



6. 6dB Bandwidth Measurement Data

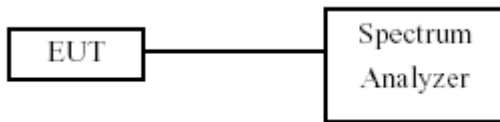
6.1 Test Limit

The minimum of 6dB Bandwidth Measurement is 0.5 MHz.

6.2 Test Procedures

- a. The transmitter output was connected to the spectrum analyzer.
- b. Set RBW of spectrum analyzer to 1~5% of the emission bandwidth and VBW \geq 3x RBW.
- c. The 6 dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 6 dB.
- d. The 6dB Bandwidth was measured and recorded.

6.3 Test Setup Layout



6.4 Measurement Equipment

Instrument/Ancillary	Manufacturer	Model No.	Serial No.	Calibration Date	Valid Date
Spectrum Analyzer	R&S	FSP40	100219	2011/11/24	2012/11/23



6.5 Test Result and Data

Test Date: Jun. 01, 2012

Temperature: 25°C

Atmospheric pressure: 1020 hPa

Humidity: 65%

Modulation Standard	Channel	Frequency (MHz)	6dB Bandwidth (MHz)	
			ANT R	ANT L
802.11b (11Mbps)	01	2412	11.9	12.0
	06	2437	12.0	12.0
	11	2462	12.0	12.0
802.11g (54Mbps)	01	2412	16.6	16.4
	06	2437	16.3	16.4
	11	2462	16.4	16.4
802.11n HT20 (130Mbps)	01	2412	17.8	17.6
	06	2437	17.6	17.6
	11	2462	17.7	17.5
802.11n HT40 (270Mbps)	03	2422	36.0	36.0
	06	2437	36.0	35.6
	09	2452	36.0	36.0

Test Date: Jun. 05, 2012

Temperature: 25°C

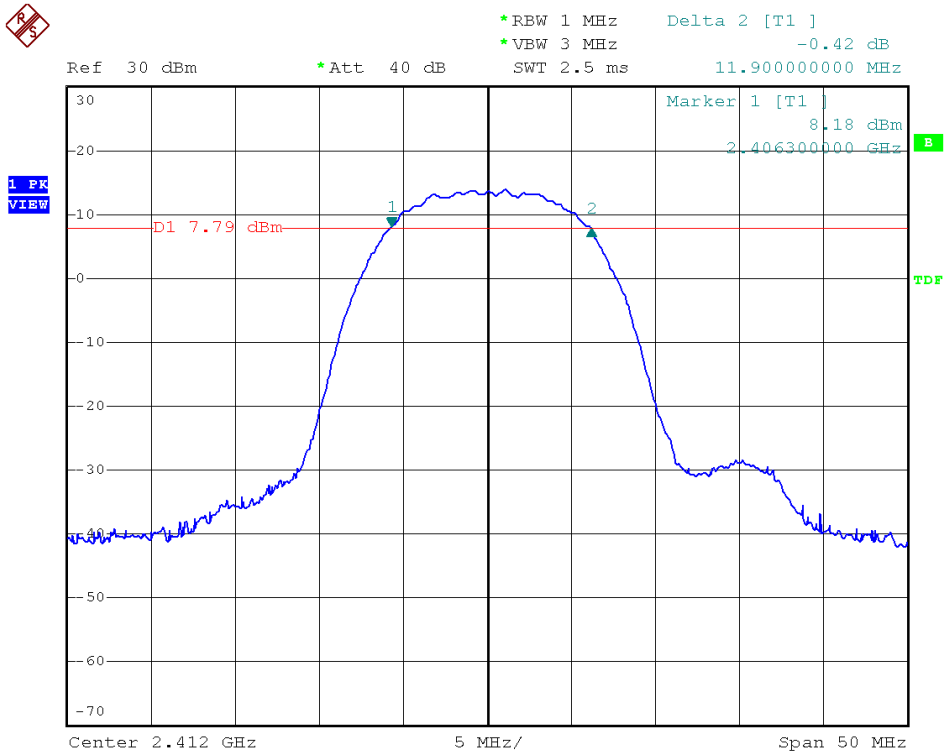
Atmospheric pressure: 1020 hPa

Humidity: 65%

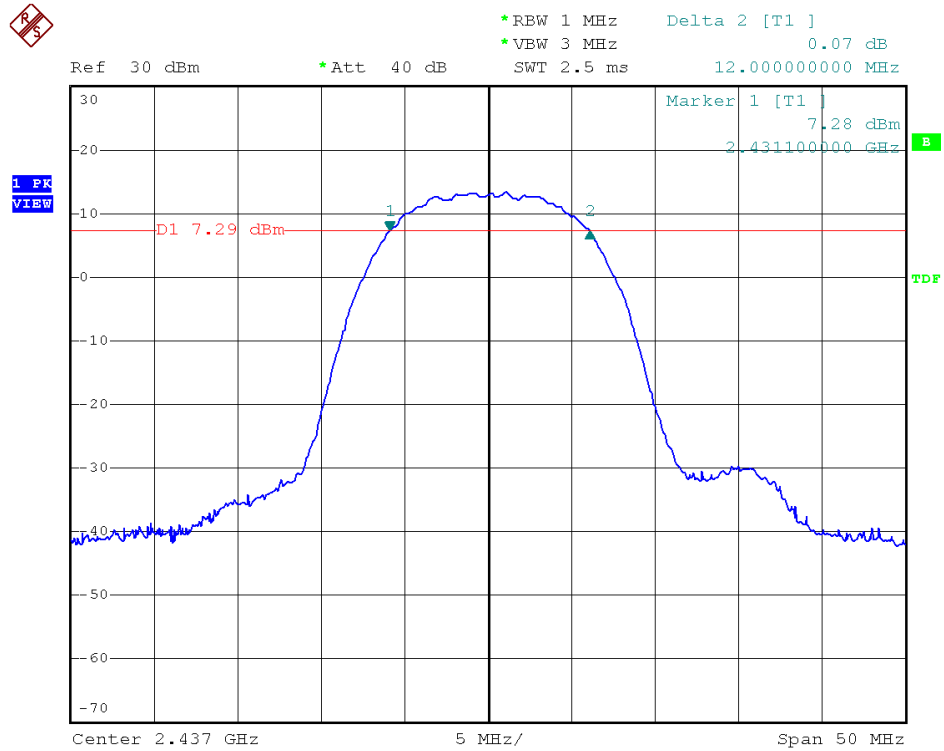
Modulation Standard	Channel	Frequency (MHz)	6dB Bandwidth (MHz)	
			ANT R	ANT L
802.11a (54Mbps)	149	5745	16.4	16.4
	157	5785	16.6	16.3
	165	5825	16.6	16.5
802.11an HT20 (130Mbps)	149	5745	17.6	17.6
	157	5785	17.5	17.5
	165	5825	17.5	17.6
802.11n HT40 (270Mbps)	151	5755	36.0	36.3
	155	5775	---	---
	159	5795	35.8	36.0



