

Test Freq.	N/A	Engineer	SB
Variant	AC Line Emissions	Temp (°C)	23.5
Freq. Range	0.150 MHz - 30 MHz	Rel. Hum.(%)	30
Power Setting		Press. (mBars)	1011
Antenna			
Test Notes 1			
Test Notes 2			



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Specification

Limit

§15.207 (a) Except as shown in paragraphs (b) and (c) of this section, for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table, as measured using a 50 $\mu\Omega$ line impedance stabilization network (LISN), see §15.207 (a) matrix below. Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal.

RSS-Gen §7.2.2

The radio frequency voltage that is conducted back into the AC power lines in the frequency range of 0.15 MHz to 30 MHz shall not exceed the limits shown in the table below. The tighter limit applies at the frequency range boundaries.

§15.207 (a) and RSS-Gen §7.2.2 Limit Matrix

The lower limit applies at the boundary between frequency ranges

Frequency of Emission (MHz)	Conducted Limit (dB μ V)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

* Decreases with the logarithm of the frequency

Laboratory Measurement Uncertainty for Conducted Emissions

Measurement uncertainty	± 2.64 dB
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Traceability

Method	Test Equipment Used
Measurements were made per work instruction WI-EMC-01 'Measurement of Conducted Emissions'	0158, 0184, 0287, 0190, 0293, 0307

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6.1.4. Dynamic Frequency Selection (DFS)

FCC, Part 15 Subpart C §15.407(h)
FCC 06-96 Memorandum Opinion and Order
Industry Canada RSS-210 A9.4

6.1.5. Interference Threshold values, Master or Client incorporating In-Service Monitoring

Maximum Transmit Power	Value (see note)
≥ 200 milliwatt	-64 dBm
< 200 milliwatt	-62 dBm
Note 1: This is the level at the input of the receiver assuming a 0 dBi receive antenna	

6.1.6. DFS Response requirement values

Parameter	Value
<i>Non-occupancy period</i>	Minimum 30 minutes
<i>Channel Availability Check Time</i>	60 seconds
<i>Channel Move Time</i>	10 seconds See Note 1.
<i>Channel Closing Transmission Time</i>	200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period. See Notes 1 and 2.
<i>U-NII Detection Bandwidth</i>	Minimum 80% of the 99% power bandwidth See Note 3.

Note 1: The instant that the *Channel Move Time* and the *Channel Closing Transmission Time* begins is as follows:

- For the Short pulse radar Test Signals this instant is the end of the *Burst*.
- For the Frequency Hopping radar Test Signal, this instant is the end of the last radar *Burst* generated.
- For the Long Pulse radar Test Signal this instant is the end of the 12 second period defining the radar transmission.

Note 2: The *Channel Closing Transmission Time* is comprised of 200 milliseconds starting at the beginning of the *Channel Move Time* plus any additional intermittent control signals required to facilitate *Channel* changes (an aggregate of 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signals will not count quiet periods in between transmissions.

Note 3: During the *U-NII Detection Bandwidth* detection test, radar type 1 is used and for each frequency step the minimum percentage of detection is 90%. Measurements are performed with no data traffic.



6.1.7. Radar Test Waveforms

This section provides the parameters for required test waveforms, minimum percentage of successful detections, and the minimum number of trials that must be used for determining DFS conformance. Step intervals of 0.1 microsecond for Pulse Width, 1 microsecond for PRI, 1 MHz for chirp width and 1 for the number of pulses will be utilized for the random determination of specific test waveforms.

Short Pulse Radar Test Waveforms

Radar Type	Pulse Width (µsec)	PRI (µsec)	Number of Pulses	Minimum Percentage of Successful Detection	Minimum Trials
1	1	1428	18	60%	30
2	1-5	150-230	23-29	60%	30
3	6-10	200-500	16-18	60%	30
4	11-20	200-500	12-16	60%	30
Aggregate (Radar Types 1-4)				80%	120

A minimum of 30 unique waveforms are required for each of the short pulse radar types 2 through 4. For short pulse radar type 1, the same waveform is used a minimum of 30 times. If more than 30 waveforms are used for short pulse radar types 2 through 4, then each additional waveform must also be unique and not repeated from the previous waveforms. The aggregate is the average of the percentage of successful detections of short pulse radar types 1-4.

Long Pulse Radar Test Waveform

Radar Type	Pulse Width (µsec)	Chirp Width (MHz)	PRI (µsec)	Number of Pulses per Burst	Number of Bursts	Minimum Percentage of Successful Detection	Minimum Trials
5	50-100	5-20	1000-2000	1-3	8-20	80%	30

The parameters for this waveform are randomly chosen. Thirty unique waveforms are required for the Long Pulse radar test signal. If more than 30 waveforms are used for the Long Pulse radar test signal, then each additional waveform must also be unique and not repeated from the previous waveforms.



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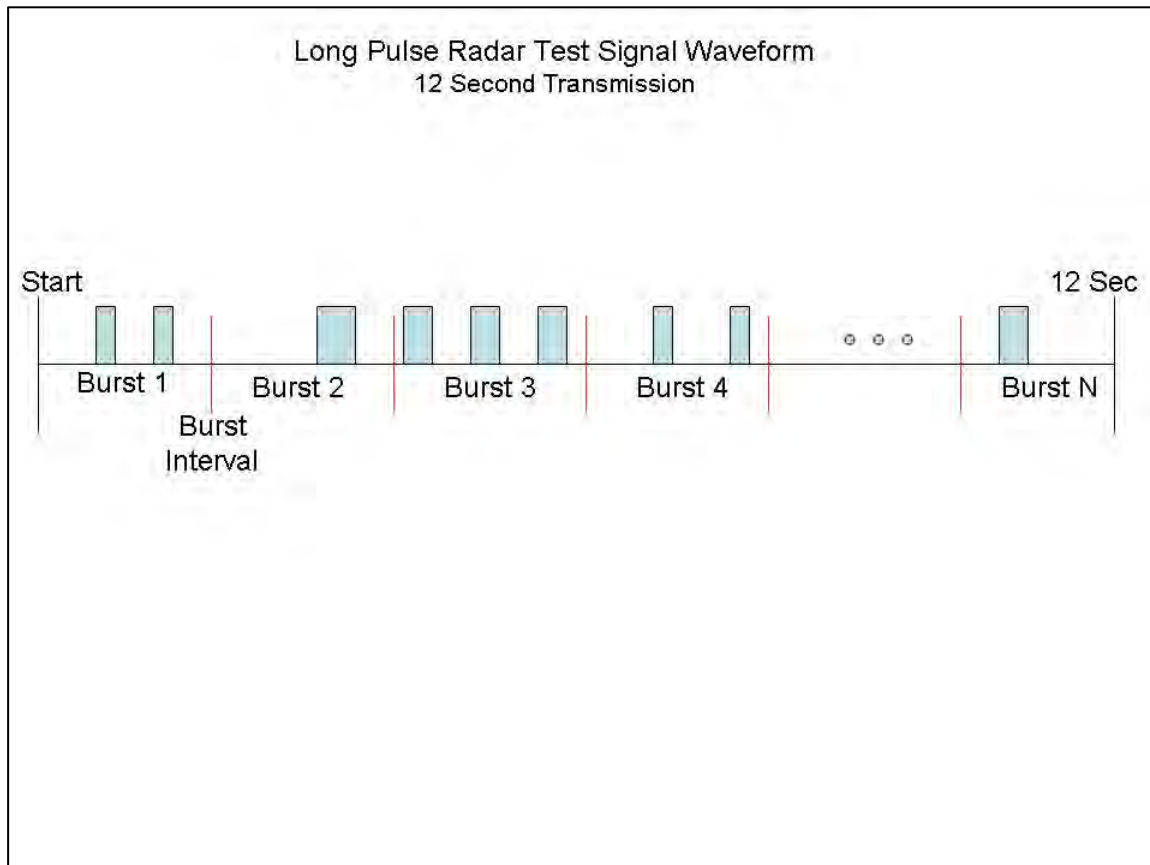
Each waveform is defined as follows:

- 1) The transmission period for the Long Pulse Radar test signal is 12 seconds.
- 2) There are a total of 8 to 20 *Bursts* in the 12 second period, with the number of *Bursts* being randomly chosen. This number is *Burst Count*.
- 3) Each *Burst* consists of 1 to 3 pulses, with the number of pulses being randomly chosen. Each *Burst* within the 12 second sequence may have a different number of pulses.
- 4) The pulse width is between 50 and 100 microseconds, with the pulse width being randomly chosen. Each pulse within a *Burst* will have the same pulse width. Pulses in different *Bursts* may have different pulse widths.
- 5) Each pulse has a linear FM chirp between 5 and 20 MHz, with the chirp width being randomly chosen. Each pulse within a *Burst* will have the same chirp width. Pulses in different *Bursts* may have different chirp widths. The chirp is centered on the pulse. For example, with a radar frequency of 5300 MHz and a 20 MHz chirped signal, the chirp starts at 5290 MHz and ends at 5310 MHz.
- 6) If more than one pulse is present in a *Burst*, the time between the pulses will be between 1000 and 2000 microseconds, with the time being randomly chosen. If three pulses are present in a *Burst*, the time between the first and second pulses is chosen independently of the time between the second and third pulses.
- 7) The 12 second transmission period is divided into even intervals. The number of intervals is equal to *Burst_Count*. Each interval is of length $(12,000,000 / \textit{Burst_Count})$ microseconds. Each interval contains one *Burst*. The start time for the *Burst*, relative to the beginning of the interval, is between 1 and $[(12,000,000 / \textit{Burst_Count}) - (\textit{Total Burst Length}) + (\textit{One Random PRI Interval})]$ microseconds, with the start time being randomly chosen. The step interval for the start time is 1 microsecond. The start time for each *Burst* is chosen independently.

A representative example of a Long Pulse radar test waveform:

- 1) The total test signal length is 12 seconds.
- 2) 8 *Bursts* are randomly generated for the *Burst_Count*.
- 3) *Burst 1* has 2 randomly generated pulses.
- 4) The pulse width (for both pulses) is randomly selected to be 75 microseconds.
- 5) The PRI is randomly selected to be at 1213 microseconds.
- 6) *Bursts 2 through 8* are generated using steps 3 – 5.
- 7) Each *Burst* is contained in even intervals of 1,500,000 microseconds. The starting location for Pulse 1, *Burst 1* is randomly generated (1 to 1,500,000 minus the total *Burst 1* length + 1 random PRI interval) at the 325,001 microsecond step. *Bursts 2 through 8* randomly fall in successive 1,500,000 microsecond intervals (i.e. *Burst 2* falls in the 1,500,001 – 3,000,000 microsecond range).

Graphical representation of the Long Pulse radar Test Waveform.



6.1.8. Frequency Hopping Radar Test Waveform

Frequency Hopping Radar Test Waveform

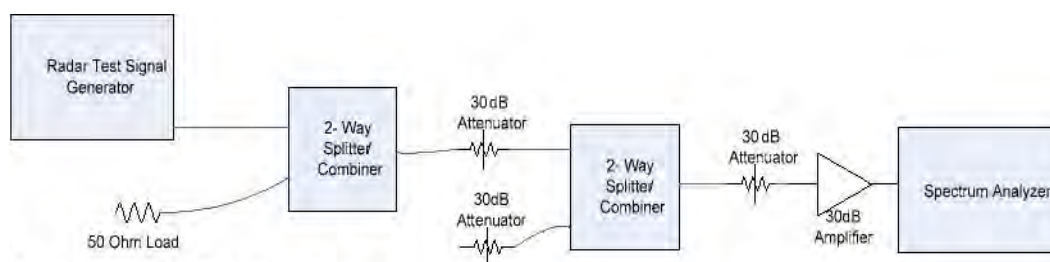
Radar Type	Pulse Width (μsec)	PRI (μsec)	Pulses per Hop	Hopping Rate (kHz)	Hopping Sequence Length (msec)	Minimum Percentage of Successful Detection	Minimum Trials
6	1	333	9	.333	300	70%	30

For the Frequency Hopping Radar Type, the same *Burst* parameters are used for each waveform. The hopping sequence is different for each waveform and a 100-length segment is selected from the hopping sequence defined by the following algorithm:

6.1.9. Radar Waveform Calibration

The following equipment setup was used to calibrate the conducted Radar Waveform. A spectrum analyzer was used to establish the test signal level for each radar type. During this process there were no transmissions by either the Master or Client Device. The spectrum analyzer was switched to the zero span (Time Domain) mode at the frequency of the Radar Waveform generator. Peak detection was utilized. The spectrum analyzer resolution bandwidth (RBW) and video bandwidth (VBW) were set to 3 MHz.

The signal generator amplitude was set so that the power level measured at the spectrum analyzer was -61dBm (Ref Section 5.1). The 30dB amplifier gain was entered as an amplitude offset on the spectrum analyzer.

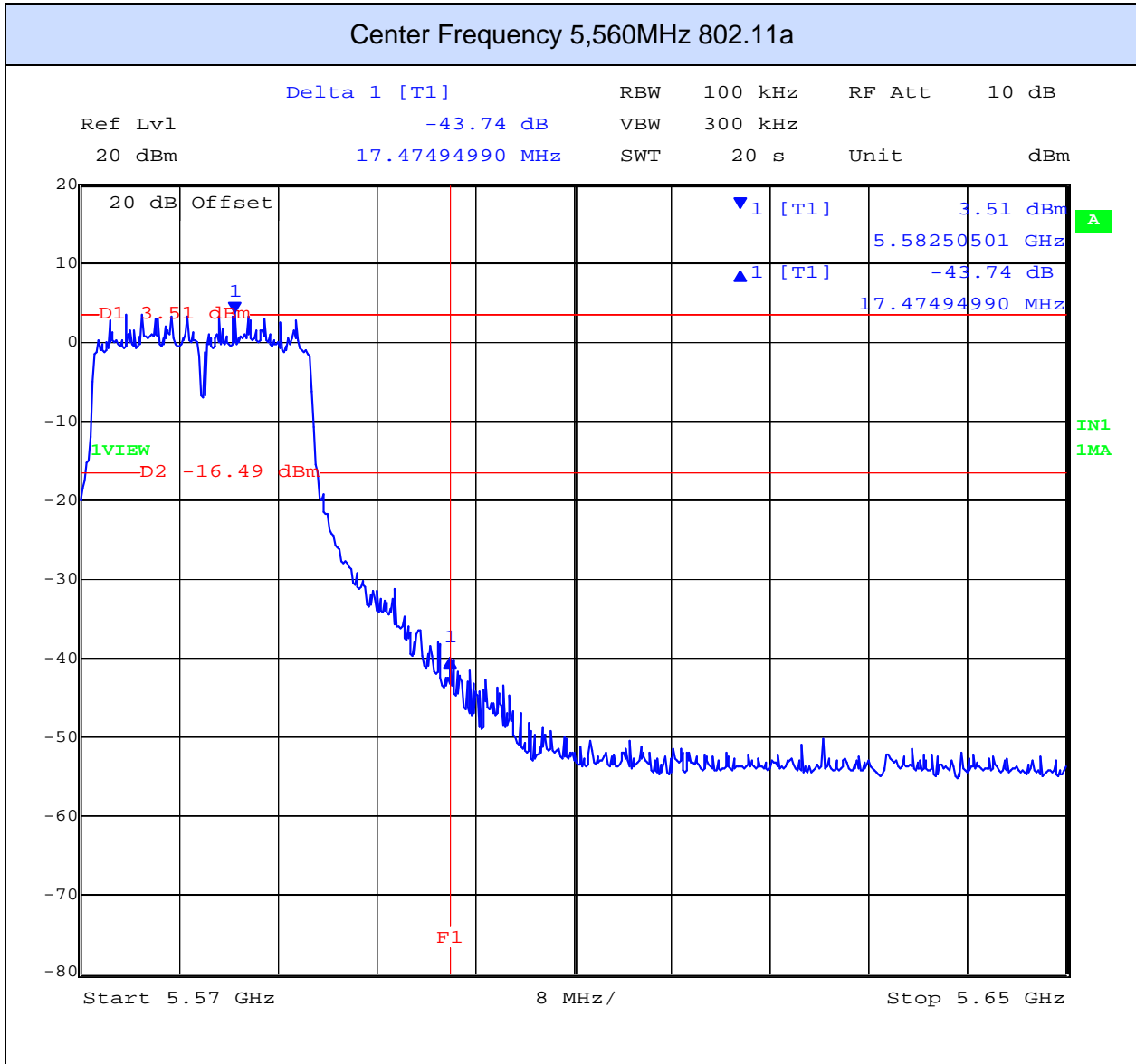


Conducted Calibration Setup



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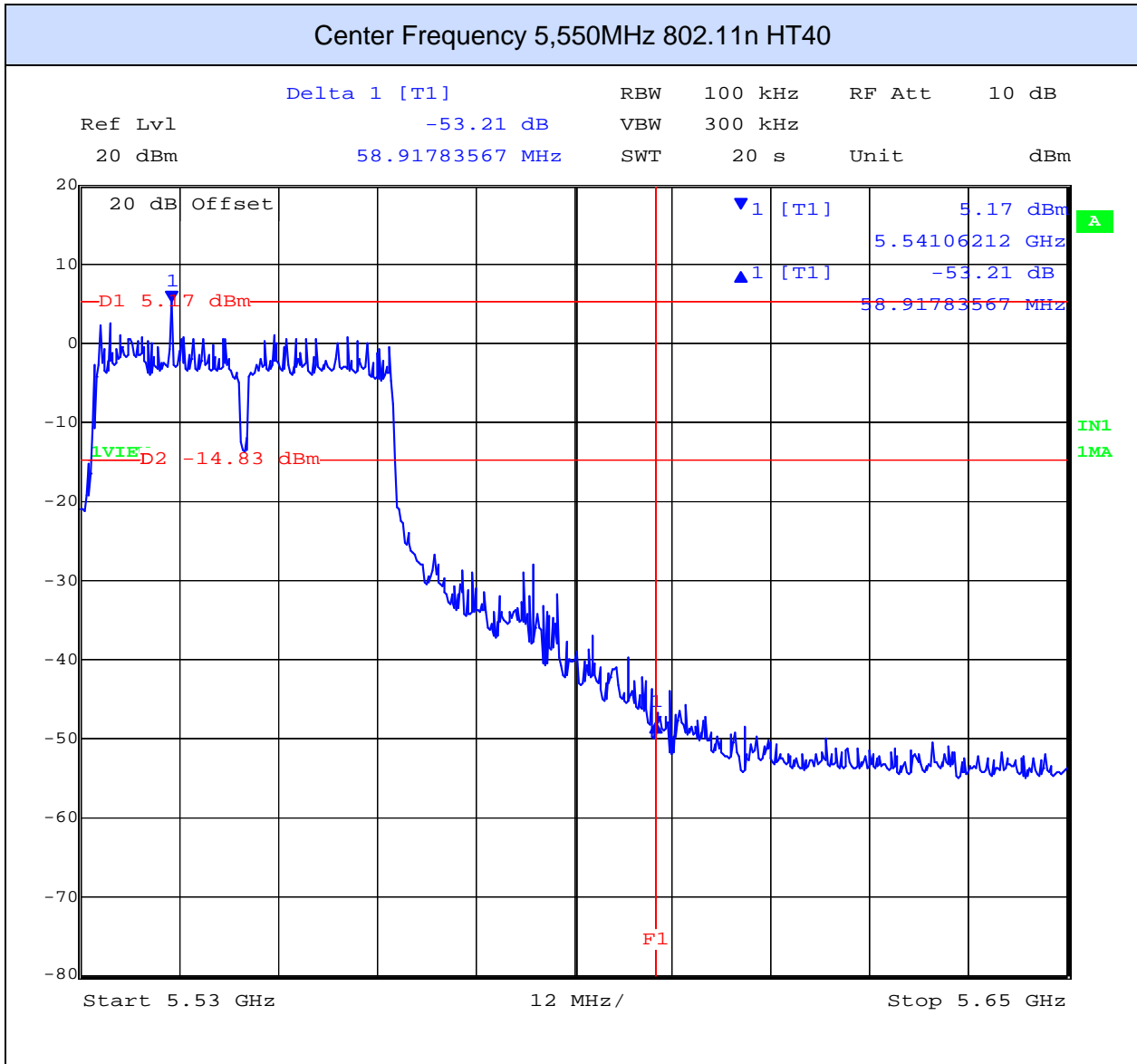
6.1.10. Weather Radar Band Edge Plots



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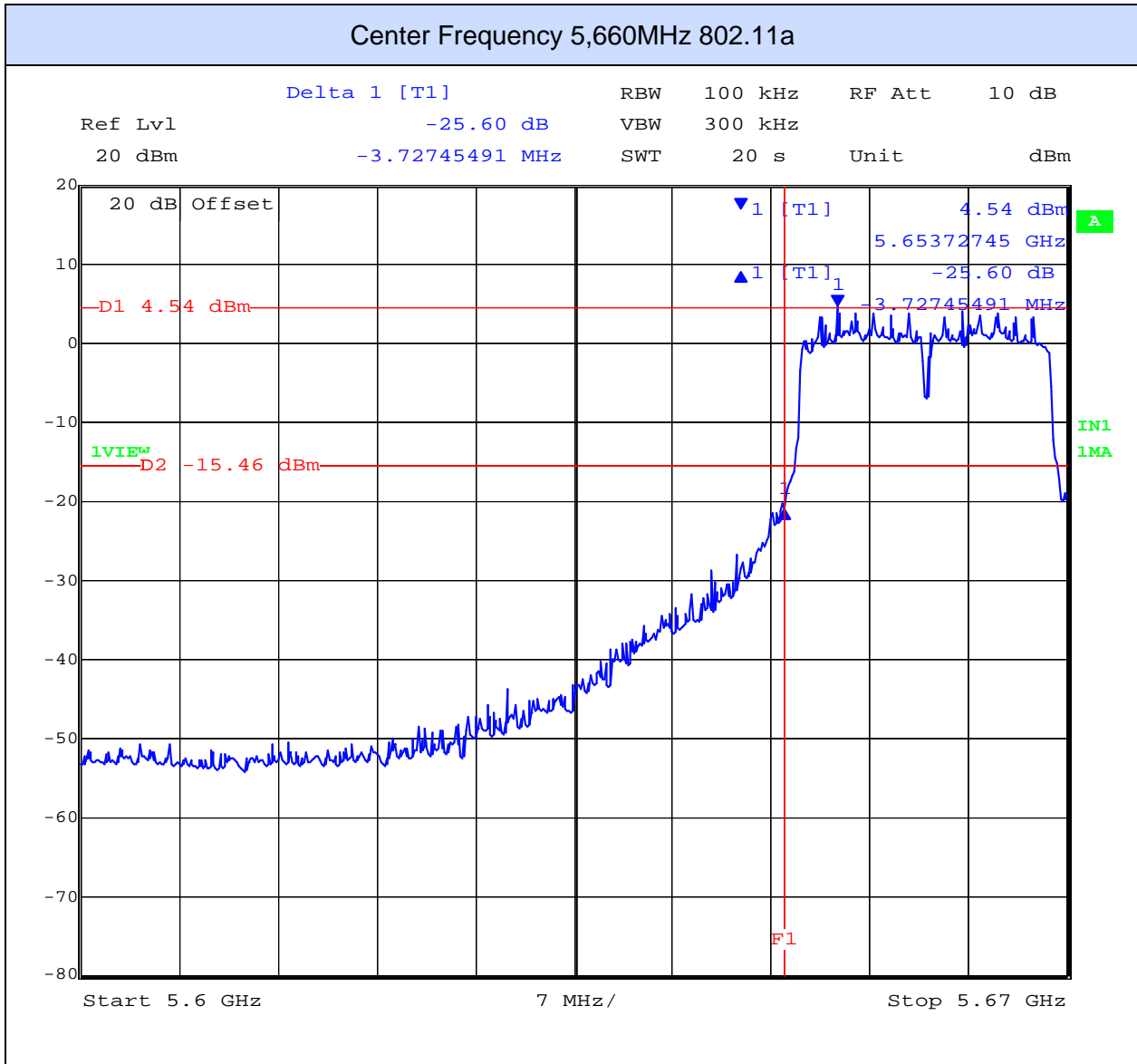
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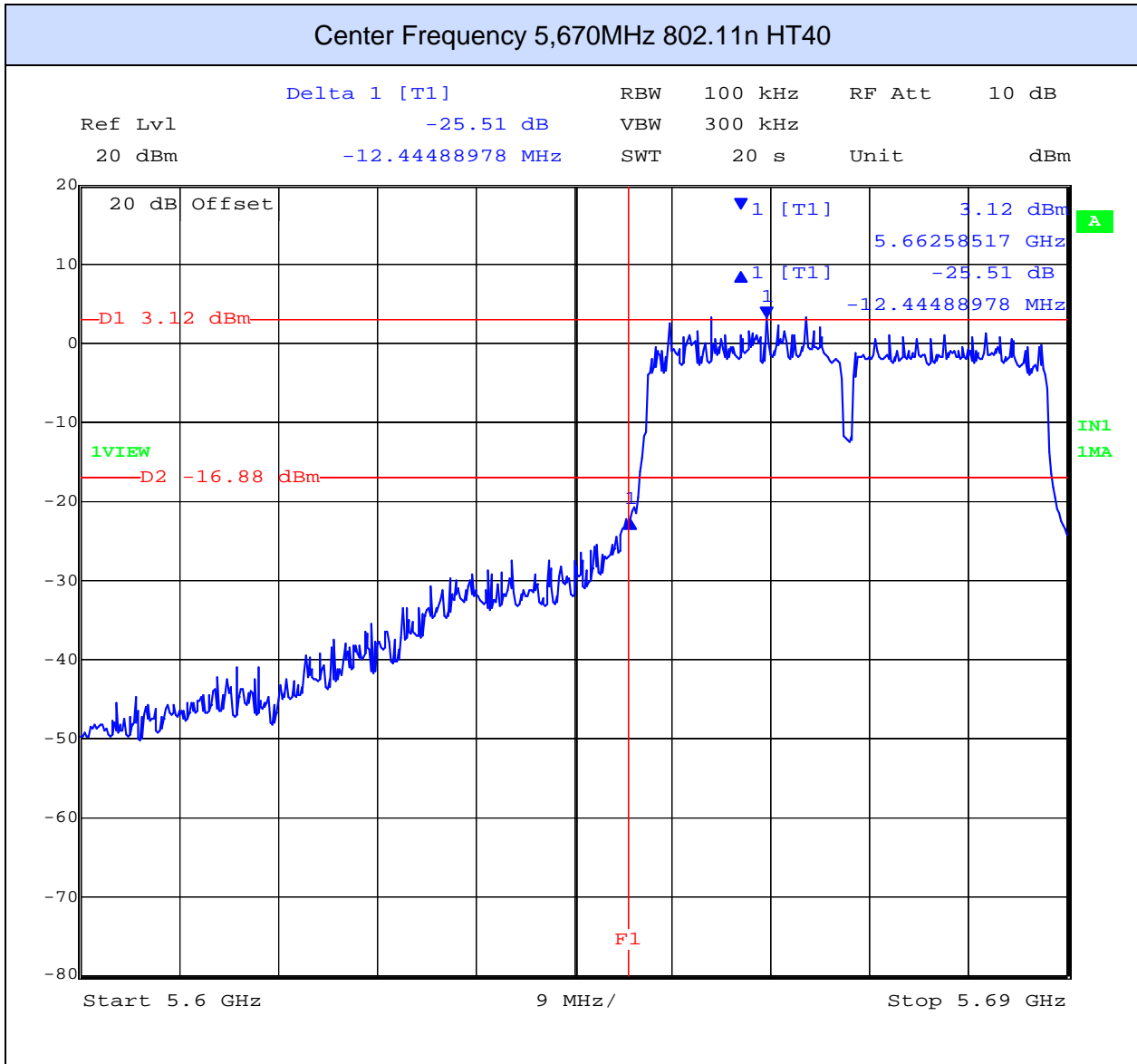
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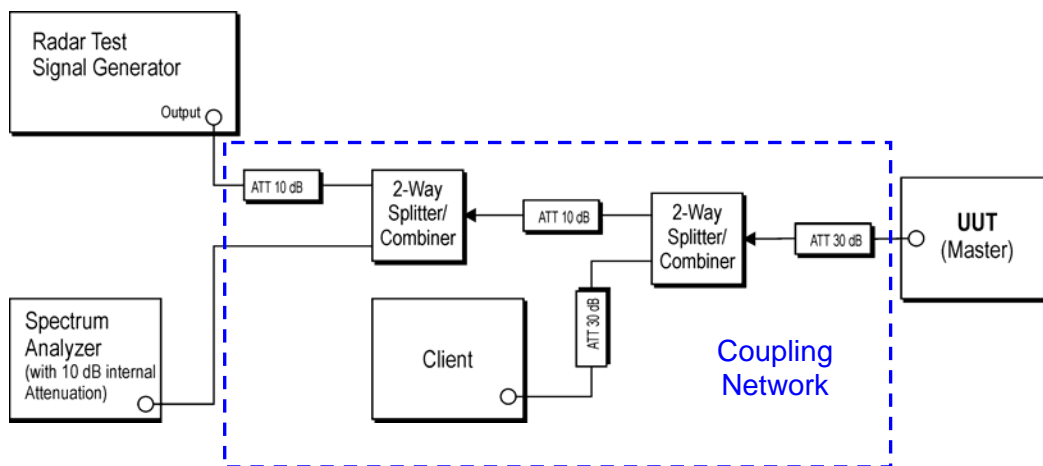


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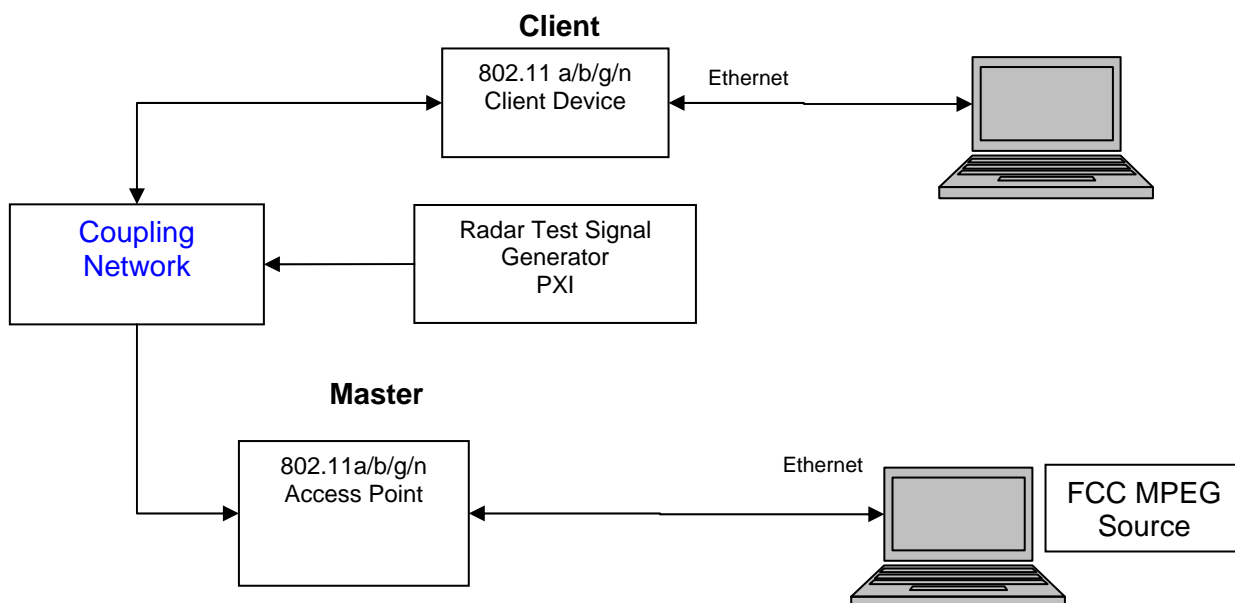
6.1.11. Test Set Up:

Block Diagram(s) of Test Setup

Setup for Conducted Measurements where the EUT is the Master with injection of Radar Test Waveforms at the Master.



Support Equipment Configuration





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The EUT is a Master Device with radar detection.

Applicability of DFS Requirements Prior to Use of a Channel
(Ref Table 1 of FCC 06-96)

Requirement	Operational Mode		
	Master	Client Without Radar Detection	Client With Radar Detection
<i>Non-Occupancy Period</i>	Yes	Not required	Yes
<i>DFS Detection Threshold</i>	Yes	Not required	Yes
<i>Channel Availability Check Time</i>	Yes	Not required	Not required
<i>Uniform Spreading</i>	Yes	Not required	Not required
<i>U-NII Detection Bandwidth</i>	Yes	Not required	Yes

Applicability of DFS requirements during normal operation
(Ref Table 2 of FCC 06-96)

Requirement	Operational Mode		
	Master	Client Without Radar Detection	Client With Radar Detection
<i>DFS Detection Threshold</i>	Yes	Not required	Yes
<i>Channel Closing Transmission Time</i>	Yes	Yes	Yes
<i>Channel Move Time</i>	Yes	Yes	Yes
<i>U-NII Detection Bandwidth</i>	Yes	Not required	Yes

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For the frequency band 5,470 – 5,725 MHz, the Master device provides, on aggregate, uniform loading of the spectrum across all devices by selecting an operating channel among the available channels using a random algorithm. The EUT was tested in HT-40 mode.

Declared minimum antenna gain 0 dBi. ;

Radar receive signal level = -62 dBm + minimum antenna gain

$$= -62 + 2.5$$

Radar receive signal level = -59.5 dBm

Radar signal offset (MHz) = 5 MHz (5495 MHz 802.11a / 5505 MHz 802.11n)

Measurement Results - Dynamic Frequency Selection (DFS)

Ambient conditions.

Temperature: 17 to 23 °C Relative humidity: 31 to 57% Pressure: 999 to 1012 mbar

Radio parameters.

Test methodology: Conducted

Device Type: Master

Transmit Power: Maximum

Operational Details - Dynamic Frequency Selection (DFS)

Operational Modes: 802.11a & 802.11n HT40

Data Rates: 18Mbit/s 802.11a & 0MCS 802.11n

**Note* No video pixilation was observed during the video stream at these rates. Video frames per second were noted to be at 30fps.*

Video Streaming Method - Dynamic Frequency Selection (DFS)

Using the VideoLan player a video stream was setup on the master laptop with the destination being the client laptop. The video profile chosen for the video stream is "MPEG-2 + MPGA (TS)". On the client laptop the VideoLan player was setup to listen to an incoming video stream from the master device.

The requisite MPEG video file ("TestFile.mpg" available on the NTIA website at the following link <http://ntiacsd.ntia.doc.gov/dfs/>) is used during this video stream.



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6.2. Dynamic Frequency Selection (DFS) Test Results

6.2.1. UNII Detection Bandwidth:

All UNII channels for this device have identical channel bandwidths and DFS testing was completed on channel 5,500 MHz (802.11a) and 5510MHz (HT40).

The generating equipment is configured as shown in the Conducted Test Setup above. A single Burst of the short pulse radar Type 1 through 6 was produced at 5,500 MHz (802.11a) and 5,510 MHz (802.11n HT40) at a level of -61 dBm (Ref Section 5.1). The EUT is set up as a standalone device (no associated Client and no traffic).

A single radar Burst is generated for a minimum of 10 trials, and the response of the EUT is noted. The EUT must detect the Radar Waveform 90% or more of the time.

The radar frequency is increased in 1 MHz steps, repeating the above test sequence, until the detection rate falls below 90%. The highest frequency at which detection is greater than or equal to 90% is denoted as F_H .

The radar frequency is decreased in 1 MHz steps, repeating the above test sequence, until the detection rate falls below 90%. The lowest frequency at which detection is greater than or equal to 90% is denoted as F_L .

The U-NII Detection Bandwidth is calculated as follows:

$$\text{U-NII Detection Bandwidth} = F_H - F_L$$

The U-NII Detection Bandwidth must be at least 80% of the EUT transmitter 99% power
Table of results are continued on the next page.



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EUT Frequency= 5,500 MHz 802.11a (Detection = √, No Detection = 0)											
Radar Frequency (MHz)	1	2	3	4	5	6	7	8	9	10	Detection Rate (%)
-20											%
-19											%
-18											%
-17											%
-16											%
-15											%
-14											%
-13											%
-12	v	v	0	0							<90%
-11	v	v	v	v	v	v	v	v	v	v	100%
-10	v	v	v	v	v	v	v	v	v	v	100%
-9	v	v	v	v	v	v	v	v	v	v	100%
-8	v	v	v	v	v	v	v	v	v	v	100%
-7	v	v	v	v	v	v	v	v	v	v	100%
-6	v	v	v	v	v	v	v	v	v	v	100%
-5	v	v	v	v	v	v	v	v	v	v	100%
-4	v	v	v	v	v	v	v	v	v	v	100%
-3	v	v	v	v	v	v	v	v	v	v	100%
-2	v	v	v	v	v	v	v	v	v	v	100%
-1	v	v	v	v	v	v	v	v	v	v	100%
F ₀	v	v	v	v	v	v	v	v	v	v	100%
+1	v	v	v	v	v	v	v	v	v	v	100%
+2	v	v	v	v	v	v	v	v	v	v	100%
+3	v	v	v	v	v	v	v	v	v	v	100%
+4	v	v	v	v	v	v	v	v	v	v	100%
+5	v	v	v	v	v	v	v	v	v	v	100%
+6	v	v	v	v	v	v	v	v	v	v	100%
+7	v	v	v	v	v	v	v	v	v	v	100%
+8	v	v	v	v	v	v	v	v	v	v	100%
+9	v	v	v	v	v	v	v	v	v	v	100%
+10	v	v	v	v	v	v	v	v	v	v	100%
+11	v	v	v	v	v	v	v	v	v	v	100%
+12	v	v	0	v	v	0					<90%
+13											%
+14											%
+15											%
+16											%
+17											%
Detection Bandwidth = $F_H - F_L = 5589 - 5511 = 22$ MHz											
EUT 99% Bandwidth = 17.83 MHz (ref. bandwidth channel 5500 MHz)											
17.83 MHz *80% = 14.26MHz											

For each frequency step the minimum percentage detection is 90%

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EUT Frequency= 5,510 MHz 802.11n HT40 (Detection = √, No Detection = 0)											
Radar Frequency (MHz)	1	2	3	4	5	6	7	8	9	10	Detection Rate (%)
-21	0	v	v	0							<90%
-20	v	v	v	v	v	v	v	v	v	v	100%
-19	v	v	v	v	v	v	v	v	v	v	100%
-18	v	v	v	v	v	v	v	v	v	v	100%
-17	v	v	v	v	v	v	v	v	v	v	100%
-16	v	v	v	v	v	v	v	v	v	v	100%
-15	v	v	v	v	v	v	v	v	v	v	100%
-14	v	v	v	v	v	v	v	v	v	v	100%
-13	v	v	v	v	v	v	v	v	v	v	100%
-12	v	v	v	v	v	v	v	v	v	v	100%
-11	v	v	v	v	v	v	v	v	v	v	100%
-10	v	v	v	v	v	v	v	v	v	v	100%
-9	v	v	v	v	v	v	v	v	v	v	100%
-8	v	v	v	v	v	v	v	v	v	v	100%
-7	v	v	v	v	v	v	v	v	v	v	100%
-6	v	v	v	v	v	v	v	v	v	v	100%
-5	v	v	v	v	v	v	v	v	v	v	100%
-4	v	v	v	v	v	v	v	v	v	v	100%
-3	v	v	v	v	v	v	v	v	v	v	100%
-2	v	v	v	v	v	v	v	v	v	v	100%
-1	v	v	v	v	v	v	v	v	v	v	100%
F ₀	v	v	v	v	v	v	v	v	v	v	100%

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EUT Frequency= 5,510 MHz 802.11n HT40 (Detection = √, No Detection = 0)											
Radar Frequency (MHz)	1	2	3	4	5	6	7	8	9	10	Detection Rate (%)
F ₀	v	v	v	v	v	v	v	v	v	v	100%
+1	v	v	v	v	v	v	v	v	v	v	100%
+2	v	v	v	v	v	v	v	v	v	v	100%
+3	v	v	v	v	v	v	v	v	v	v	100%
+4	v	v	v	v	v	v	v	v	v	v	100%
+5	v	v	v	v	v	v	v	v	v	v	100%
+6	v	v	v	v	v	v	v	v	v	v	100%
+7	v	v	v	v	v	v	v	v	v	v	100%
+8	v	v	v	v	v	v	v	v	v	v	100%
+9	v	v	v	v	v	v	v	v	v	v	100%
+10	v	v	v	v	v	v	v	v	v	v	100%
+11	v	v	v	v	v	v	v	v	v	v	100%
+12	v	v	v	v	v	v	v	v	v	v	100%
+13	v	v	v	v	v	v	v	v	v	v	100%
+14	v	v	v	v	v	v	v	v	v	v	100%
+15	v	v	v	v	v	v	v	v	v	v	100%
+16	v	v	v	v	v	v	v	v	v	v	100%
+17	v	v	v	v	v	v	v	v	v	v	100%
+18	v	v	v	v	v	v	v	v	v	v	100%
+19	v	v	v	v	v	v	v	v	v	v	100%
+20	v	v	v	v	v	v	v	v	v	v	100%
+21	v	v	v	0	v	v	0				<90%
Detection Bandwidth = F _H -F _L = 5590-5530 = 40 MHz											
EUT 99% Bandwidth = 38.07 MHz (ref. bandwidth channel 5510 MHz)											
38.07 MHz *80% = 30.40 MHz											

For each frequency step the minimum percentage detection is 90%

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6.2.2. Initial Channel Availability Check Time

This test verifies that the EUT does not emit pulse, control, or data signals on the test Channel until the power-up sequence has been completed and the U-NII device checks for Radar Waveforms for one minute on the test Channel. This test does not use any Radar Waveforms.

The U-NII device is powered on and be instructed to operate at 5,500MHz 802.11a and 5,510MHz 802.11n HT40. At the same time the EUT is powered on, the spectrum analyzer is set for zero span with a 1 MHz resolution bandwidth at 5,500& 5,510 MHz with a 260 second sweep time. The analyzer's sweep will be started the same time power is applied to the U-NII device.

The EUT should not transmit any pulse or data transmissions until at least 1 minute after the completion of the power-on cycle.

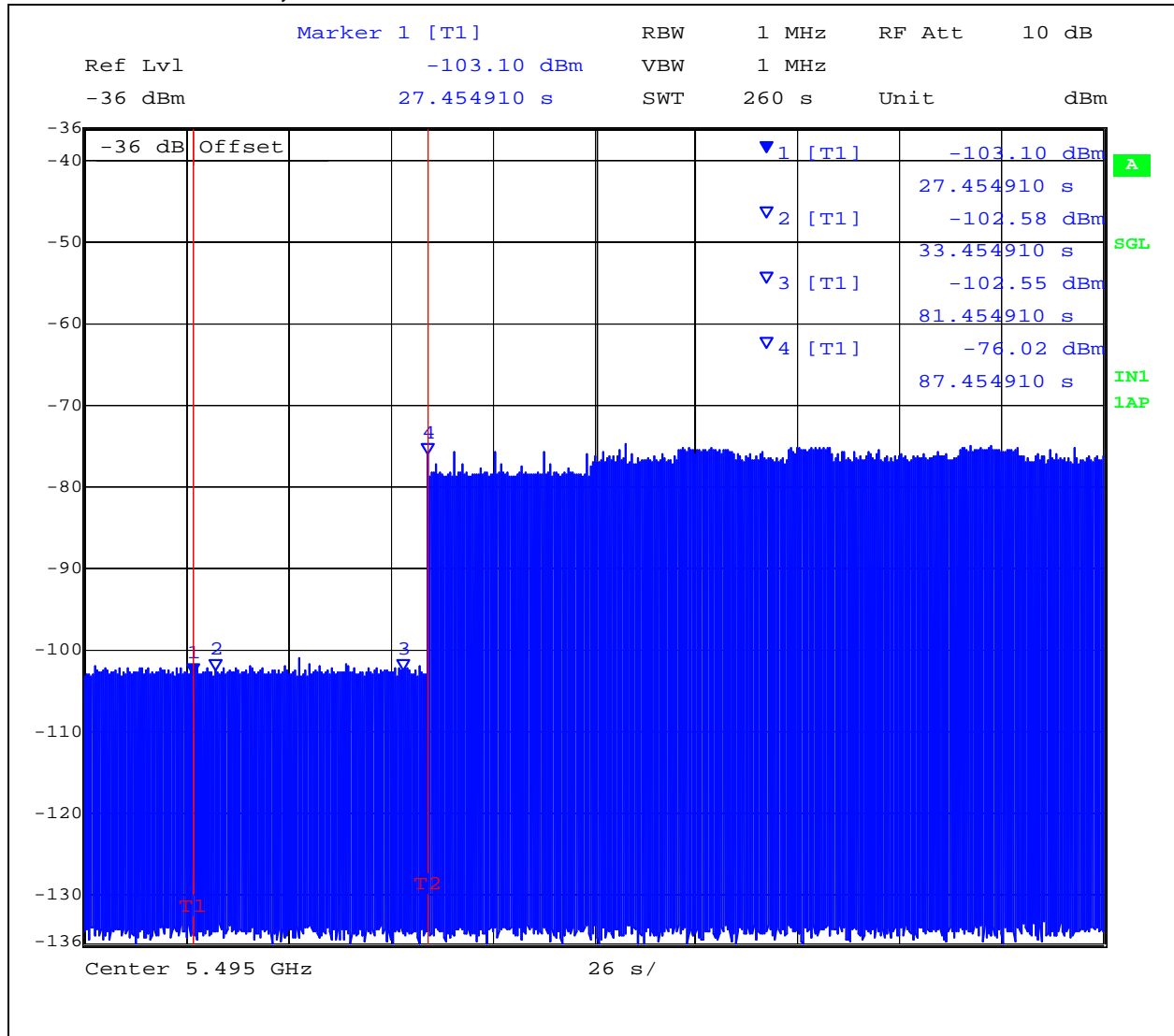
The first red marker line shown on the following plot denotes the instant when the EUT starts its power-up sequence i.e. T_0 (as defined within the FCC's MO&O 06-96 Normative Reference 2). The power-up reference T_0 is determined by the time it takes for the EUT to start "beaconing" i.e. initial beacon – 60 secs = end of power-up.

The Channel Availability Check Time commences at instant T_0 and will end no sooner than $T_0 + 60$ seconds.



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EUT power up and Initial Channel Availability Check Time
5,500MHz 802.11a Power On = 87.454 Seconds

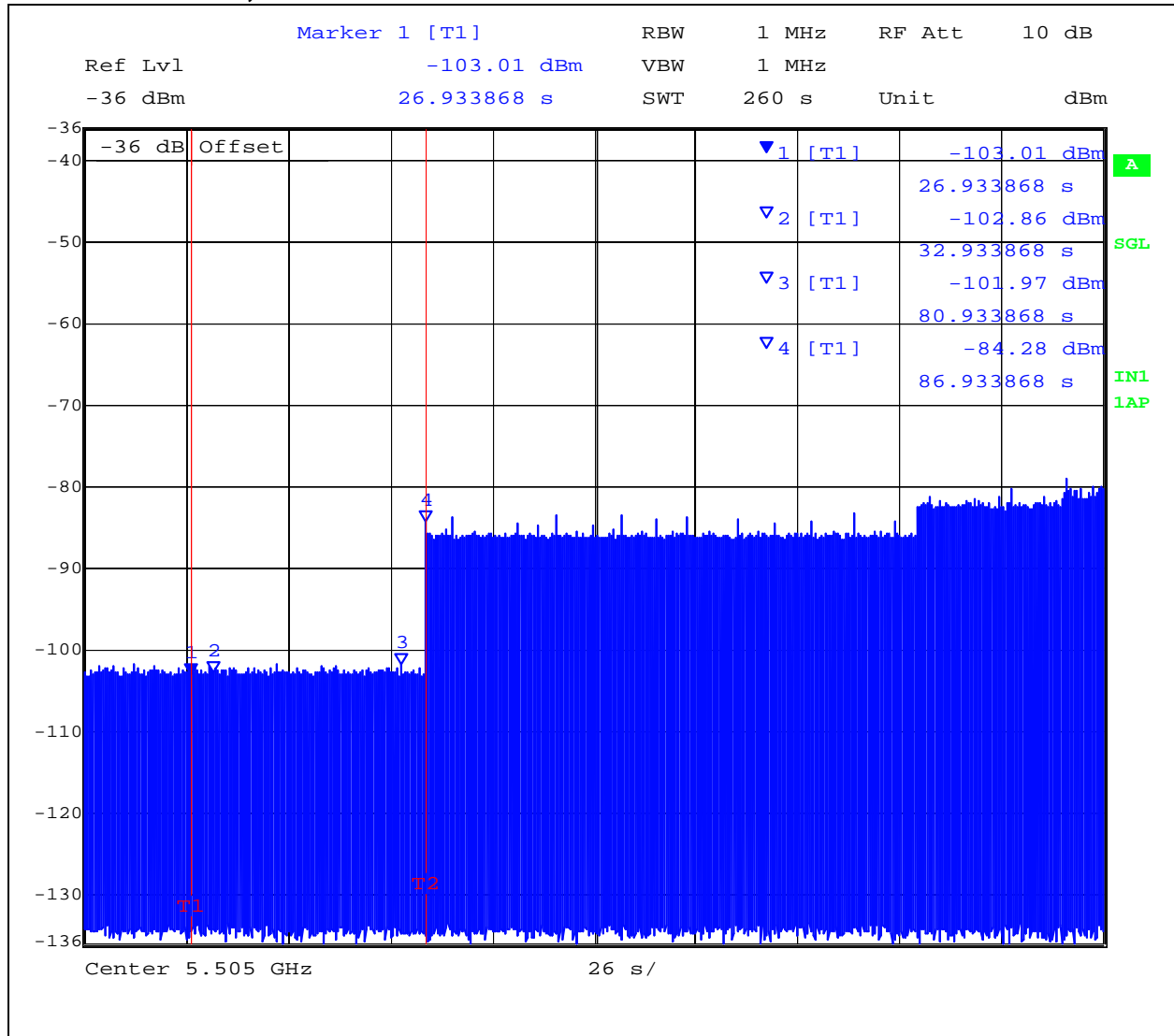


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EUT power up and Initial Channel Availability Check Time
5,510MHz 802.11n HT40 Power On = 86.93 Seconds



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6.2.3. Radar Burst at the Beginning of the Channel Availability Check Time:

The steps below define the procedure to verify successful radar detection on the selected Channel during a period equal to the Channel Availability Check Time and avoidance of operation on that Channel when a radar Burst with a level equal to the DFS Detection Threshold +6 dB (-62 dBm Ref Section 6.1.7) occurs at the beginning of the Channel Availability Check Time.

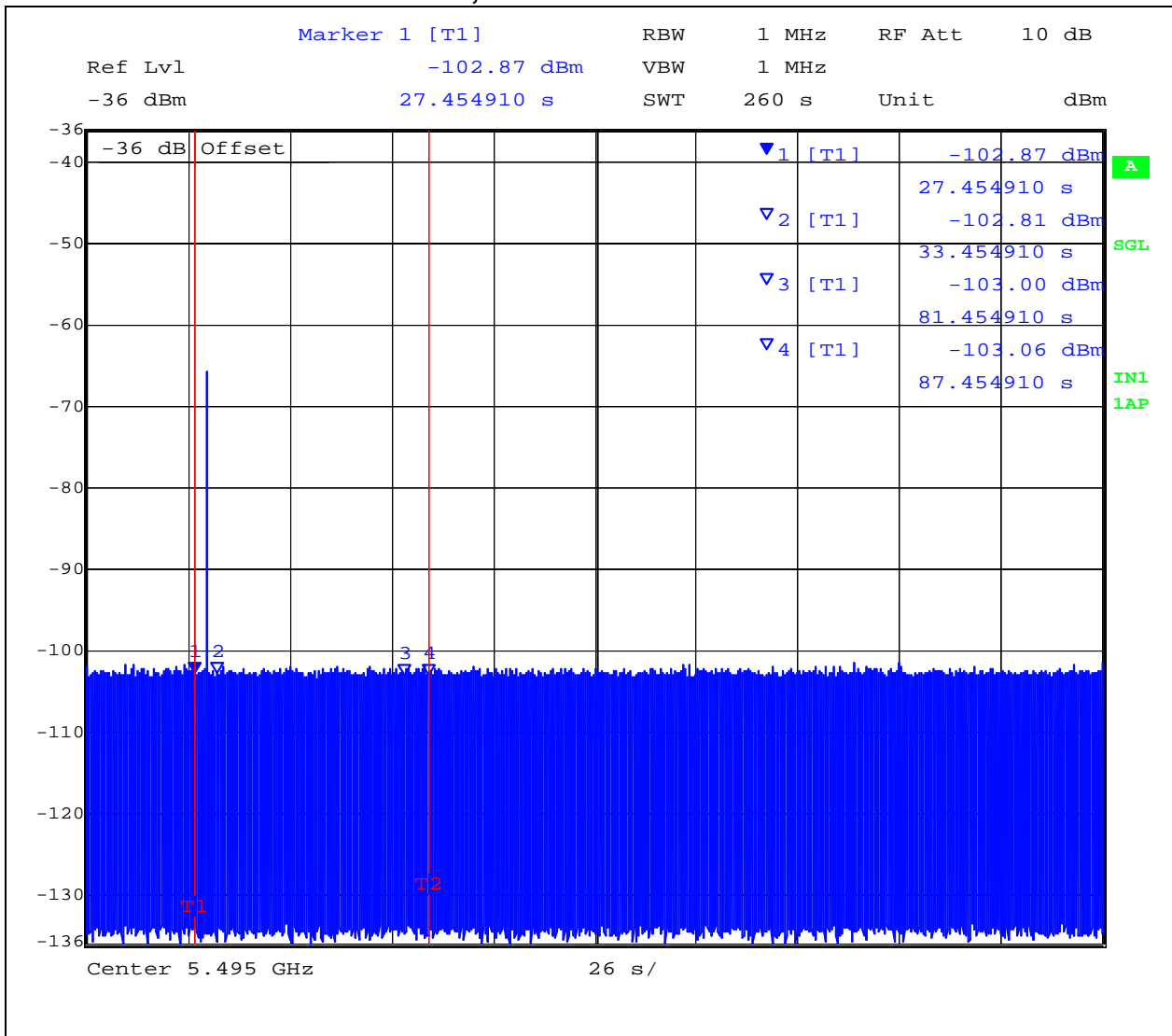
A single Burst of short pulse of radar Type 1 will commence within a 6 second window starting at T_0 (first red marker line on the following plot).

Visual indication on the EUT of successful detection of the radar Burst will be recorded and reported. Observation of emissions at 5,500MHz 802.11a & 5,510MHz 802.11n HT40 will continue for 2.5 minutes after the radar burst has been generated.



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**Channel Availability Check Time at the start T0 + 6 seconds Check Time
5,500MHz 802.11a**

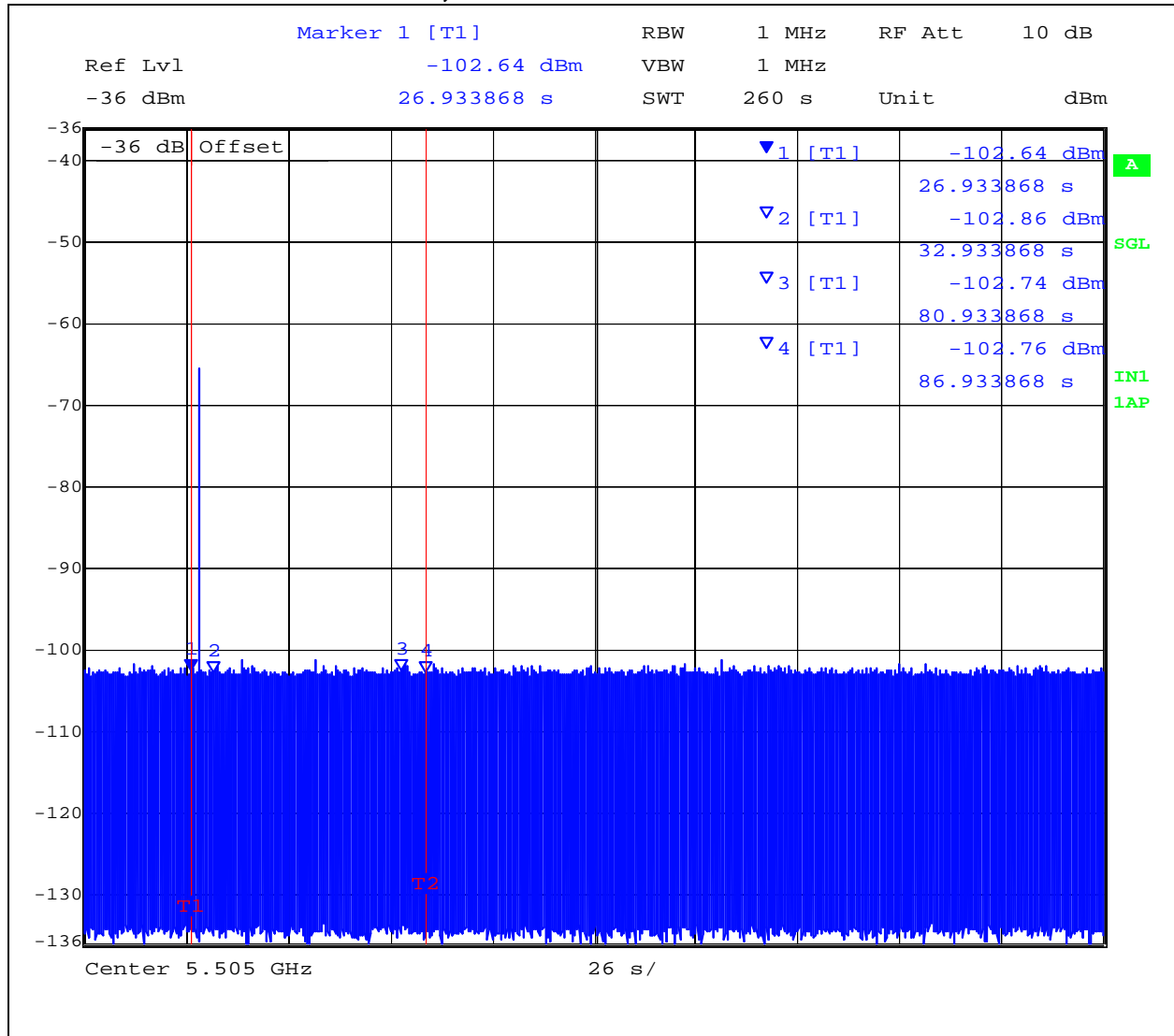


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Channel Availability Check Time at the start T0 + 6 seconds Check Time
5,510MHz 802.11n HT40



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6.2.4. Radar Burst at the End of the Channel Availability Check Time:

The steps below define the procedure to verify successful radar detection on the selected Channel during a period equal to the Channel Availability Check Time and avoidance of operation on that Channel when a radar Burst with a level equal to the DFS Detection Threshold occurs at the end of the Channel Availability Check Time.

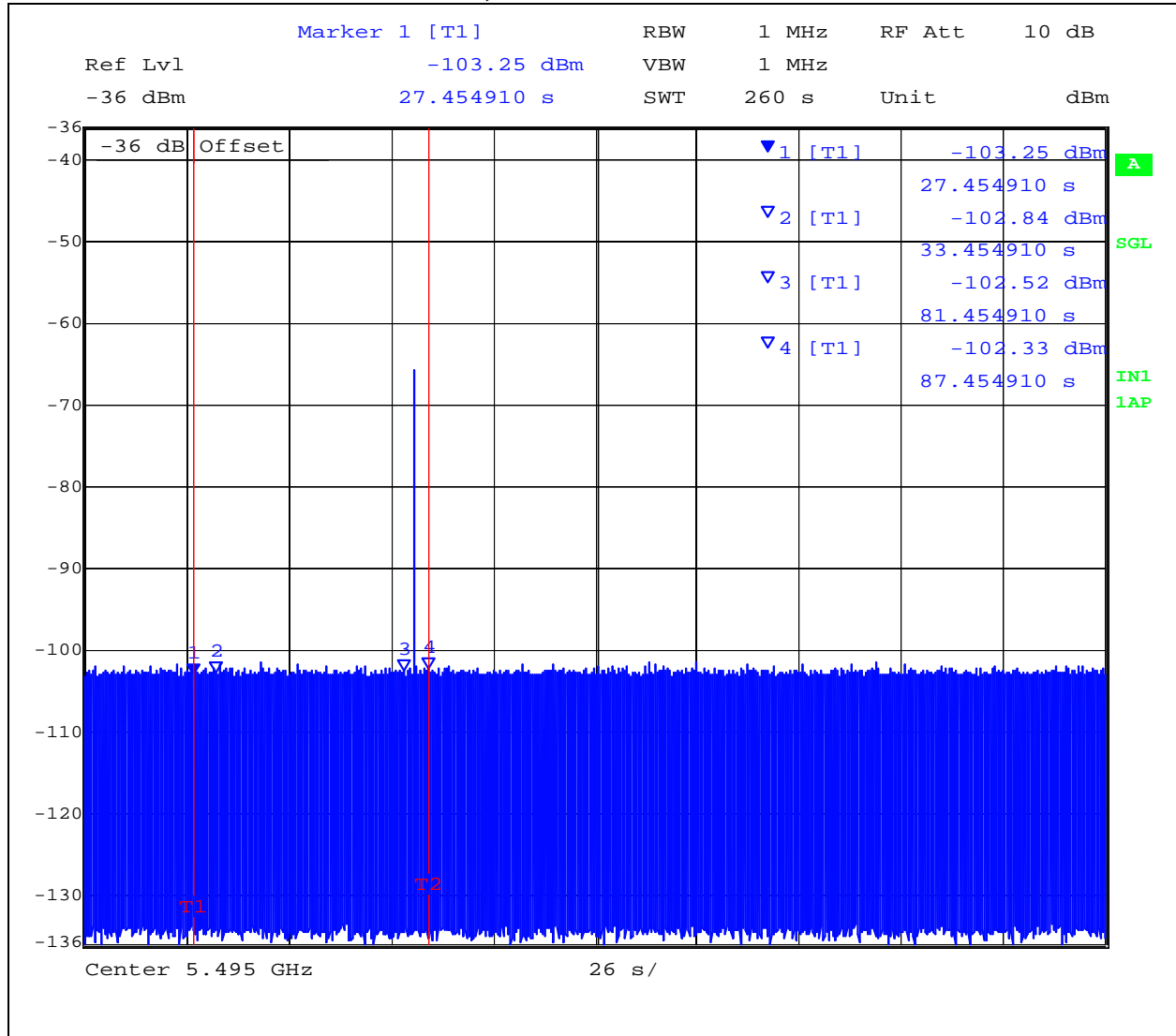
A single Burst of short pulse of radar type 1 will commence within a 6 second window starting at $T_0 + 54$ seconds. The window will commence at marker 2 and end at the red frequency line T_2 .

