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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 15.407 2009 and RSS 210: 2010

Prepared for:

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Report/Issue Date: 6 April 2011
Report Number: 31053887.002

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 15.407 2009 and RSS 210: 2010
Test Dates:	24 January 2011 to 23 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 18th 2011	Sarb Shelopal	April 20th 2011
Test Engineer	Date	NVLAP Signatory	Date

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

1 Executive Summary

1.1 Scope

This report is intended to document the status of conformance with the requirements of the CFR 47 Part 15.407 2009 and RSS 210: 2010 based on the results of testing performed on 24 January 2011 to 23 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
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, CFR47 15.407 (b) RSS-GEN Sect.7.2.3, RSS 210 Sect. A.9.2	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 15.407 (a), RSS GEN Sect.4.4.1	≥ 500 kHz	**Complied**
Maximum Output Power	CFR47 15.407 (a), RSS 210 Sect. A.9.2	Band 1: 16.97 dBm Band 2&3: 23.97 dBm	**Complied**
Peak Power Spectral Density	CFR47 15.407 (a), RSS 210 Sect. A.9.2	Band 1: 4 dBm/MHz Band 2&3: 11 dBm/MHz	**Complied**
Peak Excursion Ratio	CFR47 15.407 (a)(6)	< 13 dB	**Complied**
Conducted Emission – Antenna Port	CFR47 15.407 (b), RSS 210 Sect.6.2.2	30 MHz -40 GHz < 27 dBm/MHz	**Complied**
Frequency Stability	CFR47 15.407 (g), RSS GEN Sect. 4.7.	±20 ppm	**Complied**
Dynamic Frequency Selection	CFR47 15.407 (h) (iii), RSS 210 Sect. A.9.3	CMT – 10 s CCTT – 260 ms	**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). 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 Emissions

Testing was performed in accordance with CFR 47 Part 15.407: 2009 and RSS 210 Annex 9: 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 15.407 (a):2009 and RSS 210 A9.2: 2010.

The maximum transmitted powers are

Band 5150-5250 MHz:50 mW or 4 dBm + 10Log B.

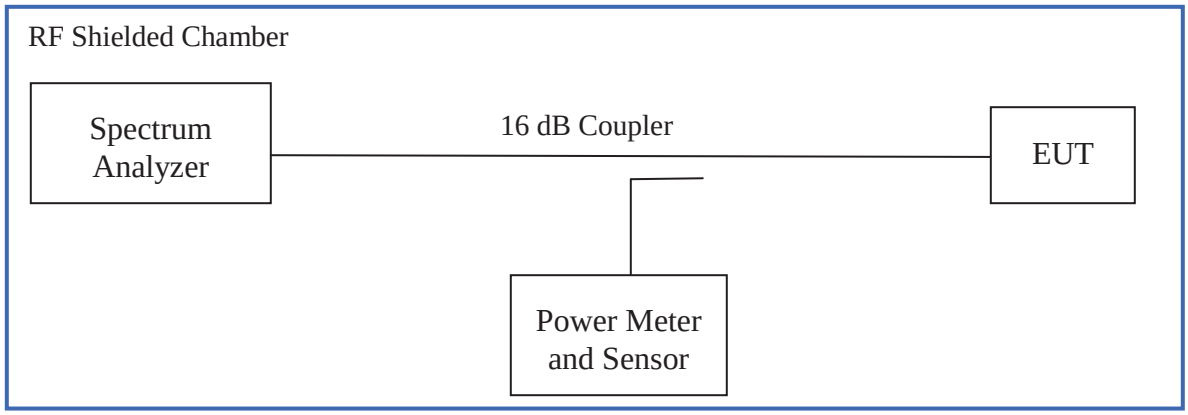
Band 5250-5350 MHz, 5470-5725 MHz:250 mW or 11 dBm + 10Log B.

Band 5725-5825 MHz:1 W or 17 dBm + 10Log B. Where B is 26 dB Bandwidth.

4.1.1 Test Method

The ANSI C63.10-2009 Section 6.10.3.1 conducted method was used to measure the channel power output. The preliminary investigation was performed at different data rate/ chain to determine the highest power output for each mode. The worst findings were conducted on 3 channels in each operating range per CFR47 Part 15.407(a): 2009 and RSS 210 A.9.2; 5150 MHz to 5250 MHz, 5250 MHz to 5350 MHz, 5470 MHz to 5725 MHz. The worst mode results 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. Sample detector was used.

Each chain was measured individually and applied the measure-and-sum approach per KDB66291.

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: + 3.2 dBi			**Signal State:** Modulated at 100%.			
Ambient Temp.: 21 °C			**Relative Humidity:**39%			
802.11a Mode, 1x3						
Operating Channel	**Limit [dBm]**	**Chain 0 [dBm]**	**Chain 1 [dBm]**	**Chain 2 [dBm]**	**Total Power [dBm]**	**Margin [dB]**
5180	16.97	11.94	13.35	11.43		-3.62
5220	16.97	12.95	13.41	12.01		-3.56
5240	16.97	12.71	13.10	11.82		-3.87
5260	23.97	17.79	17.12	16.61		-6.18
5300	23.97	15.52	17.04	16.37		-6.93
5320	23.97	15.32	16.56	15.70		-7.41
5500	23.97	16.72	15.60	15.41		-7.25
5600	23.97	16.28	15.80	15.43		-7.69
5700	23.97	15.76	16.32	15.21		-7.65
Note: The highest output power was observed at 6 Mbps.						
802.11n (HT20) Mode, 1x3						
Operating Channel	**Limit [dBm]**	**Chain 0 [dBm]**	**Chain 1 [dBm]**	**Chain 2 [dBm]**	**Total Power [dBm]**	**Margin [dB]**
5180	16.97	10.58	11.74	9.68		-5.23
5220	16.97	11.54	10.77	10.23		-5.43
5240	16.97	11.01	11.91	10.66		-5.06
5260	23.97	15.87	15.97	15.58		-8.00
5300	23.97	15.31	17.19	16.45		-6.78

5320	23.97	14.79	17.07	16.21		-6.90
5500	23.97	11.46	11.62	11.16		-12.35
5600	23.97	14.42	16.01	15.68		-7.96
5700	23.97	15.64	17.50	16.62		-6.47
Note: The highest output power was observed at HT20 6.5 Mbps, 1 Data Stream.						
802.11n (HT20) Mode, 2x3						
Operating Channel	**Limit [dBm]**	**Chain 0 [dBm]**	**Chain 1 [dBm]**	**Chain 2 [dBm]**	**Total Power [dBm]**	**Margin [dB]**
5180	16.97	11.07	10.52		13.81	-3.16
5220	16.97	11.47	10.35		13.96	-3.01
5240	16.97	10.85	10.66		13.77	-3.20
5260	23.97	15.18	14.52		17.87	-6.10
5300	23.97	15.17	15.95		18.59	-5.38
5320	23.97	14.51	15.92		18.28	-5.69
5500	23.97	10.73	10.37		13.56	-10.41
5600	23.97	14.51	14.77		17.65	-6.32
5700	23.97	15.09	15.99		18.57	-5.40
Note: The highest output power was observed at HT20 13 Mbps, 2 Data Streams.						
802.11n (HT20) Mode, 3x3						
Operating Channel	**Limit [dBm]**	**Chain 0 [dBm]**	**Chain 1 [dBm]**	**Chain 2 [dBm]**	**Total Power [dBm]**	**Margin [dB]**
5180	16.97	10.25	8.02	7.43	13.52	-3.45
5220	16.97	10.96	7.89	7.78	13.91	-3.06
5240	16.97	9.93	8.95	8.09	13.83	-3.14
5260	23.97	14.63	14.29	13.20	18.85	-5.12
5300	23.97	14.17	14.46	13.75	18.91	-5.06
5320	23.97	13.37	14.30	13.24	18.43	-5.54
5500	23.97	9.62	8.84	8.26	13.71	-10.26
5600	23.97	13.53	13.17	12.90	17.98	-5.99
5700	23.97	14.01	13.68	13.34	18.46	-5.51

Note: The highest output power was observed at HT20 19.5 Mbps, 3 Data Streams.

802.11n (HT40) Mode, 1x3

Operating Channel	Limit [dBm]	Chain 0 [dBm]	Chain 1 [dBm]	Chain 2 [dBm]	Total Power [dBm]	Margin [dB]
5190	16.97	11.09	10.75	9.26		-5.88
5230	16.97	12.09	10.75	9.96		-4.88
5270	23.97	15.76	14.34	15.13		-8.21
5310	23.97	16.20	16.13	15.93		-7.77
5510	23.97	11.89	11.39	11.02		-12.08
5590	23.97	14.55	14.20	14.10		-9.42
5670	23.97	14.78	14.26	14.46		-9.19

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]
5190	16.97	10.57	9.96		13.29	-3.68
5230	16.97	11.15	10.95		14.06	-2.91
5270	23.97	15.41	13.21		17.46	-6.51
5310	23.97	15.07	15.02		18.06	-5.91
5510	23.97	10.59	9.97		13.30	-10.67
5590	23.97	13.28	13.07		16.19	-7.78
5670	23.97	13.45	13.51		16.49	-7.48

Note: The highest output power was observed at HT40 27 Mbps, 2 Data Streams.

802.11n (HT40) Mode, 3x3

Operating Channel	Limit [dBm]	Chain 0 [dBm]	Chain 1 [dBm]	Chain 2 [dBm]	Total Power [dBm]	Margin [dB]
5190	16.97	9.46	4.49	6.70	12.13	-4.84
5230	16.97	10.64	5.13	6.75	12.92	-4.05
5270	23.97	14.22	12.69	14.28	18.56	-5.41
5310	23.97	13.98	12.96	11.67	17.74	-6.23
5510	23.97	9.60	8.23	6.16	12.99	-10.98

5590	23.97	12.13	11.02	8.16	15.51	-8.46
5670	23.97	12.37	11.81	8.04	15.89	-8.08
Note: The highest output power was observed at HT40 40.5 Mbps, 3 Data Streams.						

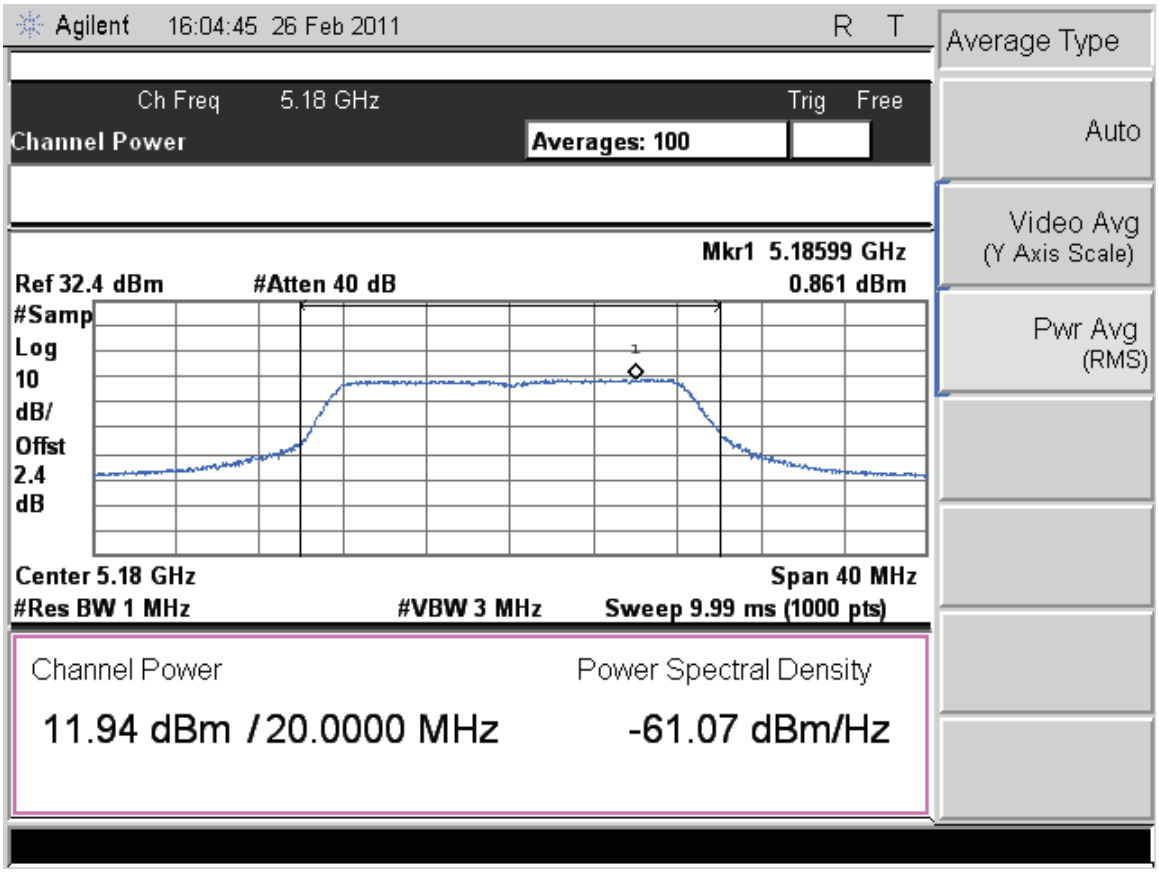


Figure 1: Maximum Transmitted Power, 5180 MHz at 802.11a, Chain 0

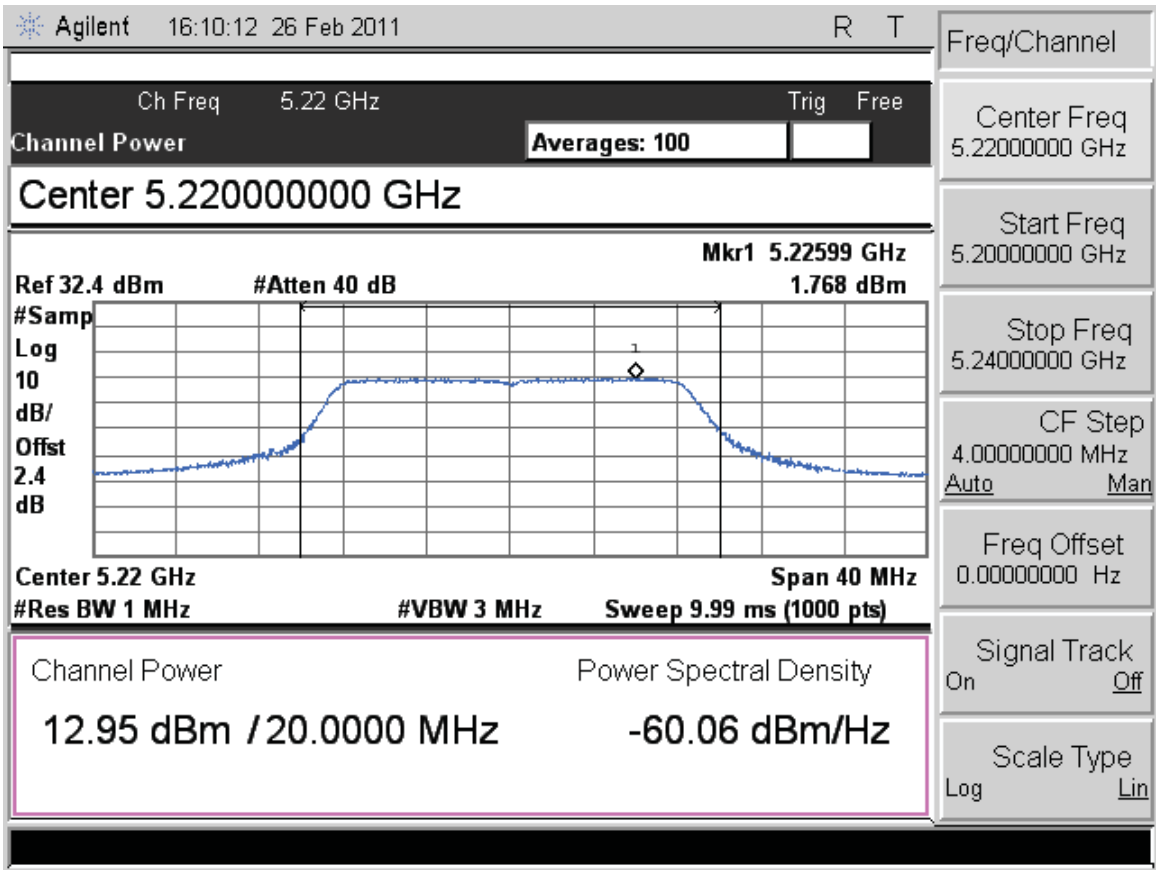


Figure 2: Maximum Transmitted Power, 5220 MHz at 802.11a, Chain 0

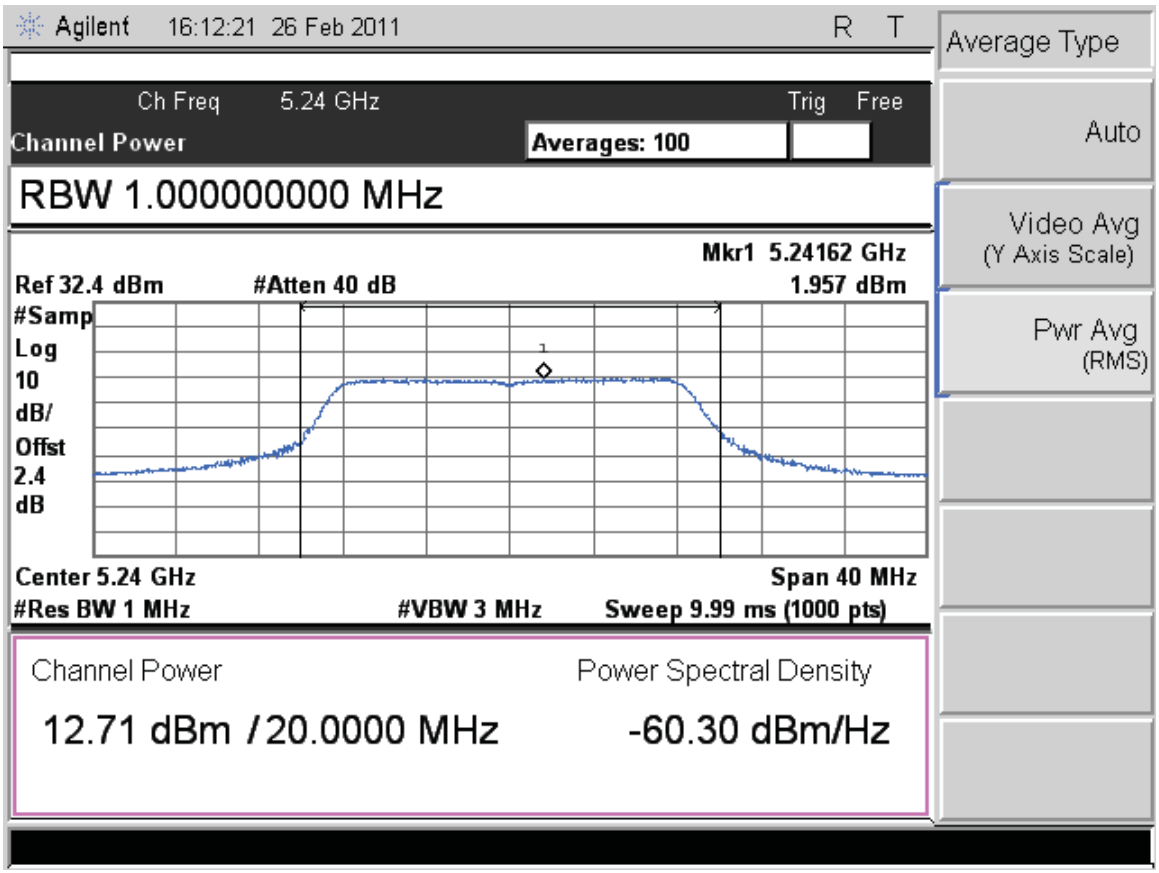


Figure 3: Maximum Transmitted Power, 5240 MHz at 802.11a, Chain 0

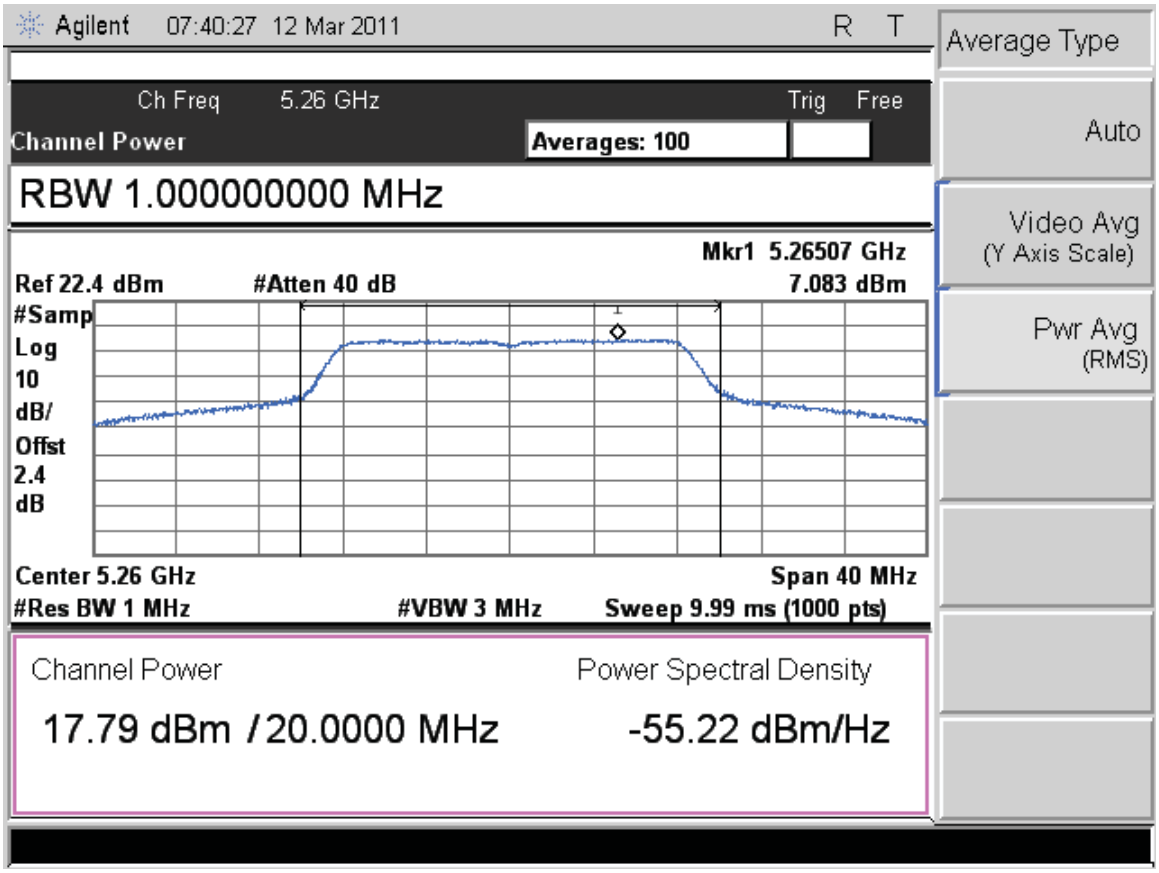


Figure 4: Maximum Transmitted Power, 5260 MHz at 802.11a, Chain 0

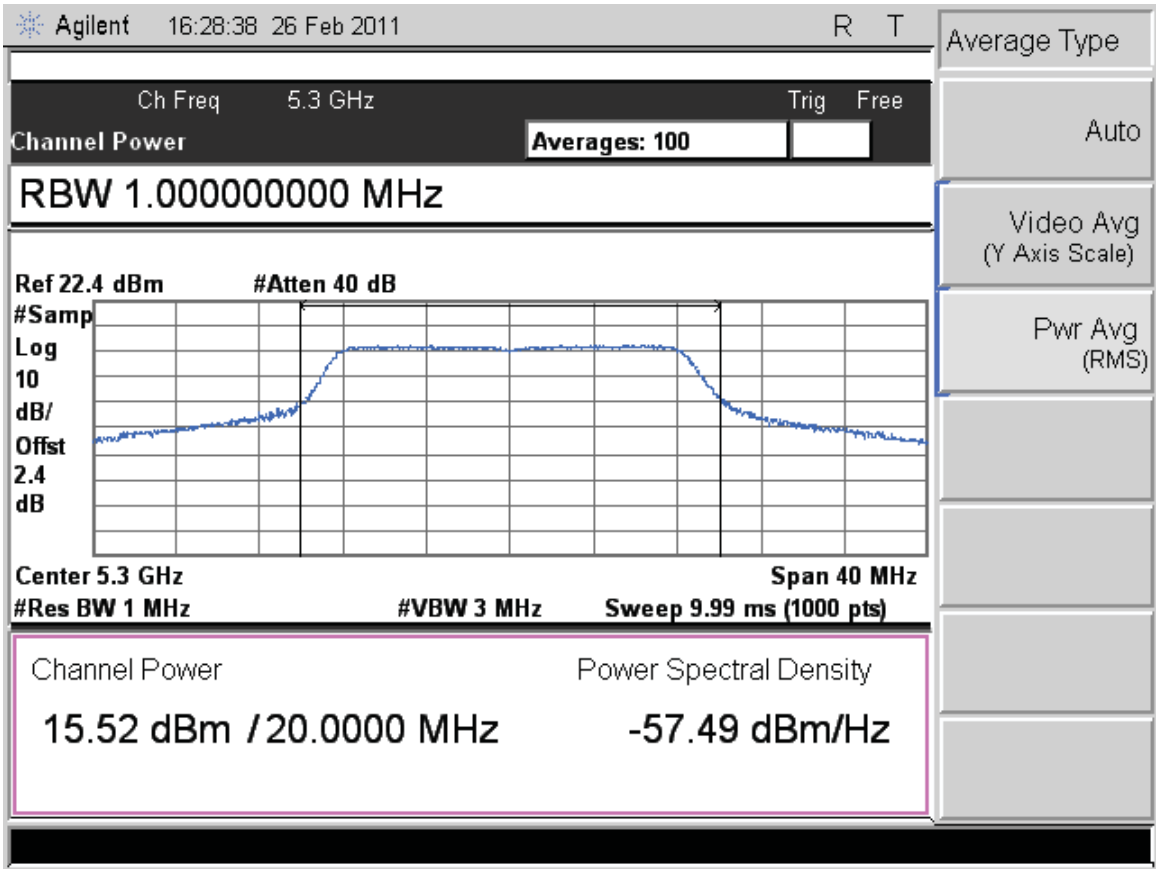


Figure 5: Maximum Transmitted Power, 5300 MHz at 802.11a, Chain 0

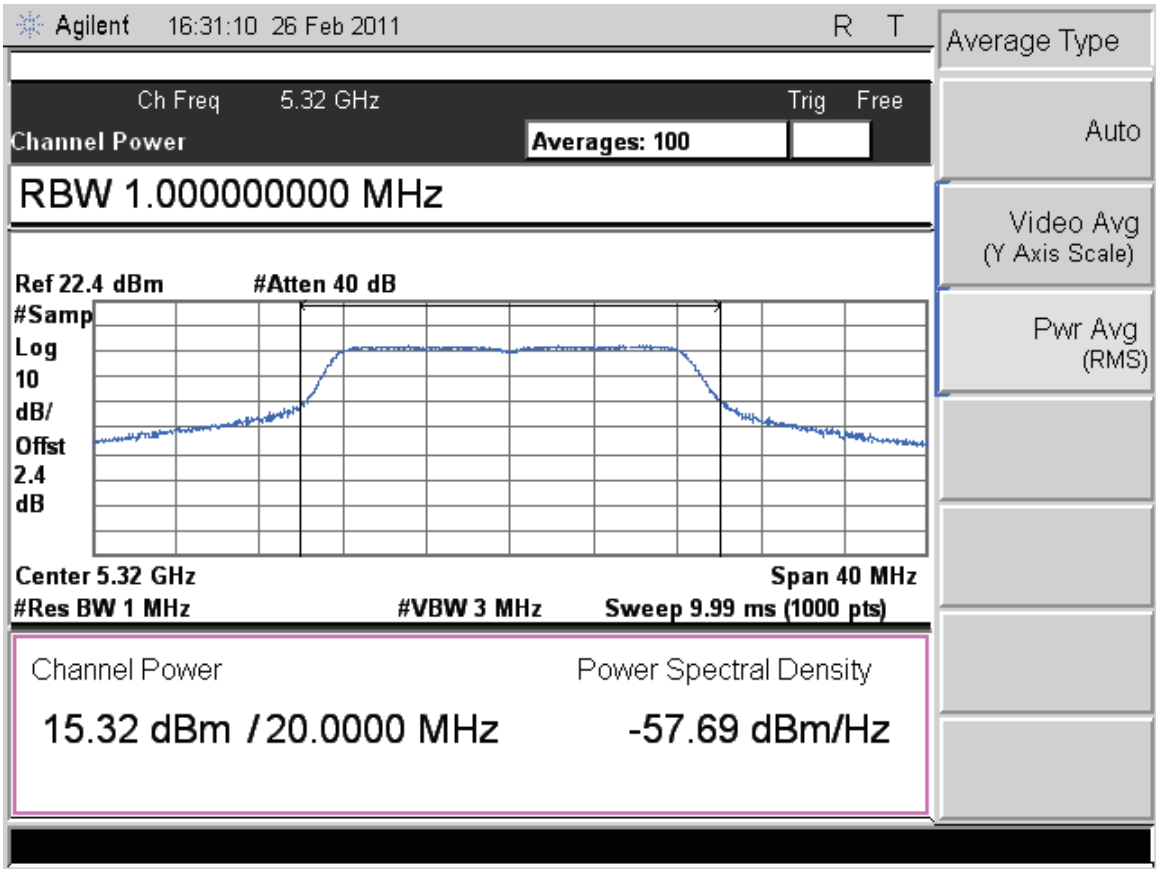


Figure 6: Maximum Transmitted Power, 5320 MHz at 802.11a, Chain 0

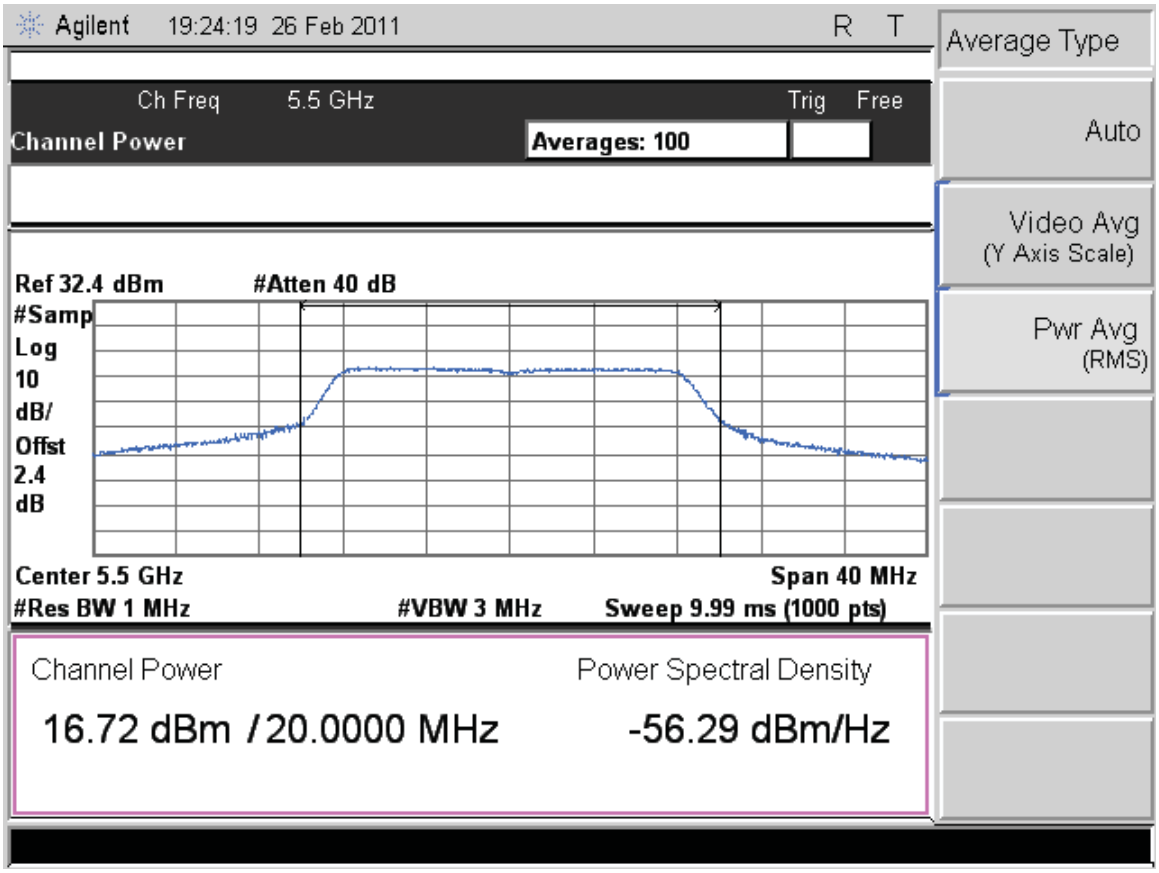


Figure 7: Maximum Transmitted Power, 5500 MHz at 802.11a, Chain 0

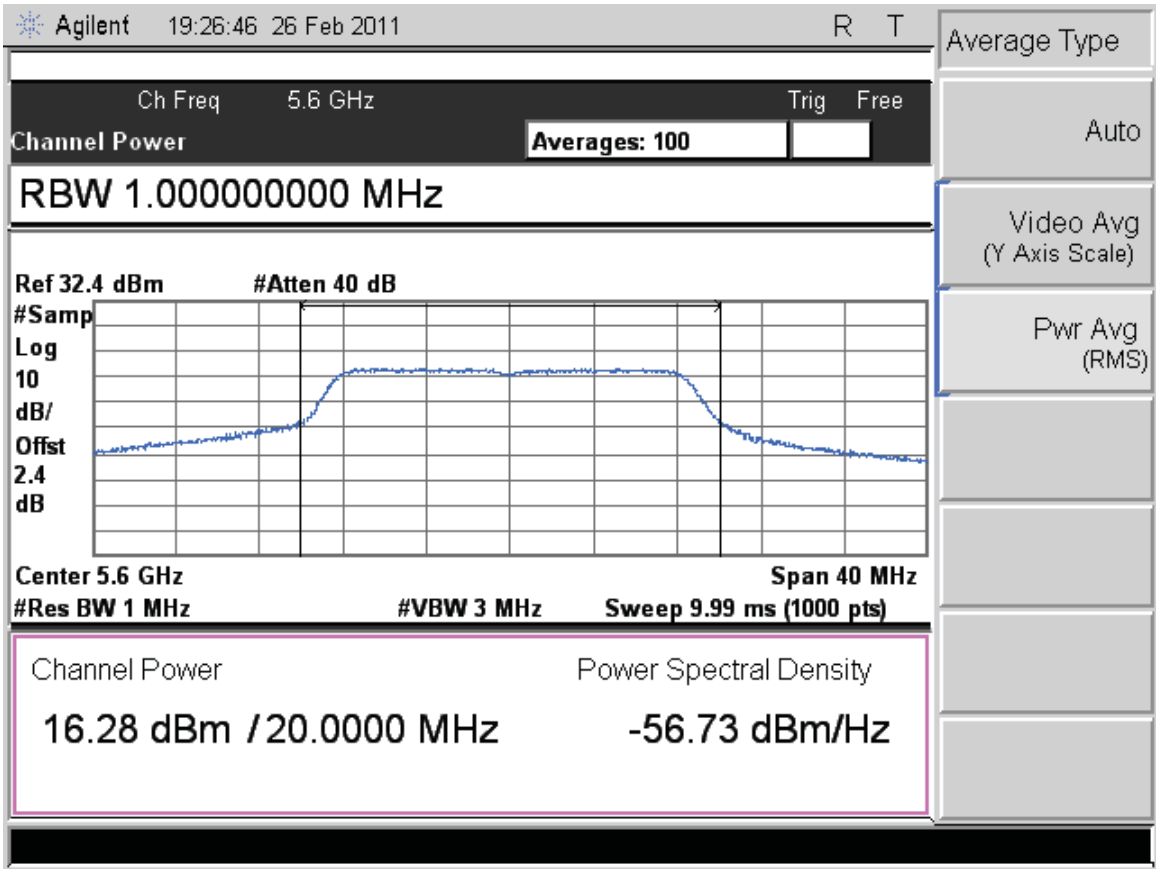


Figure 8: Maximum Transmitted Power, 5600 MHz at 802.11a, Chain 0

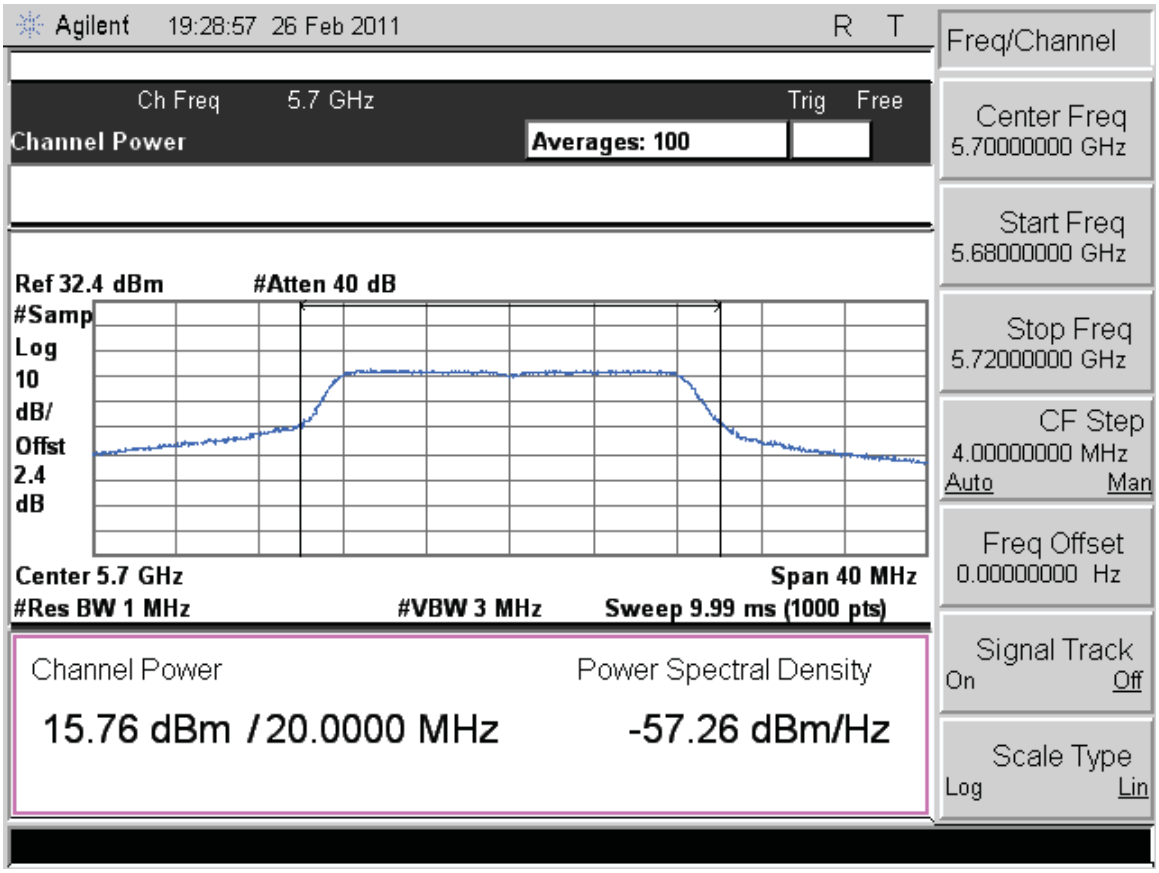


Figure 9: Maximum Transmitted Power, 5700 MHz at 802.11a, Chain 0

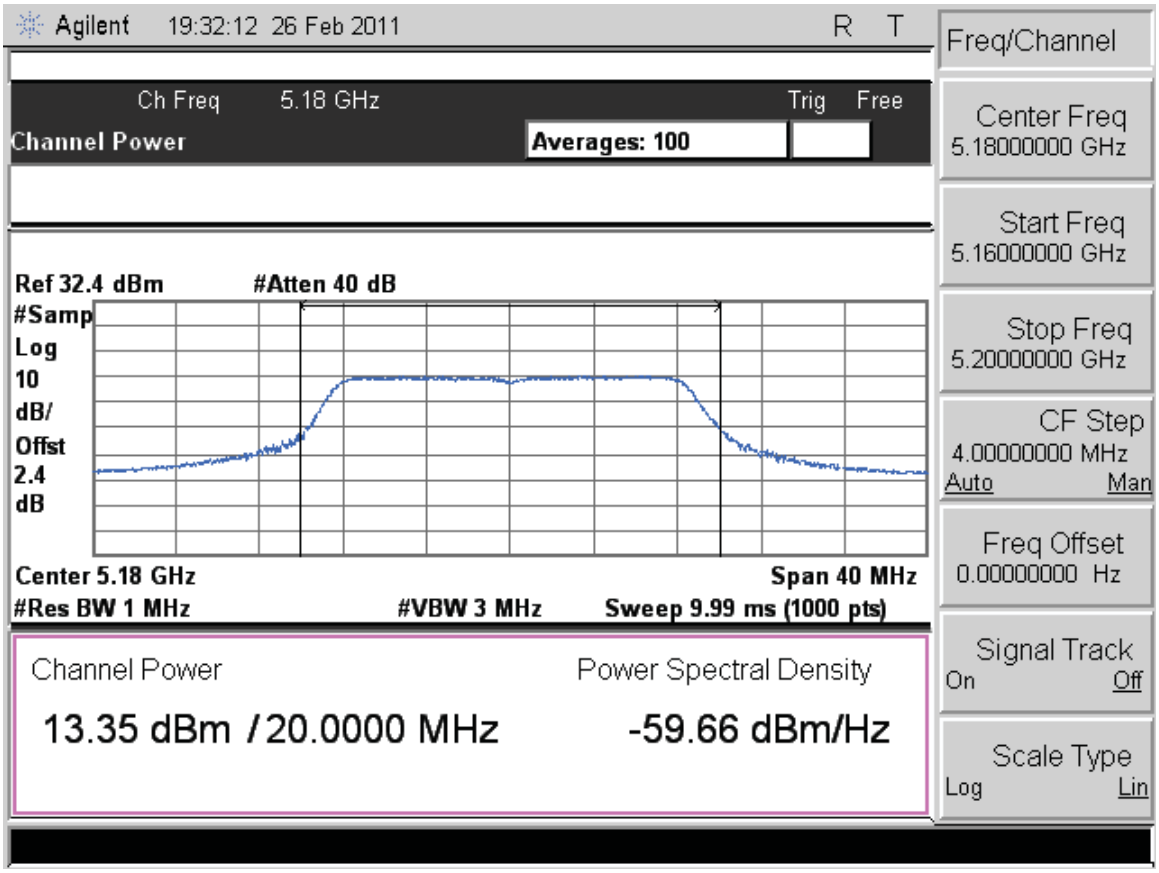


Figure 10: Maximum Transmitted Power, 5180 MHz at 802.11a, Chain 1

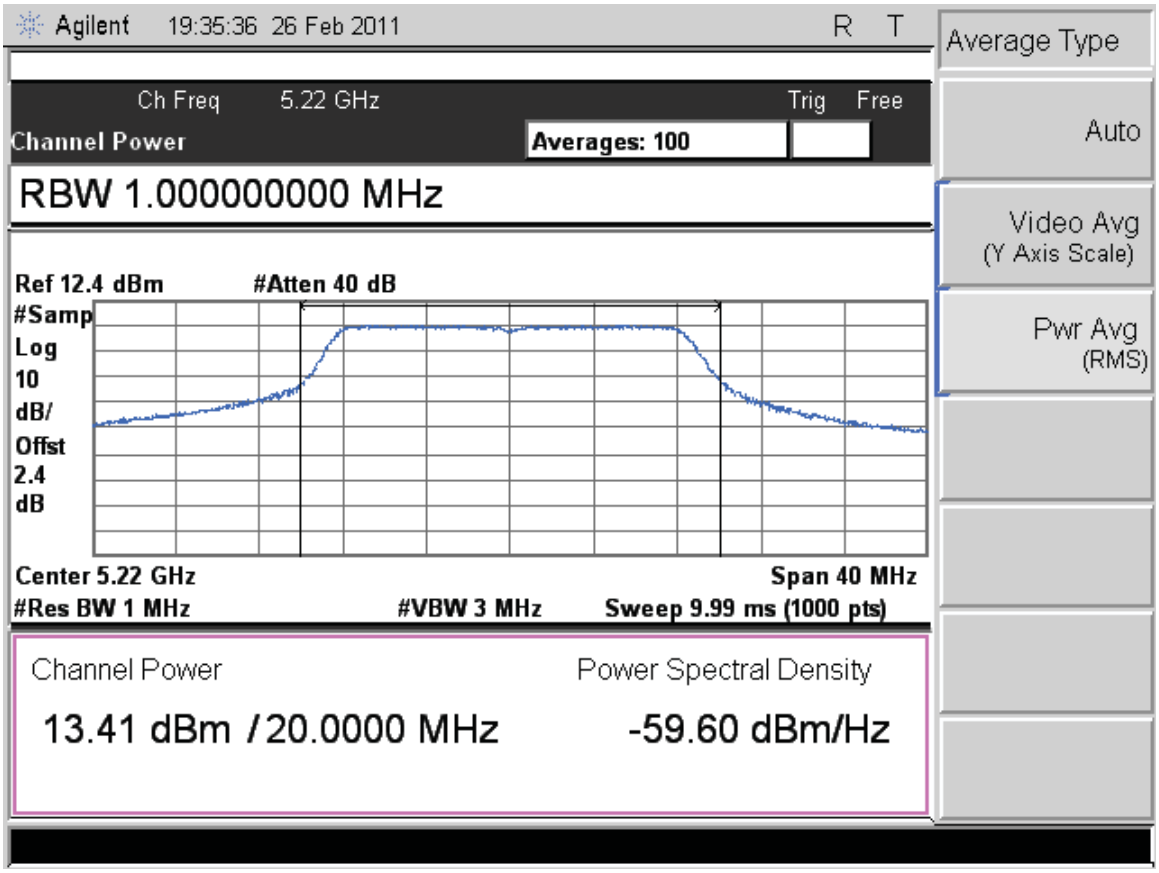


Figure 11: Maximum Transmitted Power, 5220 MHz at 802.11a, Chain 1

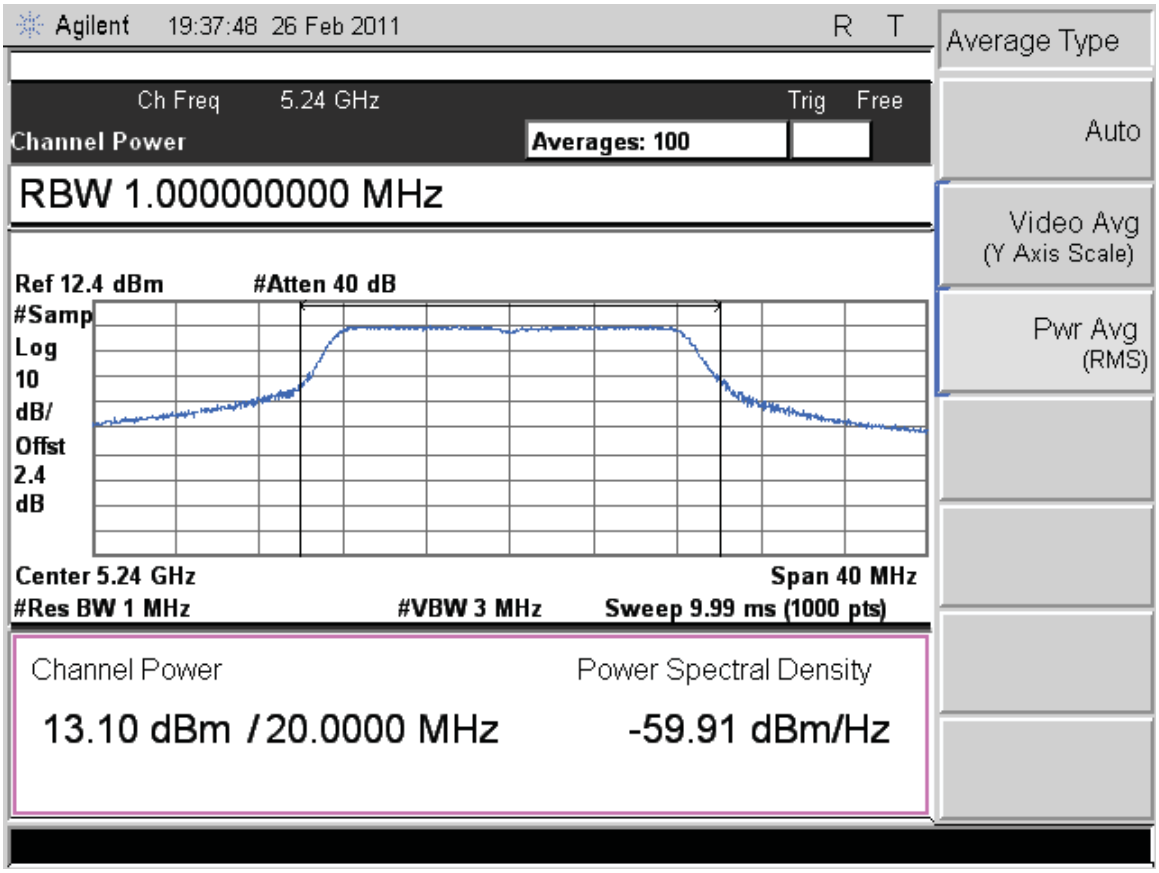


Figure 12: Maximum Transmitted Power, 5240 MHz at 802.11a, Chain 1

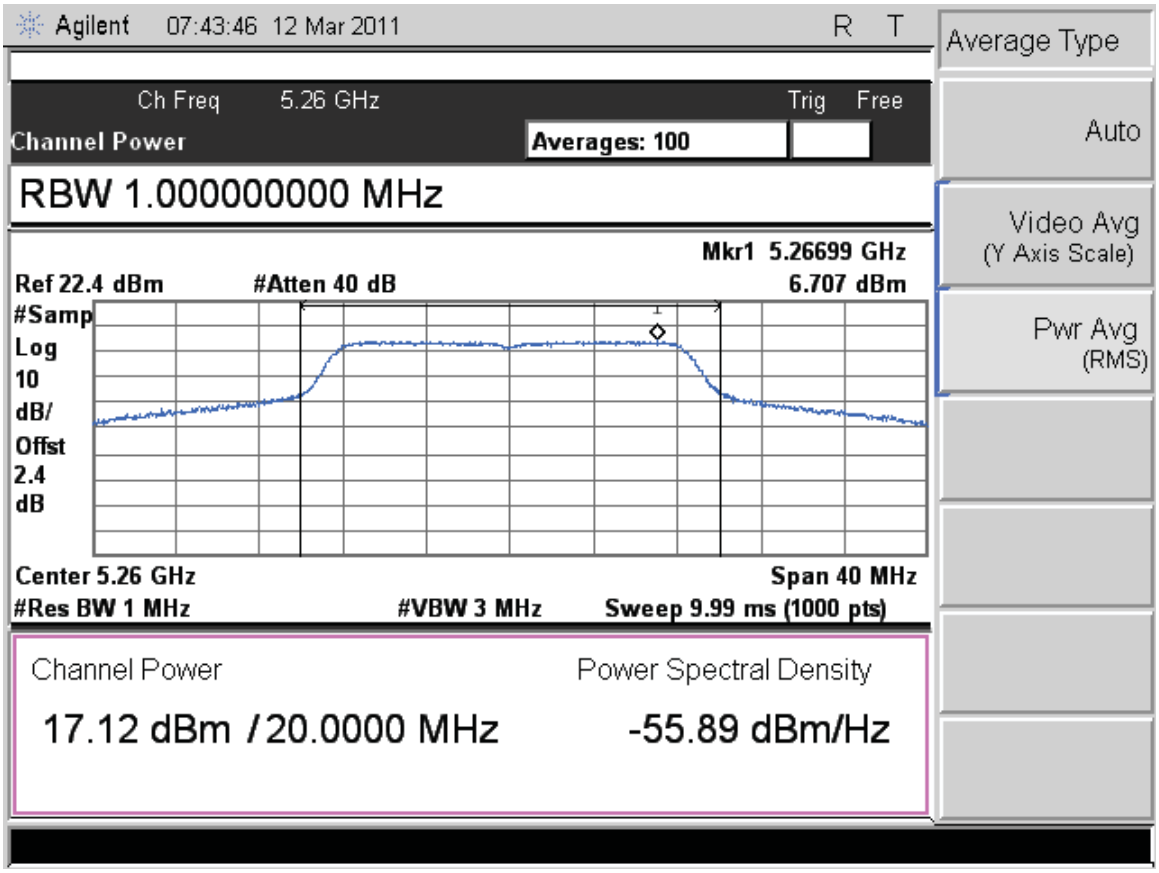


Figure 13: Maximum Transmitted Power, 5260 MHz at 802.11a, Chain 1

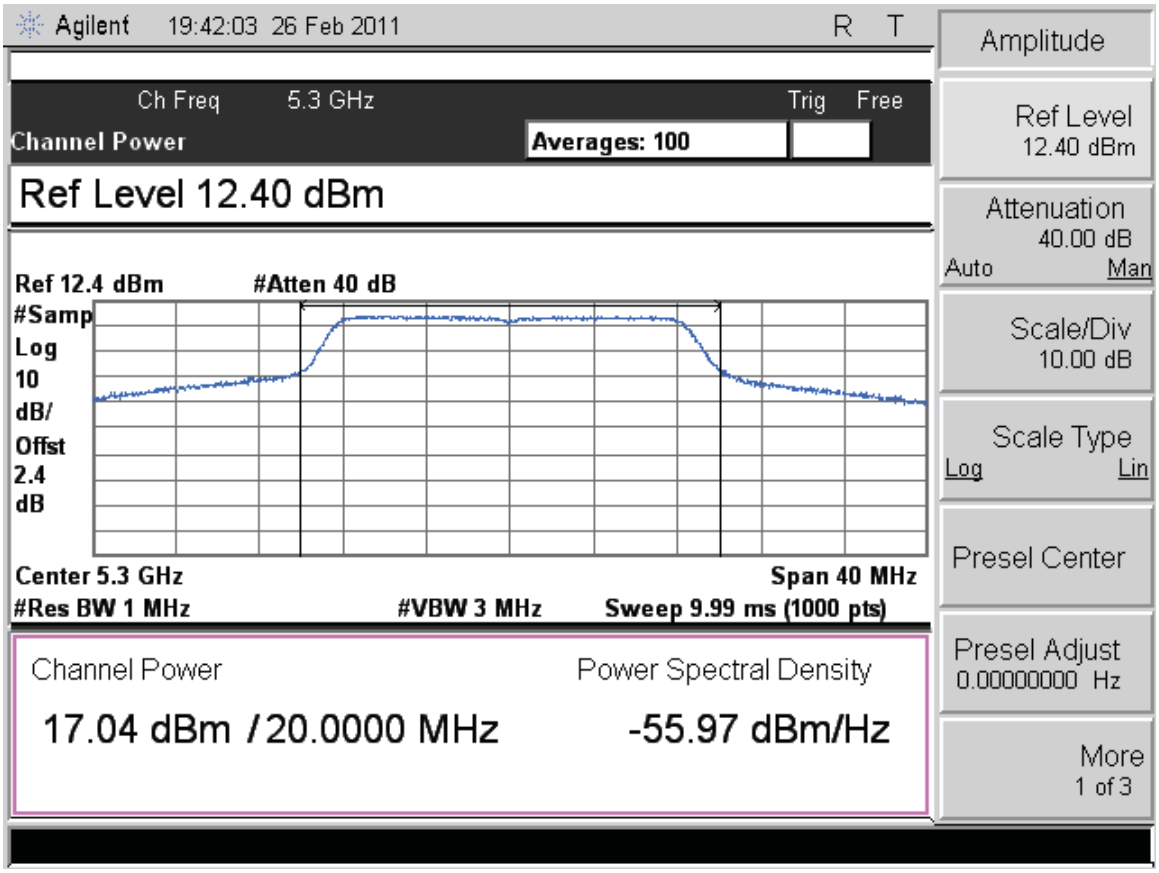


Figure 14: Maximum Transmitted Power, 5300 MHz at 802.11a, Chain 1

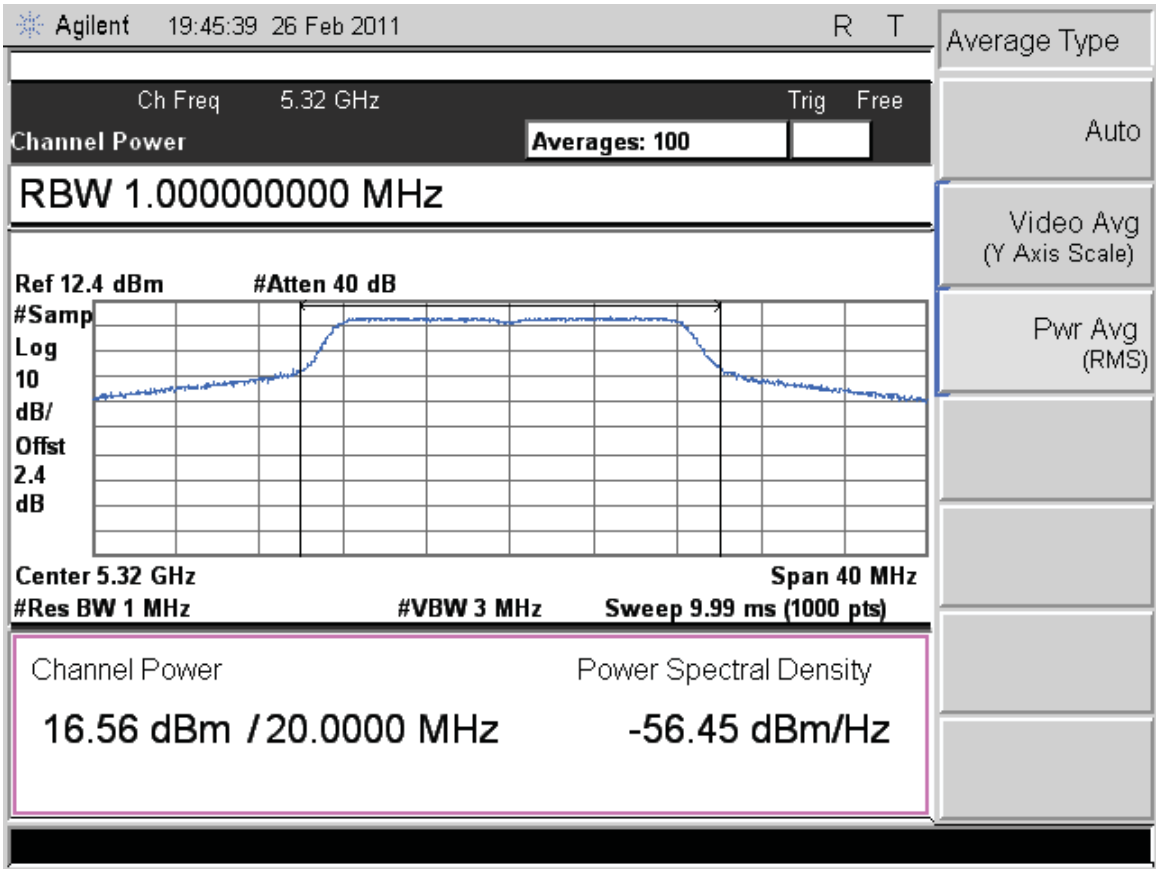


Figure 15: Maximum Transmitted Power, 5320 MHz at 802.11a, Chain 1

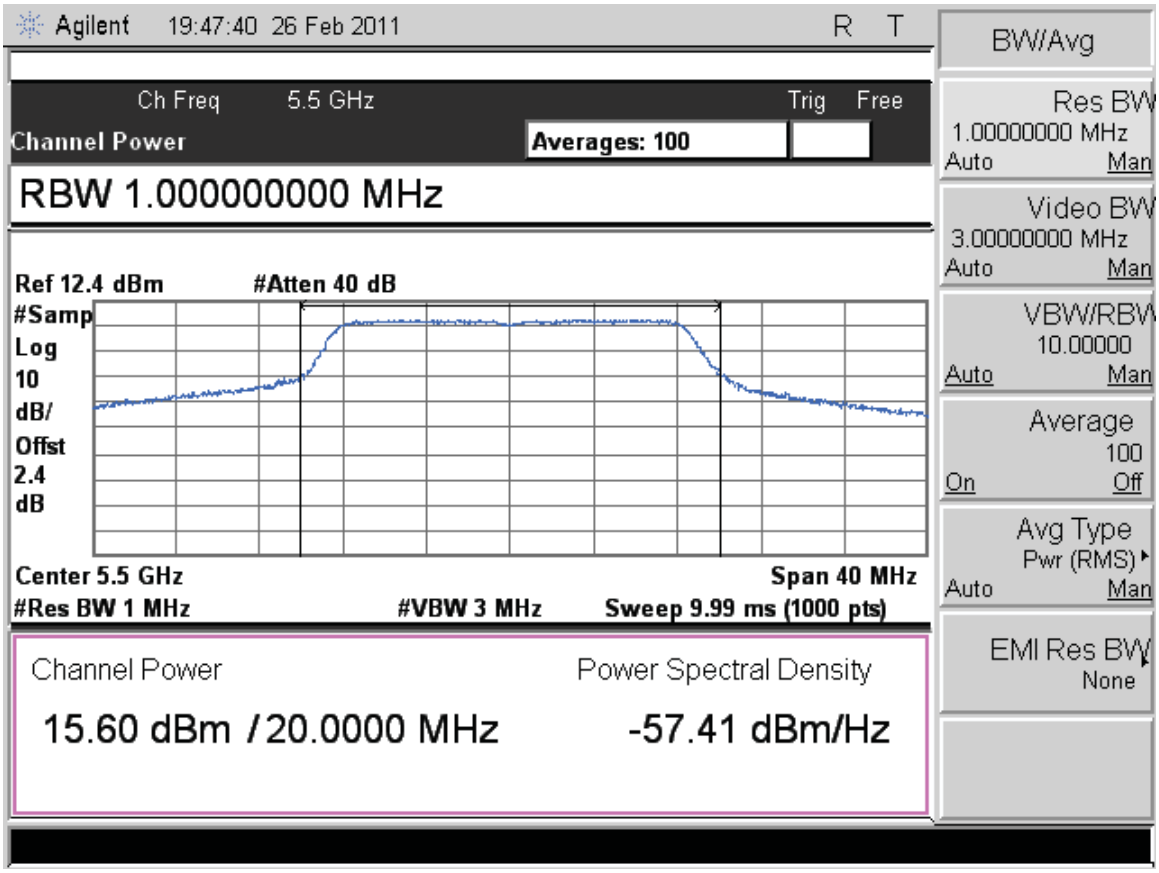


Figure 16: Maximum Transmitted Power, 5500 MHz at 802.11a, Chain 1

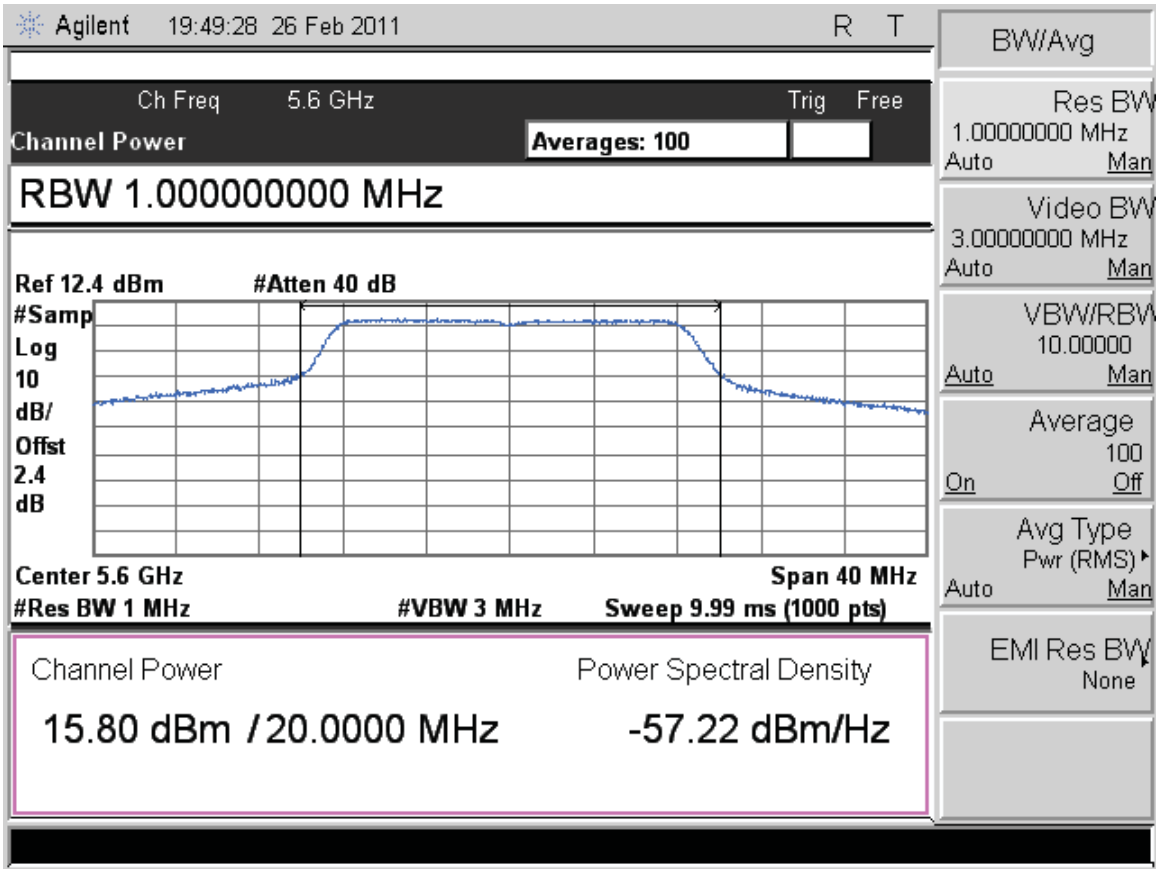


Figure 17: Maximum Transmitted Power, 5600 MHz at 802.11a, Chain 1

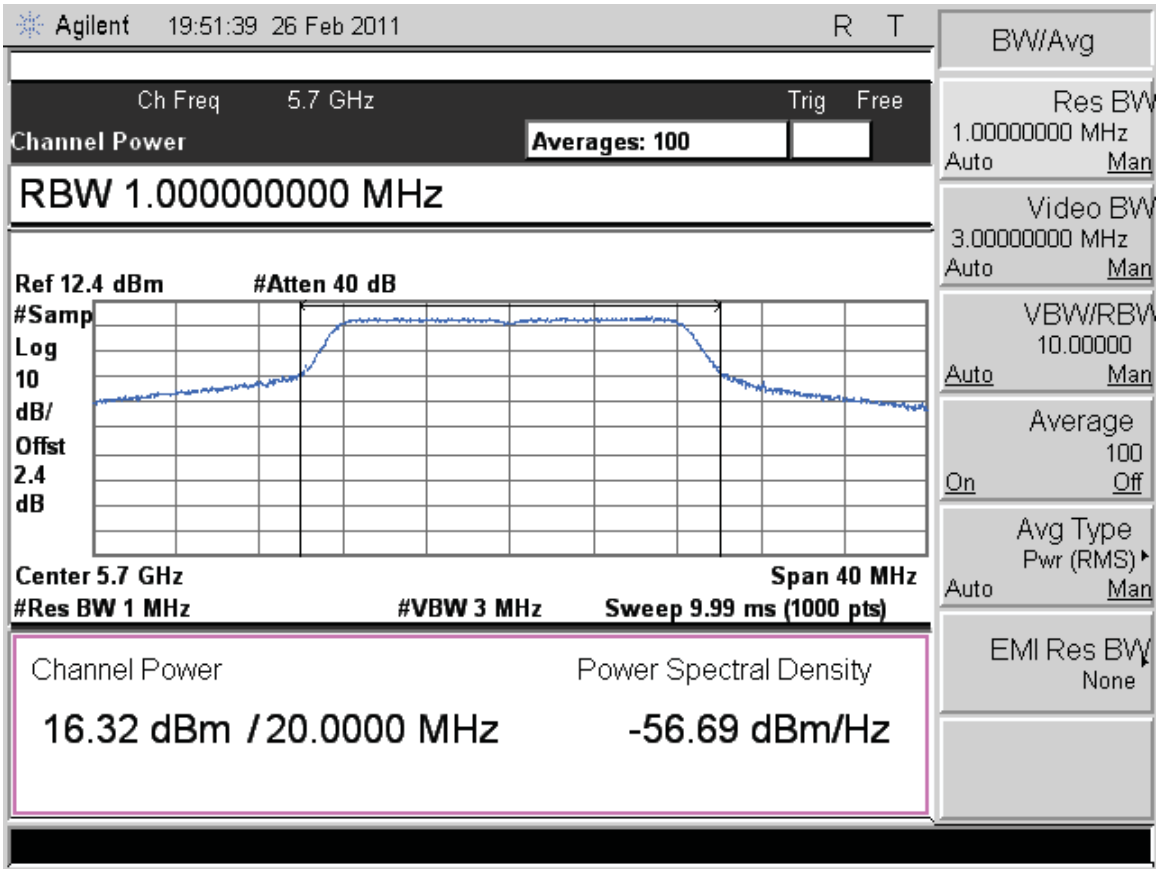


Figure 18: Maximum Transmitted Power, 5700 MHz at 802.11a, Chain 1

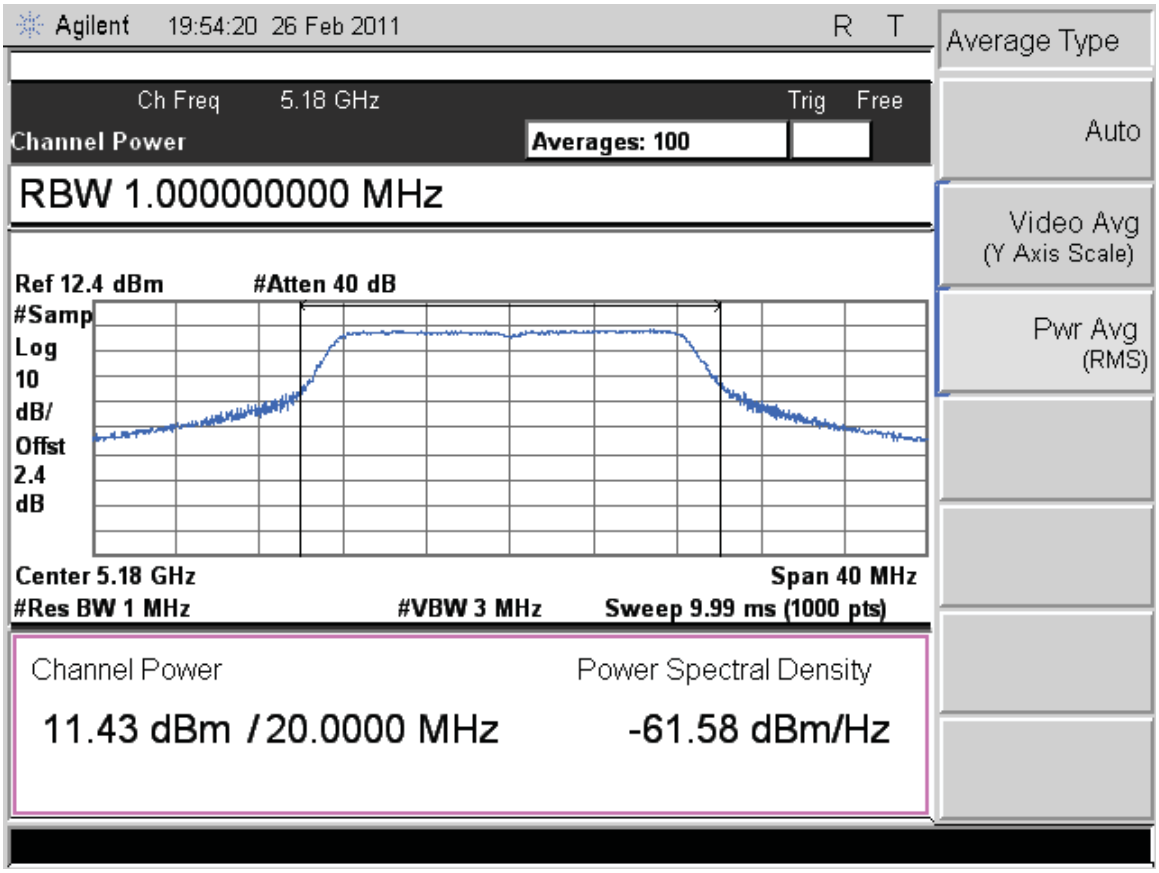


Figure 19: Maximum Transmitted Power, 5180 MHz at 802.11a, Chain 2

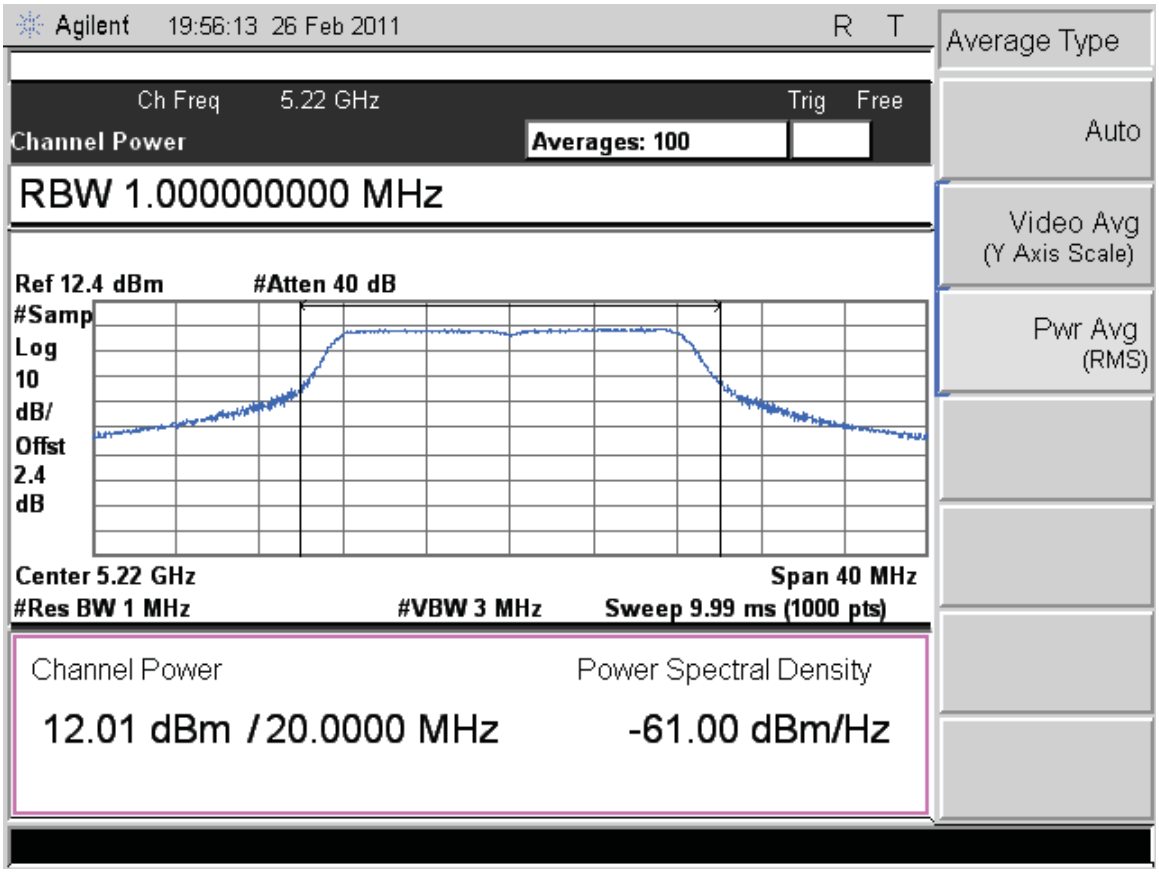


Figure 20: Maximum Transmitted Power, 5220 MHz at 802.11a, Chain 2

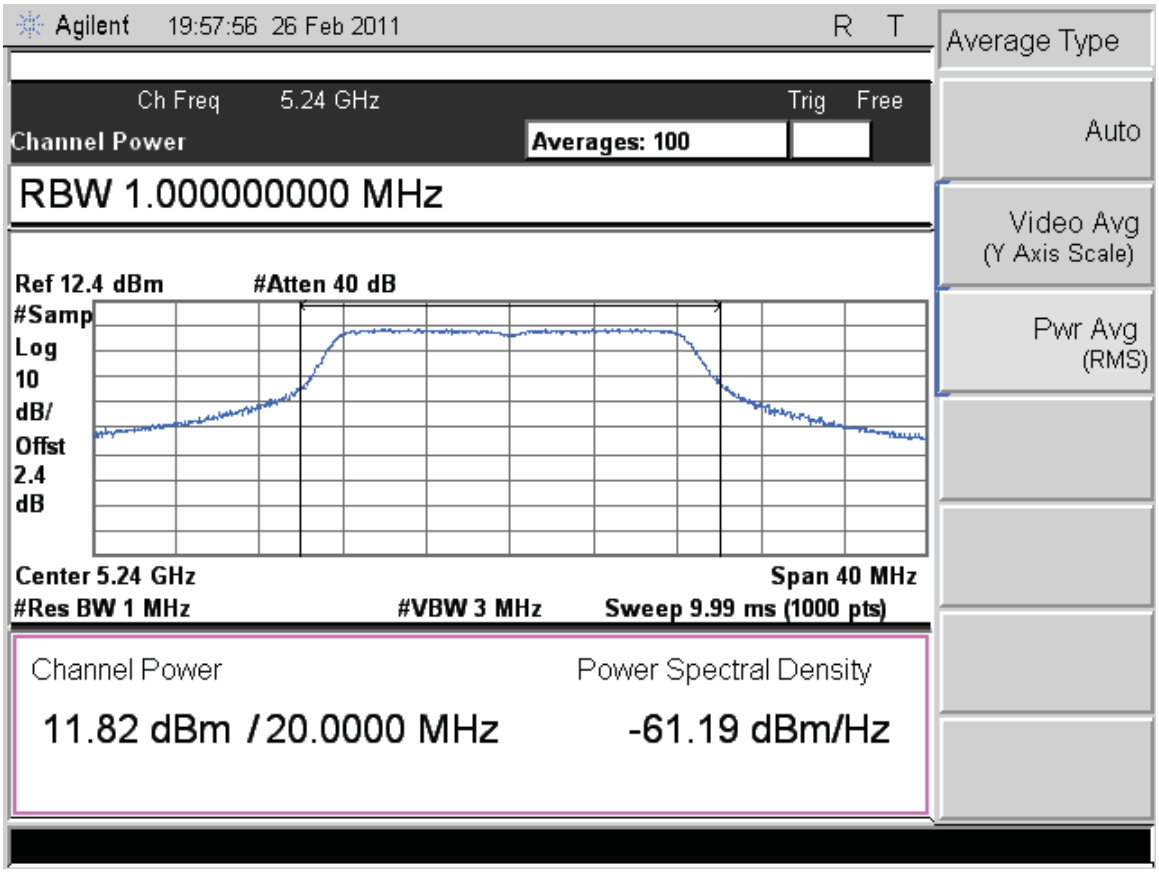


Figure 21: Maximum Transmitted Power, 5240 MHz at 802.11a, Chain 2

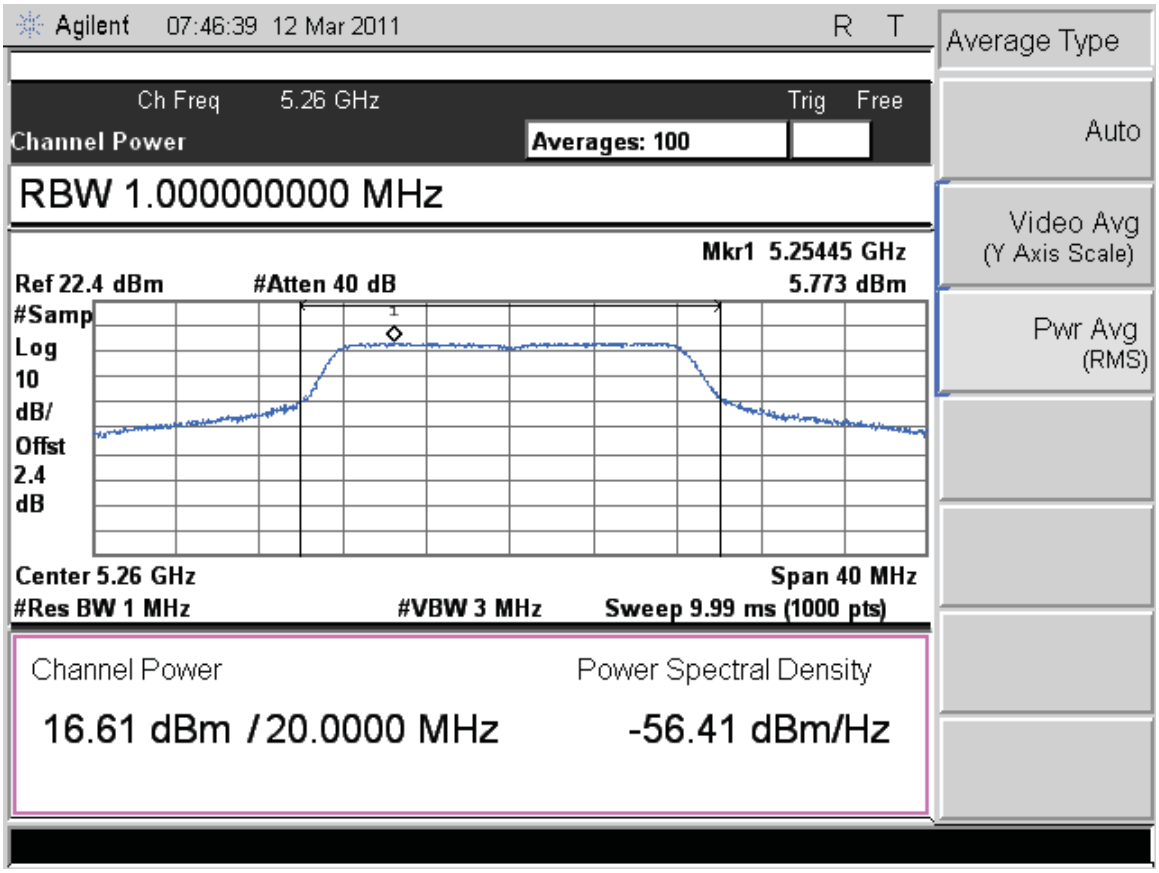


Figure 22: Maximum Transmitted Power, 5260 MHz at 802.11a, Chain 2

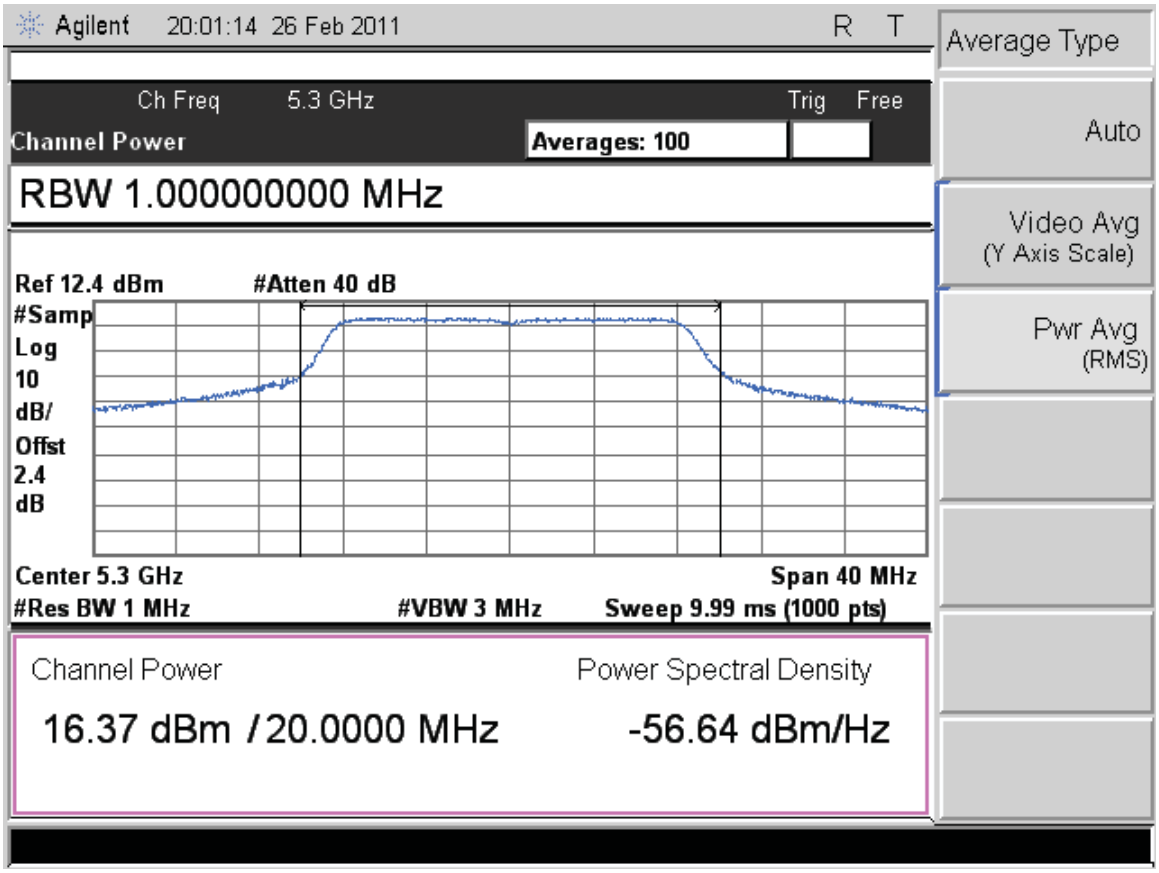


Figure 23: Maximum Transmitted Power, 5300 MHz at 802.11a, Chain 2

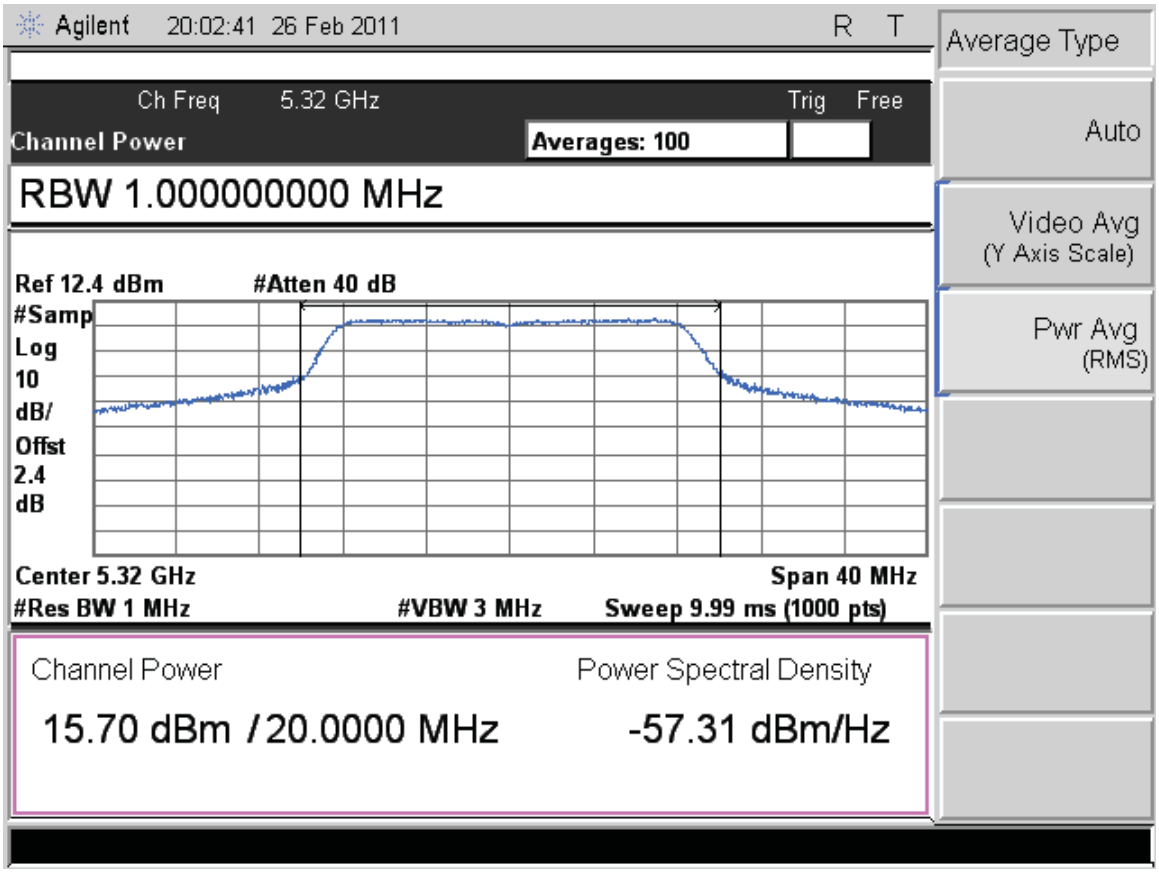


Figure 24: Maximum Transmitted Power, 5320 MHz at 802.11a, Chain 2

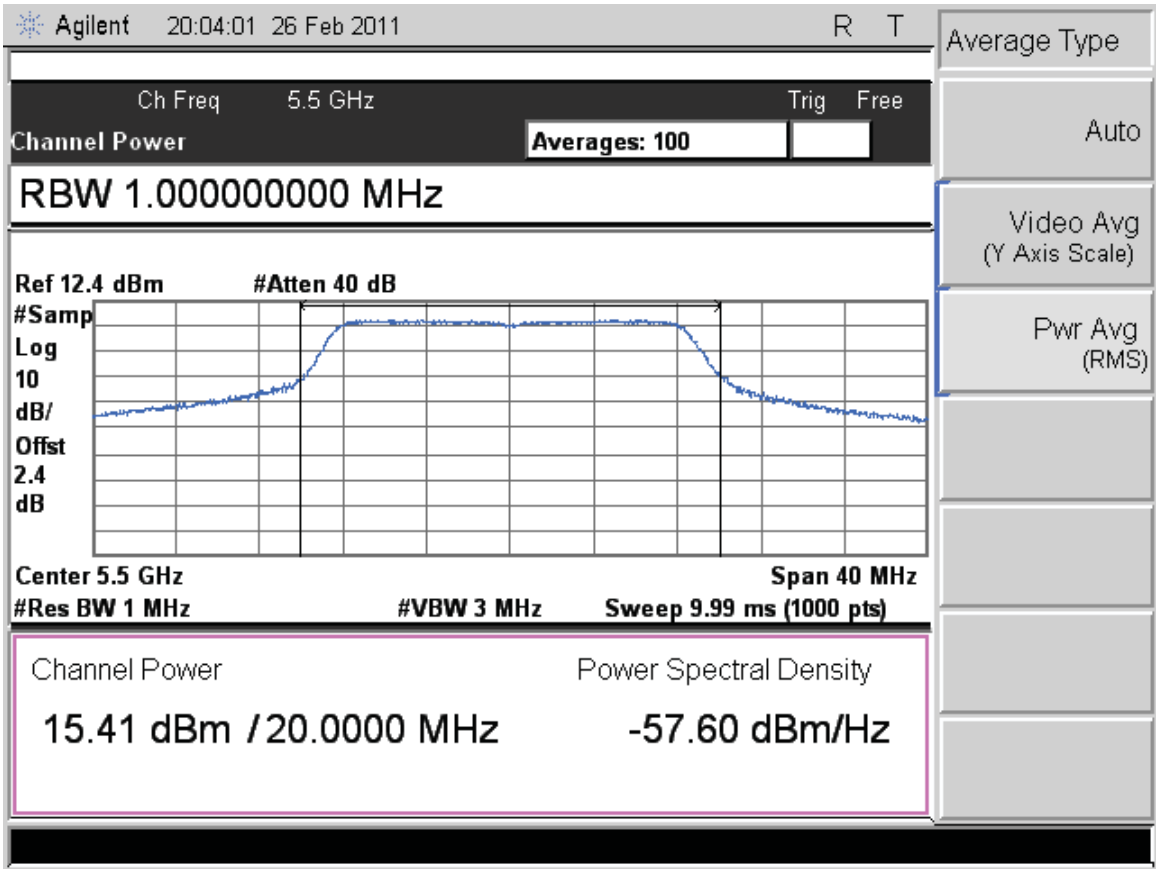


Figure 25: Maximum Transmitted Power, 5500 MHz at 802.11a, Chain 2

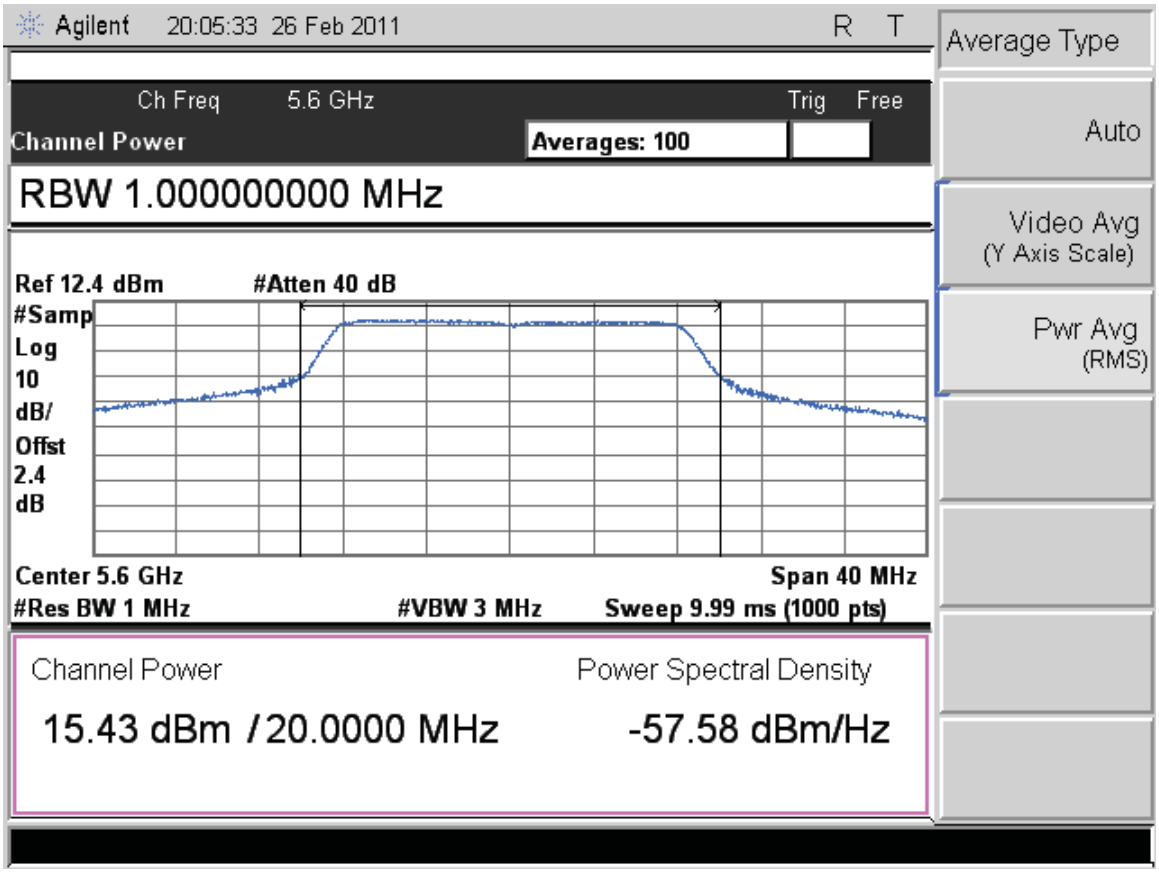


Figure 26: Maximum Transmitted Power, 5600 MHz at 802.11a, Chain 2

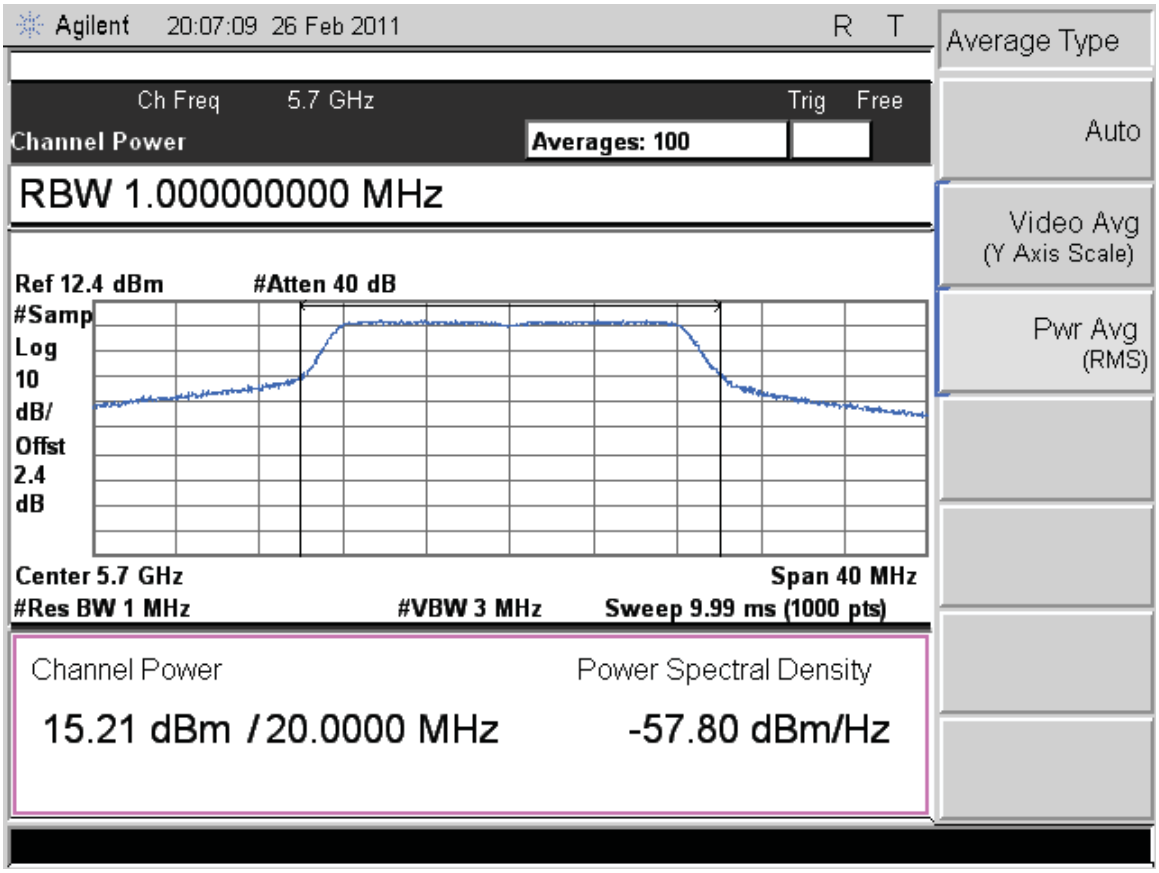


Figure 27: Maximum Transmitted Power, 5700 MHz at 802.11a, Chain 2

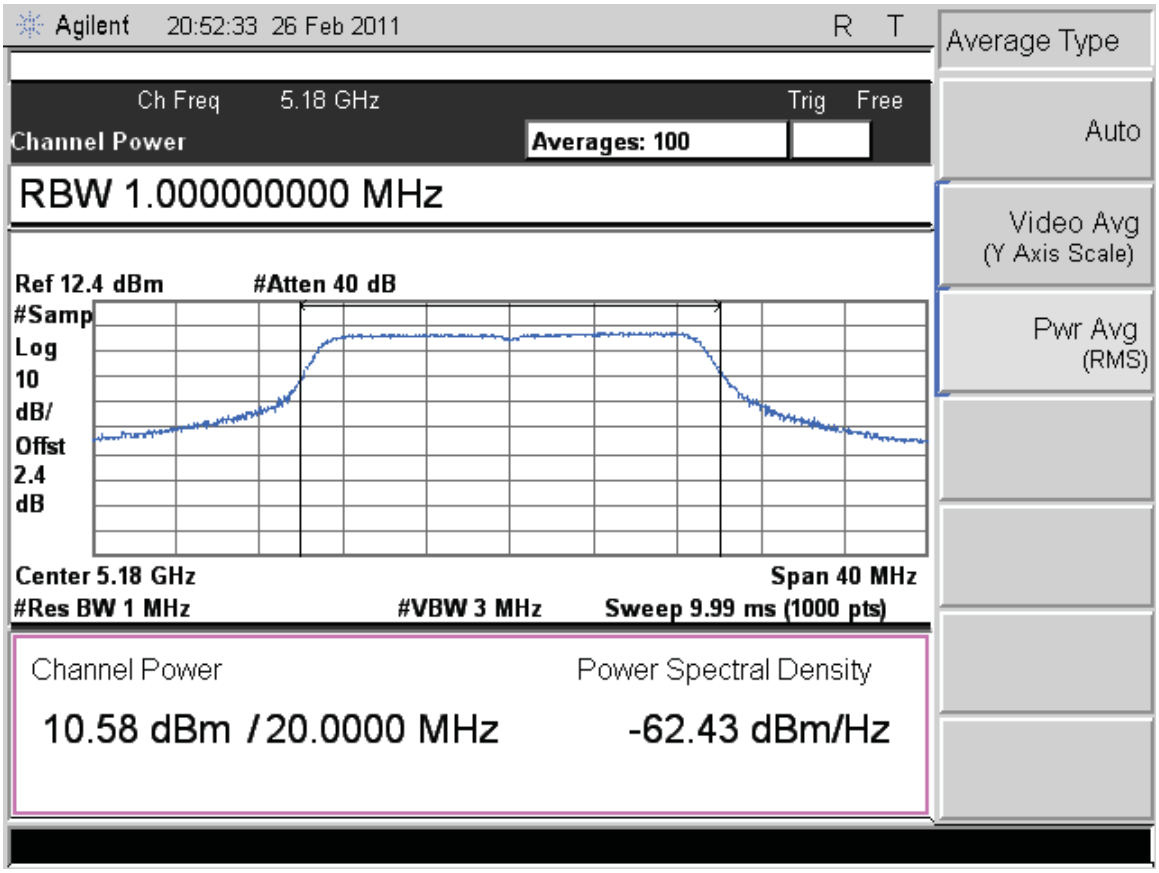


Figure 28: Maximum Transmitted Power, 5180 MHz at 802.11n HT20, Chain 0 – 6.5Mbps

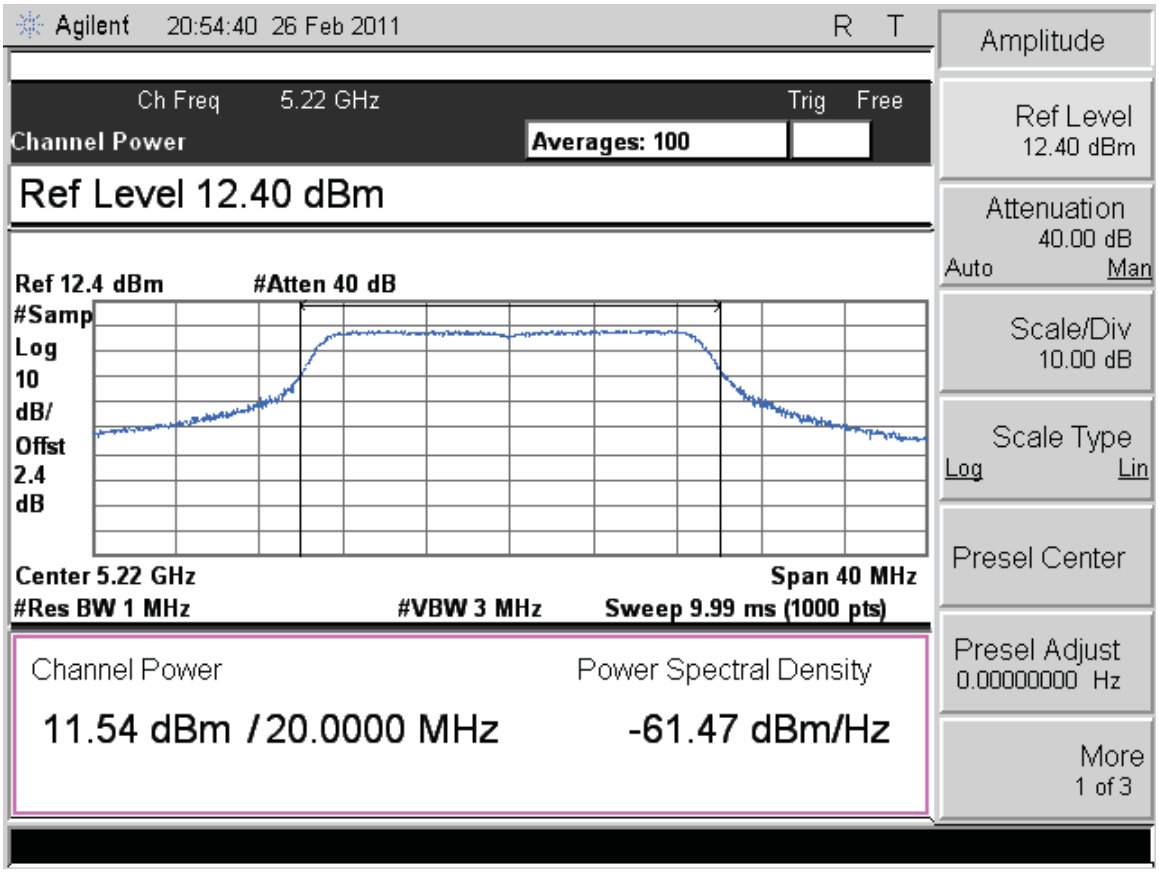


Figure 29: Maximum Transmitted Power, 5220 MHz at 802.11n HT20, Chain 0 – 6.5Mbps

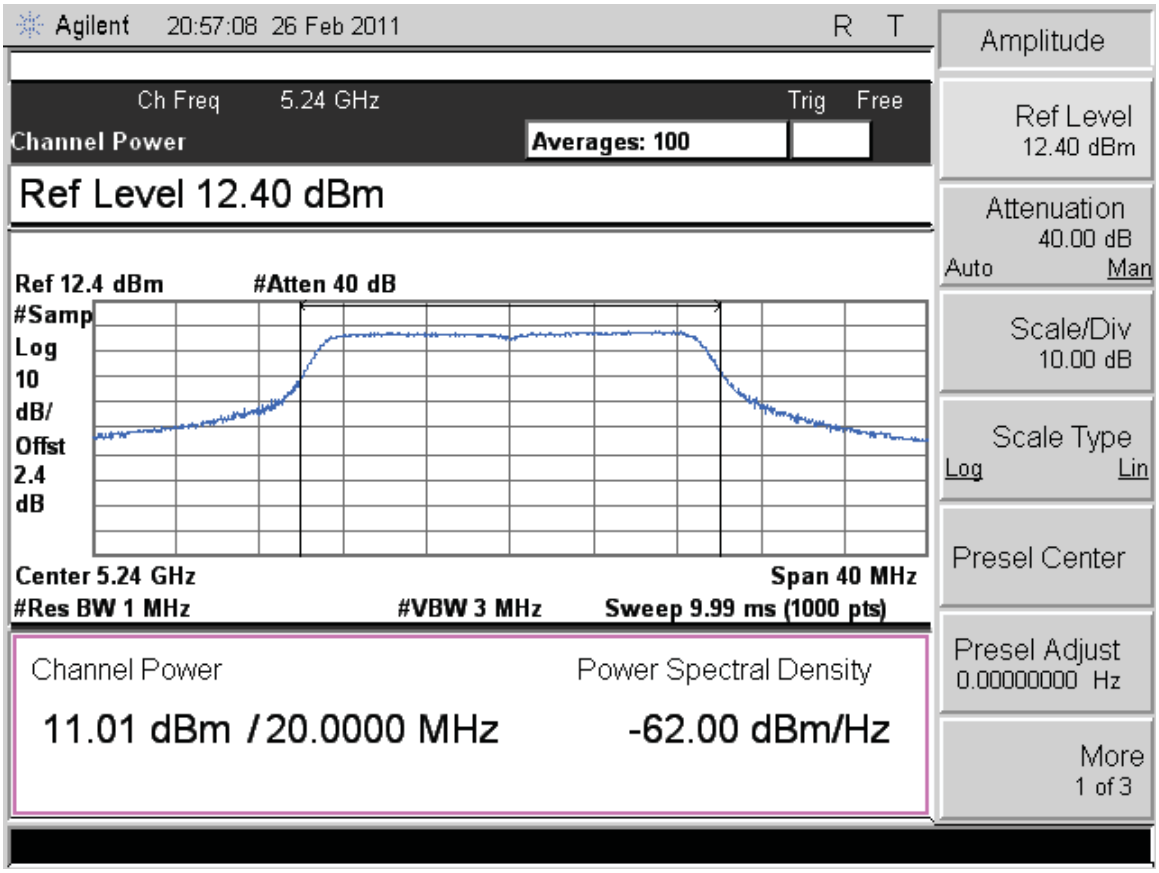


Figure 30: Maximum Transmitted Power, 5240 MHz at 802.11n HT20, Chain 0 – 6.5Mbps

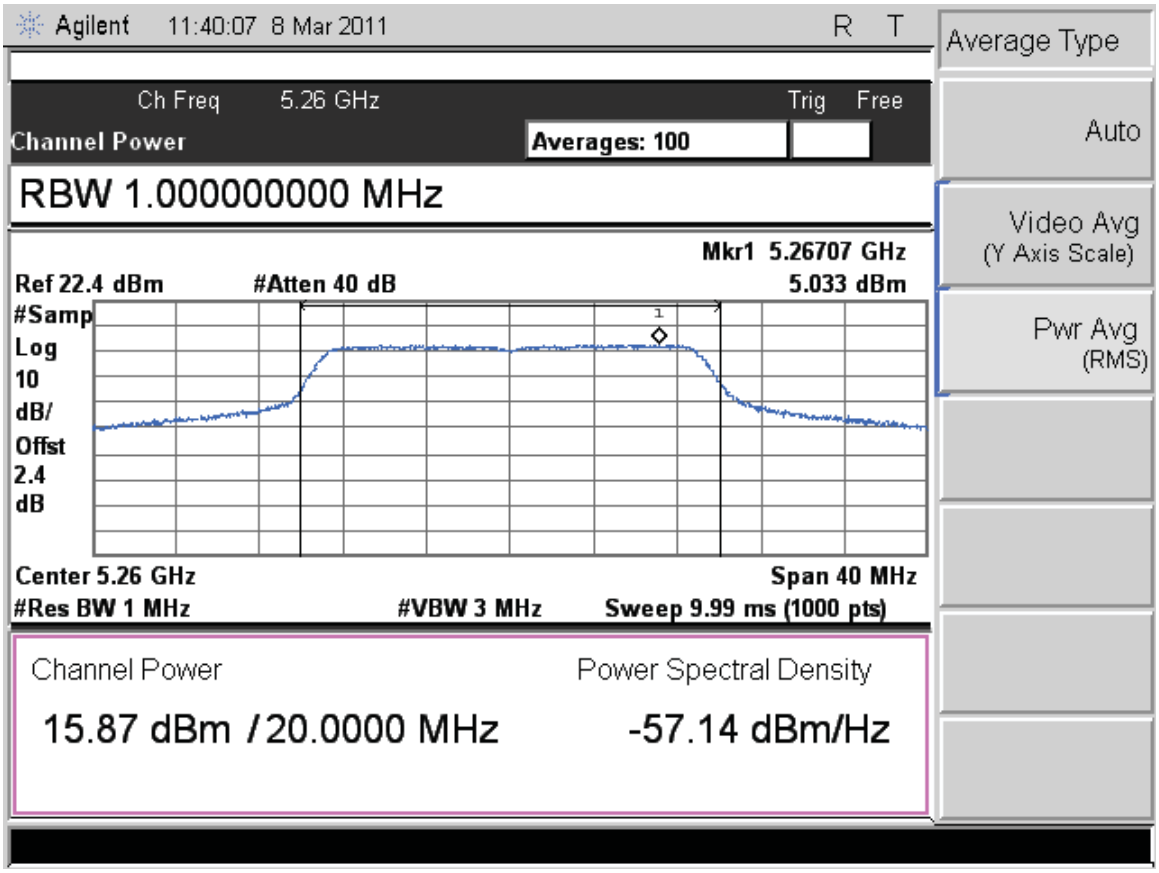


Figure 31: Maximum Transmitted Power, 5260 MHz at 802.11n HT20, Chain 0 – 6.5Mbps

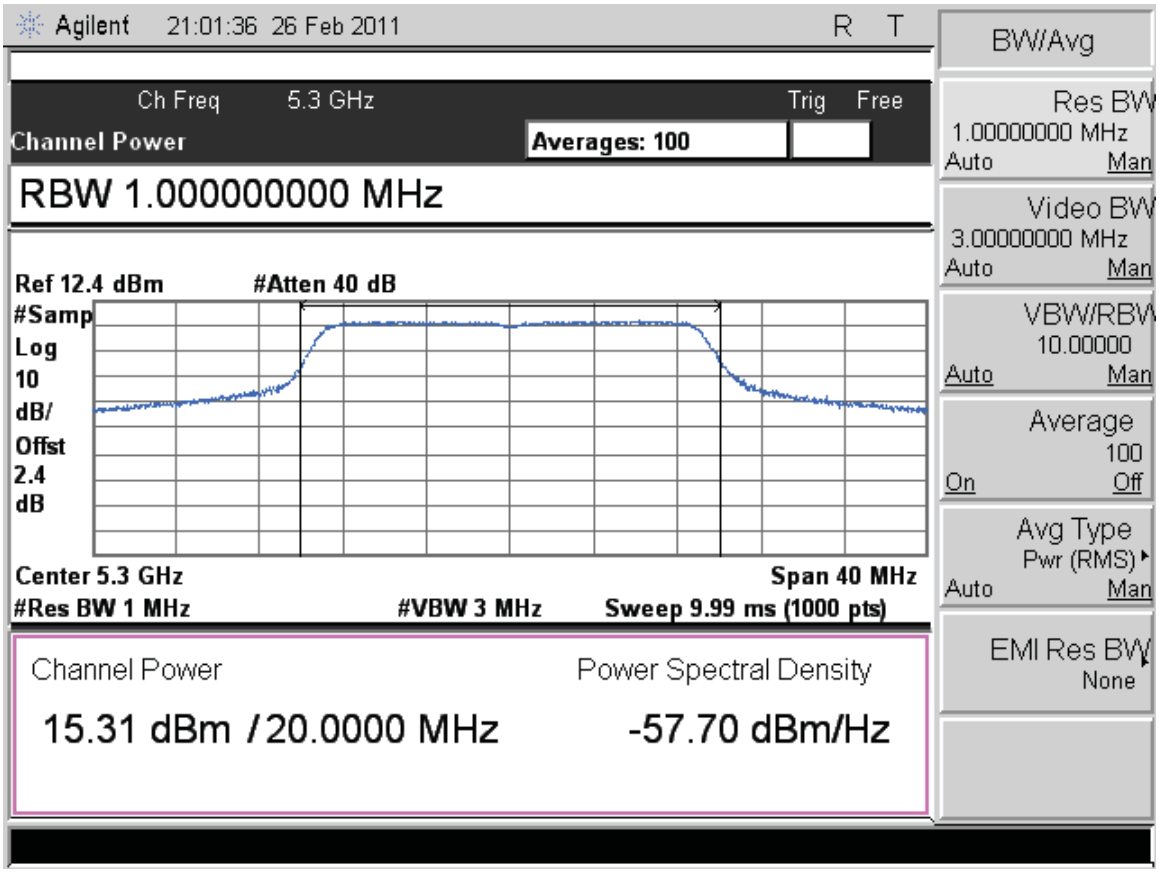


Figure 32: Maximum Transmitted Power, 5300 MHz at 802.11n HT20, Chain 0 – 6.5Mbps

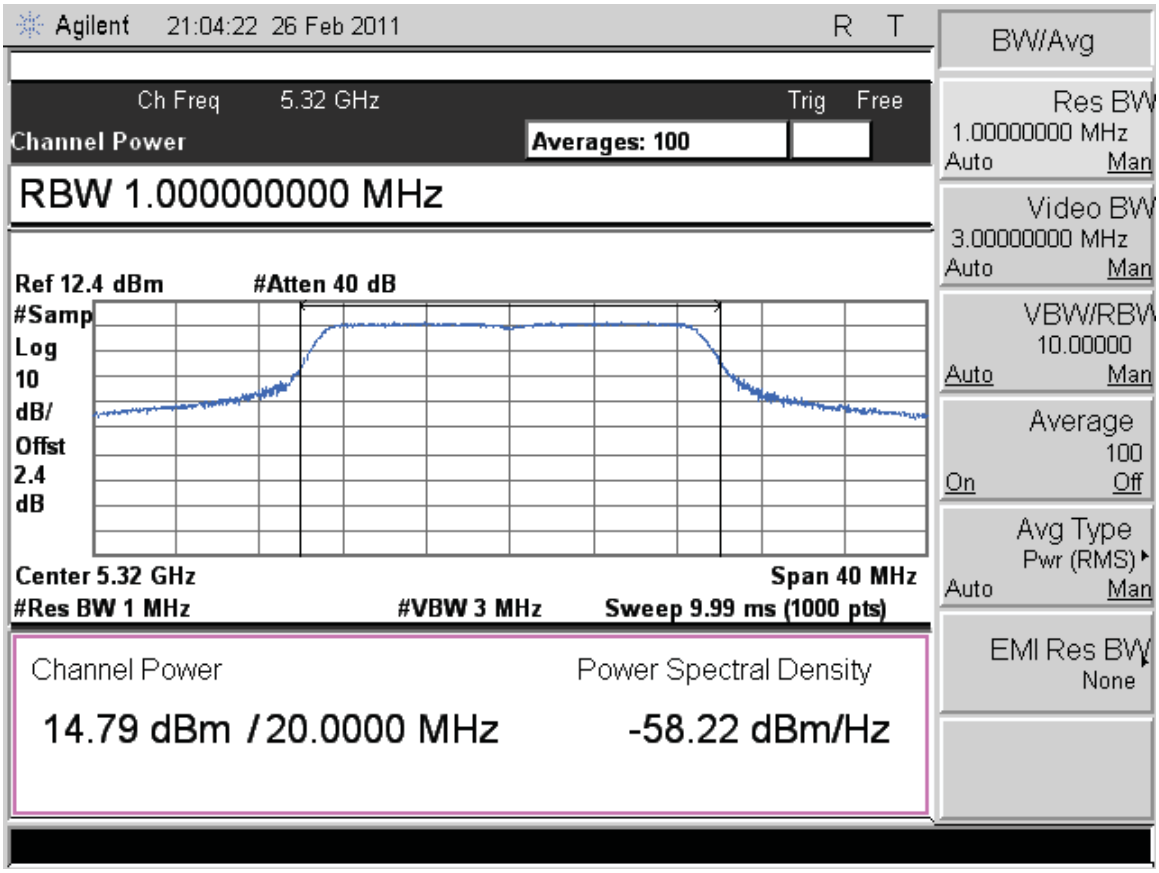


Figure 33: Maximum Transmitted Power, 5320 MHz at 802.11n HT20, Chain 0 – 6.5Mbps

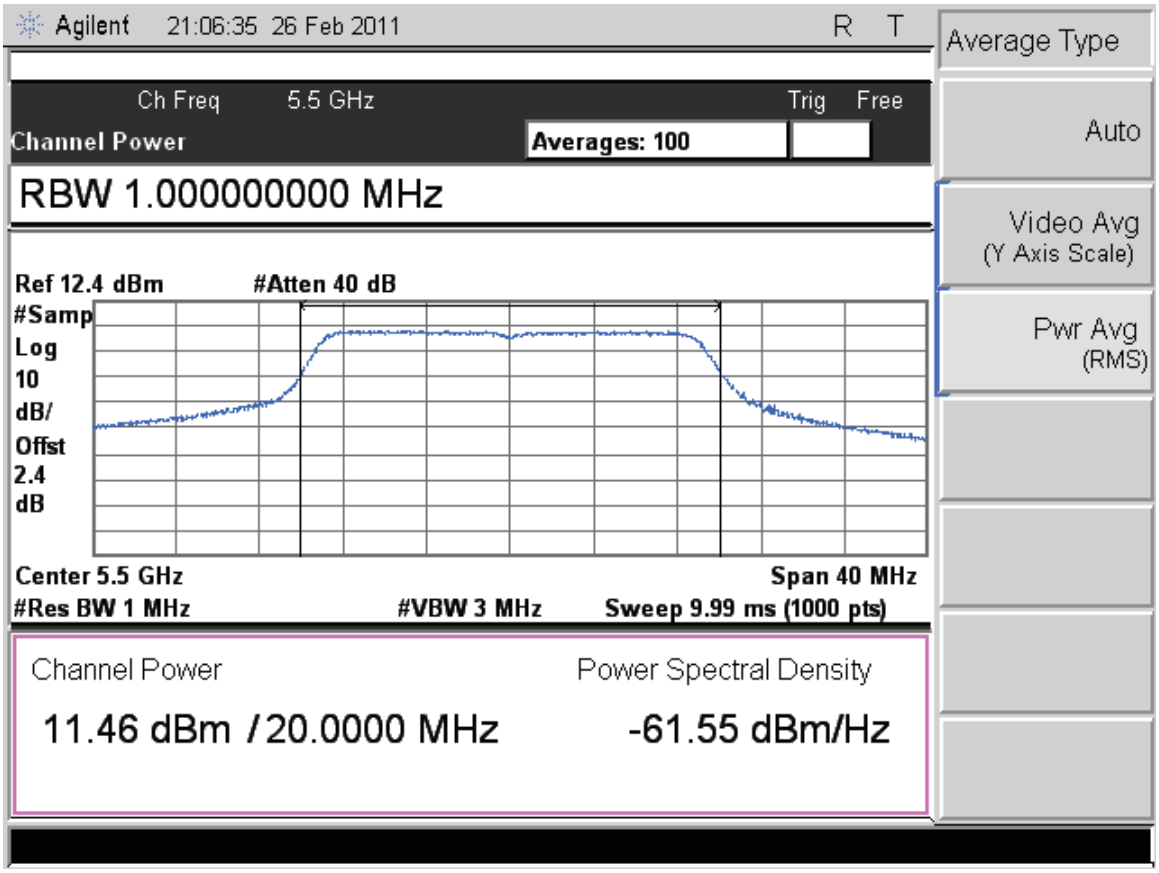


Figure 34: Maximum Transmitted Power, 5500 MHz at 802.11n HT20, Chain 0 – 6.5Mbps