Modulation Standard: 802.11b (11Mbps), ANT R
Channel: 01

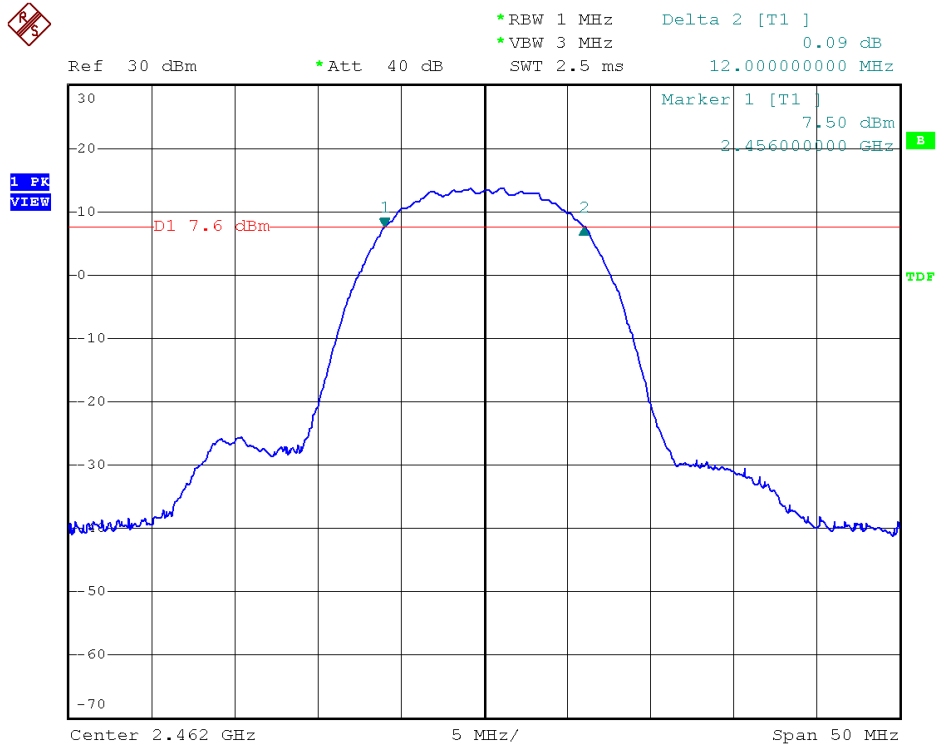


Modulation Standard: 802.11b (11Mbps), ANT R
Channel: 06

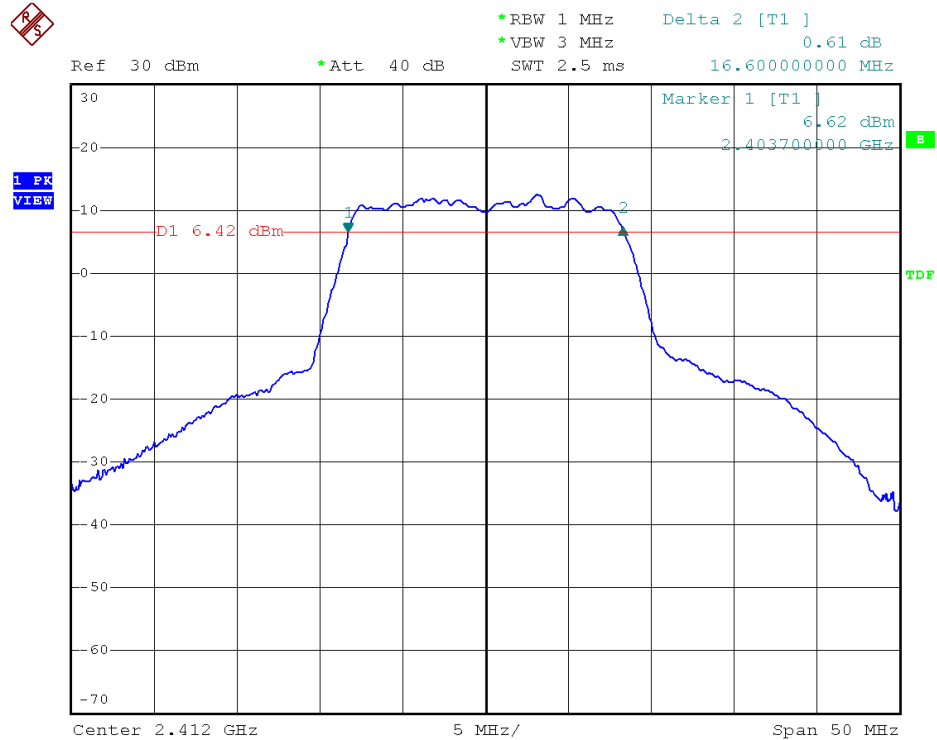




Modulation Standard: 802.11b (11Mbps), ANT R
Channel: 11

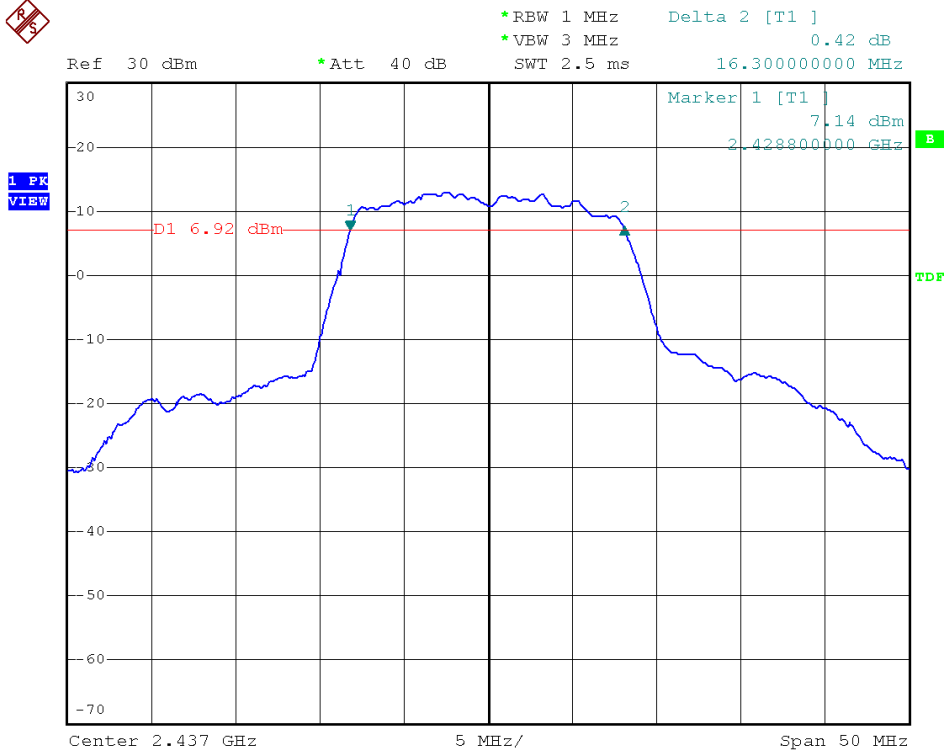


Modulation Standard: 802.11g (54Mbps), ANT R
Channel: 01

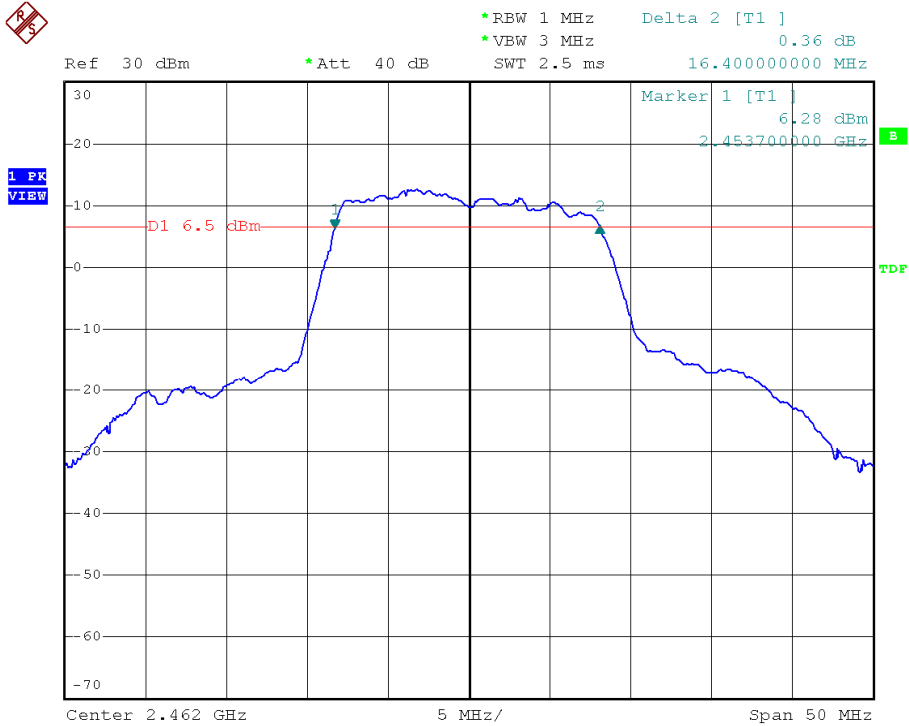




Modulation Standard: 802.11g (54Mbps), ANT R
Channel: 06

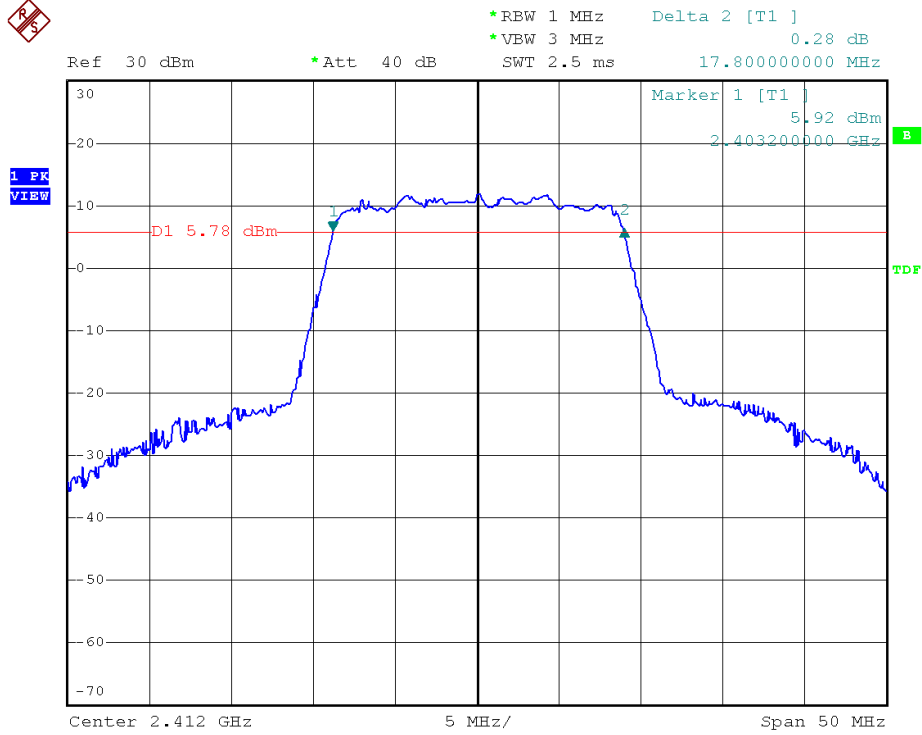


Modulation Standard: 802.11g (54Mbps), ANT R
Channel: 11

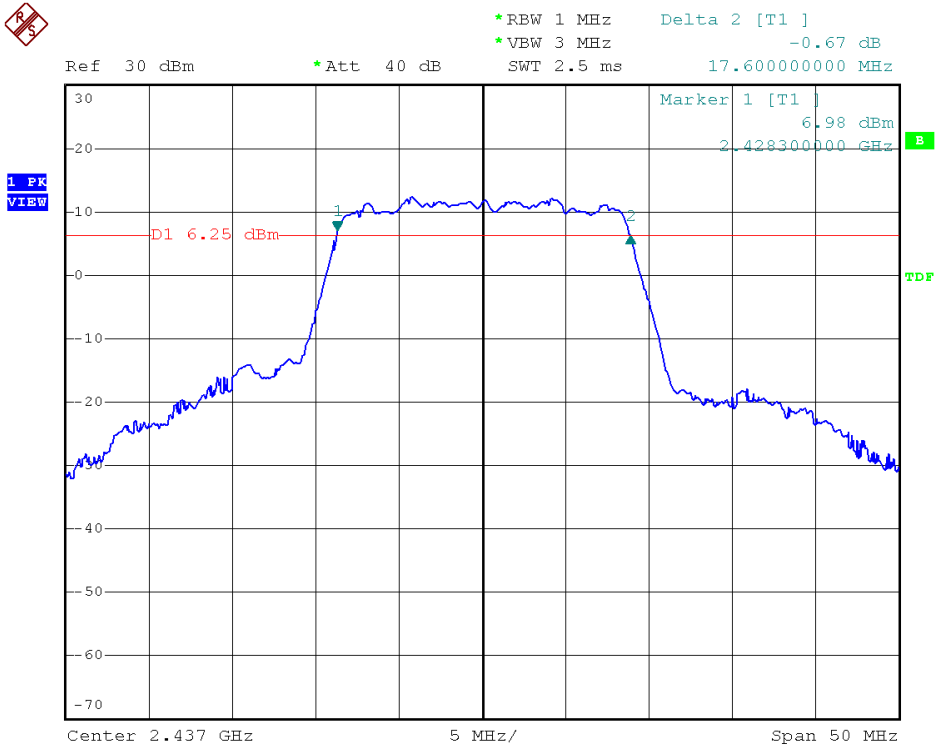




Modulation Standard: 802.11n HT20 (130Mbps), ANT R
Channel: 01

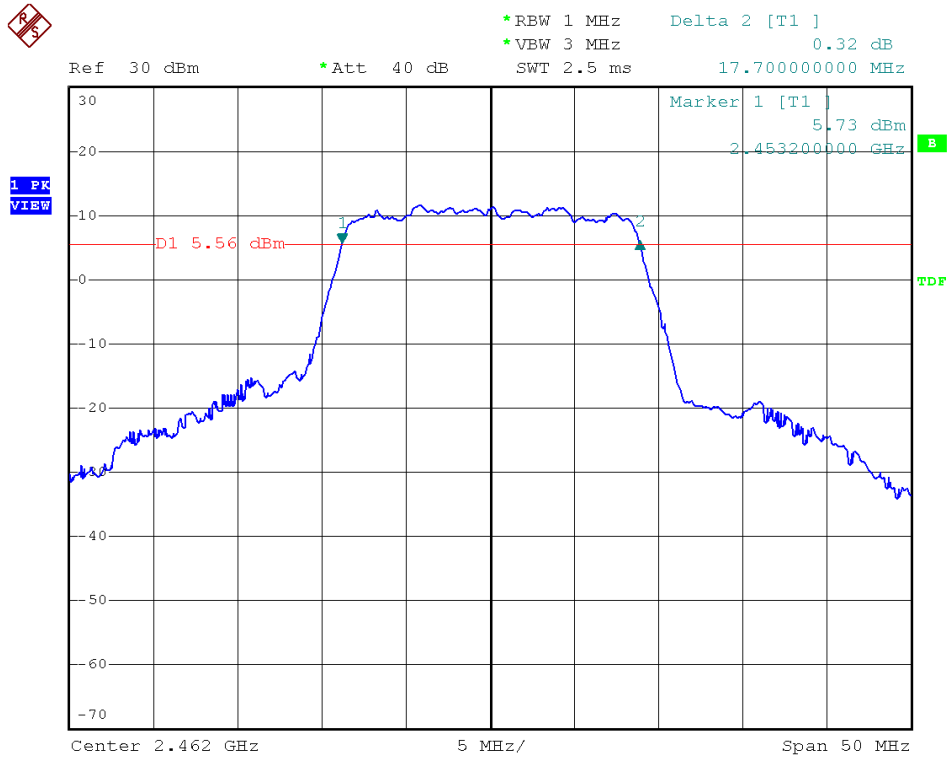


Modulation Standard: 802.11n HT20 (130Mbps), ANT R
Channel: 06

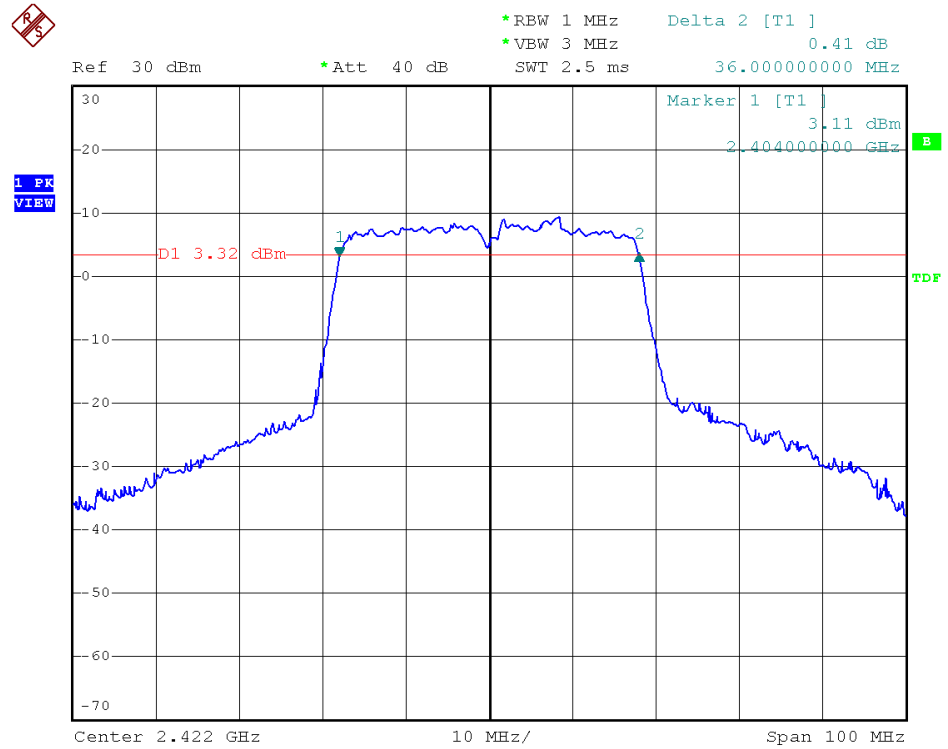




Modulation Standard: 802.11n HT20 (130Mbps), ANT R
Channel: 11

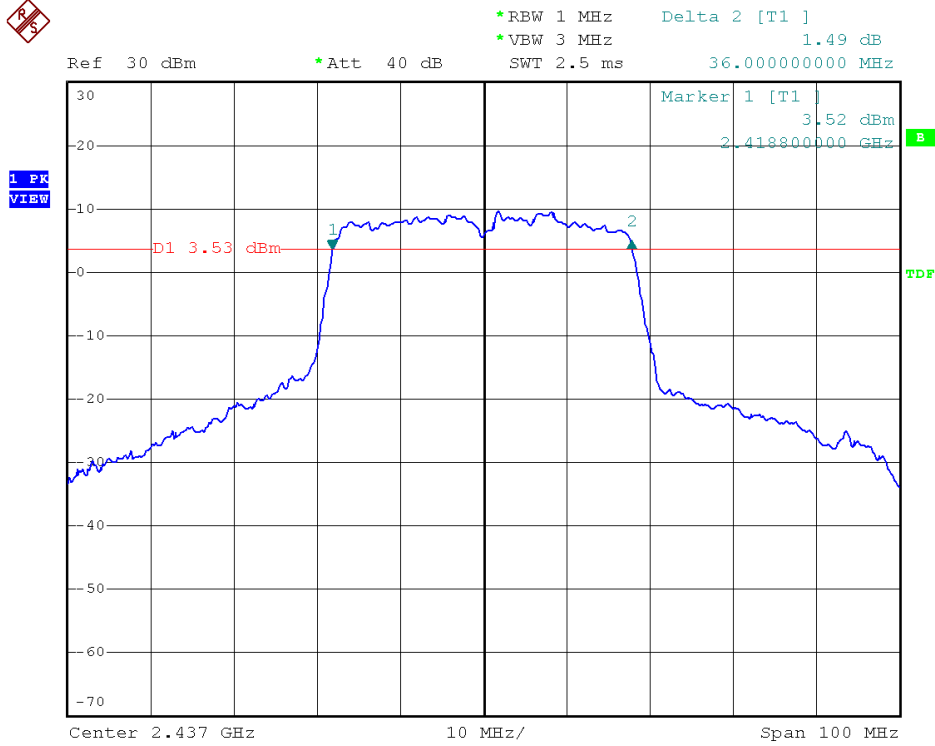


Modulation Standard: 802.11n HT40 (270Mbps), ANT R
Channel: 03

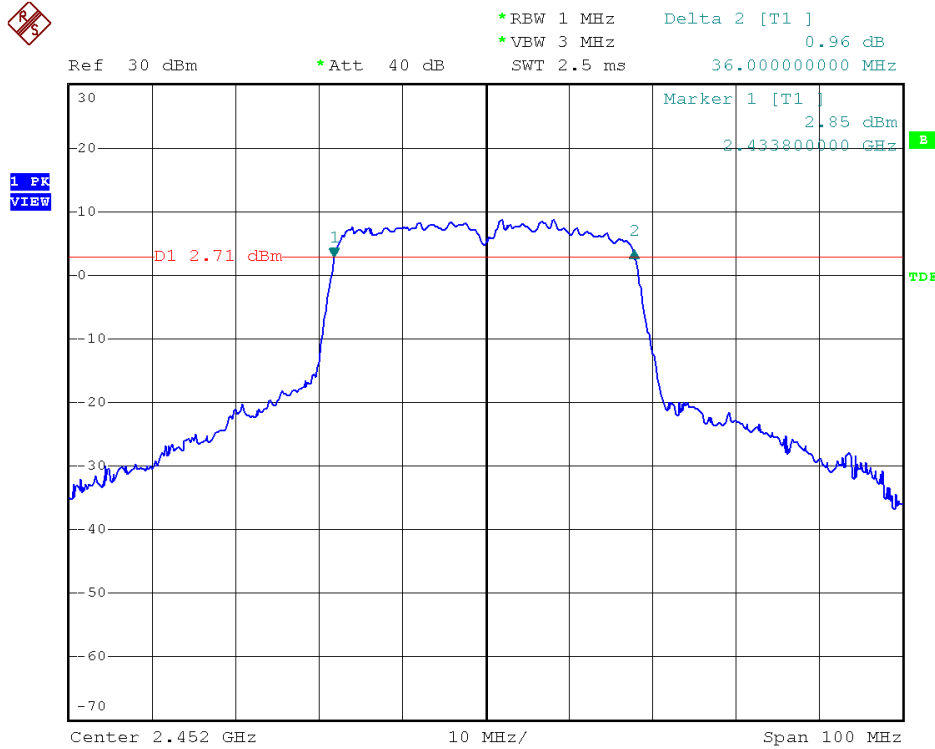




Modulation Standard: 802.11n HT40 (270Mbps), ANT R
Channel: 06

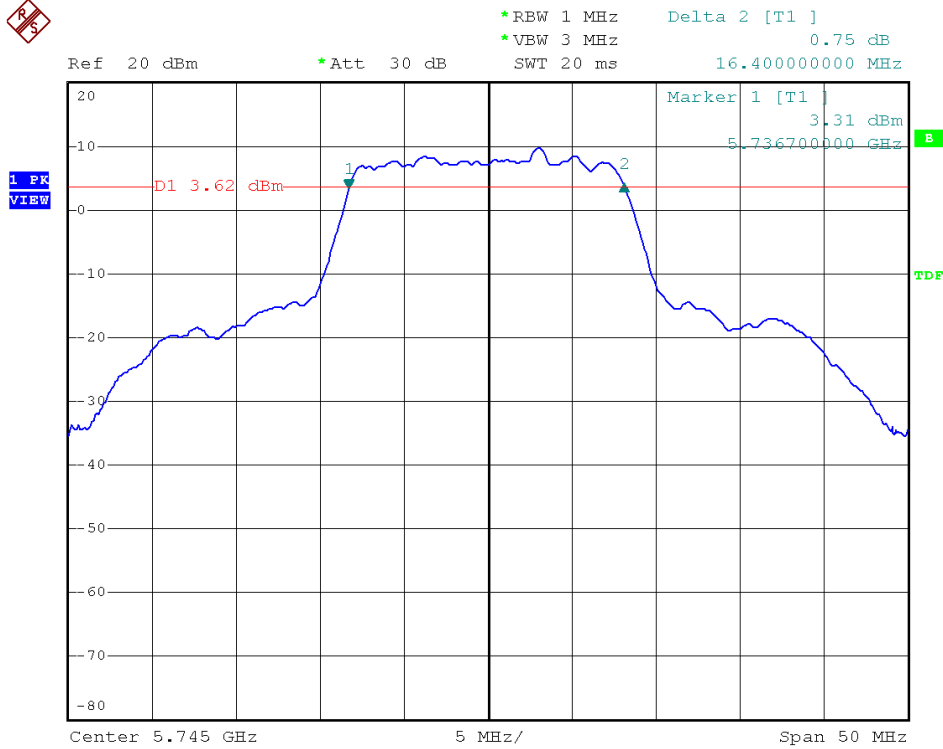


Modulation Standard: 802.11n HT40 (270Mbps), ANT R
Channel: 09

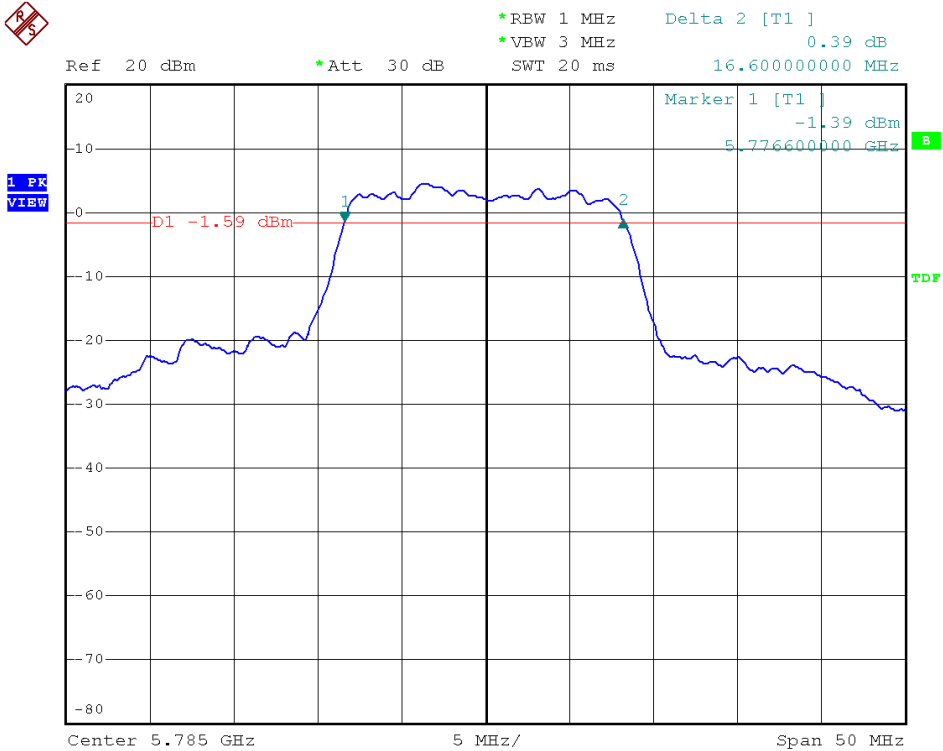




Modulation Standard: 802.11a (54Mbps), ANT R
Channel: 149

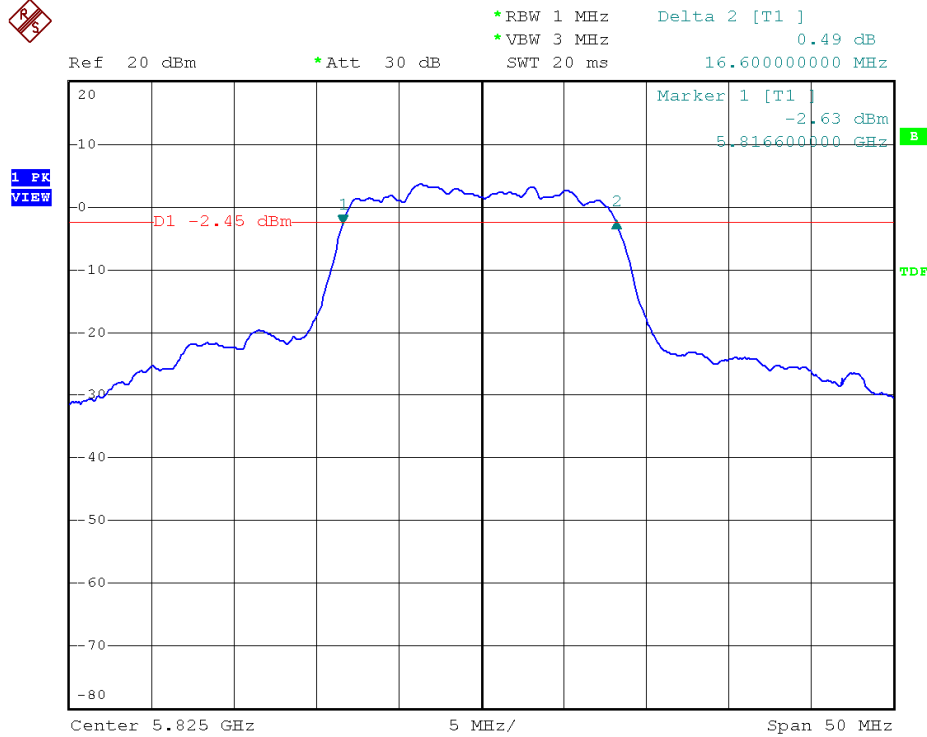


Modulation Standard: 802.11a (54Mbps), ANT R
Channel: 157

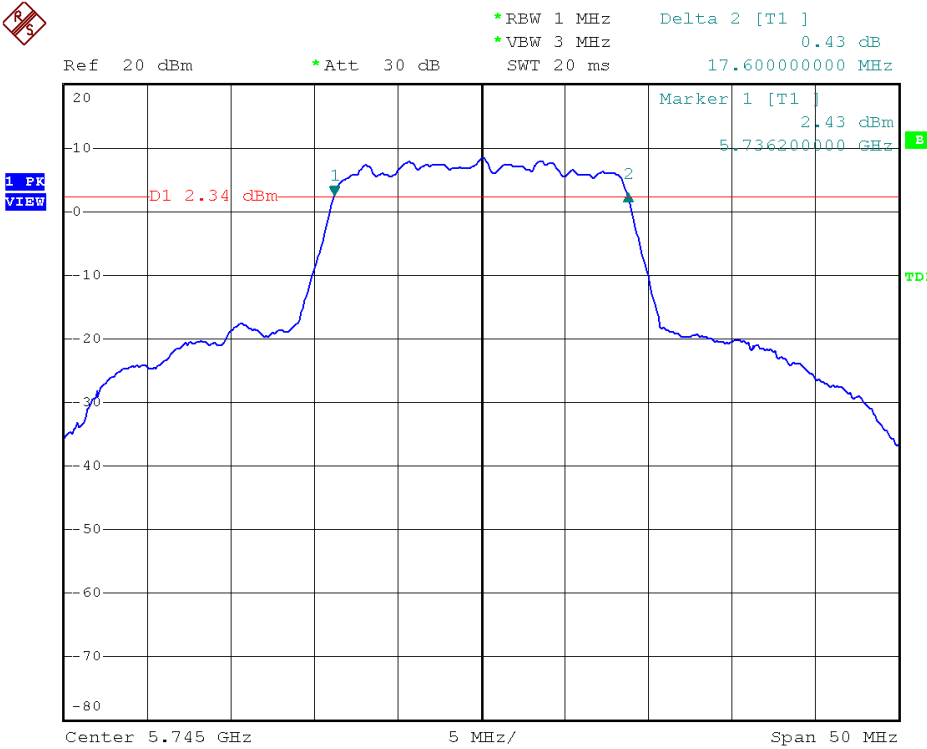




Modulation Standard: 802.11a (54Mbps), ANT R
Channel: 165

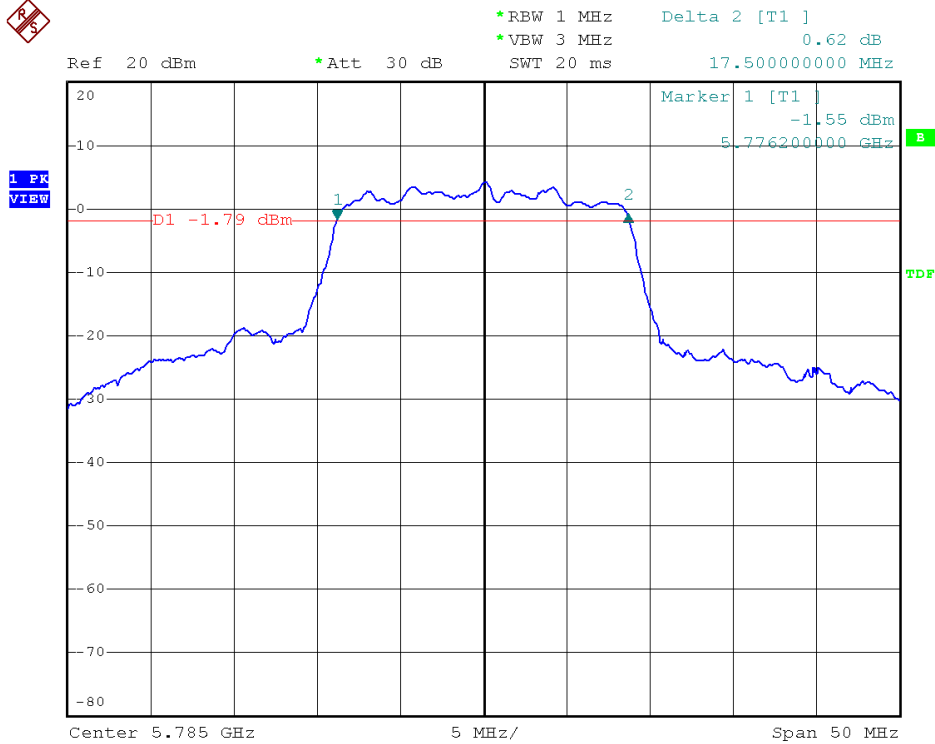


Modulation Standard: 802.11an HT20 (130Mbps), ANT R
Channel: 149

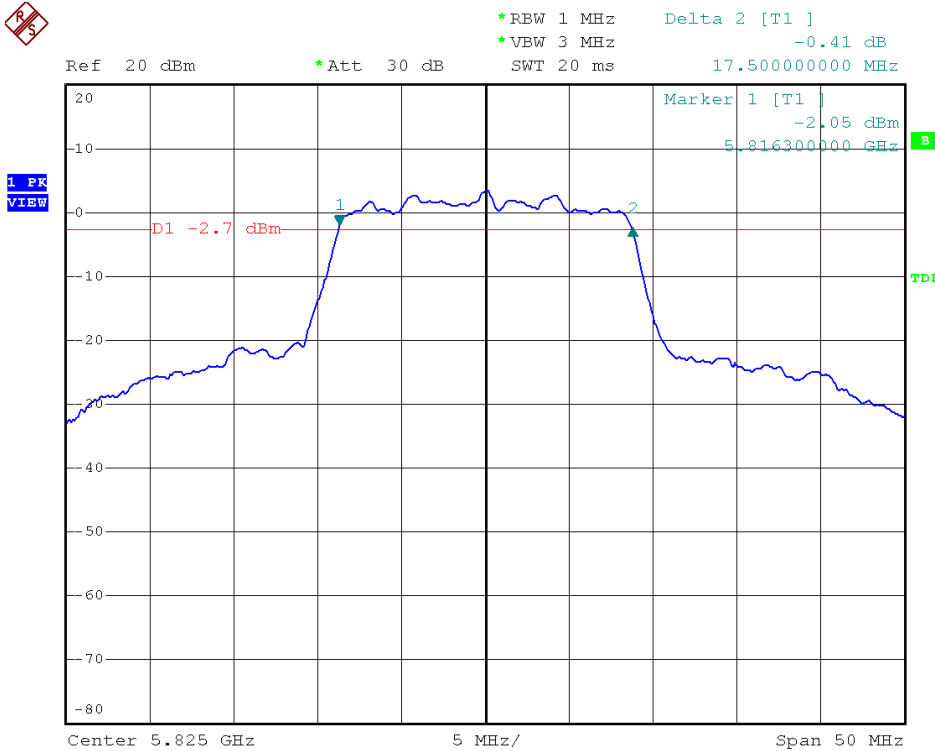




Modulation Standard: 802.11an HT20 (130Mbps), ANT R
Channel: 157

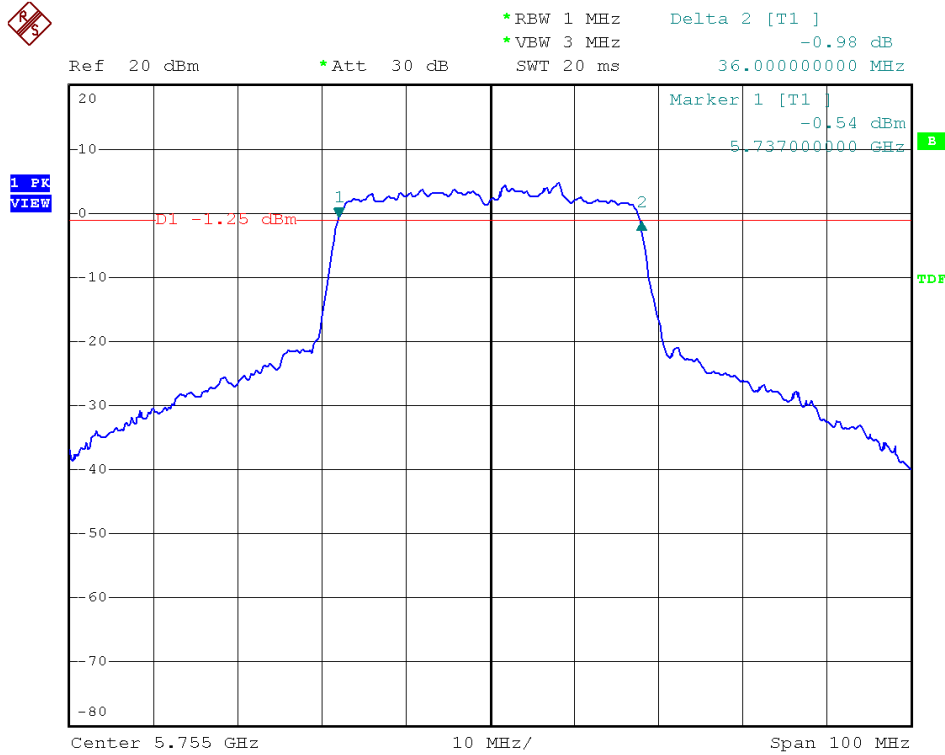


Modulation Standard: 802.11an HT20 (130Mbps), ANT R
Channel: 165

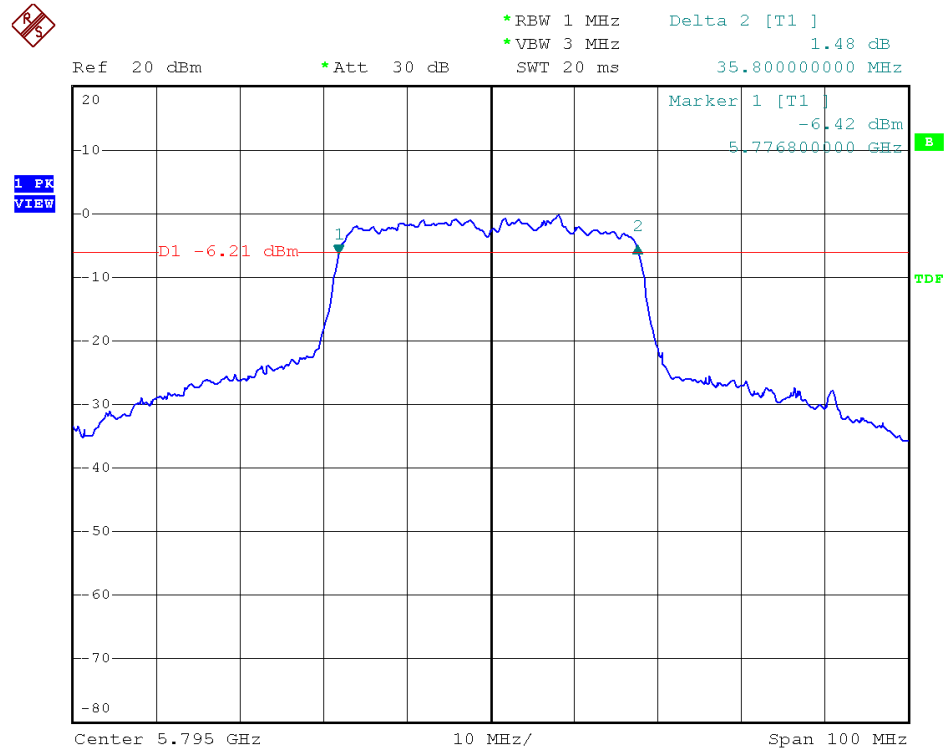




Modulation Standard: 802.11an HT40 (270Mbps), ANT R
Channel: 151

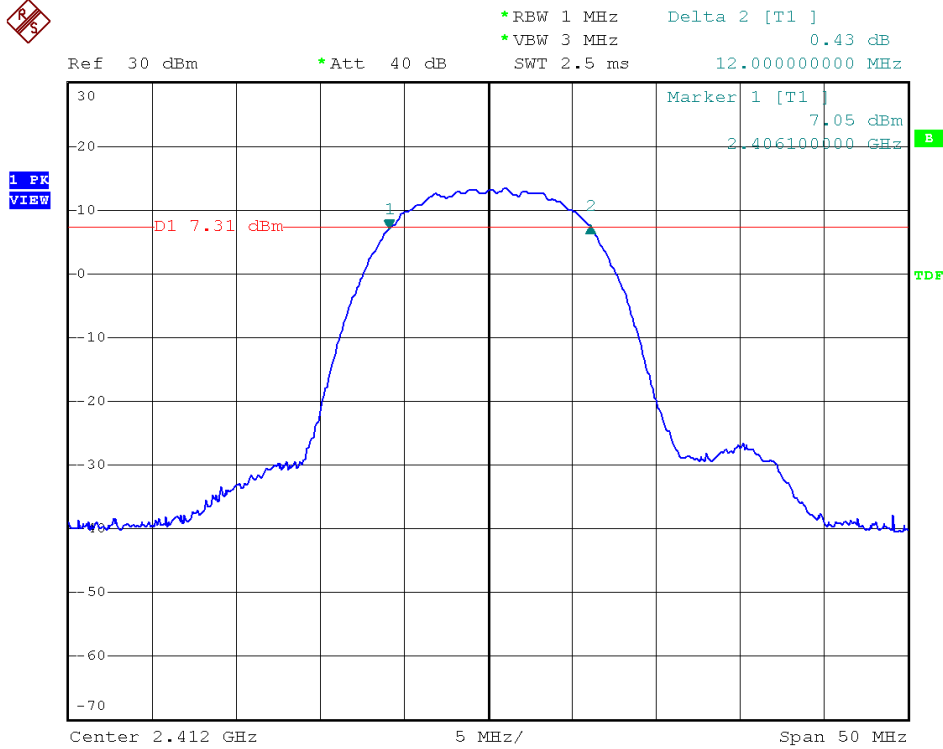


Modulation Standard: 802.11an HT40 (270Mbps), ANT R
Channel: 159

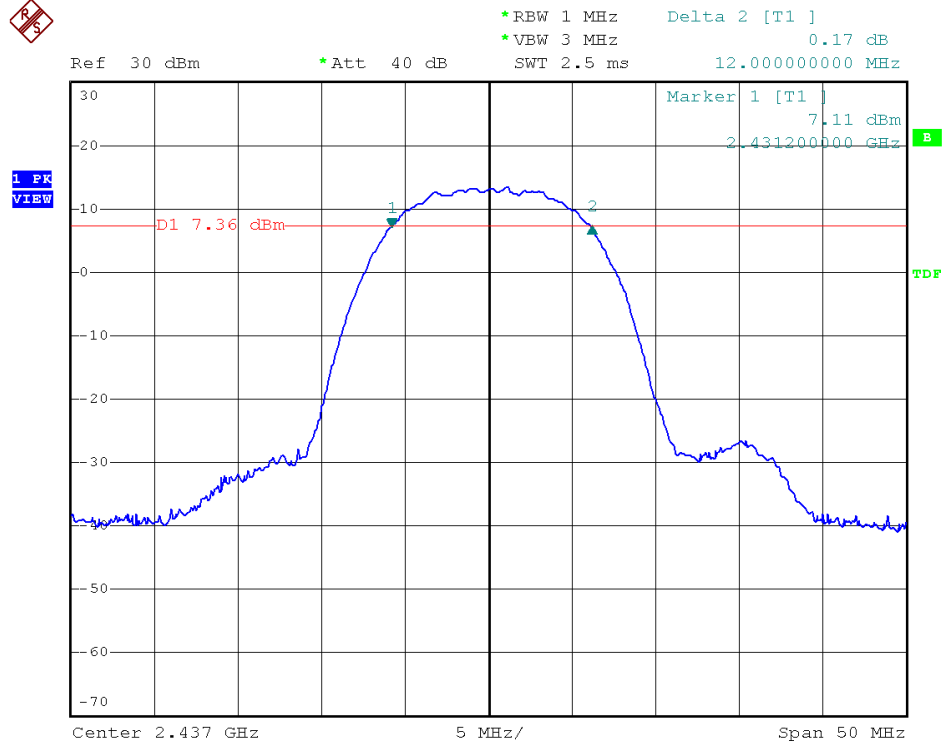




Modulation Standard: 802.11b (11Mbps), ANT L
Channel: 01

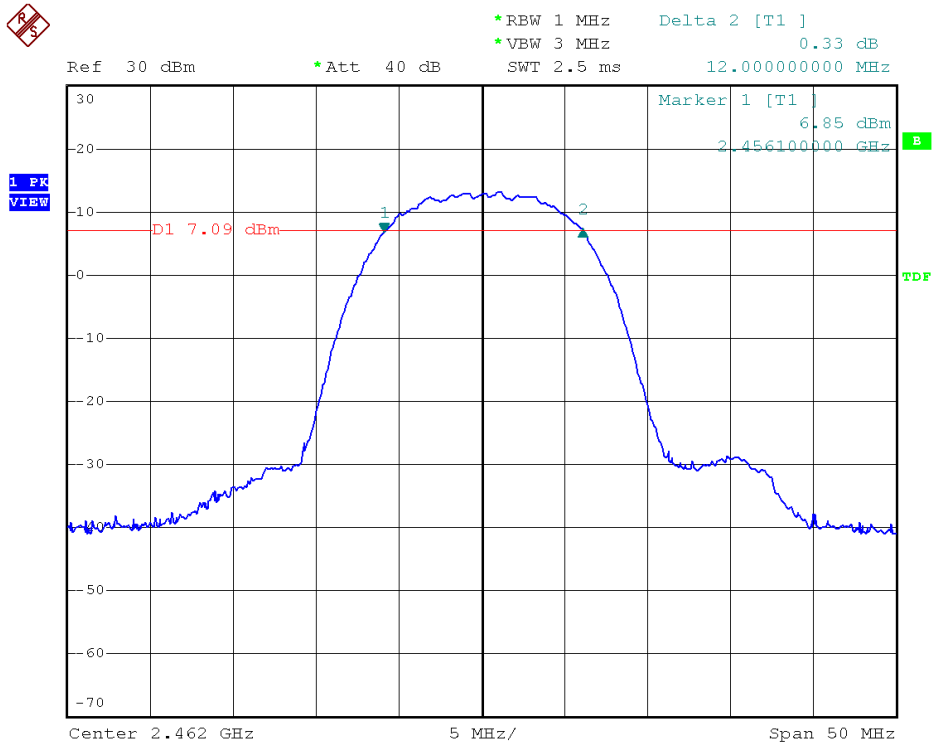


Modulation Standard: 802.11b (11Mbps), ANT L
Channel: 06

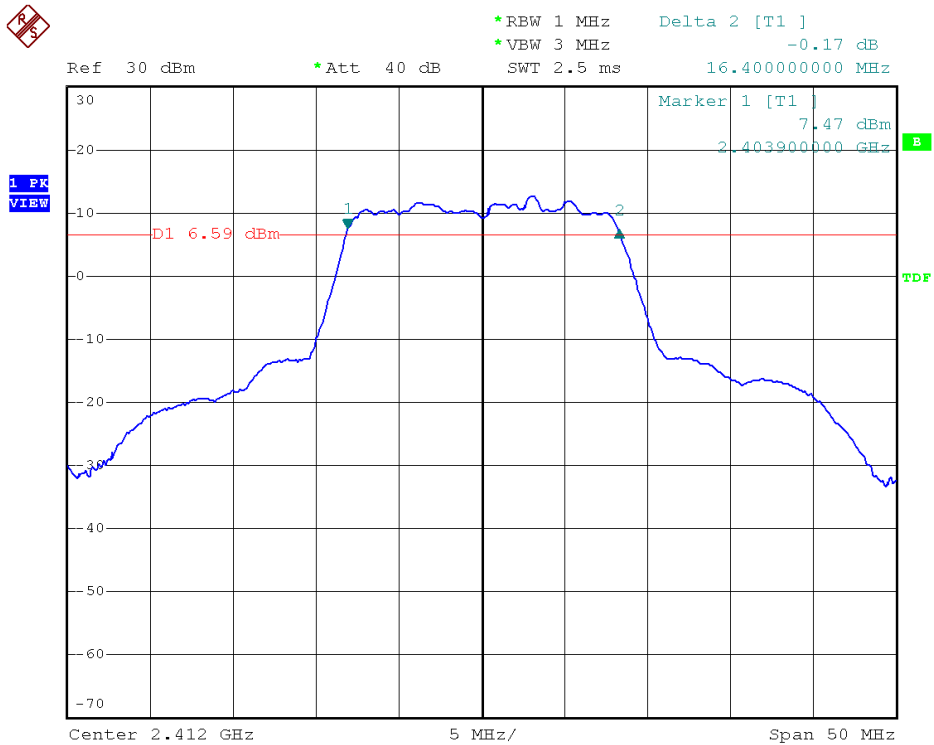




Modulation Standard: 802.11b (11Mbps), ANT L
Channel: 11

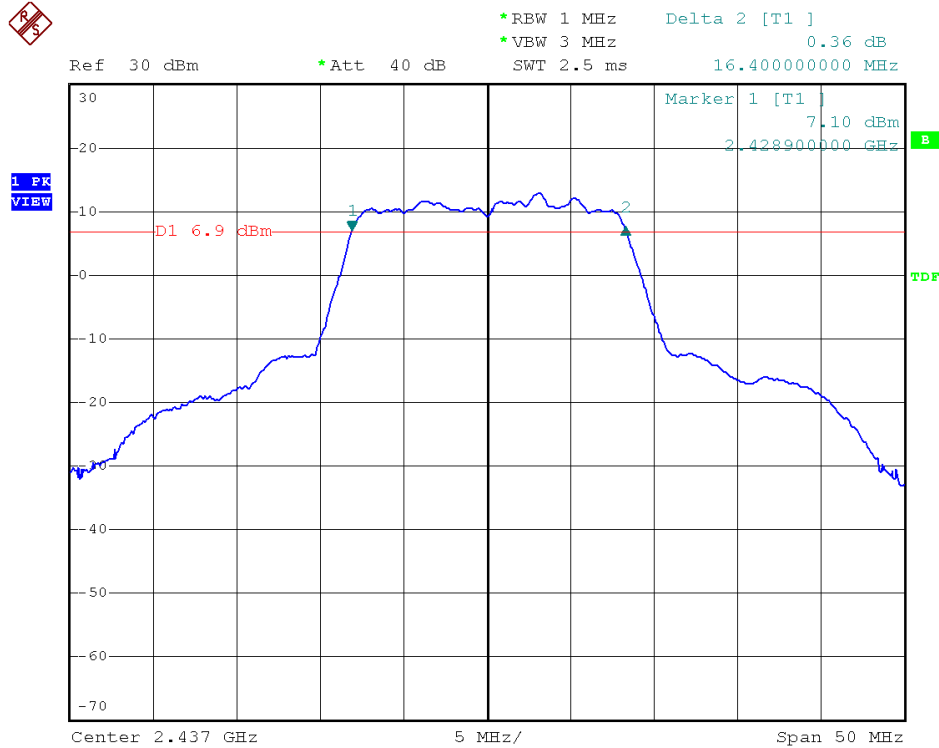


Modulation Standard: 802.11g (54Mbps), ANT L
Channel: 01

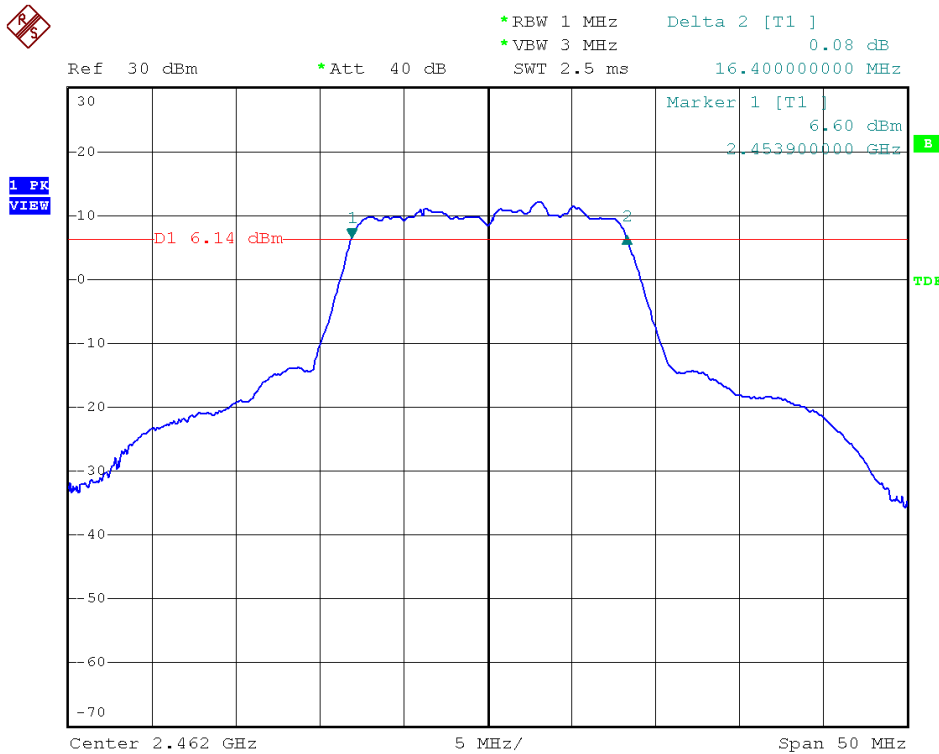




Modulation Standard: 802.11g (54Mbps), ANT L
Channel: 06

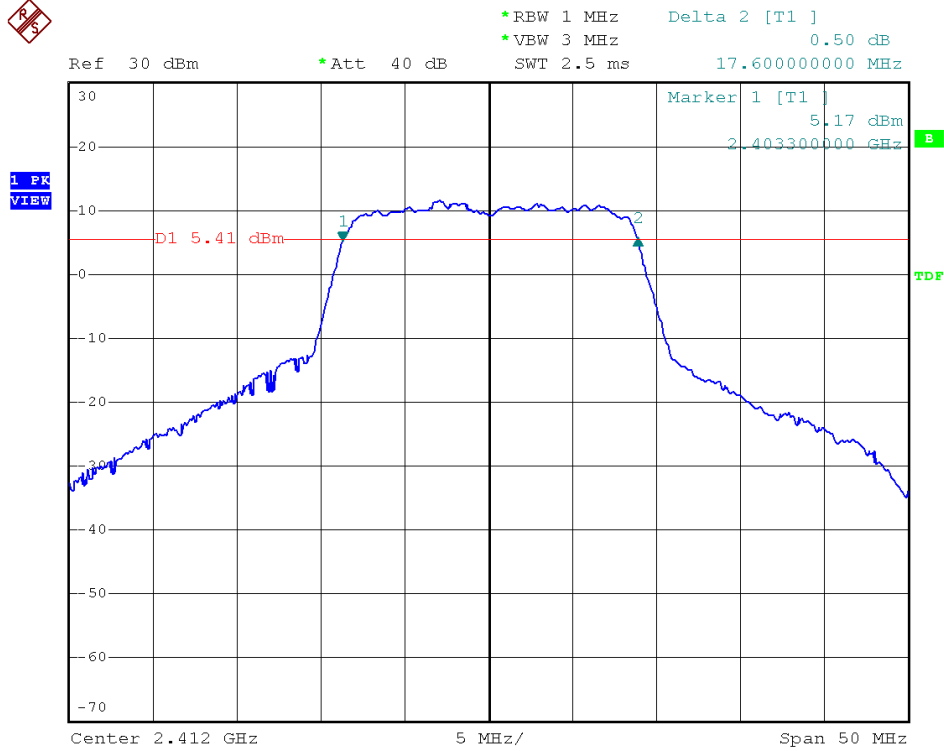


Modulation Standard: 802.11g (54Mbps), ANT L
Channel: 11

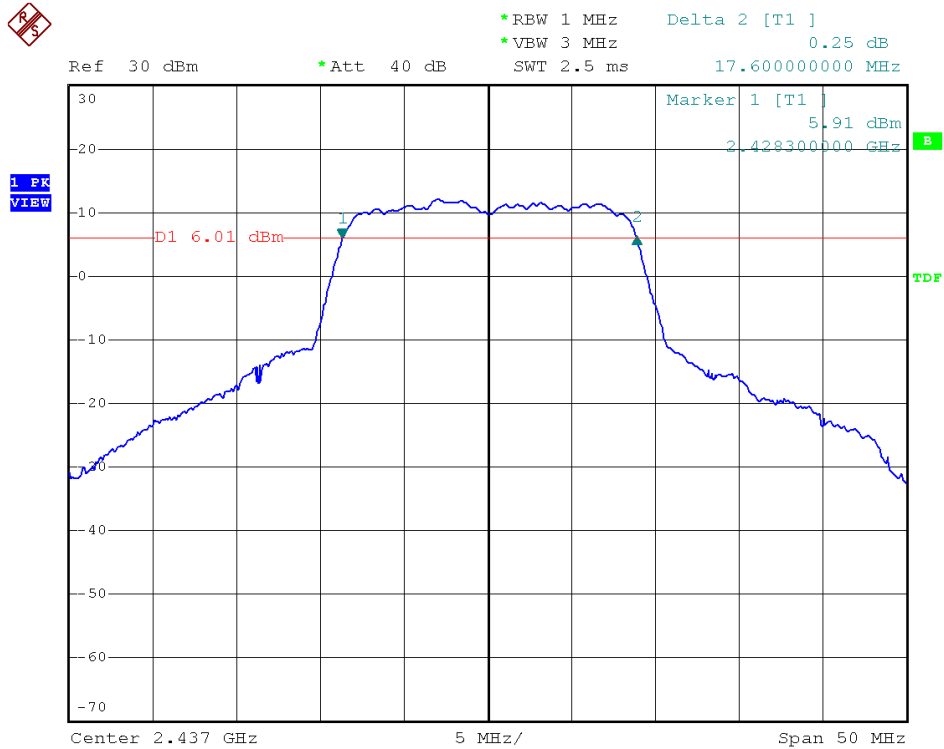




Modulation Standard: 802.11n HT20 (130Mbps), ANT L
Channel: 01

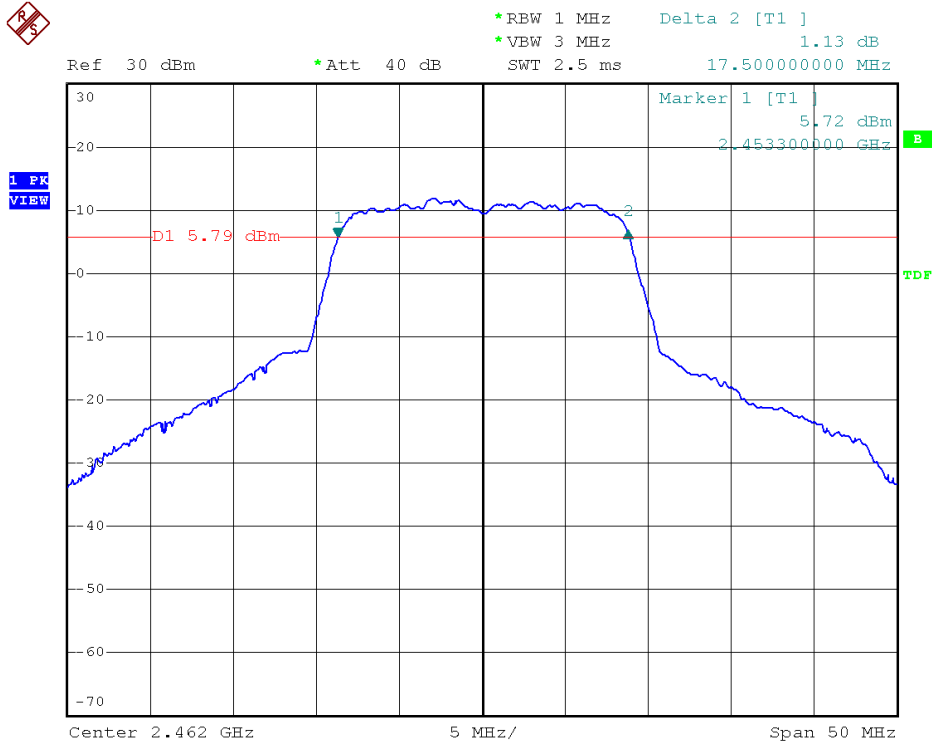


Modulation Standard: 802.11n HT20 (130Mbps), ANT L
Channel: 06

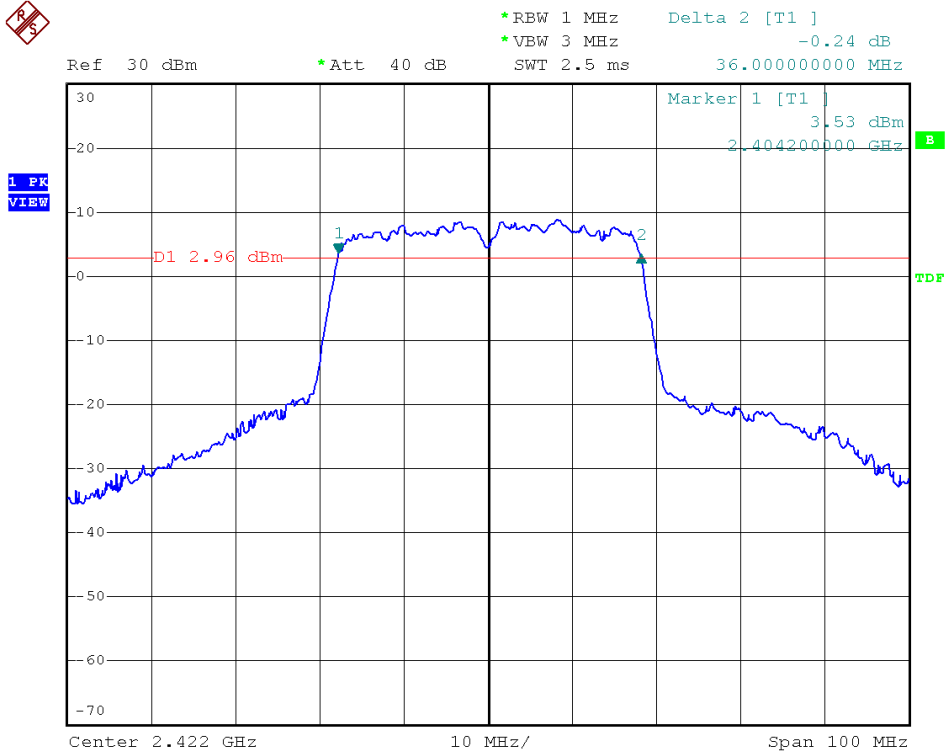




Modulation Standard: 802.11n HT20 (130Mbps), ANT L
Channel: 11

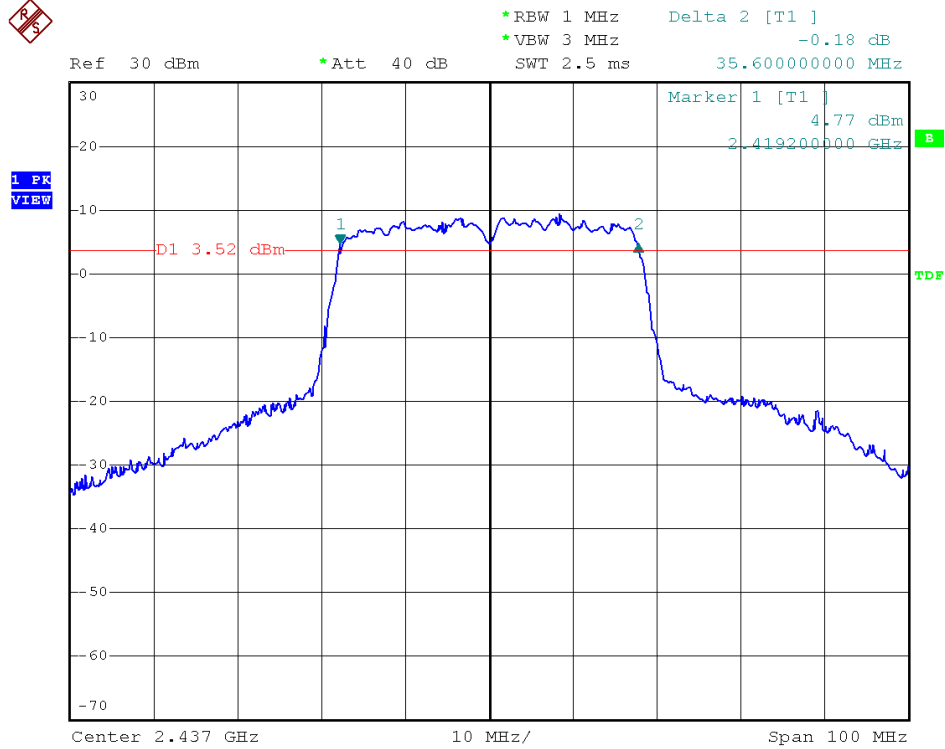


Modulation Standard: 802.11n HT40 (270Mbps), ANT L
Channel: 03

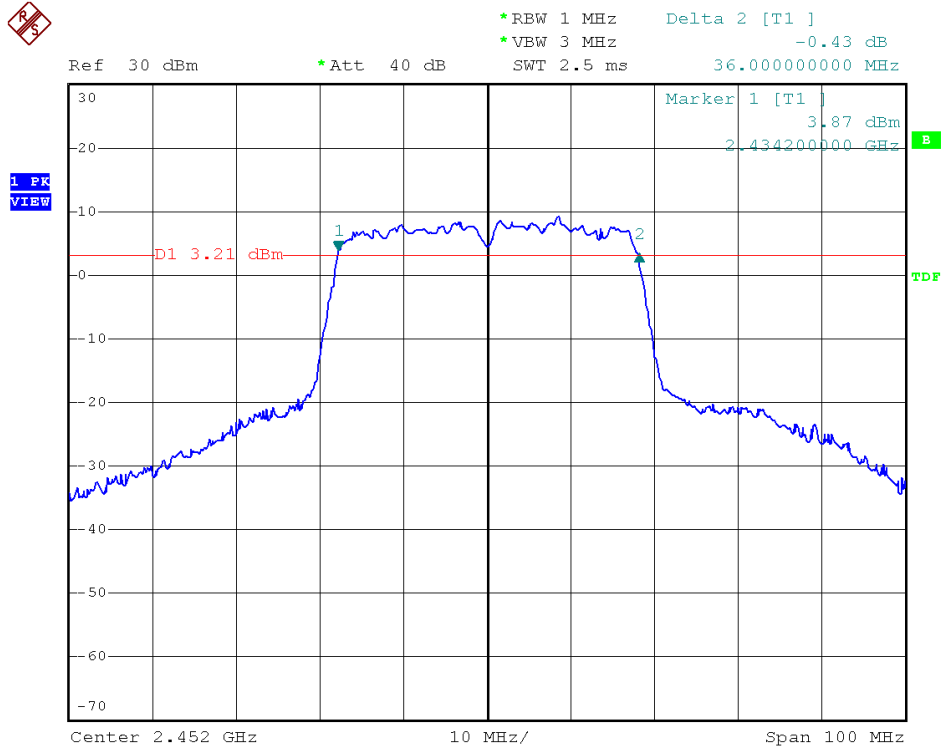




Modulation Standard: 802.11n HT40 (270Mbps), ANT L
Channel: 06

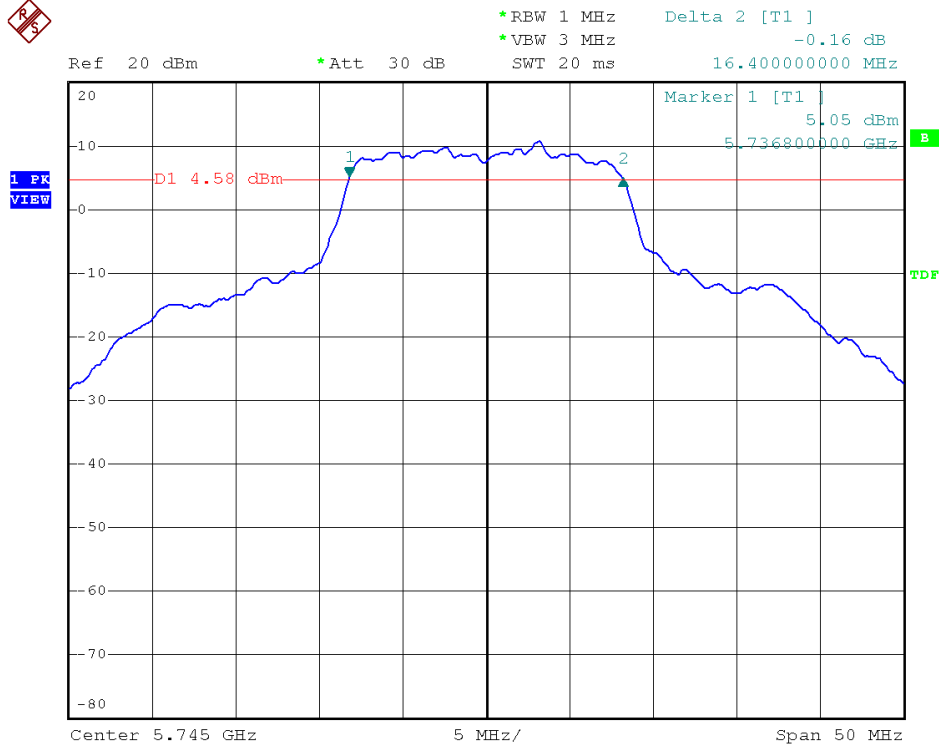


Modulation Standard: 802.11n HT40 (270Mbps), ANT L
Channel: 09

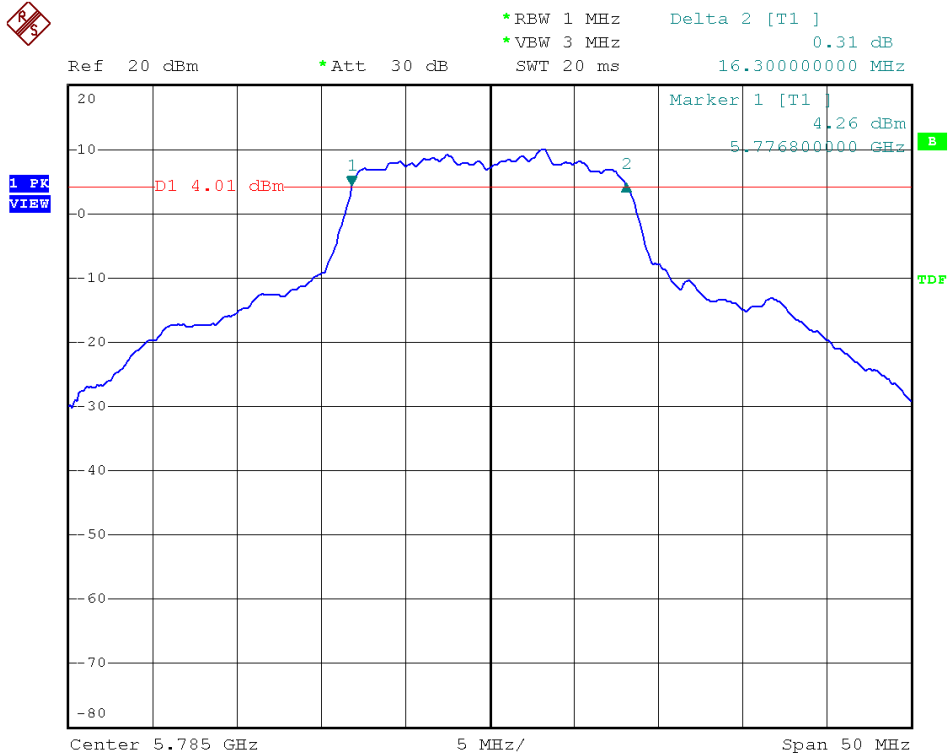




Modulation Standard: 802.11a (54Mbps), ANT L
Channel: 149

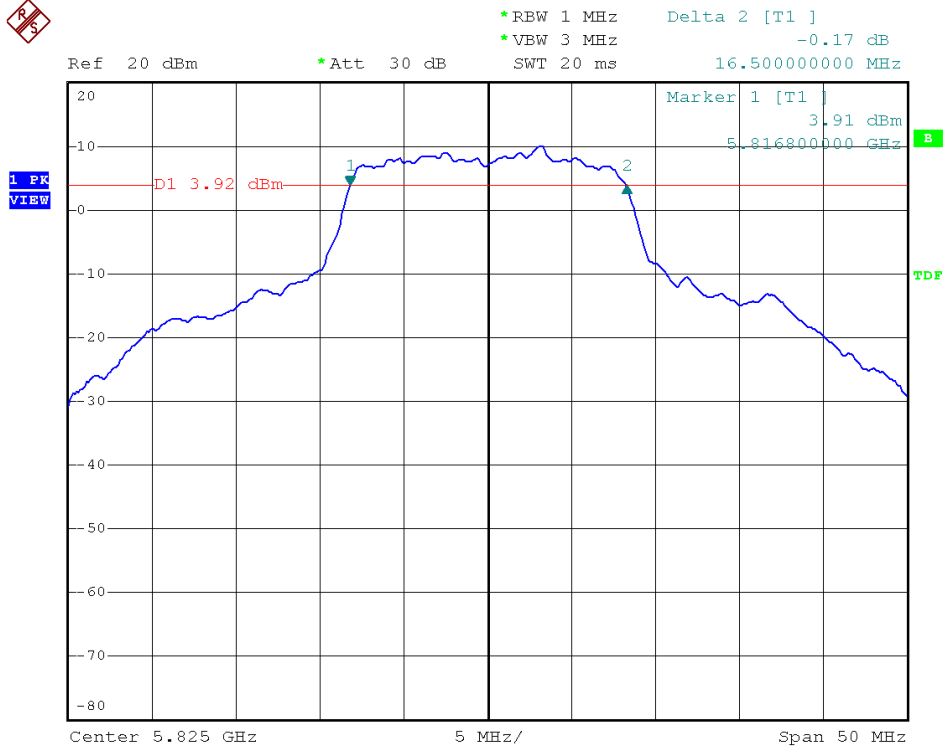


Modulation Standard: 802.11a (54Mbps), ANT L
Channel: 157

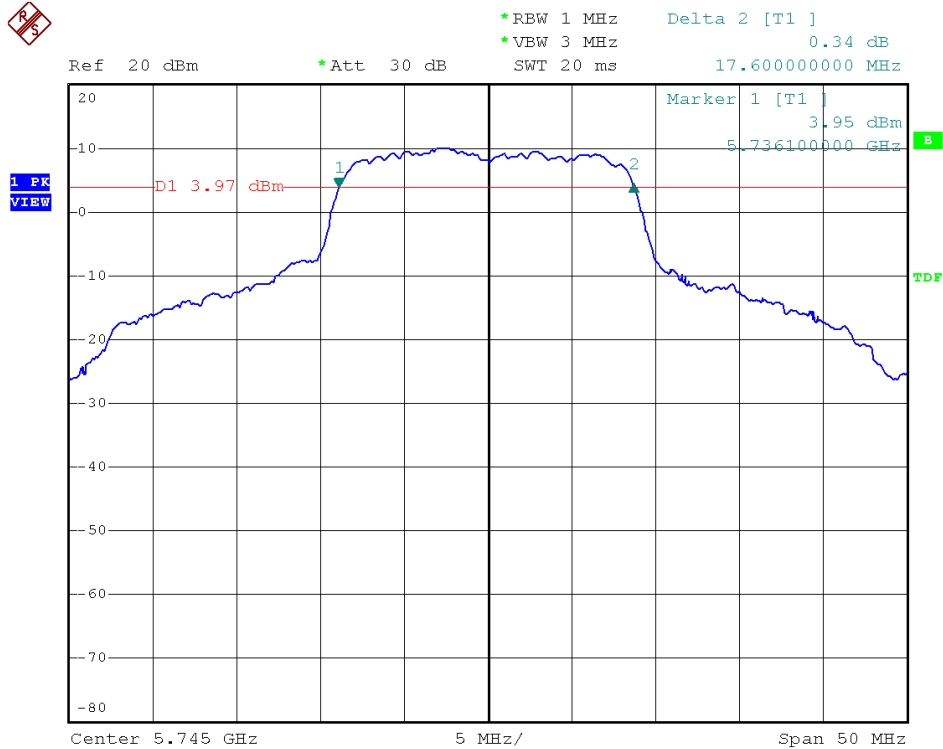




Modulation Standard: 802.11a (54Mbps), ANT L
Channel: 165

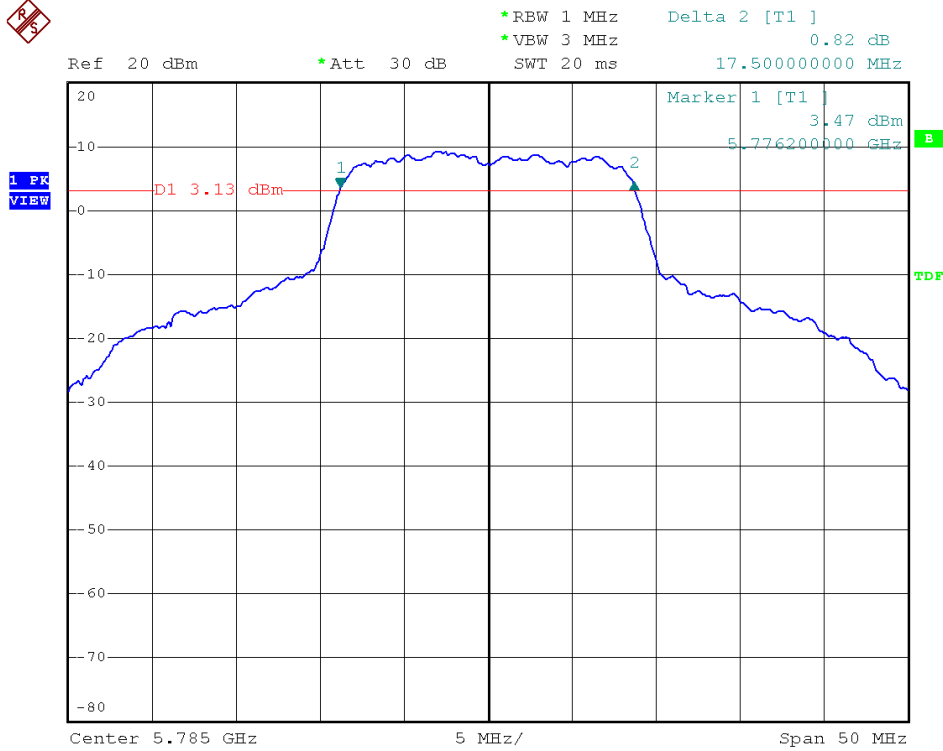


Modulation Standard: 802.11an HT20 (130Mbps), ANT L
Channel: 149

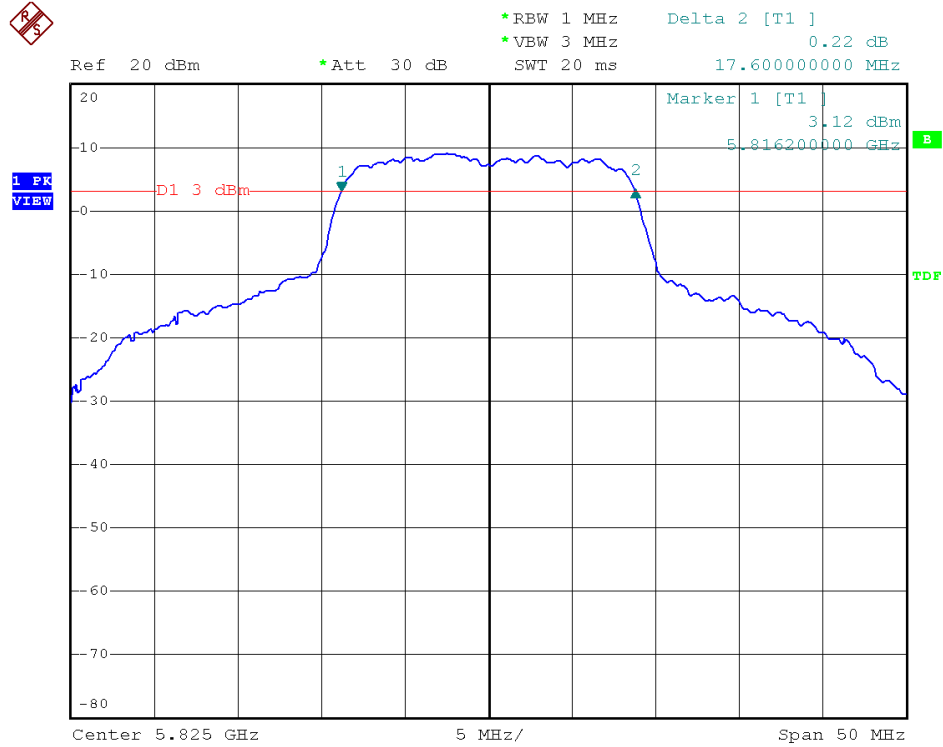




Modulation Standard: 802.11an HT20 (130Mbps), ANT L
Channel: 157

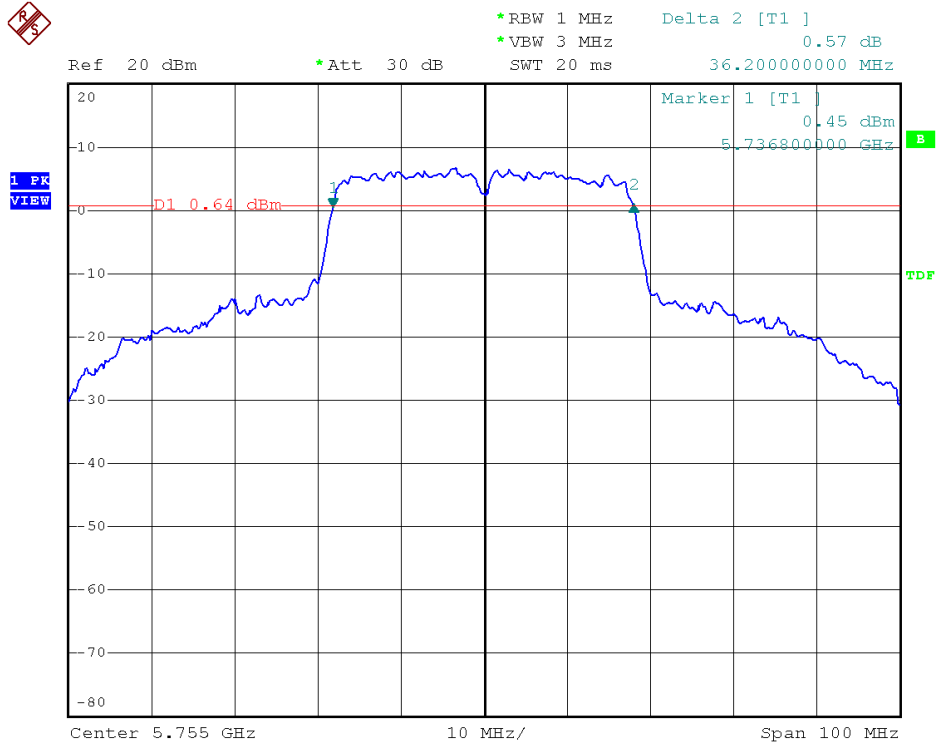


Modulation Standard: 802.11an HT20 (130Mbps), ANT L
Channel: 165

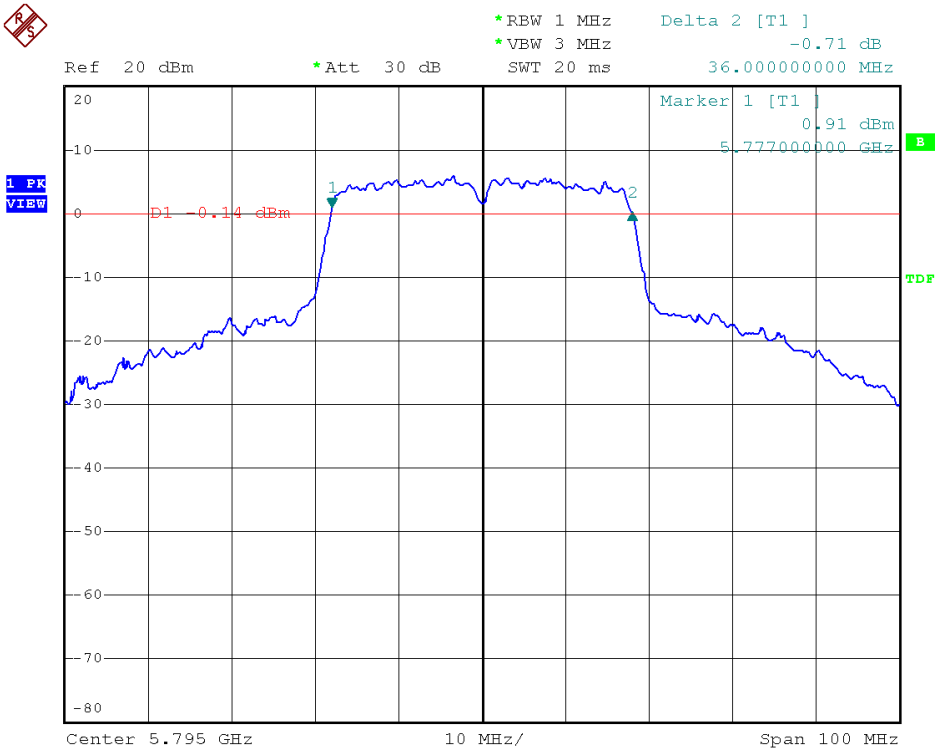




Modulation Standard: 802.11an HT40 (270Mbps), ANT L
