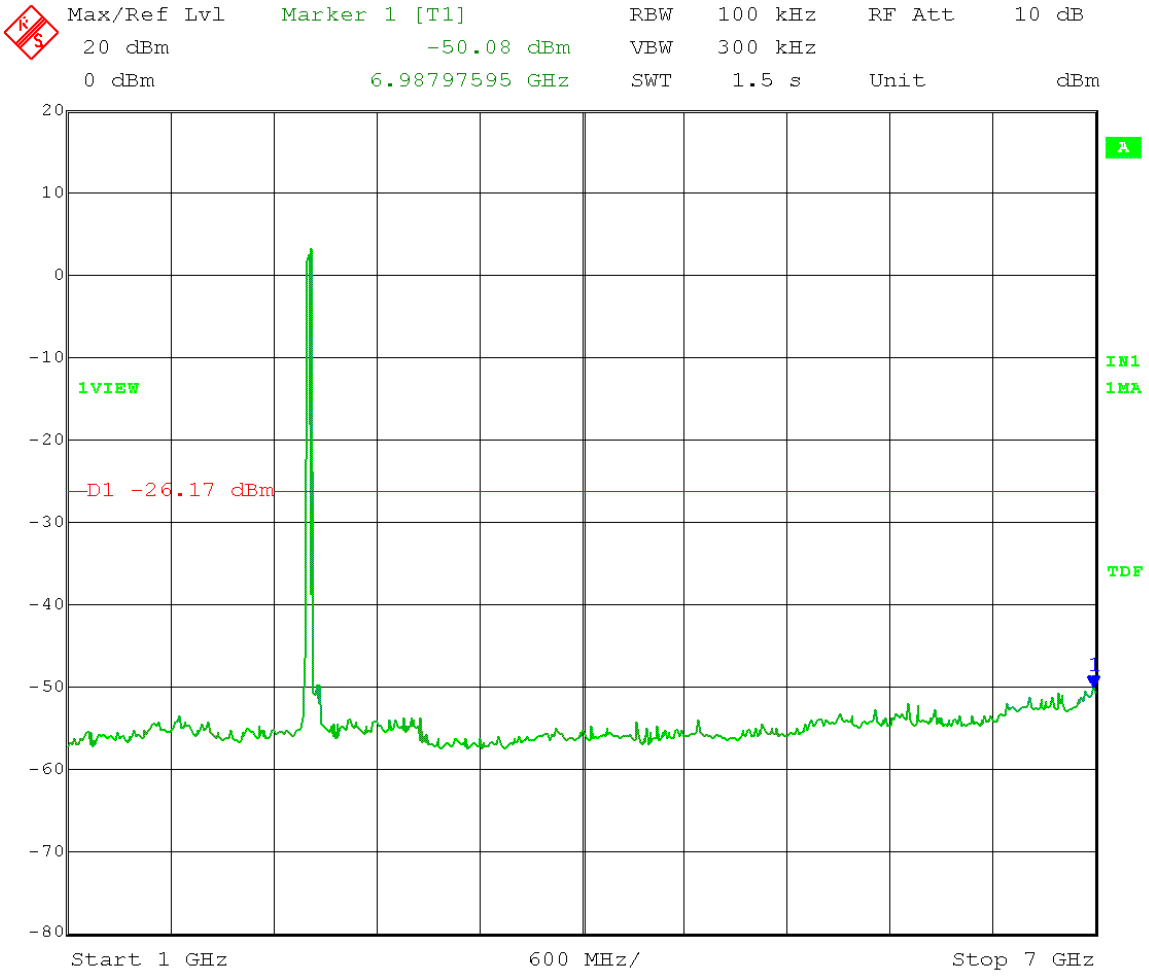
Date: 7.MAR.2014 09:49:46

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 ≥ 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



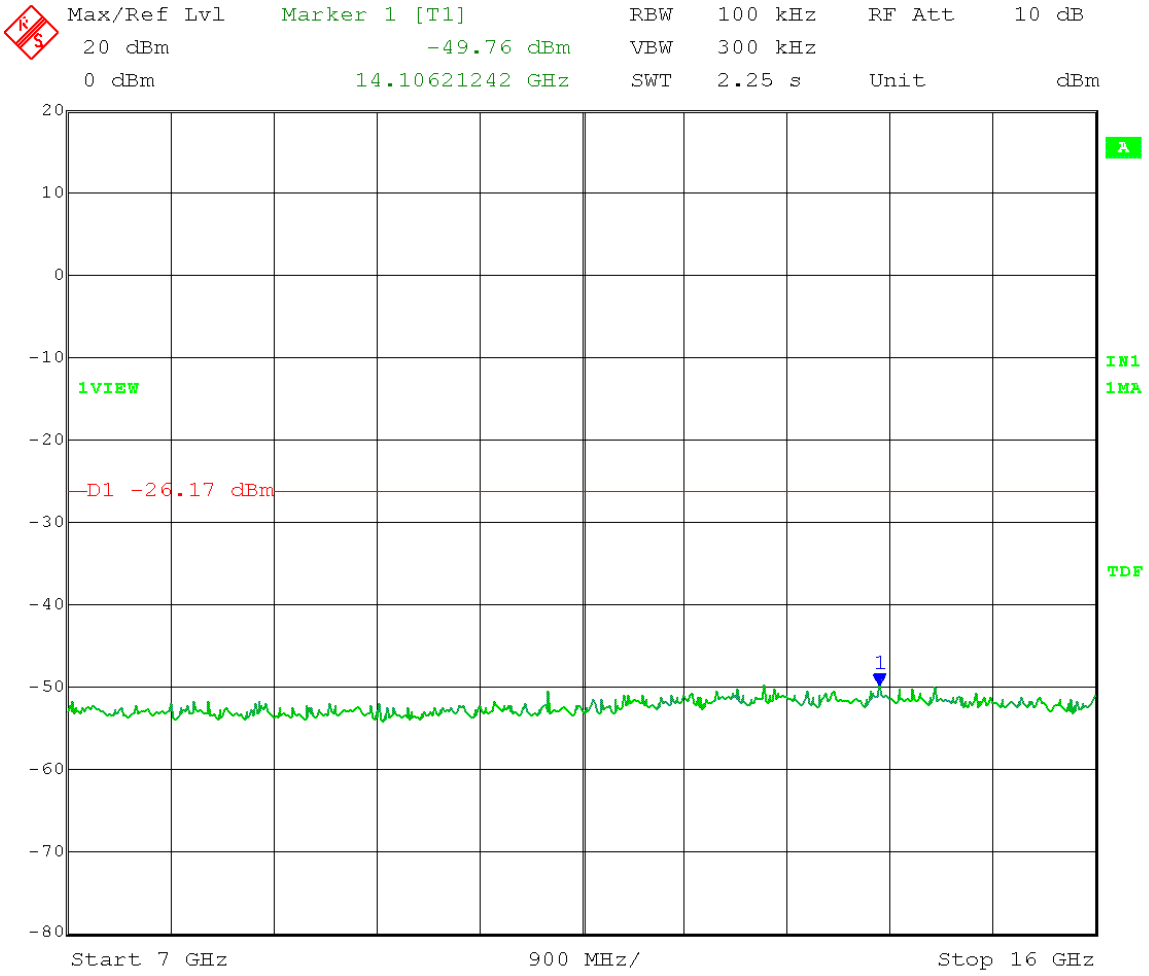
Date: 7.MAR.2014 09:56:20

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 ≥ 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



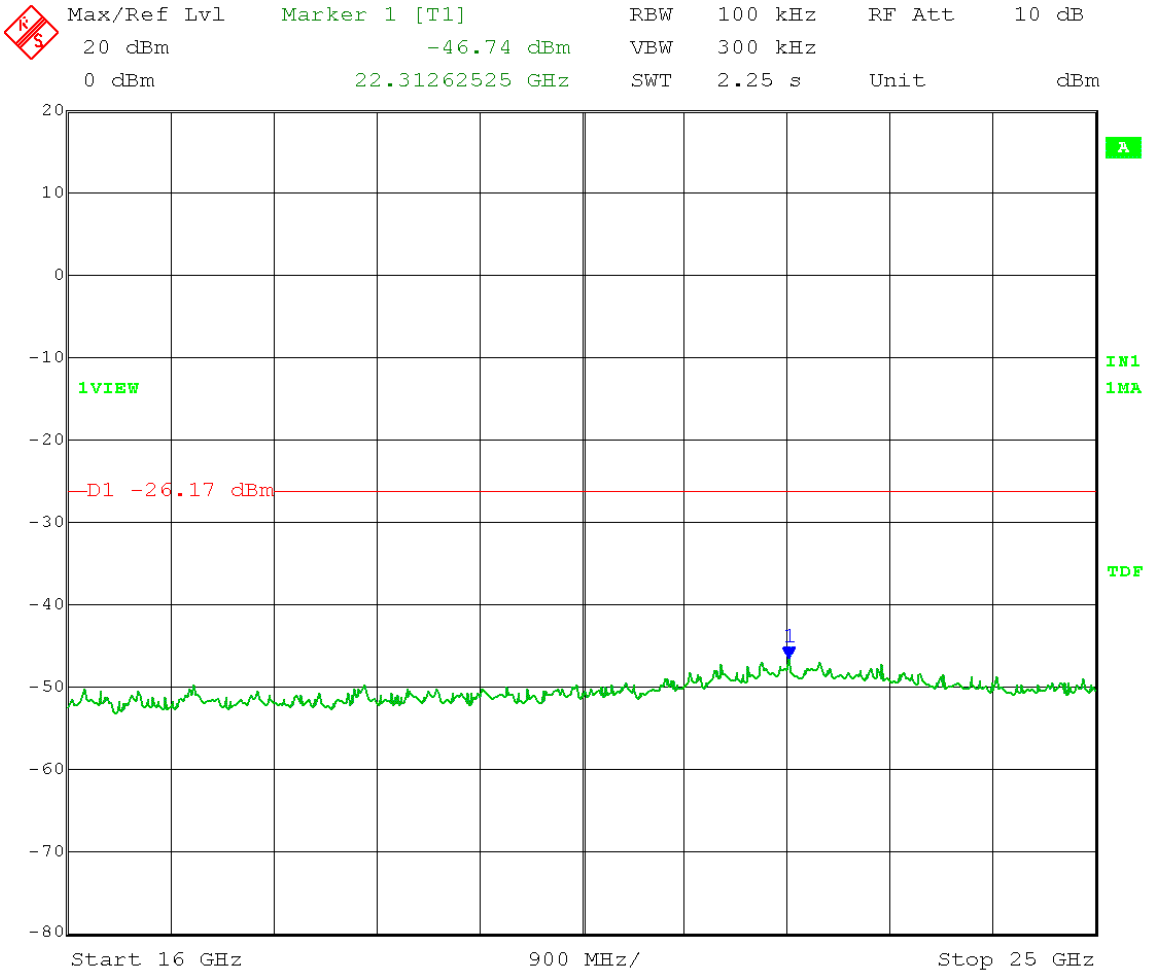
Date: 7.MAR.2014 09:51:48

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 ≥ 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



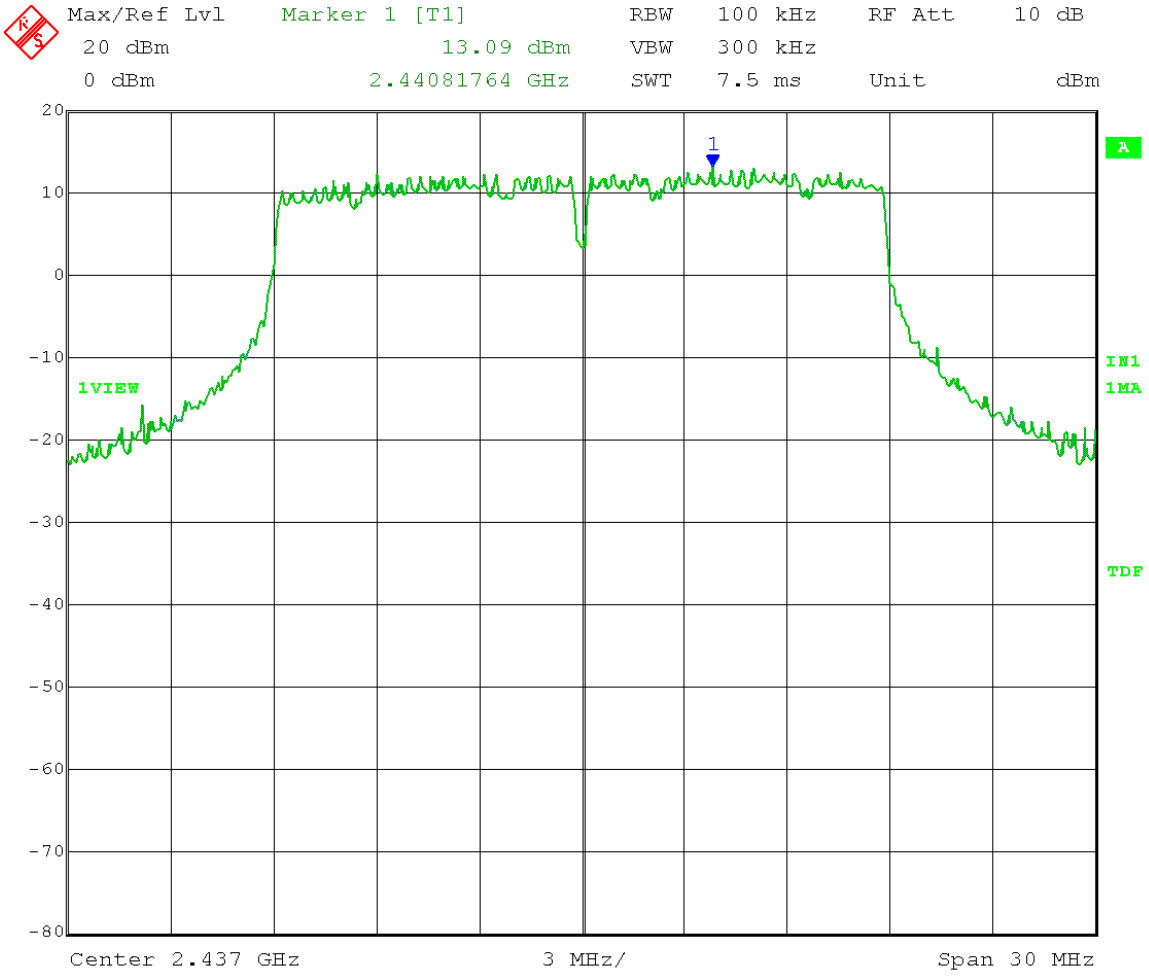
Date: 7.MAR.2014 09:53:33

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 ≥ 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



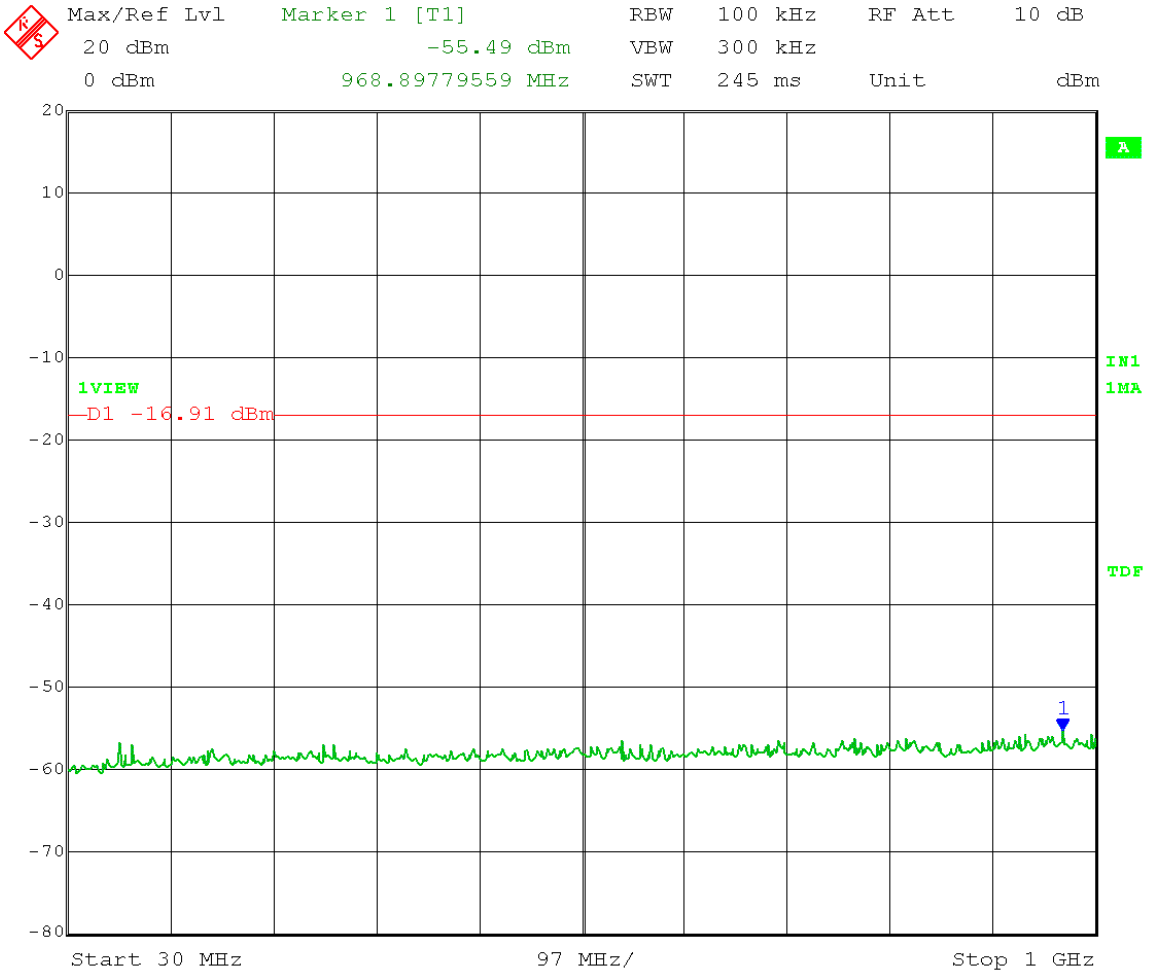
Date: 7.MAR.2014 09:54:49

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 ≥ 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



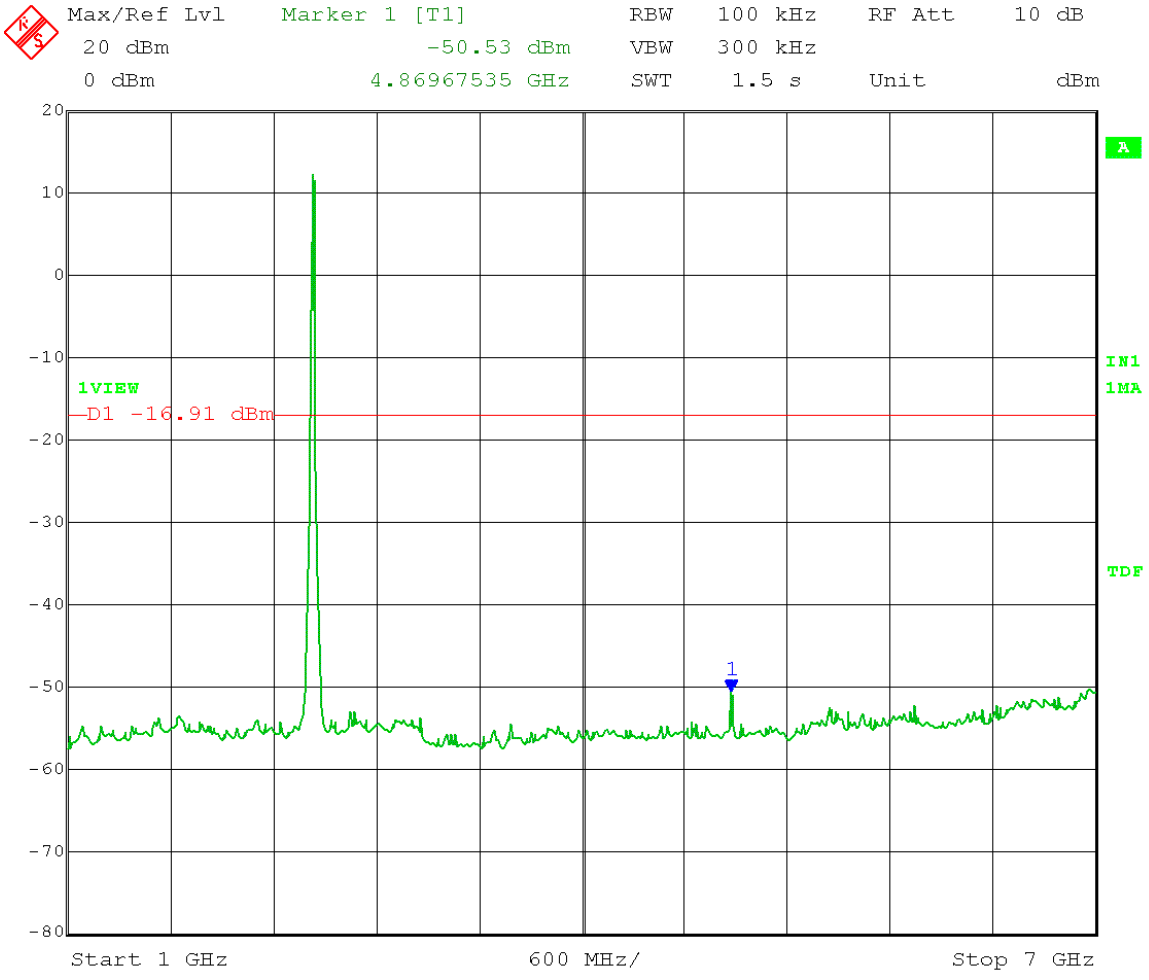
Date: 7.MAR.2014 09:32:46

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 ≥ 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



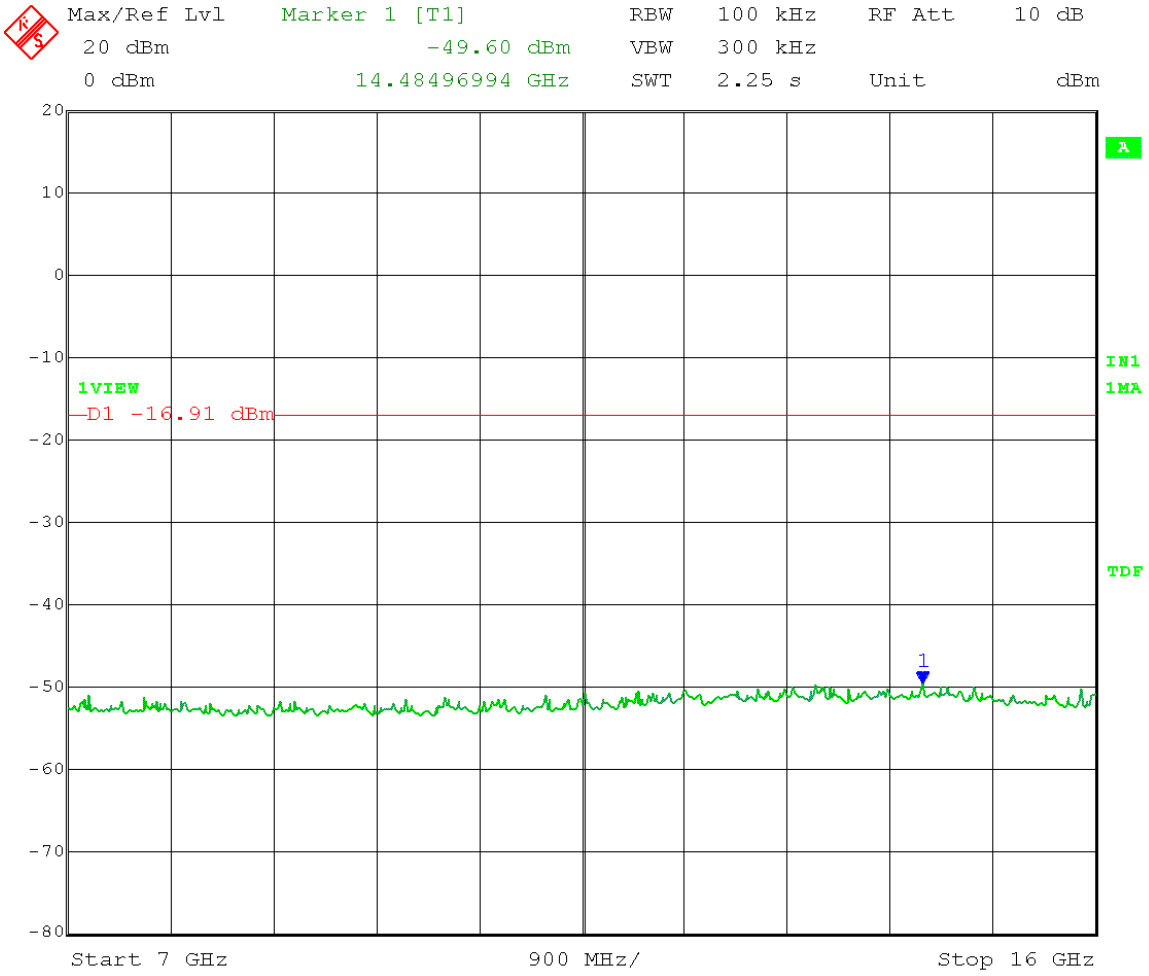
Date: 7.MAR.2014 09:45:27

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 ≥ 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



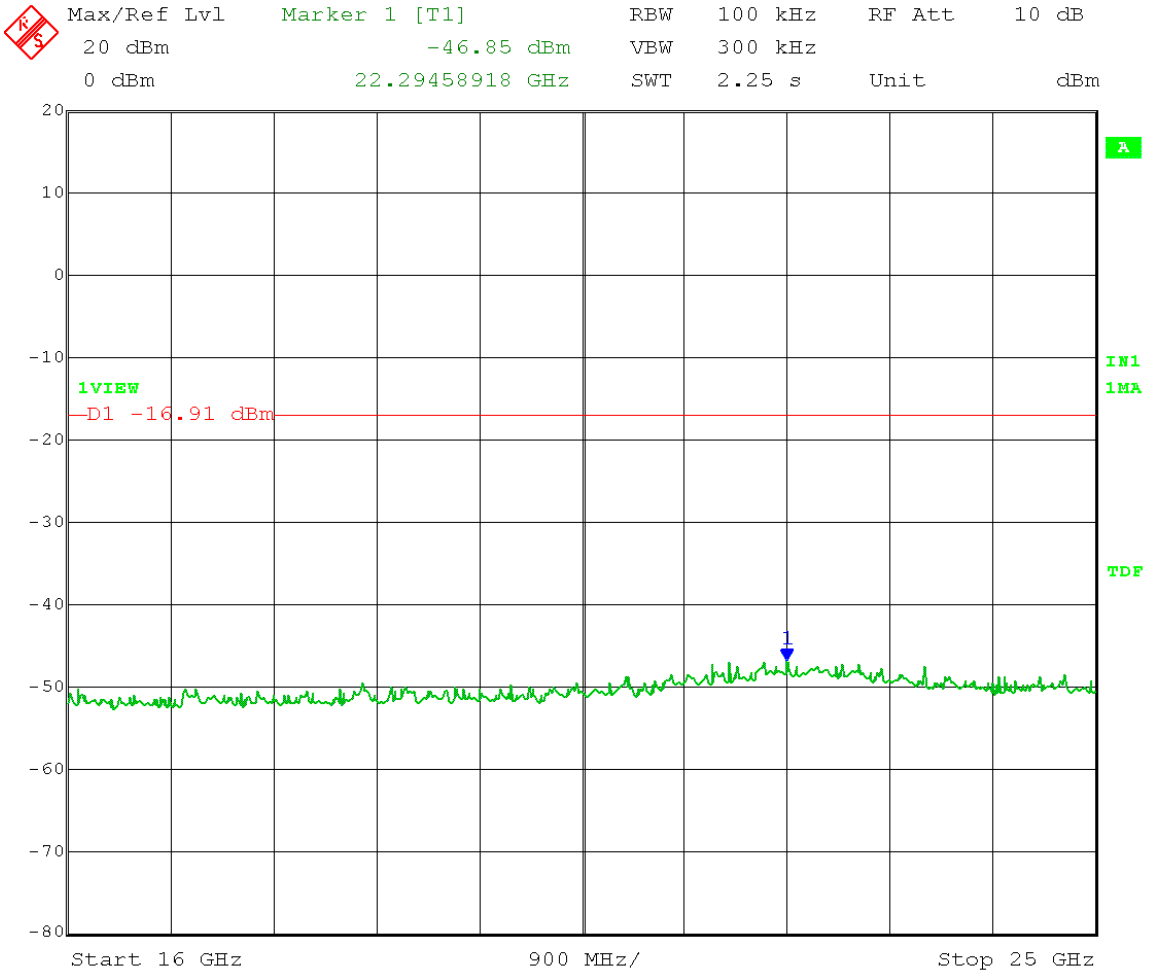
Date: 7.MAR.2014 09:38:59

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 ≥ 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



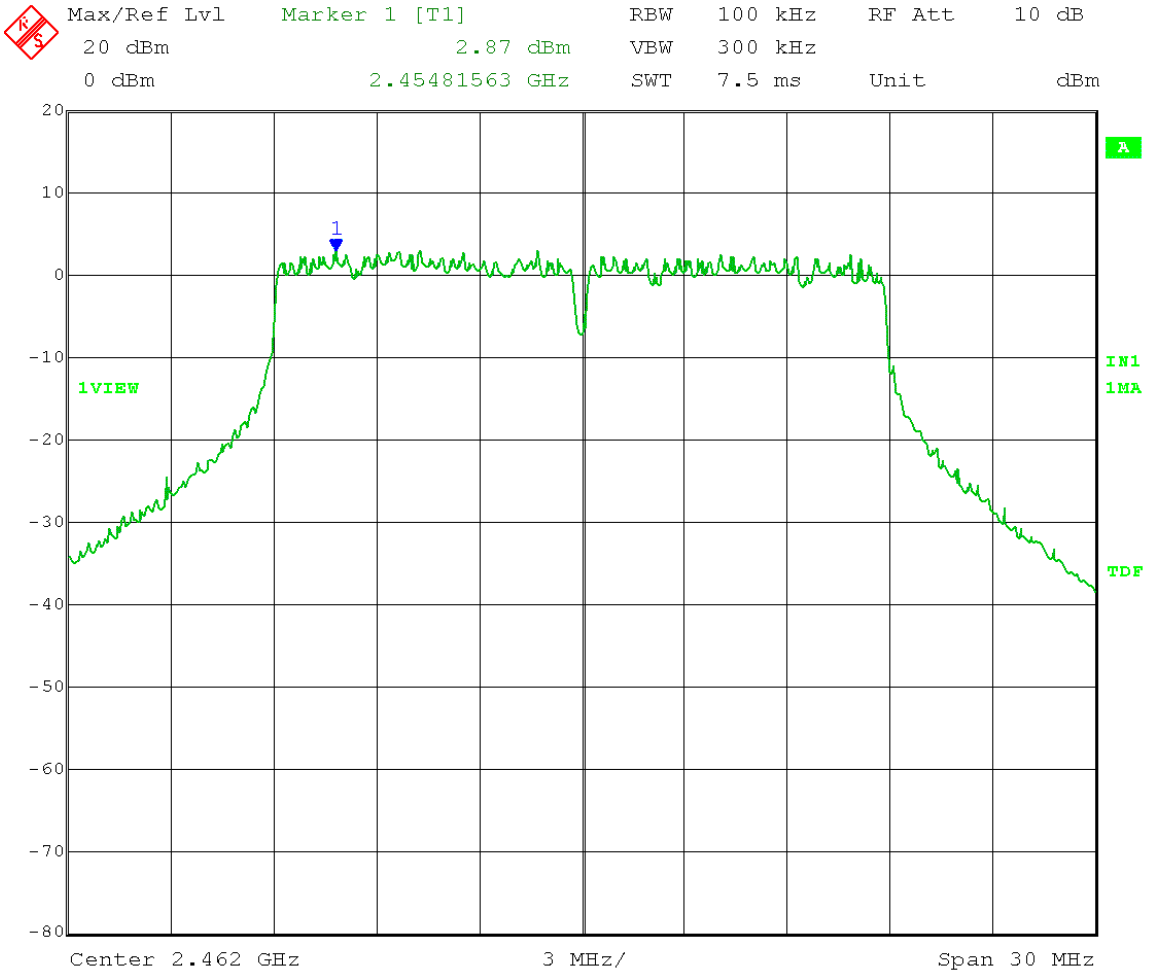
Date: 7.MAR.2014 09:41:46

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 ≥ 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



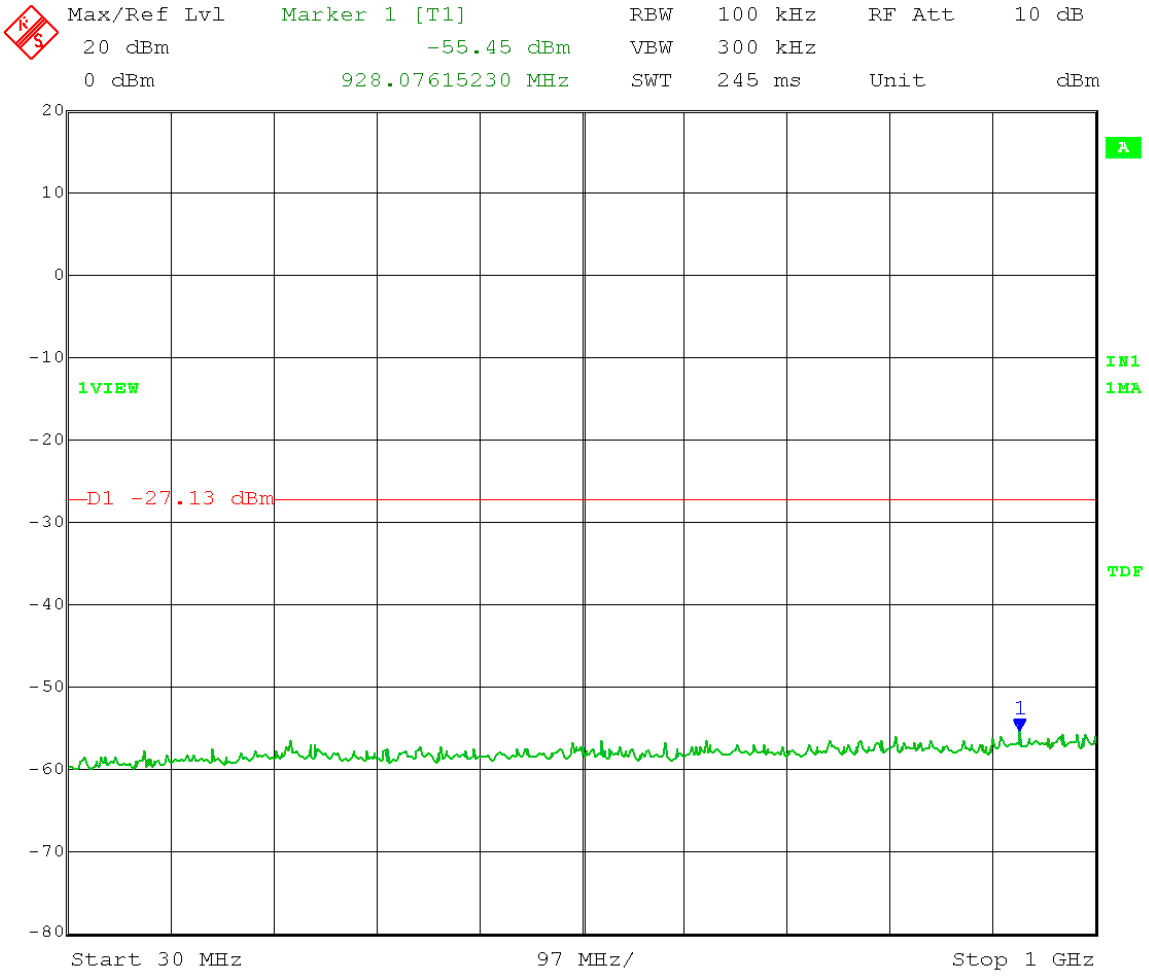
Date: 7.MAR.2014 09:43:47

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 ≥ 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



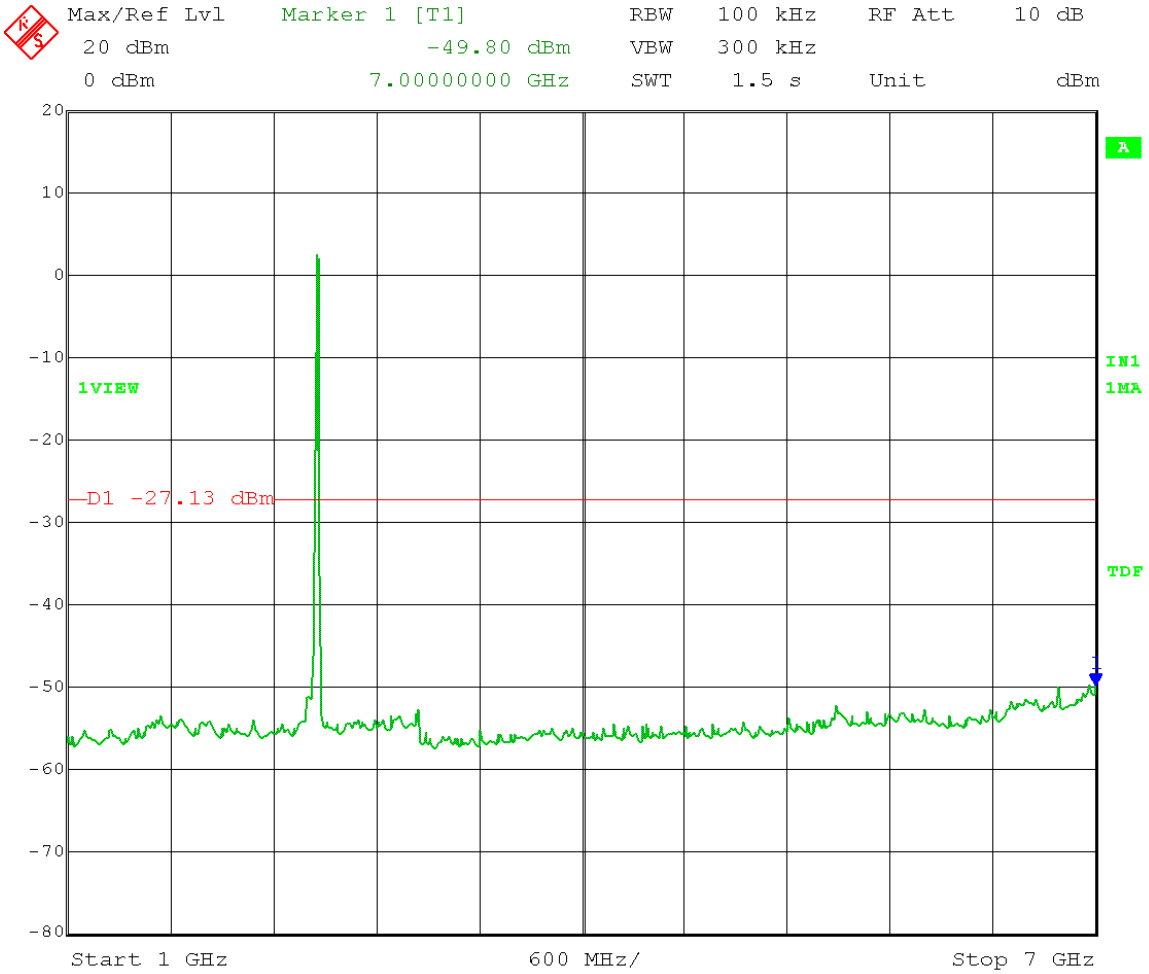
Date: 7.MAR.2014 09:58:41

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 ≥ 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



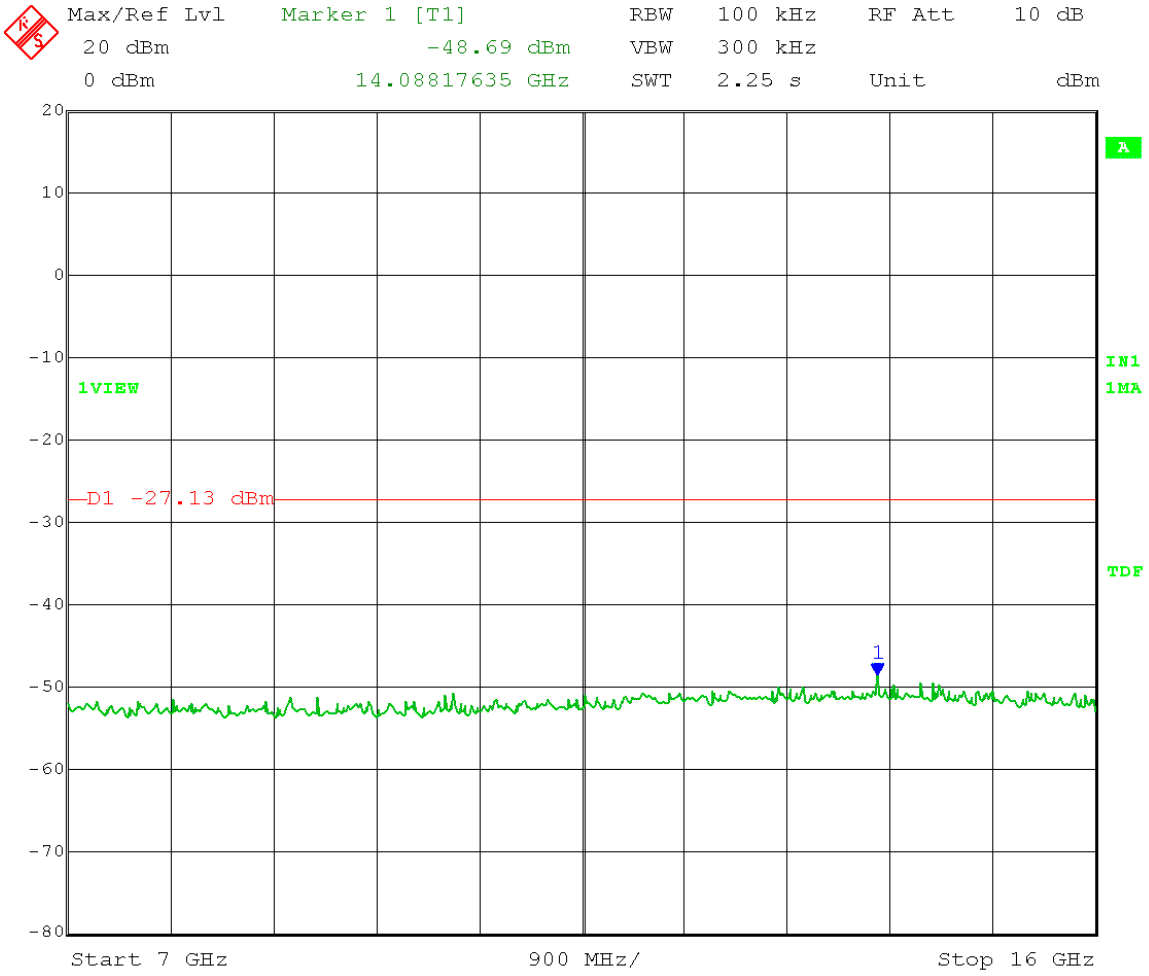
Date: 7.MAR.2014 10:06:08

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 ≥ 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



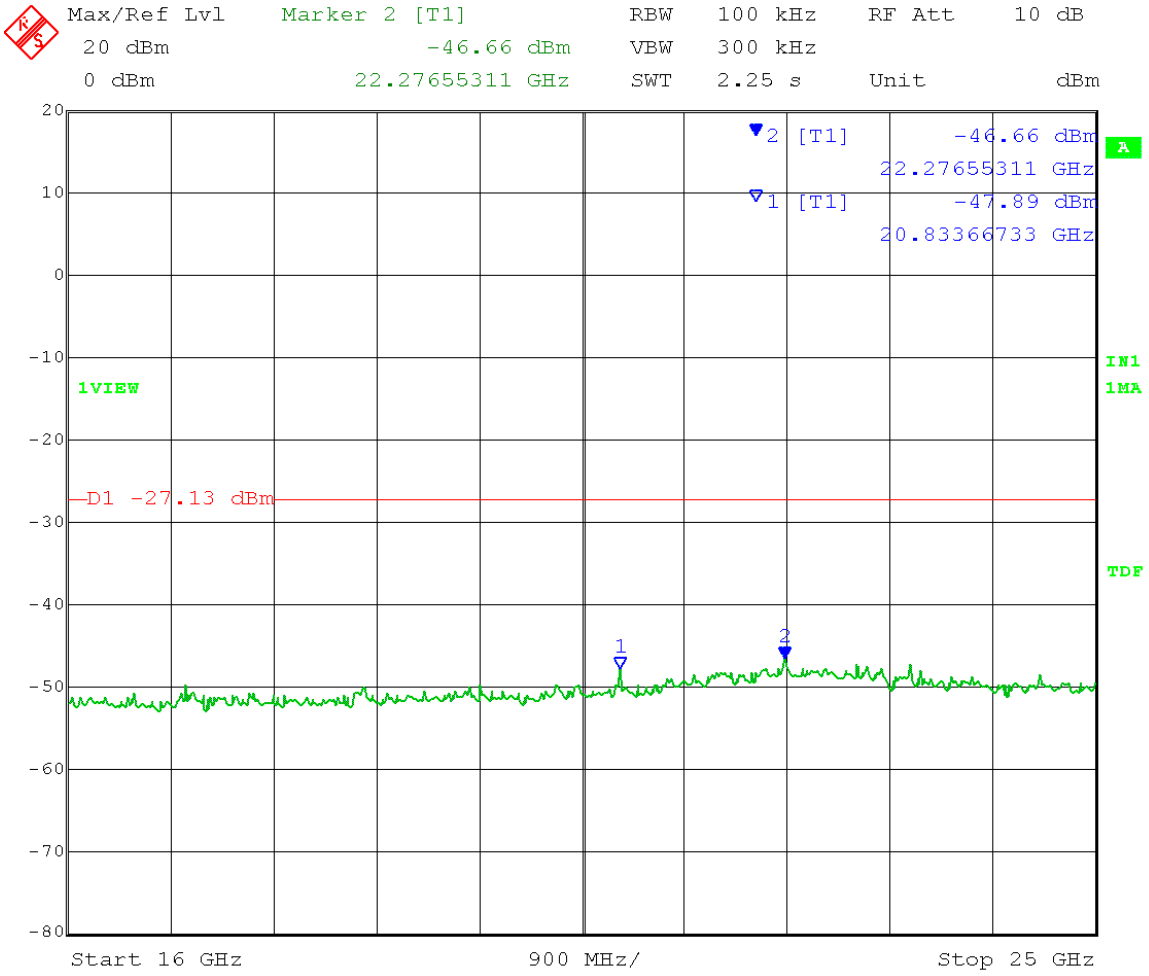
Date: 7.MAR.2014 10:01:13

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 ≥ 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



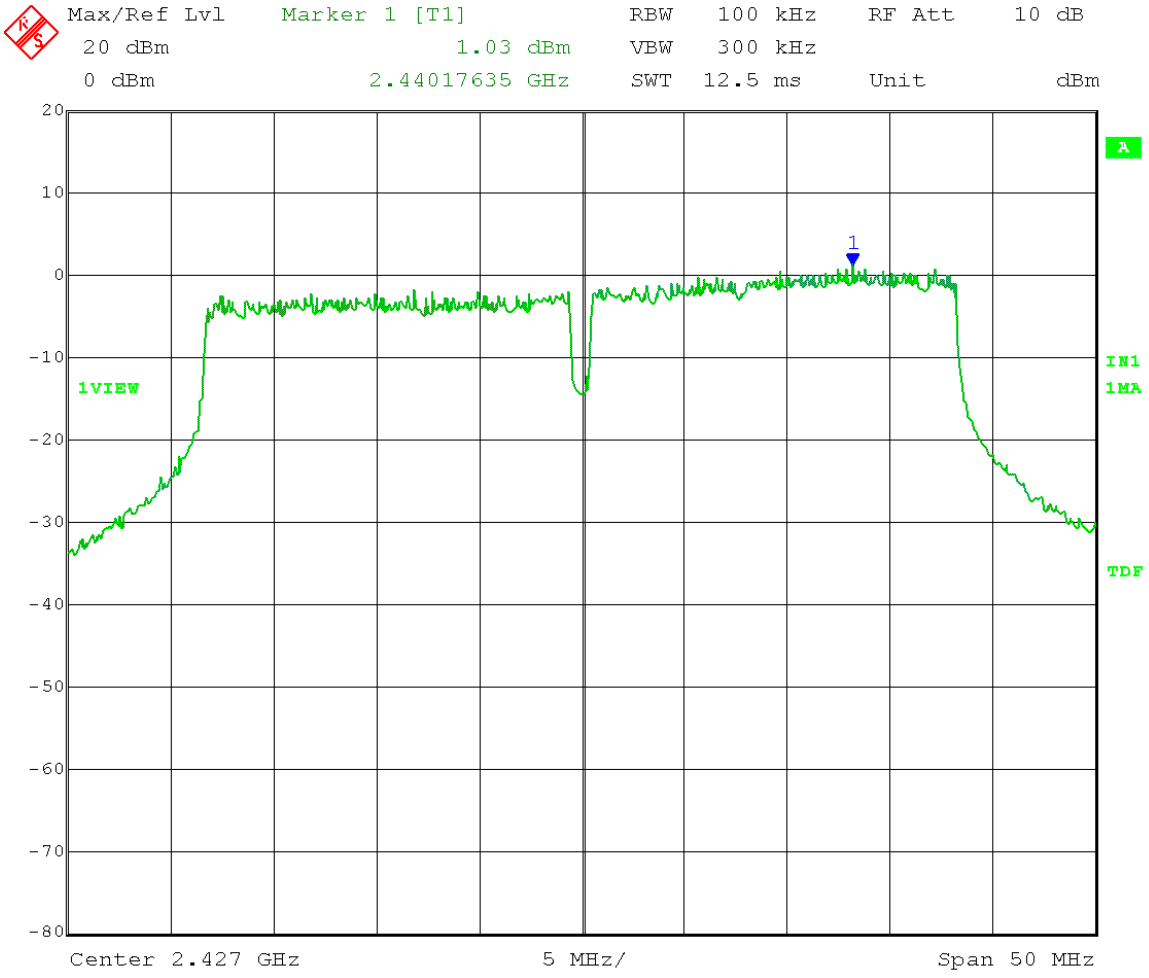
Date: 7.MAR.2014 10:03:09

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 ≥ 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



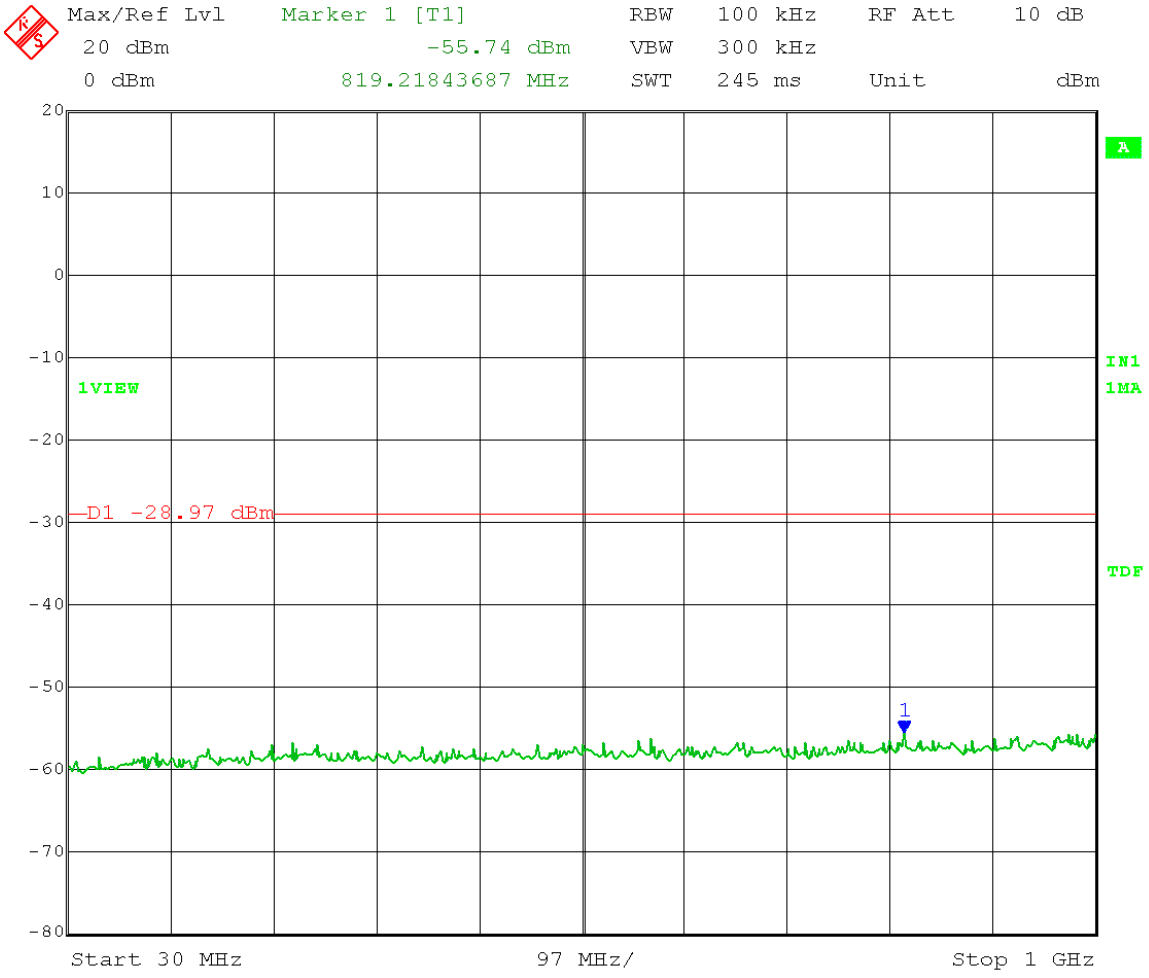
Date: 7.MAR.2014 10:04:32

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 ≥ 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



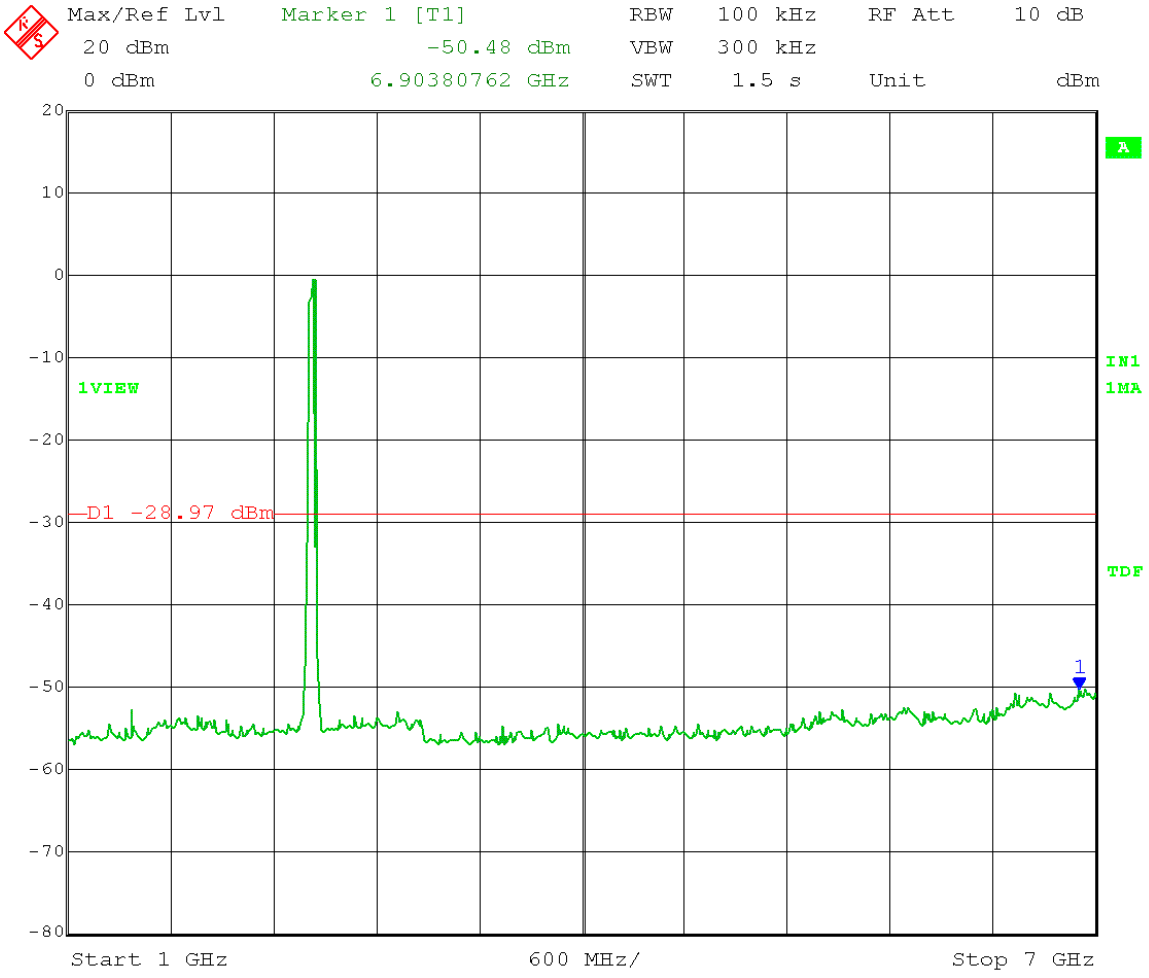
Date: 7.MAR.2014 10:20:40

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 ≥ 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



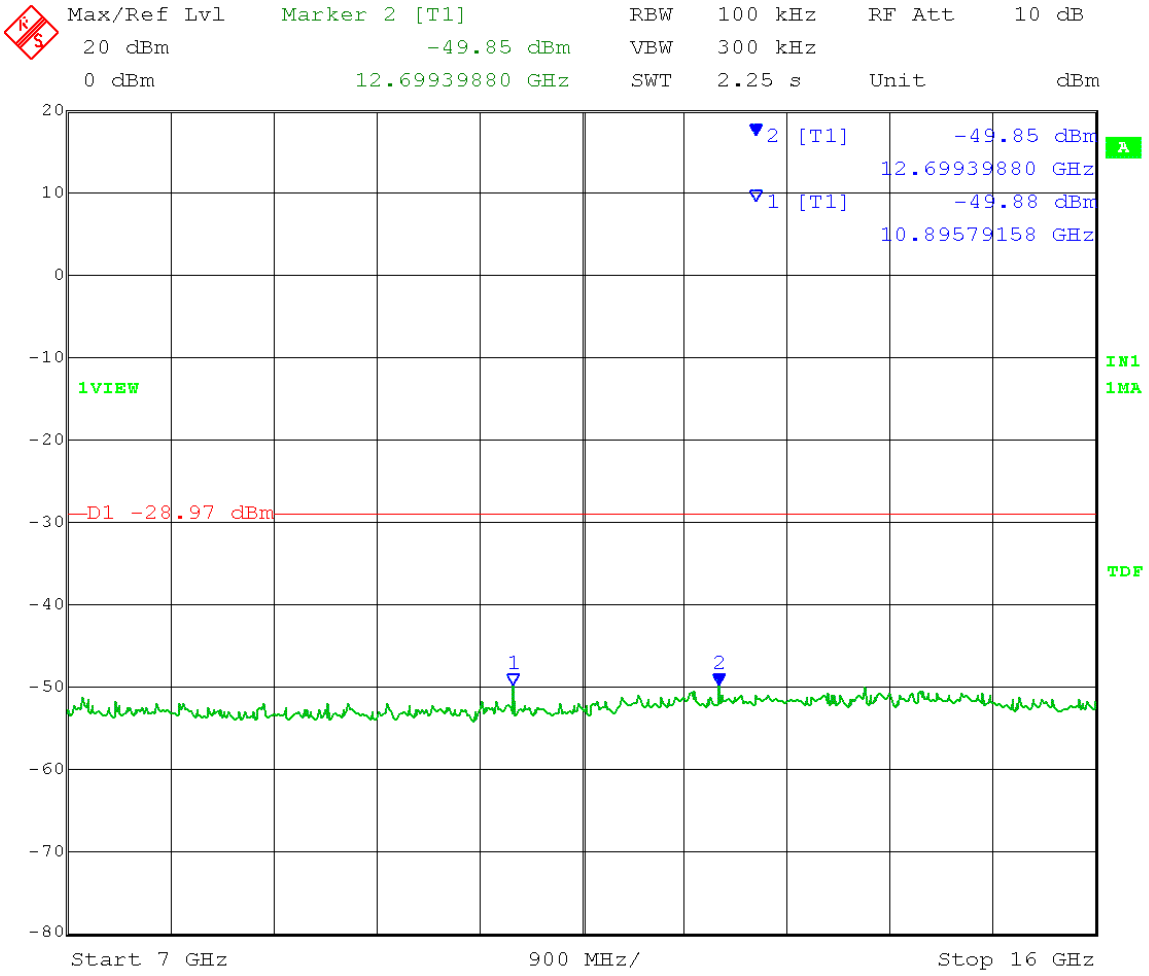
Date: 7.MAR.2014 10:27:16

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 ≥ 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



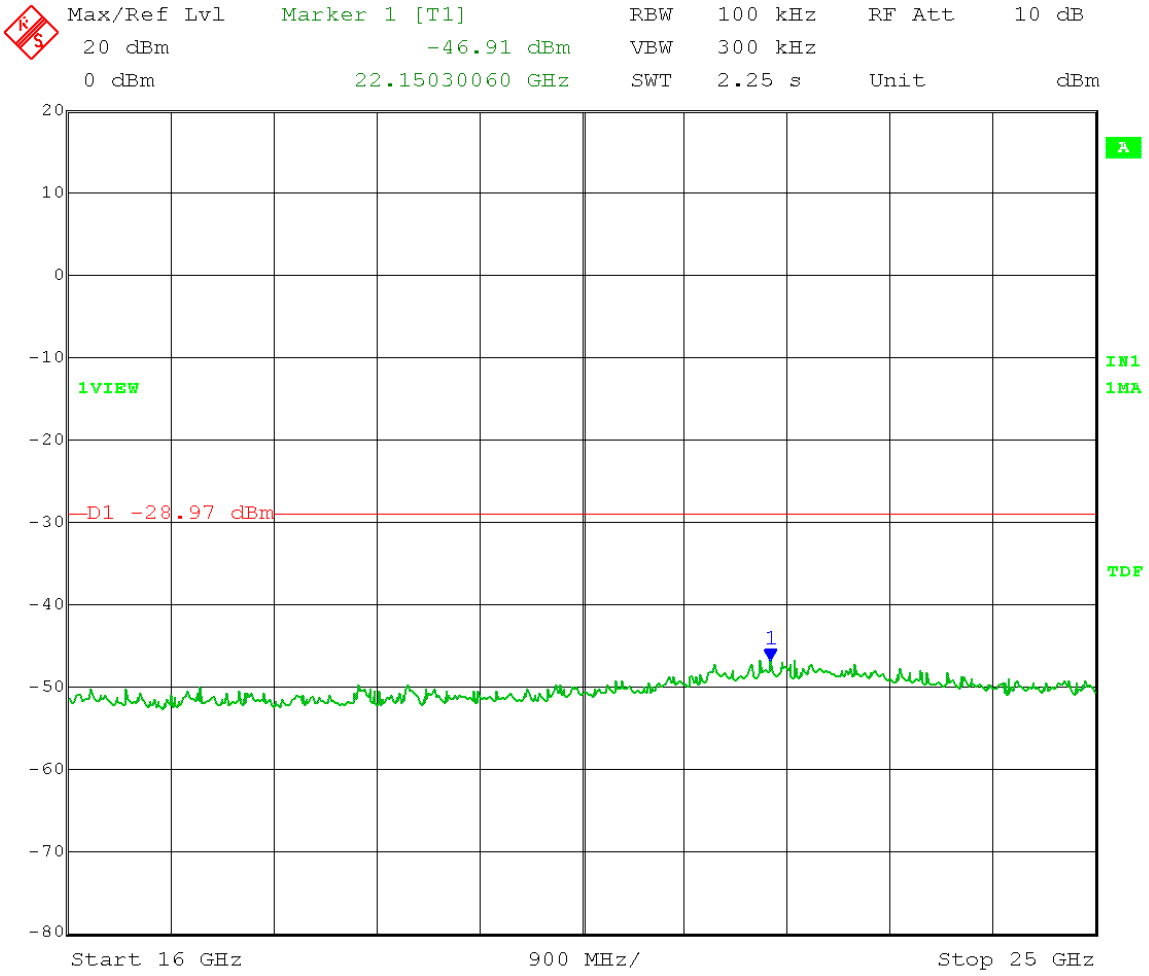
Date: 7.MAR.2014 10:22:55

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 ≥ 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



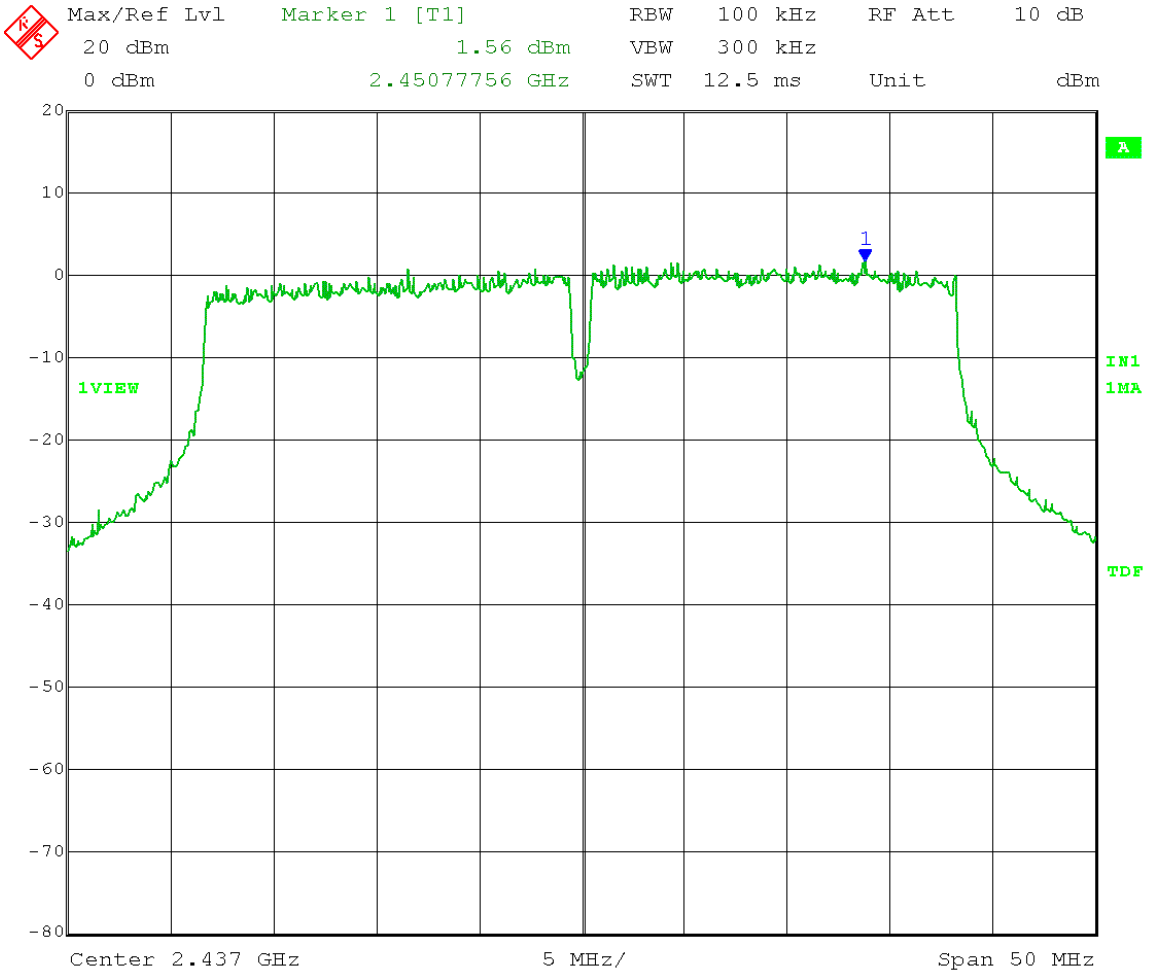
Date: 7.MAR.2014 10:24:15

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 ≥ 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



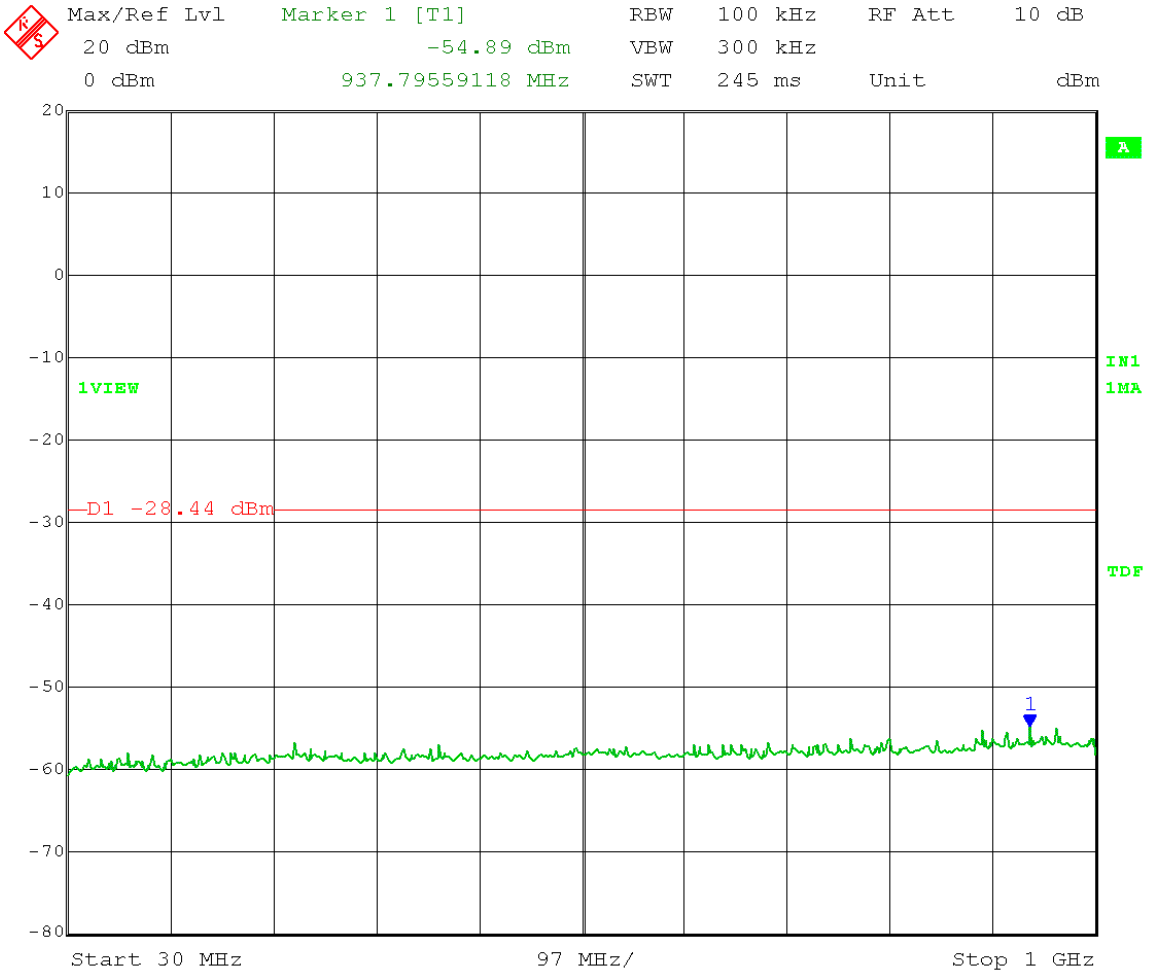
Date: 7.MAR.2014 10:25:52

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 ≥ 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



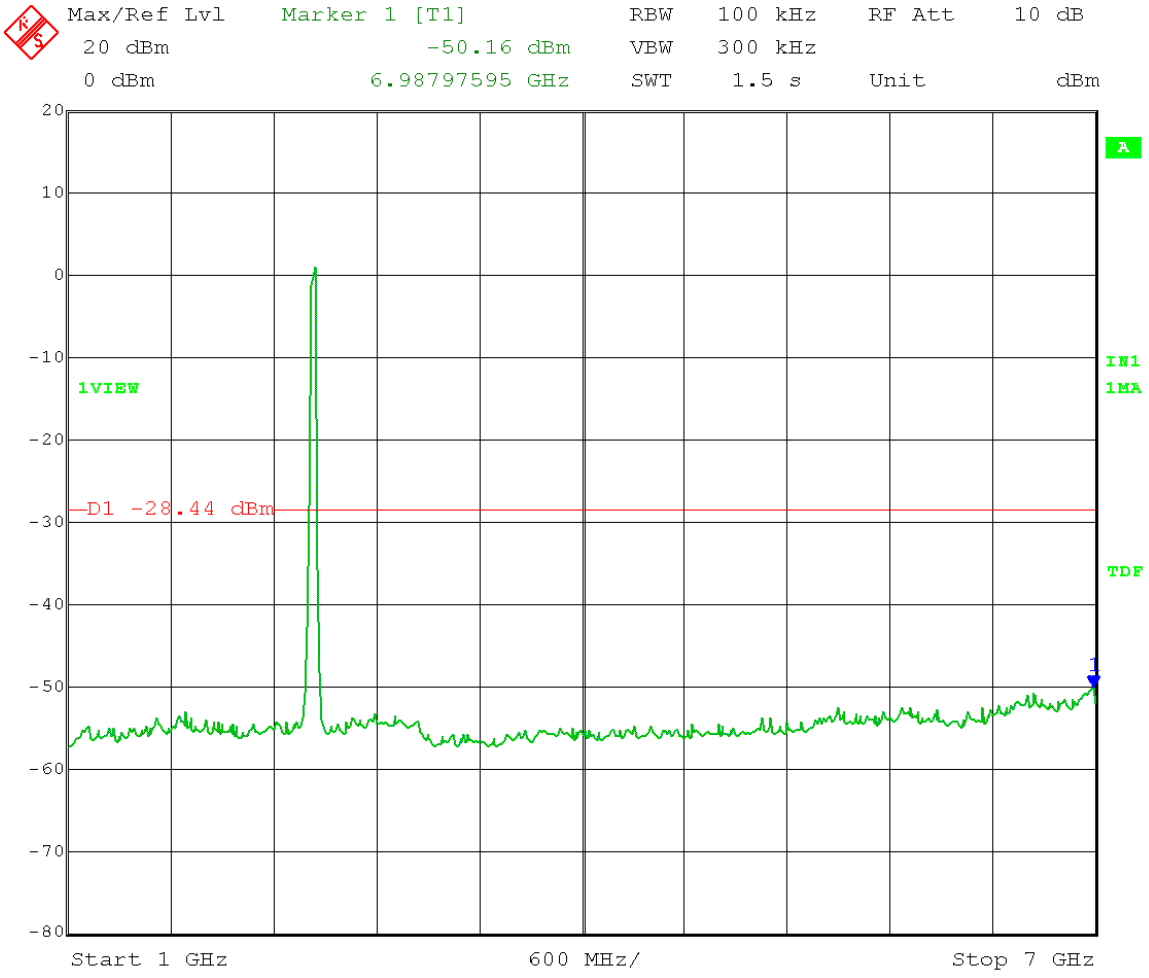
Date: 7.MAR.2014 10:11:01

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 ≥ 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



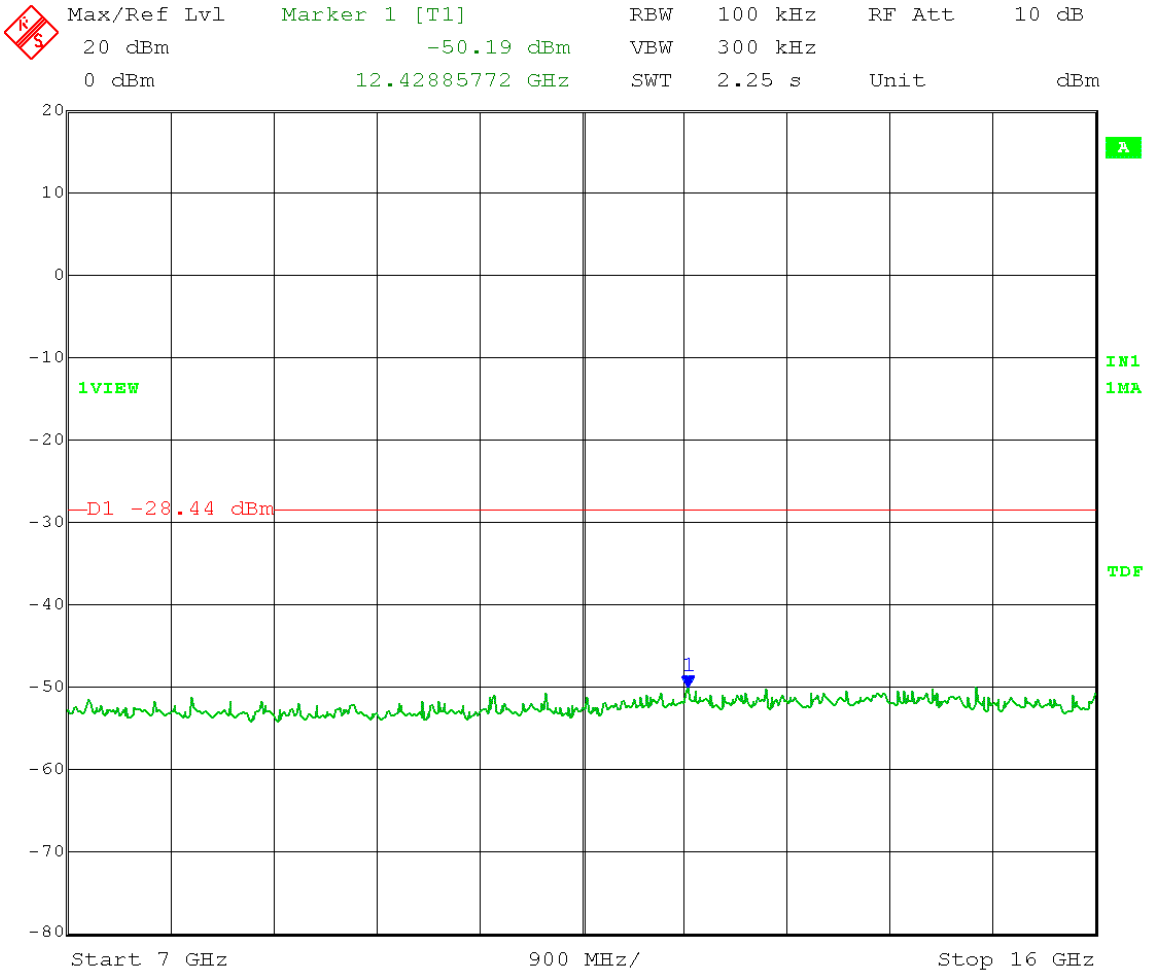
Date: 7.MAR.2014 10:16:36

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 ≥ 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



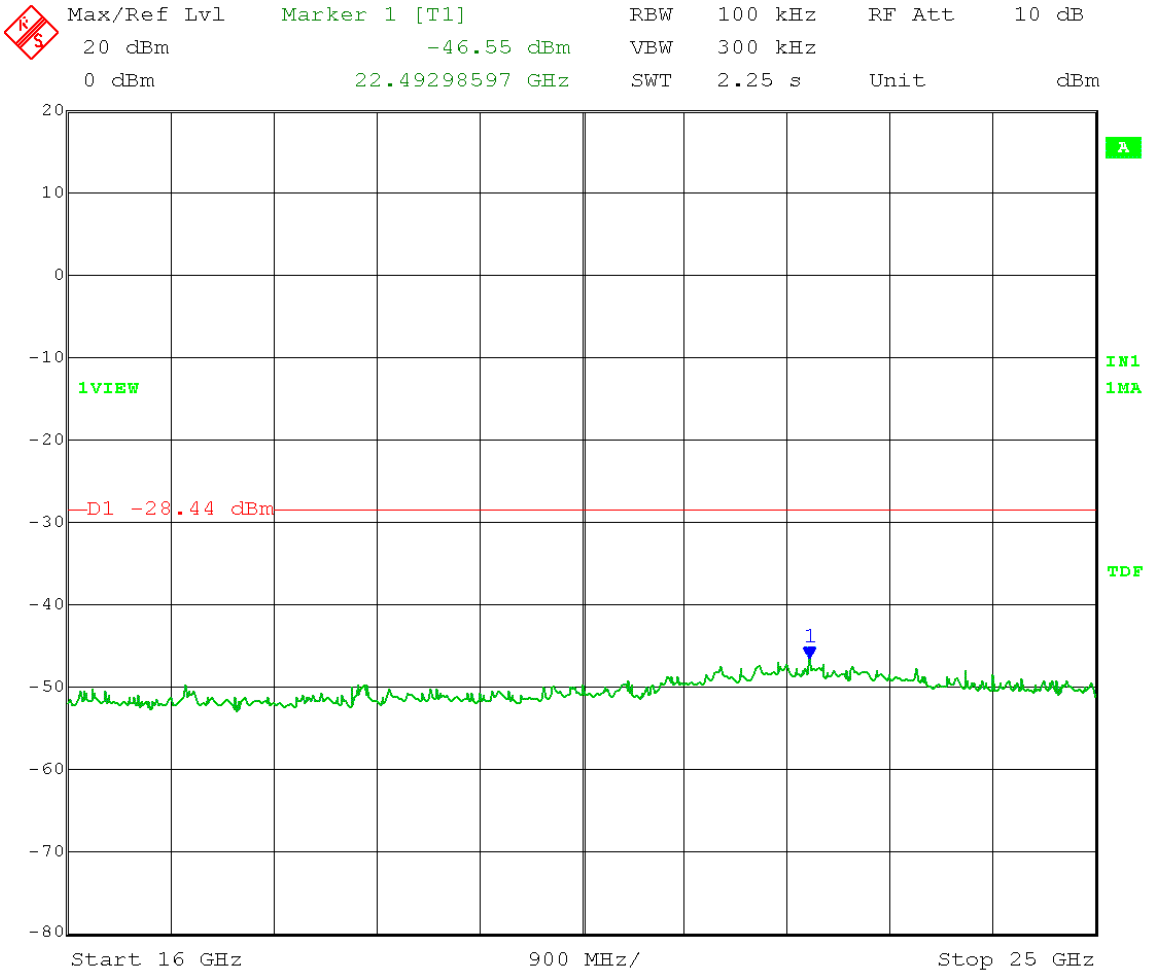
Date: 7.MAR.2014 10:12:53

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 ≥ 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



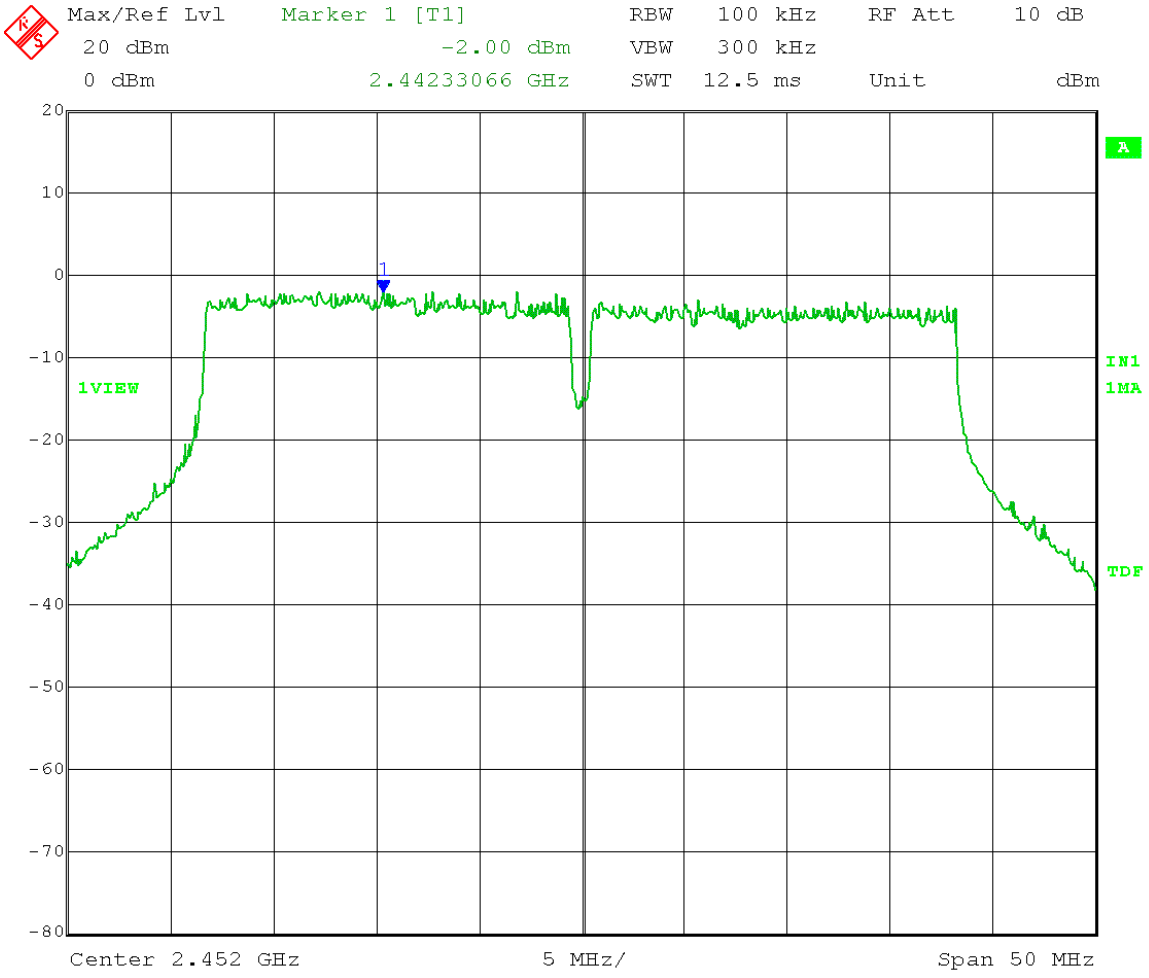
Date: 7.MAR.2014 10:14:00

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 ≥ 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