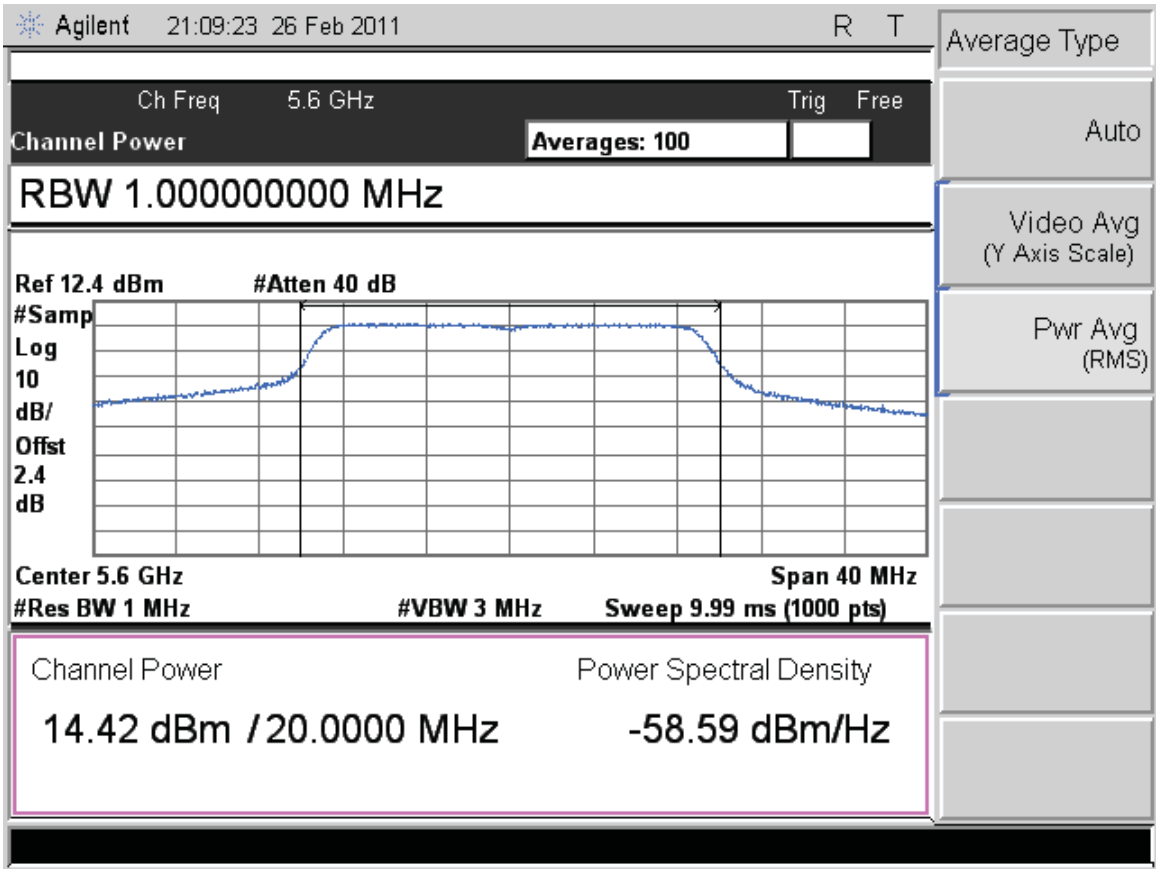


Figure 35: Maximum Transmitted Power, 5600 MHz at 802.11n HT20, Chain 0 – 6.5Mbps

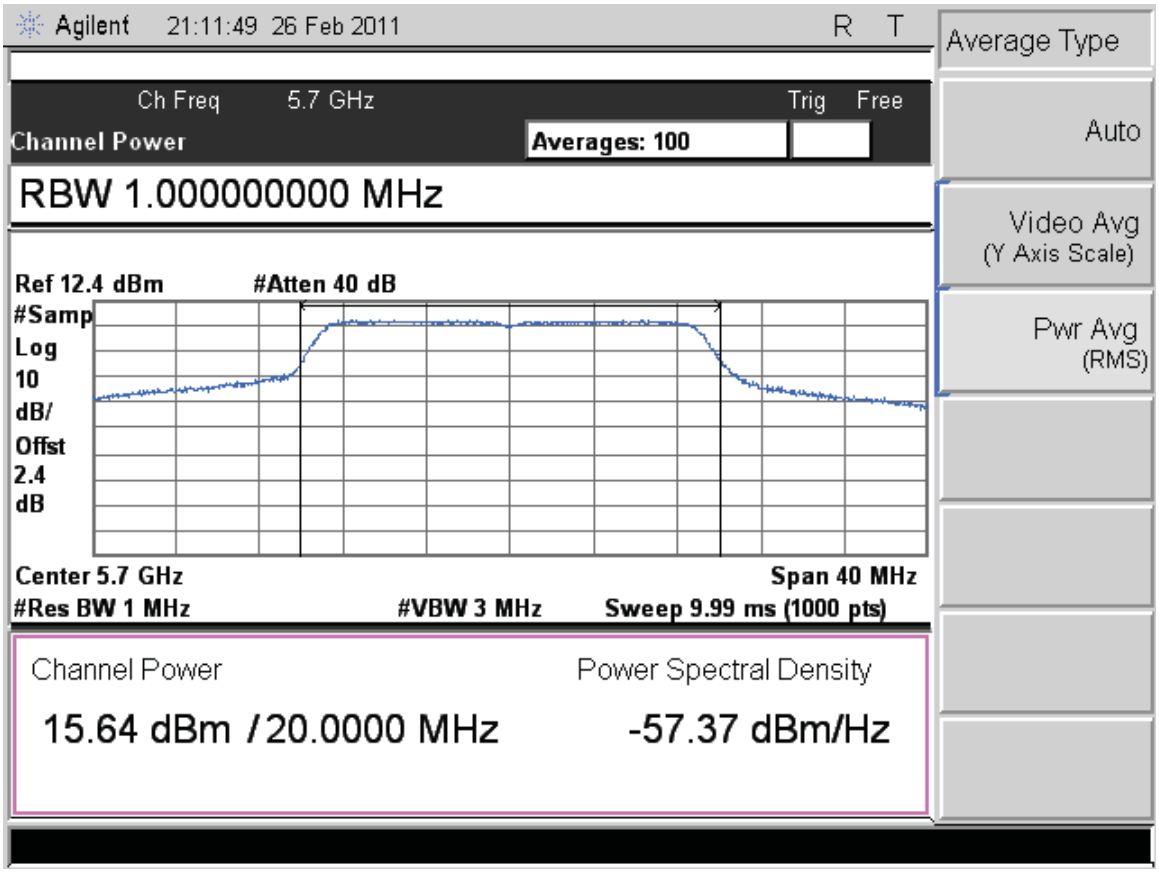


Figure 36: Maximum Transmitted Power, 5700 MHz at 802.11n HT20, Chain 0 – 6.5Mbps

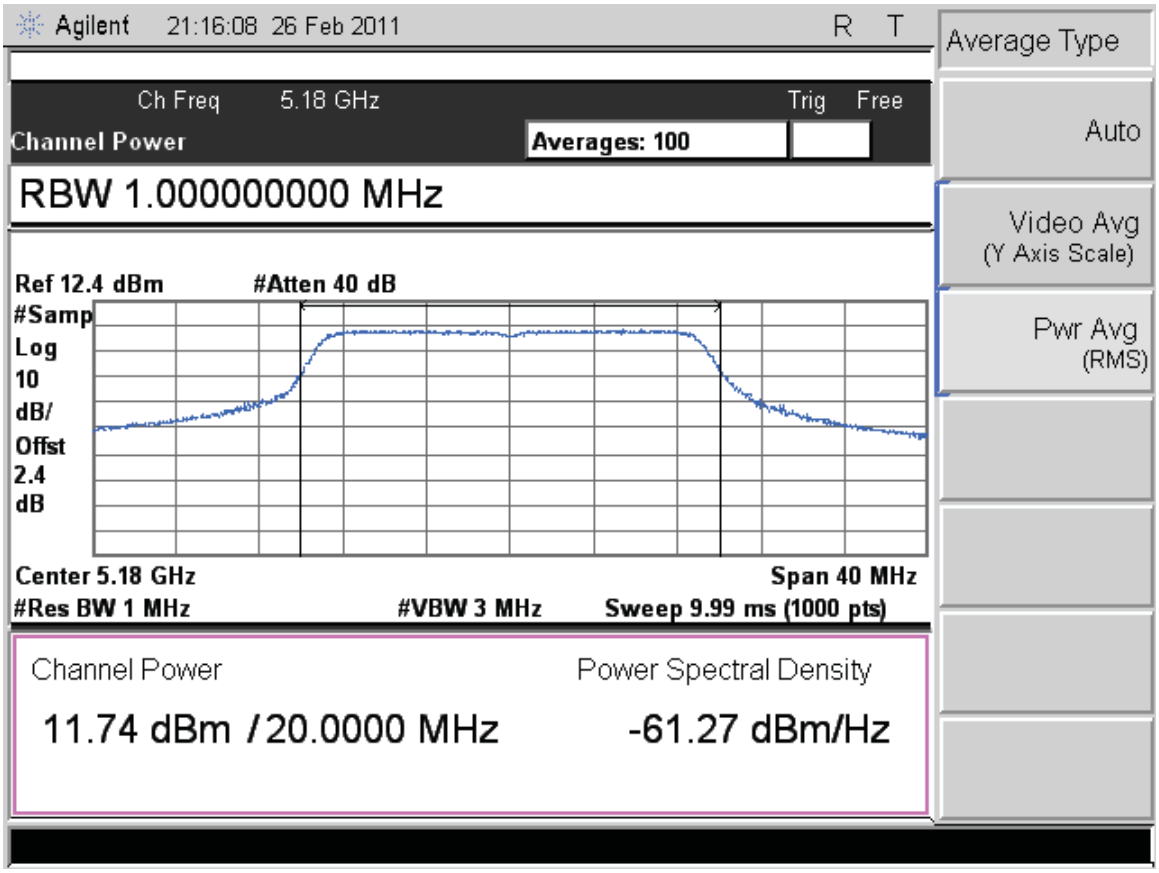


Figure 37: Maximum Transmitted Power, 5180 MHz at 802.11n HT20, Chain 1 – 6.5Mbps

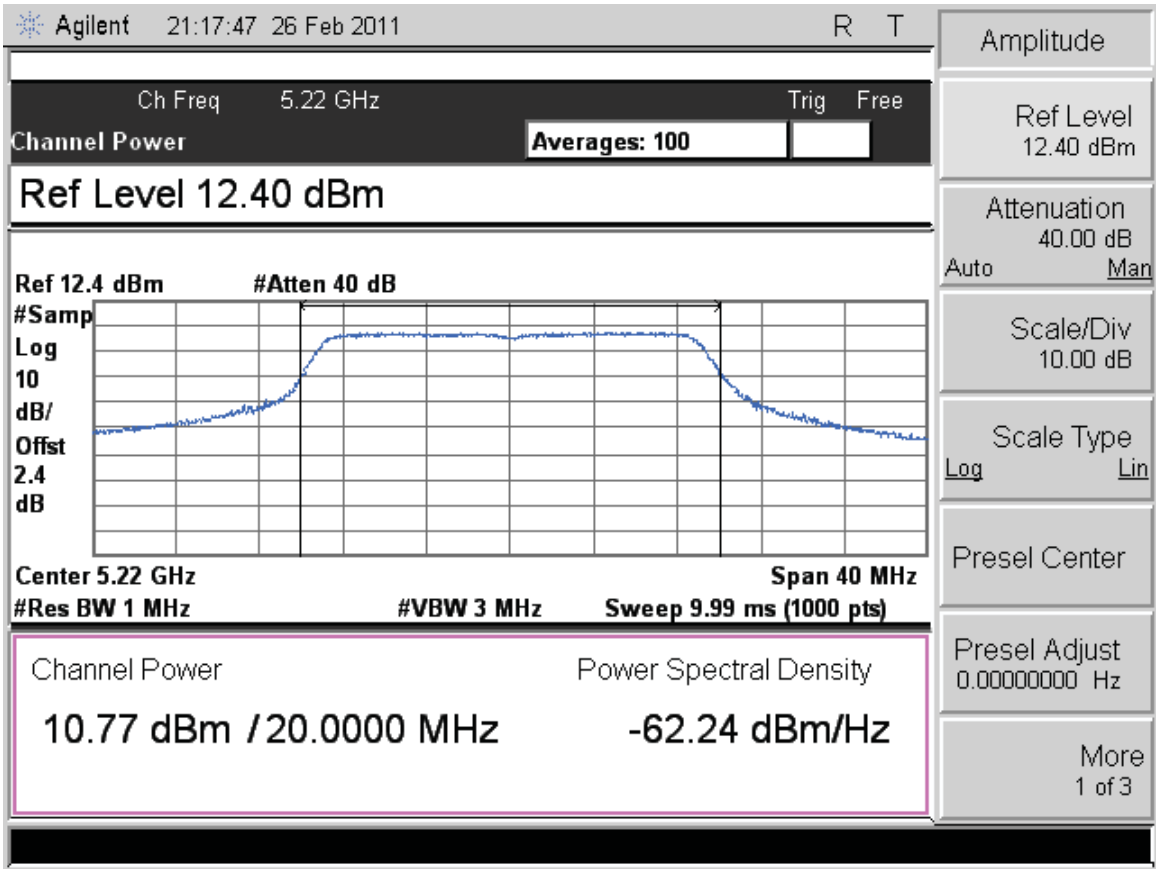


Figure 38: Maximum Transmitted Power, 5220 MHz at 802.11n HT20, Chain 1 – 6.5Mbps

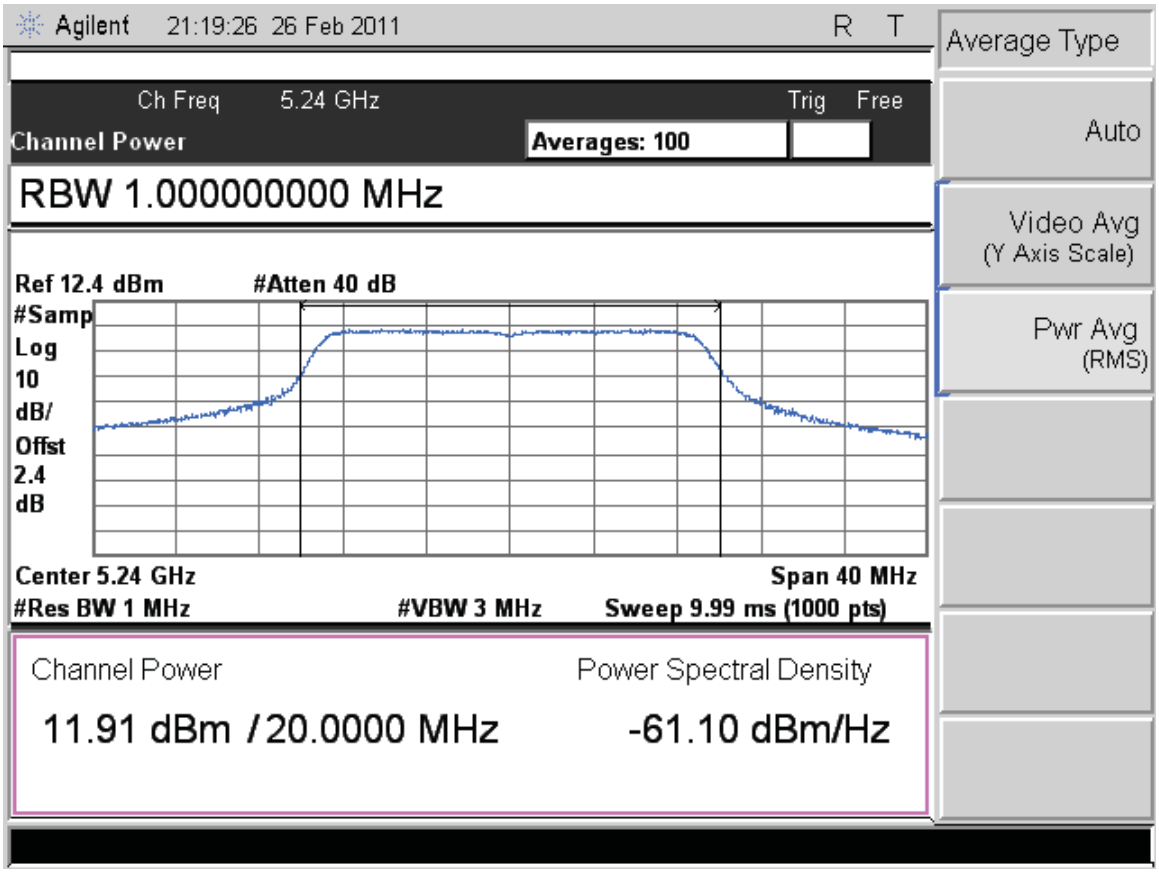


Figure 39: Maximum Transmitted Power, 5240 MHz at 802.11n HT20, Chain 1 – 6.5Mbps

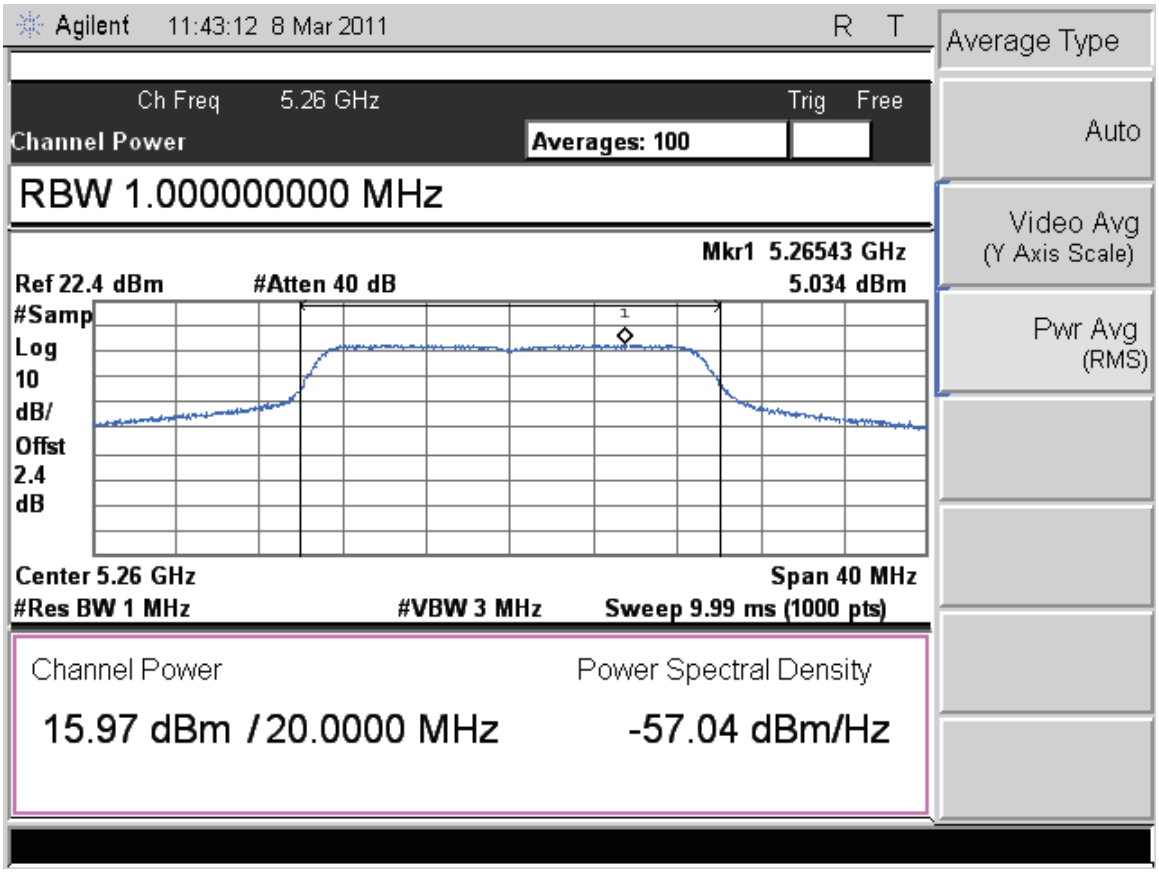


Figure 40: Maximum Transmitted Power, 5260 MHz at 802.11n HT20, Chain 1 – 6.5Mbps

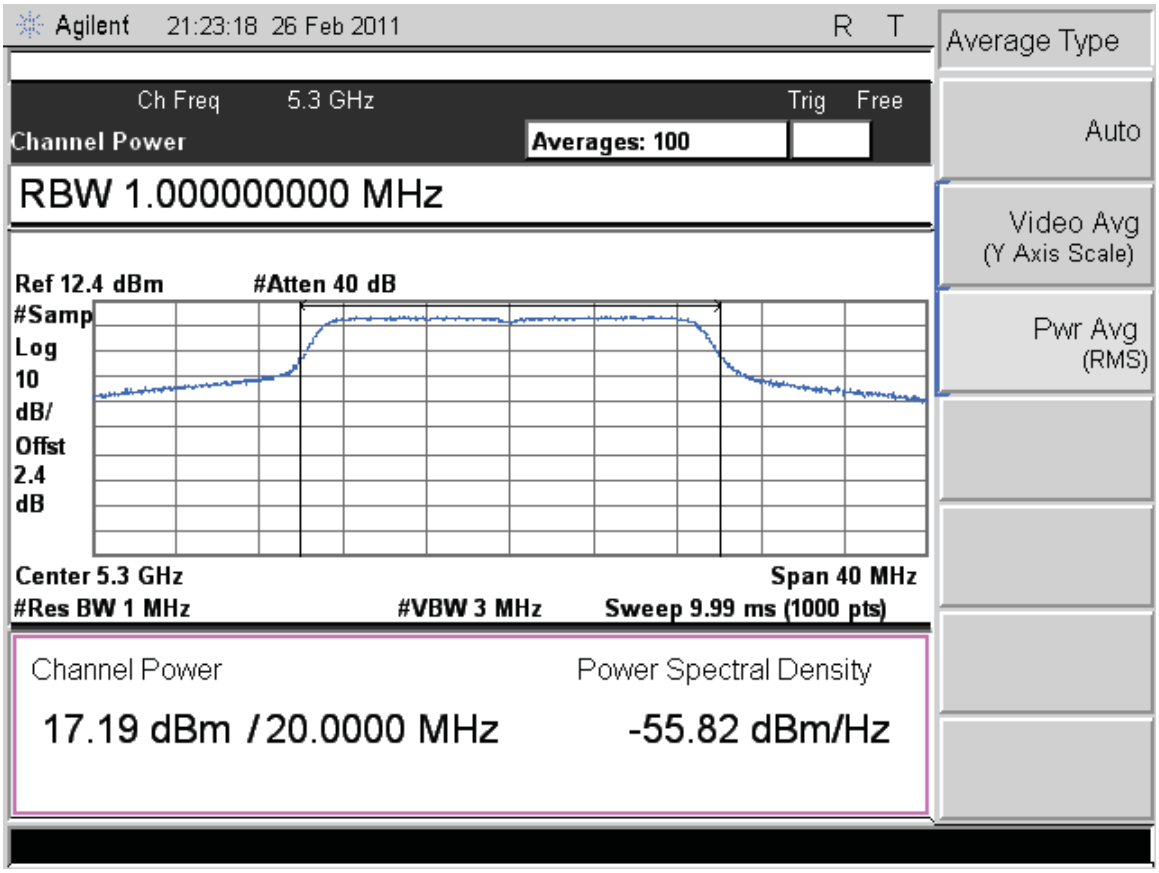


Figure 41: Maximum Transmitted Power, 5300 MHz at 802.11n HT20, Chain 1 – 6.5Mbps

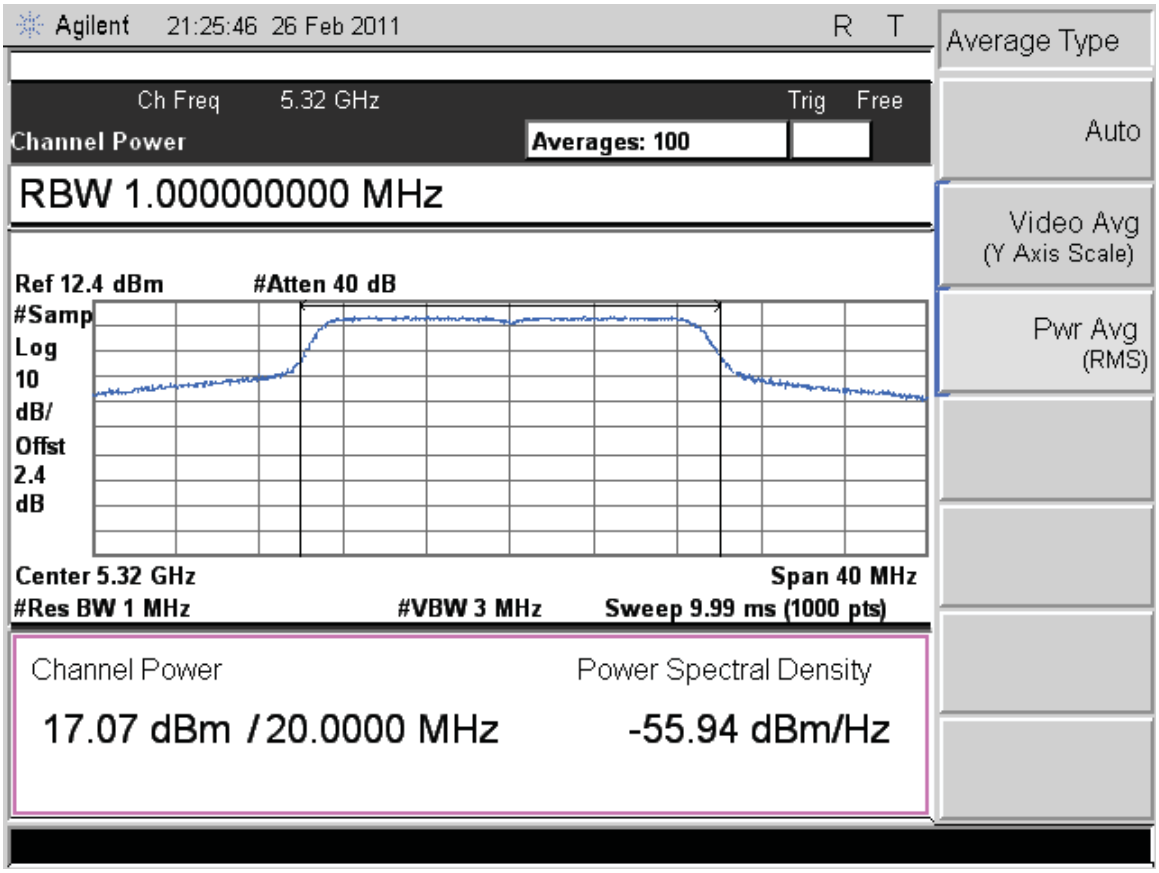


Figure 42: Maximum Transmitted Power, 5320 MHz at 802.11n HT20, Chain 1 – 6.5Mbps

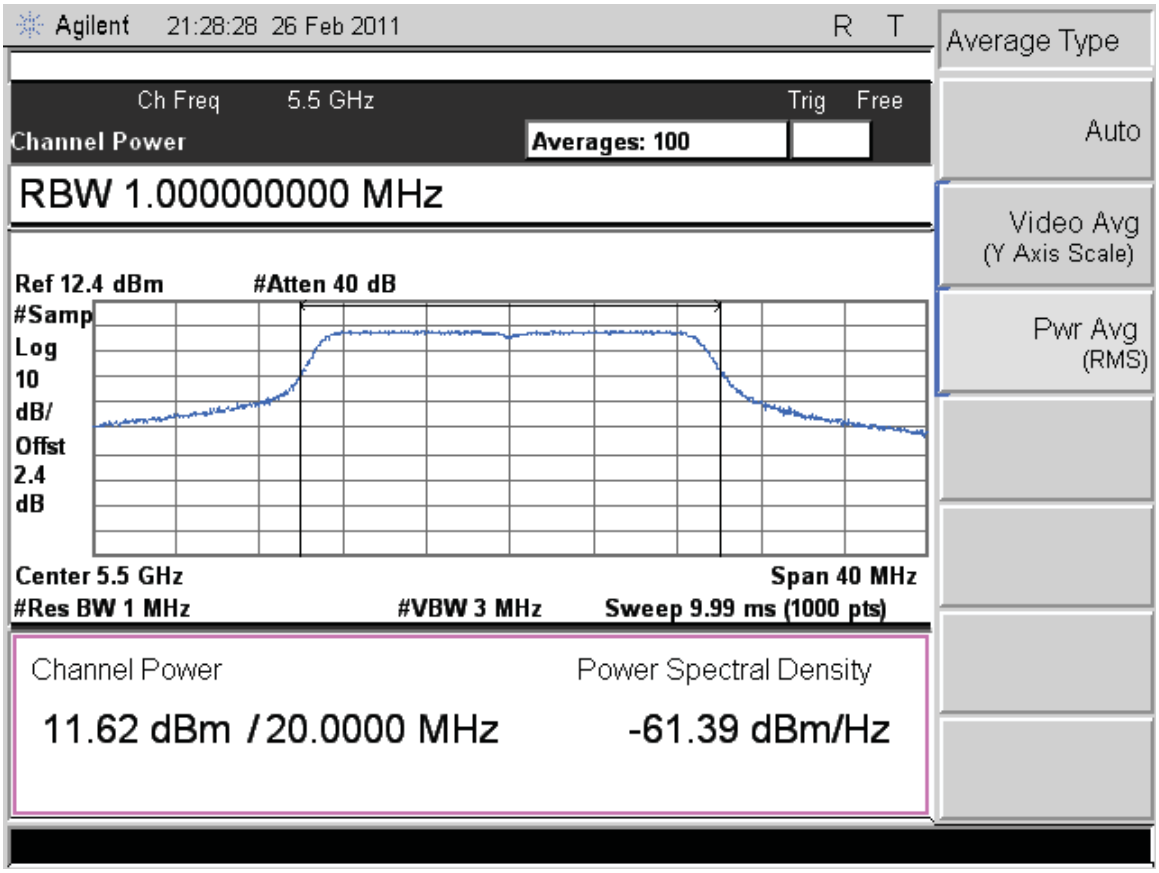


Figure 43: Maximum Transmitted Power, 5500 MHz at 802.11n HT20, Chain 1 – 6.5Mbps

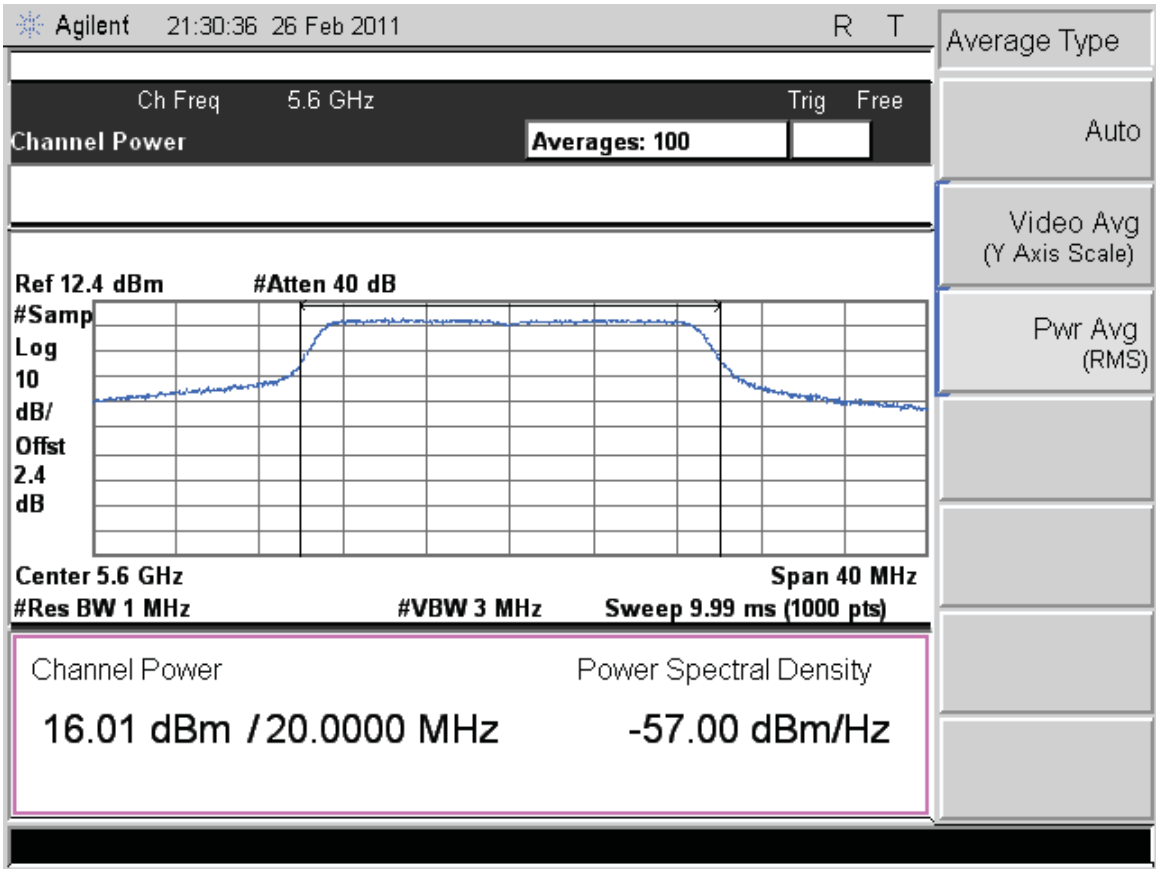


Figure 44: Maximum Transmitted Power, 5600 MHz at 802.11n HT20, Chain 1 – 6.5Mbps

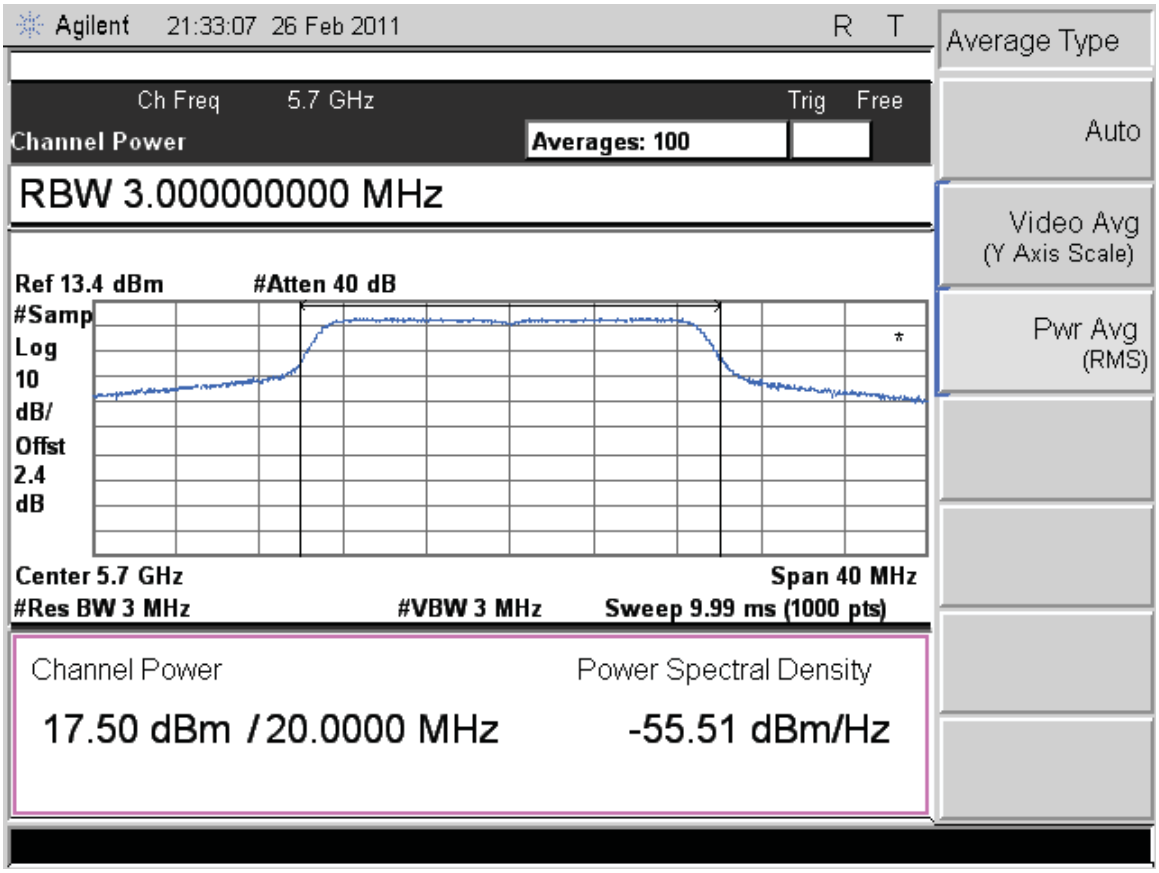


Figure 45: Maximum Transmitted Power, 5700 MHz at 802.11n HT20, Chain 1 – 6.5Mbps

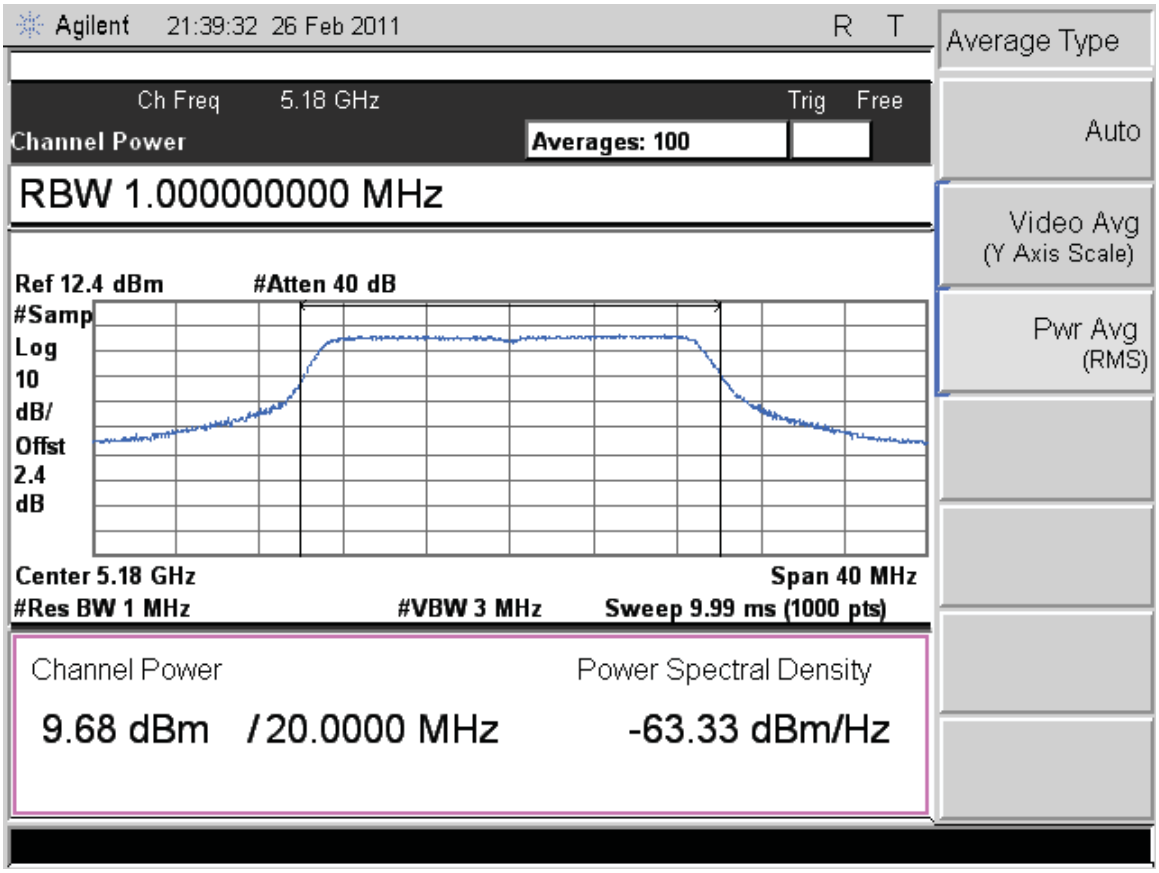


Figure 46: Maximum Transmitted Power, 5180 MHz at 802.11n HT20, Chain 2 – 6.5Mbps

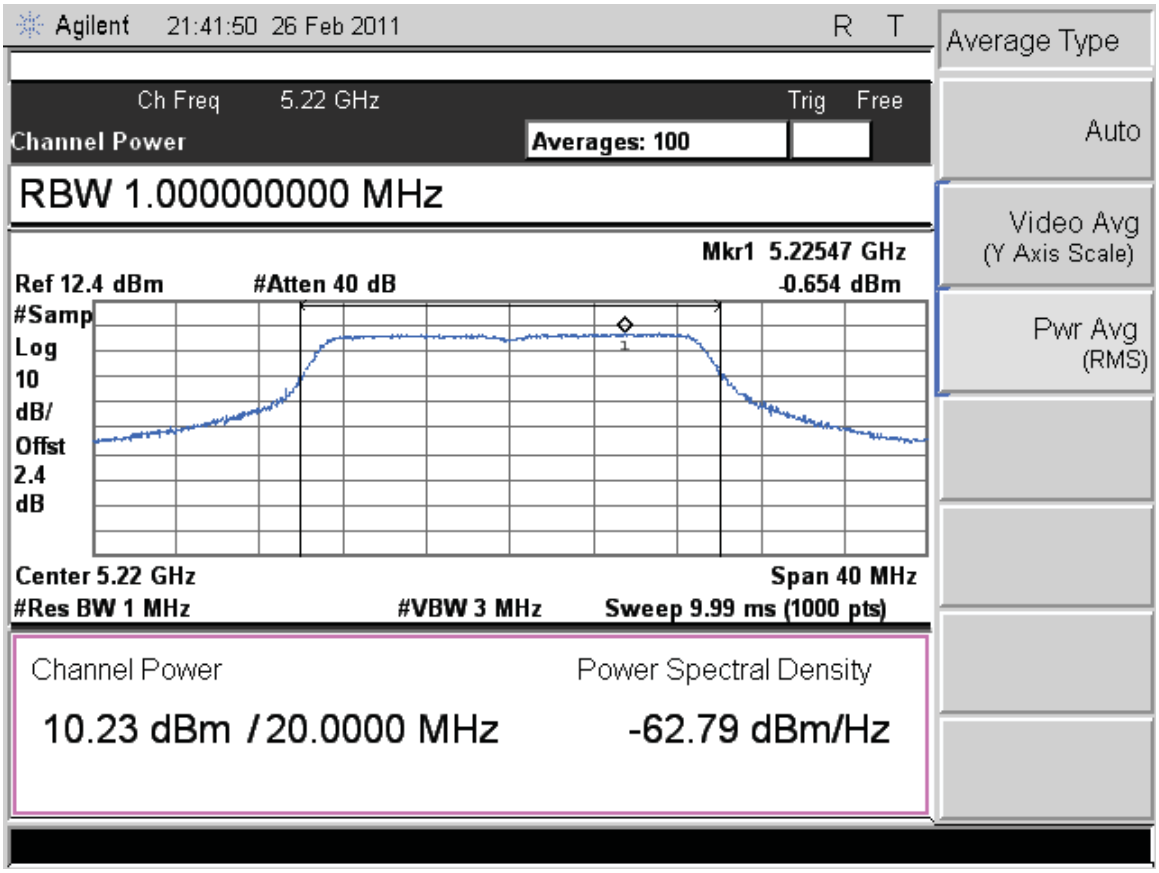


Figure 47: Maximum Transmitted Power, 5220 MHz at 802.11n HT20, Chain 2 – 6.5Mbps

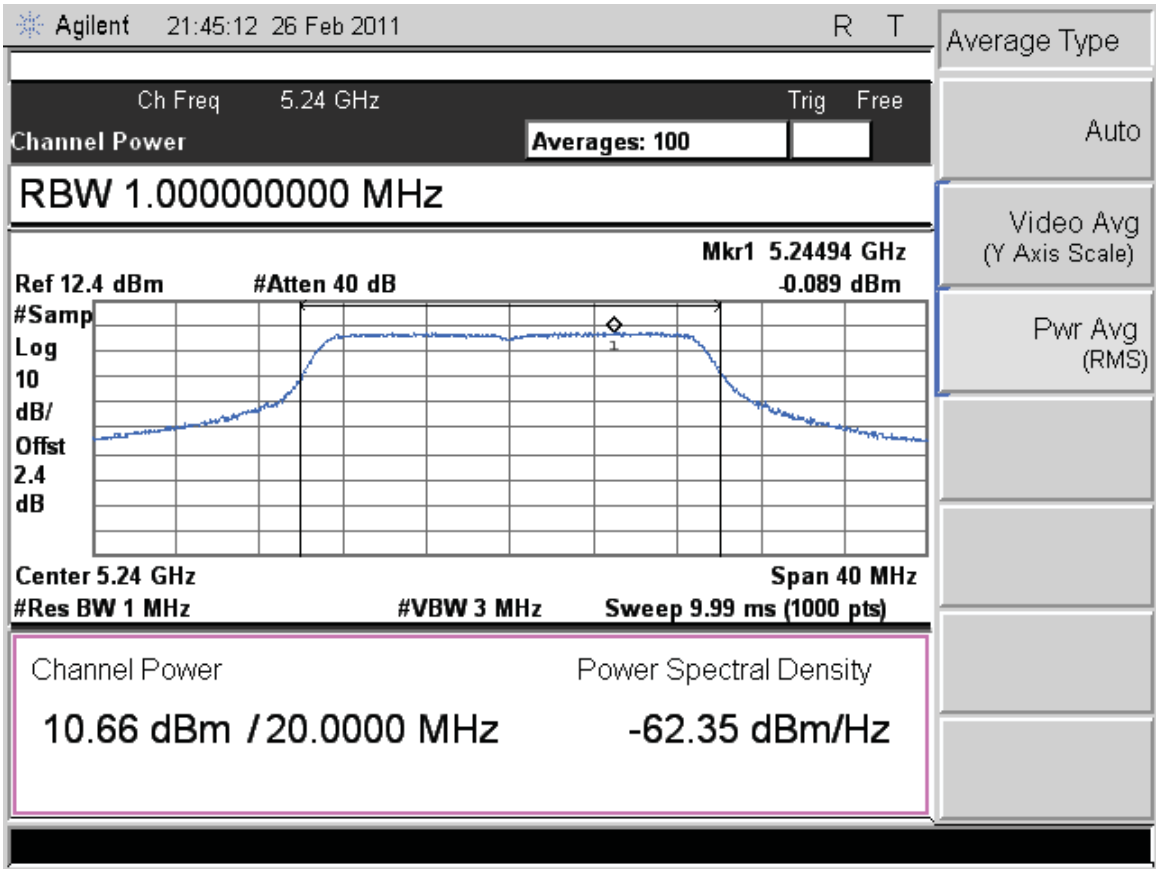


Figure 48: Maximum Transmitted Power, 5240 MHz at 802.11n HT20, Chain 2 – 6.5Mbps

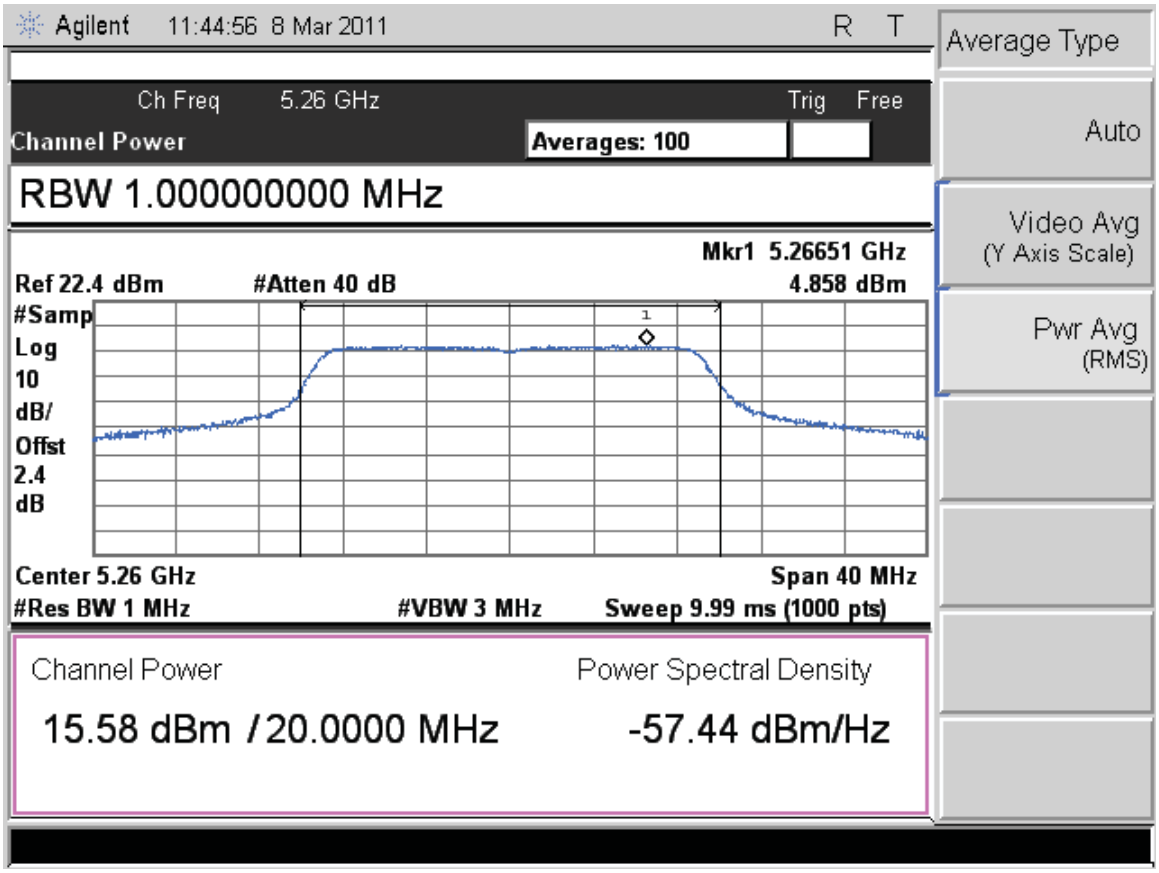


Figure 49: Maximum Transmitted Power, 5260 MHz at 802.11n HT20, Chain 2 – 6.5Mbps

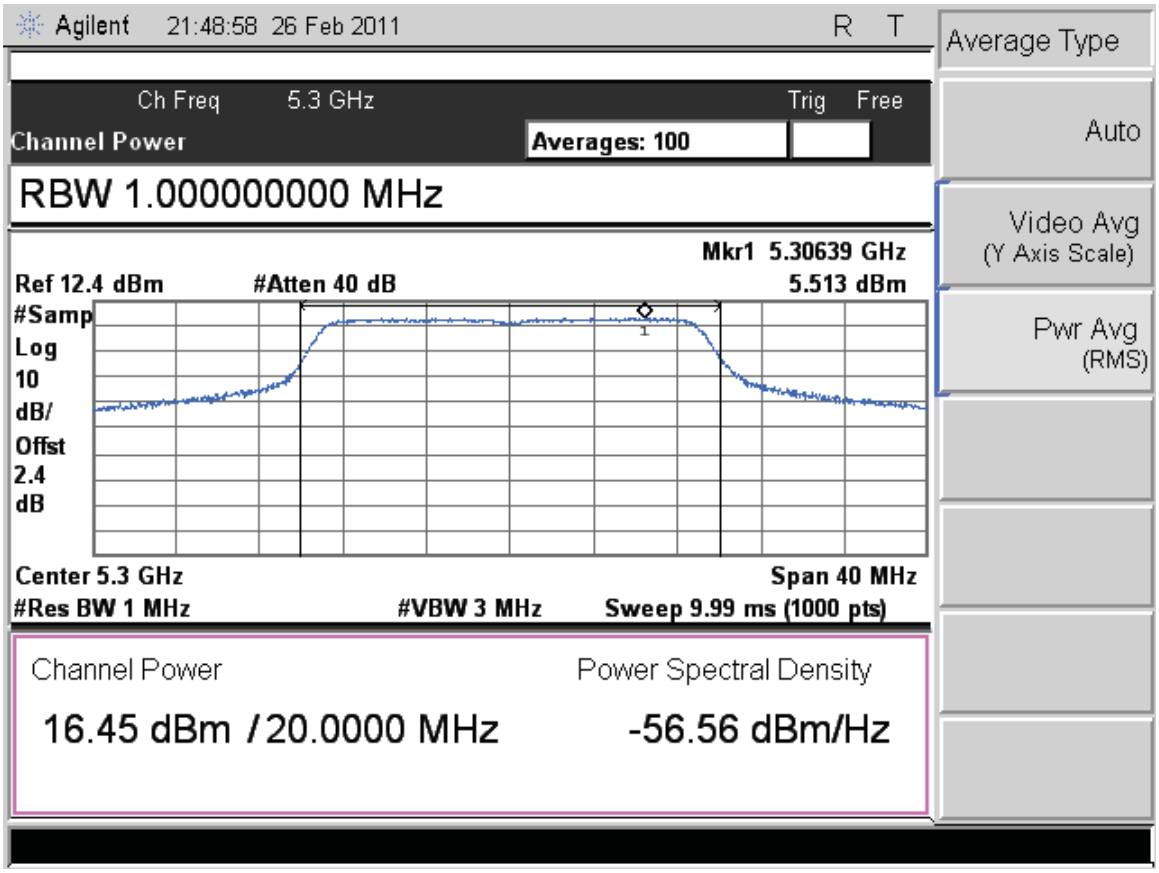


Figure 50: Maximum Transmitted Power, 5300 MHz at 802.11n HT20, Chain 2 – 6.5Mbps

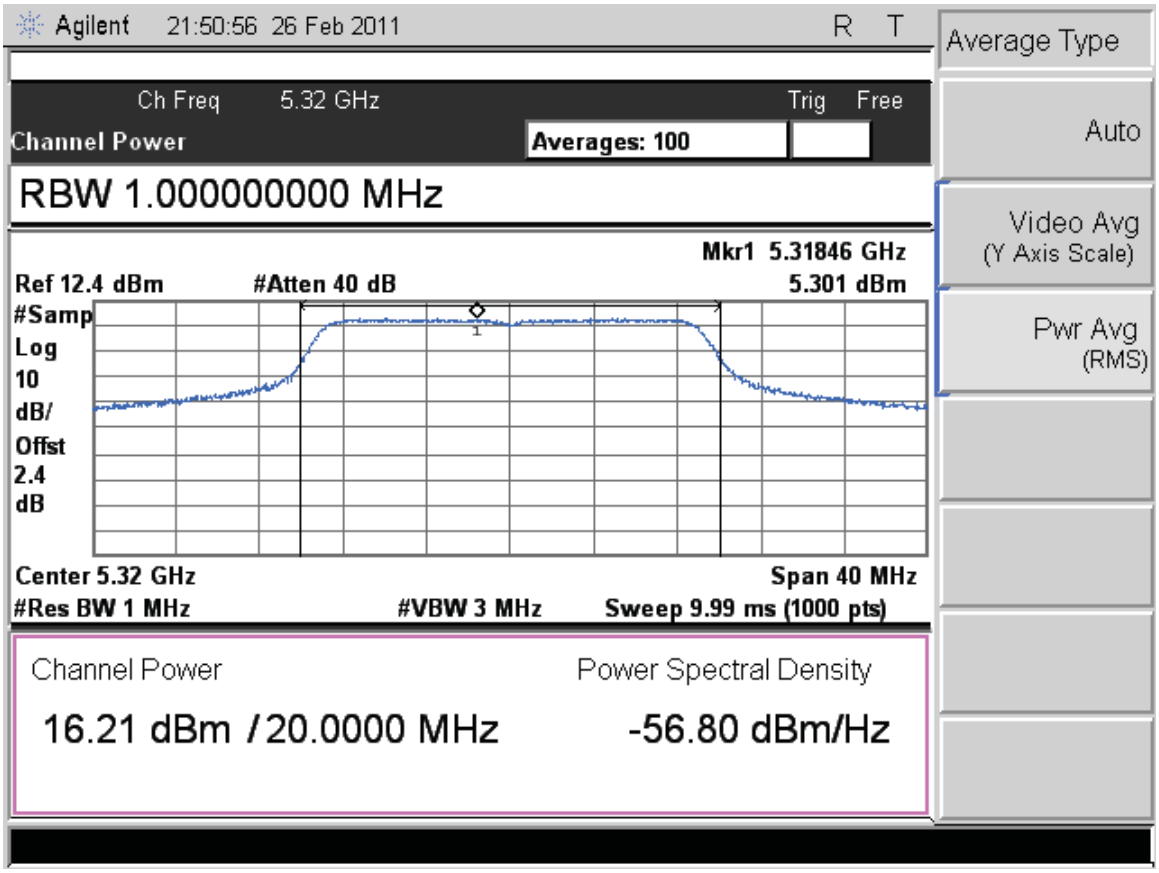


Figure 51: Maximum Transmitted Power, 5320 MHz at 802.11n HT20, Chain 2 – 6.5Mbps

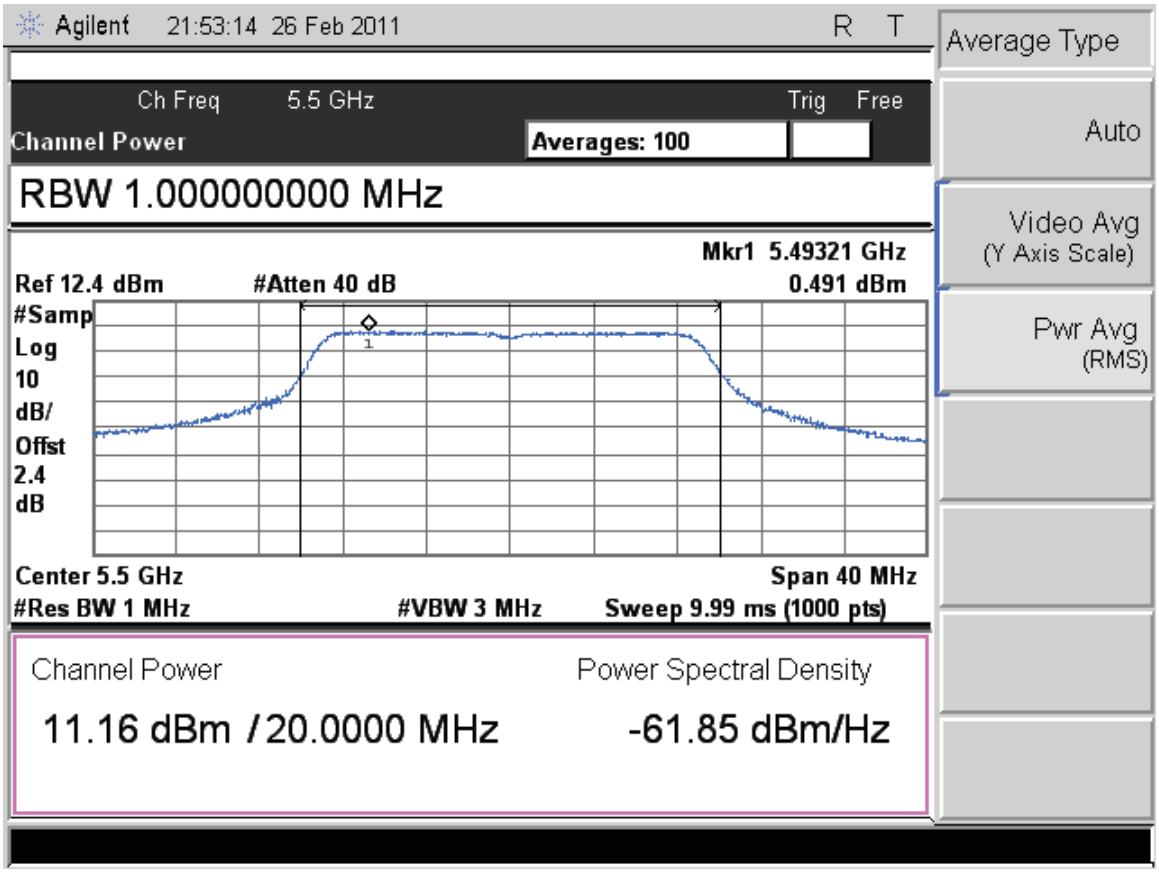


Figure 52: Maximum Transmitted Power, 5500 MHz at 802.11n HT20, Chain 2 – 6.5Mbps

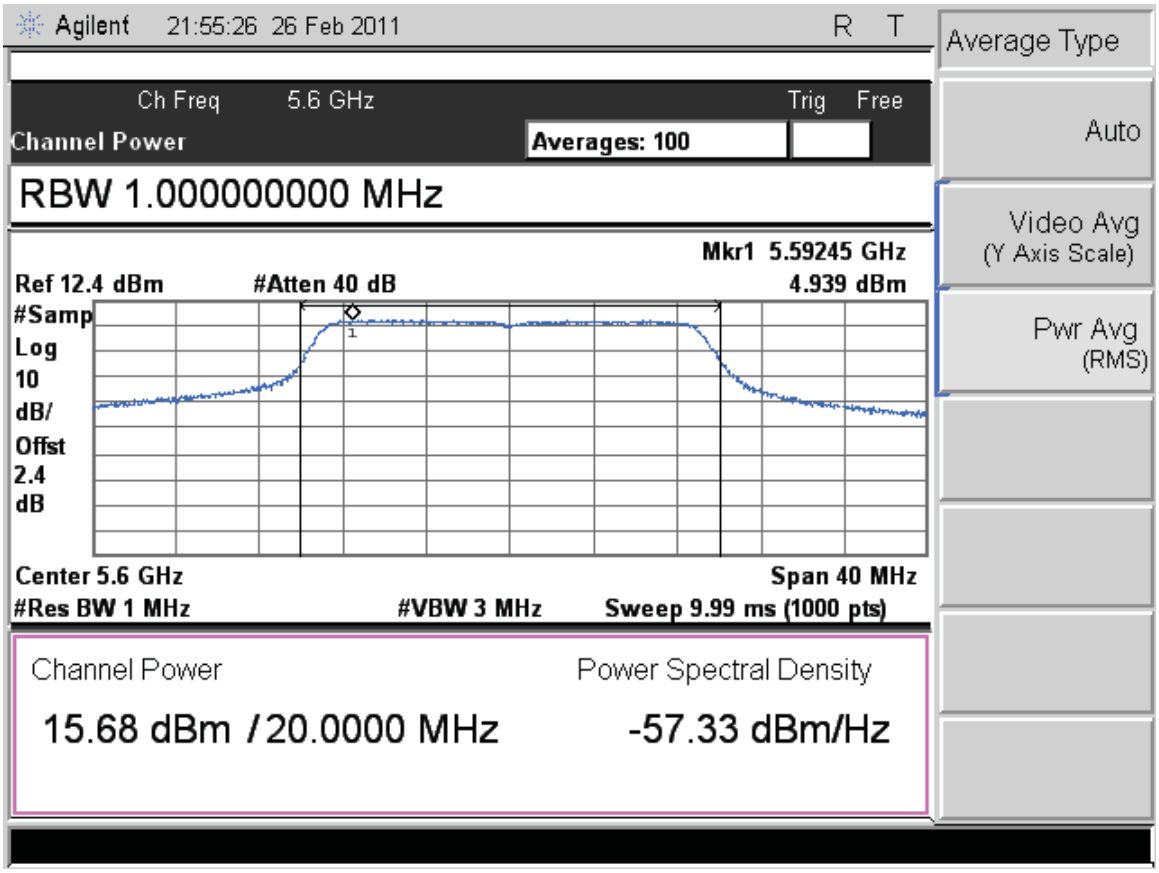


Figure 53: Maximum Transmitted Power, 5600 MHz at 802.11n HT20, Chain 2 – 6.5Mbps

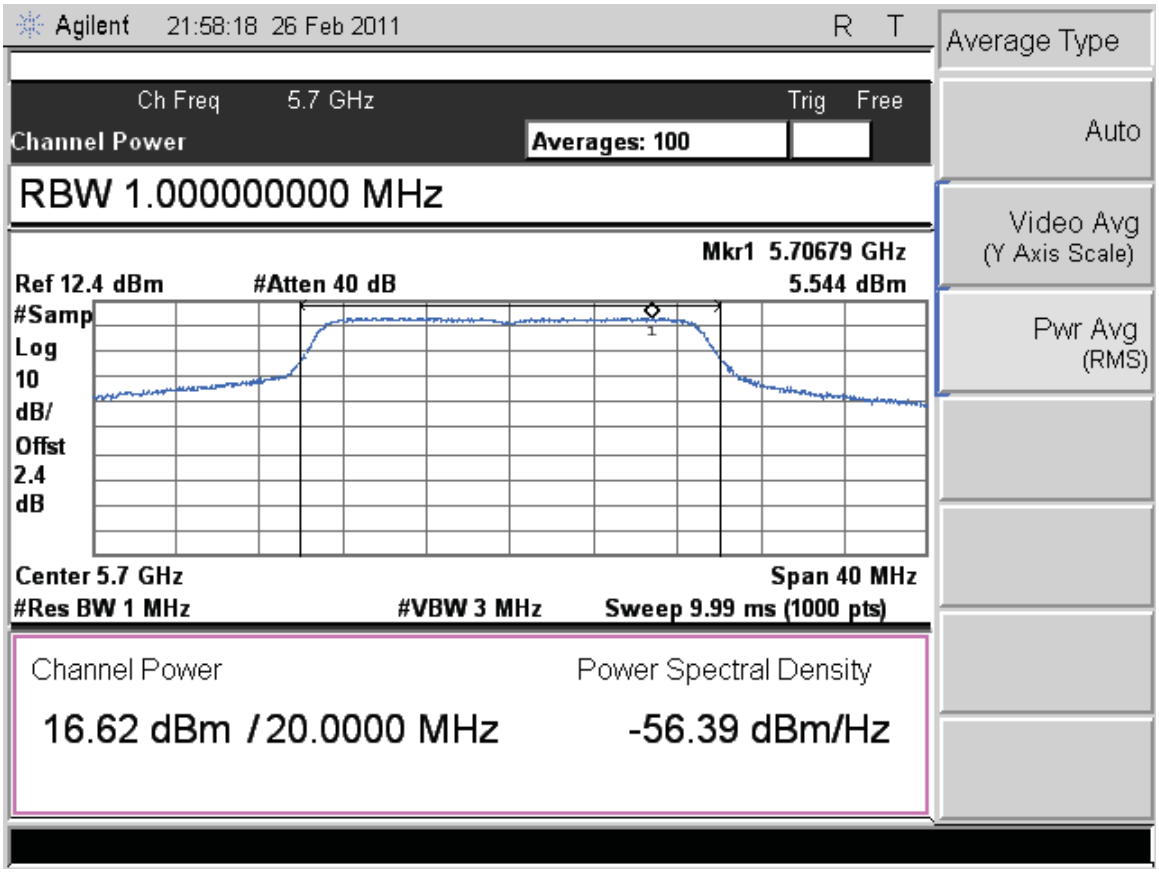


Figure 54: Maximum Transmitted Power, 5700 MHz at 802.11n HT20, Chain 2 – 6.5Mbps

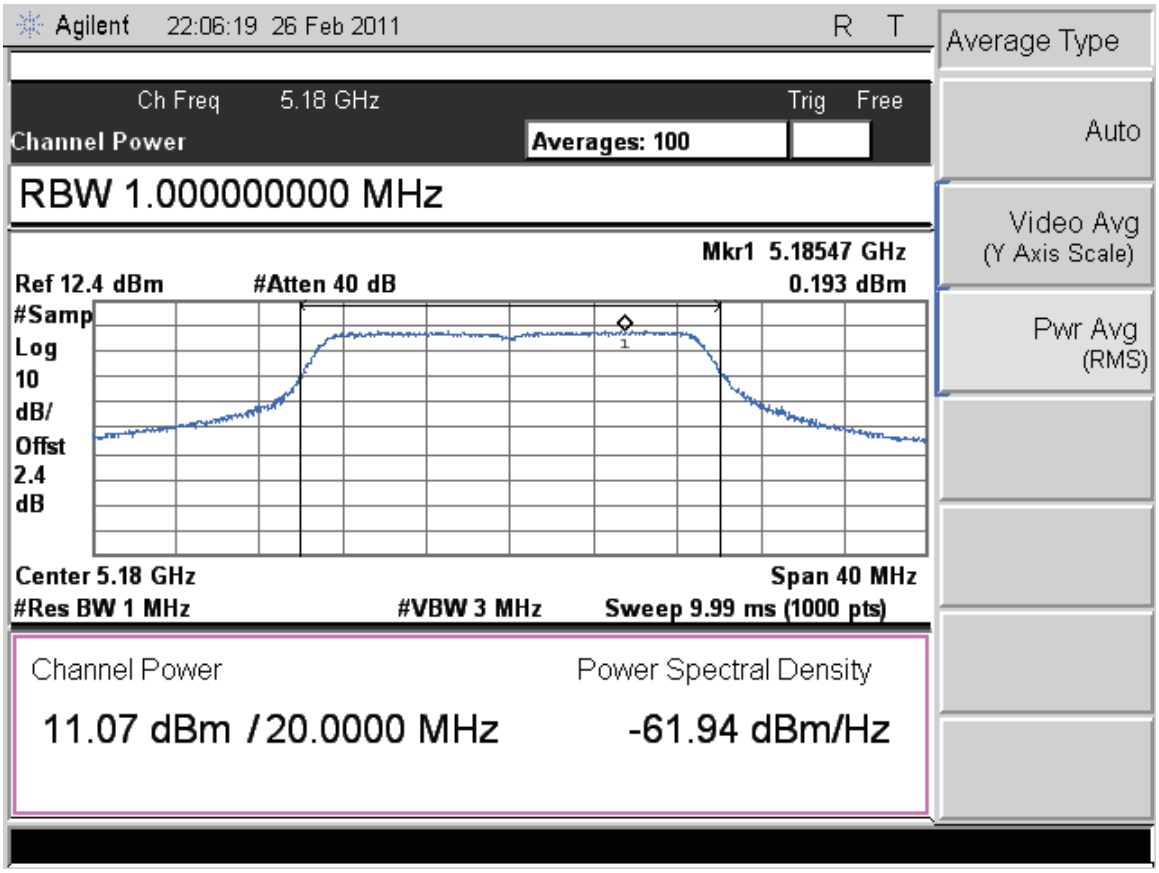


Figure 55: Maximum Transmitted Power, 5180 MHz at 802.11n HT20, 2x3 Chain 0 – 13Mbps

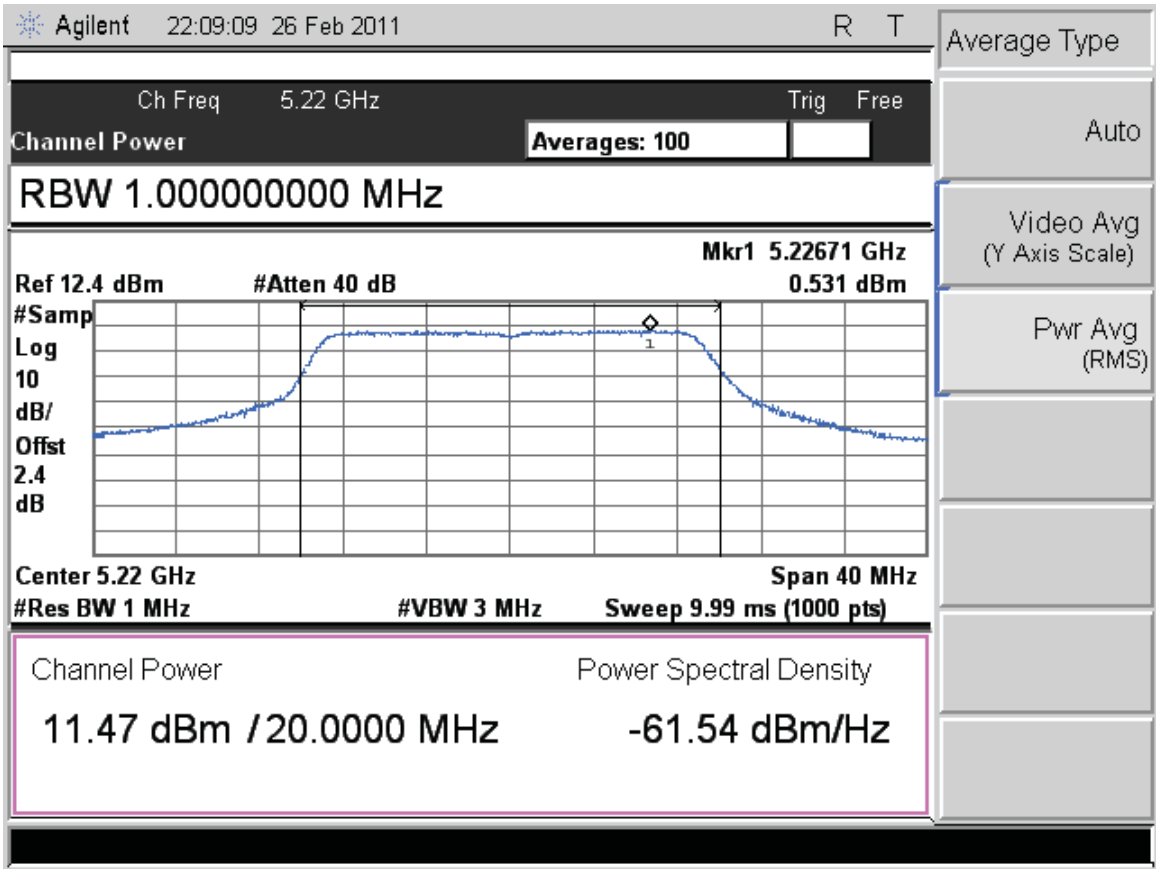


Figure 56: Maximum Transmitted Power, 5220 MHz at 802.11n HT20, 2x3 Chain 0 – 13Mbps

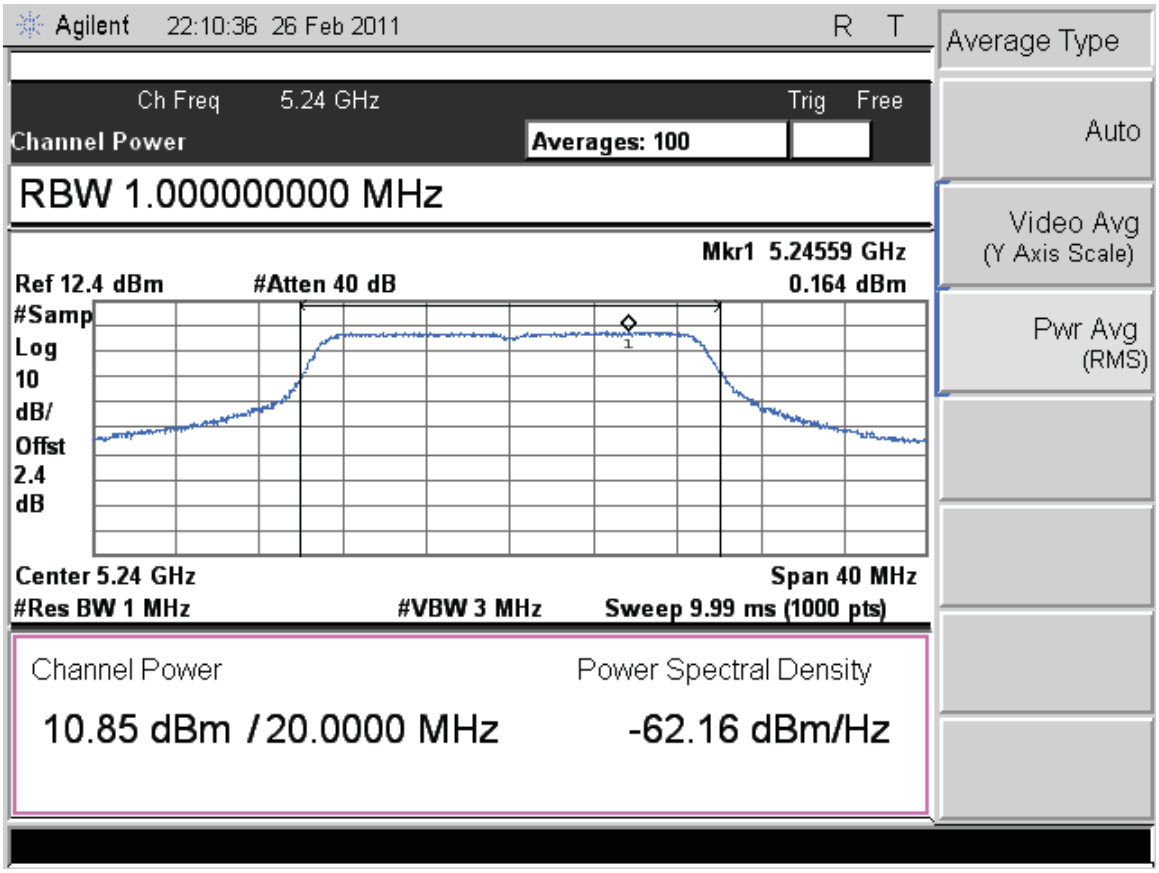


Figure 57: Maximum Transmitted Power, 5240 MHz at 802.11n HT20, 2x3 Chain 0 – 13Mbps

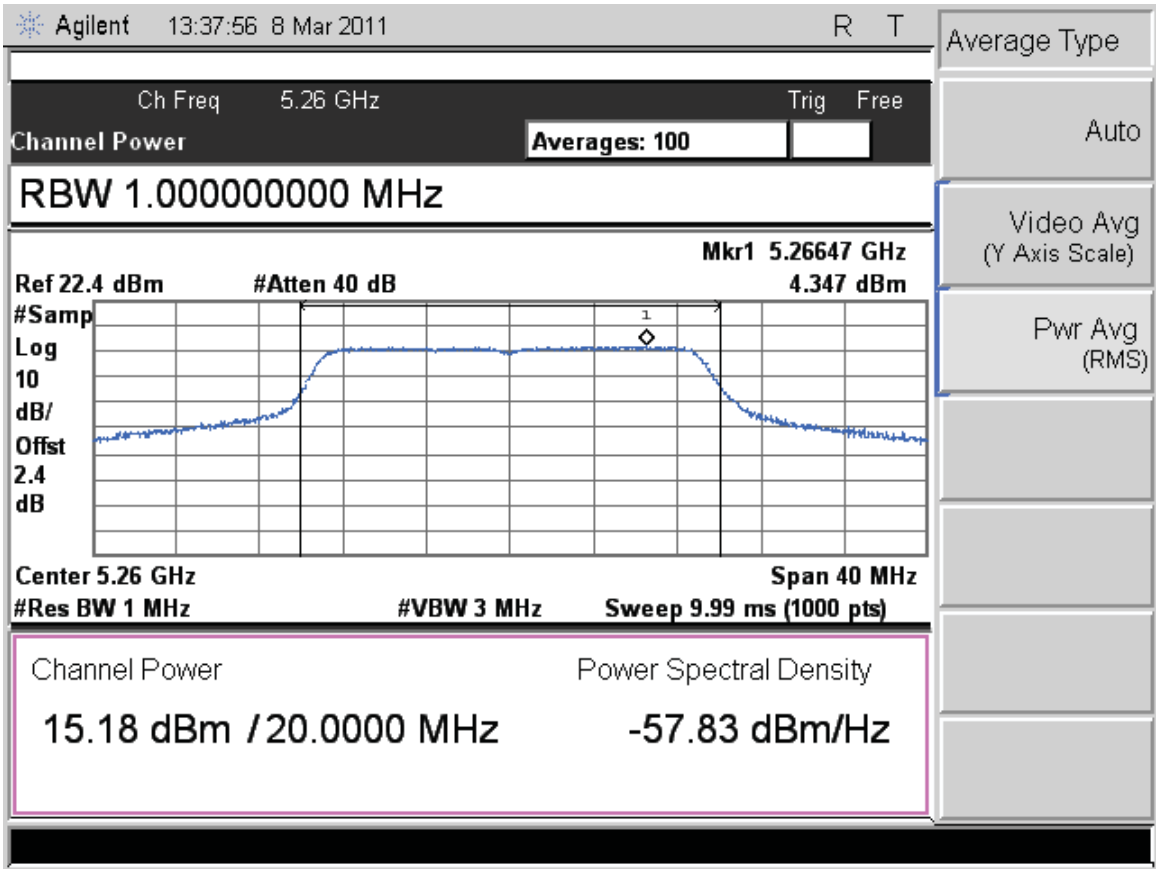


Figure 58: Maximum Transmitted Power, 5260 MHz at 802.11n HT20, 2x3 Chain 0 – 13Mbps

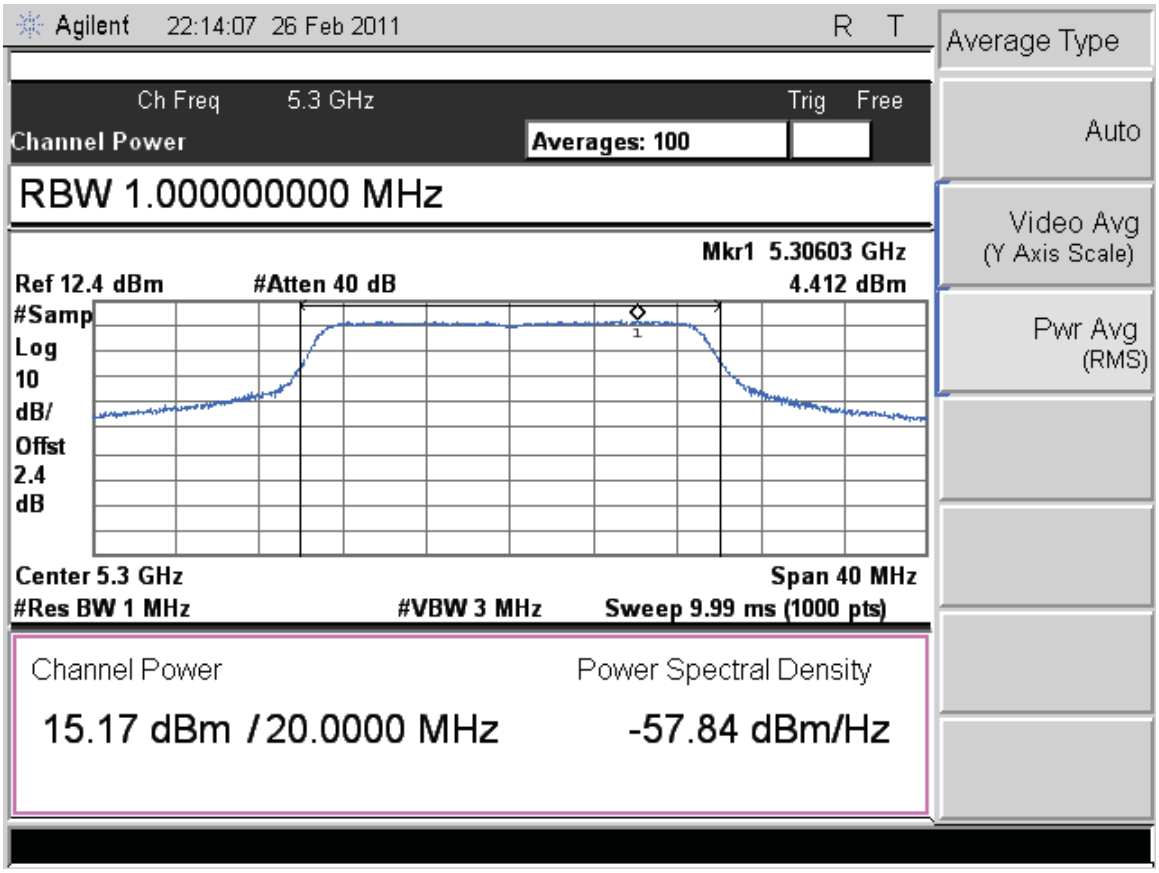


Figure 59: Maximum Transmitted Power, 5300 MHz at 802.11n HT20, 2x3 Chain 0 – 13Mbps

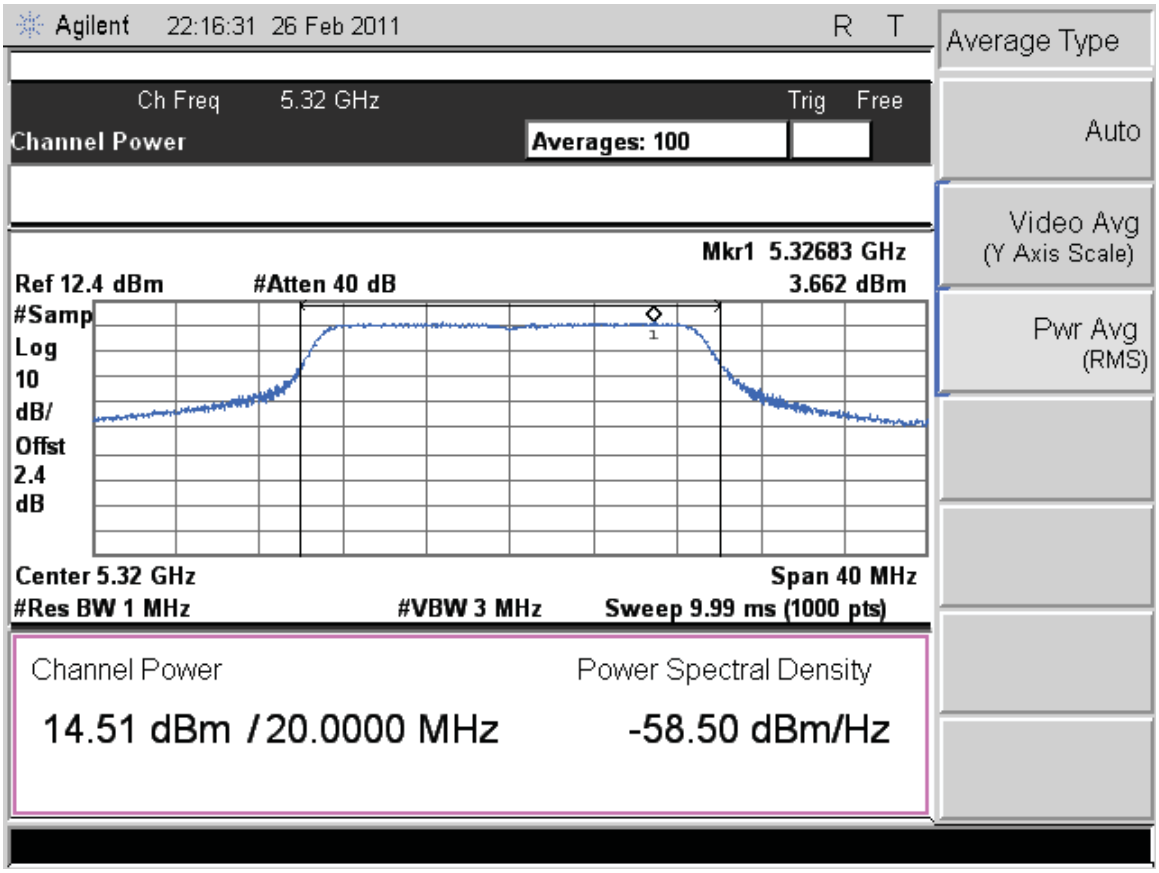


Figure 60: Maximum Transmitted Power, 5320 MHz at 802.11n HT20, 2x3 Chain 0 – 13Mbps

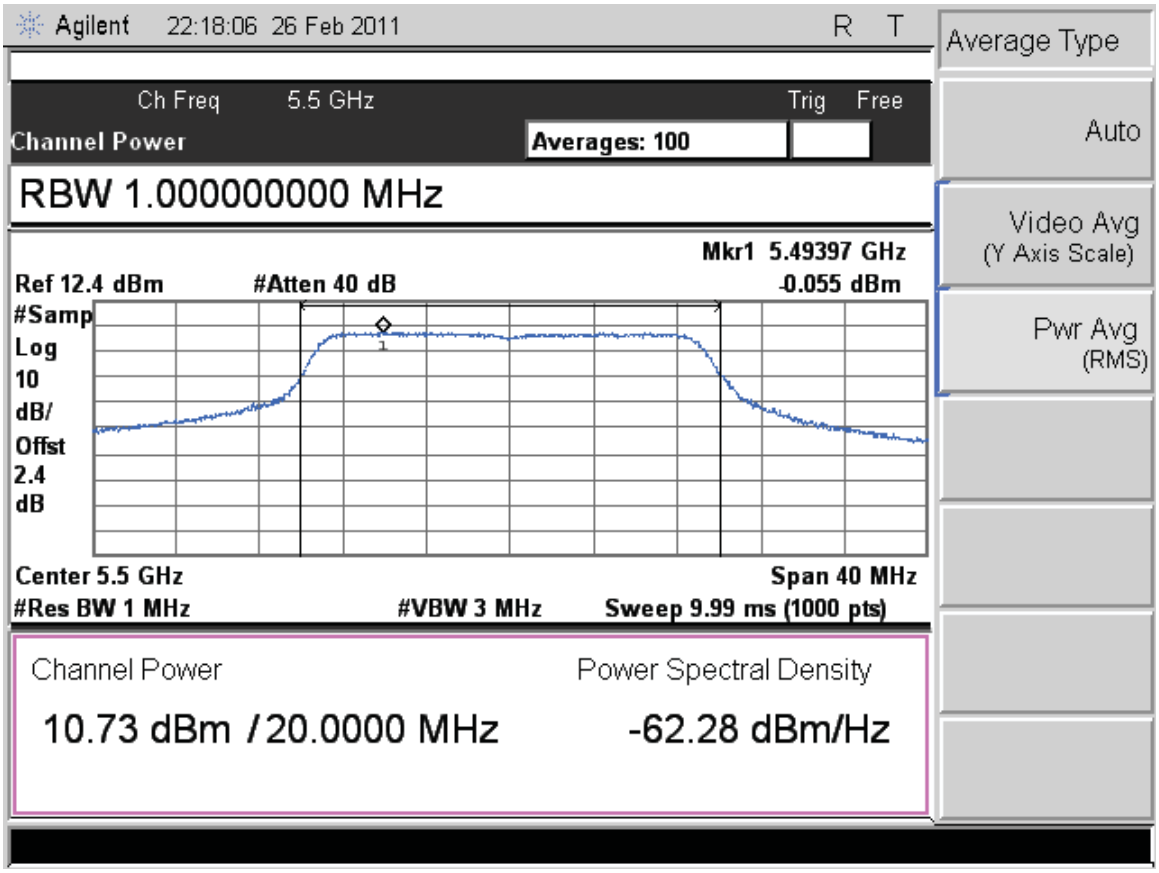


Figure 61: Maximum Transmitted Power, 5500 MHz at 802.11n HT20, 2x3 Chain 0 – 13Mbps

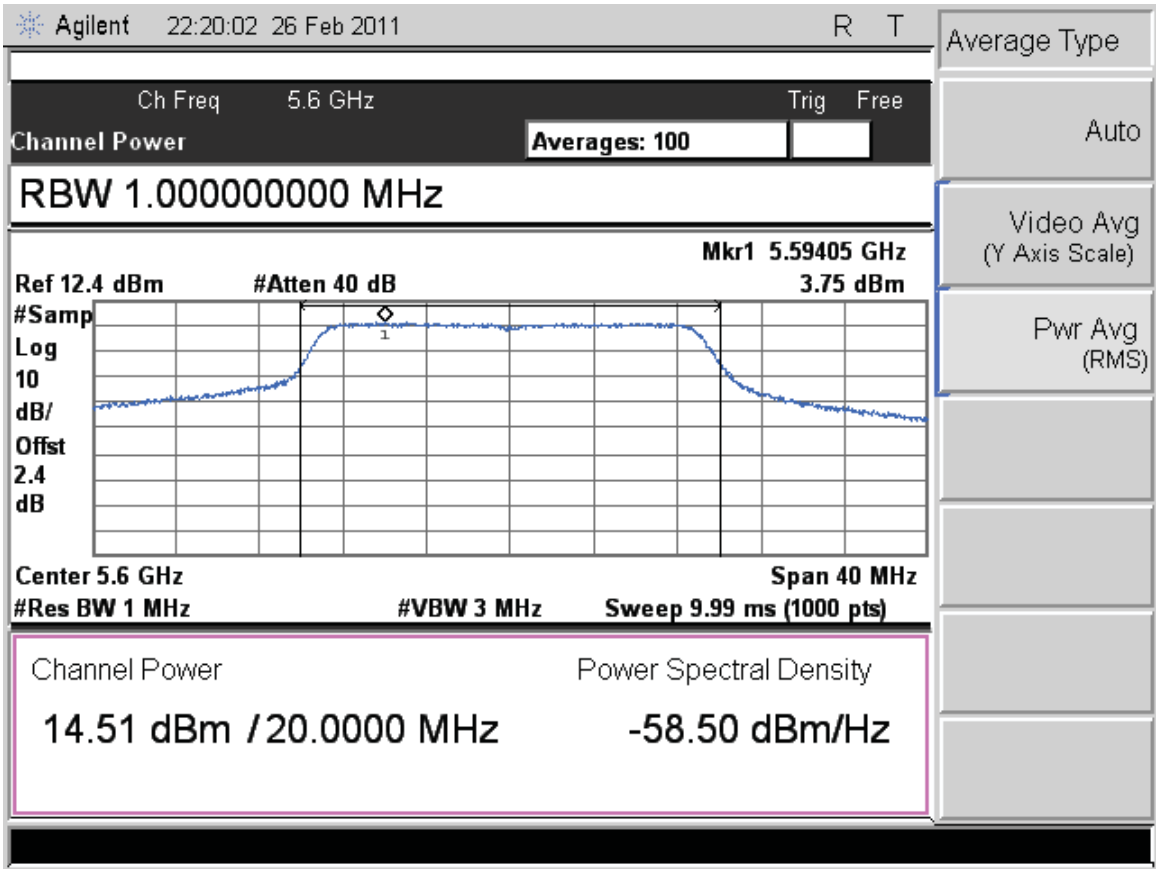


Figure 62: Maximum Transmitted Power, 5600 MHz at 802.11n HT20, 2x3 Chain 0 – 13Mbps

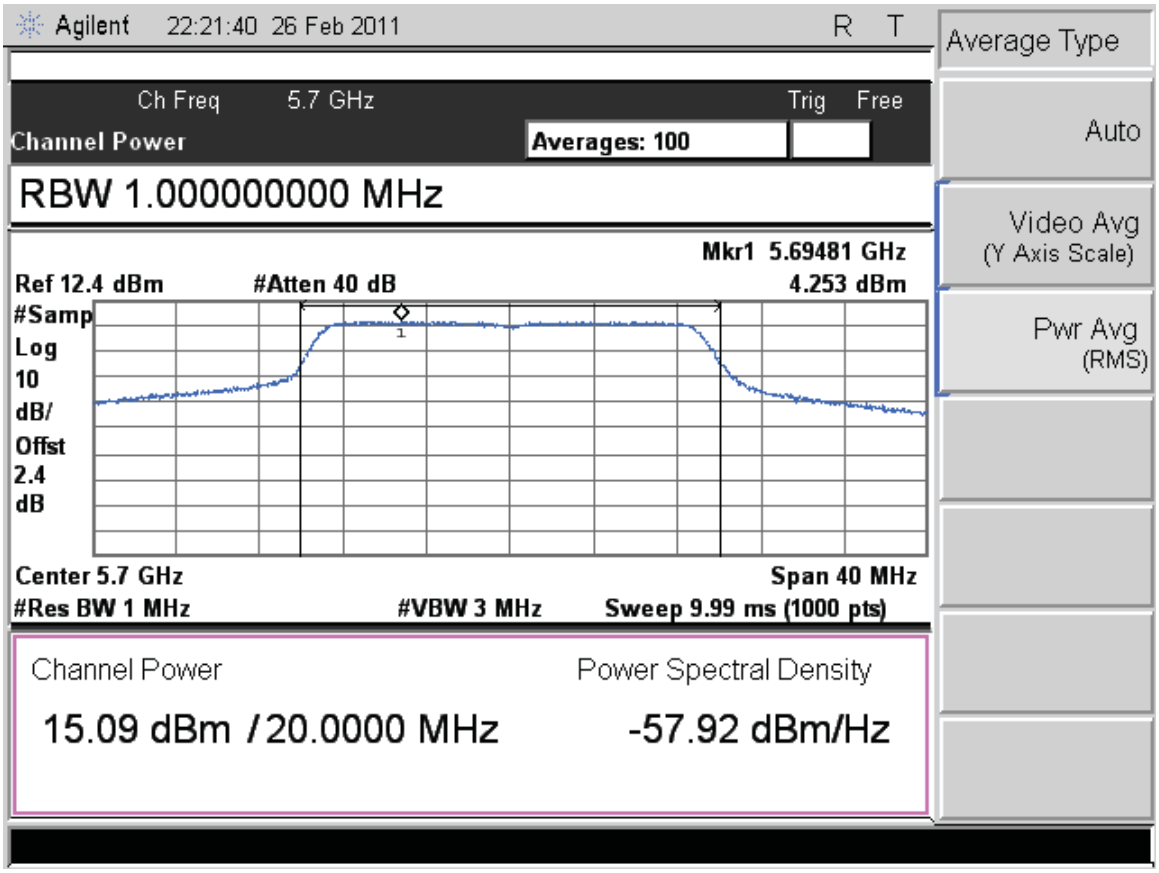


Figure 63: Maximum Transmitted Power, 5700 MHz at 802.11n HT20, 2x3 Chain 0 – 13Mbps

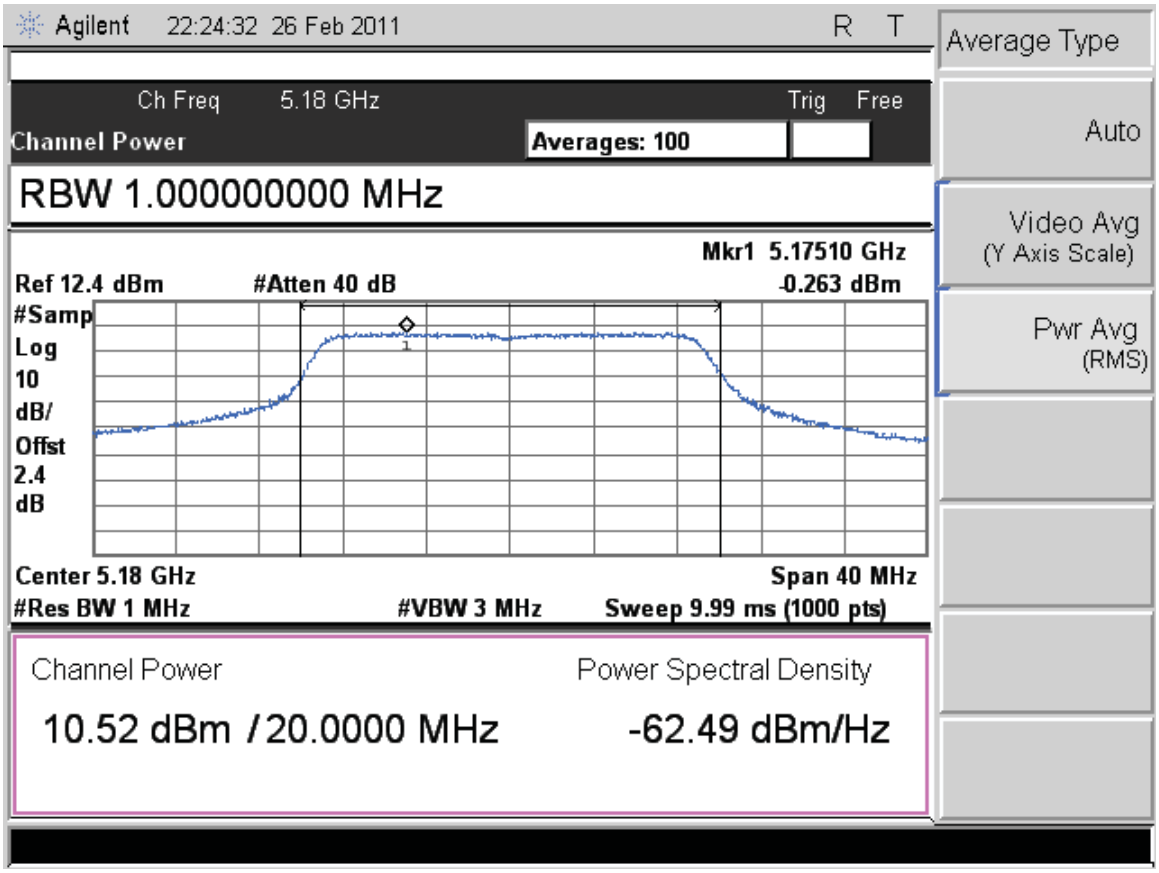


Figure 64: Maximum Transmitted Power, 5180 MHz at 802.11n HT20, 2x3 Chain 1 – 13Mbps

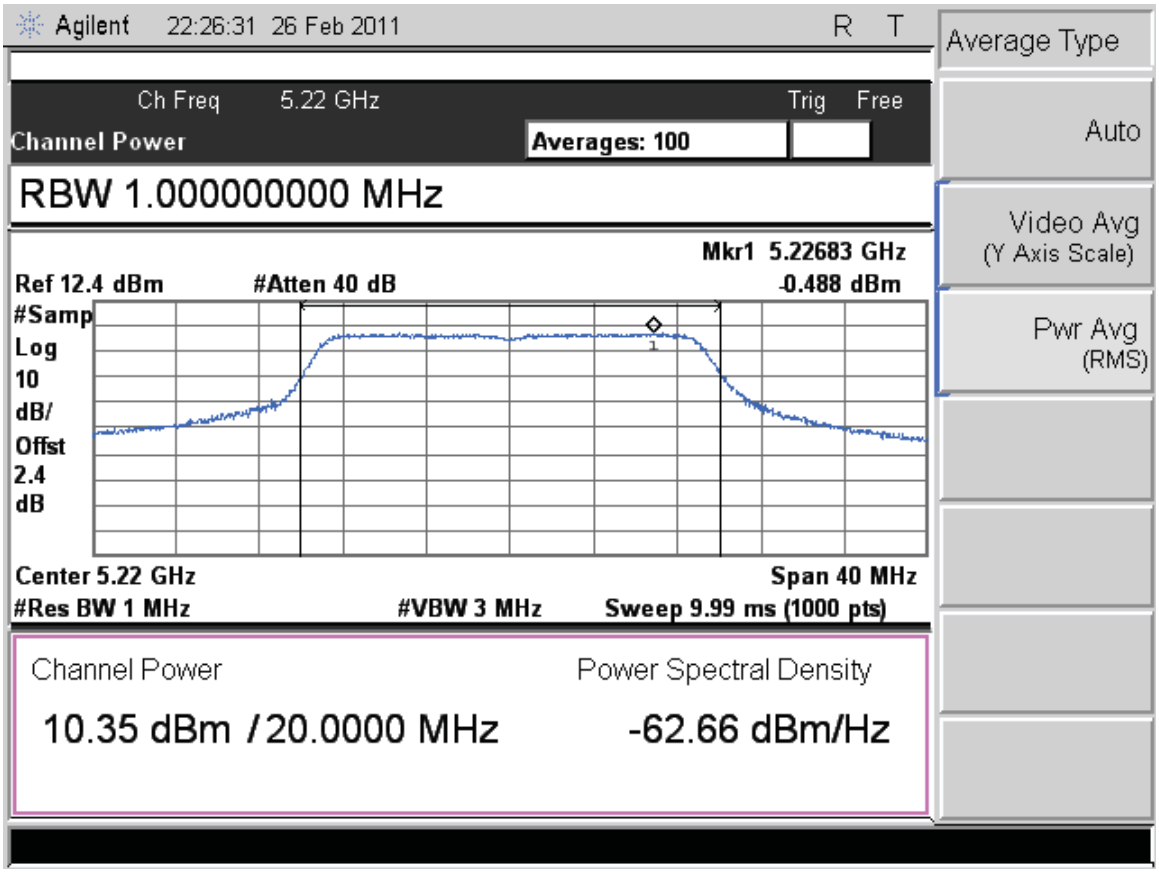


Figure 65: Maximum Transmitted Power, 5220 MHz at 802.11n HT20, 2x3 Chain 1 – 13Mbps

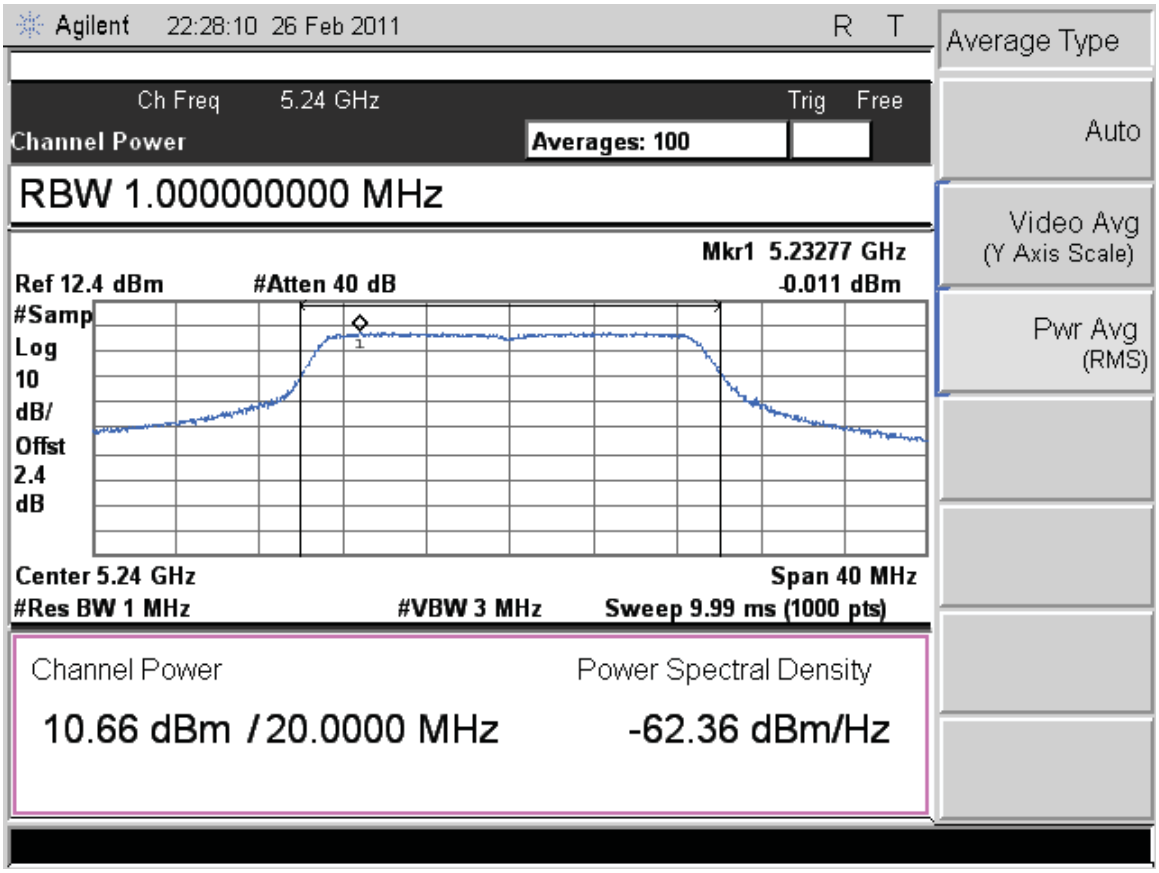


Figure 66: Maximum Transmitted Power, 5240 MHz at 802.11n HT20, 2x3 Chain 1 – 13Mbps

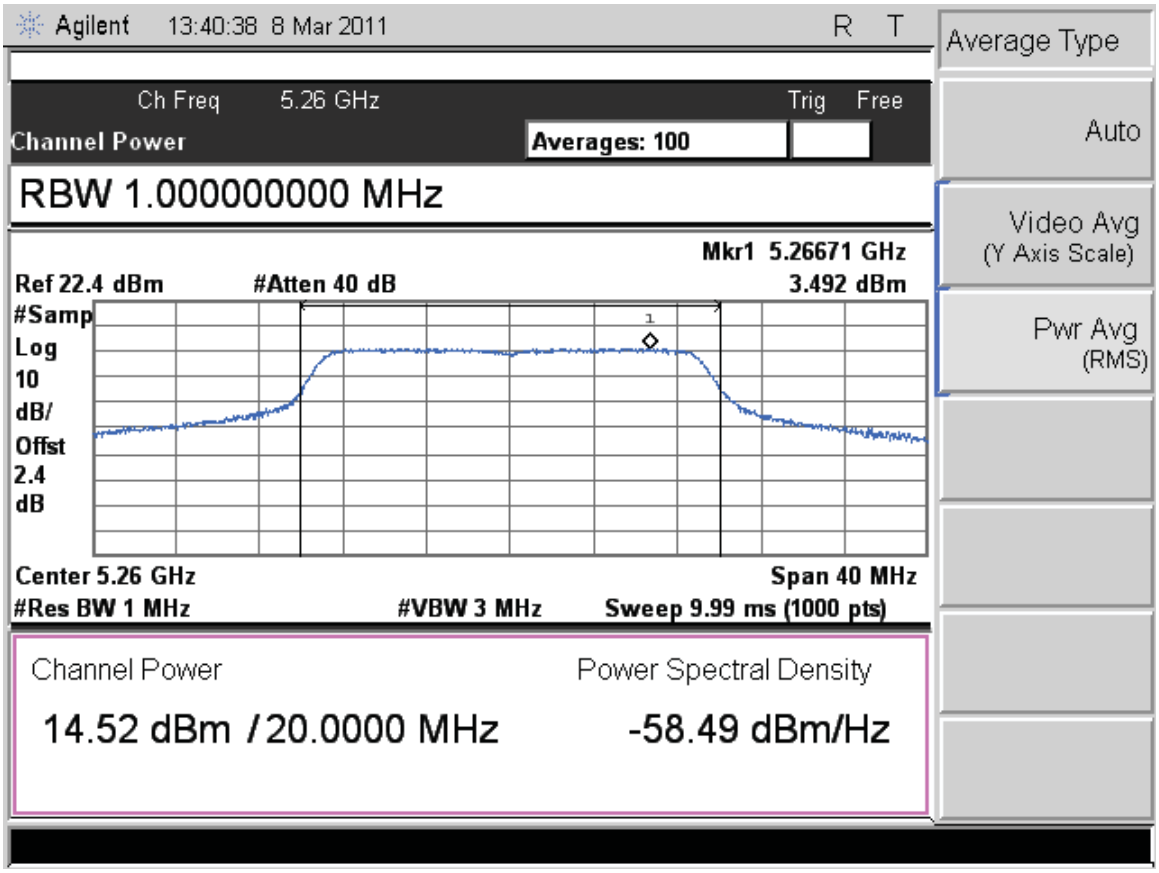


Figure 67: Maximum Transmitted Power, 5260 MHz at 802.11n HT20, 2x3 Chain 1 – 13Mbps

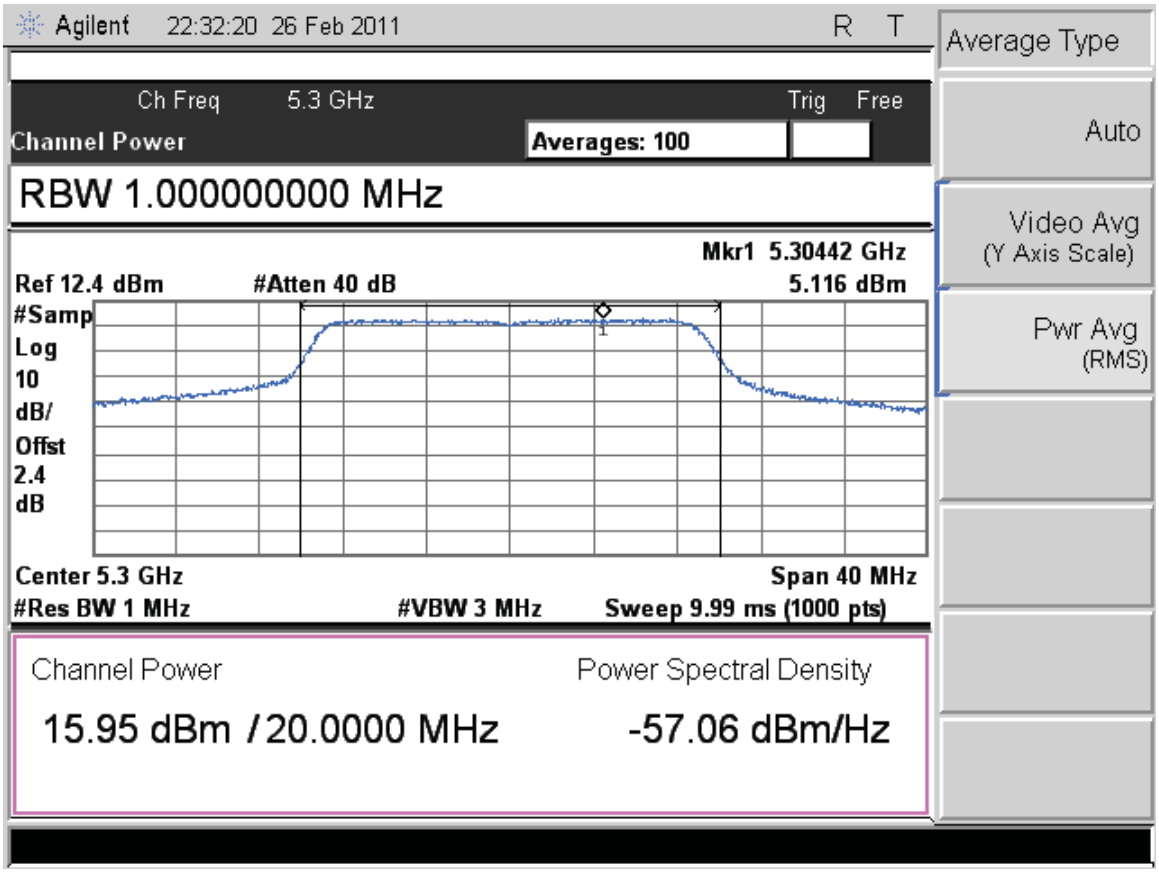


Figure 68: Maximum Transmitted Power, 5300 MHz at 802.11n HT20, 2x3 Chain 1 – 13Mbps

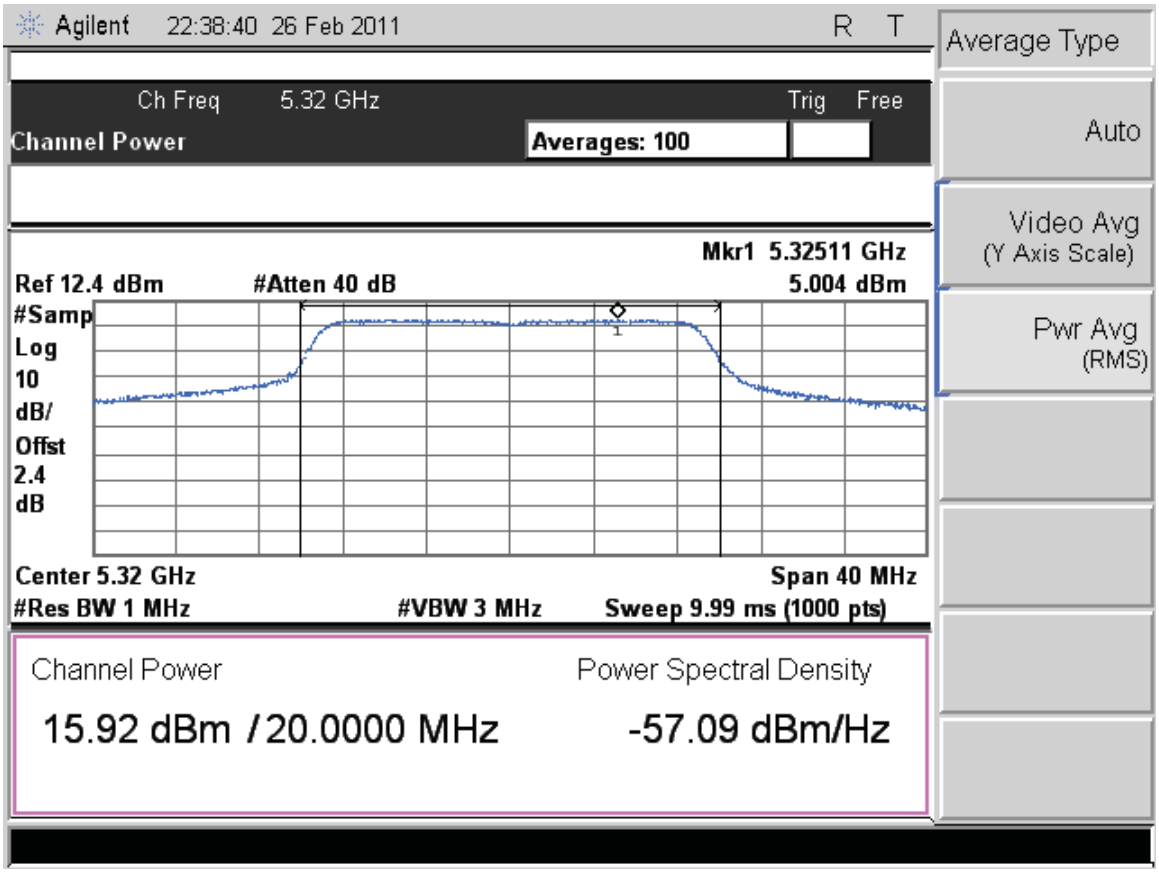


Figure 69: Maximum Transmitted Power, 5320 MHz at 802.11n HT20, 2x3 Chain 1 – 13Mbps

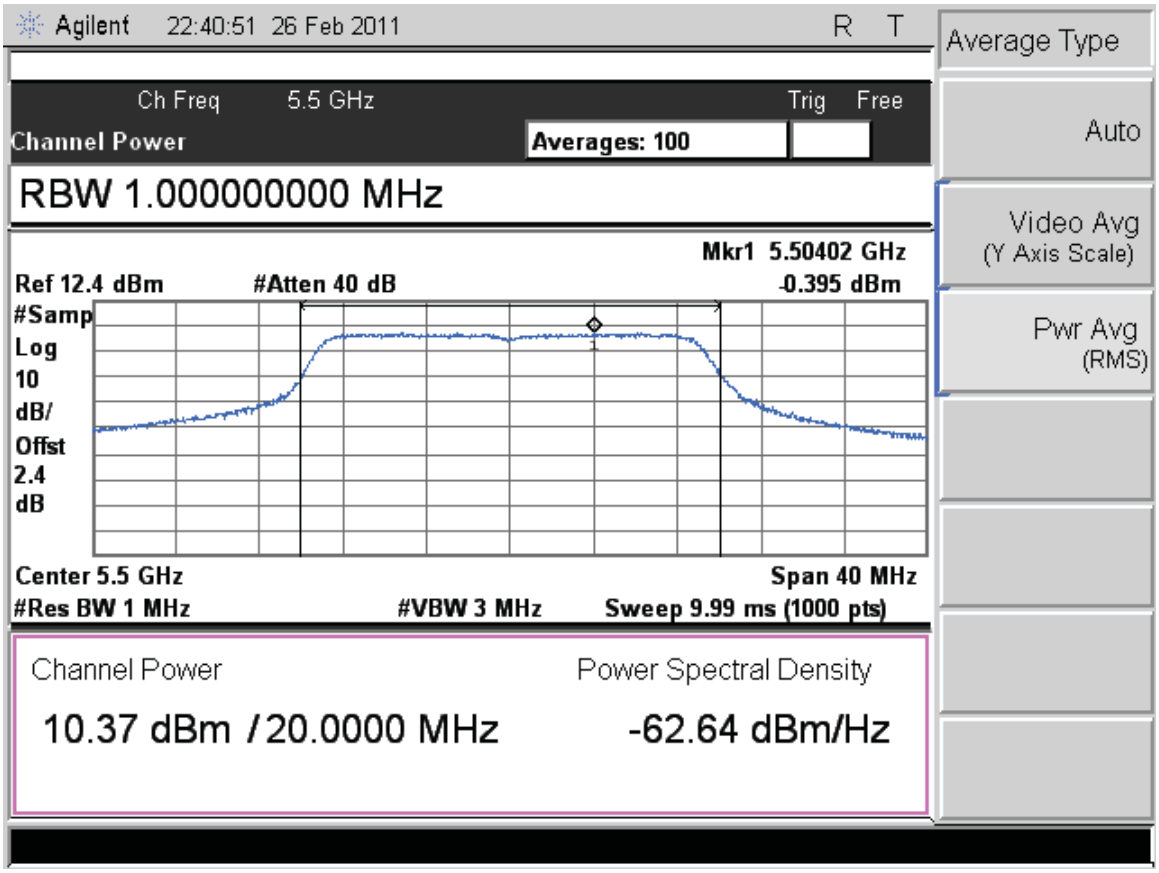


Figure 70: Maximum Transmitted Power, 5500 MHz at 802.11n HT20, 2x3 Chain 1 – 13Mbps