Channel: 151



Modulation Standard: 802.11an HT40 (270Mbps), ANT L
Channel: 159





7. Maximum Peak and Average Output Power

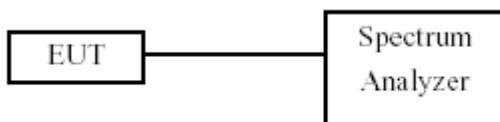
7.1 Test Limit

The Maximum Peak Output Power Measurement is 30dBm.

7.2 Test Procedures

- a. The transmitter output was connected to the spectrum analyzer.
- b. Set RBW of spectrum analyzer to 1MHz and VBW to 3MHz.
- c. Set detector mode to peak (for peak output power) or set detector mode to RMS (for average output power).
- d. Use the spectrum analyzer's integrated band power measurement function with band limits set equal to the EBW band edges.
- e. The maximum peak and average output power was measured and recorded.

7.3 Test Setup Layout



7.4 Measurement Equipment

Instrument/Ancillary	Manufacturer	Model No.	Serial No.	Calibration Date	Valid Date
Spectrum Analyzer	R&S	FSP40	100219	2011/11/24	2012/11/23



7.5 Test Result and Data

Test Date: Jun. 01, 2012

Temperature: 25°C

Atmospheric pressure: 1020 hPa

Humidity: 65%

Modulation Standard	Channel	Frequency (MHz)	Peak Power Output (dBm)			Peak Power Output (mW)
			ANT R	ANT L	R+L	R+L
802.11b (11Mbps)	01	2412	22.50	22.60	25.56	359.80
	06	2437	22.86	22.78	25.83	382.87
	11	2462	22.48	22.44	25.47	352.40
802.11g (54Mbps)	01	2412	22.36	22.59	25.49	353.74
	06	2437	22.86	22.86	25.87	386.39
	11	2462	22.24	22.32	25.29	338.10

Modulation Standard	Channel	Frequency (MHz)	Peak Power Output (dBm)			Peak Power Output (mW)
			ANT R	ANT L	R+L	R+L
802.11n HT20 (130Mbps)	01	2412	22.35	22.42	25.40	346.37
	06	2437	22.85	22.87	25.87	386.39
	11	2462	22.27	22.47	25.38	345.26
802.11n HT40 (270Mbps)	03	2422	22.35	22.44	25.41	347.18
	06	2437	22.88	22.84	25.87	386.40
	09	2452	22.21	22.42	25.33	340.92

Test Date: Jun. 05, 2012

Temperature: 25°C

Atmospheric pressure: 1020 hPa

Humidity: 65%

Modulation Standard	Channel	Frequency (MHz)	Peak Power Output (dBm)			Peak Power Output (mW)
			ANT R	ANT L	R+L	R+L
802.11a (54Mbps)	149	5745	19.66	20.41	23.06	202.37
	157	5785	14.90	19.96	21.14	129.99
	165	5825	14.02	20.05	21.02	126.39
802.11an HT20 (130Mbps)	149	5745	19.61	20.32	22.99	199.06
	157	5785	14.87	19.75	20.97	125.10
	165	5825	13.90	19.84	20.83	120.93
802.11an HT40 (270Mbps)	151	5755	19.02	20.23	22.68	185.24
	155	5775	---	---	---	---
	159	5795	14.07	19.68	20.73	118.42



Test Date: Jun. 01, 2012

Temperature: 25°C

Atmospheric pressure: 1020 hPa

Humidity: 65%

Modulation Standard	Channel	Frequency (MHz)	Average Power Output (dBm)			Average Power Output (mW)
			ANT R	ANT L	R+L	R+L
802.11b (11Mbps)	01	2412	18.03	18.35	21.20	131.92
	06	2437	18.36	18.53	21.46	139.83
	11	2462	17.87	18.18	21.04	127.00
802.11g (54Mbps)	01	2412	16.16	16.46	19.32	85.56
	06	2437	16.81	16.77	19.80	95.51
	11	2462	16.05	16.04	19.06	80.45

Modulation Standard	Channel	Frequency (MHz)	Average Power Output (dBm)			Average Power Output (mW)
			ANT R	ANT L	R+L	R+L
802.11n HT20 (130Mbps)	01	2412	16.12	16.23	19.19	82.90
	06	2437	16.53	16.76	19.66	92.40
	11	2462	15.88	16.44	19.18	82.78
802.11n HT40 (270Mbps)	03	2422	16.23	16.25	19.25	84.15
	06	2437	16.78	16.51	19.66	92.41
	09	2452	16.19	16.20	19.21	83.28

Test Date: Jun. 05, 2012

Temperature: 25°C

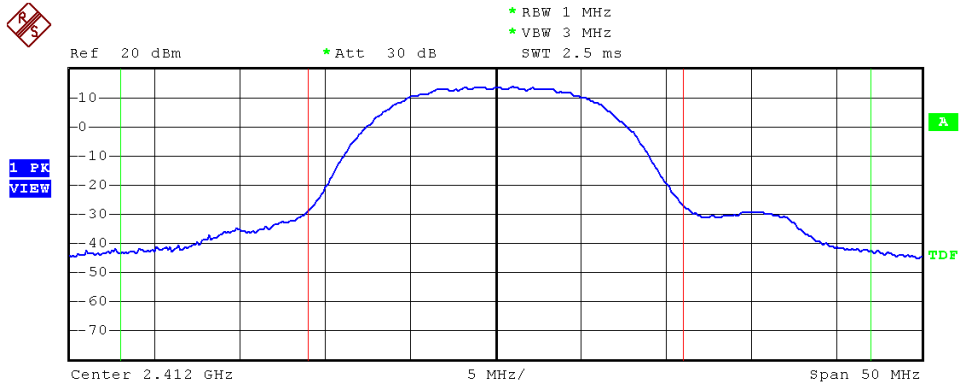
Atmospheric pressure: 1020 hPa

Humidity: 65%

Modulation Standard	Channel	Frequency (MHz)	Average Power Output (dBm)			Average Power Output (mW)
			ANT R	ANT L	R+L	R+L
802.11a (54Mbps)	149	5745	11.44	12.32	14.91	30.99
	157	5785	6.71	11.88	13.03	20.11
	165	5825	5.67	11.93	12.85	19.29
802.11an HT20 (130Mbps)	149	5745	11.40	12.30	14.88	30.79
	157	5785	6.49	11.79	12.91	19.56
	165	5825	5.53	11.88	12.79	18.99
802.11an HT40 (270Mbps)	151	5755	7.62	11.53	13.01	20.00
	155	5775	---	---	---	---
	159	5795	6.13	11.61	12.69	18.59

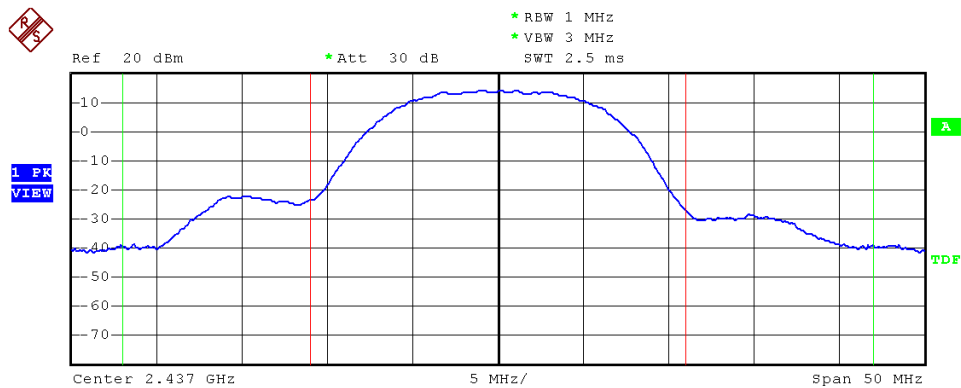


Modulation Standard: 802.11b (11Mbps), ANT R, Peak Power Output Channel: 01



Tx Channel			
Bandwidth	22 MHz	Power	22.50 dBm
Adjacent Channel			
Bandwidth	11 MHz	Lower	-48.83 dB
Spacing	16.5 MHz	Upper	-44.78 dB
Alternate Channel			
Bandwidth	11 MHz	Lower	-----
Spacing	27.5 MHz	Upper	-----

