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Emissions
Test Report

EUT Name: OPTIVIEW XG, OPVXG, OPTIVIEW XG-10G, OPVXG-10G, OPVXGPRO, OPVXG-EXPT, OPTIVIEW XG-LAN, OPVXG-LAN, OPVXG-LAN-10G, OPTIVIEW XG WLAN, OPVXG-WLAN

Model No.: 3365336, 3949539, 3949542, 3949556, 3949616, 4020634

CFR 47 Part 15.247 2009 and RSS 210: 2010

Prepared for:

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Report/Issue Date: 6 April 2011
Report Number: 31053887.001

Statement of Compliance

Manufacturer:	Fluke Networks 6920 Seaway Blvd Everett, WA 98203 (719) 330-7471
Requester / Applicant:	Bradley Harper
Name of Equipment:	OPTIVIEW XG, OPVXG, OPTIVIEW XG-10G, OPVXG-10G, OPVXGPRO, OPVXG-EXPT, OPTIVIEW XG-LAN, OPVXG-LAN, OPVXG-LAN-10G, OPTIVIEW XG WLAN, OPVXG-WLAN
Model No.	3365336, 3949539, 3949542, 3949556, 3949616, 4020634
Type of Equipment:	Intentional Radiator
Application of Regulations:	CFR 47 Part 15.247 2009 and RSS 210: 2010
Test Dates:	24 January 2011 to 21 March 2011

Guidance Documents:

Emissions: ANSI C63.10-2009

Test Methods:

Emissions: ANSI C63.10-2009

The electromagnetic compatibility test and documented data described in this report has been performed and recorded by TUV Rheinland, in accordance with the standards and procedures listed herein. As the responsible authorized agent of the EMC laboratory, I hereby declare that the equipment described above has been shown to be compliant with the EMC requirements of the stated regulations and standards based on these results. If any special accessories and/or modifications were required for compliance, they are listed in the Executive Summary of this report.

This report must not be used to claim product endorsement by NVLAP or any agency of the U.S. Government. This report contains data that are not covered by NVLAP accreditation. This report shall not be reproduced except in full, without the written authorization of TUV Rheinland of North America.

Jeremy Luong	April 14th 2011	Sarb Shelopal	April 20th 2011
Test Engineer	Date	NVLAP Signatory	Date

500011-0 **US5254** **2932M-1**

1 Executive Summary

1.1 Scope

This report is intended to document the status of conformance with the requirements of the CFR 47 Part 15.247 2009 and RSS 210: 2010 based on the results of testing performed on 24 January 2011 to 21 March 2011 on the OPTIVIEW XG, OPVXG, OPTIVIEW XG-10G, OPVXG-10G, OPVXGPRO, OPVXG-EXPT, OPTIVIEW XG-LAN, OPVXG-LAN, OPVXG-LAN-10G, OPTIVIEW XG WLAN, OPVXG-WLAN Model 3365336, 3949539, 3949542, 3949556, 3949616, 4020634 manufactured by Fluke Networks This report only applies to the specific samples tested under the stated test conditions. It is the responsibility of the manufacturer to assure that additional production units of this model are manufactured with identical or EMI equivalent electrical and mechanical components. This report is further intended to document changes and modifications to the EUT throughout its life cycle. All documentation will be included as a supplement.

1.2 Purpose

Testing was performed to evaluate the EMC performance of the EUT in accordance with the applicable requirements, procedures, and criteria defined in the application of regulations and application of standards listed in this report.

1.3 Summary of Test Results

Table 1: Summary of Test Results

Test	Test Method ANSI C63.4	Test Parameters (from Standard)	Result
2400 MHz to 2483.5MHz Band			
Spurious Emission in Received Mode	CFR47 15.109, RSS-GEN Sect.7.2.3	Class A	**Complied**
Spurious Emission in Transmitted Mode	CFR47 15.209, RSS-GEN Sect.7.2.3	Class B	**Complied**
Restricted Bands of Operation	CFR47 15.205, RSS 210 Sect.2.6	Class B	**Complied**
AC Power Conducted Emission	CFR47 15.207, RSS-GEN Sect.7.2.2	Class B	**Complied**
Occupied Bandwidth	CFR47 15.247 (a2), RSS GEN Sect.4.4.1	≥ 500 kHz	**Complied**
Maximum Transmitted Power	CFR47 15.247 (b3), RSS 210 Sect. A.8.4	30 dBm	**Complied**
Peak Power Spectral Density	CFR47 15.247 (e), RSS 210 Sect. A.8.2	8 dBm/ 3 kHz.	**Complied**
Bandedge Measurement	CFR47 15.247 (d), RSS 210 Sect. A.8.5	20 dBr	**Complied**
5725MHz to 5850 MHz Band			
Spurious Emission in Received Mode	CFR47 15.109, RSS-GEN Sect.7.2.3	Class A	**Complied**
Spurious Emission in Transmitted Mode	CFR47 15.209, RSS-GEN Sect.7.2.3	Class B	**Complied**
Restricted Bands of Operation	CFR47 15.205, RSS 210 Sect.2.6	Class B	**Complied**
AC Power Conducted Emission	CFR47 15.207, RSS-GEN Sect.7.2.2	Class B	**Complied**
Occupied Bandwidth	CFR47 15.247 (a2), RSS GEN Sect.4.4.1	≥ 500 kHz	**Complied**
Maximum Transmitted Power	CFR47 15.247 (b3), RSS 210 Sect. A.8.4	30 dBm	**Complied**
Peak Power Spectral Density	CFR47 15.247 (e), RSS 210 Sect. A.8.2	8 dBm/ 3 kHz.	**Complied**
Bandedge Measurement	CFR47 15.247 (d), RSS 210 Sect. A.8.5	20 dBr	**Complied**

Note: Since EUT is portable device where the end user will have the direct contact, RF Exposure/ SAR testing is required. This test completed separately.

1.4 Special Accessories

No special accessories were necessary in order to achieve compliance.

1.5 Equipment Modifications

None

2 Laboratory Information

2.1 Accreditations & Endorsements

2.1.1 US Federal Communications Commission

TUV Rheinland of North America at 1279 Quarry Ln, Pleasanton, CA 94566 is recognized by the commission for performing testing services for the general public on a fee basis. These laboratory test facilities have been fully described in reports submitted to and accepted by the FCC (US5254). The laboratory scope of accreditation includes: Title 47 CFR Parts 15, 18, and 90. The accreditation is updated every 3 years.

2.1.2 NIST / NVLAP

TUV Rheinland of North America is accredited by the National Voluntary Laboratory Accreditation Program, which is administered under the auspices of the National Institute of Standards and Technology. The laboratory has been assessed and accredited in accordance with ISO Guide 17025:1999 and ISO 9002 (Lab Code 500011-0). The scope of laboratory accreditation includes emission and immunity testing. The accreditation is updated annually.

2.1.3 Canada – Industry Canada

TUV Rheinland of North America at the 1279 Quarry Ln, Pleasanton, CA 94566 address is accredited by Industry Canada for performing testing services for the general public on a fee basis. This laboratory test facilities have been fully described in reports submitted to and accepted by Industry Canada (File Number 2932M-1). This reference number is the indication to the Industry Canada Certification Officers that the site meets the requirements of RSS 212, Issue 1 (Provisional). The accreditation is updated every 3 years.

2.1.4 Japan – VCCI

The Voluntary Control Council for Interference by Information Technology Equipment (VCCI) is a group that consists of Information Technology Equipment (ITE) manufacturers and EMC test laboratories. The purpose of the Council is to take voluntary control measures against electromagnetic interference from Information Technology Equipment, and thereby contribute to the development of a socially beneficial and responsible state of affairs in the realm of Information Technology Equipment in Japan. TUV Rheinland of North America at 1279 Quarry Ln, Pleasanton, CA 94566 has been assessed and approved in accordance with the Regulations for Voluntary Control Measures. (Registration Nos. R-3269, C-3637, C-3638, T-1752, T-1753).

2.1.5 Acceptance by Mutual Recognition Arrangement

The United States has an established agreement with specific countries under the Asia Pacific Laboratory Accreditation Corporation (APLAC) Mutual Recognition Arrangement. Under this agreement, all TUV Rheinland at 1279 Quarry Ln, Pleasanton, CA 94566 test results and test reports within the scope of the laboratory NIST / NVLAP accreditation will be accepted by each member country.

2.2 Test Facilities

All of the test facilities are located at 1279 Quarry Lane, Pleasanton, California 94566, USA. The 2305 Mission College, Santa Clara, 95054, USA location is considered a Pleasanton annex.

2.2.1 Emission Test Facility

The Semi-Anechoic chamber and AC Line Conducted measurement facility used to collect the radiated and conducted data has been constructed in accordance with ANSI C63.7:1992. The site has been measured in accordance with and verified to comply with the theoretical normalized site attenuation requirements of ANSI C63.4-2009, at a test distance of 3 and 5 meters. The site is listed with the FCC and accredited by NVLAP (Lab Code 500011-0). The 3/5-meter semi-anechoic chamber used to collect the radiated data has been verified to comply with the theoretical normalized site attenuation requirements of ANSI C63.4-2009, at a test distance of 3 meter and 5 meters. A report detailing this site can be obtained from TUV Rheinland of North America.

2.2.2 Immunity Test Facility

ESD, EFT, Surge, PQF: These tests are performed in an environmentally controlled room with a 3.7 m x 4.8 m x 3.175 mm thick aluminum floor connected to PE ground.

For ESD testing, tabletop equipment is placed on an insulated mat with a surface resistivity of 10^9 Ohms/square on a 1.6 m x 0.8 m x 0.8 m high non-conductive table with a 3.175 mm aluminum top (Horizontal Coupling Plane). The HCP is connected to the main ground plane via a low impedance ground strap through two 470-kΩ resistors. The Vertical Coupling Plane consists of an aluminum plate 50 cm x 50 cm x 3.175 mm thick. The VCP is connected to the main ground plane via a low impedance ground strap through two 470-kΩ resistors.

For EFT, Surge, PQF, the HCP and VCP are removed.

RF Field Immunity testing is performed in a 7.3m x 4.3m x 4.1m anechoic chamber.

RF Conducted and Magnetic Field Immunity testing is performed on a 4.8m x 3.7m x 3.175mm thick aluminum ground plane.

All test areas allow a minimum distance of 1 meter from the EUT to walls or conducting objects.

2.3 Measurement Uncertainty

Two types of measurement uncertainty are expressed in this report, per *ISO Guide To The Expression Of Uncertainty In Measurement*, 1st Edition, 1995.

The Combined Standard Uncertainty is the standard uncertainty of the result of a measurement when that result is obtained from the values of a number of other quantities; it is equal to the positive square root of the sum of the variances or co-variances of these other quantities, weighted according to how the measurement result varies with changes in these quantities. The term *standard uncertainty* is the result of a measurement expressed as a standard deviation.

2.3.1 Sample Calculation – radiated & conducted emissions

The field strength is calculated by subtracting the Amplifier Gain and adding the Cable Loss and Antenna Correction Factor to the measured reading. The basic equation is as follows:

Field Strength (dBμV/m) = RAW - AMP + CBL + ACF

Where: RAW = Measured level before correction (dBμV)

AMP = Amplifier Gain (dB)

CBL = Cable Loss (dB)

ACF = Antenna Correction Factor (dB/m)

$$\mu V/m = 10^{\frac{dB\mu V/m}{20}}$$

Sample radiated emissions calculation @ 30 MHz

Measurement +Antenna Factor–Amplifier Gain+Cable loss=Radiated Emissions (dBuV/m)

25 dBuV/m + 17.5 dB – 20 dB + 1.0 dB = 23.5 dBuV/m

2.3.2 Measurement Uncertainty

	U_{lab}	U_{cispr}
Radiated Disturbance		
30 MHz – 40,000 MHz	3.2 dB	5.2 dB
Conducted Disturbance @ Mains Terminals		
150 kHz – 30 MHz	2.4 dB	3.6 dB
Disturbance Power		
30 MHz – 300 MHz	3.92 dB	4.5 dB

Measurement Uncertainty – Immunity Testing

The estimated combined standard uncertainty for ESD immunity measurements is ± 4.1%.
The estimated combined standard uncertainty for radiated immunity measurements is ± 2.7 dB.
The estimated combined standard uncertainty for conducted immunity measurements is ± 1.4 dB.
The estimated combined standard uncertainty for damped oscillatory wave immunity measurements is ± 8.8%.
The estimated combined standard uncertainty for harmonic current and flicker measurements is ± 0.45%.

Measurement Uncertainty – Radio Testing

The estimated combined standard uncertainty for frequency error measurements is ± 3.88 Hz
The estimated combined standard uncertainty for carrier power measurements is ± 1.59 dB.
The estimated combined standard uncertainty for adjacent channel power measurements is ± 1.47 dB.
The estimated combined standard uncertainty for modulation frequency response measurements is ± 0.46 dB.
The estimated combined standard uncertainty for transmitter conducted emission measurements is ± 4.01 dB

The expanded uncertainty at a level of 95% confidence is obtained by multiplying the combined standard uncertainty by a coverage factor of 2. Compliance criteria are not based on measurement uncertainty.

2.4 Calibration Traceability

All measurement instrumentation is traceable to the National Institute of Standards and Technology (NIST). Measurement method complies with ANSI/NCSL Z540-1-1994 and ISO Standard 17025:2005. Equipment calibration records are kept on file at the test facility.

3 Product Information

3.1 Product Description

The OptiView XG Network Analysis Tablet provides 10/100/1000Mb/10Gb wired and 802.11n wireless network analysis anywhere in the network. The tablet enables users to monitor and analyze key assets remotely from the desk and troubleshoot locally "on-the-wire." It's an all-in-one portable network analysis tool designed to help network professionals save time resolving performance problems that are impacting the end-user experience. The flexible user interface allows for custom presentation of information and test results to meet specific needs. The OptiView XG also provides accurate reporting and documentation of the network. The WLAN, 10G and Wire options are SW key options no change to HW.

3.2 Equipment Configuration

A description of the equipment configuration is given in the Test Plan Section. The EUT was tested as called for in the test standard and was configured and operated in a manner consistent with its intended use. The EUT was connected to rated power and allowed to reach intended operating conditions. The placement of the EUT system components was guided by the test standard and selected to represent typical installation conditions.

In the case of an EUT that can operate in more than one configuration, preliminary testing was performed to determine the configuration that produced maximum radiation.

The final configuration was selected to produce the worst case radiation for emissions testing and to place the EUT in the most susceptible state for immunity testing.

3.3 Operating Mode

A description of the operation mode is given in the Test Plan Section. In the case of an EUT that can operate in more than one state, preliminary testing was performed to determine the operating mode that produced maximum radiation.

The final operating mode was selected to produce the worst case radiation for emissions testing and to place the EUT in the most susceptible state for immunity testing.

3.4 Unique Antenna Connector

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this Section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. This requirement does not apply to carrier current devices or to devices operated under the provisions of CFR47 Parts 15.211, 15.213, 15.217, 15.219, or 15.221.

3.4.1 Results

The OPTIVIEW XG, OPVXG, OPTIVIEW XG-10G, OPVXG-10G, OPVXGPRO, OPVXG-EXPT, OPTIVIEW XG-LAN, OPVXG-LAN, OPVXG-LAN-10G, OPTIVIEW XG WLAN, OPVXG-WLAN has 6 internal PCB mounted antenna, 1 directional external and 1 omni directional antenna. All external antennas use reversed SMA connector.

4 Emission Requirements – 2400 MHz to 2483.5 MHz Band

Testing was performed in accordance with CFR 47 Part 15.247: 2009 and RSS 210 Annex 8: 2010. These test methods are listed under the laboratory's NVLAP Scope of Accreditation. This test measures the levels emanating from the EUT, thus evaluating the potential for the EUT to cause radio frequency interference to other electronic devices. Procedures described in section 8 of the standard were used.

4.1 Output Power Requirements

The maximum output power requirement is the maximum equivalent isotropic radiated power delivering at the transmitting antenna under specified conditions of measurements in the presence of modulation.

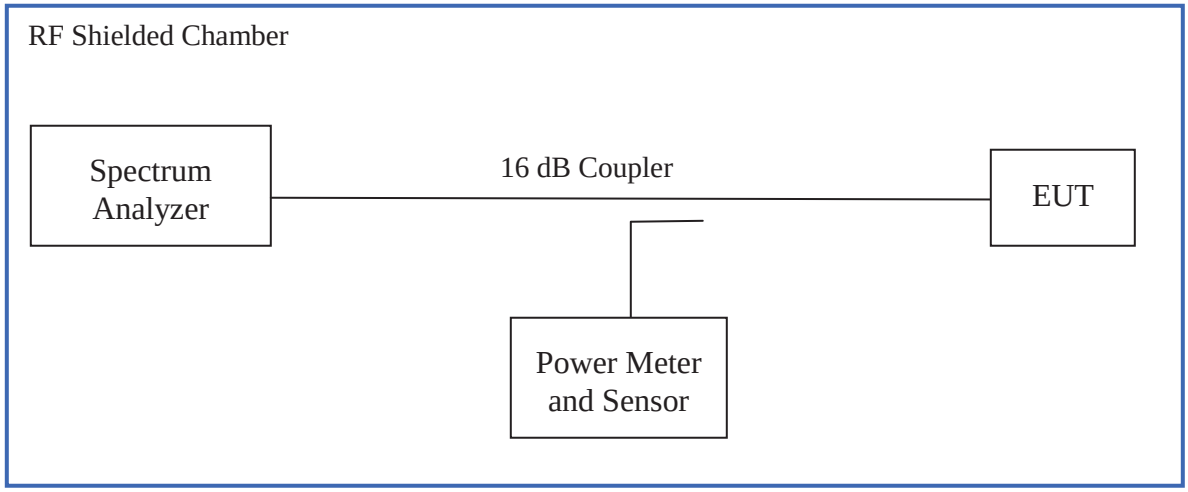
The maximum output power and harmonics shall not exceed CFR47 Part 15.247 (b3):2009 and RSS 210 A.8.4: 2010

The maximum transmitted power is +30 dBm or 1 Watt.

4.1.1 Test Method

The conducted method was used to measure the channel power output according to ANSI C63.10:2009 Section 6.10.3.1. The measurement was performed with modulation per CFR47 Part 15.247 (b3):2009 and RSS 210 A.8.4. This test was conducted on 3 channels in each operating range. The worst mode result indicated below.

Test Setup:



Method #1 of "Measurement of Digital Transmission Systems Operating under Section 15.247"applies since the EUT continuously transmit; where T, Transmission Duration Pulse, is greater than analyzer sweep time. Peak detector was used.

Each chain was measured individually and applied the measure-and-sum approach per KDB662911.

4.1.2 Results

As originally tested, the EUT was found to be compliant to the requirements of the test standard(s).

Table 2: RF Output Power at the Antenna Port – Test Results

Test Conditions: Conducted Measurement, Normal Temperature						
Antenna Type: Integrated				**Power Setting:** See test plan		
Max. Antenna Gain: + 1.1dBi				**Signal State:** Modulated @ 99%		
Ambient Temp.: 21 °C				**Relative Humidity:**39%		
802.11b Mode						
Operating Channel	**Limit [dBm]**	**Chain 0 [dBm]**	**Chain 1 [dBm]**	**Chain 2 [dBm]**	**Total Power [dBm]**	**Margin [dB]**
2412MHz	+30.00	+15.89	+16.58	+15.60		-13.42
2437MHz	+30.00	+16.17	+16.33	+16.21		-13.67
2462MHz	+30.00	+16.30	+15.21	+15.36		-13.70
Note: The highest output power was observed at 1Mbps. Only one chain would be active in this mode.						
802.11g Mode						
Operating Channel	**Limit [dBm]**	**Chain 0 [dBm]**	**Chain 1 [dBm]**	**Chain 2 [dBm]**	**Total Power [dBm]**	**Margin [dB]**
2412MHz	+30.00	+16.76	+17.64	+16.23		-12.36
2437MHz	+30.00	+16.32	+17.43	+16.90		-12.57
2462MHz	+30.00	+16.75	+16.54	+16.11		-13.25
Note: The highest output power was observed at 6 Mbps. Only one chain would be active in this mode.						
802.11n (HT20) Mode, 1x3						
Operating Channel	**Limit [dBm]**	**Chain 0 [dBm]**	**Chain 1 [dBm]**	**Chain 2 [dBm]**	**Total Power [dBm]**	**Margin [dB]**
2412MHz	+30.00	+16.84	+18.25	+16.71		-11.75
2437MHz	+30.00	+16.52	+17.55	+17.08		-12.45
2462MHz	+30.00	+16.90	+16.68	+16.51		-13.10
Note: The highest output power was observed at HT20 6.5 Mbps, 1 Data Stream. Only one chain would be active in this mode.						

802.11n (HT20) Mode, 2x3						
Operating Channel	**Limit [dBm]**	**Chain 0 [dBm]**	**Chain 1 [dBm]**	**Chain 2 [dBm]**	**Total Power [dBm]**	**Margin [dB]**
2412MHz	+30.00	22.33	23.24		25.82	-4.18
2437MHz	+30.00	21.86	22.37		25.13	-4.87
2462MHz	+30.00	22.30	22.17		25.25	-4.75
Note: The highest output power was observed at HT20 13 Mbps, 2 Data Stream.						
802.11n (HT20) Mode, 3x3						
Operating Channel	**Limit [dBm]**	**Chain 0 [dBm]**	**Chain 1 [dBm]**	**Chain 2 [dBm]**	**Total Power [dBm]**	**Margin [dB]**
2412MHz	+30.00	22.03	23.05	22.05	27.17	-2.83
2437MHz	+30.00	21.75	22.14	21.91	26.71	-3.29
2462MHz	+30.00	22.16	22.03	22.00	26.84	-3.16
Note: The highest output power was observed at HT20 19.5 Mbps, 3 Data Stream.						
802.11n (HT40) Mode, 1x3						
Operating Channel	**Limit [dBm]**	**Chain 0 [dBm]**	**Chain 1 [dBm]**	**Chain 2 [dBm]**	**Total Power [dBm]**	**Margin [dB]**
2422MHz	+30.00	+12.61	+13.11	+11.92		-16.89
2437MHz	+30.00	+12.76	+12.40	+11.95		-17.24
2452MHz	+30.00	+13.01	+12.20	+12.02		-16.99
Note: The highest output power was observed at HT40 13.5 Mbps, 1 Data Stream.						
802.11n (HT40) Mode, 2x3						
Operating Channel	**Limit [dBm]**	**Chain 0 [dBm]**	**Chain 1 [dBm]**	**Chain 2 [dBm]**	**Total Power [dBm]**	**Margin [dB]**
2422MHz	+30.00	18.51	18.52		21.53	-8.47
2437MHz	+30.00	18.26	17.80		21.05	-8.95
2452MHz	+30.00	18.47	17.77		21.14	-8.86
Note: The highest output power was observed at HT40 27 Mbps, 2 Data Stream.						
802.11n (HT40) Mode, 3x3						
Operating Channel	**Limit [dBm]**	**Chain 0 [dBm]**	**Chain 1 [dBm]**	**Chain 2 [dBm]**	**Total Power [dBm]**	**Margin [dB]**
2422MHz	+30.00	18.32	18.81	18.26	23.24	-6.76

2437MHz	+30.00	18.31	17.70	18.21	22.85	-7.15
2452MHz	+30.00	18.39	18.33	18.26	23.10	-6.90
Note: The highest peak output power was observed at HT40 40.5 Mbps, 3 Data Stream.						

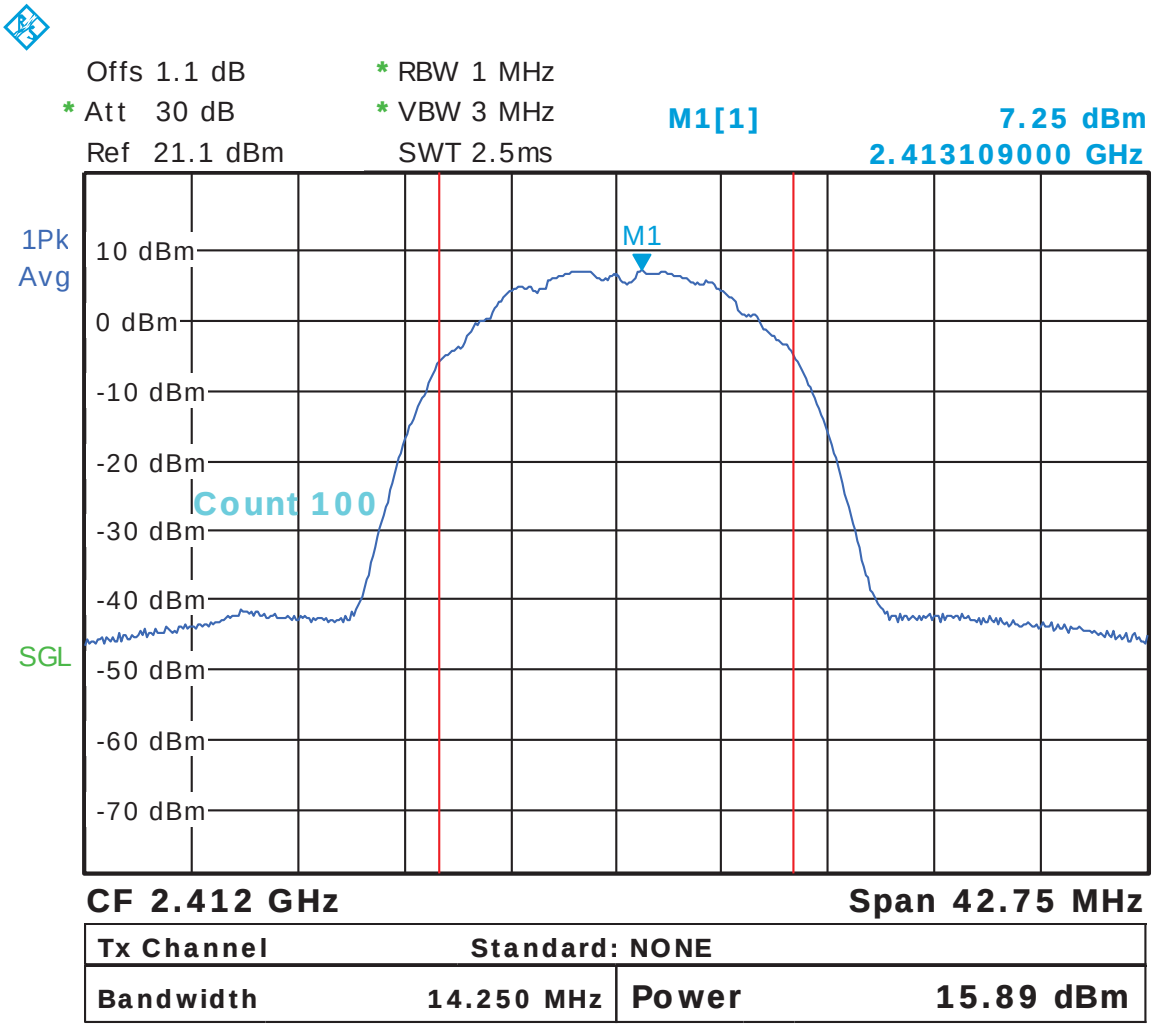


Figure 1: Maximum Transmitted Power, 2412 MHz at 802.11b, Chain 0 – 1Mbps

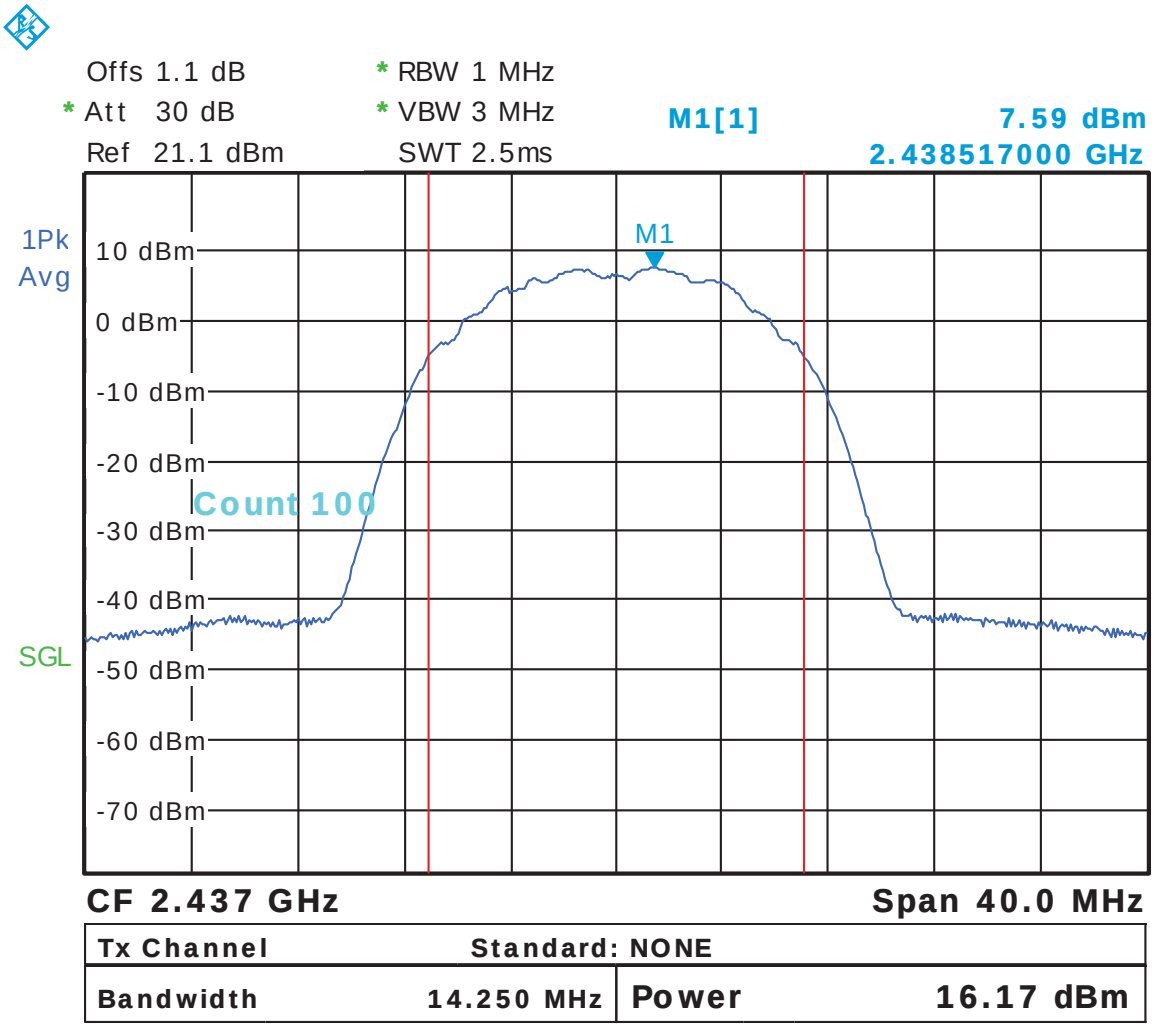


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Figure 2: Maximum Transmitted Power, 2437 MHz at 802.11b, Chain 0 – 1Mbps

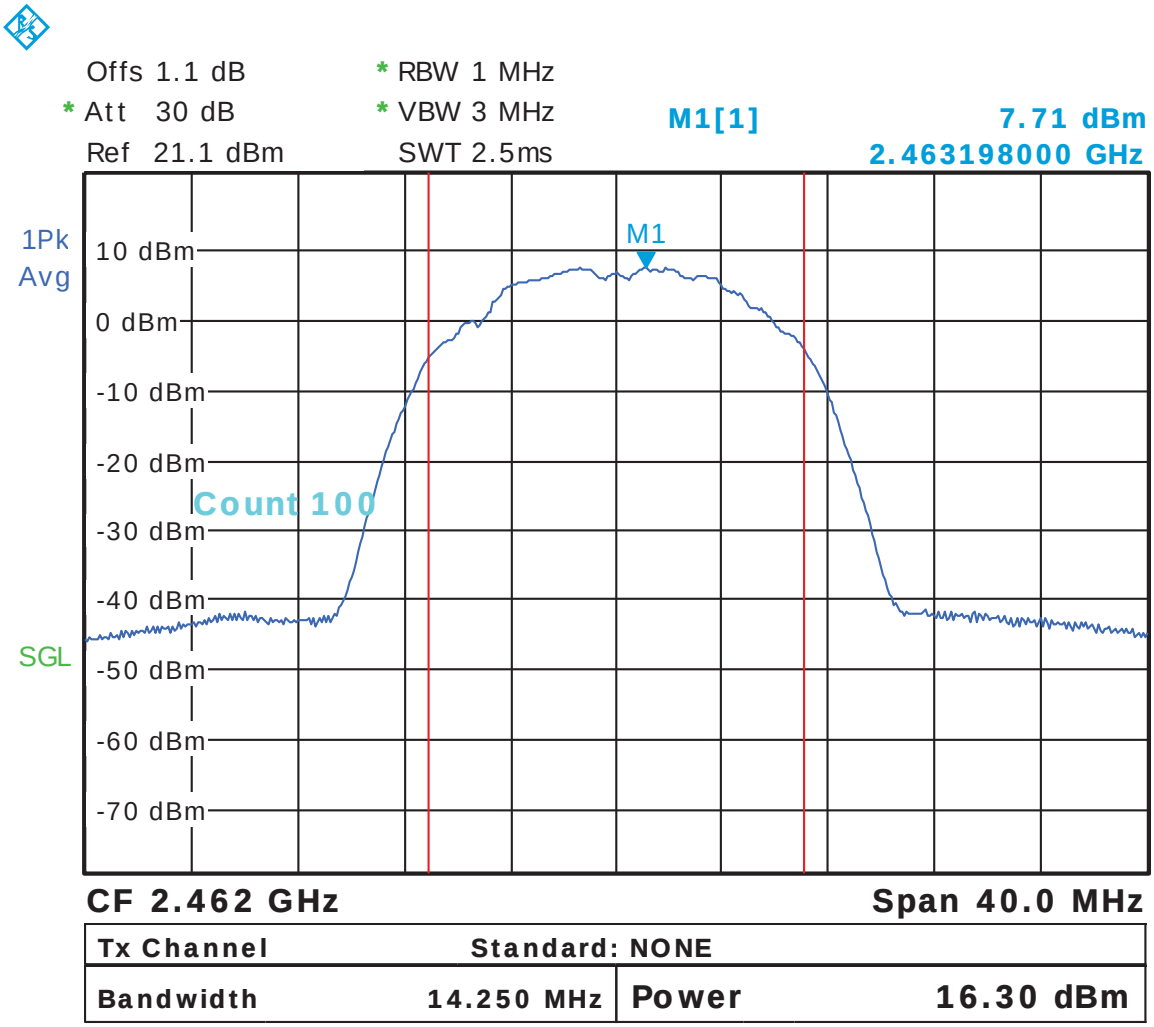

Figure 3: Maximum Transmitted Power, 2462 MHz at 802.11b, Chain 0 – 1Mbps

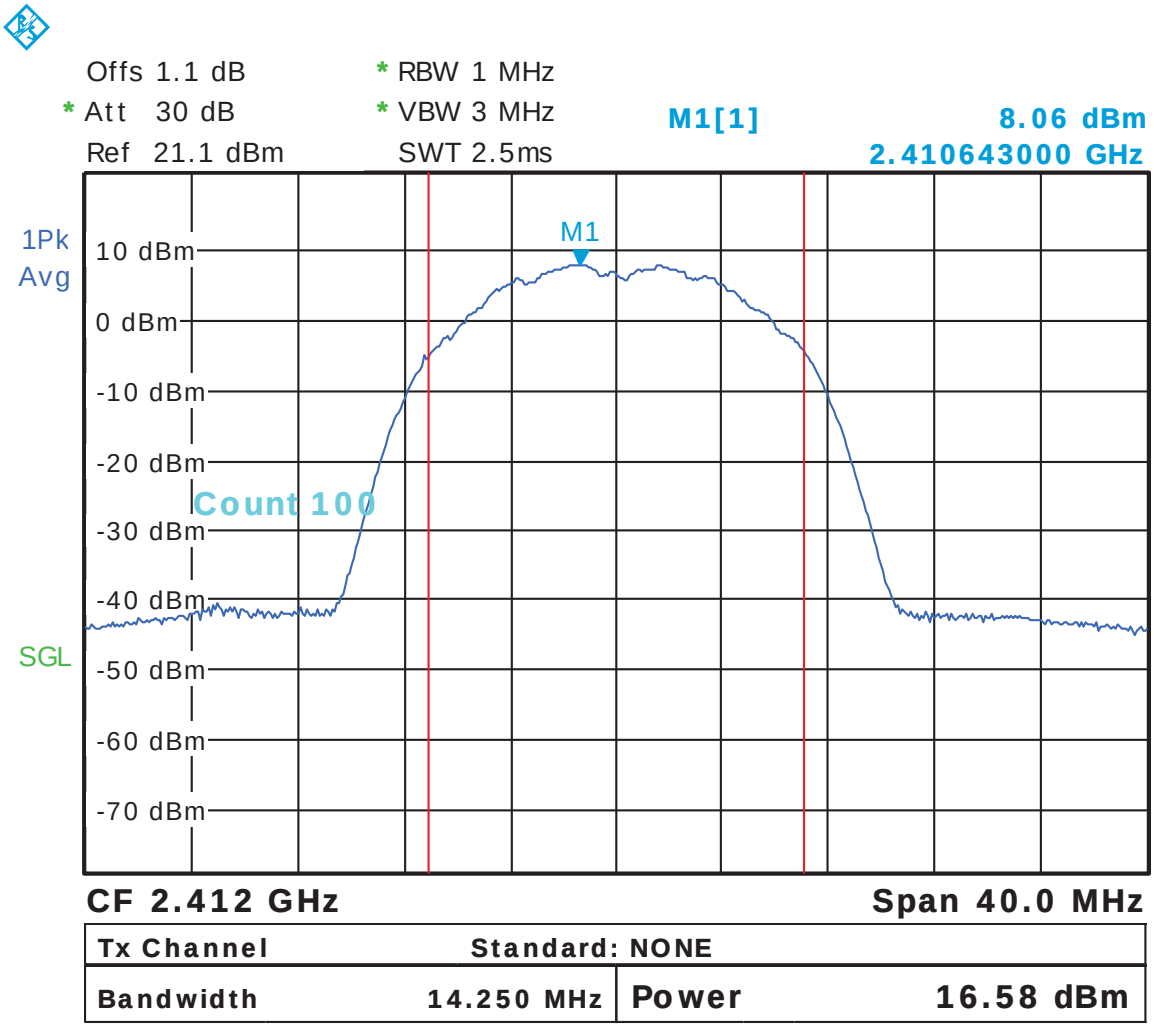

Figure 4: Maximum Transmitted Power, 2412 MHz at 802.11b, Chain 1 – 1Mbps

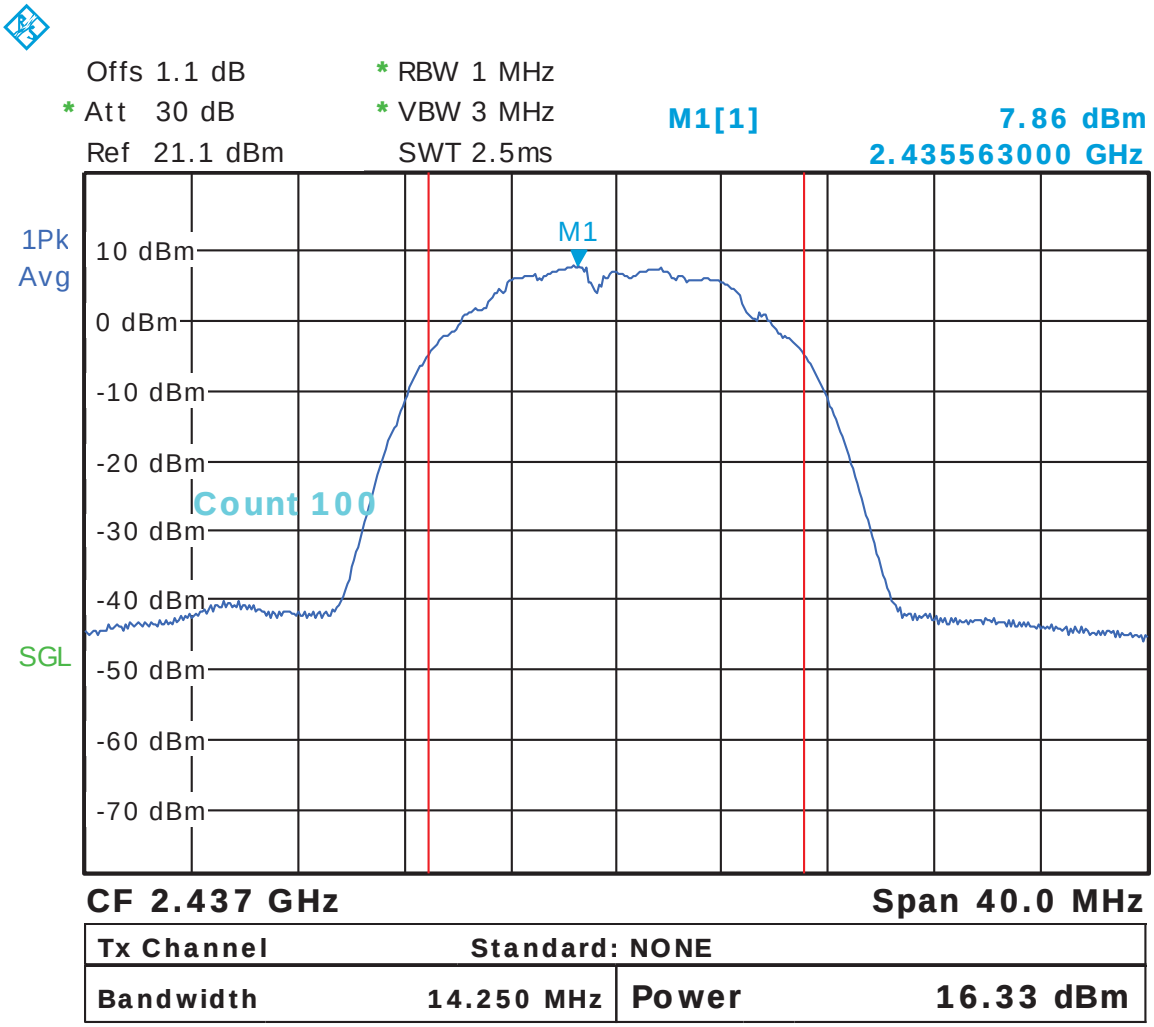

Figure 5: Maximum Transmitted Power, 2437 MHz at 802.11b, Chain 1 – 1Mbps

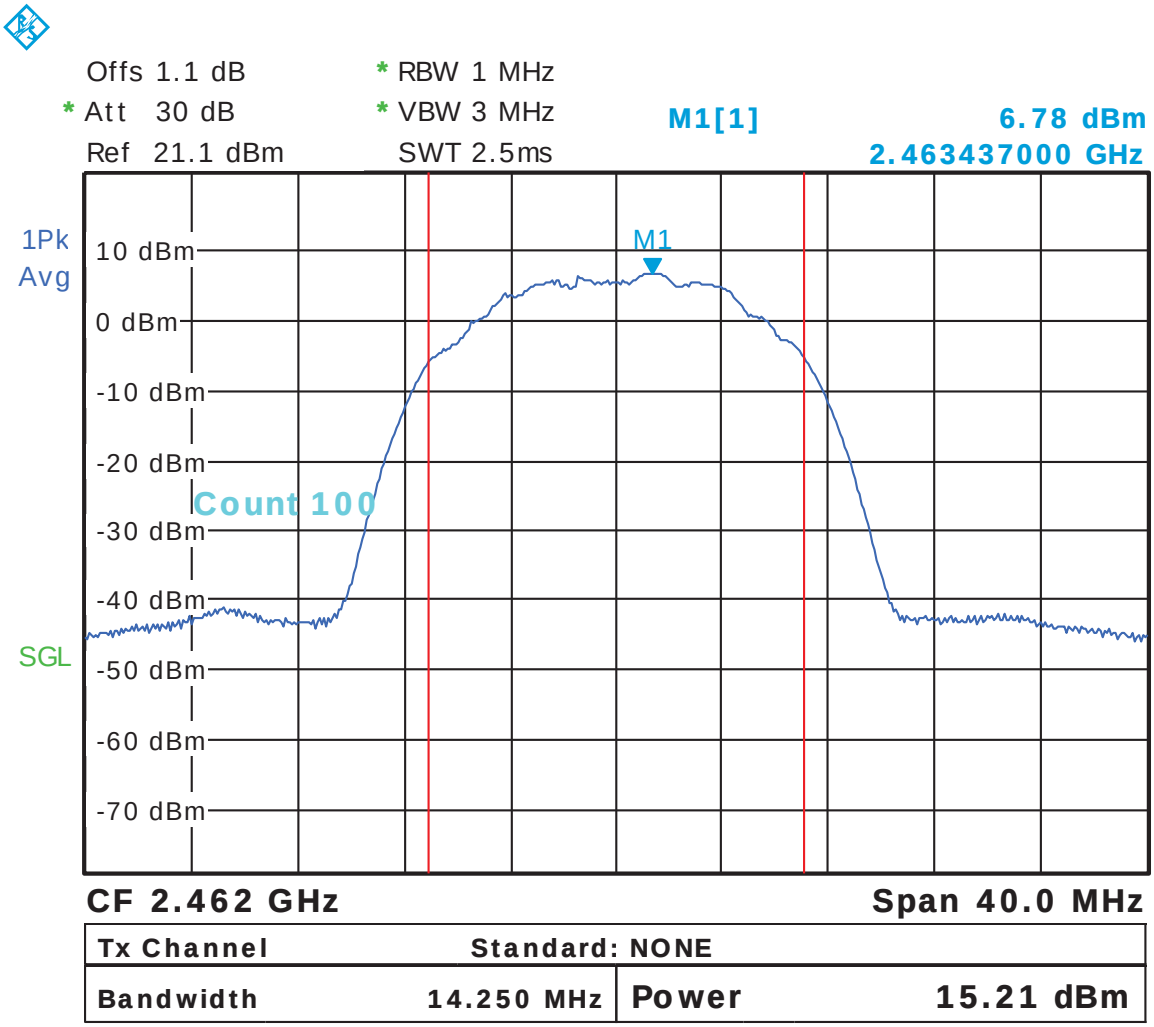

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Figure 6: Maximum Transmitted Power, 2462 MHz at 802.11b, Chain 1 – 1Mbps

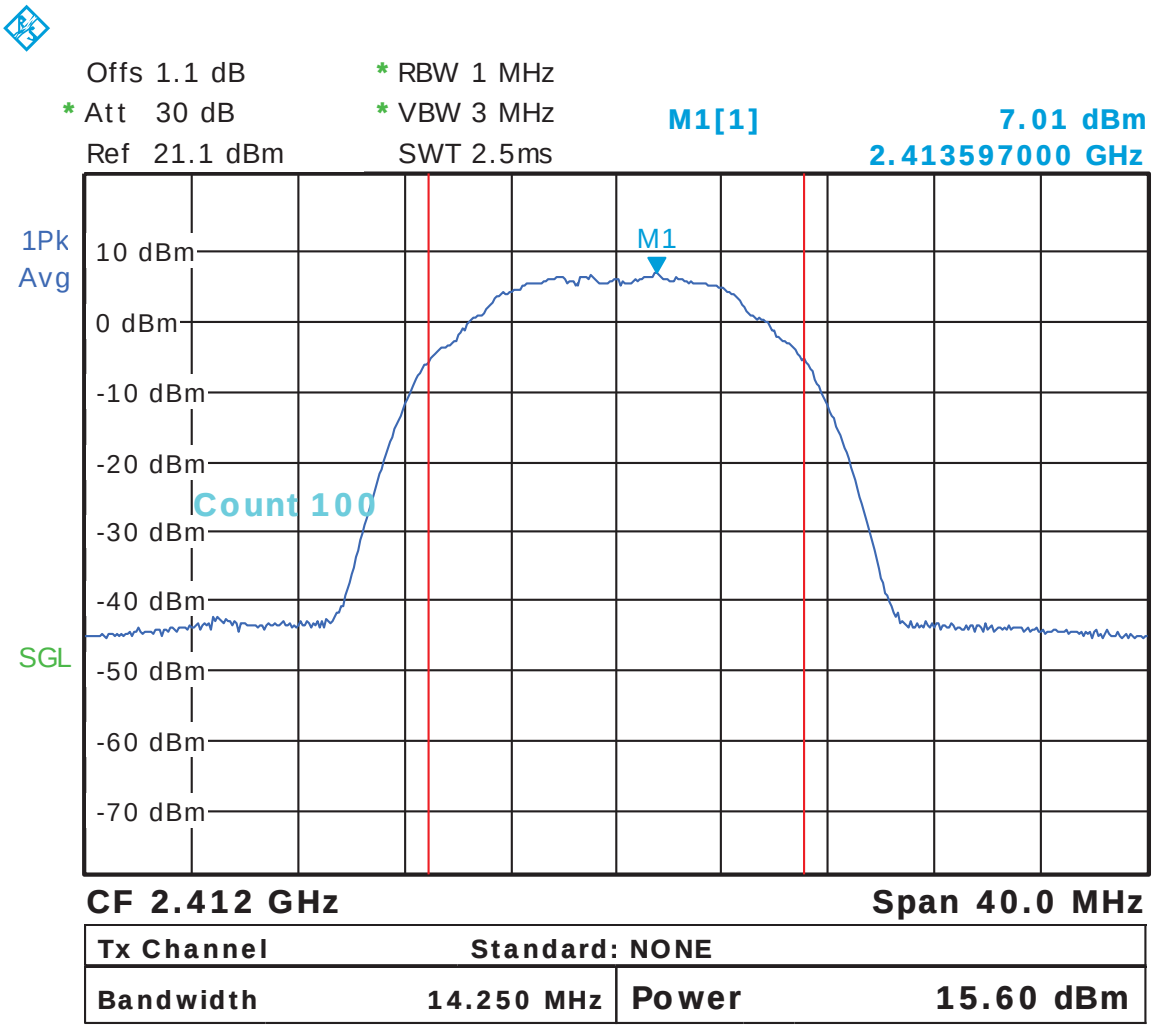

Figure 7: Maximum Transmitted Power, 2412 MHz at 802.11b, Chain 2 – 1Mbps

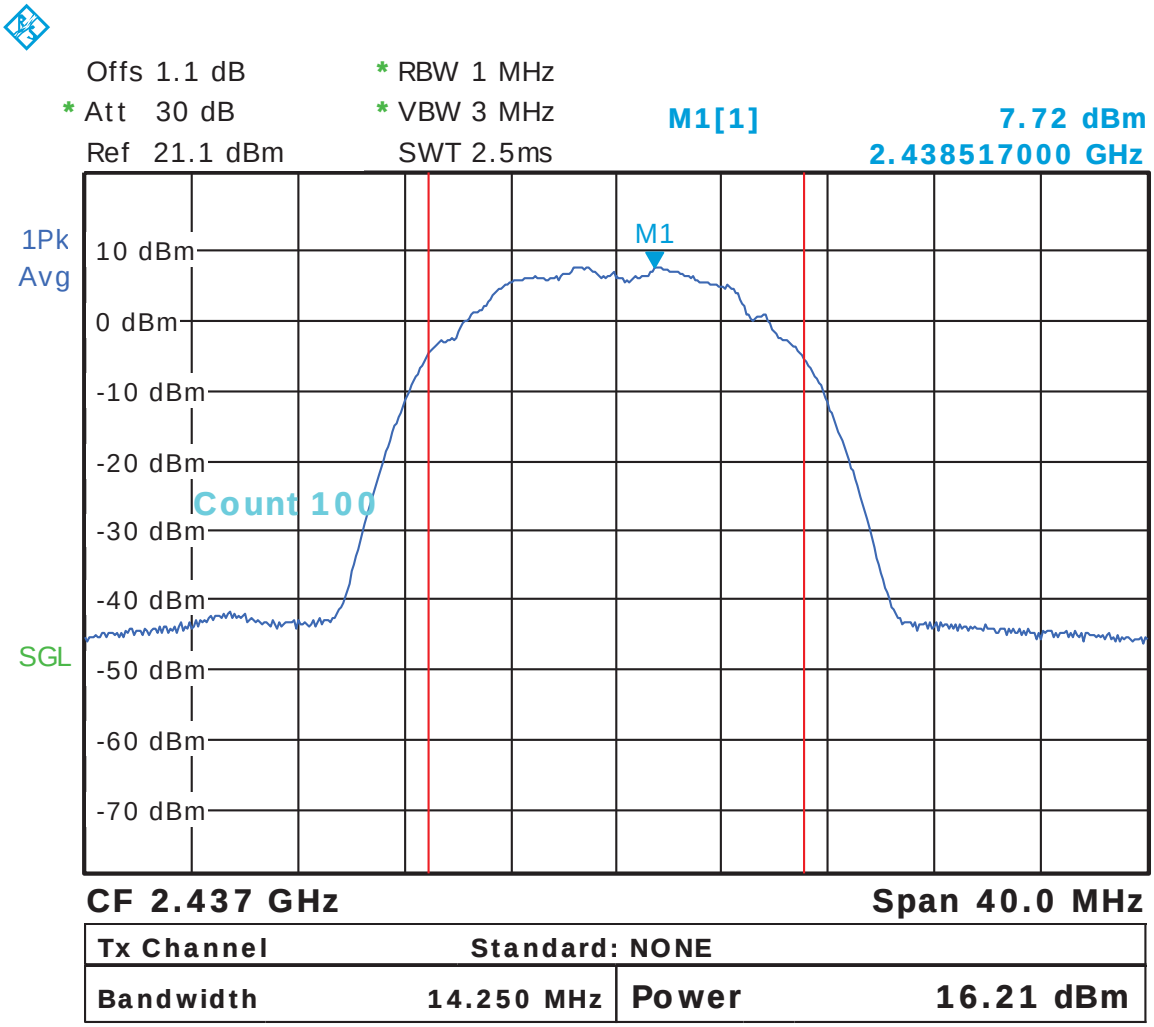

Figure 8: Maximum Transmitted Power, 2437 MHz at 802.11b, Chain 2 – 1Mbps

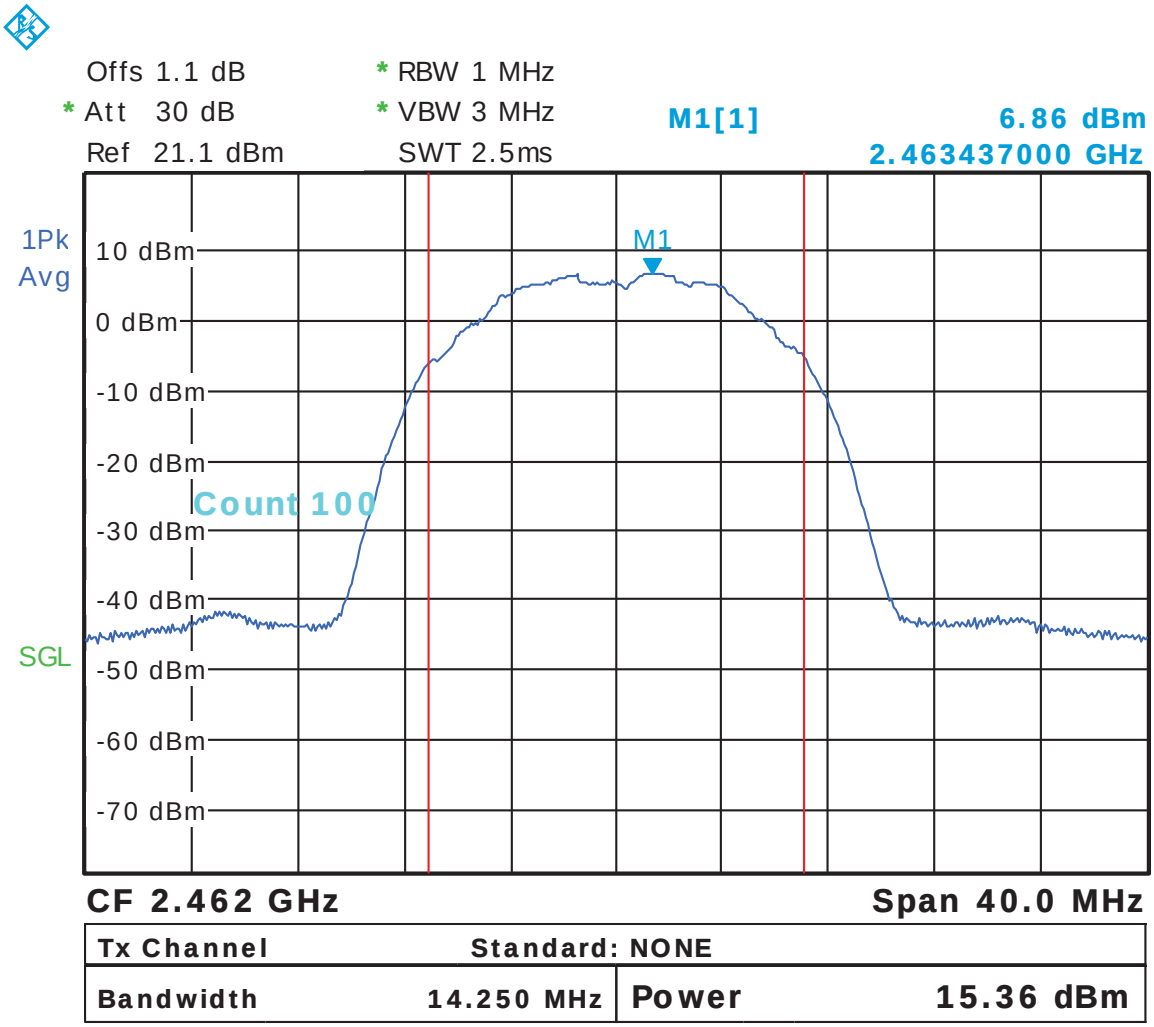

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Figure 9: Maximum Transmitted Power, 2462 MHz at 802.11b, Chain 2 – 1Mbps

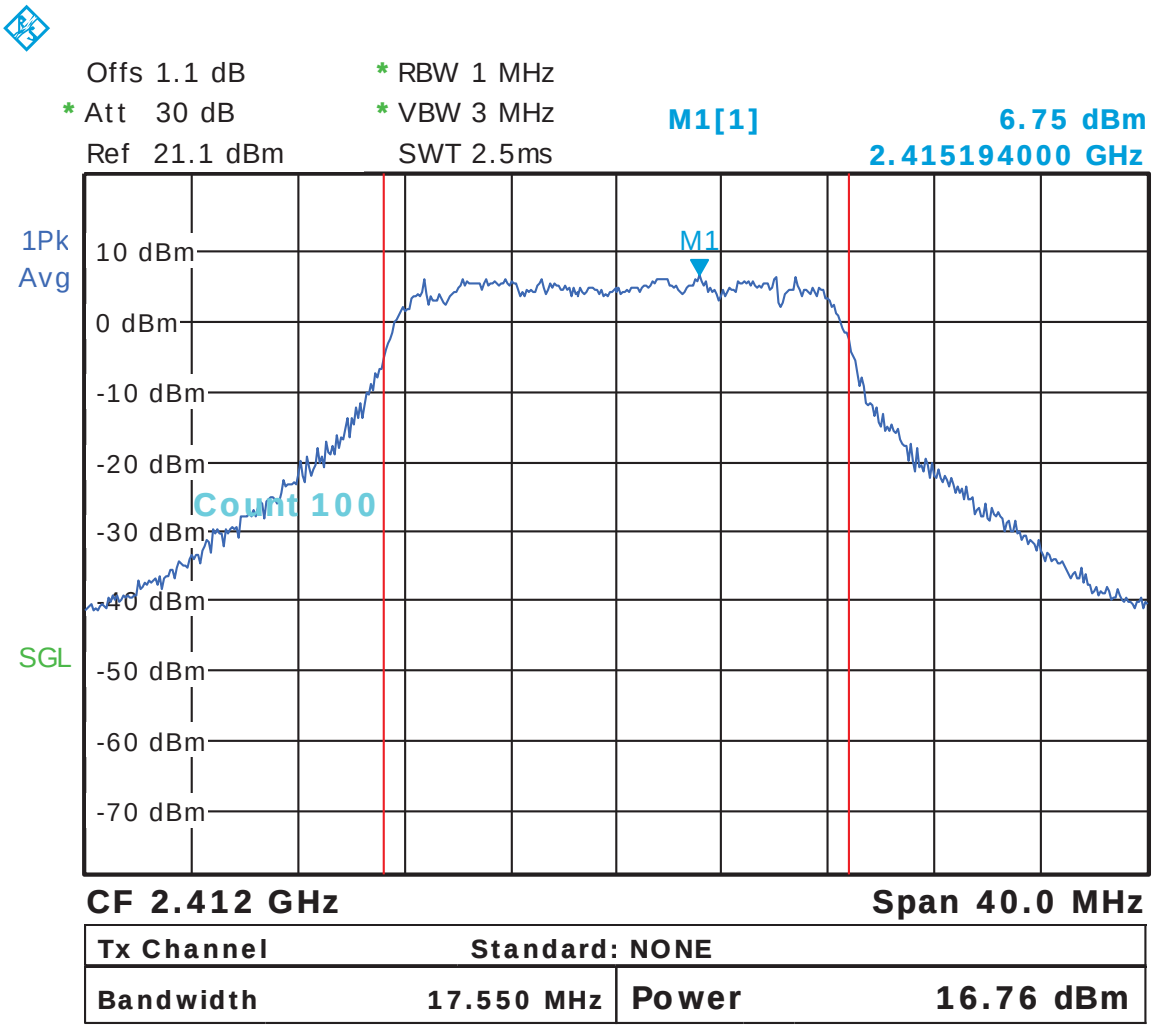

Figure 10: Maximum Transmitted Power, 2412 MHz at 802.11g, Chain 0 – 6Mbps

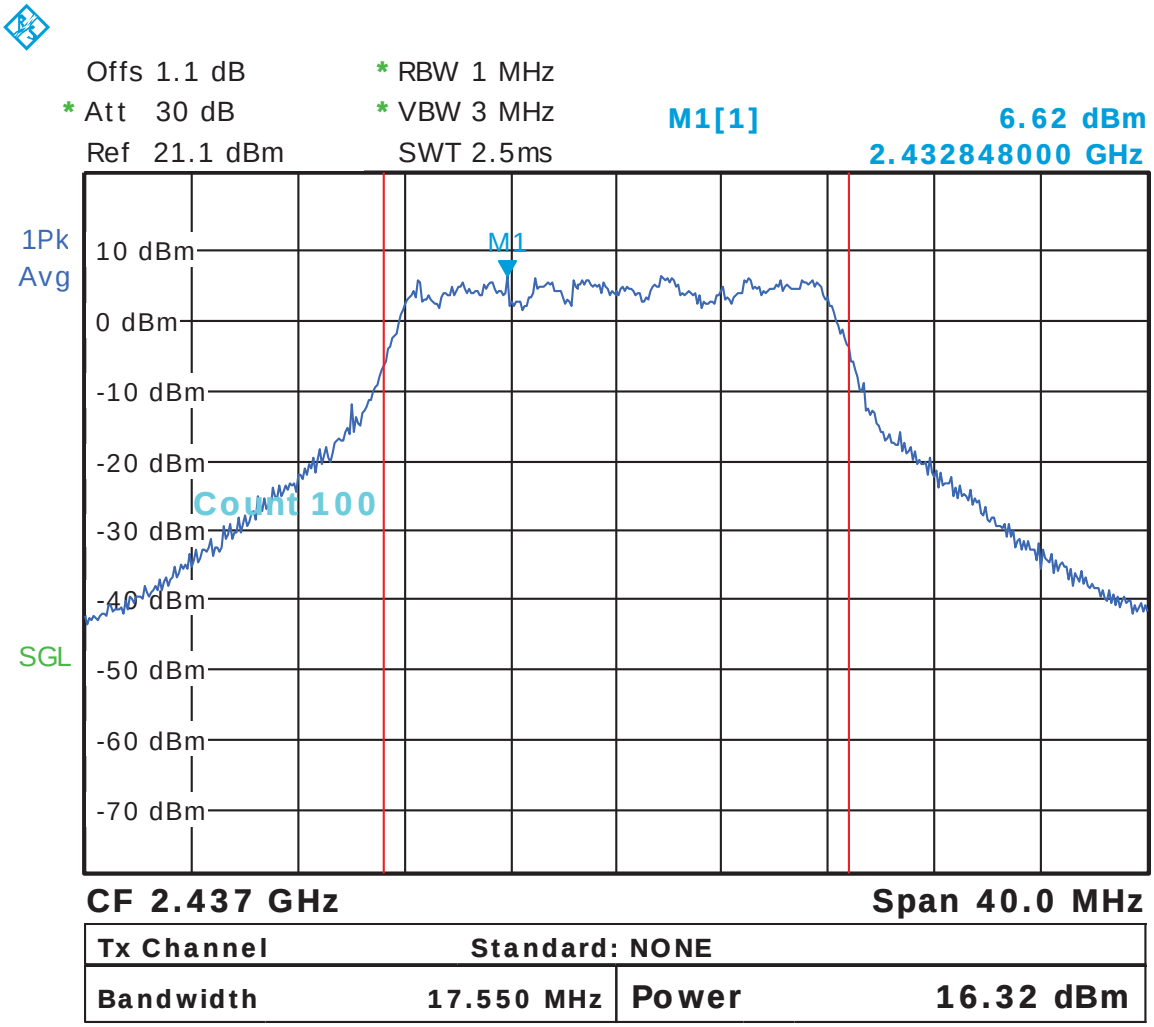

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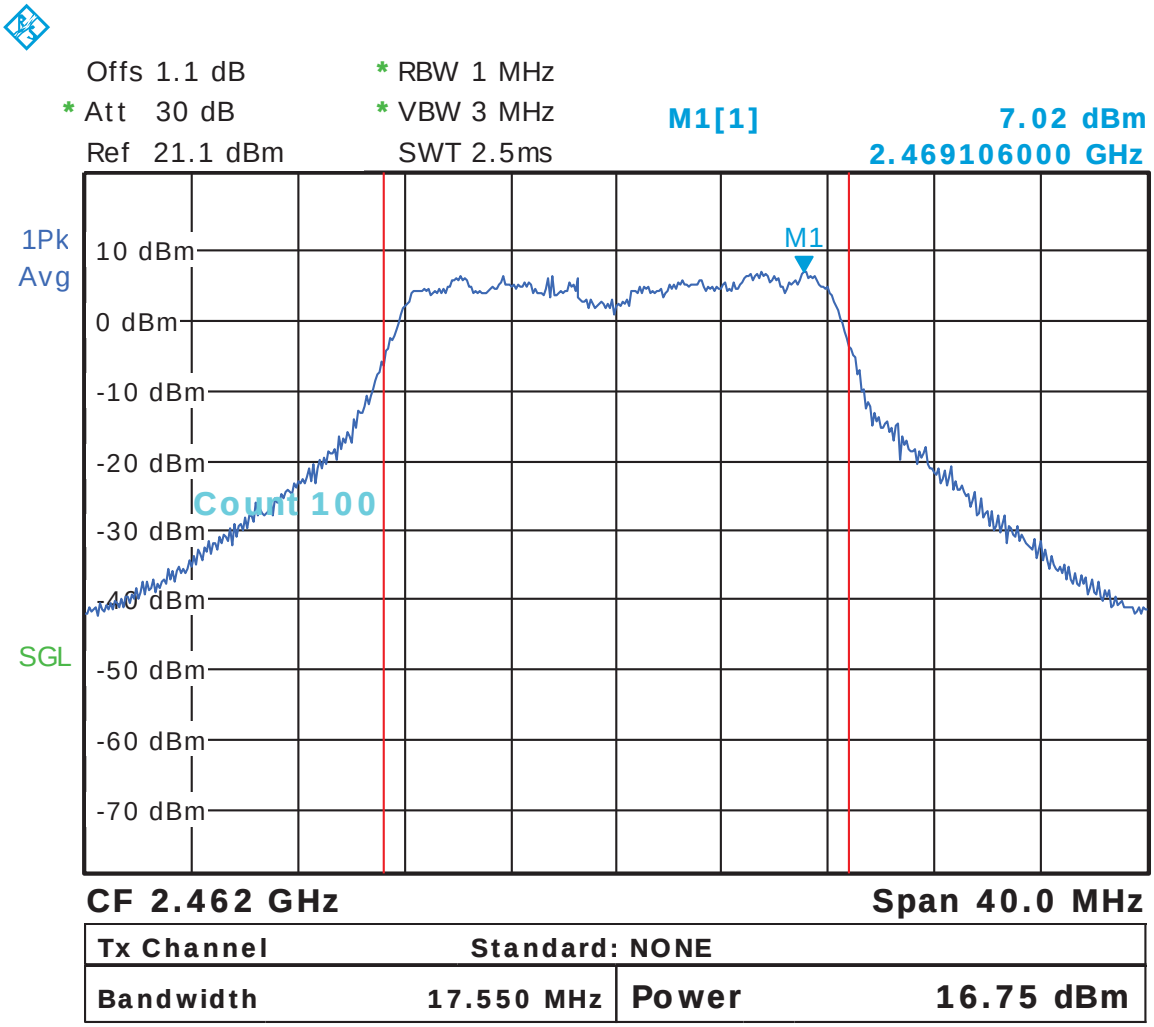
Figure 11: Maximum Transmitted Power, 2437 MHz at 802.11g, Chain 0 – 6Mbps



Date: 26.JAN.2011 14:09:04

Figure 12: Maximum Transmitted Power, 2462 MHz at 802.11g, Chain 0 – 6Mbps

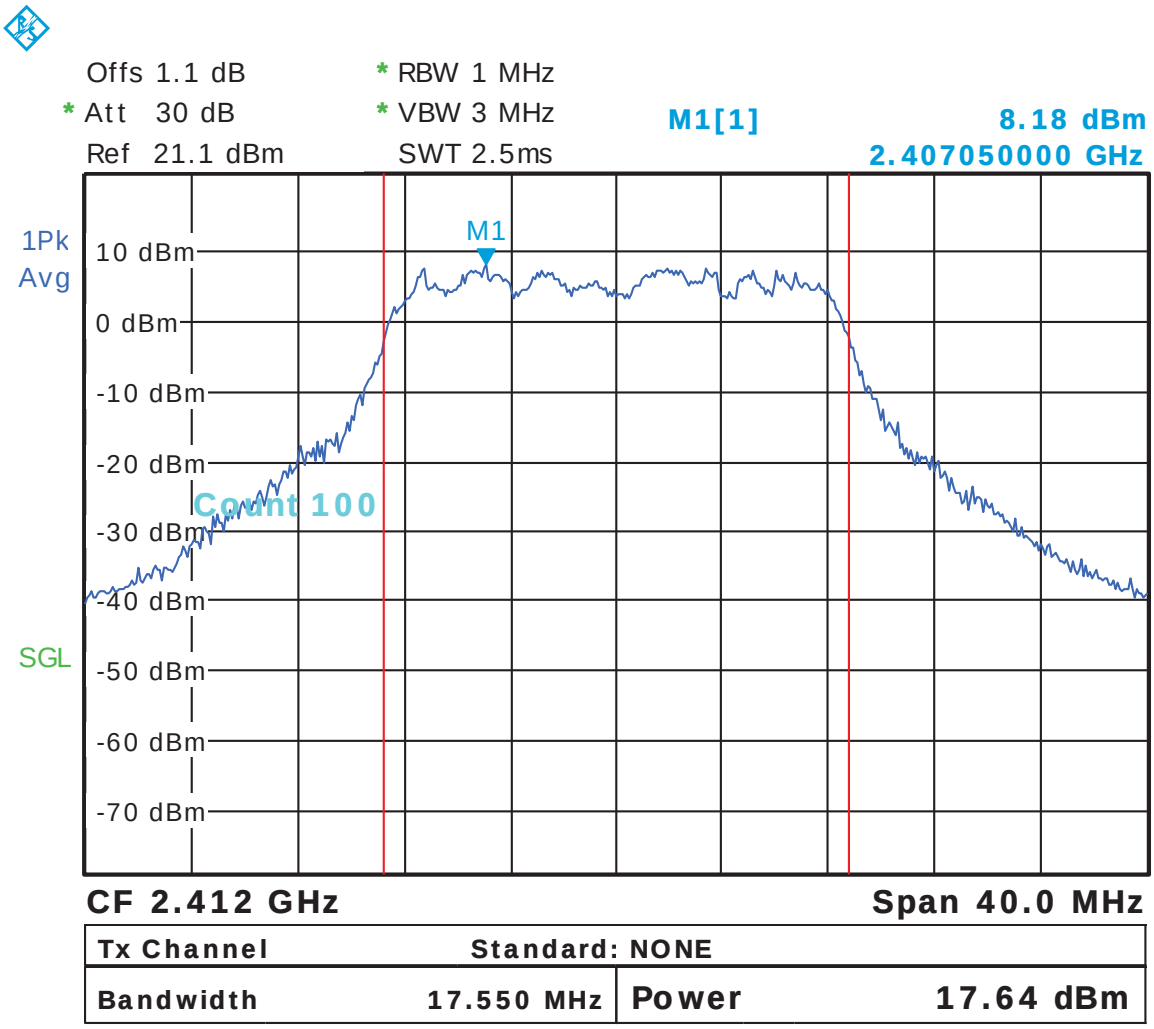
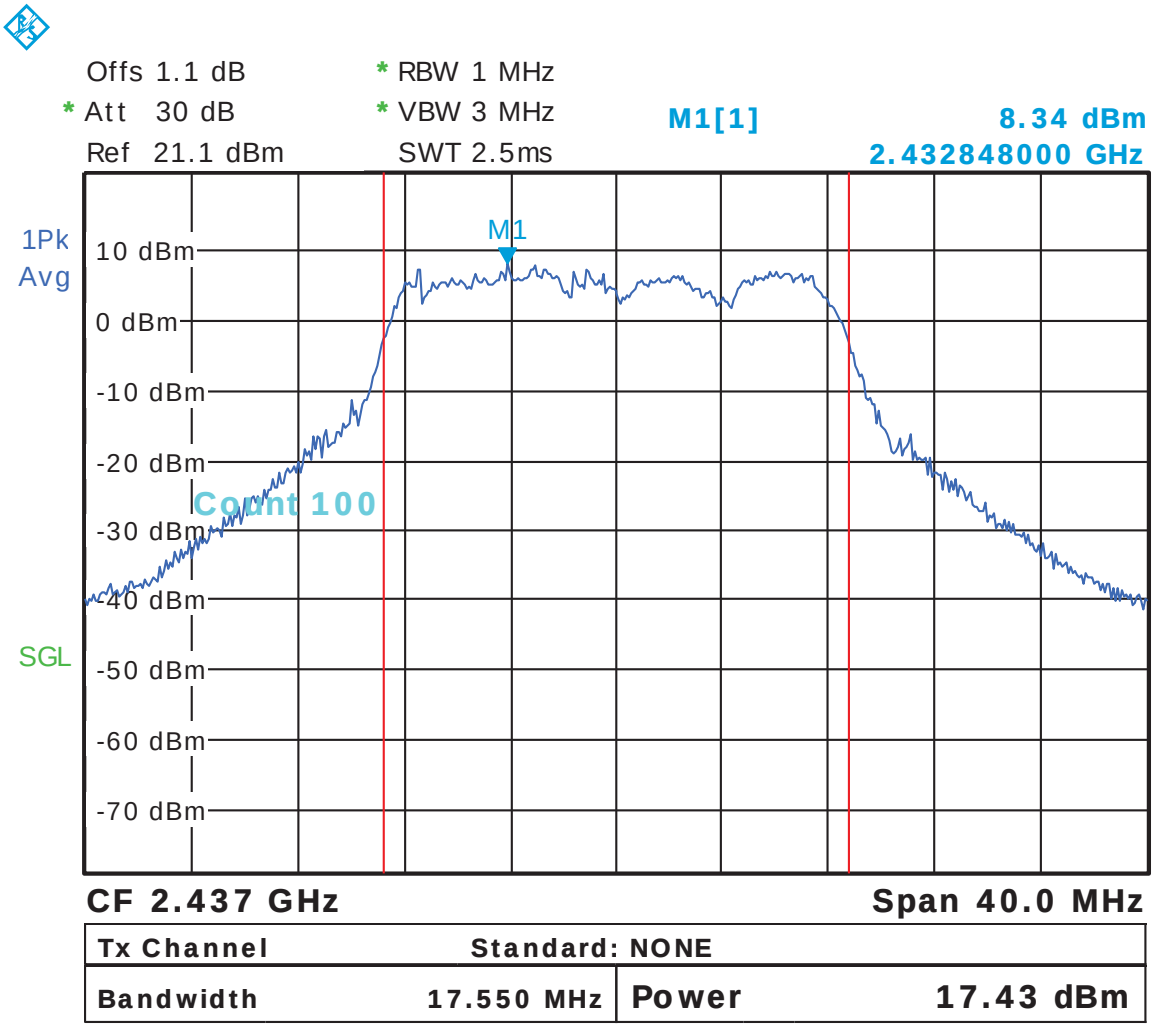


Figure 13: Maximum Transmitted Power, 2412 MHz at 802.11g, Chain 1 – 6Mbps



Date: 26.JAN.2011 14:04:36

Figure 14: Maximum Transmitted Power, 2437 MHz at 802.11g, Chain 1 – 6Mbps

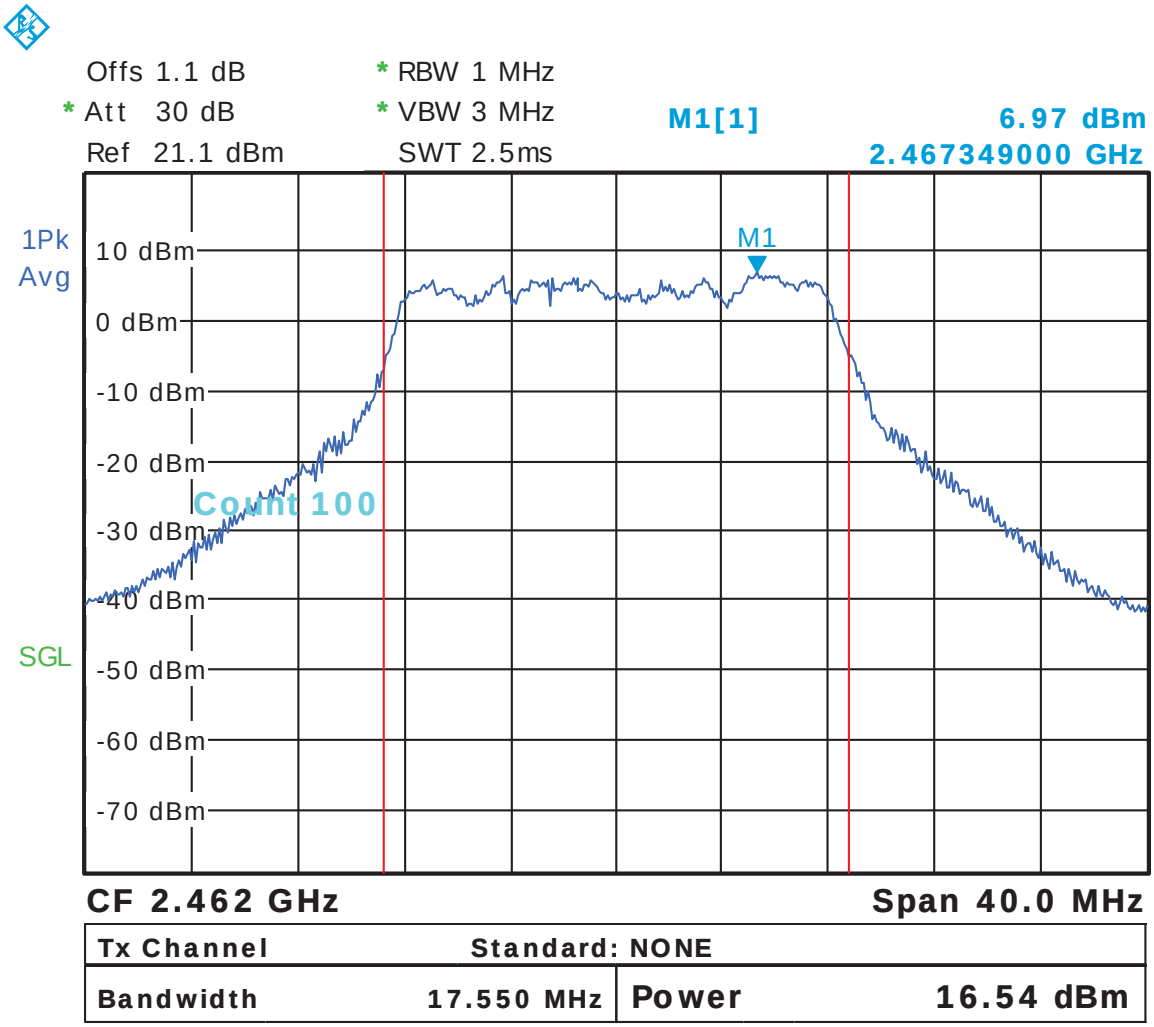


Figure 15: Maximum Transmitted Power, 2462 MHz at 802.11g, Chain 1 – 6Mbps

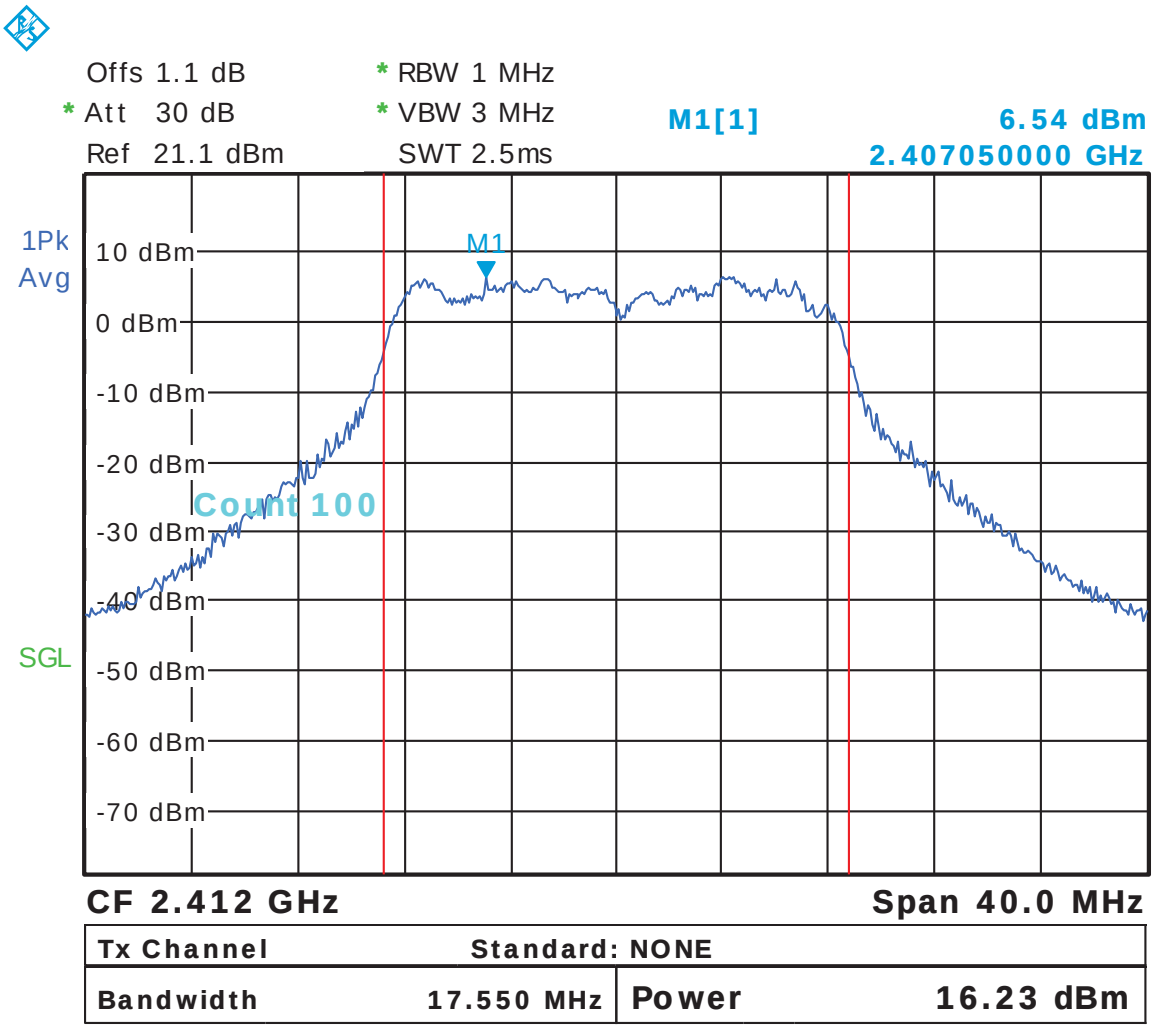


Figure 16: Maximum Transmitted Power, 2412 MHz at 802.11g, Chain 2 – 6Mbps

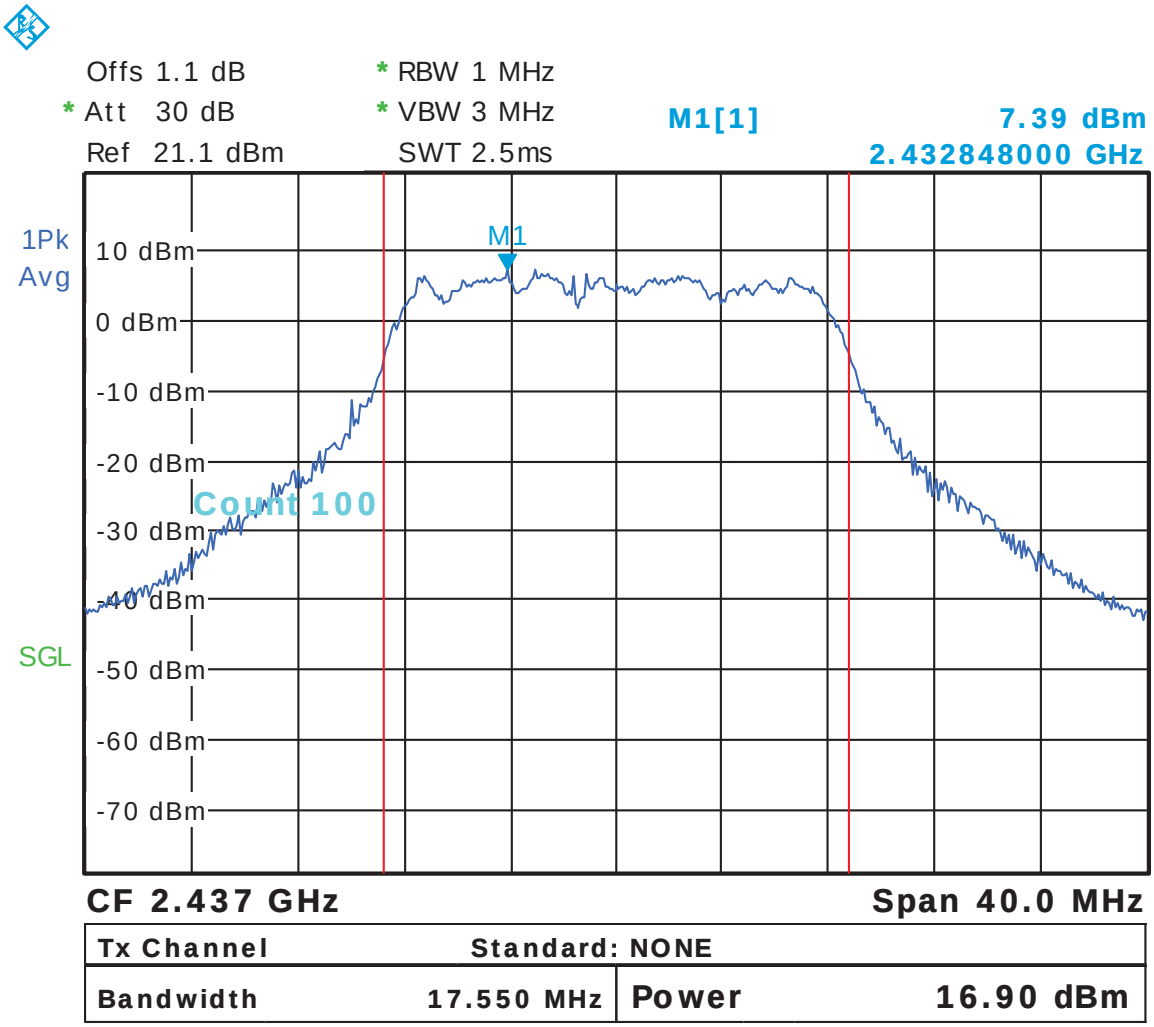


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Figure 17: Maximum Transmitted Power, 2437 MHz at 802.11g, Chain 2 – 6Mbps

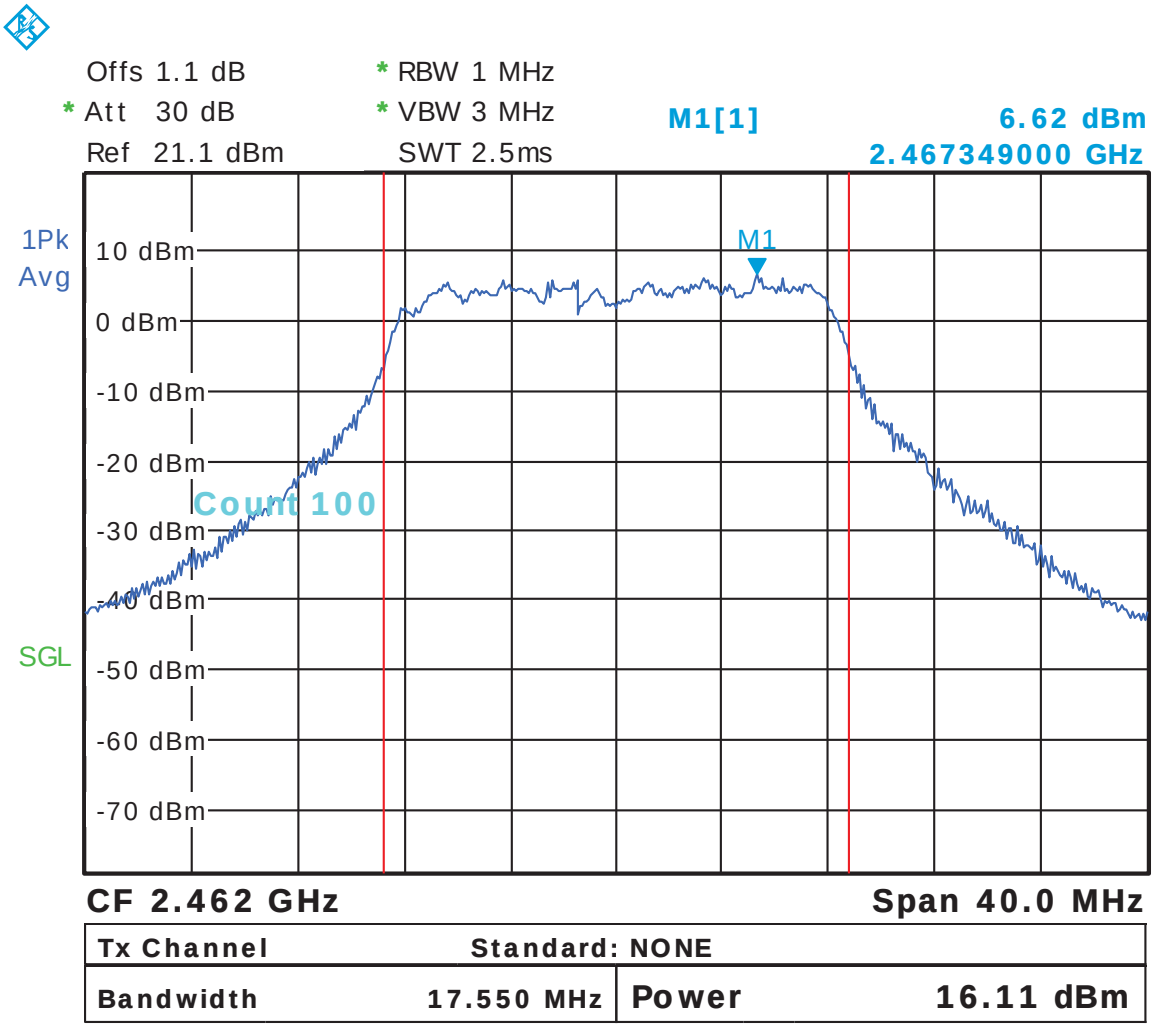

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Figure 18: Maximum Transmitted Power, 2462 MHz at 802.11g, Chain 2 – 6Mbps

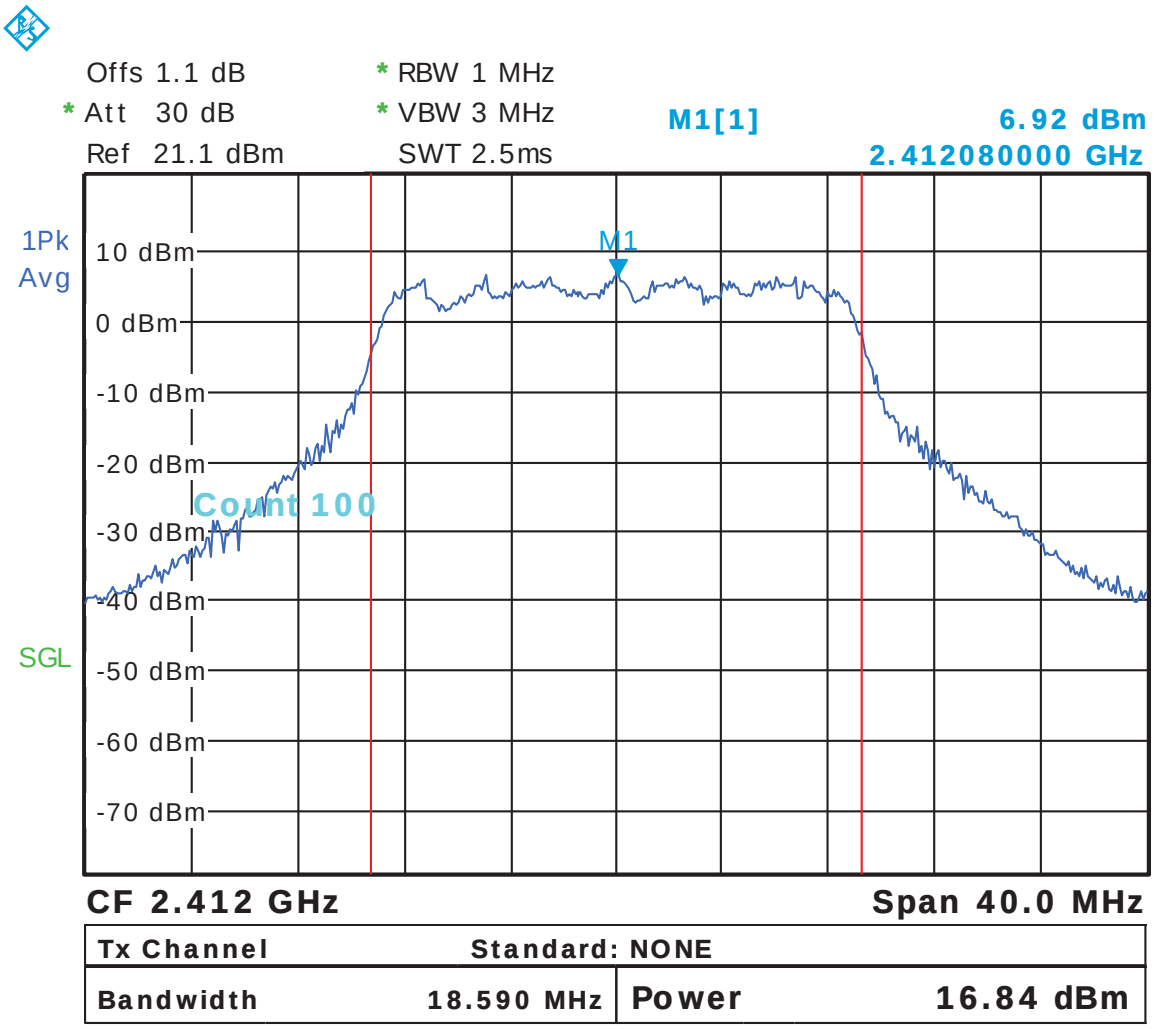

Figure 19: Maximum Transmitted Power, 2412 MHz at 802.11n (HT20), Chain 0 – 6.5Mbps

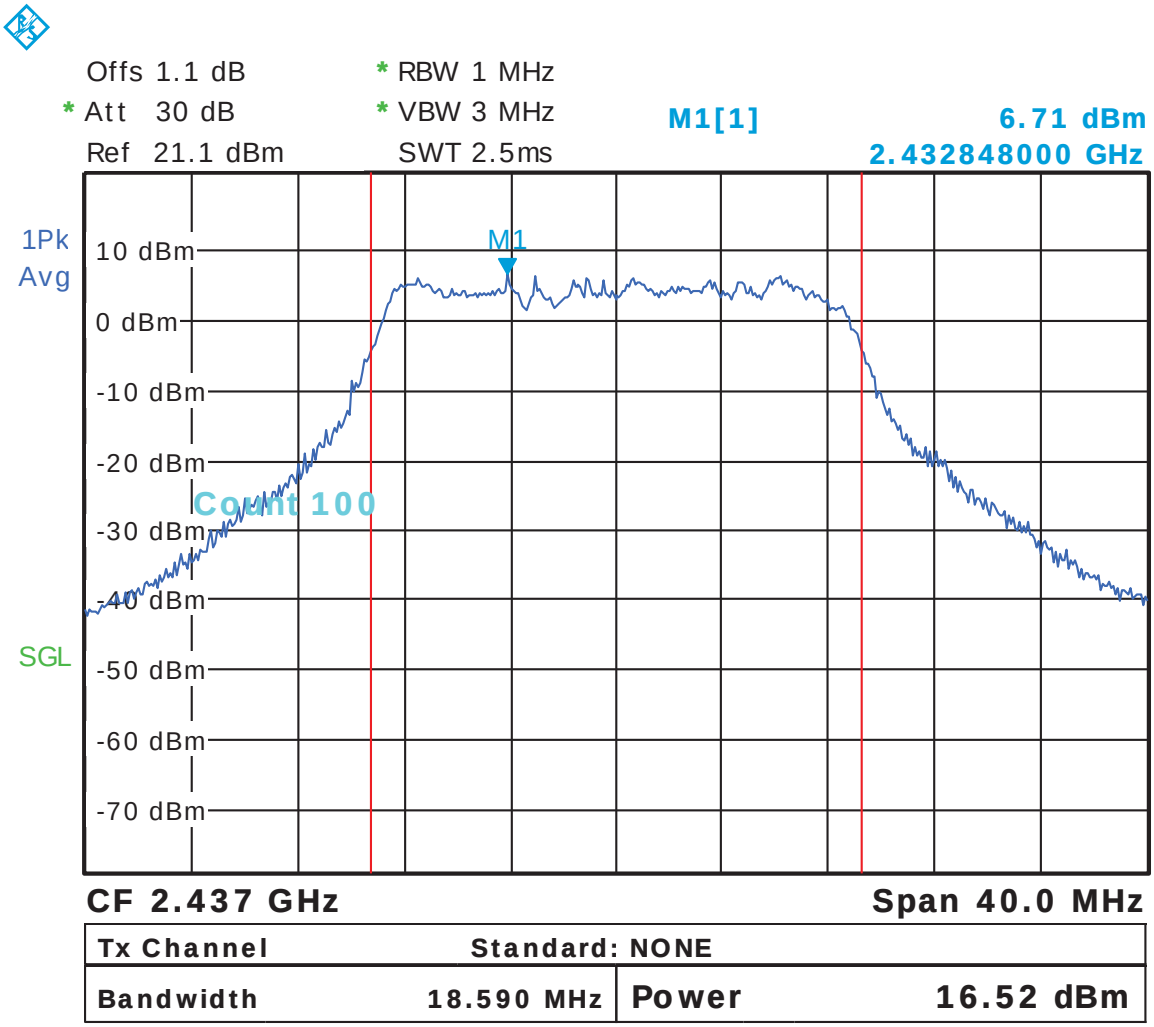

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Figure 20: Maximum Transmitted Power, 2437 MHz at 802.11n (HT20), Chain 0 – 6.5Mbps

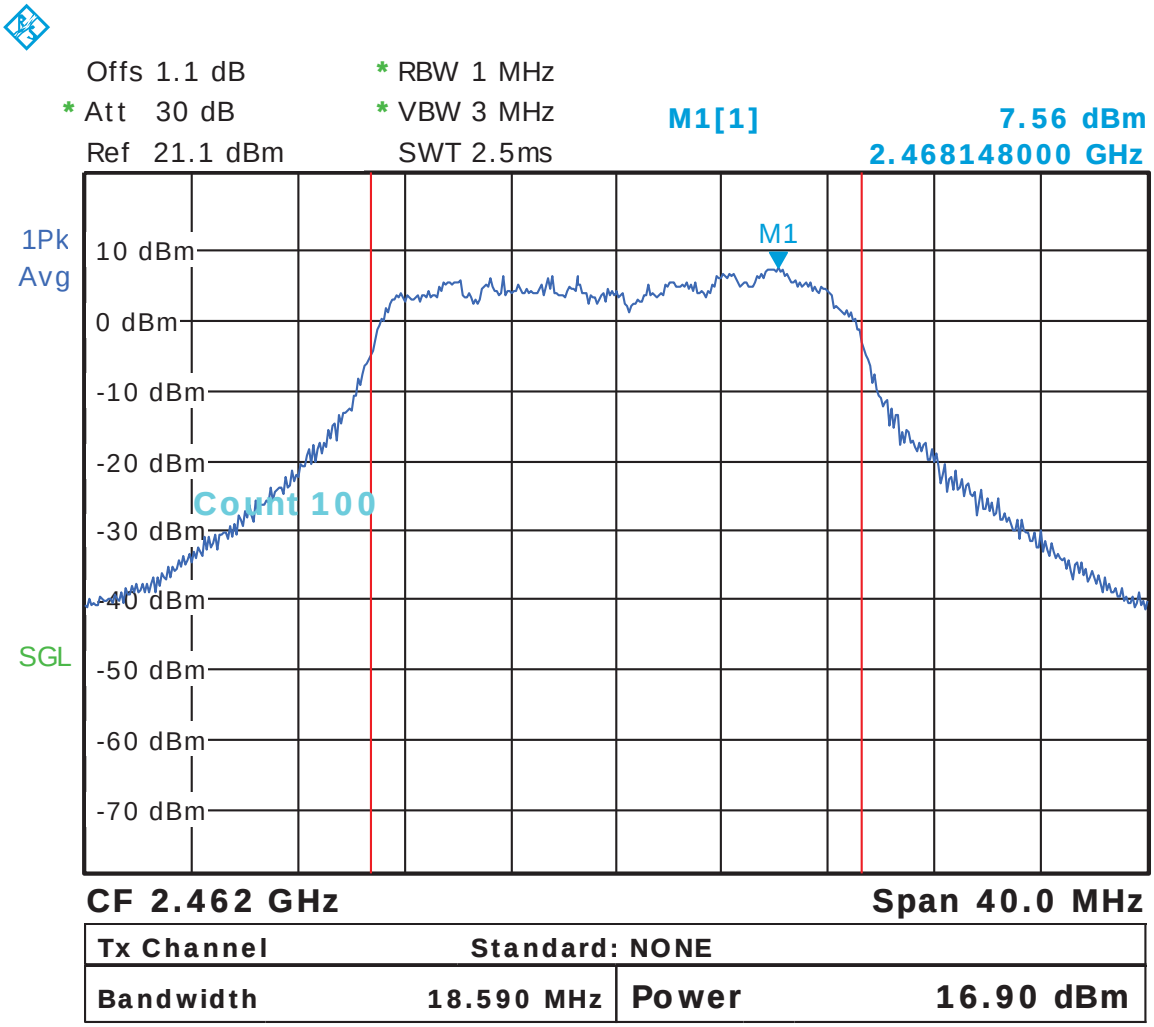

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Figure 21: Maximum Transmitted Power, 2462 MHz at 802.11n (HT20), Chain 0 – 6.5Mbps

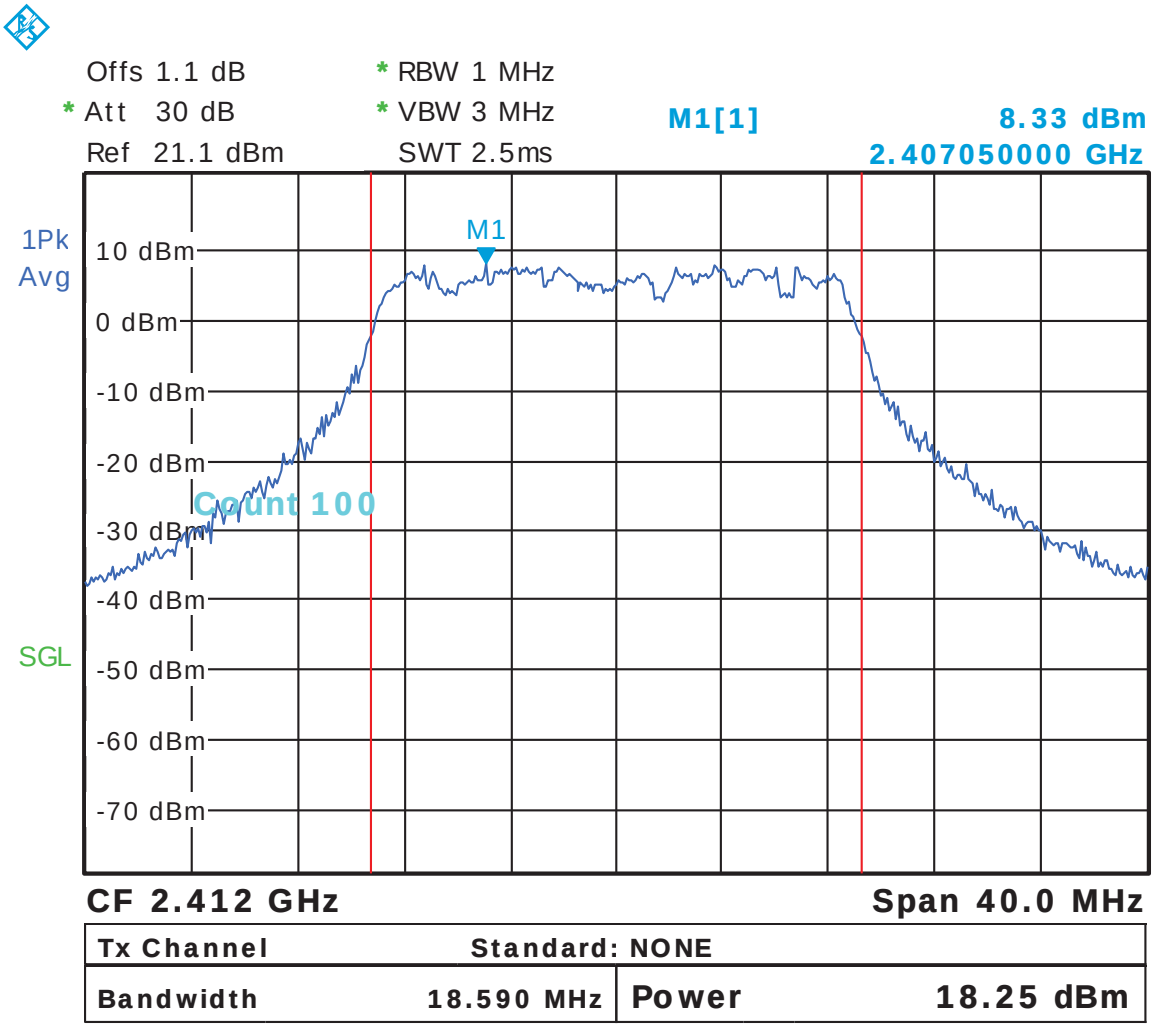

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Figure 22: Maximum Transmitted Power, 2412 MHz at 802.11n (HT20), Chain 1 – 6.5Mbps

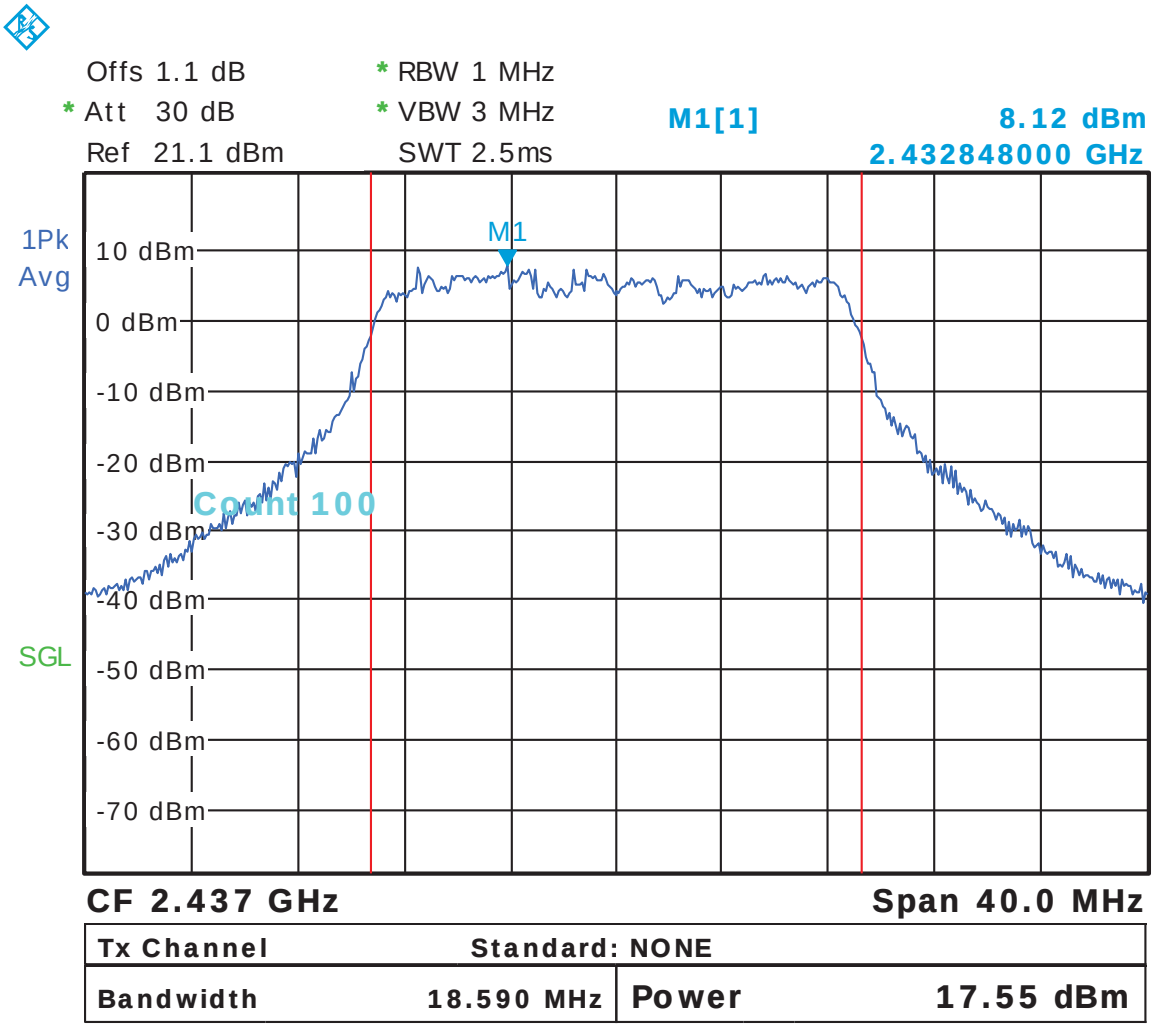

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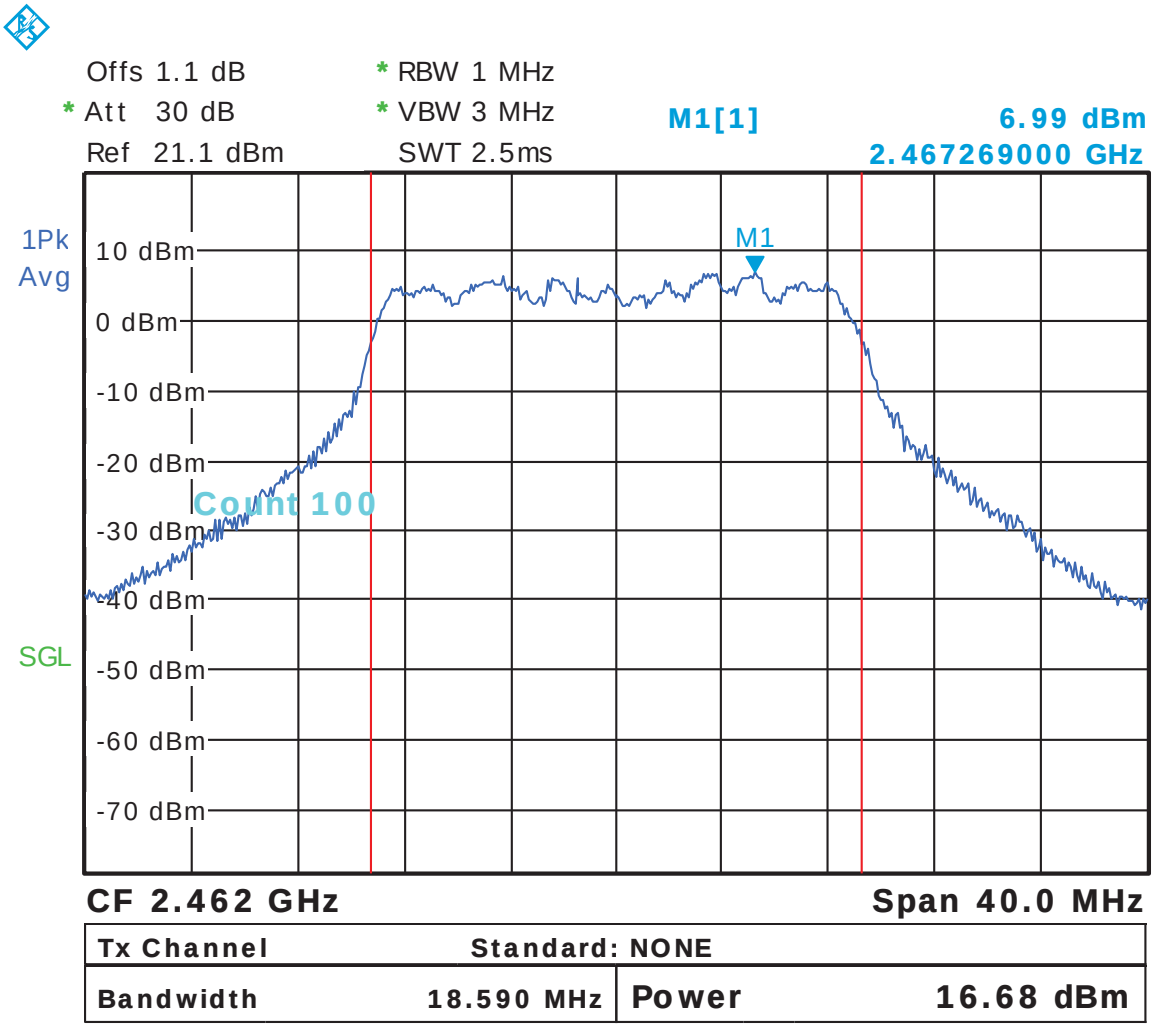
Figure 23: Maximum Transmitted Power, 2437 MHz at 802.11n (HT20), Chain 1 – 6.5Mbps



Date: 26.JAN.2011 14:36:24

Figure 24: Maximum Transmitted Power, 2462 MHz at 802.11n (HT20), Chain 1 – 6.5Mbps

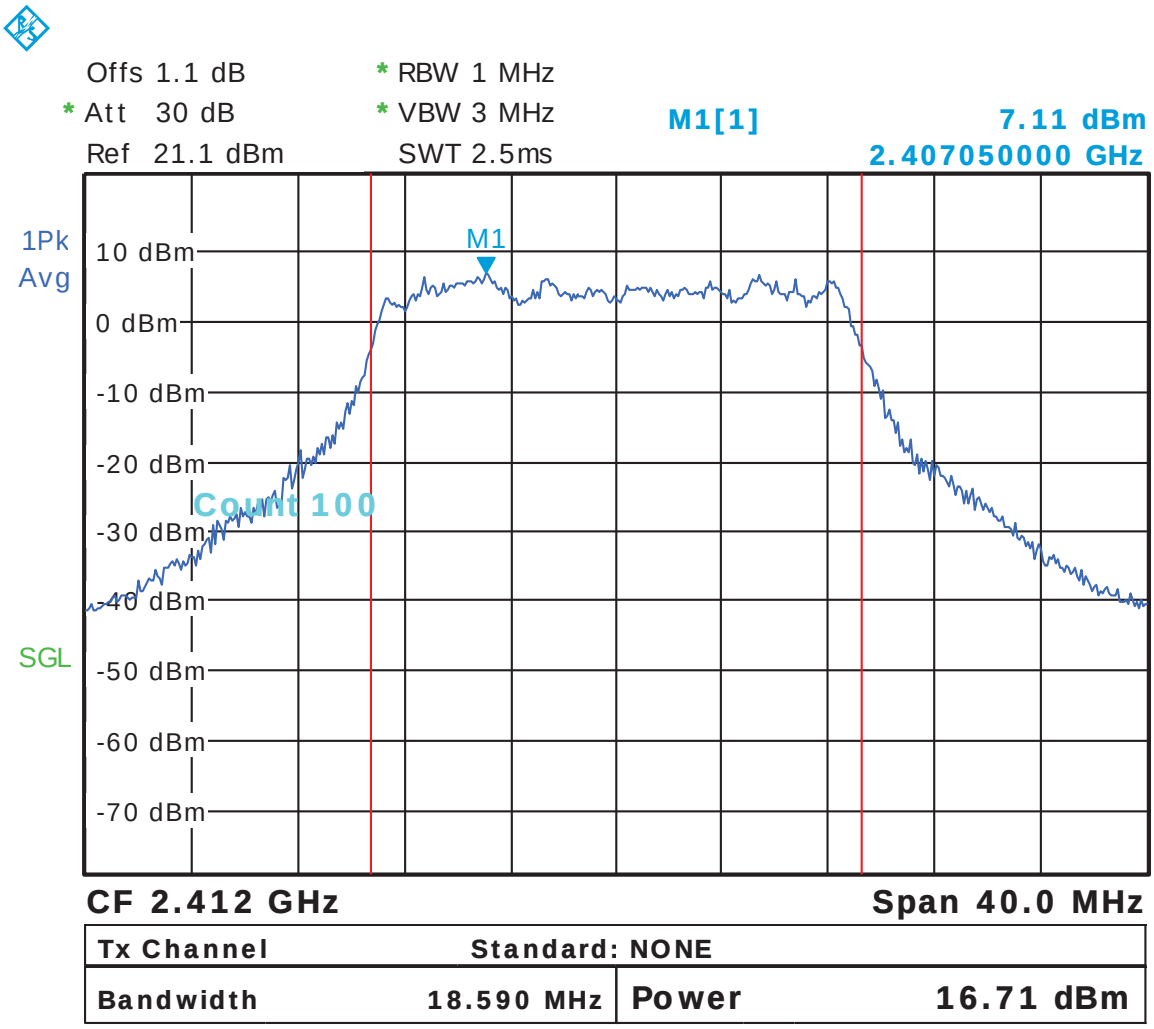


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Figure 25: Maximum Transmitted Power, 2412 MHz at 802.11n (HT20), Chain 2 – 6.5Mbps

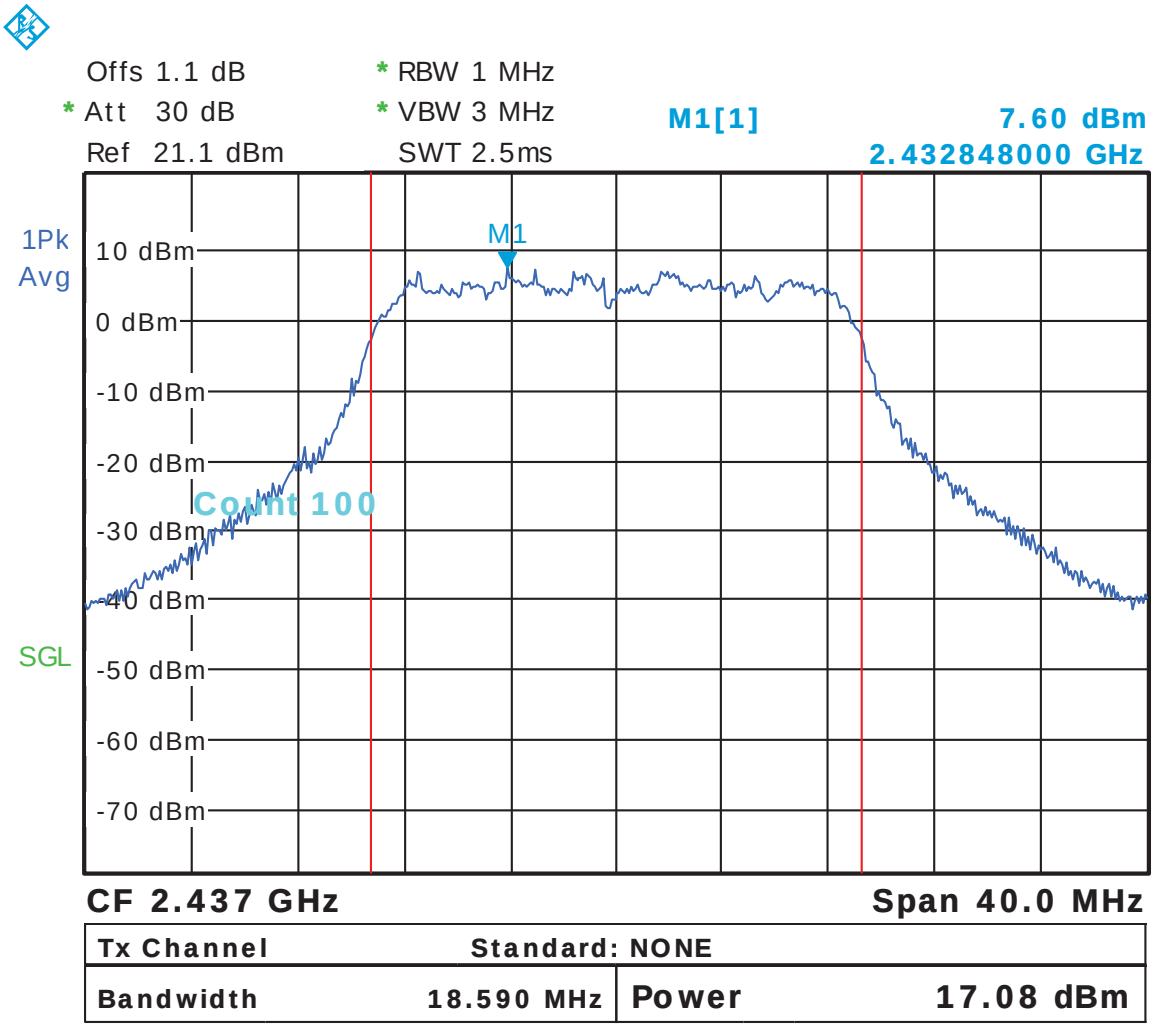

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Figure 26: Maximum Transmitted Power, 2437 MHz at 802.11n (HT20), Chain 2 – 6.5Mbps

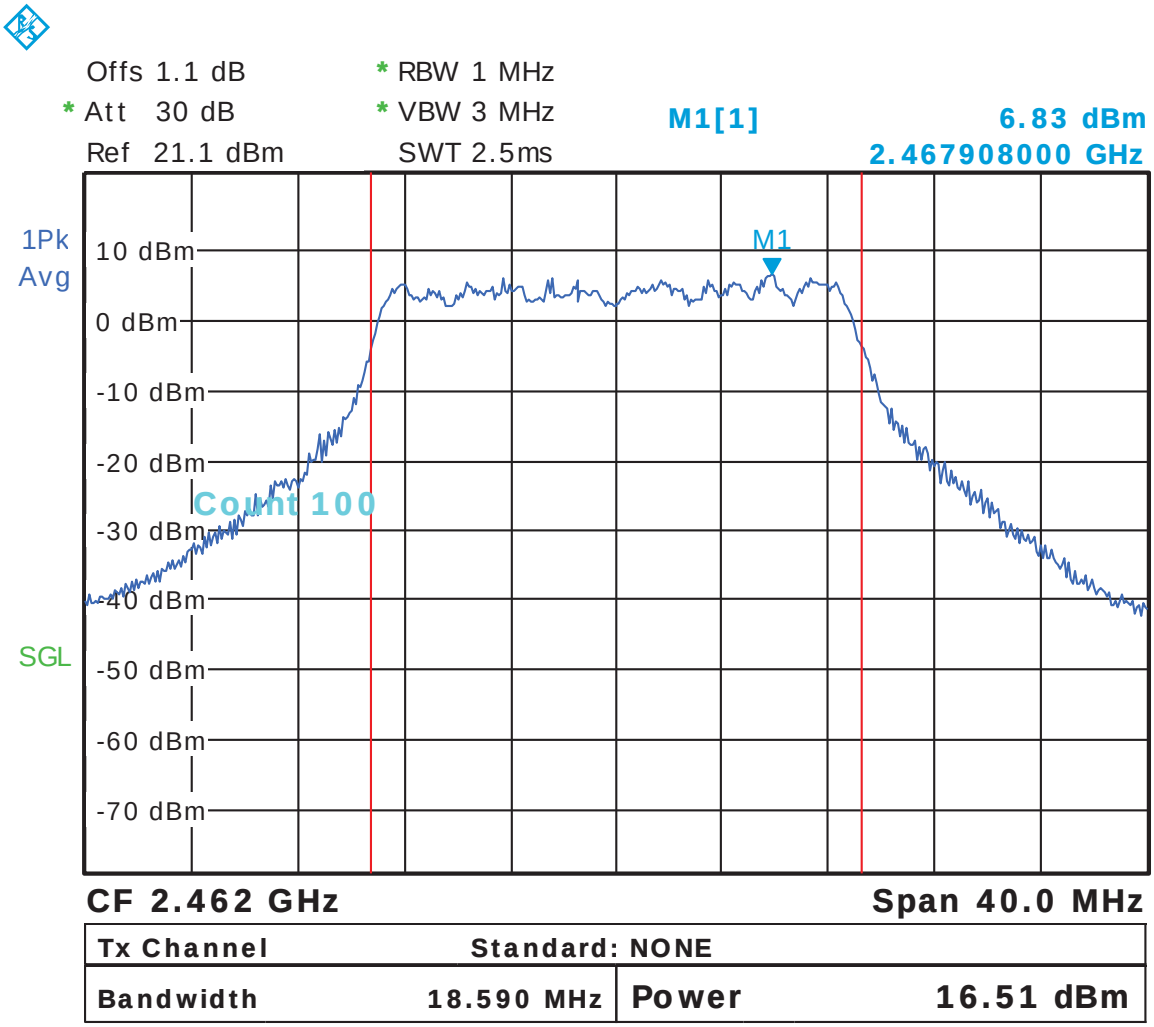

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Figure 27: Maximum Transmitted Power, 2462 MHz at 802.11n (HT20), Chain 2 – 6.5Mbps

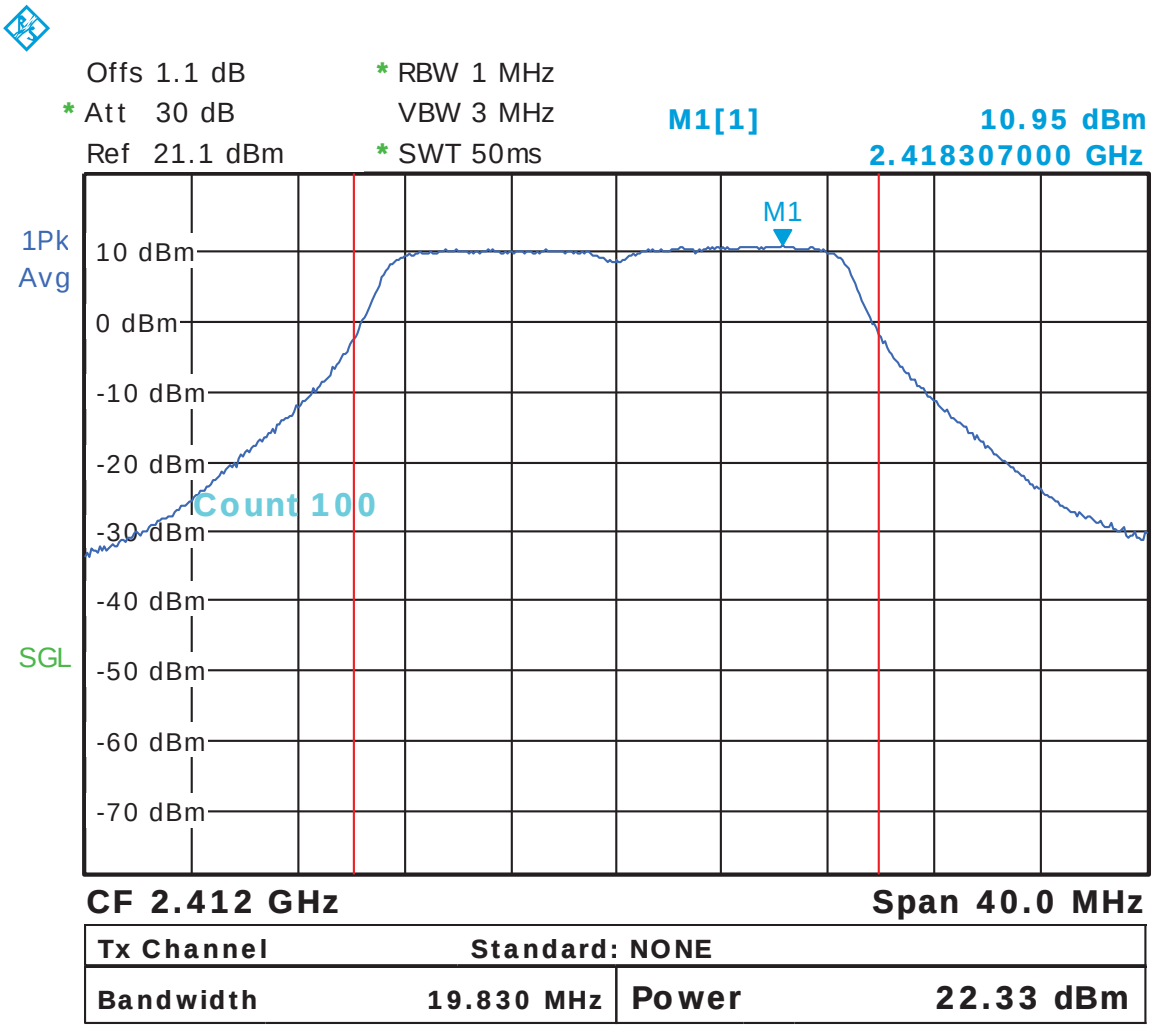

Figure 28: Maximum Transmitted Power, 2412 MHz at 802.11n (HT20), Chain 0 – 13Mbps

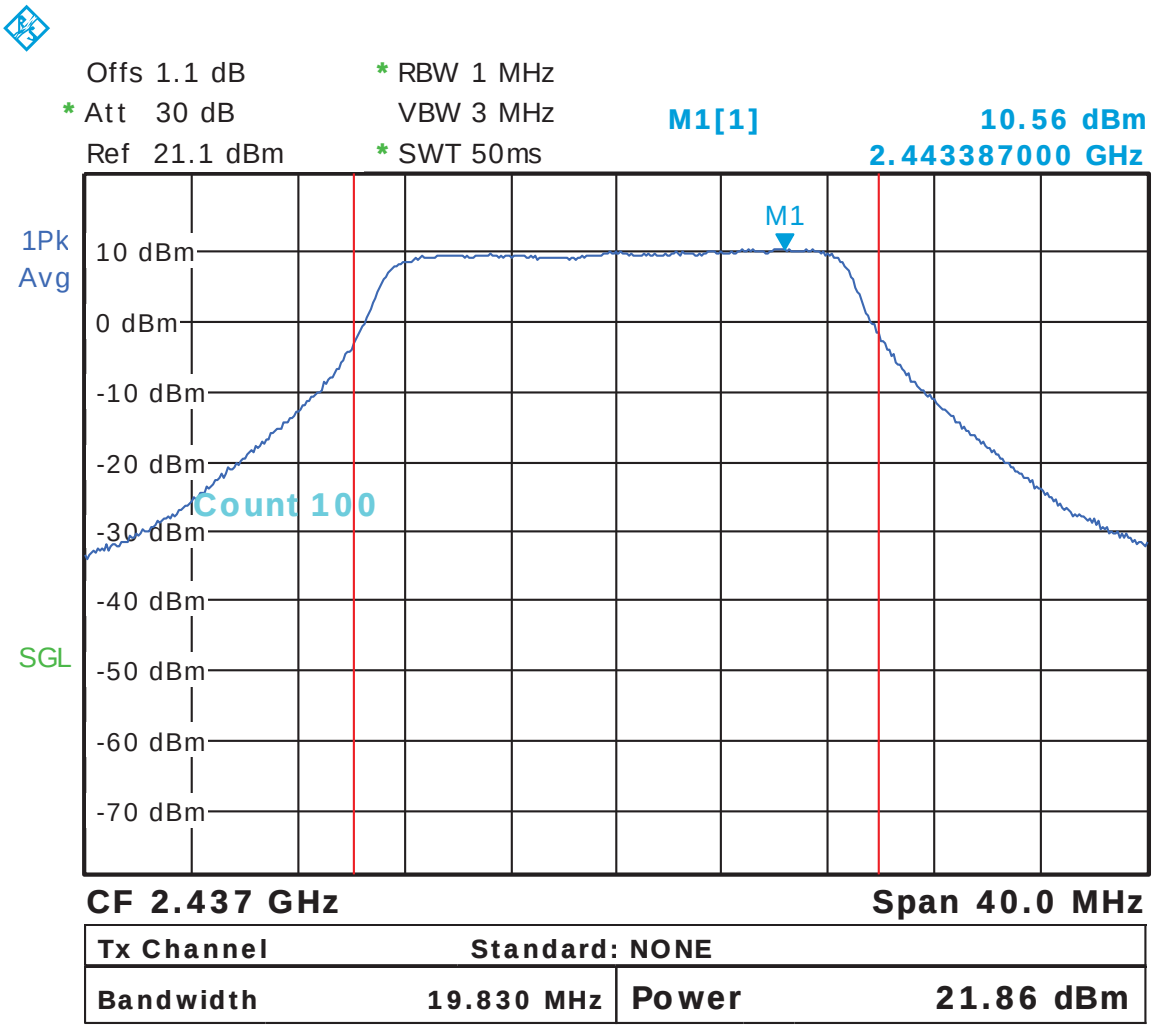

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Figure 29: Maximum Transmitted Power, 2437 MHz at 802.11n (HT20), Chain 0 – 13Mbps