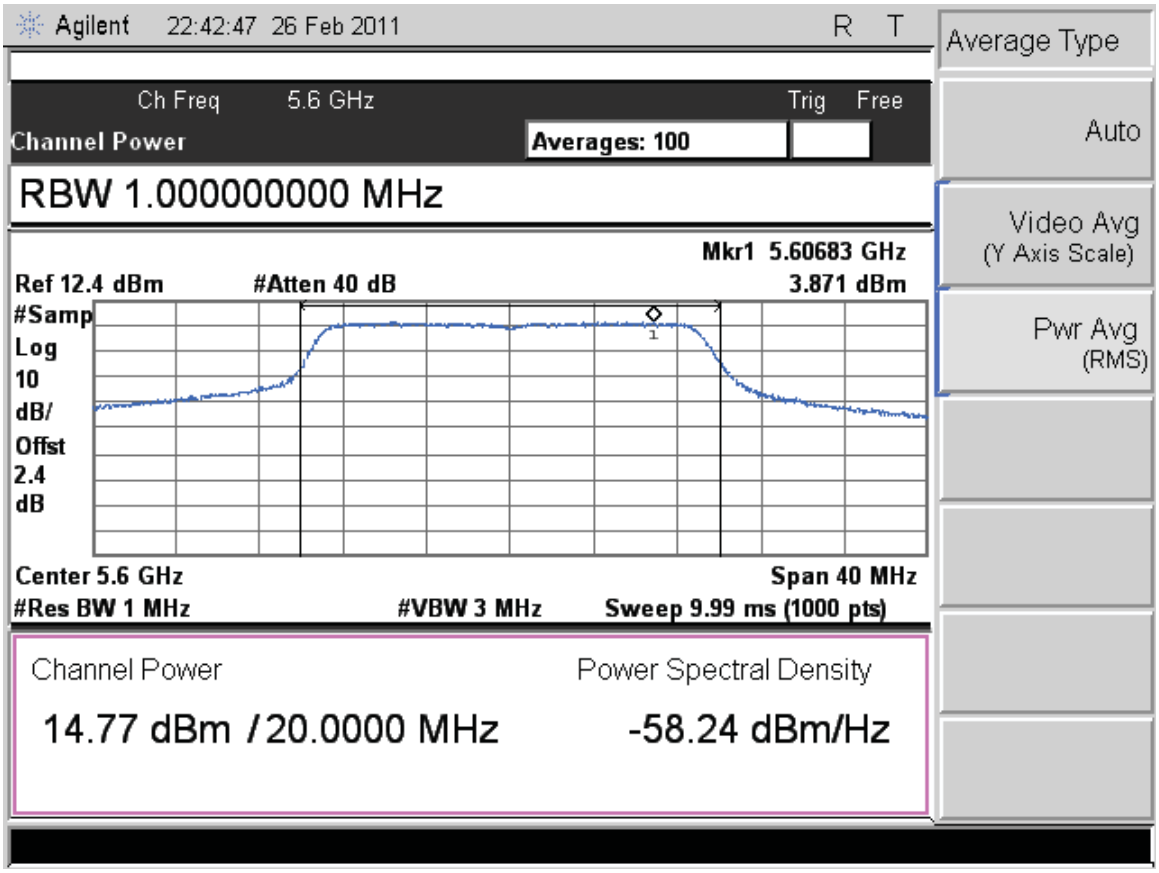


Figure 71: Maximum Transmitted Power, 5600 MHz at 802.11n HT20, 2x3 Chain 1 – 13Mbps

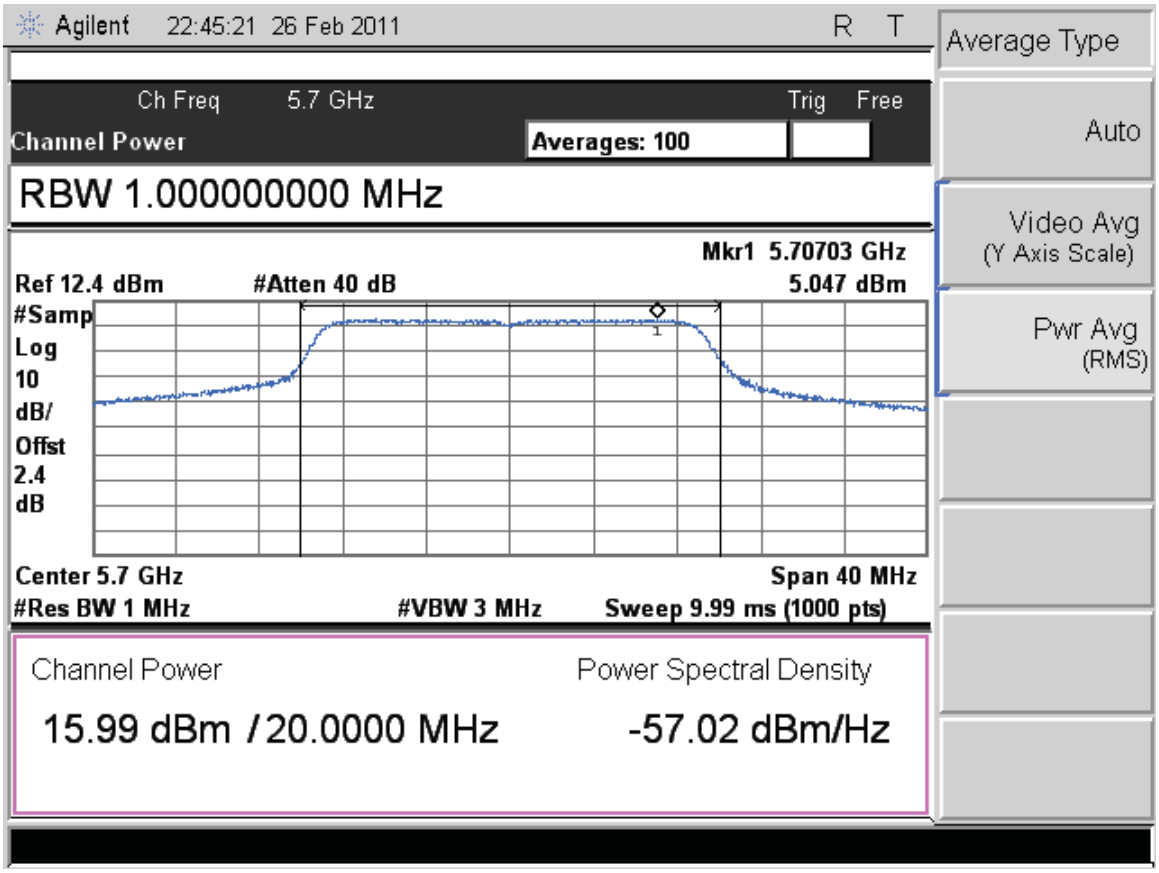


Figure 72: Maximum Transmitted Power, 5700 MHz at 802.11n HT20, 2x3 Chain 1 – 13Mbps

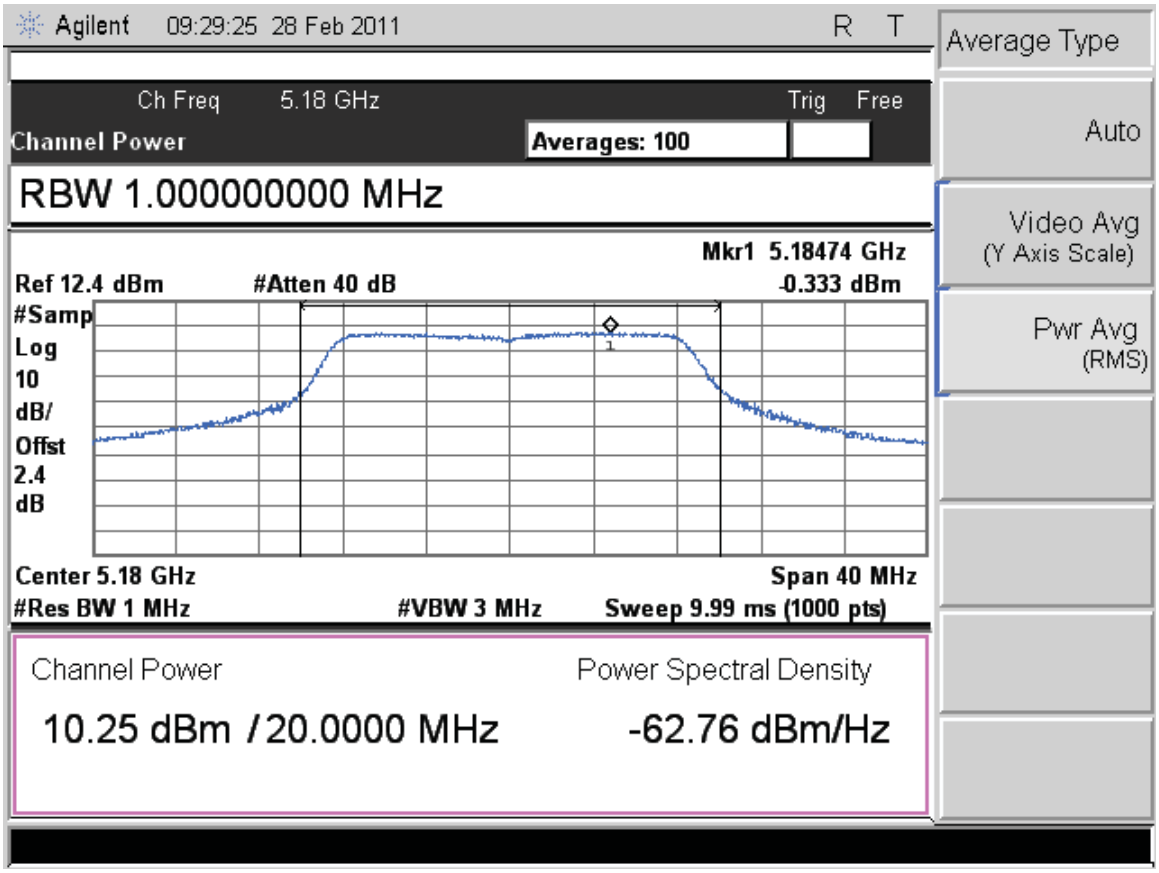


Figure 73: Maximum Transmitted Power, 5180 MHz at 802.11n HT20, 3x3 Chain 0 – 19.5 Mbps

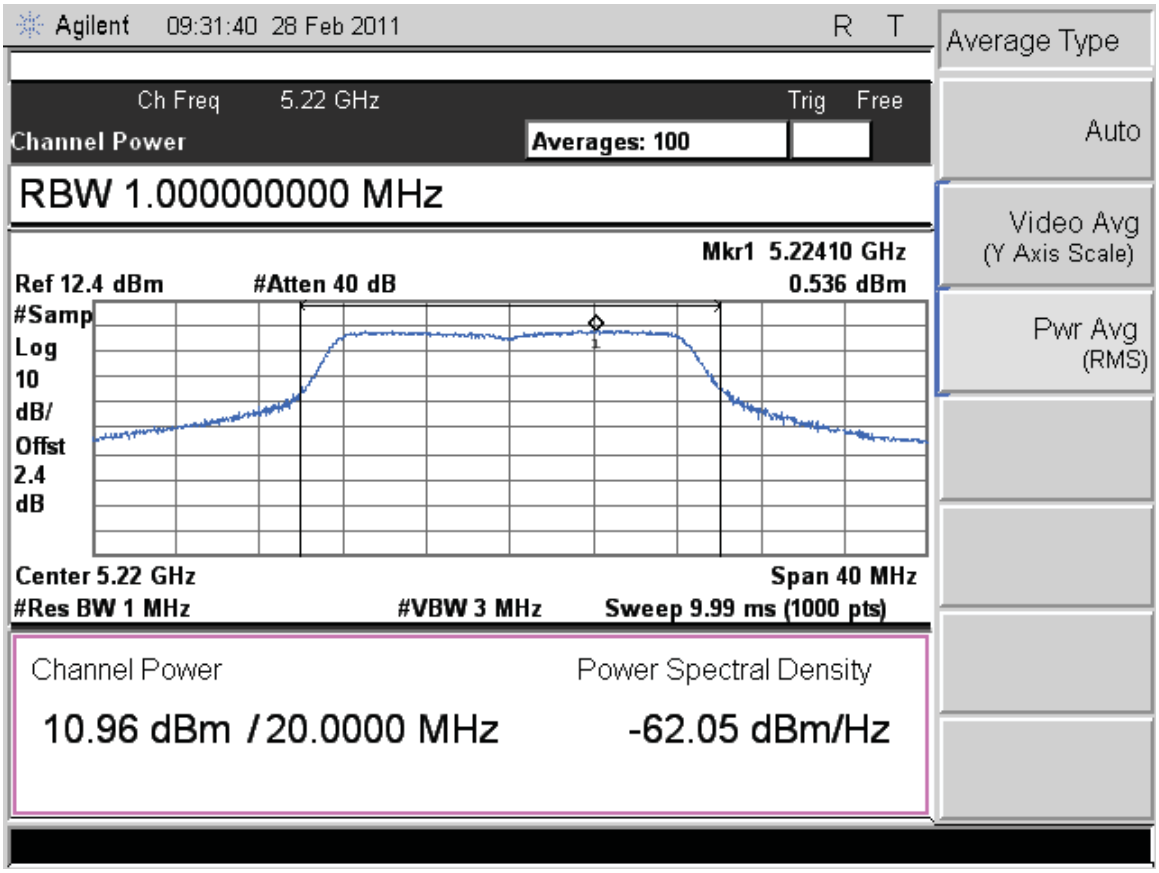


Figure 74: Maximum Transmitted Power, 5220 MHz at 802.11n HT20, 3x3 Chain 0 – 19.5 Mbps

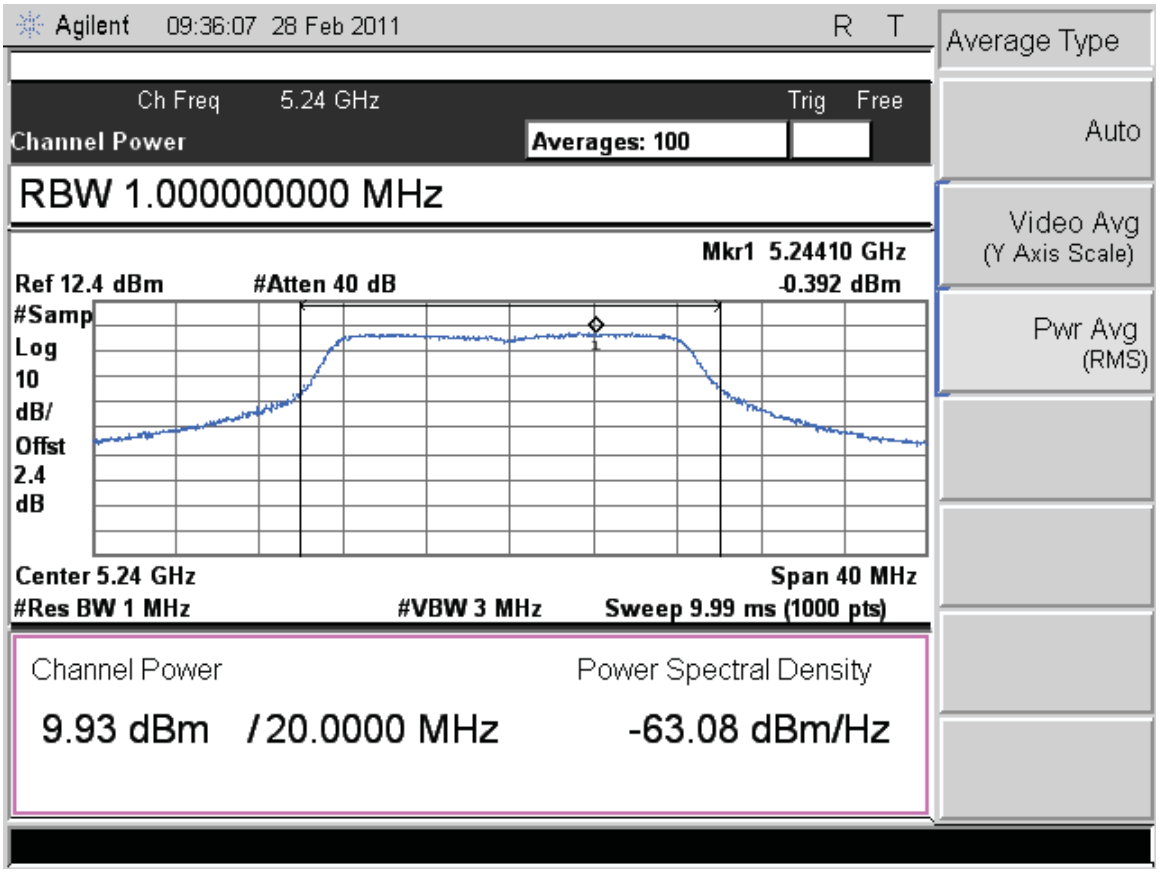


Figure 75: Maximum Transmitted Power, 5240 MHz at 802.11n HT20, 3x3 Chain 0 – 19.5 Mbps

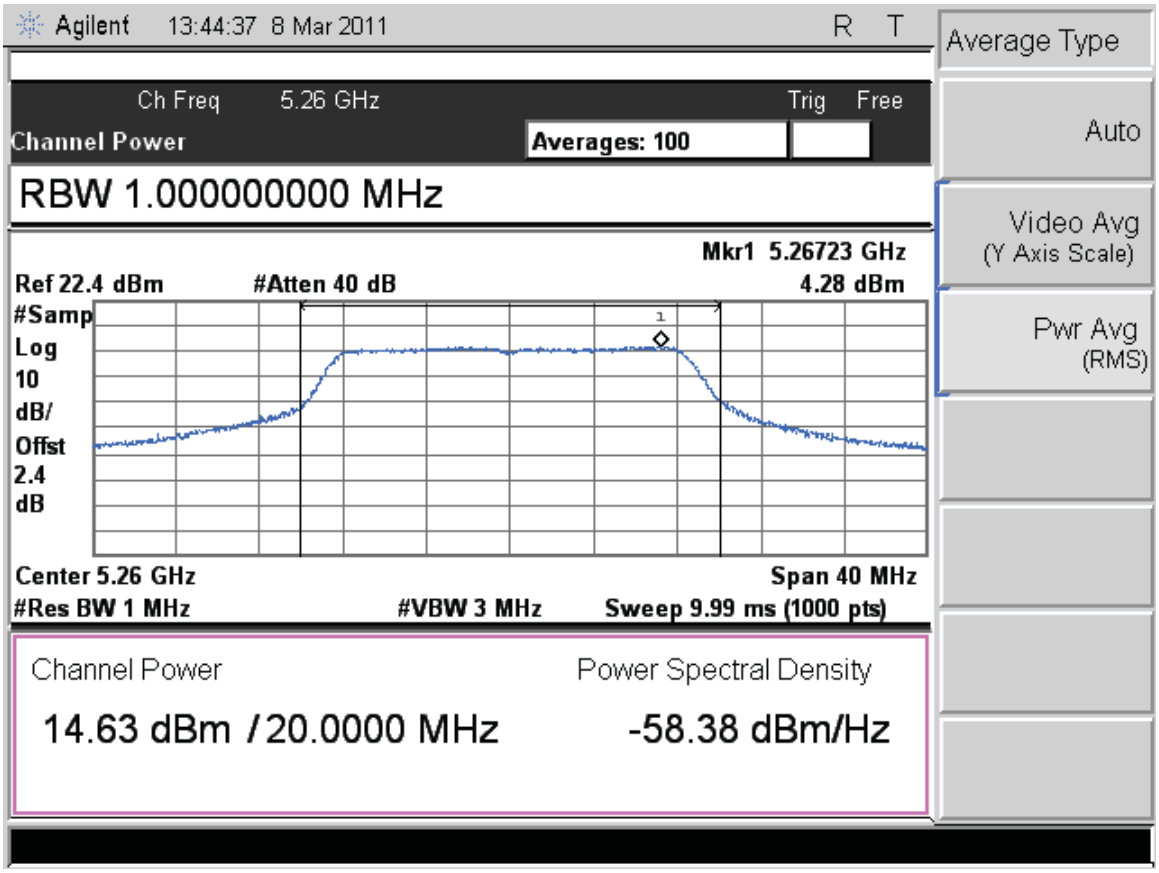


Figure 76: Maximum Transmitted Power, 5260 MHz at 802.11n HT20, 3x3 Chain 0 – 19.5 Mbps

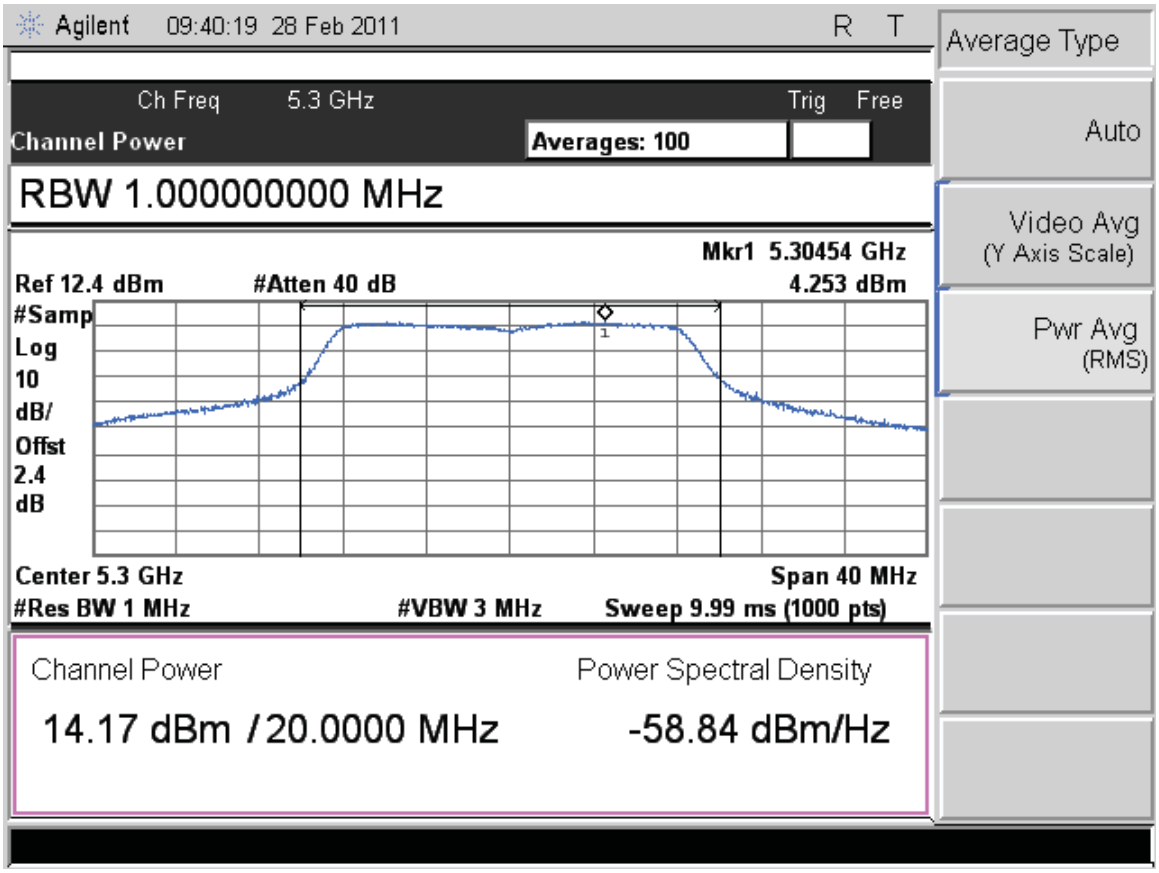


Figure 77: Maximum Transmitted Power, 5300 MHz at 802.11n HT20, 3x3 Chain 0 – 19.5 Mbps

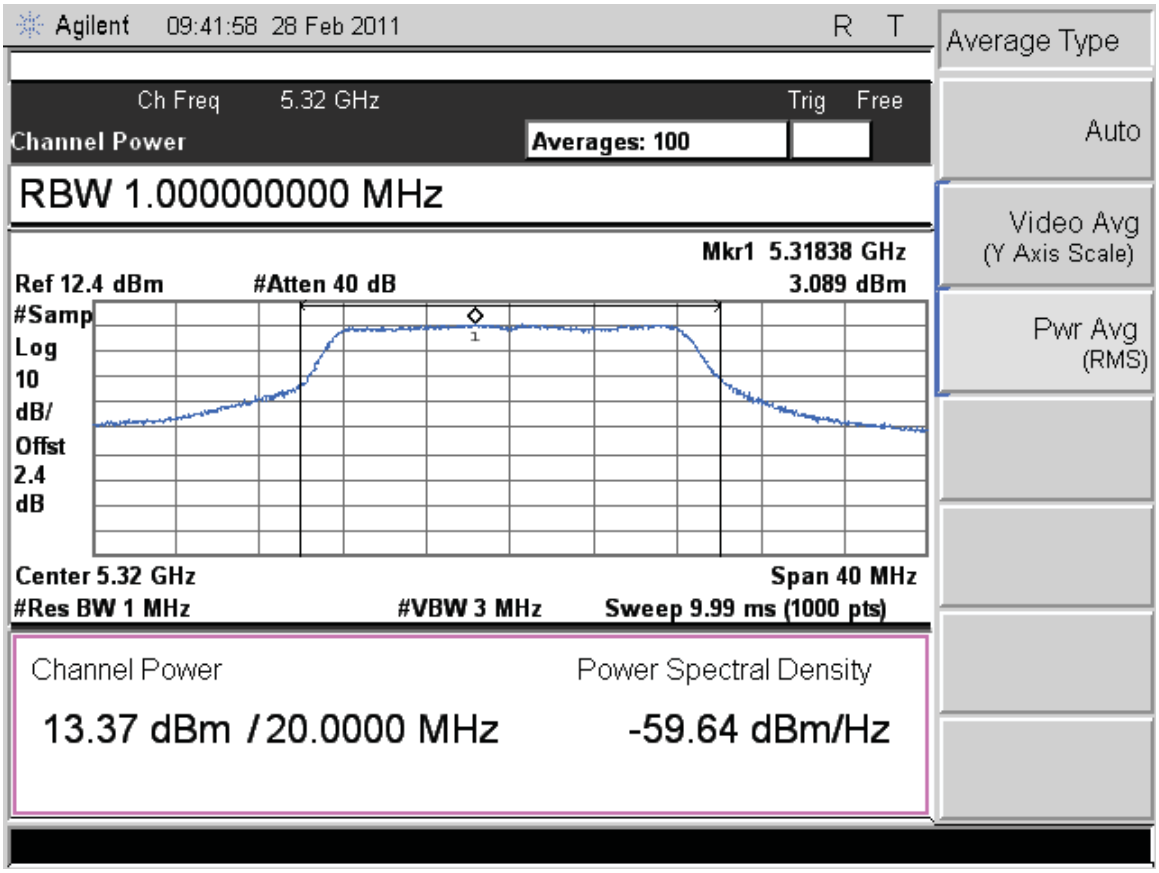


Figure 78: Maximum Transmitted Power, 5320 MHz at 802.11n HT20, 3x3 Chain 0 – 19.5 Mbps

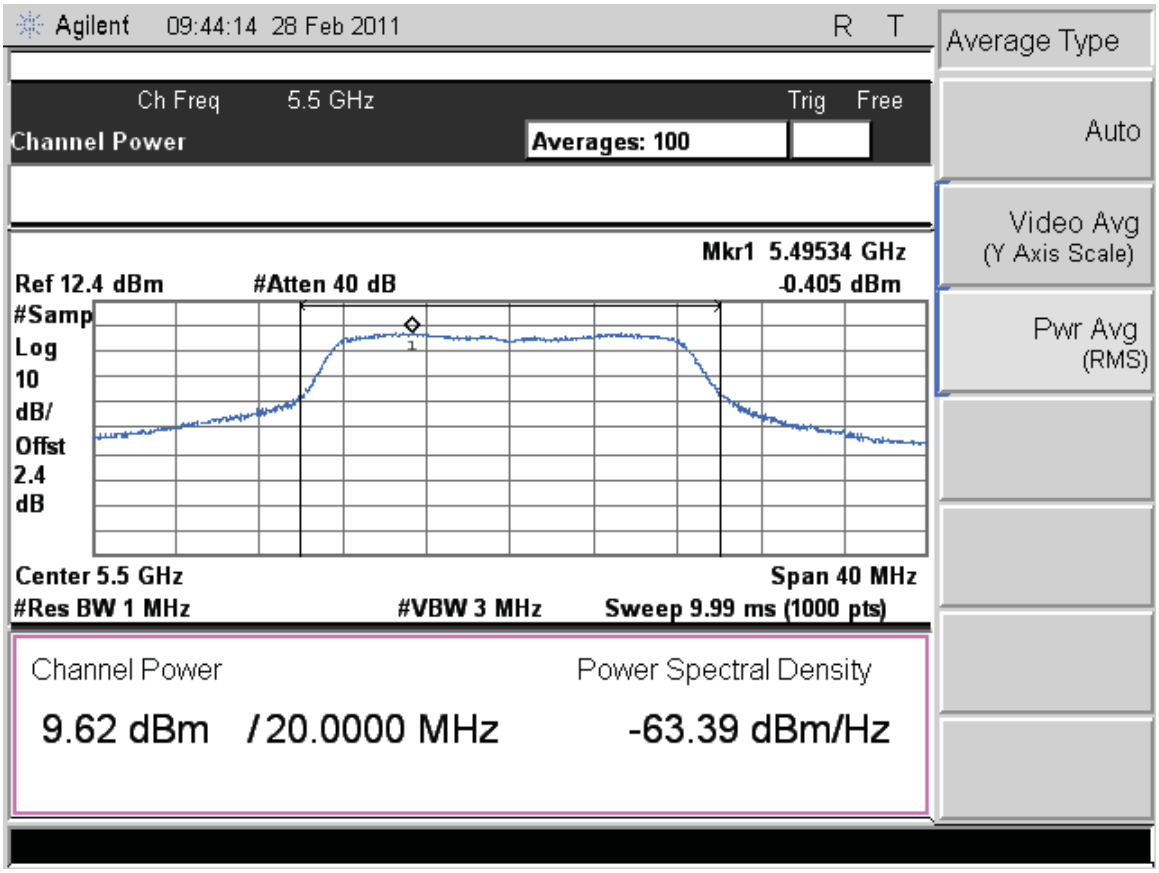


Figure 79: Maximum Transmitted Power, 5500 MHz at 802.11n HT20, 3x3 Chain 0 – 19.5 Mbps

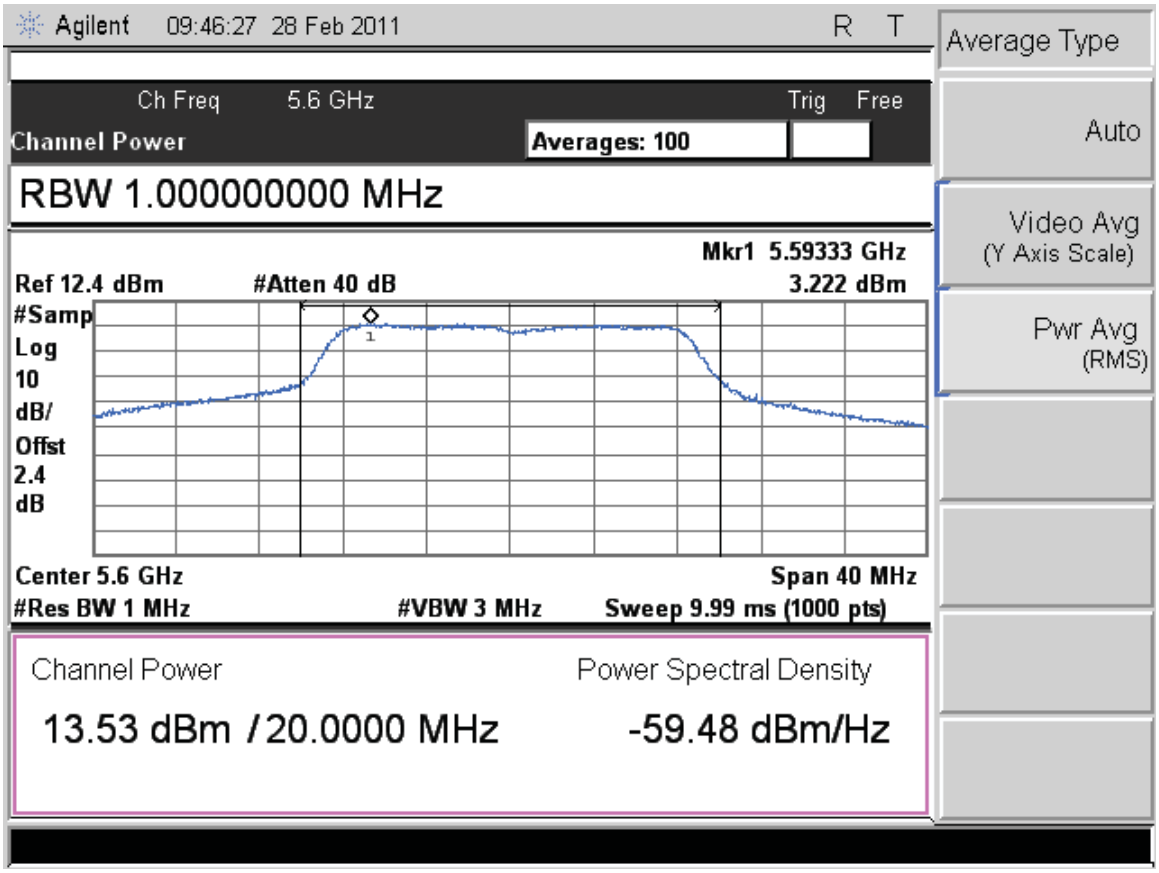


Figure 80: Maximum Transmitted Power, 5600 MHz at 802.11n HT20, 3x3 Chain 0 – 19.5 Mbps

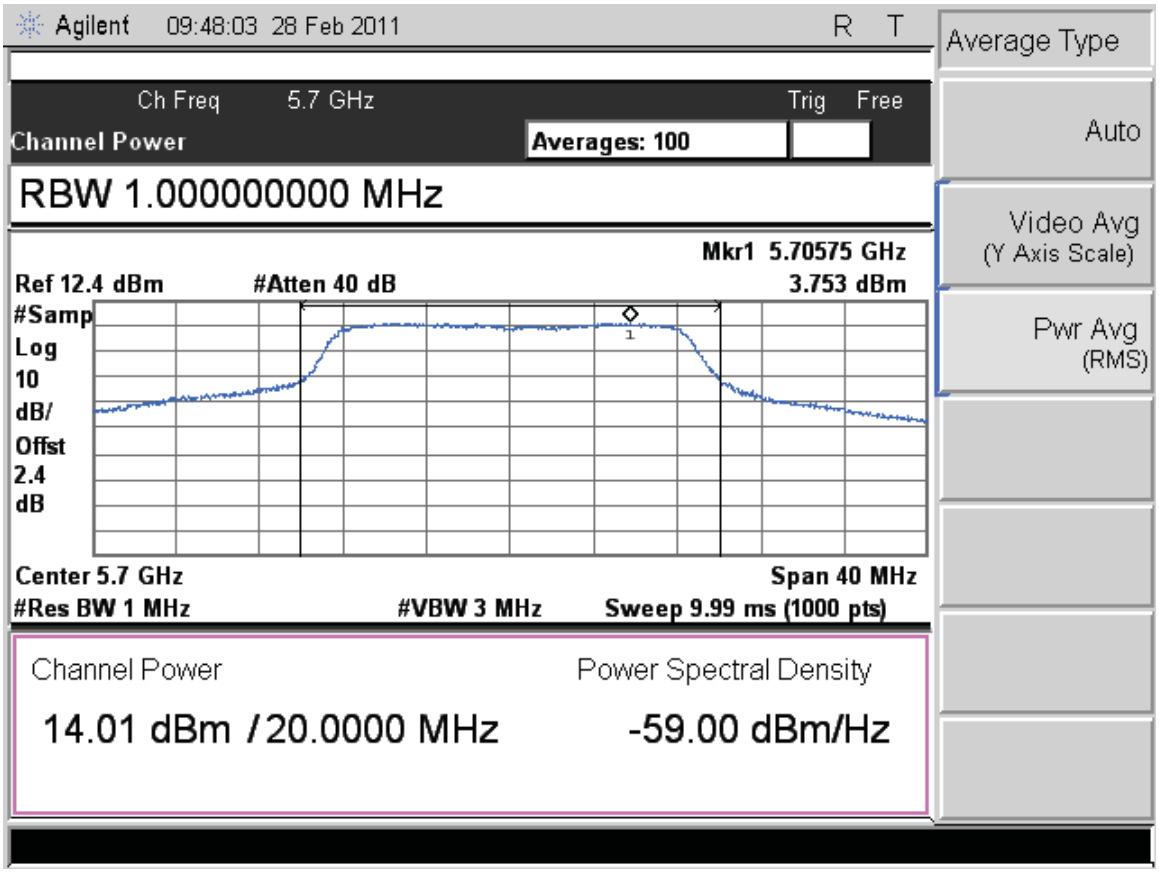


Figure 81: Maximum Transmitted Power, 5700 MHz at 802.11n HT20, 3x3 Chain 0 – 19.5 Mbps

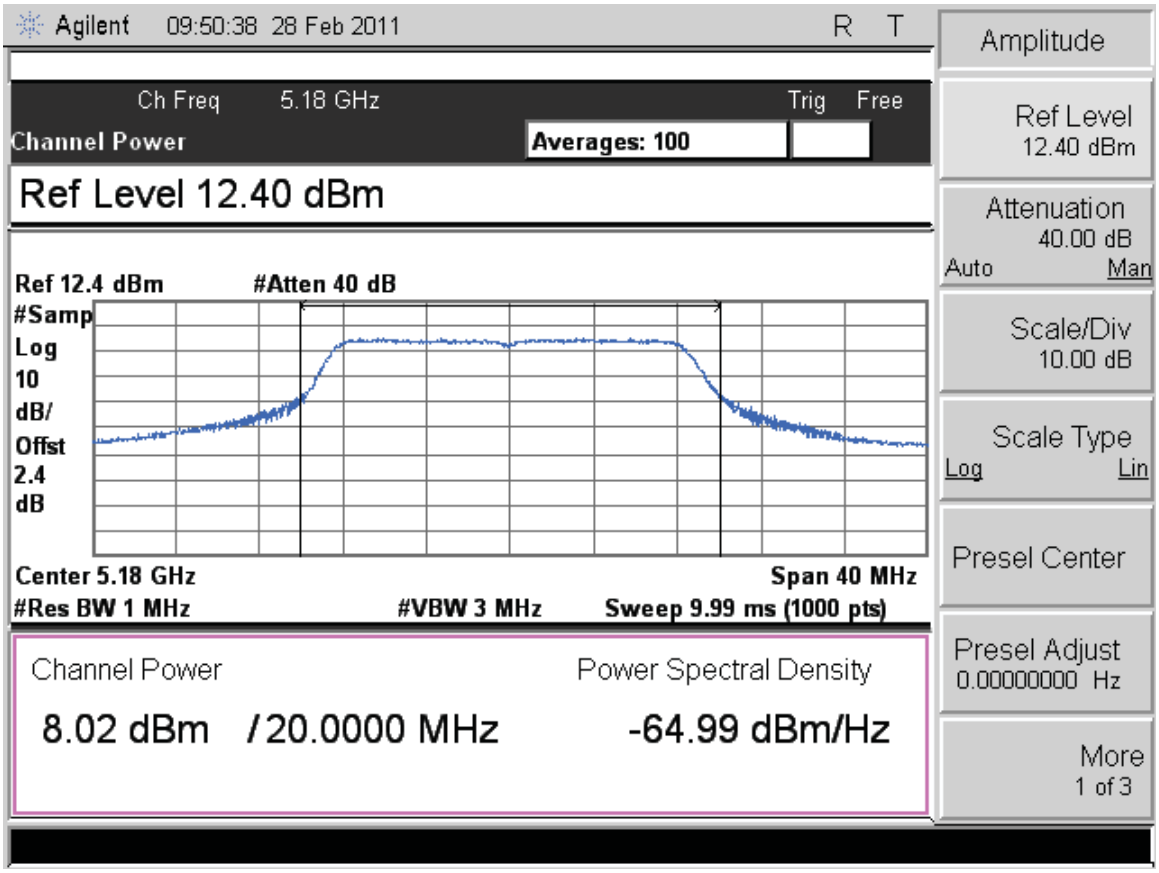


Figure 82: Maximum Transmitted Power, 5180 MHz at 802.11n HT20, 3x3 Chain 1 – 19.5 Mbps

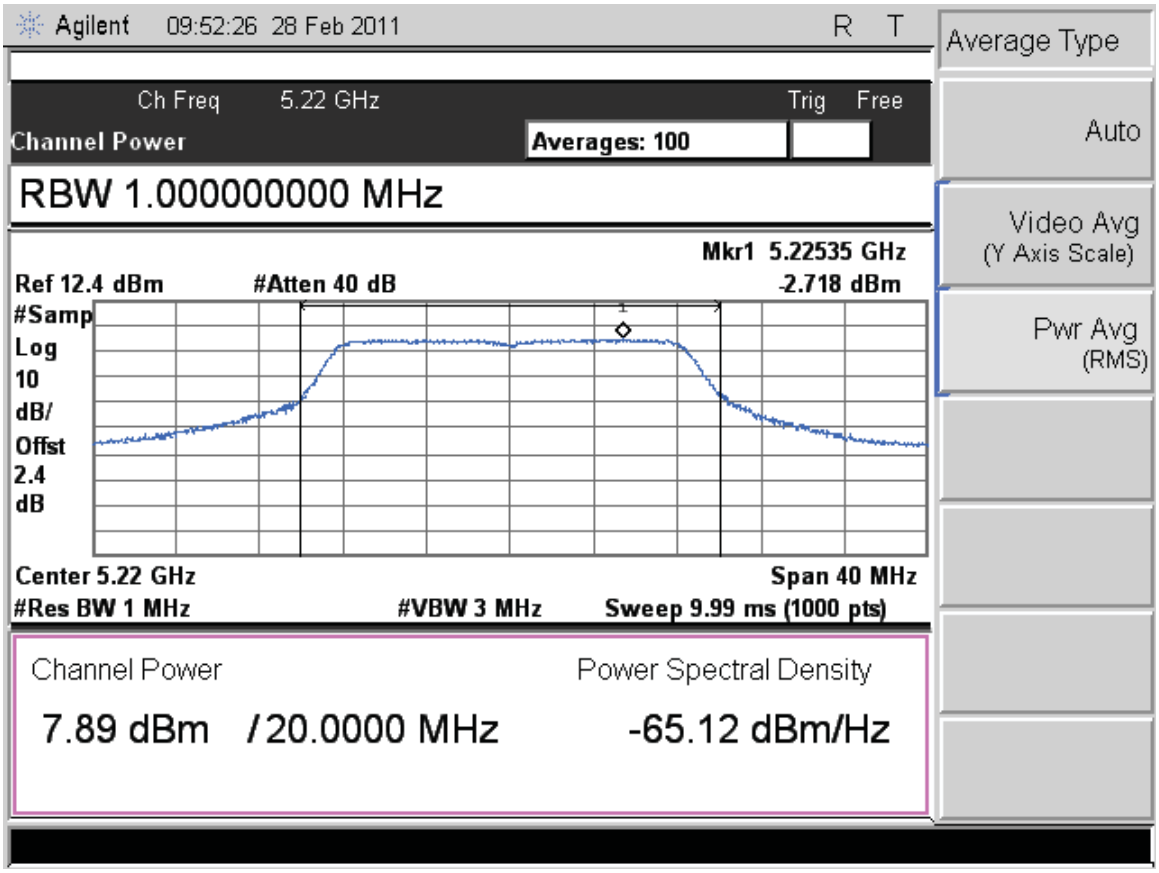


Figure 83: Maximum Transmitted Power, 5220 MHz at 802.11n HT20, 3x3 Chain 1 – 19.5 Mbps

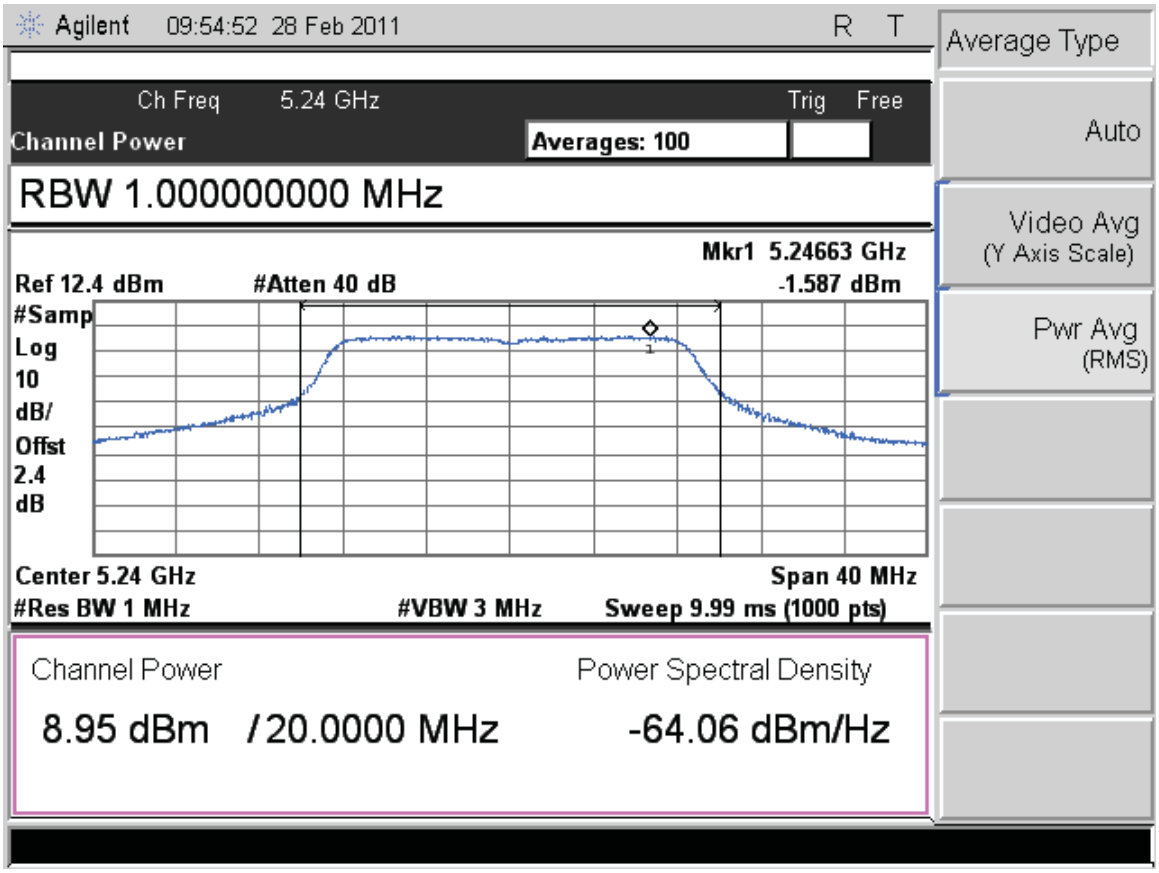


Figure 84: Maximum Transmitted Power, 5240 MHz at 802.11n HT20, 3x3 Chain 1 – 19.5 Mbps

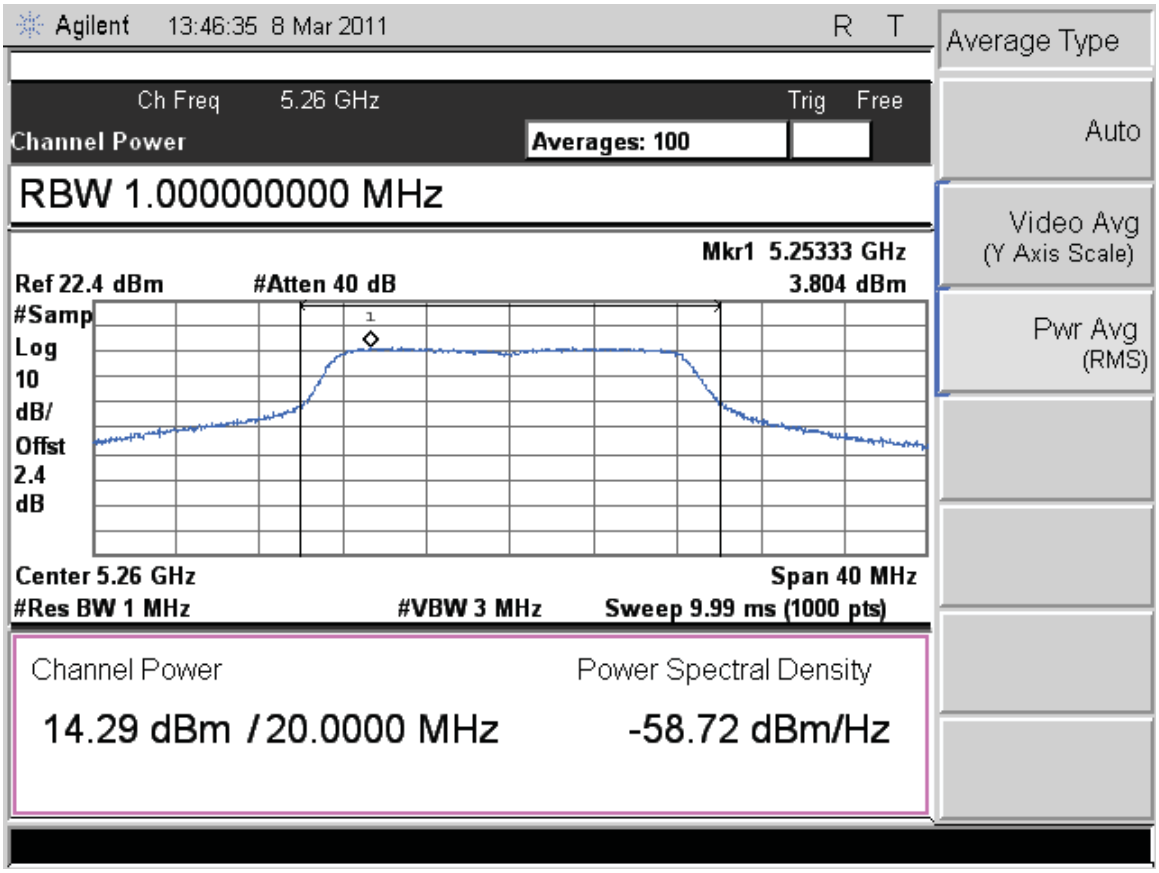


Figure 85: Maximum Transmitted Power, 5260 MHz at 802.11n HT20, 3x3 Chain 1 – 19.5 Mbps

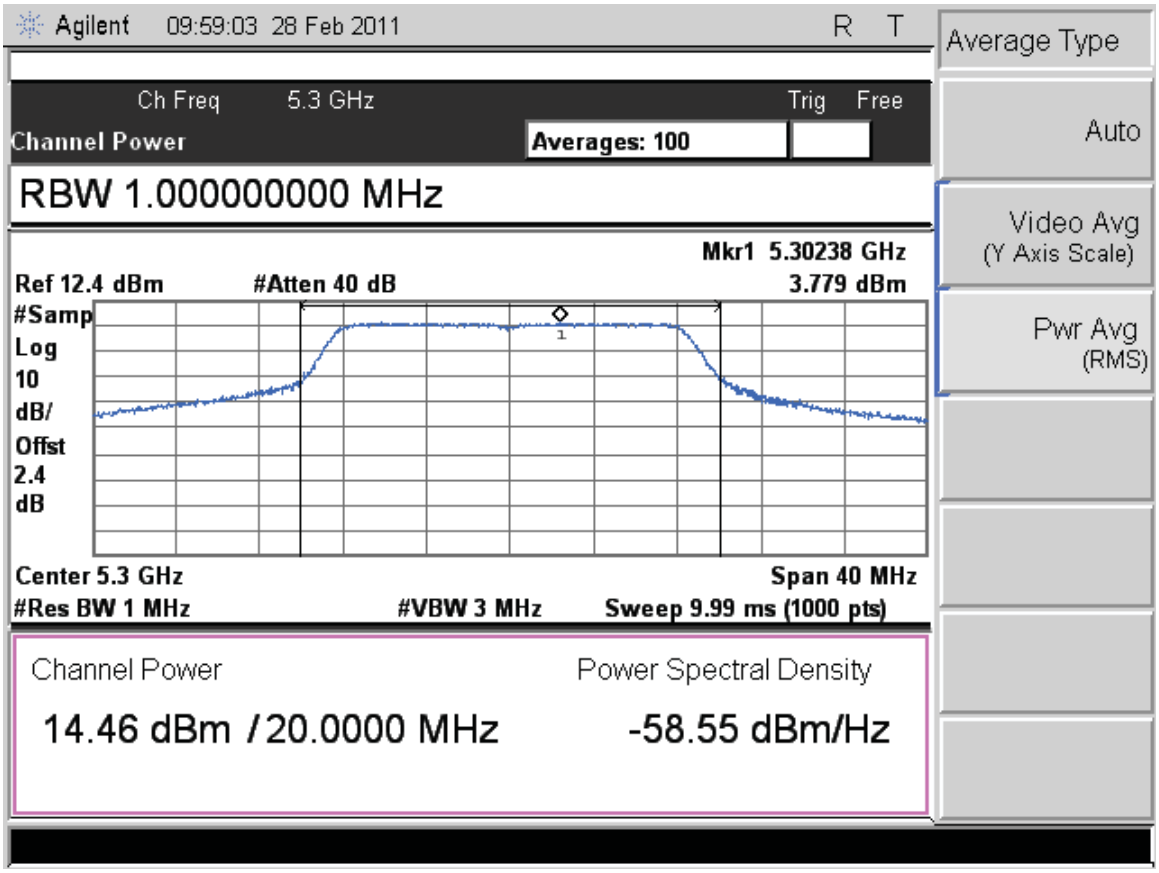


Figure 86: Maximum Transmitted Power, 5300 MHz at 802.11n HT20, 3x3 Chain 1 – 19.5 Mbps

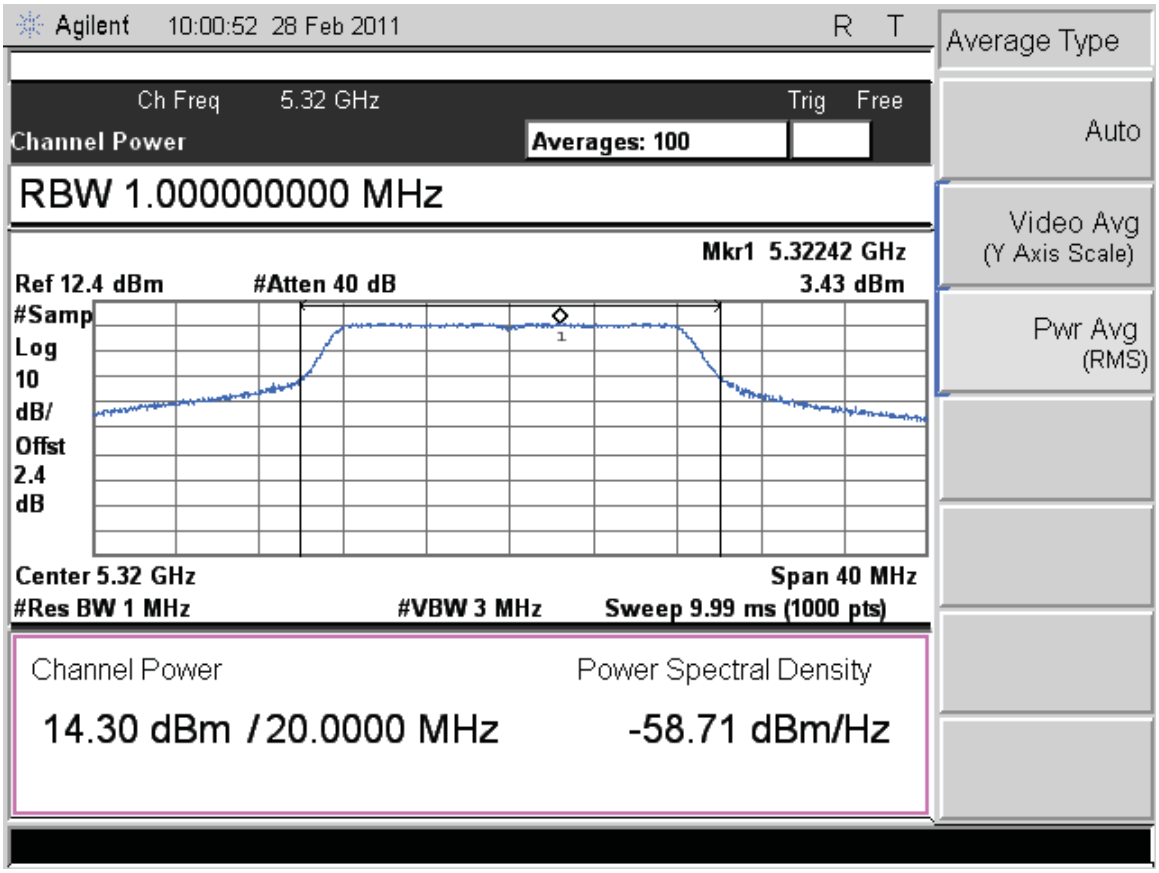


Figure 87: Maximum Transmitted Power, 5320 MHz at 802.11n HT20, 3x3 Chain 1 – 19.5 Mbps

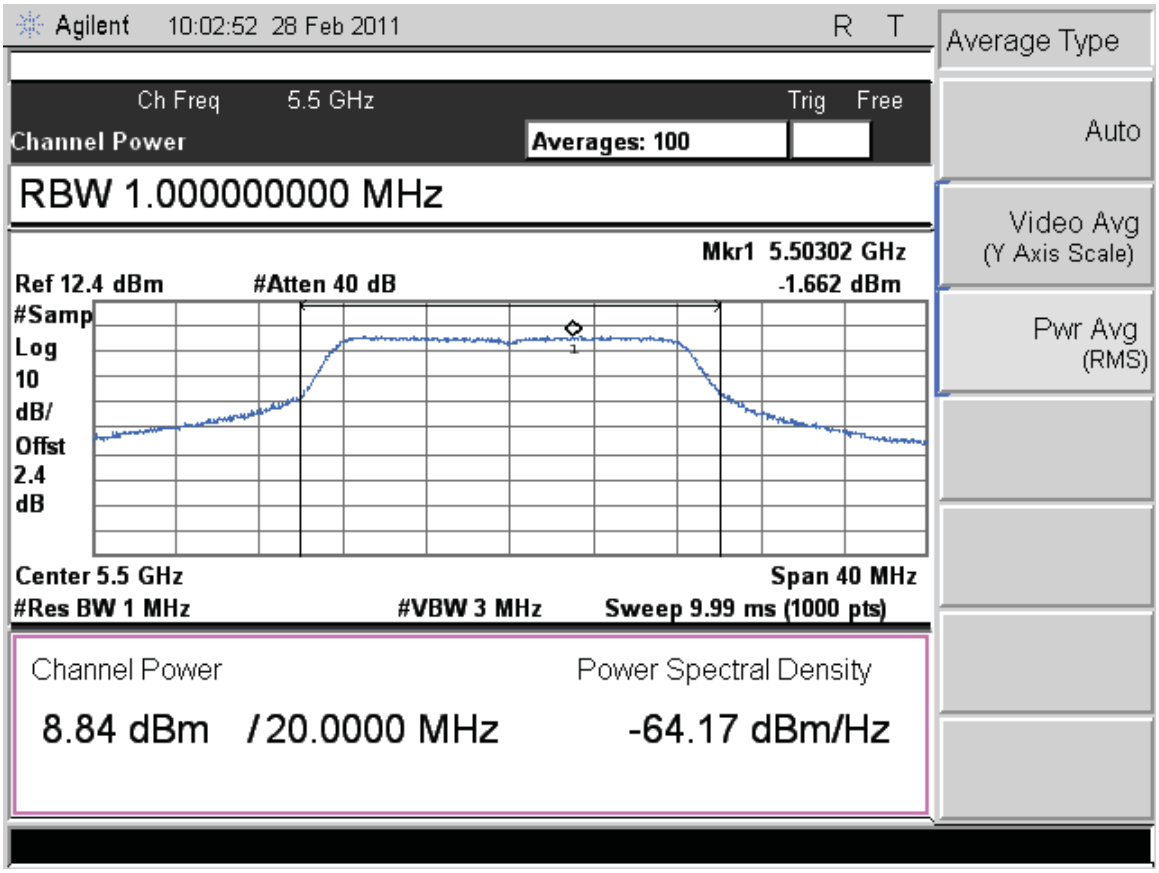


Figure 88: Maximum Transmitted Power, 5500 MHz at 802.11n HT20, 3x3 Chain 1 – 19.5 Mbps

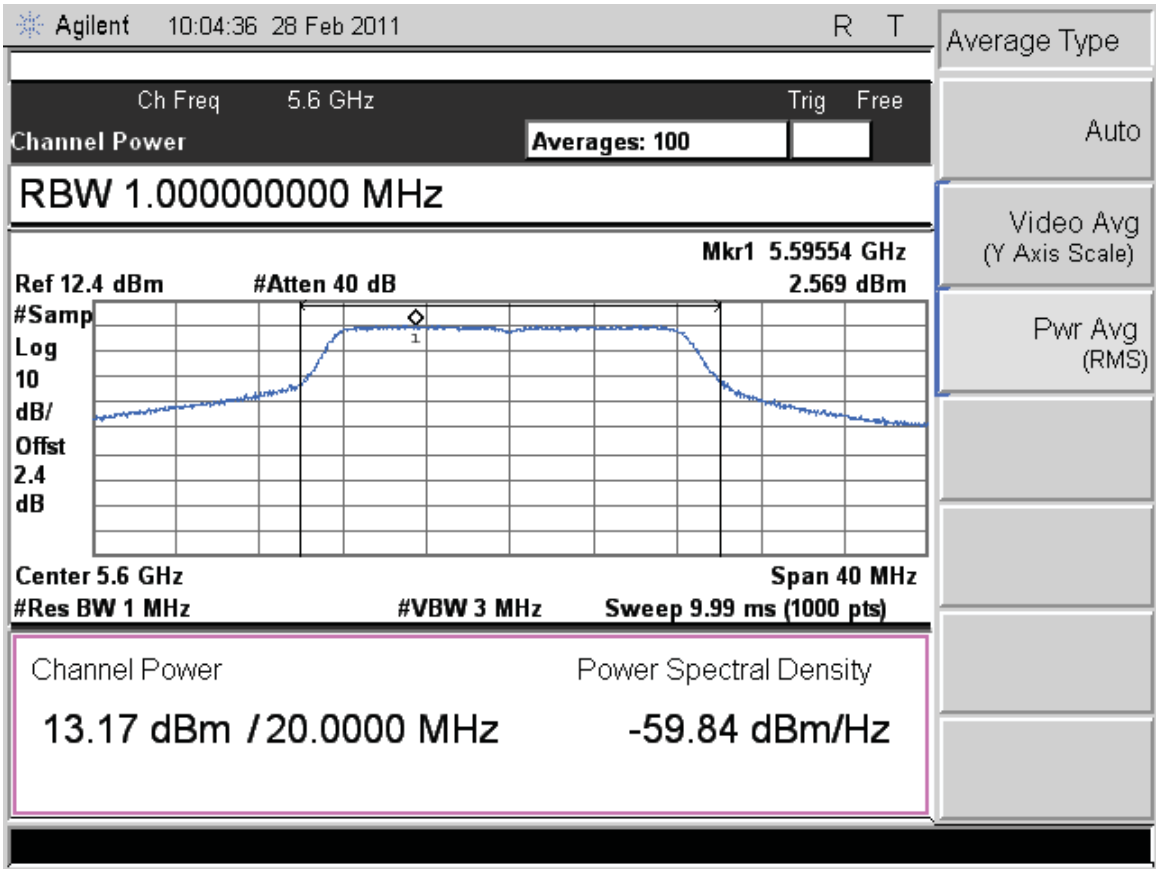


Figure 89: Maximum Transmitted Power, 5600 MHz at 802.11n HT20, 3x3 Chain 1 – 19.5 Mbps

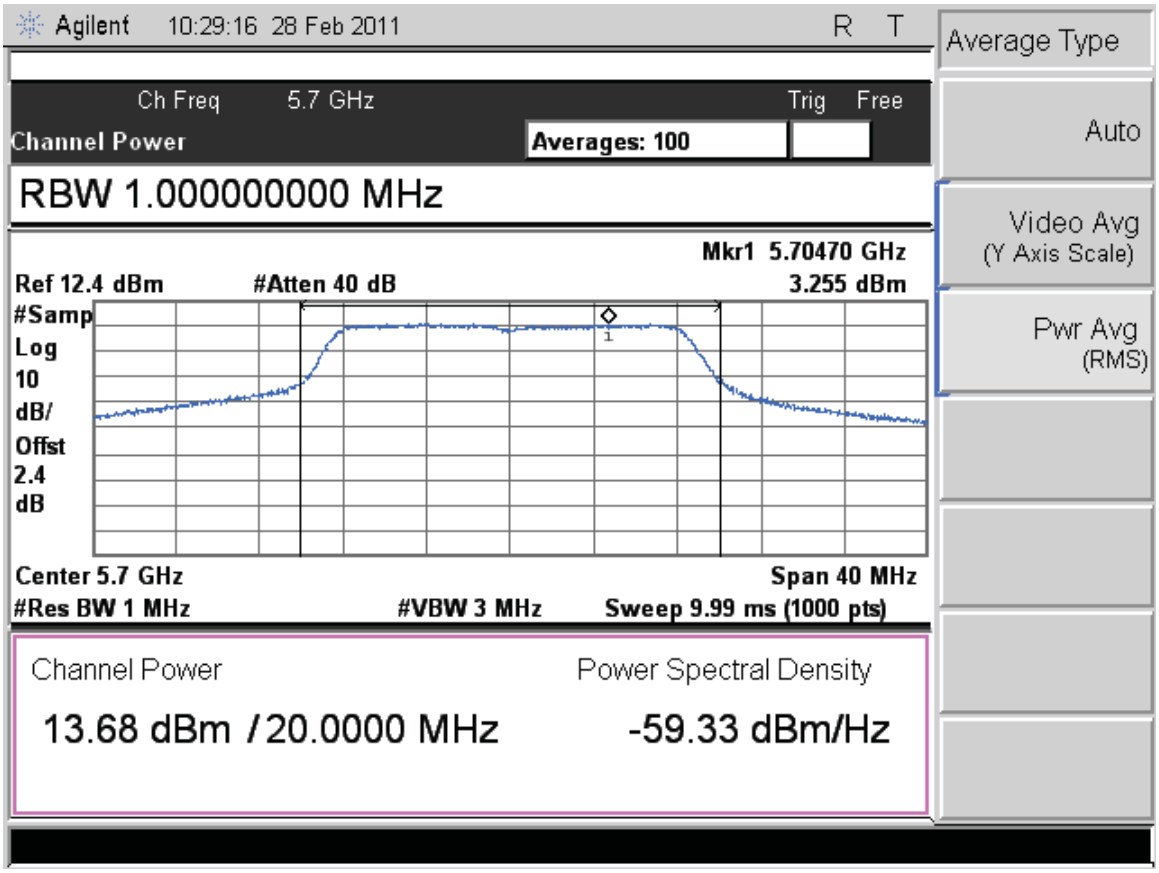


Figure 90: Maximum Transmitted Power, 5700 MHz at 802.11n HT20, 3x3 Chain 1 – 19.5 Mbps

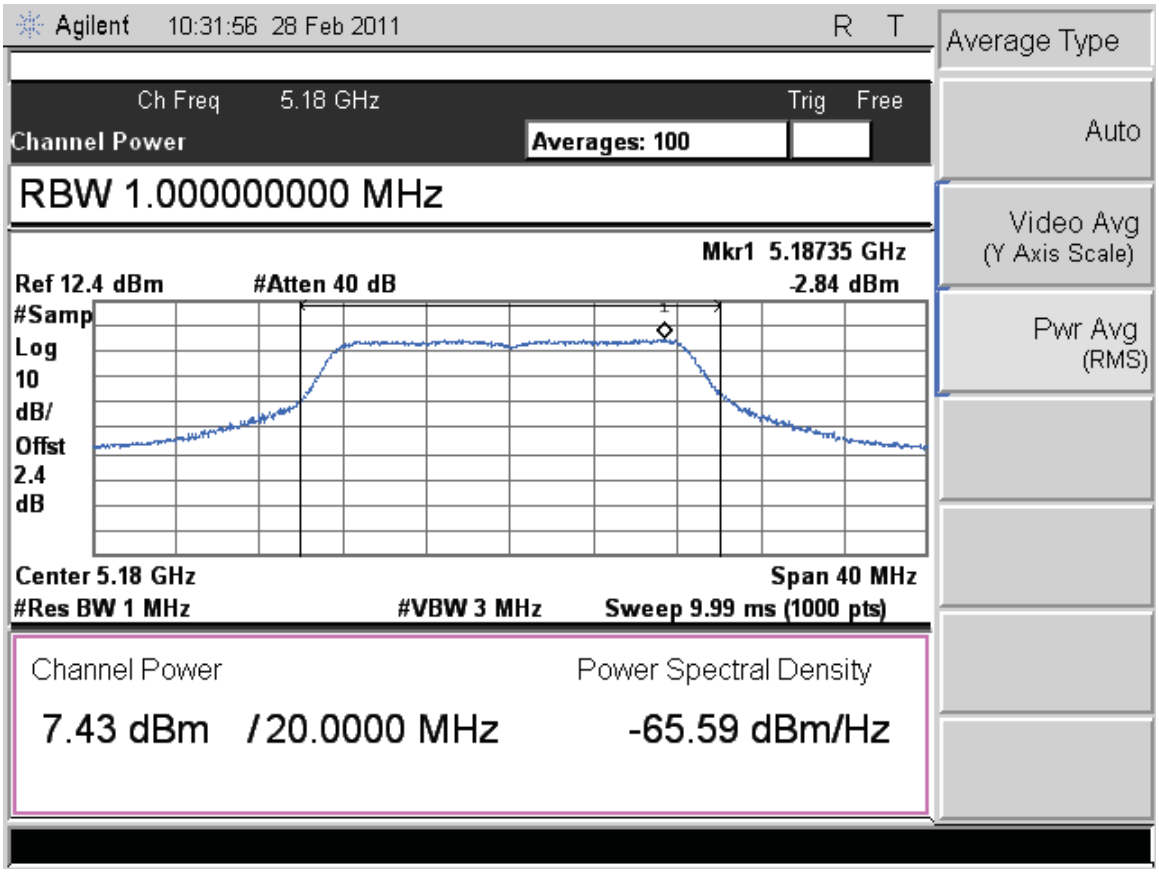


Figure 91: Maximum Transmitted Power, 5180 MHz at 802.11n HT20, 3x3 Chain 2 – 19.5 Mbps

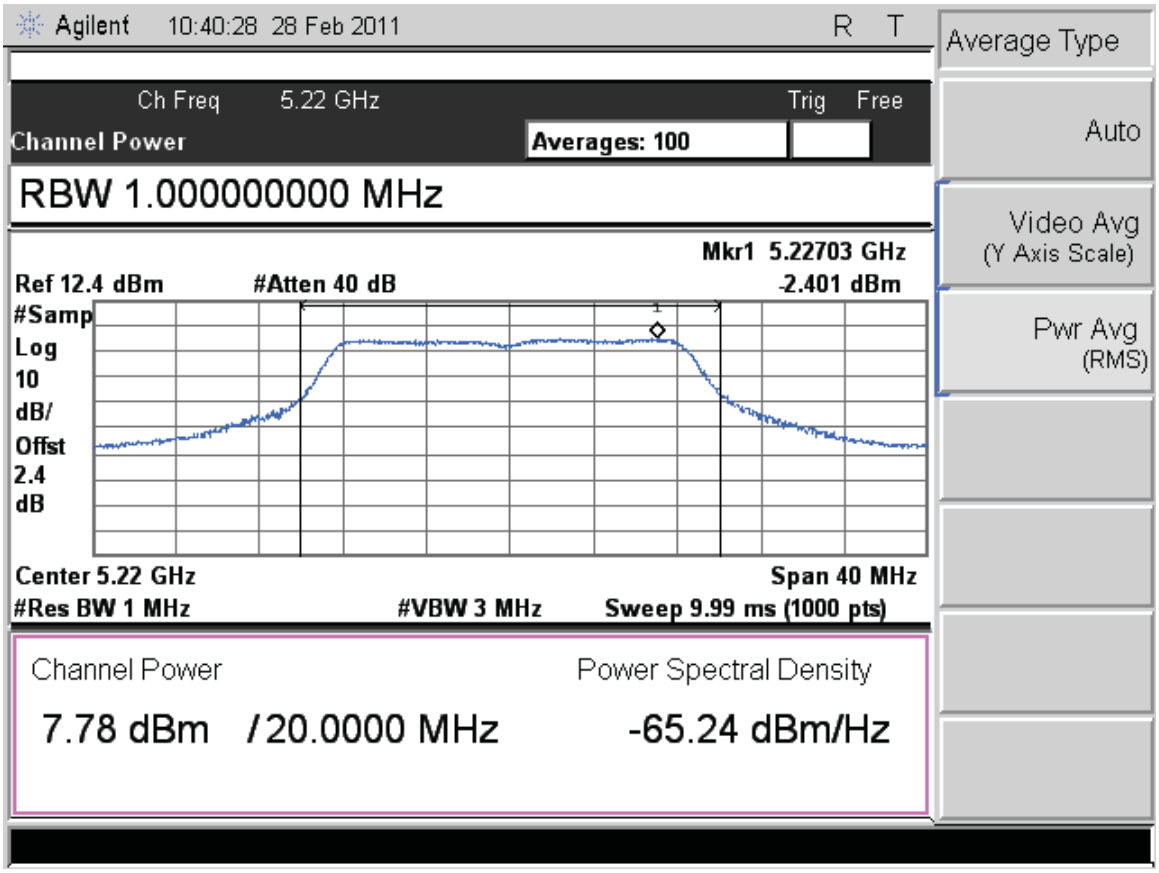


Figure 92: Maximum Transmitted Power, 5220 MHz at 802.11n HT20, 3x3 Chain 2 – 19.5 Mbps

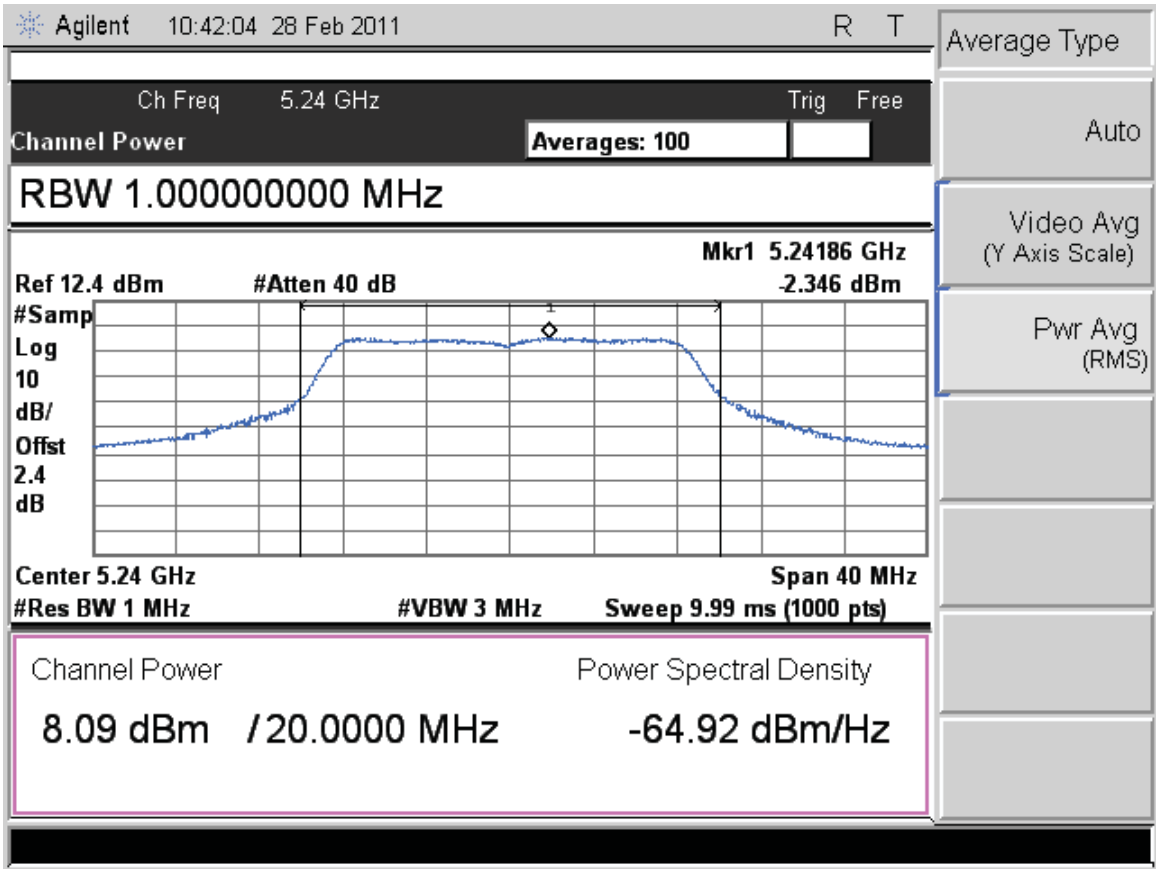


Figure 93: Maximum Transmitted Power, 5240 MHz at 802.11n HT20, 3x3 Chain 2 – 19.5 Mbps

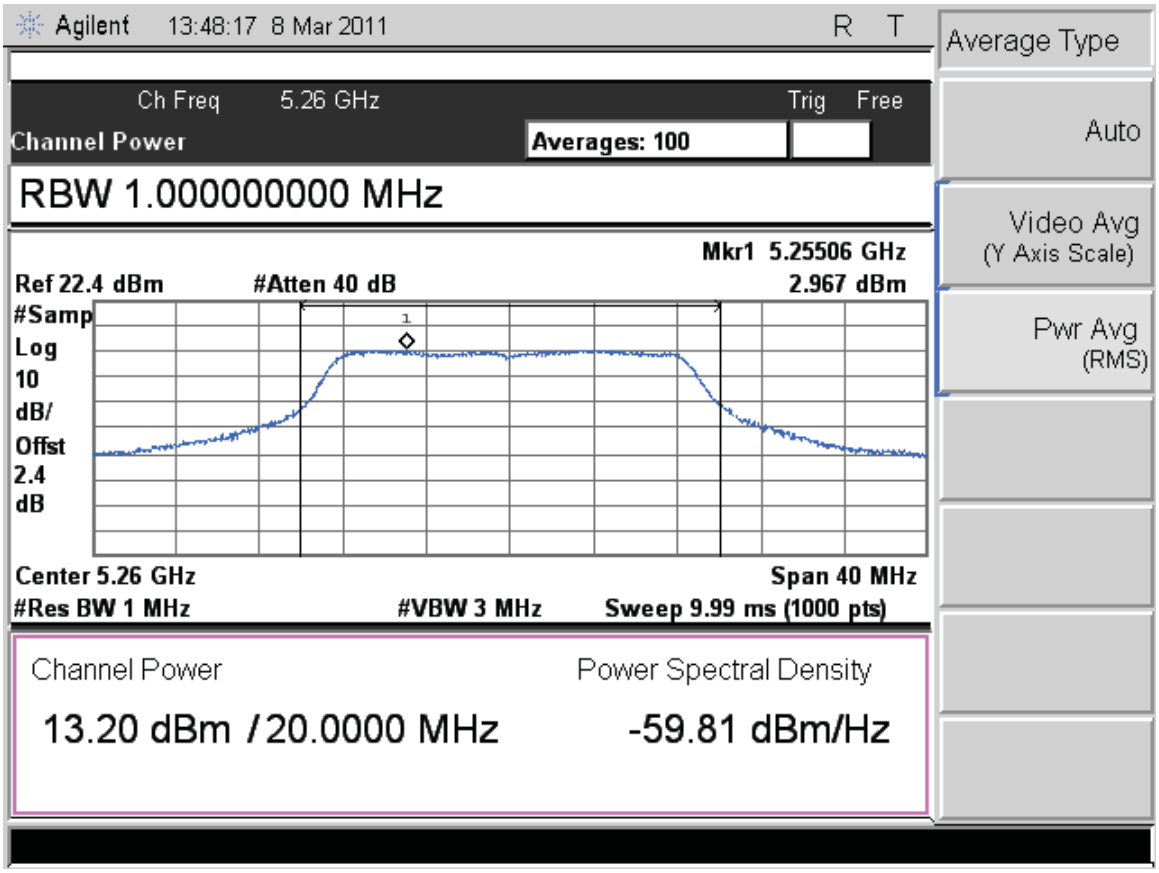


Figure 94: Maximum Transmitted Power, 5260 MHz at 802.11n HT20, 3x3 Chain 2 – 19.5 Mbps

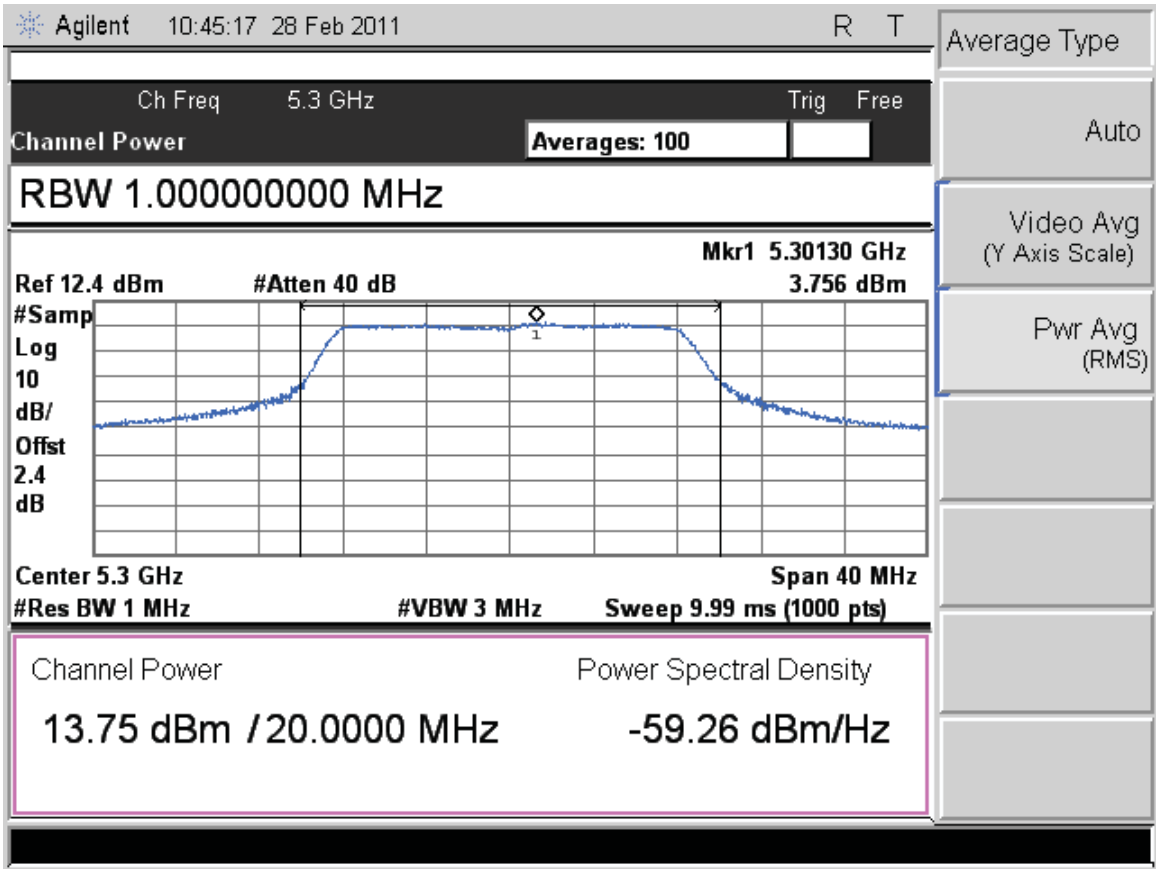


Figure 95: Maximum Transmitted Power, 5300 MHz at 802.11n HT20, 3x3 Chain 2 – 19.5 Mbps

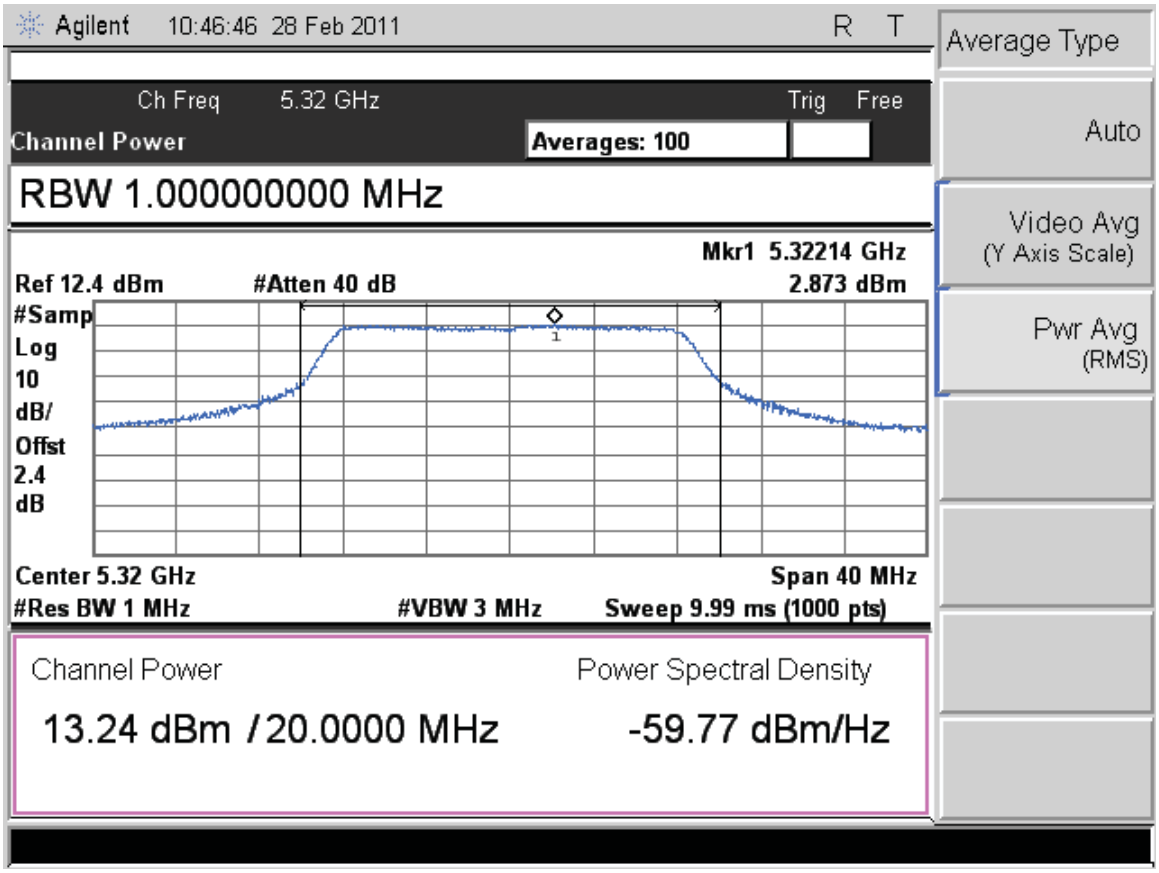


Figure 96: Maximum Transmitted Power, 5320 MHz at 802.11n HT20, 3x3 Chain 2 – 19.5 Mbps

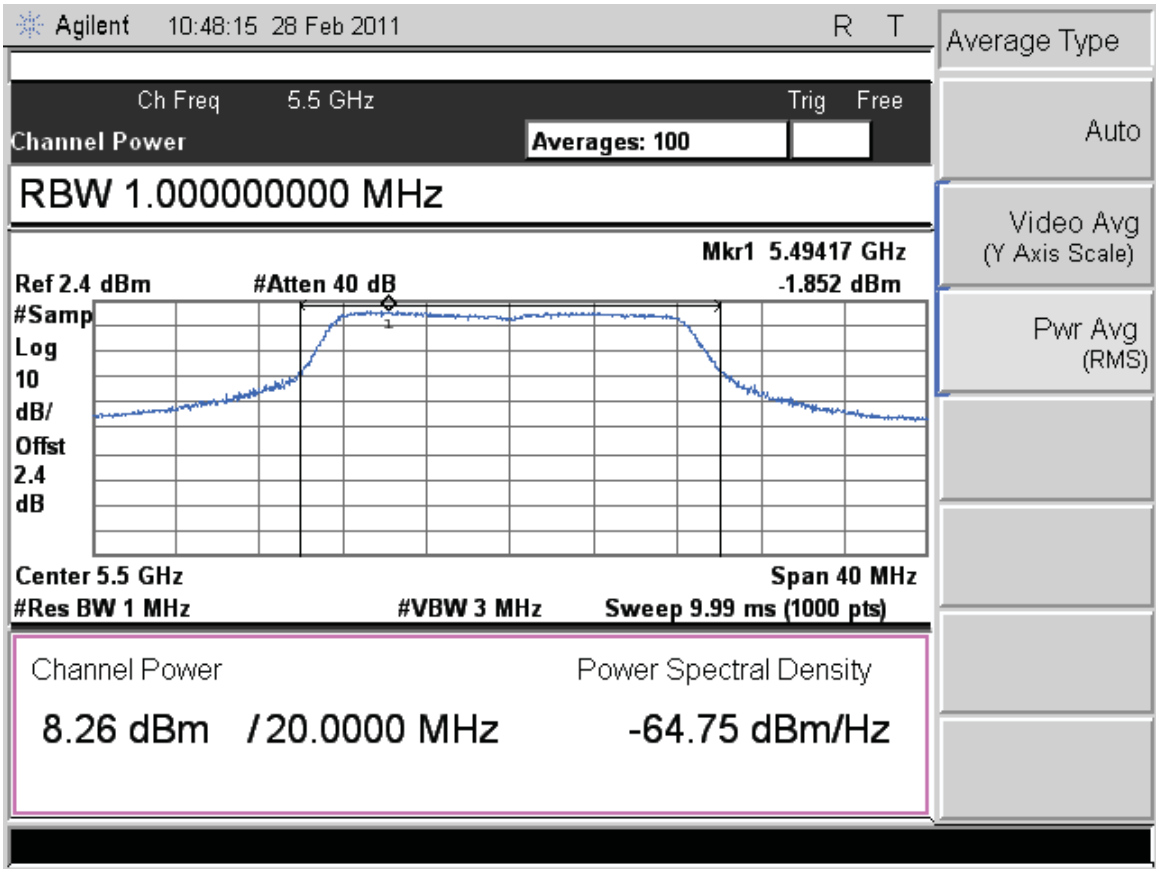


Figure 97: Maximum Transmitted Power, 5500 MHz at 802.11n HT20, 3x3 Chain 2 – 19.5 Mbps

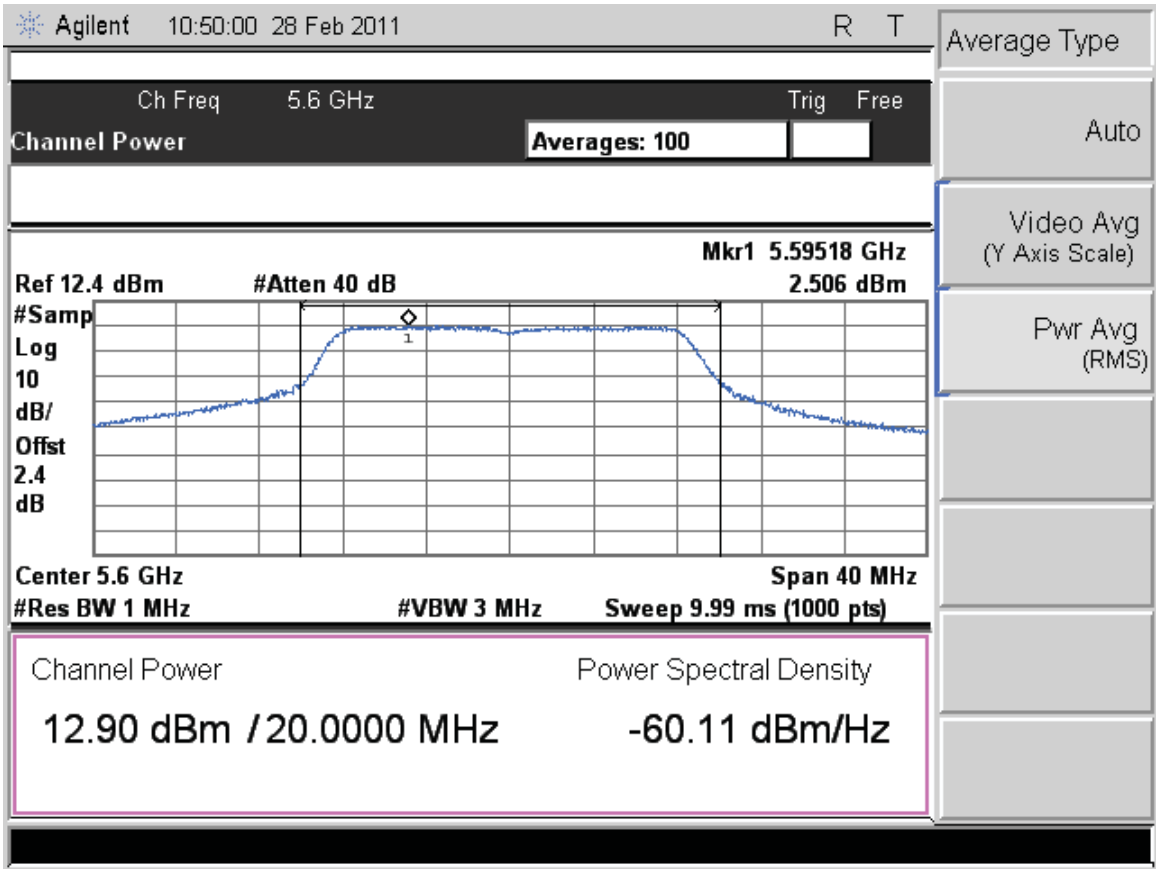


Figure 98: Maximum Transmitted Power, 5600 MHz at 802.11n HT20, 3x3 Chain 2 – 19.5 Mbps

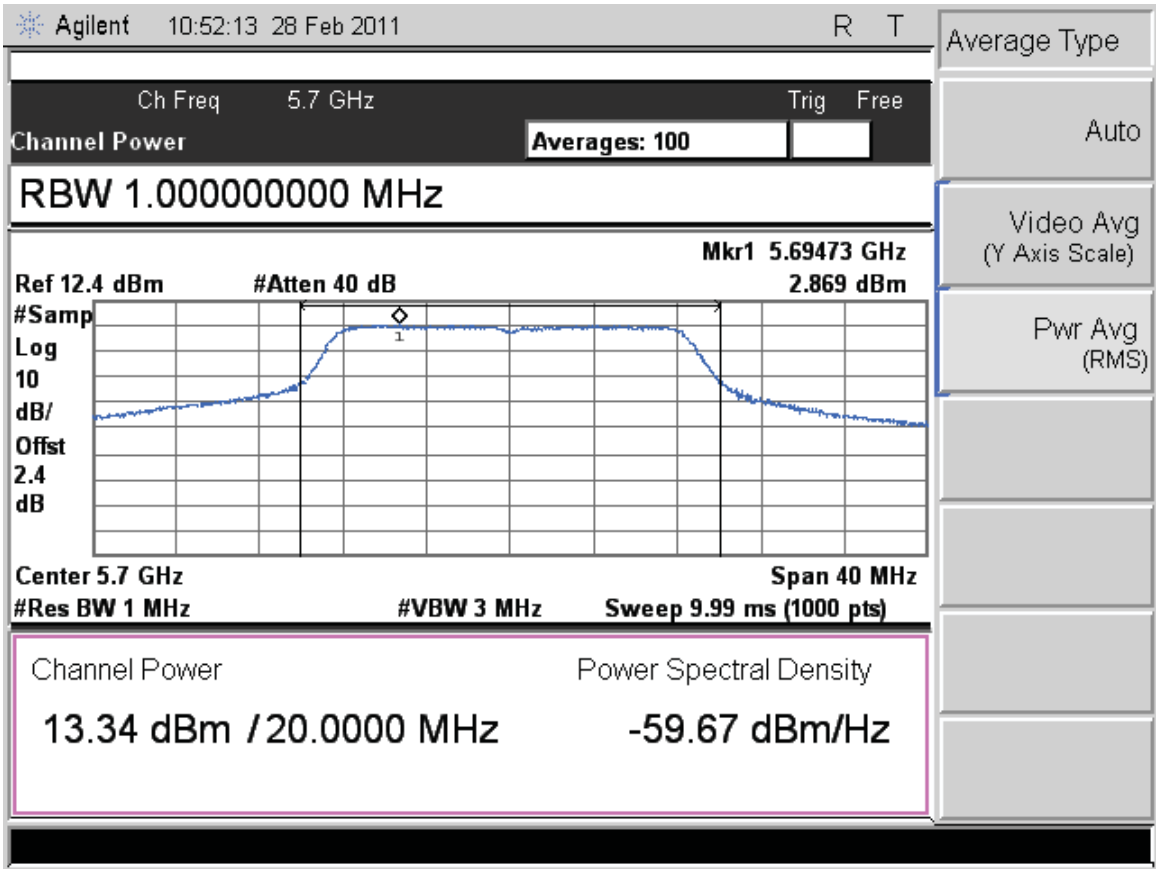


Figure 99: Maximum Transmitted Power, 5700 MHz at 802.11n HT20, 3x3 Chain 2 – 19.5 Mbps

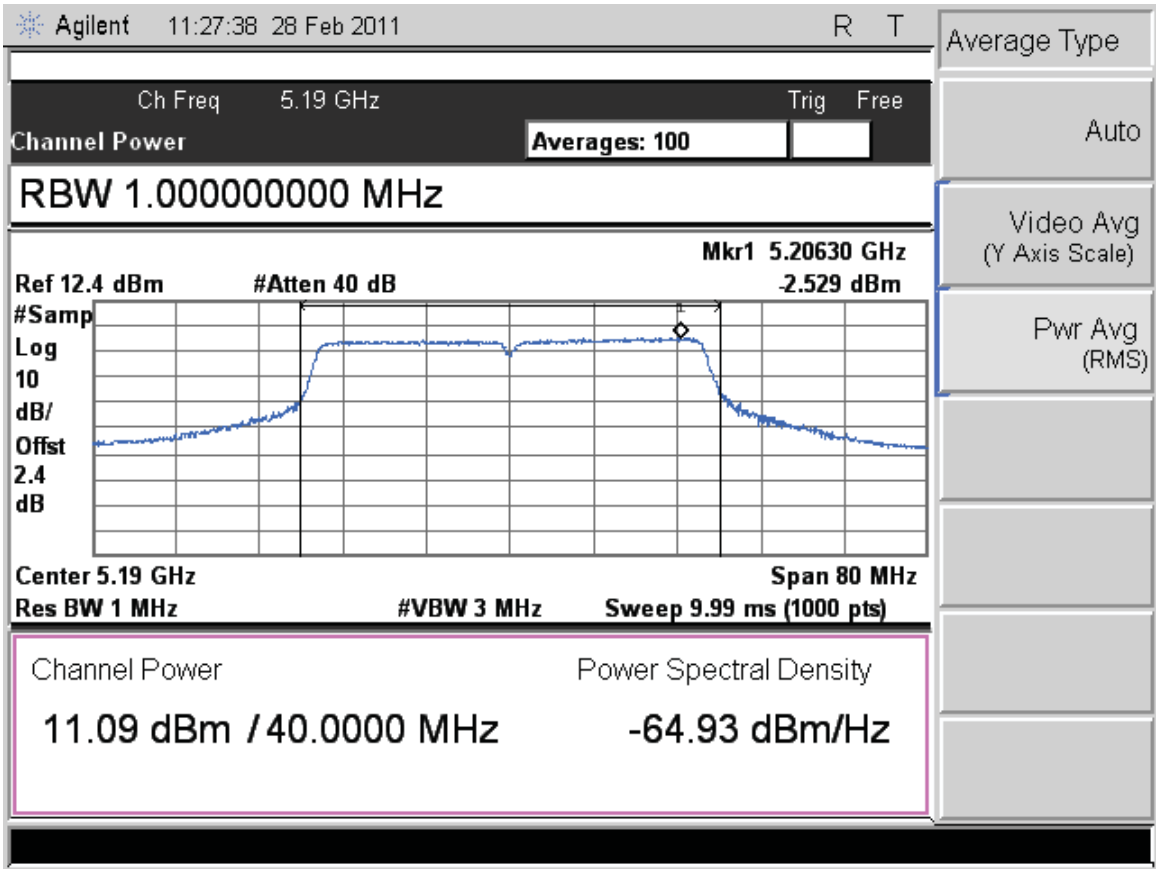


Figure 100: Maximum Transmitted Power, 5190 MHz at 802.11n HT40, 1x3 Chain 0 – 13.5 Mbps

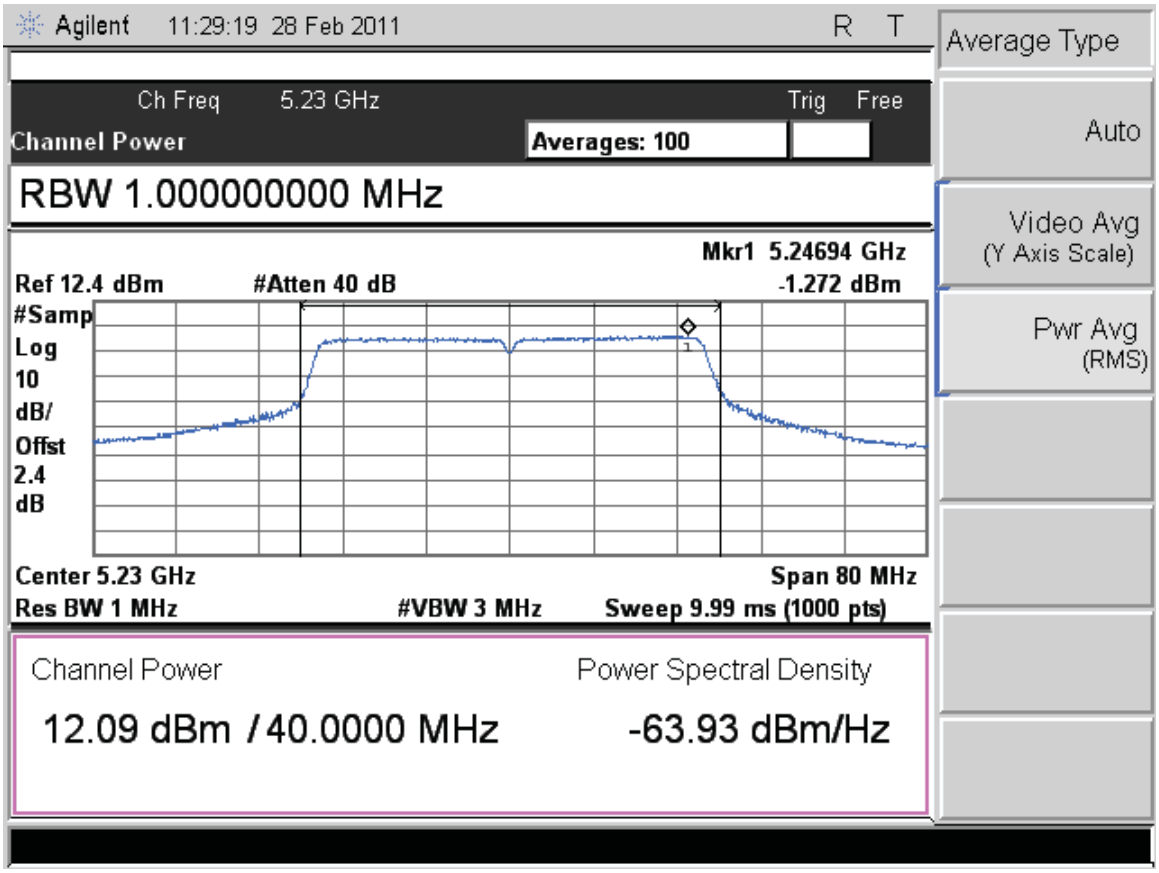


Figure 101: Maximum Transmitted Power, 5230 MHz at 802.11n HT40, 1x3 Chain 0 – 13.5 Mbps

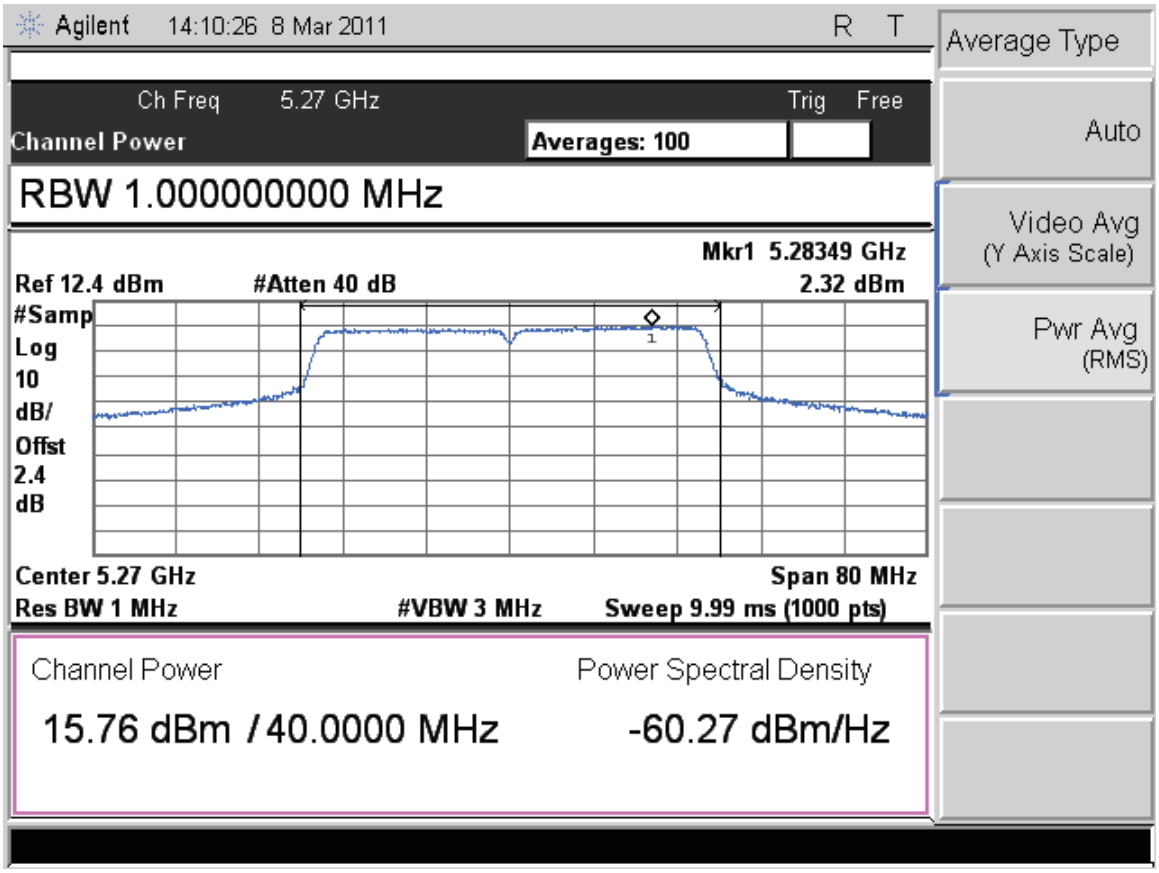


Figure 102: Maximum Transmitted Power, 5270 MHz at 802.11n HT40, 1x3 Chain 0 – 13.5 Mbps

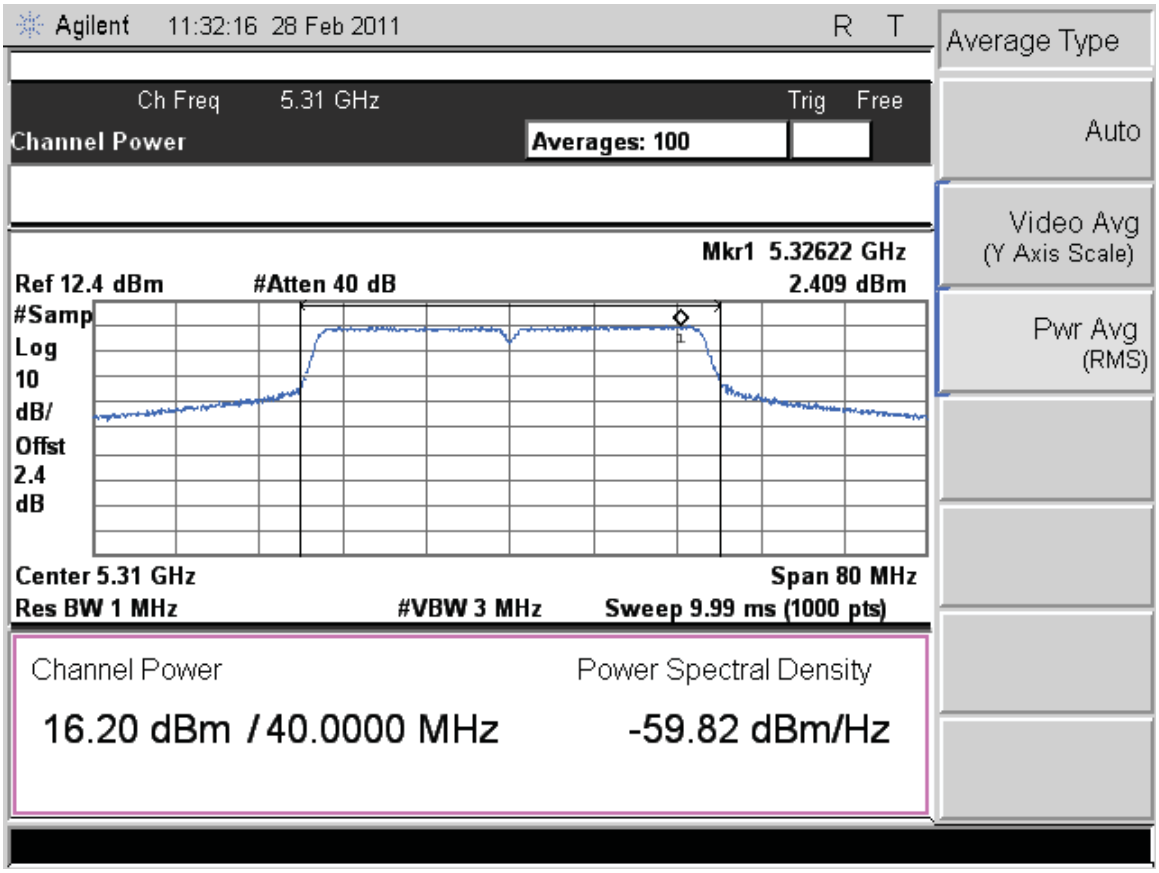


Figure 103: Maximum Transmitted Power, 5310 MHz at 802.11n HT40, 1x3 Chain 0 – 13.5 Mbps

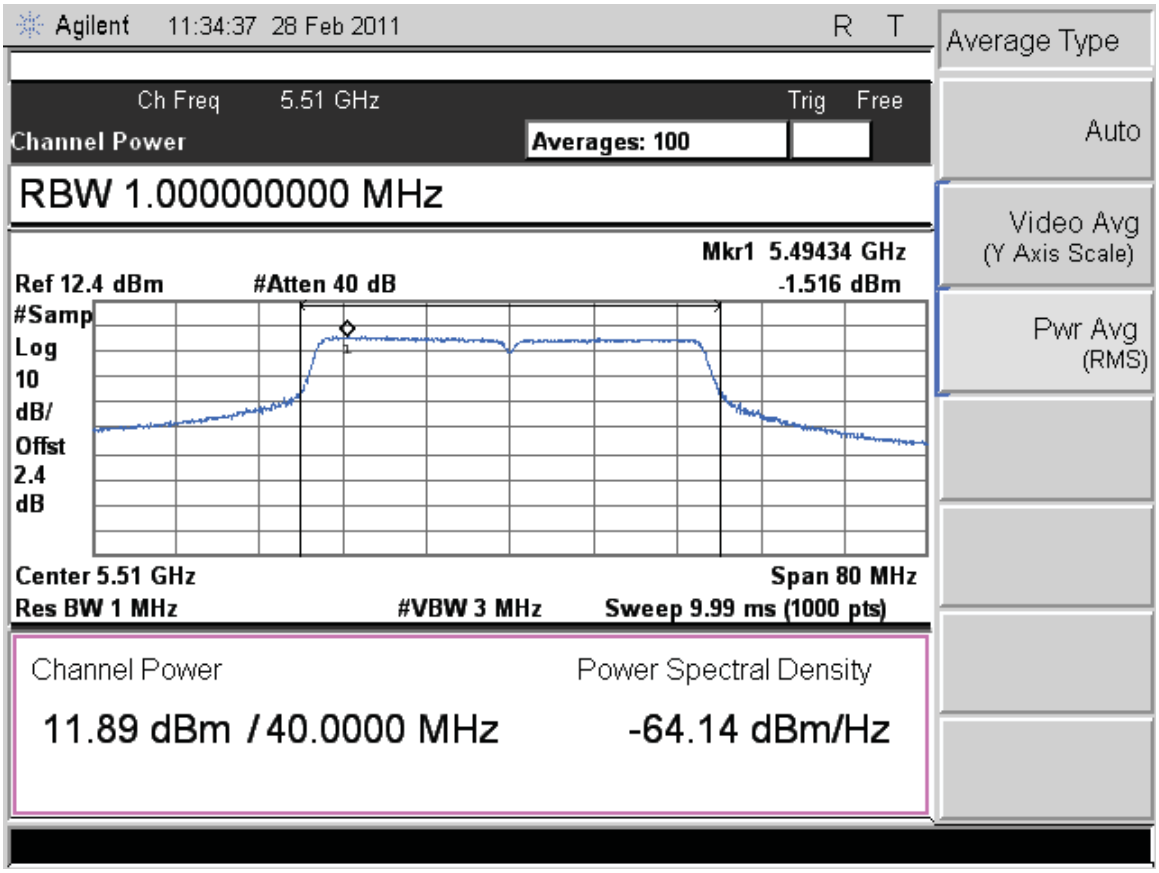


Figure 104: Maximum Transmitted Power, 5510 MHz at 802.11n HT40, 1x3 Chain 0 – 13.5 Mbps

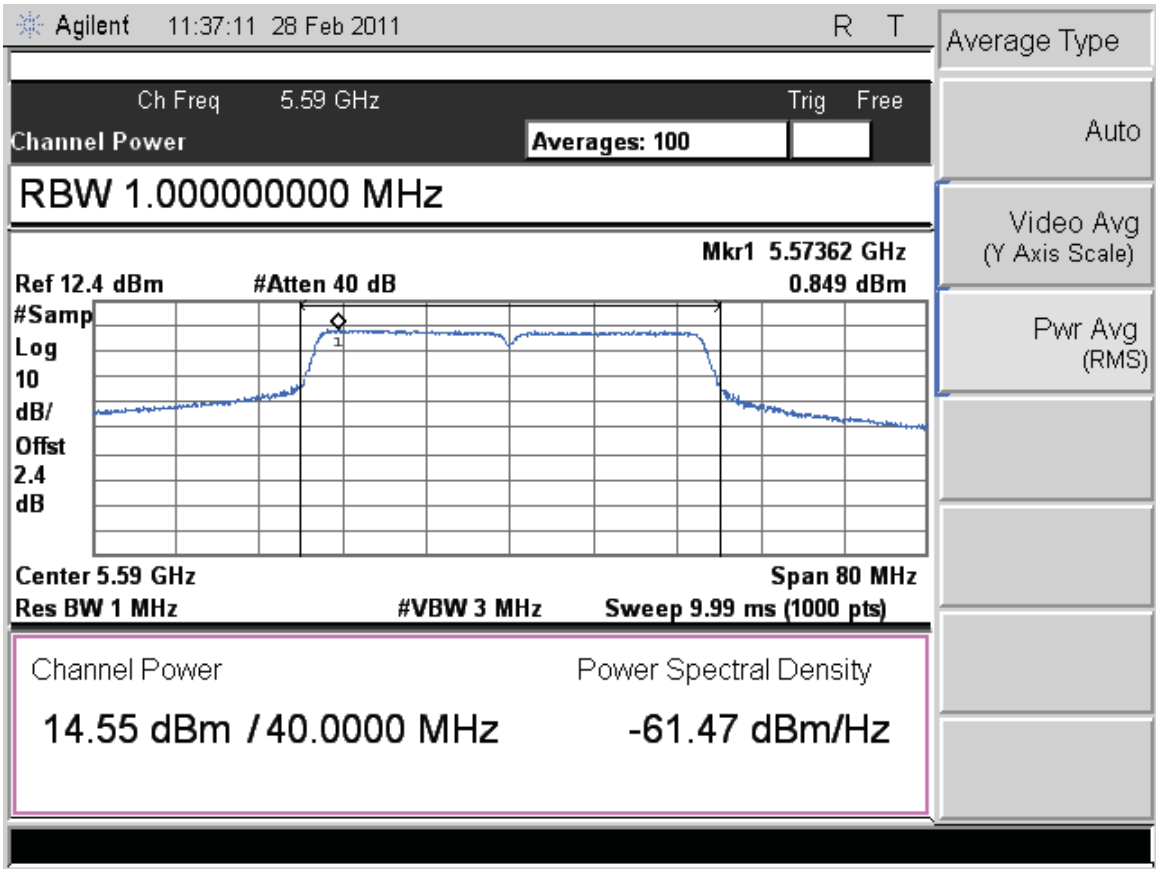


Figure 105: Maximum Transmitted Power, 5590 MHz at 802.11n HT40, 1x3 Chain 0 – 13.5 Mbps

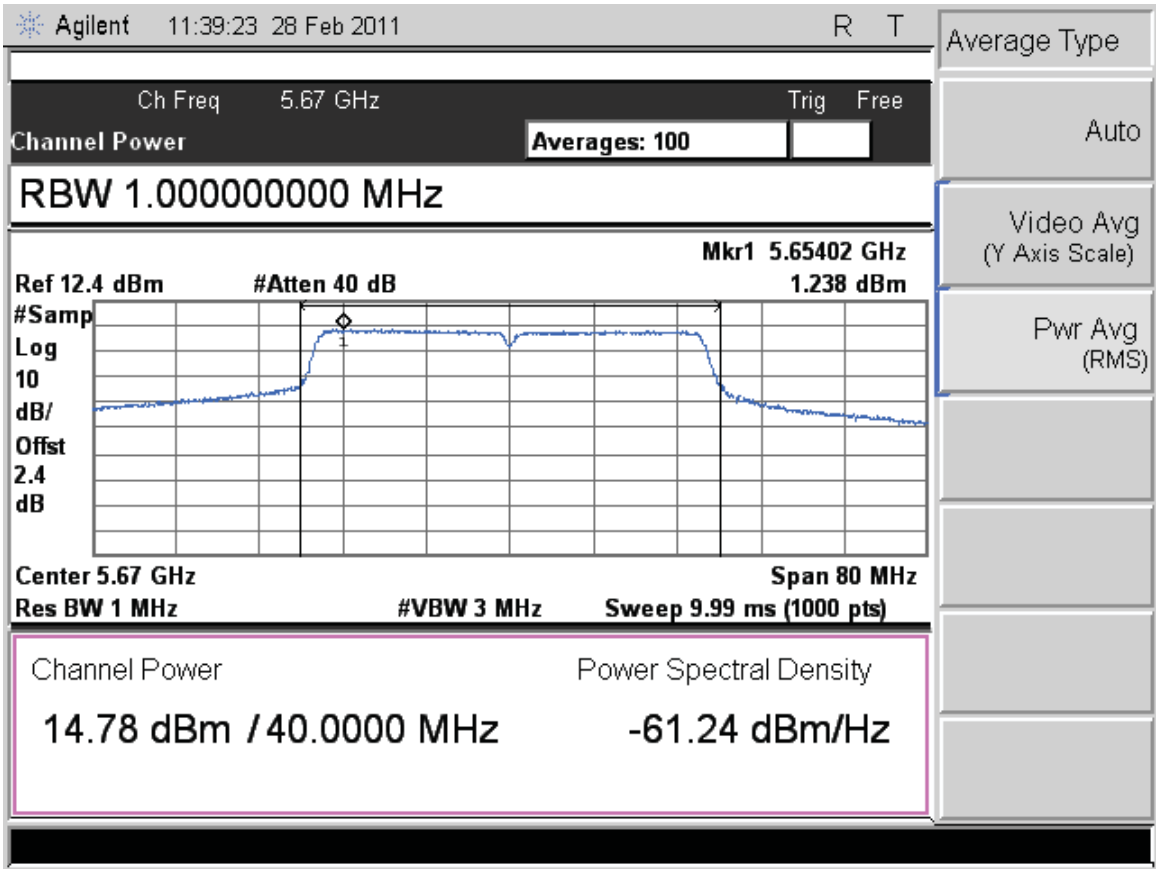


Figure 106: Maximum Transmitted Power, 5670 MHz at 802.11n HT40, 1x3 Chain 0 – 13.5 Mbps