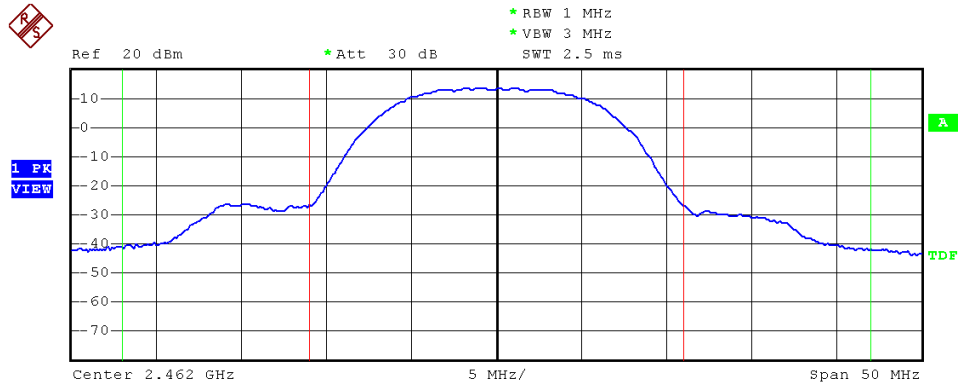
Modulation Standard: 802.11b (11Mbps), ANT R, Peak Power Output Channel: 06



Tx Channel			
Bandwidth	22 MHz	Power	22.86 dBm
Adjacent Channel			
Bandwidth	11 MHz	Lower	-38.96 dB
Spacing	16.5 MHz	Upper	-44.70 dB
Alternate Channel			
Bandwidth	11 MHz	Lower	-----
Spacing	27.5 MHz	Upper	-----

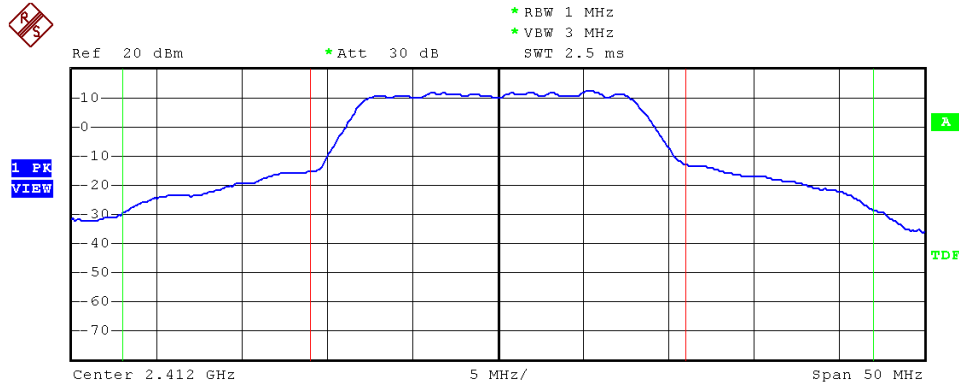


Modulation Standard: 802.11b (11Mbps), ANT R, Peak Power Output Channel: 11



Tx Channel			
Bandwidth	22 MHz	Power	22.48 dBm
Adjacent Channel			
Bandwidth	11 MHz	Lower	-42.30 dB
Spacing	16.5 MHz	Upper	-45.02 dB
Alternate Channel			
Bandwidth	11 MHz	Lower	-----
Spacing	27.5 MHz	Upper	-----

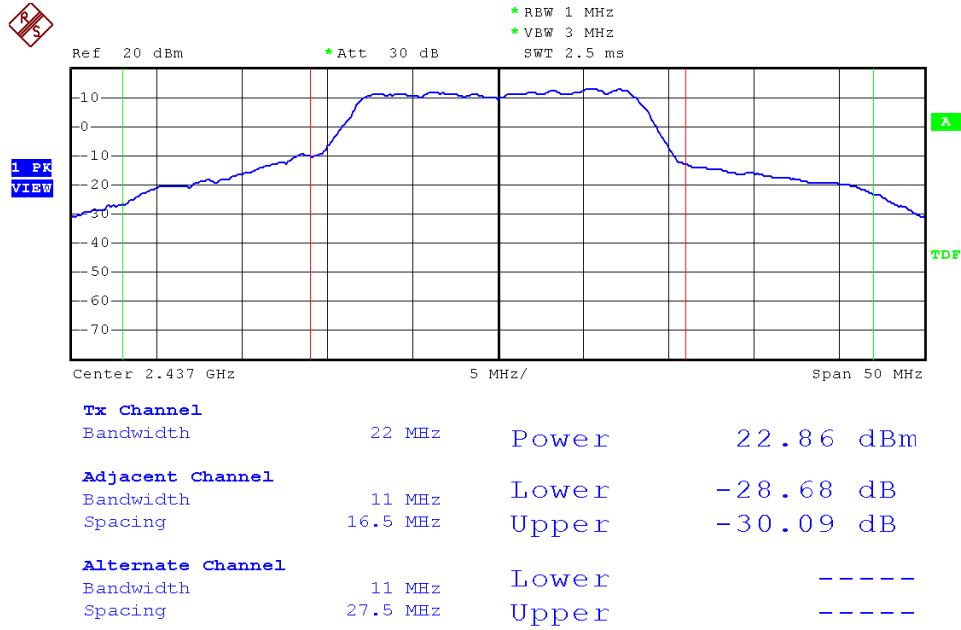
Modulation Standard: 802.11g (54Mbps), ANT R, Peak Power Output Channel: 01



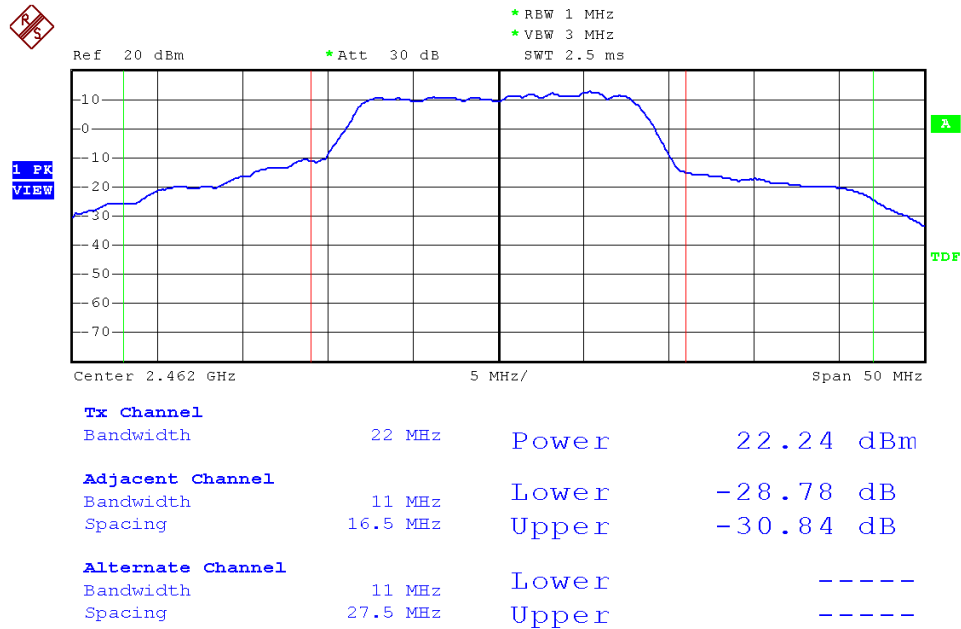
Tx Channel			
Bandwidth	22 MHz	Power	22.36 dBm
Adjacent Channel			
Bandwidth	11 MHz	Lower	-32.32 dB
Spacing	16.5 MHz	Upper	-30.13 dB
Alternate Channel			
Bandwidth	11 MHz	Lower	-----
Spacing	27.5 MHz	Upper	-----



Modulation Standard: 802.11g (54Mbps), ANT R, Peak Power Output Channel: 06

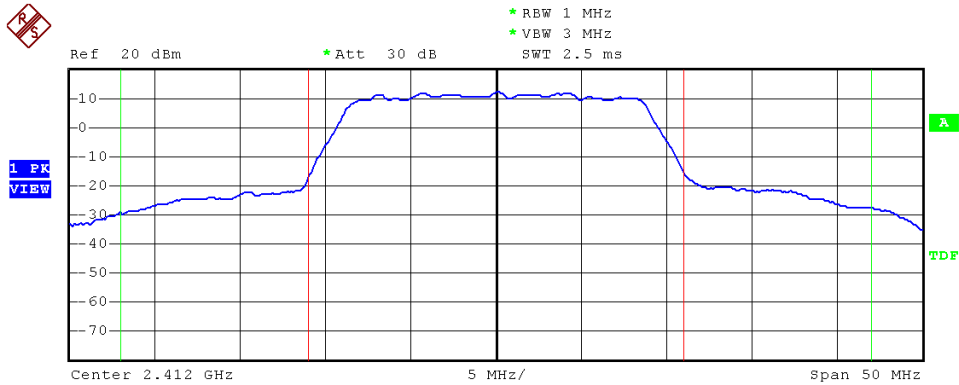


Modulation Standard: 802.11g (54Mbps), ANT R, Peak Power Output Channel: 11



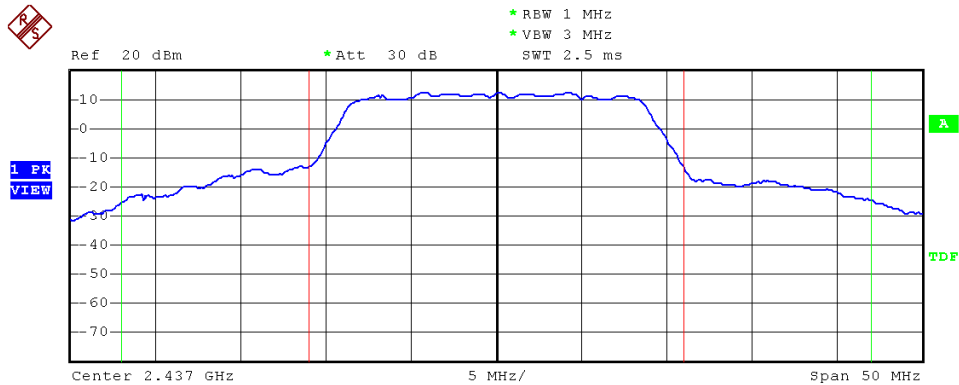


Modulation Standard: 802.11n HT20 (130Mbps), ANT R, Peak Power Output Channel: 01



Tx Channel			
Bandwidth	22 MHz	Power	22.35 dBm
Adjacent Channel			
Bandwidth	11 MHz	Lower	-36.58 dB
Spacing	16.5 MHz	Upper	-34.65 dB
Alternate Channel			
Bandwidth	11 MHz	Lower	-----
Spacing	27.5 MHz	Upper	-----

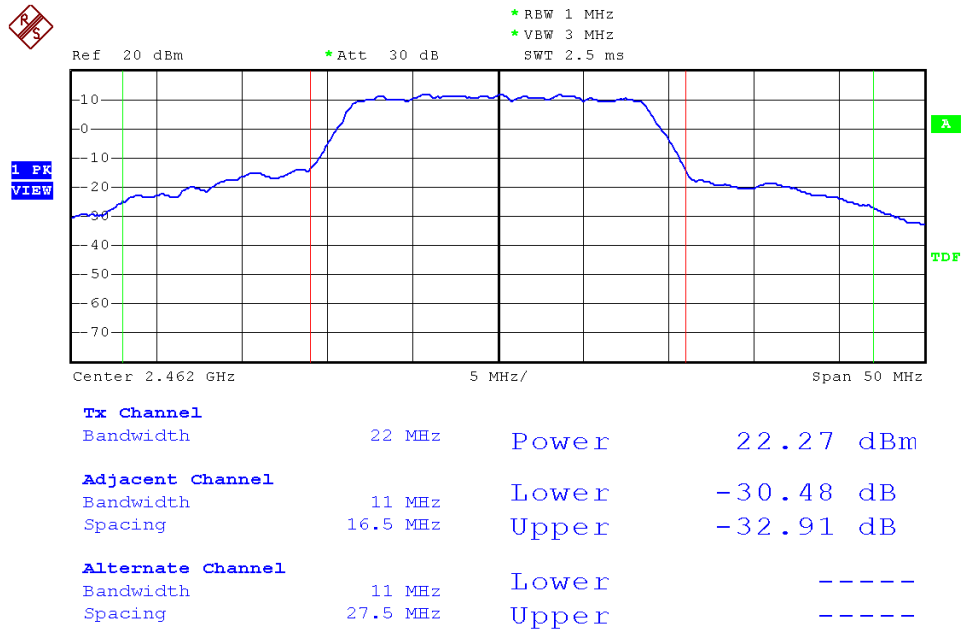
Modulation Standard: 802.11n HT20 (130Mbps), ANT R, Peak Power Output Channel: 06



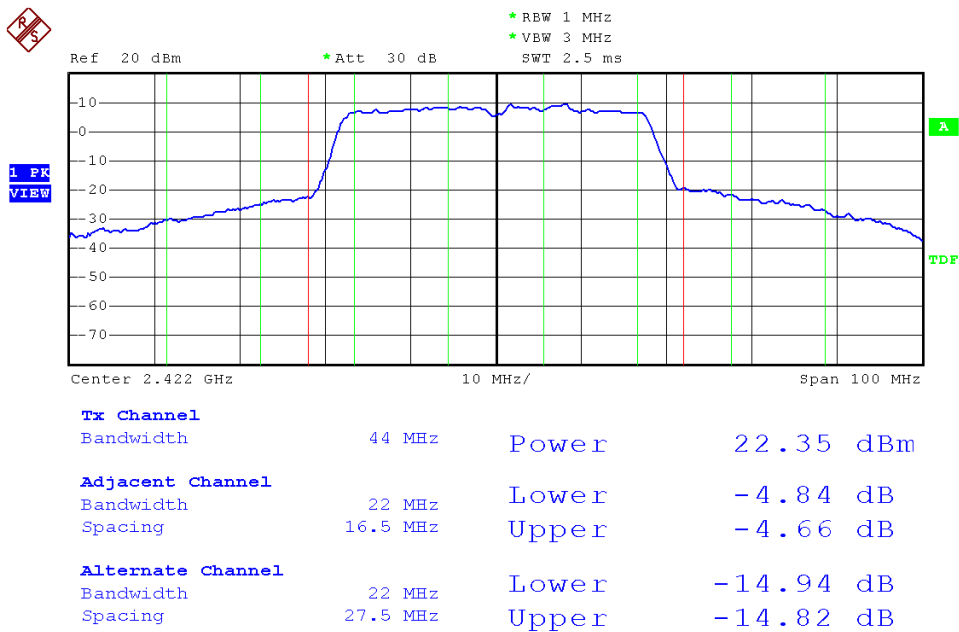
Tx Channel			
Bandwidth	22 MHz	Power	22.85 dBm
Adjacent Channel			
Bandwidth	11 MHz	Lower	-30.21 dB
Spacing	16.5 MHz	Upper	-32.60 dB
Alternate Channel			
Bandwidth	11 MHz	Lower	-----
Spacing	27.5 MHz	Upper	-----



Modulation Standard: 802.11n HT20 (130Mbps), ANT R, Peak Power Output Channel: 11

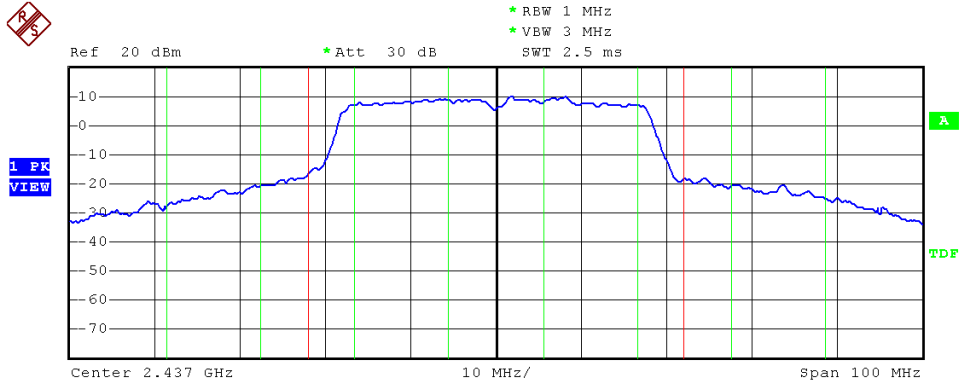


Modulation Standard: 802.11n HT40 (270Mbps), ANT R, Peak Power Output Channel: 03



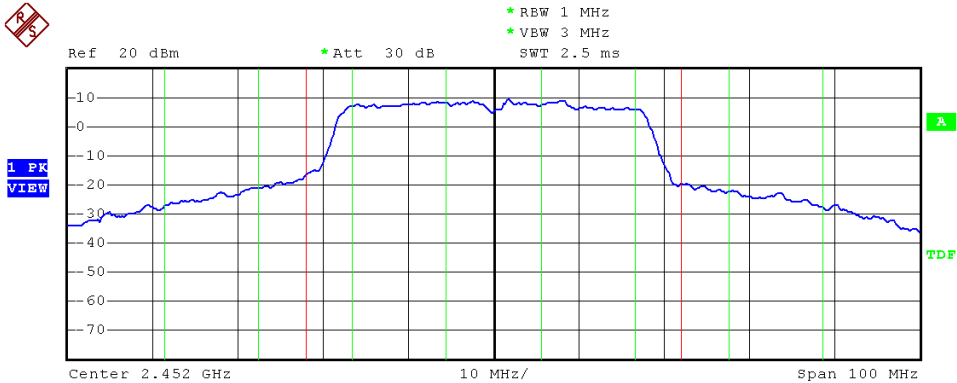


Modulation Standard: 802.11n HT40 (270Mbps), ANT R, Peak Power Output Channel: 06



Tx Channel			
Bandwidth	44 MHz	Power	22.88 dBm
Adjacent Channel			
Bandwidth	22 MHz	Lower	-4.72 dB
Spacing	16.5 MHz	Upper	-4.83 dB
Alternate Channel			
Bandwidth	22 MHz	Lower	-14.87 dB
Spacing	27.5 MHz	Upper	-14.86 dB

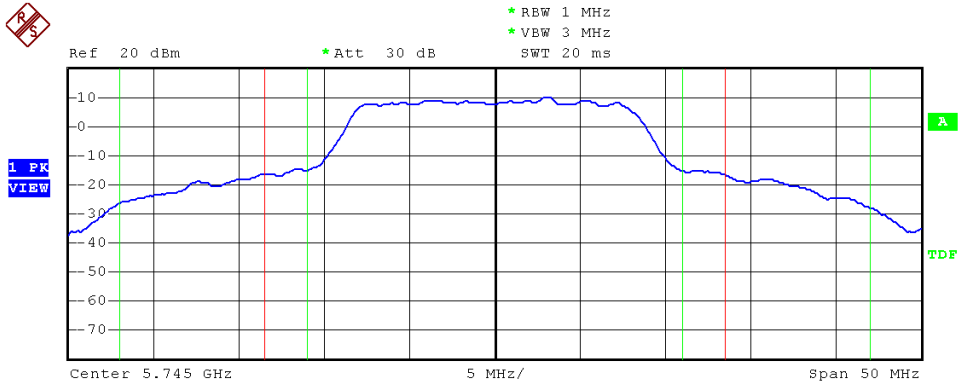
Modulation Standard: 802.11n HT40 (270Mbps), ANT R, Peak Power Output Channel: 09



Tx Channel			
Bandwidth	44 MHz	Power	22.21 dBm
Adjacent Channel			
Bandwidth	22 MHz	Lower	-4.50 dB
Spacing	16.5 MHz	Upper	-5.06 dB
Alternate Channel			
Bandwidth	22 MHz	Lower	-14.42 dB
Spacing	27.5 MHz	Upper	-15.16 dB

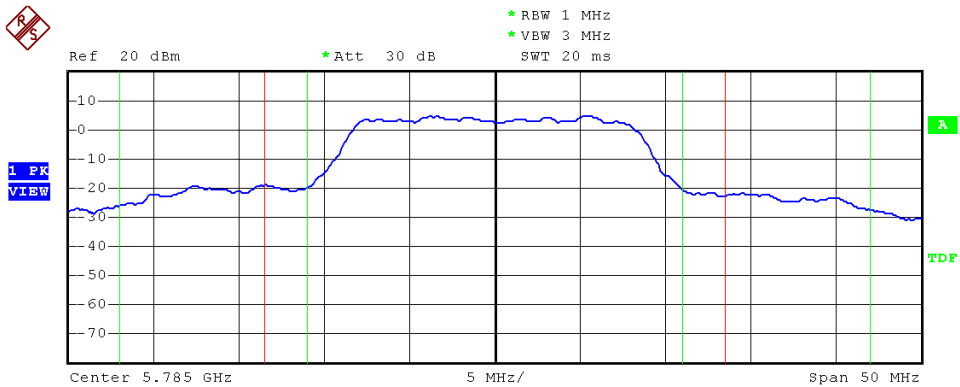


Modulation Standard: 802.11a (54Mbps), ANT R, Peak Power Output Channel: 149



Tx Channel			
Bandwidth	27 MHz	Power	19.66 dBm
Adjacent Channel			
Bandwidth	11 MHz	Lower	-28.77 dB
Spacing	16.5 MHz	Upper	-28.80 dB
Alternate Channel			
Bandwidth	11 MHz	Lower	-----
Spacing	27.5 MHz	Upper	-----

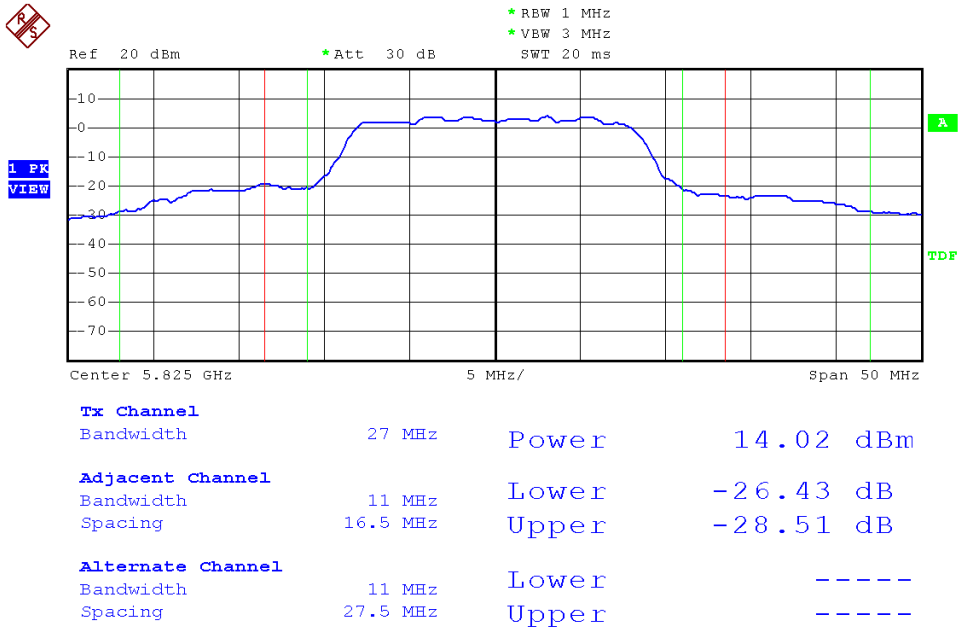
Modulation Standard: 802.11a (54Mbps), ANT R, Peak Power Output Channel: 157



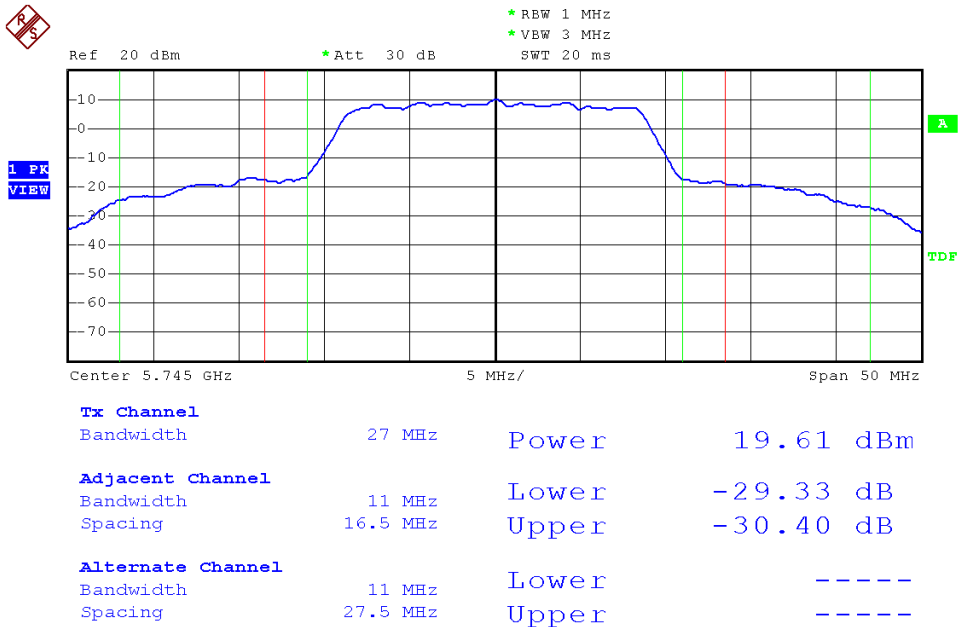
Tx Channel			
Bandwidth	27 MHz	Power	14.90 dBm
Adjacent Channel			
Bandwidth	11 MHz	Lower	-26.25 dB
Spacing	16.5 MHz	Upper	-28.32 dB
Alternate Channel			
Bandwidth	11 MHz	Lower	-----
Spacing	27.5 MHz	Upper	-----



Modulation Standard: 802.11a (54Mbps), ANT R, Peak Power Output Channel: 165

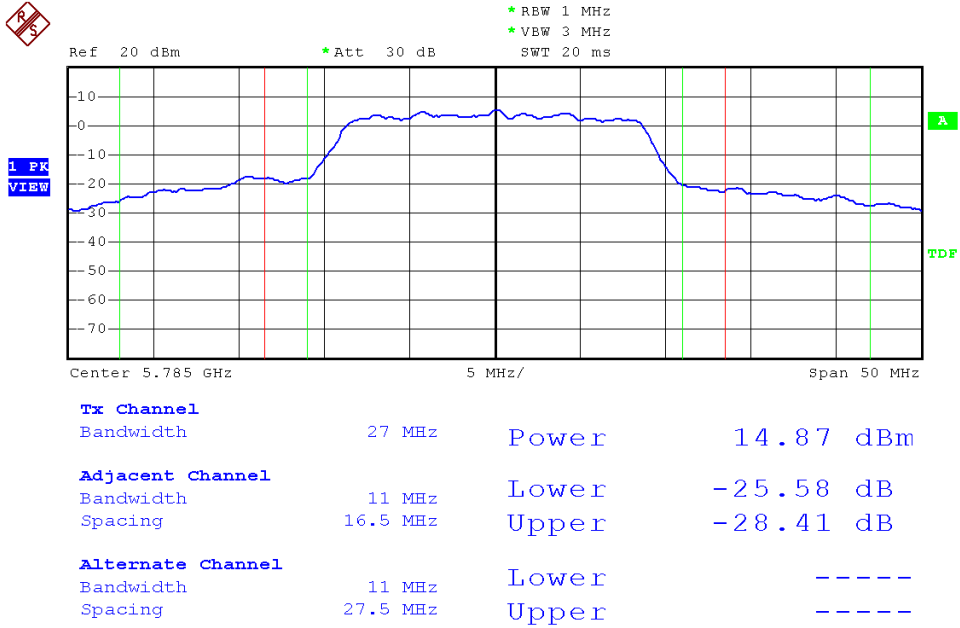


Modulation Standard: 802.11an HT20 (130Mbps), ANT R, Peak Power Output Channel: 149

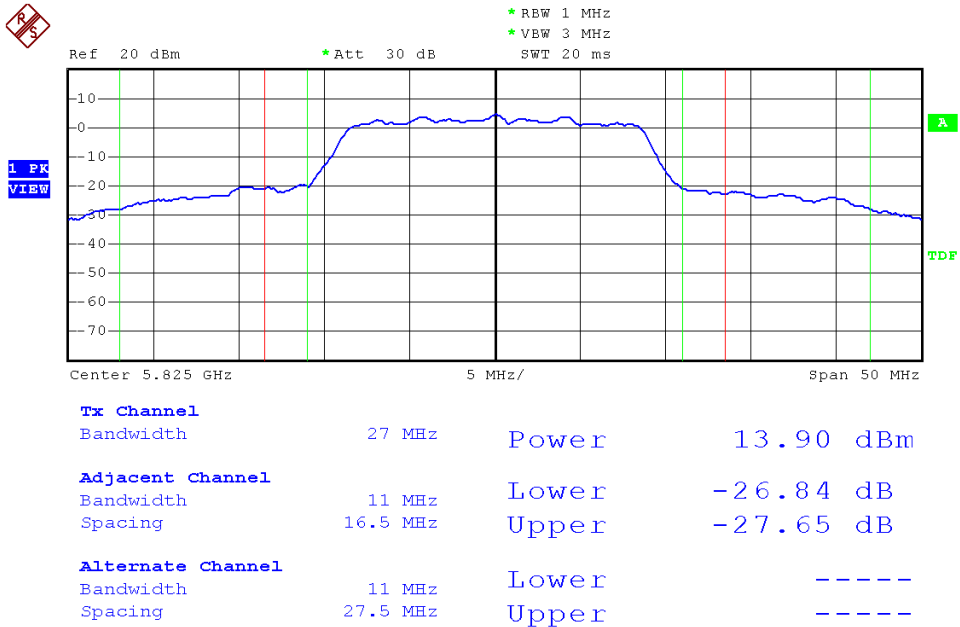




Modulation Standard: 802.11an HT20 (130Mbps), ANT R, Peak Power Output Channel: 157

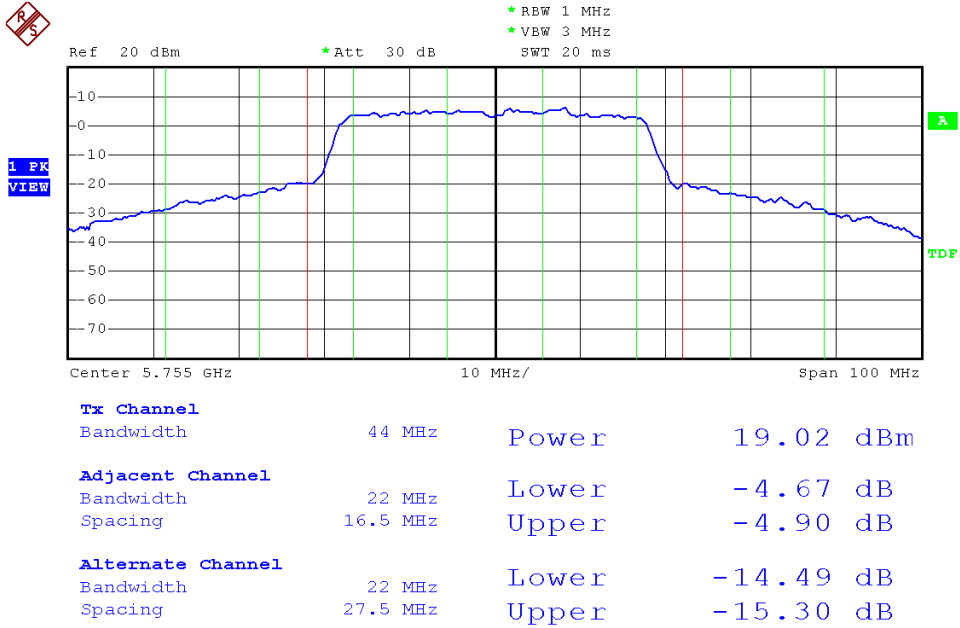


Modulation Standard: 802.11an HT20 (130Mbps), ANT R, Peak Power Output Channel: 165

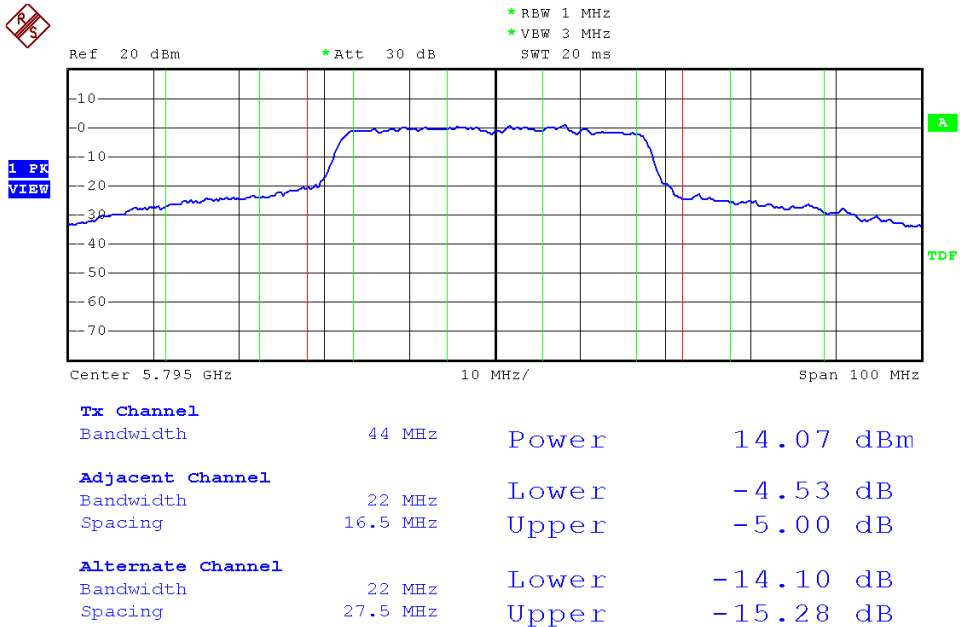




Modulation Standard: 802.11an HT40 (270Mbps), ANT R, Peak Power Output Channel: 151