Visual indication on the EUT of successful detection of the radar Burst will be recorded and reported. Observation of emissions at 5,500MHz 802.11a & 5,510MHz 802.11n HT40 will continue for 2.5 minutes after the radar burst has been generated.



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Channel Availability Check Time at T0 + 54 seconds Check Time
5,500MHz 802.11a

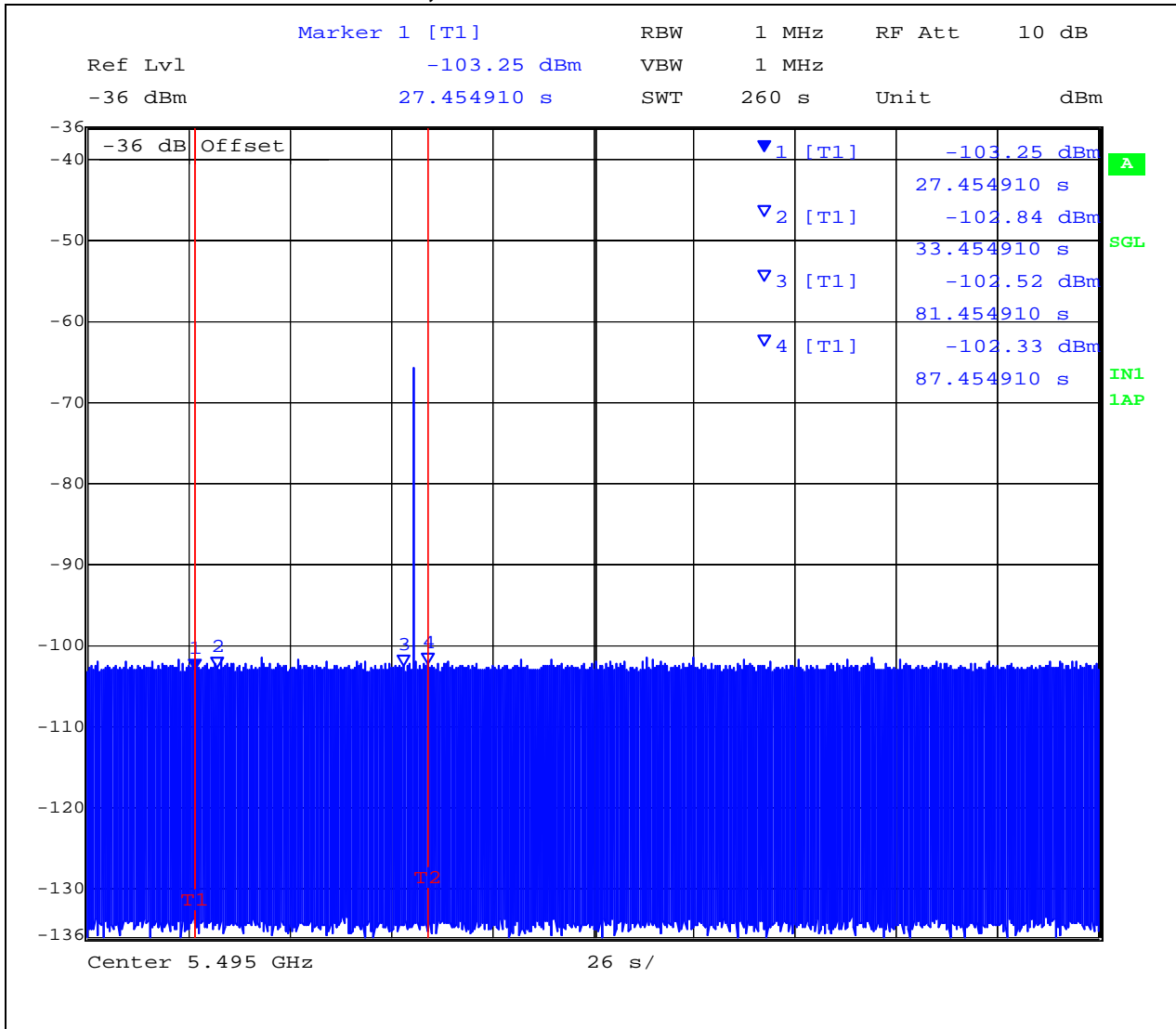


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Channel Availability Check Time at T0 + 54 seconds Check Time
5,510MHz 802.11n HT40



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6.2.5. In-Service Monitoring for Channel Move Time, Channel Closing Transmission Time and Non-Occupancy Period

FCC §15.407(h)(2)(iii)

The steps below define the procedure to determine the above mentioned parameters when a radar Burst with a level equal to the DFS Detection Threshold is generated on the Operating Channel of the U-NII device.

A U-NII device operating as a Client Device will associate with the EUT (Master). The requisite MPEG video file ("TestFile.mpg" available on the NTIA website at the following link <http://ntiacsd.ntia.doc.gov/dfs/>) is streamed from the master device (AP) to the client.

Channel Closing Transmission Time - Measurement

A Type 1 waveform was introduced to the EUT, from which a 12 second transmission record was digitally captured, collecting nearly 250M samples of data, which included in excess of 600 ms of pre-trigger data. This Type 1 waveform had an integral marker built into its construction, marking the start of the radar waveform play, which directly triggered the PXI digitizer's data capture via the PXI backplane trigger bus.

The test system was set-up to capture all transmission data for access point events above a threshold level of -50 dBm. The test equipment time stamps all captured events with respect to T_0 (zero time indicating the start of the measurements sequence) starting the 612.1 ms pre-trigger period followed by the radar type 1 burst period.

Radar (Type 1) Pre-trigger period 612.1 ms

Type 1 burst period 25.70 ms

(The period of the 18 pulse burst includes [18 pulses * 1.428mS PRI] = 25.704 ms. Then add 1 μ s pulse width for the final pulse.)

Channel Closing Transmission Time starts immediately after the last radar pulse is transmitted i.e. 637.8 ms after the start of the trace capture period.



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Therefore, pulses seen after this 637.8 ms boundary are identified and totaled to provide an aggregate total of transmissions in order to determine whether the EUT is compliant with the Channel Closing Transmission Time requirements as described in MO&O FCC 06-96. In this case, it was found that an aggregate total of 0.00 ms of transmission time accrued. This value is found at the right hand side at the foot of the following plot (10s Total).

Channel Closing Transmission Time 5,500 MHz (802.11a) = 0.064 mSecs (limit 260 mSecs)

Channel Move Time 5,500MHz (802.11a) = 724.2 mSecs (limit 10 Secs)

Channel Move Time, Channel Closing Transmission Time for Type 1 Radar Captured by the Test System - 0 to 10 seconds



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**Channel Closing Transmission Time 5,510 MHz (802.11n HT40) = 0.001 mSecs
(limit 260 mSecs)**

Channel Move Time 5,510 MHz (802.11n HT40) = 1.074 Secs (limit 10 Secs)

**Channel Move Time, Channel Closing Transmission Time for Type 1 Radar
Captured by the Test System - 0 to 10 seconds**



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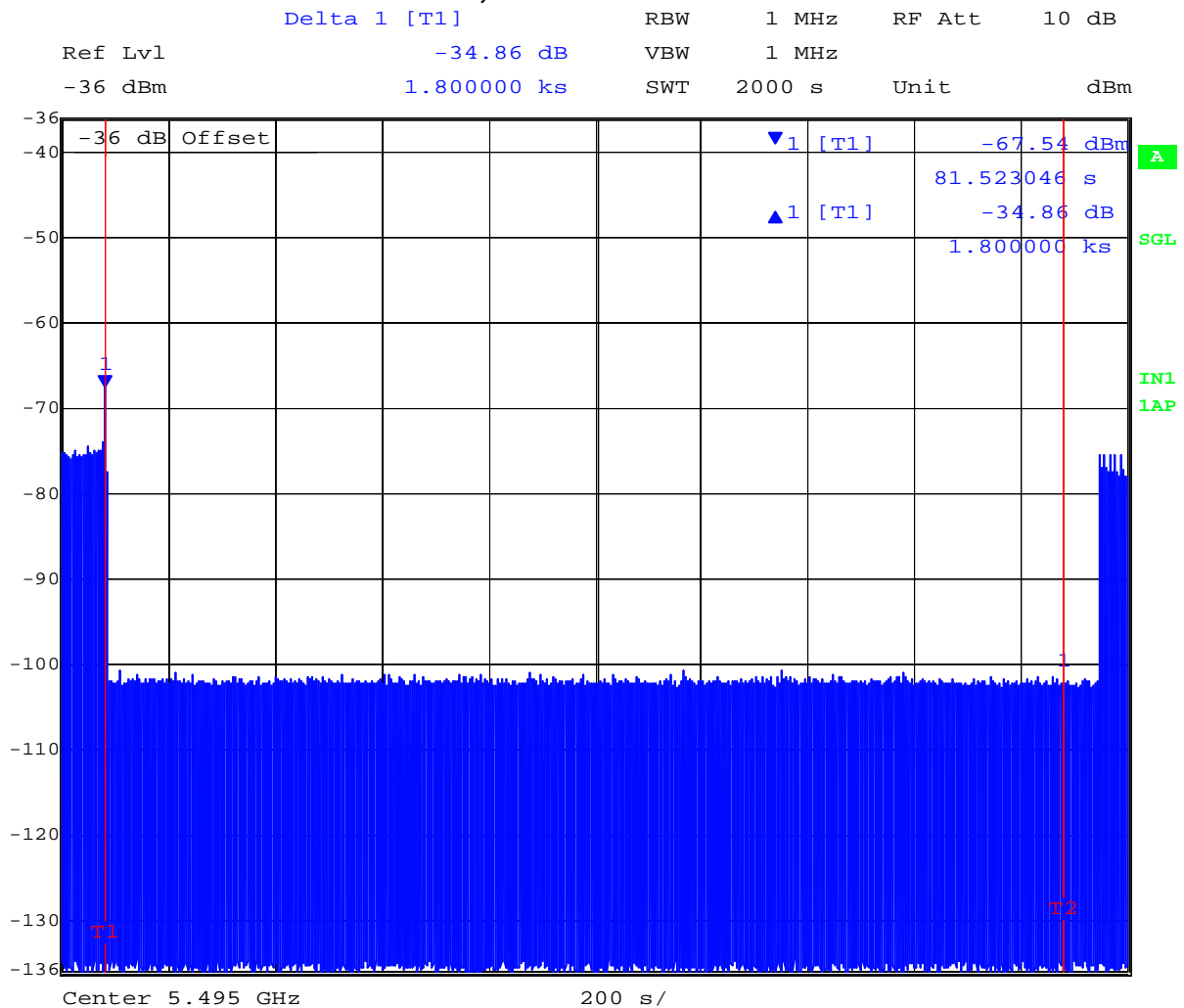


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30 Minute Non-Occupancy Period

The EUT is monitored for more than 30 minutes following the channel close/move time to verify no transmissions resume on this Channel.

30 Minute Non-Occupancy Period Type 1 Radar 5,500MHz 802.11a



Date: 7.JUN.2013 15:31:02

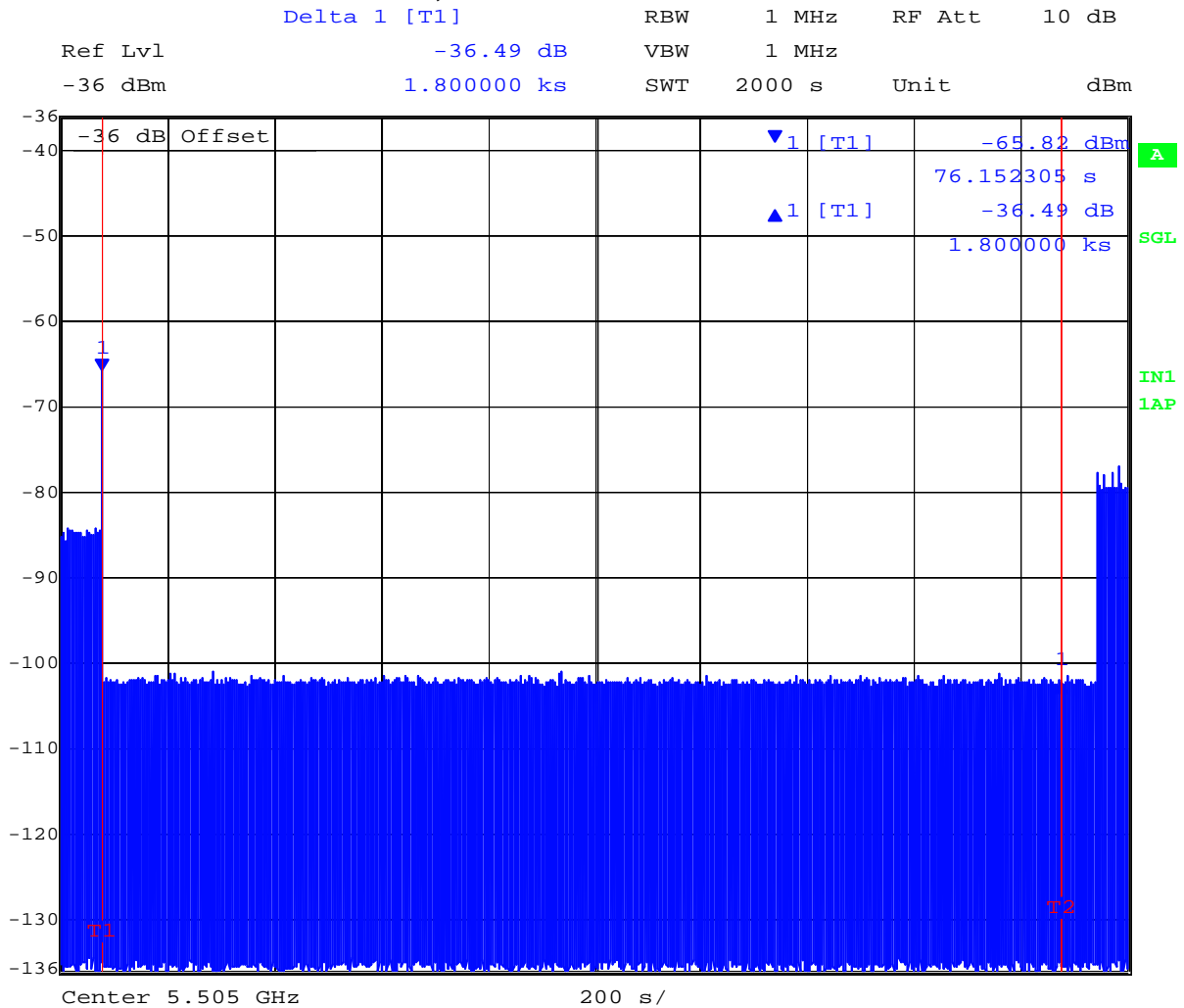
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30 Minute Non-Occupancy Period Type 1 Radar

5,510 MHz 802.11n HT40



Date: 7.JUN.2013 17:01:28

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6.2.6. Statistical Performance Check

The steps below define the procedure to determine the minimum percentage of detection when a radar burst with a level equal to the DFS Detection Threshold is generated on the Operating Channel of the U-NII device.

A U-NII device operating as a Client Device will associate with the UUT (Master) at 5,500MHz 802.11a and 5,510MHz 802.11n HT40.

The Radar Waveform generator sends the individual waveform for each of the radar types 1-6. Statistical data will be gathered to determine the ability of the device to detect the radar test waveforms. The device can utilize a test mode to demonstrate when detection occurs to prevent the need to reset the device between trial runs. The percentage of successful detection is calculated by:

$$\text{Total \# of detections} \div \text{Total \# of Trials} \times 100 = \text{Probability of Detection}$$

The Minimum number of trails, minimum percentage of successful detection and the average minimum percentage of successful detection are found in the Radar Test Waveforms section.



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Verification of Detection 5,500MHz 802.11a

Trial #	Detection = √, No Detection = 0					
	Type 1	Type 2	Type 3	Type 4	Type 5	Type 6
1	√	√	√	√	√	√
2	√	√	√	√	√	√
3	√	√	√	√	√	√
4	√	√	√	√	√	√
5	√	√	√	√	0	√
6	√	√	√	√	√	√
7	√	√	√	√	√	√
8	√	√	√	√	√	√
9	√	√	√	√	√	√
10	√	√	√	√	√	√
11	√	√	√	√	√	√
12	√	√	√	√	√	√
13	√	√	√	√	√	√
14	√	√	√	√	0	√
15	√	√	√	√	0	√
16	√	√	√	√	√	√
17	√	√	√	√	√	√
18	√	√	√	√	√	√
19	√	√	√	√	√	√
20	√	√	√	√	√	√
21	√	√	√	√	√	√
22	√	√	√	√	√	√
23	√	√	√	√	√	√
24	√	√	√	√	0	√
25	√	√	√	√	0	√
26	√	√	0	√	√	√
27	√	√	√	√	√	√
28	√	√	√	√	√	√
29	√	√	√	√	√	√
30	√	√	√	√	√	√
Detection Percentage	100% (>60%)	100% (>60%)	96.6% (>60%)	100% (>60%)	83.3% (>80%)	100% (>70%)

In addition an average minimum percentage of successful detection across all four Short pulse radar test waveforms is required and calculated as follows;

$$(P_{d1} + P_{d2} + P_{d3} + P_{d4}) / 4 = (100\% + 100\% + 96.6\% + 100\%) / 4 = 99.15\% (> 80\%)$$

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Verification of Detection 5,510MHz 802.11n HT40

Trial #	Detection = √, No Detection = 0					
	Type 1	Type 2	Type 3	Type 4	Type 5	Type 6
1	√	√	√	√	√	√
2	√	√	√	√	√	√
3	√	√	√	√	√	√
4	√	√	√	√	√	√
5	√	√	√	√	√	√
6	√	√	√	√	√	√
7	√	√	√	√	√	√
8	√	√	√	√	√	√
9	√	√	√	√	√	√
10	√	√	√	√	√	√
11	√	√	√	√	√	√
12	√	√	√	√	√	√
13	√	√	√	√	√	√
14	√	√	√	√	√	√
15	√	√	√	√	√	√
16	√	√	√	√	√	√
17	√	√	√	√	√	√
18	√	√	√	√	√	√
19	√	√	√	√	√	√
20	√	√	√	√	√	√
21	√	√	√	√	√	√
22	√	√	√	√	√	√
23	√	√	√	√	√	√
24	√	√	√	√	√	√
25	√	√	√	√	√	√
26	√	√	√	√	√	√
27	√	√	√	√	√	√
28	√	√	√	√	√	√
29	√	√	√	√	√	√
30	√	√	√	√	√	√
Detection Percentage	100% (>60%)	100% (>60%)	100% (>60%)	100% (>60%)	100% (>80%)	100% (>70%)

In addition an average minimum percentage of successful detection across all four Short pulse radar test waveforms is required and calculated as follows;

$$(P_{d1} + P_{d2} + P_{d3} + P_{d4}) / 4 = (100\% + 100\% + 100\% + 100\%) / 4 = 100\% (> 80\%)$$

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Measurement Uncertainty Time/Power

Measurement uncertainty	
- Time	4%
- Power	1.33dB

Traceability

Test Equipment Used

0072, 0083, 0098, 0116, 0132, 0158, 0313, 0314, 0193, 0223, 0252, 0253, 0251, 0256, 0328, 0329

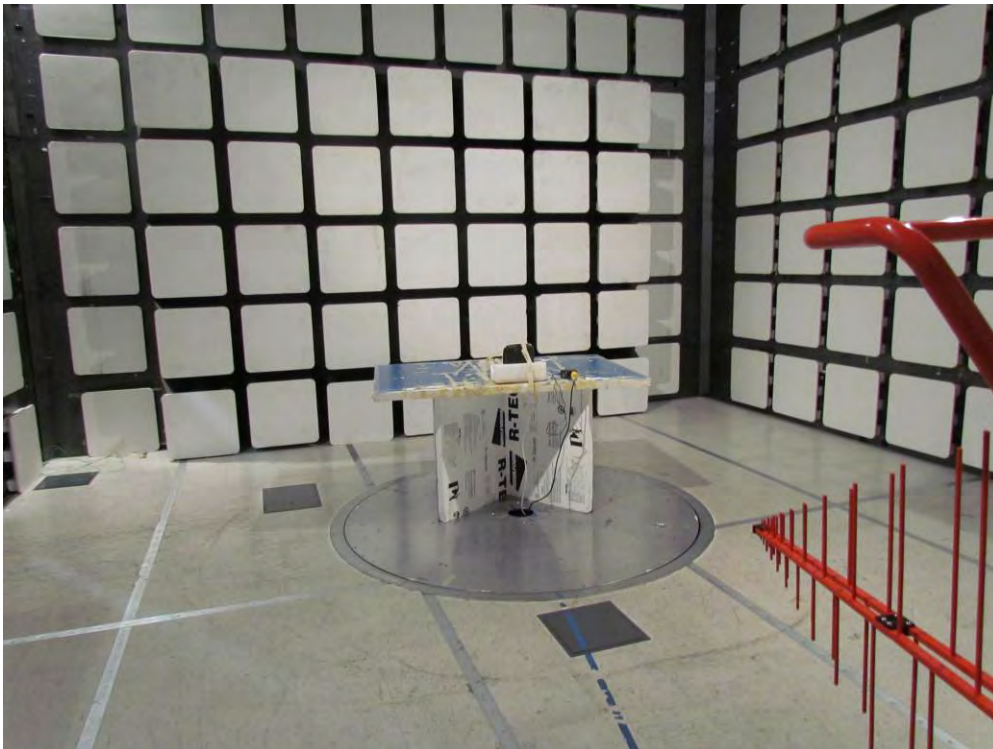
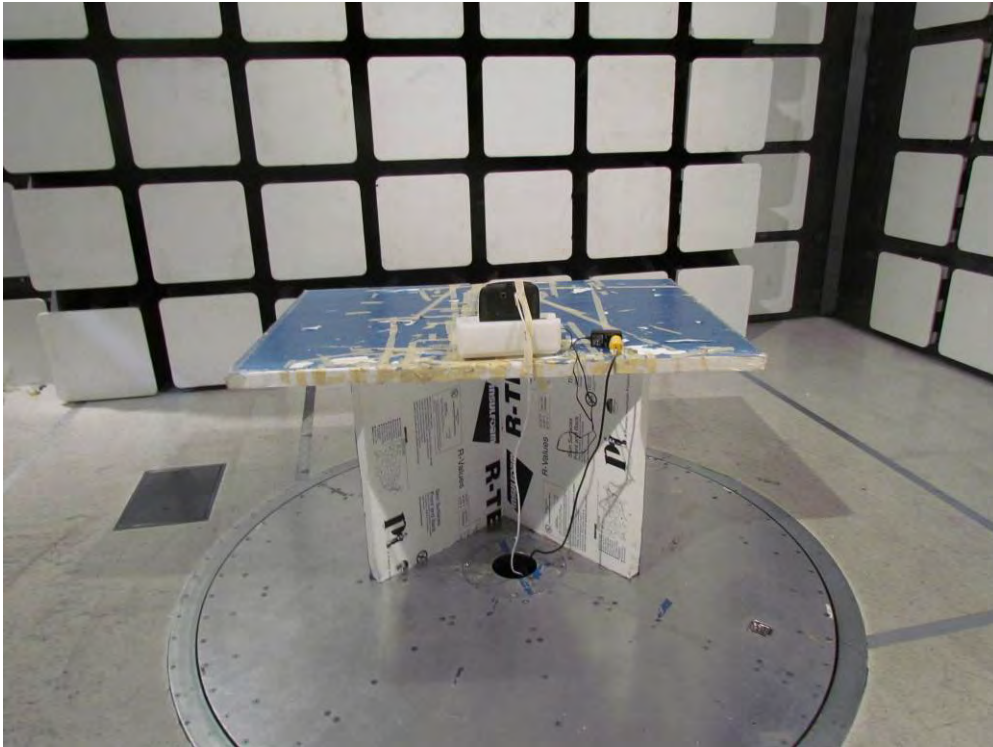
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7. PHOTOGRAPHS

7.1. Test Setup - Conducted

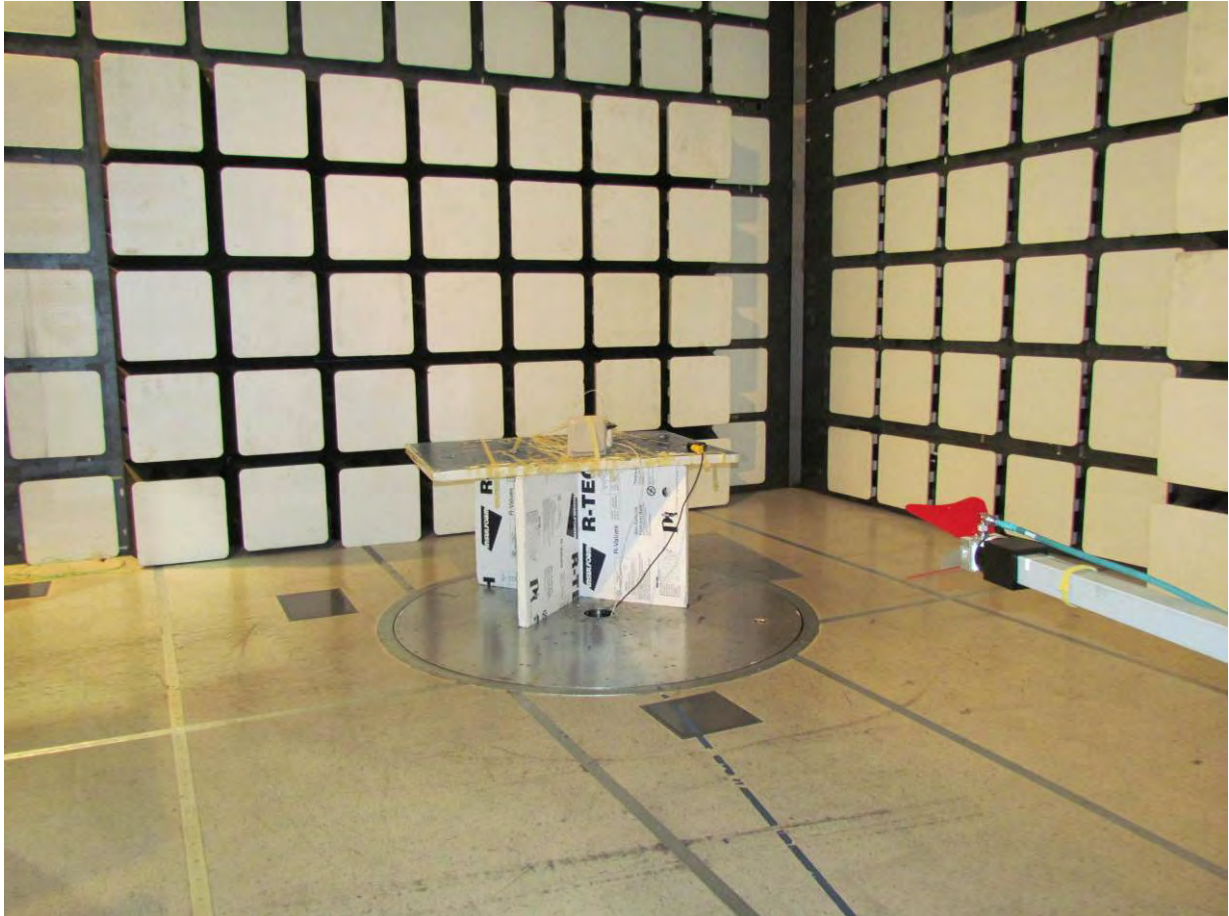


7.2. Test Setup - Digital Emissions < 1 GHz



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7.3. Radiated Emissions Test Setup >1 GHz



7.4. Dynamic Frequency Selection (DFS)

General DFS Test Setup





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8. TEST EQUIPMENT DETAILS

Asset #	Instrument	Manufacturer	Part #	Serial #	Calibration Due Date
0070	Power Meter	Hewlett Packard	437B	3125U11552	28 th Nov 13
0117	Power Sensor	Hewlett Packard	8487D	3318A00371	15 th Nov 13
0223	Power Meter	Hewlett Packard	EPM-442A	US37480256	15 th Nov 13
0374	Power Sensor	Hewlett Packard	8485A	3318A19694	29 th Nov 13
0158	Barometer /Thermometer	Control Co.	4196	E2846	8 th Dec 13
0193	EMI Receiver	Rhode & Schwartz	ESI 7	838496/007	2 nd Dec 13
0287	EMI Receiver	Rhode & Schwartz	ESIB40	100201	16 th Nov 13
0338	30 - 3000 MHz Antenna	Sunol	JB3	A052907	8 th Nov 13
0335	1-18 GHz Horn Antenna	EMCO	3117	00066580	7 th Nov 13
0252	SMA Cable	Megaphase	Sucoflex 104	None	N/A
0293	BNC Cable	Megaphase	1689 1GVT4	15F50B001	N/A
0307	BNC Cable	Megaphase	1689 1GVT4	15F50B002	N/A
0310	2m SMA Cable	Micro-Coax	UFA210A-0-0787-3G03G0	209089-001	N/A
0312	3m SMA Cable	Micro-Coax	UFA210A-1-1181-3G0300	209092-001	N/A
0314	30dB N-Type Attenuator	ARRA	N9444-30	1623	N/A
	EMC Test Software	EMISoft	Vasona	5.0051	N/A
	RF Conducted Test Software	National Instruments	Labview	Version 8.2	N/A
	RF Conducted Test Software	MiCOM Labs ATS		Version 1.5	N/A

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APPENDIX

A. SUPPORTING INFORMATION

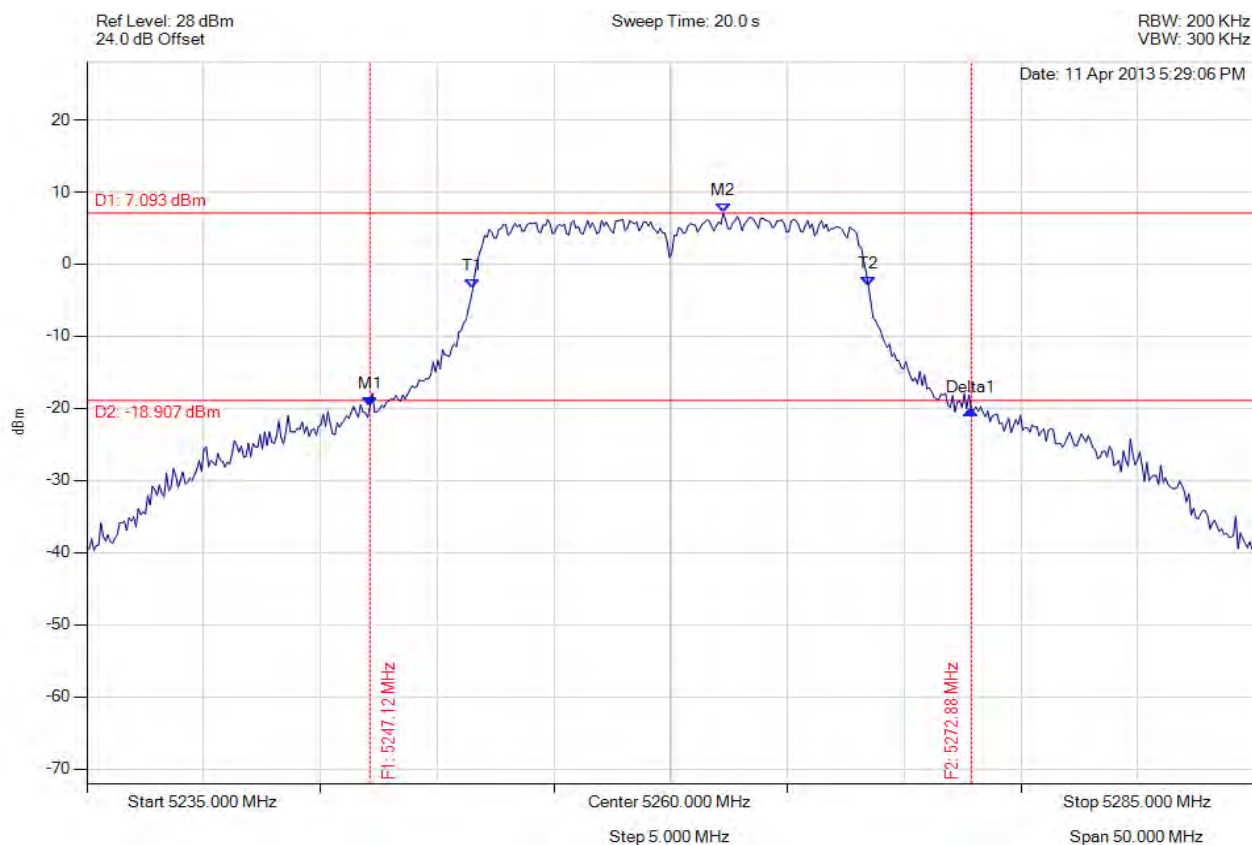
A.1. CONDUCTED TEST PLOTS

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A.1.1. 26 dB & 99% Bandwidth

26 dB & 99% BANDWIDTH

Variant: 802.11a, Channel: 5260.00 MHz, Chain a, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5247.124 MHz : -19.754 dBm M2 : 5262.255 MHz : 7.093 dBm Delta1 : 25.752 MHz : -0.510 dB T1 : 5251.533 MHz : -3.417 dBm T2 : 5268.467 MHz : -3.009 dBm OBW : 16.934 MHz	Measured 26 dB Bandwidth: 25.752 MHz Measured 99% Bandwidth: 16.934 MHz

[Back to the Matrix](#)

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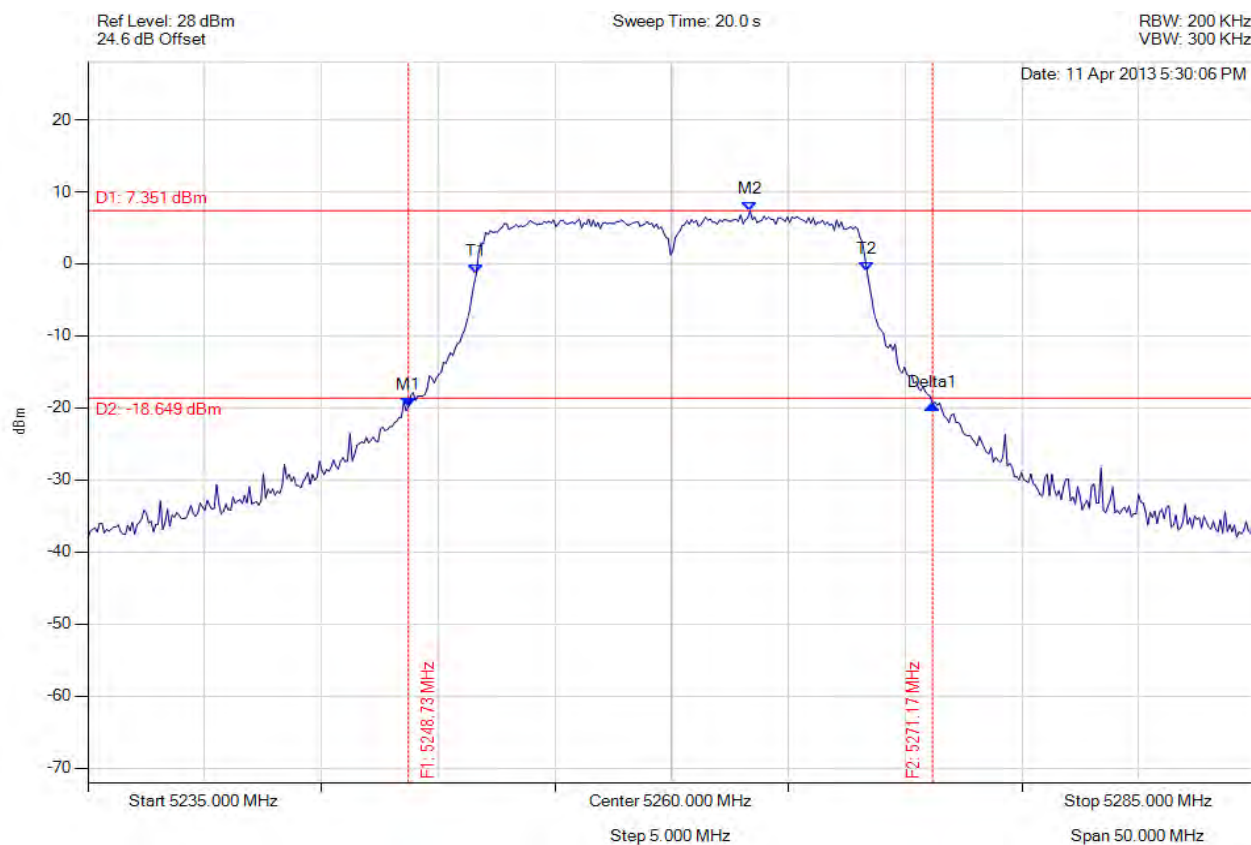


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26 dB & 99% BANDWIDTH

Variant: 802.11a, Channel: 5260.00 MHz, Chain b, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5248.727 MHz : -19.815 dBm M2 : 5263.357 MHz : 7.351 dBm Delta1 : 22.445 MHz : 0.321 dB T1 : 5251.633 MHz : -1.408 dBm T2 : 5268.367 MHz : -1.048 dBm OBW : 16.733 MHz	Measured 26 dB Bandwidth: 22.445 MHz Measured 99% Bandwidth: 16.733 MHz

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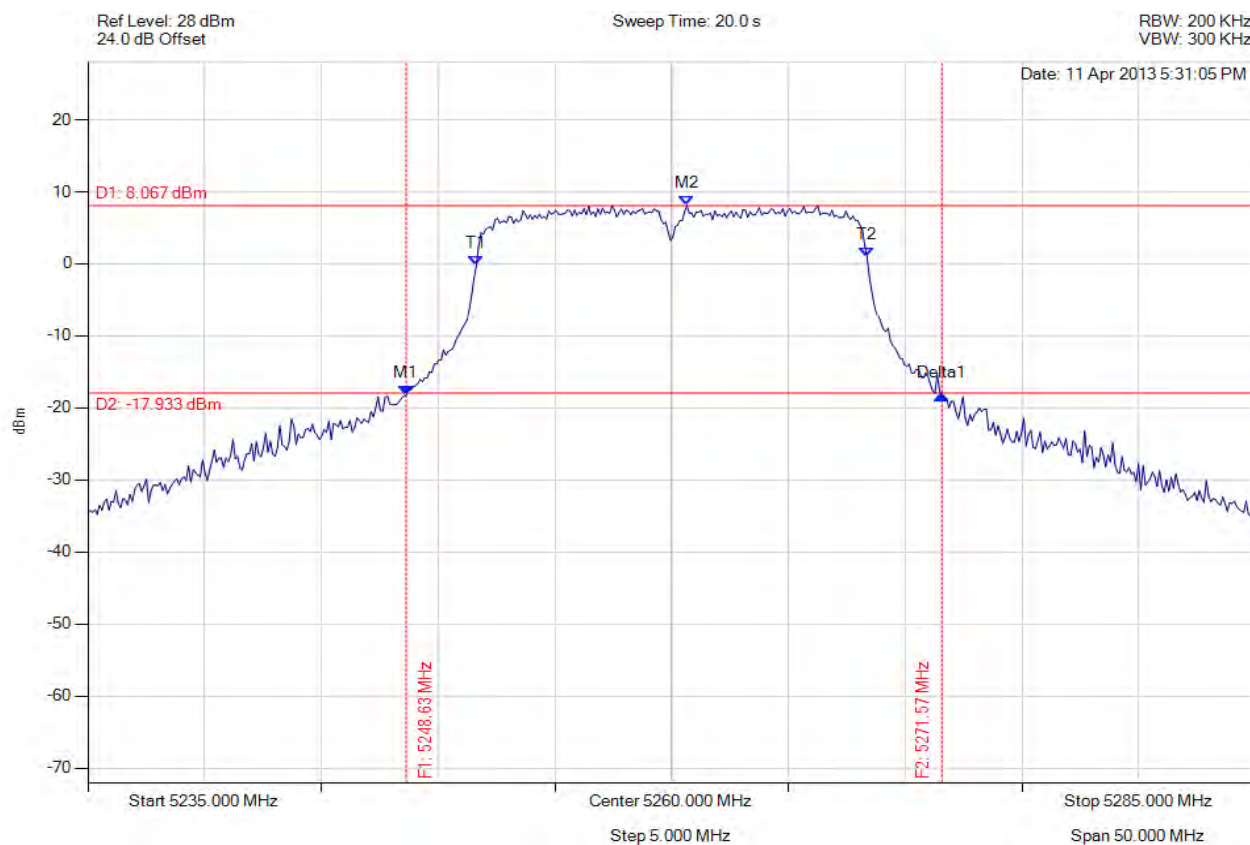


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26 dB & 99% BANDWIDTH

Variant: 802.11a, Channel: 5260.00 MHz, Chain c, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5248.627 MHz : -18.268 dBm M2 : 5260.651 MHz : 8.067 dBm Delta1 : 22.946 MHz : -0.022 dB T1 : 5251.633 MHz : -0.257 dBm T2 : 5268.367 MHz : 0.925 dBm OBW : 16.733 MHz	Measured 26 dB Bandwidth: 22.946 MHz Measured 99% Bandwidth: 16.733 MHz

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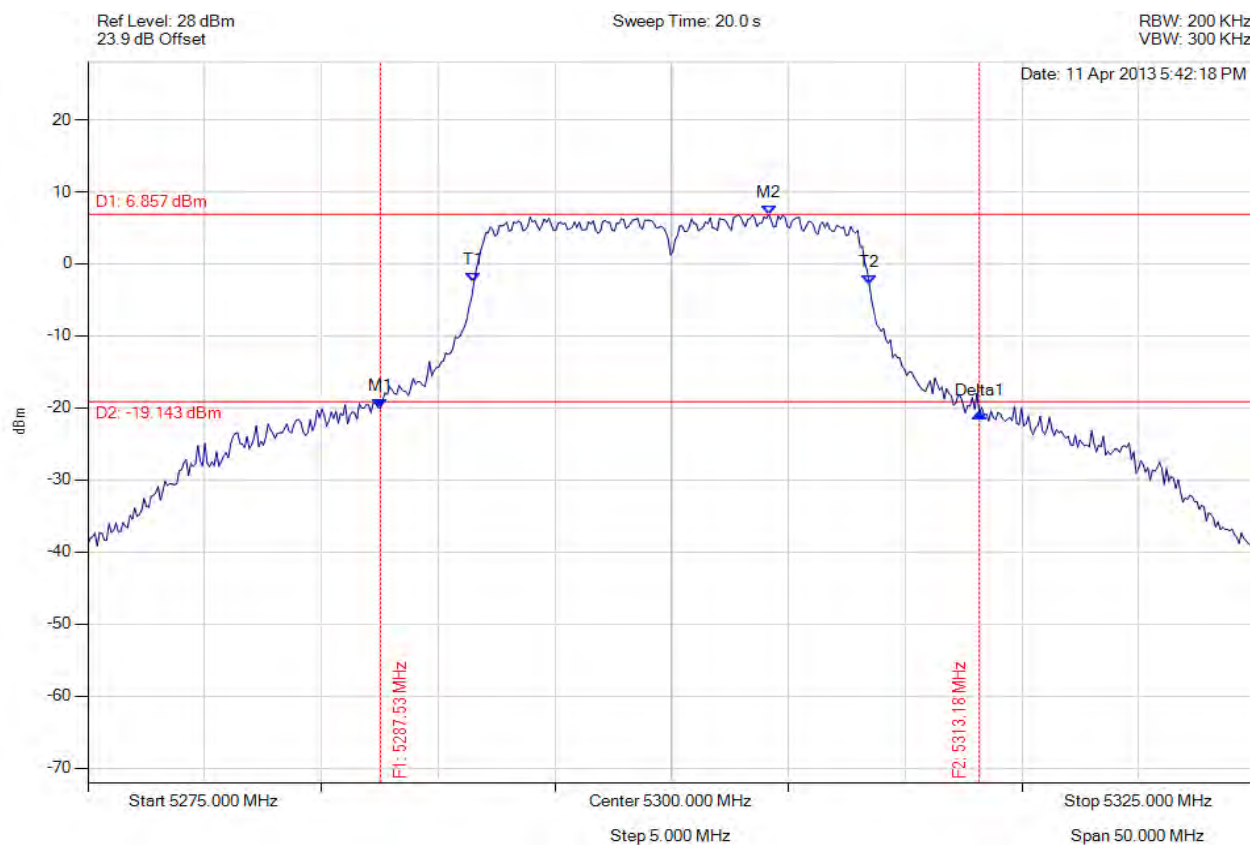


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26 dB & 99% BANDWIDTH

Variant: 802.11a, Channel: 5300.00 MHz, Chain a, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5287.525 MHz : -20.070 dBm M2 : 5304.158 MHz : 6.857 dBm Delta1 : 25.651 MHz : -0.626 dB T1 : 5291.533 MHz : -2.606 dBm T2 : 5308.467 MHz : -2.927 dBm OBW : 16.934 MHz	Measured 26 dB Bandwidth: 25.651 MHz Measured 99% Bandwidth: 16.934 MHz

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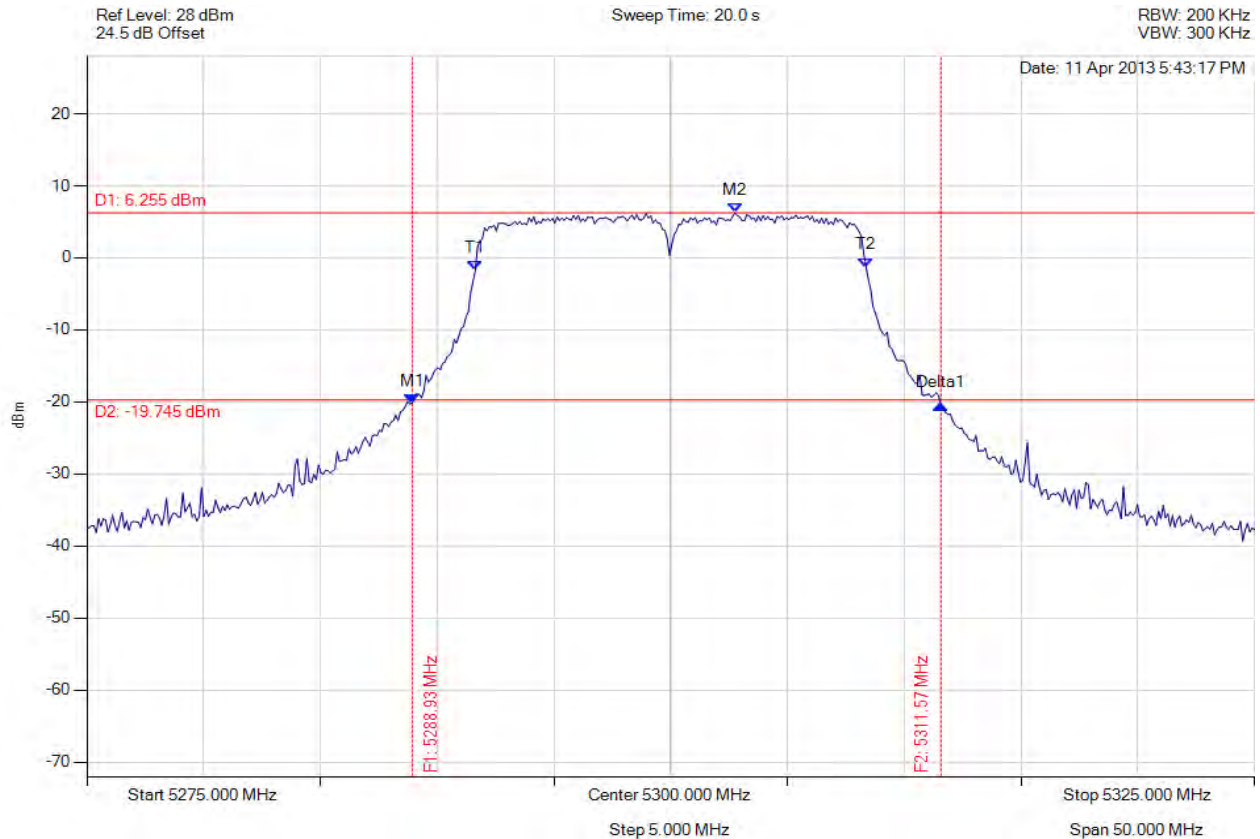


Title: APIN0114, APIN0115 802.11a/b/g/n
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26 dB & 99% BANDWIDTH

Variant: 802.11a, Channel: 5300.00 MHz, Chain b, Temp: Ambient, Voltage: 12 Vdc



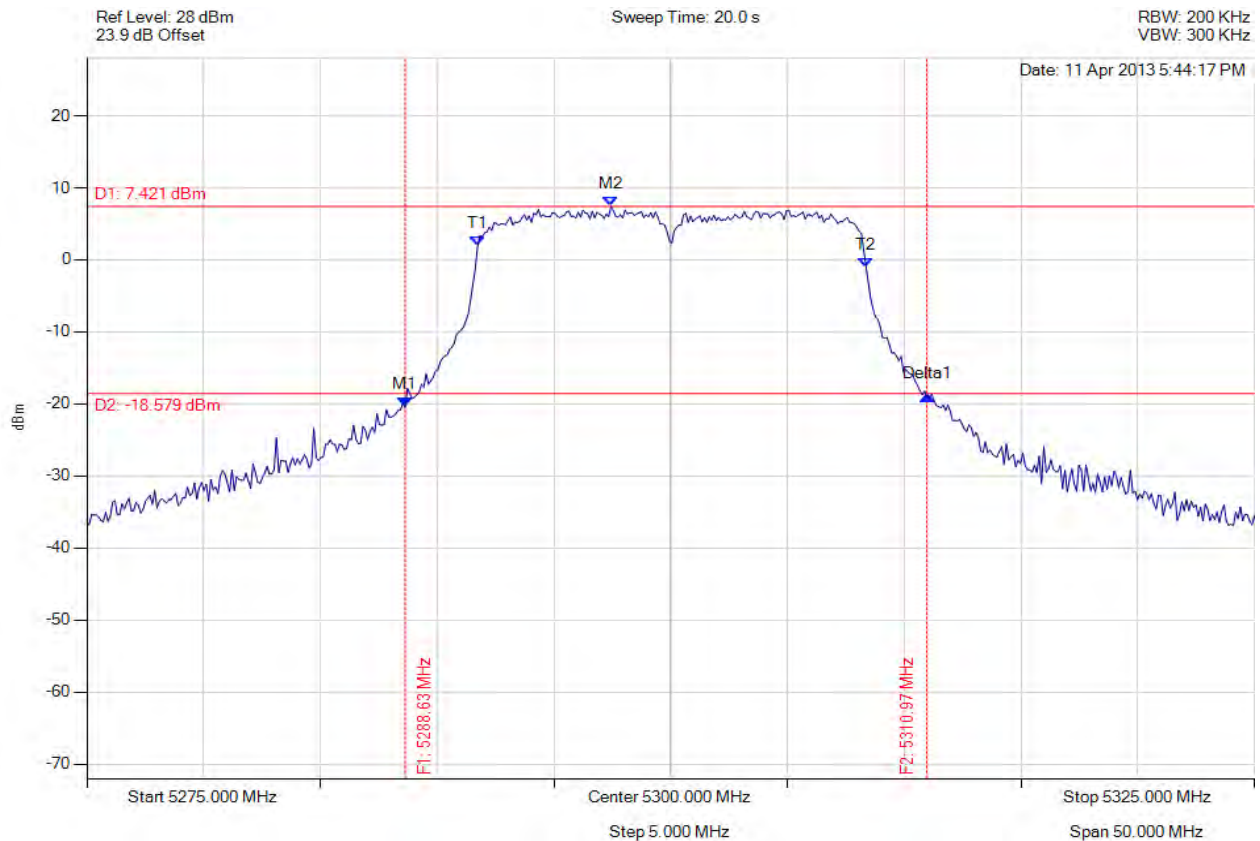
Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5288.928 MHz : -20.175 dBm M2 : 5302.756 MHz : 6.255 dBm Delta1 : 22.645 MHz : -0.283 dB T1 : 5291.633 MHz : -1.776 dBm T2 : 5308.367 MHz : -1.286 dBm OBW : 16.733 MHz	Measured 26 dB Bandwidth: 22.645 MHz Measured 99% Bandwidth: 16.733 MHz

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26 dB & 99% BANDWIDTH

Variant: 802.11a, Channel: 5300.00 MHz, Chain c, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5288.627 MHz : -20.432 dBm M2 : 5297.445 MHz : 7.421 dBm Delta1 : 22.345 MHz : 1.570 dB T1 : 5291.733 MHz : 1.954 dBm T2 : 5308.367 MHz : -0.965 dBm OBW : 16.633 MHz	Measured 26 dB Bandwidth: 22.345 MHz Measured 99% Bandwidth: 16.633 MHz

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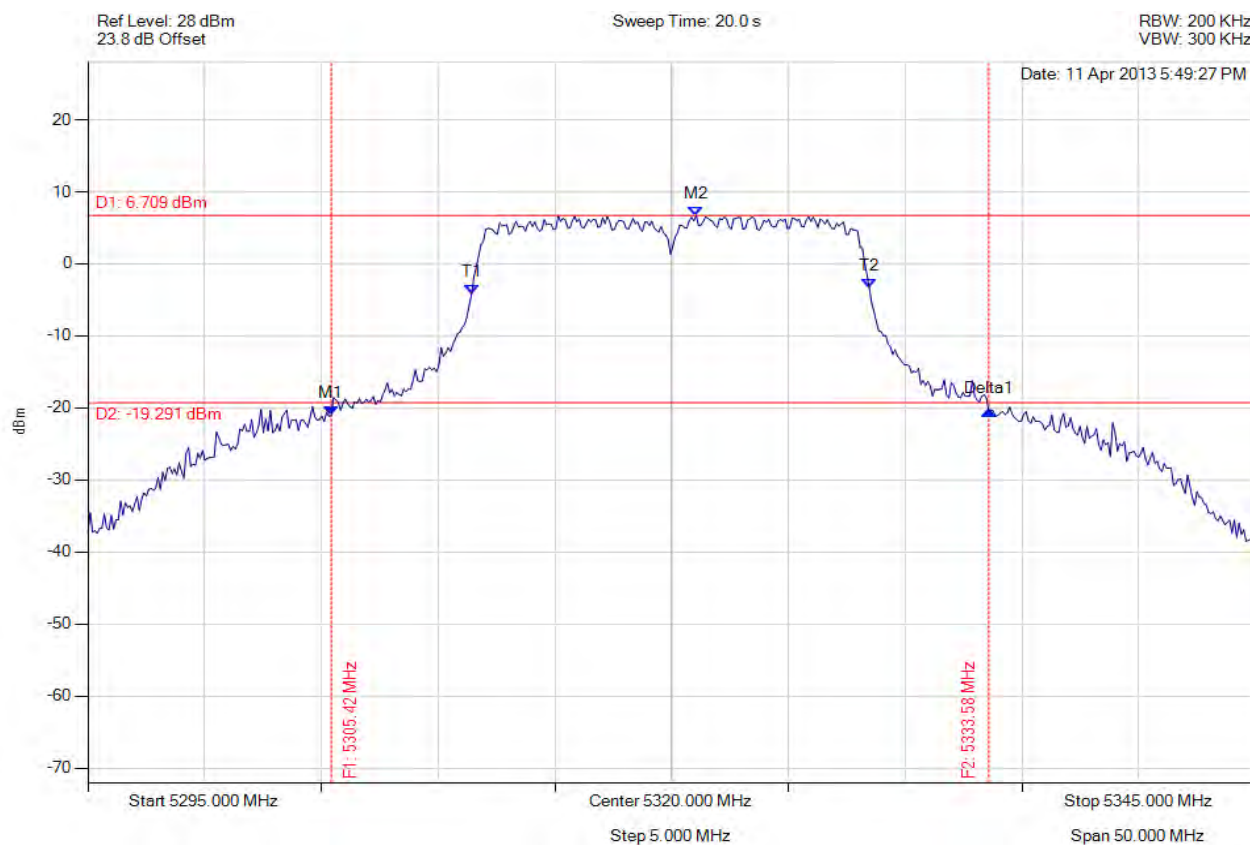


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26 dB & 99% BANDWIDTH

Variant: 802.11a, Channel: 5320.00 MHz, Chain a, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5305.421 MHz : -21.052 dBm M2 : 5321.052 MHz : 6.709 dBm Delta1 : 28.156 MHz : 0.600 dB T1 : 5311.433 MHz : -4.192 dBm T2 : 5328.467 MHz : -3.444 dBm OBW : 17.034 MHz	Measured 26 dB Bandwidth: 28.156 MHz Measured 99% Bandwidth: 17.034 MHz

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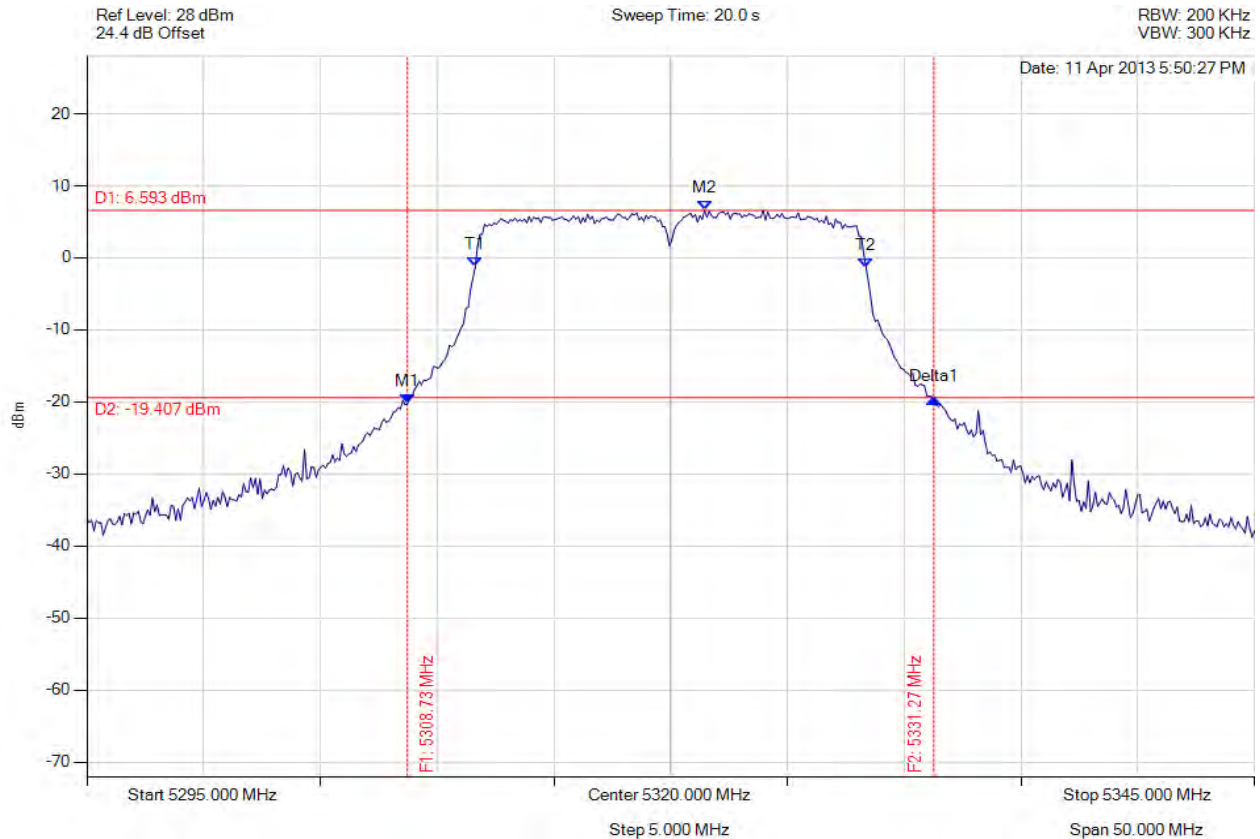


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26 dB & 99% BANDWIDTH

Variant: 802.11a, Channel: 5320.00 MHz, Chain b, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5308.727 MHz : -20.259 dBm M2 : 5321.453 MHz : 6.593 dBm Delta1 : 22.545 MHz : 0.750 dB T1 : 5311.633 MHz : -1.262 dBm T2 : 5328.367 MHz : -1.323 dBm OBW : 16.733 MHz	Measured 26 dB Bandwidth: 22.545 MHz Measured 99% Bandwidth: 16.733 MHz