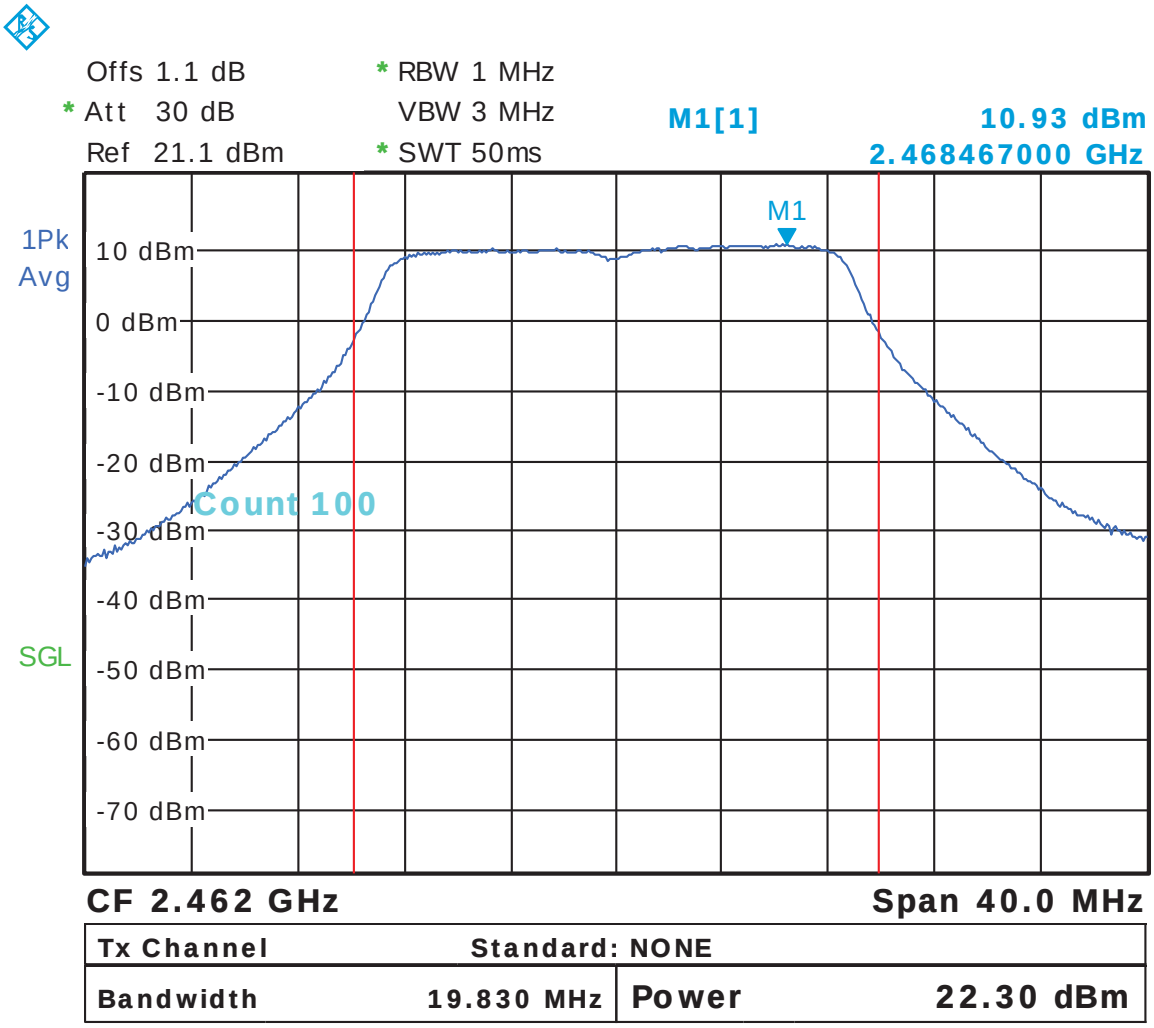

Figure 30: Maximum Transmitted Power, 2462 MHz at 802.11n (HT20), Chain 0 – 13Mbps

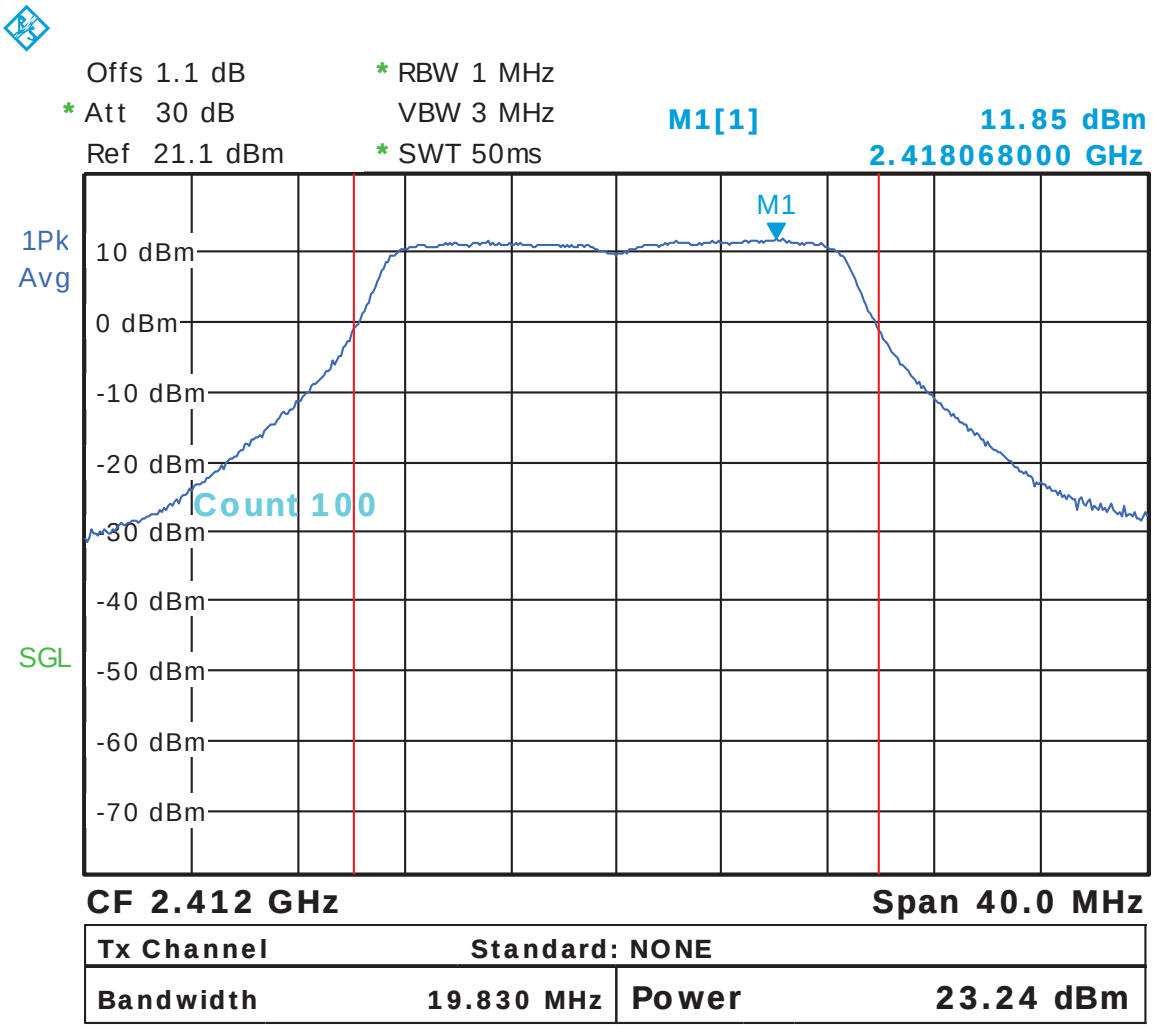

Figure 31: Maximum Transmitted Power, 2412 MHz at 802.11n (HT20), Chain 1 – 13Mbps

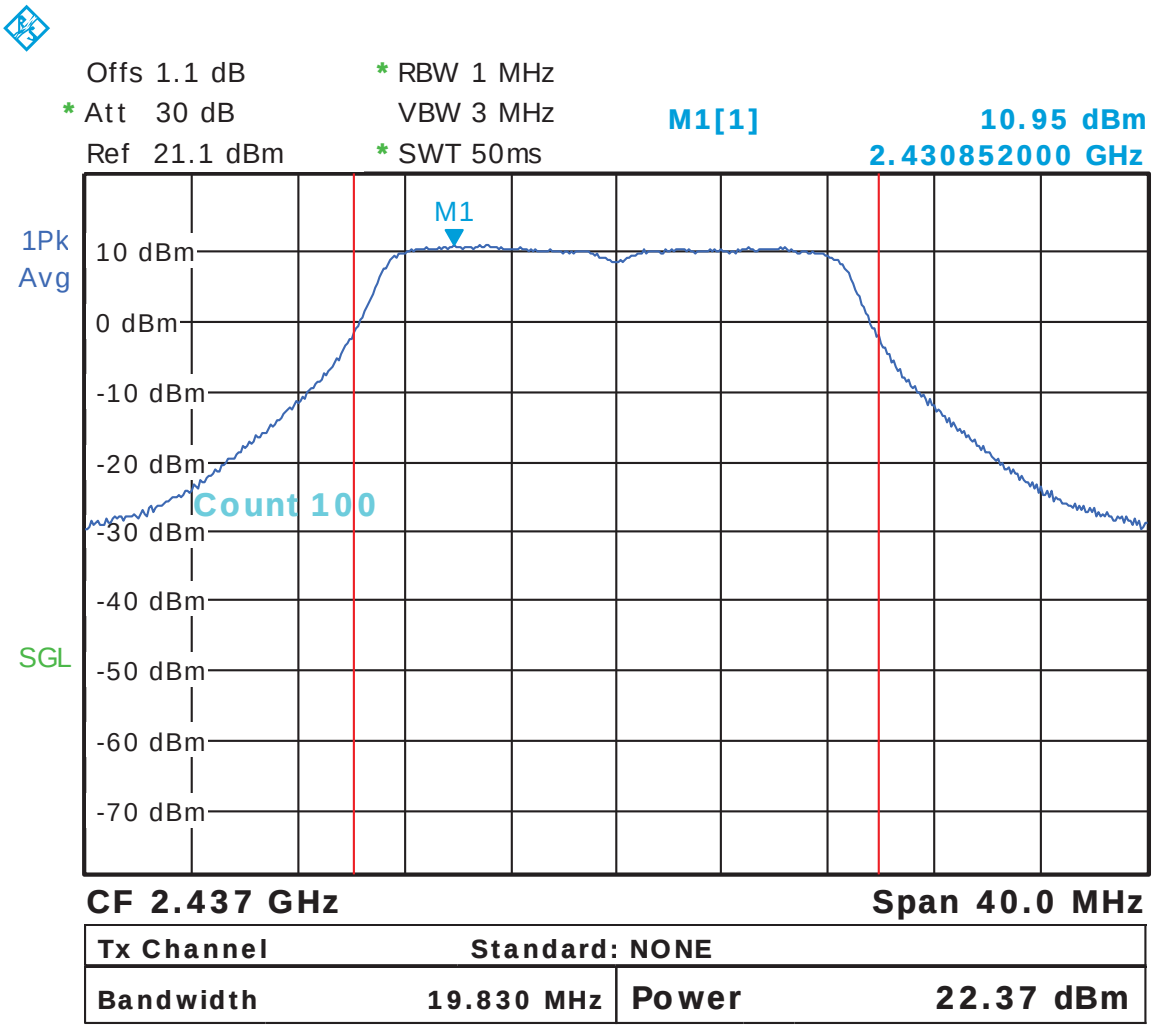

Figure 32: Maximum Transmitted Power, 2437 MHz at 802.11n (HT20), Chain 1 – 13Mbps

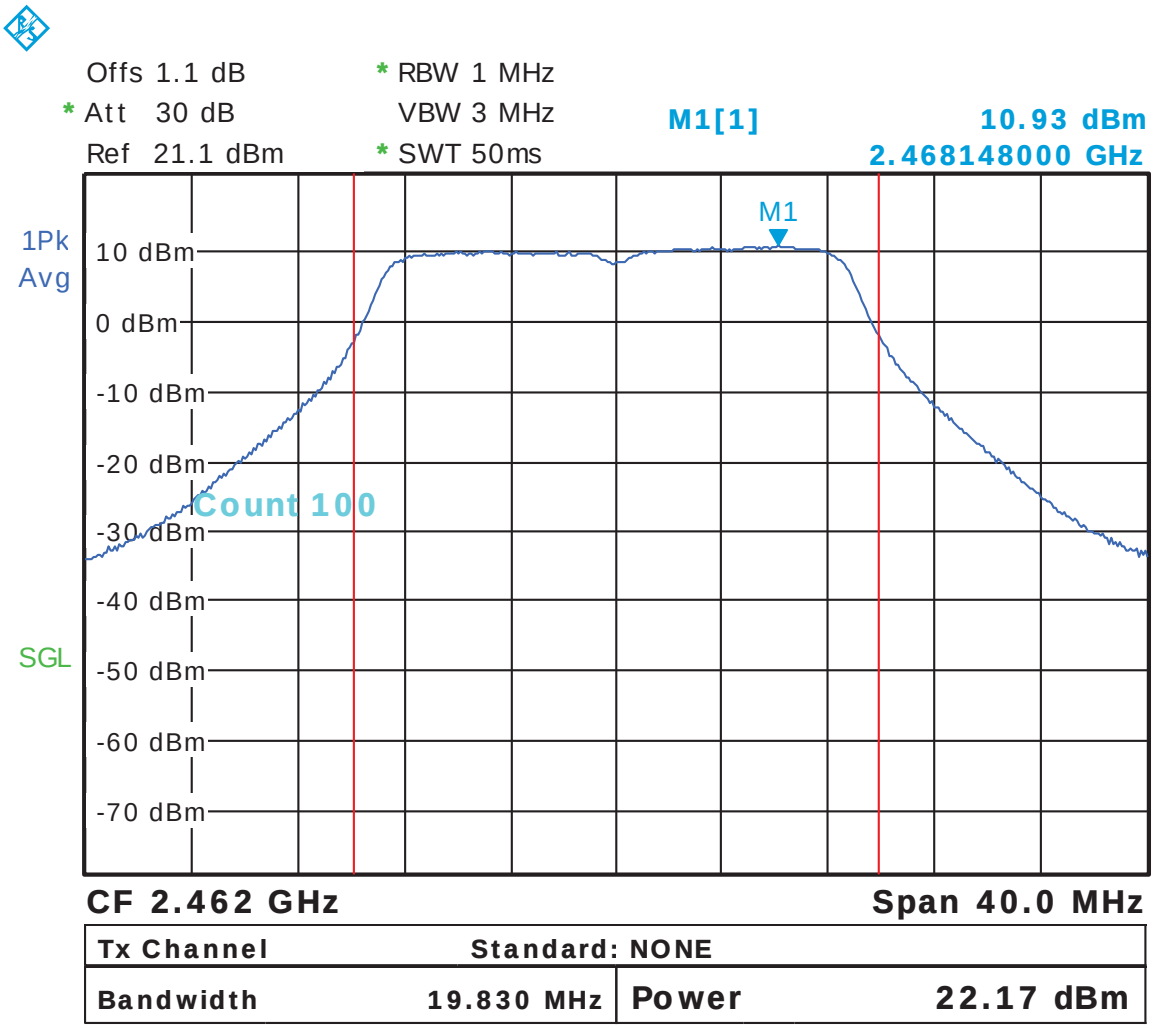

Figure 33: Maximum Transmitted Power, 2462 MHz at 802.11n (HT20), Chain 1 – 13Mbps

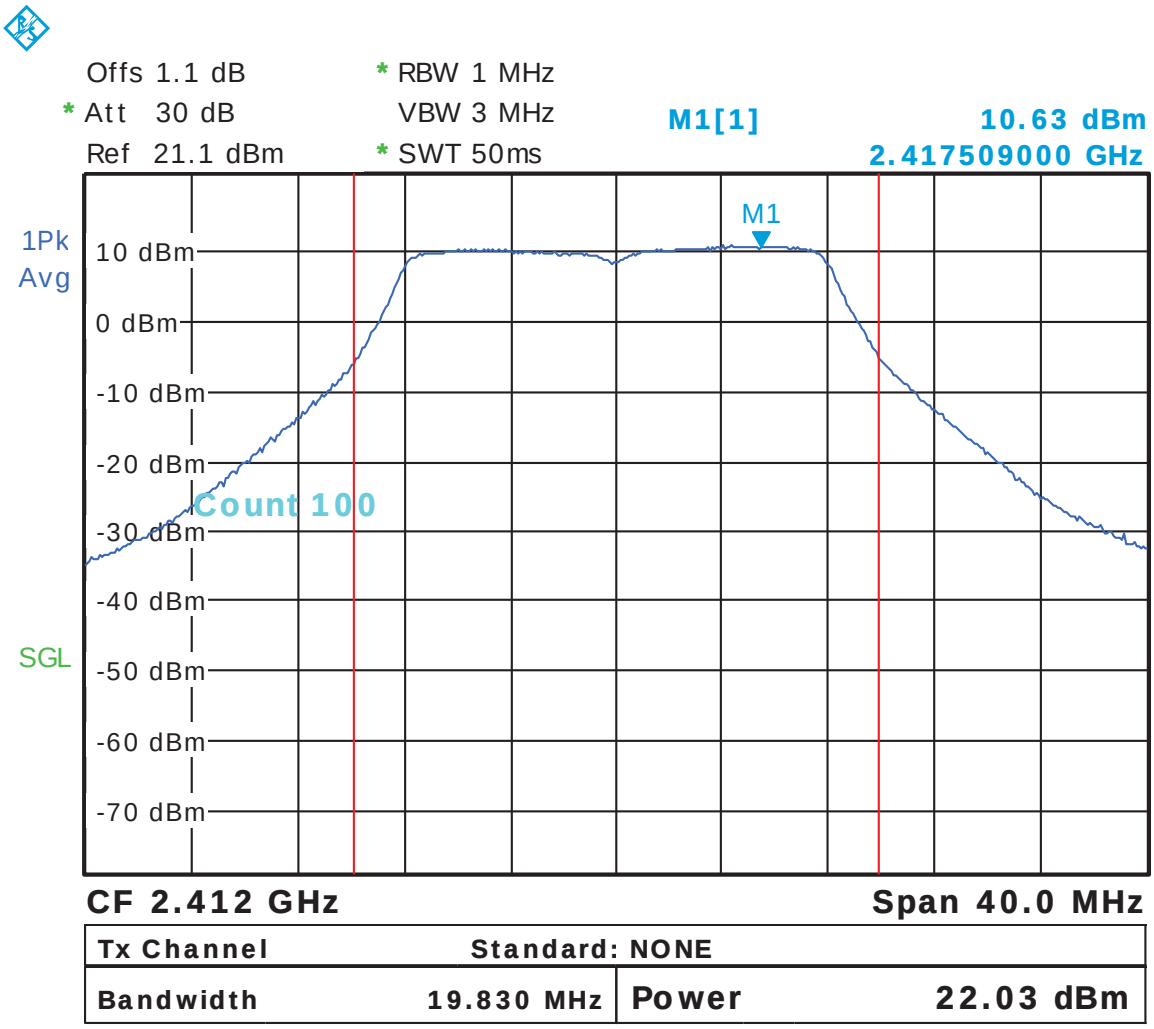

Figure 34: Maximum Transmitted Power, 2412 MHz at 802.11n (HT20), Chain 0 – 19.5Mbps

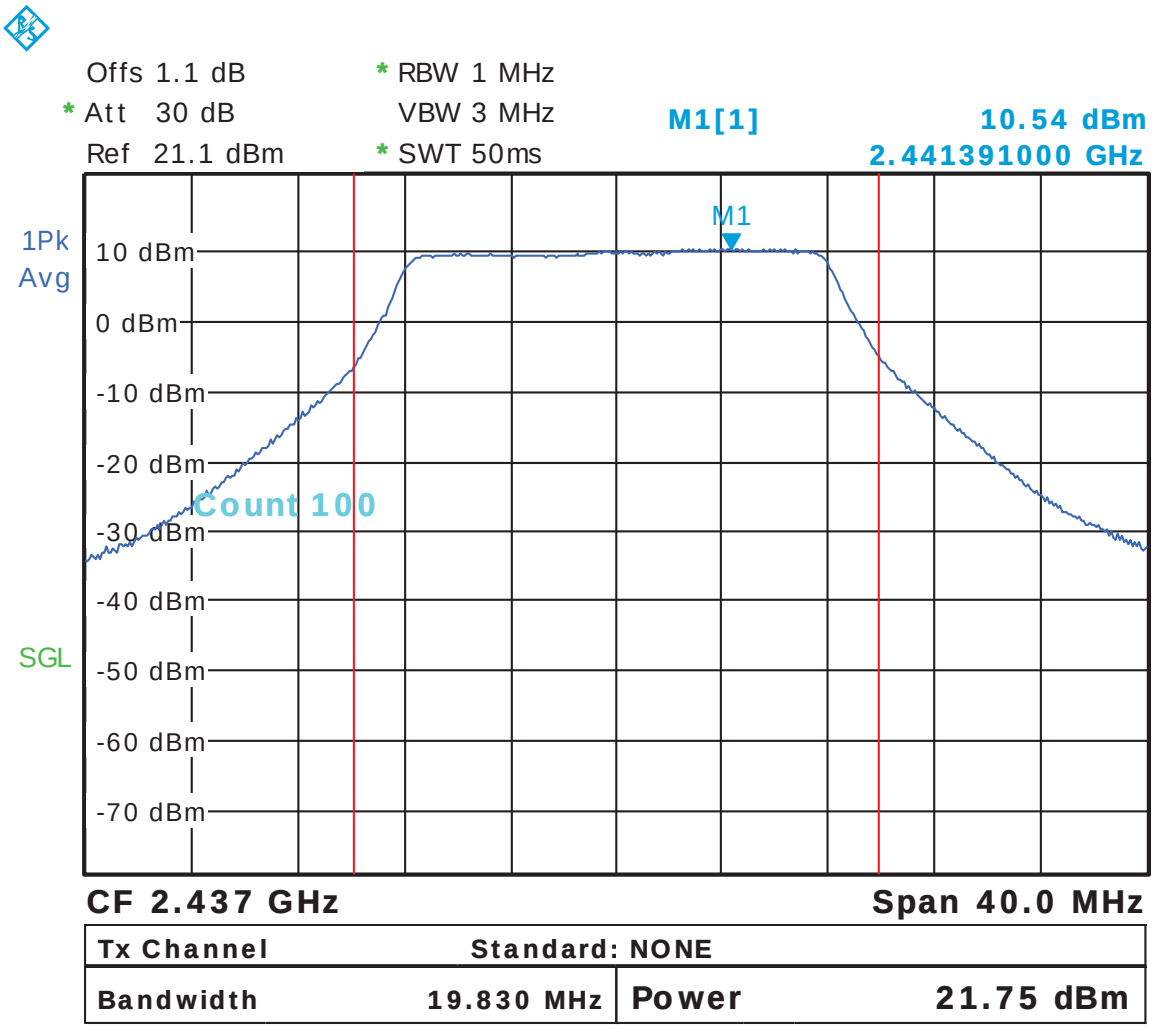

Figure 35: Maximum Transmitted Power, 2437 MHz at 802.11n (HT20), Chain 0 – 19.5Mbps

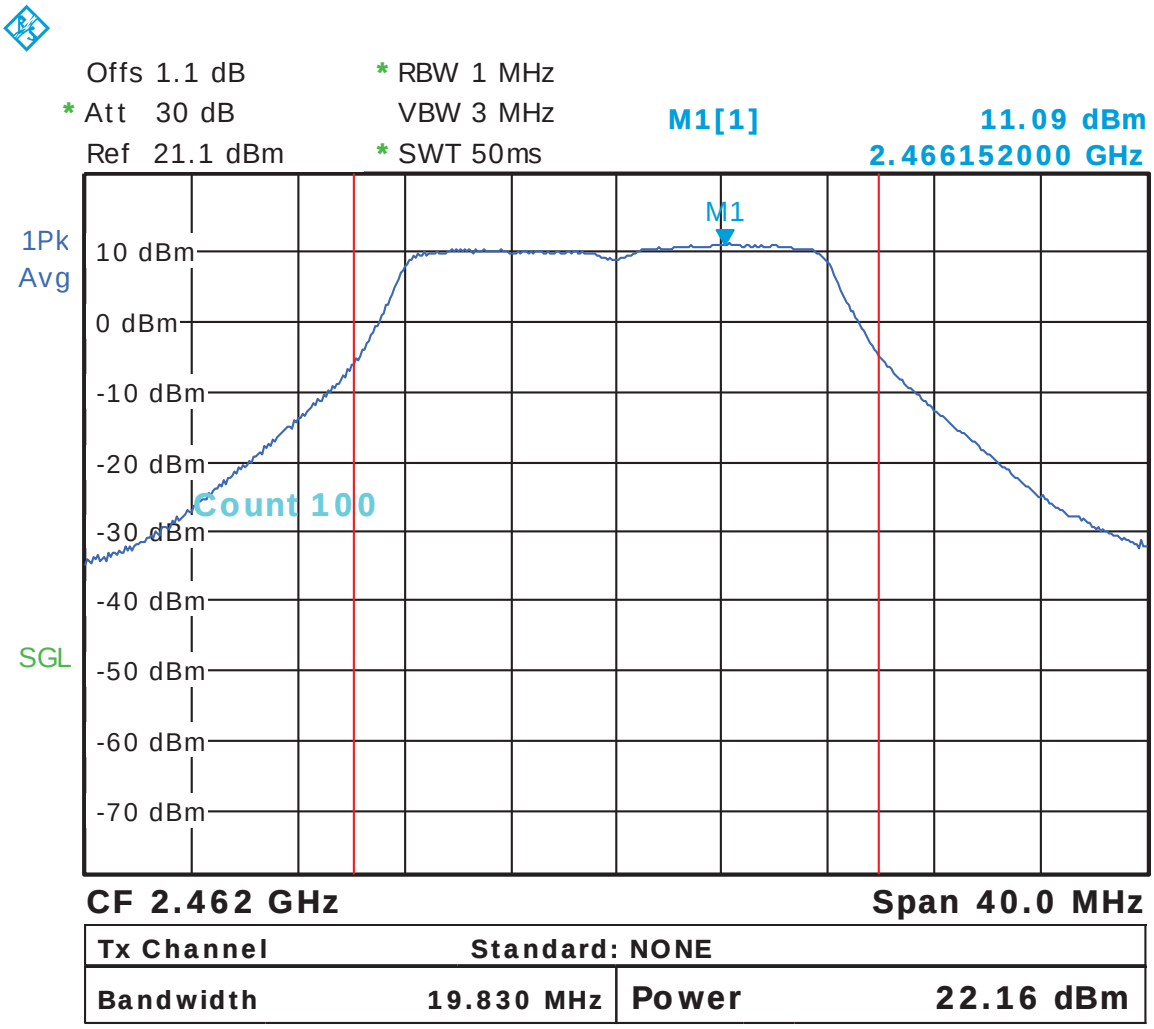

Figure 36: Maximum Transmitted Power, 2462 MHz at 802.11n (HT20), Chain 0 – 19.5Mbps

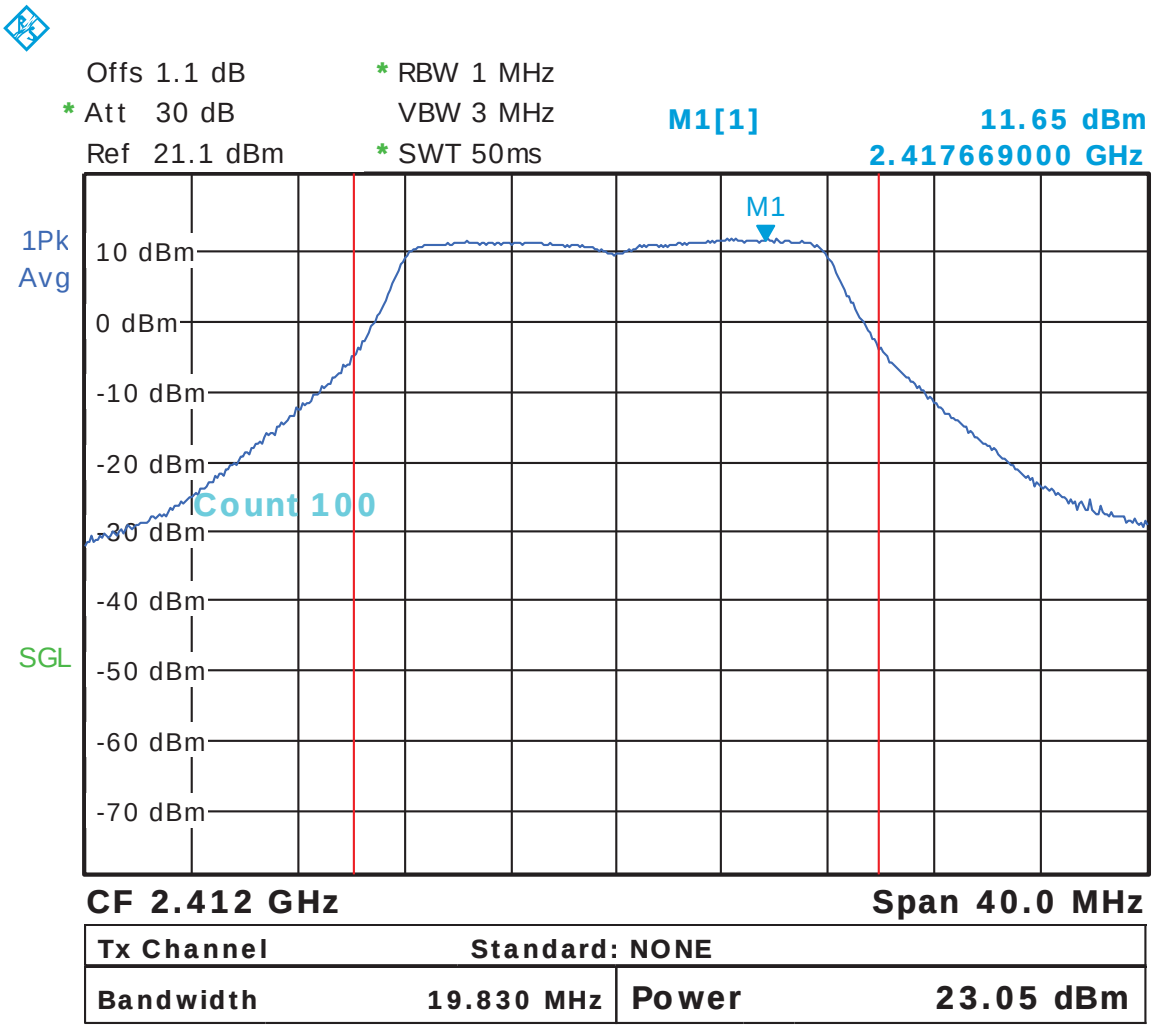

Figure 37: Maximum Transmitted Power, 2412 MHz at 802.11n (HT20), Chain 1 – 19.5Mbps

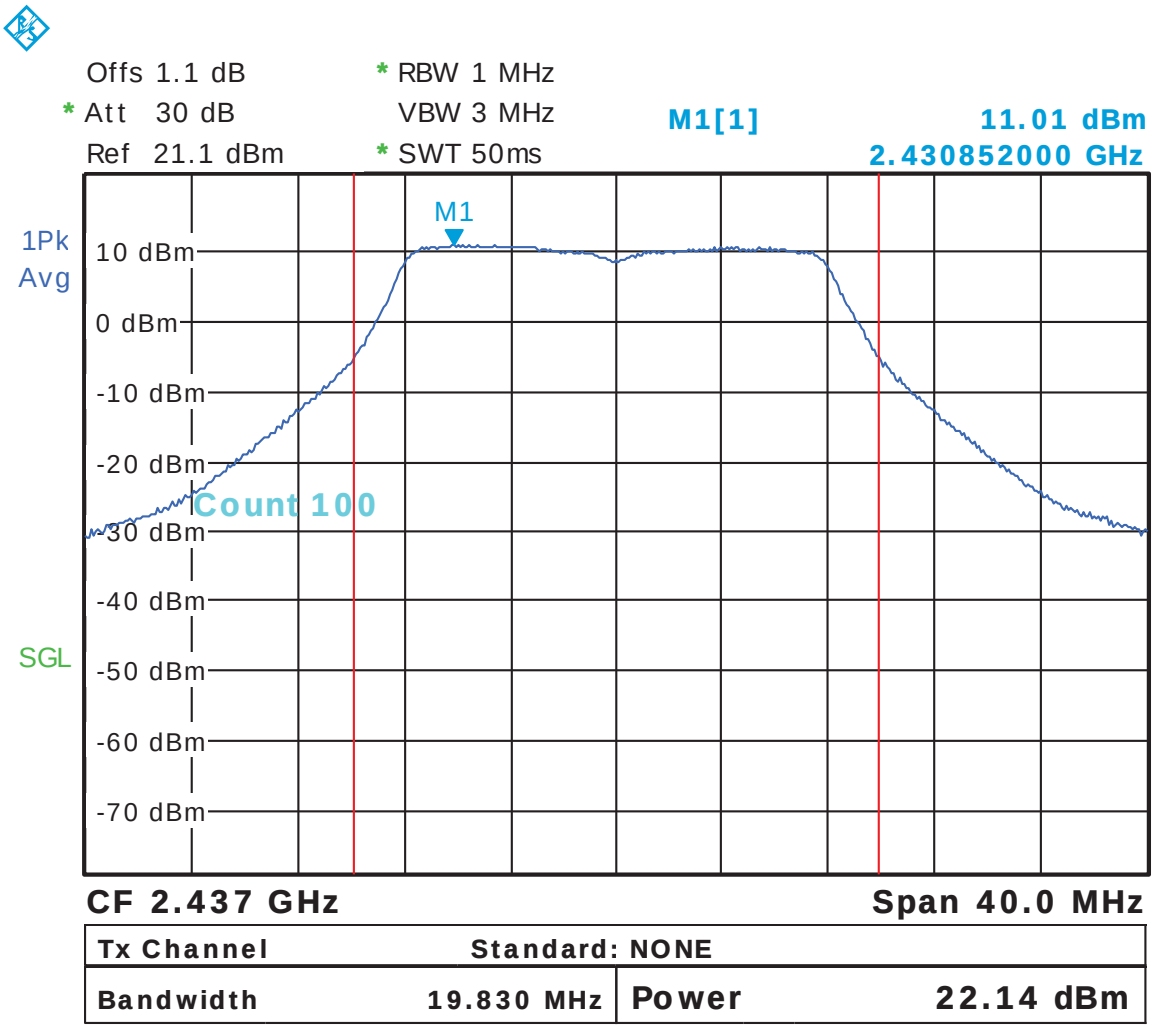

Figure 38: Maximum Transmitted Power, 2437 MHz at 802.11n (HT20), Chain 1 – 19.5Mbps

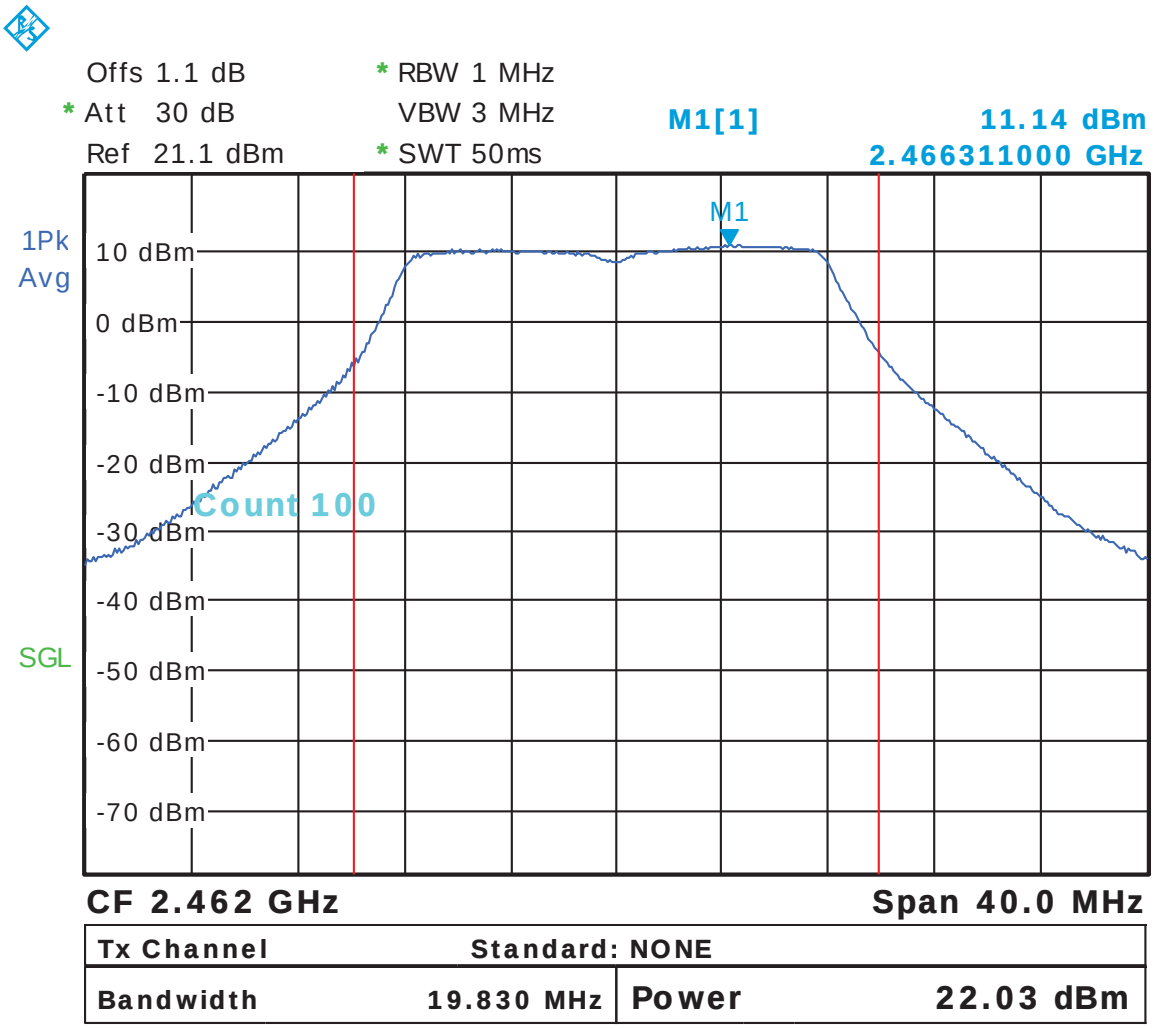

Figure 39: Maximum Transmitted Power, 2462 MHz at 802.11n (HT20), Chain 1 – 19.5Mbps

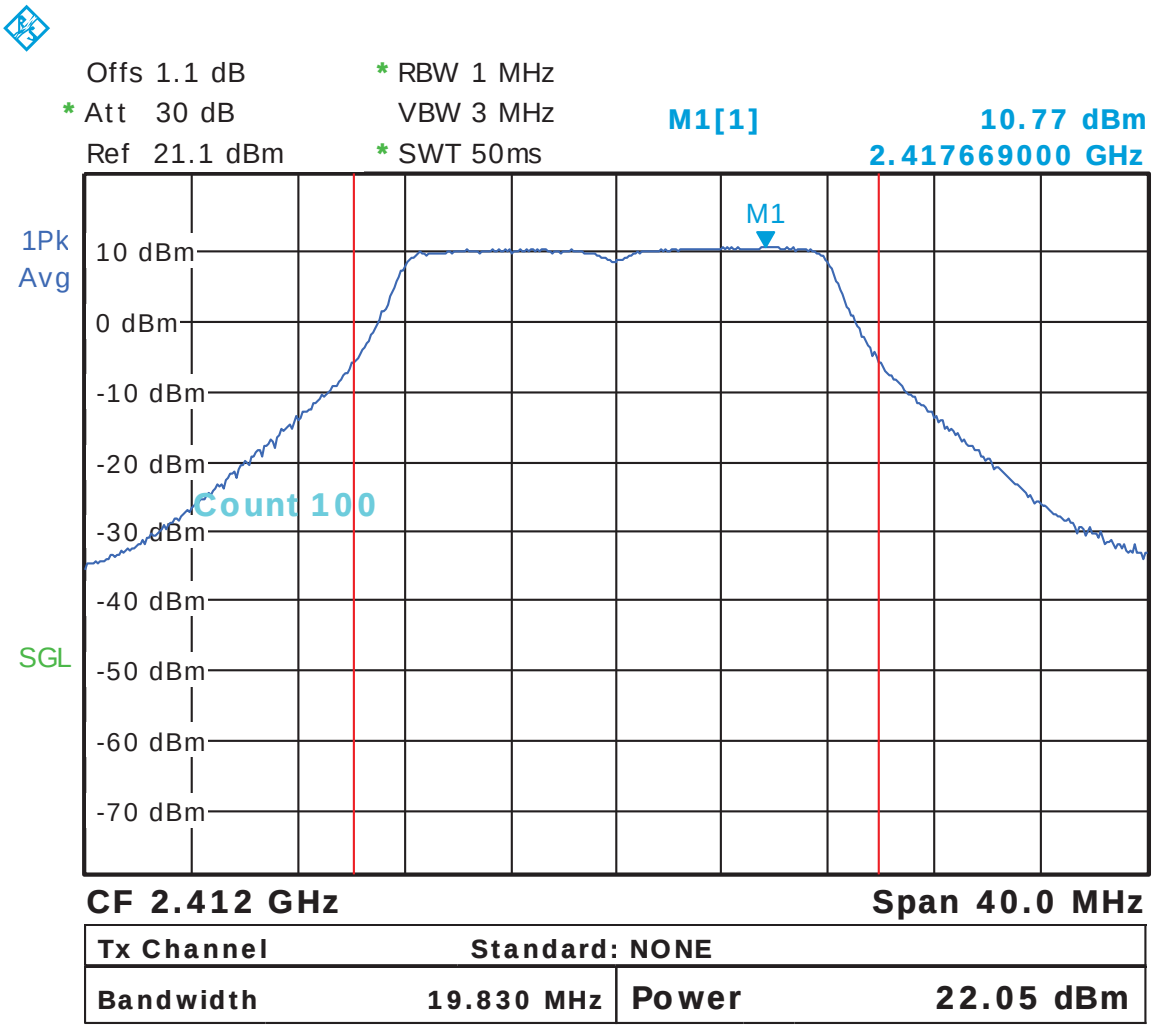

Figure 40: Maximum Transmitted Power, 2412 MHz at 802.11n (HT20), Chain 2 – 19.5Mbps

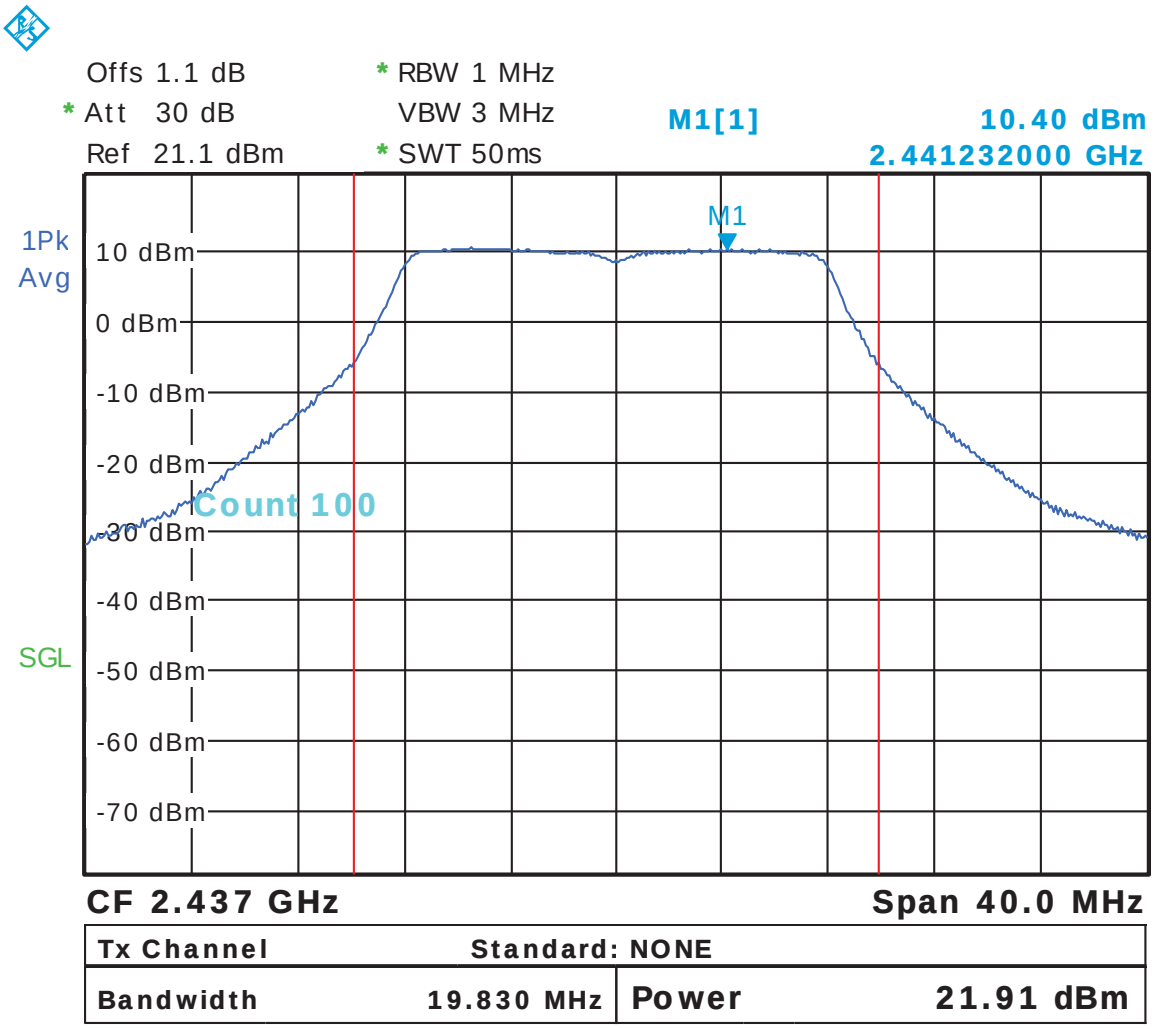

Figure 41: Maximum Transmitted Power, 2437 MHz at 802.11n (HT20), Chain 2 – 19.5Mbps

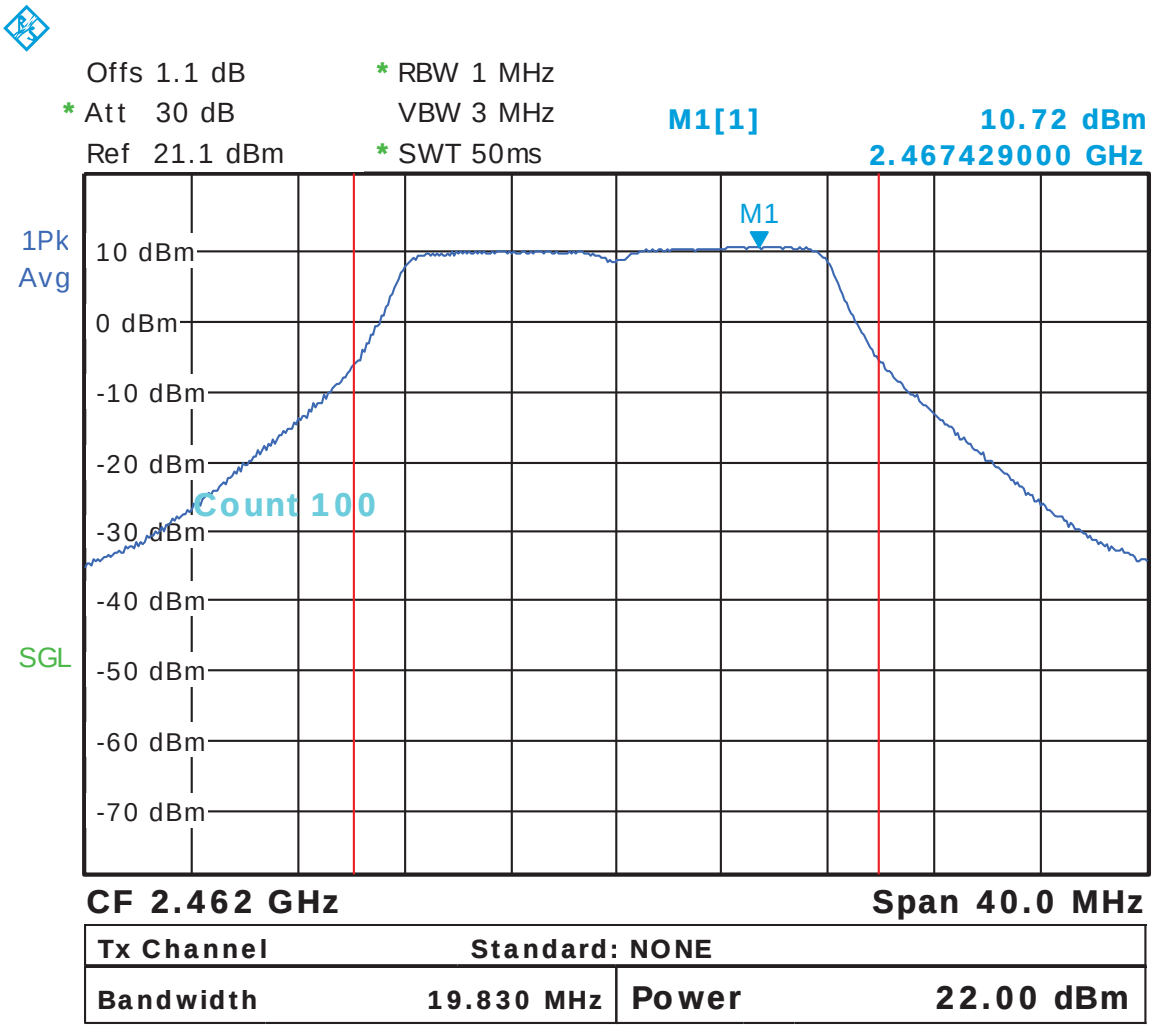

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Figure 42: Maximum Transmitted Power, 2462 MHz at 802.11n (HT20), Chain 2 – 19.5Mbps

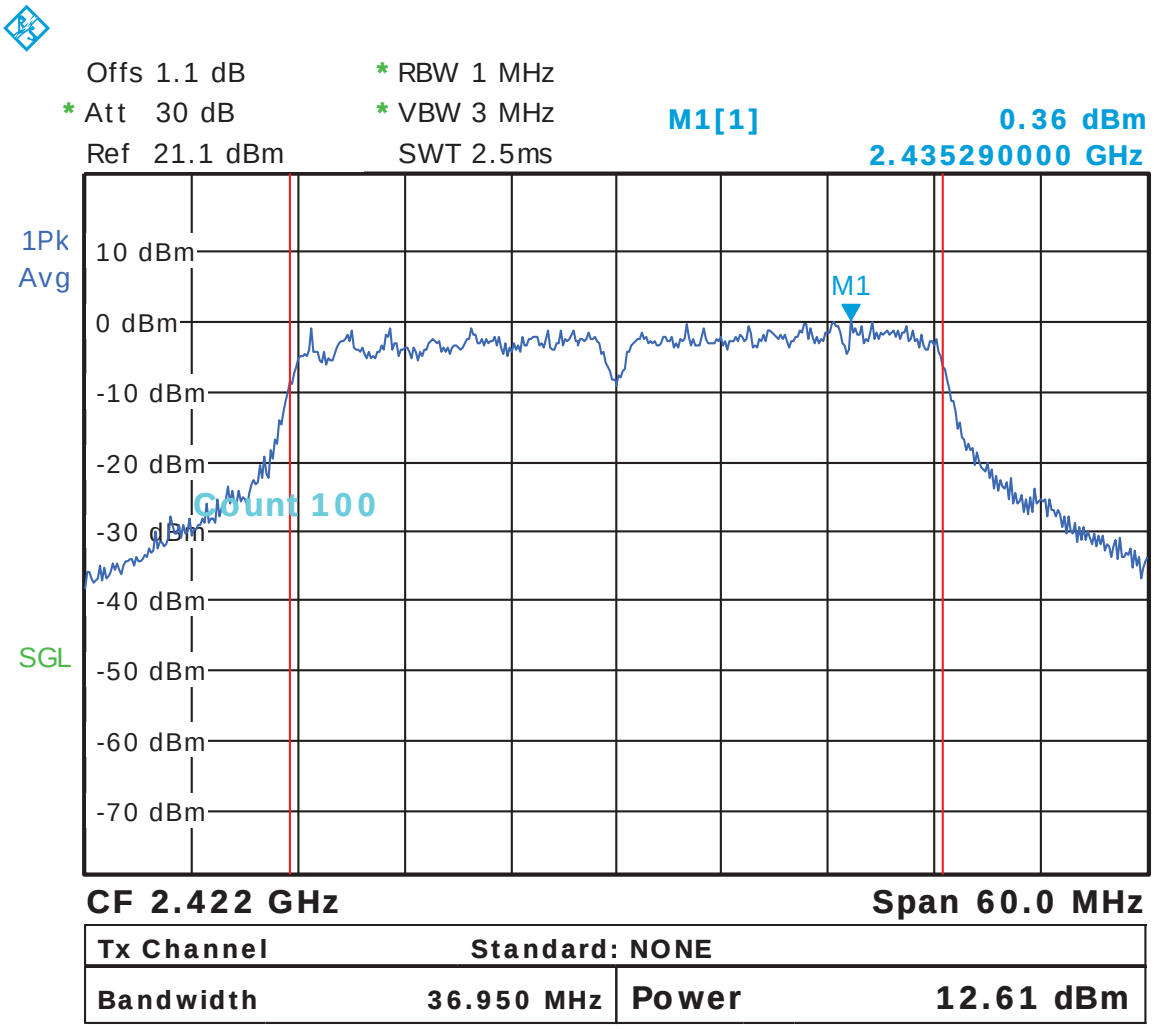

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Figure 43: Maximum Transmitted Power, 2422 MHz at 802.11n (HT40), Chain 0 – 13.5Mbps

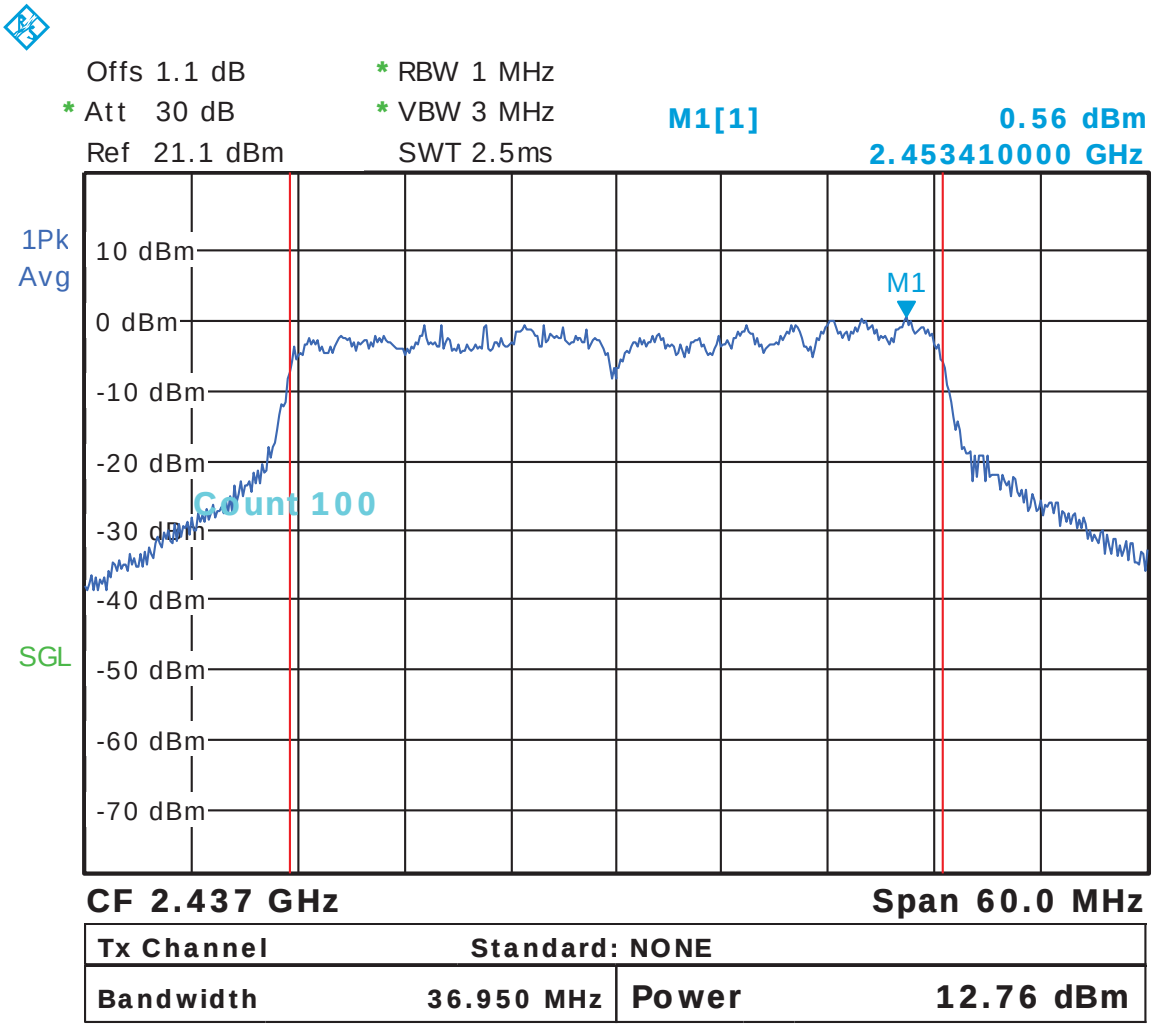

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Figure 44: Maximum Transmitted Power, 2437 MHz at 802.11n (HT40), Chain 0 – 13.5Mbps

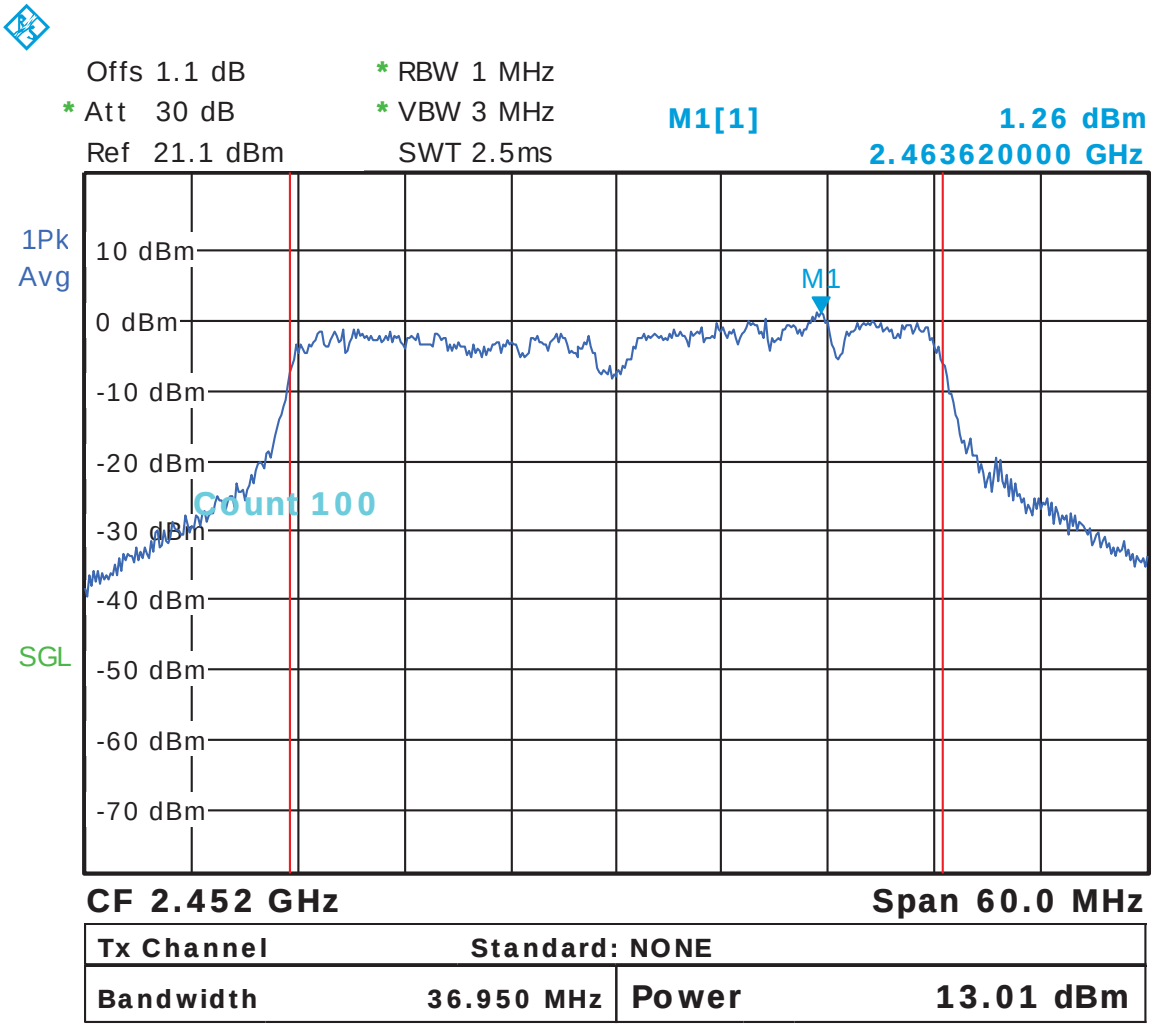

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Figure 45: Maximum Transmitted Power, 2452 MHz at 802.11n (HT40), Chain 0 – 13.5Mbps

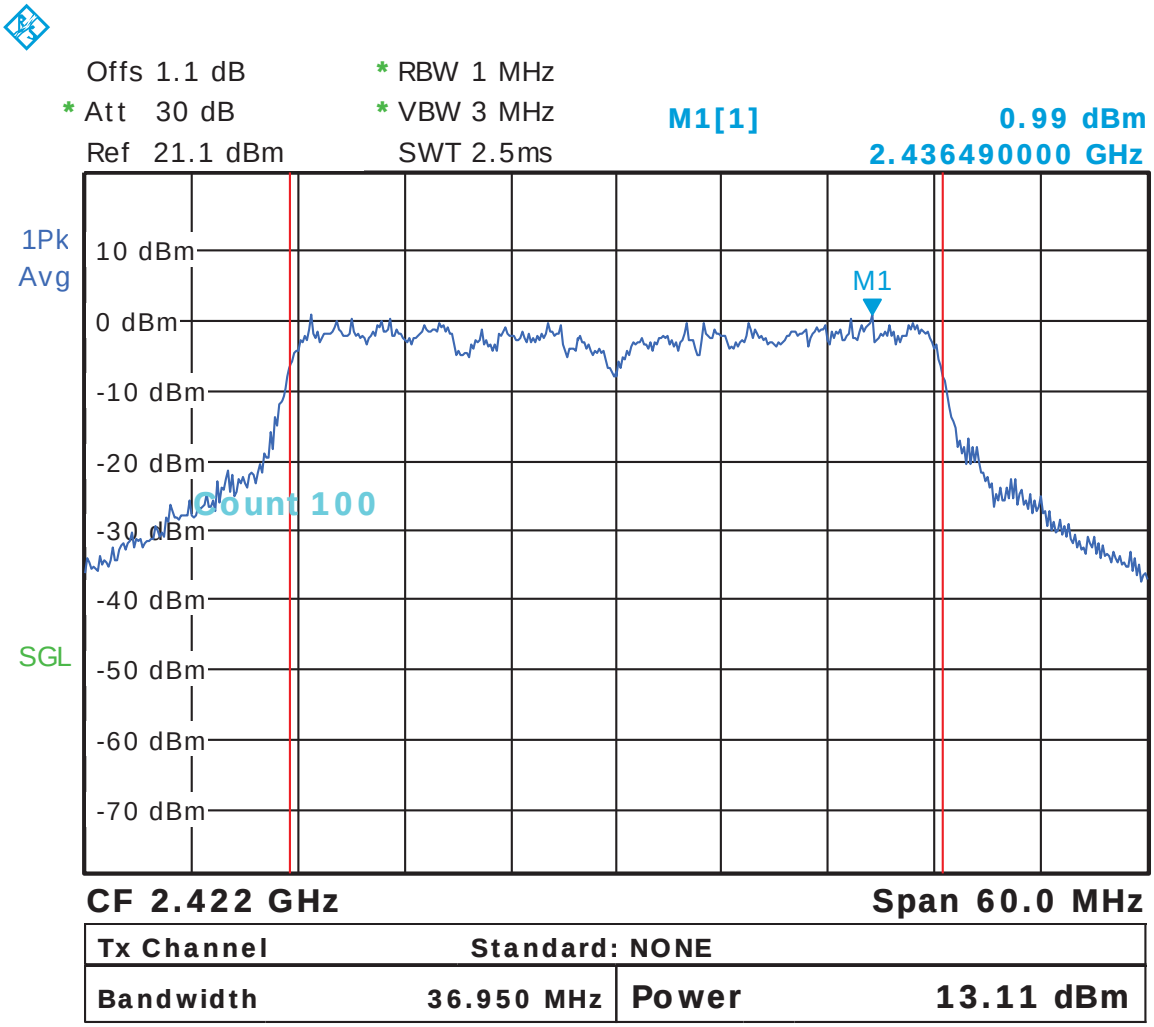

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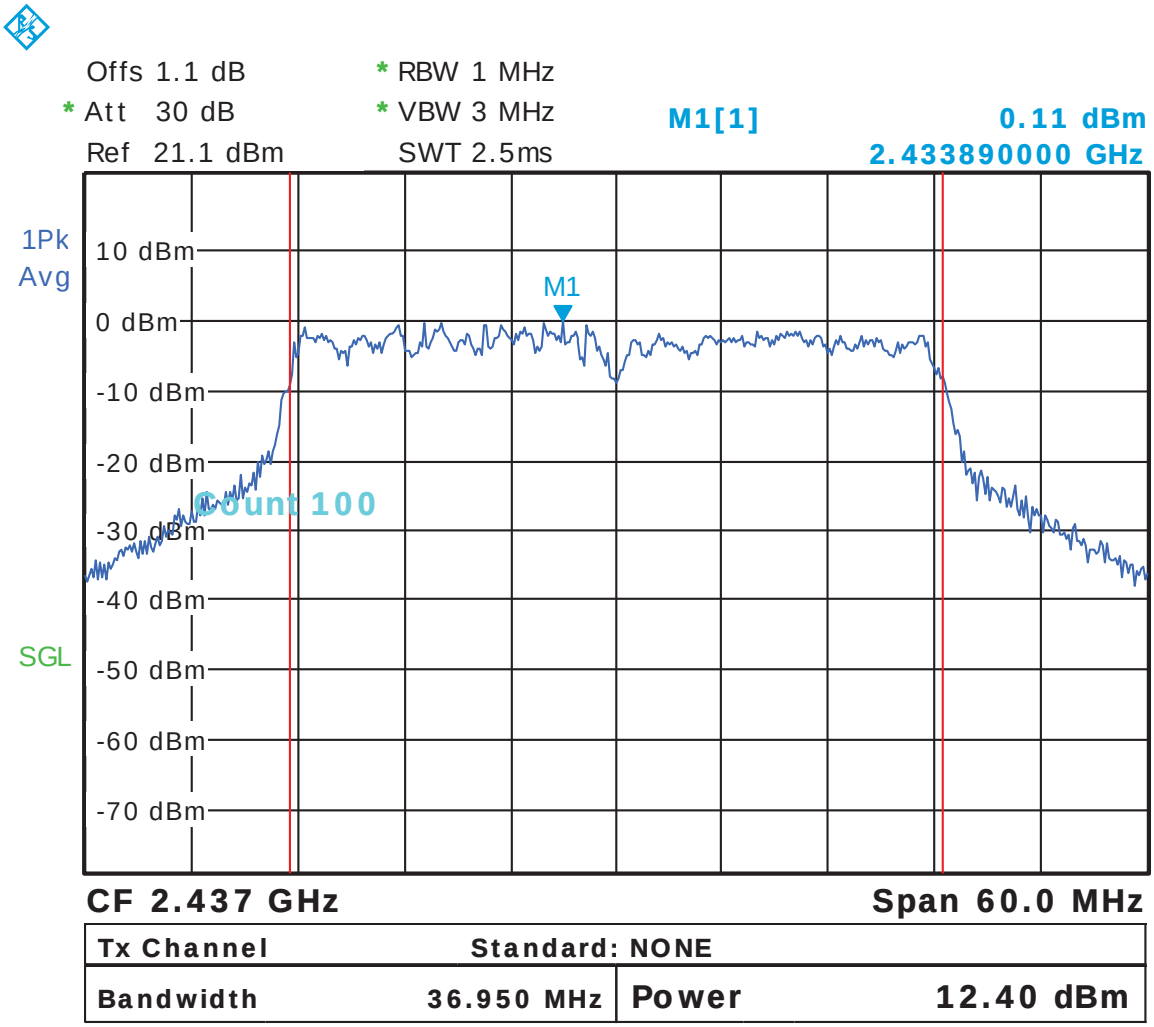
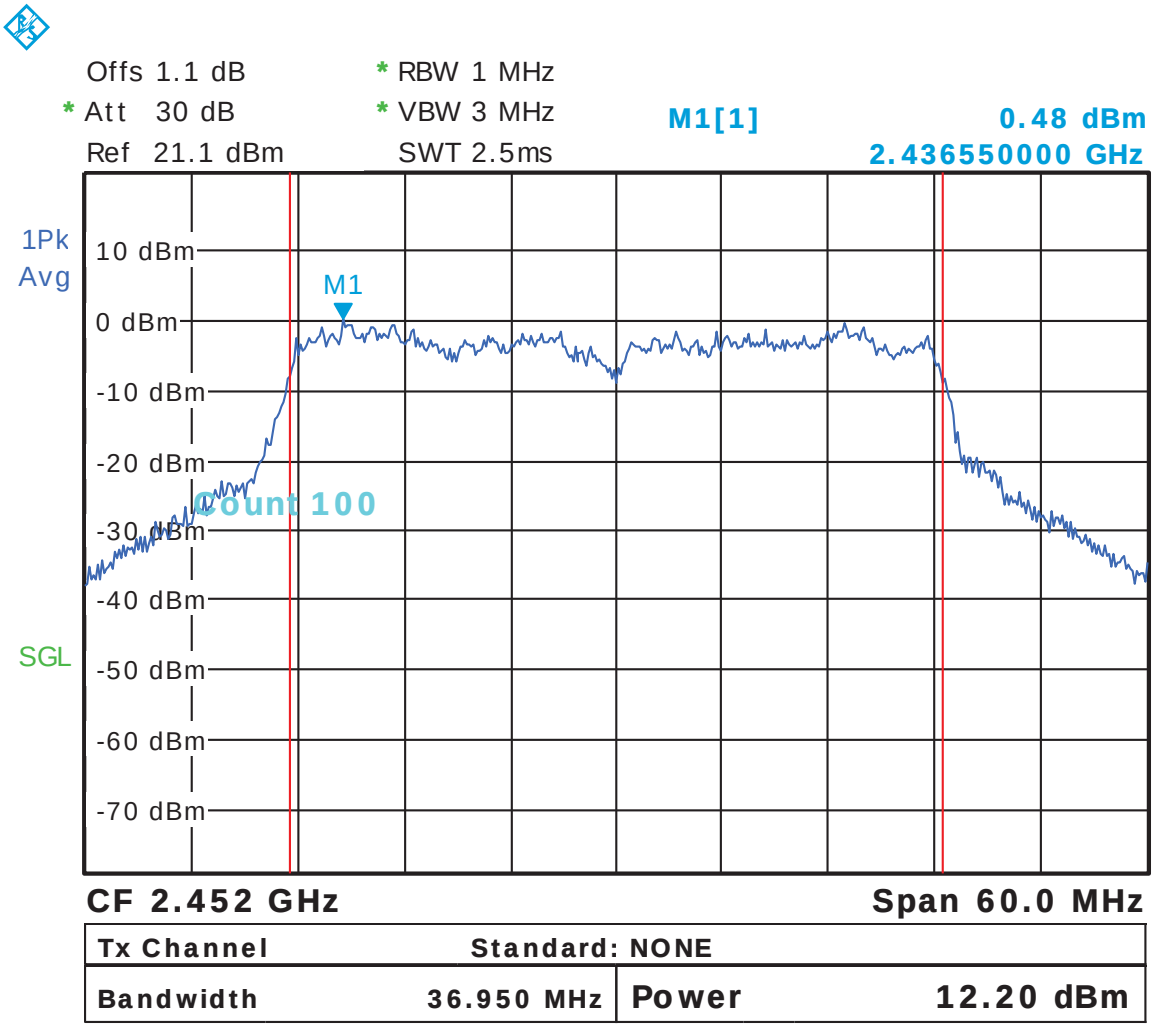
Figure 46: Maximum Transmitted Power, 2422 MHz at 802.11n (HT40), Chain 1 – 13.5Mbps



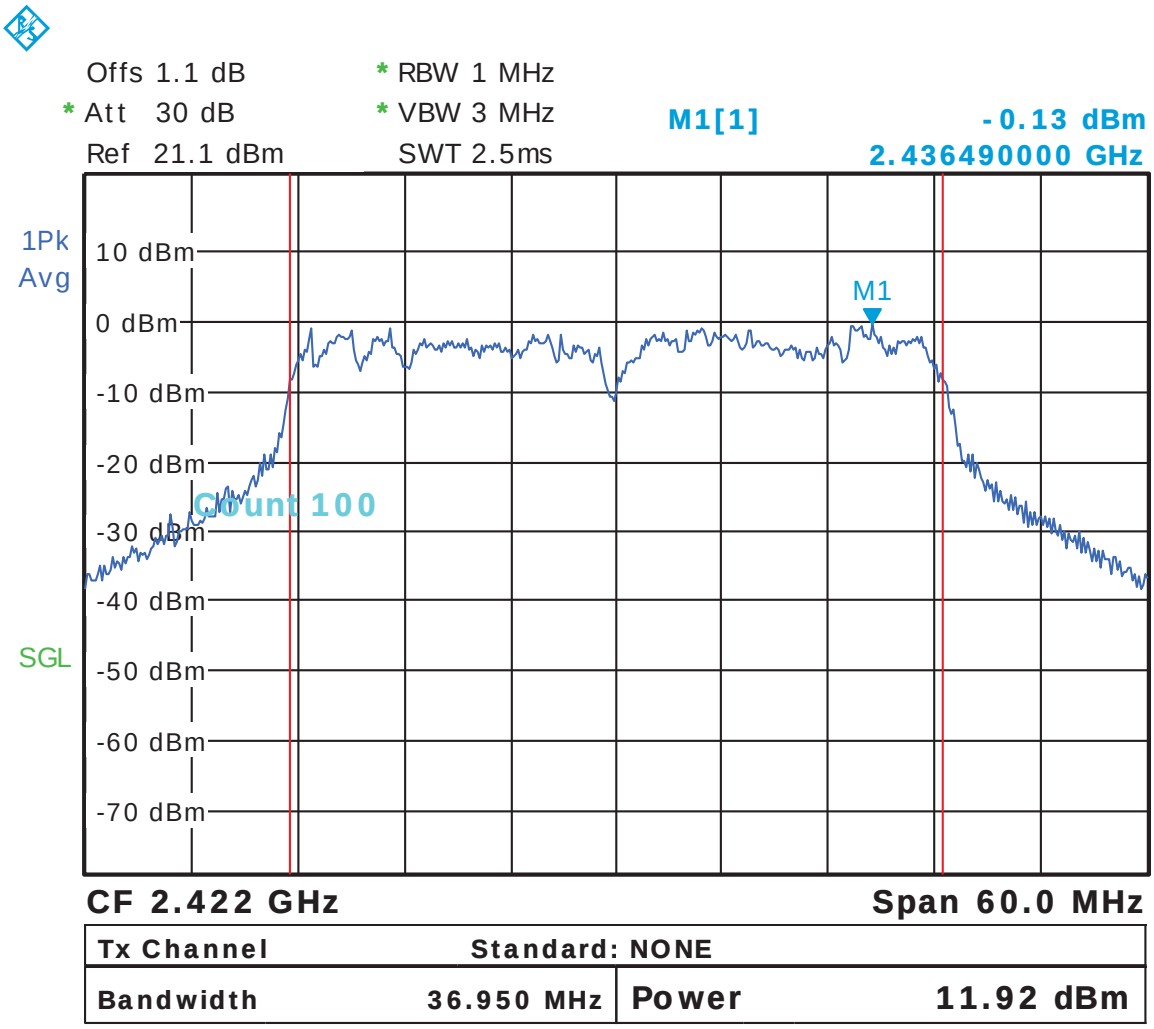
Date: 26.JAN.2011 14:56:18

Figure 47: Maximum Transmitted Power, 2437 MHz at 802.11n (HT40), Chain 1 – 13.5Mbps



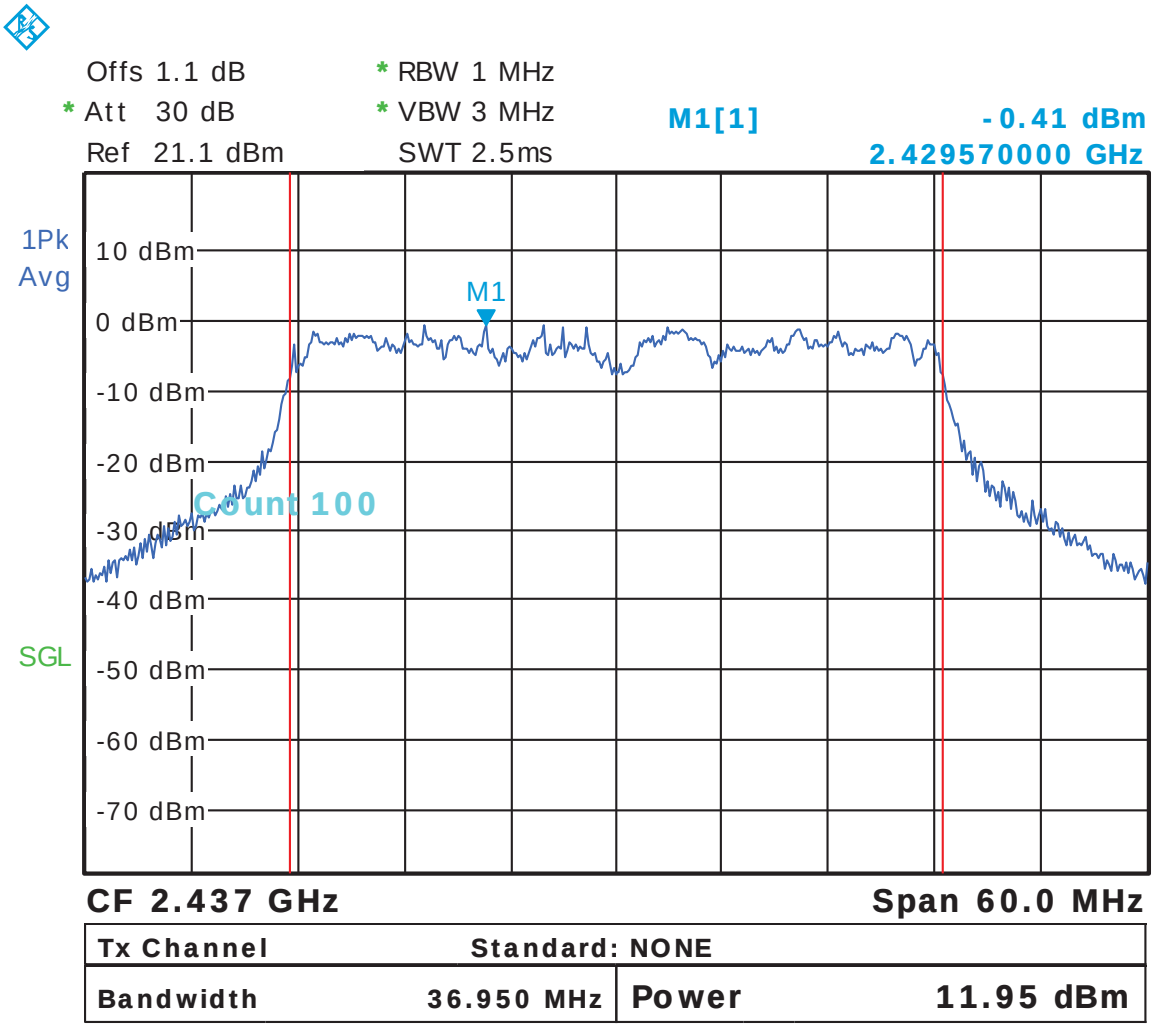
Date: 26.JAN.2011 14:55:21

Figure 48: Maximum Transmitted Power, 2452 MHz at 802.11n (HT40), Chain 1 – 13.5Mbps



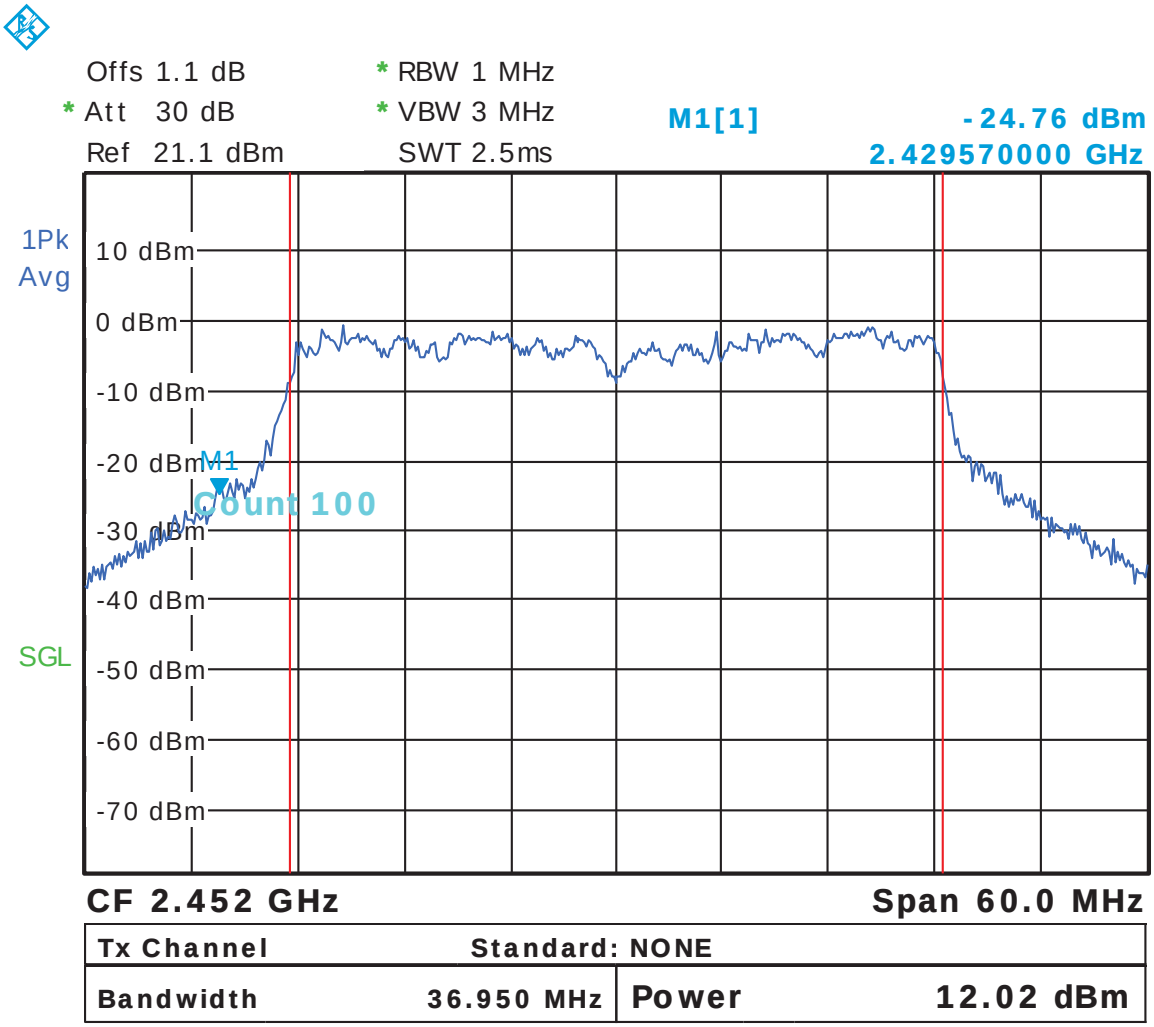
Date: 26.JAN.2011 14:51:14

Figure 49: Maximum Transmitted Power, 2422 MHz at 802.11n (HT40), Chain 2 – 13.5Mbps



Date: 26.JAN.2011 14:52:35

Figure 50: Maximum Transmitted Power, 2437 MHz at 802.11n (HT40), Chain 2 – 13.5Mbps



Date: 26.JAN.2011 14:53:33

Figure 51: Maximum Transmitted Power, 2452 MHz at 802.11n (HT40), Chain 2 – 13.5Mbps

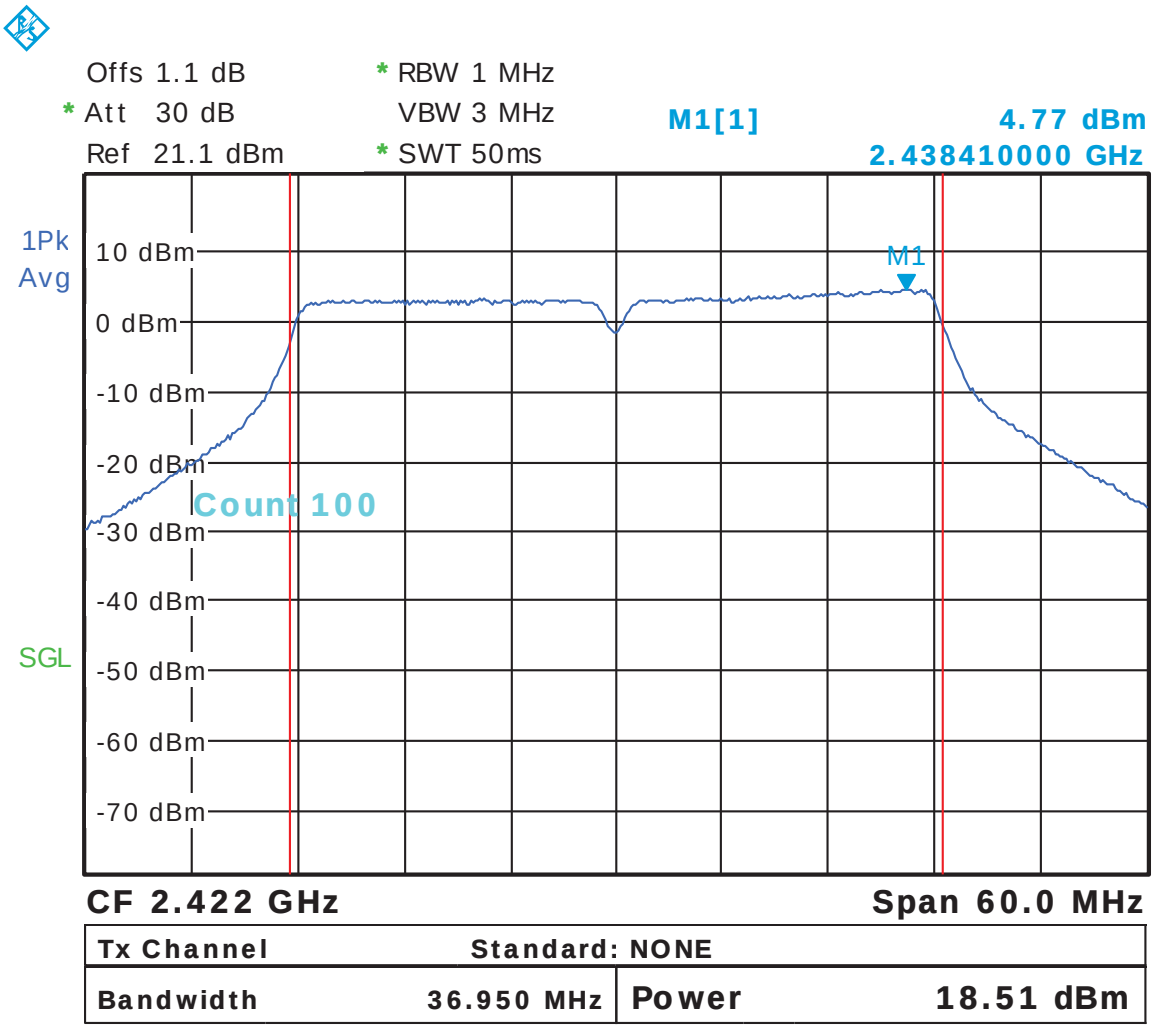


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Figure 52: Maximum Transmitted Power, 2422 MHz at 802.11n (HT40), Chain 0 – 27Mbps

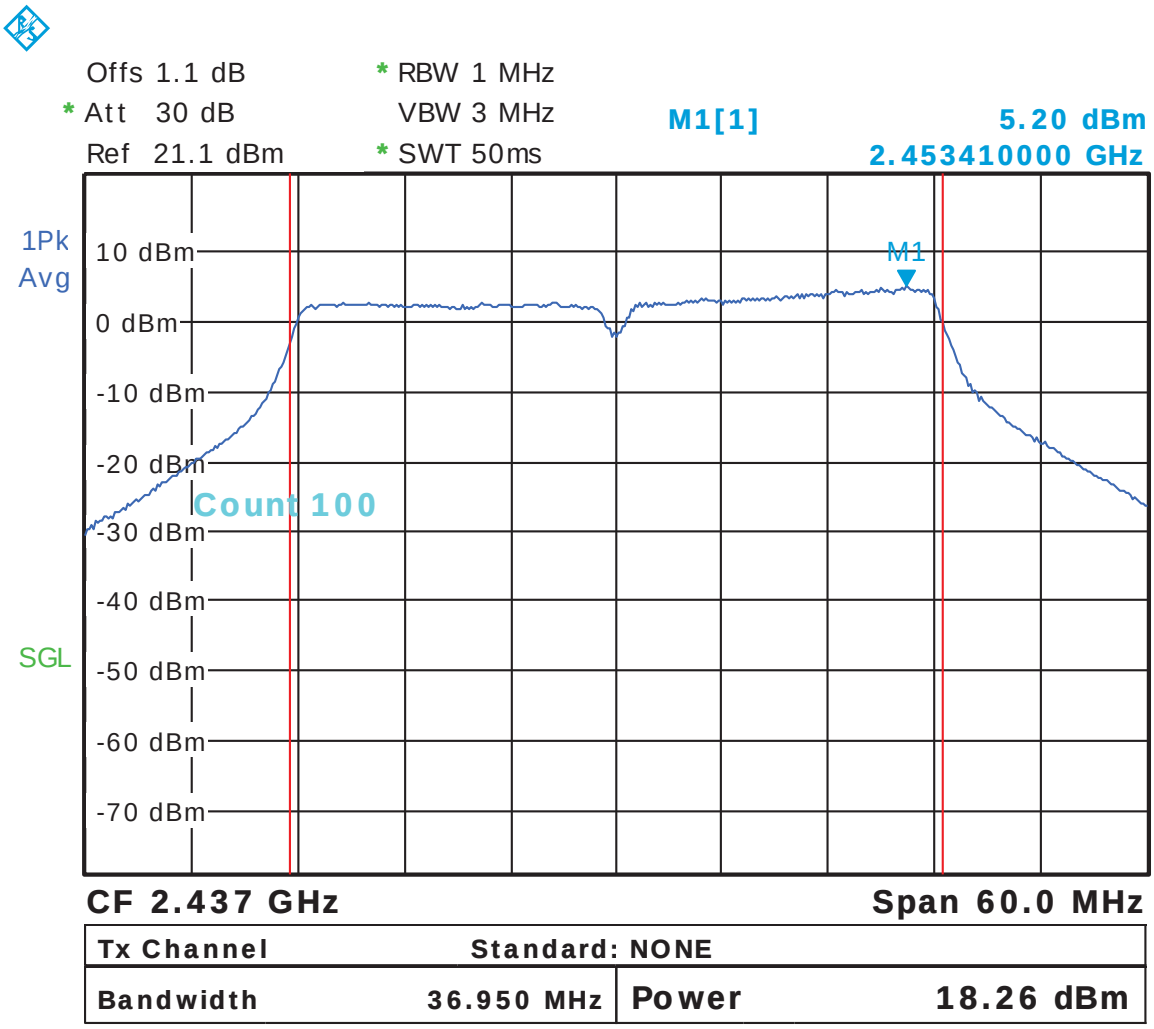
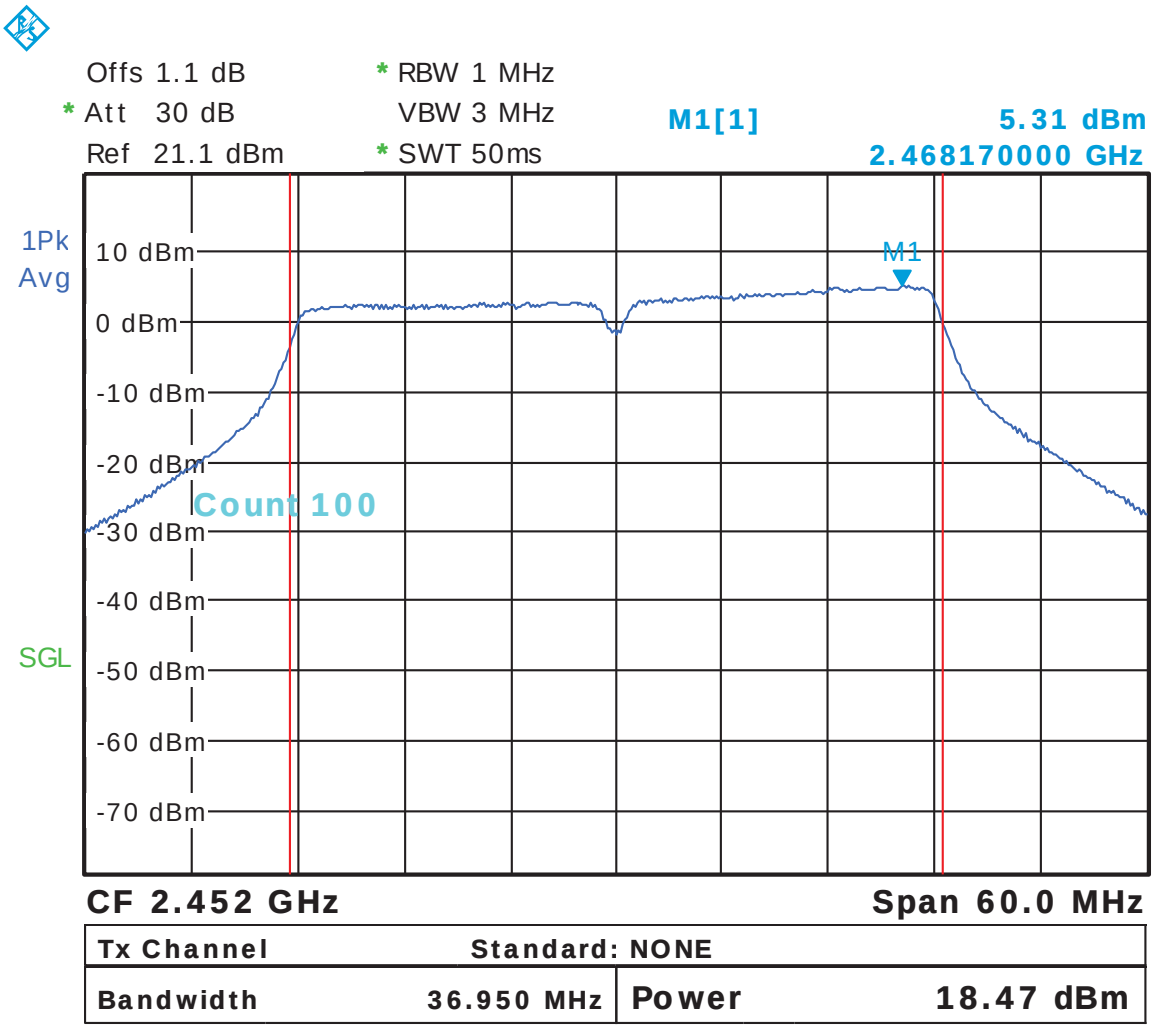


Figure 53: Maximum Transmitted Power, 2437 MHz at 802.11n (HT40), Chain 0 – 27Mbps



Date: 2.MAR.2011 16:06:43

Figure 54: Maximum Transmitted Power, 2452 MHz at 802.11n (HT40), Chain 0 – 27Mbps

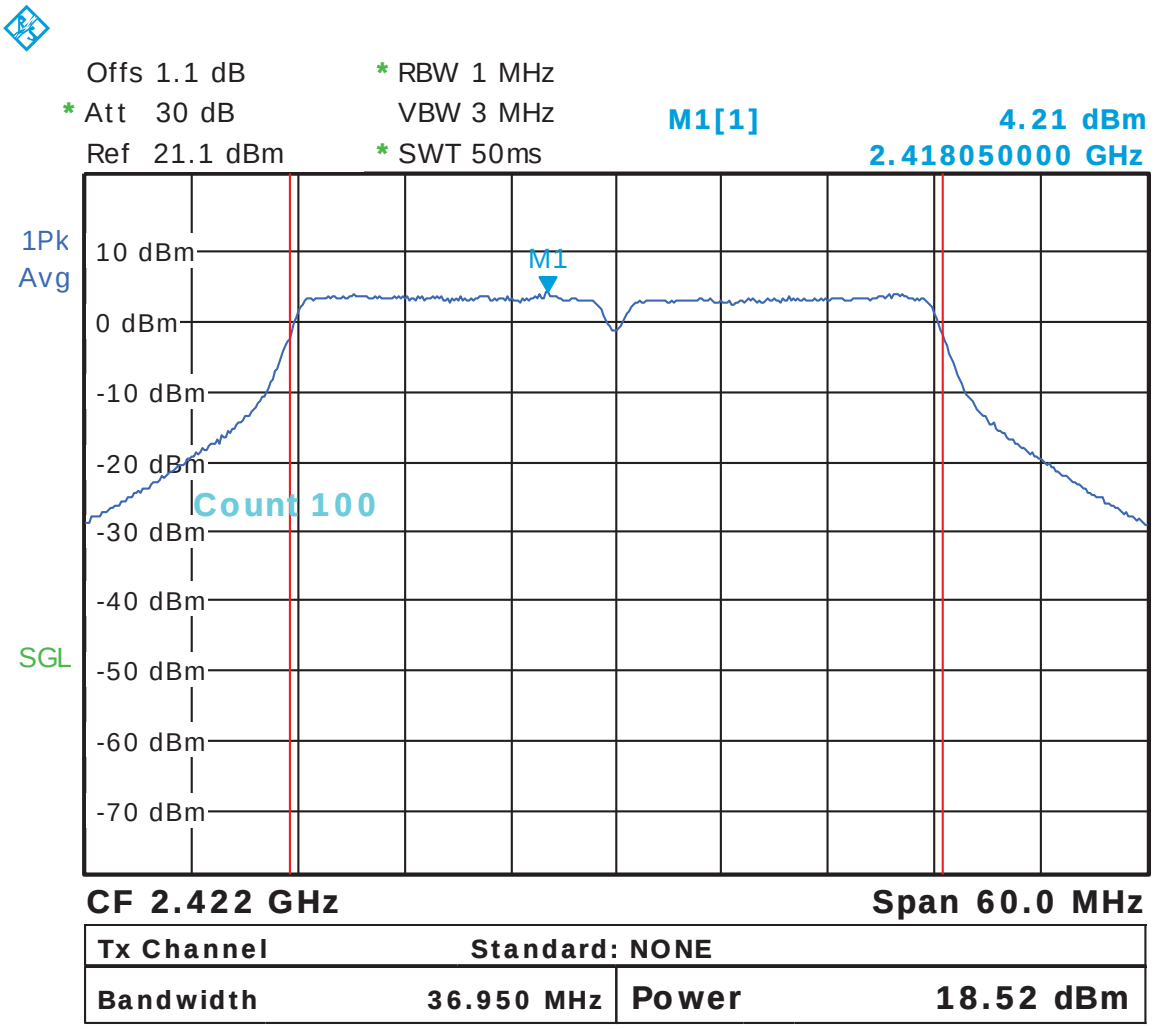


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Figure 55: Maximum Transmitted Power, 2422 MHz at 802.11n (HT40), Chain 1 – 27Mbps

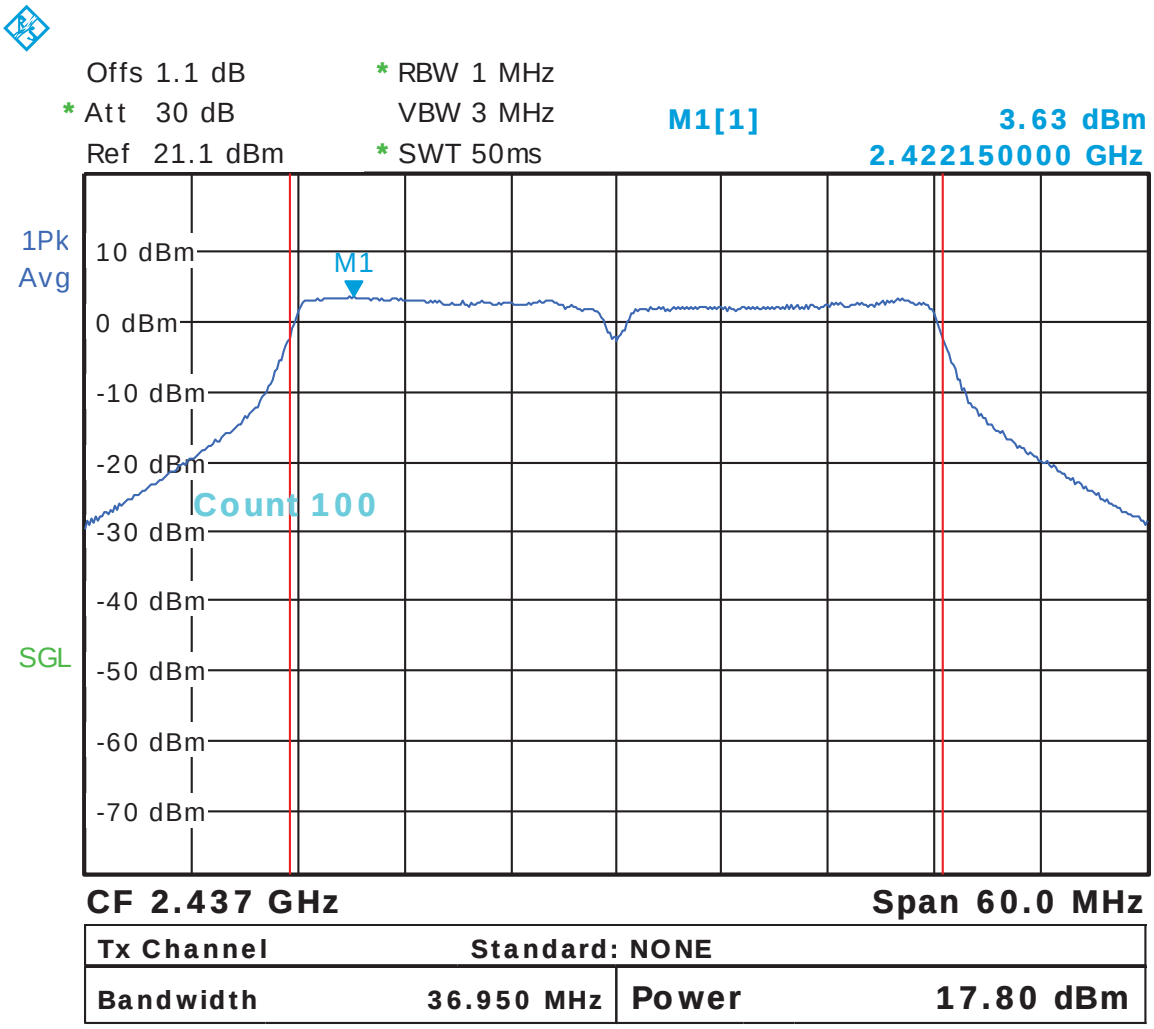

Figure 56: Maximum Transmitted Power, 2437 MHz at 802.11n (HT40), Chain 1 – 27Mbps

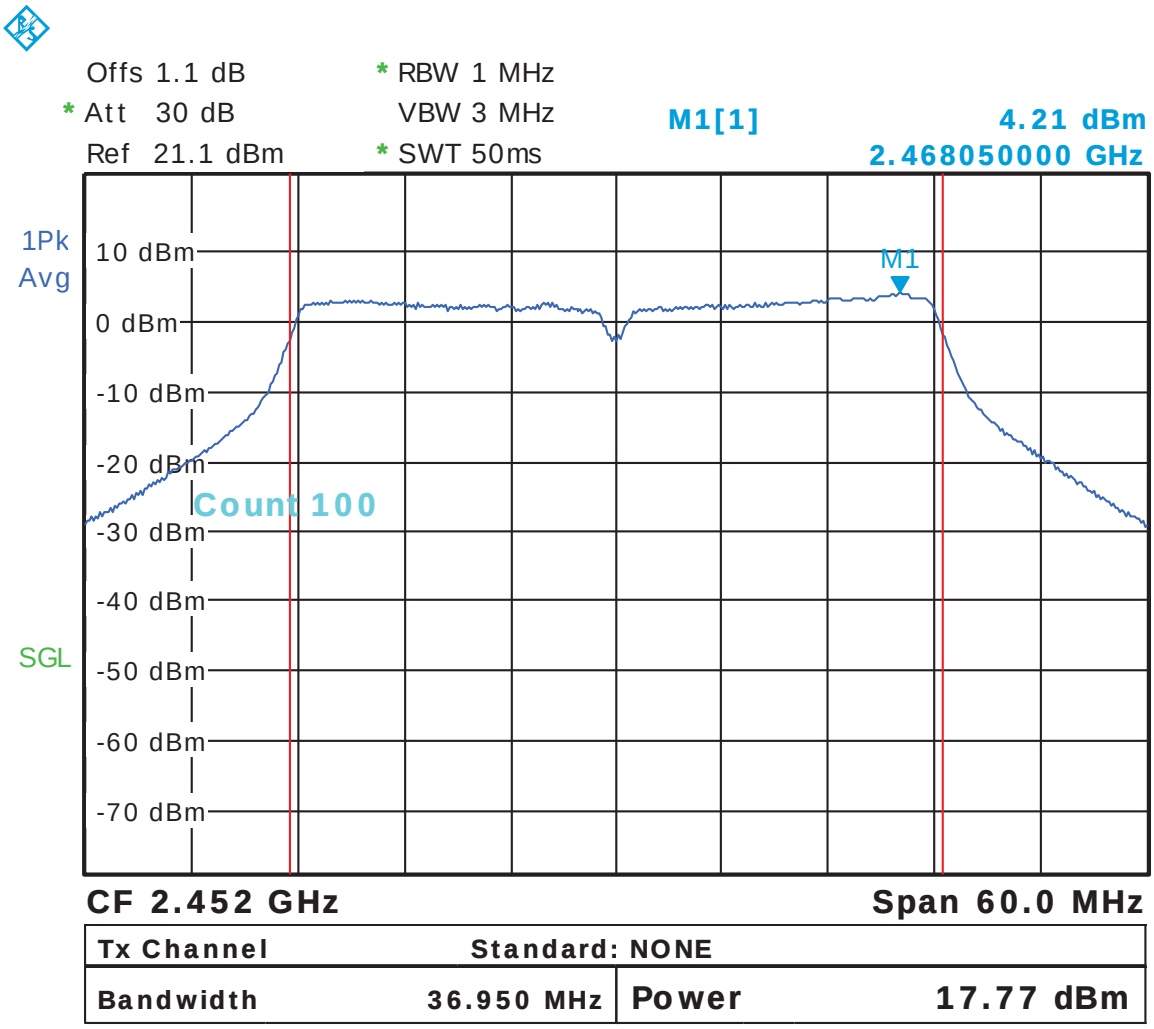

Figure 57: Maximum Transmitted Power, 2452 MHz at 802.11n (HT40), Chain 1 – 27Mbps

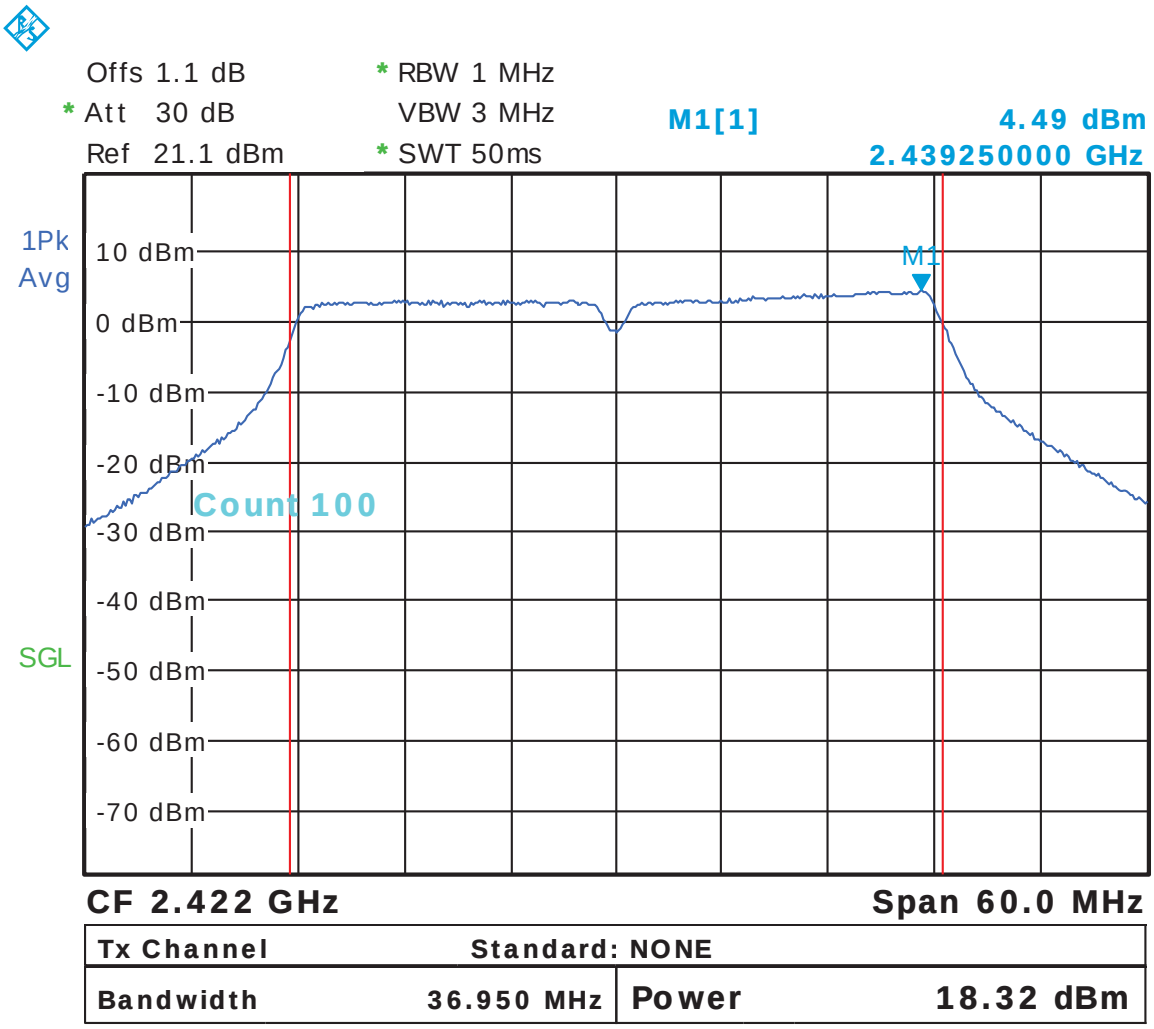

Figure 58: Maximum Transmitted Power, 2422 MHz at 802.11n (HT40), Chain 0 – 40.5Mbps

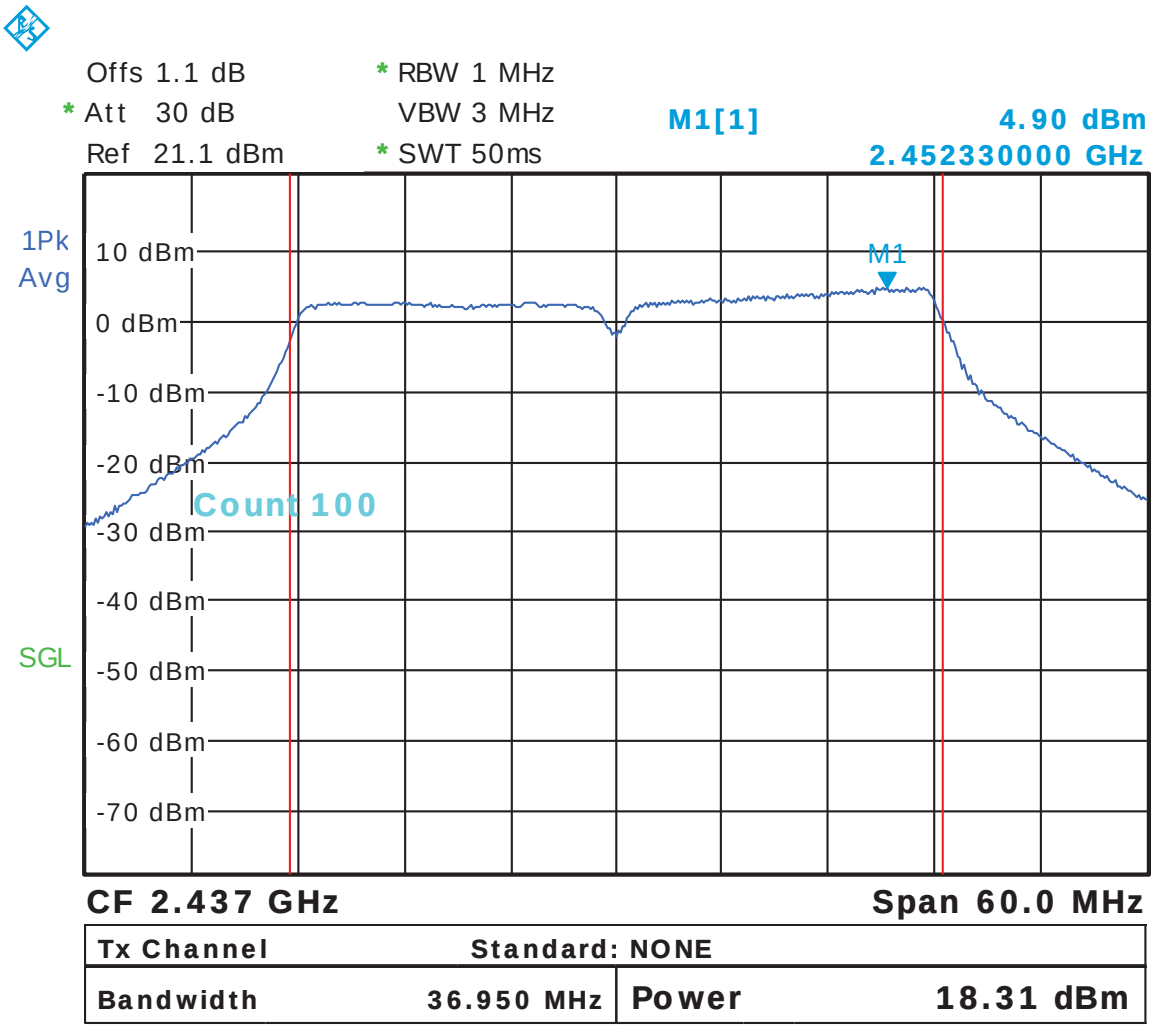

Figure 59: Maximum Transmitted Power, 2437 MHz at 802.11n (HT40), Chain 0 – 40.5Mbps

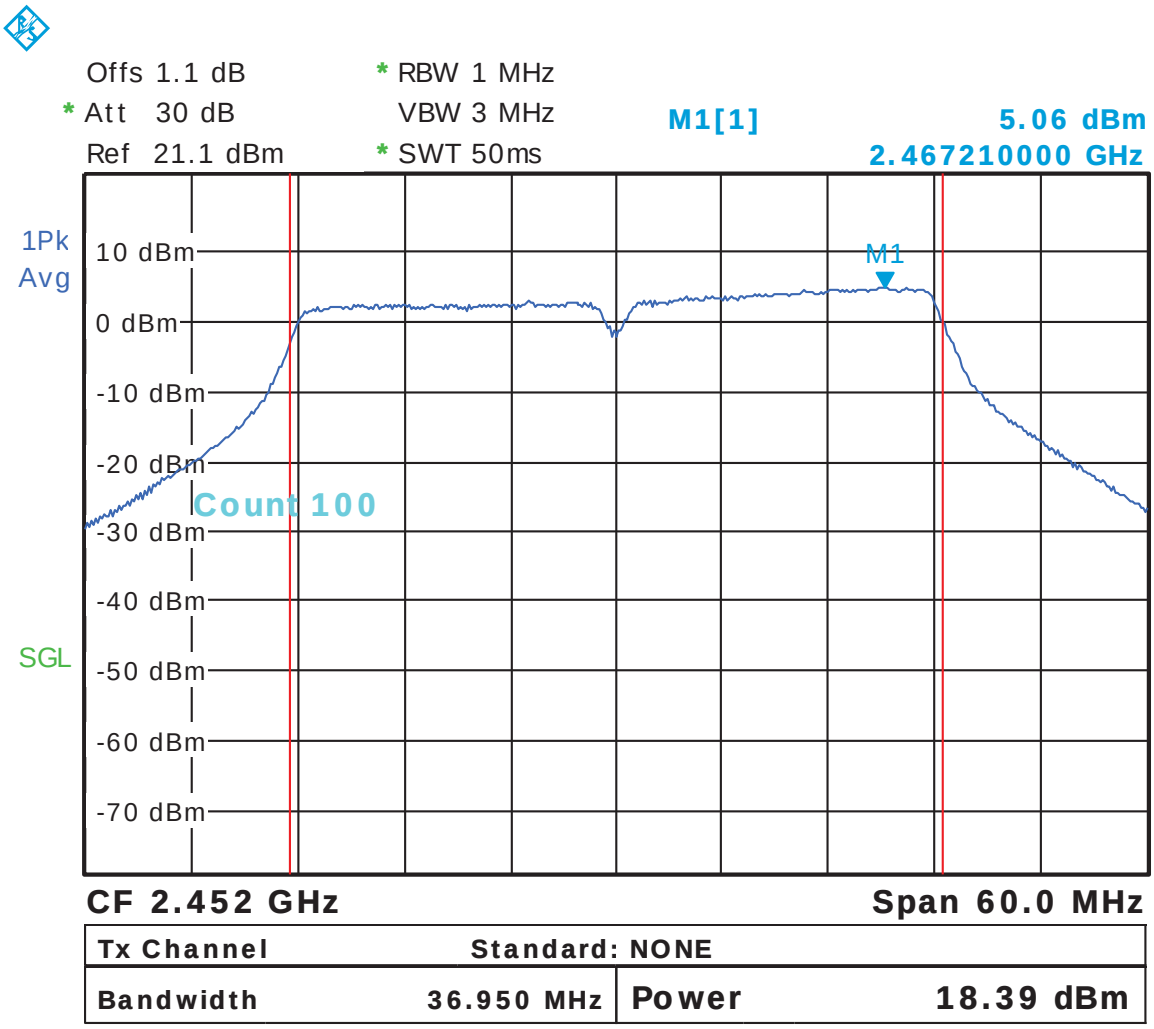

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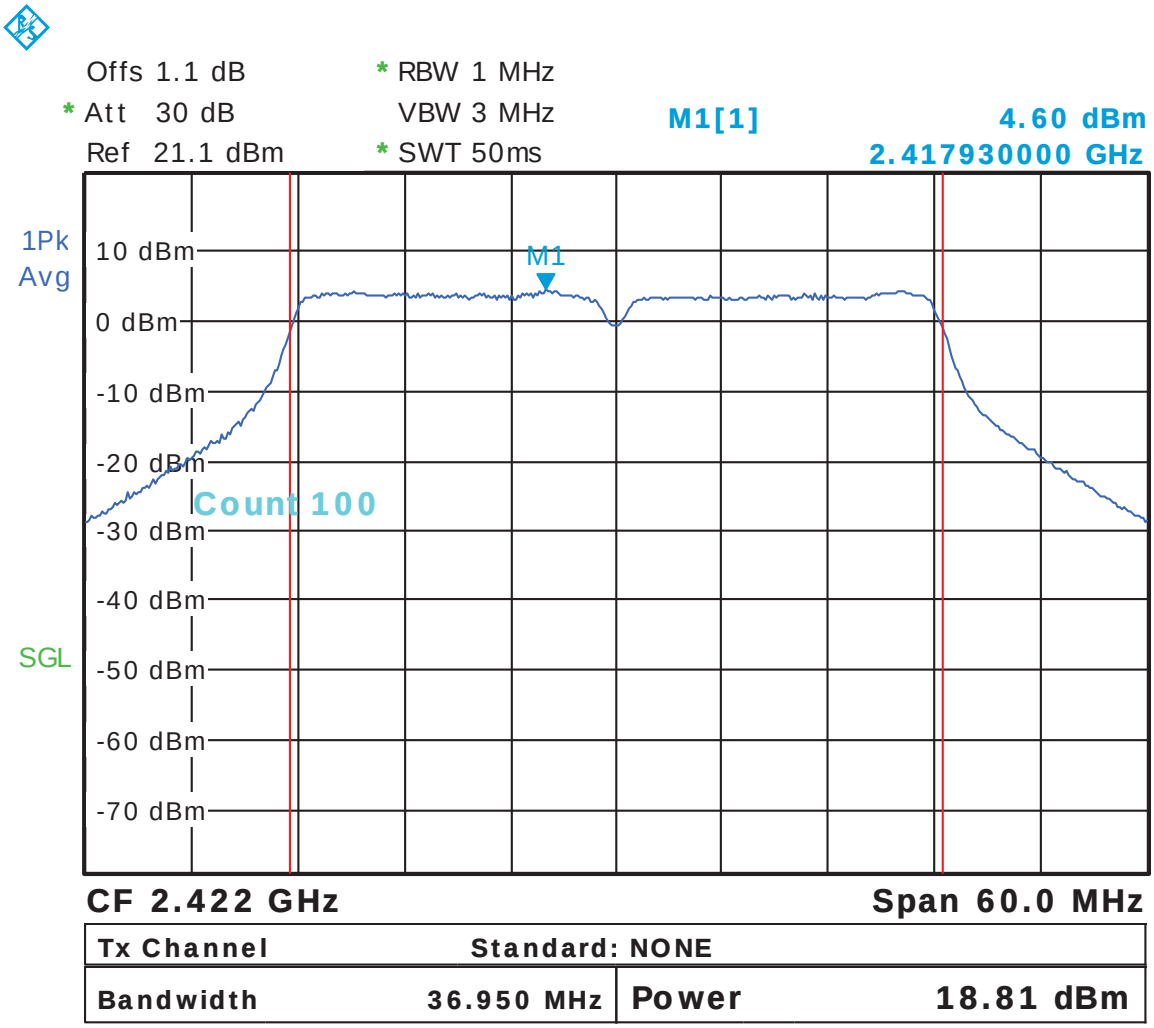
Figure 60: Maximum Transmitted Power, 2452 MHz at 802.11n (HT40), Chain 0 – 40.5Mbps



Date: 2.MAR.2011 16:29:56

Figure 61: Maximum Transmitted Power, 2422 MHz at 802.11n (HT40), Chain 1 – 40.5Mbps

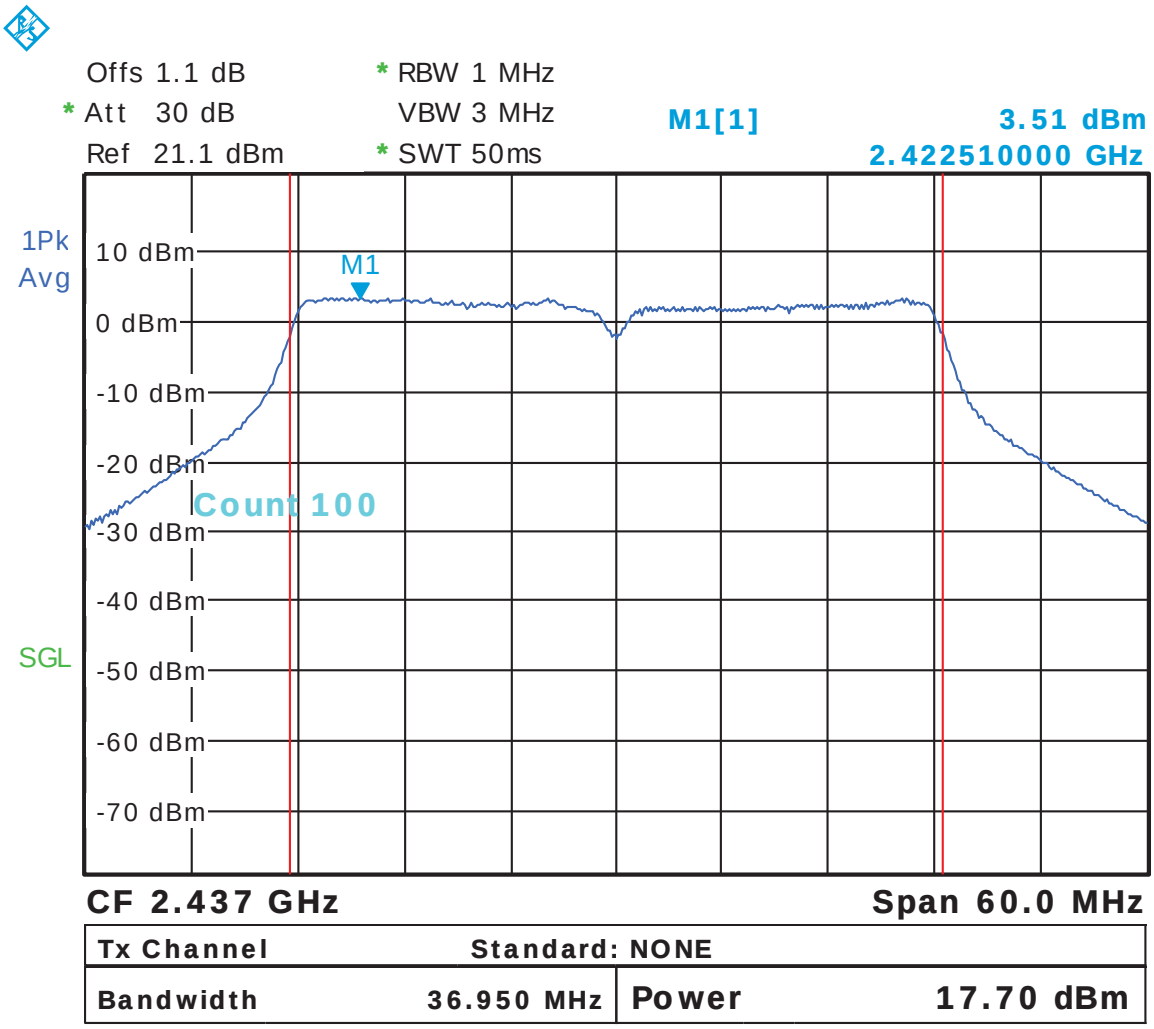


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Figure 62: Maximum Transmitted Power, 2437 MHz at 802.11n (HT40), Chain 1 – 40.5Mbps

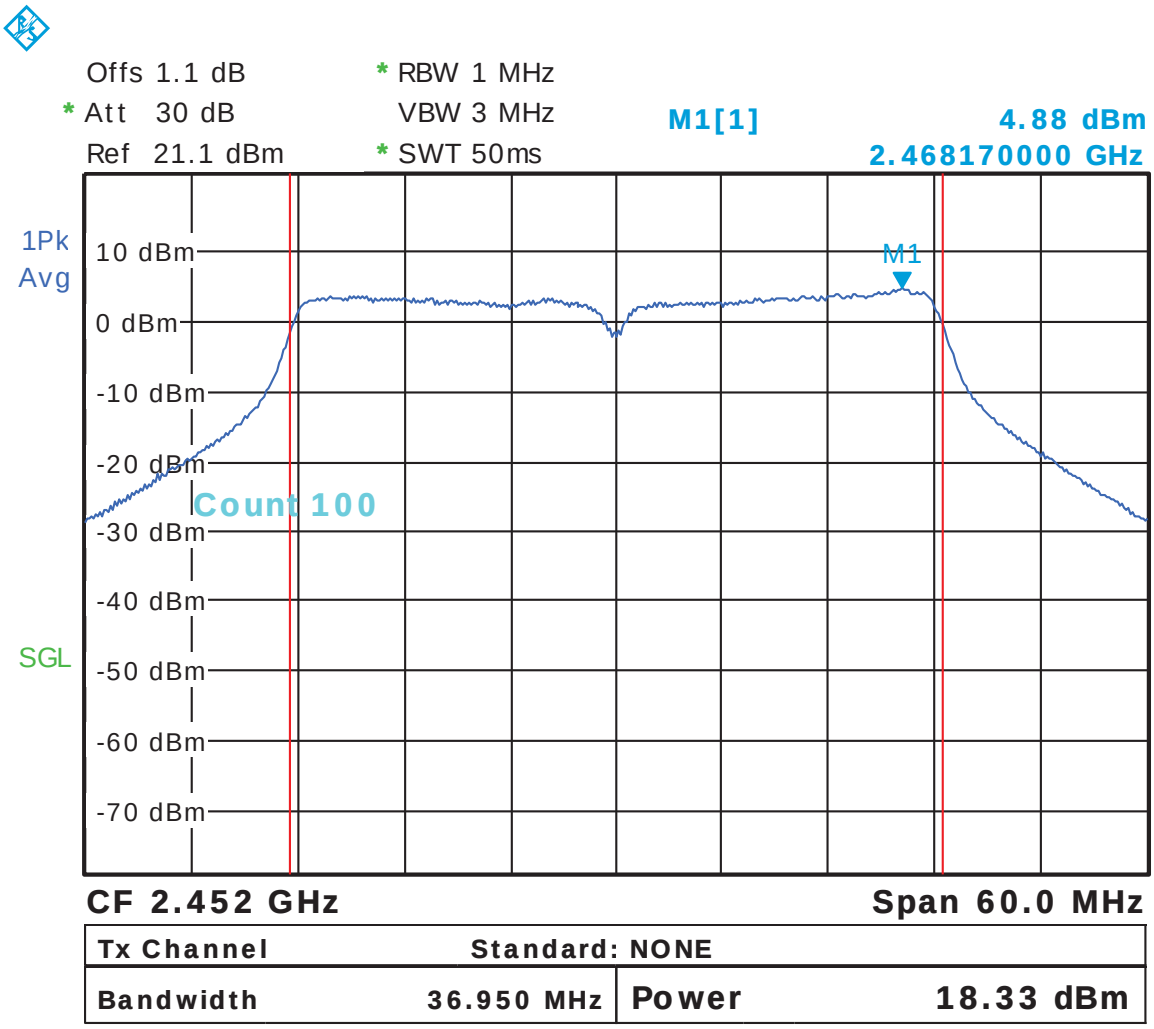


Figure 63: Maximum Transmitted Power, 2452 MHz at 802.11n (HT40), Chain 1 – 40.5Mbps

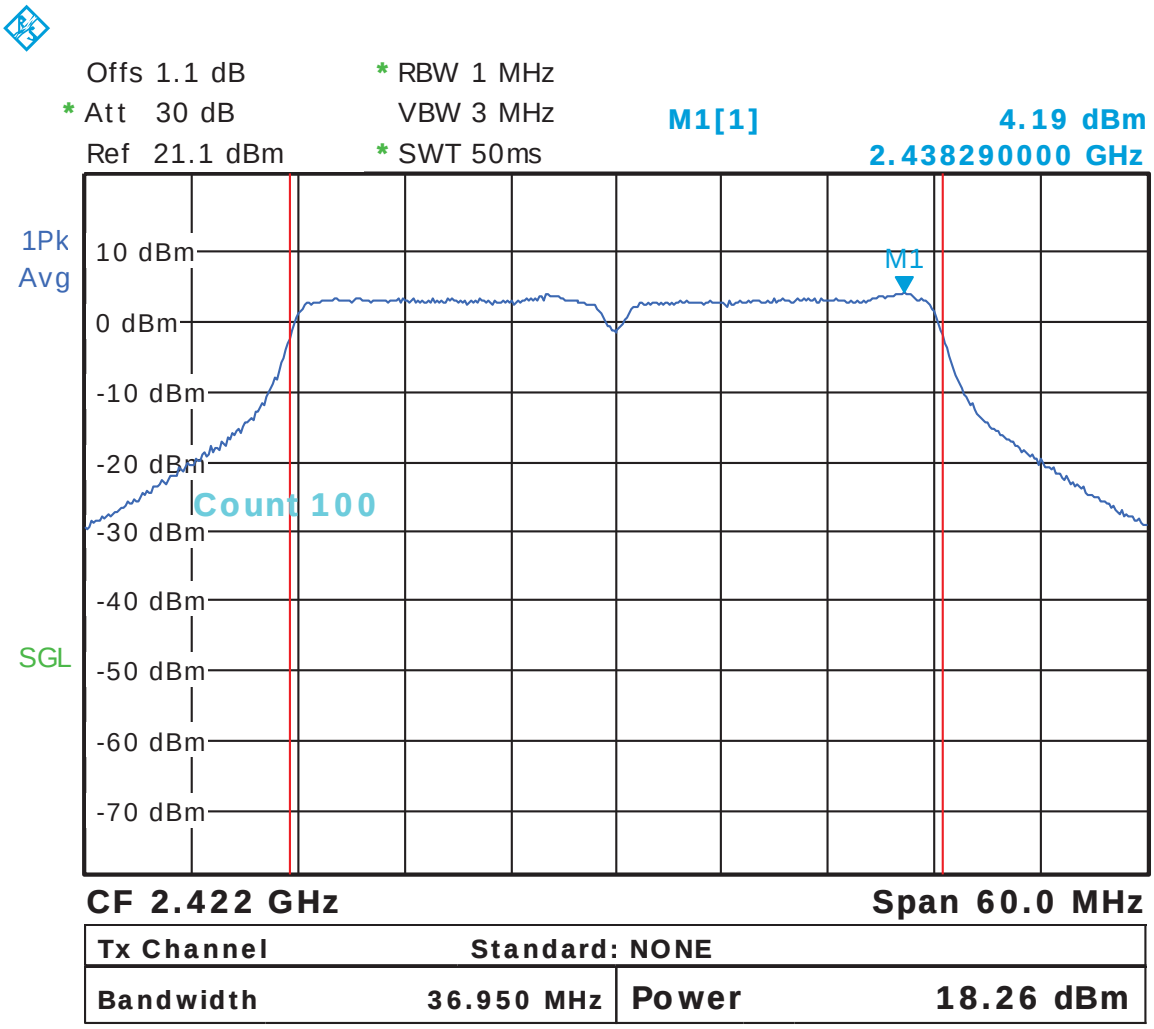


Figure 64: Maximum Transmitted Power, 2422 MHz at 802.11n (HT40), Chain 2 – 40.5Mbps

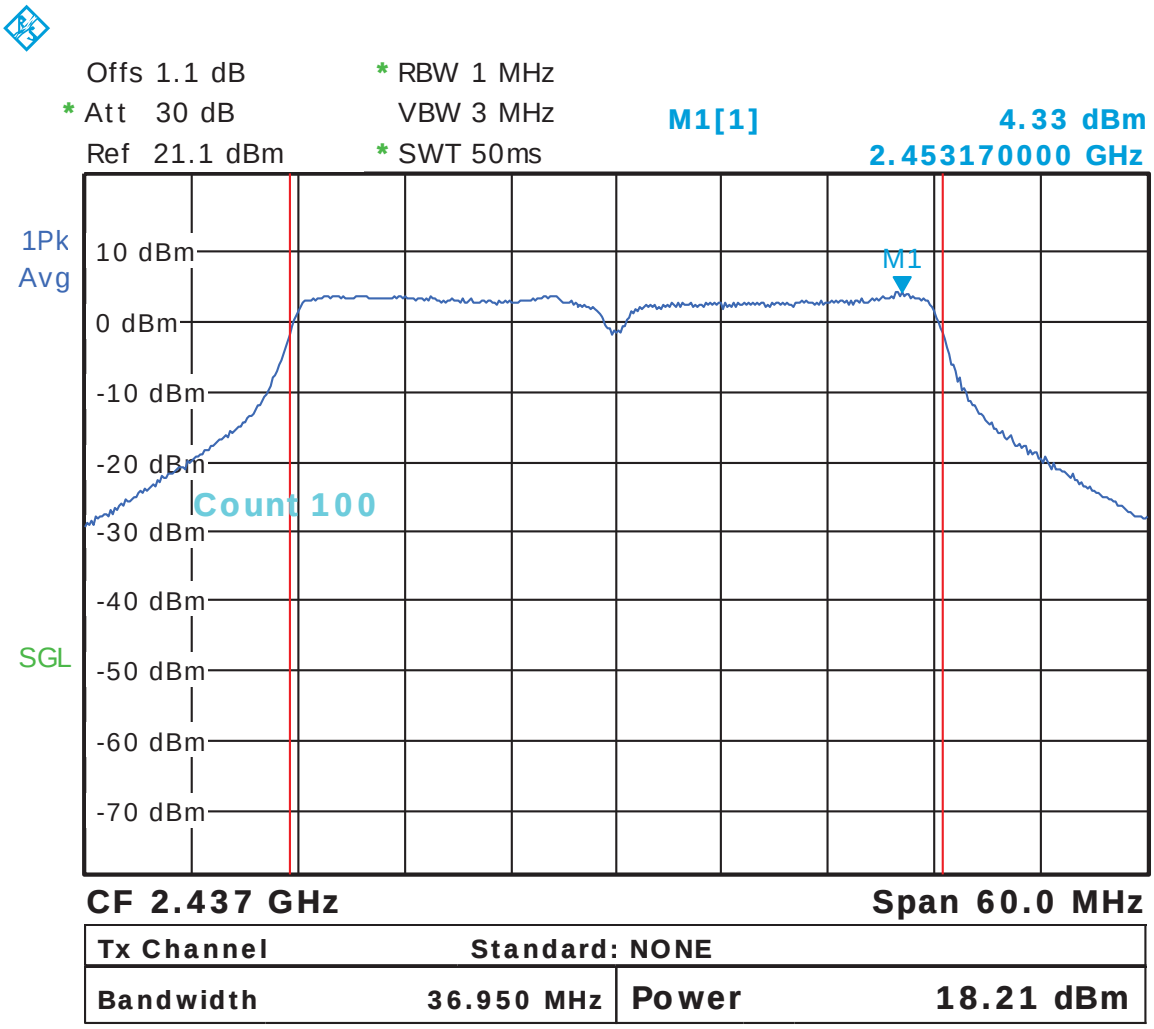
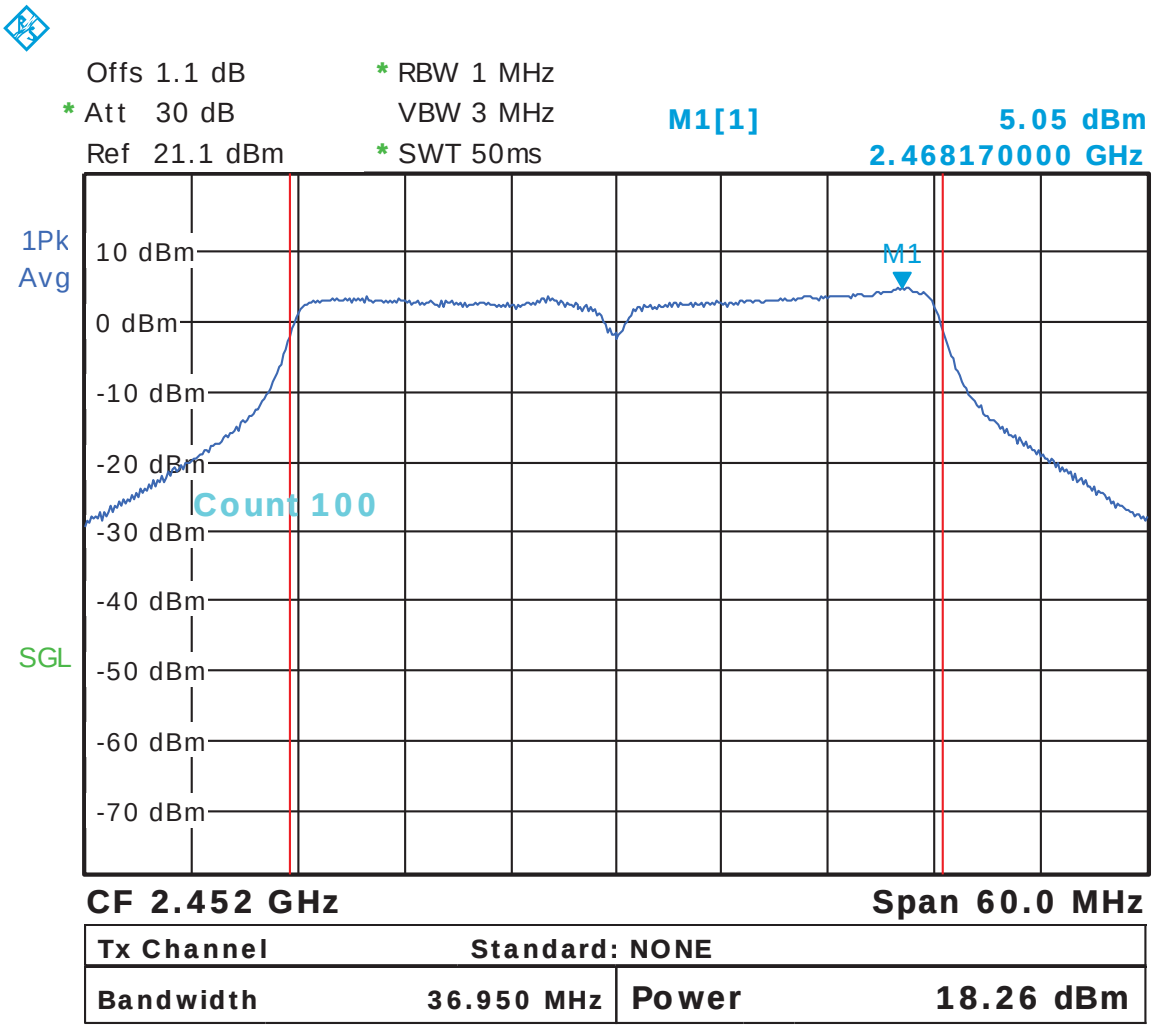


Figure 65: Maximum Transmitted Power, 2437 MHz at 802.11n (HT40), Chain 2 – 40.5Mbps



Date: 2.MAR.2011 16:44:15

Figure 66: Maximum Transmitted Power, 2452 MHz at 802.11n (HT40), Chain 2 – 40.5Mbps

4.2 Occupied Bandwidth

The occupied bandwidth is measured at an amplitude level reduced from the reference level by a specified ratio. The reference level is the level of the highest amplitude signal observed from the transmitter at the fundamental frequency.