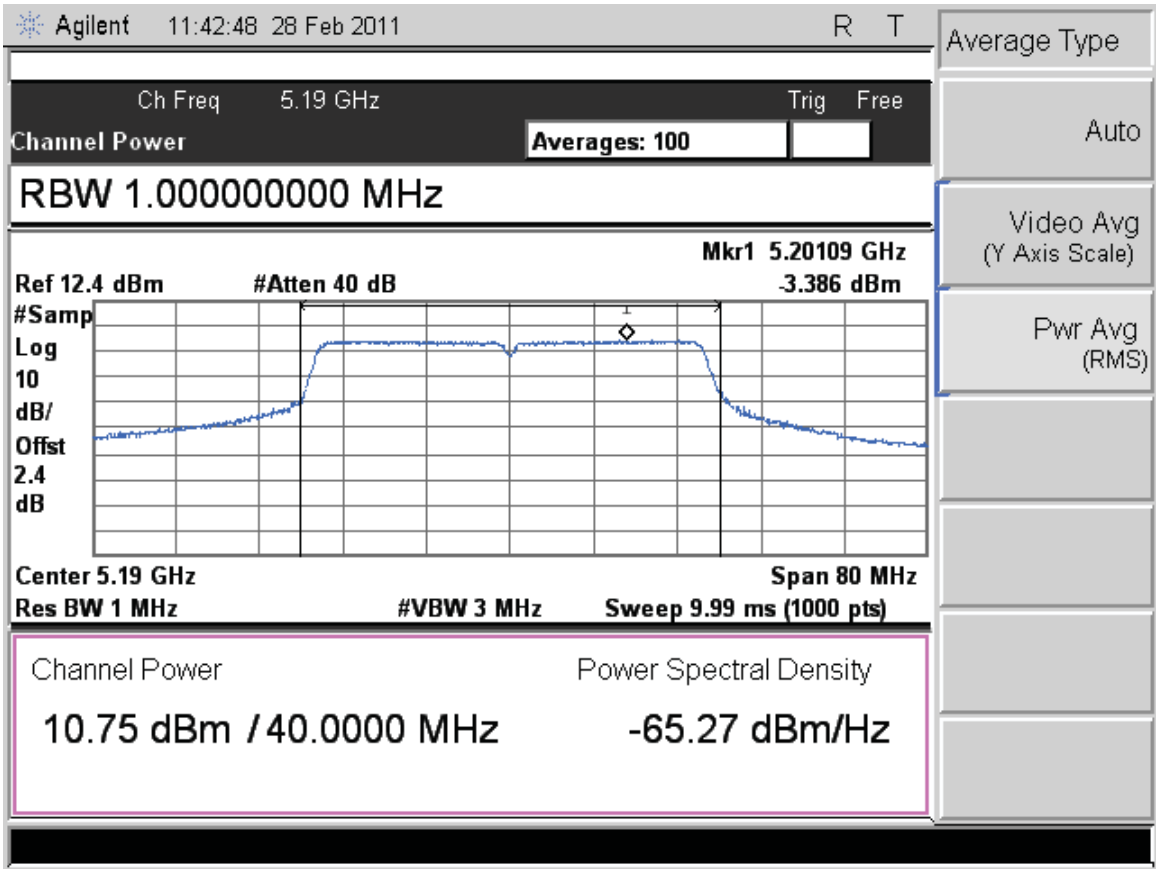


Figure 107: Maximum Transmitted Power, 5190 MHz at 802.11n HT40, 1x3 Chain 1 – 13.5 Mbps

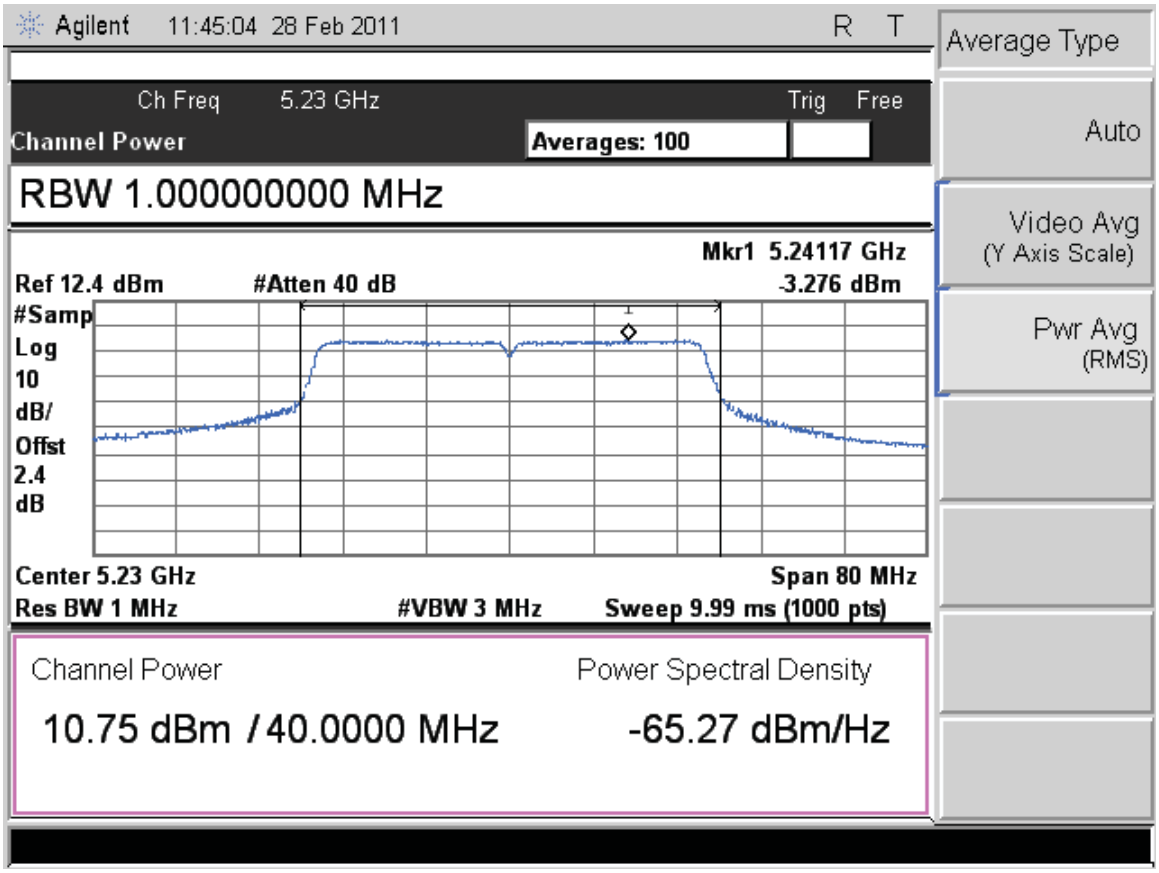


Figure 108: Maximum Transmitted Power, 5230 MHz at 802.11n HT40, 1x3 Chain 1 – 13.5 Mbps

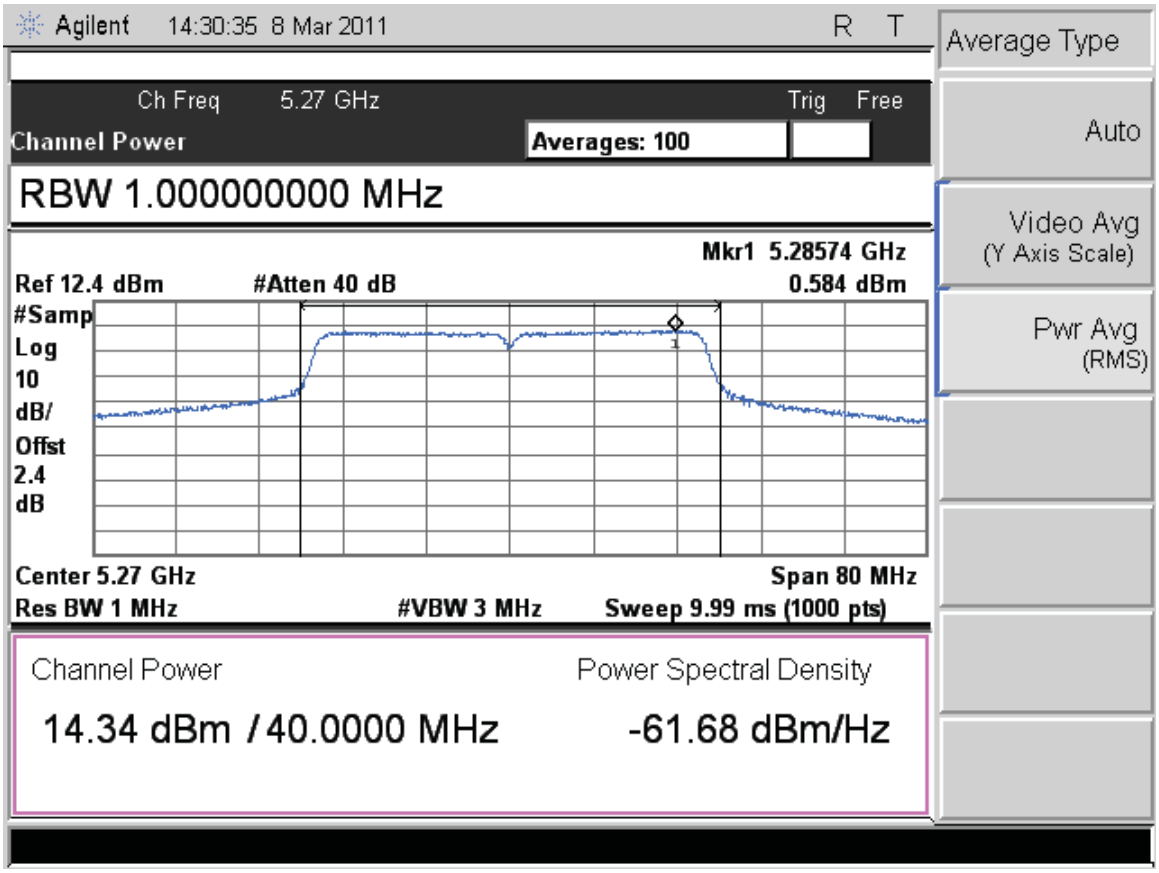


Figure 109: Maximum Transmitted Power, 5270 MHz at 802.11n HT40, 1x3 Chain 1 – 13.5 Mbps

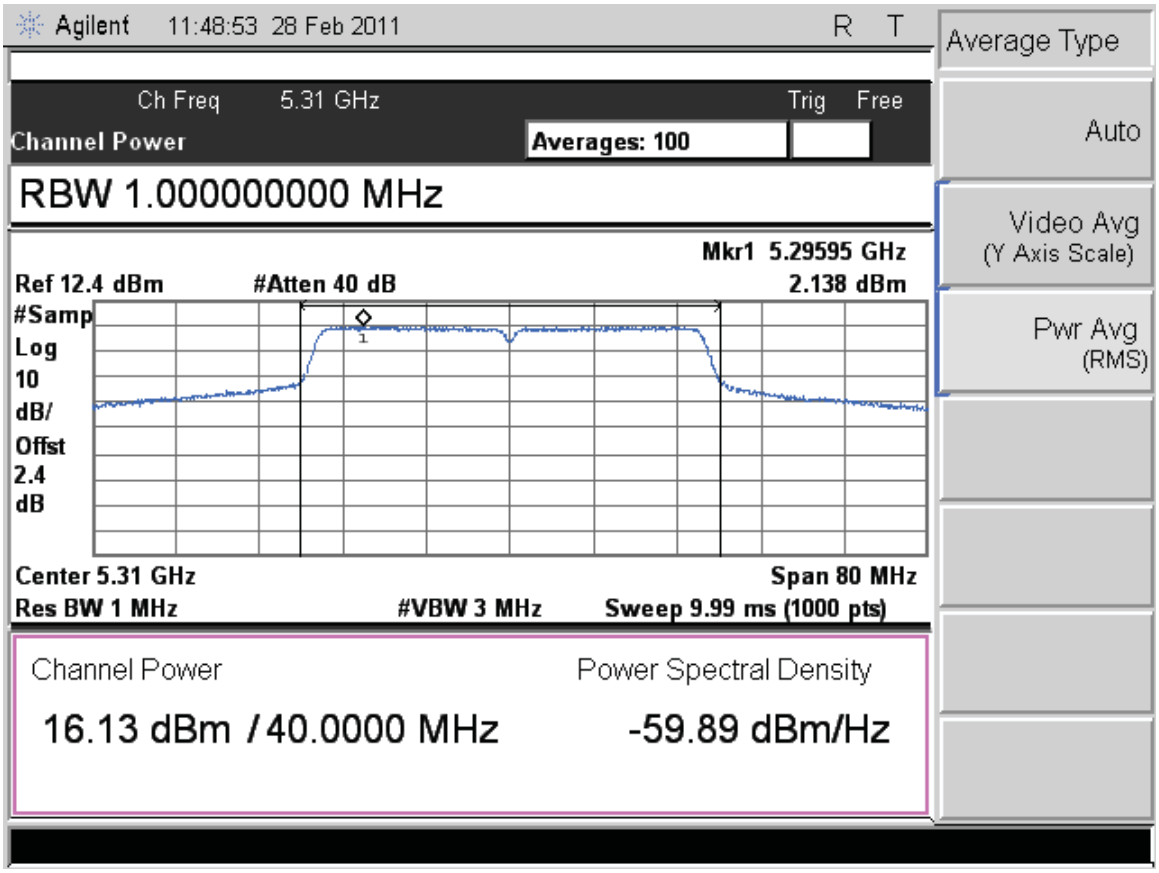


Figure 110: Maximum Transmitted Power, 5310 MHz at 802.11n HT40, 1x3 Chain 1 – 13.5 Mbps

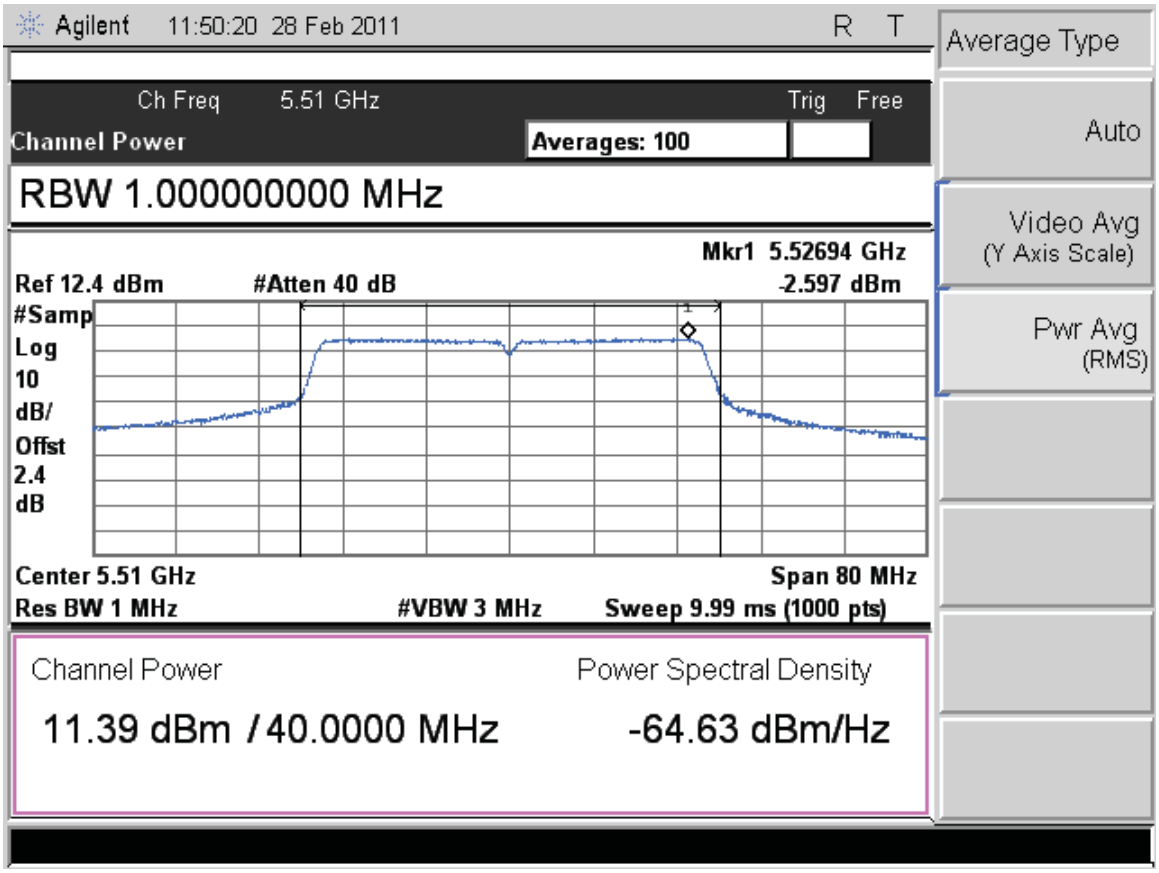


Figure 111: Maximum Transmitted Power, 5510 MHz at 802.11n HT40, 1x3 Chain 1 – 13.5 Mbps

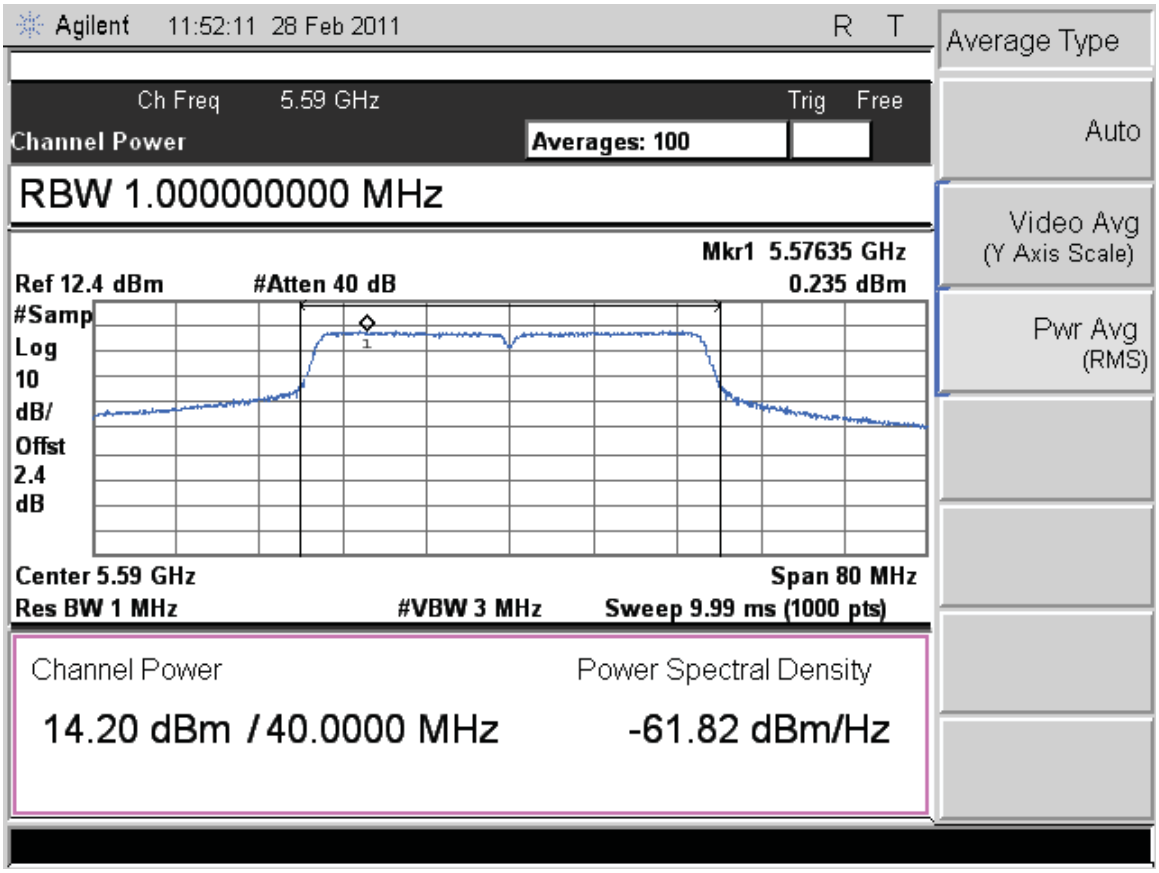


Figure 112: Maximum Transmitted Power, 5590 MHz at 802.11n HT40, 1x3 Chain 1 – 13.5 Mbps

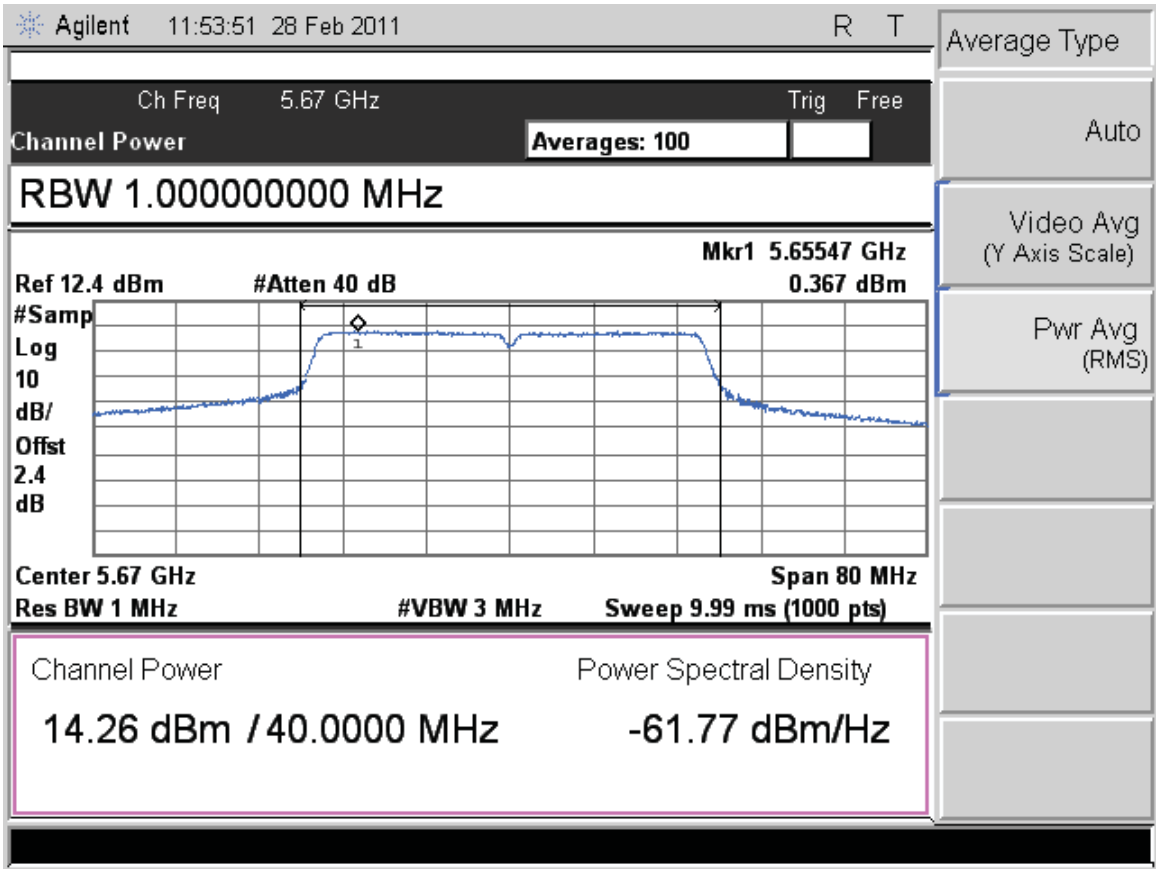


Figure 113: Maximum Transmitted Power, 5670 MHz at 802.11n HT40, 1x3 Chain 1 – 13.5 Mbps

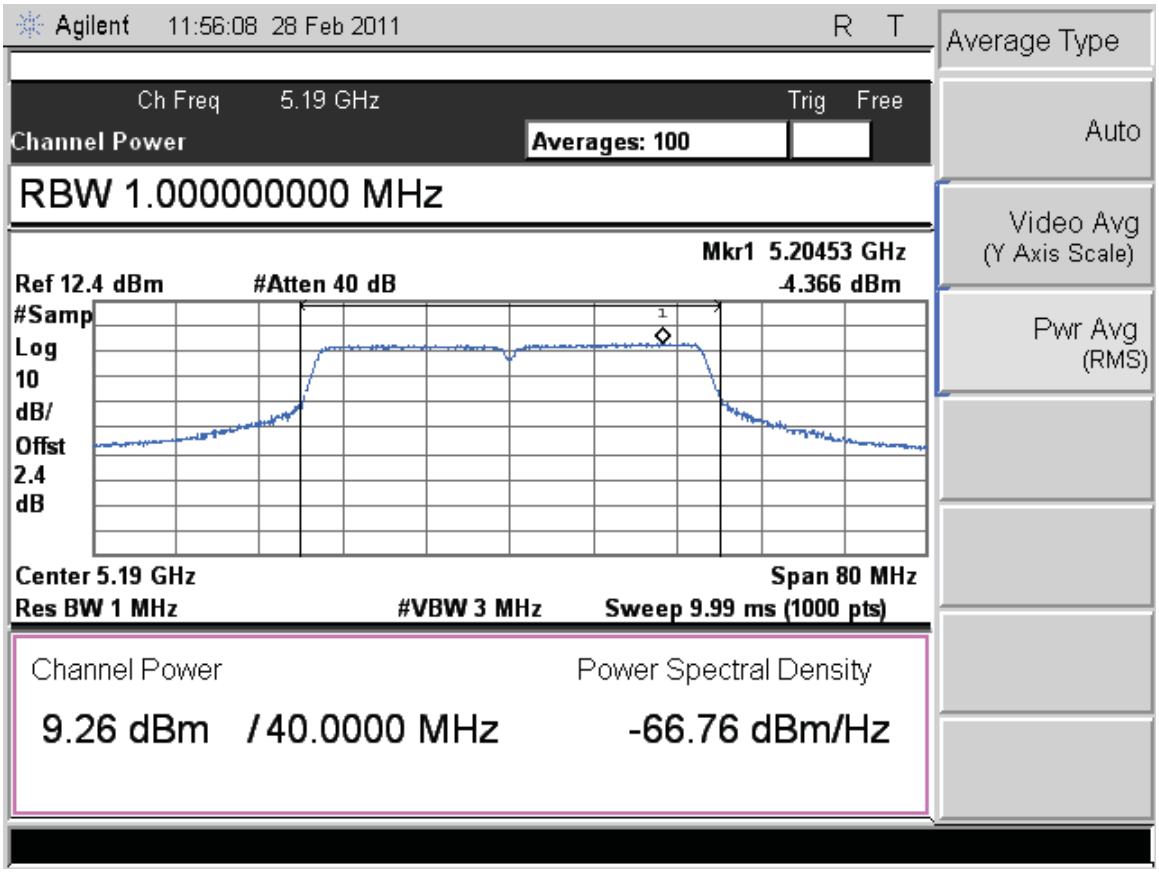


Figure 114: Maximum Transmitted Power, 5190 MHz at 802.11n HT40, 1x3 Chain 2– 13.5 Mbps

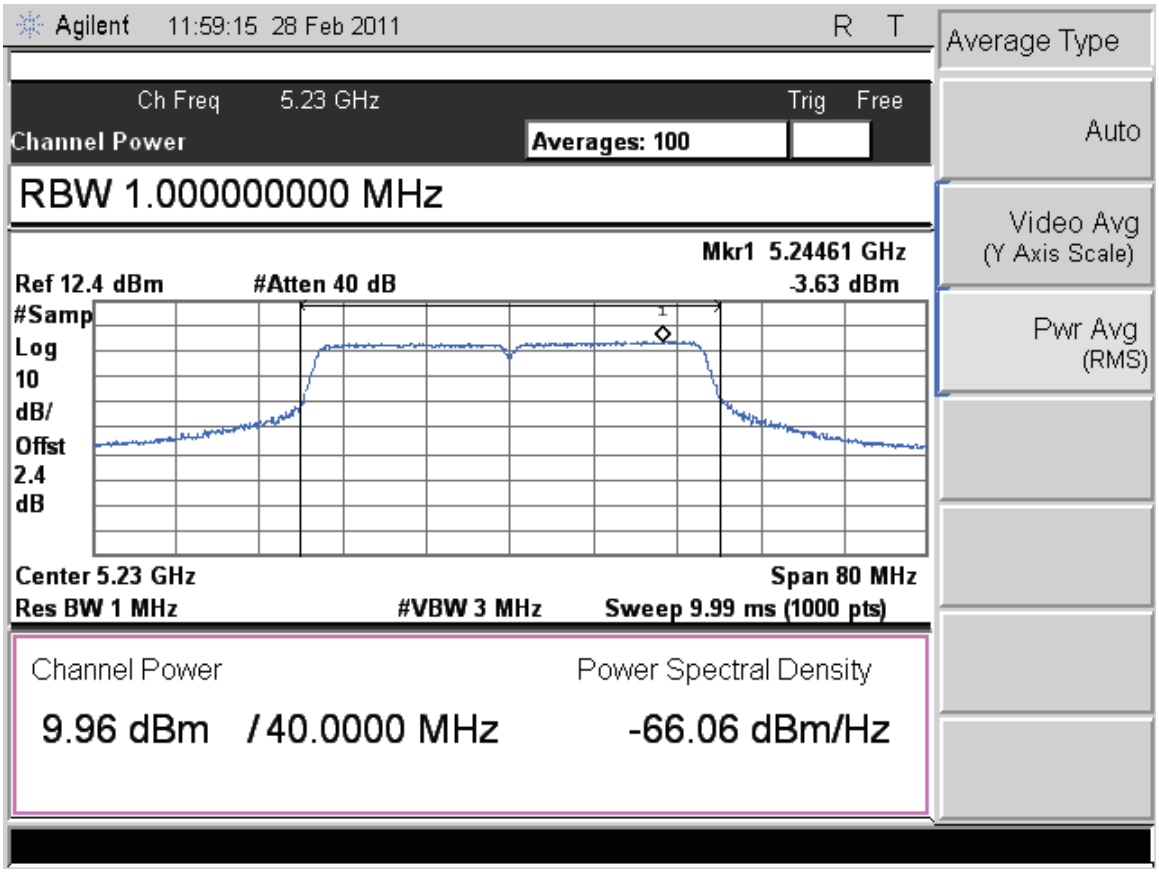


Figure 115: Maximum Transmitted Power, 5230 MHz at 802.11n HT40, 1x3 Chain 2– 13.5 Mbps

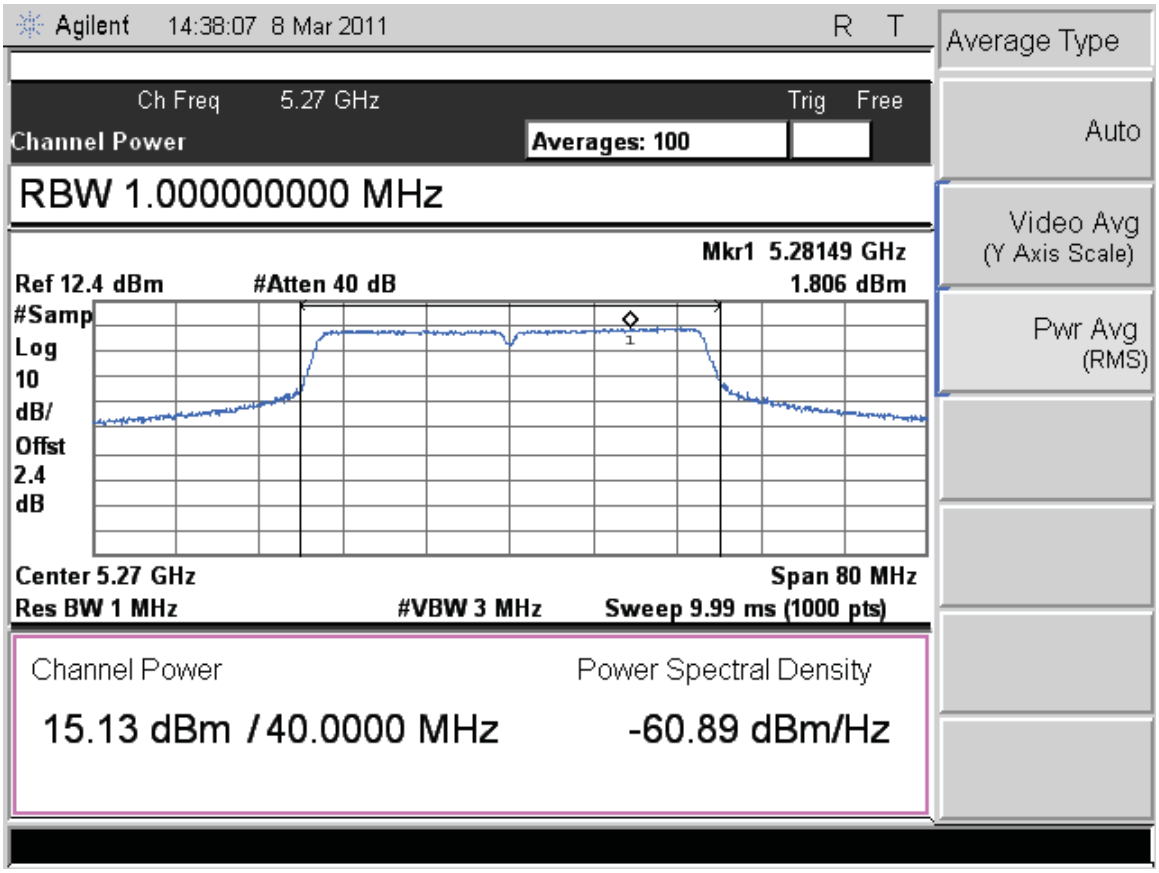


Figure 116: Maximum Transmitted Power, 5270 MHz at 802.11n HT40, 1x3 Chain 2– 13.5 Mbps

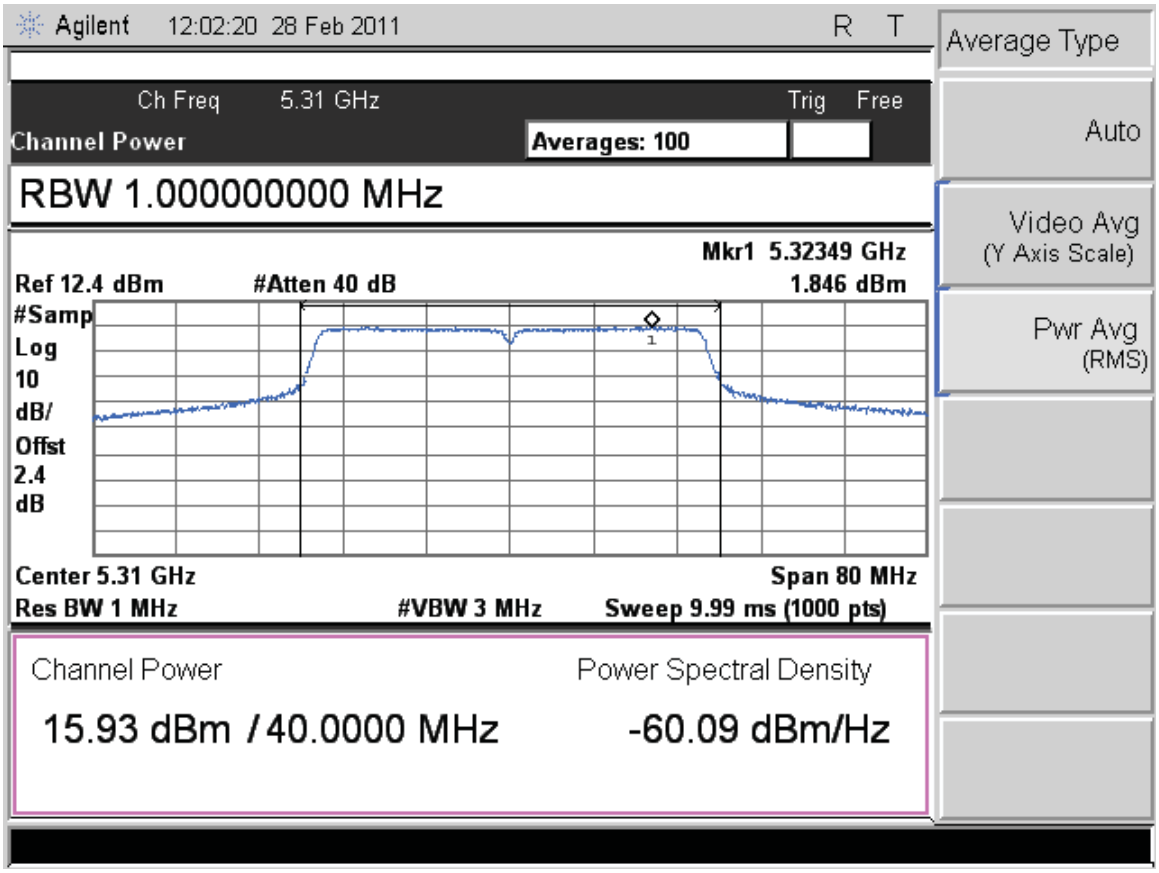


Figure 117: Maximum Transmitted Power, 5310 MHz at 802.11n HT40, 1x3 Chain 2– 13.5 Mbps

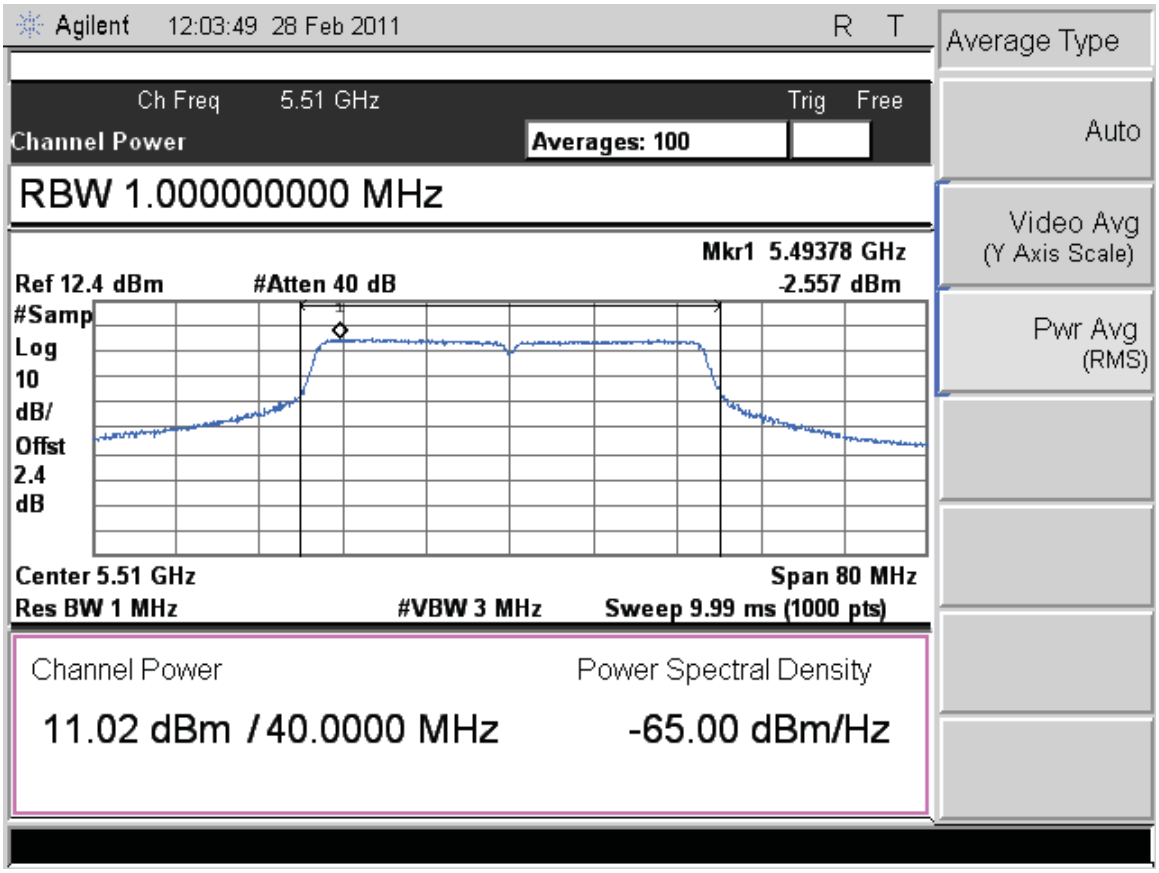


Figure 118: Maximum Transmitted Power, 5510 MHz at 802.11n HT40, 1x3 Chain 2– 13.5 Mbps

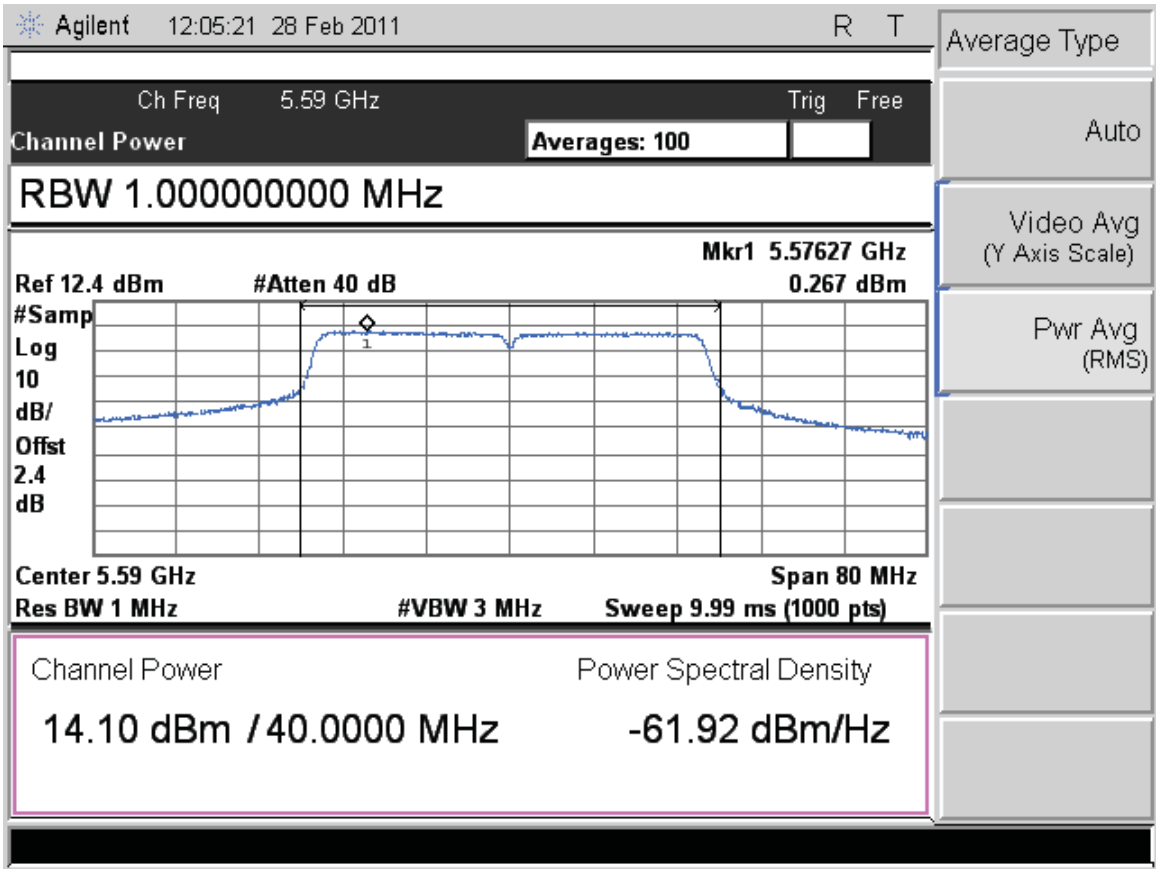


Figure 119: Maximum Transmitted Power, 5590 MHz at 802.11n HT40, 1x3 Chain 2– 13.5 Mbps

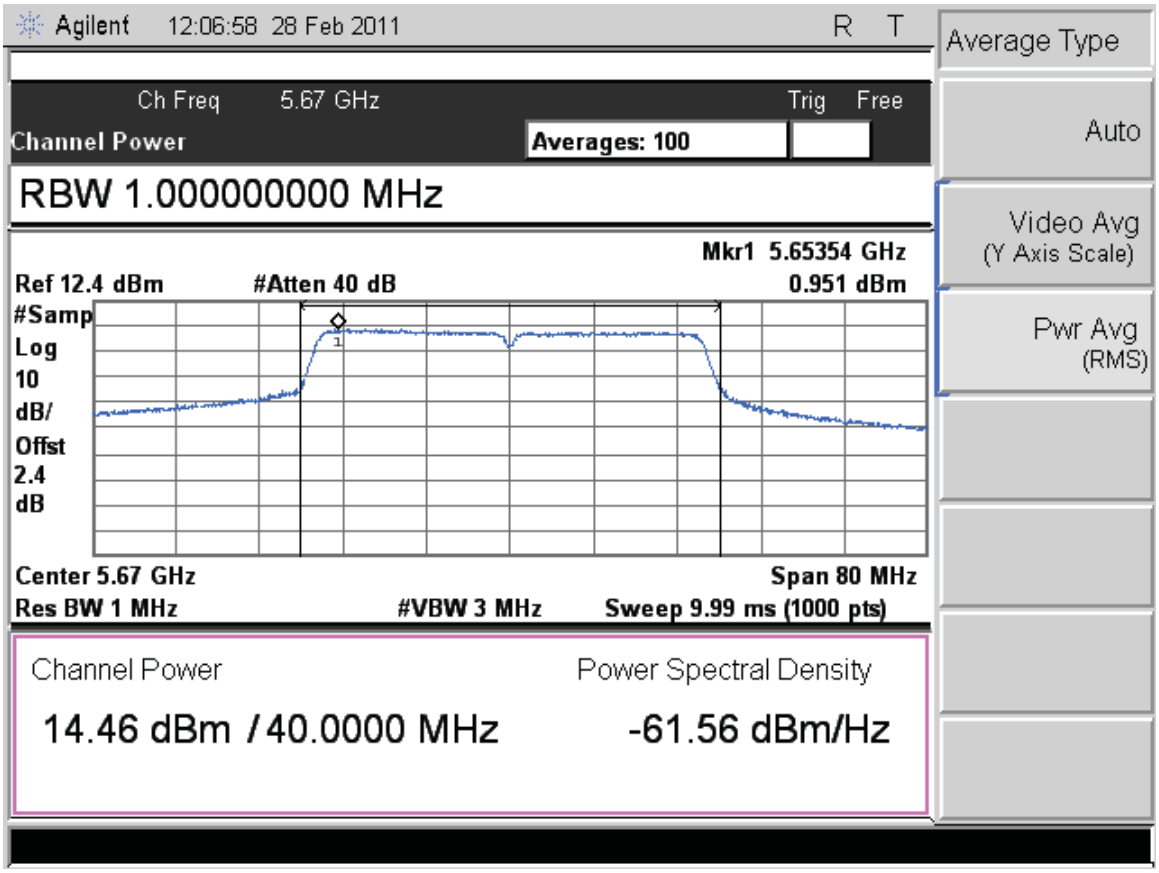


Figure 120: Maximum Transmitted Power, 5670 MHz at 802.11n HT40, 1x3 Chain 2– 13.5 Mbps

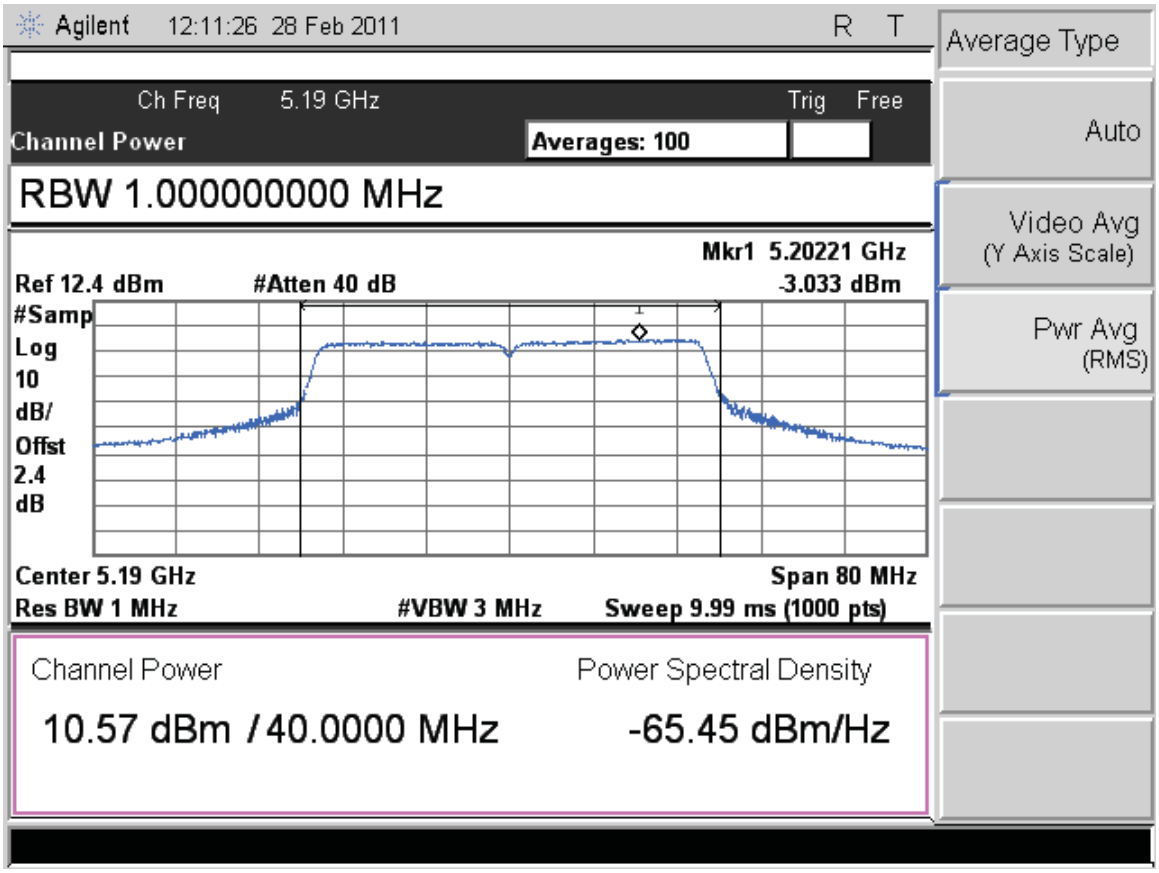


Figure 121: Maximum Transmitted Power, 5180 MHz at 802.11n HT40, 2x3 Chain 0– 27.0 Mbps

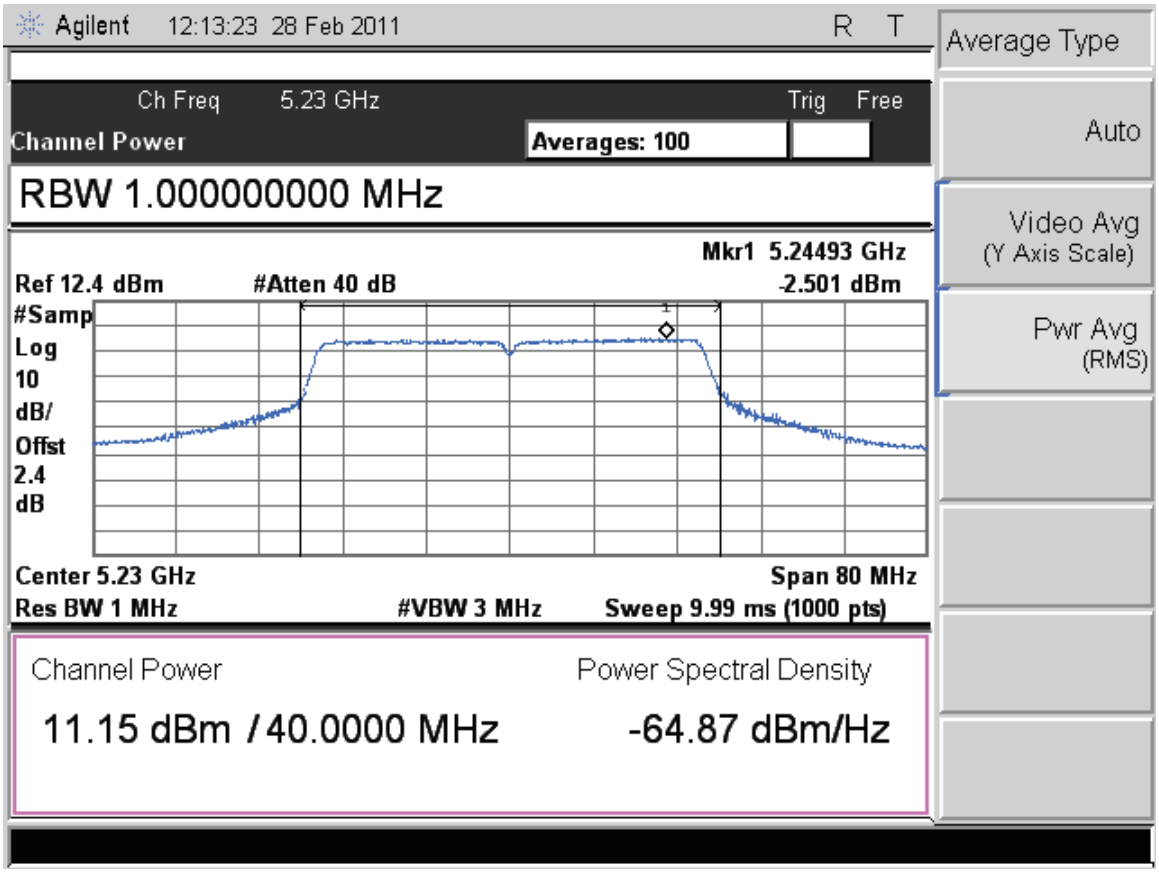


Figure 122: Maximum Transmitted Power, 5230 MHz at 802.11n HT40, 2x3 Chain 0– 27.0 Mbps

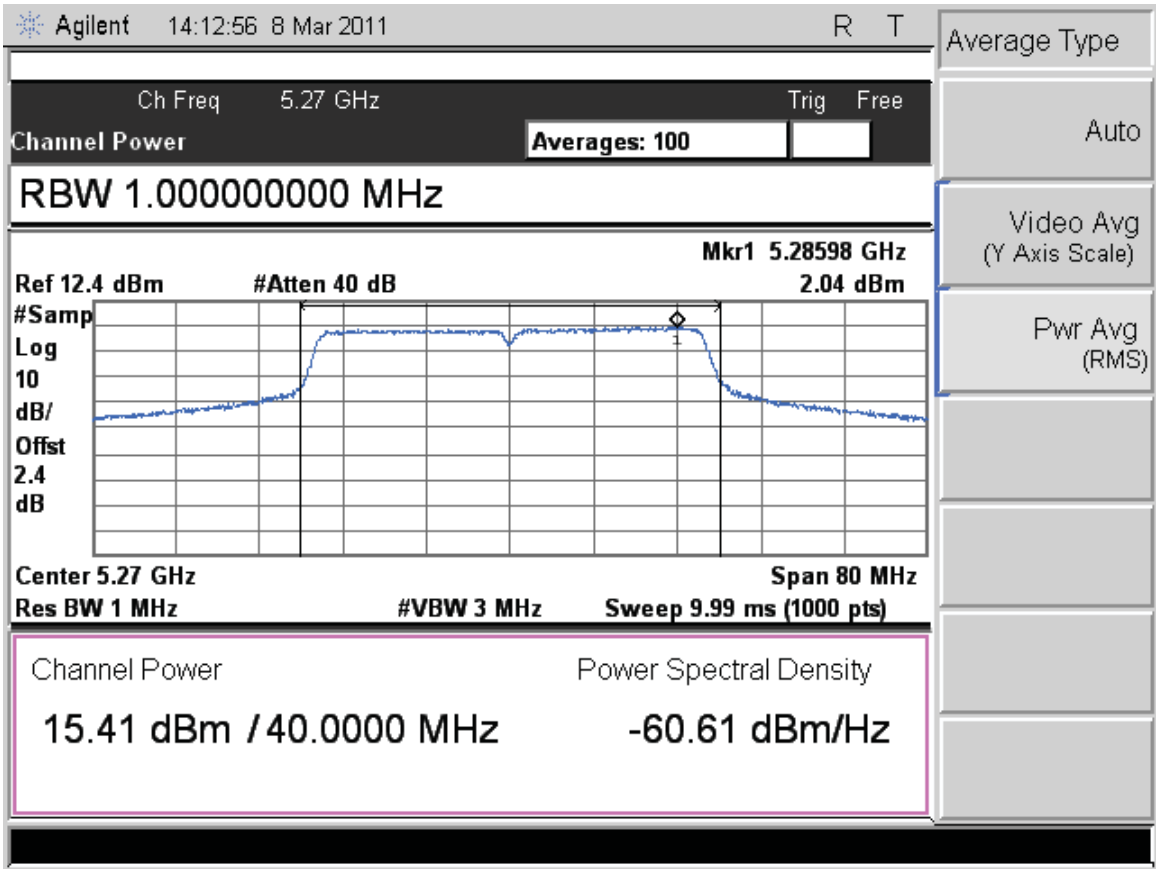


Figure 123: Maximum Transmitted Power, 5270 MHz at 802.11n HT40, 2x3 Chain 0– 27.0 Mbps

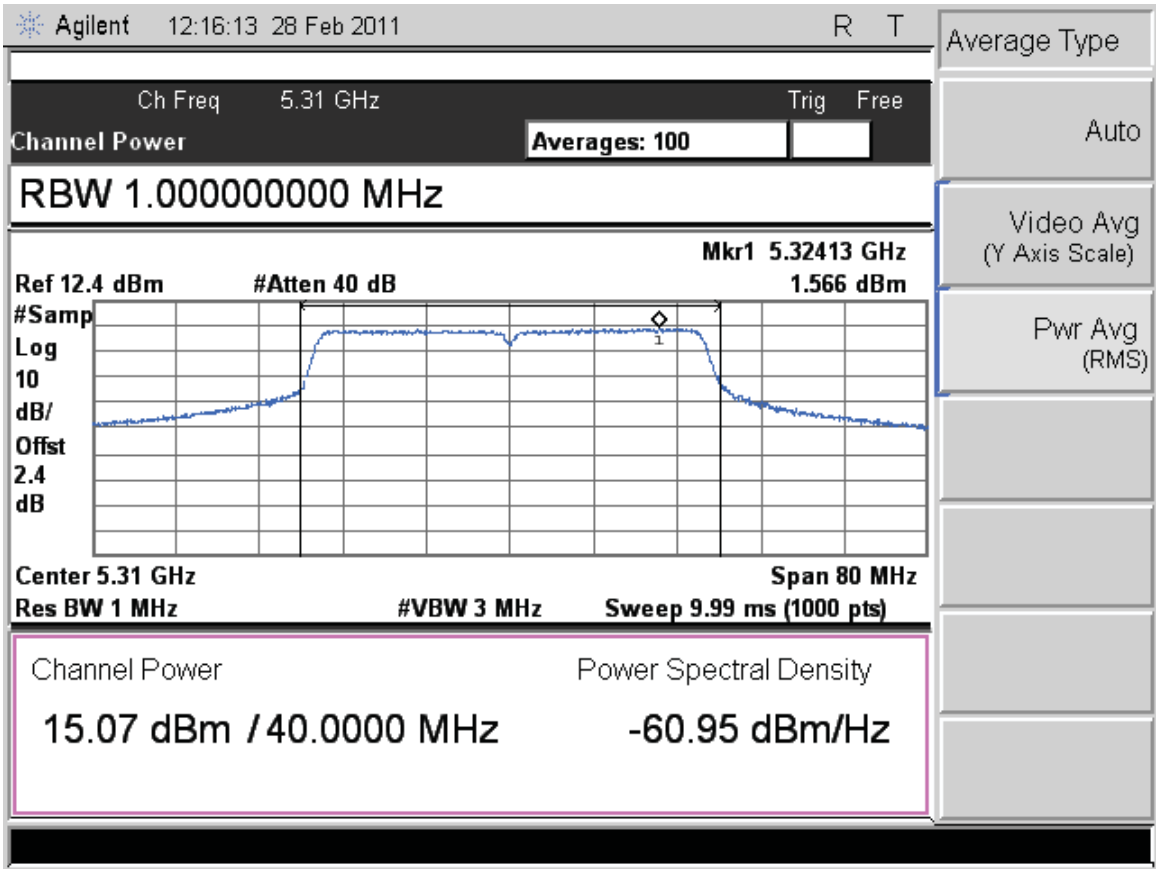


Figure 124: Maximum Transmitted Power, 5310 MHz at 802.11n HT40, 2x3 Chain 0– 27.0 Mbps

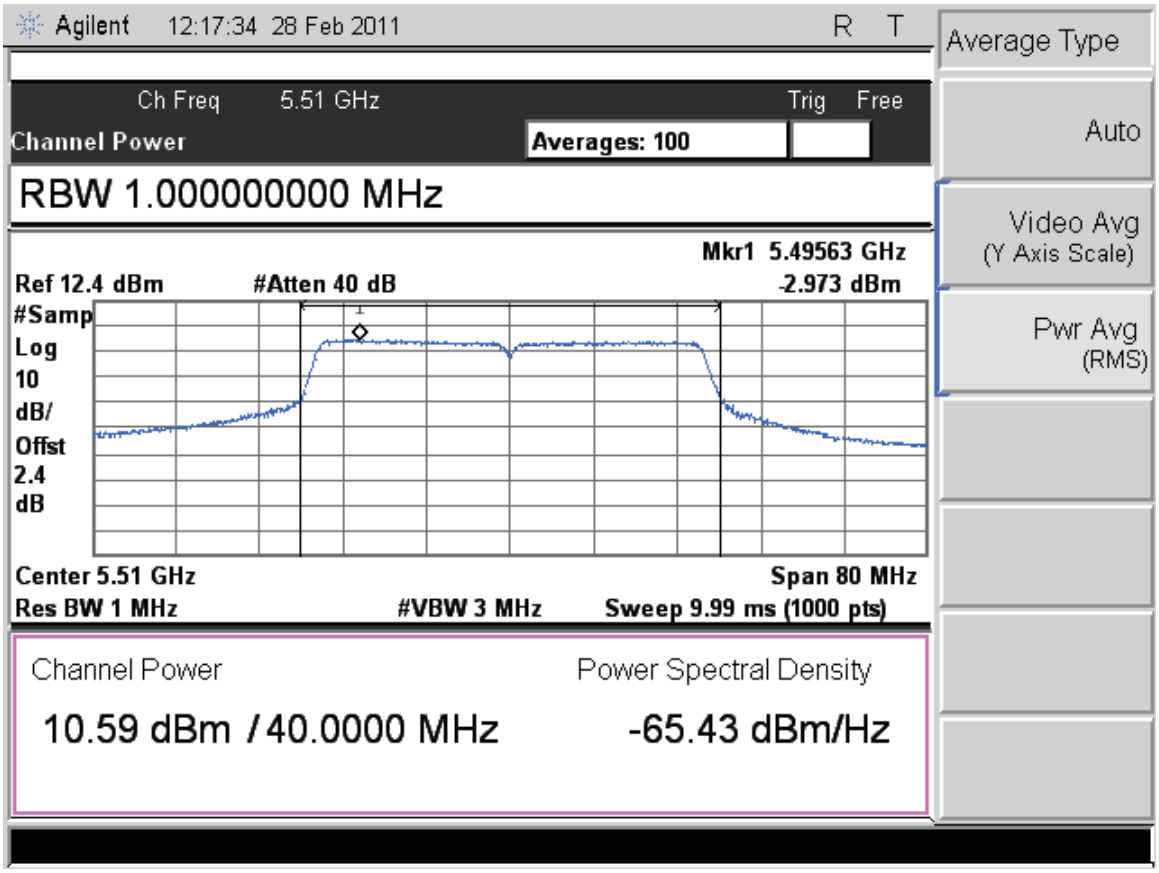


Figure 125: Maximum Transmitted Power, 5510 MHz at 802.11n HT40, 2x3 Chain 0– 27.0 Mbps

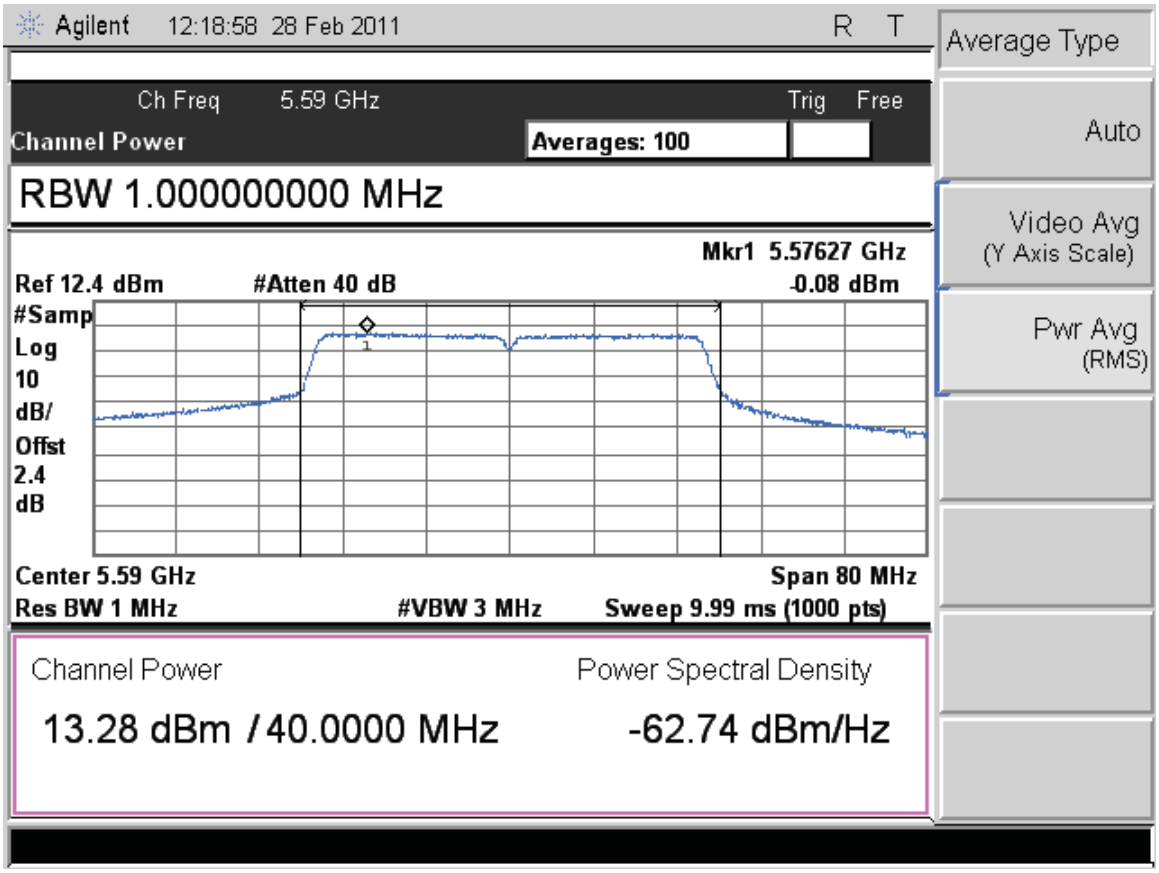


Figure 126: Maximum Transmitted Power, 5590 MHz at 802.11n HT40, 2x3 Chain 0– 27.0 Mbps

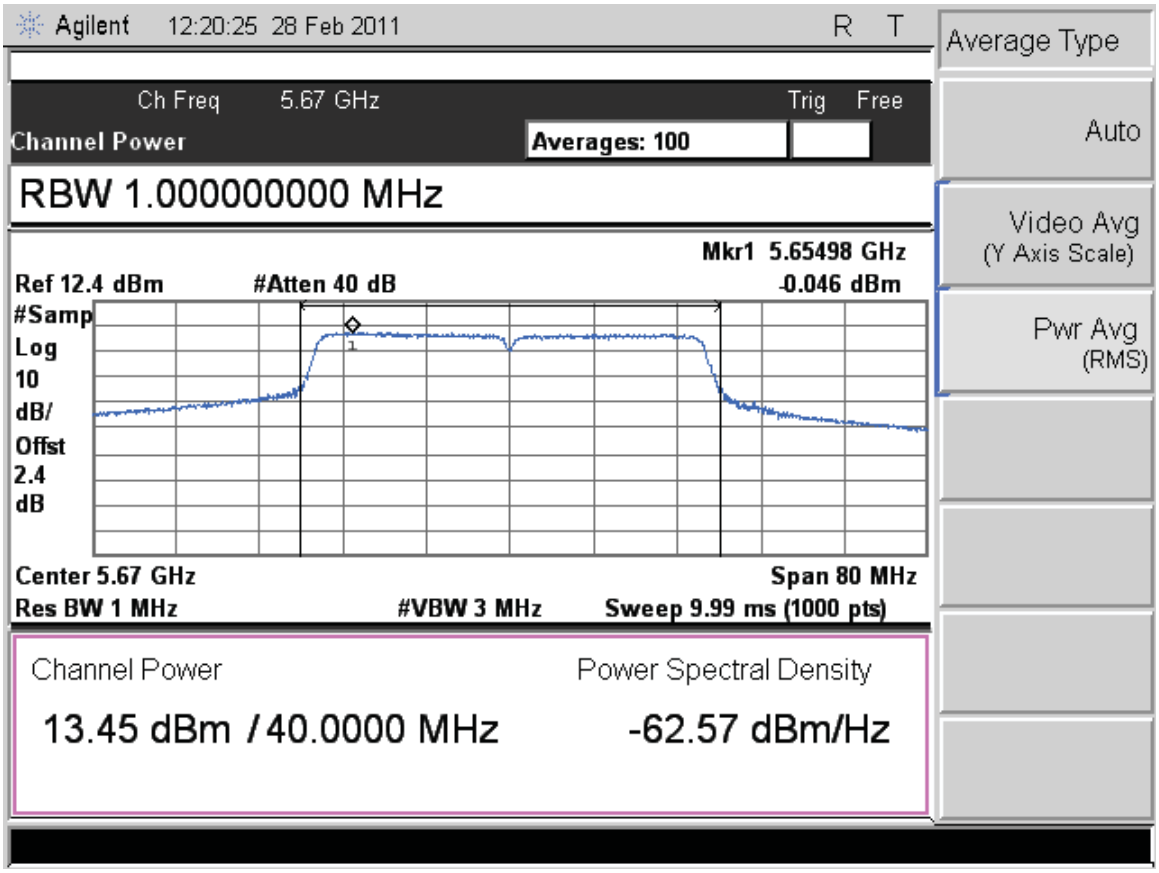


Figure 127: Maximum Transmitted Power, 5670 MHz at 802.11n HT40, 2x3 Chain 0– 27.0 Mbps

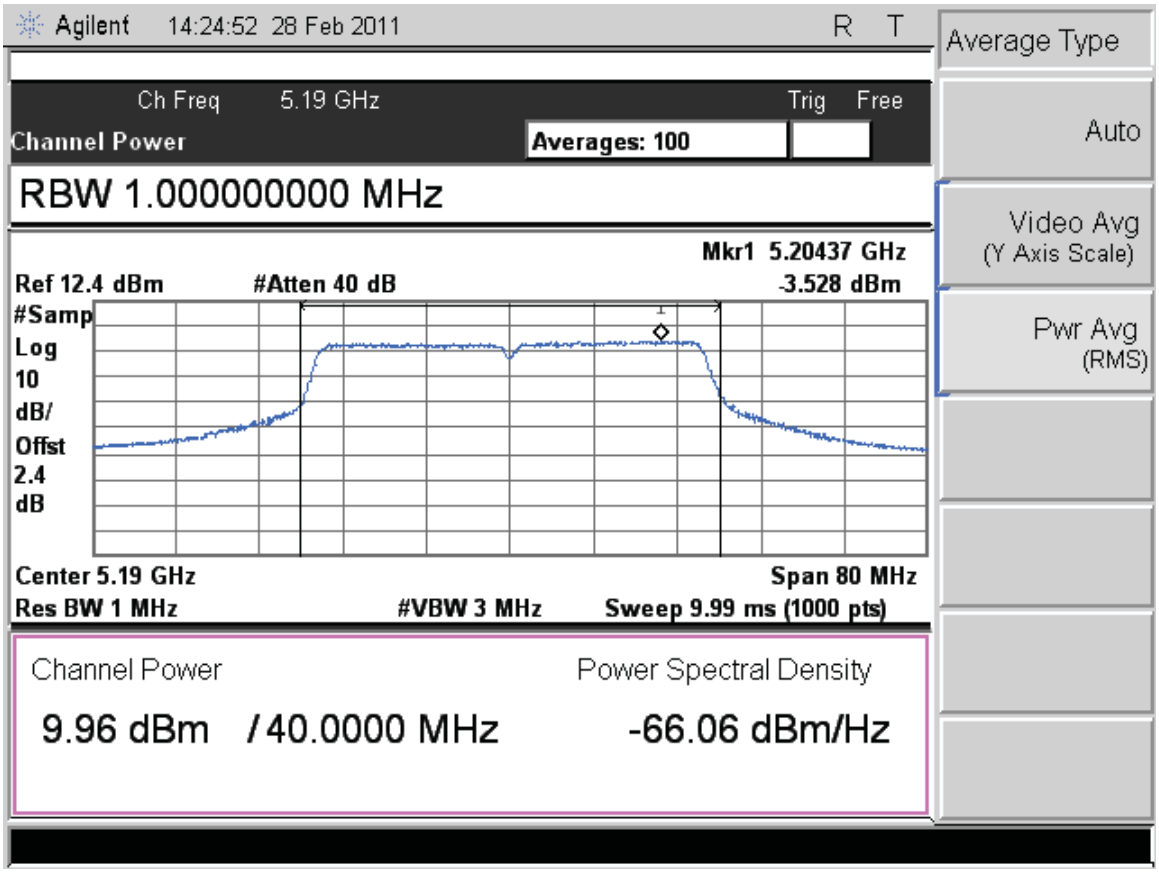


Figure 128: Maximum Transmitted Power, 5190 MHz at 802.11n HT40, 2x3 Chain 1– 27.0 Mbps

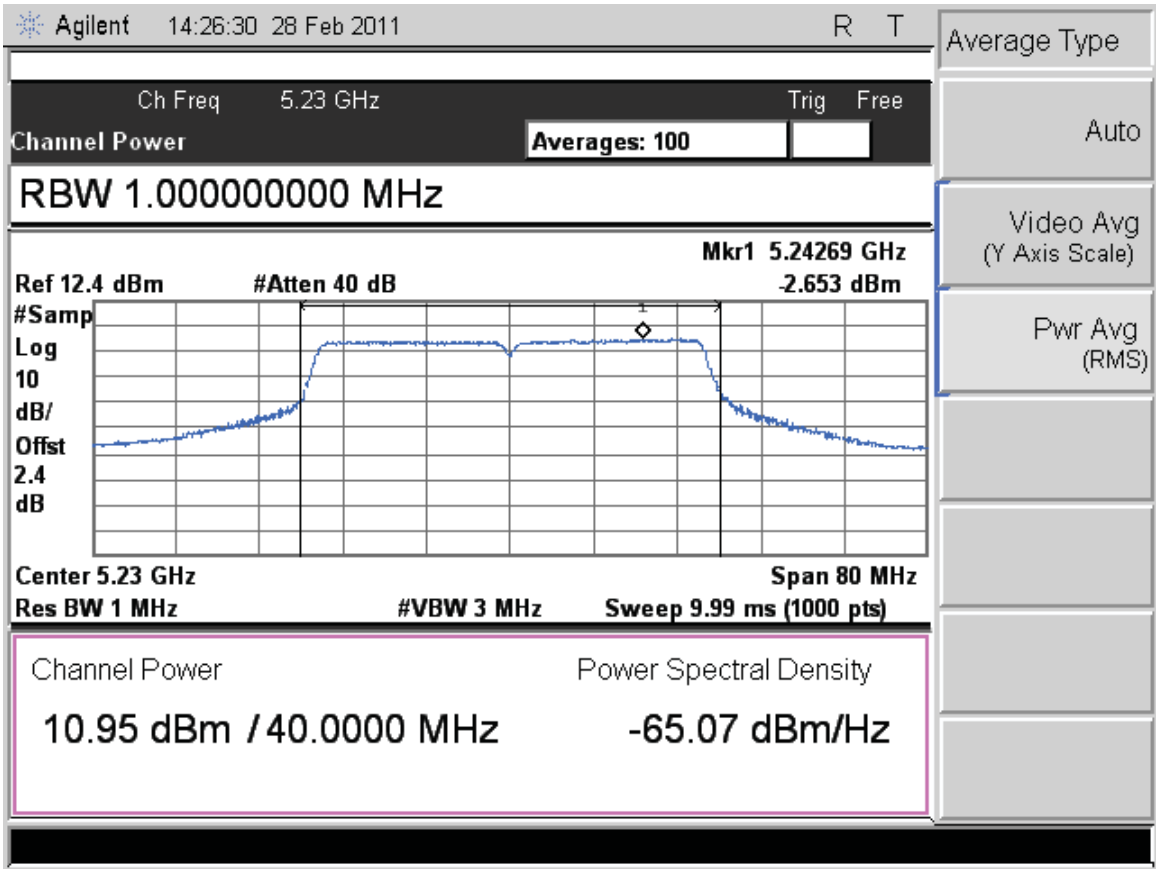


Figure 129: Maximum Transmitted Power, 5230 MHz at 802.11n HT40, 2x3 Chain 1– 27.0 Mbps

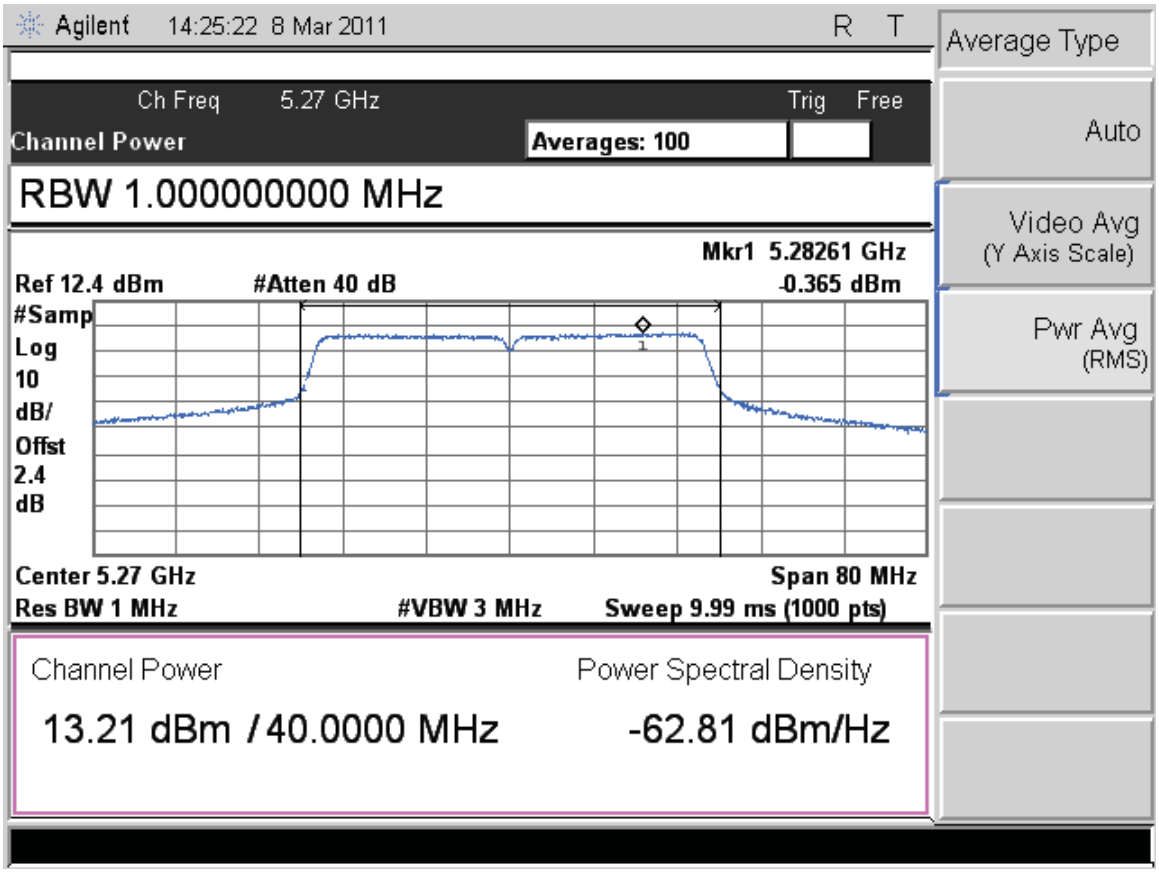


Figure 130: Maximum Transmitted Power, 5270 MHz at 802.11n HT40, 2x3 Chain 1– 27.0 Mbps

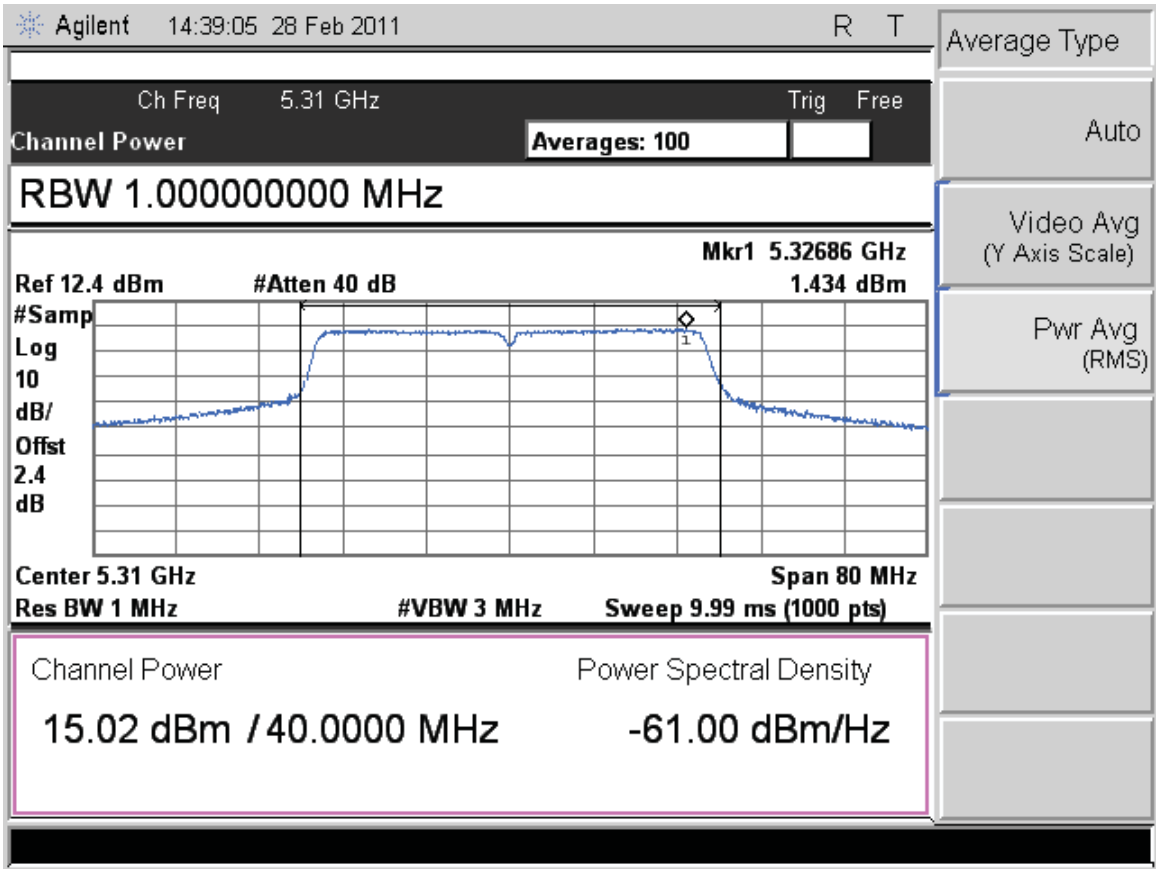


Figure 131: Maximum Transmitted Power, 5310 MHz at 802.11n HT40, 2x3 Chain 1– 27.0 Mbps

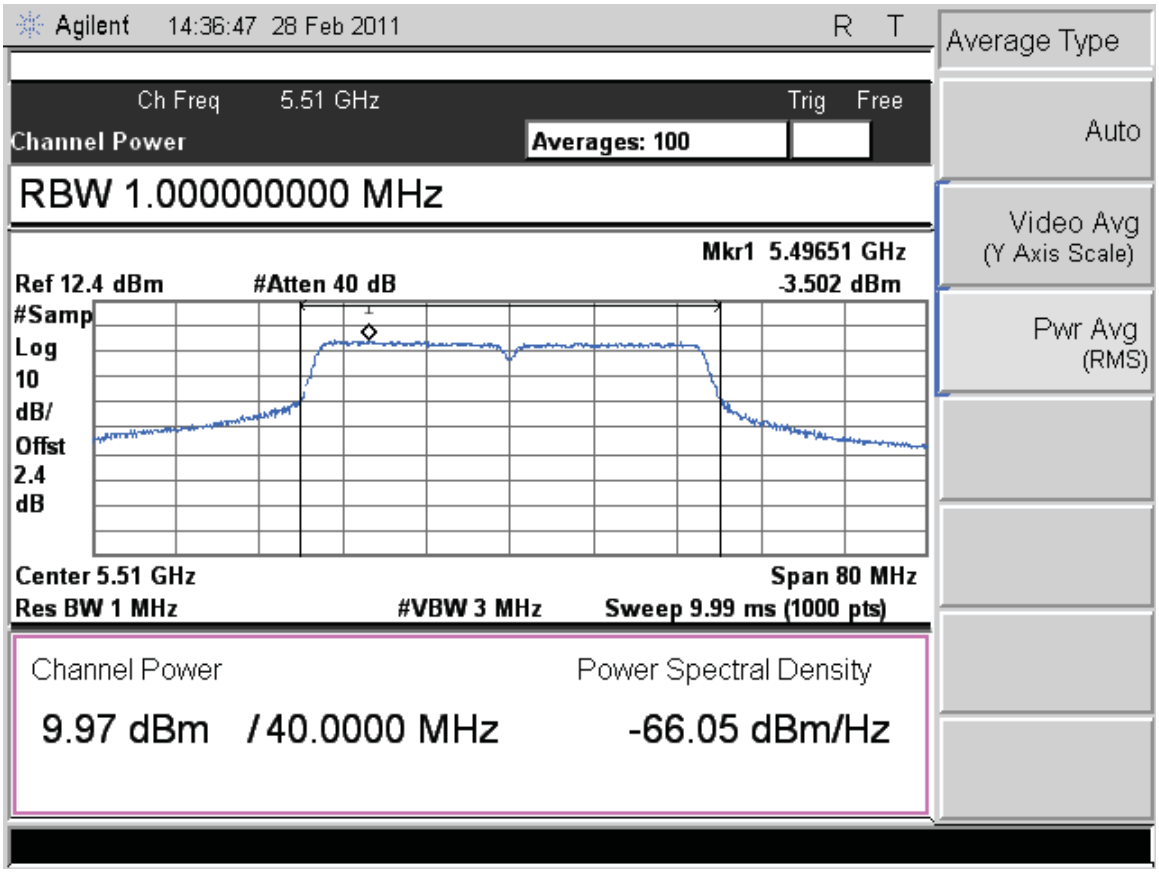


Figure 132: Maximum Transmitted Power, 5510 MHz at 802.11n HT40, 2x3 Chain 1– 27.0 Mbps

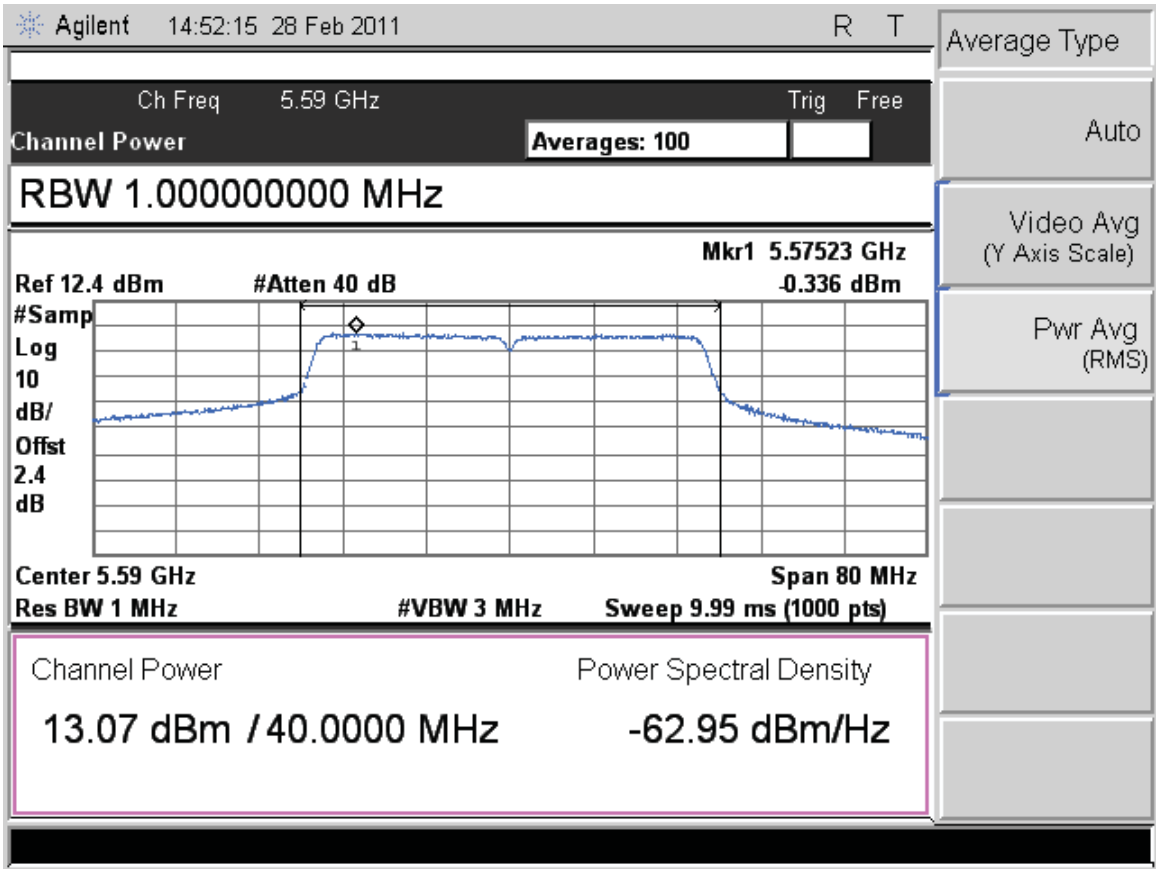


Figure 133: Maximum Transmitted Power, 5590 MHz at 802.11n HT40, 2x3 Chain 1– 27.0 Mbps

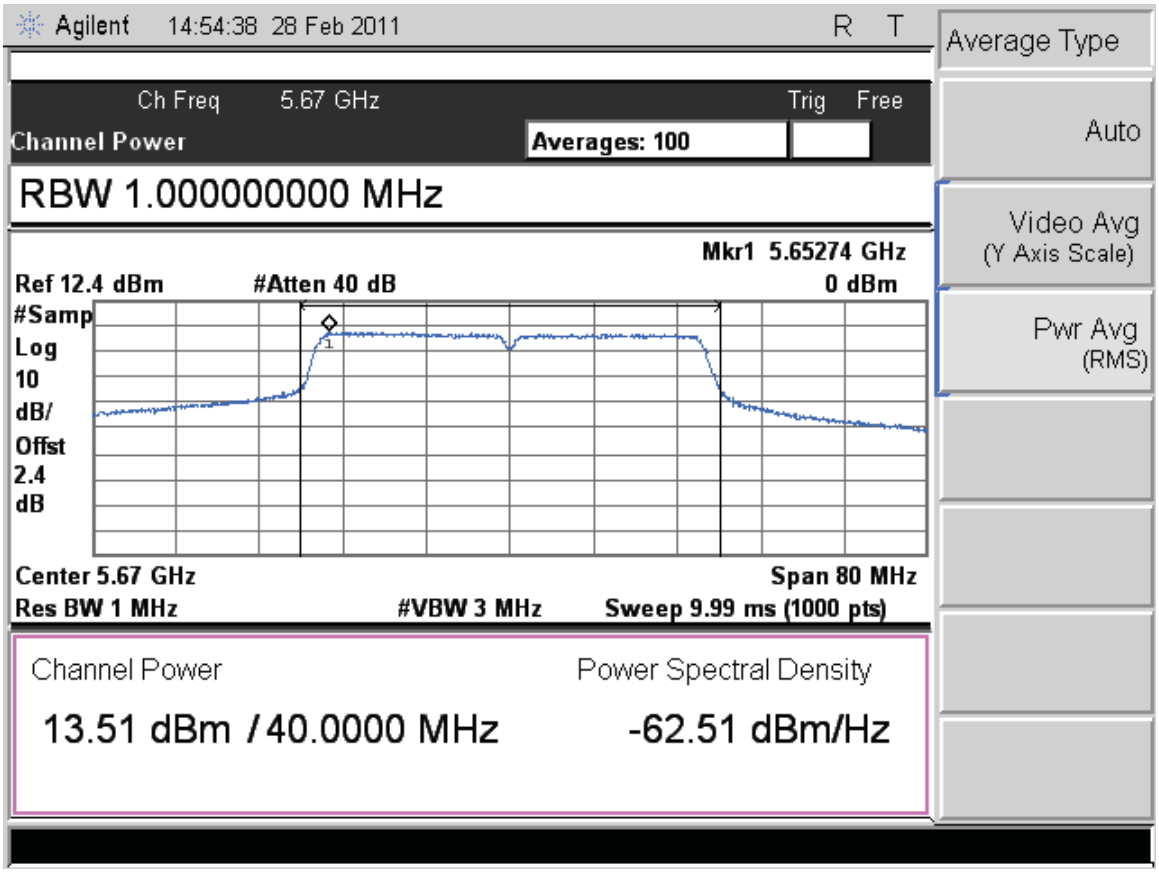


Figure 134: Maximum Transmitted Power, 5670 MHz at 802.11n HT40, 2x3 Chain 1– 27.0 Mbps

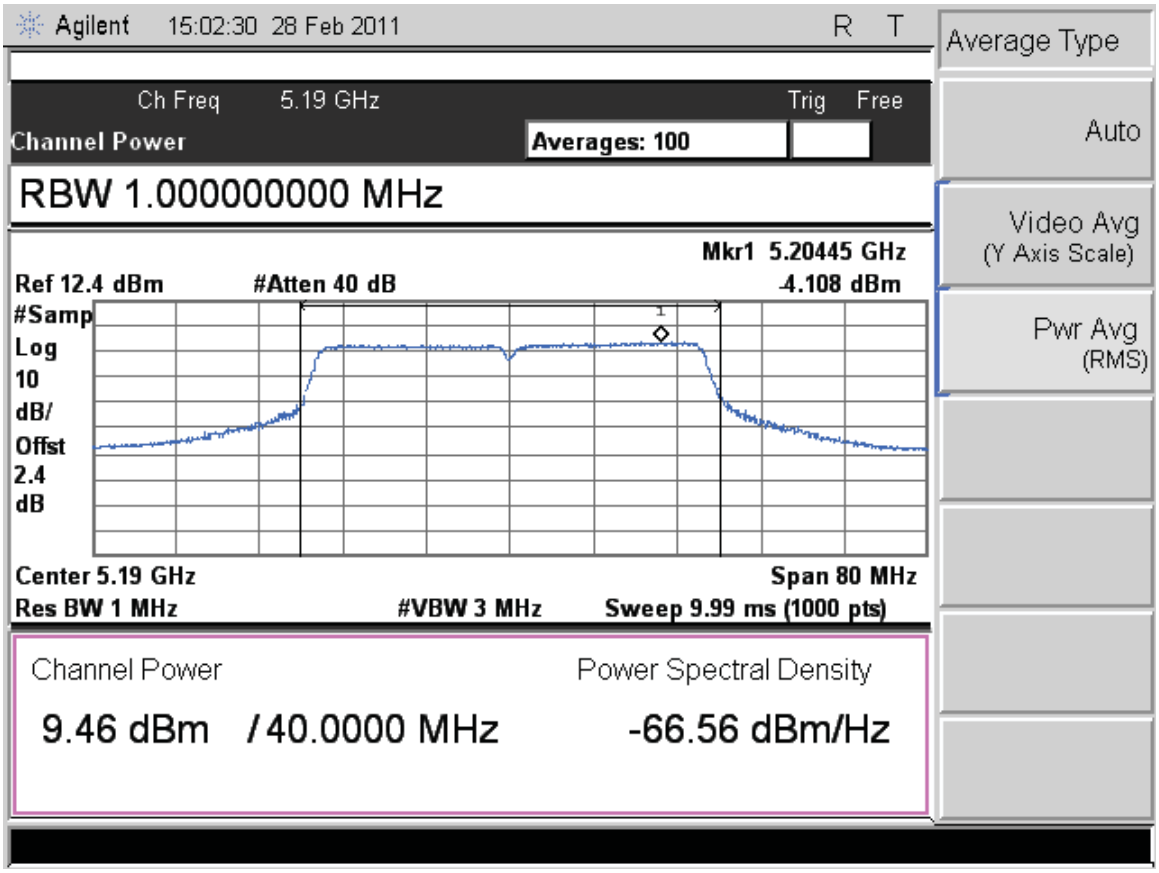


Figure 135: Maximum Transmitted Power, 5190 MHz at 802.11n HT40, 3x3 Chain 0– 40.5 Mbps

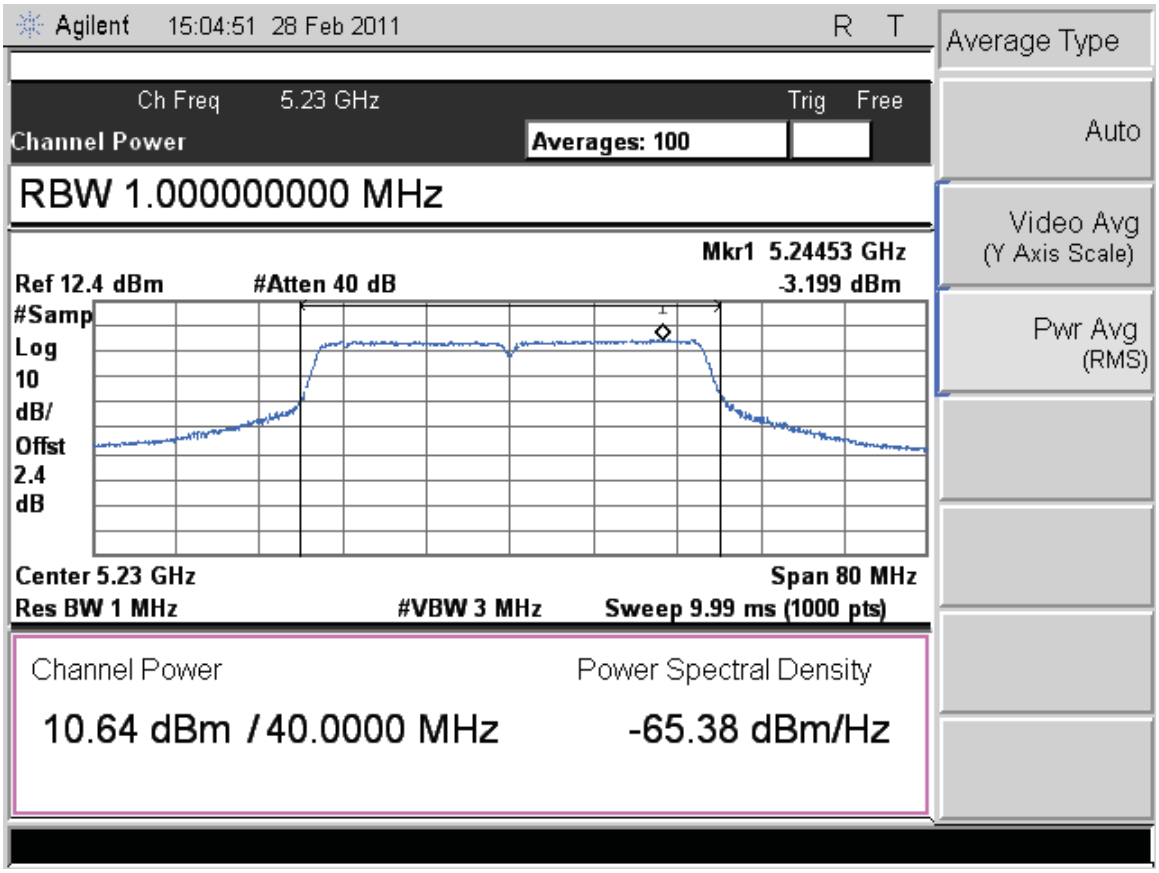


Figure 136: Maximum Transmitted Power, 5230 MHz at 802.11n HT40, 3x3 Chain 0– 40.5 Mbps

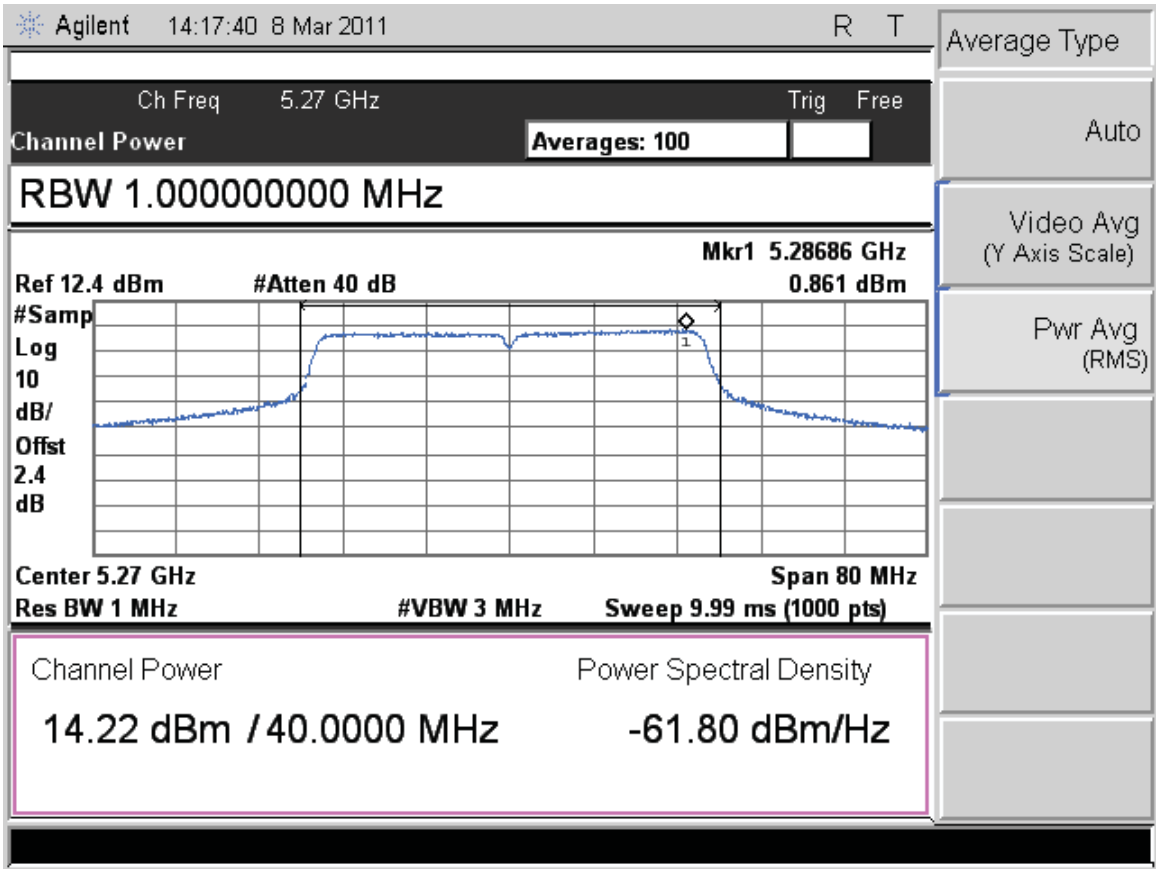


Figure 137: Maximum Transmitted Power, 5270 MHz at 802.11n HT40, 3x3 Chain 0– 40.5 Mbps

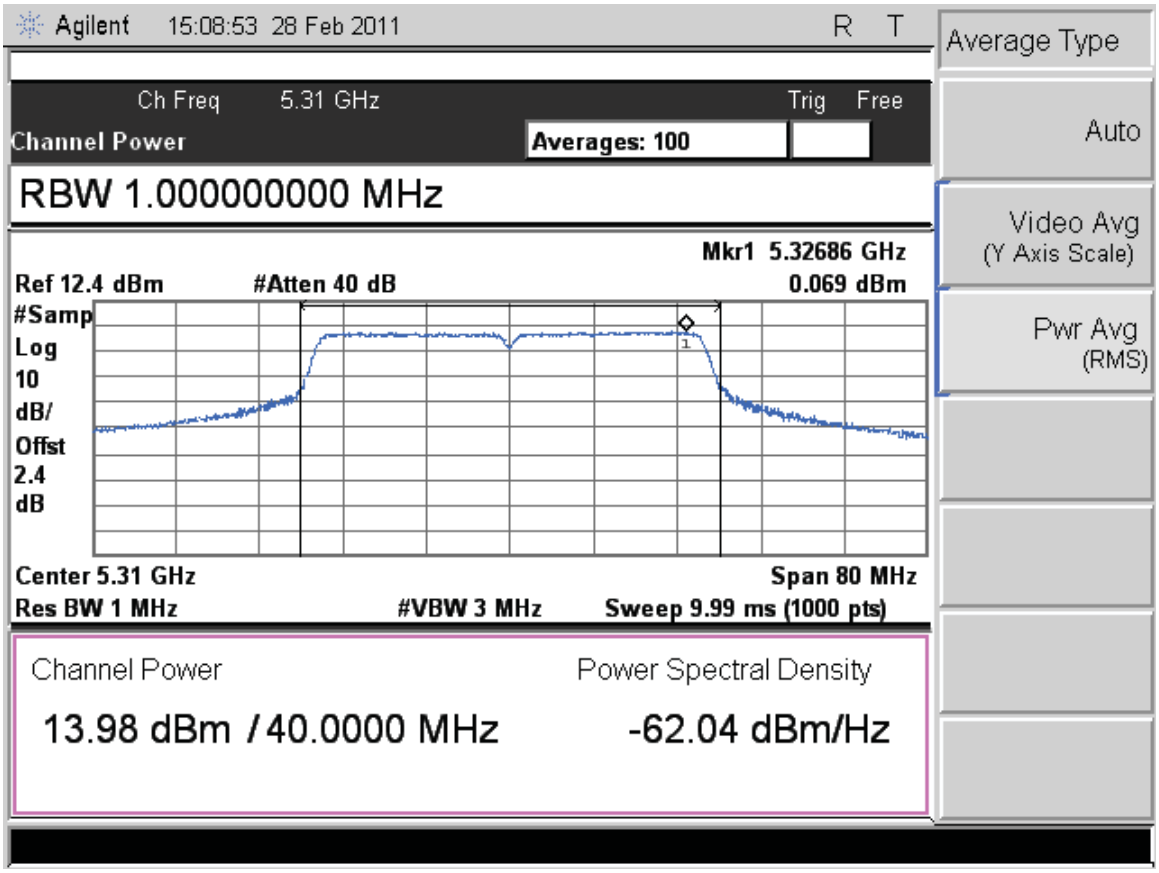


Figure 138: Maximum Transmitted Power, 5310 MHz at 802.11n HT40, 3x3 Chain 0– 40.5 Mbps

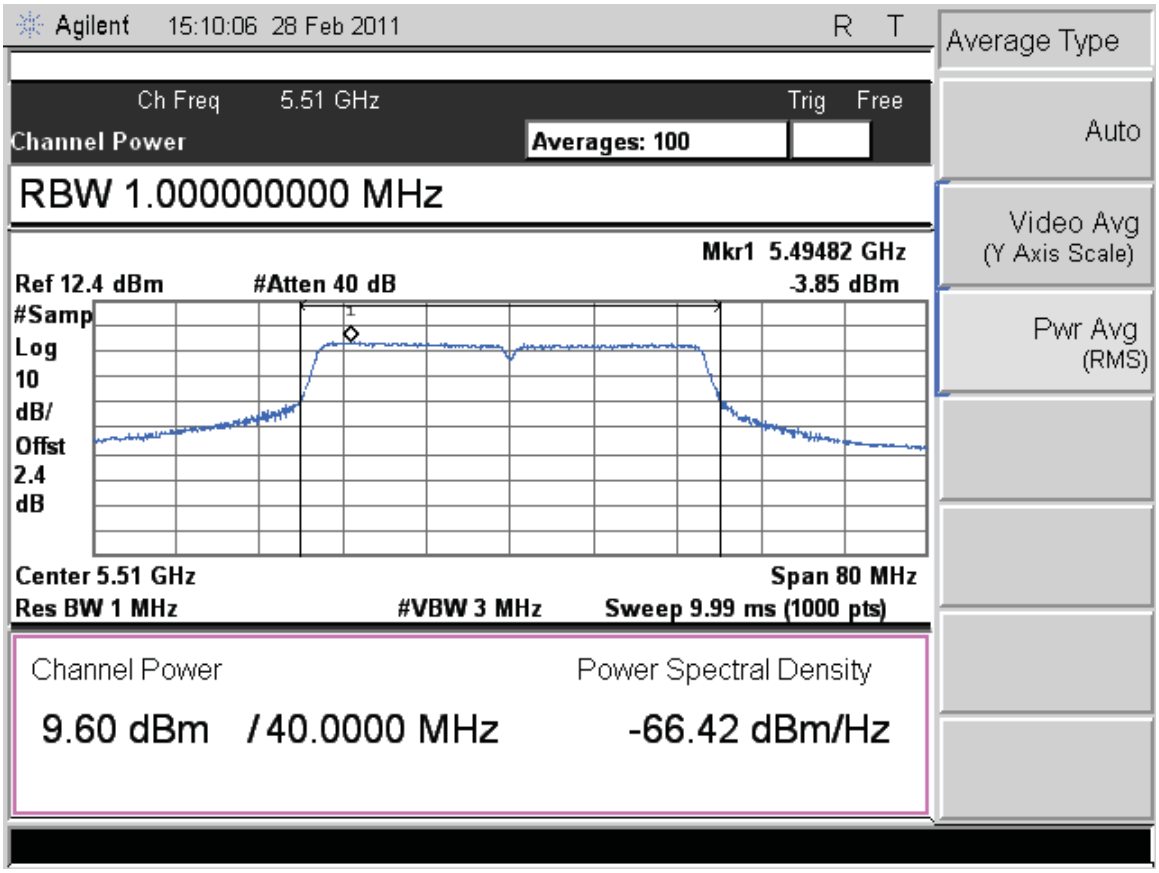


Figure 139: Maximum Transmitted Power, 5510 MHz at 802.11n HT40, 3x3 Chain 0– 40.5 Mbps

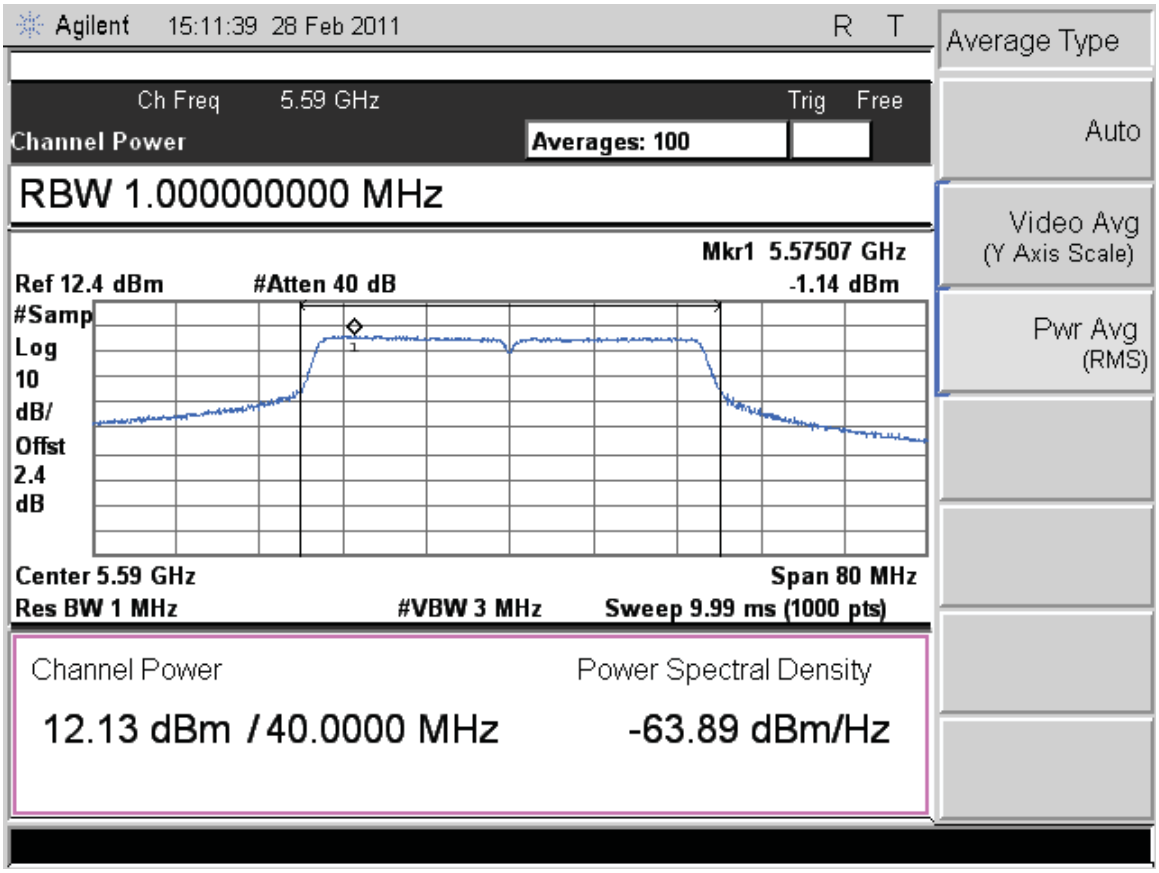


Figure 140: Maximum Transmitted Power, 5590 MHz at 802.11n HT40, 3x3 Chain 0– 40.5 Mbps

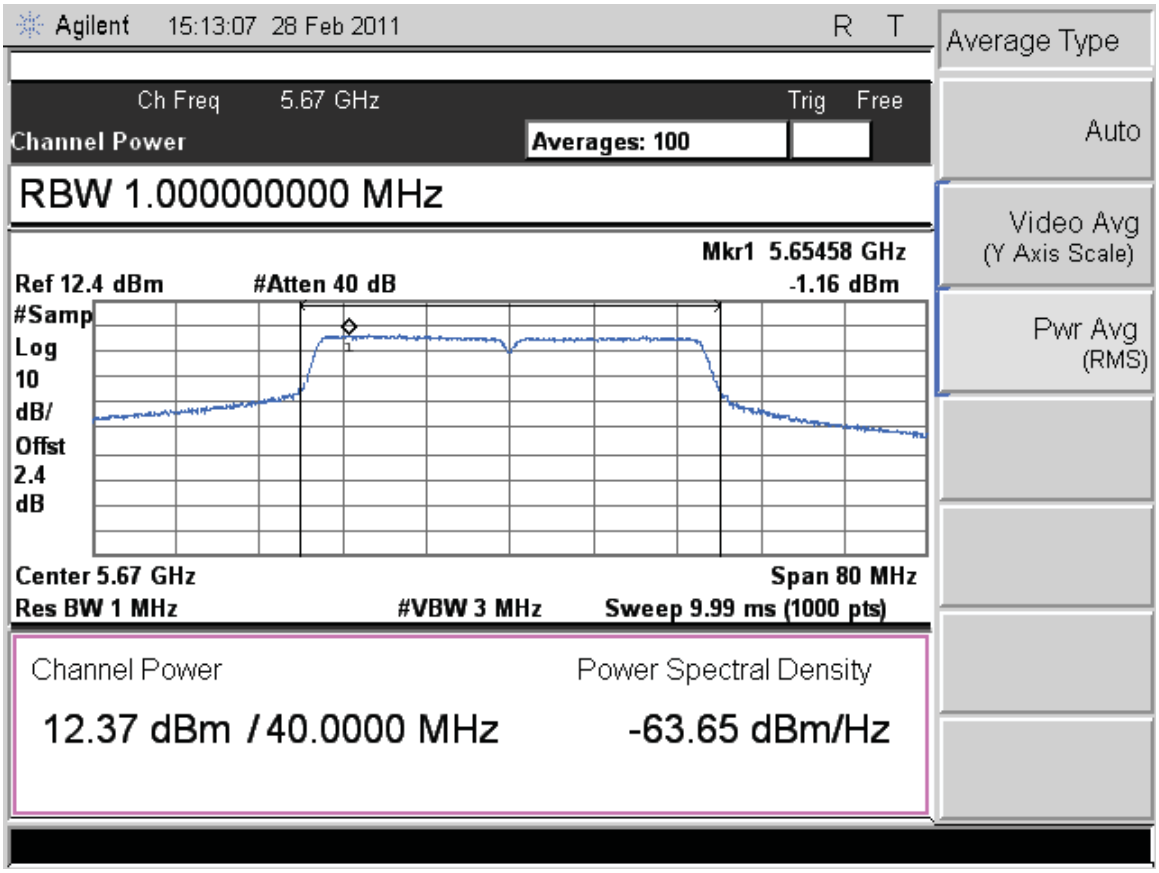


Figure 141: Maximum Transmitted Power, 5670 MHz at 802.11n HT40, 3x3 Chain 0– 40.5 Mbps

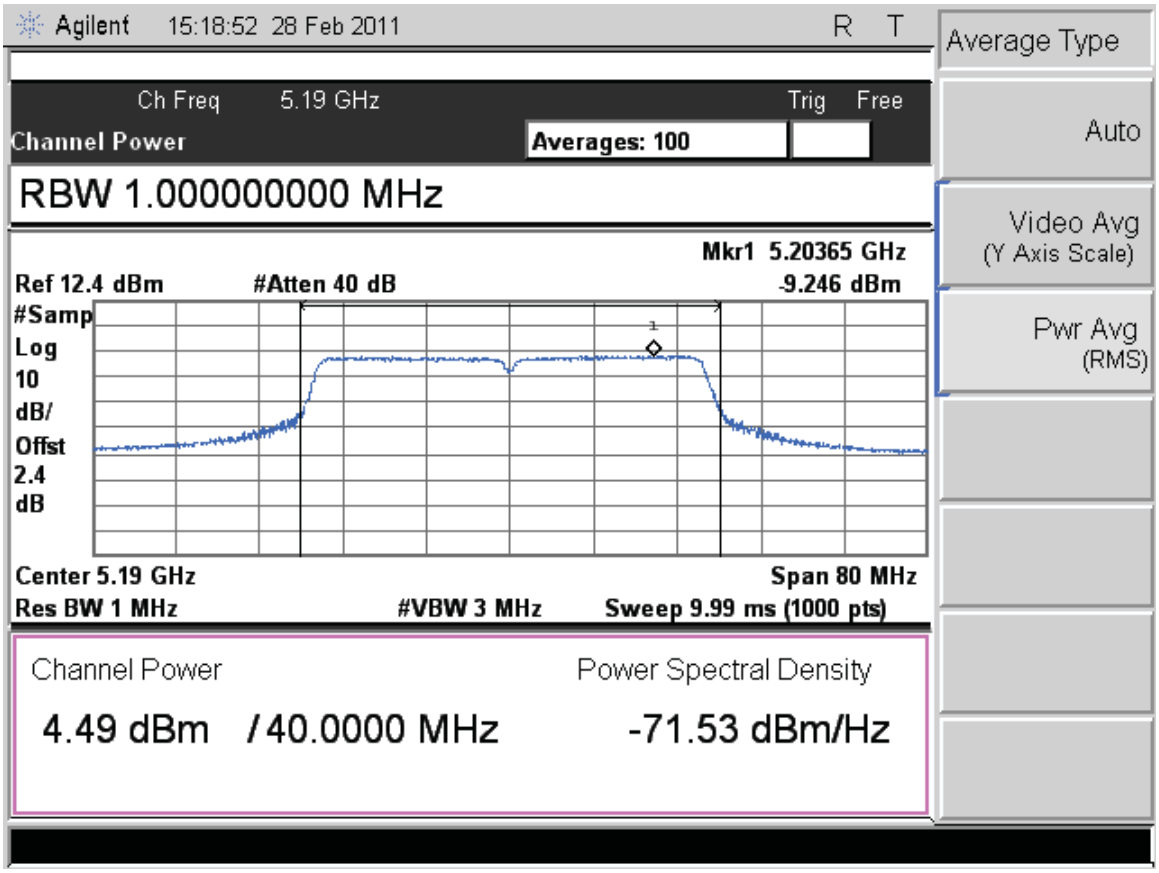


Figure 142: Maximum Transmitted Power, 5190 MHz at 802.11n HT40, 3x3 Chain 1– 40.5 Mbps