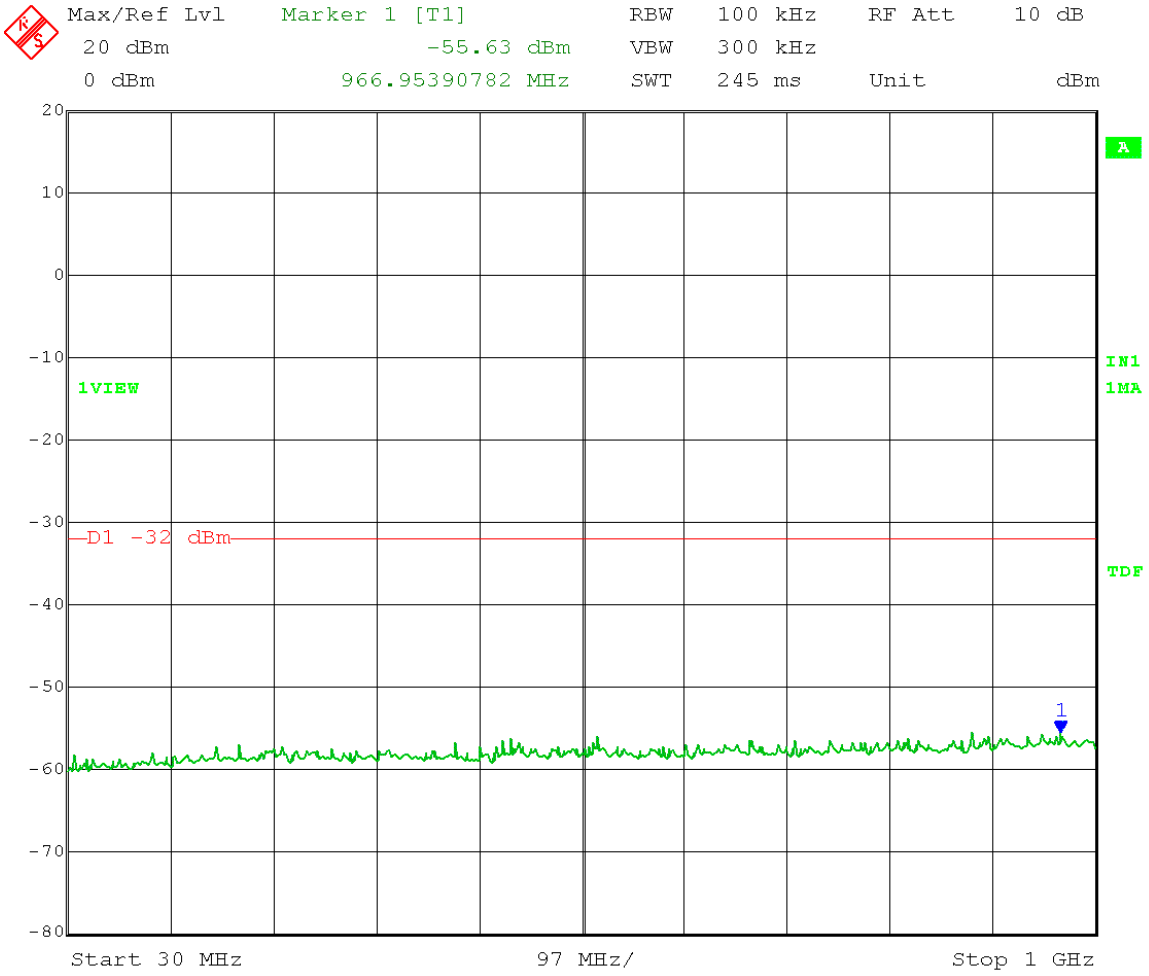
Date: 7.MAR.2014 10:15:24

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 ≥ 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



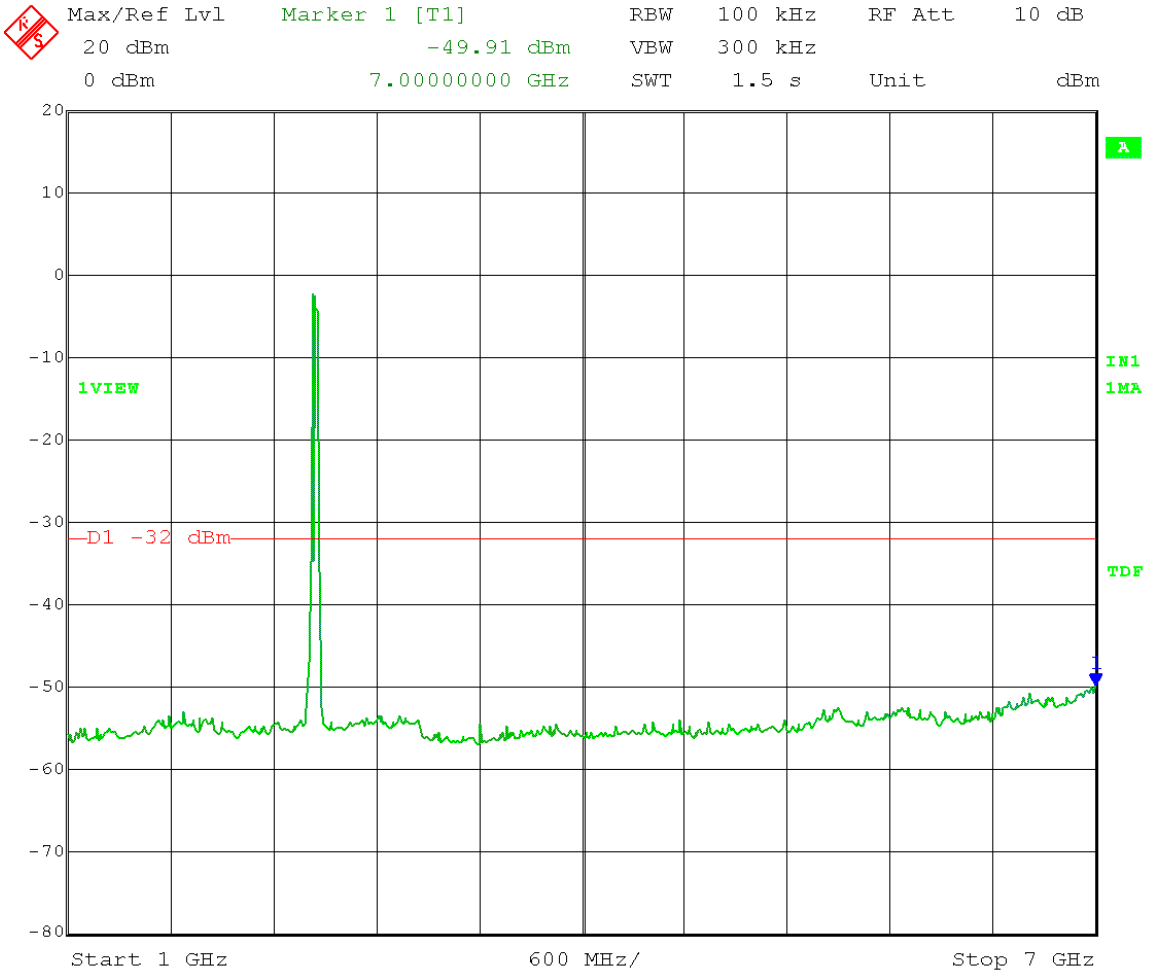
Date: 7.MAR.2014 10:30:19

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 ≥ 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



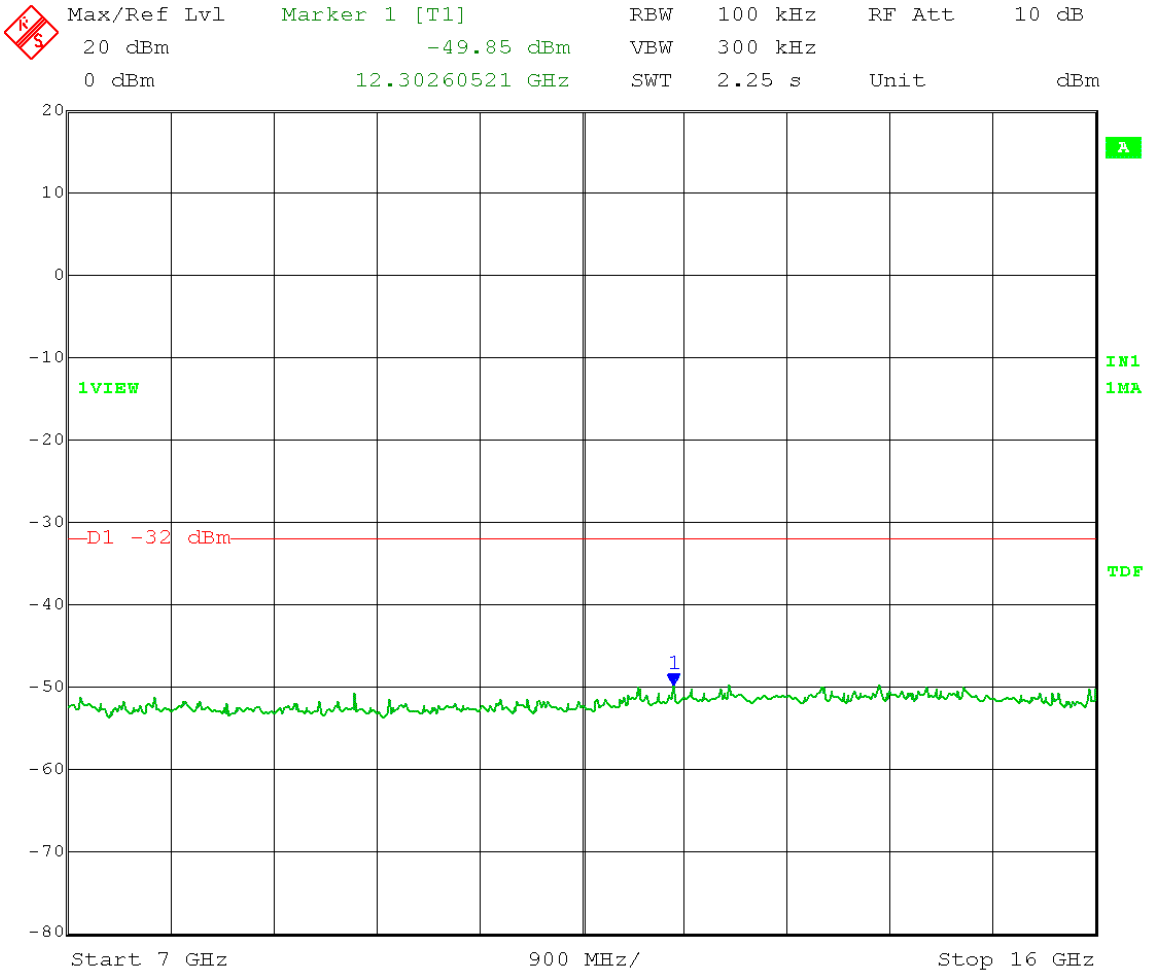
Date: 7.MAR.2014 10:36:59

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 ≥ 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



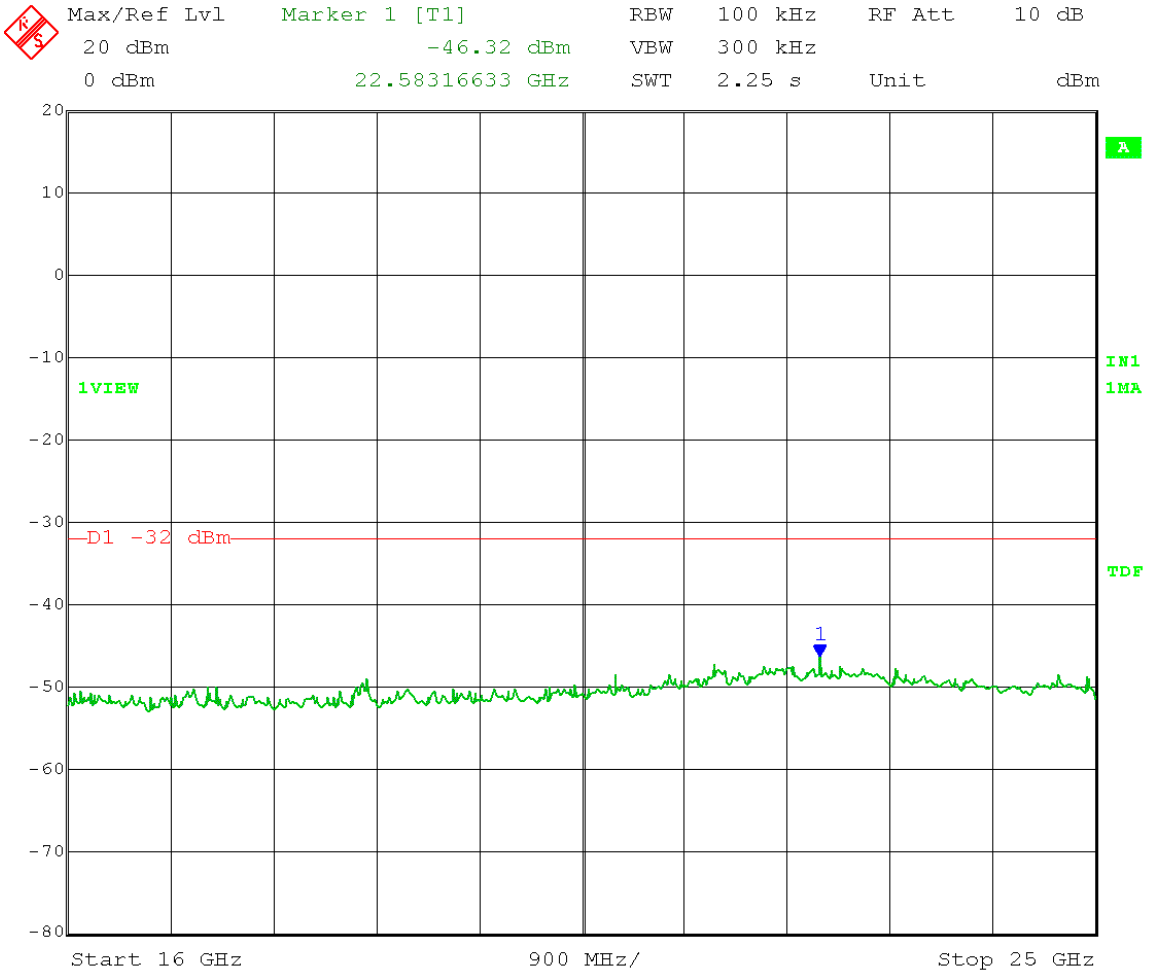
Date: 7.MAR.2014 10:32:46

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 ≥ 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



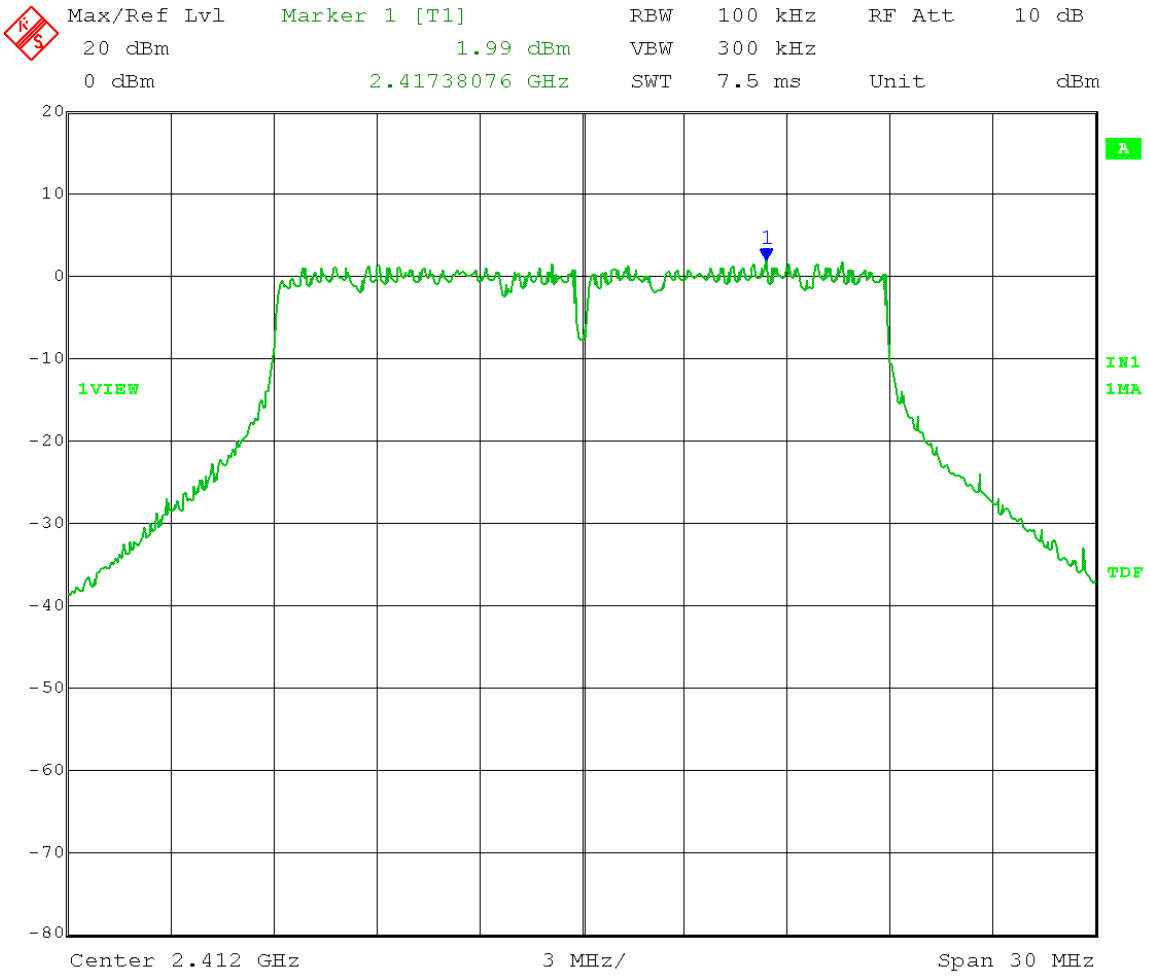
Date: 7.MAR.2014 10:34:32

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 ≥ 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



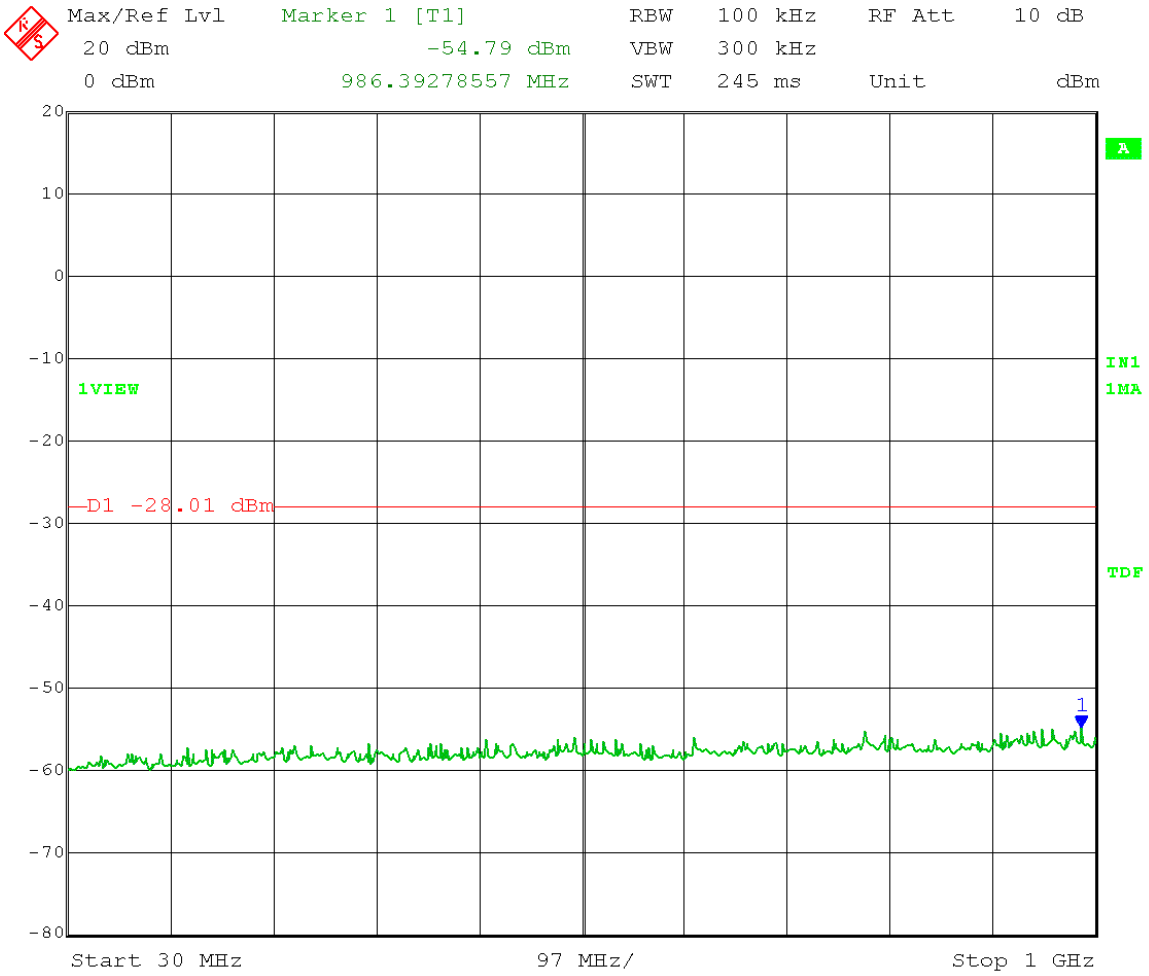
Date: 7.MAR.2014 10:35:42

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 ≥ 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



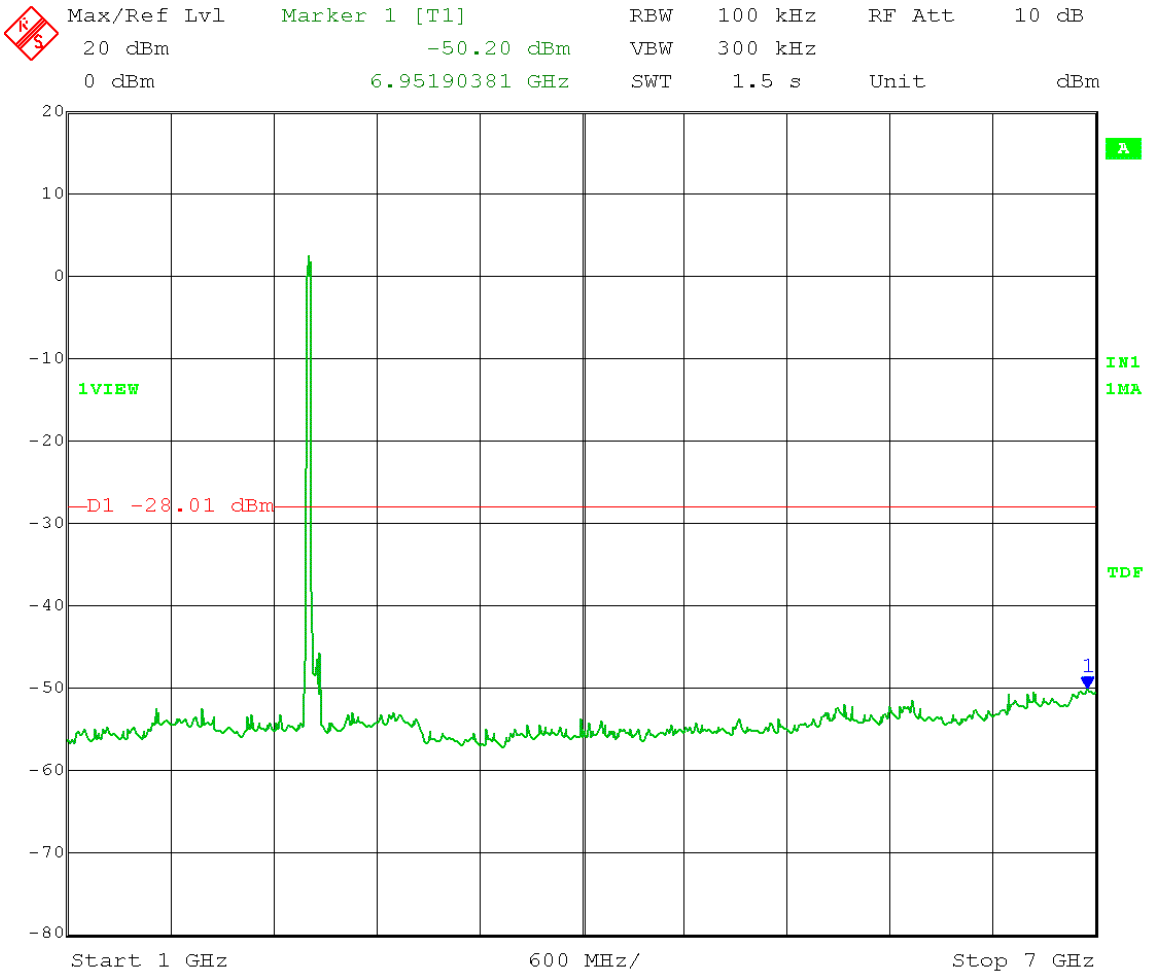
Date: 11.MAR.2014 09:50:03

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 ≥ 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



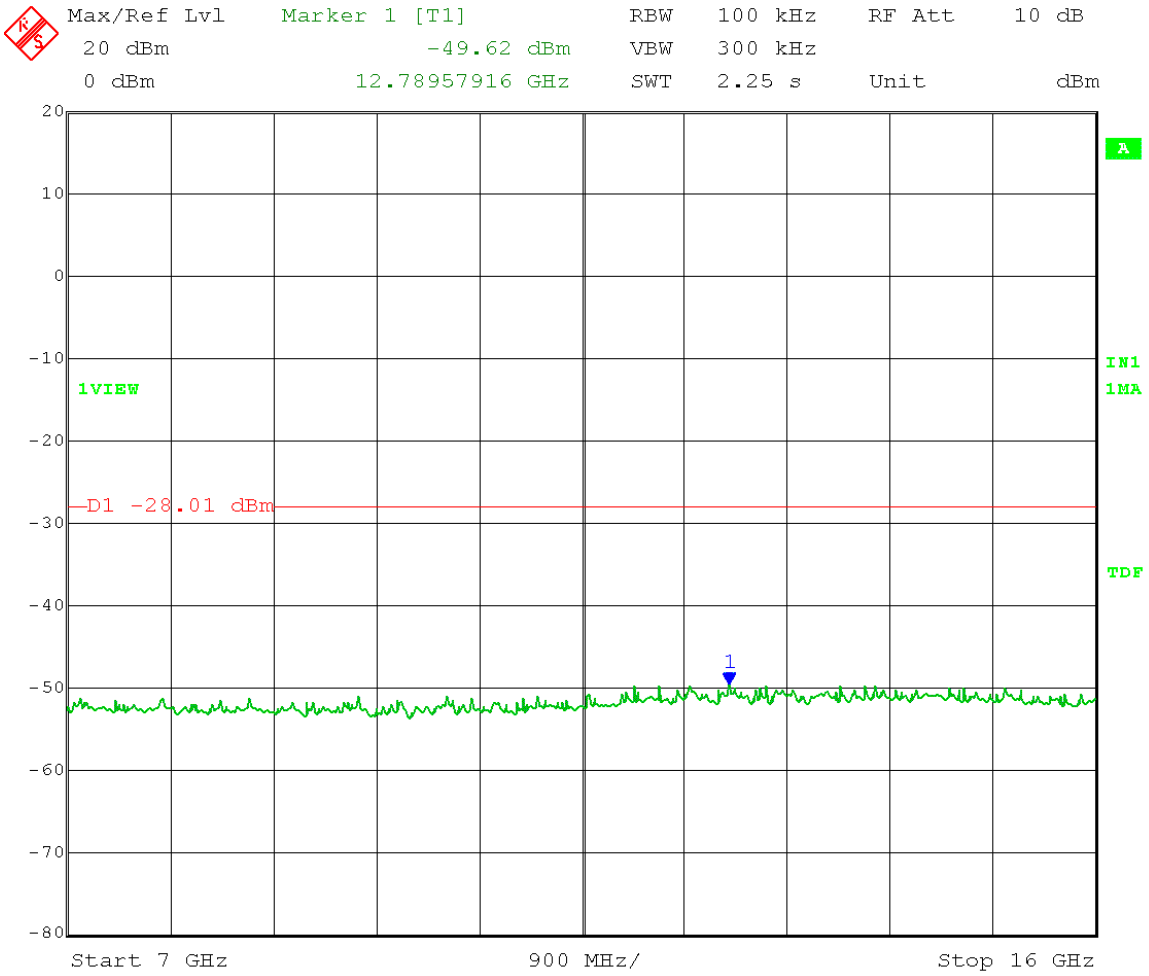
Date: 11.MAR.2014 10:27:02

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 ≥ 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



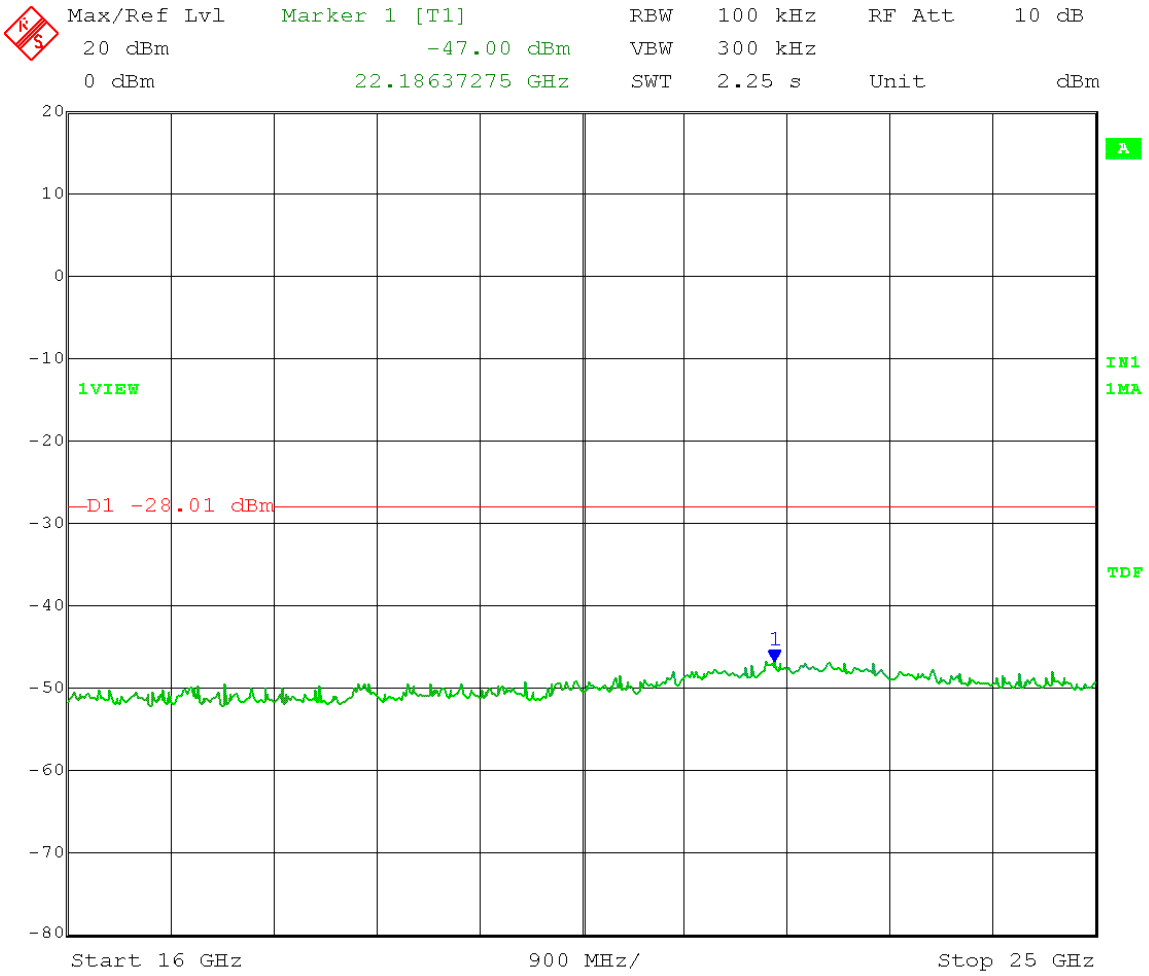
Date: 11.MAR.2014 10:21:08

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 ≥ 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



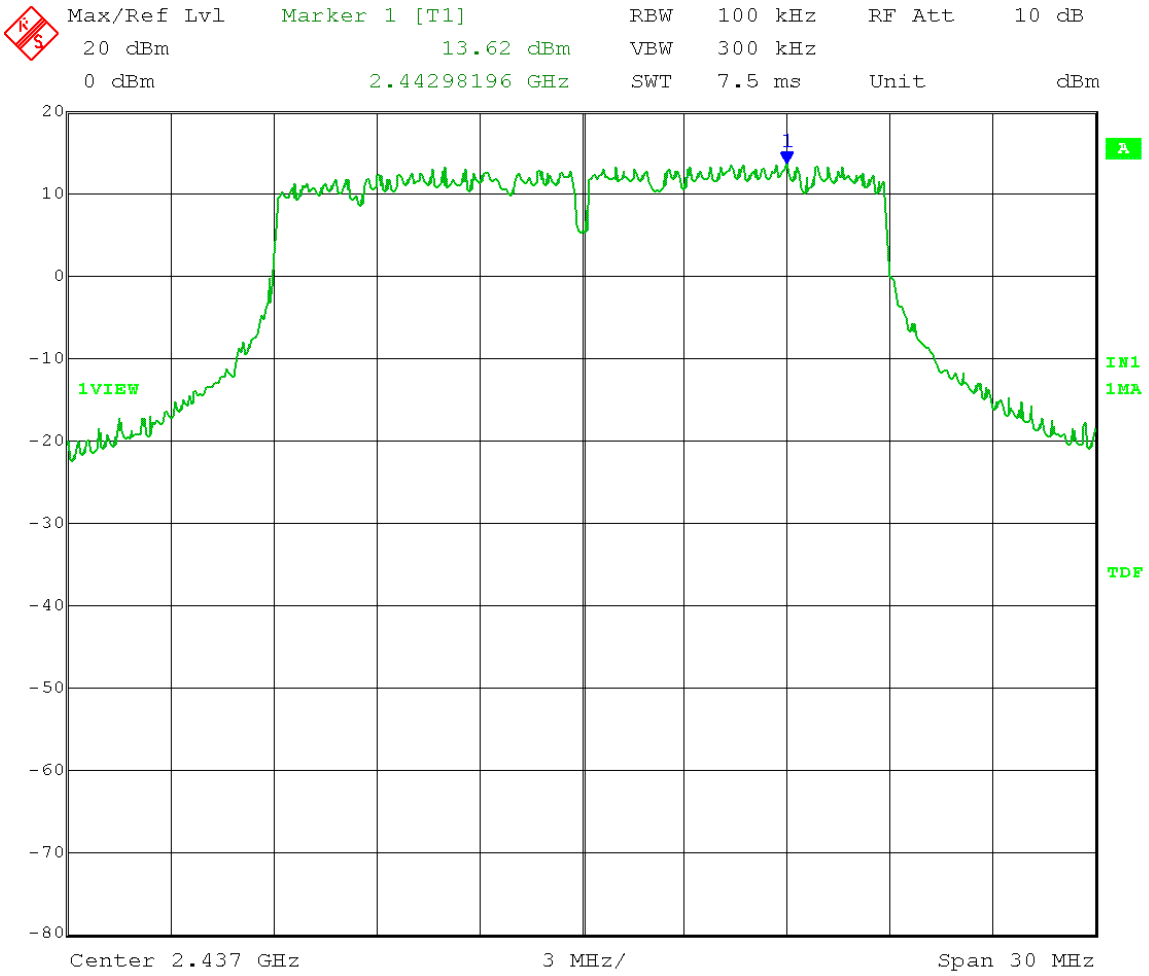
Date: 11.MAR.2014 10:22:44

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 ≥ 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



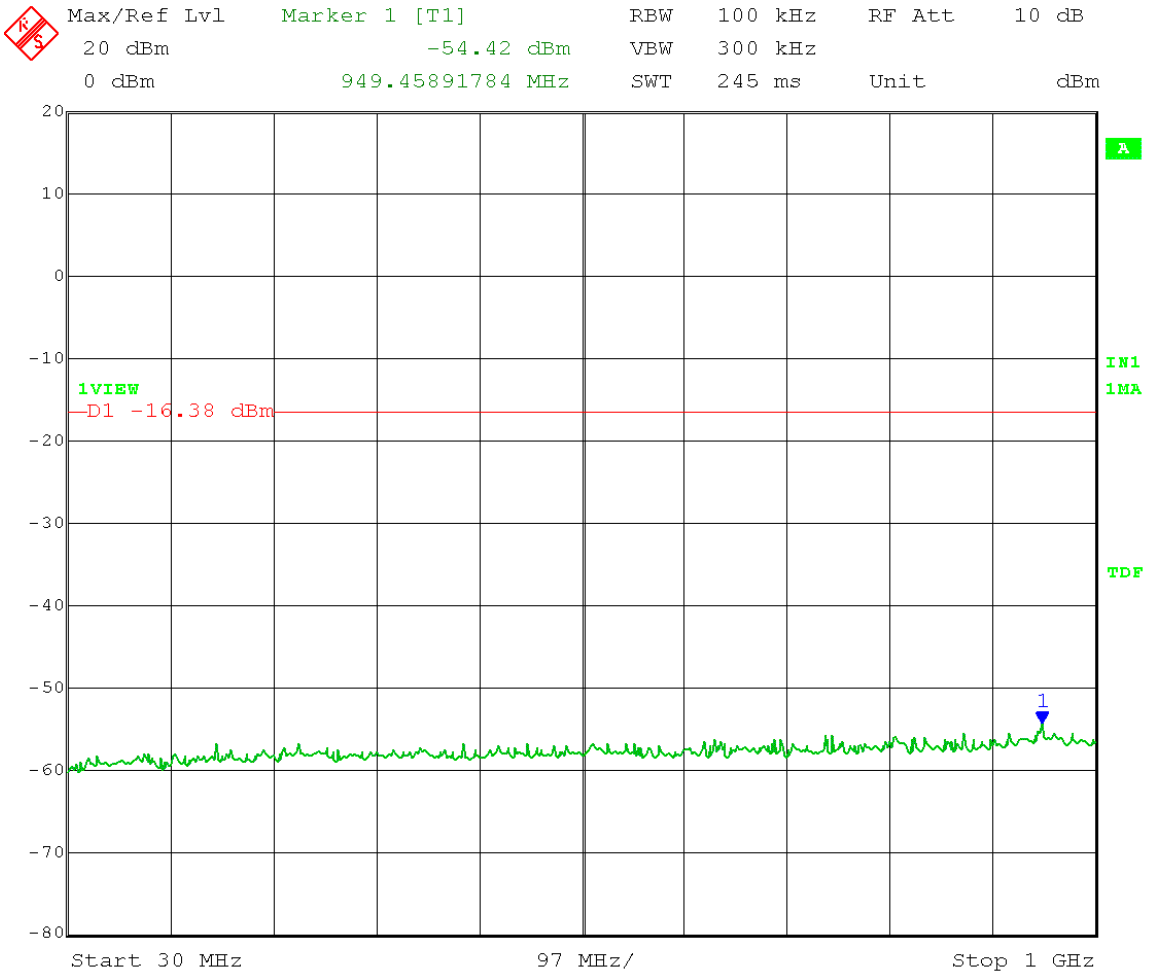
Date: 11.MAR.2014 10:24:39

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 ≥ 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



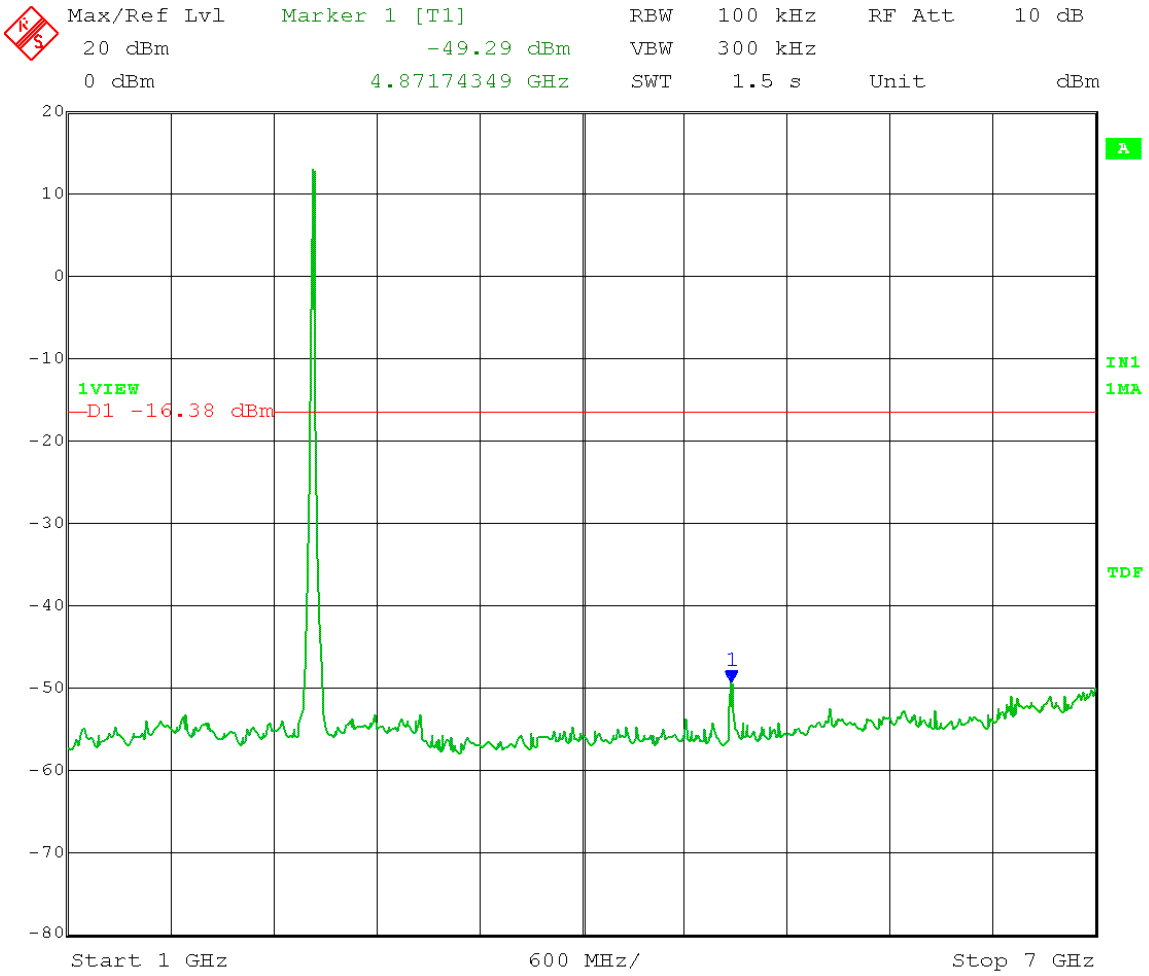
Date: 11.MAR.2014 10:45:51

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 ≥ 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



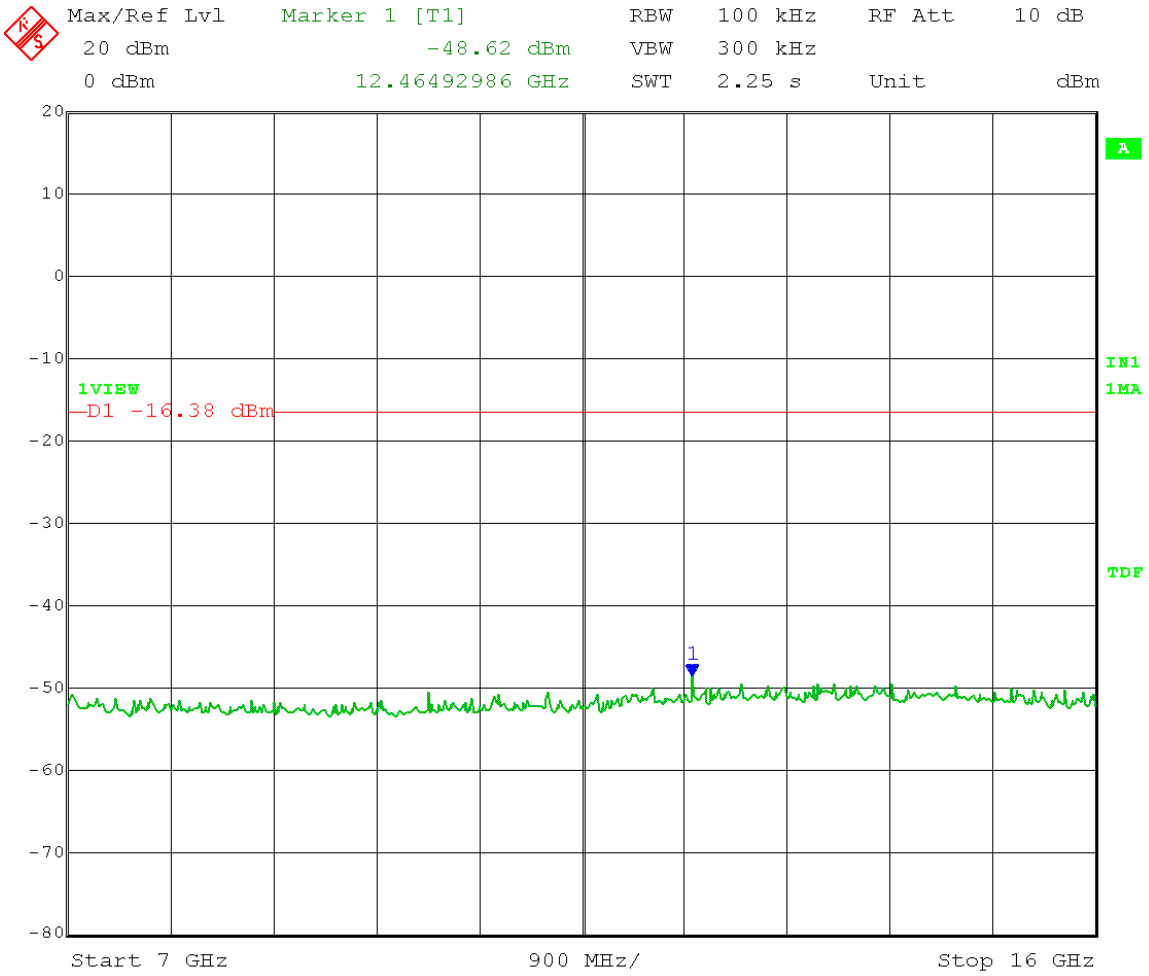
Date: 11.MAR.2014 11:54:36

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 ≥ 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



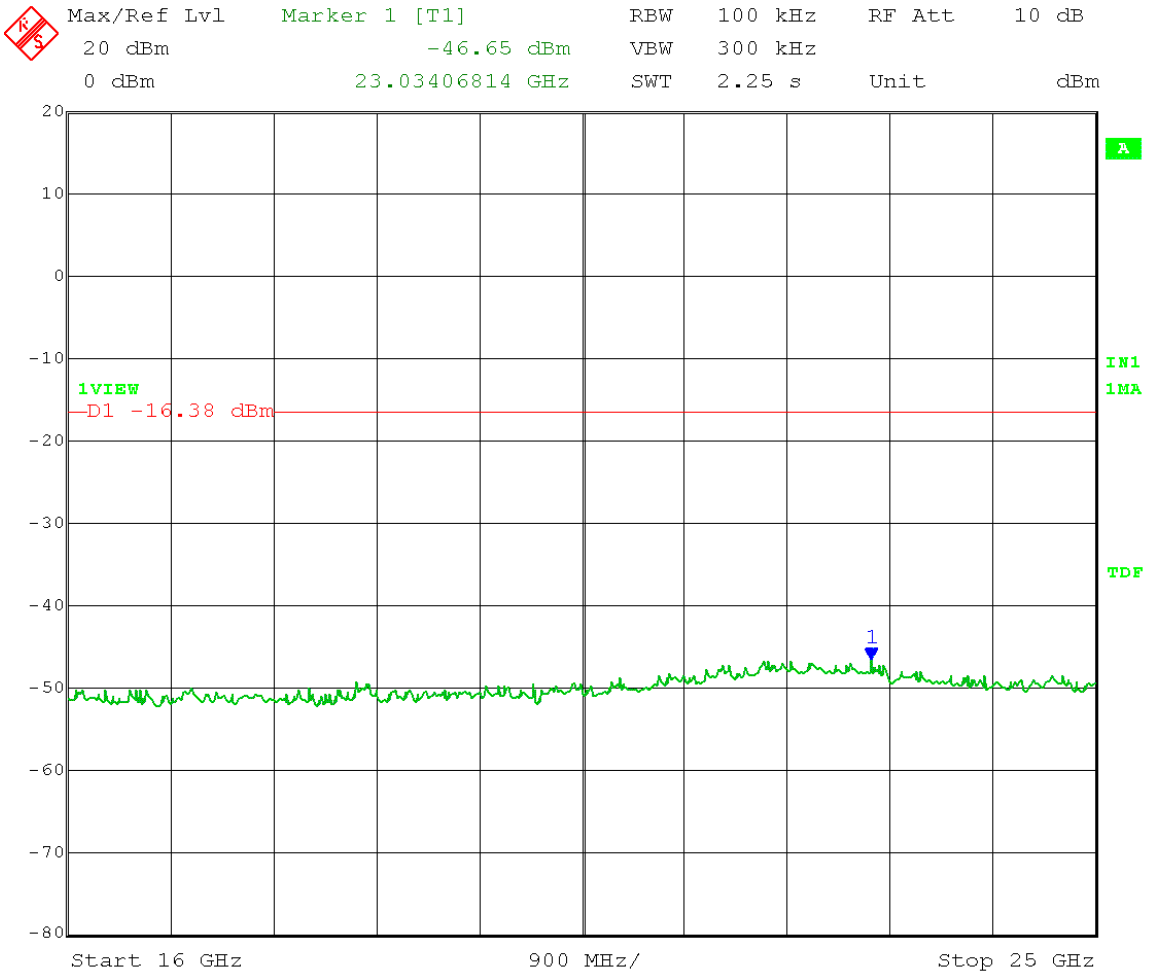
Date: 11.MAR.2014 11:49:59

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 ≥ 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



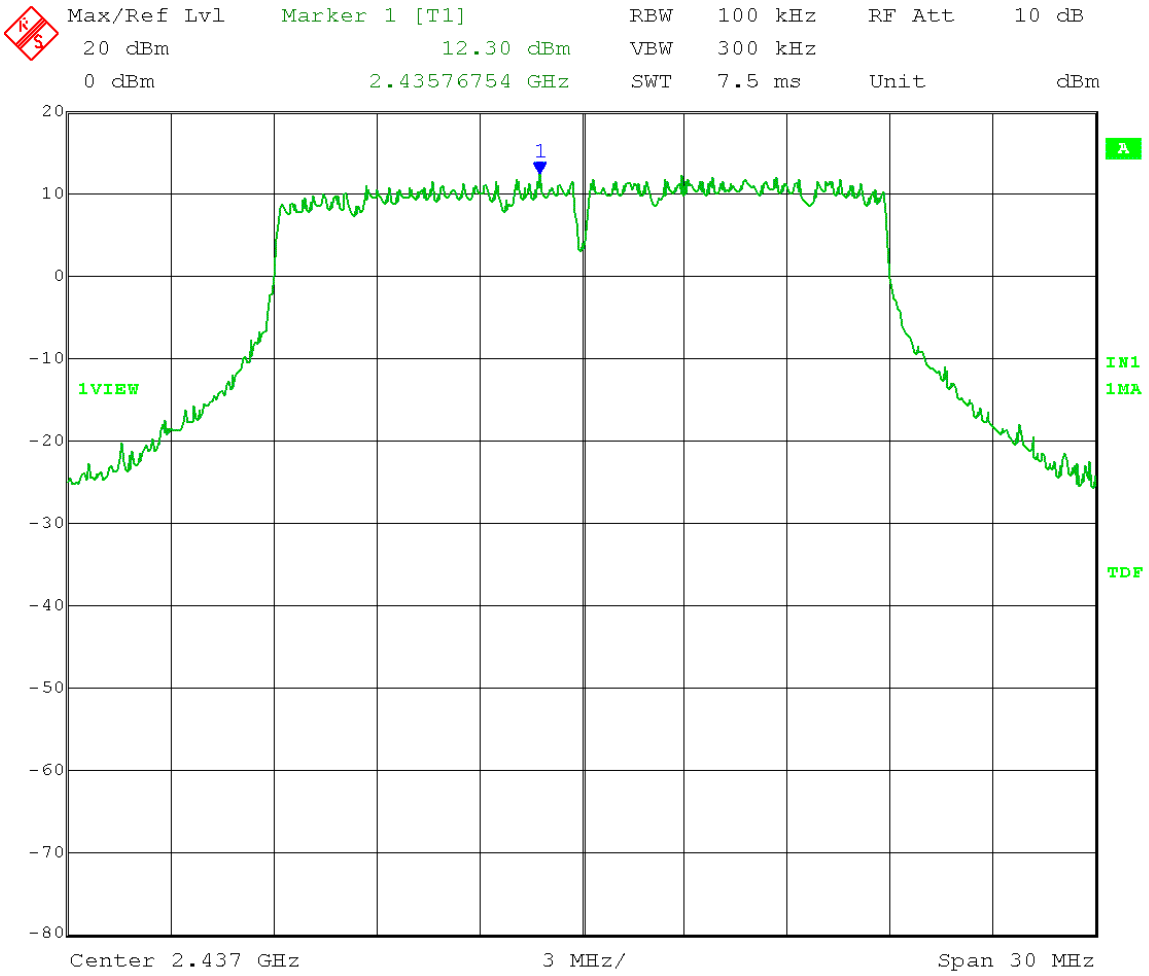
Date: 11.MAR.2014 11:51:20

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 ≥ 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



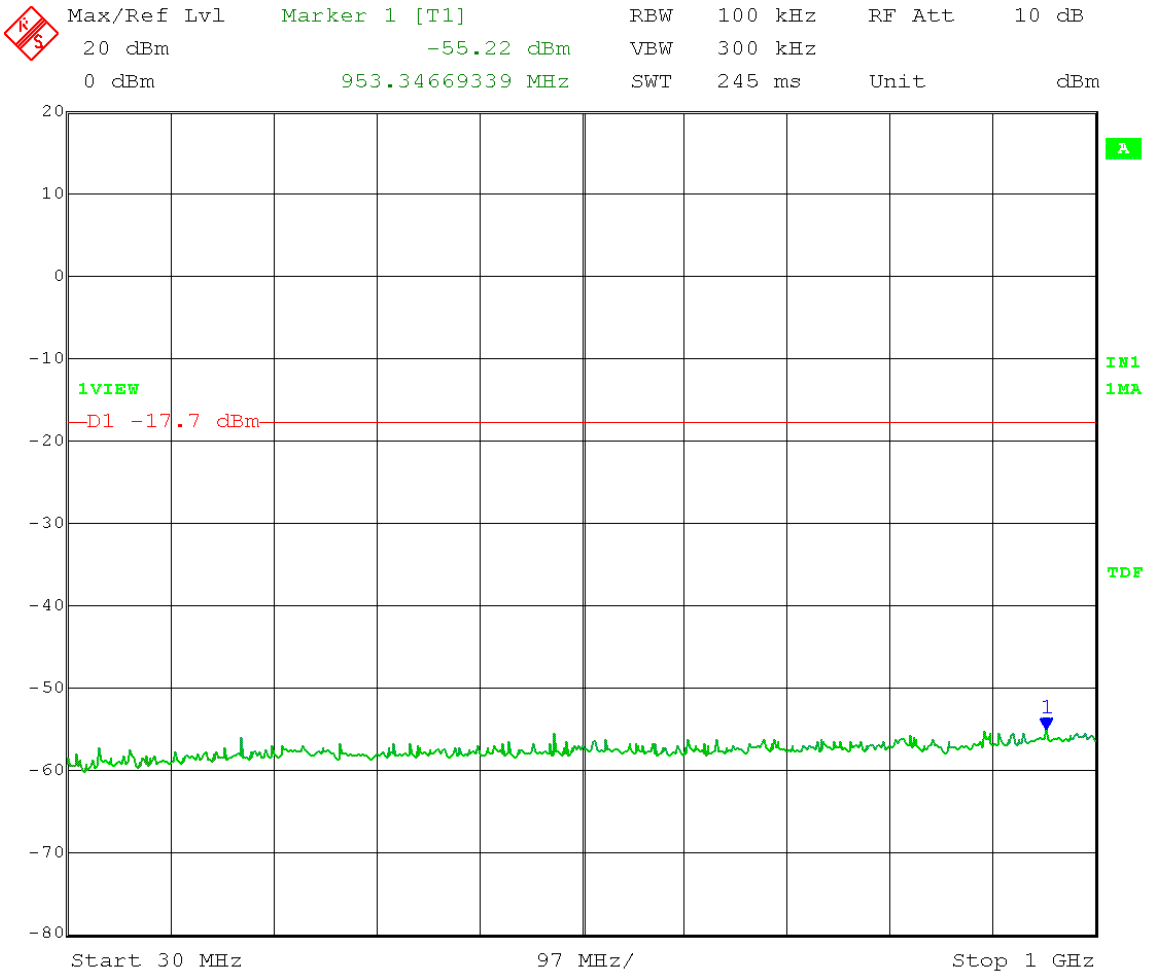
Date: 11.MAR.2014 11:52:42

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 ≥ 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



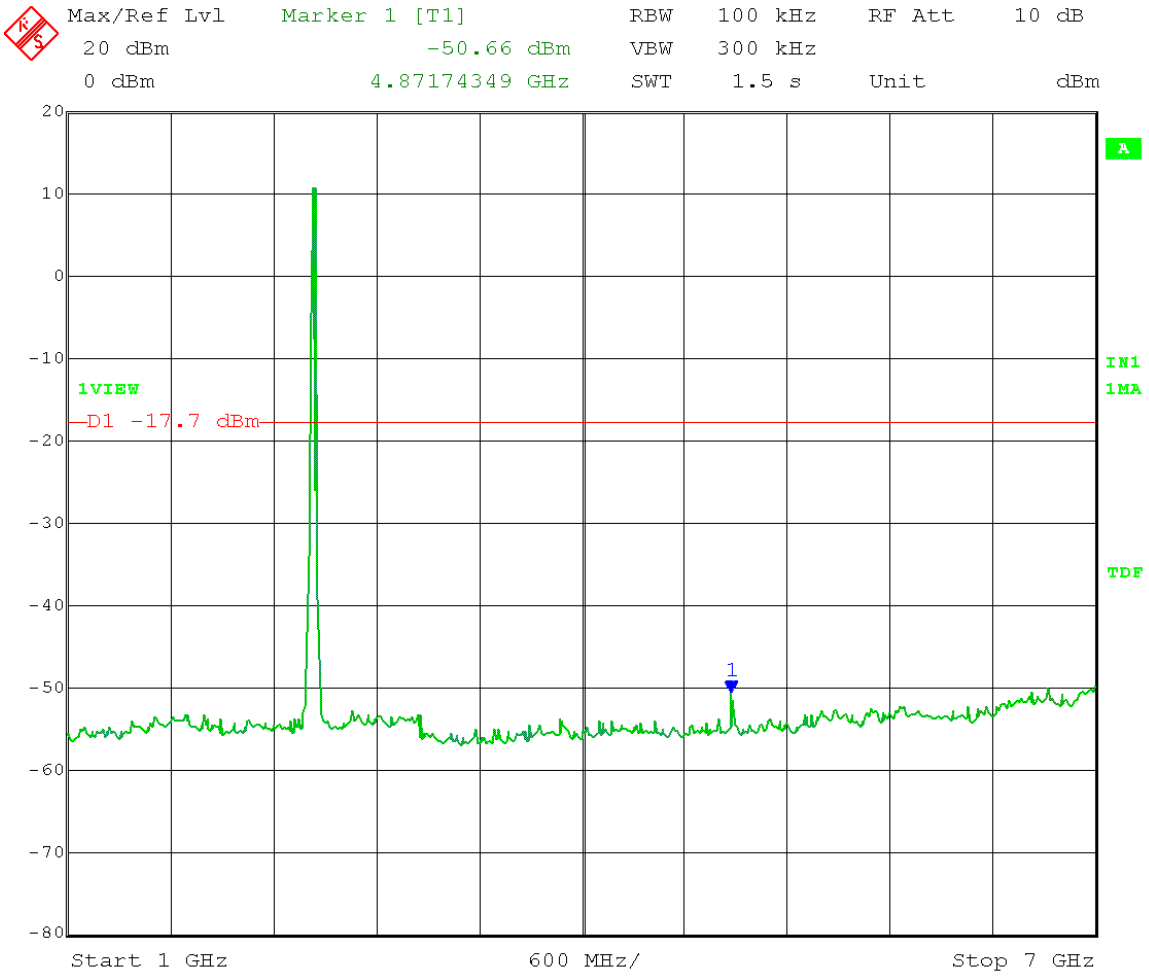
Date: 11.MAR.2014 10:33:58

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 ≥ 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



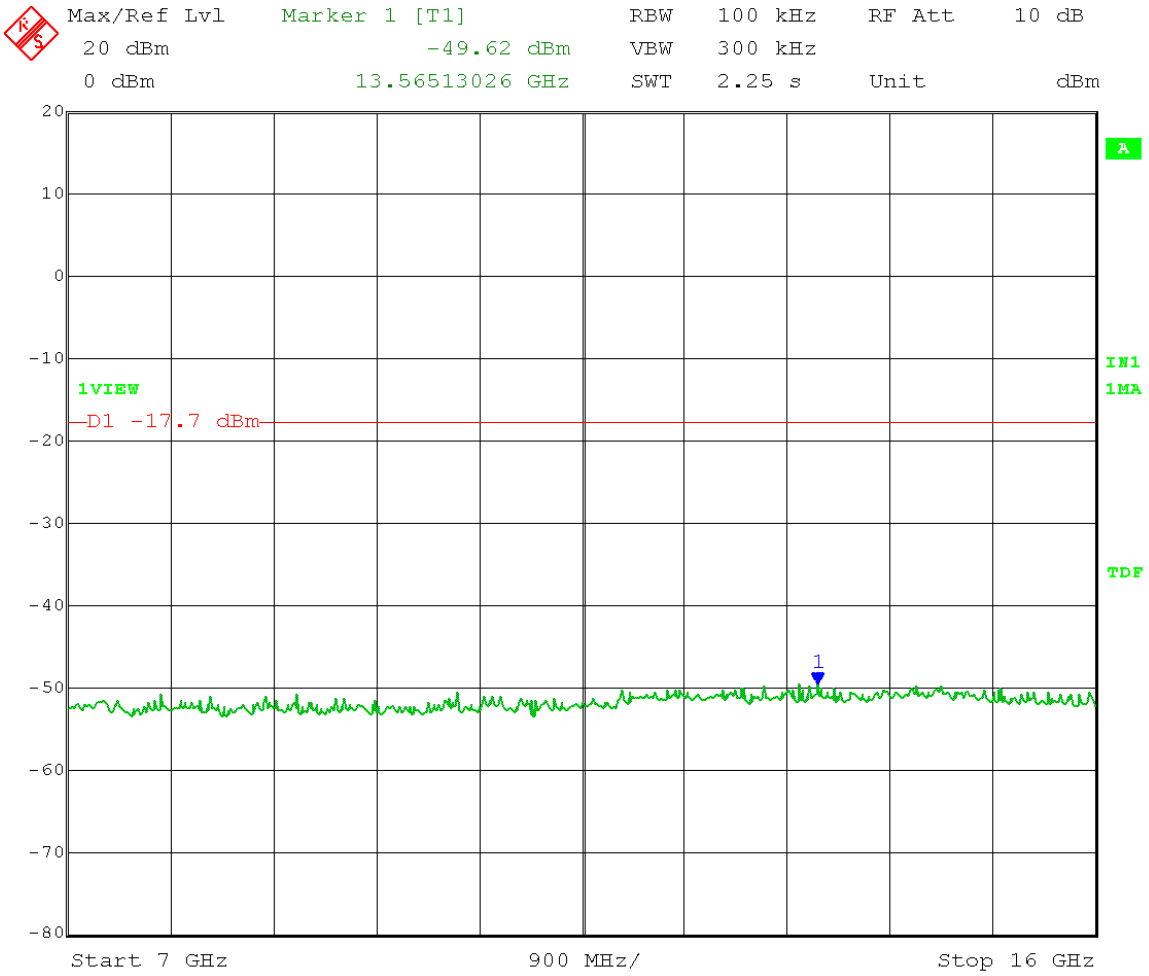
Date: 11.MAR.2014 10:43:18

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 ≥ 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



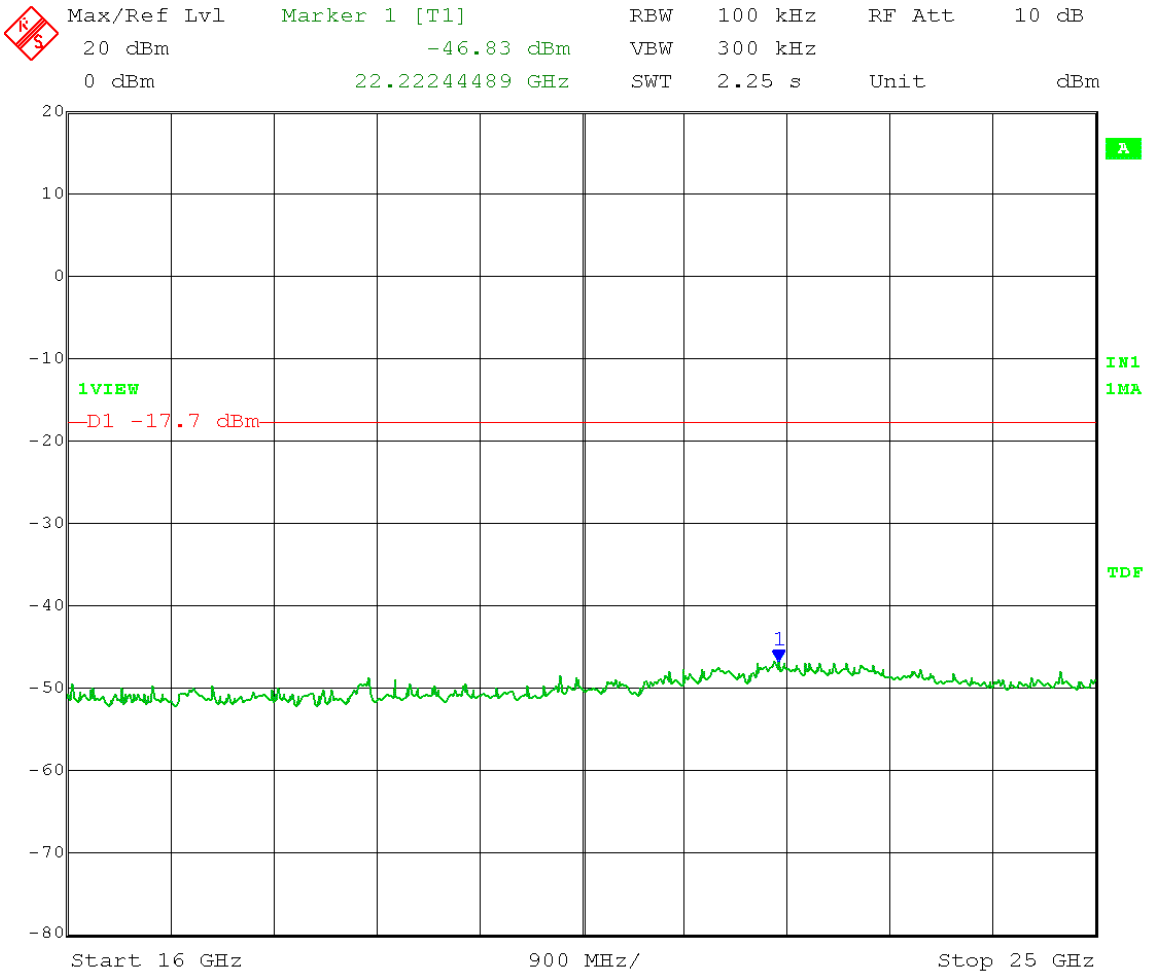
Date: 11.MAR.2014 10:37:11

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 ≥ 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



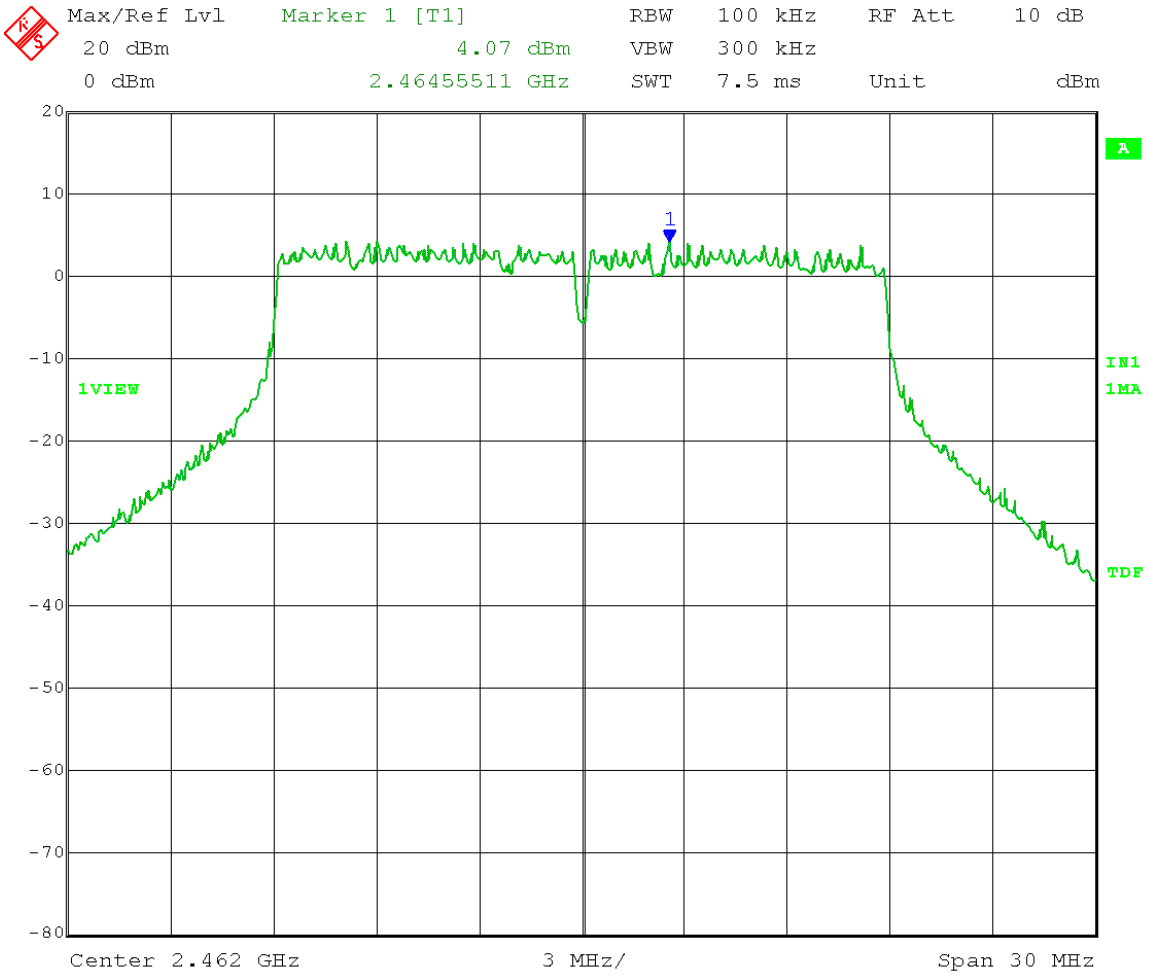
Date: 11.MAR.2014 10:39:38

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 ≥ 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



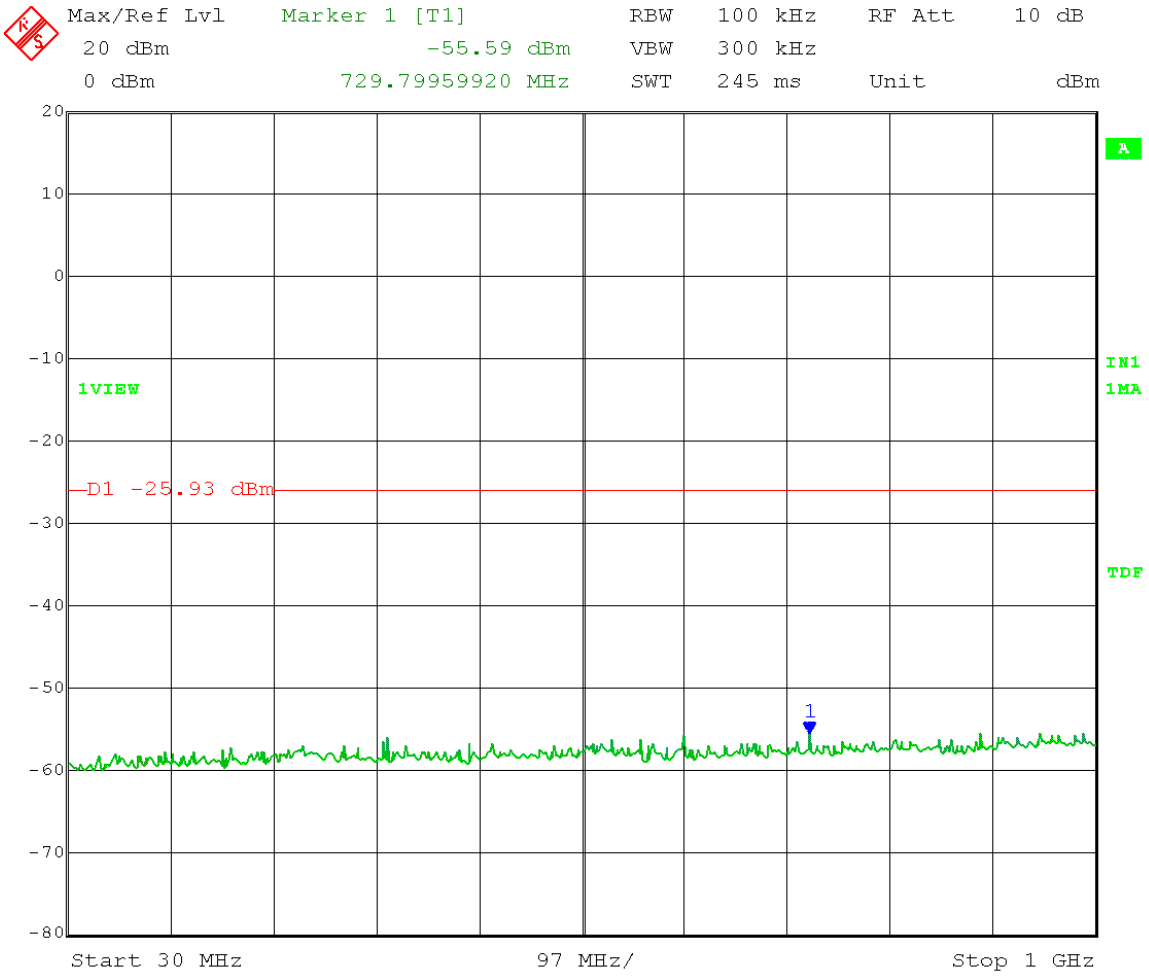
Date: 11.MAR.2014 10:41:15

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 ≥ 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



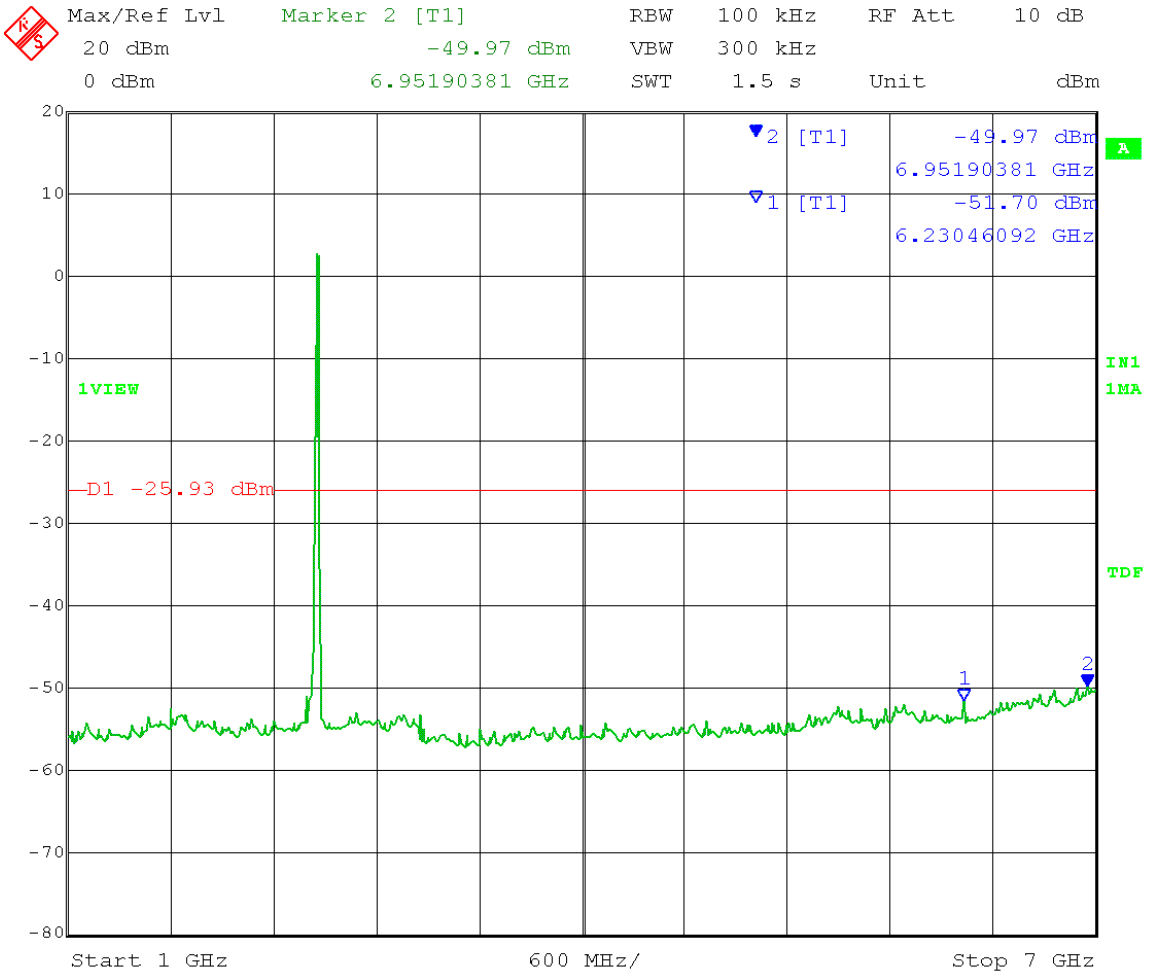
Date: 11.MAR.2014 09:27:34

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 ≥ 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



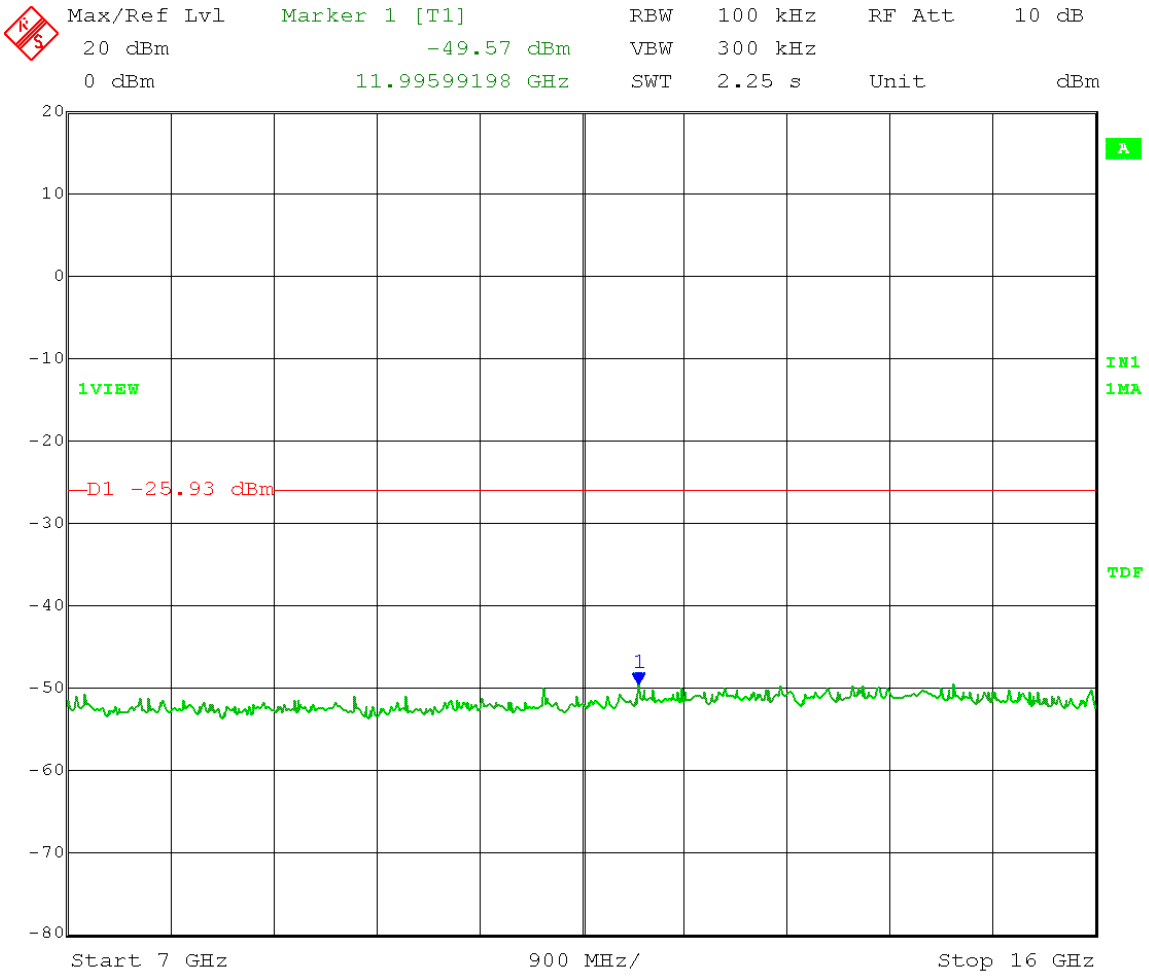
Date: 11.MAR.2014 09:35:19

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 ≥ 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



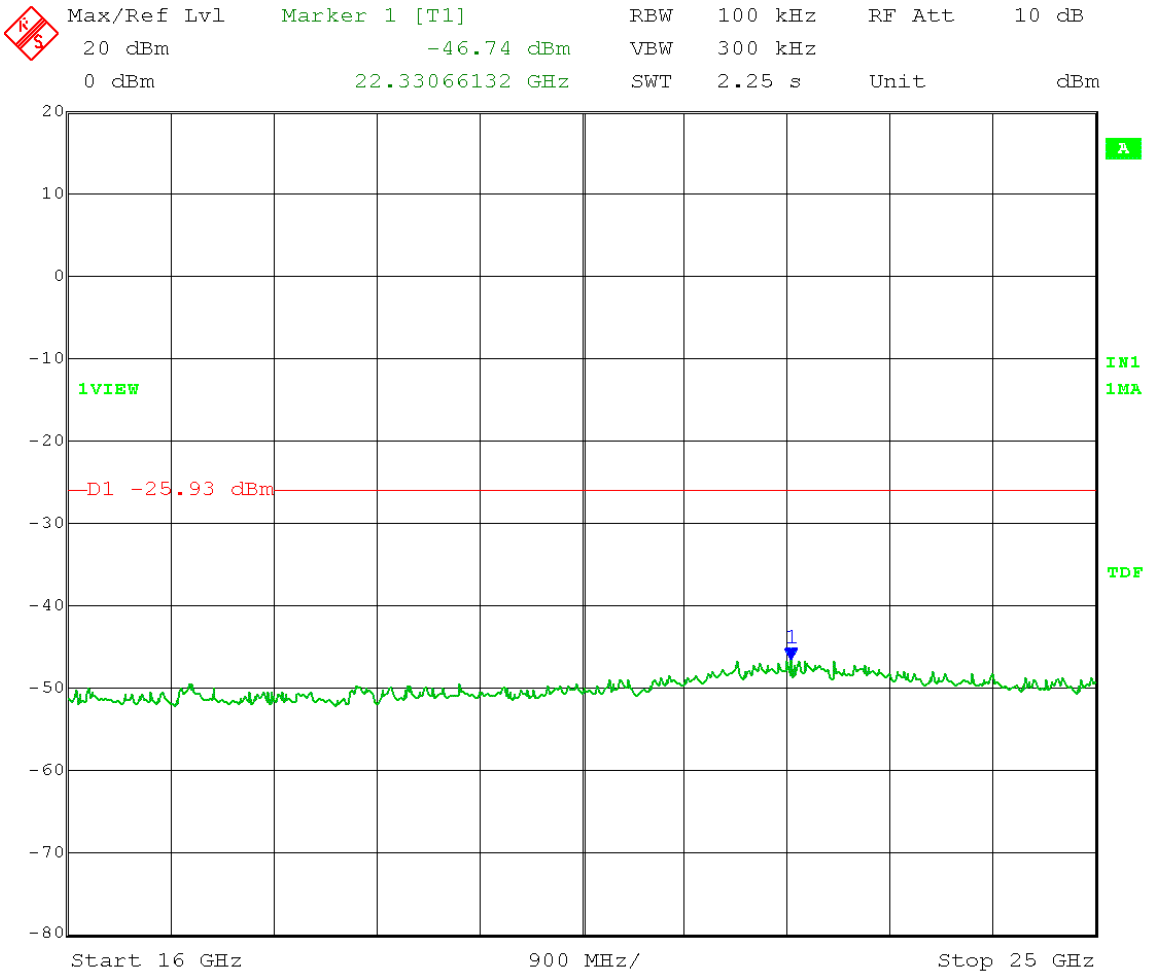
Date: 11.MAR.2014 09:31:13

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 ≥ 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