The 99% bandwidth is the bandwidth in which 99% of the transmitted power occupied.

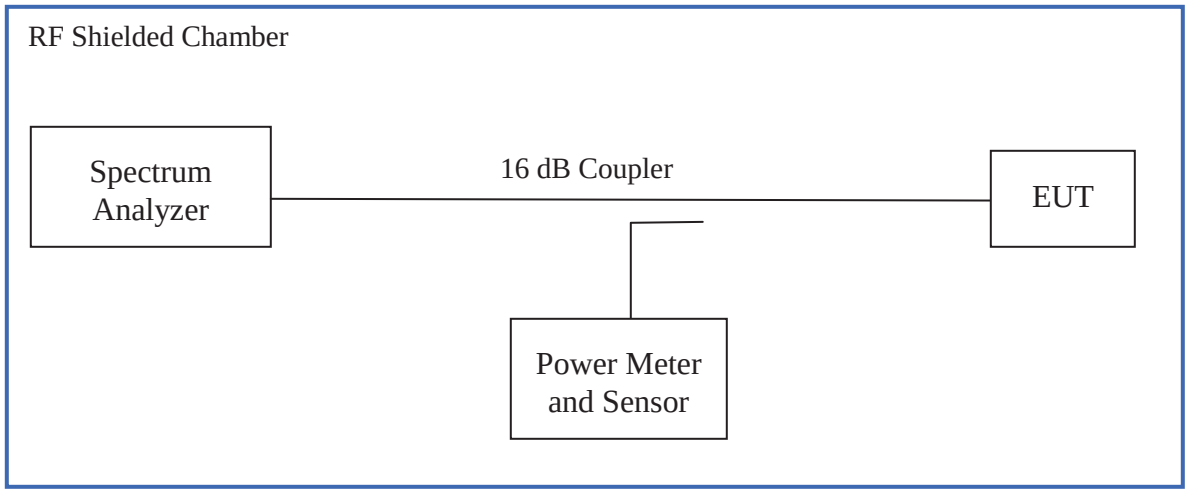
The 6 dB bandwidth is defined the bandwidth of 6 dBr from highest transmitted level of the fundamental frequency.

The bandwidth shall be at least 500 kHz per Section CFR47 15.247(a2) 2009 and RSS Gen Sect. 4.4.1: 2010.

4.2.1 Test Method

The conducted method was used to measure the occupied bandwidth. The measurement was performed with modulation per CFR47 15.247(a2) 2009 and RSS Gen Sect. 4.4.1:2010. Initial investigation was performed at different data rates and TX chains. The narrowest bandwidths at each operational mode were measured on 3 operating channels. The worst sample result indicated below.

Test Setup:



4.2.2 Results

As originally tested, the EUT was found to be compliant to the requirements of the test standard(s).

Table 3: Occupied Bandwidth – Test Results

Test Conditions: Conducted Measurement, Normal Temperature and Voltage only								
Antenna Type: Integrated			**Power Setting:** See test plan					
Max. Antenna Gain: + 1.1 dBi			**Signal State:** Modulated					
Ambient Temp.: 21 °C			**Relative Humidity:**33%					
Bandwidth (MHz) for 802.11b								
Freq. (MHz)	**Limit (kHz)**	**Ch 0 99% BW**	**Ch 1 99% BW**	**Ch 2 99% BW**	**Ch 0 6 dB BW**	**Ch 1 6 dB BW**	**Ch 2 6 dB BW**	**Results**
2412	500	13.9478	13.9478	13.9078	10.2204	10.2204	10.2204	Pass
2437	500	13.8276	13.9879	13.8677	10.2204	10.2204	10.2204	Pass
2462	500	13.8276	13.9478	13.8276	10.2605	10.2204	10.2204	Pass
Note: The bandwidth was measured at 1Mbps for 802.11b mode.								
Bandwidth (MHz) for 802.11g								
Freq. (MHz)	**Limit (kHz)**	**Ch 0 99% BW**	**Ch 1 99% BW**	**Ch 2 99% BW**	**Ch 0 6 dB BW**	**Ch 1 6 dB BW**	**Ch 2 6 dB BW**	**Results**
2412	500	16.7935	16.6332	16.6332	16.4729	16.5531	16.5531	Pass
2437	500	16.7535	16.6733	16.6332	16.5130	16.5531	16.5531	Pass
2462	500	16.7134	16.6733	16.6332	16.4729	16.5531	16.5531	Pass
Note: The bandwidth was measured at 6Mbps for 802.11g mode.								
Bandwidth (MHz) for 802.11n HT20								
Freq. (MHz)	**Limit (kHz)**	**Ch 0 99% BW**	**Ch 1 99% BW**	**Ch 2 99% BW**	**Ch 0 6 dB BW**	**Ch 1 6 dB BW**	**Ch 2 6 dB BW**	**Results**
2412	500	17.8356	17.8356	17.7955	17.7154	17.7555	17.7154	Pass
2437	500	17.8757	17.8356	17.7955	17.7154	17.7955	17.7154	Pass
2462	500	17.7955	17.8356	17.7955	17.7555	17.7955	17.7154	Pass

Note: The bandwidth was measured at 6.5Mbps at 1 data stream

Bandwidth (MHz) for 802.11n HT40

Freq. (MHz)	Limit (kHz)	Ch 0 99% BW	Ch 1 99% BW	Ch 2 99% BW	Ch 0 6 dB BW	Ch 1 6 dB BW	Ch 2 6 dB BW	Results
2422	500	37.7755	37.7755	37.8757	36.8737	37.1743	37.0741	Pass
2437	500	37.8757	37.7755	37.6753	36.6733	37.1743	37.0741	Pass
2452	500	37.7755	37.7755	37.7755	36.8737	37.0741	37.0741	Pass