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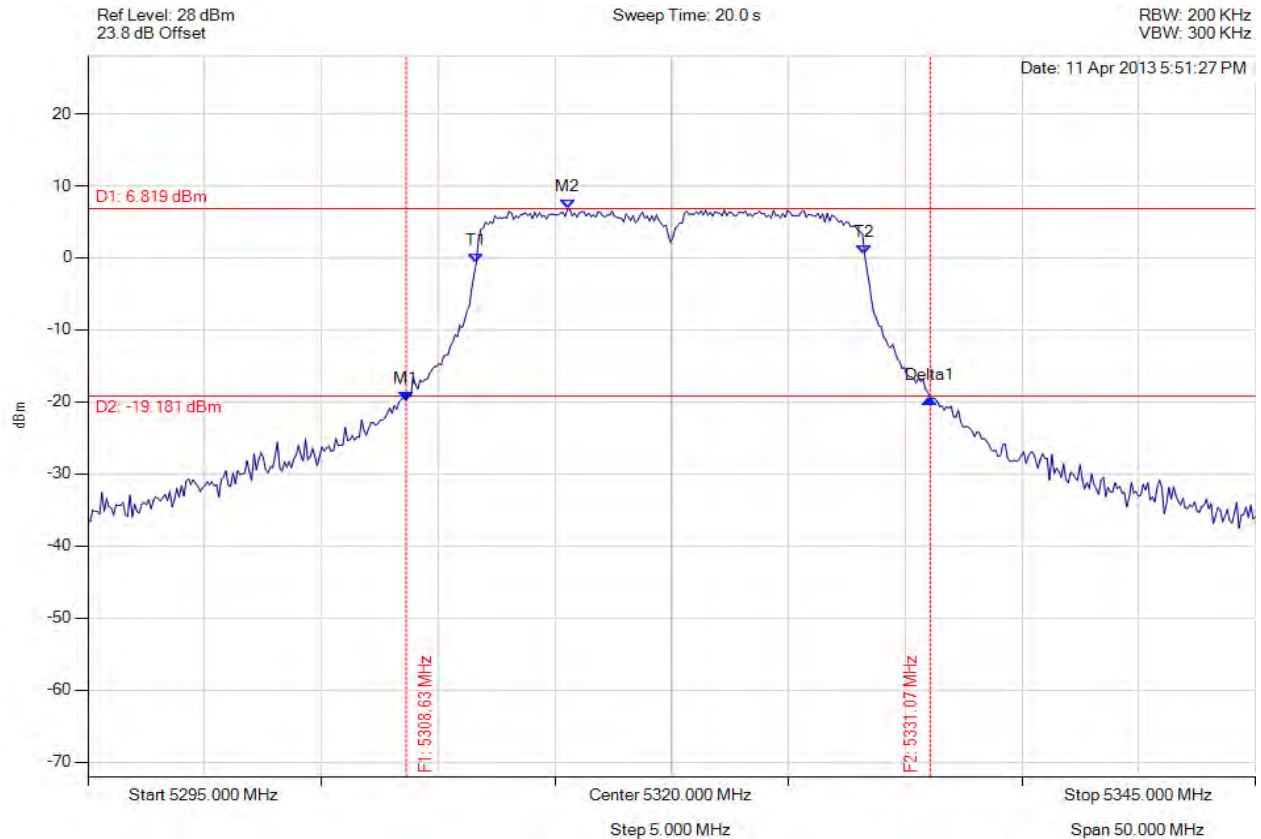


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26 dB & 99% BANDWIDTH

Variant: 802.11a, Channel: 5320.00 MHz, Chain c, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5308.627 MHz : -19.809 dBm M2 : 5315.541 MHz : 6.819 dBm Delta1 : 22.445 MHz : 0.336 dB T1 : 5311.633 MHz : -0.694 dBm T2 : 5328.267 MHz : 0.418 dBm OBW : 16.633 MHz	Measured 26 dB Bandwidth: 22.445 MHz Measured 99% Bandwidth: 16.633 MHz

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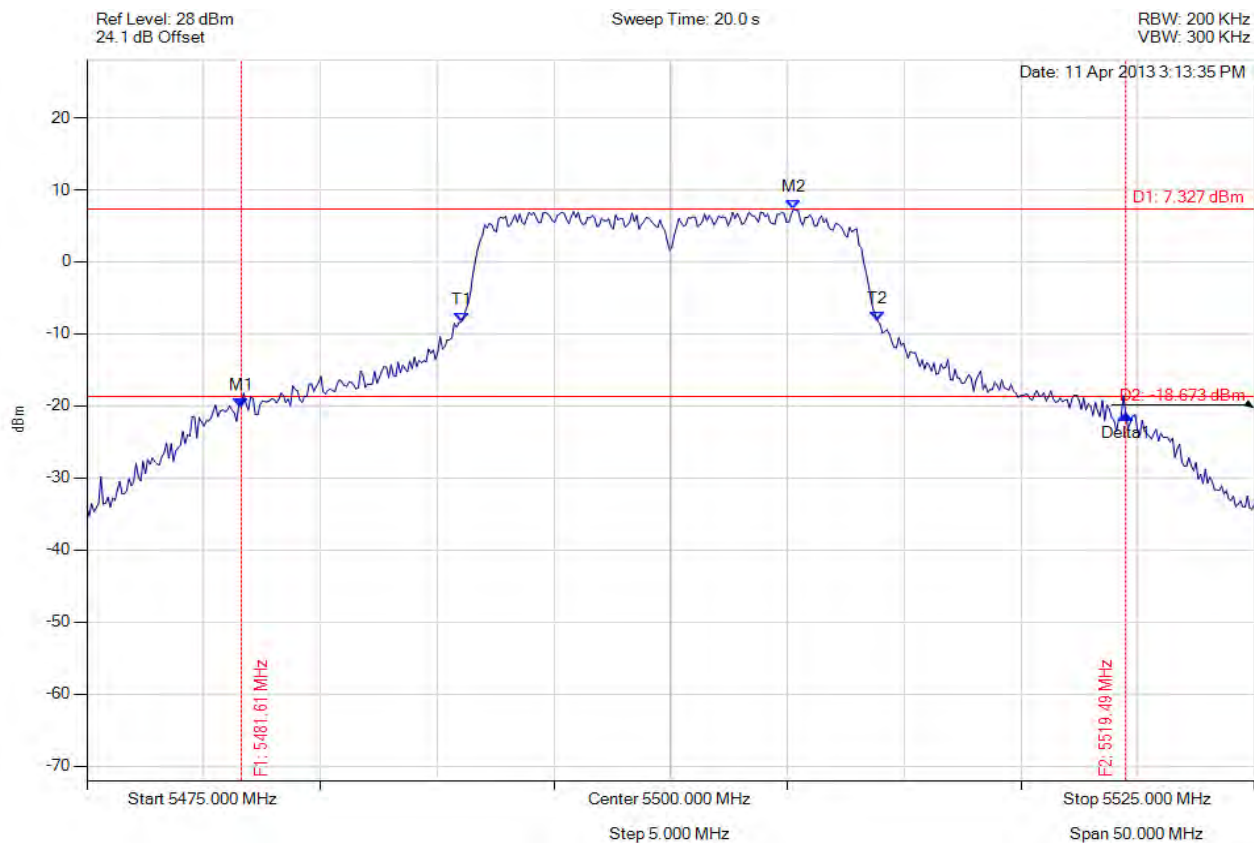


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26 dB & 99% BANDWIDTH

Variant: 802.11a, Channel: 5500.00 MHz, Chain a, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5481.613 MHz : -20.184 dBm M2 : 5505.261 MHz : 7.327 dBm Delta1 : 37.876 MHz : -1.017 dB T1 : 5491.032 MHz : -8.321 dBm T2 : 5508.868 MHz : -8.231 dBm OBW : 17.836 MHz	Measured 26 dB Bandwidth: 37.876 MHz Measured 99% Bandwidth: 17.836 MHz

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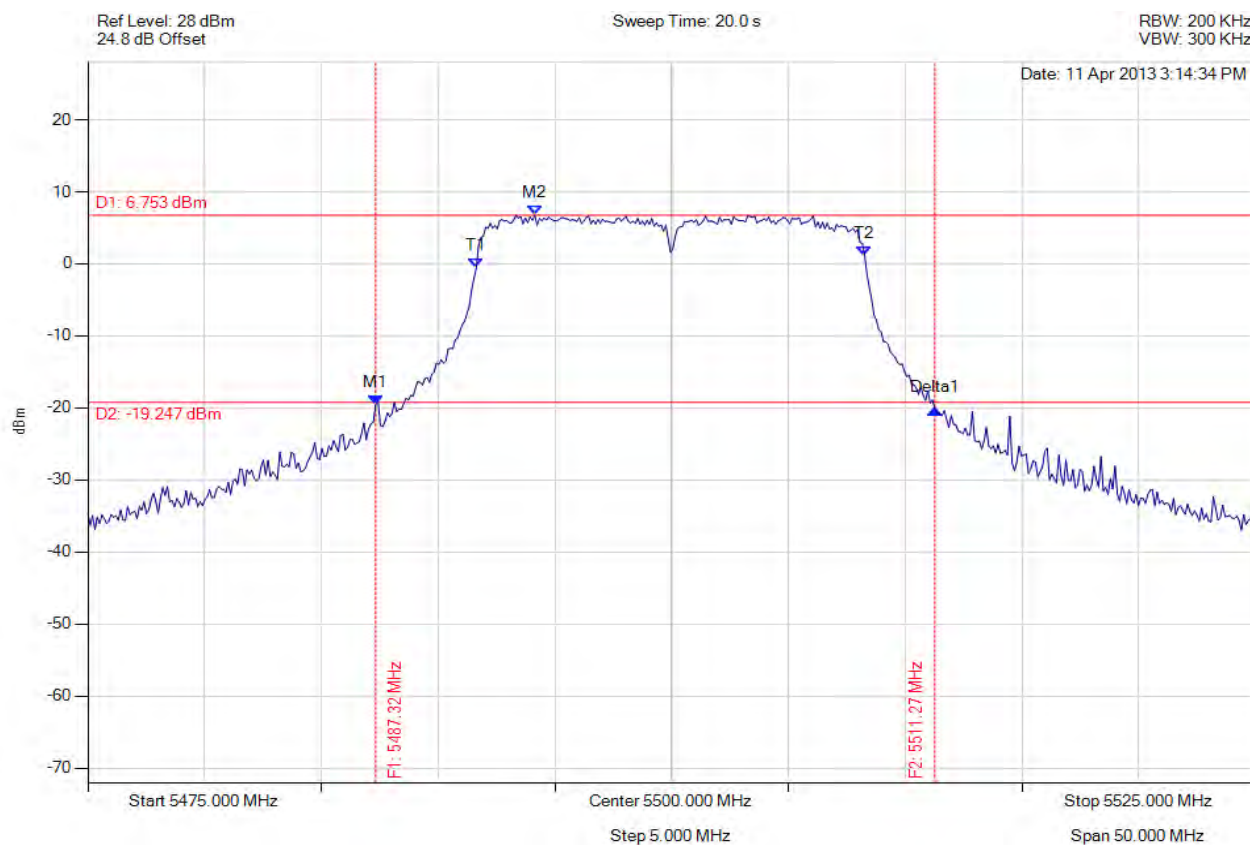


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26 dB & 99% BANDWIDTH

Variant: 802.11a, Channel: 5500.00 MHz, Chain b, Temp: Ambient, Voltage: 12 Vdc



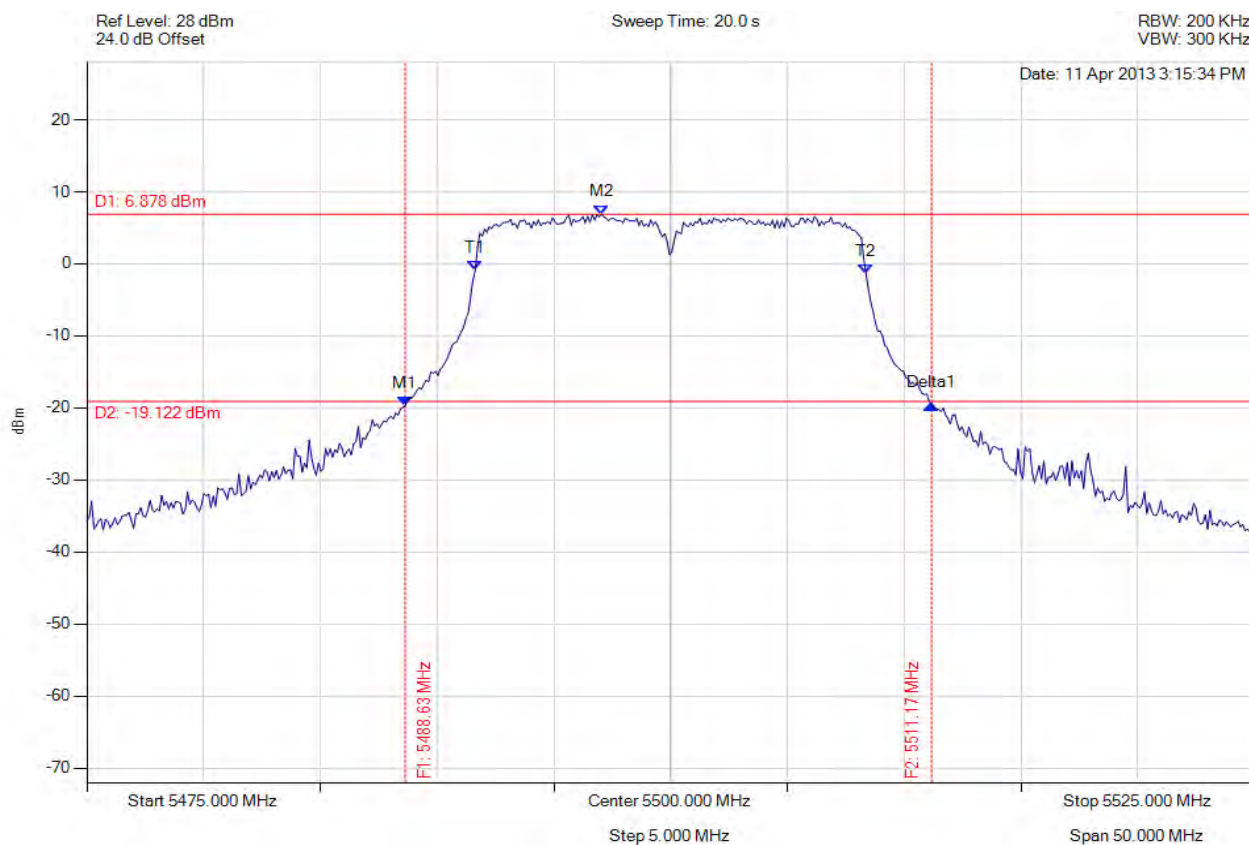
Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5487.325 MHz : -19.518 dBm M2 : 5494.138 MHz : 6.753 dBm Delta1 : 23.948 MHz : -0.647 dB T1 : 5491.633 MHz : -0.544 dBm T2 : 5508.267 MHz : 1.183 dBm OBW : 16.633 MHz	Measured 26 dB Bandwidth: 23.948 MHz Measured 99% Bandwidth: 16.633 MHz

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26 dB & 99% BANDWIDTH

Variant: 802.11a, Channel: 5500.00 MHz, Chain c, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5488.627 MHz : -19.769 dBm M2 : 5497.044 MHz : 6.878 dBm Delta1 : 22.545 MHz : 0.275 dB T1 : 5491.633 MHz : -0.834 dBm T2 : 5508.367 MHz : -1.396 dBm OBW : 16.733 MHz	Measured 26 dB Bandwidth: 22.545 MHz Measured 99% Bandwidth: 16.733 MHz

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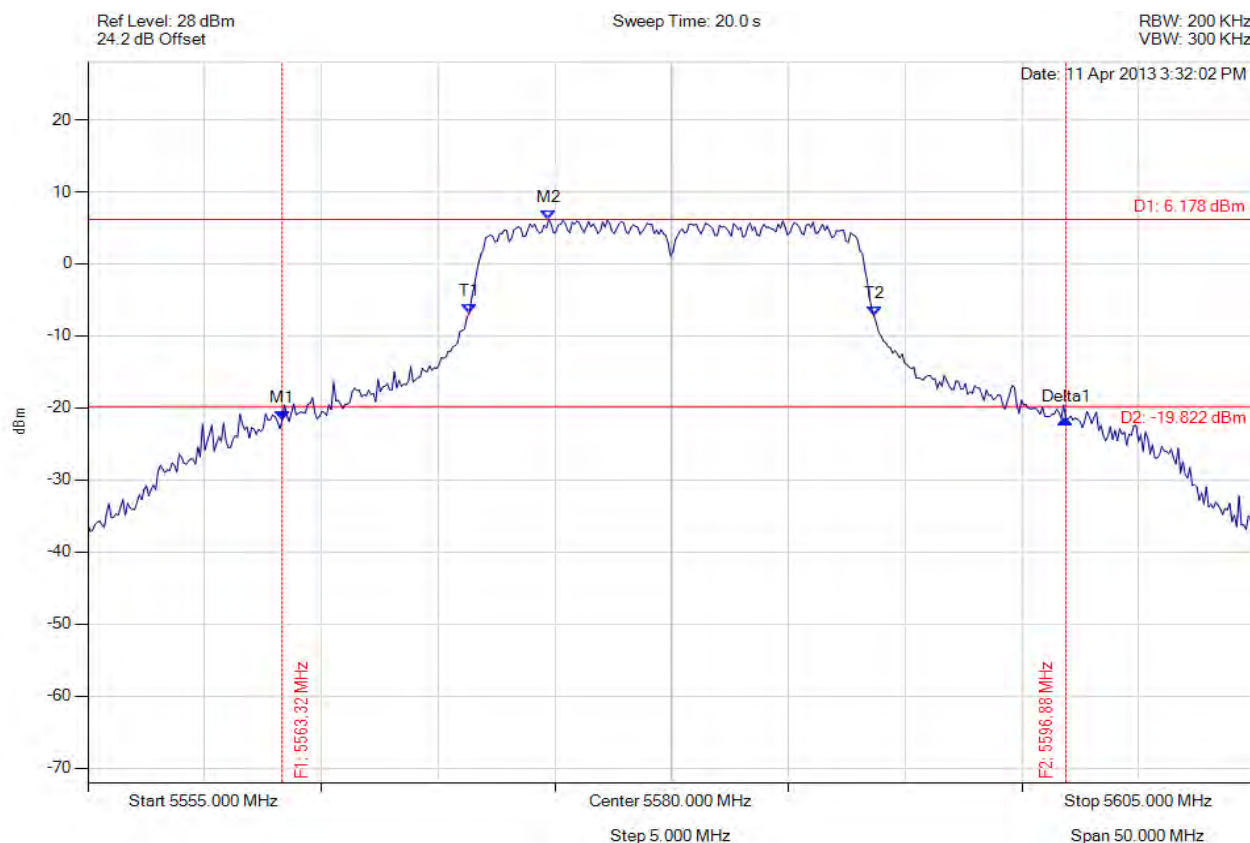


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26 dB & 99% BANDWIDTH

Variant: 802.11a, Channel: 5580.00 MHz, Chain a, Temp: Ambient, Voltage: 12 Vdc



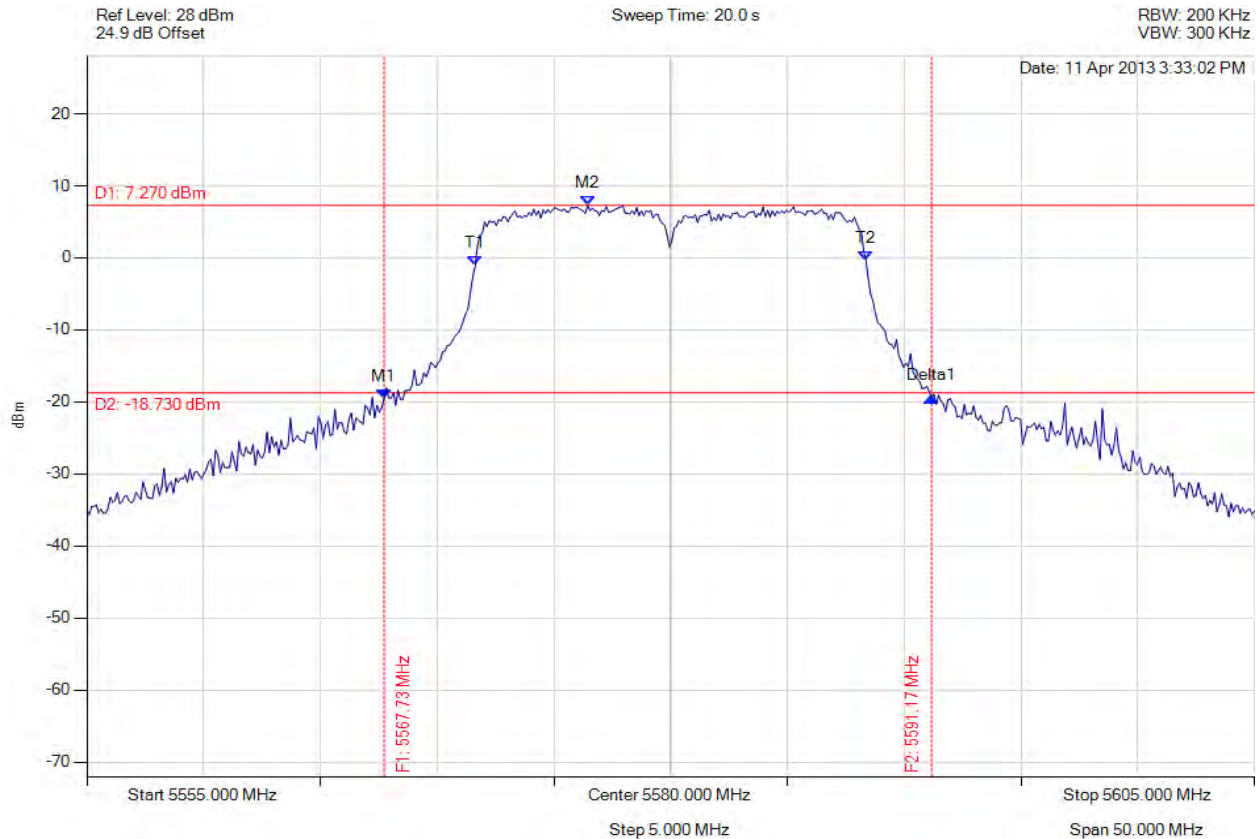
Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5563.317 MHz : -21.701 dBm M2 : 5574.739 MHz : 6.178 dBm Delta1 : 33.567 MHz : 0.220 dB T1 : 5571.333 MHz : -6.899 dBm T2 : 5588.667 MHz : -7.257 dBm OBW : 17.335 MHz	Measured 26 dB Bandwidth: 33.567 MHz Measured 99% Bandwidth: 17.335 MHz

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26 dB & 99% BANDWIDTH

Variant: 802.11a, Channel: 5580.00 MHz, Chain b, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5567.725 MHz : -19.614 dBm M2 : 5576.443 MHz : 7.270 dBm Delta1 : 23.447 MHz : 0.236 dB T1 : 5571.633 MHz : -1.050 dBm T2 : 5588.367 MHz : -0.420 dBm OBW : 16.733 MHz	Measured 26 dB Bandwidth: 23.447 MHz Measured 99% Bandwidth: 16.733 MHz

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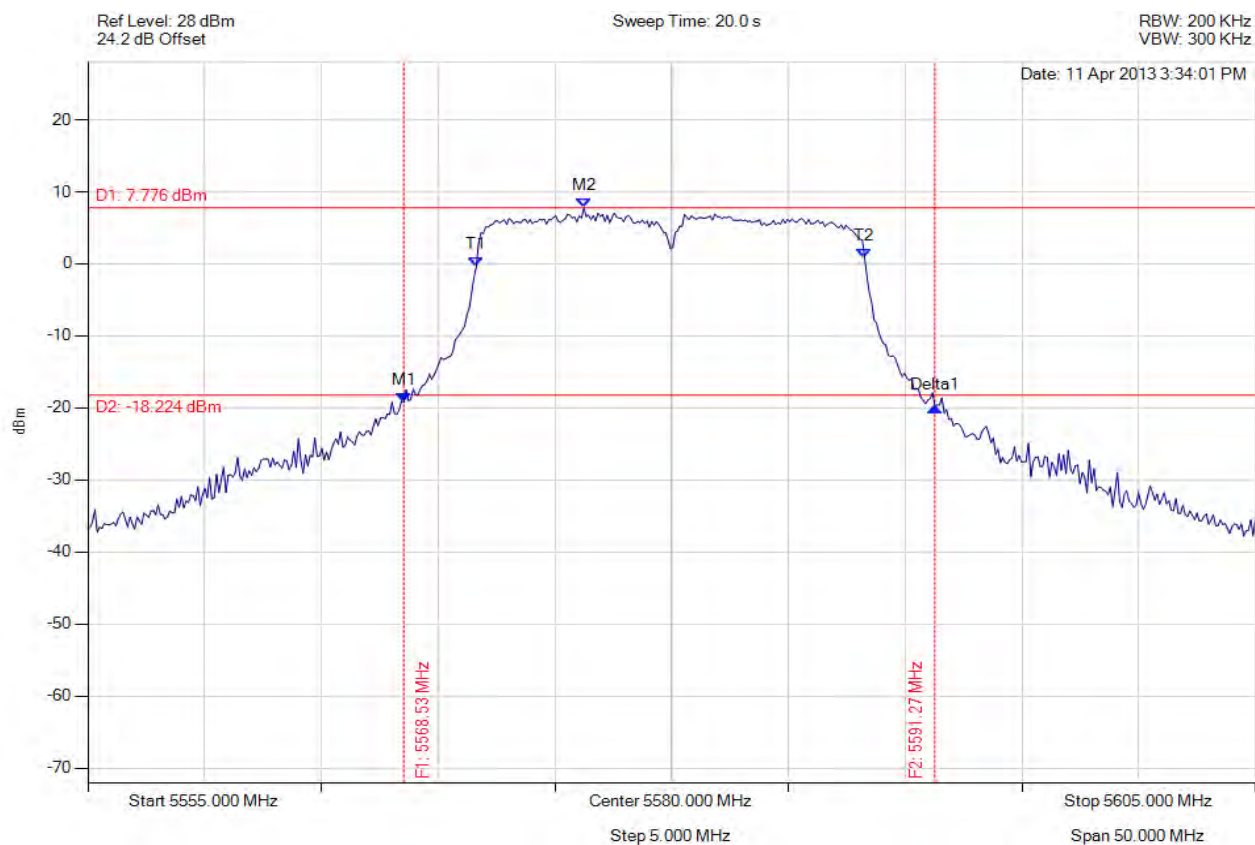


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26 dB & 99% BANDWIDTH

Variant: 802.11a, Channel: 5580.00 MHz, Chain c, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5568.527 MHz : -19.189 dBm M2 : 5576.242 MHz : 7.776 dBm Delta1 : 22.745 MHz : -0.645 dB T1 : 5571.633 MHz : -0.399 dBm T2 : 5588.267 MHz : 0.754 dBm OBW : 16.633 MHz	Measured 26 dB Bandwidth: 22.745 MHz Measured 99% Bandwidth: 16.633 MHz

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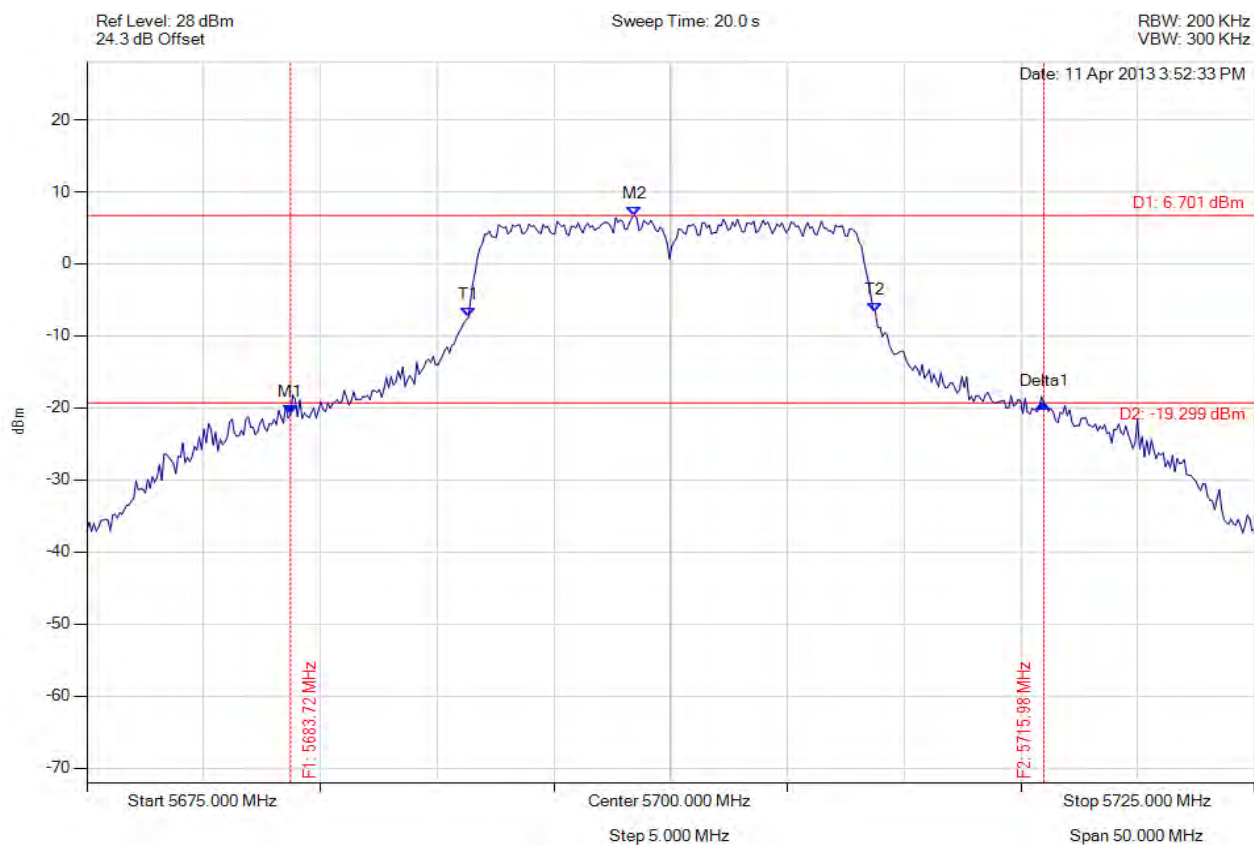


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26 dB & 99% BANDWIDTH

Variant: 802.11a, Channel: 5700.00 MHz, Chain a, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5683.717 MHz : -20.908 dBm M2 : 5698.447 MHz : 6.701 dBm Delta1 : 32.265 MHz : 1.574 dB T1 : 5691.333 MHz : -7.446 dBm T2 : 5708.768 MHz : -6.671 dBm OBW : 17.435 MHz	Measured 26 dB Bandwidth: 32.265 MHz Measured 99% Bandwidth: 17.435 MHz

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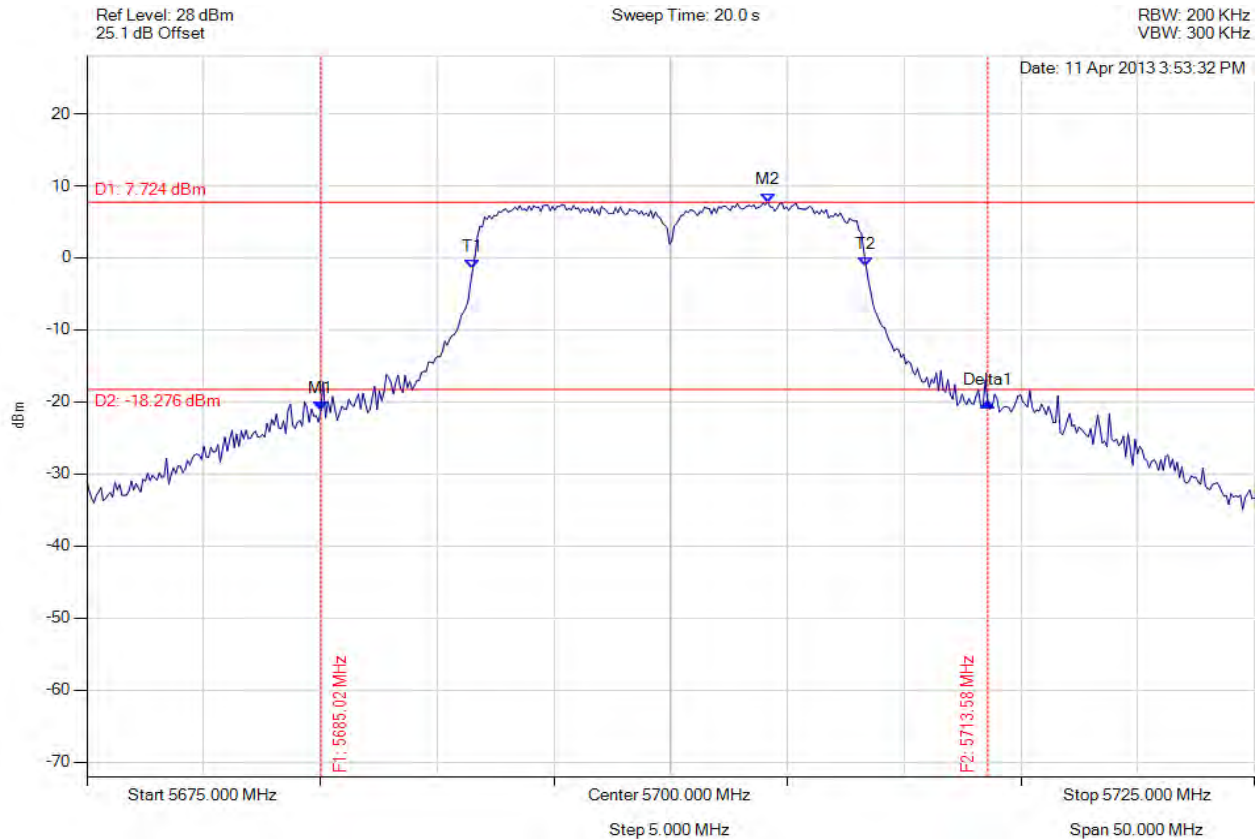


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26 dB & 99% BANDWIDTH

Variant: 802.11a, Channel: 5700.00 MHz, Chain b, Temp: Ambient, Voltage: 12 Vdc



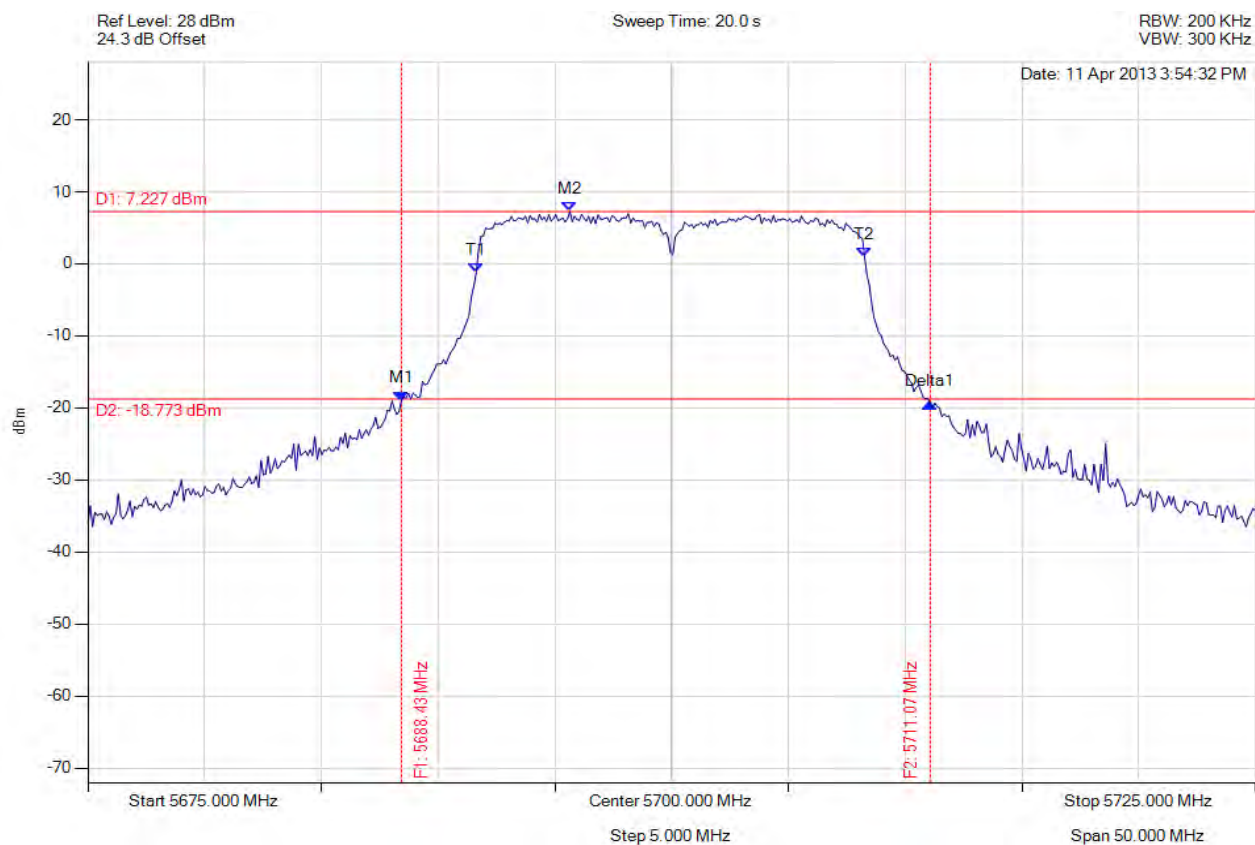
Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5685.020 MHz : -21.215 dBm M2 : 5704.158 MHz : 7.724 dBm Delta1 : 28.557 MHz : 1.167 dB T1 : 5691.533 MHz : -1.477 dBm T2 : 5708.367 MHz : -1.150 dBm OBW : 16.834 MHz	Measured 26 dB Bandwidth: 28.557 MHz Measured 99% Bandwidth: 16.834 MHz

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26 dB & 99% BANDWIDTH

Variant: 802.11a, Channel: 5700.00 MHz, Chain c, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5688.427 MHz : -18.965 dBm M2 : 5695.641 MHz : 7.227 dBm Delta1 : 22.645 MHz : -0.476 dB T1 : 5691.633 MHz : -1.180 dBm T2 : 5708.267 MHz : 0.902 dBm OBW : 16.633 MHz	Measured 26 dB Bandwidth: 22.645 MHz Measured 99% Bandwidth: 16.633 MHz

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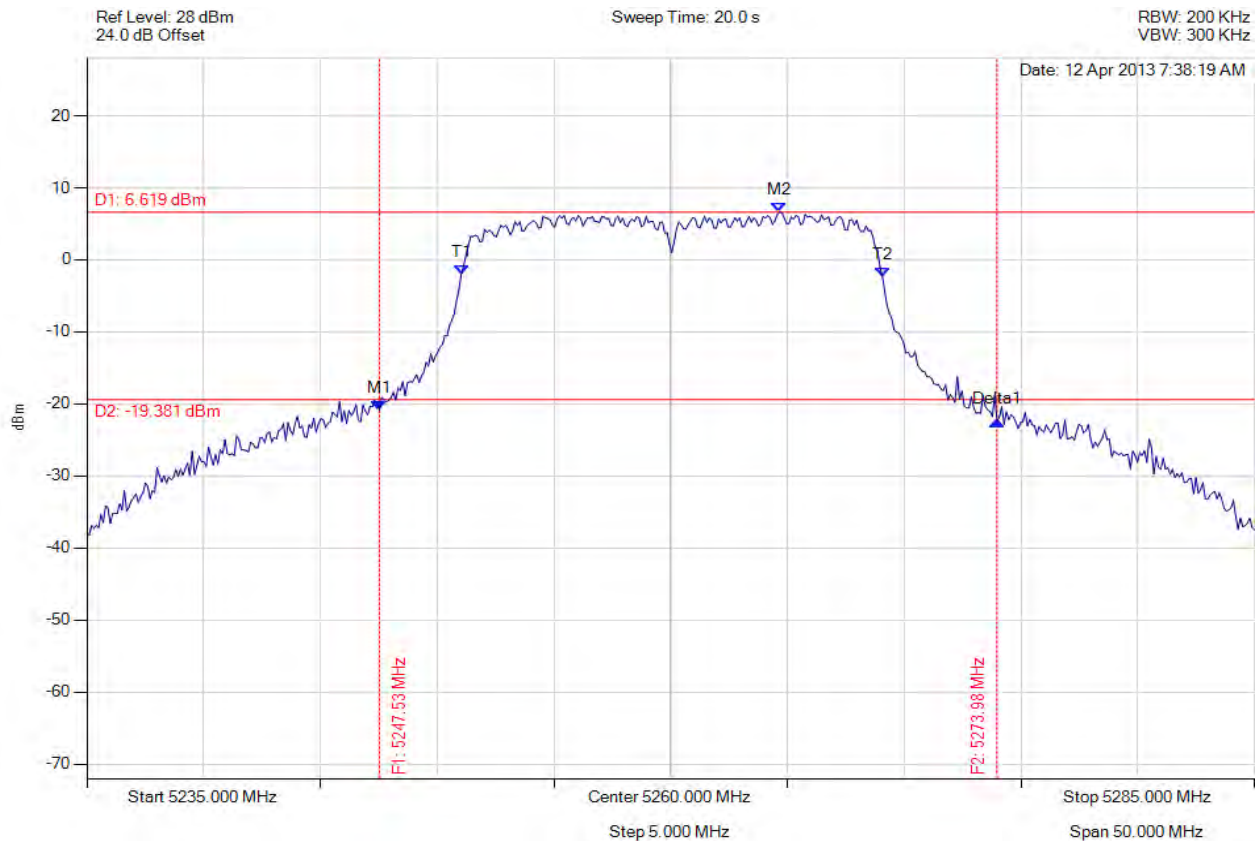


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26 dB & 99% BANDWIDTH

Variant: 802.11n HT-20, Channel: 5260.00 MHz, Chain a, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5247.525 MHz : -20.853 dBm M2 : 5264.659 MHz : 6.619 dBm Delta1 : 26.453 MHz : -1.560 dB T1 : 5251.032 MHz : -1.988 dBm T2 : 5269.068 MHz : -2.303 dBm OBW : 18.036 MHz	Measured 26 dB Bandwidth: 26.453 MHz Measured 99% Bandwidth: 18.036 MHz

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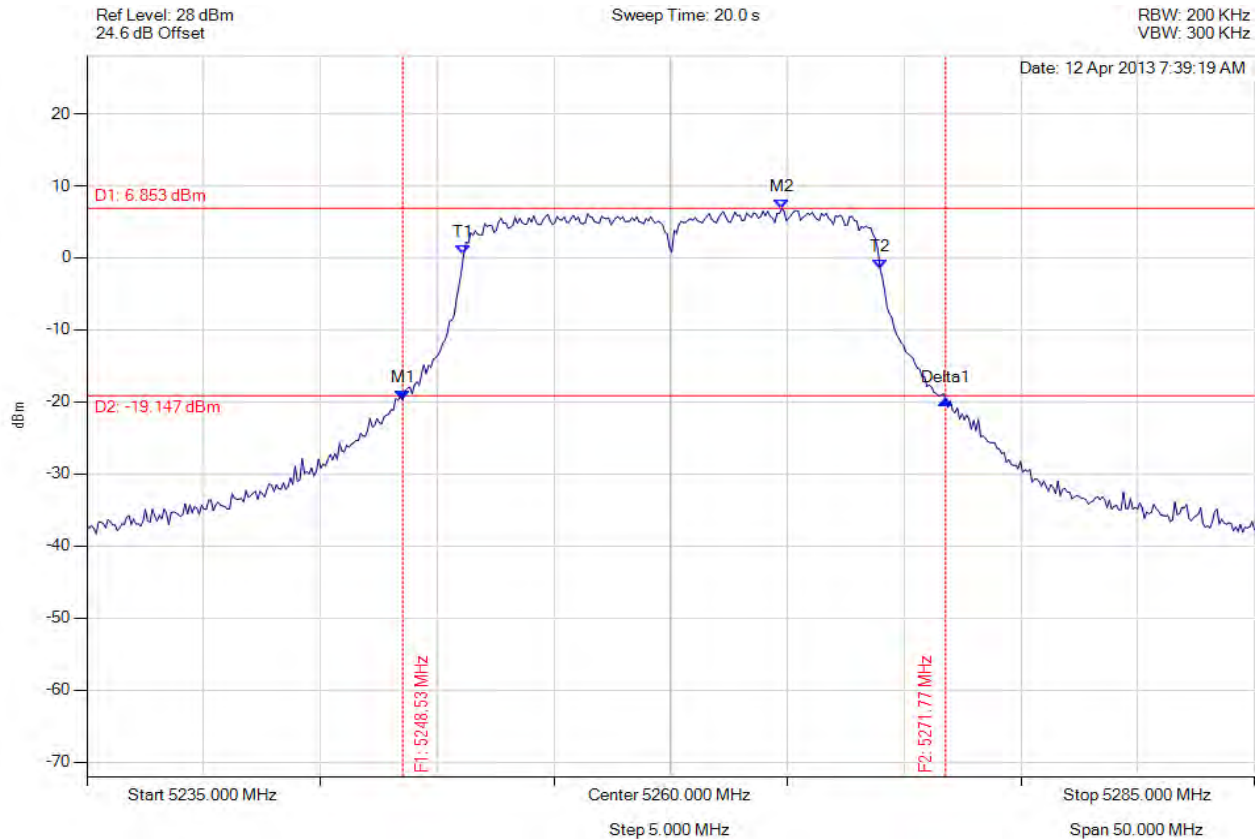


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26 dB & 99% BANDWIDTH

Variant: 802.11n HT-20, Channel: 5260.00 MHz, Chain b, Temp: Ambient, Voltage: 12 Vdc



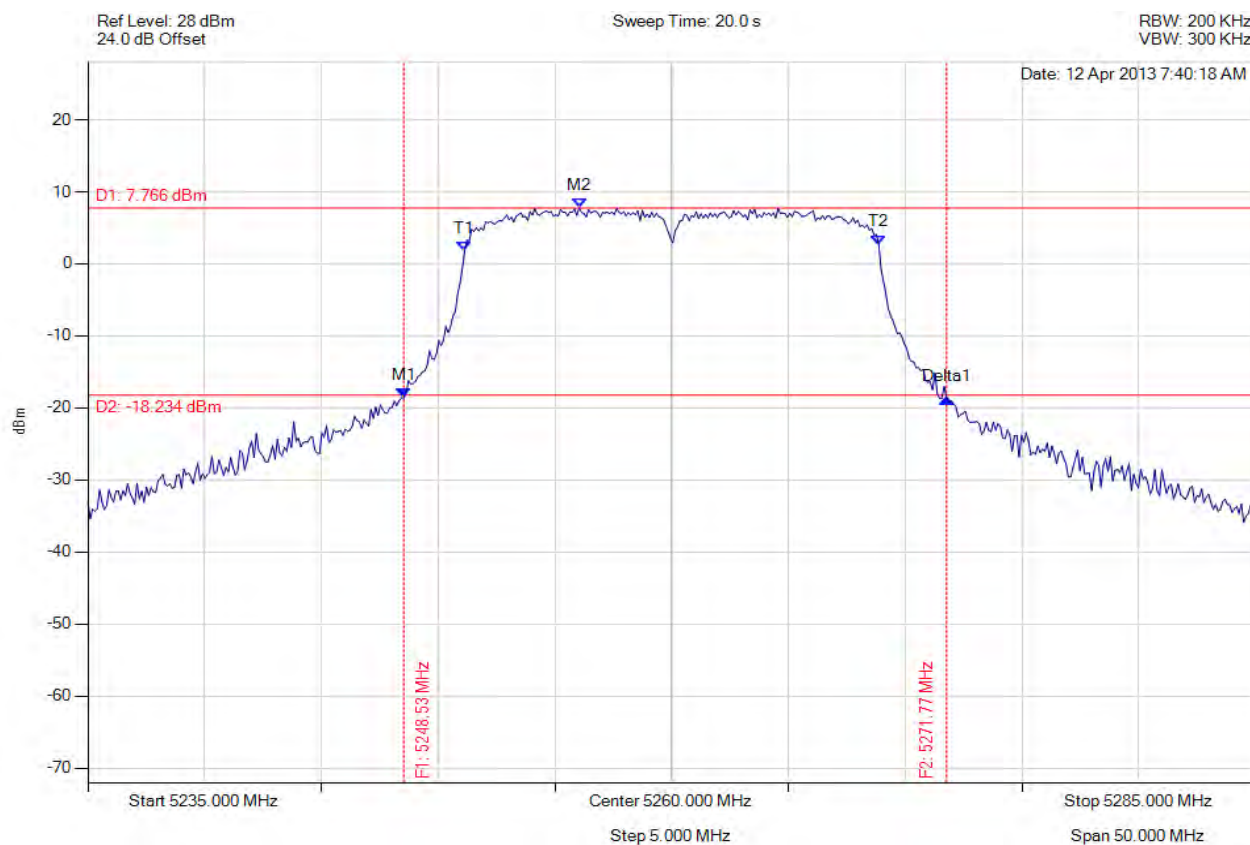
Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5248.527 MHz : -19.765 dBm M2 : 5264.760 MHz : 6.853 dBm Delta1 : 23.246 MHz : 0.069 dB T1 : 5251.132 MHz : 0.388 dBm T2 : 5268.968 MHz : -1.510 dBm OBW : 17.836 MHz	Measured 26 dB Bandwidth: 23.246 MHz Measured 99% Bandwidth: 17.836 MHz

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26 dB & 99% BANDWIDTH

Variant: 802.11n HT-20, Channel: 5260.00 MHz, Chain c, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5248.527 MHz : -18.605 dBm M2 : 5256.042 MHz : 7.766 dBm Delta1 : 23.246 MHz : -0.136 dB T1 : 5251.132 MHz : 1.769 dBm T2 : 5268.868 MHz : 2.712 dBm OBW : 17.735 MHz	Measured 26 dB Bandwidth: 23.246 MHz Measured 99% Bandwidth: 17.735 MHz

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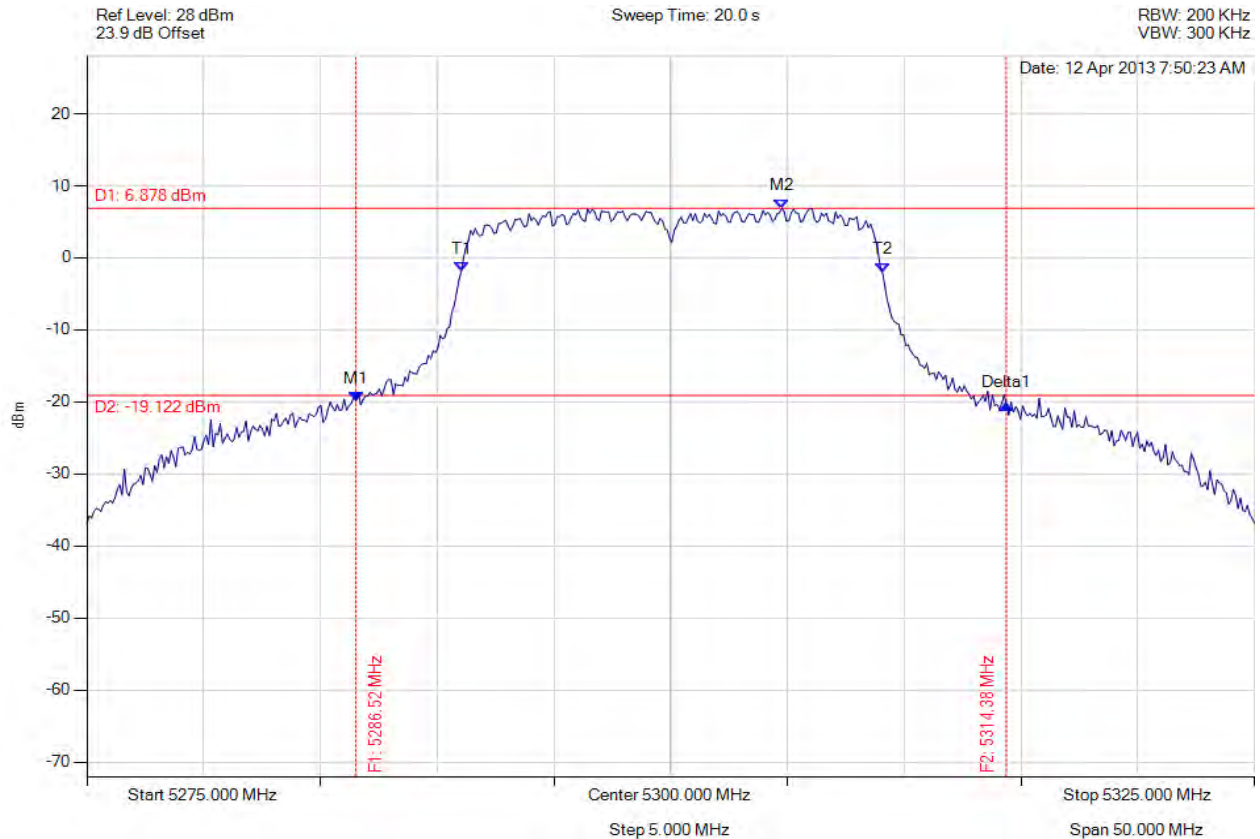


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26 dB & 99% BANDWIDTH

Variant: 802.11n HT-20, Channel: 5300.00 MHz, Chain a, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5286.523 MHz : -19.848 dBm M2 : 5304.760 MHz : 6.878 dBm Delta1 : 27.856 MHz : -0.510 dB T1 : 5291.032 MHz : -1.894 dBm T2 : 5309.068 MHz : -1.949 dBm OBW : 18.036 MHz	Measured 26 dB Bandwidth: 27.856 MHz Measured 99% Bandwidth: 18.036 MHz

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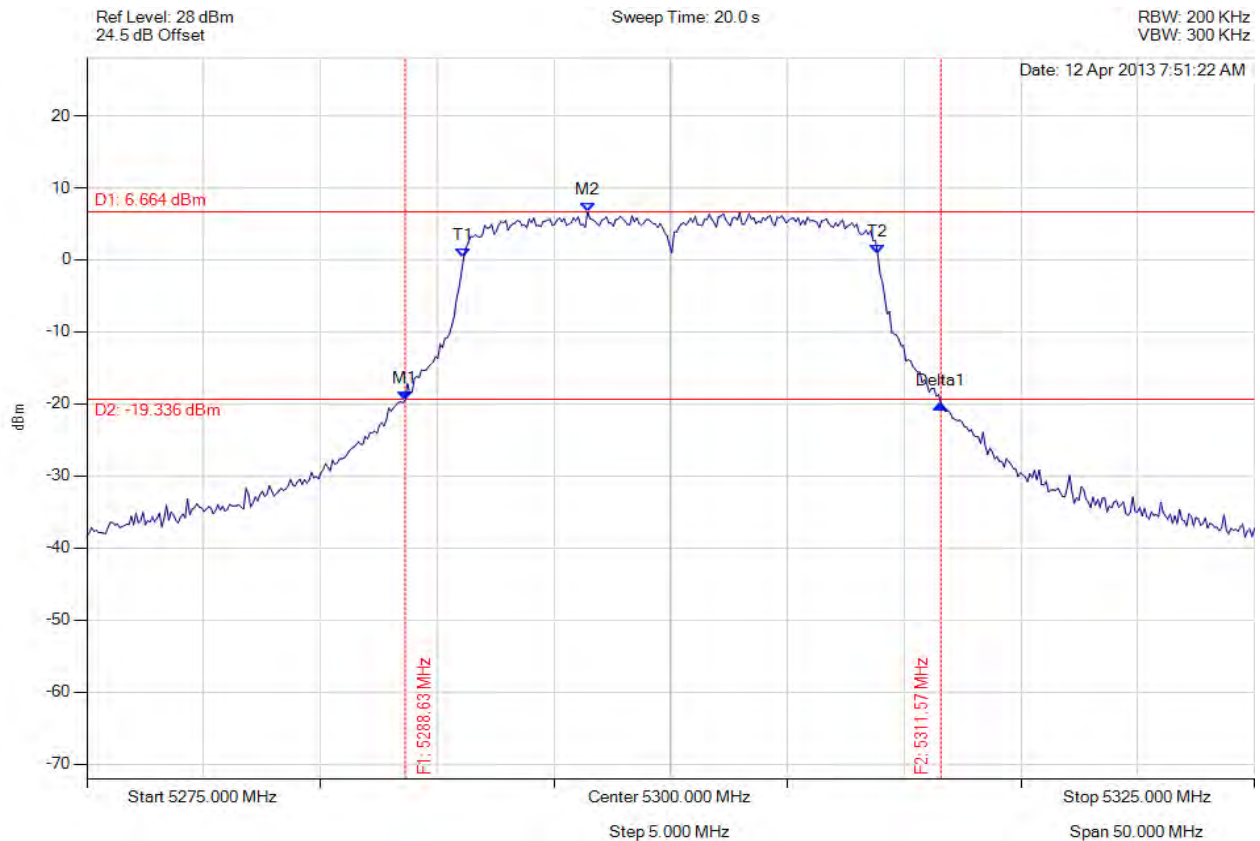


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26 dB & 99% BANDWIDTH

Variant: 802.11n HT-20, Channel: 5300.00 MHz, Chain b, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5288.627 MHz : -19.514 dBm M2 : 5296.443 MHz : 6.664 dBm Delta1 : 22.946 MHz : -0.447 dB T1 : 5291.132 MHz : 0.225 dBm T2 : 5308.868 MHz : 0.734 dBm OBW : 17.735 MHz	Measured 26 dB Bandwidth: 22.946 MHz Measured 99% Bandwidth: 17.735 MHz

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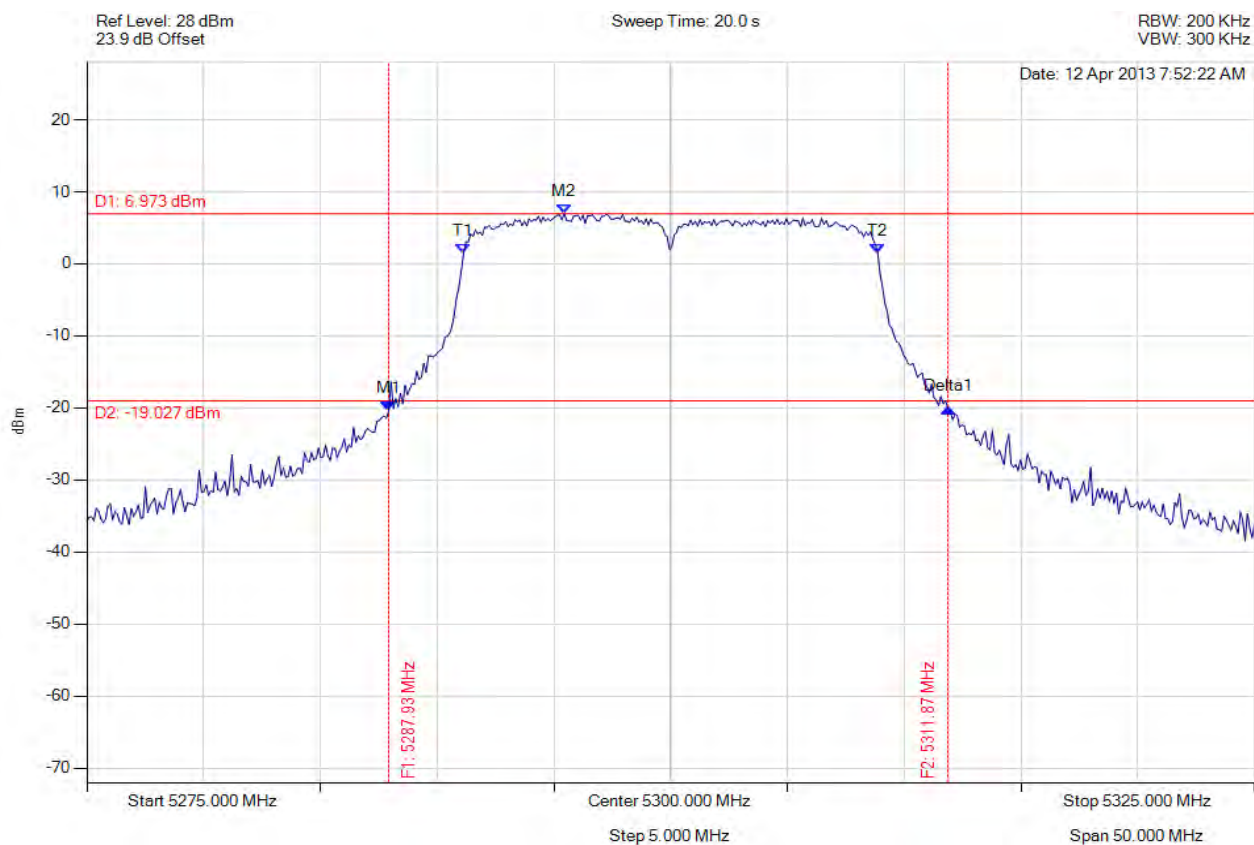


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26 dB & 99% BANDWIDTH

Variant: 802.11n HT-20, Channel: 5300.00 MHz, Chain c, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5287.926 MHz : -20.411 dBm M2 : 5295.441 MHz : 6.973 dBm Delta1 : 23.948 MHz : 0.291 dB T1 : 5291.132 MHz : 1.421 dBm T2 : 5308.868 MHz : 1.482 dBm OBW : 17.735 MHz	Measured 26 dB Bandwidth: 23.948 MHz Measured 99% Bandwidth: 17.735 MHz