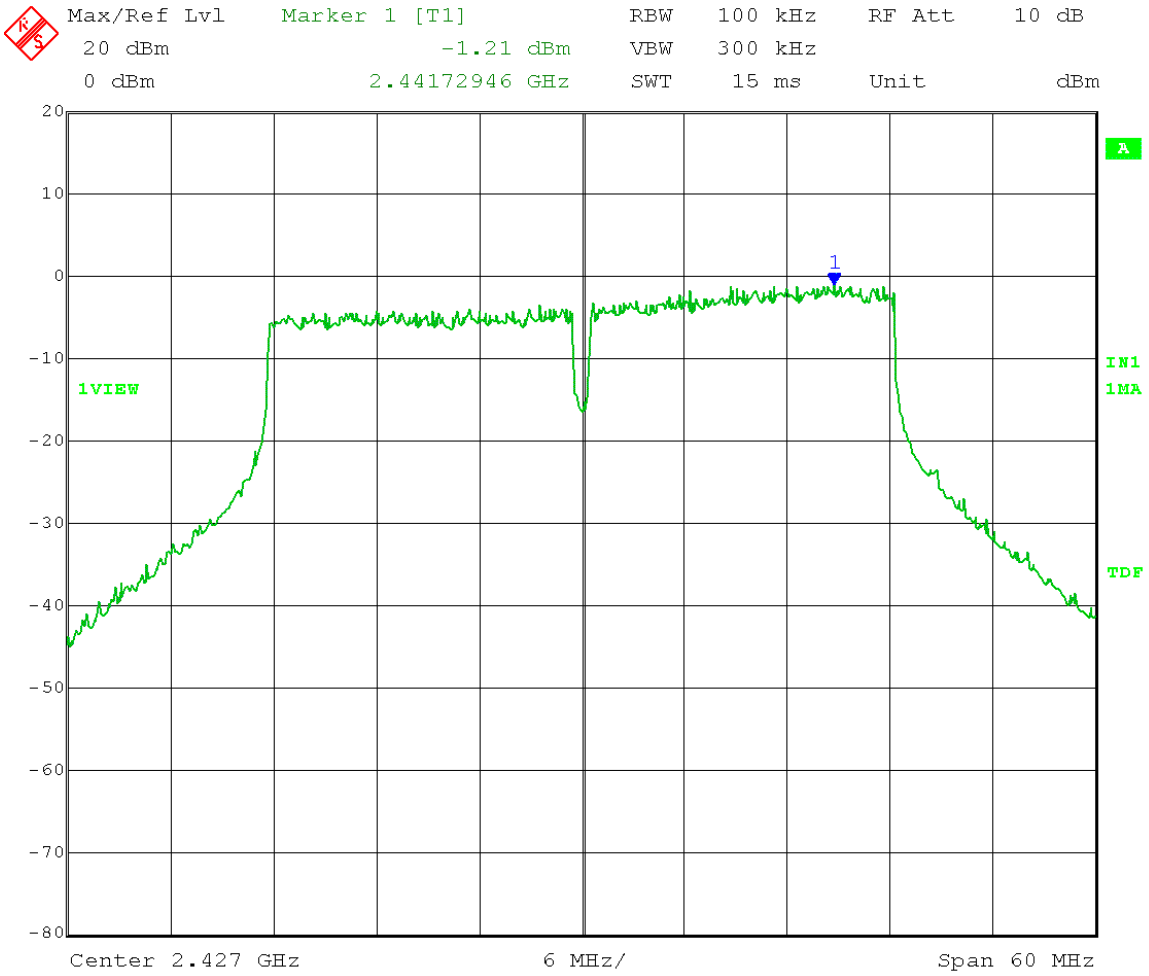
Date: 11.MAR.2014 09:32:47

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 ≥ 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



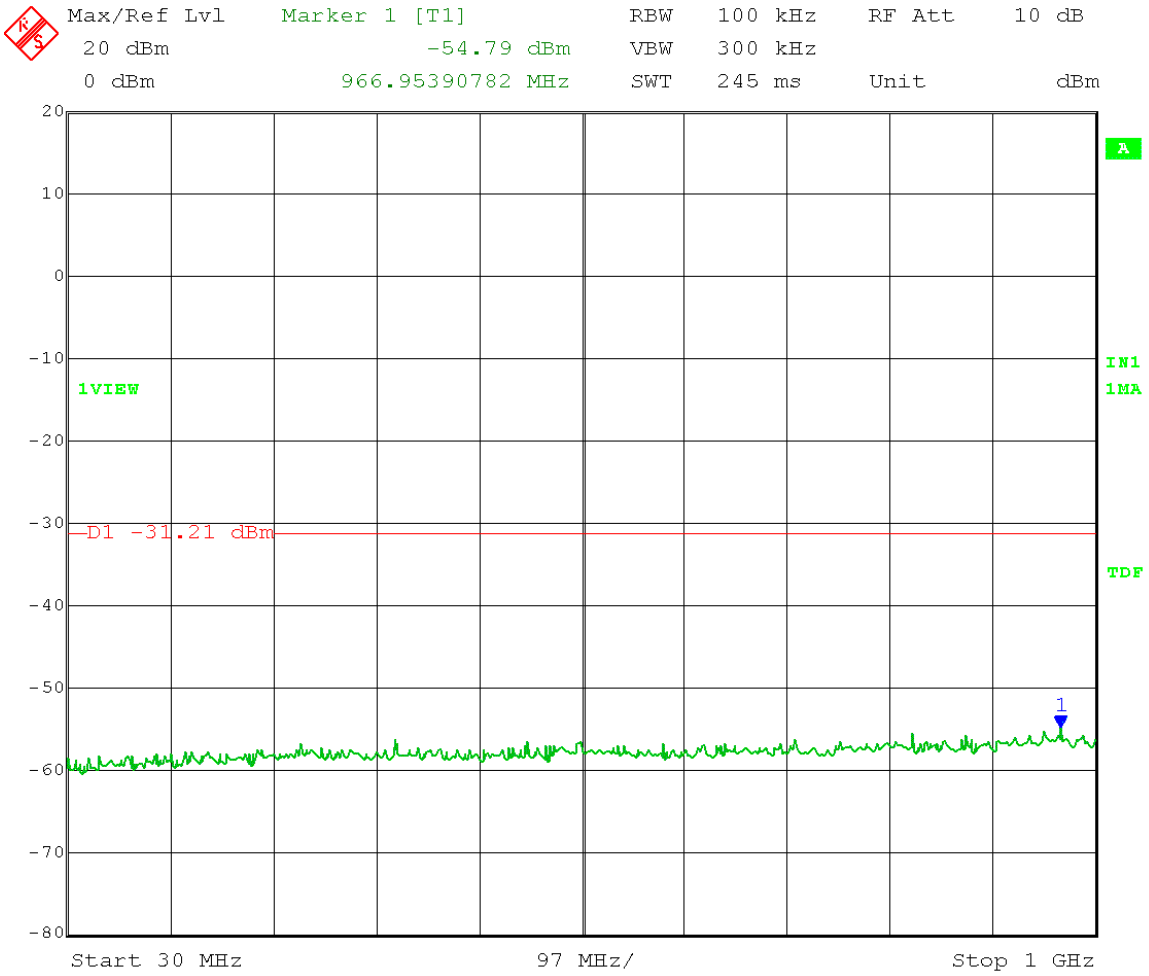
Date: 11.MAR.2014 09:34:12

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 ≥ 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



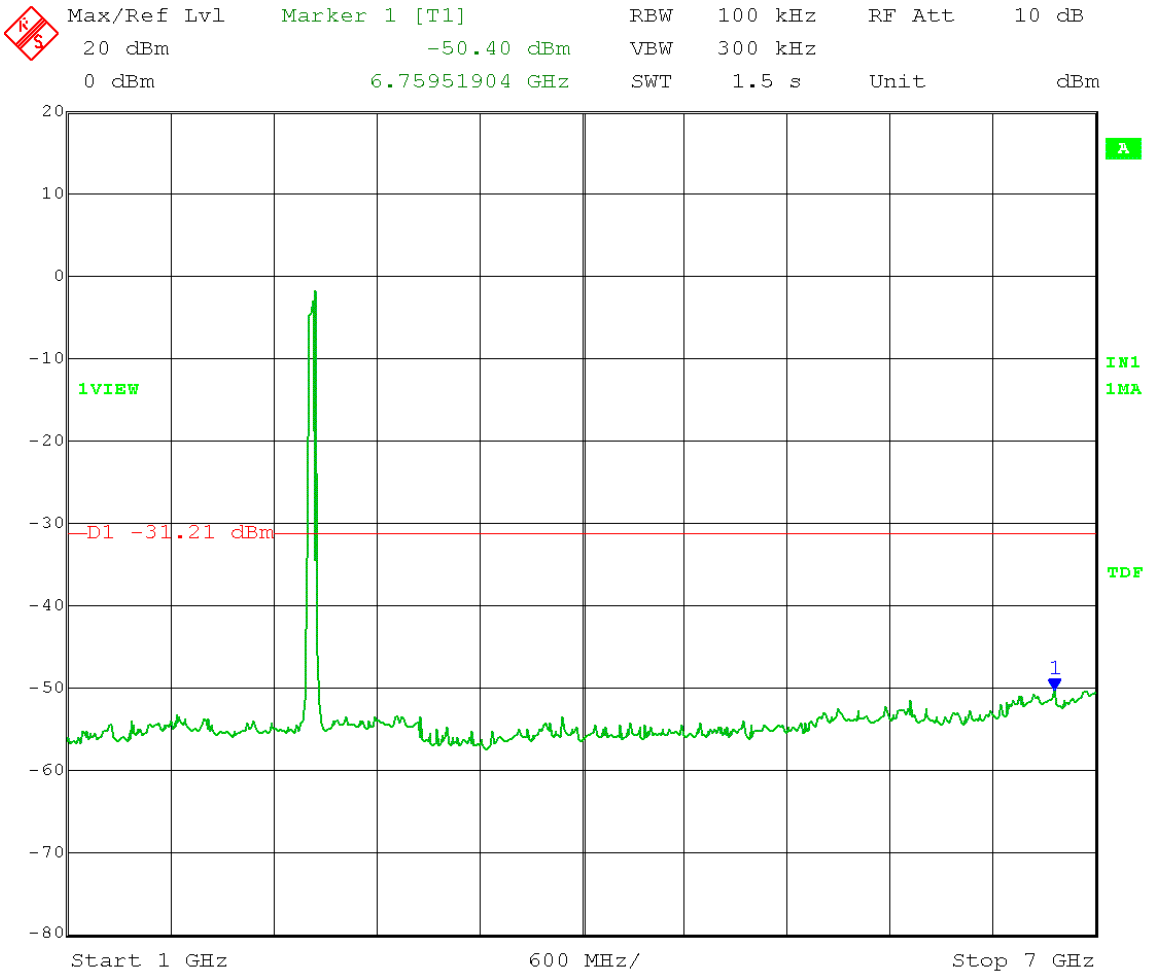
Date: 11.MAR.2014 12:07:48

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 ≥ 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



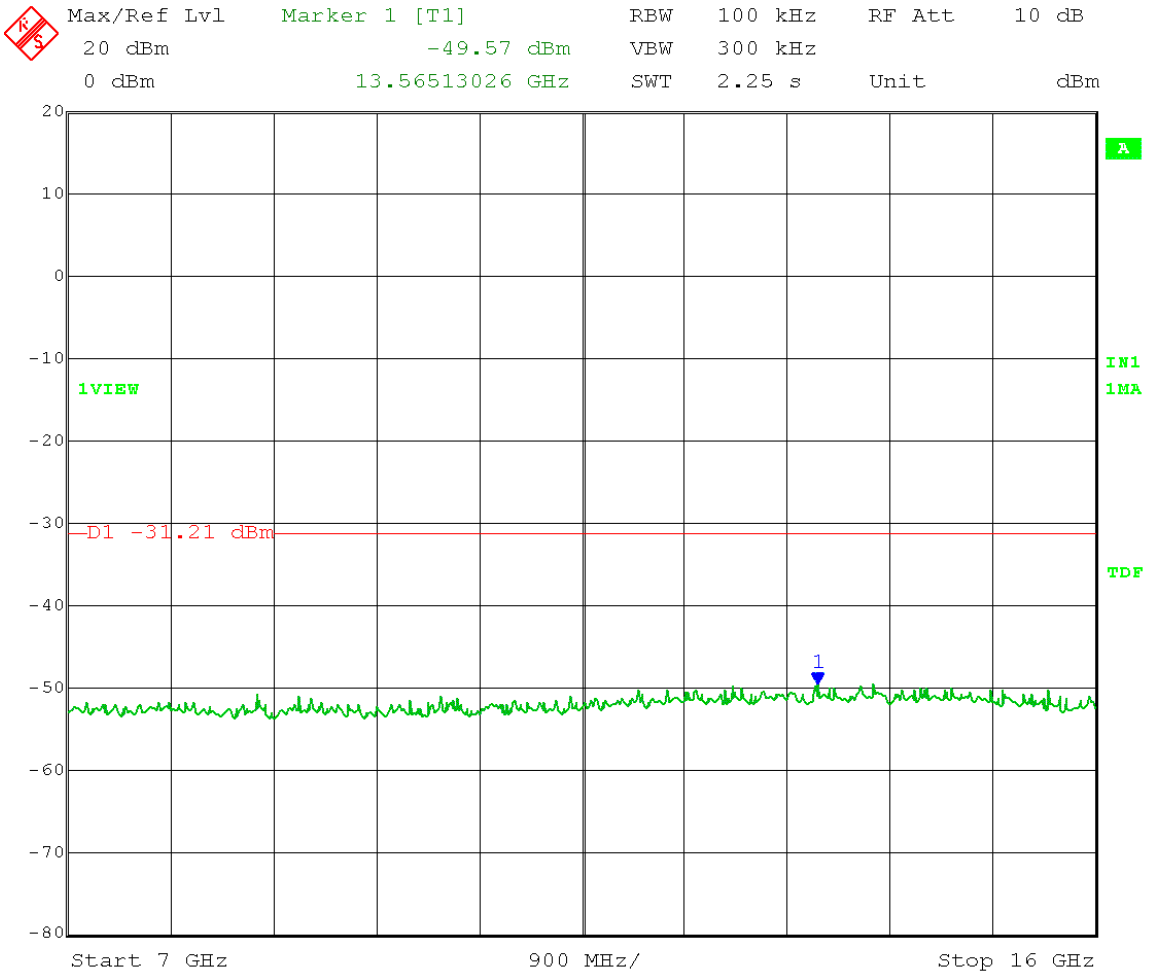
Date: 11.MAR.2014 12:17:06

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 ≥ 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



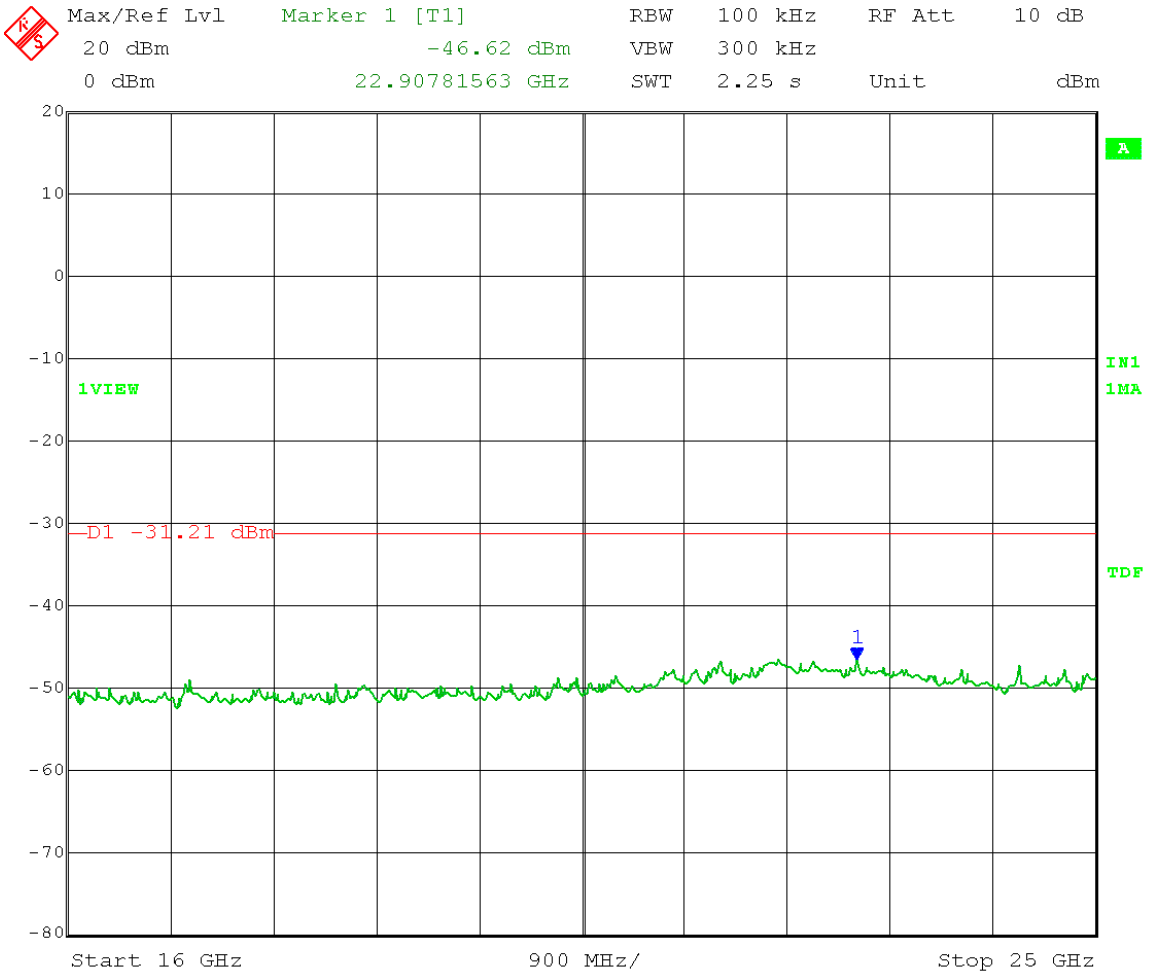
Date: 11.MAR.2014 12:09:58

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 ≥ 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



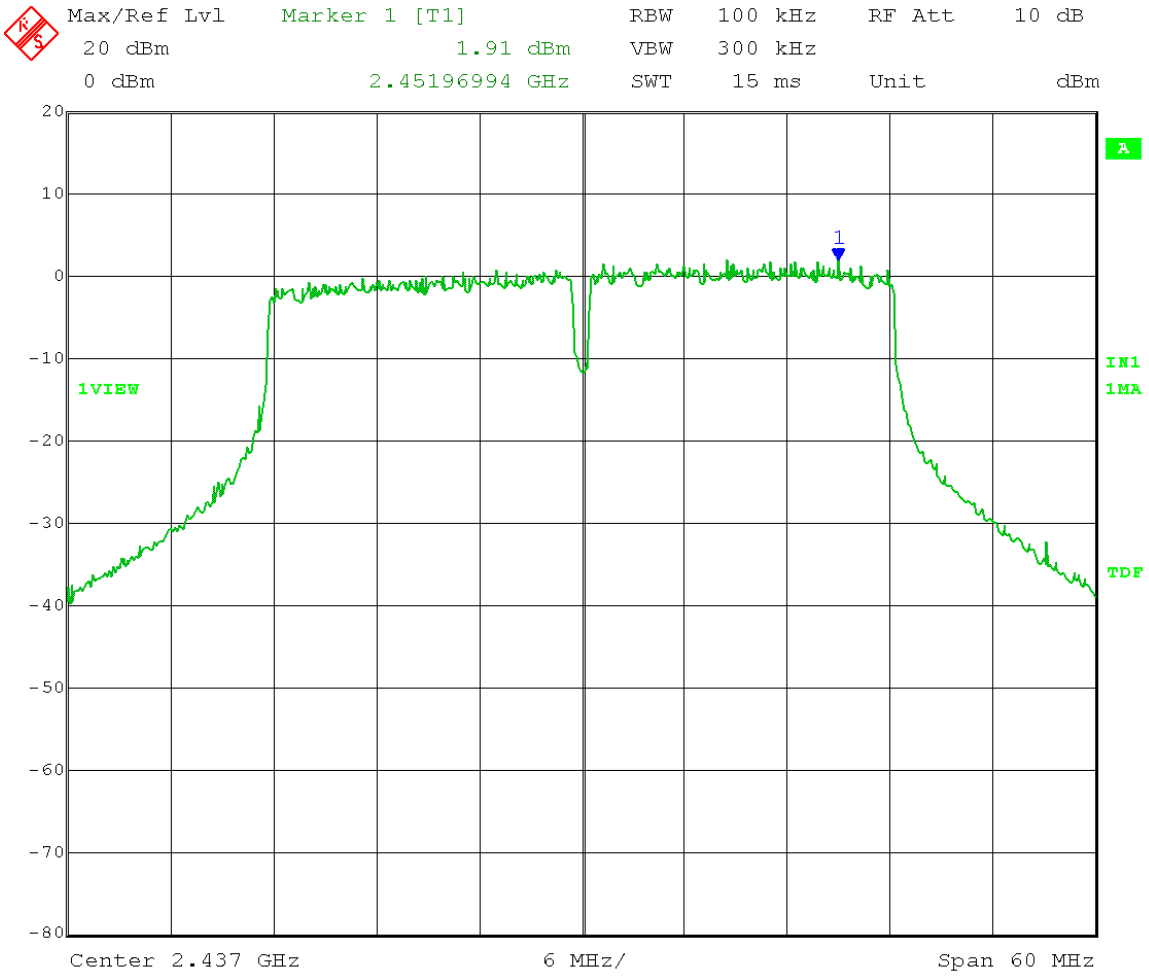
Date: 11.MAR.2014 12:10:53

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 ≥ 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



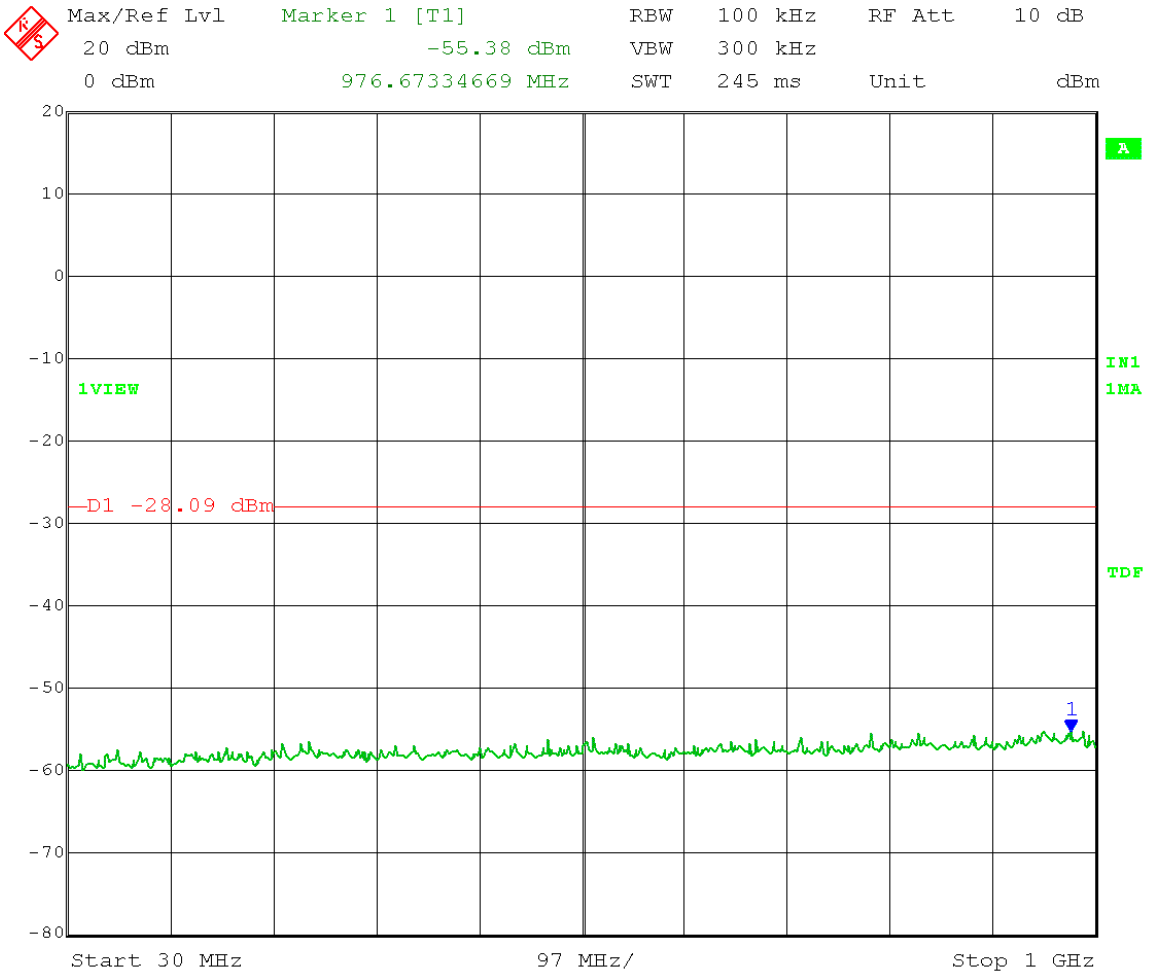
Date: 11.MAR.2014 12:12:21

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 ≥ 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



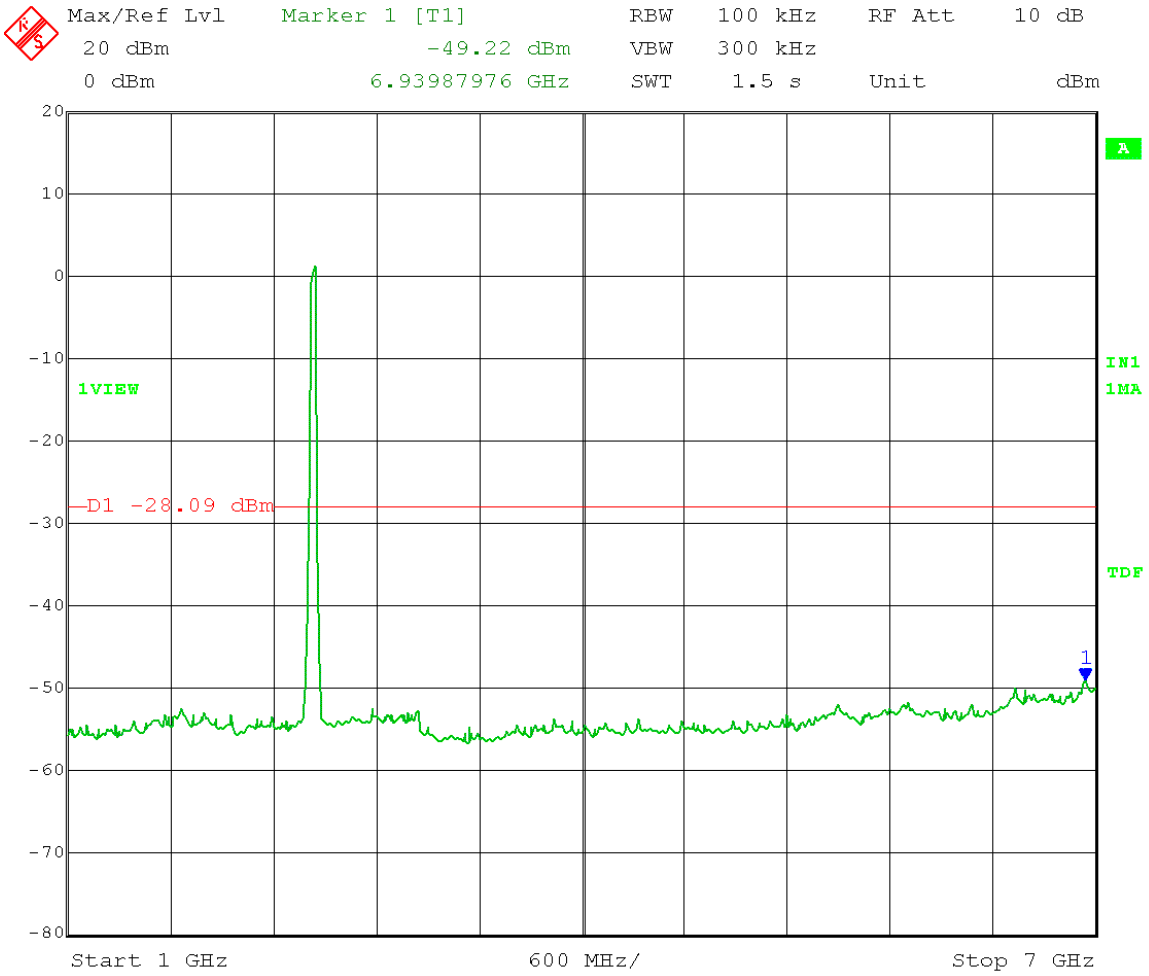
Date: 11.MAR.2014 12:19:23

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 ≥ 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



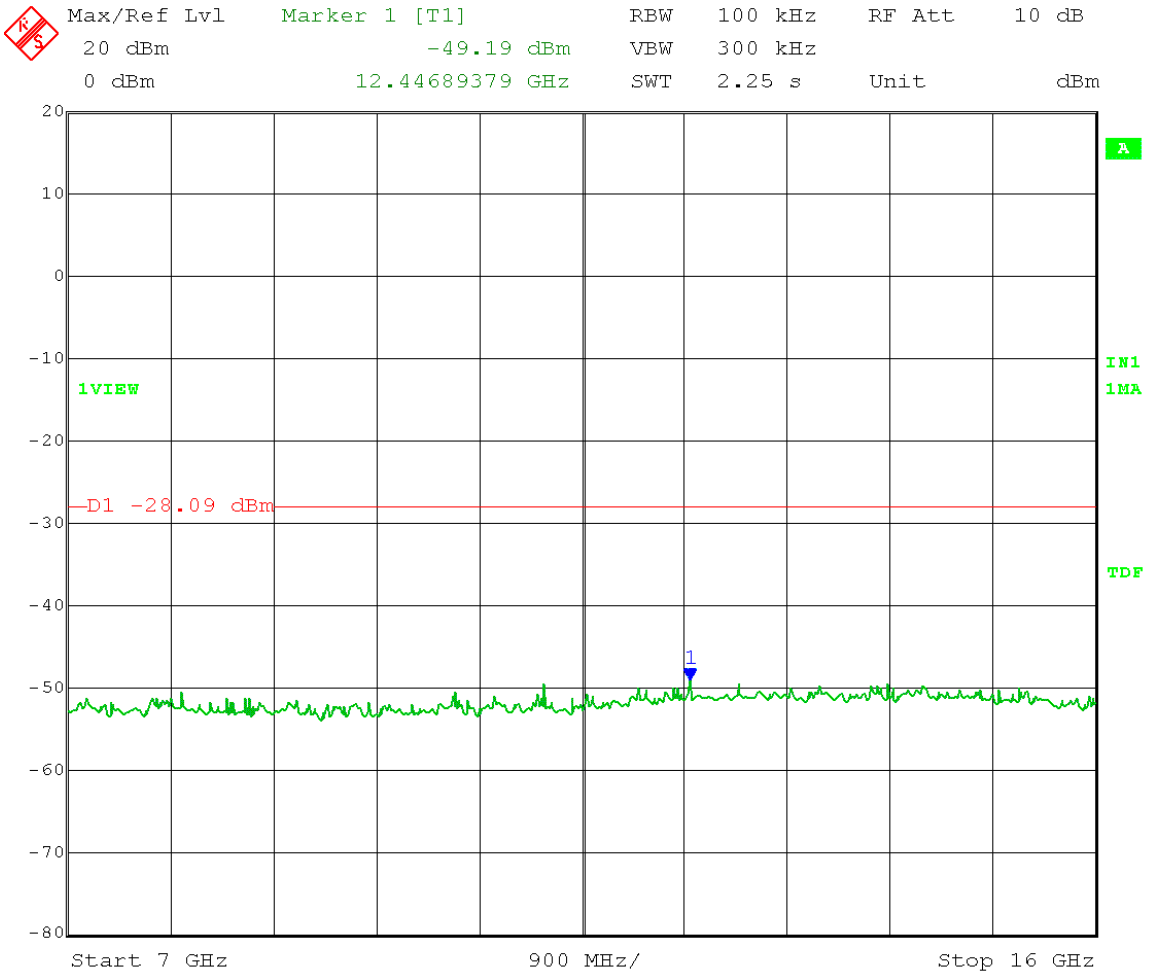
Date: 11.MAR.2014 12:26:58

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 ≥ 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



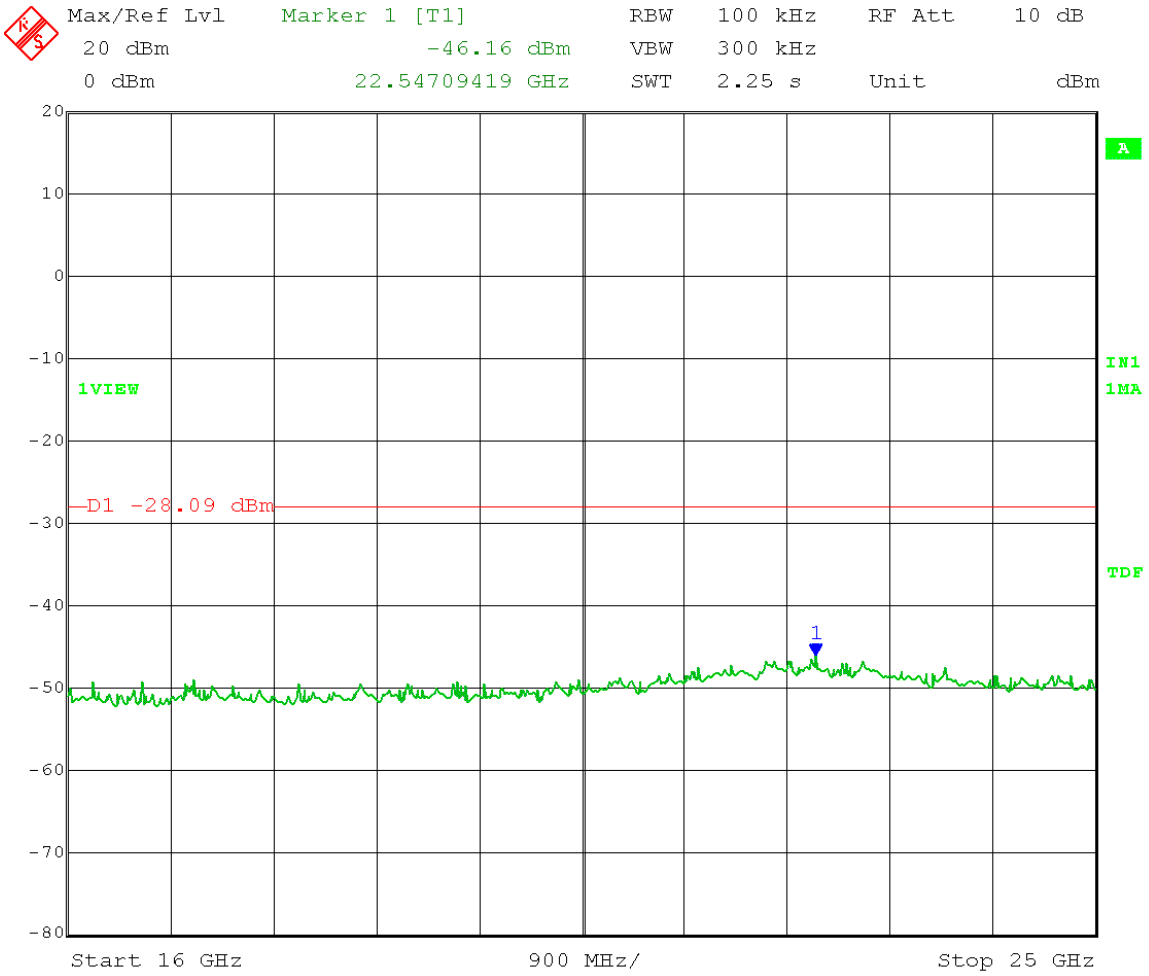
Date: 11.MAR.2014 12:22:09

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 ≥ 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



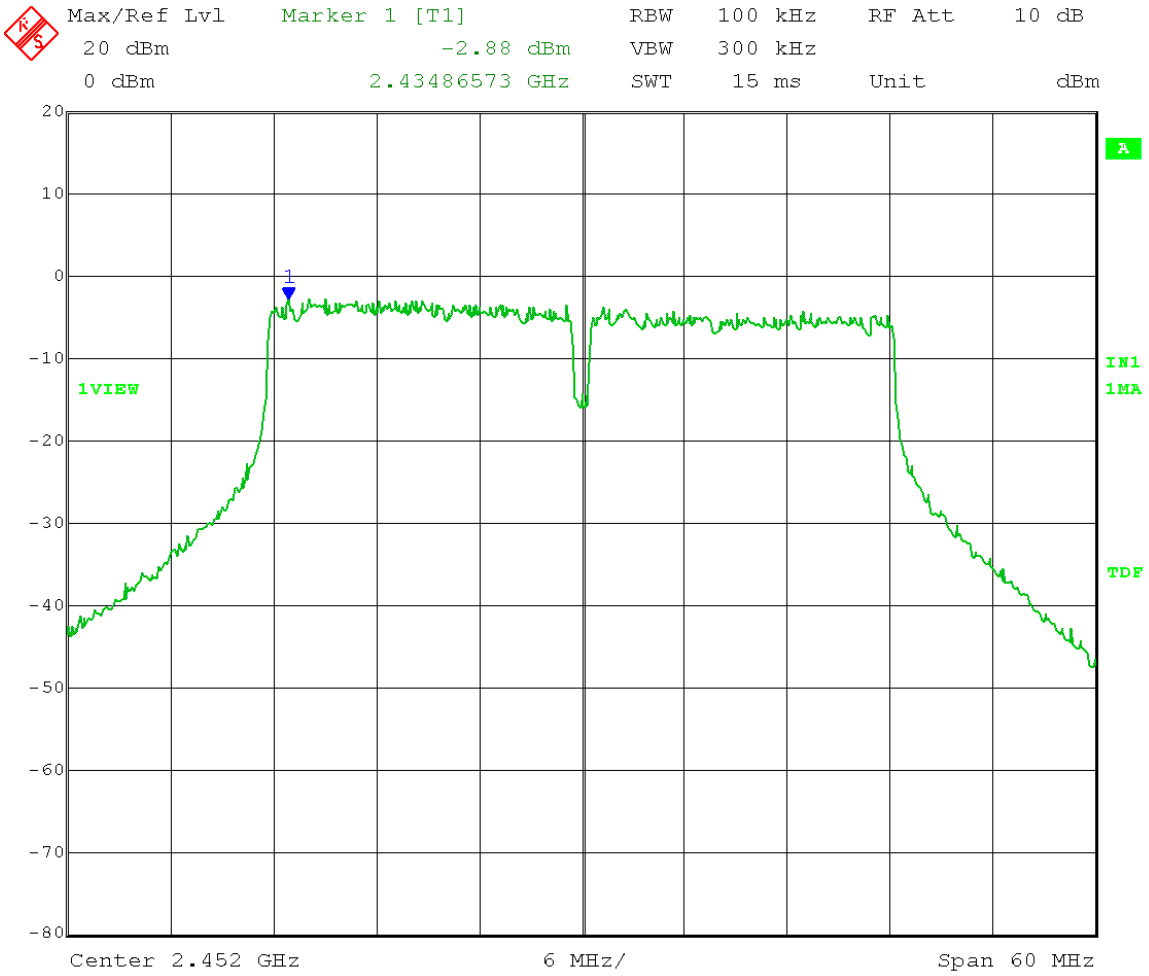
Date: 11.MAR.2014 12:23:25

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 ≥ 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



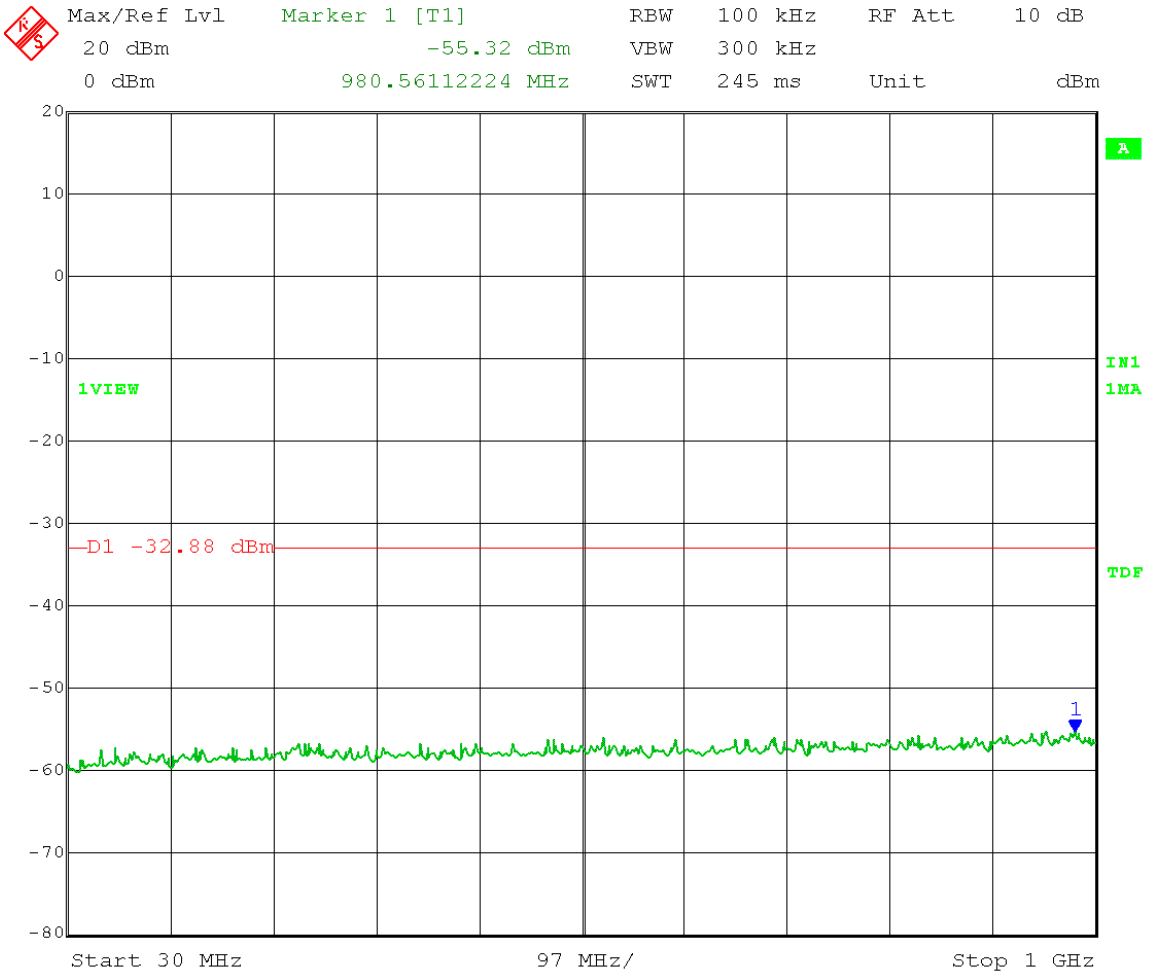
Date: 11.MAR.2014 12:24:57

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 ≥ 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



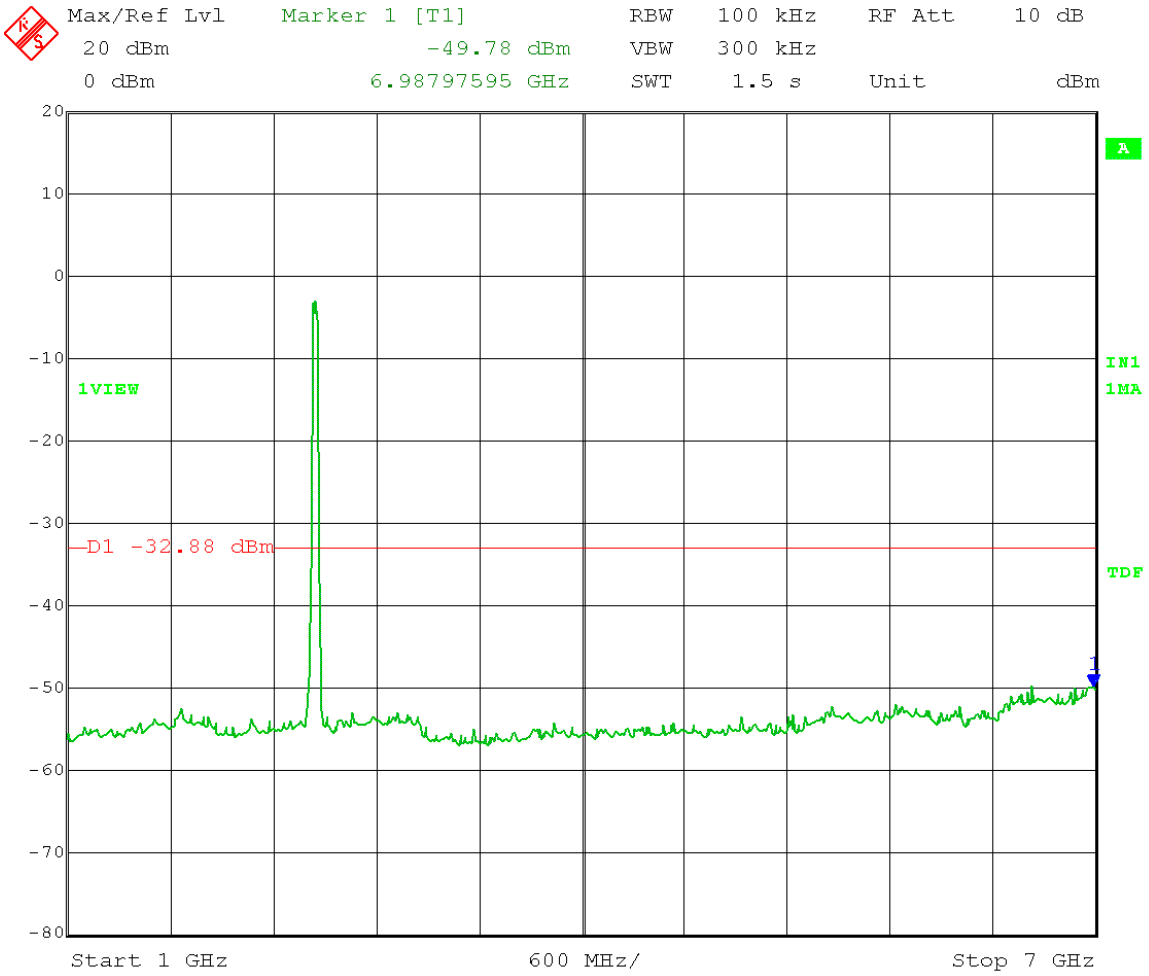
Date: 11.MAR.2014 11:58:56

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 ≥ 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



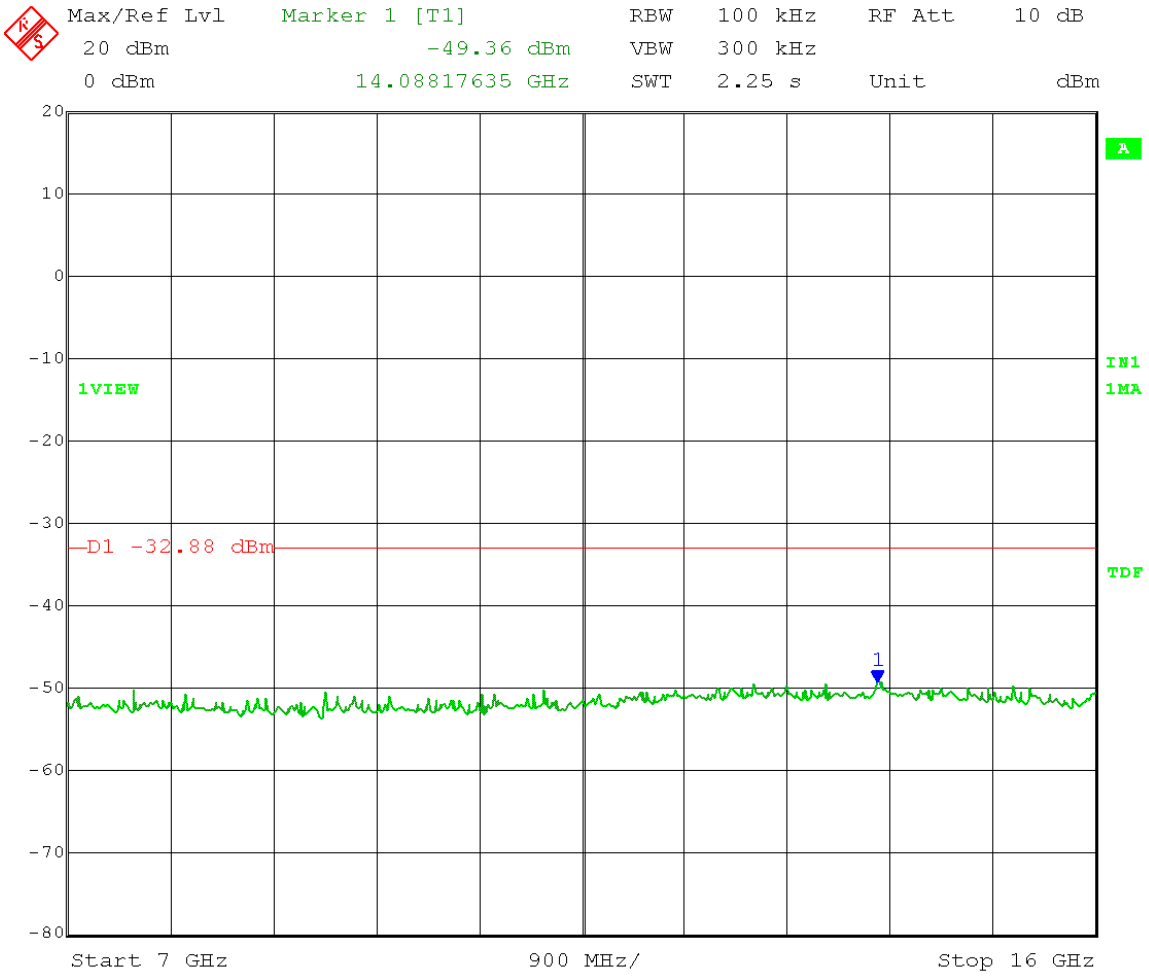
Date: 11.MAR.2014 12:05:21

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 ≥ 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



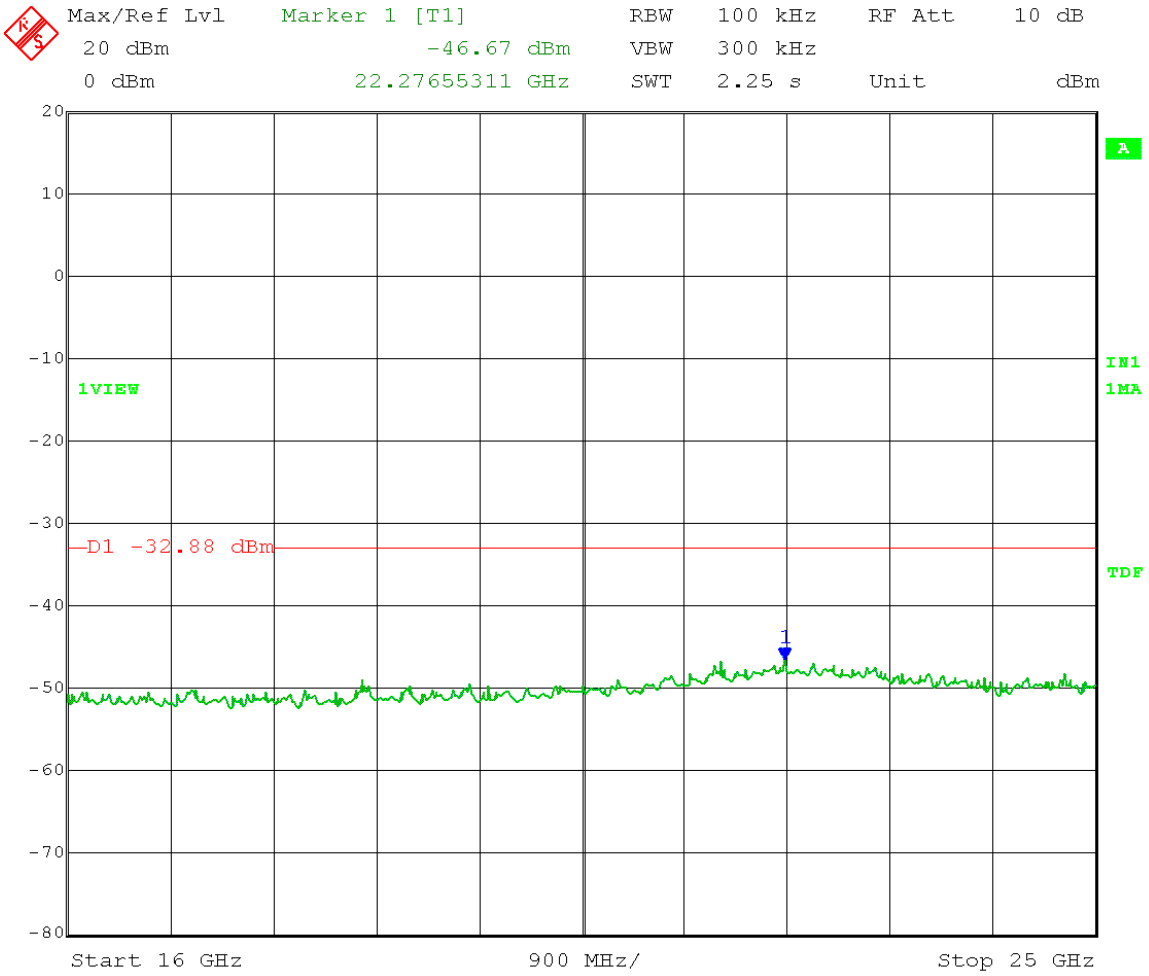
Date: 11.MAR.2014 12:01:17

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 ≥ 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



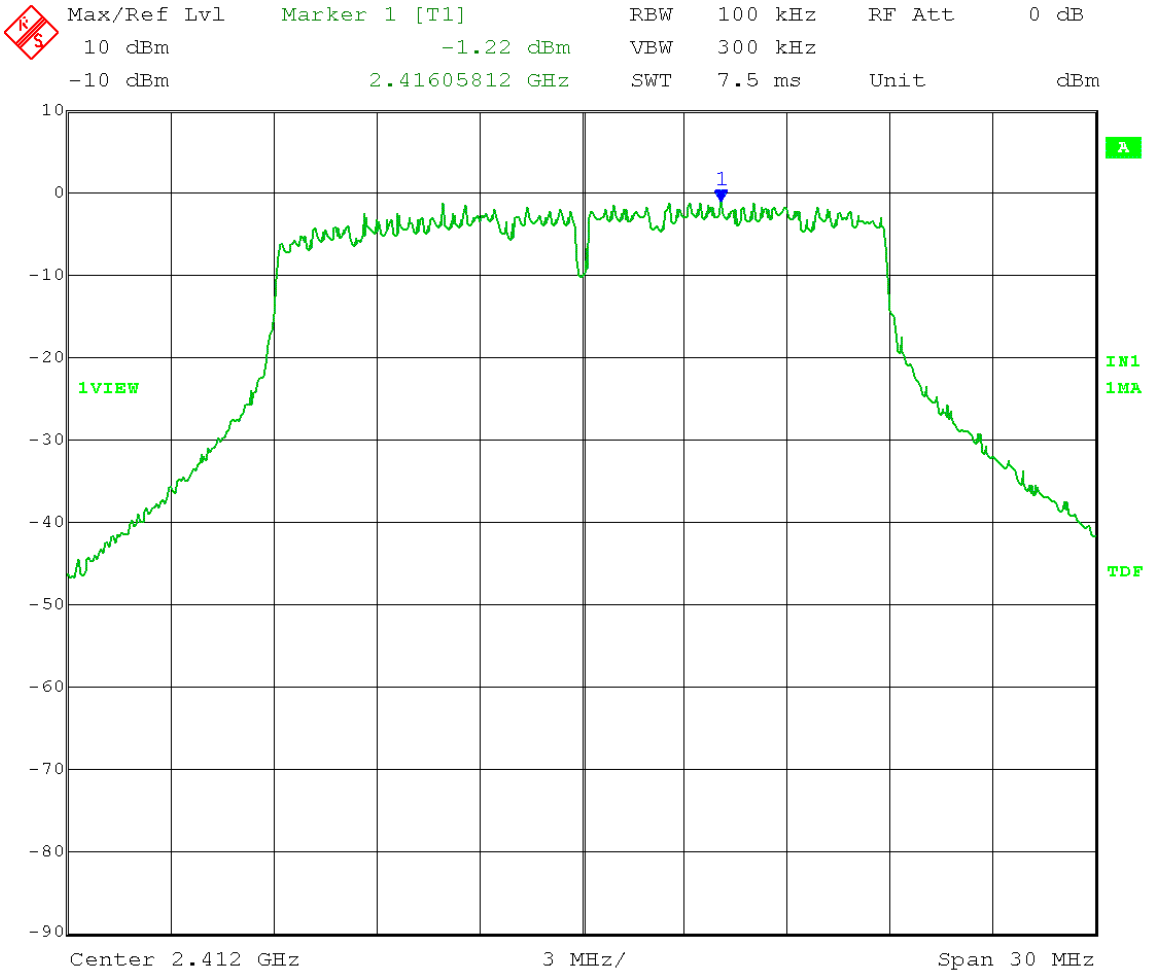
Date: 11.MAR.2014 12:02:25

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 ≥ 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



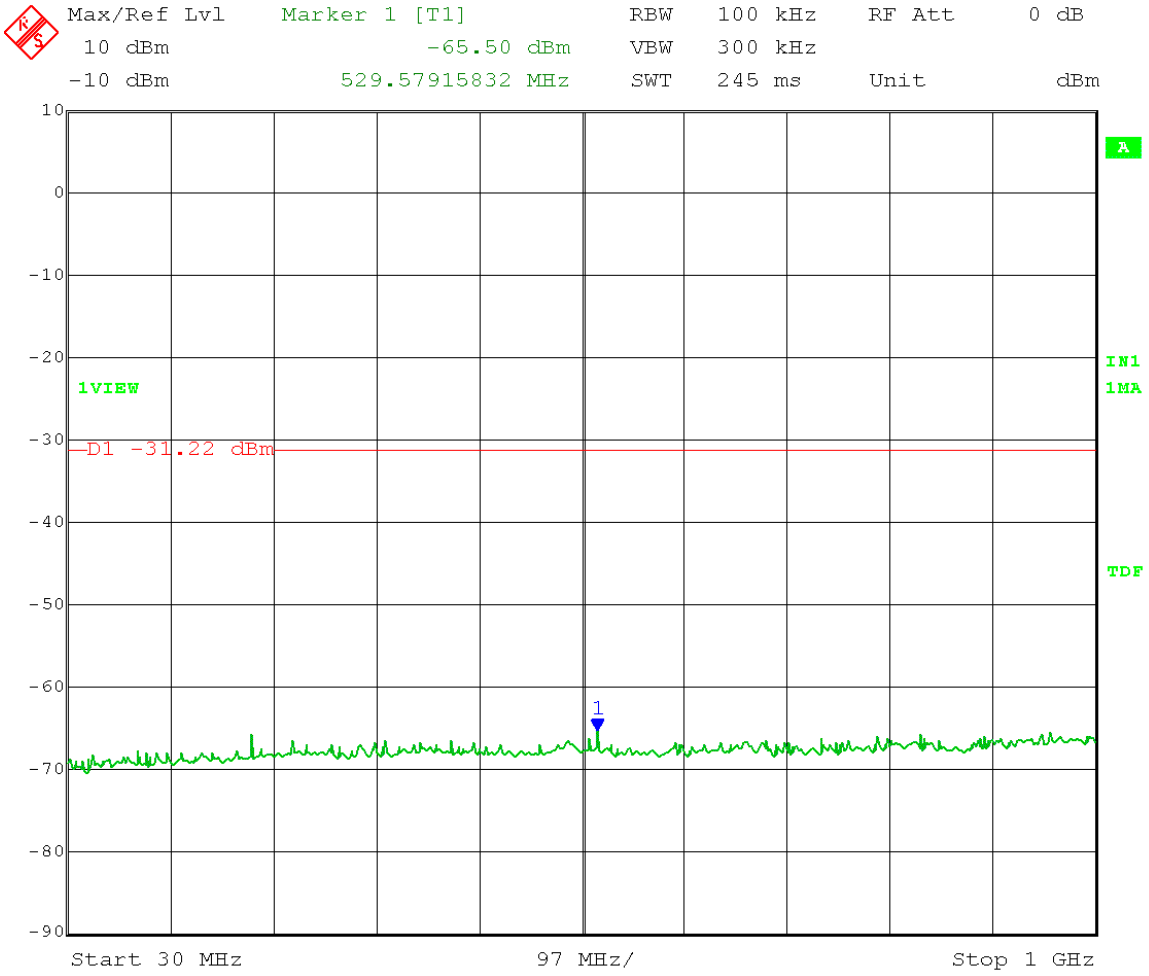
Date: 11.MAR.2014 12:03:28

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 ≥ 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



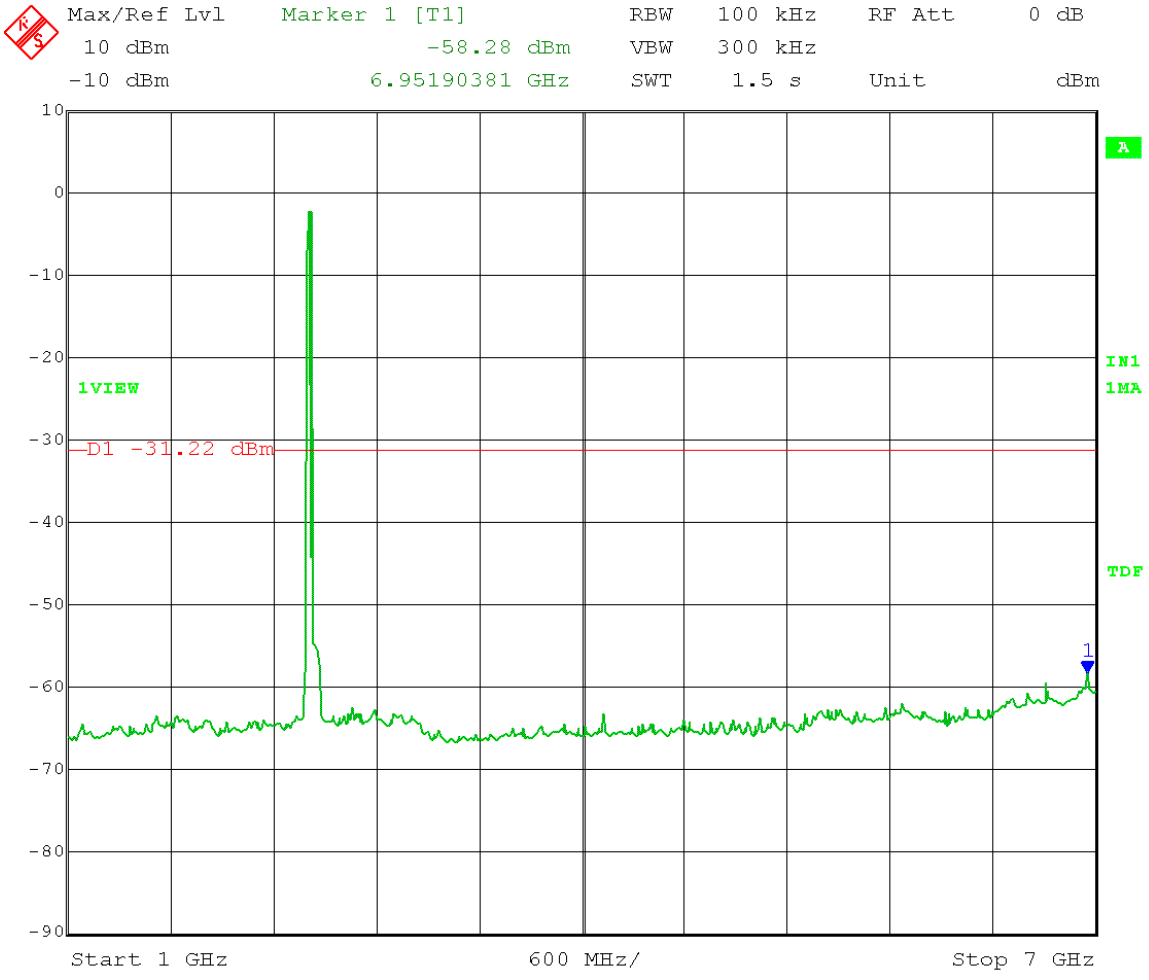
Date: 13.MAR.2014 09:31:10

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 ≥ 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



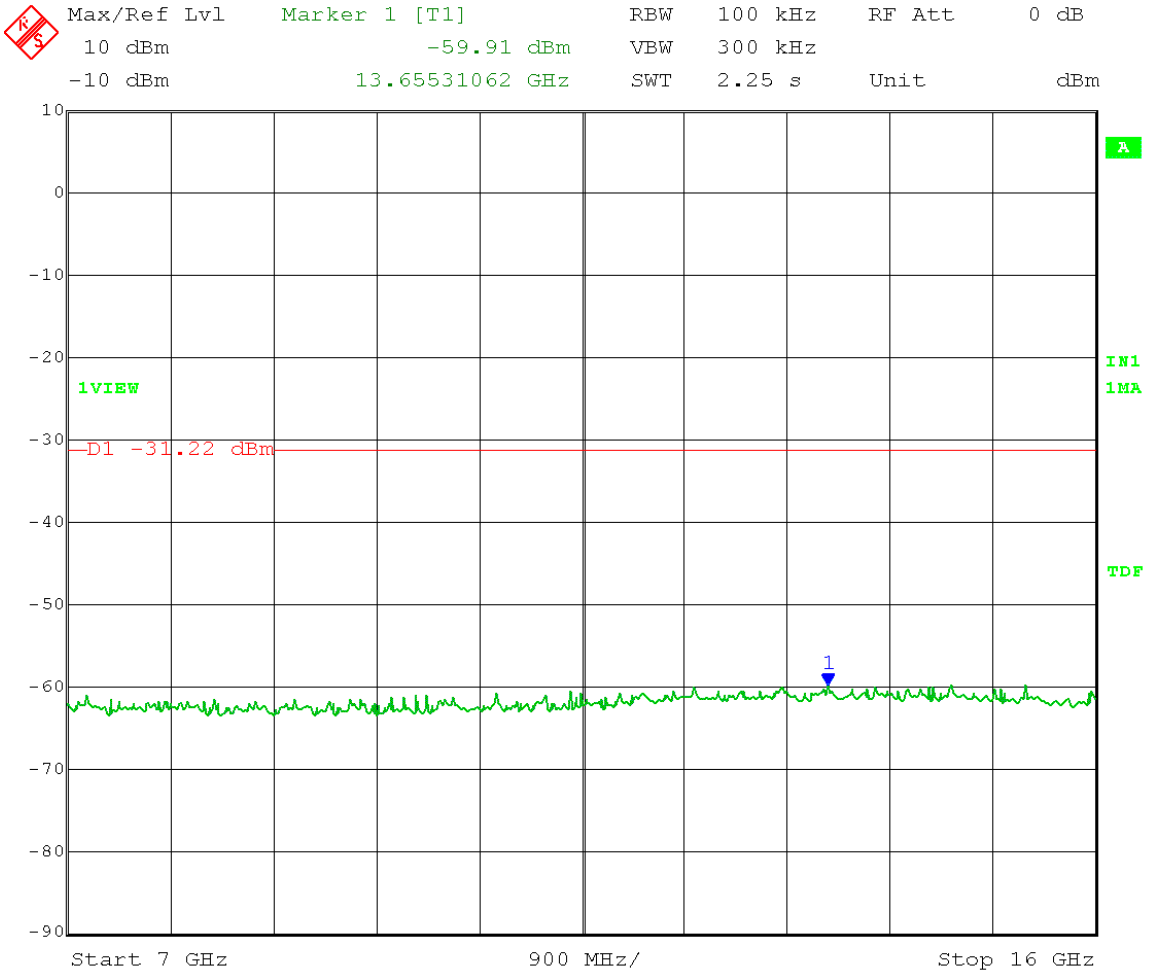
Date: 13.MAR.2014 09:37:20

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 ≥ 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



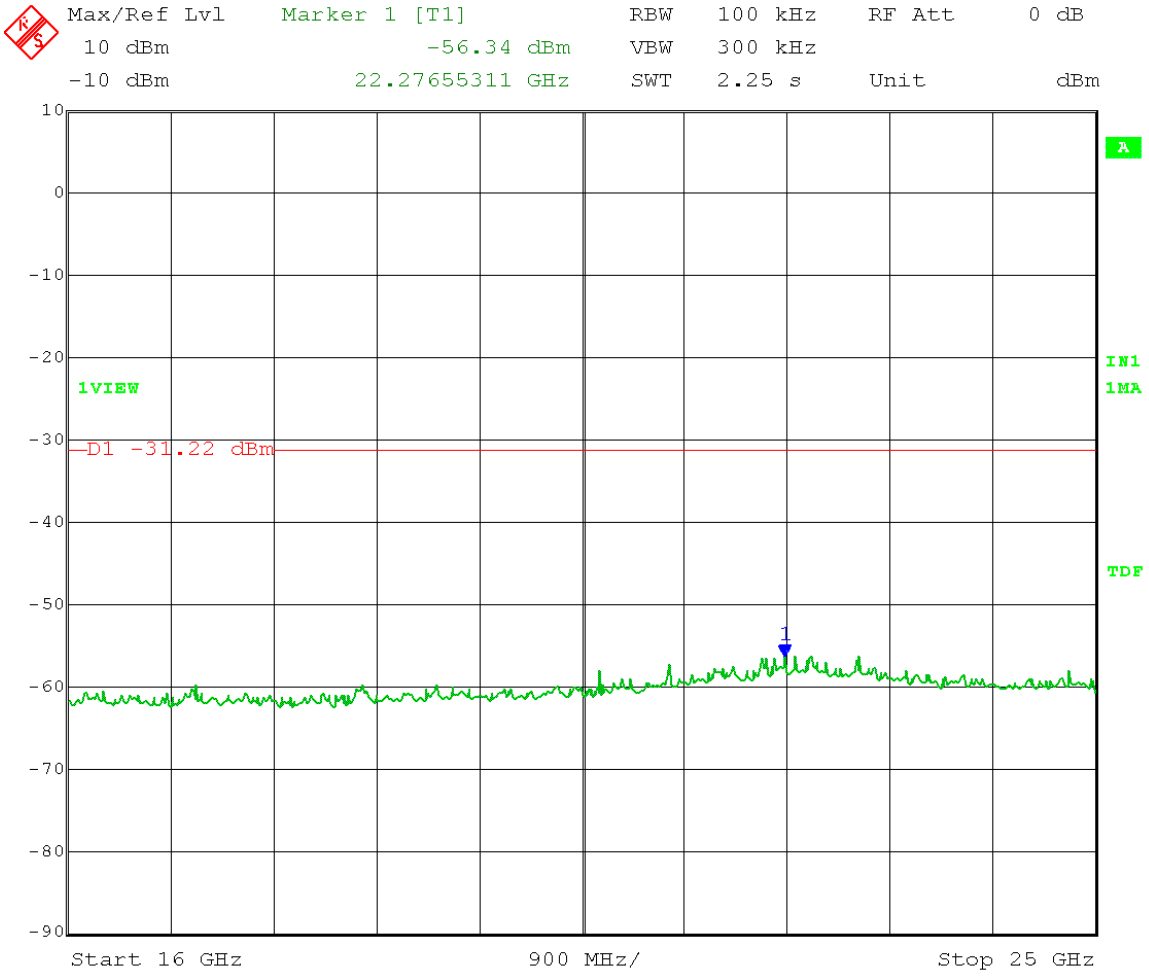
Date: 13.MAR.2014 09:33:00

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 ≥ 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



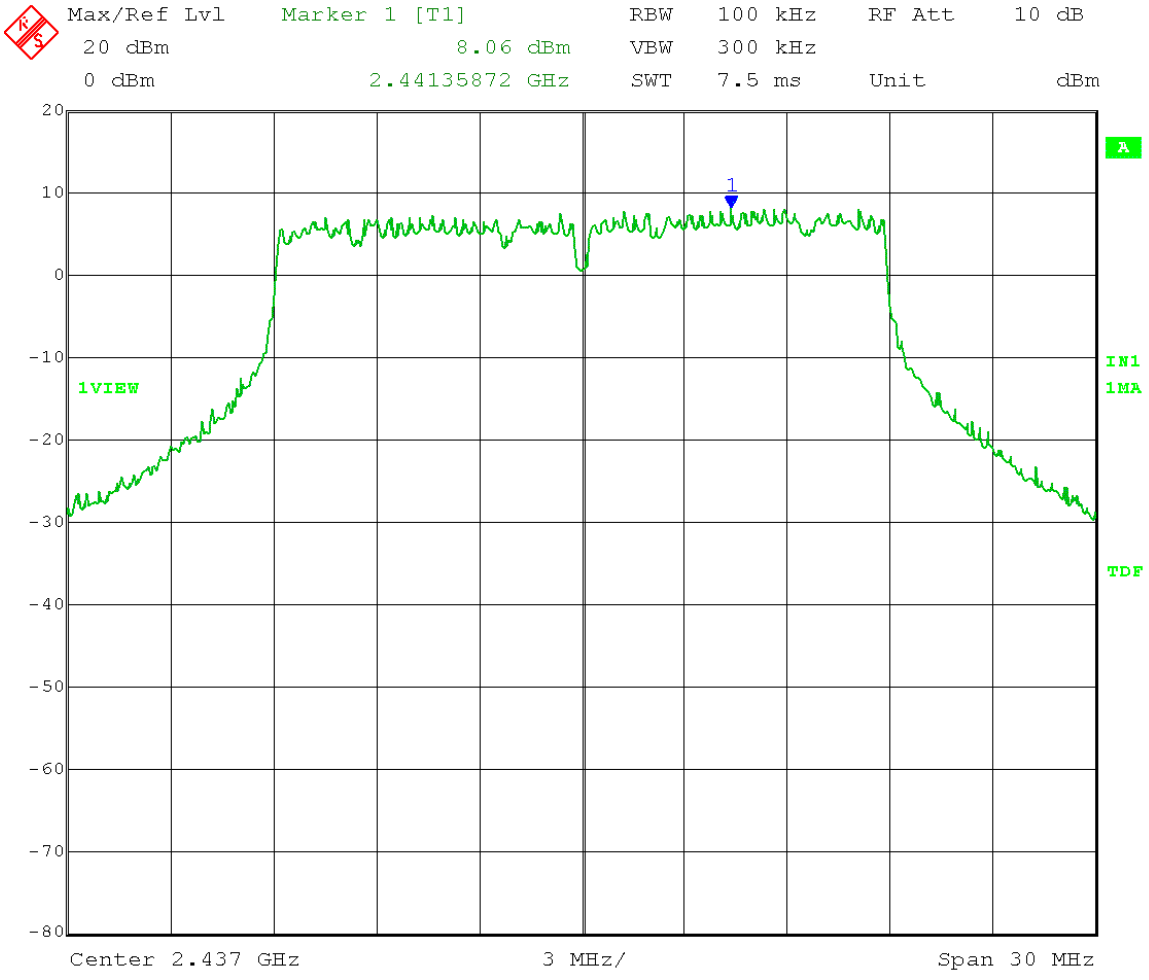
Date: 13.MAR.2014 09:34:28

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 ≥ 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



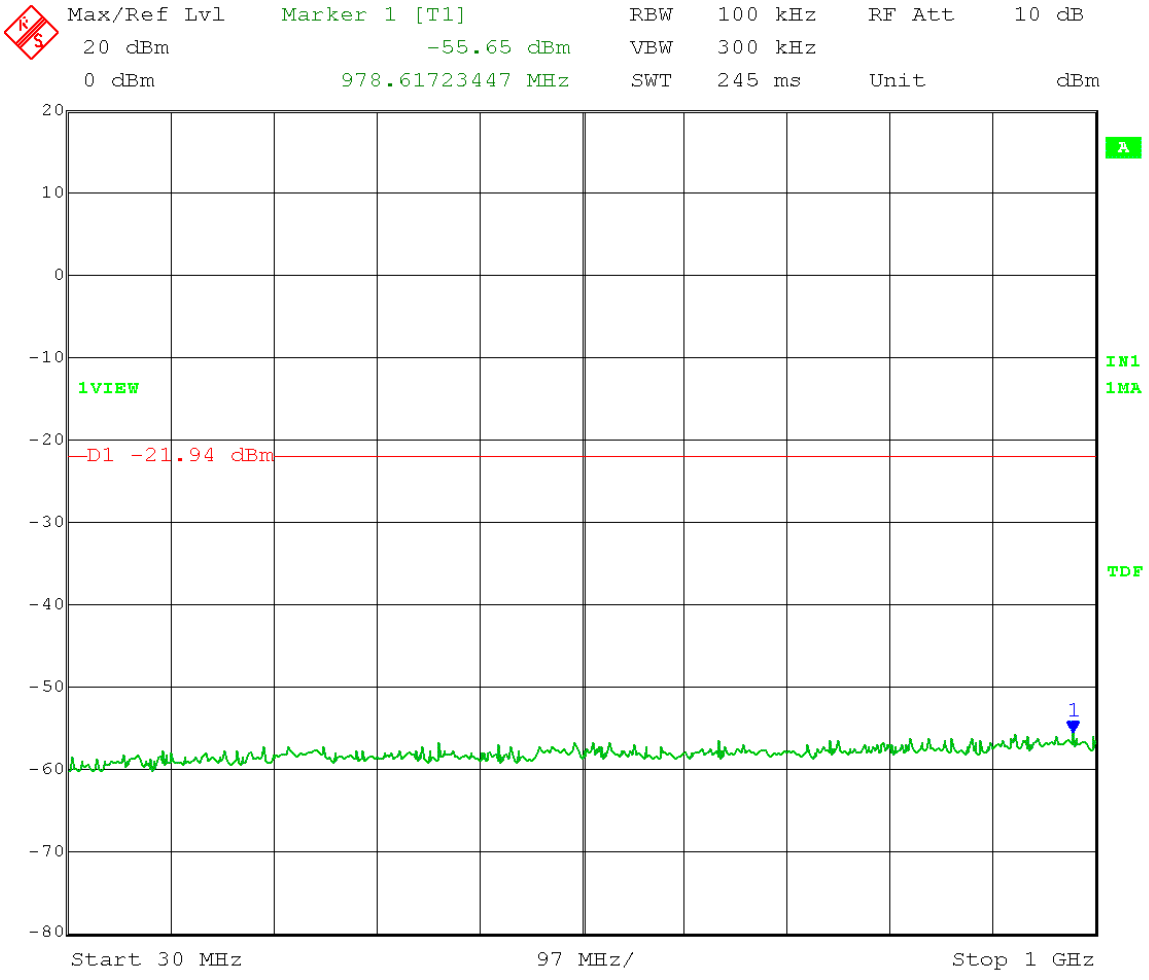
Date: 13.MAR.2014 09:35:52

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 ≥ 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



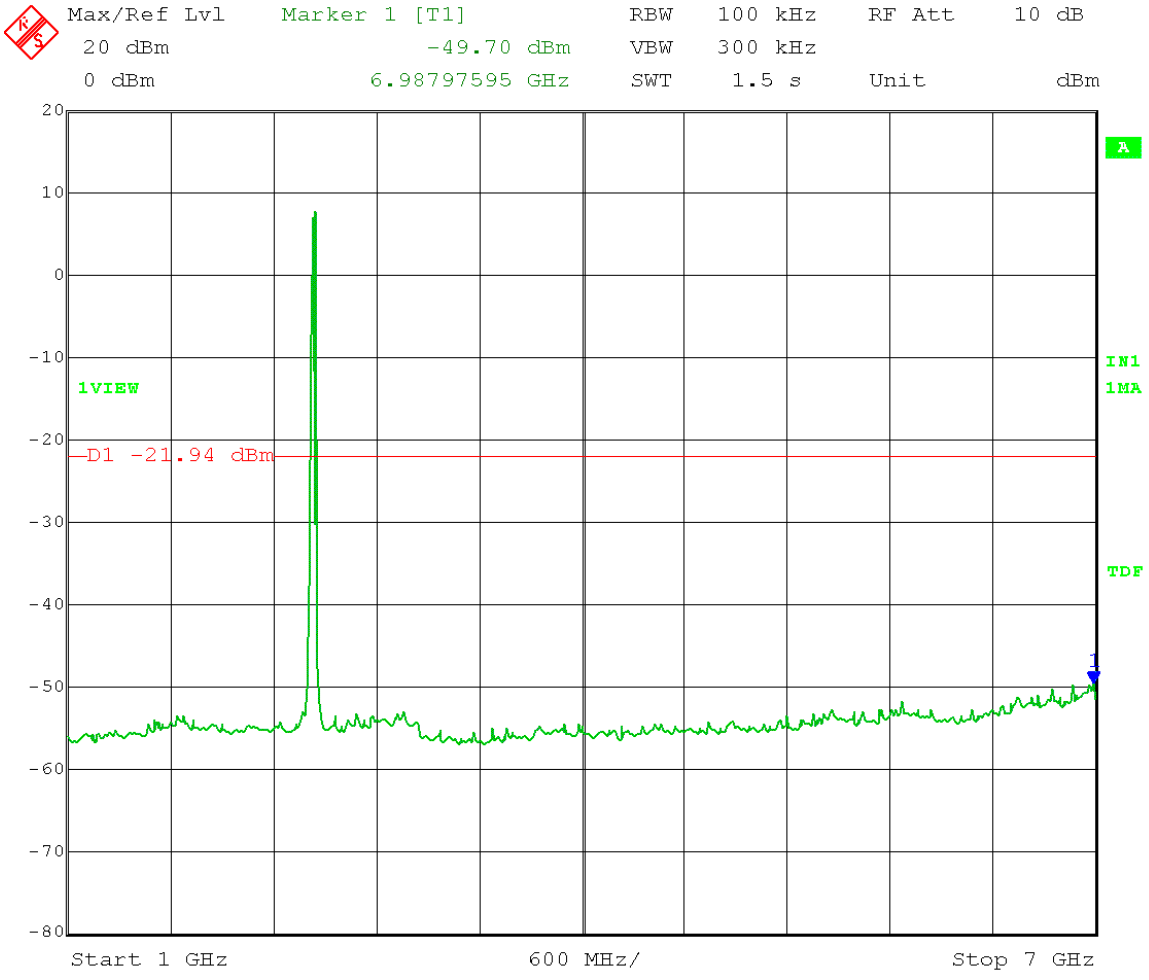
Date: 13.MAR.2014 09:12:44

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 ≥ 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



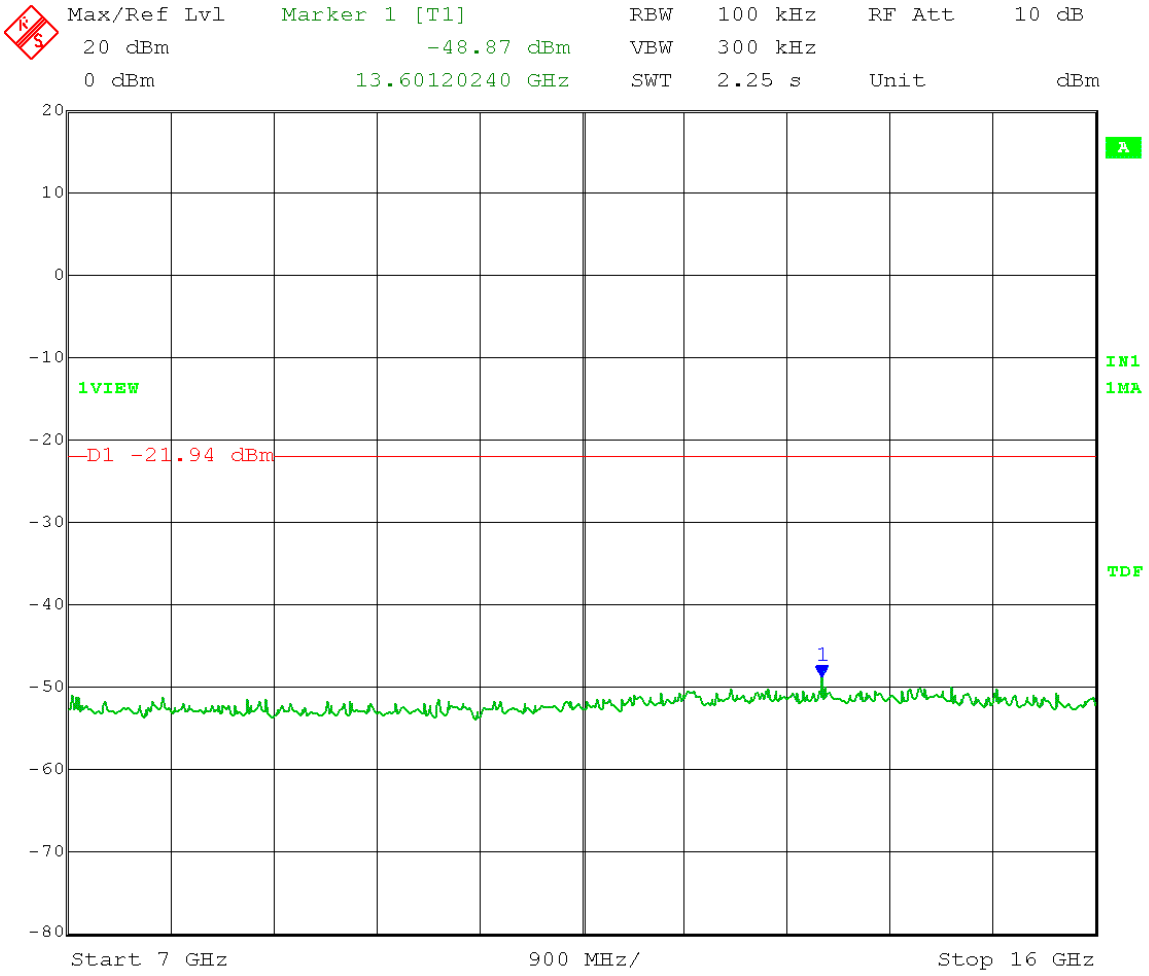
Date: 13.MAR.2014 09:18:10

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 ≥ 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



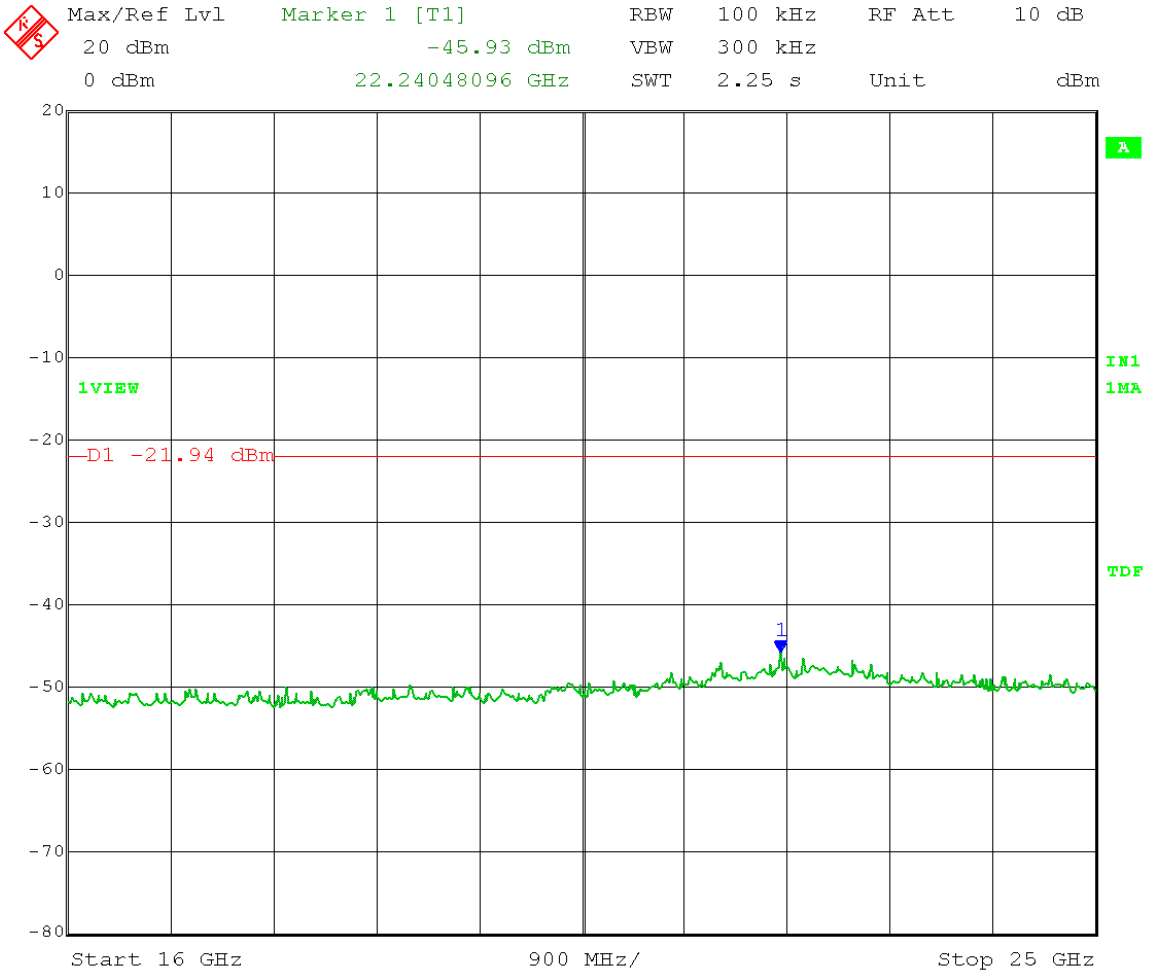
Date: 13.MAR.2014 09:14:53

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 ≥ 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