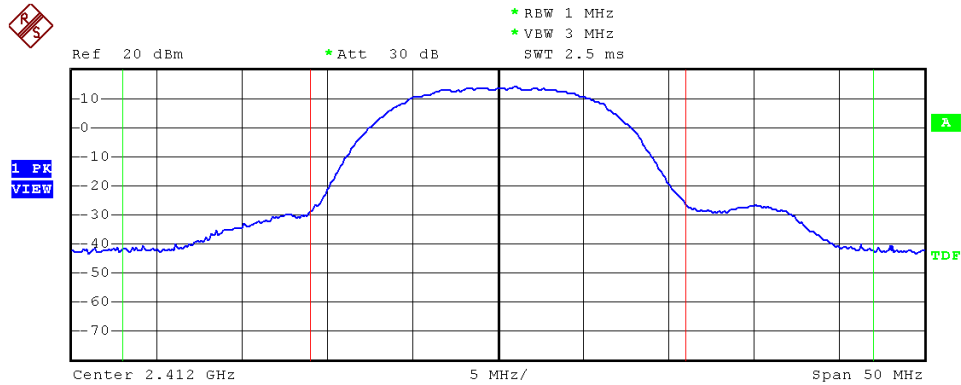


Modulation Standard: 802.11an HT40 (270Mbps), ANT R, Peak Power Output Channel: 159



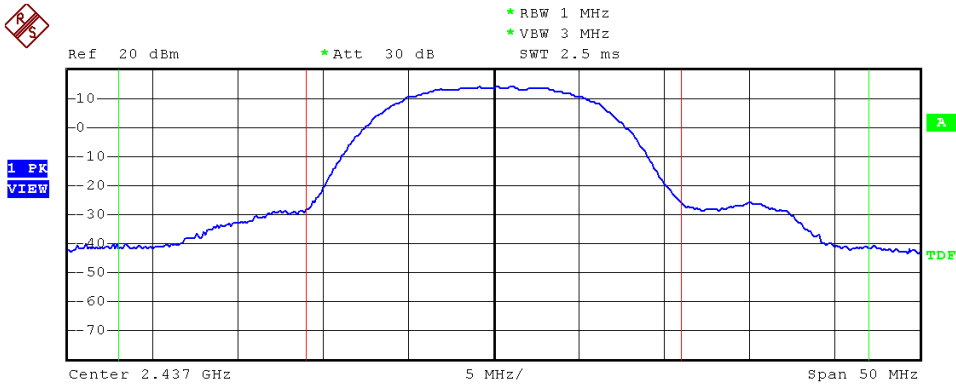


Modulation Standard: 802.11b (11Mbps), ANT L, Peak Power Output Channel: 01



Tx Channel			
Bandwidth	22 MHz	Power	22.60 dBm
Adjacent Channel			
Bandwidth	11 MHz	Lower	-47.31 dB
Spacing	16.5 MHz	Upper	-42.91 dB
Alternate Channel			
Bandwidth	11 MHz	Lower	-----
Spacing	27.5 MHz	Upper	-----

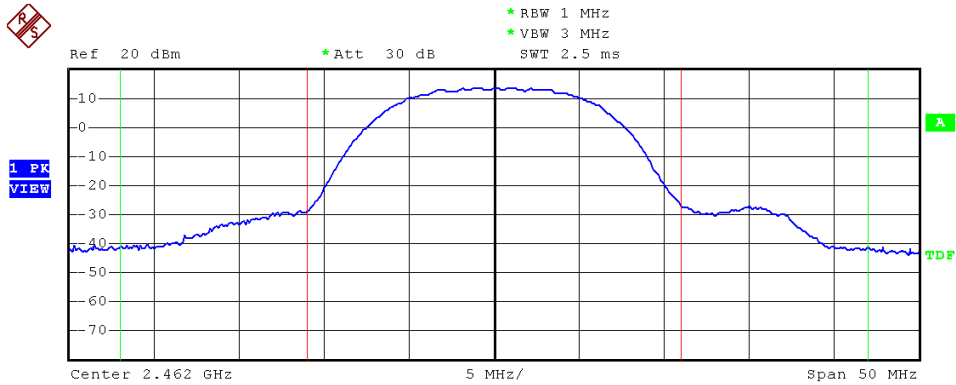
Modulation Standard: 802.11b (11Mbps), ANT L, Peak Power Output Channel: 06



Tx Channel			
Bandwidth	22 MHz	Power	22.78 dBm
Adjacent Channel			
Bandwidth	11 MHz	Lower	-46.22 dB
Spacing	16.5 MHz	Upper	-42.49 dB
Alternate Channel			
Bandwidth	11 MHz	Lower	-----
Spacing	27.5 MHz	Upper	-----

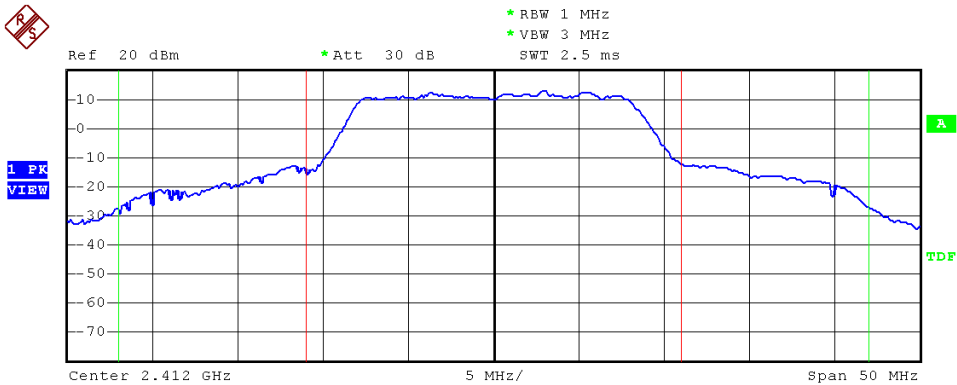


Modulation Standard: 802.11b (11Mbps), ANT L, Peak Power Output Channel: 11



Tx Channel			
Bandwidth	22 MHz	Power	22.44 dBm
Adjacent Channel			
Bandwidth	11 MHz	Lower	-46.16 dB
Spacing	16.5 MHz	Upper	-43.43 dB
Alternate Channel			
Bandwidth	11 MHz	Lower	-----
Spacing	27.5 MHz	Upper	-----

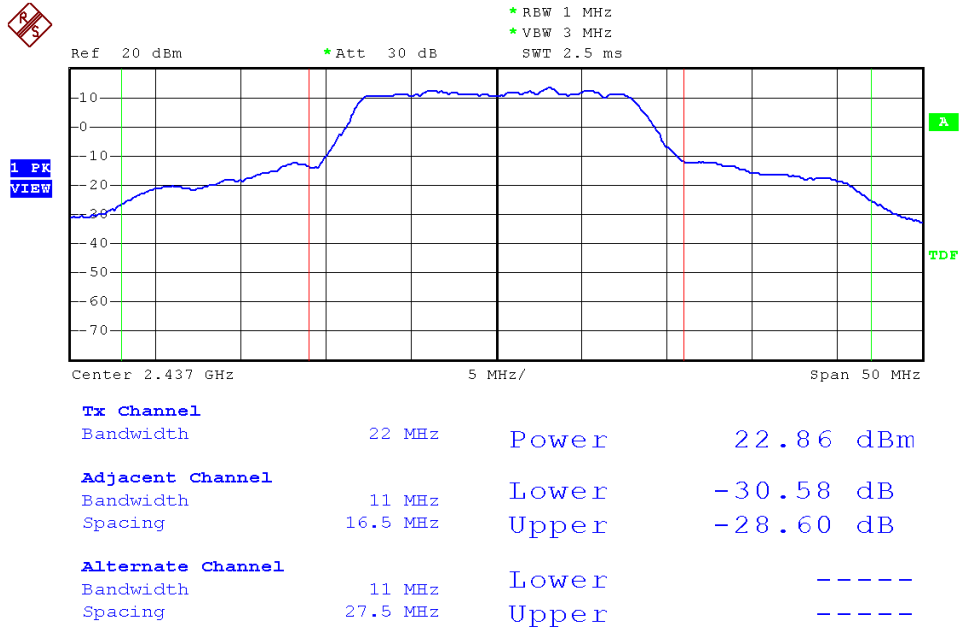
Modulation Standard: 802.11g (54Mbps), ANT L, Peak Power Output Channel: 01



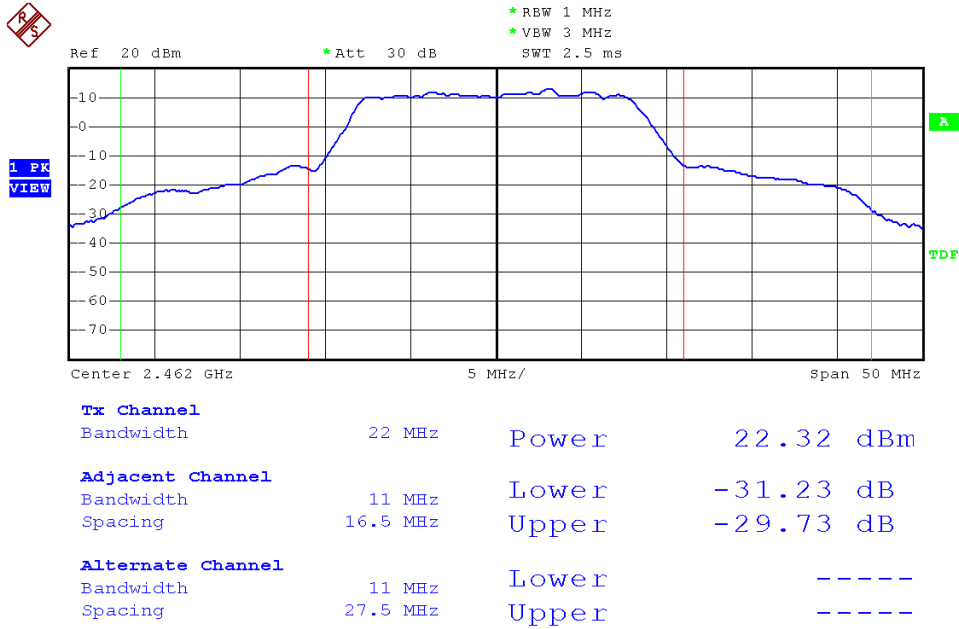
Tx Channel			
Bandwidth	22 MHz	Power	22.59 dBm
Adjacent Channel			
Bandwidth	11 MHz	Lower	-31.13 dB
Spacing	16.5 MHz	Upper	-28.82 dB
Alternate Channel			
Bandwidth	11 MHz	Lower	-----
Spacing	27.5 MHz	Upper	-----



Modulation Standard: 802.11g (54Mbps), ANT L, Peak Power Output Channel: 06

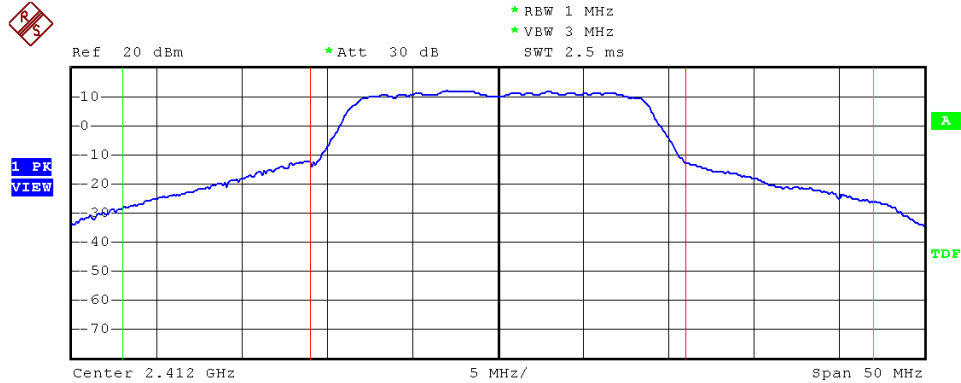


Modulation Standard: 802.11g (54Mbps), ANT L, Peak Power Output Channel: 11



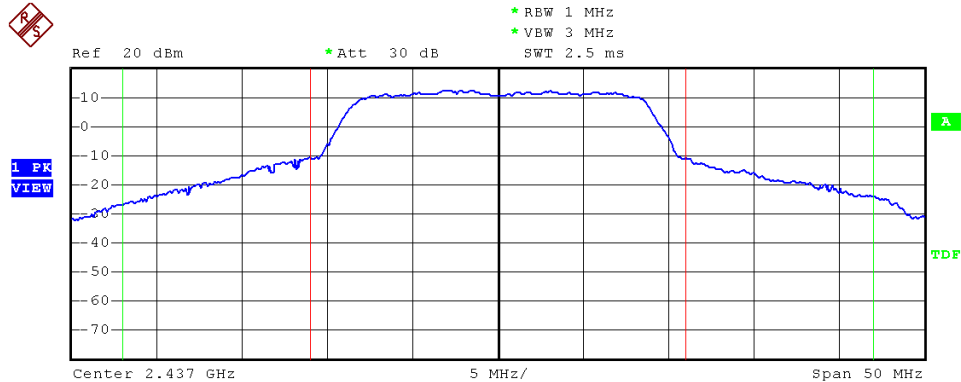


Modulation Standard: 802.11n HT20 (130Mbps), ANT L, Peak Power Output Channel: 01



Tx Channel			
Bandwidth	22 MHz	Power	22.42 dBm
Adjacent Channel			
Bandwidth	11 MHz	Lower	-30.58 dB
Spacing	16.5 MHz	Upper	-31.17 dB
Alternate Channel			
Bandwidth	11 MHz	Lower	-----
Spacing	27.5 MHz	Upper	-----

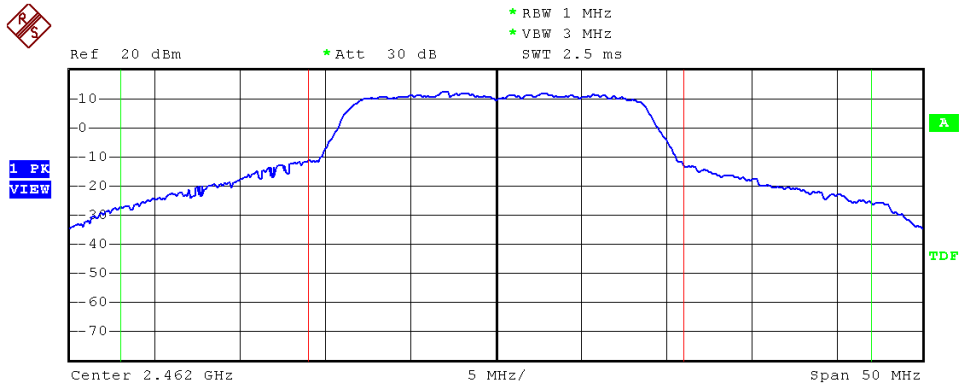
Modulation Standard: 802.11n HT20 (130Mbps), ANT L, Peak Power Output Channel: 06



Tx Channel			
Bandwidth	22 MHz	Power	22.87 dBm
Adjacent Channel			
Bandwidth	11 MHz	Lower	-29.60 dB
Spacing	16.5 MHz	Upper	-29.92 dB
Alternate Channel			
Bandwidth	11 MHz	Lower	-----
Spacing	27.5 MHz	Upper	-----

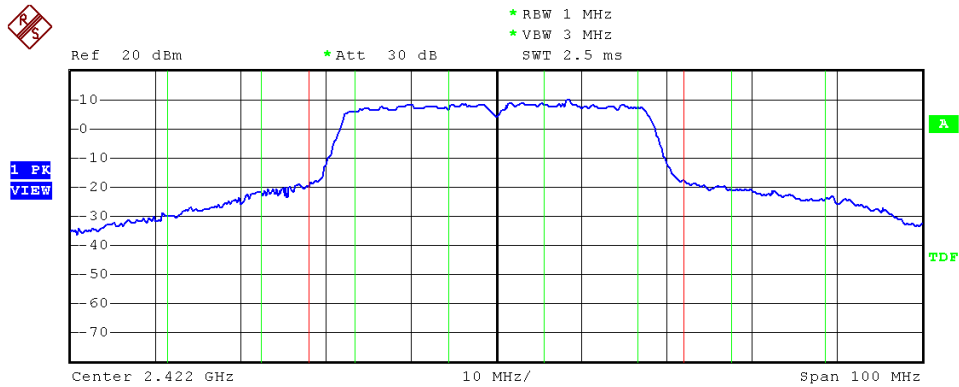


Modulation Standard: 802.11n HT20 (130Mbps), ANT L, Peak Power Output Channel: 11



Tx Channel			
Bandwidth	22 MHz	Power	22.47 dBm
Adjacent Channel			
Bandwidth	11 MHz	Lower	-29.97 dB
Spacing	16.5 MHz	Upper	-31.01 dB
Alternate Channel			
Bandwidth	11 MHz	Lower	----
Spacing	27.5 MHz	Upper	----

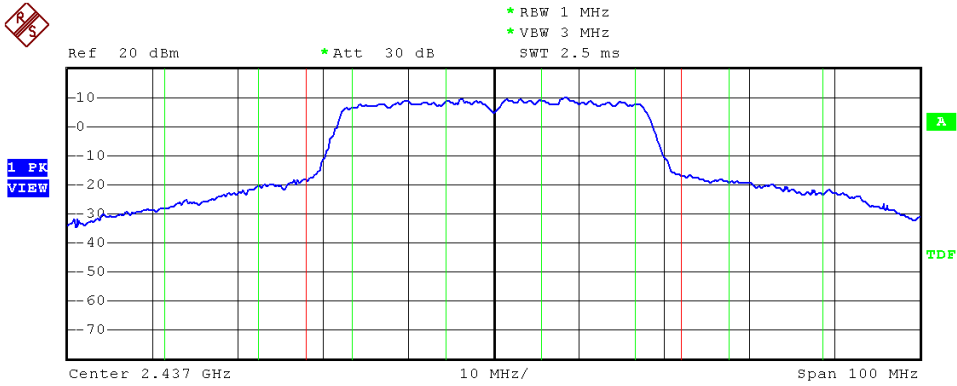
Modulation Standard: 802.11n HT40 (270Mbps), ANT L, Peak Power Output Channel: 03



Tx Channel			
Bandwidth	44 MHz	Power	22.44 dBm
Adjacent Channel			
Bandwidth	22 MHz	Lower	-5.14 dB
Spacing	16.5 MHz	Upper	-4.37 dB
Alternate Channel			
Bandwidth	22 MHz	Lower	-15.29 dB
Spacing	27.5 MHz	Upper	-14.02 dB

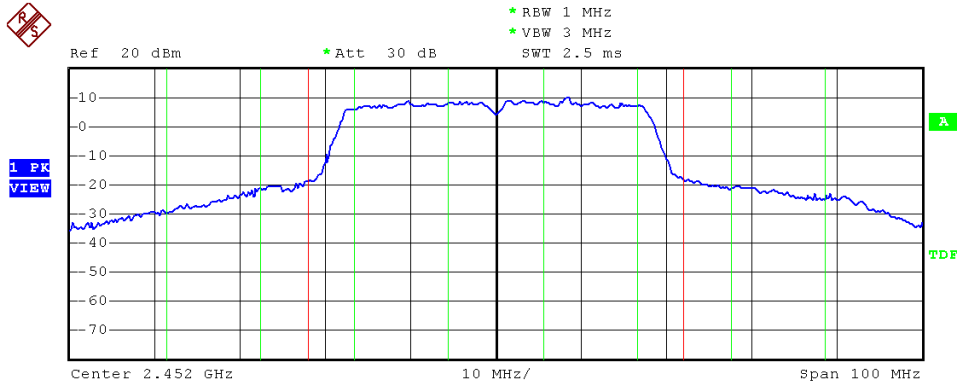


Modulation Standard: 802.11n HT40 (270Mbps), ANT L, Peak Power Output Channel: 06



Tx Channel			
Bandwidth	44 MHz	Power	22.84 dBm
Adjacent Channel			
Bandwidth	22 MHz	Lower	-5.09 dB
Spacing	16.5 MHz	Upper	-4.43 dB
Alternate Channel			
Bandwidth	22 MHz	Lower	-15.27 dB
Spacing	27.5 MHz	Upper	-13.99 dB

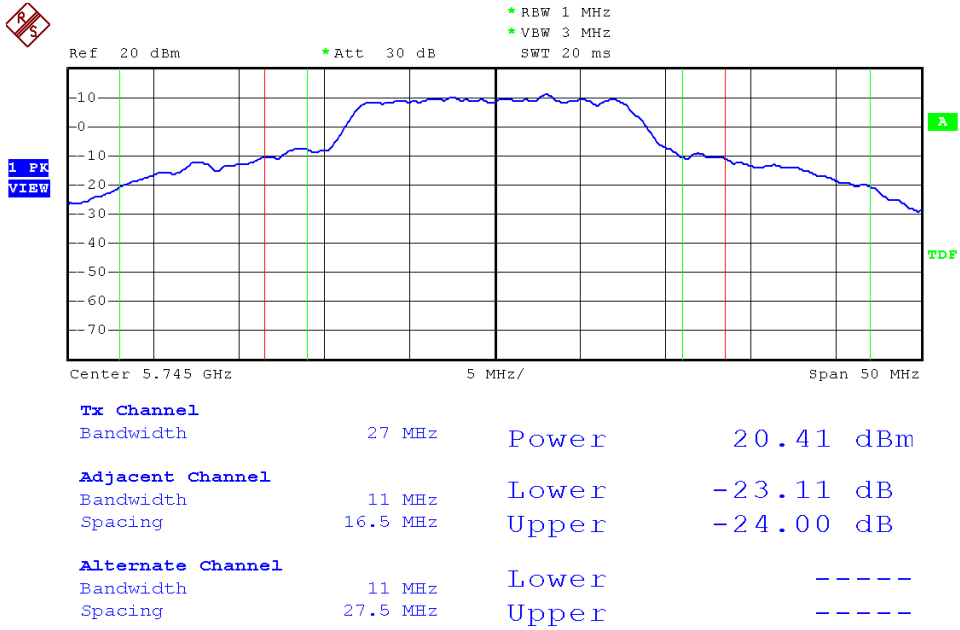
Modulation Standard: 802.11n HT40 (270Mbps), ANT L, Peak Power Output Channel: 09



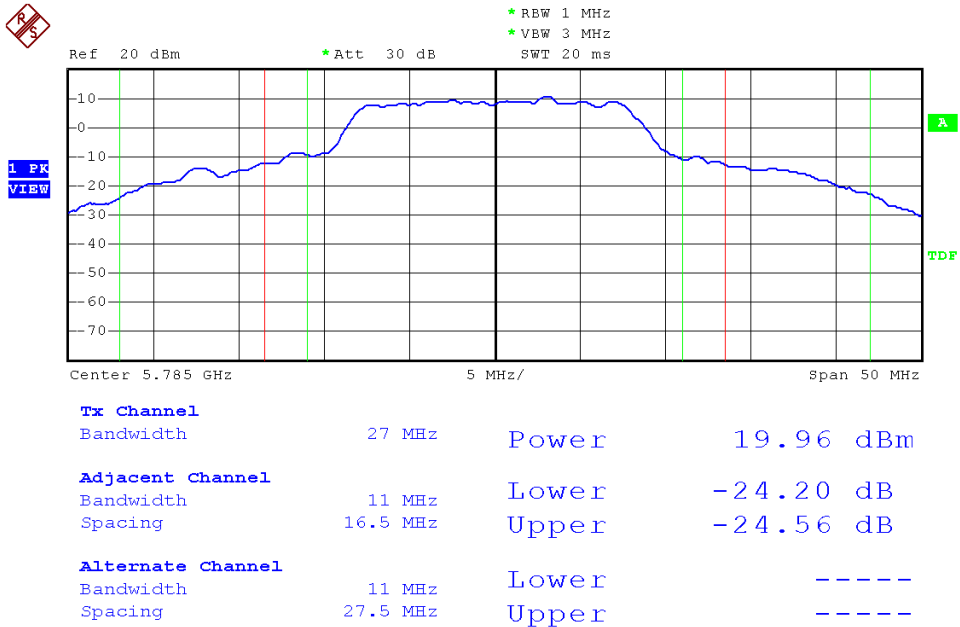
Tx Channel			
Bandwidth	44 MHz	Power	22.42 dBm
Adjacent Channel			
Bandwidth	22 MHz	Lower	-5.02 dB
Spacing	16.5 MHz	Upper	-4.49 dB
Alternate Channel			
Bandwidth	22 MHz	Lower	-15.32 dB
Spacing	27.5 MHz	Upper	-14.20 dB



Modulation Standard: 802.11a (54Mbps), ANT L, Peak Power Output Channel: 149

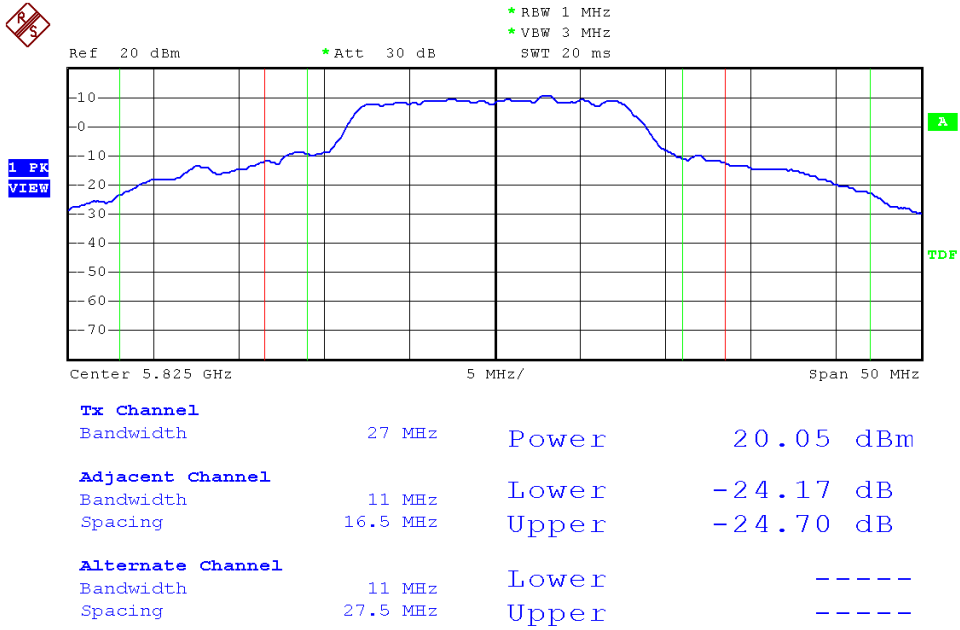


Modulation Standard: 802.11a (54Mbps), ANT L, Peak Power Output Channel: 157

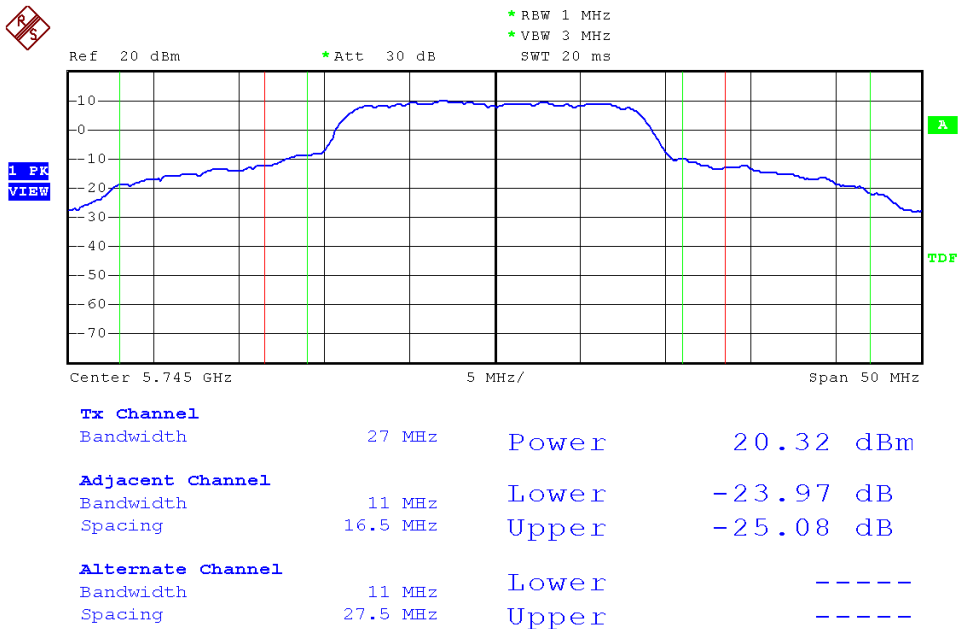




Modulation Standard: 802.11a (54Mbps), ANT L, Peak Power Output Channel: 165

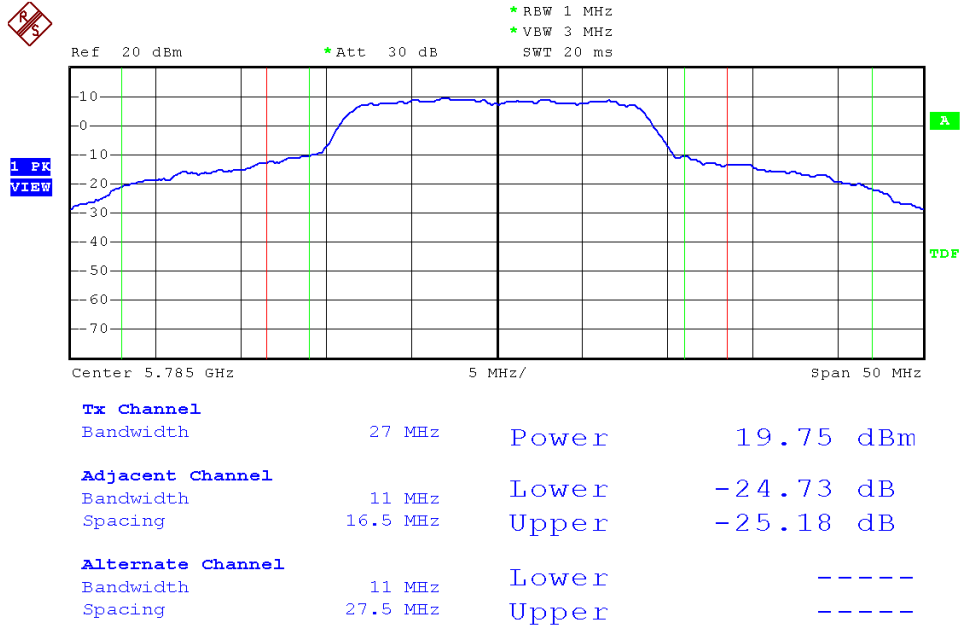


Modulation Standard: 802.11an HT20 (130Mbps), ANT L, Peak Power Output Channel: 149

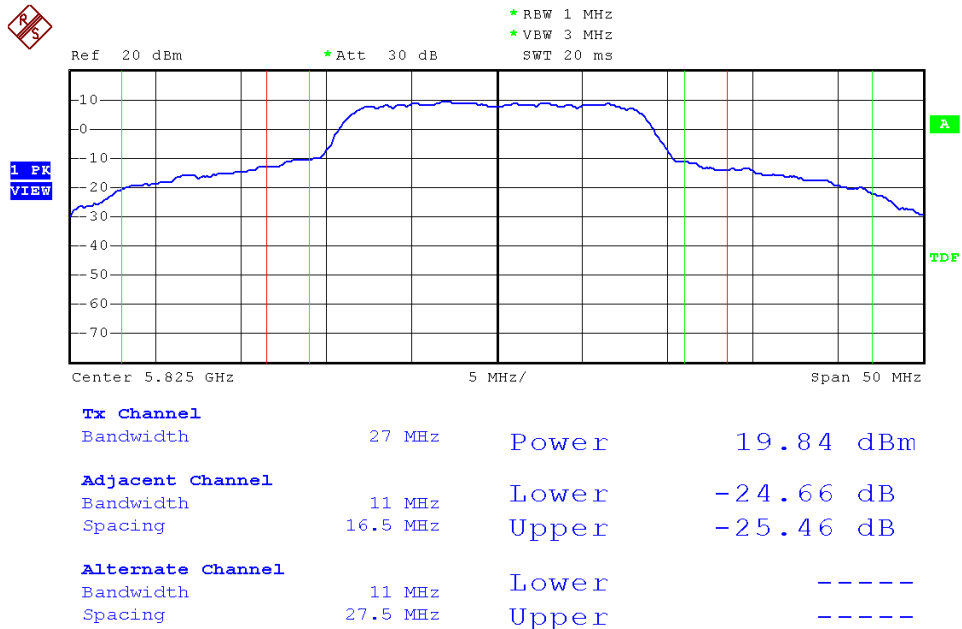




Modulation Standard: 802.11an HT20 (130Mbps), ANT L, Peak Power Output Channel: 157

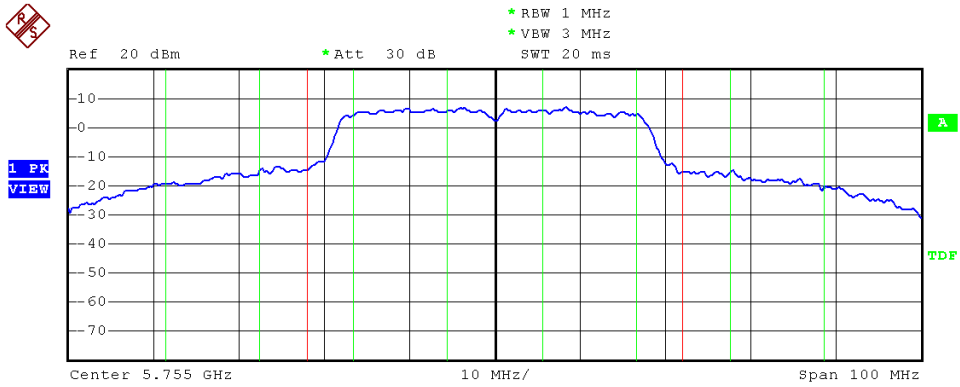


Modulation Standard: 802.11an HT20 (130Mbps), ANT L, Peak Power Output Channel: 165