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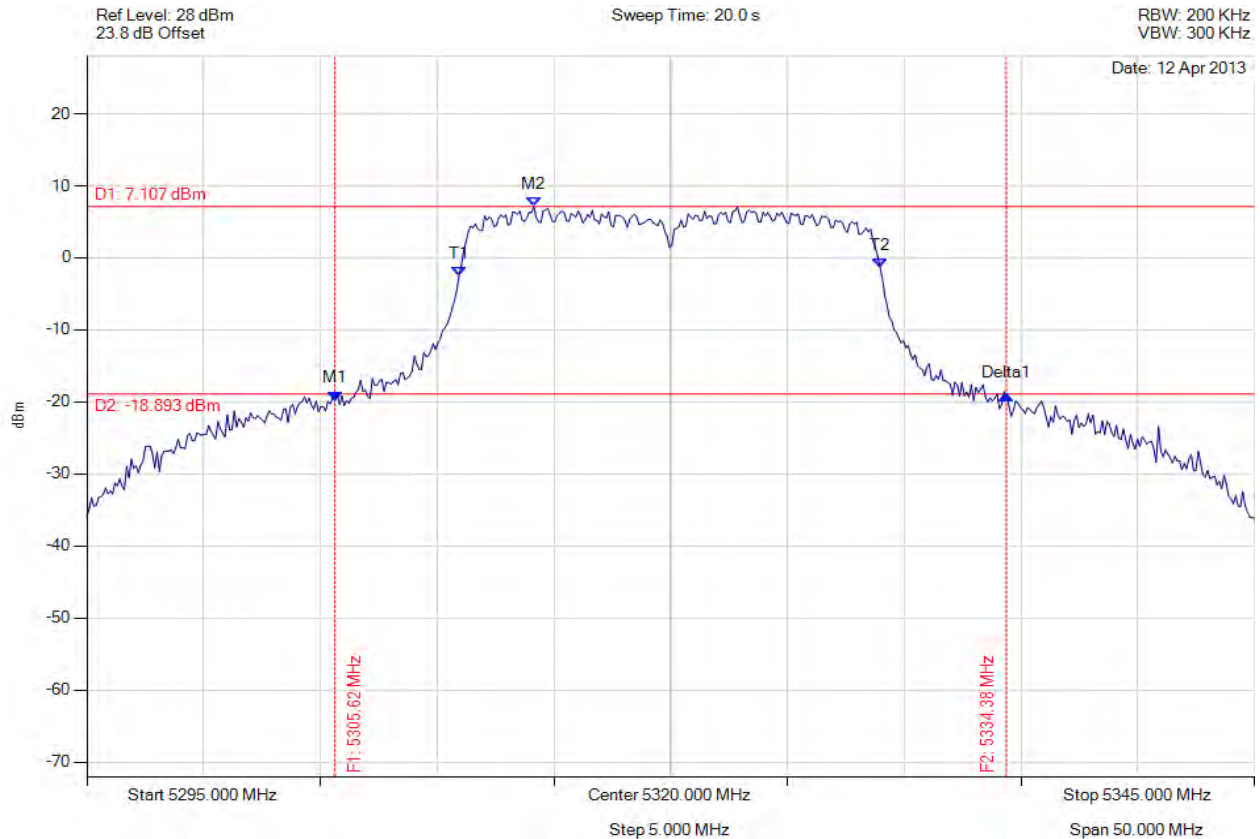


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26 dB & 99% BANDWIDTH

Variant: 802.11n HT-20, Channel: 5320.00 MHz, Chain a, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5305.621 MHz : -19.805 dBm M2 : 5314.138 MHz : 7.107 dBm Delta1 : 28.758 MHz : 0.763 dB T1 : 5310.932 MHz : -2.522 dBm T2 : 5328.968 MHz : -1.369 dBm OBW : 18.036 MHz	Measured 26 dB Bandwidth: 28.758 MHz Measured 99% Bandwidth: 18.036 MHz

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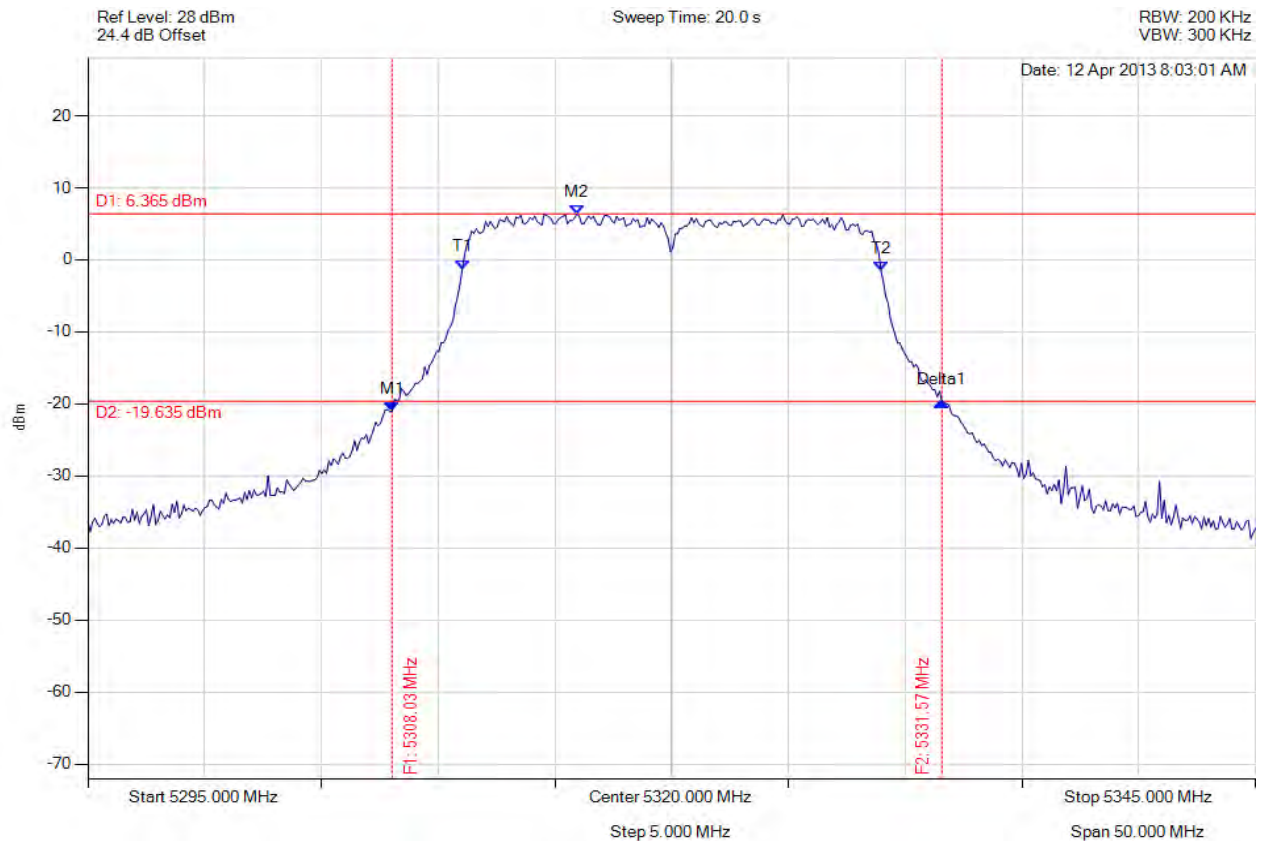


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26 dB & 99% BANDWIDTH

Variant: 802.11n HT-20, Channel: 5320.00 MHz, Chain b, Temp: Ambient, Voltage: 12 Vdc



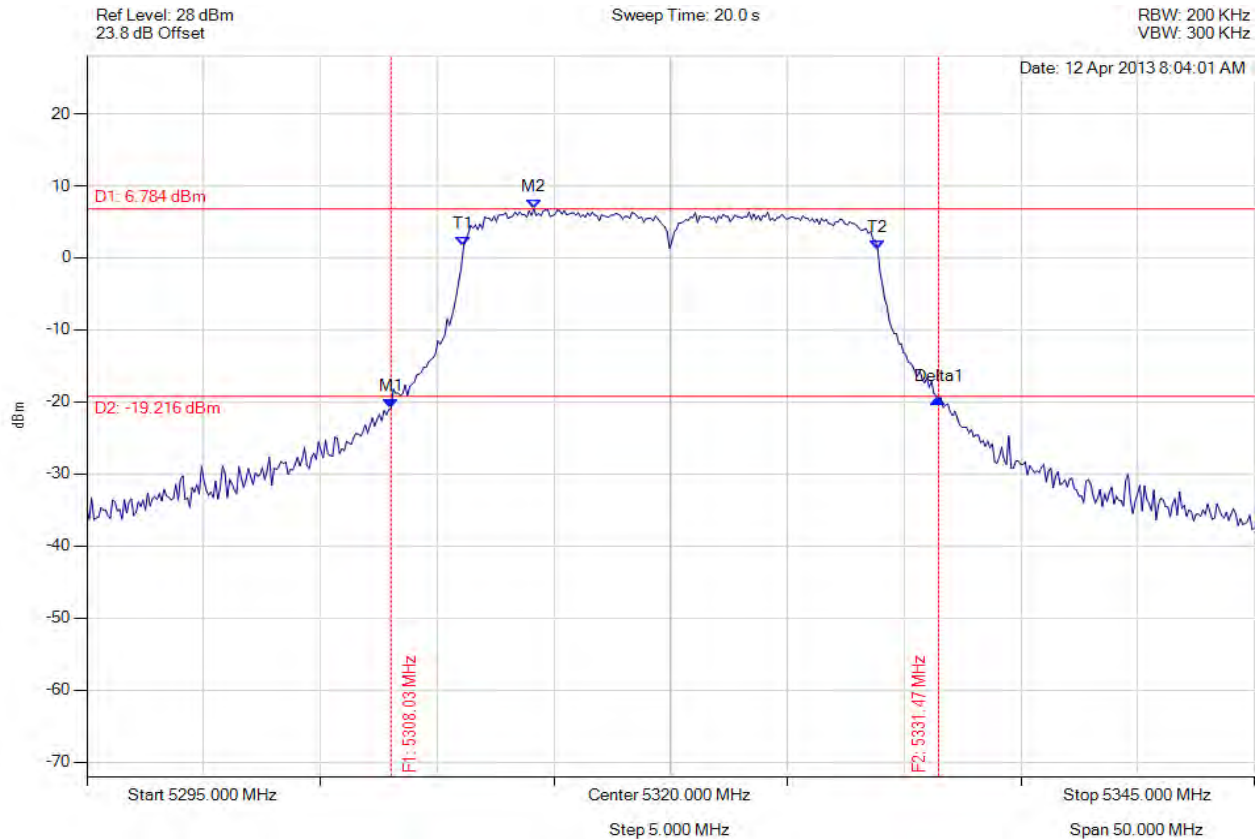
Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5308.026 MHz : -21.048 dBm M2 : 5315.942 MHz : 6.365 dBm Delta1 : 23.547 MHz : 1.279 dB T1 : 5311.032 MHz : -1.282 dBm T2 : 5328.968 MHz : -1.589 dBm OBW : 17.936 MHz	Measured 26 dB Bandwidth: 23.547 MHz Measured 99% Bandwidth: 17.936 MHz

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26 dB & 99% BANDWIDTH

Variant: 802.11n HT-20, Channel: 5320.00 MHz, Chain c, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5308.026 MHz : -20.883 dBm M2 : 5314.138 MHz : 6.784 dBm Delta1 : 23.447 MHz : 1.385 dB T1 : 5311.132 MHz : 1.600 dBm T2 : 5328.868 MHz : 1.104 dBm OBW : 17.735 MHz	Measured 26 dB Bandwidth: 23.447 MHz Measured 99% Bandwidth: 17.735 MHz

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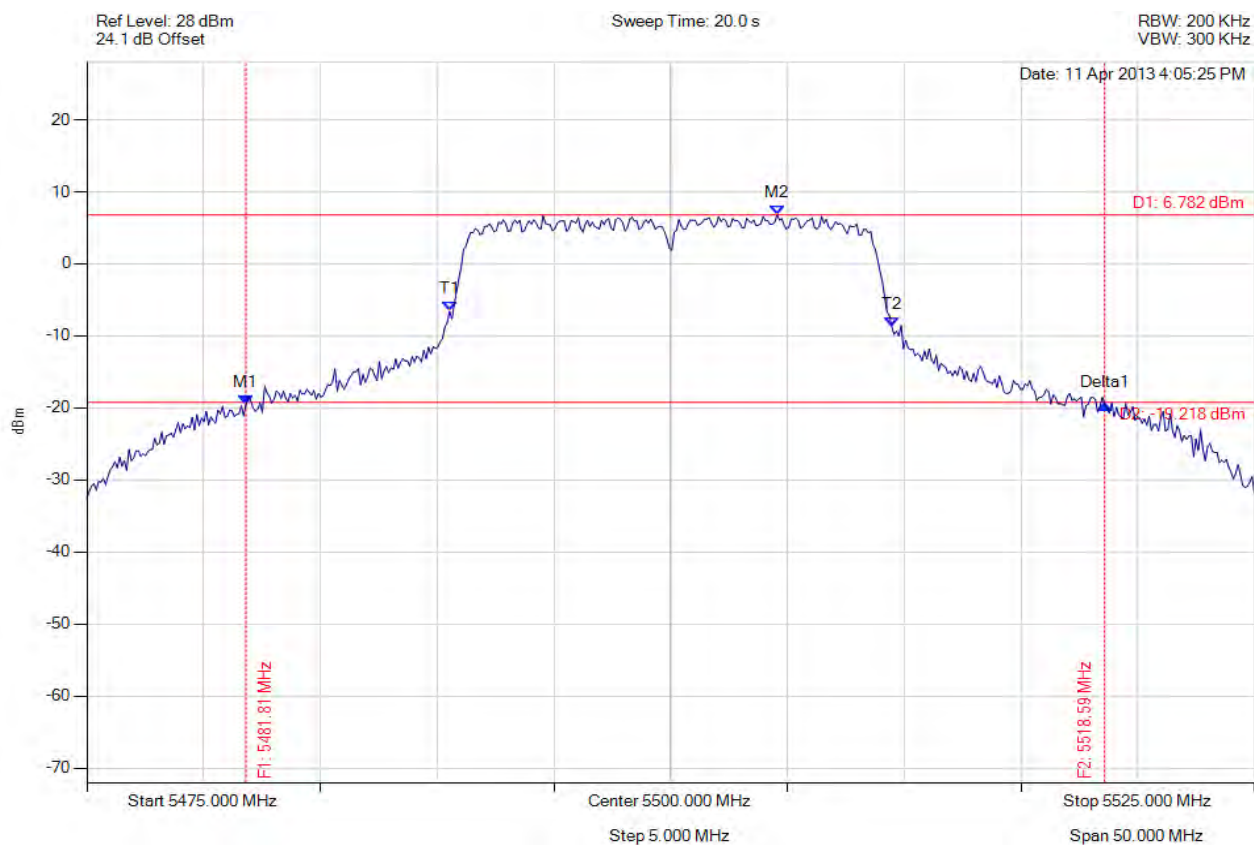


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26 dB & 99% BANDWIDTH

Variant: 802.11n HT-20, Channel: 5500.00 MHz, Chain a, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5481.814 MHz : -19.512 dBm M2 : 5504.559 MHz : 6.782 dBm Delta1 : 36.774 MHz : -0.008 dB T1 : 5490.531 MHz : -6.598 dBm T2 : 5509.469 MHz : -8.742 dBm OBW : 18.938 MHz	Measured 26 dB Bandwidth: 36.774 MHz Measured 99% Bandwidth: 18.938 MHz

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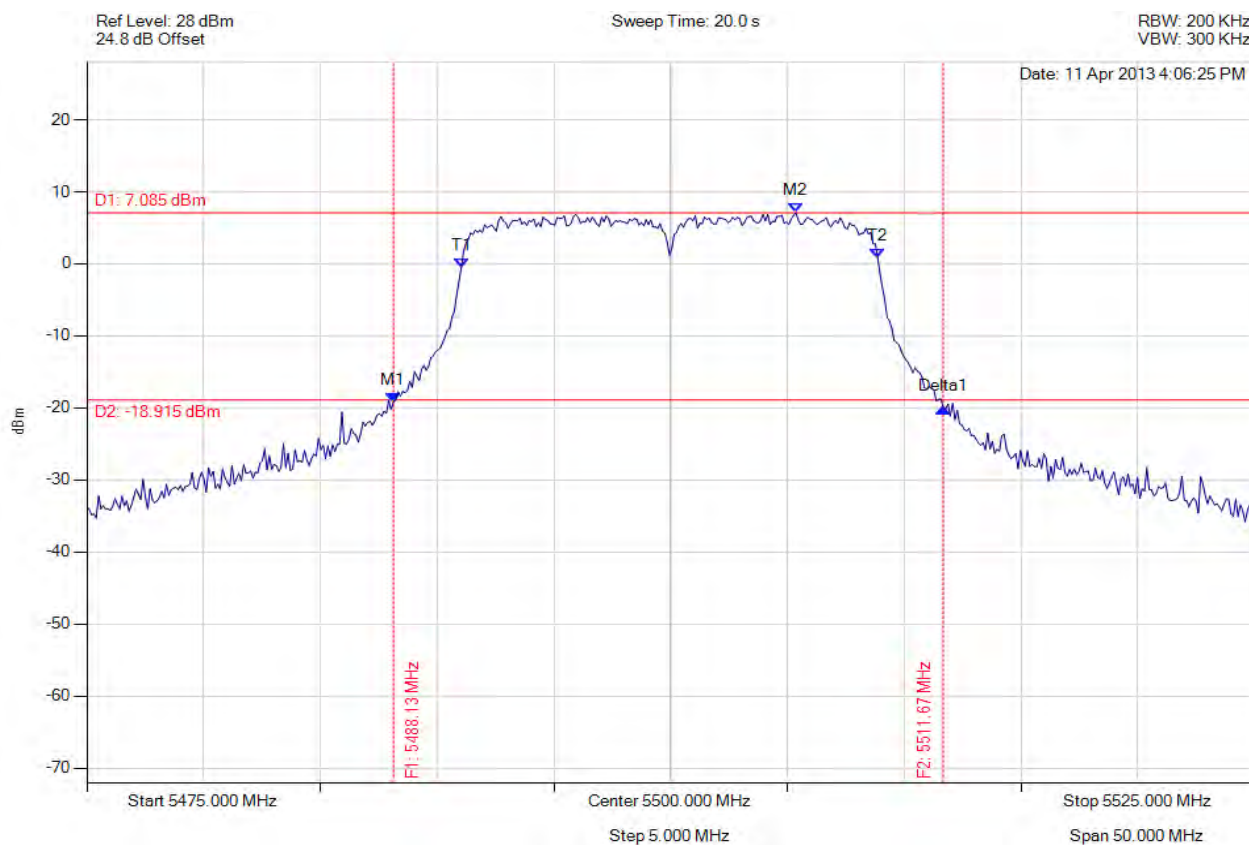


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26 dB & 99% BANDWIDTH

Variant: 802.11n HT-20, Channel: 5500.00 MHz, Chain b, Temp: Ambient, Voltage: 12 Vdc



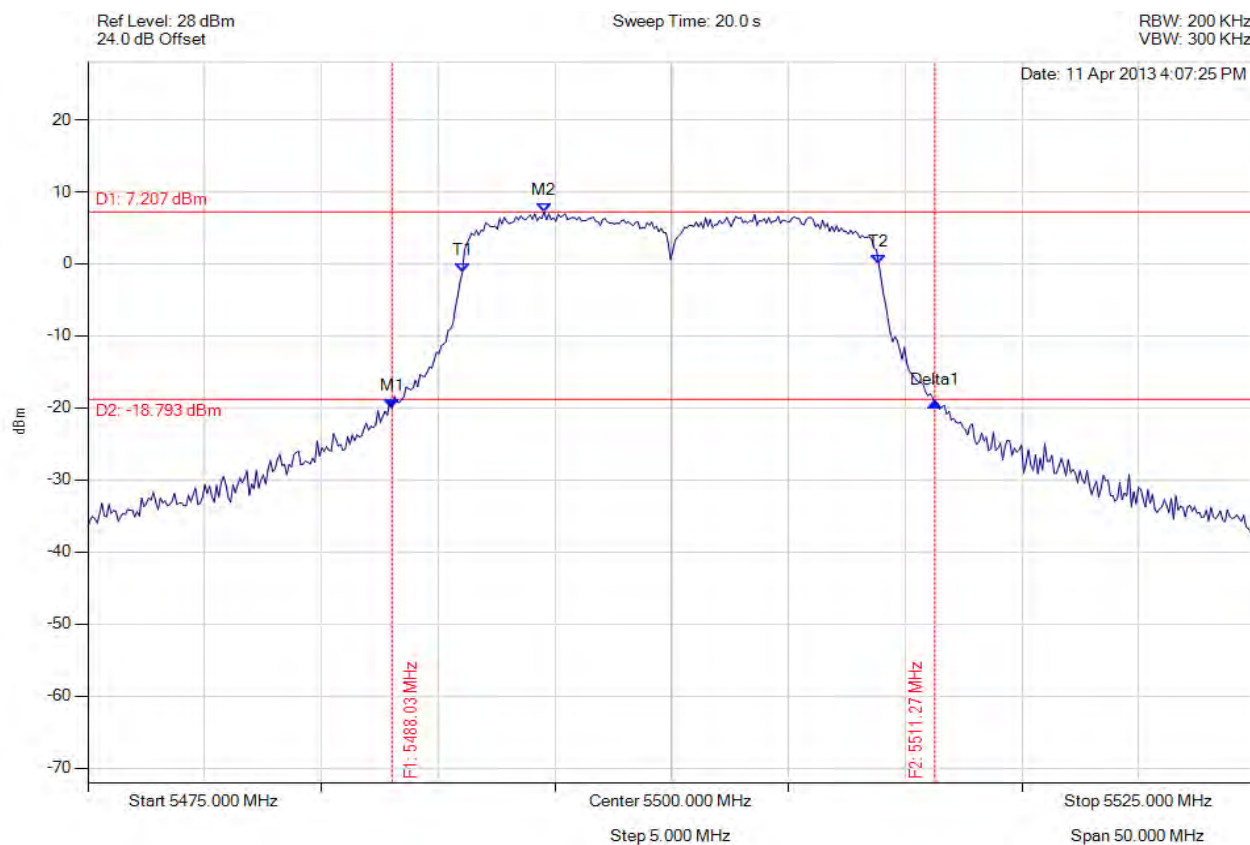
Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5488.126 MHz : -19.187 dBm M2 : 5505.361 MHz : 7.085 dBm Delta1 : 23.547 MHz : -0.822 dB T1 : 5491.032 MHz : -0.538 dBm T2 : 5508.868 MHz : 0.782 dBm OBW : 17.836 MHz	Measured 26 dB Bandwidth: 23.547 MHz Measured 99% Bandwidth: 17.836 MHz

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26 dB & 99% BANDWIDTH

Variant: 802.11n HT-20, Channel: 5500.00 MHz, Chain c, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5488.026 MHz : -20.064 dBm M2 : 5494.539 MHz : 7.207 dBm Delta1 : 23.246 MHz : 0.838 dB T1 : 5491.032 MHz : -1.270 dBm T2 : 5508.868 MHz : -0.013 dBm OBW : 17.836 MHz	Measured 26 dB Bandwidth: 23.246 MHz Measured 99% Bandwidth: 17.836 MHz

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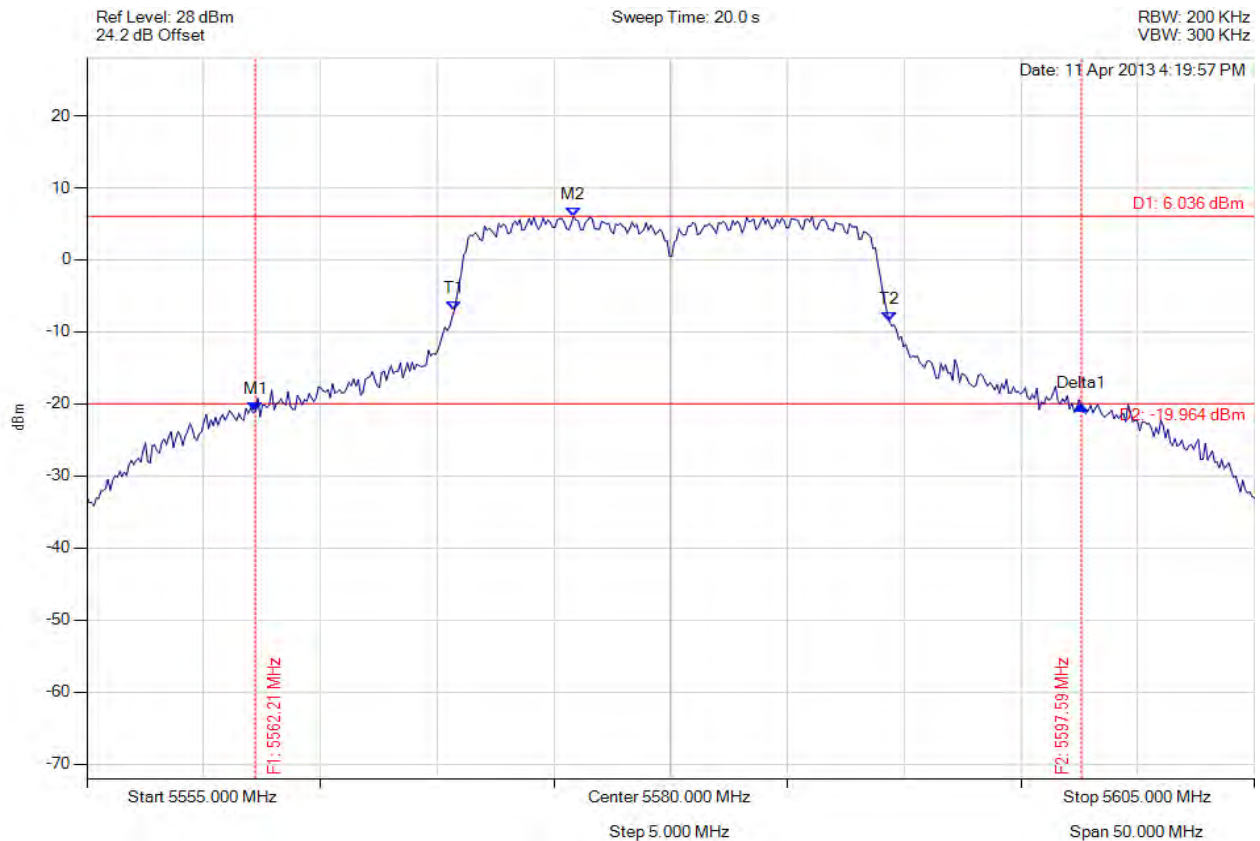


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26 dB & 99% BANDWIDTH

Variant: 802.11n HT-20, Channel: 5580.00 MHz, Chain a, Temp: Ambient, Voltage: 12 Vdc



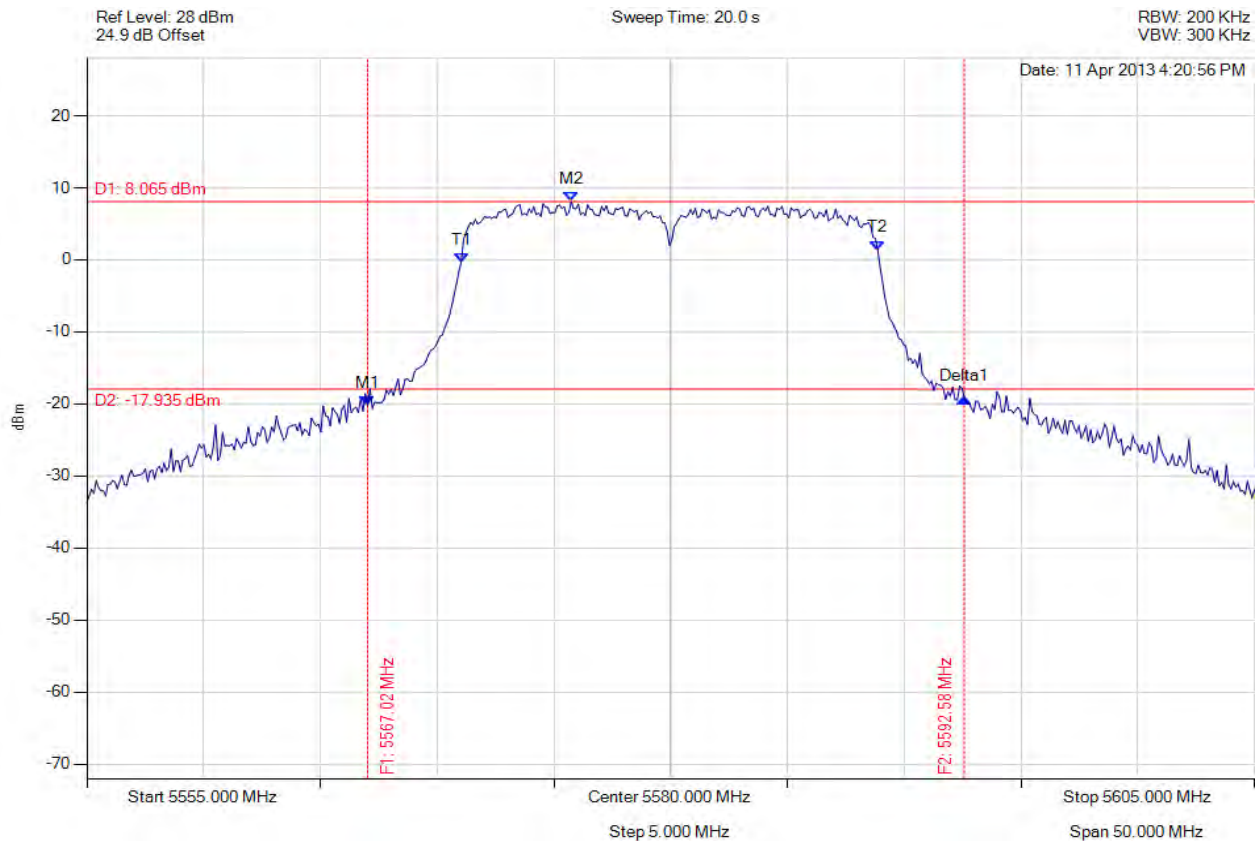
Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5562.214 MHz : -21.048 dBm M2 : 5575.842 MHz : 6.036 dBm Delta1 : 35.371 MHz : 0.822 dB T1 : 5570.731 MHz : -7.015 dBm T2 : 5589.369 MHz : -8.618 dBm OBW : 18.637 MHz	Measured 26 dB Bandwidth: 35.371 MHz Measured 99% Bandwidth: 18.637 MHz

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26 dB & 99% BANDWIDTH

Variant: 802.11n HT-20, Channel: 5580.00 MHz, Chain b, Temp: Ambient, Voltage: 12 Vdc



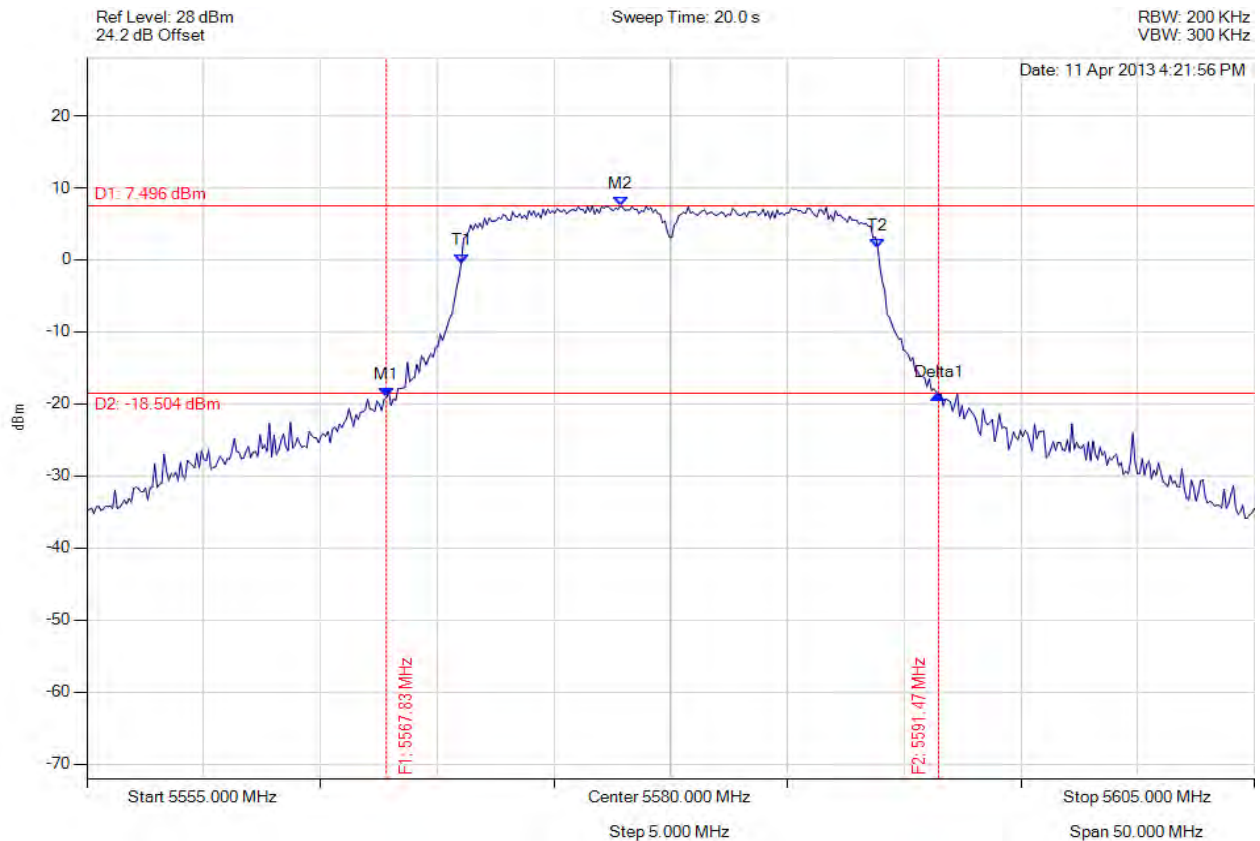
Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5567.024 MHz : -20.226 dBm M2 : 5575.741 MHz : 8.065 dBm Delta1 : 25.551 MHz : 0.999 dB T1 : 5571.032 MHz : -0.308 dBm T2 : 5588.868 MHz : 1.384 dBm OBW : 17.836 MHz	Measured 26 dB Bandwidth: 25.551 MHz Measured 99% Bandwidth: 17.836 MHz

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26 dB & 99% BANDWIDTH

Variant: 802.11n HT-20, Channel: 5580.00 MHz, Chain c, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5567.826 MHz : -19.100 dBm M2 : 5577.846 MHz : 7.496 dBm Delta1 : 23.647 MHz : 0.399 dB T1 : 5571.032 MHz : -0.452 dBm T2 : 5588.868 MHz : 1.702 dBm OBW : 17.836 MHz	Measured 26 dB Bandwidth: 23.647 MHz Measured 99% Bandwidth: 17.836 MHz

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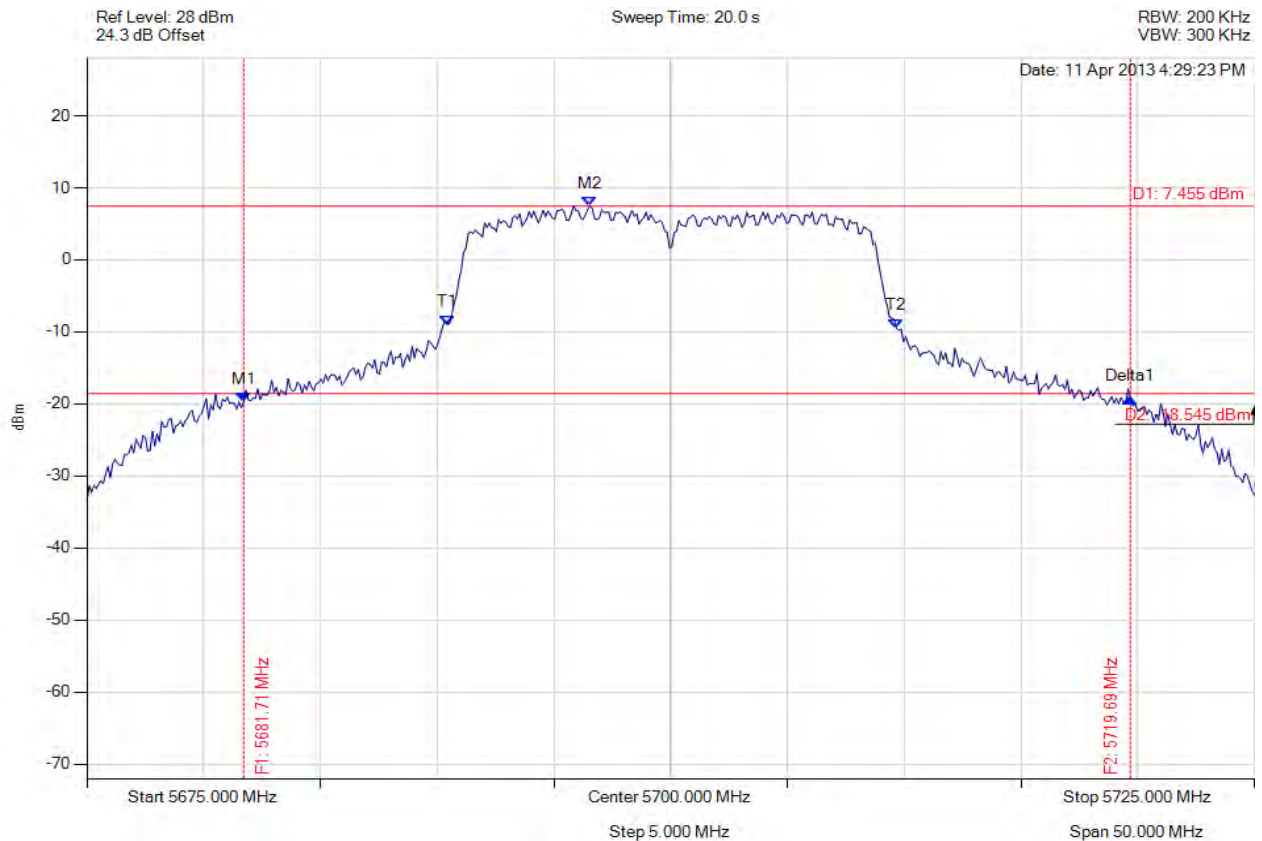


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26 dB & 99% BANDWIDTH

Variant: 802.11n HT-20, Channel: 5700.00 MHz, Chain a, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5681.713 MHz : -19.718 dBm M2 : 5696.543 MHz : 7.455 dBm Delta1 : 37.976 MHz : 0.565 dB T1 : 5690.431 MHz : -8.965 dBm T2 : 5709.669 MHz : -9.462 dBm OBW : 19.238 MHz	Measured 26 dB Bandwidth: 37.976 MHz Measured 99% Bandwidth: 19.238 MHz

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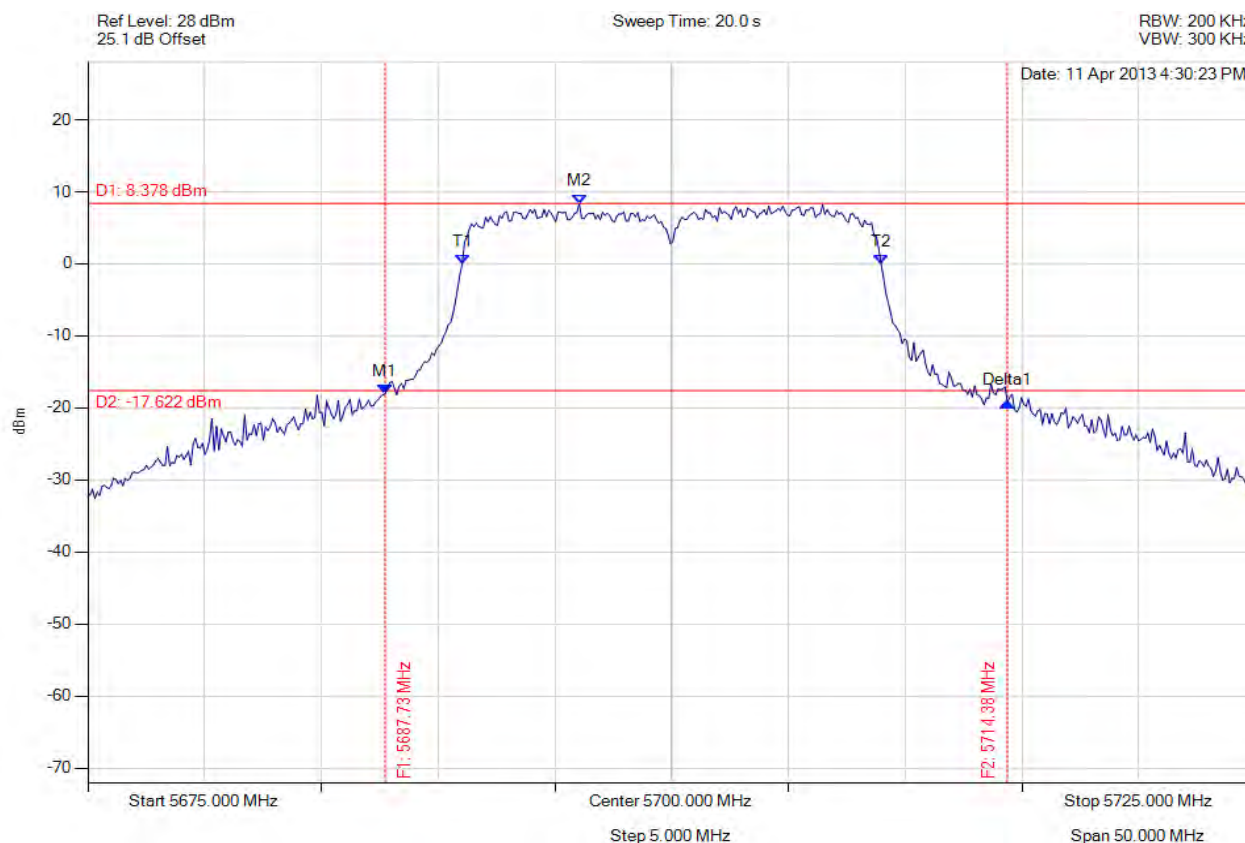


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26 dB & 99% BANDWIDTH

Variant: 802.11n HT-20, Channel: 5700.00 MHz, Chain b, Temp: Ambient, Voltage: 12 Vdc



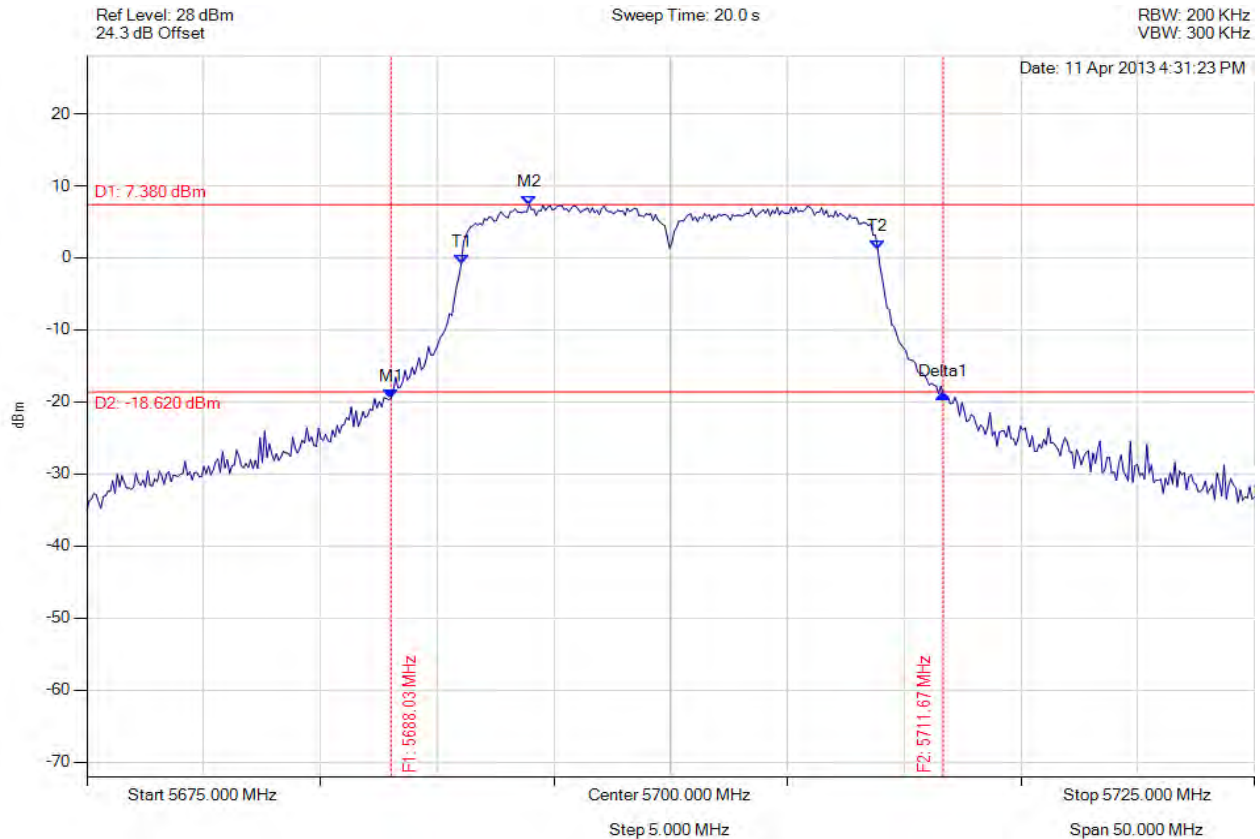
Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5687.725 MHz : -18.044 dBm M2 : 5696.042 MHz : 8.378 dBm Delta1 : 26.653 MHz : -1.202 dB T1 : 5691.032 MHz : 0.028 dBm T2 : 5708.968 MHz : -0.053 dBm OBW : 17.936 MHz	Measured 26 dB Bandwidth: 26.653 MHz Measured 99% Bandwidth: 17.936 MHz

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26 dB & 99% BANDWIDTH

Variant: 802.11n HT-20, Channel: 5700.00 MHz, Chain c, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5688.026 MHz : -19.521 dBm M2 : 5693.938 MHz : 7.380 dBm Delta1 : 23.647 MHz : 0.588 dB T1 : 5691.032 MHz : -0.841 dBm T2 : 5708.868 MHz : 1.218 dBm OBW : 17.836 MHz	Measured 26 dB Bandwidth: 23.647 MHz Measured 99% Bandwidth: 17.836 MHz

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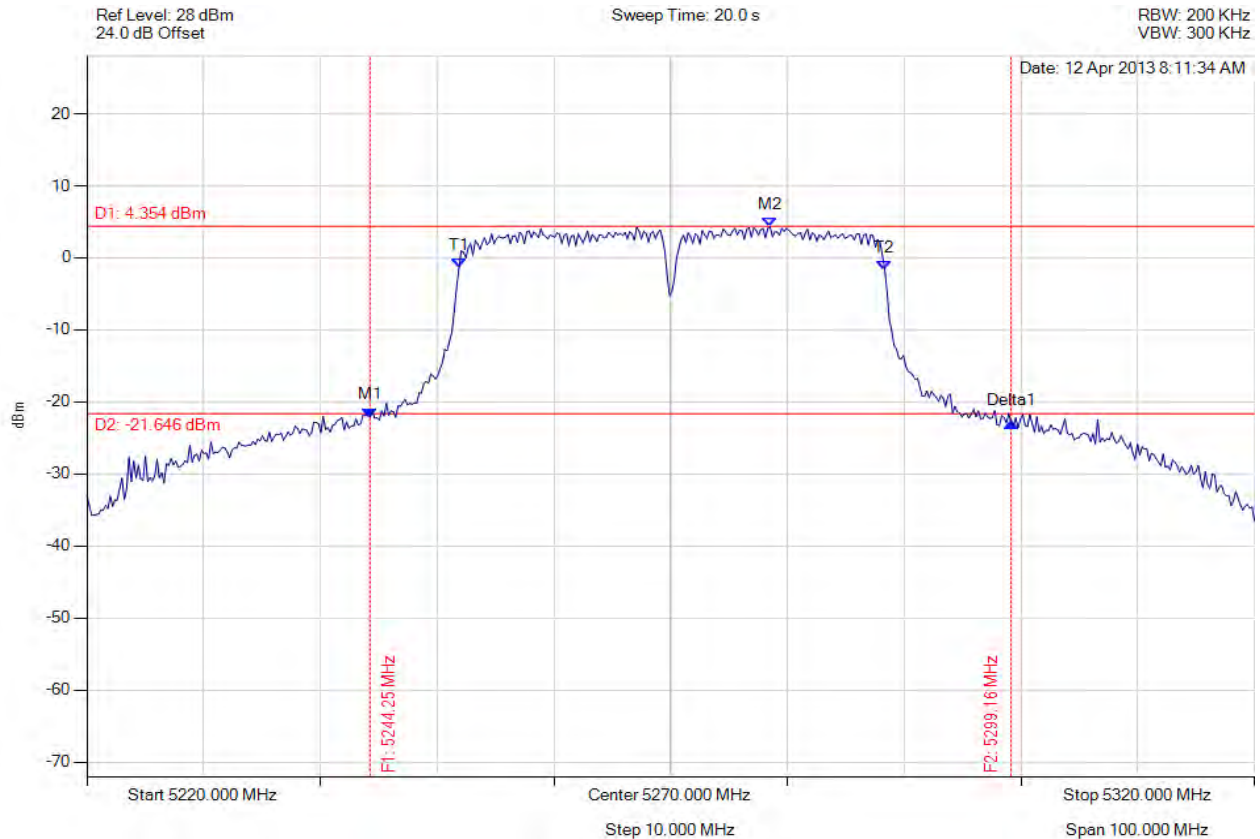


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26 dB & 99% BANDWIDTH

Variant: 802.11n HT-40, Channel: 5270.00 MHz, Chain a, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5244.248 MHz : -22.136 dBm M2 : 5278.517 MHz : 4.354 dBm Delta1 : 54.910 MHz : -0.799 dB T1 : 5251.864 MHz : -1.382 dBm T2 : 5288.337 MHz : -1.644 dBm OBW : 36.473 MHz	Measured 26 dB Bandwidth: 54.910 MHz Measured 99% Bandwidth: 36.473 MHz

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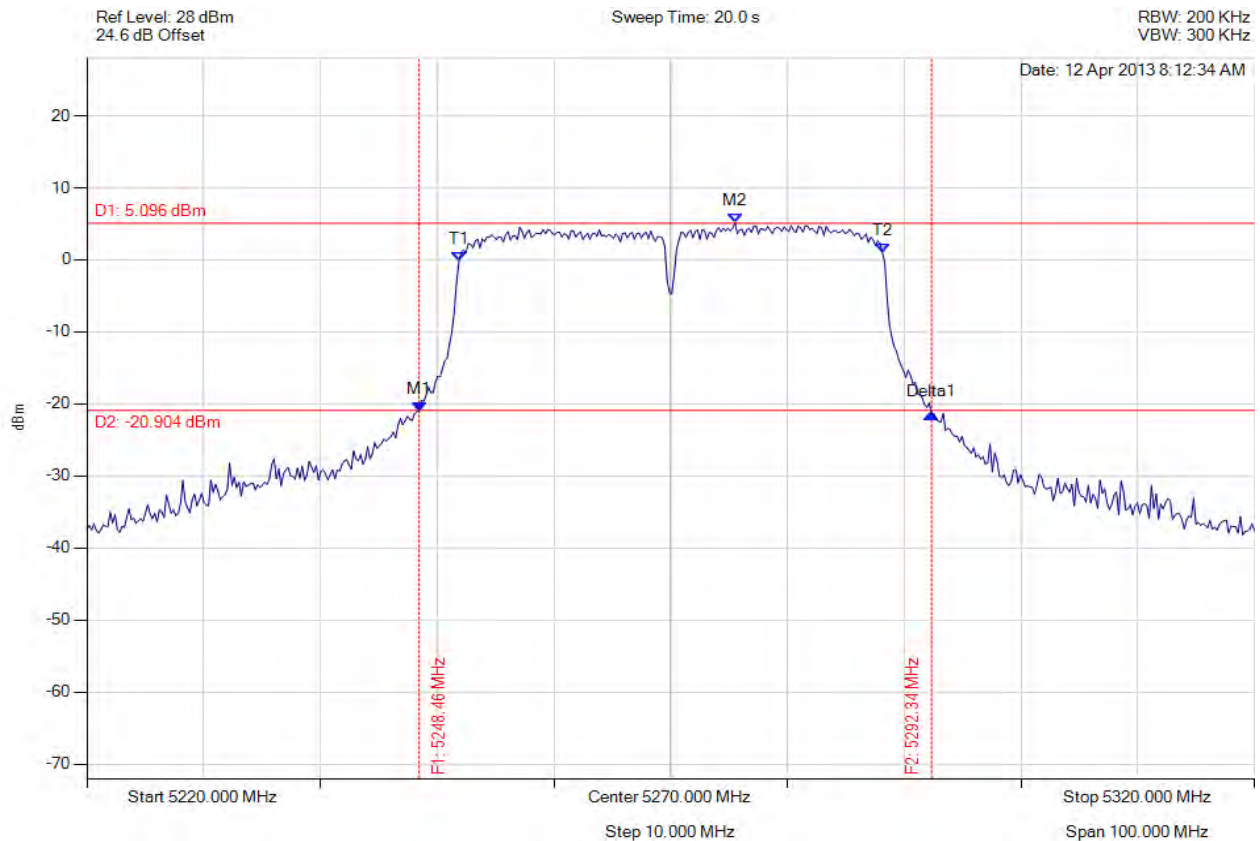


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26 dB & 99% BANDWIDTH

Variant: 802.11n HT-40, Channel: 5270.00 MHz, Chain b, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5248.457 MHz : -20.991 dBm M2 : 5275.511 MHz : 5.096 dBm Delta1 : 43.888 MHz : -0.421 dB T1 : 5251.864 MHz : -0.261 dBm T2 : 5288.136 MHz : 1.012 dBm OBW : 36.273 MHz	Measured 26 dB Bandwidth: 43.888 MHz Measured 99% Bandwidth: 36.273 MHz

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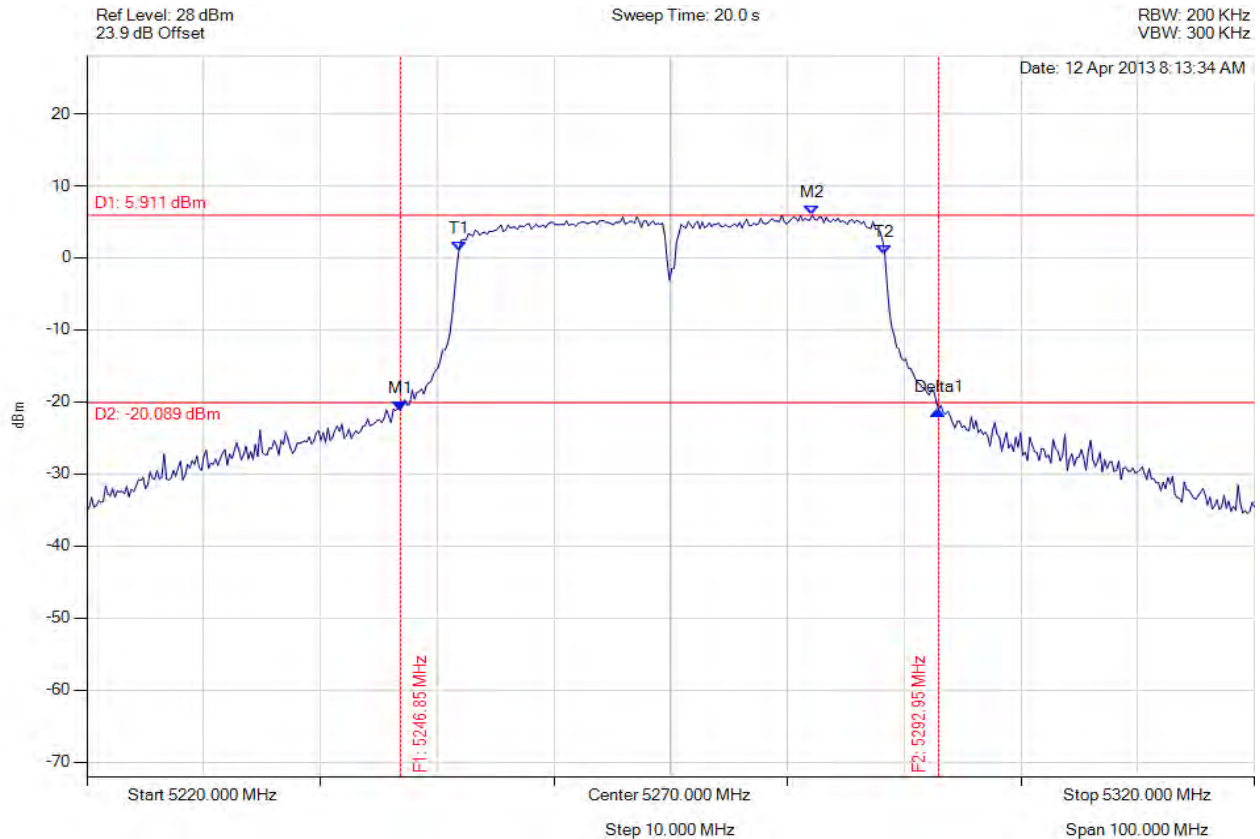


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26 dB & 99% BANDWIDTH

Variant: 802.11n HT-40, Channel: 5270.00 MHz, Chain c, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5246.854 MHz : -21.211 dBm M2 : 5282.124 MHz : 5.911 dBm Delta1 : 46.092 MHz : 0.079 dB T1 : 5251.864 MHz : 1.033 dBm T2 : 5288.337 MHz : 0.473 dBm OBW : 36.473 MHz	Measured 26 dB Bandwidth: 46.092 MHz Measured 99% Bandwidth: 36.473 MHz

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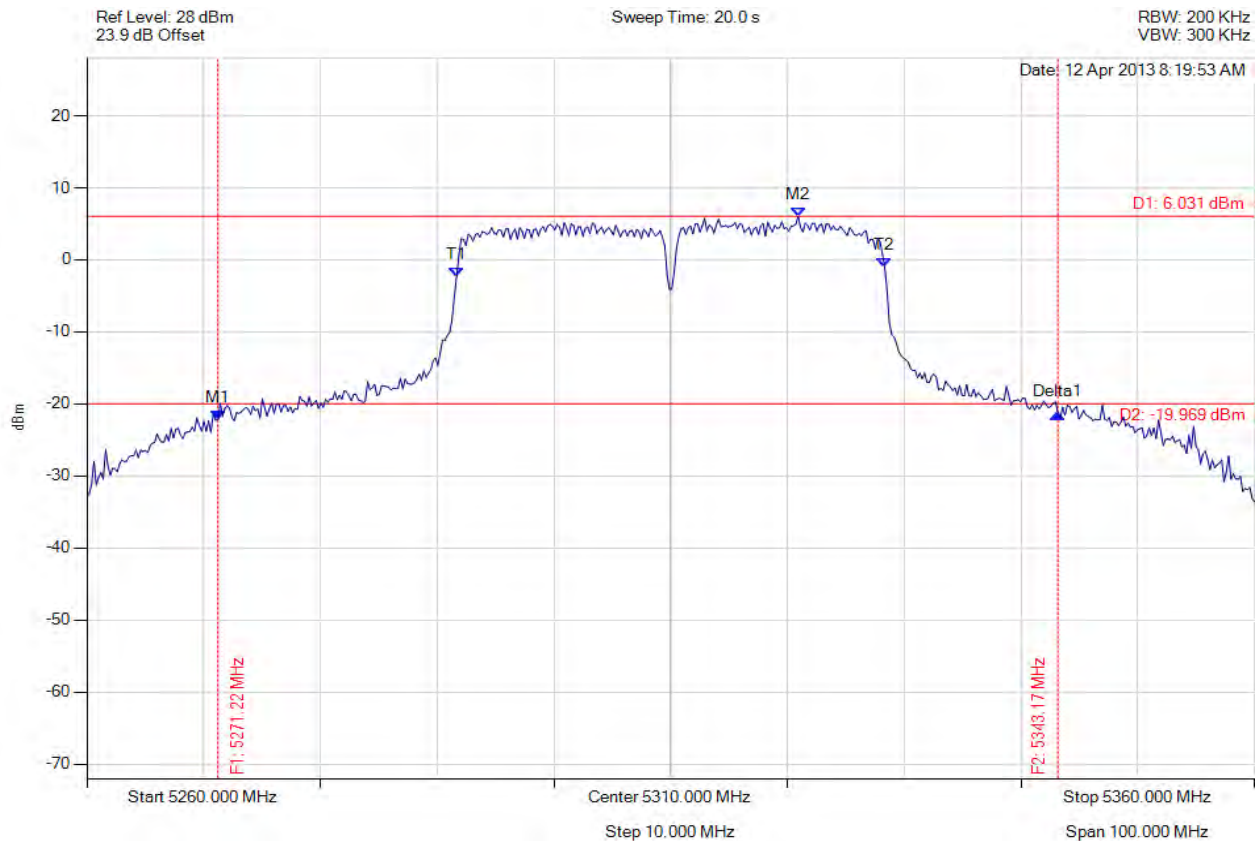


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26 dB & 99% BANDWIDTH

Variant: 802.11n HT-40, Channel: 5310.00 MHz, Chain a, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5271.222 MHz : -22.236 dBm M2 : 5320.922 MHz : 6.031 dBm Delta1 : 71.944 MHz : 0.911 dB T1 : 5291.663 MHz : -2.337 dBm T2 : 5328.337 MHz : -1.107 dBm OBW : 36.673 MHz	Measured 26 dB Bandwidth: 71.944 MHz Measured 99% Bandwidth: 36.673 MHz