Note: The bandwidth was observed at 13.5Mbps at 1 data stream

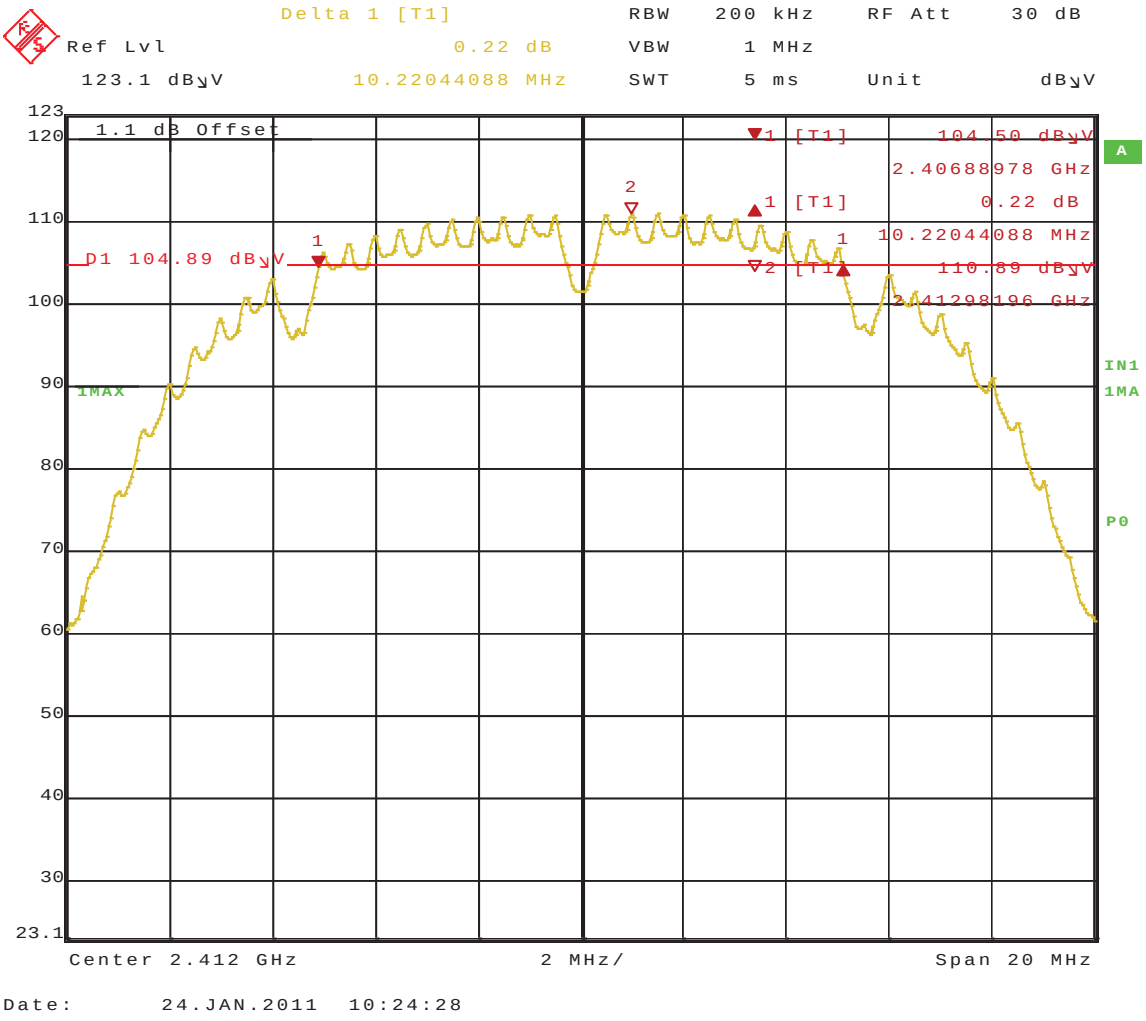


Figure 67: 6 dB Bandwidth at 1Mbit/s – Operating Channel 2412 MHz, Chain 0

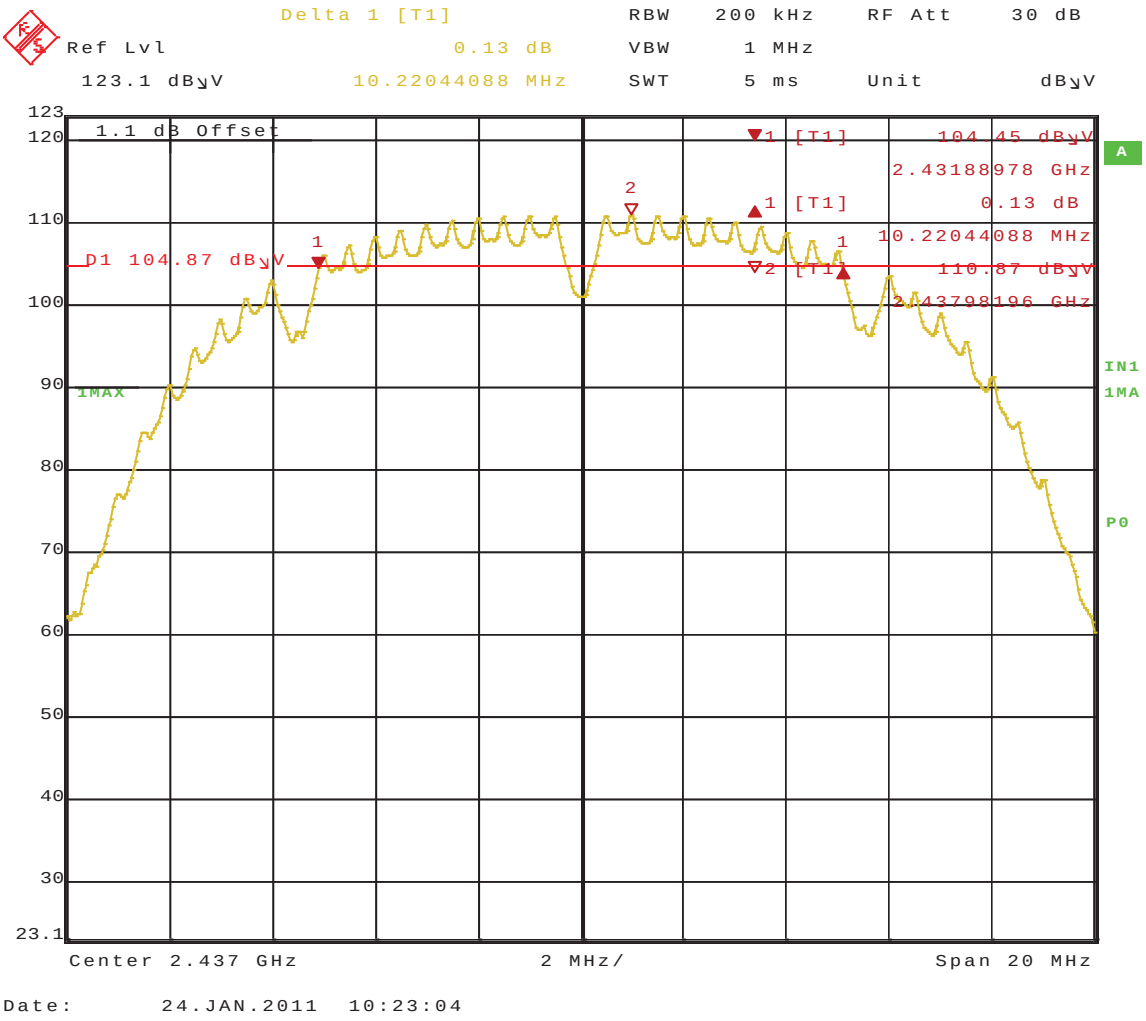


Figure 68: 6 dB Bandwidth at 1Mbit/s – Operating Channel 2437 MHz, Chain 0

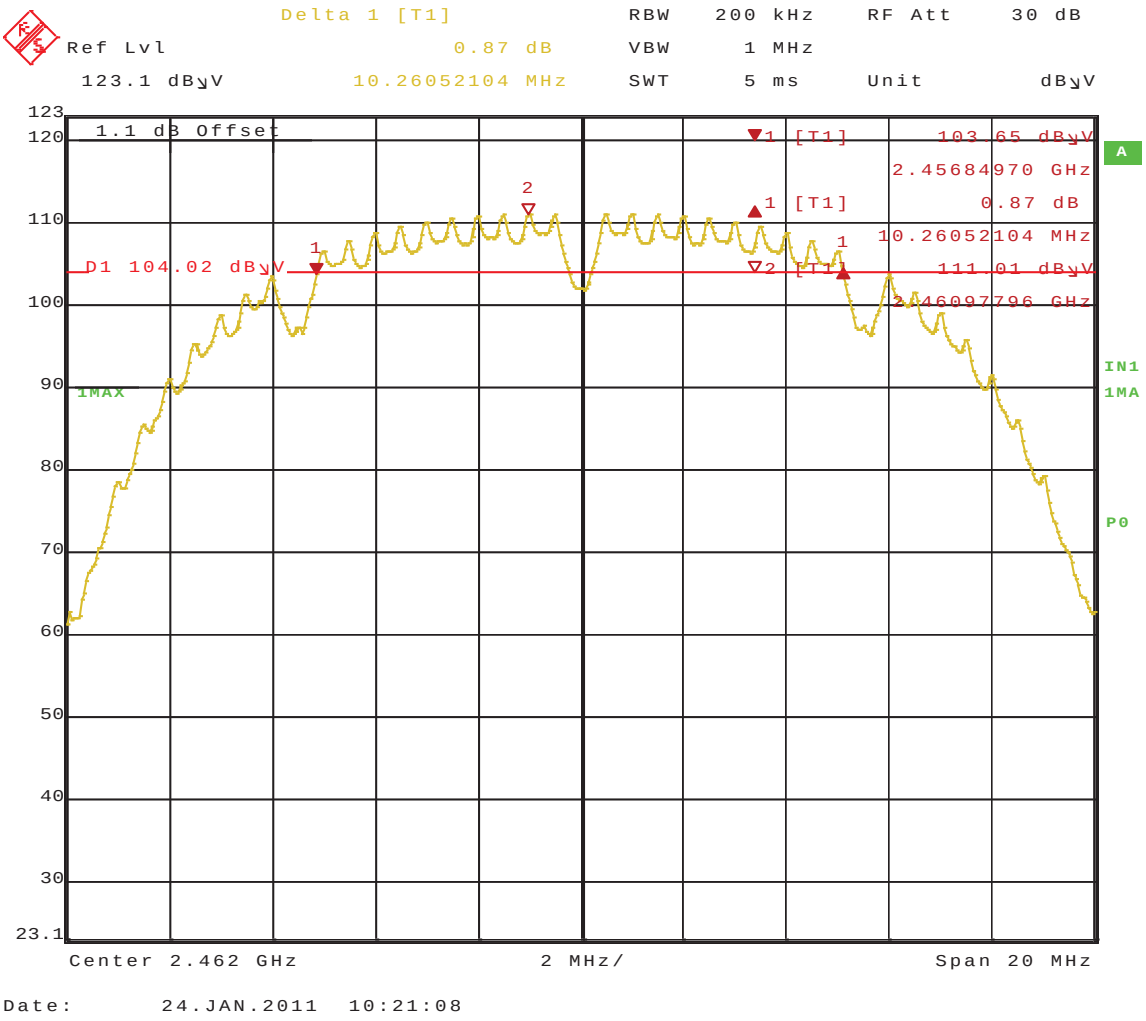


Figure 69: 6 dB Bandwidth at 1Mbit/s – Operating Channel 2462 MHz, Chain 0

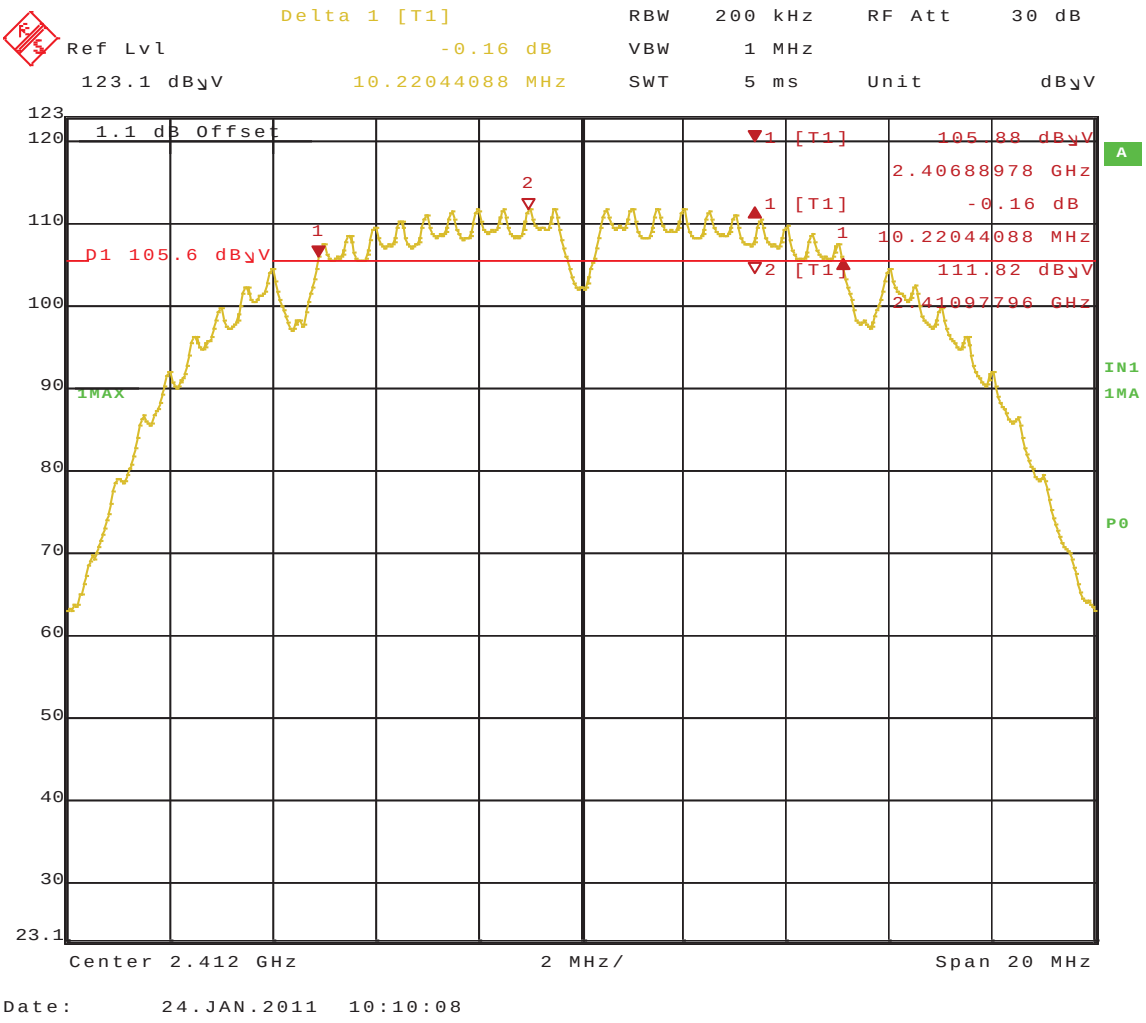


Figure 70: 6 dB Bandwidth at 1Mbit/s – Operating Channel 2412 MHz, Chain 1

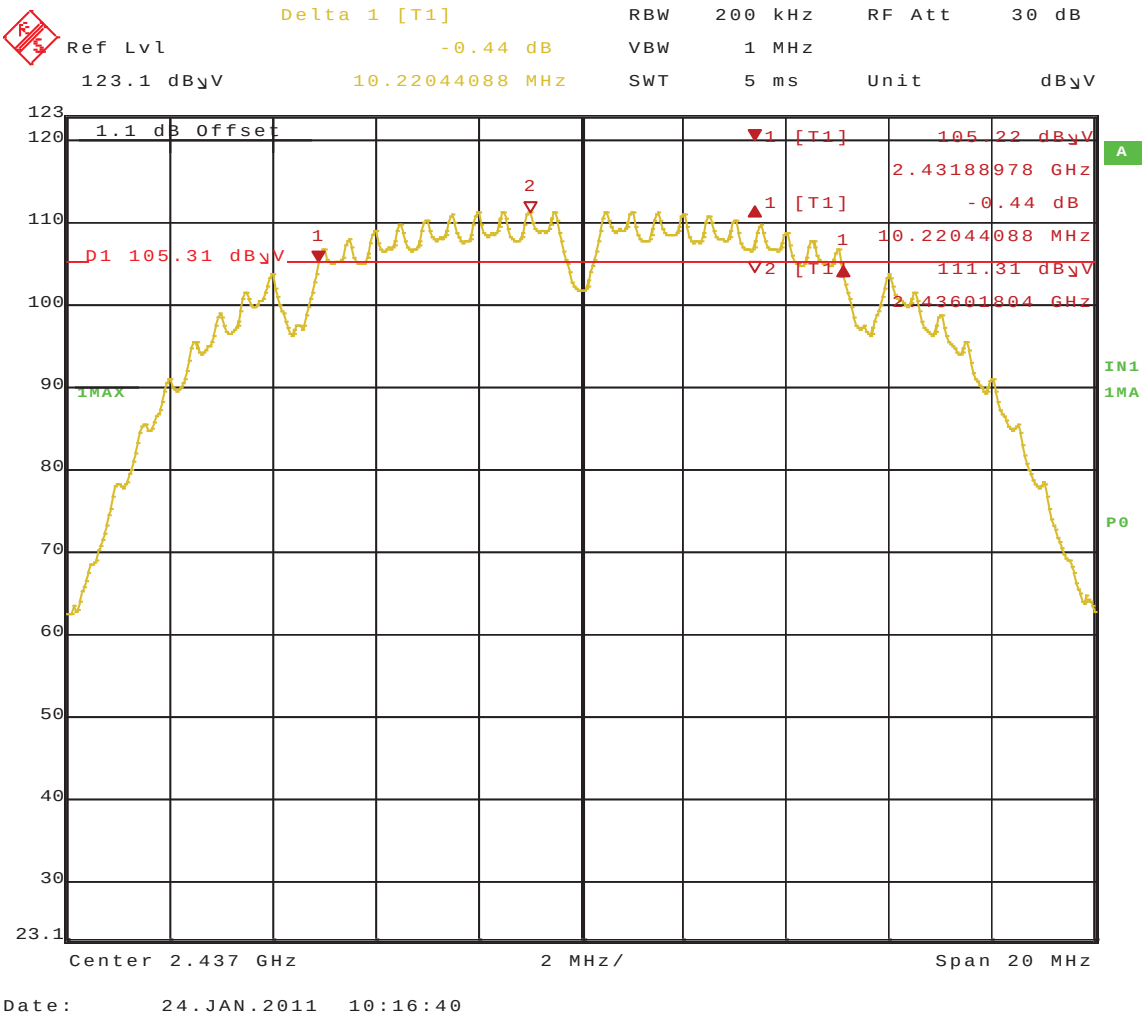


Figure 71: 6 dB Bandwidth at 1Mbit/s – Operating Channel 2437 MHz, Chain 1

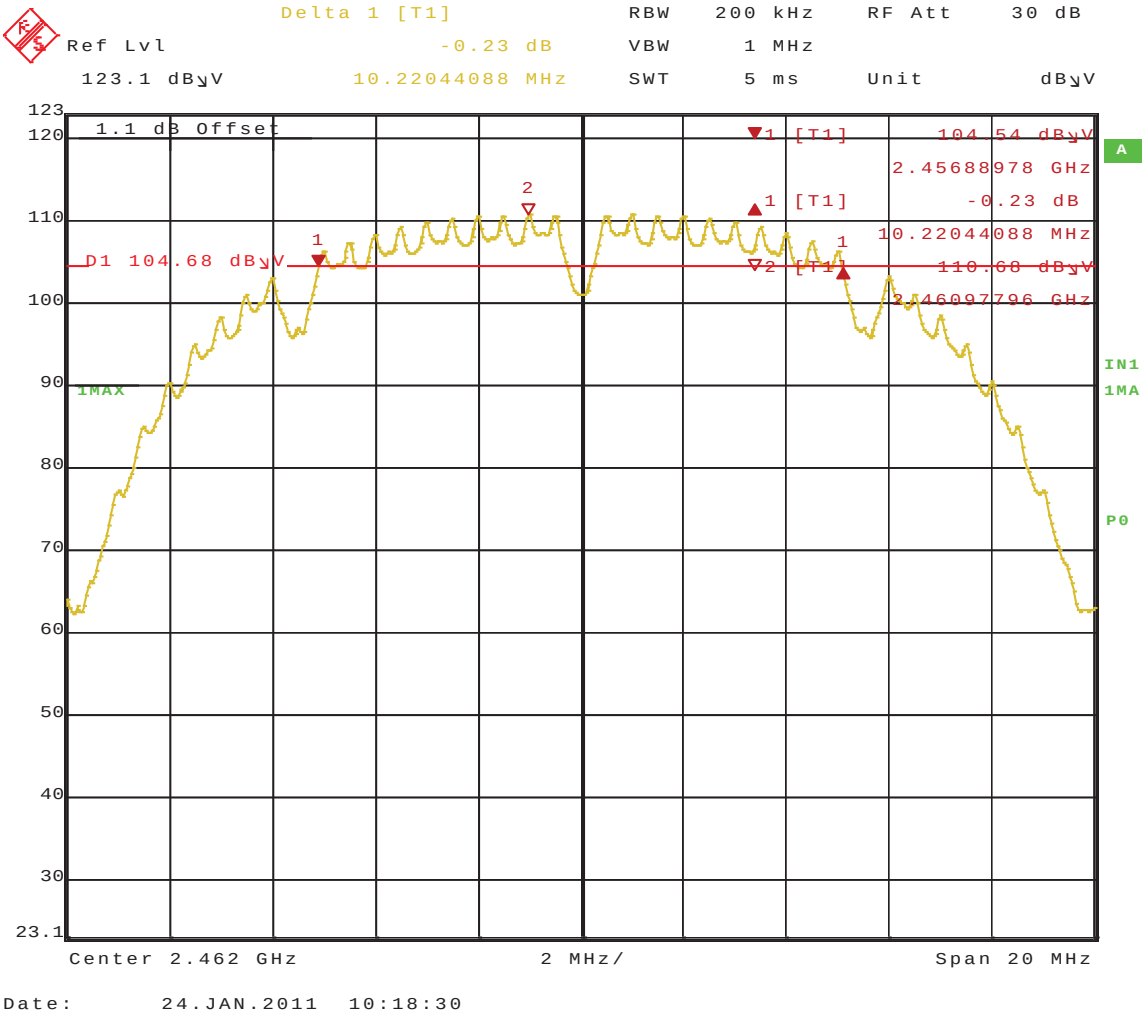


Figure 72: 6 dB Bandwidth at 1Mbit/s – Operating Channel 2462 MHz, Chain 1

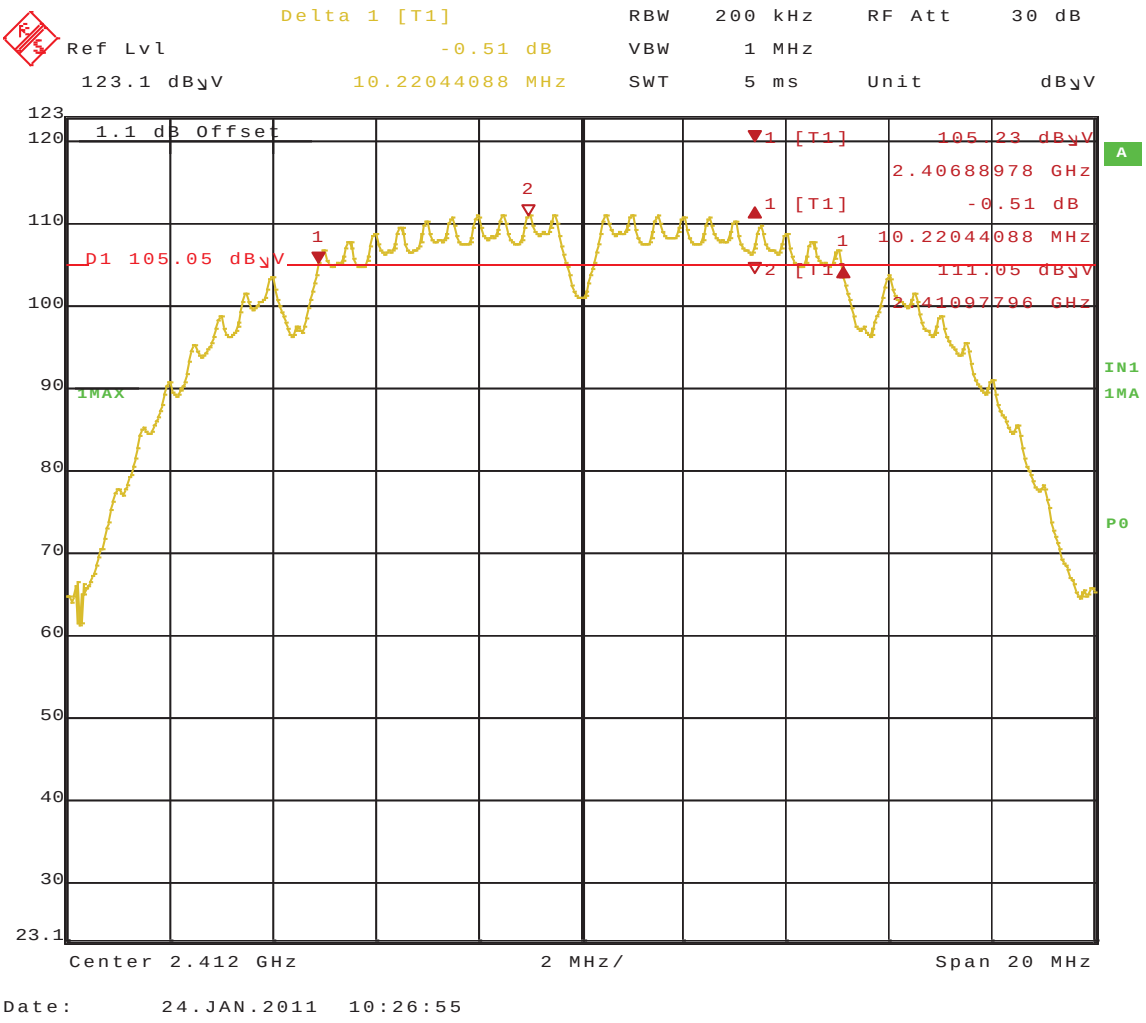


Figure 73: 6 dB Bandwidth at 1Mbit/s – Operating Channel 2412 MHz, Chain 2

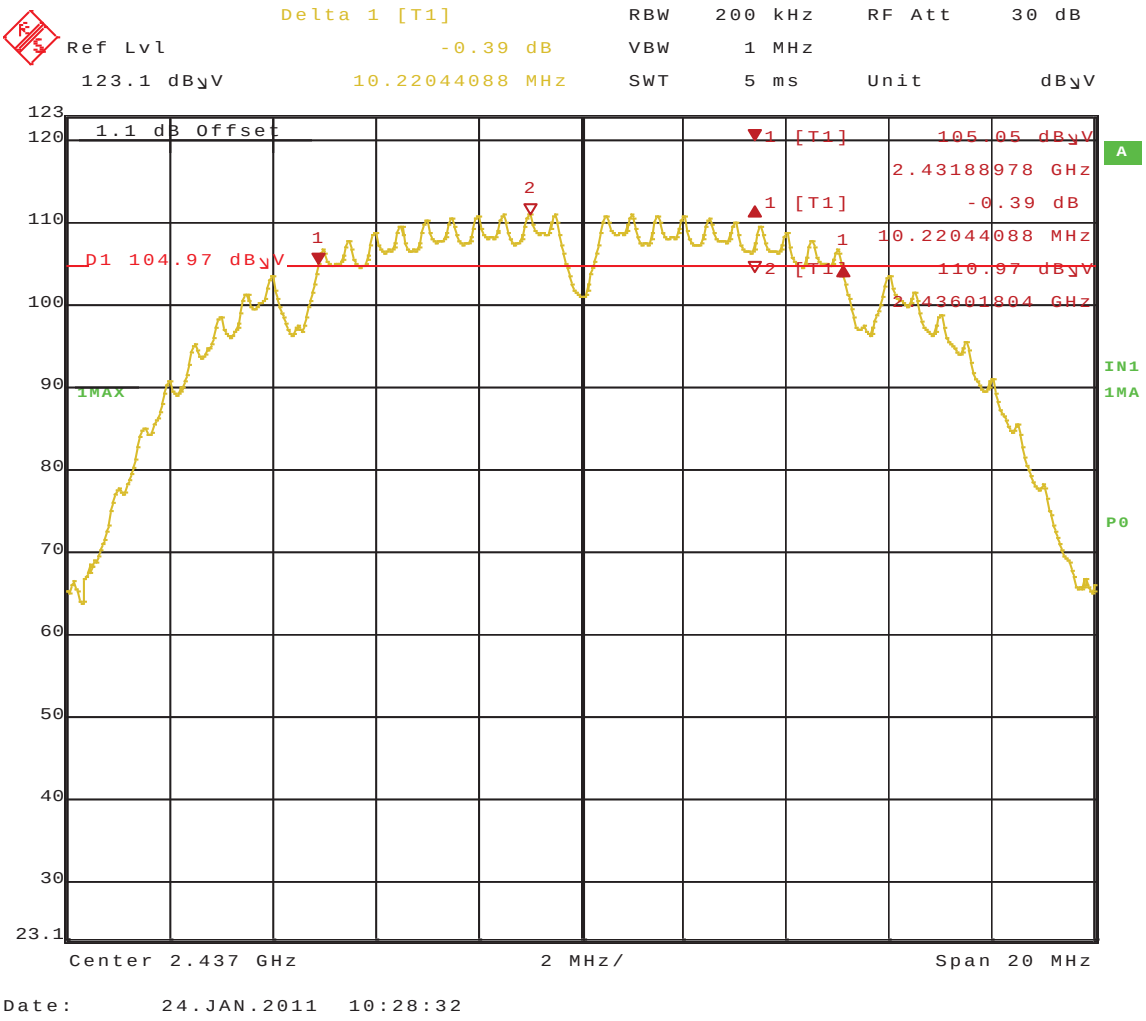


Figure 74: 6 dB Bandwidth at 1Mbit/s – Operating Channel 2437 MHz, Chain 2

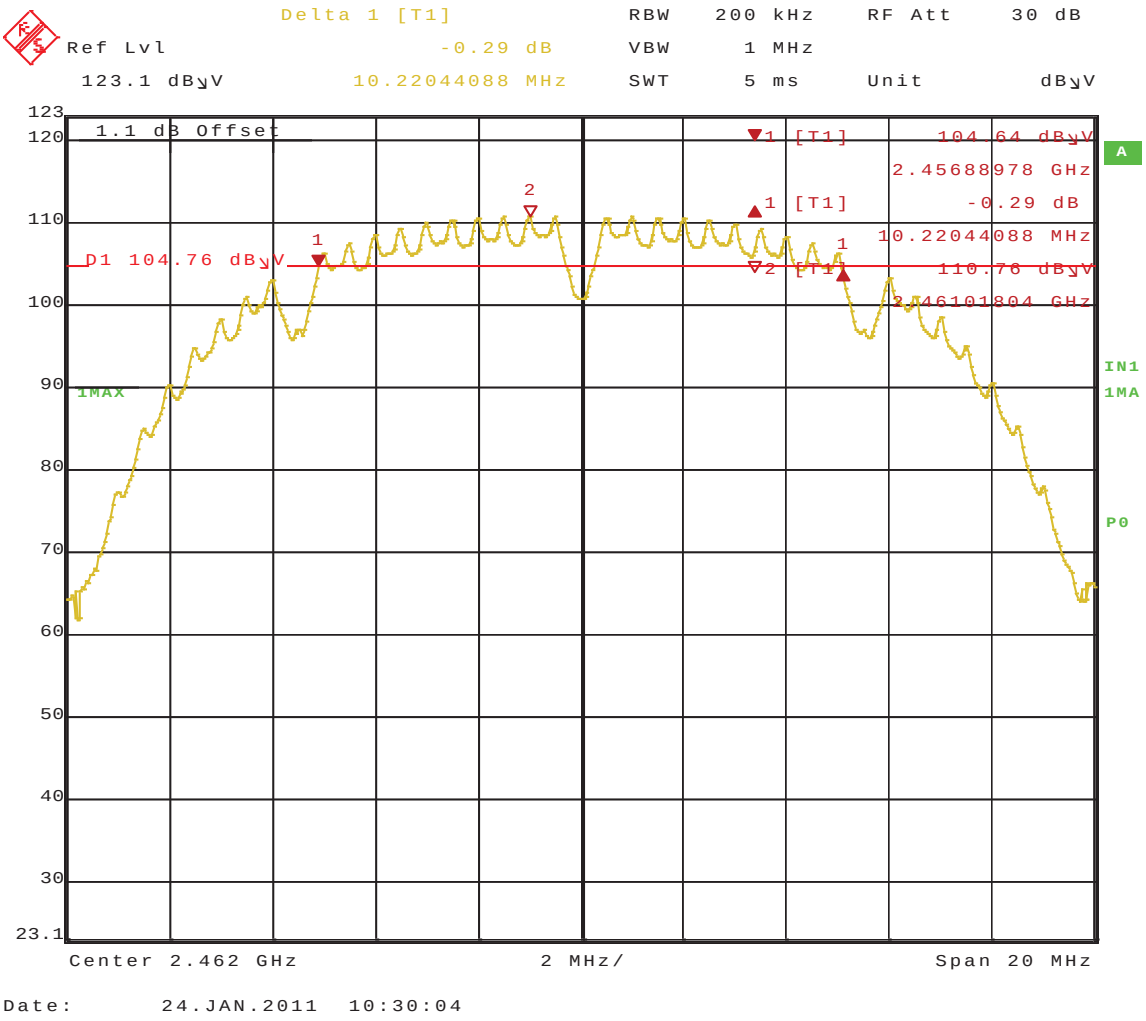


Figure 75: 6 dB Bandwidth at 1Mbit/s – Operating Channel 2462 MHz, Chain 2

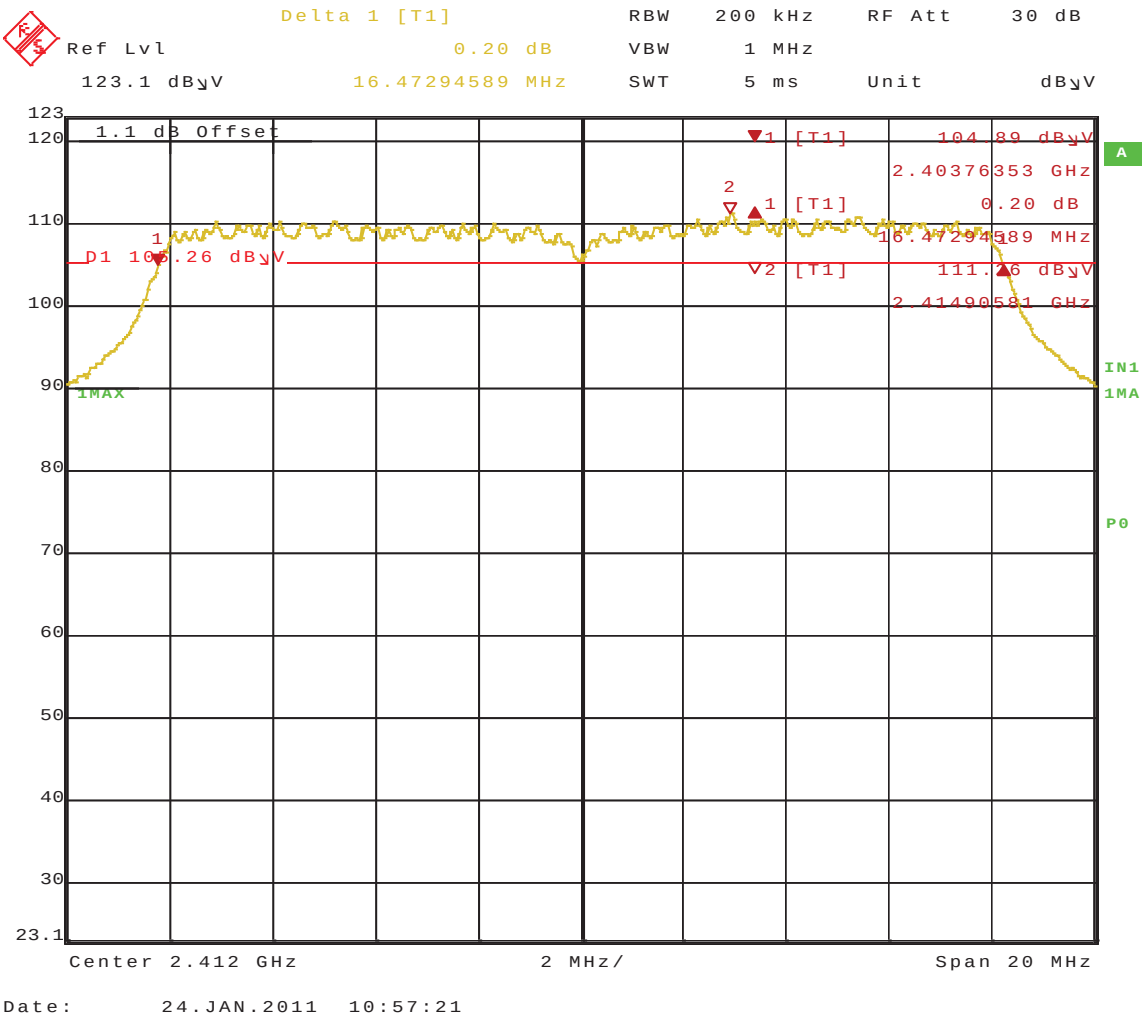


Figure 76: 6 dB Bandwidth at 6Mbit/s – Operating Channel 2412 MHz, Chain 0

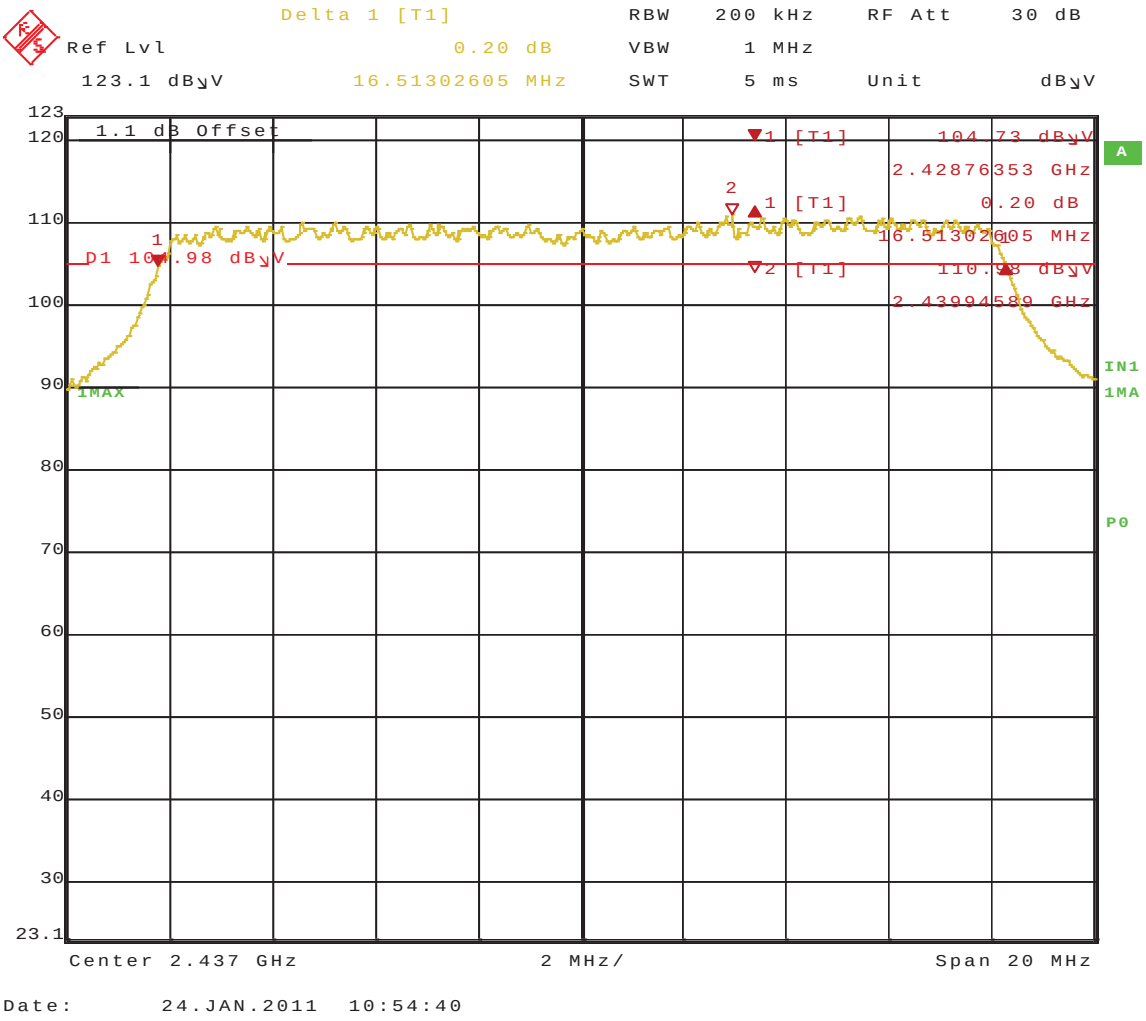


Figure 77: 6 dB Bandwidth at 6Mbit/s – Operating Channel 2437 MHz, Chain 0

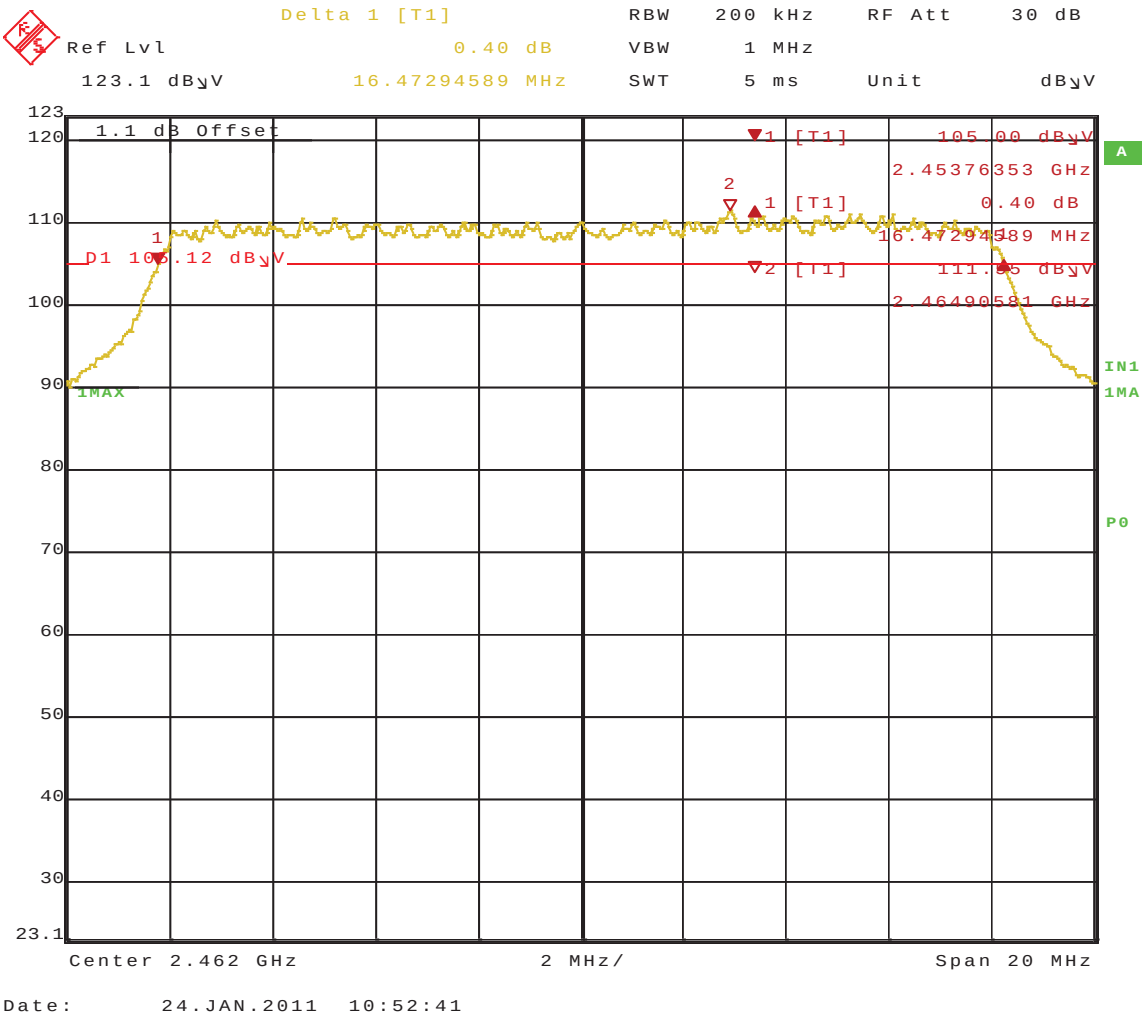


Figure 78: 6 dB Bandwidth at 6Mbit/s – Operating Channel 2462 MHz, Chain 0

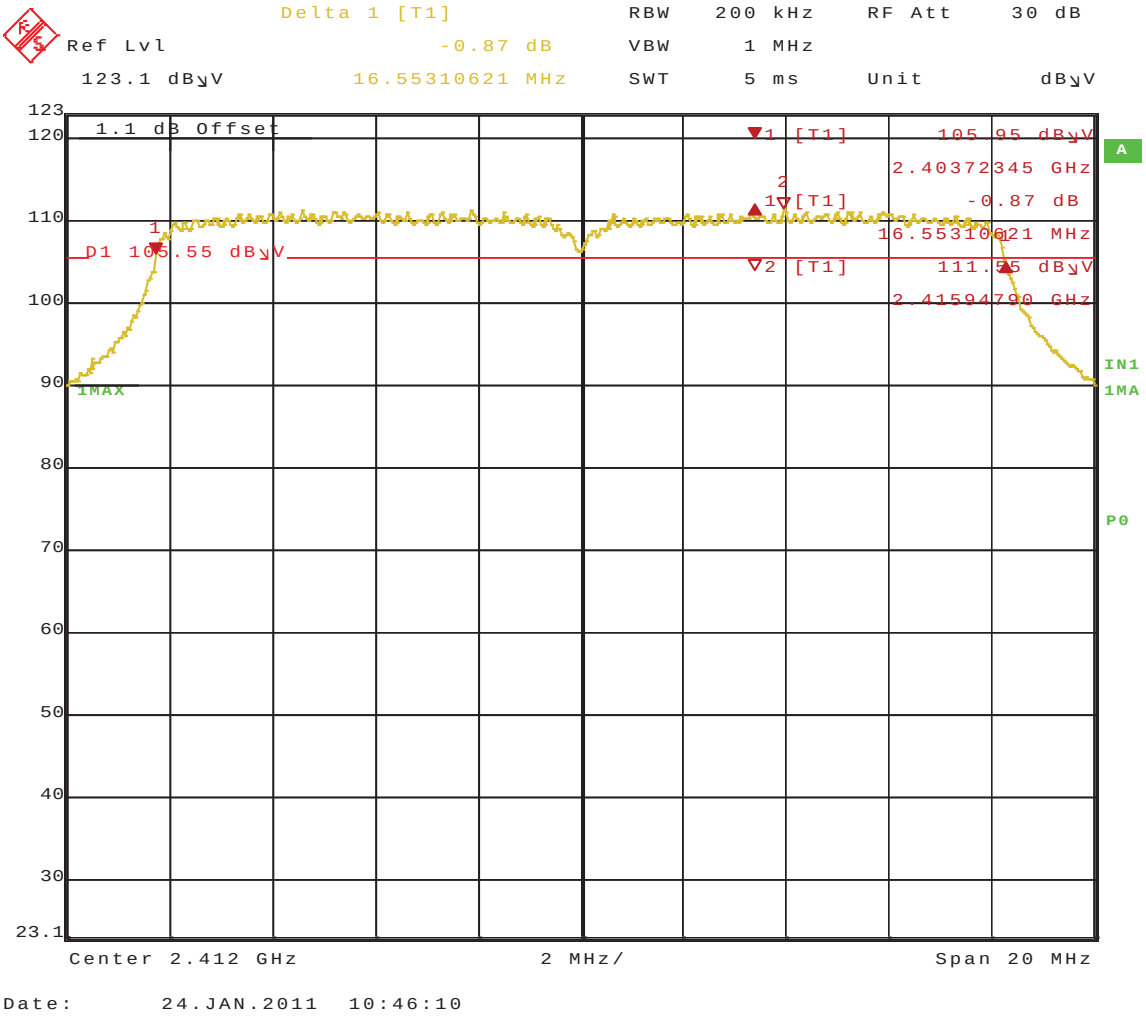


Figure 79: 6 dB Bandwidth at 6Mbit/s – Operating Channel 2412 MHz, Chain 1

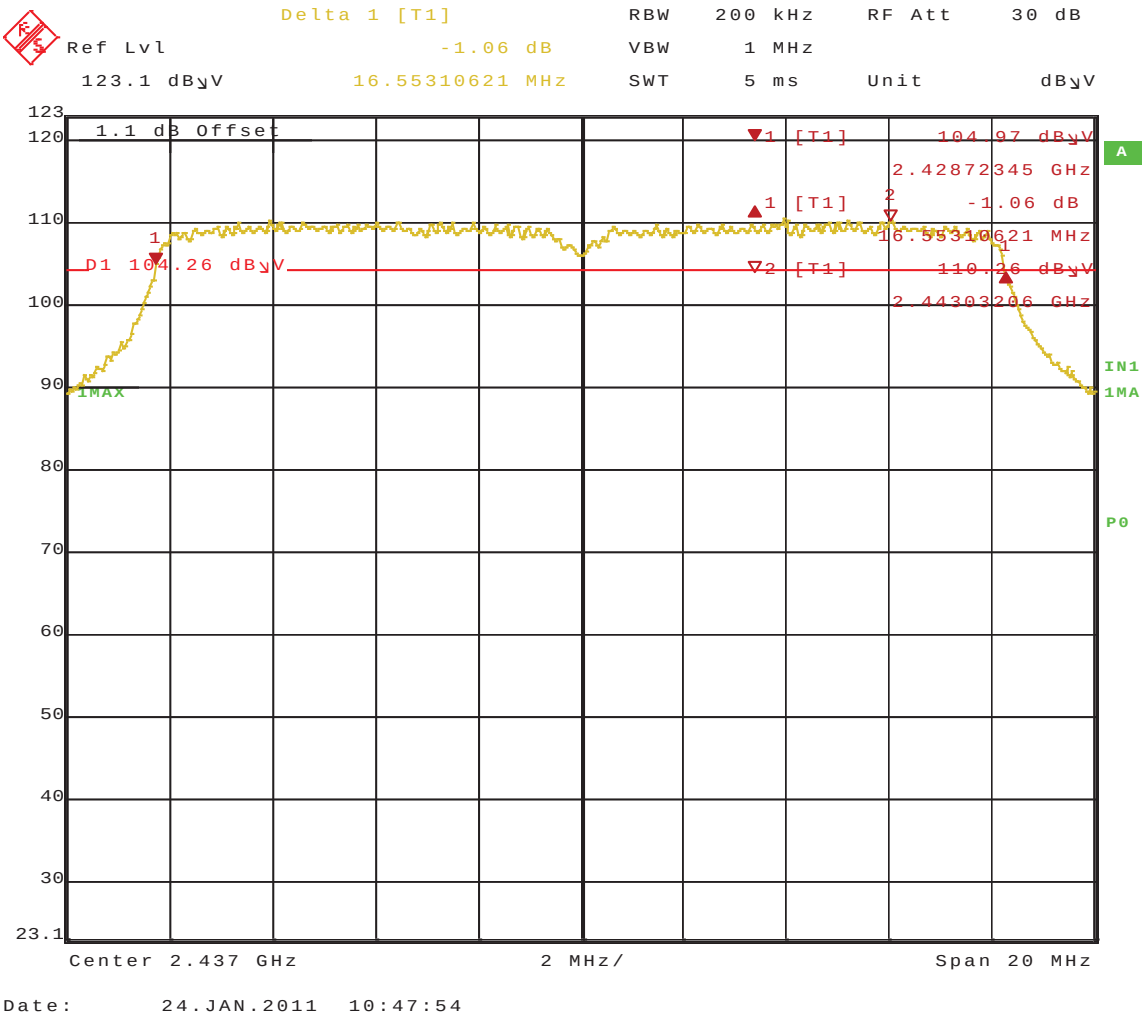


Figure 80: 6 dB Bandwidth at 6Mbit/s – Operating Channel 2437 MHz, Chain 1

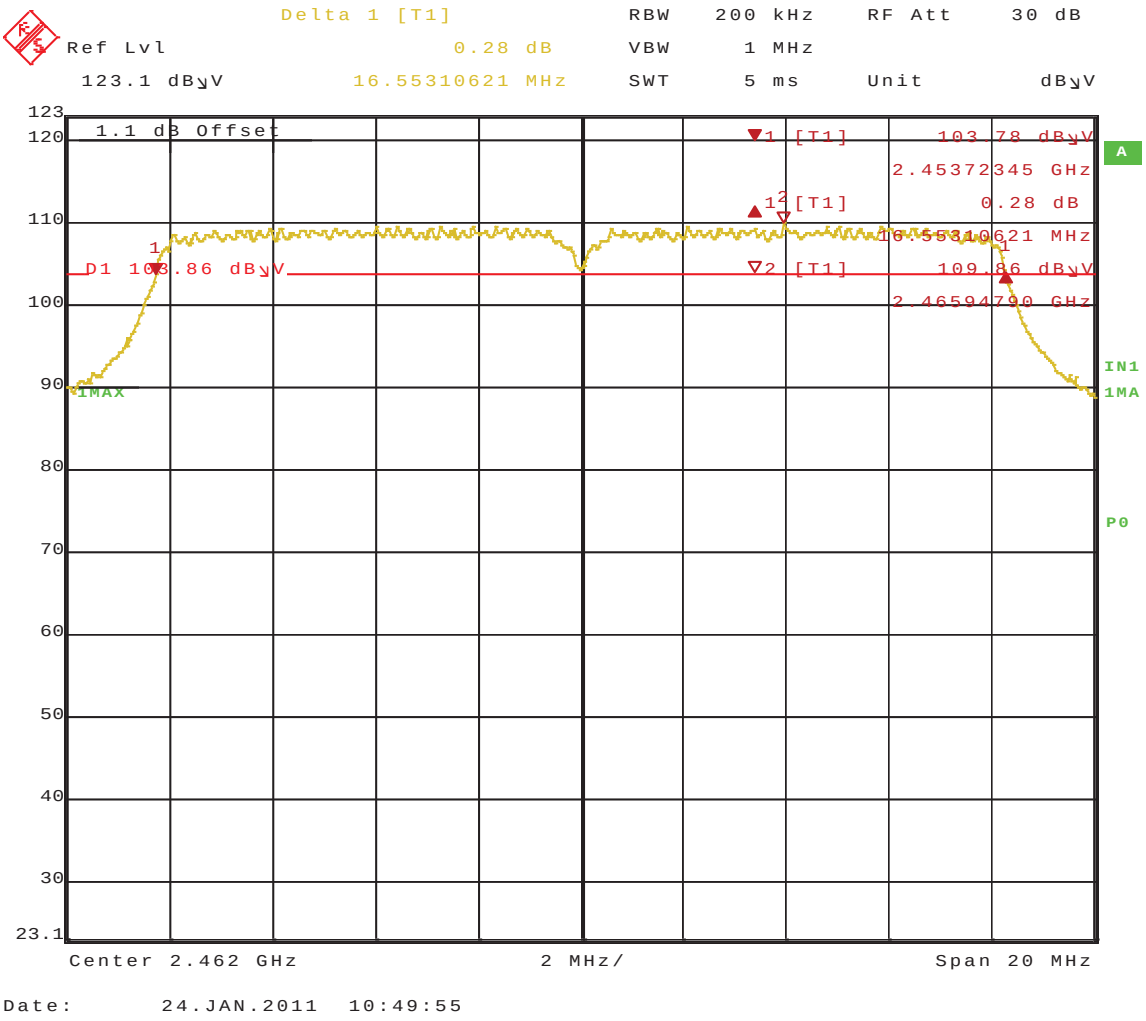


Figure 81: 6 dB Bandwidth at 6Mbit/s – Operating Channel 2462 MHz, Chain 1

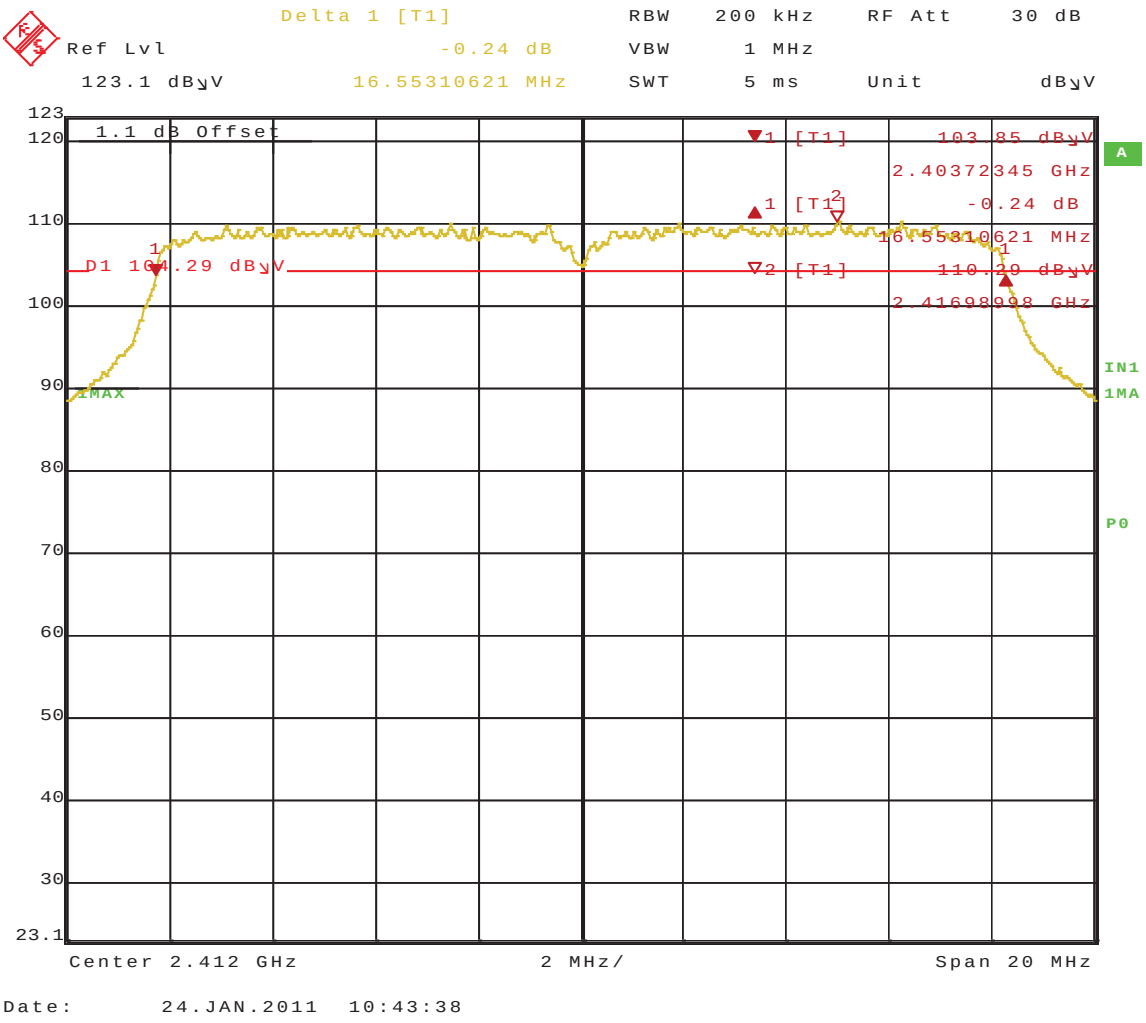


Figure 82: 6 dB Bandwidth at 6Mbit/s – Operating Channel 2412 MHz, Chain 2

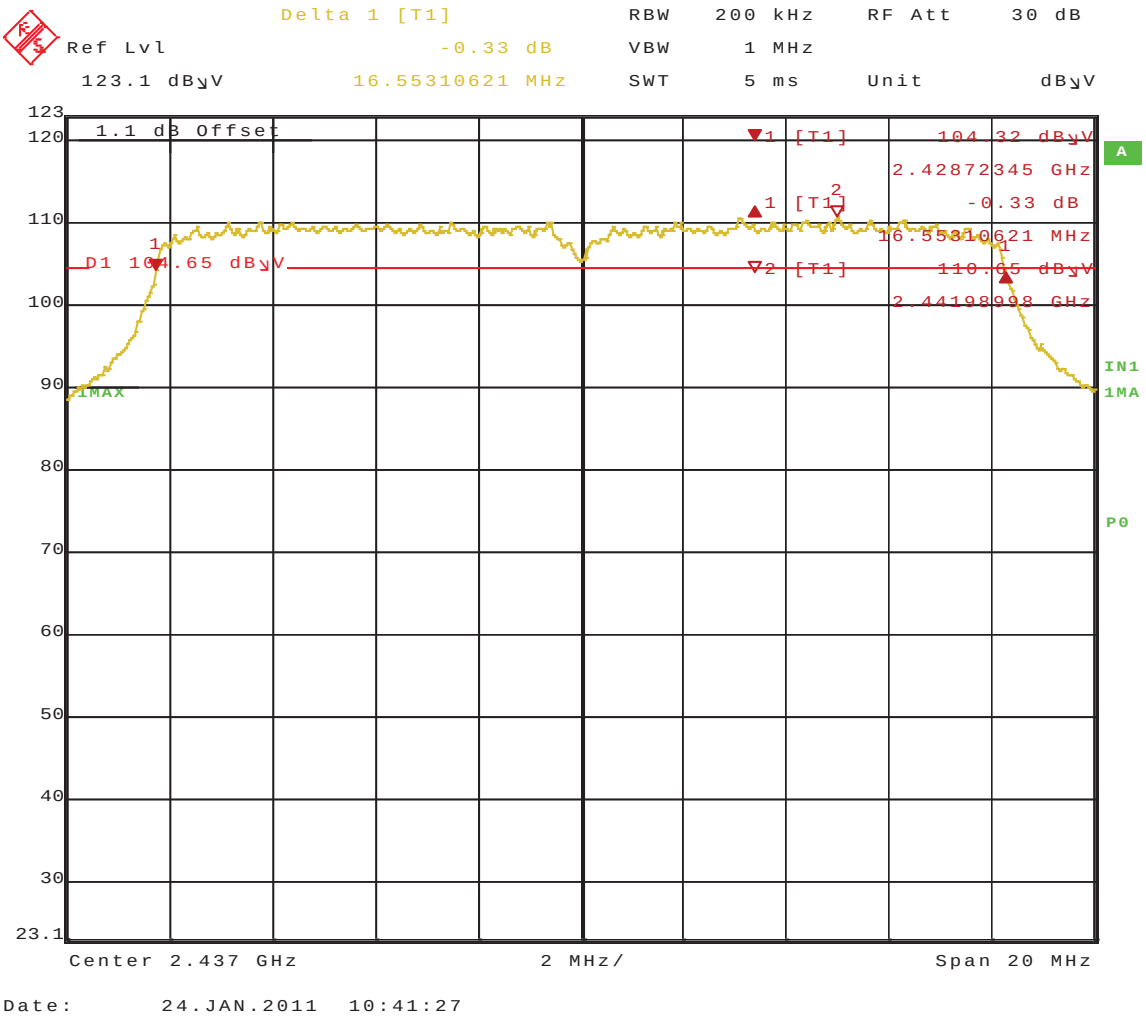


Figure 83: 6 dB Bandwidth at 6Mbit/s – Operating Channel 2437 MHz, Chain 2

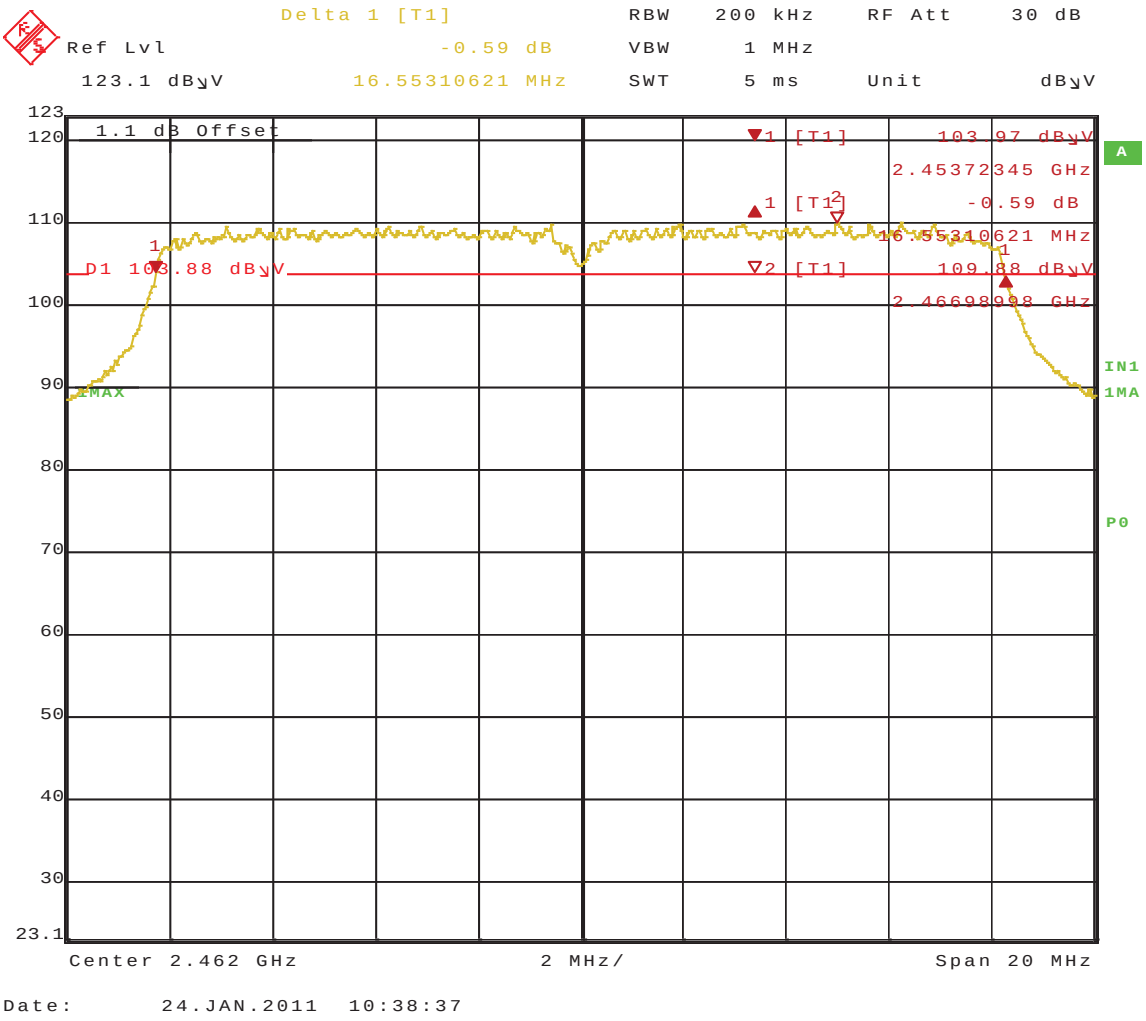


Figure 84: 6 dB Bandwidth at 6Mbit/s – Operating Channel 2462 MHz, Chain 2

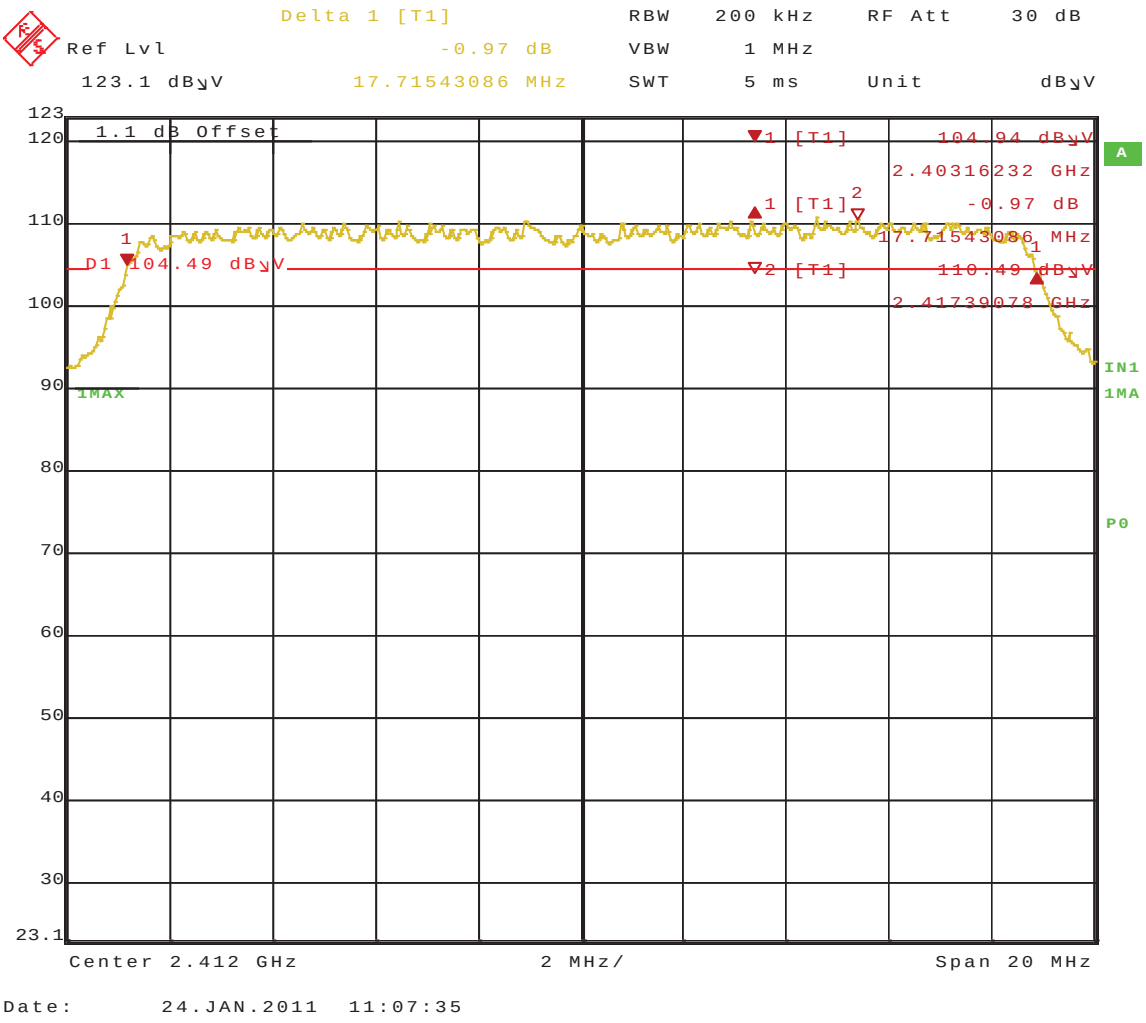


Figure 85: 6 dB Bandwidth at 6.5Mbit/s – Operating Channel 2412 MHz, Chain 0

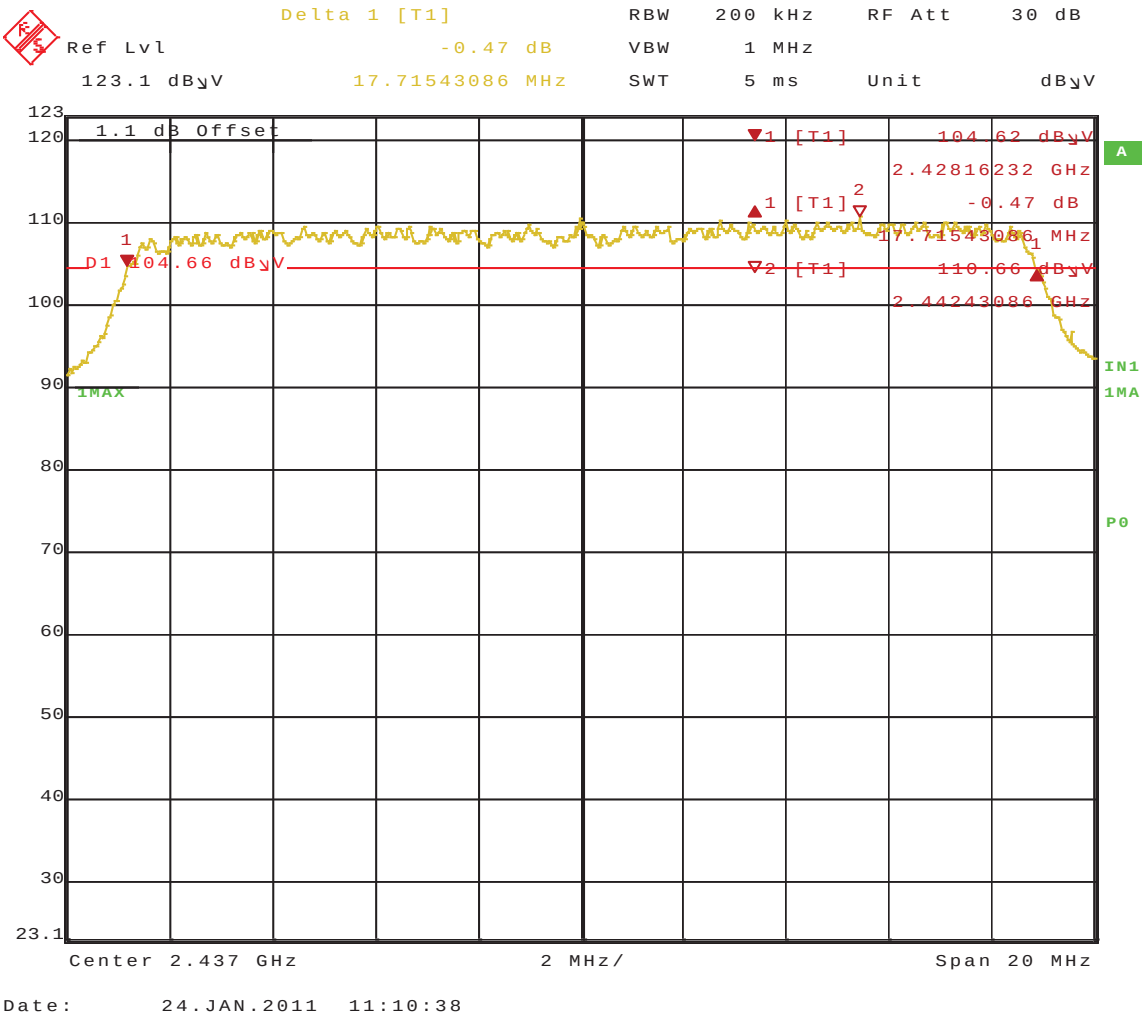


Figure 86: 6 dB Bandwidth at 6.5Mbit/s – Operating Channel 2437 MHz, Chain 0

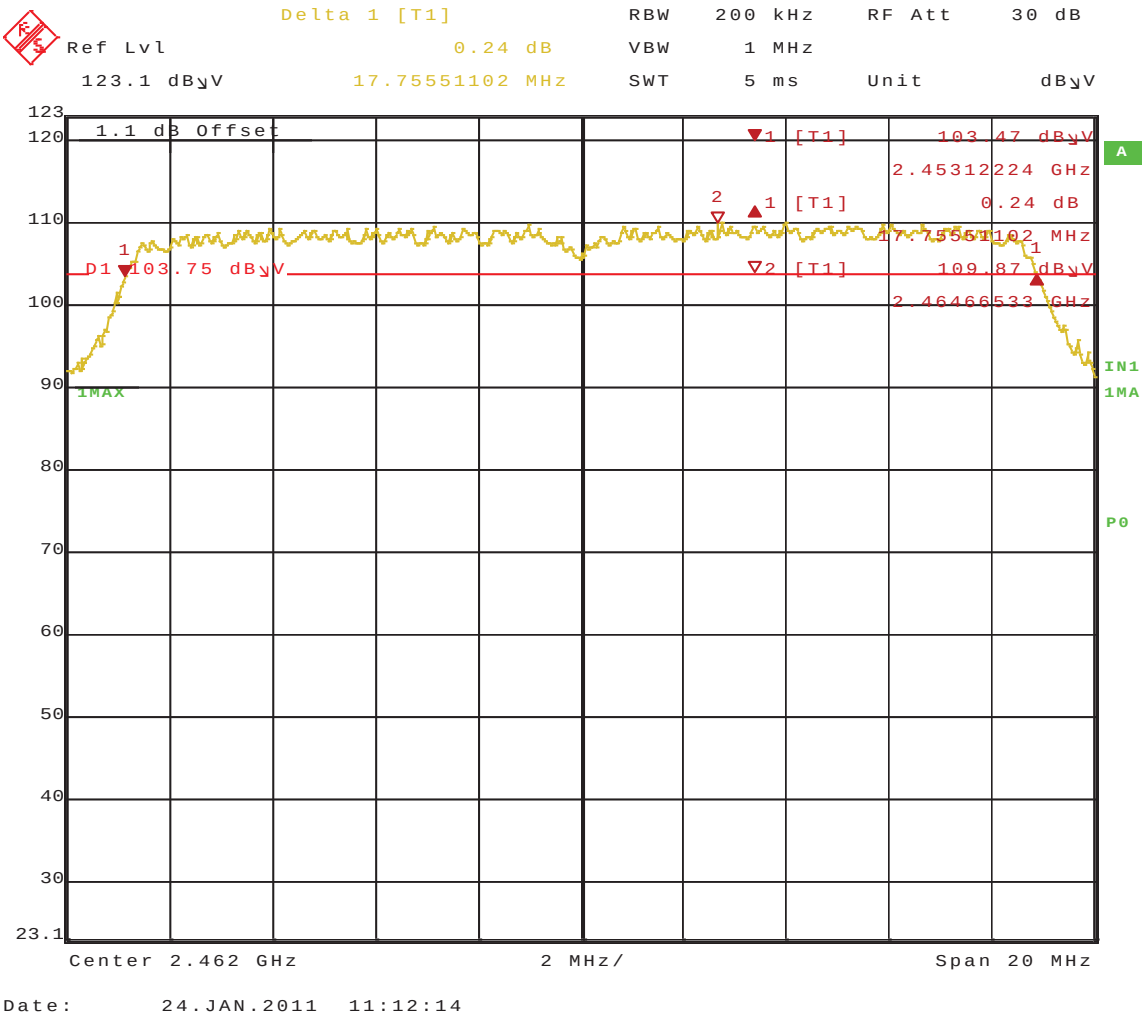


Figure 87: 6 dB Bandwidth at 6.5Mbit/s – Operating Channel 2462 MHz, Chain 0

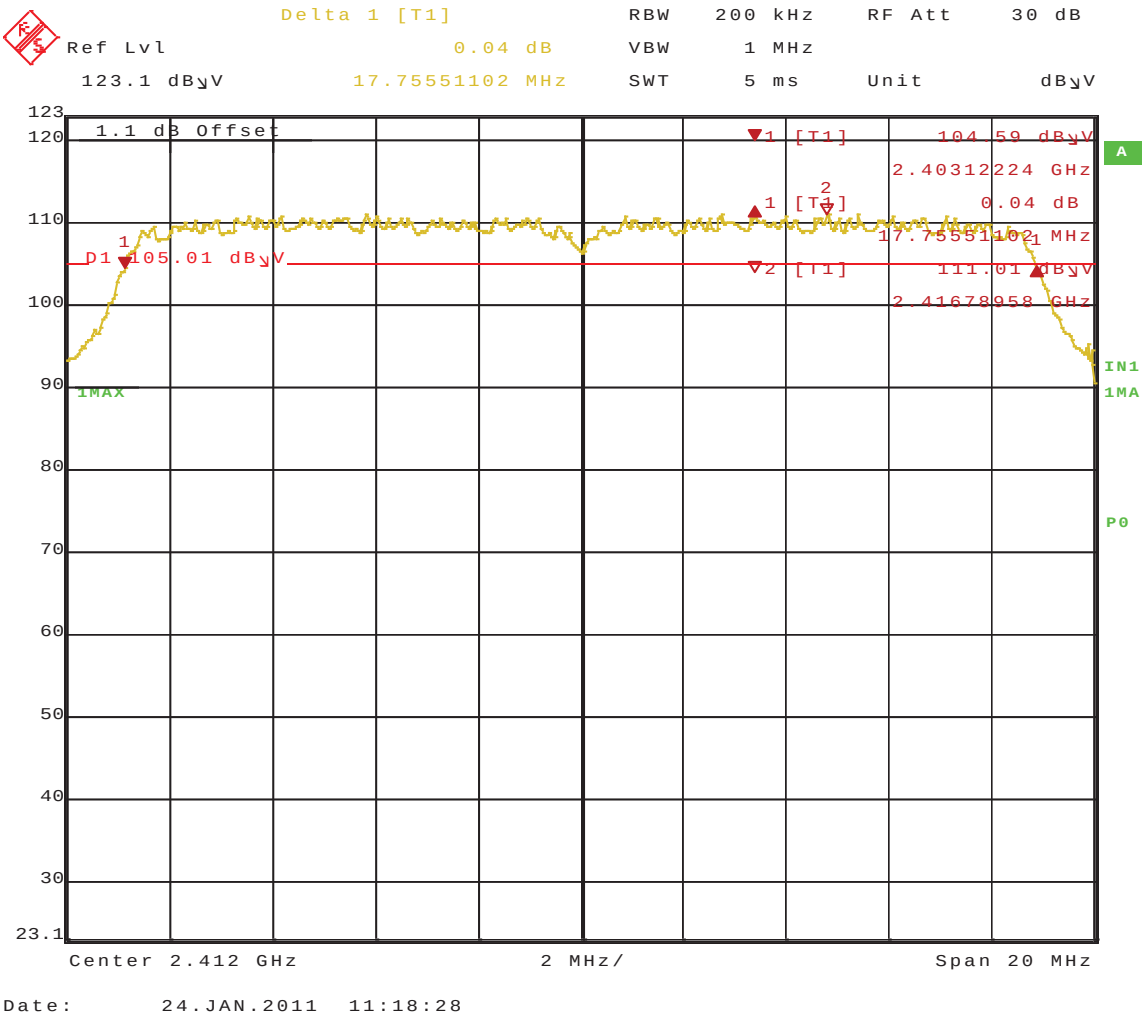


Figure 88: 6 dB Bandwidth at 6.5Mbit/s – Operating Channel 2412 MHz, Chain 1

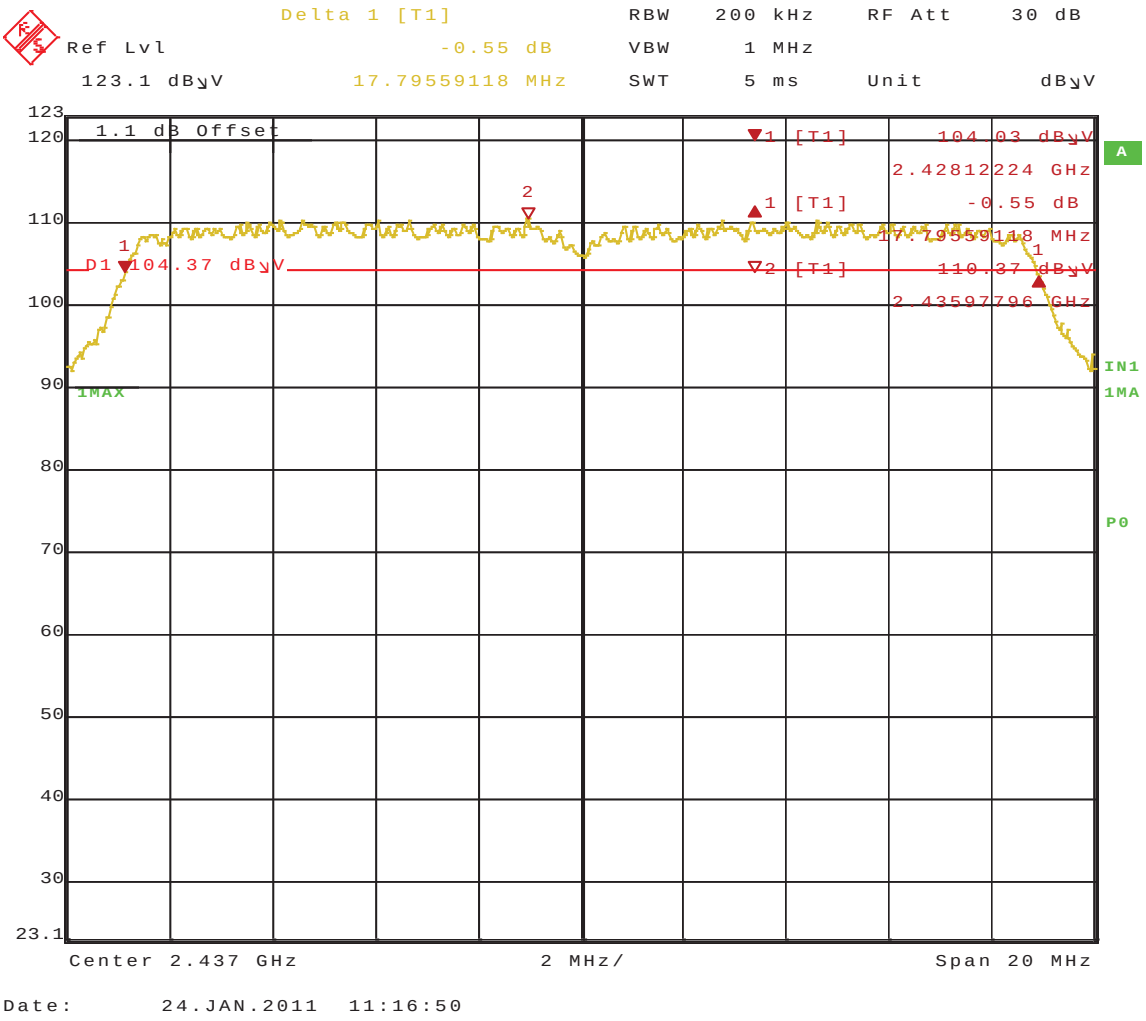


Figure 89: 6 dB Bandwidth at 6.5Mbit/s – Operating Channel 2437 MHz, Chain 1

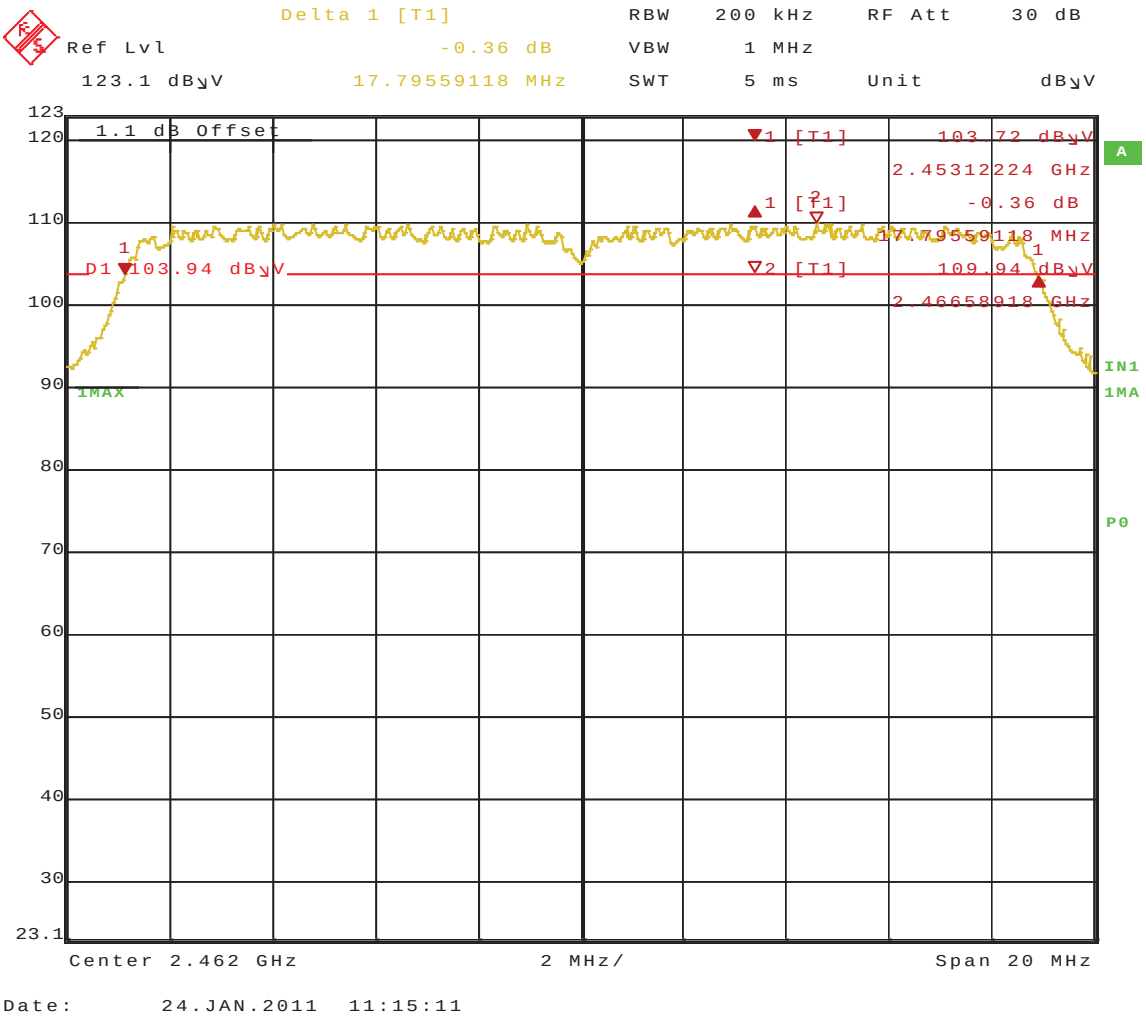


Figure 90: 6 dB Bandwidth at 6.5Mbit/s – Operating Channel 2462 MHz, Chain 1

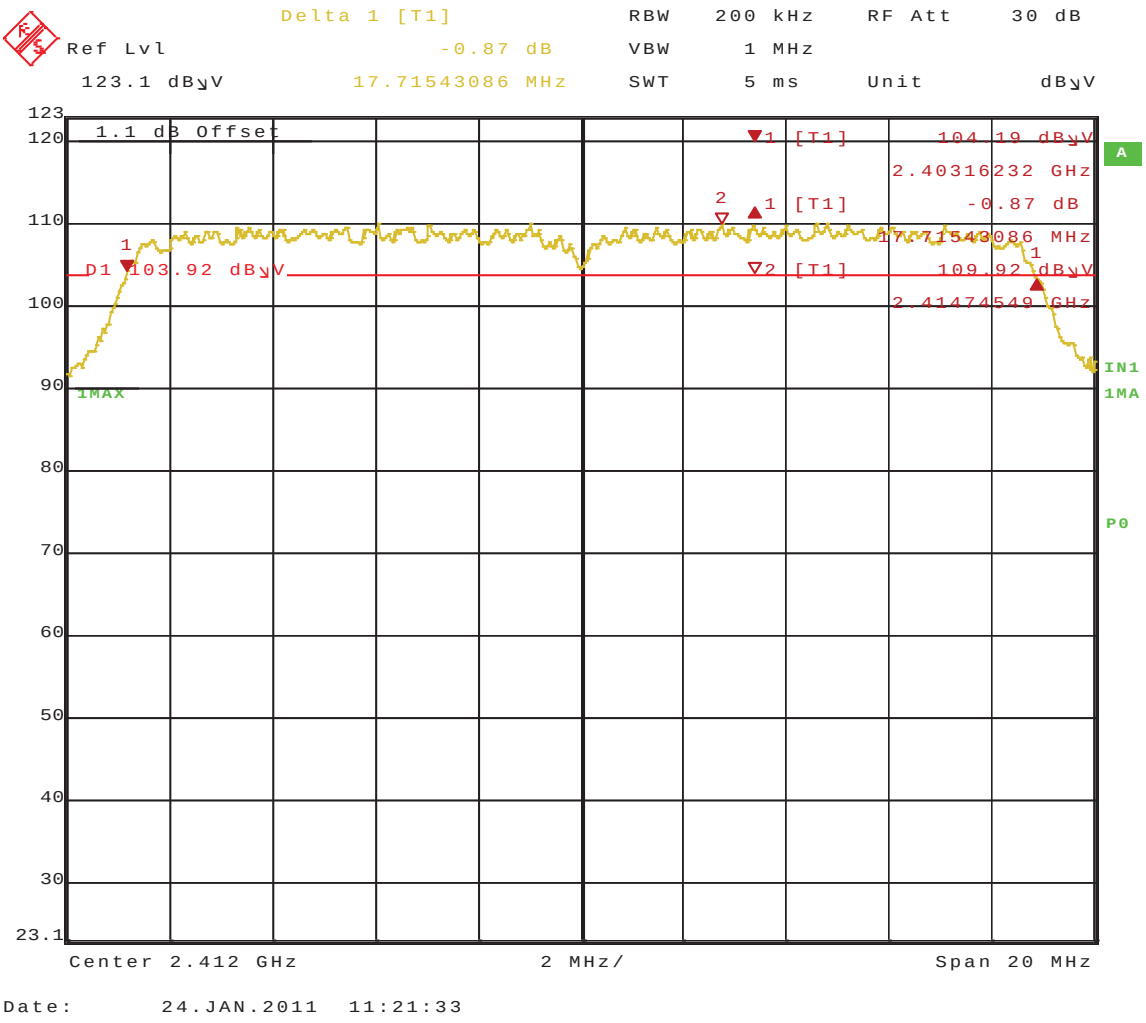


Figure 91: 6 dB Bandwidth at 6.5Mbit/s – Operating Channel 2412 MHz, Chain 2

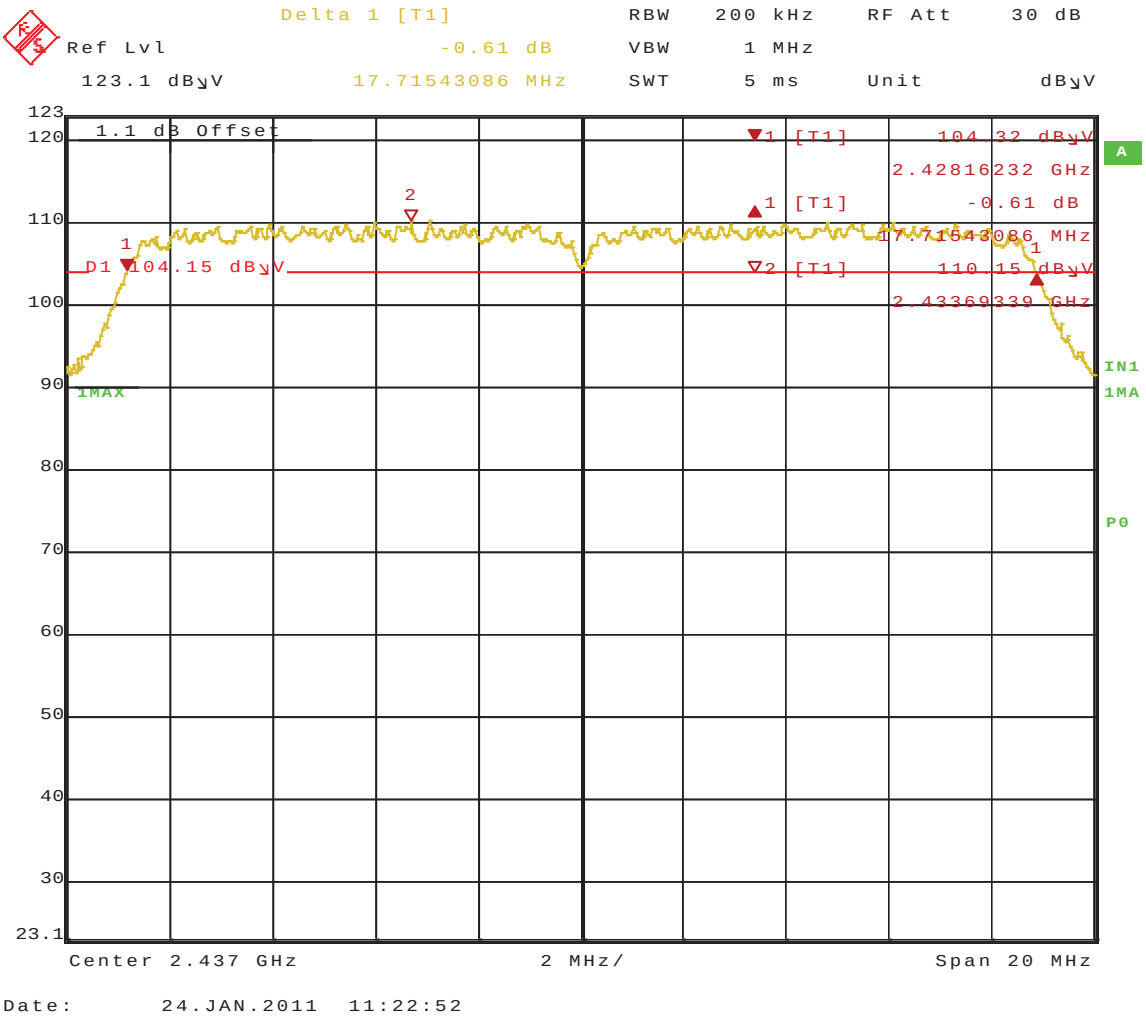


Figure 92: 6 dB Bandwidth at 6.5Mbit/s – Operating Channel 2437 MHz, Chain 2

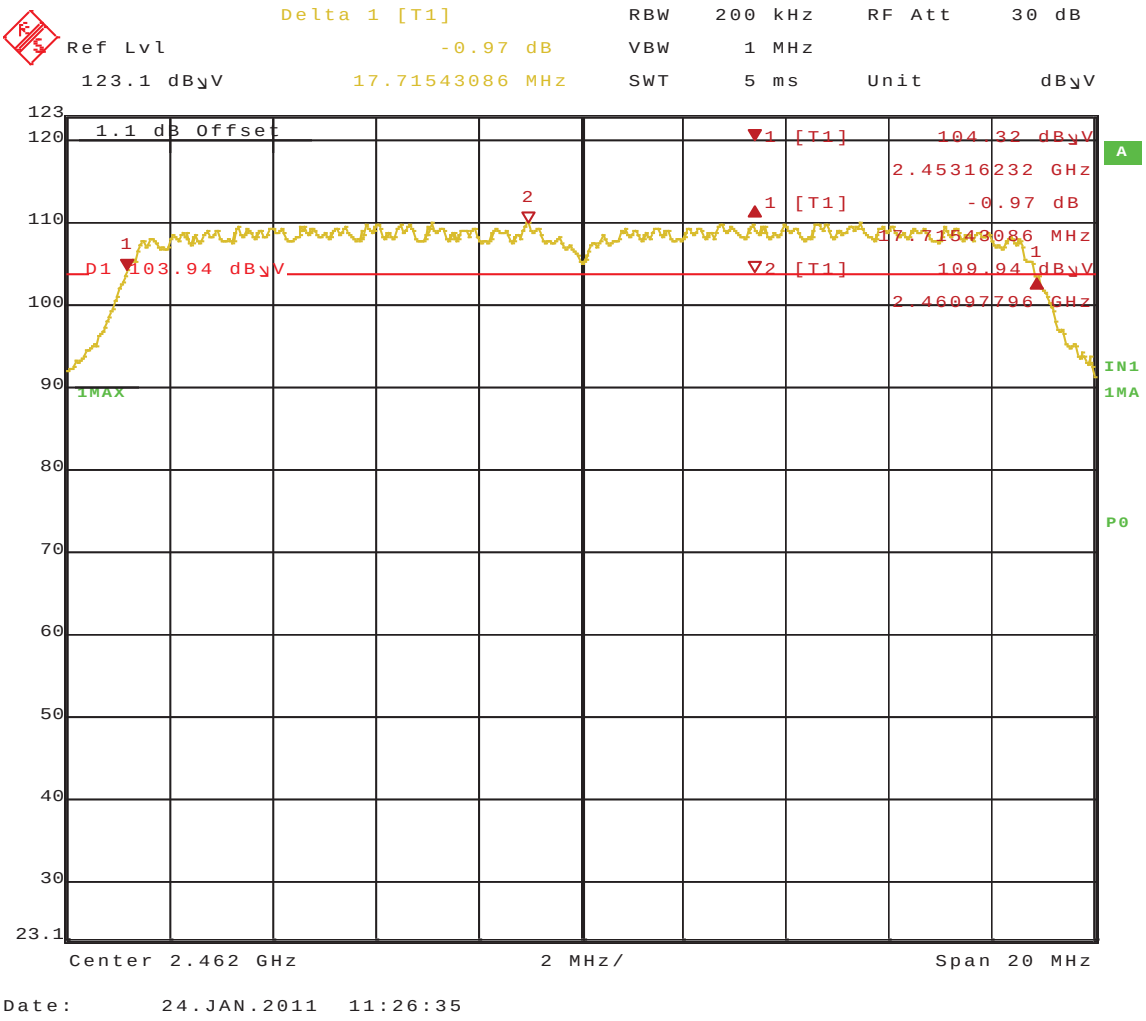


Figure 93: 6 dB Bandwidth at 6.5Mbit/s – Operating Channel 2462 MHz, Chain 2

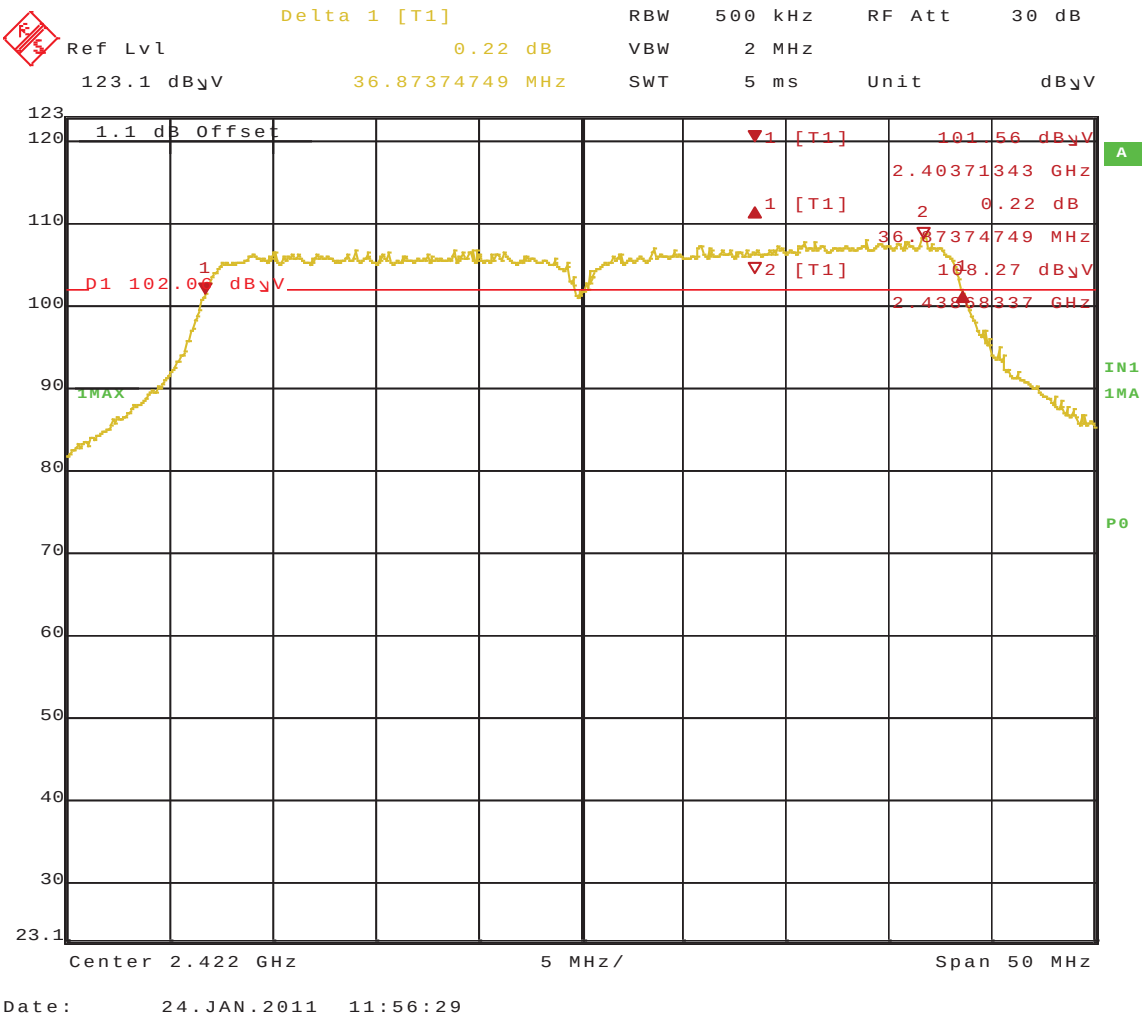


Figure 94: 6 dB Bandwidth at 13.5Mbit/s – Operating Channel 2422 MHz, Chain 0

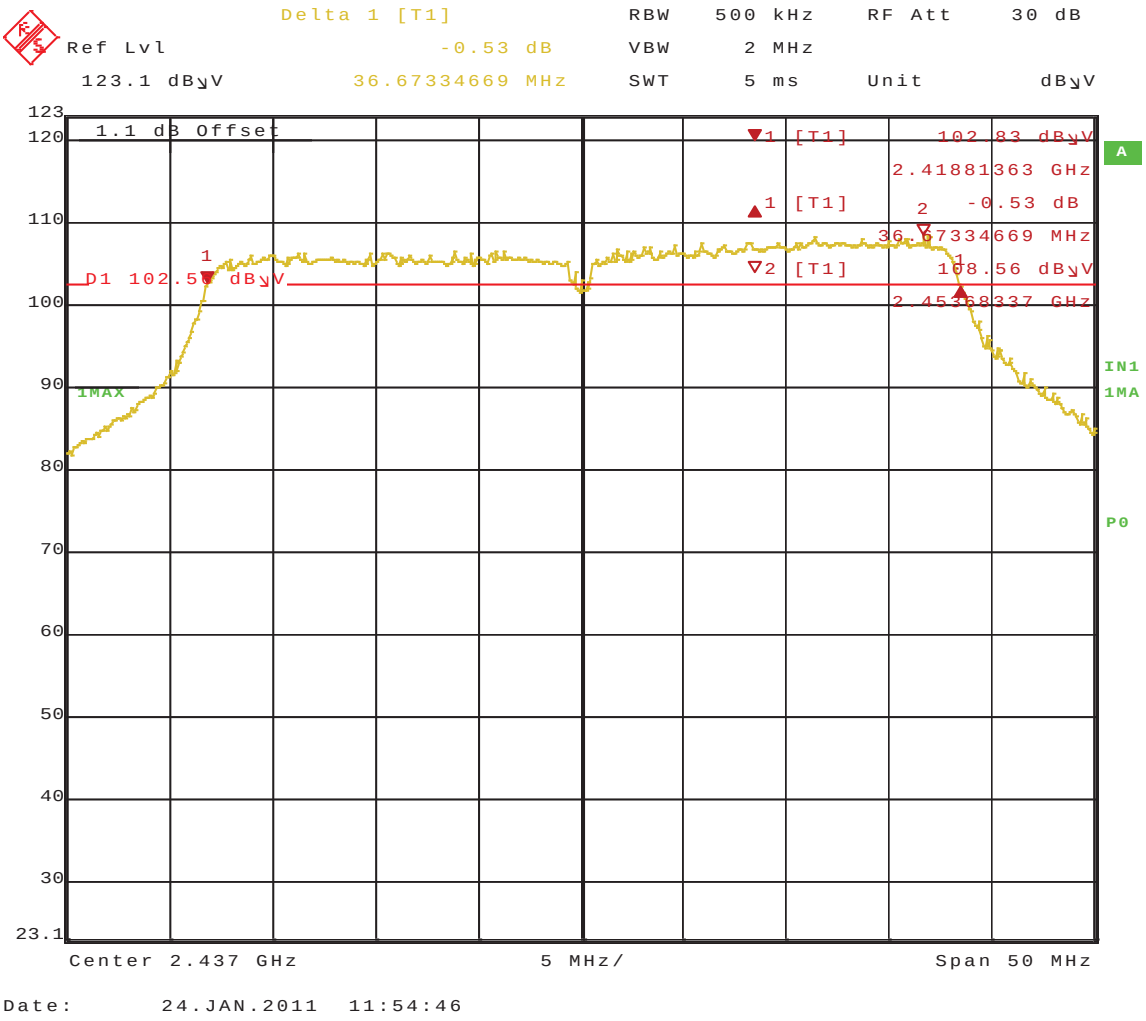


Figure 95: 6 dB Bandwidth at 13.5Mbit/s – Operating Channel 2437 MHz, Chain 0

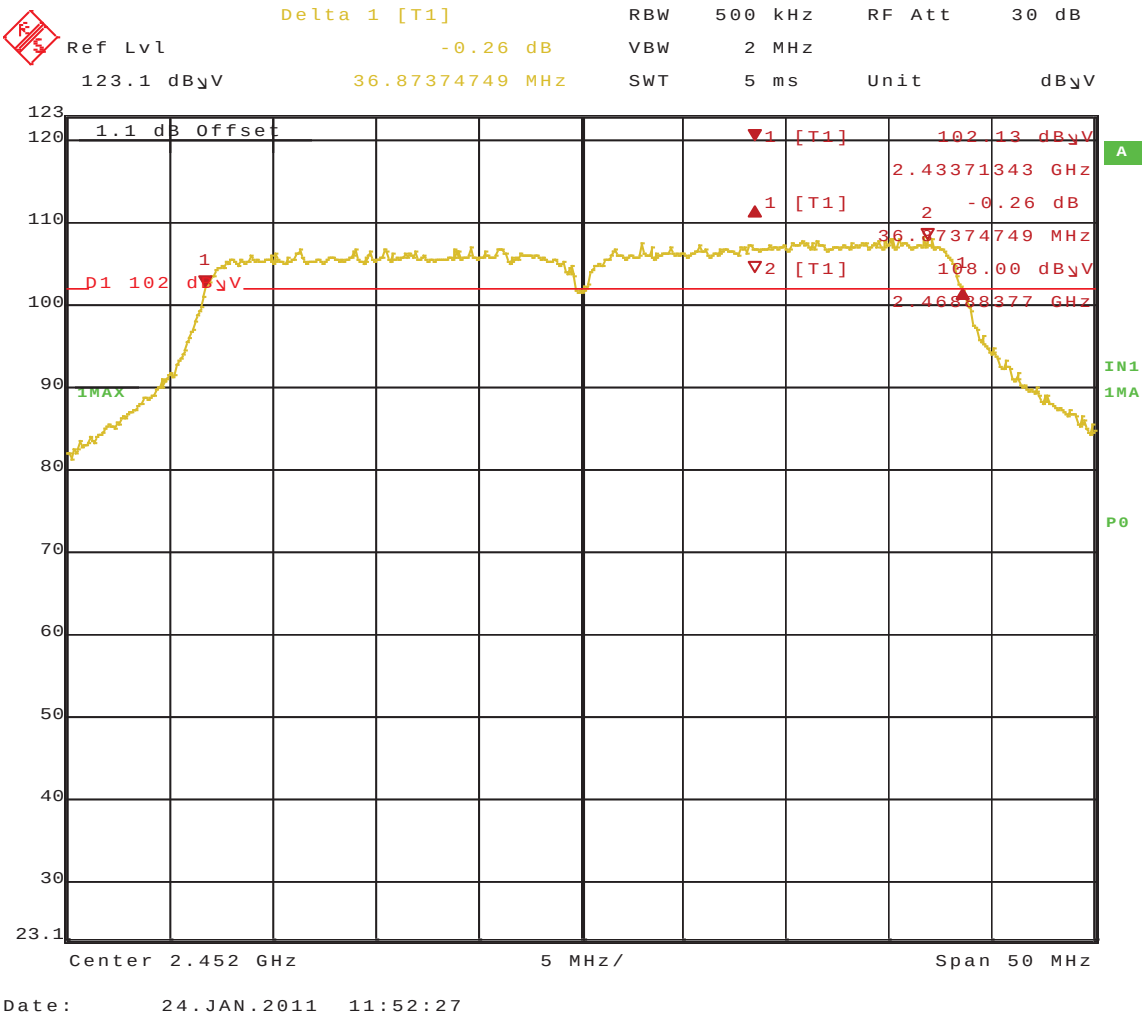


Figure 96: 6 dB Bandwidth at 13.5Mbit/s – Operating Channel 2452 MHz, Chain 0

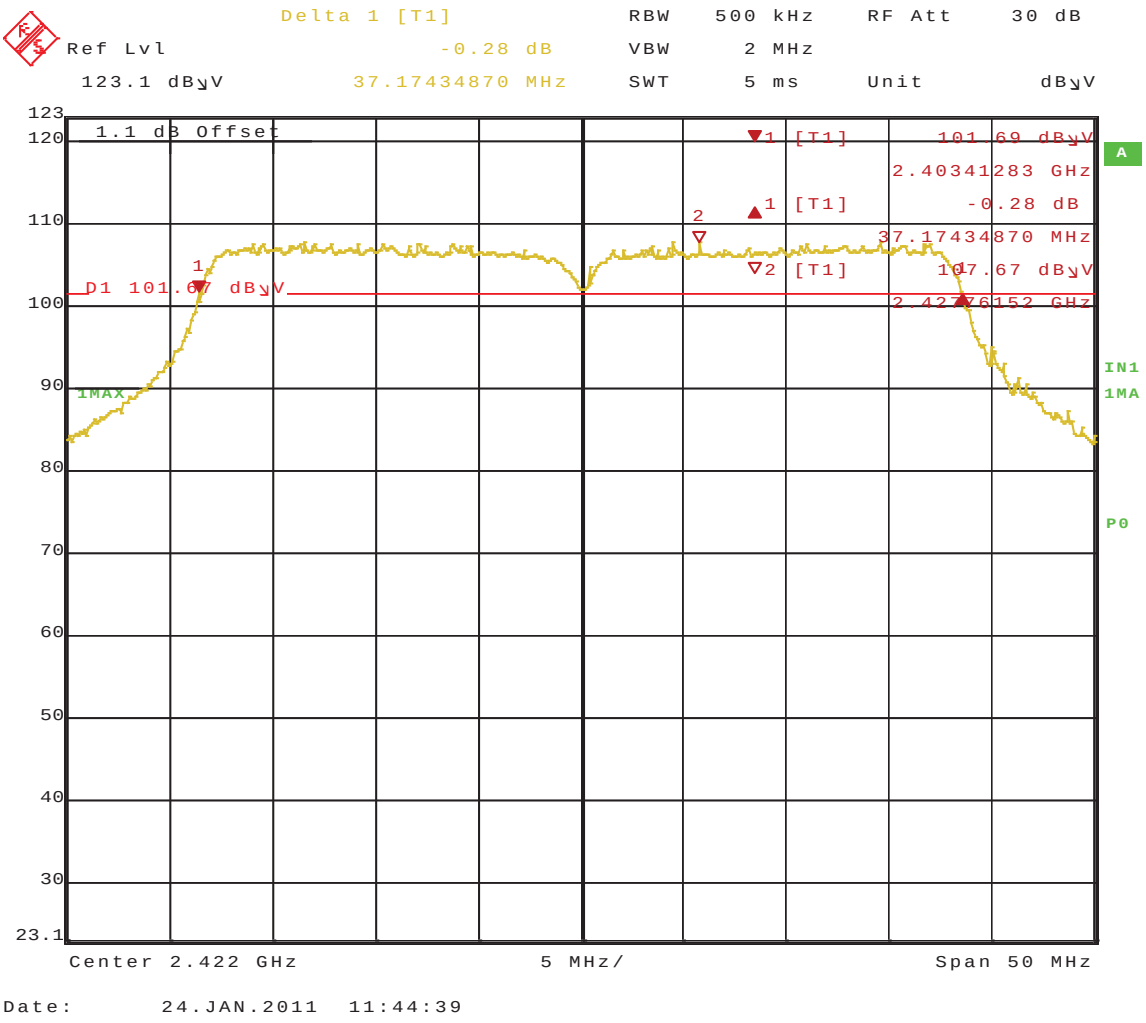


Figure 97: 6 dB Bandwidth at 13.5Mbit/s – Operating Channel 2422 MHz, Chain 1

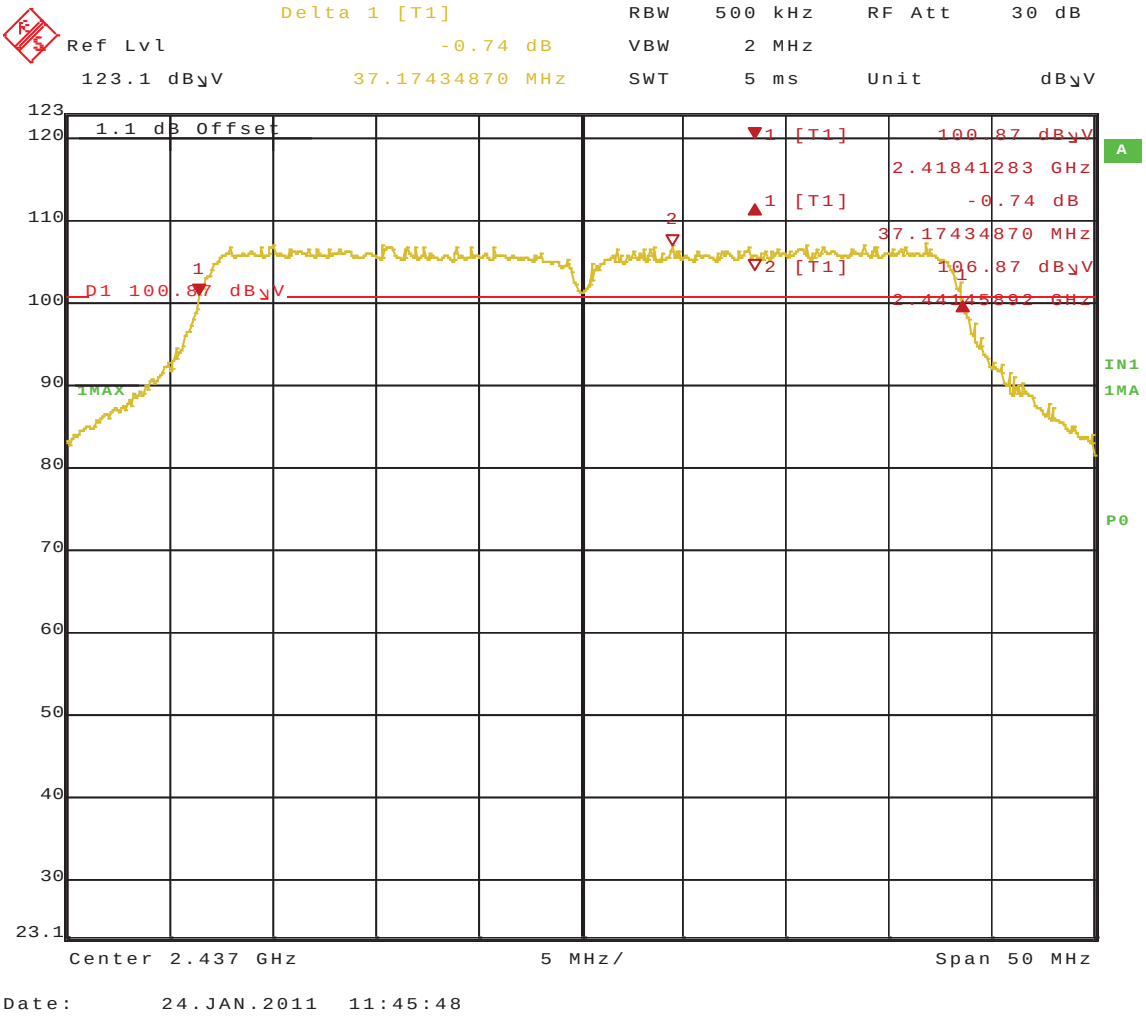


Figure 98: 6 dB Bandwidth at 13.5Mbit/s – Operating Channel 2437 MHz, Chain 1

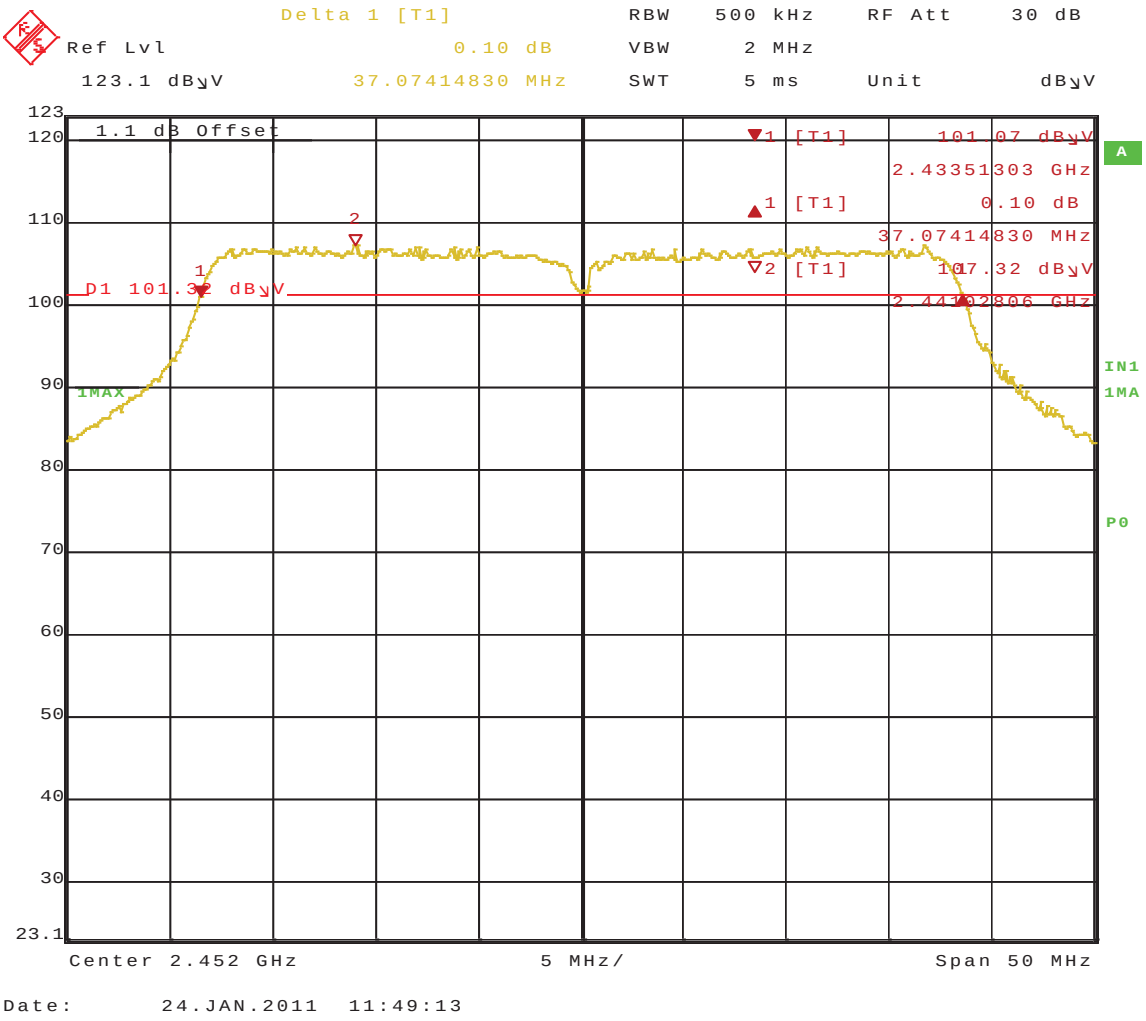


Figure 99: 6 dB Bandwidth at 13.5Mbit/s – Operating Channel 2452 MHz, Chain 1

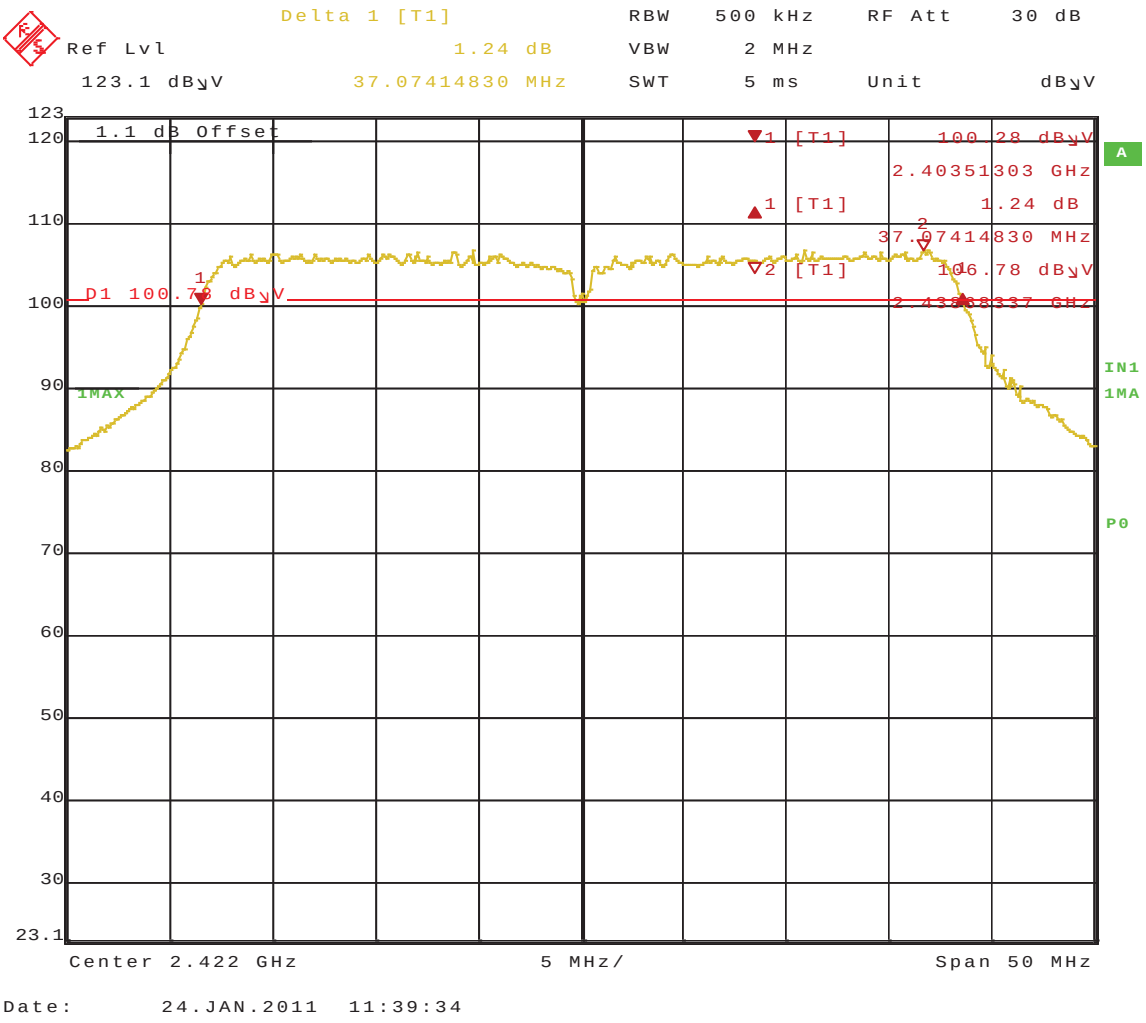


Figure 100: 6 dB Bandwidth at 13.5Mbit/s – Operating Channel 2422 MHz, Chain 2

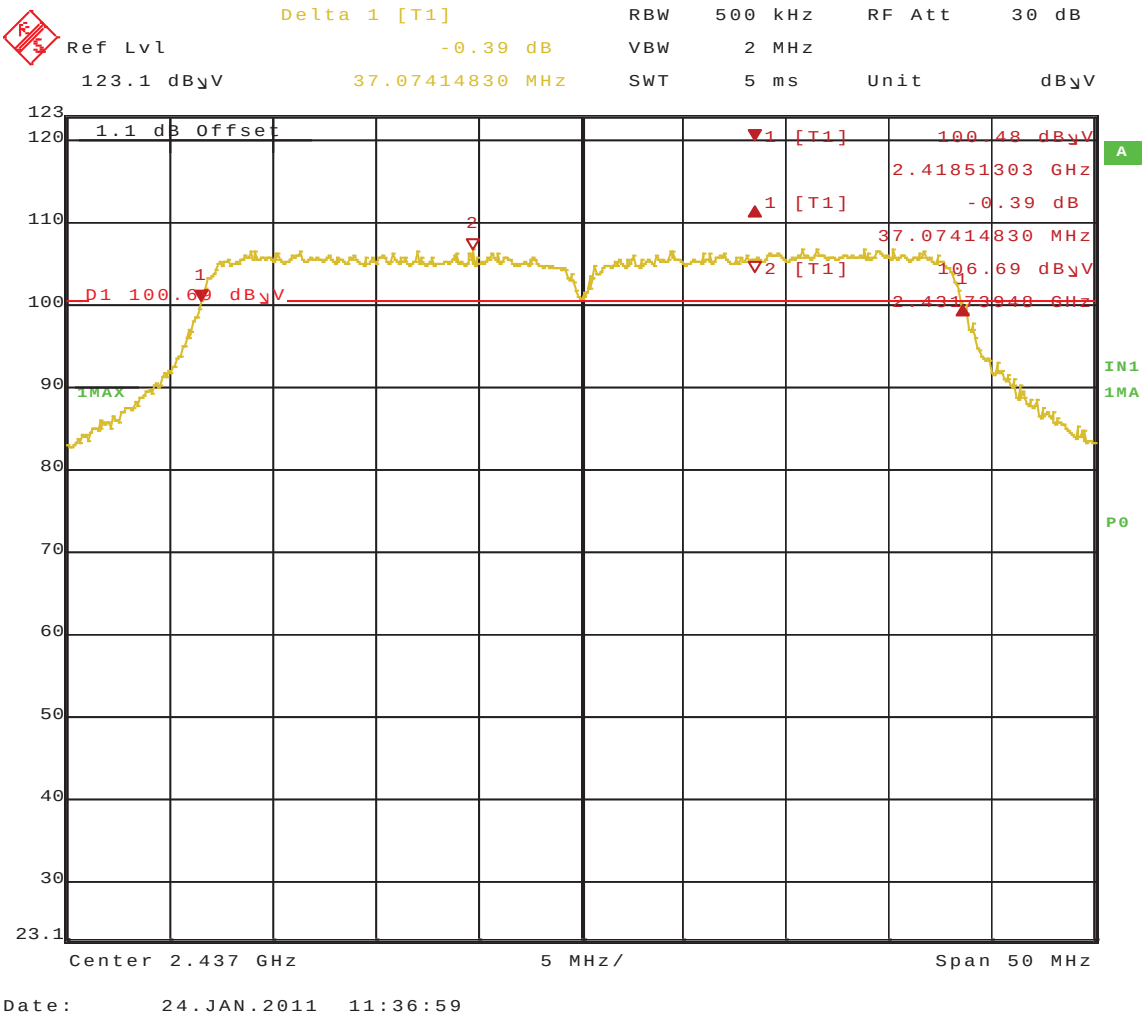


Figure 101: 6 dB Bandwidth at 13.5Mbit/s – Operating Channel 2437 MHz, Chain 2

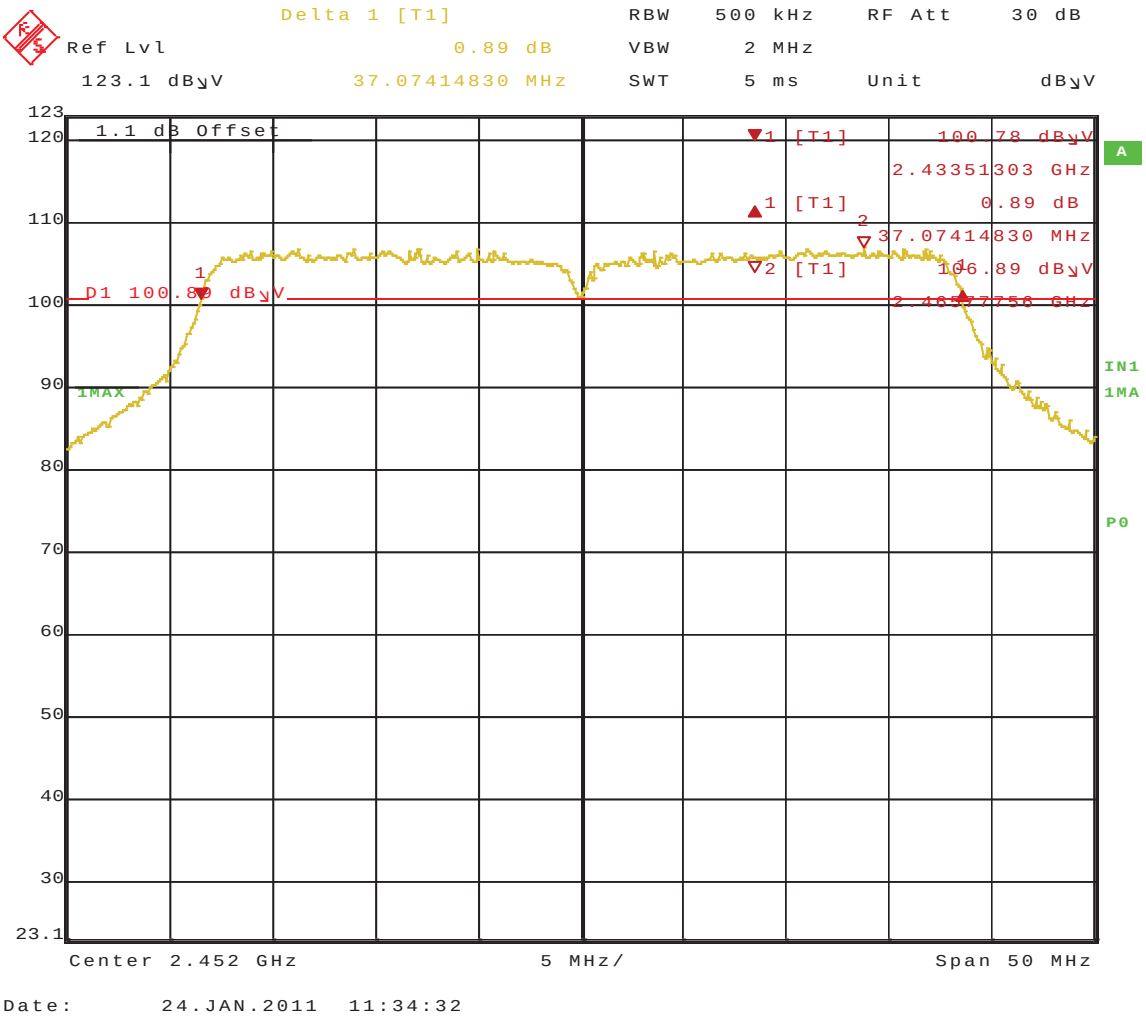


Figure 102: 6 dB Bandwidth at 13.5Mbit/s – Operating Channel 2452 MHz, Chain 2

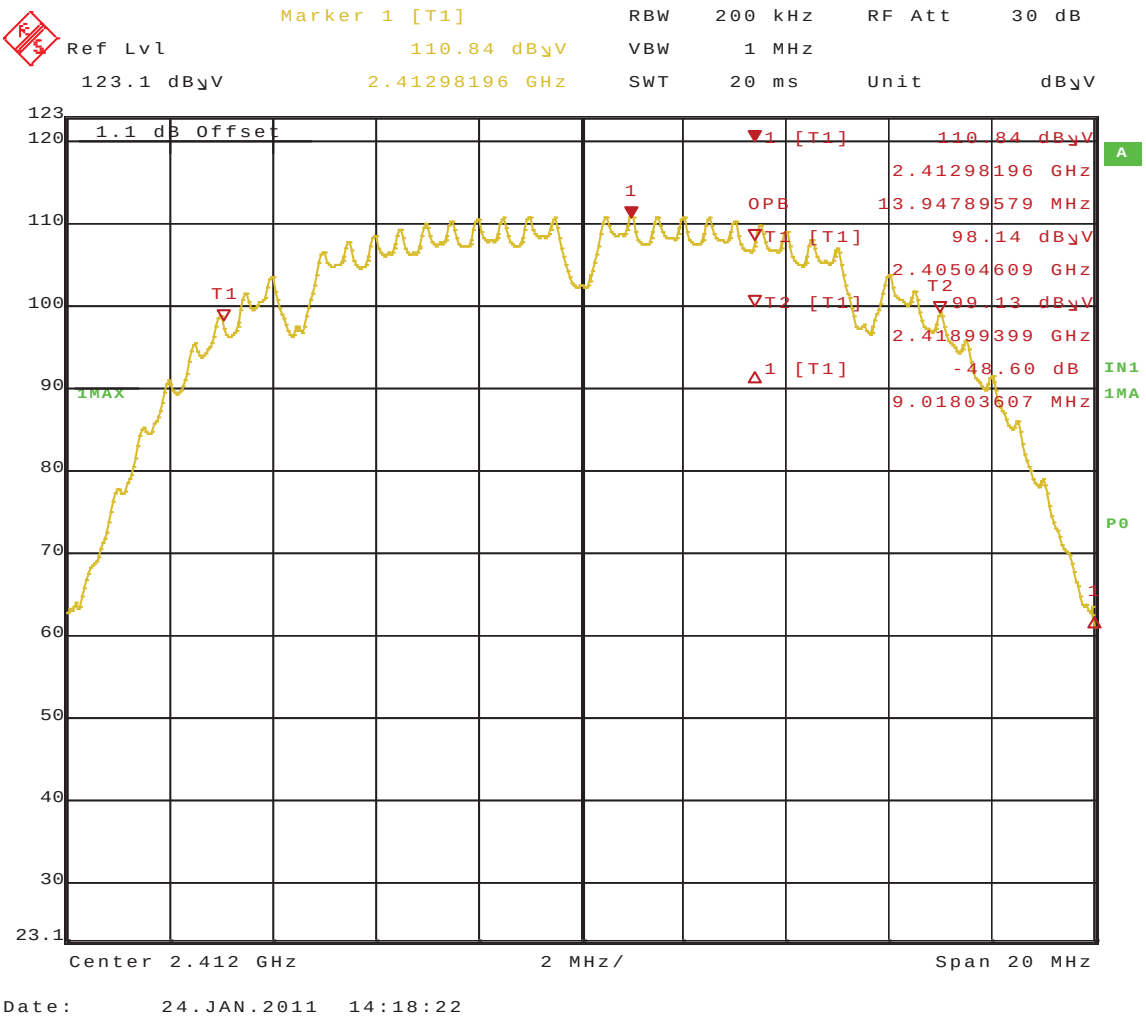


Figure 103: 99% Bandwidth at 1Mbit/s – Operating Channel 2412 MHz, Chain 0

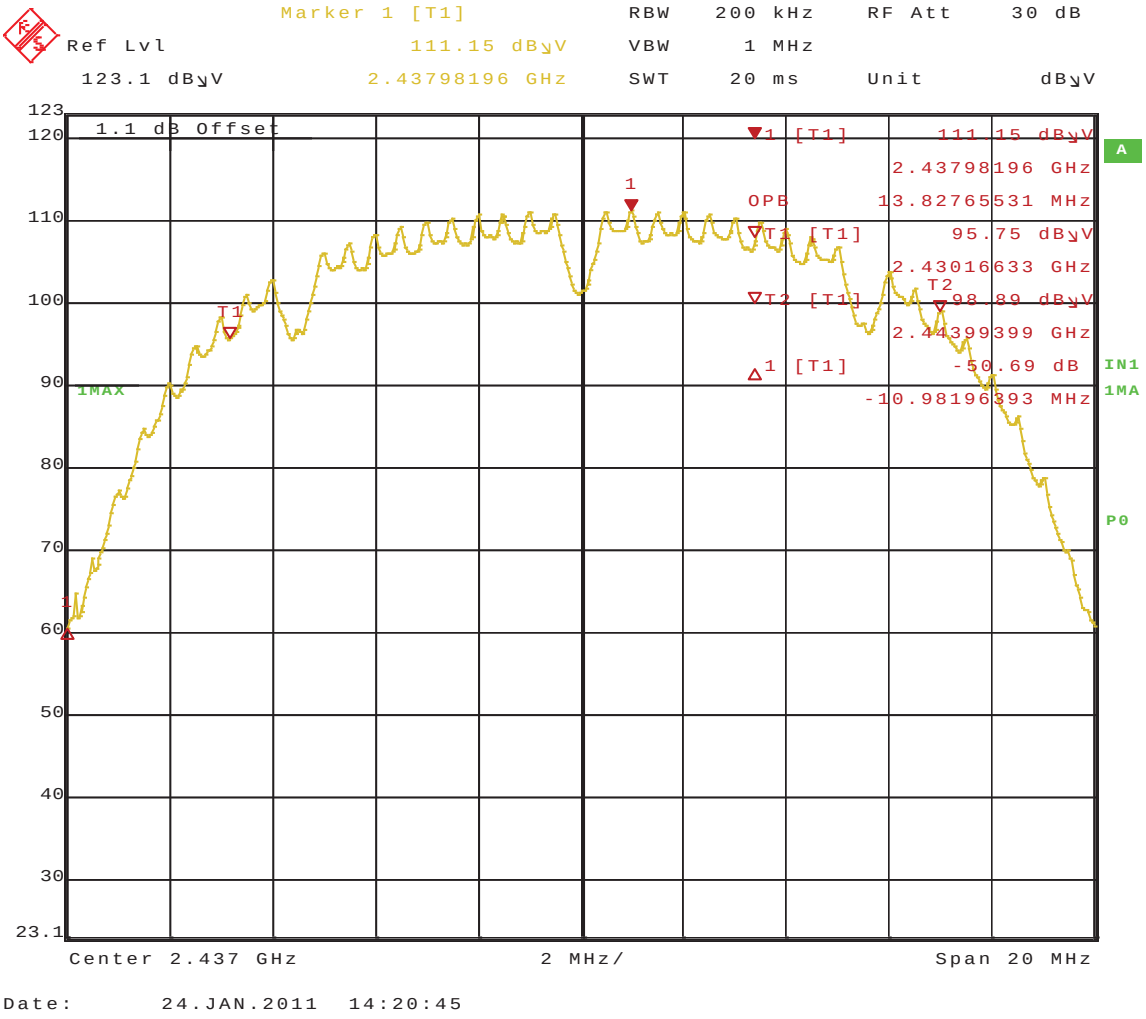


Figure 104: 99% Bandwidth at 1Mbit/s – Operating Channel 2437 MHz, Chain 0

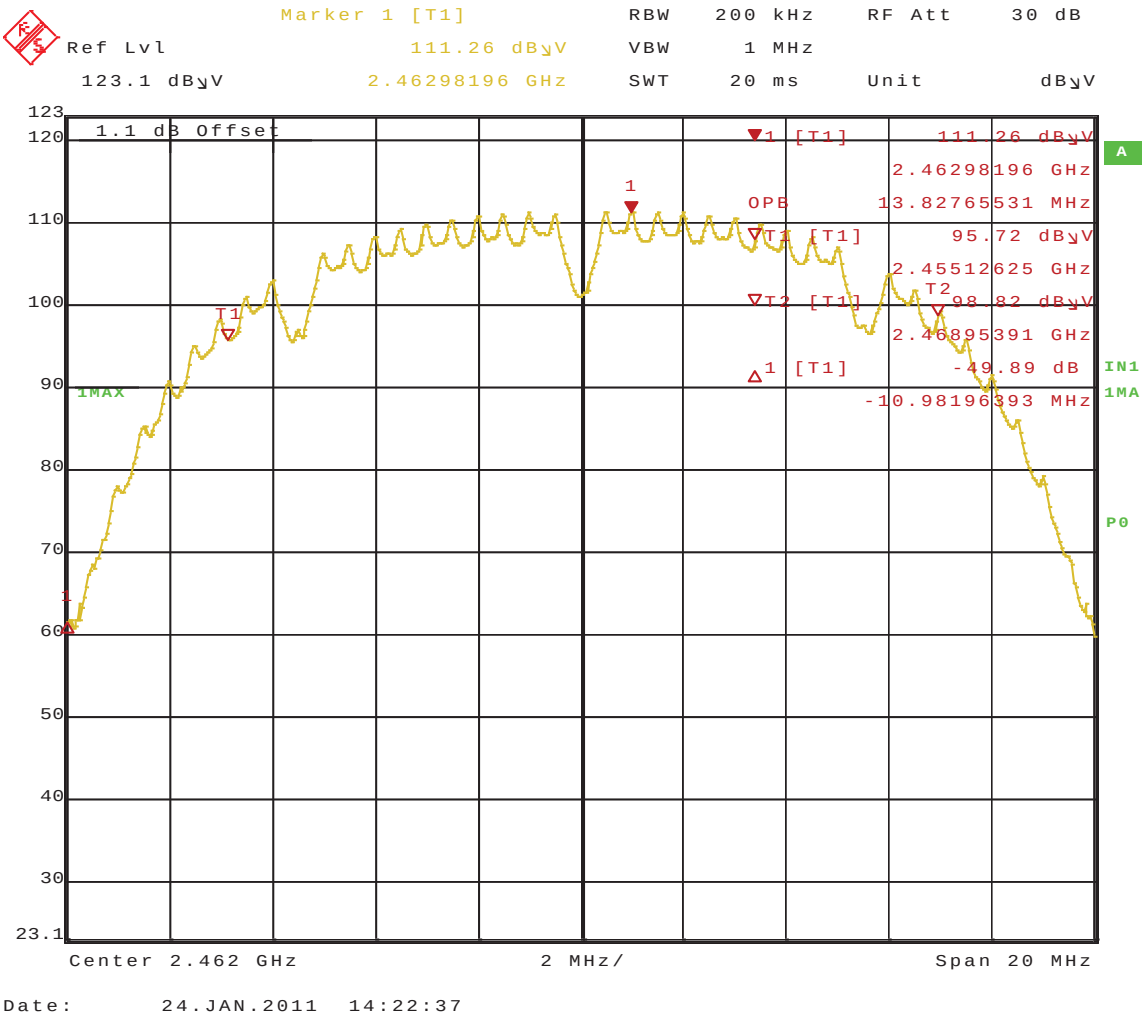


Figure 105: 99% Bandwidth at 1Mbit/s – Operating Channel 2462 MHz, Chain 0

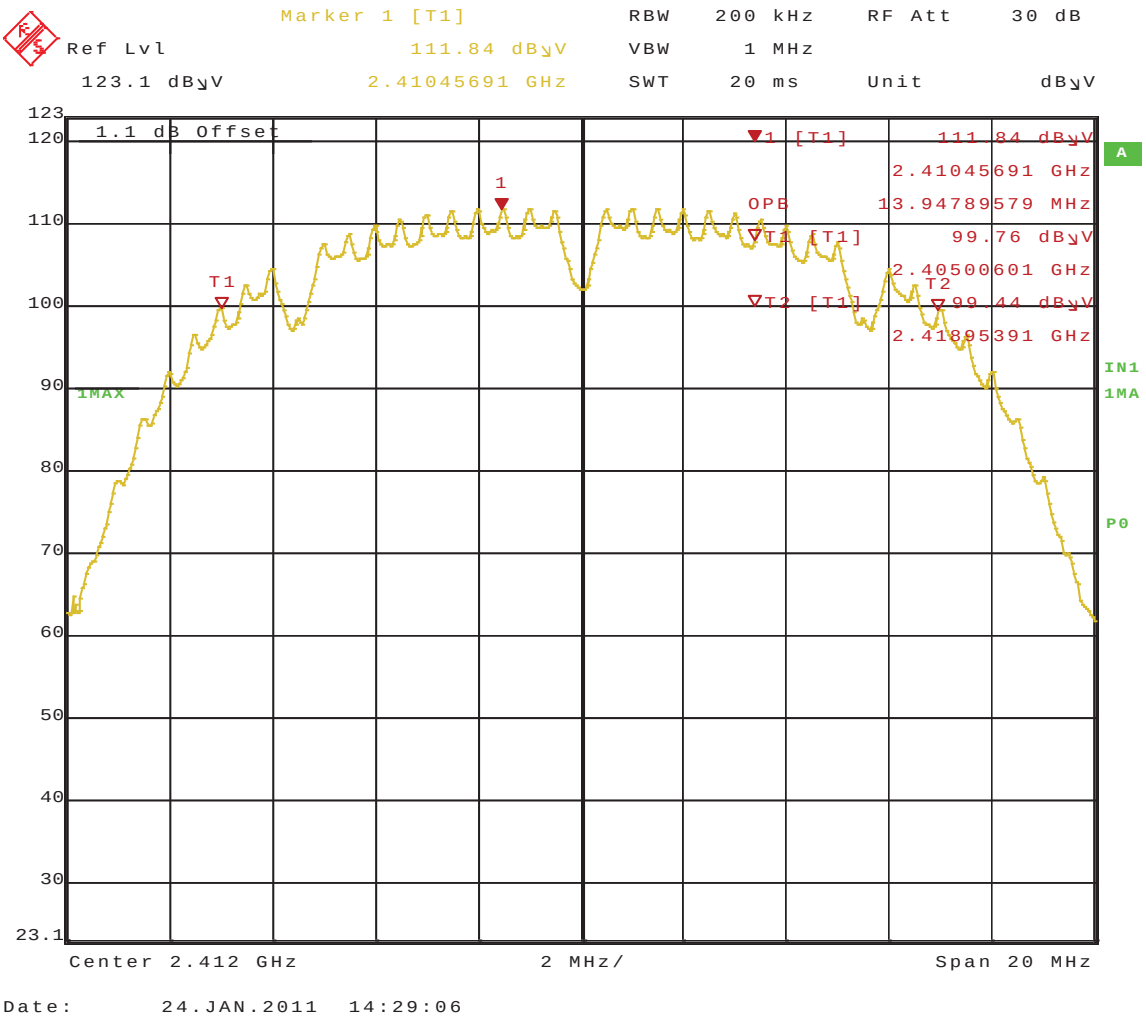


Figure 106: 99% Bandwidth at 1Mbit/s – Operating Channel 2412 MHz, Chain 1

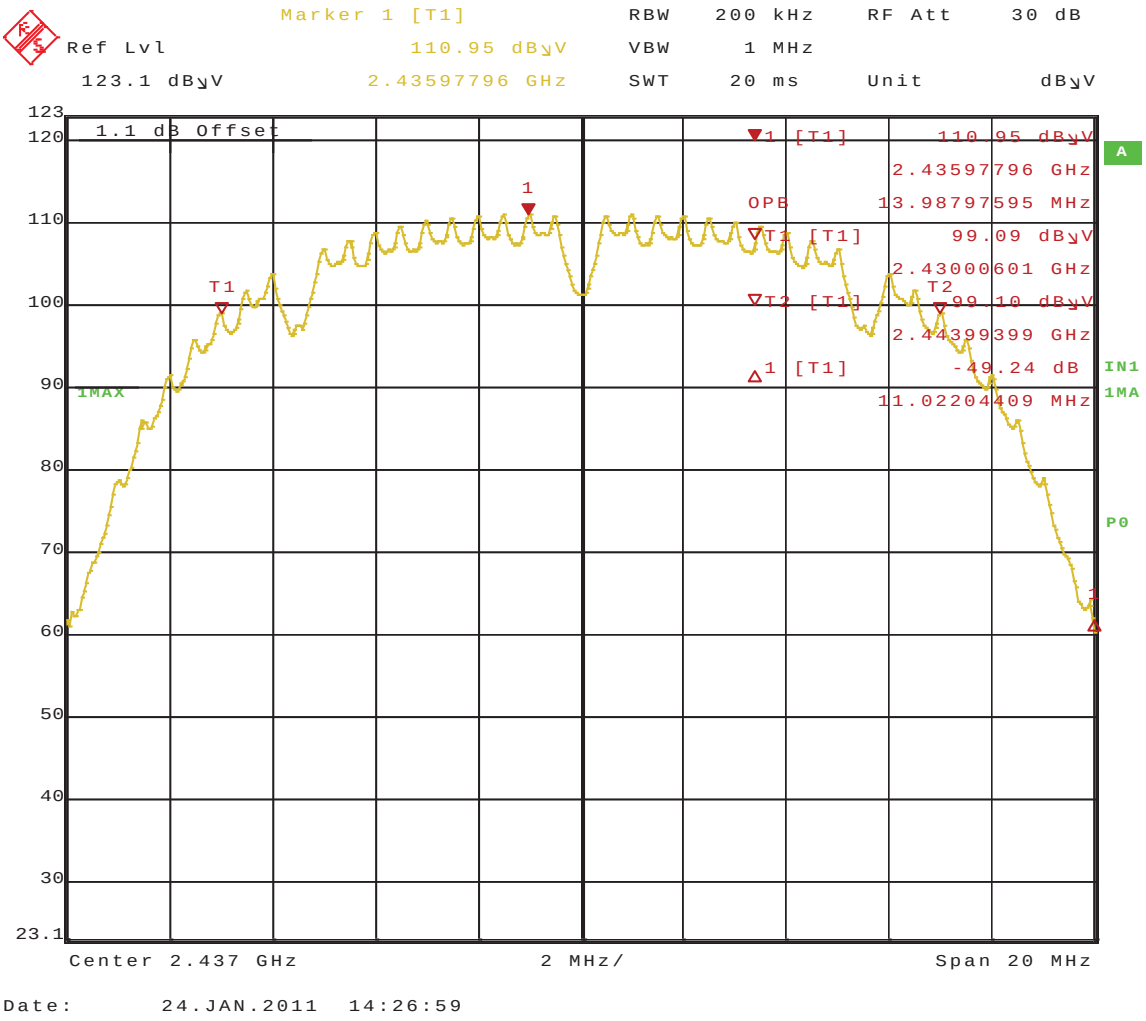


Figure 107: 99% Bandwidth at 1Mbit/s – Operating Channel 2437 MHz, Chain 1

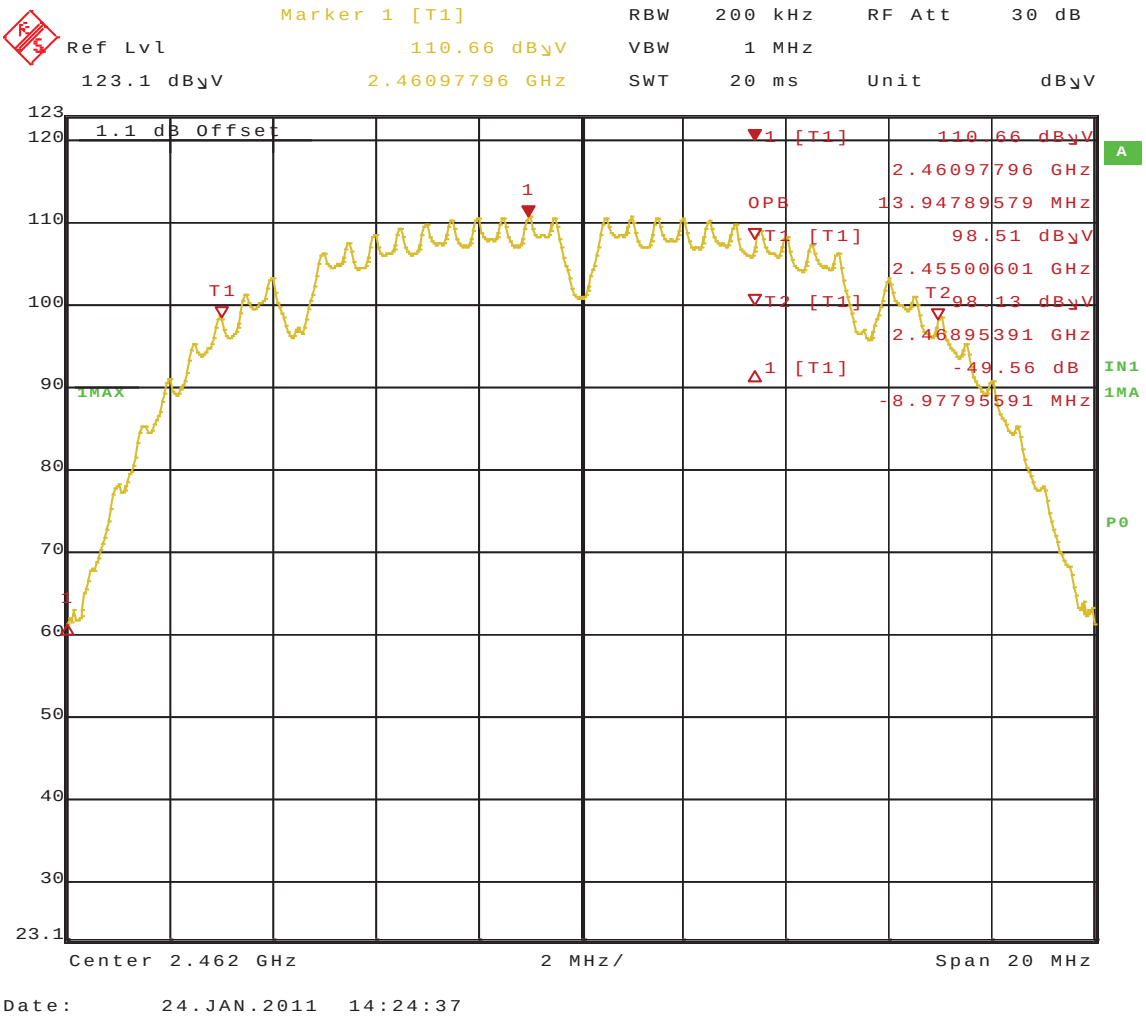


Figure 108: 99% Bandwidth at 1Mbit/s – Operating Channel 2462 MHz, Chain 1

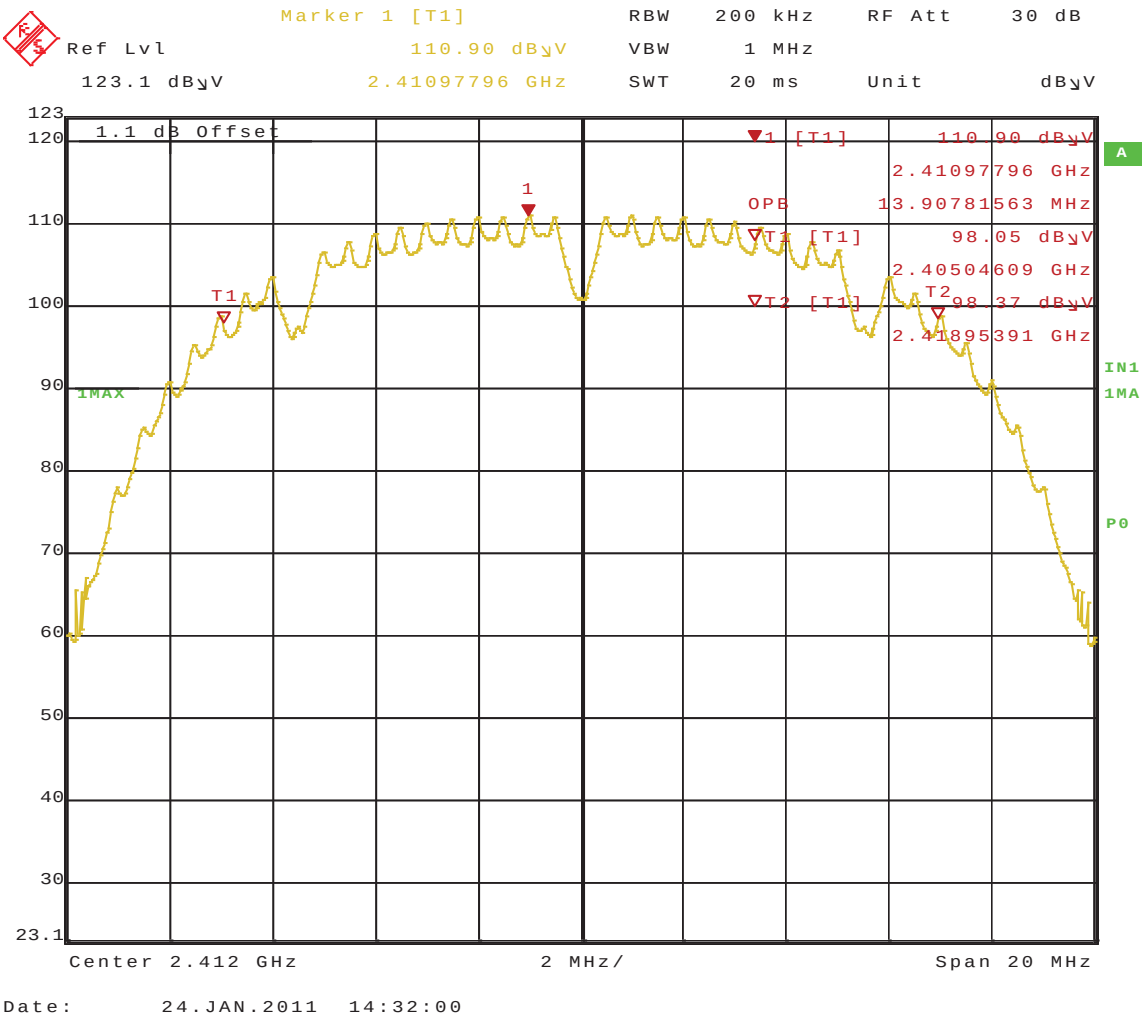


Figure 109: 99% Bandwidth at 1Mbit/s – Operating Channel 2412 MHz, Chain 2

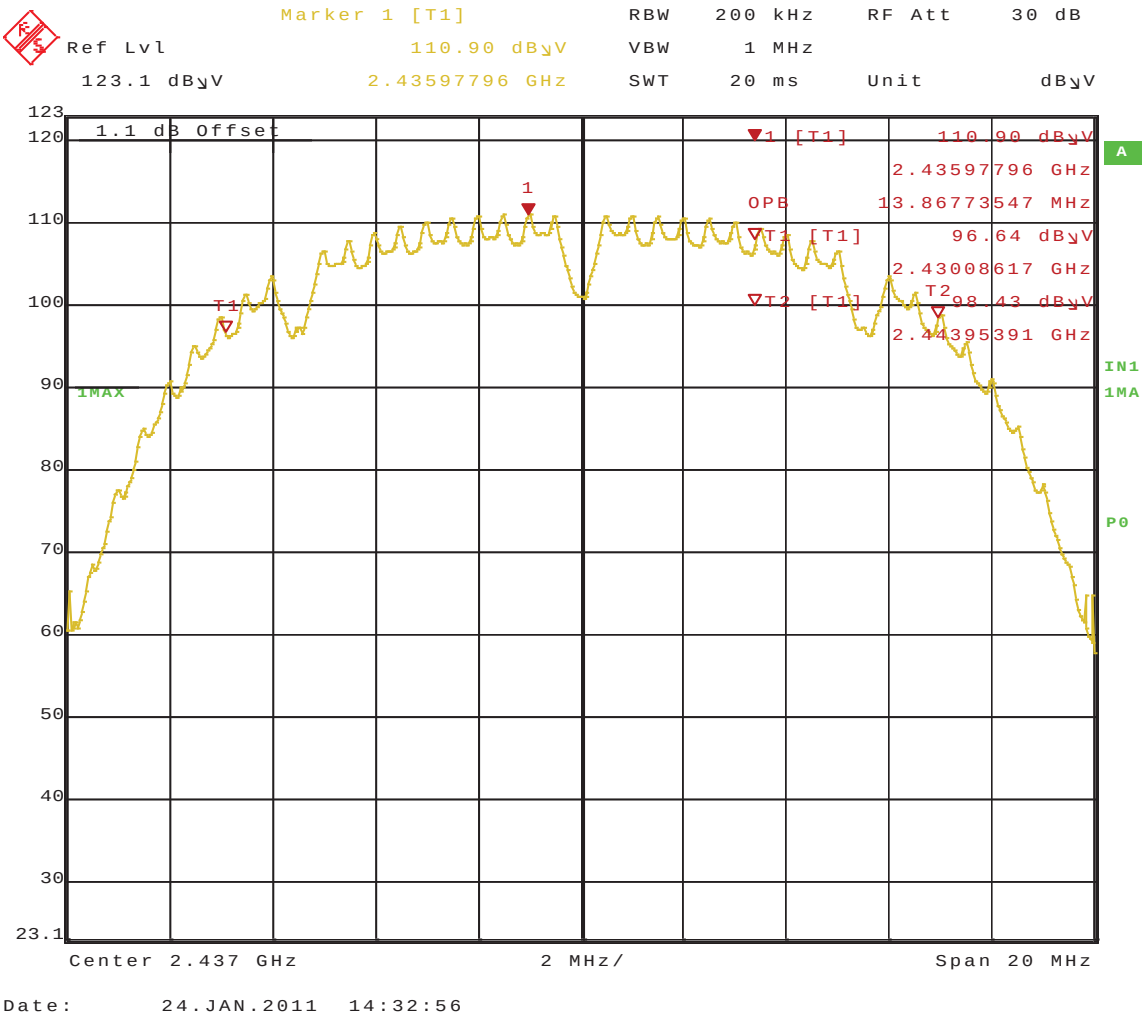


Figure 110: 99% Bandwidth at 1Mbit/s – Operating Channel 2437 MHz, Chain 2

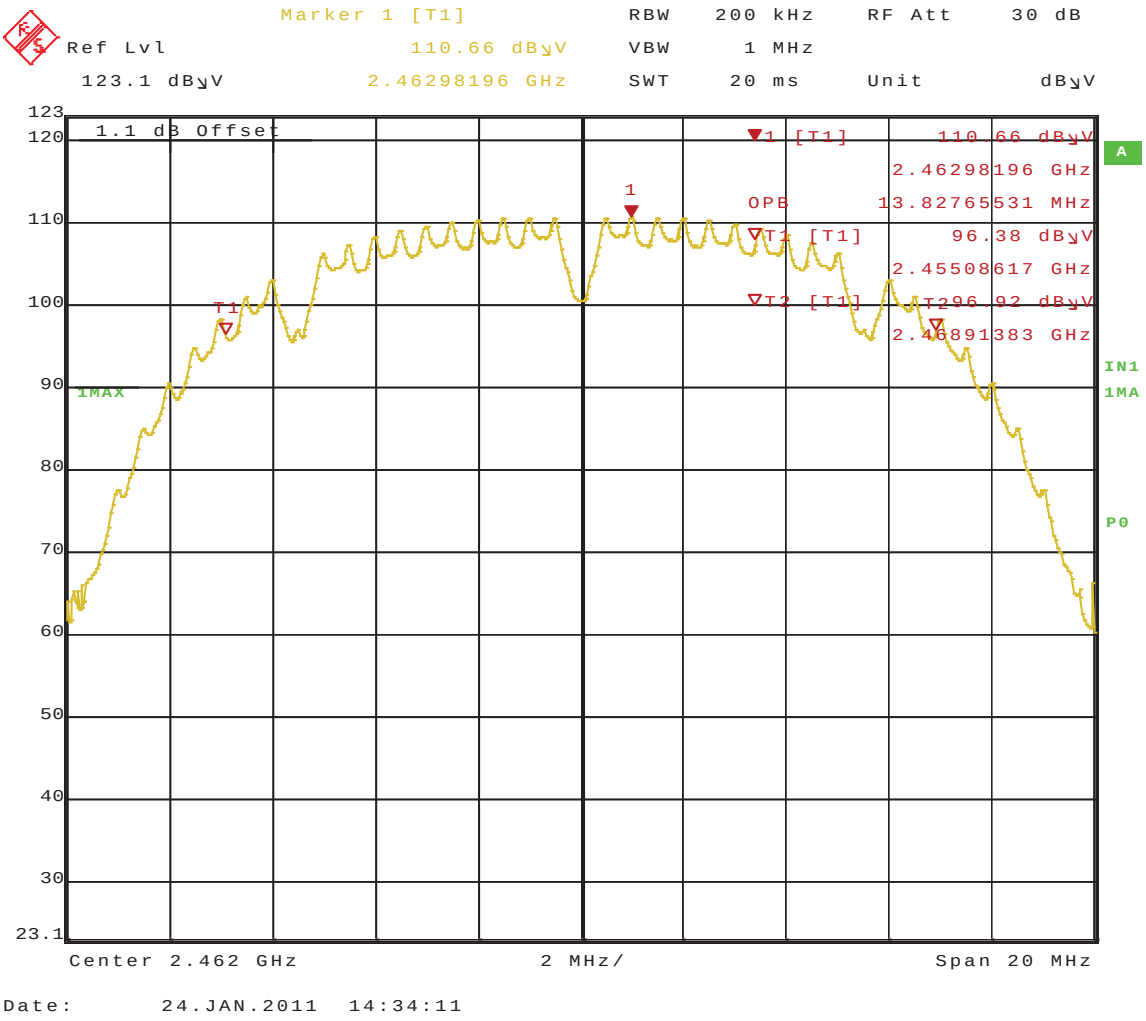


Figure 111: 99% Bandwidth at 1Mbit/s – Operating Channel 2462 MHz, Chain 2

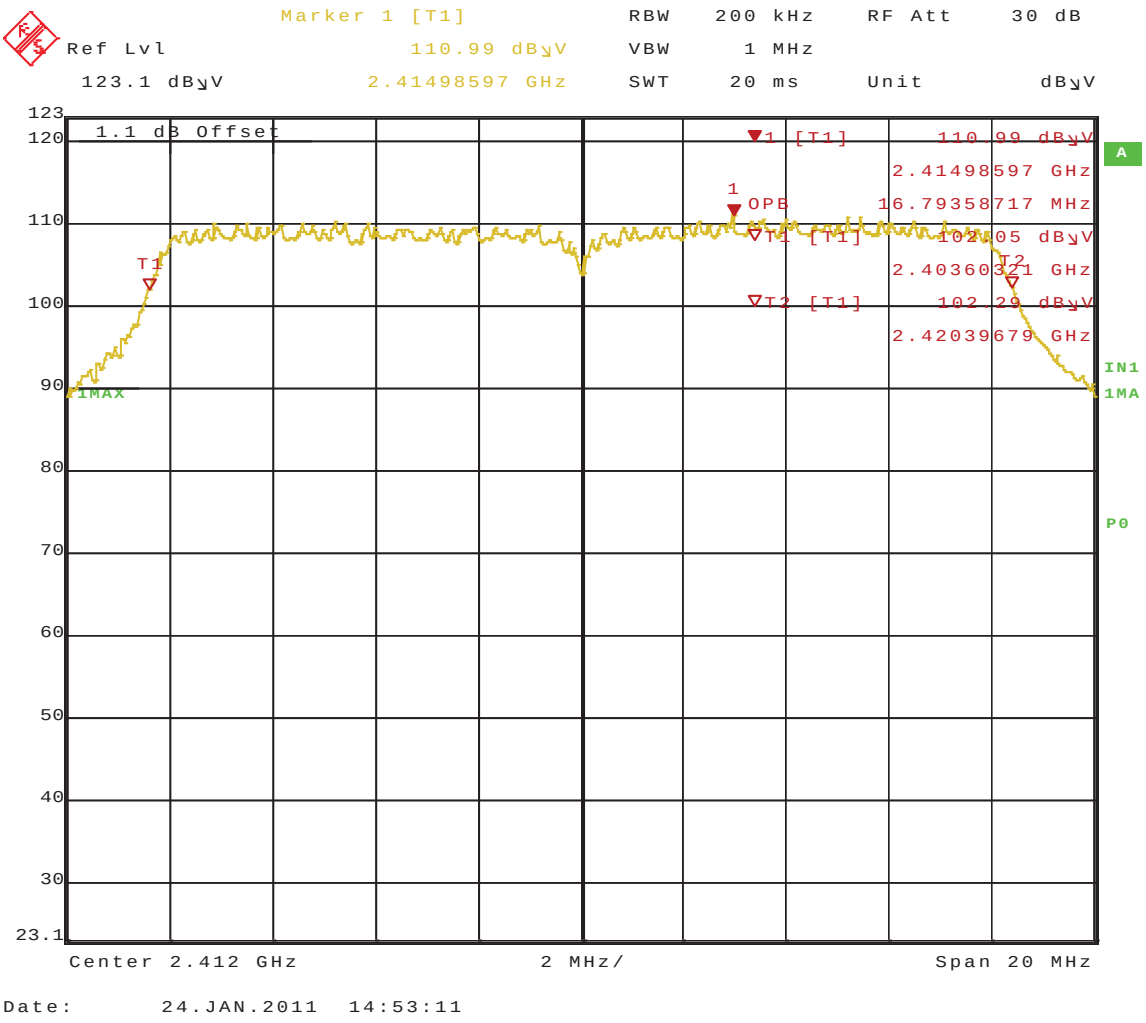


Figure 112: 99% Bandwidth at 6Mbit/s – Operating Channel 2412 MHz, Chain 0

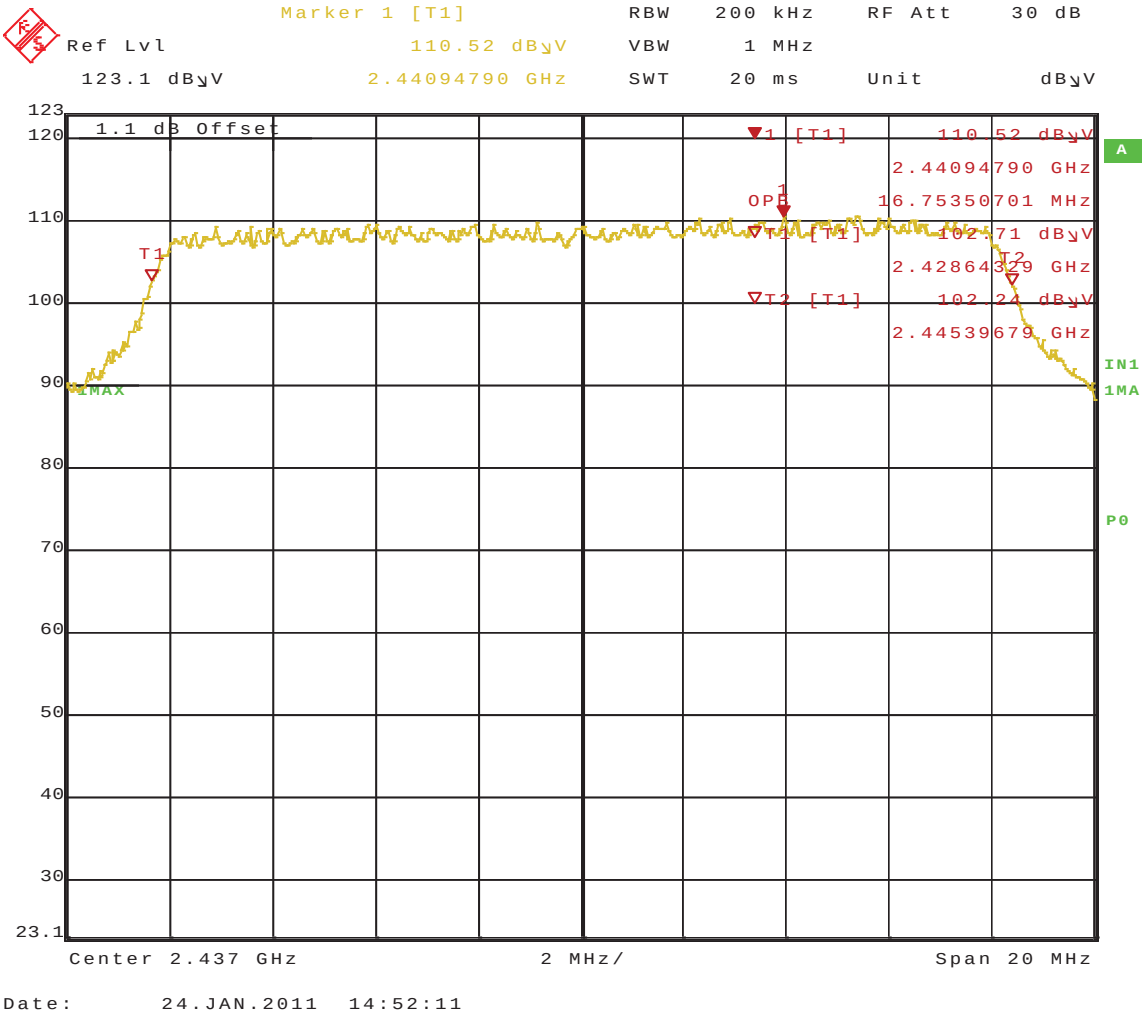


Figure 113: 99% Bandwidth at 6Mbit/s – Operating Channel 2437 MHz, Chain 0

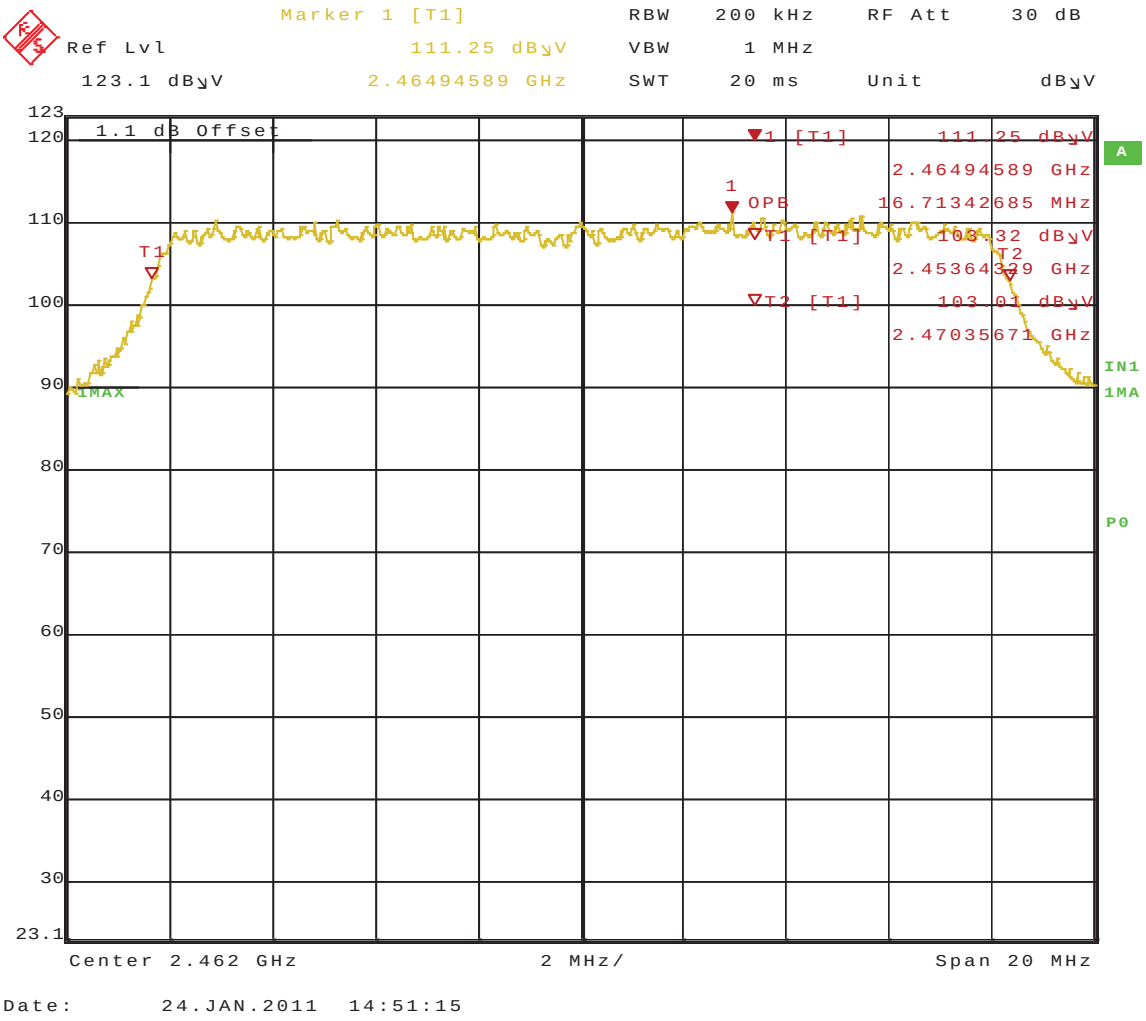


Figure 114: 99% Bandwidth at 6Mbit/s – Operating Channel 2462 MHz, Chain 0

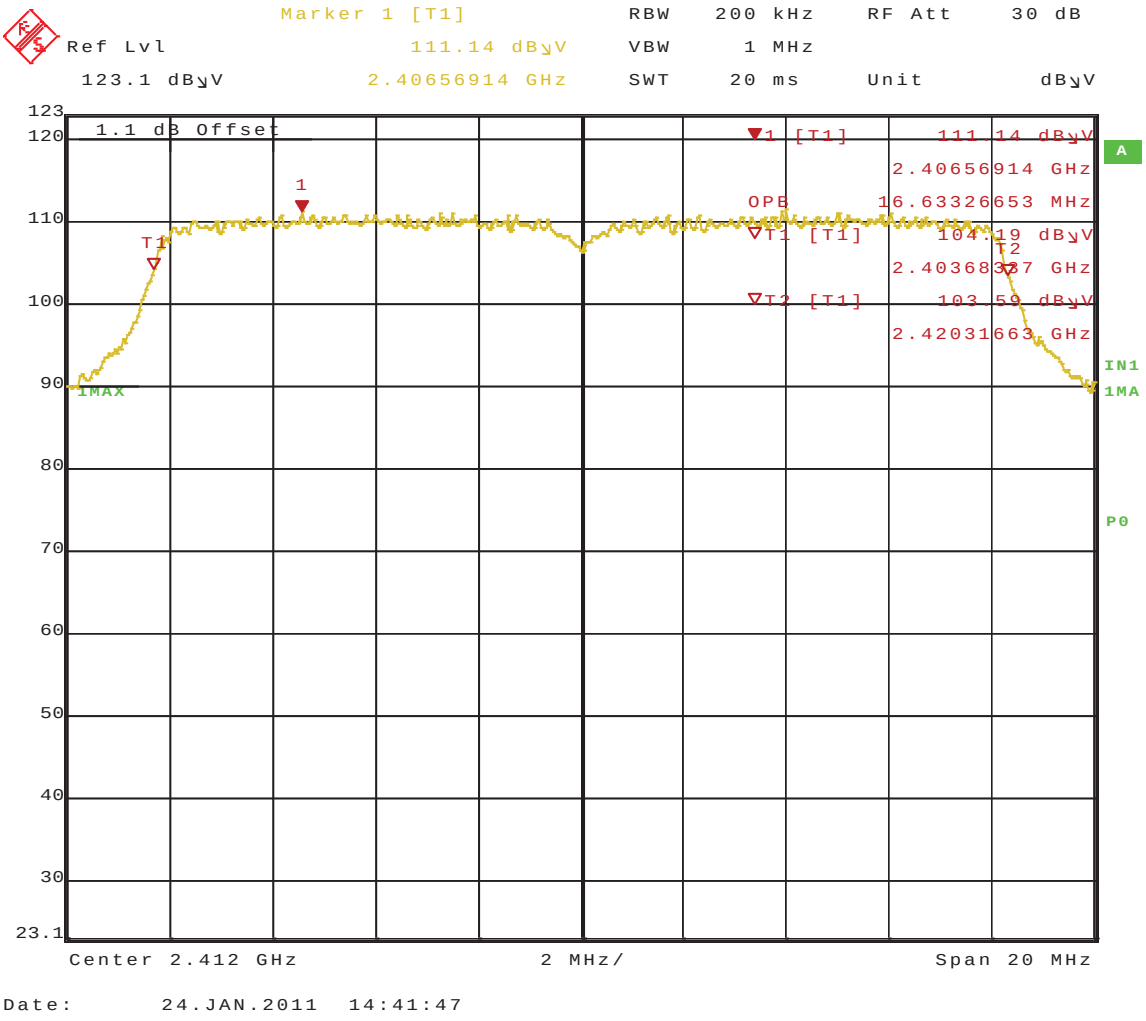


Figure 115: 99% Bandwidth at 6Mbit/s – Operating Channel 2412 MHz, Chain 1

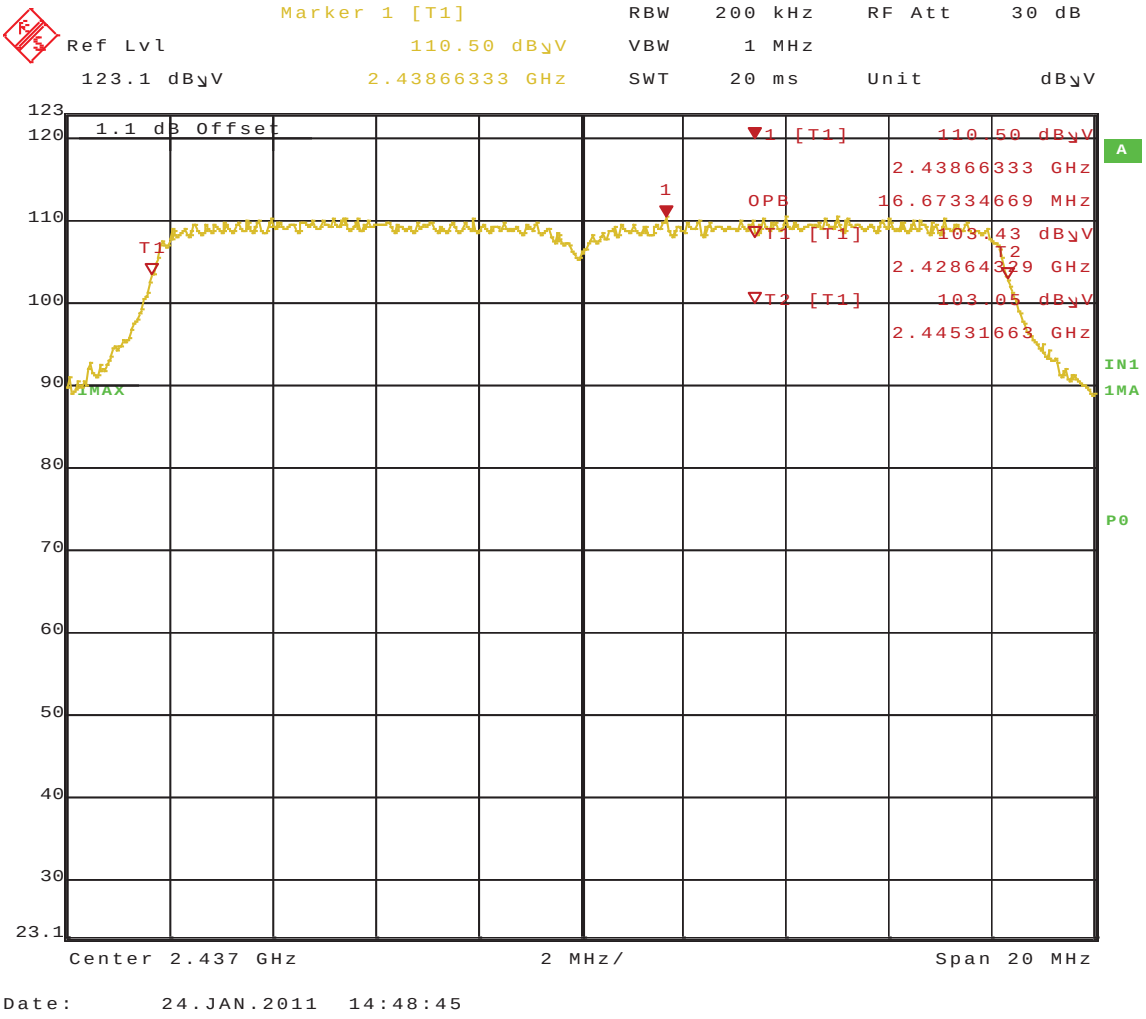


Figure 116: 99% Bandwidth at 6Mbit/s – Operating Channel 2437 MHz, Chain 1

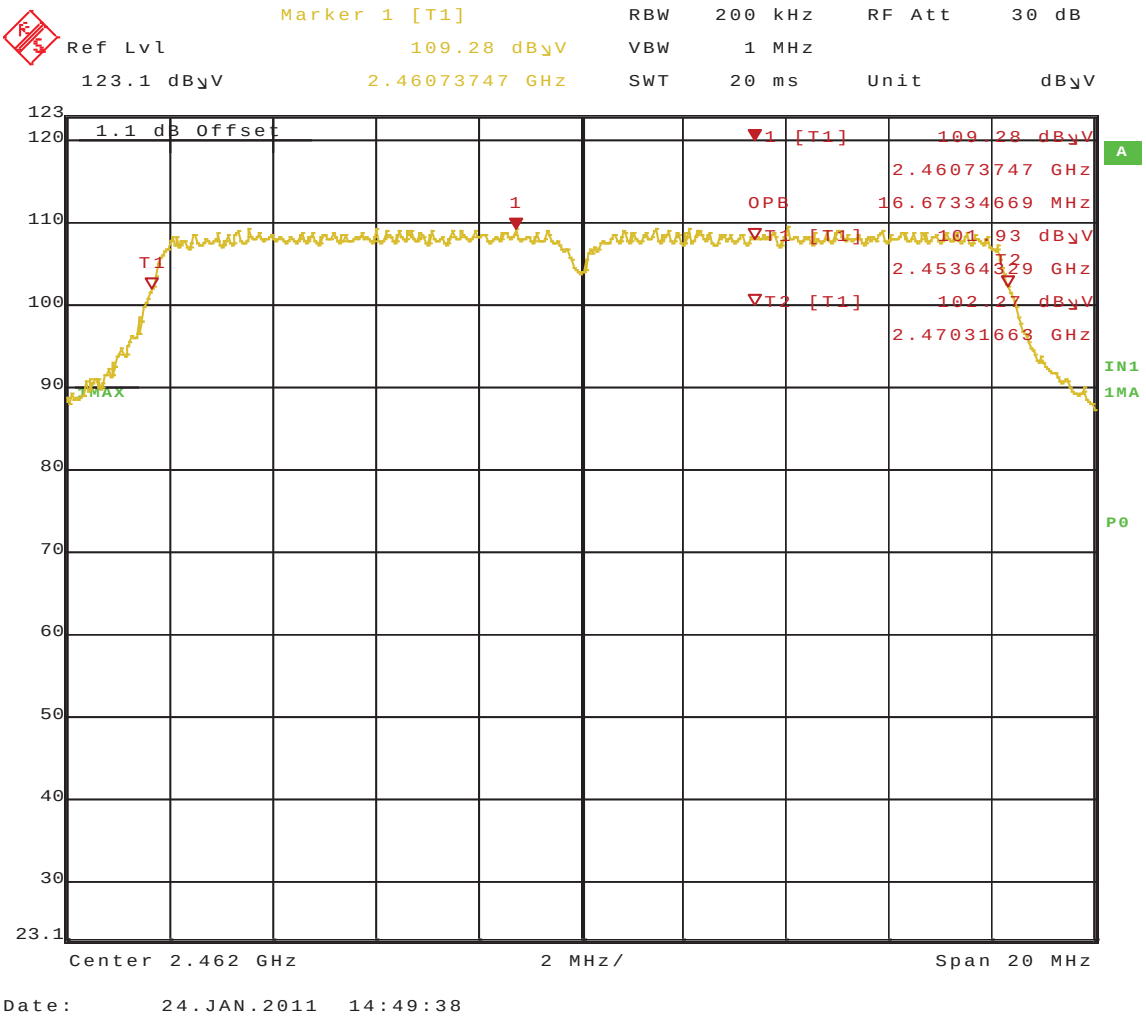


Figure 117: 99% Bandwidth at 6Mbit/s – Operating Channel 2462 MHz, Chain 1

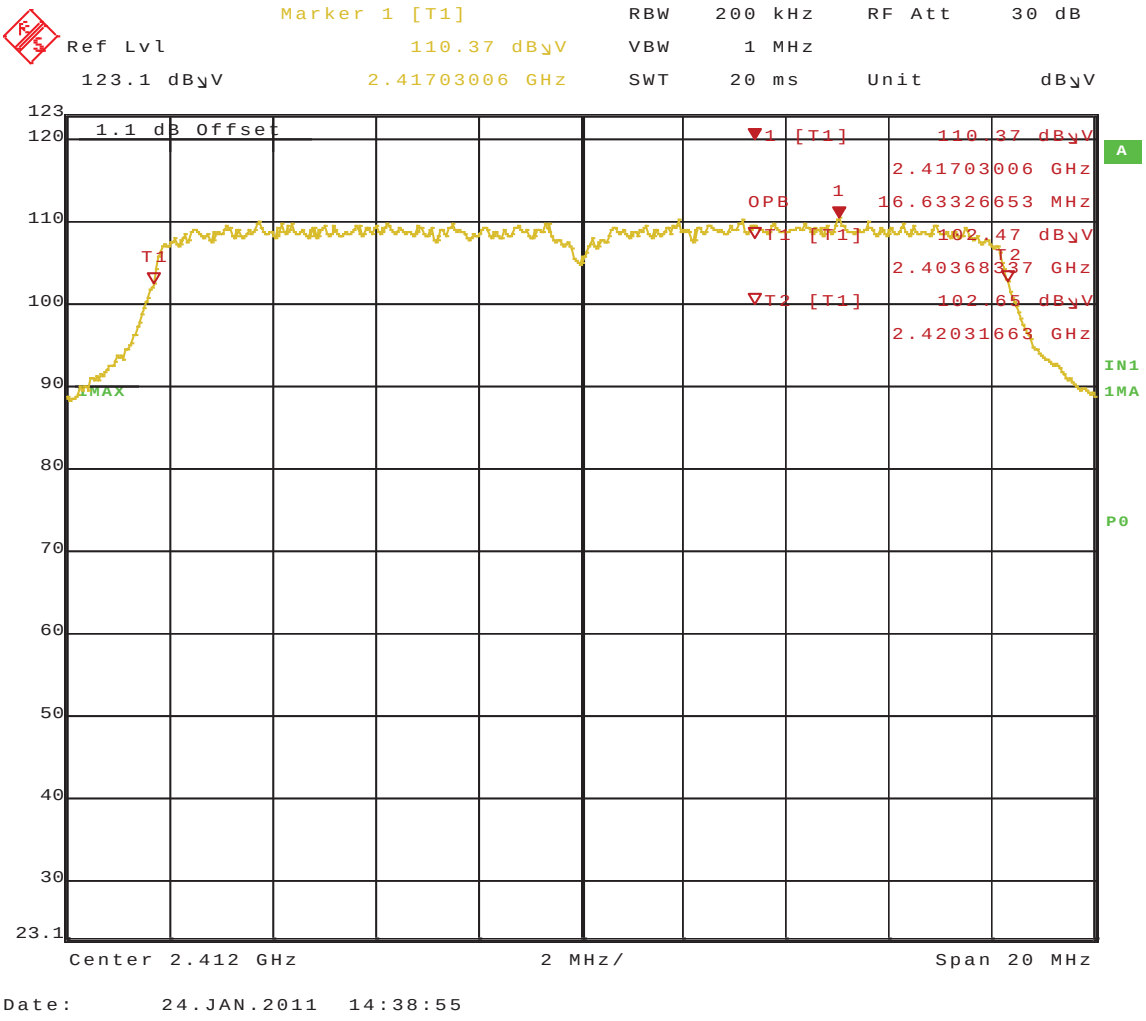


Figure 118: 99% Bandwidth at 6Mbit/s – Operating Channel 2412 MHz, Chain 2

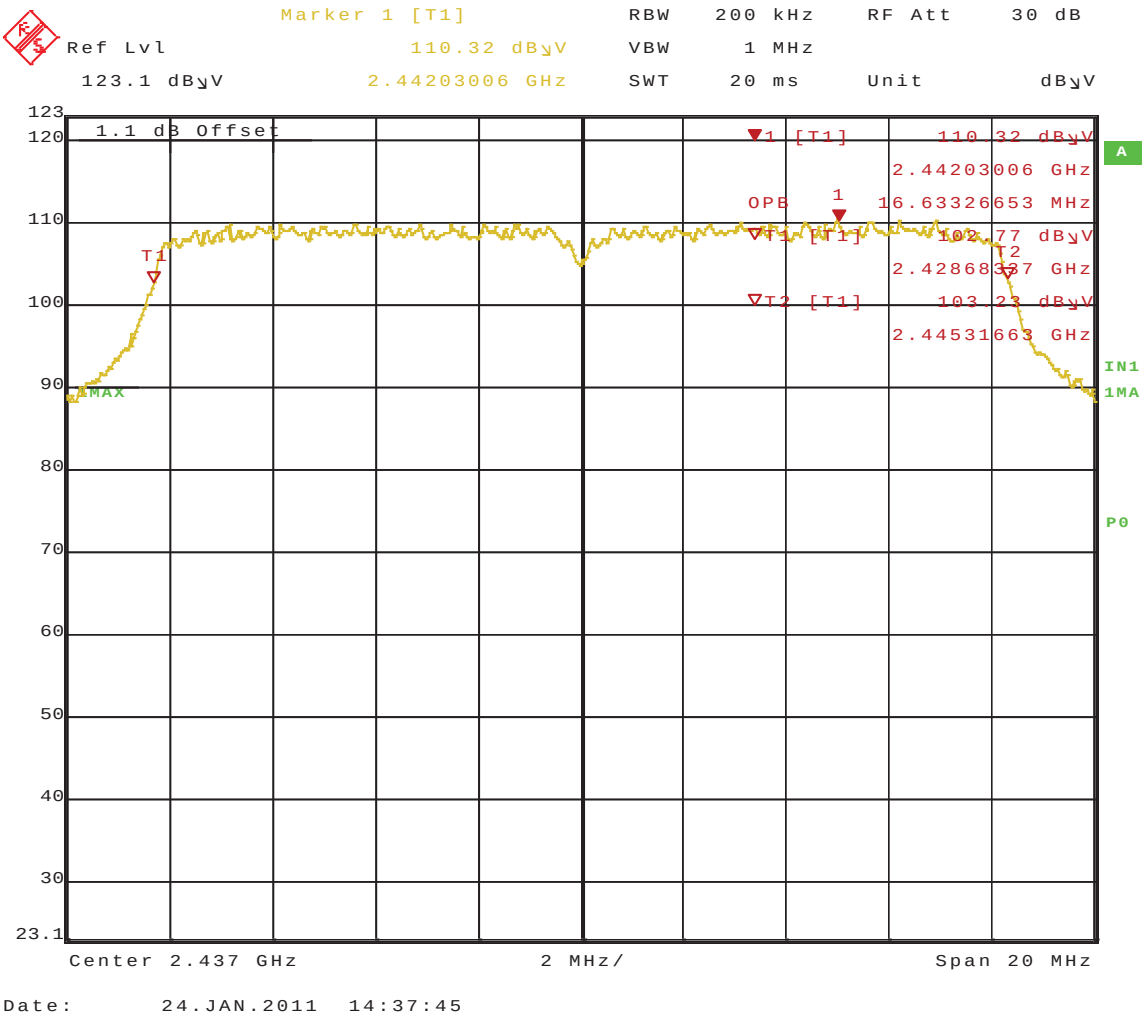


Figure 119: 99% Bandwidth at 6Mbit/s – Operating Channel 2437 MHz, Chain 2

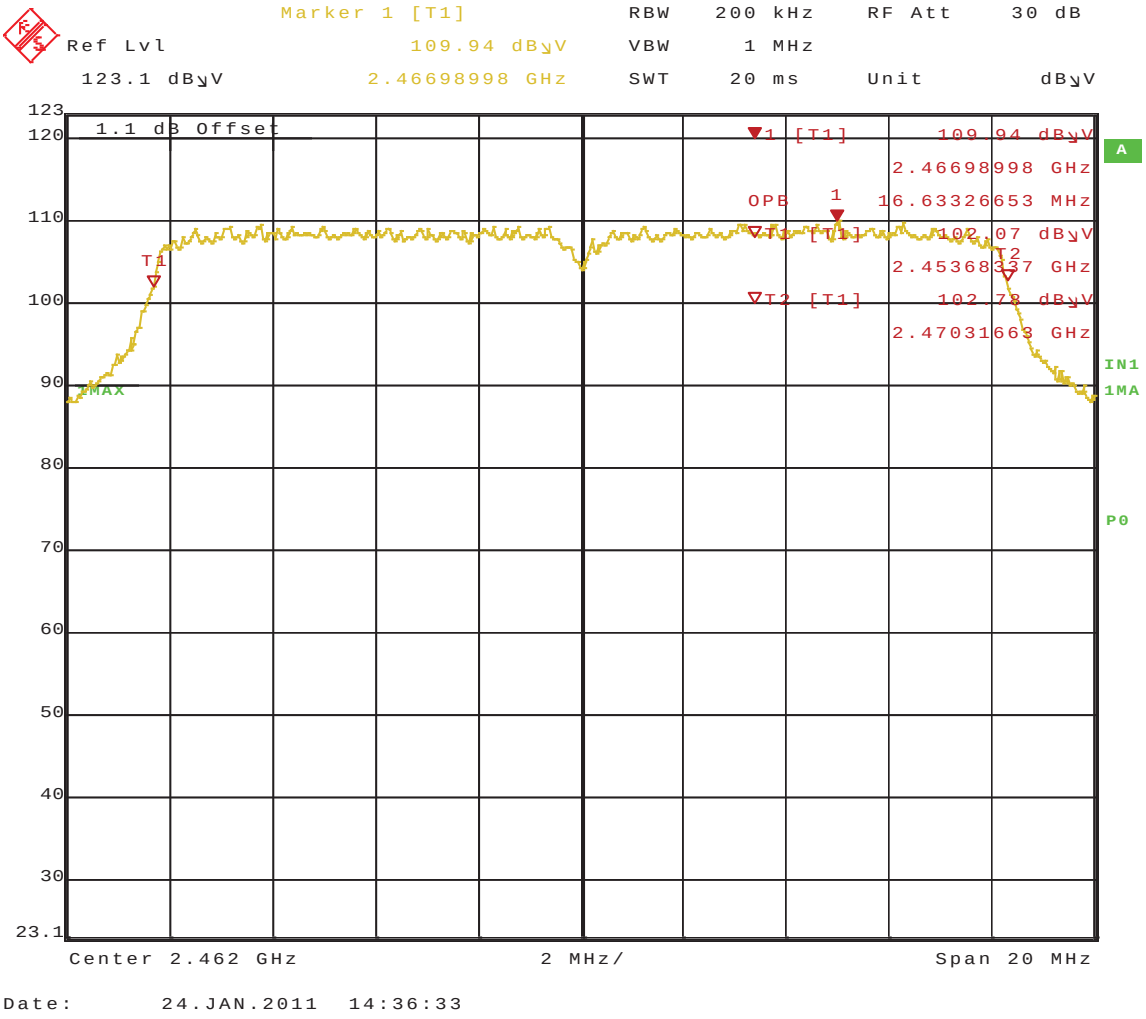


Figure 120: 99% Bandwidth at 6Mbit/s – Operating Channel 2462 MHz, Chain 2

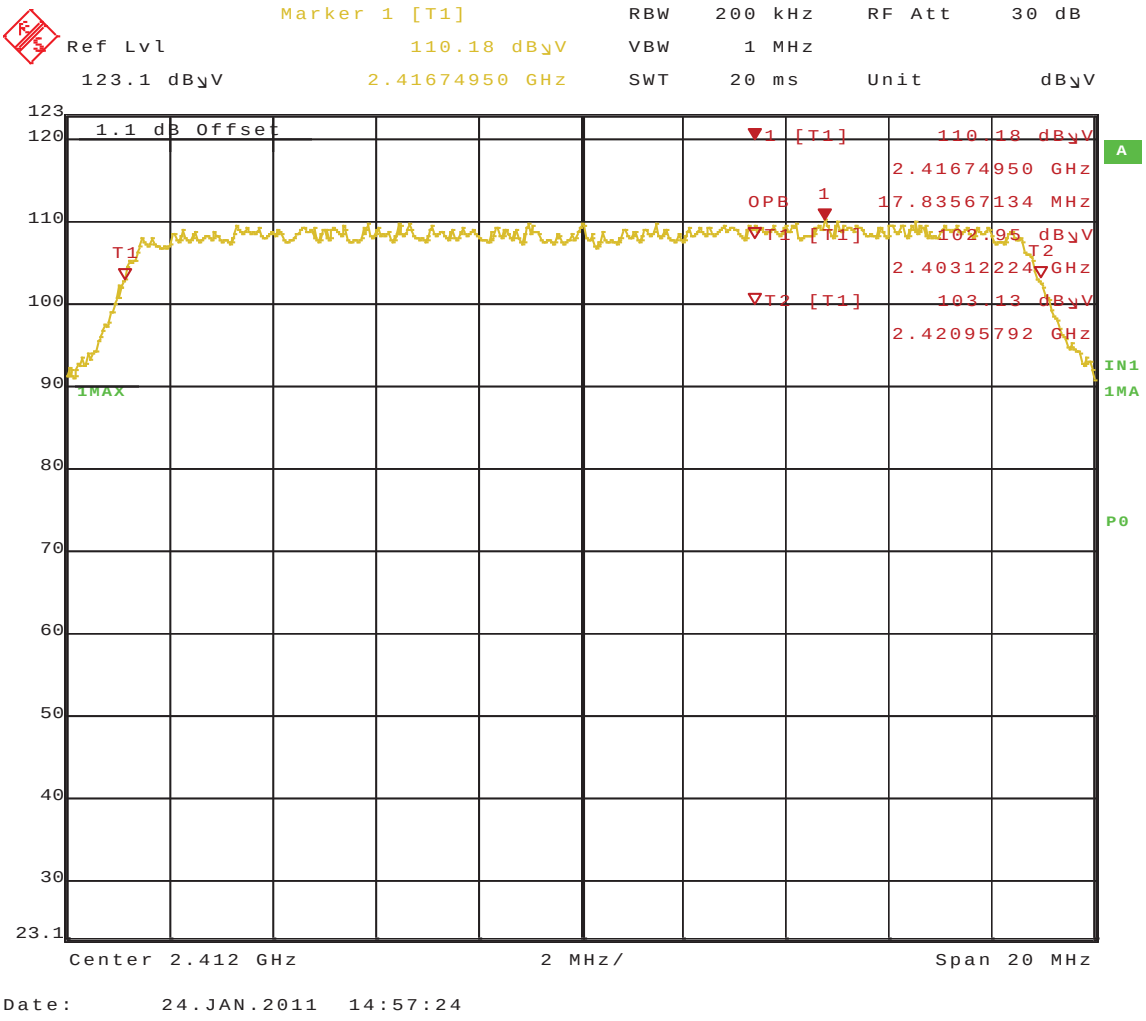


Figure 121: 99% Bandwidth at 6.5Mbit/s – Operating Channel 2412 MHz, Chain 0

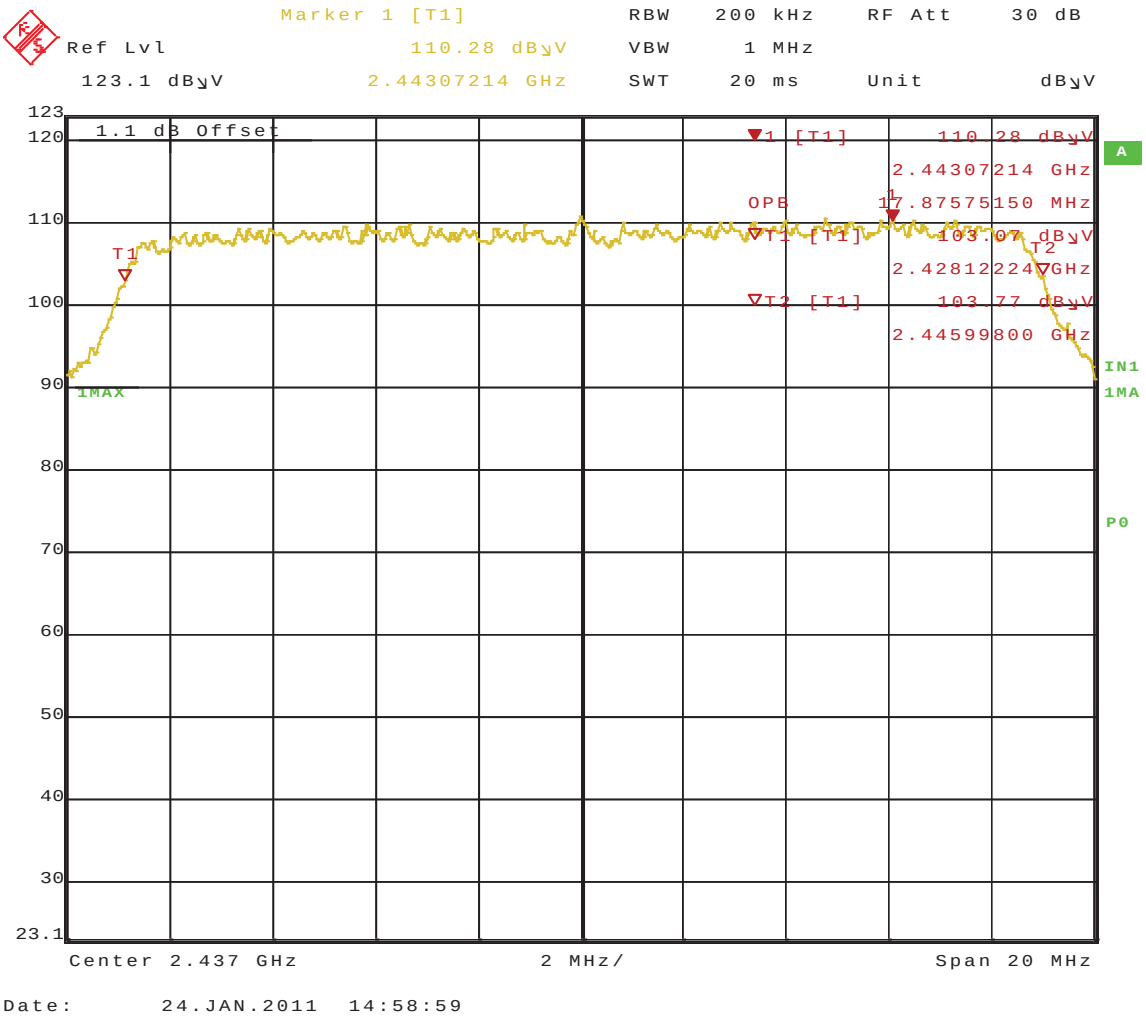


Figure 122: 99% Bandwidth at 6.5Mbit/s – Operating Channel 2437 MHz, Chain 0

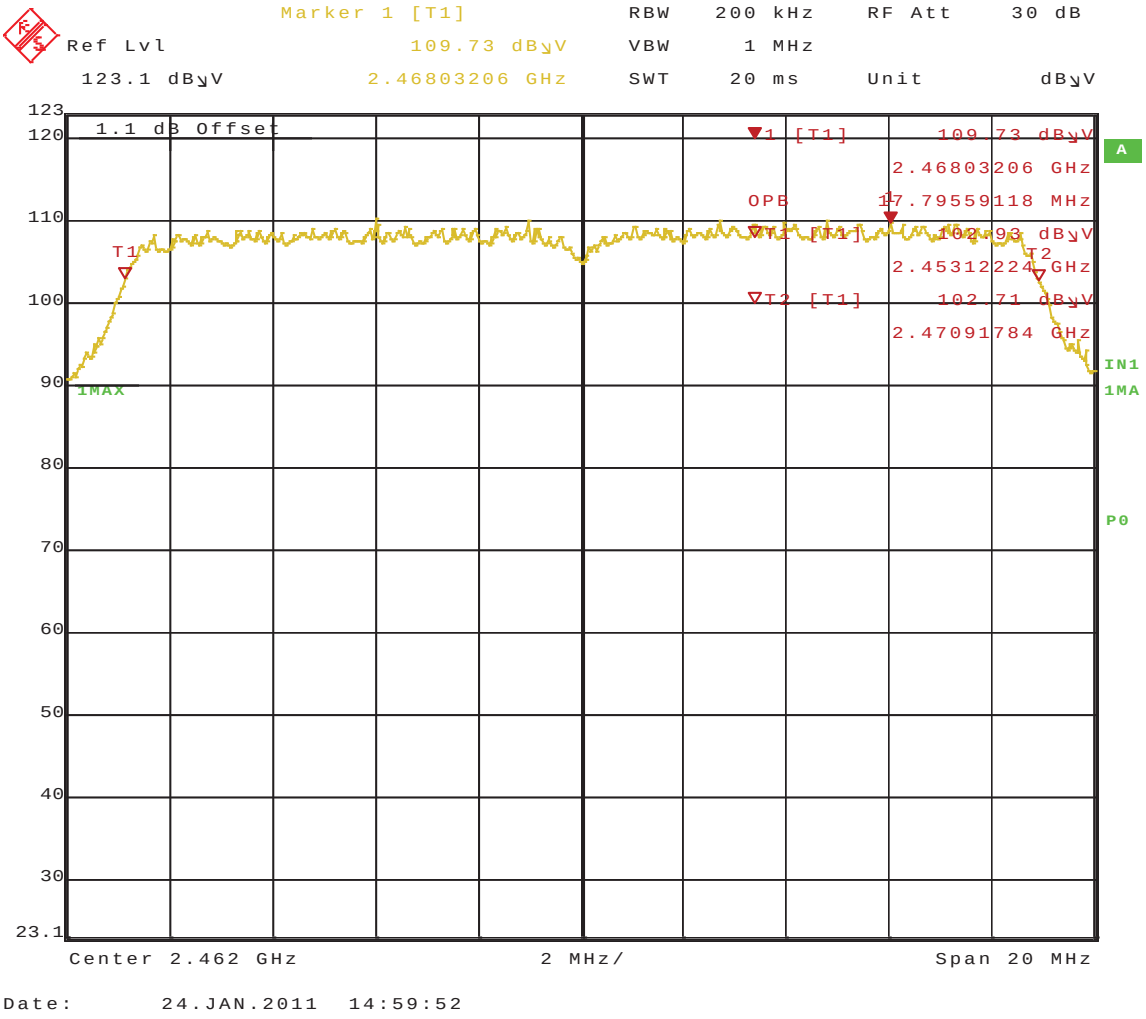


Figure 123: 99% Bandwidth at 6.5Mbit/s – Operating Channel 2462 MHz, Chain 0

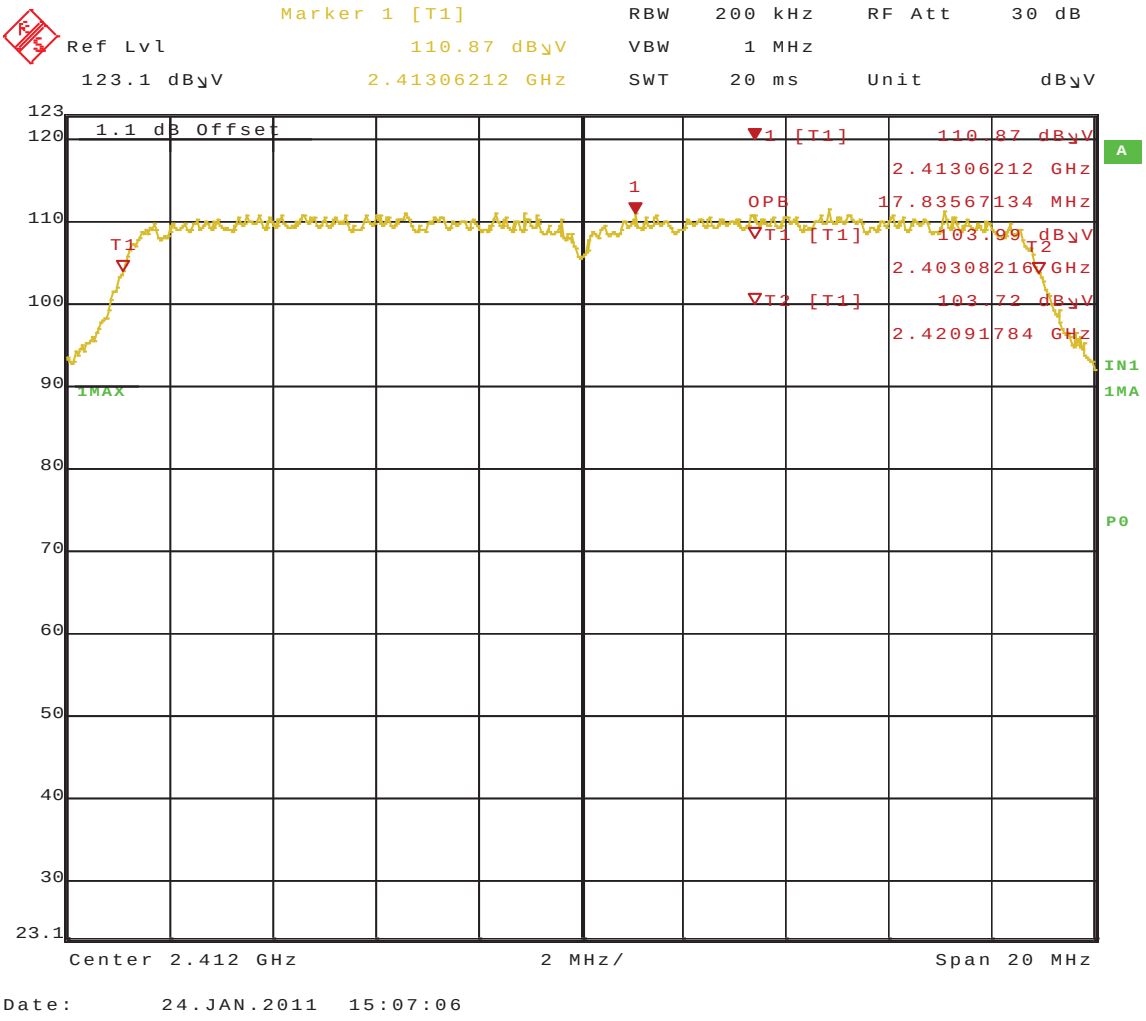


Figure 124: 99% Bandwidth at 6.5Mbit/s – Operating Channel 2412 MHz, Chain 1

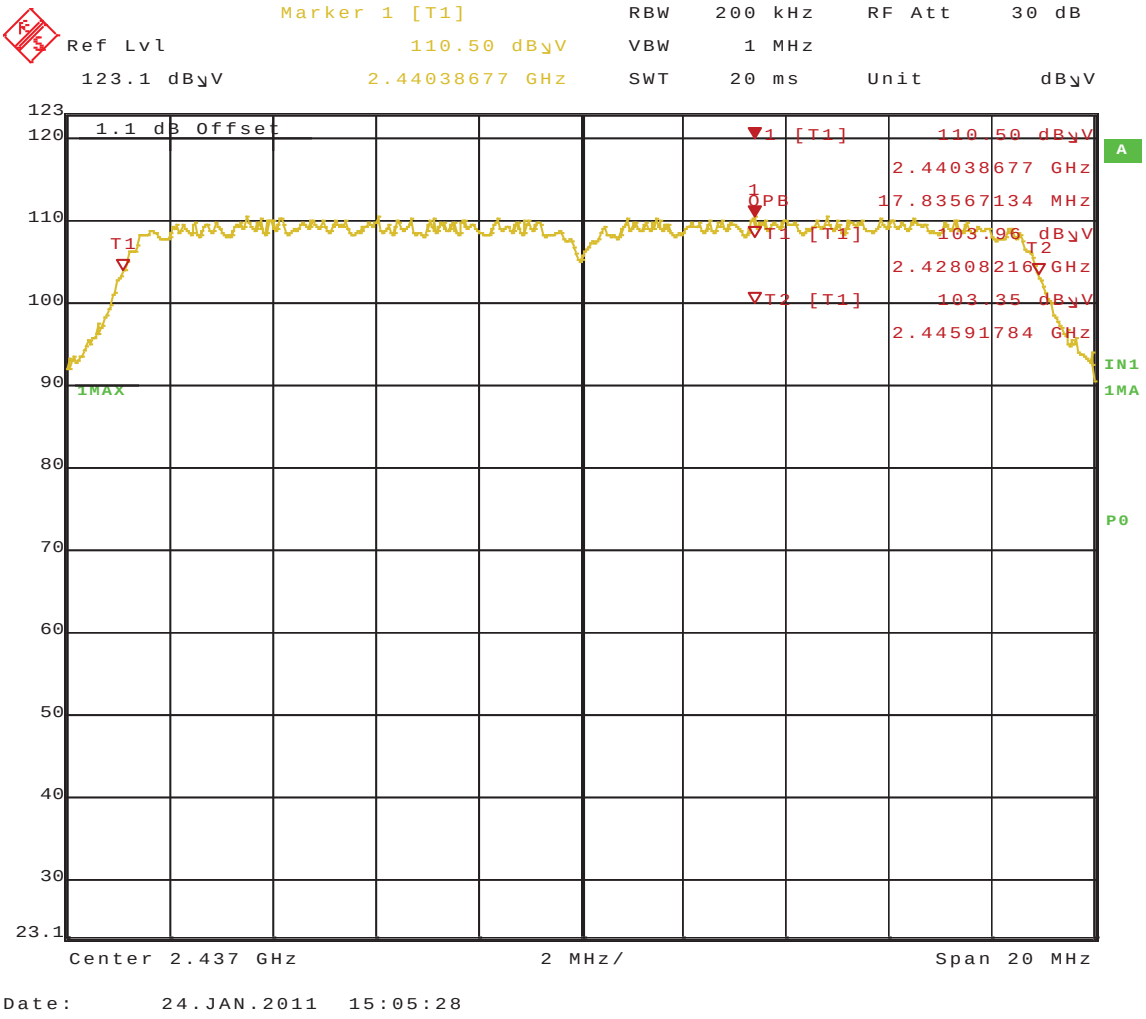


Figure 125: 99% Bandwidth at 6.5Mbit/s – Operating Channel 2437 MHz, Chain 1

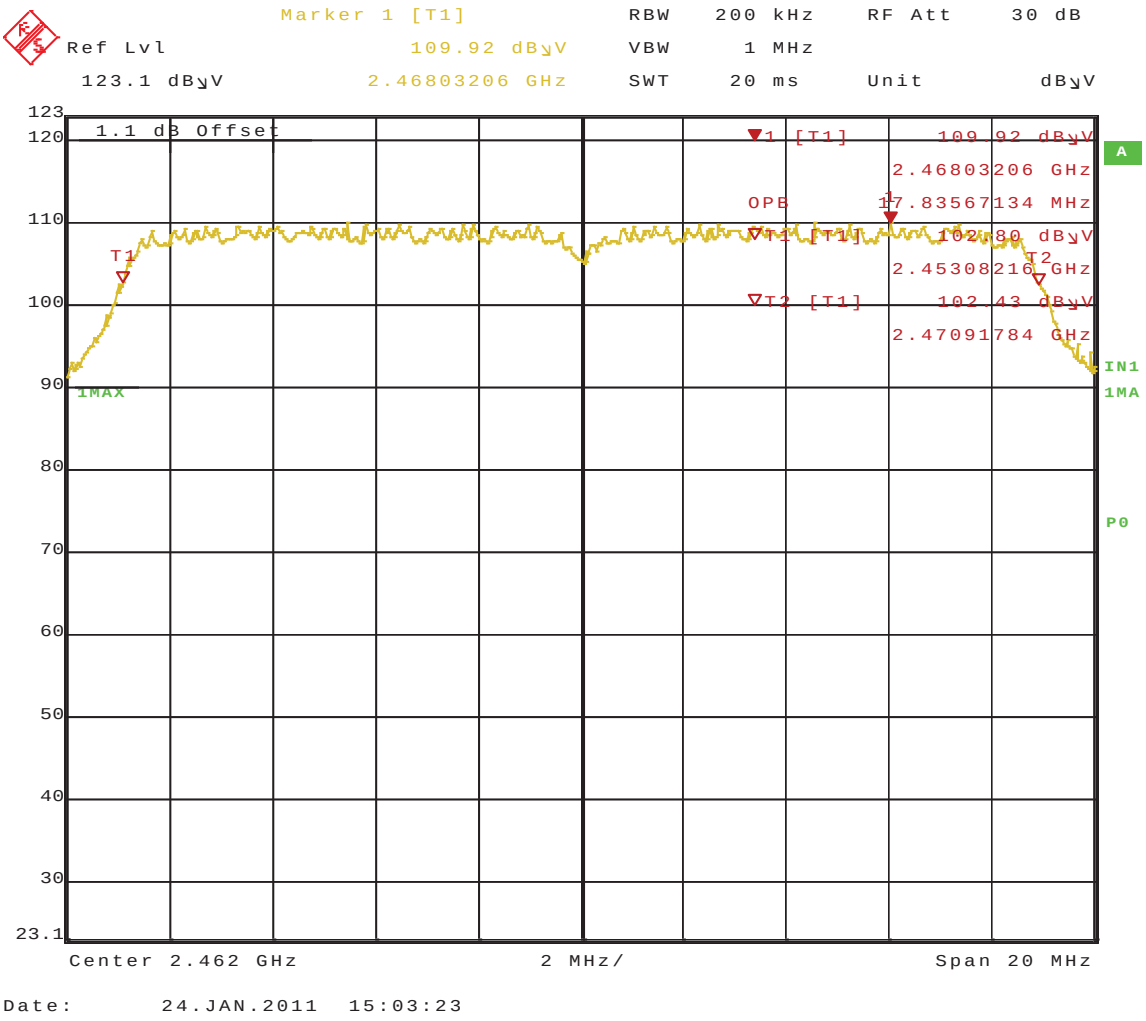


Figure 126: 99% Bandwidth at 6.5Mbit/s – Operating Channel 2462 MHz, Chain 1

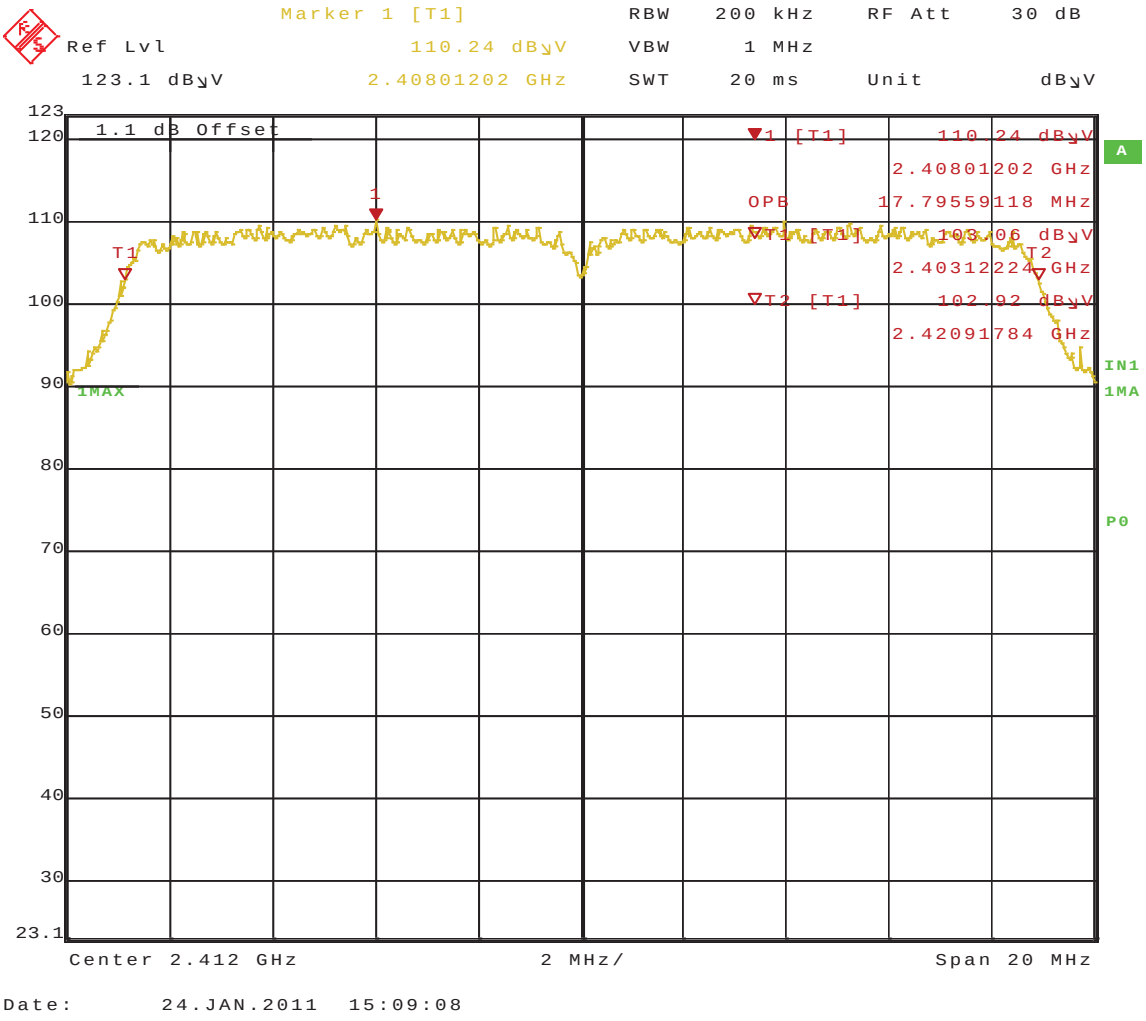


Figure 127: 99% Bandwidth at 6.5Mbit/s – Operating Channel 2412 MHz, Chain 2

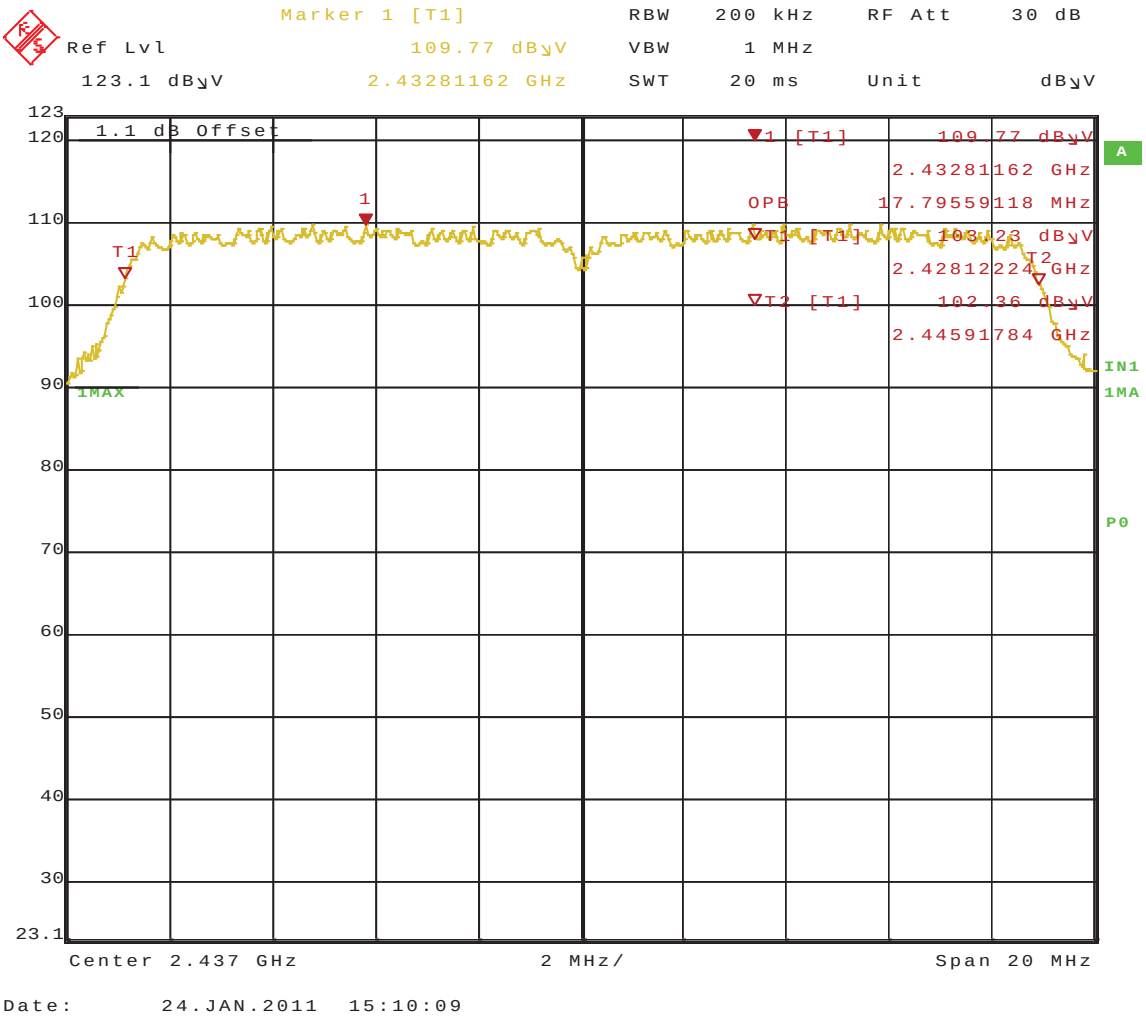


Figure 128: 99% Bandwidth at 6.5Mbit/s – Operating Channel 2437 MHz, Chain 2

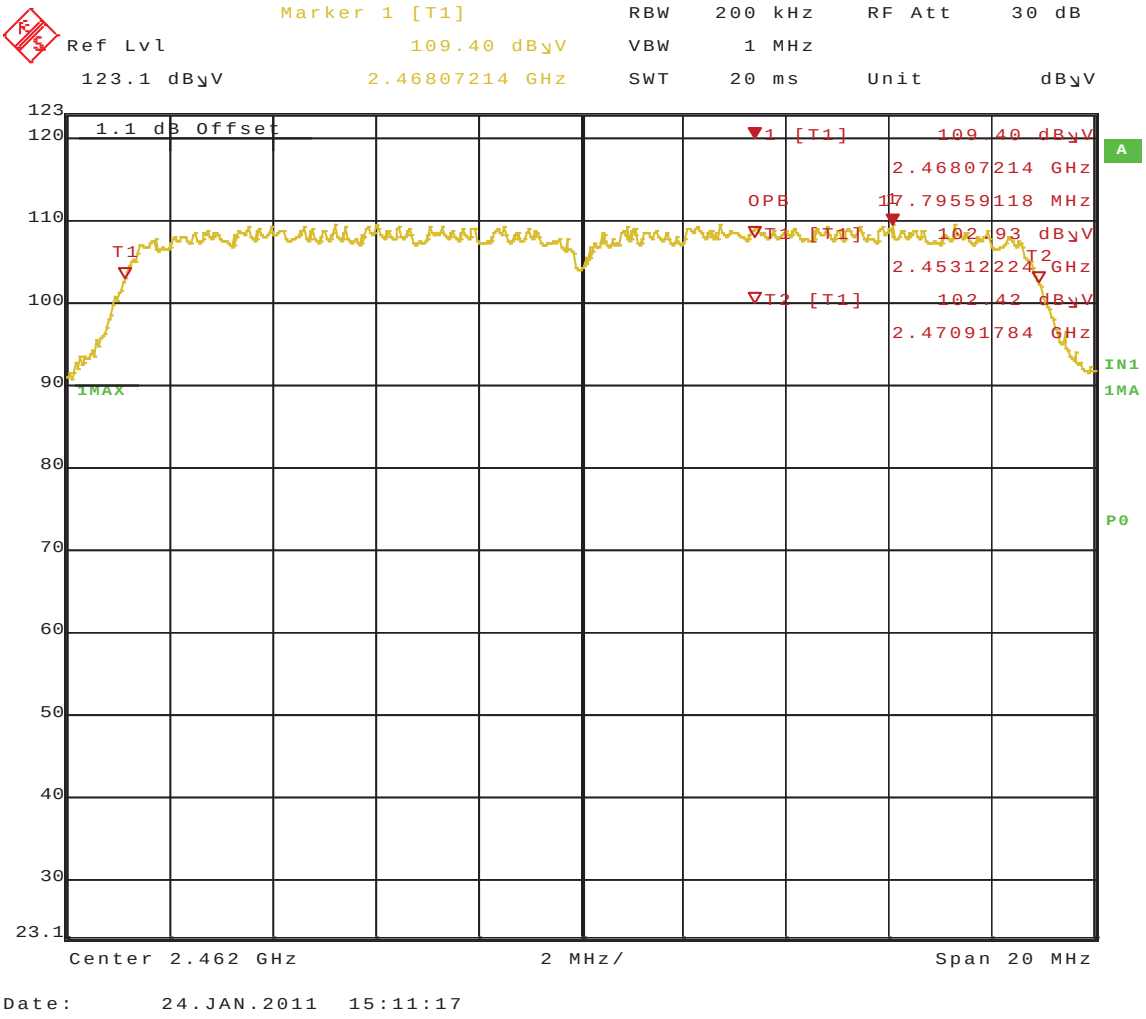


Figure 129: 99% Bandwidth at 6.5Mbit/s – Operating Channel 2462 MHz, Chain 2

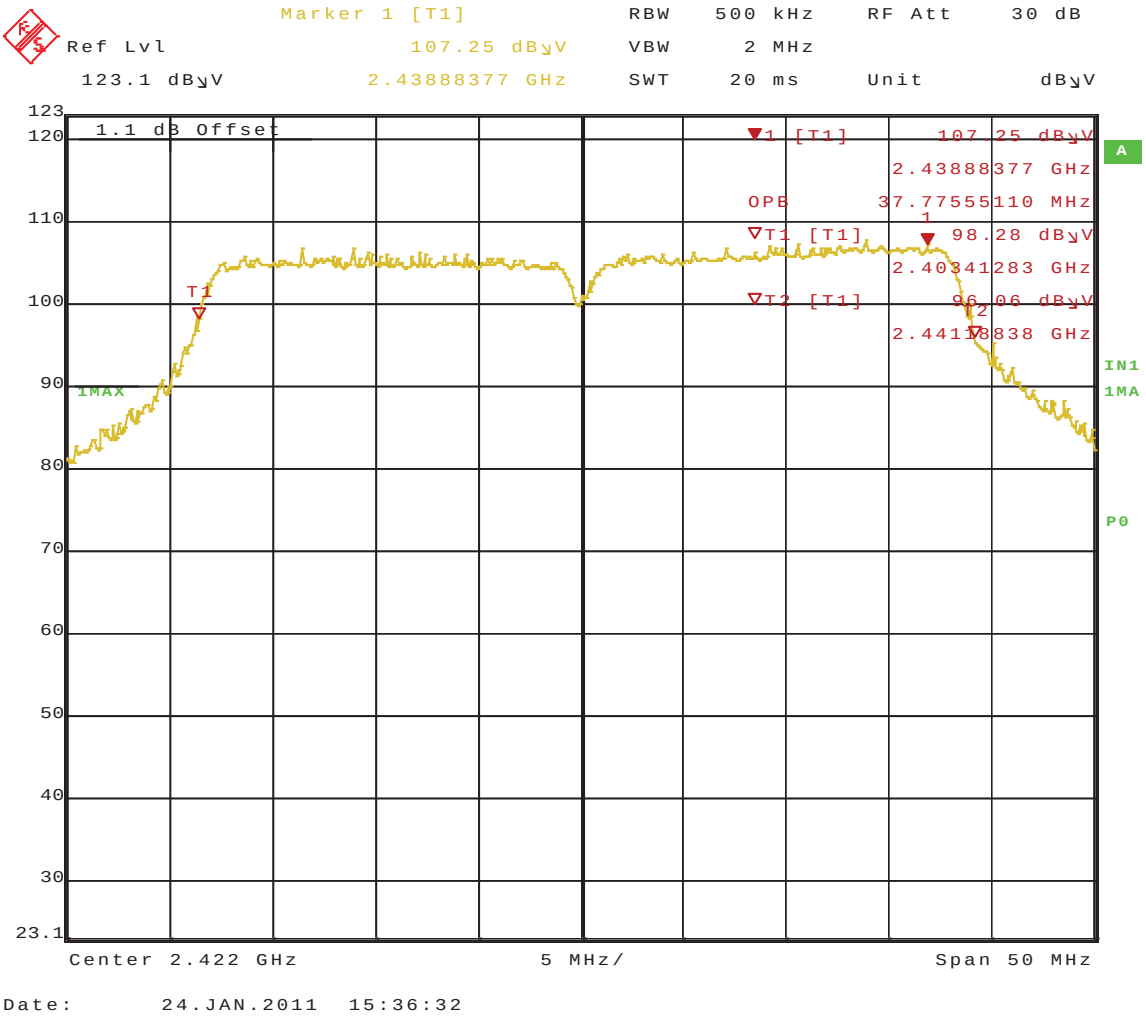


Figure 130: 99% Bandwidth at 13.5Mbit/s – Operating Channel 2412 MHz, Chain 0

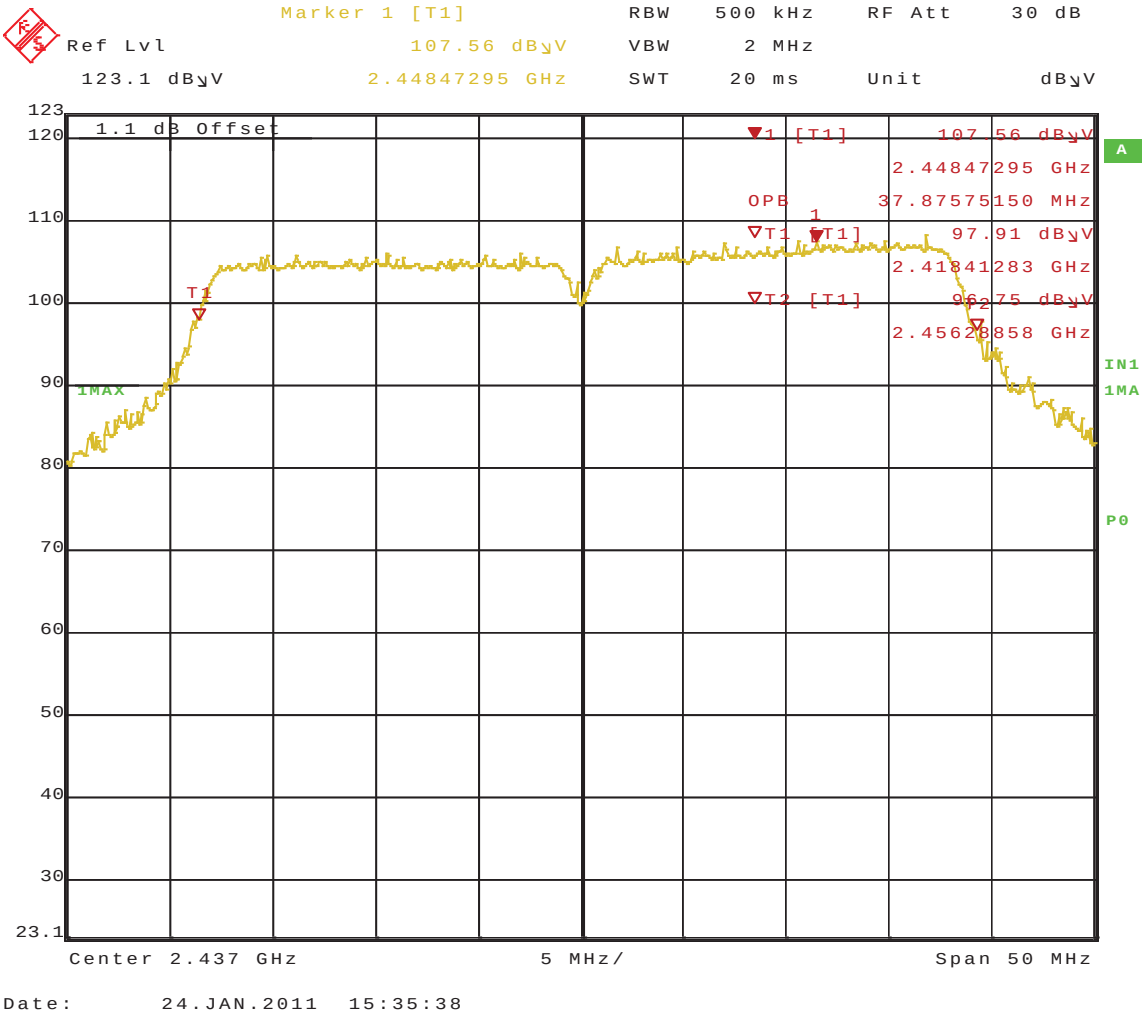


Figure 131: 99% Bandwidth at 13.5Mbit/s – Operating Channel 2437 MHz, Chain 0

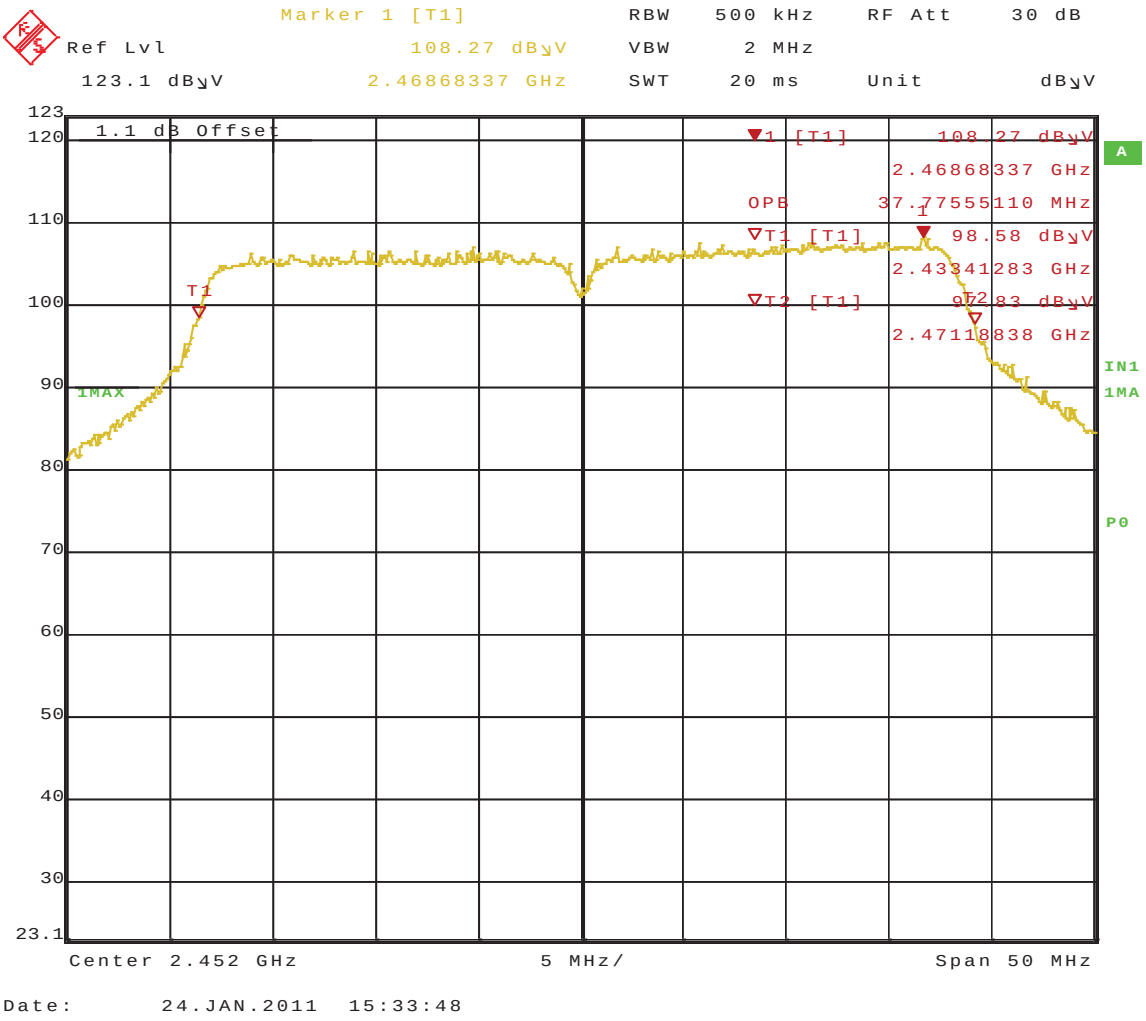


Figure 132: 99% Bandwidth at 13.5Mbit/s – Operating Channel 2462 MHz, Chain 0

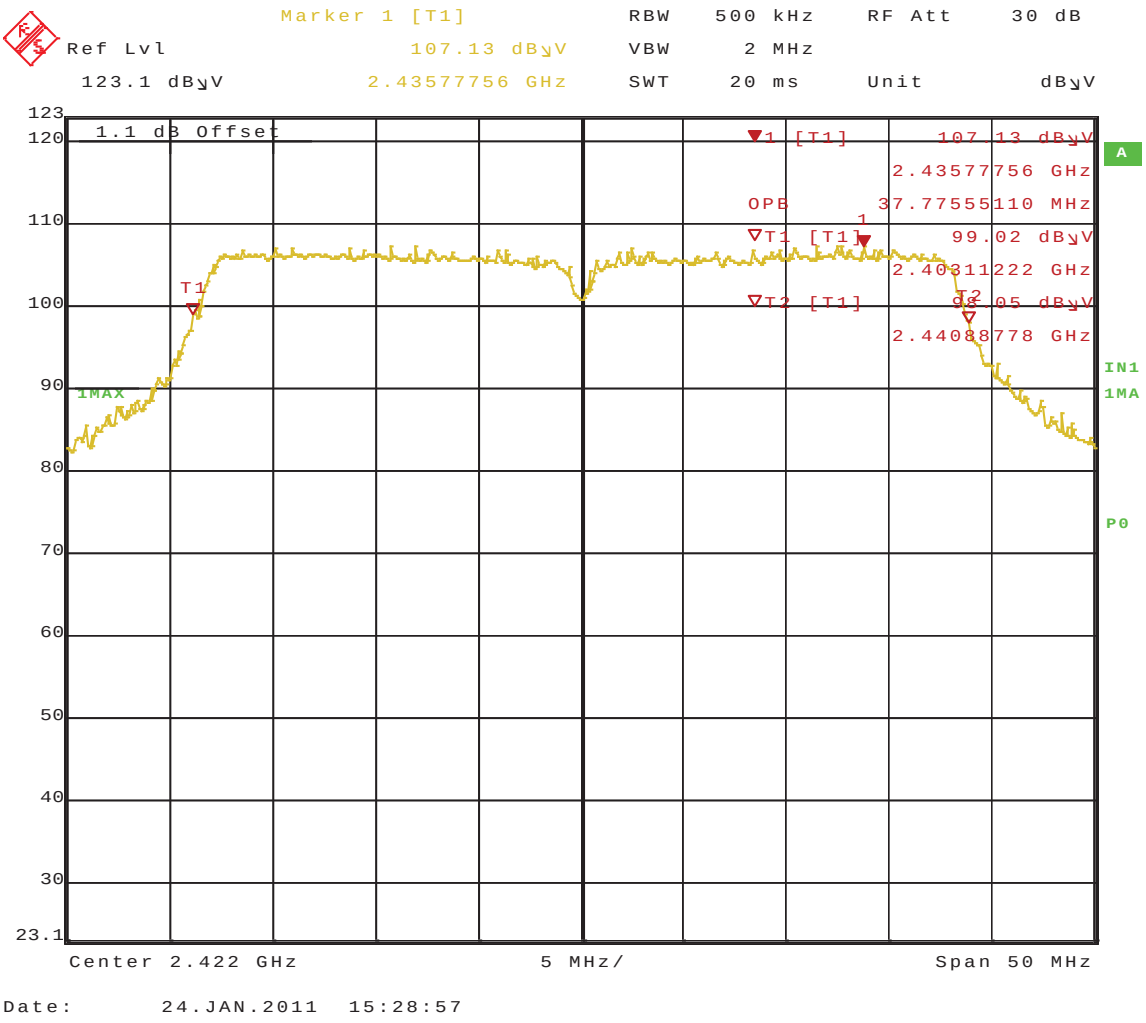


Figure 133: 99% Bandwidth at 13.5Mbit/s – Operating Channel 2422 MHz, Chain 1

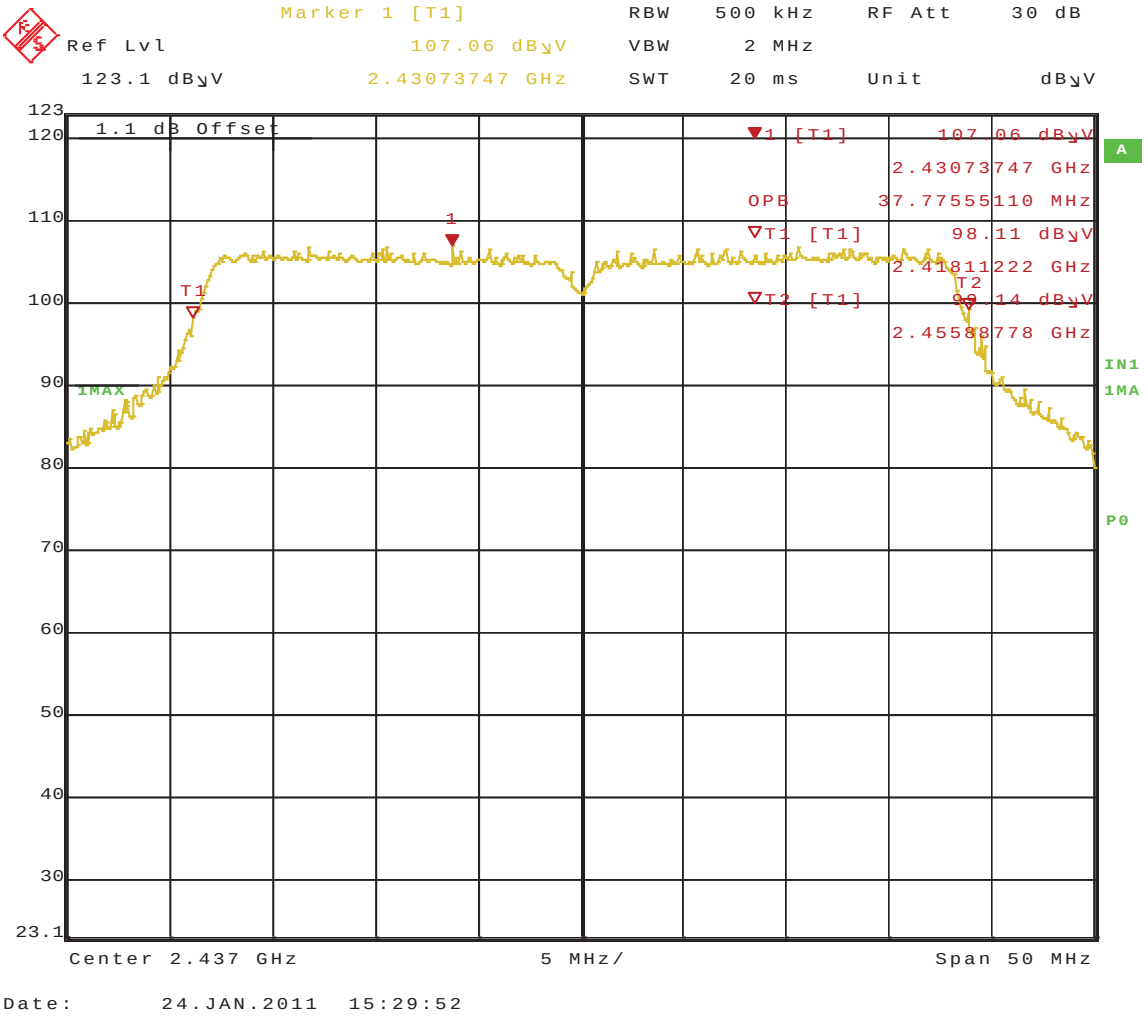


Figure 134: 99% Bandwidth at 13.5Mbit/s – Operating Channel 2437 MHz, Chain 1

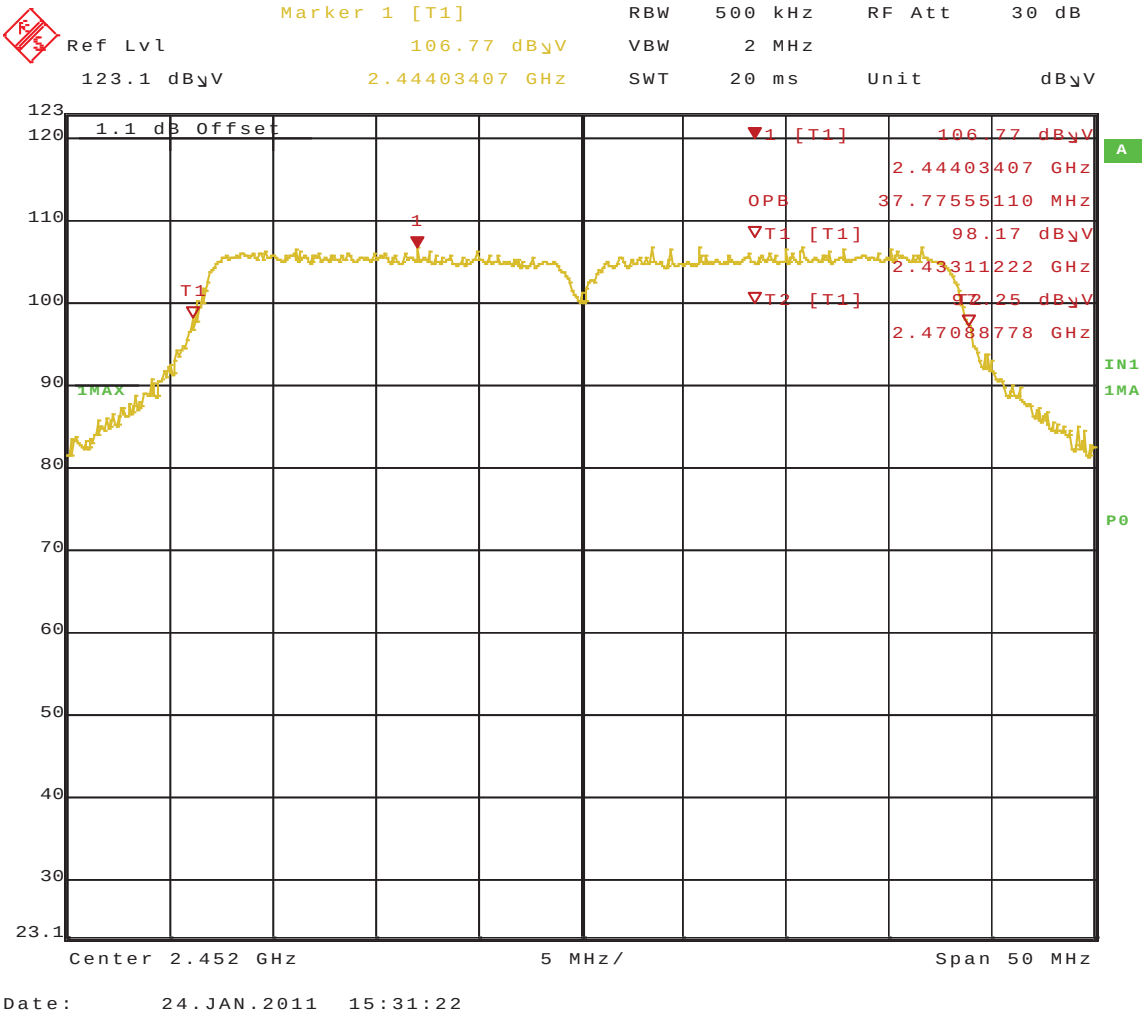


Figure 135: 99% Bandwidth at 13.5Mbit/s – Operating Channel 2452 MHz, Chain 1

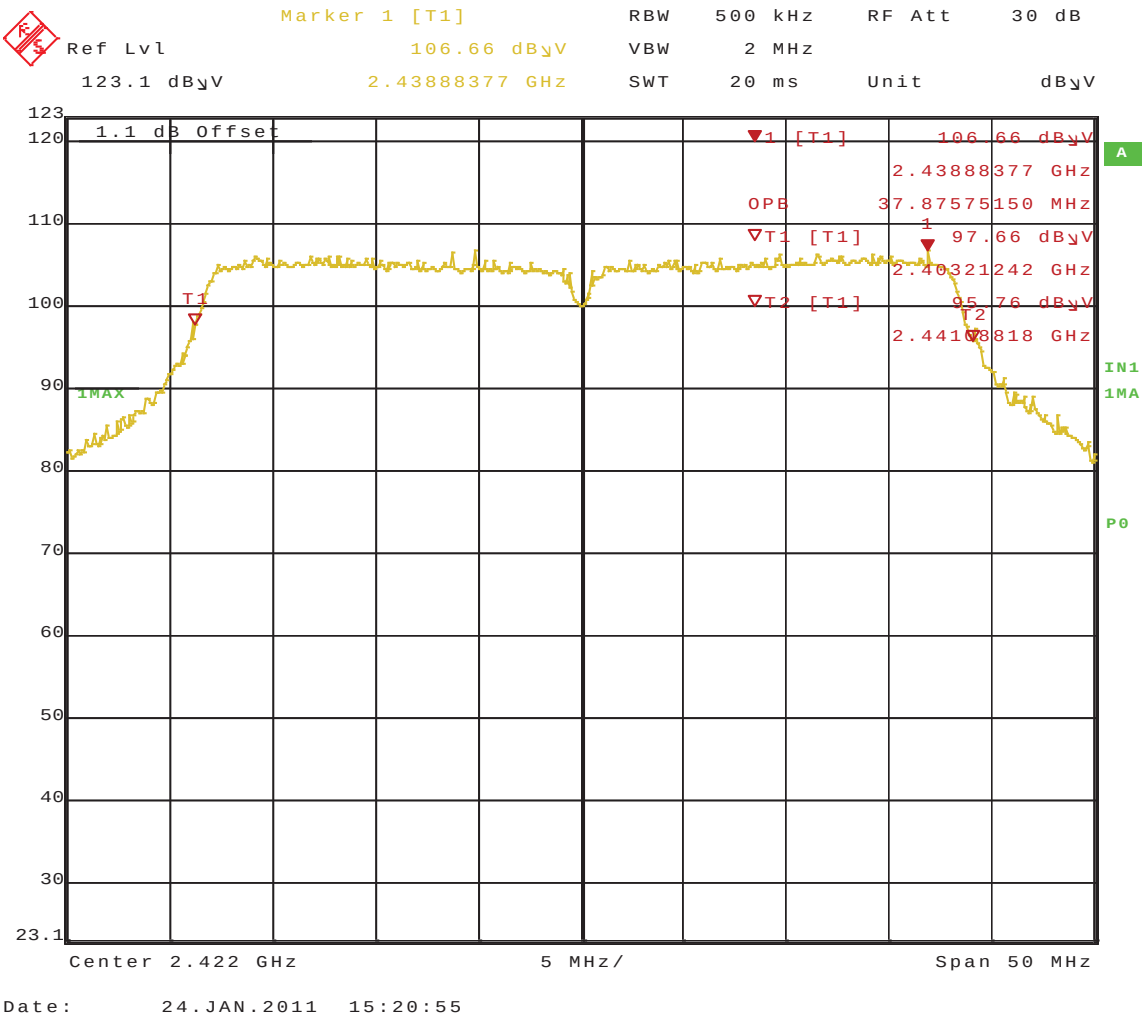


Figure 136: 99% Bandwidth at 13.5Mbit/s – Operating Channel 2422 MHz, Chain 2

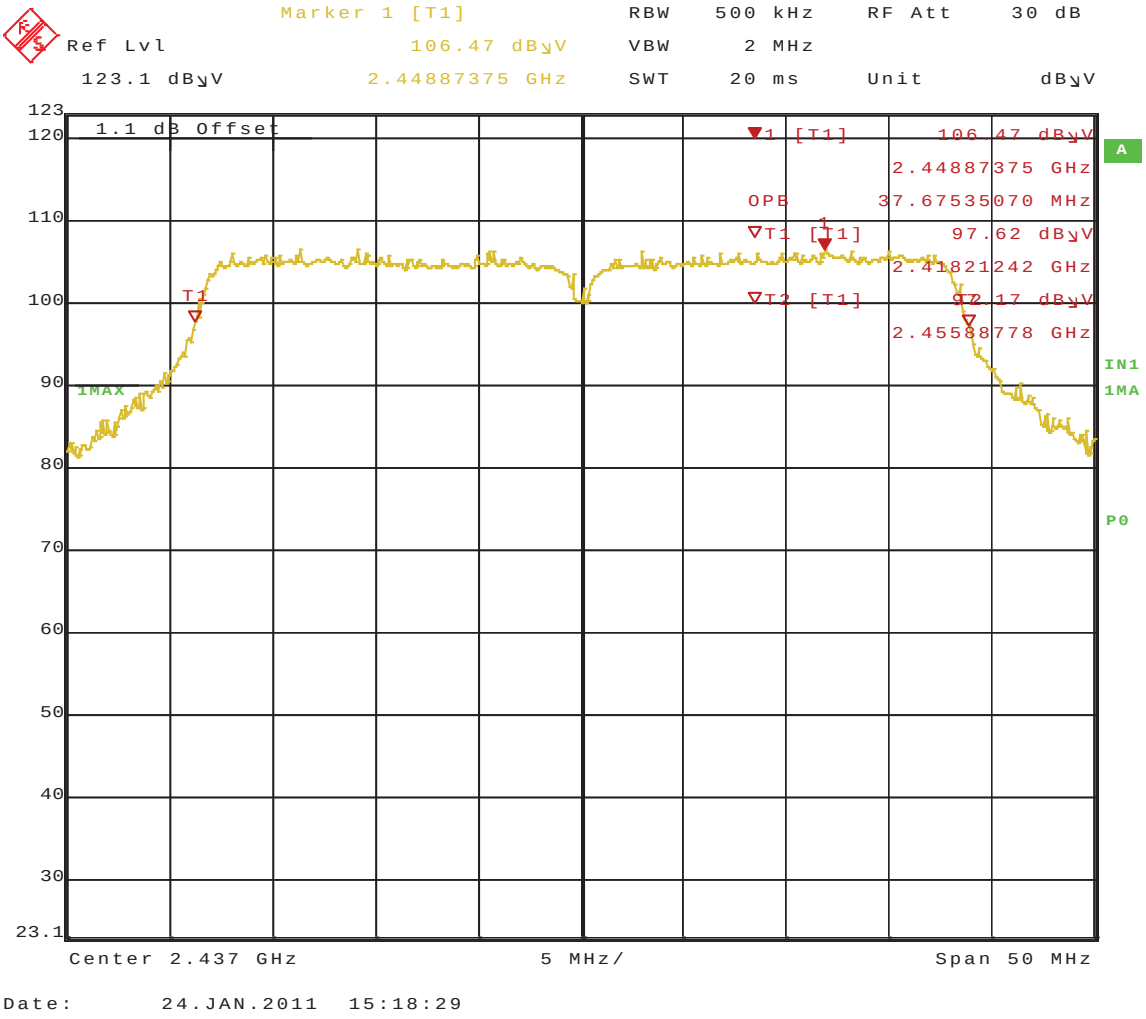


Figure 137: 99% Bandwidth at 13.5Mbit/s – Operating Channel 2437 MHz, Chain 2

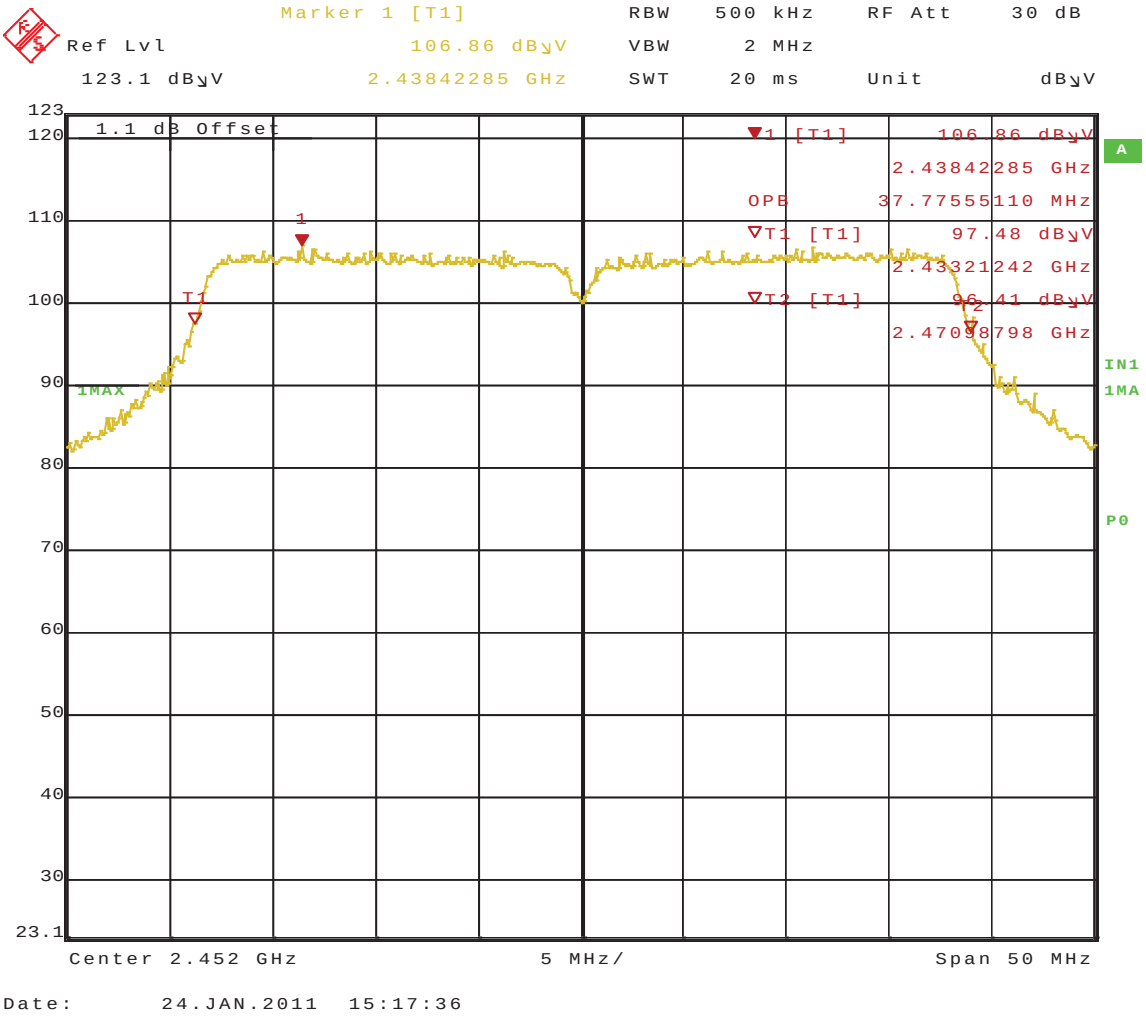


Figure 138: 99% Bandwidth at 13.5Mbit/s – Operating Channel 2452 MHz, Chain 2

4.3 Band-edge Requirements

The setup was identical to RF output power measurement. Intentional radiators operating under the alternative provisions to the general emission limits, must be designed to ensure that the 20 dB bandwidth of the emission, or whatever bandwidth may otherwise be specified in the specific rule section under which the equipment operates, is contained within the frequency band designated in the rule section under which the equipment is operated. The requirement to contain the designated bandwidth of the emission within the specified frequency band includes the effects from frequency sweeping, frequency hopping and other modulation techniques that may be employed as well as the frequency stability of the transmitter over expected variations in temperature and supply voltage. If the frequency stability is not specified in the regulations, it is recommended that the fundamental emission be kept within at least the central 80% of the permitted band in order to minimize the possibility of out-of-band operation.