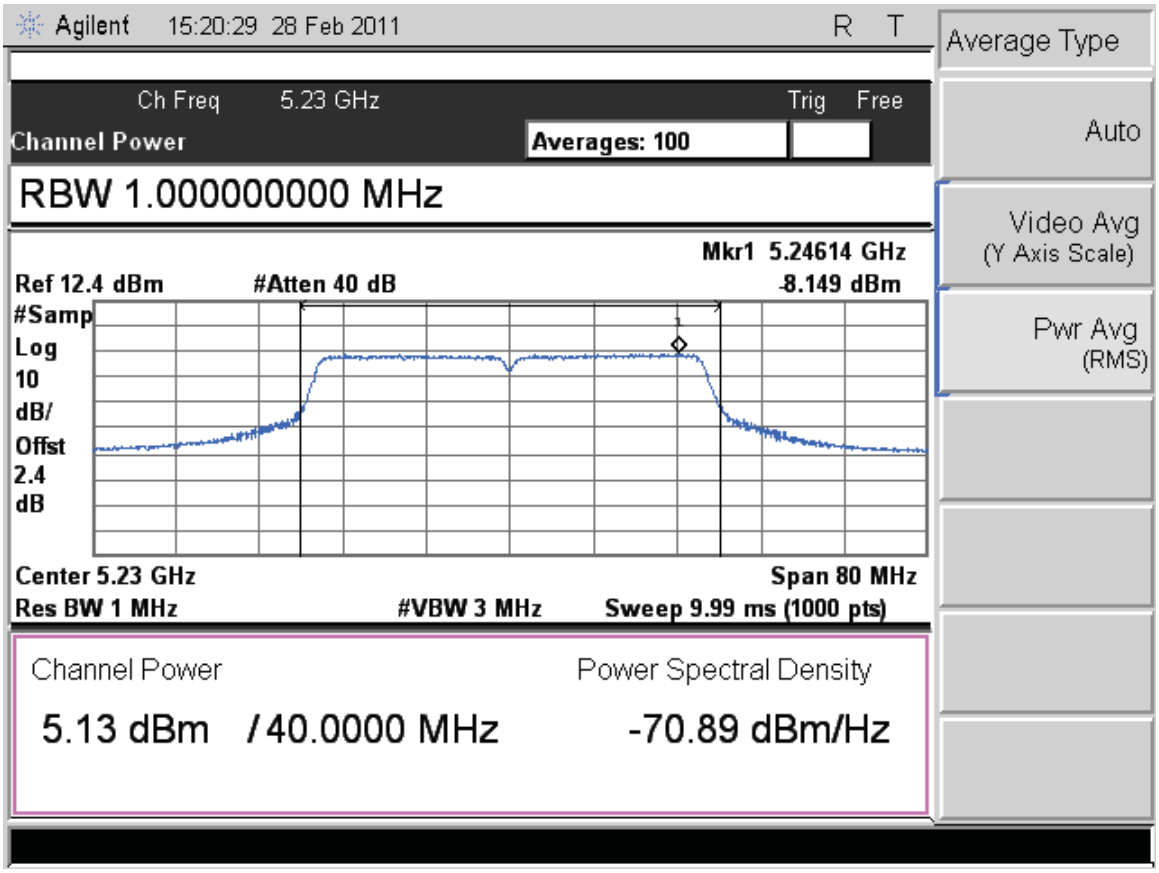


Figure 143: Maximum Transmitted Power, 5230 MHz at 802.11n HT40, 3x3 Chain 1– 40.5 Mbps

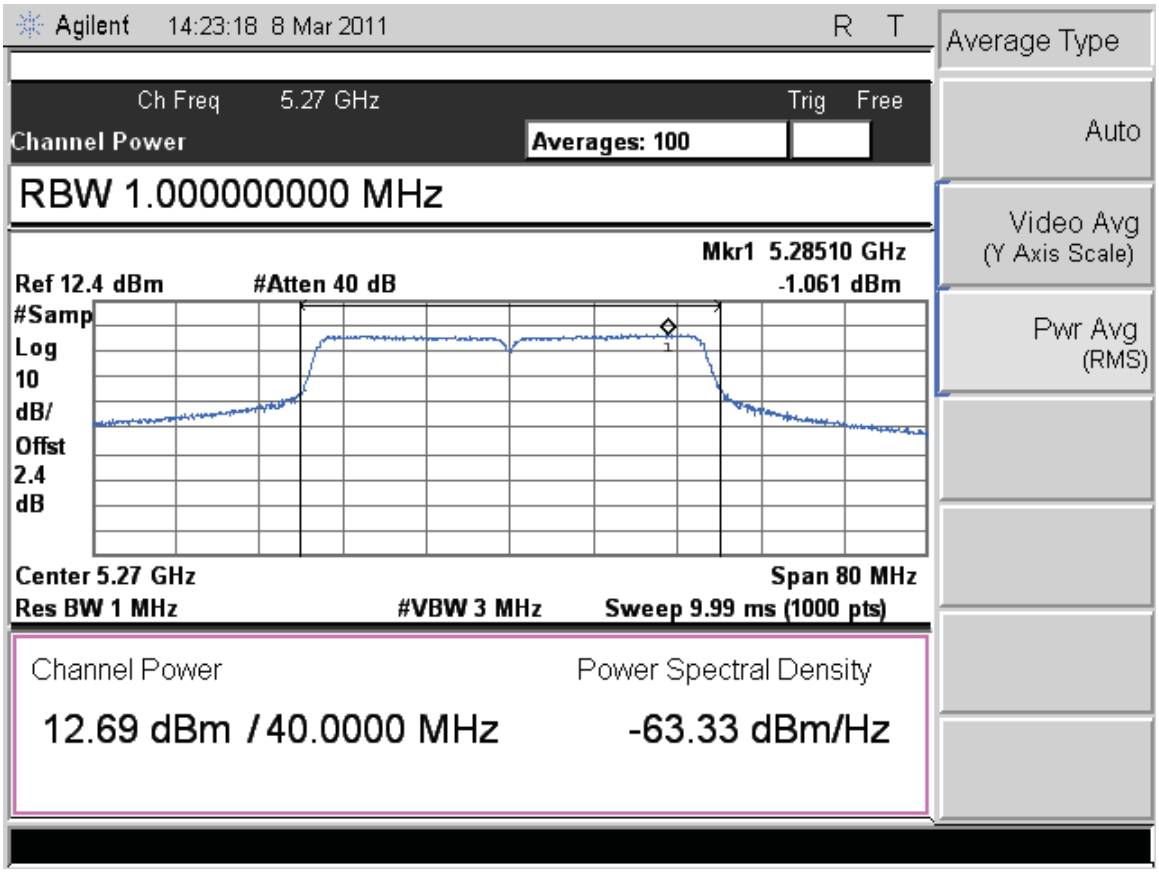


Figure 144: Maximum Transmitted Power, 5270 MHz at 802.11n HT40, 3x3 Chain 1– 40.5 Mbps

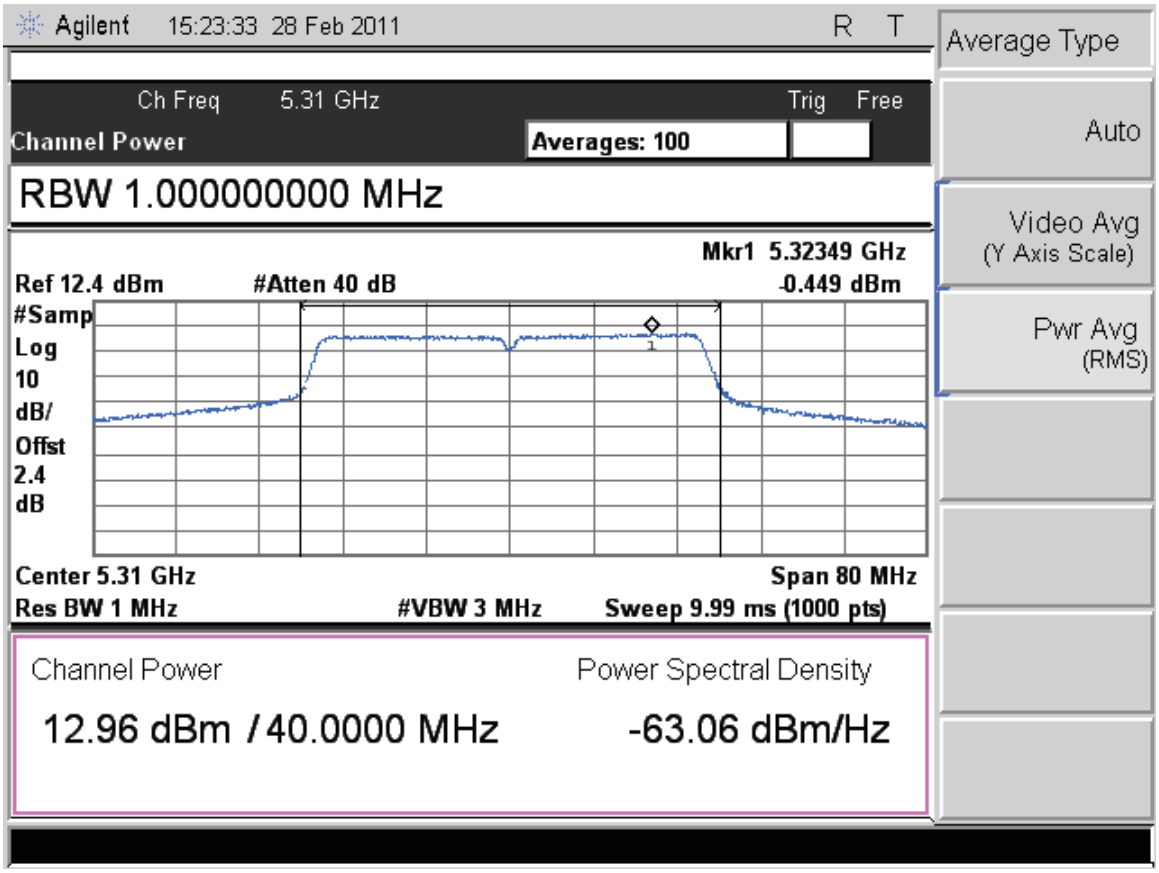


Figure 145: Maximum Transmitted Power, 5310 MHz at 802.11n HT40, 3x3 Chain 1– 40.5 Mbps

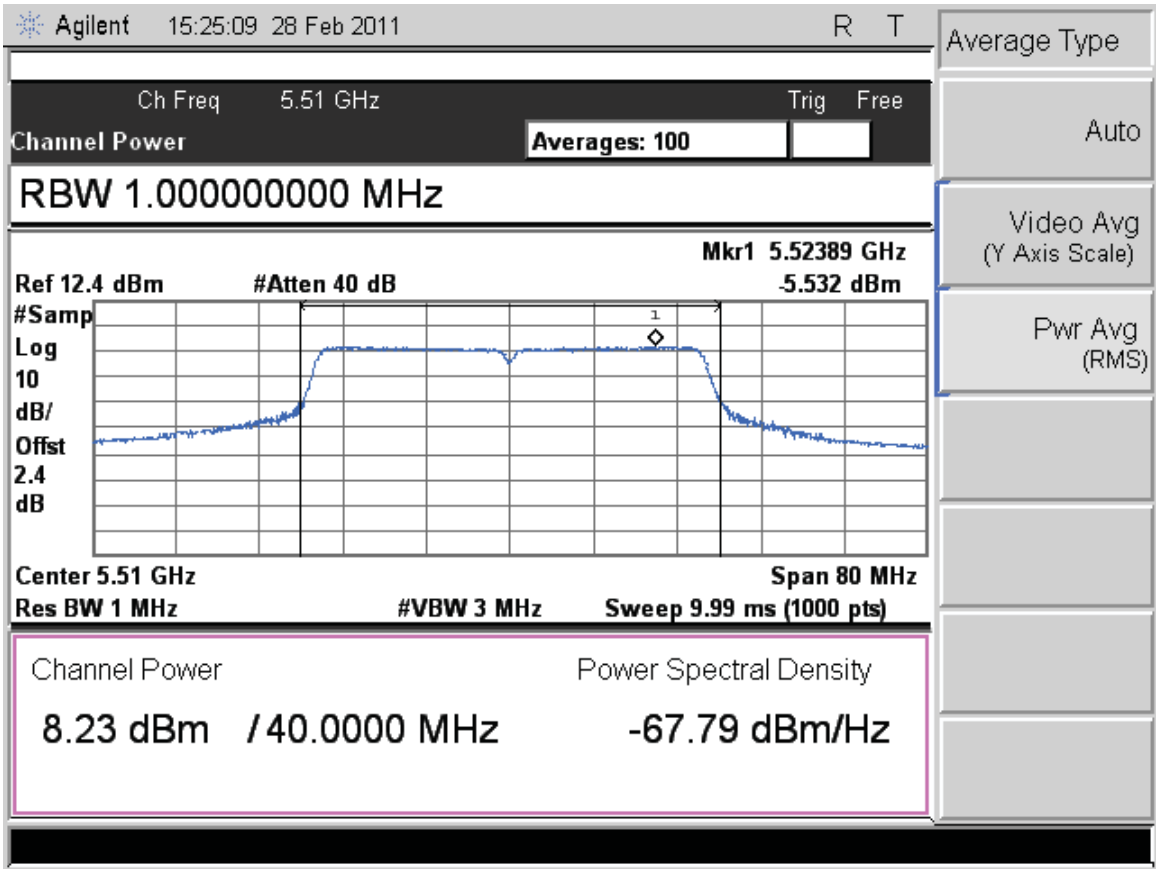


Figure 146: Maximum Transmitted Power, 5510 MHz at 802.11n HT40, 3x3 Chain 1– 40.5 Mbps

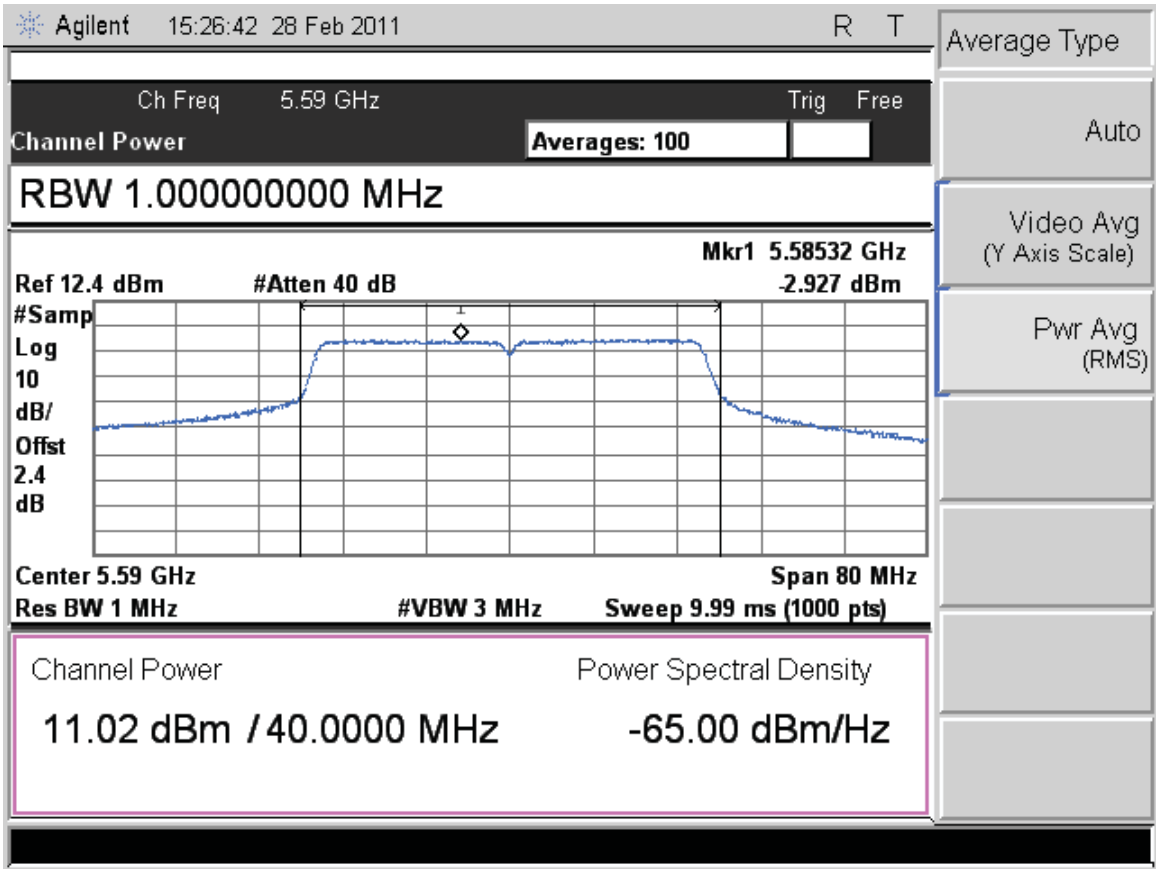


Figure 147: Maximum Transmitted Power, 5590 MHz at 802.11n HT40, 3x3 Chain 1– 40.5 Mbps

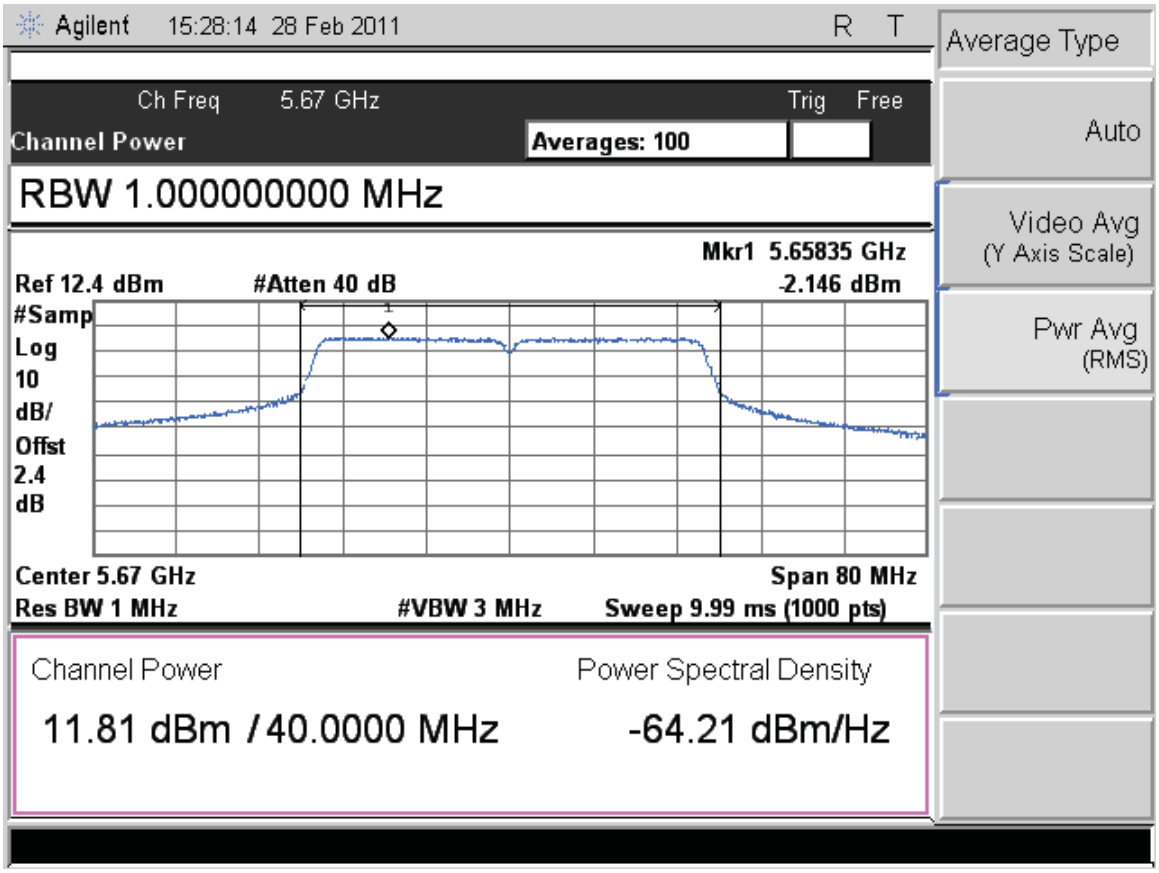


Figure 148: Maximum Transmitted Power, 5670 MHz at 802.11n HT40, 3x3 Chain 1– 40.5 Mbps

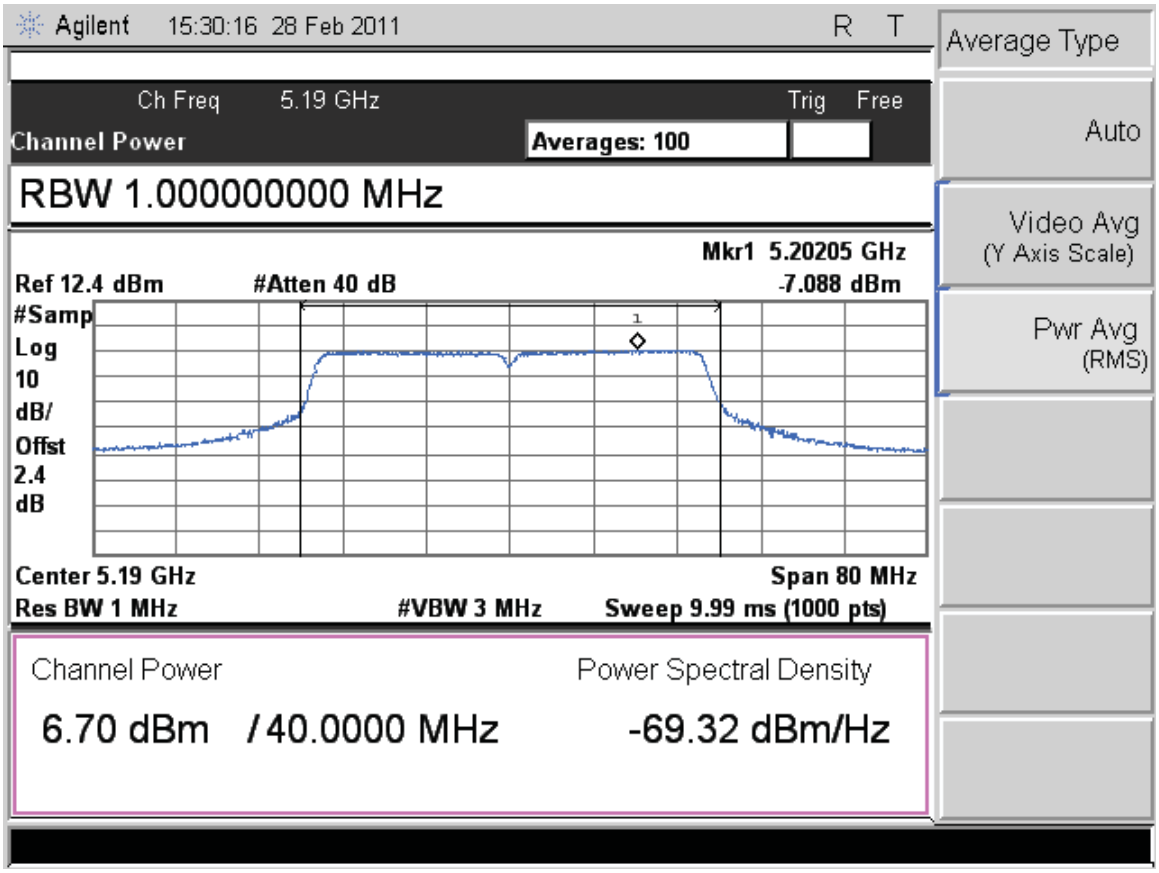


Figure 149: Maximum Transmitted Power, 5190 MHz at 802.11n HT40, 3x3 Chain 2– 40.5 Mbps

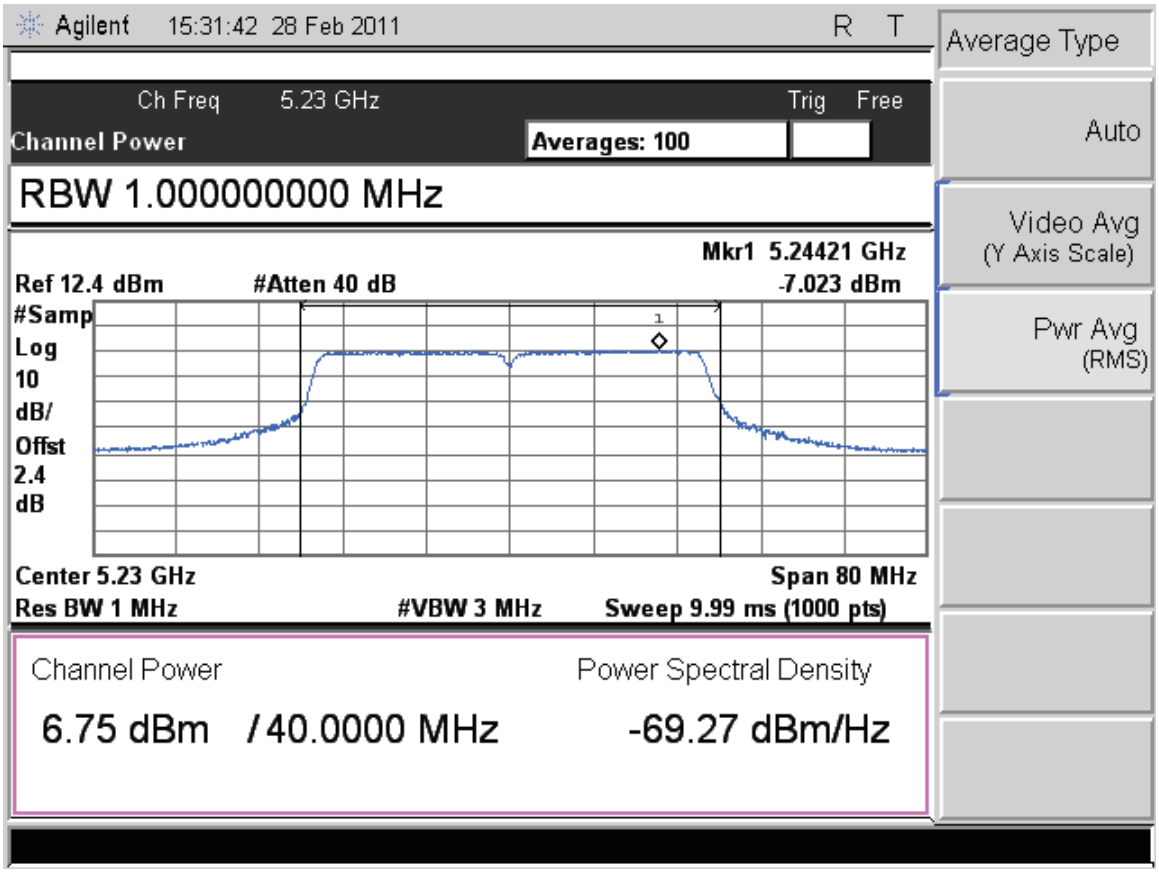


Figure 150: Maximum Transmitted Power, 5230 MHz at 802.11n HT40, 3x3 Chain 2– 40.5 Mbps

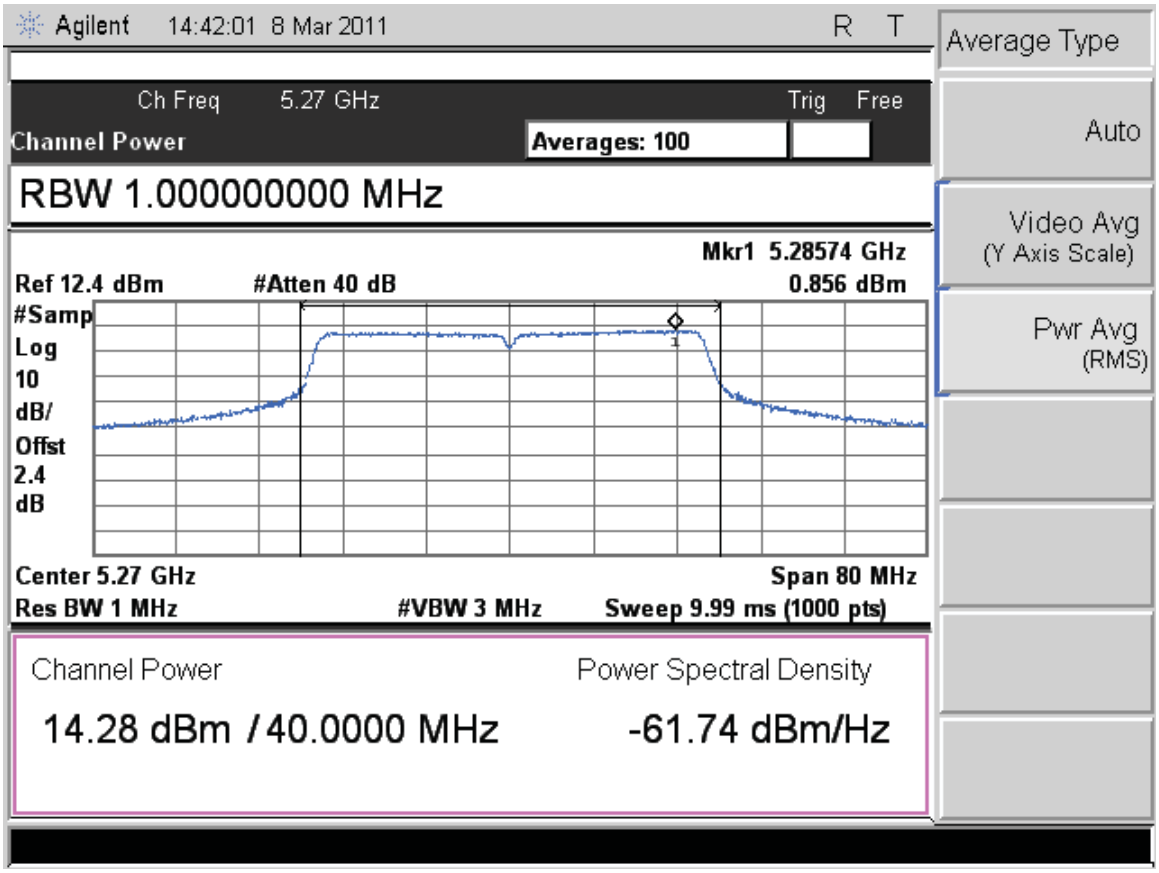


Figure 151: Maximum Transmitted Power, 5270 MHz at 802.11n HT40, 3x3 Chain 2– 40.5 Mbps

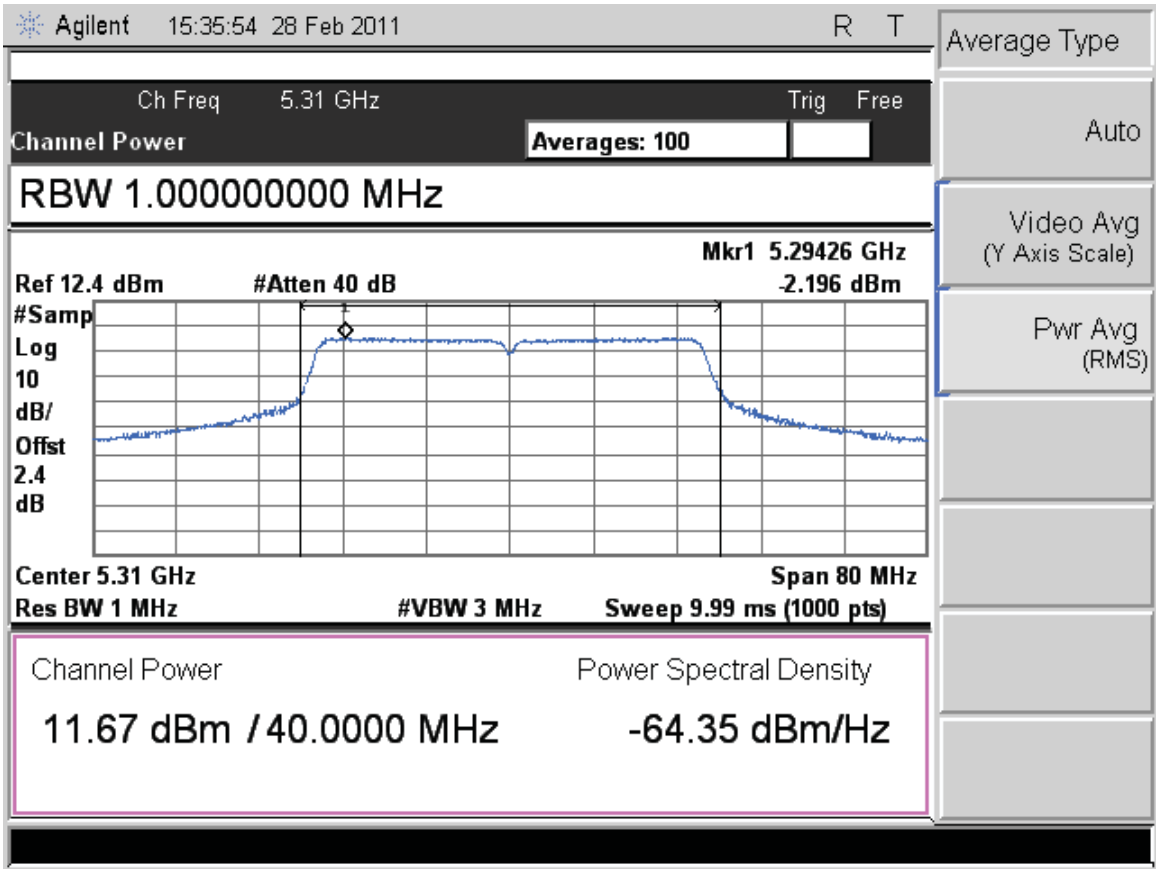


Figure 152: Maximum Transmitted Power, 5310 MHz at 802.11n HT40, 3x3 Chain 2– 40.5 Mbps

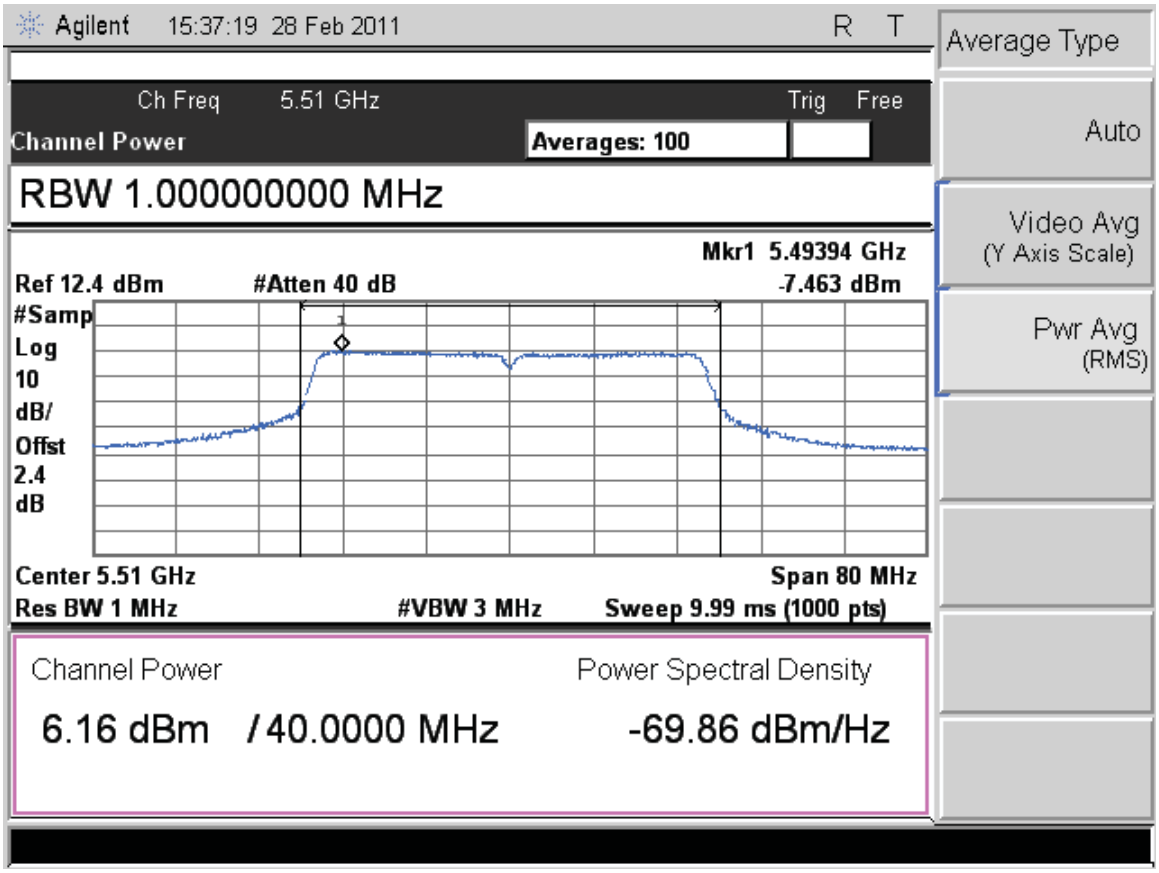


Figure 153: Maximum Transmitted Power, 5510 MHz at 802.11n HT40, 3x3 Chain 2– 40.5 Mbps

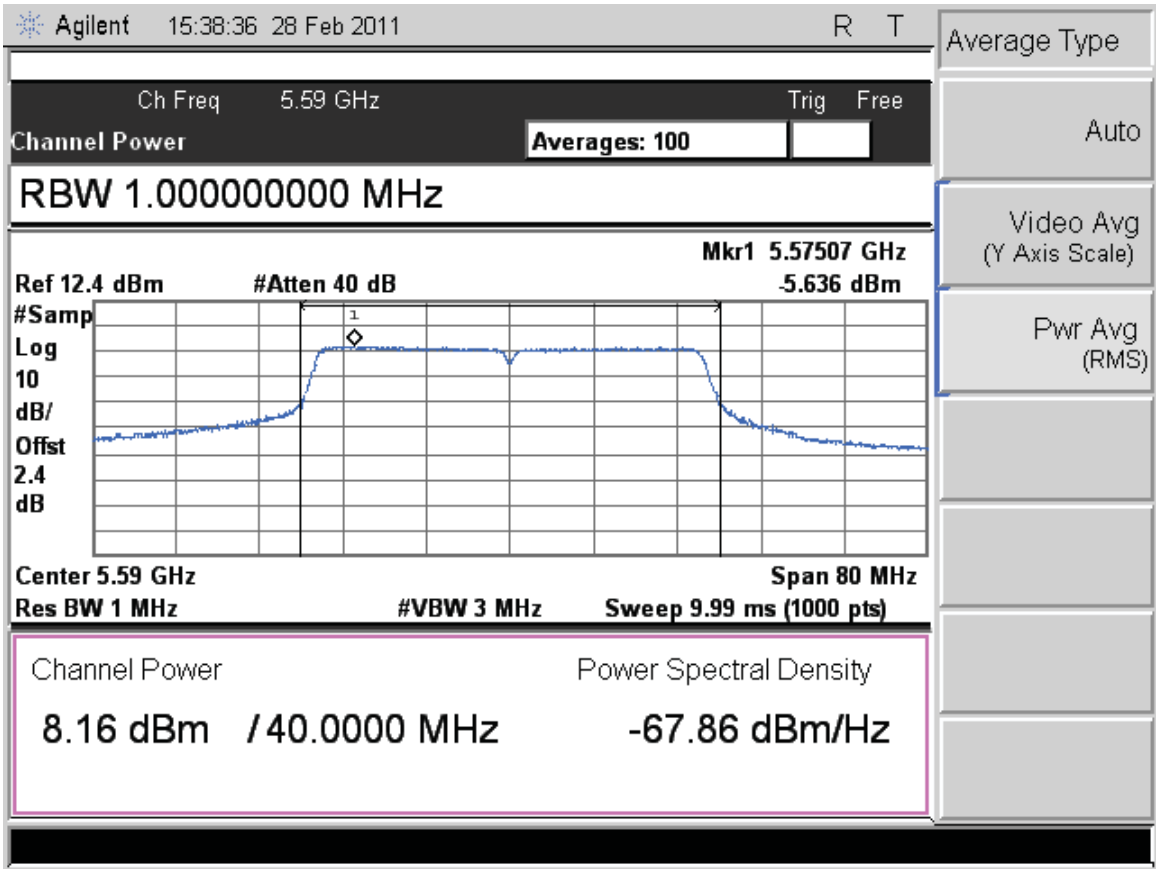


Figure 154: Maximum Transmitted Power, 5590 MHz at 802.11n HT40, 3x3 Chain 2– 40.5 Mbps

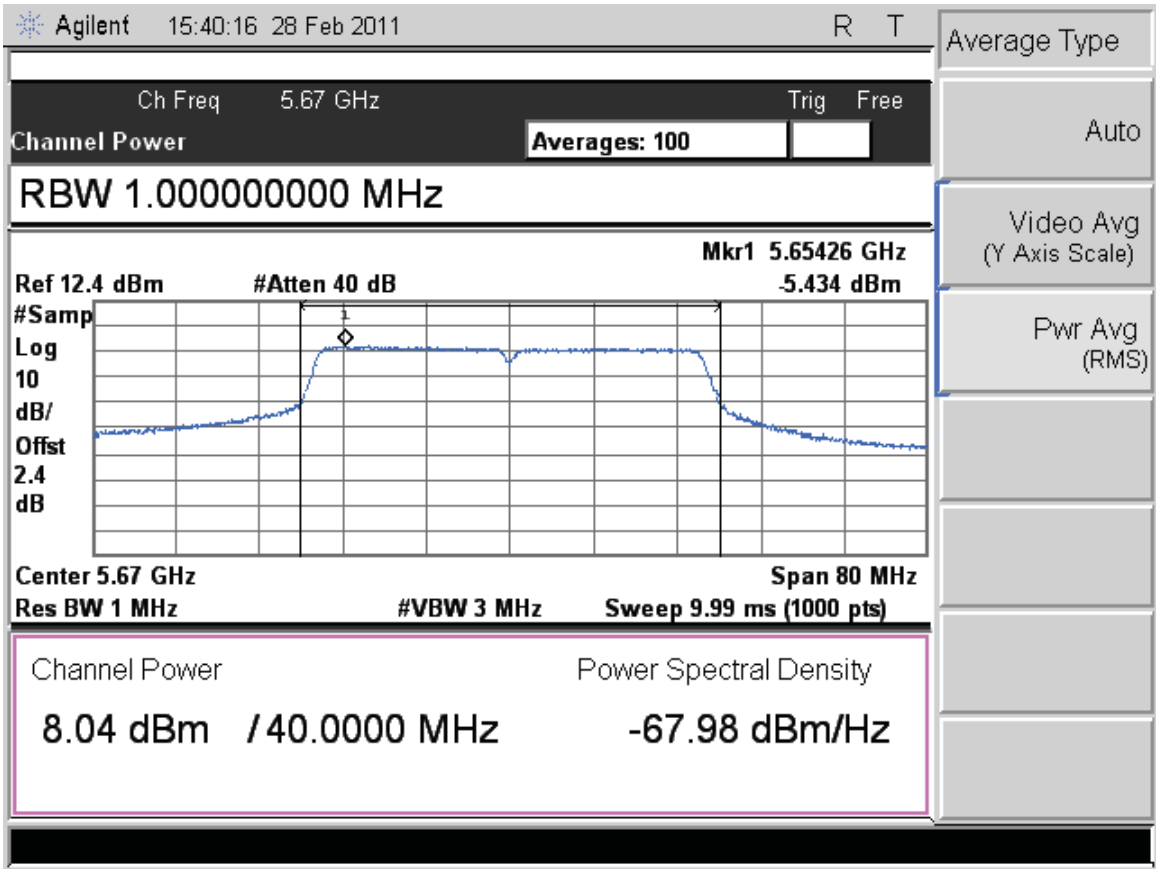


Figure 155: Maximum Transmitted Power, 5670 MHz at 802.11n HT40, 3x3 Chain 2– 40.5 Mbps

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 26 dB bandwidth is defined the bandwidth of 26 dBr from highest transmitted level of the fundamental frequency.

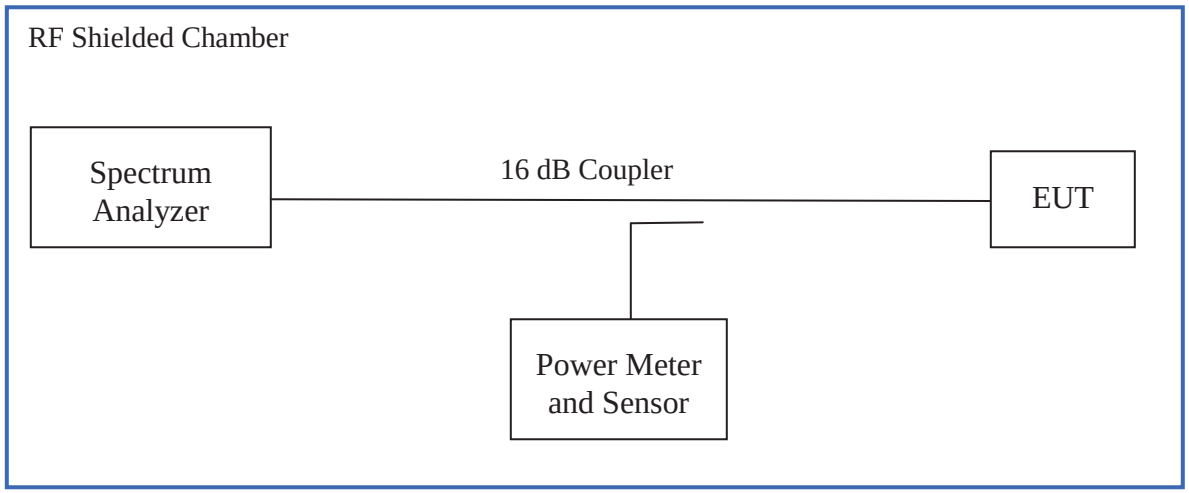
There is no restriction limits for the bandwidth. The 26 dB bandwidth was used to determine the limit for maximum conducted output power per CFR47 Part 15.407(a).

To obtain the tighter limit,

4.2.1 Test Method

The conducted method was used to measure the occupied bandwidth. The measurement was performed with modulation per CFR47 15.407(a) 2009 and RSS Gen Sect. 4.4.1:2010. The preliminary investigation was performed to find the narrowest 26 dB bandwidth for each operational mode at different data rates. This worst finding was performed on 3 channels in each operating frequency range; 5150 MHz to 5250 MHz, 5250 MHz to 5350 MHz, 5470 MHz to 5725 MHz. The worst results 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: + 3.2 dBi			**Signal State:** Modulated				
Ambient Temp.: 21 °C			**Relative Humidity:**33%				
Bandwidth (MHz) for 802.11a							
Freq. (MHz)	**Stream**	**Ch 0 99% BW**	**Ch 1 99% BW**	**Ch 2 99% BW**	**Ch 0 26 dB BW**	**Ch 1 26 dB BW**	**Ch 2 26 dB BW**
5180	1	18.8377	18.8377	18.7375	27.3547	27.7555	27.1543
5220	1	18.8377	18.7374	18.6373	27.1543	27.0541	27.3547
5240	1	18.8377	18.7374	18.7374	26.6533	26.9539	26.8573
5260	1	18.6372	18.7374	18.6372	26.5531	27.1943	27.1943
5300	1	20.4408	22.2444	20.0400	38.8777	42.0841	39.0781
5320	1	18.6373	19.2385	18.7374	27.1543	35.4108	28.2965
5500	1	19.0380	18.9379	18.7374	29.7595	29.5591	26.9539
5600	1	19.3387	19.1382	18.9379	33.2665	32.4649	29.6593
5700	1	19.4389	19.2385	18.9379	33.0661	31.2625	27.6553
Note: The bandwidth was measured at 6Mbps for 802.11a mode.							
Bandwidth (MHz) for 802.11n HT20							
Freq. (MHz)	**Config.**	**Ch 0 99% BW**	**Ch 1 99% BW**	**Ch 2 99% BW**	**Ch 0 26 dB BW**	**Ch 1 26 dB BW**	**Ch 2 26 dB BW**
5180	1	19.7394	19.6392	19.7394	27.6553	28.1563	27.7555
5220	1	19.5391	19.6392	19.6392	27.3547	27.7555	27.6553
5240	1	19.6392	19.5390	19.5390	27.3947	28.5971	28.1963
5260	1	19.6392	19.7394	19.5390	27.5350	27.7354	27.6352

5300	1	19.9398	20.4408	20.0400	31.8637	41.2825	38.5771
5320	1	19.8396	20.3406	20.2404	28.3567	42.5851	33.5070
5500	1	19.7394	19.5390	19.6392	28.6573	27.9559	28.1563
5600	1	20.1402	19.9398	19.9398	34.2685	35.4709	31.7635
5700	1	20.6412	20.5410	20.2404	37.4749	40.1803	38.0761
Note: The bandwidth was measured at 6.5Mbps at 1 data stream.							
Bandwidth (MHz) for 802.11n HT40							
Freq. (MHz)	**Config.**	**Ch 0 99% BW**	**Ch 1 99% BW**	**Ch 2 99% BW**	**Ch 0 26 dB BW**	**Ch 1 26 dB BW**	**Ch 2 26 dB BW**
5190	1	39.4789	39.4789	39.4789	54.7094	55.7114	55.5110
5230	1	39.6793	39.2785	39.4789	55.6613	55.9919	55.9118
5270	1	39.4789	39.2785	39.2785	56.1422	55.0701	55.7915
5310	1	39.6793	40.2805	39.6793	57.2244	76.3927	59.8797
5510	1	39.4789	39.4789	39.2785	54.7094	56.1122	54.5090
5590	1	39.8797	39.6793	39.2785	61.3226	62.9285	55.5110
5670	1	40.4809	39.8797	39.8797	61.9328	61.9238	61.5230
Note: The bandwidth was measured at 13.5Mbps at 1 data stream							