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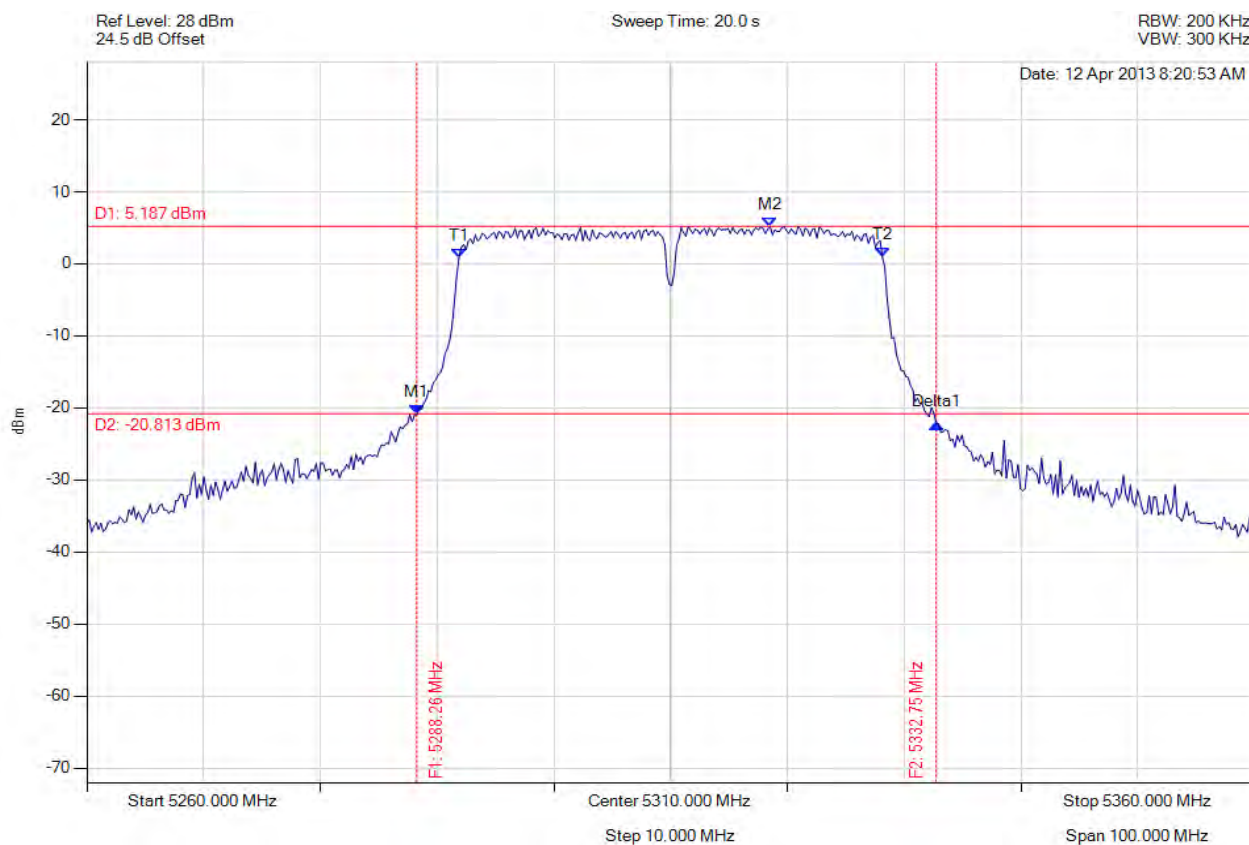


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26 dB & 99% BANDWIDTH

Variant: 802.11n HT-40, Channel: 5310.00 MHz, Chain b, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5288.257 MHz : -20.908 dBm M2 : 5318.517 MHz : 5.187 dBm Delta1 : 44.489 MHz : -1.312 dB T1 : 5291.864 MHz : 0.849 dBm T2 : 5328.136 MHz : 0.927 dBm OBW : 36.273 MHz	Measured 26 dB Bandwidth: 44.489 MHz Measured 99% Bandwidth: 36.273 MHz

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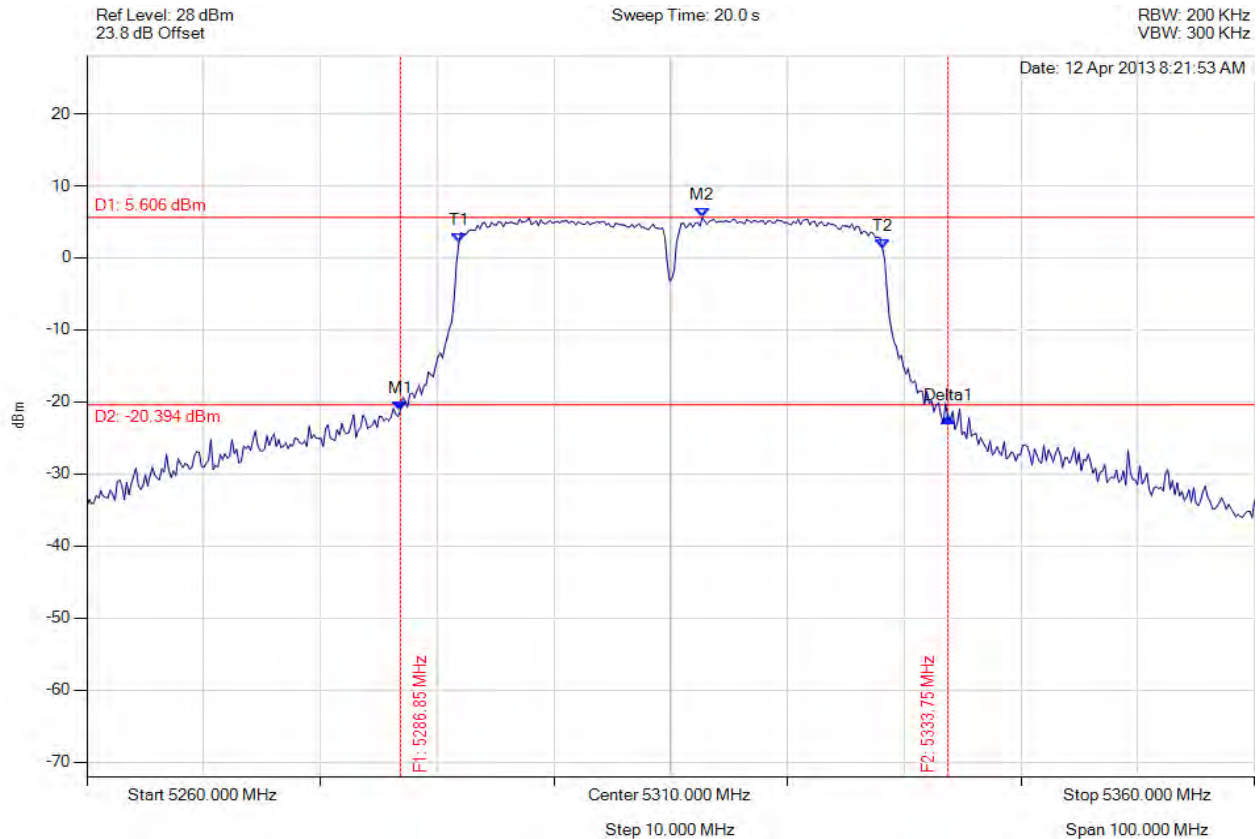


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26 dB & 99% BANDWIDTH

Variant: 802.11n HT-40, Channel: 5310.00 MHz, Chain c, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5286.854 MHz : -21.196 dBm M2 : 5312.705 MHz : 5.606 dBm Delta1 : 46.894 MHz : -1.092 dB T1 : 5291.864 MHz : 2.171 dBm T2 : 5328.136 MHz : 1.307 dBm OBW : 36.273 MHz	Measured 26 dB Bandwidth: 46.894 MHz Measured 99% Bandwidth: 36.273 MHz

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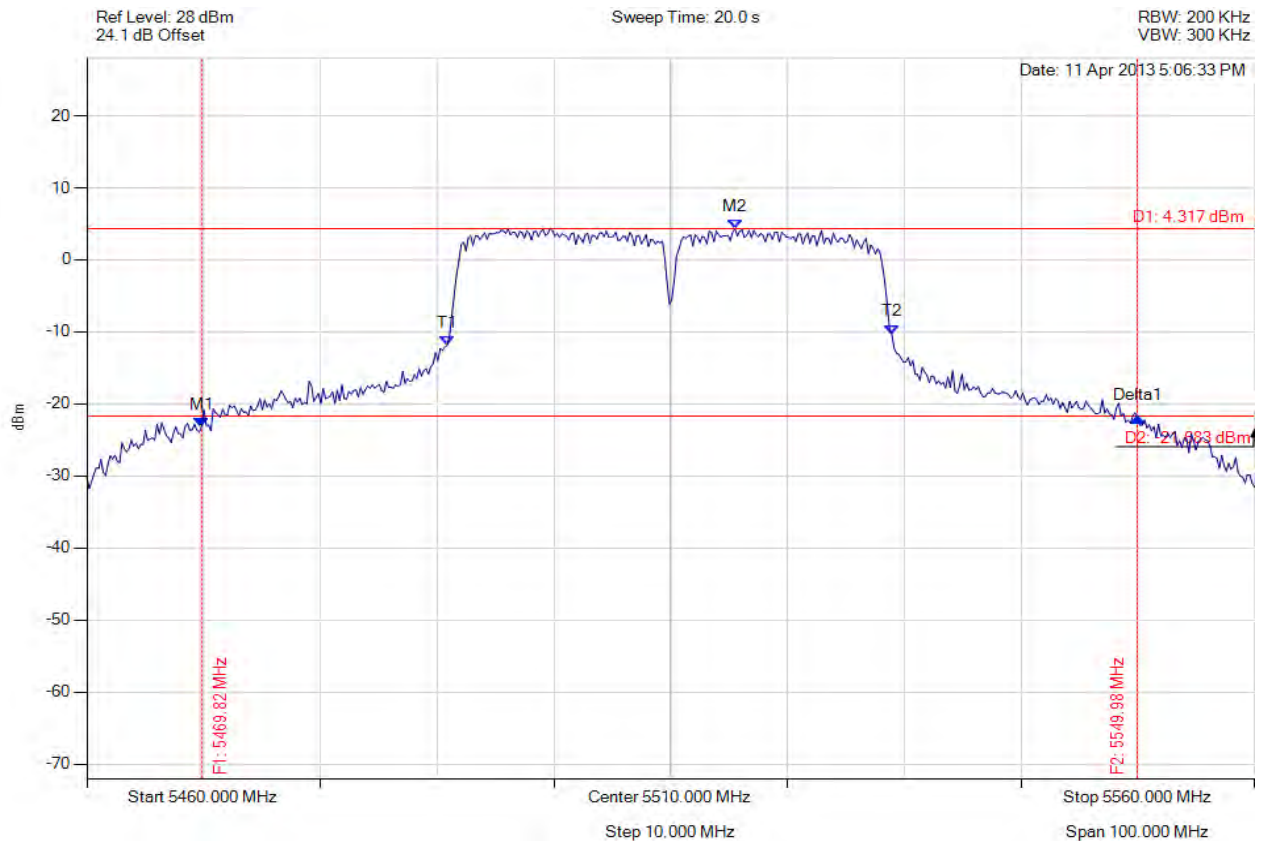


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26 dB & 99% BANDWIDTH

Variant: 802.11n HT-40, Channel: 5510.00 MHz, Chain a, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5469.820 MHz : -23.157 dBm M2 : 5515.511 MHz : 4.317 dBm Delta1 : 80.160 MHz : 1.334 dB T1 : 5490.862 MHz : -11.910 dBm T2 : 5528.938 MHz : -10.293 dBm OBW : 38.076 MHz	Measured 26 dB Bandwidth: 80.160 MHz Measured 99% Bandwidth: 38.076 MHz

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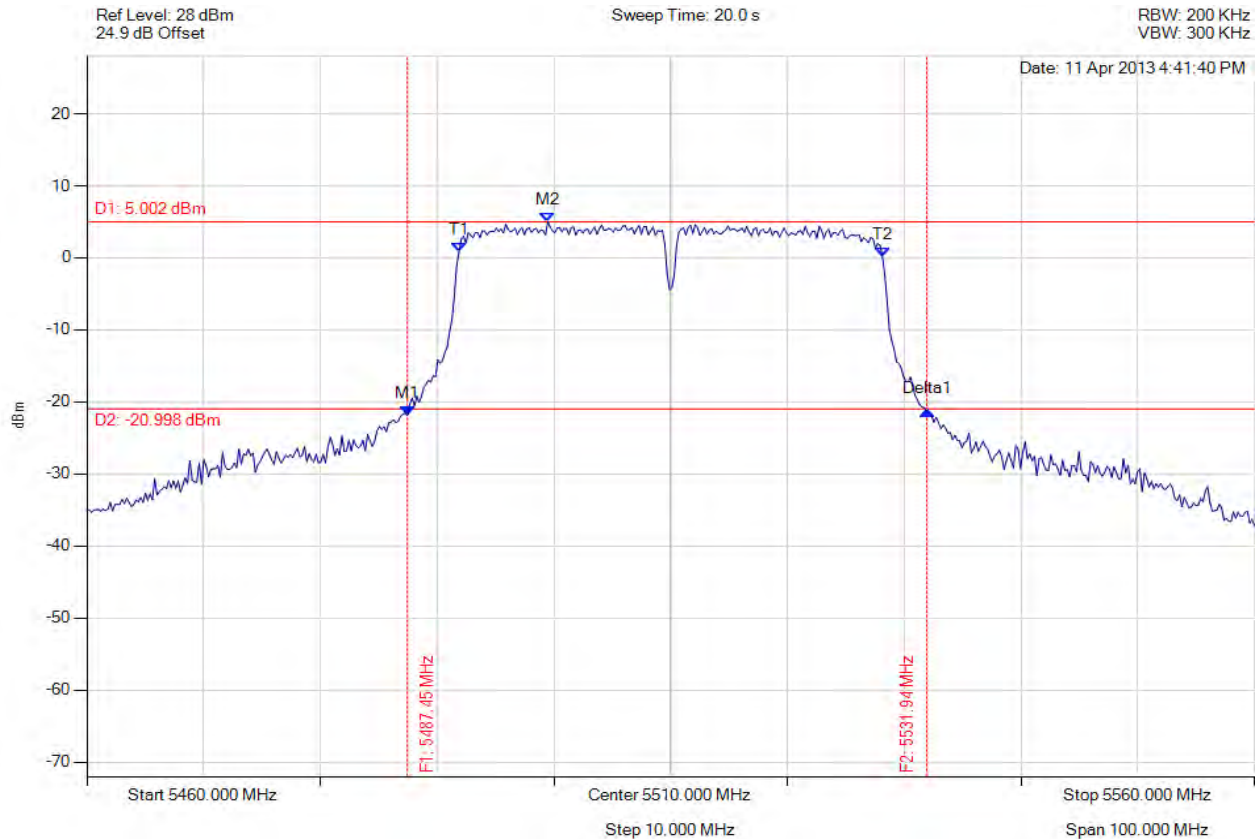


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26 dB & 99% BANDWIDTH

Variant: 802.11n HT-40, Channel: 5510.00 MHz, Chain b, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5487.455 MHz : -21.845 dBm M2 : 5499.479 MHz : 5.002 dBm Delta1 : 44.489 MHz : 0.649 dB T1 : 5491.864 MHz : 0.807 dBm T2 : 5528.136 MHz : 0.160 dBm OBW : 36.273 MHz	Measured 26 dB Bandwidth: 44.489 MHz Measured 99% Bandwidth: 36.273 MHz

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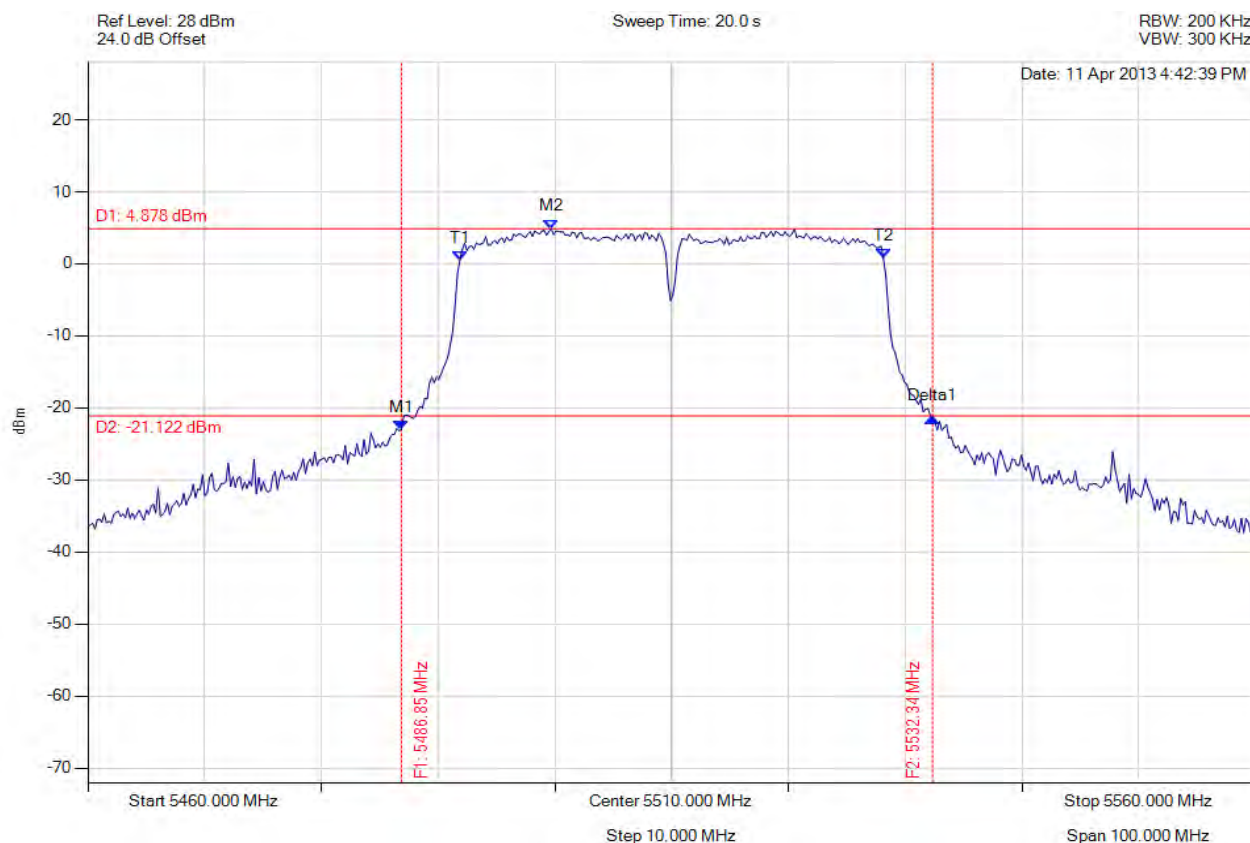


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26 dB & 99% BANDWIDTH

Variant: 802.11n HT-40, Channel: 5510.00 MHz, Chain c, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5486.854 MHz : -23.008 dBm M2 : 5499.679 MHz : 4.878 dBm Delta1 : 45.491 MHz : 1.586 dB T1 : 5491.864 MHz : 0.534 dBm T2 : 5528.136 MHz : 0.721 dBm OBW : 36.273 MHz	Measured 26 dB Bandwidth: 45.491 MHz Measured 99% Bandwidth: 36.273 MHz

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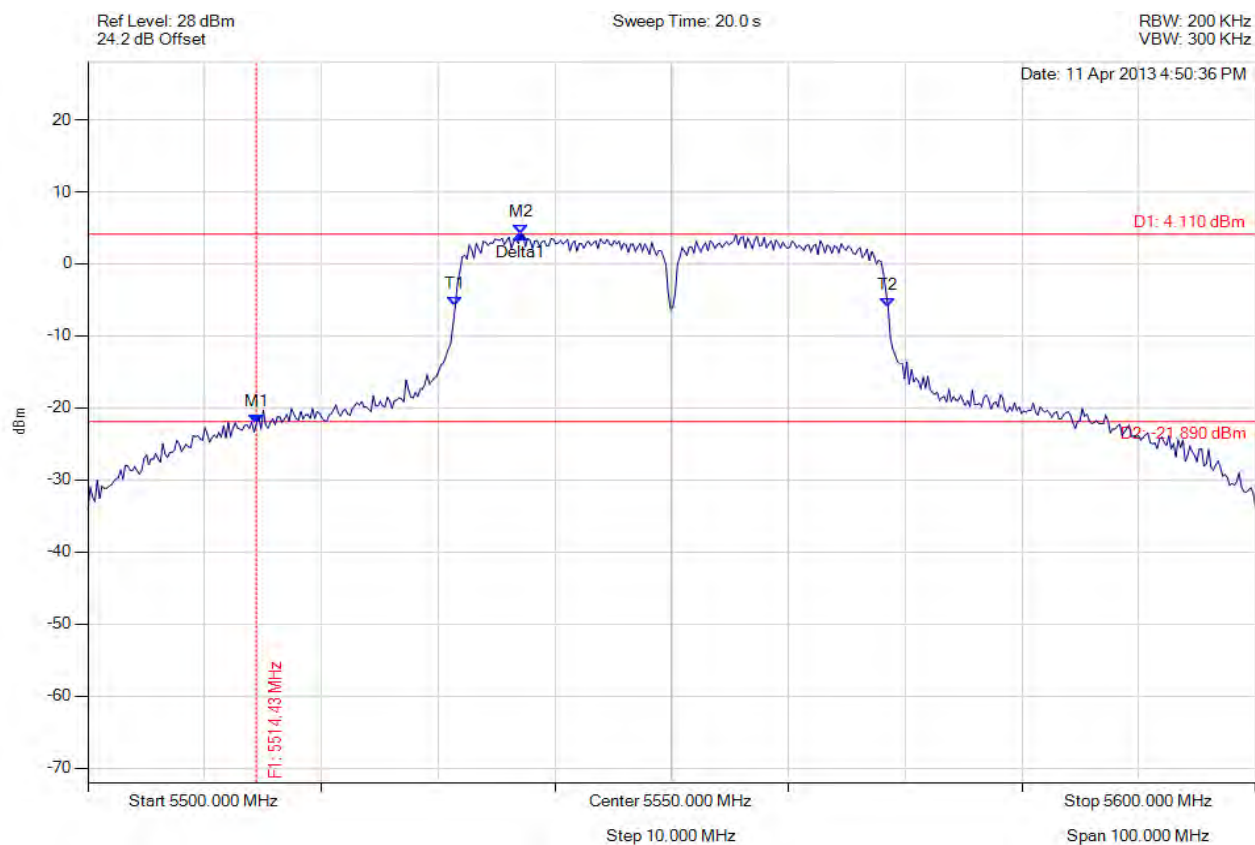


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26 dB & 99% BANDWIDTH

Variant: 802.11n HT-40, Channel: 5550.00 MHz, Chain a, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5514.429 MHz : -22.240 dBm M2 : 5559.720 MHz : -23.332 dBm Delta1 : 45.291 MHz : 26.349 dB T1 : 5531.463 MHz : -5.905 dBm T2 : 5568.537 MHz : -6.039 dBm OBW : 37.074 MHz	Measured 26 dB Bandwidth: 45.291 MHz Measured 99% Bandwidth: 37.074 MHz

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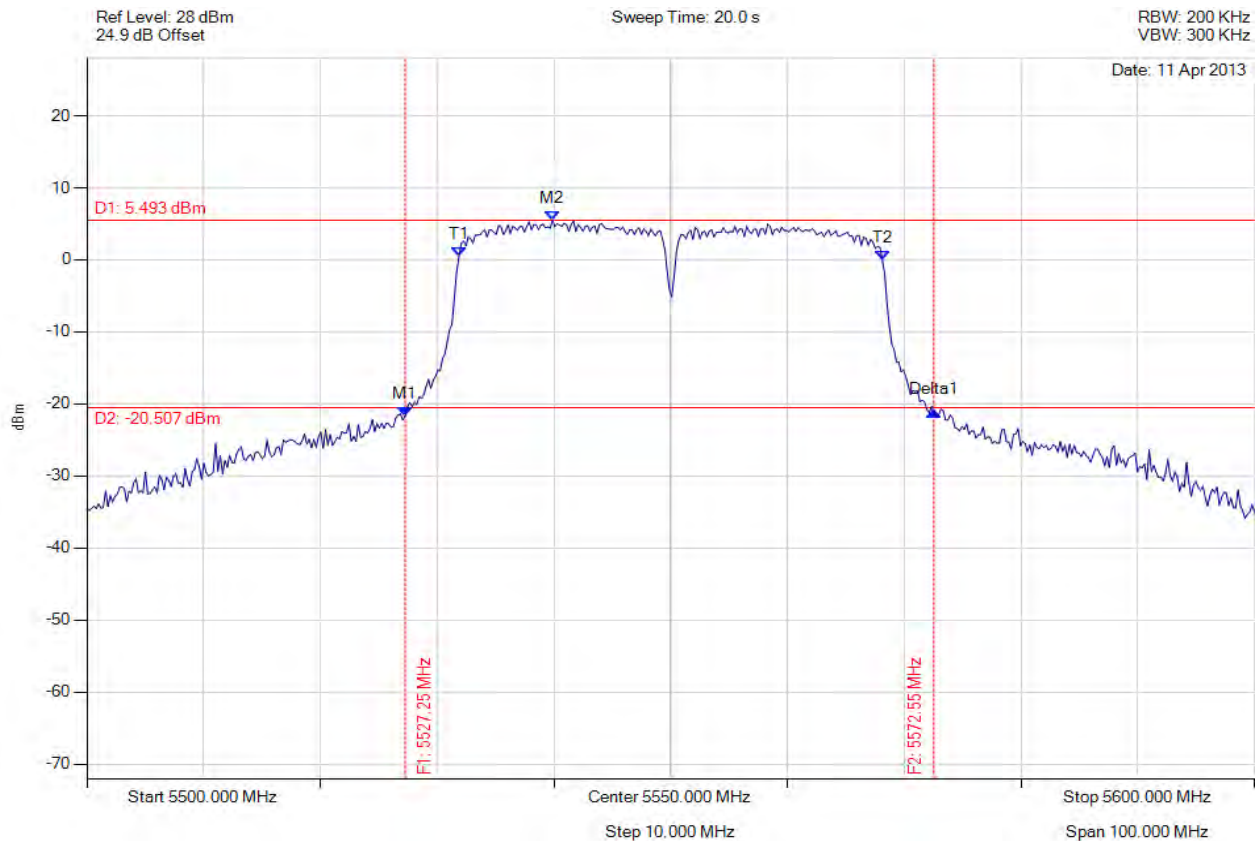


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26 dB & 99% BANDWIDTH

Variant: 802.11n HT-40, Channel: 5550.00 MHz, Chain b, Temp: Ambient, Voltage: 12 Vdc



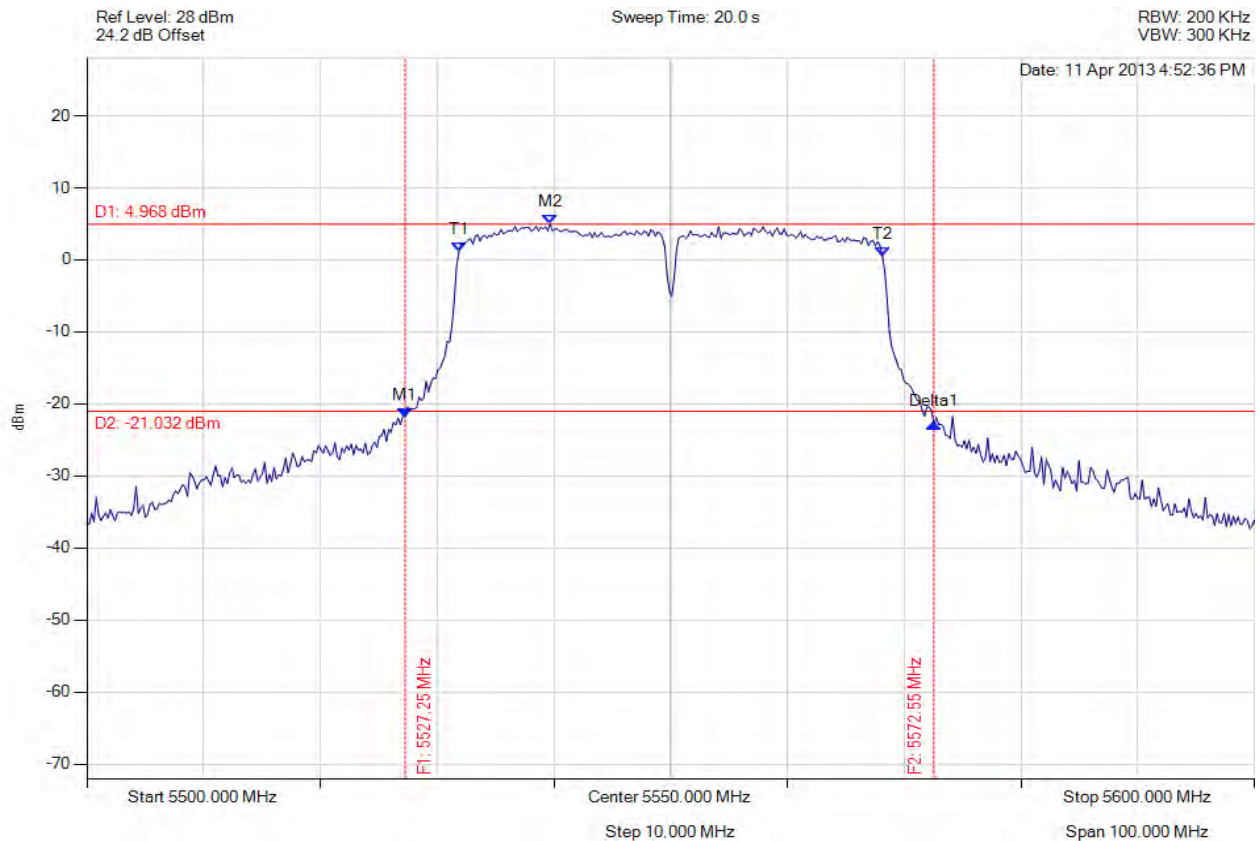
Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5527.255 MHz : -21.674 dBm M2 : 5539.880 MHz : 5.493 dBm Delta1 : 45.291 MHz : 0.553 dB T1 : 5531.864 MHz : 0.412 dBm T2 : 5568.136 MHz : -0.088 dBm OBW : 36.273 MHz	Measured 26 dB Bandwidth: 45.291 MHz Measured 99% Bandwidth: 36.273 MHz

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26 dB & 99% BANDWIDTH

Variant: 802.11n HT-40, Channel: 5550.00 MHz, Chain c, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5527.255 MHz : -21.815 dBm M2 : 5539.679 MHz : 4.968 dBm Delta1 : 45.291 MHz : -0.919 dB T1 : 5531.864 MHz : 1.173 dBm T2 : 5568.136 MHz : 0.500 dBm OBW : 36.273 MHz	Measured 26 dB Bandwidth: 45.291 MHz Measured 99% Bandwidth: 36.273 MHz

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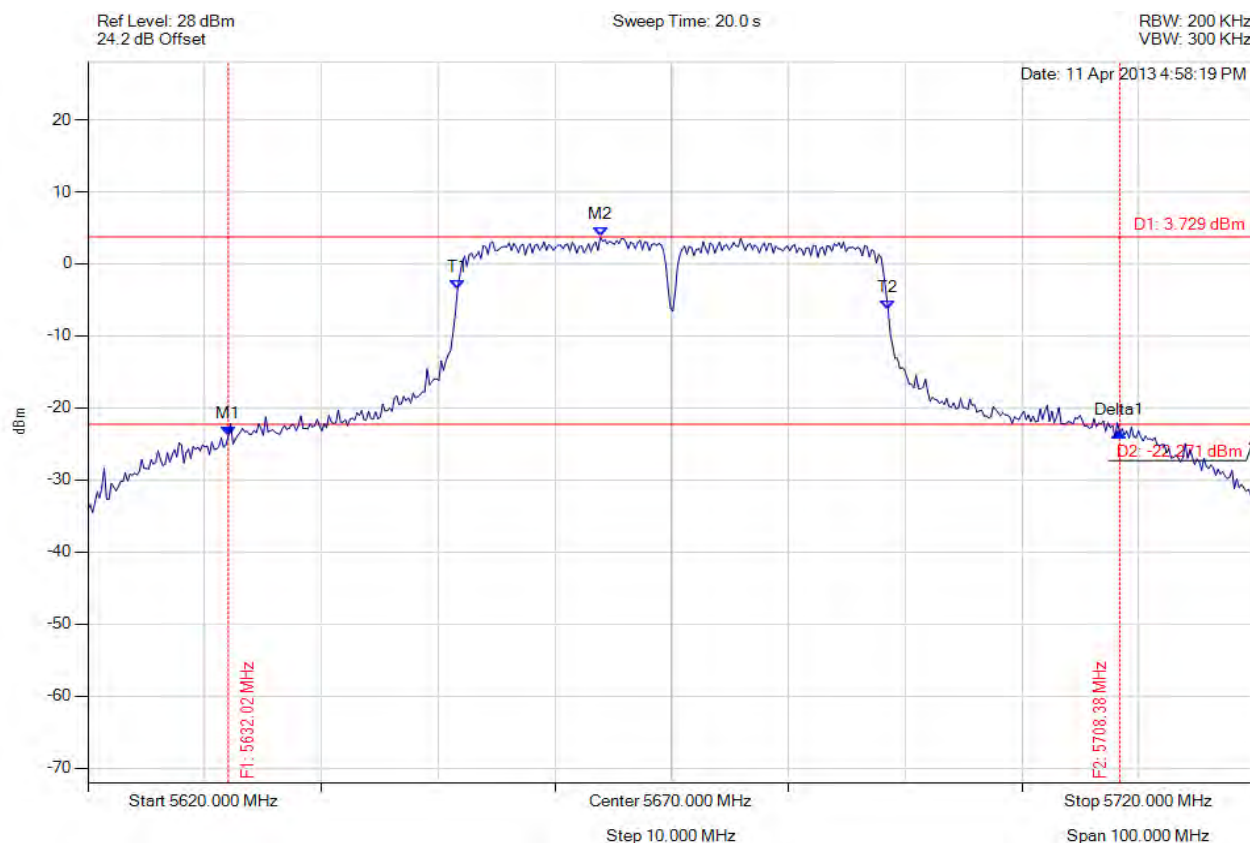


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26 dB & 99% BANDWIDTH

Variant: 802.11n HT-40, Channel: 5670.00 MHz, Chain a, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5632.024 MHz : -23.883 dBm M2 : 5663.888 MHz : 3.729 dBm Delta1 : 76.353 MHz : 0.437 dB T1 : 5651.663 MHz : -3.539 dBm T2 : 5688.537 MHz : -6.307 dBm OBW : 36.874 MHz	Measured 26 dB Bandwidth: 76.353 MHz Measured 99% Bandwidth: 36.874 MHz

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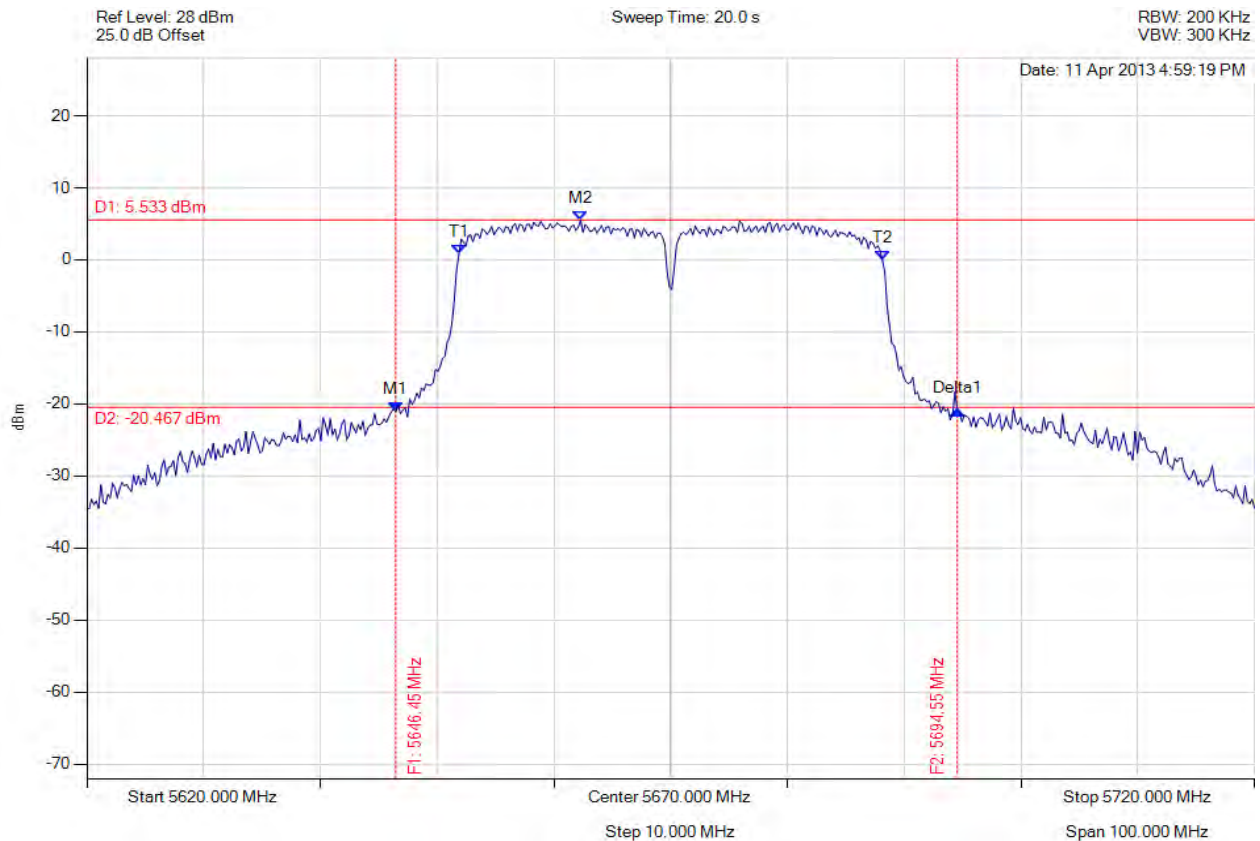


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26 dB & 99% BANDWIDTH

Variant: 802.11n HT-40, Channel: 5670.00 MHz, Chain b, Temp: Ambient, Voltage: 12 Vdc



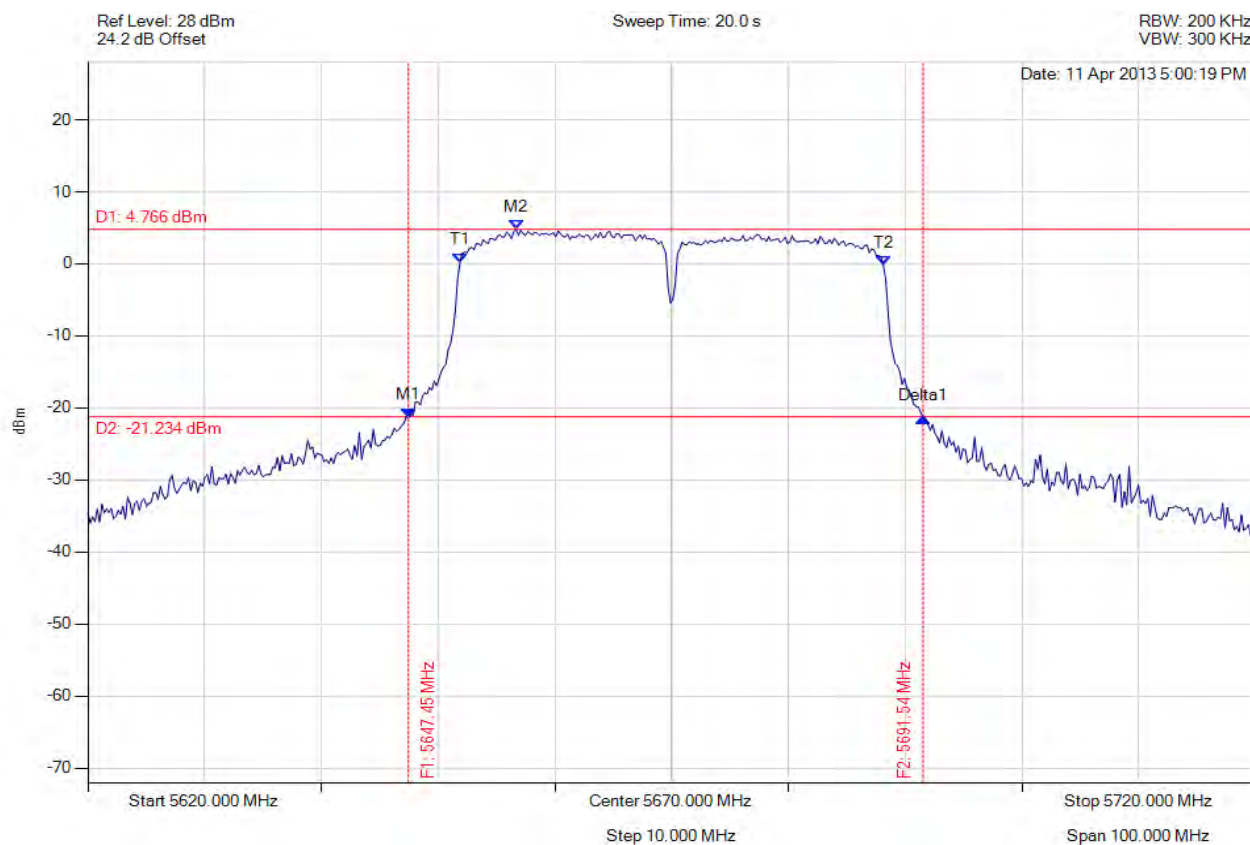
Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5646.453 MHz : -21.054 dBm M2 : 5662.285 MHz : 5.533 dBm Delta1 : 48.096 MHz : 0.146 dB T1 : 5651.864 MHz : 0.744 dBm T2 : 5688.136 MHz : -0.068 dBm OBW : 36.273 MHz	Measured 26 dB Bandwidth: 48.096 MHz Measured 99% Bandwidth: 36.273 MHz

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26 dB & 99% BANDWIDTH

Variant: 802.11n HT-40, Channel: 5670.00 MHz, Chain c, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5647.455 MHz : -21.306 dBm M2 : 5656.673 MHz : 4.766 dBm Delta1 : 44.088 MHz : -0.053 dB T1 : 5651.864 MHz : 0.215 dBm T2 : 5688.136 MHz : -0.222 dBm OBW : 36.273 MHz	Measured 26 dB Bandwidth: 44.088 MHz Measured 99% Bandwidth: 36.273 MHz

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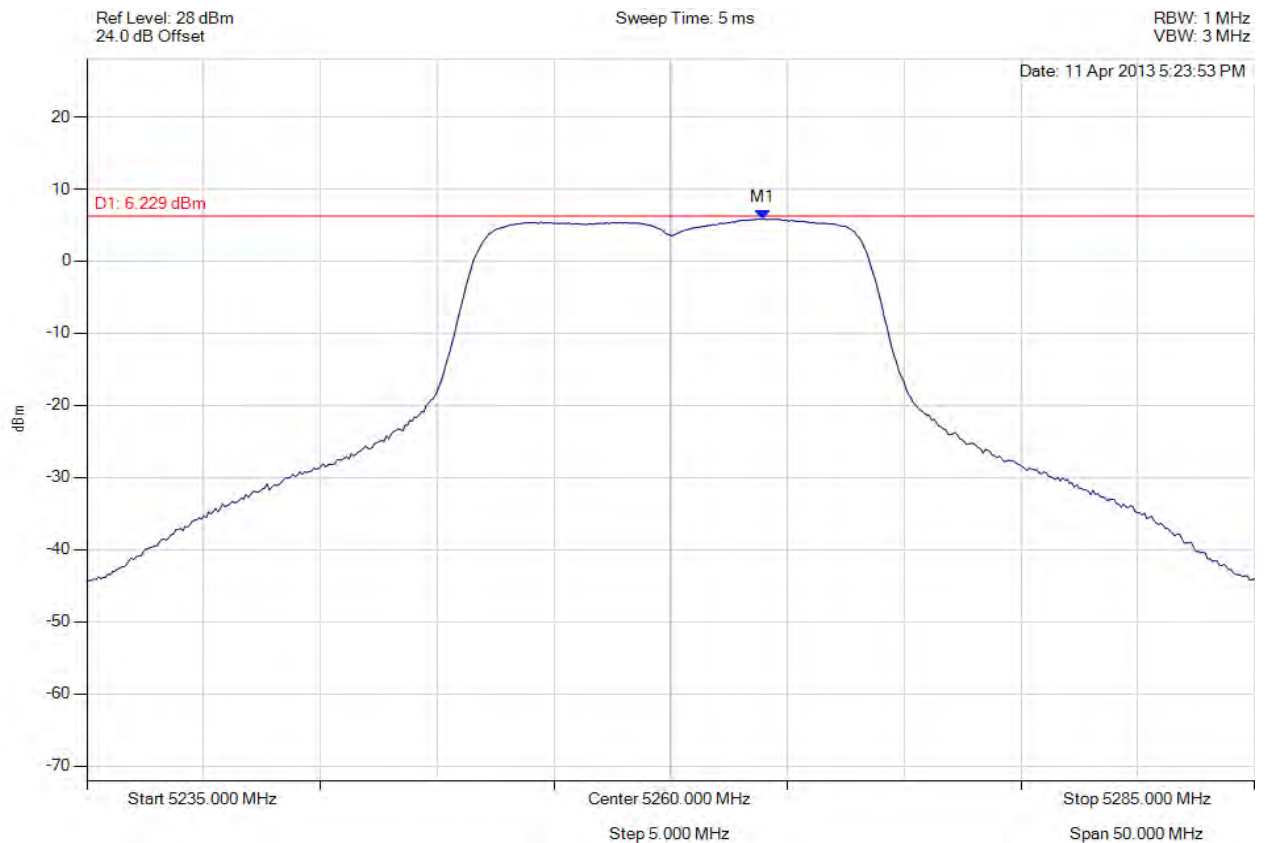
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A.1.2. Peak Power Spectral Density



PEAK POWER SPECTRAL DENSITY

Variant: 802.11a, Channel: 5260.00 MHz, Chain a, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5263.958 MHz : 5.835 dBm	Limit: ≤ 6.229 dBm Margin: -0.39 dB

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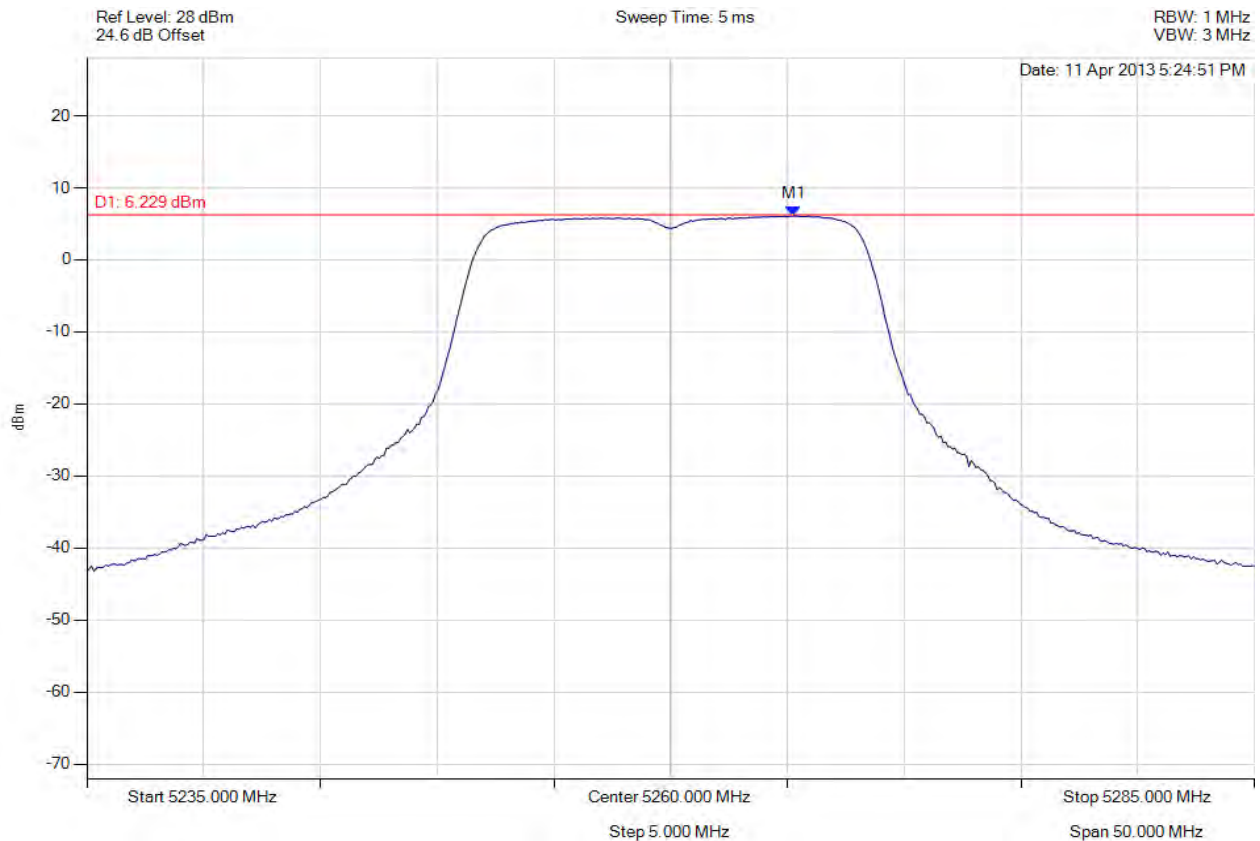


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PEAK POWER SPECTRAL DENSITY

Variant: 802.11a, Channel: 5260.00 MHz, Chain b, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5265.261 MHz : 6.087 dBm	Limit: ≤ 6.229 dBm Margin: -0.14 dB

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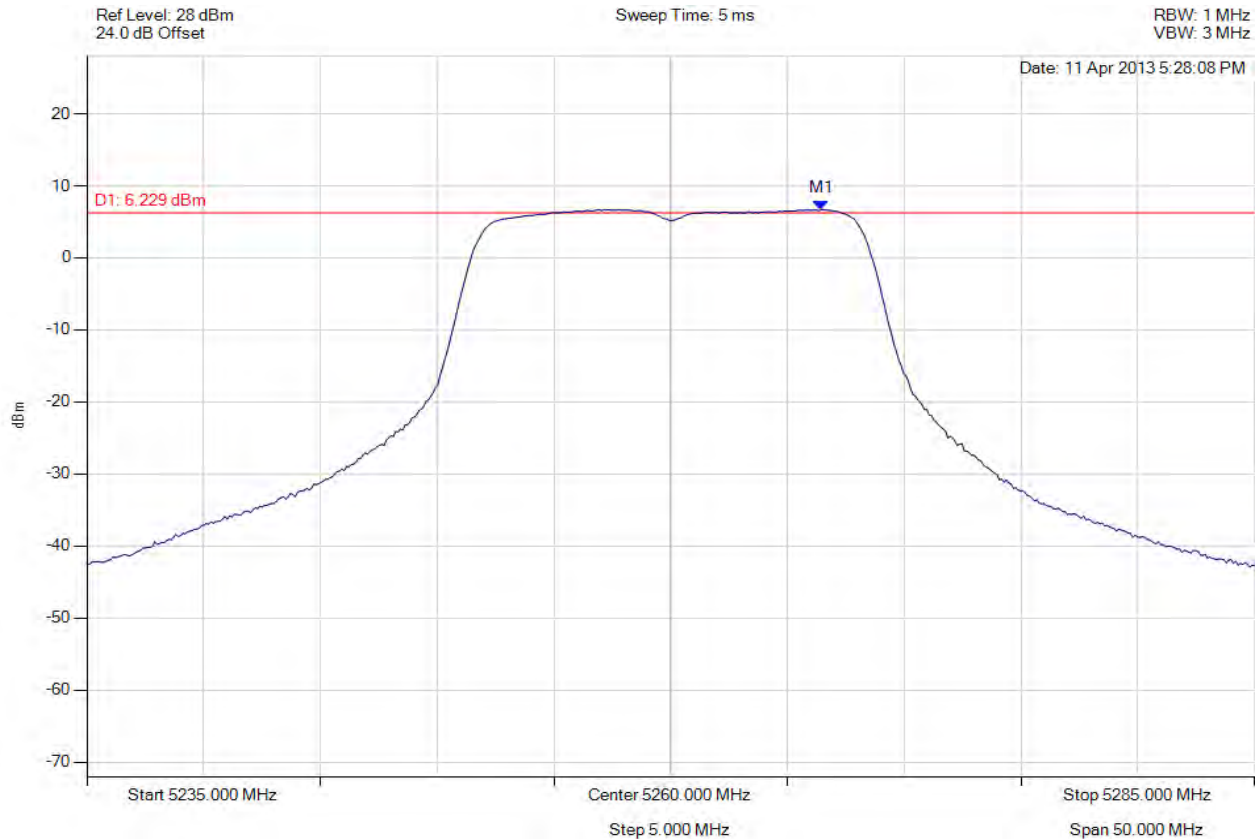


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PEAK POWER SPECTRAL DENSITY

Variant: 802.11a, Channel: 5260.00 MHz, Chain c, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5266.463 MHz : 6.707 dBm	Limit: ≤ 6.229 dBm Margin: 0.48 dB

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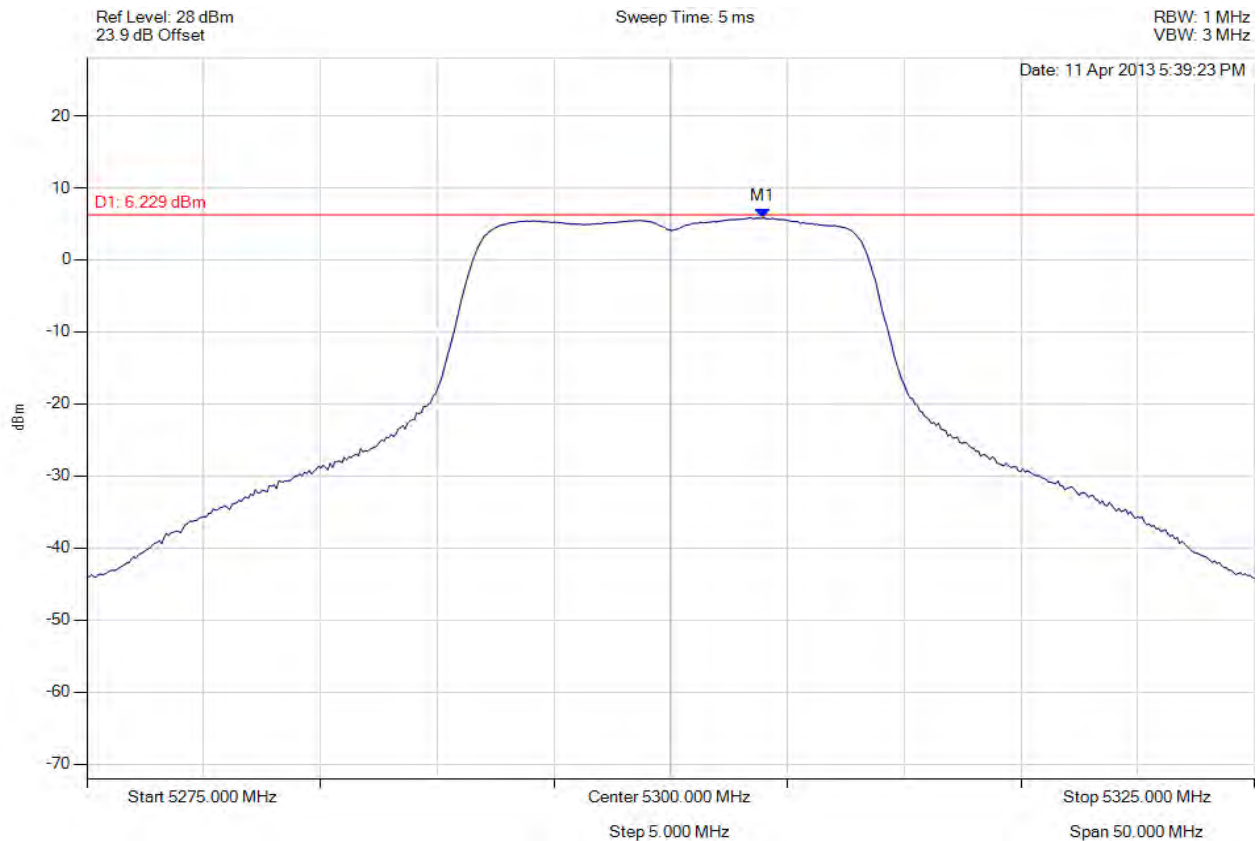


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PEAK POWER SPECTRAL DENSITY

Variant: 802.11a, Channel: 5300.00 MHz, Chain a, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5303.958 MHz : 5.819 dBm	Limit: ≤ 6.229 dBm Margin: -0.41 dB

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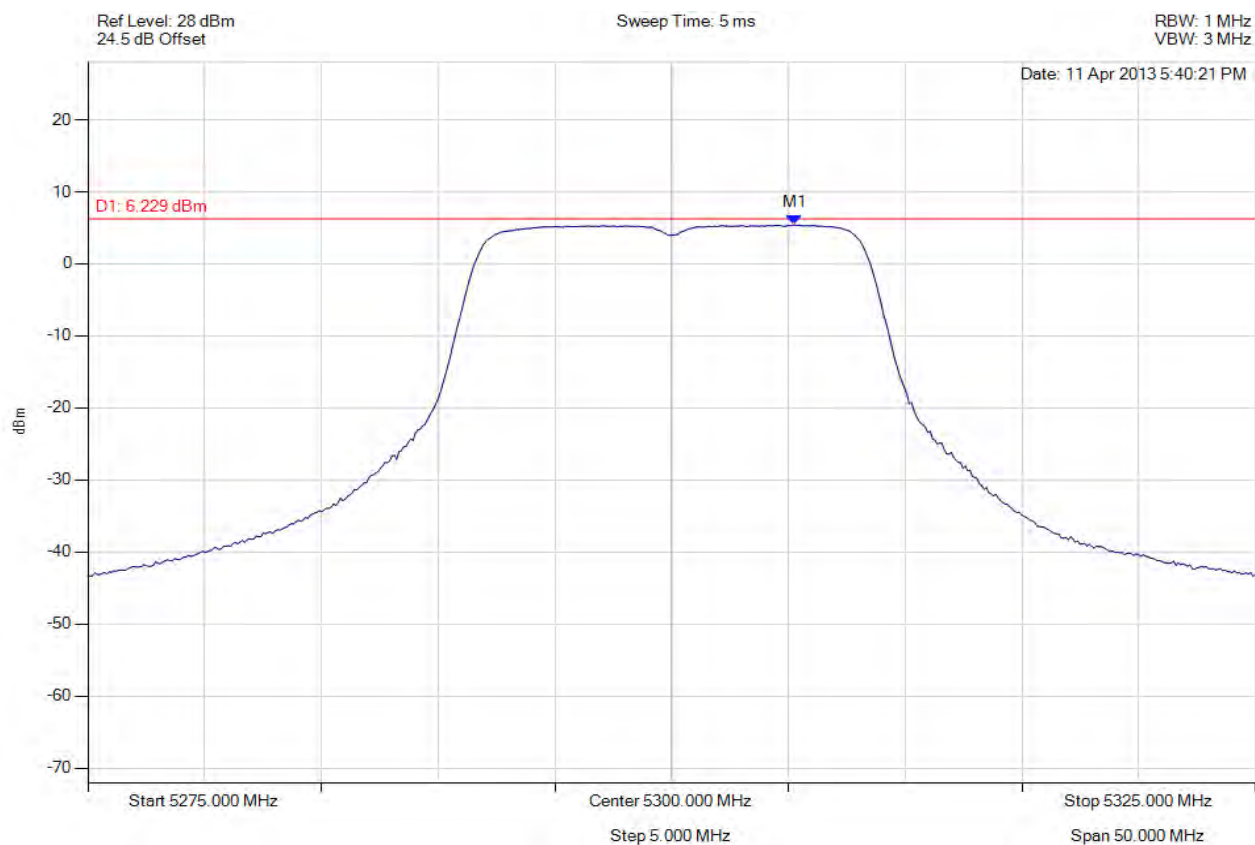


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PEAK POWER SPECTRAL DENSITY

Variant: 802.11a, Channel: 5300.00 MHz, Chain b, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5305.261 MHz : 5.415 dBm	Limit: ≤ 6.229 dBm Margin: -0.81 dB

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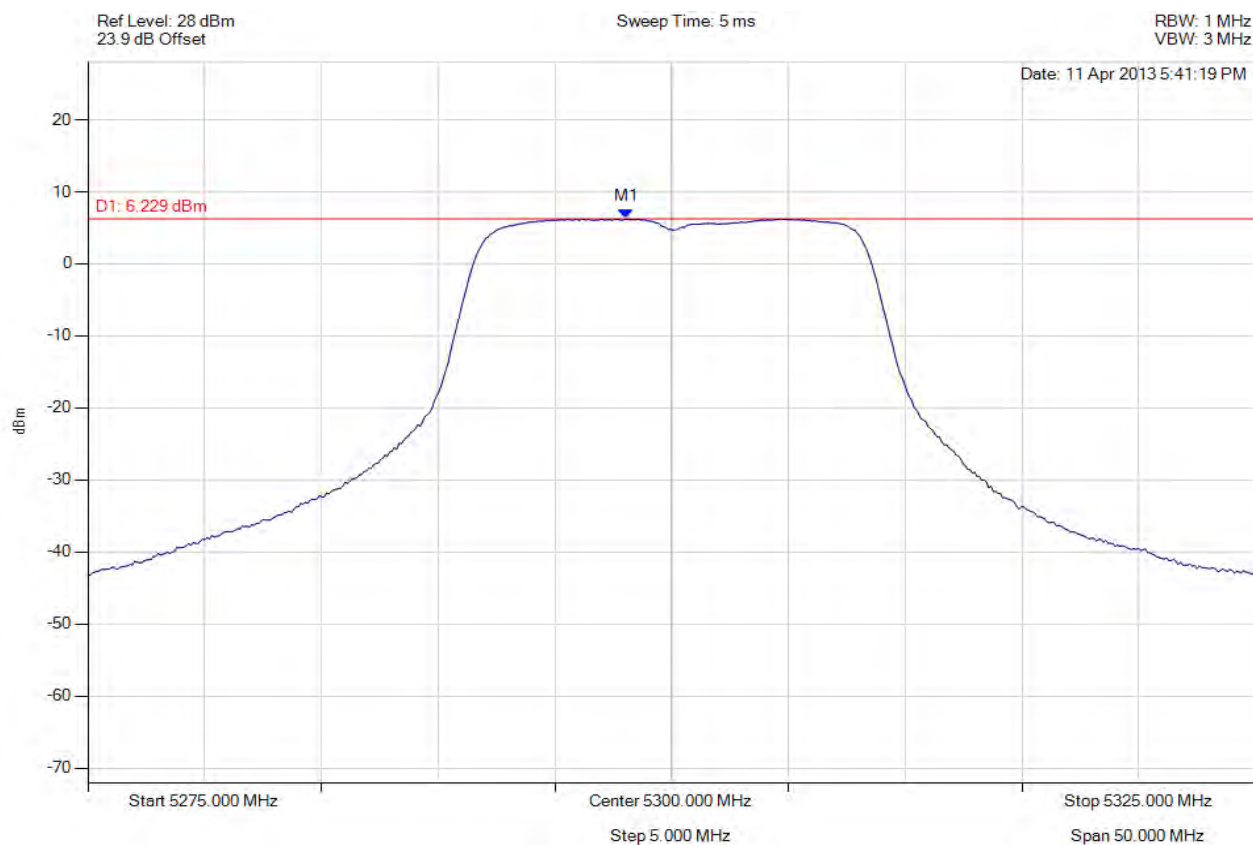