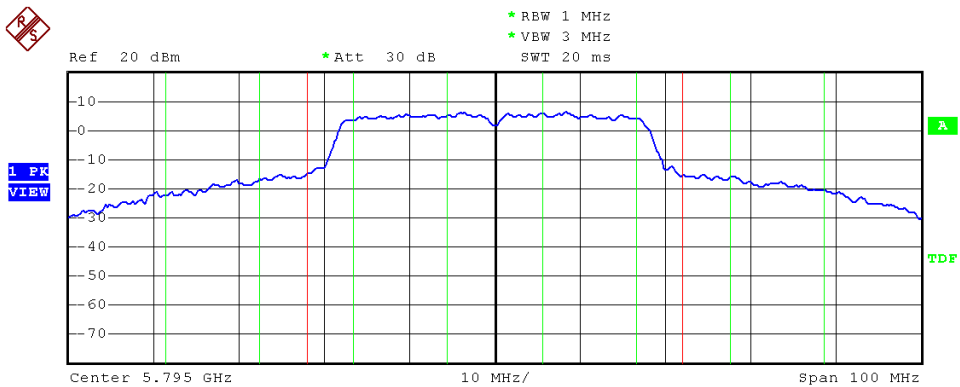


Modulation Standard: 802.11an HT40 (270Mbps), ANT L, Peak Power Output Channel: 151



Tx Channel			
Bandwidth	44 MHz	Power	20.23 dBm
Adjacent Channel			
Bandwidth	22 MHz	Lower	-4.50 dB
Spacing	16.5 MHz	Upper	-4.84 dB
Alternate Channel			
Bandwidth	22 MHz	Lower	-14.03 dB
Spacing	27.5 MHz	Upper	-14.72 dB

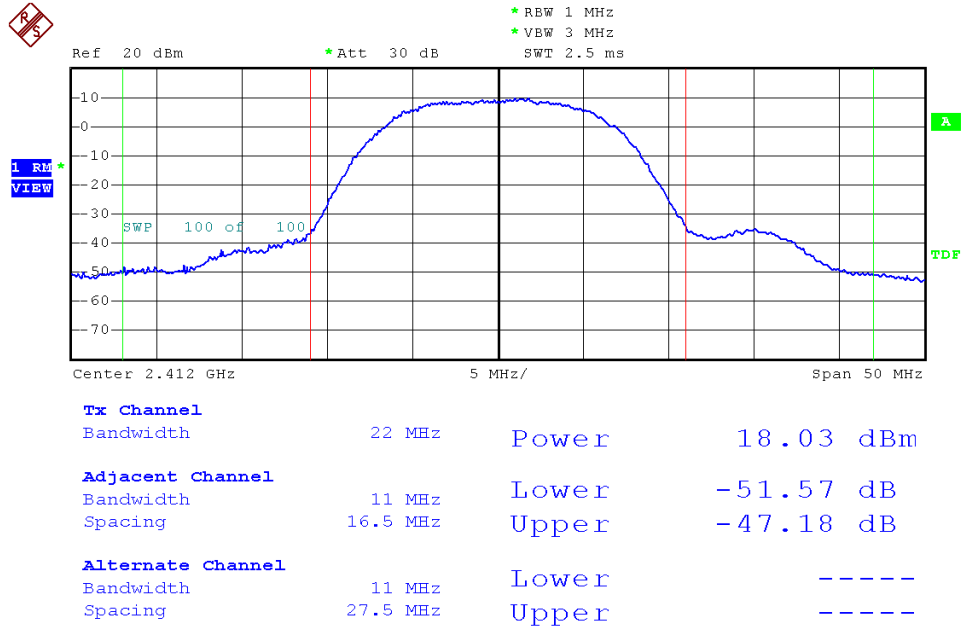
Modulation Standard: 802.11an HT40 (270Mbps), ANT L, Peak Power Output Channel: 159



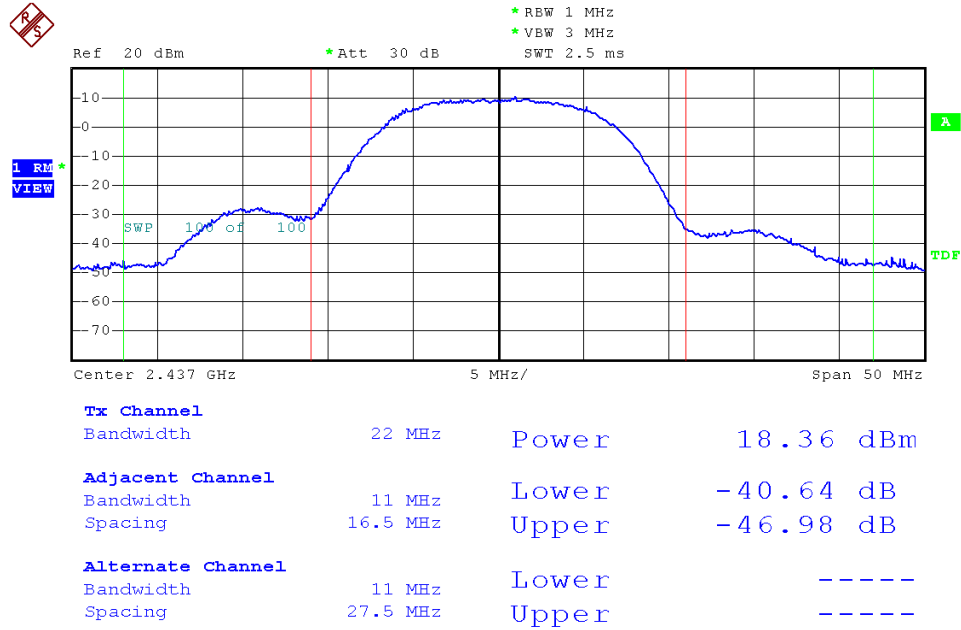
Tx Channel			
Bandwidth	44 MHz	Power	19.68 dBm
Adjacent Channel			
Bandwidth	22 MHz	Lower	-4.72 dB
Spacing	16.5 MHz	Upper	-4.65 dB
Alternate Channel			
Bandwidth	22 MHz	Lower	-14.13 dB
Spacing	27.5 MHz	Upper	-14.36 dB



Modulation Standard: 802.11b (11Mbps), ANT R, Average Power Output Channel: 01

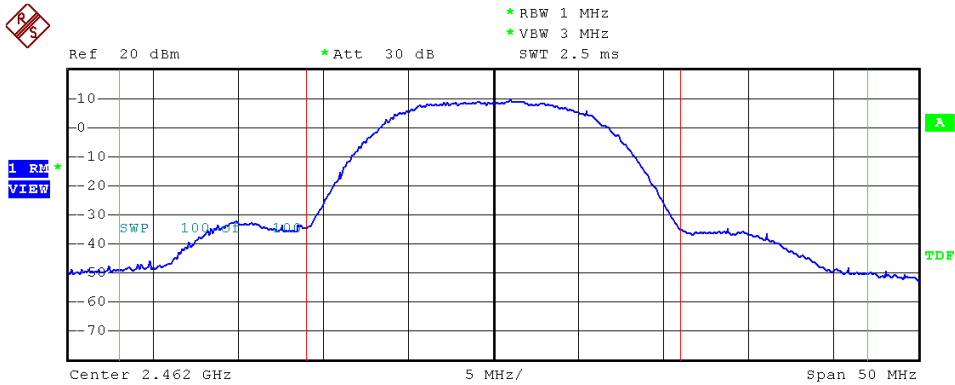


Modulation Standard: 802.11b (11Mbps), ANT R, Average Power Output Channel: 06



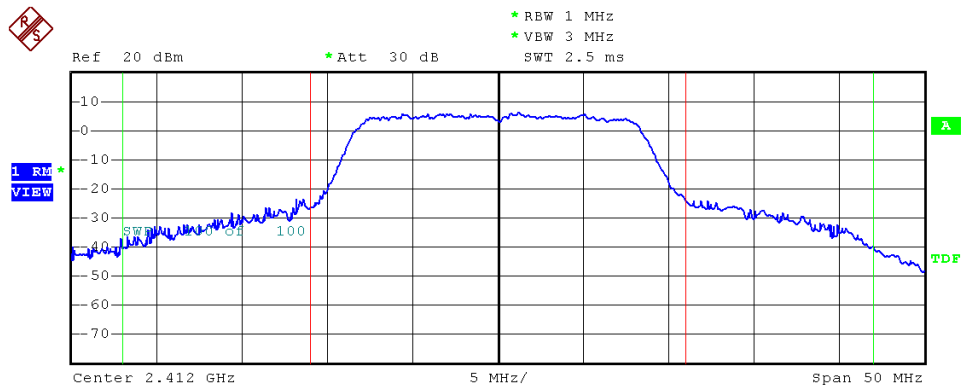


Modulation Standard: 802.11b (11Mbps), ANT R, Average Power Output Channel: 11



Tx Channel			
Bandwidth	22 MHz	Power	17.87 dBm
Adjacent Channel			
Bandwidth	11 MHz	Lower	-44.46 dB
Spacing	16.5 MHz	Upper	-46.83 dB
Alternate Channel			
Bandwidth	11 MHz	Lower	-----
Spacing	27.5 MHz	Upper	-----

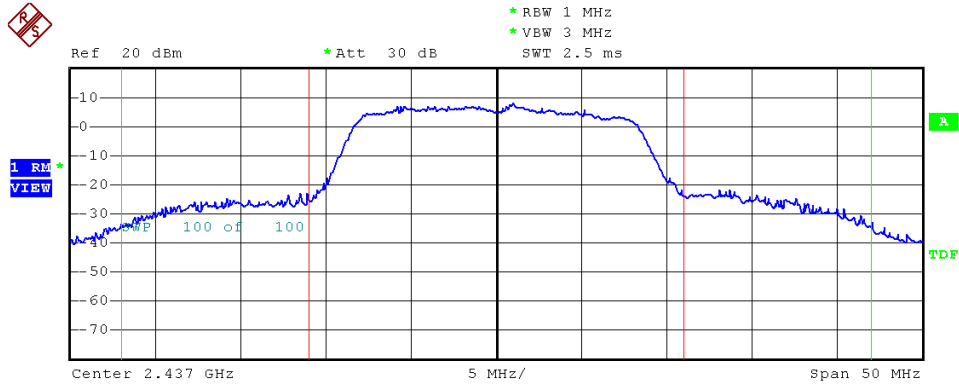
Modulation Standard: 802.11g (54Mbps), ANT R, Average Power Output Channel: 01



Tx Channel			
Bandwidth	22 MHz	Power	16.16 dBm
Adjacent Channel			
Bandwidth	11 MHz	Lower	-36.95 dB
Spacing	16.5 MHz	Upper	-35.12 dB
Alternate Channel			
Bandwidth	11 MHz	Lower	-----
Spacing	27.5 MHz	Upper	-----

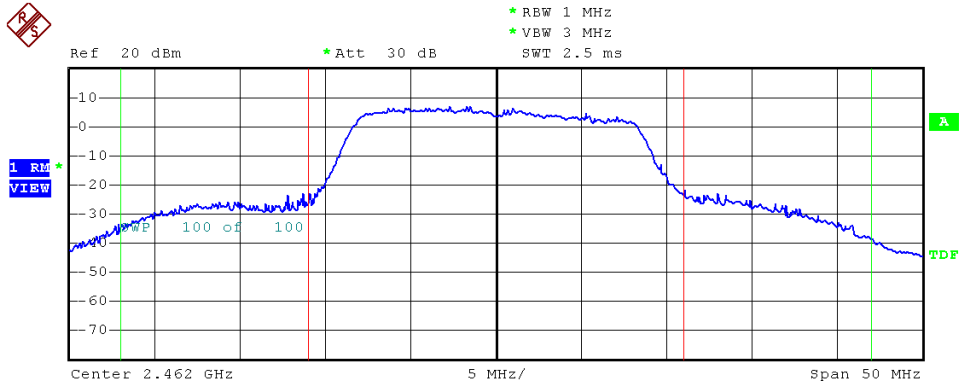


Modulation Standard: 802.11g (54Mbps), ANT R, Average Power Output Channel: 06



Tx Channel			
Bandwidth	22 MHz	Power	16.81 dBm
Adjacent Channel			
Bandwidth	11 MHz	Lower	-34.34 dB
Spacing	16.5 MHz	Upper	-32.84 dB
Alternate Channel			
Bandwidth	11 MHz	Lower	-----
Spacing	27.5 MHz	Upper	-----

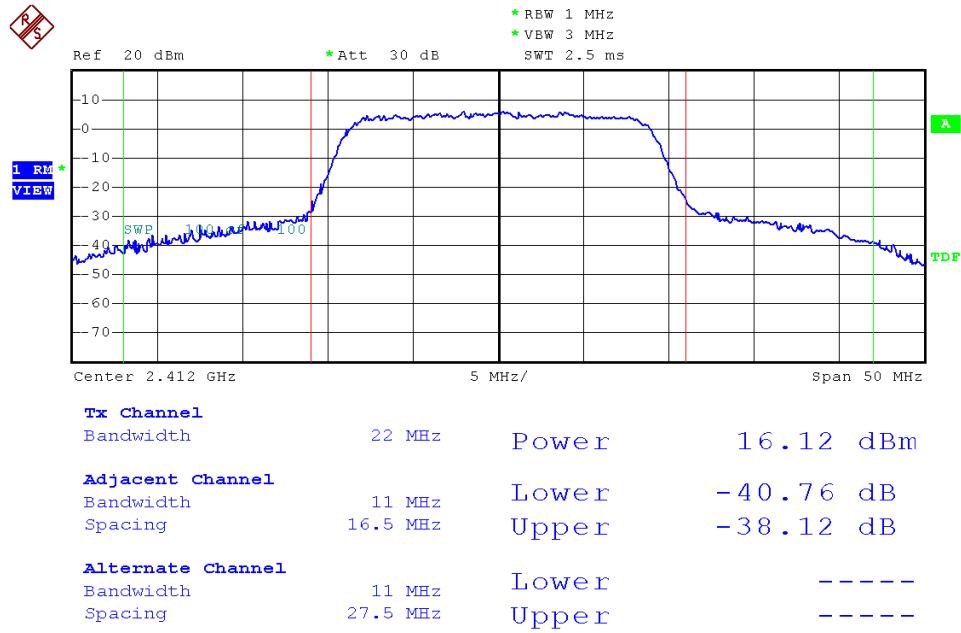
Modulation Standard: 802.11g (6Mbps), ANT R, Average Power Output Channel: 11



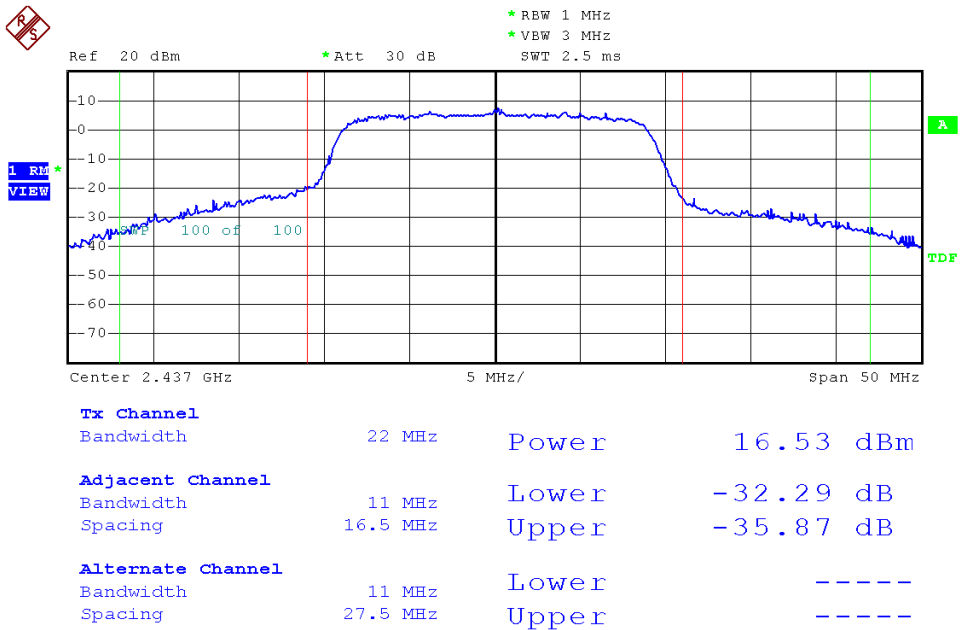
Tx Channel			
Bandwidth	22 MHz	Power	16.05 dBm
Adjacent Channel			
Bandwidth	11 MHz	Lower	-34.31 dB
Spacing	16.5 MHz	Upper	-33.79 dB
Alternate Channel			
Bandwidth	11 MHz	Lower	-----
Spacing	27.5 MHz	Upper	-----



Modulation Standard: 802.11n HT20 (130Mbps), ANT R, Average Power Output Channel: 01

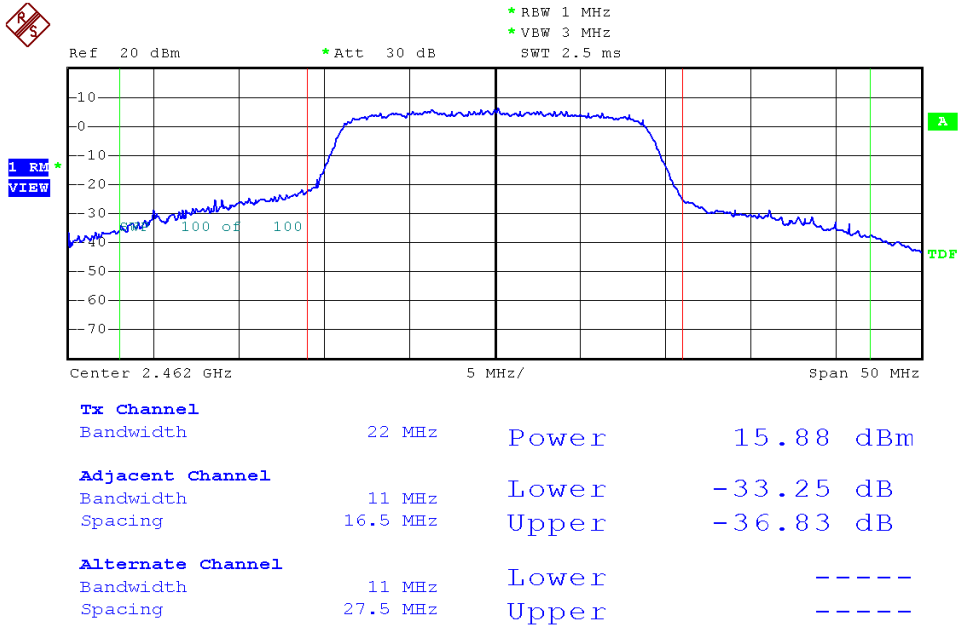


Modulation Standard: 802.11n HT20 (130Mbps), ANT R, Average Power Output Channel: 06

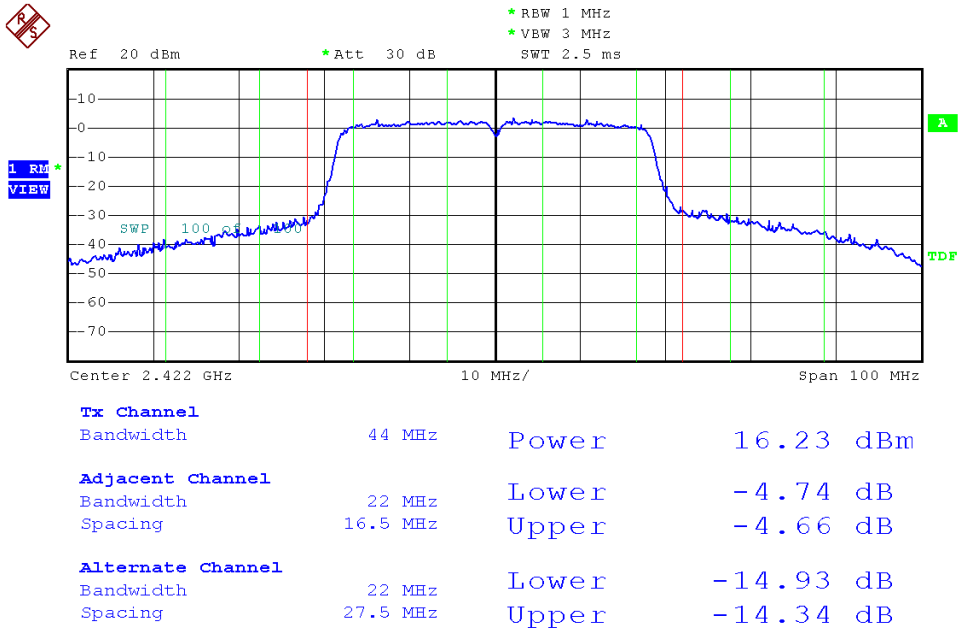




Modulation Standard: 802.11n HT20 (130Mbps), ANT R, Average Power Output Channel: 11

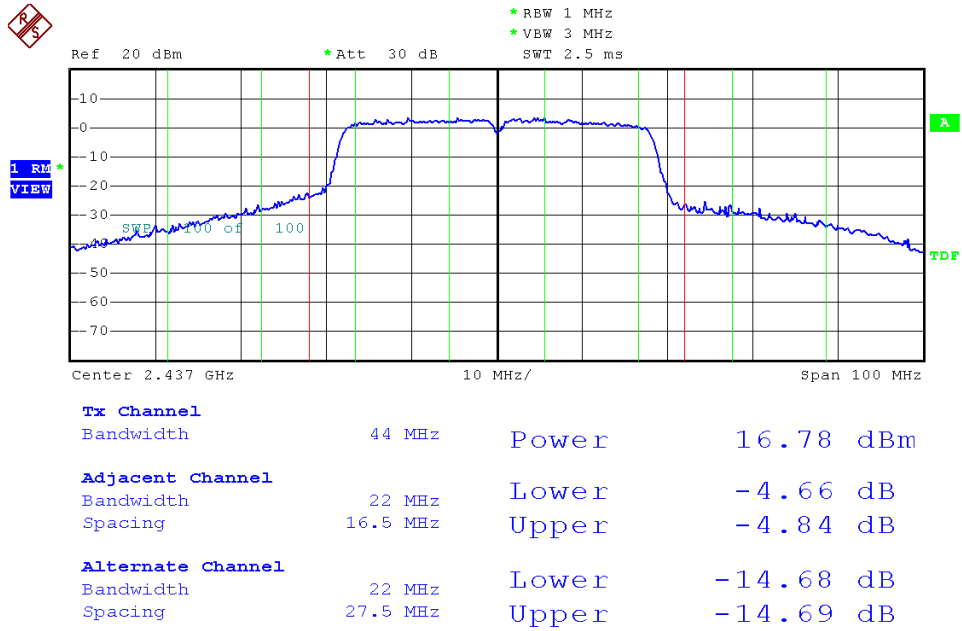


Modulation Standard: 802.11n HT40 (270Mbps), ANT R, Average Power Output Channel: 03

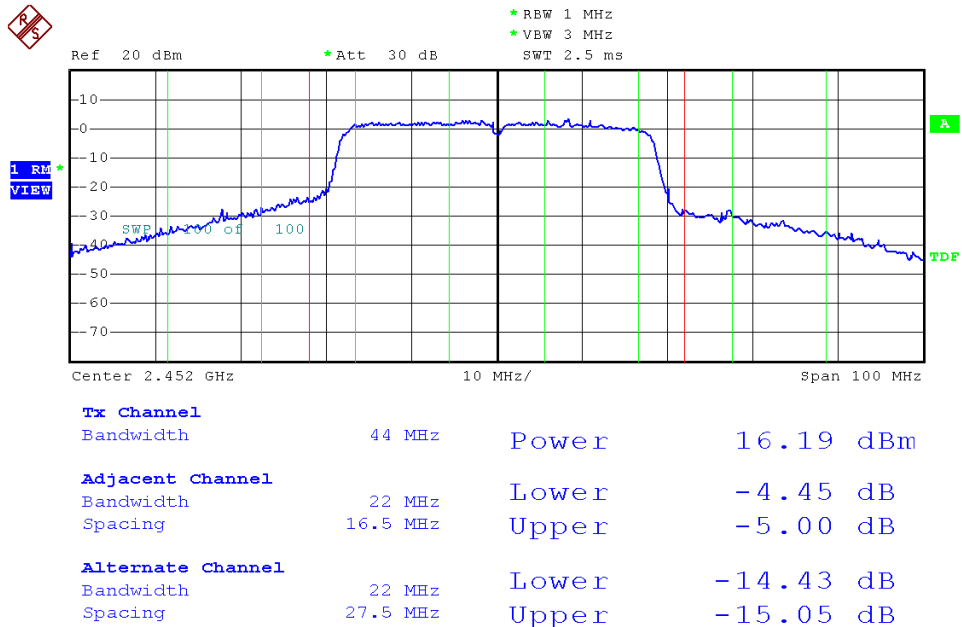




Modulation Standard: 802.11n HT40 (270Mbps), ANT R, Average Power Output Channel: 06

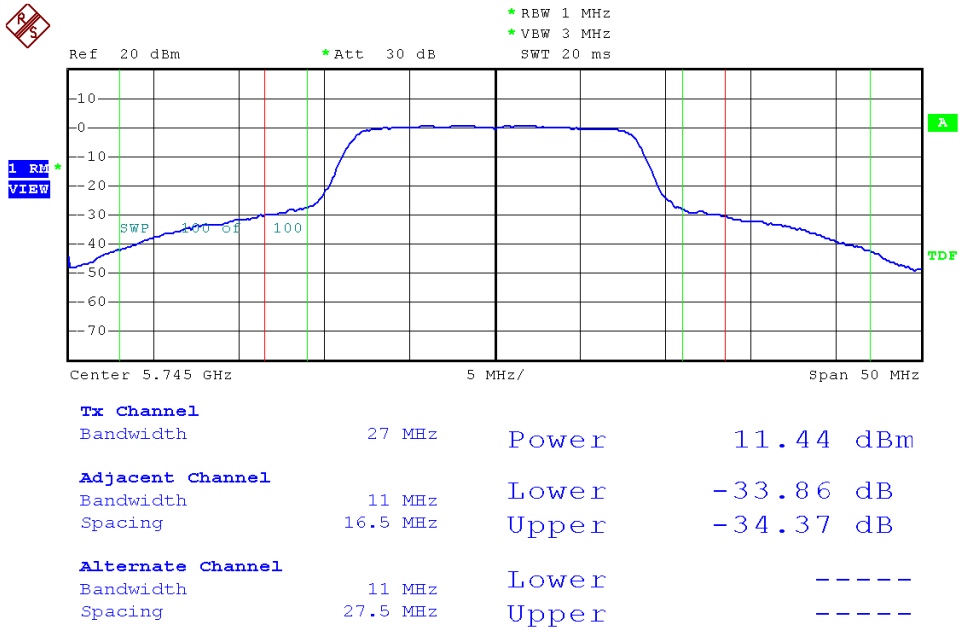


Modulation Standard: 802.11n HT40 (270Mbps), ANT R, Average Power Output Channel: 09

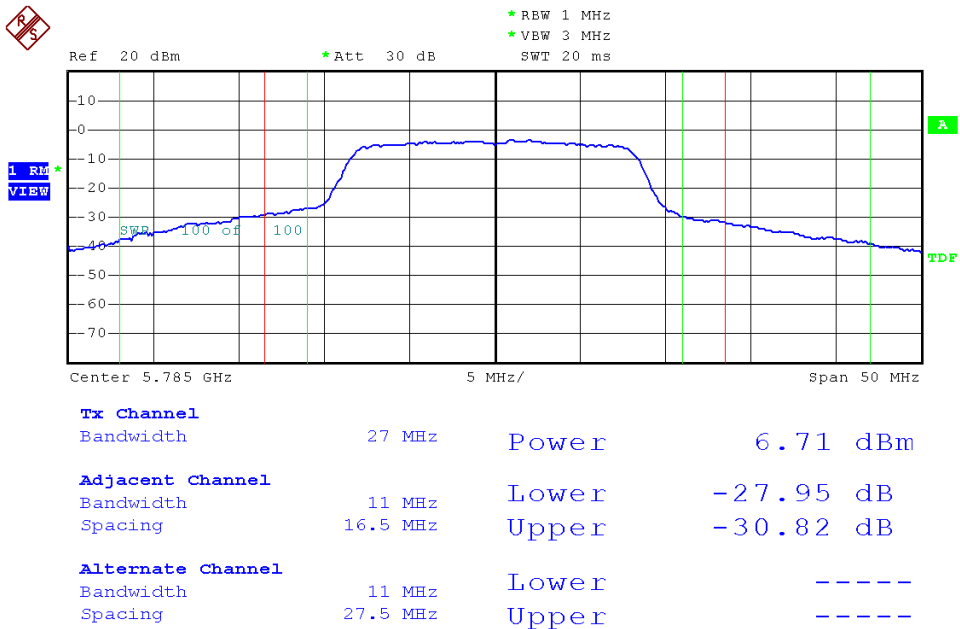




Modulation Standard: 802.11a (54Mbps), ANT R, Average Power Output Channel: 149

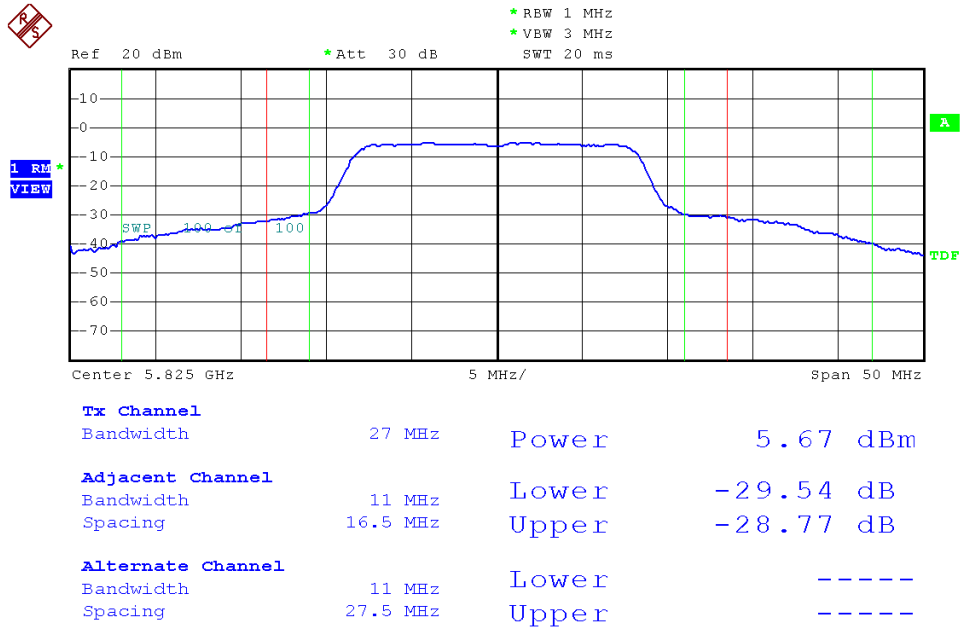


Modulation Standard: 802.11a (54Mbps), ANT R, Average Power Output Channel: 157

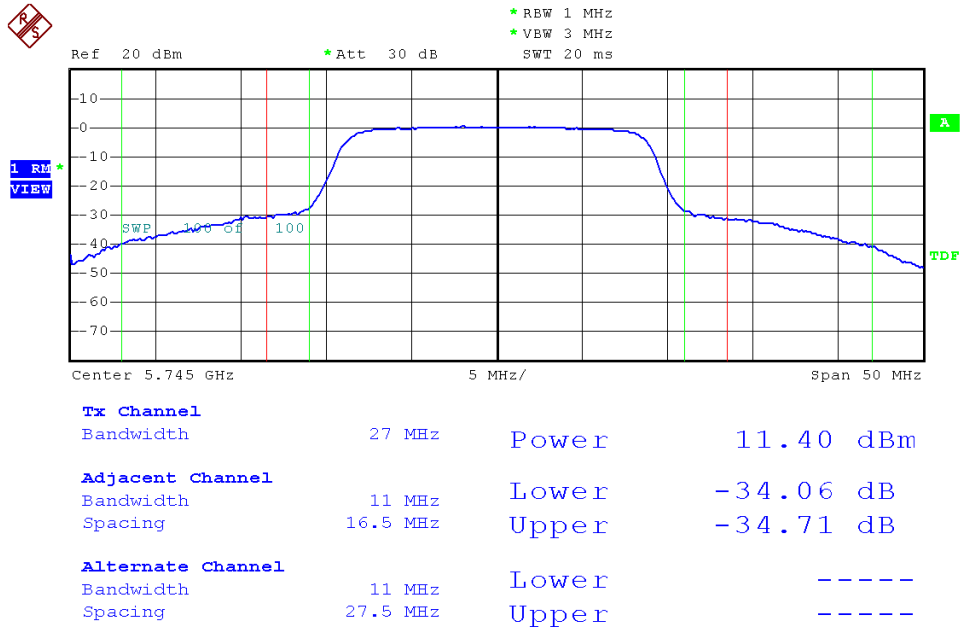




Modulation Standard: 802.11a (54Mbps), ANT R, Average Power Output Channel: 165

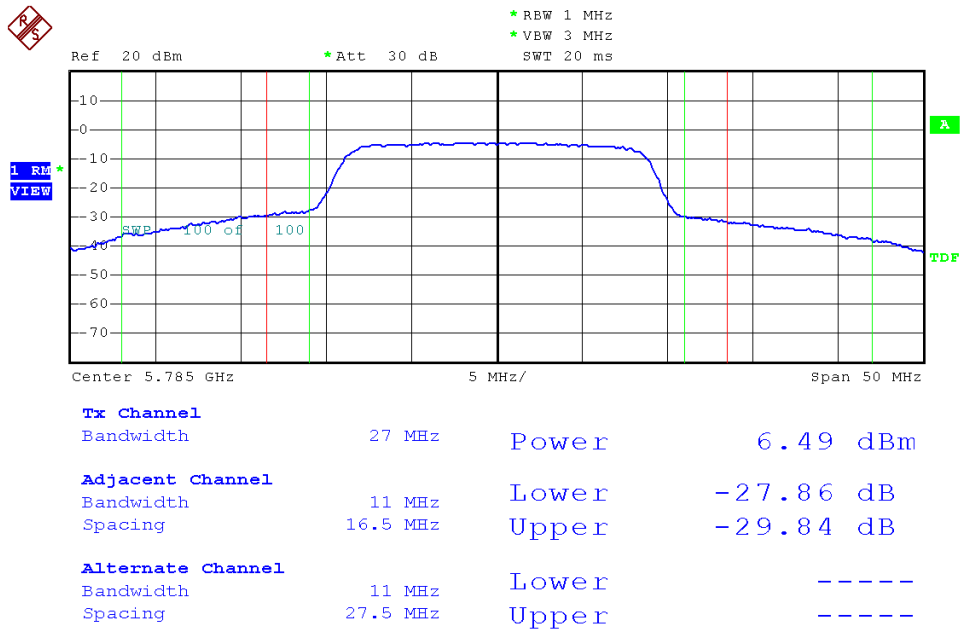


Modulation Standard: 802.11an HT20 (130Mbps), ANT R, Average Power Output Channel: 149