Any frequency outside the band of 2400 MHz to 2483.5MHz, the power output level must be below 20 dB from the in-band transmitting signal; CFR 47 Part 15.215, 15.247(d) and RSS 210 A8.5

4.3.1 Results

The Out of band emission was performed on the conducted test Sample.

As originally tested, the EUT was found to be compliant to the requirements of the test standard(s).

Table 4: Band-Edge Requirements – Test Results

Test Conditions: Conducted Measurement, Normal Temperature and Voltage only								
Antenna Type: Integrated				**Power Setting:** See test plan				
Max. Antenna Gain: + 1.1 dBi				**Signal State:** Modulated				
Ambient Temp.: 21 °C				**Relative Humidity:**39%				
-20 dB Band-Edge Results								
Operating Freq.	**Mode**	**Chain 0**		**Chain 1**		**Chain 2**		**Result**
		Level (dBm)	**Limit (dBm)**	**Level (dBm)**	**Limit (dBm)**	**Level (dBm)**	**Limit (dBm)**	
2412 MHz	11Mbps	-43.62	-16.61	-42.55	-15.22	-43.67	-16.42	Pass
2437 MHz	11Mbps	-44.52	-16.59	-43.43	-16.21	-44.97	-16.27	Pass
2462 MHz	11Mbps	-44.73	-16.14	-44.53	-16.56	-44.05	-16.42	Pass
2412 MHz	6 Mbps	-29.76	-19.47	-28.17	-18.46	-29.67	-19.79	Pass
2437 MHz	6 Mbps	-44.06	-20.15	-44.20	-18.93	-45.09	-19.40	Pass
2462 MHz	6 Mbps	-43.91	-19.31	-44.11	-19.25	-44.22	-19.76	Pass

2412 MHz	HT20 65 Mbps	-28.41	-19.31	-28.78	-17.78	-29.44	-18.99	Pass
2437 MHz	HT20 65 Mbps	-43.58	-18.64	-44.81	-18.31	-44.96	-18.70	Pass
2462 MHz	HT20 65 Mbps	-43.12	-18.66	-41.80	-18.94	-42.72	-19.03	Pass
2422 MHz	HT40 13.5 Mbps	-32.24	-24.65	-30.48	-25.49	-33.12	-26.22	Pass
2437 MHz	HT40 13.5 Mbps	-44.71	-24.56	-44.08	-25.70	-44.24	-26.15	Pass
2452 MHz	HT40 13.5 Mbps	-40.70	-24.54	-43.04	-25.61	-42.79	-25.96	Pass
Note: The stated limits for 20 dBr are relative to each individual output per KDB 662911 Method.								

Table 5: Out of band Conducted Emission – Test Results

Test Conditions: Conducted Measurement, Normal Temperature and Voltage only								
Antenna Type: Integrated				**Power Setting:** See test plan				
Max. Antenna Gain: + 1.1dBi				**Signal State:** Modulated at 99%				
Ambient Temp.: 21 °C				**Relative Humidity:**39%				
Output of Band Results								
Operating Freq.	**Mode**	**30 MHz to 25 GHz**						**Result**
		Chain 0		**Chain 1**		**Chain 2**		
2412 MHz	11Mbps	Fig.	175	Fig.	178	Fig.	181	Pass
2437 MHz	11Mbps	Fig.	176	Fig.	179	Fig.	182	Pass
2462 MHz	11Mbps	Fig.	177	Fig.	180	Fig.	183	Pass
2412 MHz	6 Mbps	Fig.	184	Fig.	187	Fig.	190	Pass
2437 MHz	6 Mbps	Fig.	185	Fig.	188	Fig.	191	Pass
2462 MHz	6 Mbps	Fig.	186	Fig.	189	Fig.	192	Pass
2412 MHz	HT20 65 Mbps	Fig.	193	Fig.	196	Fig.	199	Pass
2437 MHz	HT20 65 Mbps	Fig.	194	Fig.	197	Fig.	200	Pass
2462 MHz	HT20 65 Mbps	Fig.	195	Fig.	198	Fig.	201	Pass
2422 MHz	HT40 13.5 Mbps	Fig.	202	Fig.	205	Fig.	208	Pass
2437 MHz	HT40 13.5 Mbps	Fig.	203	Fig.	206	Fig.	209	Pass
2452 MHz	HT40 13.5 Mbps	Fig.	204	Fig.	207	Fig.	210	Pass
Note: All Out of Band Emissions are compared to the relative 20 dBr limit of that output, per KDB 662911.								

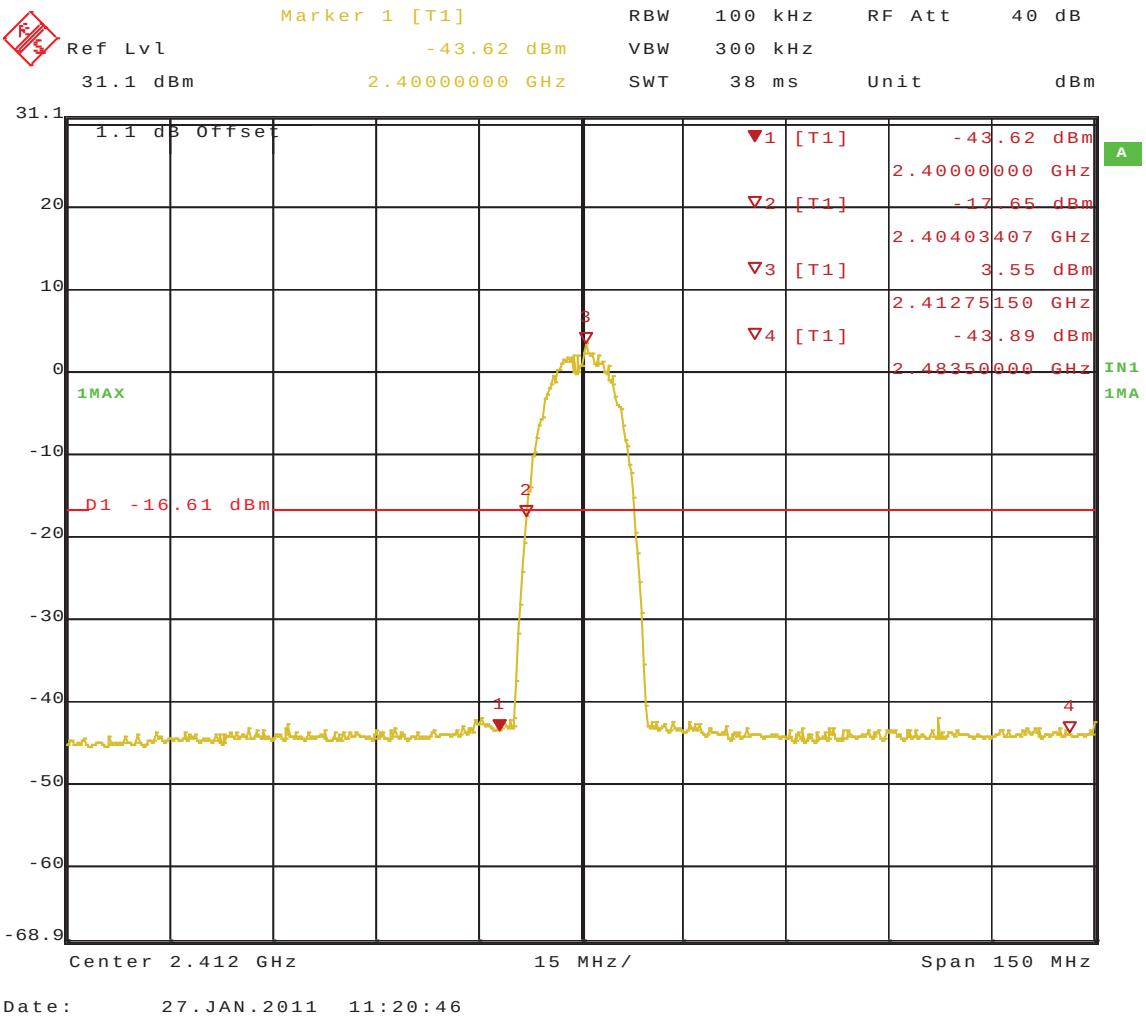


Figure 139: Band-edge Requirement at Operating Channel 2412 MHz, Chain 0, 11MBit/s

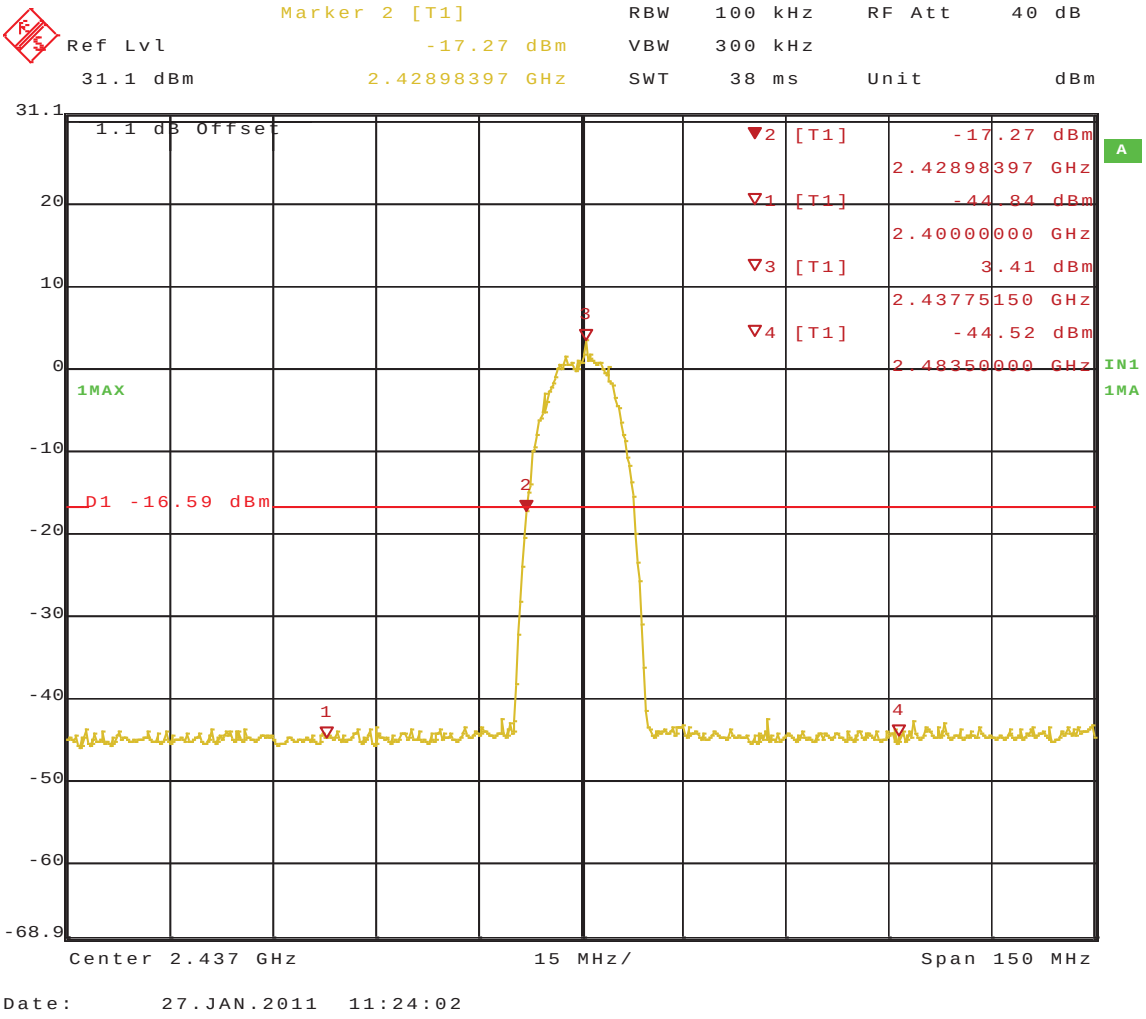


Figure 140: Band-edge Requirement at Operating Channel 2437 MHz, Chain 0, 11MBit/s

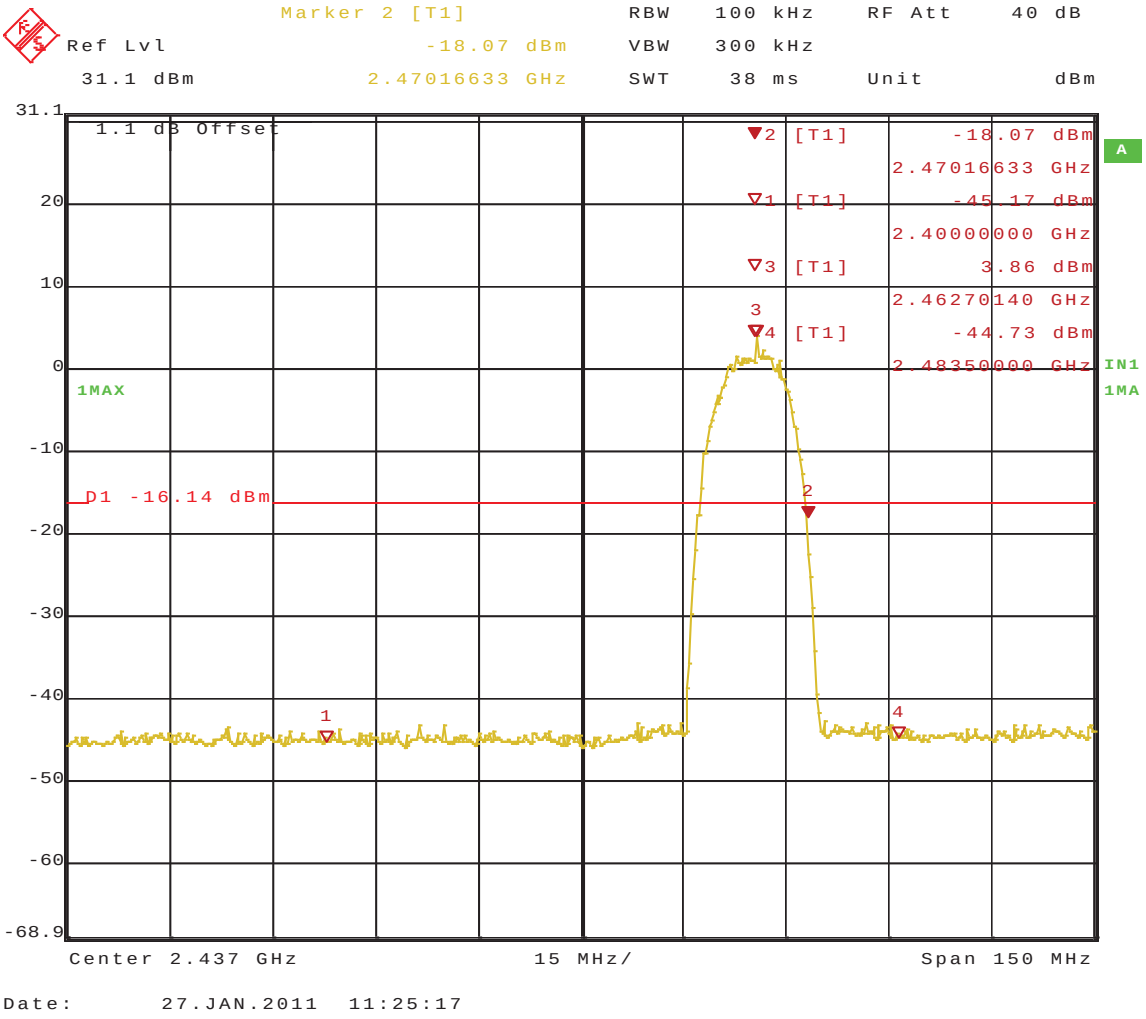


Figure 141: Band-edge Requirement at Operating Channel 2462 MHz, Chain 0, 11MBit/s

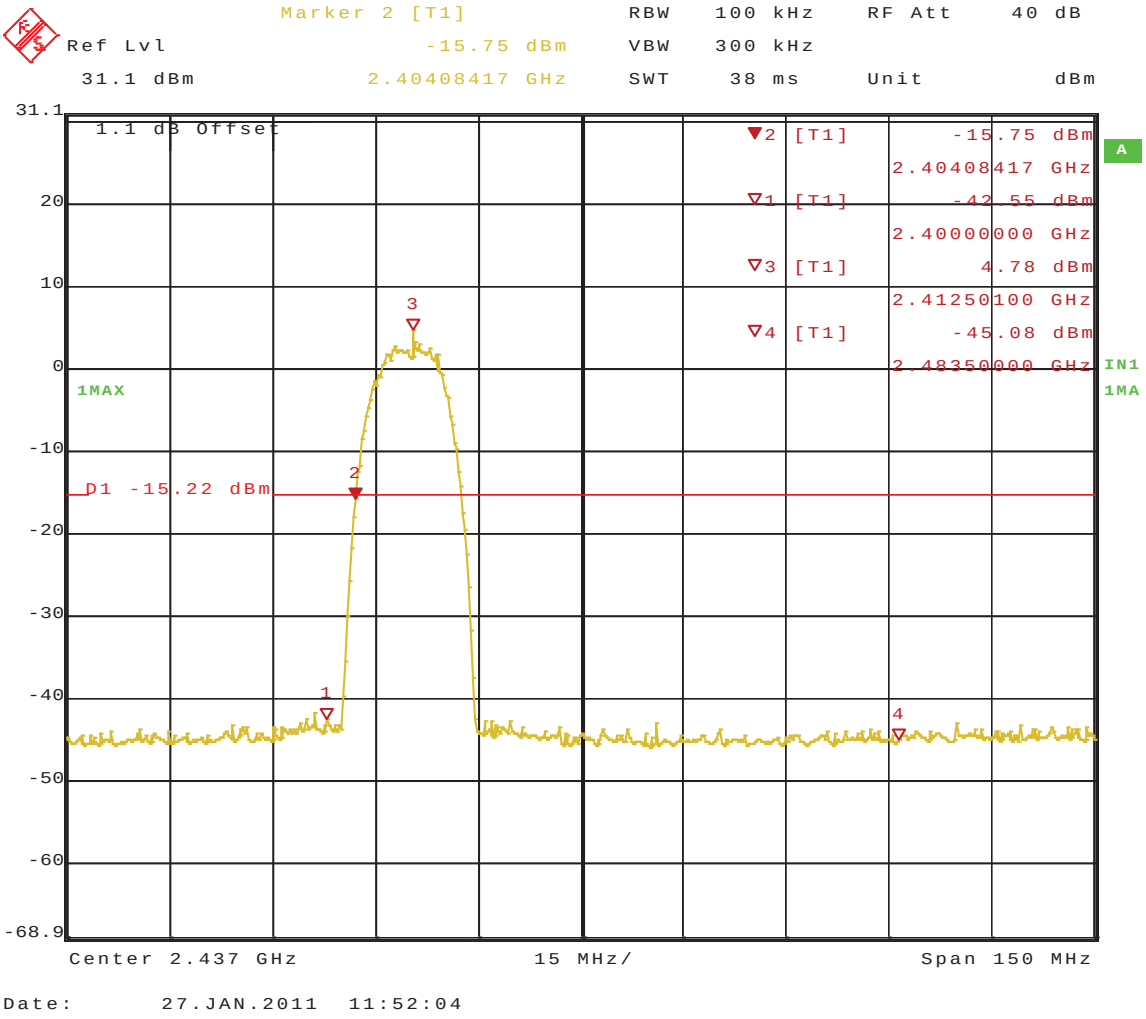


Figure 142: Band-edge Requirement at Operating Channel 2412 MHz, Chain 1, 11MBit/s

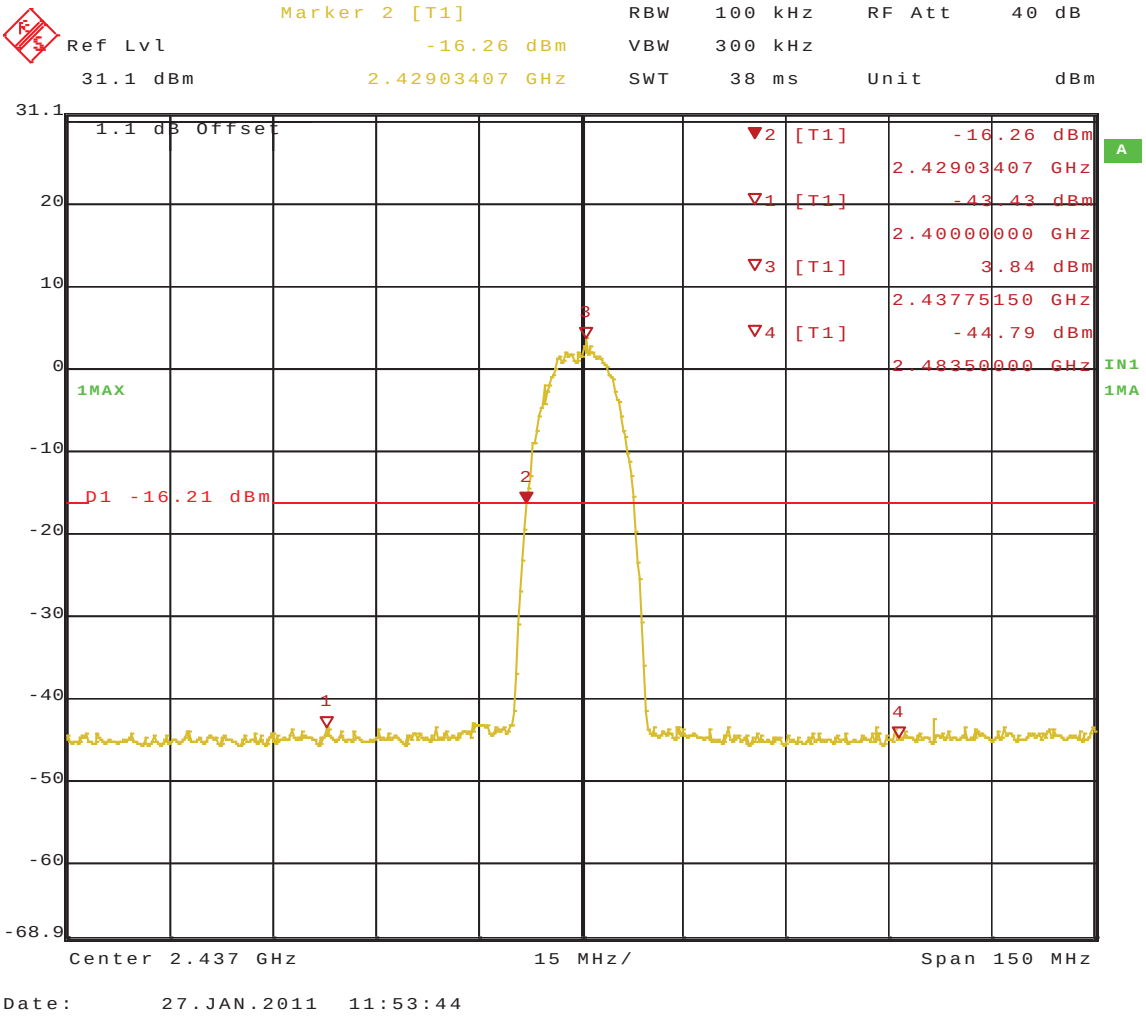


Figure 143: Band-edge Requirement at Operating Channel 2437 MHz, Chain 1, 11MBit/s

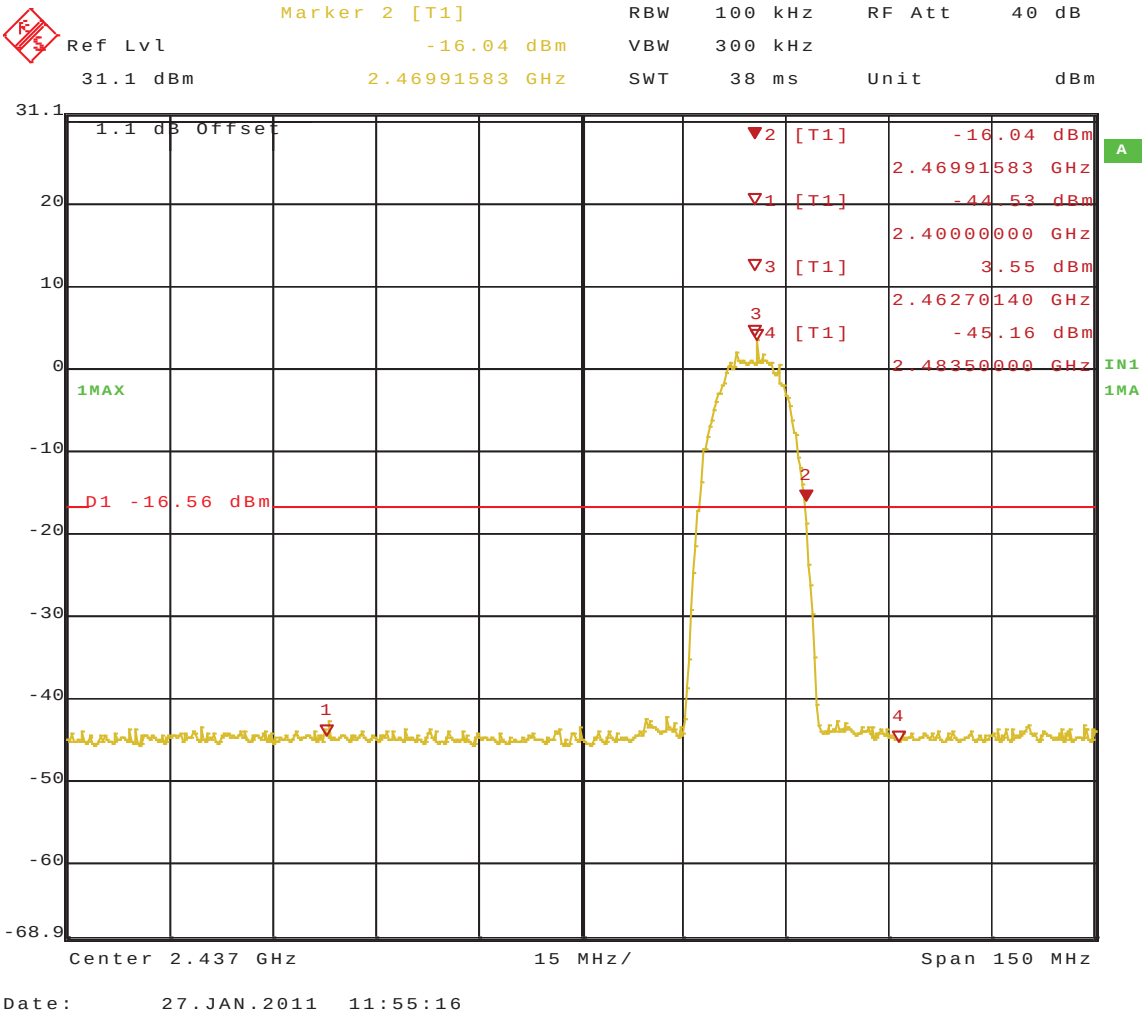


Figure 144: Band-edge Requirement at Operating Channel 2462 MHz, Chain 1, 11MBit/s

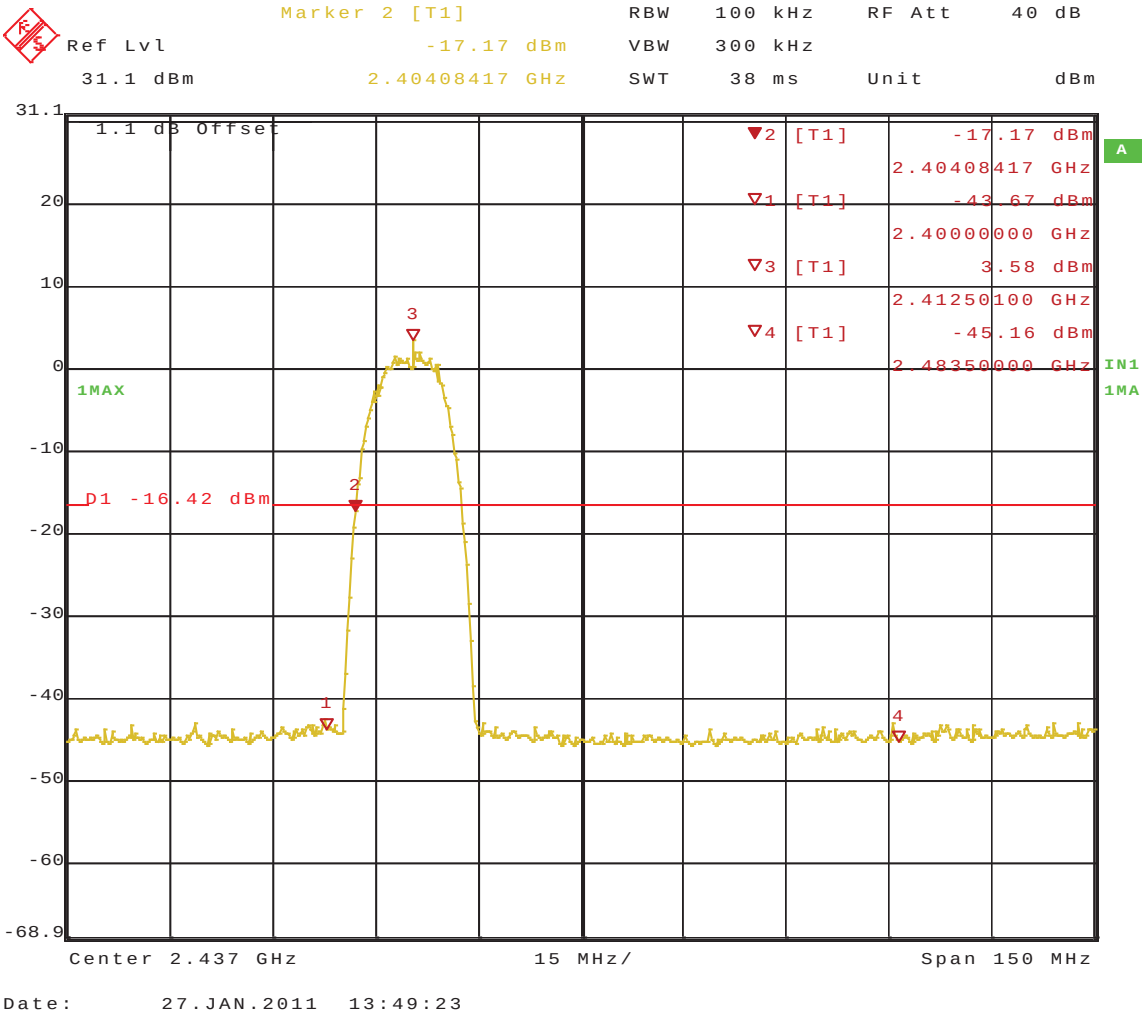


Figure 145: Band-edge Requirement at Operating Channel 2412 MHz, Chain 2, 11MBit/s

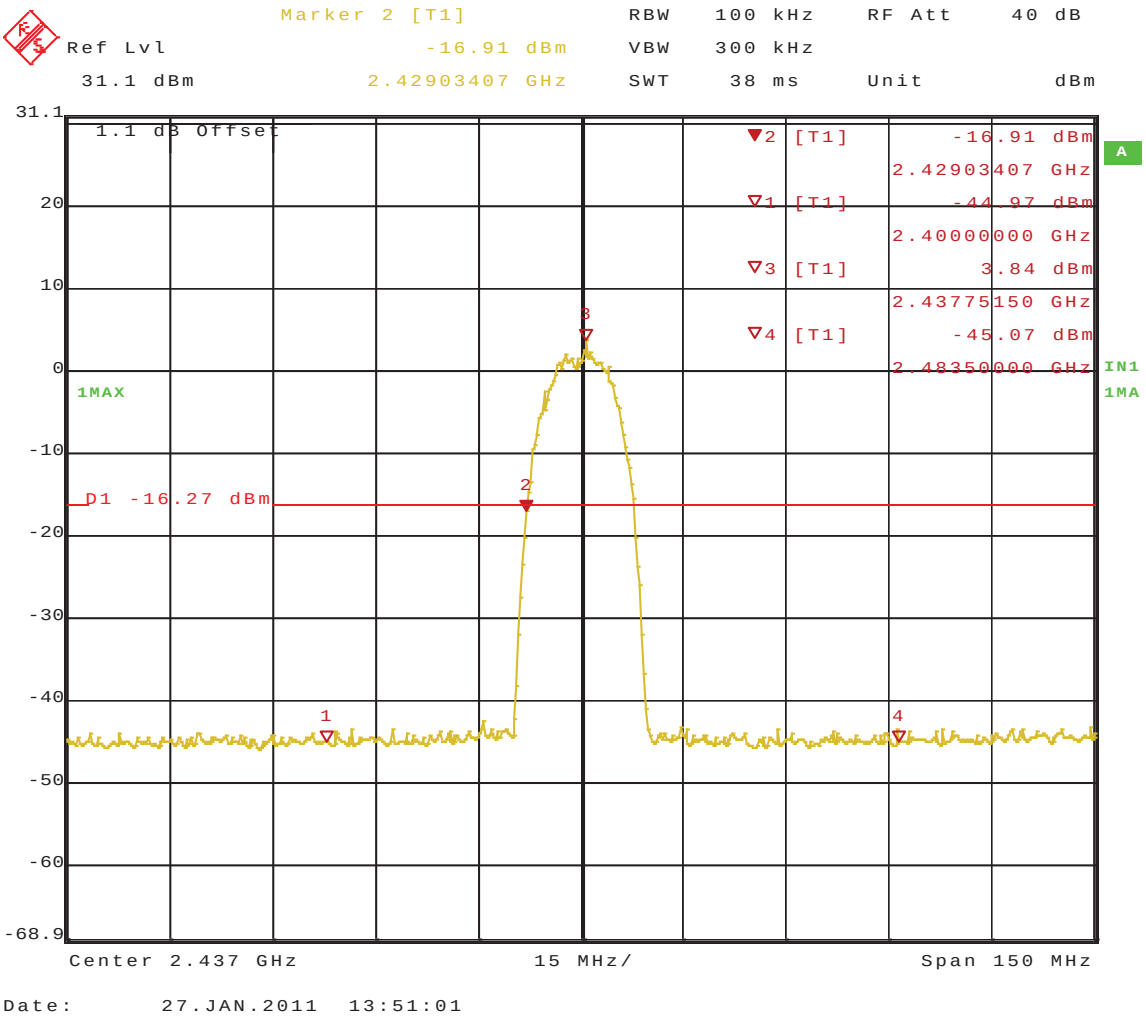


Figure 146: Band-edge Requirement at Operating Channel 2437 MHz, Chain 2, 11MBit/s

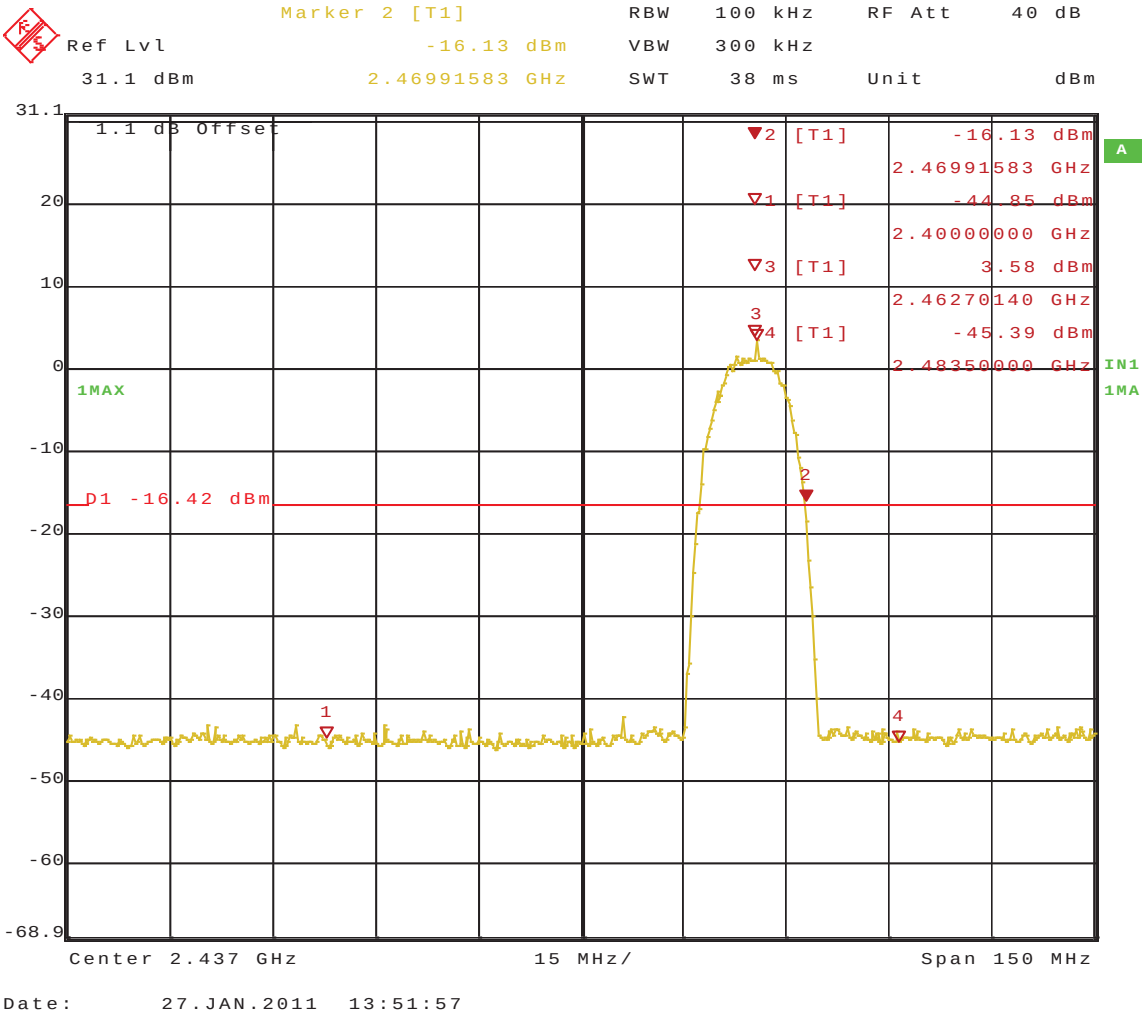


Figure 147: Band-edge Requirement at Operating Channel 2462 MHz, Chain 2, 11MBit/s

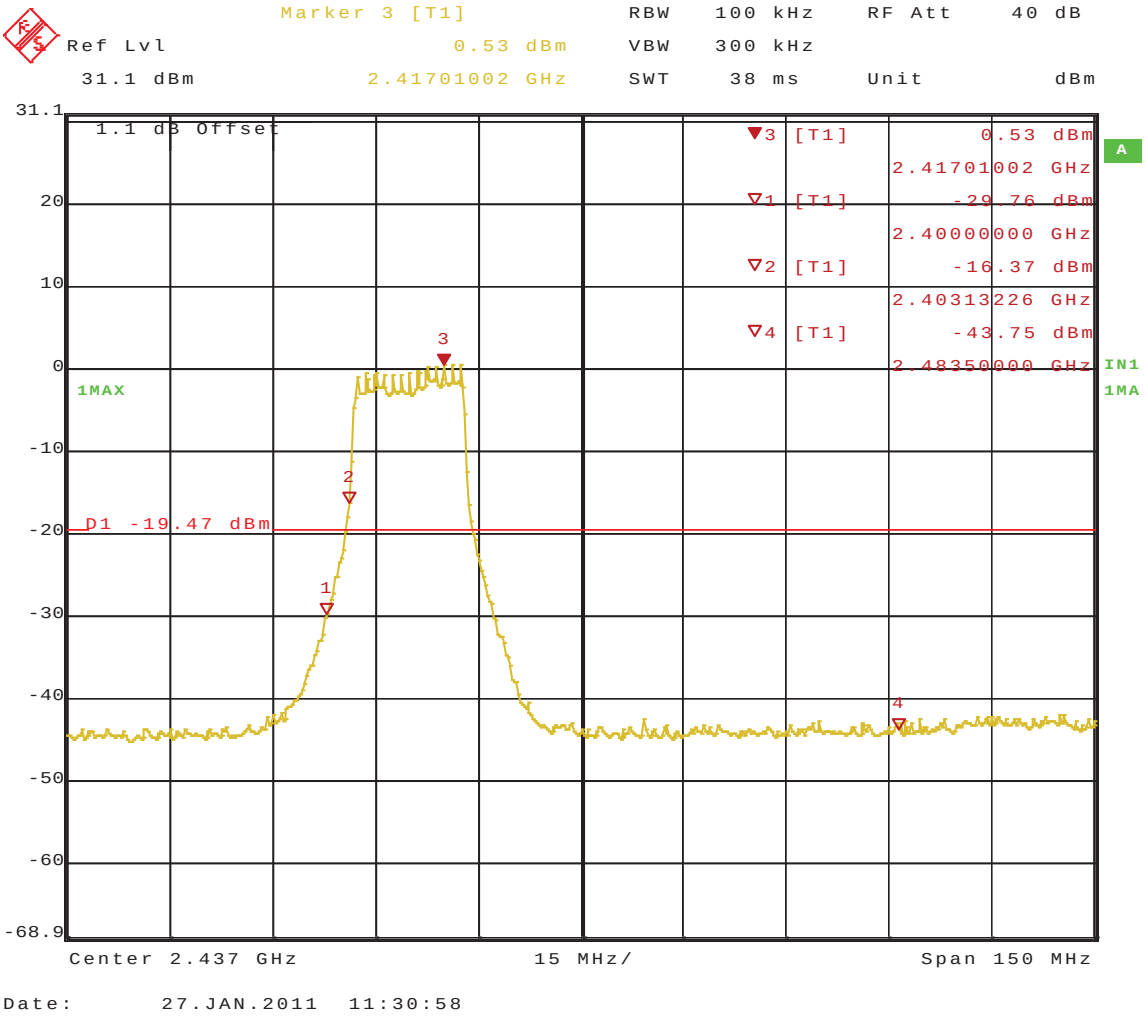


Figure 148: Band-edge Requirement at Operating Channel 2412 MHz, Chain 0, 6MBit/s

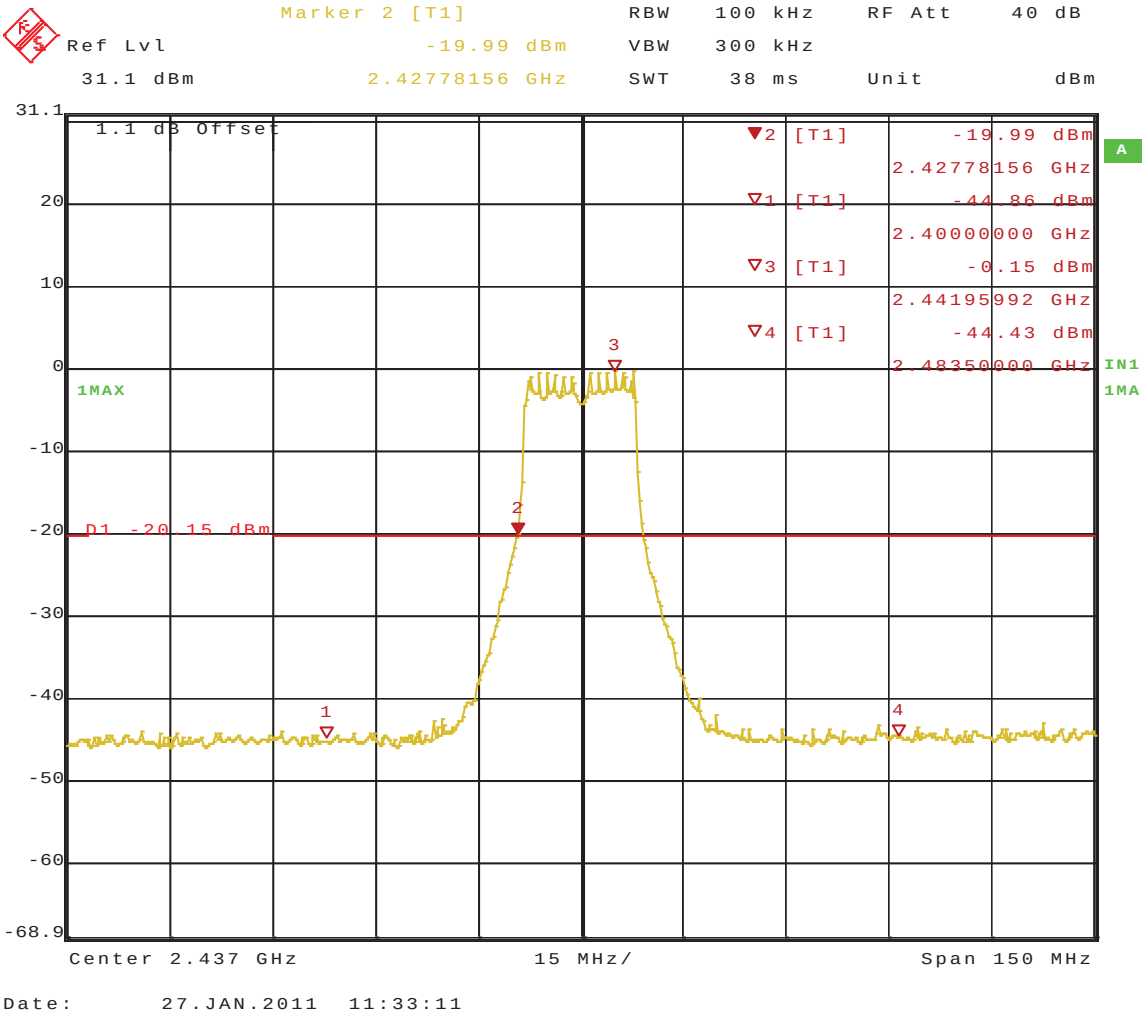


Figure 149: Band-edge Requirement at Operating Channel 2437 MHz, Chain 0, 6MBit/s

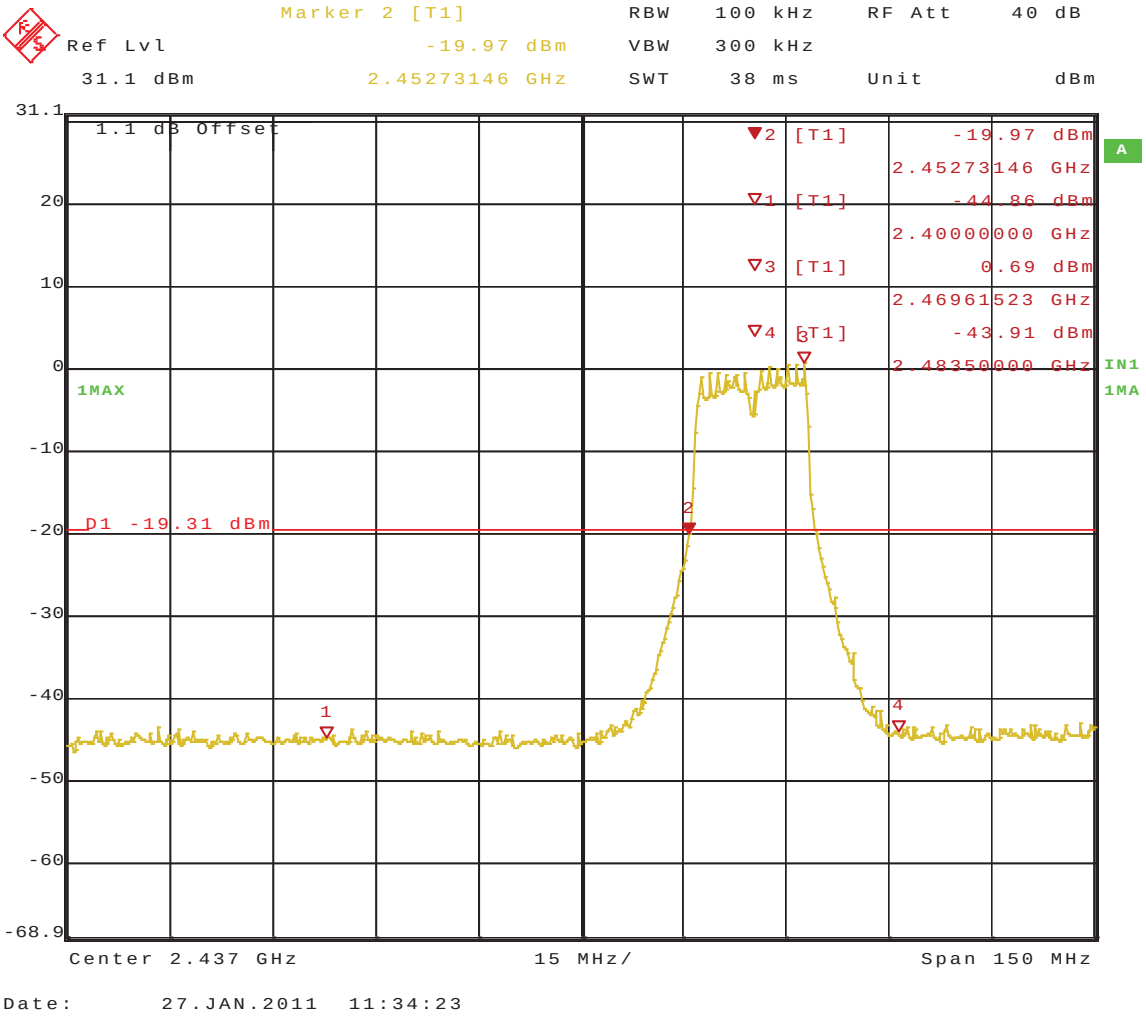


Figure 150: Band-edge Requirement at Operating Channel 2462 MHz, Chain 0, 6MBit/s

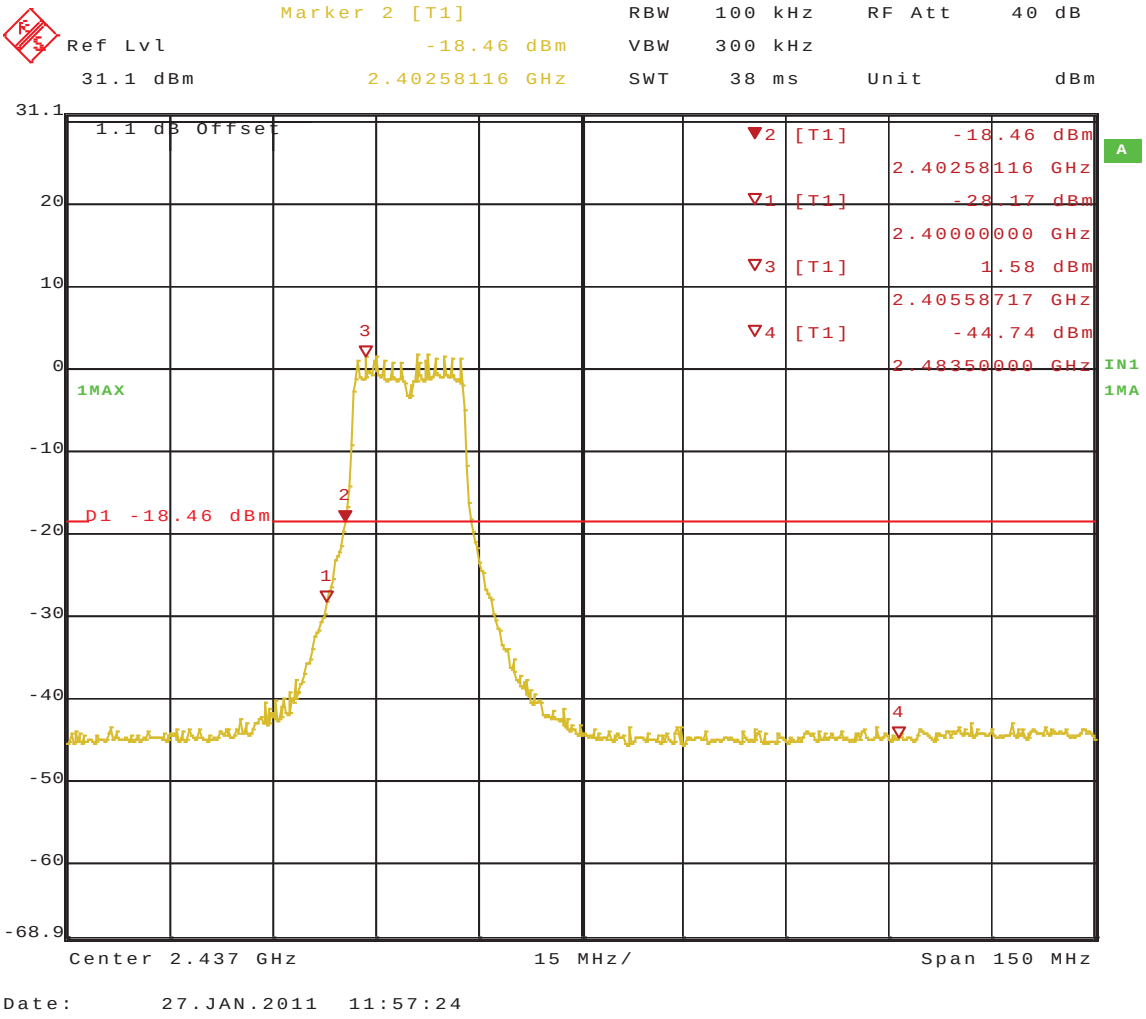


Figure 151: Band-edge Requirement at Operating Channel 2412 MHz, Chain 1, 6MBit/s

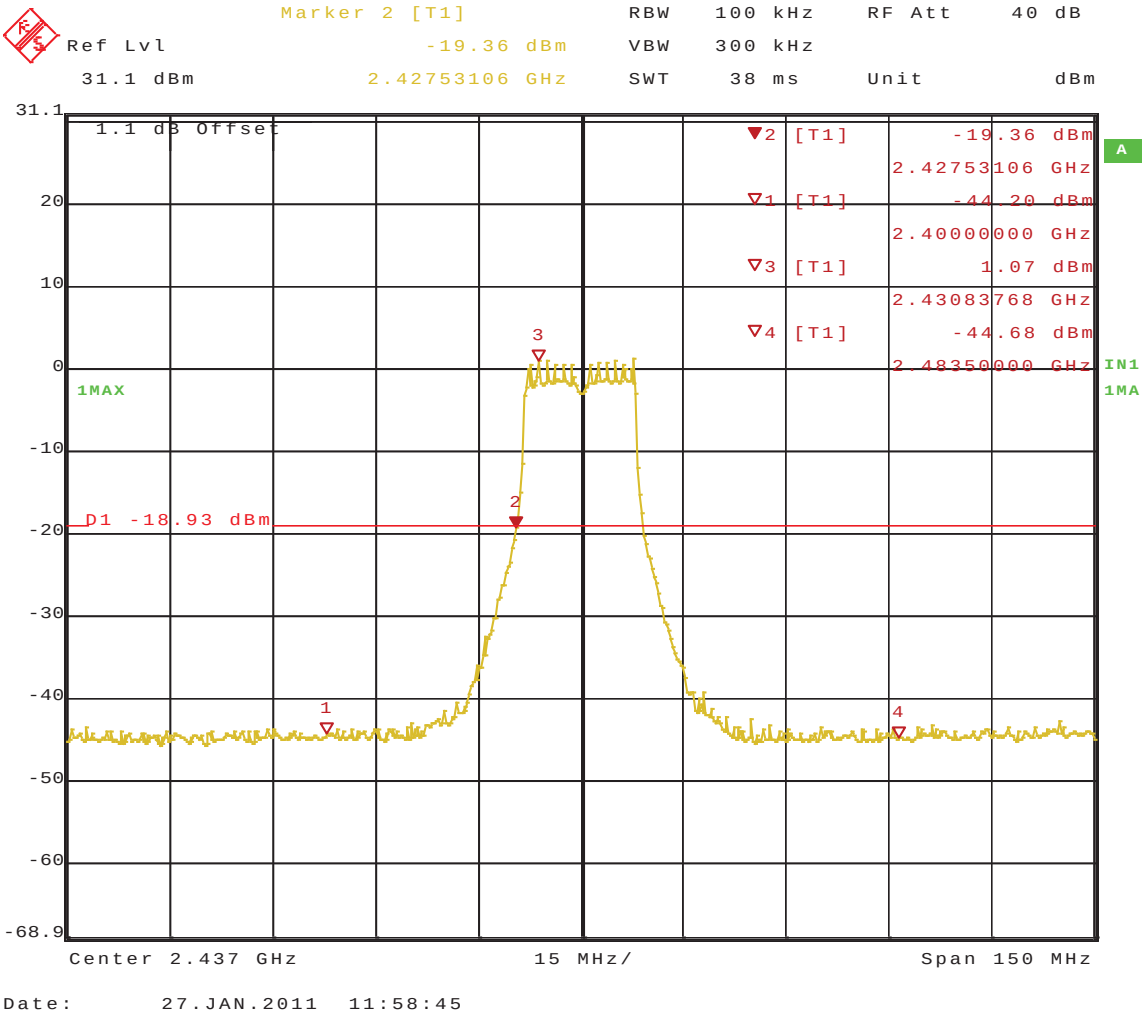


Figure 152: Band-edge Requirement at Operating Channel 2437 MHz, Chain 1, 6MBit/s

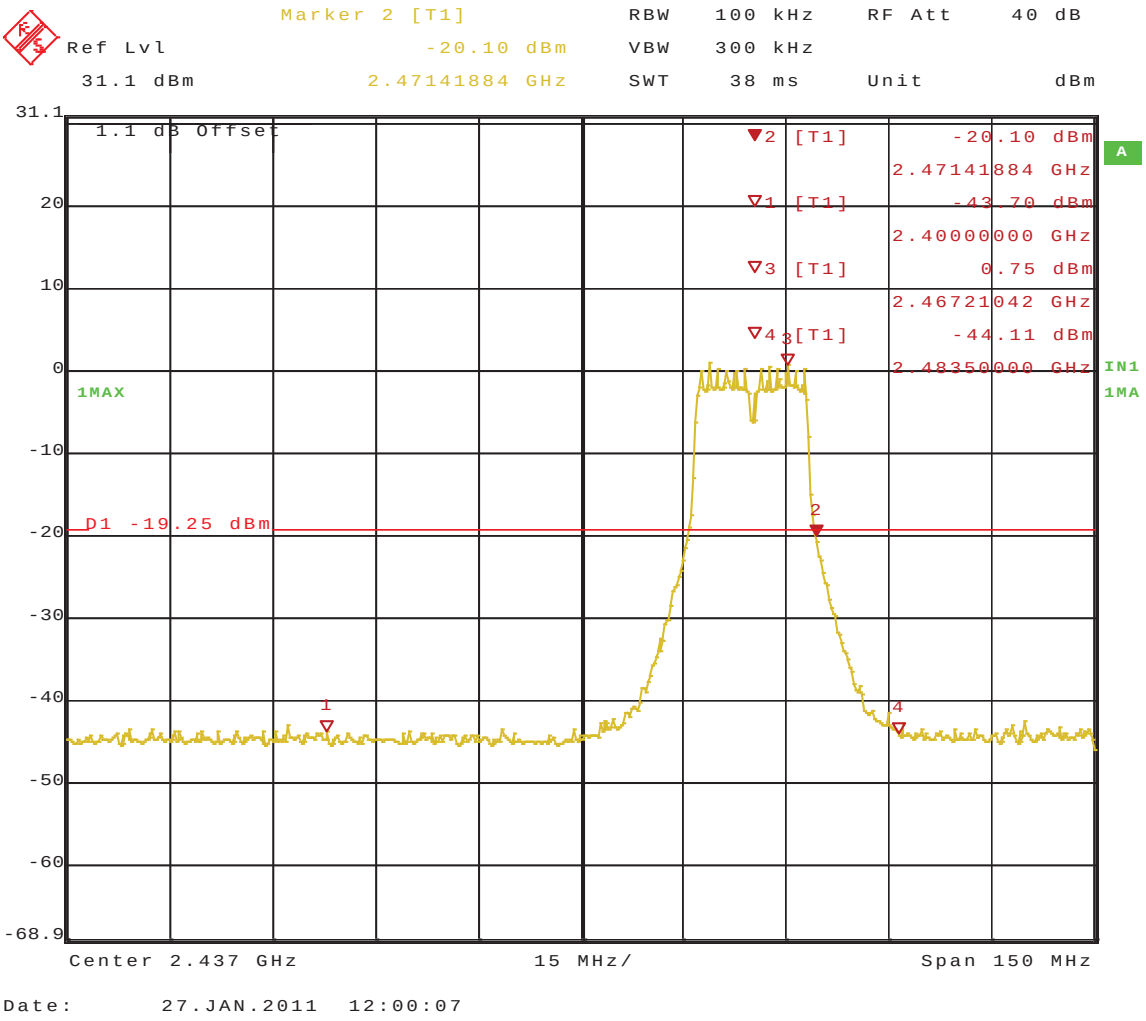


Figure 153: Band-edge Requirement at Operating Channel 2462 MHz, Chain 1, 6MBit/s

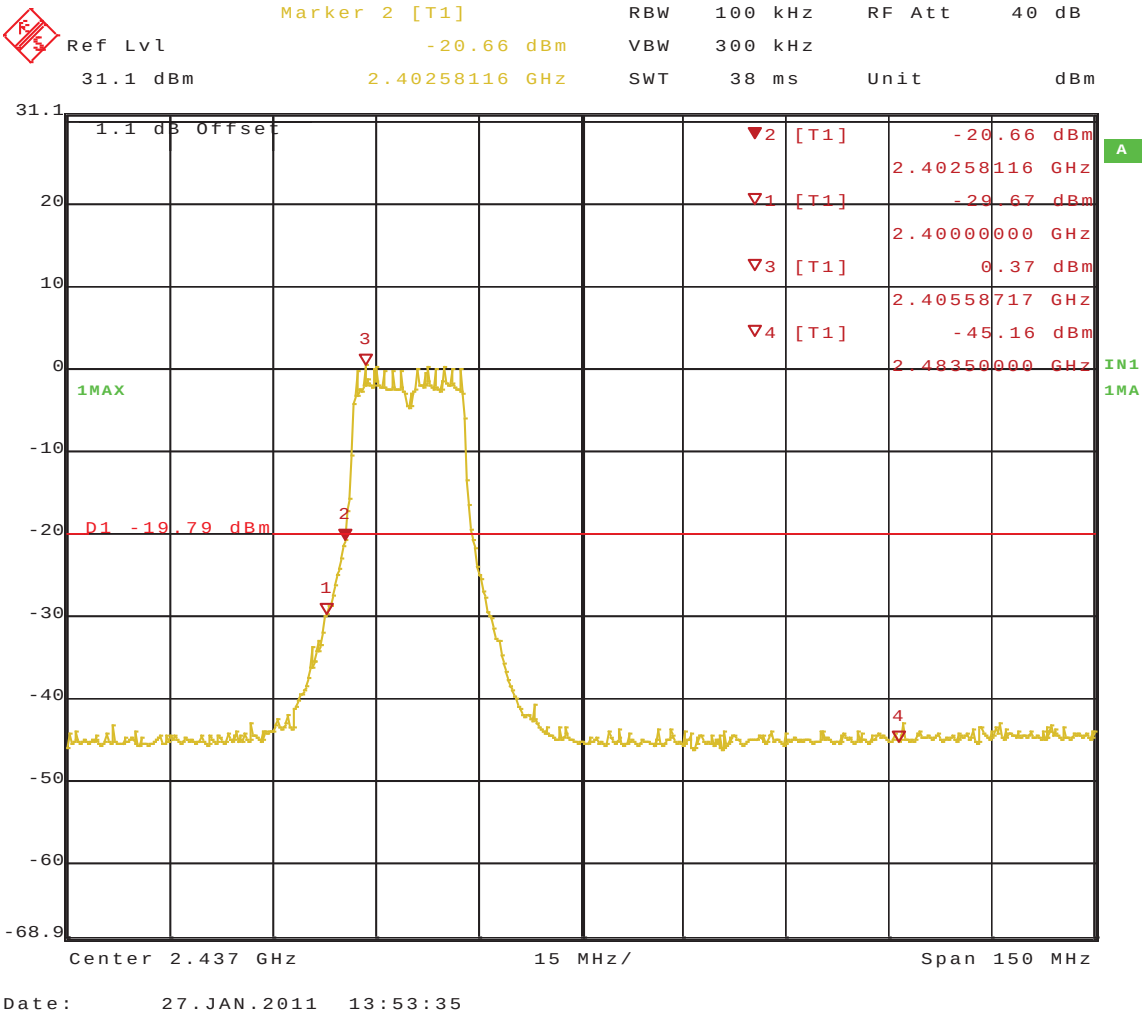


Figure 154: Band-edge Requirement at Operating Channel 2412 MHz, Chain 2, 6MBit/s

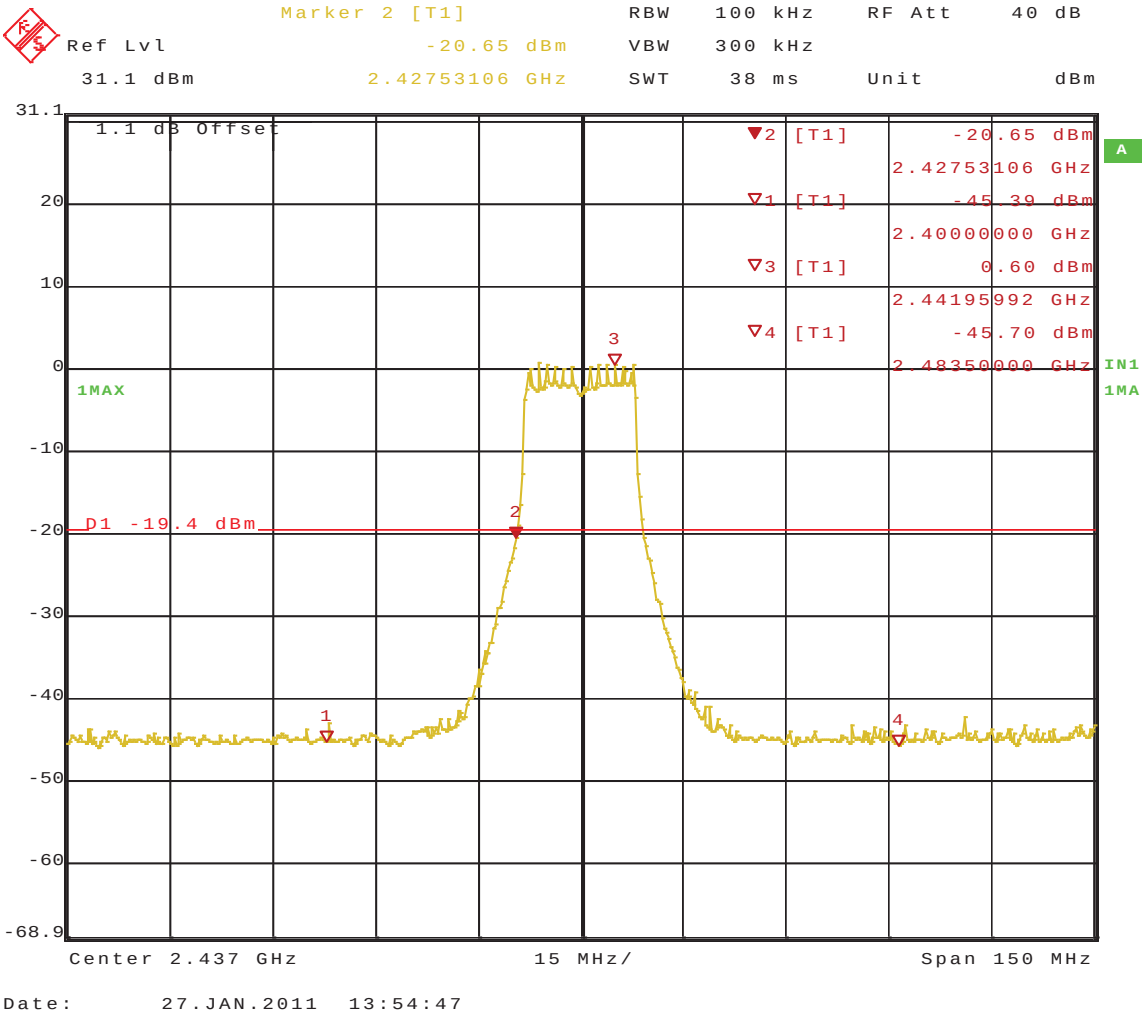


Figure 155: Band-edge Requirement at Operating Channel 2437 MHz, Chain 2, 6MBit/s

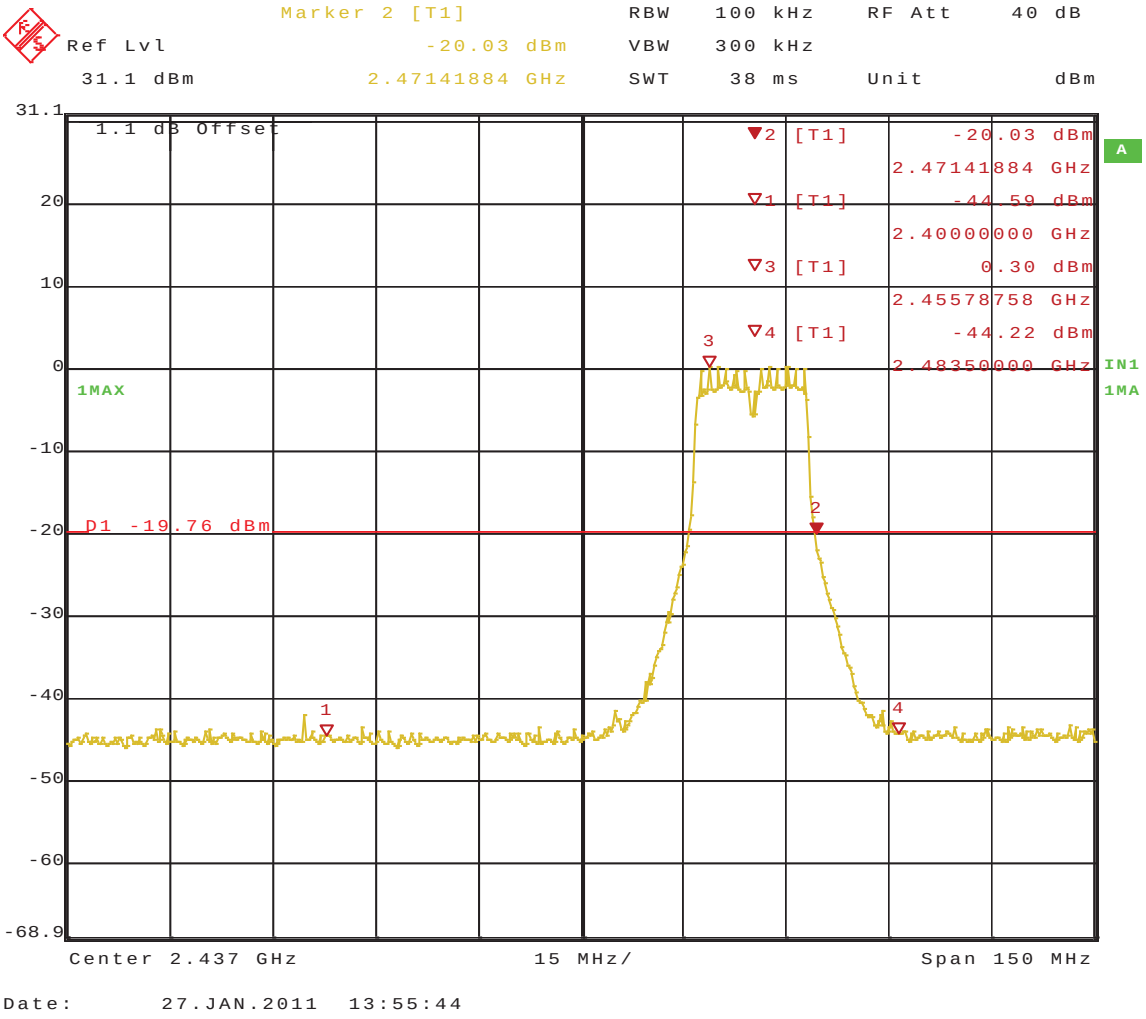


Figure 156: Band-edge Requirement at Operating Channel 2462 MHz, Chain 2, 6MBit/s

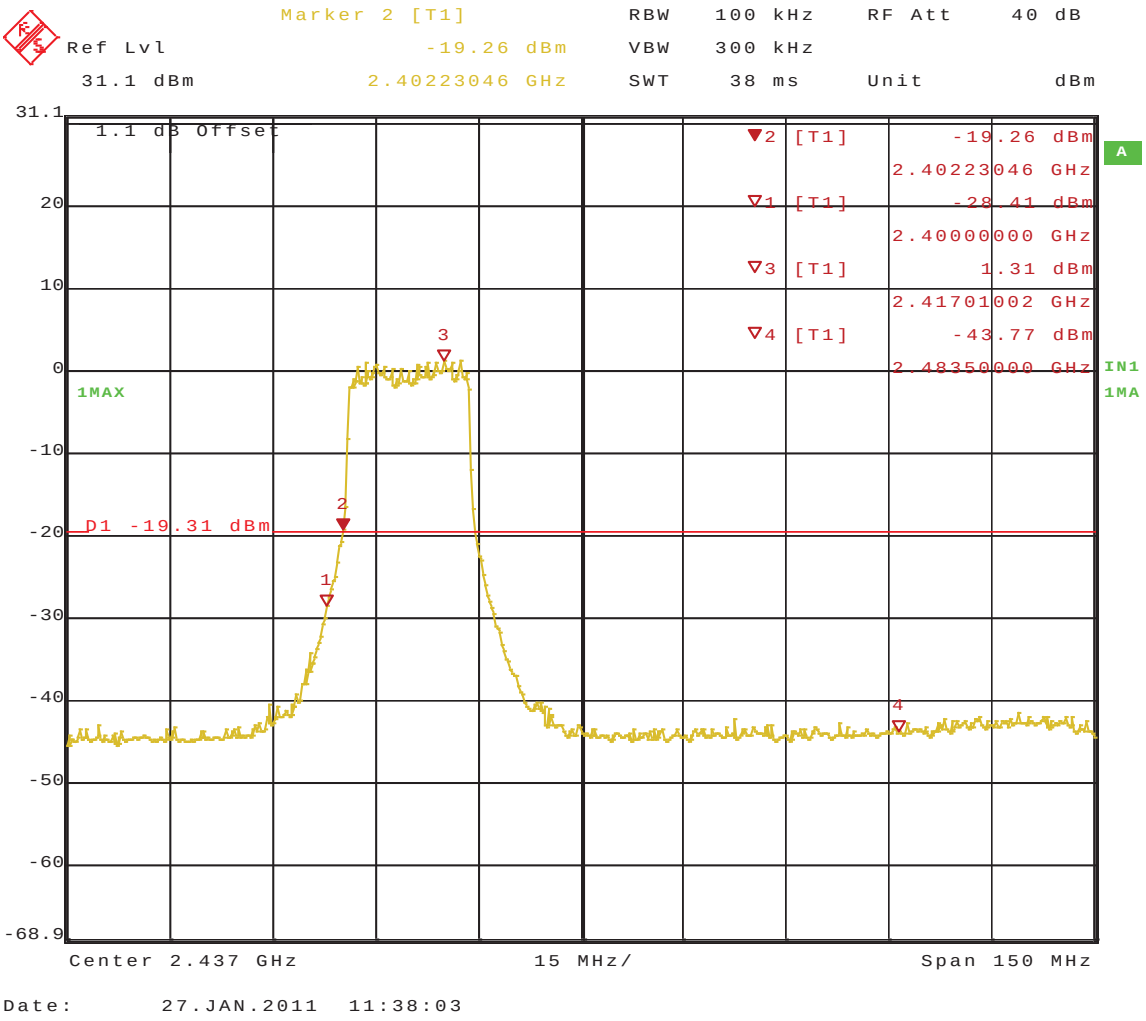


Figure 157: Band-edge Requirement at Operating Channel 2412 MHz, Chain 0, HT20 65 Mbps

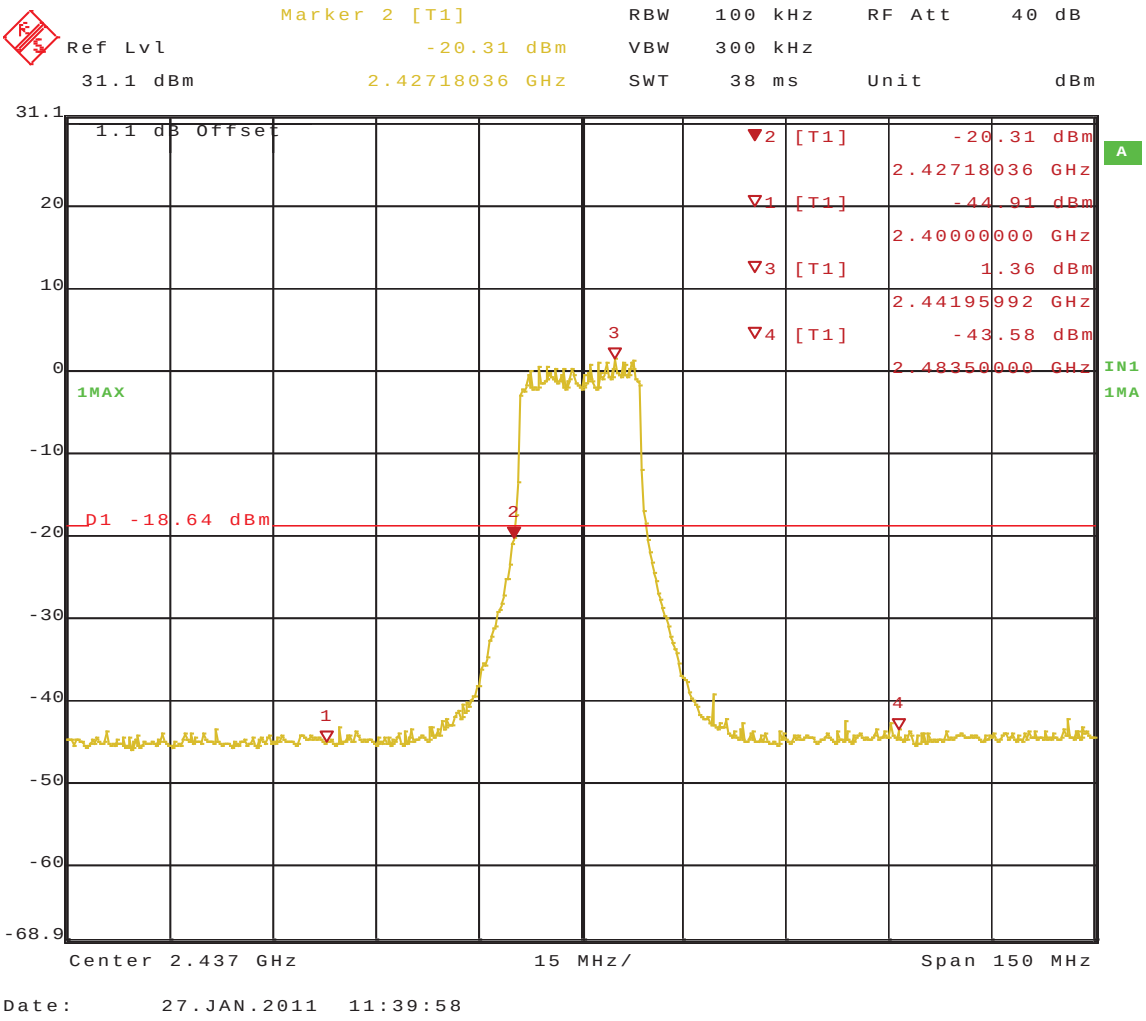


Figure 158: Band-edge Requirement at Operating Channel 2437 MHz, Chain 0, HT20 65 Mbps

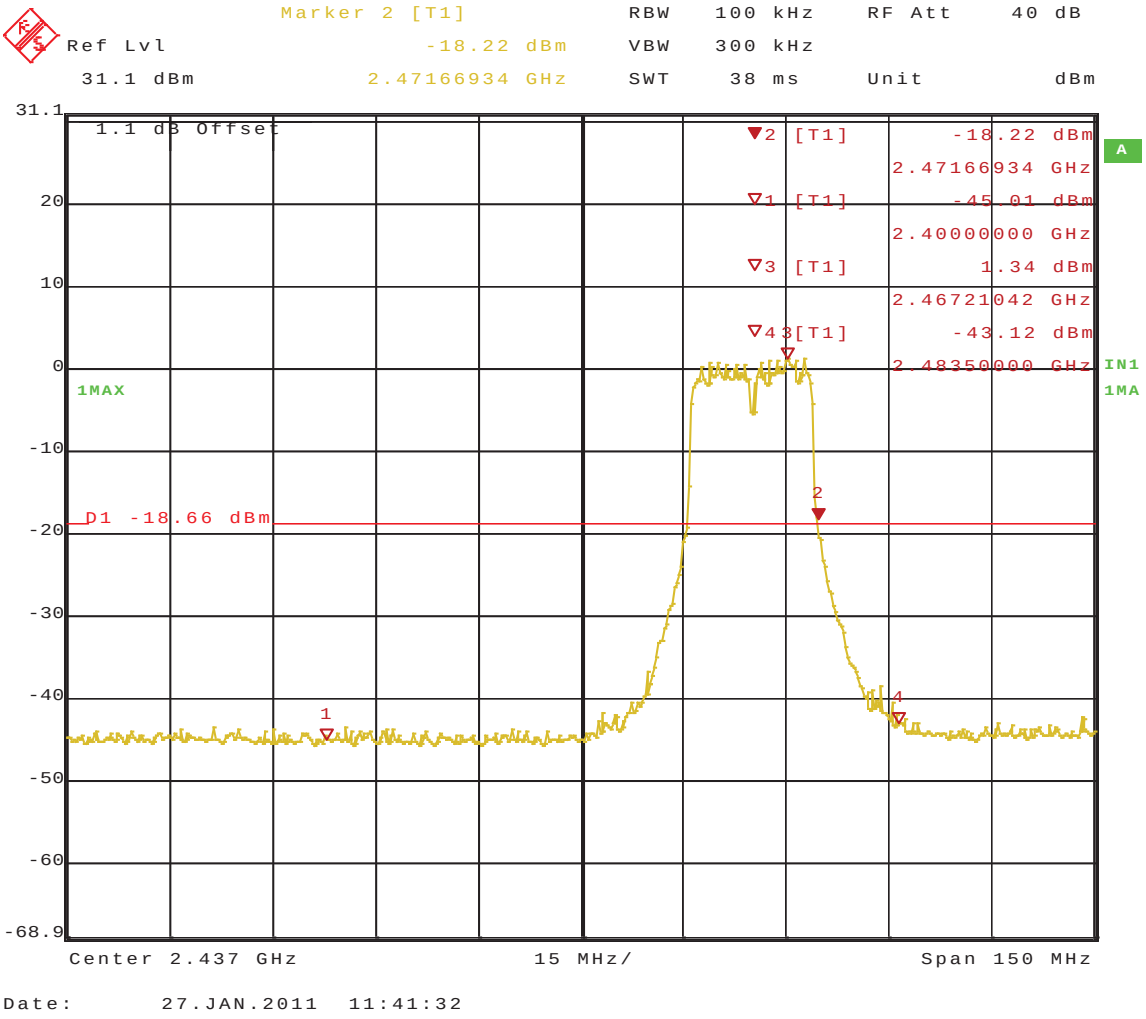


Figure 159: Band-edge Requirement at Operating Channel 2462 MHz, Chain 0, HT20 65 Mbps

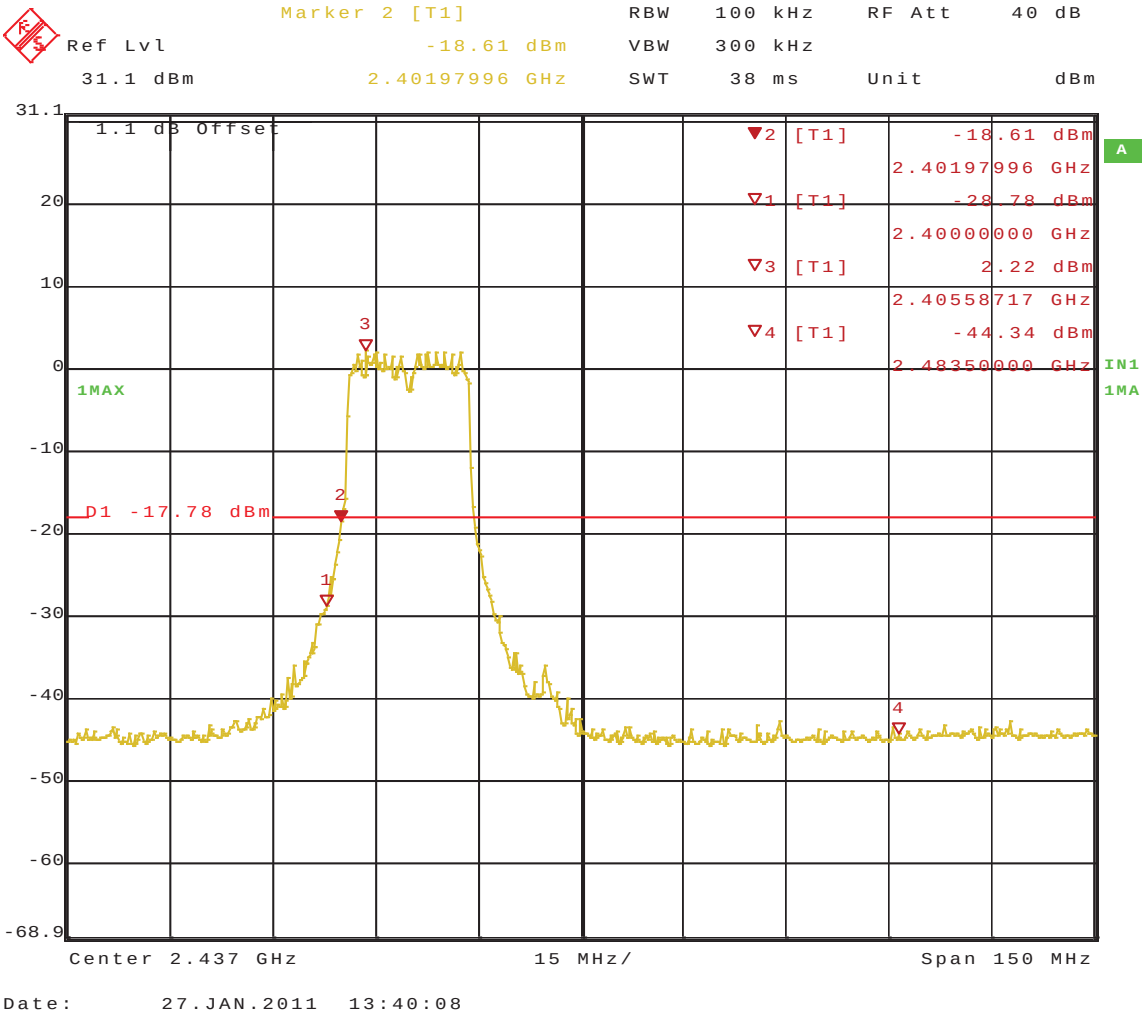


Figure 160: Band-edge Requirement at Operating Channel 2412 MHz, Chain 1, HT20 65 Mbps

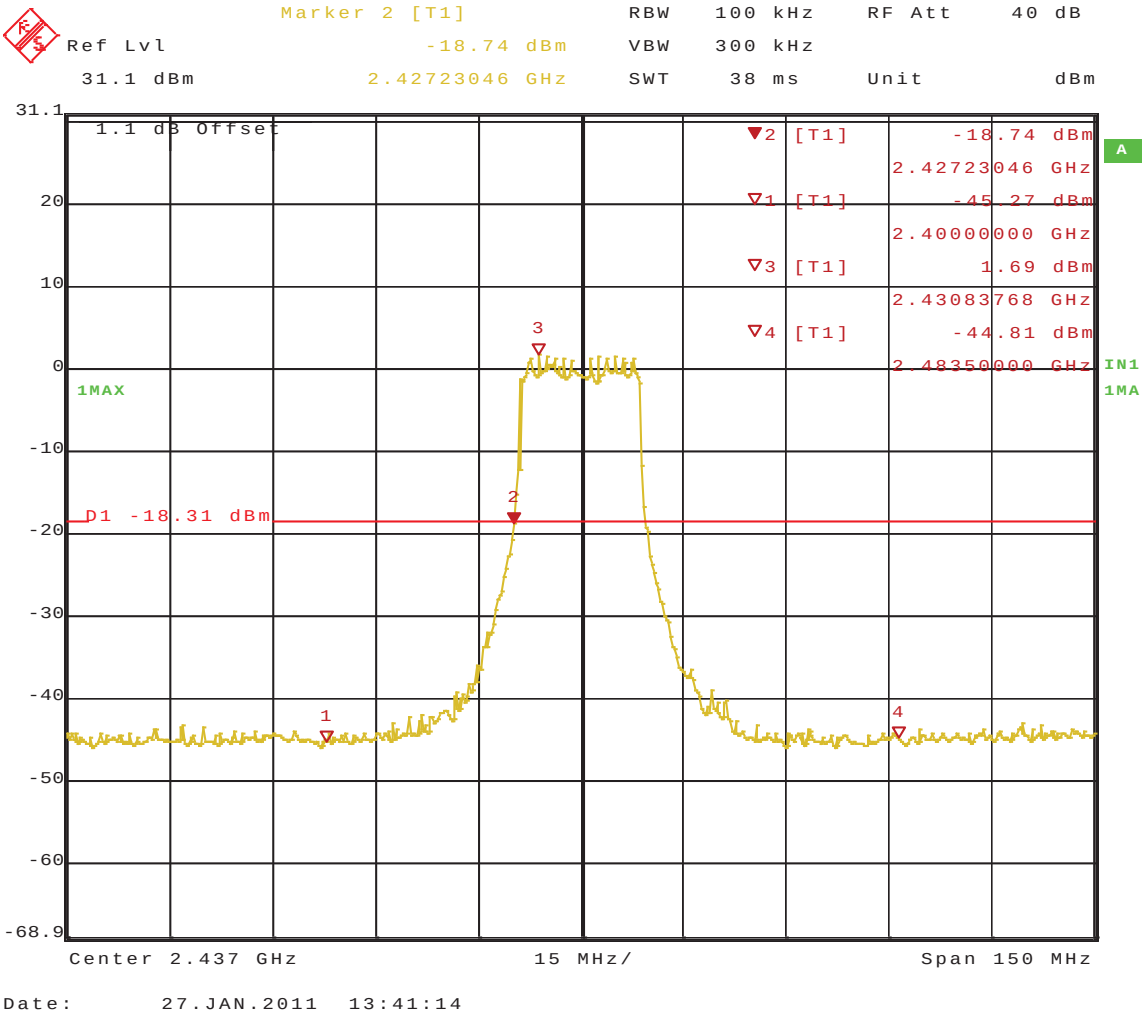


Figure 161: Band-edge Requirement at Operating Channel 2437 MHz, Chain 1, HT20 65 Mbps

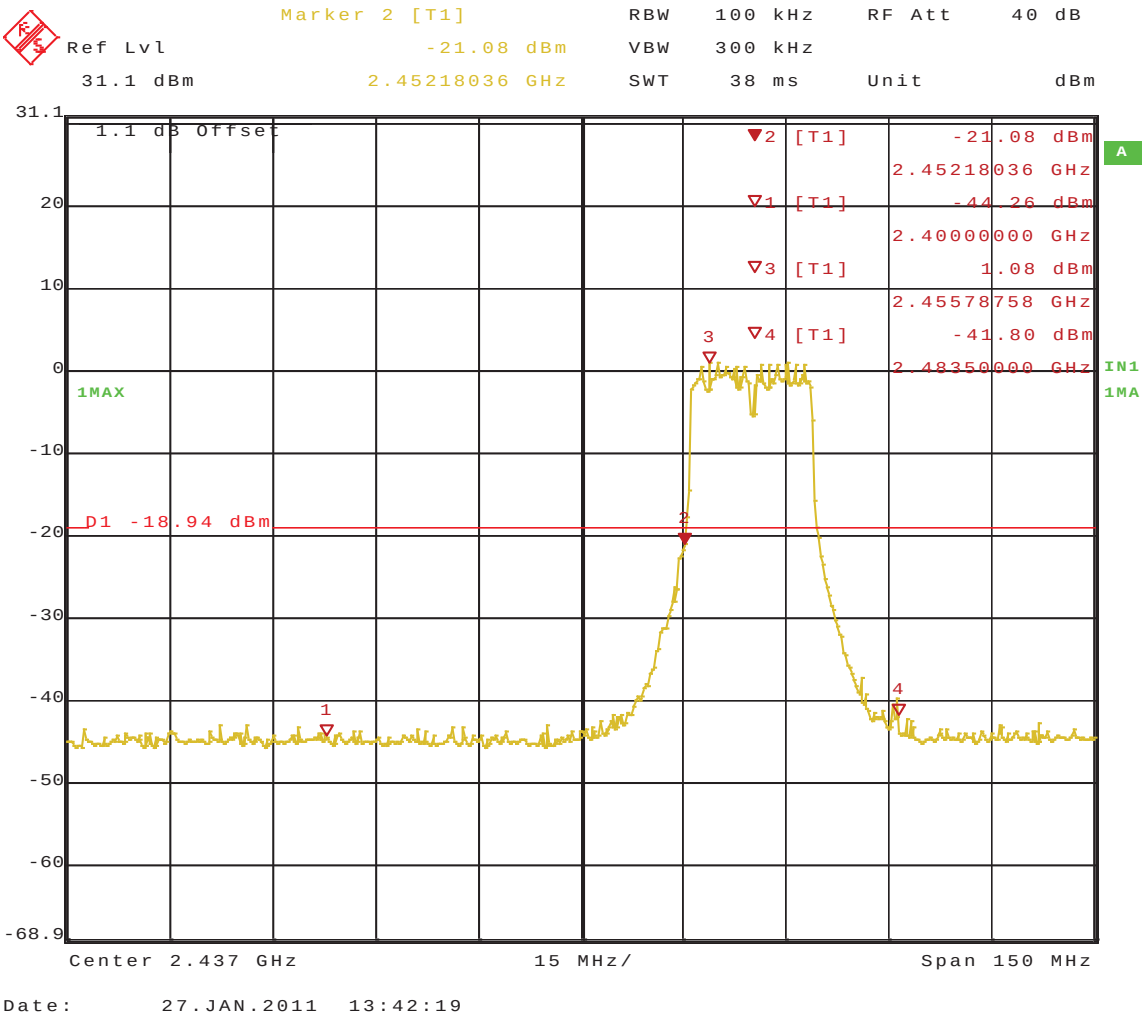


Figure 162: Band-edge Requirement at Operating Channel 2462 MHz, Chain 1, HT20 65 Mbps

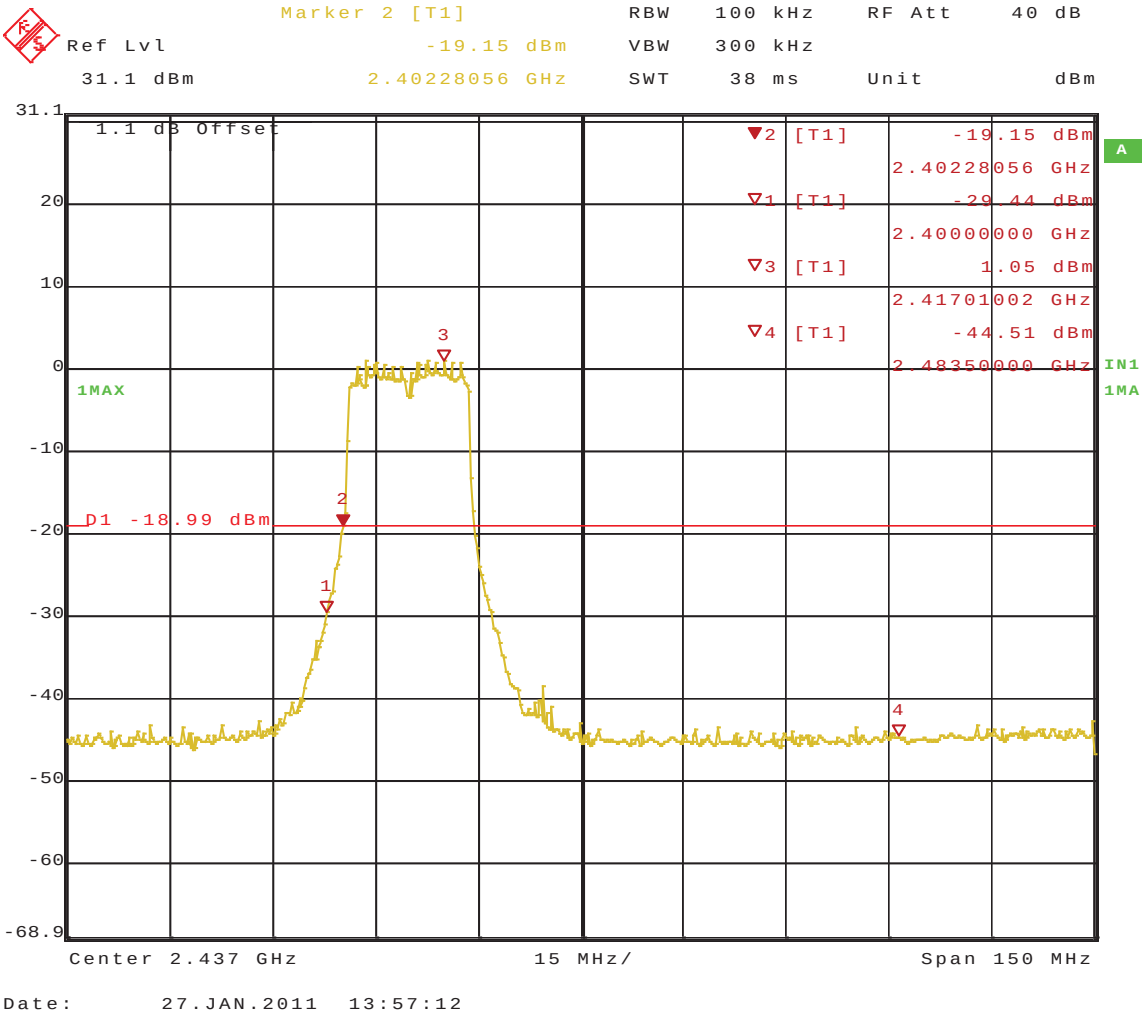


Figure 163: Band-edge Requirement at Operating Channel 2412 MHz, Chain 2, HT20 65 Mbps

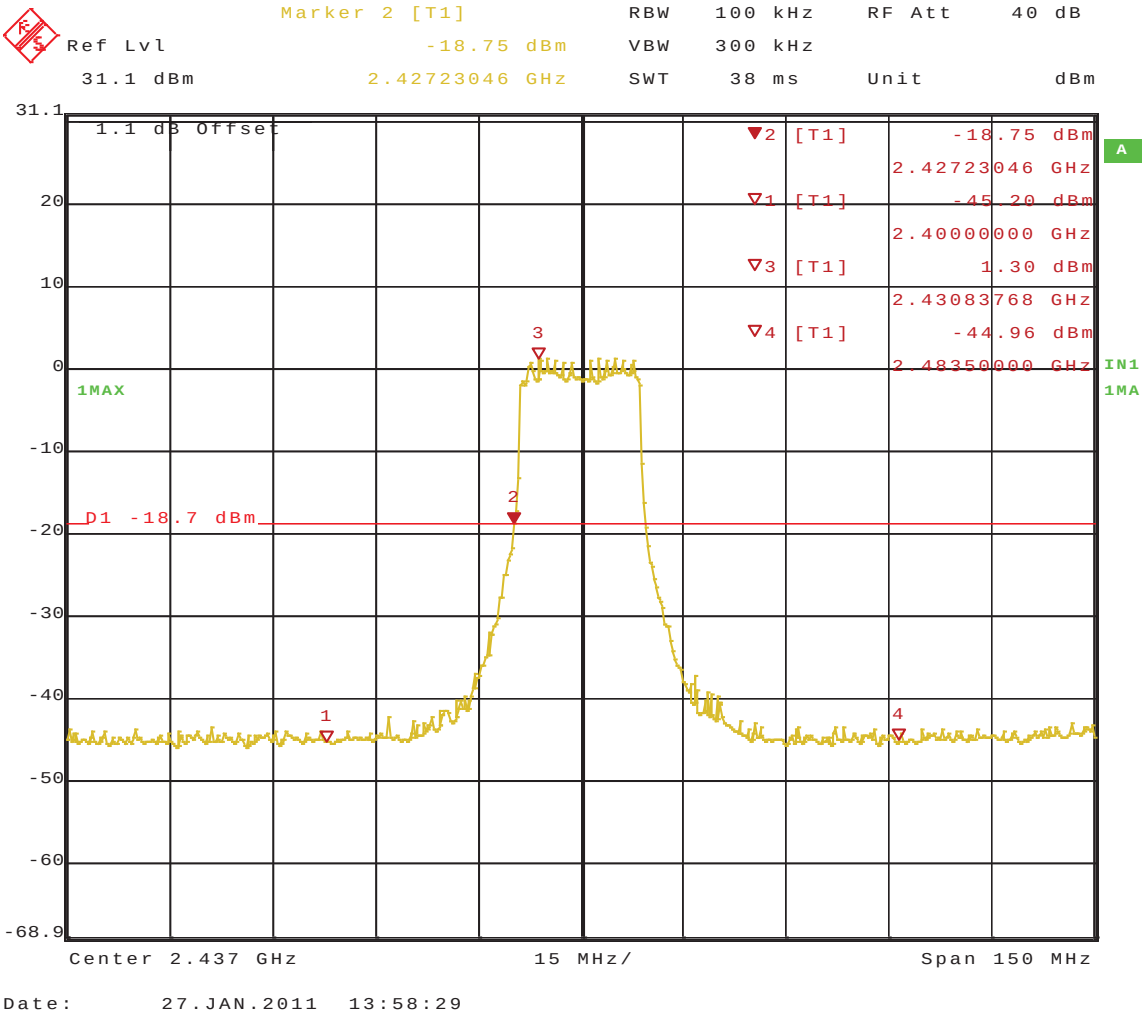


Figure 164: Band-edge Requirement at Operating Channel 2437 MHz, Chain 2, HT20 65 Mbps

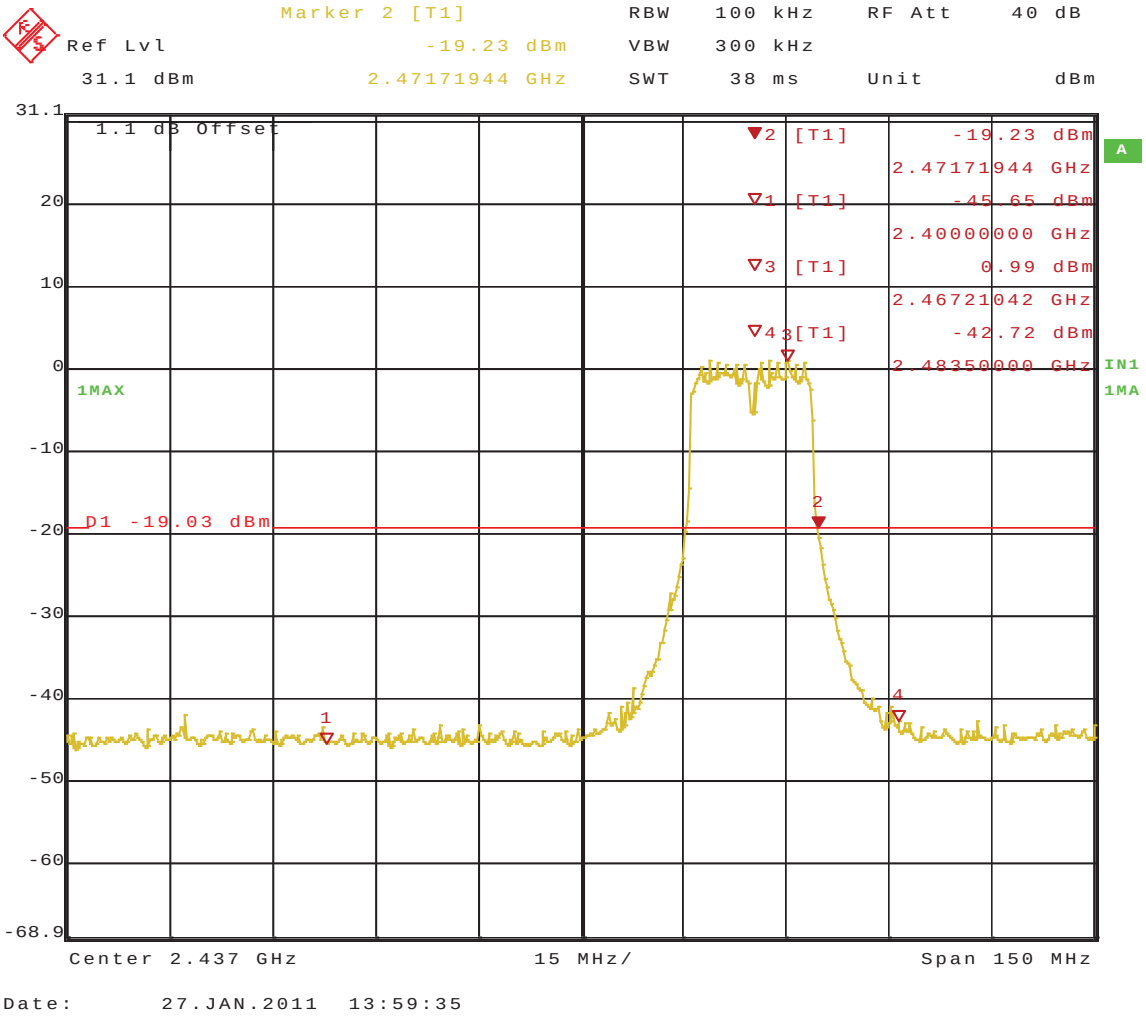


Figure 165: Band-edge Requirement at Operating Channel 2462 MHz, Chain 2, HT20 65 Mbps

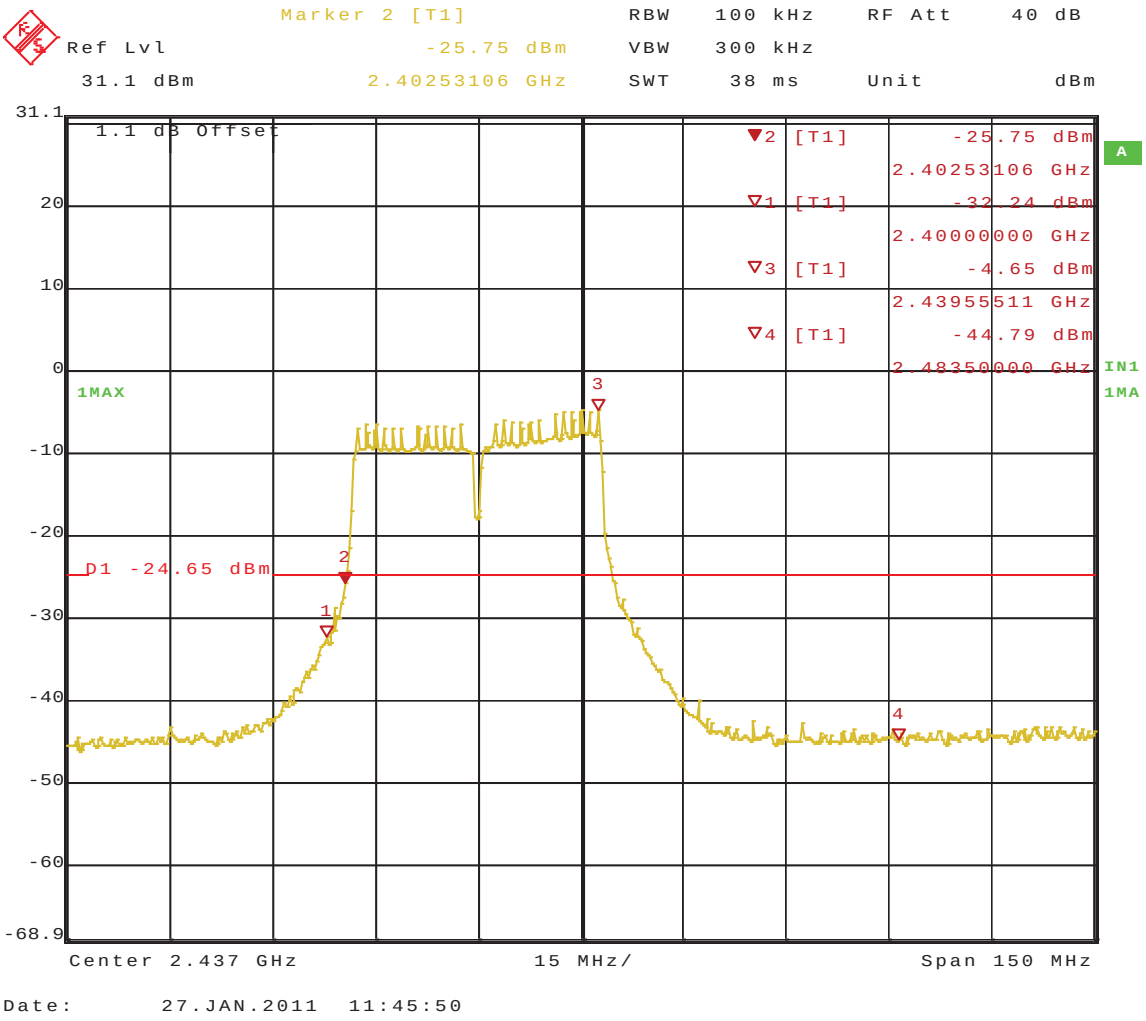


Figure 166: Band-edge Requirement at Operating Channel 2422 MHz, Chain 0, HT40 13.5 Mbps

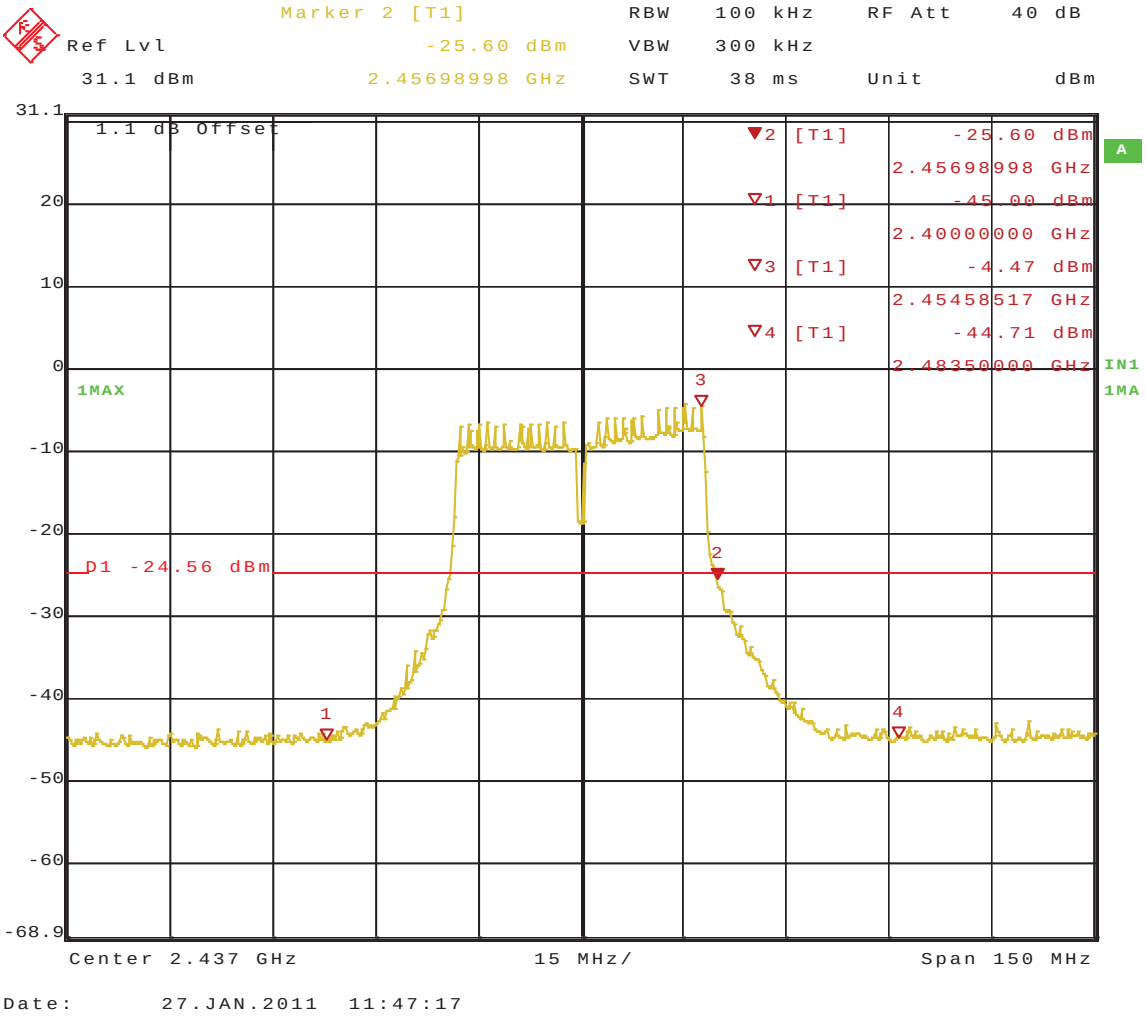


Figure 167: Band-edge Requirement at Operating Channel 2437 MHz, Chain 0, HT40 13.5 Mbps

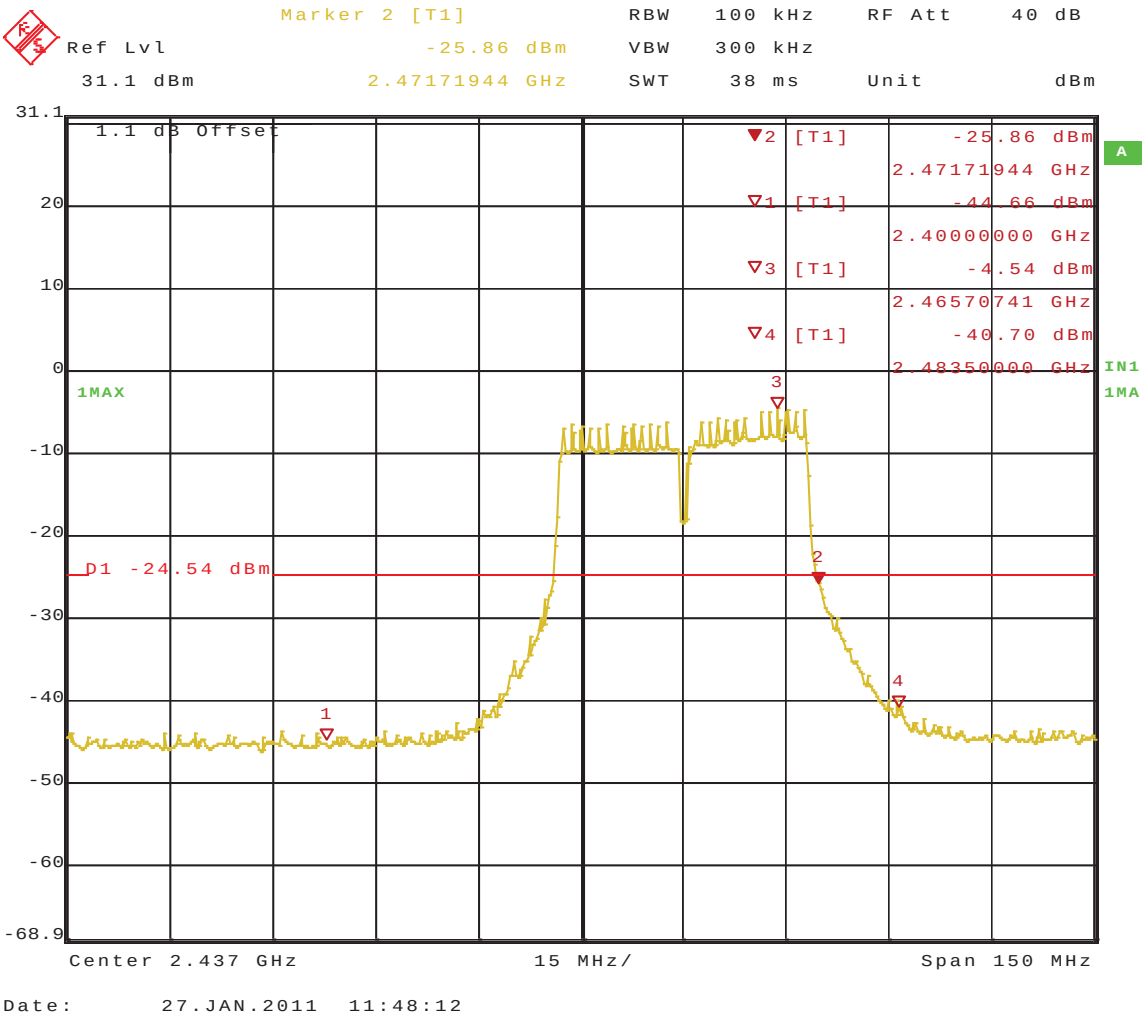


Figure 168: Band-edge Requirement at Operating Channel 2452 MHz, Chain 0, HT40 13.5 Mbps

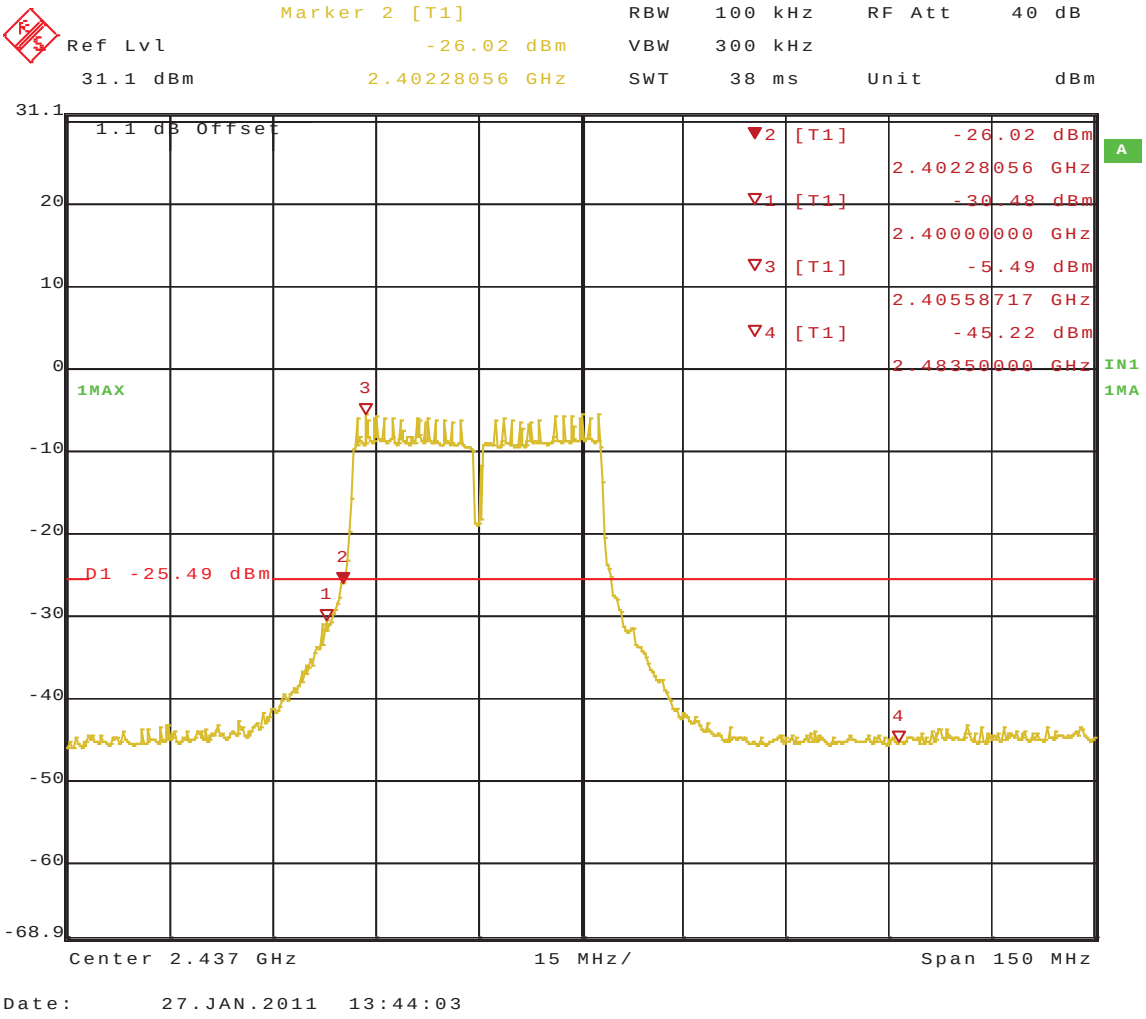


Figure 169: Band-edge Requirement at Operating Channel 2422 MHz, Chain 1, HT40 13.5 Mbps