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PEAK POWER SPECTRAL DENSITY

Variant: 802.11a, Channel: 5300.00 MHz, Chain c, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5298.046 MHz : 6.229 dBm	Limit: ≤ 6.229 dBm Margin: 0.00 dB

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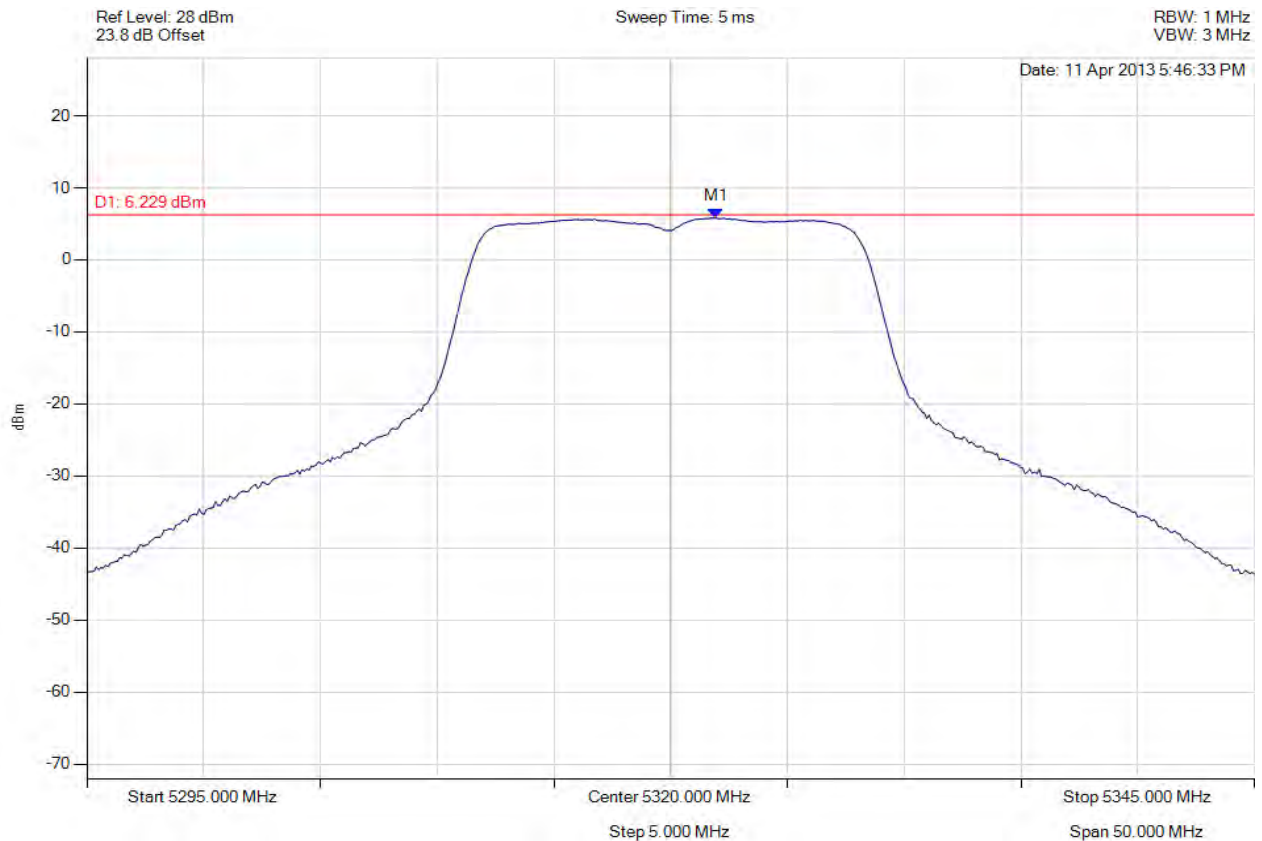


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PEAK POWER SPECTRAL DENSITY

Variant: 802.11a, Channel: 5320.00 MHz, Chain a, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5321.954 MHz : 5.800 dBm	Limit: ≤ 6.229 dBm Margin: -0.43 dB

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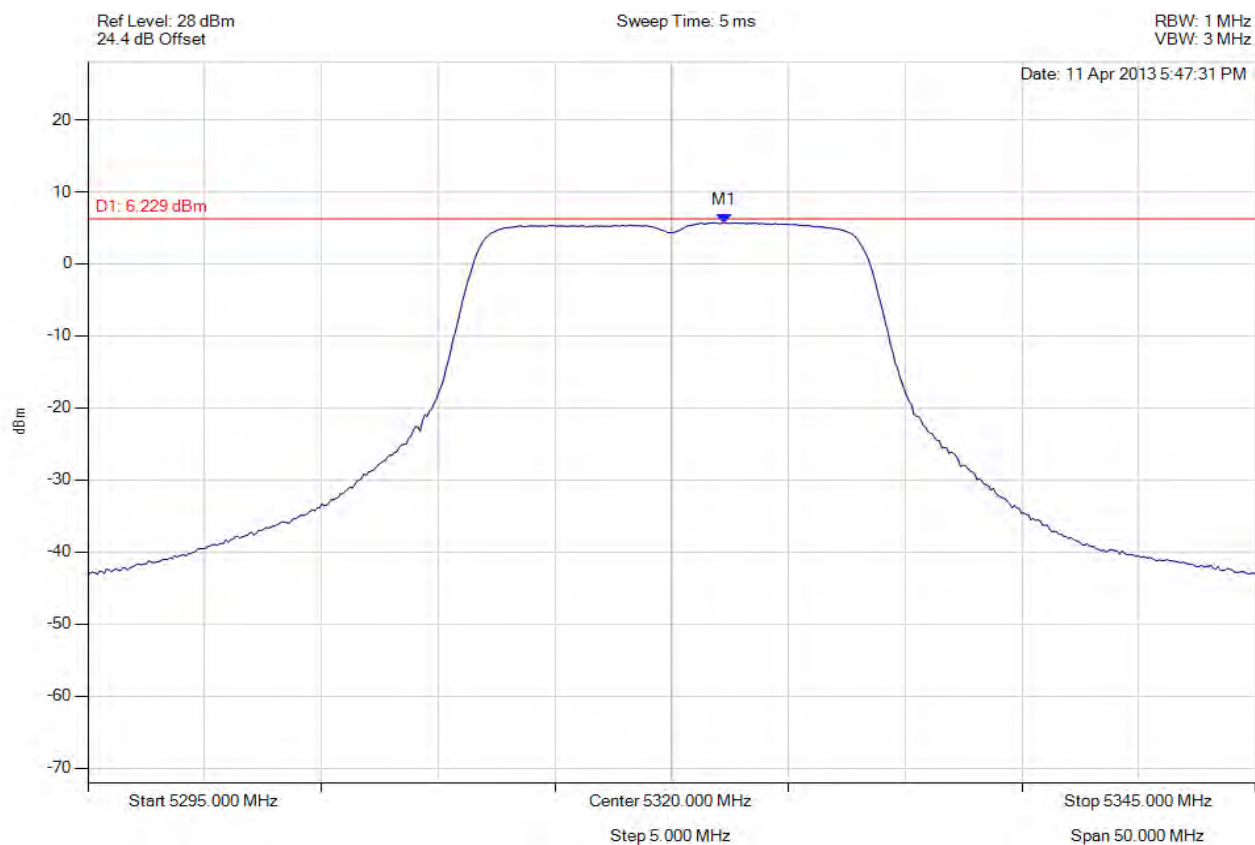


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PEAK POWER SPECTRAL DENSITY

Variant: 802.11a, Channel: 5320.00 MHz, Chain b, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5322.255 MHz : 5.711 dBm	Limit: ≤ 6.229 dBm Margin: -0.52 dB

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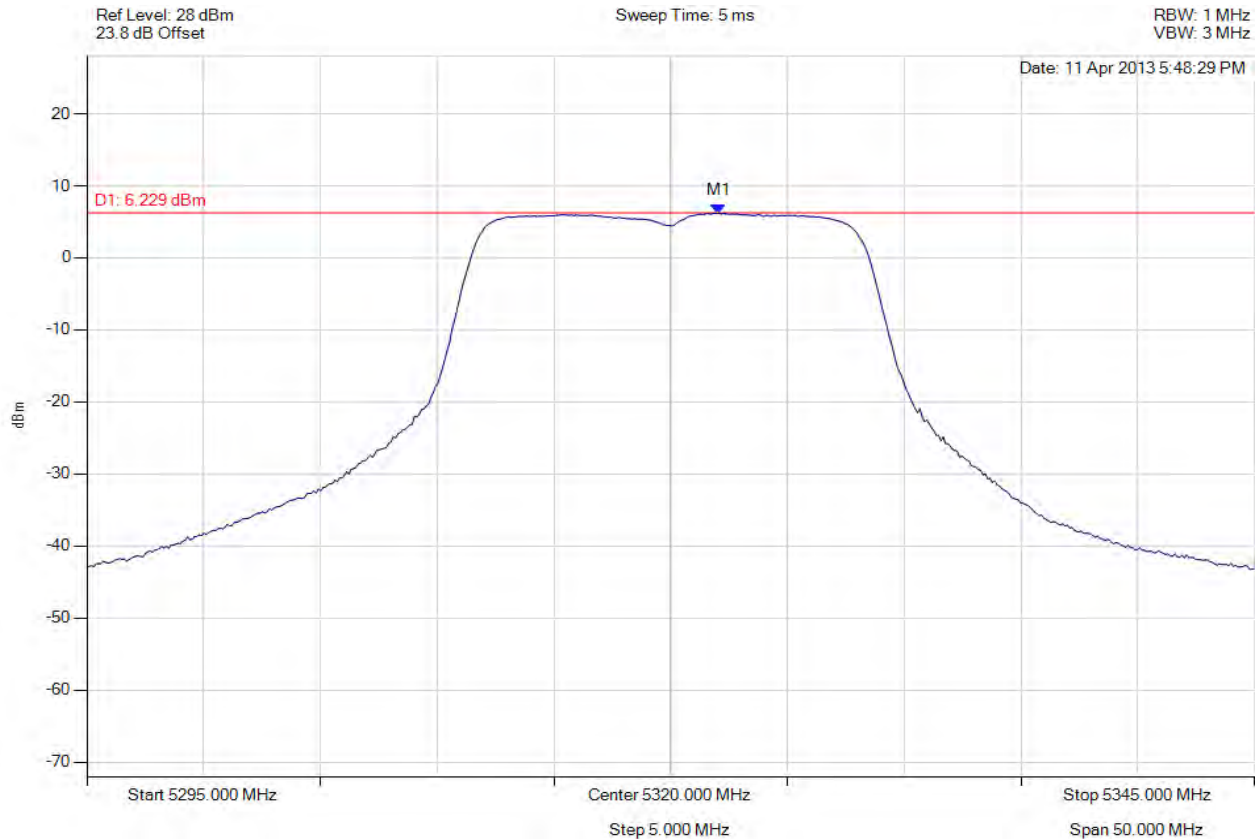


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PEAK POWER SPECTRAL DENSITY

Variant: 802.11a, Channel: 5320.00 MHz, Chain c, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5322.054 MHz : 6.212 dBm	Limit: ≤ 6.229 dBm Margin: -0.02 dB

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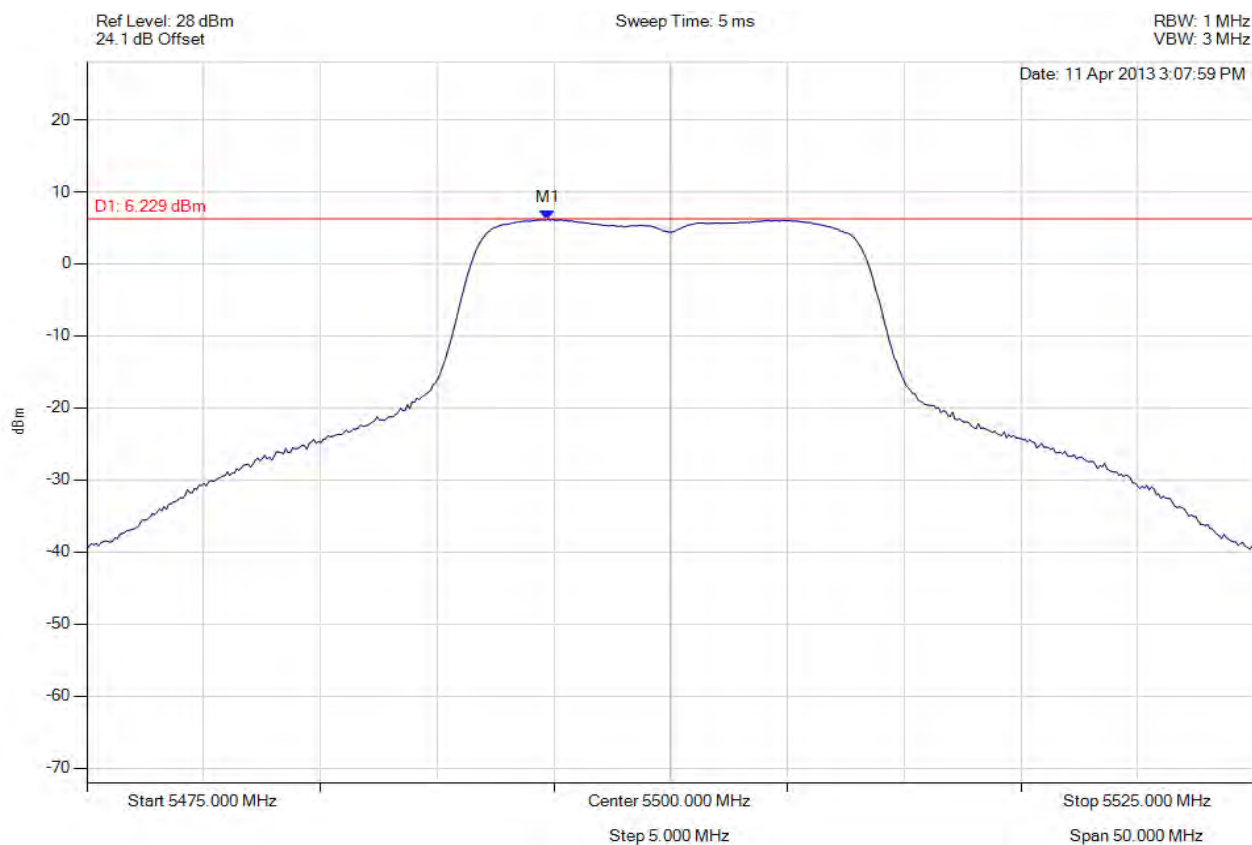


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PEAK POWER SPECTRAL DENSITY

Variant: 802.11a, Channel: 5500.00 MHz, Chain a, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5494.739 MHz : 6.173 dBm	Limit: ≤ 6.229 dBm Margin: -0.06 dB

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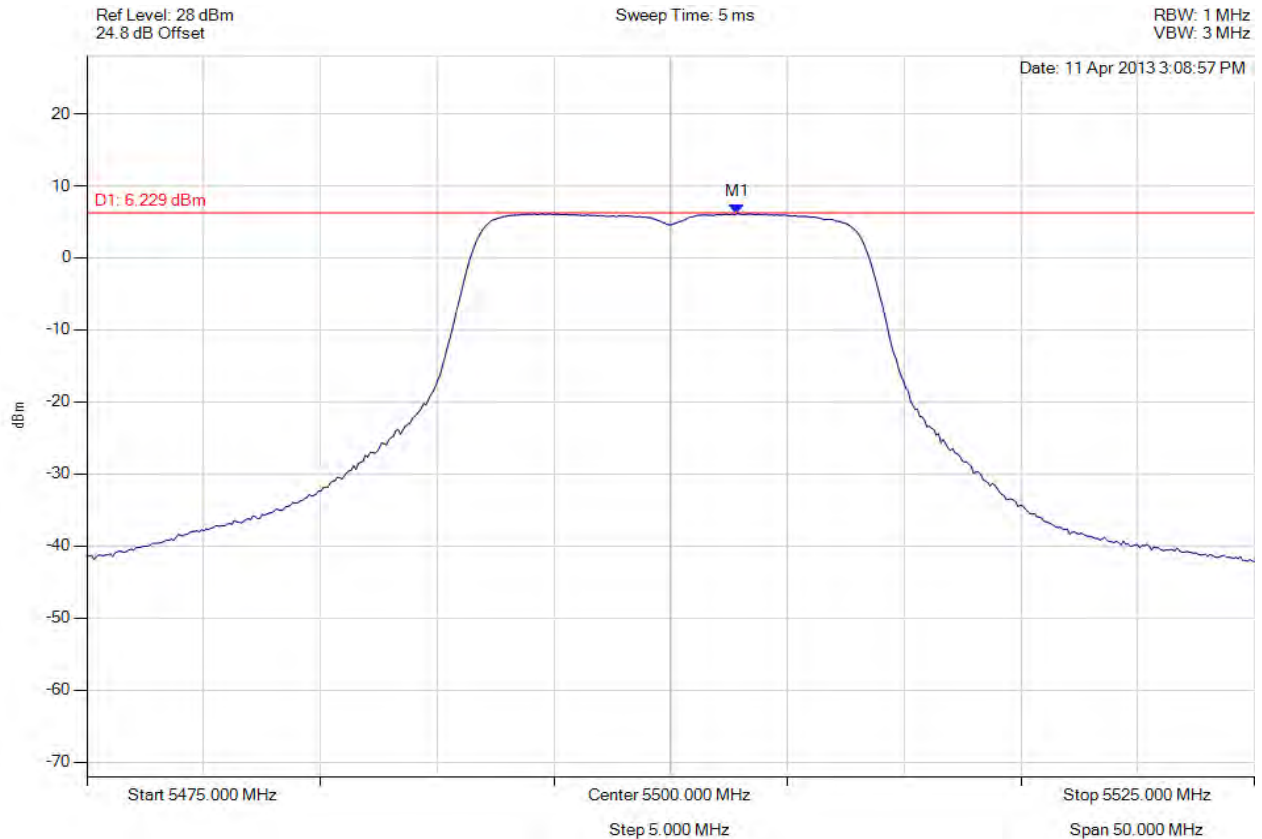


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PEAK POWER SPECTRAL DENSITY

Variant: 802.11a, Channel: 5500.00 MHz, Chain b, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5502.856 MHz : 6.148 dBm	Limit: ≤ 6.229 dBm Margin: -0.08 dB

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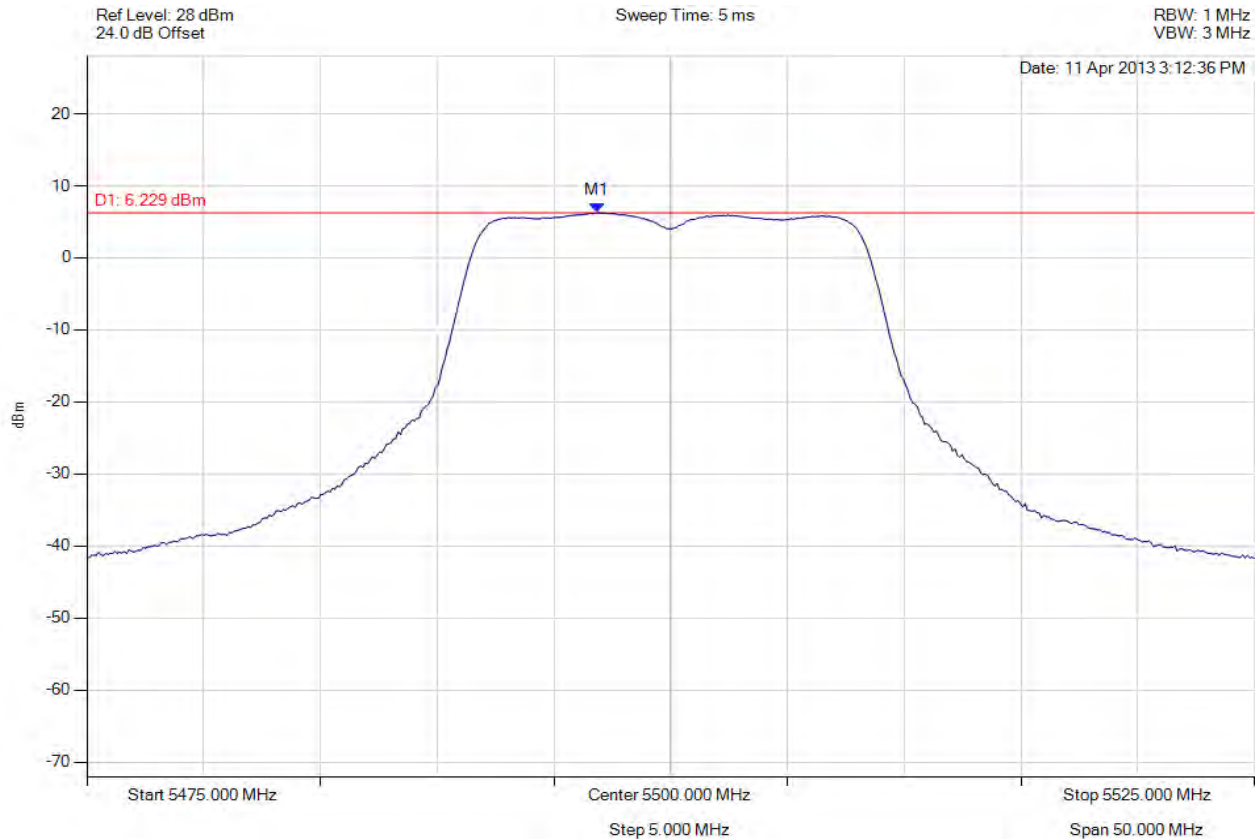


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PEAK POWER SPECTRAL DENSITY

Variant: 802.11a, Channel: 5500.00 MHz, Chain c, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5496.844 MHz : 6.238 dBm	Limit: ≤ 6.229 dBm Margin: 0.01 dB

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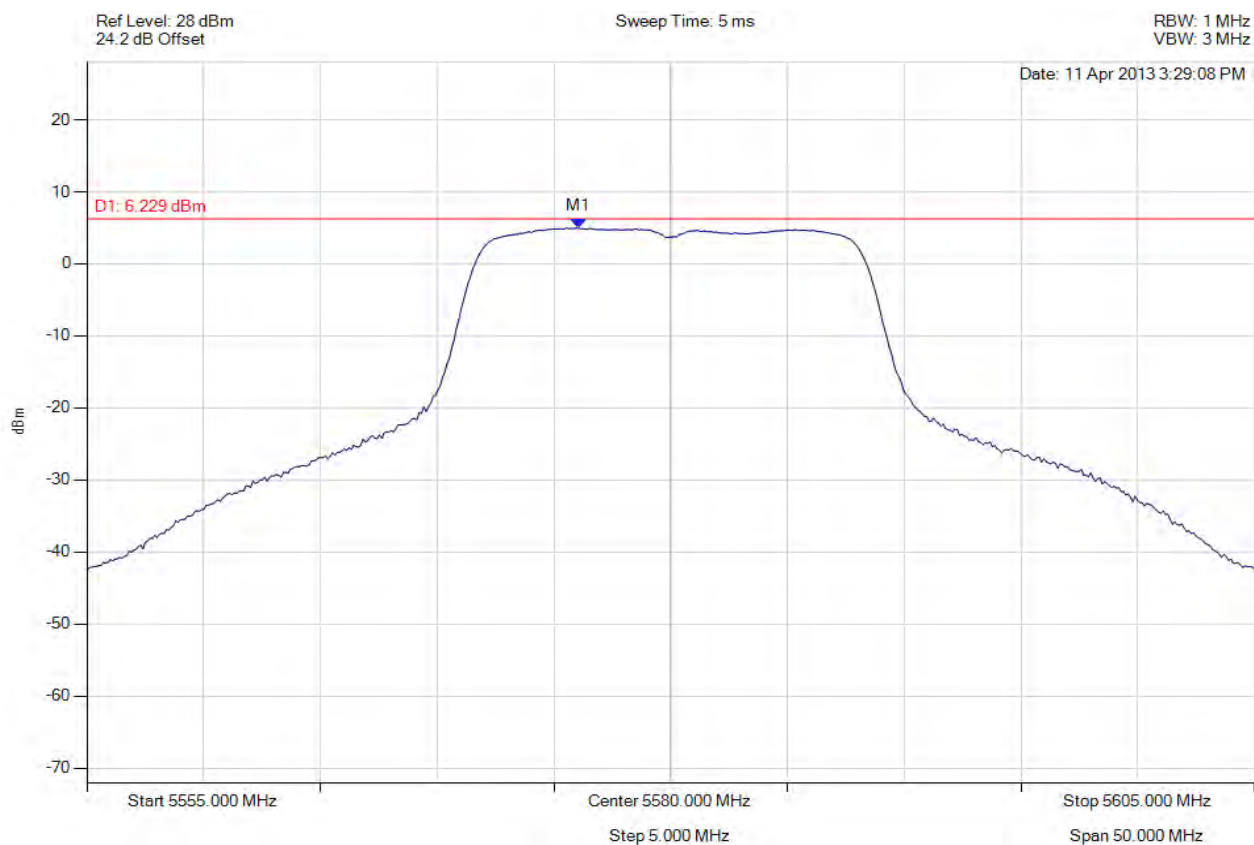


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PEAK POWER SPECTRAL DENSITY

Variant: 802.11a, Channel: 5580.00 MHz, Chain a, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5576.042 MHz : 4.987 dBm	Limit: ≤ 6.229 dBm Margin: -1.24 dB

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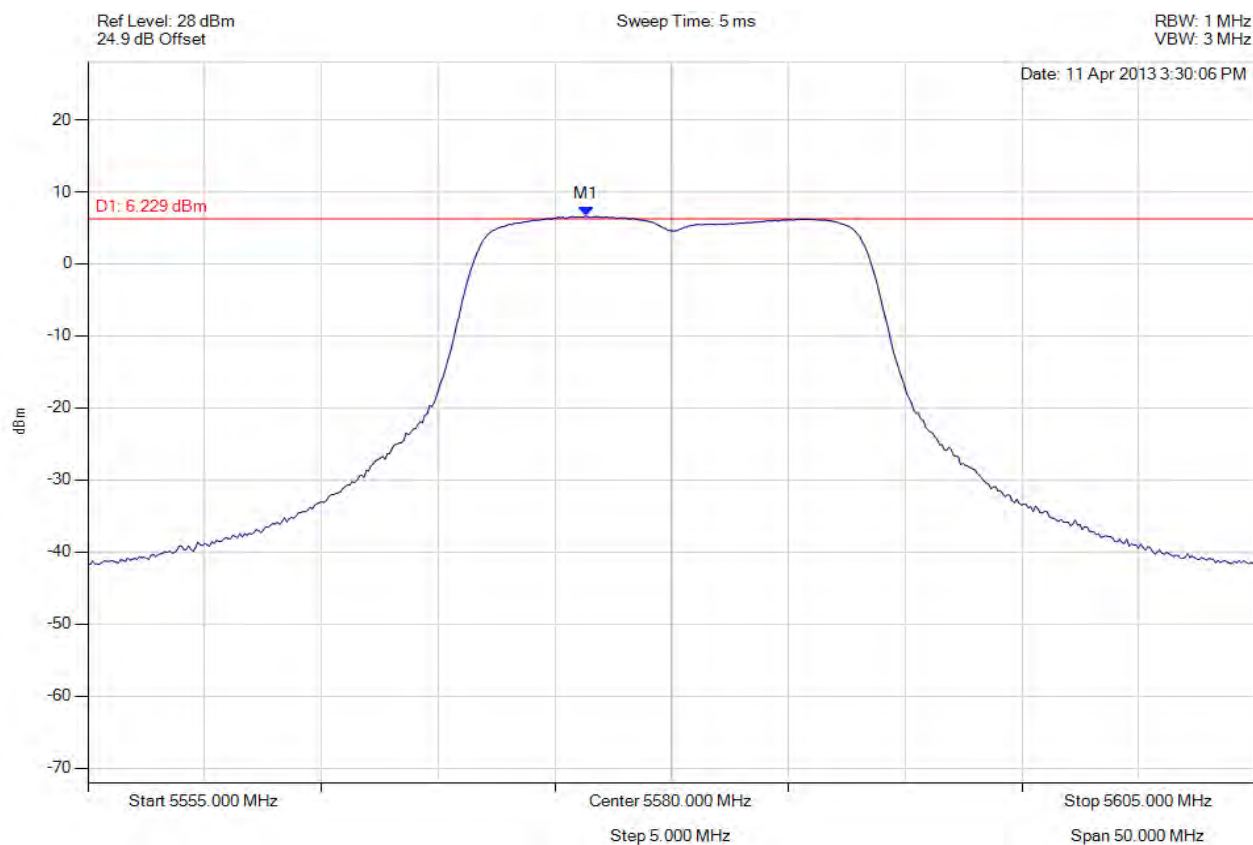


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PEAK POWER SPECTRAL DENSITY

Variant: 802.11a, Channel: 5580.00 MHz, Chain b, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5576.343 MHz : 6.611 dBm	Limit: ≤ 6.229 dBm Margin: 0.38 dB

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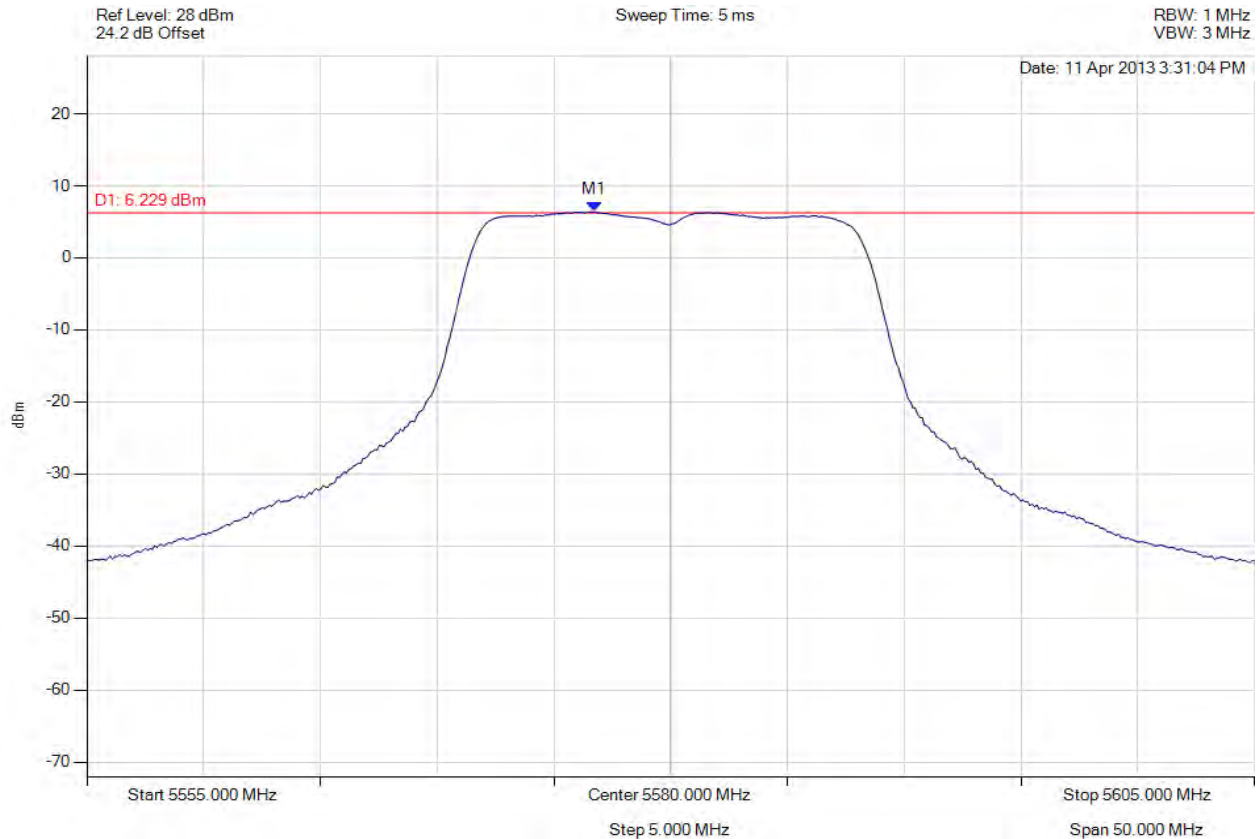


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PEAK POWER SPECTRAL DENSITY

Variant: 802.11a, Channel: 5580.00 MHz, Chain c, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5576.743 MHz : 6.392 dBm	Limit: ≤ 6.229 dBm Margin: 0.16 dB

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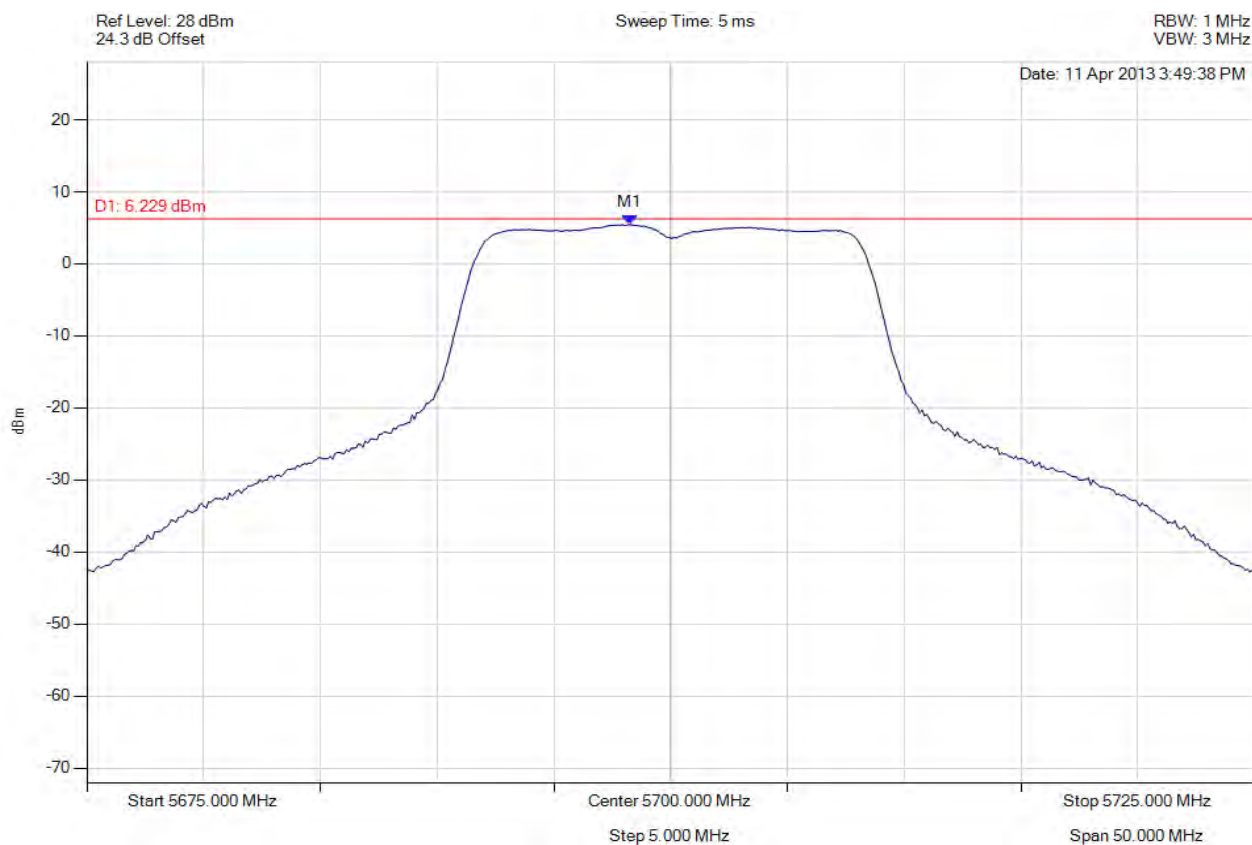


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PEAK POWER SPECTRAL DENSITY

Variant: 802.11a, Channel: 5700.00 MHz, Chain a, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5698.246 MHz : 5.445 dBm	Limit: ≤ 6.229 dBm Margin: -0.78 dB

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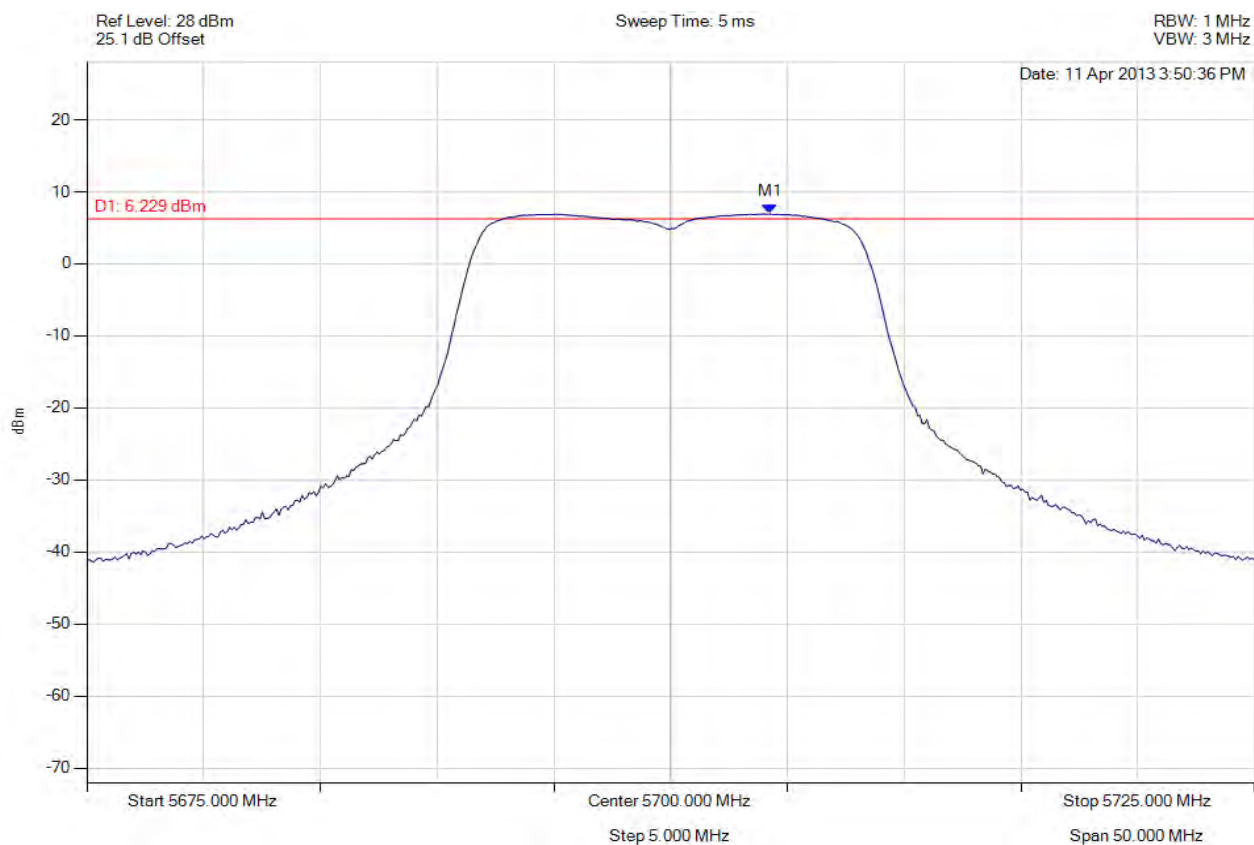


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PEAK POWER SPECTRAL DENSITY

Variant: 802.11a, Channel: 5700.00 MHz, Chain b, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5704.259 MHz : 6.922 dBm	Limit: ≤ 6.229 dBm Margin: 0.69 dB

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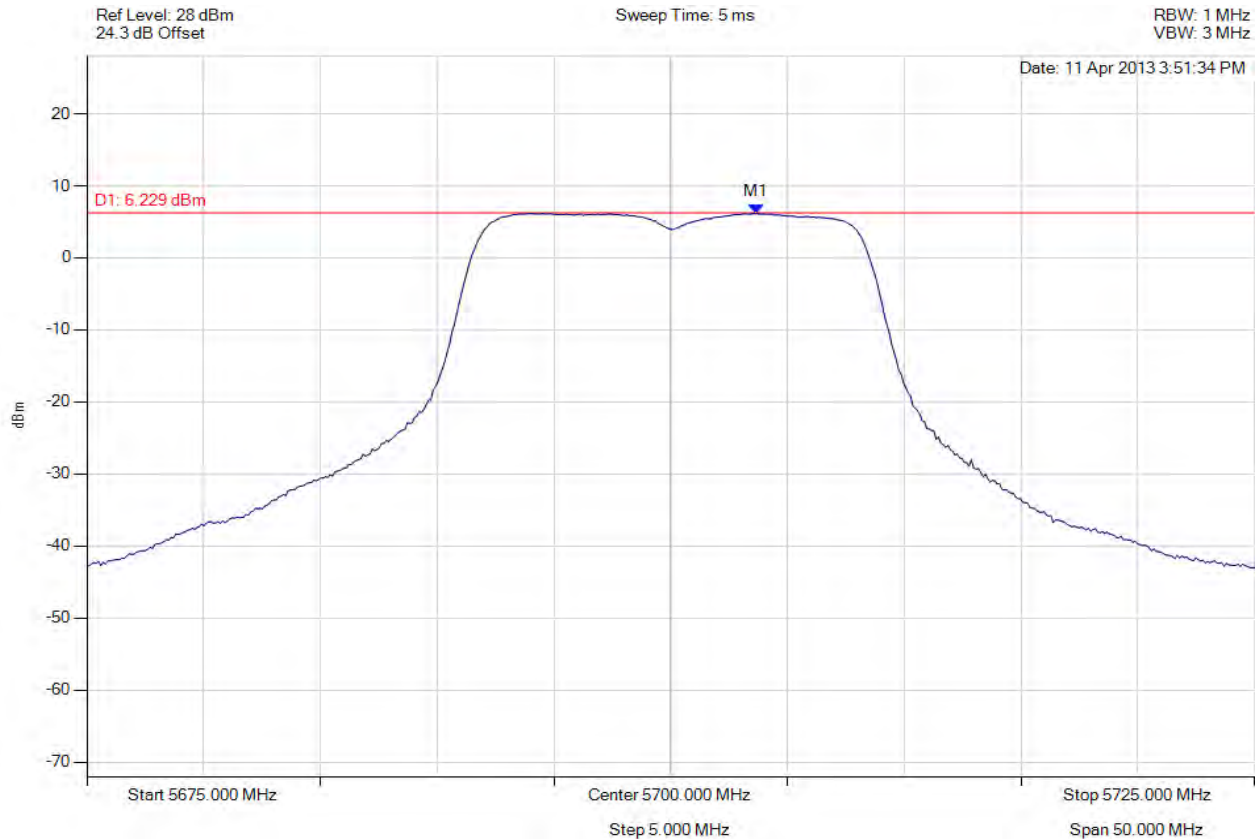


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PEAK POWER SPECTRAL DENSITY

Variant: 802.11a, Channel: 5700.00 MHz, Chain c, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5703.657 MHz : 6.130 dBm	Limit: ≤ 6.229 dBm Margin: -0.10 dB

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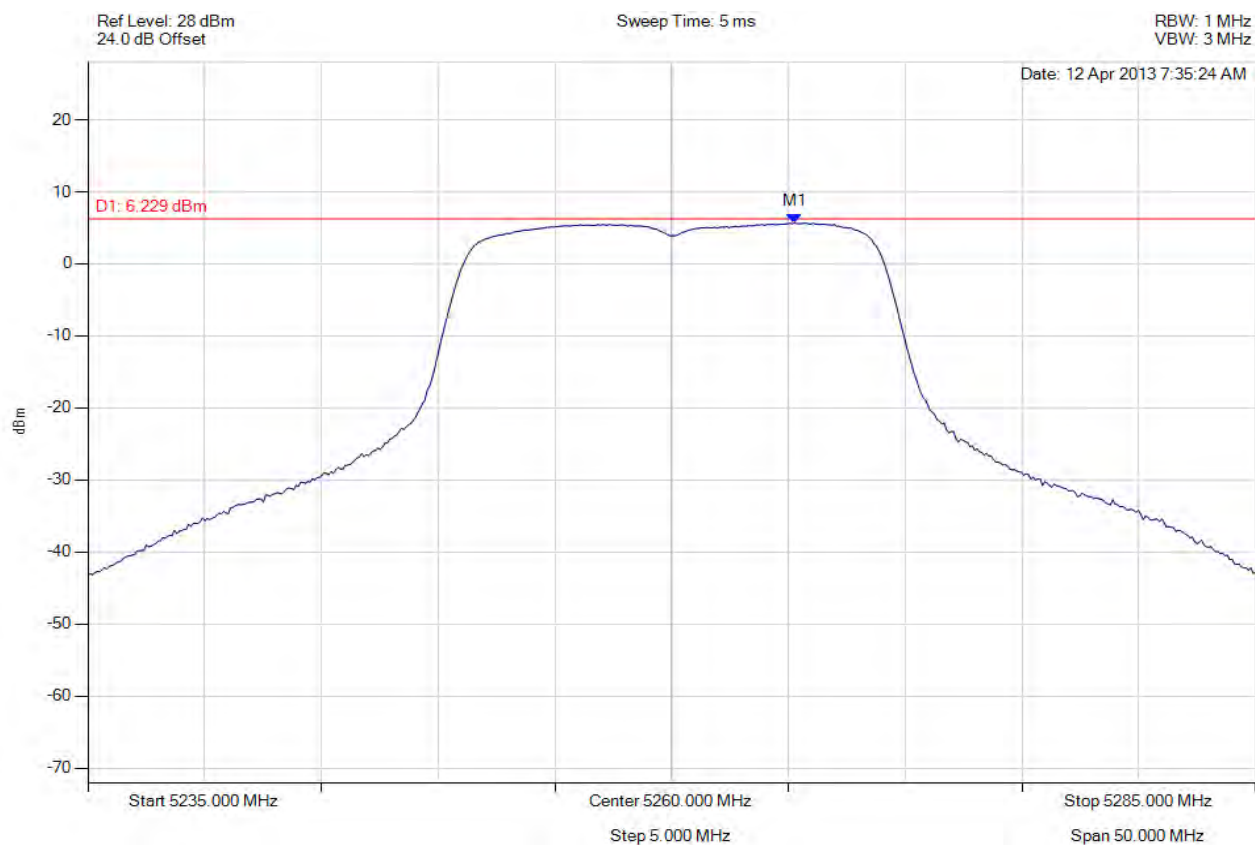


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PEAK POWER SPECTRAL DENSITY

Variant: 802.11n HT-20, Channel: 5260.00 MHz, Chain a, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5265.261 MHz : 5.565 dBm	Limit: ≤ 6.229 dBm Margin: -0.66 dB

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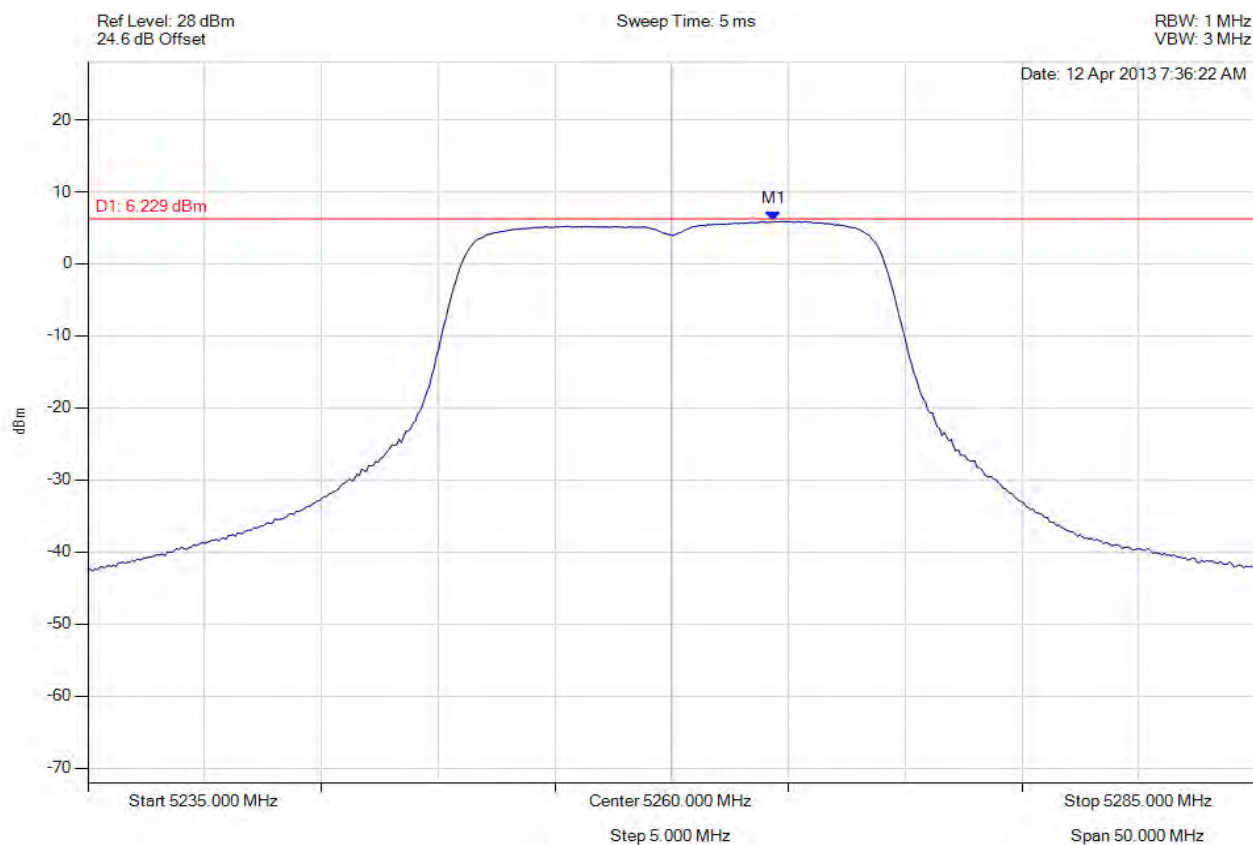


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PEAK POWER SPECTRAL DENSITY

Variant: 802.11n HT-20, Channel: 5260.00 MHz, Chain b, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5264.359 MHz : 5.901 dBm	Limit: ≤ 6.229 dBm Margin: -0.33 dB

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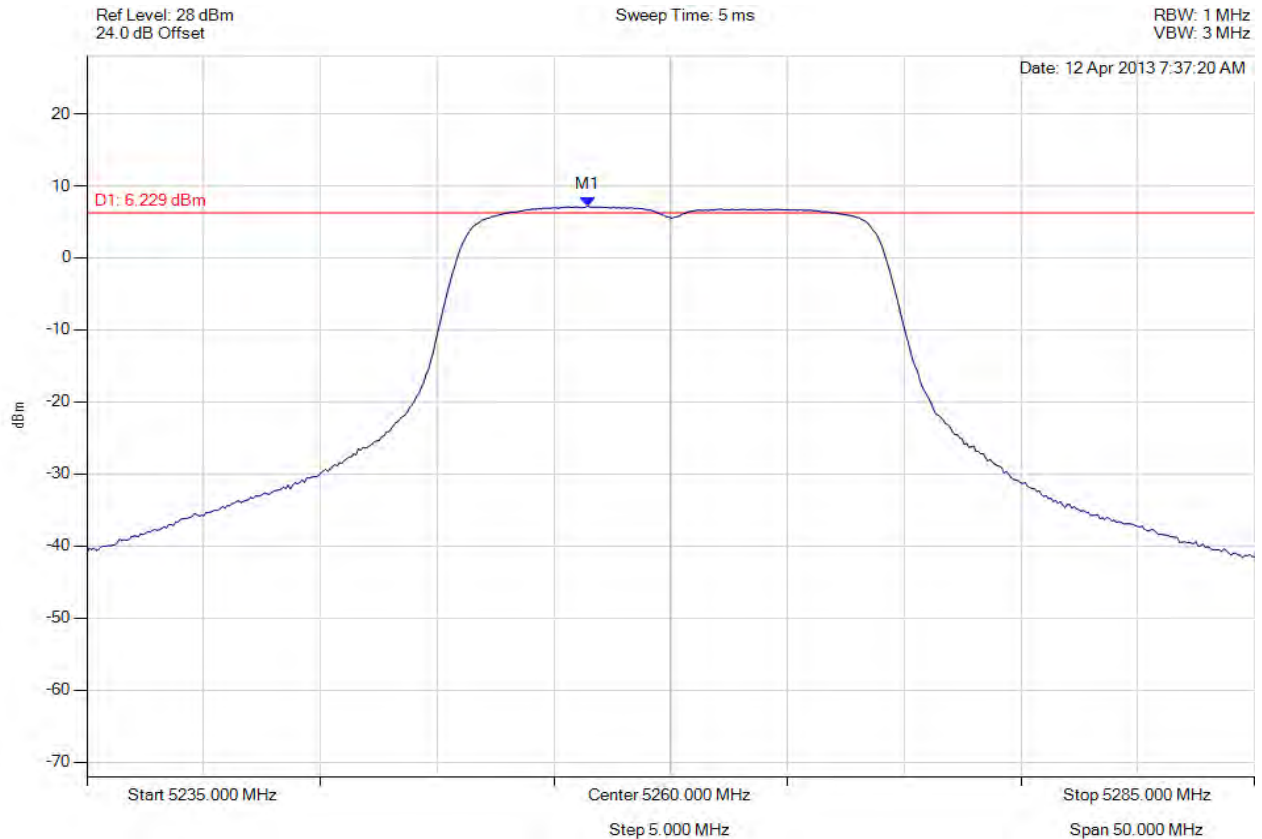


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PEAK POWER SPECTRAL DENSITY

Variant: 802.11n HT-20, Channel: 5260.00 MHz, Chain c, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5256.443 MHz : 7.010 dBm	Limit: ≤ 6.229 dBm Margin: 0.78 dB

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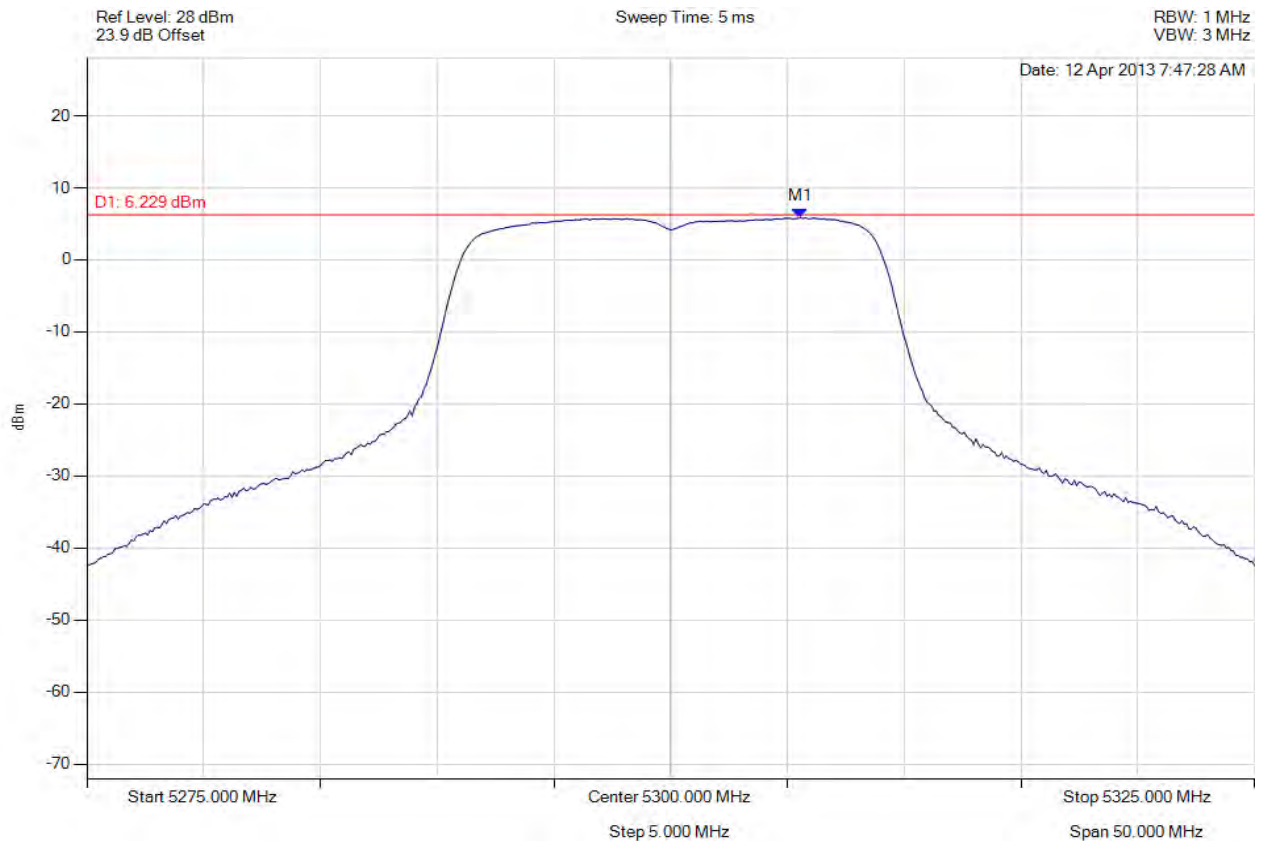


Title: APIN0114, APIN0115 802.11a/b/g/n
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PEAK POWER SPECTRAL DENSITY

Variant: 802.11n HT-20, Channel: 5300.00 MHz, Chain a, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5305.561 MHz : 5.837 dBm	Limit: ≤ 6.229 dBm Margin: -0.39 dB

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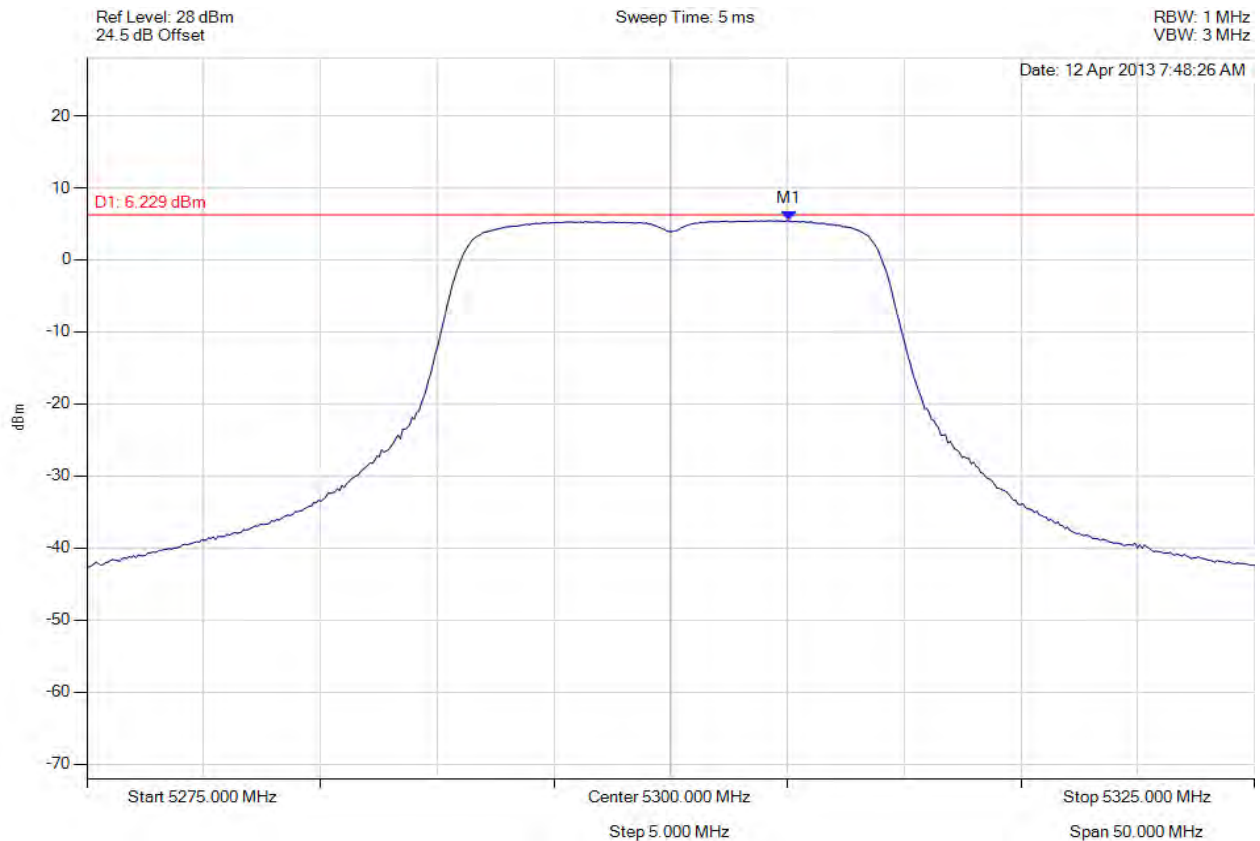


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PEAK POWER SPECTRAL DENSITY

Variant: 802.11n HT-20, Channel: 5300.00 MHz, Chain b, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5305.060 MHz : 5.434 dBm	Limit: ≤ 6.229 dBm Margin: -0.79 dB