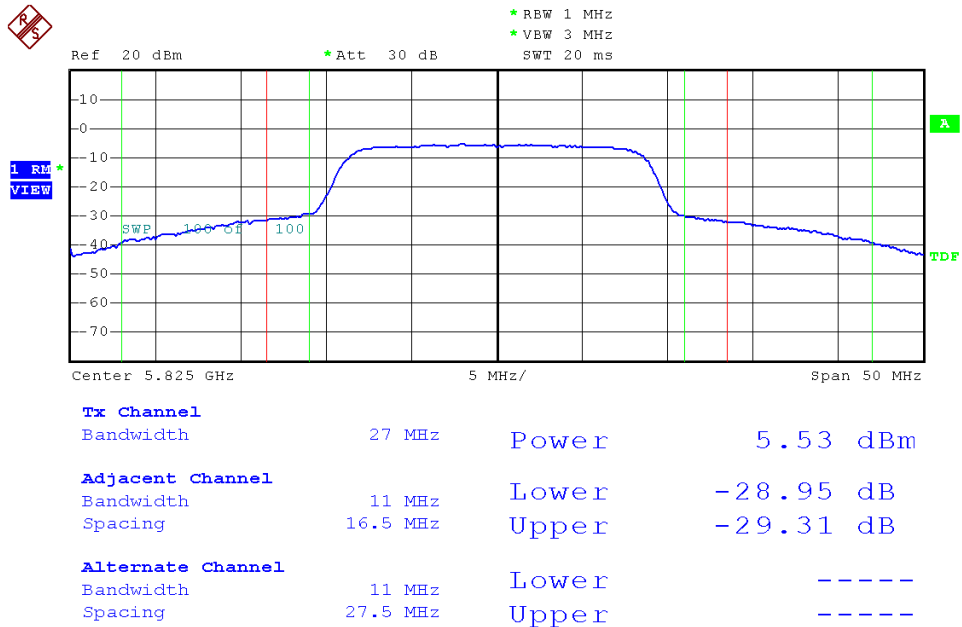




Modulation Standard: 802.11an HT20 (130Mbps), ANT R, Average Power Output Channel: 157

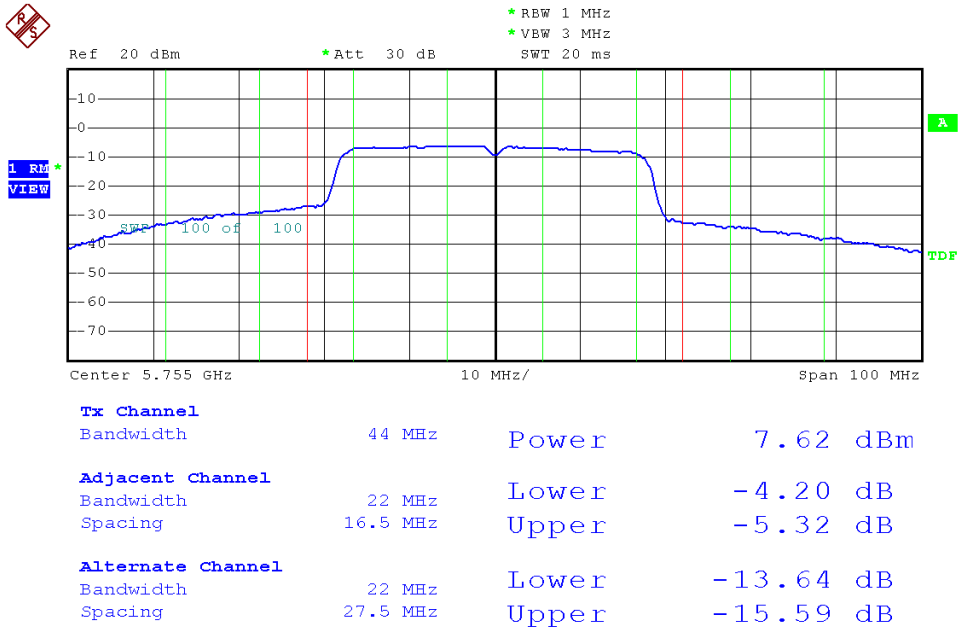


Modulation Standard: 802.11an HT20 (130Mbps), ANT R, Average Power Output Channel: 165

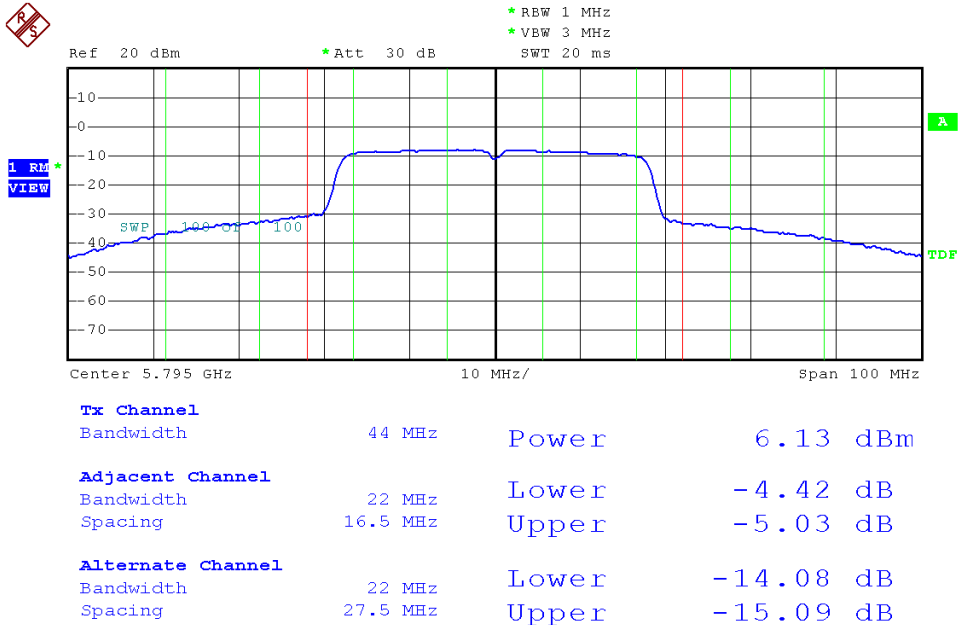




Modulation Standard: 802.11an HT40 (270Mbps), ANT R, Average Power Output Channel: 151

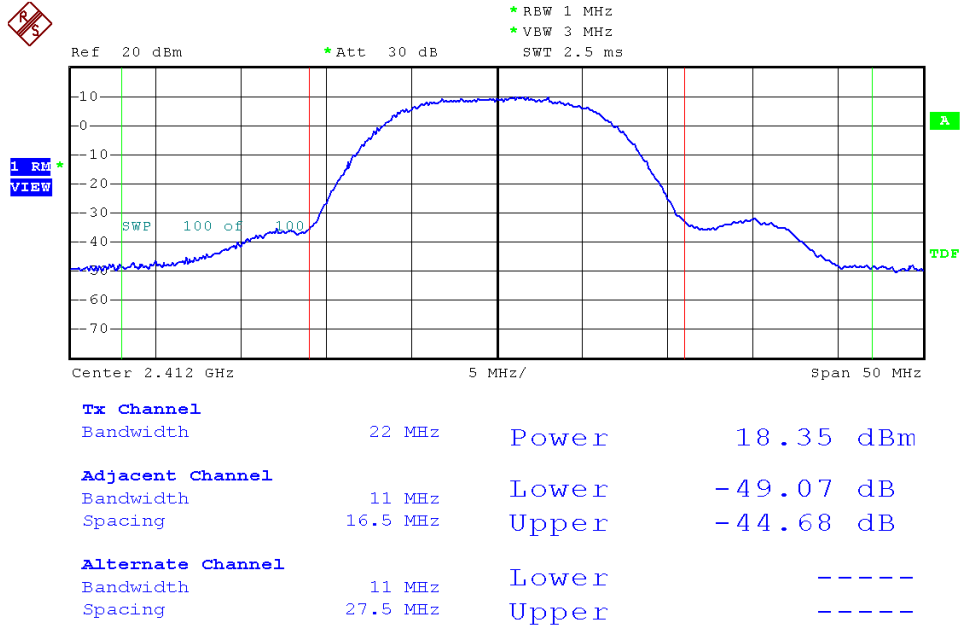


Modulation Standard: 802.11an HT40 (270Mbps), ANT R, Average Power Output Channel: 159

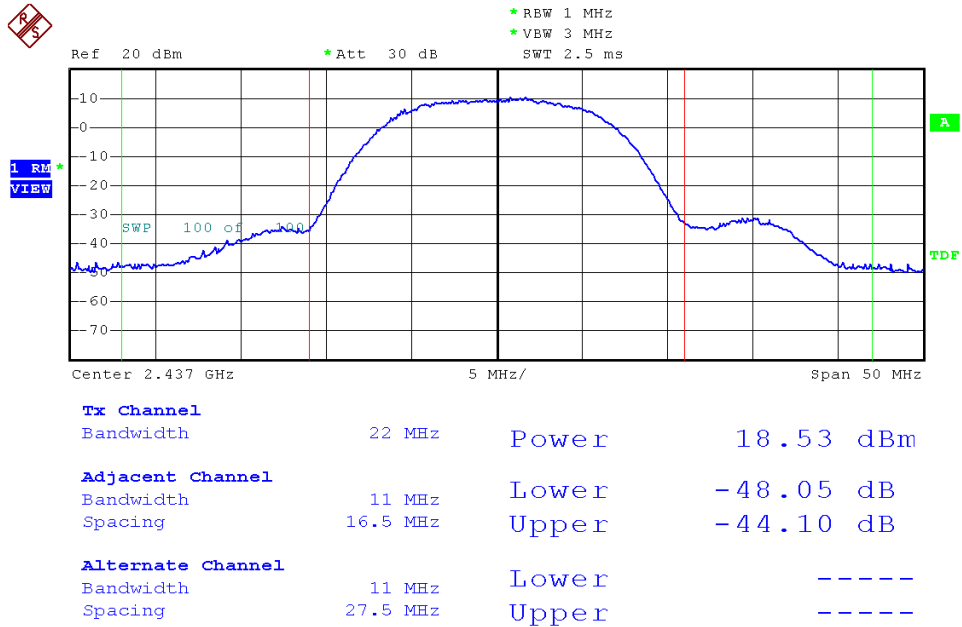




Modulation Standard: 802.11b (11Mbps), ANT L, Average Power Output Channel: 01

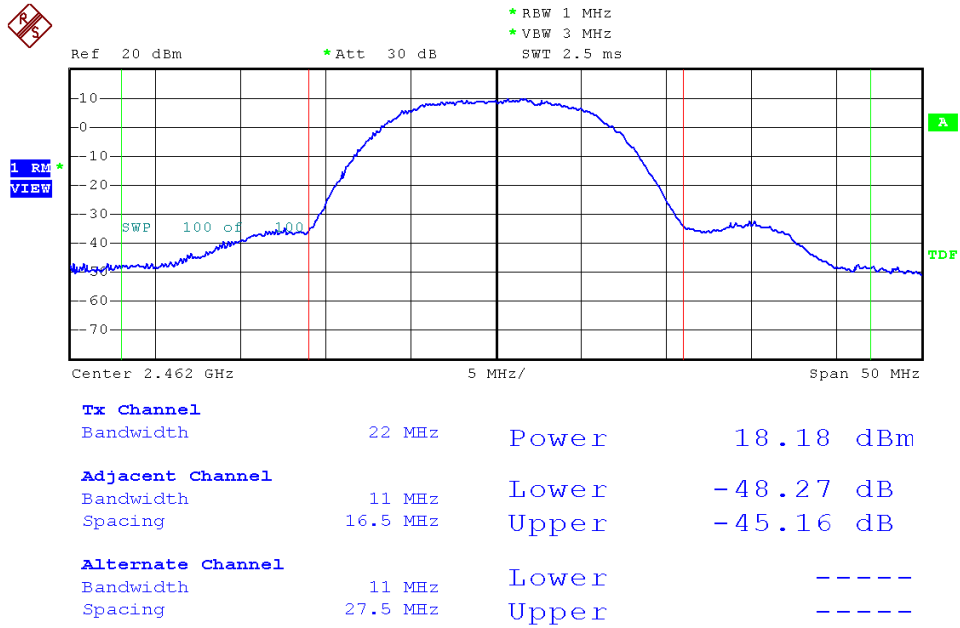


Modulation Standard: 802.11b (11Mbps), ANT L, Average Power Output Channel: 06

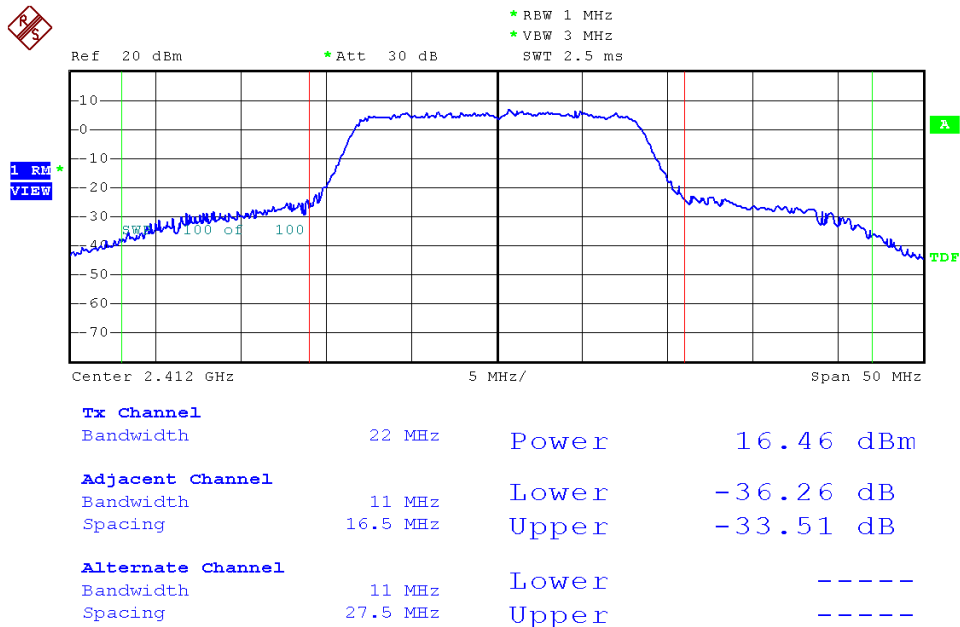




Modulation Standard: 802.11b (11Mbps), ANT L, Average Power Output Channel: 11

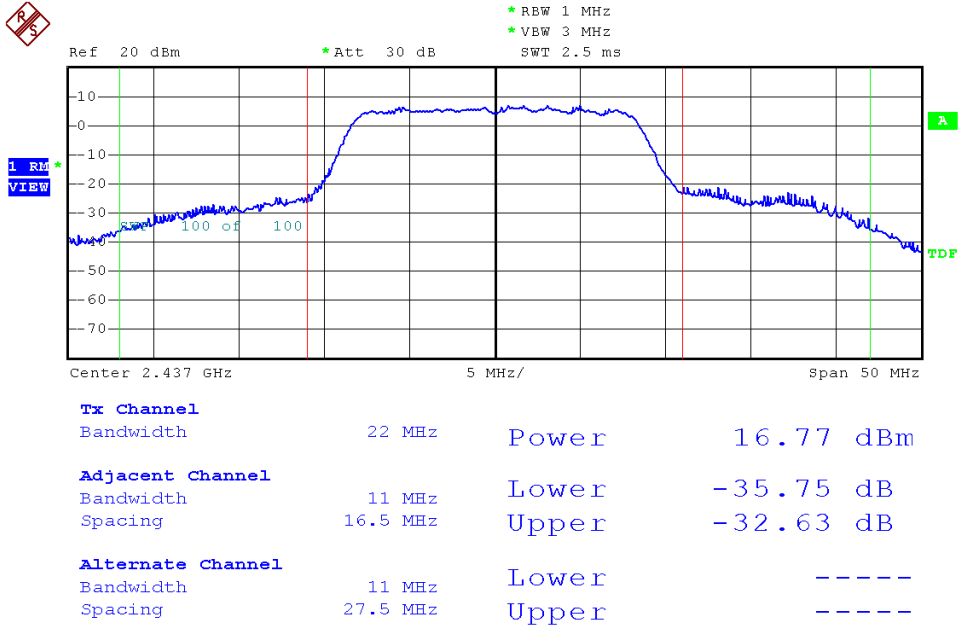


Modulation Standard: 802.11g (54Mbps), ANT L, Average Power Output Channel: 01

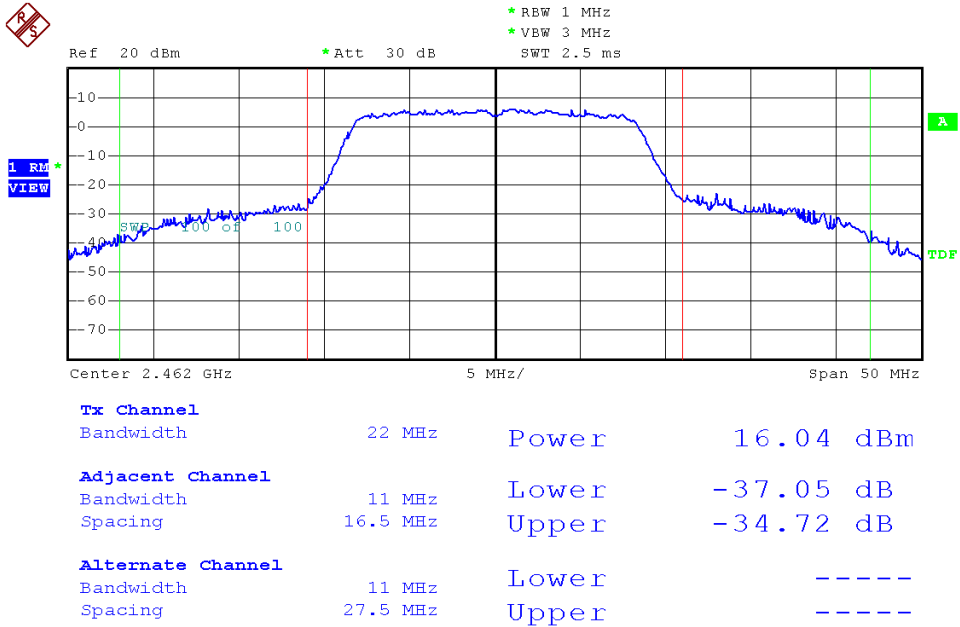




Modulation Standard: 802.11g (54Mbps), ANT L, Average Power Output Channel: 06

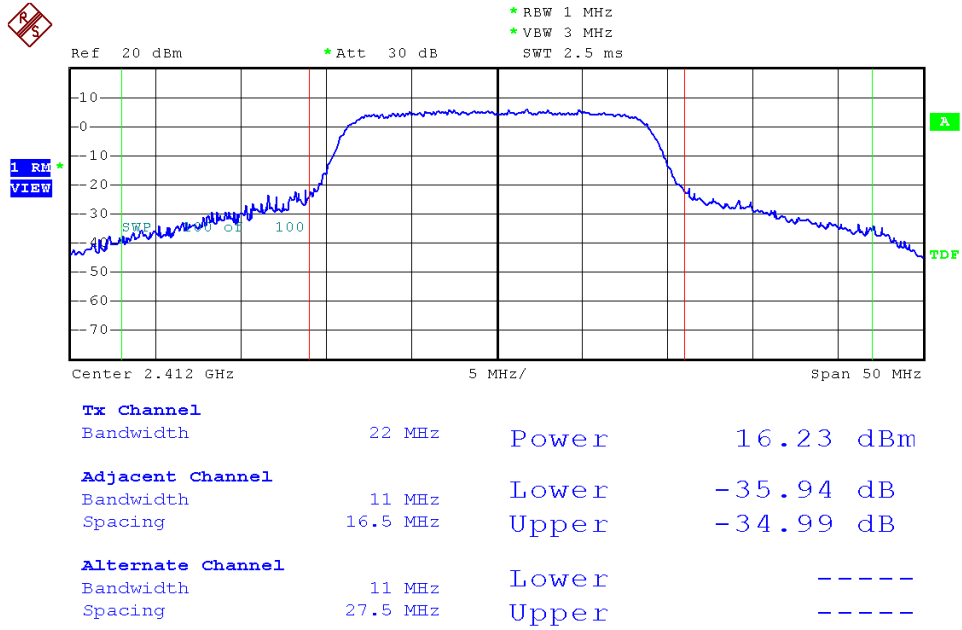


Modulation Standard: 802.11g (54Mbps), ANT L, Average Power Output Channel: 11

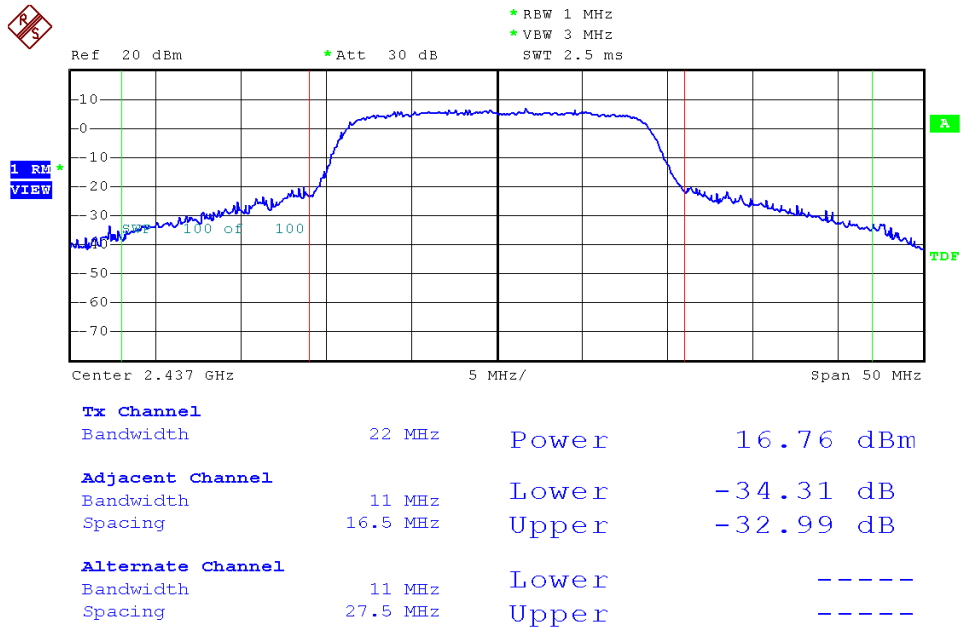




Modulation Standard: 802.11n HT20 (130Mbps), ANT L, Average Power Output Channel: 01

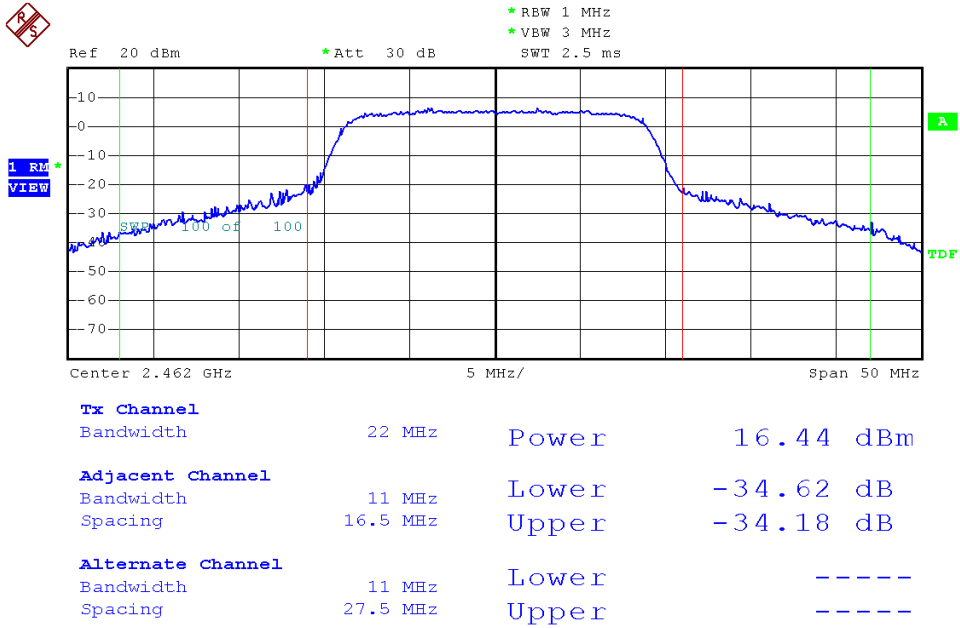


Modulation Standard: 802.11n HT20 (130Mbps), ANT L, Average Power Output Channel: 06

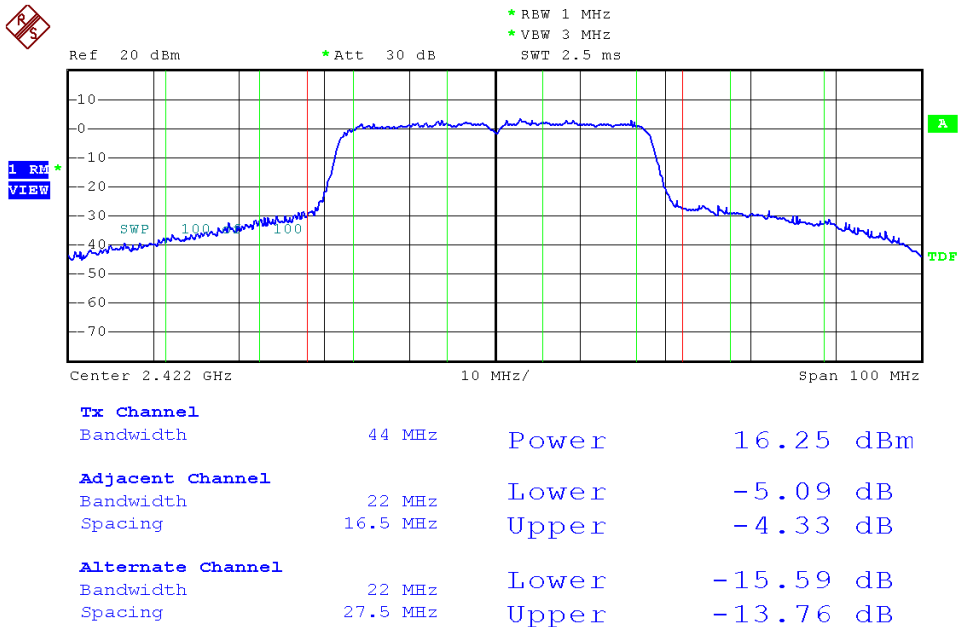




Modulation Standard: 802.11n HT20 (130Mbps), ANT L, Average Power Output Channel: 11

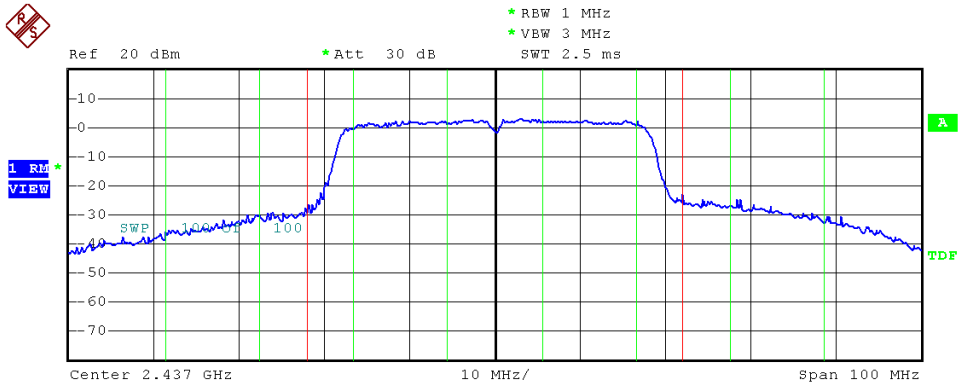


Modulation Standard: 802.11n HT40 (270Mbps), ANT L, Average Power Output Channel: 03



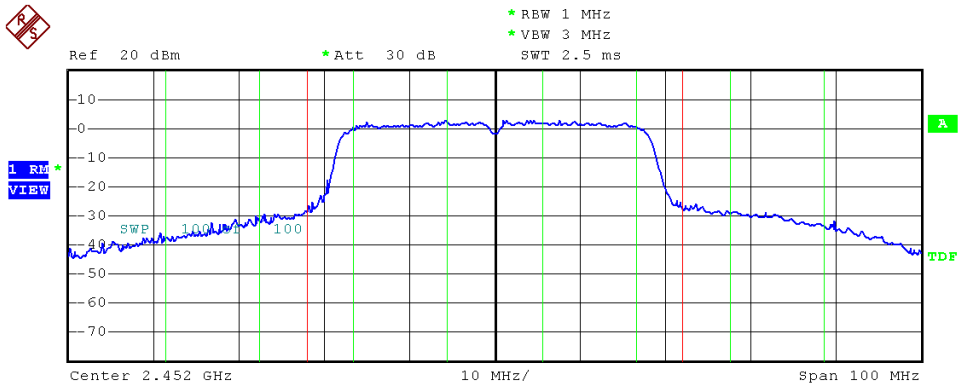


Modulation Standard: 802.11n HT40 (270Mbps), ANT L, Average Power Output Channel: 06



Tx Channel			
Bandwidth	44 MHz	Power	16.51 dBm
Adjacent Channel			
Bandwidth	22 MHz	Lower	-5.07 dB
Spacing	16.5 MHz	Upper	-4.40 dB
Alternate Channel			
Bandwidth	22 MHz	Lower	-15.51 dB
Spacing	27.5 MHz	Upper	-13.74 dB

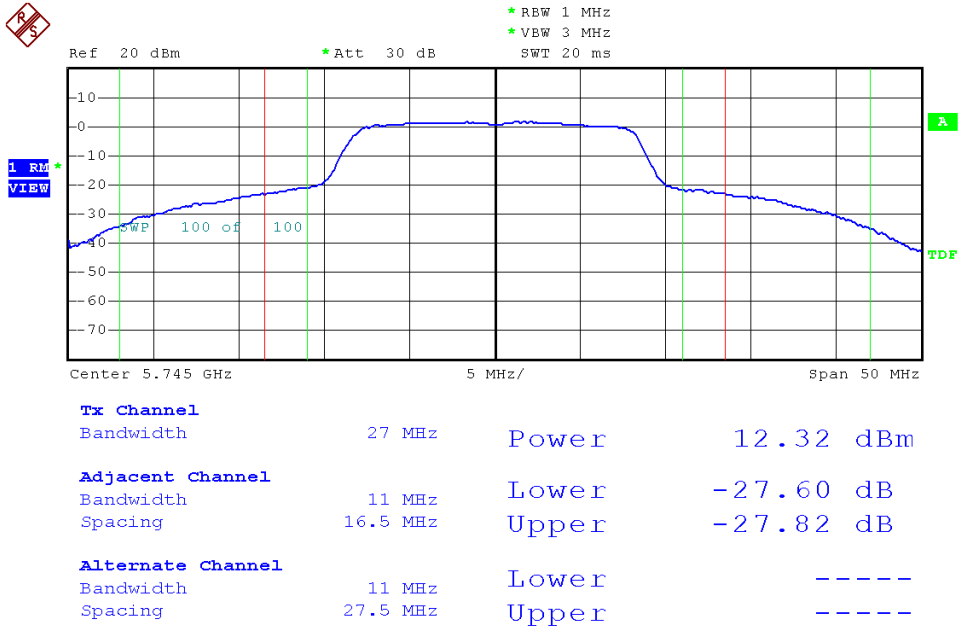
Modulation Standard: 802.11n HT40 (270Mbps), ANT L, Average Power Output Channel: 09



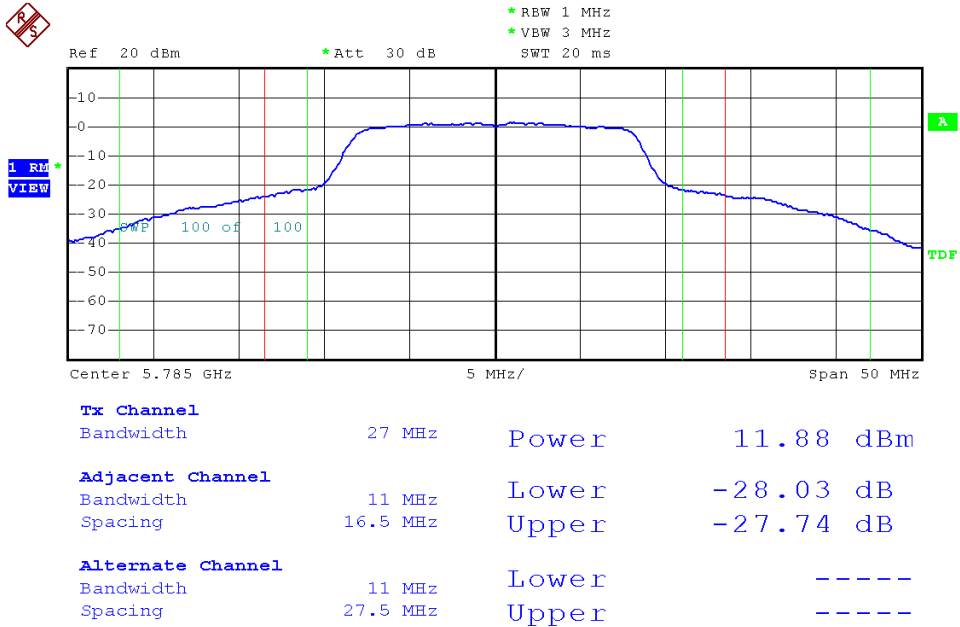
Tx Channel			
Bandwidth	44 MHz	Power	16.20 dBm
Adjacent Channel			
Bandwidth	22 MHz	Lower	-4.96 dB
Spacing	16.5 MHz	Upper	-4.51 dB
Alternate Channel			
Bandwidth	22 MHz	Lower	-15.44 dB
Spacing	27.5 MHz	Upper	-14.22 dB