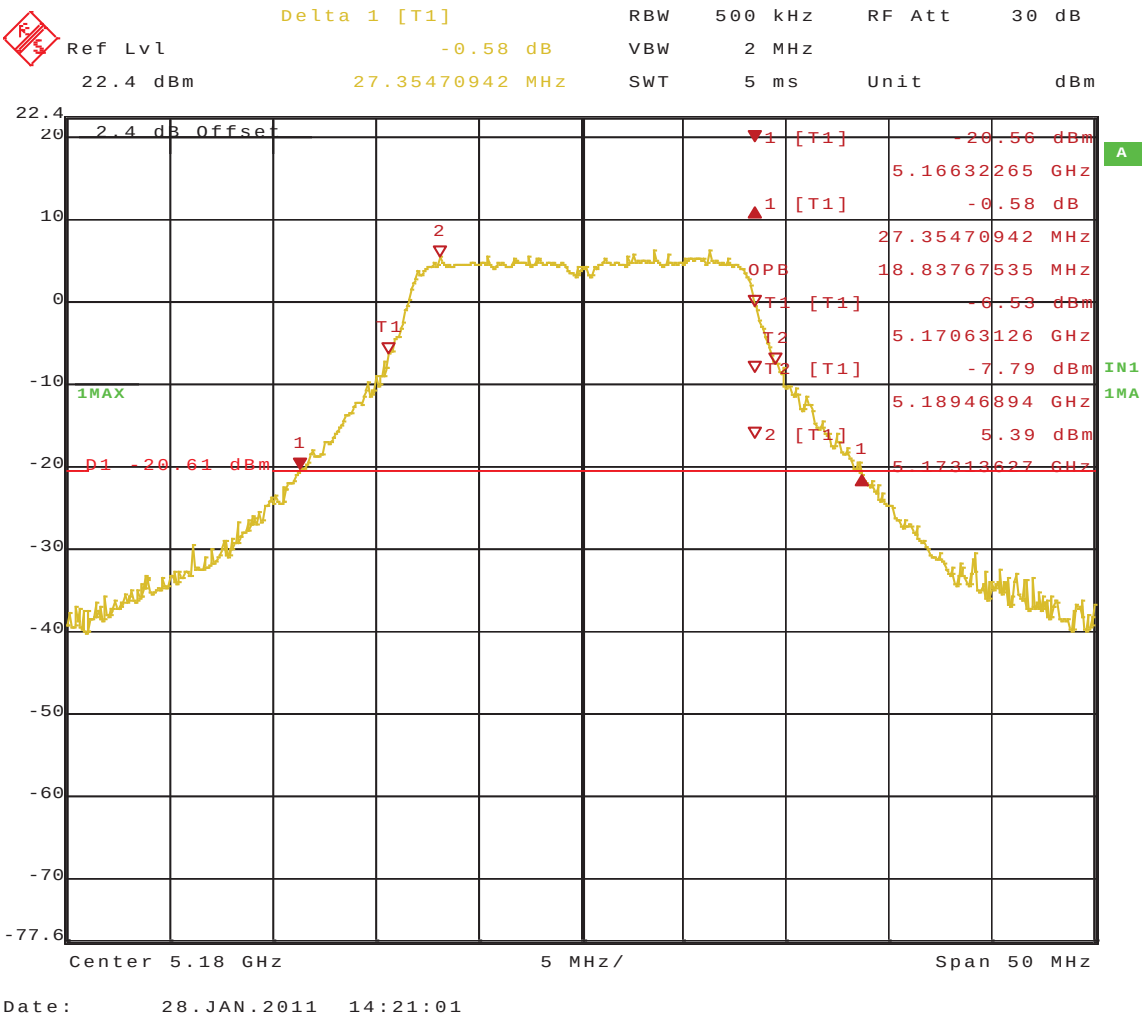


Figure 156: 26 dB and 99% Bandwidth at 5180 MHz, Chain 0

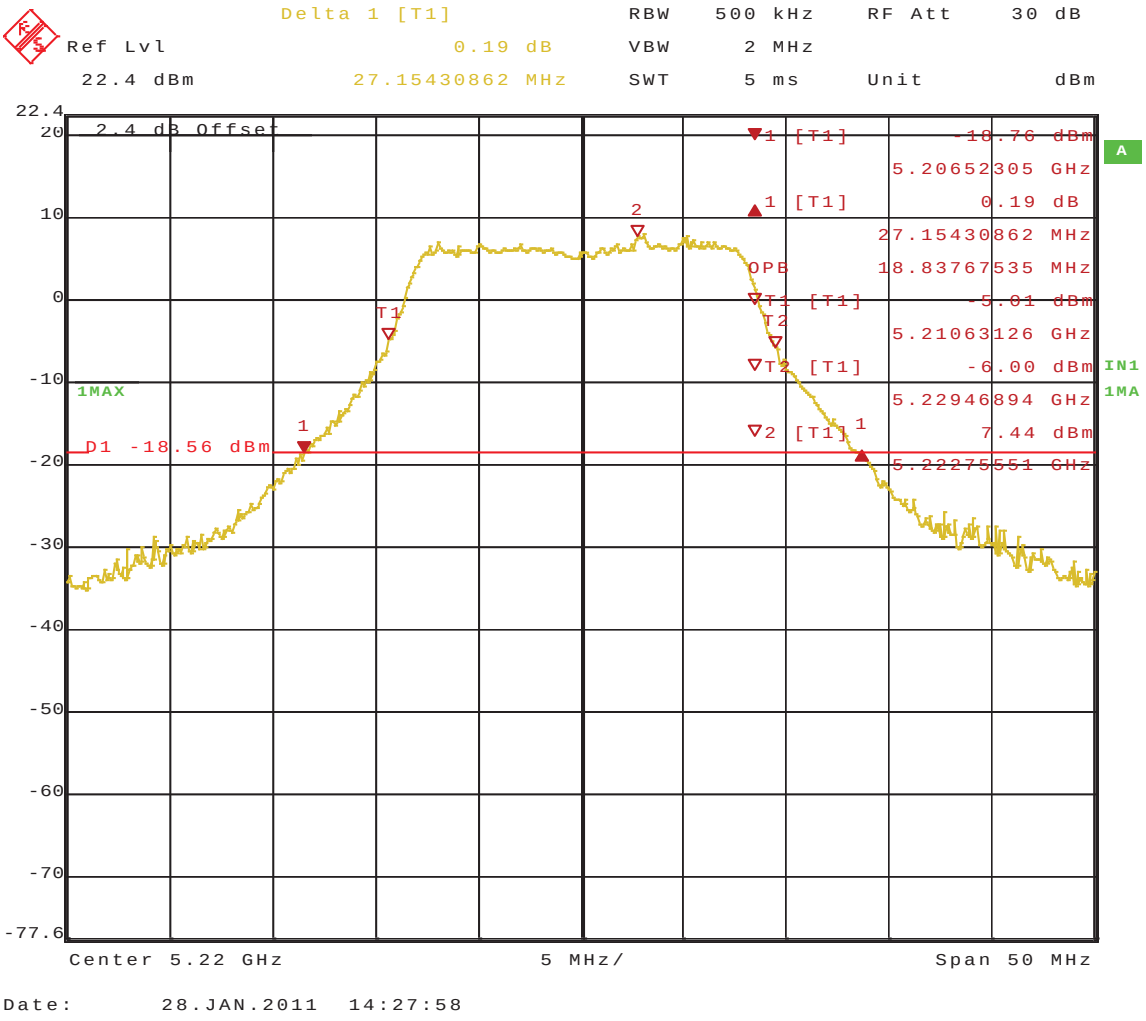


Figure 157: 26 dB and 99% Bandwidth at 5220 MHz, Chain 0

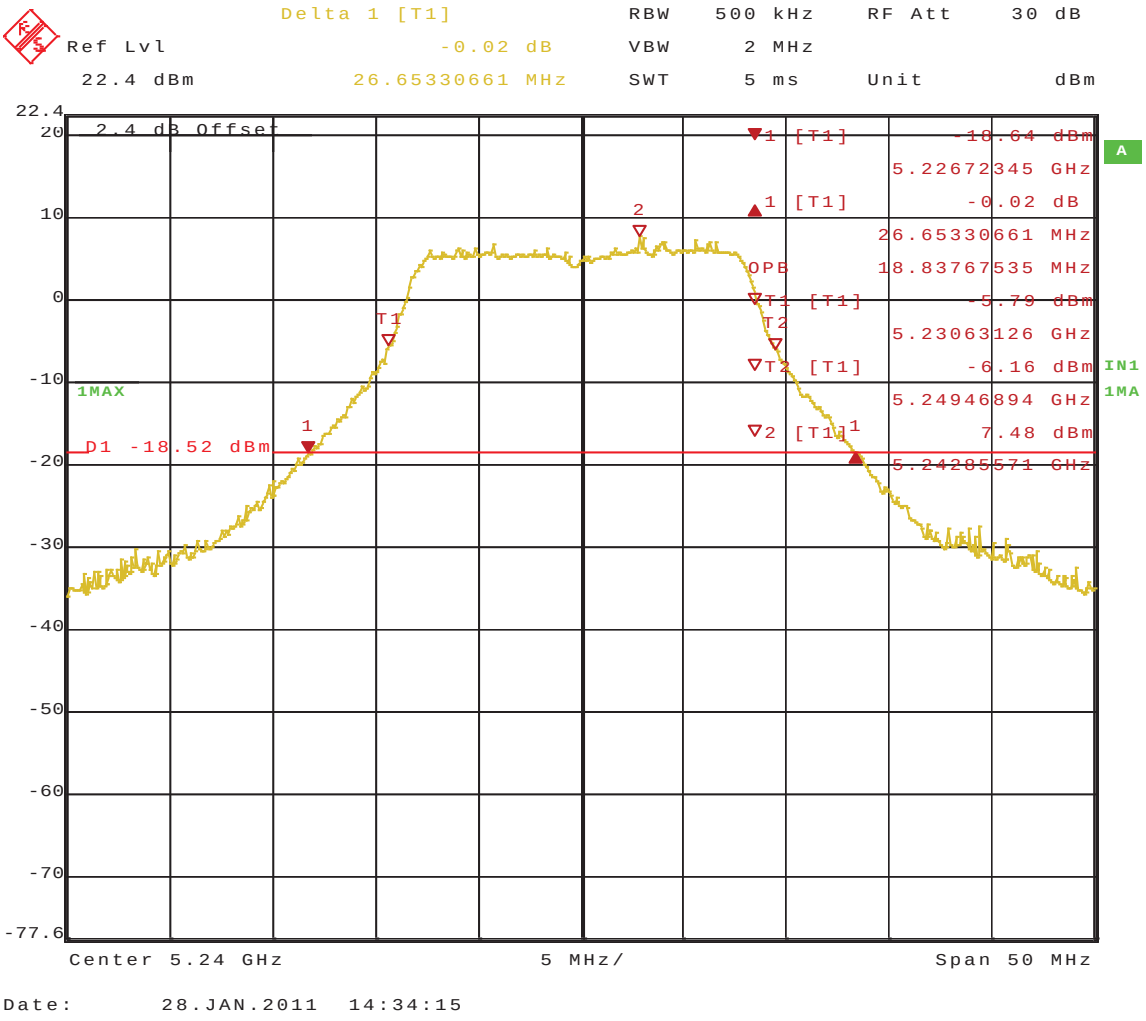


Figure 158: 26 dB and 99% Bandwidth – 5240 MHz, Chain 0

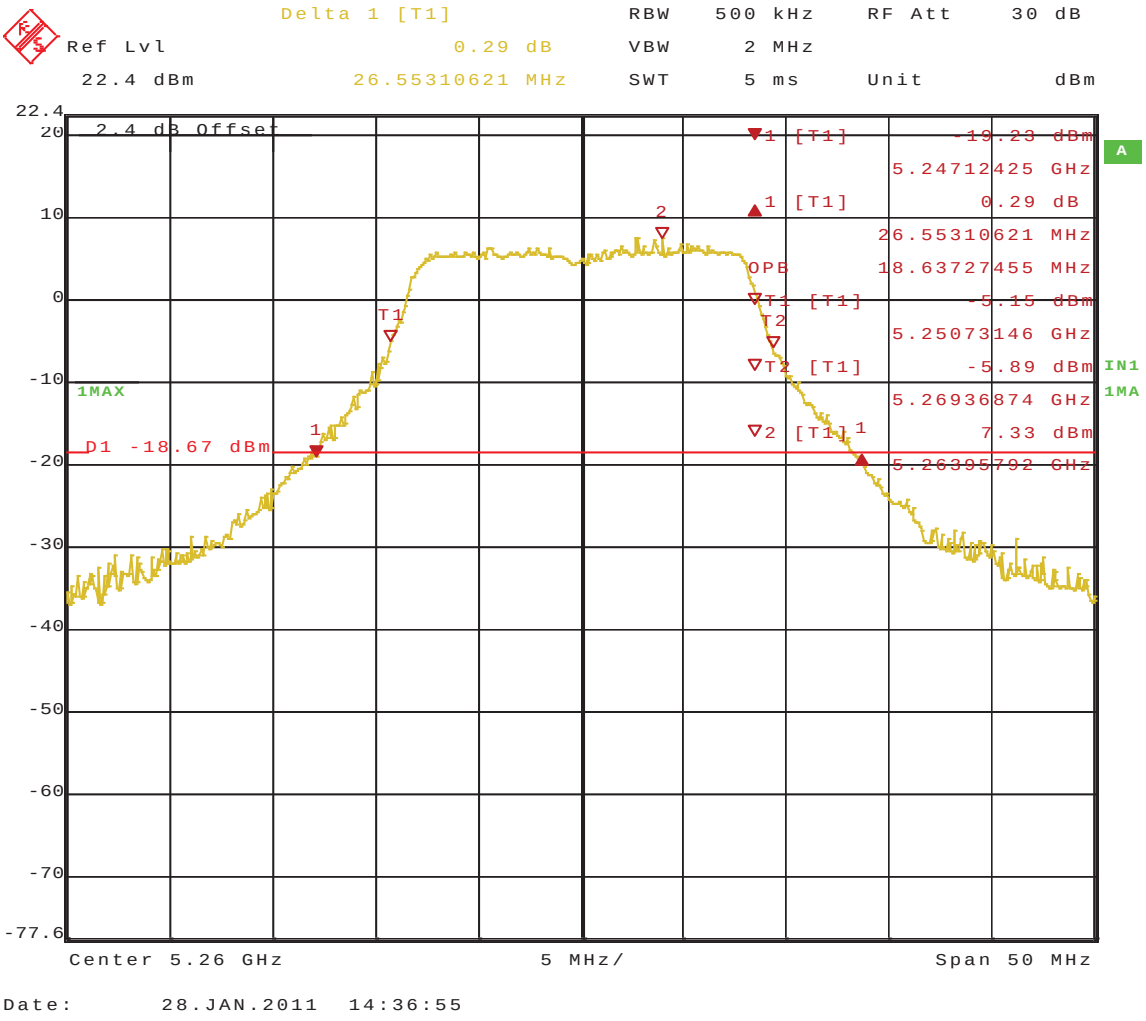


Figure 159: 26 dB and 99% Bandwidth – 5260 MHz, Chain 0

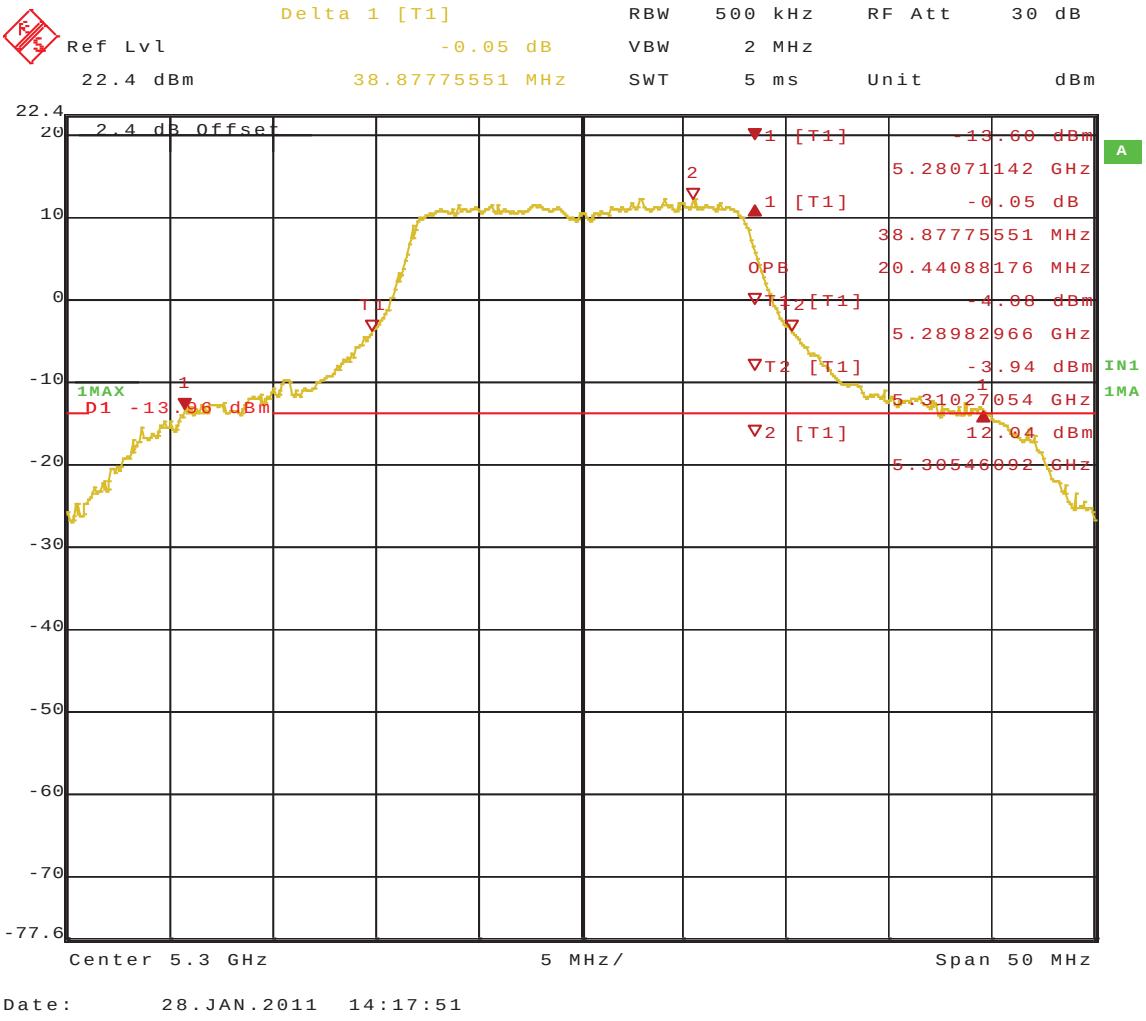


Figure 160: 26 dB and 99% Bandwidth – 5300 MHz, Chain 0

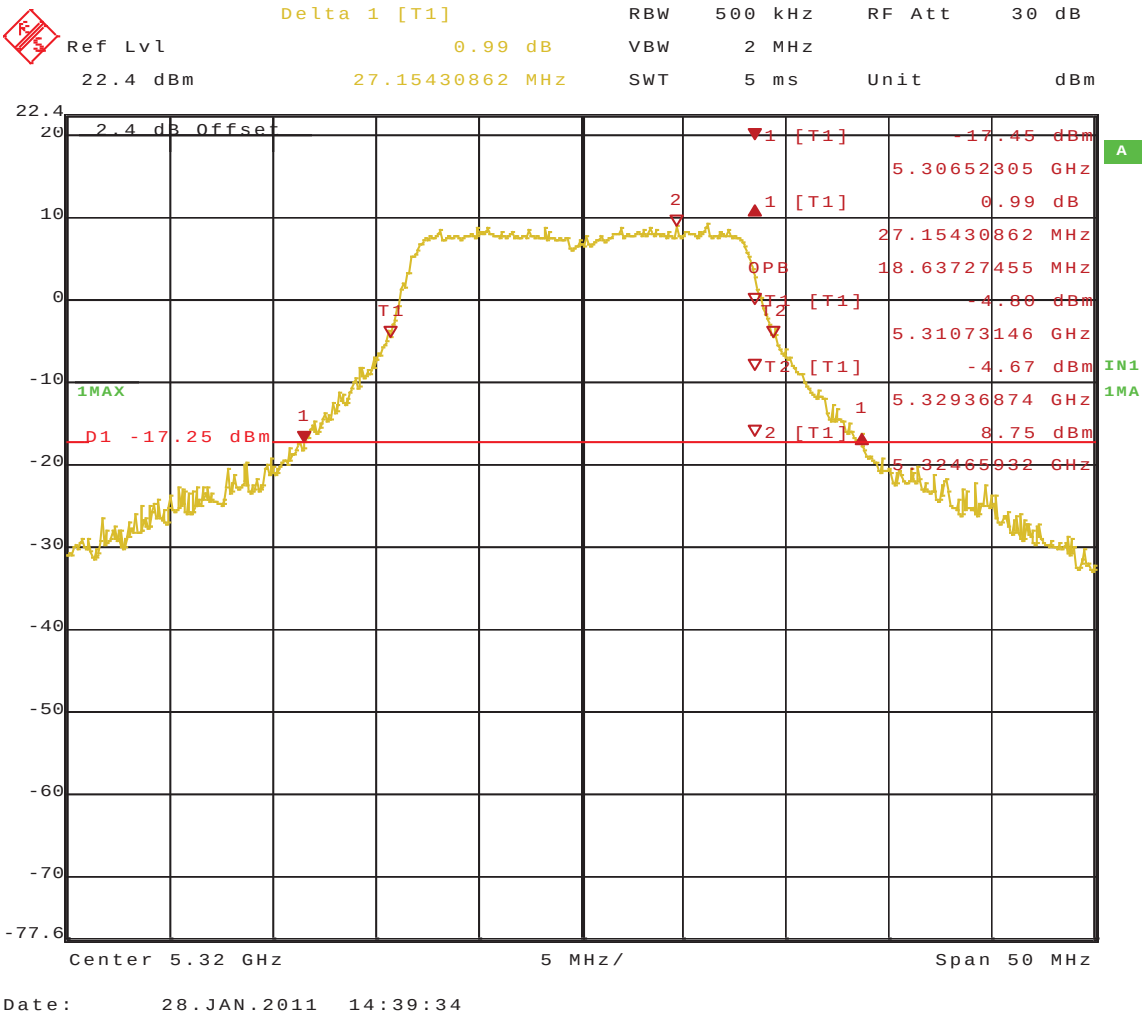


Figure 161: 26 dB and 99% Bandwidth – 5320 MHz, Chain 0

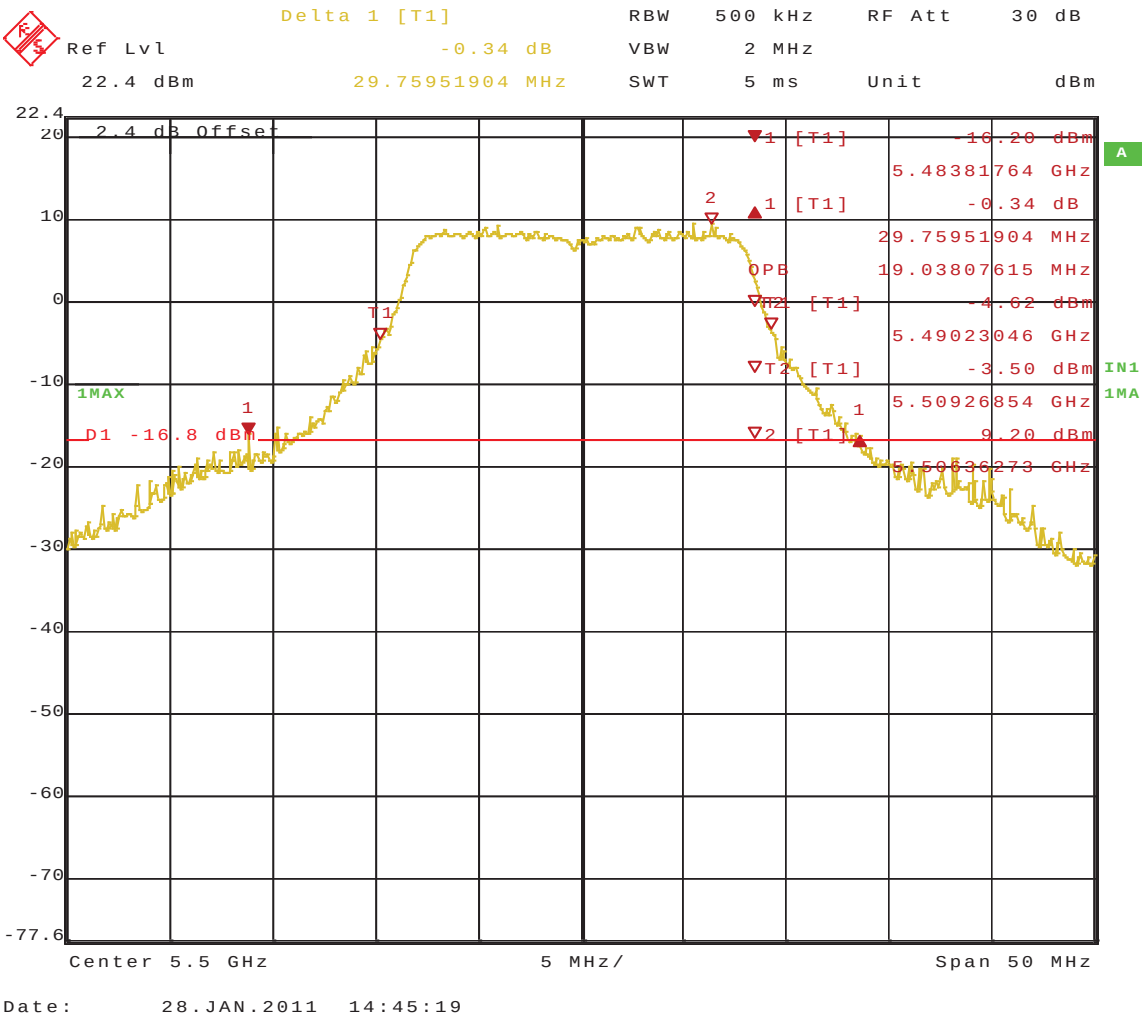


Figure 162: 26 dB and 99% Bandwidth – 5500 MHz, Chain 0

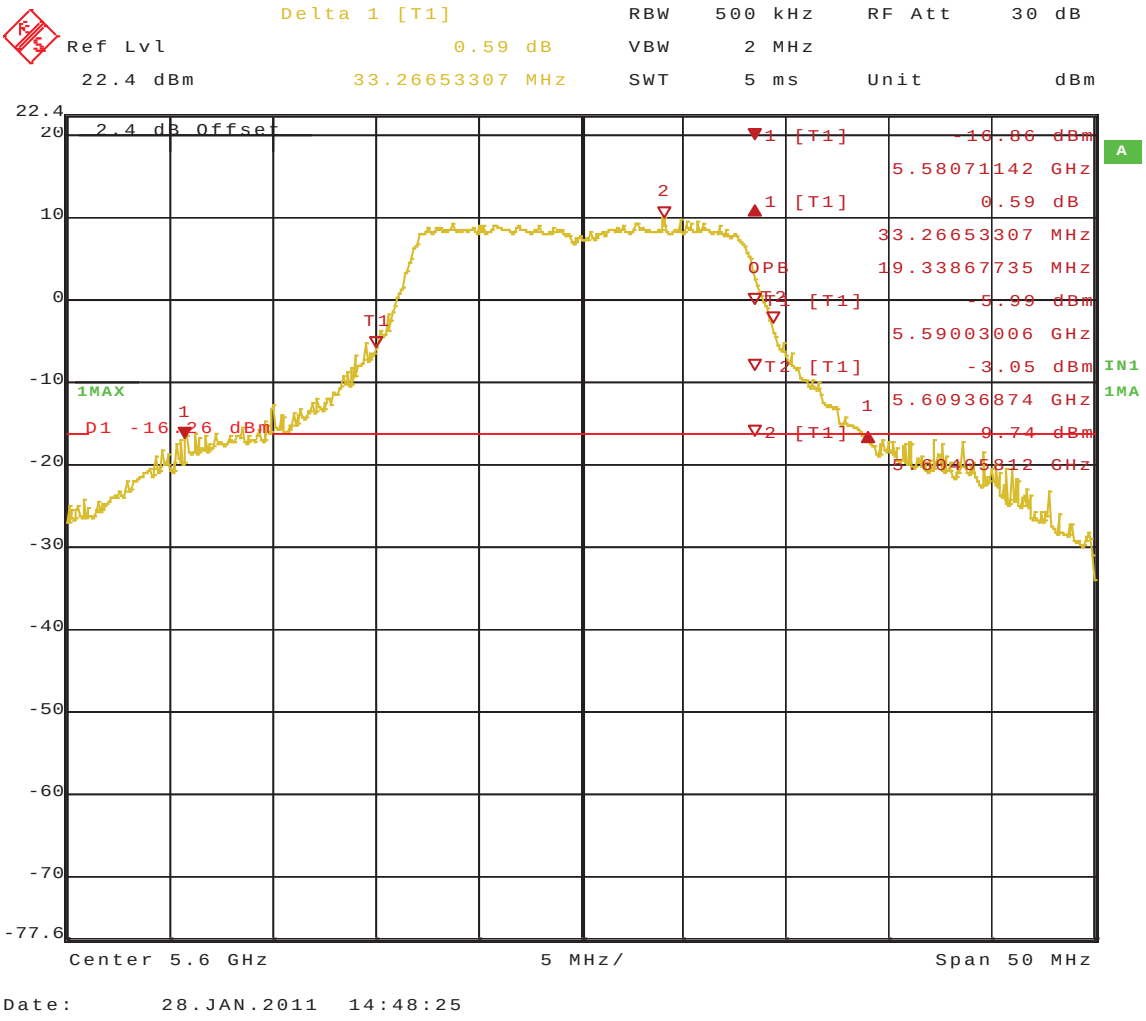


Figure 163: 26 dB and 99% Bandwidth – 5600 MHz, Chain 0

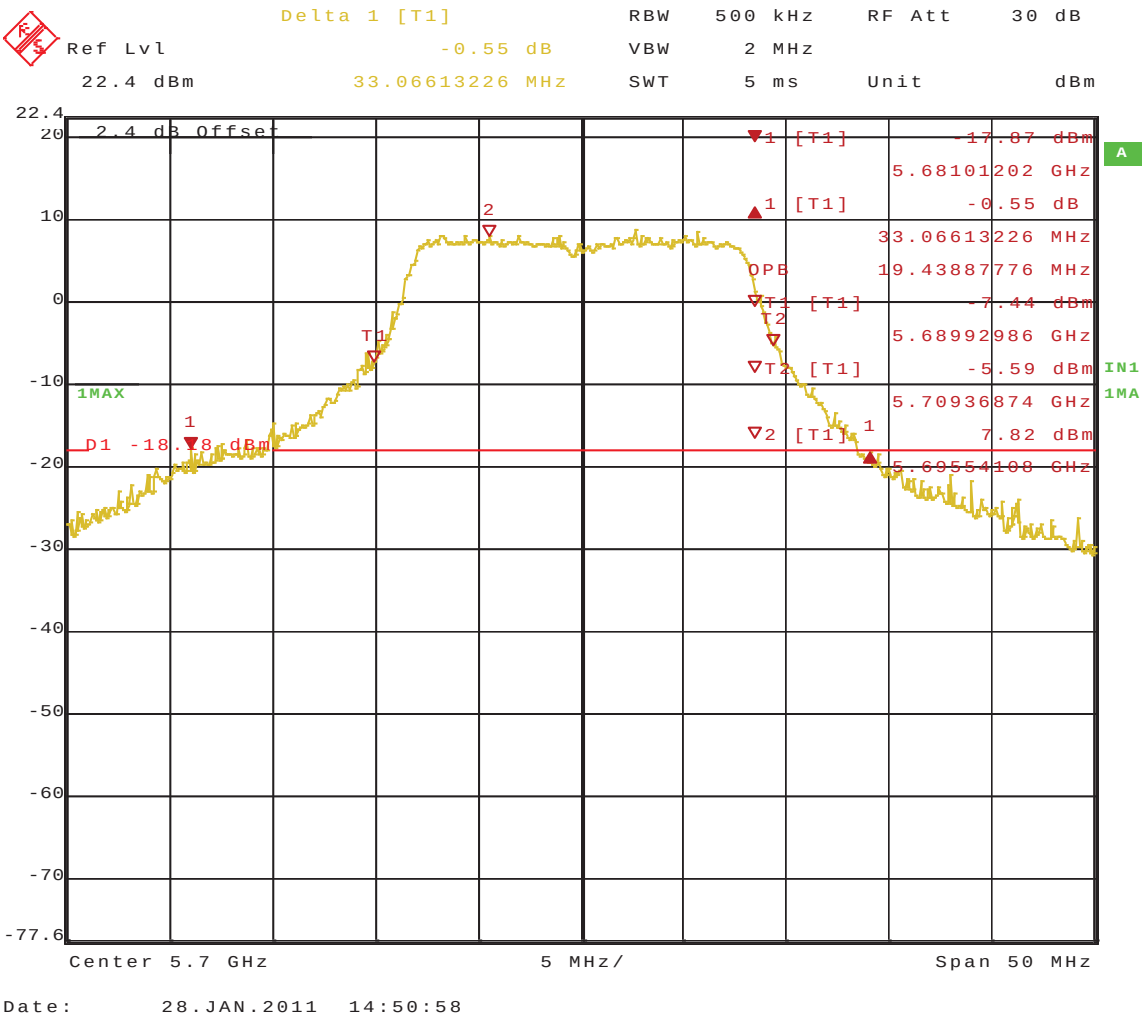


Figure 164: 26 dB and 99% Bandwidth – 5700 MHz, Chain 0

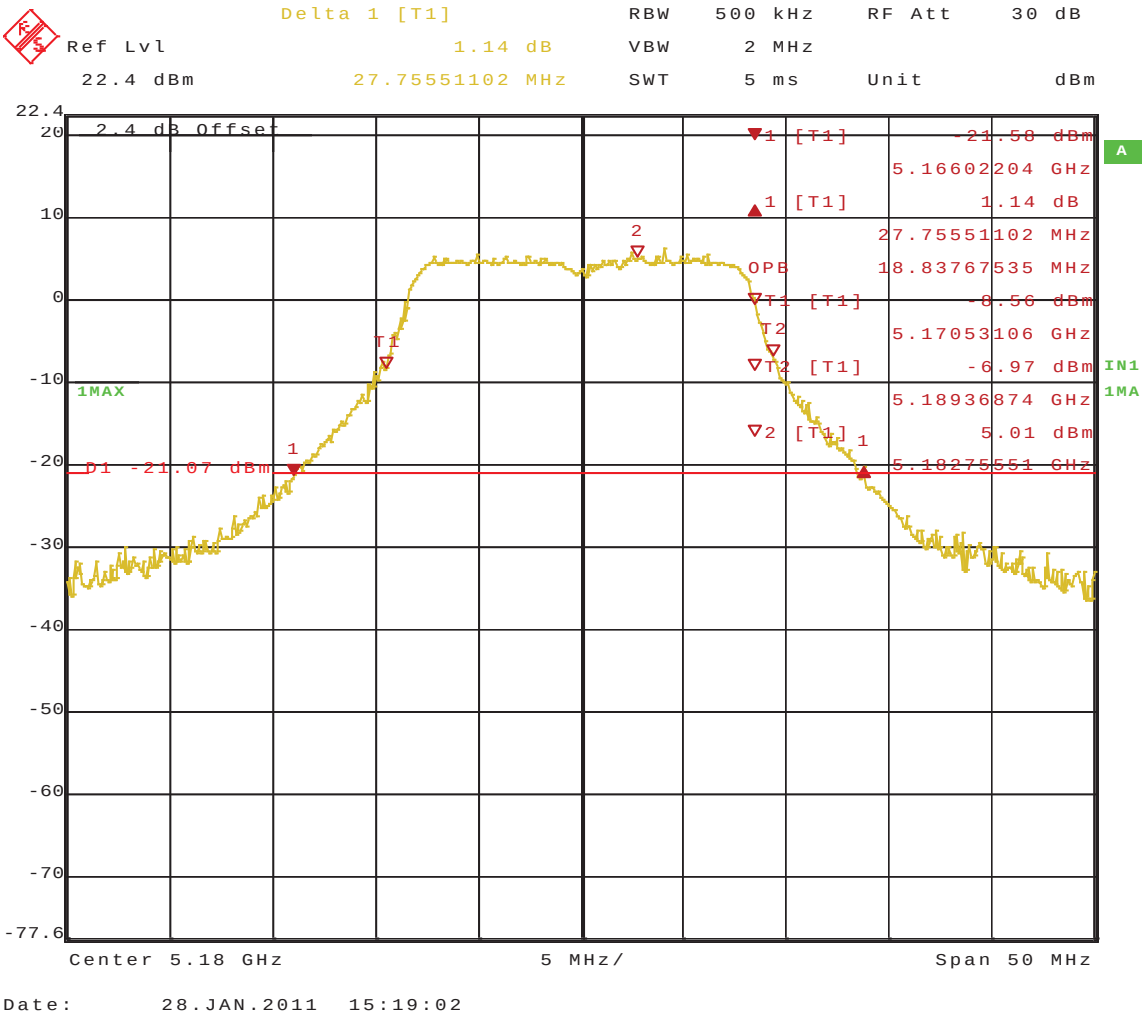


Figure 165: 26 dB and 99% Bandwidth – 5180 MHz, Chain 1

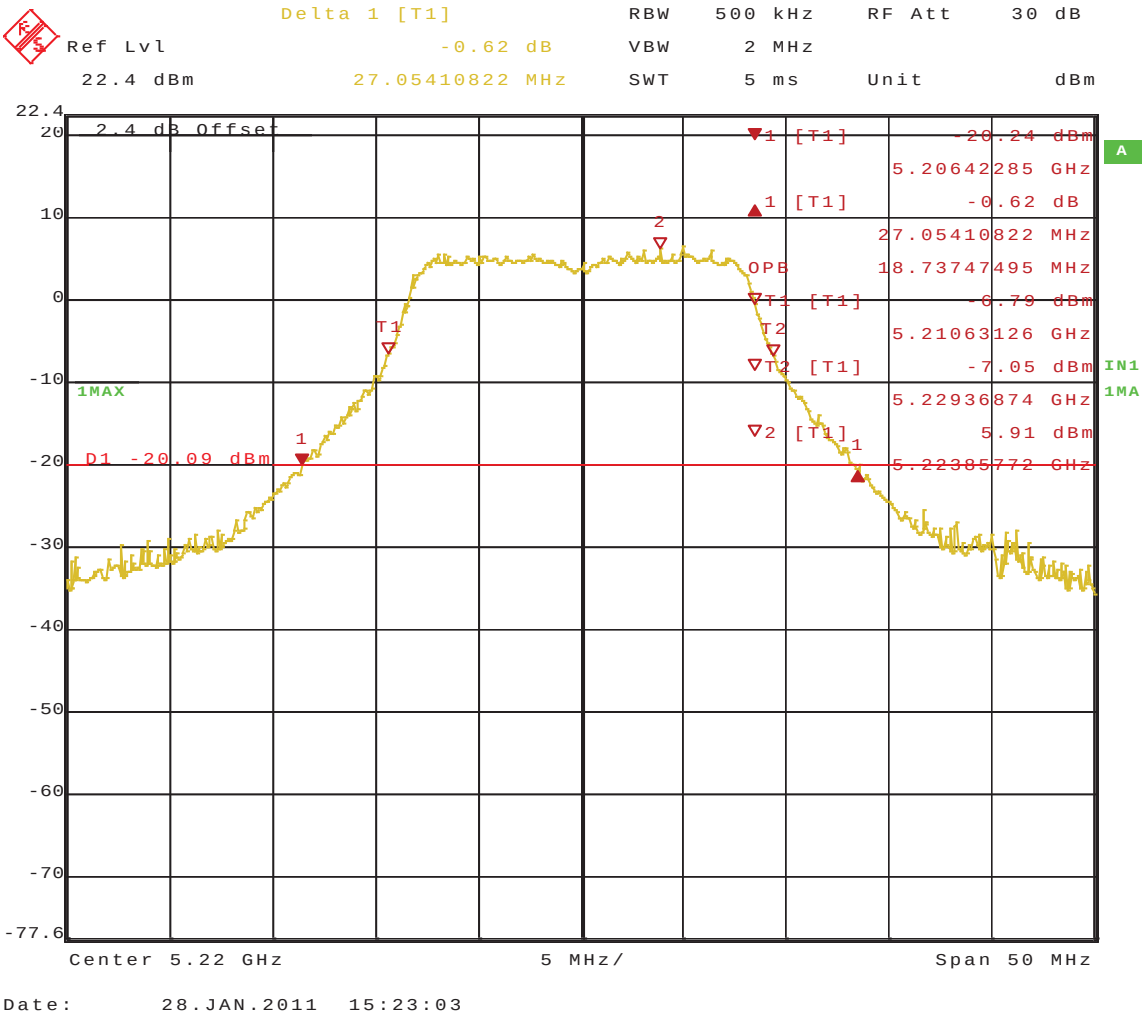


Figure 166: 26 dB and 99% Bandwidth – 5220 MHz, Chain 1

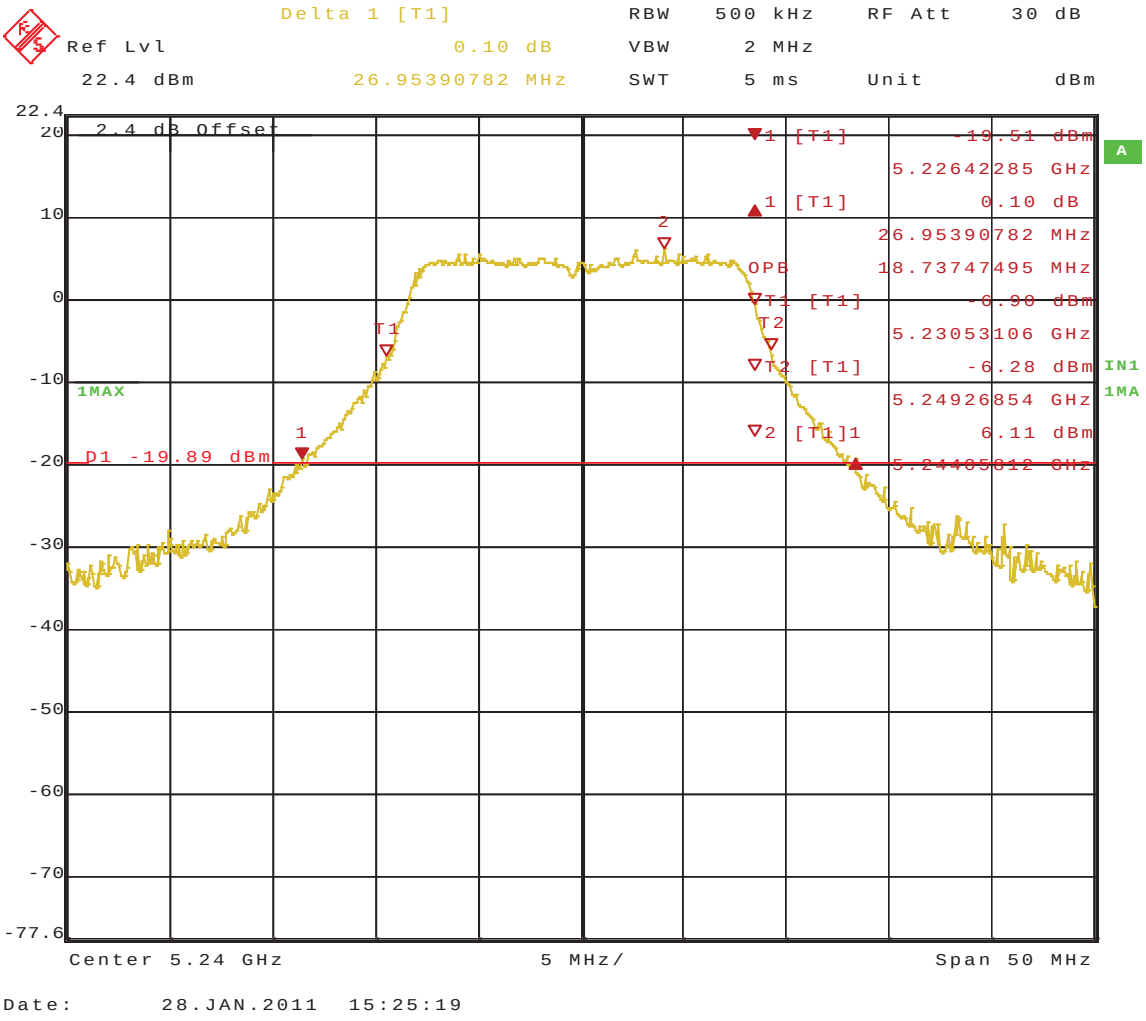


Figure 167: 26 dB and 99% Bandwidth – 5240 MHz, Chain 1

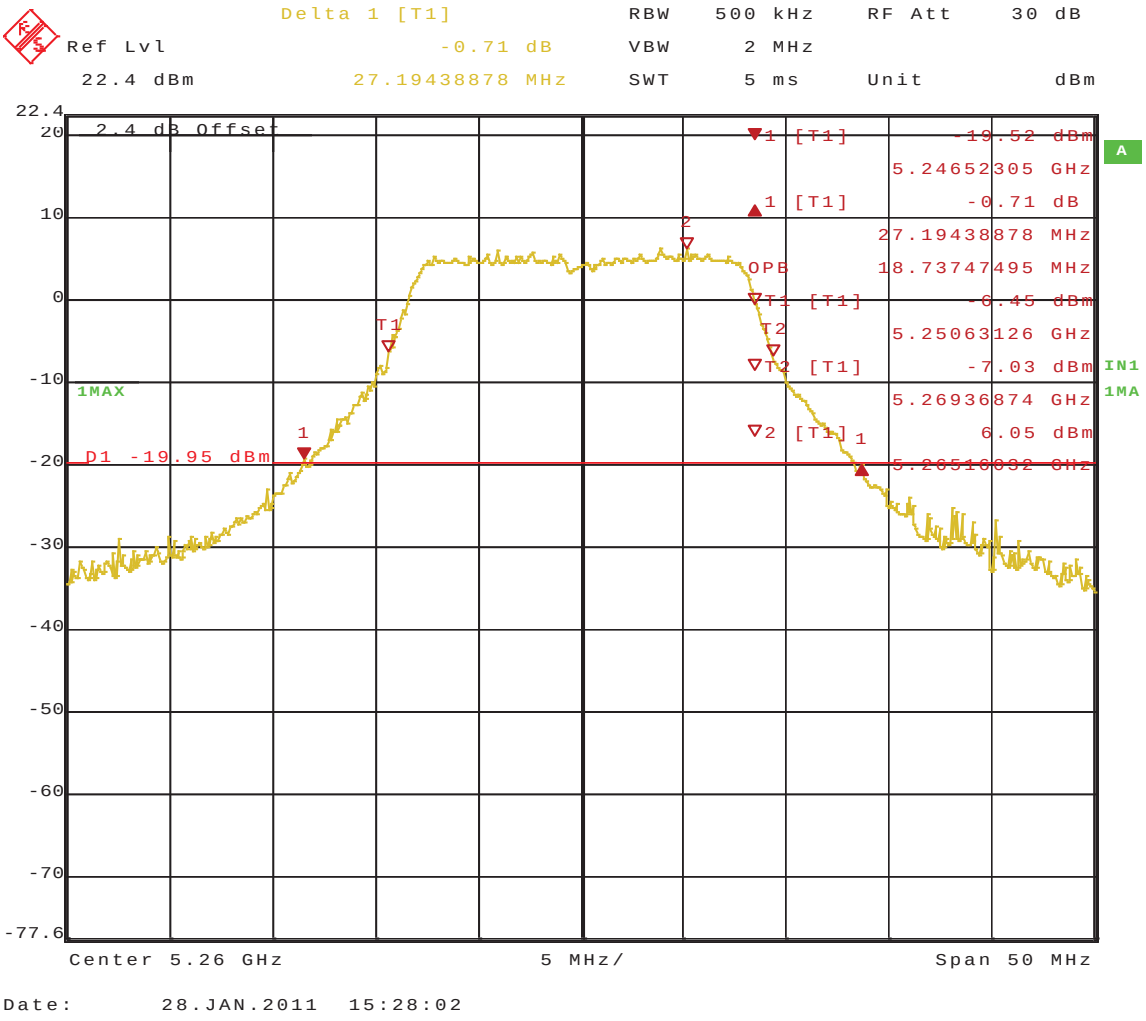


Figure 168: 26 dB and 99% Bandwidth – 5260 MHz, Chain 1

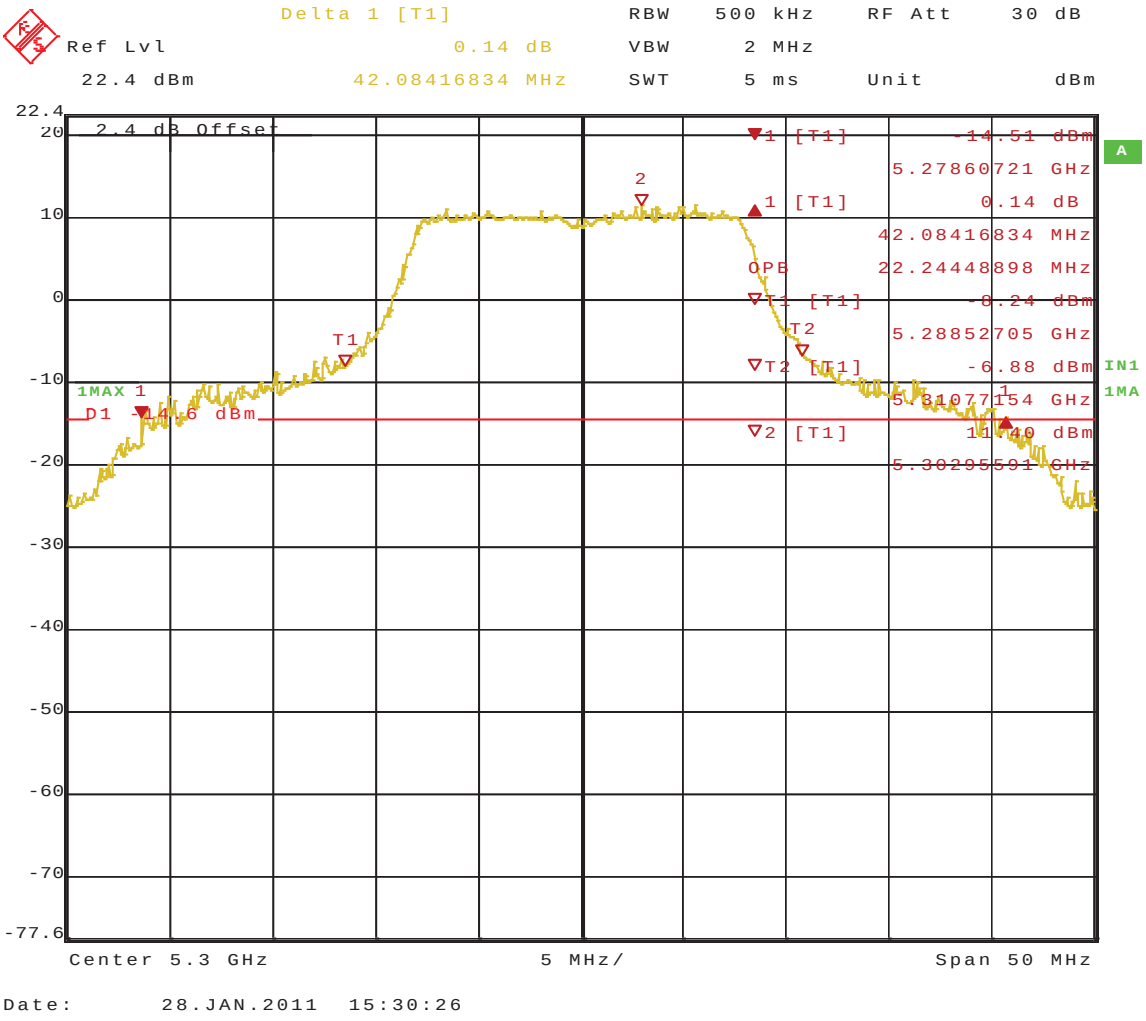


Figure 169: 26 dB and 99% Bandwidth – 5300 MHz, Chain 1

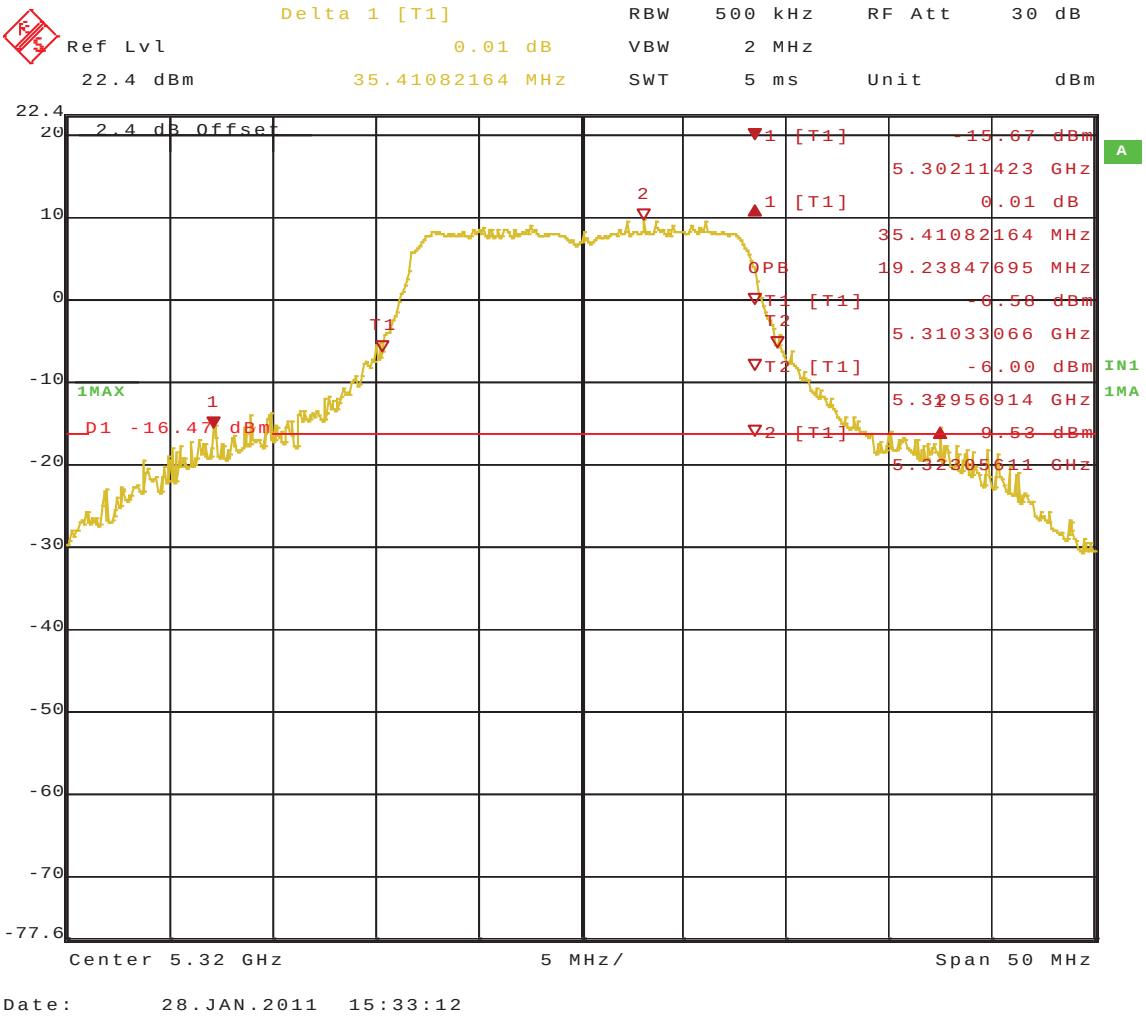


Figure 170: 26 dB and 99% Bandwidth – 5320 MHz, Chain 1

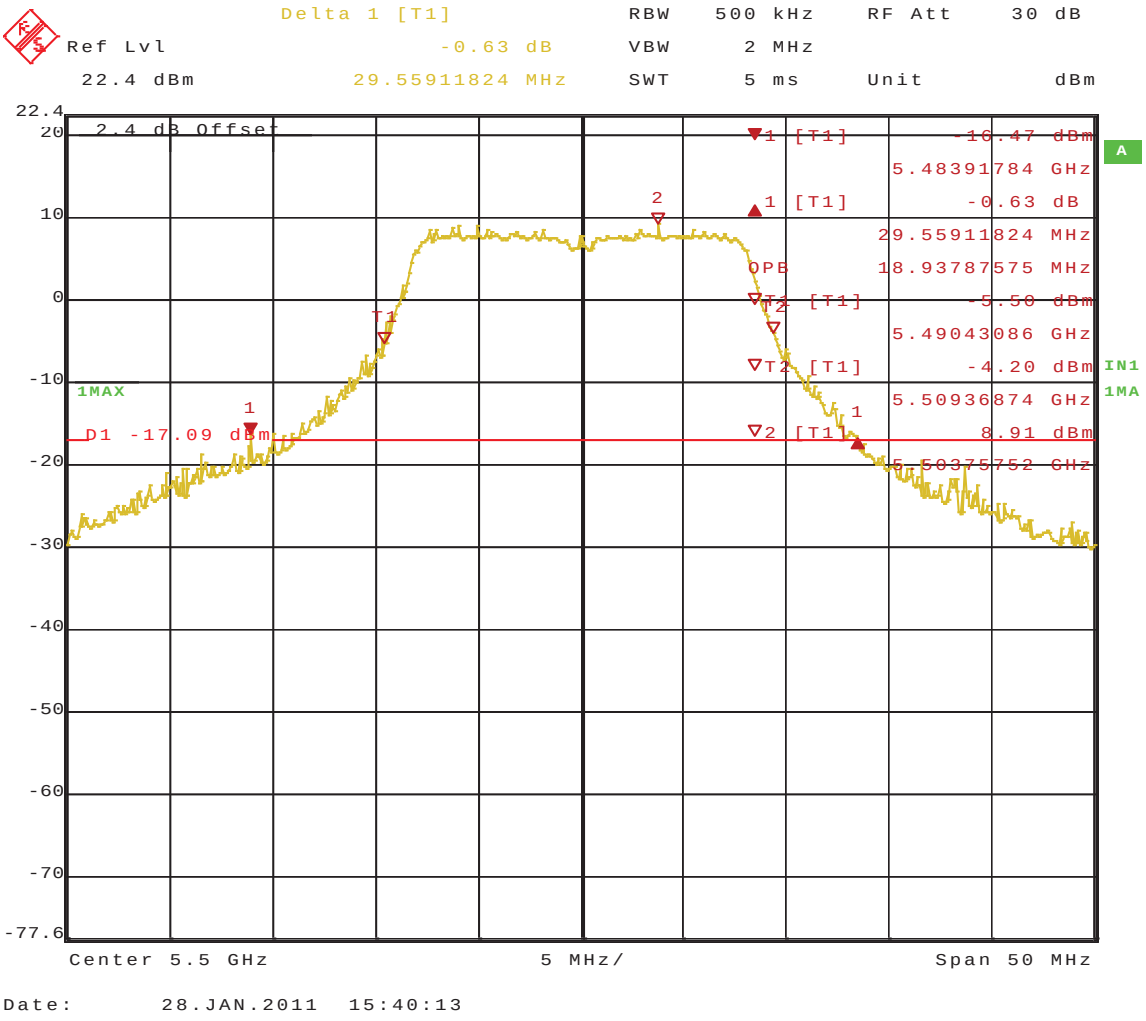


Figure 171: 26 dB and 99% Bandwidth – 5500 MHz, Chain 1

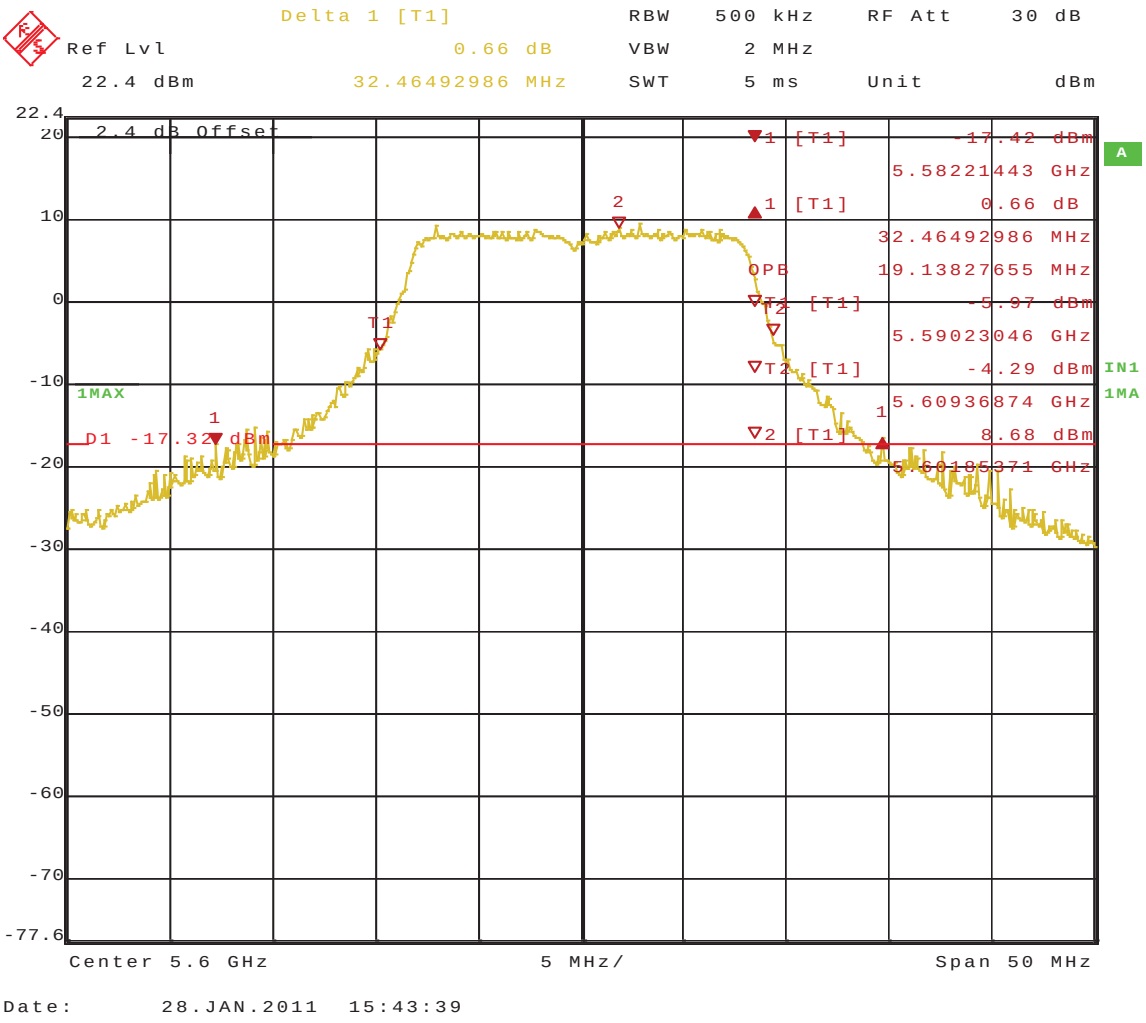


Figure 172: 26 dB and 99% Bandwidth – 5600 MHz, Chain 1

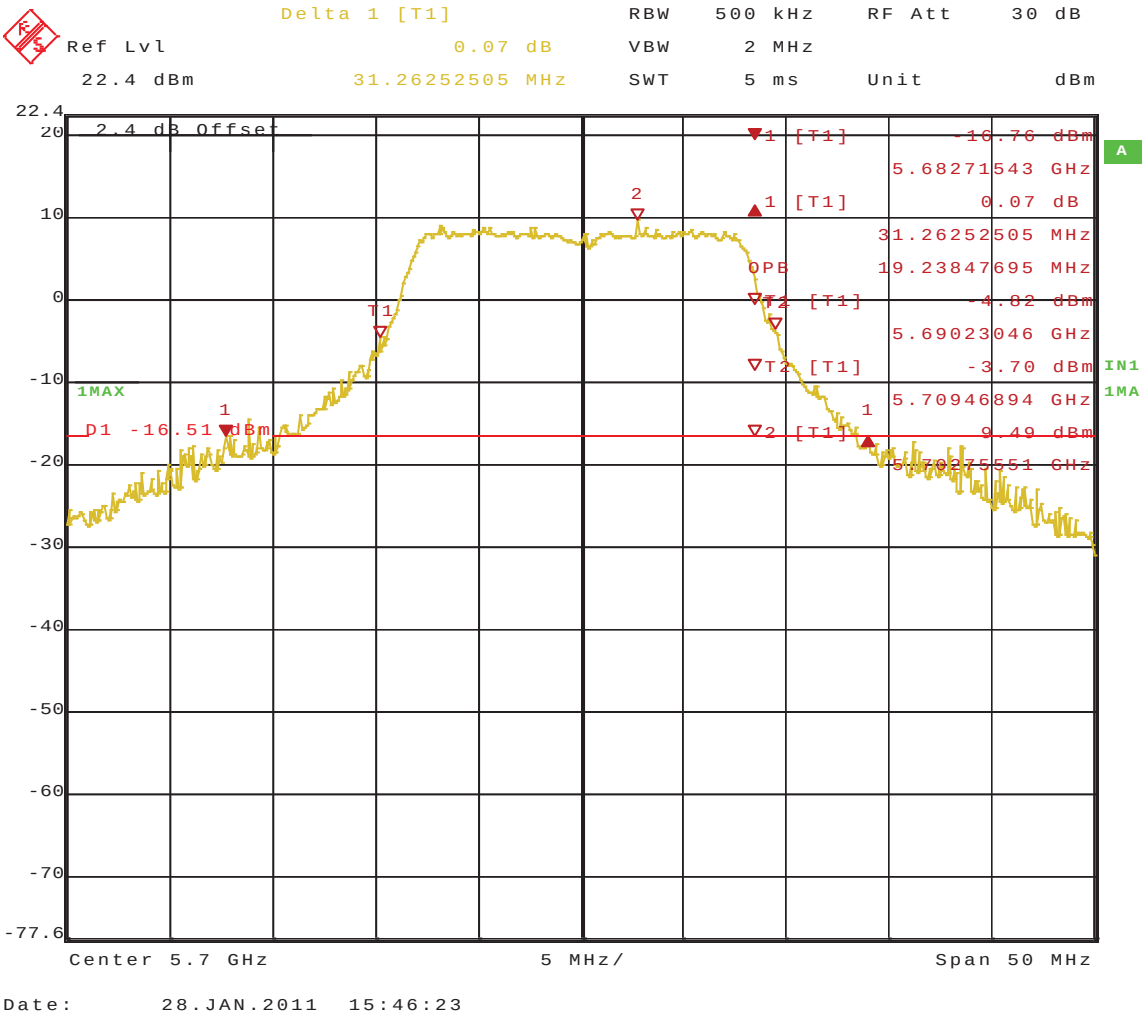


Figure 173: 26 dB and 99% Bandwidth – 5700 MHz, Chain 1

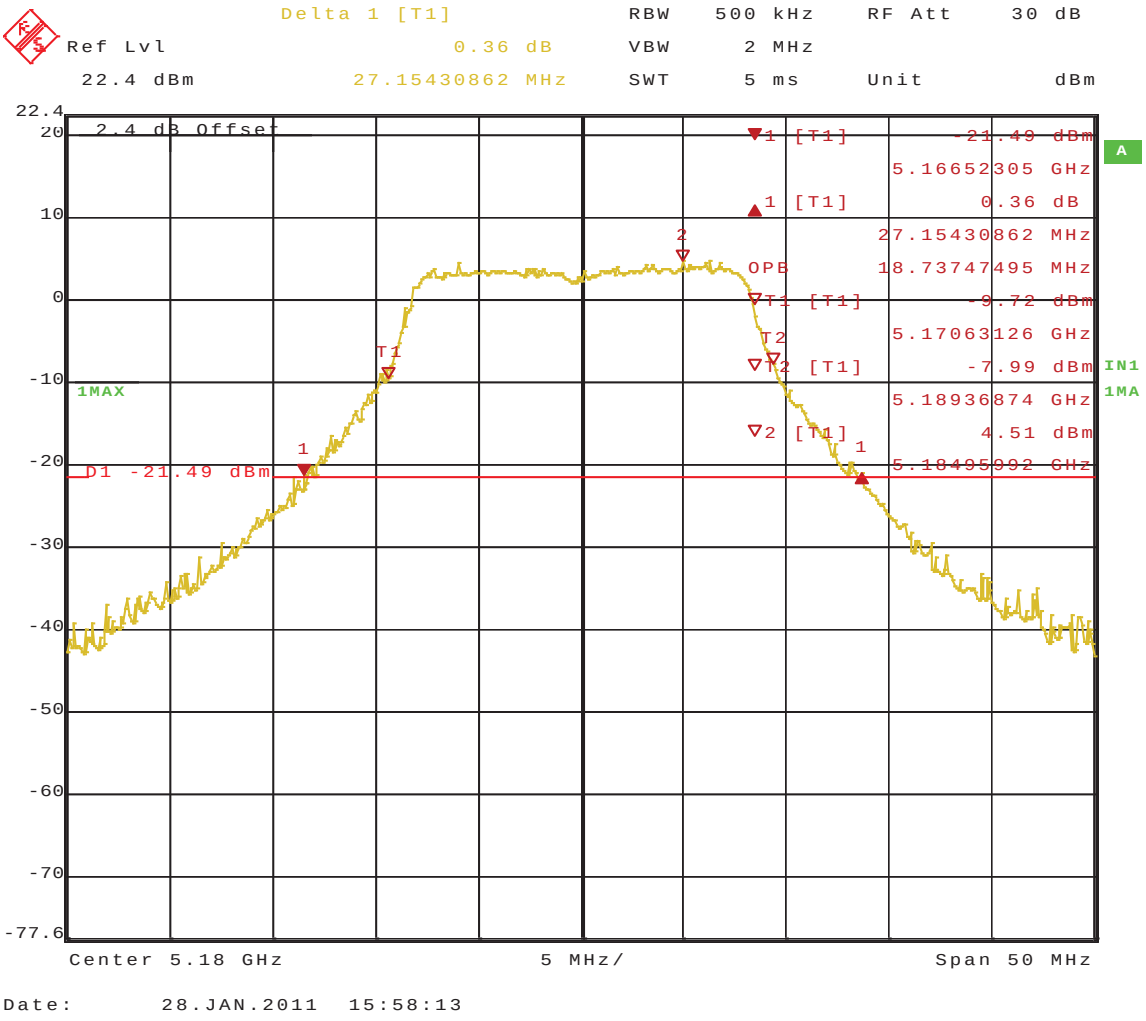


Figure 174: 26 dB and 99% Bandwidth – 5180 MHz, Chain 2

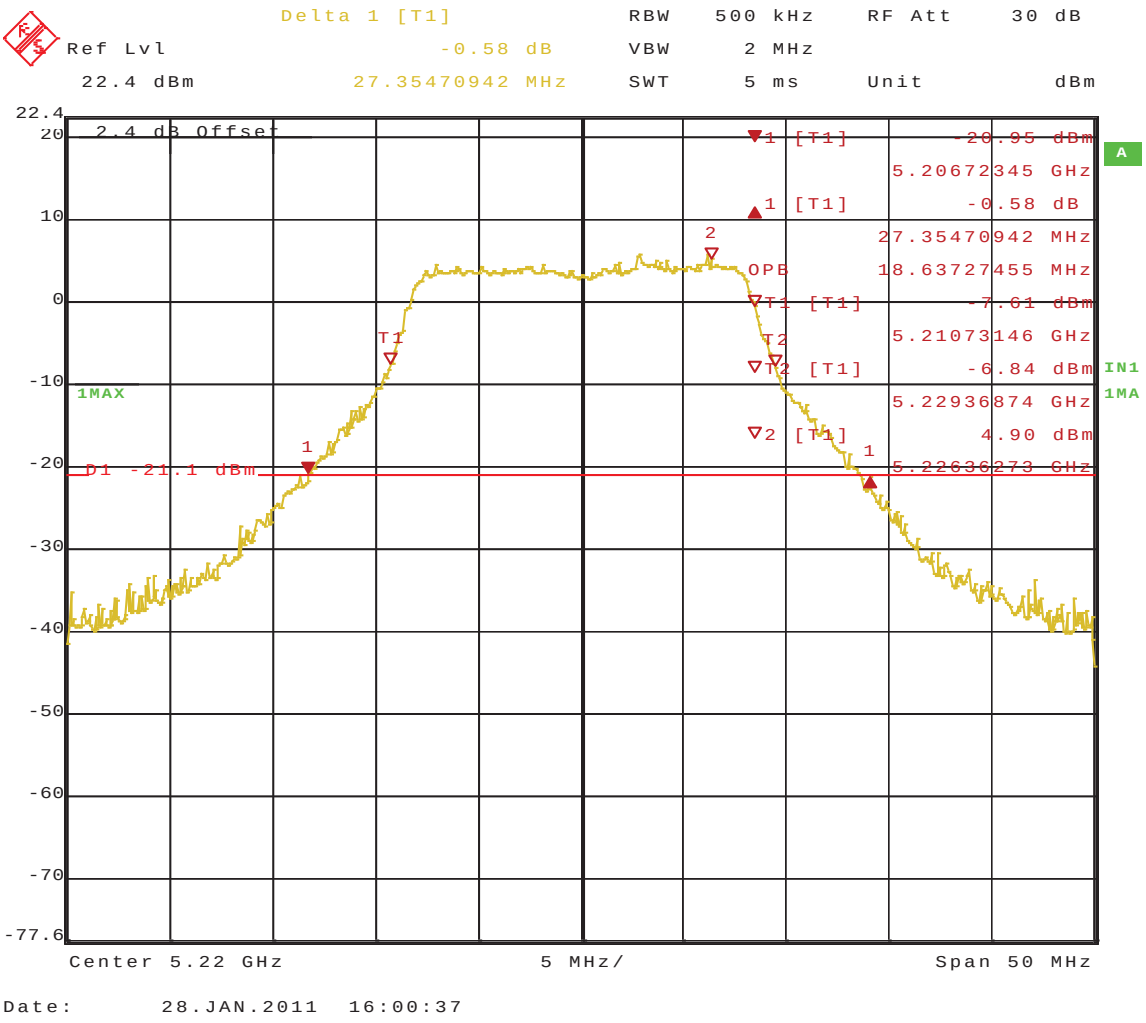


Figure 175: 26 dB and 99% Bandwidth – 5220 MHz, Chain 2

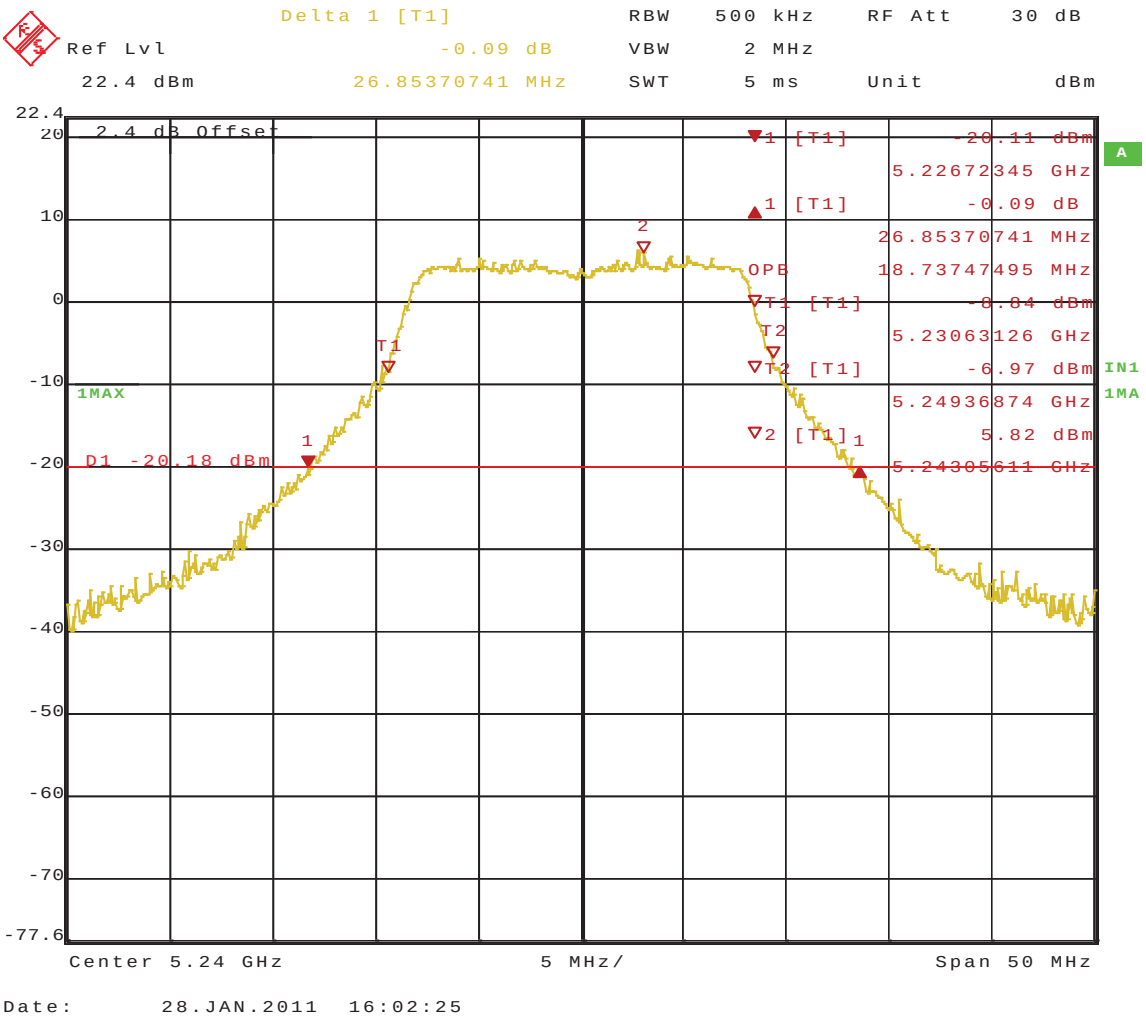


Figure 176: 26 dB and 99% Bandwidth – 5240 MHz, Chain 2

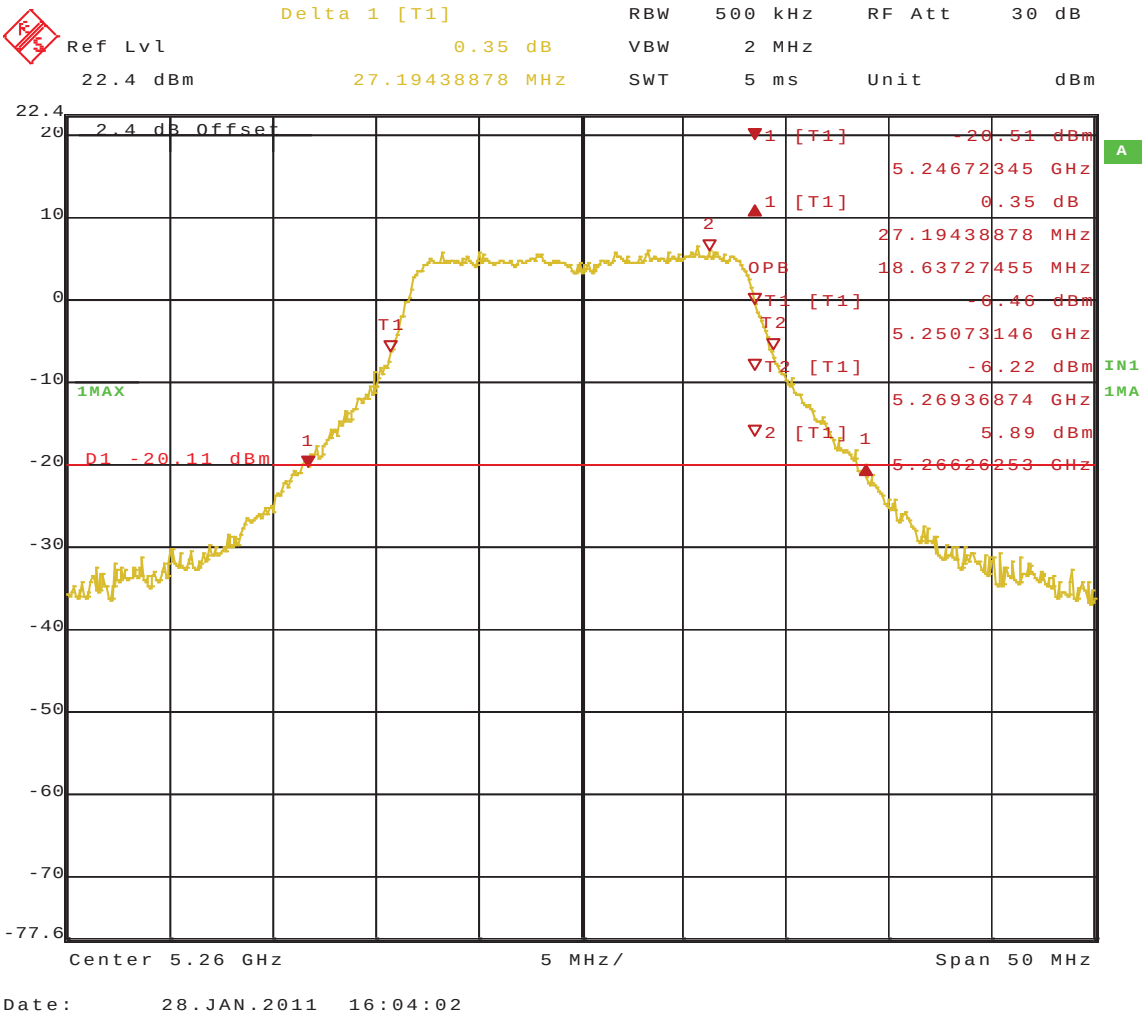


Figure 177: 26 dB and 99% Bandwidth – 5260 MHz, Chain 2

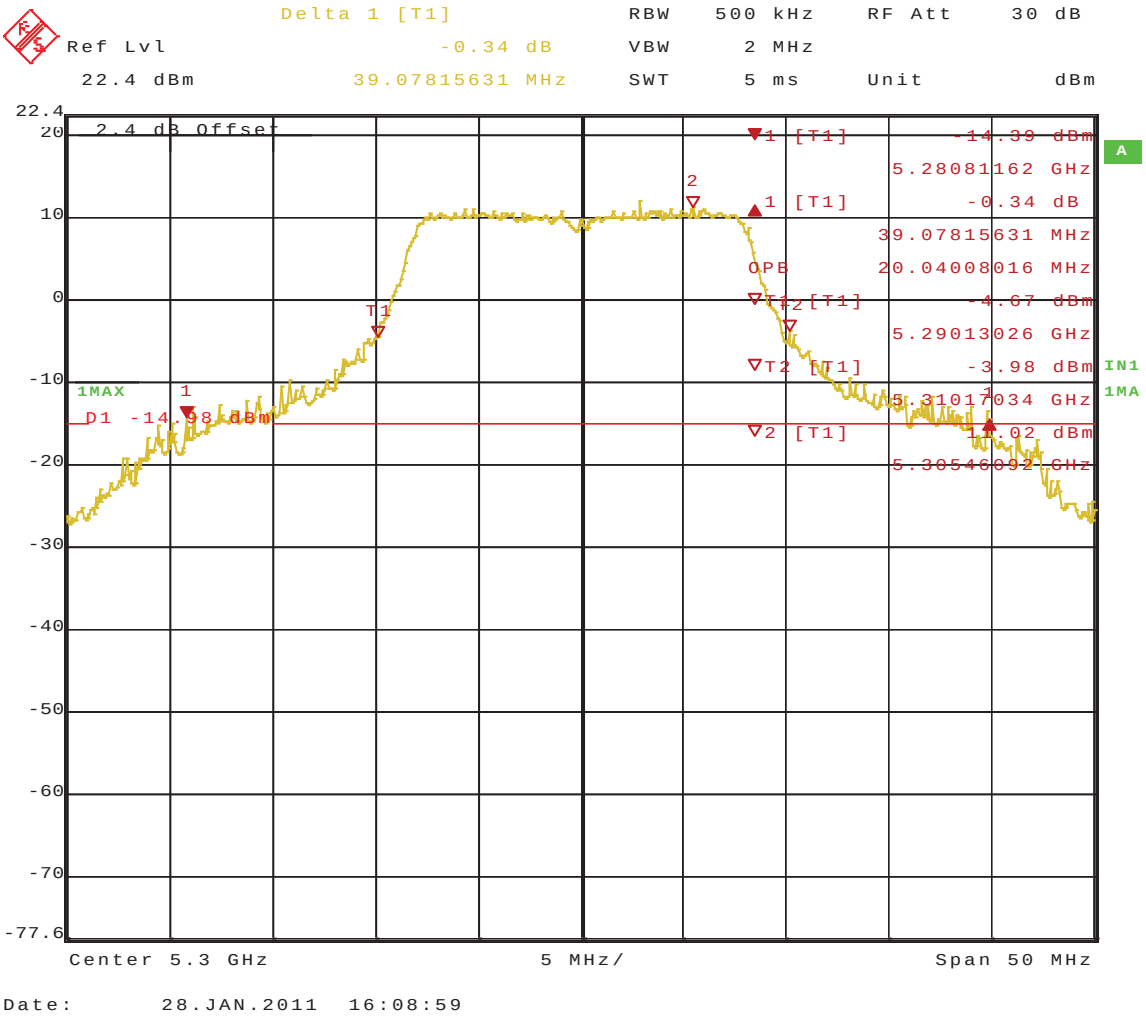


Figure 178: 26 dB and 99% Bandwidth – 5300 MHz, Chain 2

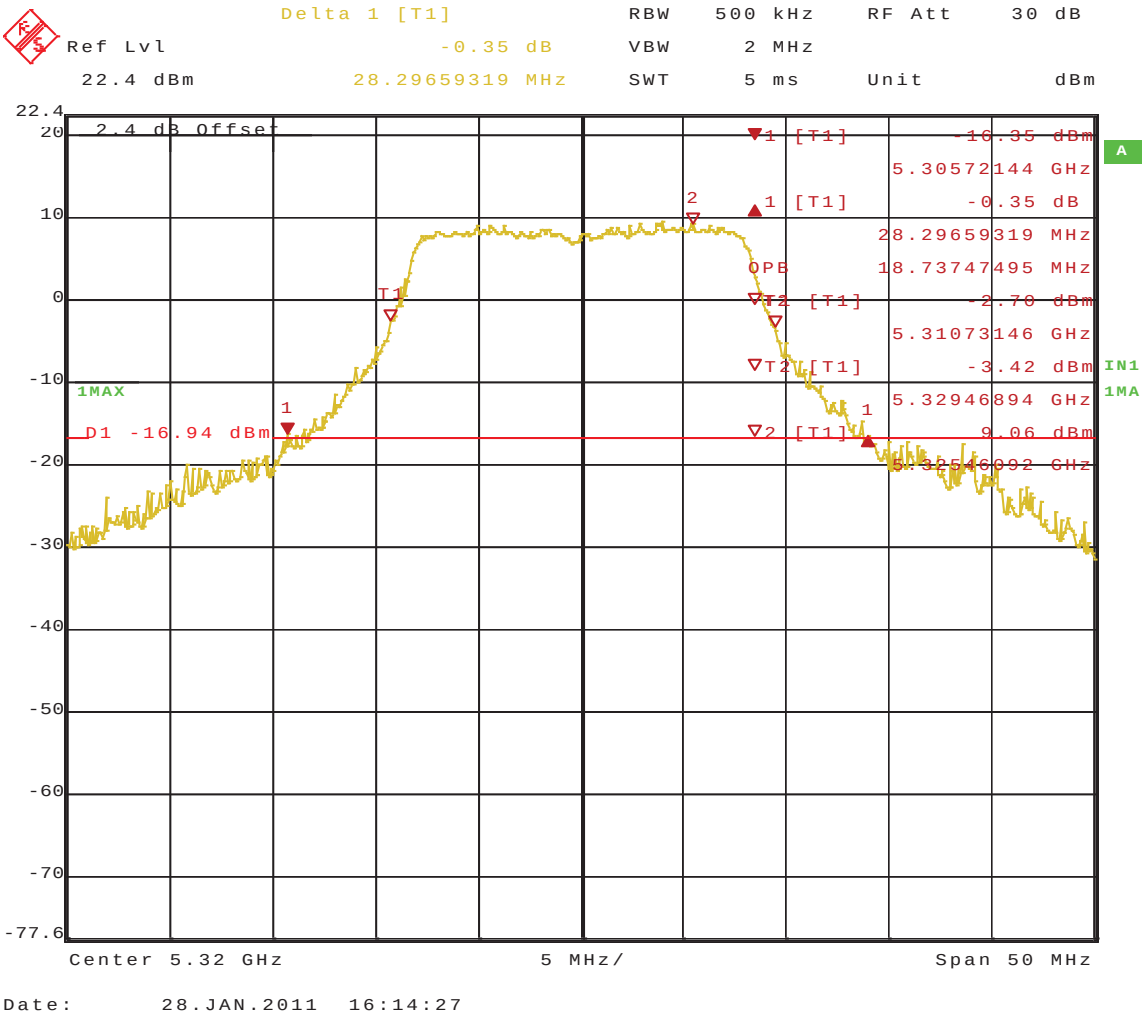


Figure 179: 26 dB and 99% Bandwidth – 5320 MHz, Chain 2

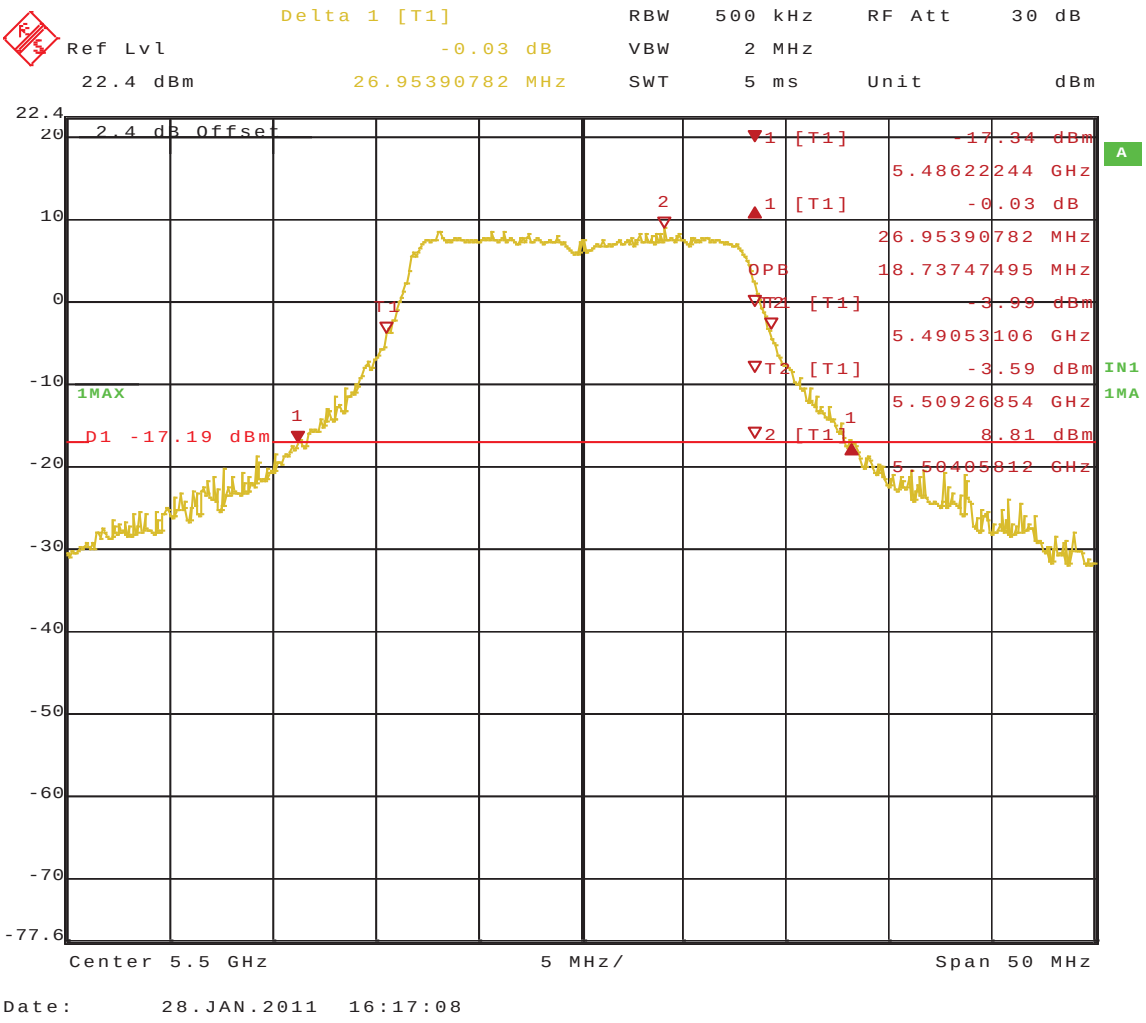


Figure 180: 26 dB and 99% Bandwidth – 5500 MHz, Chain 2

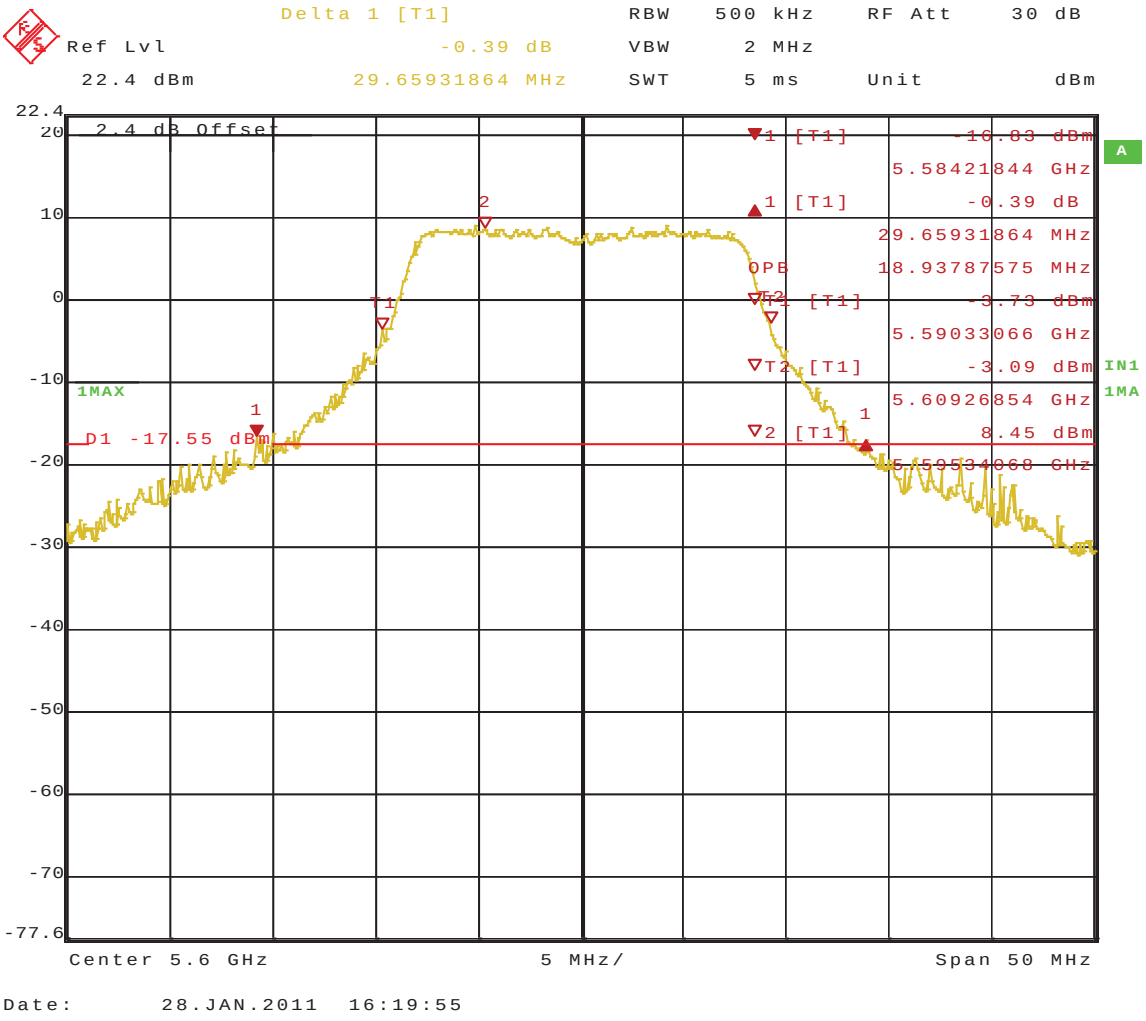


Figure 181: 26 dB and 99% Bandwidth – 5600 MHz, Chain 2

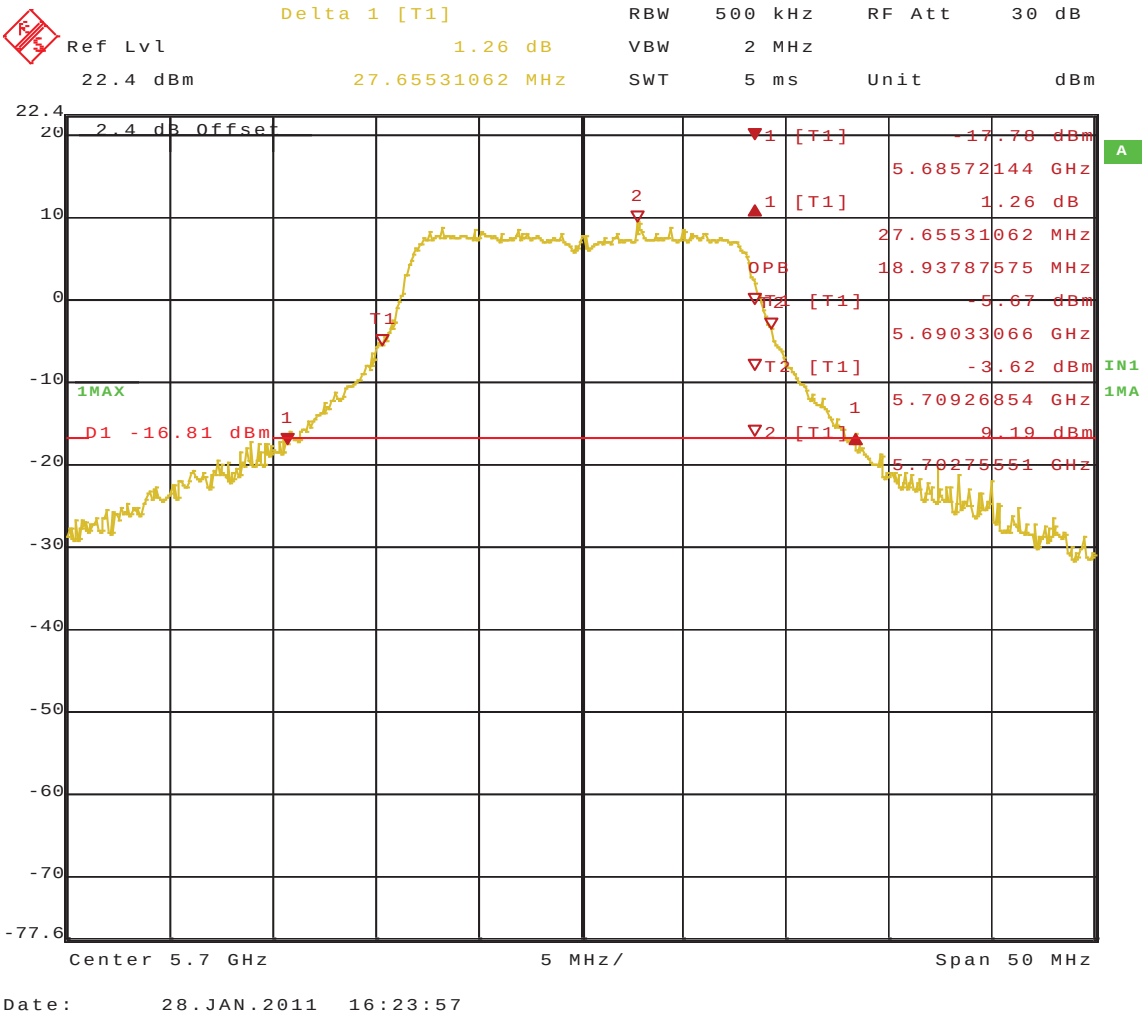


Figure 182: 26 dB and 99% Bandwidth – 5700 MHz, Chain 2

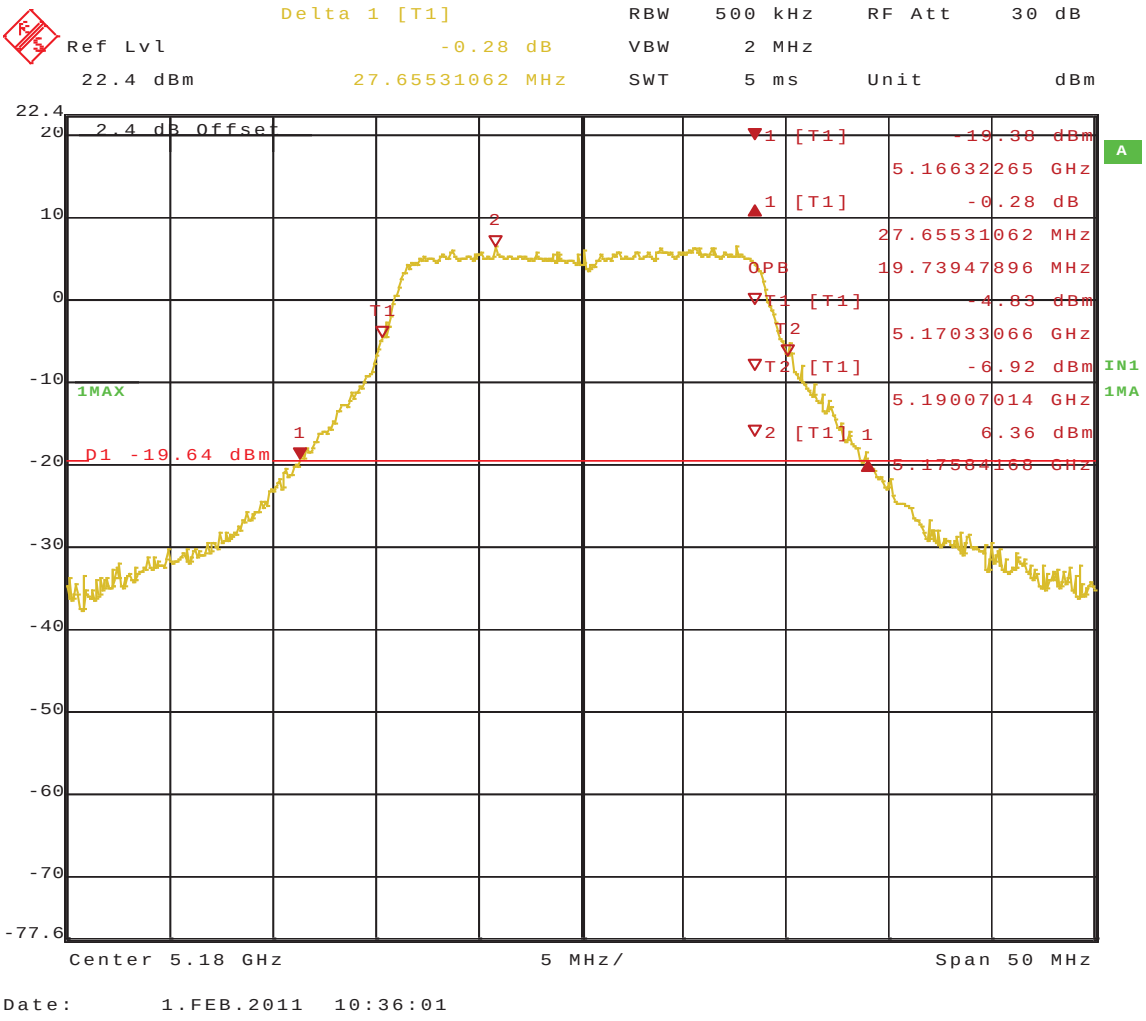


Figure 183: 26 dB and 99% Bandwidth – 5180 MHz, Chain 0, HT20

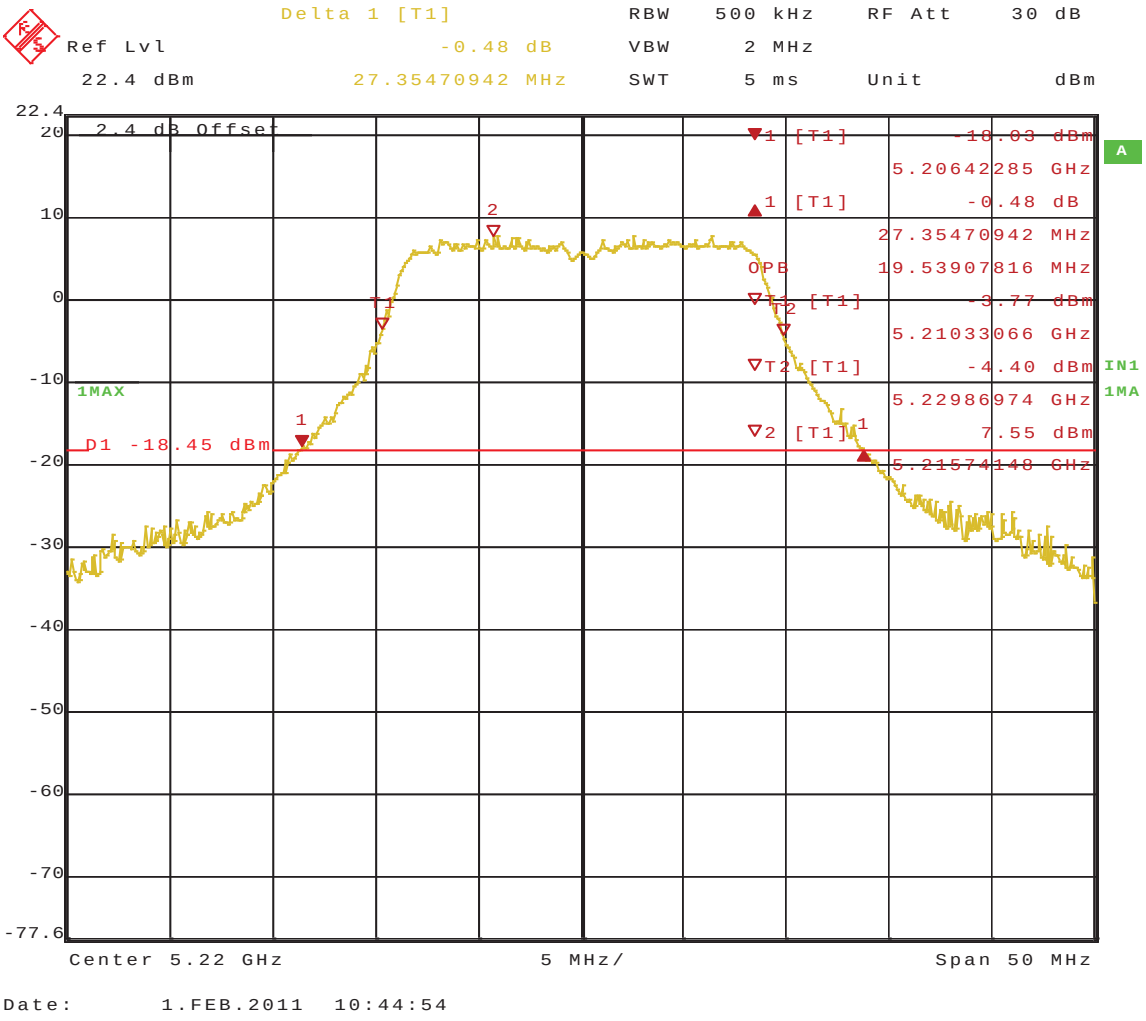


Figure 184: 26 dB and 99% Bandwidth – 5220 MHz, Chain 0, HT20

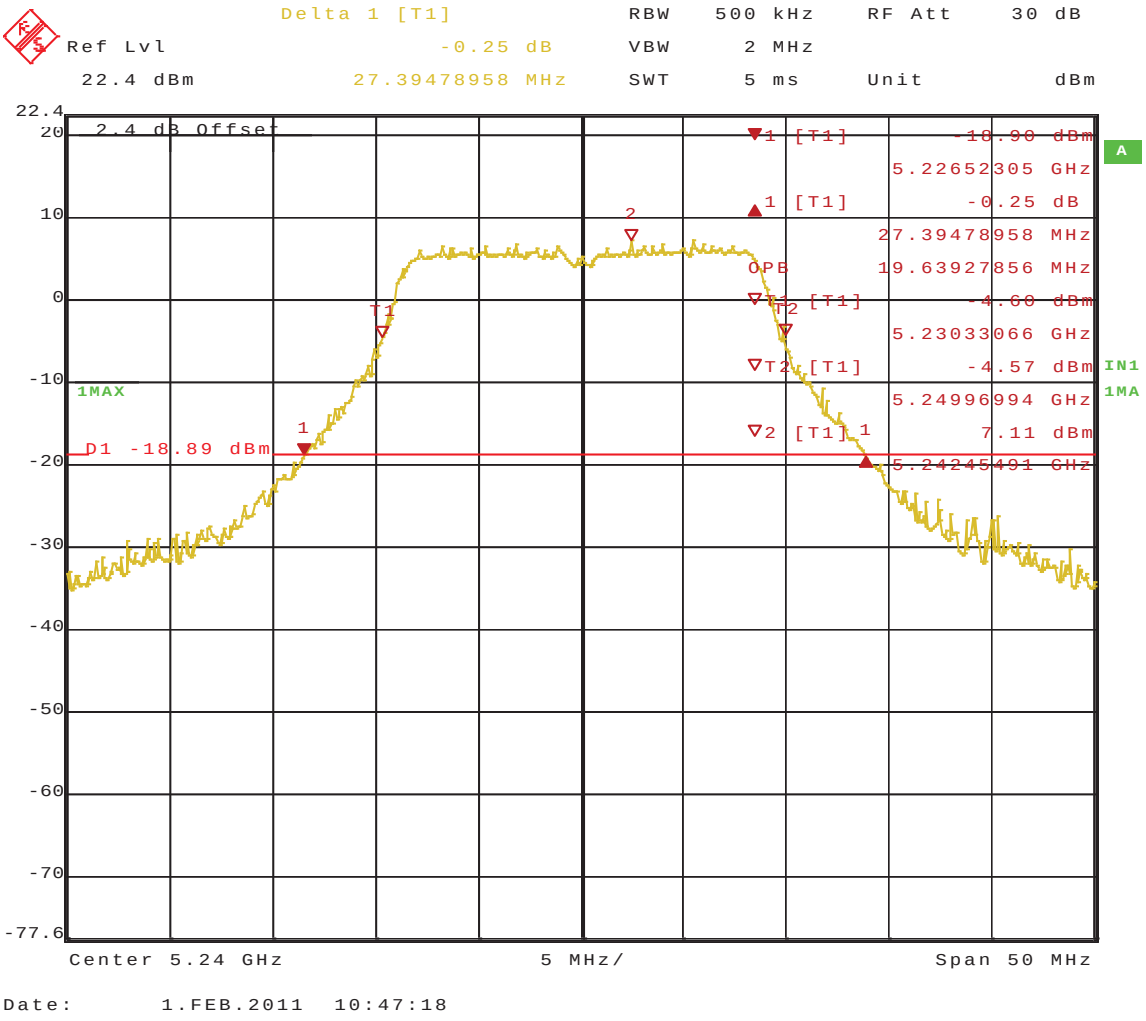


Figure 185: 26 dB and 99% Bandwidth – 5240 MHz, Chain 0, HT20

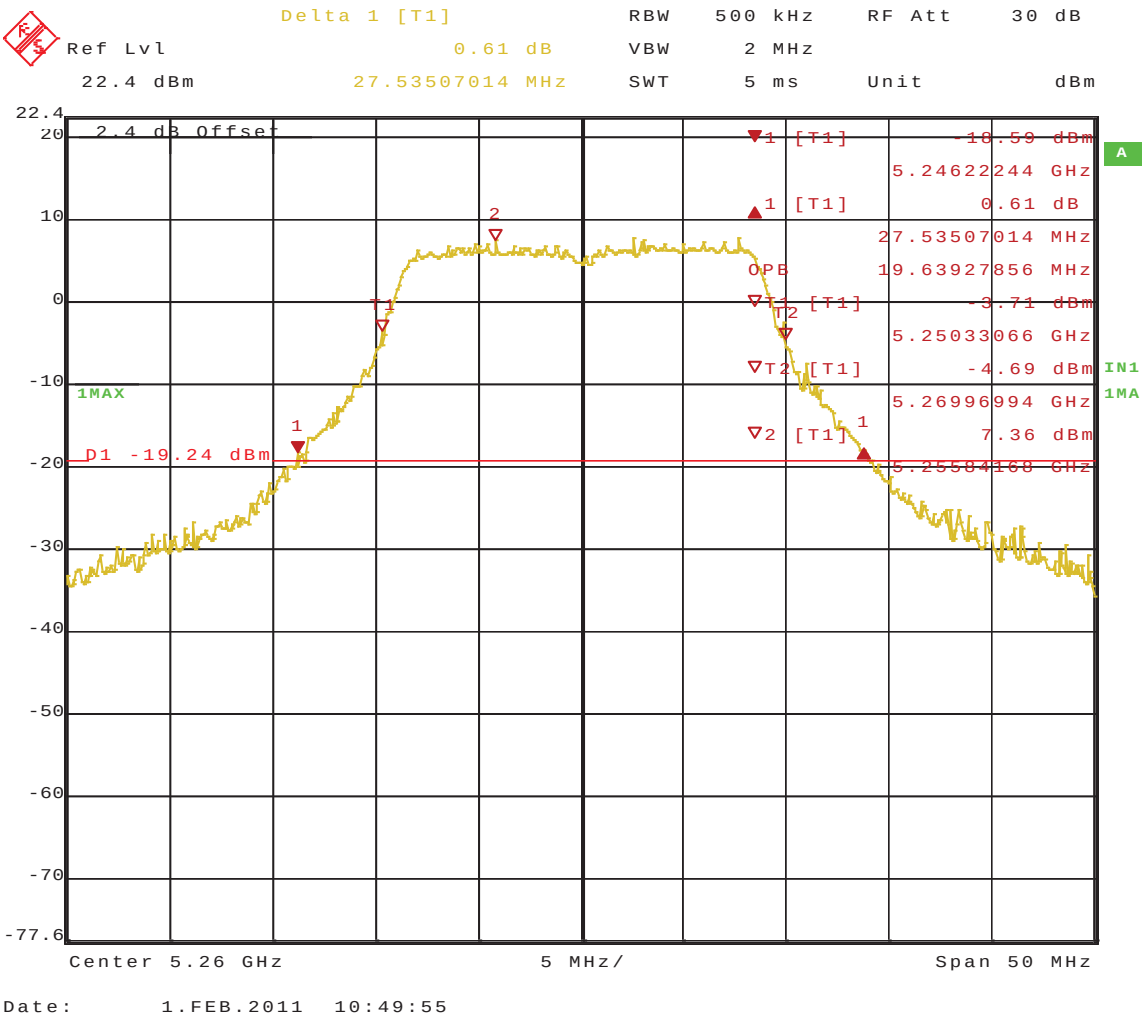


Figure 186: 26 dB and 99% Bandwidth – 5260 MHz, Chain 0, HT20

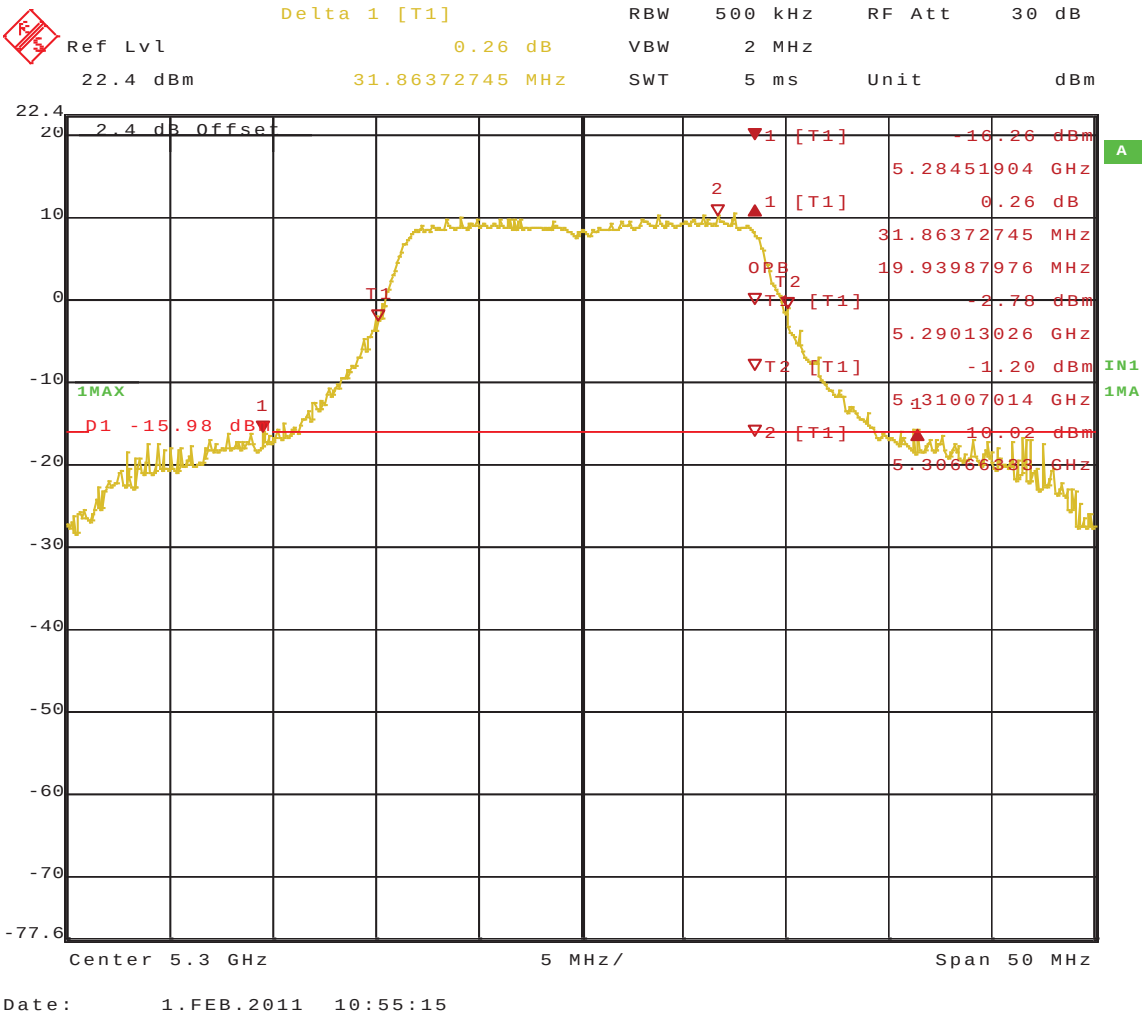


Figure 187: 26 dB and 99% Bandwidth – 5300 MHz, Chain 0, HT20

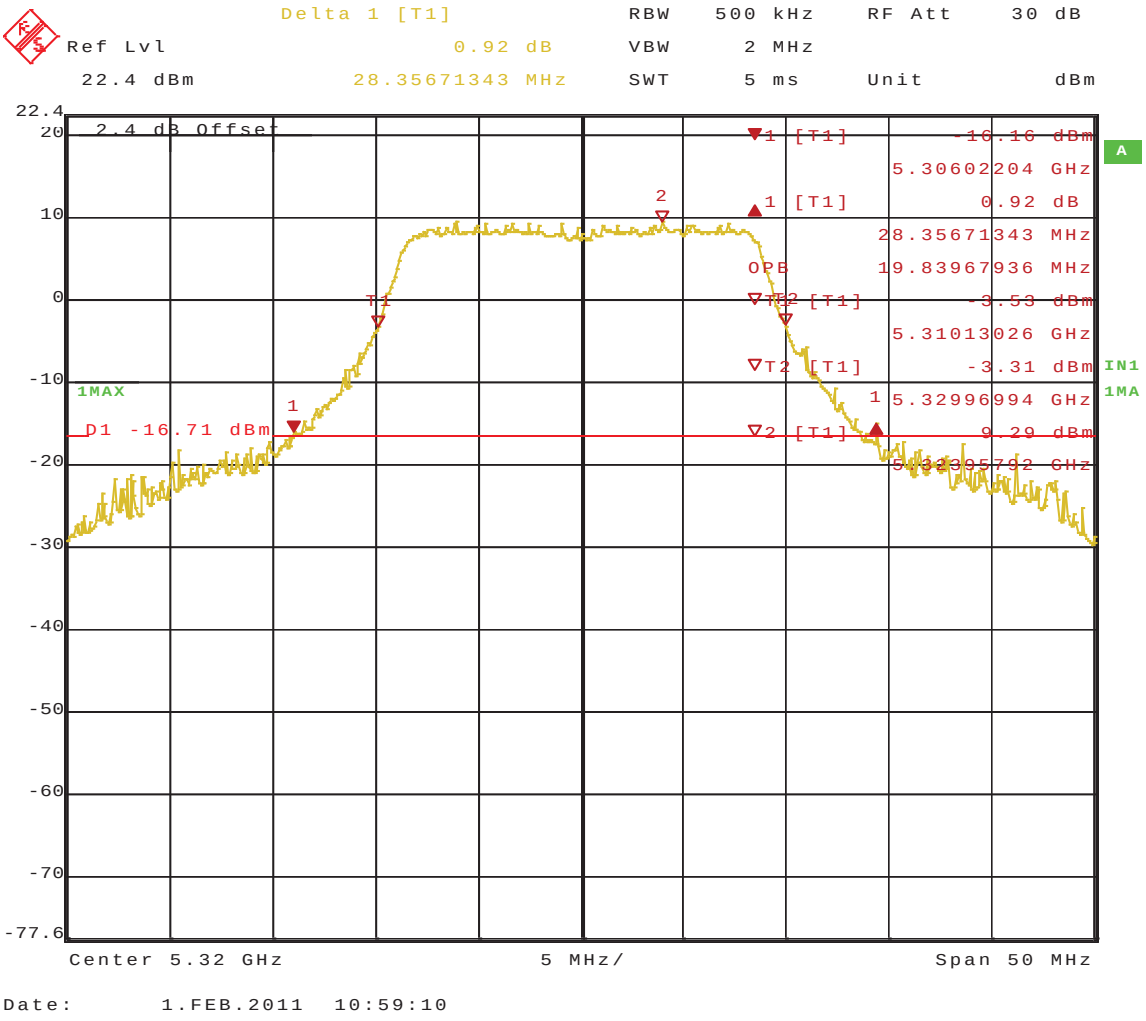


Figure 188: 26 dB and 99% Bandwidth – 5320 MHz, Chain 0, HT20

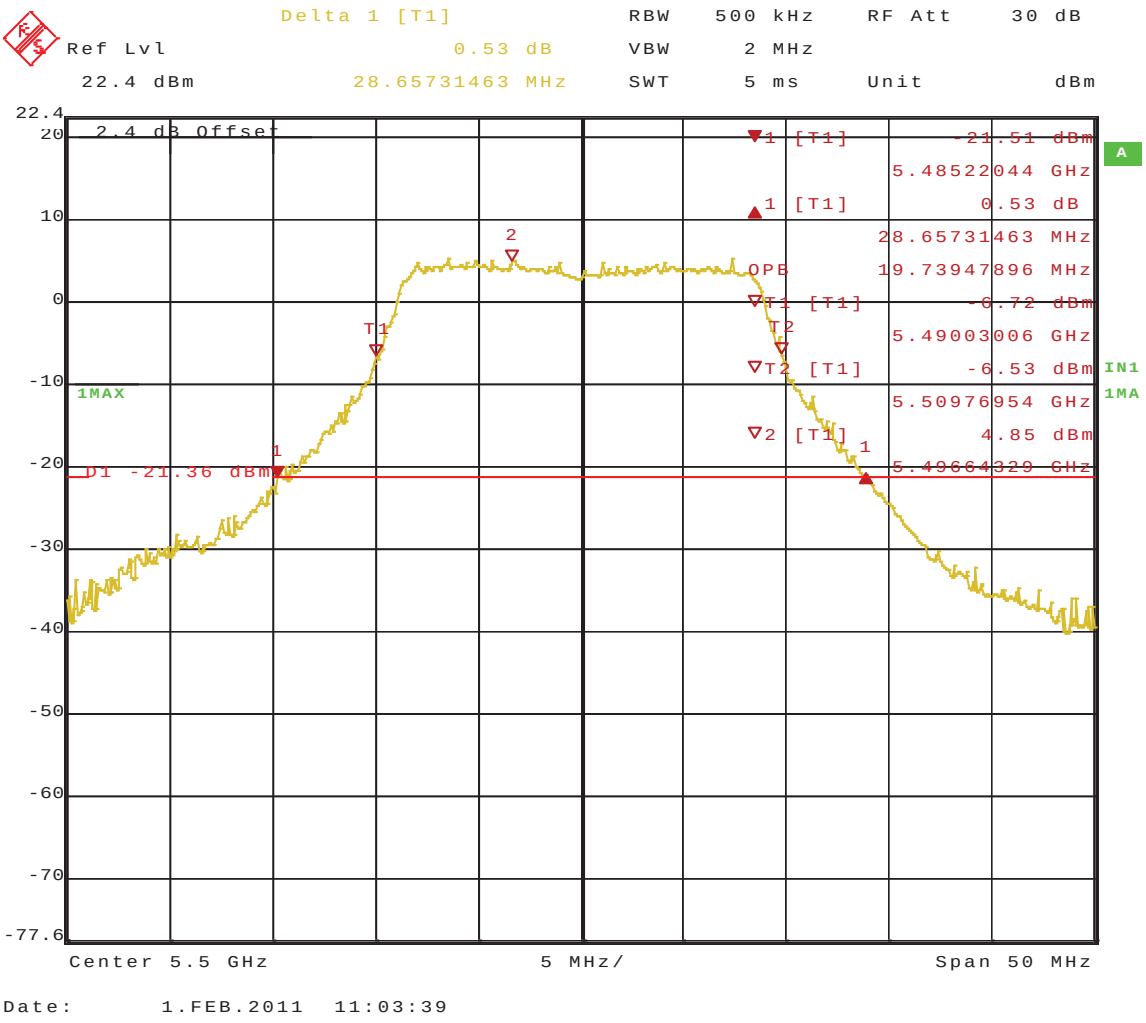


Figure 189: 26 dB and 99% Bandwidth – 5500 MHz, Chain 0, HT20

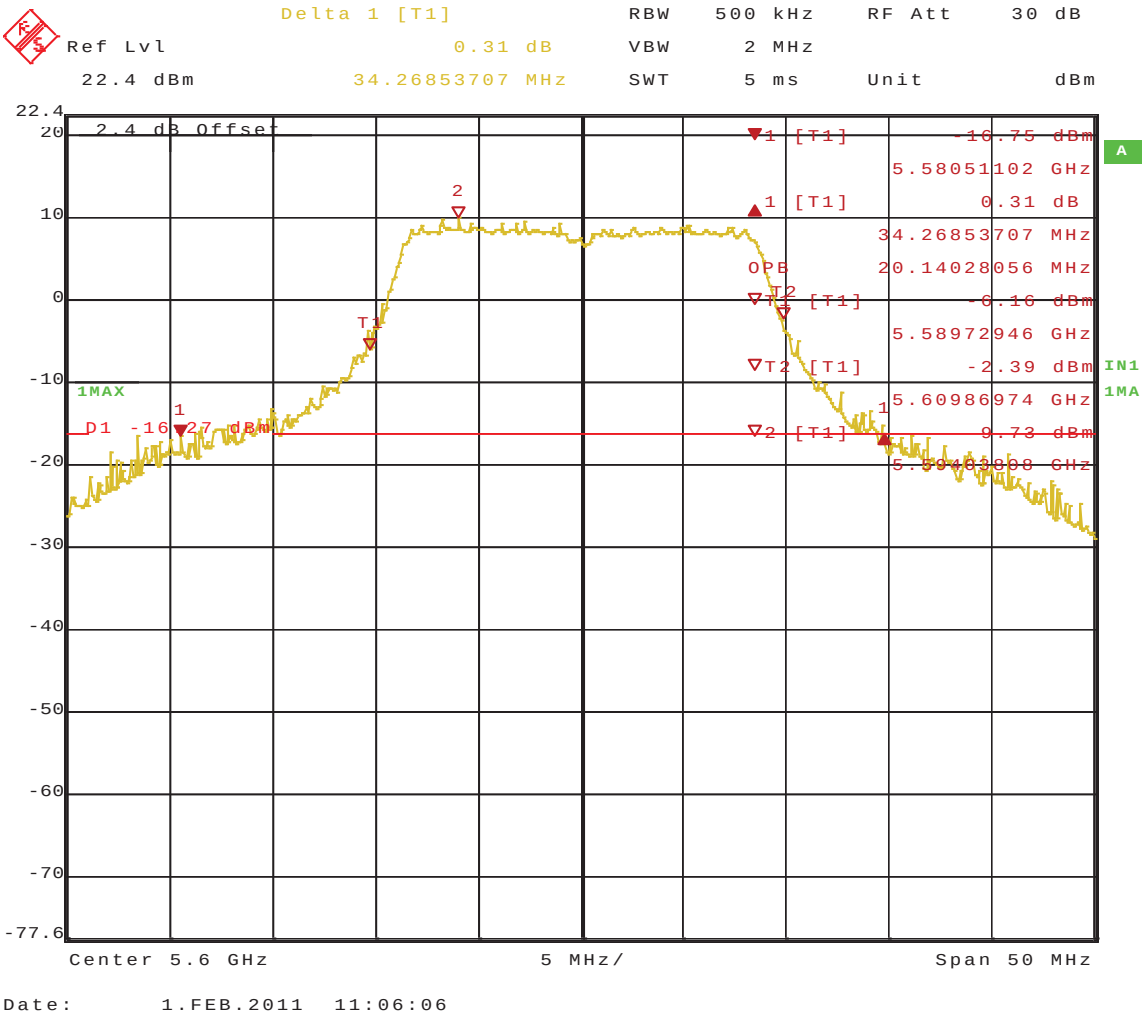


Figure 190: 26 dB and 99% Bandwidth – 5600 MHz, Chain 0, HT20

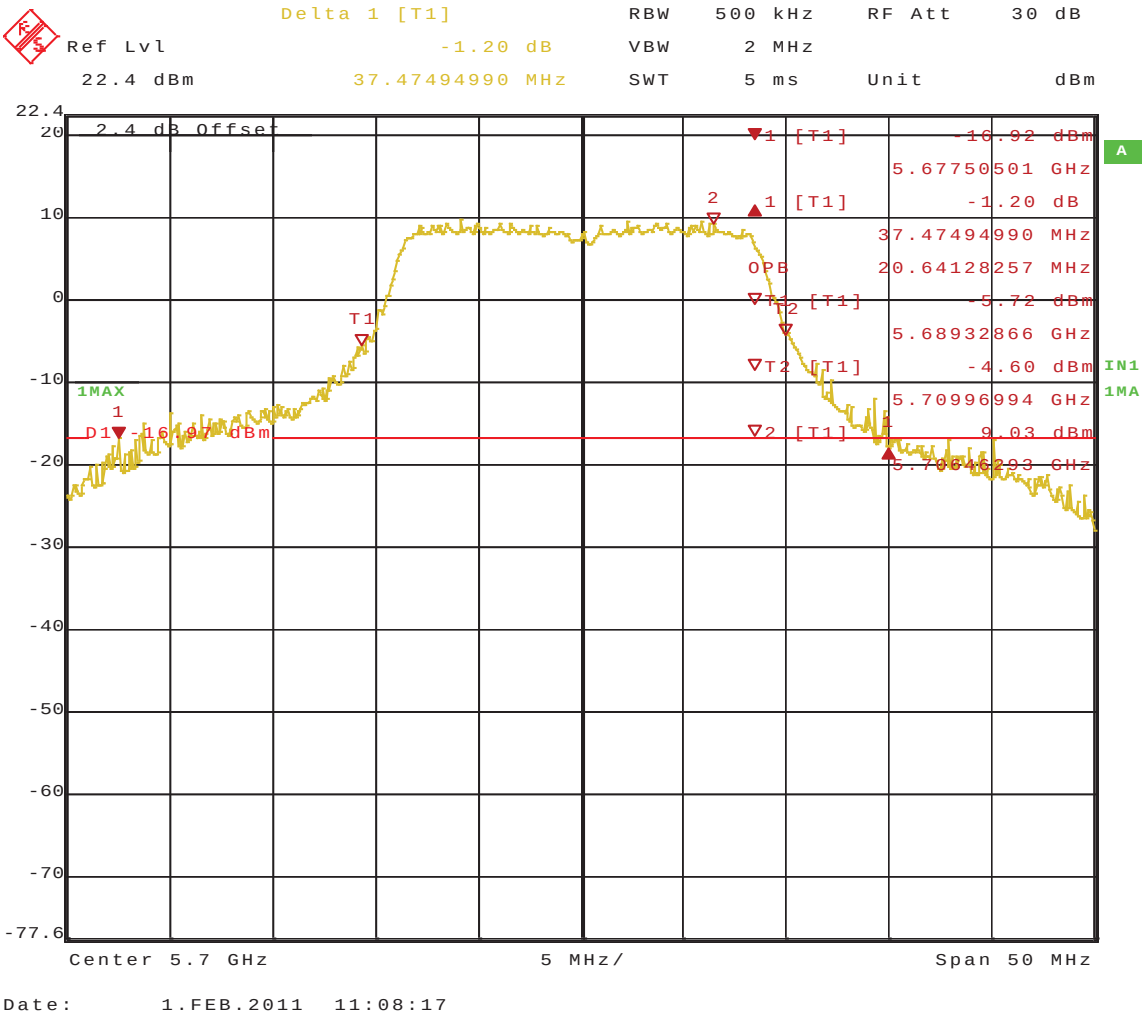


Figure 191: 26 dB and 99% Bandwidth – 5700 MHz, Chain 0, HT20

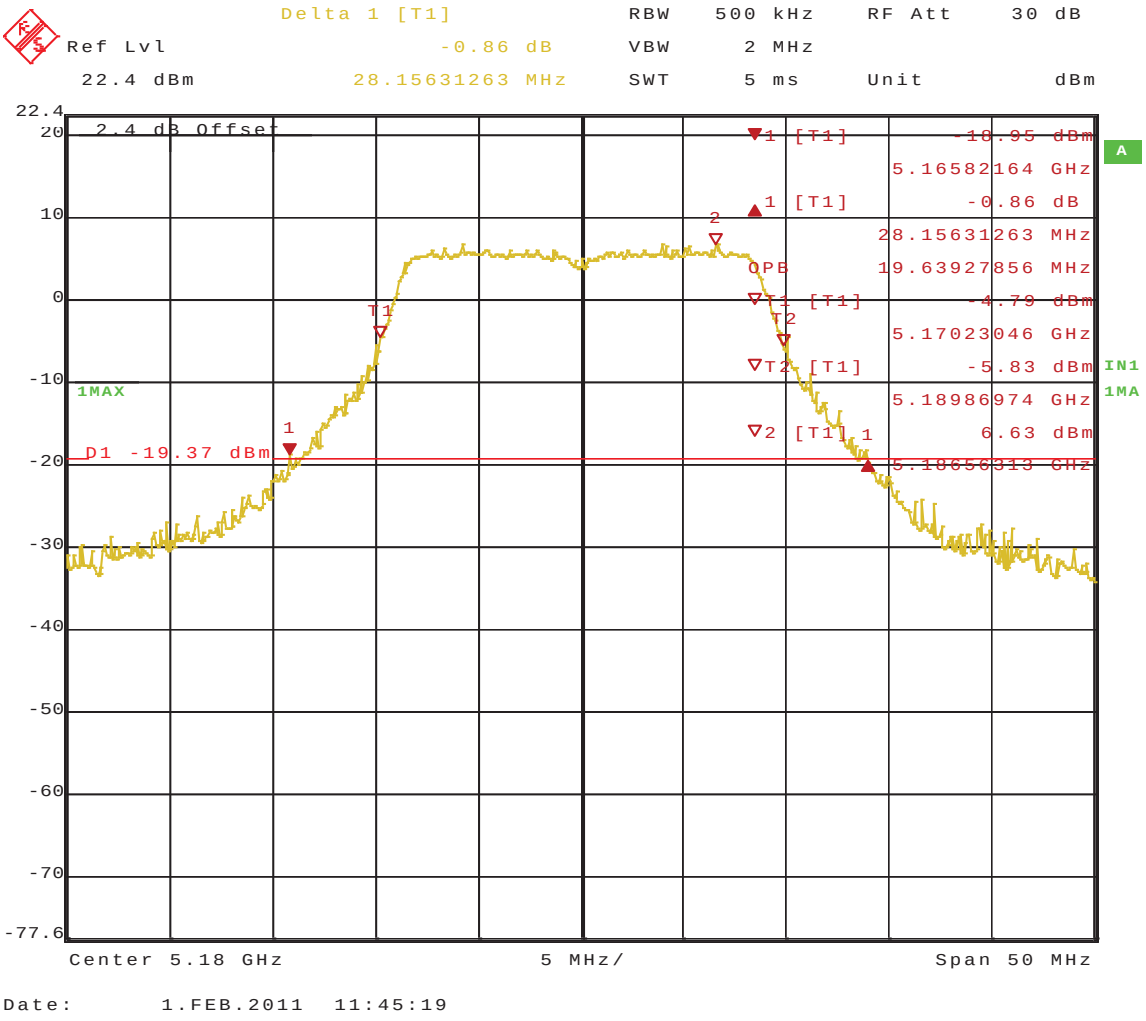


Figure 192: 26 dB and 99% Bandwidth – 5180 MHz, Chain 1, HT20

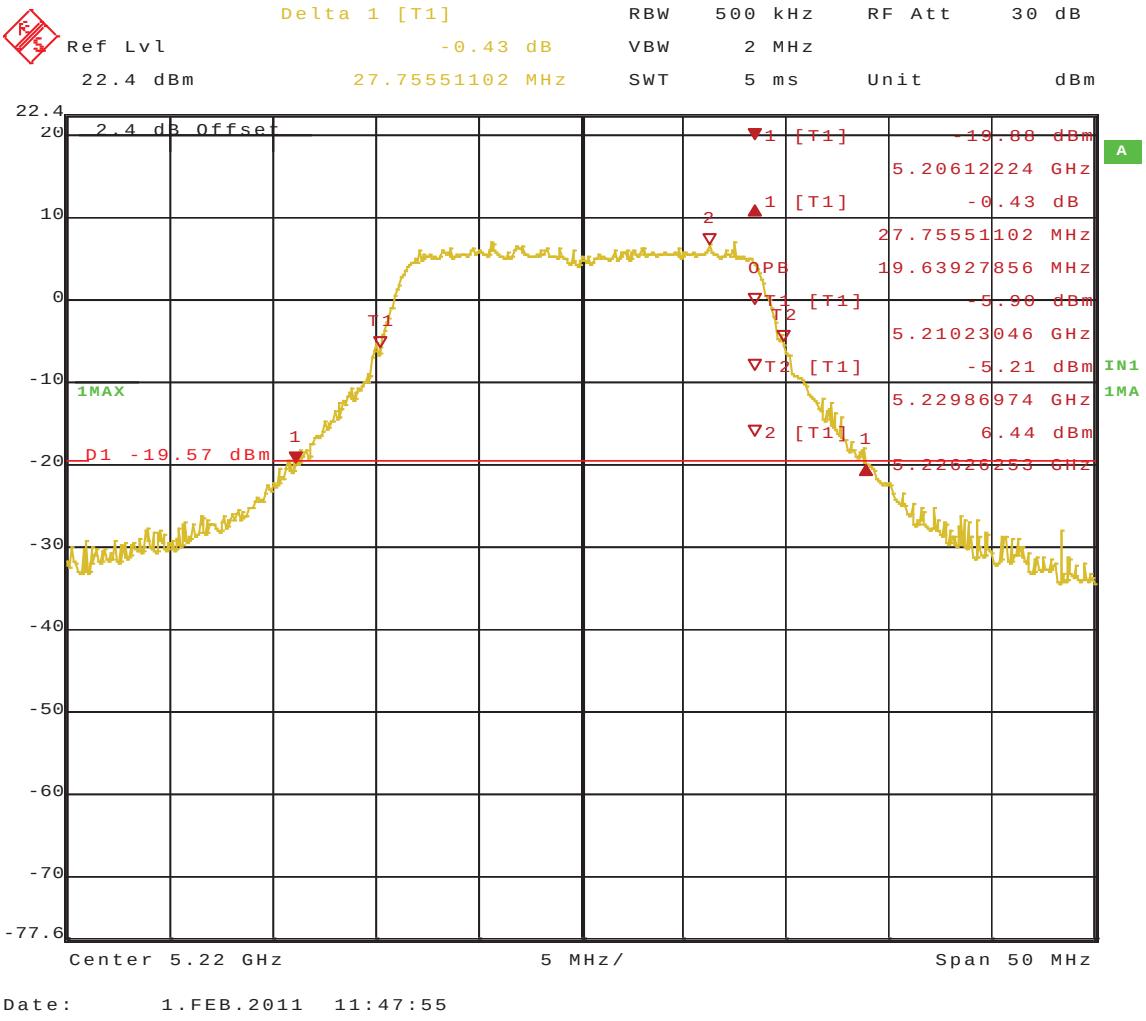


Figure 193: 26 dB and 99% Bandwidth – 5220 MHz, Chain 1, HT20

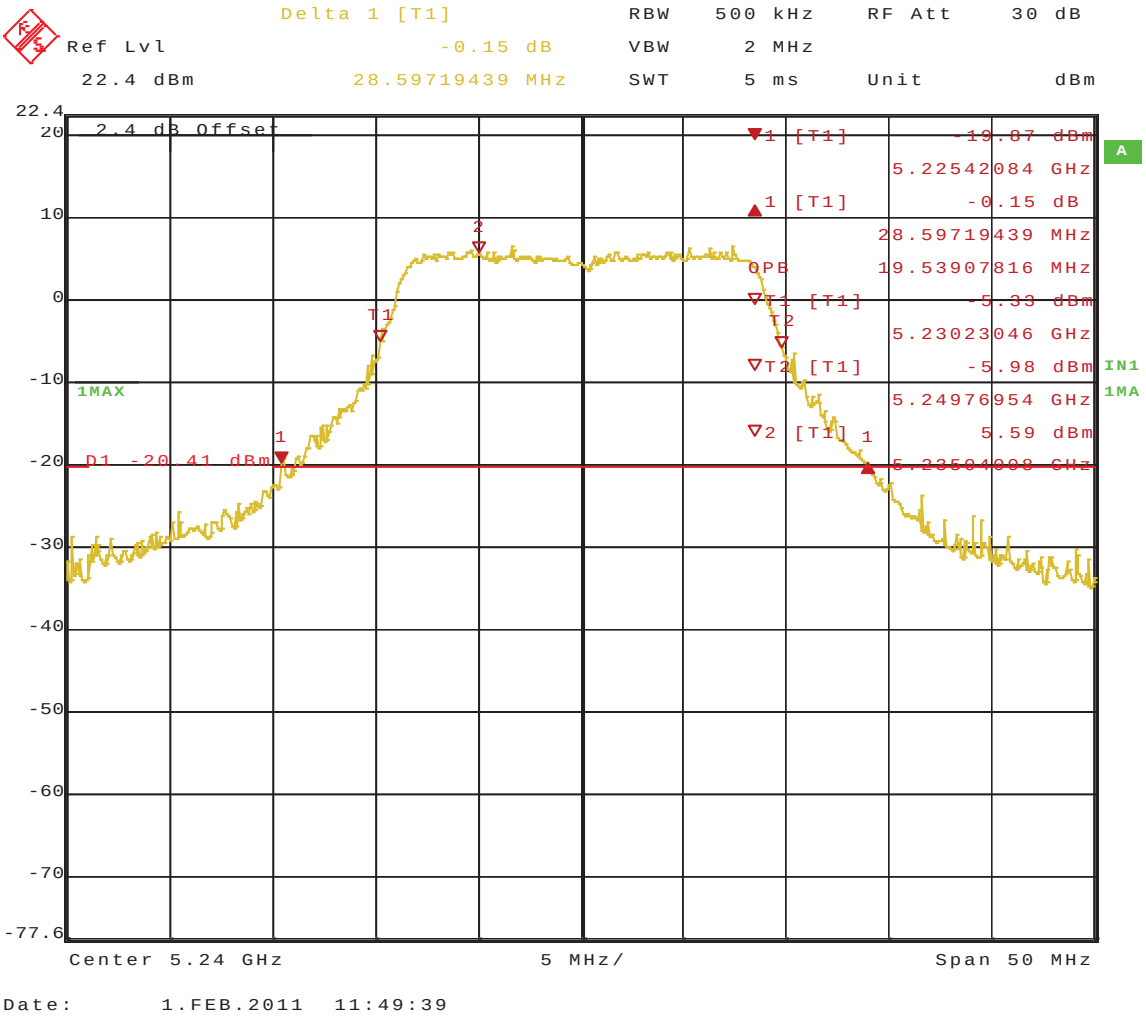


Figure 194: 26 dB and 99% Bandwidth – 5240 MHz, Chain 1, HT20

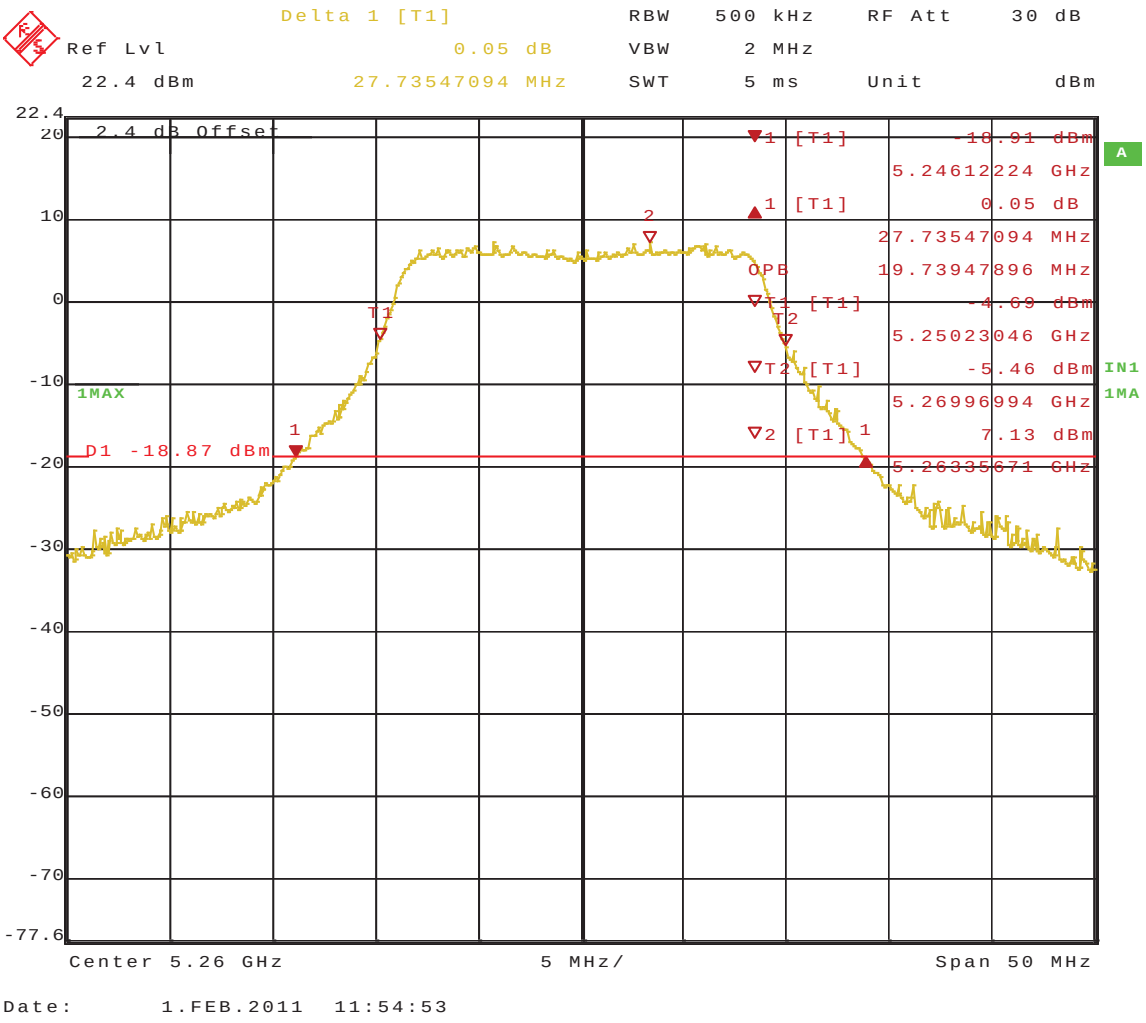


Figure 195: 26 dB and 99% Bandwidth – 5260 MHz, Chain 1, HT20

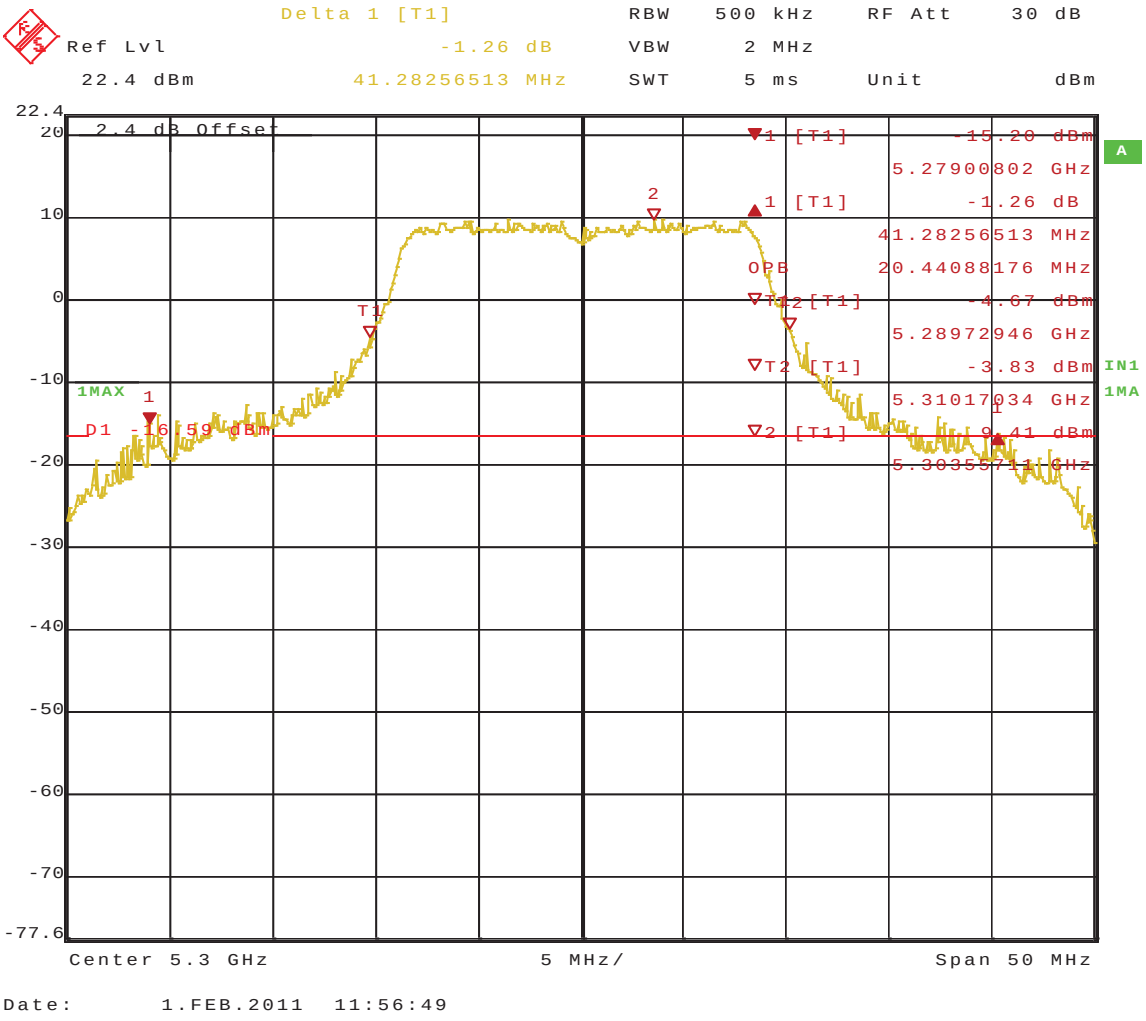


Figure 196: 26 dB and 99% Bandwidth – 5300 MHz, Chain 1, HT20

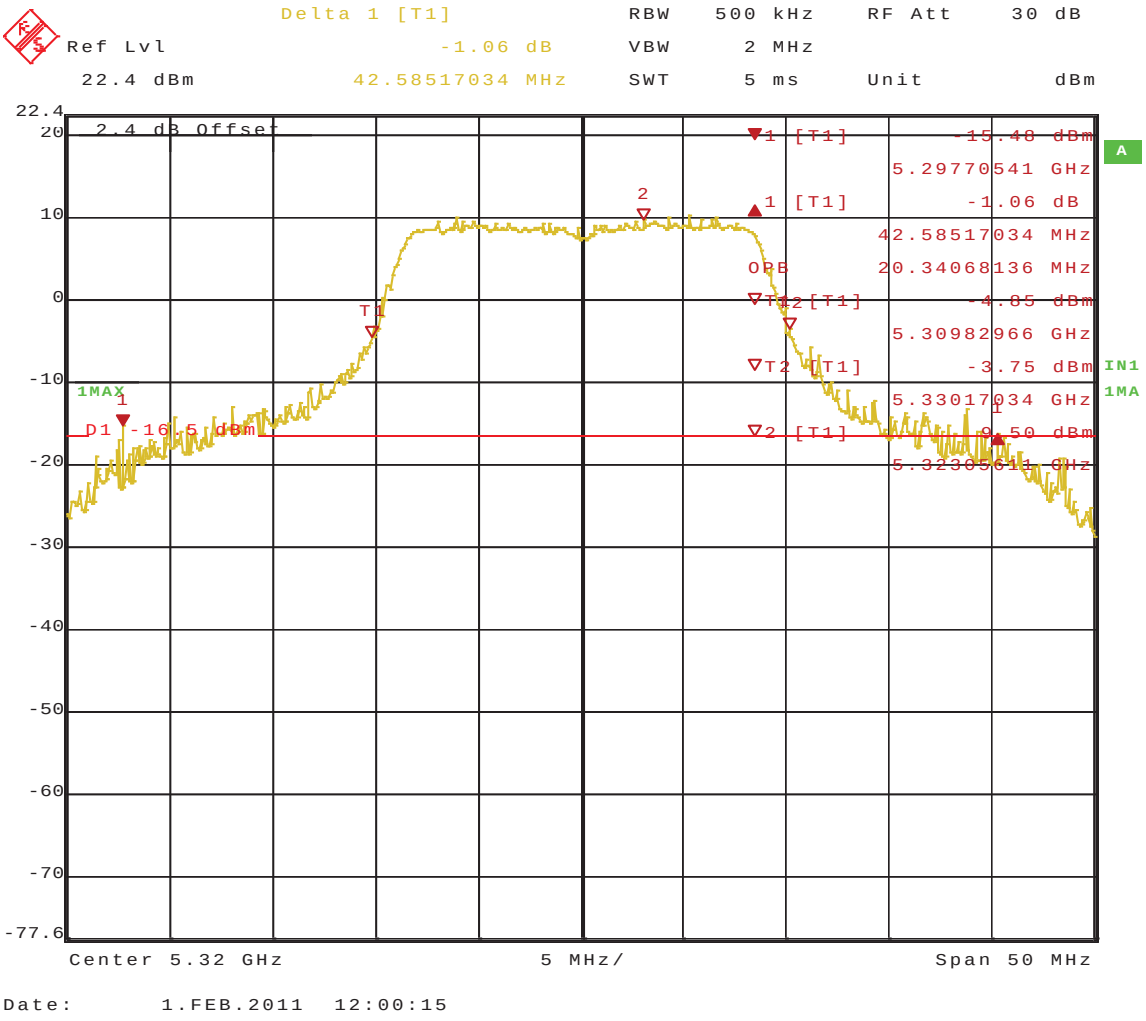


Figure 197: 26 dB and 99% Bandwidth – 5320 MHz, Chain 1, HT20

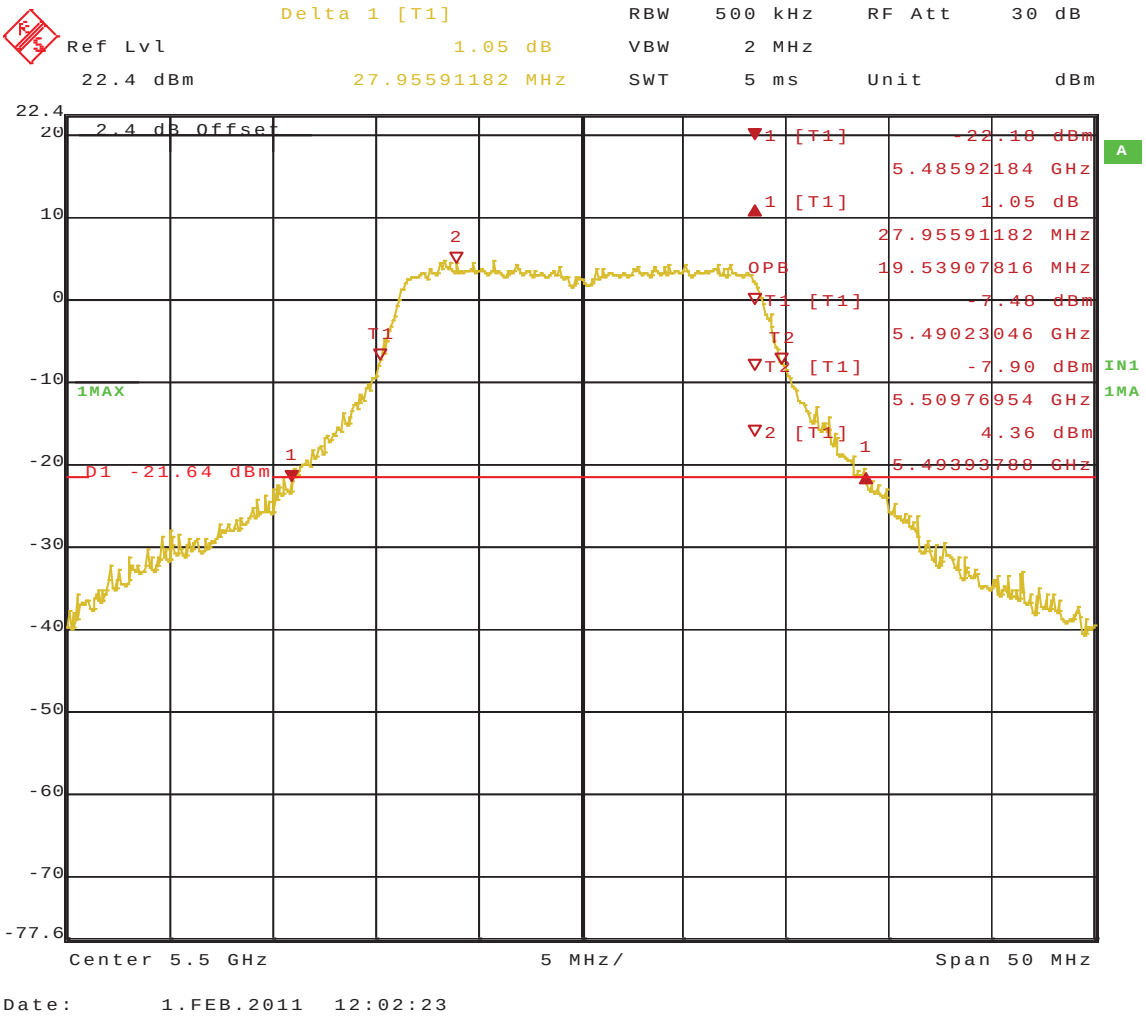


Figure 198: 26 dB and 99% Bandwidth – 5500 MHz, Chain 1, HT20

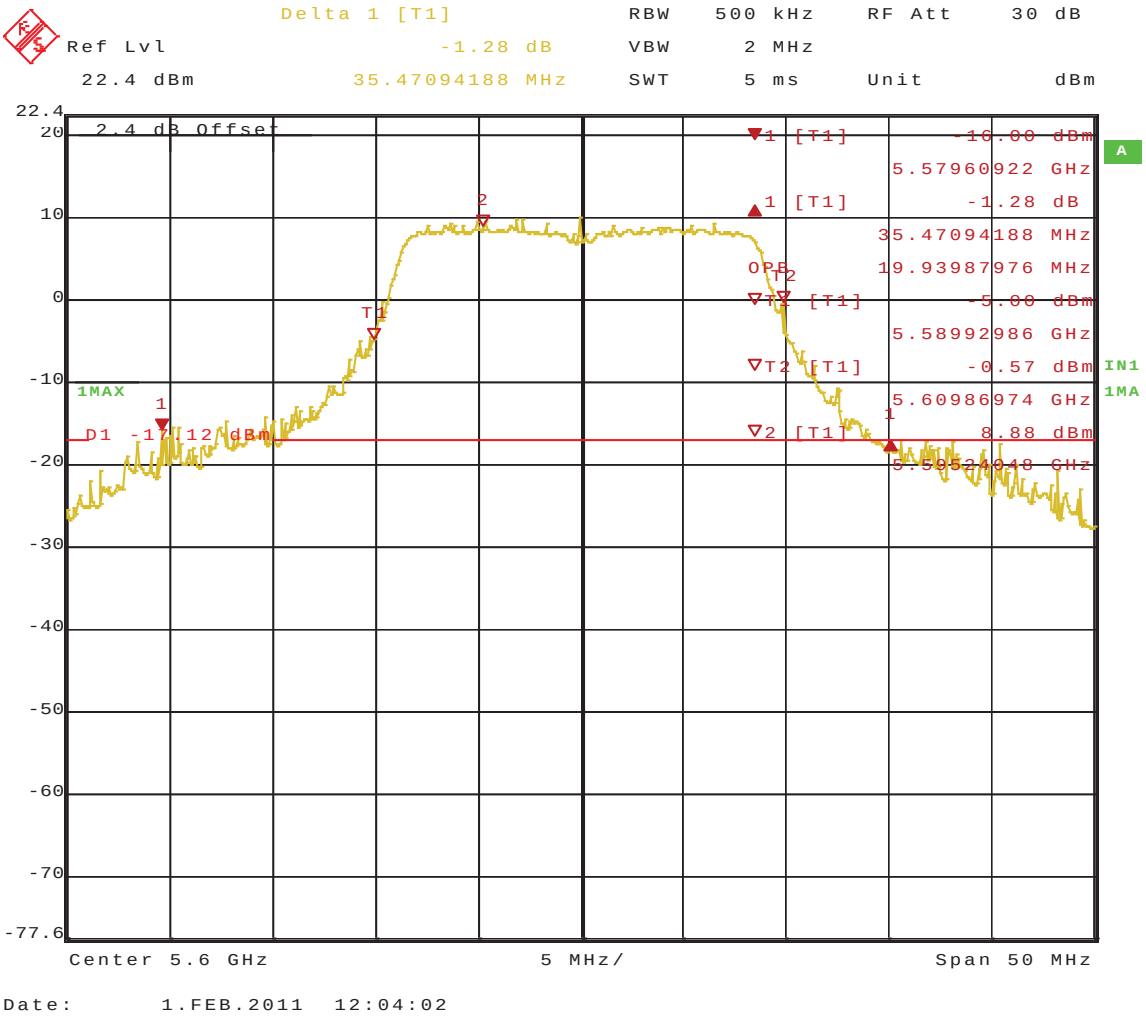


Figure 199: 26 dB and 99% Bandwidth – 5600 MHz, Chain 1, HT20

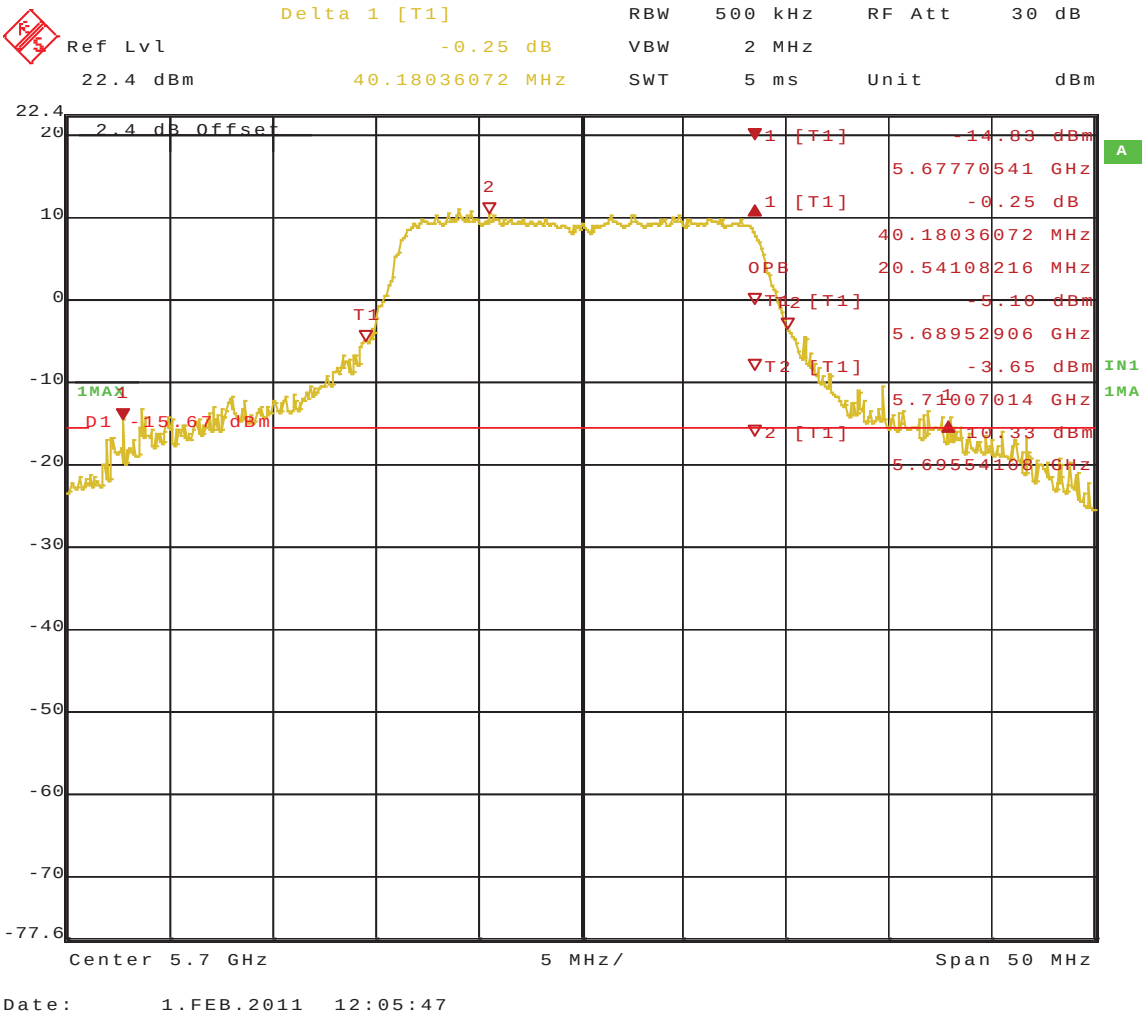


Figure 200: 26 dB and 99% Bandwidth – 5700 MHz, Chain 1, HT20

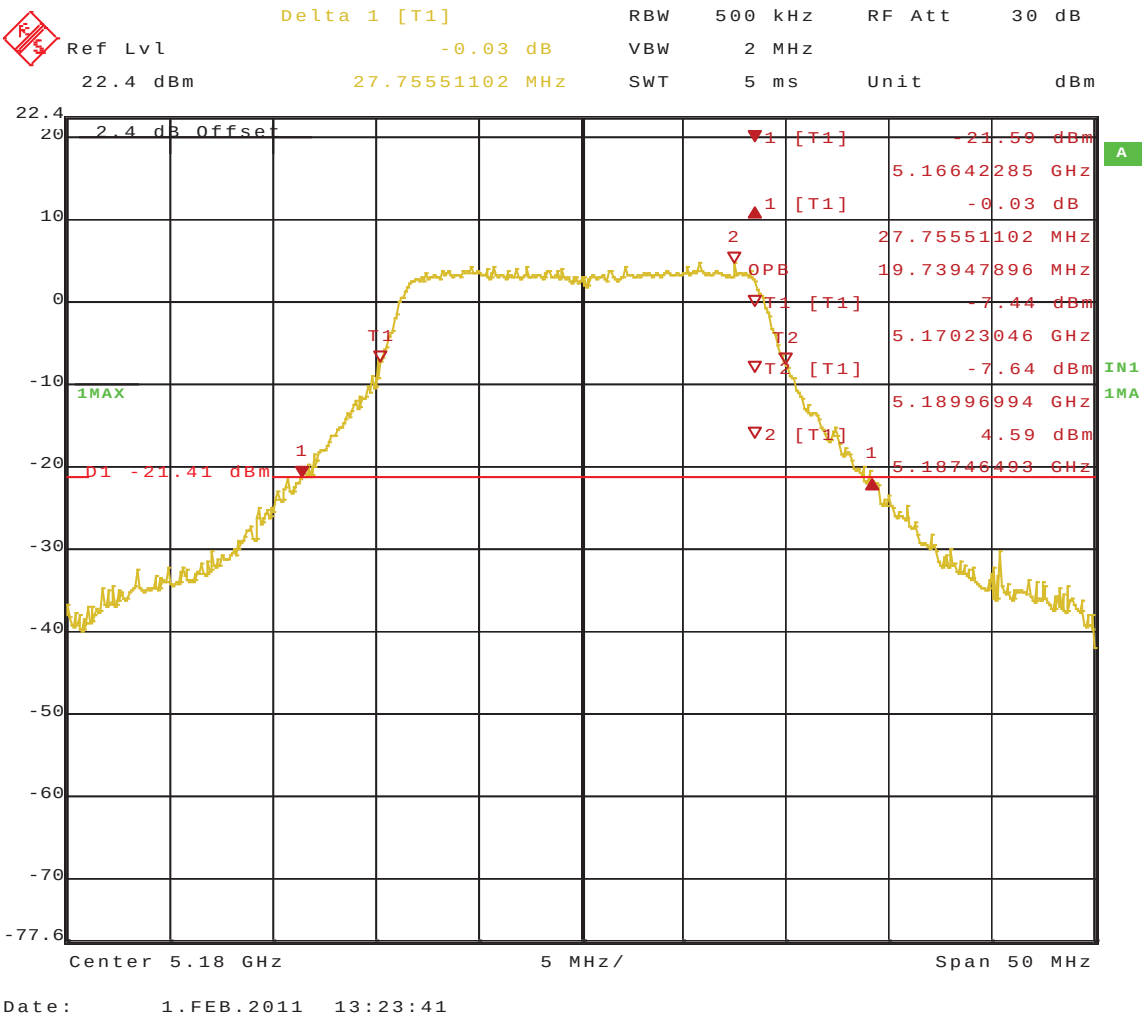


Figure 201: 26 dB and 99% Bandwidth – 5180 MHz, Chain 2, HT20

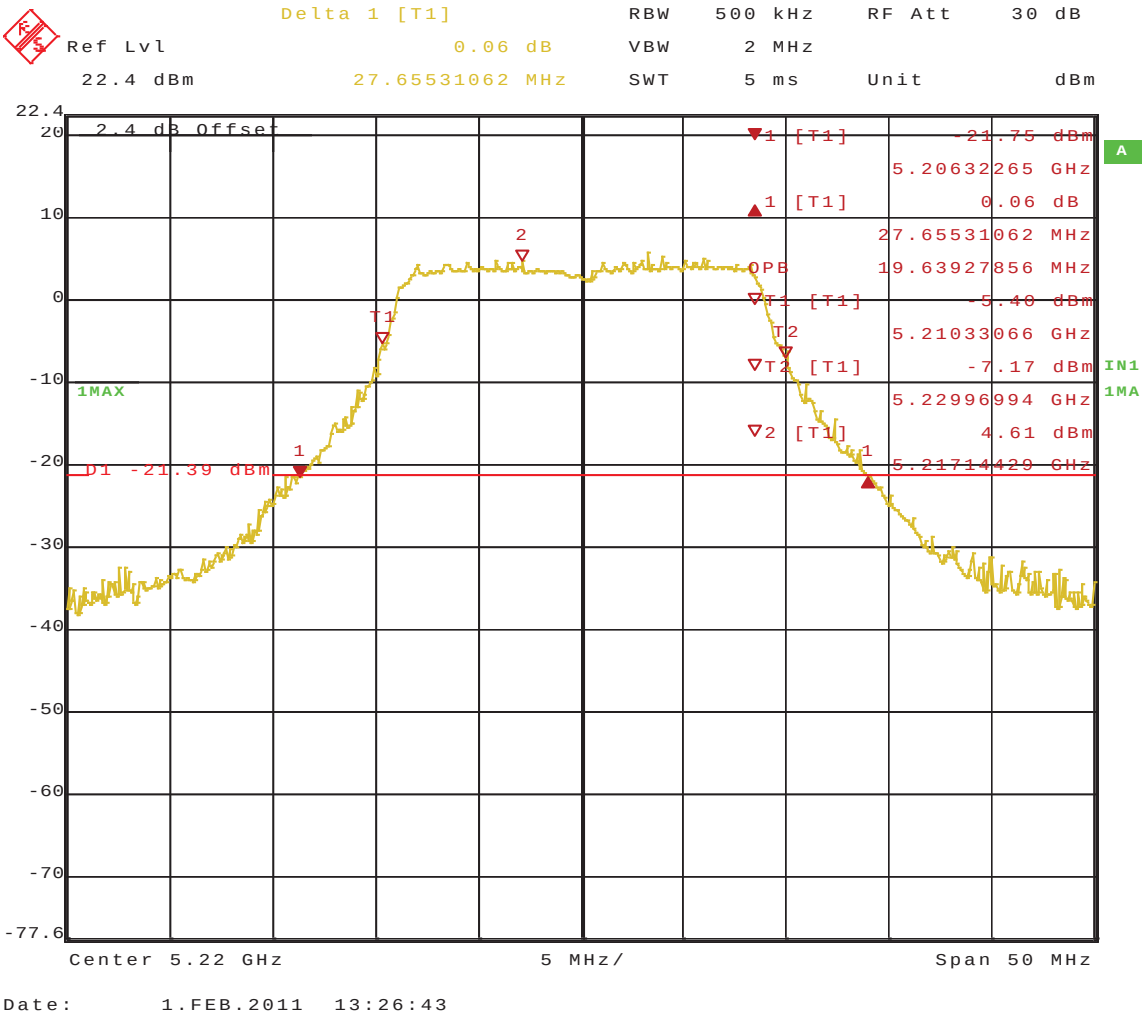


Figure 202: 26 dB and 99% Bandwidth – 5220 MHz, Chain 2, HT20

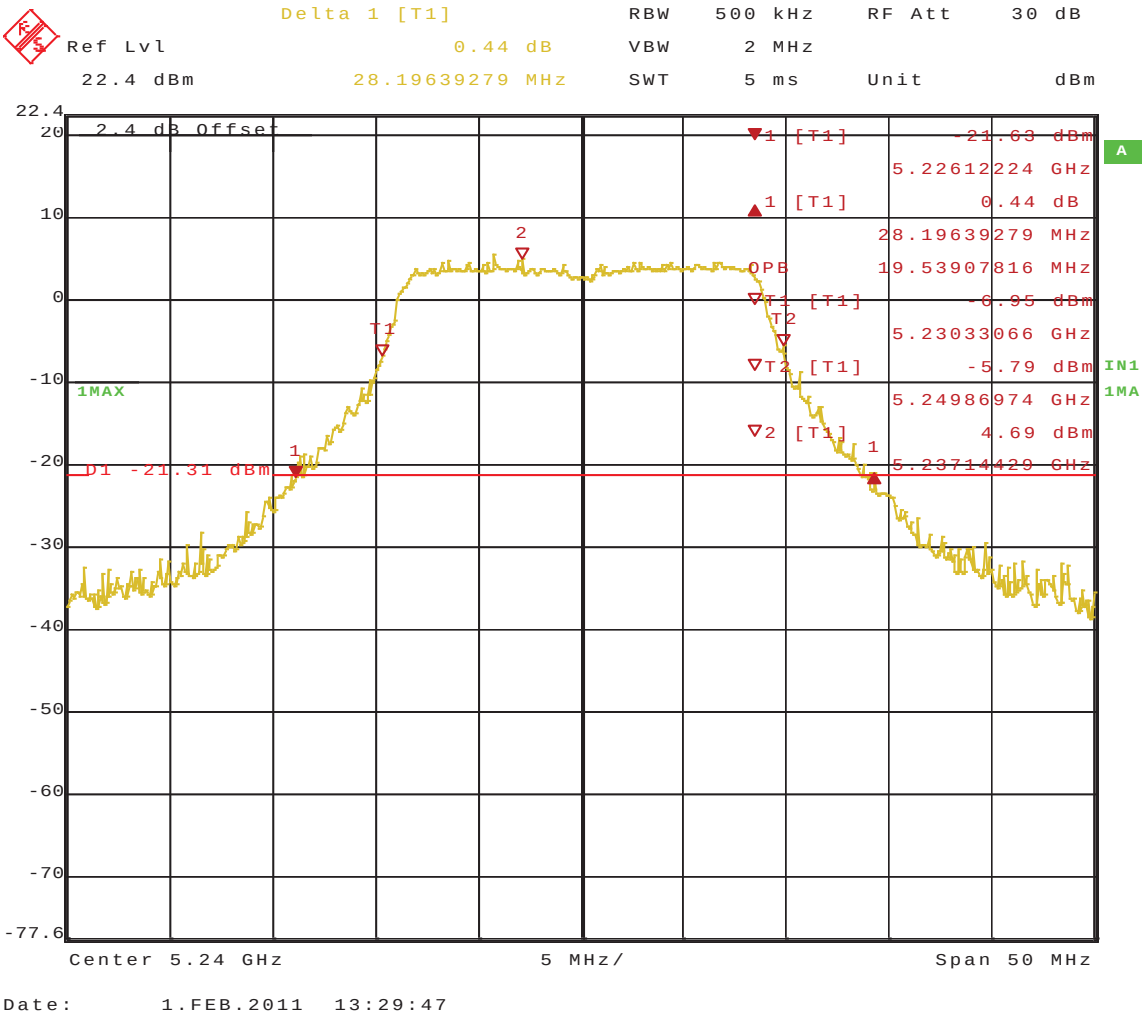


Figure 203: 26 dB and 99% Bandwidth – 5240 MHz, Chain 2, HT20

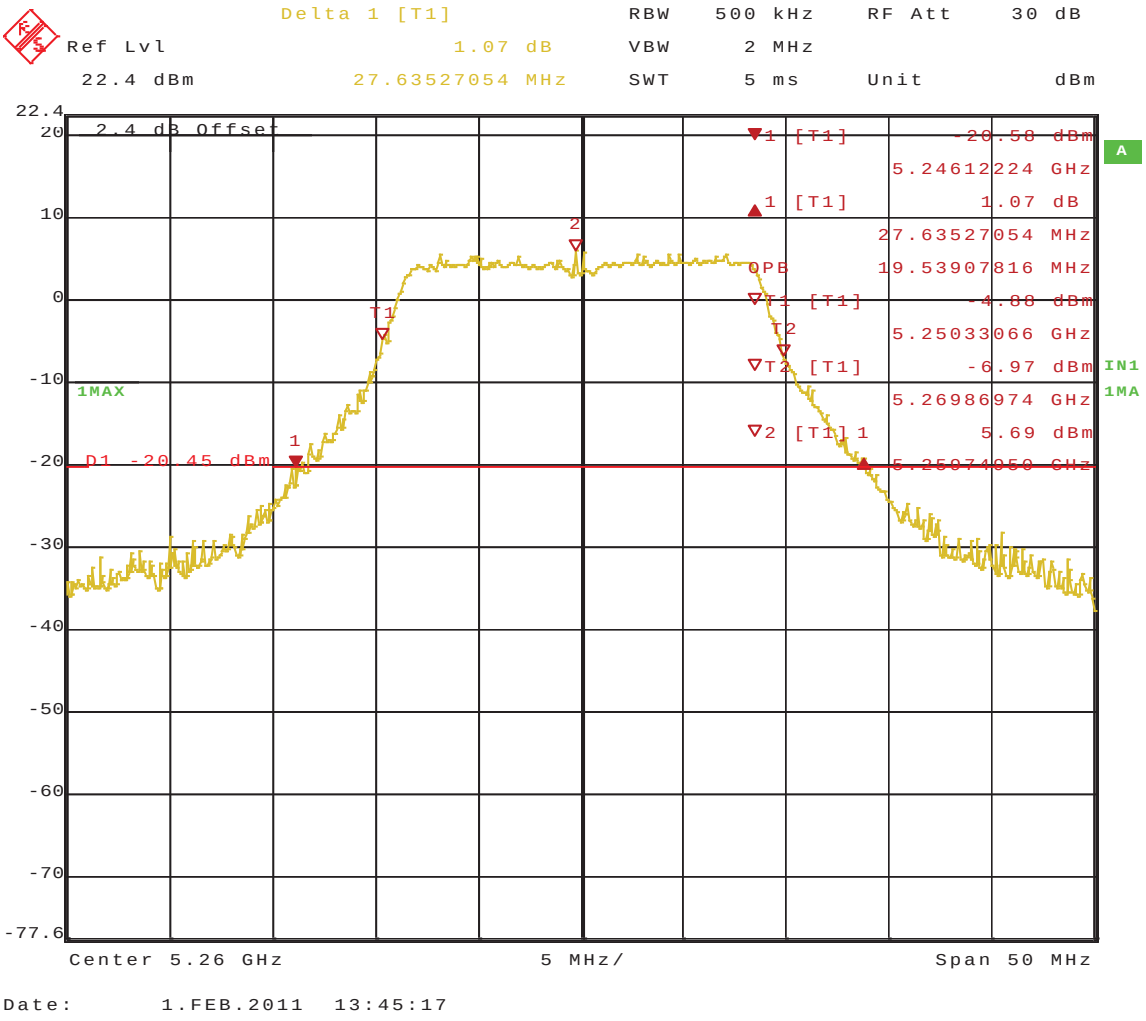


Figure 204: 26 dB and 99% Bandwidth – 5260 MHz, Chain 2, HT20

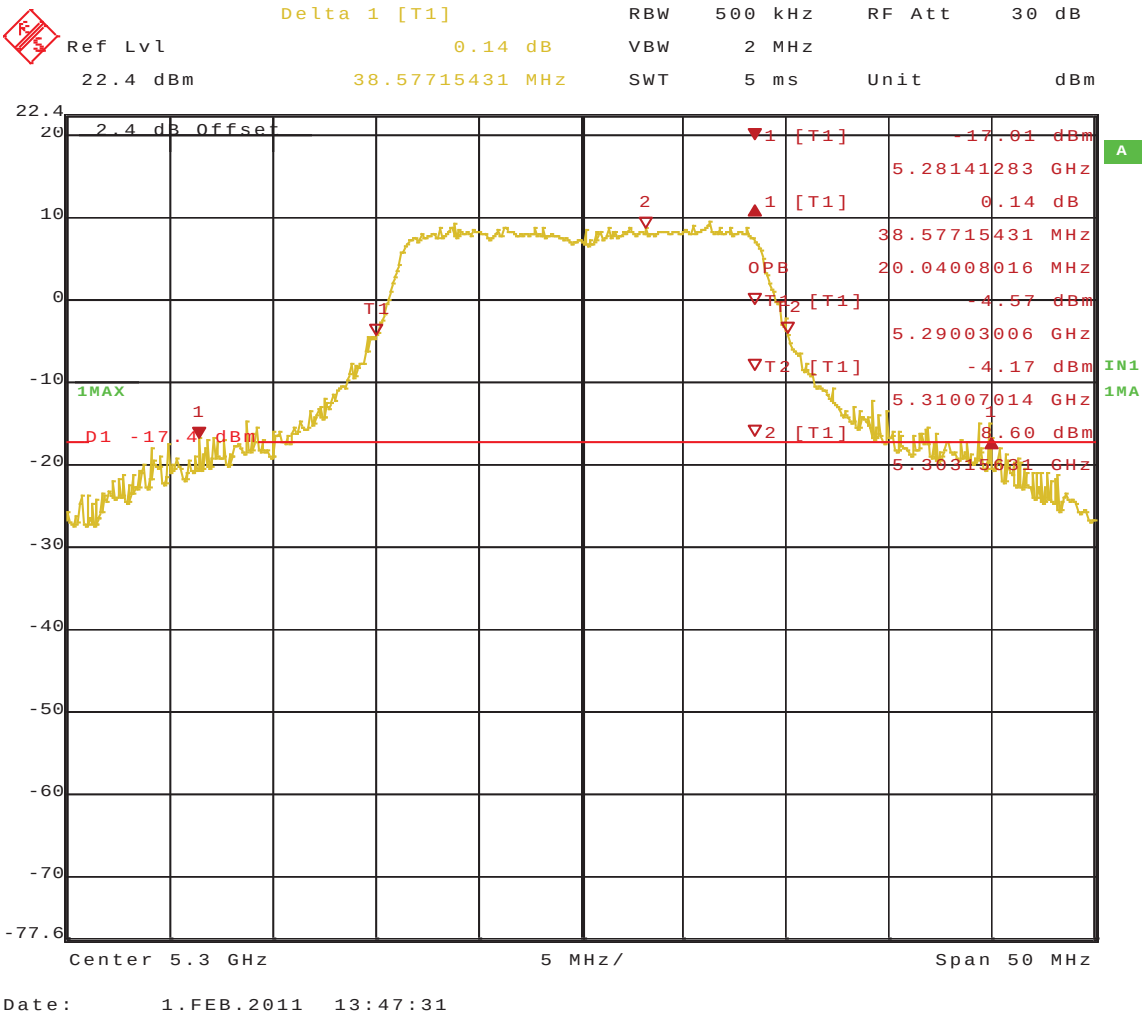


Figure 205: 26 dB and 99% Bandwidth – 5300 MHz, Chain 2, HT20

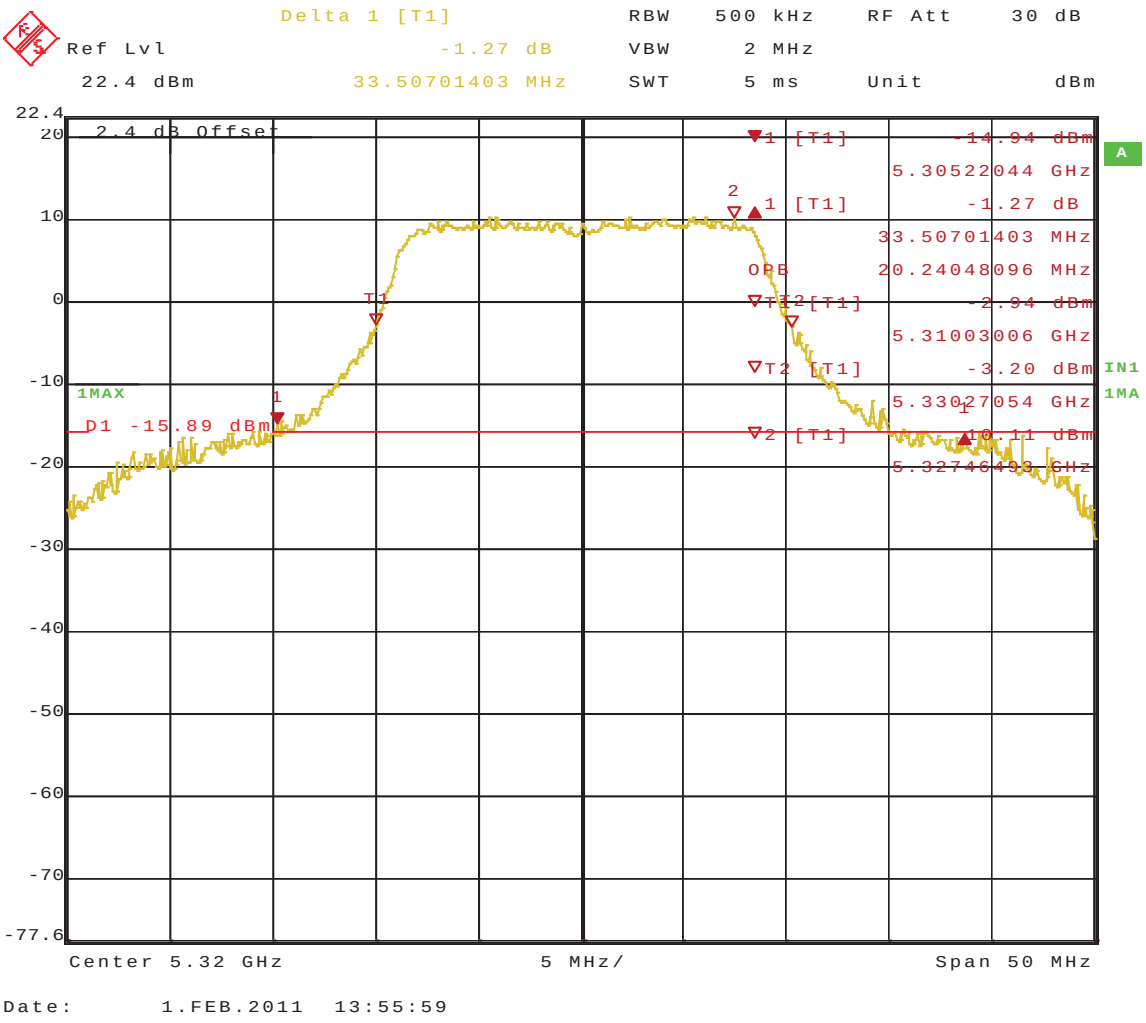


Figure 206: 26 dB and 99% Bandwidth – 5320 MHz, Chain 2, HT20

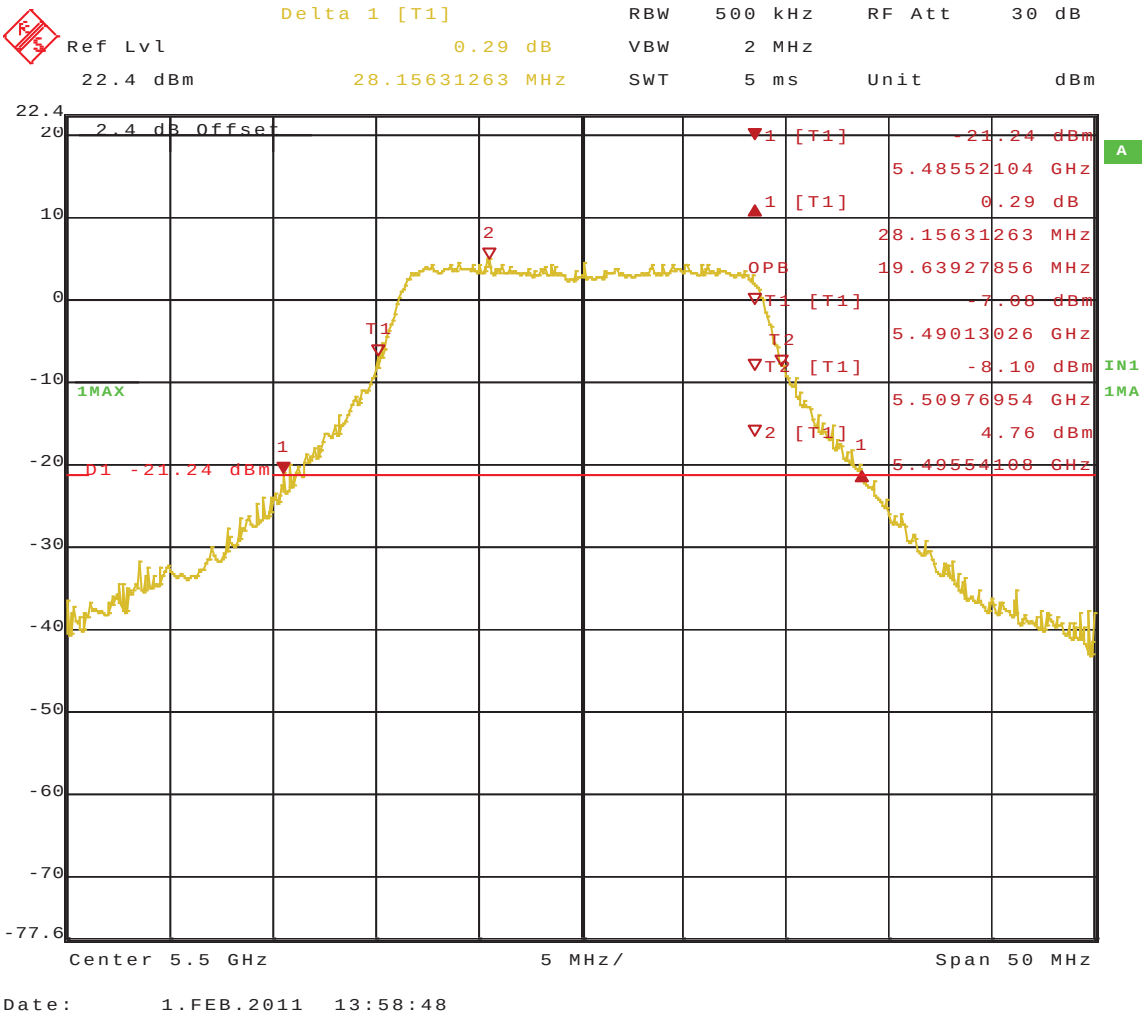


Figure 207: 26 dB and 99% Bandwidth – 5500 MHz, Chain 2, HT20

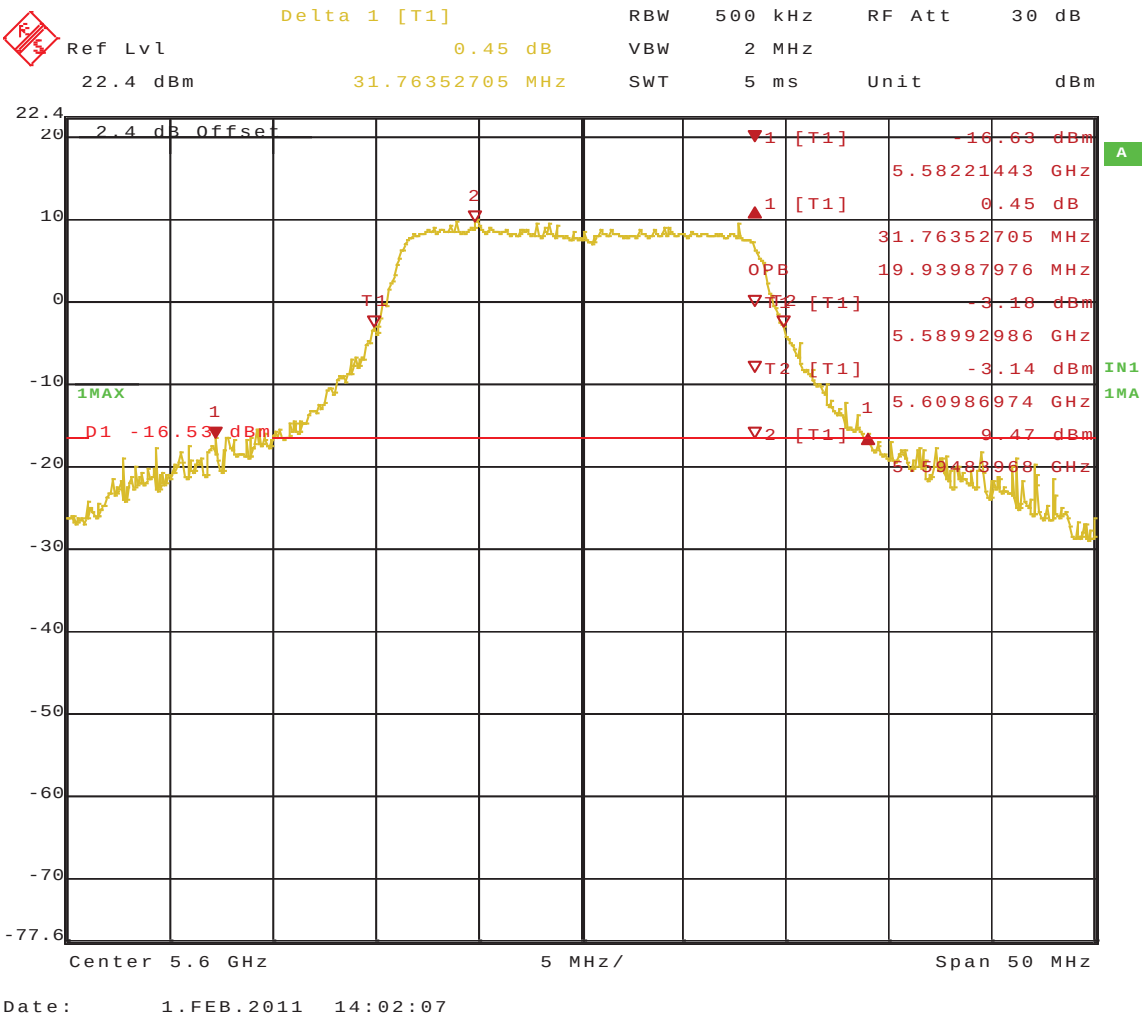


Figure 208: 26 dB and 99% Bandwidth – 5600 MHz, Chain 2, HT20

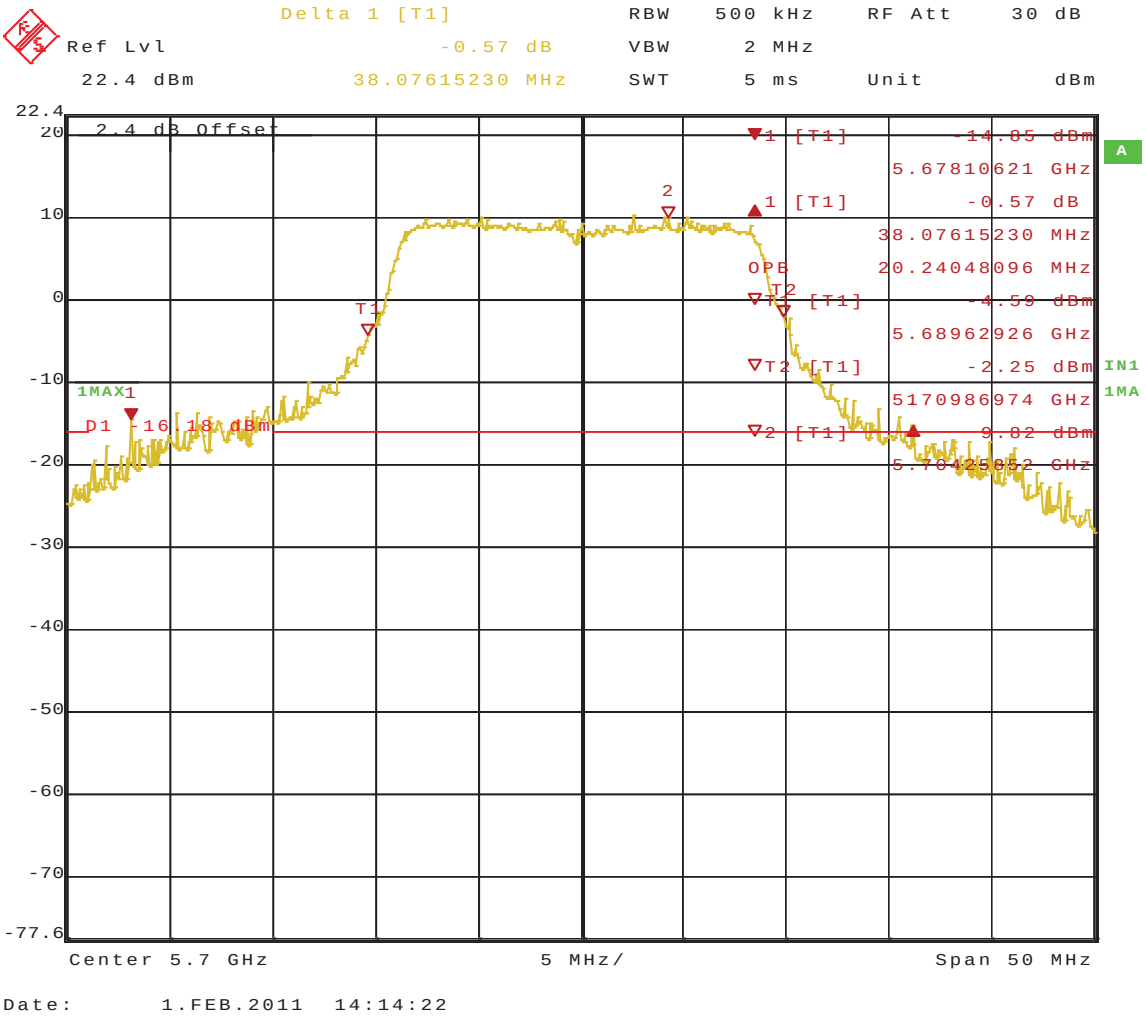


Figure 209: 26 dB and 99% Bandwidth – 5700 MHz, Chain 2, HT20

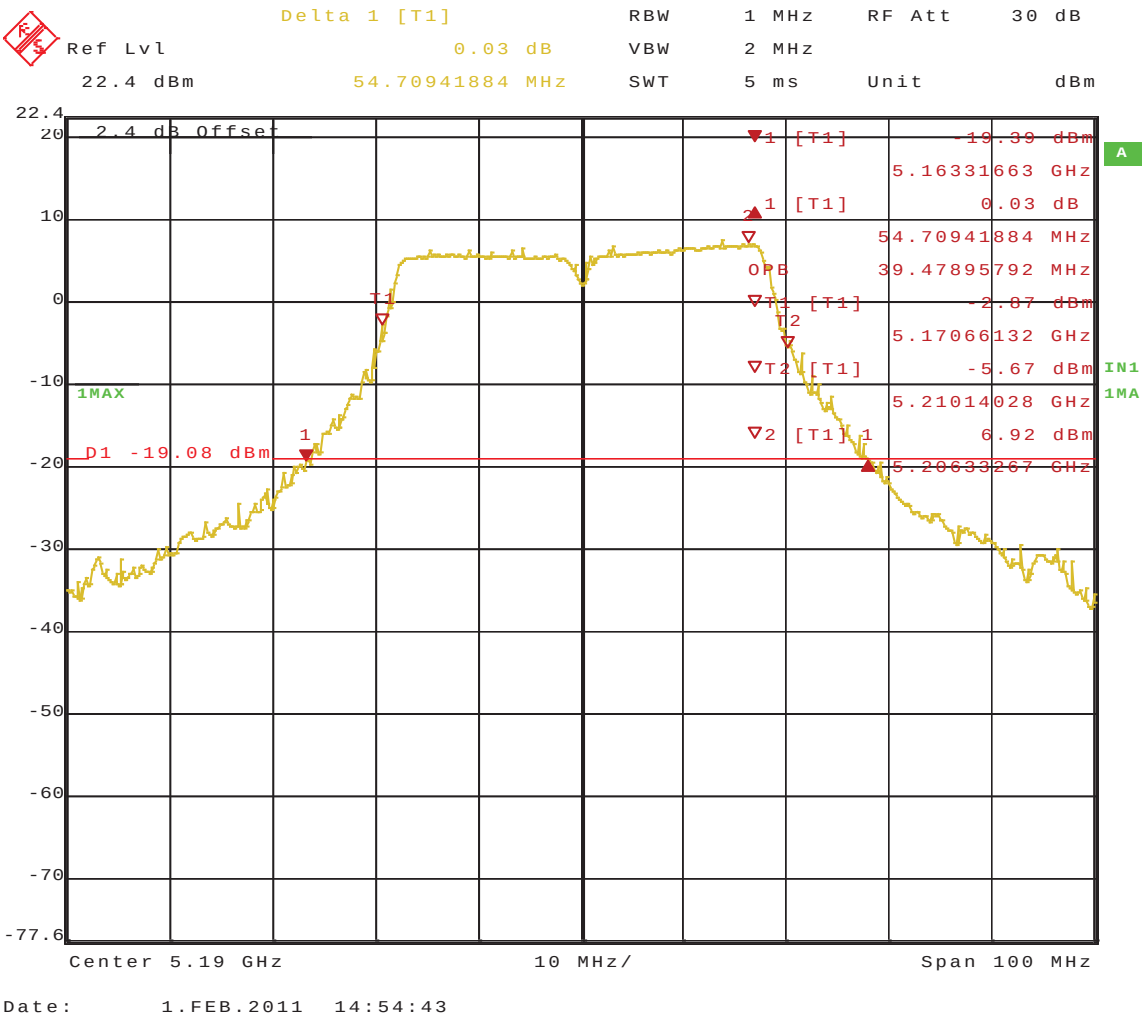


Figure 210: 26 dB and 99% Bandwidth – 5190 MHz, Chain 0, HT40

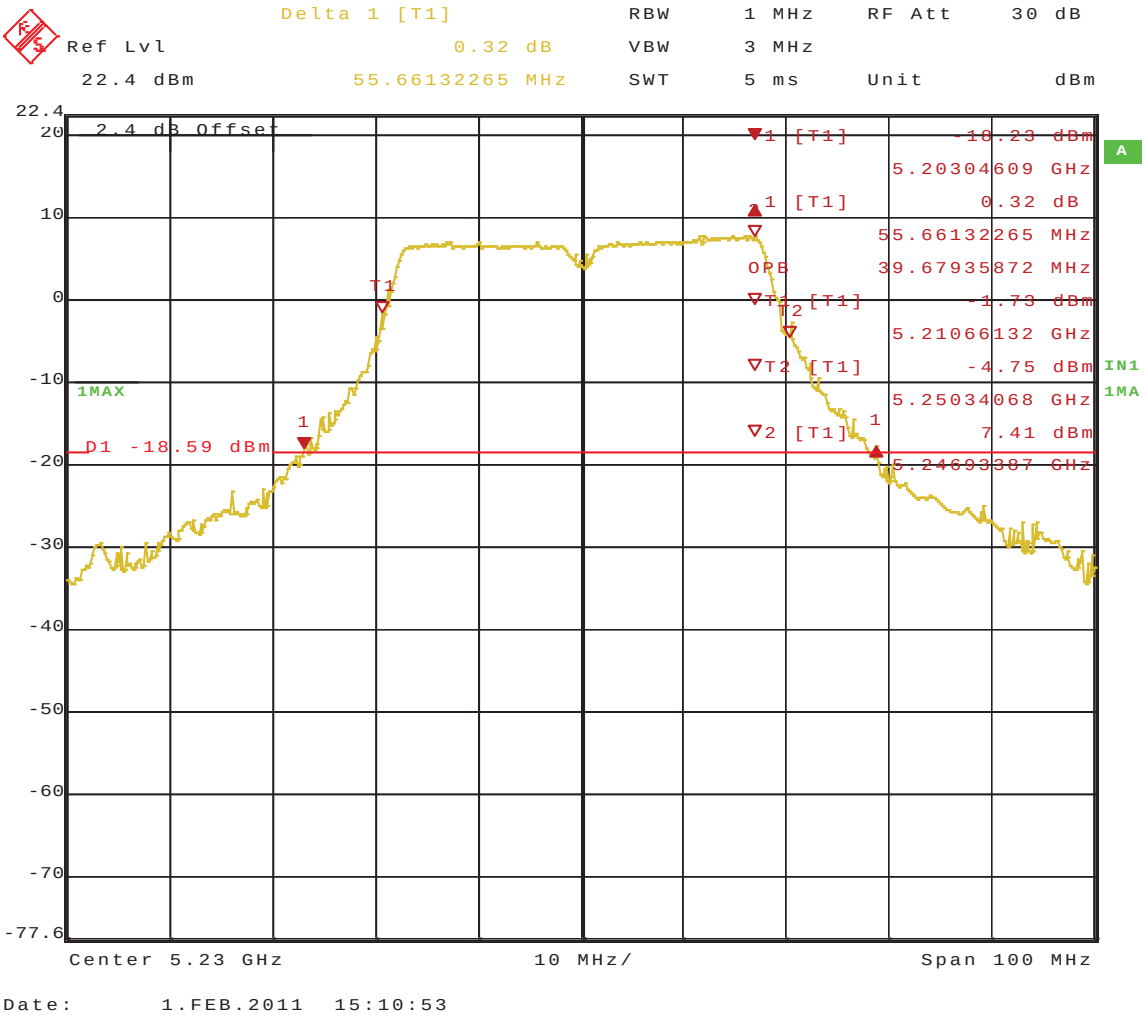


Figure 211: 26 dB and 99% Bandwidth – 5230 MHz, Chain 0, HT40

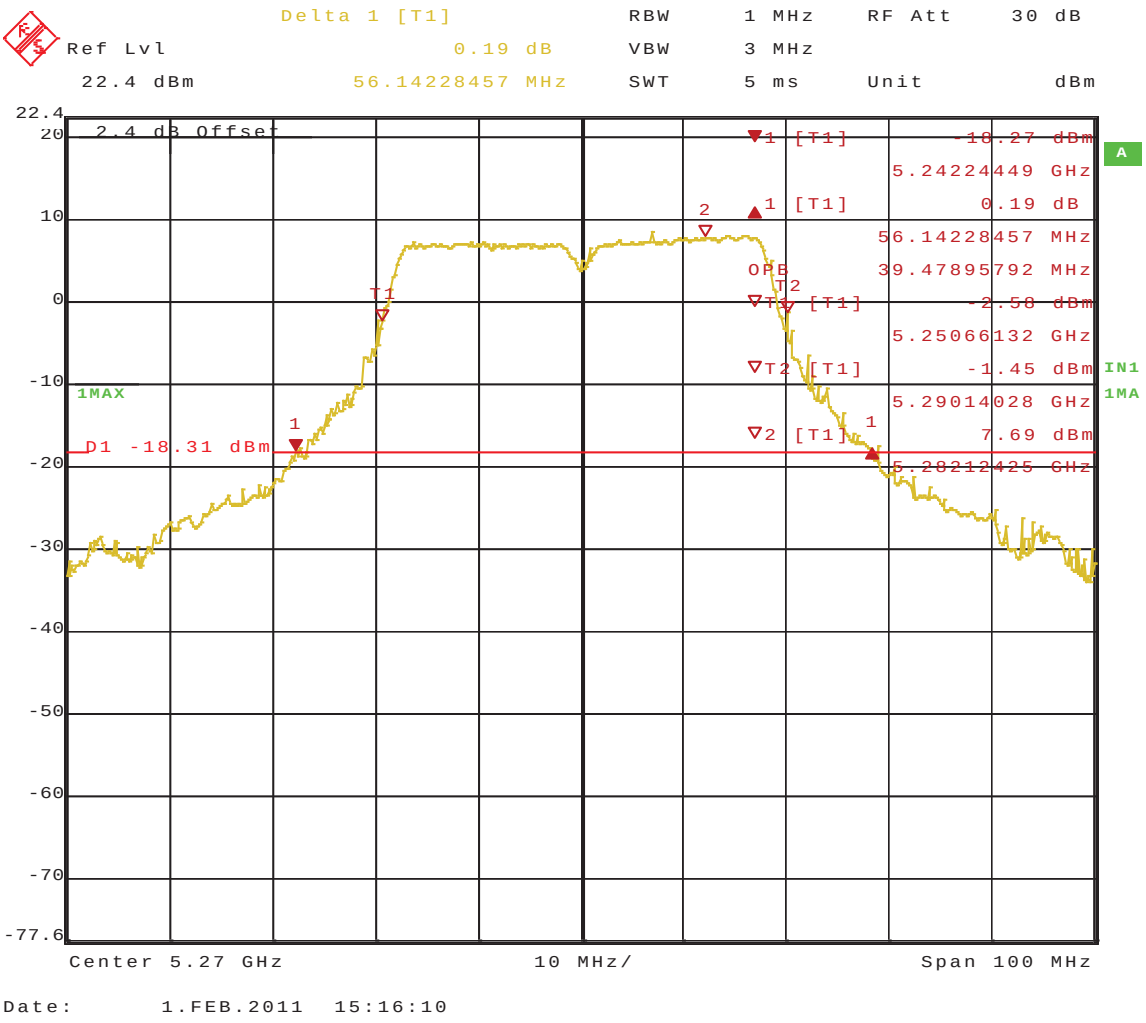


Figure 212: 26 dB and 99% Bandwidth – 5270 MHz, Chain 0, HT40

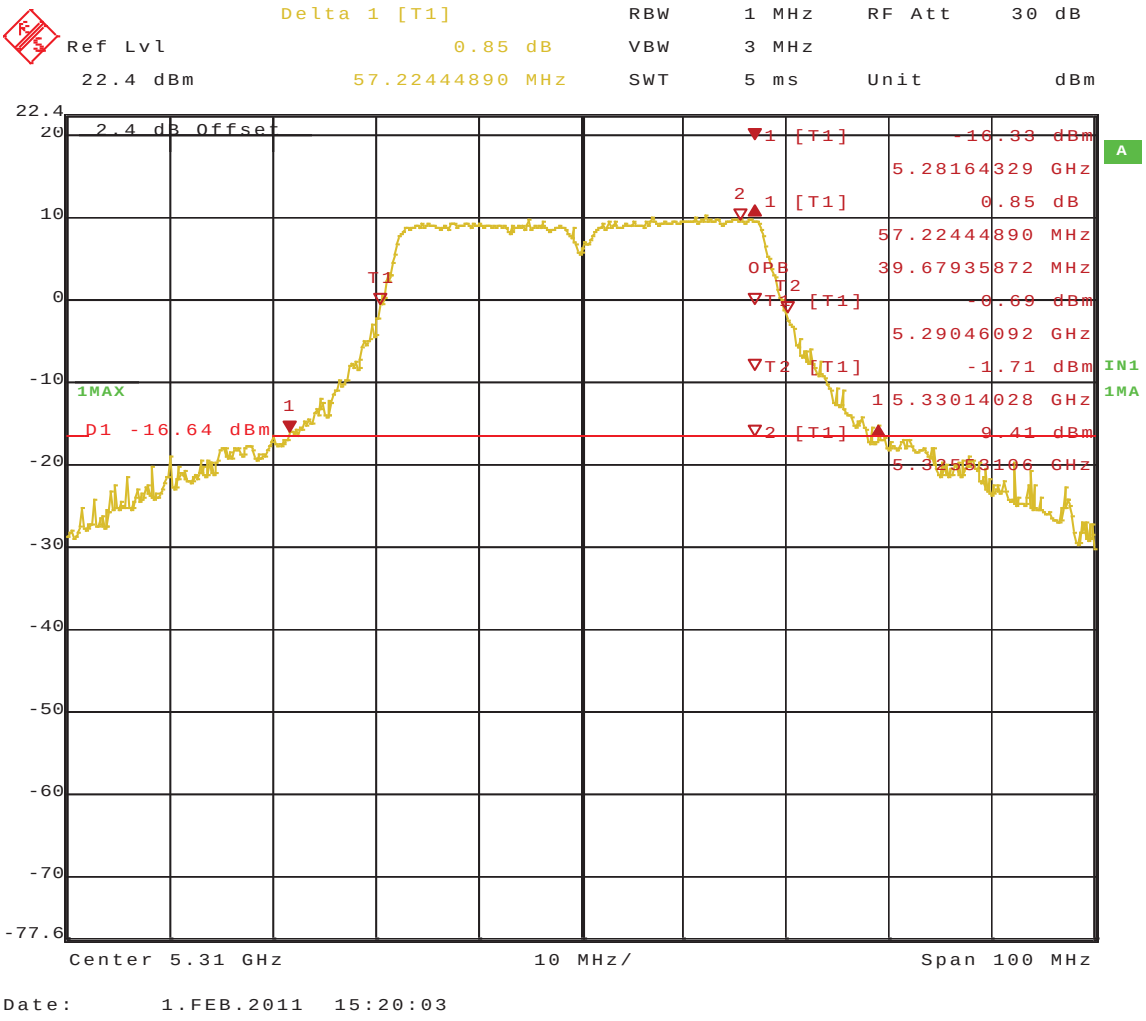


Figure 213: 26 dB and 99% Bandwidth – 5310 MHz, Chain 0, HT40

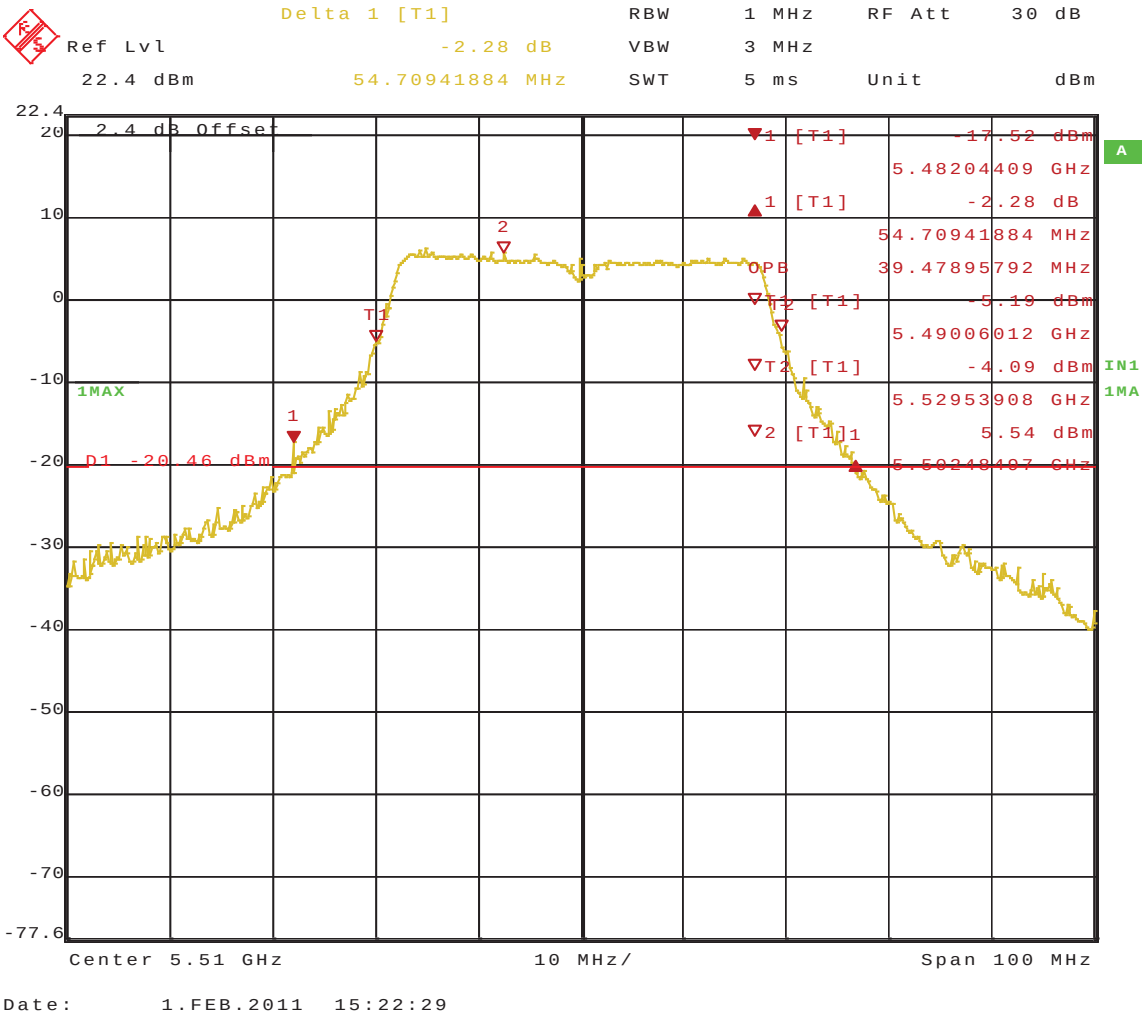