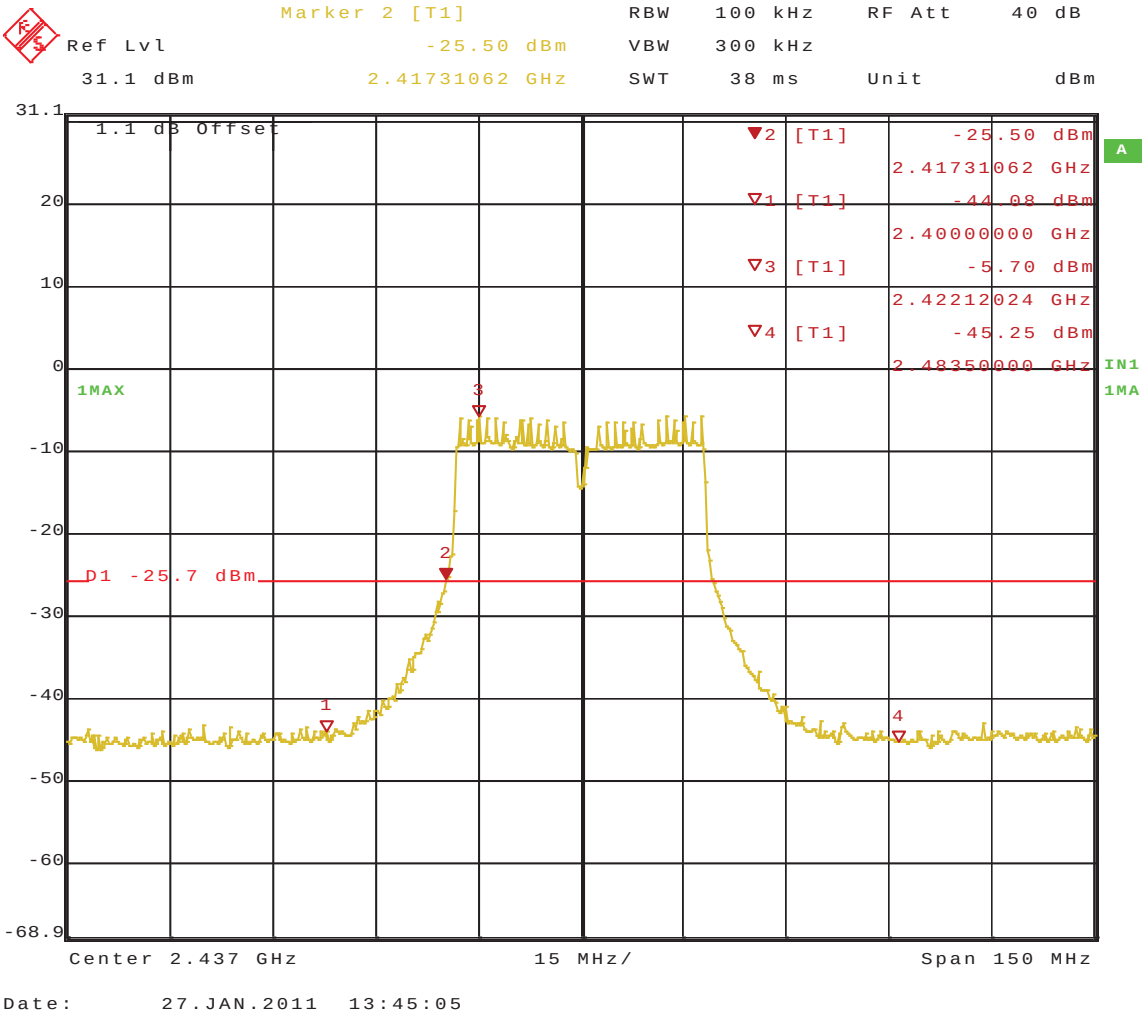


Figure 170: Band-edge Requirement at Operating Channel 2437 MHz, Chain 1, HT40 13.5 Mbps

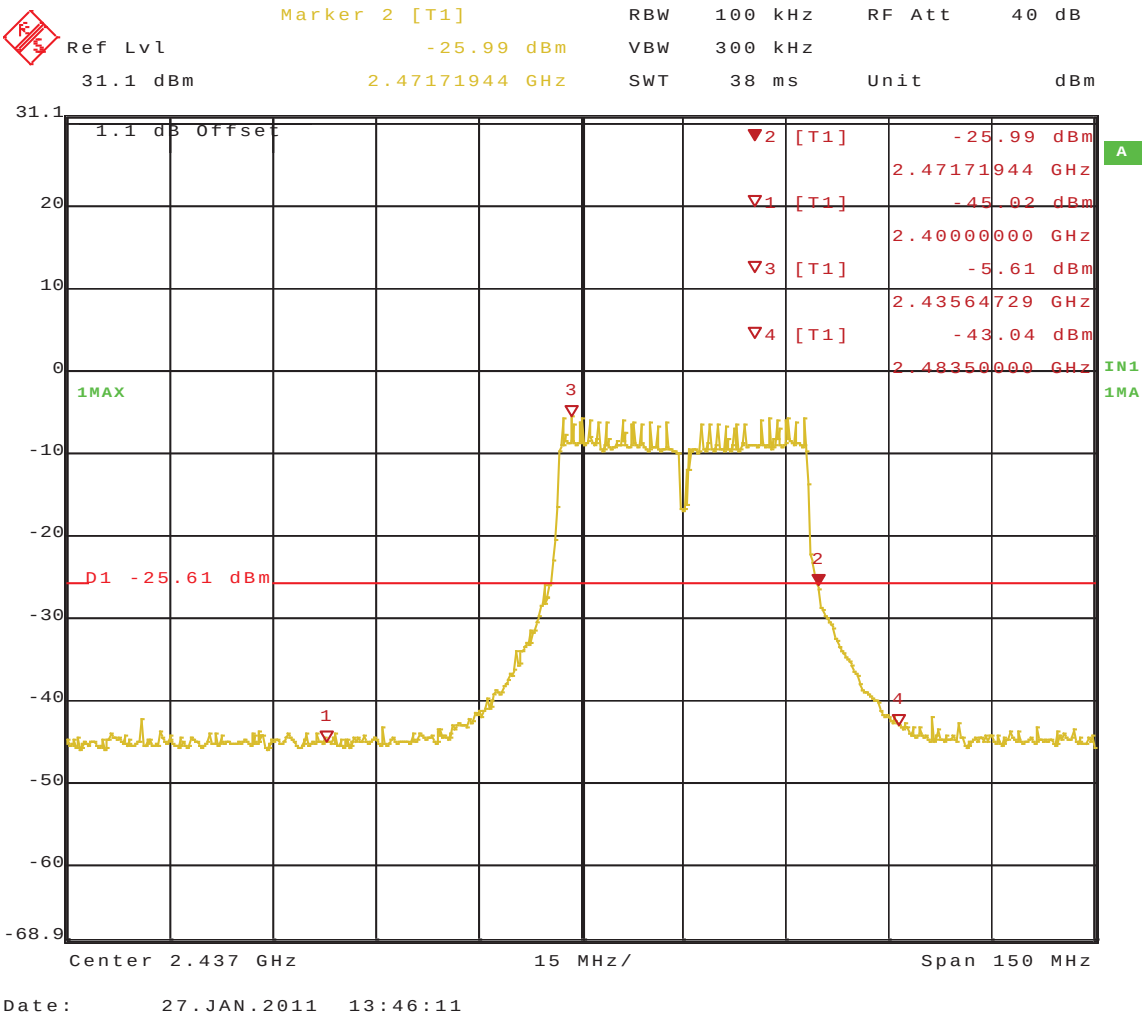


Figure 171: Band-edge Requirement at Operating Channel 2452 MHz, Chain 1, HT40 13.5 Mbps

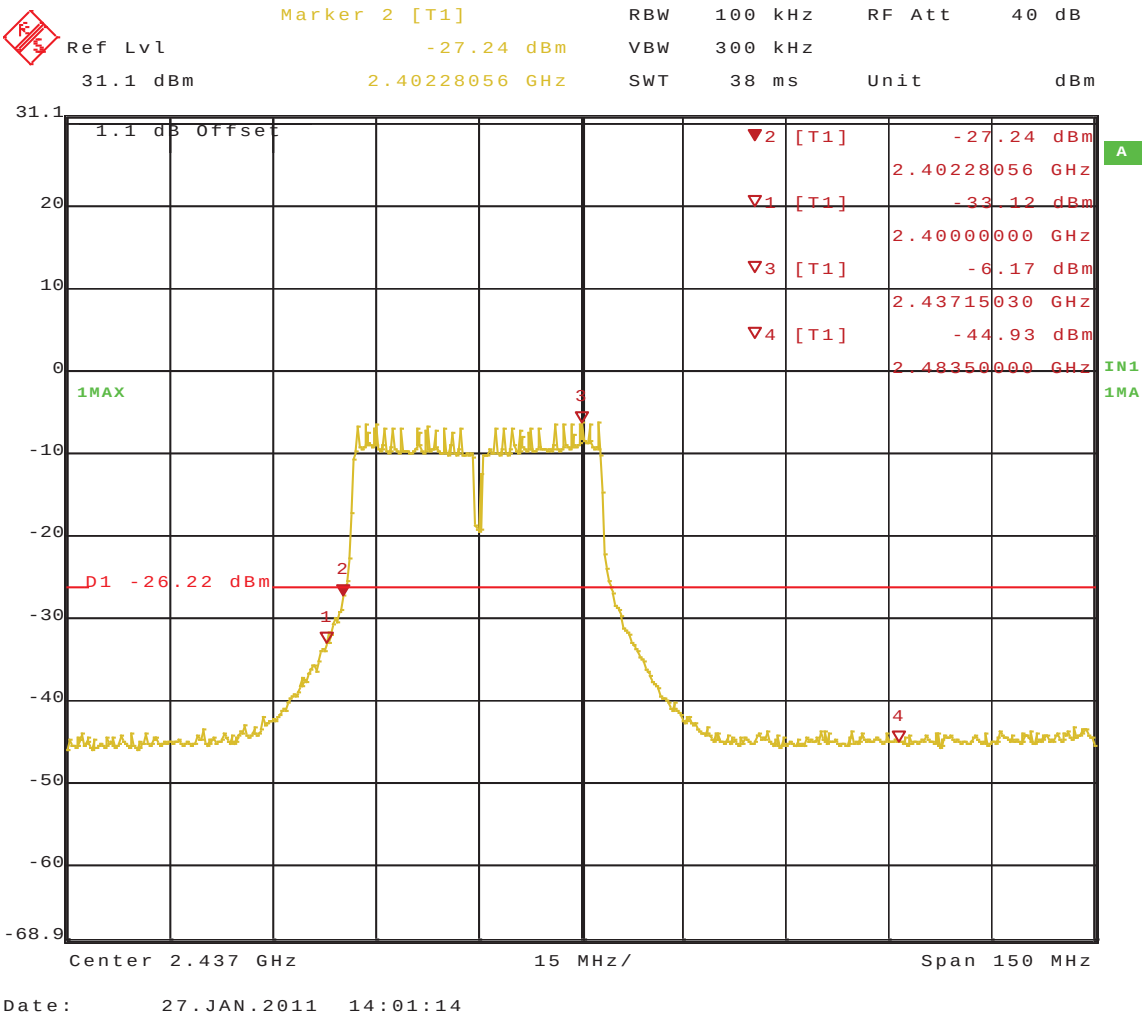


Figure 172: Band-edge Requirement at Operating Channel 2422 MHz, Chain 2, HT40 13.5 Mbps

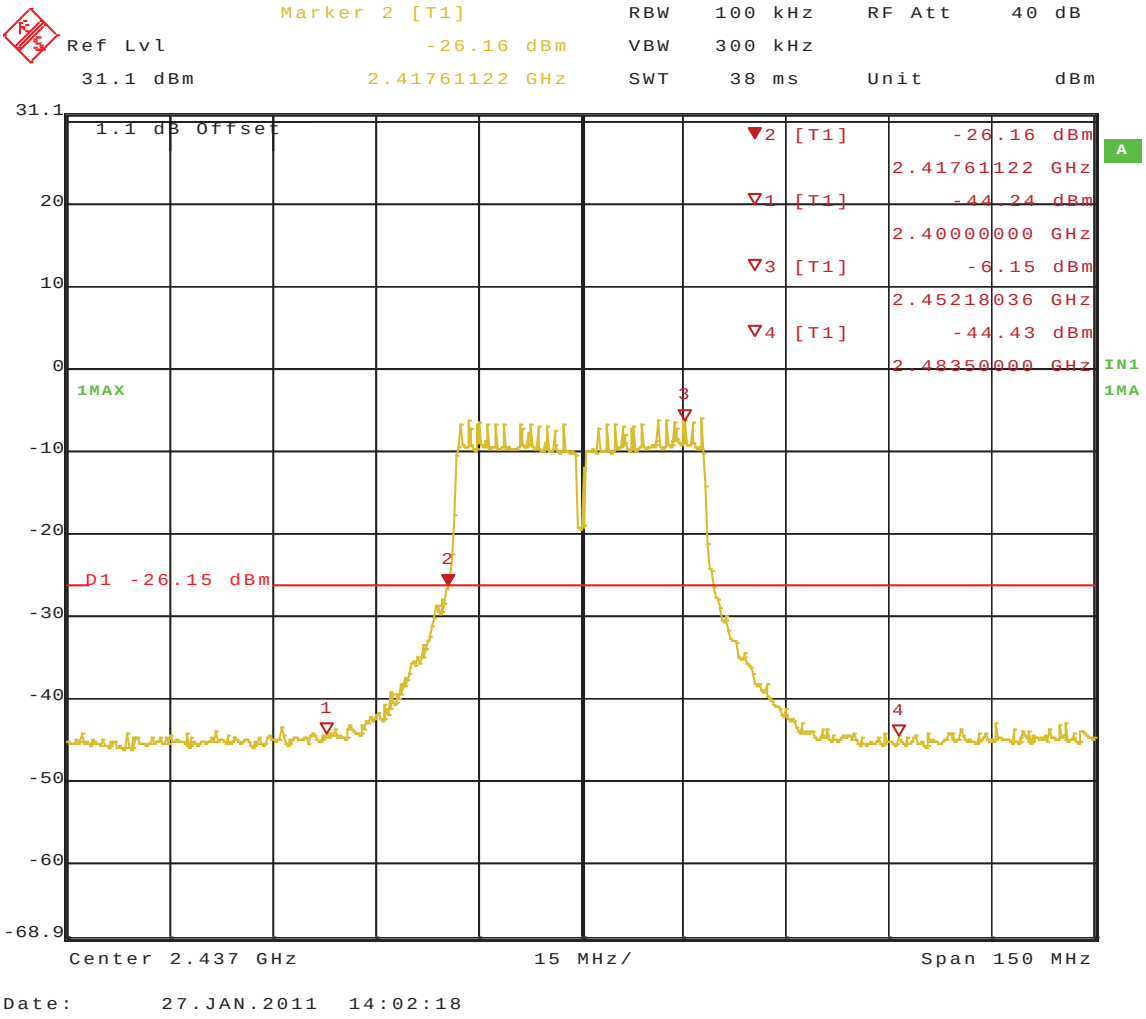


Figure 173: Band-edge Requirement at Operating Channel 2437 MHz, Chain 2, HT40 13.5 Mbps

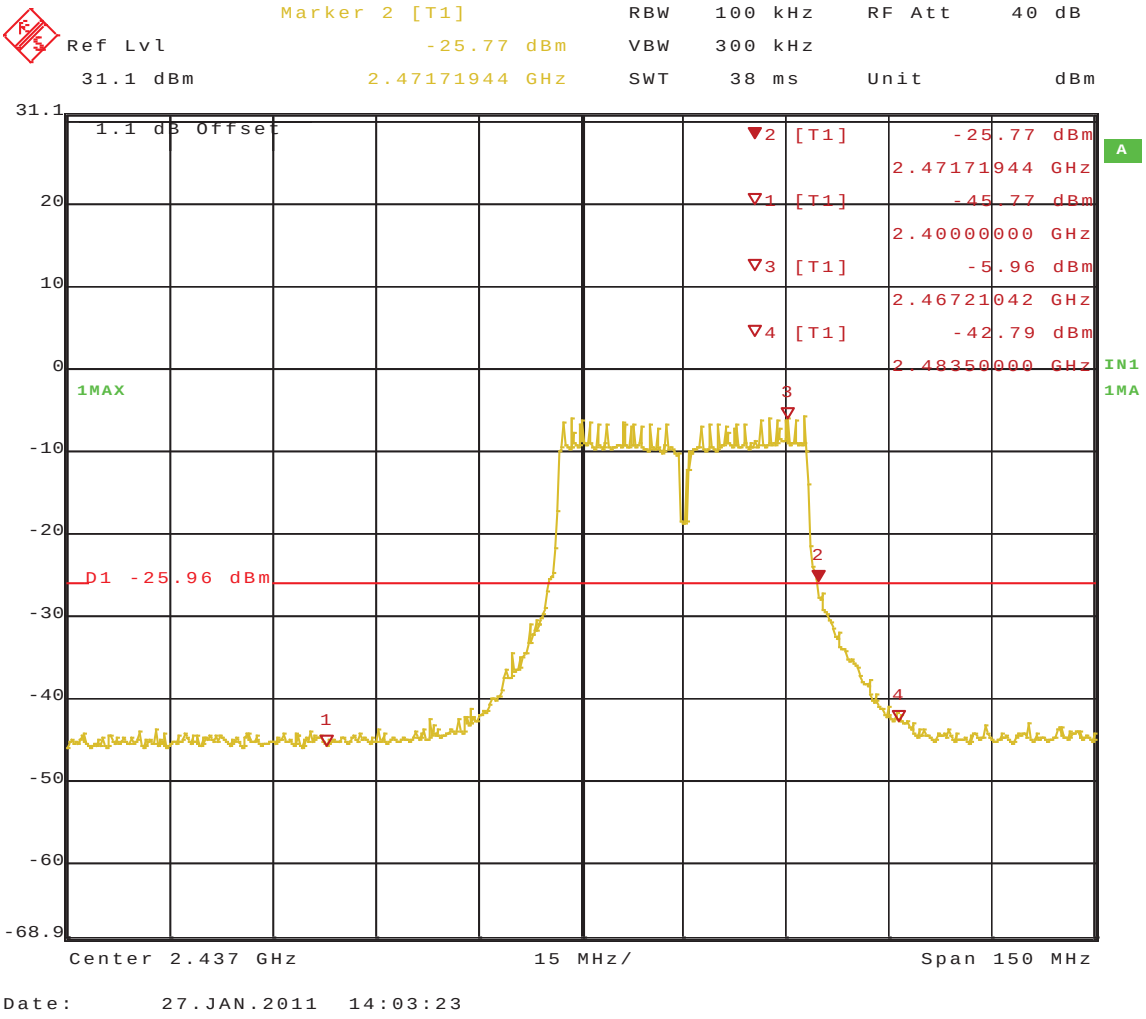


Figure 174: Band-edge Requirement at Operating Channel 2452 MHz, Chain 2, HT40 13.5 Mbps

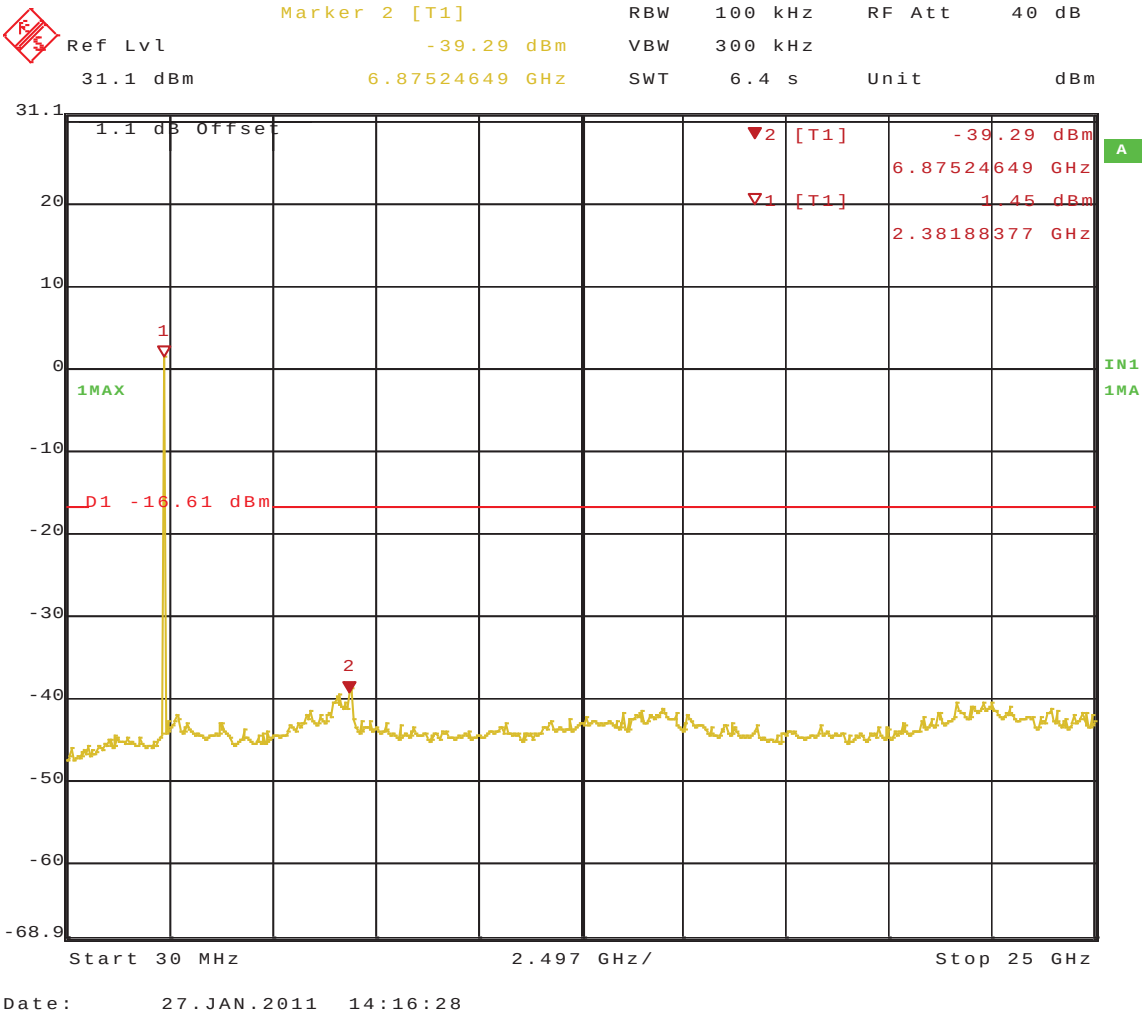


Figure 175: Out of Band Emission for Channel 2412 MHz at Chain 0, 11Mbit/s

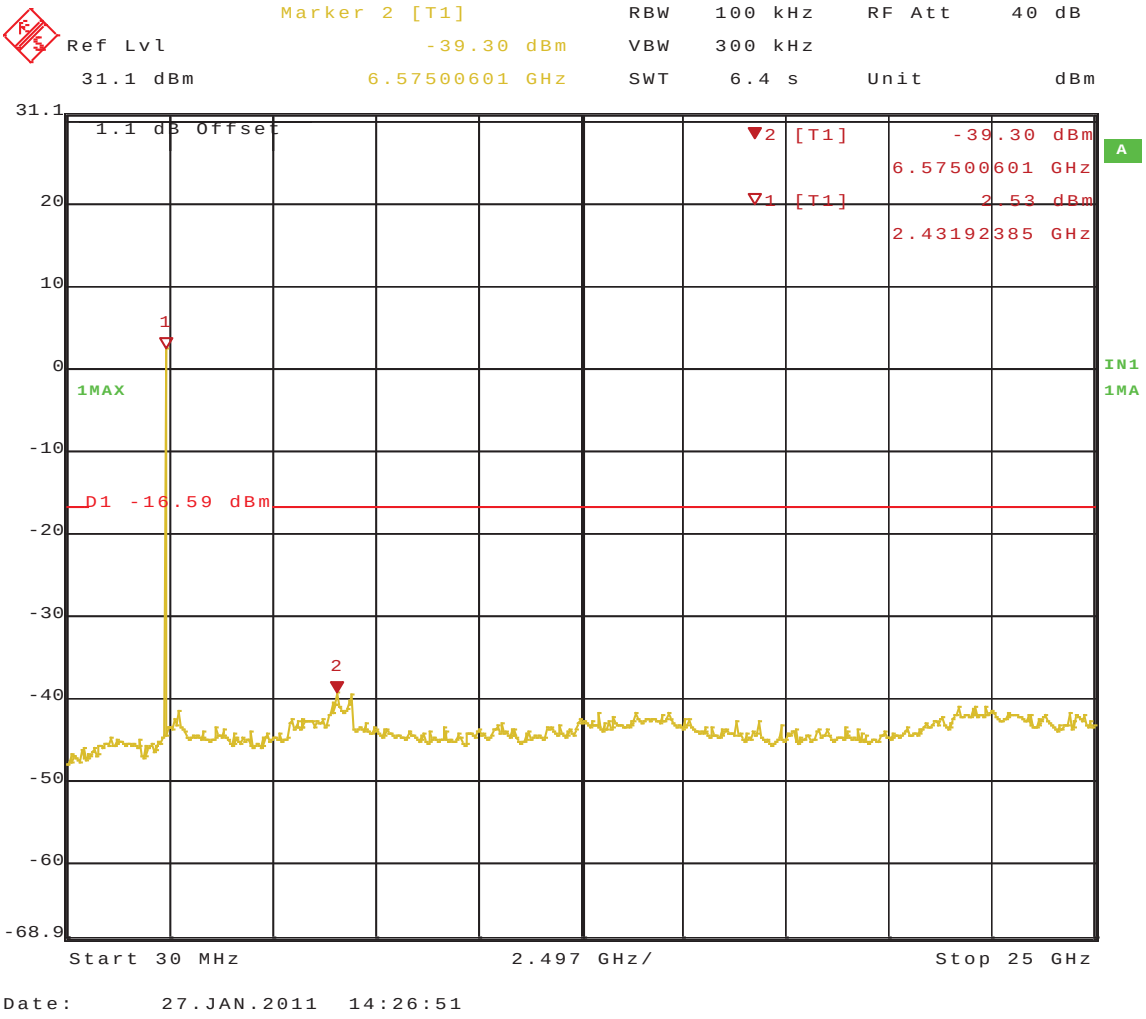


Figure 176: Out of Band Emission for Channel 2437 MHz at Chain 0, 11Mbit/s

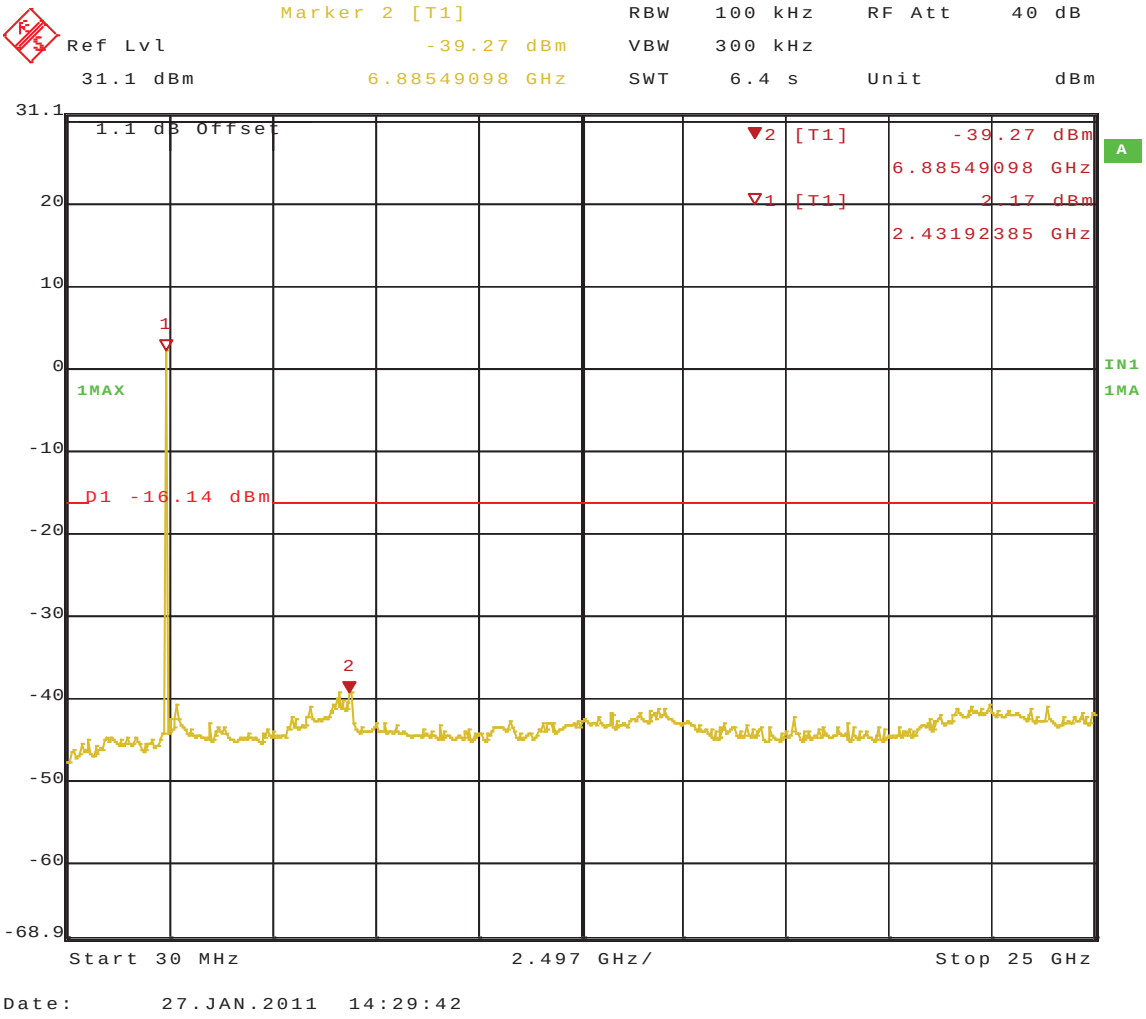


Figure 177: Out of Band Emission for Channel 2462 MHz at Chain 0, 11Mbit/s

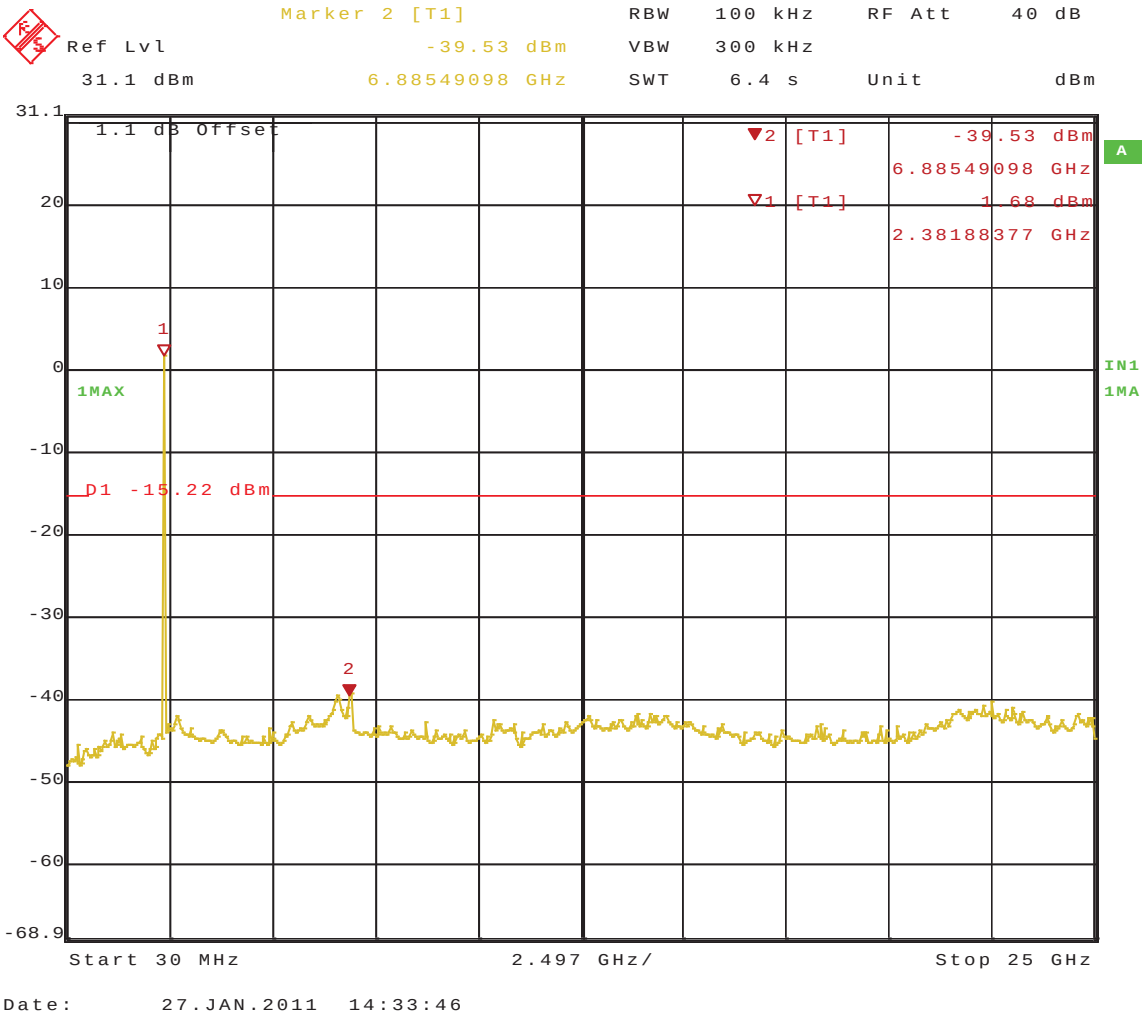


Figure 178: Out of Band Emission for Channel 2412 MHz at Chain 1, 11Mbit/s

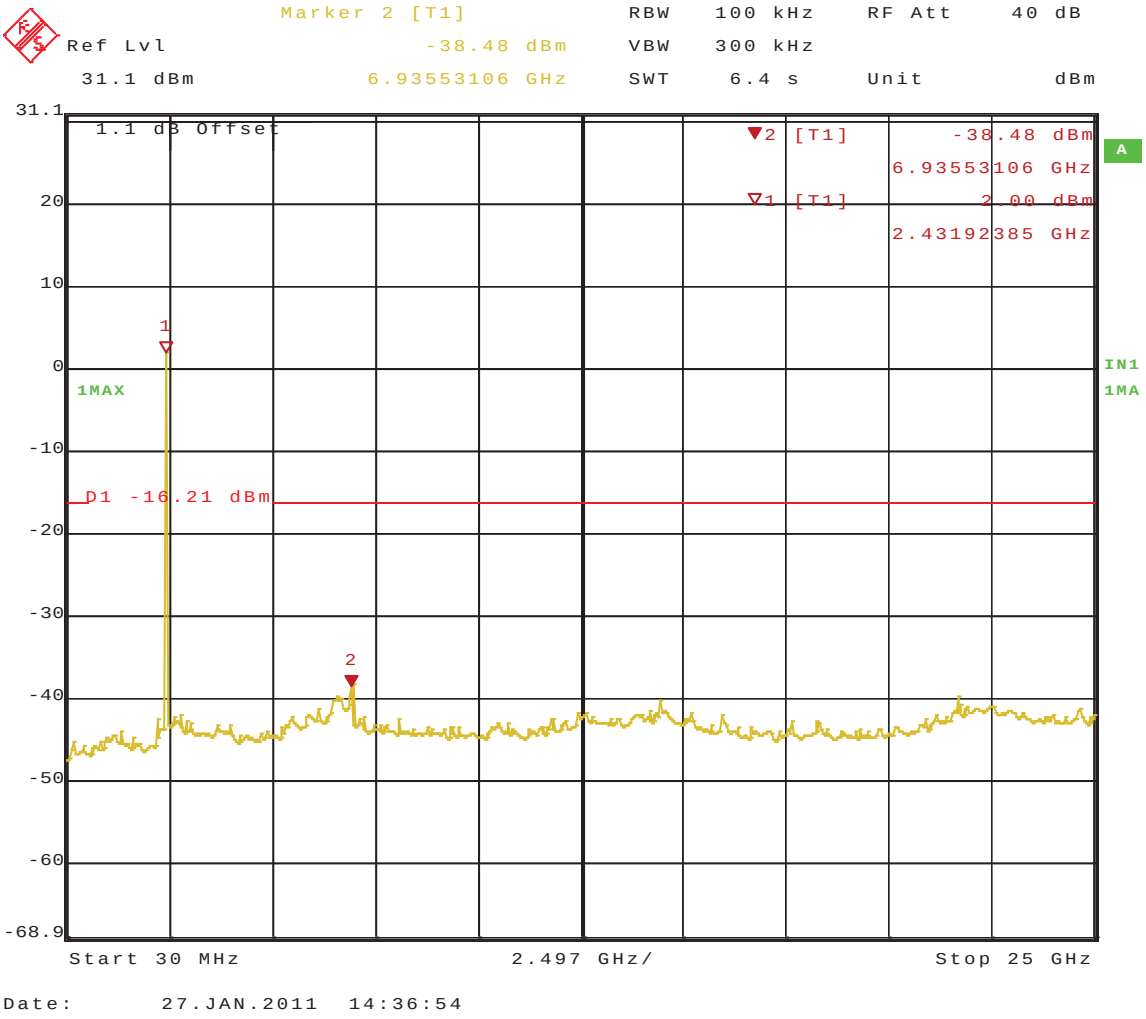


Figure 179: Out of Band Emission for Channel 2437 MHz at Chain 1, 11Mbit/s

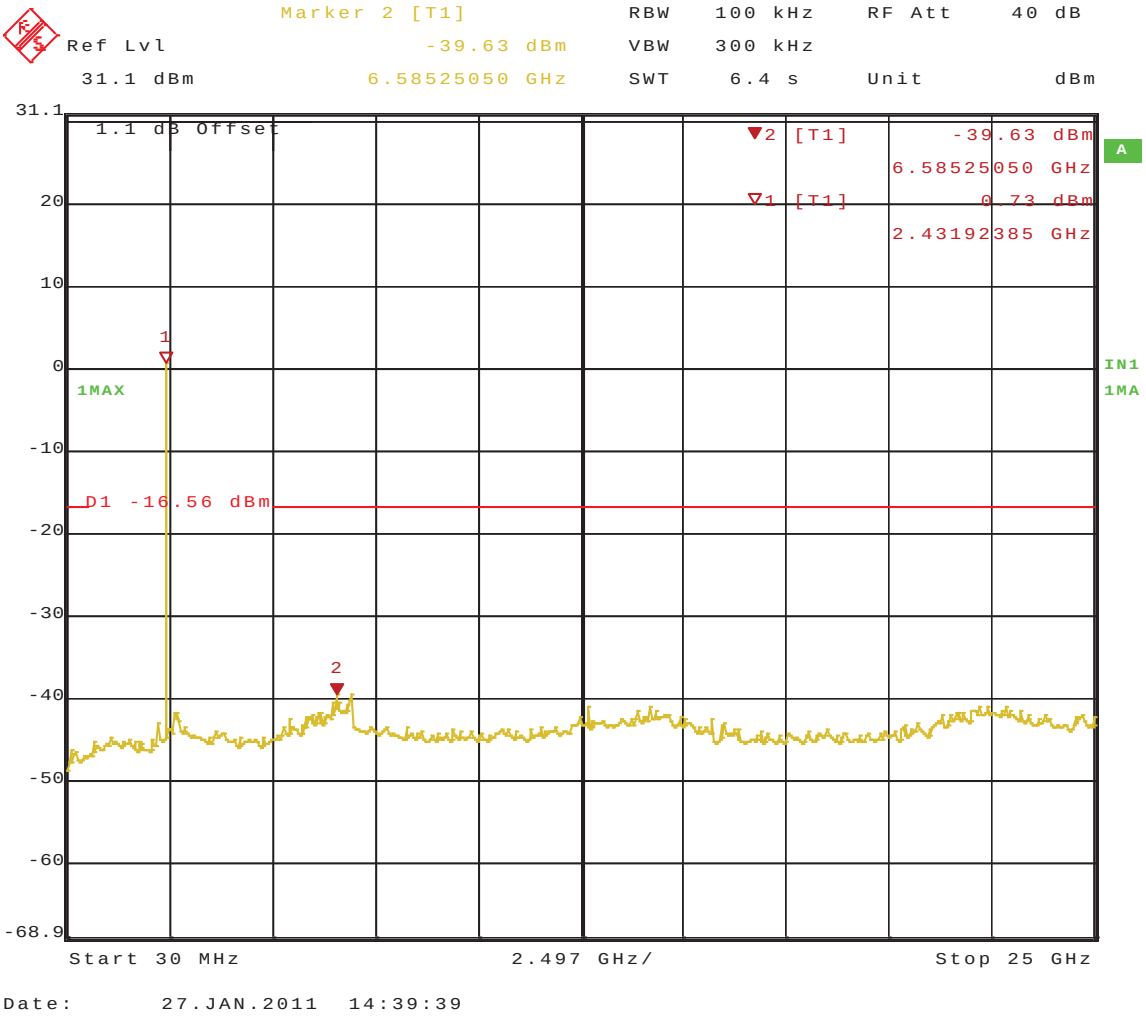


Figure 180: Out of Band Emission for Channel 2462 MHz at Chain 1, 11Mbit/s

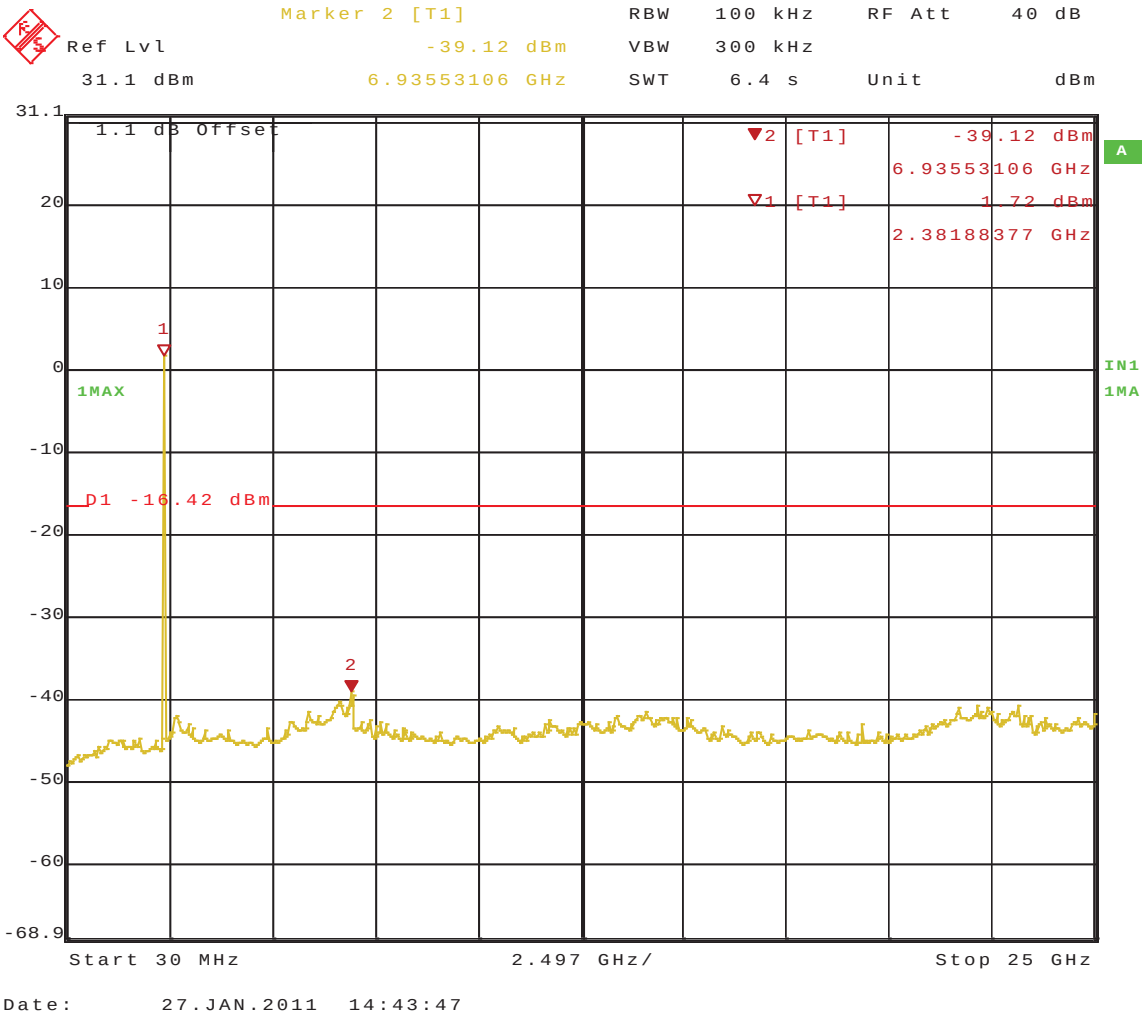


Figure 181: Out of Band Emission for Channel 2412 MHz at Chain 2, 11Mbit/s

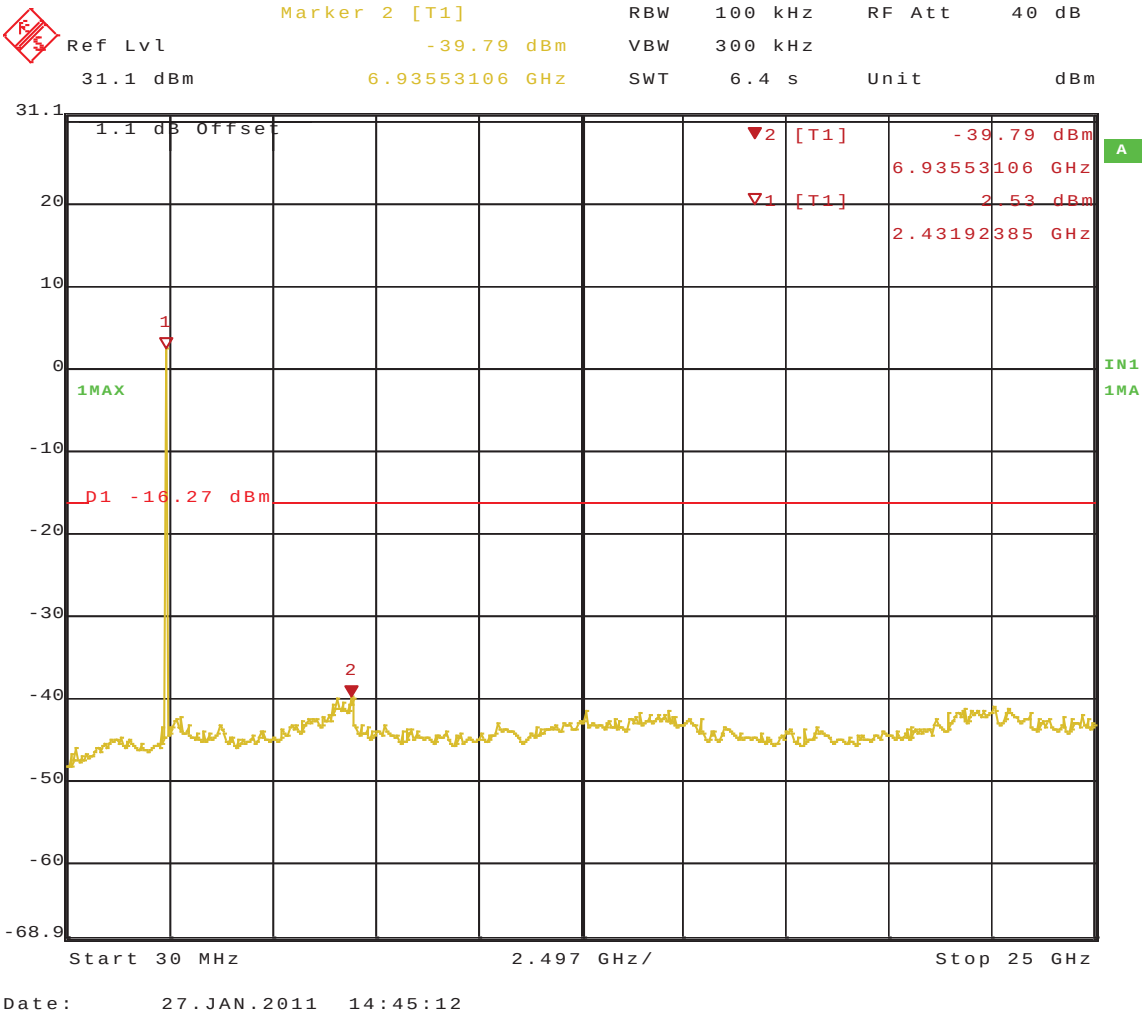


Figure 182: Out of Band Emission for Channel 2437 MHz at Chain 2, 11Mbit/s

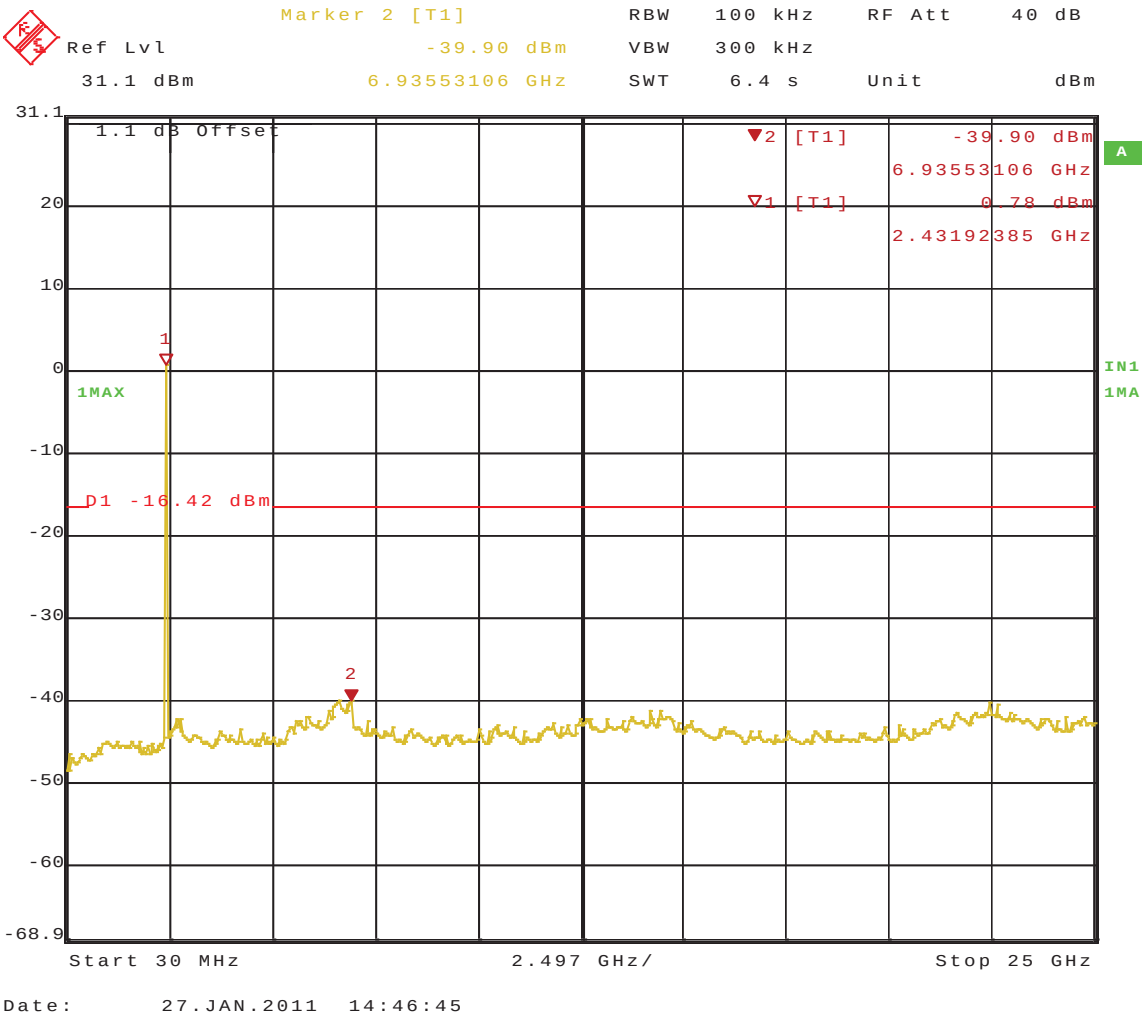


Figure 183: Out of Band Emission for Channel 2462 MHz at Chain 2, 11Mbit/s

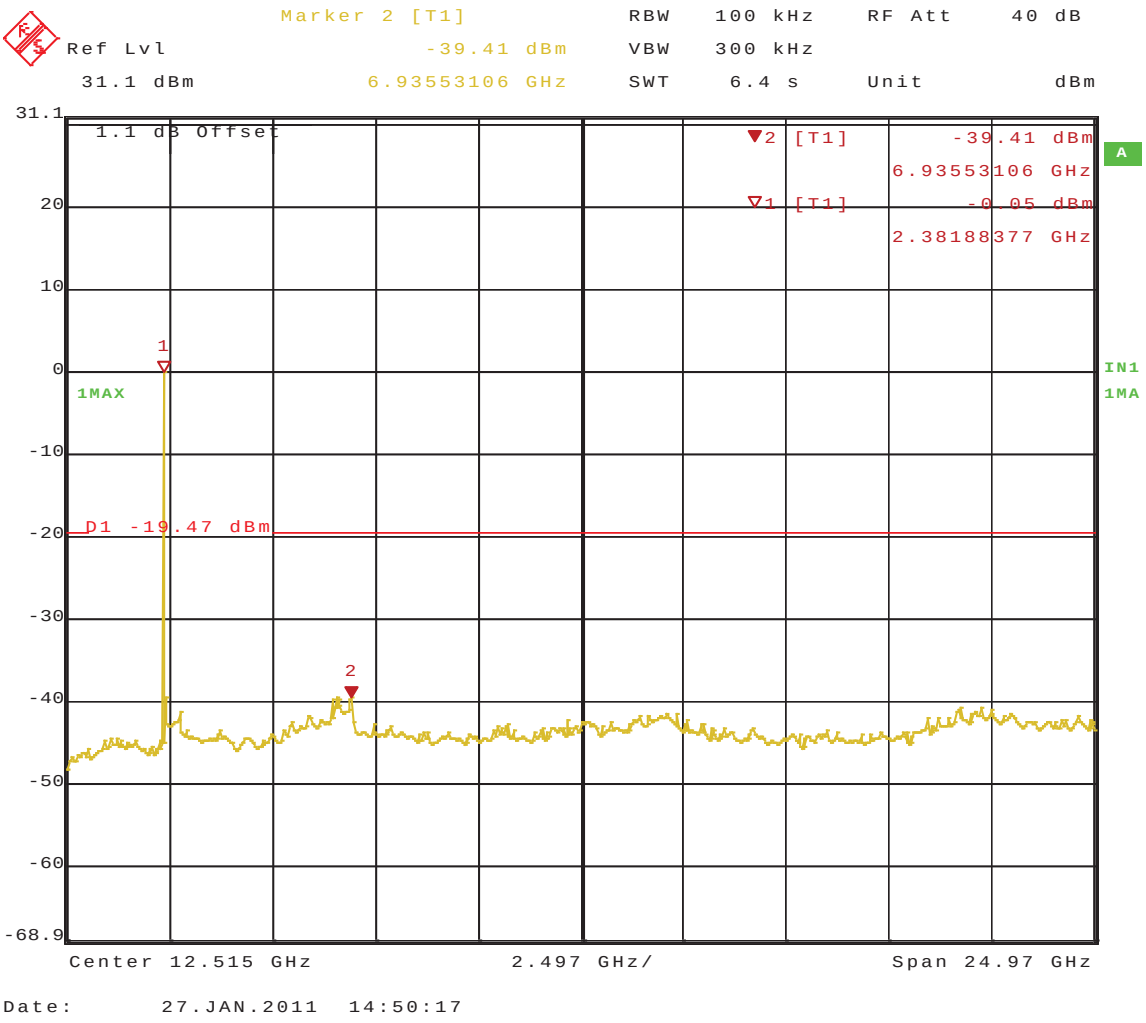


Figure 184: Out of Band Emission for Channel 2412 MHz at Chain 0, 6Mbit/s

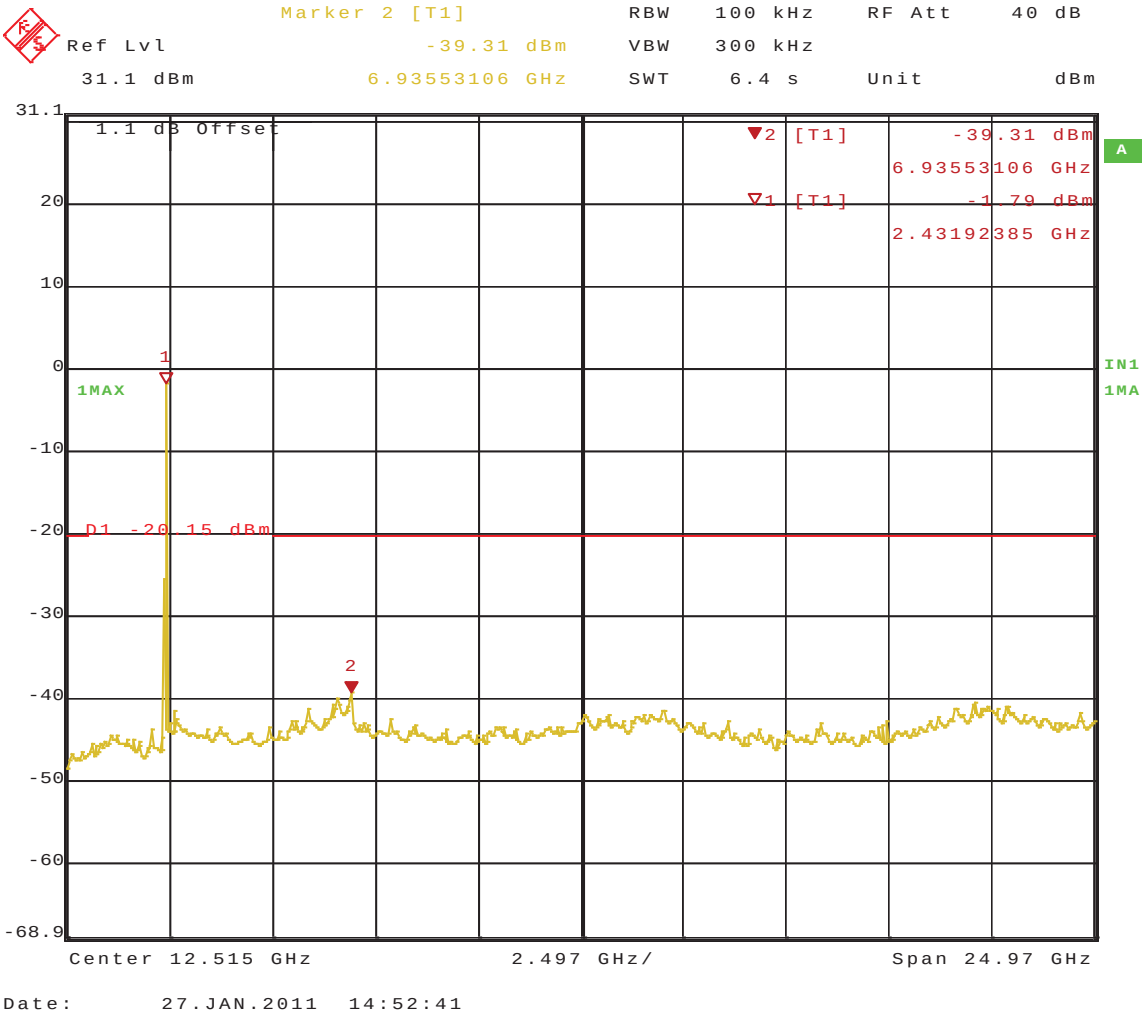


Figure 185: Out of Band Emission for Channel 2437 MHz at Chain 0, 6Mbit/s

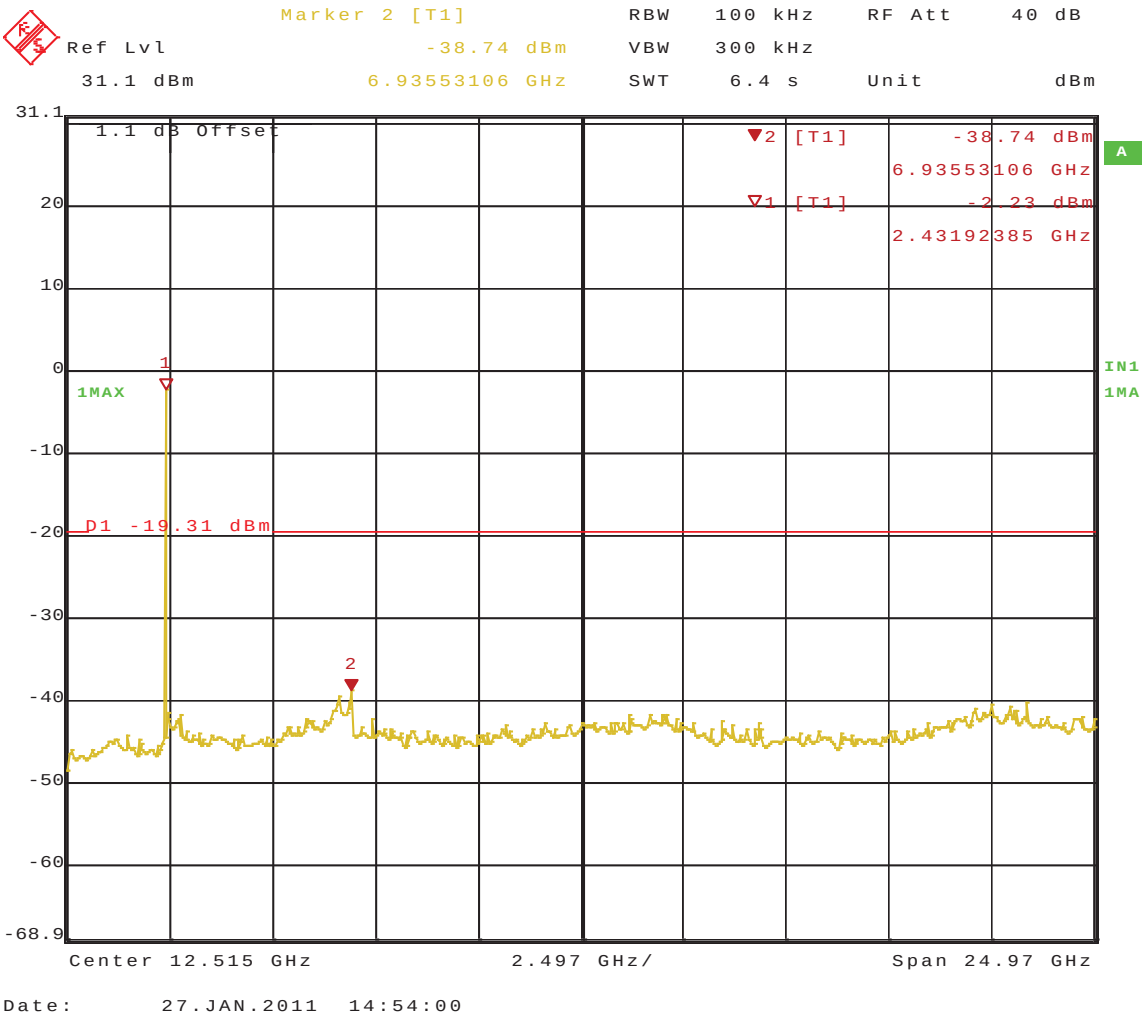


Figure 186: Out of Band Emission for Channel 2462 MHz at Chain 0, 6Mbit/s

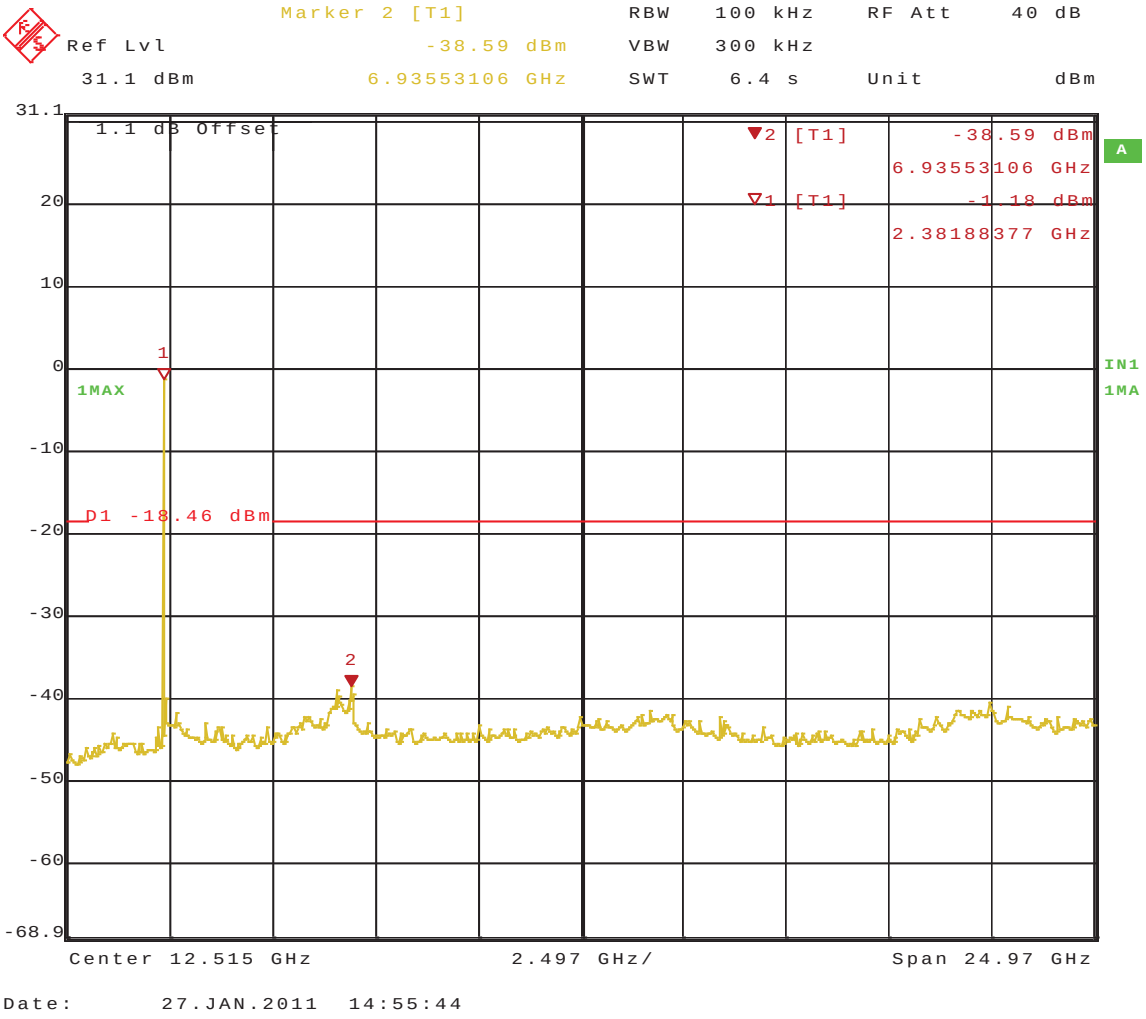


Figure 187: Out of Band Emission for Channel 2412 MHz at Chain 1, 6Mbit/s

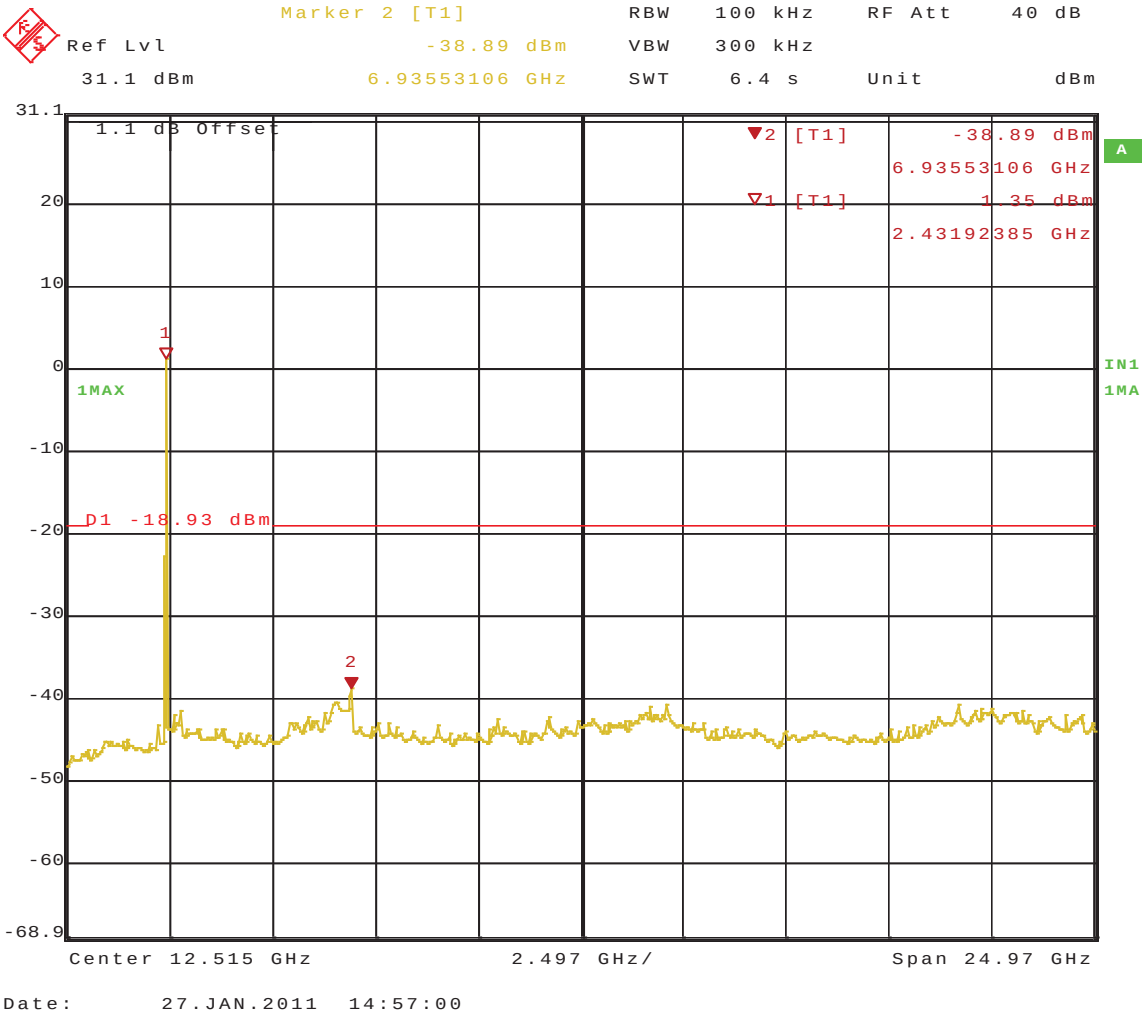


Figure 188: Out of Band Emission for Channel 2437 MHz at Chain 1, 6Mbit/s

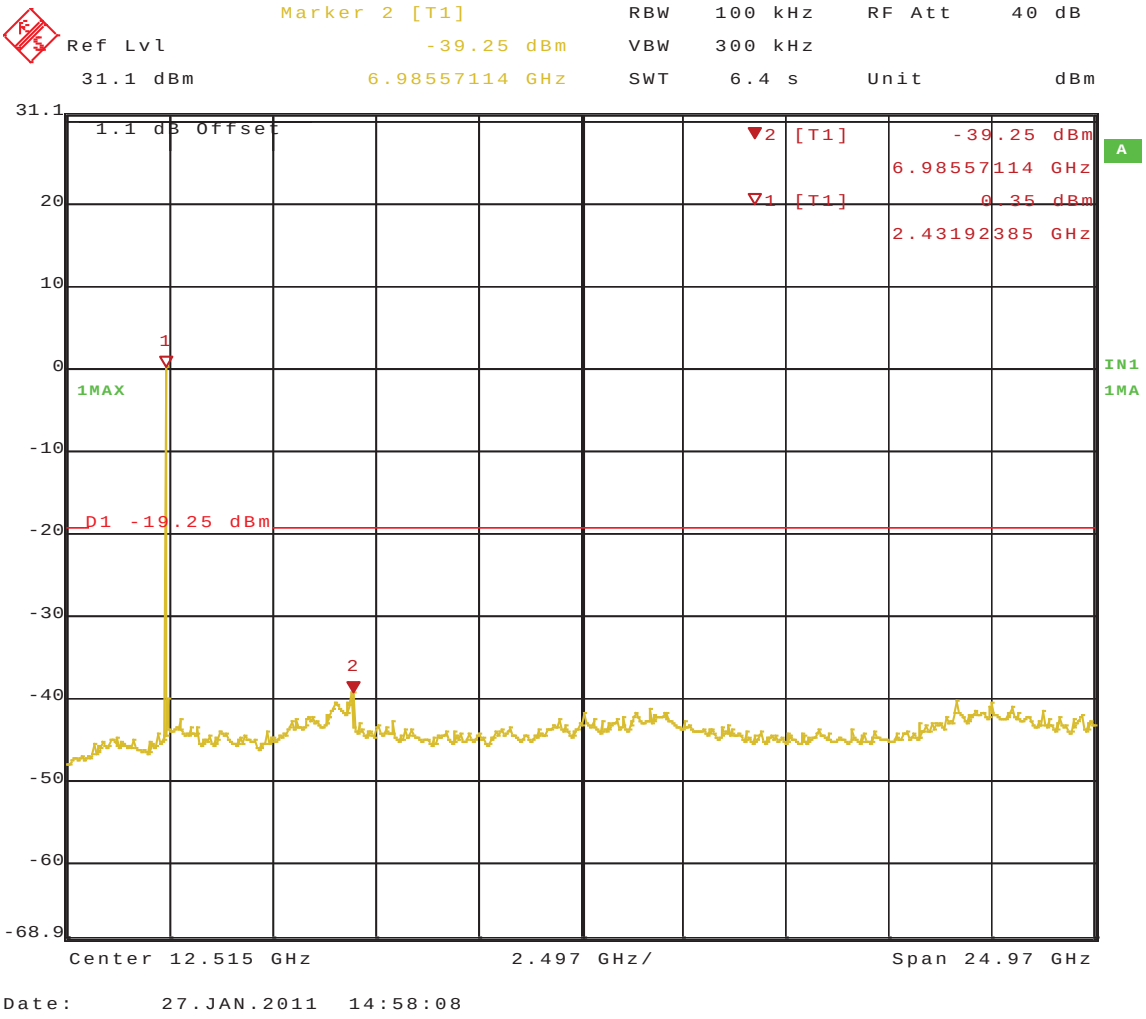


Figure 189: Out of Band Emission for Channel 2462 MHz at Chain 1, 6Mbit/s

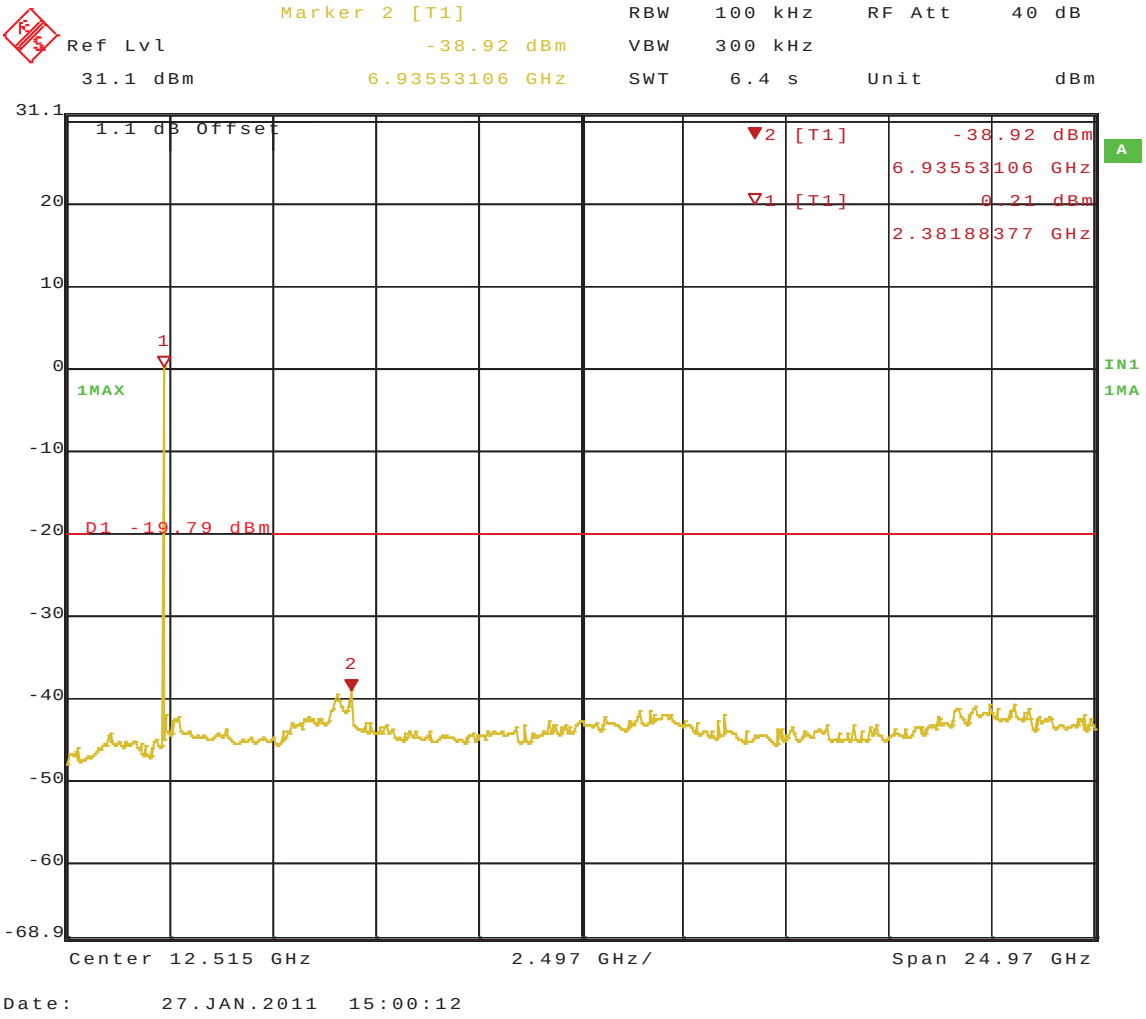


Figure 190: Out of Band Emission for Channel 2412 MHz at Chain 2, 6Mbit/s

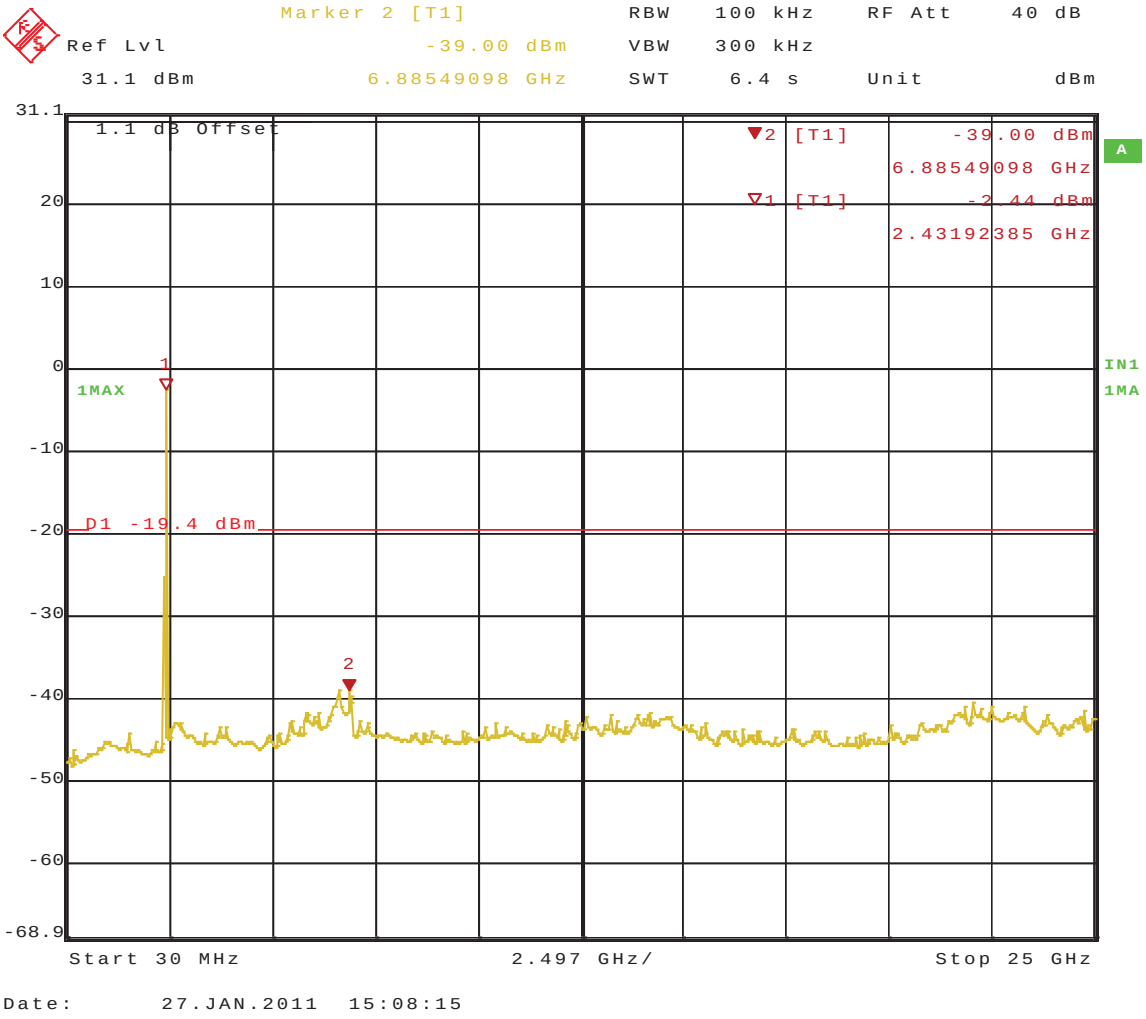


Figure 191: Out of Band Emission for Channel 2437 MHz at Chain 2, 6Mbit/s

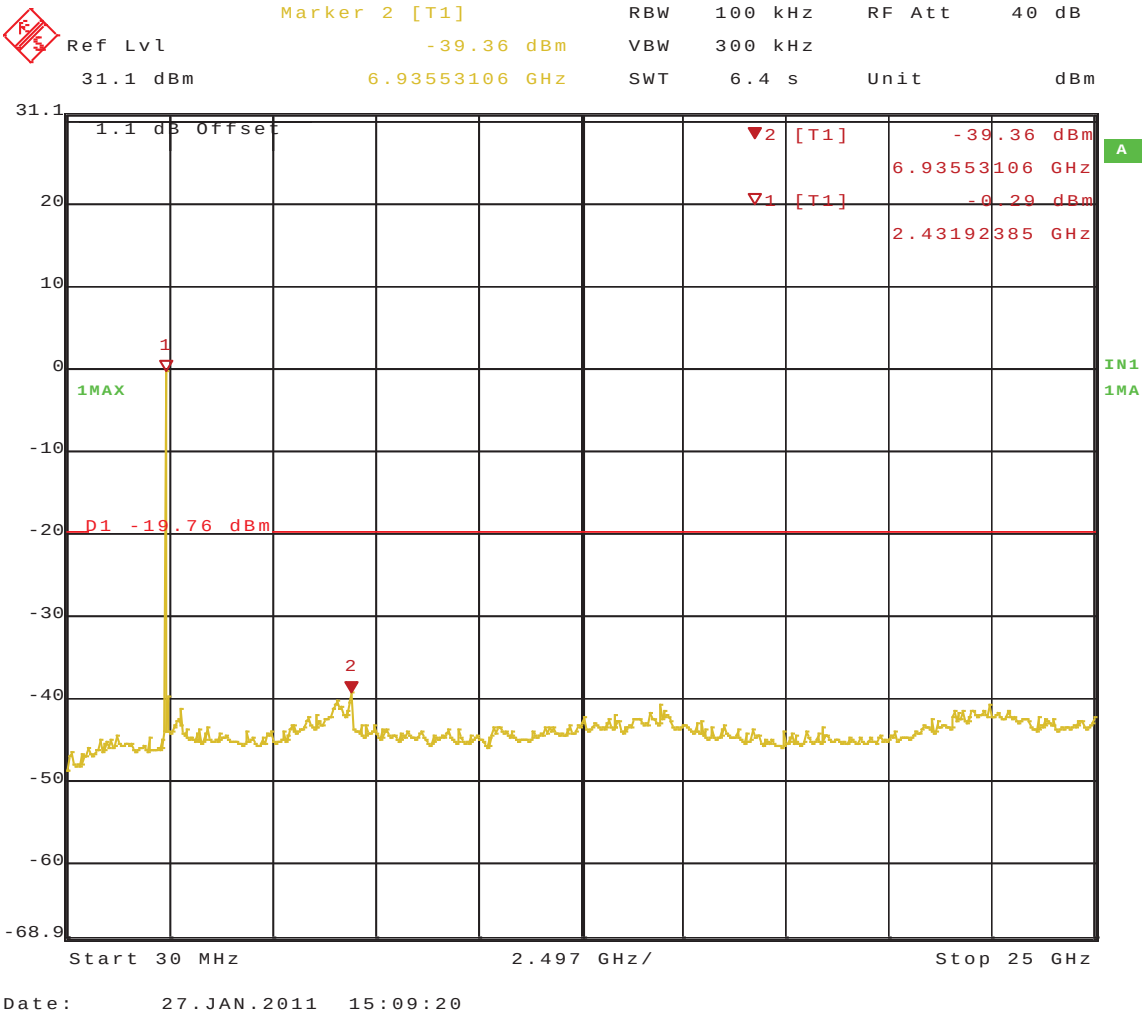


Figure 192: Out of Band Emission for Channel 2462 MHz at Chain 2, 6Mbit/s

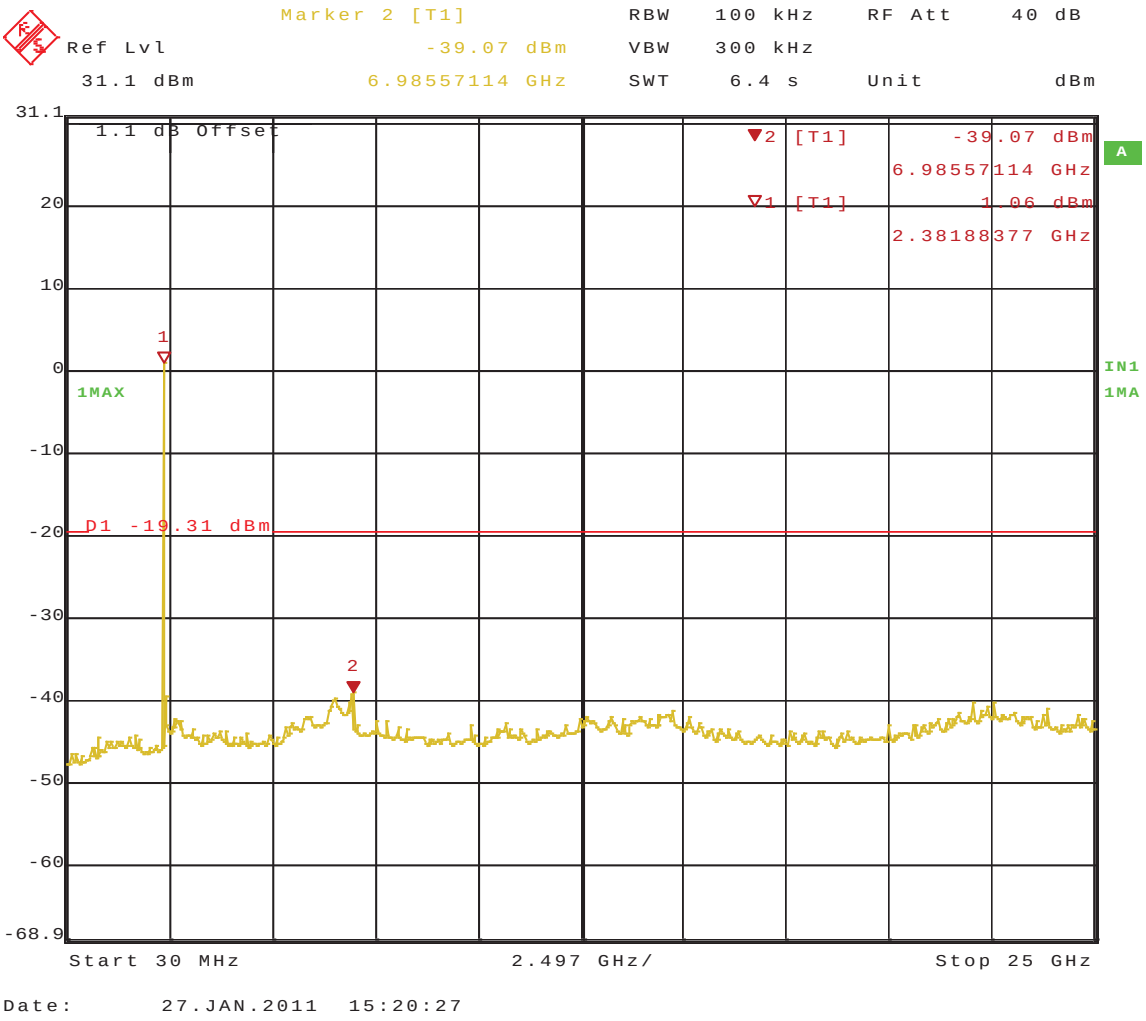


Figure 193: Out of Band Emission for Channel 2412 MHz at Chain 0, HT20 65 Mbps

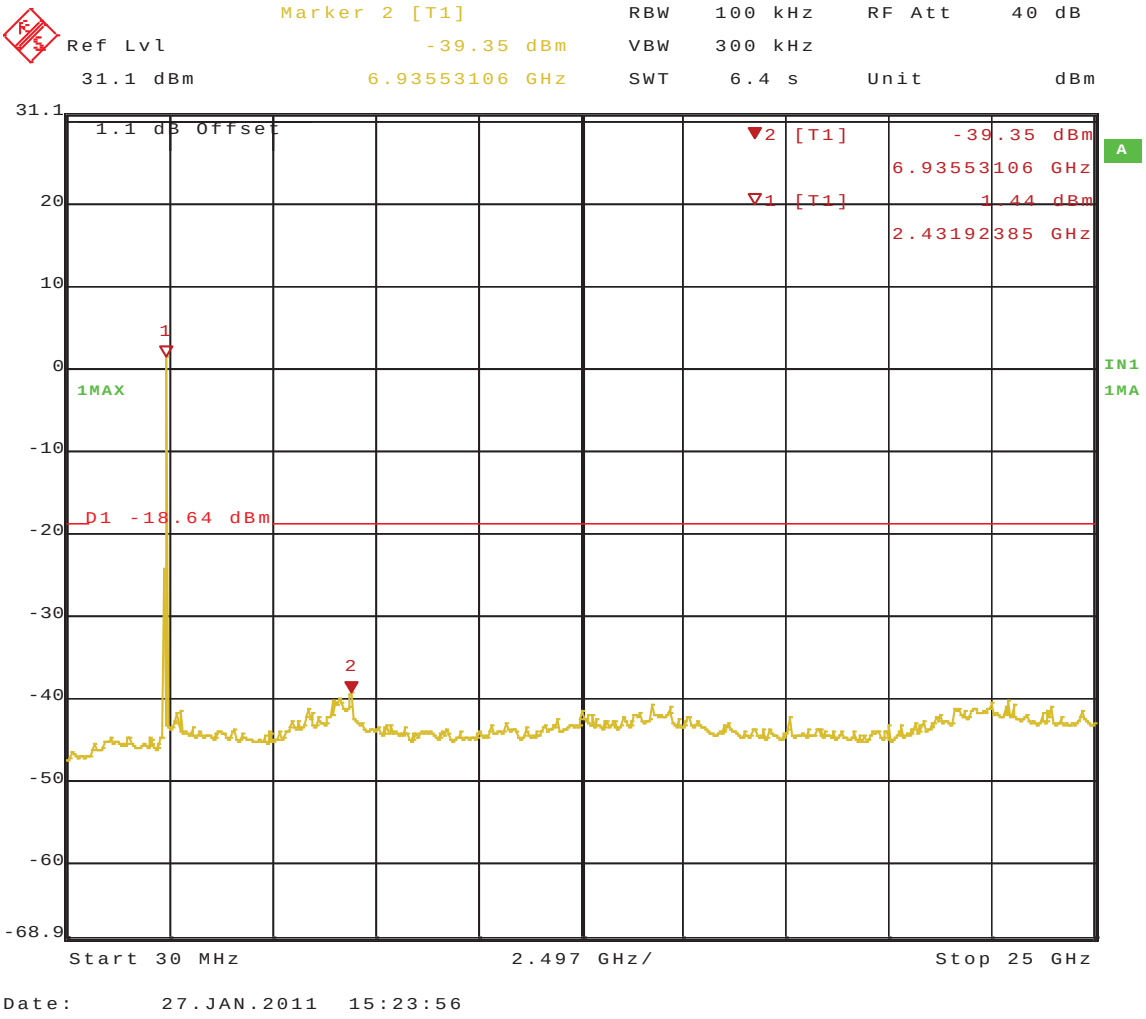


Figure 194: Out of Band Emission for Channel 2437 MHz at Chain 0, HT20 65 Mbps

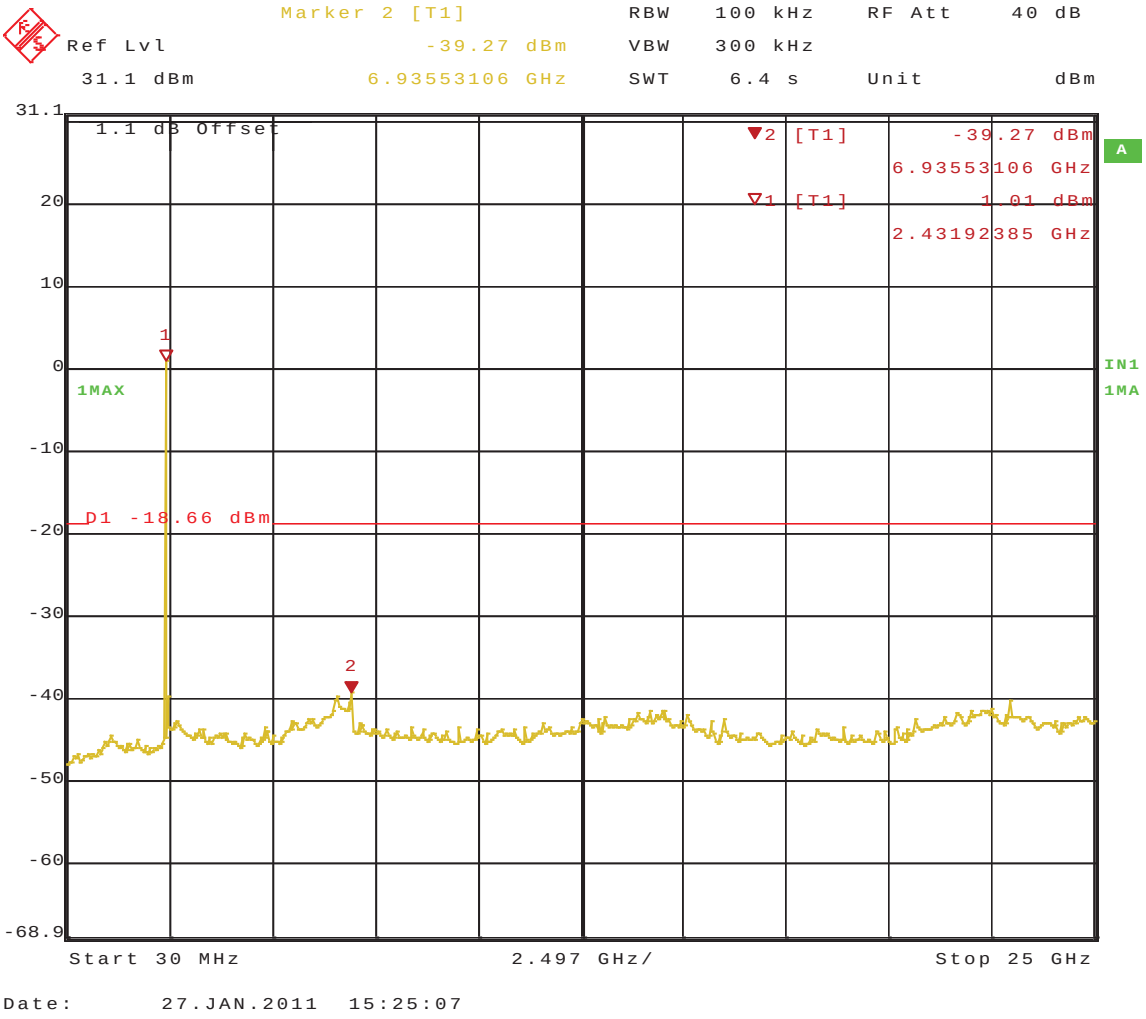


Figure 195: Out of Band Emission for Channel 2462 MHz at Chain 0, HT20 65 Mbps

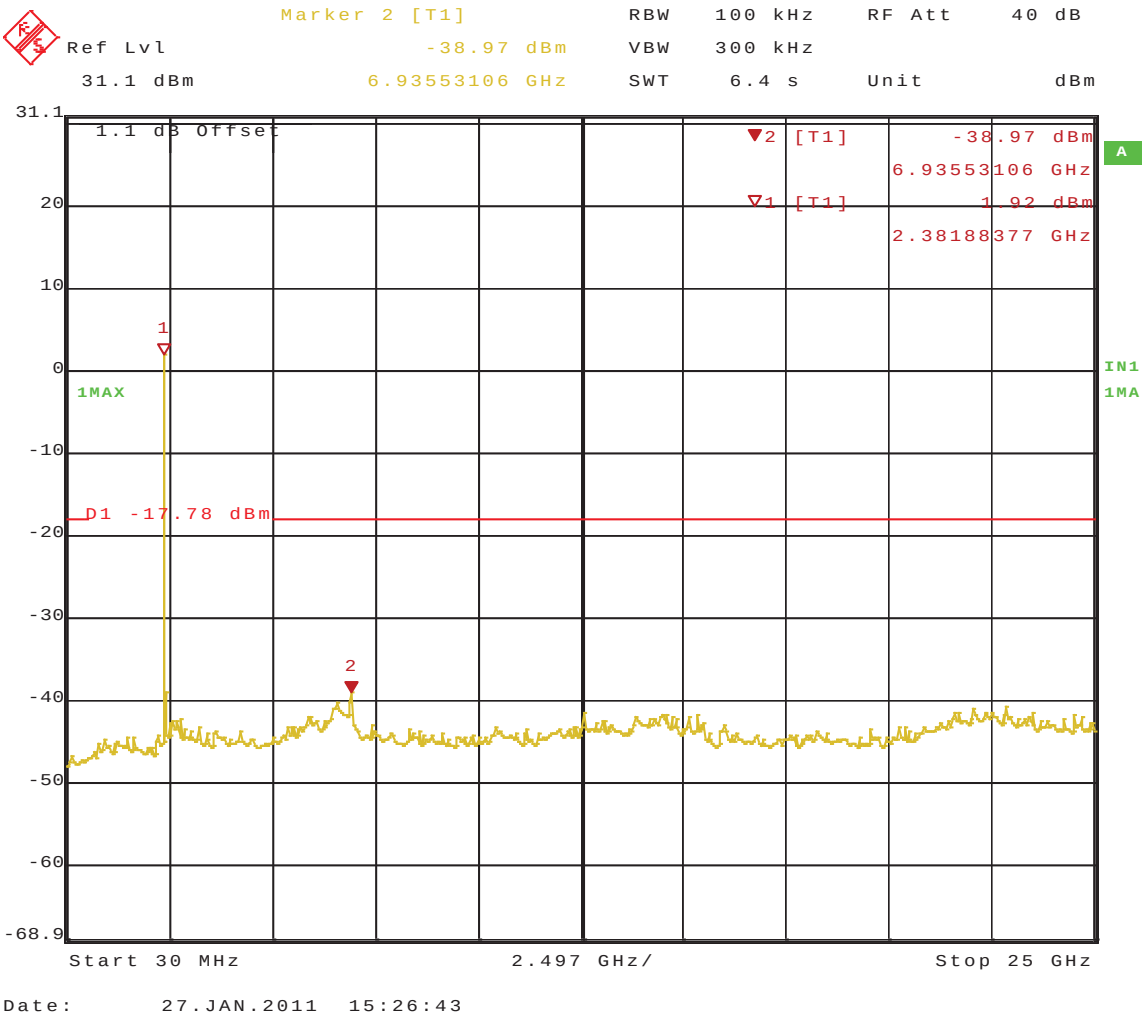


Figure 196: Out of Band Emission for Channel 2412 MHz at Chain 1, HT20 65 Mbps

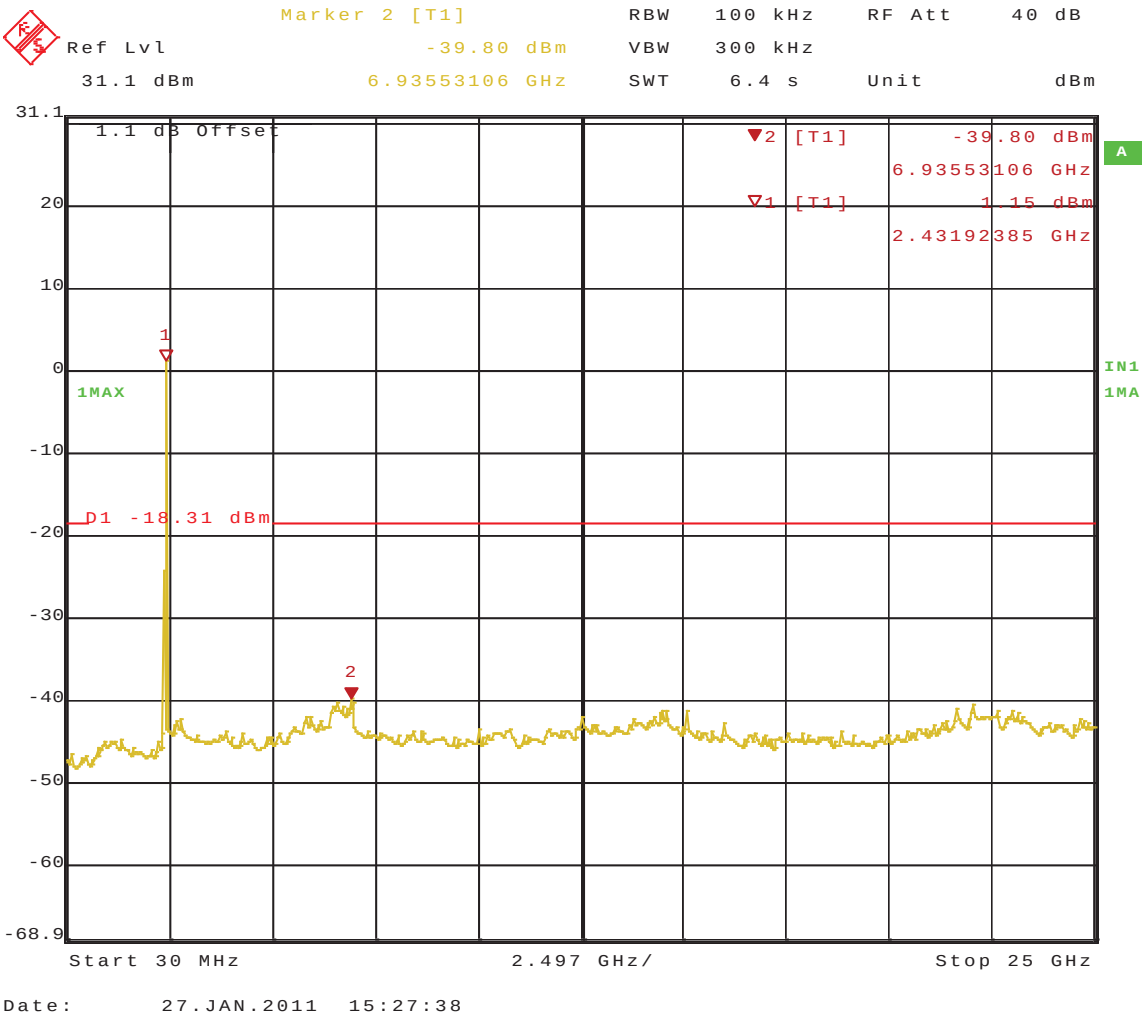


Figure 197: Out of Band Emission for Channel 2437 MHz at Chain 1, HT20 65 Mbps

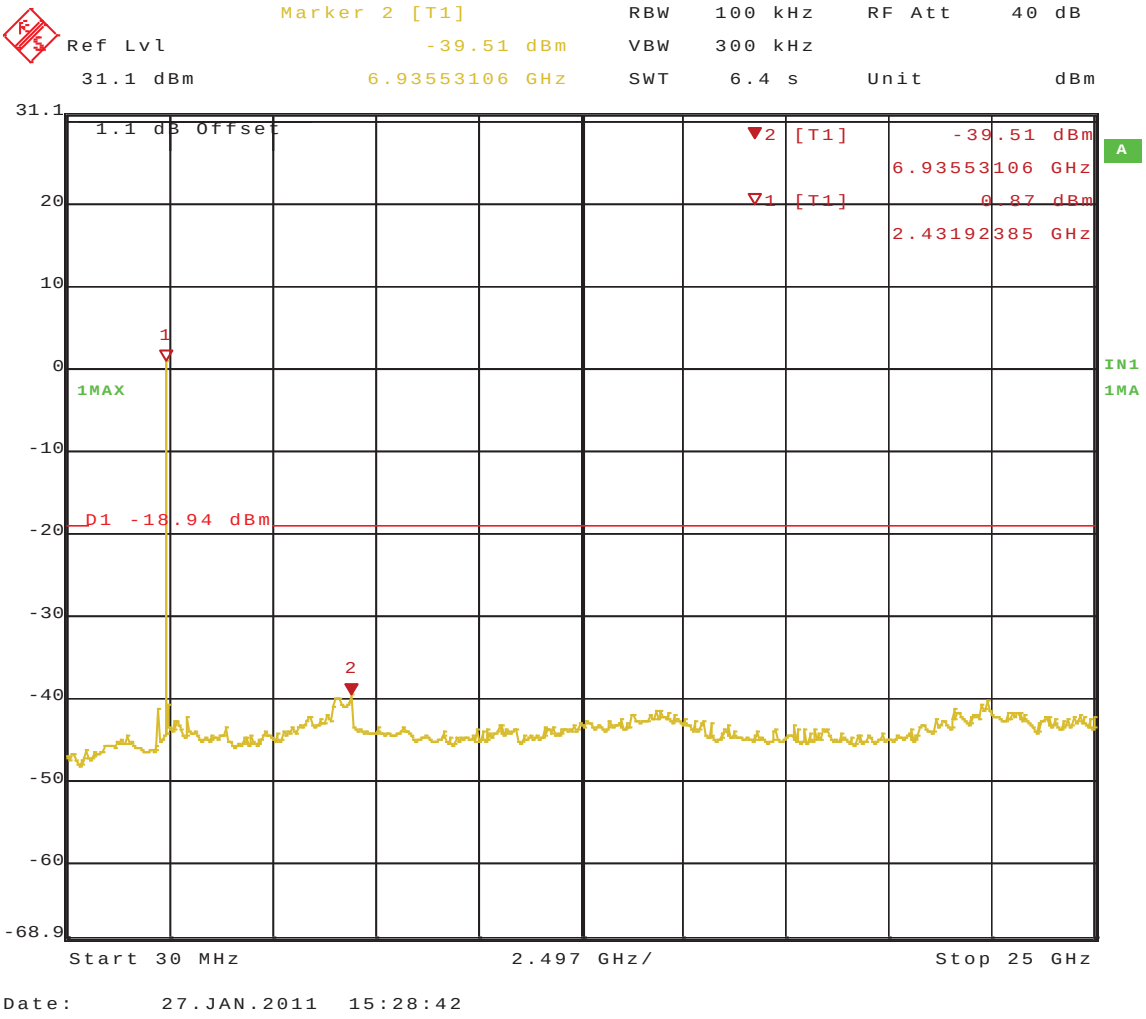


Figure 198: Out of Band Emission for Channel 2462 MHz at Chain 1, HT20 65 Mbps

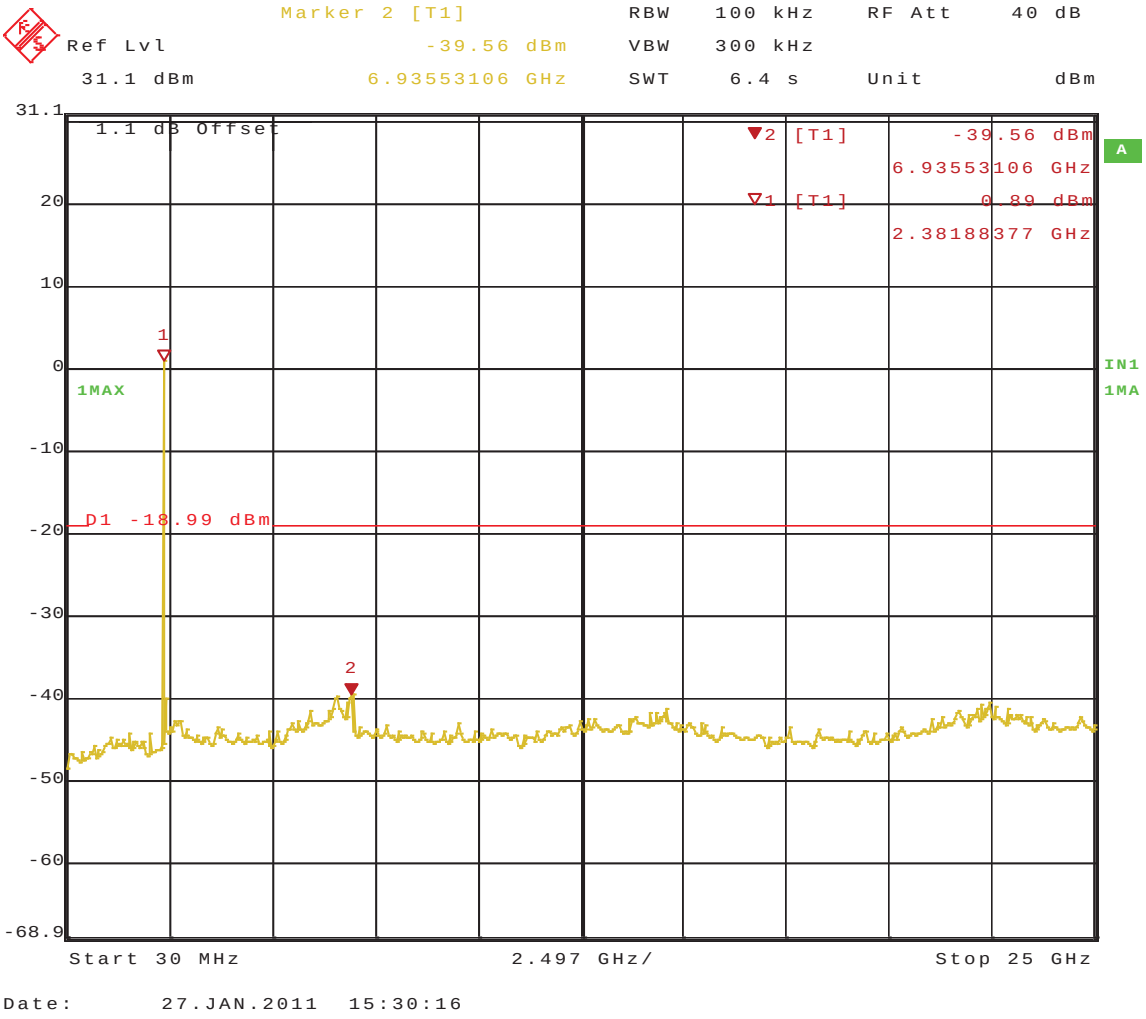


Figure 199: Out of Band Emission for Channel 2412 MHz at Chain 2, HT20 65 Mbps

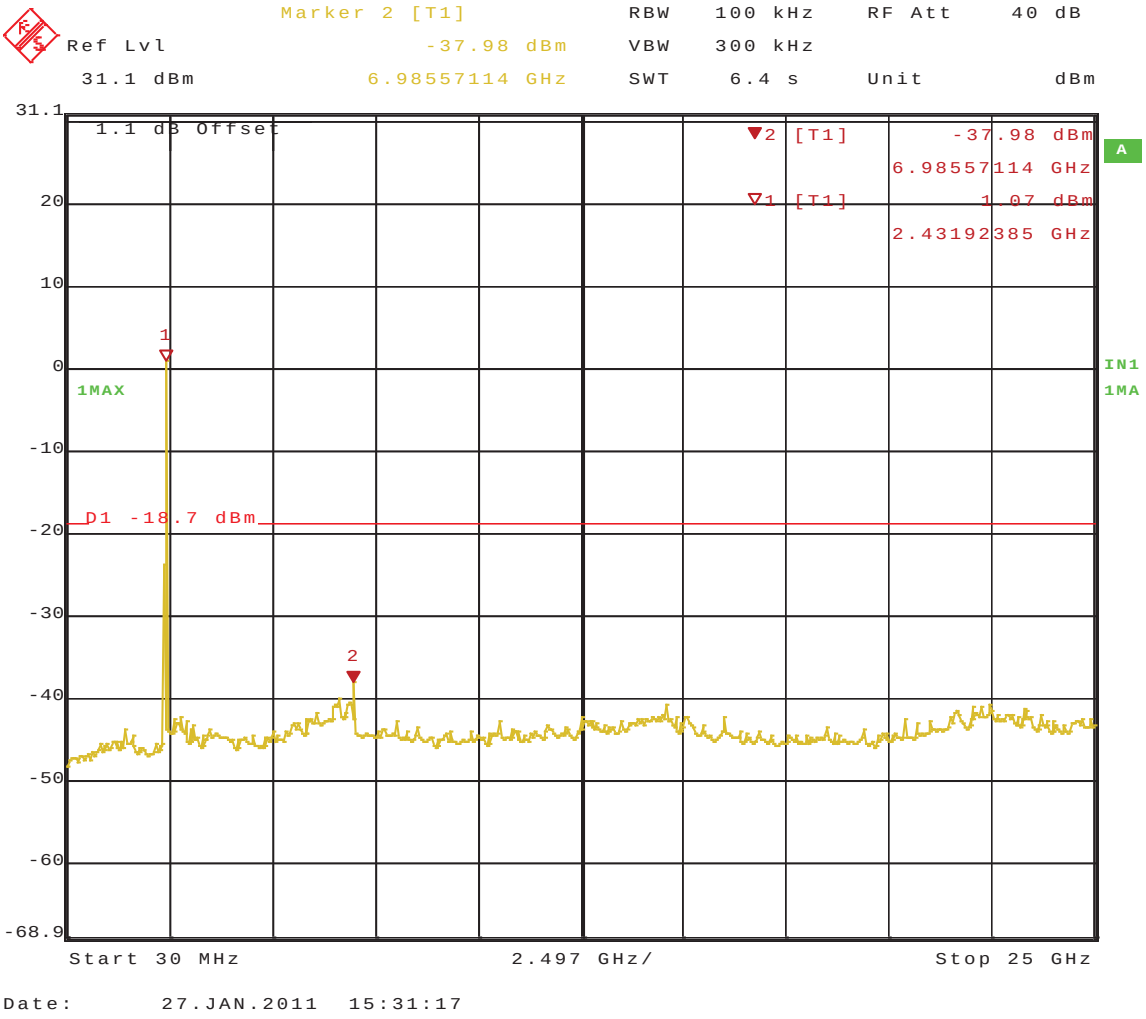


Figure 200: Out of Band Emission for Channel 2437 MHz at Chain 2, HT20 65 Mbps

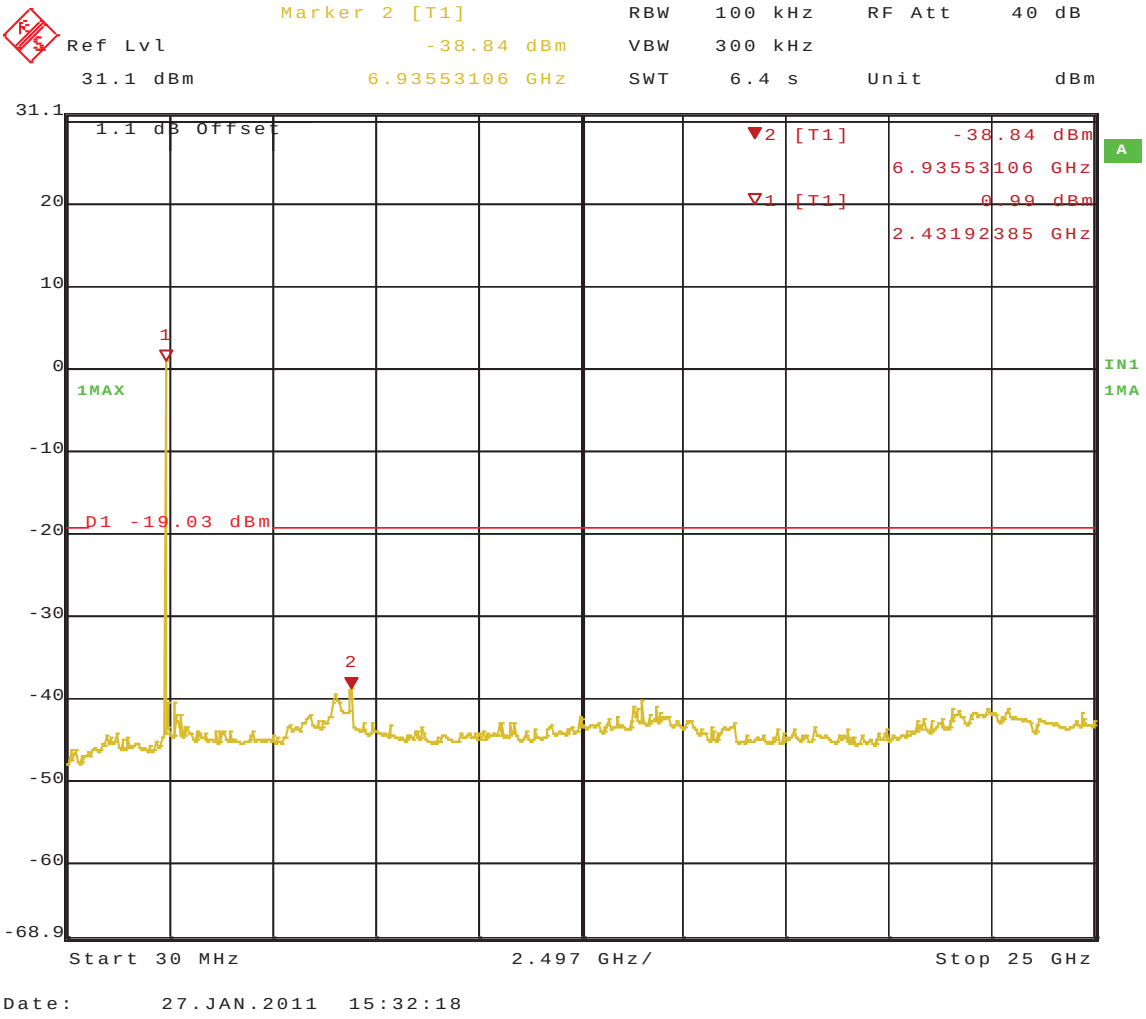


Figure 201: Out of Band Emission for Channel 2462 MHz at Chain 2, HT20 65 Mbps

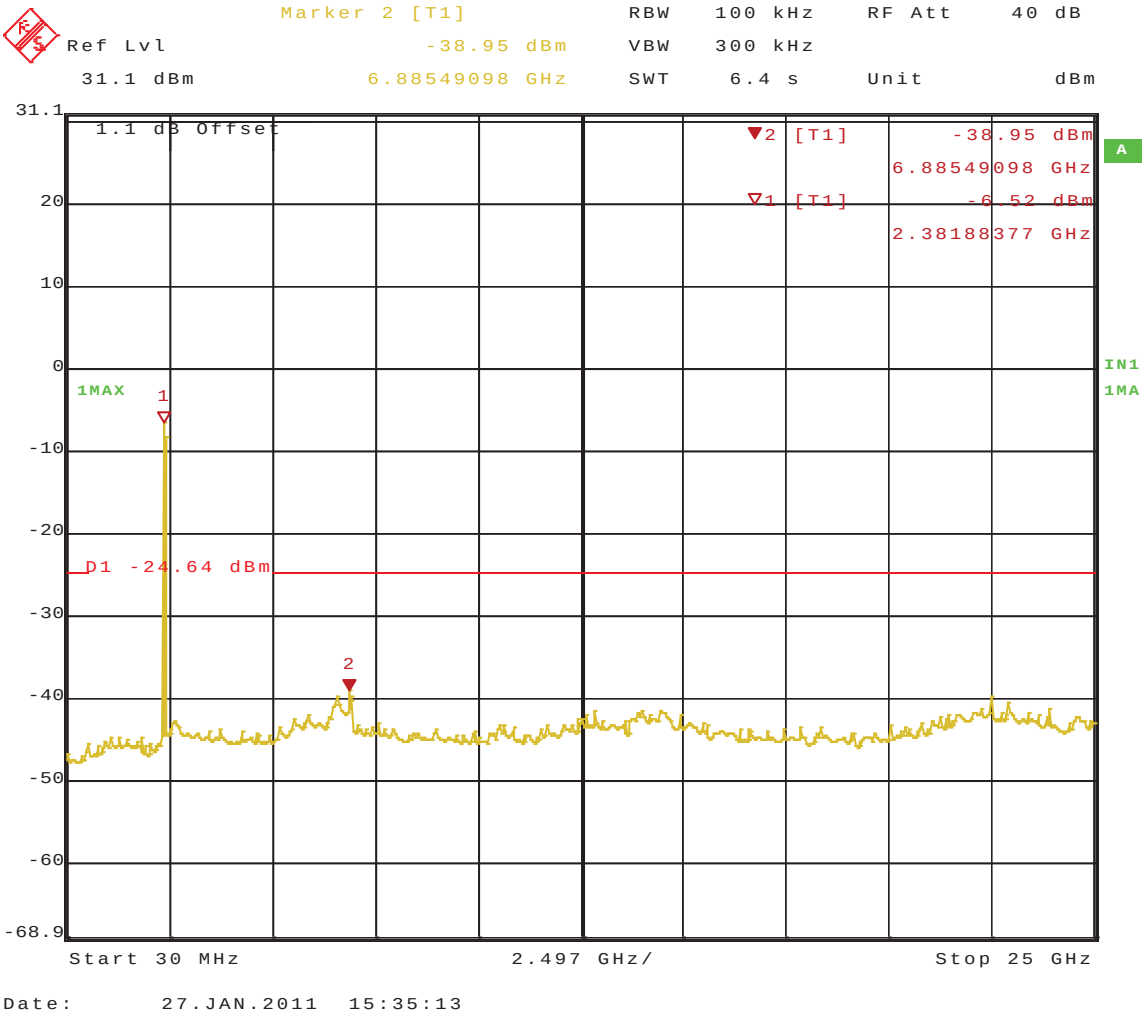


Figure 202: Out of Band Emission for Channel 2422 MHz at Chain 0, HT40 13.5 Mbps

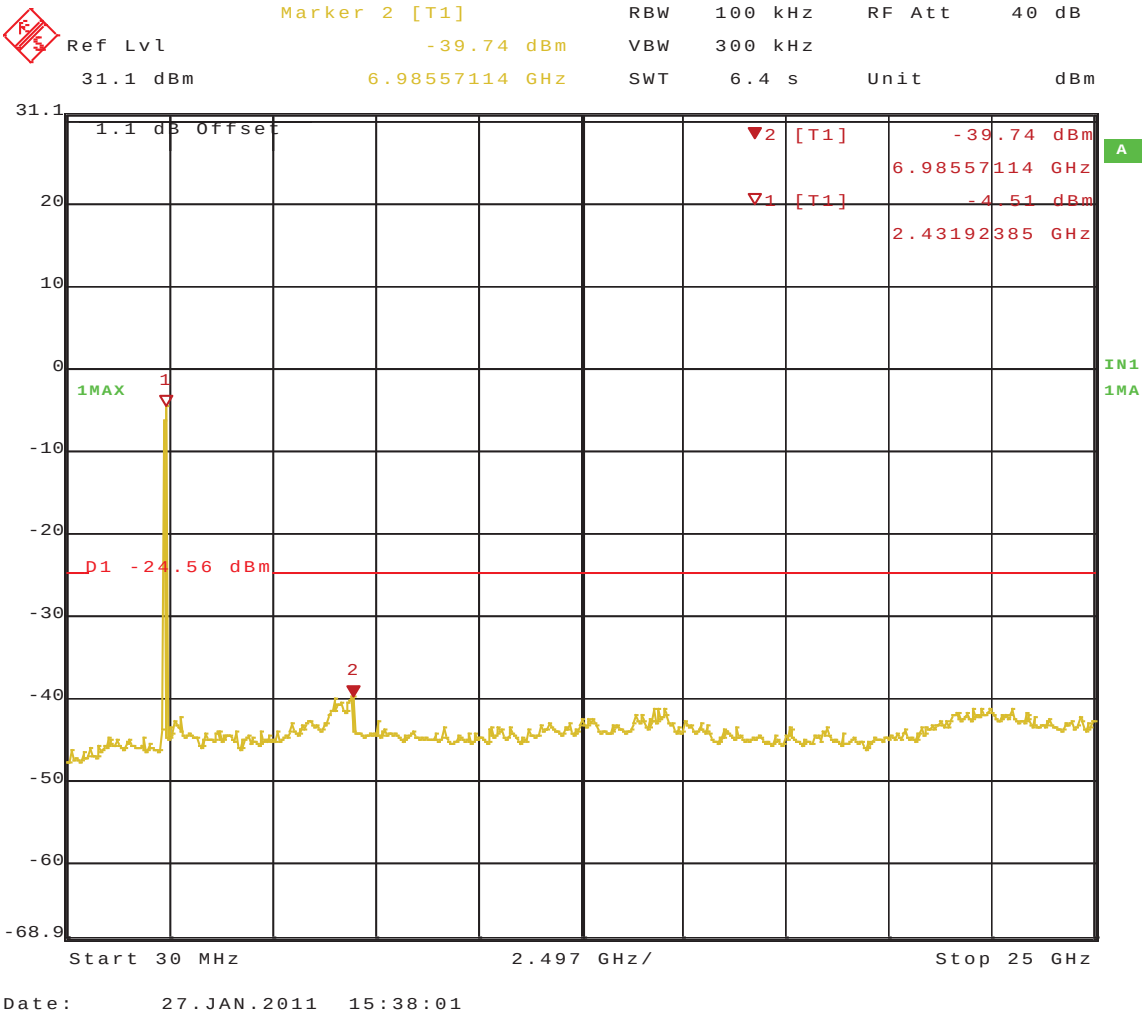


Figure 203: Out of Band Emission for Channel 2437 MHz at Chain 0, HT40 13.5 Mbps

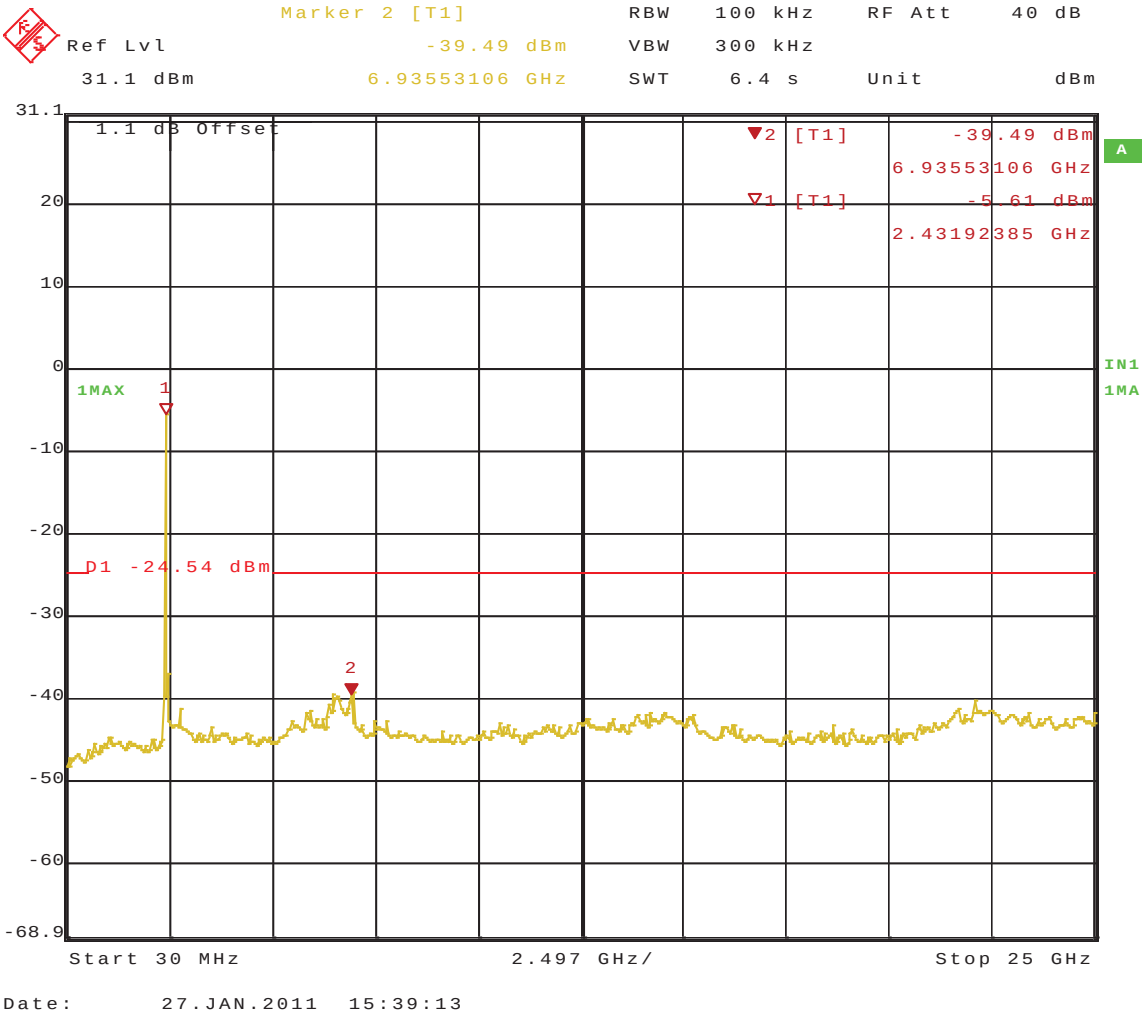


Figure 204: Out of Band Emission for Channel 2452 MHz at Chain 0, HT40 13.5 Mbps

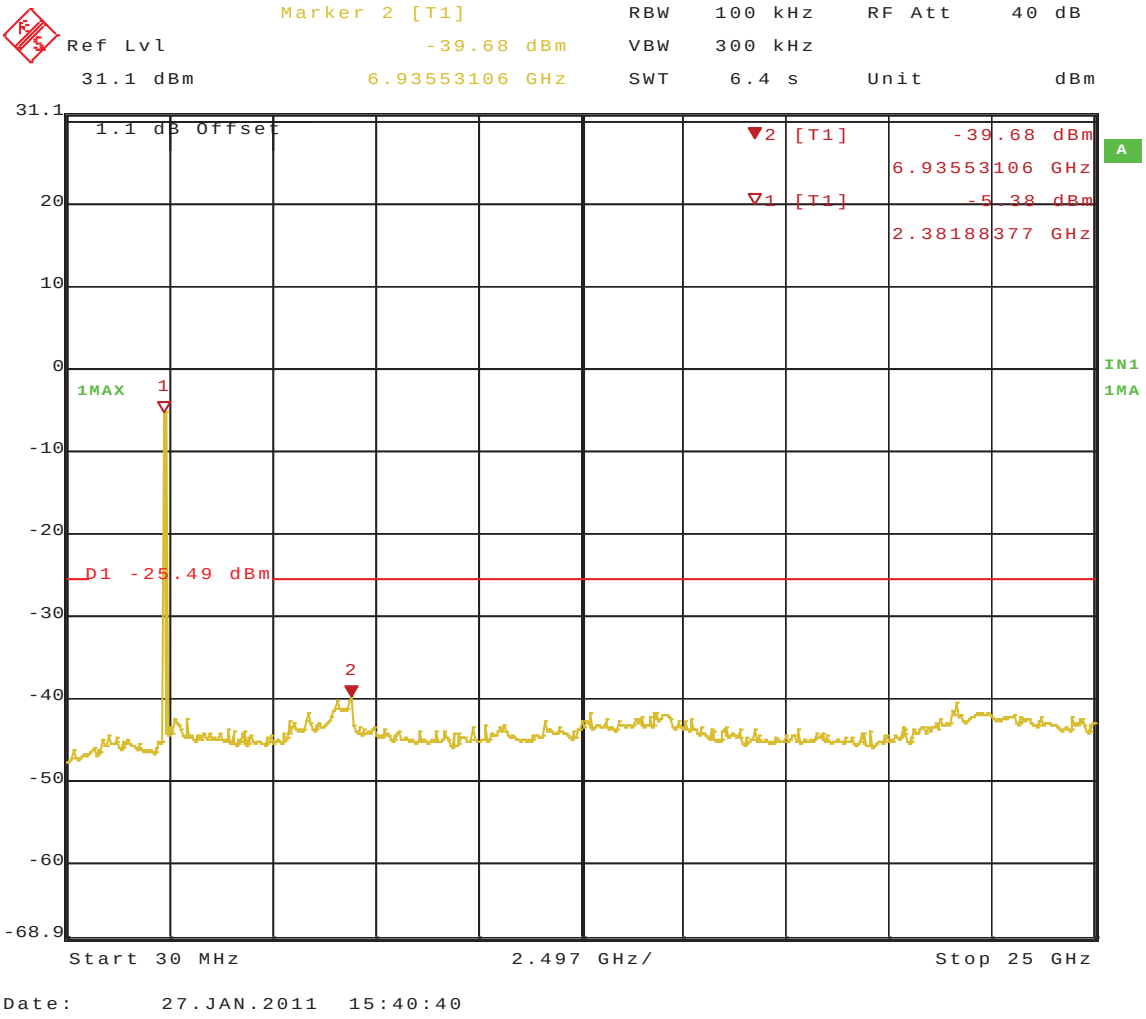


Figure 205: Out of Band Emission for Channel 2422 MHz at Chain 1, HT40 13.5 Mbps

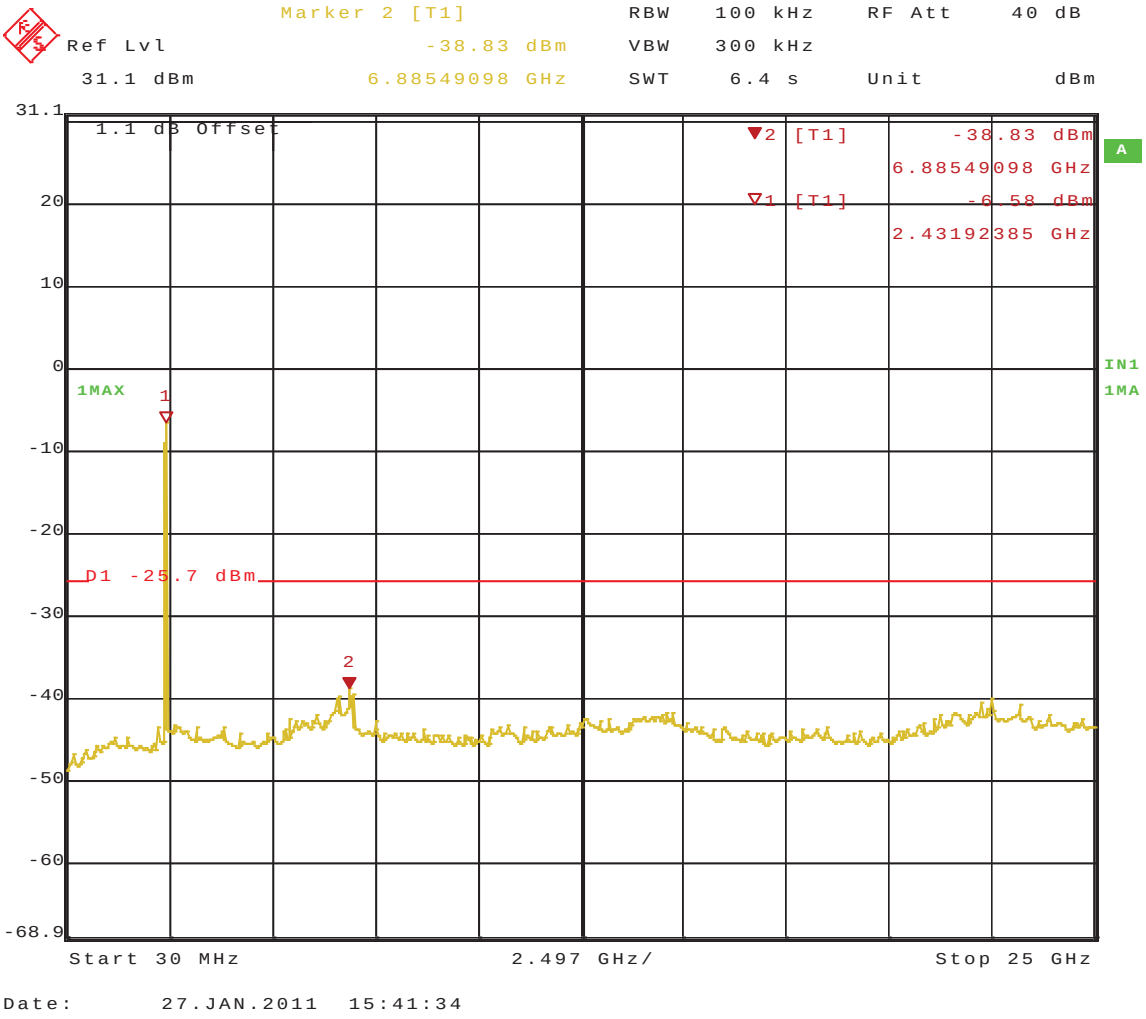


Figure 206: Out of Band Emission for Channel 2437 MHz at Chain 1, HT40 13.5 Mbps

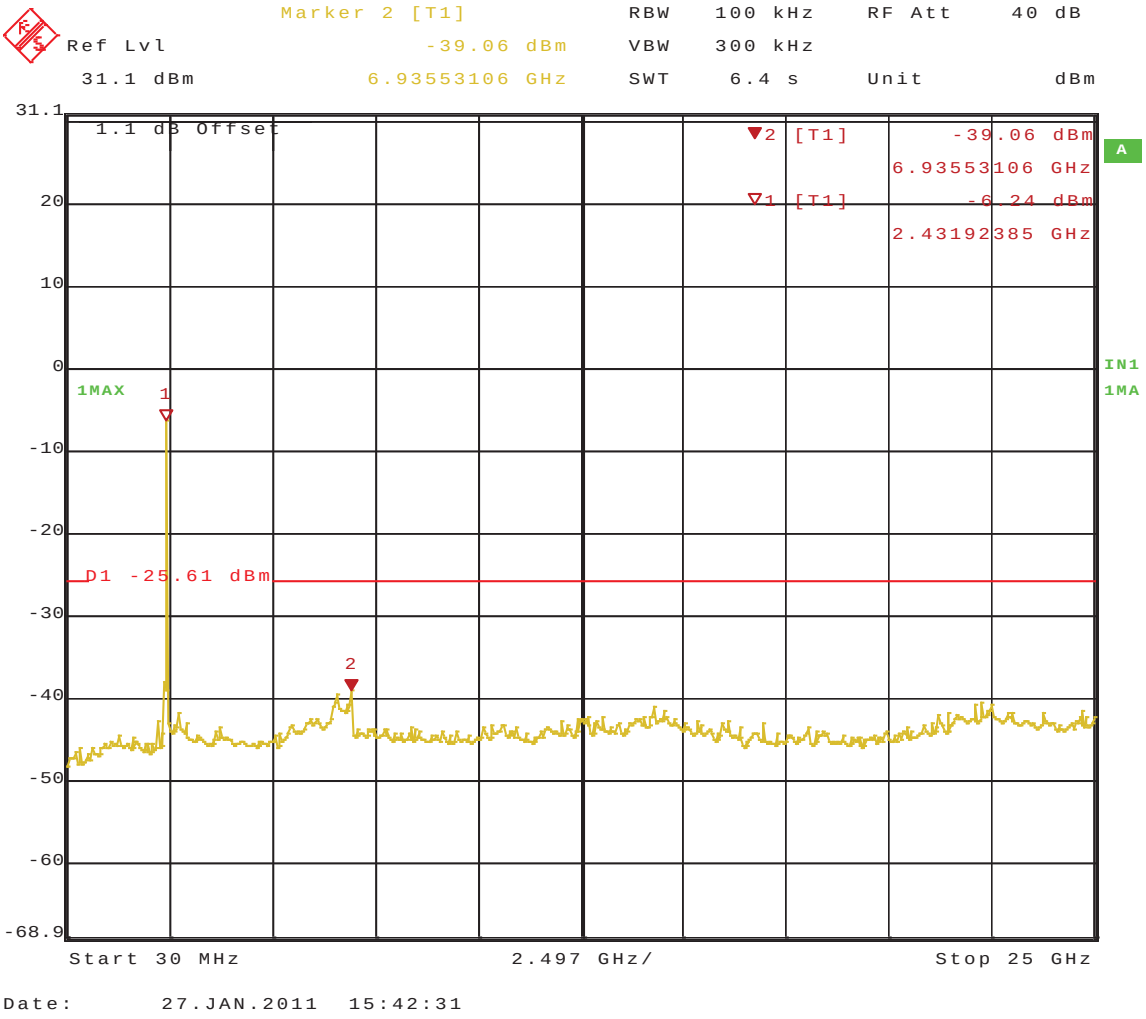


Figure 207: Out of Band Emission for Channel 2452 MHz at Chain 1, HT40 13.5 Mbps

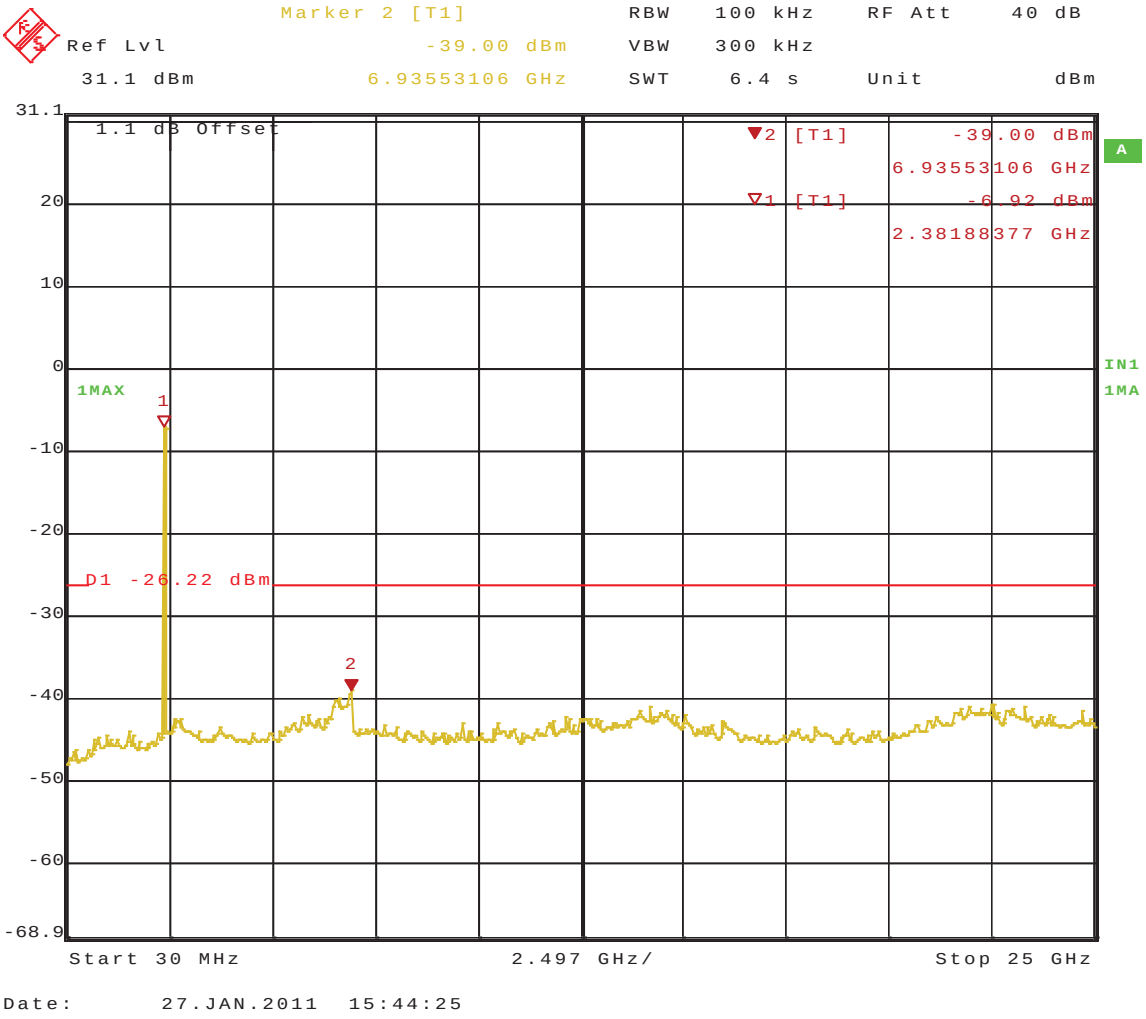


Figure 208: Out of Band Emission for Channel 2422 MHz at Chain 2, HT40 13.5 Mbps

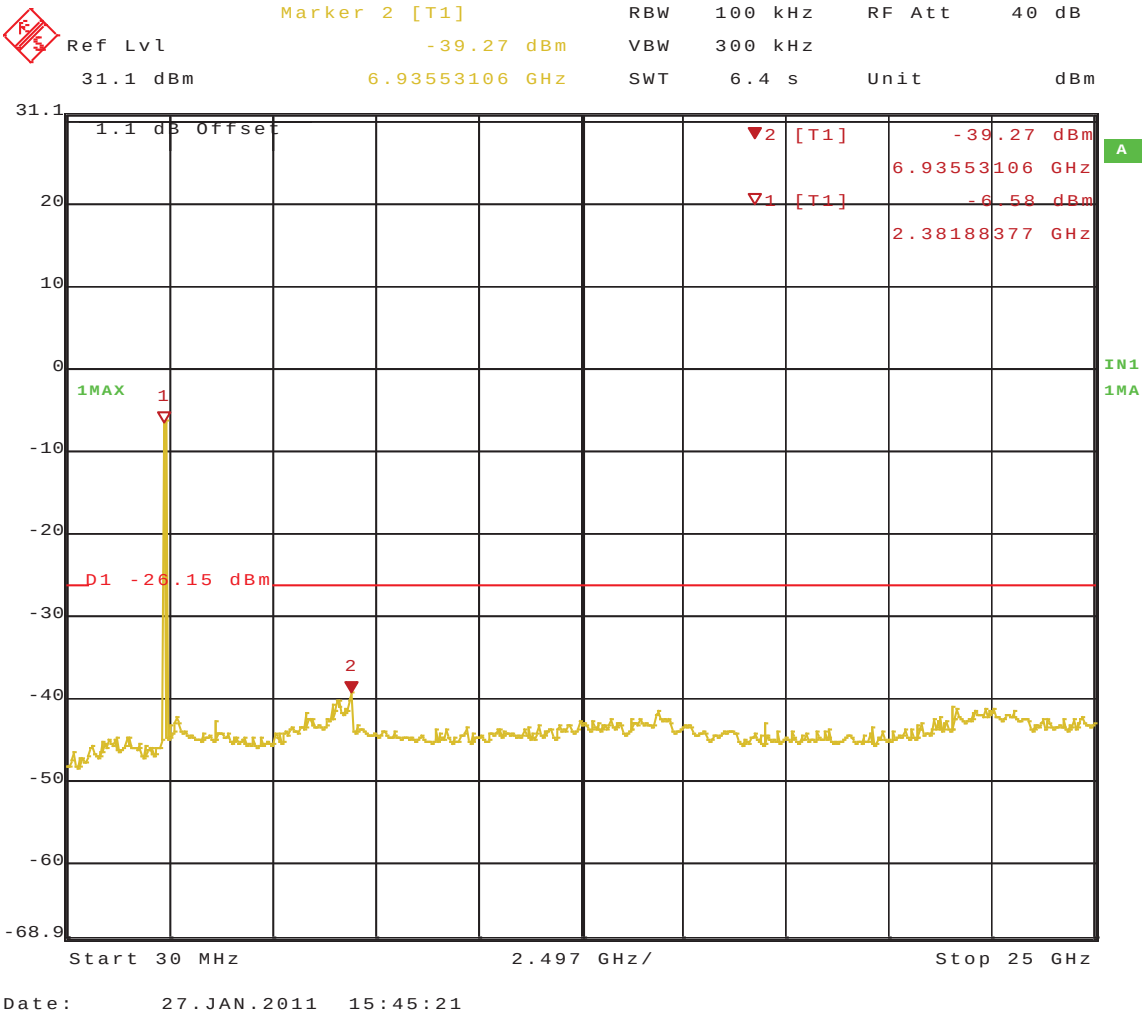


Figure 209: Out of Band Emission for Channel 2437 MHz at Chain 2, HT40 13.5 Mbps

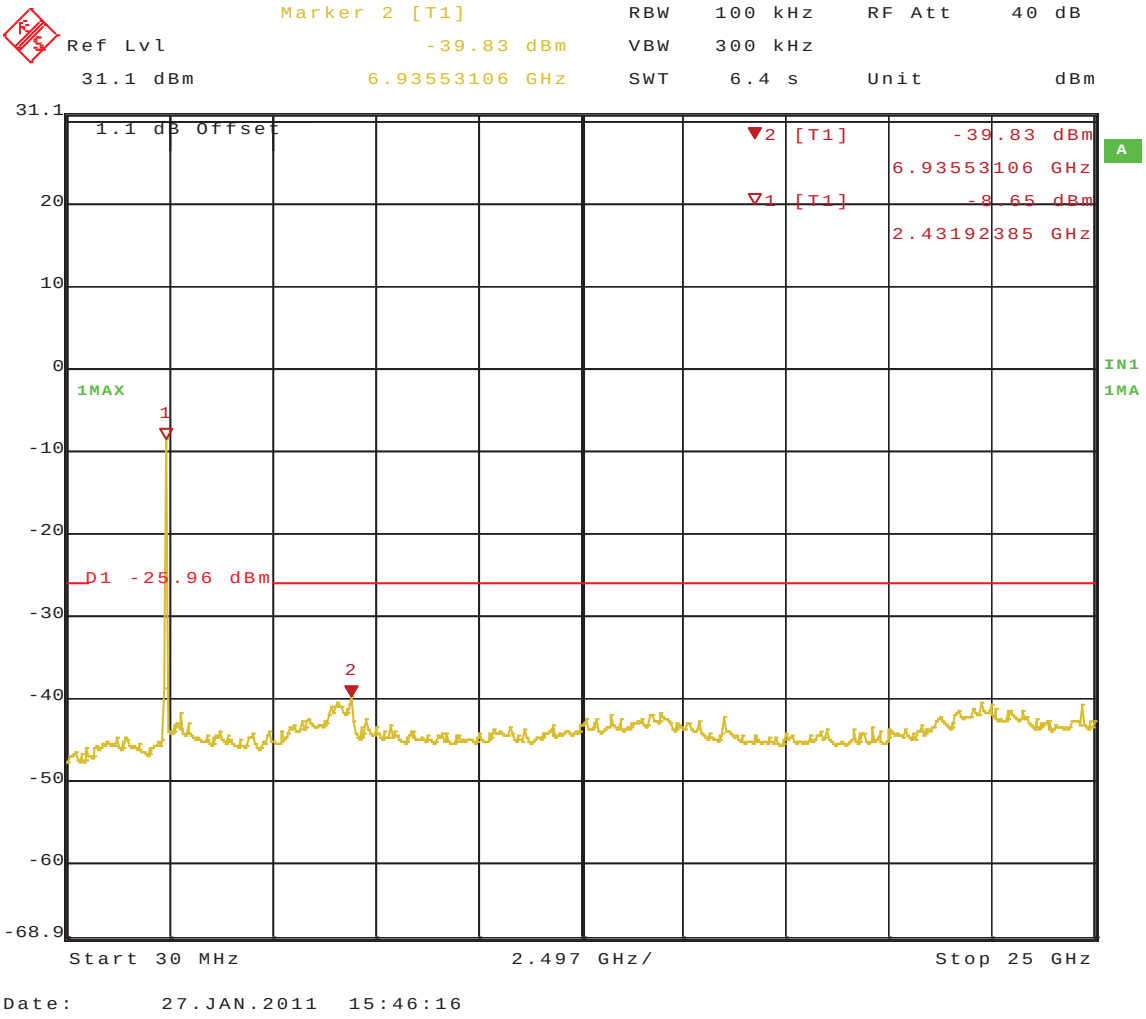


Figure 210: Out of Band Emission for Channel 2452 MHz at Chain 2, HT40 13.5 Mbps

4.4 Peak Power Spectral Density

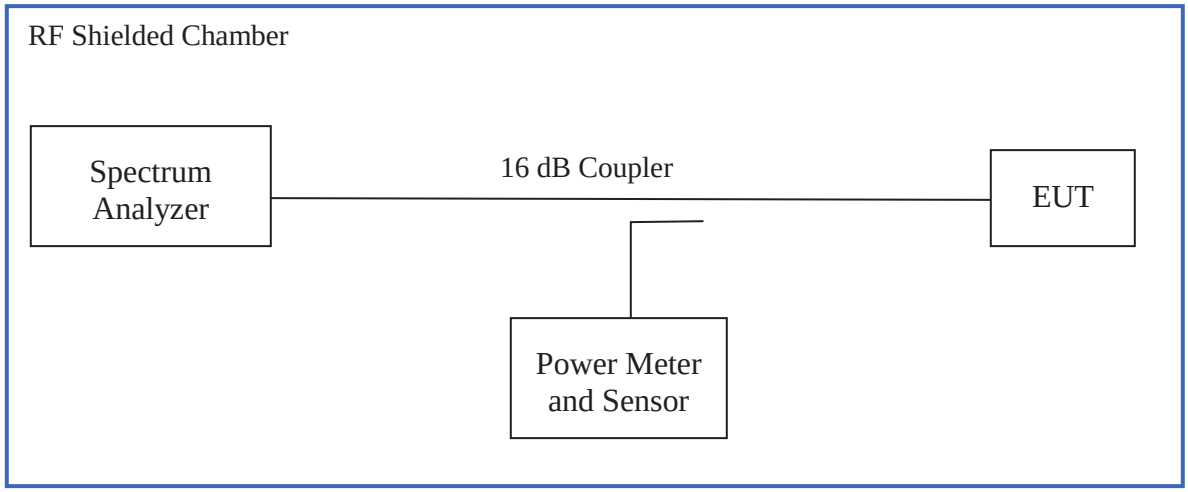
According to the CFR47 Part 15.247 (e) and RSS 210 (A8.2), the spectral power density output of the antenna port shall be less than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

4.4.1 Test Method

The conducted method was used to measure the channel power output per ANSI C63.10:2009 Section 6.11.2

The measurement was performed with modulation per CFR47 Part 15.247 (e) and RSS 210 (A8.2). This test was conducted on 3 channels in each mode. The worst sample result indicated below.