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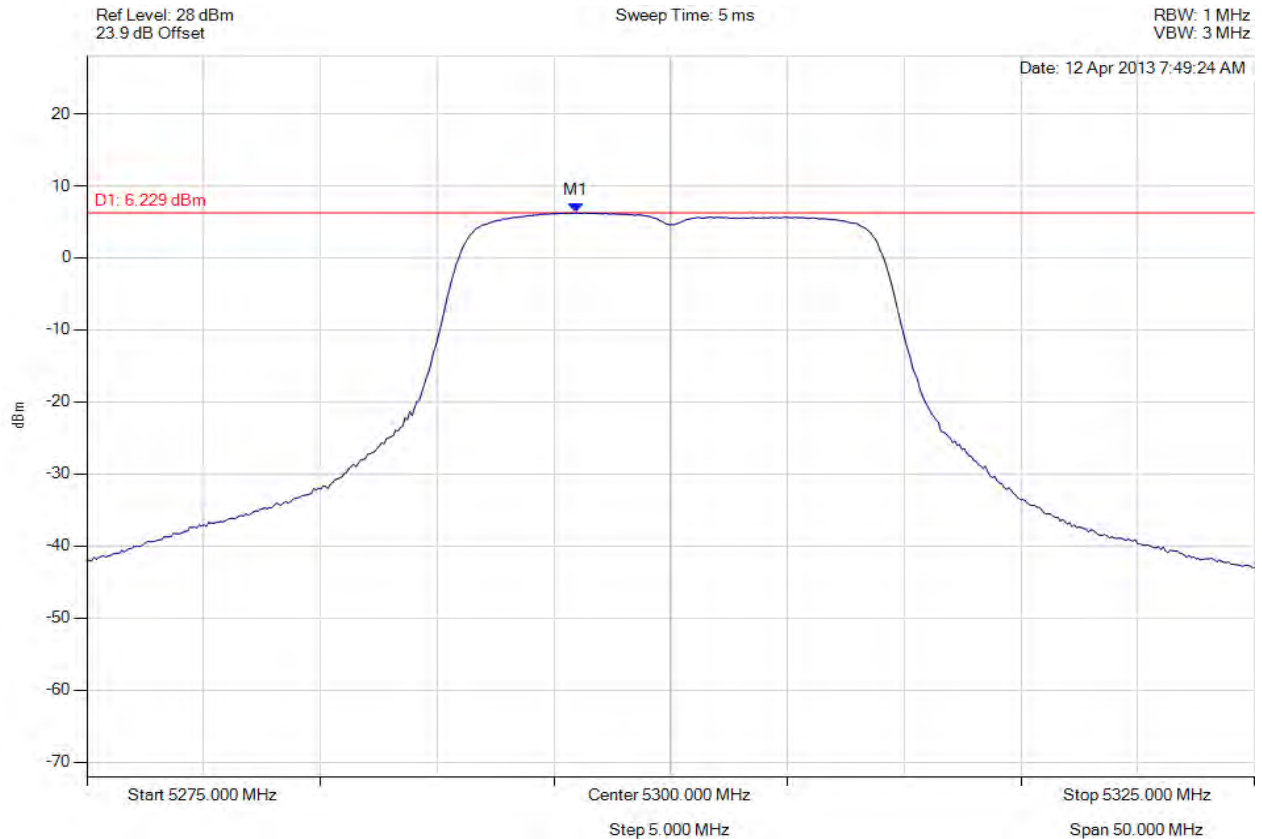


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PEAK POWER SPECTRAL DENSITY

Variant: 802.11n HT-20, Channel: 5300.00 MHz, Chain c, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5295.942 MHz : 6.264 dBm	Limit: ≤ 6.229 dBm Margin: 0.04 dB

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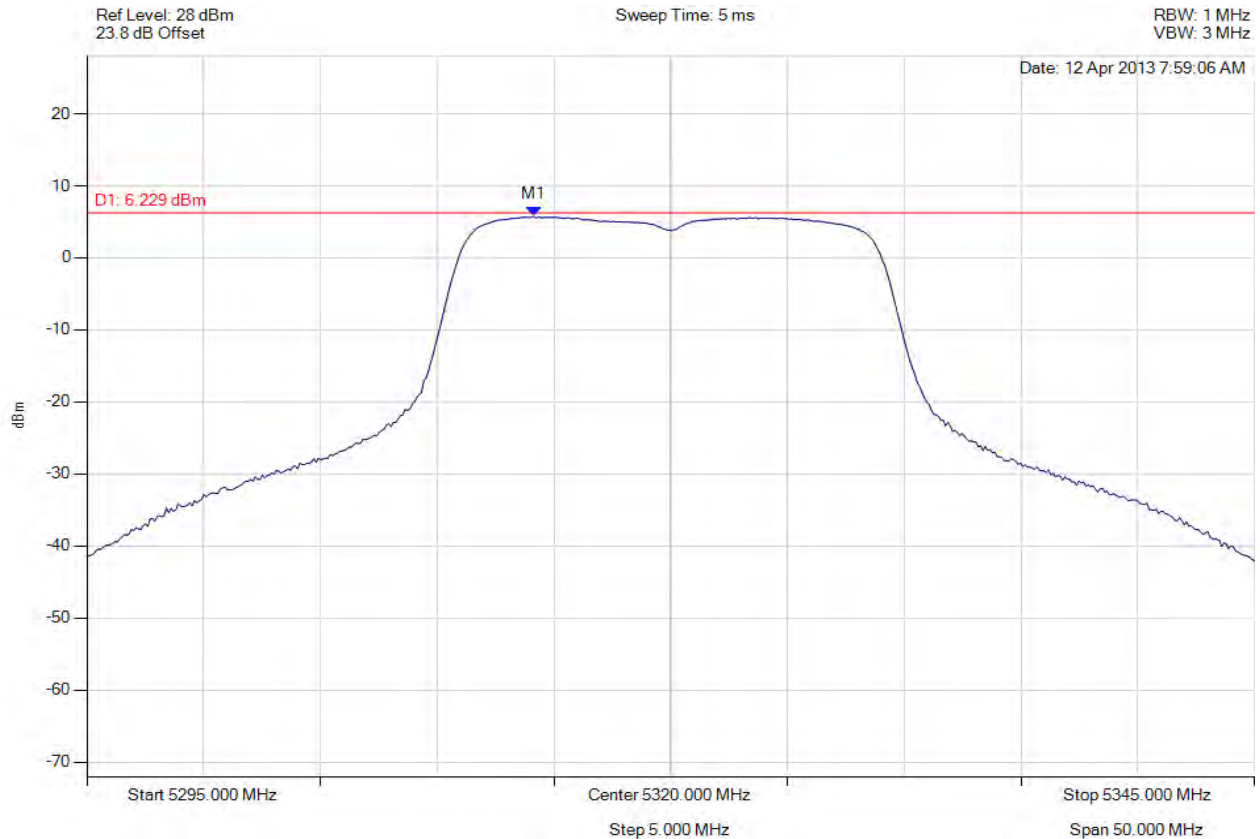


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PEAK POWER SPECTRAL DENSITY

Variant: 802.11n HT-20, Channel: 5320.00 MHz, Chain a, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5314.138 MHz : 5.740 dBm	Limit: ≤ 6.229 dBm Margin: -0.49 dB

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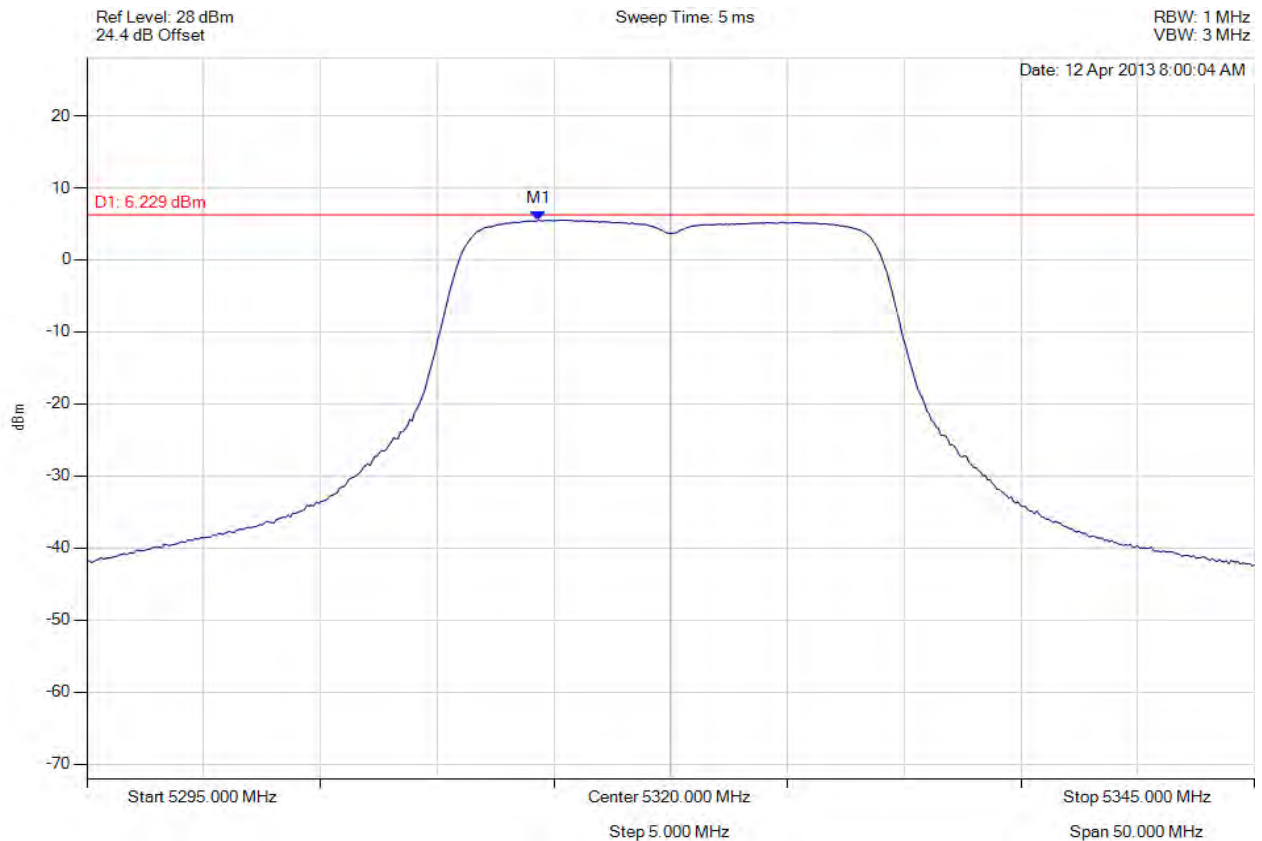


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PEAK POWER SPECTRAL DENSITY

Variant: 802.11n HT-20, Channel: 5320.00 MHz, Chain b, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5314.339 MHz : 5.538 dBm	Limit: ≤ 6.229 dBm Margin: -0.69 dB

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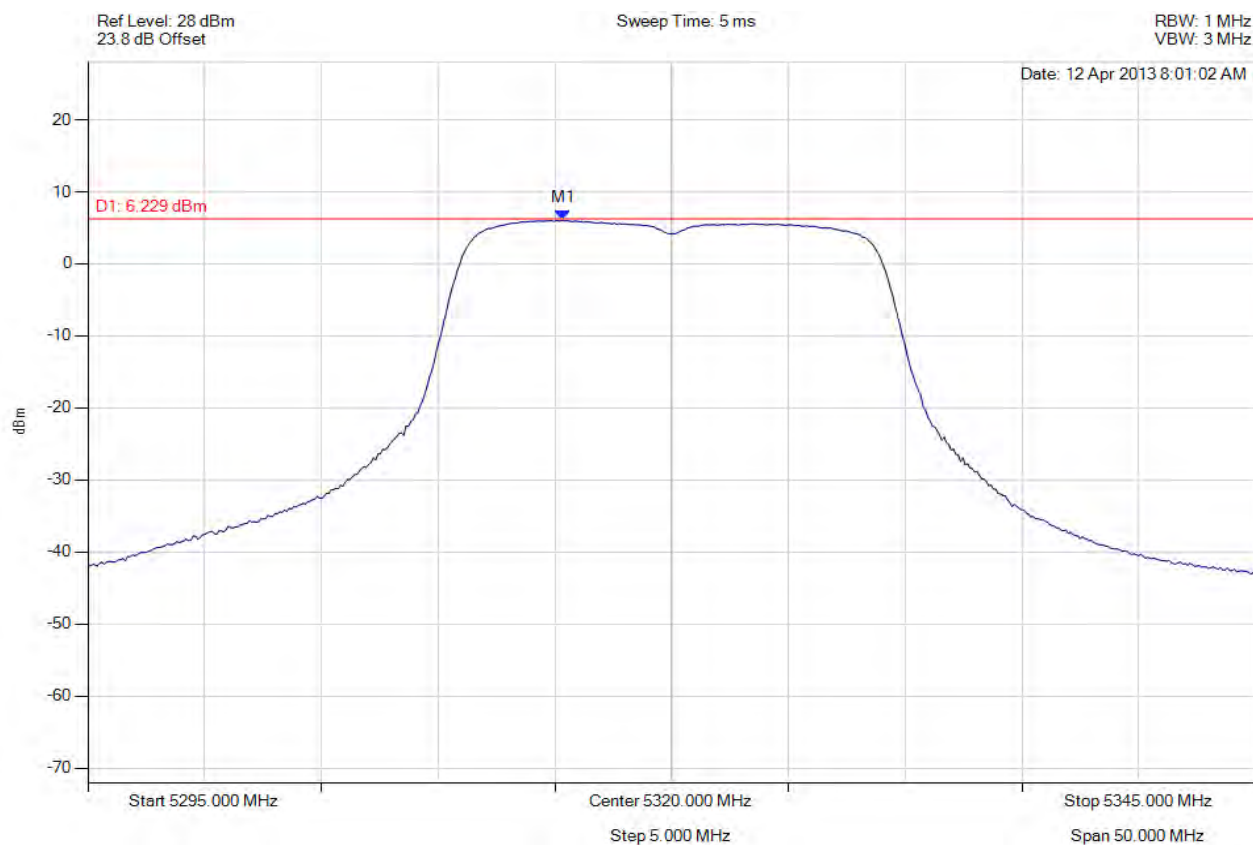


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PEAK POWER SPECTRAL DENSITY

Variant: 802.11n HT-20, Channel: 5320.00 MHz, Chain c, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5315.341 MHz : 6.062 dBm	Limit: ≤ 6.229 dBm Margin: -0.17 dB

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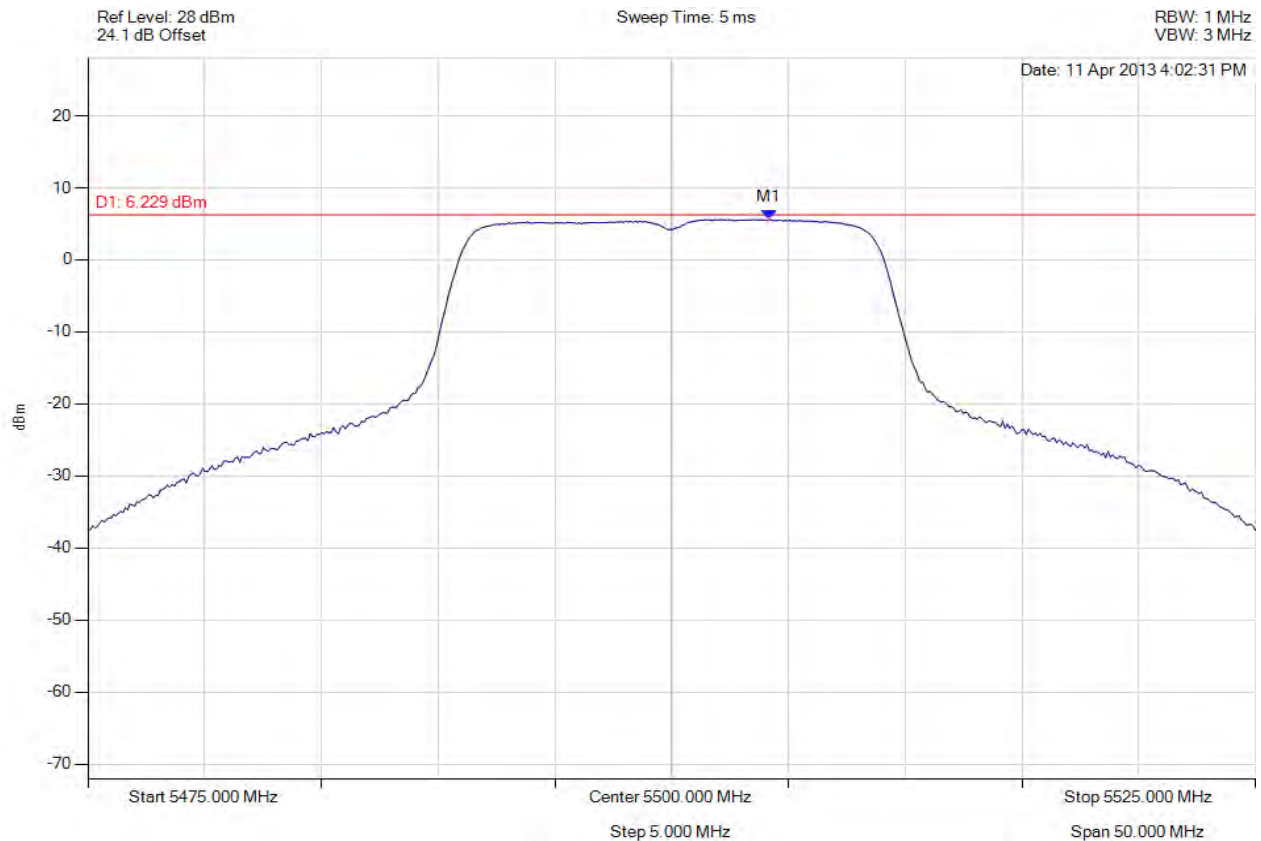


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PEAK POWER SPECTRAL DENSITY

Variant: 802.11n HT-20, Channel: 5500.00 MHz, Chain a, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5504.158 MHz : 5.612 dBm	Limit: ≤ 6.229 dBm Margin: -0.62 dB

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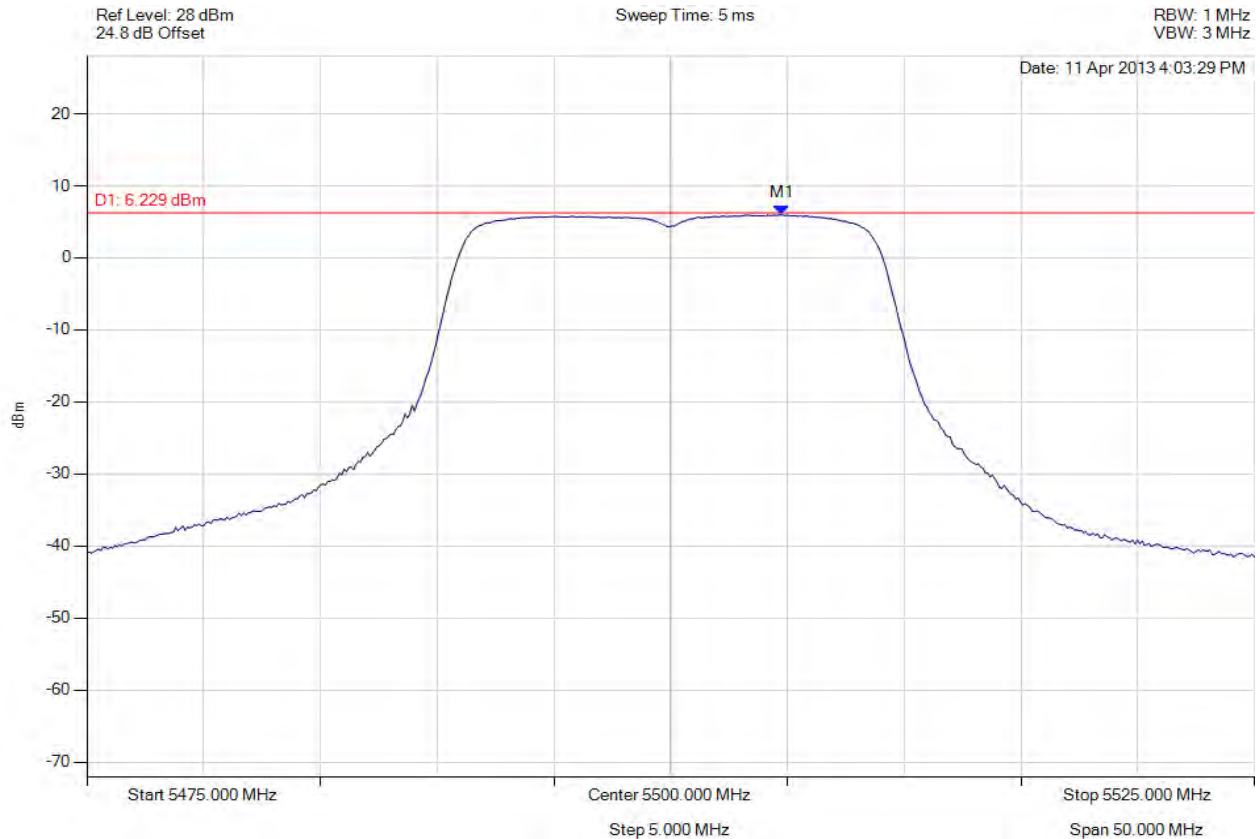


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PEAK POWER SPECTRAL DENSITY

Variant: 802.11n HT-20, Channel: 5500.00 MHz, Chain b, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5504.760 MHz : 5.973 dBm	Limit: ≤ 6.229 dBm Margin: -0.26 dB

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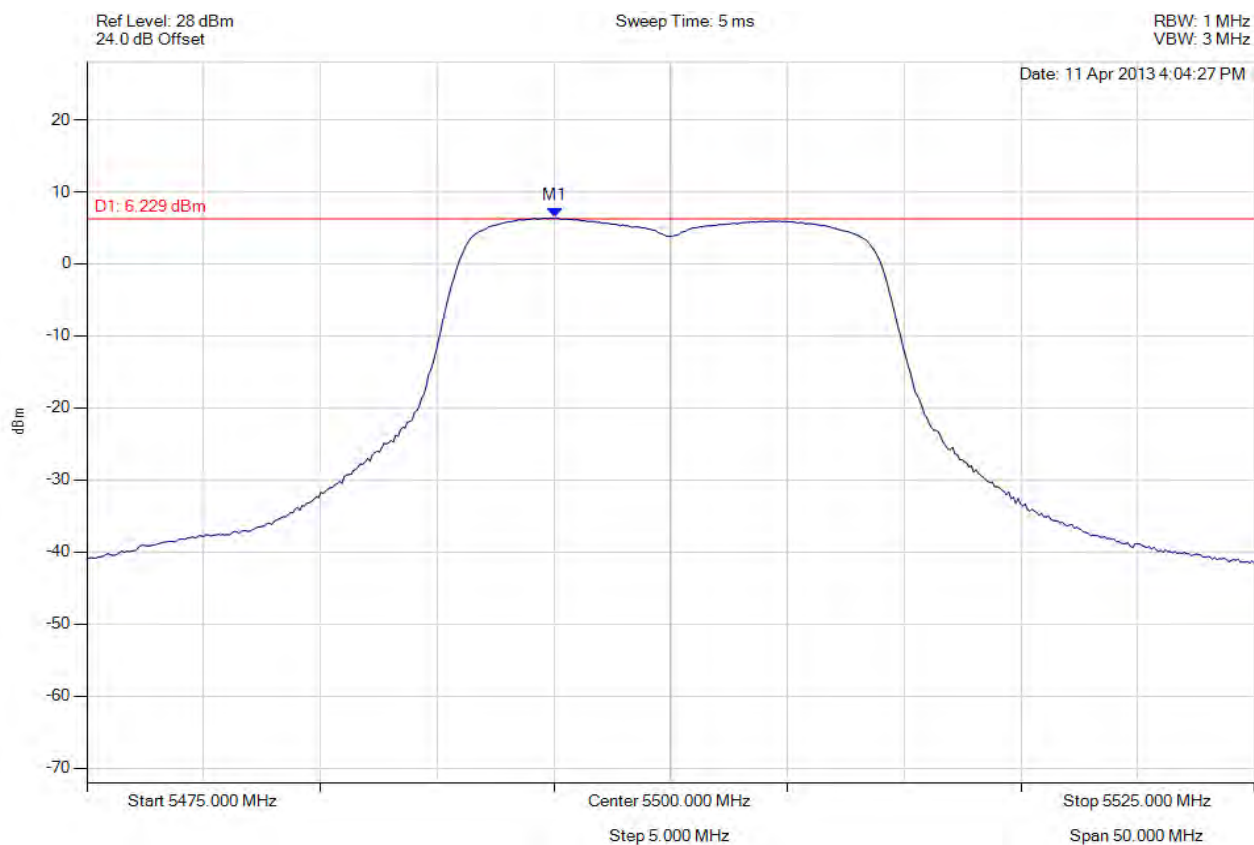


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PEAK POWER SPECTRAL DENSITY

Variant: 802.11n HT-20, Channel: 5500.00 MHz, Chain c, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5495.040 MHz : 6.396 dBm	Limit: ≤ 6.229 dBm Margin: 0.17 dB

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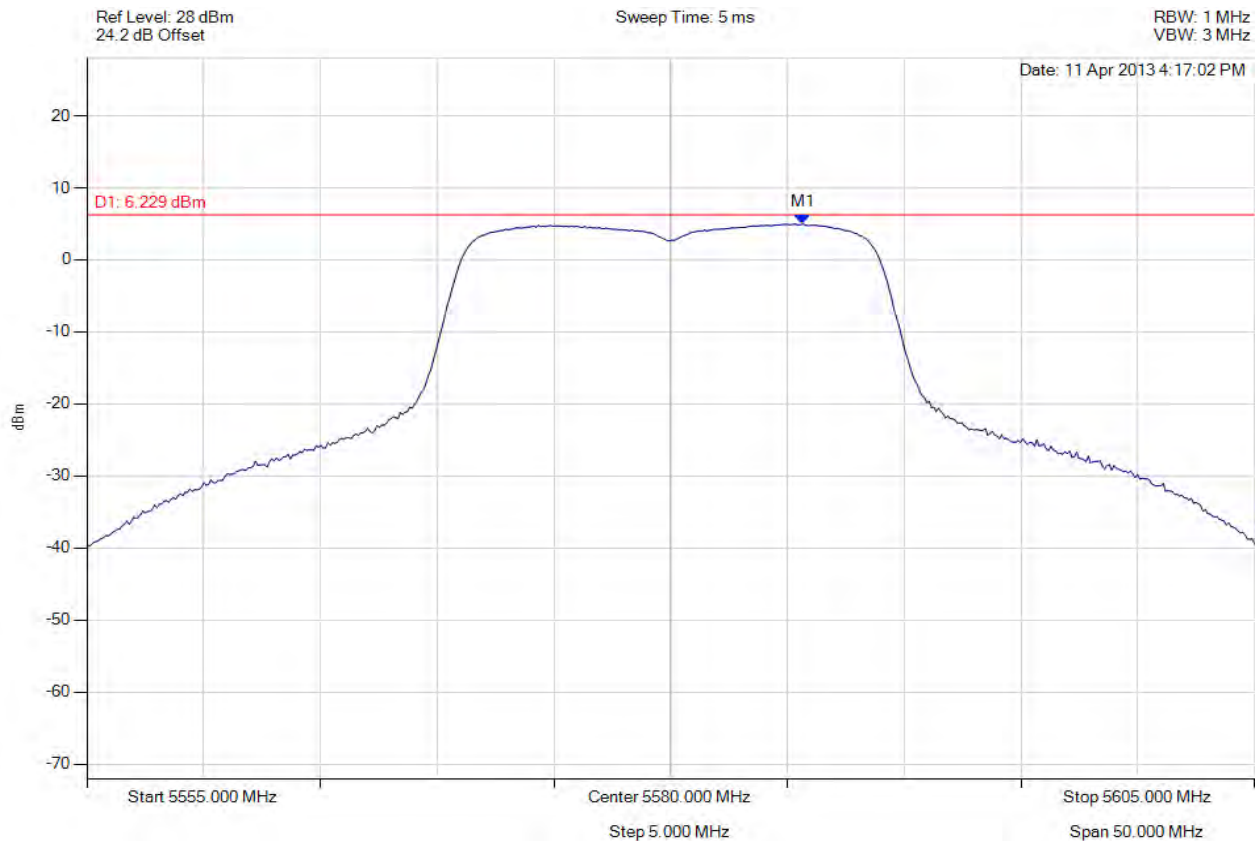


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PEAK POWER SPECTRAL DENSITY

Variant: 802.11n HT-20, Channel: 5580.00 MHz, Chain a, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5585.661 MHz : 4.984 dBm	Limit: ≤ 6.229 dBm Margin: -1.24 dB

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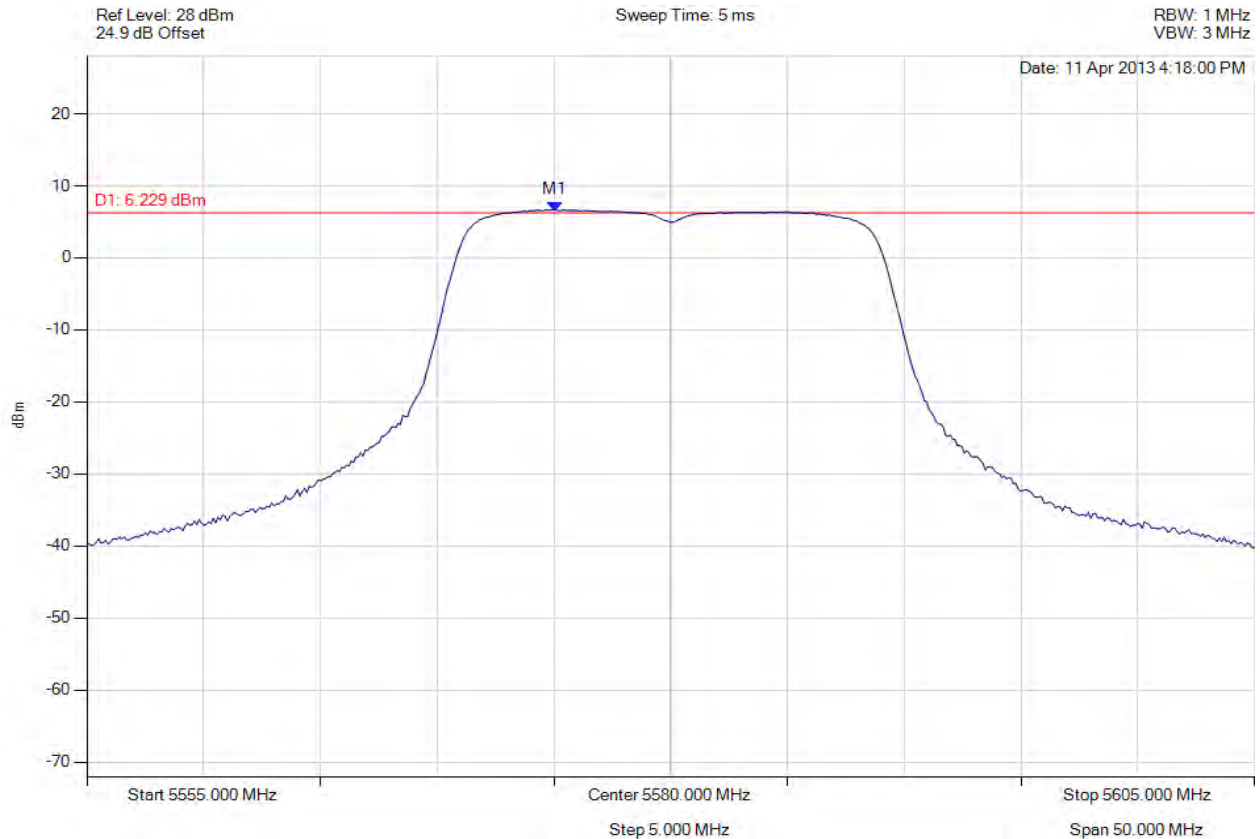


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PEAK POWER SPECTRAL DENSITY

Variant: 802.11n HT-20, Channel: 5580.00 MHz, Chain b, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5575.040 MHz : 6.529 dBm	Limit: ≤ 6.229 dBm Margin: 0.30 dB

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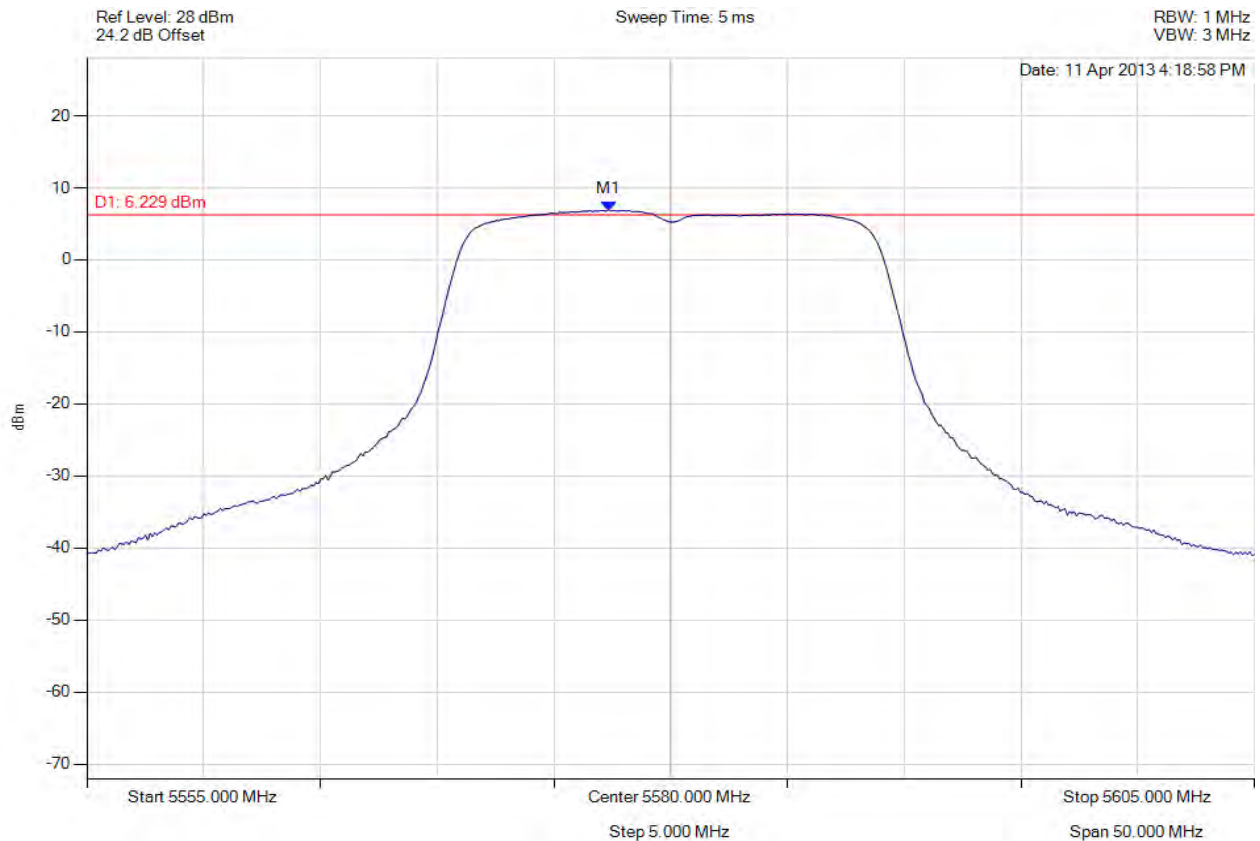


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PEAK POWER SPECTRAL DENSITY

Variant: 802.11n HT-20, Channel: 5580.00 MHz, Chain c, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5577.345 MHz : 6.806 dBm	Limit: ≤ 6.229 dBm Margin: 0.58 dB

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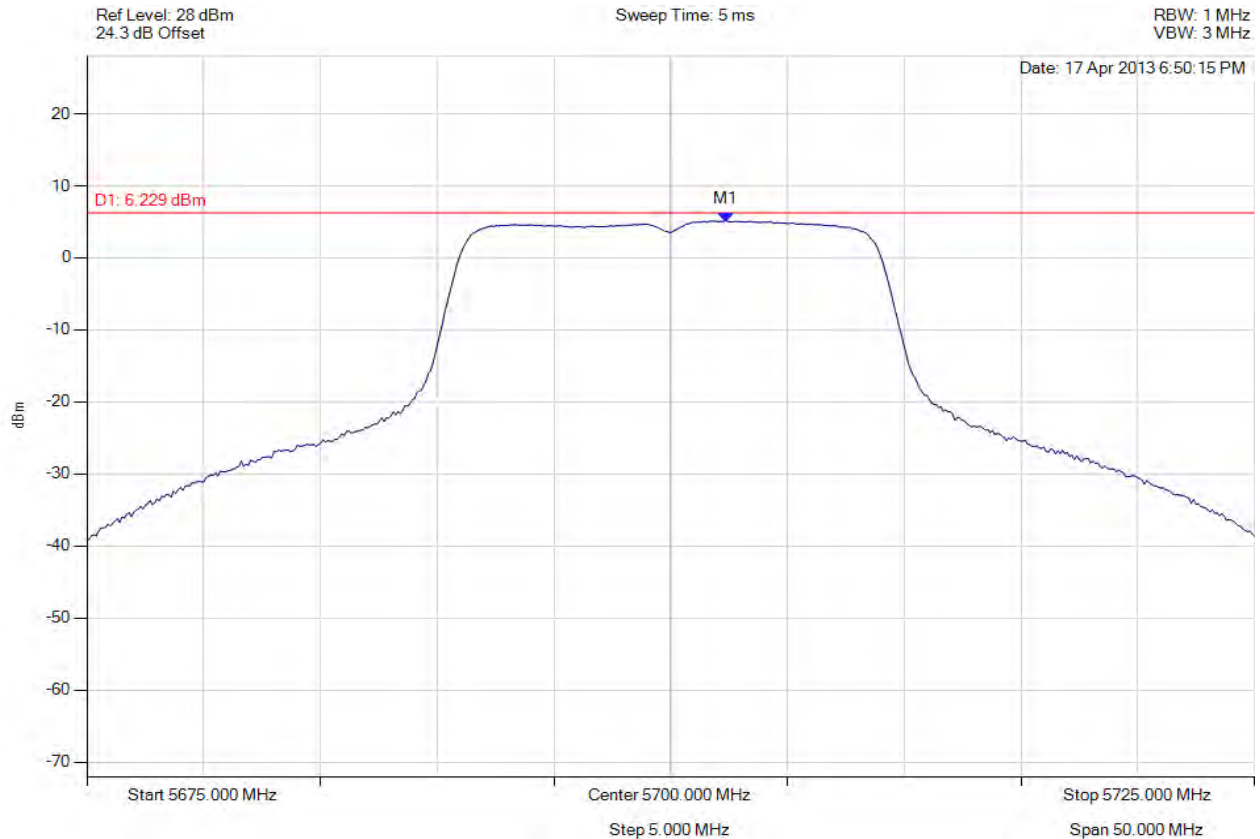


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PEAK POWER SPECTRAL DENSITY

Variant: 802.11n HT-20, Channel: 5700.00 MHz, Chain a, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5702.355 MHz : 5.056 dBm	Limit: ≤ 6.229 dBm Margin: -1.17 dB

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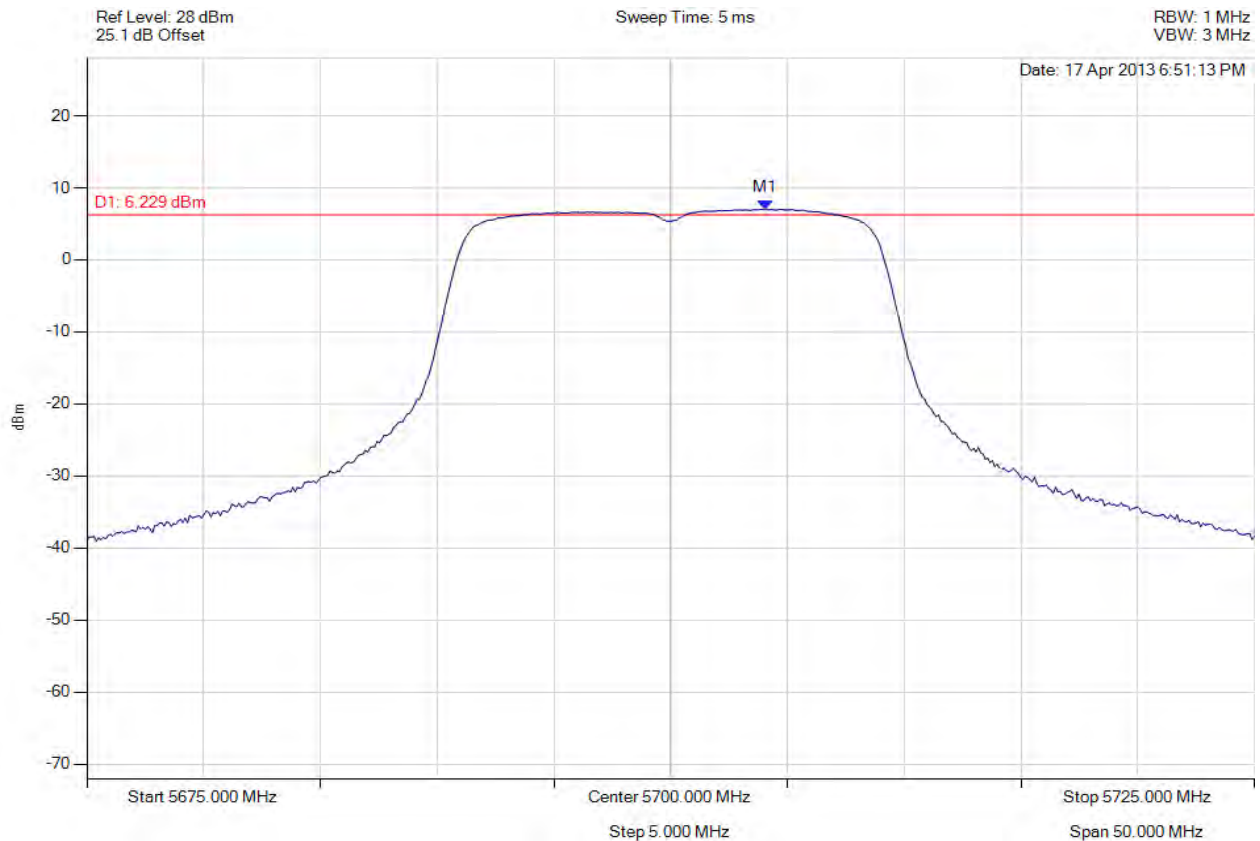


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PEAK POWER SPECTRAL DENSITY

Variant: 802.11n HT-20, Channel: 5700.00 MHz, Chain b, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5704.058 MHz : 7.002 dBm	Limit: ≤ 6.229 dBm Margin: 0.77 dB

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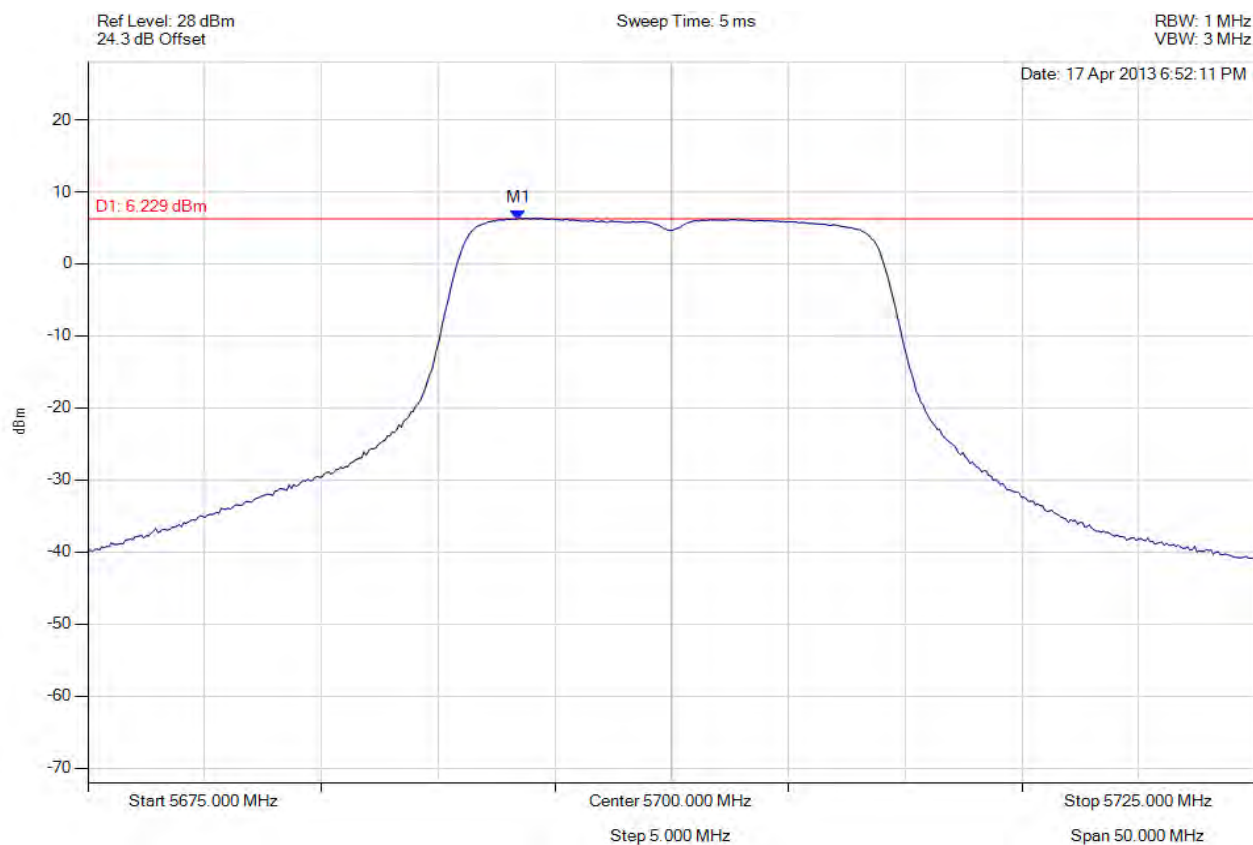


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PEAK POWER SPECTRAL DENSITY

Variant: 802.11n HT-20, Channel: 5700.00 MHz, Chain c, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5693.437 MHz : 6.201 dBm	Limit: ≤ 6.229 dBm Margin: -0.03 dB

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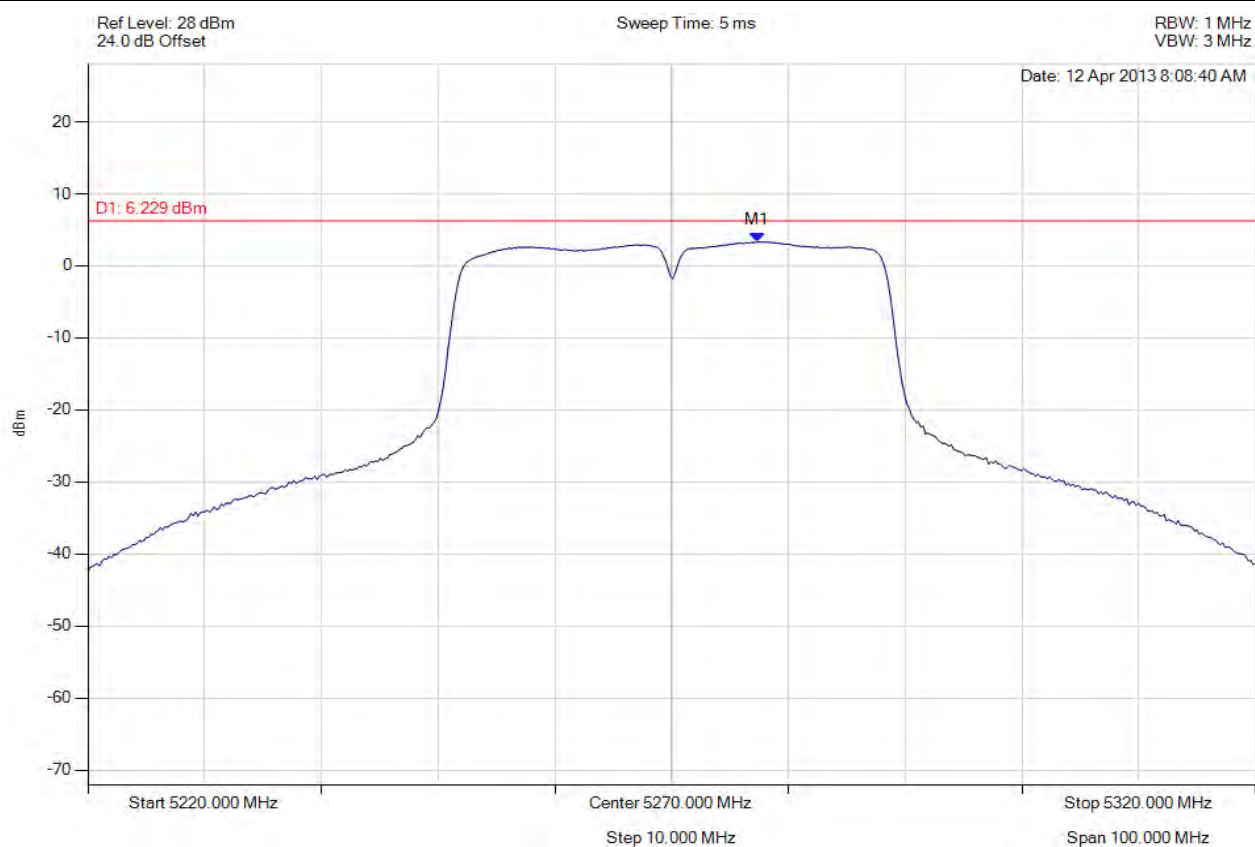


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PEAK POWER SPECTRAL DENSITY

Variant: 802.11n HT-40, Channel: 5270.00 MHz, Chain a, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5277.315 MHz : 3.342 dBm	Limit: ≤ 6.229 dBm Margin: -2.89 dB

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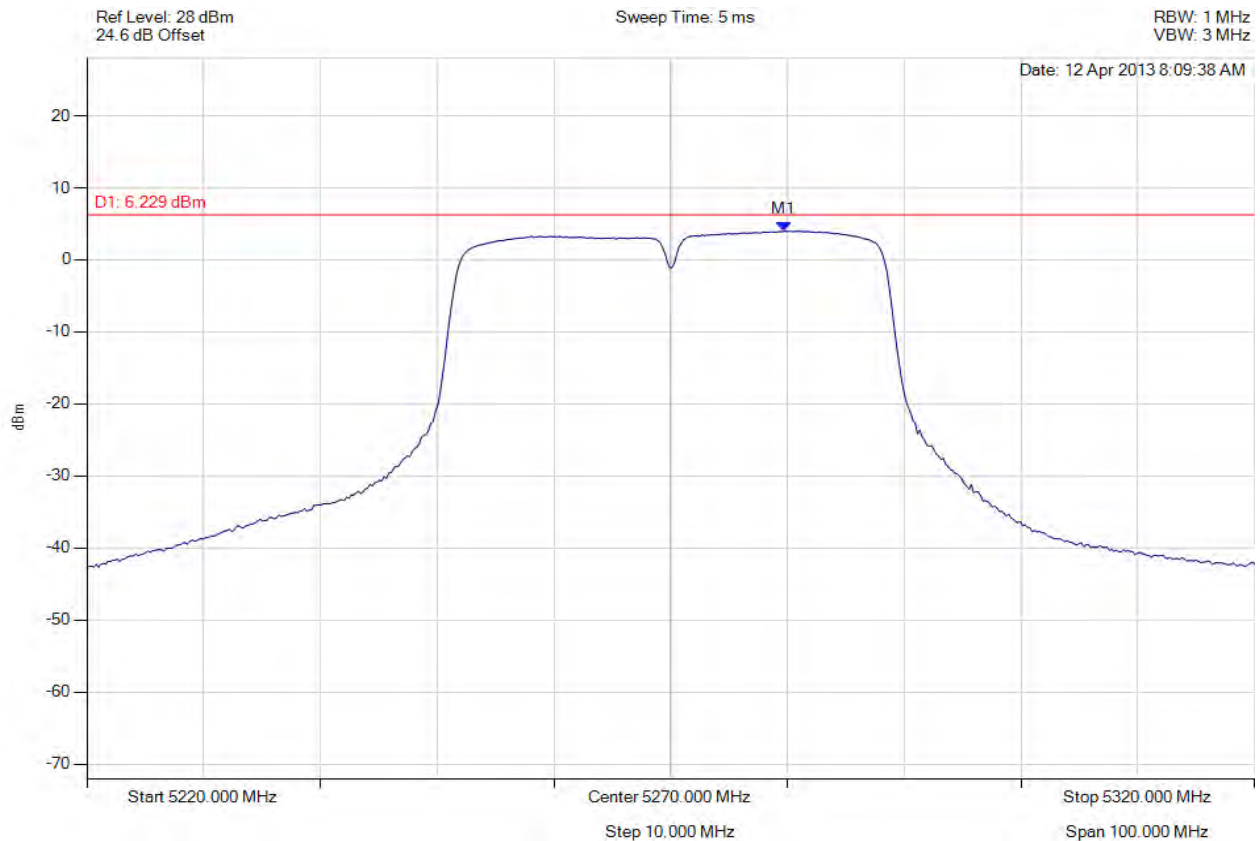


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PEAK POWER SPECTRAL DENSITY

Variant: 802.11n HT-40, Channel: 5270.00 MHz, Chain b, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5279.719 MHz : 3.990 dBm	Limit: ≤ 6.229 dBm Margin: -2.24 dB

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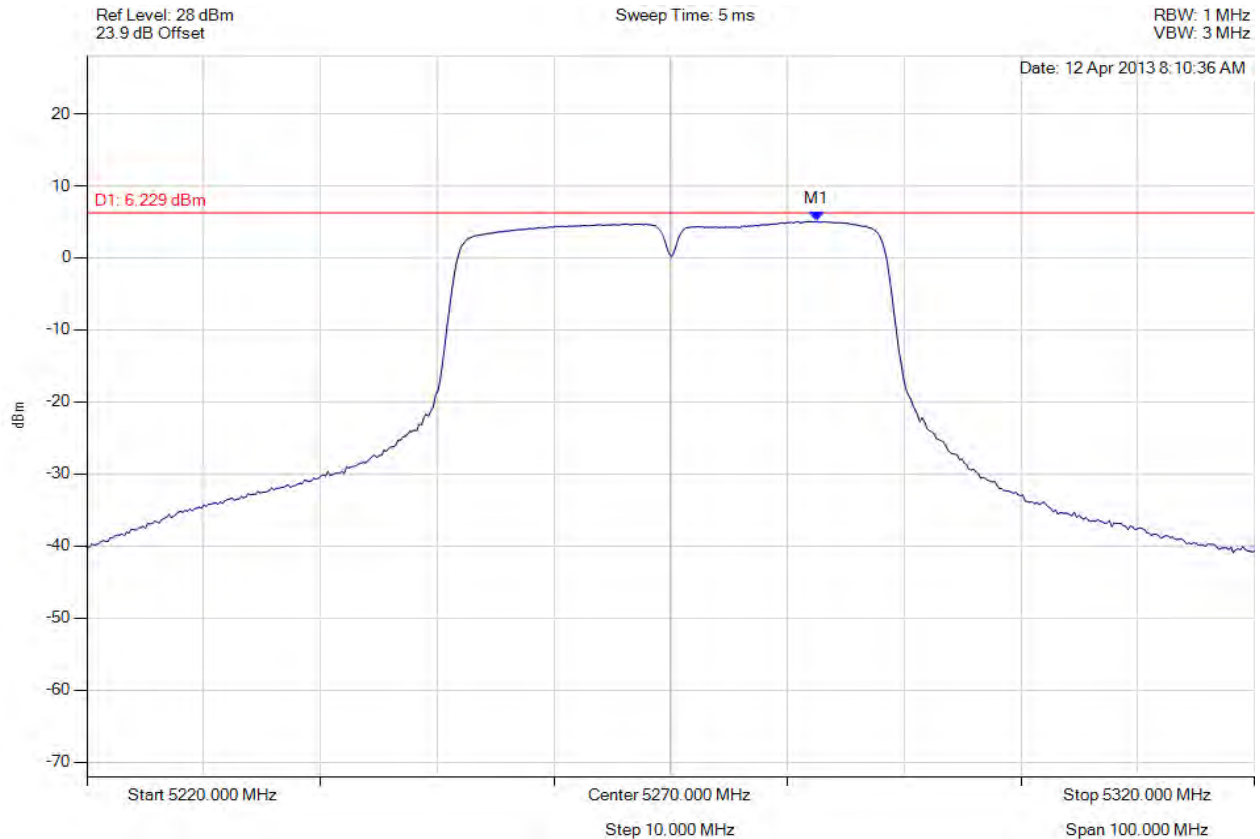


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PEAK POWER SPECTRAL DENSITY

Variant: 802.11n HT-40, Channel: 5270.00 MHz, Chain c, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5282.525 MHz : 5.058 dBm	Limit: ≤ 6.229 dBm Margin: -1.17 dB

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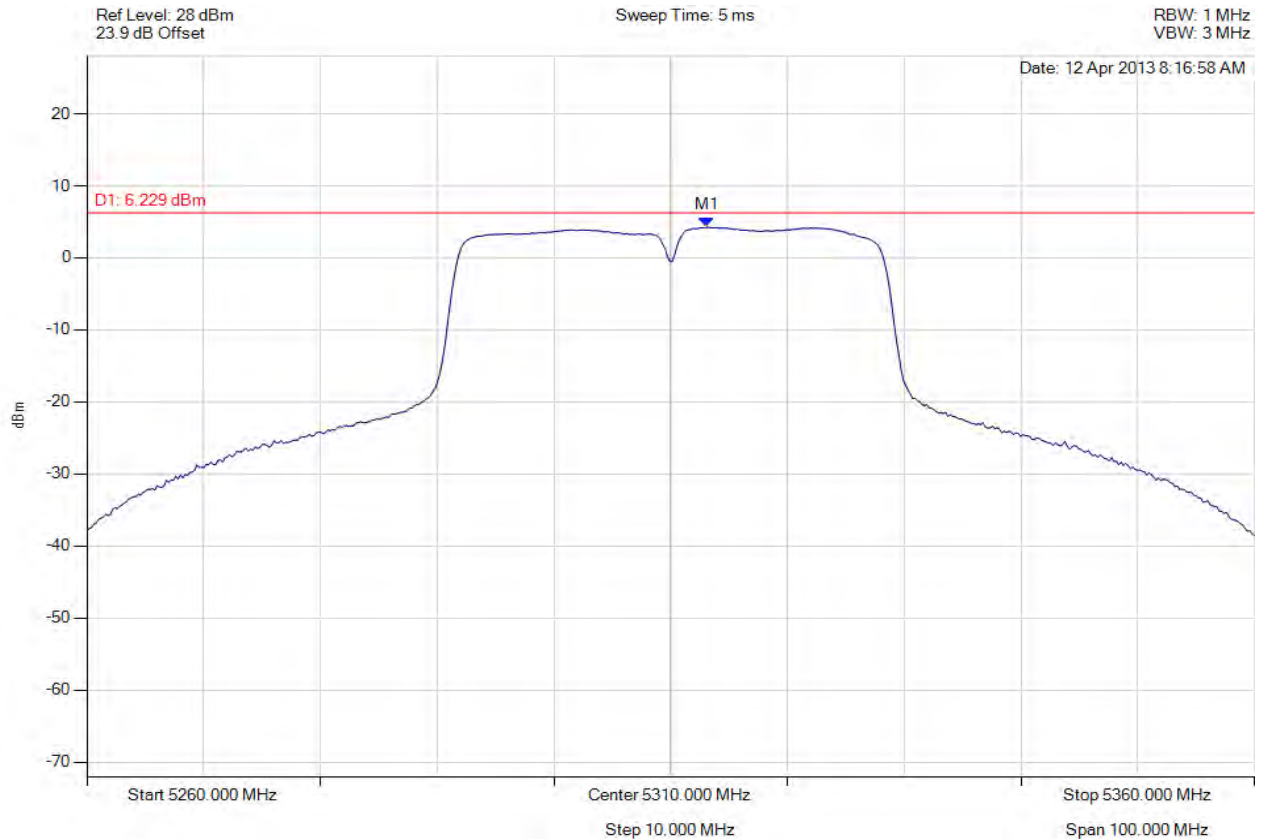


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PEAK POWER SPECTRAL DENSITY

Variant: 802.11n HT-40, Channel: 5310.00 MHz, Chain a, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5313.106 MHz : 4.253 dBm	Limit: ≤ 6.229 dBm Margin: -1.98 dB