Figure 214: 26 dB and 99% Bandwidth – 5510 MHz, Chain 0, HT40

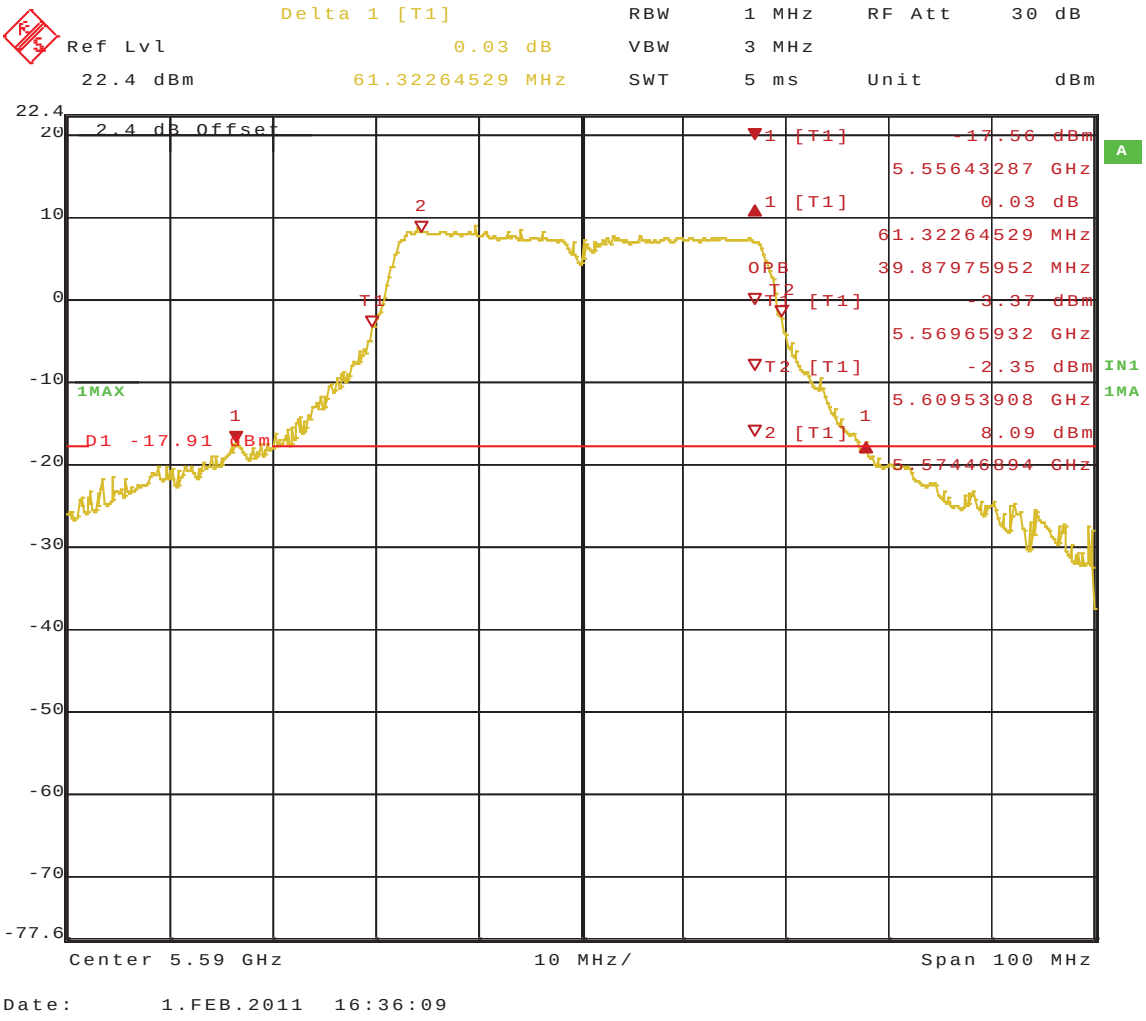


Figure 215: 26 dB and 99% Bandwidth – 5590 MHz, Chain 0, HT40

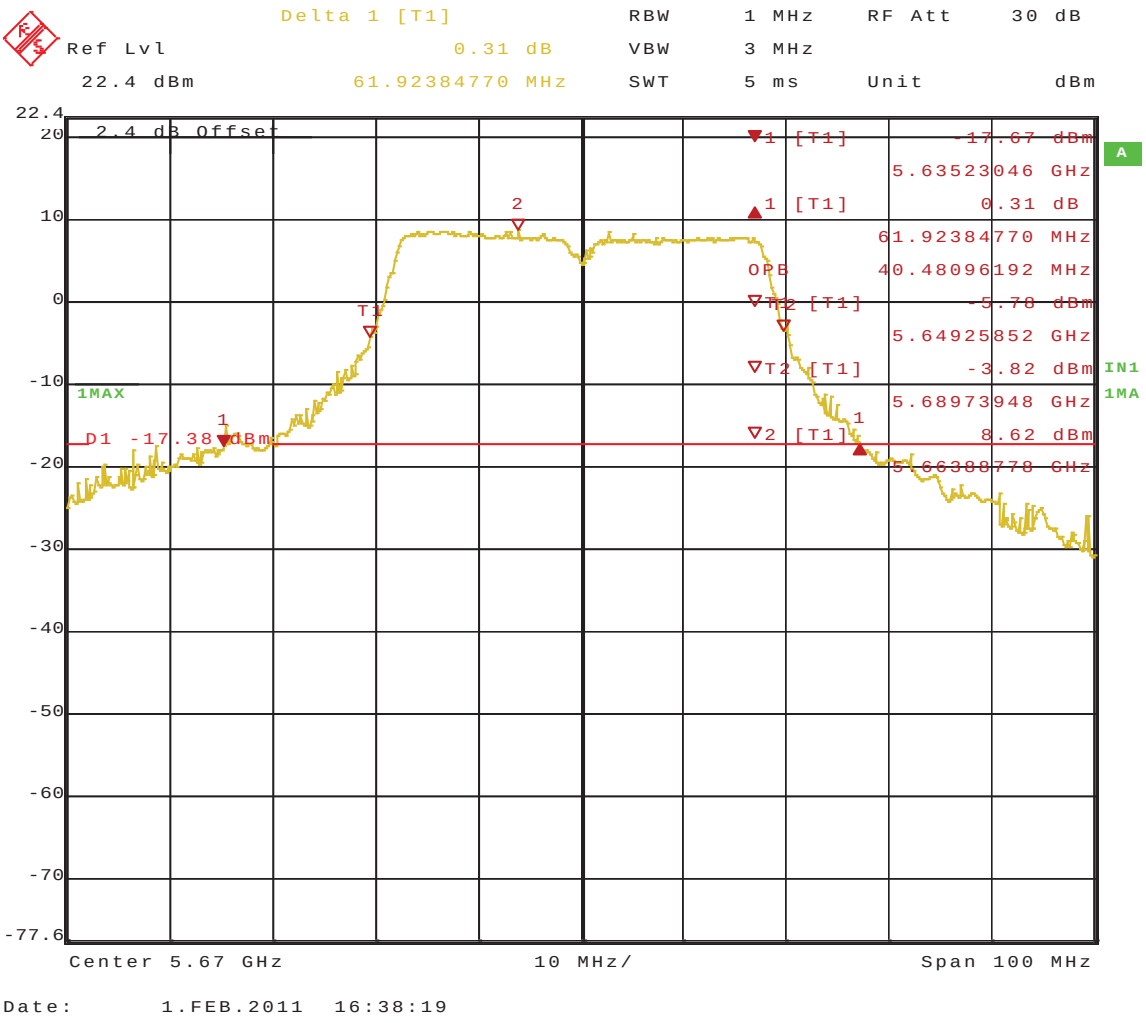


Figure 216: 26 dB and 99% Bandwidth – 5670 MHz, Chain 0, HT40

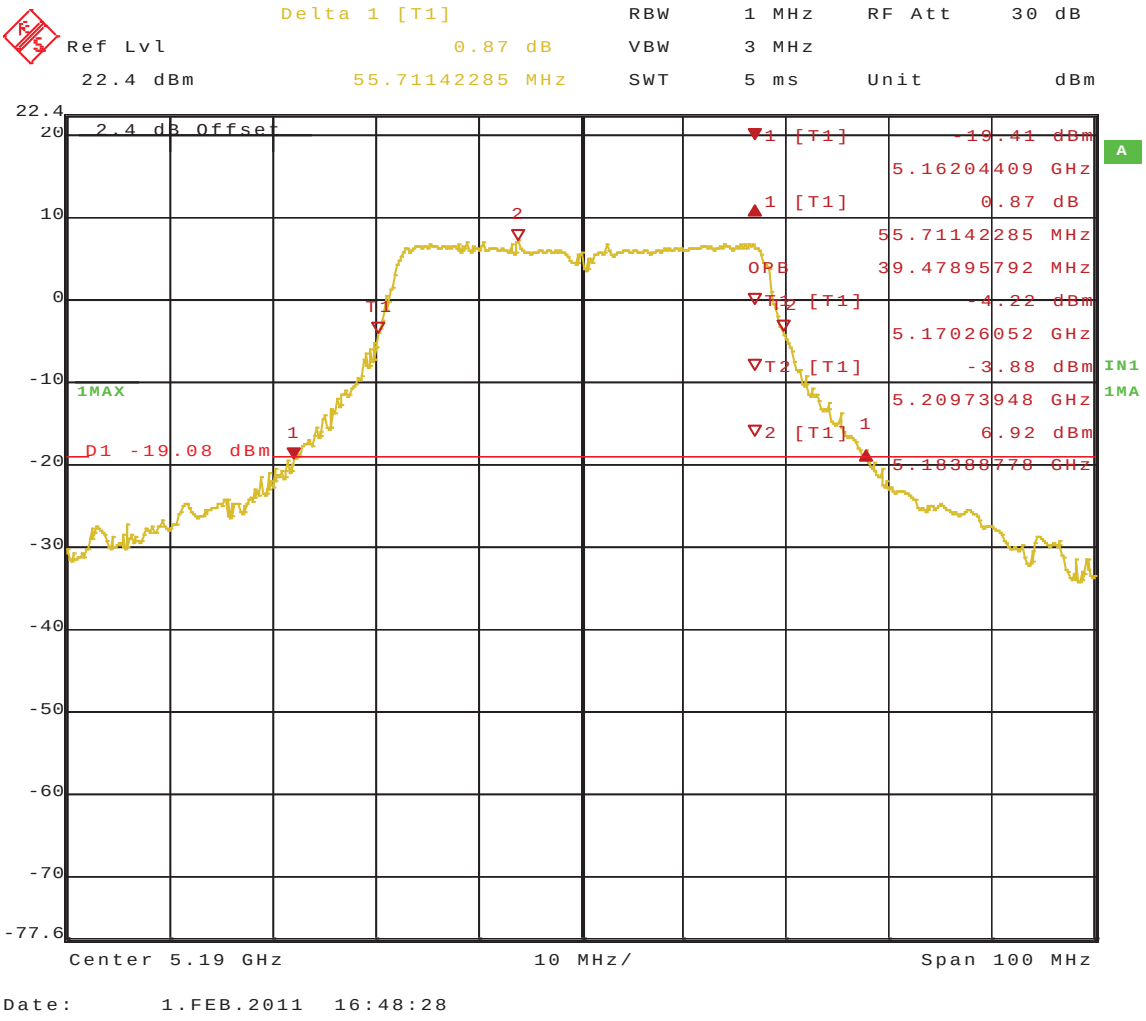


Figure 217: 26 dB and 99% Bandwidth – 5190 MHz, Chain 1, HT40

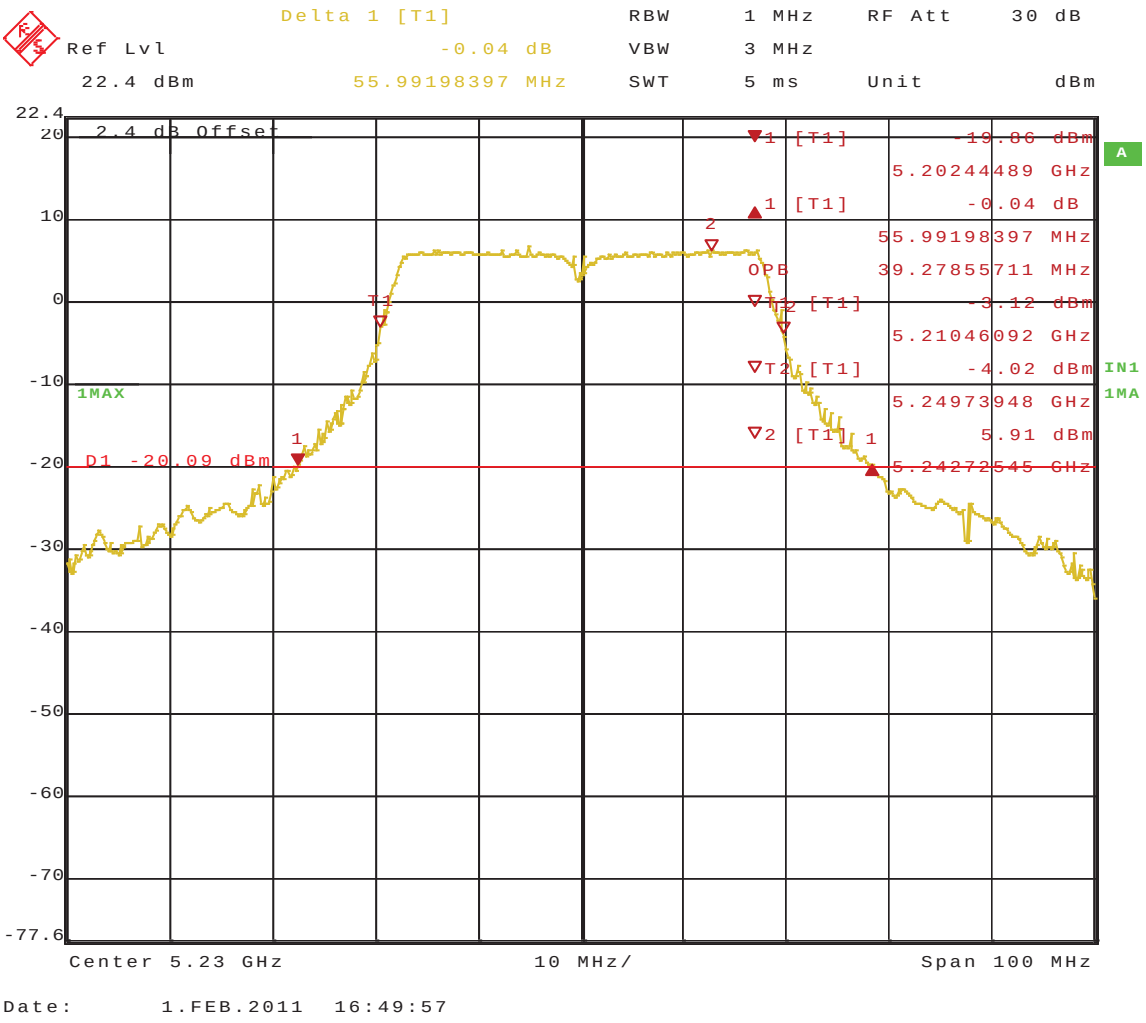


Figure 218: 26 dB and 99% Bandwidth – 5230 MHz, Chain 1, HT40

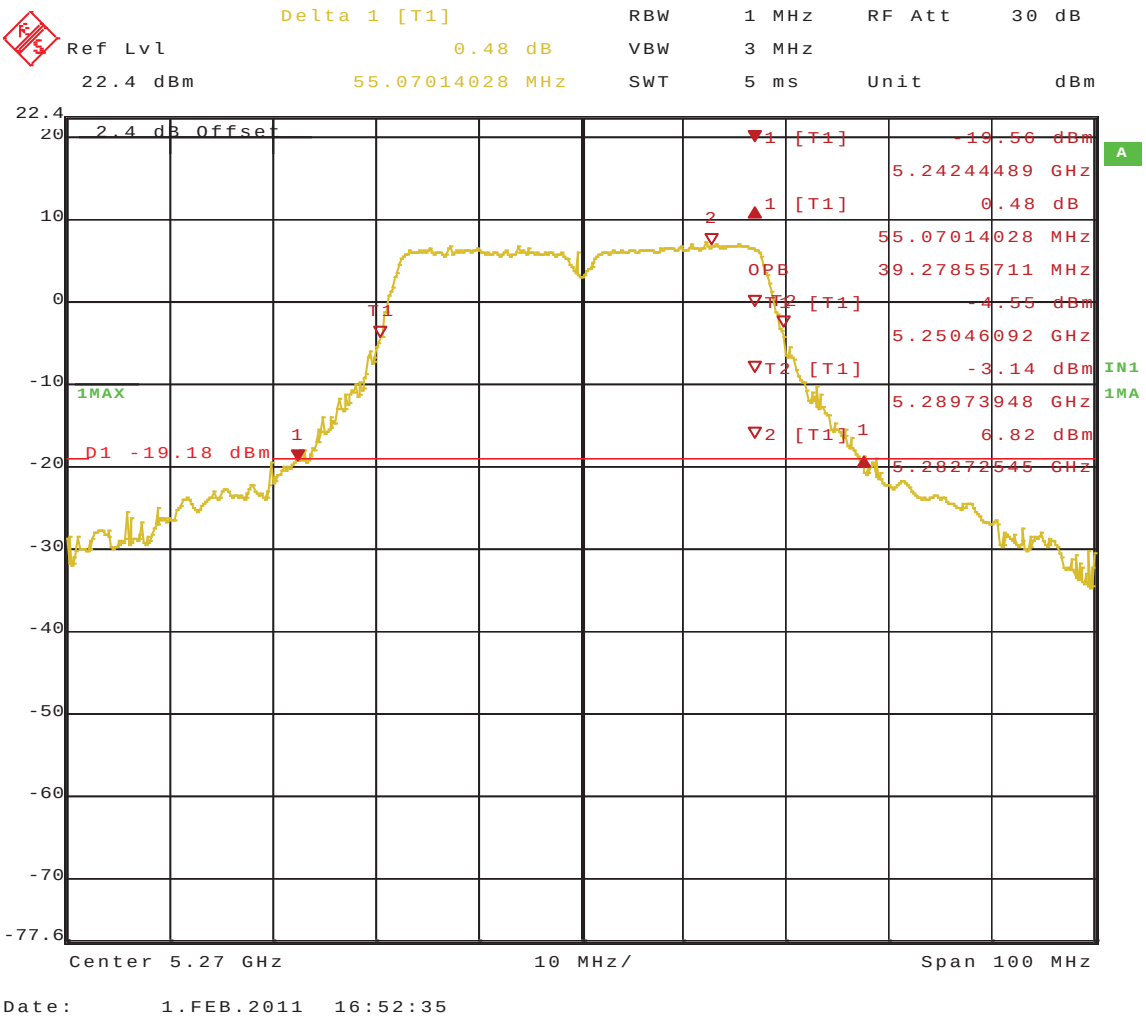


Figure 219: 26 dB and 99% Bandwidth – 5270 MHz, Chain 1, HT40

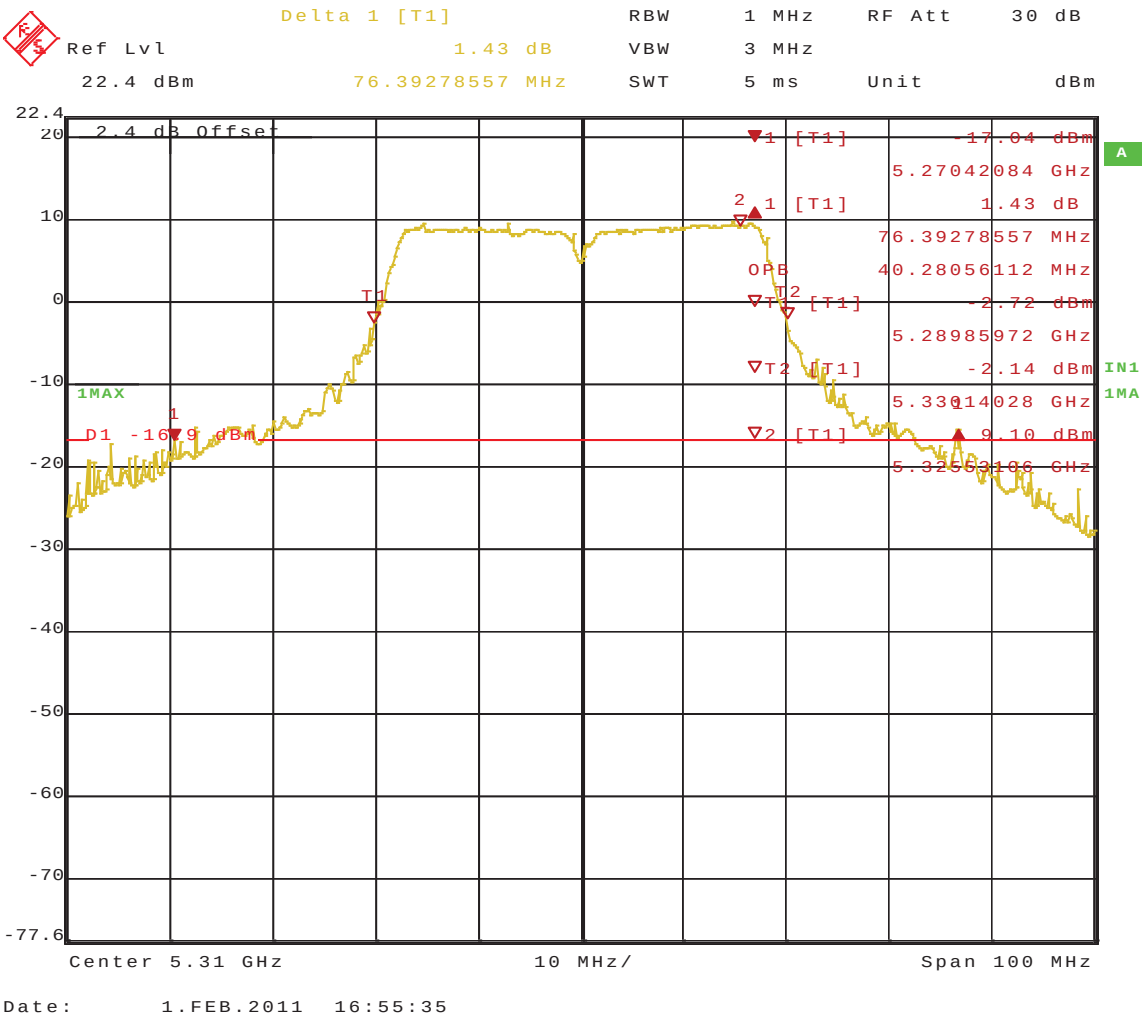


Figure 220: 26 dB and 99% Bandwidth – 5310 MHz, Chain 1, HT40

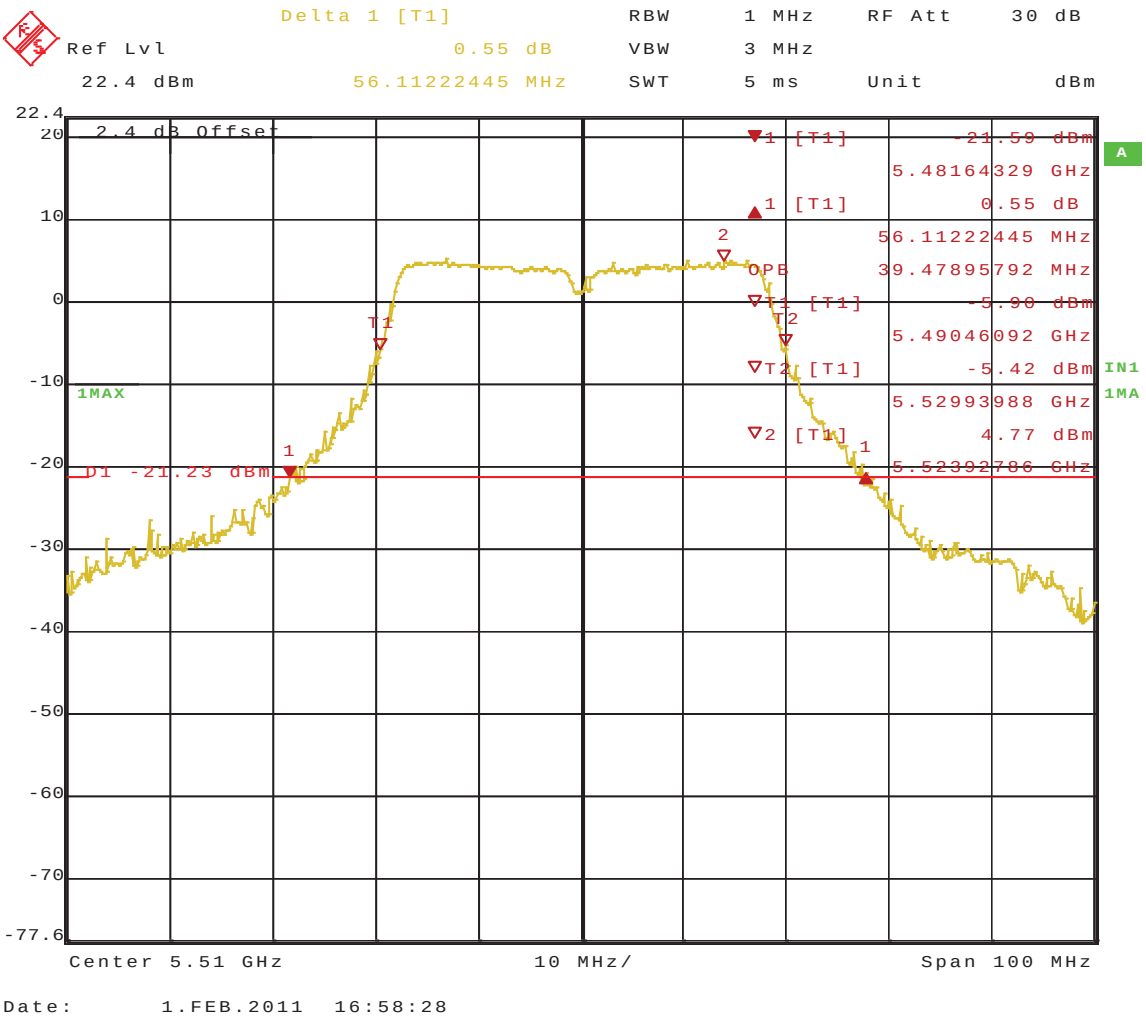


Figure 221: 26 dB and 99% Bandwidth – 5510 MHz, Chain 1, HT40

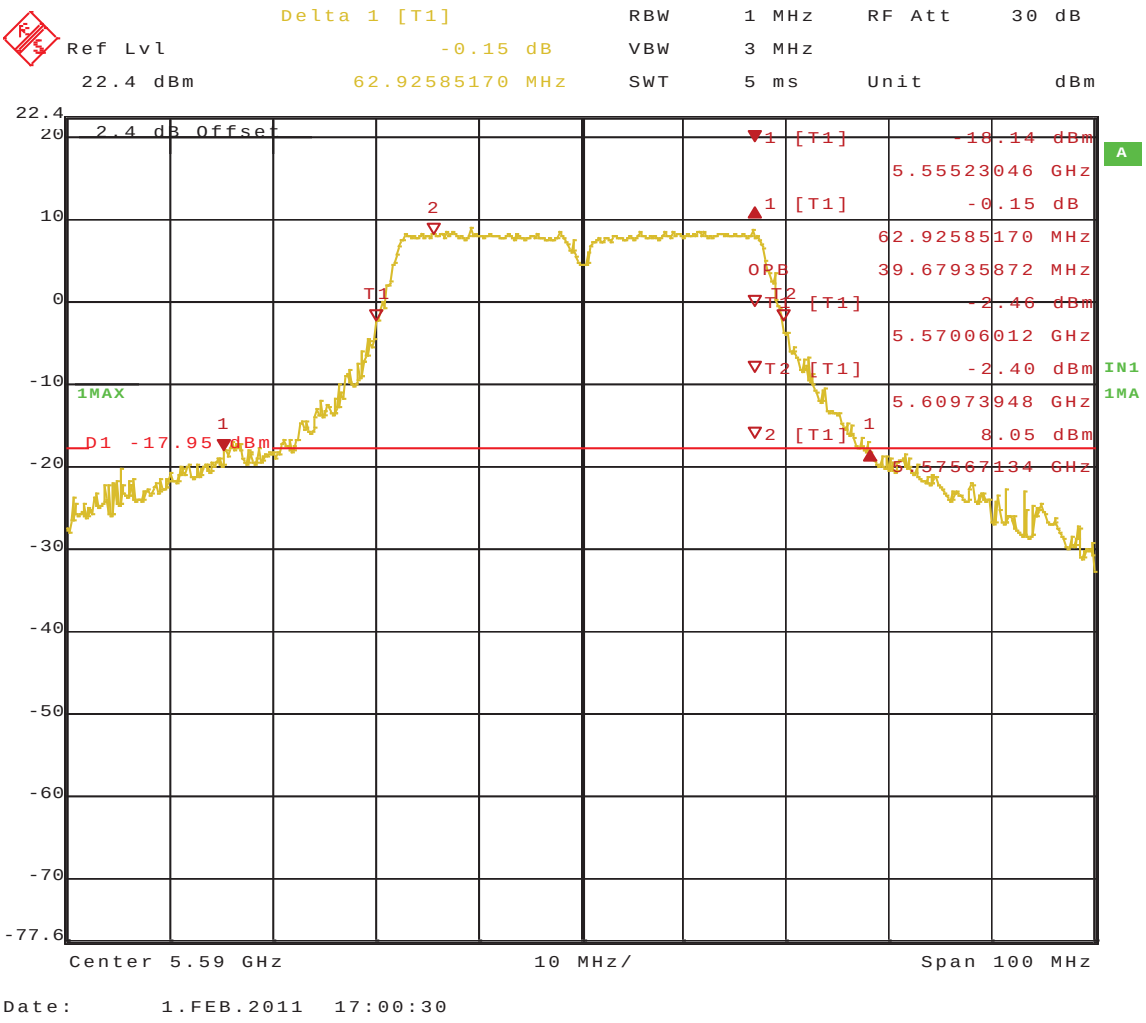


Figure 222: 26 dB and 99% Bandwidth – 5590 MHz, Chain 1, HT40

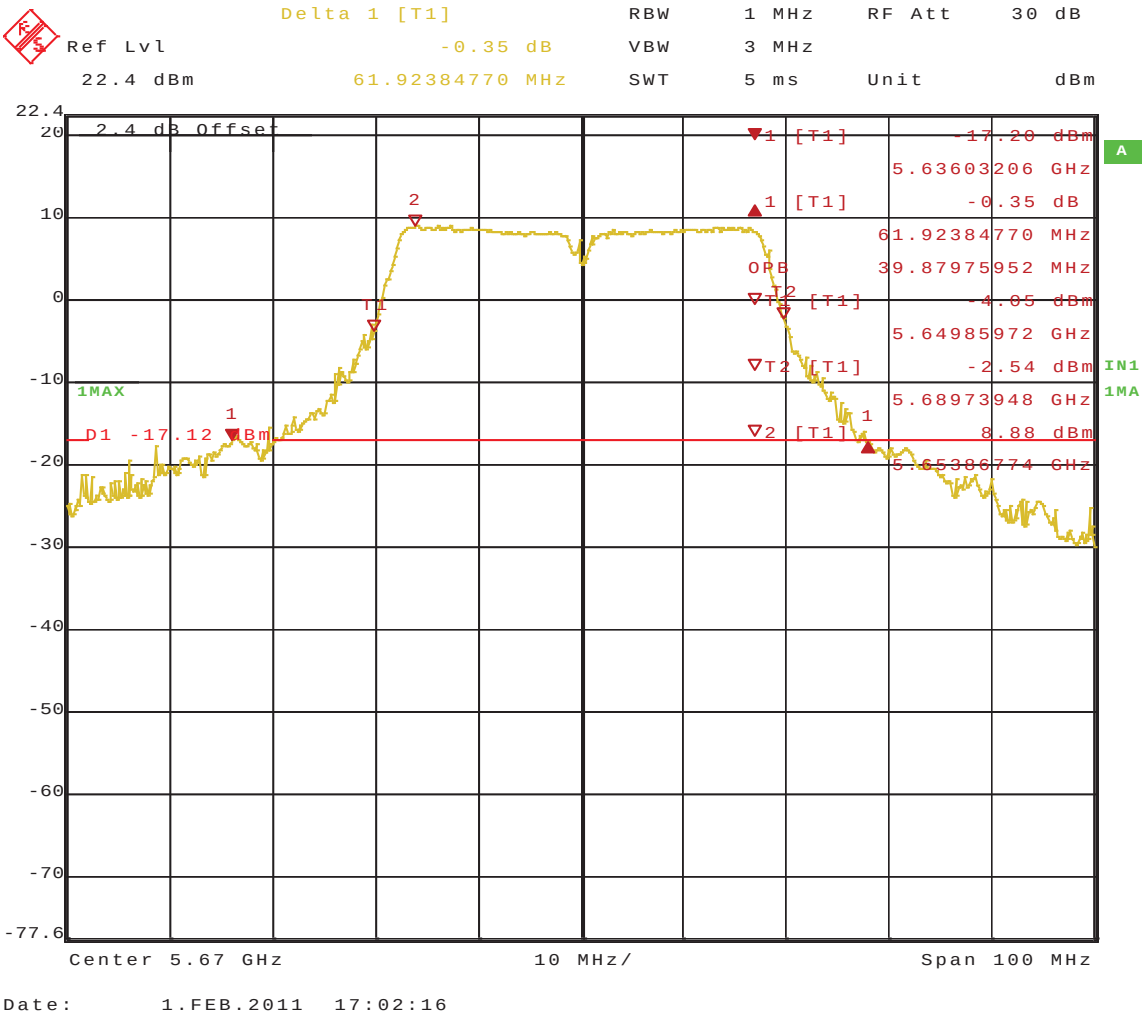


Figure 223: 26 dB and 99% Bandwidth – 5670 MHz, Chain 1, HT40

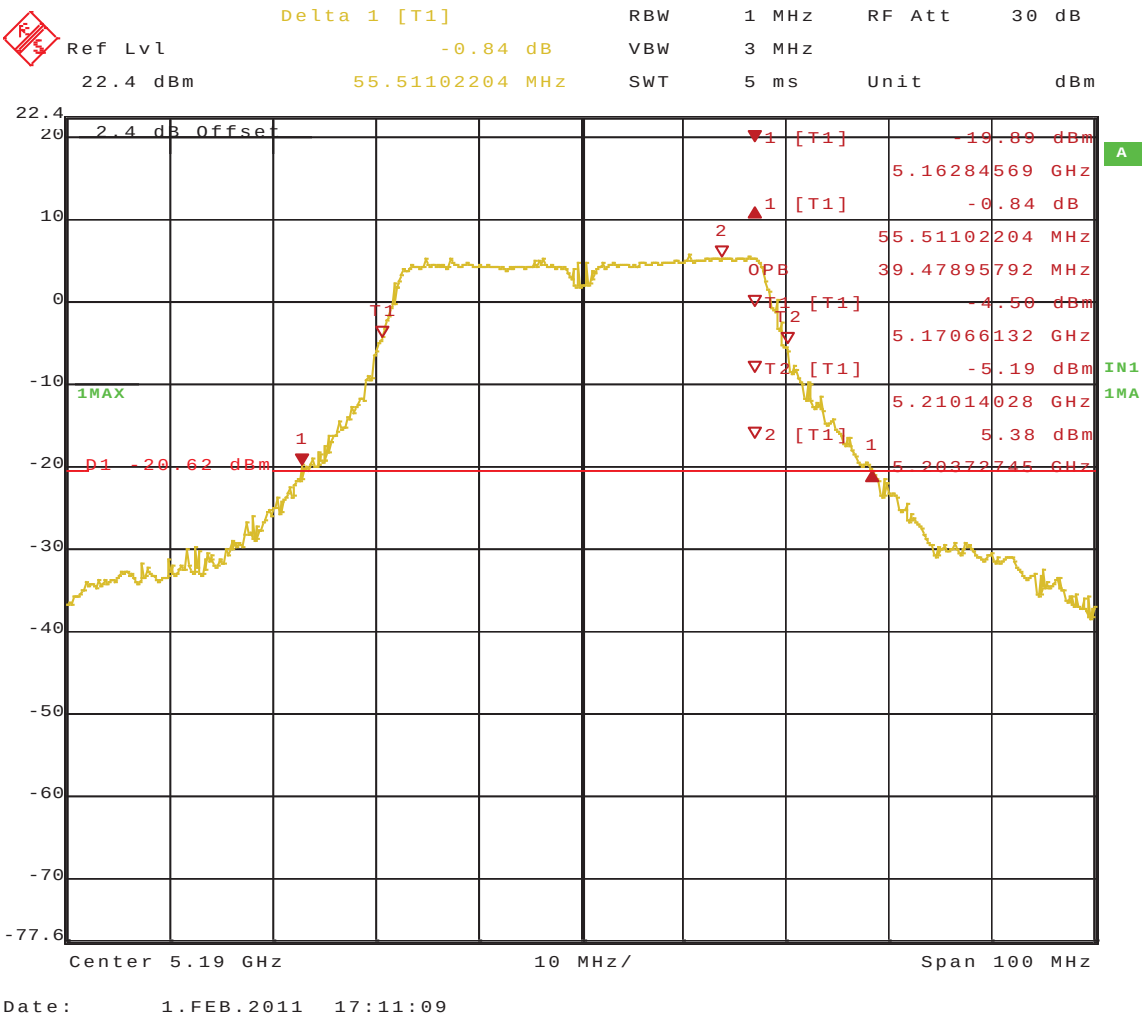


Figure 224: 26 dB and 99% Bandwidth – 5190 MHz, Chain 2, HT40

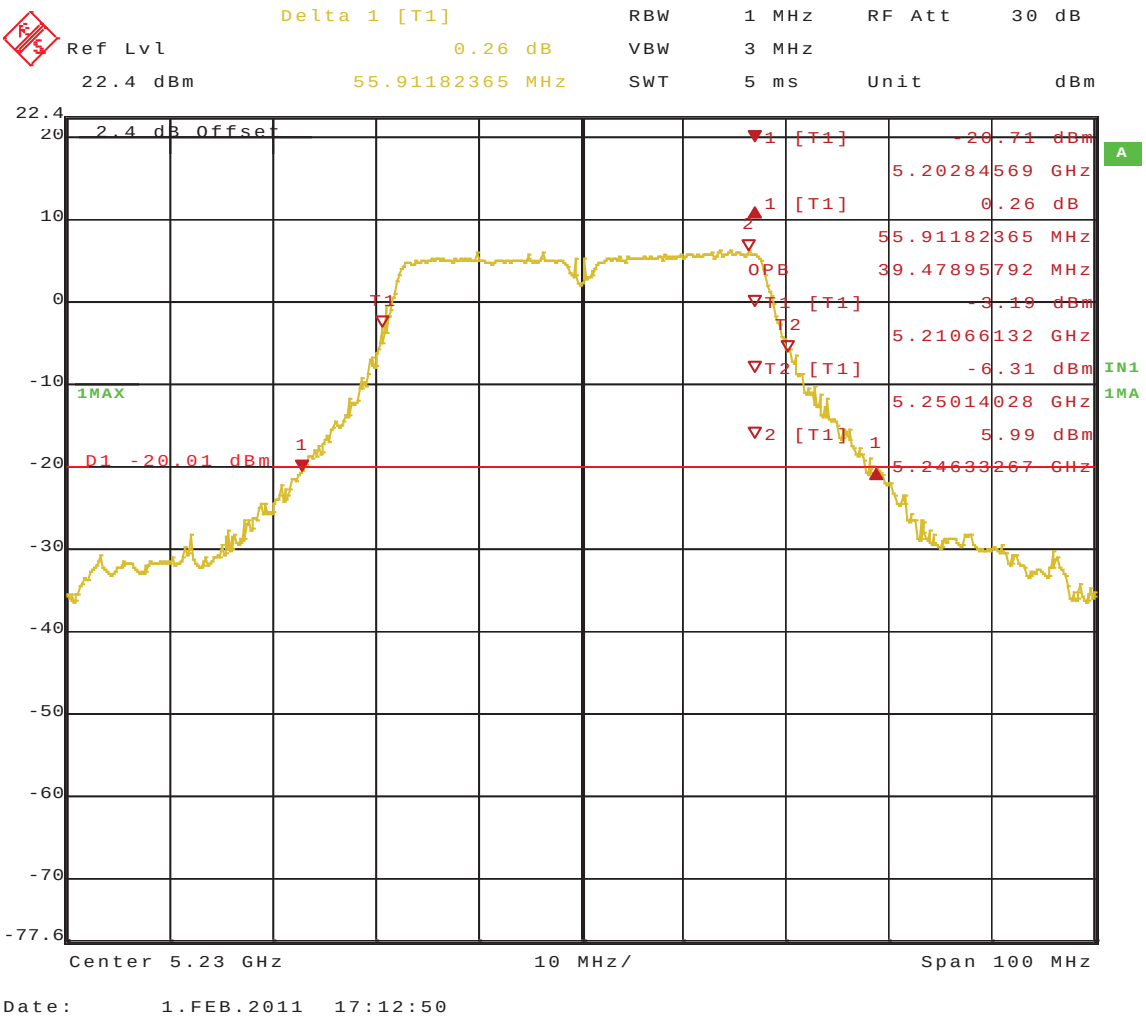


Figure 225: 26 dB and 99% Bandwidth – 5230 MHz, Chain 2, HT40

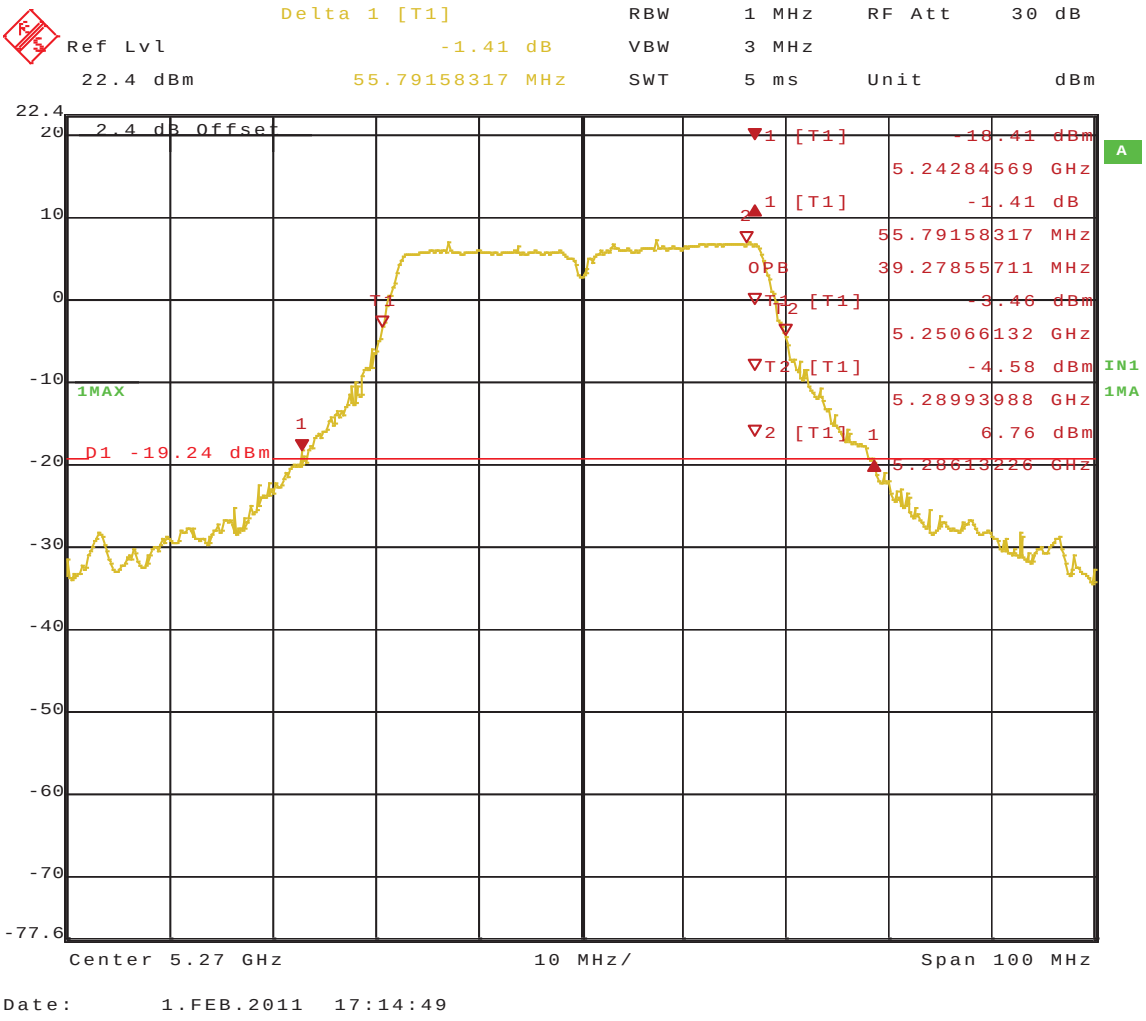


Figure 226: 26 dB and 99% Bandwidth – 5270 MHz, Chain 2, HT40

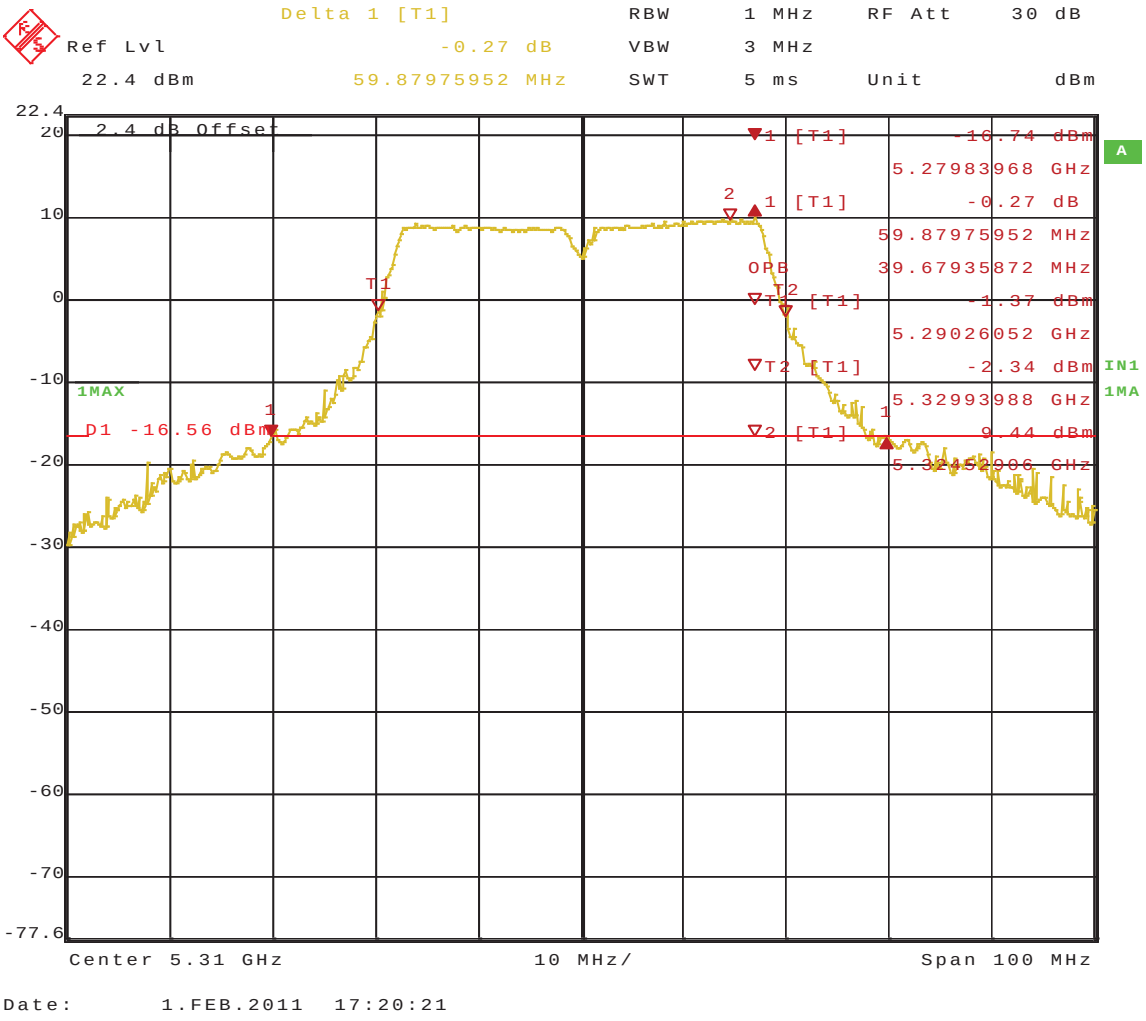


Figure 227: 26 dB and 99% Bandwidth – 5310 MHz, Chain 2, HT40

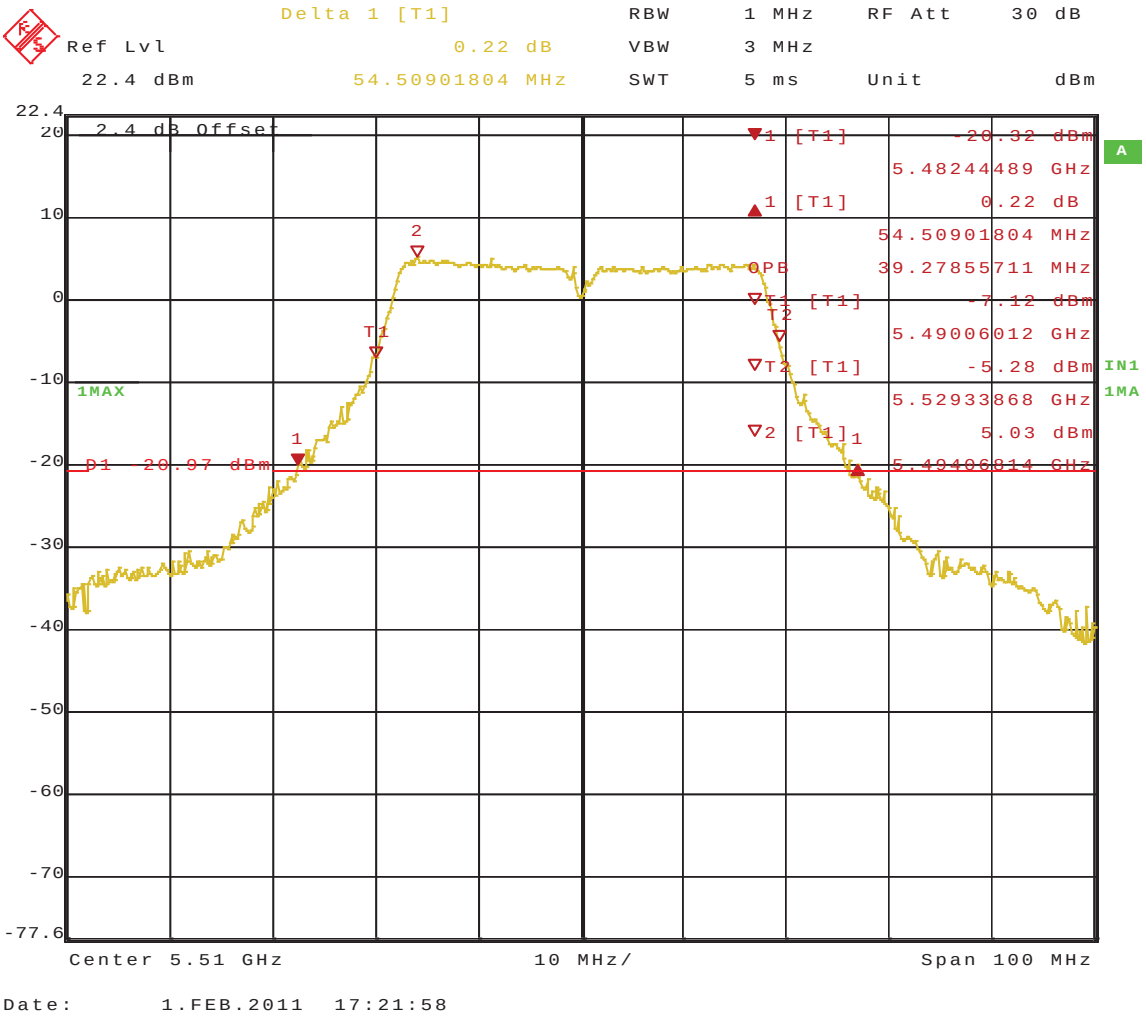


Figure 228: 26 dB and 99% Bandwidth – 5510 MHz, Chain 2, HT40

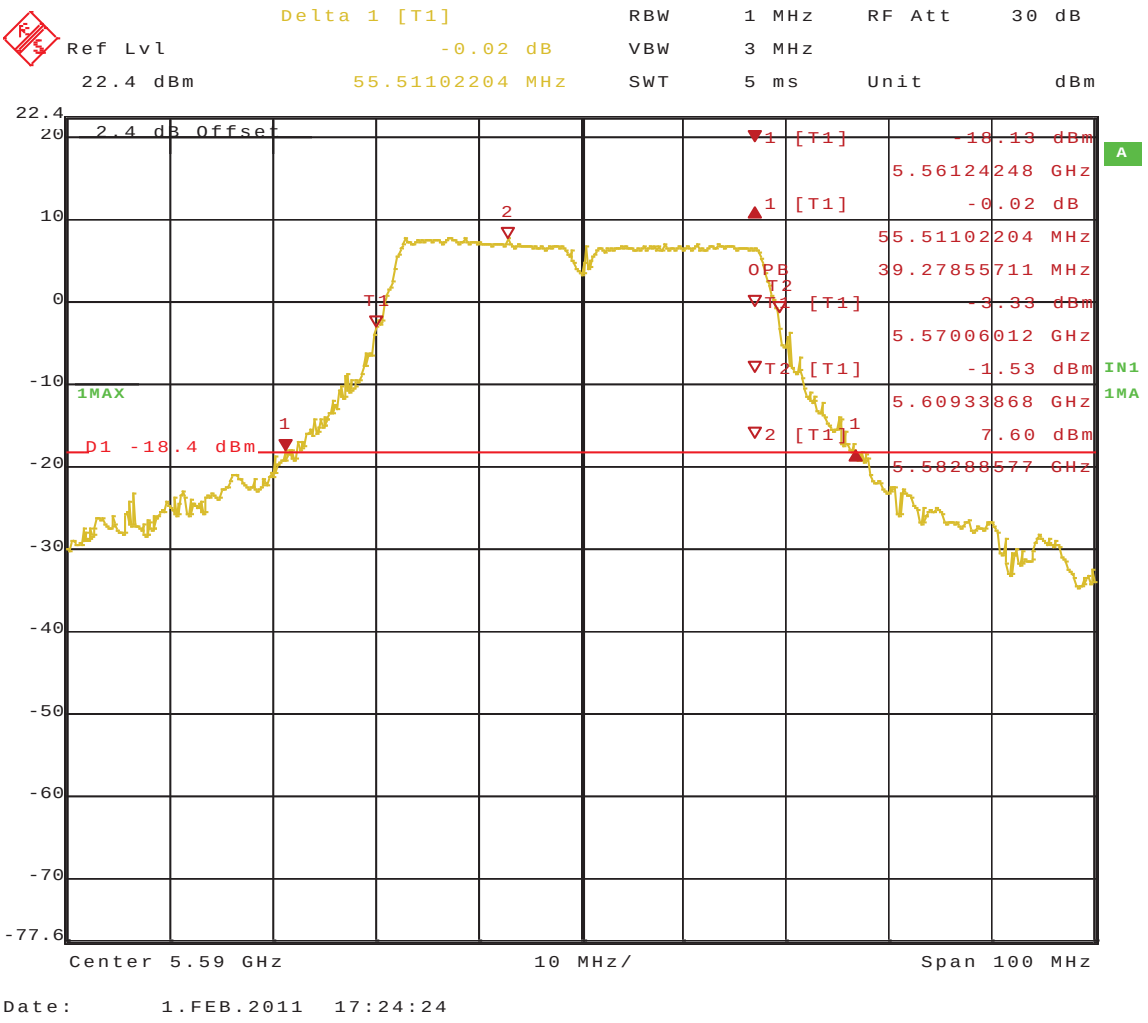


Figure 229: 26 dB and 99% Bandwidth – 5590 MHz, Chain 2, HT40

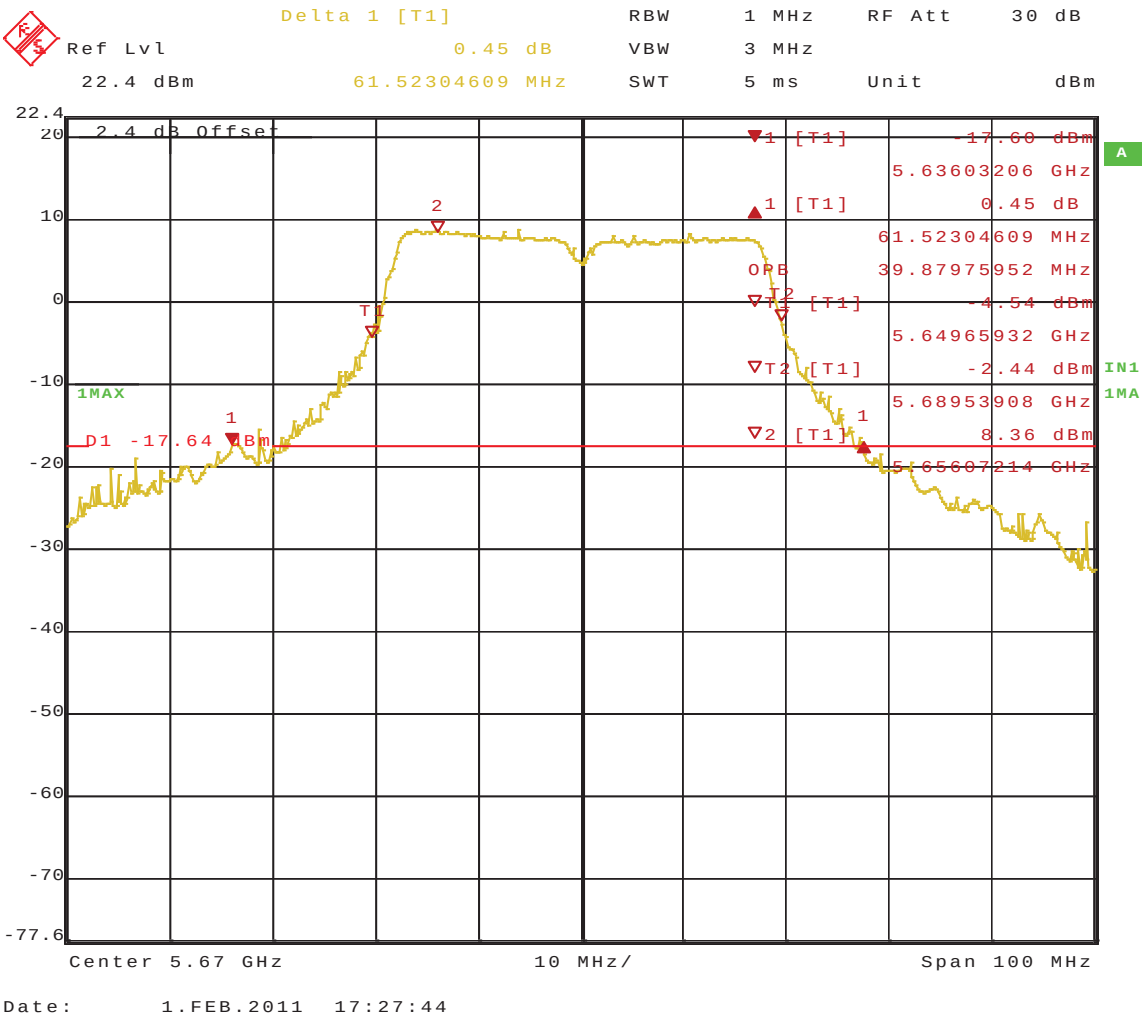


Figure 230: 26 dB and 99% Bandwidth – 5670 MHz, Chain 2, HT40

4.3 Peak Excursion

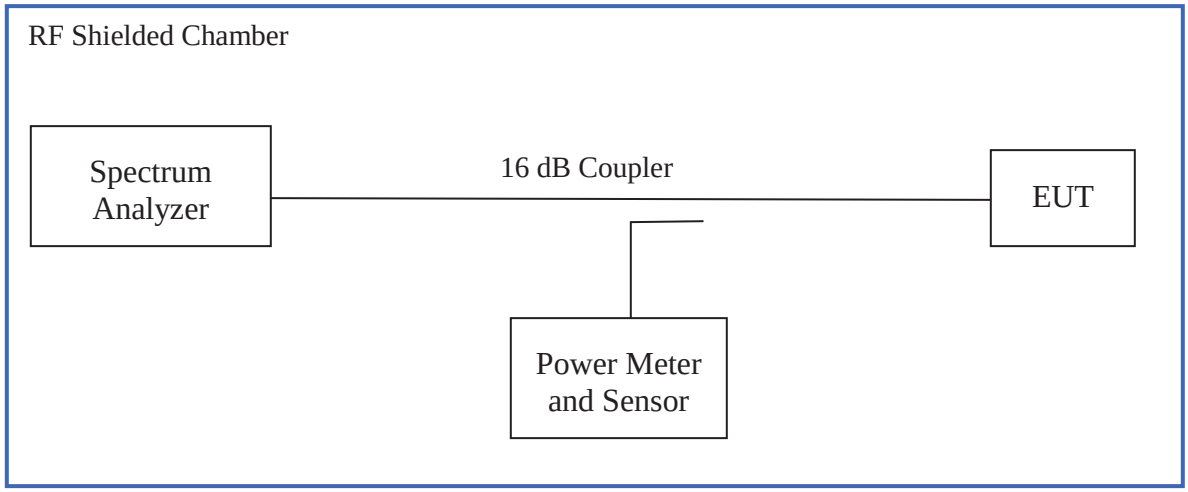
According to the CFR47 Part 15.407 (a)(6), the ratio of the peak excursion of the modulation envelope(measured suing a peak hold function) to the maximum conducted output power shall not exceed 13 dB across any 1 MHz bandwidth or the emission bandwidth whichever is less.

4.3.1 Test Method

The ANSI C63.10-2009 Section 6.10.4 conducted method was used to measure the peak excursion.

The measurement was performed with modulation per CFR47 Part 15.407 (a) (6) This test was conducted on 3 channels in each operating frequency range of 5150 MHz to 5250 MHz, 5250 MHz to 5350 MHz, 5470 MHz to 5725 MHz. The worst sample result indicated below.

Test Setup:



4.3.2 Results

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

Table 4: Peak Excursion – Test Results

Test Conditions: Conducted Measurement, Normal Temperature					
Antenna Type: Integrated			**Power Setting:** see test plan		
Max. Antenna Gain: + 3.2 dBi			**Signal State:** Modulated (100%)		
Ambient Temp.: 21 °C			**Relative Humidity:**31%		
802.11a Mode, 1x3					
Operating Channel	**Limit [dB]**	**Chain 0 [dB]**	**Chain 1 [dB]**	**Chain 2 [dB]**	**Margin [dB]**
5180	13.0	8.11	11.21	10.27	-1.79
5220	13.0	9.95	9.84	9.55	-3.05
5240	13.0	10.27	9.81	11.49	-1.51
5260	13.0	10.40	10.29	9.28	-2.60
5300	13.0	10.97	9.81	10.19	-2.03
5320	13.0	10.41	10.82	9.47	-2.18
5500	13.0	9.60	9.98	10.04	-2.96
5600	13.0	9.22	9.77	10.63	-2.37
5700	13.0	10.66	10.33	10.32	-2.34
Note: The peak excursion was observed at 6 Mbps.					
802.11n (HT20) Mode, 1x3					
Operating Channel	**Limit [dB]**	**Chain 0 [dB]**	**Chain 1 [dB]**	**Chain 2 [dB]**	**Margin [dB]**
5180	13.0	9.48	10.31	10.90	-2.10
5220	13.0	9.44	10.35	10.47	-2.53
5240	13.0	10.20	9.78	10.19	-2.80
5260	13.0	10.24	9.20	9.86	-2.76
5300	13.0	10.66	10.41	9.98	-2.34
5320	13.0	10.06	9.60	9.80	-2.94

5500	13.0	9.96	10.41	10.71	-2.29
5600	13.0	10.43	10.22	10.35	-2.57
5700	13.0	10.00	10.29	10.15	-2.71
Note: The peak excursion was observed at HT20 6.5 Mbps, 1 Data Stream.					
802.11n (HT20) Mode, 2x3					
Operating Channel	**Limit [dB]**	**Chain 0 [dB]**	**Chain 1 [dB]**	**Chain 2 [dB]**	**Margin [dB]**
5180	13.0	11.91	11.98		-1.02
5220	13.0	10.69	11.96		-1.04
5240	13.0	10.72	11.10		-1.90
5260	13.0	10.97	11.32		-1.68
5300	13.0	10.91	11.48		-1.52
5320	13.0	11.11	11.14		-1.86
5500	13.0	-10.40	10.65		-2.35
5600	13.0	12.08	11.37		-0.92
5700	13.0	10.96	11.69		-1.31
Note: The peak excursion was observed at HT20 13 Mbps, 2 Data Streams.					
802.11n (HT20) Mode, 3x3					
Operating Channel	**Limit [dB]**	**Chain 0 [dB]**	**Chain 1 [dB]**	**Chain 2 [dB]**	**Margin [dB]**
5180	13.0	12.43	10.82	10.52	-0.57
5220	13.0	12.04	10.91	10.87	-0.96
5240	13.0	10.96	10.78	10.20	-2.04
5260	13.0	10.39	10.68	10.88	-2.12
5300	13.0	10.63	10.53	10.98	-2.02
5320	13.0	10.21	9.76	10.15	-2.79
5500	13.0	10.45	12.22	9.72	-0.78
5600	13.0	10.91	10.79	10.84	-2.09
5700	13.0	11.16	9.50	10.52	-1.84
Note: The peak excursion was observed at HT20 19.5 Mbps, 3 Data Streams.					

802.11n (HT40) Mode, 1x3					
Operating Channel	**Limit [dB]**	**Chain 0 [dB]**	**Chain 1 [dB]**	**Chain 2 [dB]**	**Margin [dB]**
5190	13.0	9.50	10.84	9.84	-2.16
5230	13.0	10.98	10.32	10.31	-2.02
5270	13.0	9.73	9.68	9.25	-3.27
5310	13.0	10.13	10.64	10.82	-2.18
5510	13.0	9.99	9.96	9.61	-3.01
5590	13.0	11.21	11.07	10.35	-1.79
5670	13.0	9.33	10.09	10.35	-2.65
Note: The peak excursion was observed at HT40 13.5 Mbps, 1 Data Stream					
802.11n (HT40) Mode, 2x3					
Operating Channel	**Limit [dB]**	**Chain 0 [dB]**	**Chain 1 [dB]**	**Chain 2 [dB]**	**Margin [dB]**
5190	13.0	9.85	10.22		-2.78
5230	13.0	9.34	9.68		-3.32
5270	13.0	9.30	9.75		-3.25
5310	13.0	9.78	10.18		-2.82
5510	13.0	9.56	10.29		-2.71
5590	13.0	10.18	9.66		-2.82
5670	13.0	9.96	10.31		-2.69
Note: The peak excursion was observed at HT40 27 Mbps, 2 Data Streams.					
802.11n (HT40) Mode, 3x3					
Operating Channel	**Limit [dB]**	**Chain 0 [dB]**	**Chain 1 [dB]**	**Chain 2 [dB]**	**Margin [dB]**
5190	13.0	10.44	11.48	11.22	-1.52
5230	13.0	9.83	10.41	10.94	-2.06
5270	13.0	9.82	10.93	9.82	-2.07
5310	13.0	10.40	11.50	11.11	-1.50
5510	13.0	10.14	10.70	11.31	-1.69
5590	13.0	9.90	10.24	10.80	-2.20

5670	13.0	11.12	11.14	11.88	-1.12
Note: The peak excursion was observed at HT40 40.5 Mbps, 3 Data Streams.					