Test Setup:



4.4.2 Results

As originally tested, the EUT was found to be compliant to the requirements of the test standard(s).

Table 6: Peak Power Spectral Density – Test Results

Test Conditions: Conducted Measurement, Normal Temperature and Voltage only								
Antenna Type: Integrated			**Power Setting:** See test plan					
Max. Antenna Gain: + 1.1dBi			**Signal State:** Modulated					
Ambient Temp.: 21 °C			**Relative Humidity:**39%					
Peak Power Spectral Density								
Freq. (MHz)	**Mode**	**Chain 0 [dBm]**	**Chain 1 [dBm]**	**Chain 2 [dBm]**	**CF [dB]**	**Max. PPSD [dBm]**	**Limit [dBm]**	**Margin [dB]**
2412	1Mbps	-10.25	-9.85	-10.87		-9.85	8.00	-17.85
2437	1Mbps	-10.89	-10.00	-10.20		-10.00	8.00	-18.00
2462	1Mbps	-9.92	-11.32	-11.12		-9.92	8.00	-17.92
2412	6 Mbps	-0.91	-10.00	-10.95		-0.91	8.00	-8.91
2437	6 Mbps	-10.74	-10.73	-11.07		-10.73	8.00	-18.73
2462	6 Mbps	-10.66	-11.89	-10.82		-10.66	8.00	-18.66
2412	HT20 6.5 Mbps	-0.72	-10.01	-11.17		-0.72	8.00	-8.72
2437	HT20 6.5 Mbps	-10.52	-10.25	-10.88		-10.25	8.00	-18.25
2462	HT20 6.5 Mbps	-11.49	-11.49	-11.29		-11.29	8.00	-19.29
2412	HT20 13 Mbps	-9.52	-7.45		3.01	-4.44	8.00	-12.44
2437	HT20 13 Mbps	-0.48	-8.21		3.01	2.53	8.00	-5.47

2462	HT20 13 Mbps	-9.07	-10.38		3.01	-6.06	8.00	-14.06
2412	HT20 19.5 Mbps	-10.20	-8.44	-10.43	4.77	-3.67	8.00	-11.67
2437	HT20 19.5 Mbps	-1.52	-9.43	-9.90	4.77	3.25	8.00	-4.75
2462	HT20 19.5 Mbps	-9.06	-10.42	-10.31	4.77	-4.29	8.00	-12.29
2422	HT40 13.5 Mbps	-17.92	-19.01	-18.48		-17.92	8.00	-25.92
2437	HT40 13.5 Mbps	-17.19	-18.14	-18.34		-17.19	8.00	-25.19
2452	HT40 13.5 Mbps	-15.89	-17.29	-16.41		-15.89	8.00	-23.89
2422	HT40 27 Mbps	-16.83	-16.61		3.01	-13.60	8.00	-21.60
2437	HT40 27 Mbps	-17.04	-16.18		3.01	-13.17	8.00	-21.17
2452	HT40 27 Mbps	-17.35	-16.55		3.01	-13.54	8.00	-21.54
2422	HT40 40.5 Mbps	-16.98	-16.12	-16.72	4.77	-11.35	8.00	-19.35
2437	HT40 40.5 Mbps	-15.67	-17.04	-16.88	4.77	-10.90	8.00	-18.90
2452	HT40 40.5 Mbps	-16.34	-17.75	-17.10	4.77	-11.57	8.00	-19.57

Note: CF was accounted for the number of data streams being used, 10*Log(N) per KDB 662911; where N is number of outputs.

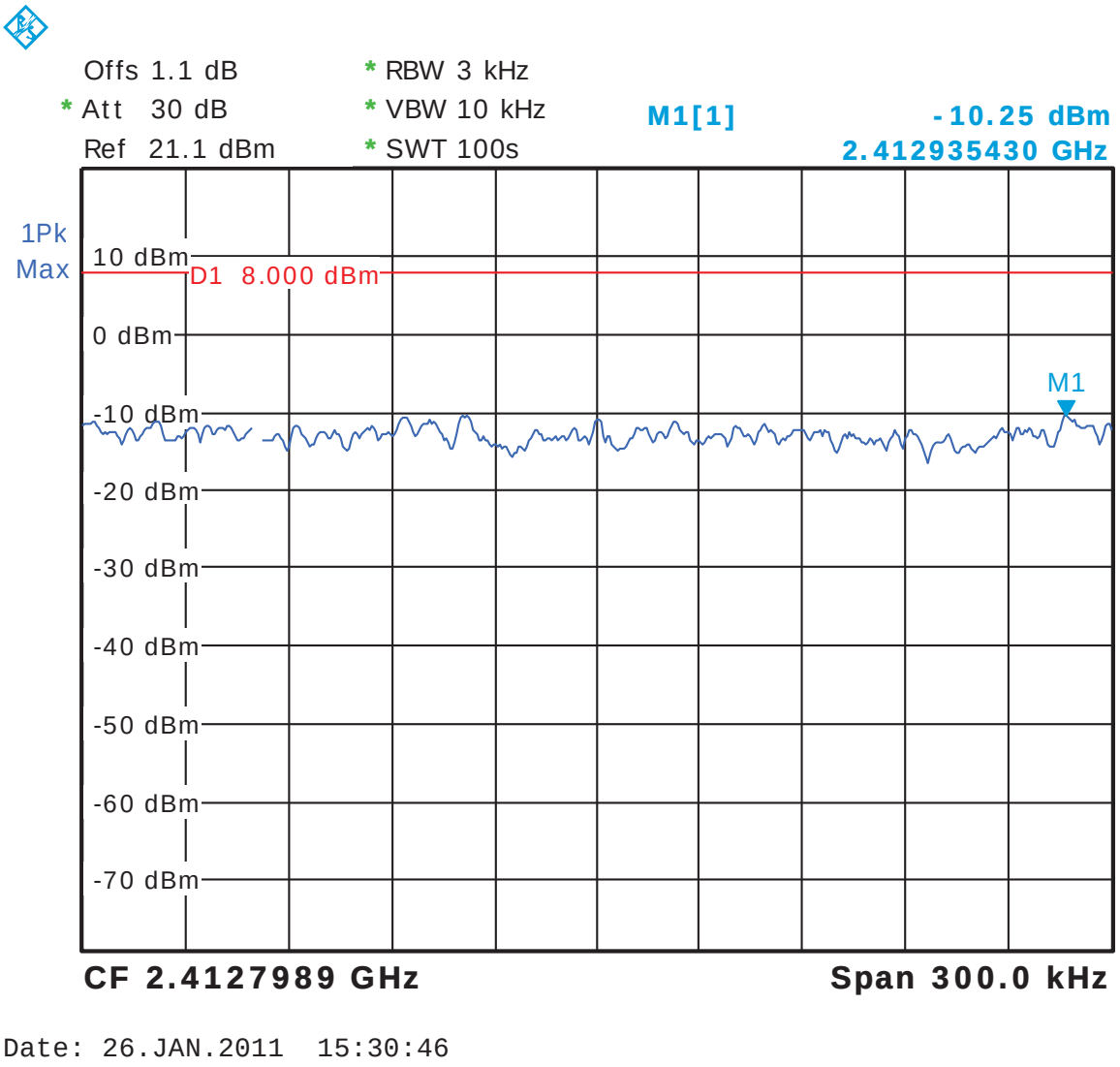


Figure 211: Peak Power Spectral Density for Operating Channel 2412MHz, Chain 0 – 1Mbps

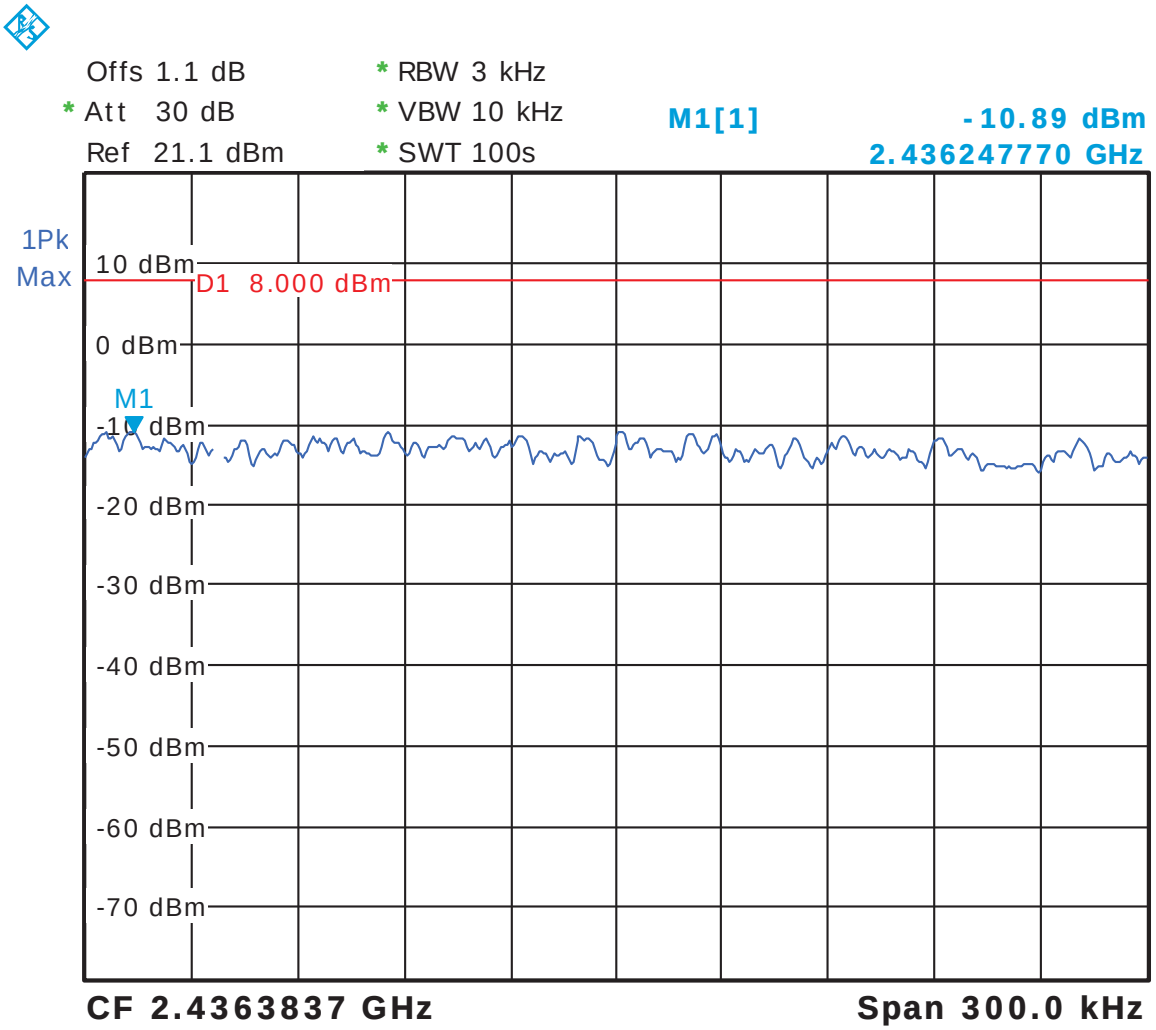


Figure 212: Peak Power Spectral Density for Operating Channel 2437MHz, Chain 0 – 1Mbps

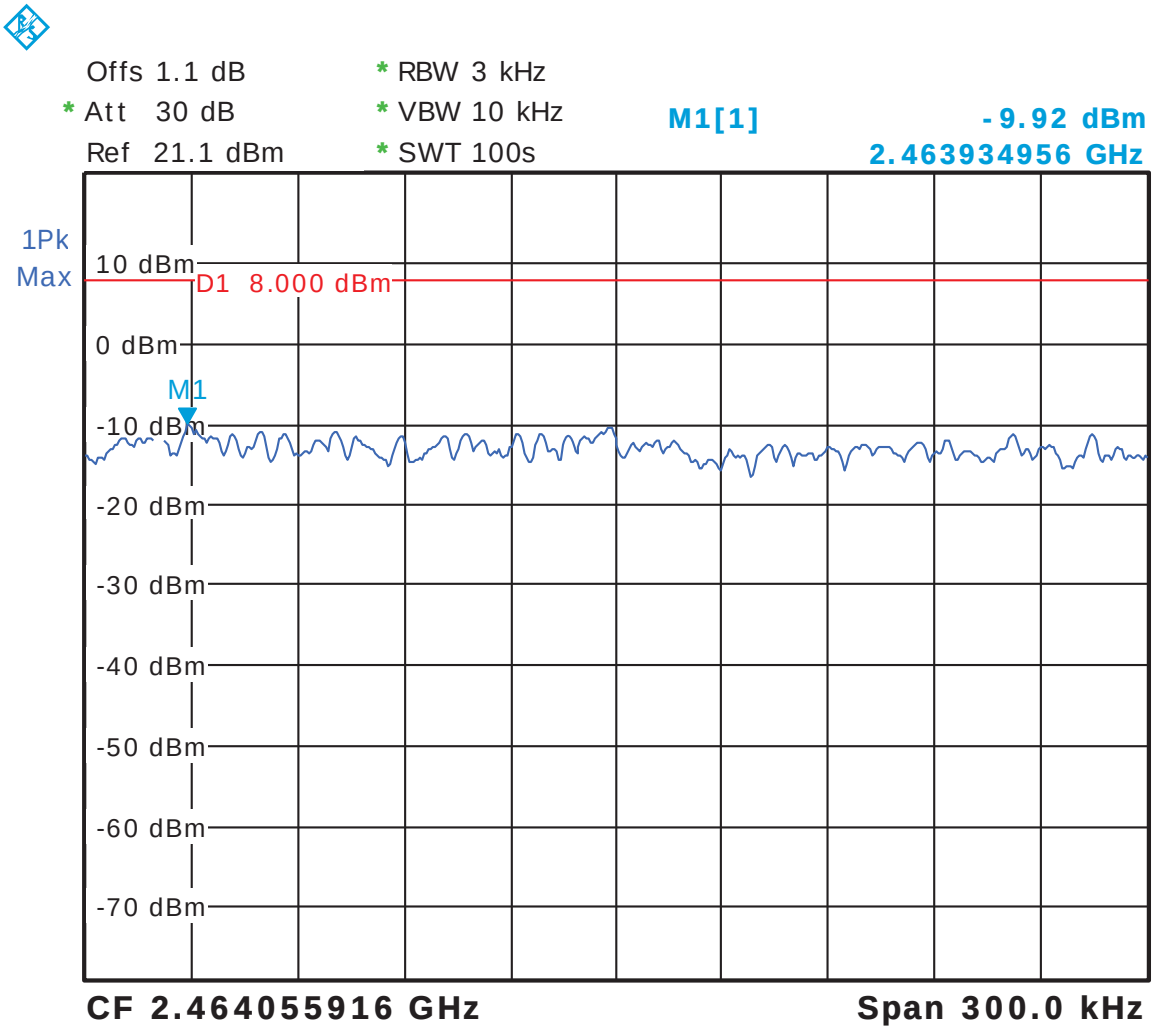


Figure 213: Peak Power Spectral Density for Operating Channel 2462MHz, Chain 0 – 1Mbps

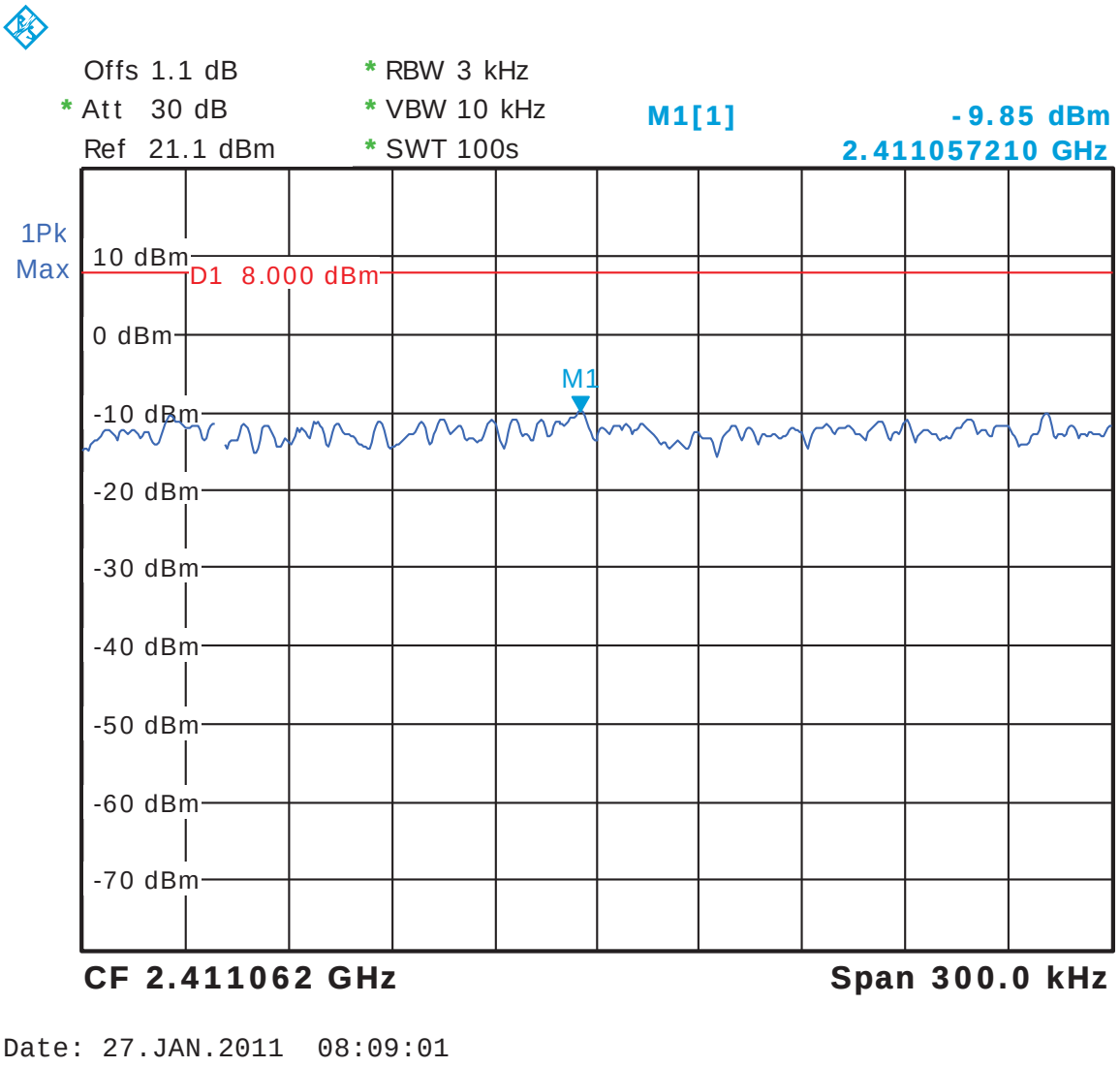
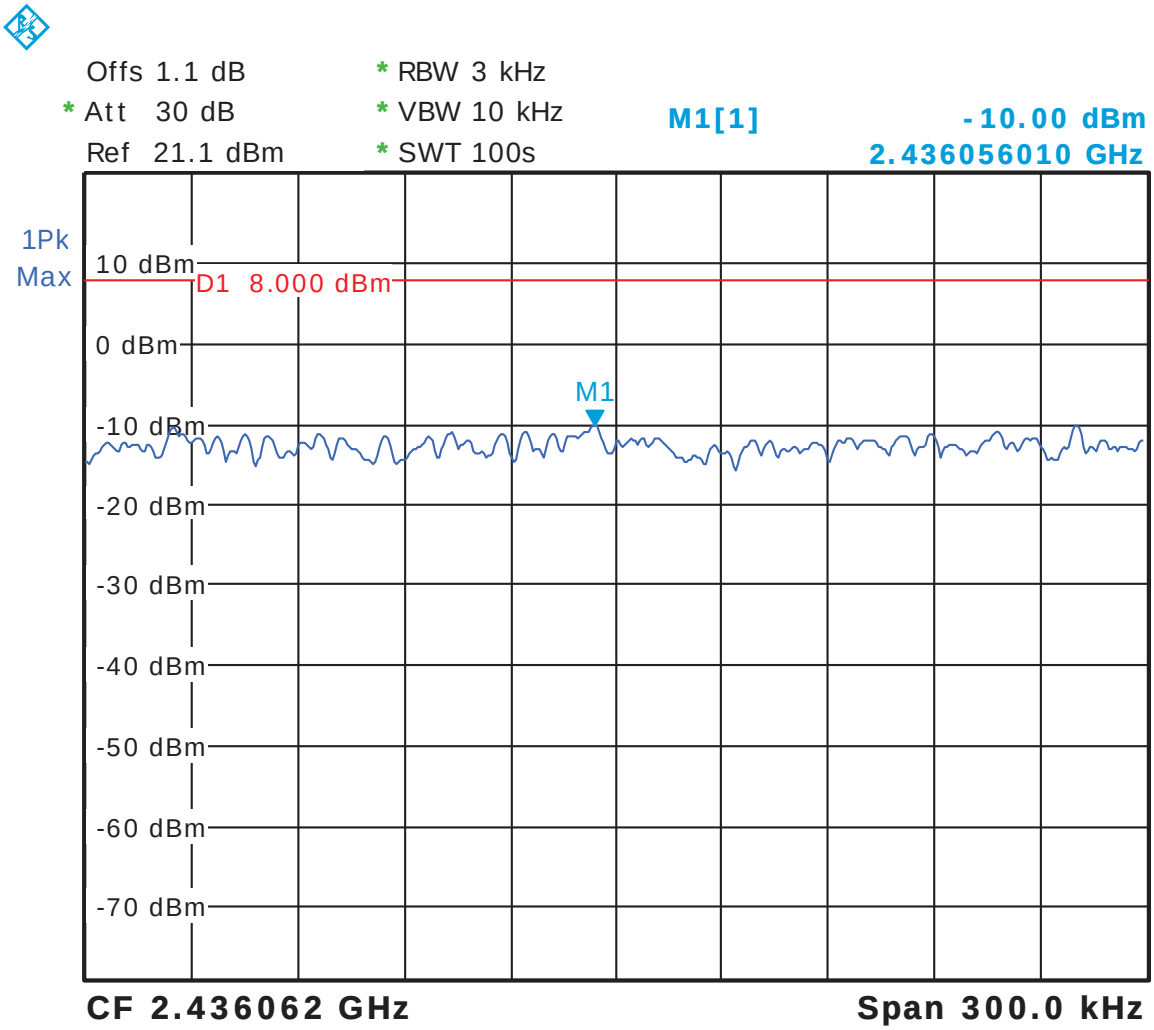


Figure 214: Peak Power Spectral Density for Operating Channel 2412MHz, Chain 1 – 1Mbps



Date: 27.JAN.2011 08:14:02

Figure 215: Peak Power Spectral Density for Operating Channel 2437MHz, Chain 1 – 1Mbps

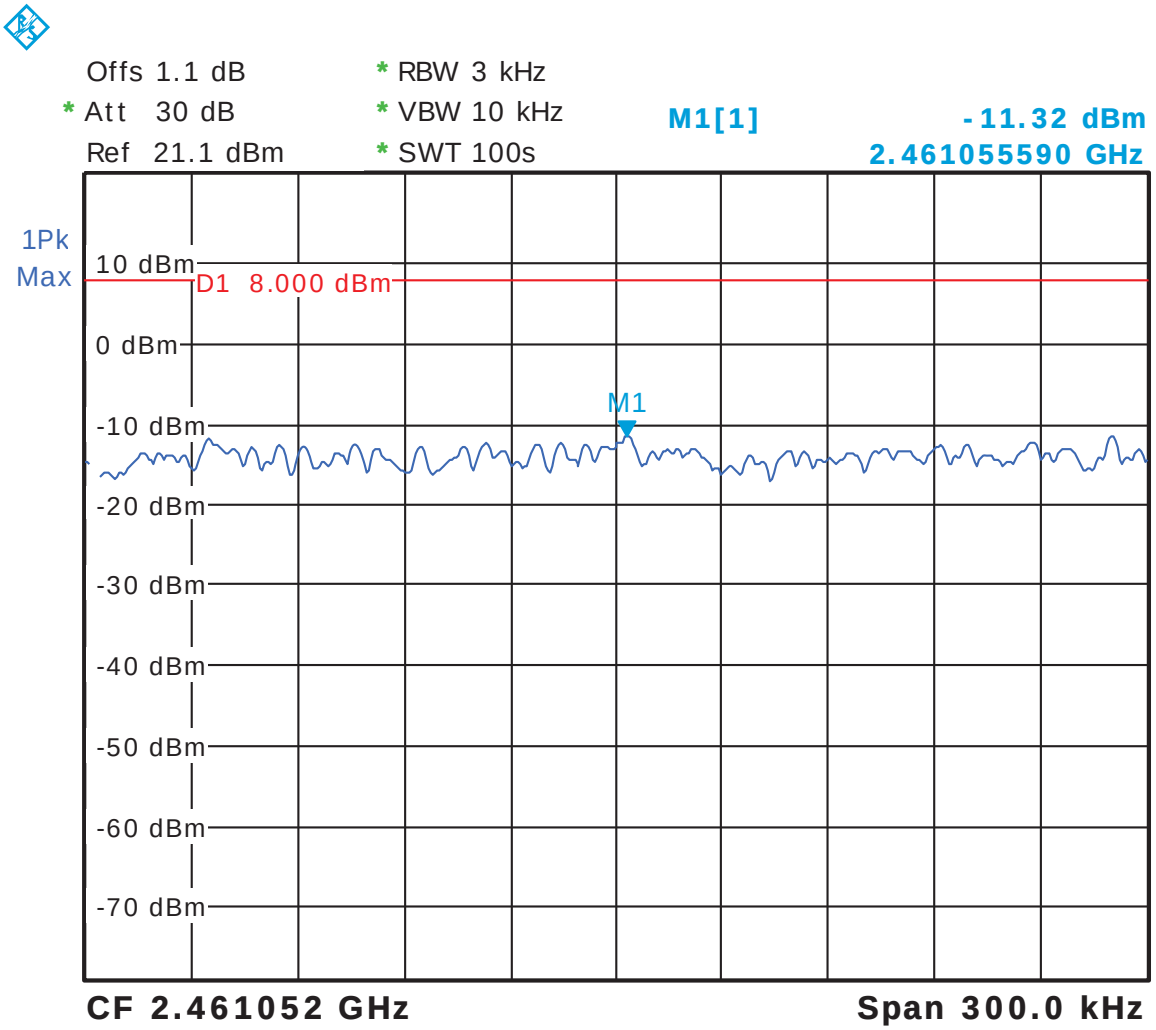


Figure 216: Peak Power Spectral Density for Operating Channel 2462MHz, Chain 1 – 1Mbps

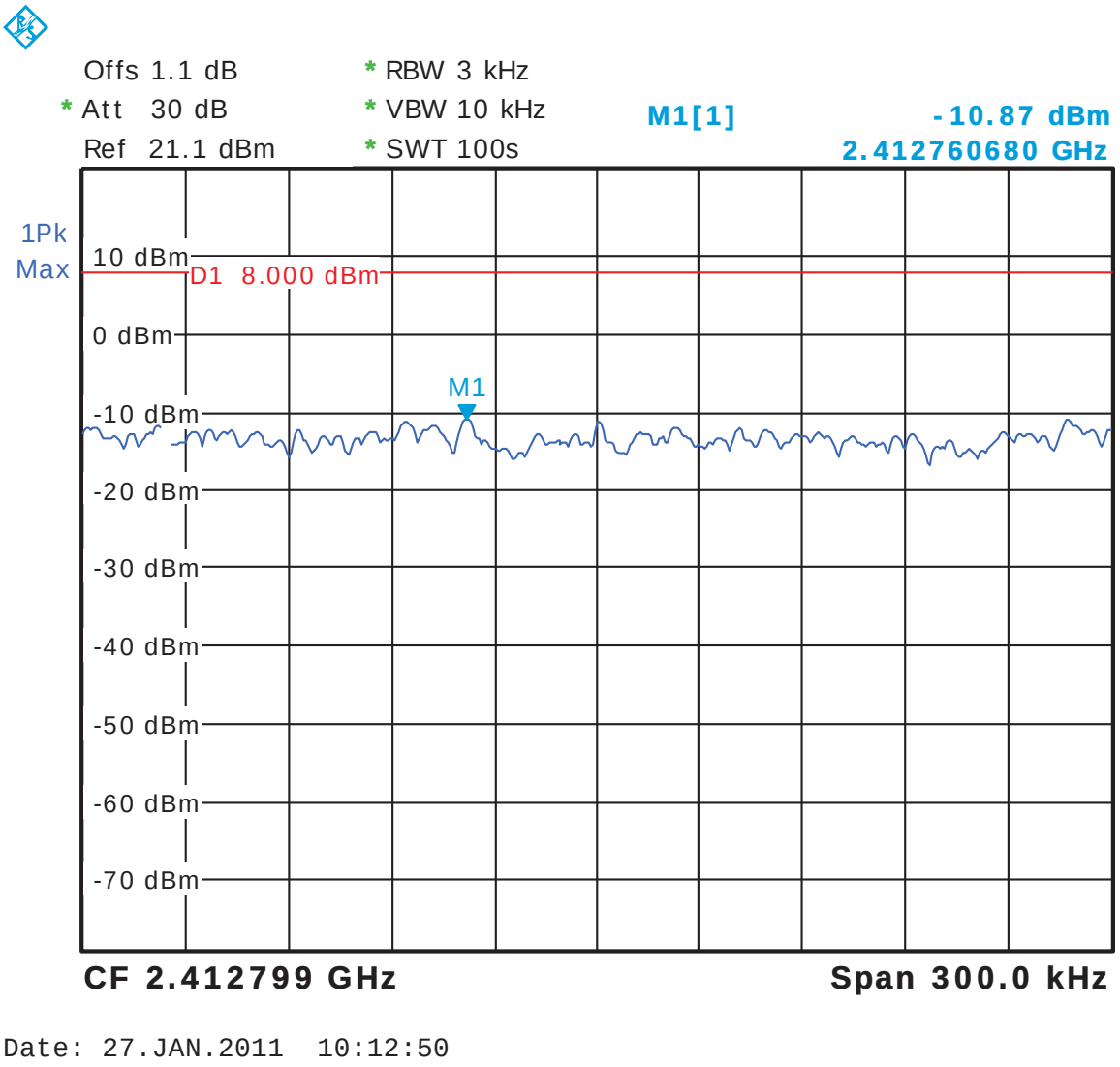
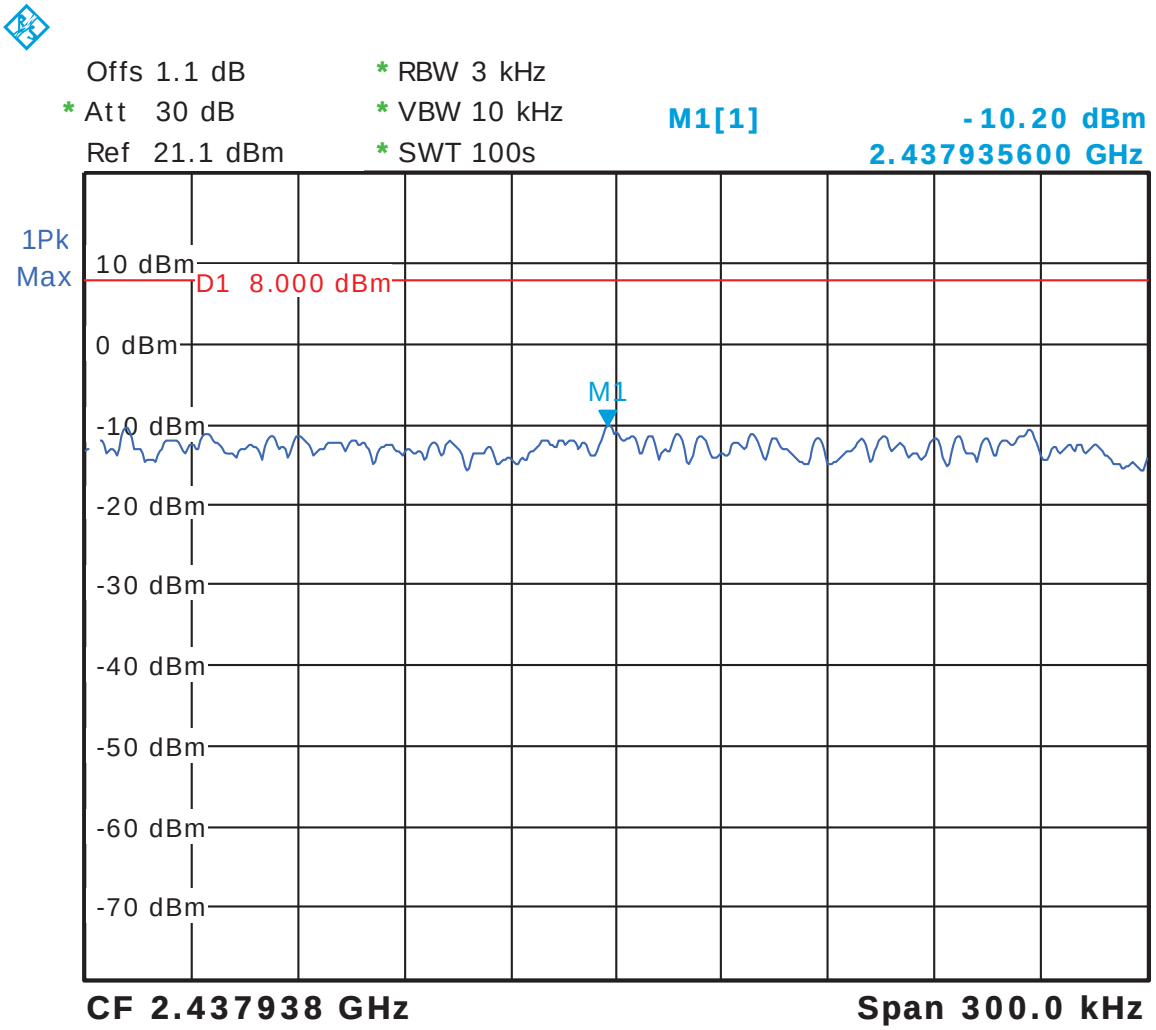


Figure 217: Peak Power Spectral Density for Operating Channel 2412MHz, Chain 2 – 1Mbps



Date: 27.JAN.2011 10:22:01

Figure 218: Peak Power Spectral Density for Operating Channel 2437MHz, Chain 2 – 1Mbps

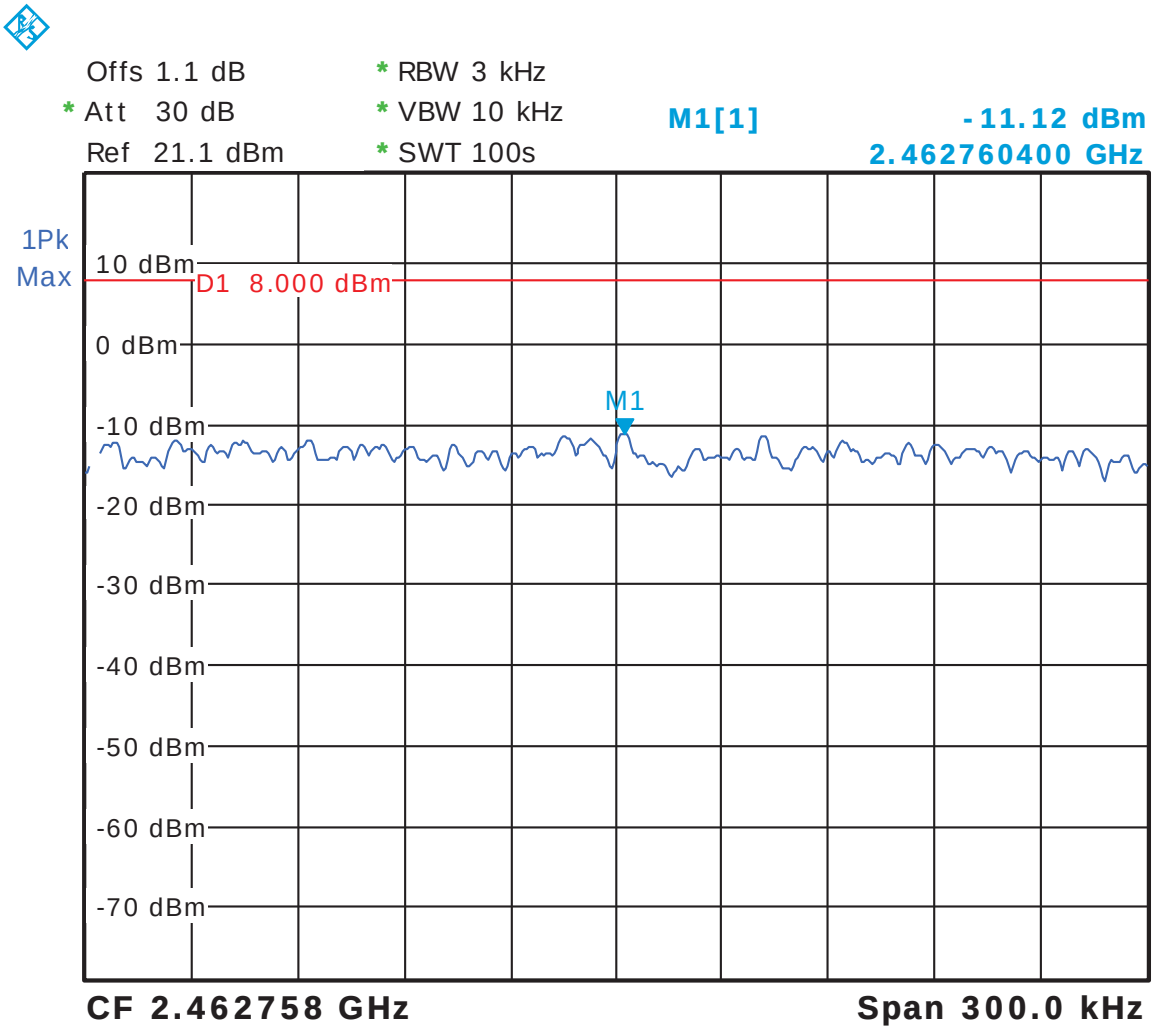


Figure 219: Peak Power Spectral Density for Operating Channel 2462MHz, Chain 2 – 1Mbps

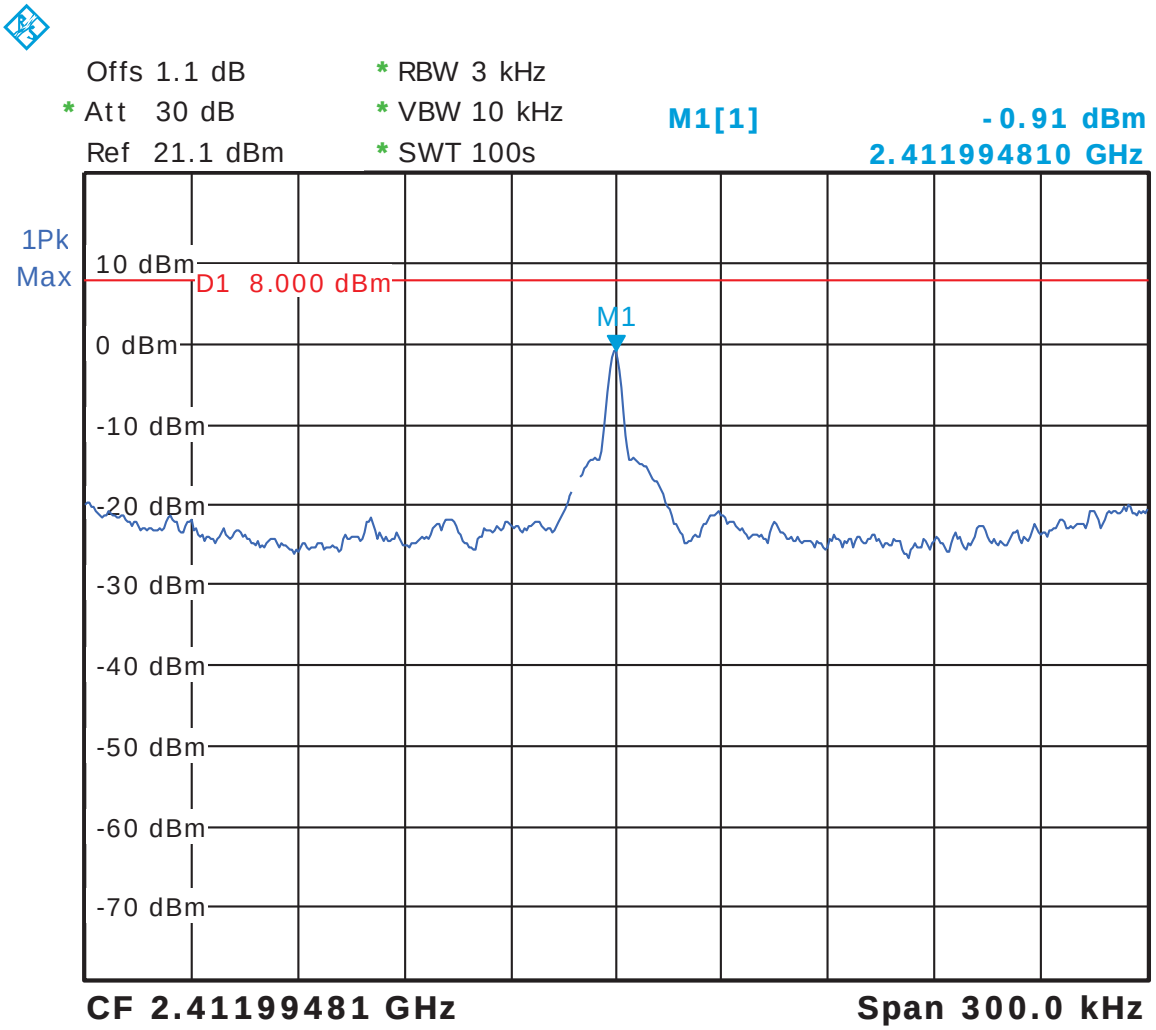


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Figure 220: Peak Power Spectral Density for Operating Channel 2412MHz, Chain 0 – 6 Mbps

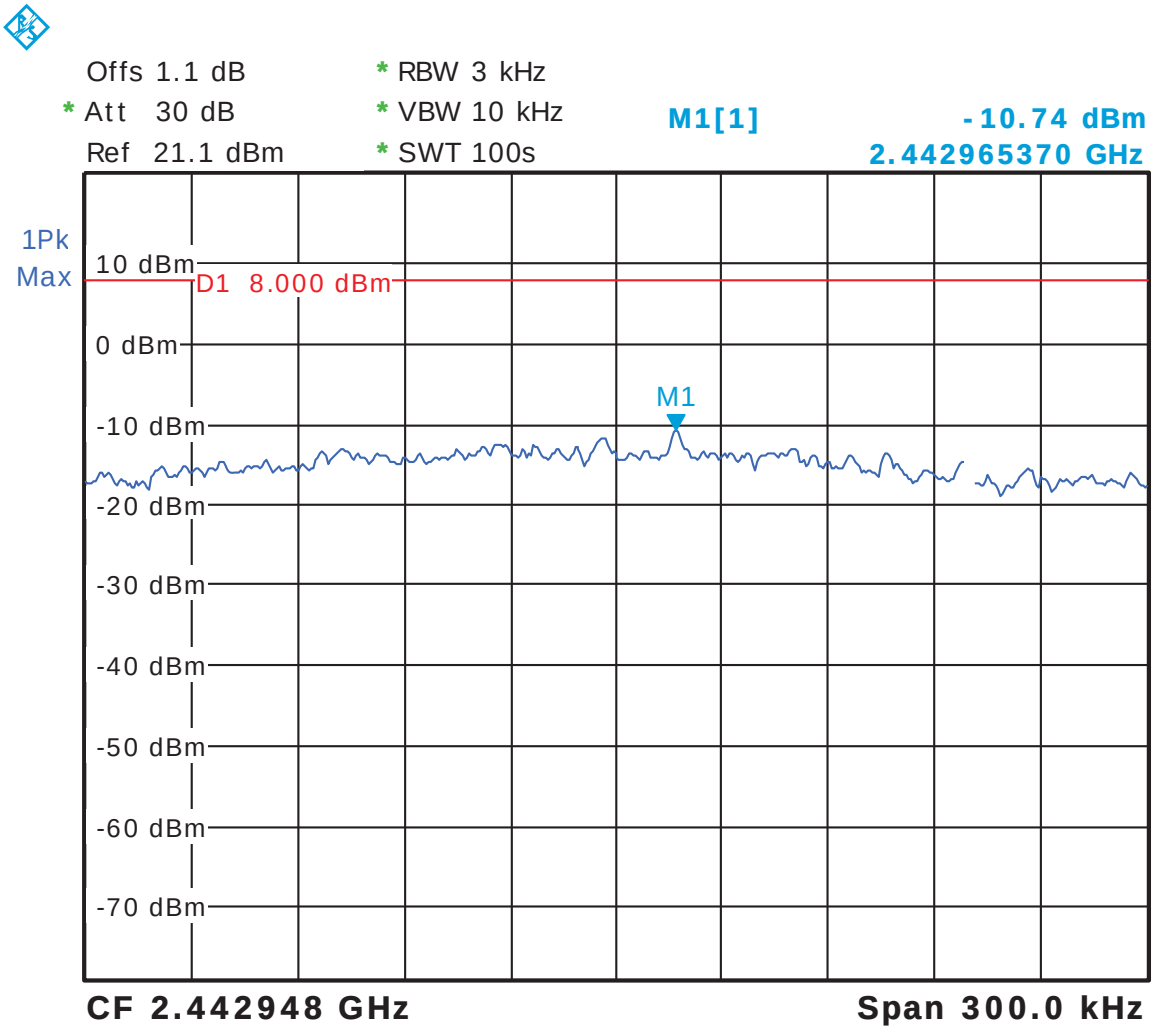


Figure 221: Peak Power Spectral Density for Operating Channel 2437MHz, Chain 0 – 6 Mbps

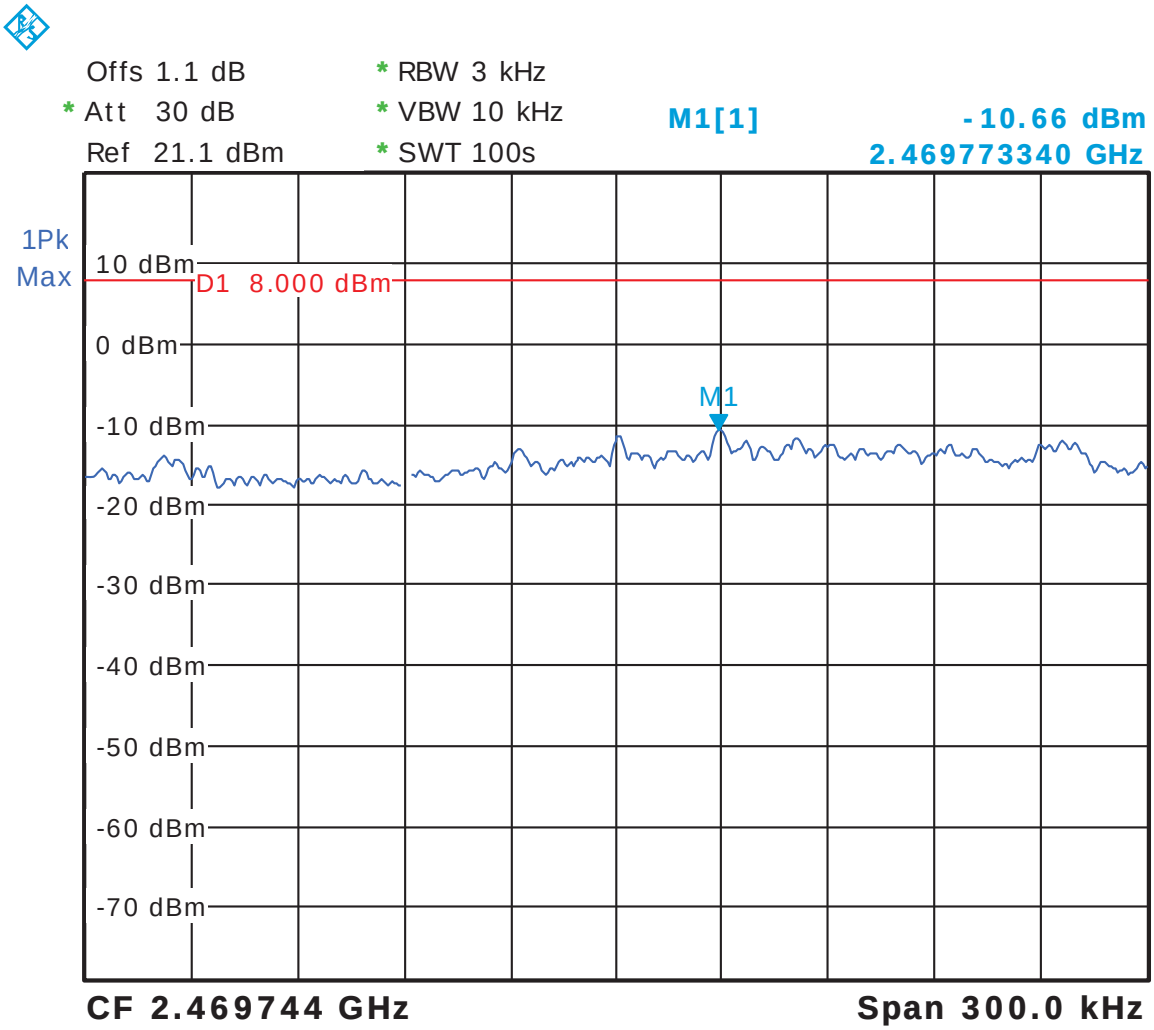


Figure 222: Peak Power Spectral Density for Operating Channel 2462MHz, Chain 0 – 6 Mbps

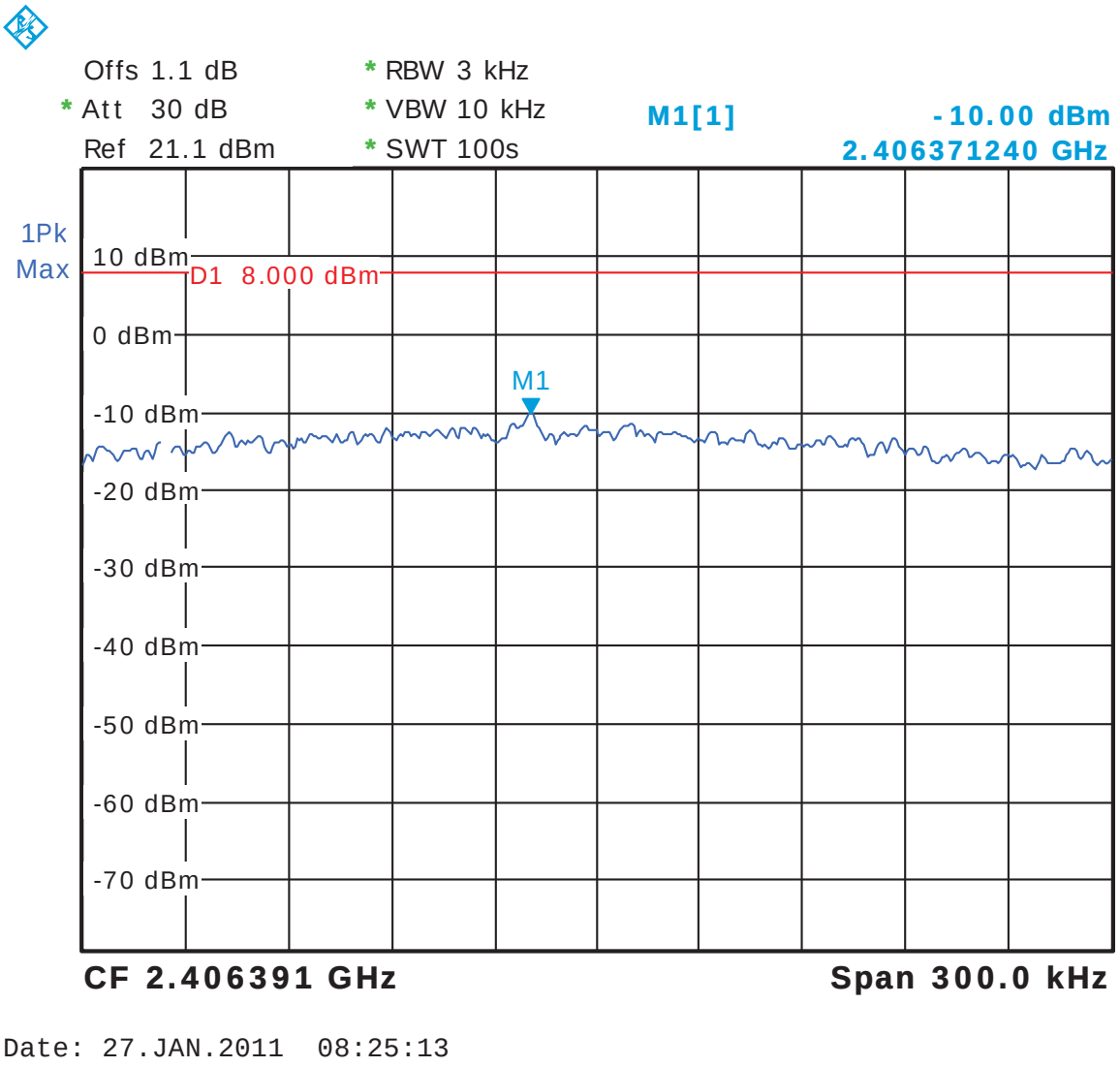
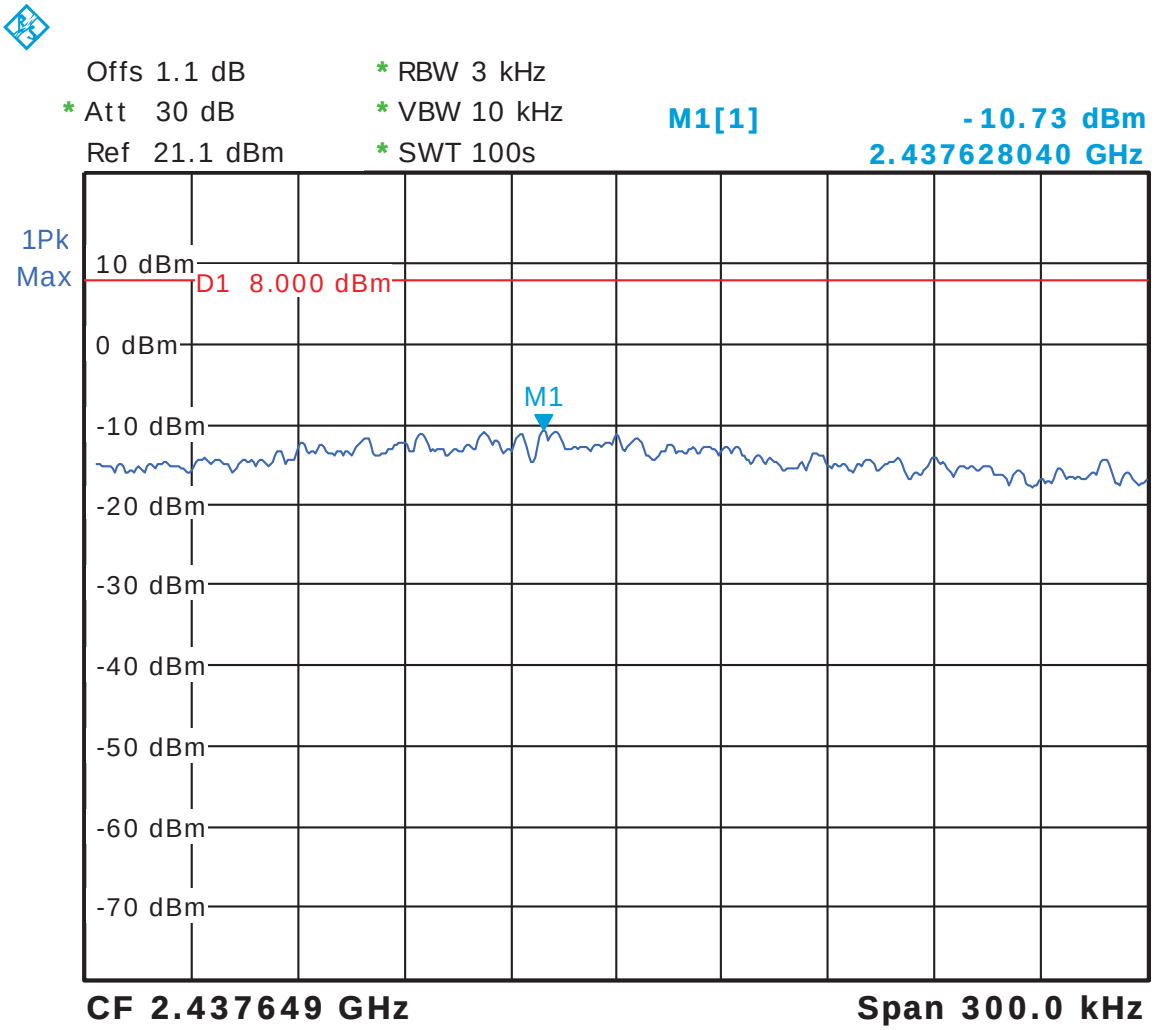
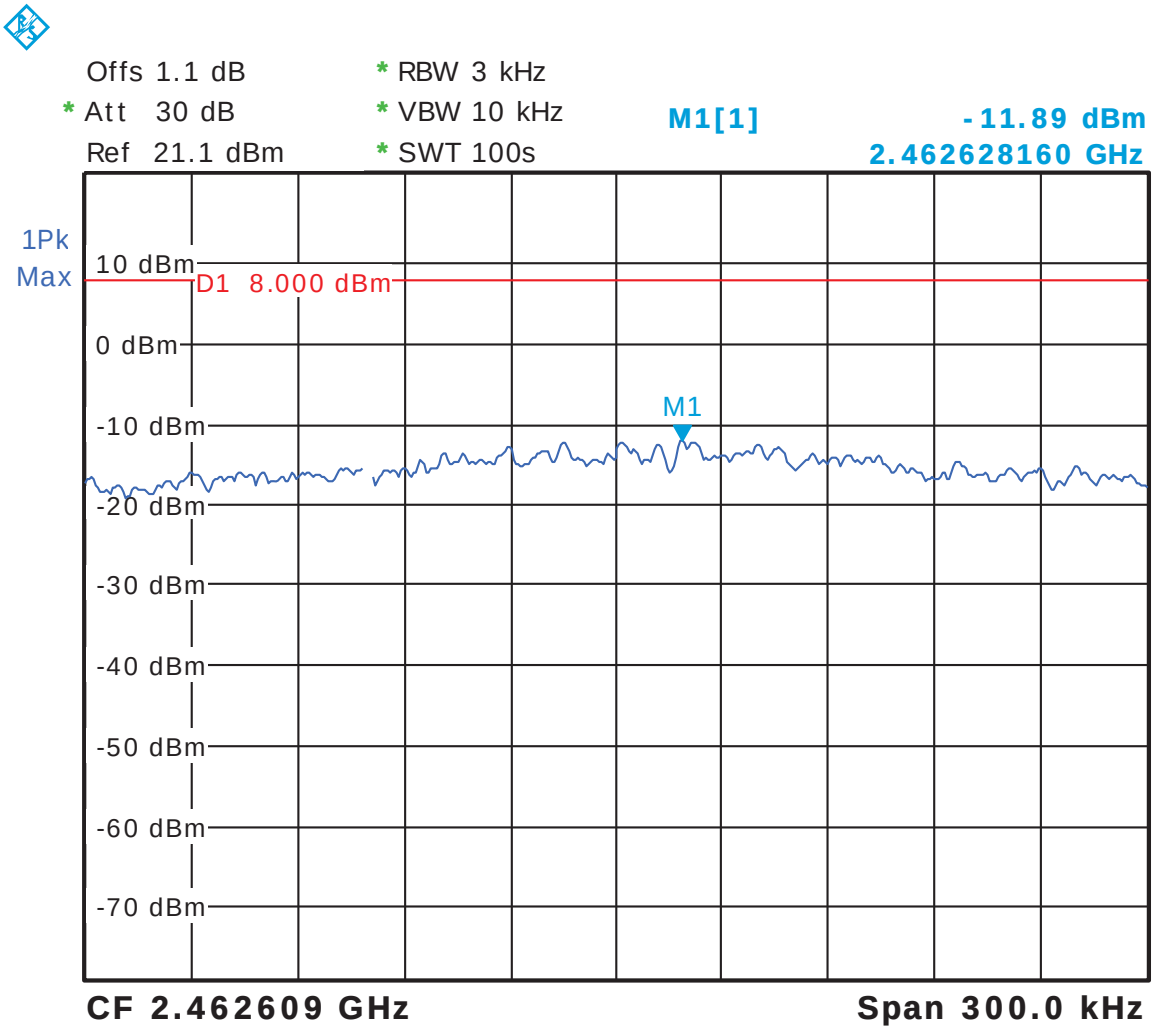


Figure 223: Peak Power Spectral Density for Operating Channel 2412MHz, Chain 1 – 6 Mbps



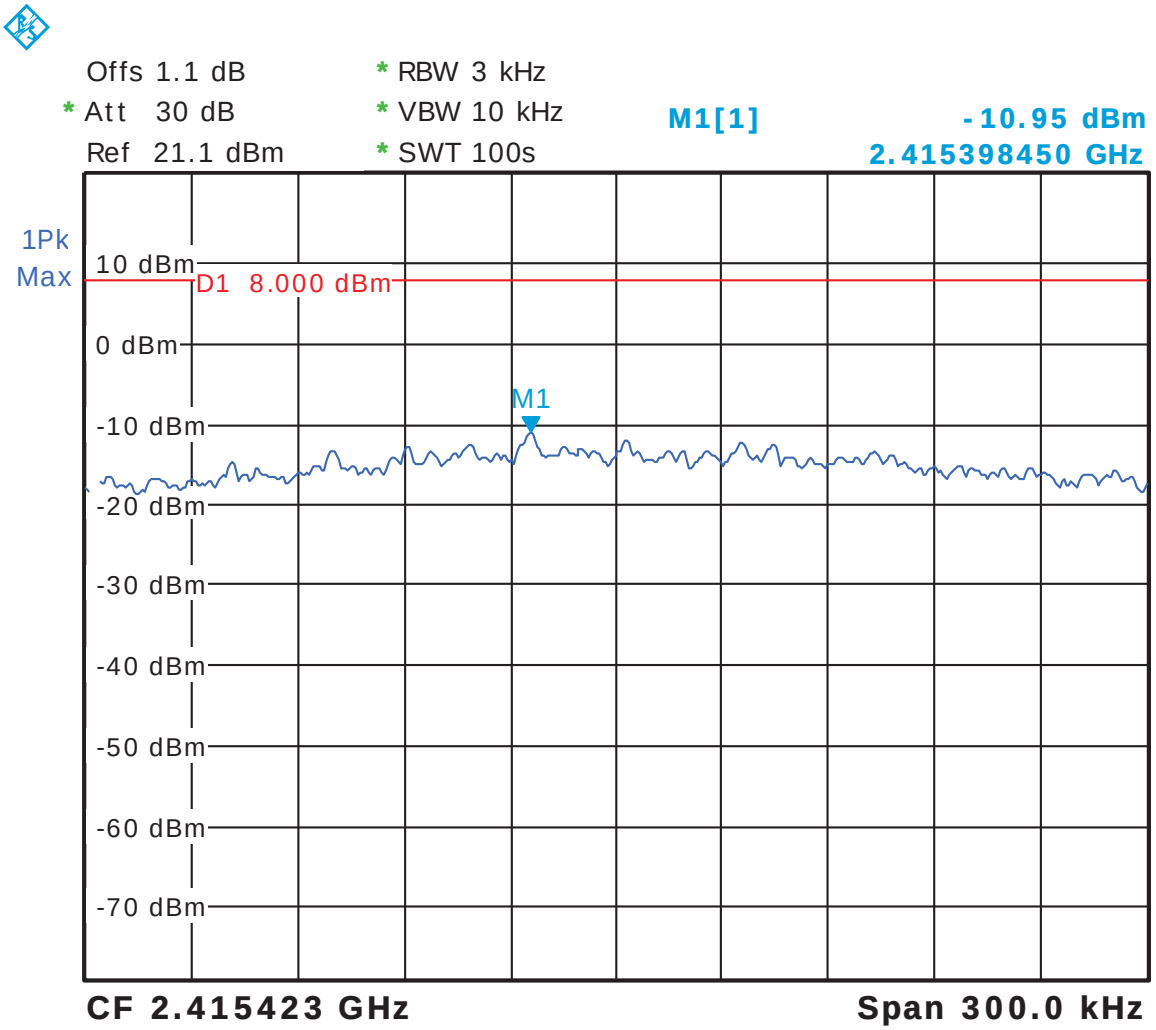
Date: 27.JAN.2011 08:38:19

Figure 224: Peak Power Spectral Density for Operating Channel 2437MHz, Chain 1 – 6 Mbps



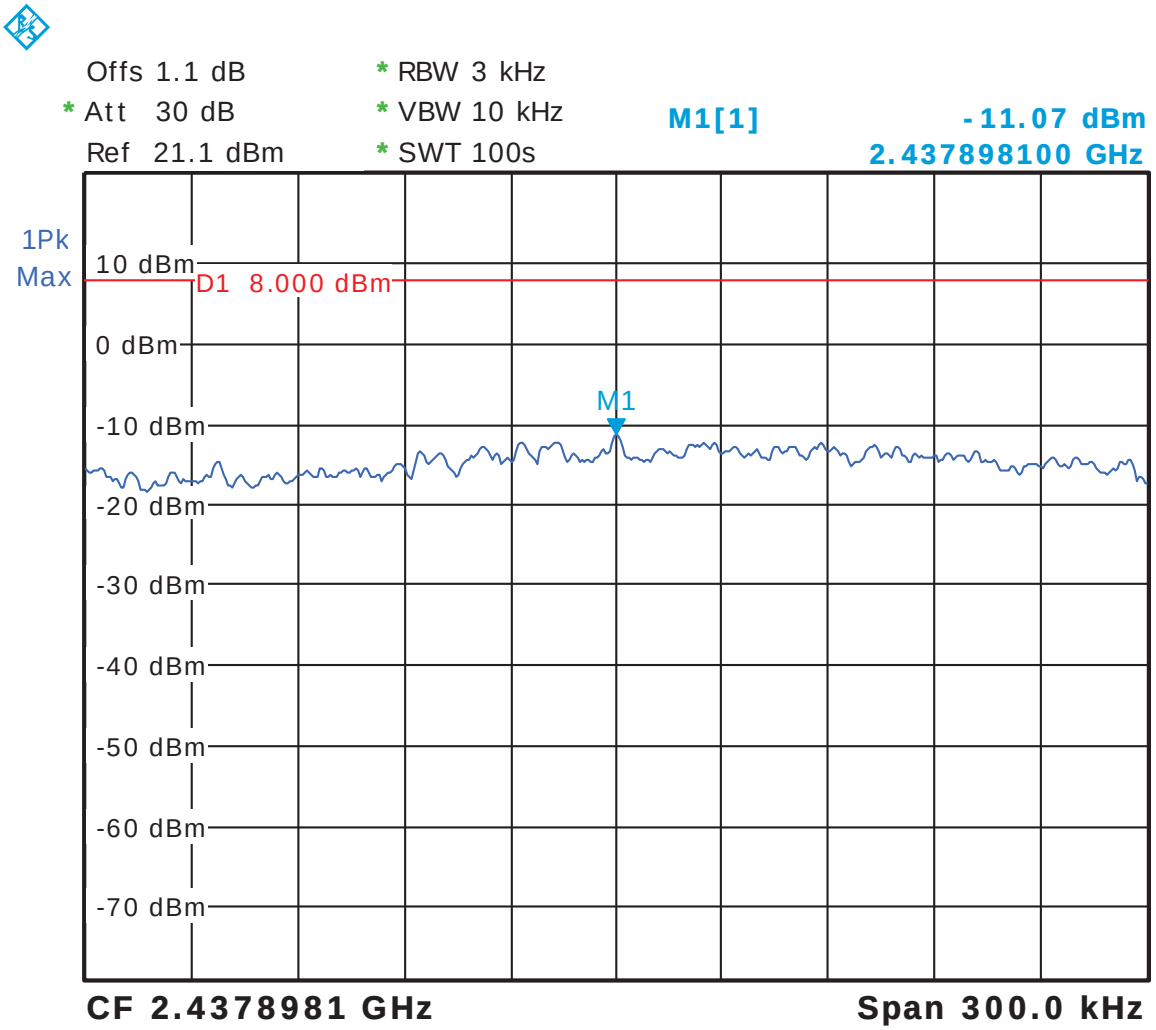
Date: 27.JAN.2011 08:43:51

Figure 225: Peak Power Spectral Density for Operating Channel 2462MHz, Chain 1 – 6 Mbps



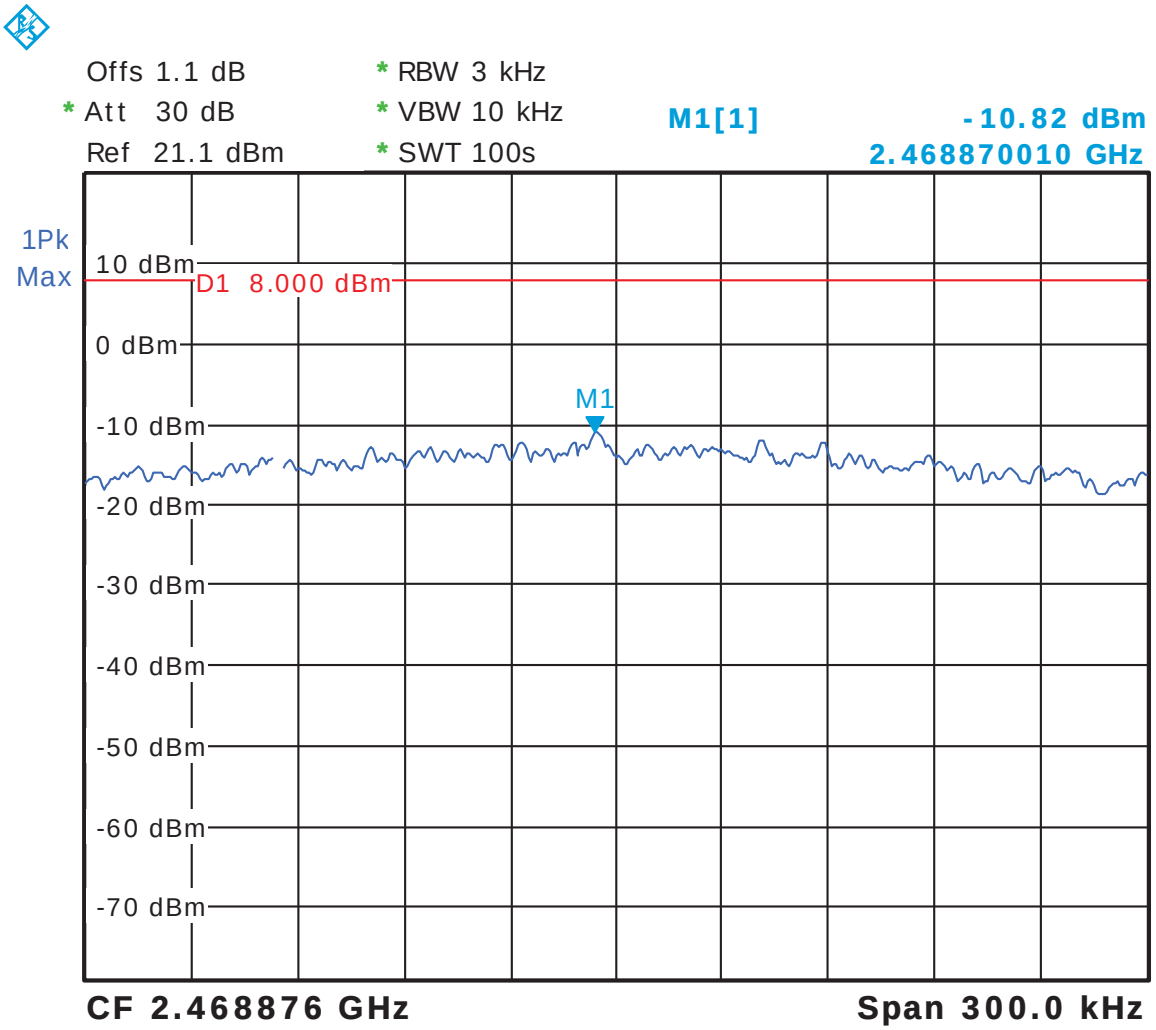
Date: 27.JAN.2011 09:59:51

Figure 226: Peak Power Spectral Density for Operating Channel 2412MHz, Chain 2 – 6 Mbps



Date: 27.JAN.2011 10:04:28

Figure 227: Peak Power Spectral Density for Operating Channel 2437MHz, Chain 2 – 6 Mbps



Date: 27.JAN.2011 10:09:19

Figure 228: Peak Power Spectral Density for Operating Channel 2462MHz, Chain 2 – 6 Mbps

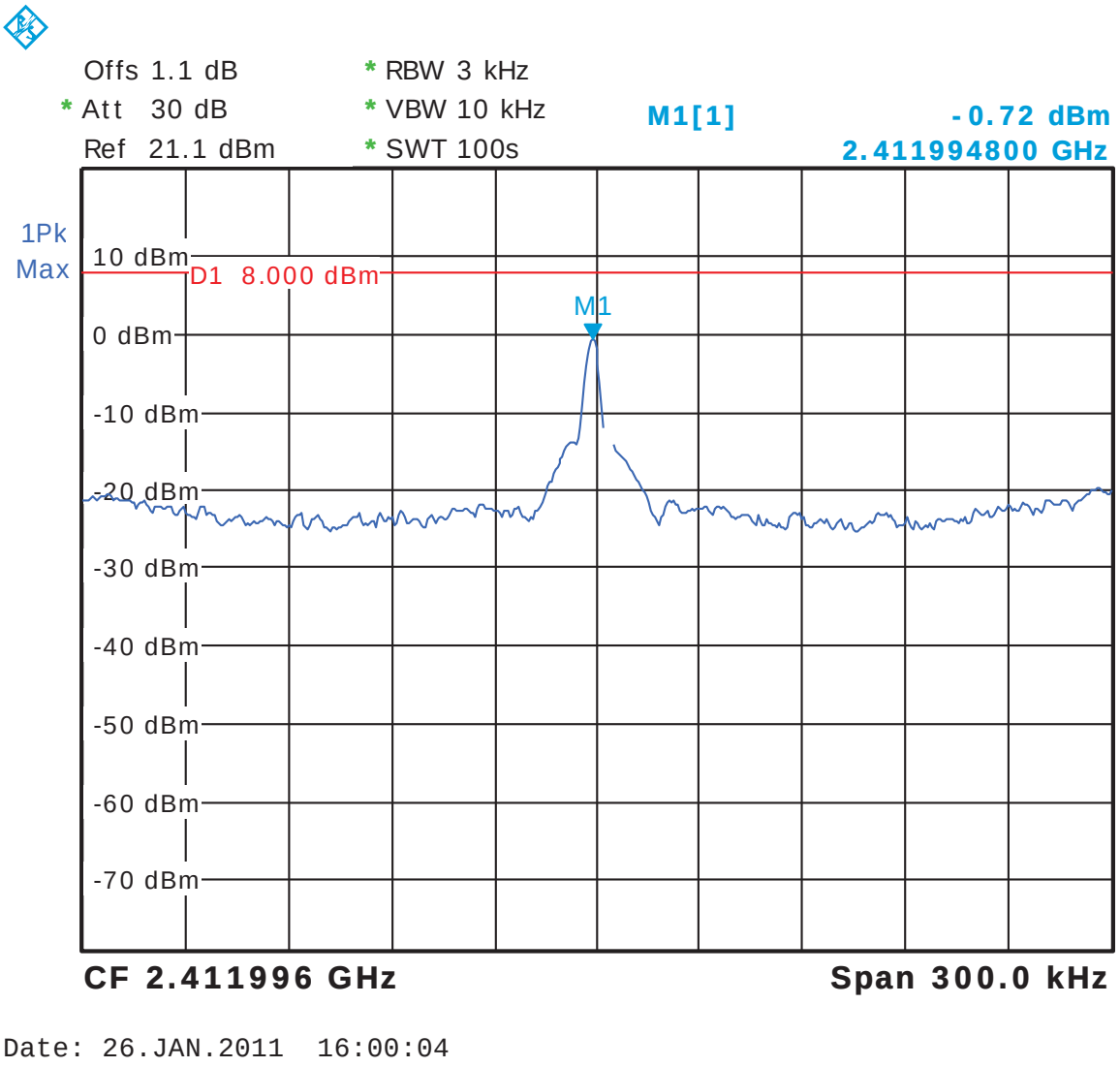
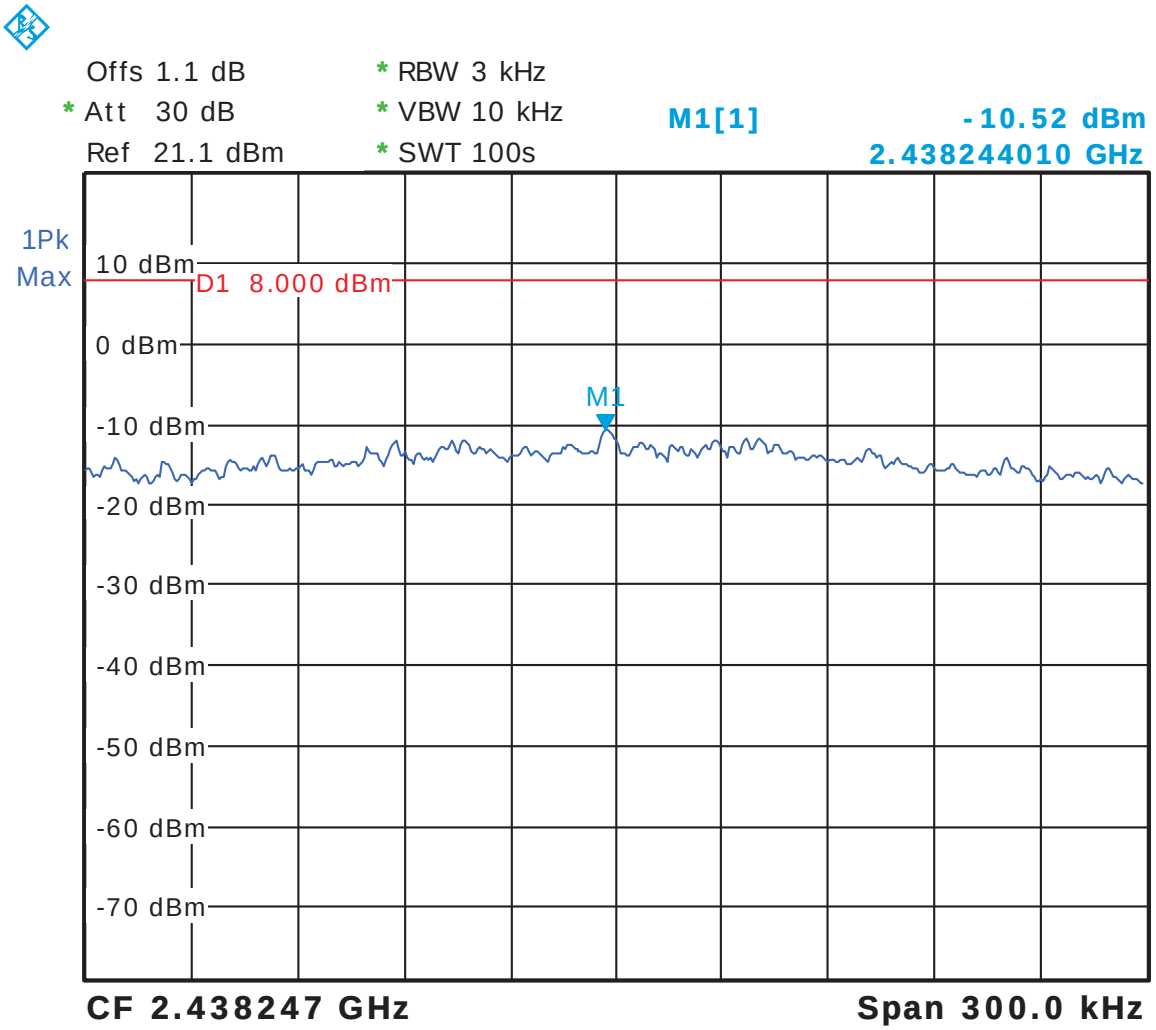
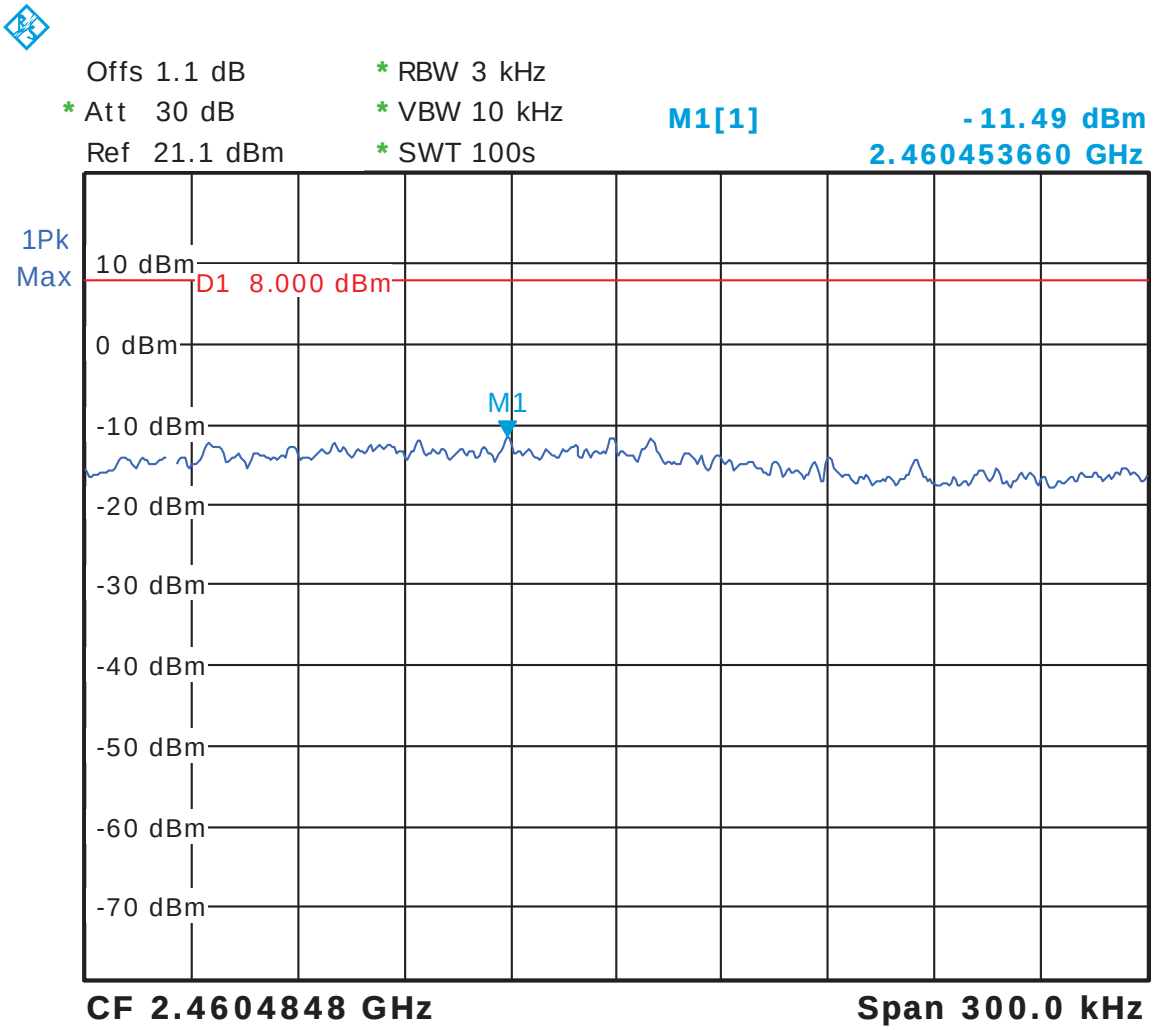


Figure 229: Peak Power Spectral Density for Operating Channel 2412MHz, Chain 0 – HT20 6.5 Mbps



Date: 26.JAN.2011 16:05:42

Figure 230: Peak Power Spectral Density for Operating Channel 2437MHz, Chain 0 – HT20 6.5 Mbps



Date: 26.JAN.2011 16:10:49

Figure 231: Peak Power Spectral Density for Operating Channel 2462MHz, Chain 0 – HT20 6.5 Mbps

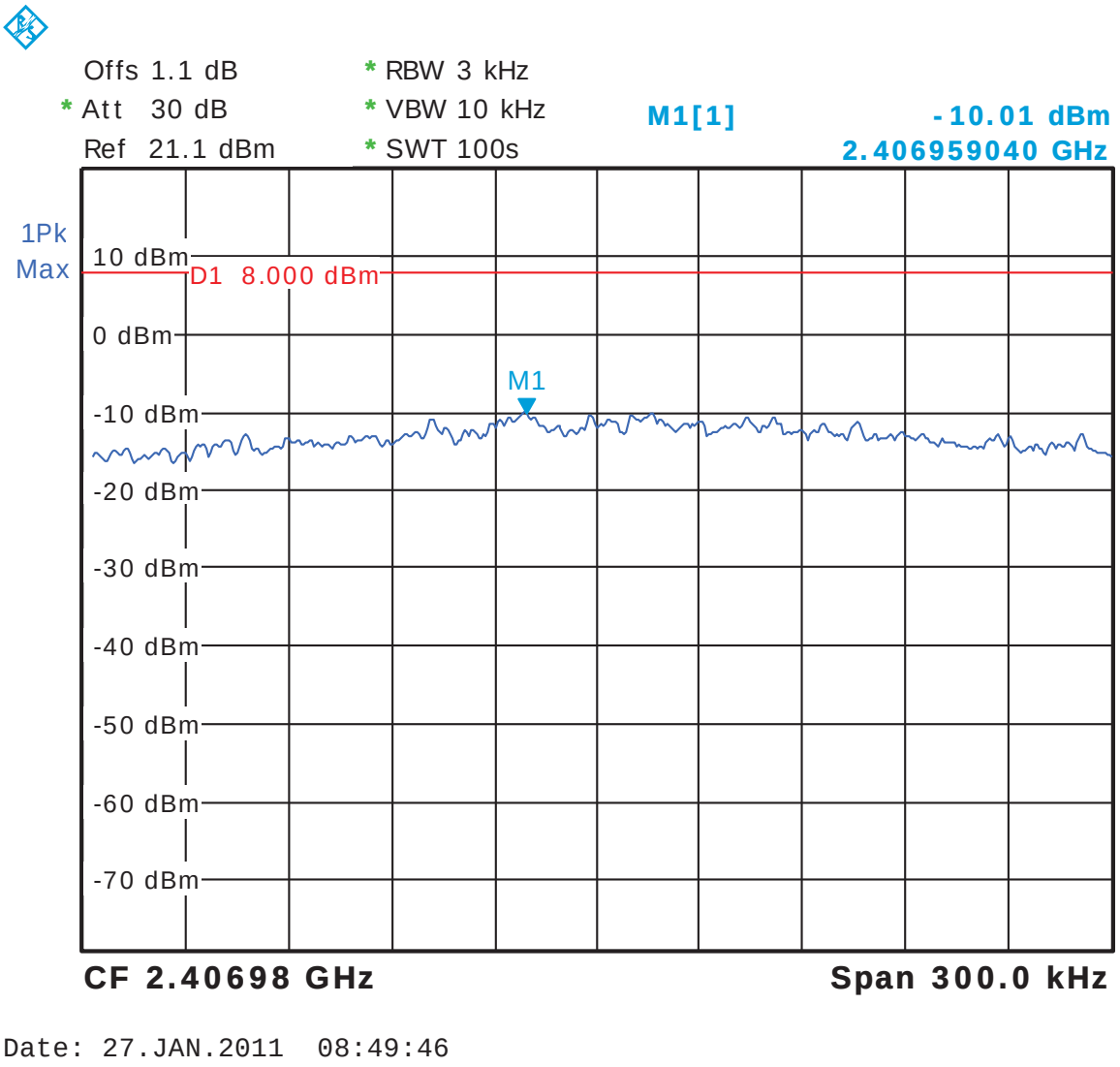
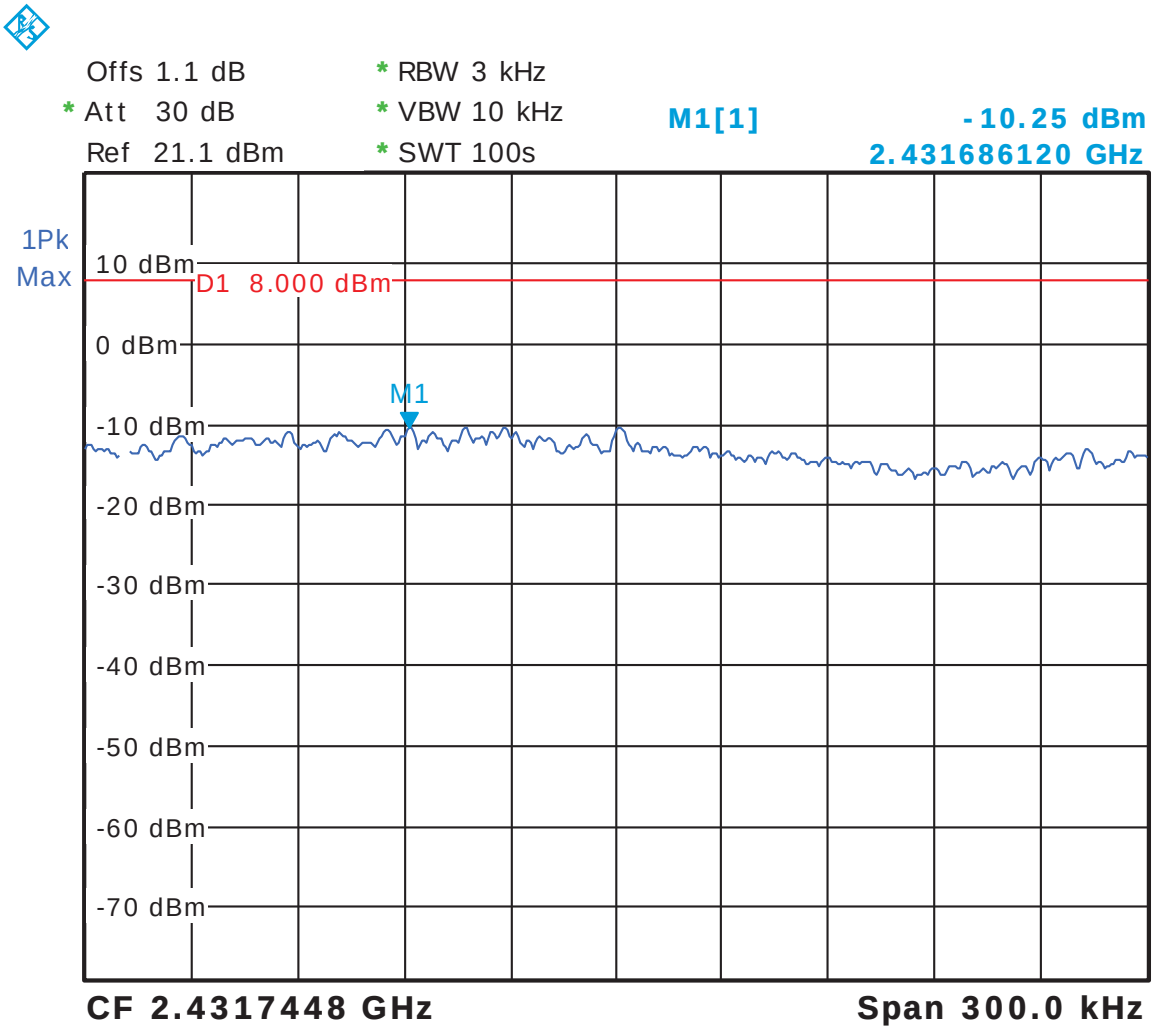
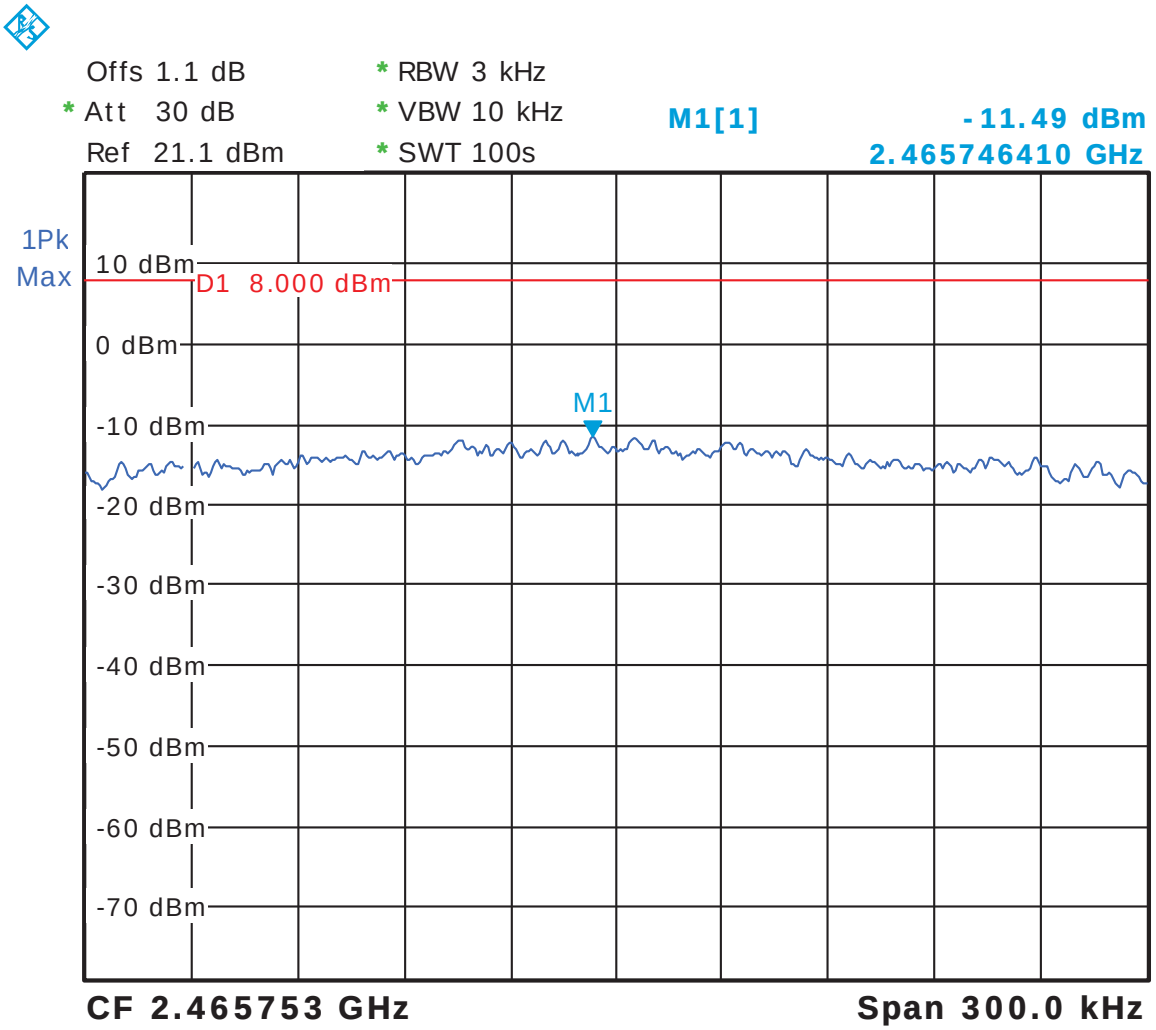


Figure 232: Peak Power Spectral Density for Operating Channel 2412MHz, Chain 1 – HT20 6.5 Mbps



Date: 27.JAN.2011 08:57:09

Figure 233: Peak Power Spectral Density for Operating Channel 2437MHz, Chain 1 – HT20 6.5 Mbps



Date: 27.JAN.2011 09:02:58

Figure 234: Peak Power Spectral Density for Operating Channel 2462MHz, Chain 1 – HT20 6.5 Mbps

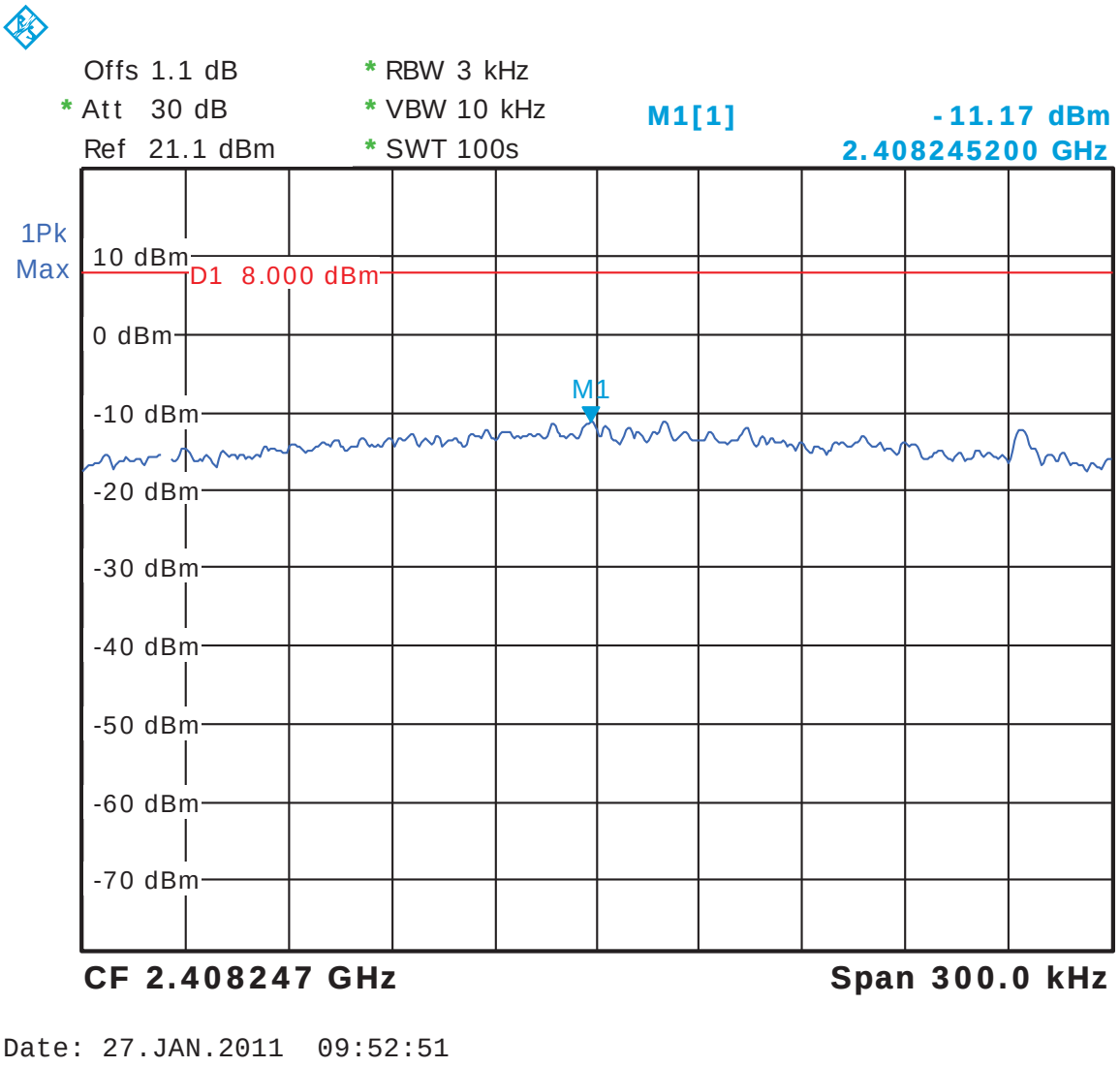


Figure 235: Peak Power Spectral Density for Operating Channel 2412MHz, Chain 2 – HT20 6.5 Mbps

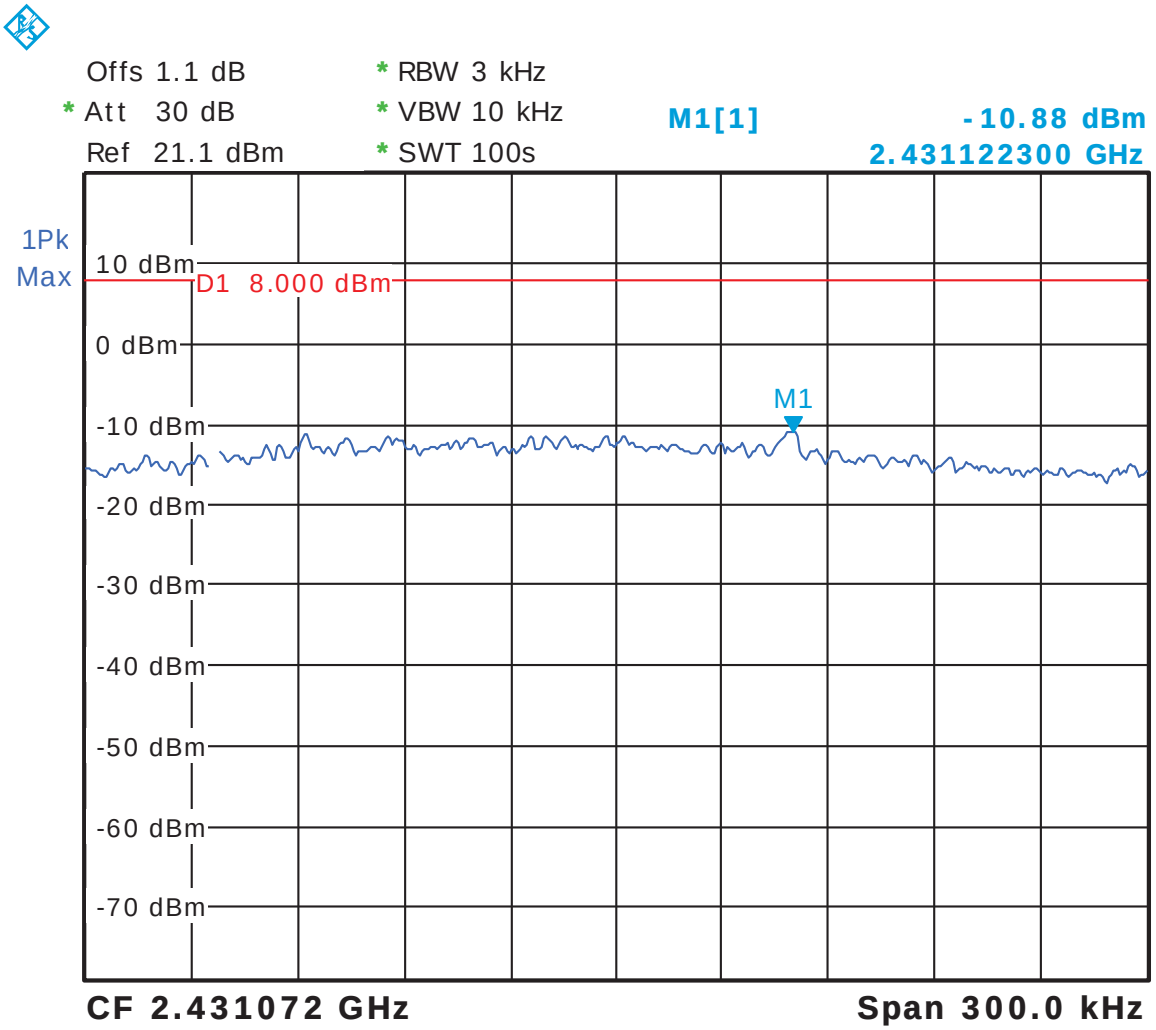
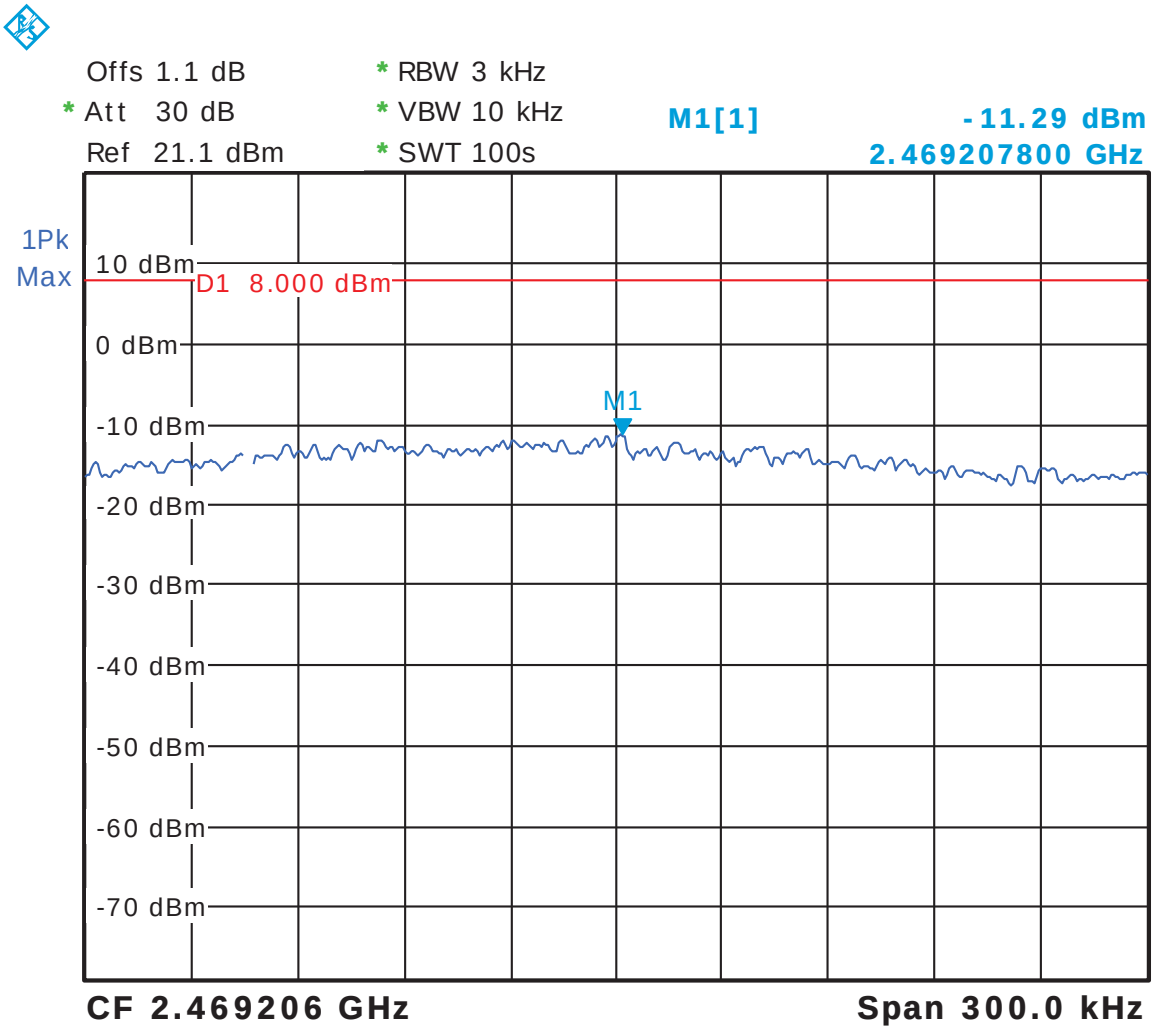
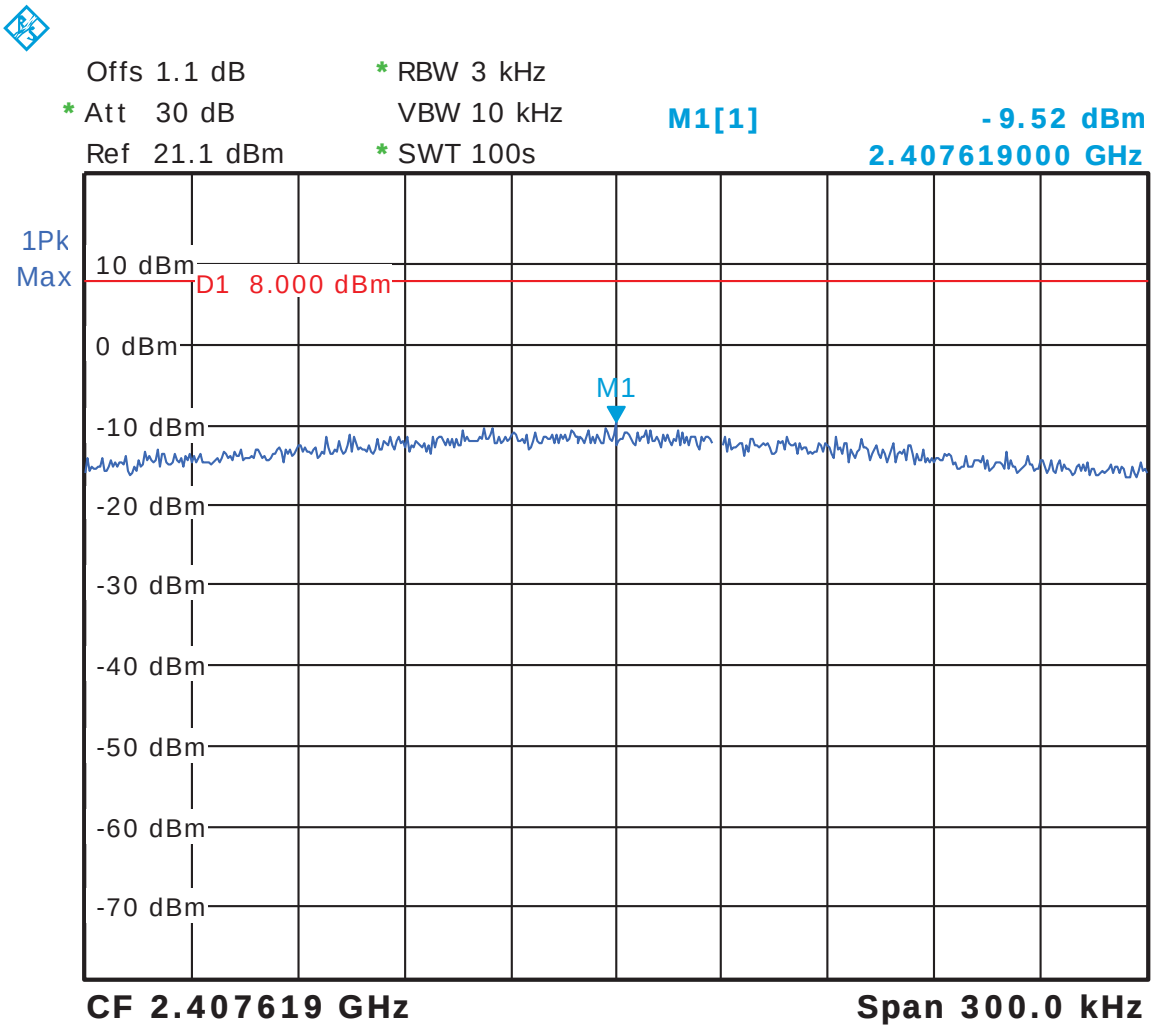


Figure 236: Peak Power Spectral Density for Operating Channel 2437MHz, Chain 2 – HT20 6.5 Mbps



Date: 27.JAN.2011 09:42:38

Figure 237: Peak Power Spectral Density for Operating Channel 2462MHz, Chain 2 – HT20 6.5 Mbps



Date: 10.MAR.2011 10:26:29

Figure 238: Peak Power Spectral Density for Operating Channel 2412MHz, Chain 0 – HT20 13 Mbps

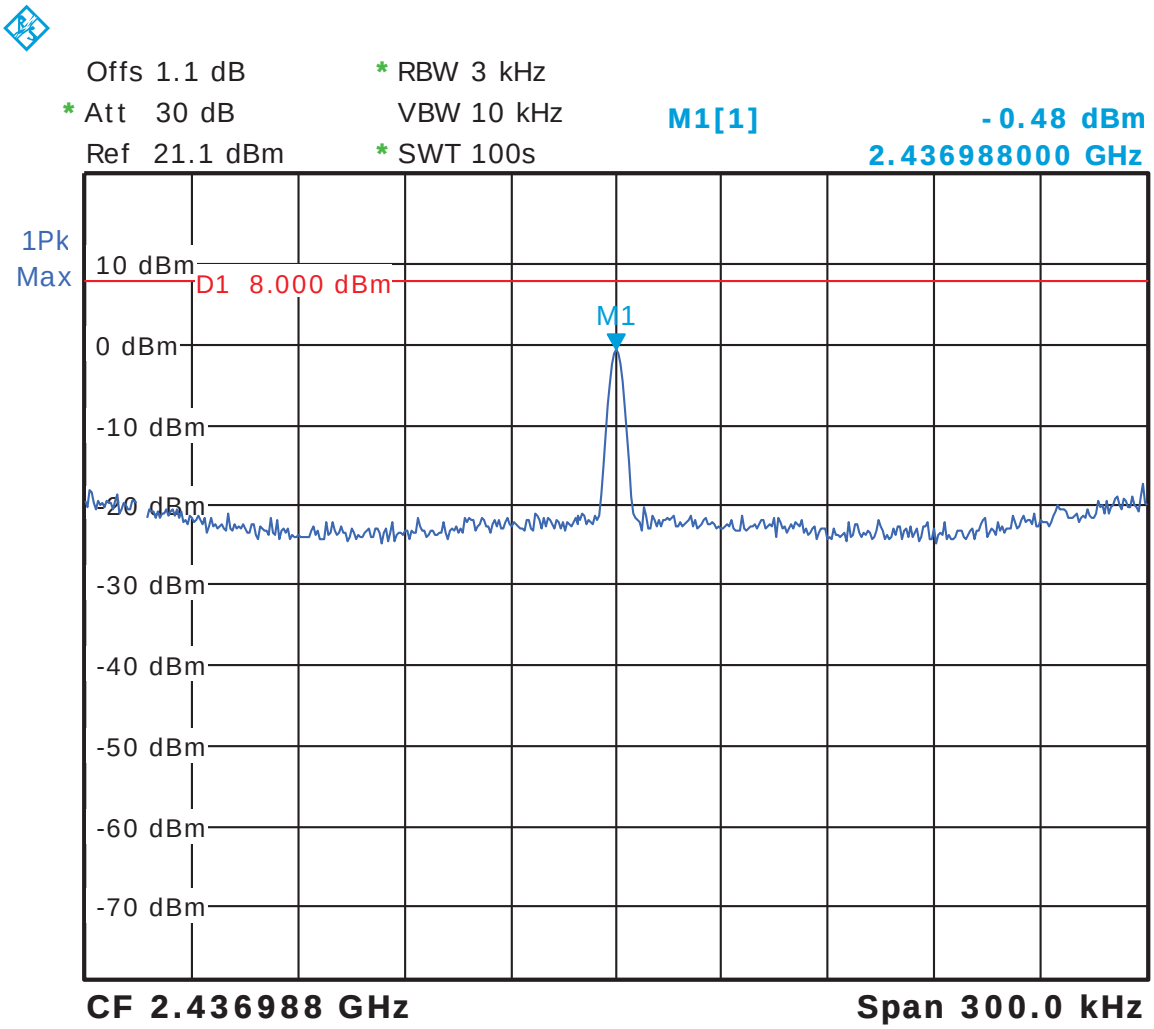
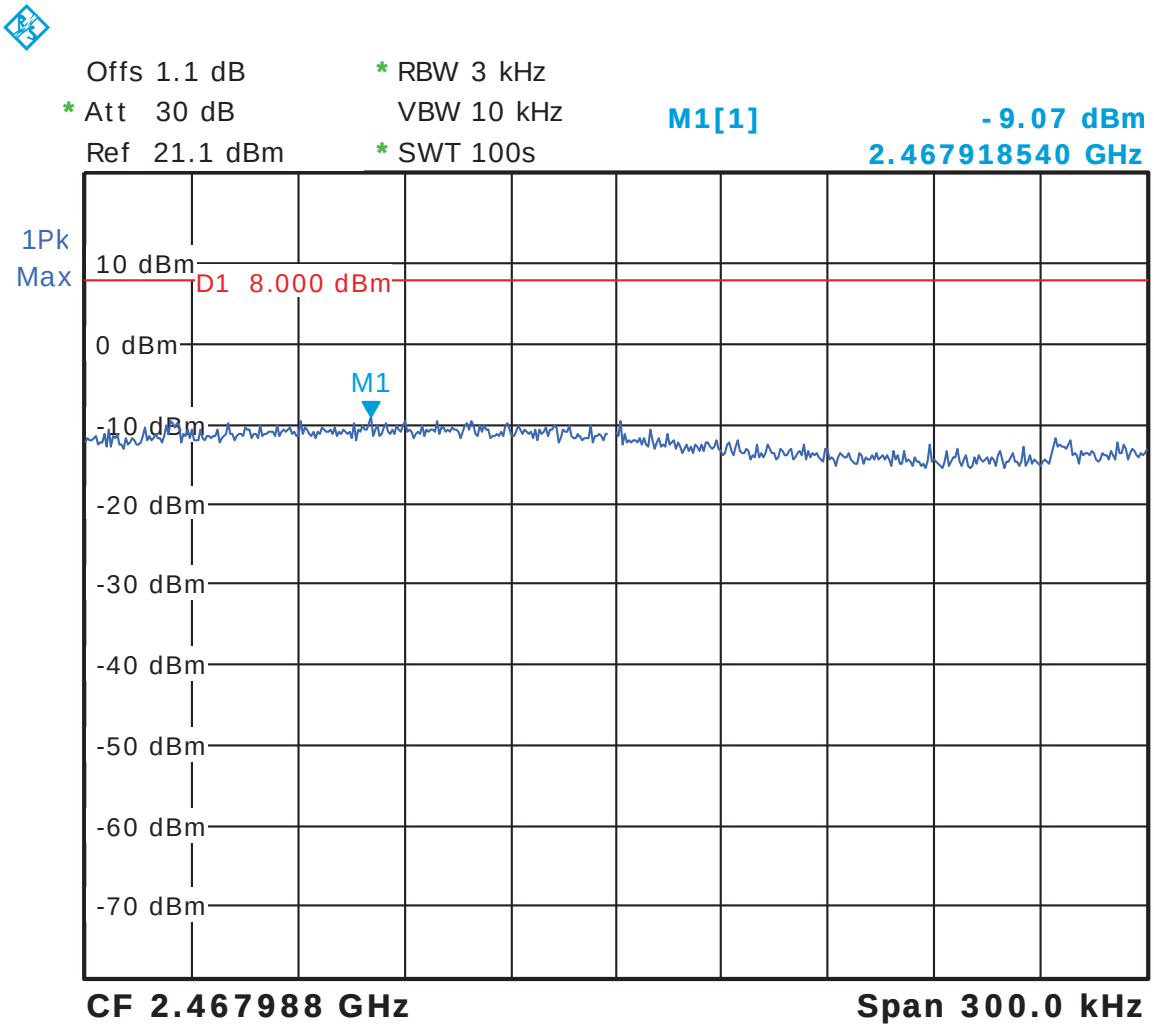