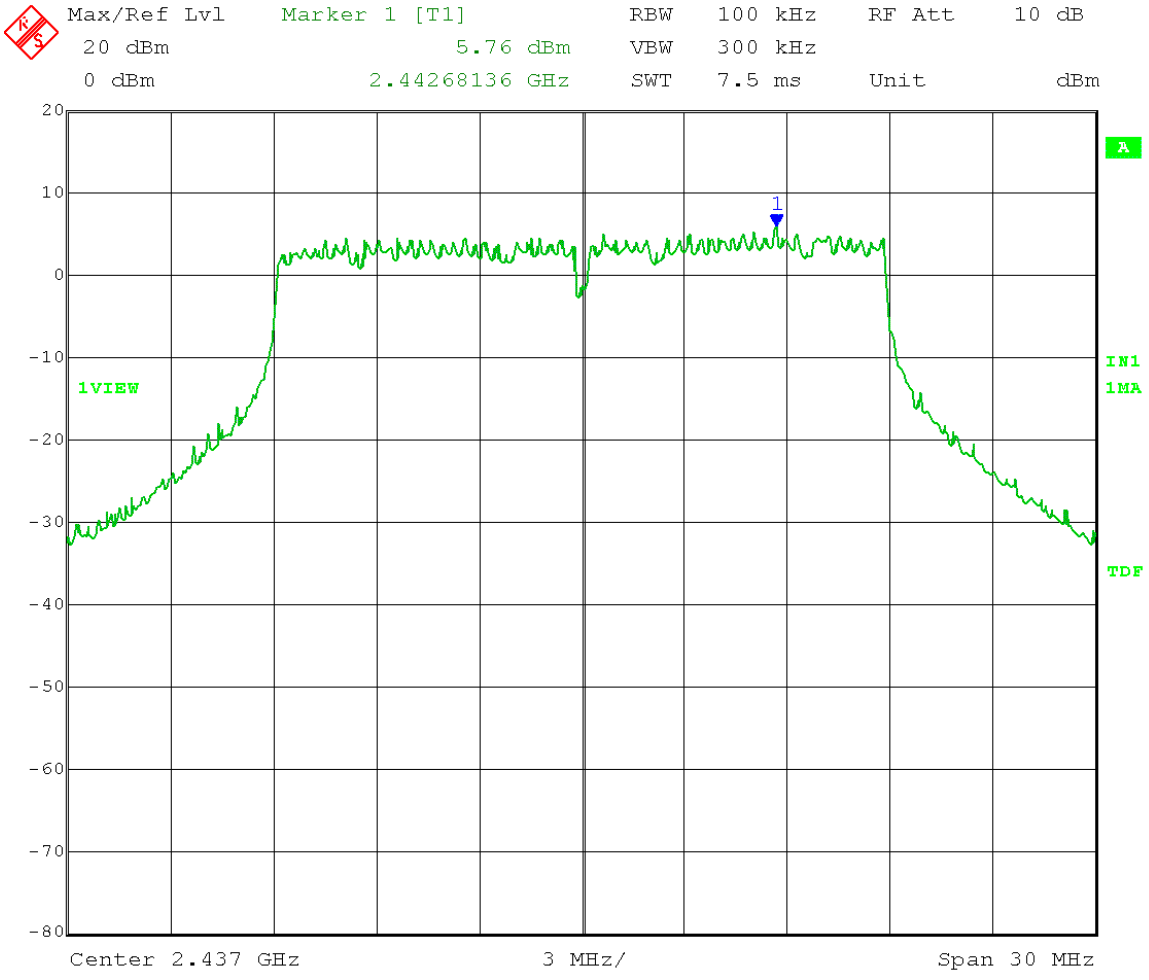
Date: 13.MAR.2014 09:15:55

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 ≥ 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



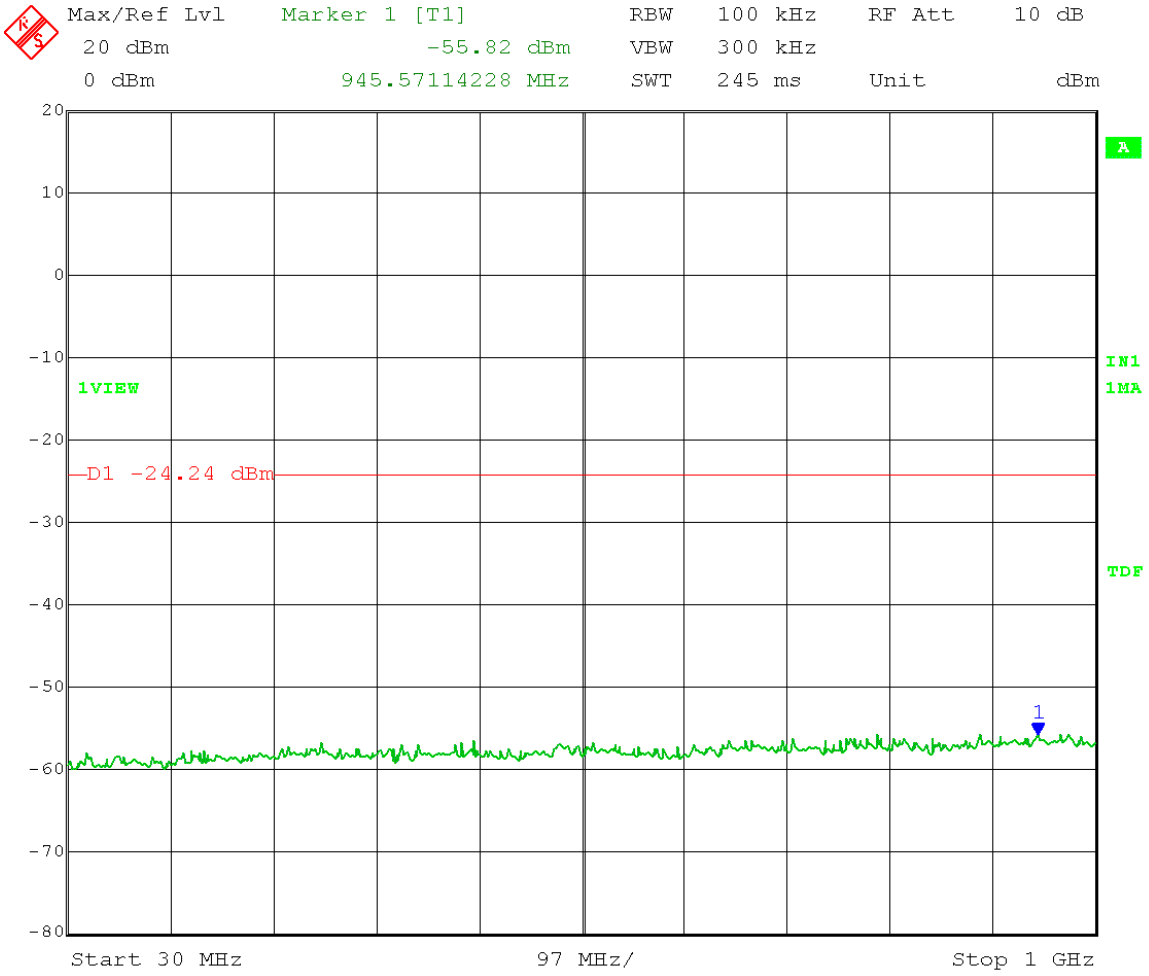
Date: 13.MAR.2014 09:17:03

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 ≥ 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



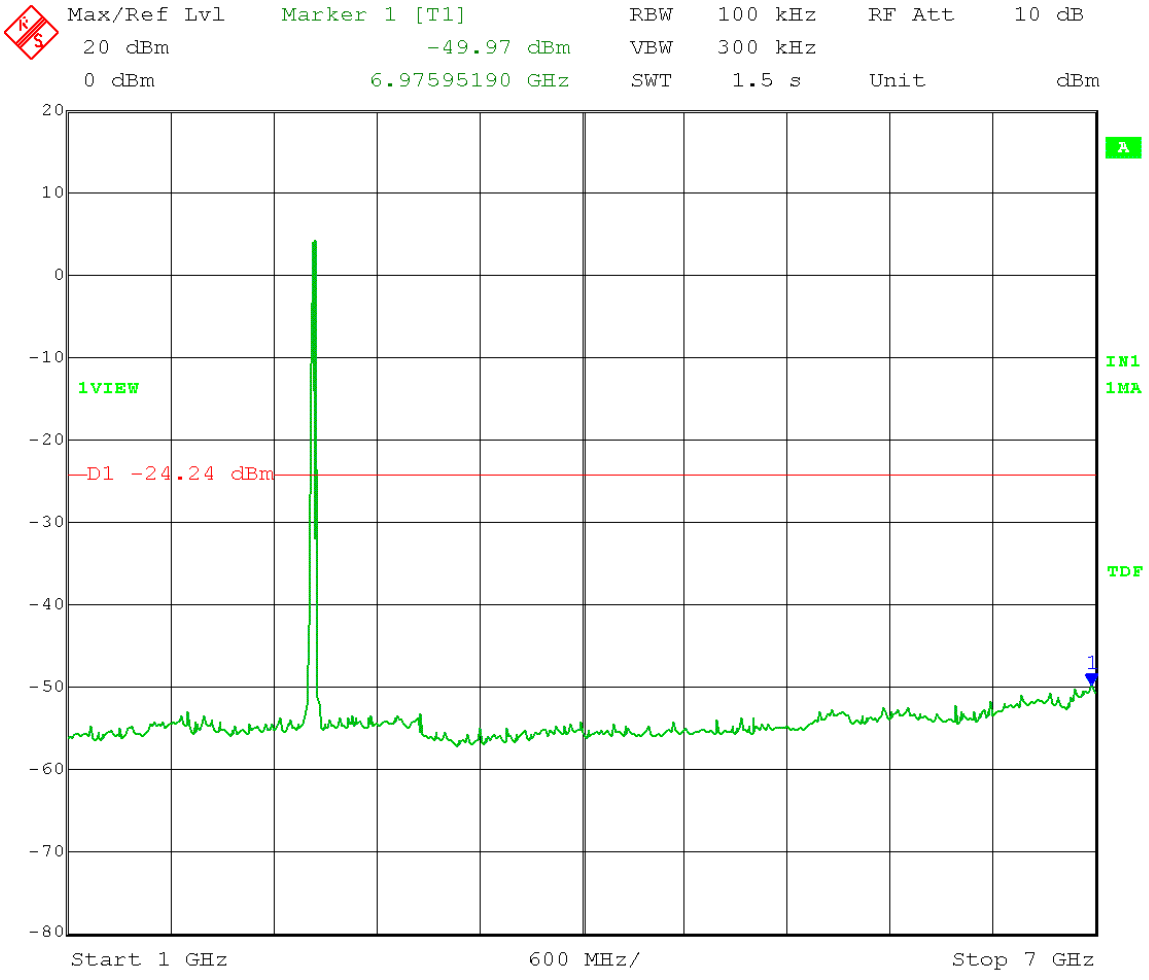
Date: 13.MAR.2014 09:21:31

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 ≥ 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



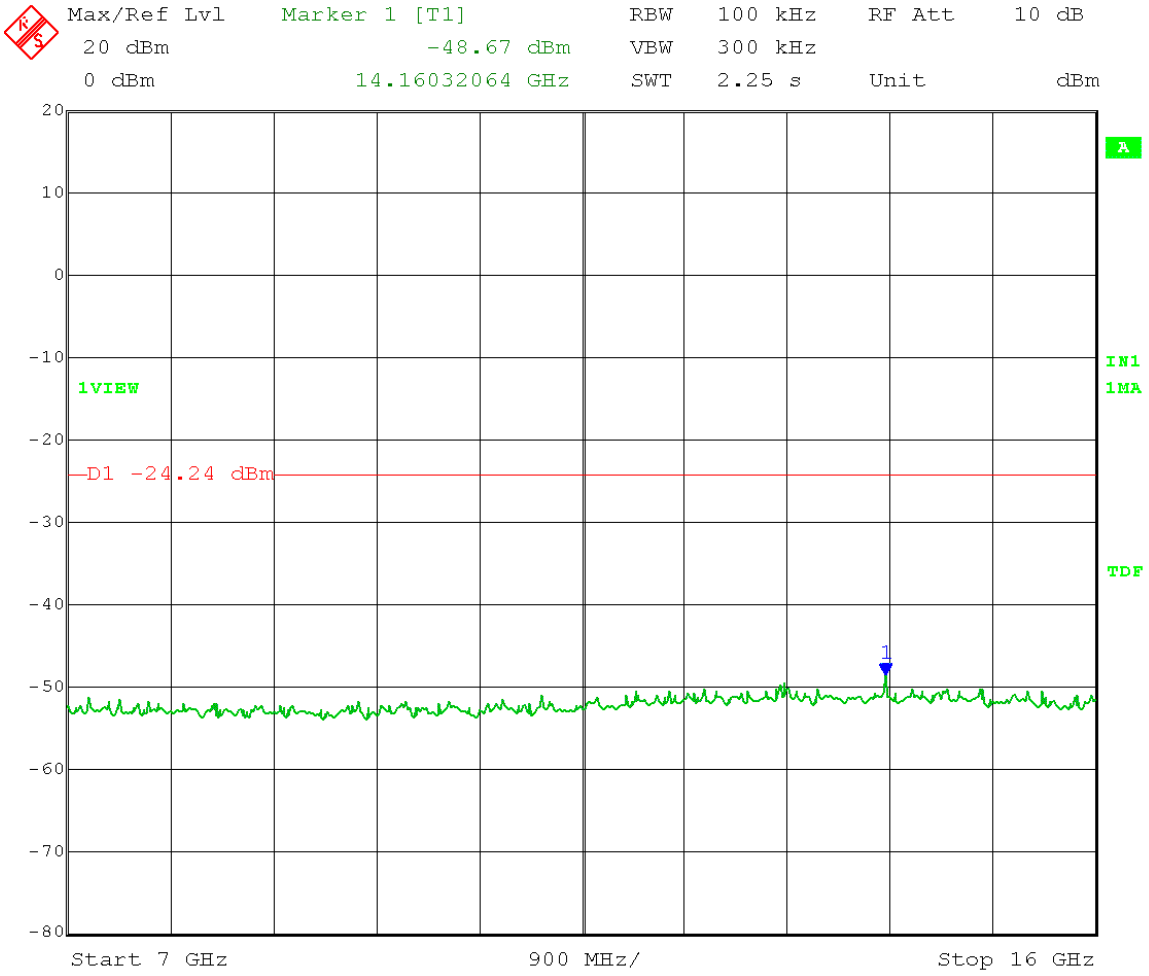
Date: 13.MAR.2014 09:27:11

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 ≥ 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



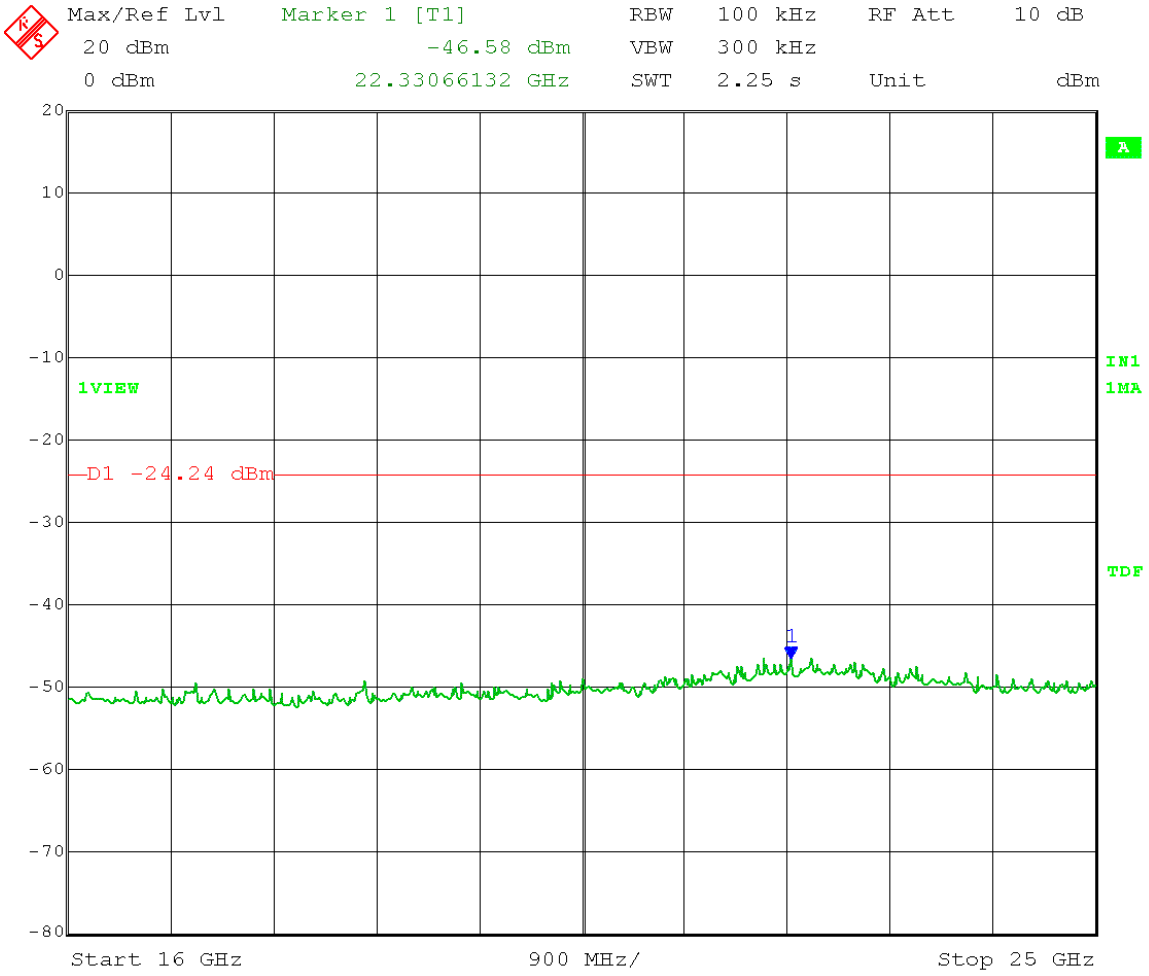
Date: 13.MAR.2014 09:23:30

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 ≥ 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



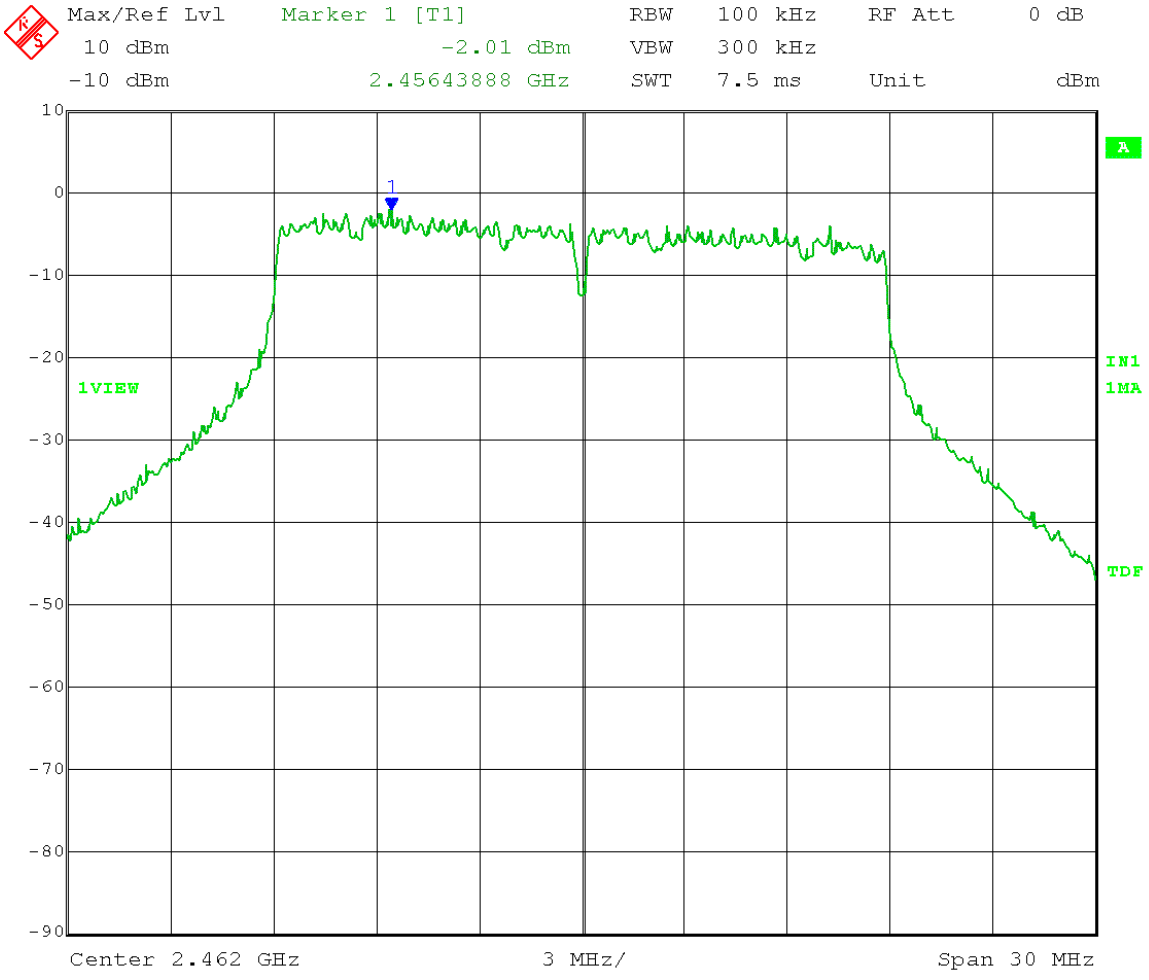
Date: 13.MAR.2014 09:24:30

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 ≥ 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



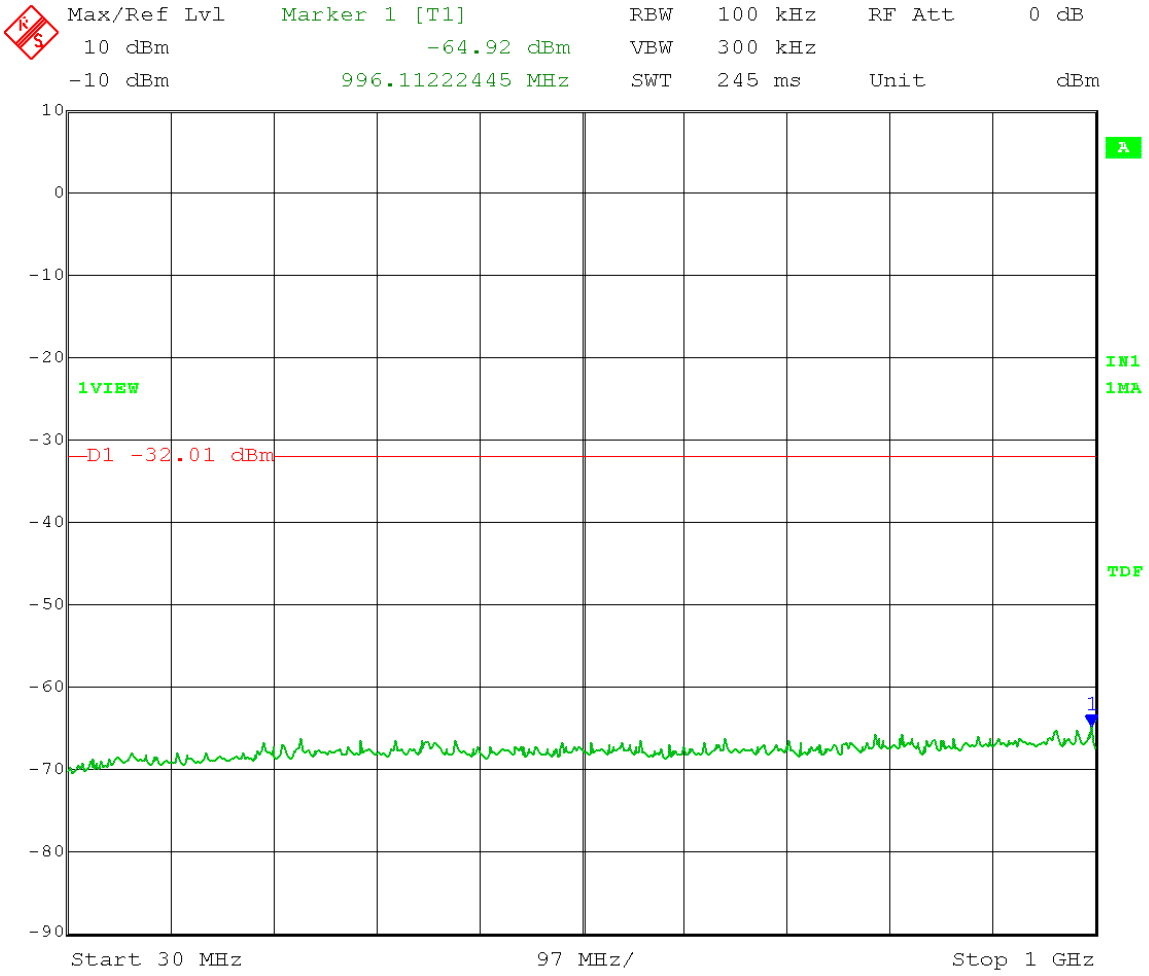
Date: 13.MAR.2014 09:25:43

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 ≥ 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



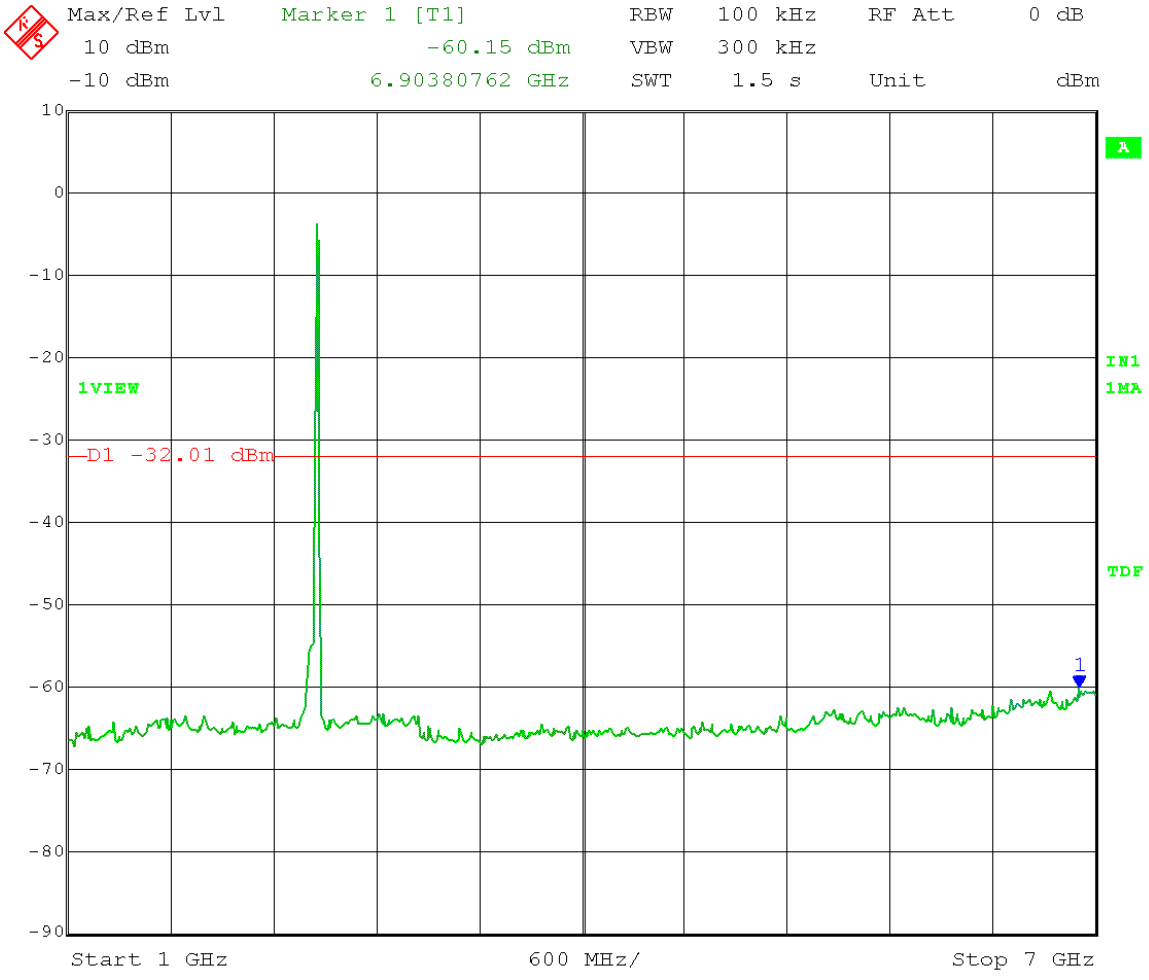
Date: 13.MAR.2014 09:40:49

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 ≥ 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



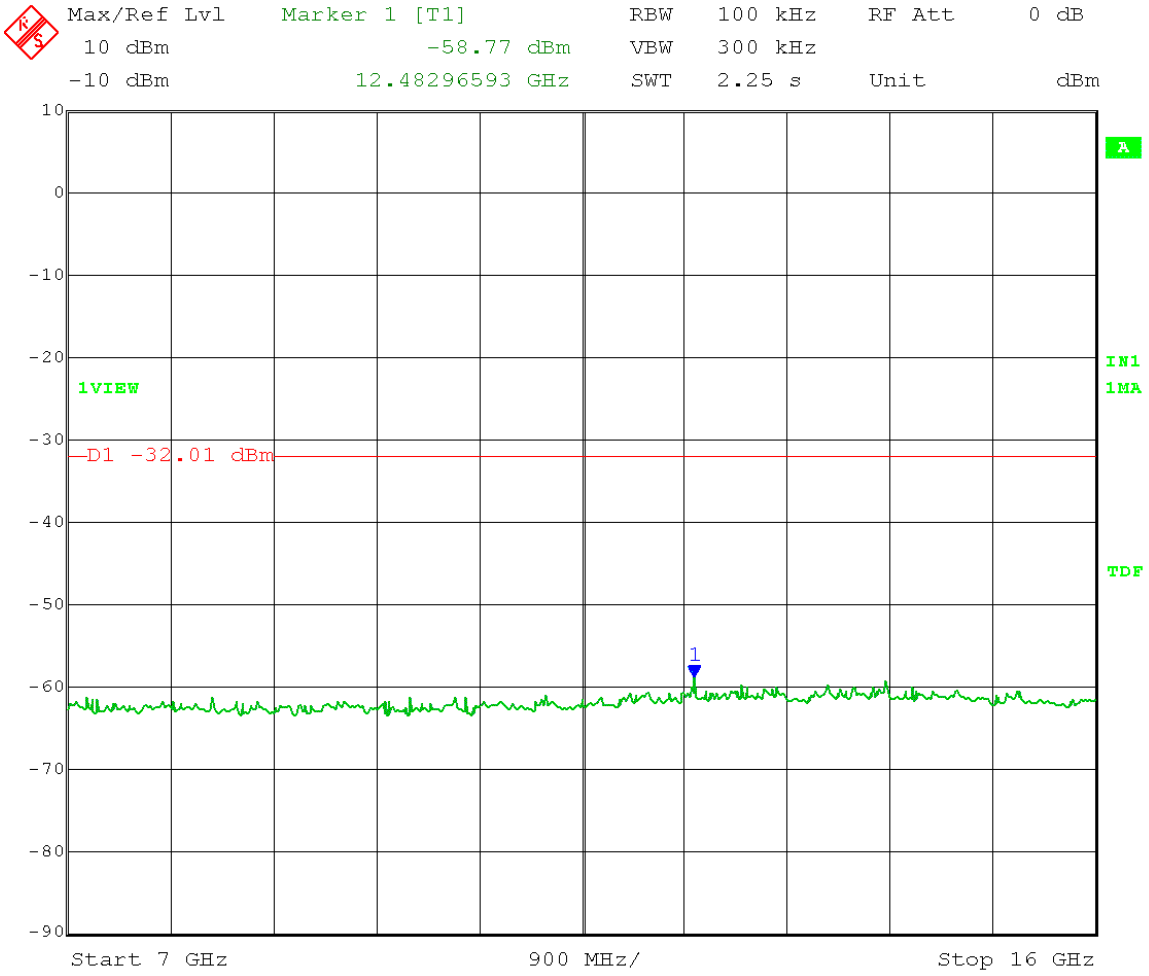
Date: 13.MAR.2014 09:47:23

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 ≥ 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



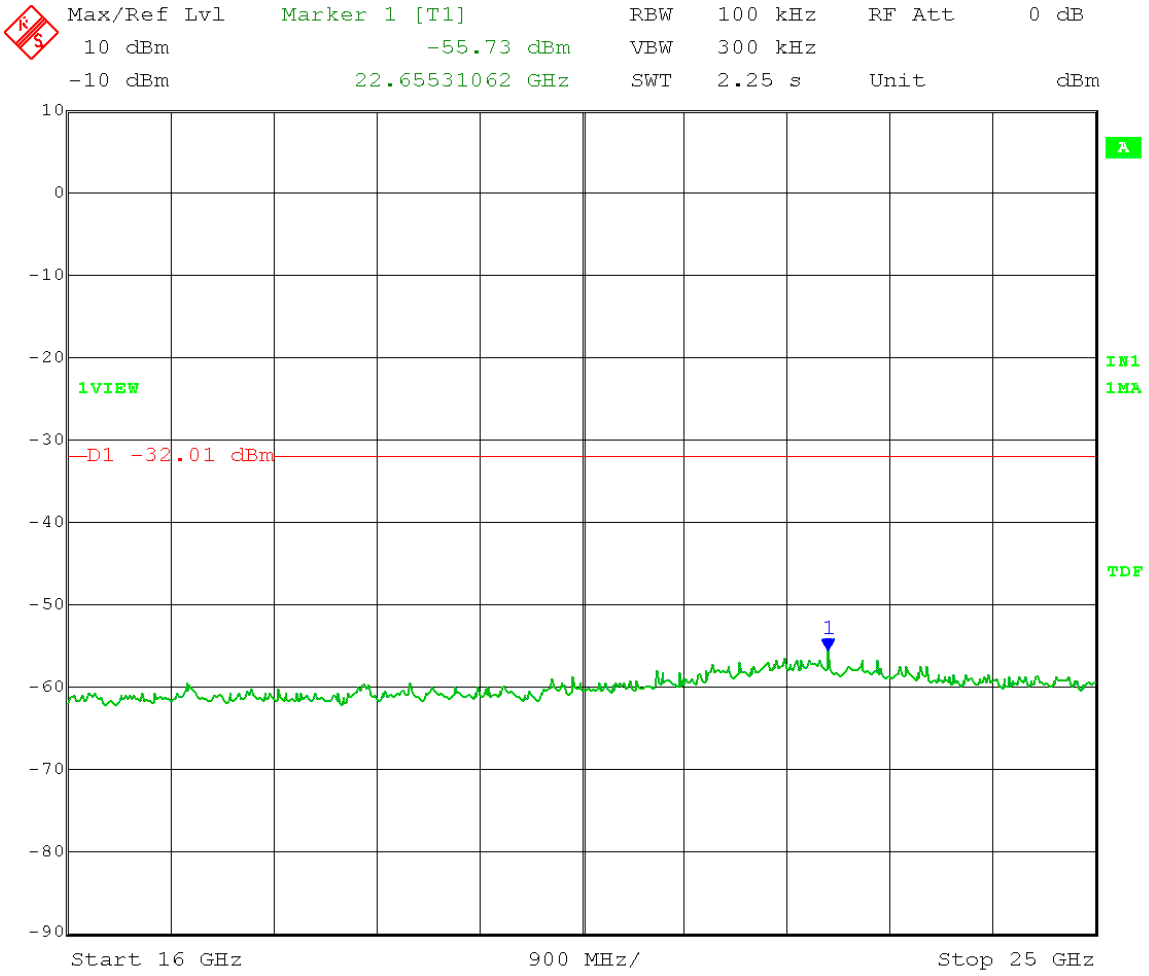
Date: 13.MAR.2014 09:42:48

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 ≥ 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



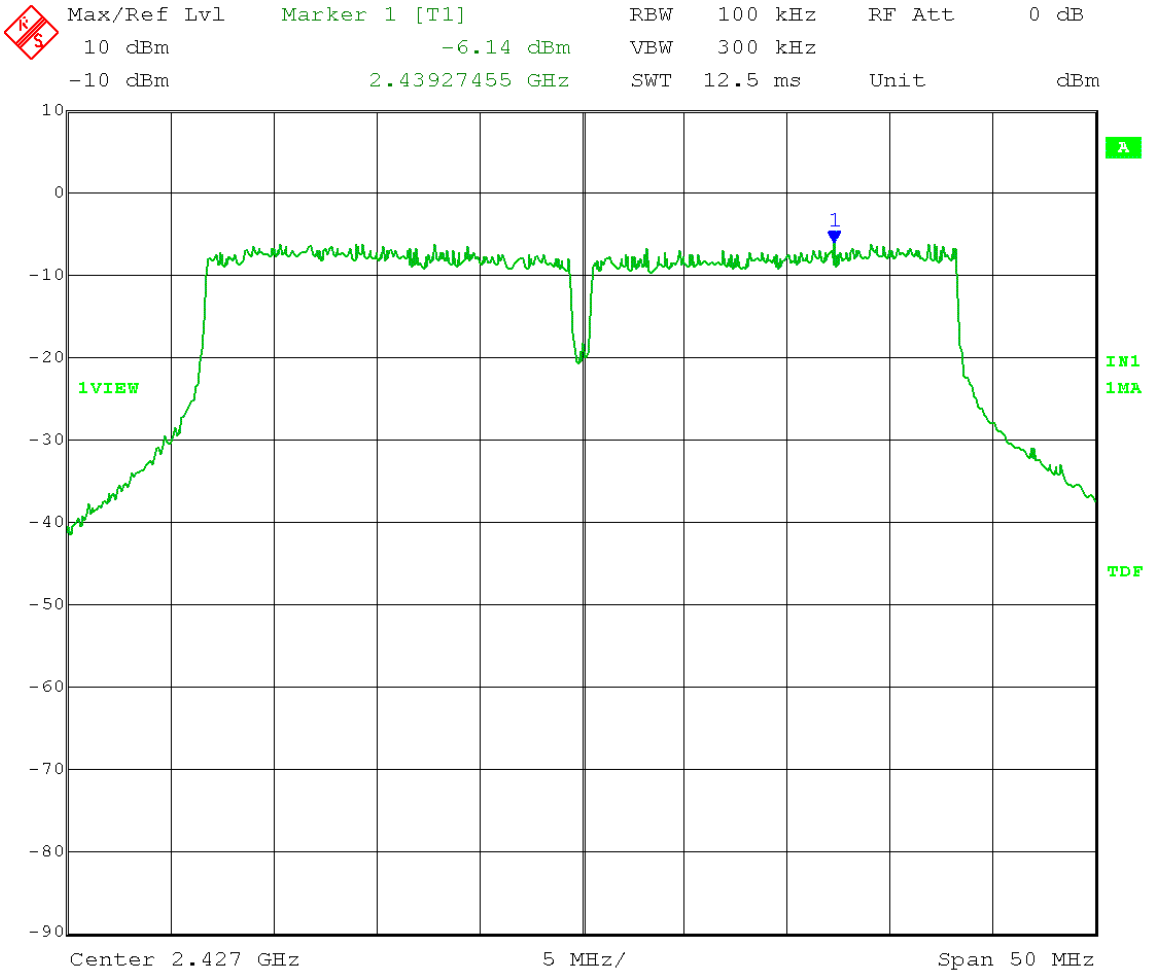
Date: 13.MAR.2014 09:44:07

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 ≥ 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



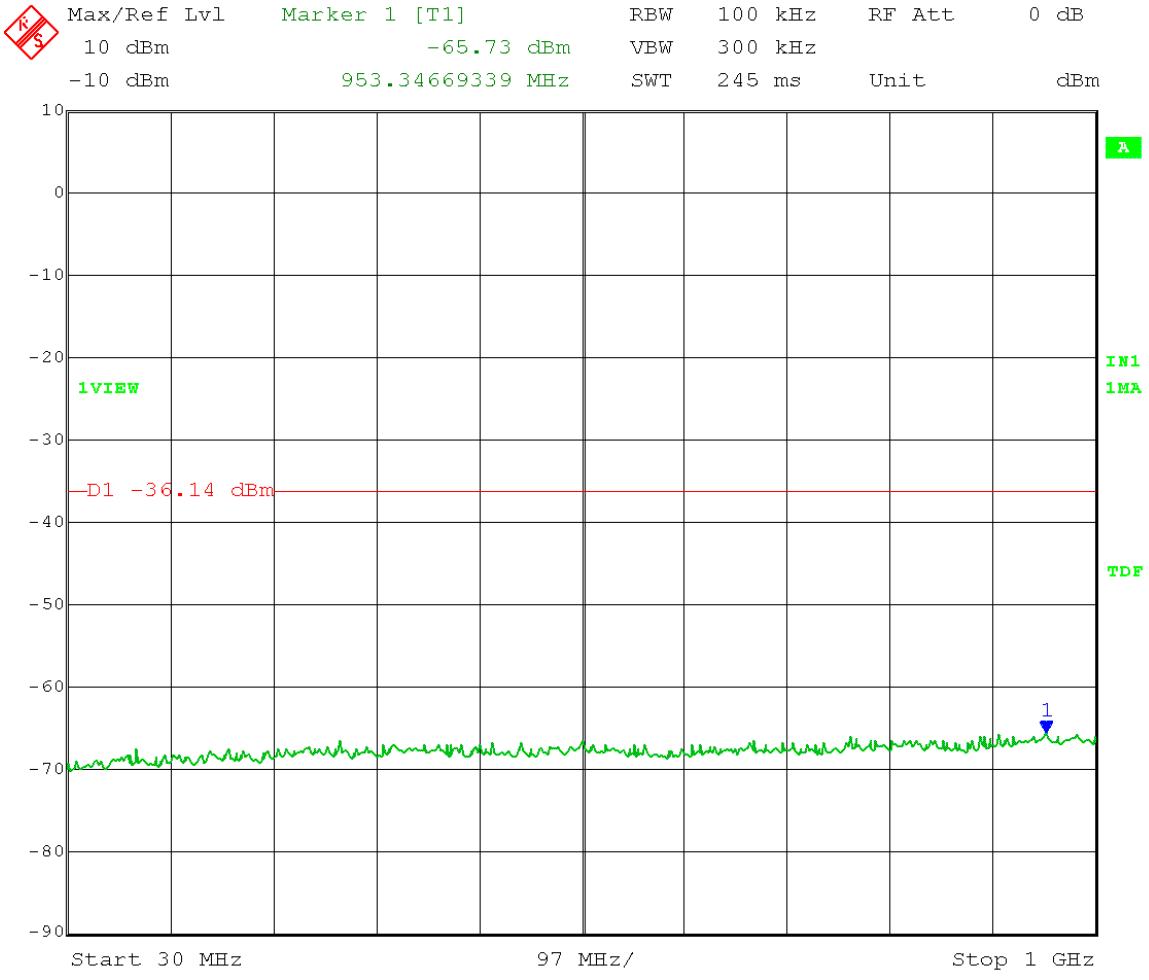
Date: 13.MAR.2014 09:45:40

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 ≥ 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



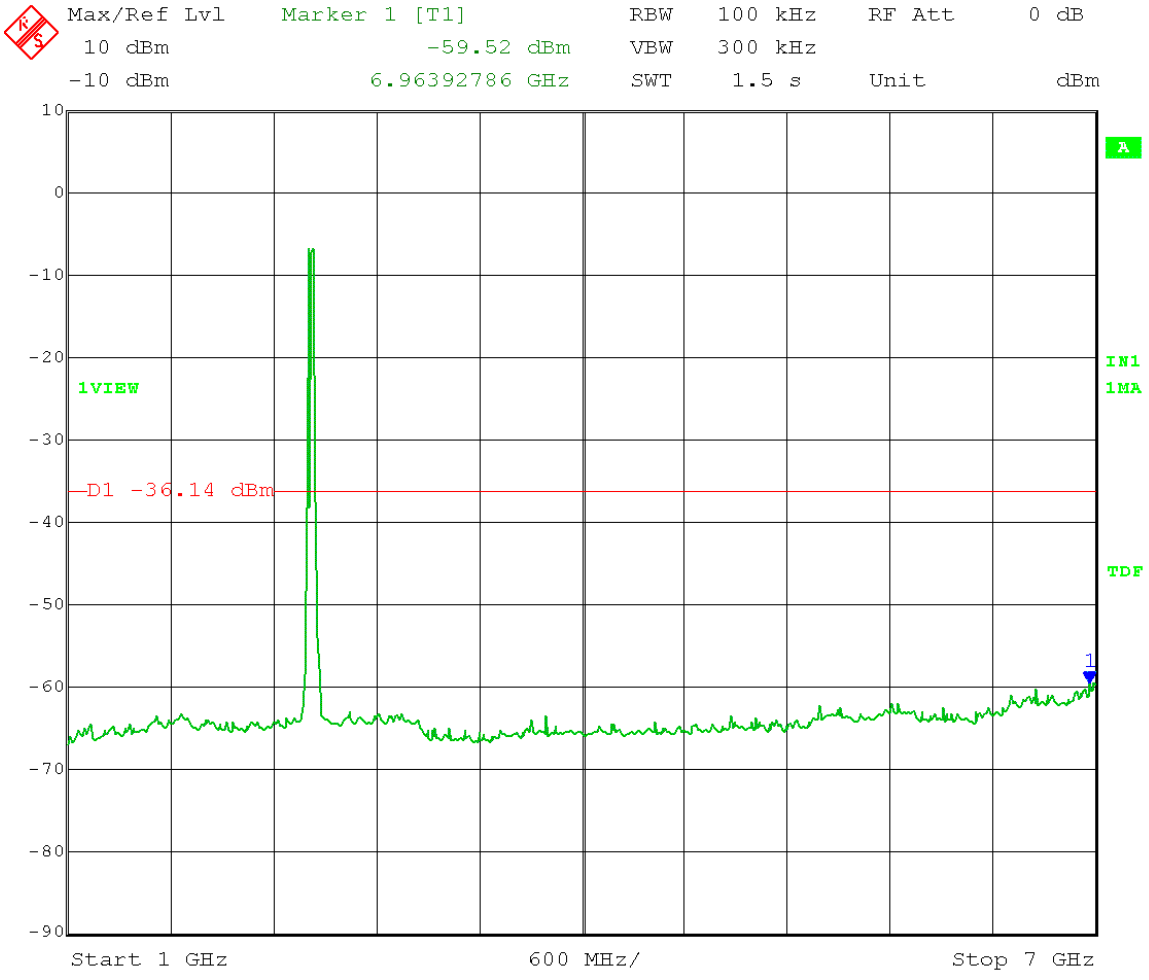
Date: 13.MAR.2014 10:14:16

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 ≥ 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



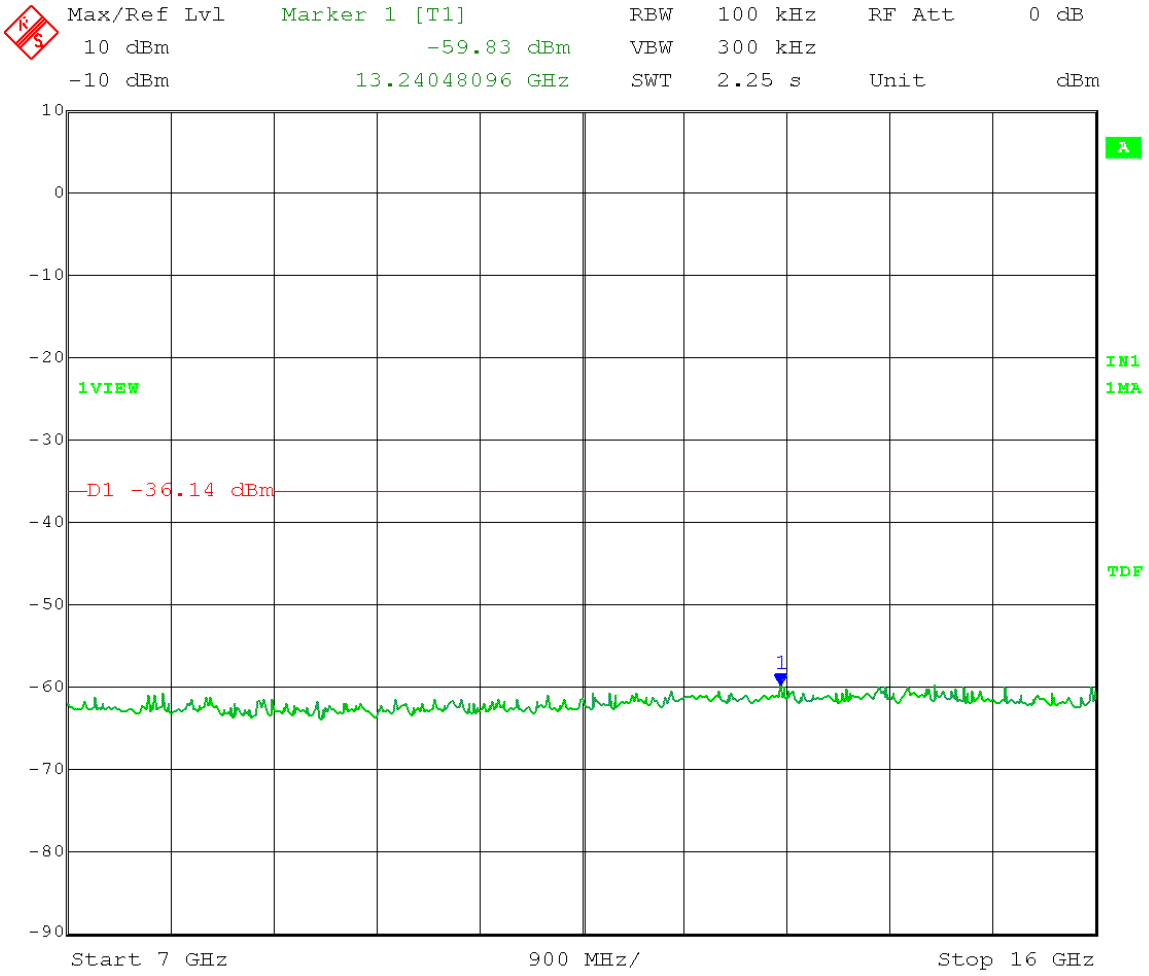
Date: 13.MAR.2014 10:20:13

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 ≥ 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



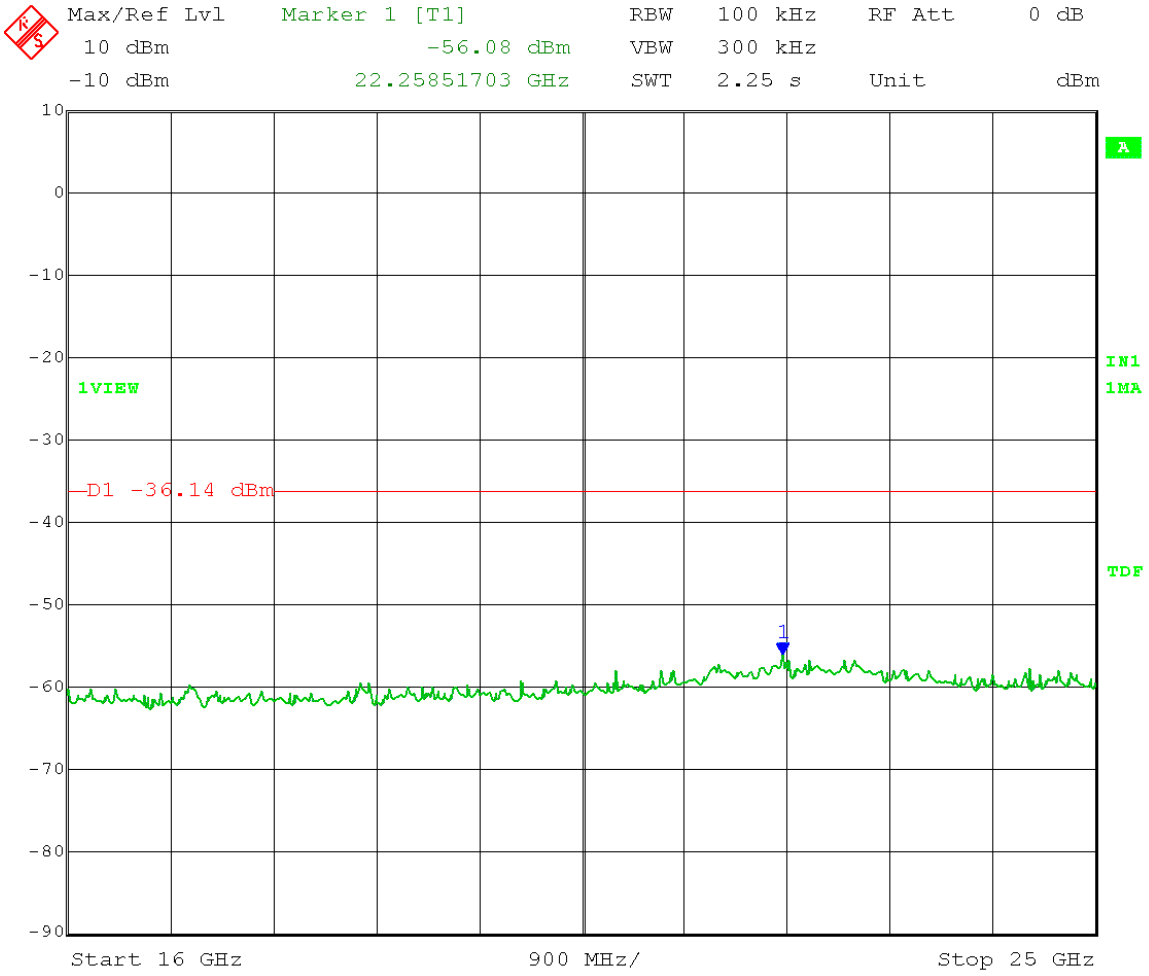
Date: 13.MAR.2014 10:16:29

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 ≥ 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



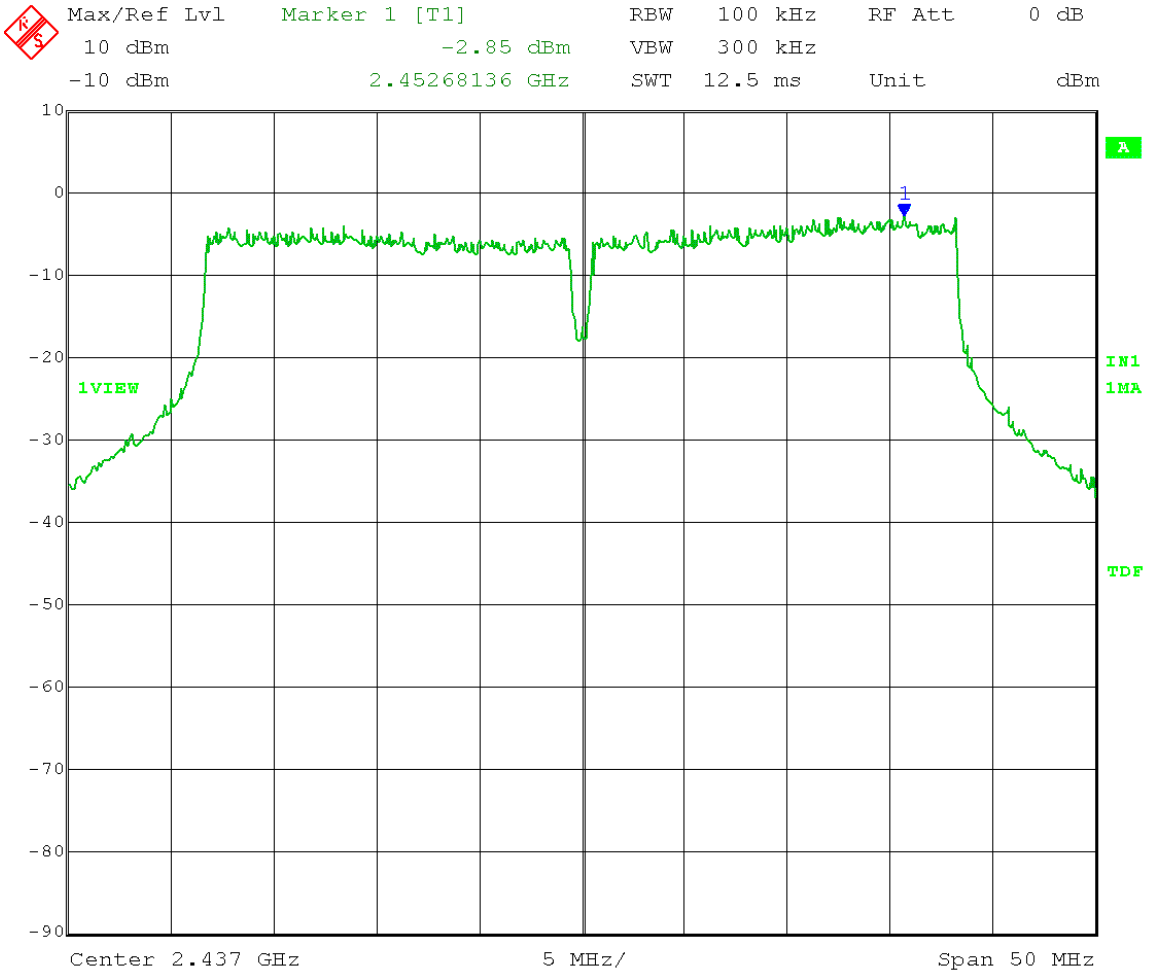
Date: 13.MAR.2014 10:17:43

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 ≥ 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



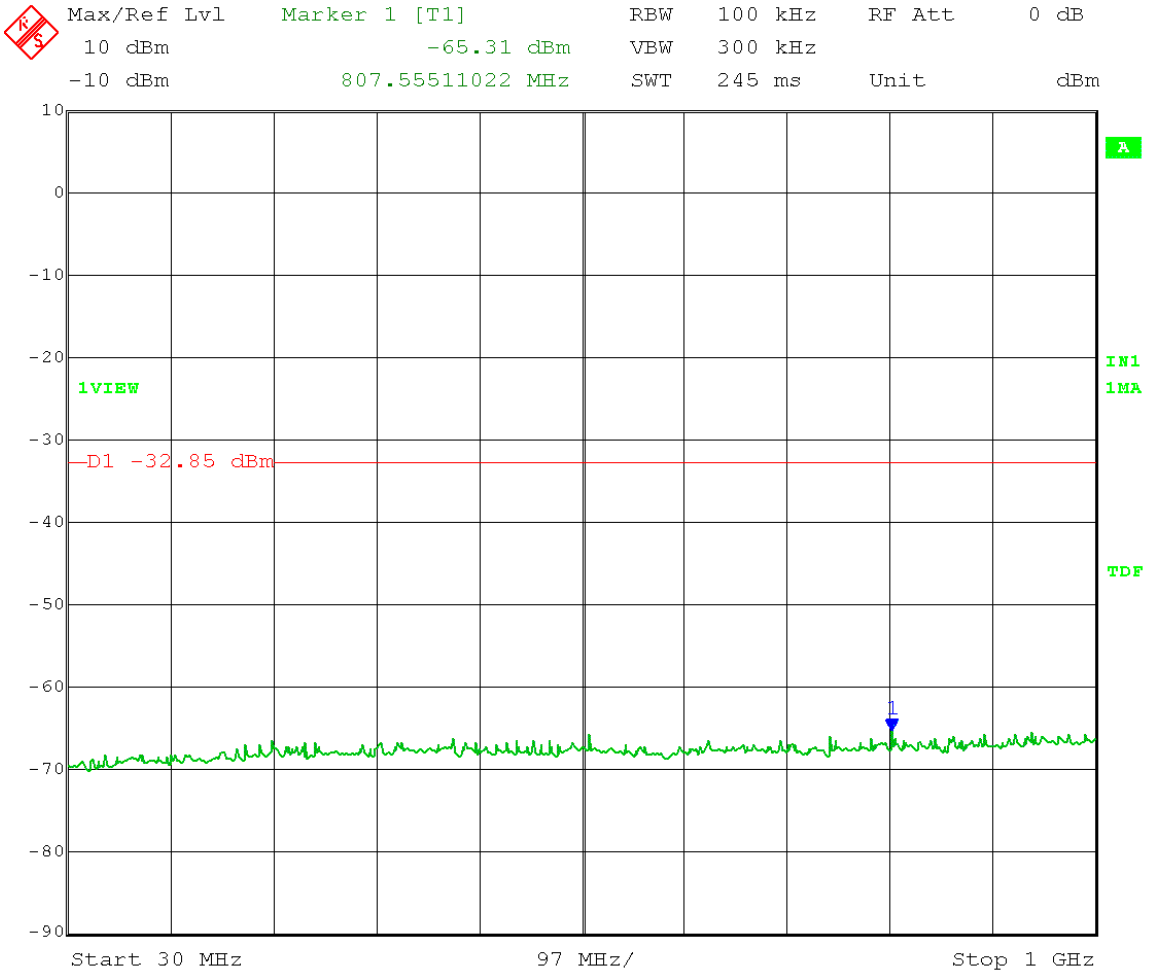
Date: 13.MAR.2014 10:18:49

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 ≥ 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



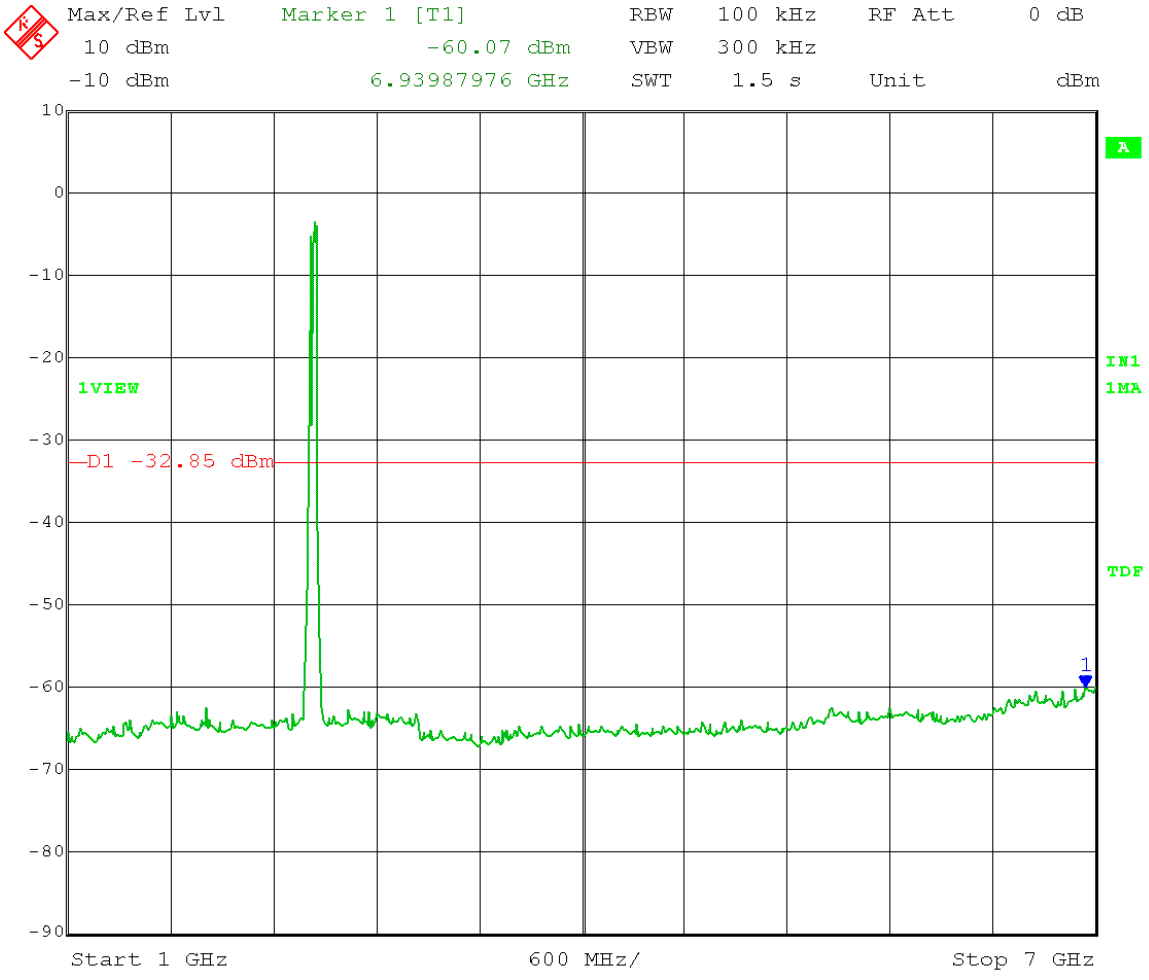
Date: 13.MAR.2014 10:01:29

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 ≥ 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



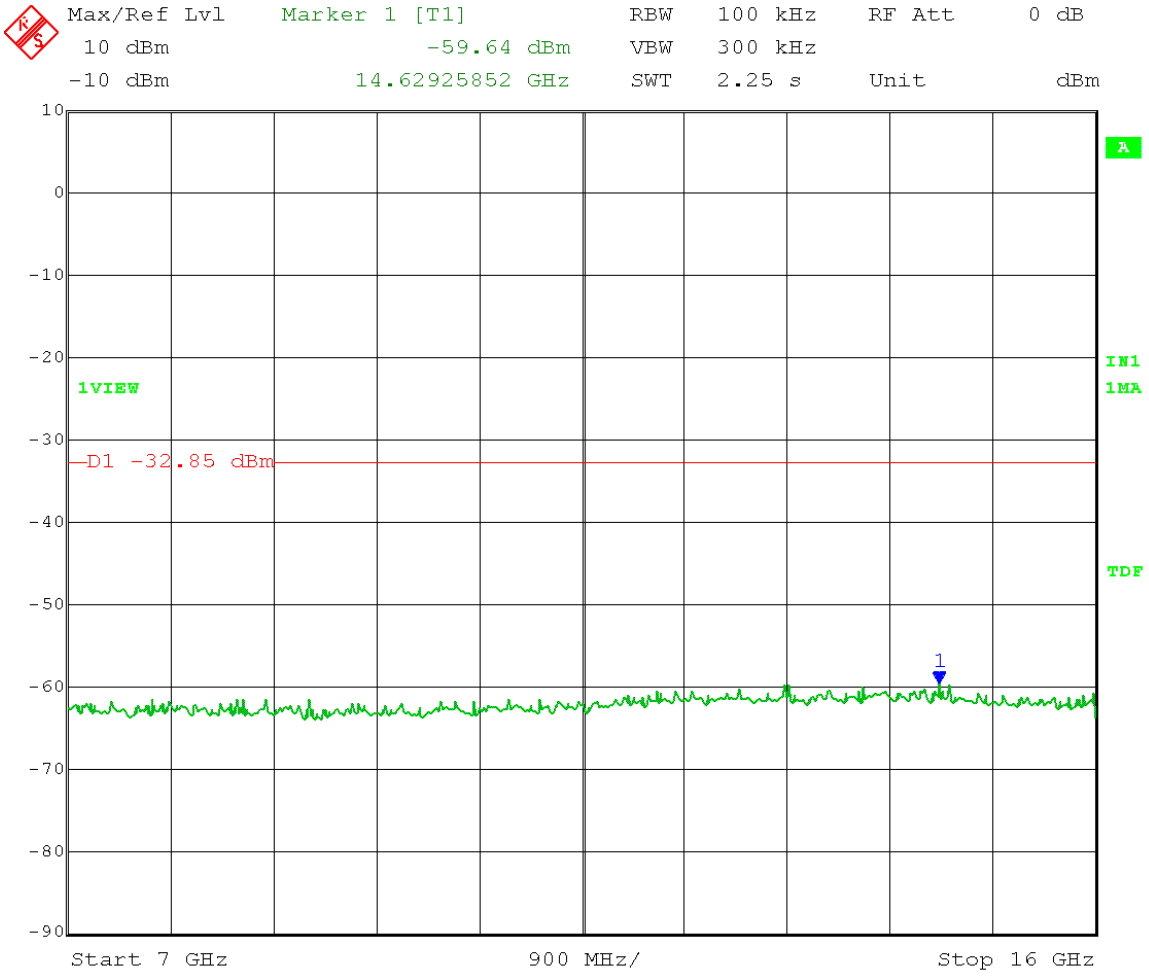
Date: 13.MAR.2014 10:08:53

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 ≥ 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



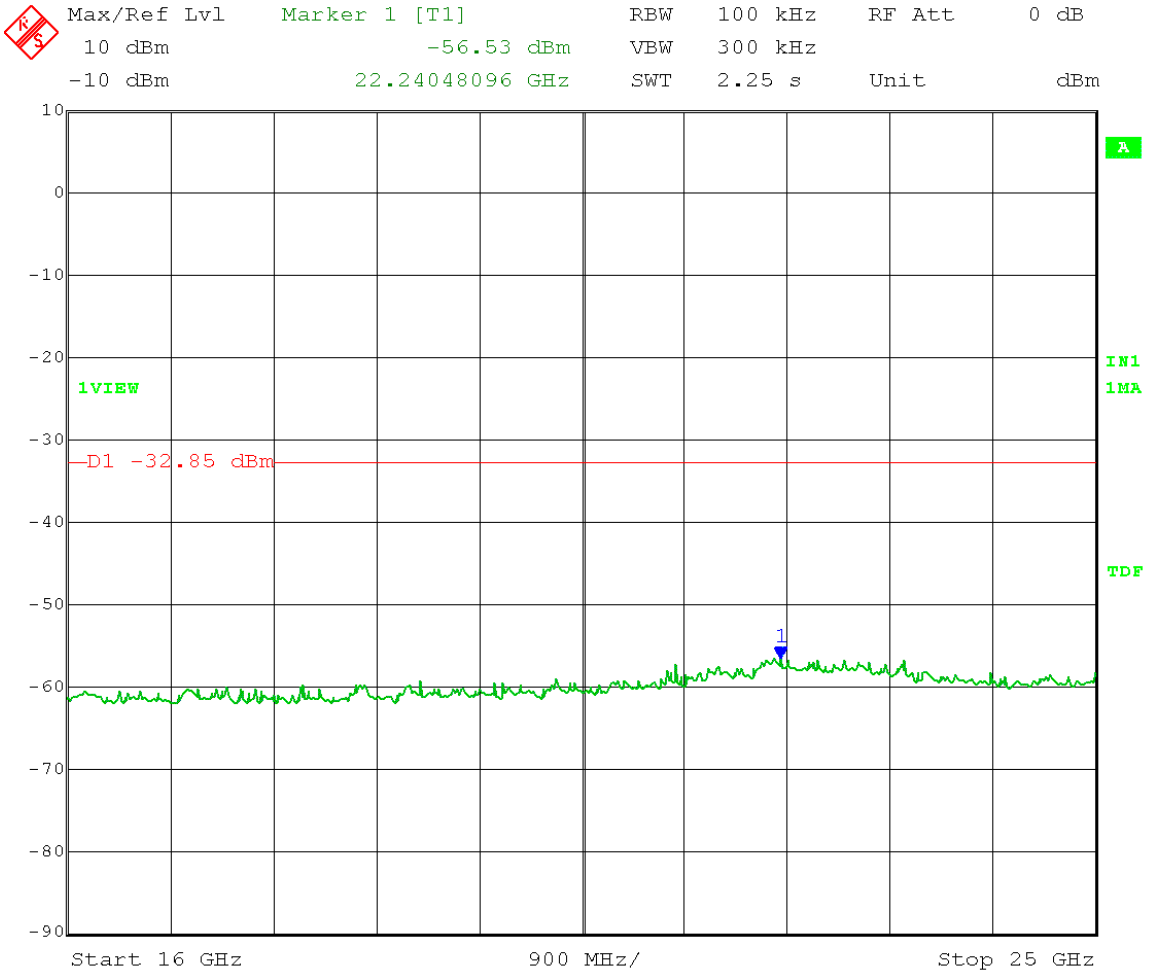
Date: 13.MAR.2014 10:03:54

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 ≥ 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



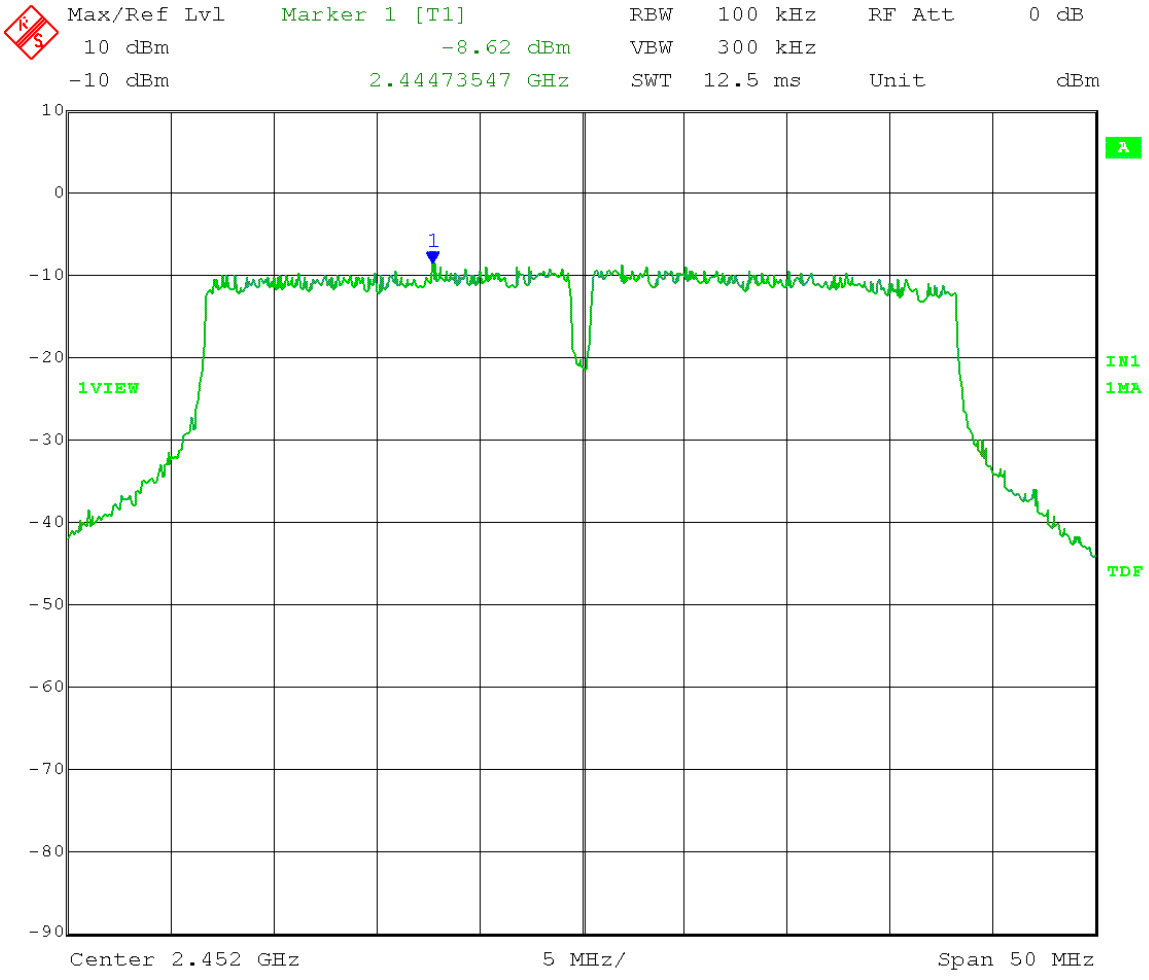
Date: 13.MAR.2014 10:05:39

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 ≥ 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



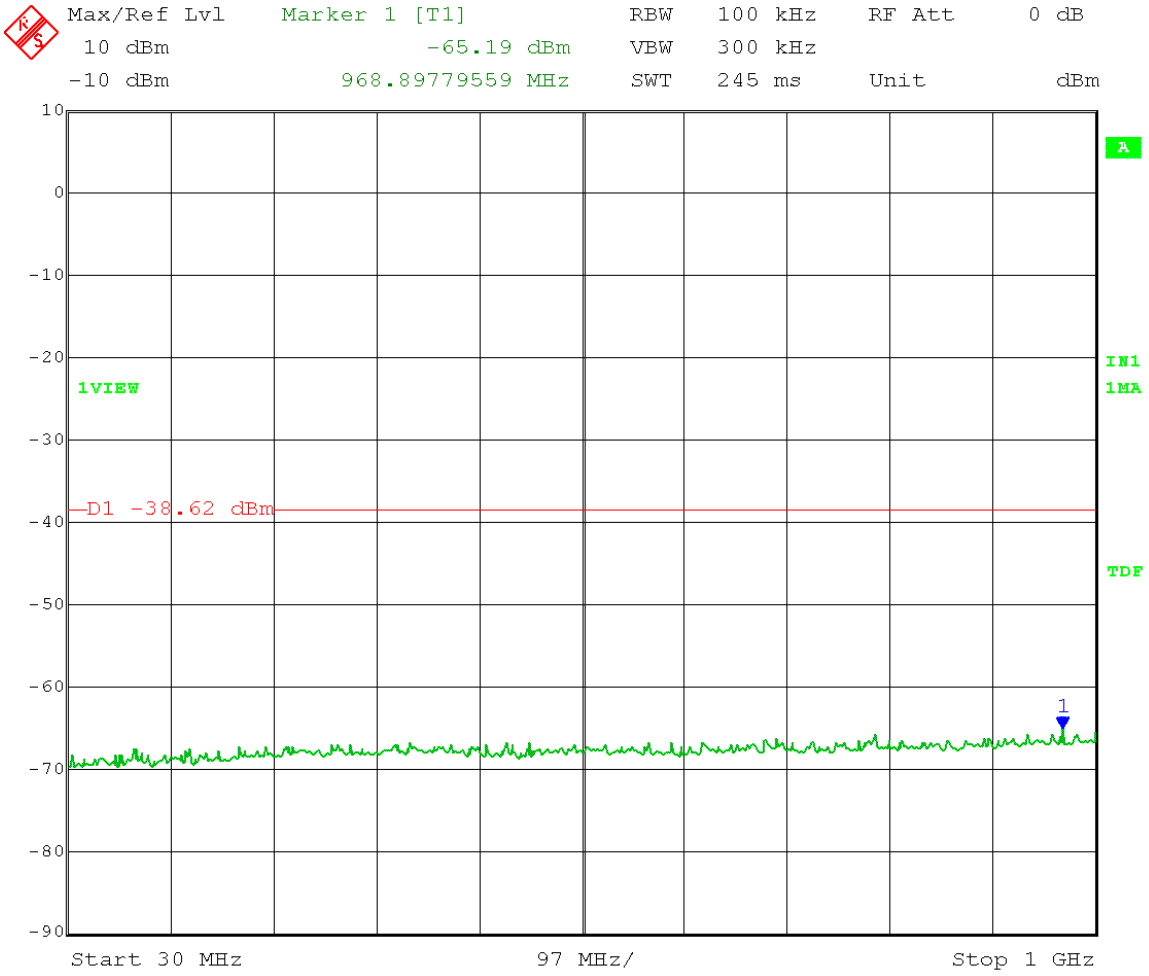
Date: 13.MAR.2014 10:07:24

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 ≥ 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



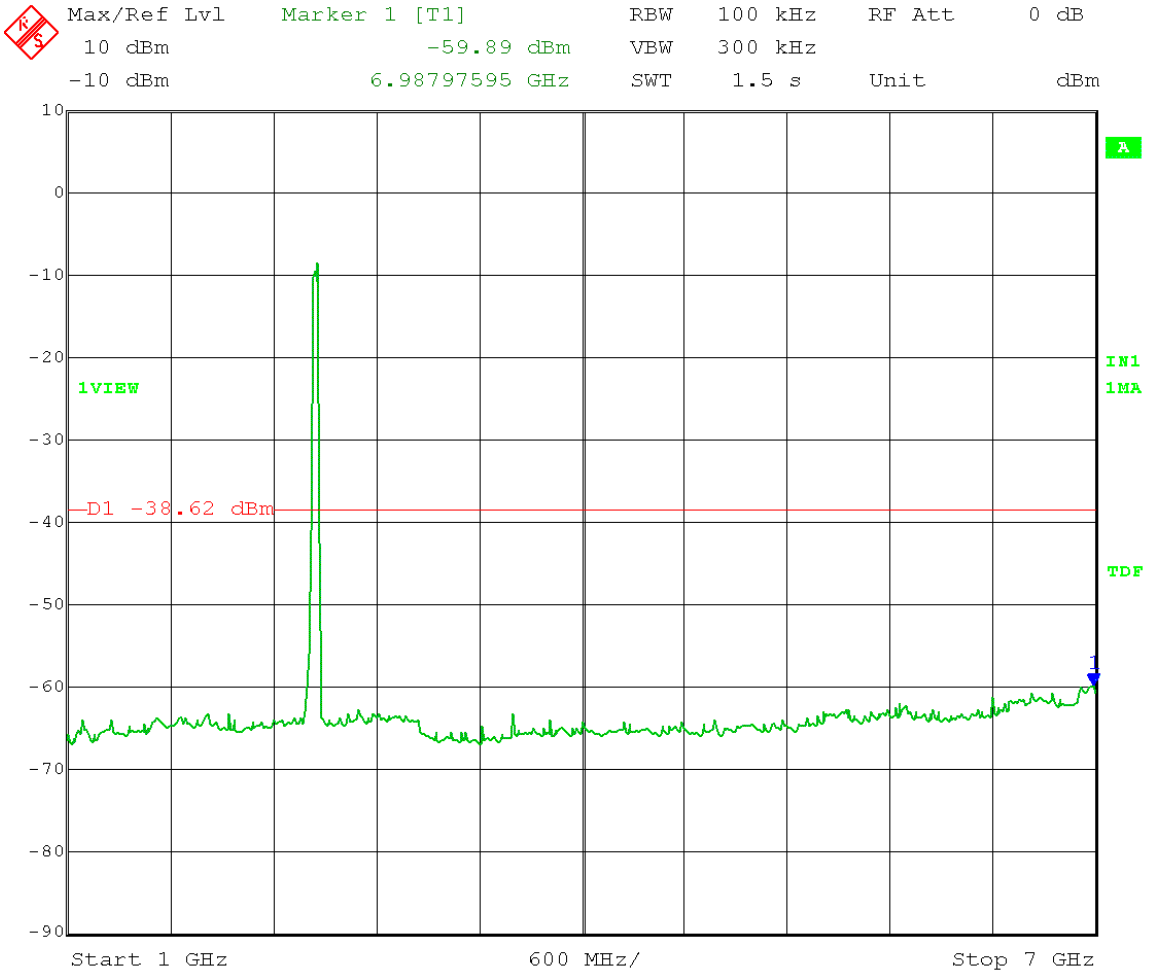
Date: 13.MAR.2014 10:24:00

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 ≥ 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



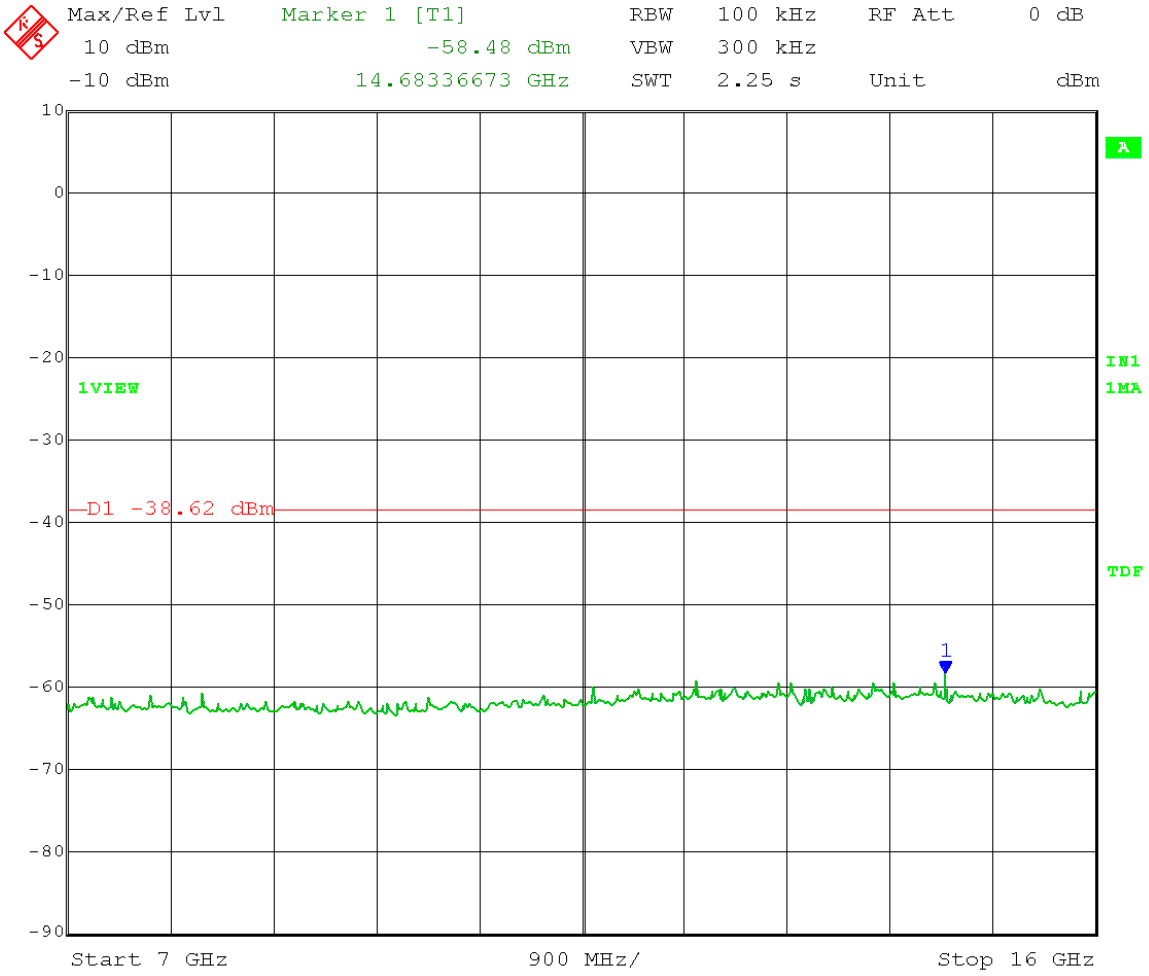
Date: 13.MAR.2014 10:31:32

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 ≥ 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