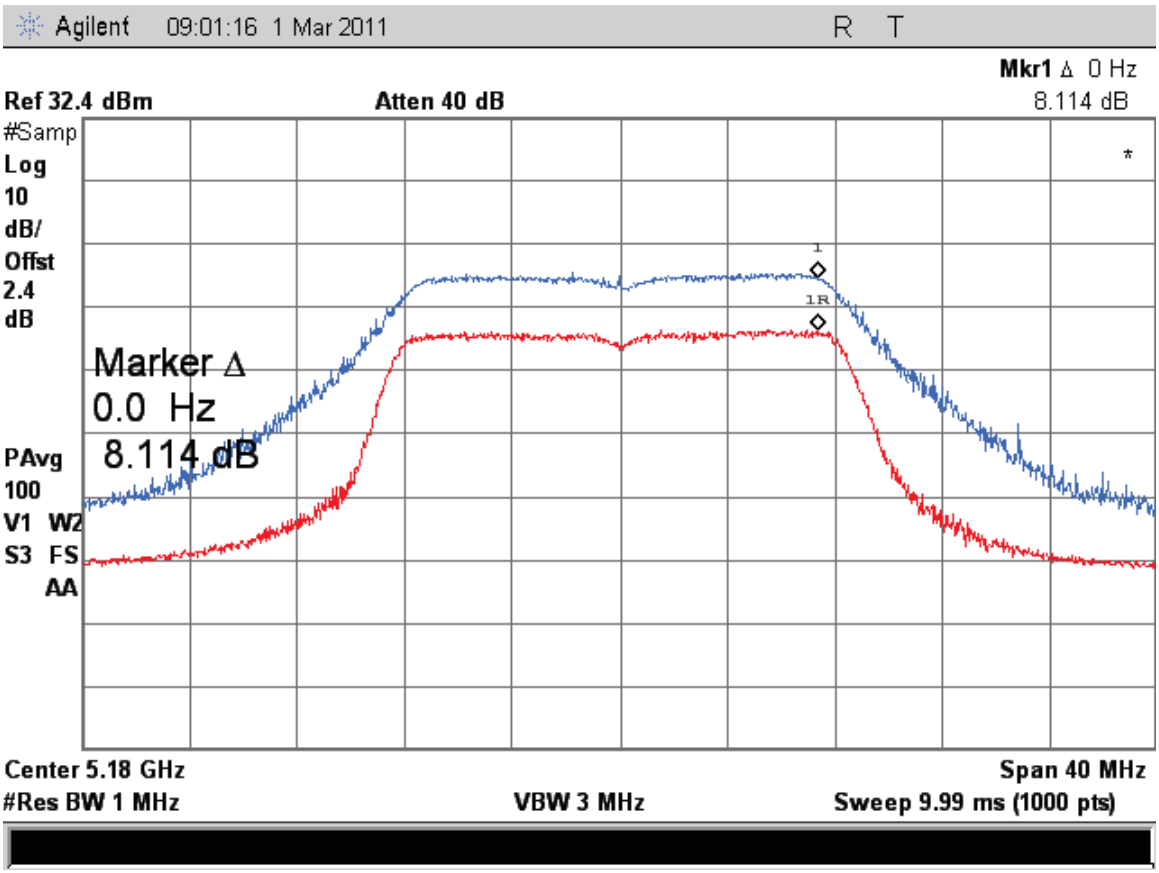


Figure 231: Peak Excursion, 5180 MHz at 802.11a, Chain 0 - 6Mbps

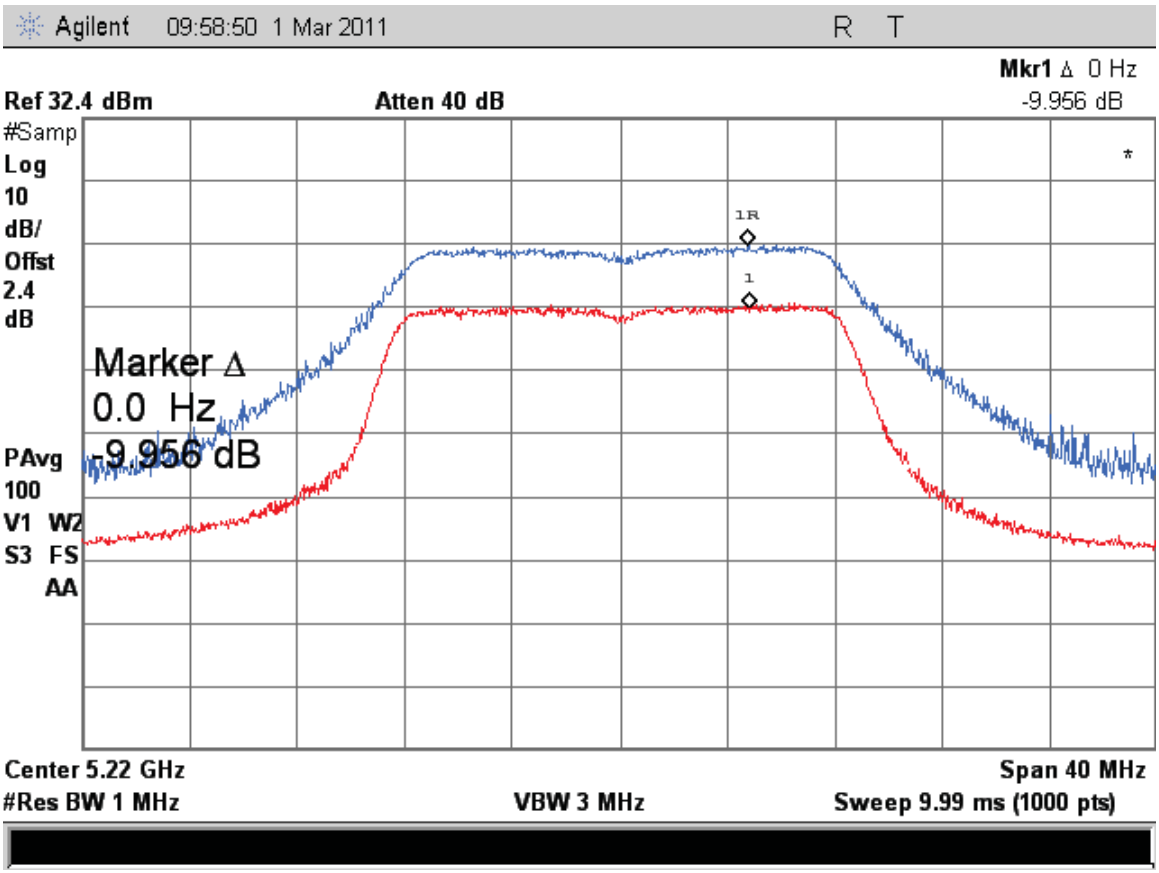


Figure 232: Peak Excursion, 5220 MHz at 802.11a, Chain 0 - 6Mbps

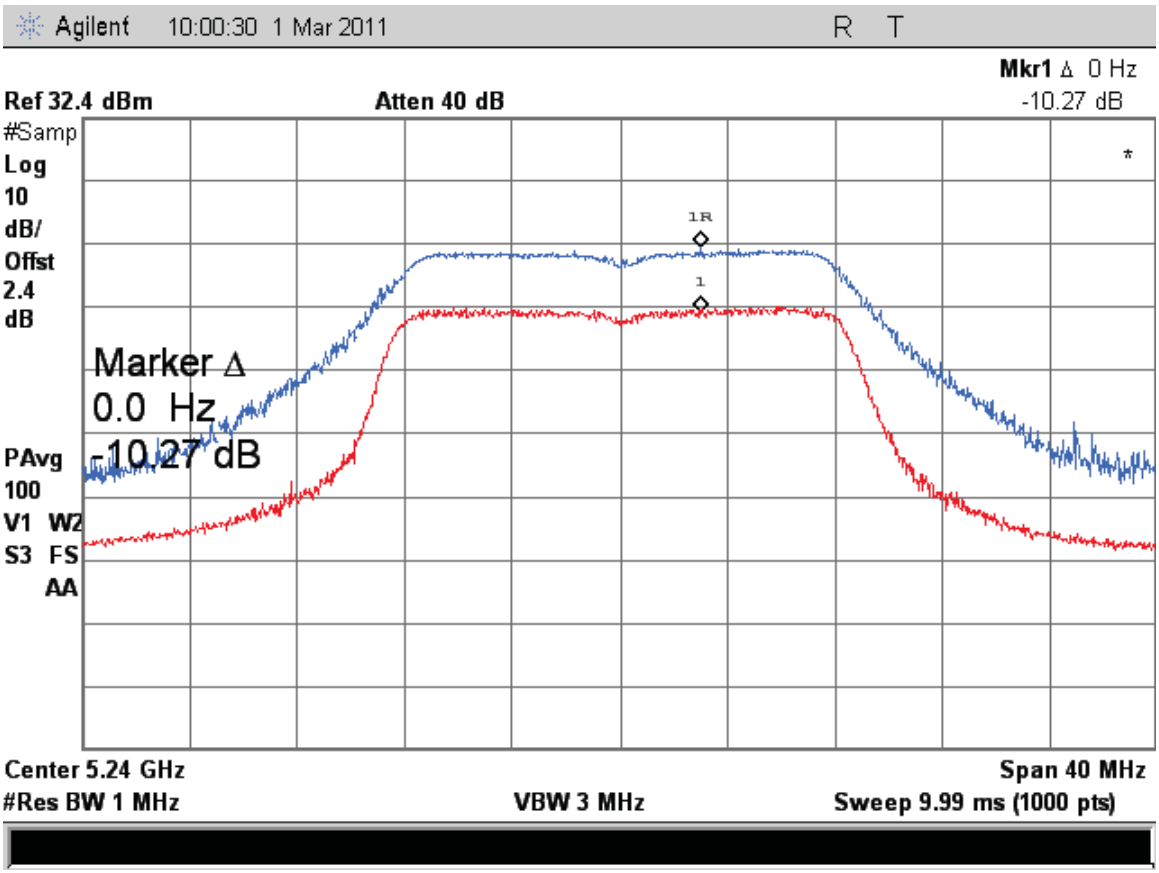


Figure 233: Peak Excursion, 5240 MHz at 802.11a, Chain 0 - 6Mbps

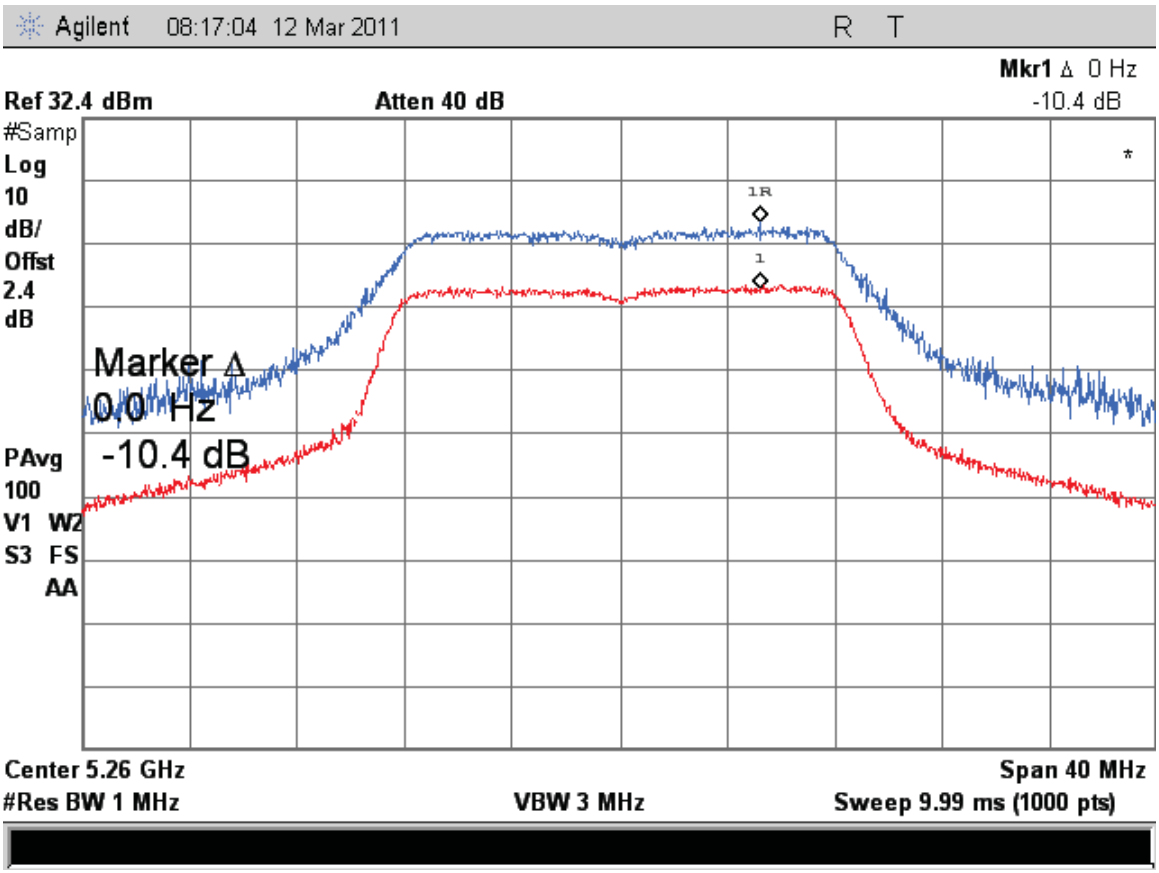


Figure 234: Peak Excursion, 5260 MHz at 802.11a, Chain 0 - 6Mbps

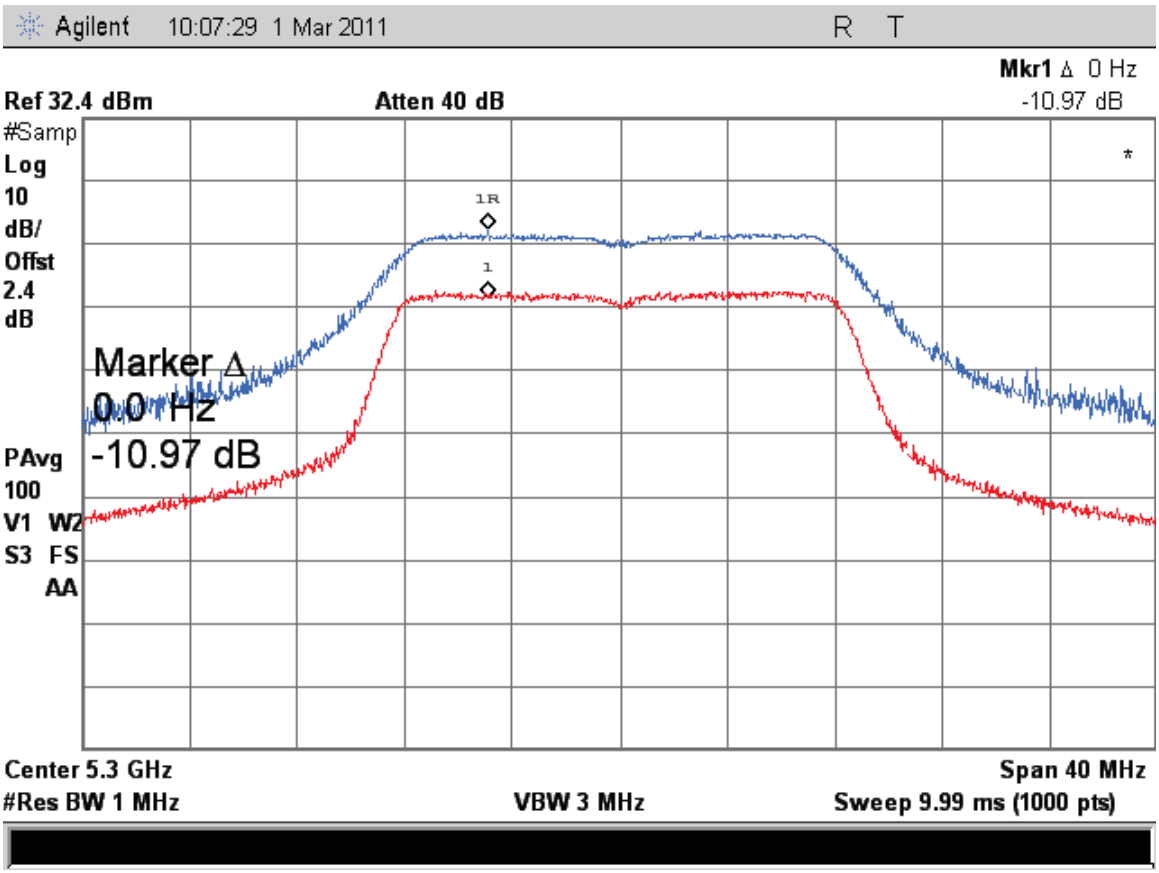


Figure 235: Peak Excursion, 5300 MHz at 802.11a, Chain 0 - 6Mbps

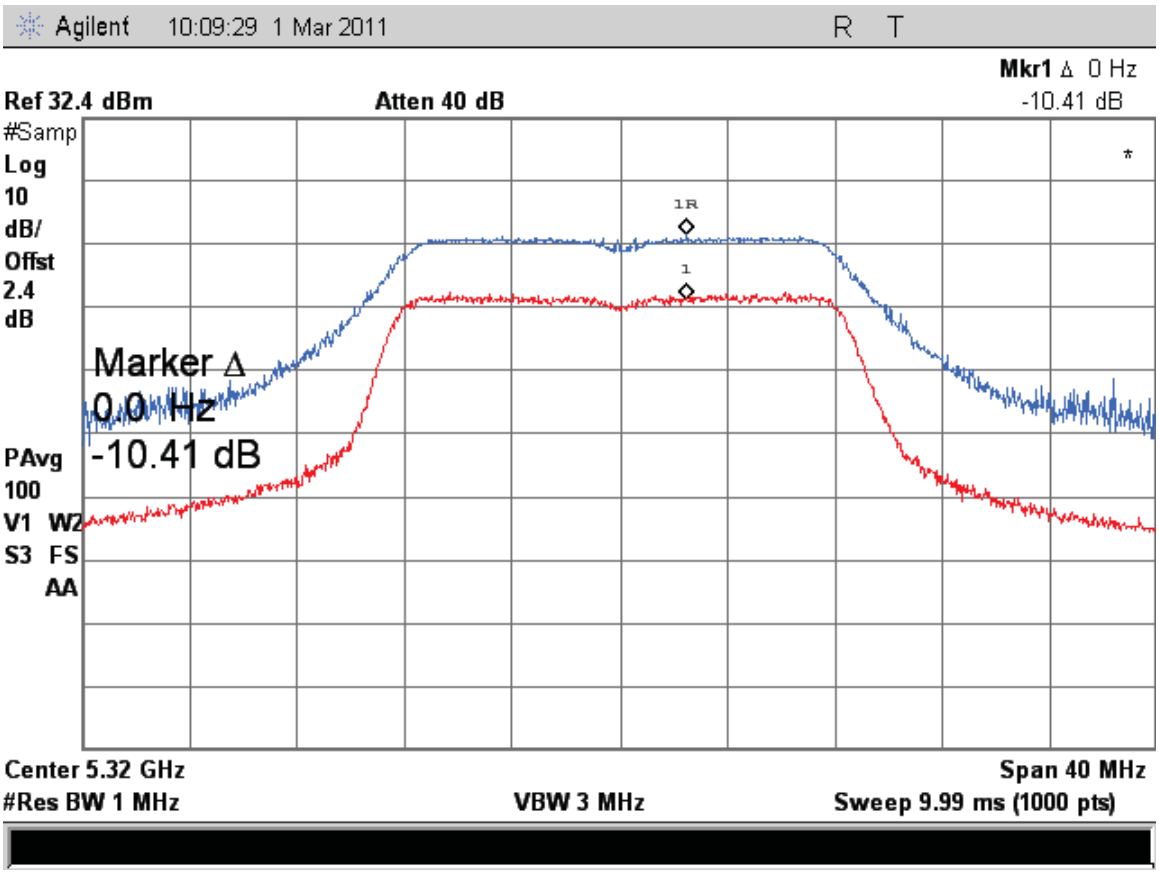


Figure 236: Peak Excursion, 5320 MHz at 802.11a, Chain 0 - 6Mbps

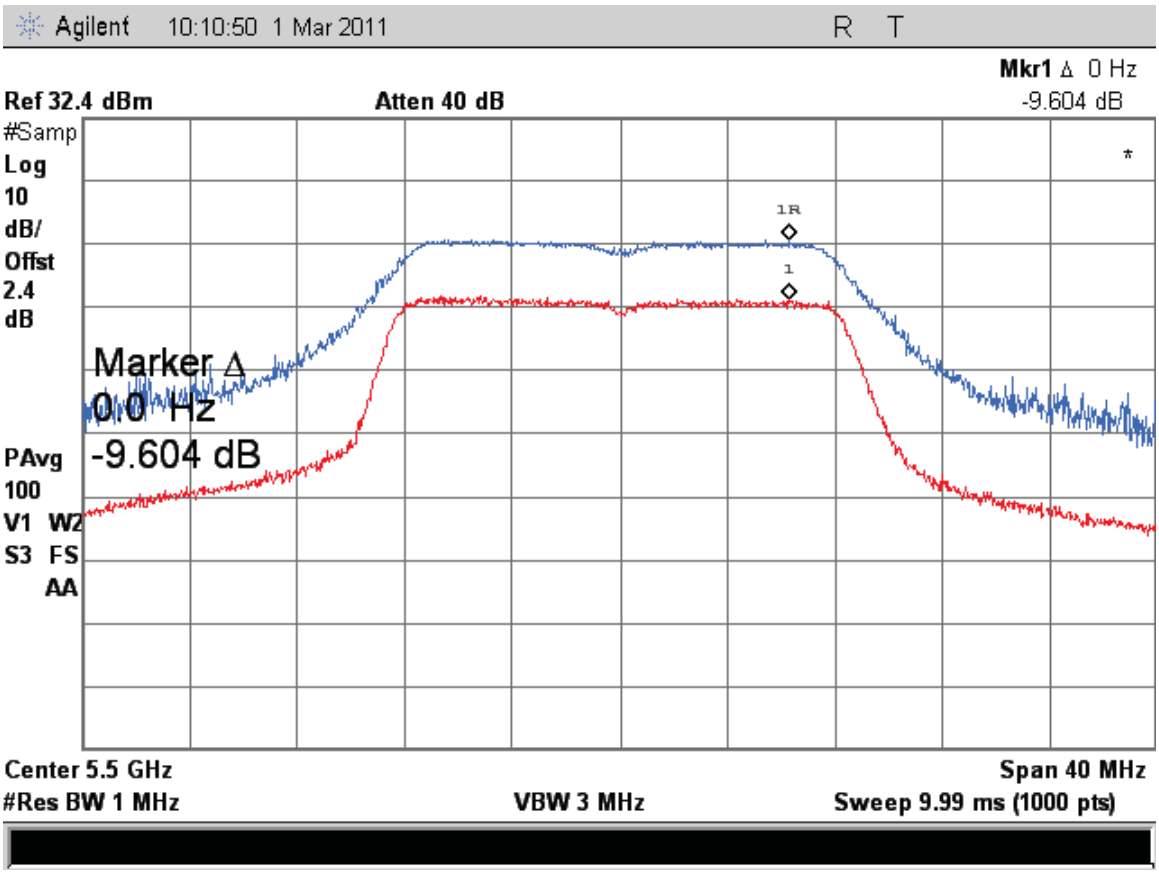


Figure 237: Peak Excursion, 5500 MHz at 802.11a, Chain 0 - 6Mbps

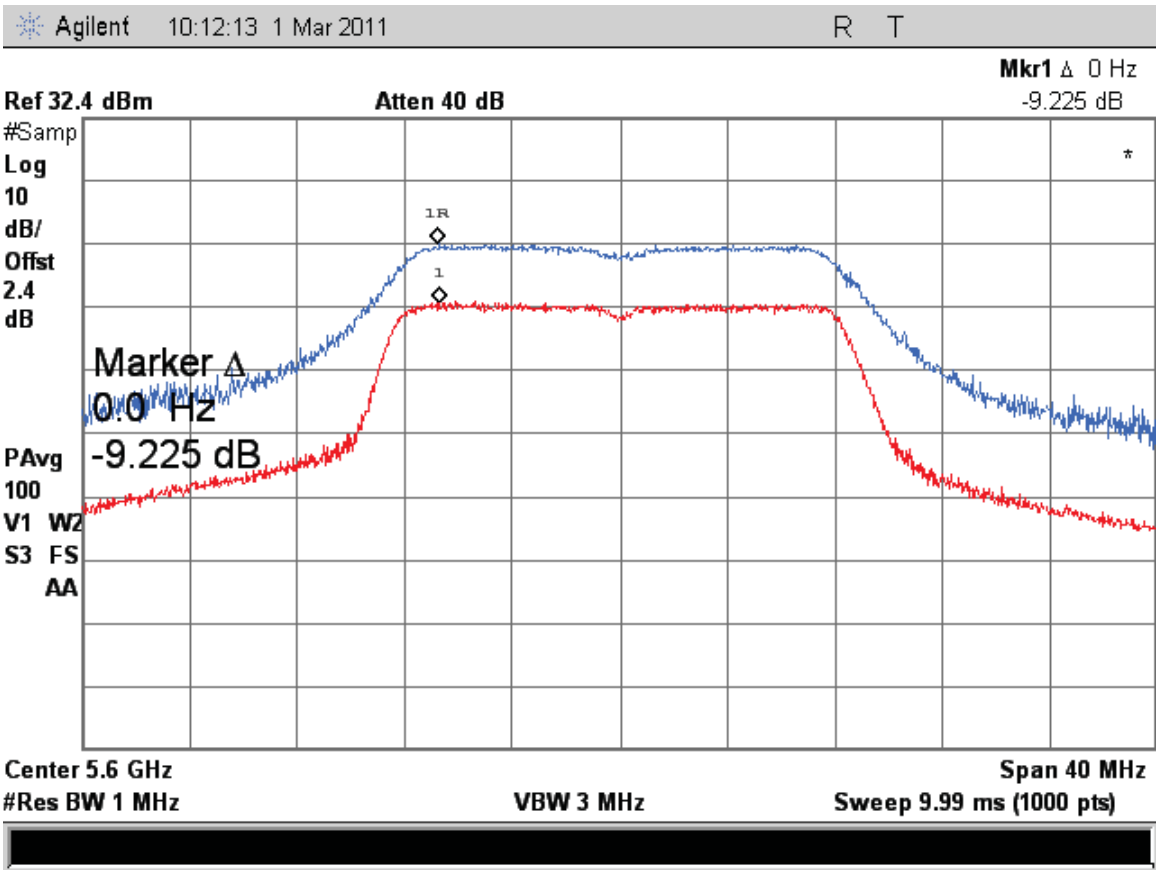


Figure 238: Peak Excursion, 5600 MHz at 802.11a, Chain 0 - 6Mbps

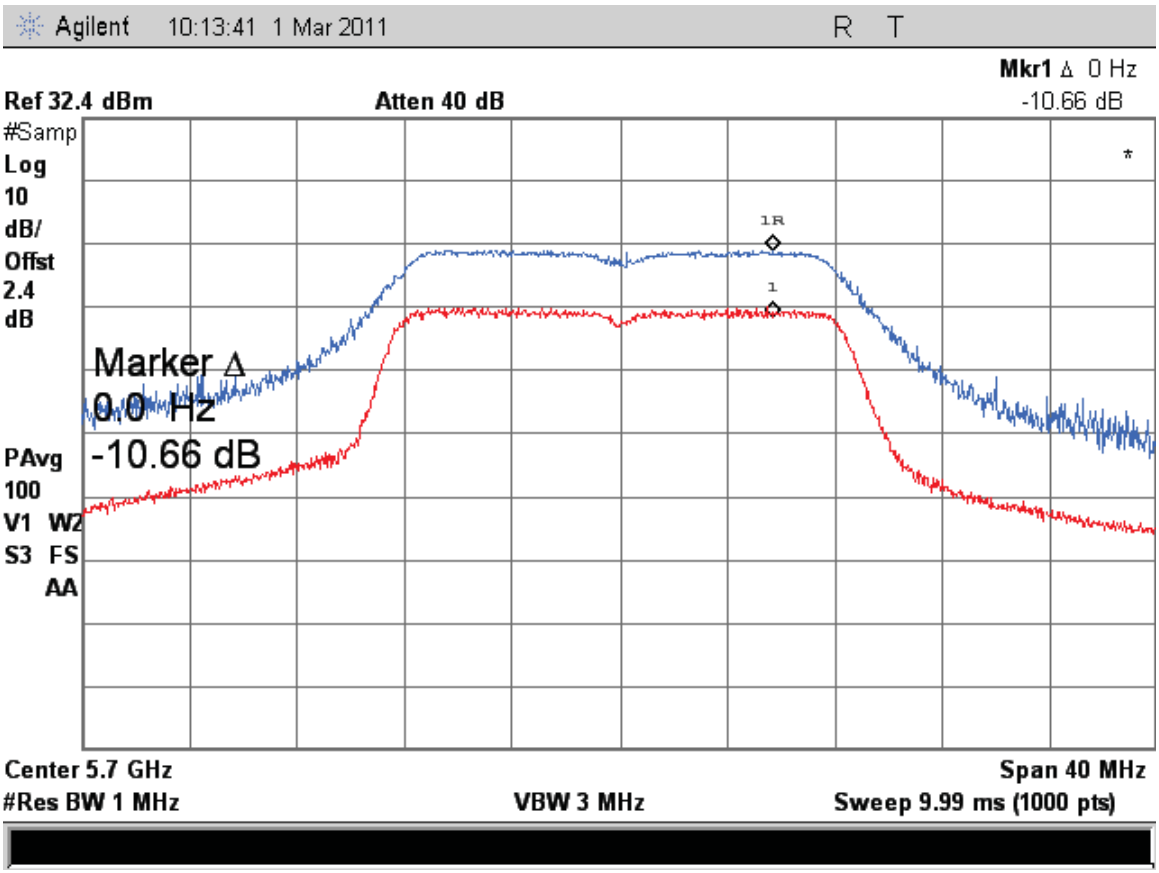


Figure 239: Peak Excursion, 5700 MHz at 802.11a, Chain 0 - 6Mbps

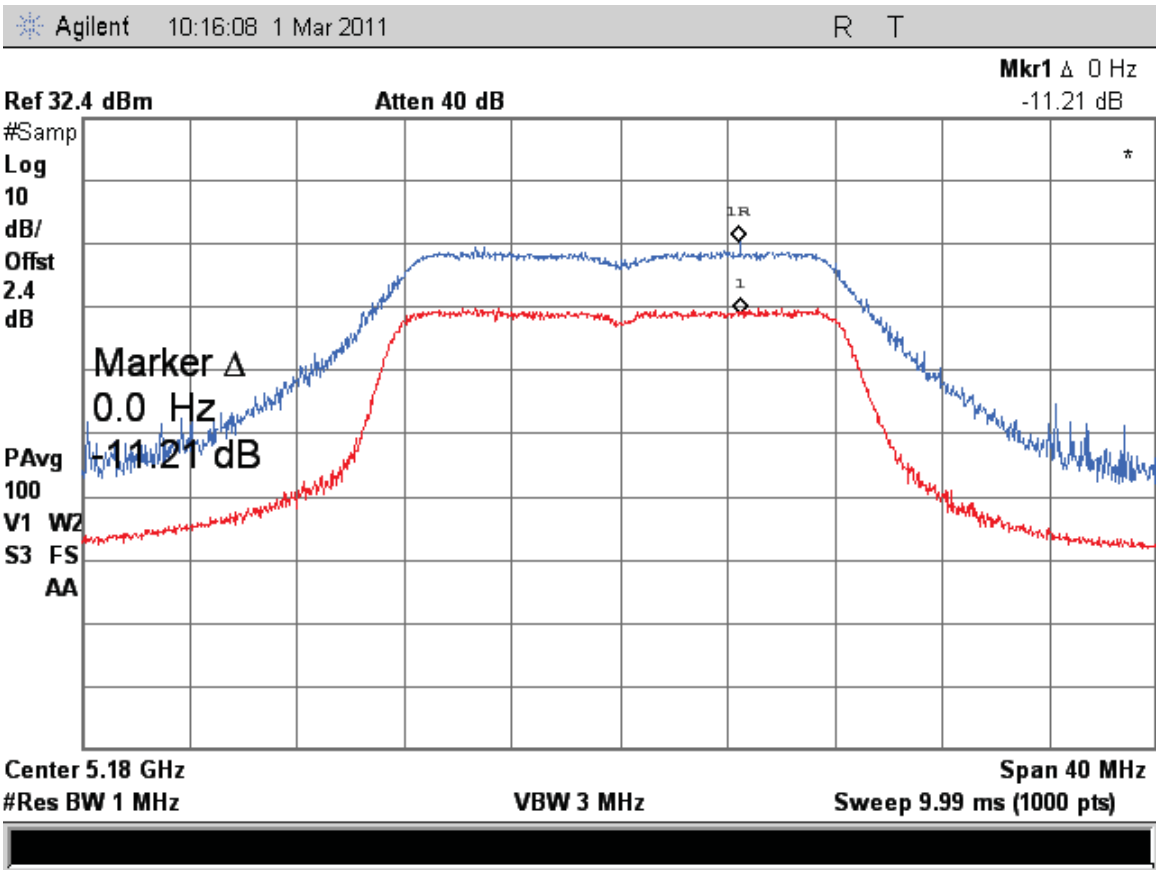


Figure 240: Peak Excursion, 5180 MHz at 802.11a, Chain 1 - 6Mbps

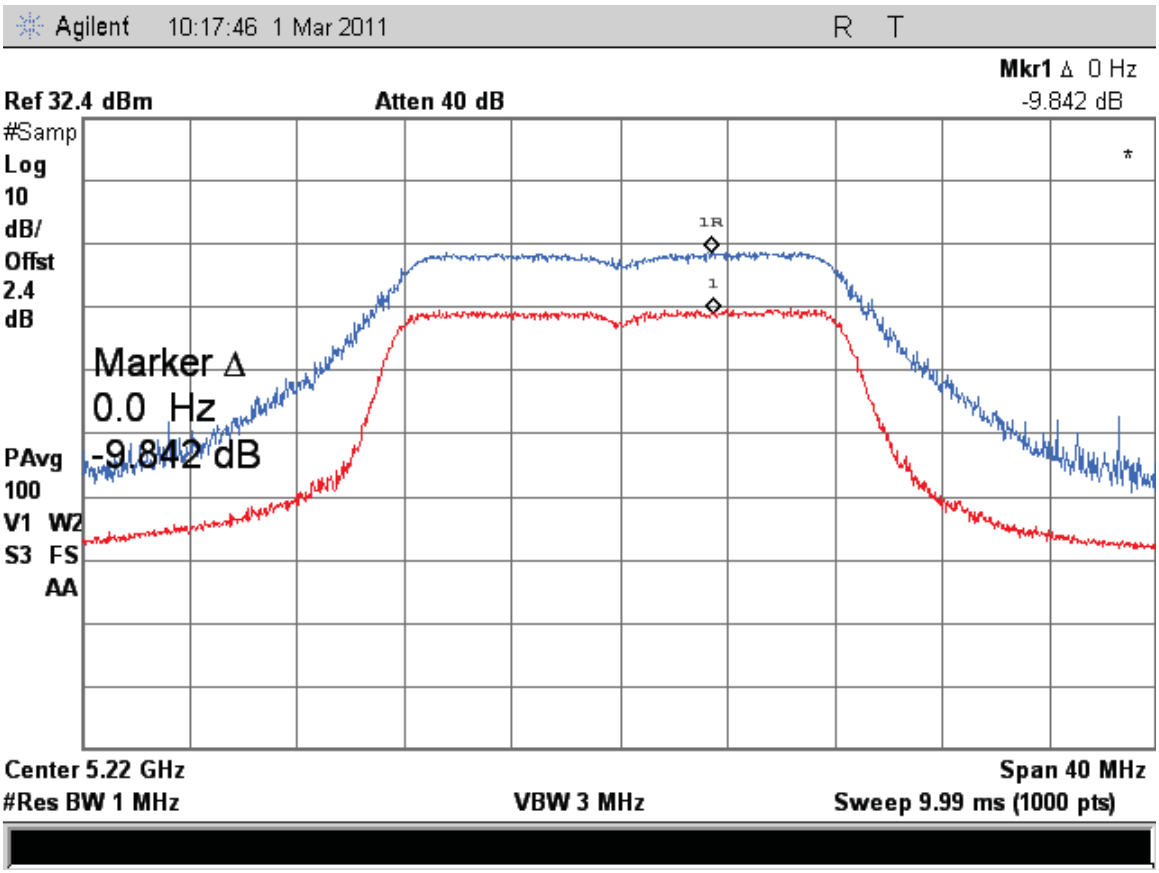


Figure 241: Peak Excursion, 5220 MHz at 802.11a, Chain 1 - 6Mbps

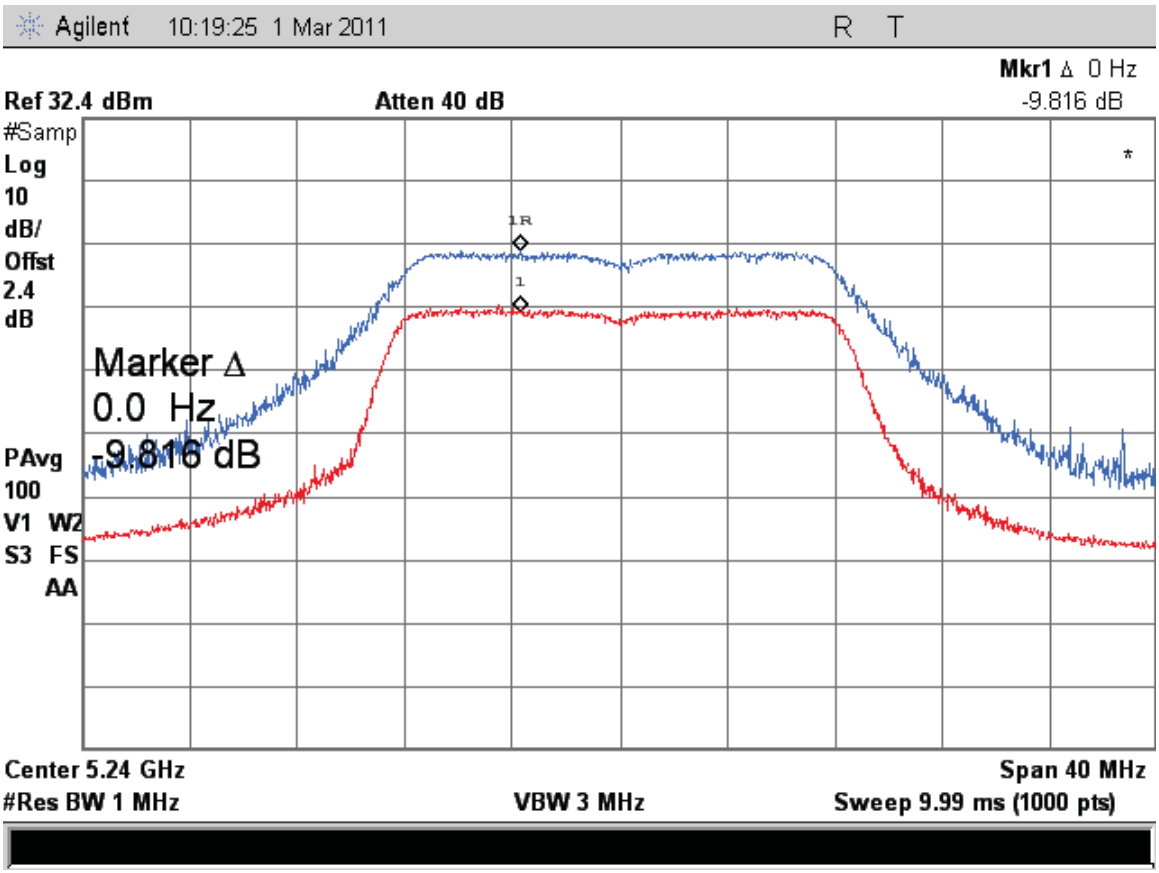


Figure 242: Peak Excursion, 5240 MHz at 802.11a, Chain 1 - 6Mbps

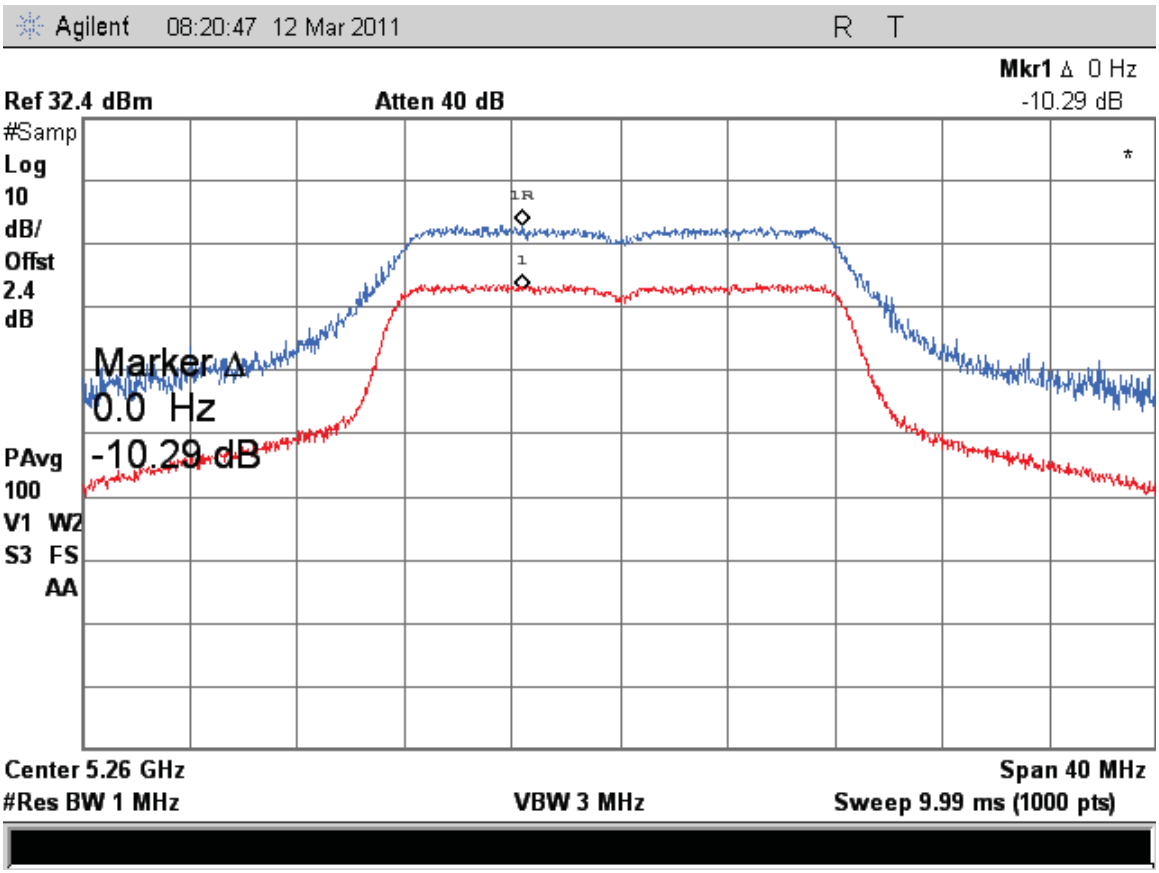


Figure 243: Peak Excursion, 5260 MHz at 802.11a, Chain 1 - 6Mbps

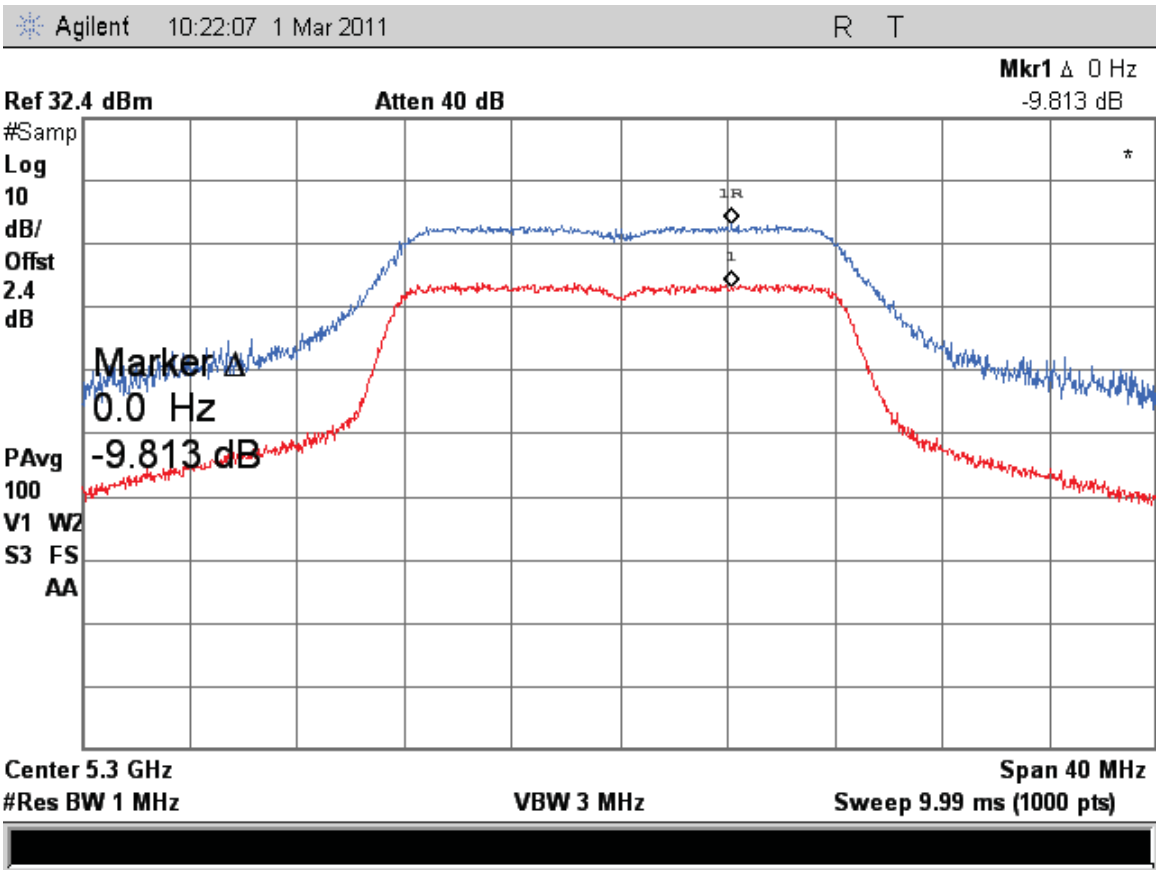


Figure 244: Peak Excursion, 5300 MHz at 802.11a, Chain 1 - 6Mbps

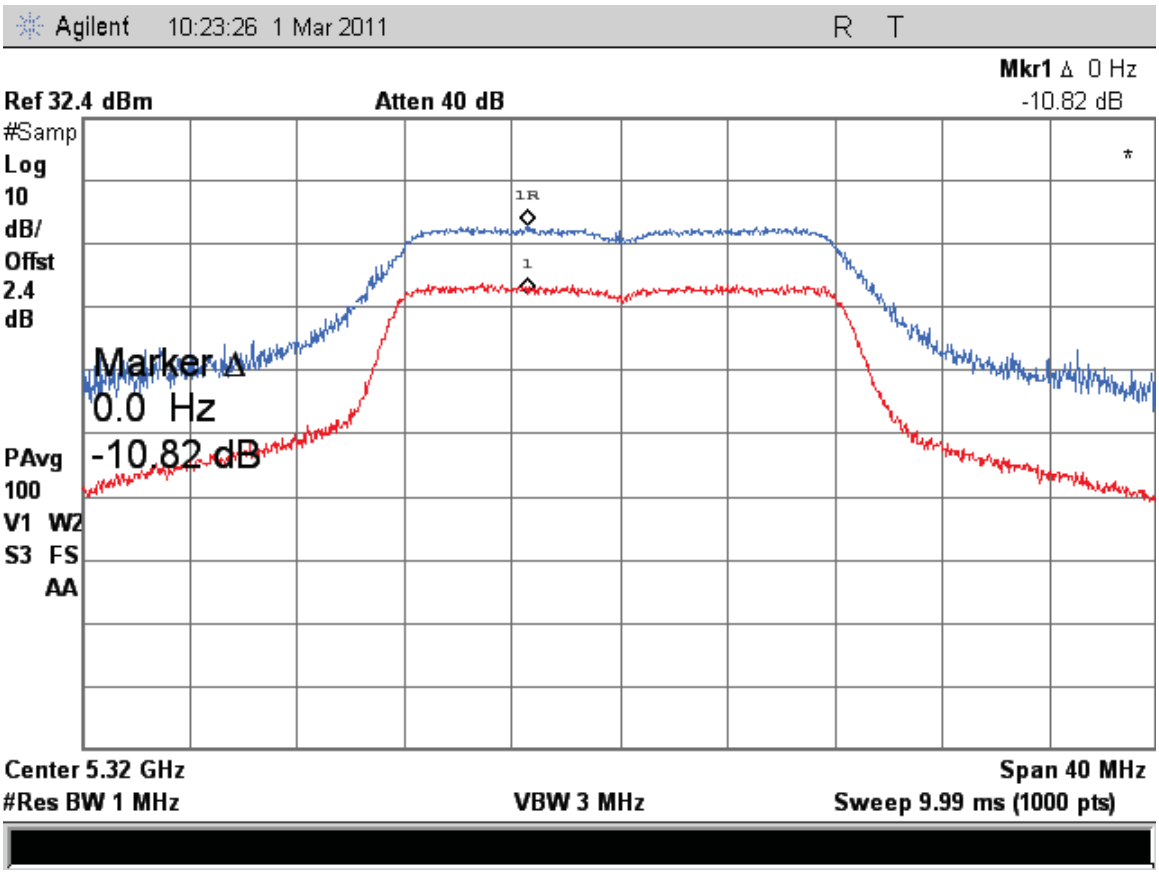


Figure 245: Peak Excursion, 5320 MHz at 802.11a, Chain 1 - 6Mbps

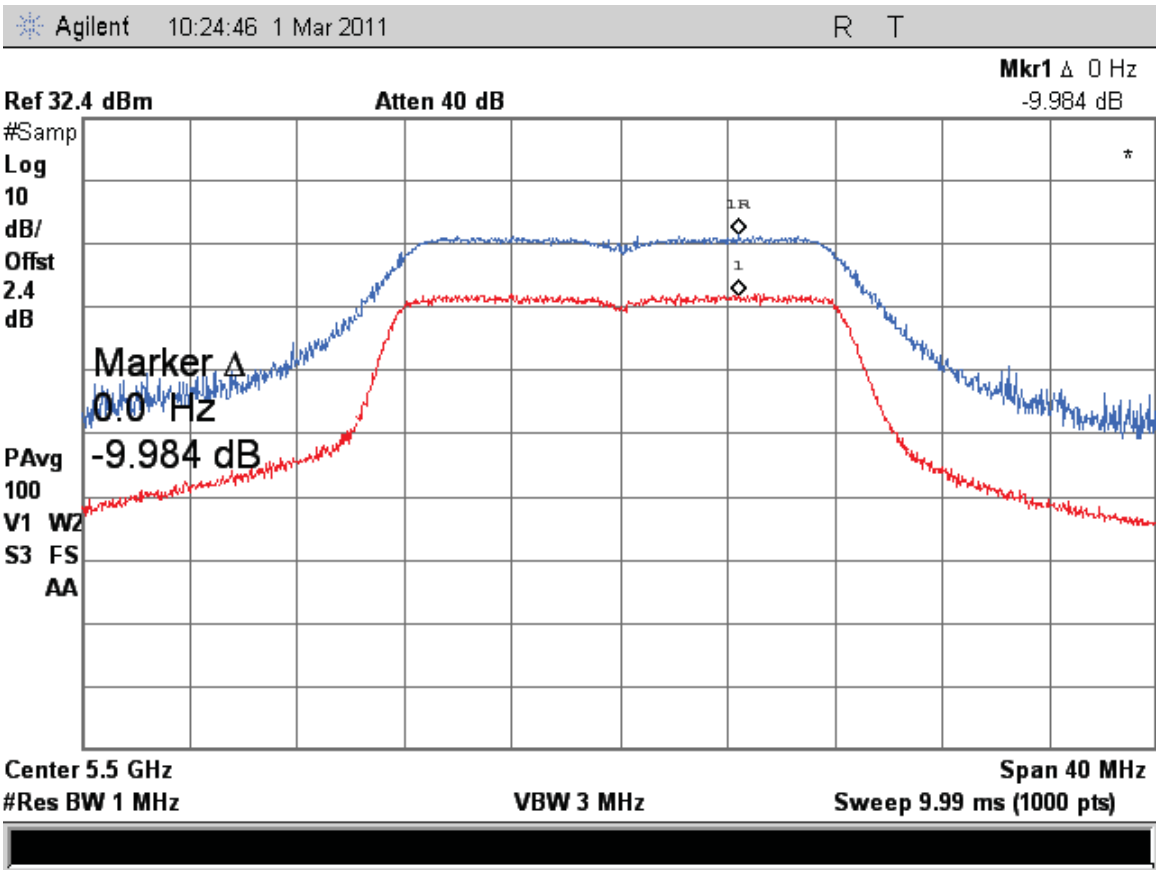


Figure 246: Peak Excursion, 5500 MHz at 802.11a, Chain 1 - 6Mbps

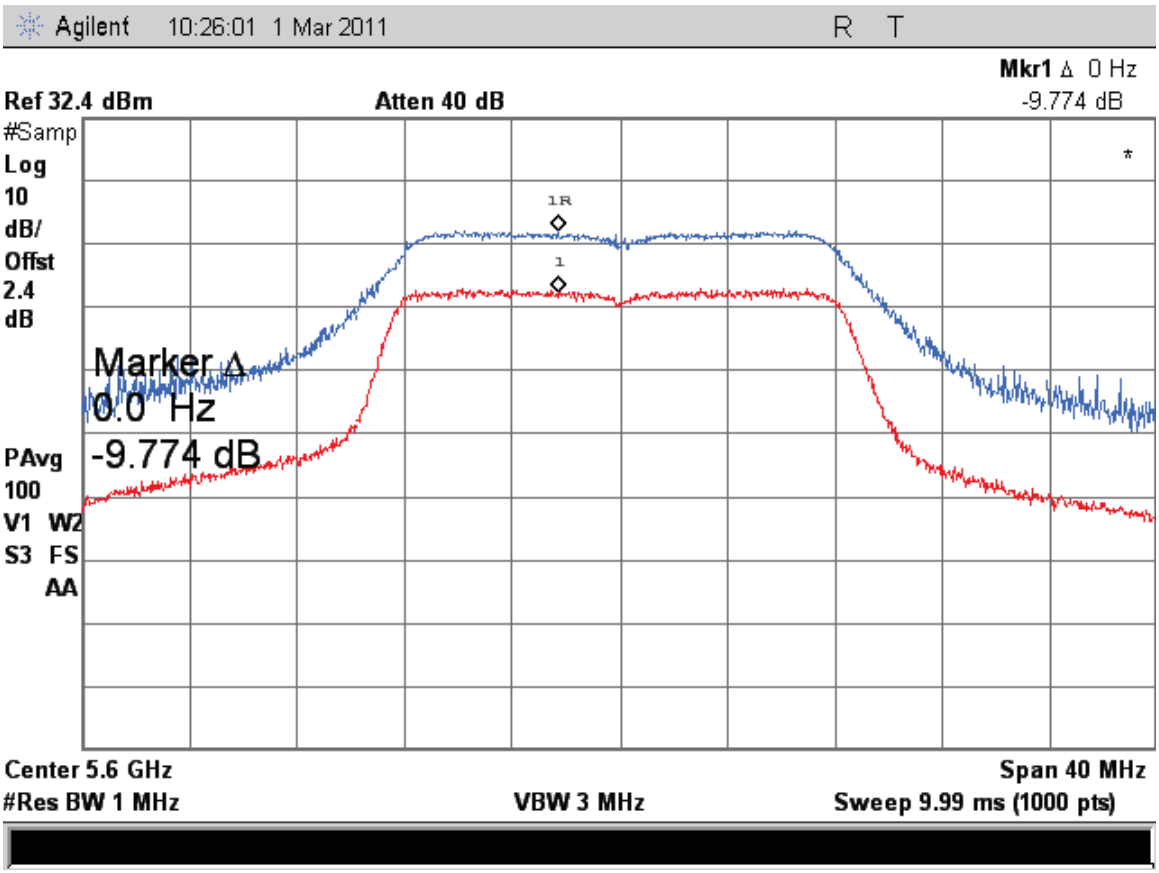


Figure 247: Peak Excursion, 5600 MHz at 802.11a, Chain 1 - 6Mbps

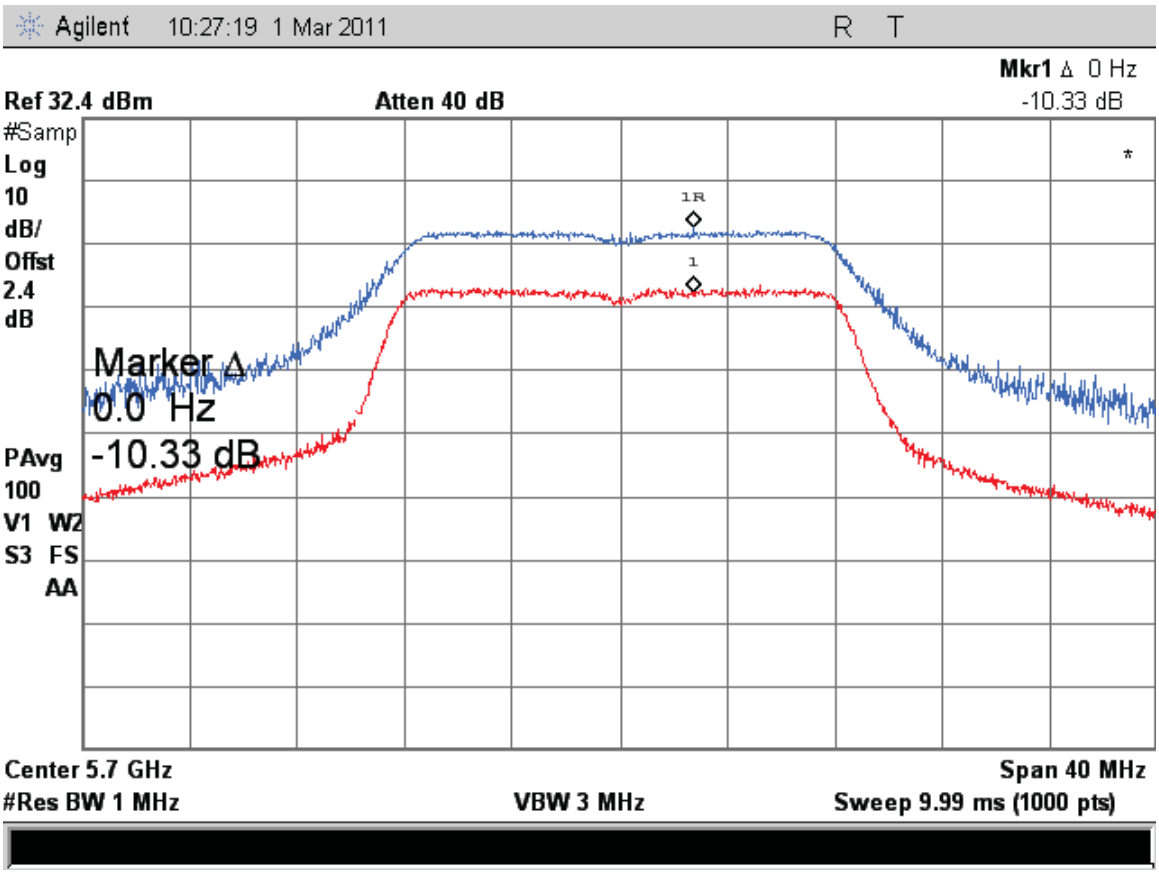


Figure 248: Peak Excursion, 5700 MHz at 802.11a, Chain 1 - 6Mbps

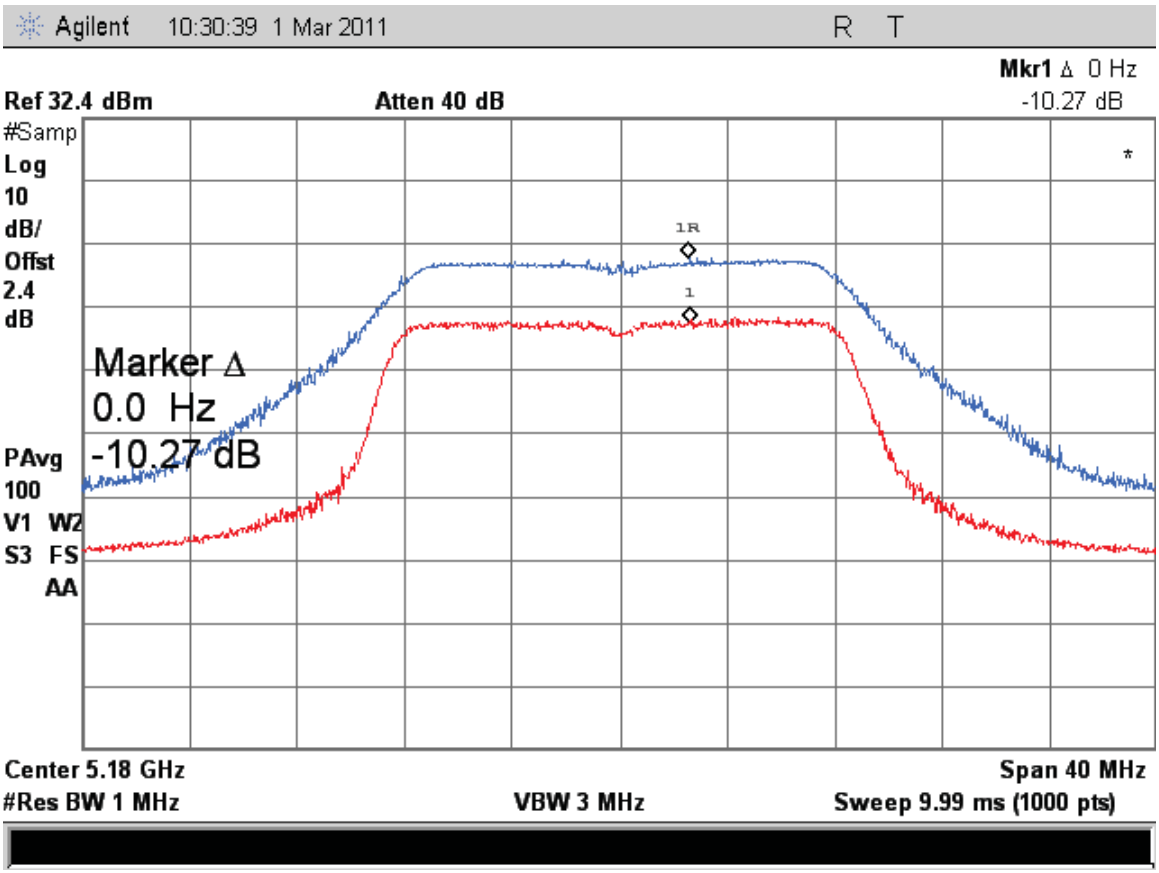


Figure 249: Peak Excursion, 5180 MHz at 802.11a, Chain 2 – 6Mbps

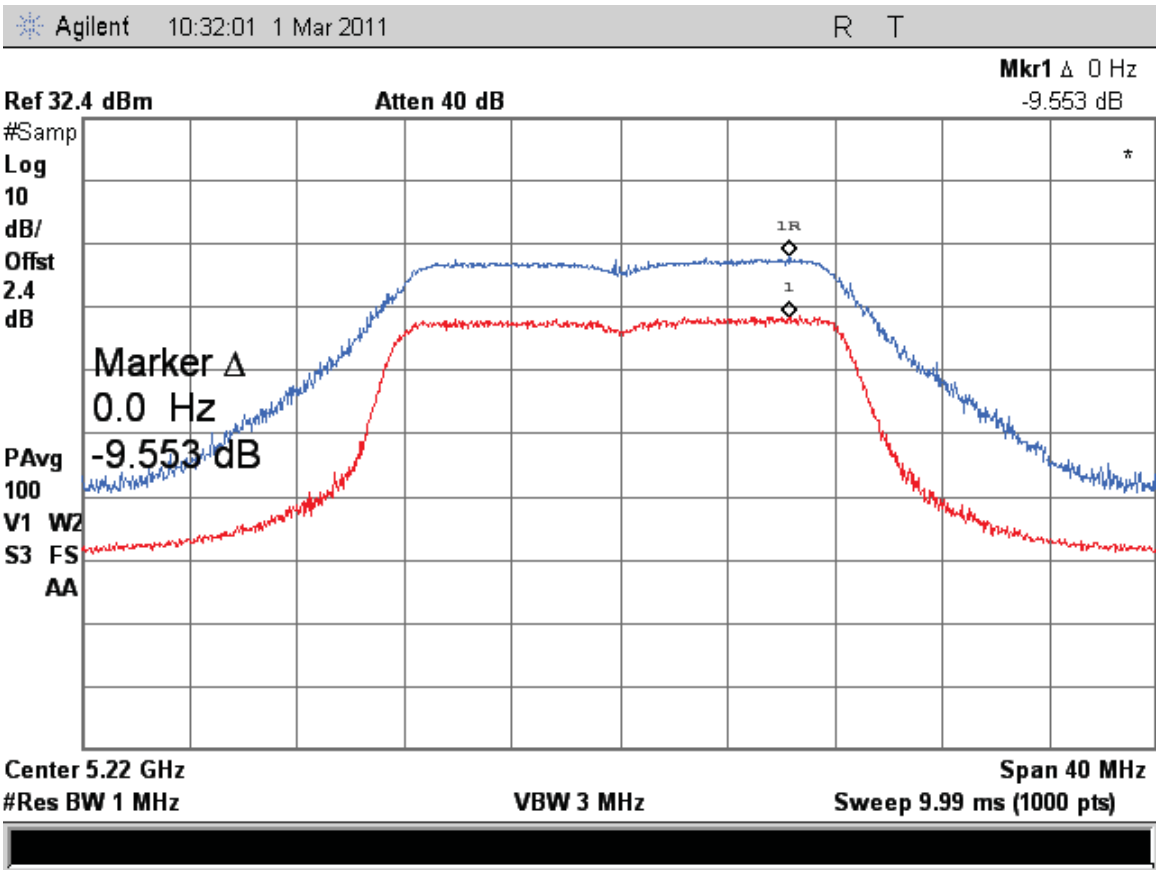


Figure 250: Peak Excursion, 5220 MHz at 802.11a, Chain 2 – 6Mbps

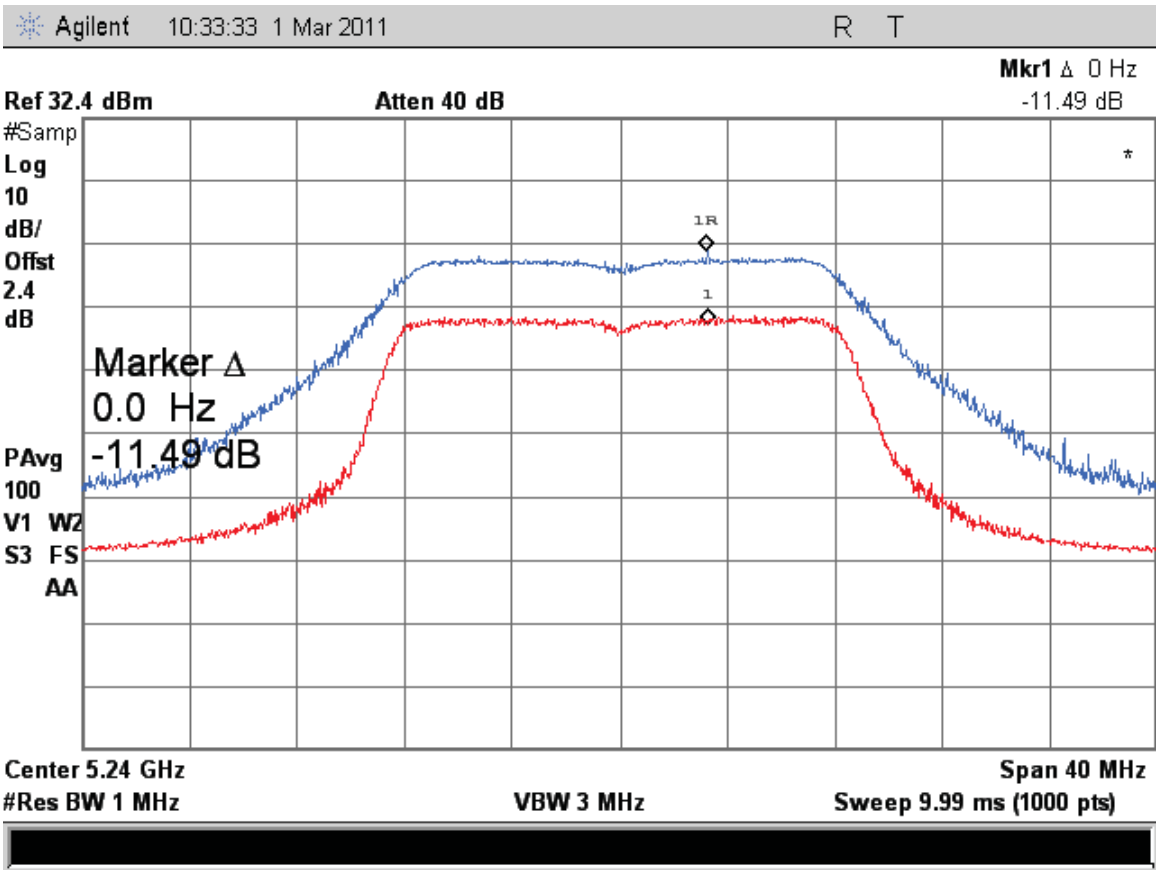


Figure 251: Peak Excursion, 5240 MHz at 802.11a, Chain 2 – 6Mbps

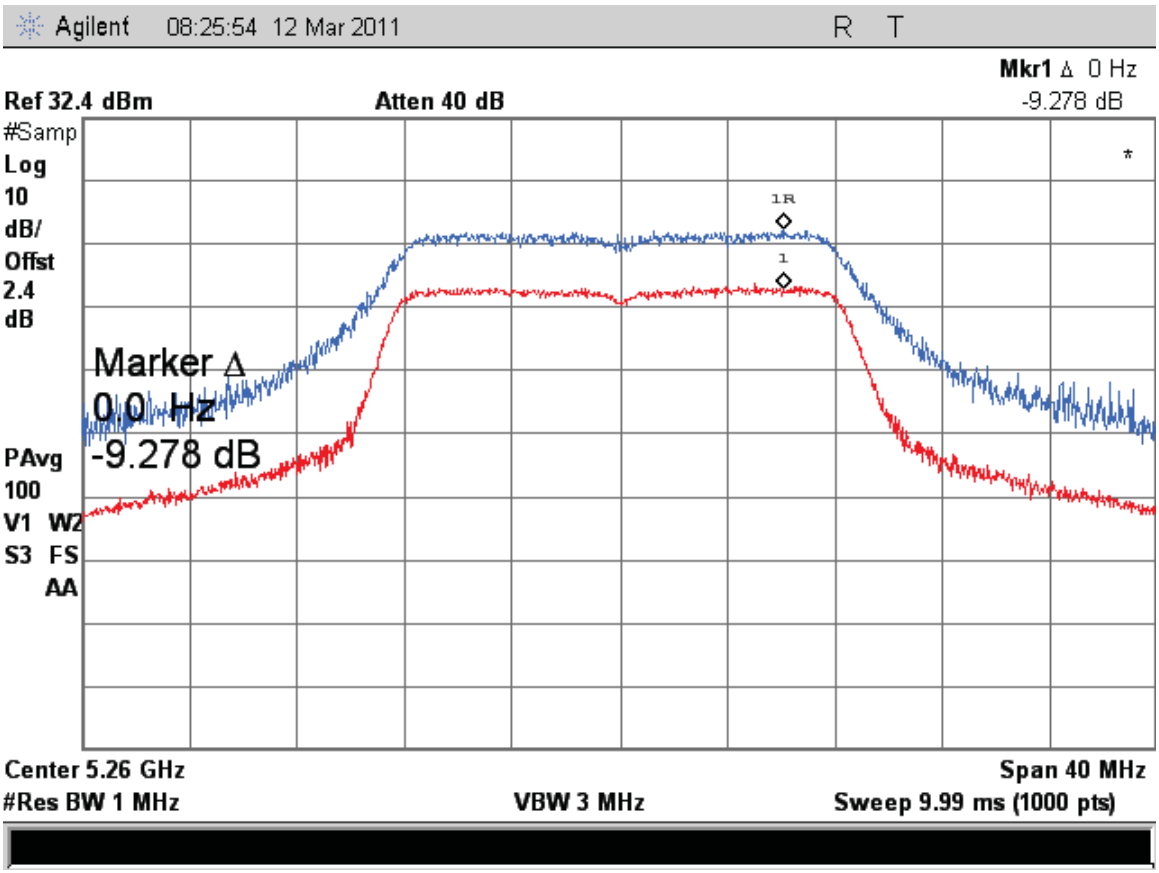


Figure 252: Peak Excursion, 5260 MHz at 802.11a, Chain 2 – 6Mbps

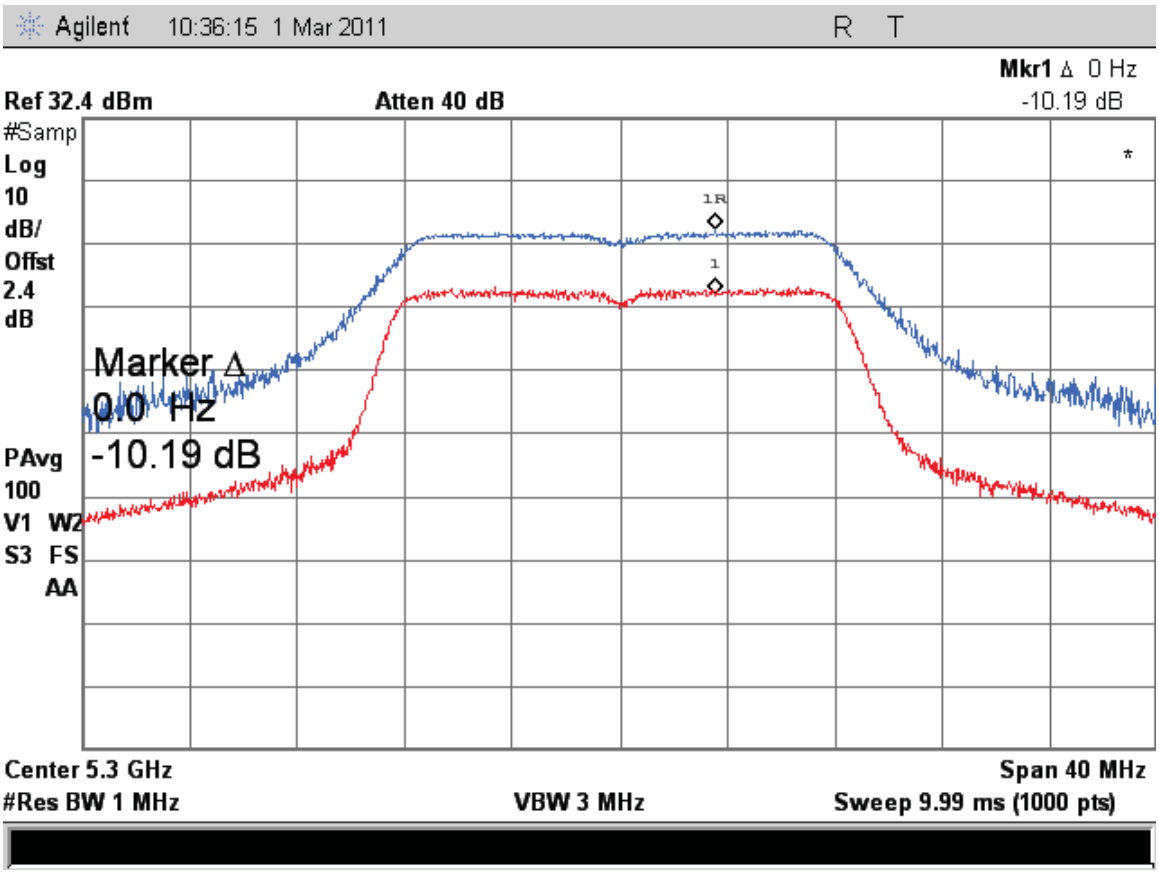


Figure 253: Peak Excursion, 5300 MHz at 802.11a, Chain 2 – 6Mbps

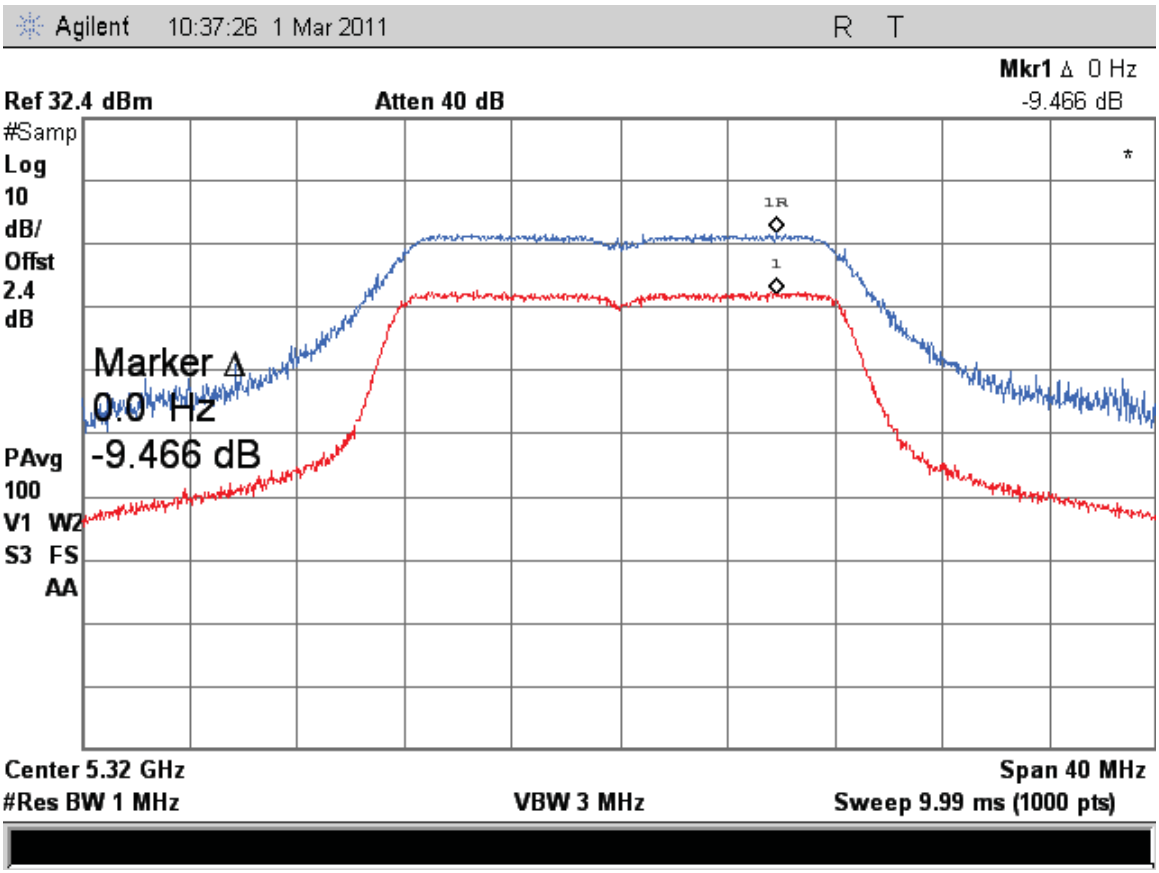


Figure 254: Peak Excursion, 5320 MHz at 802.11a, Chain 2 – 6Mbps

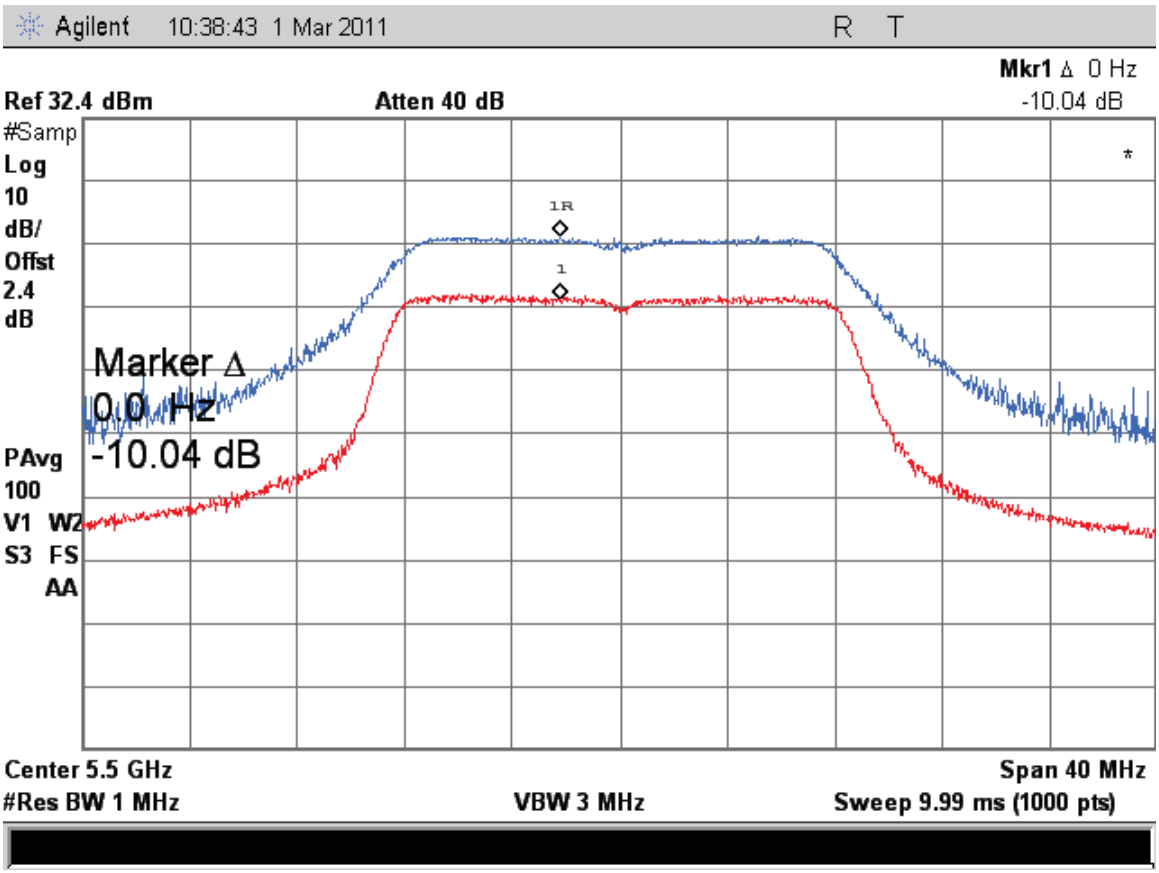


Figure 255: Peak Excursion, 5500 MHz at 802.11a, Chain 2 – 6Mbps

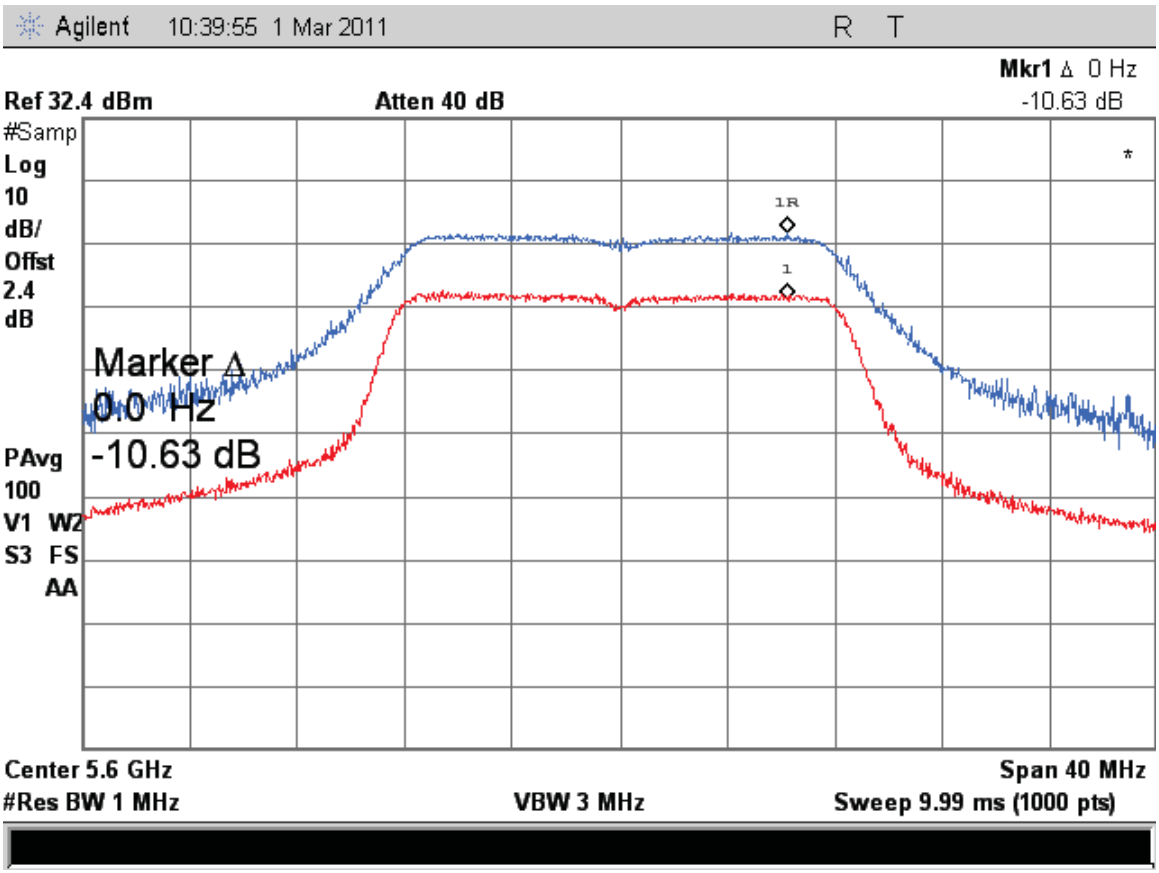


Figure 256: Peak Excursion, 5600 MHz at 802.11a, Chain 2 – 6Mbps

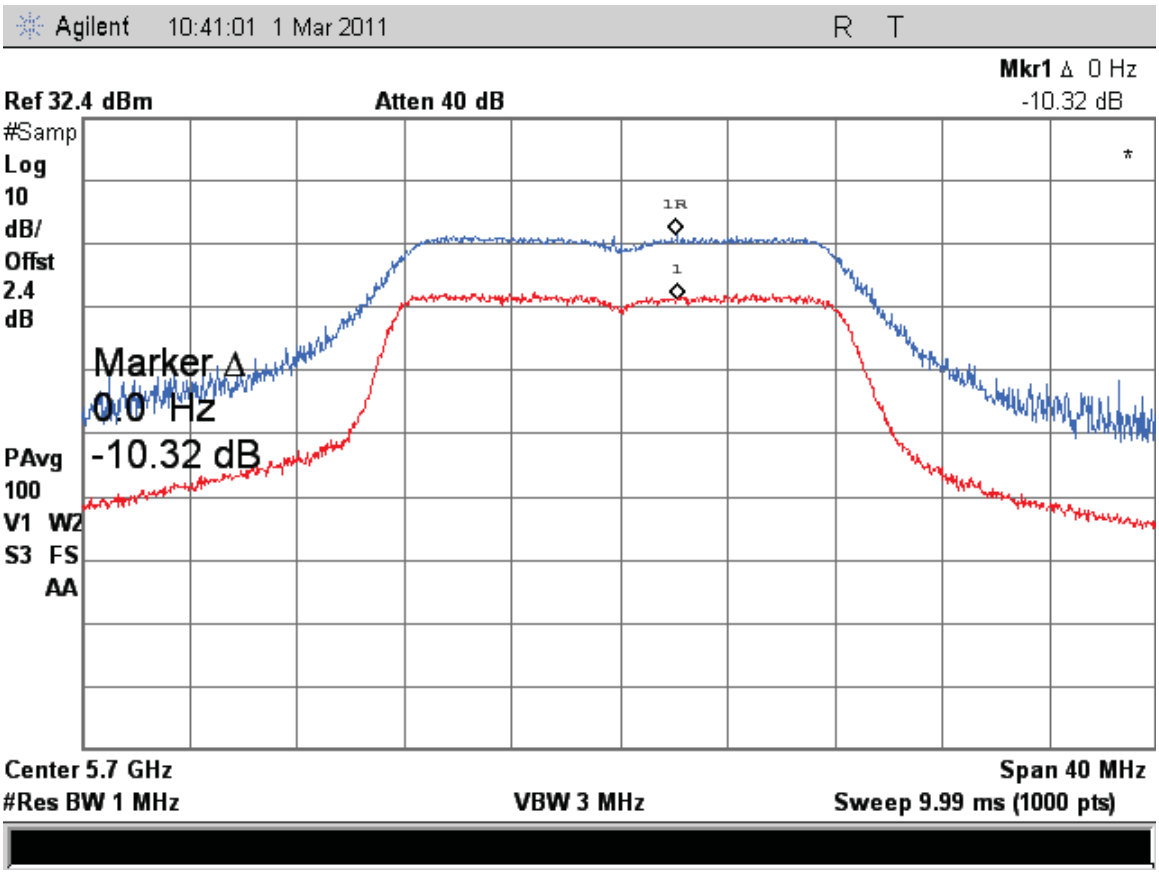


Figure 257: Peak Excursion, 5700 MHz at 802.11a, Chain 2 – 6Mbps

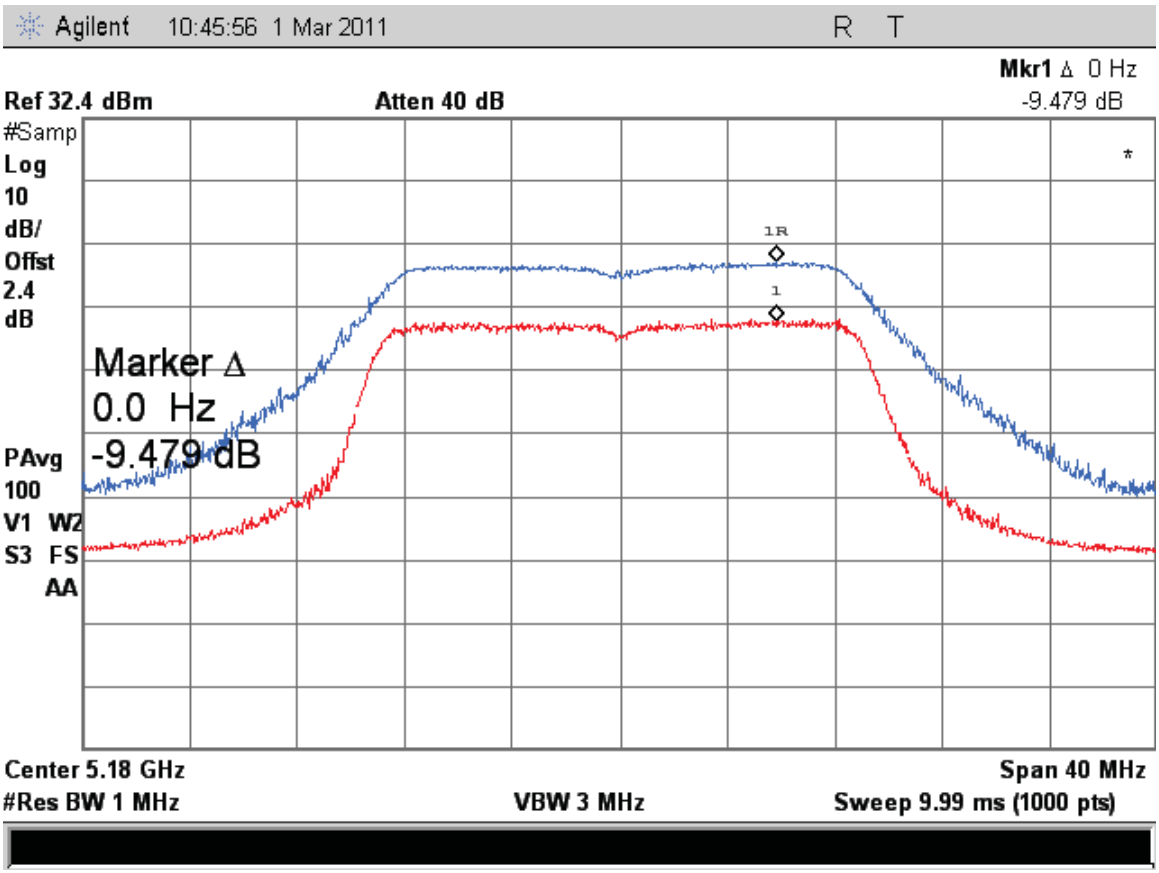


Figure 258: Peak Excursion, 5180 MHz at 802.11n (HT20), Chain 0 – 6.5Mbps

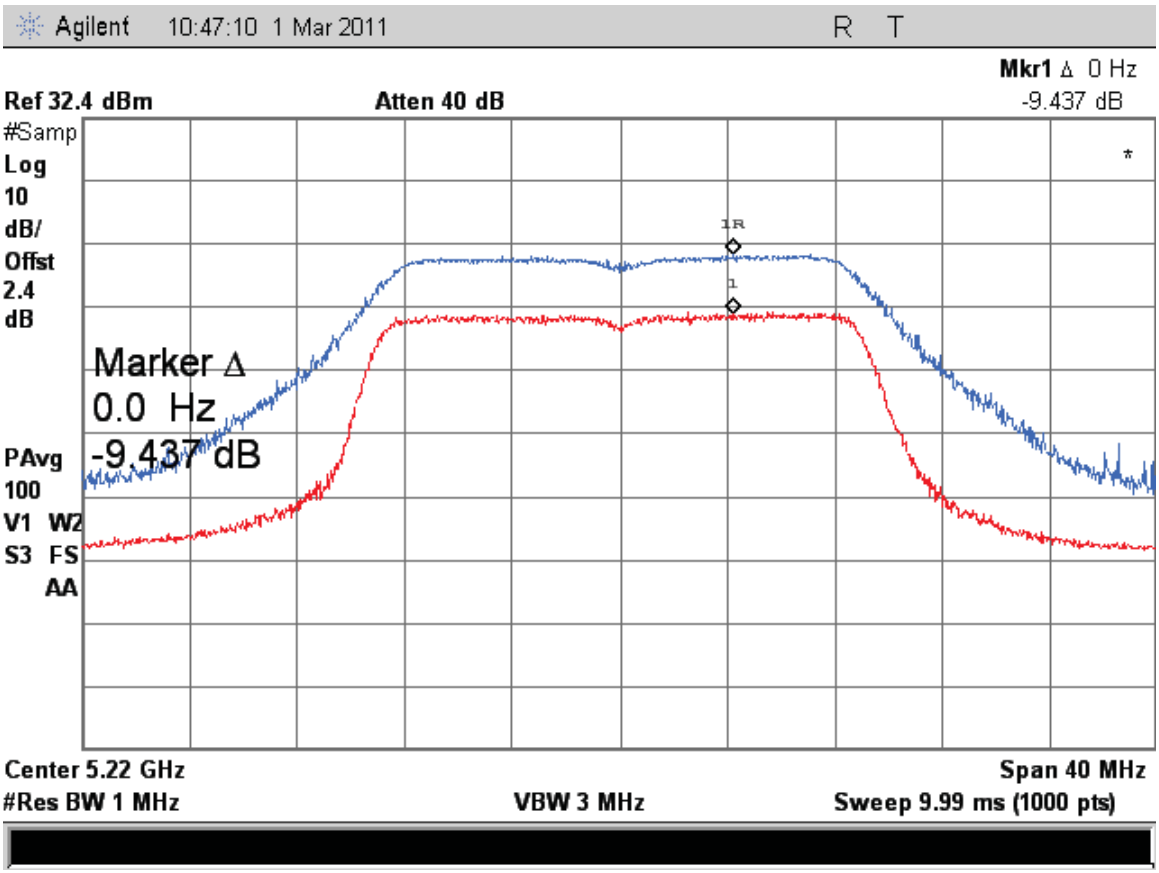


Figure 259: Peak Excursion, 5220 MHz at 802.11n (HT20), Chain 0 – 6.5Mbps

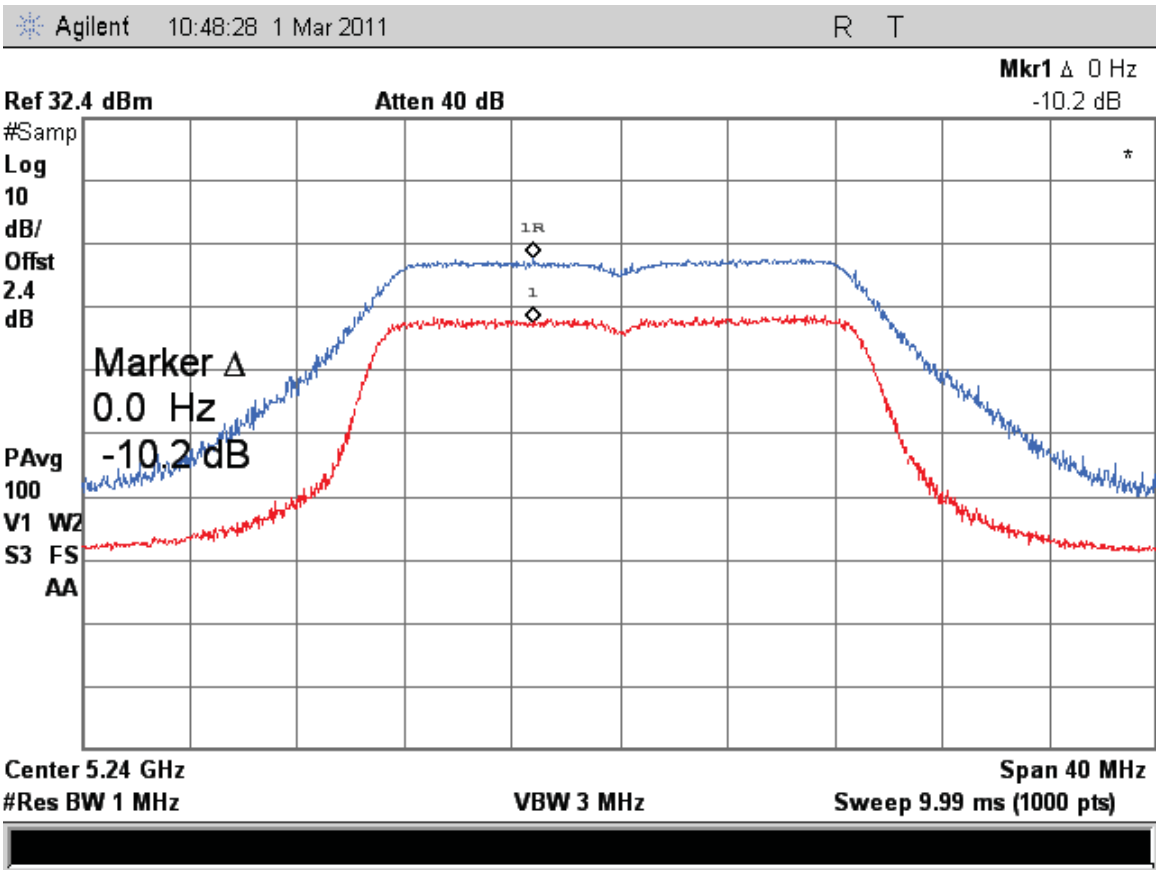


Figure 260: Peak Excursion, 5240 MHz at 802.11n (HT20), Chain 0 – 6.5Mbps

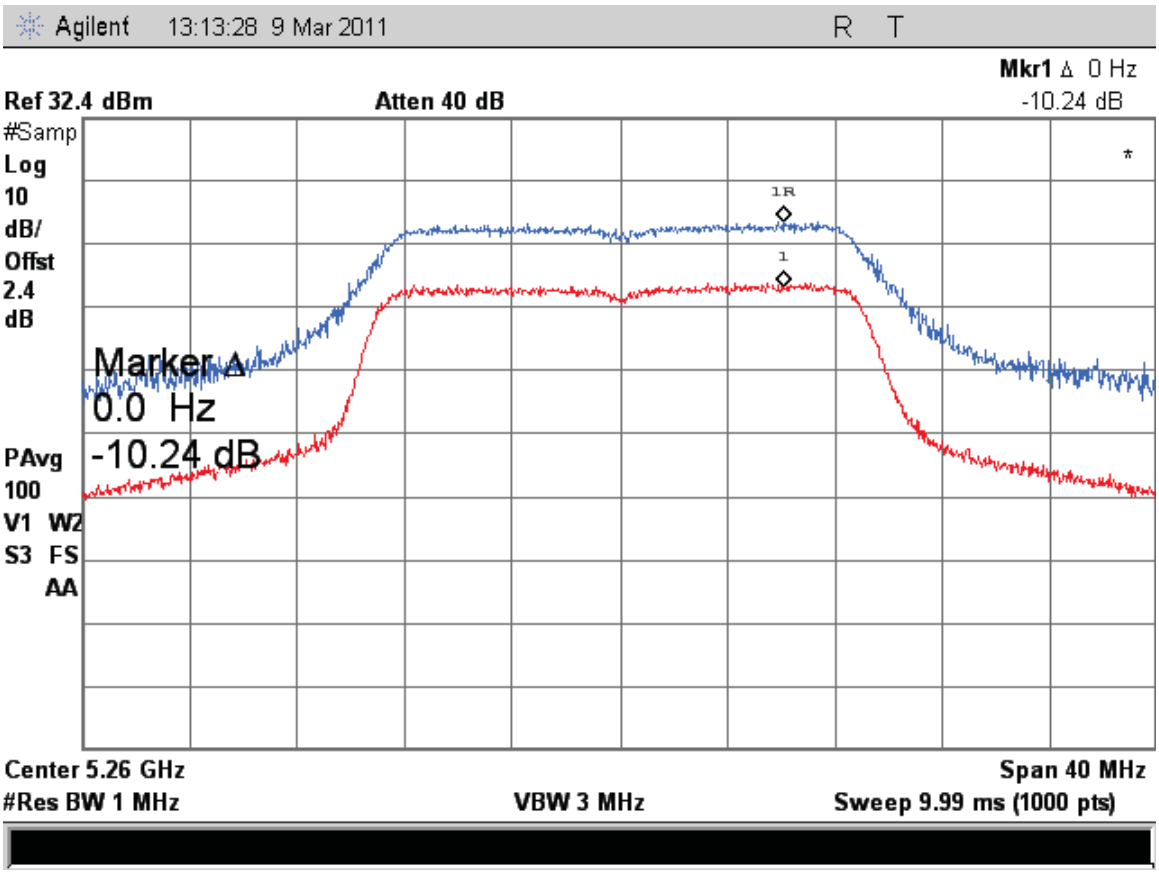


Figure 261: Peak Excursion, 5260 MHz at 802.11n (HT20), Chain 0 – 6.5Mbps

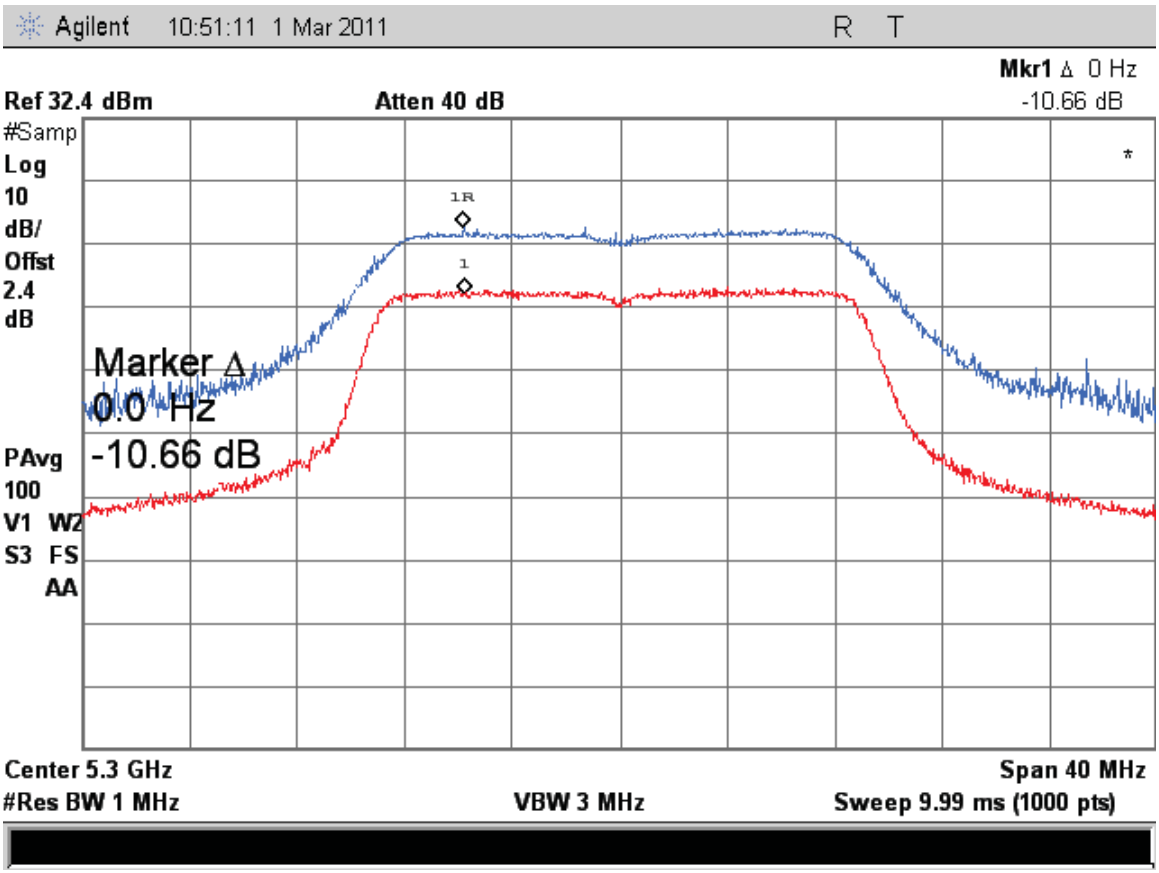


Figure 262: Peak Excursion, 5300 MHz at 802.11n (HT20), Chain 0 – 6.5Mbps

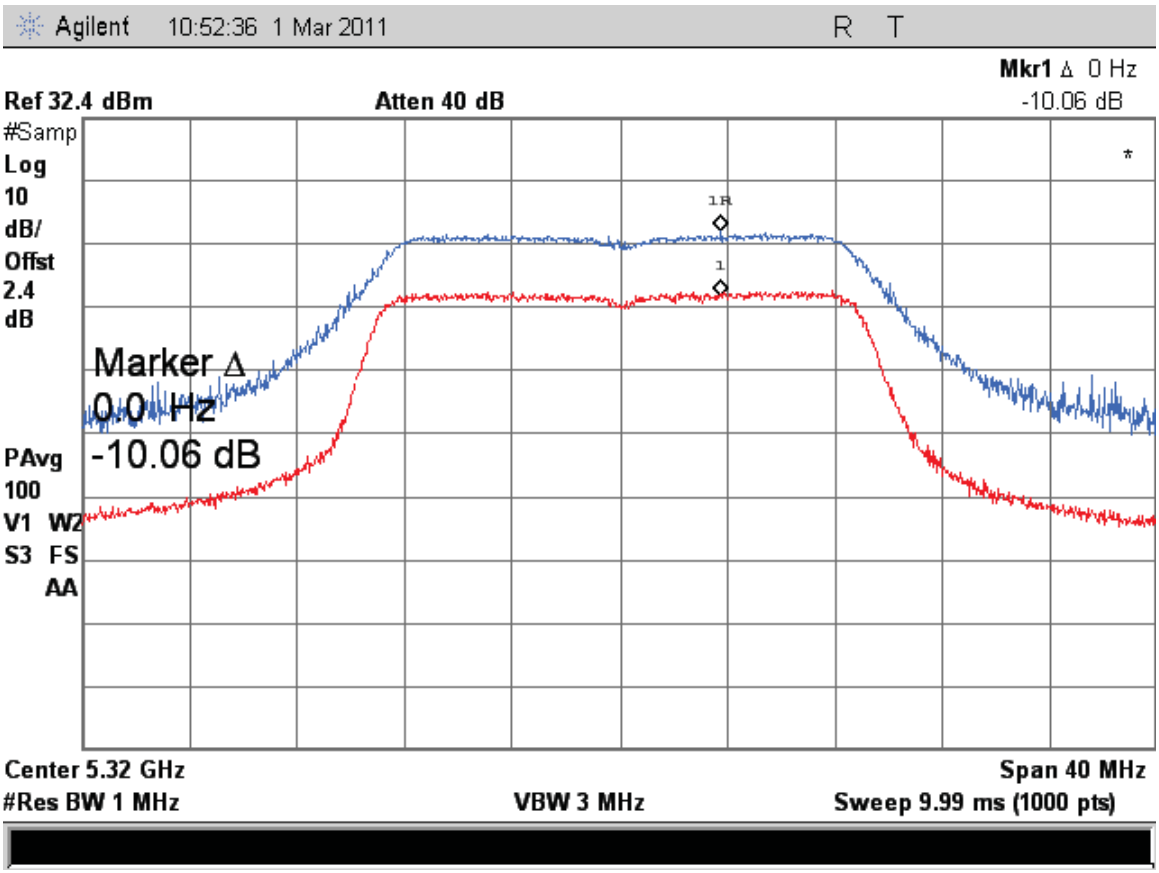


Figure 263: Peak Excursion, 5320 MHz at 802.11n (HT20), Chain 0 – 6.5Mbps

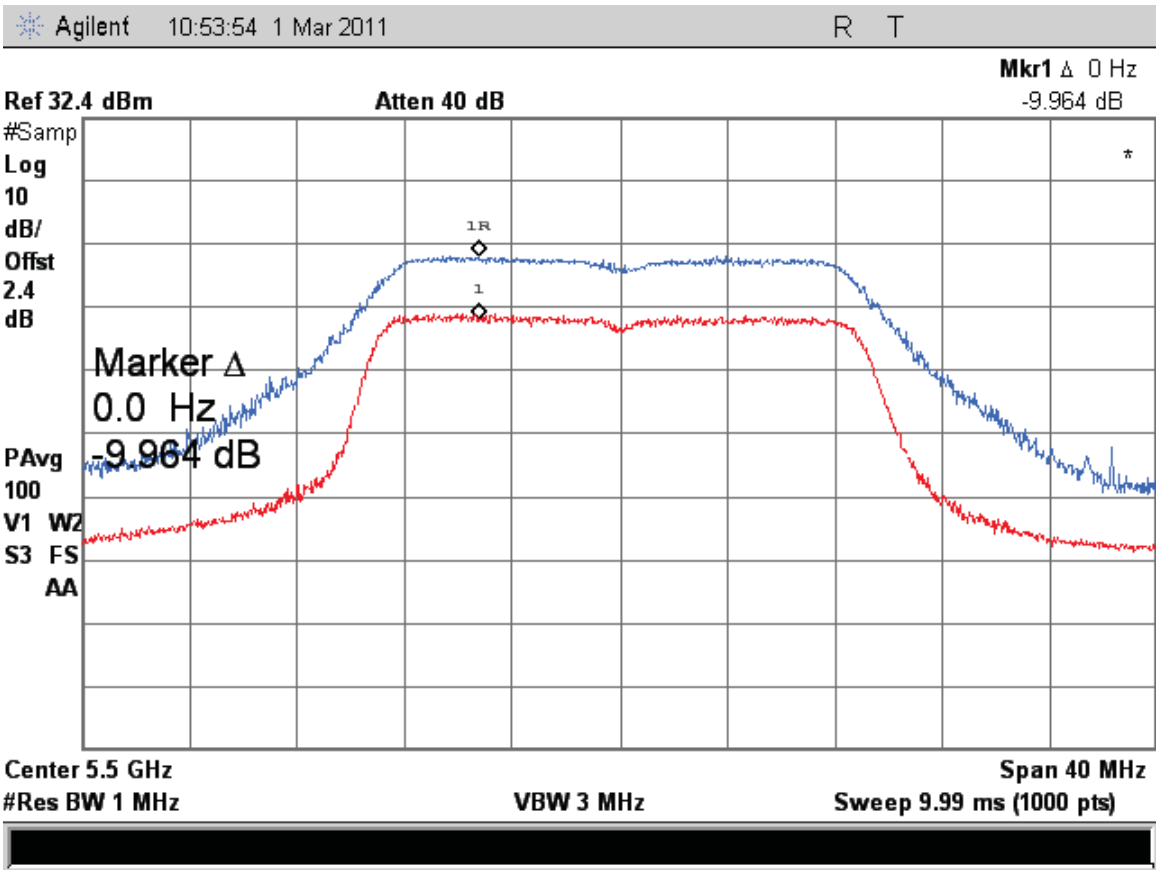


Figure 264: Peak Excursion, 5500 MHz at 802.11n (HT20), Chain 0 – 6.5Mbps

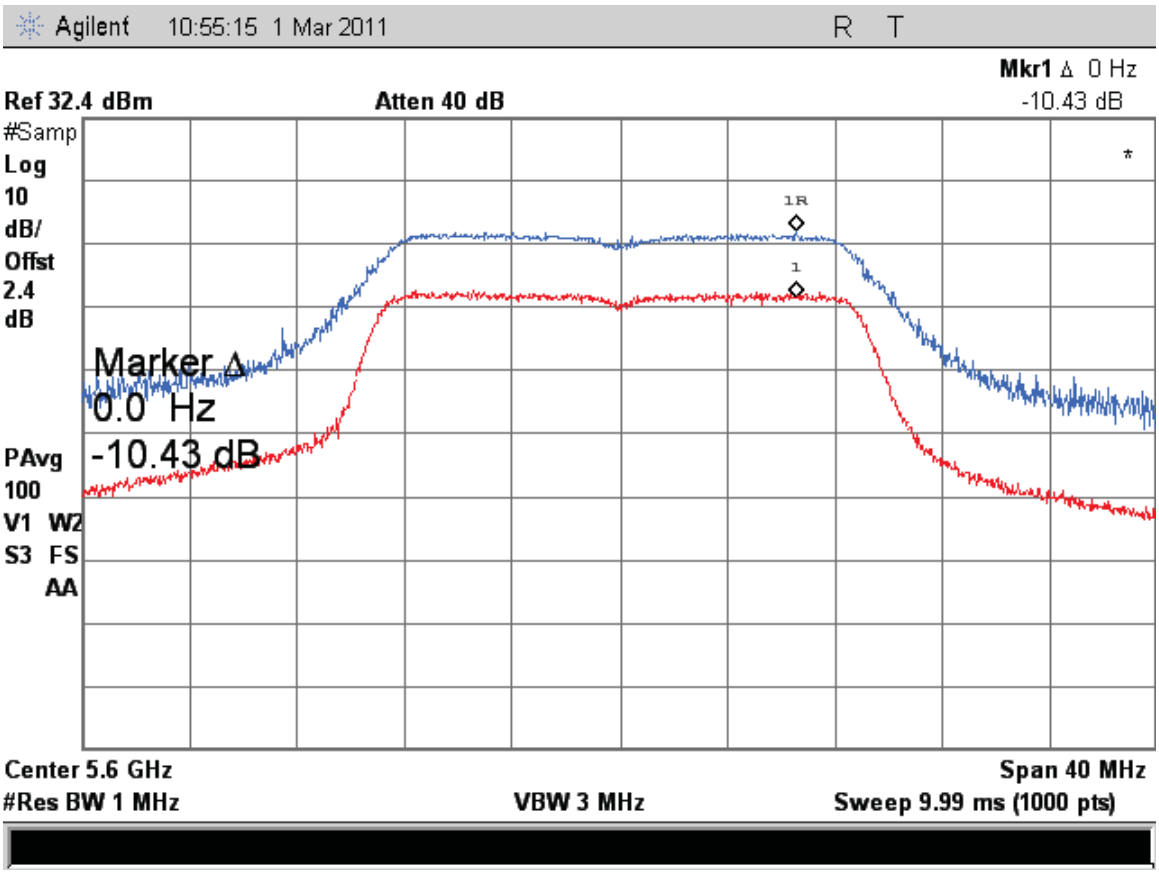


Figure 265: Peak Excursion, 5600 MHz at 802.11n (HT20), Chain 0 – 6.5Mbps

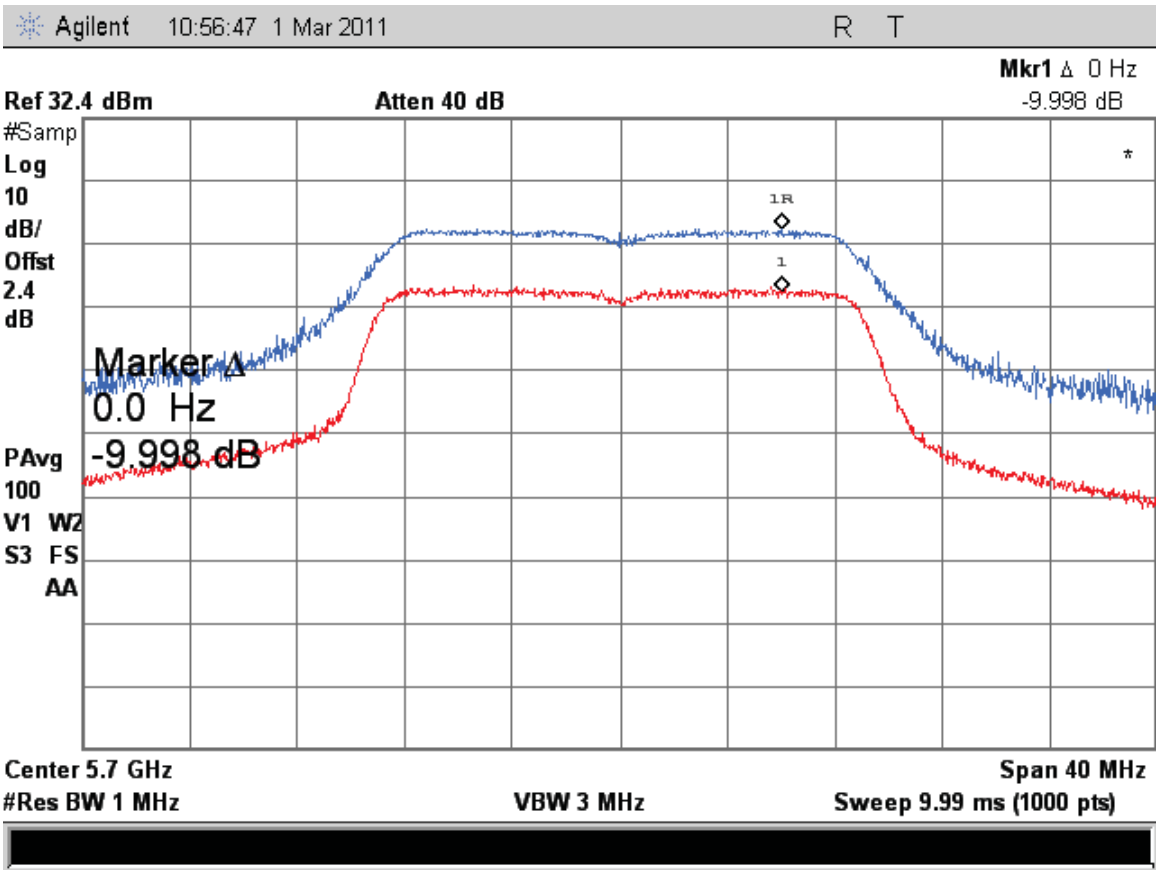


Figure 266: Peak Excursion, 5700 MHz at 802.11n (HT20), Chain 0 – 6.5Mbps

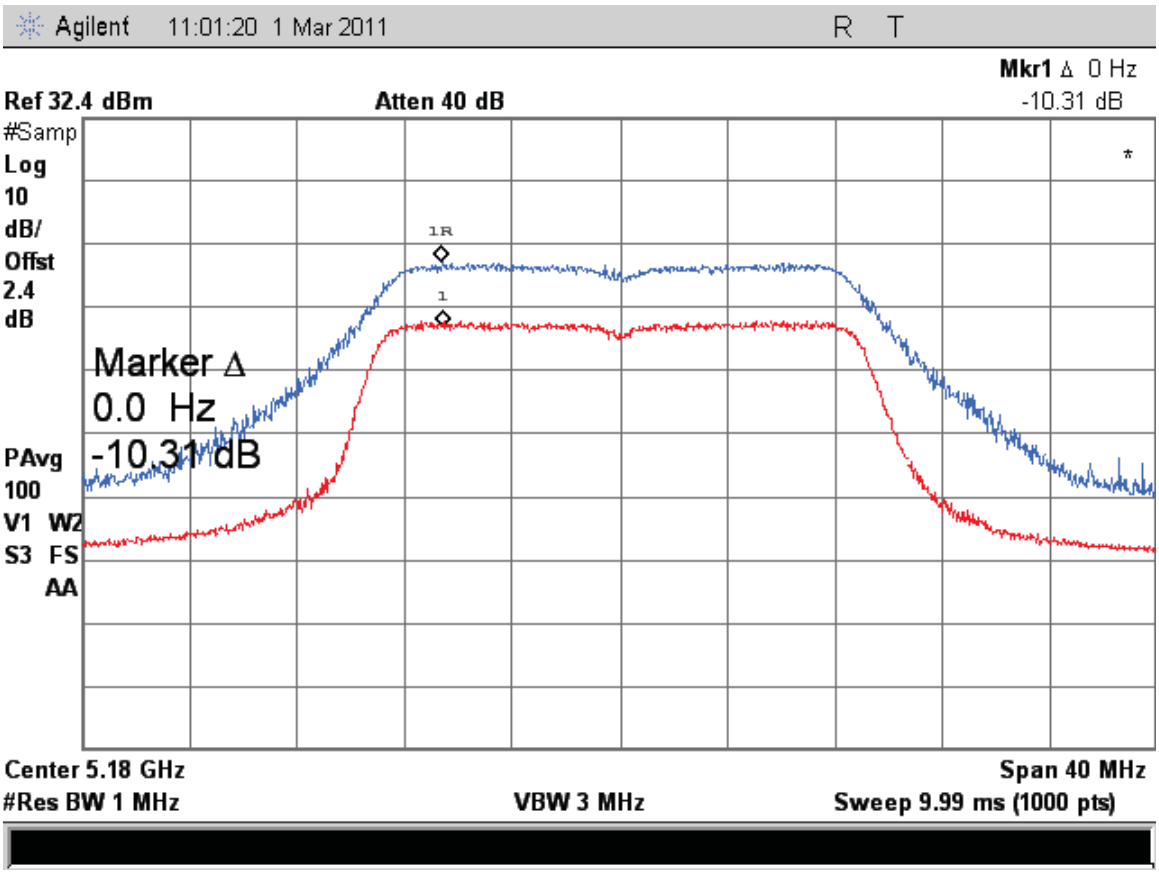


Figure 267: Peak Excursion, 5180 MHz at 802.11n (HT20), Chain 1 – 6.5Mbps

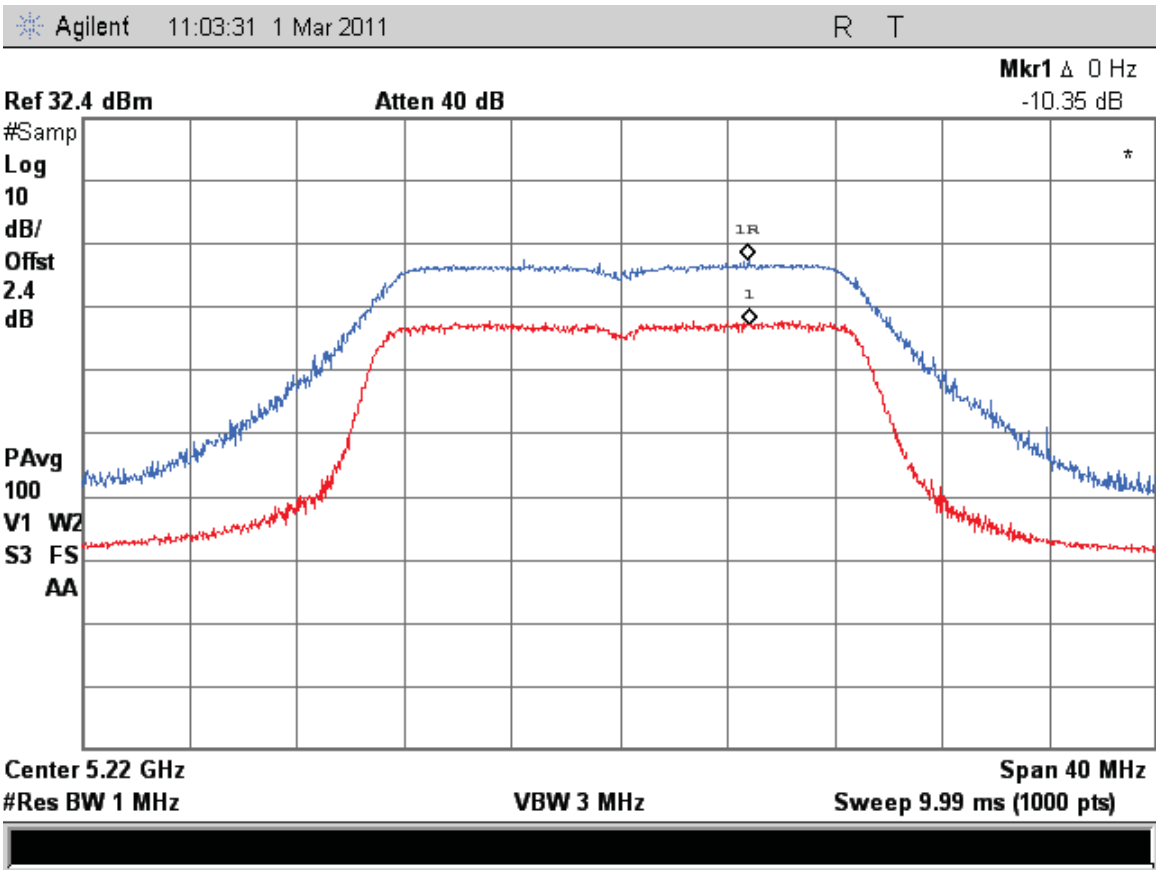


Figure 268: Peak Excursion, 5220 MHz at 802.11n (HT20), Chain 1 – 6.5Mbps

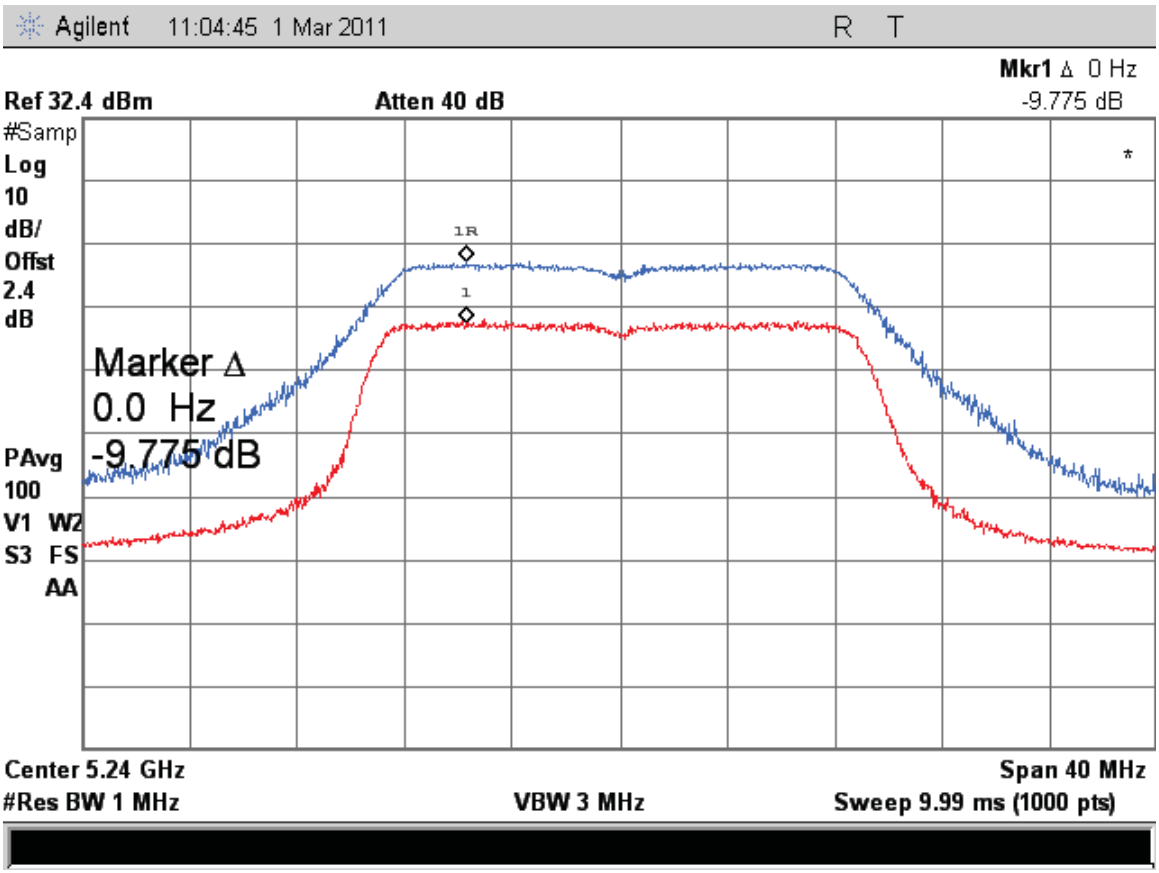


Figure 269: Peak Excursion, 5240 MHz at 802.11n (HT20), Chain 1 – 6.5Mbps

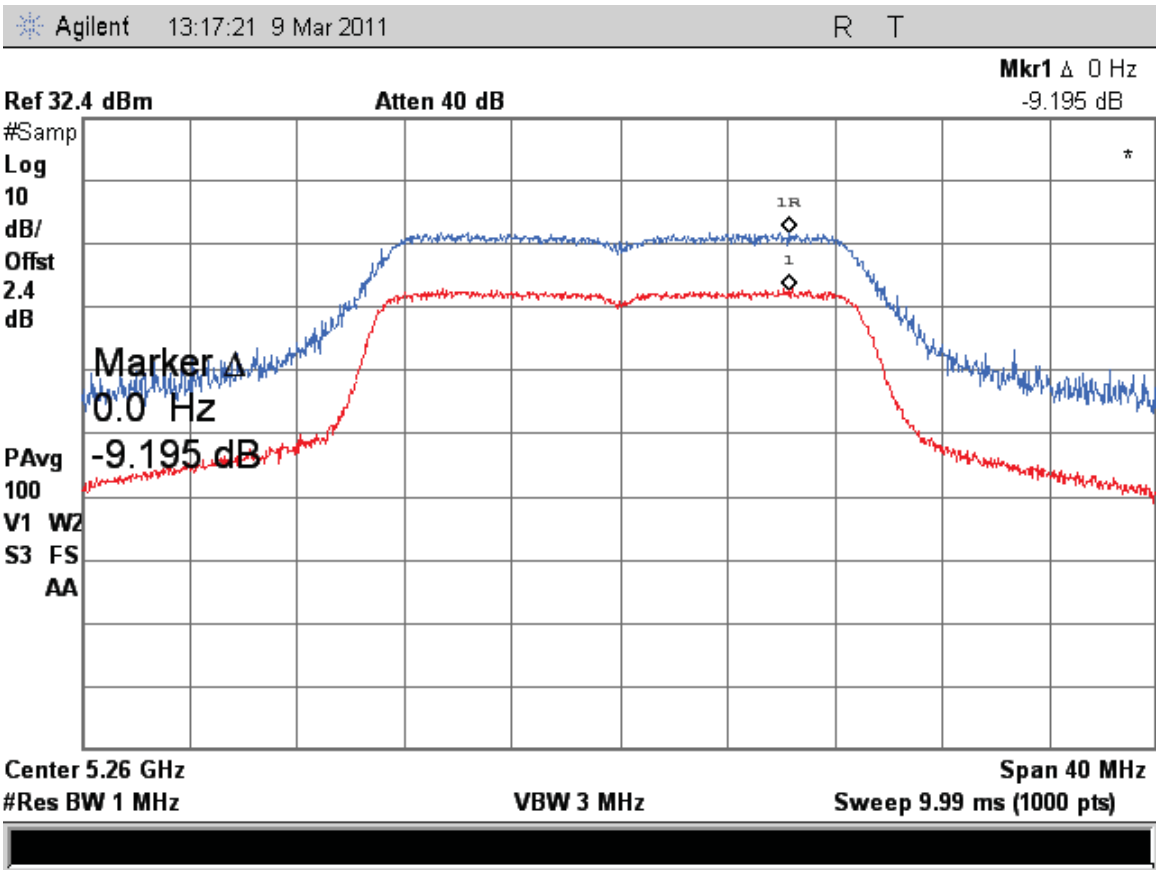


Figure 270: Peak Excursion, 5260 MHz at 802.11n (HT20), Chain 1 – 6.5Mbps

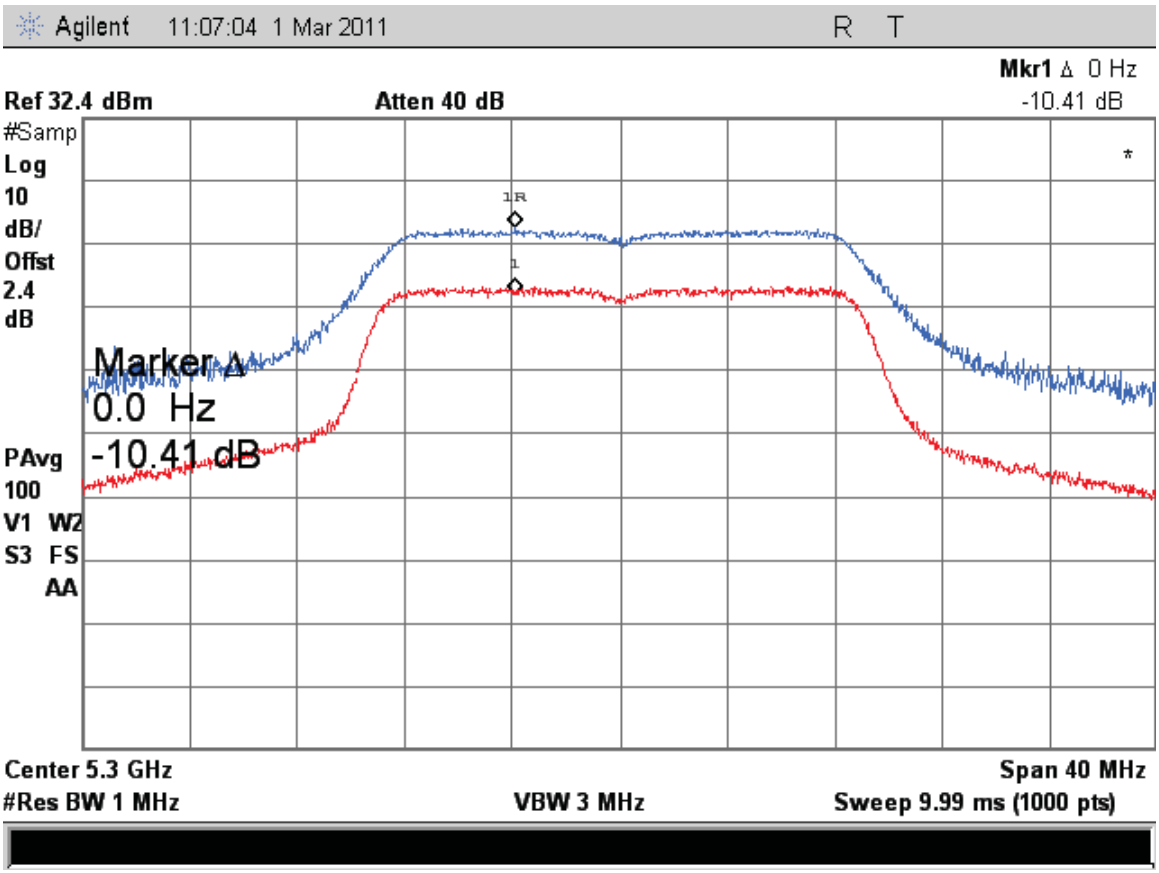


Figure 271: Peak Excursion, 5300 MHz at 802.11n (HT20), Chain 1 – 6.5Mbps

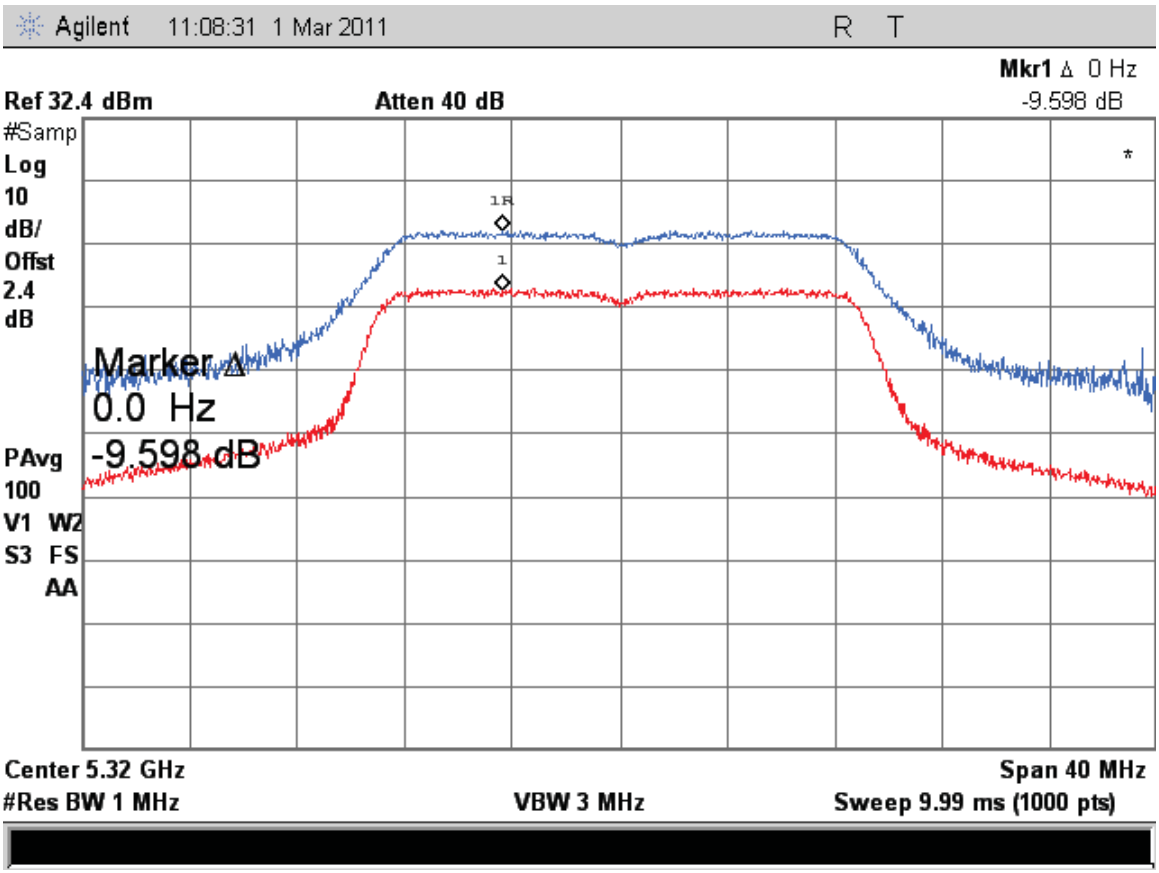


Figure 272: Peak Excursion, 5320 MHz at 802.11n (HT20), Chain 1 – 6.5Mbps

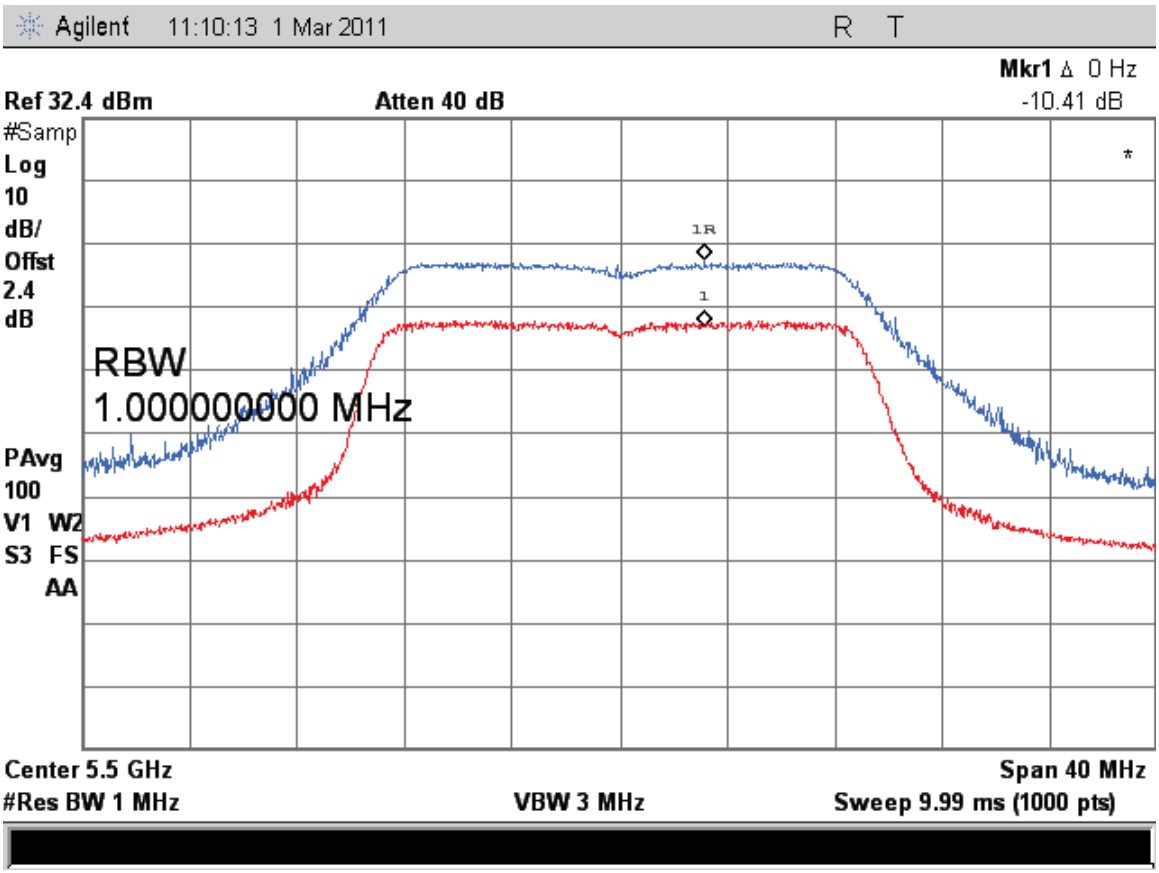


Figure 273: Peak Excursion, 5500 MHz at 802.11n (HT20), Chain 1 – 6.5Mbps

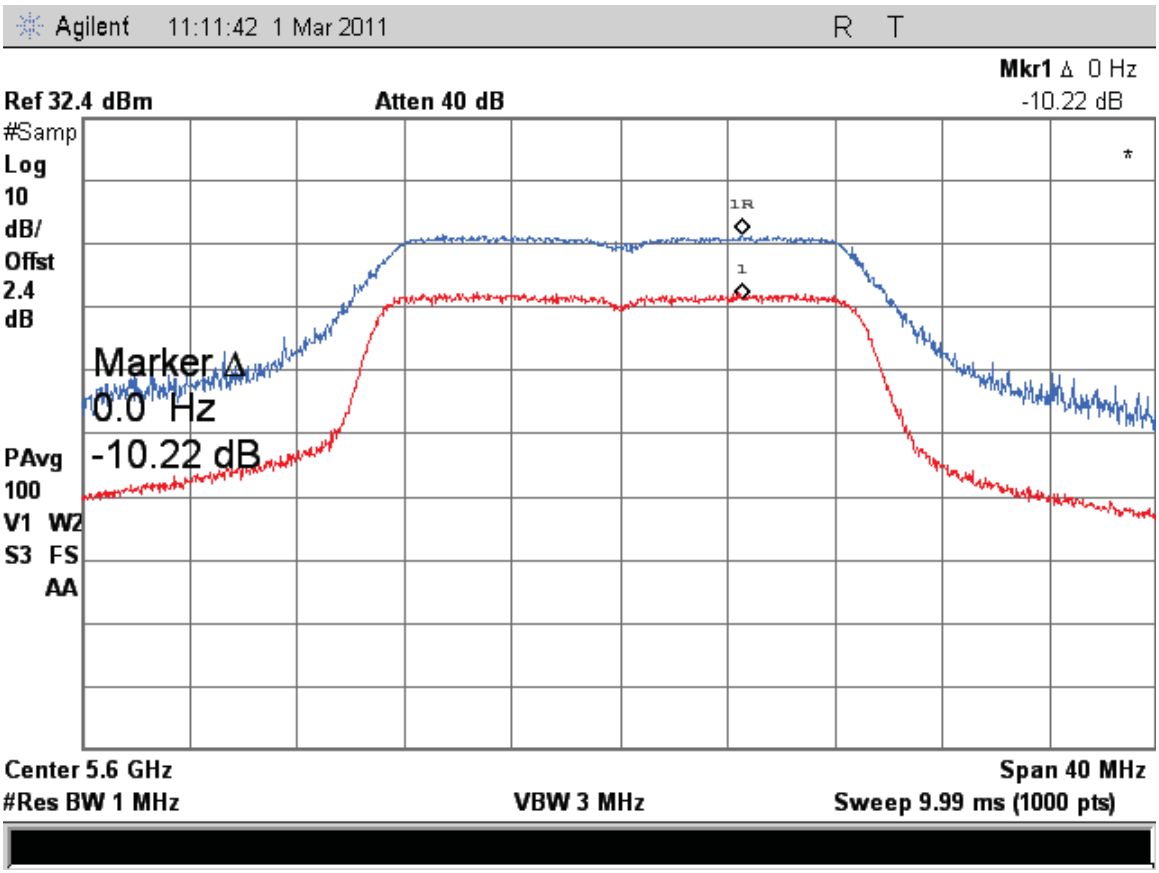


Figure 274: Peak Excursion, 5600 MHz at 802.11n (HT20), Chain 1 – 6.5Mbps