Figure 239: Peak Power Spectral Density for Operating Channel 2437MHz, Chain 0 – HT20 13 Mbps



Date: 10.MAR.2011 10:38:34

Figure 240: Peak Power Spectral Density for Operating Channel 2462MHz, Chain 0 – HT20 13 Mbps

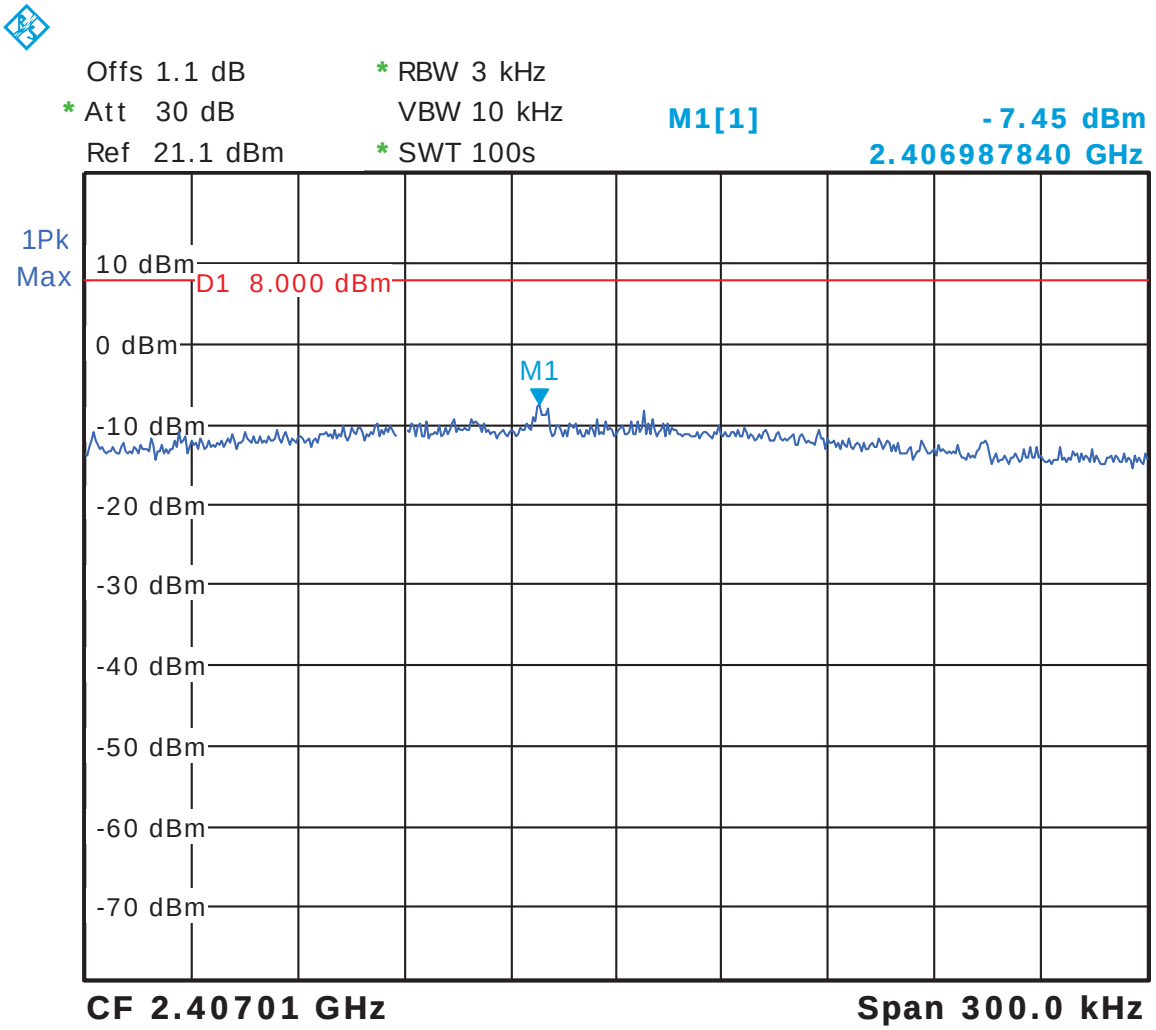


Figure 241: Peak Power Spectral Density for Operating Channel 2412MHz, Chain 1 – HT20 13 Mbps

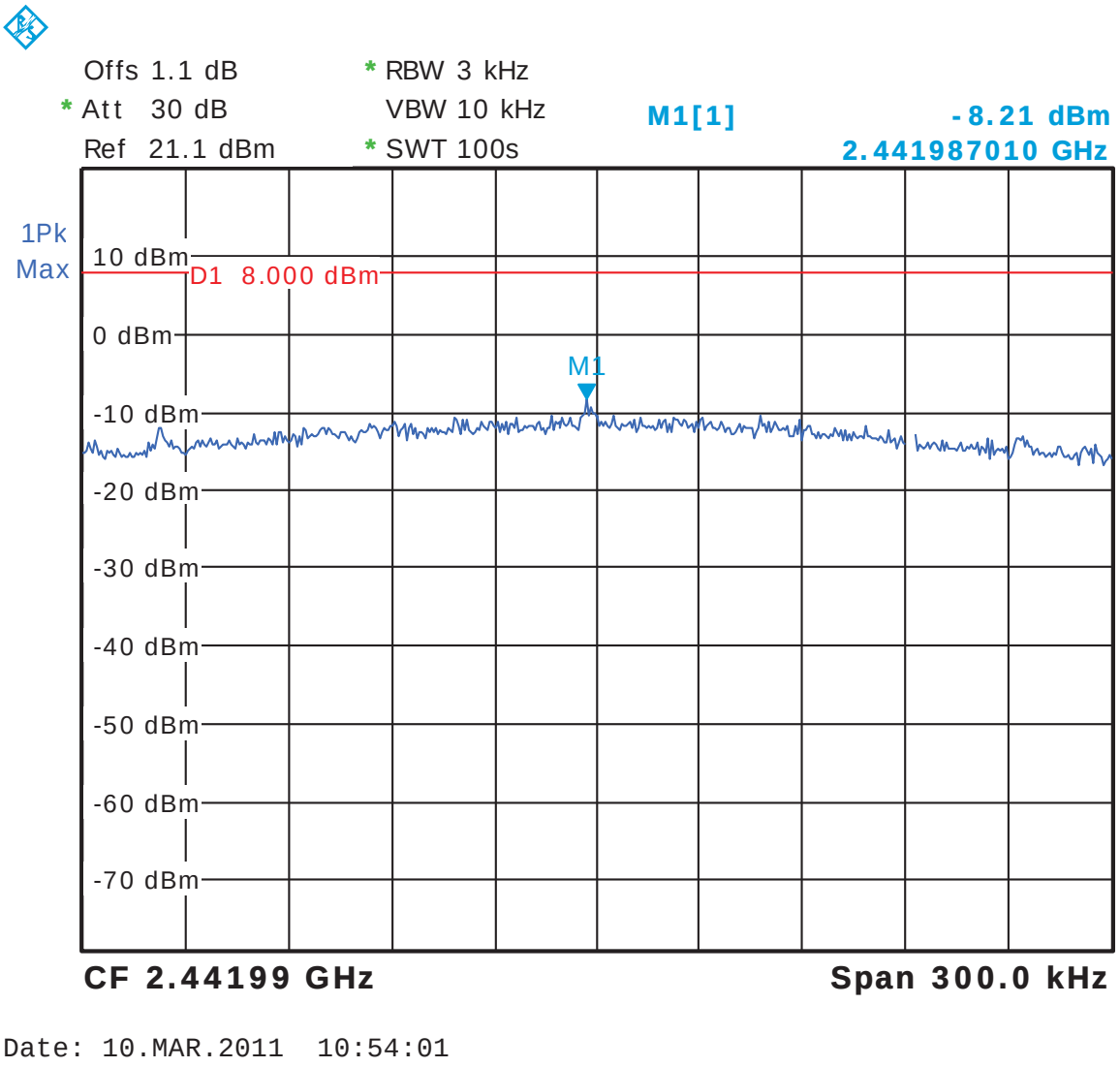


Figure 242: Peak Power Spectral Density for Operating Channel 2437MHz, Chain 1 – HT20 13 Mbps

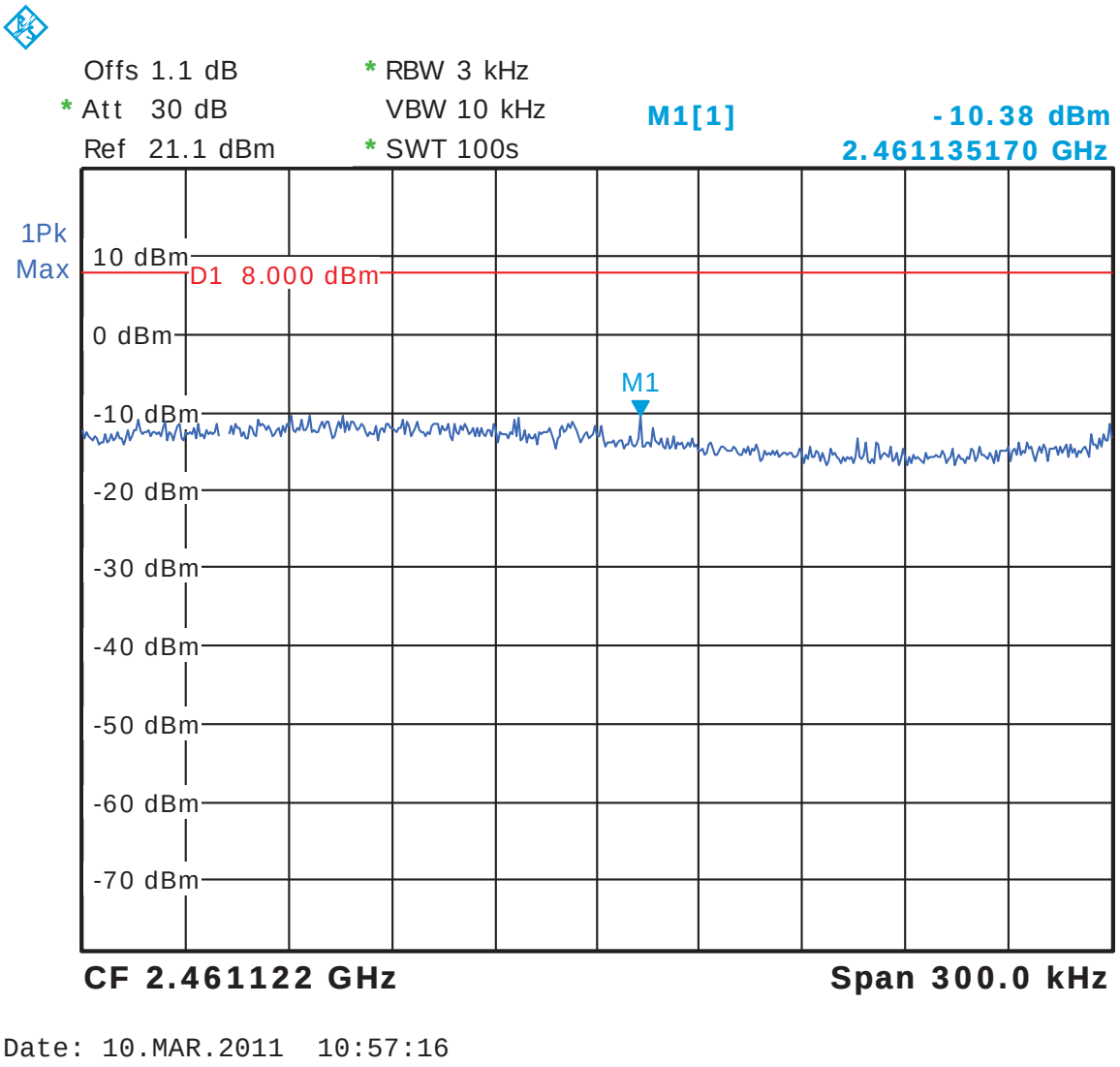


Figure 243: Peak Power Spectral Density for Operating Channel 2462MHz, Chain 1 – HT20 13 Mbps

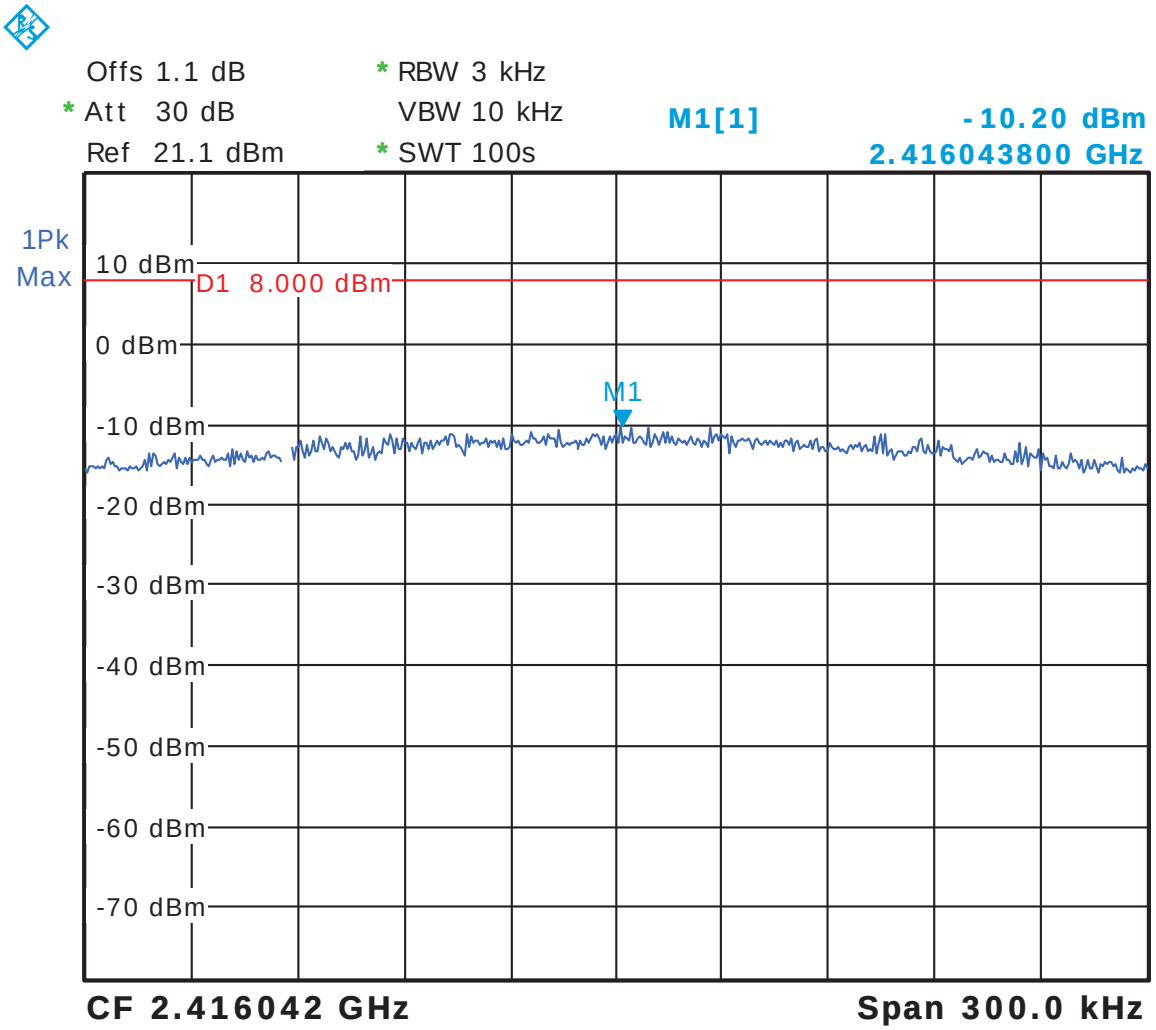


Figure 244: Peak Power Spectral Density for Operating Channel 2412MHz, Chain 0 – HT20 19.5 Mbps

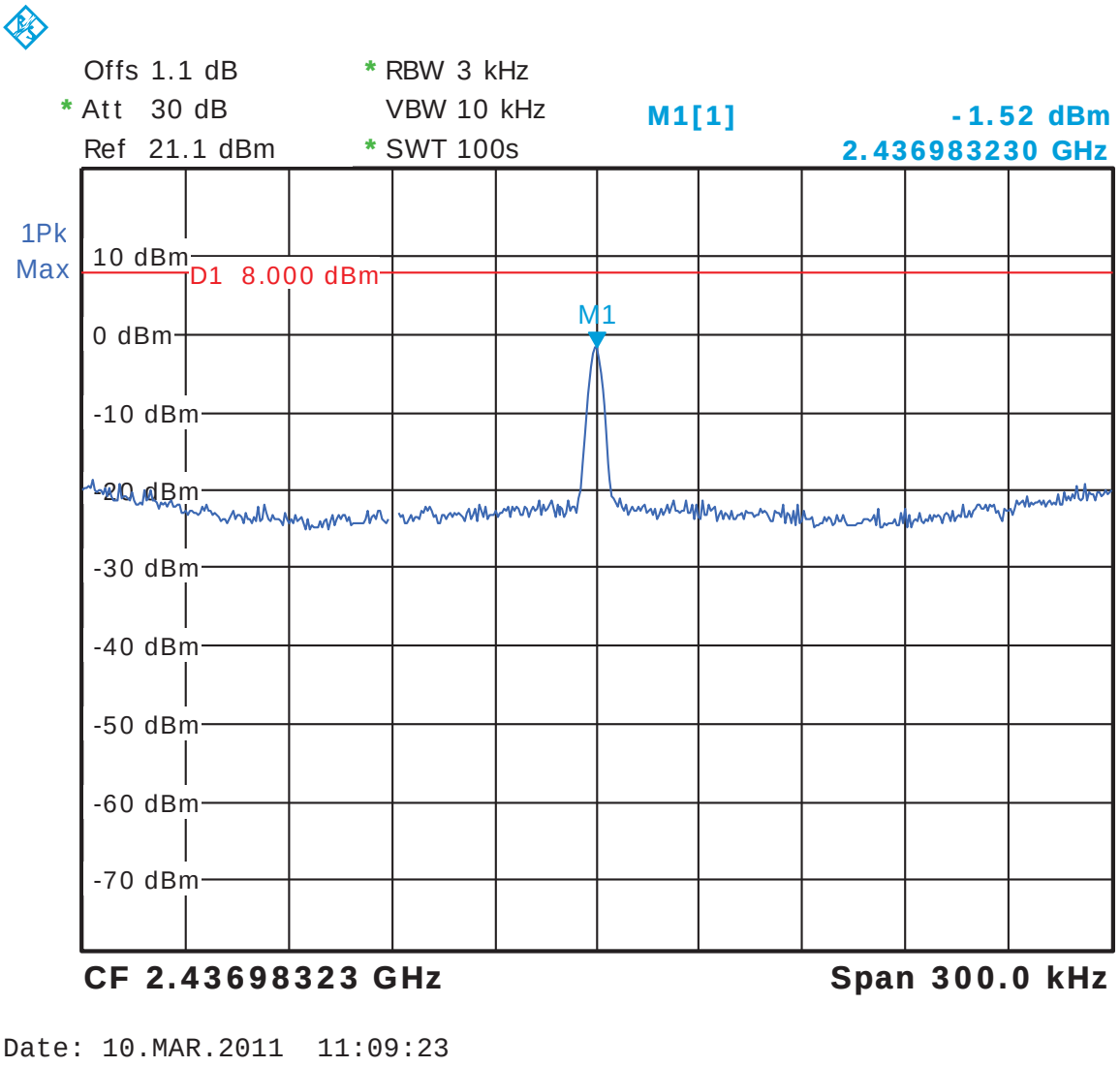


Figure 245: Peak Power Spectral Density for Operating Channel 2437MHz, Chain 0 – HT20 19.5 Mbps

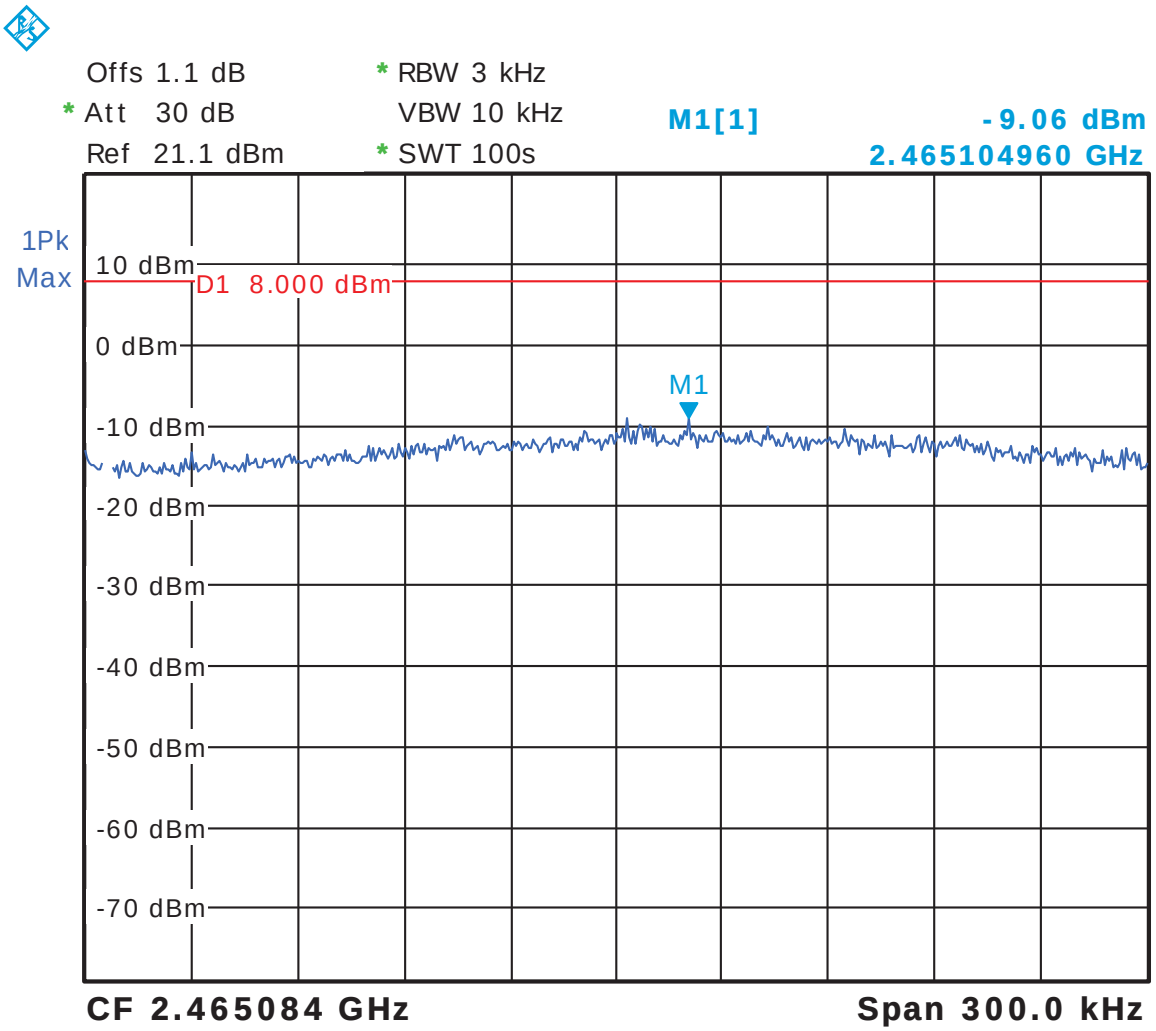


Figure 246: Peak Power Spectral Density for Operating Channel 2462MHz, Chain 0 – HT20 19.5 Mbps

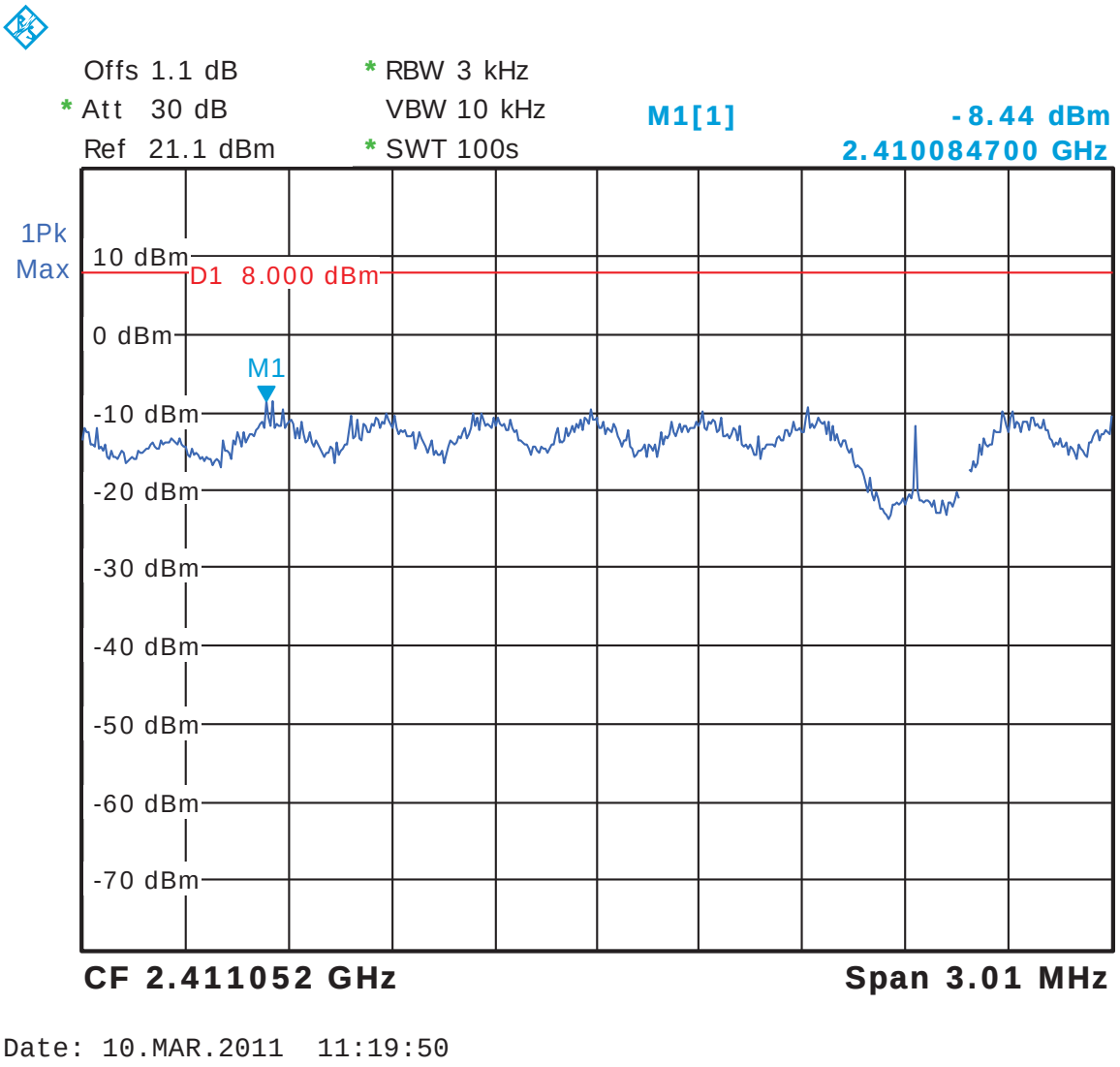


Figure 247: Peak Power Spectral Density for Operating Channel 2412MHz, Chain 1 – HT20 19.5 Mbps

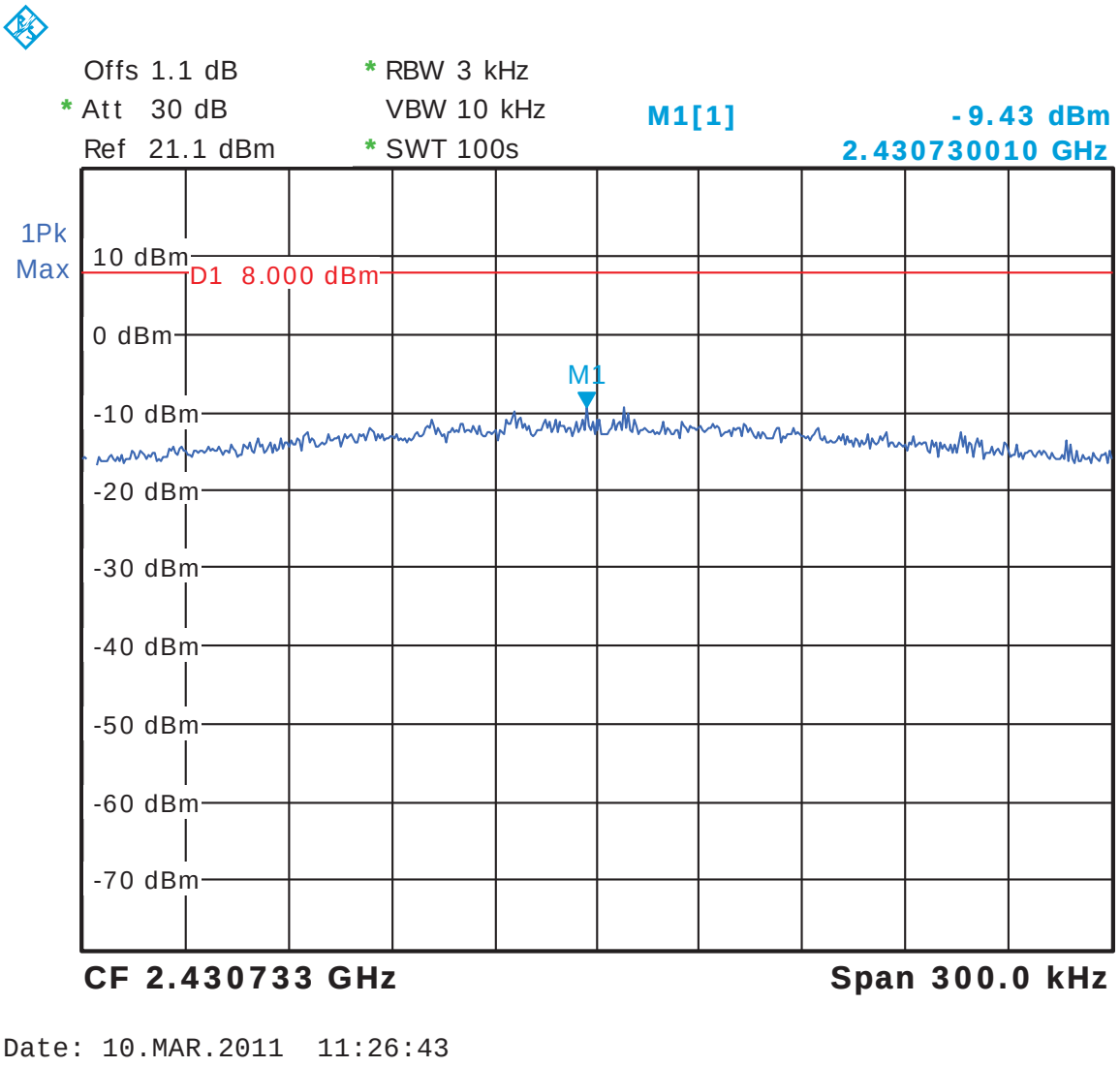


Figure 248: Peak Power Spectral Density for Operating Channel 2437MHz, Chain 1 – HT20 19.5 Mbps

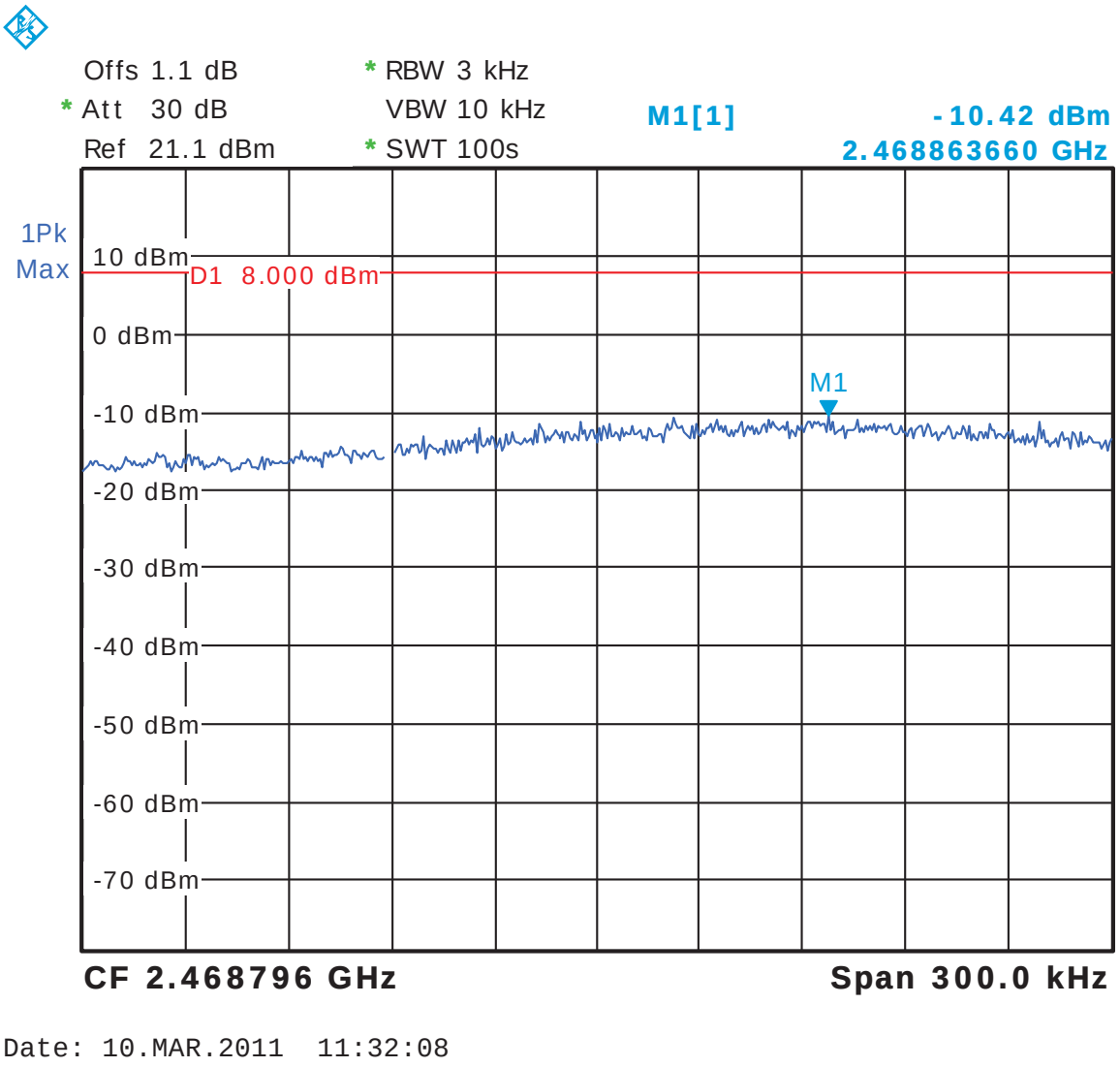


Figure 249: Peak Power Spectral Density for Operating Channel 2462MHz, Chain 1 – HT20 19.5 Mbps

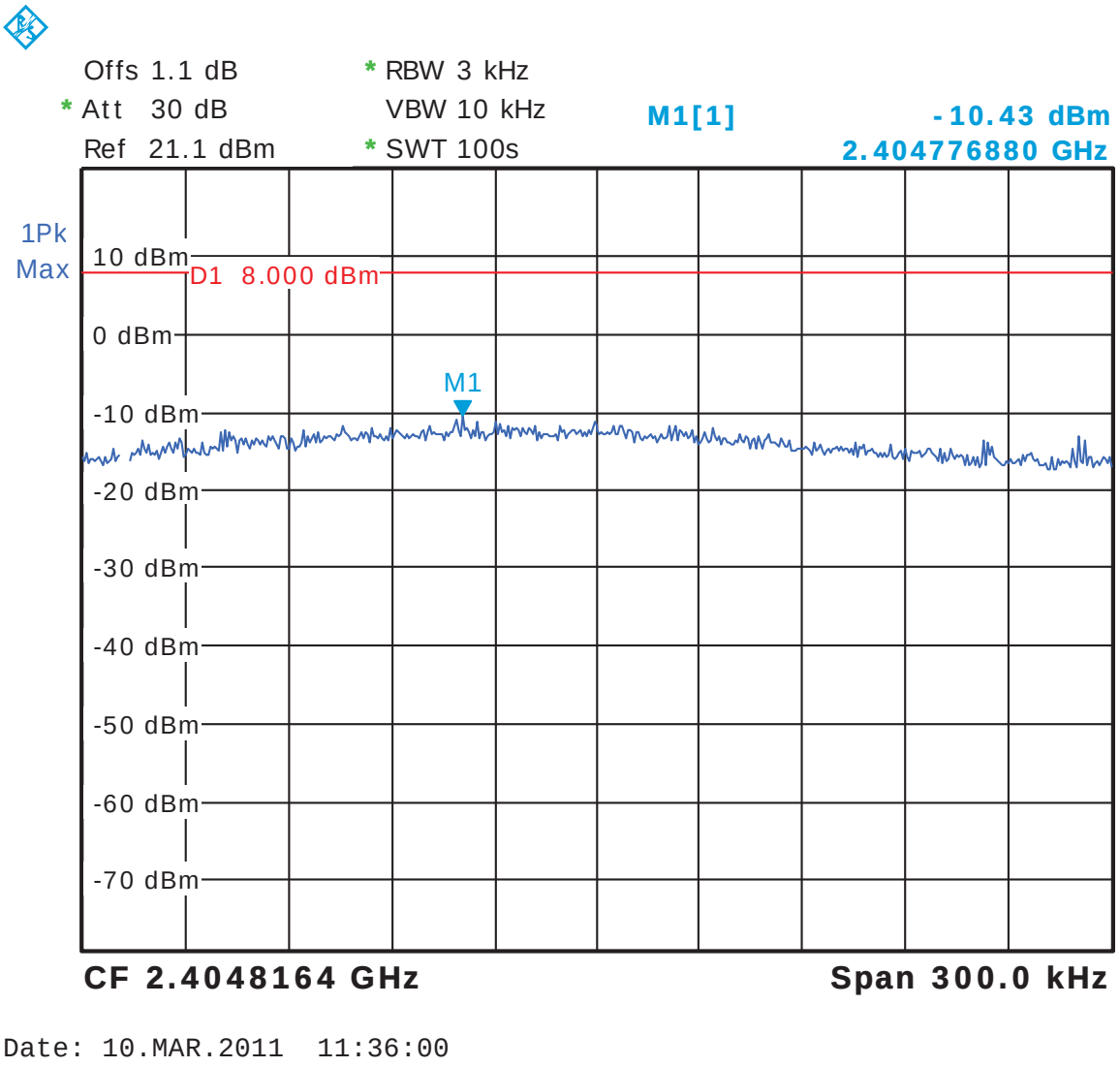


Figure 250: Peak Power Spectral Density for Operating Channel 2412MHz, Chain 2 – HT20 19.5 Mbps

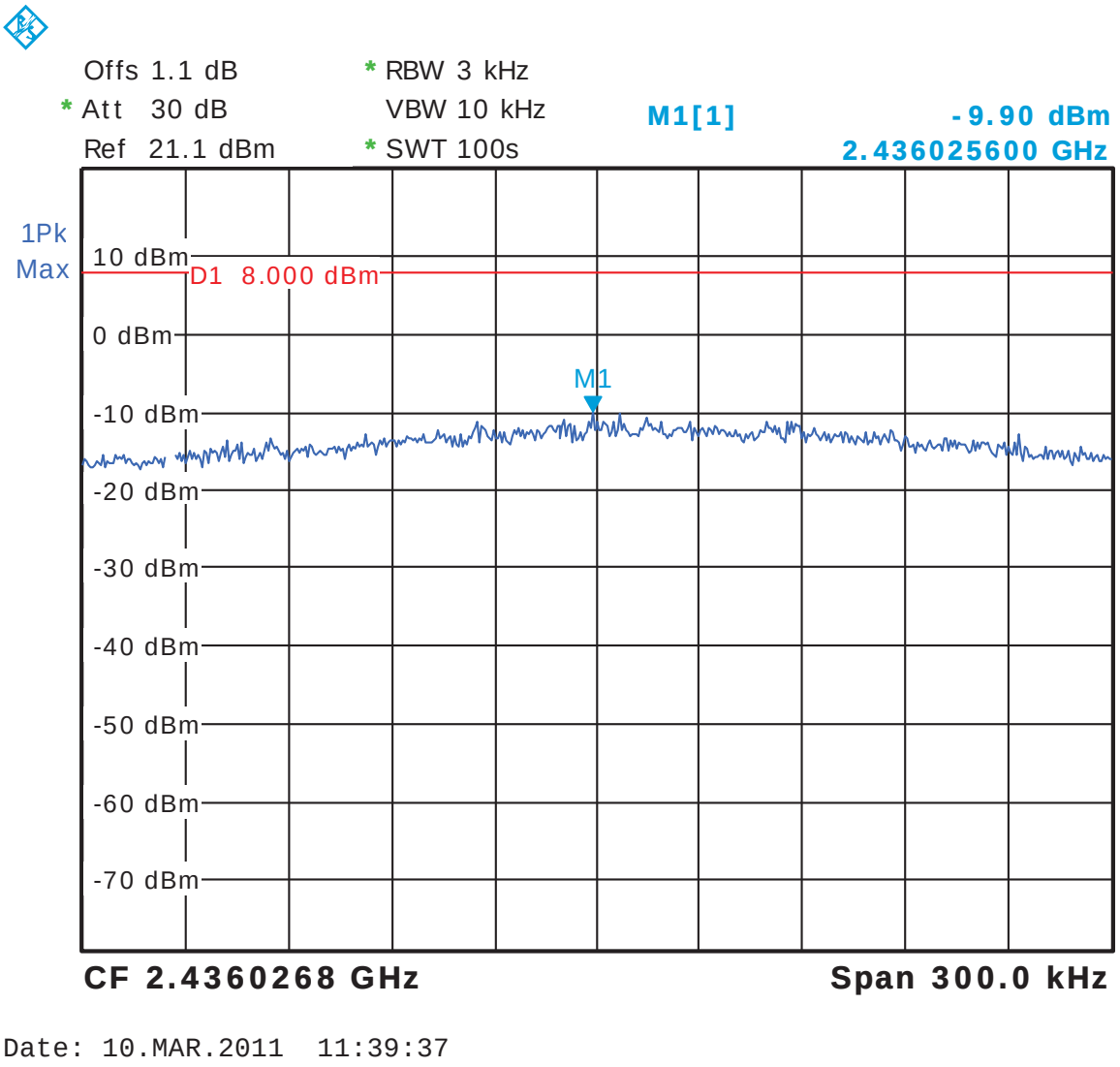


Figure 251: Peak Power Spectral Density for Operating Channel 2437MHz, Chain 2 – HT20 19.5 Mbps

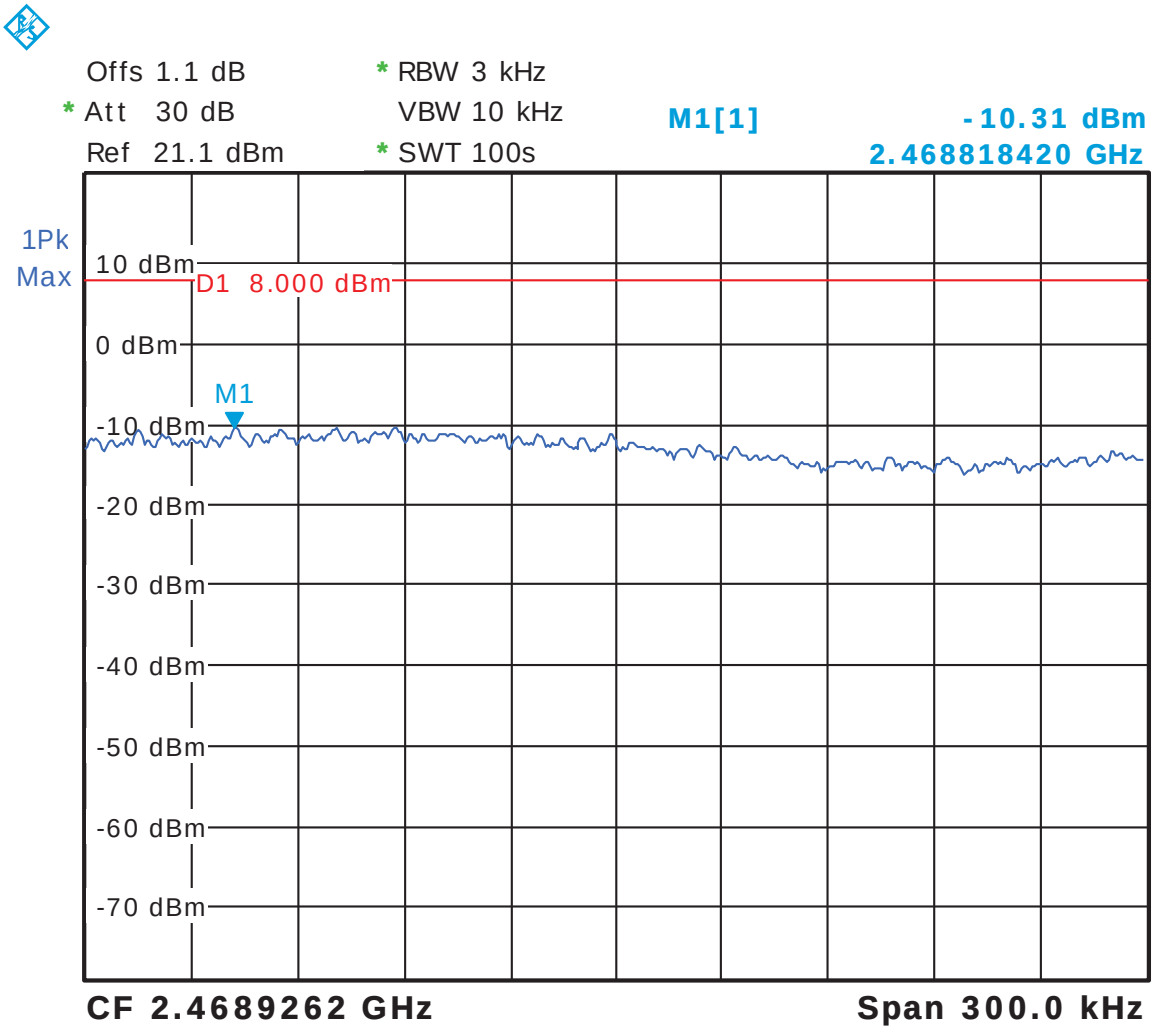
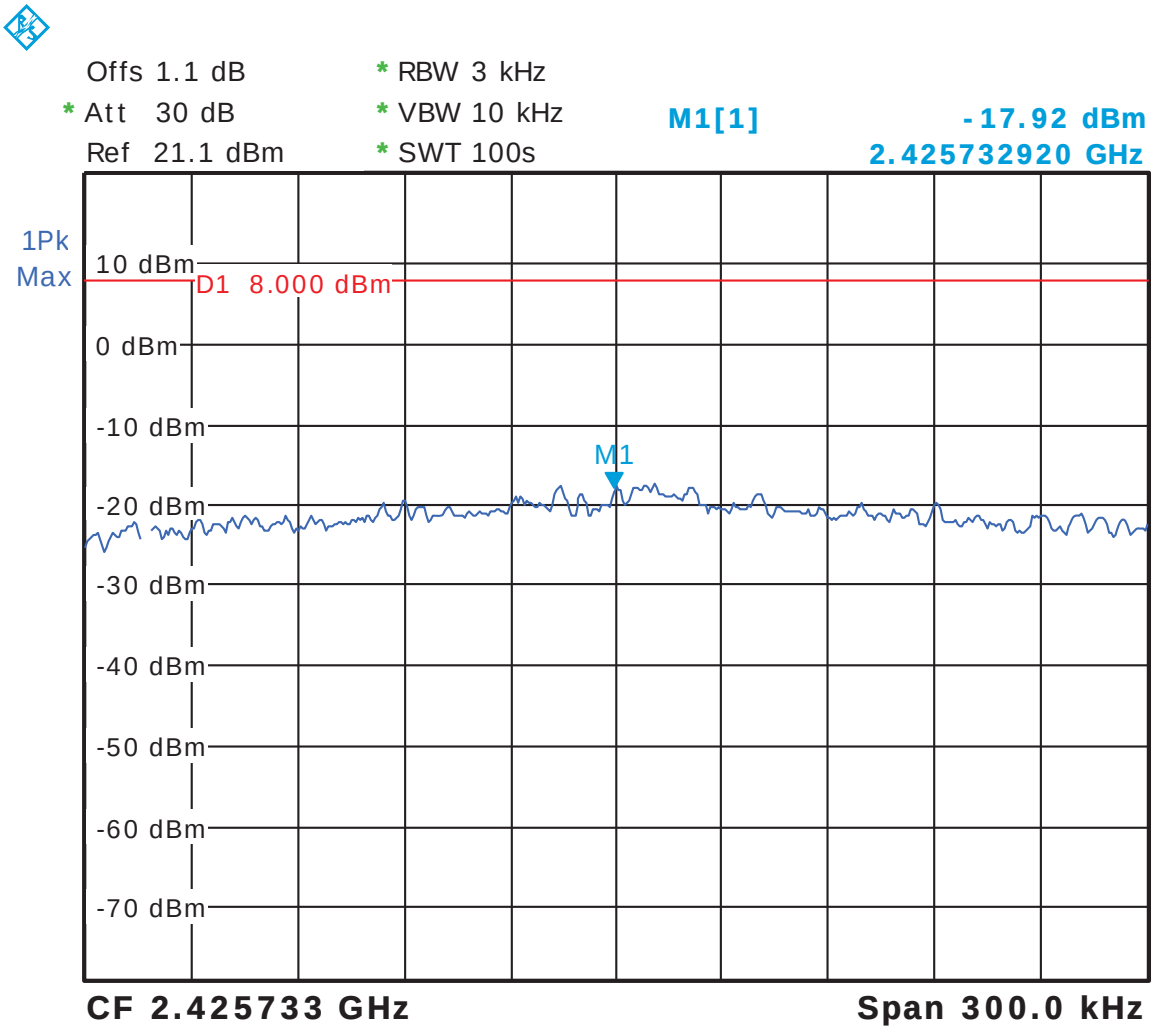
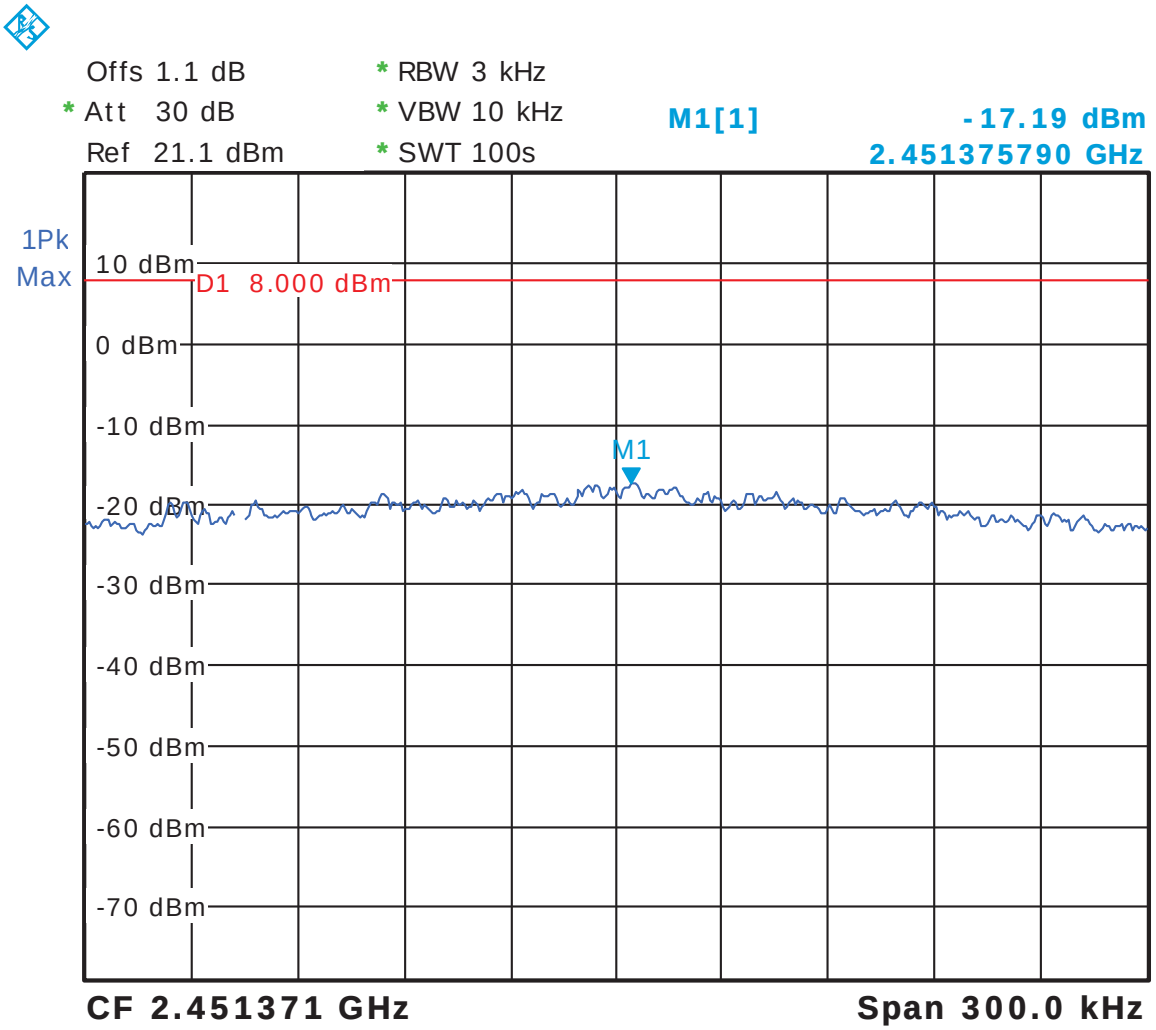


Figure 252: Peak Power Spectral Density for Operating Channel 2462MHz, Chain 2 – HT20 19.5 Mbps



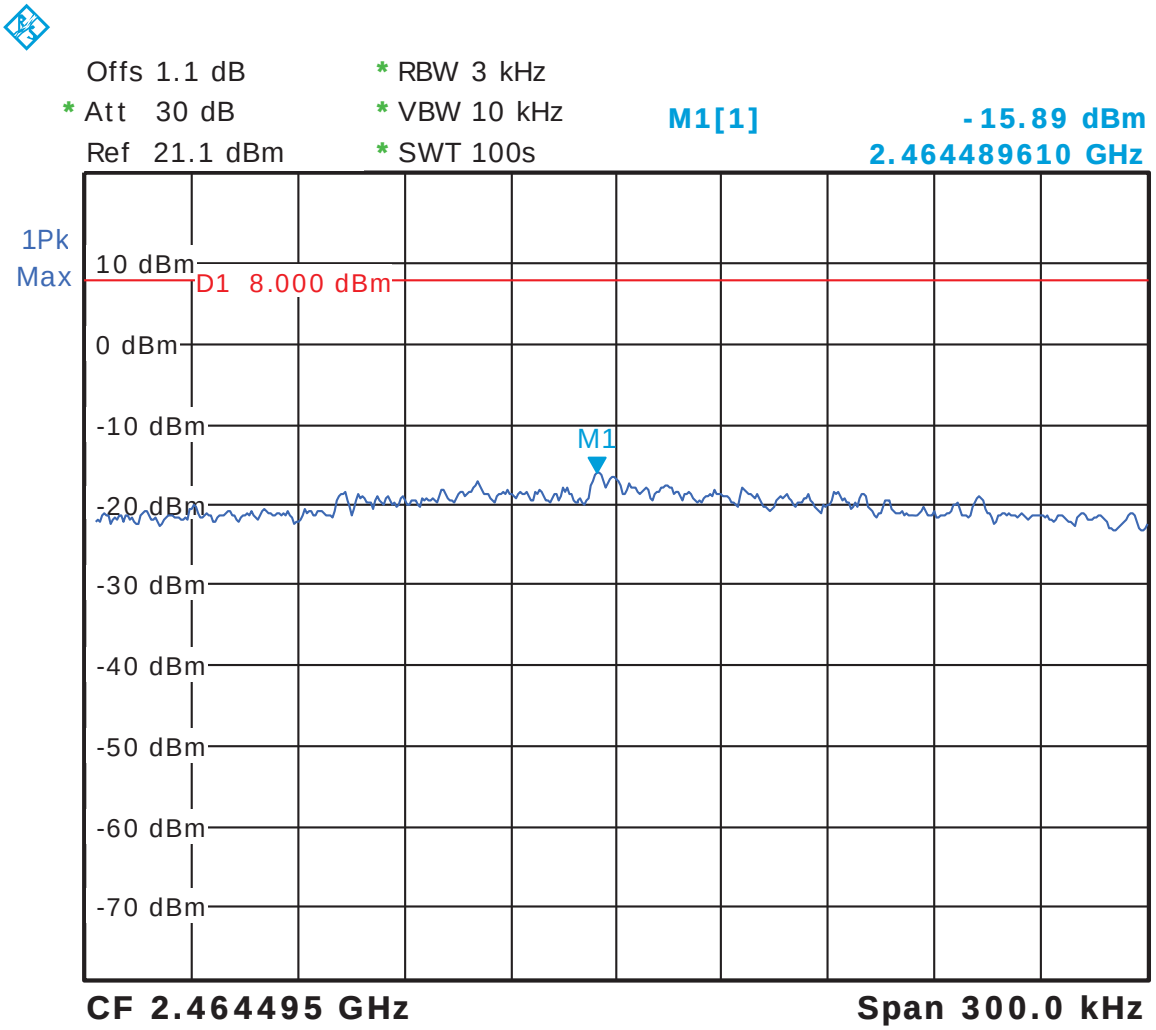
Date: 26.JAN.2011 16:17:24

Figure 253: Peak Power Spectral Density for Operating Channel 2422MHz, Chain 0 – HT40 13.5 Mbps



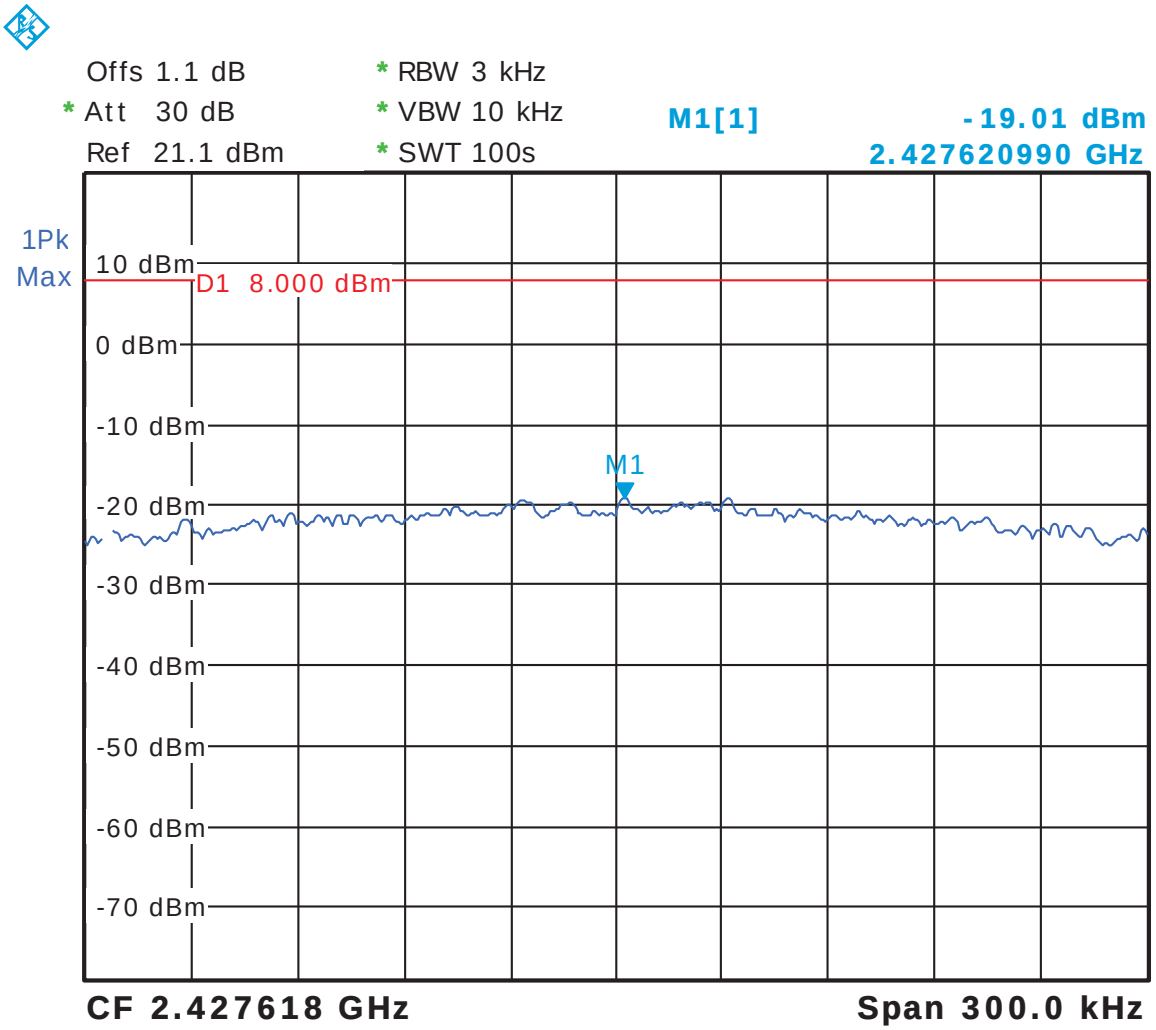
Date: 26.JAN.2011 16:21:10

Figure 254: Peak Power Spectral Density for Operating Channel 2437MHz, Chain 0 – HT40 13.5 Mbps



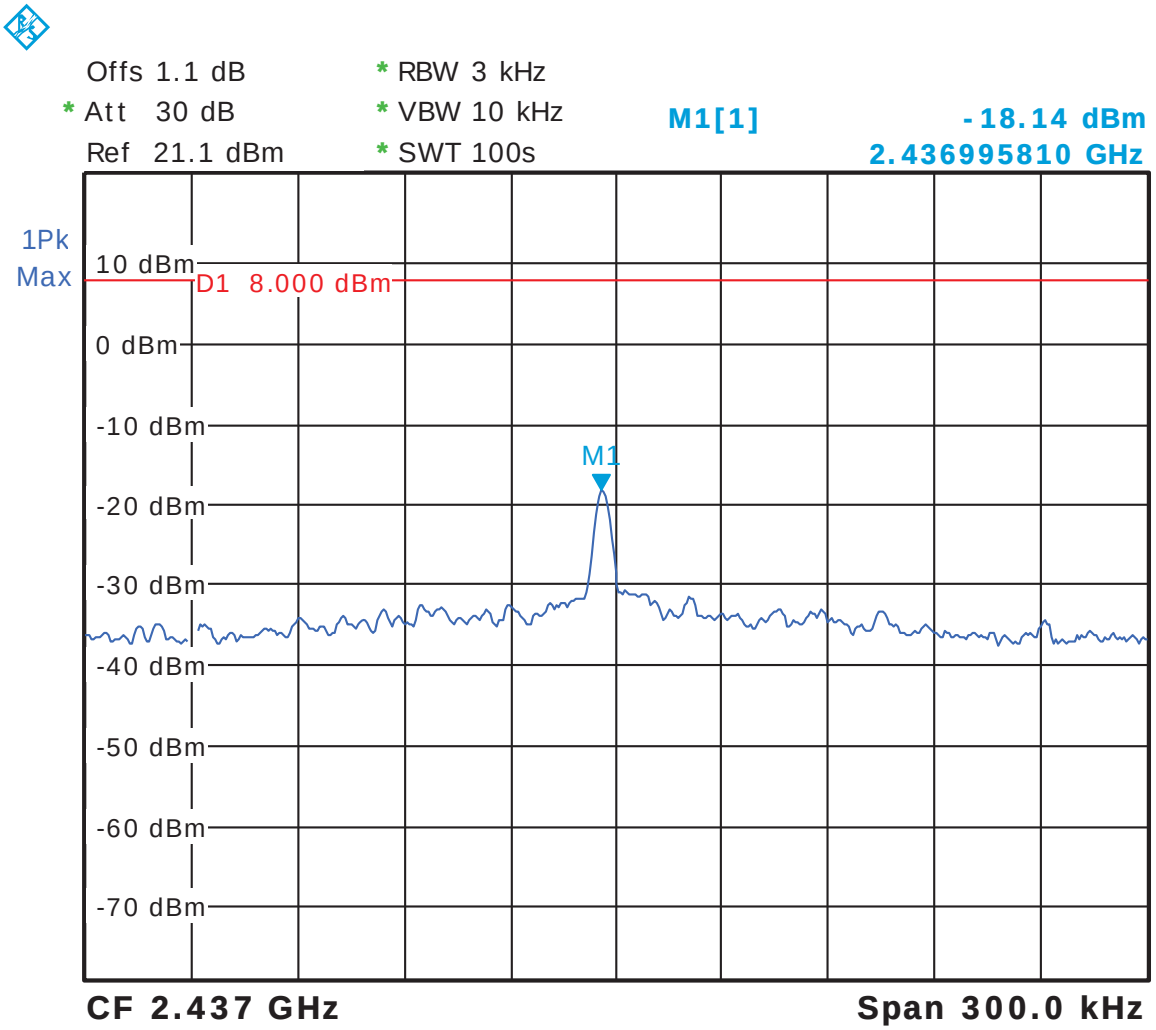
Date: 26.JAN.2011 16:28:20

Figure 255: Peak Power Spectral Density for Operating Channel 2452MHz, Chain 0 – HT40 13.5 Mbps



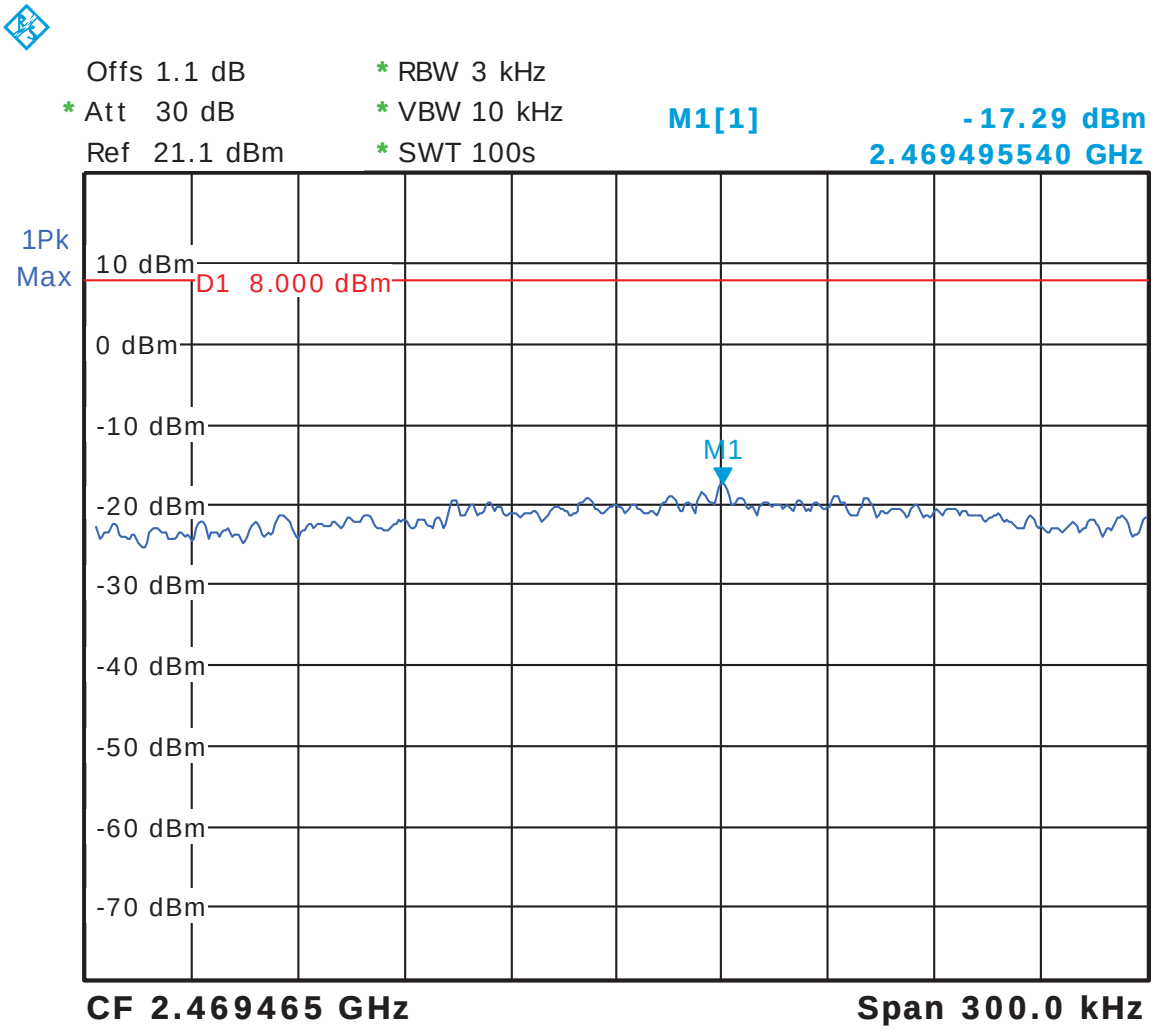
Date: 27.JAN.2011 09:08:51

Figure 256: Peak Power Spectral Density for Operating Channel 2422MHz, Chain 1 – HT40 13.5 Mbps



Date: 27.JAN.2011 09:14:30

Figure 257: Peak Power Spectral Density for Operating Channel 2437MHz, Chain 1 – HT40 13.5 Mbps



Date: 27.JAN.2011 09:21:21

Figure 258: Peak Power Spectral Density for Operating Channel 2452MHz, Chain 1 – HT40 13.5 Mbps

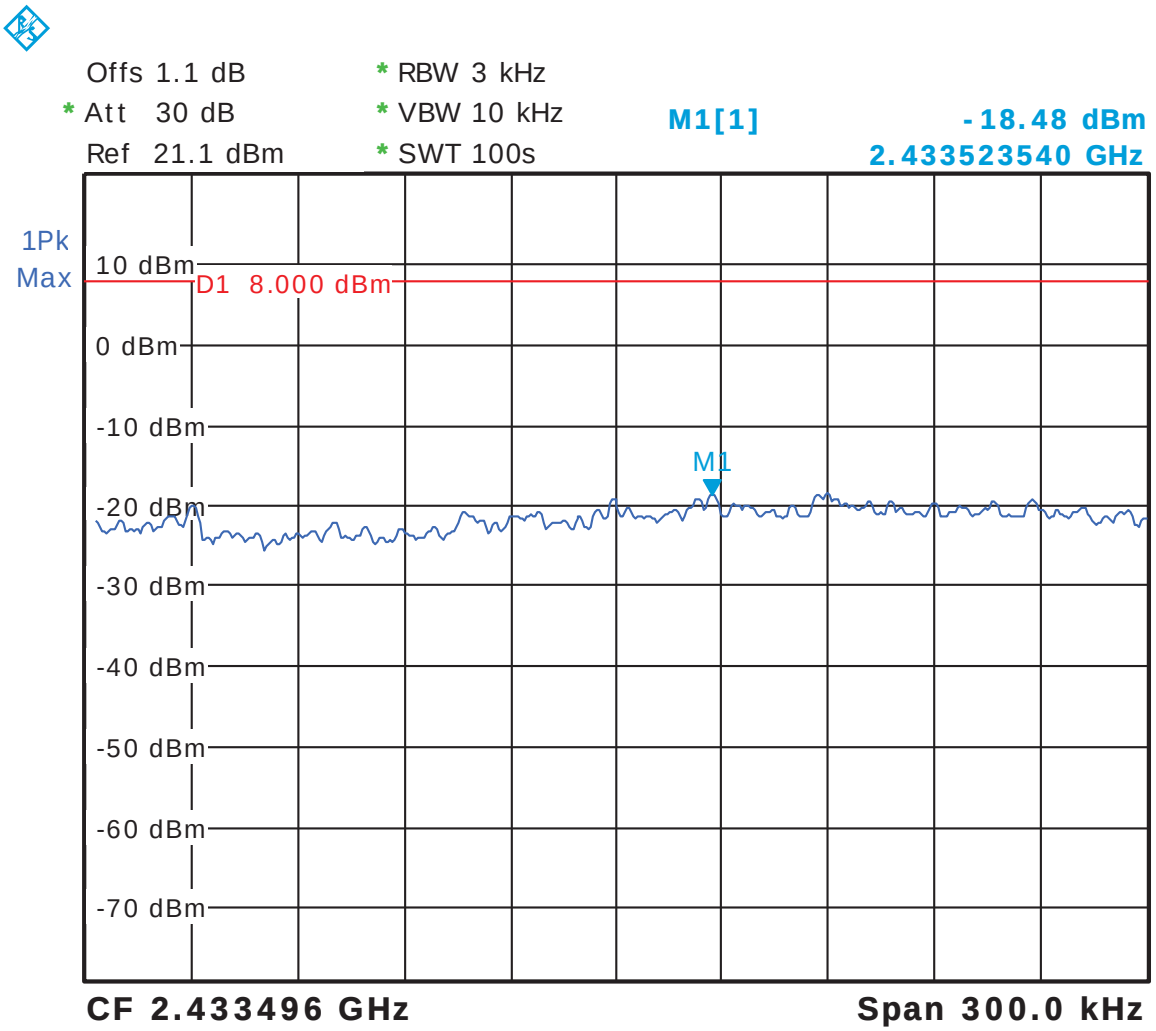
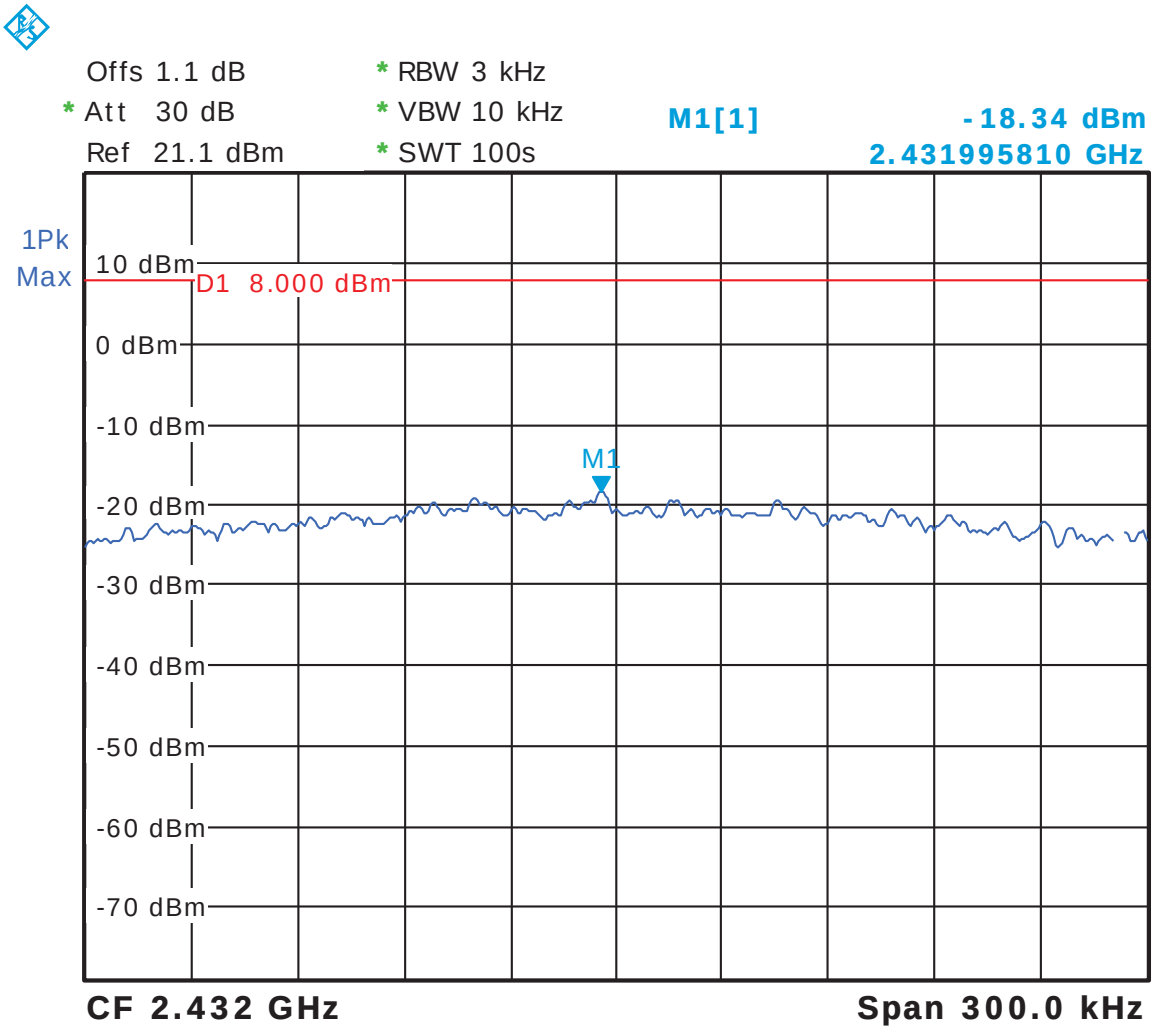
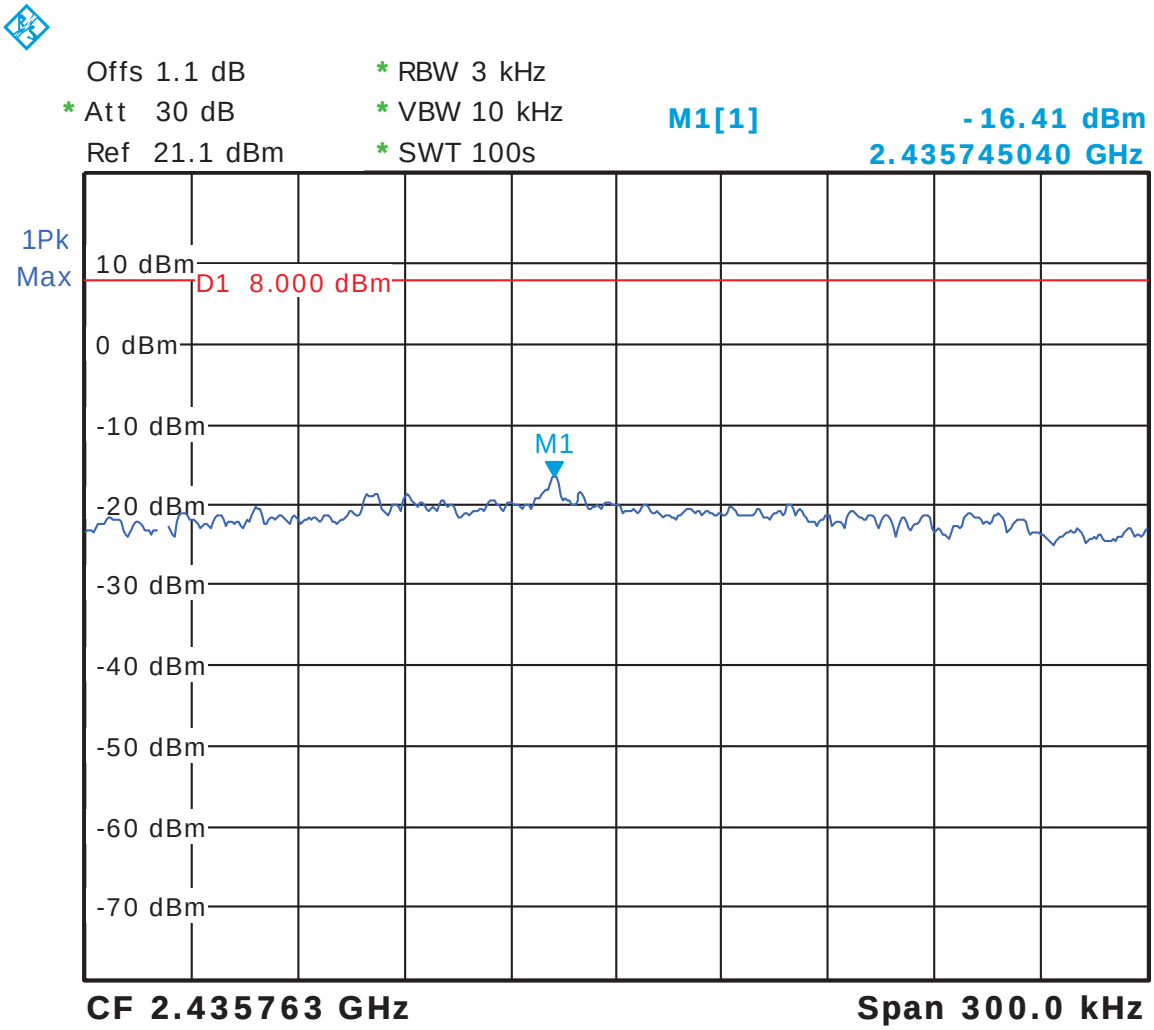


Figure 259: Peak Power Spectral Density for Operating Channel 2422MHz, Chain 2 – HT40 13.5 Mbps



Date: 27.JAN.2011 09:32:27

Figure 260: Peak Power Spectral Density for Operating Channel 2437MHz, Chain 2 – HT40 13.5 Mbps



Date: 27.JAN.2011 09:25:54

Figure 261: Peak Power Spectral Density for Operating Channel 2452MHz, Chain 2 – HT40 13.5 Mbps

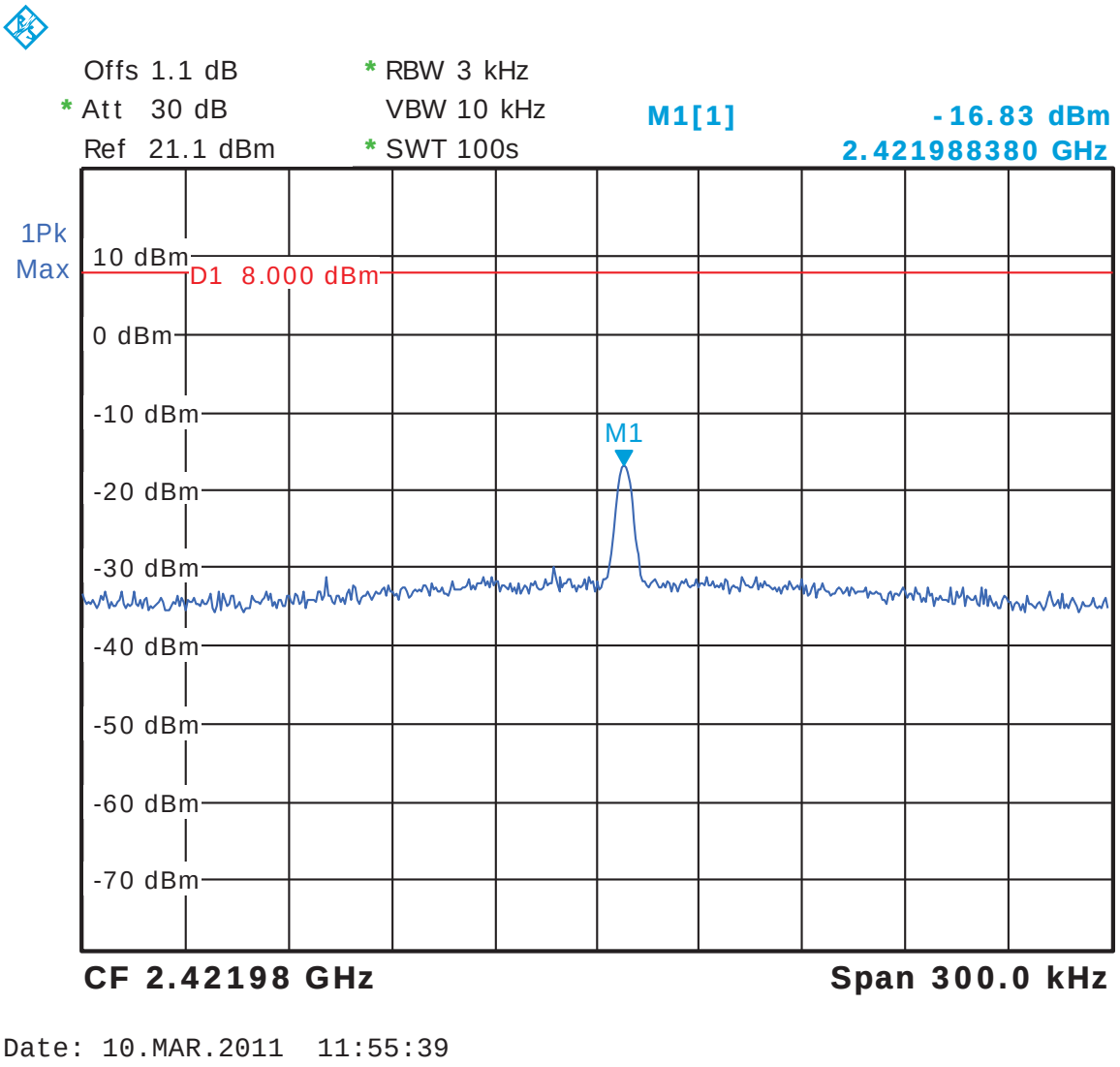


Figure 262: Peak Power Spectral Density for Operating Channel 2422MHz, Chain 0 – HT40 27 Mbps

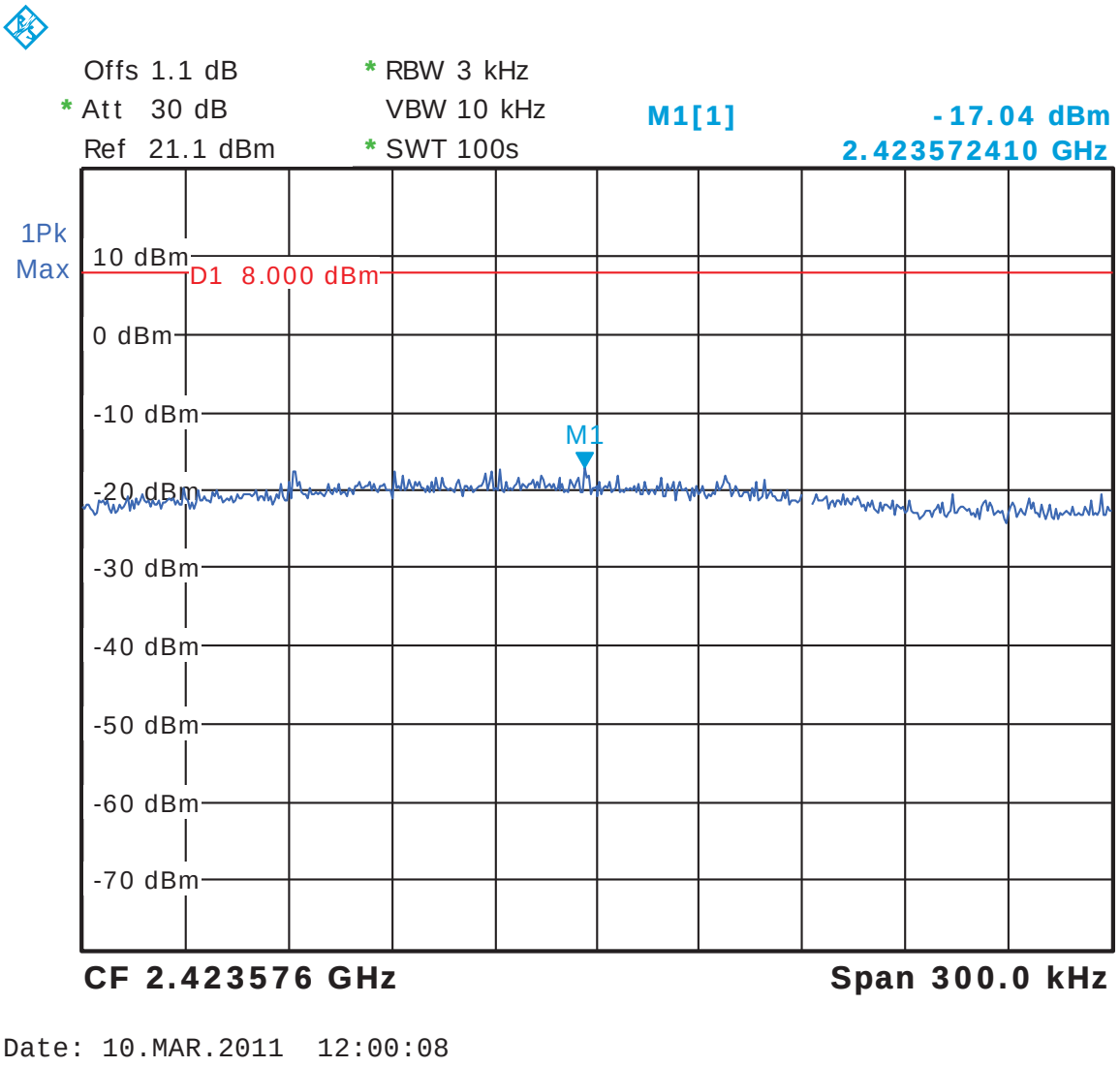


Figure 263: Peak Power Spectral Density for Operating Channel 2437MHz, Chain 0 – HT40 27 Mbps

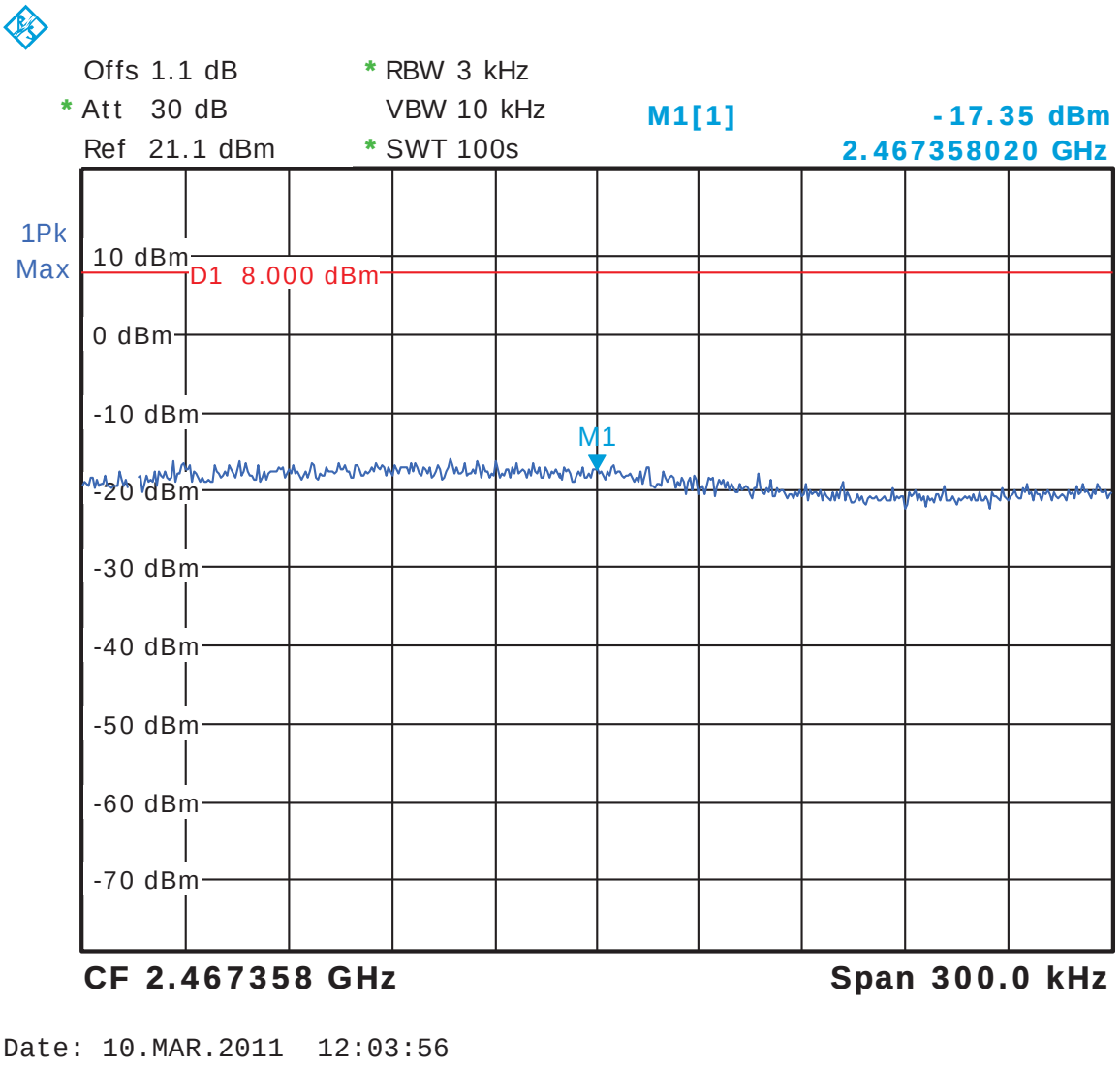


Figure 264: Peak Power Spectral Density for Operating Channel 2452MHz, Chain 0 – HT40 27 Mbps

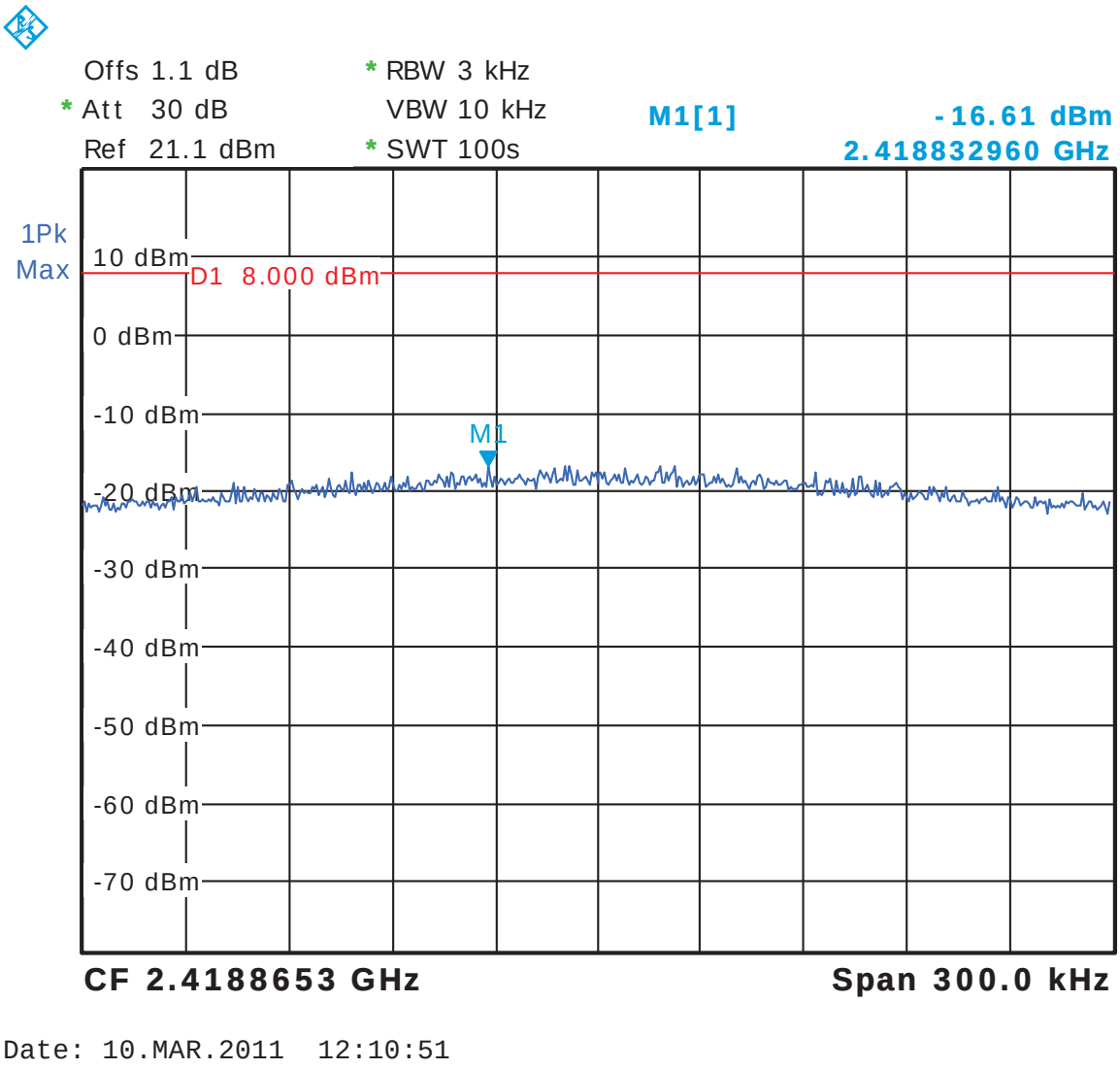


Figure 265: Peak Power Spectral Density for Operating Channel 2422MHz, Chain 1 – HT40 27 Mbps

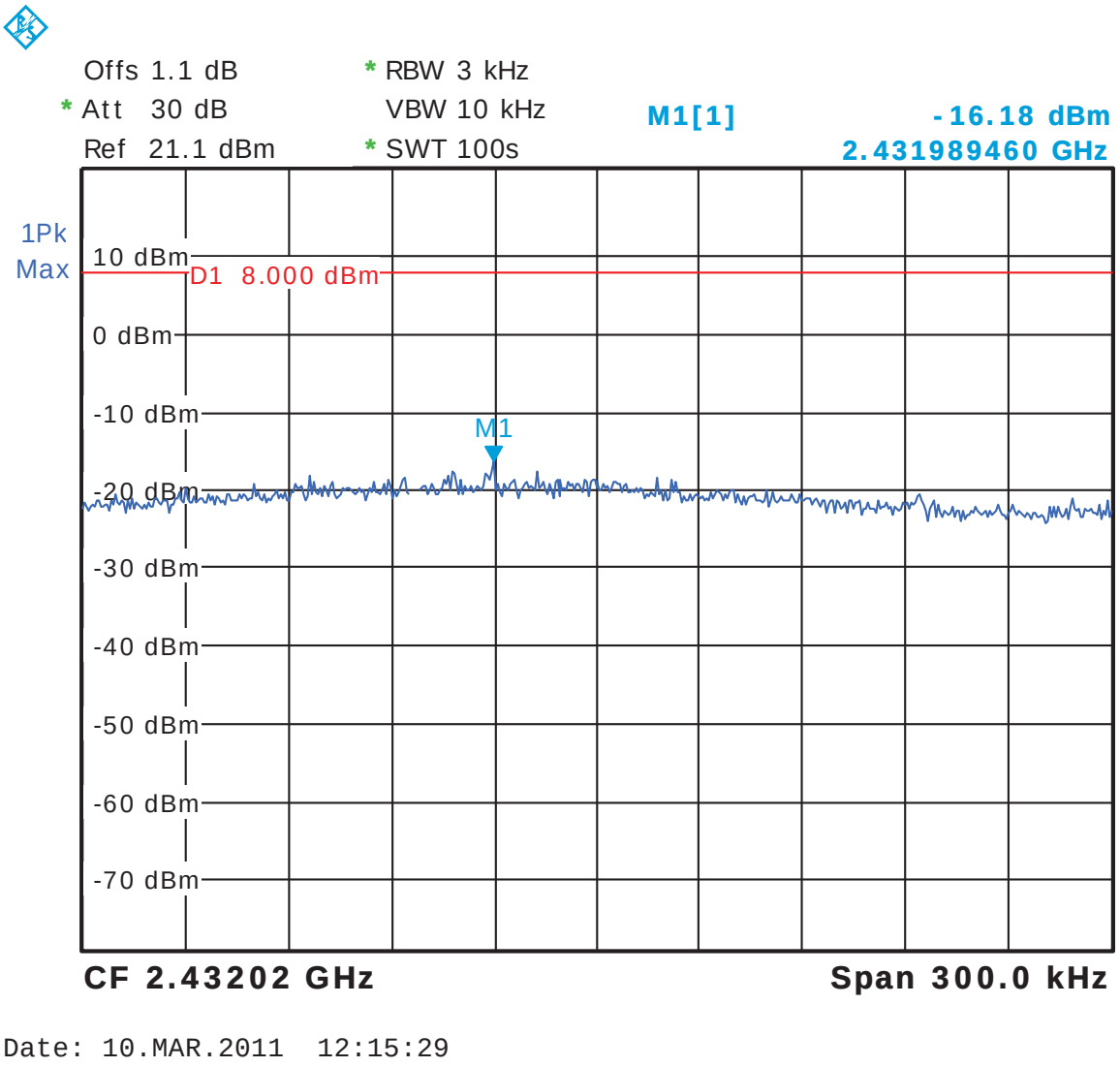


Figure 266: Peak Power Spectral Density for Operating Channel 2437MHz, Chain 1 – HT40 27 Mbps

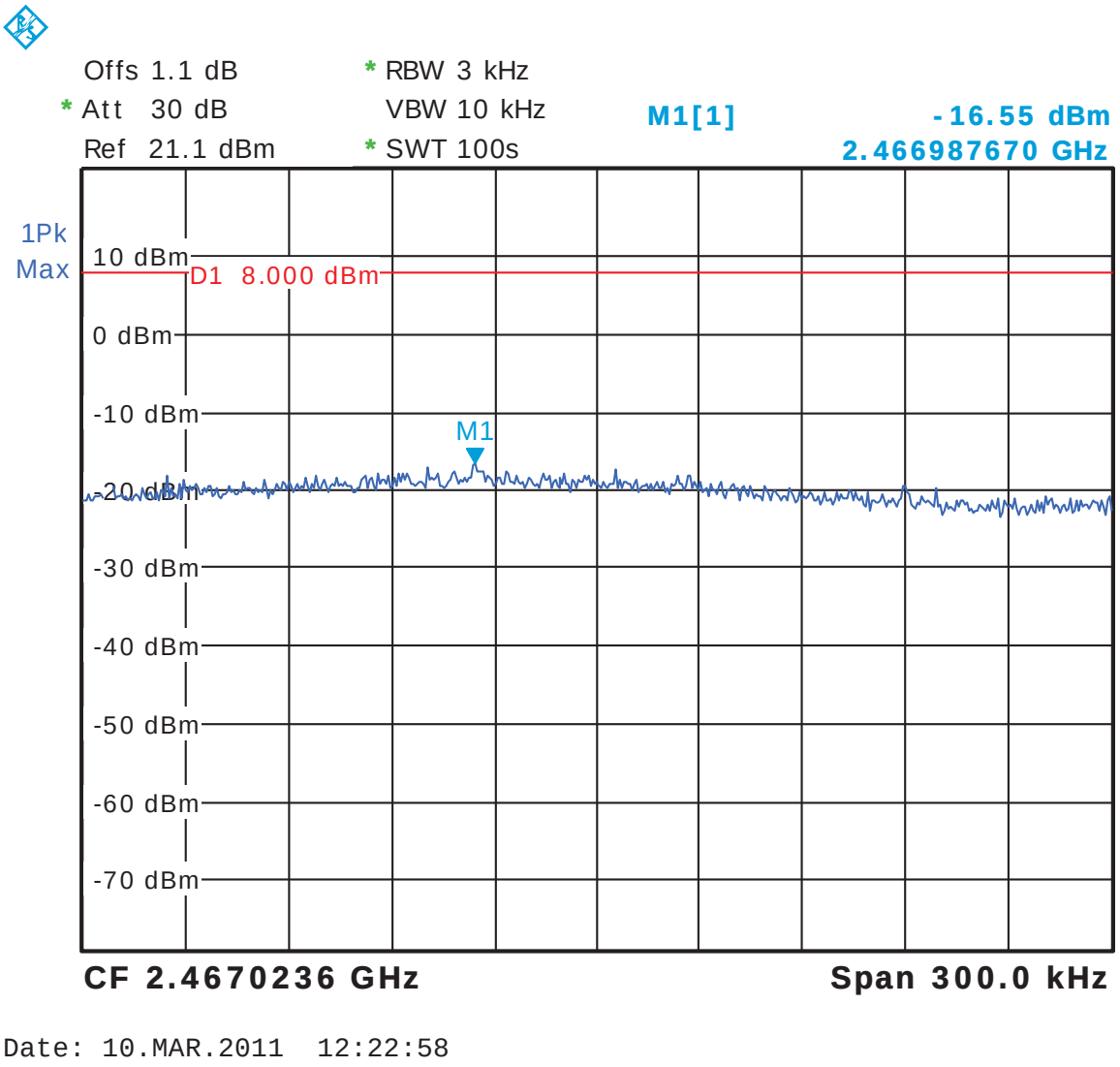


Figure 267: Peak Power Spectral Density for Operating Channel 2452MHz, Chain 1 – HT40 27 Mbps

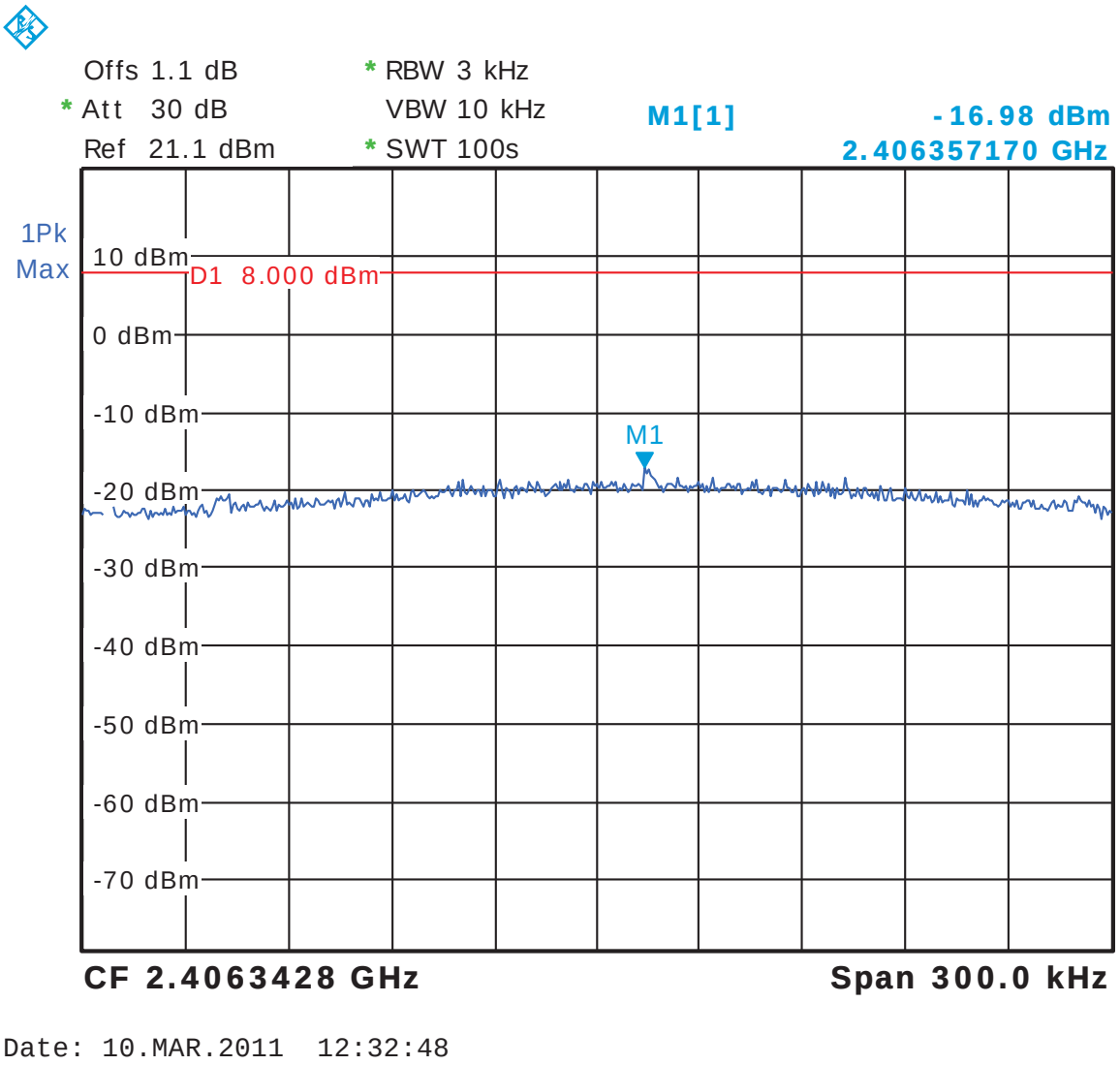


Figure 268: Peak Power Spectral Density for Operating Channel 2422MHz, Chain 0 – HT40 40.5 Mbps

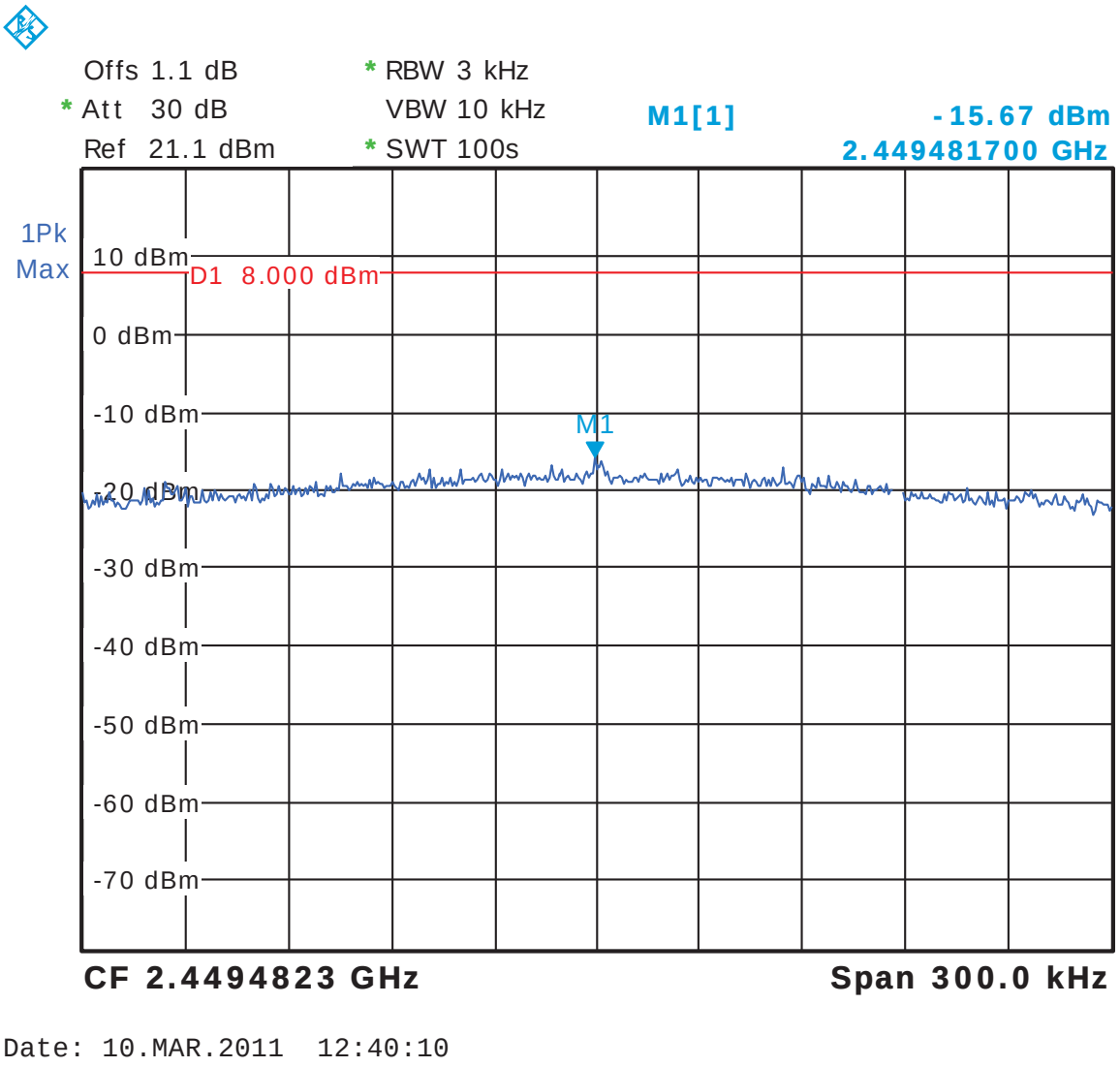


Figure 269: Peak Power Spectral Density for Operating Channel 2437MHz, Chain 0 – HT40 40.5 Mbps

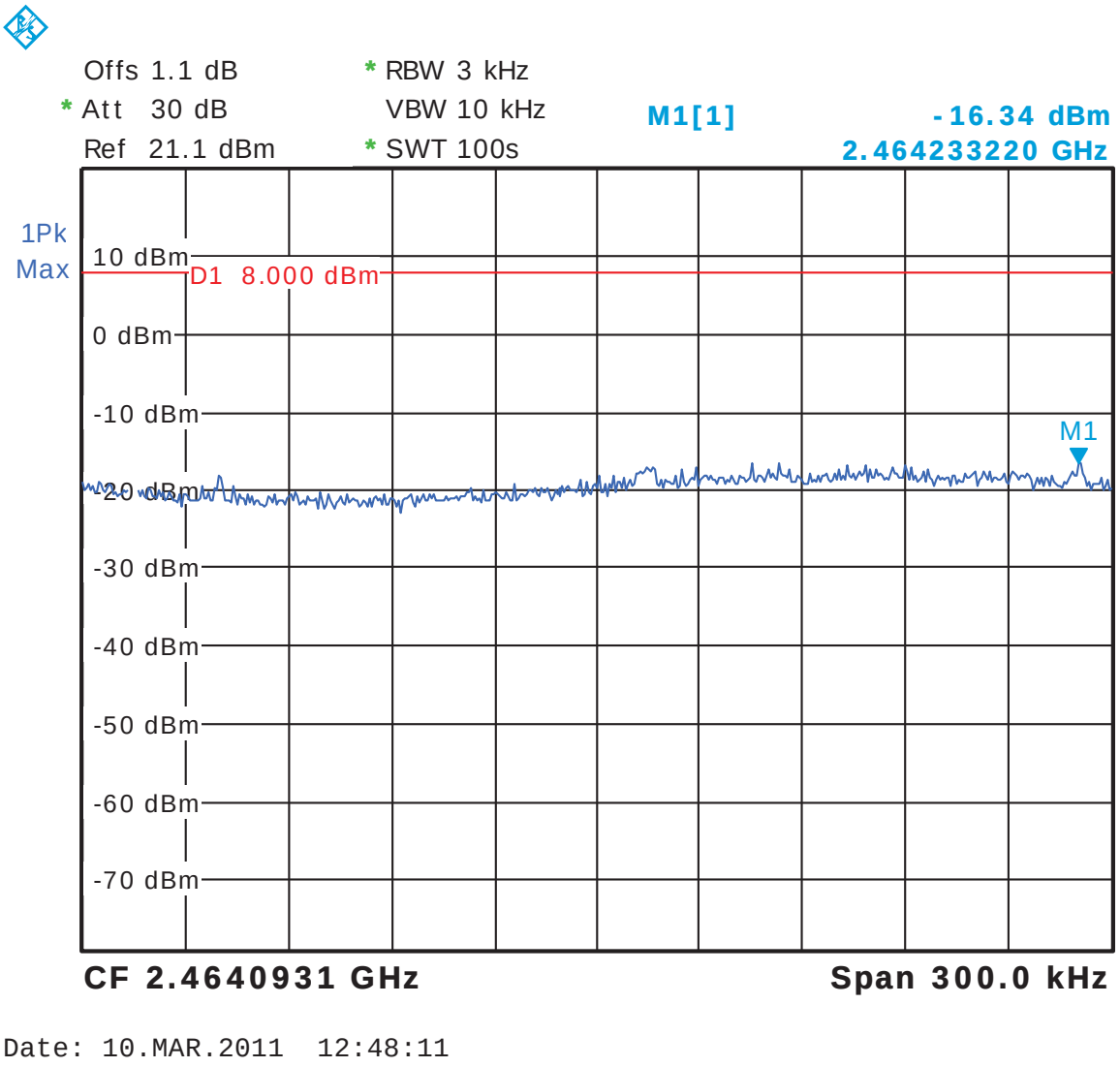


Figure 270: Peak Power Spectral Density for Operating Channel 2452MHz, Chain 0 – HT40 40.5 Mbps

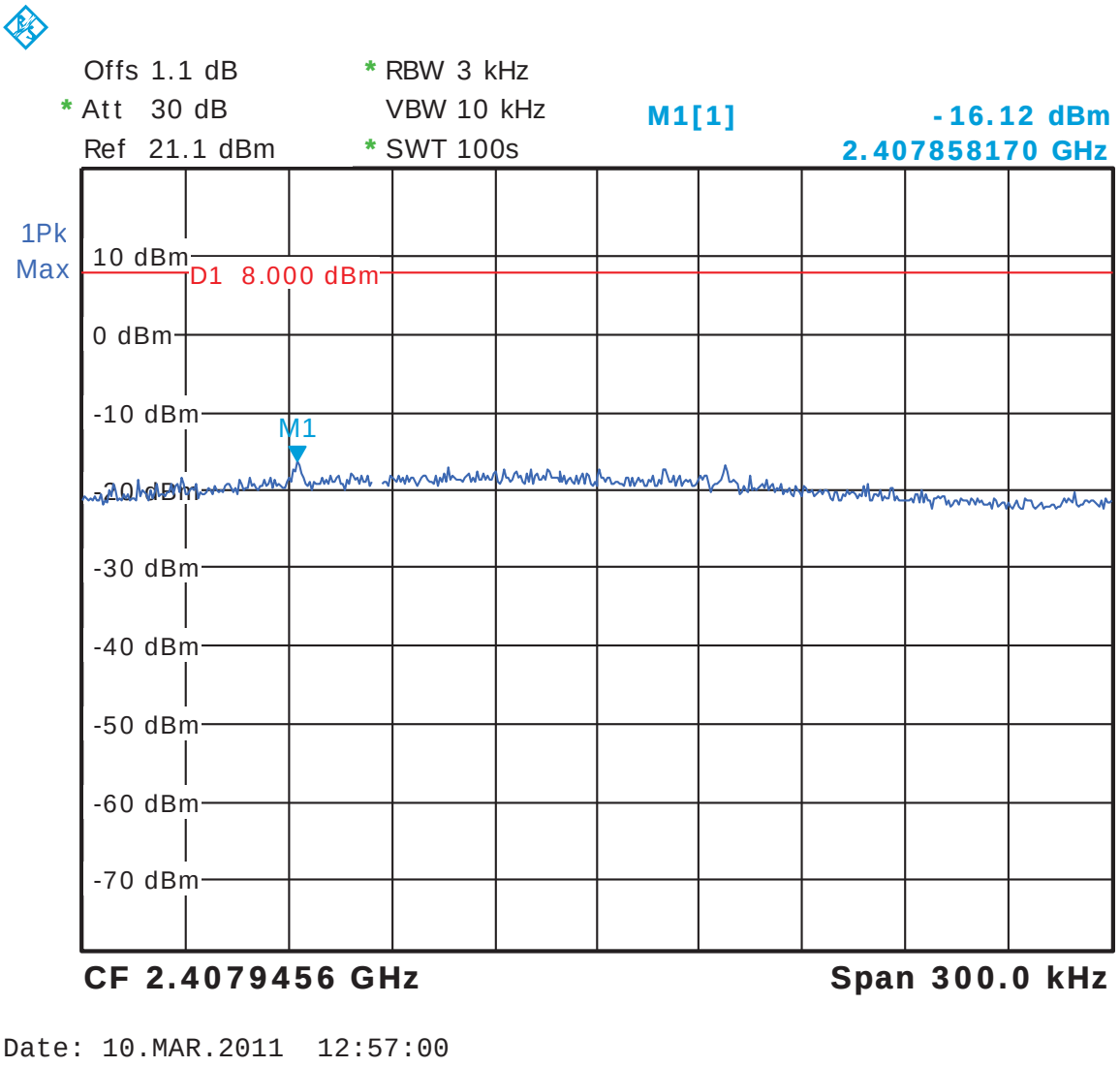


Figure 271: Peak Power Spectral Density for Operating Channel 2422MHz, Chain 1 – HT40 40.5 Mbps

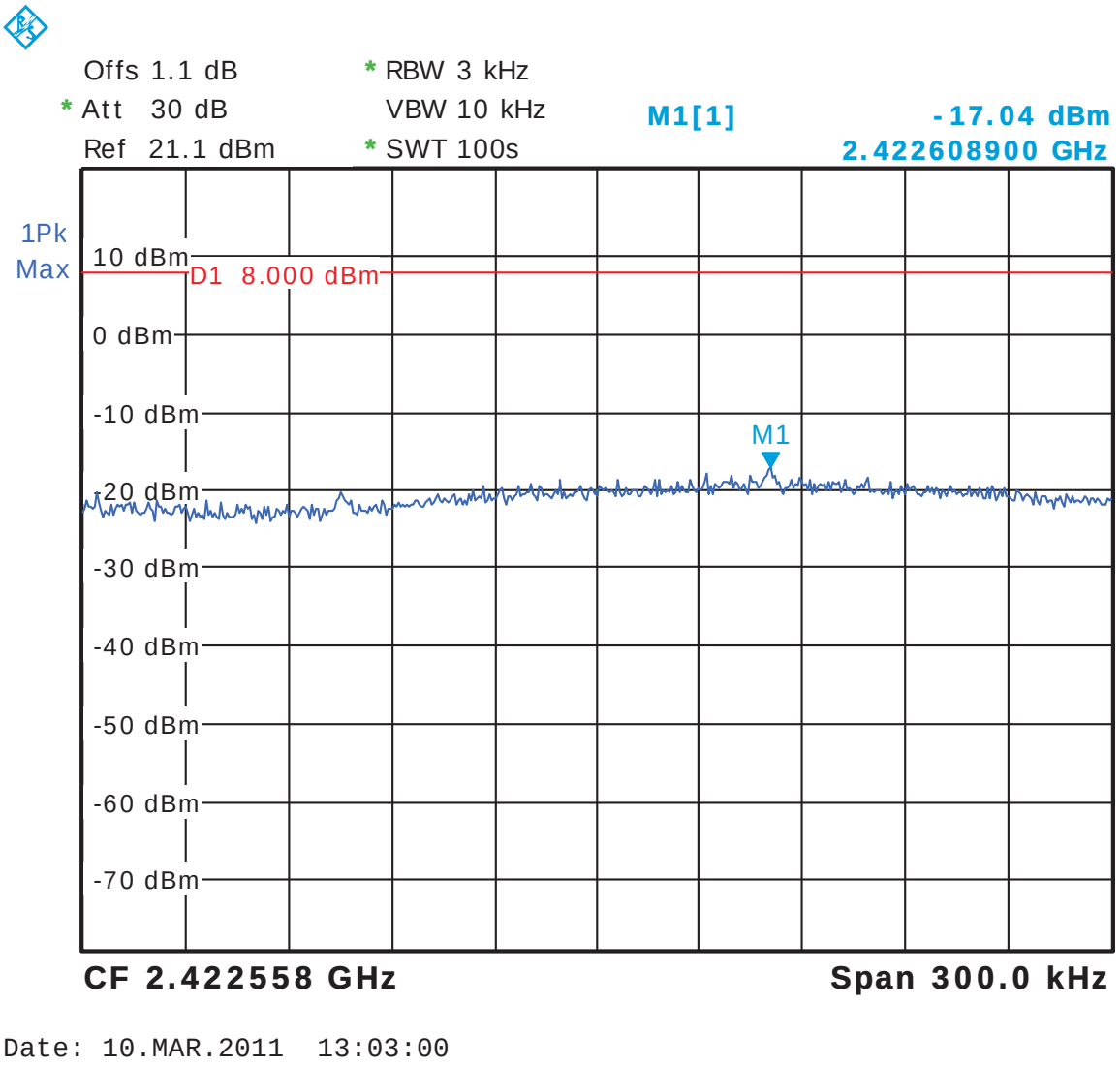


Figure 272: Peak Power Spectral Density for Operating Channel 2437MHz, Chain 1 – HT40 40.5 Mbps

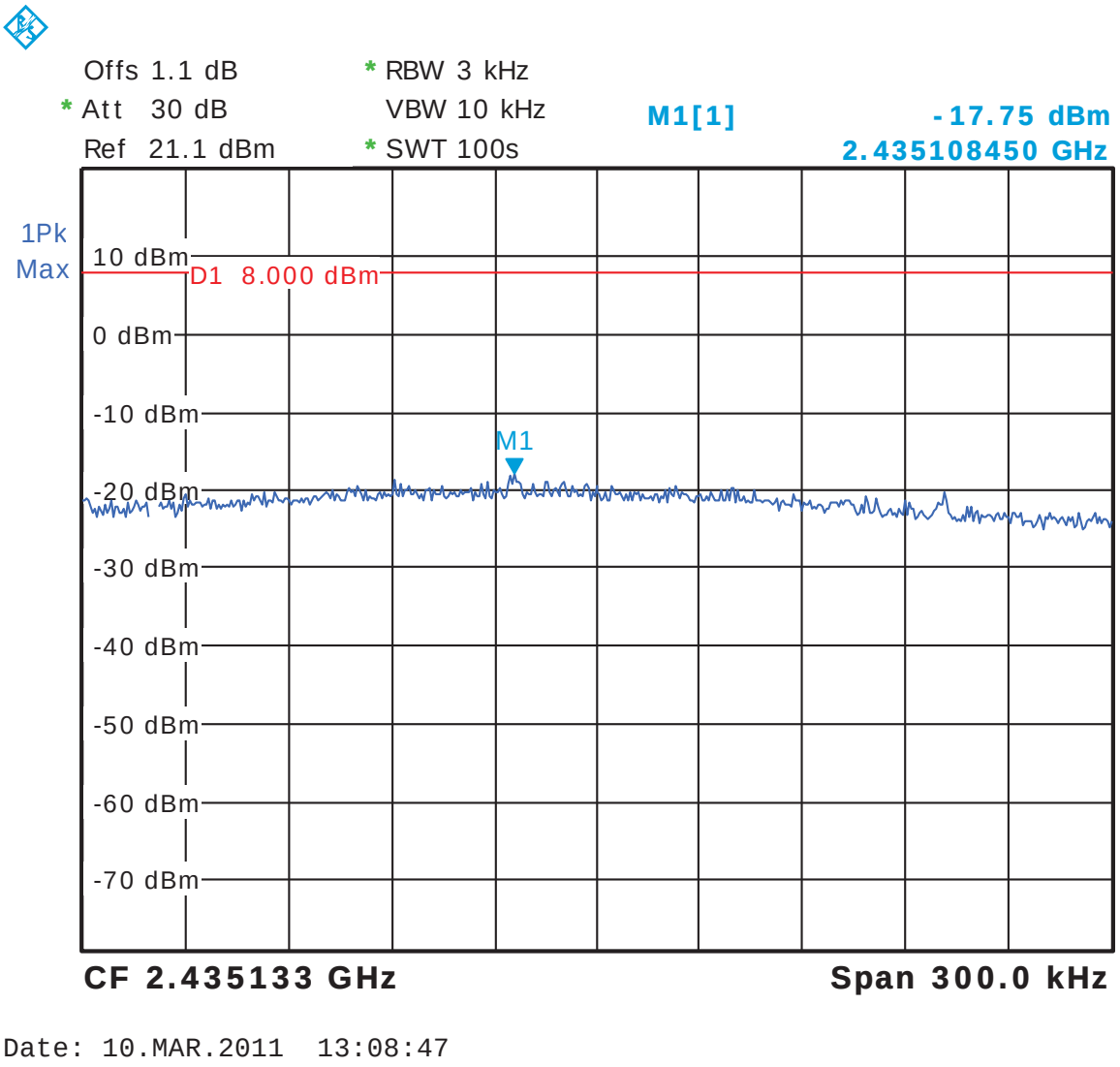


Figure 273: Peak Power Spectral Density for Operating Channel 2452MHz, Chain 1 – HT40 40.5 Mbps

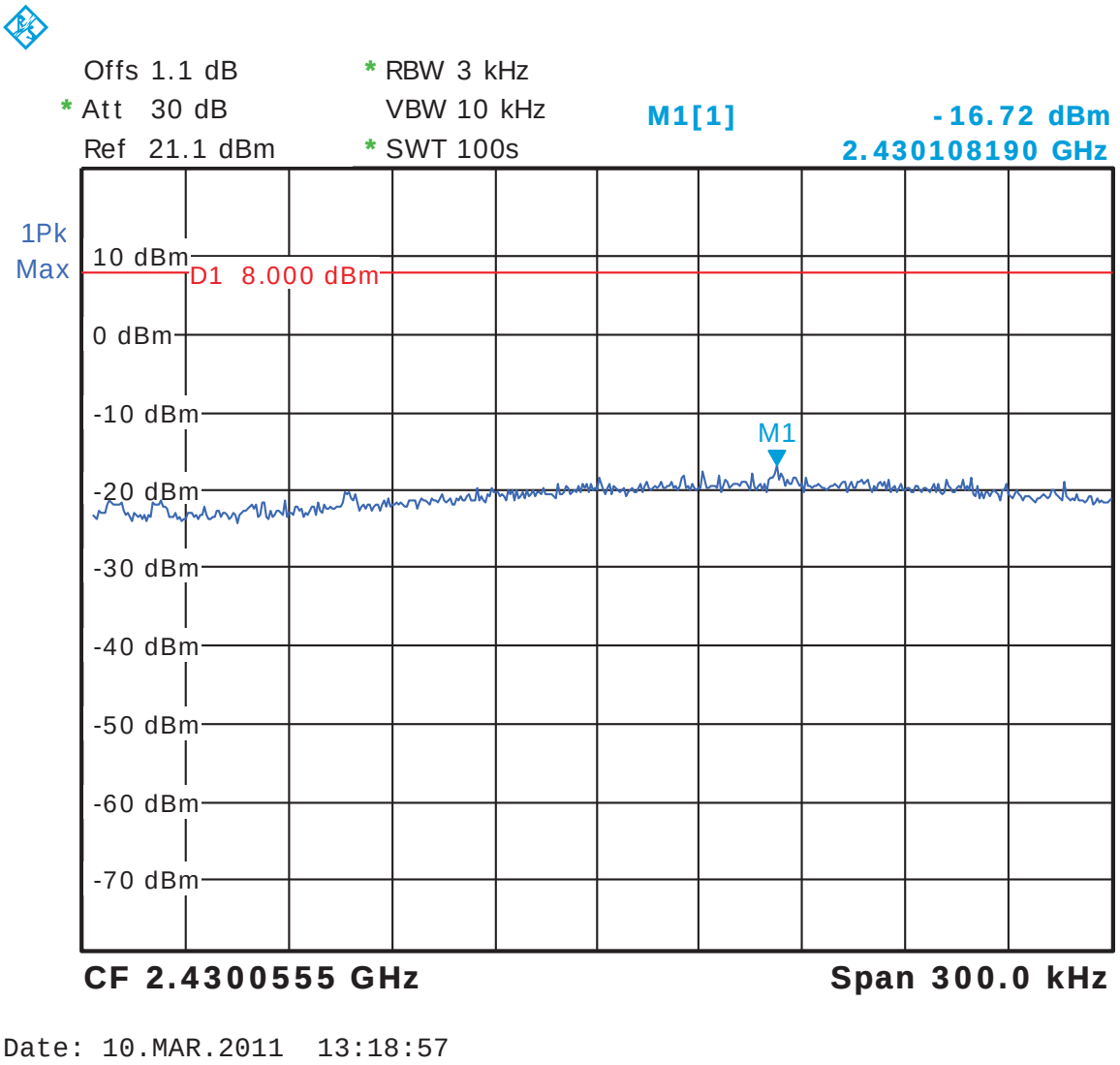


Figure 274: Peak Power Spectral Density for Operating Channel 2422MHz, Chain 2 – HT40 40.5 Mbps