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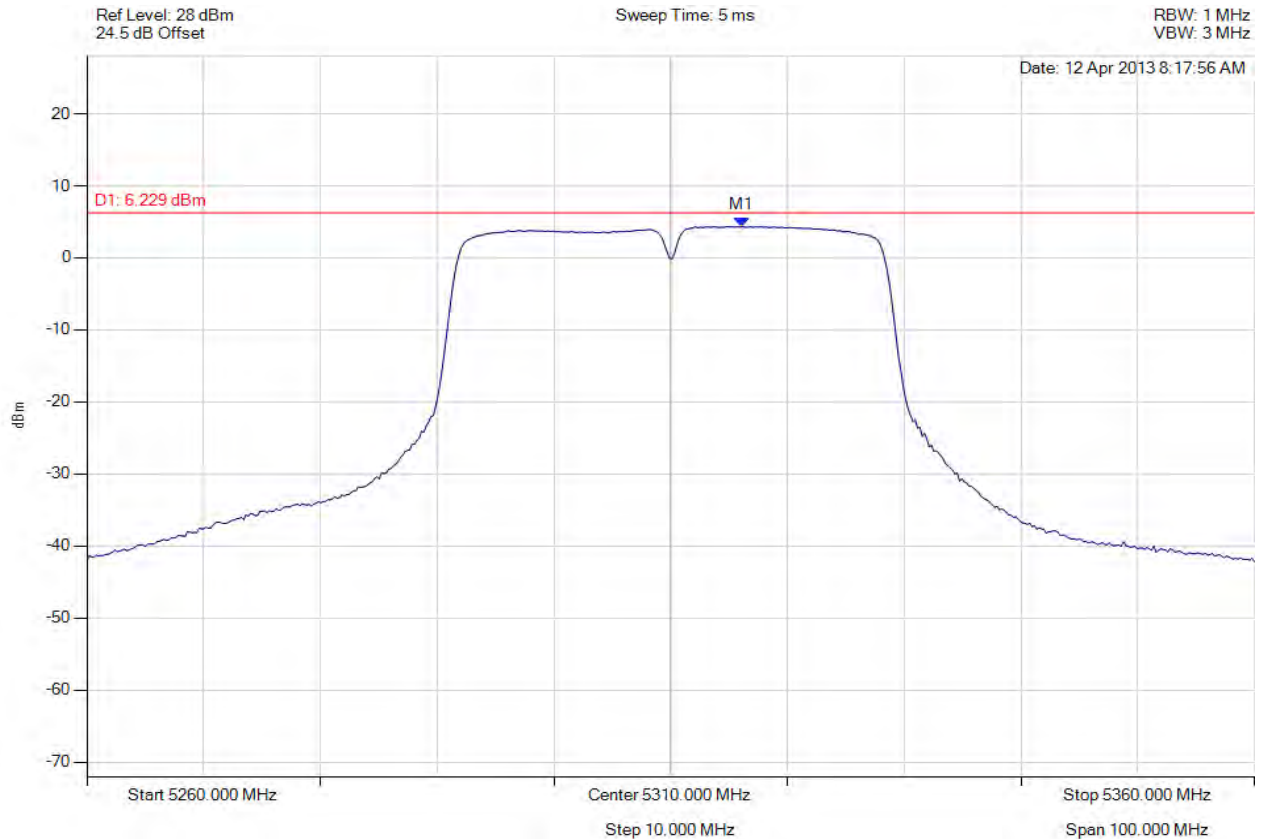


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PEAK POWER SPECTRAL DENSITY

Variant: 802.11n HT-40, Channel: 5310.00 MHz, Chain b, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5316.112 MHz : 4.326 dBm	Limit: ≤ 6.229 dBm Margin: -1.90 dB

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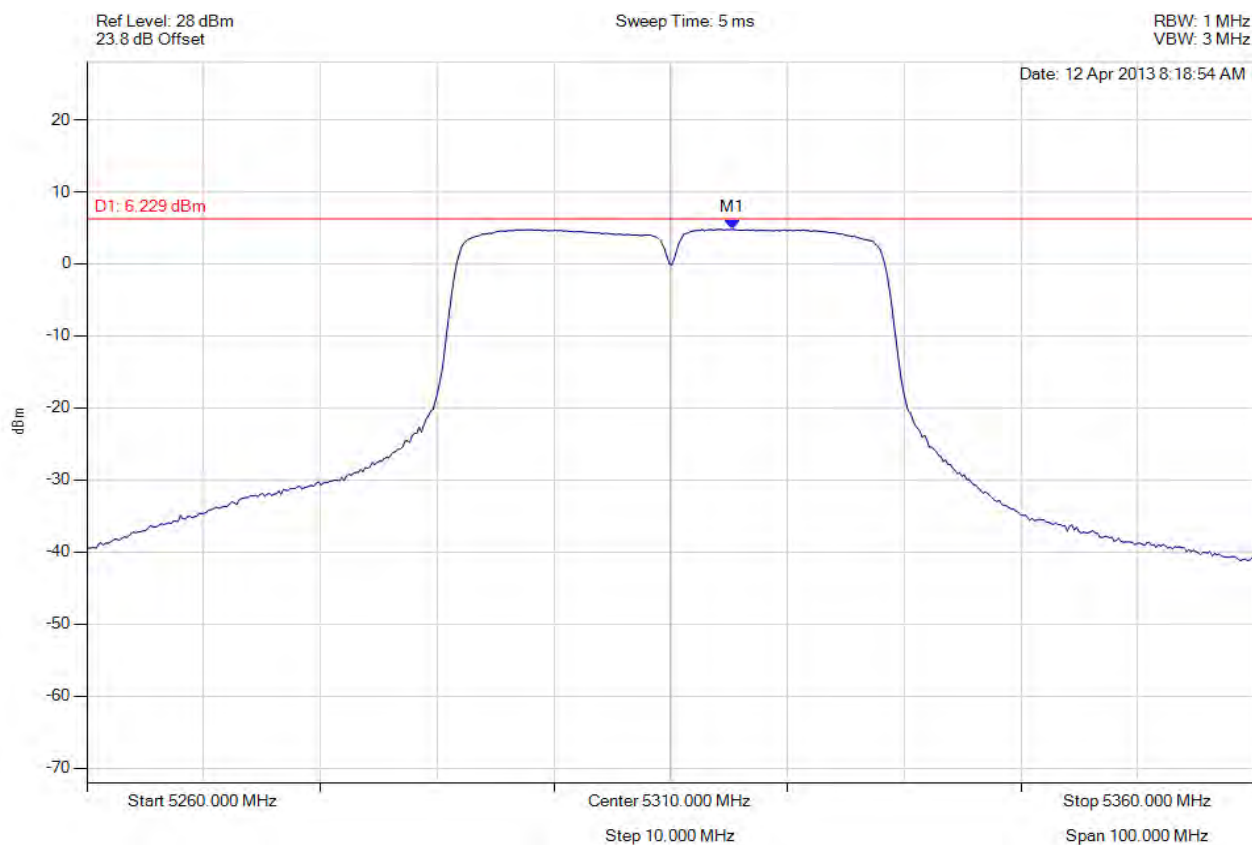


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PEAK POWER SPECTRAL DENSITY

Variant: 802.11n HT-40, Channel: 5310.00 MHz, Chain c, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5315.311 MHz : 4.787 dBm	Limit: ≤ 6.229 dBm Margin: -1.44 dB

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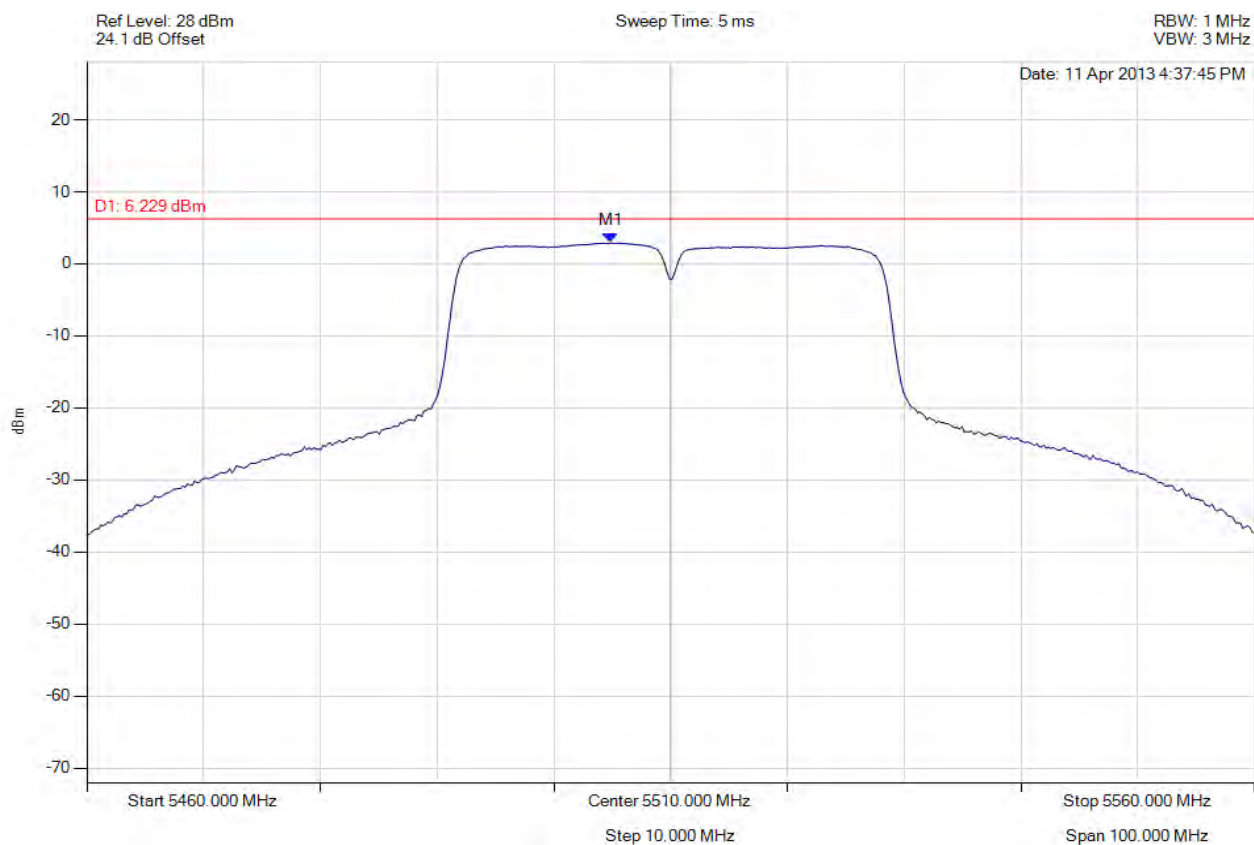


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PEAK POWER SPECTRAL DENSITY

Variant: 802.11n HT-40, Channel: 5510.00 MHz, Chain a, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5504.890 MHz : 2.909 dBm	Limit: ≤ 6.229 dBm Margin: -3.32 dB

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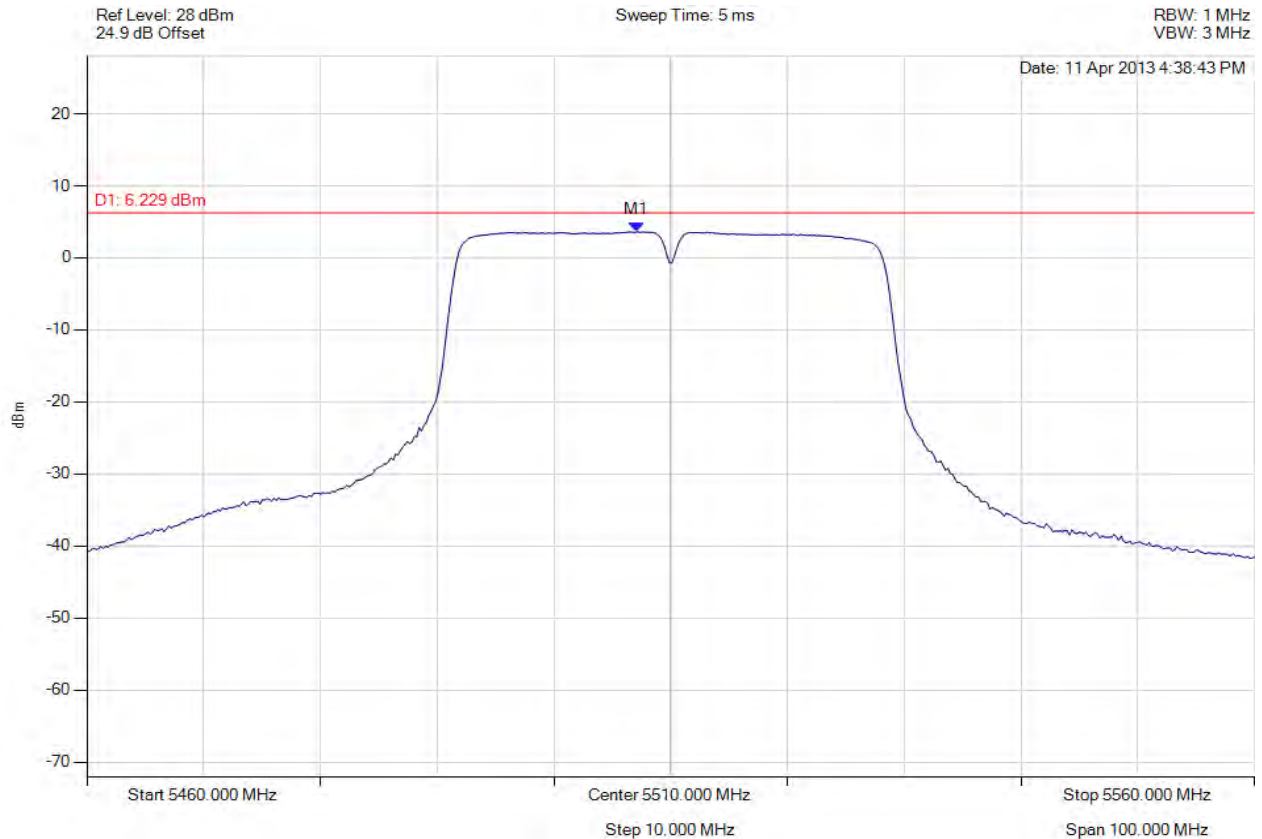


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PEAK POWER SPECTRAL DENSITY

Variant: 802.11n HT-40, Channel: 5510.00 MHz, Chain b, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5507.094 MHz : 3.612 dBm	Limit: ≤ 6.229 dBm Margin: -2.62 dB

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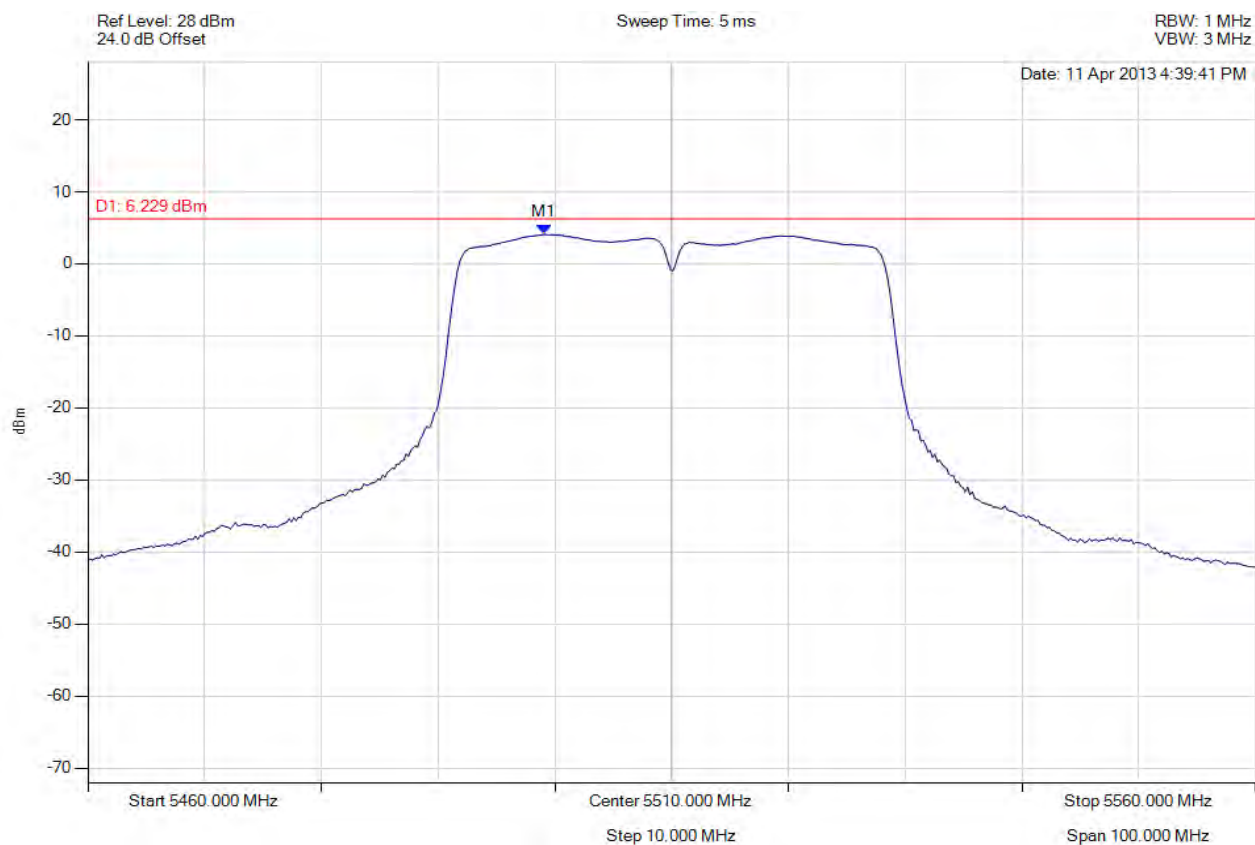


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PEAK POWER SPECTRAL DENSITY

Variant: 802.11n HT-40, Channel: 5510.00 MHz, Chain c, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5499.078 MHz : 4.103 dBm	Limit: ≤ 6.229 dBm Margin: -2.13 dB

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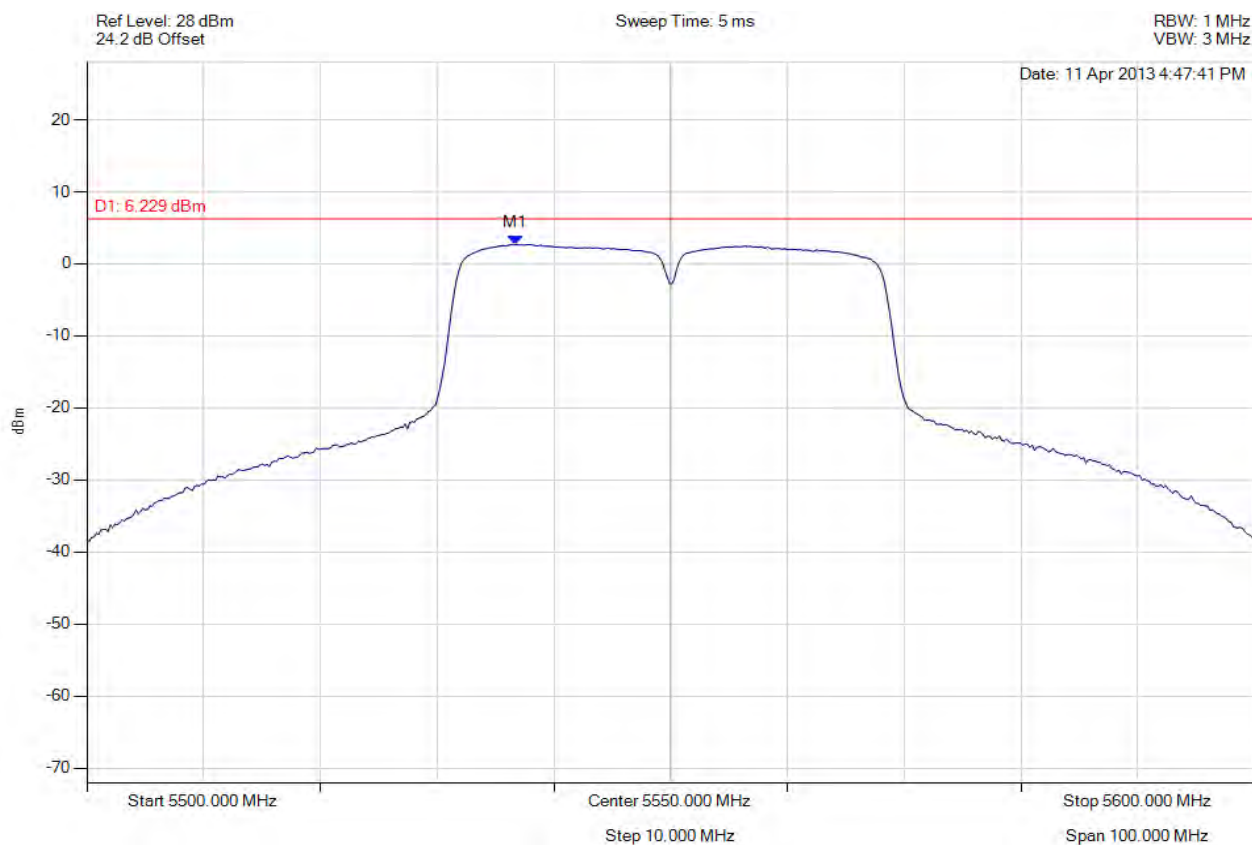


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PEAK POWER SPECTRAL DENSITY

Variant: 802.11n HT-40, Channel: 5550.00 MHz, Chain a, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5536.673 MHz : 2.669 dBm	Limit: ≤ 6.229 dBm Margin: -3.56 dB

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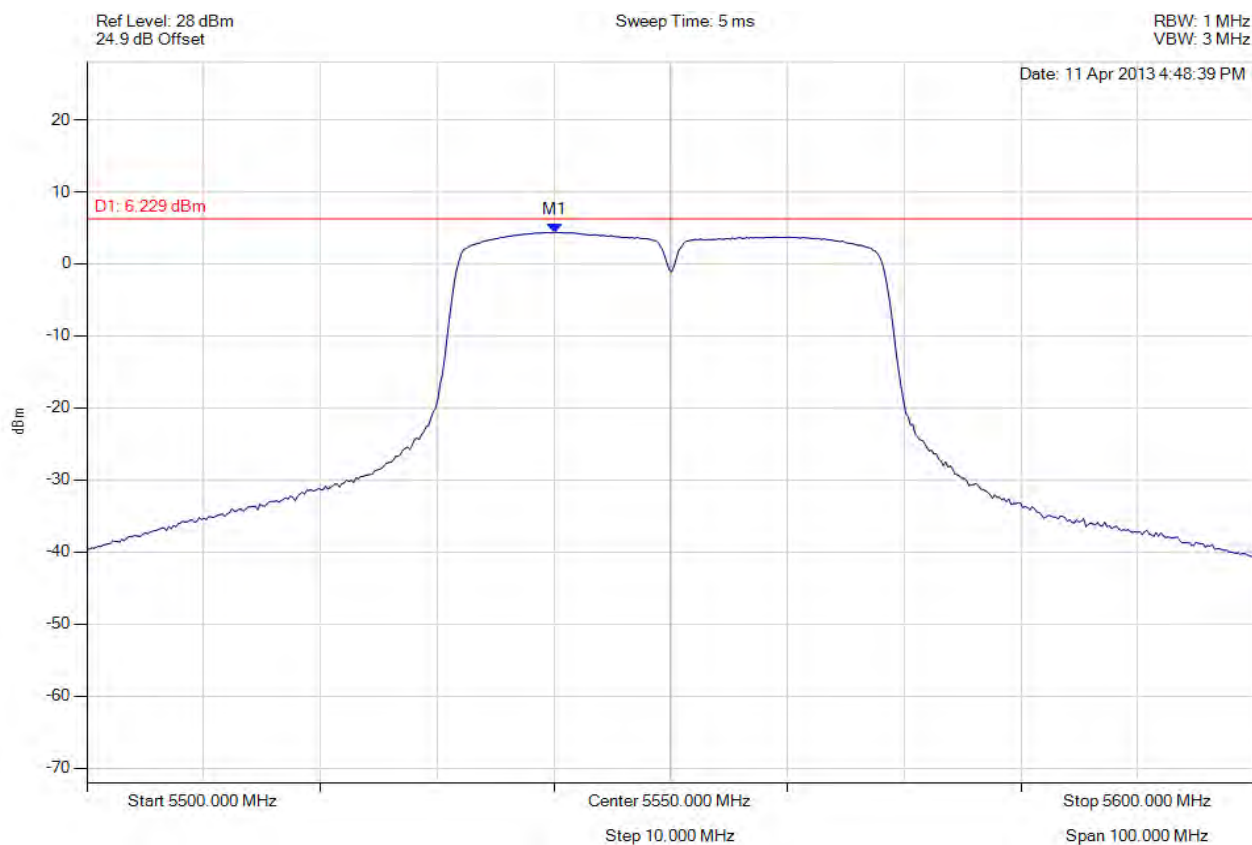


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PEAK POWER SPECTRAL DENSITY

Variant: 802.11n HT-40, Channel: 5550.00 MHz, Chain b, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5540.080 MHz : 4.380 dBm	Limit: ≤ 6.229 dBm Margin: -1.85 dB

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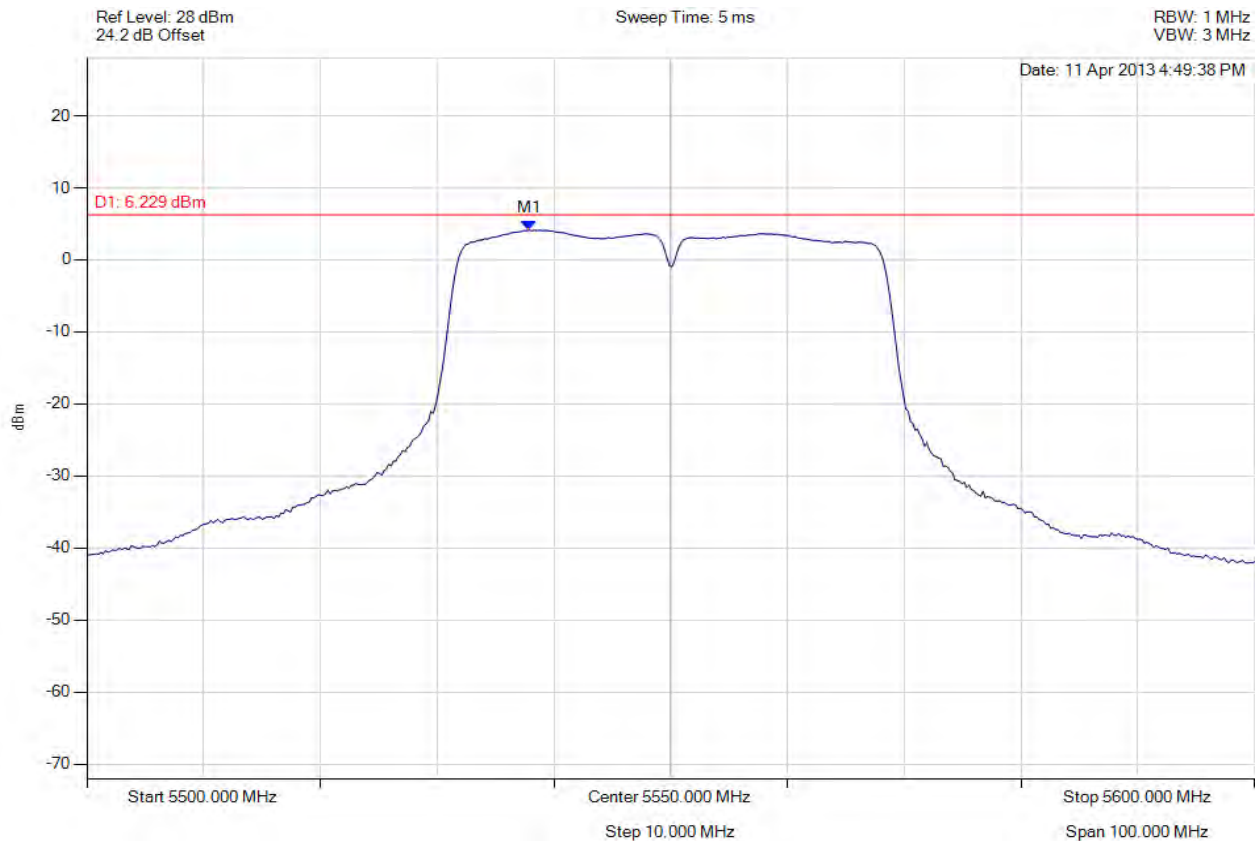


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PEAK POWER SPECTRAL DENSITY

Variant: 802.11n HT-40, Channel: 5550.00 MHz, Chain c, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5537.876 MHz : 4.129 dBm	Limit: ≤ 6.229 dBm Margin: -2.10 dB

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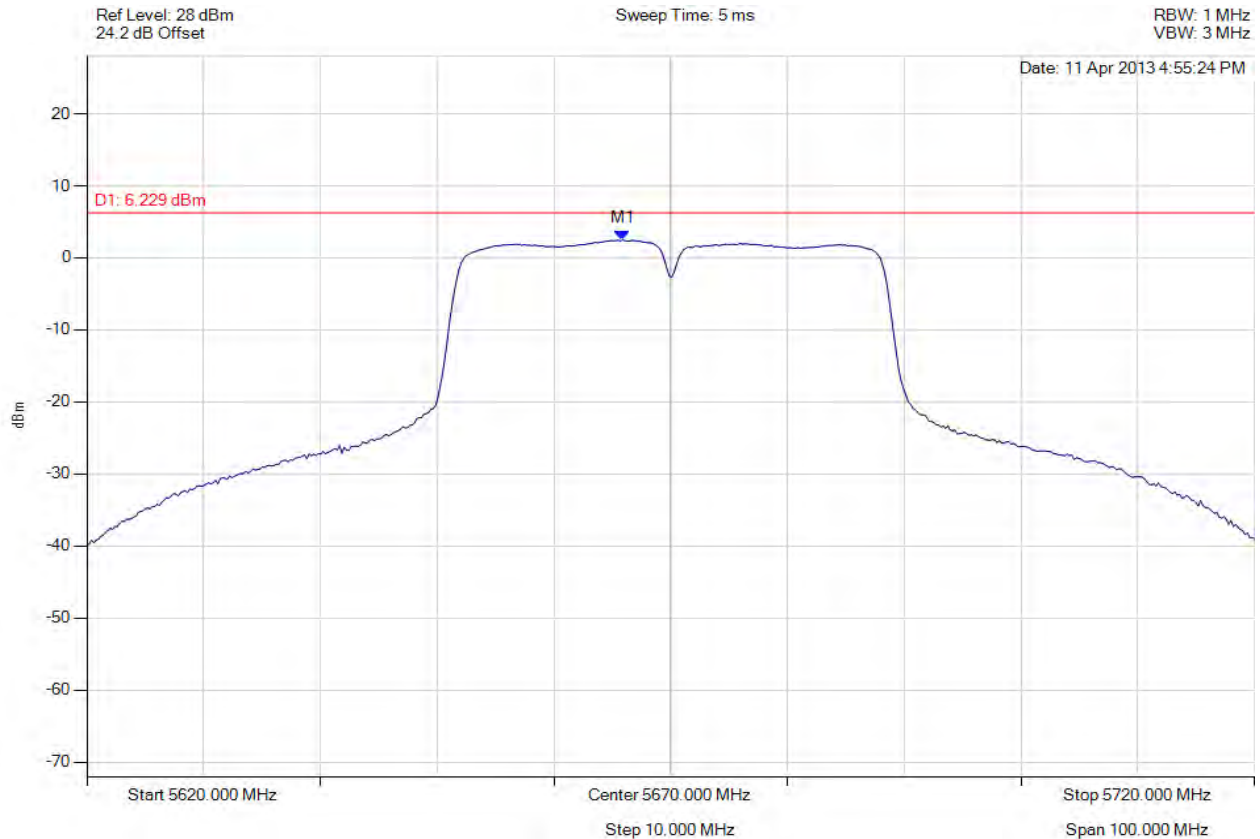


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PEAK POWER SPECTRAL DENSITY

Variant: 802.11n HT-40, Channel: 5670.00 MHz, Chain a, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5665.892 MHz : 2.507 dBm	Limit: ≤ 6.229 dBm Margin: -3.72 dB

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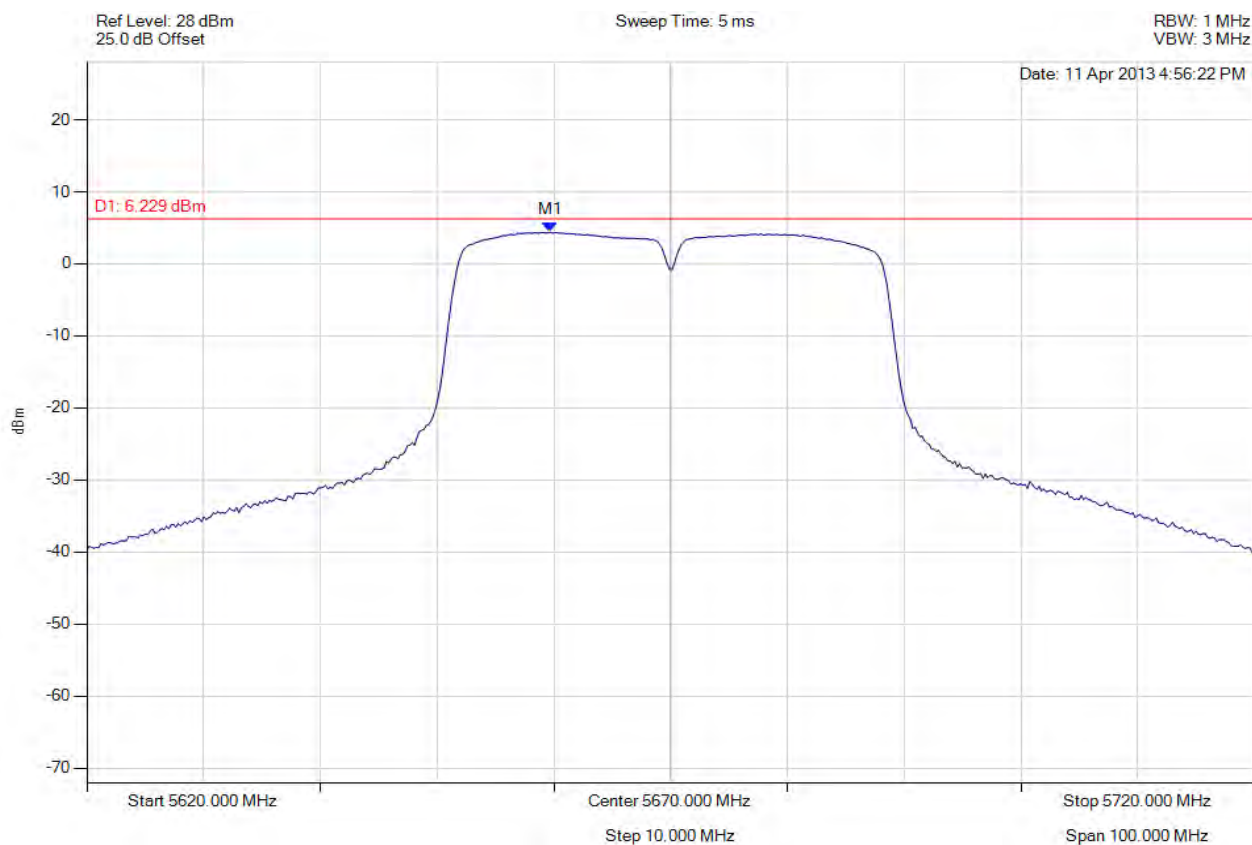


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PEAK POWER SPECTRAL DENSITY

Variant: 802.11n HT-40, Channel: 5670.00 MHz, Chain b, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5659.679 MHz : 4.394 dBm	Limit: ≤ 6.229 dBm Margin: -1.83 dB

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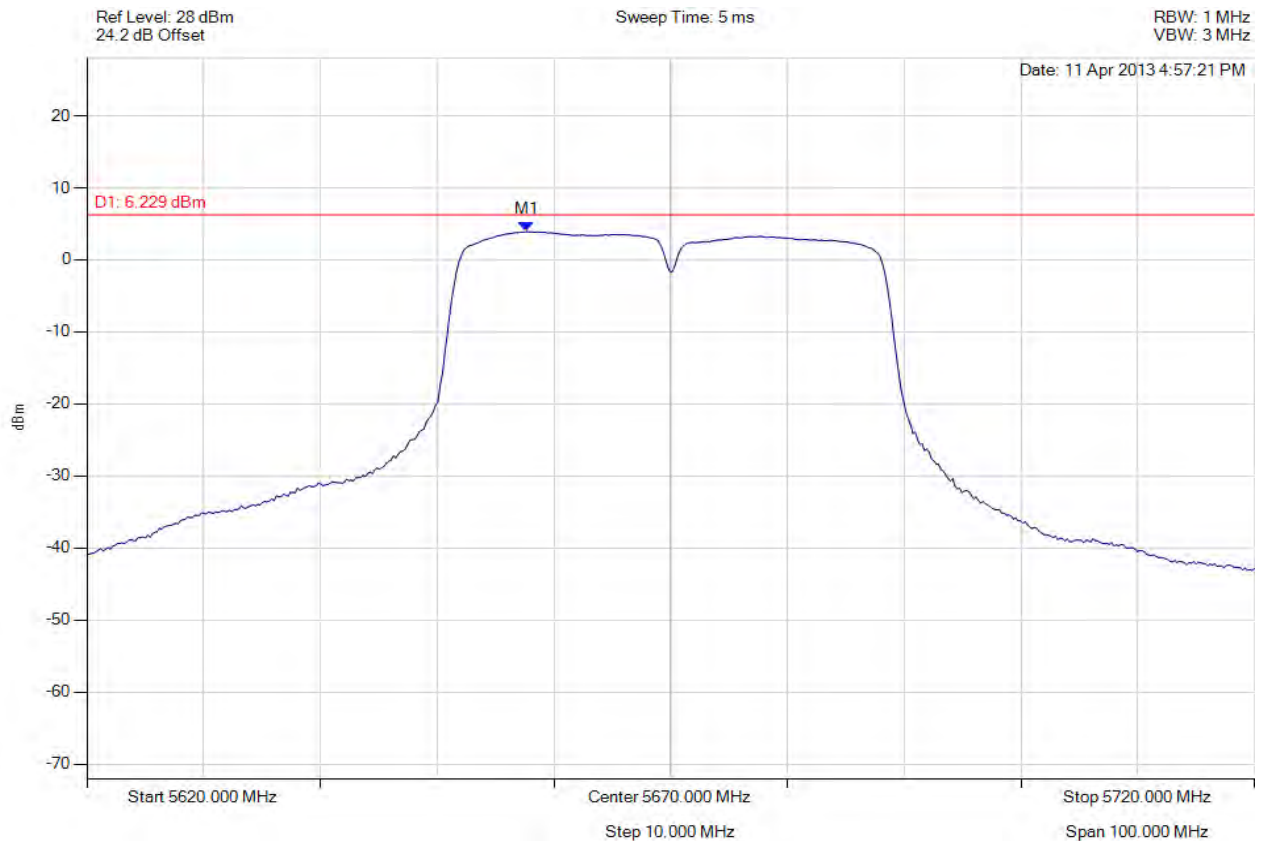


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PEAK POWER SPECTRAL DENSITY

Variant: 802.11n HT-40, Channel: 5670.00 MHz, Chain c, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Detector = RMS Sweep Count = 100 RF Atten (dB) = 20 Trace Mode = VIEW	M1 : 5657.675 MHz : 3.930 dBm	Limit: ≤ 6.229 dBm Margin: -2.30 dB

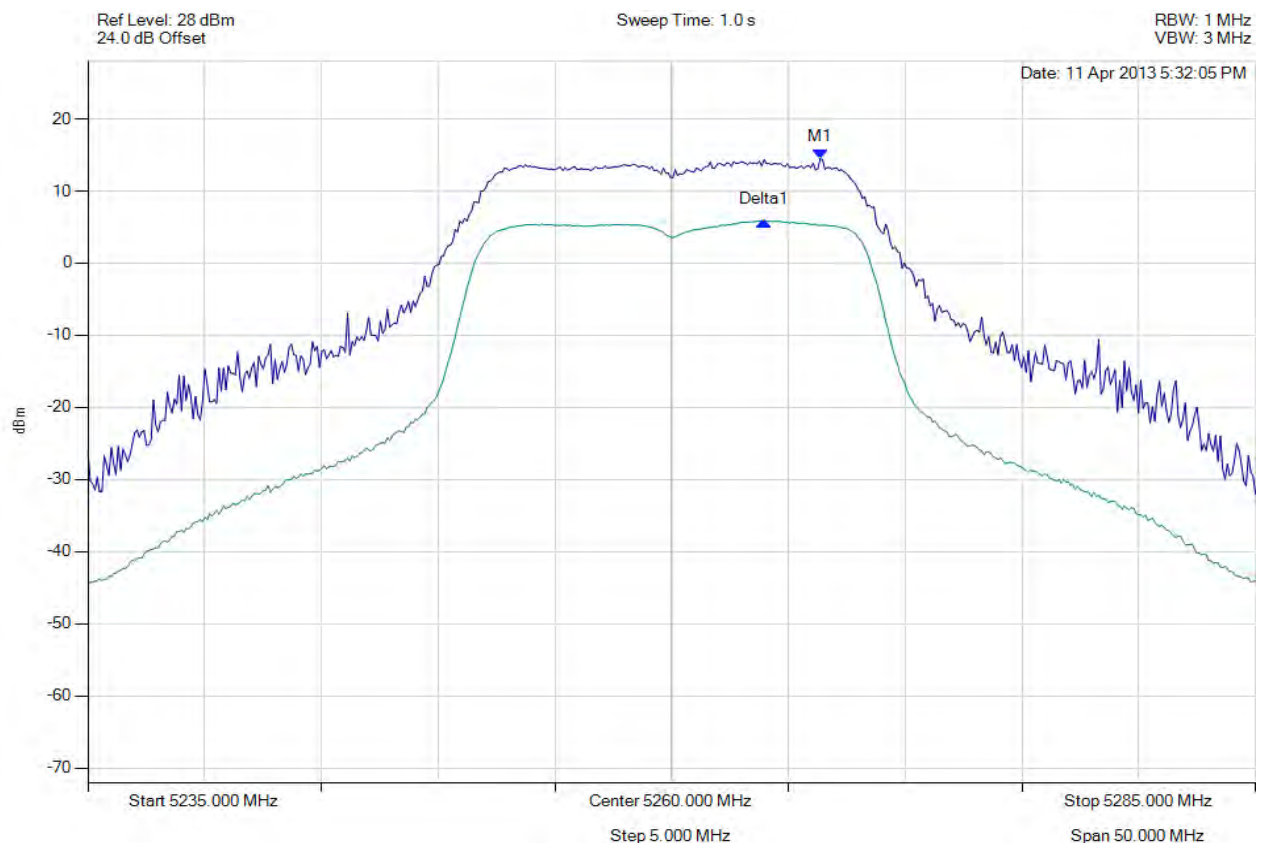
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A.1.3. Peak Excursion Ratio

PEAK EXCURSION RATIO

Variant: 802.11a, Channel: 5260.00 MHz, Chain a, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Sweep Count = 0 RF Atten (dB) = 20 TRACE 1: Detector = MAX PEAK Trace Mode = VIEW TRACE 2: Detector = RMS Trace Mode = VIEW	M1 : 5266.363 MHz : 14.513 dBm Delta1 : -2404810 Hz : -8.664 dB	Measured Excursion Ratio: 8.66 dB Limit: 13.0 dB Margin: -4.34 dB

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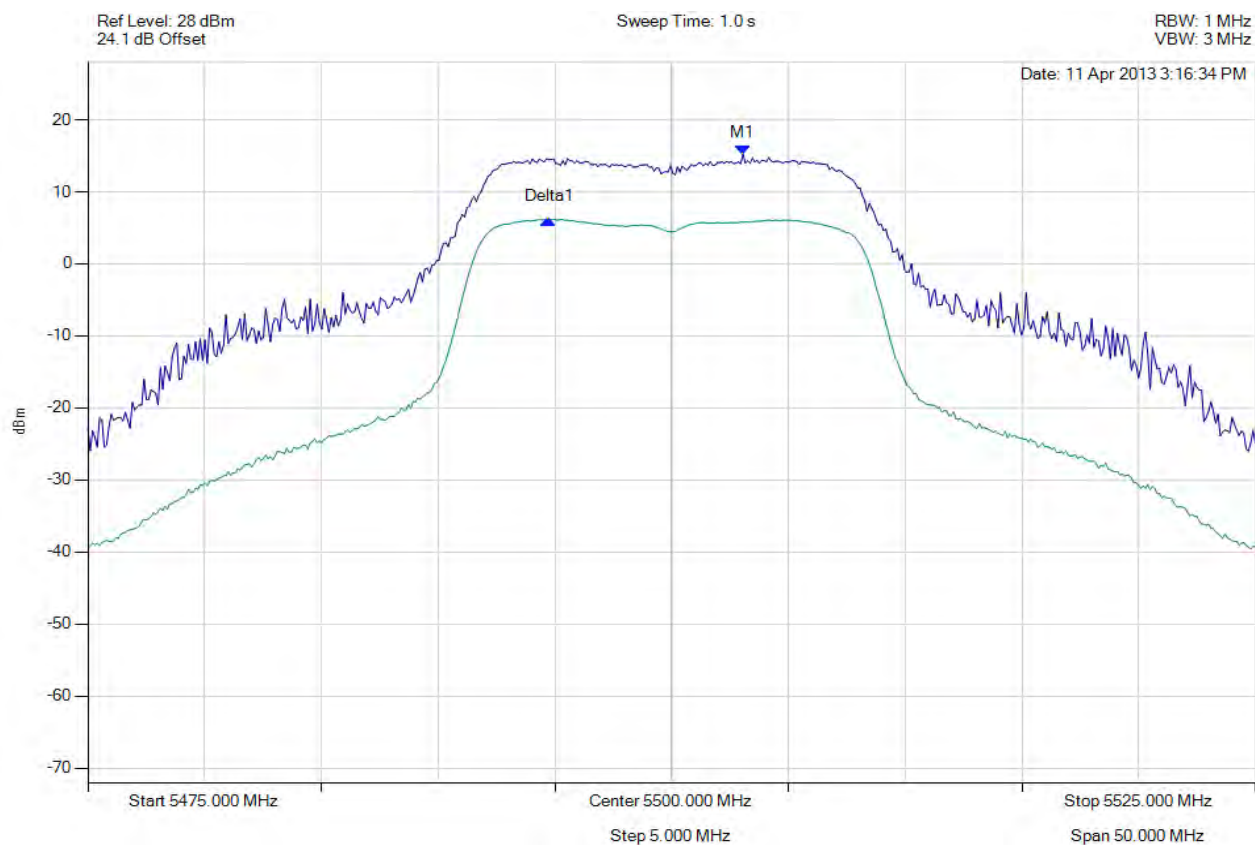


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PEAK EXCURSION RATIO

Variant: 802.11a, Channel: 5500.00 MHz, Chain a, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Sweep Count = 0 RF Atten (dB) = 20 TRACE 1: Detector = MAX PEAK Trace Mode = VIEW TRACE 2: Detector = RMS Trace Mode = VIEW	M1 : 5503.056 MHz : 15.213 dBm Delta1 : -8316633 Hz : -8.997 dB	Measured Excursion Ratio: 9.00 dB Limit: 13.0 dB Margin: -4.00 dB

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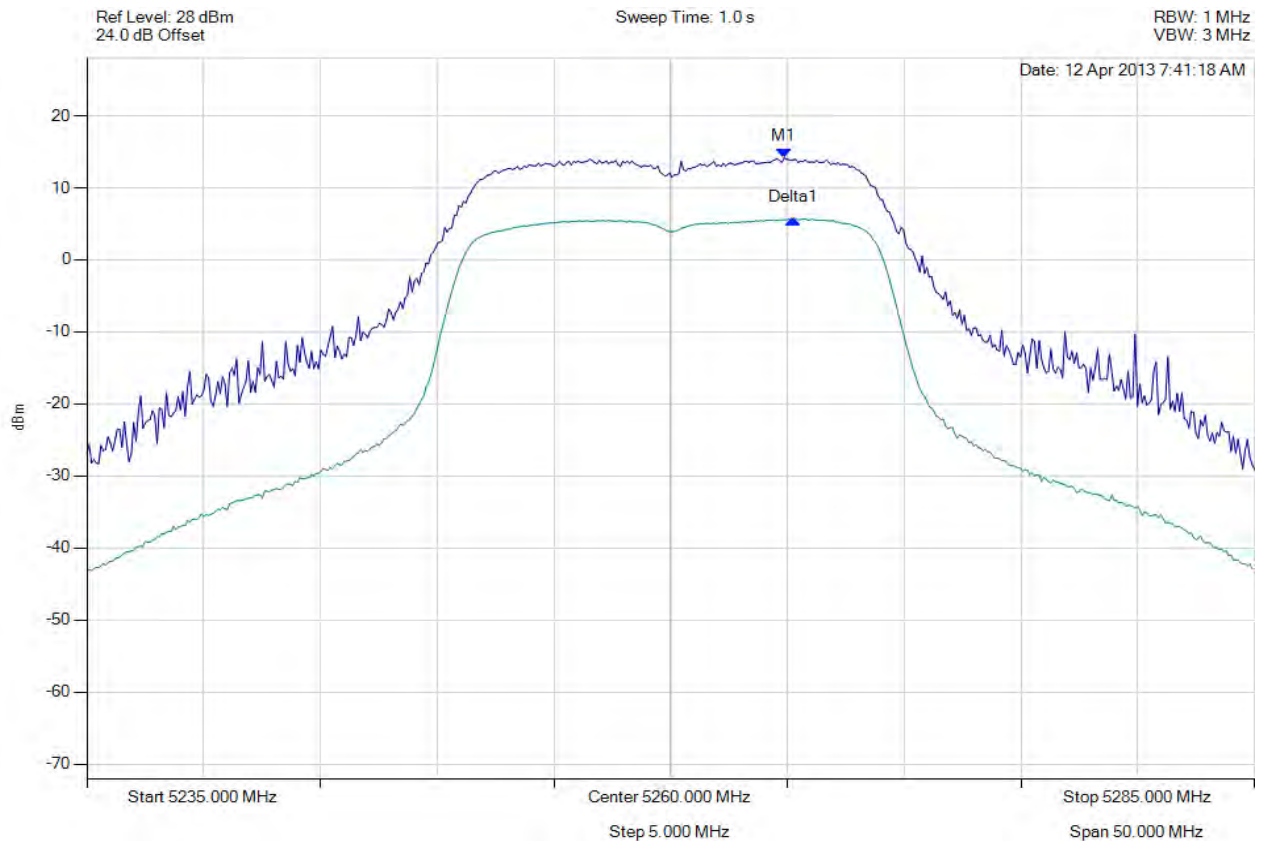


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PEAK EXCURSION RATIO

Variant: 802.11n HT-20, Channel: 5260.00 MHz, Chain a, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Sweep Count = 0 RF Atten (dB) = 20 TRACE 1: Detector = MAX PEAK Trace Mode = VIEW TRACE 2: Detector = RMS Trace Mode = VIEW	M1 : 5264.860 MHz : 14.146 dBm Delta1 : 401 KHz : -8.467 dB	Measured Excursion Ratio: 8.47 dB Limit: 13.0 dB Margin: -4.53 dB

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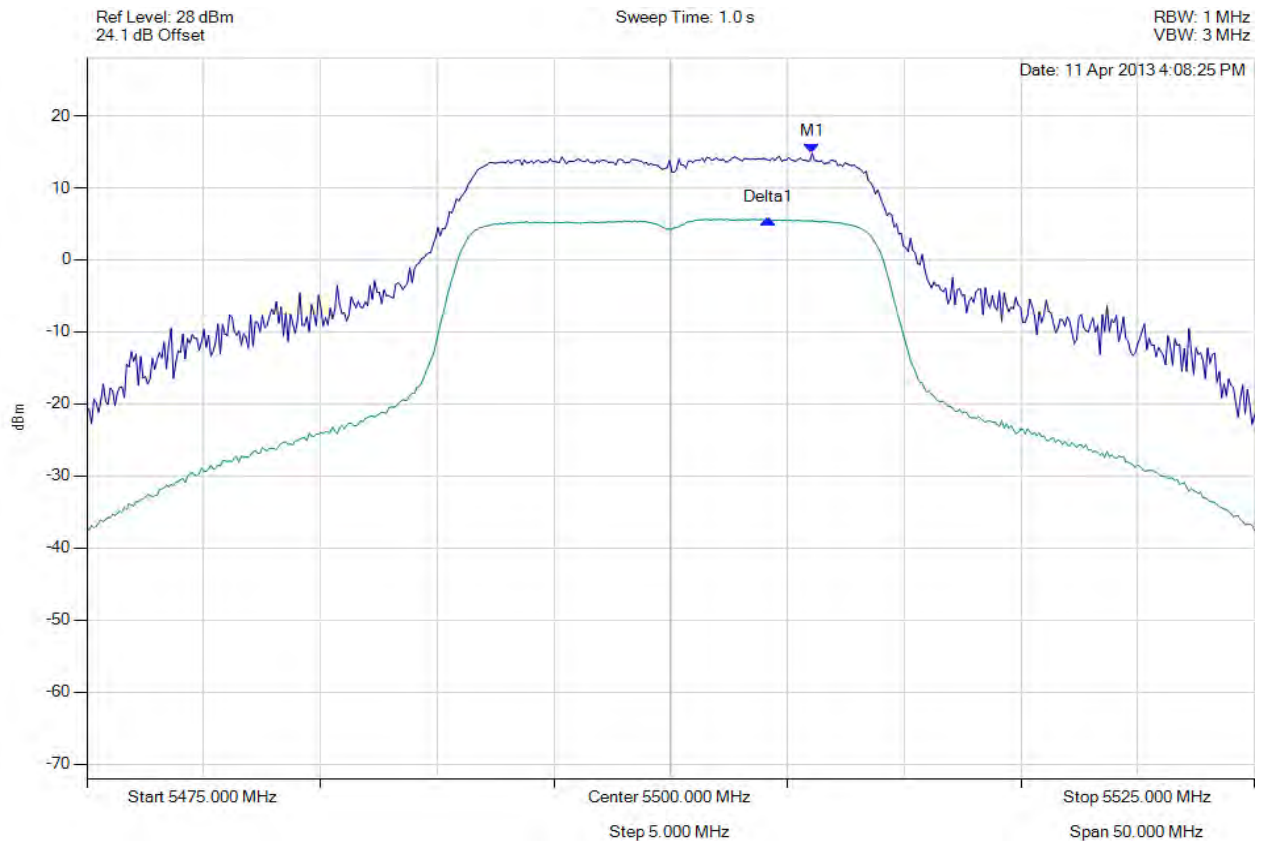


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PEAK EXCURSION RATIO

Variant: 802.11n HT-20, Channel: 5500.00 MHz, Chain a, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Sweep Count = 0 RF Atten (dB) = 20 TRACE 1: Detector = MAX PEAK Trace Mode = VIEW TRACE 2: Detector = RMS Trace Mode = VIEW	M1 : 5506.062 MHz : 14.779 dBm Delta1 : -1903808 Hz : -9.124 dB	Measured Excursion Ratio: 9.12 dB Limit: 13.0 dB Margin: -3.88 dB

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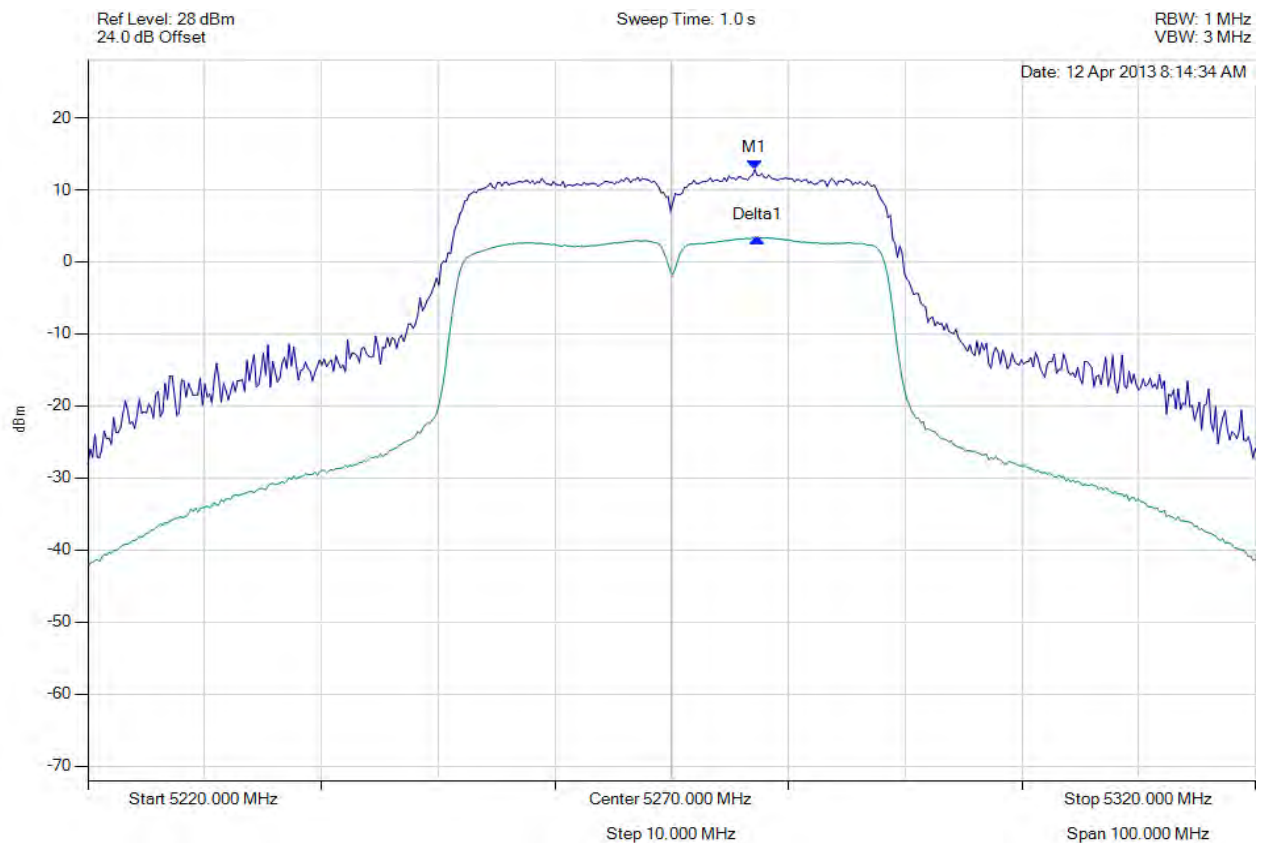


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PEAK EXCURSION RATIO

Variant: 802.11n HT-40, Channel: 5270.00 MHz, Chain a, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Sweep Count = 0 RF Atten (dB) = 20 TRACE 1: Detector = MAX PEAK Trace Mode = VIEW TRACE 2: Detector = RMS Trace Mode = VIEW	M1 : 5277.114 MHz : 12.823 dBm Delta1 : 200 KHz : -9.444 dB	Measured Excursion Ratio: 9.44 dB Limit: 13.0 dB Margin: -3.56 dB

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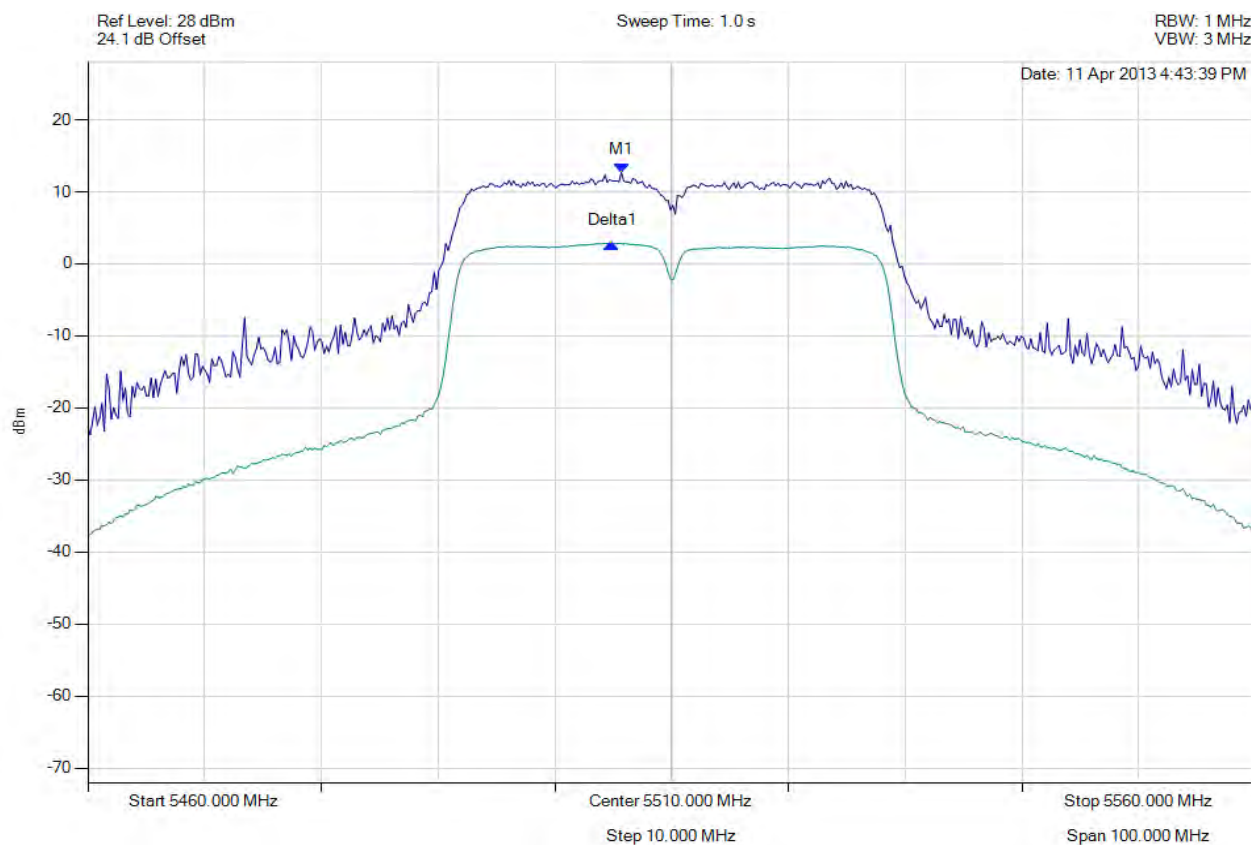


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PEAK EXCURSION RATIO

Variant: 802.11n HT-40, Channel: 5510.00 MHz, Chain a, Temp: Ambient, Voltage: 12 Vdc



Analyser Setup	Marker : Frequency : Amplitude	Test Results
Sweep Count = 0 RF Atten (dB) = 20 TRACE 1: Detector = MAX PEAK Trace Mode = VIEW TRACE 2: Detector = RMS Trace Mode = VIEW	M1 : 5505.691 MHz : 12.723 dBm Delta1 : -801603 Hz : -9.845 dB	Measured Excursion Ratio: 9.85 dB Limit: 13.0 dB Margin: -3.15 dB

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