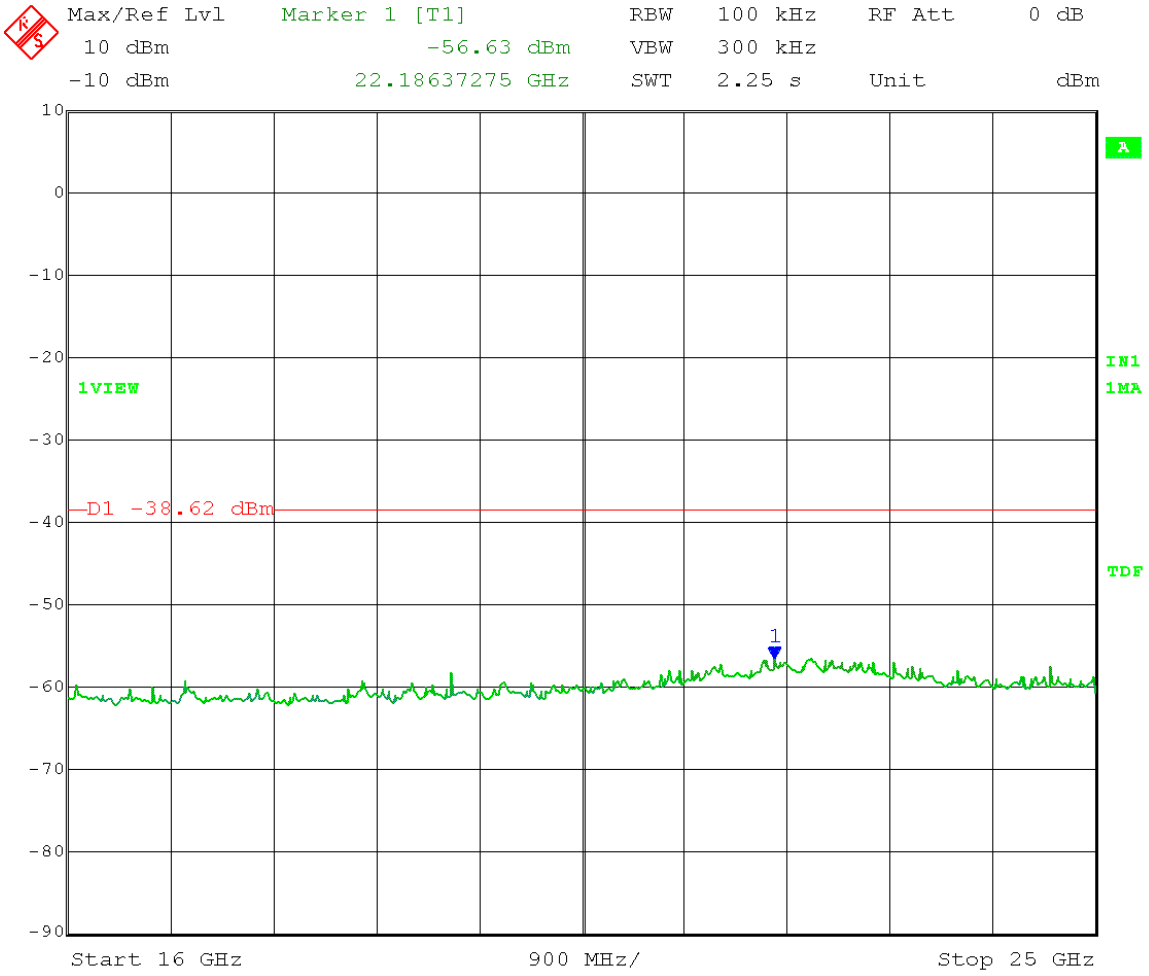
Date: 13.MAR.2014 10:26:44

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 ≥ 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



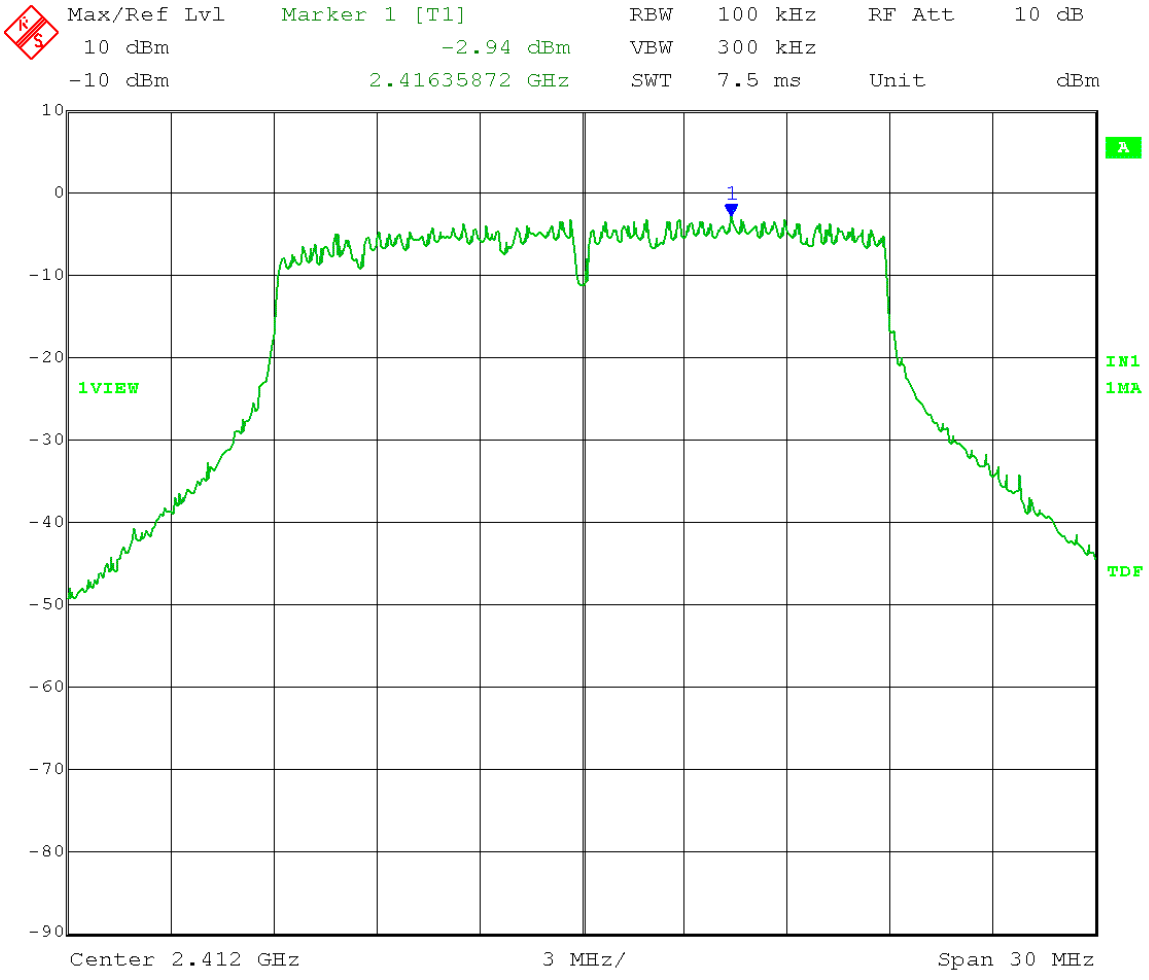
Date: 13.MAR.2014 10:28:33

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 ≥ 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



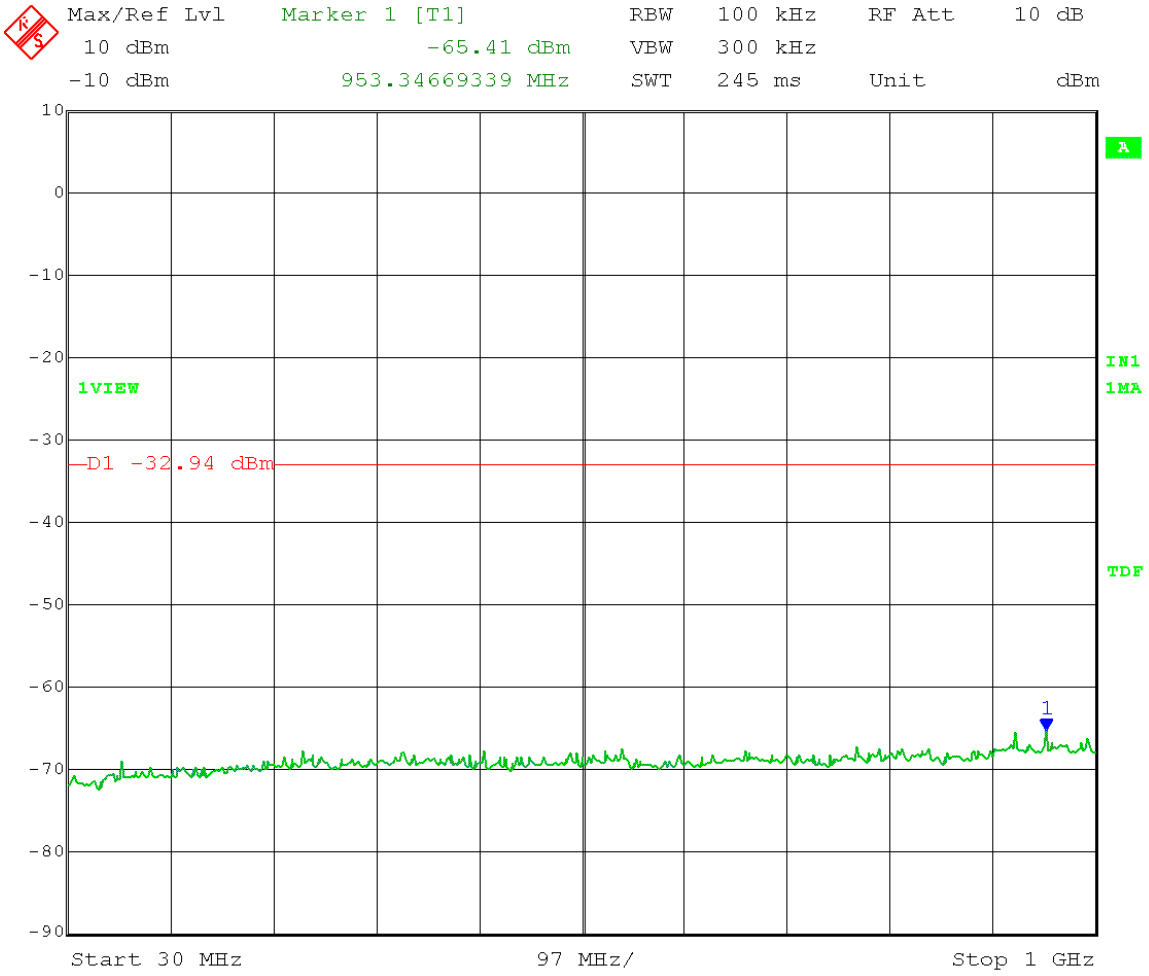
Date: 13.MAR.2014 10:29:59

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 ≥ 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



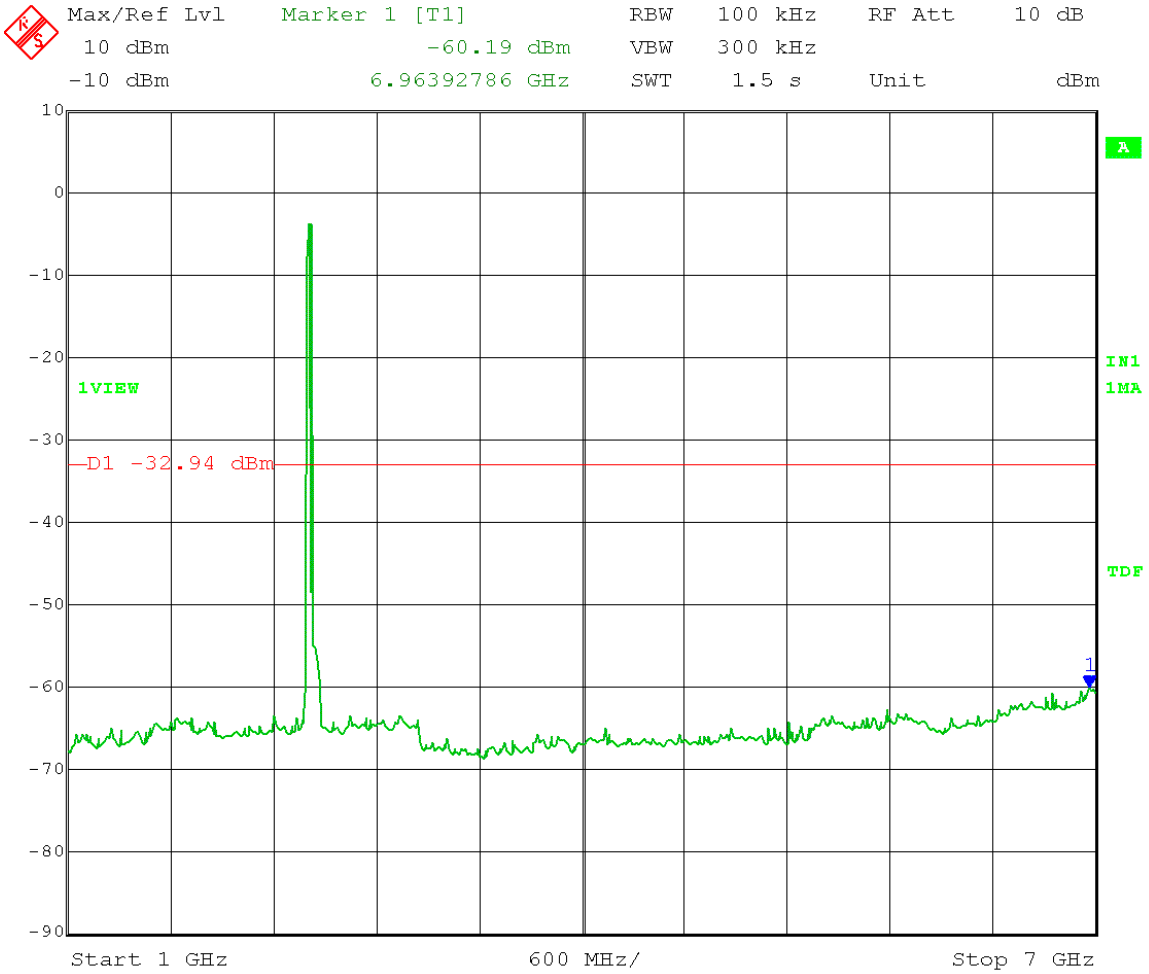
Date: 15.MAR.2014 11:25:48

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 ≥ 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



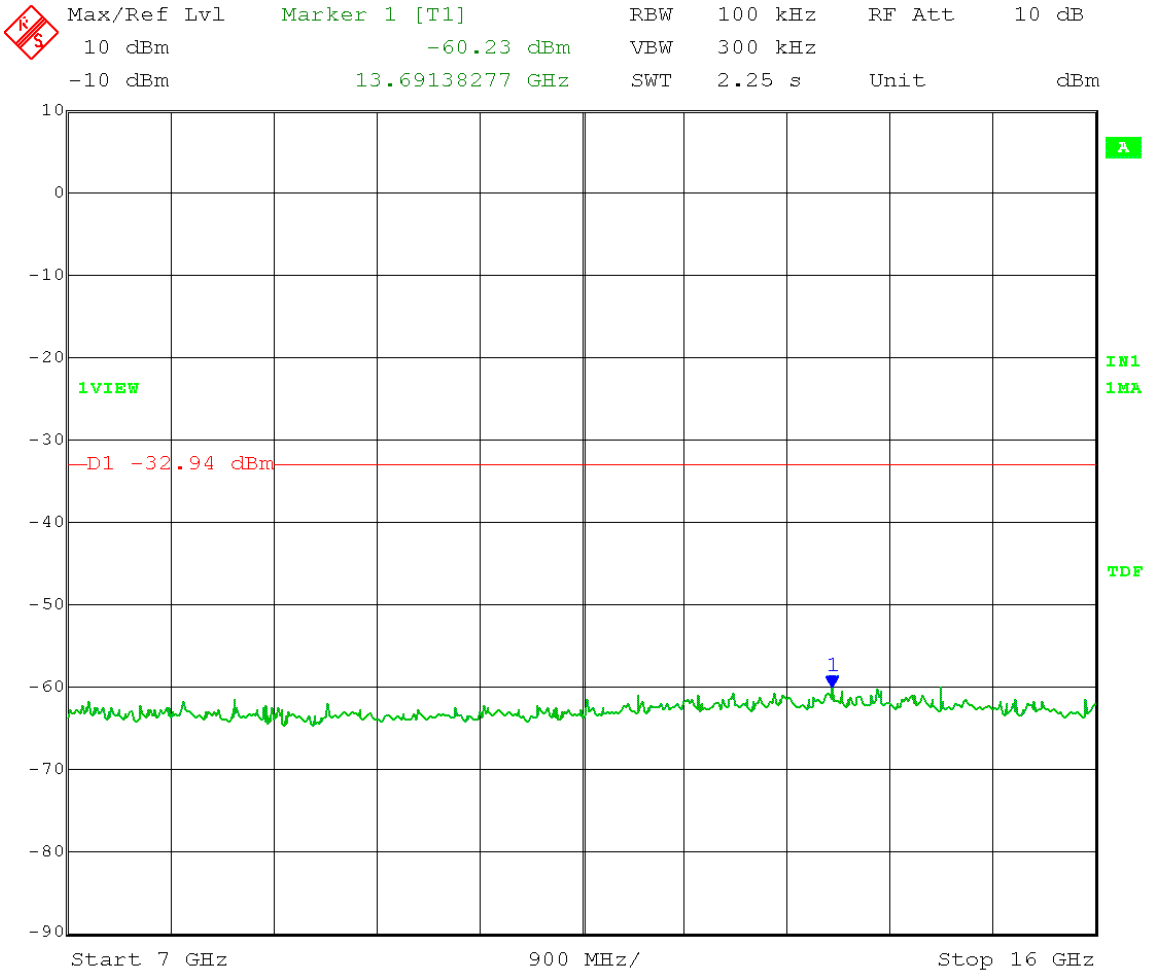
Date: 15.MAR.2014 11:31:47

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 ≥ 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



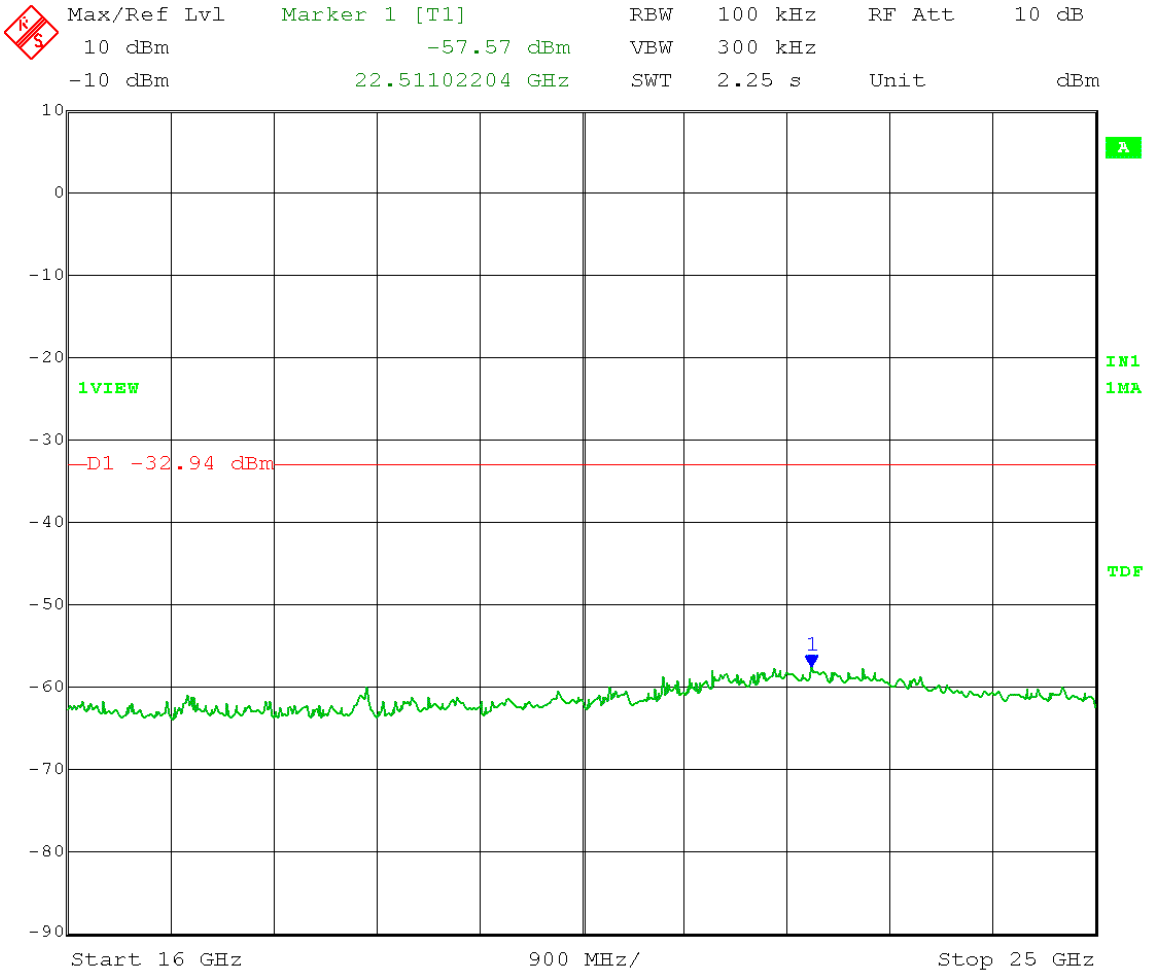
Date: 15.MAR.2014 11:27:39

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 ≥ 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



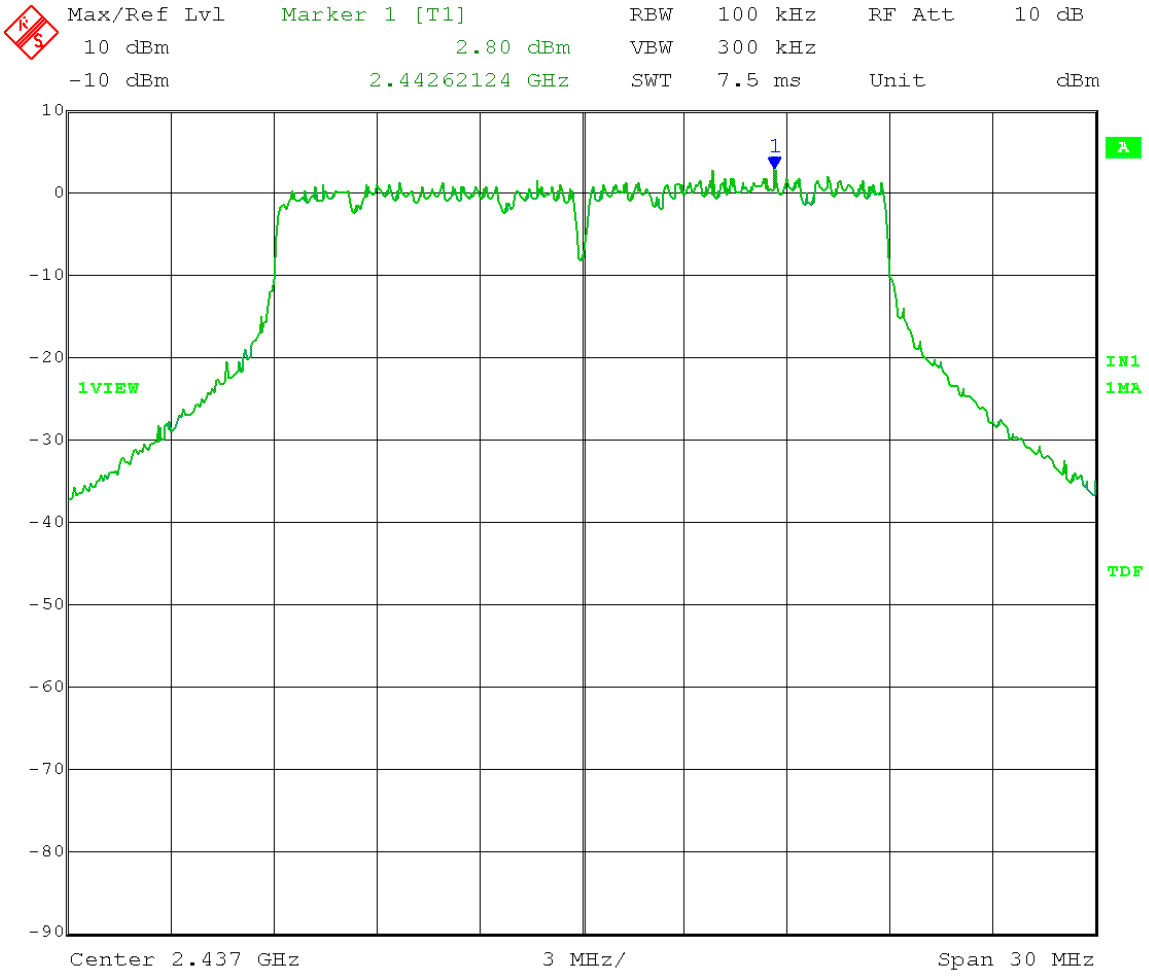
Date: 15.MAR.2014 11:29:05

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 ≥ 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



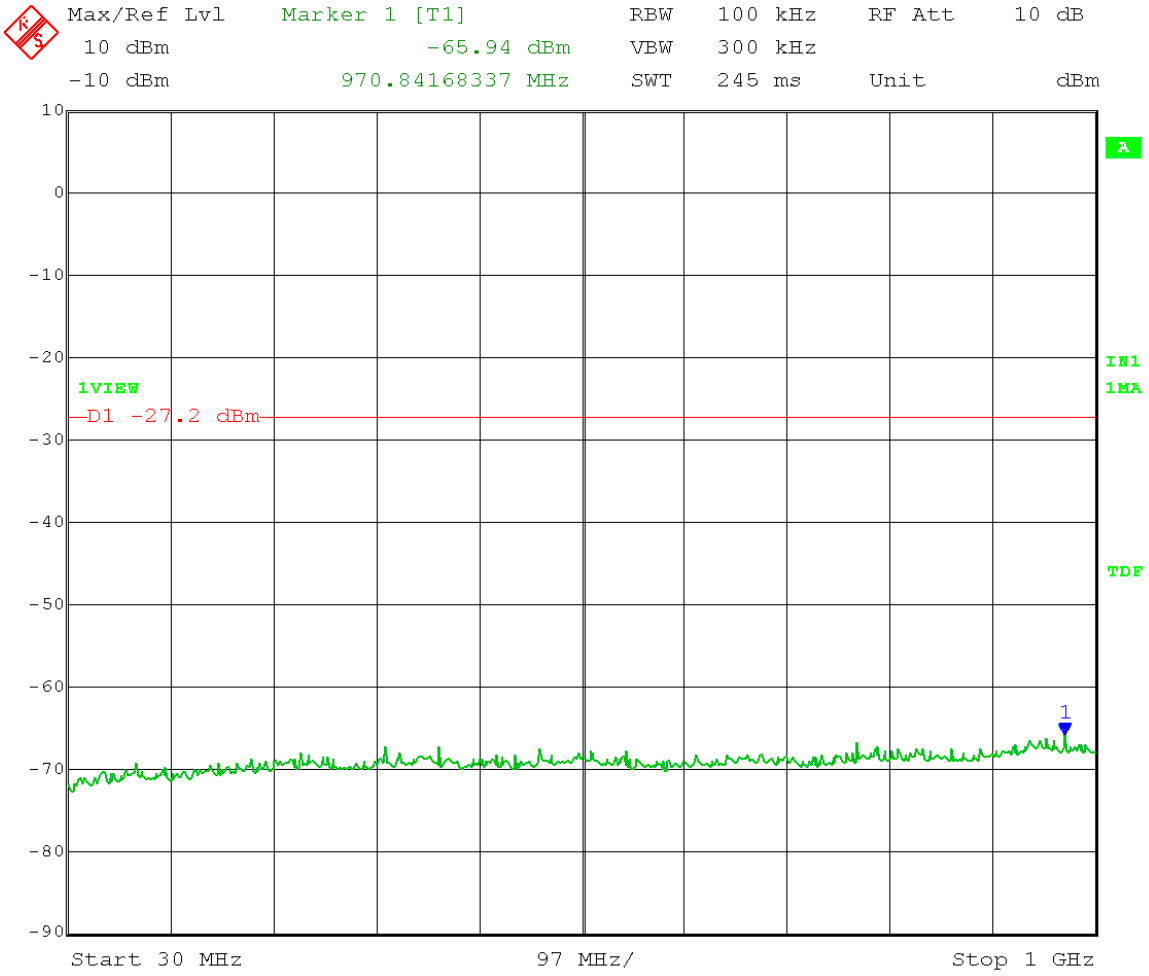
Date: 15.MAR.2014 11:30:15

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 ≥ 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



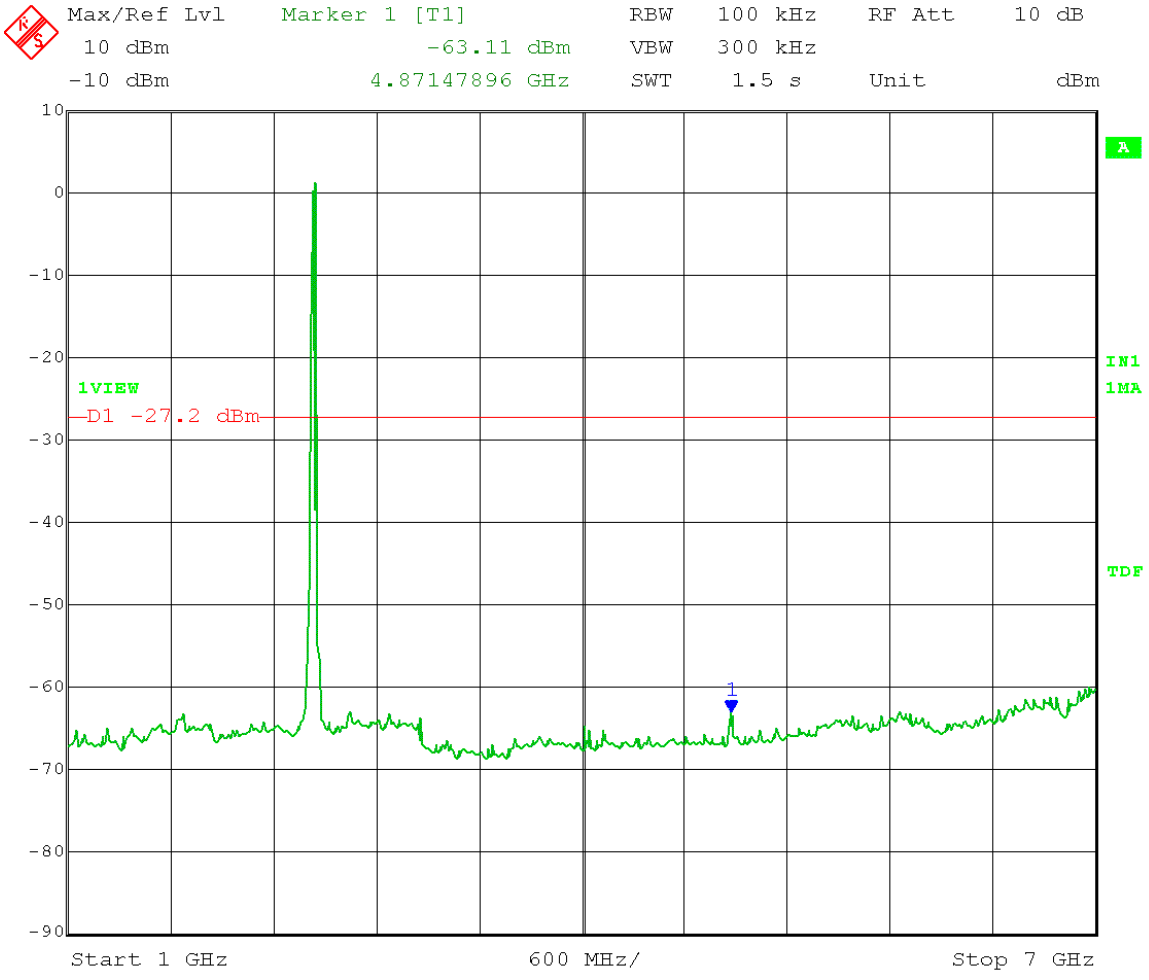
Date: 15.MAR.2014 11:07:58

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 ≥ 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



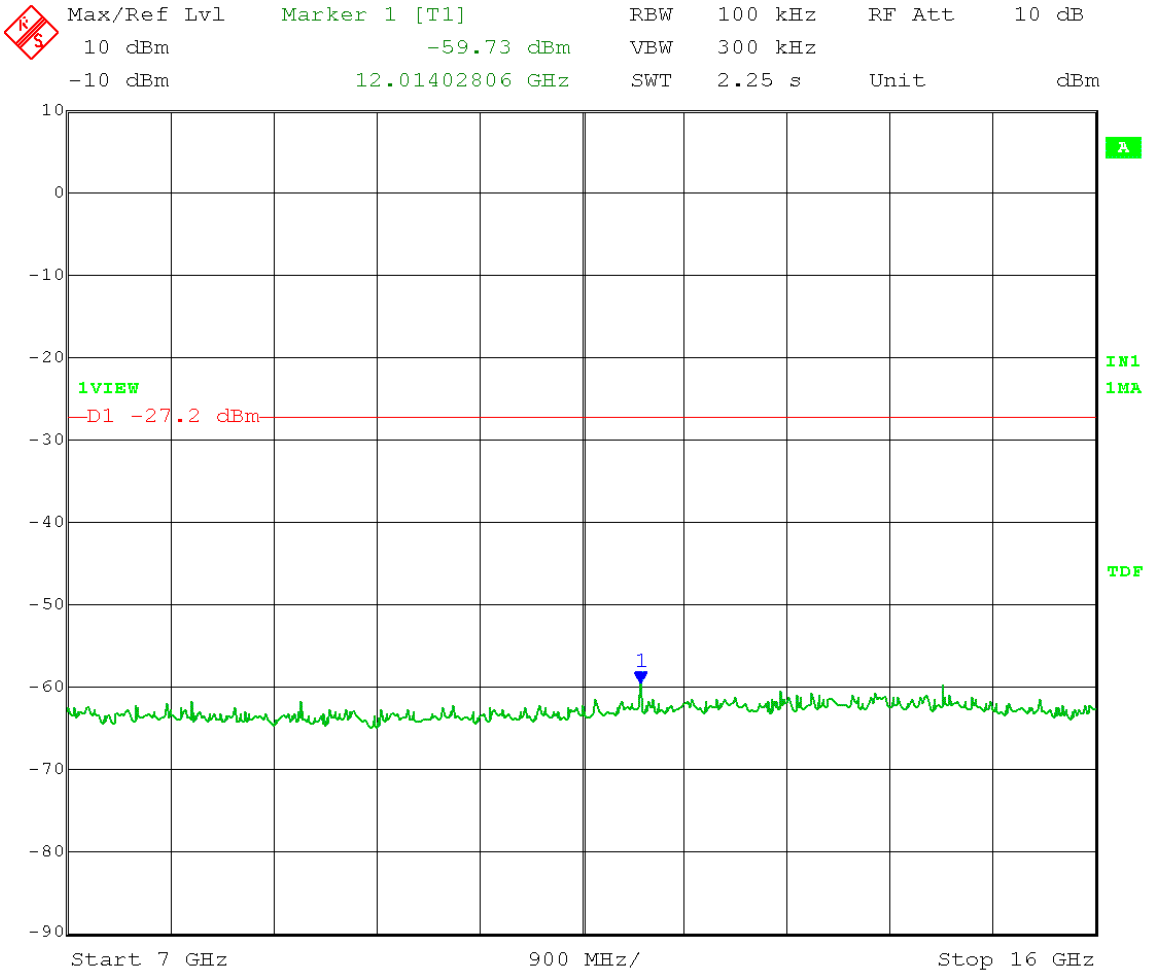
Date: 15.MAR.2014 11:14:08

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 ≥ 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



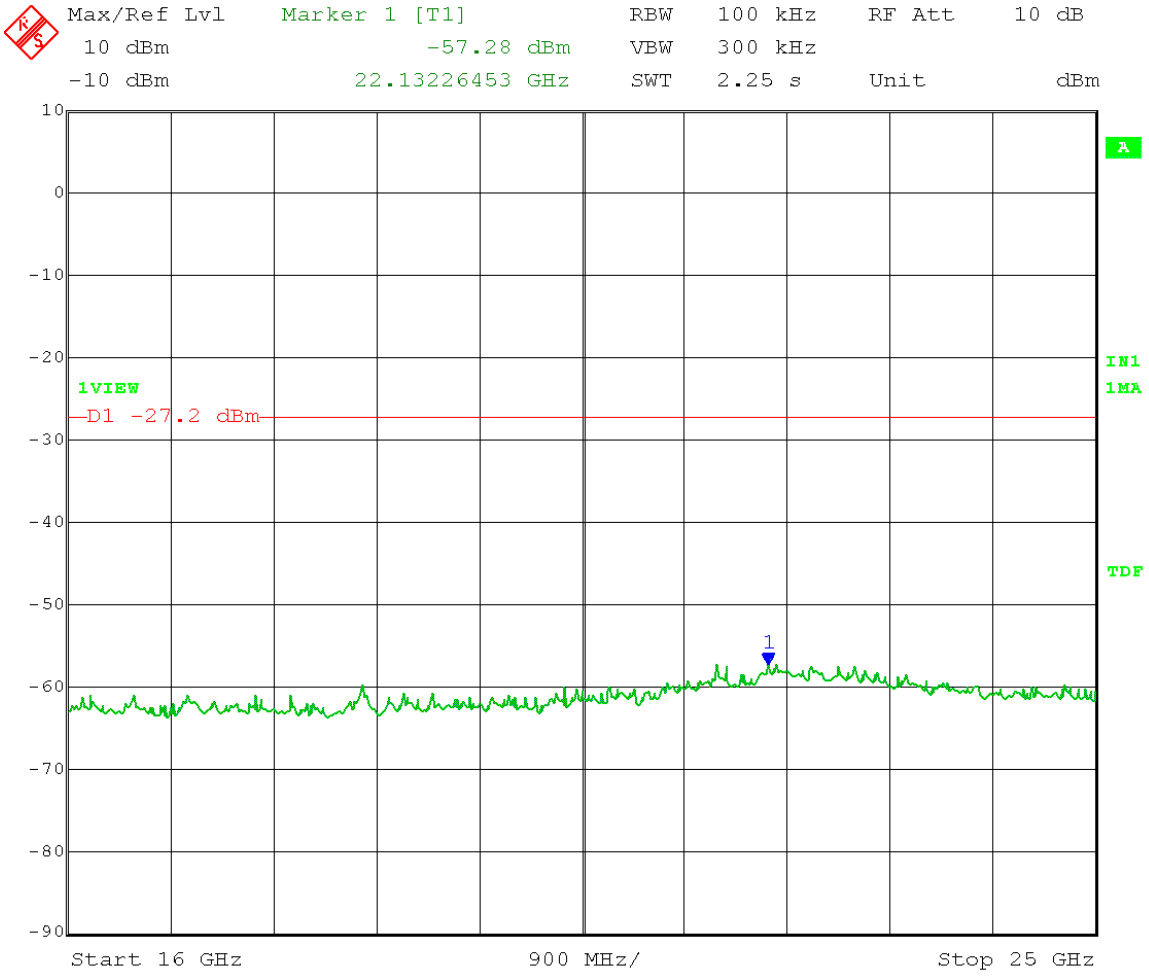
Date: 15.MAR.2014 11:09:49

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 ≥ 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



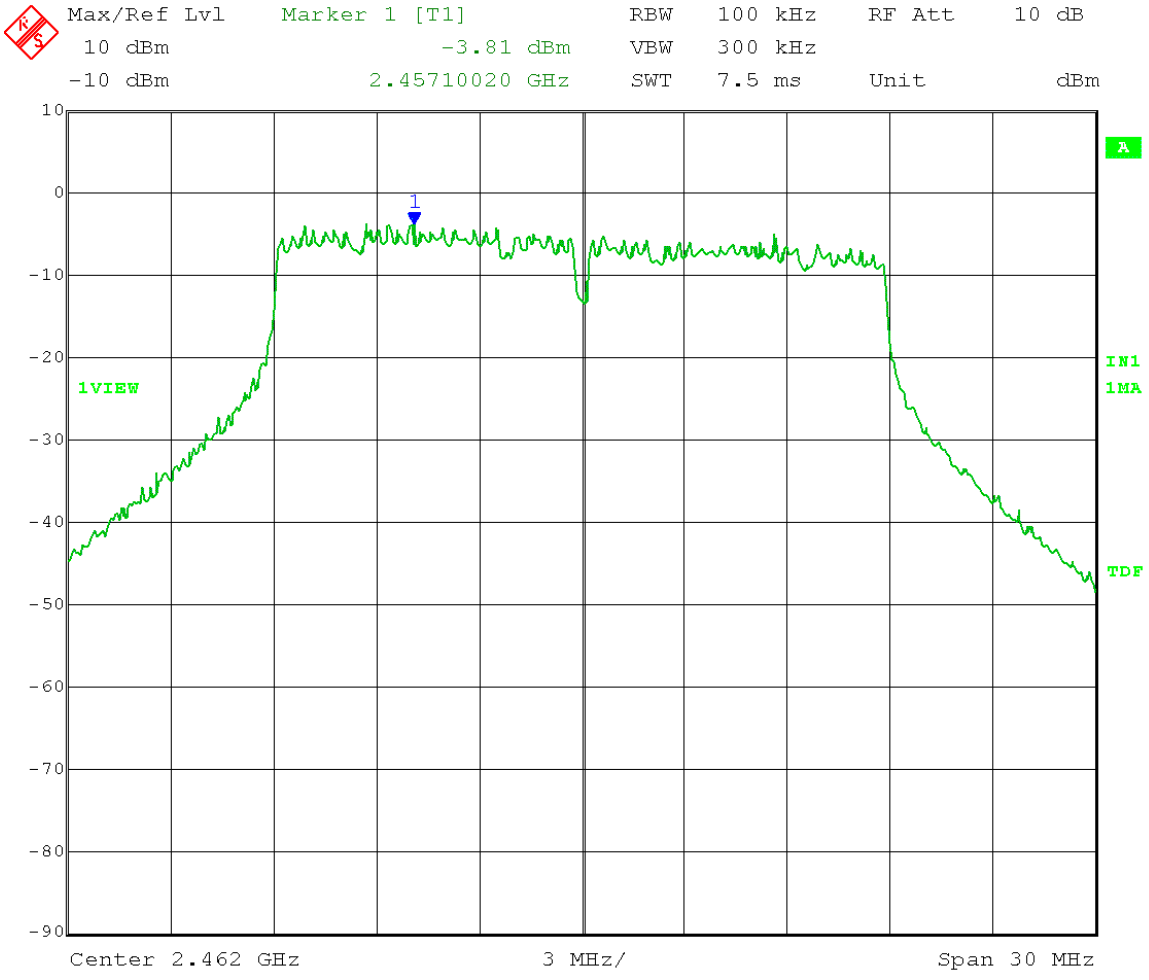
Date: 15.MAR.2014 11:11:11

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 ≥ 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



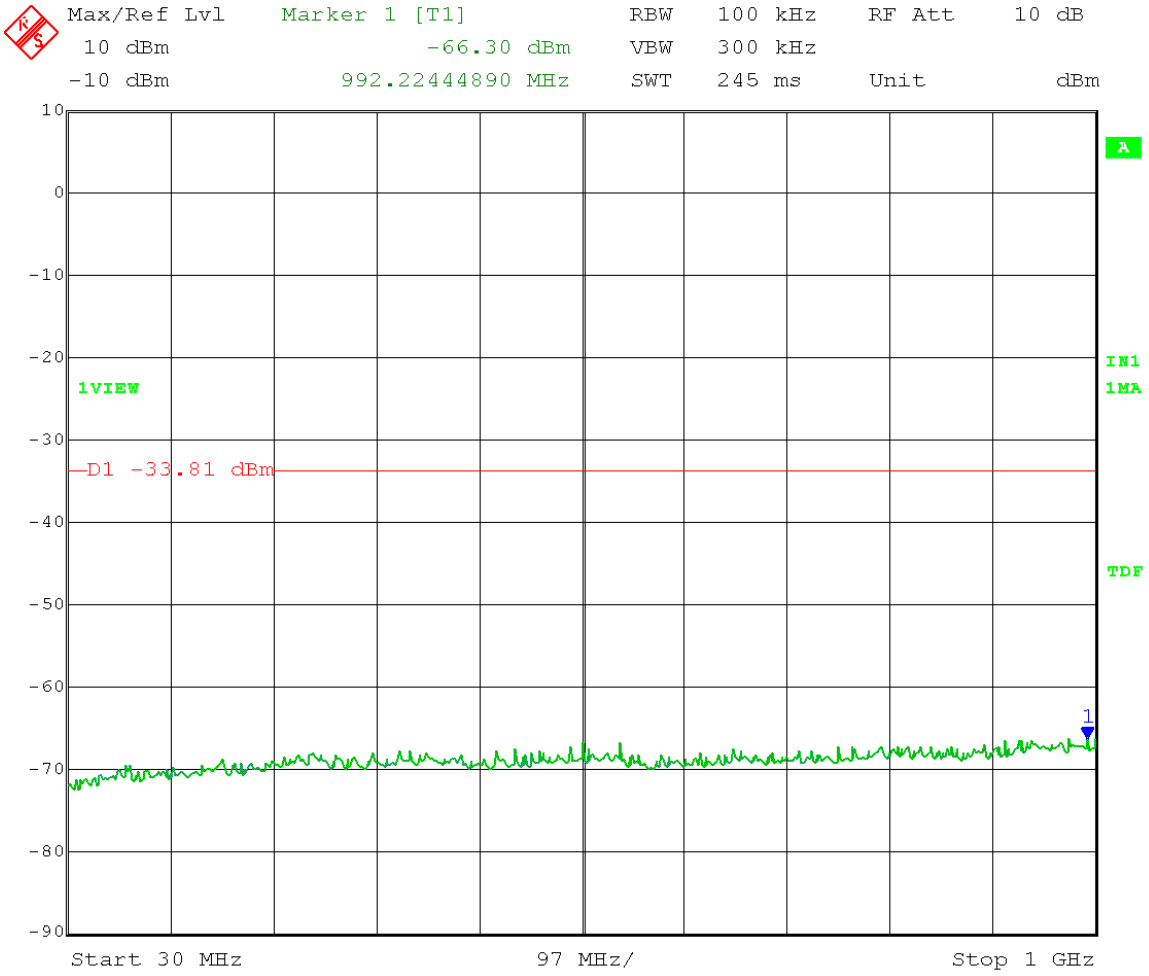
Date: 15.MAR.2014 11:12:33

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 ≥ 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



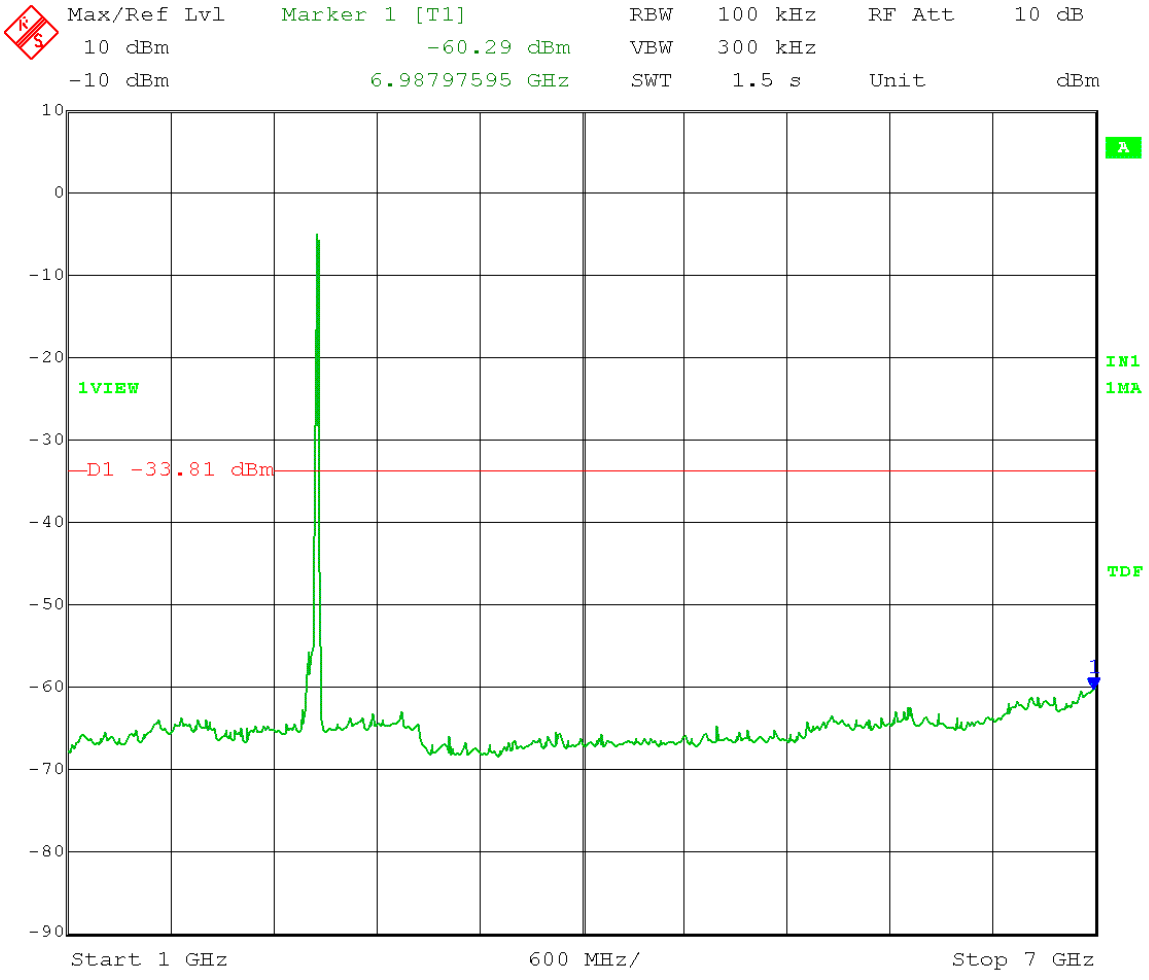
Date: 15.MAR.2014 11:34:56

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 ≥ 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



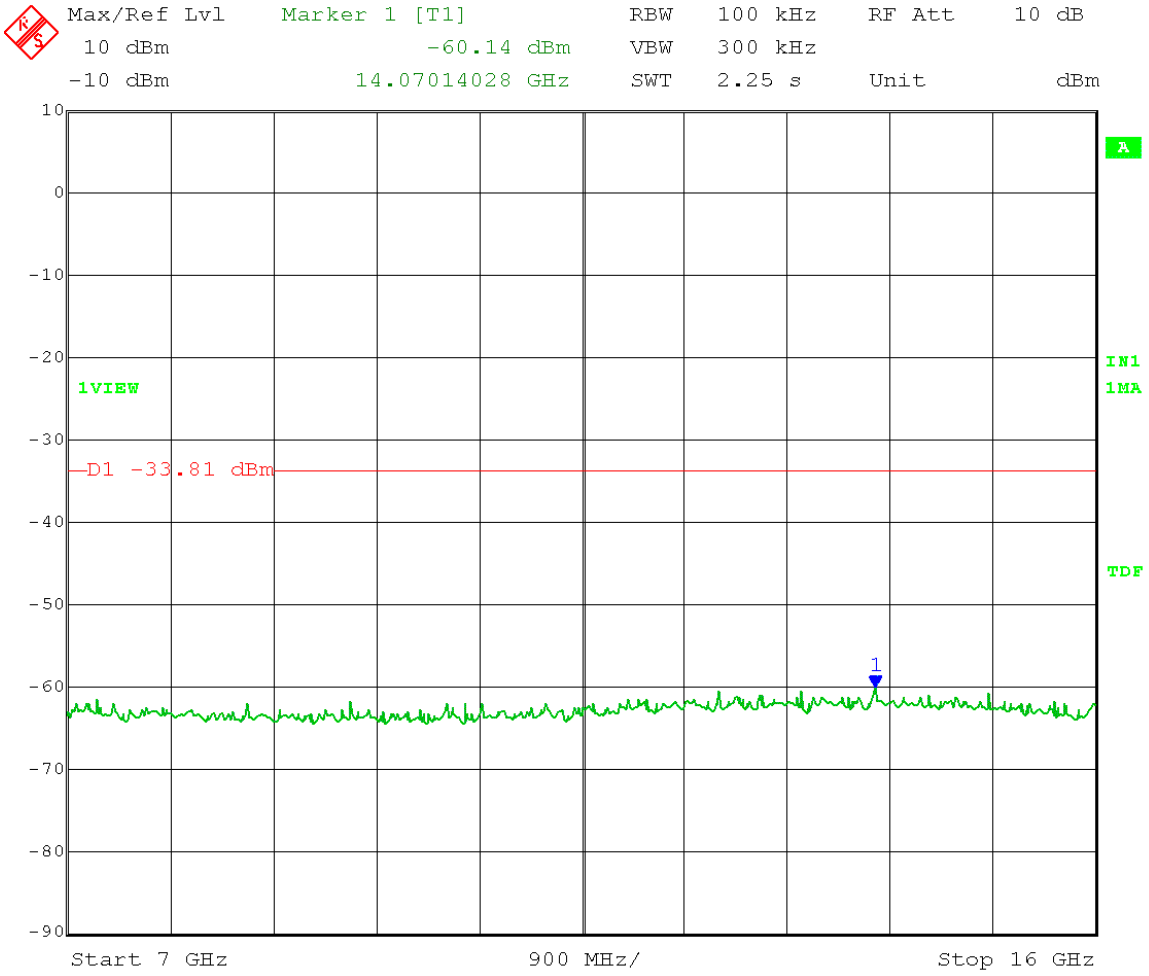
Date: 15.MAR.2014 11:42:35

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 ≥ 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



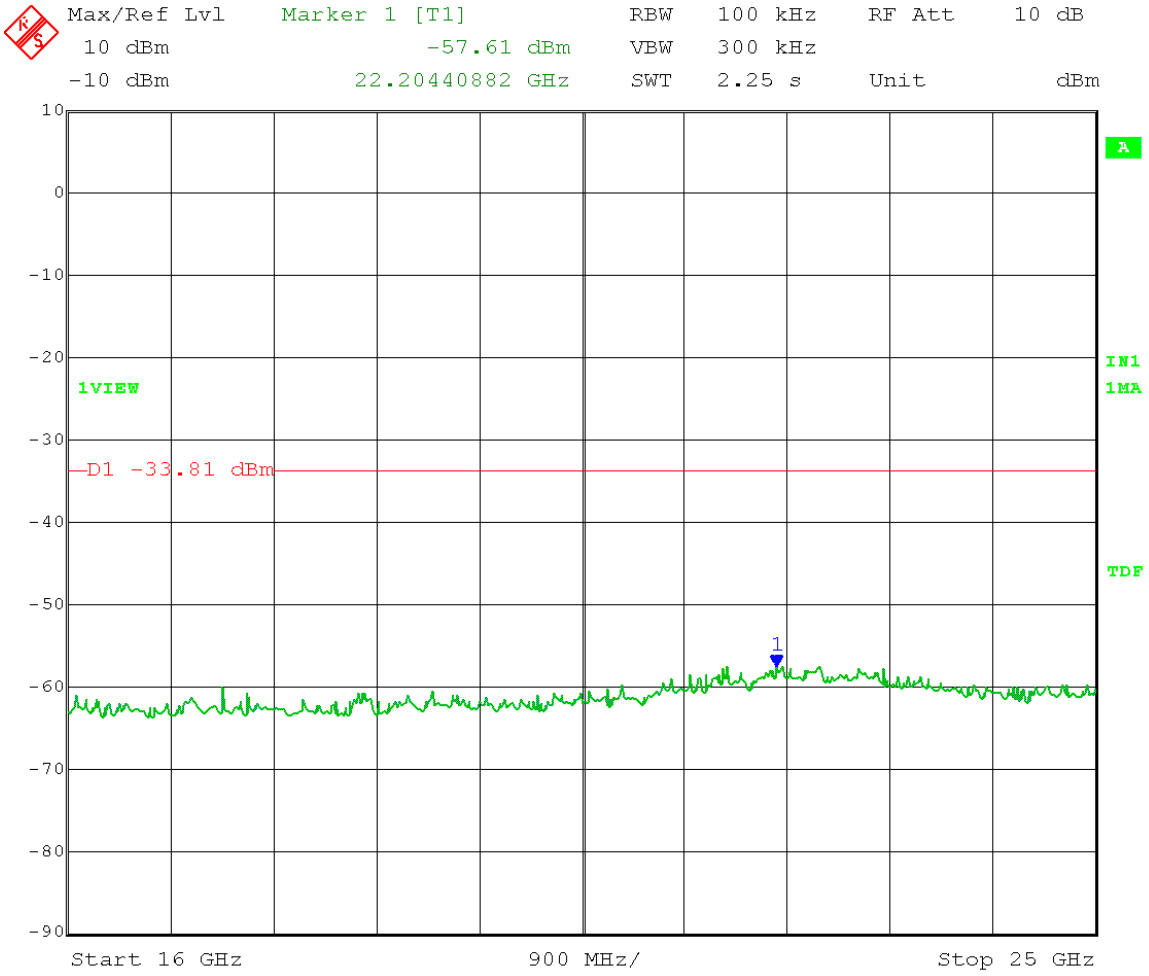
Date: 15.MAR.2014 11:37:41

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 ≥ 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



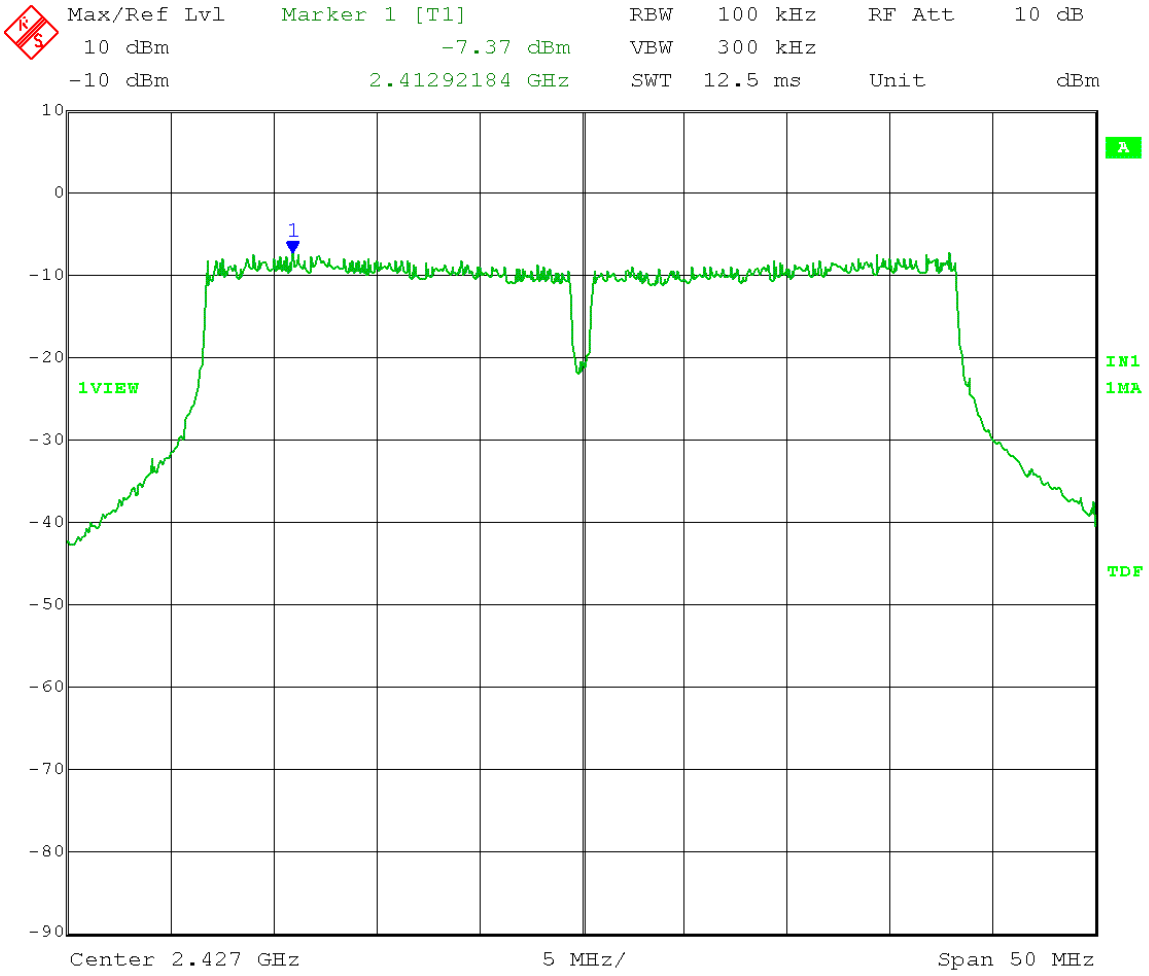
Date: 15.MAR.2014 11:39:16

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 ≥ 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



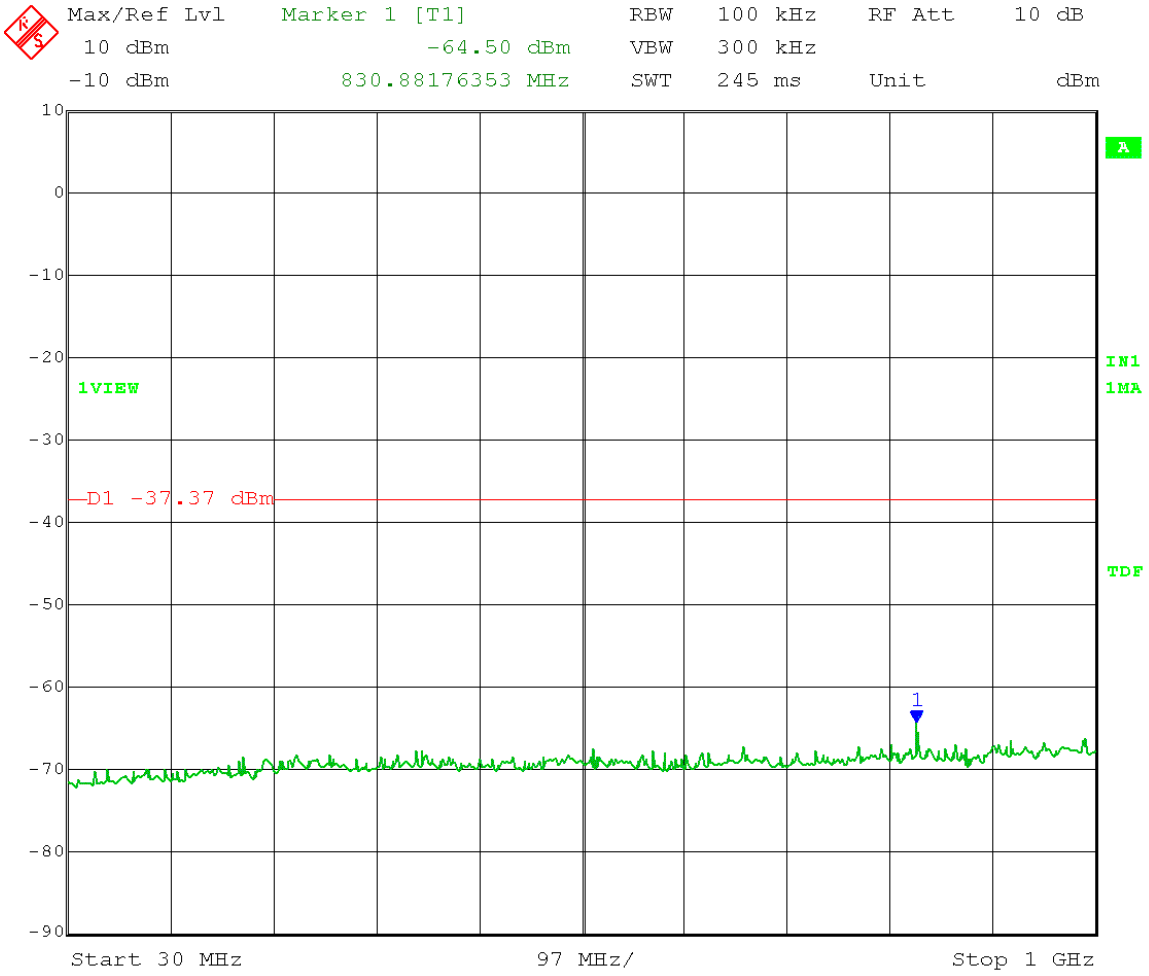
Date: 15.MAR.2014 11:40:33

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 ≥ 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



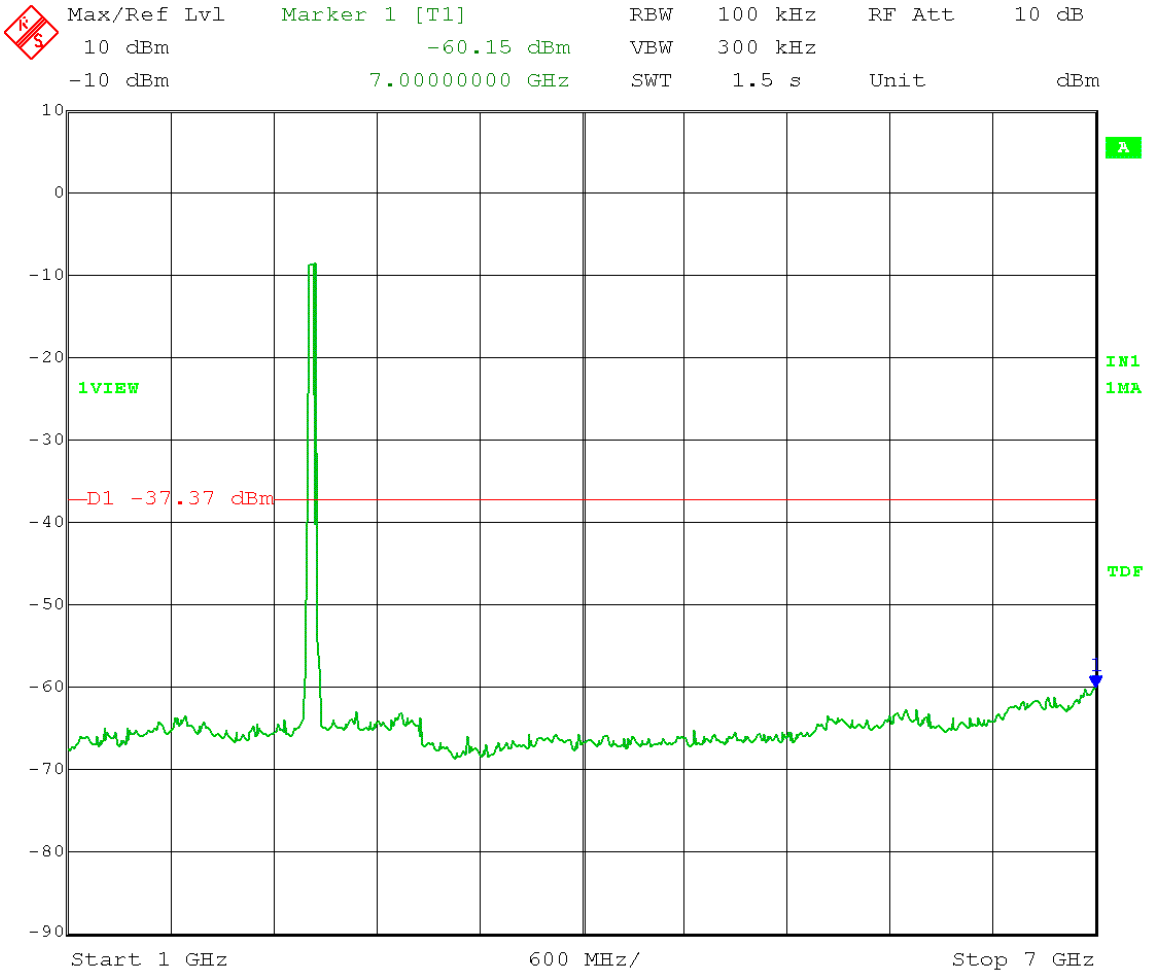
Date: 15.MAR.2014 12:06:53

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 ≥ 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



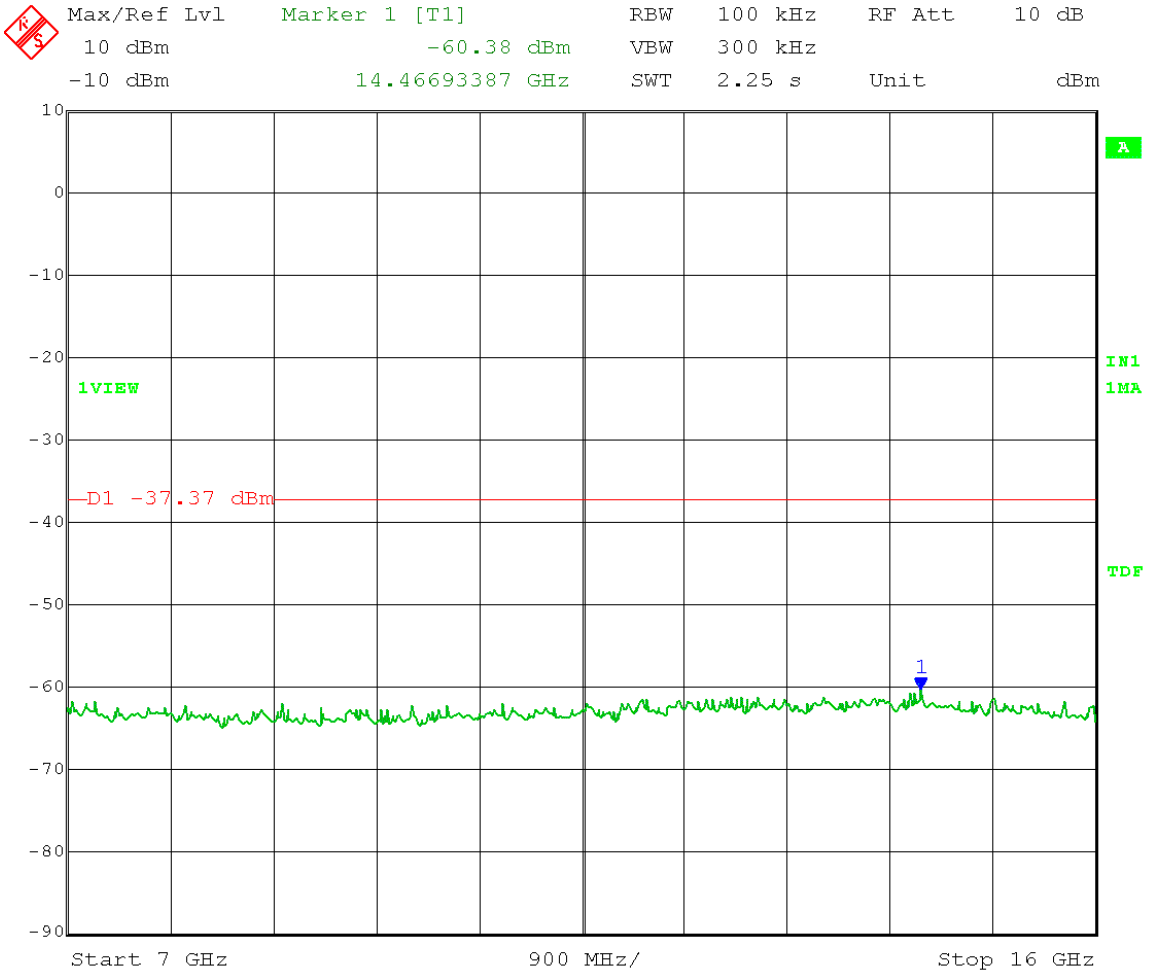
Date: 15.MAR.2014 12:12:55

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 ≥ 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



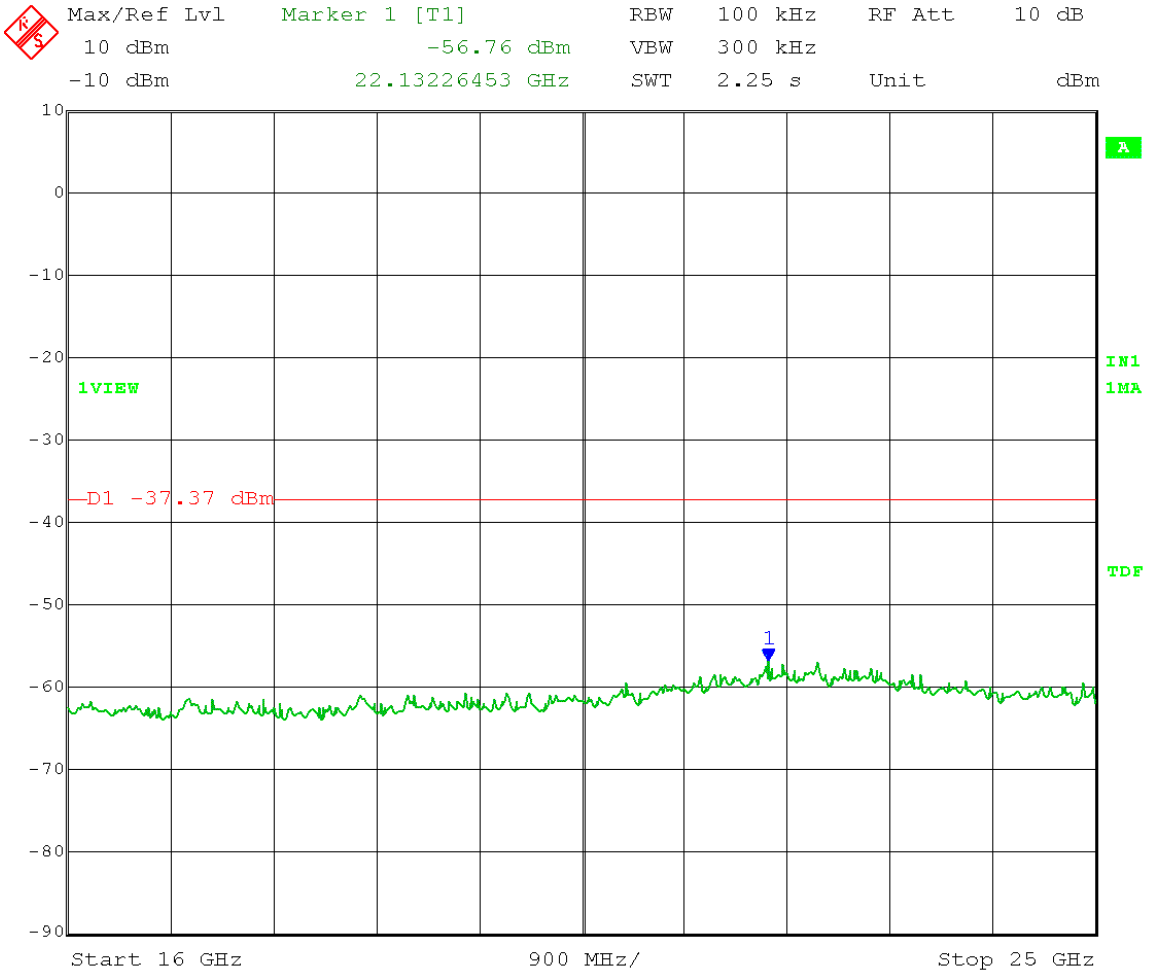
Date: 15.MAR.2014 12:09:14

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 ≥ 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



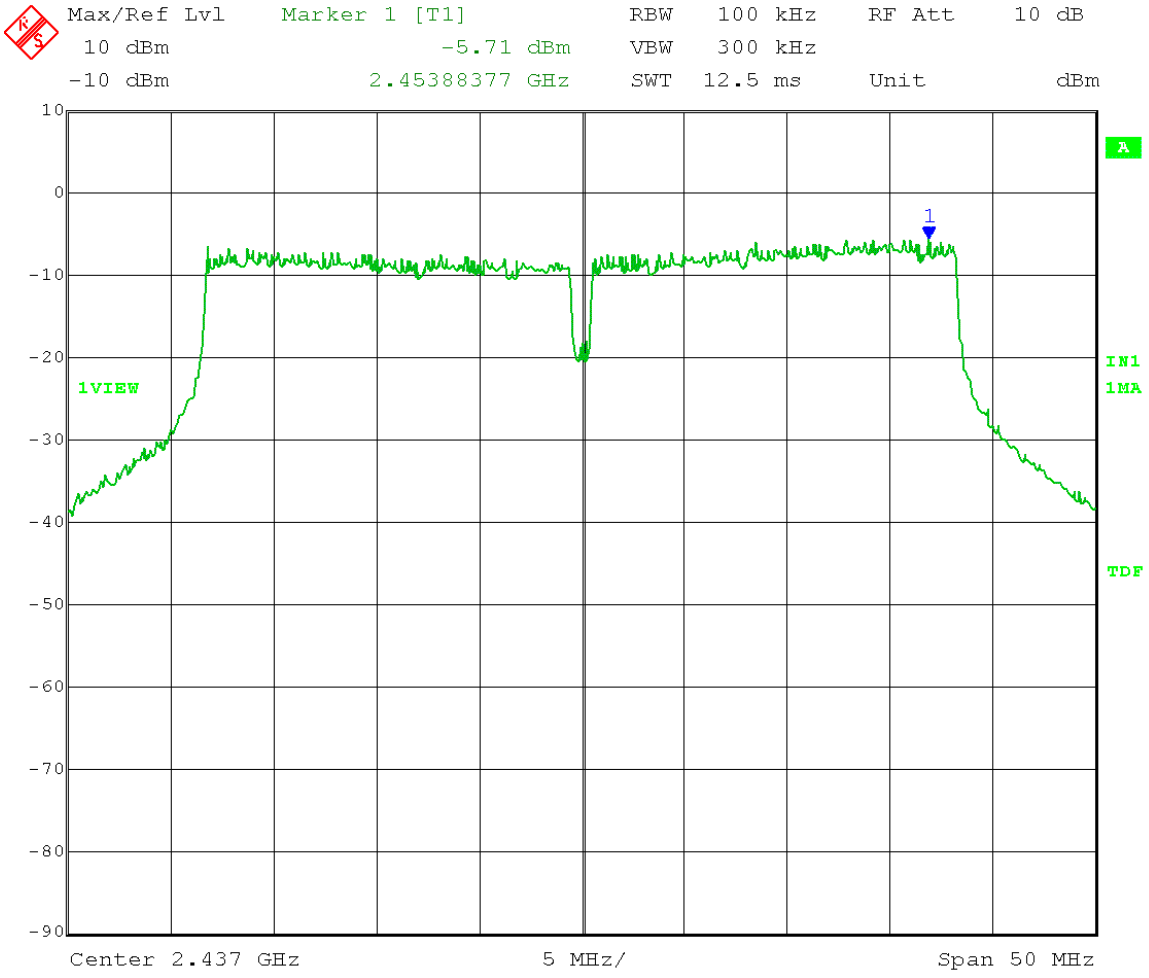
Date: 15.MAR.2014 12:10:28

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 ≥ 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



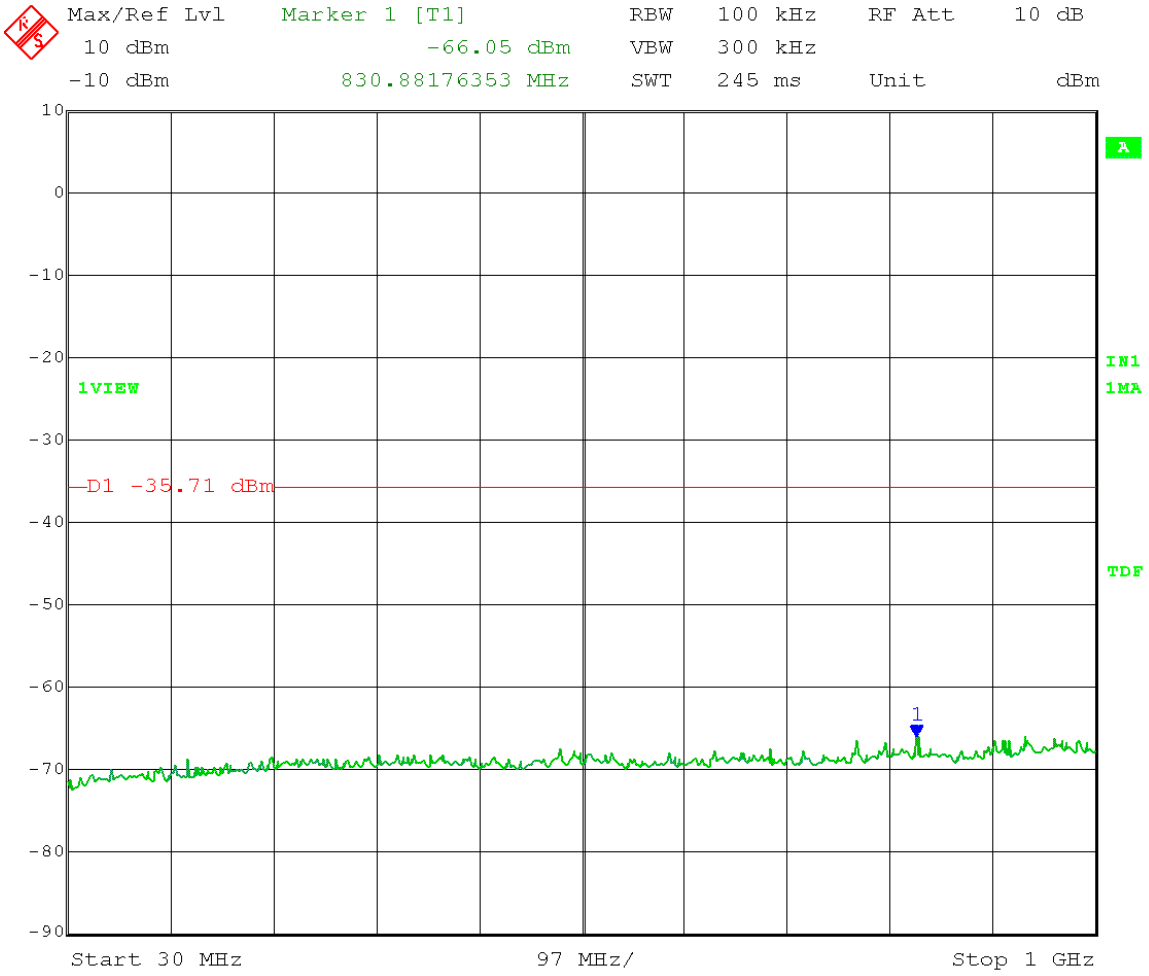
Date: 15.MAR.2014 12:11:44

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 ≥ 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



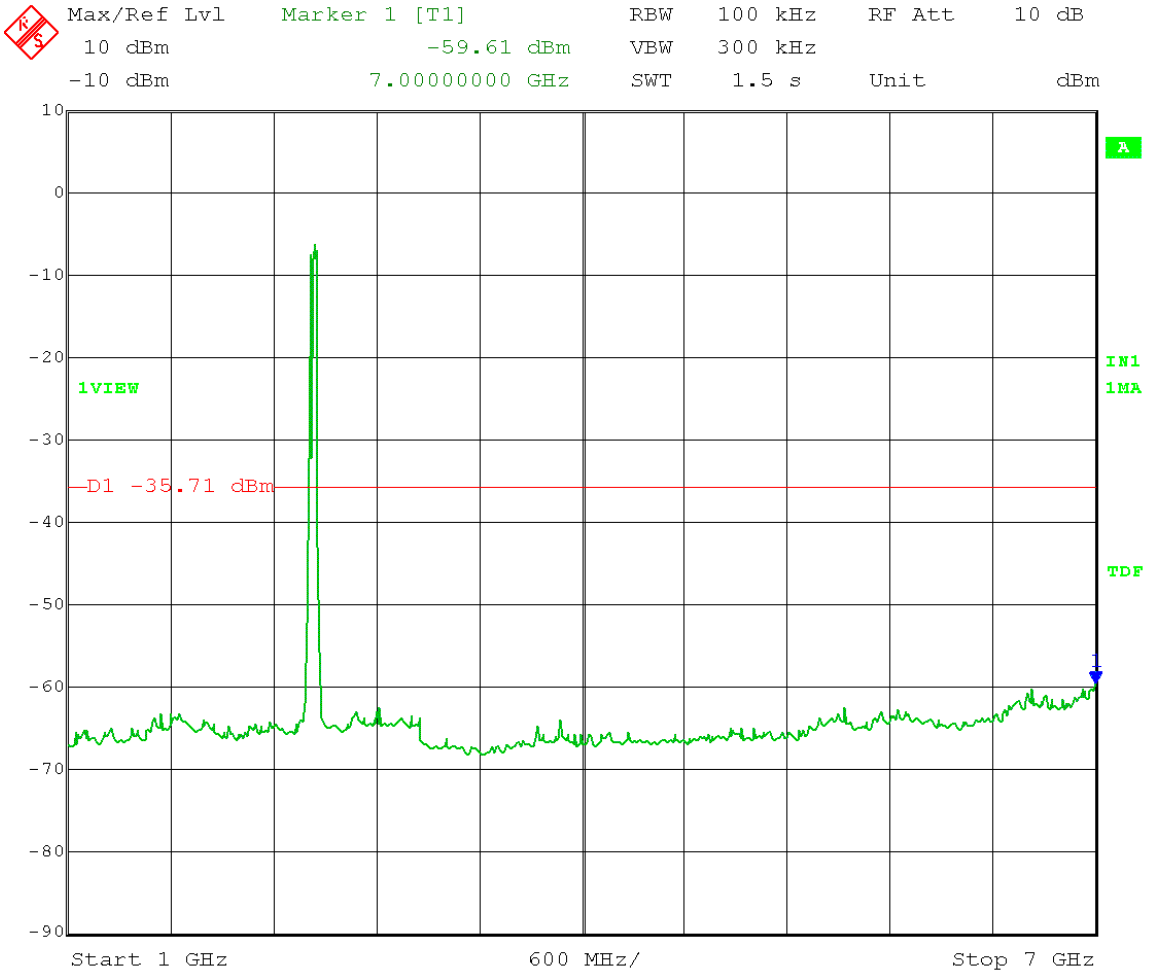
Date: 15.MAR.2014 11:46:16

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 ≥ 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



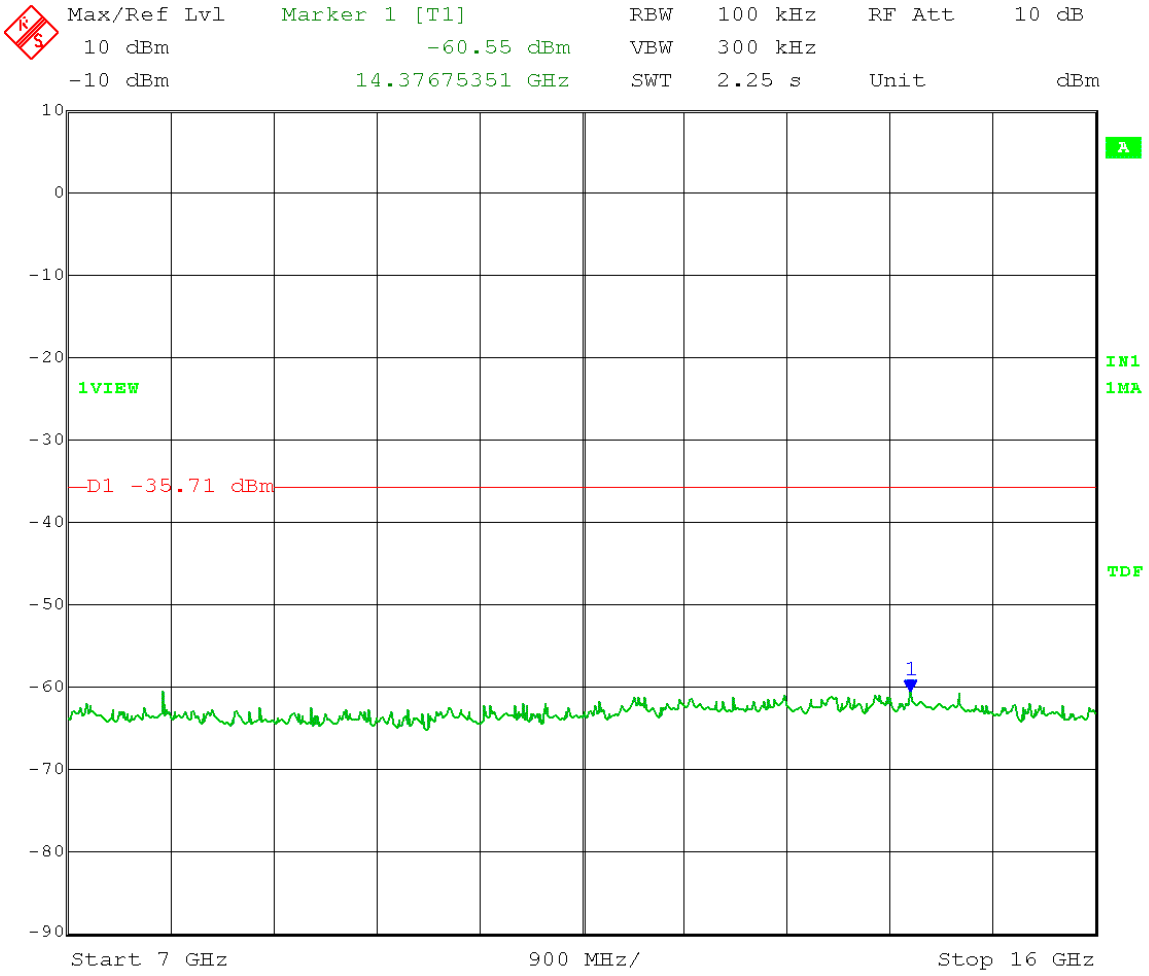
Date: 15.MAR.2014 11:53:45

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 ≥ 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



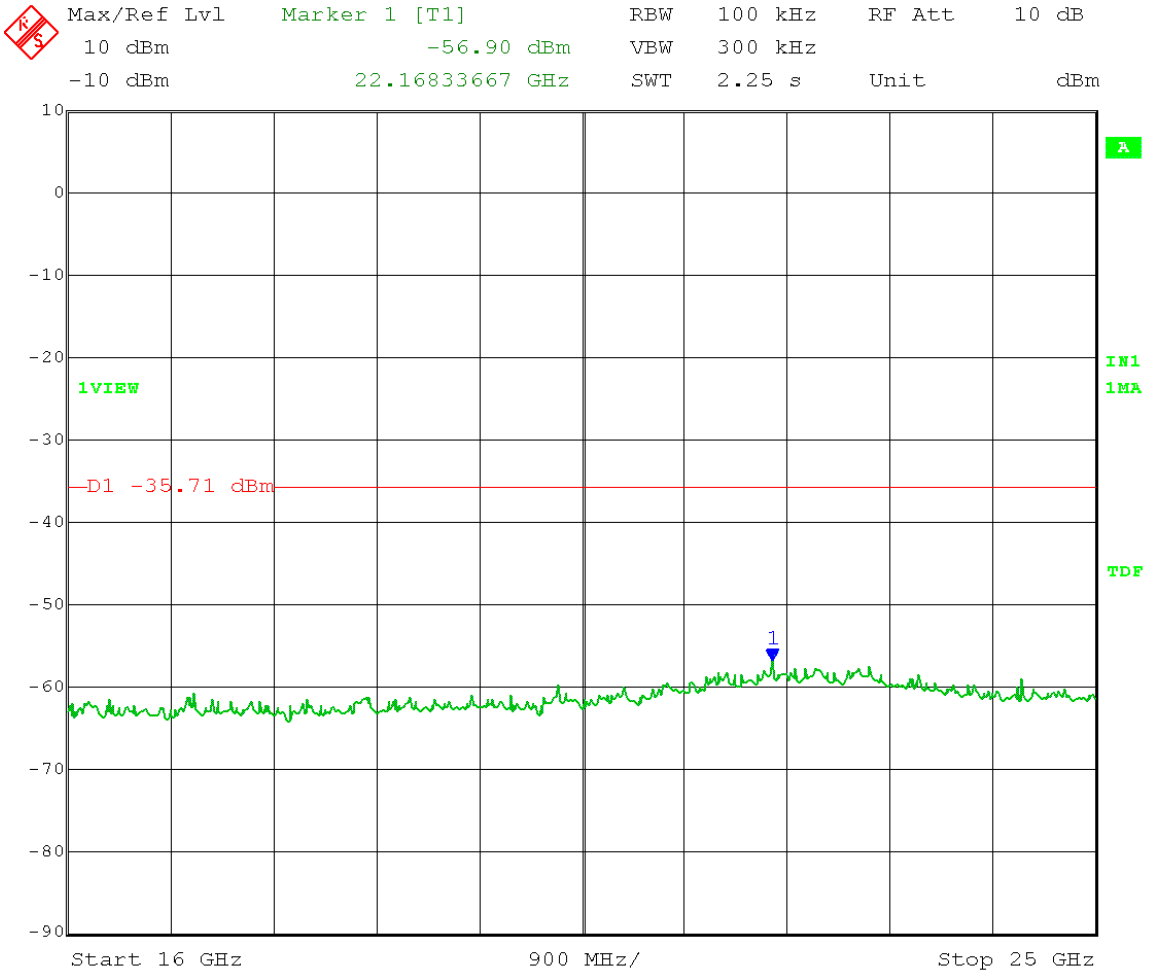
Date: 15.MAR.2014 11:49:33

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 ≥ 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



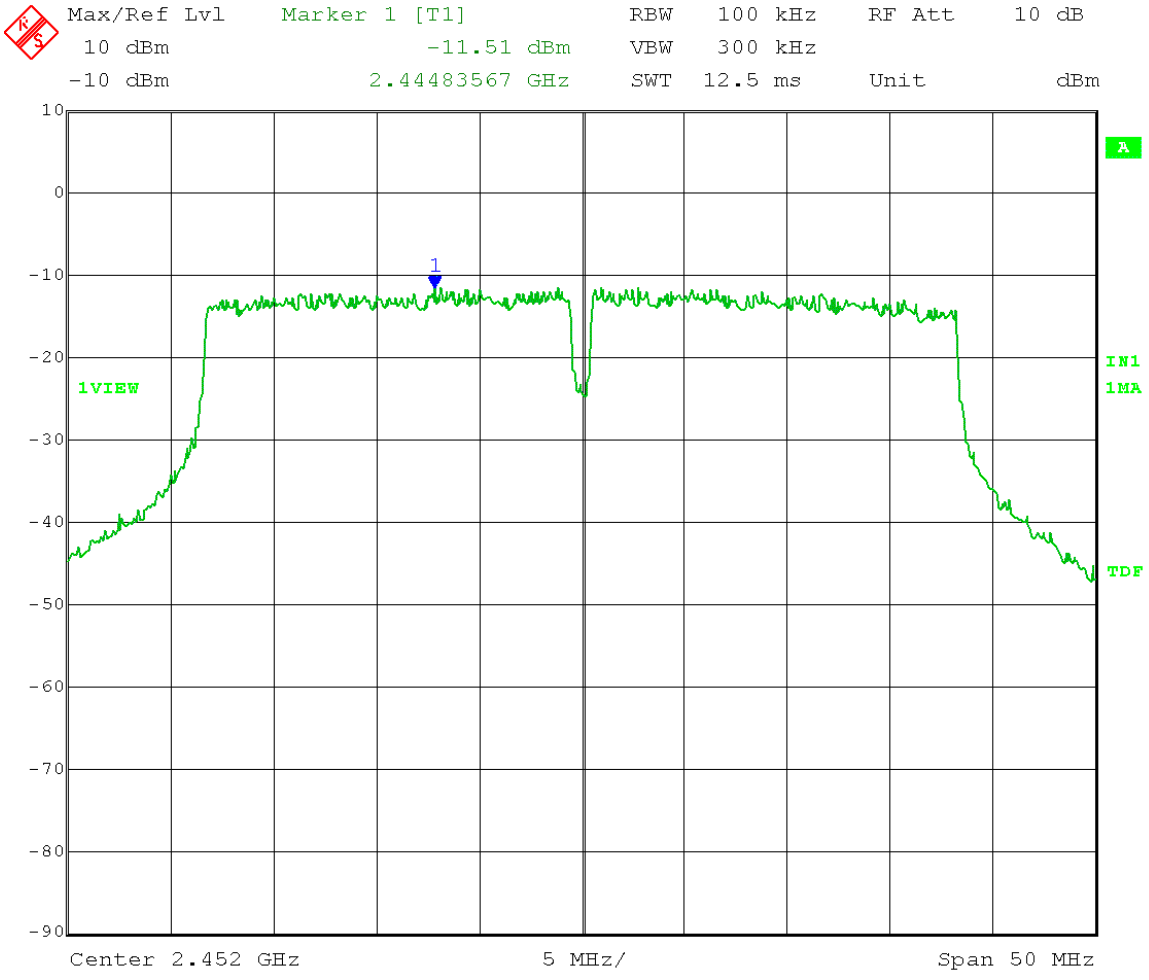
Date: 15.MAR.2014 11:50:41

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 ≥ 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



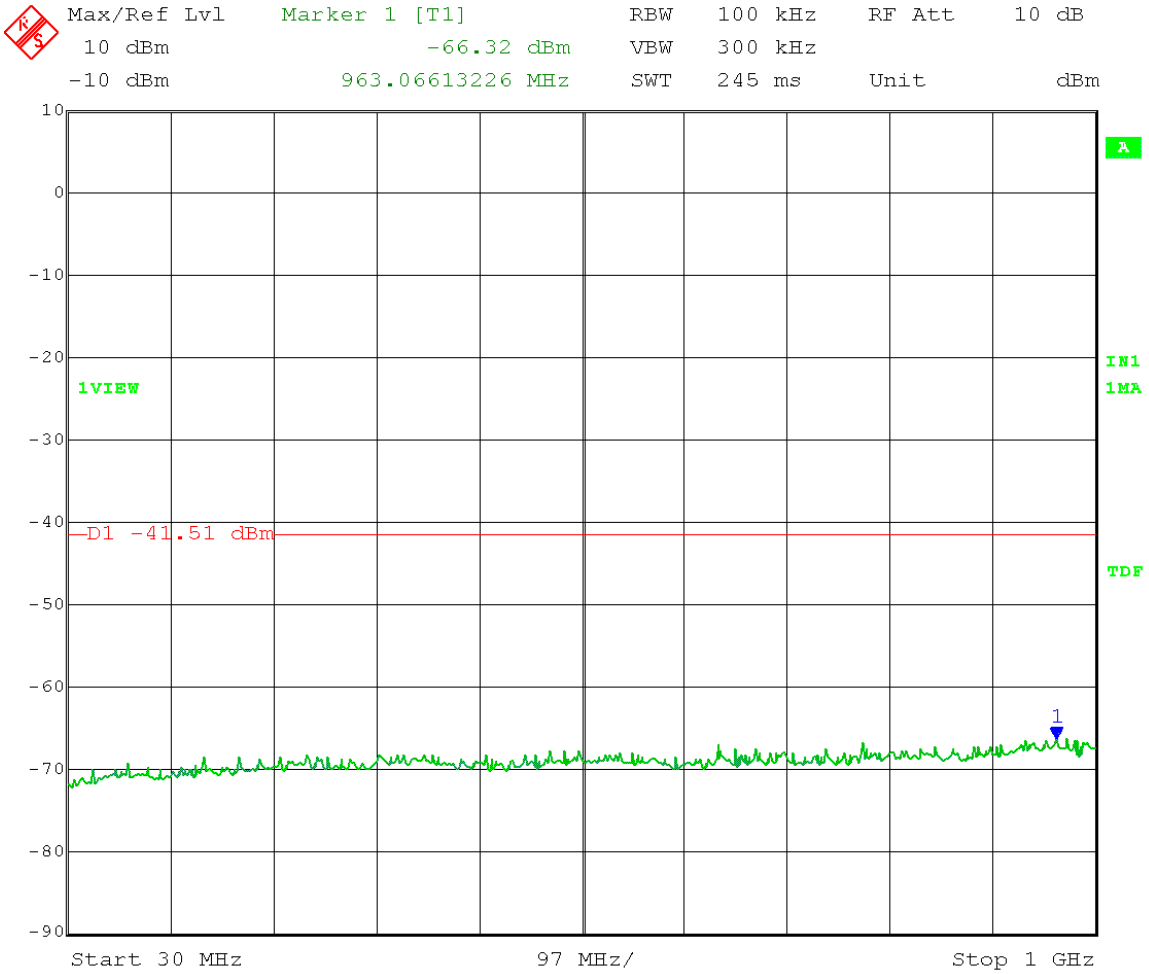
Date: 15.MAR.2014 11:52:01

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 ≥ 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



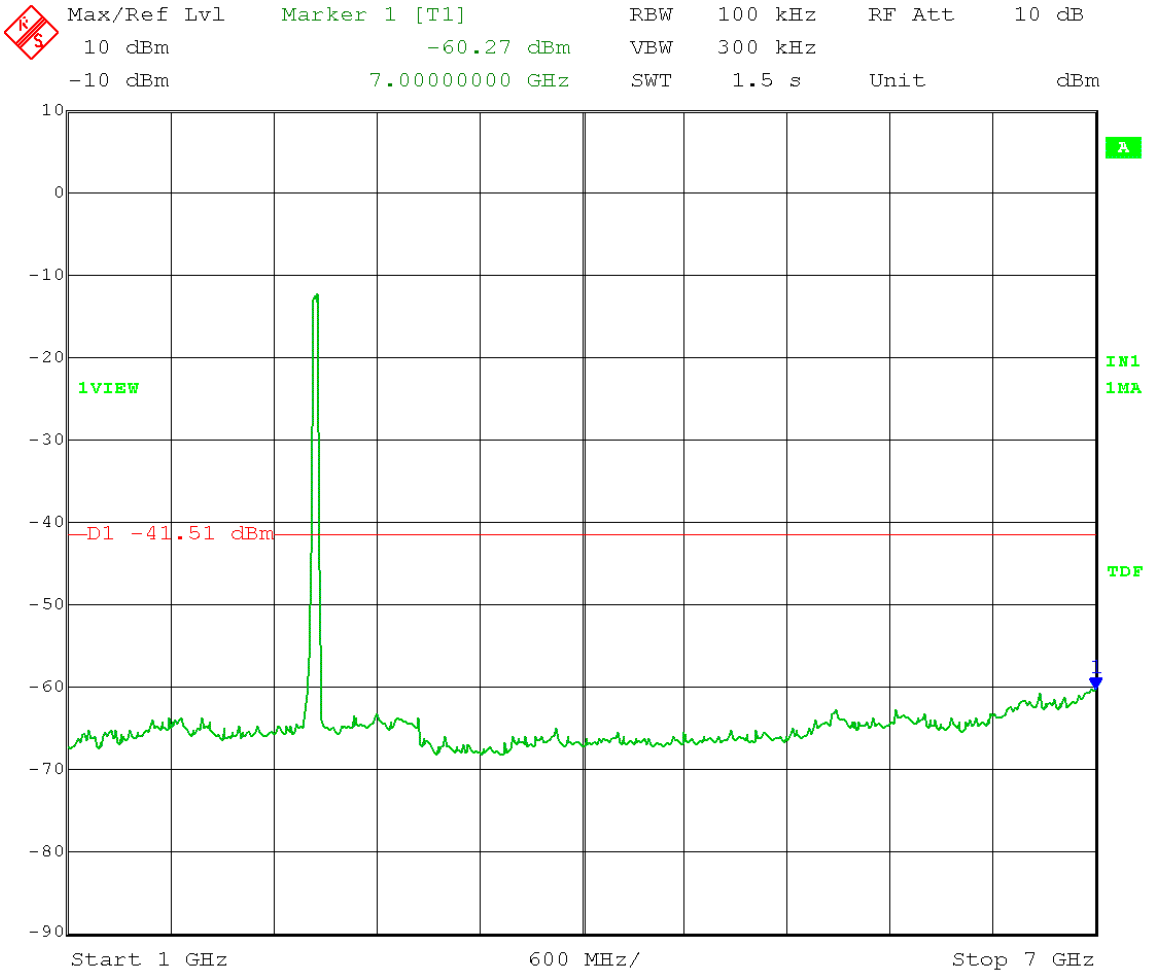
Date: 15.MAR.2014 12:15:18

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 ≥ 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



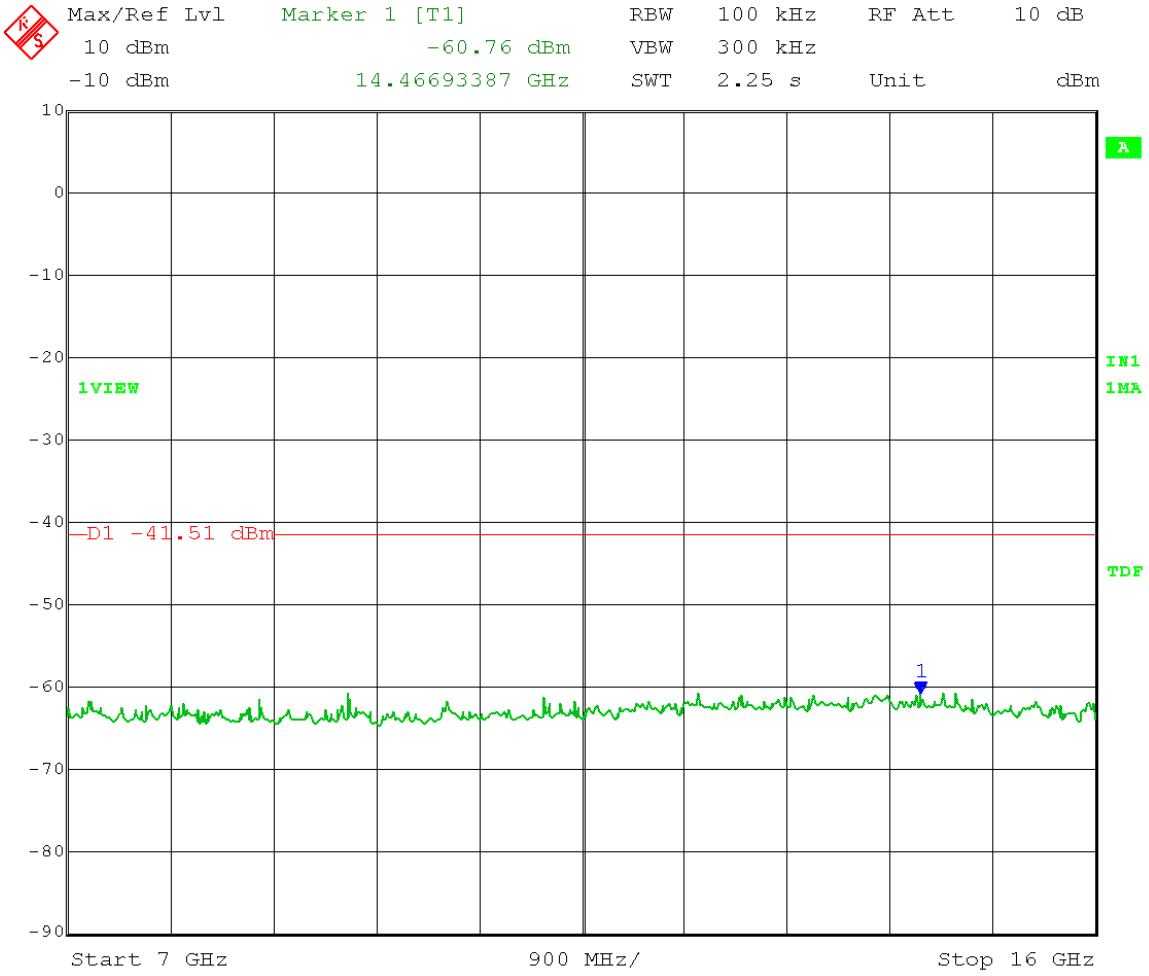
Date: 15.MAR.2014 12:22:03

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 ≥ 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



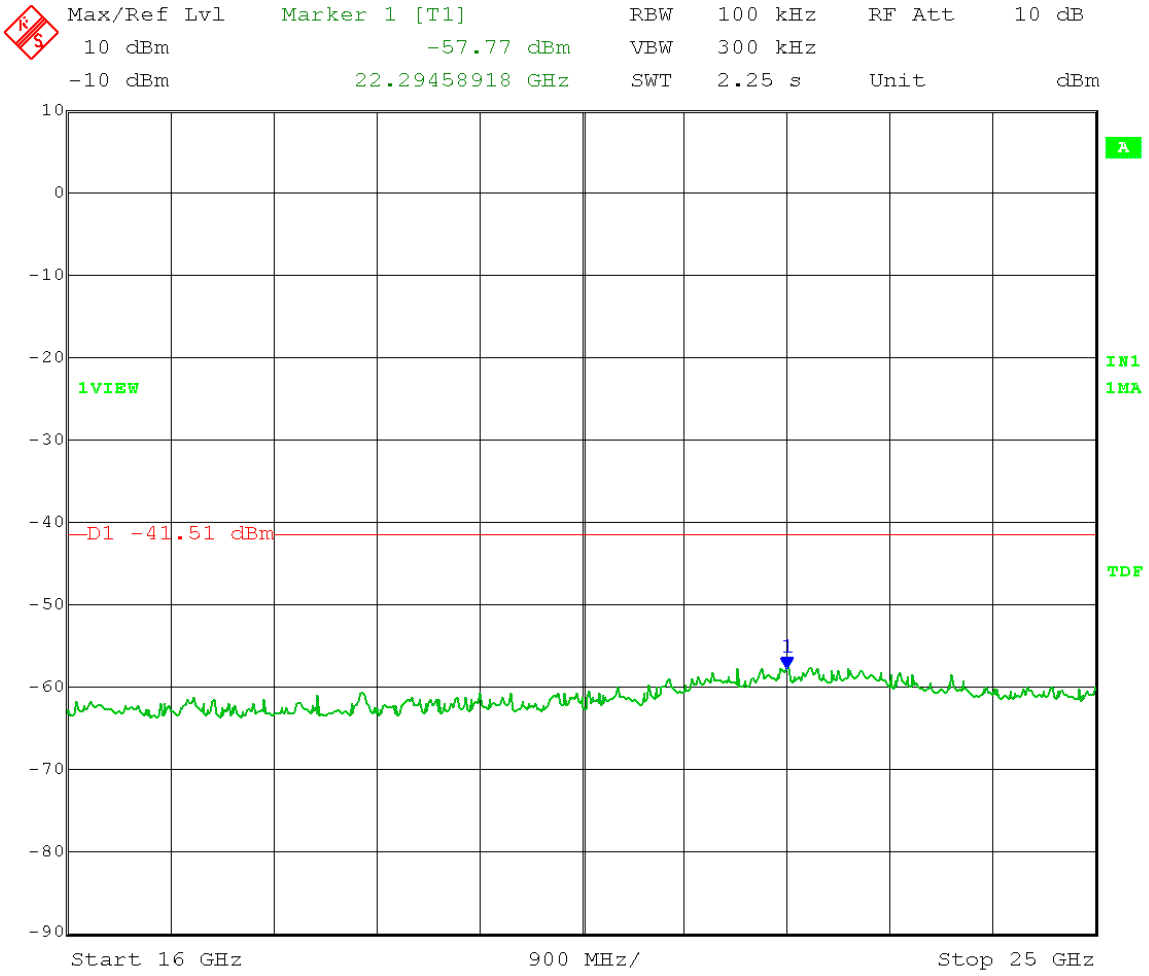
Date: 15.MAR.2014 12:17:37

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 ≥ 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



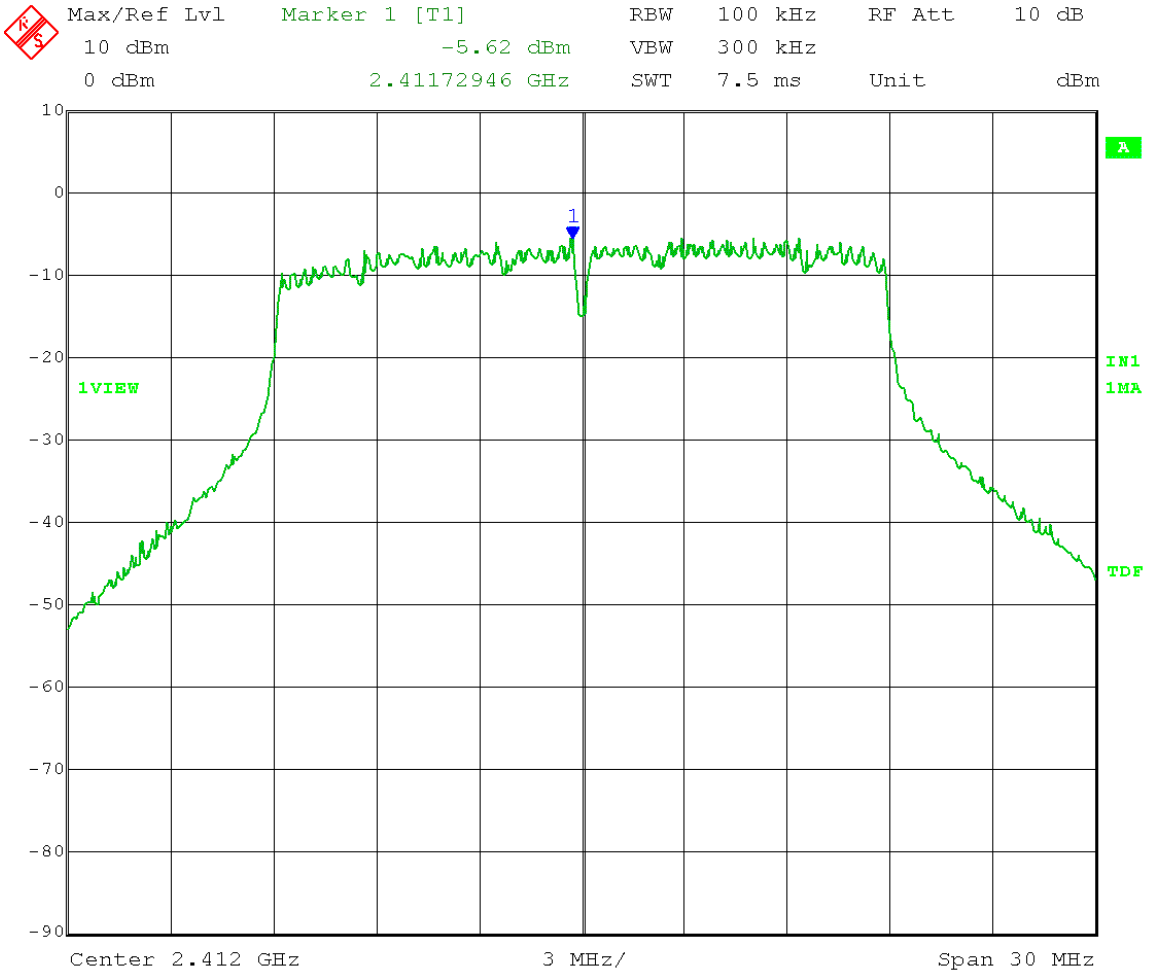
Date: 15.MAR.2014 12:18:52

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 ≥ 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



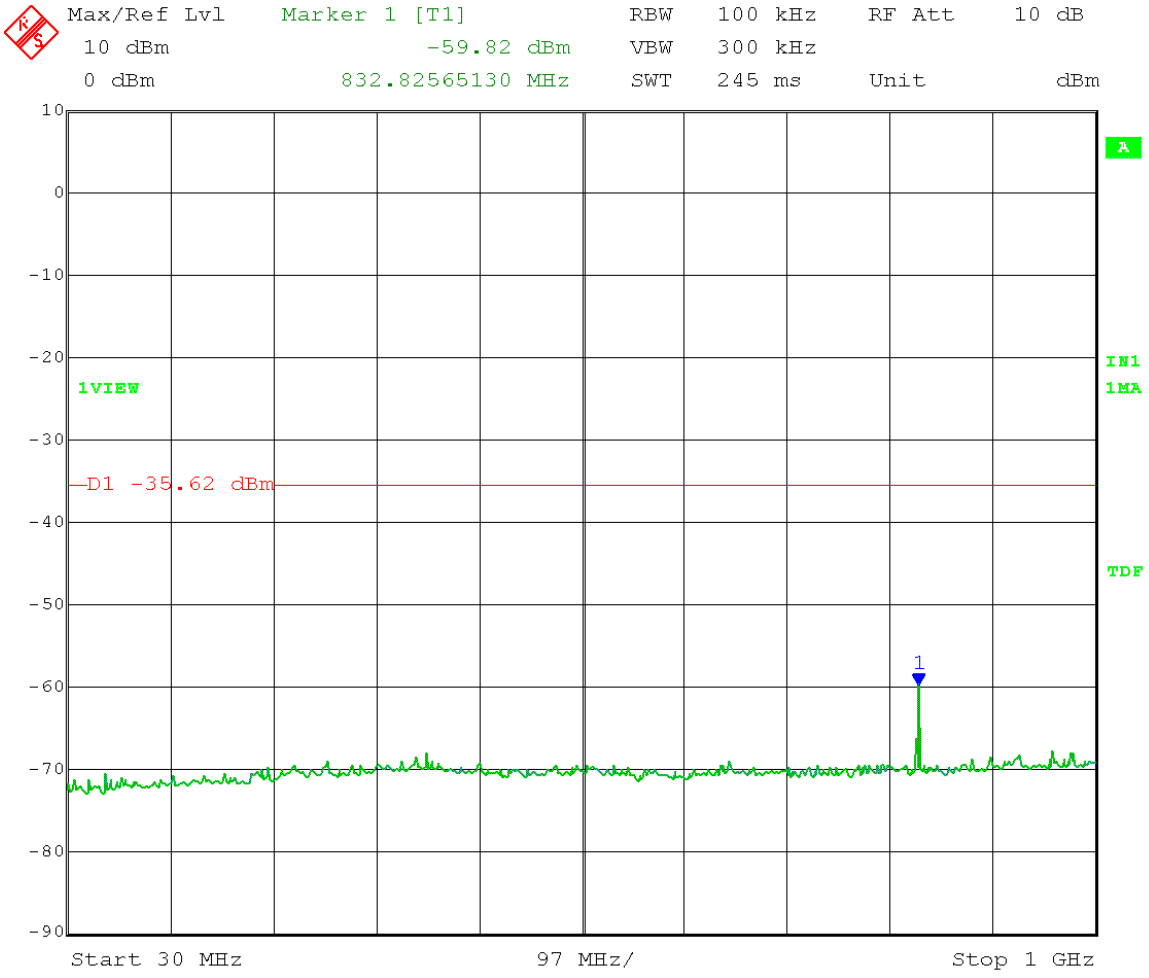
Date: 15.MAR.2014 12:20:12

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 ≥ 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



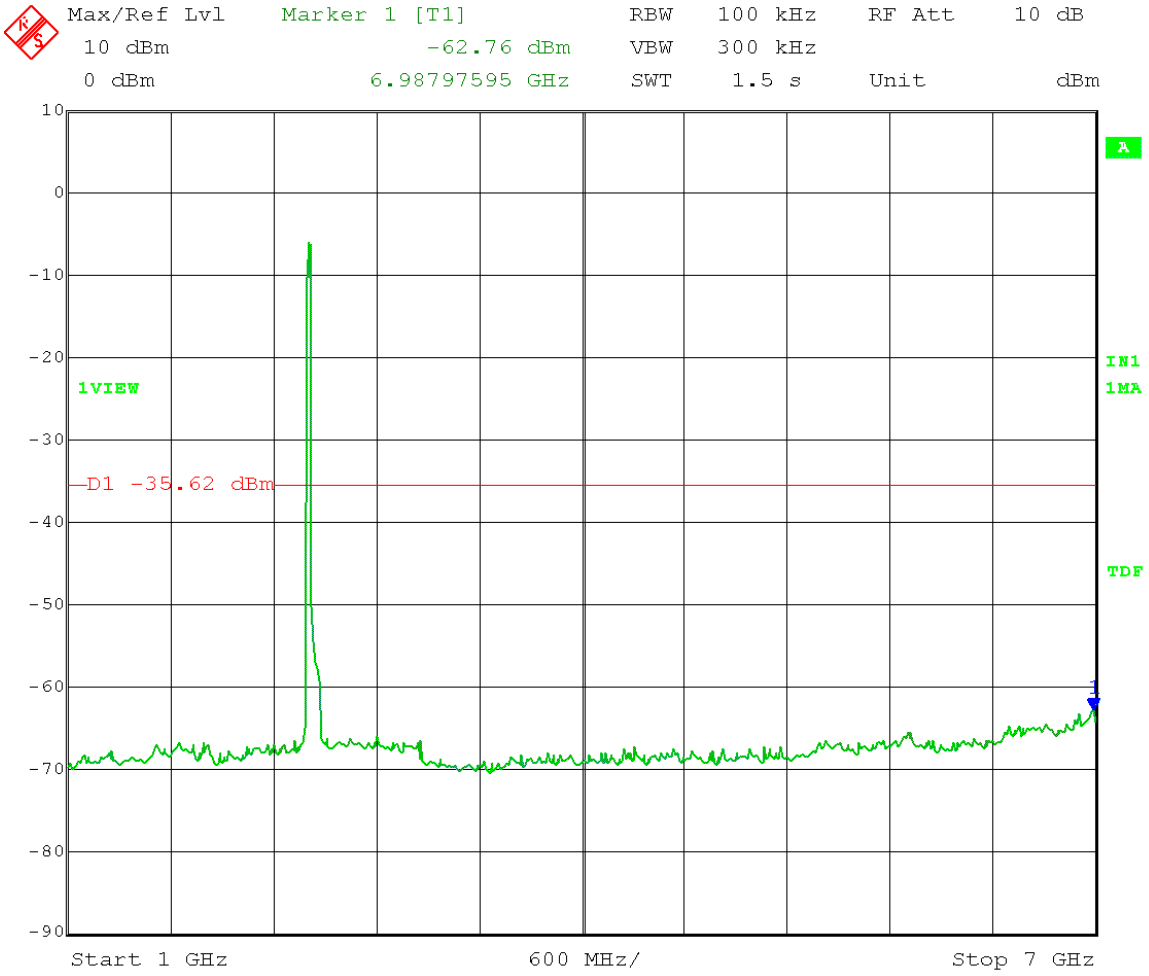
Date: 17.MAR.2014 10:17:02

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 ≥ 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



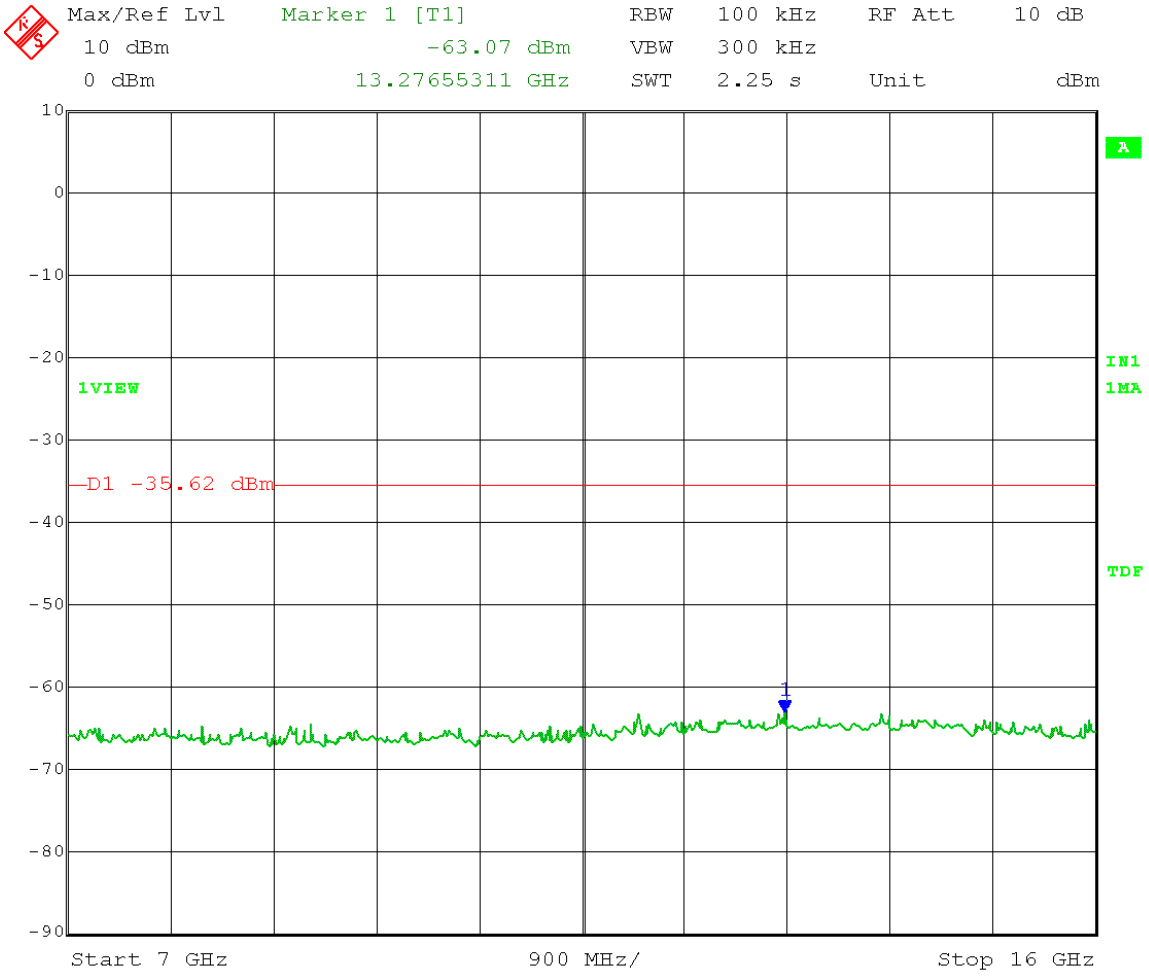
Date: 17.MAR.2014 10:26:30

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 ≥ 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



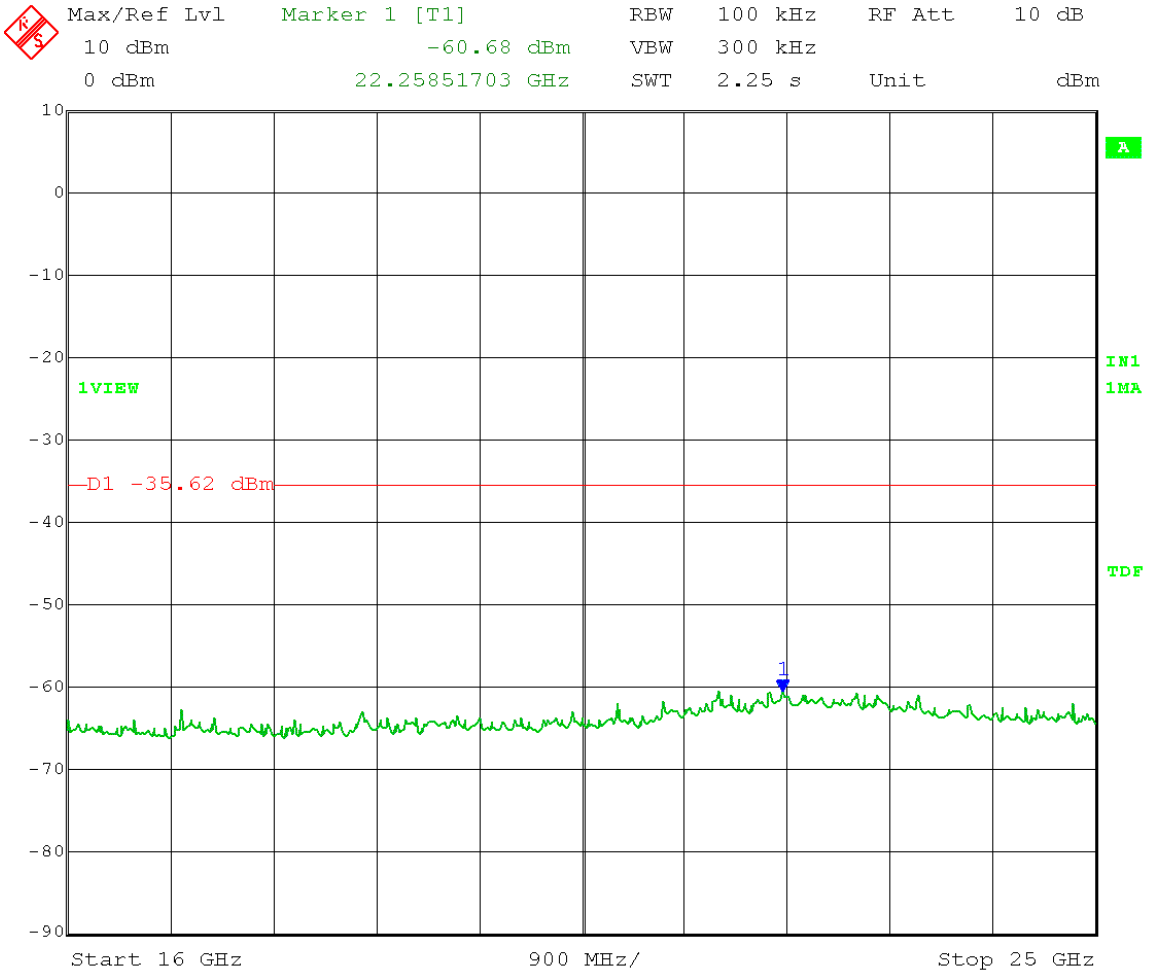
Date: 17.MAR.2014 10:19:18

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 ≥ 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



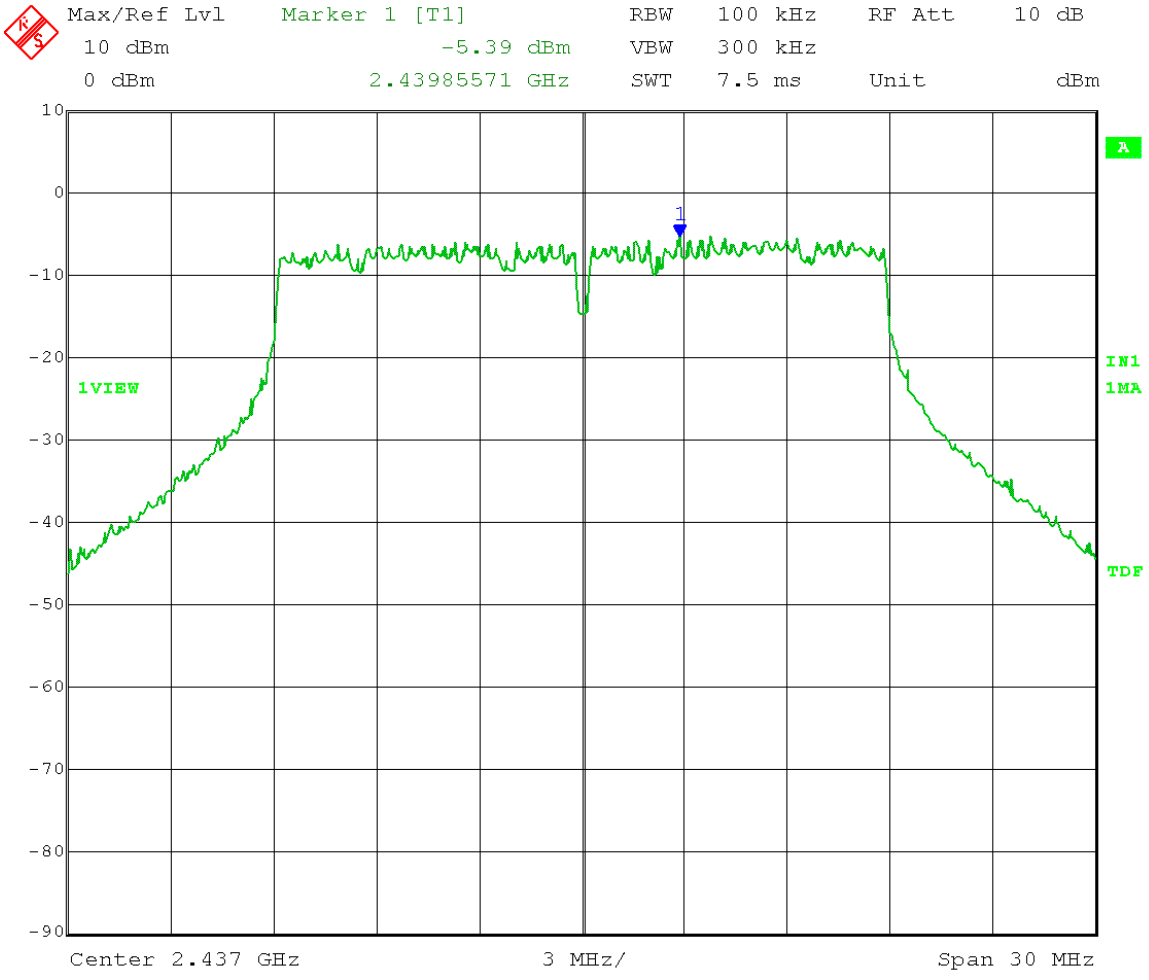
Date: 17.MAR.2014 10:20:51

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 ≥ 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



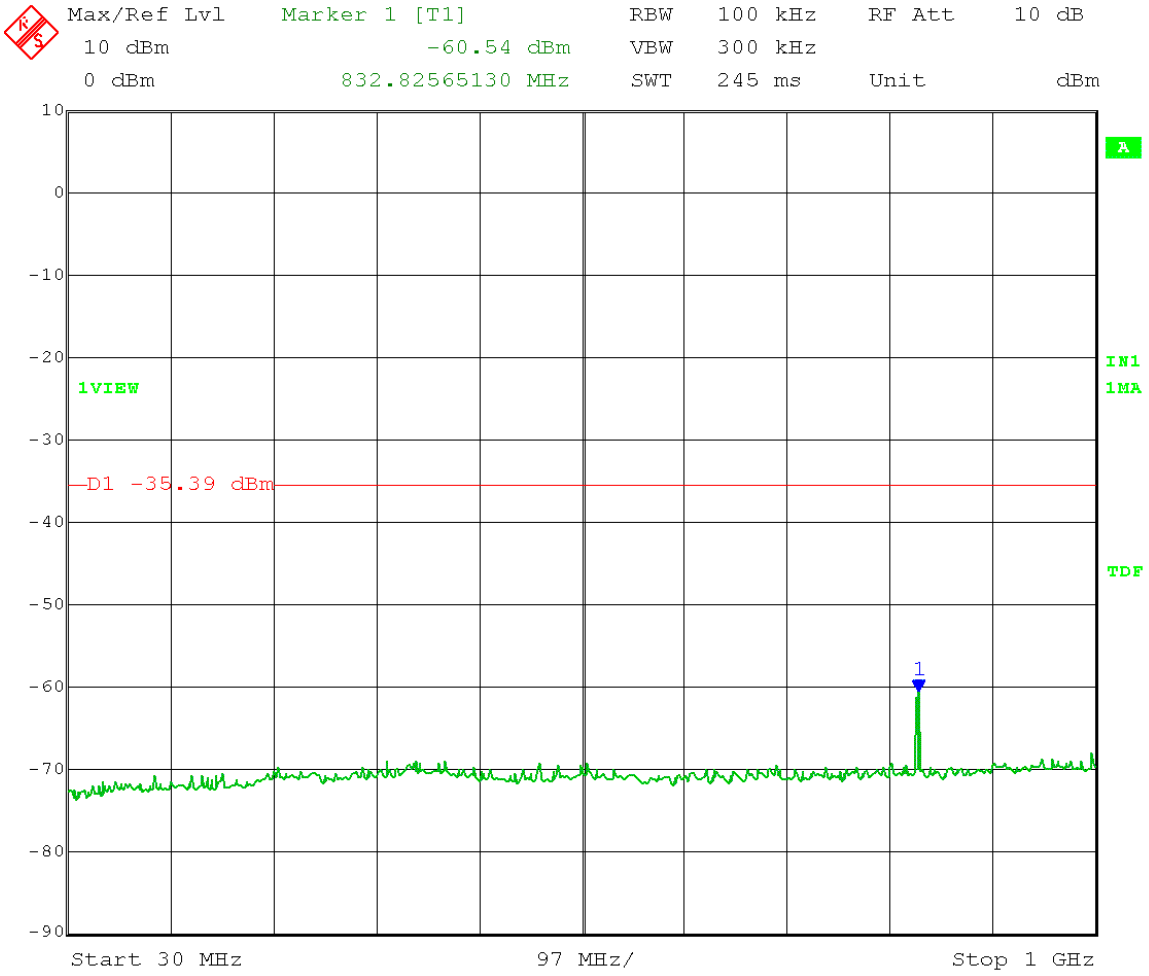
Date: 17.MAR.2014 10:22:19

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 ≥ 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



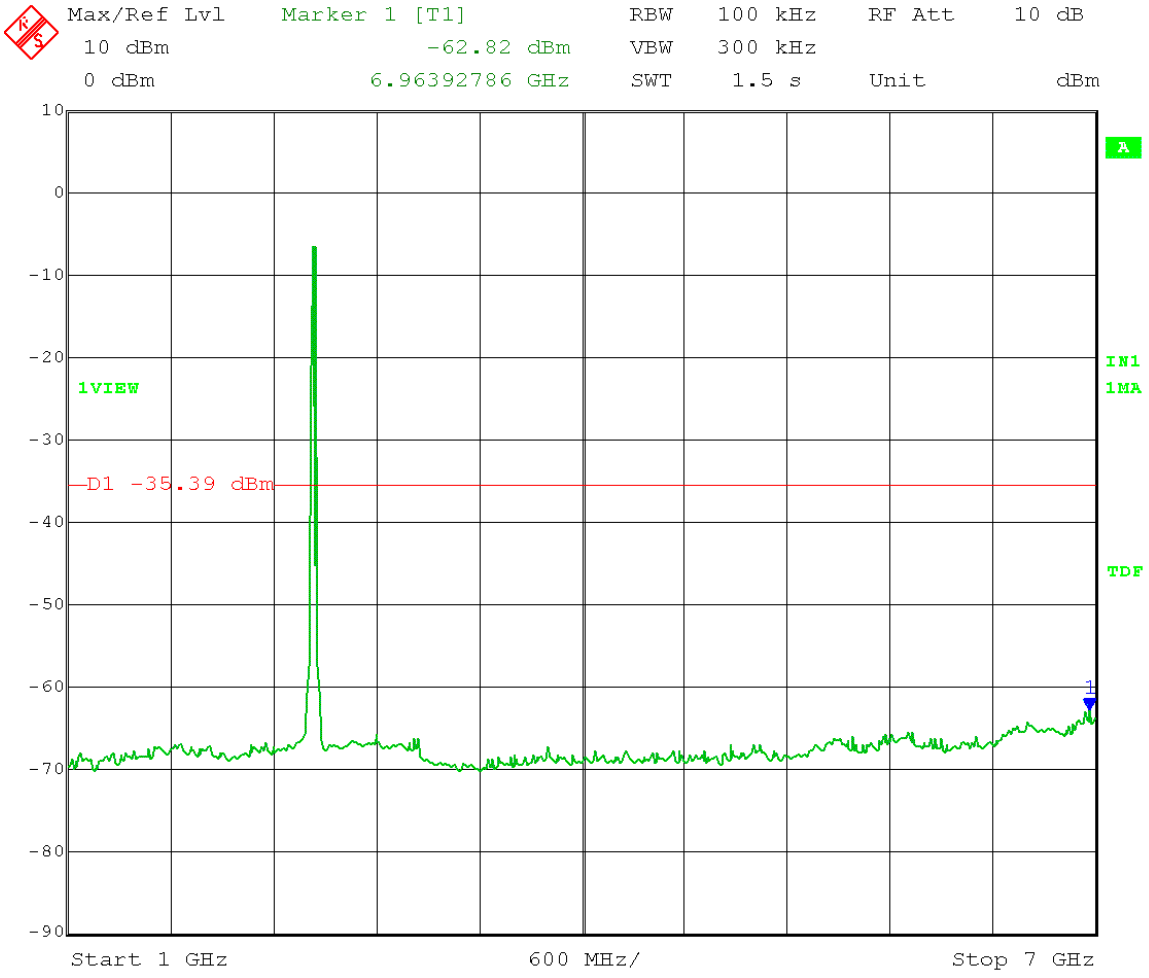
Date: 17.MAR.2014 10:01:46

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 ≥ 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



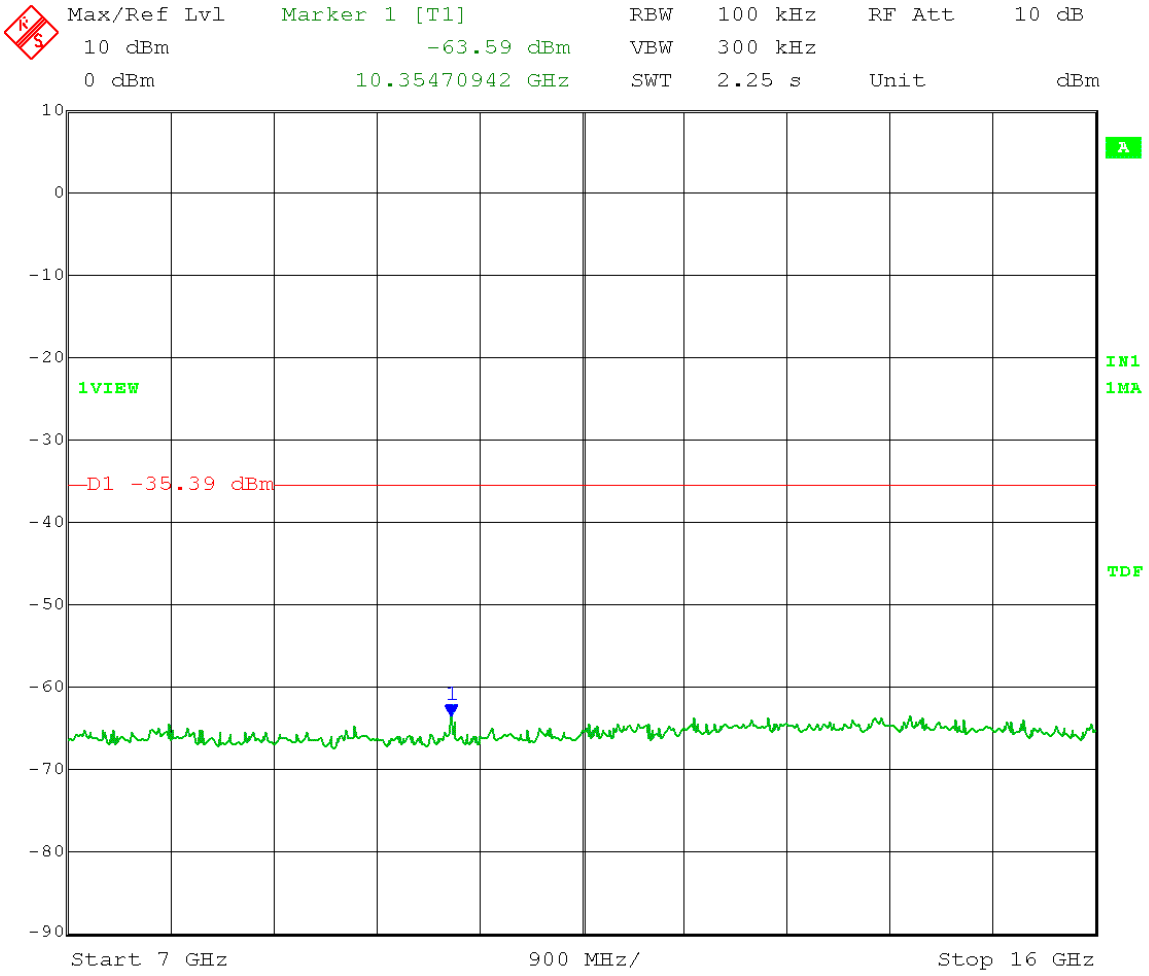
Date: 17.MAR.2014 10:08:26

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 ≥ 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



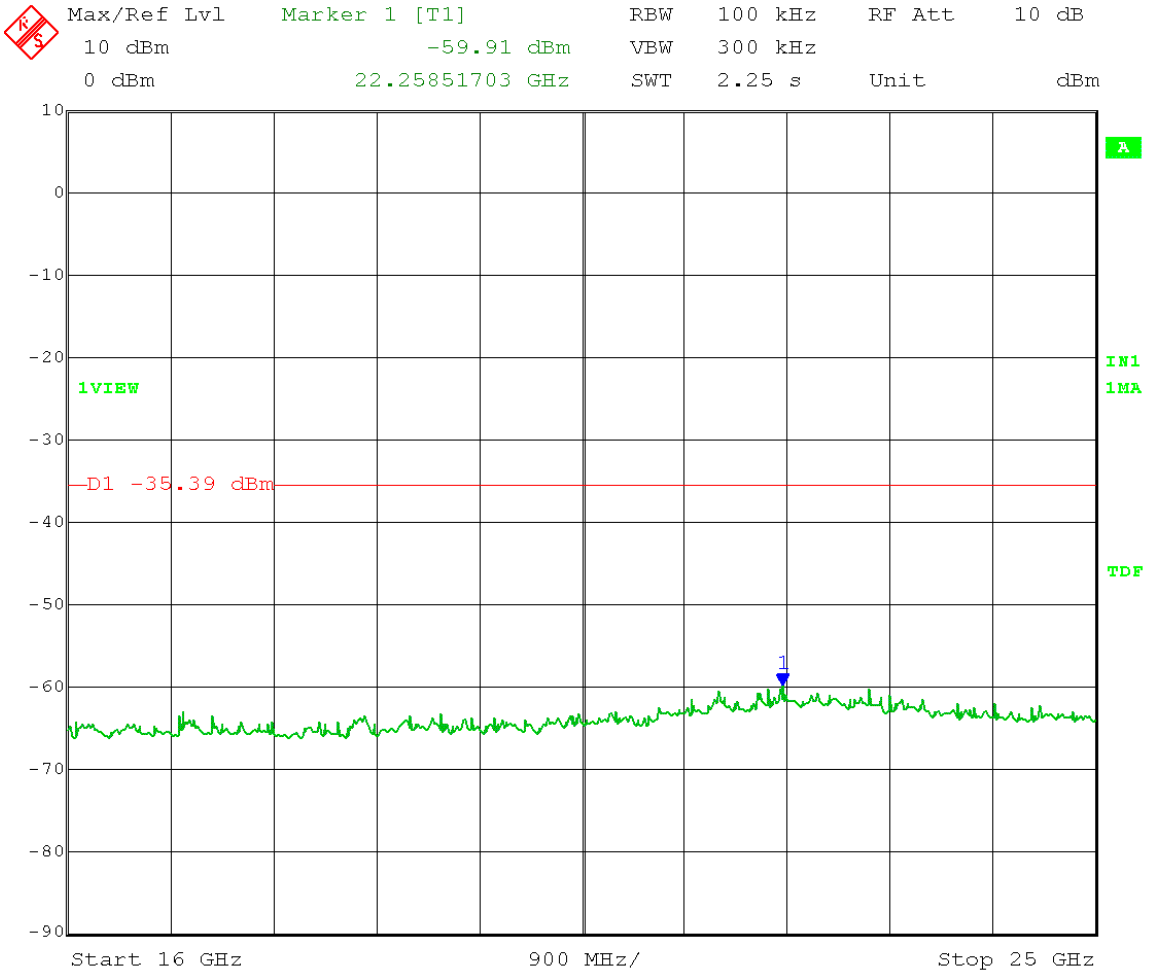
Date: 17.MAR.2014 10:04:00

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 ≥ 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



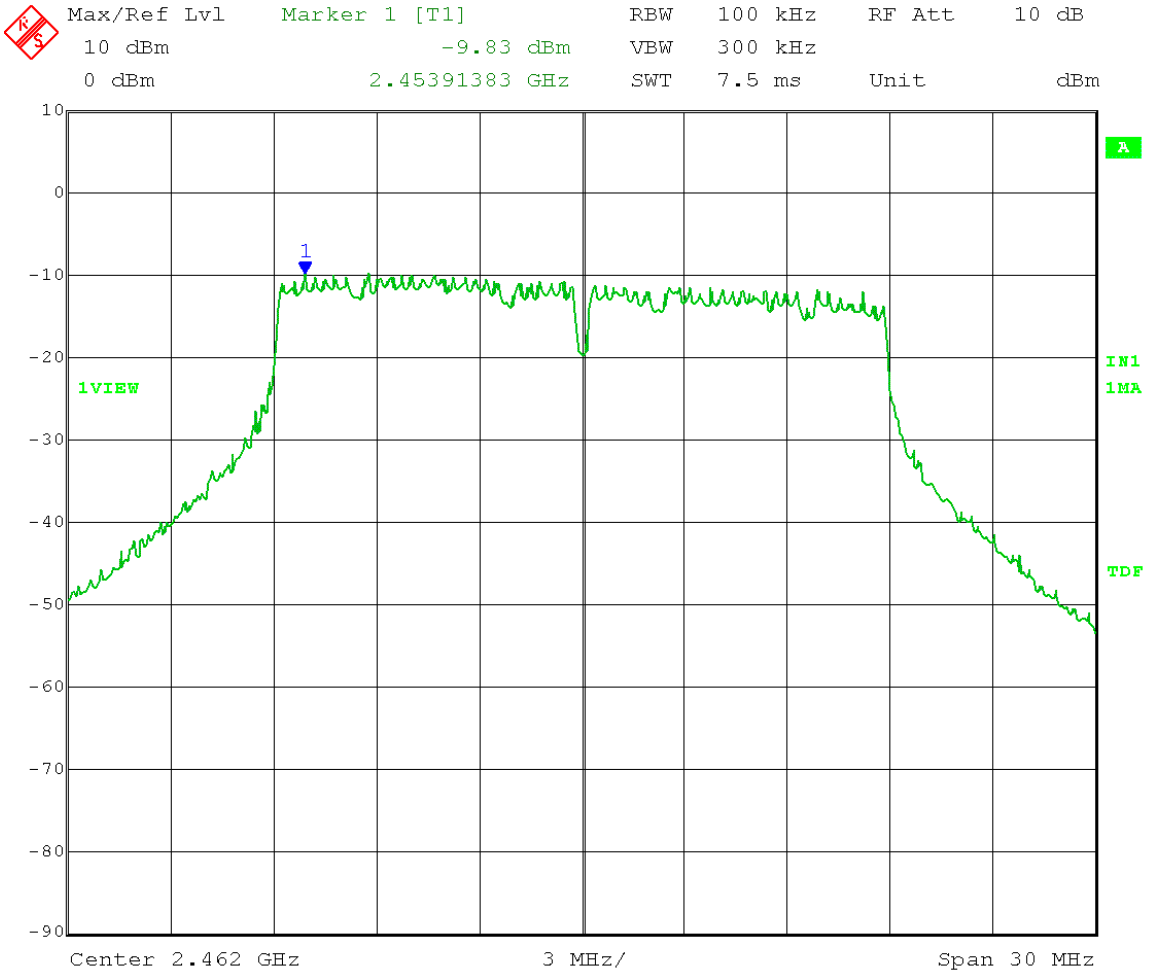
Date: 17.MAR.2014 10:05:24

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 ≥ 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



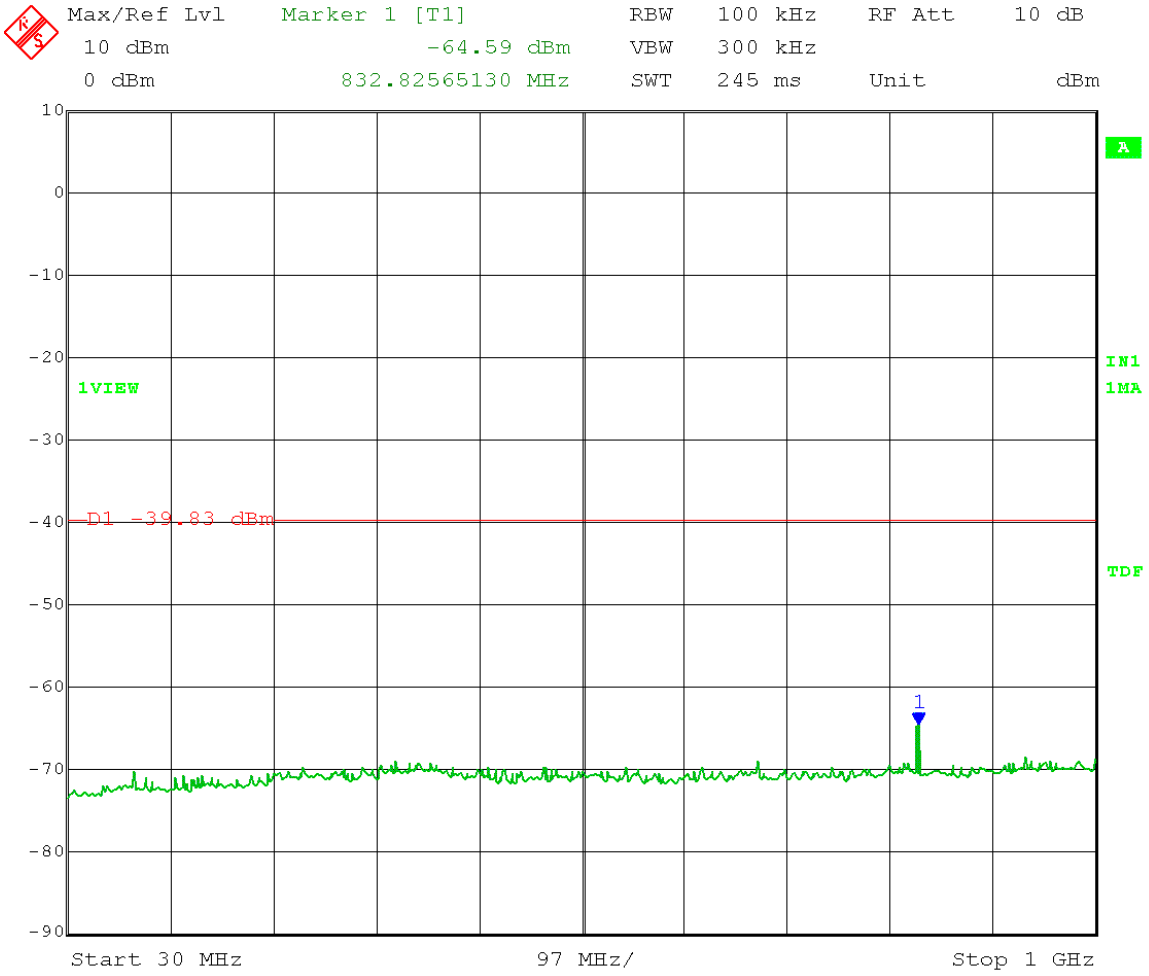
Date: 17.MAR.2014 10:06:39

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 ≥ 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



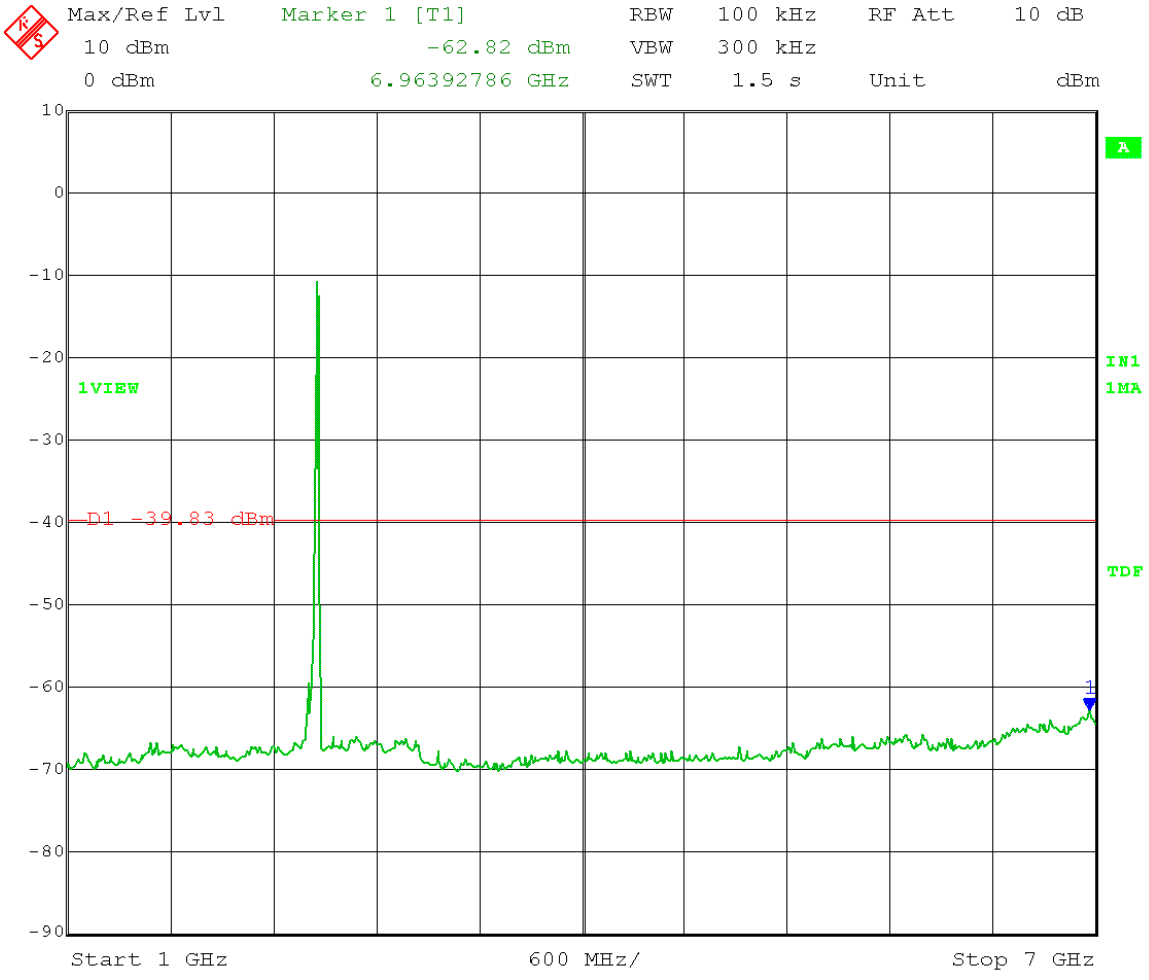
Date: 17.MAR.2014 10:40:14

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 ≥ 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



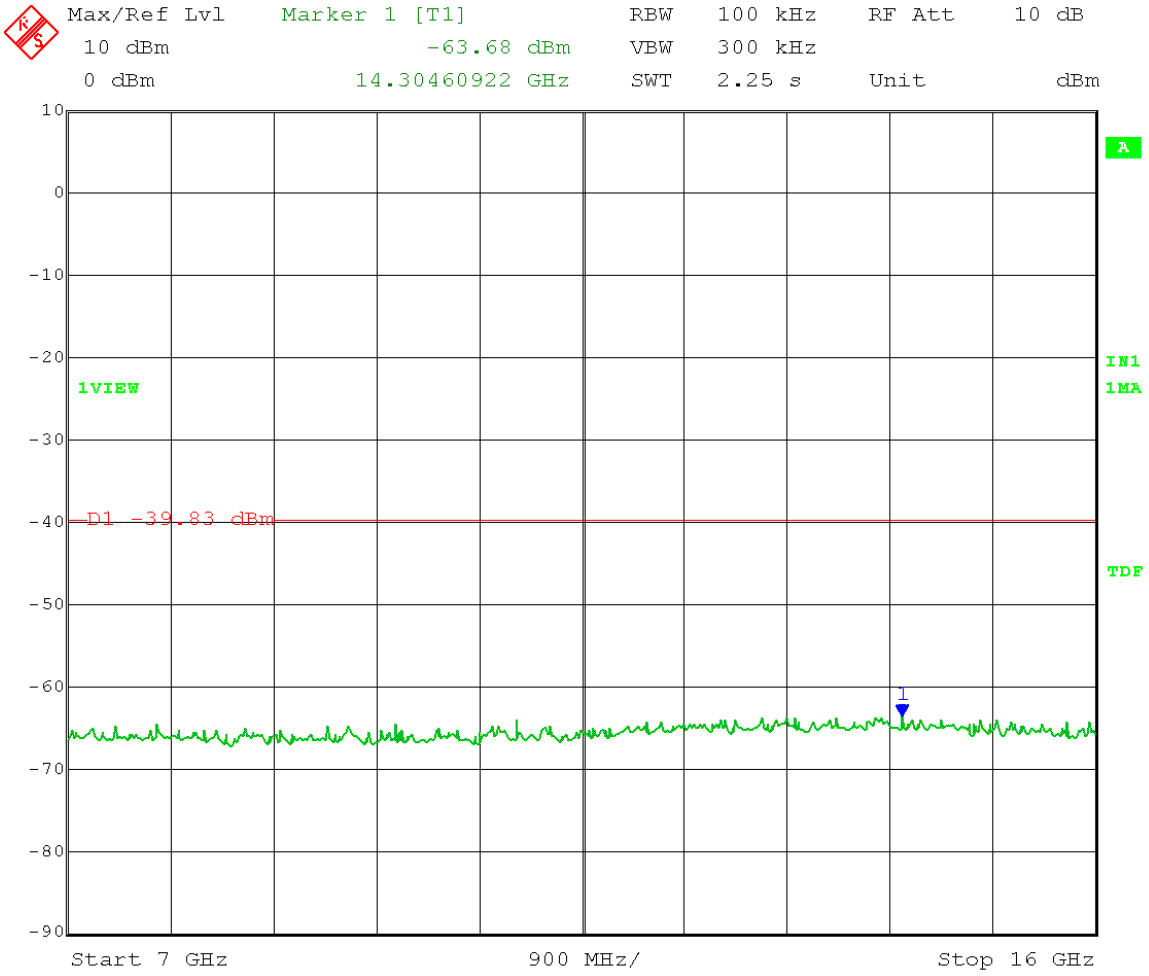
Date: 17.MAR.2014 10:47:55

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 ≥ 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



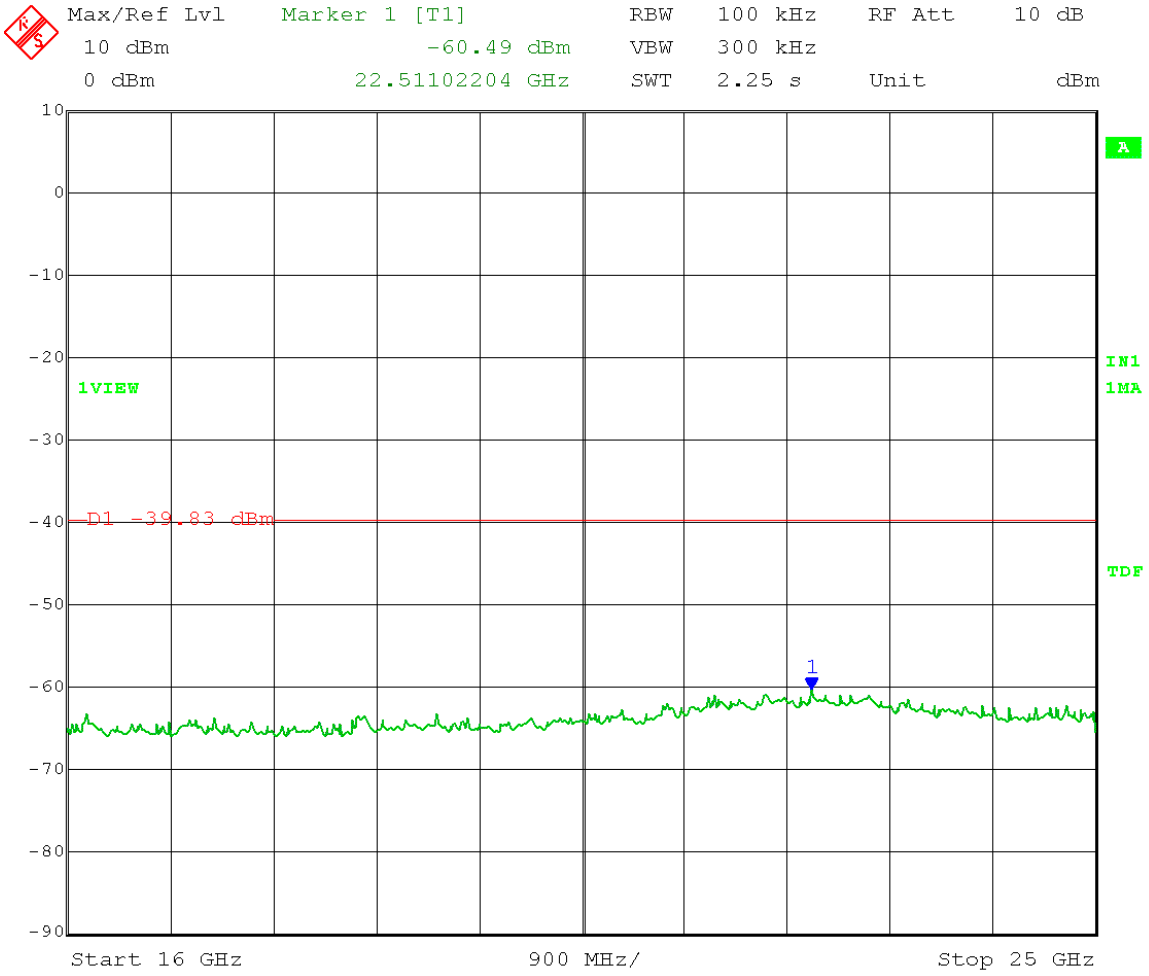
Date: 17.MAR.2014 10:42:49

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 ≥ 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



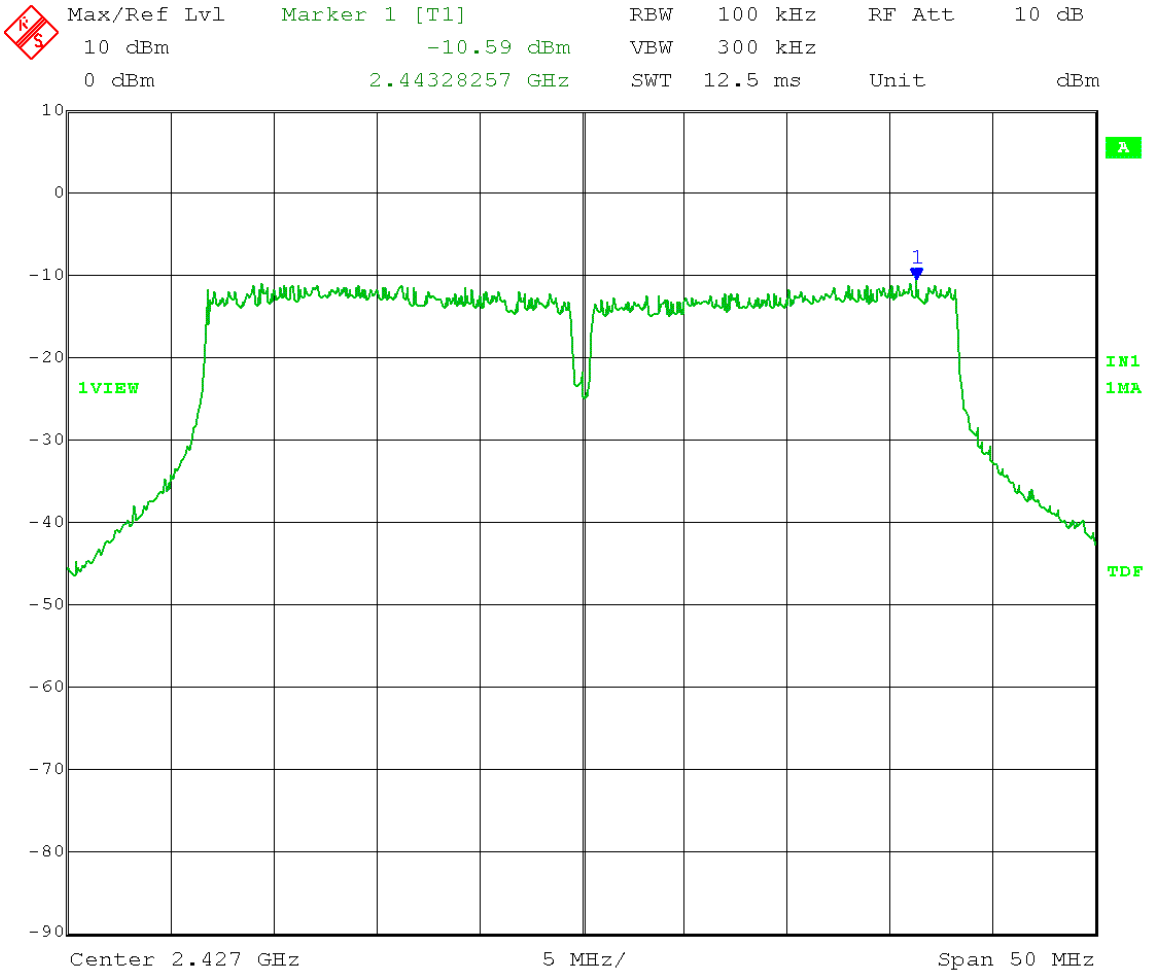
Date: 17.MAR.2014 10:44:33

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 ≥ 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



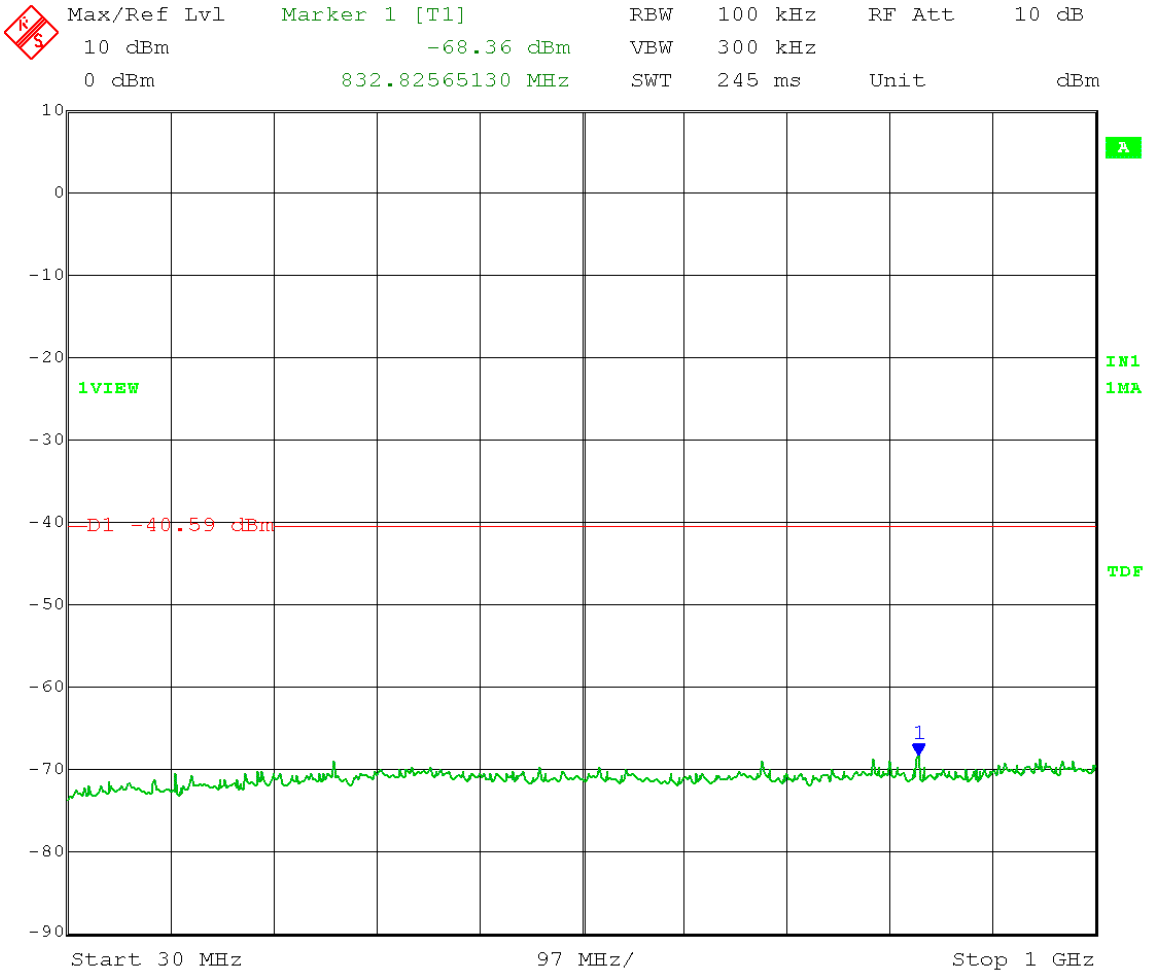
Date: 17.MAR.2014 10:46:10

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 ≥ 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



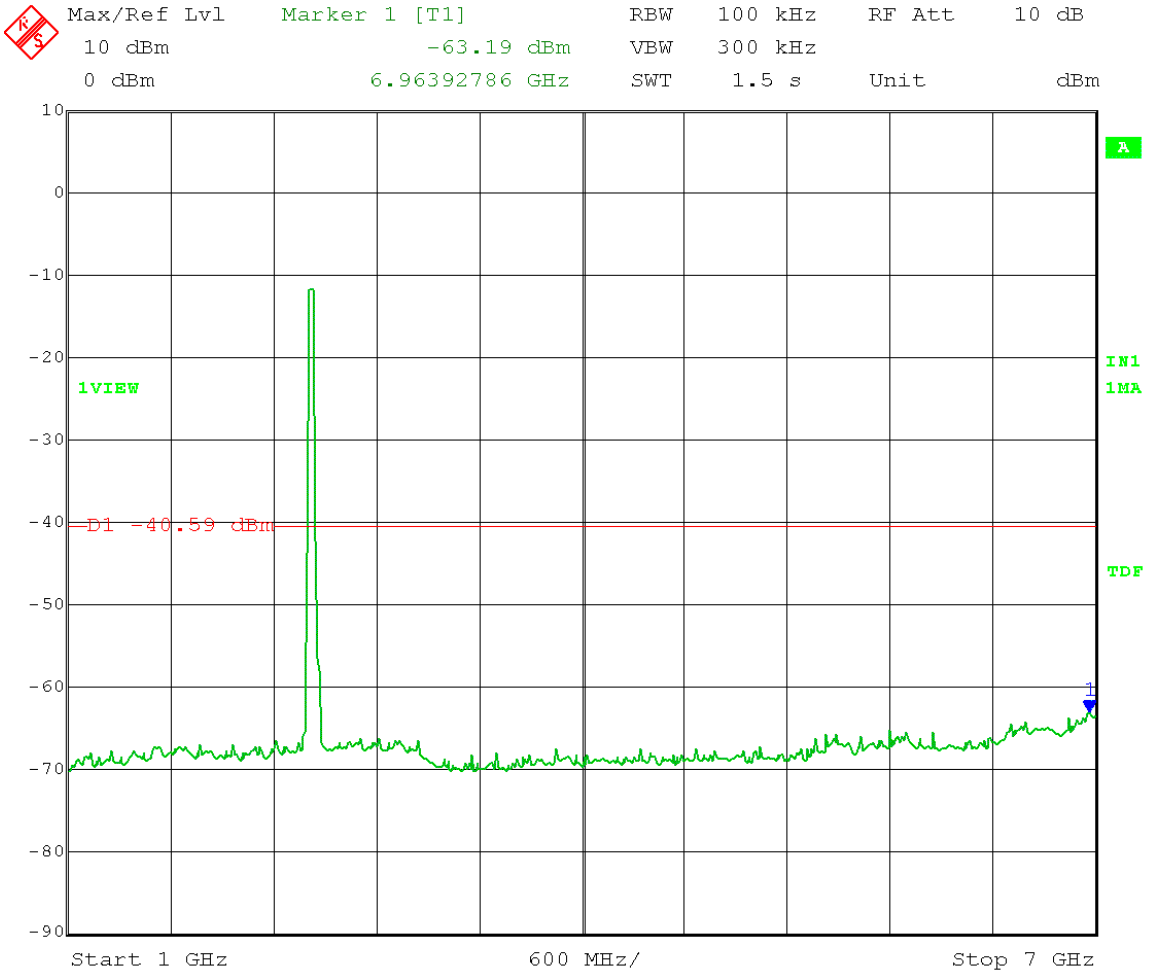
Date: 17.MAR.2014 11:07:01

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 ≥ 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



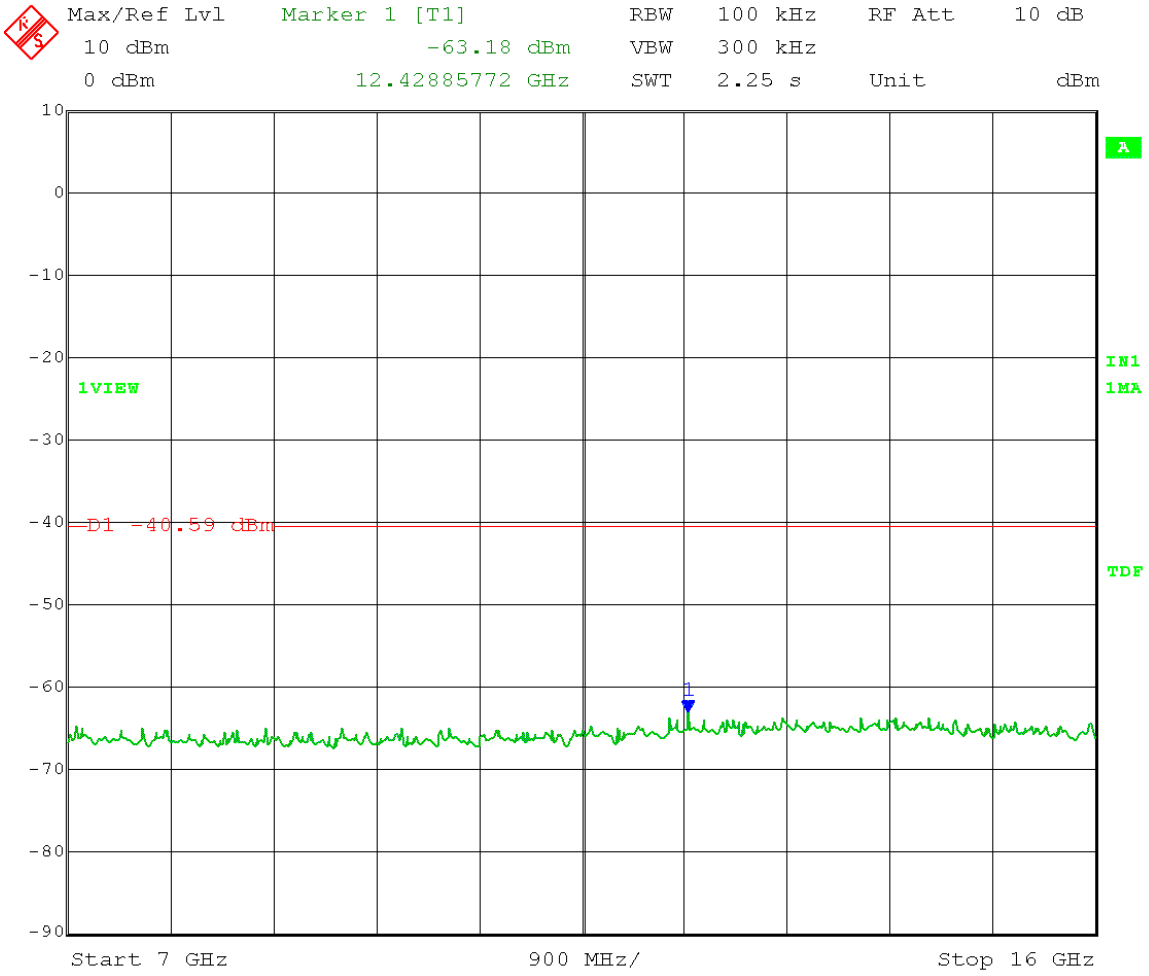
Date: 17.MAR.2014 11:13:02

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 ≥ 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



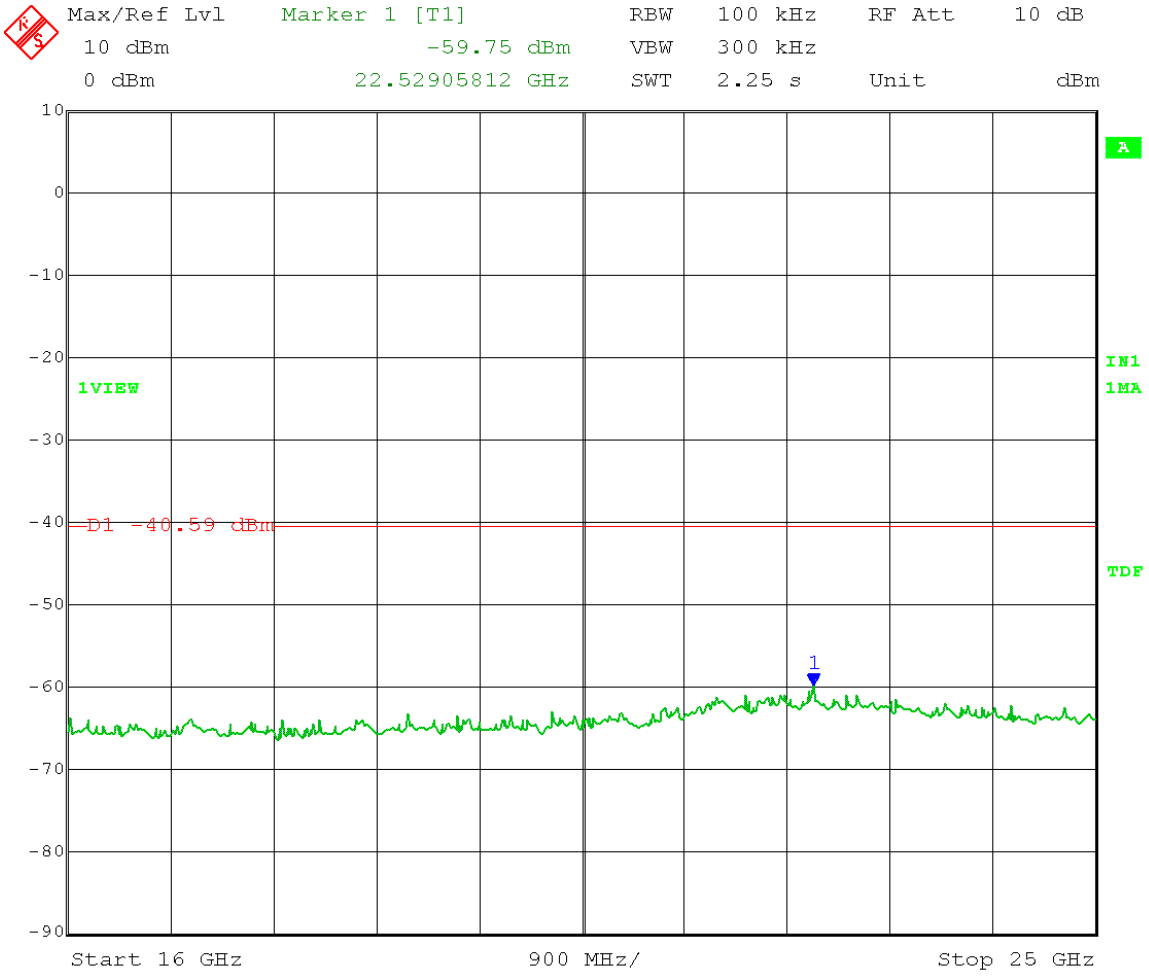
Date: 17.MAR.2014 11:09:14

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 ≥ 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



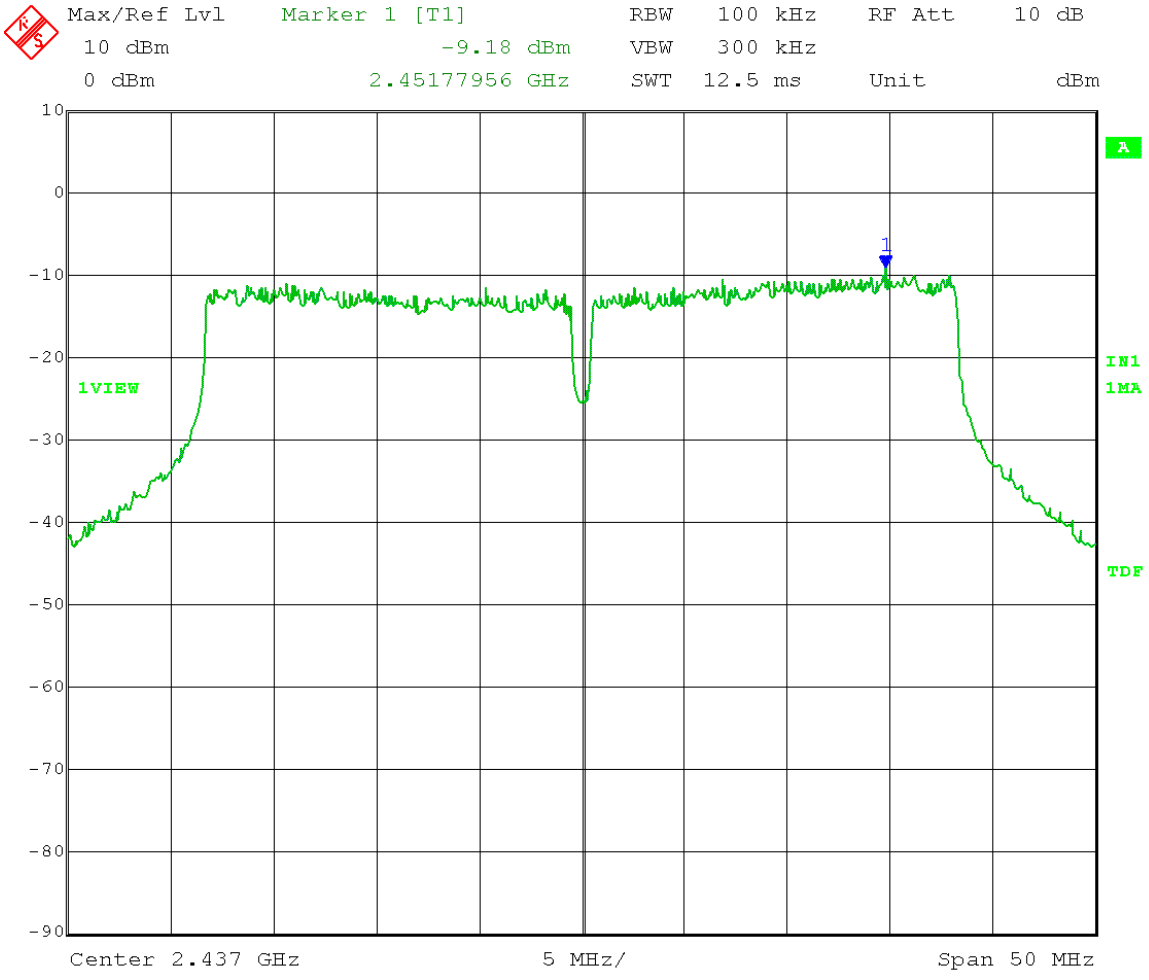
Date: 17.MAR.2014 11:10:21

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 ≥ 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



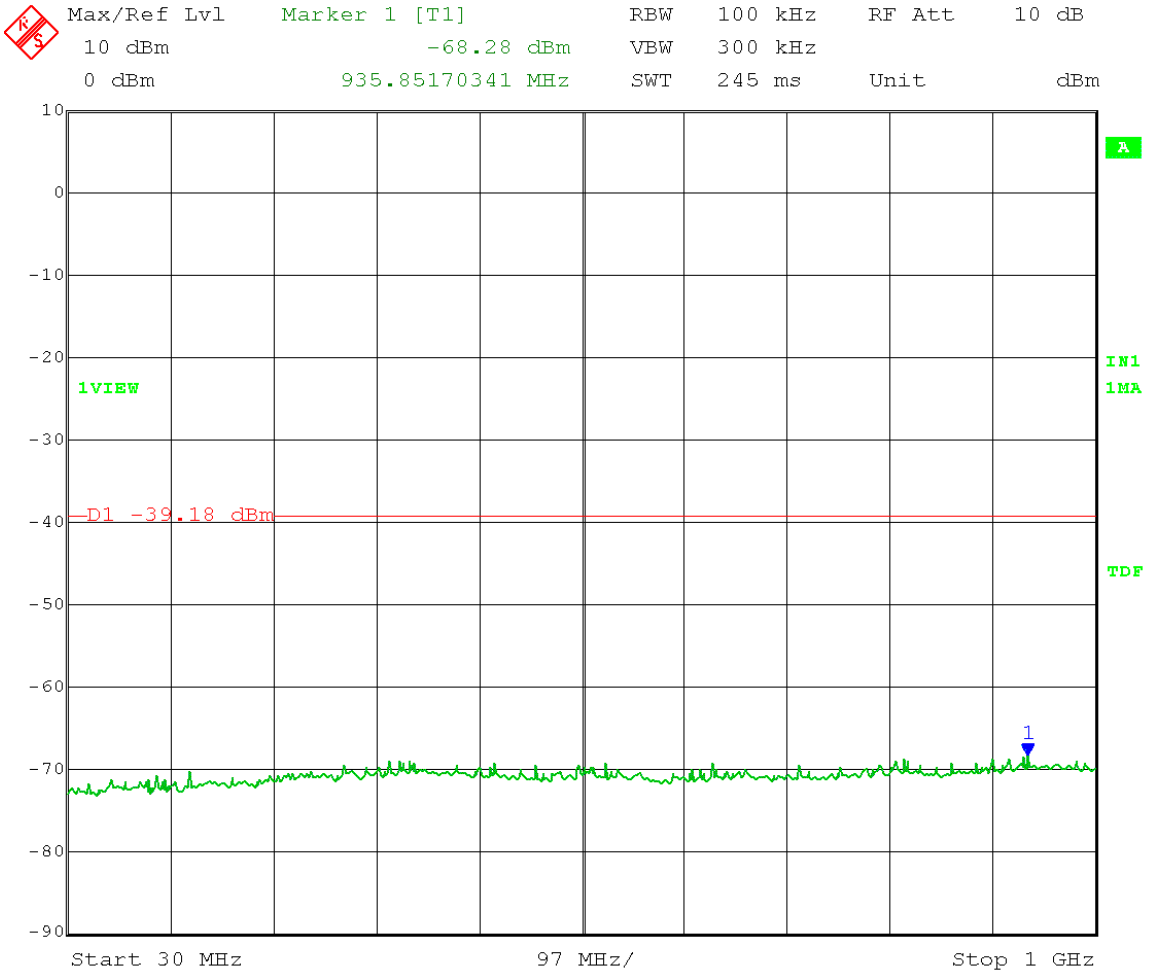
Date: 17.MAR.2014 11:11:42

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 ≥ 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



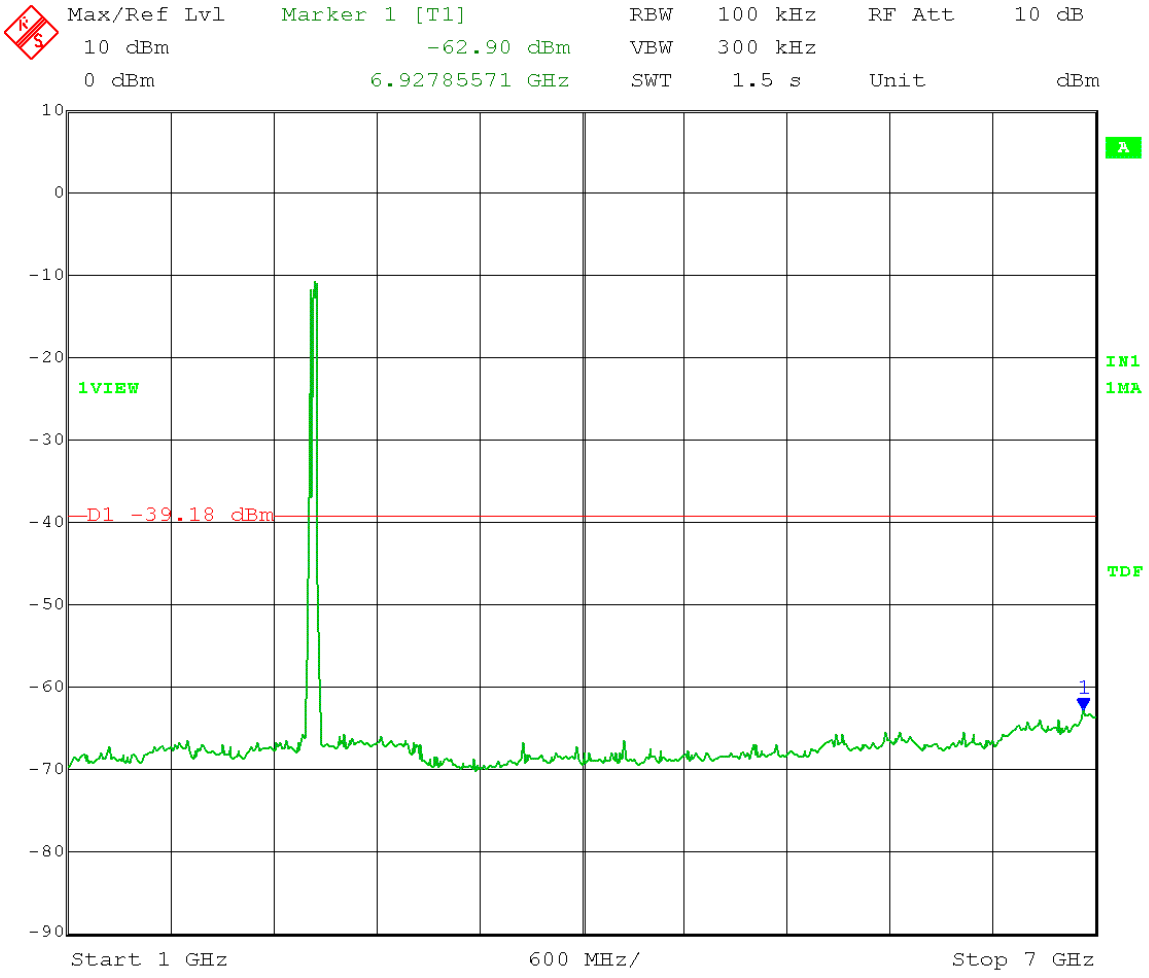
Date: 17.MAR.2014 10:52:15

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 ≥ 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



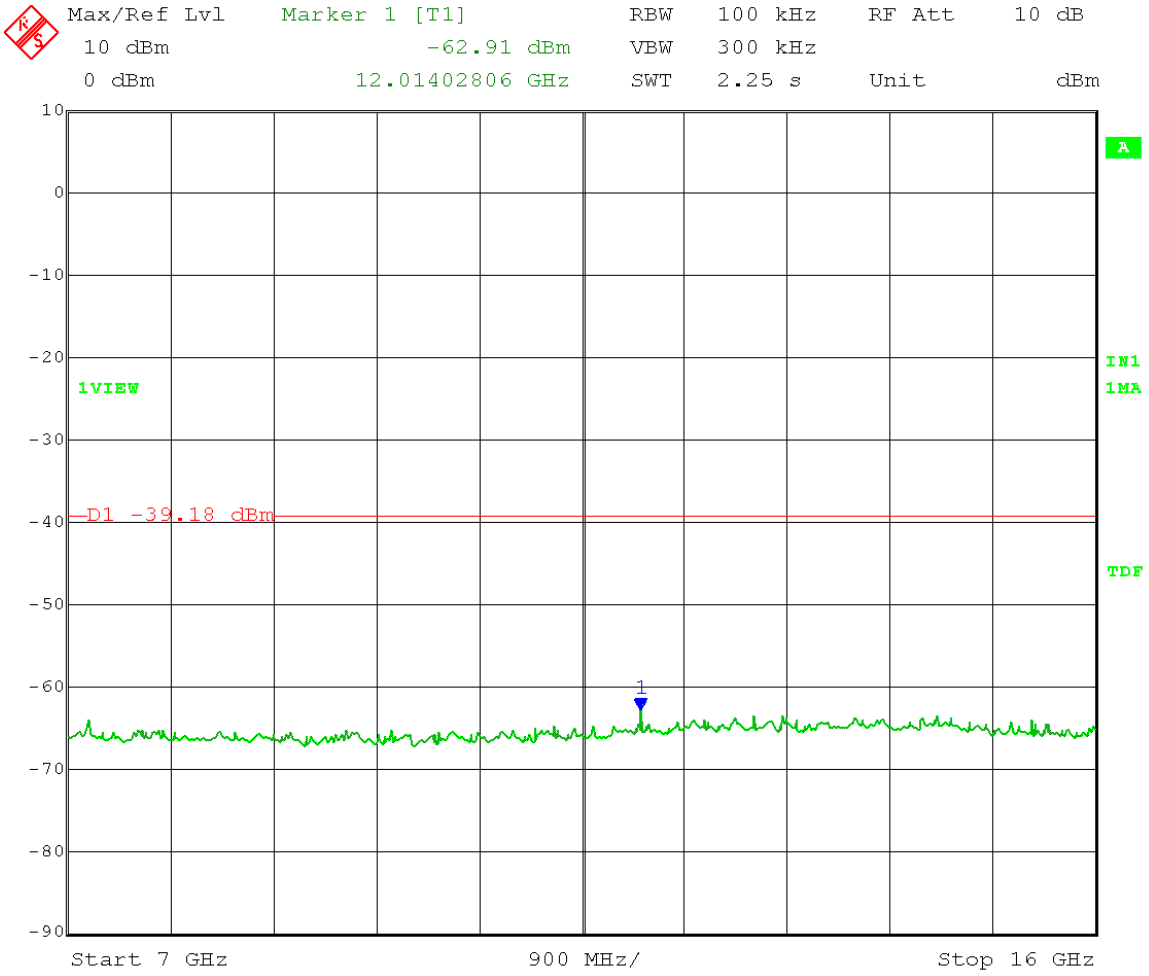
Date: 17.MAR.2014 11:02:47

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 ≥ 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



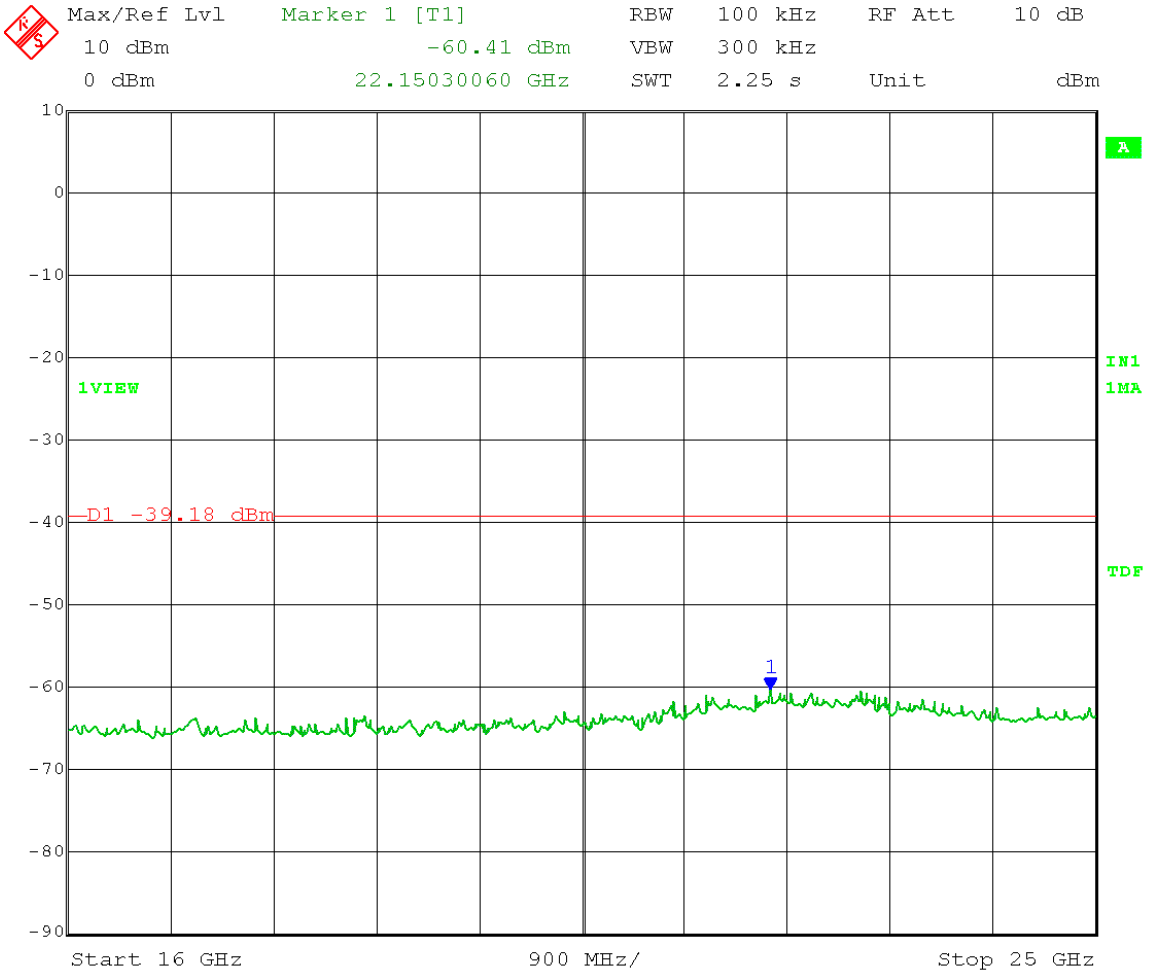
Date: 17.MAR.2014 10:55:33

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 ≥ 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



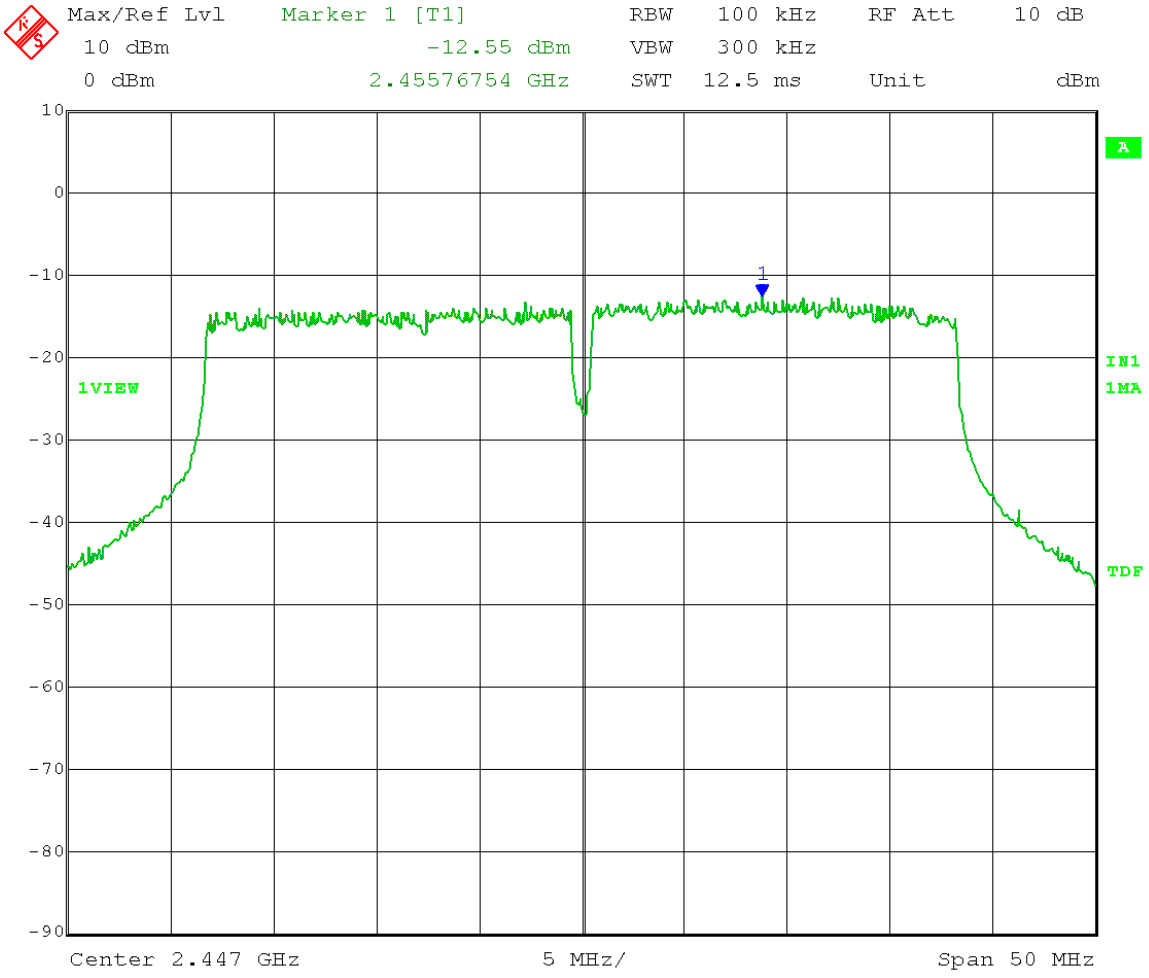
Date: 17.MAR.2014 10:59:14

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 ≥ 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



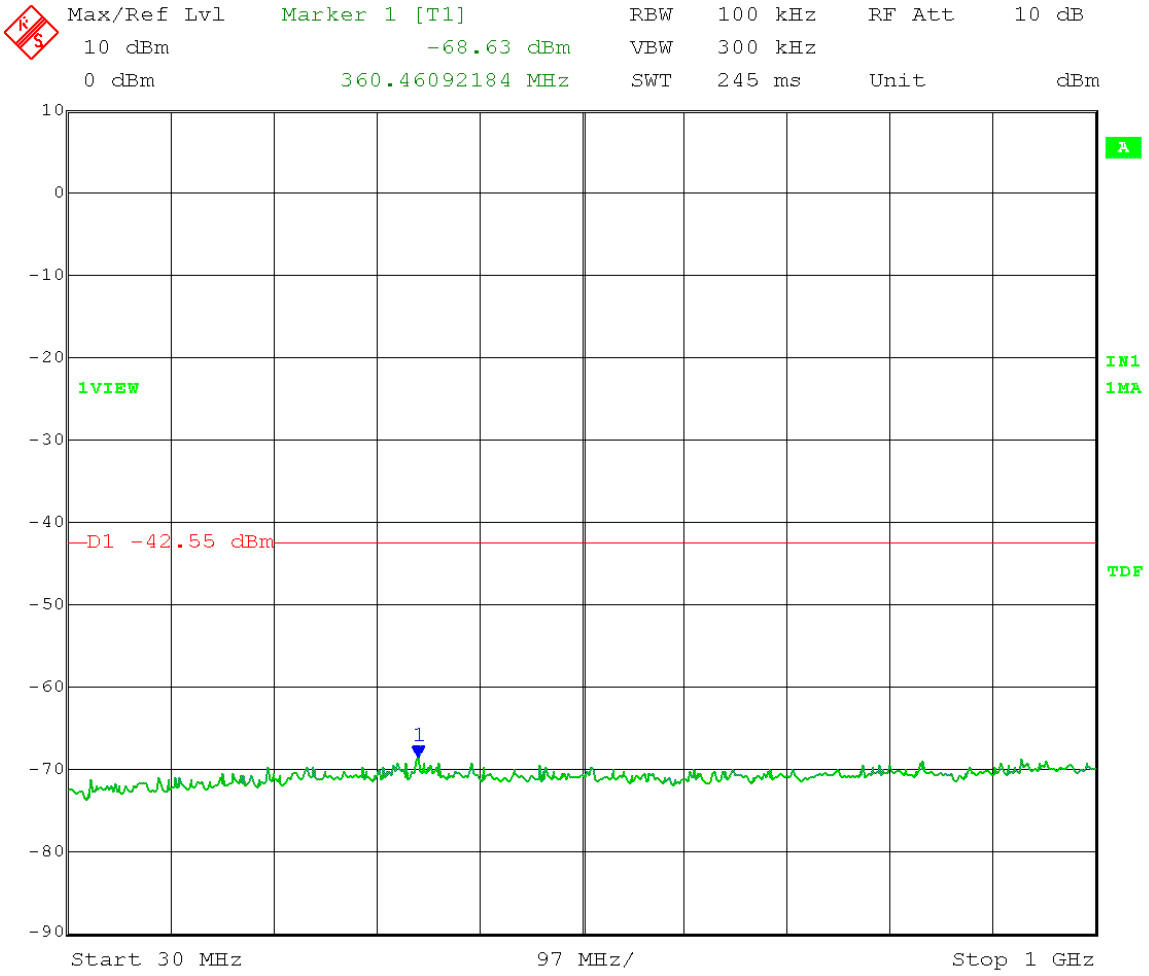
Date: 17.MAR.2014 11:00:52

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 ≥ 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



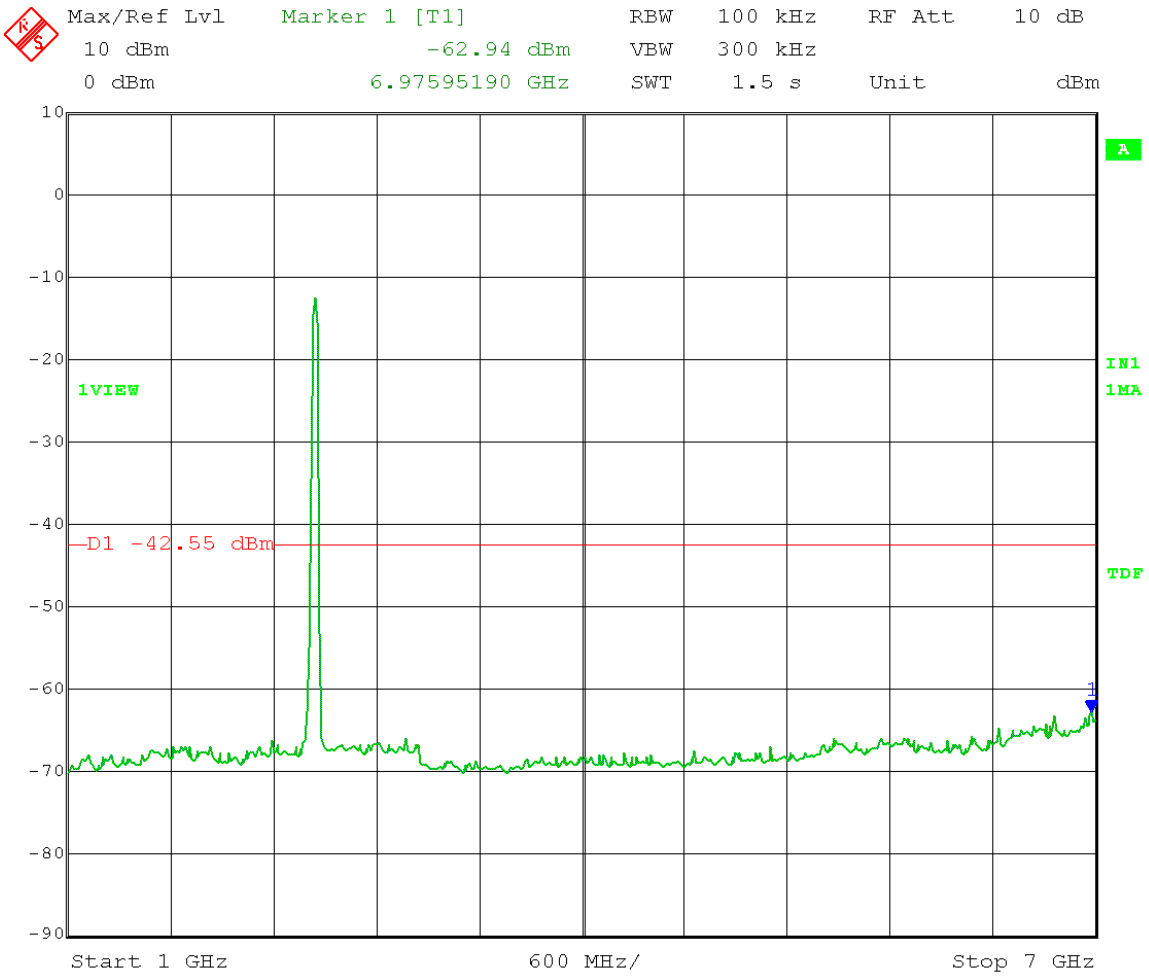
Date: 17.MAR.2014 11:16:56

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 ≥ 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



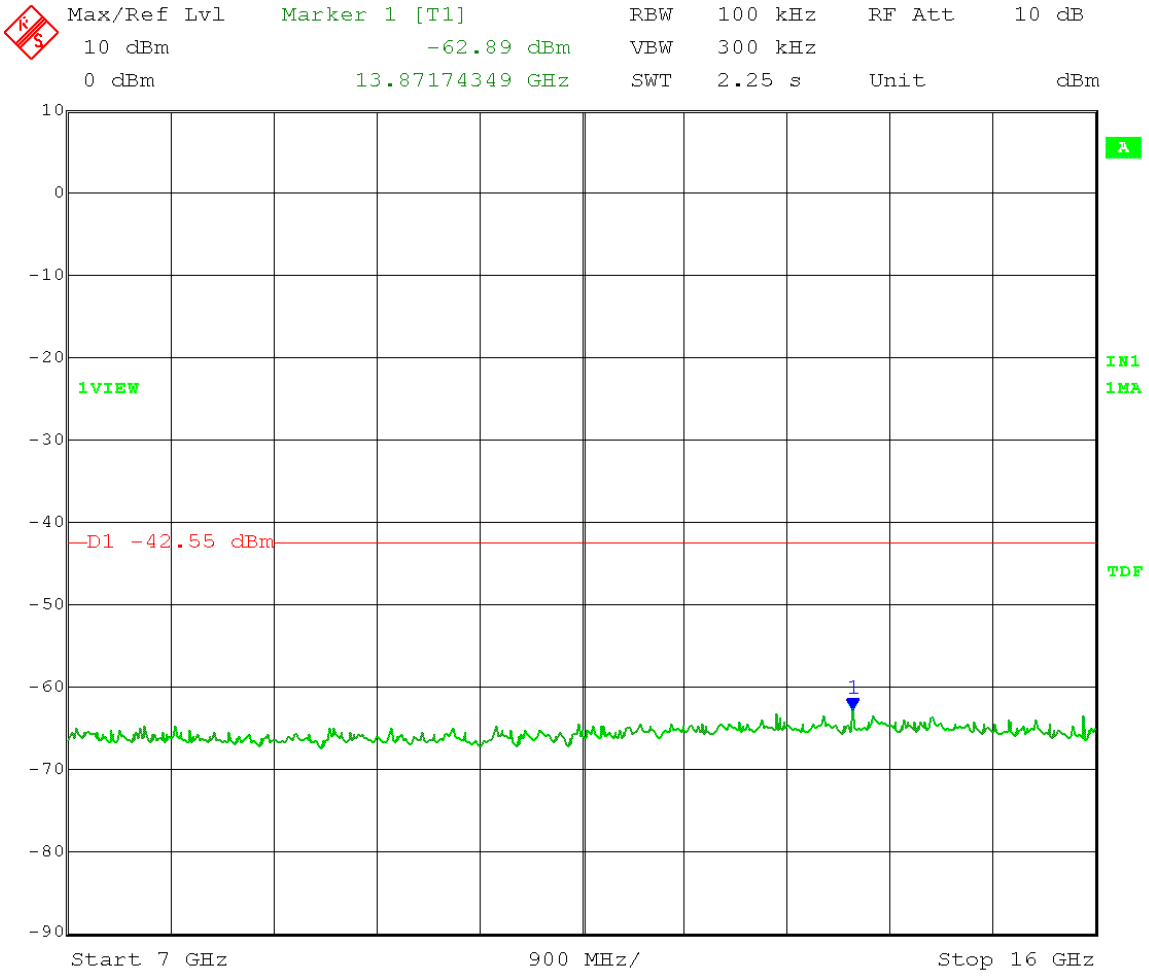
Date: 17.MAR.2014 11:23:48

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 ≥ 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



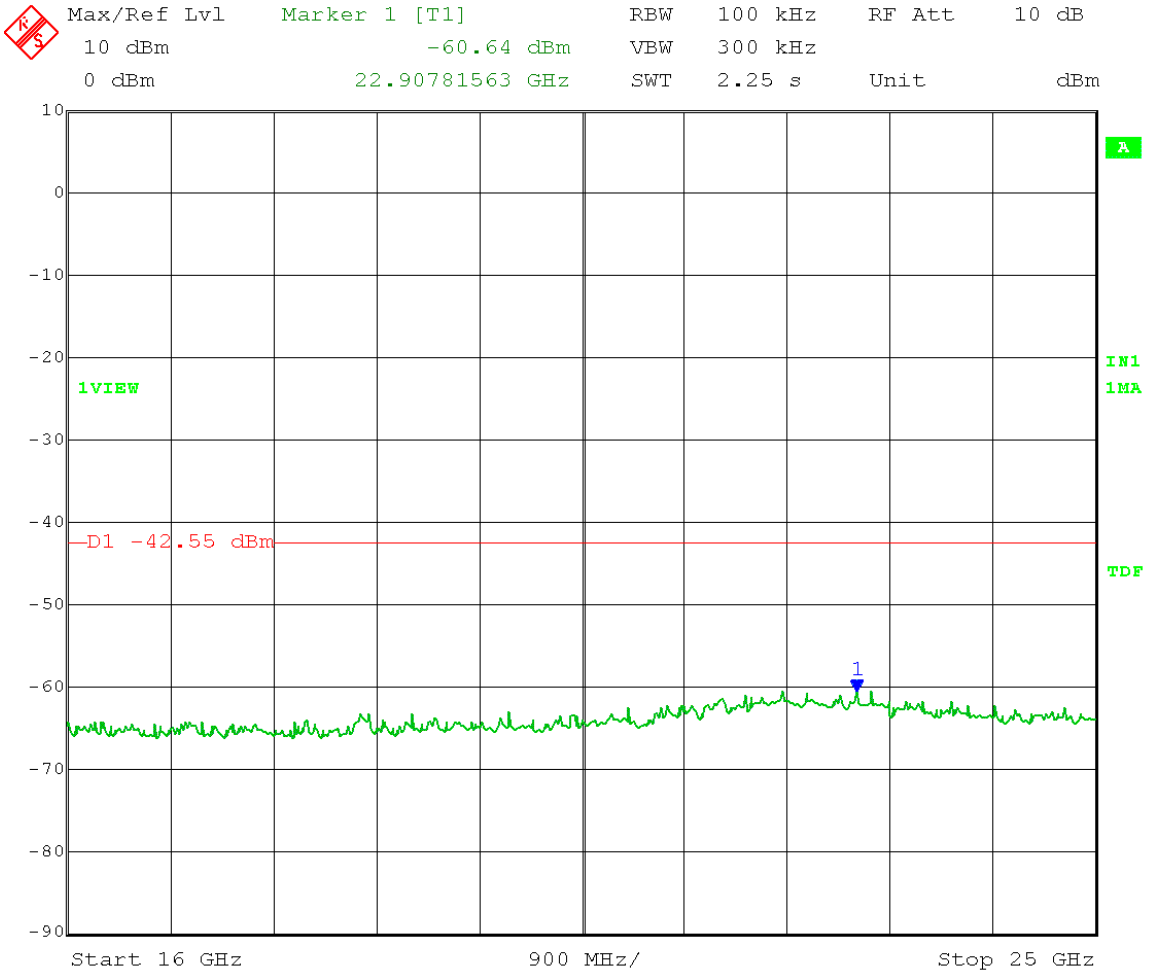
Date: 17.MAR.2014 11:19:12

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 ≥ 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 ≥ 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

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 ≥ 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.

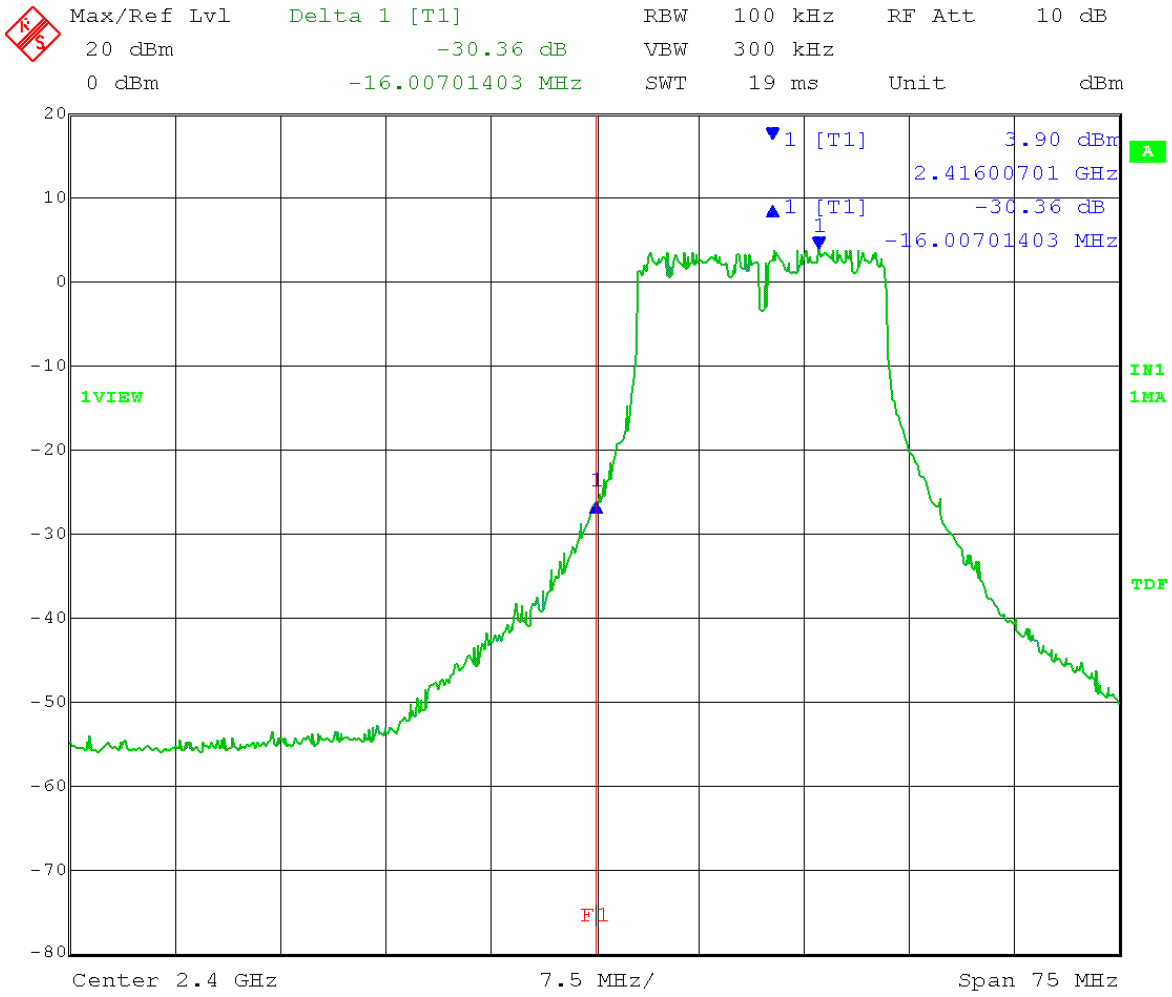
Limit: 30 dB below maximum in-band average PSD level (maximum level in any 100 kHz band). Average output power procedure was used to measure the fundamental emission power.

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

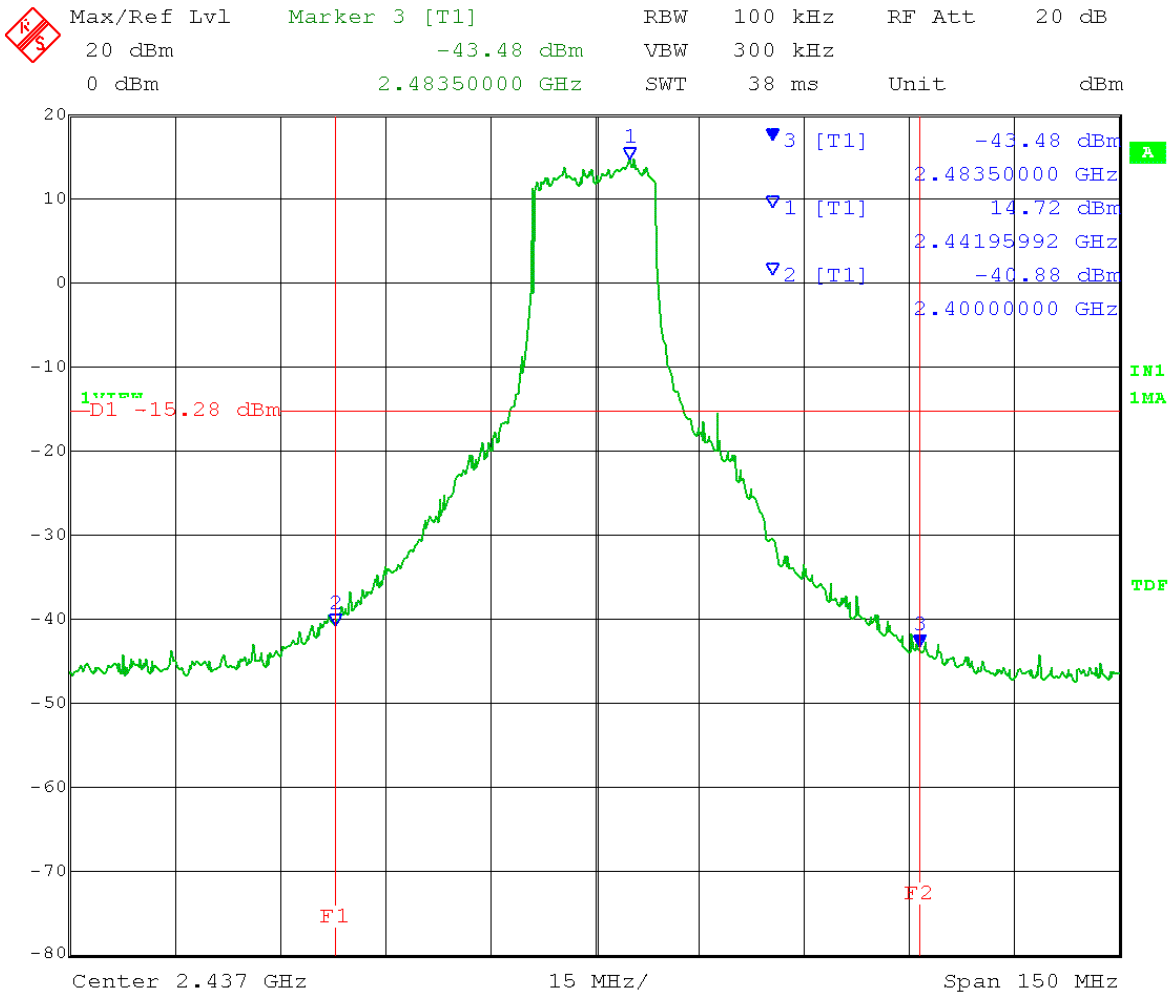
Comment: RBW = 100 kHz VBW ≥ 300 kHz
Detector = Peak Sweep = auto couple
Trace = max hold
Point-to-Multipoint operation
Low Channel: Transmit = 2412 MHz Output power setting: 18
Channel bandwidth: 20 MHz Output port: 1 Antenna gain: 8 dBi
Lower band edge frequency = 2.4 GHz
Limit: > 30 dB below Peak 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

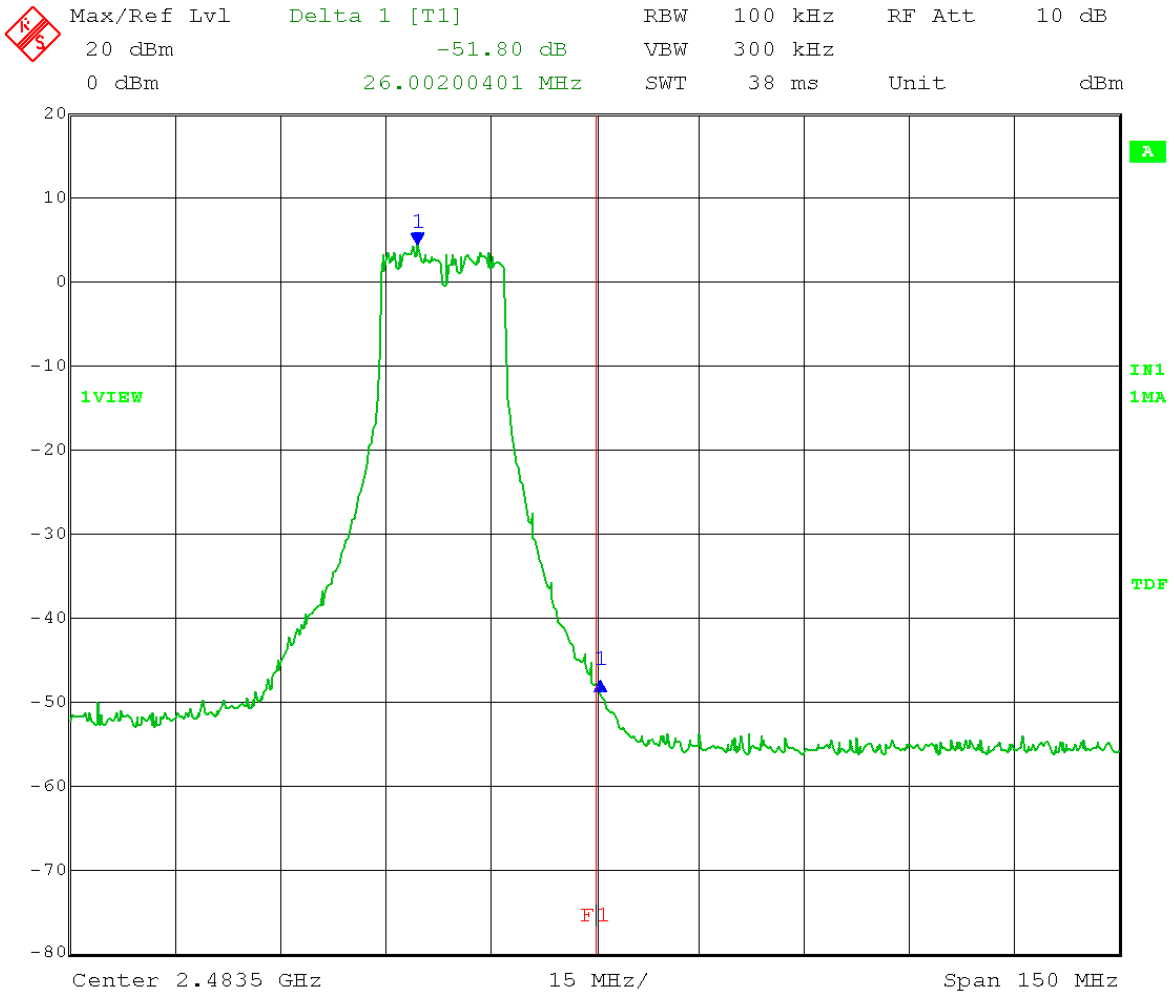
Comment: RBW = 100 kHz VBW ≥ 300 kHz
Detector = Peak Sweep = auto couple
Trace = max hold
Point-to-Multipoint operation
Mid Channel: Transmit = 2437 MHz Output power setting: 26.5
Channel bandwidth: 20 MHz Output port: 1 Antenna gain: 8 dBi
Lower band edge frequency = 2.4 GHz
Upper band edge frequency = 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

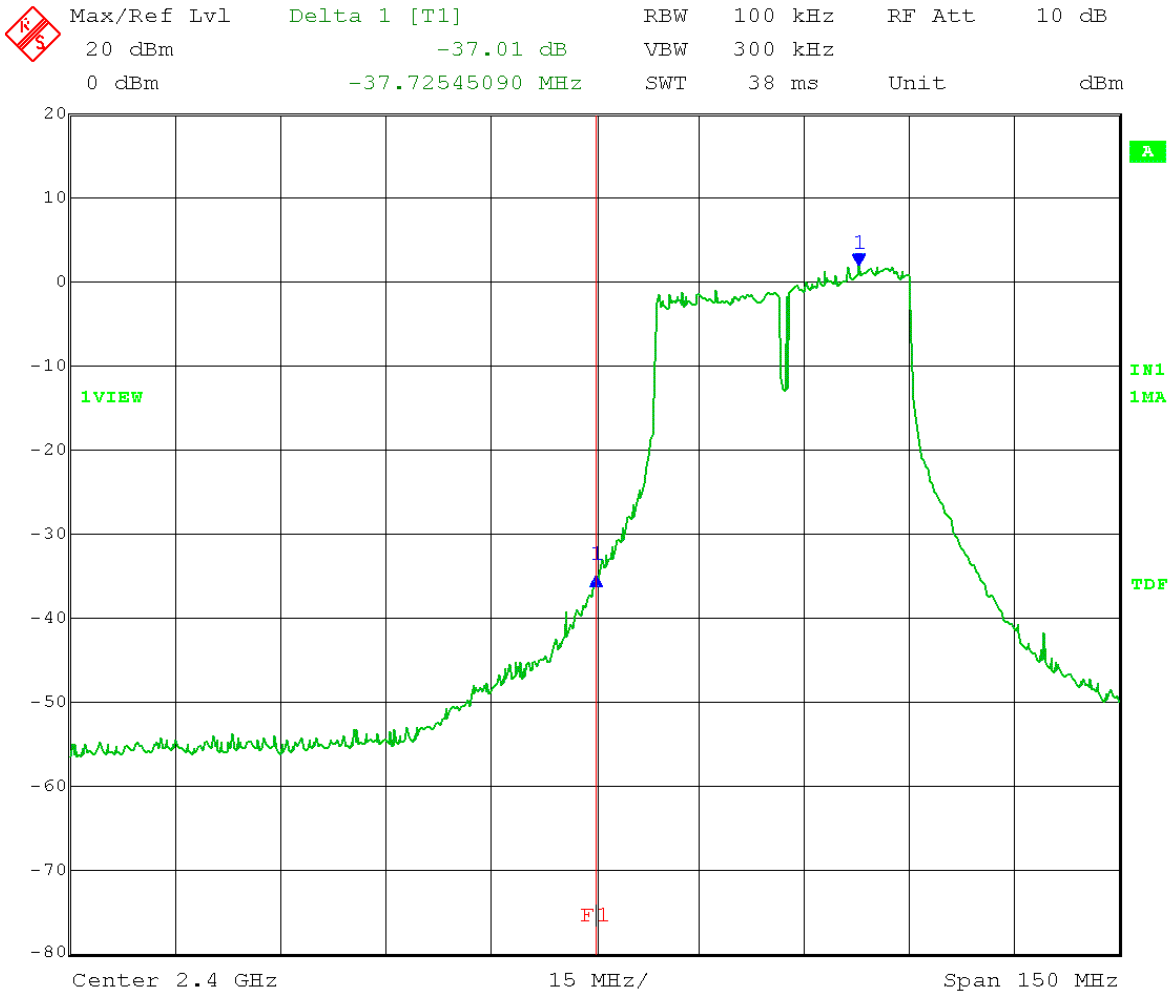
Comment: RBW = 100 kHz VBW ≥ 300 kHz
Detector = Peak Sweep = auto couple
Trace = max hold
Point-to-Multipoint operation
High Channel: Transmit = 2462 MHz Output power setting: 18
Channel bandwidth: 20 MHz Output port: 1 Antenna gain: 8 dBi
Upper band edge frequency = 2.4835 GHz
Limit: > 30 dB below Peak 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

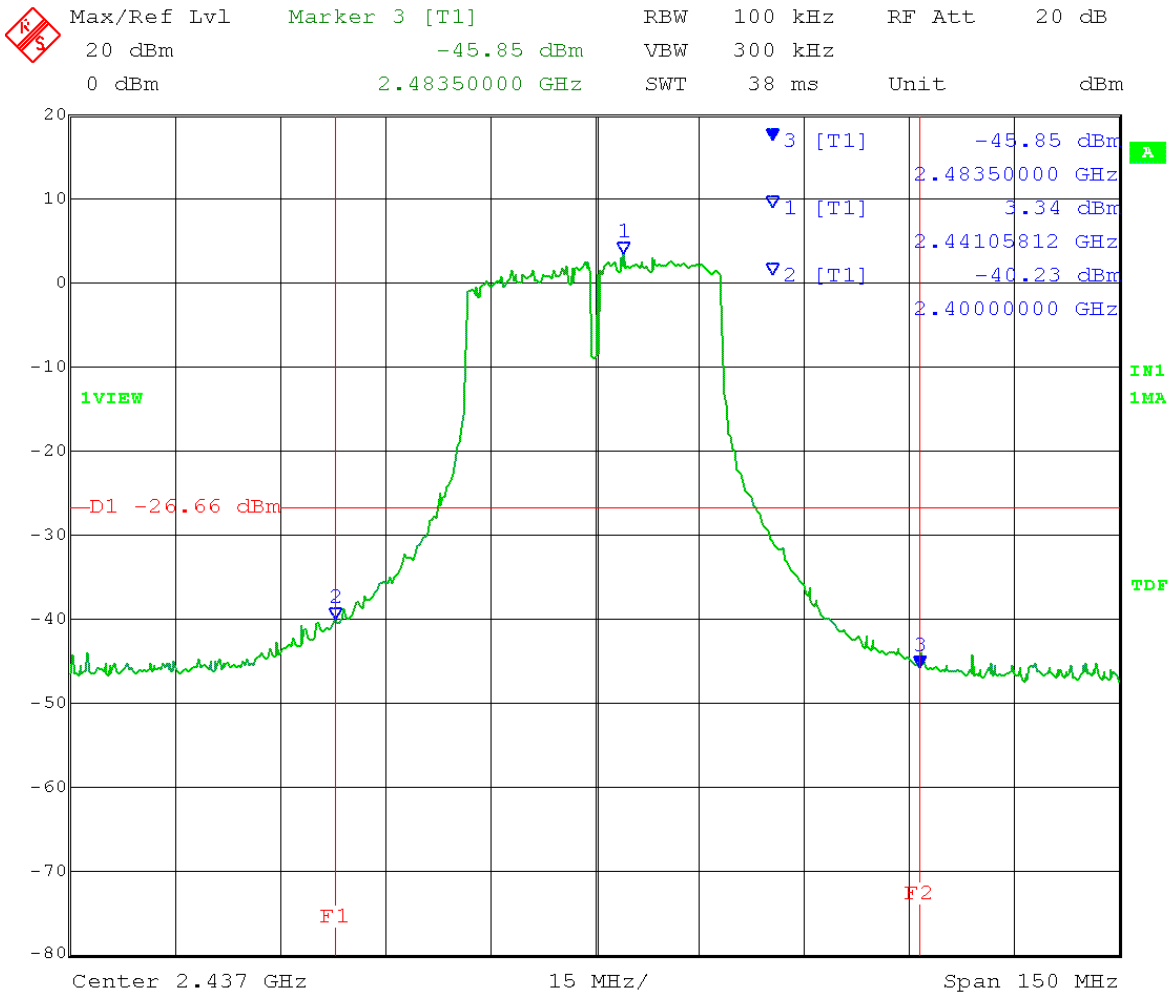
Comment: RBW = 100 kHz VBW ≥ 300 kHz
Detector = Peak Sweep = auto couple
Trace = max hold
Point-to-Multipoint operation
Low Channel: Transmit = 2427 MHz Output power setting: 15.5
Channel bandwidth: 40 MHz Output port: 1 Antenna gain: 8 dBi
Lower band edge frequency = 2.4 GHz
Limit: > 30 dB below Peak 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

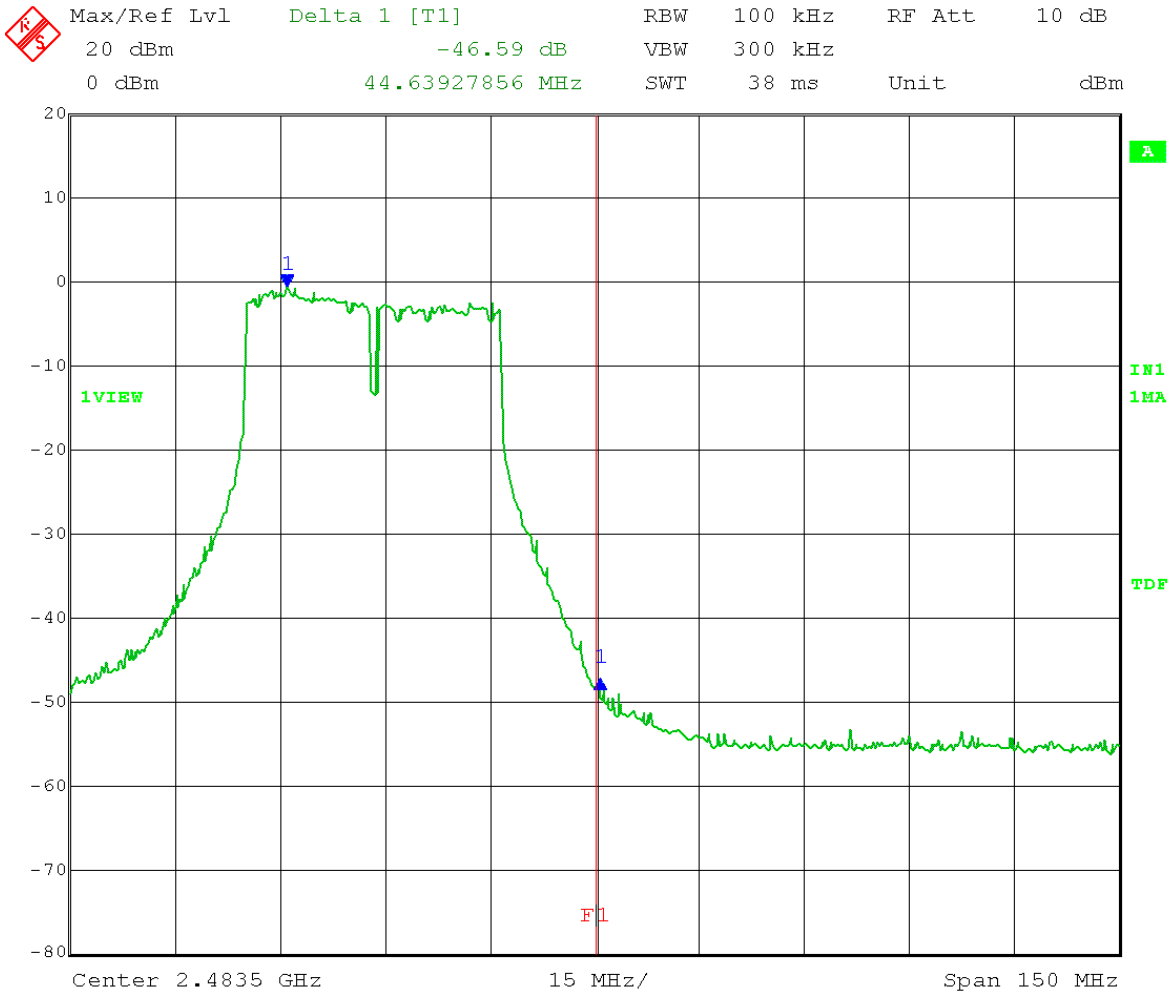
Comment: RBW = 100 kHz VBW ≥ 300 kHz
Detector = Peak Sweep = auto couple
Trace = max hold
Point-to-Multipoint operation
Mid Channel: Transmit = 2437 MHz Output power setting: 18
Channel bandwidth: 40 MHz Output port: 1 Antenna gain: 8 dBi
Lower band edge frequency = 2.4 GHz
Upper band edge frequency = 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

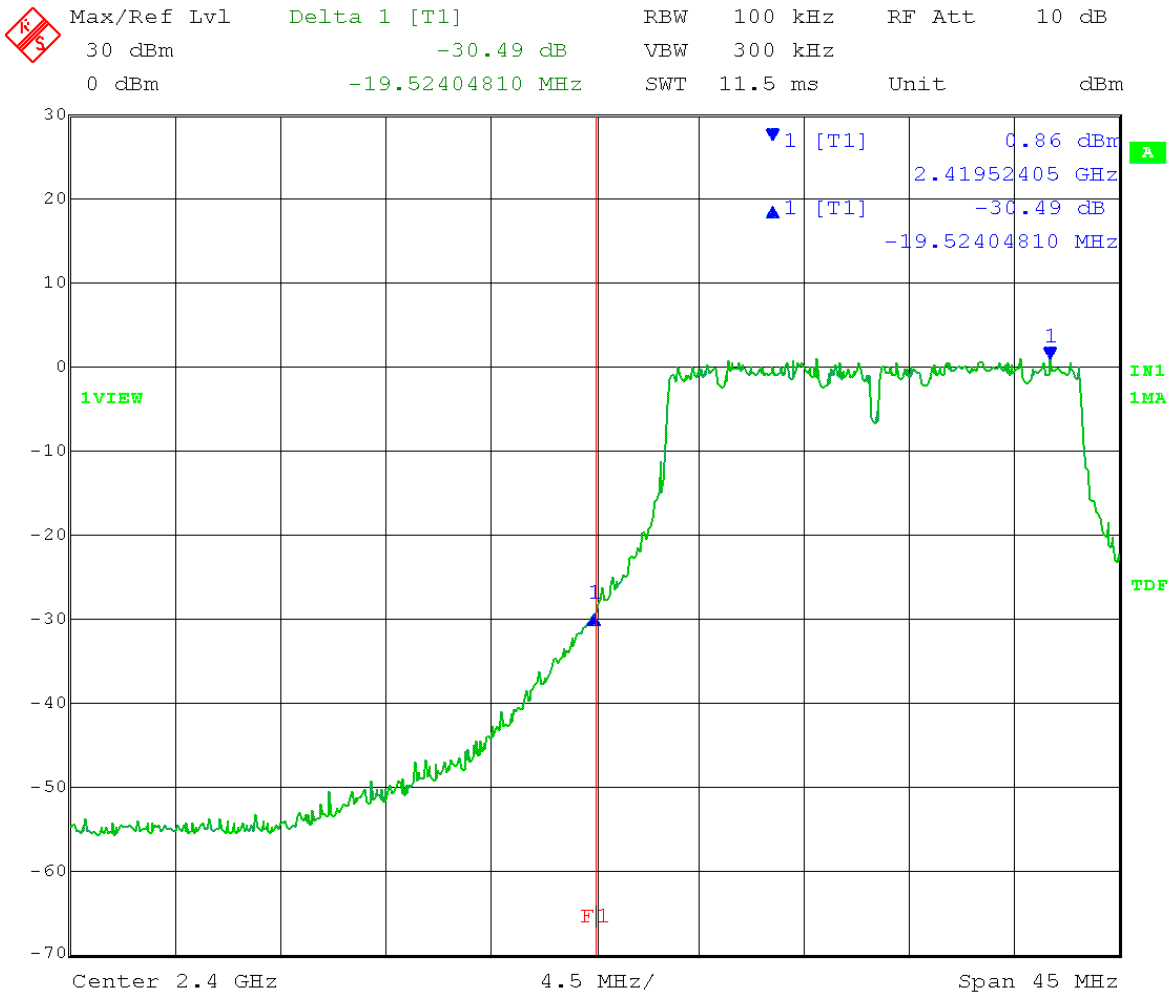
Comment: RBW = 100 kHz VBW ≥ 300 kHz
Detector = Peak Sweep = auto couple
Trace = max hold
Point-to-Multipoint operation
High Channel: Transmit = 2452 MHz Output power setting: 15.5
Channel bandwidth: 40 MHz Output port: 1 Antenna gain: 8 dBi
Upper band edge frequency = 2.4835 GHz
Limit: > 30 dB below Peak In-Band Emission



Date: 5.MAR.2014 13:24:14

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

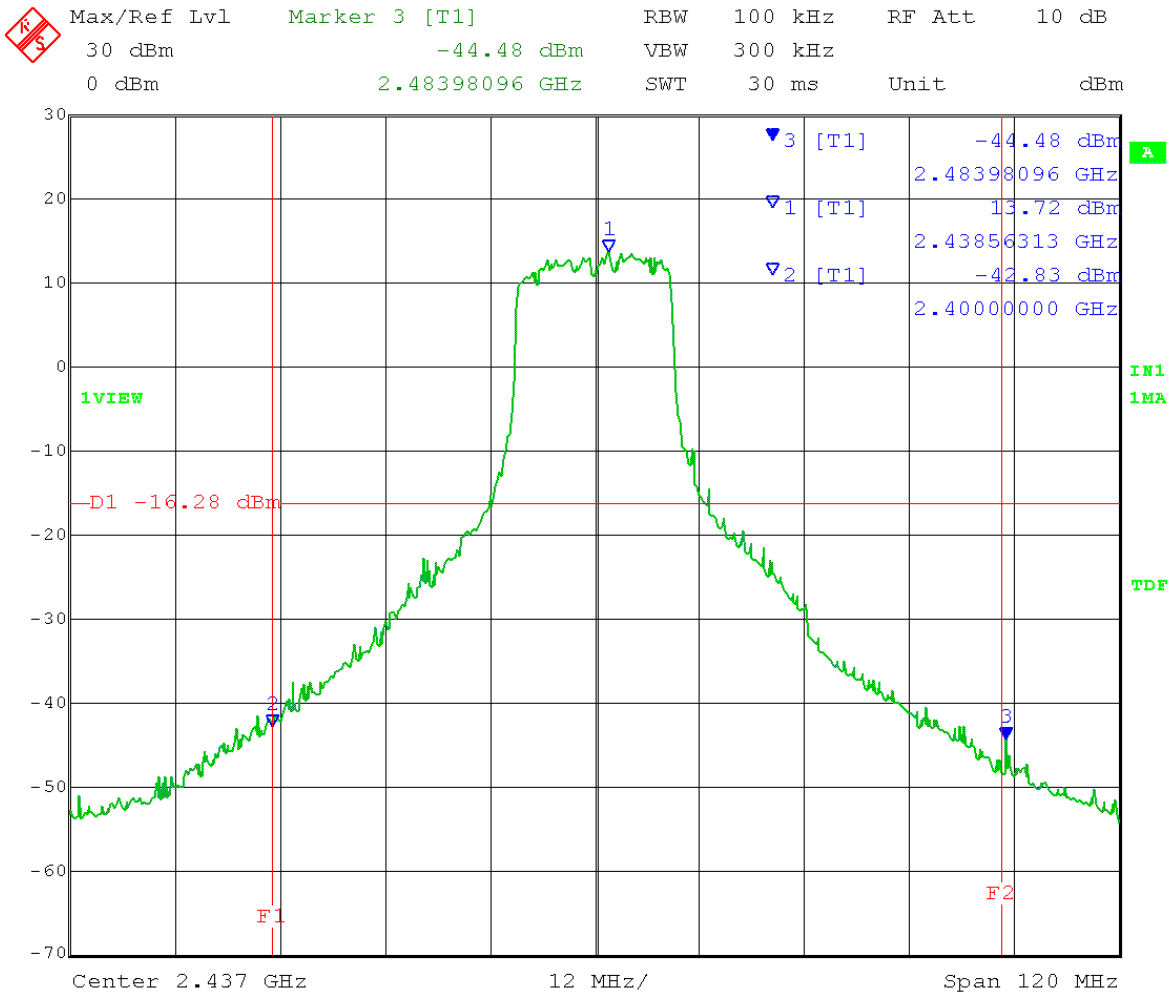
Comment: RBW = 100 kHz VBW ≥ 300 kHz
Detector = Peak Sweep = auto couple
Trace = max hold
POINT-TO-POINT & POINT-TO-MULTIPOINT OPERATION
Low Channel: Transmit = 2412 MHz Output power setting: 15
Channel bandwidth: 20 MHz Output port: 1 Antenna gain: 12 dBi
Lower band edge frequency = 2.4 GHz
Limit: > 30 dB below Peak In-Band Emission



Date: 11.MAR.2014 08:29:07

Test Date: 03-11-2014
Company: Cambium Networks
EUT: EPMP 2.4 GHz STA MAC: 000456C69680
Test: Band-Edge Measurements - Conducted
Operator: Craig B

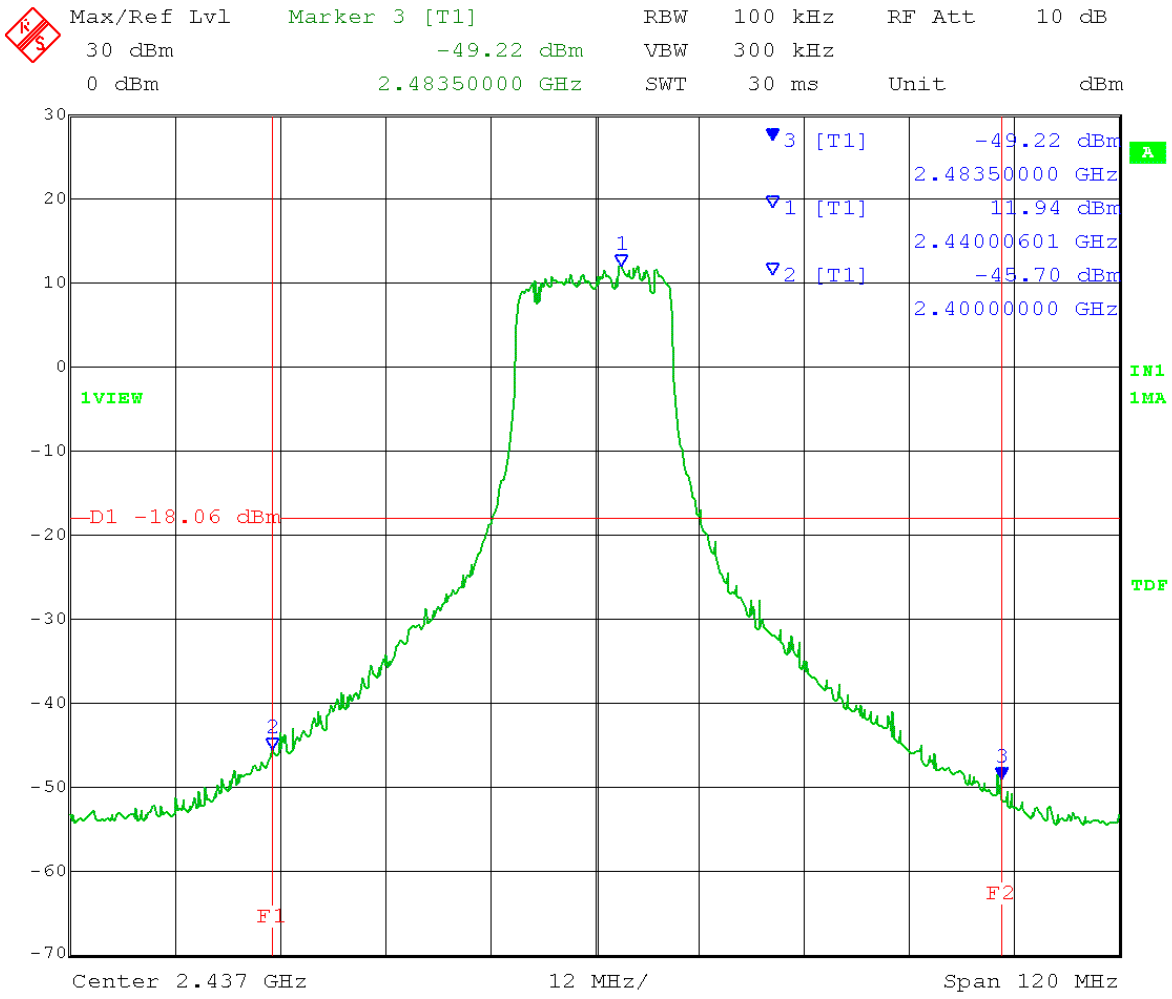
Comment: RBW = 100 kHz VBW ≥ 300 kHz
Detector = Peak Sweep = auto couple
Trace = max hold
POINT-TO-POINT OPERATION
Mid Channel: Transmit = 2437 MHz Output power setting: 27
Channel bandwidth: 20 MHz Output port: 1 Antenna gain: 12 dBi
Lower band edge frequency = 2.4 GHz
Upper band edge frequency = 2.4835 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

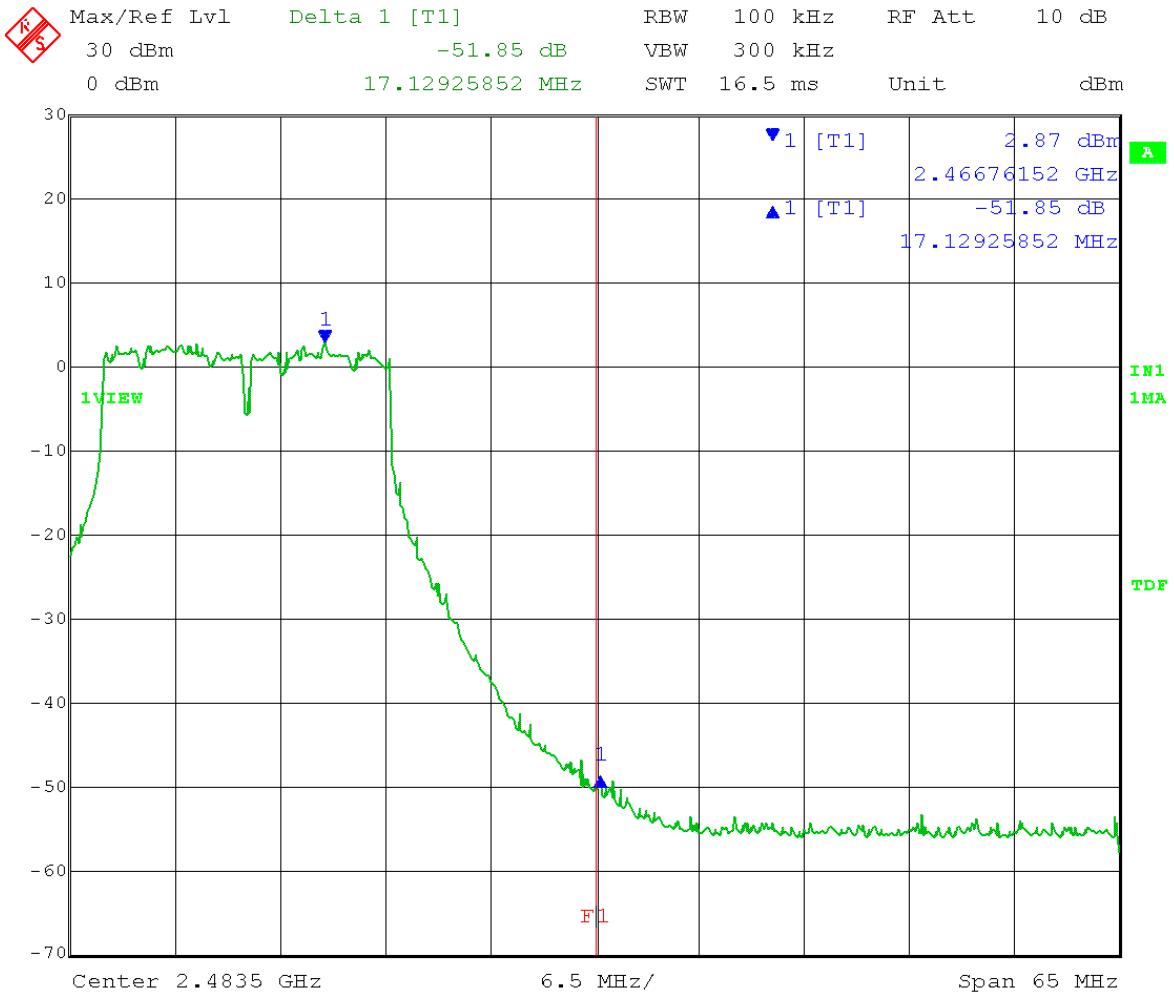
Comment: RBW = 100 kHz VBW ≥ 300 kHz
Detector = Peak Sweep = auto couple
Trace = max hold
POINT-TO-MULTIPOINT OPERATION
Mid Channel: Transmit = 2437 MHz Output power setting: 24.5
Channel bandwidth: 20 MHz Output port: 1 Antenna gain: 12 dBi
Lower band edge frequency = 2.4 GHz
Upper band edge frequency = 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

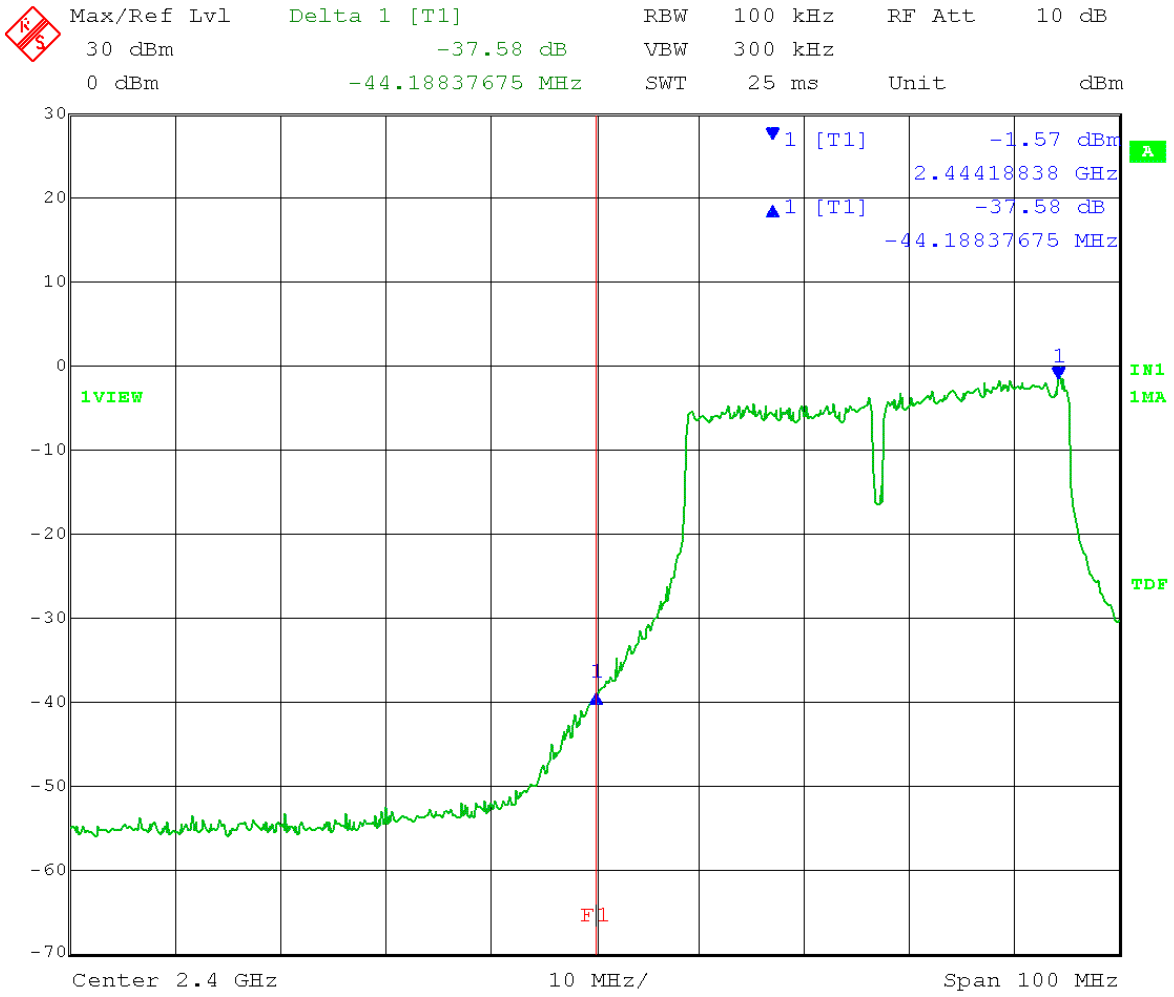
Comment: RBW = 100 kHz VBW ≥ 300 kHz
Detector = Peak Sweep = auto couple
Trace = max hold
POINT-TO-POINT & POINT-TO-MULTIPOINT OPERATION
High Channel: Transmit = 2462 MHz Output power setting: 17
Channel bandwidth: 20 MHz Output port: 1 Antenna gain: 12 dBi
Upper band edge frequency = 2.4835 GHz
Limit: > 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

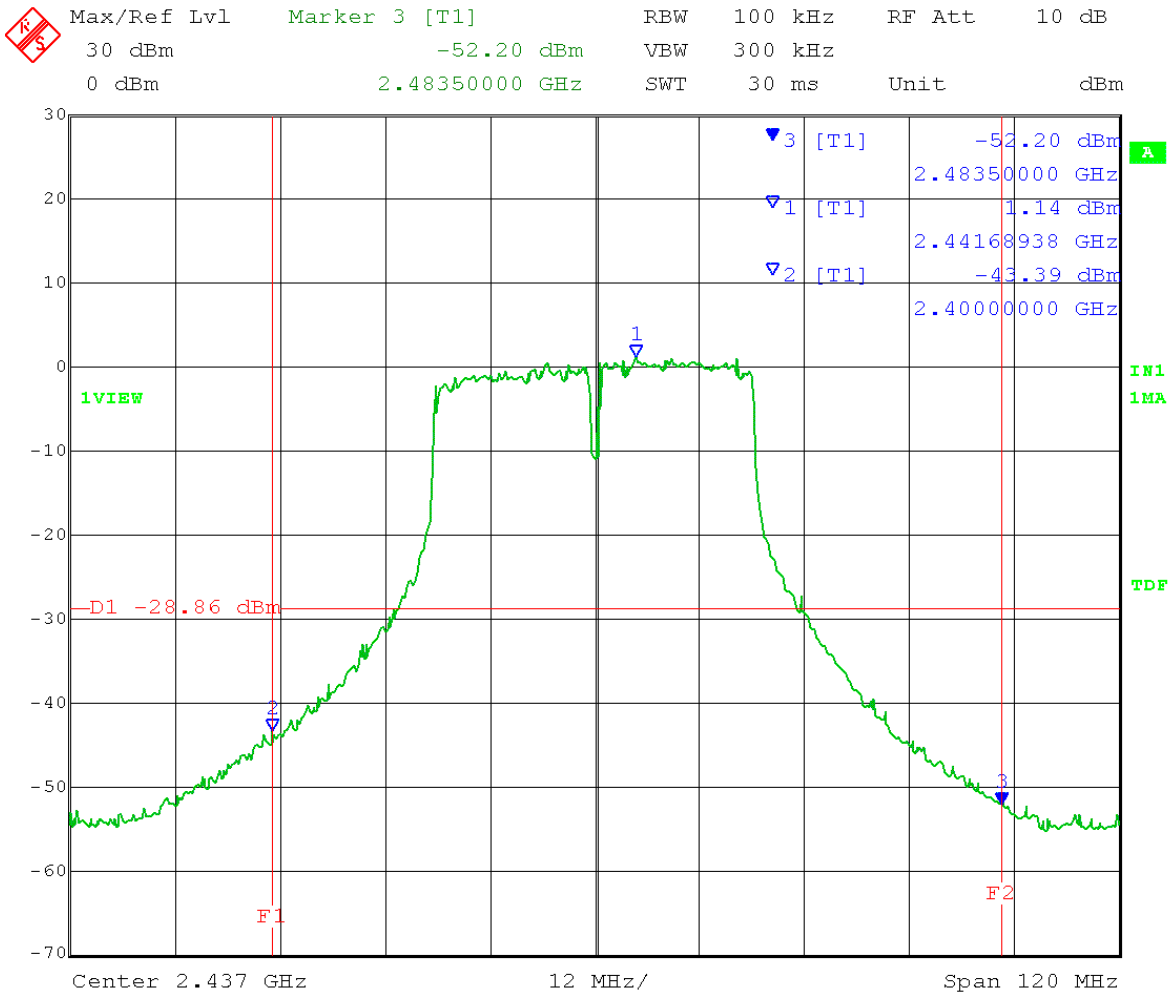
Comment: RBW = 100 kHz VBW ≥ 300 kHz
Detector = Peak Sweep = auto couple
Trace = max hold
POINT-TO-POINT & POINT-TO-MULTIPOINT OPERATION
Low Channel: Transmit = 2427 MHz Output power setting: 12.5
Channel bandwidth: 40 MHz Output port: 1 Antenna gain: 12 dBi
Lower band edge frequency = 2.4 GHz
Limit: > 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

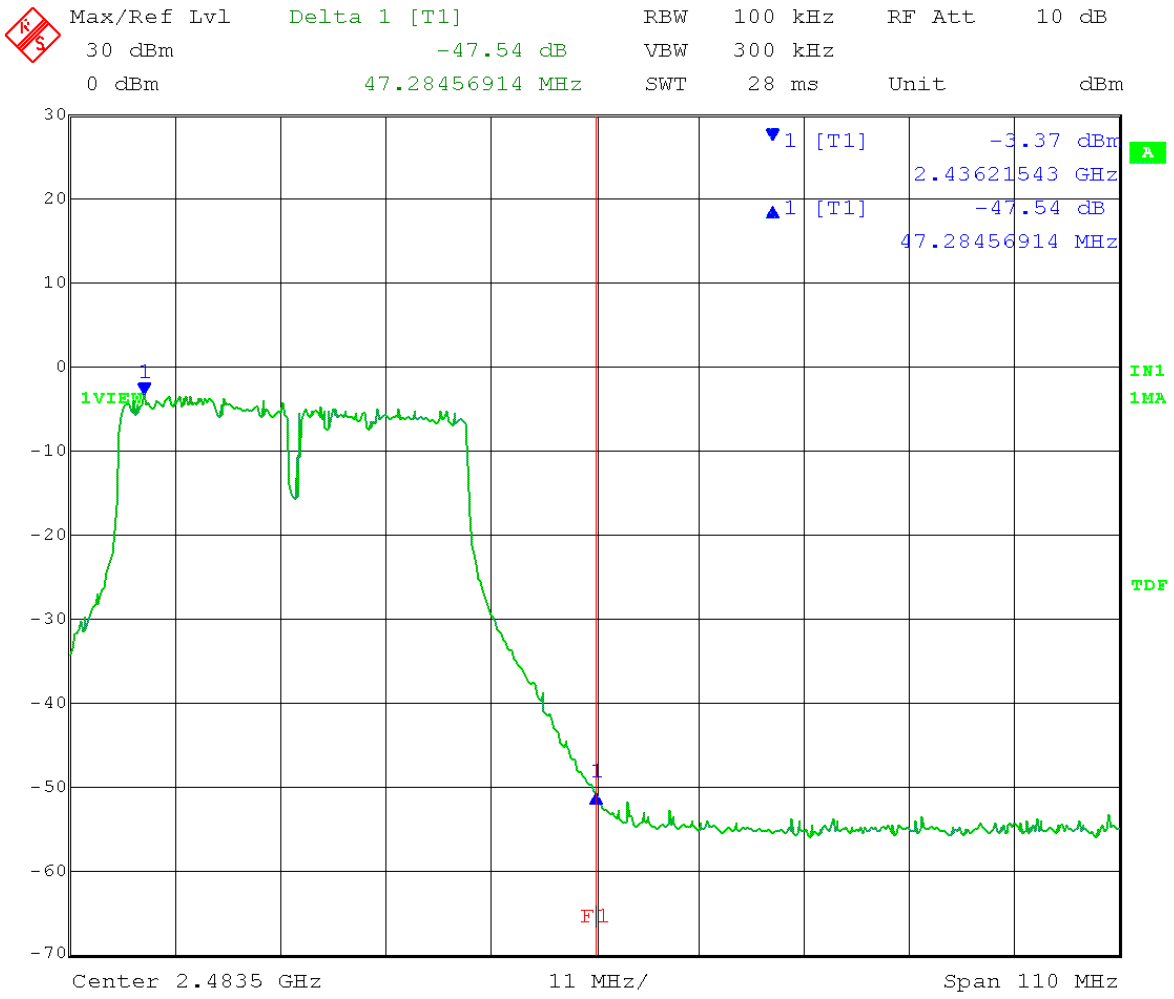
Comment: RBW = 100 kHz VBW ≥ 300 kHz
Detector = Peak Sweep = auto couple
Trace = max hold
POINT-TO-POINT & POINT-TO-MULTIPOINT OPERATION
Mid Channel: Transmit = 2437 MHz Output power setting: 17
Channel bandwidth: 40 MHz Output port: 1 Antenna gain: 12 dBi
Lower band edge frequency = 2.4 GHz
Upper band 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

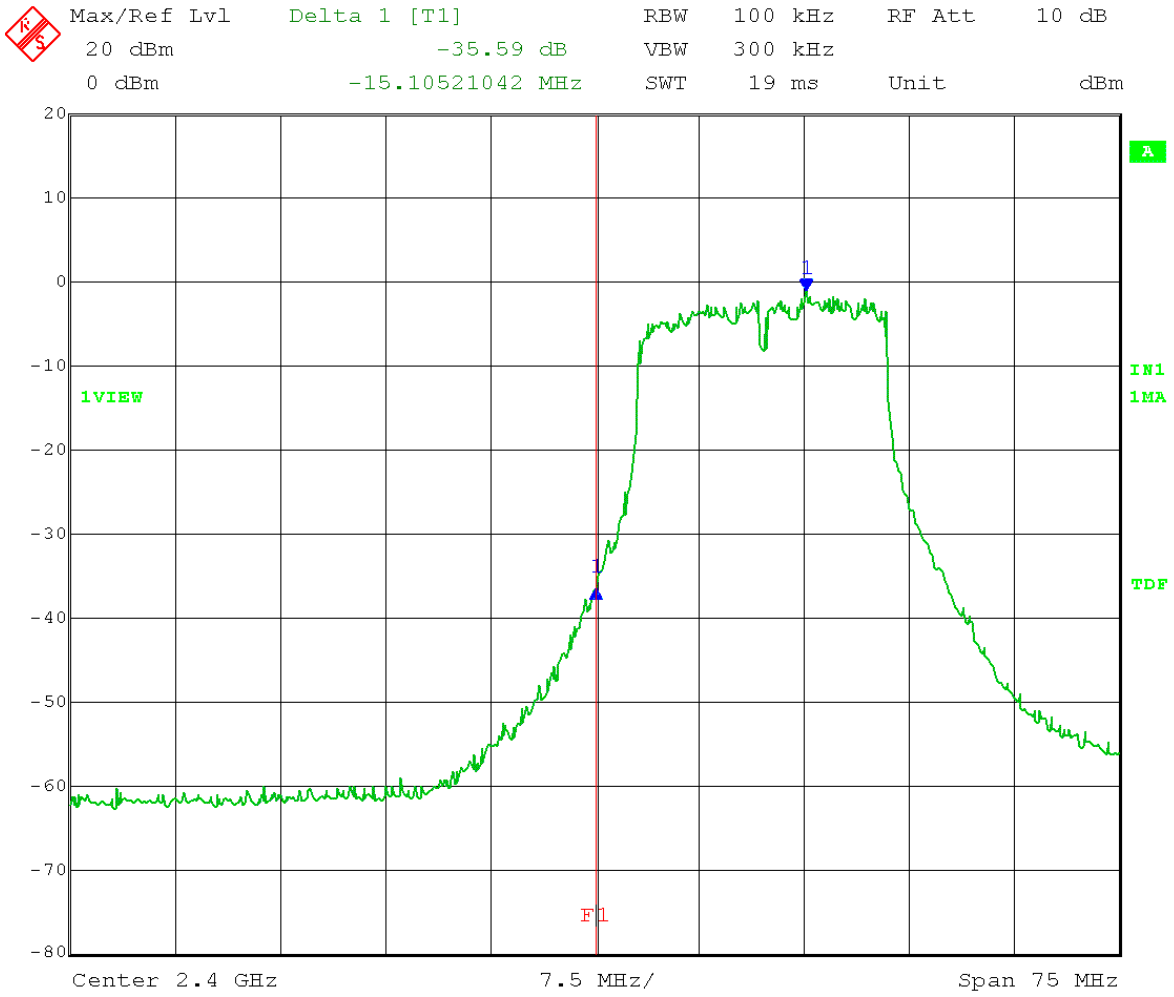
Comment: RBW = 100 kHz VBW ≥ 300 kHz
Detector = Peak Sweep = auto couple
Trace = max hold
POINT-TO-POINT & POINT-TO-MULTIPOINT OPERATION
High Channel: Transmit = 2452 MHz Output power setting: 13.5
Channel bandwidth: 40 MHz Output port: 1 Antenna gain: 12 dBi
Upper band edge frequency = 2.4835 GHz
Limit: > 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

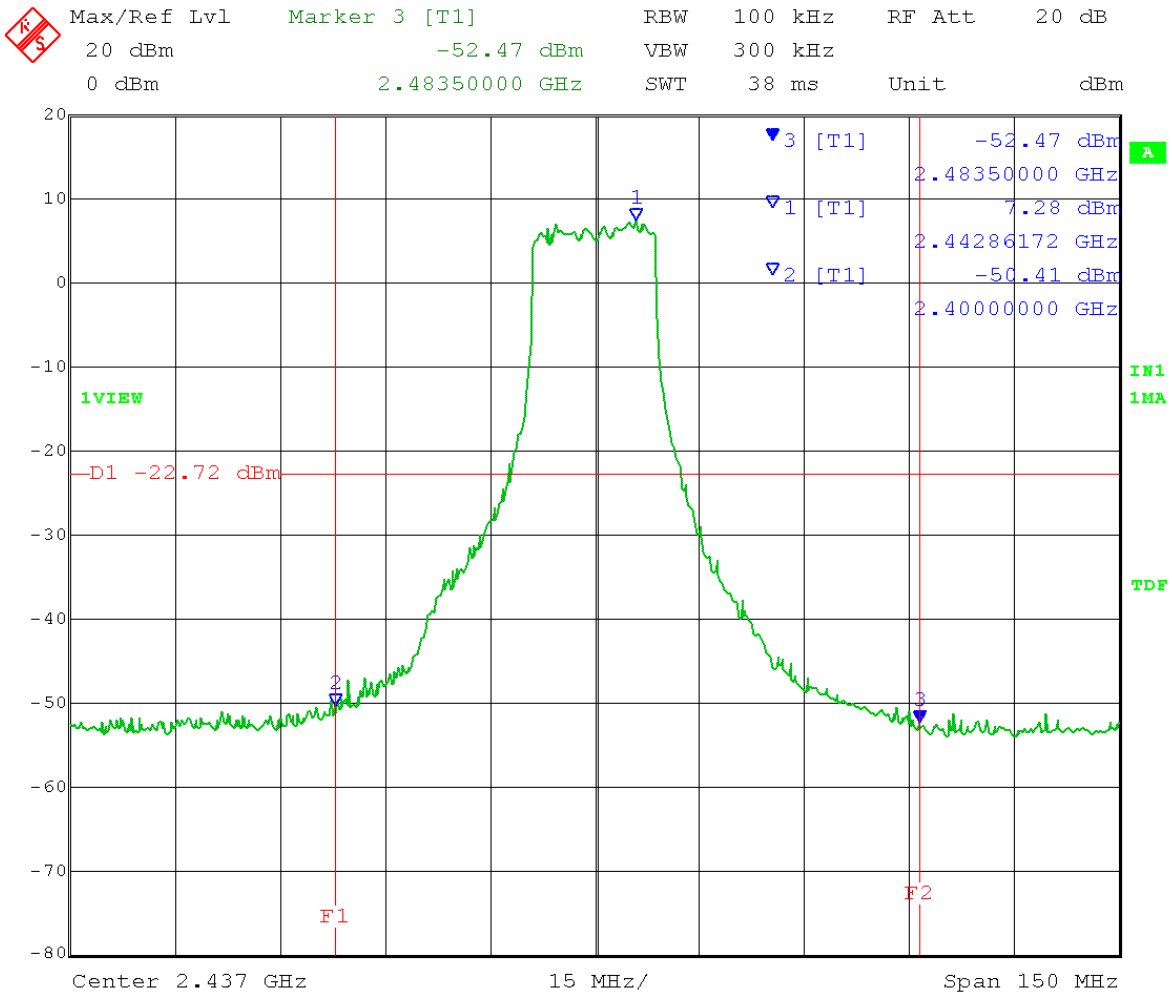
Comment: RBW = 100 kHz VBW ≥ 300 kHz
Detector = Peak Sweep = auto couple
Trace = max hold
Point-to-Point & Point-to-Multipoint operation
Low Channel: Transmit = 2412 MHz Output power setting: 11.5
Channel bandwidth: 20 MHz Output port: 1 Antenna gain: 17 dBi
Lower band edge frequency = 2.4 GHz
Limit: > 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

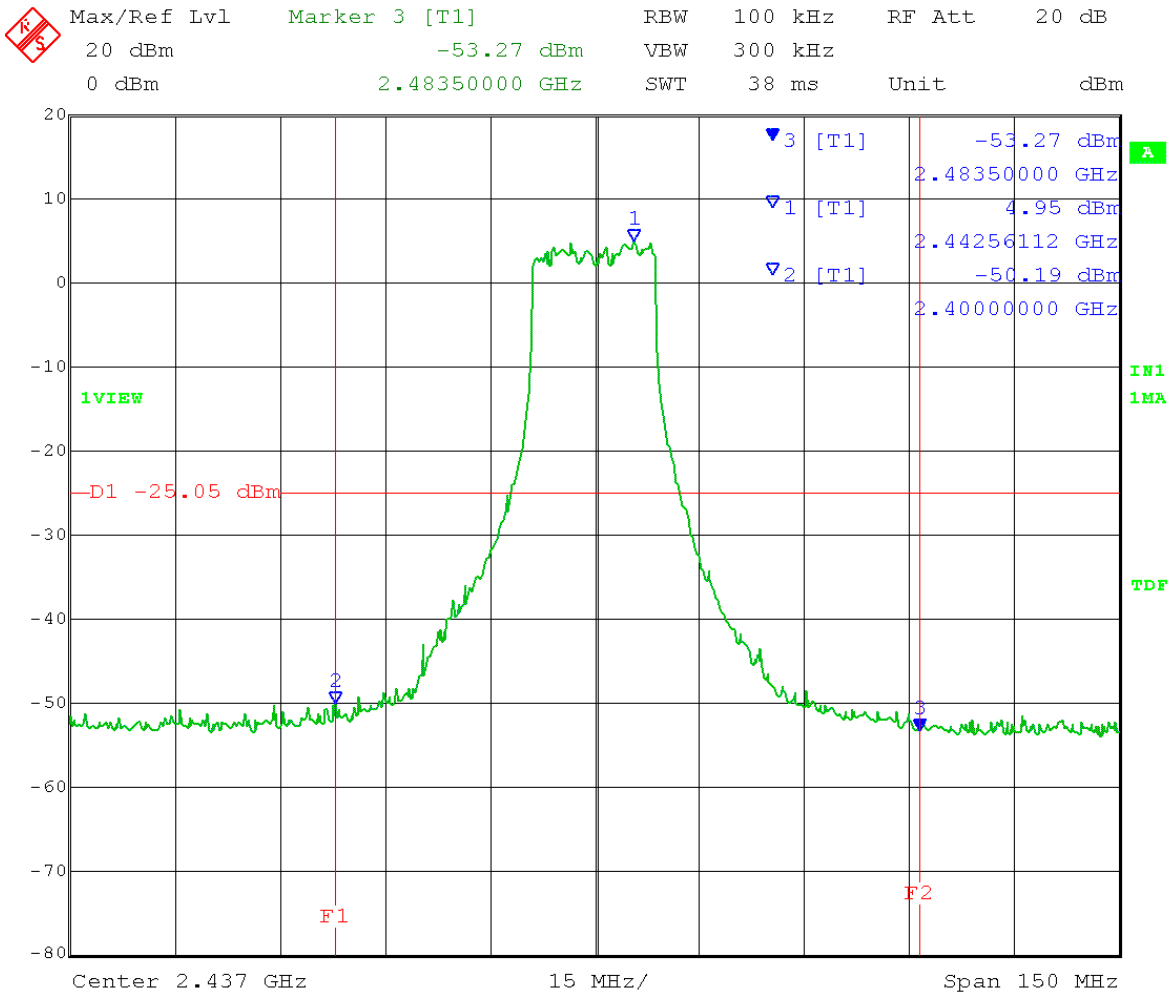
Comment: RBW = 100 kHz VBW ≥ 300 kHz
Detector = Peak Sweep = auto couple
Trace = max hold
Point-to-Point operation
Mid Channel: Transmit = 2437 MHz Output power setting: 20.5
Channel bandwidth: 20 MHz Output port: 1 Antenna gain: 17 dBi
Lower band edge frequency = 2.4 GHz
Upper band edge frequency = 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

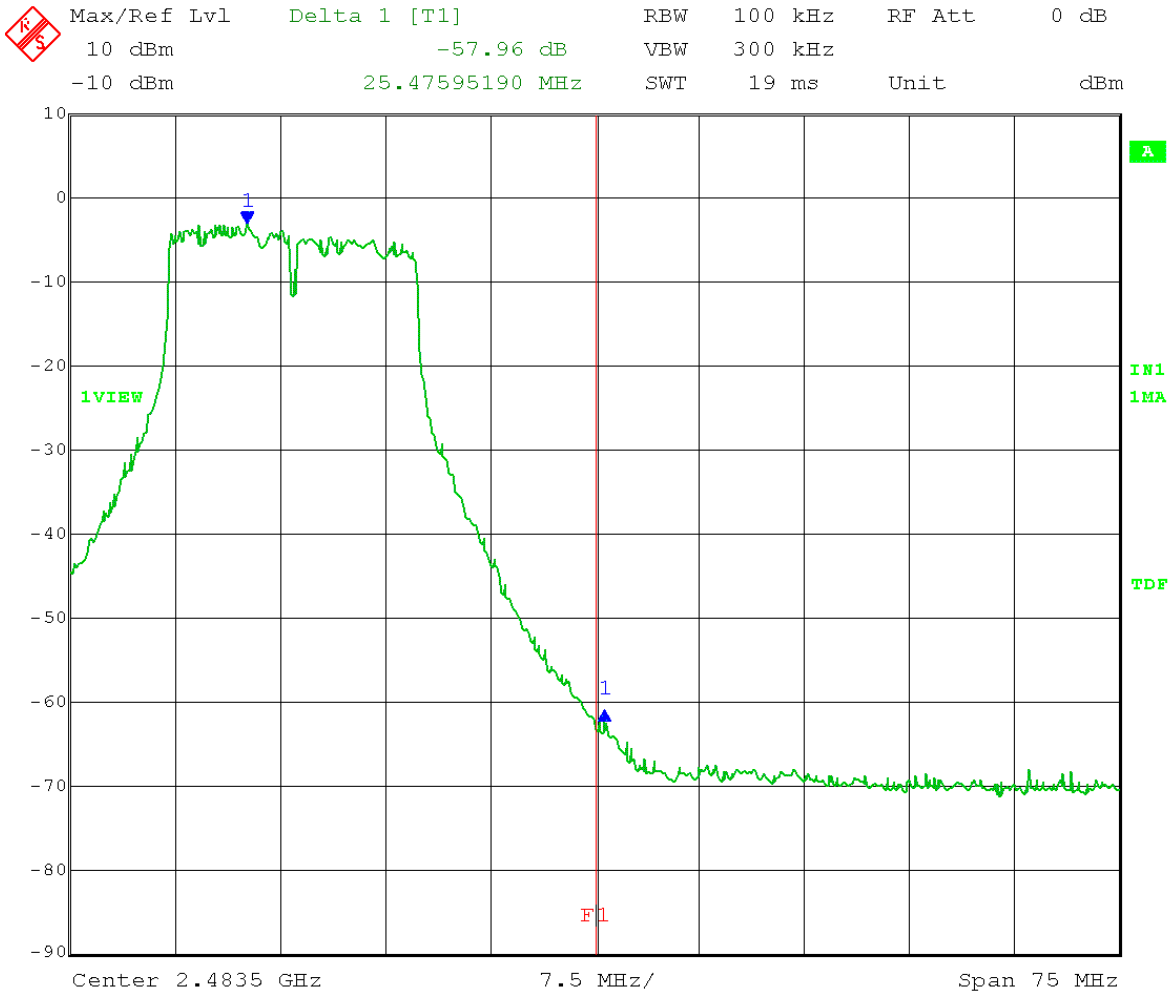
Comment: RBW = 100 kHz VBW ≥ 300 kHz
Detector = Peak Sweep = auto couple
Trace = max hold
Point-to-Multipoint operation
Mid Channel: Transmit = 2437 MHz Output power setting: 18.0
Channel bandwidth: 20 MHz Output port: 1 Antenna gain: 17 dBi
Lower band edge frequency = 2.4 GHz
Upper band edge frequency = 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

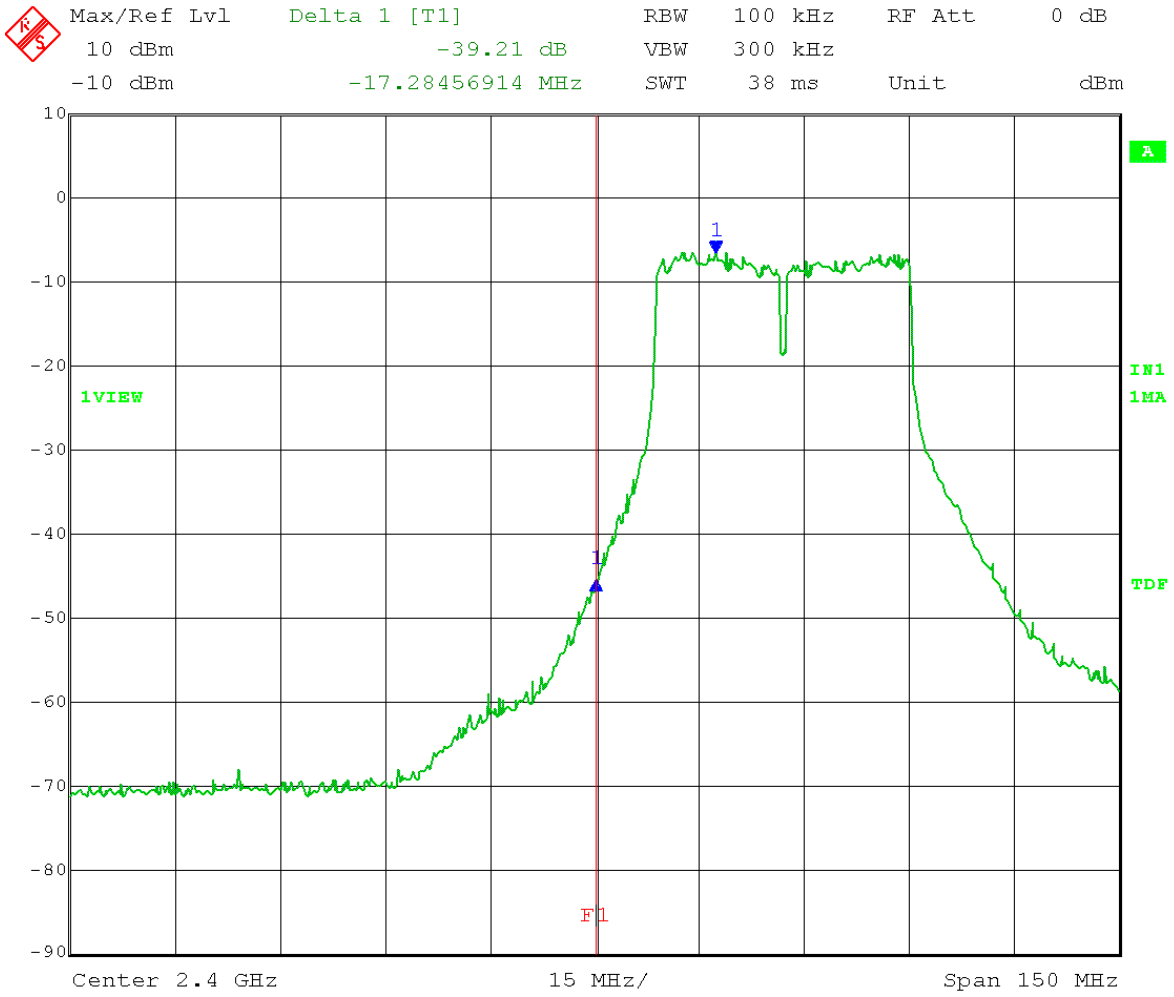
Comment: RBW = 100 kHz VBW ≥ 300 kHz
Detector = Peak Sweep = auto couple
Trace = max hold
Point-to-Point & Point-to-Multipoint operation
High Channel: Transmit = 2462 MHz Output power setting: 10
Channel bandwidth: 20 MHz Output port: 1 Antenna gain: 17 dBi
Upper band edge frequency = 2.4835 GHz
Limit: > 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

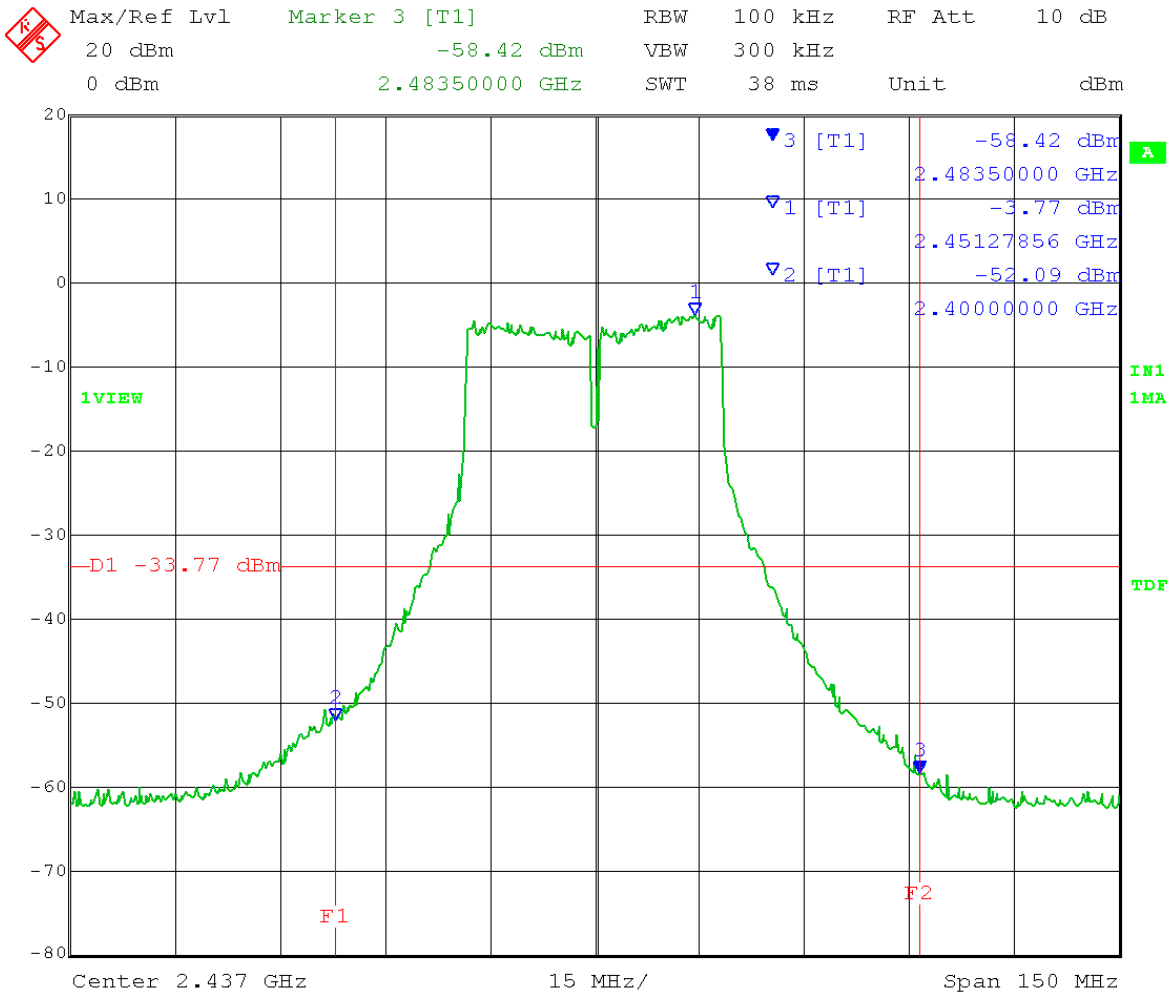
Comment: RBW = 100 kHz VBW ≥ 300 kHz
Detector = Peak Sweep = auto couple
Trace = max hold
Point-to-Point & Point-to-Multipoint operation
Low Channel: Transmit = 2427 MHz Output power setting: 10
Channel bandwidth: 40 MHz Output port: 1 Antenna gain: 17 dBi
Lower band edge frequency = 2.4 GHz
Limit: > 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

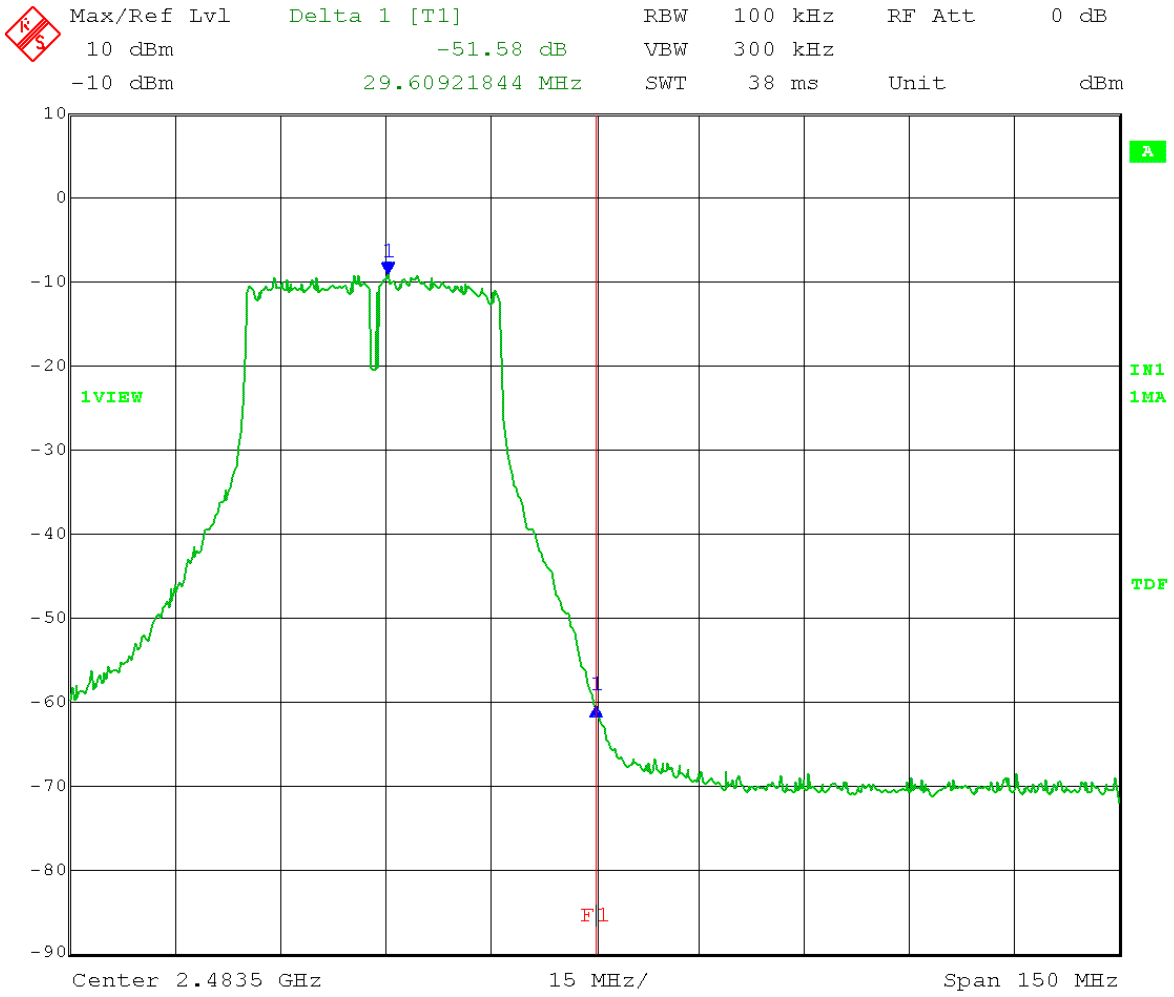
Comment: RBW = 100 kHz VBW ≥ 300 kHz
Detector = Peak Sweep = auto couple
Trace = max hold
Point-to-Point & Point-to-Multipoint operation
Mid Channel: Transmit = 2437 MHz Output power setting: 11.5
Channel bandwidth: 40 MHz Output port: 1 Antenna gain: 17 dBi
Lower band edge frequency = 2.4 GHz
Upper 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

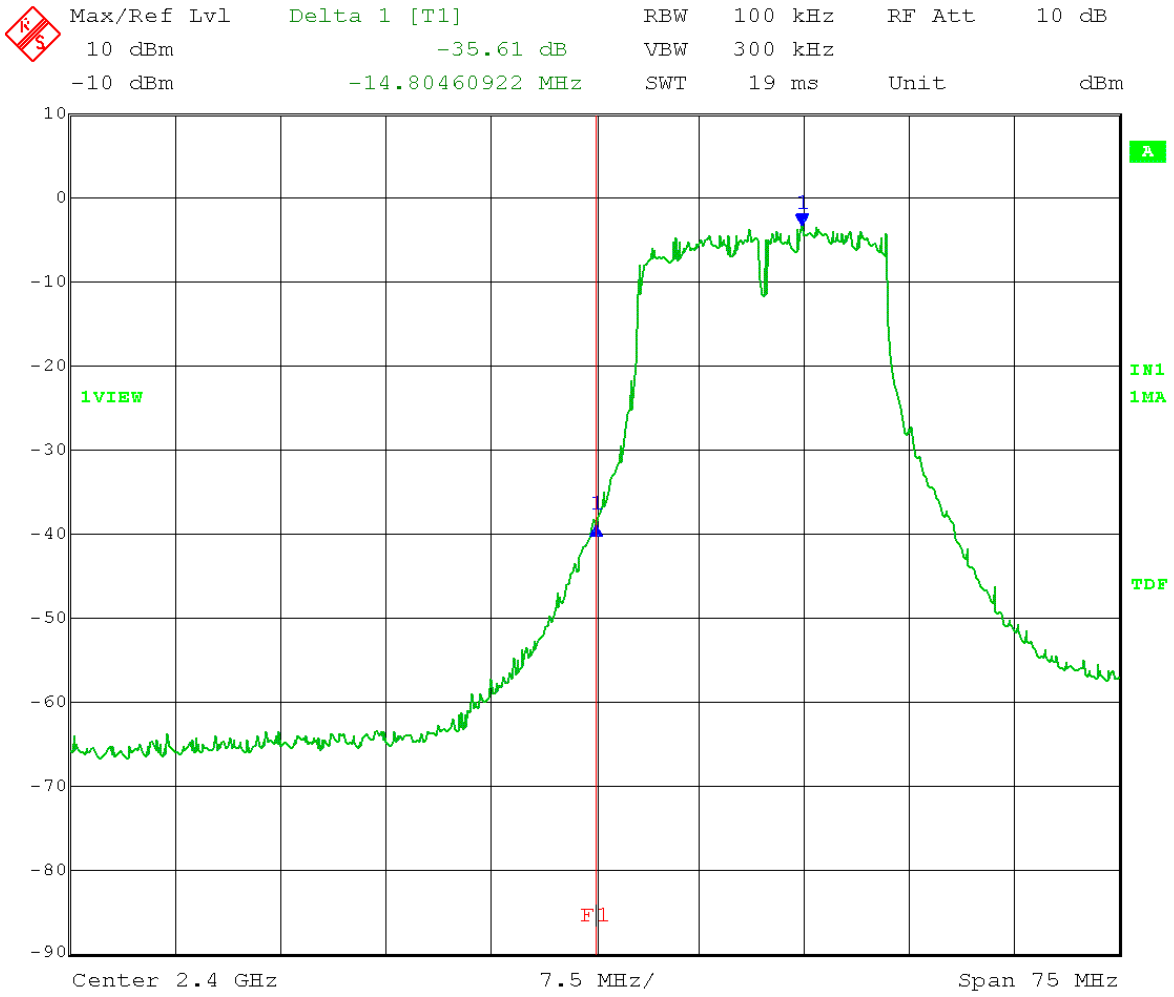
Comment: RBW = 100 kHz VBW ≥ 300 kHz
Detector = Peak Sweep = auto couple
Trace = max hold
Point-to-Point & Point-to-Multipoint operation
High Channel: Transmit = 2452 MHz Output power setting: 6.5
Channel bandwidth: 40 MHz Output port: 1 Antenna gain: 17 dBi
Upper band edge frequency = 2.4835 GHz
Limit: > 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

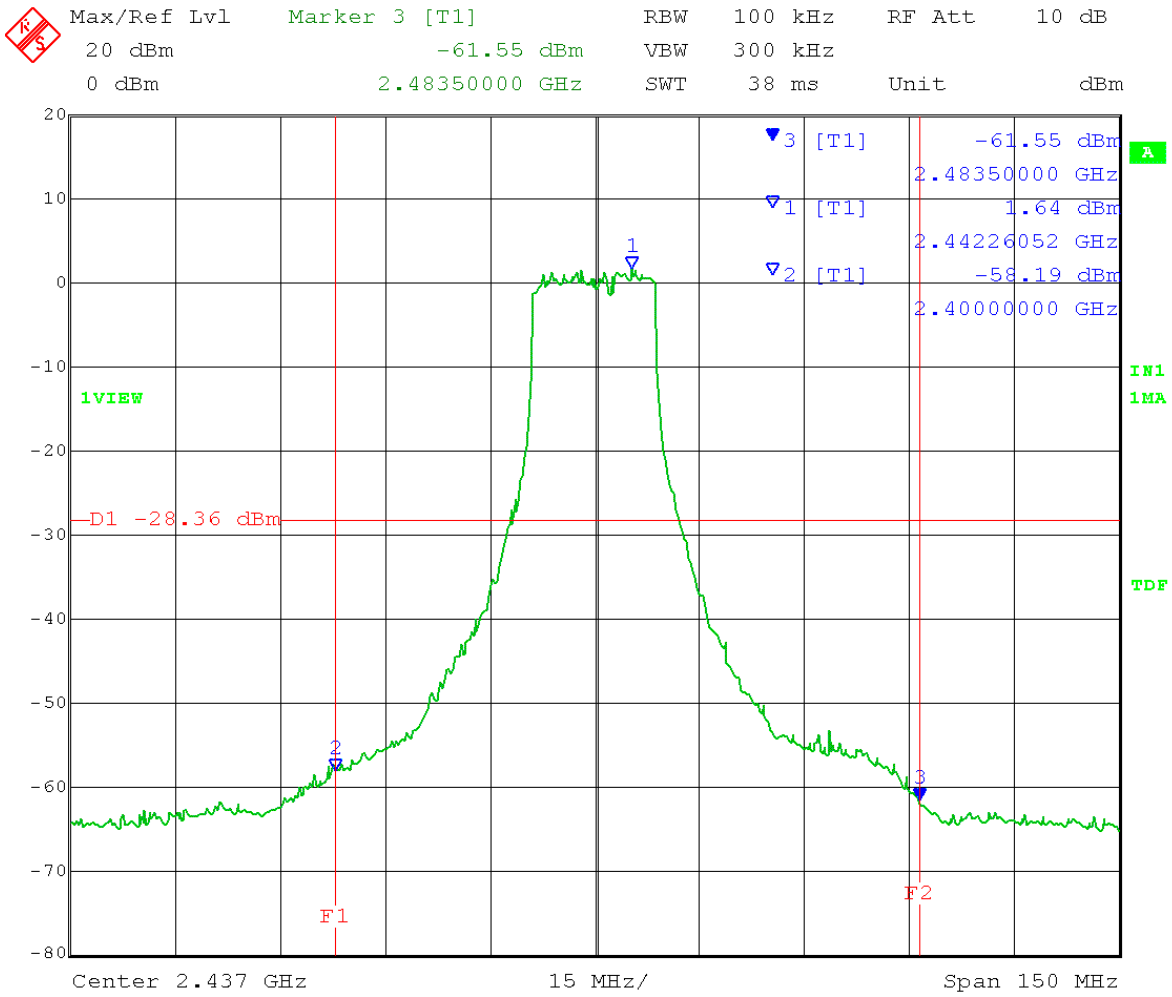
Comment: RBW = 100 kHz VBW ≥ 300 kHz
Detector = Peak Sweep = auto couple
Trace = max hold
Point-to-Point & Point-to-Multipoint operation
Low Channel: Transmit = 2412 MHz Output power setting: 10.5
Channel bandwidth: 20 MHz Output port: 1 Antenna gain: 19 dBi
Lower band edge frequency = 2.4 GHz
Limit: > 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

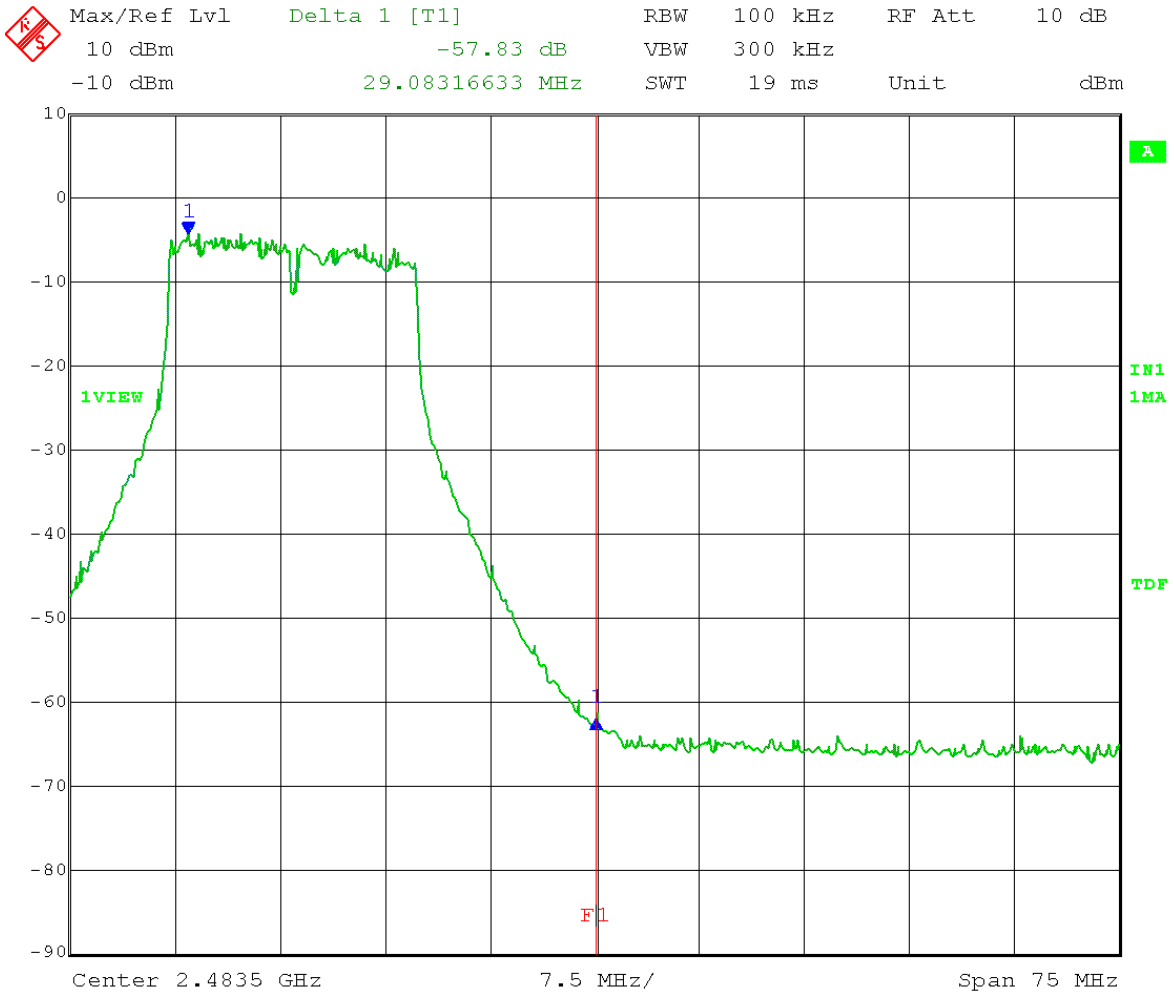
Comment: RBW = 100 kHz VBW ≥ 300 kHz
Detector = Peak Sweep = auto couple
Trace = max hold
Point-to-Point & Point-to-Multipoint operation
Mid Channel: Transmit = 2437 MHz Output power setting: 15.0
Channel bandwidth: 20 MHz Output port: 1 Antenna gain: 19 dBi
Lower band edge frequency = 2.4 GHz
Upper 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

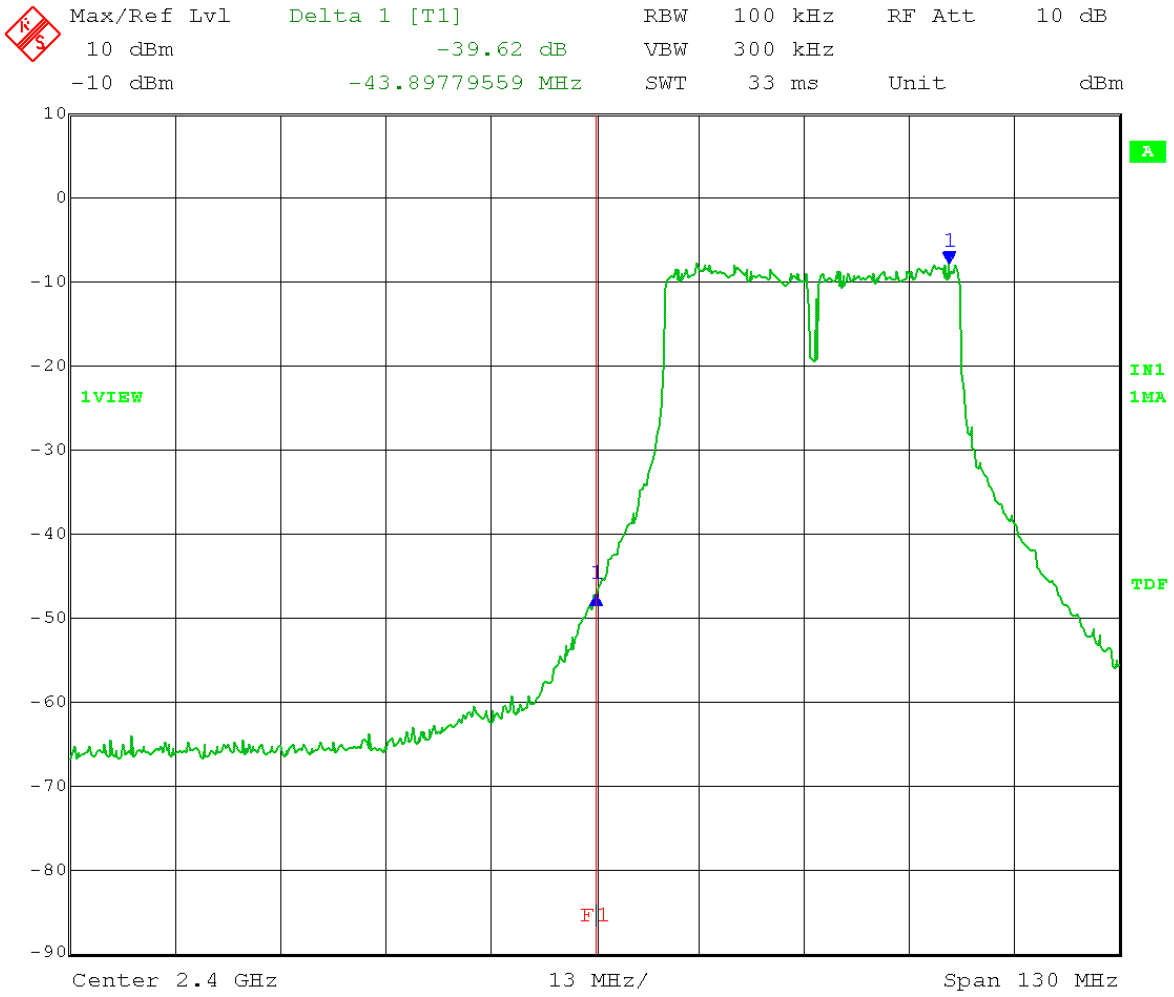
Comment: RBW = 100 kHz VBW ≥ 300 kHz
Detector = Peak Sweep = auto couple
Trace = max hold
Point-to-Point & Point-to-Multipoint operation
High Channel: Transmit = 2462 MHz Output power setting: 9
Channel bandwidth: 20 MHz Output port: 1 Antenna gain: 19 dBi
Upper band edge frequency = 2.4835 GHz
Limit: > 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

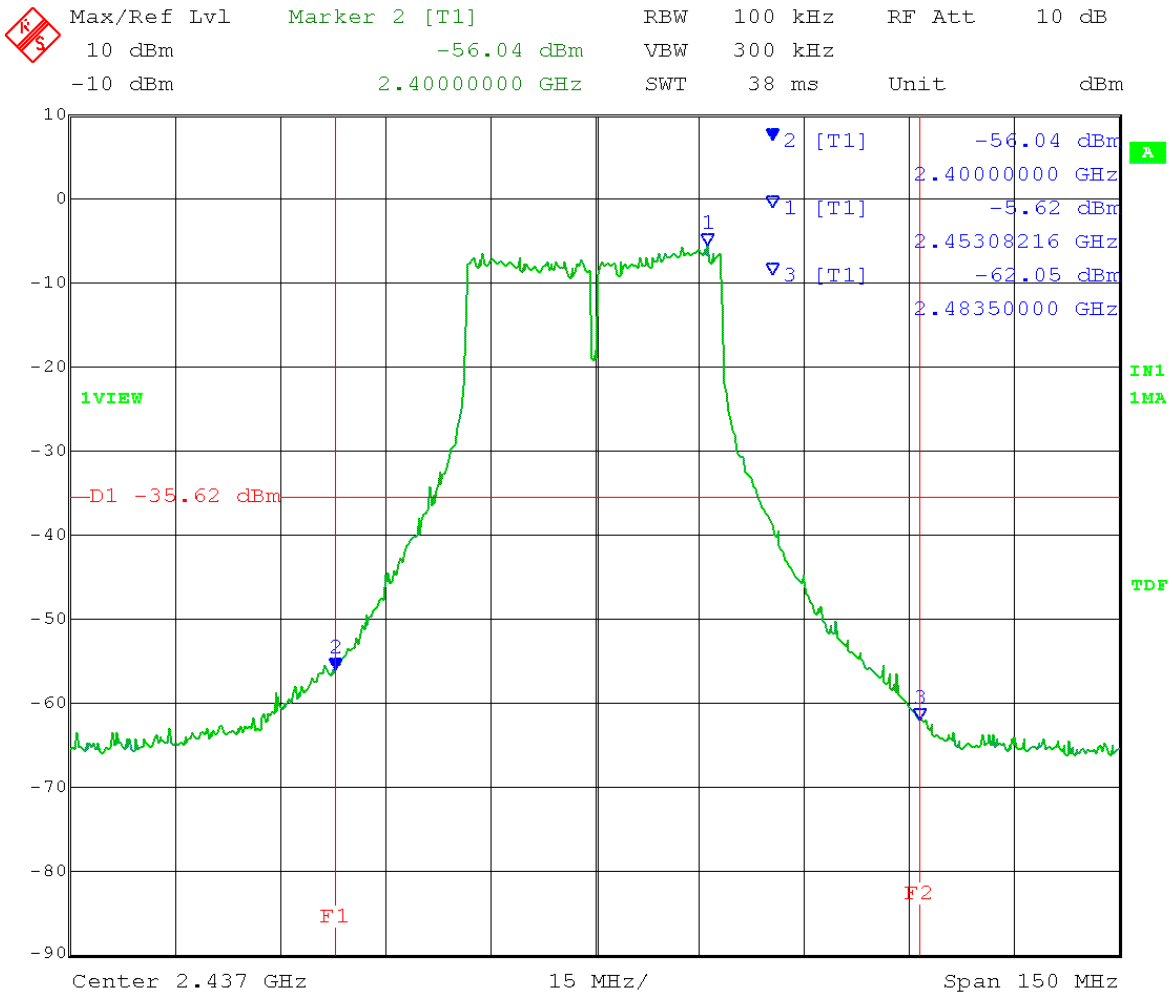
Comment: RBW = 100 kHz VBW ≥ 300 kHz
Detector = Peak Sweep = auto couple
Trace = max hold
Point-to-Point & Point-to-Multipoint operation
Low Channel: Transmit = 2427 MHz Output power setting: 9
Channel bandwidth: 40 MHz Output port: 1 Antenna gain: 19 dBi
Lower band edge frequency = 2.4 GHz
Limit: > 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

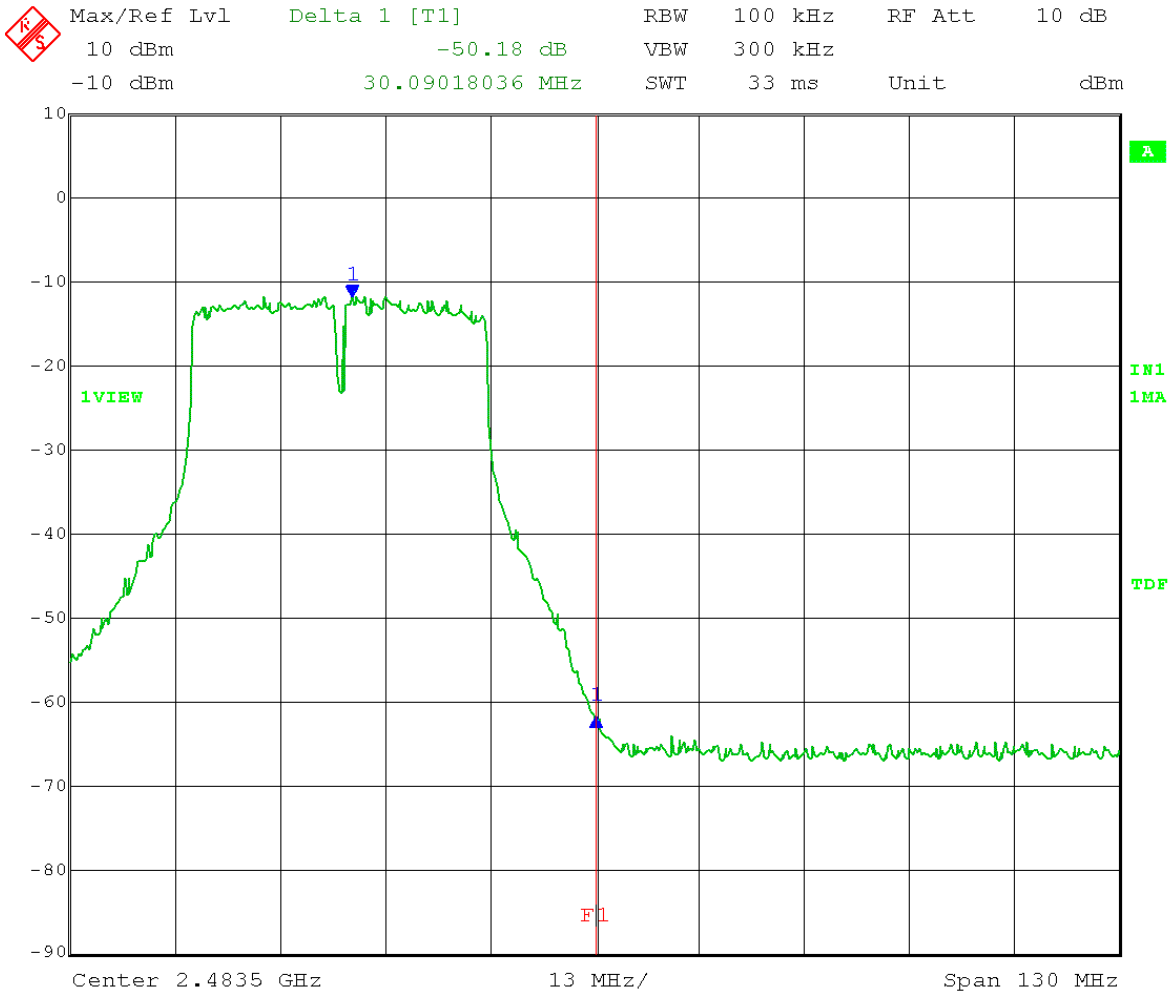
Comment: RBW = 100 kHz VBW ≥ 300 kHz
Detector = Peak Sweep = auto couple
Trace = max hold
Point-to-Point & Point-to-Multipoint operation
Mid Channel: Transmit = 2437 MHz Output power setting: 10
Channel bandwidth: 40 MHz Output port: 1 Antenna gain: 19 dBi
Lower band edge frequency = 2.4 GHz
Upper band 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

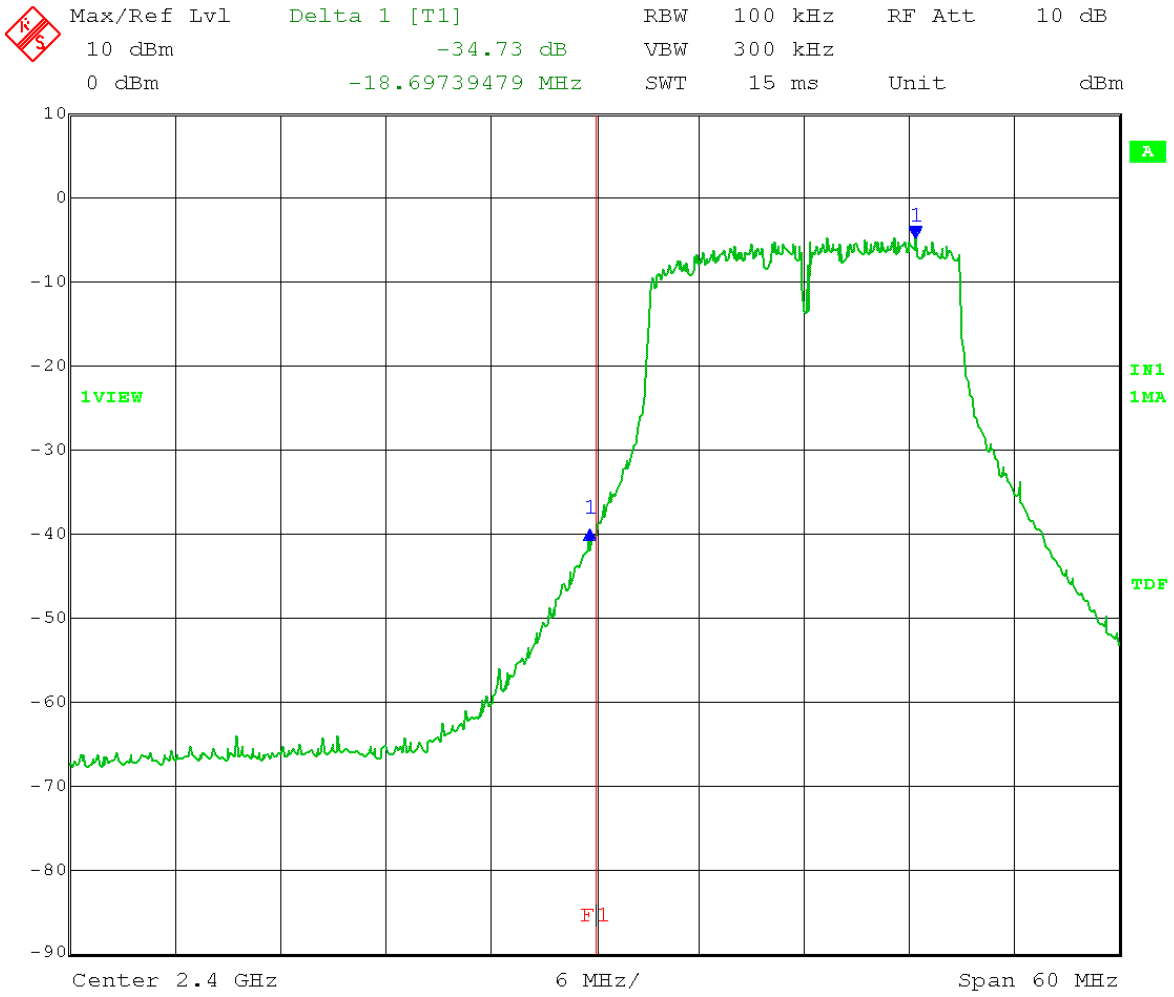
Comment: RBW = 100 kHz VBW ≥ 300 kHz
Detector = Peak Sweep = auto couple
Trace = max hold
Point-to-Point & Point-to-Multipoint operation
High Channel: Transmit = 2452 MHz Output power setting: 4.5
Channel bandwidth: 40 MHz Output port: 1 Antenna gain: 19 dBi
Upper band edge frequency = 2.4835 GHz
Limit: > 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

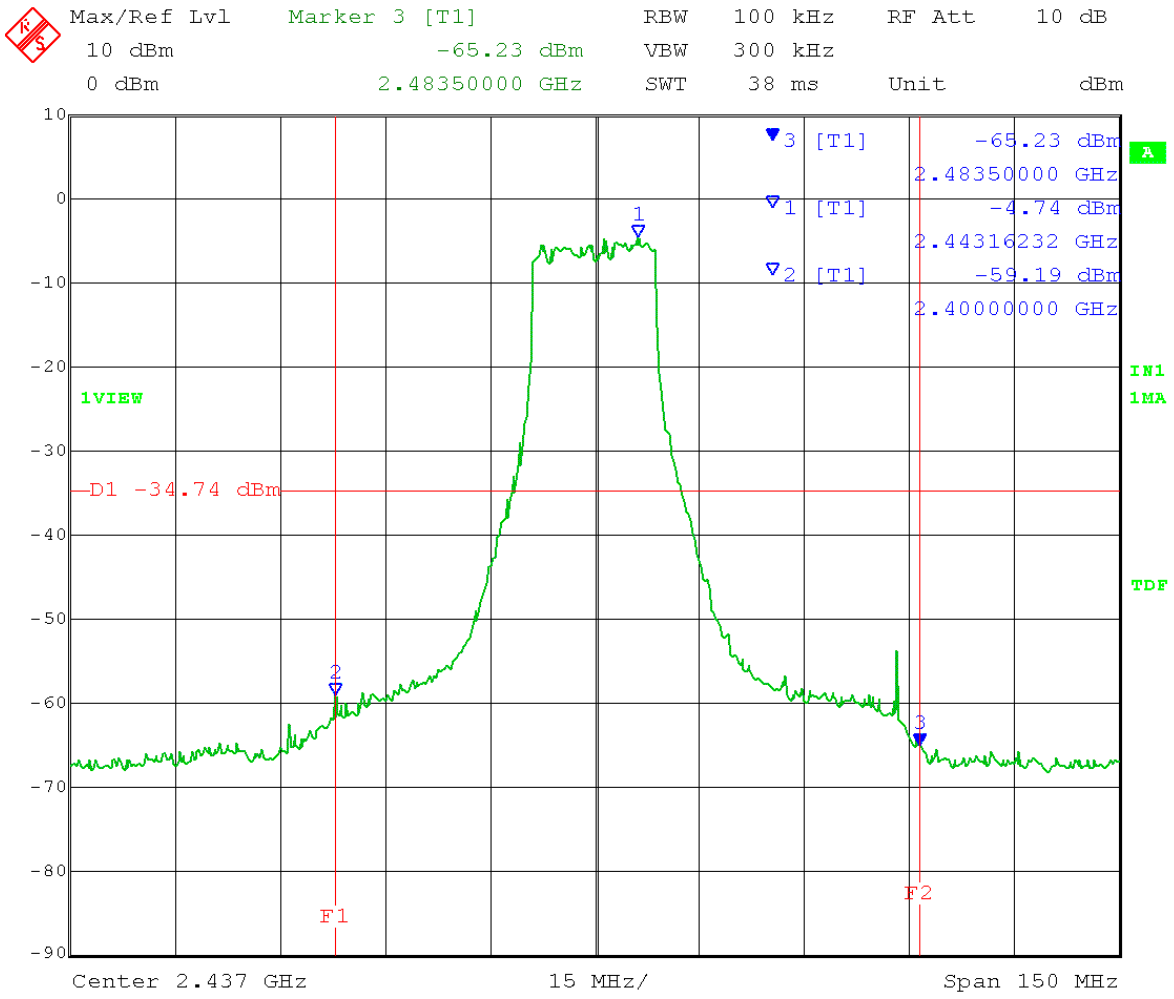
Comment: RBW = 100 kHz VBW ≥ 300 kHz
Detector = Peak Sweep = auto couple
Trace = max hold
Point-to-Point & Point-to-Multipoint operation
Low Channel: Transmit = 2412 MHz Output power setting: 7
Channel bandwidth: 20 MHz Output port: 1 Antenna gain: 25 dBi
Lower band edge frequency = 2.4 GHz
Limit: > 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

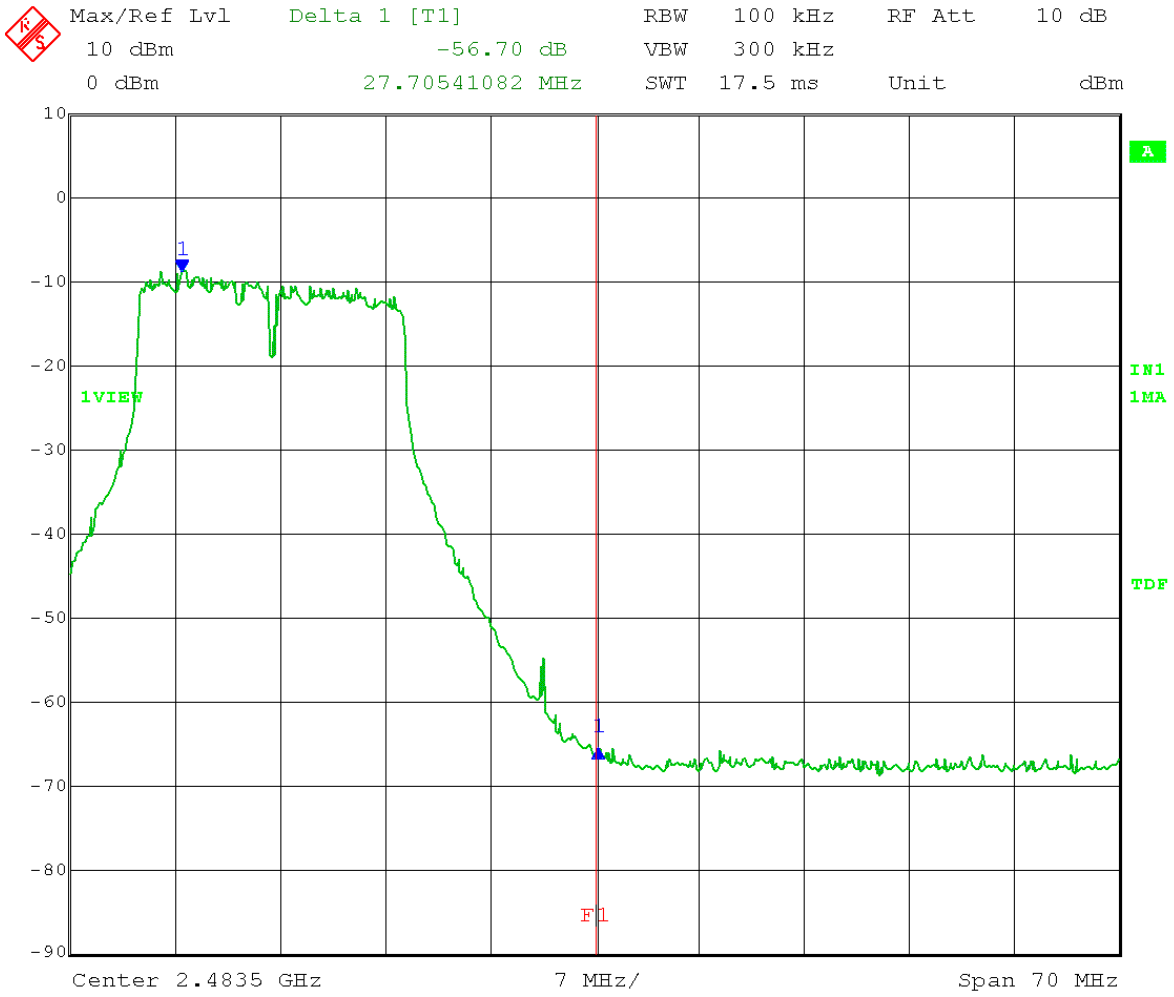
Comment: RBW = 100 kHz VBW ≥ 300 kHz
Detector = Peak Sweep = auto couple
Trace = max hold
Point-to-Point & Point-to-Multipoint operation
Mid Channel: Transmit = 2437 MHz Output power setting: 7
Channel bandwidth: 20 MHz Output port: 1 Antenna gain: 25 dBi
Lower band edge frequency = 2.4 GHz
Upper band 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

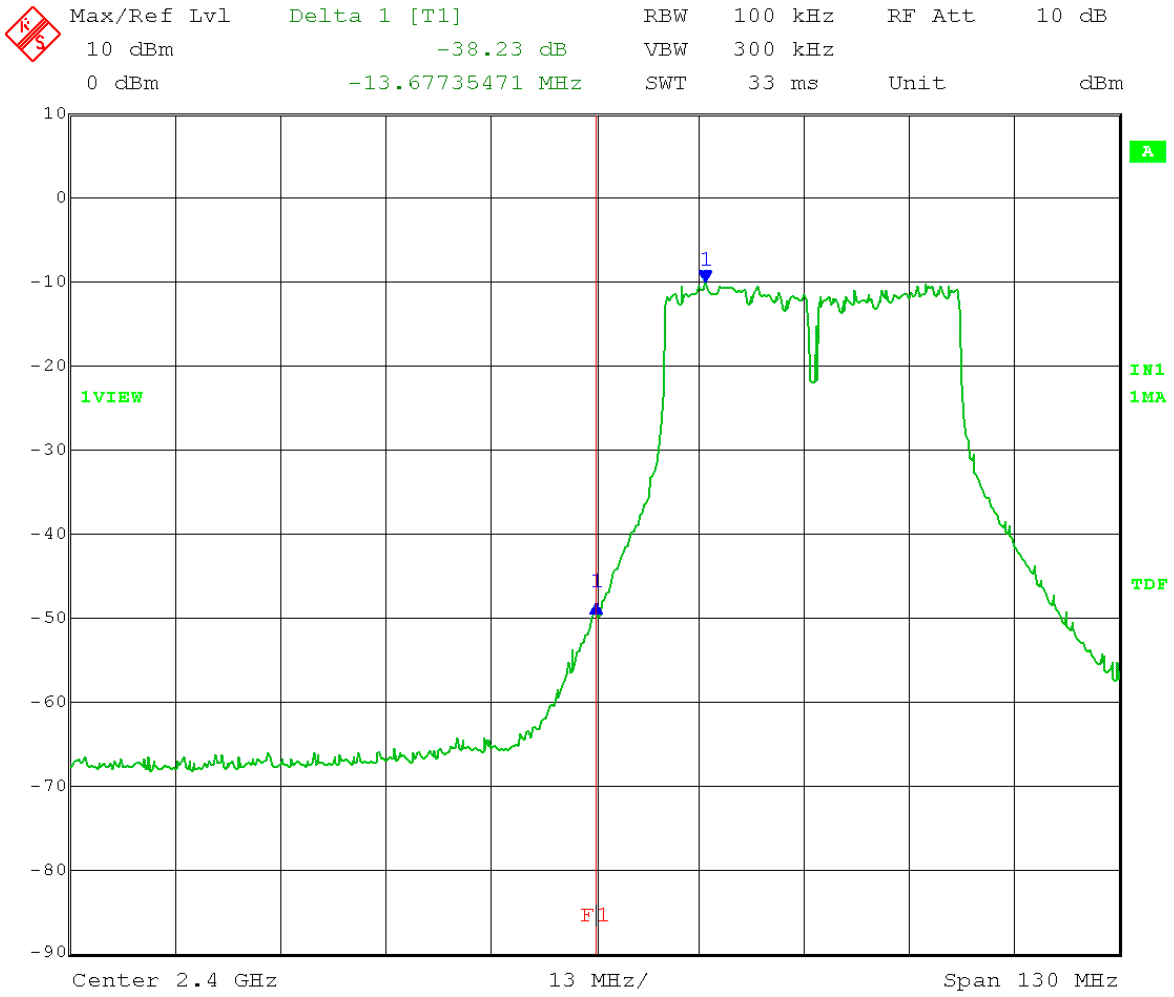
Comment: RBW = 100 kHz VBW ≥ 300 kHz
Detector = Peak Sweep = auto couple
Trace = max hold
Point-to-Point & Point-to-Multipoint operation
High Channel: Transmit = 2462 MHz Output power setting: 2.5
Channel bandwidth: 20 MHz Output port: 1 Antenna gain: 25 dBi
Upper band edge frequency = 2.4835 GHz
Limit: > 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

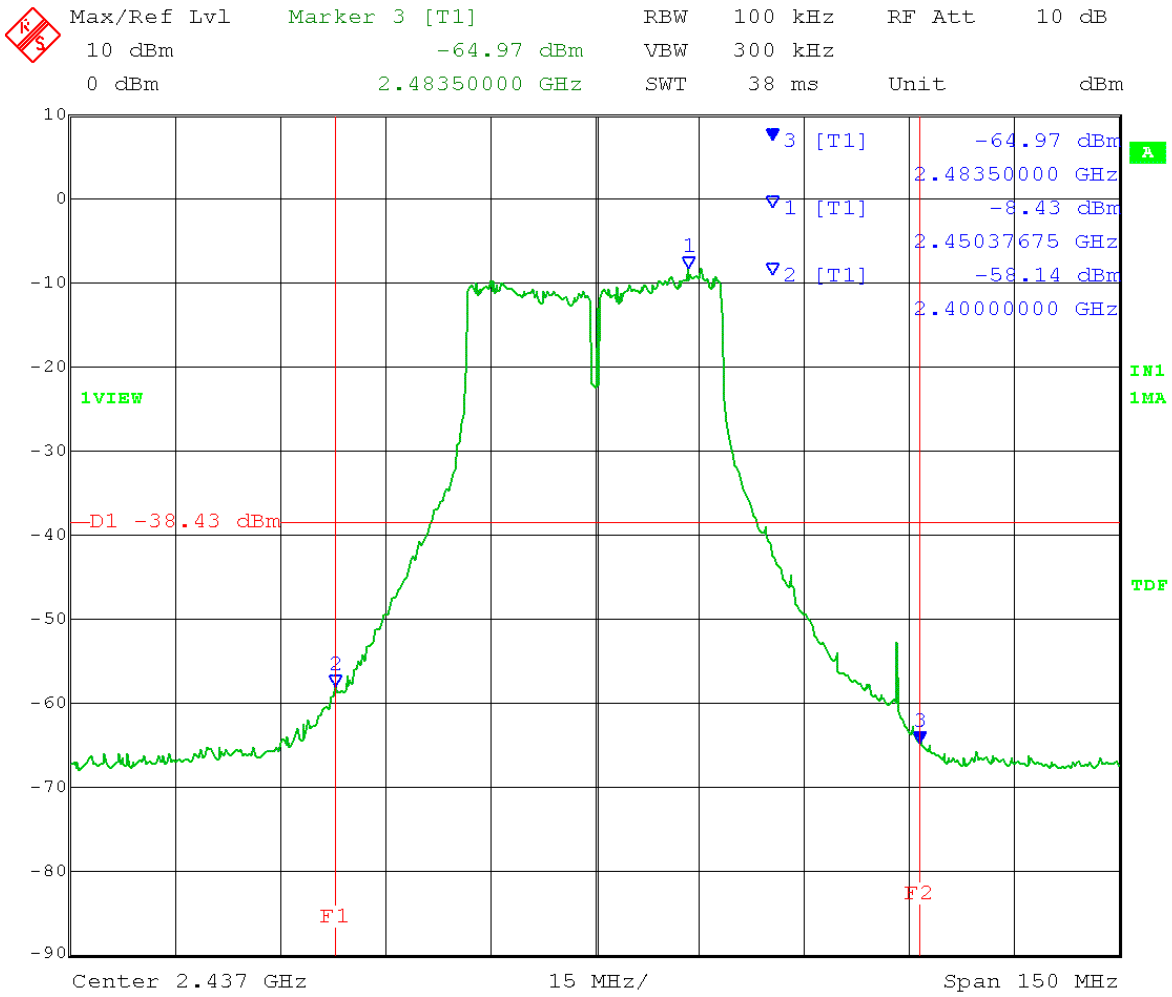
Comment: RBW = 100 kHz VBW ≥ 300 kHz
Detector = Peak Sweep = auto couple
Trace = max hold
Point-to-Point & Point-to-Multipoint operation
Low Channel: Transmit = 2427 MHz Output power setting: 4.5
Channel bandwidth: 40 MHz Output port: 1 Antenna gain: 25 dBi
Lower band edge frequency = 2.4 GHz
Limit: > 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

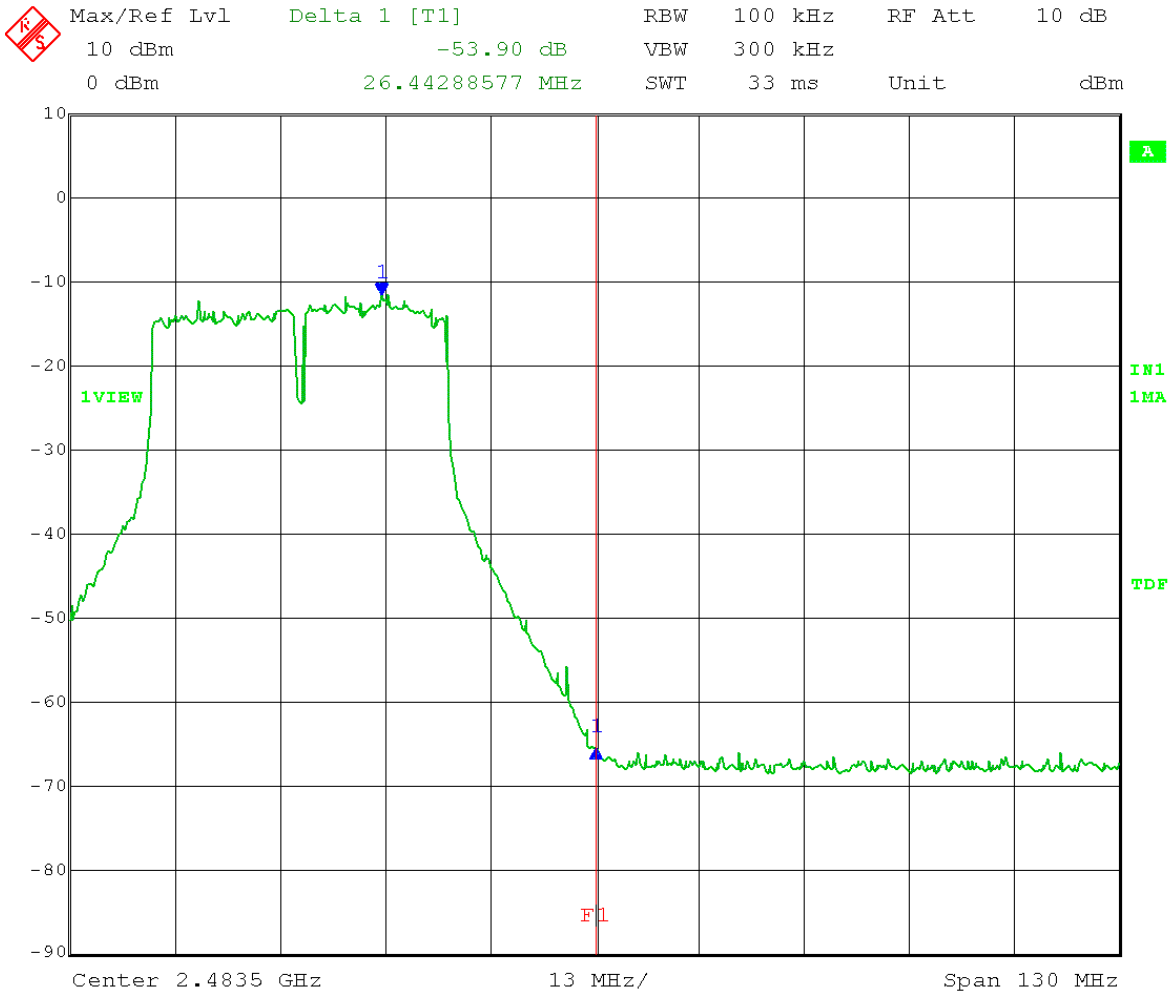
Comment: RBW = 100 kHz VBW ≥ 300 kHz
Detector = Peak Sweep = auto couple
Trace = max hold
Point-to-Point & Point-to-Multipoint operation
Mid Channel: Transmit = 2437 MHz Output power setting: 4.5
Channel bandwidth: 40 MHz Output port: 1 Antenna gain: 25 dBi
Lower band edge frequency = 2.4 GHz
Upper band 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 ≥ 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

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