Modulation Standard: 802.11a (54Mbps), ANT L, Average Power Output Channel: 149

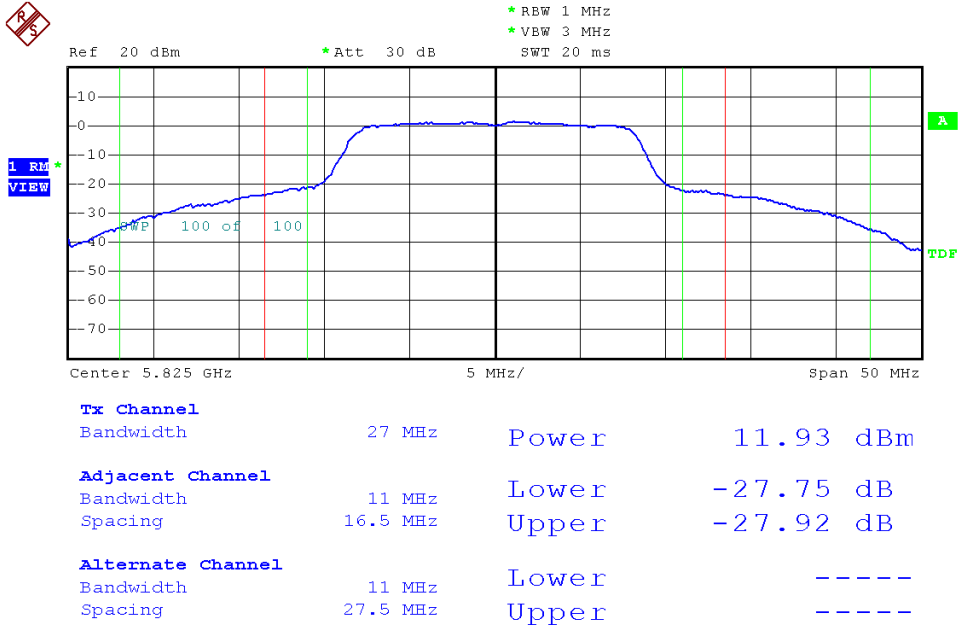


Modulation Standard: 802.11a (54Mbps), ANT L, Average Power Output Channel: 157

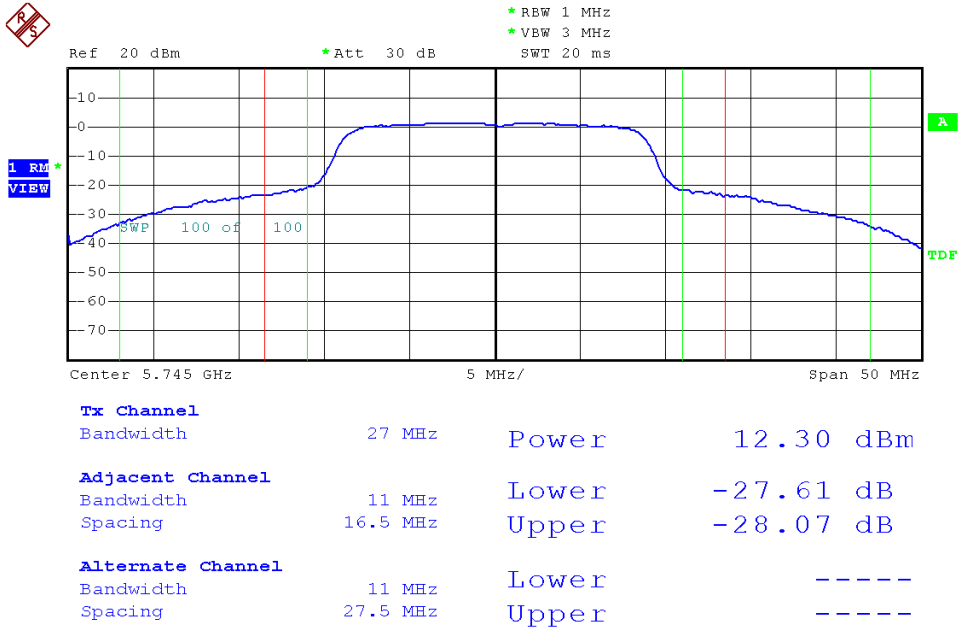




Modulation Standard: 802.11a (54Mbps), ANT L, Average Power Output Channel: 165

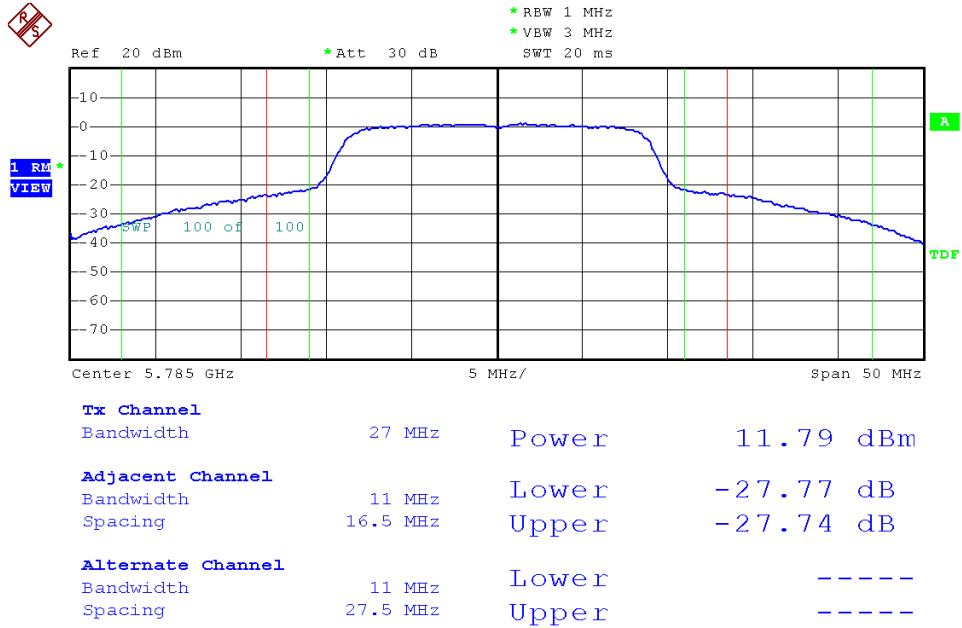


Modulation Standard: 802.11an HT20 (130Mbps), ANT L, Average Power Output Channel: 149

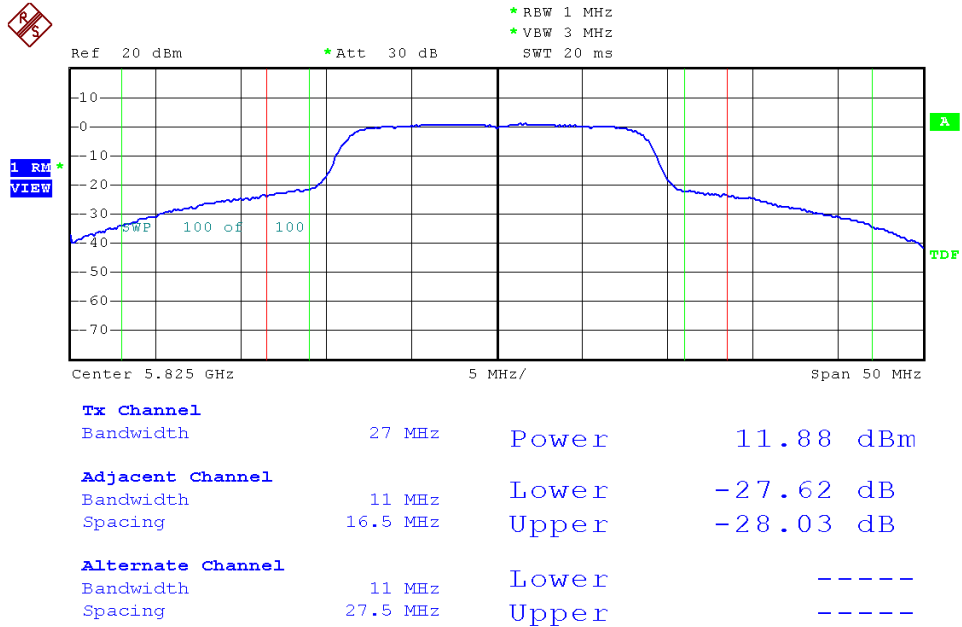




Modulation Standard: 802.11an HT20 (130Mbps), ANT L, Average Power Output Channel: 157

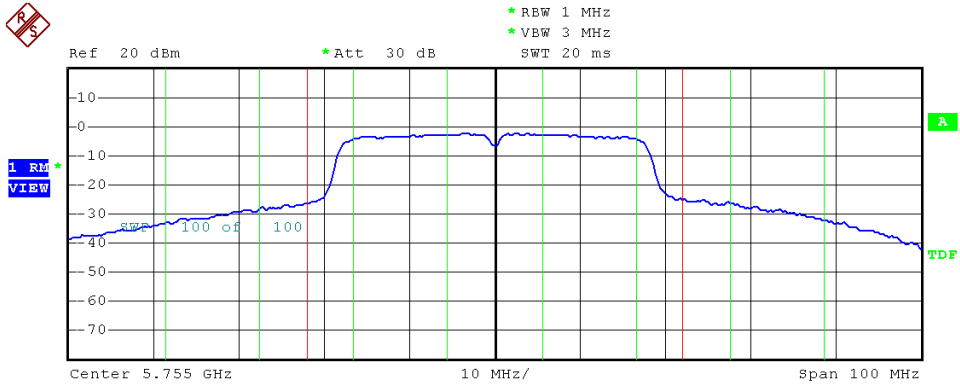


Modulation Standard: 802.11an HT20 (130Mbps), ANT L, Average Power Output Channel: 165



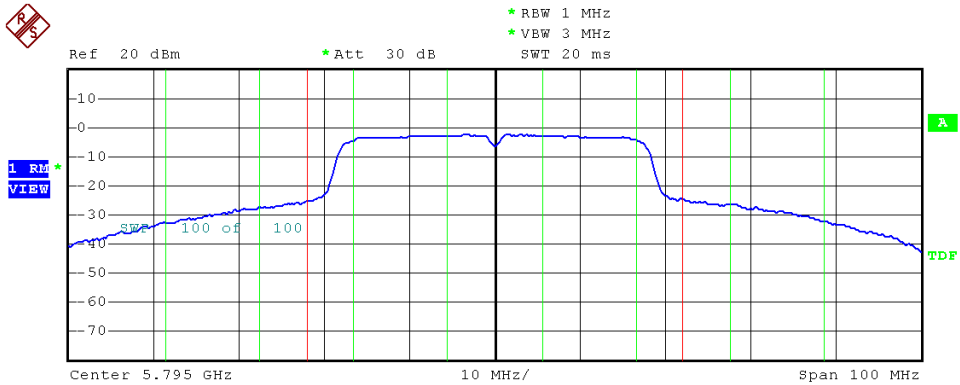


Modulation Standard: 802.11an HT40 (270Mbps), ANT L, Average Power Output Channel: 151



Tx Channel			
Bandwidth	44 MHz	Power	11.53 dBm
Adjacent Channel			
Bandwidth	22 MHz	Lower	-4.71 dB
Spacing	16.5 MHz	Upper	-4.79 dB
Alternate Channel			
Bandwidth	22 MHz	Lower	-14.63 dB
Spacing	27.5 MHz	Upper	-14.71 dB

Modulation Standard: 802.11an HT40 (270Mbps), ANT L, Average Power Output Channel: 159



Tx Channel			
Bandwidth	44 MHz	Power	11.61 dBm
Adjacent Channel			
Bandwidth	22 MHz	Lower	-4.71 dB
Spacing	16.5 MHz	Upper	-4.77 dB
Alternate Channel			
Bandwidth	22 MHz	Lower	-14.62 dB
Spacing	27.5 MHz	Upper	-14.70 dB



8. Power Spectral Density

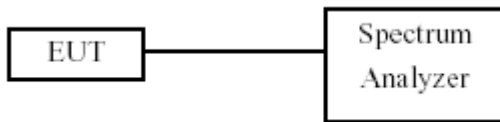
8.1 Test Limit

The Maximum of Power Spectral Density Measurement is 8dBm.

8.2 Test Procedures

- a. The transmitter output was connected to spectrum analyzer.
- b. The spectrum analyzer's resolution bandwidth were set at 100KHz RBW and 300KHz VBW as that of the fundamental frequency. Set the sweep time=auto couple.
- c. Scale the observed power level to an equivalent value in 3 kHz by adjusting the measured power by a bandwidth correction factor (BWCF) where $BWCF = 10\log(3\text{ kHz}/100) = -15.2\text{ dB}$.
- d. The power spectral density was measured and recorded.

8.3 Test Setup Layout



8.4 Measurement Equipment

Instrument/Ancillary	Manufacturer	Model No.	Serial No.	Calibration Date	Valid Date
Spectrum Analyzer	R&S	FSP40	100219	2011/11/24	2012/11/23



8.5 Test Result and Data

Test Date: Jun. 01, 2012

Temperature: 25°C

Atmospheric pressure: 1020 hPa

Humidity: 65%

Modulation Standard	Channel	Frequency (MHz)	Maximum Power Density of 3 kHz Bandwidth (dBm)	
			ANT R	ANT L
802.11b (11Mbps)	01	2412	-9.65	-10.23
	06	2437	-9.31	-10.11
	11	2462	-9.65	-10.44
802.11g (54Mbps)	01	2412	-13.64	-13.80
	06	2437	-13.18	-13.47
	11	2462	-13.64	-14.39

Modulation Standard	Channel	Frequency (MHz)	Maximum Power Density of 3 kHz Bandwidth (dBm)		
			ANT R	ANT L	R+L
802.11n HT20 (130Mbps)	01	2412	-14.08	-14.58	-11.31
	06	2437	-13.71	-13.80	-10.74
	11	2462	-13.91	-14.05	-10.97
802.11n HT40 (270Mbps)	03	2422	-16.70	-16.92	-13.80
	06	2437	-16.39	-16.44	-13.40
	09	2452	-17.08	-16.75	-13.90

Test Date: Jun. 05, 2012

Temperature: 25°C

Atmospheric pressure: 1020 hPa

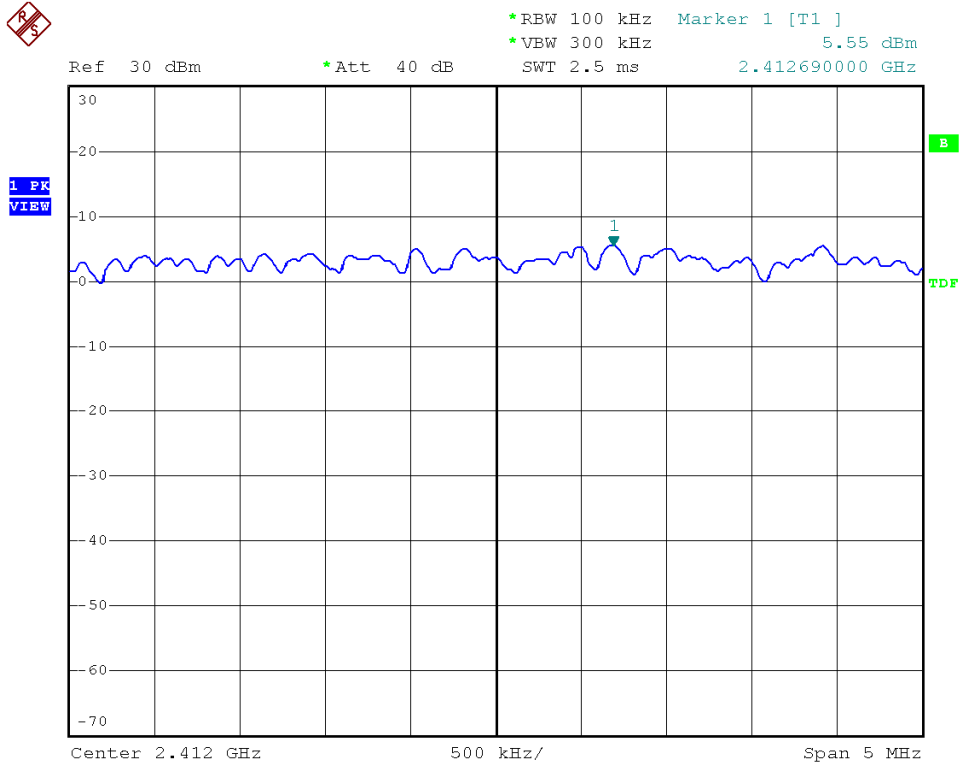
Humidity: 65%

Modulation Standard	Channel	Frequency (MHz)	Maximum Power Density of 3 kHz Bandwidth (dBm)	
			ANT R	ANT L
802.11a (54Mbps)	149	5745	-15.13	-13.58
	157	5785	-19.49	-14.50
	165	5825	-21.20	-14.33

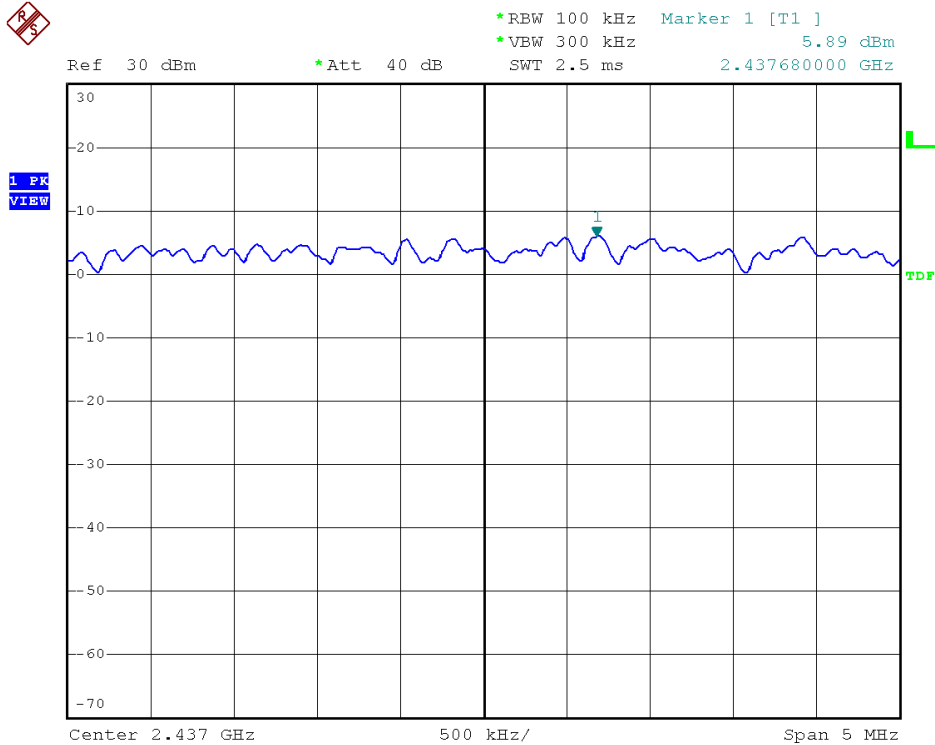
Modulation Standard	Channel	Frequency (MHz)	Maximum Power Density of 3 kHz Bandwidth (dBm)		
			ANT R	ANT L	R+L
802.11an HT20 (130Mbps)	149	5745	-16.20	-14.20	-12.08
	157	5785	-20.65	-15.01	-13.96
	165	5825	-21.53	-15.31	-14.38
802.11an HT40 (270Mbps)	151	5755	-19.35	-17.26	-15.17
	155	5775	---	---	---
	159	5795	-24.36	-17.00	-16.27



Modulation Standard: 802.11b (11Mbps), ANT R
Channel: 01

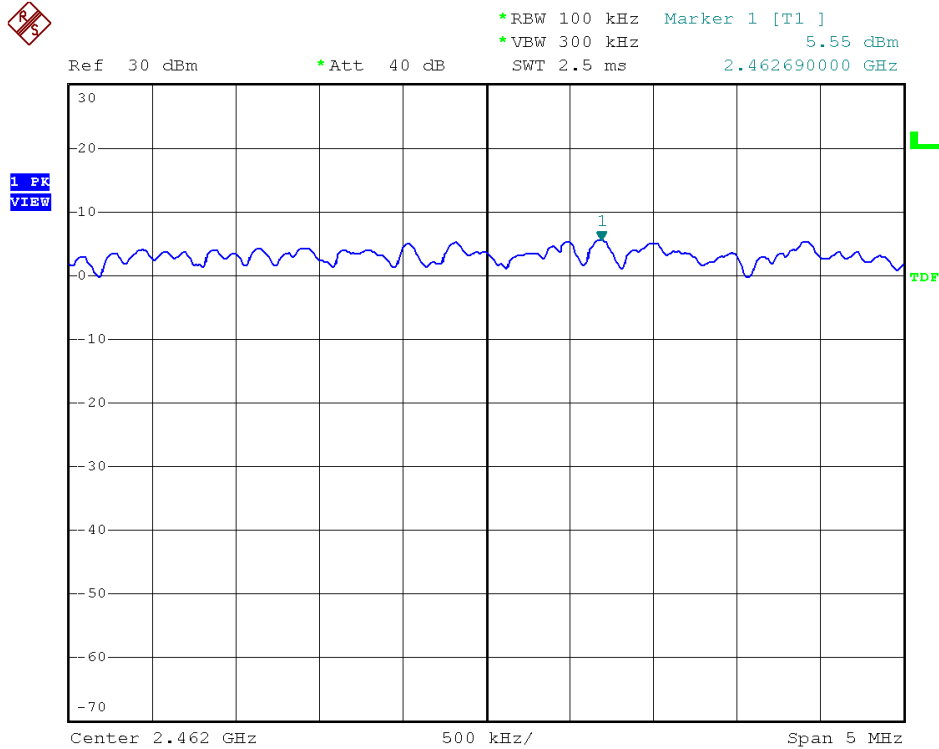


Modulation Standard: 802.11b (11Mbps), ANT R
Channel: 06

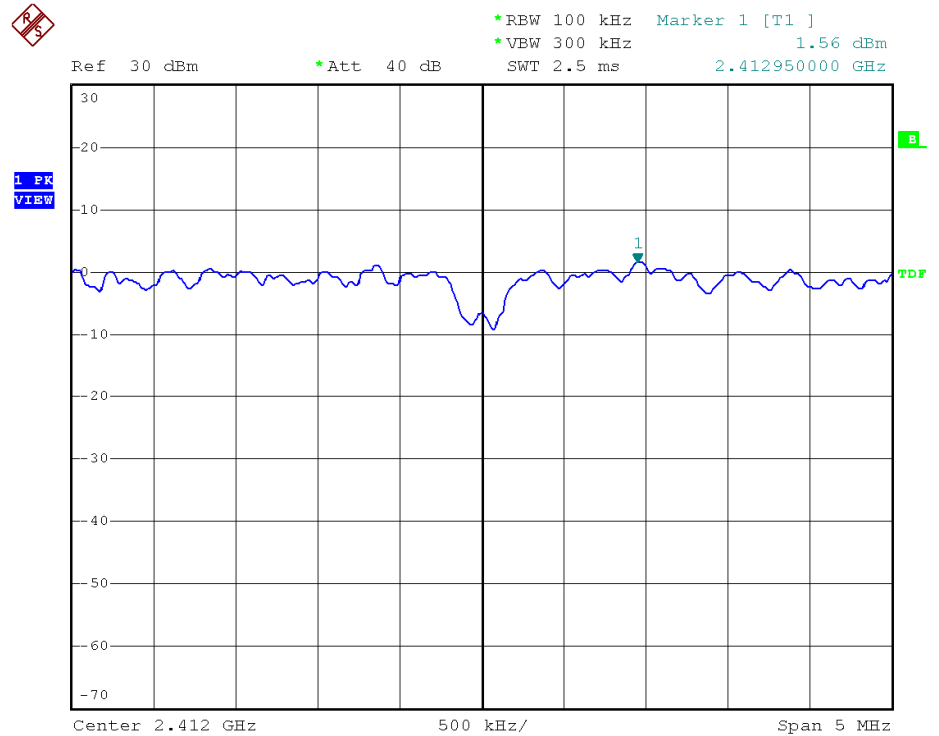




Modulation Standard: 802.11b (11Mbps), ANT R
Channel: 11

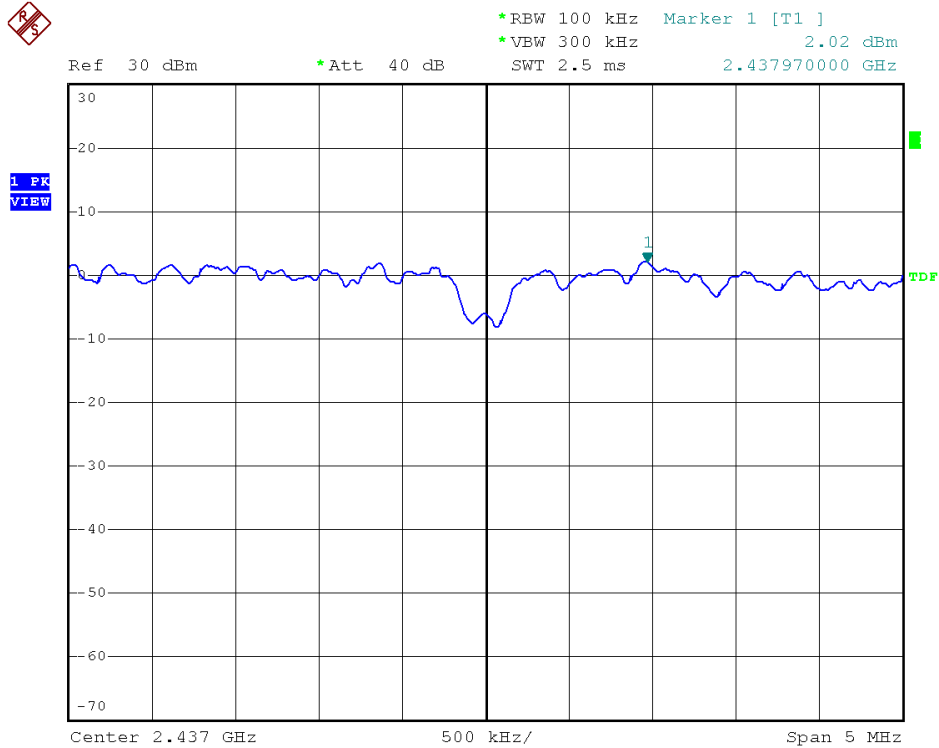


Modulation Standard: 802.11g (54Mbps), ANT R
Channel: 01

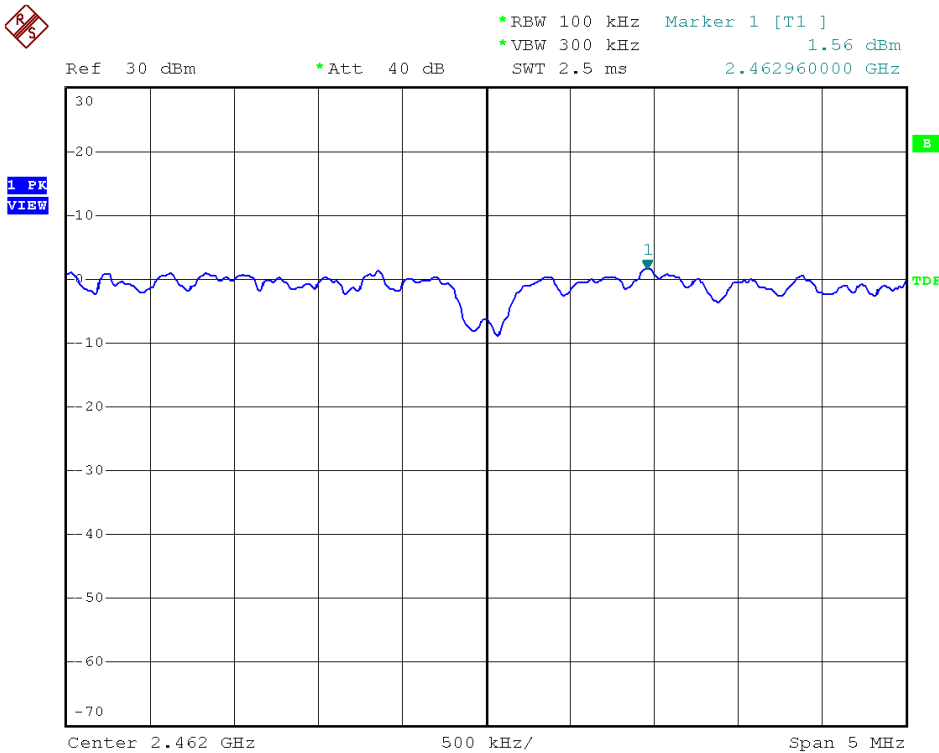




Modulation Standard: 802.11g (54Mbps), ANT R
Channel: 06

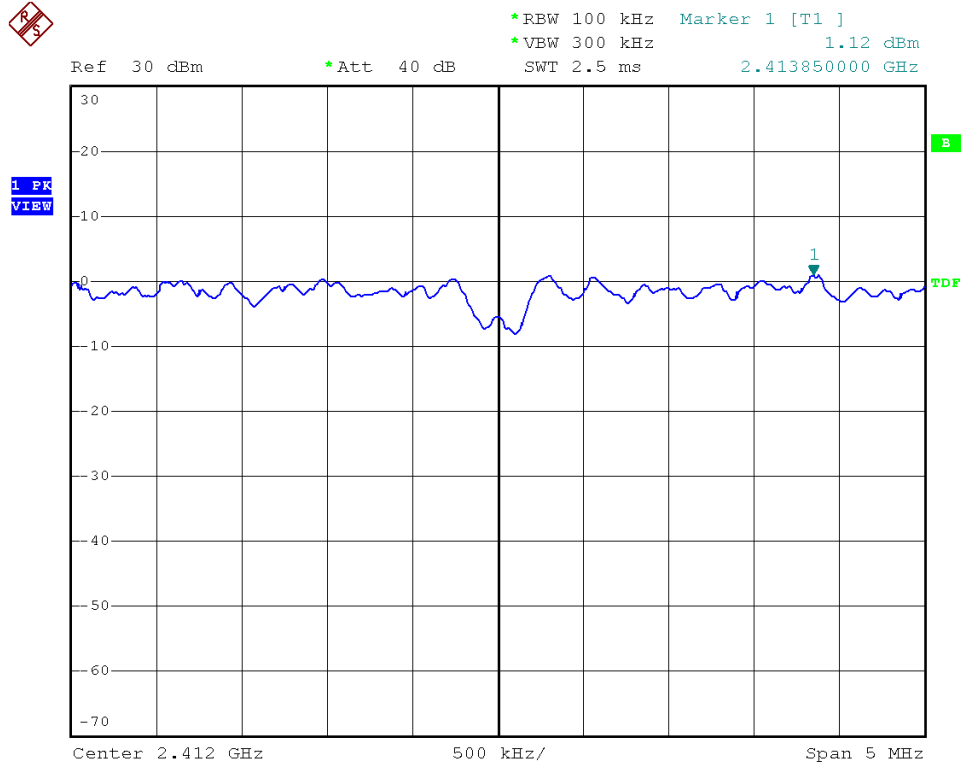


Modulation Standard: 802.11g (54Mbps), ANT R
Channel: 11

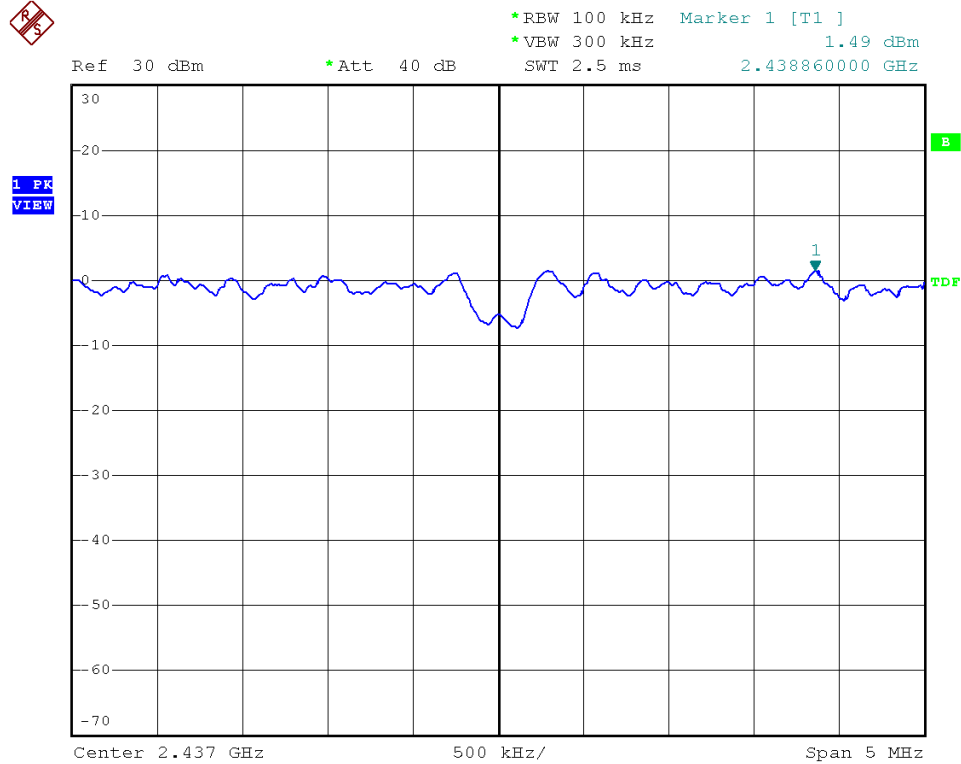




Modulation Standard: 802.11n HT20 (130Mbps), ANT R
Channel: 01

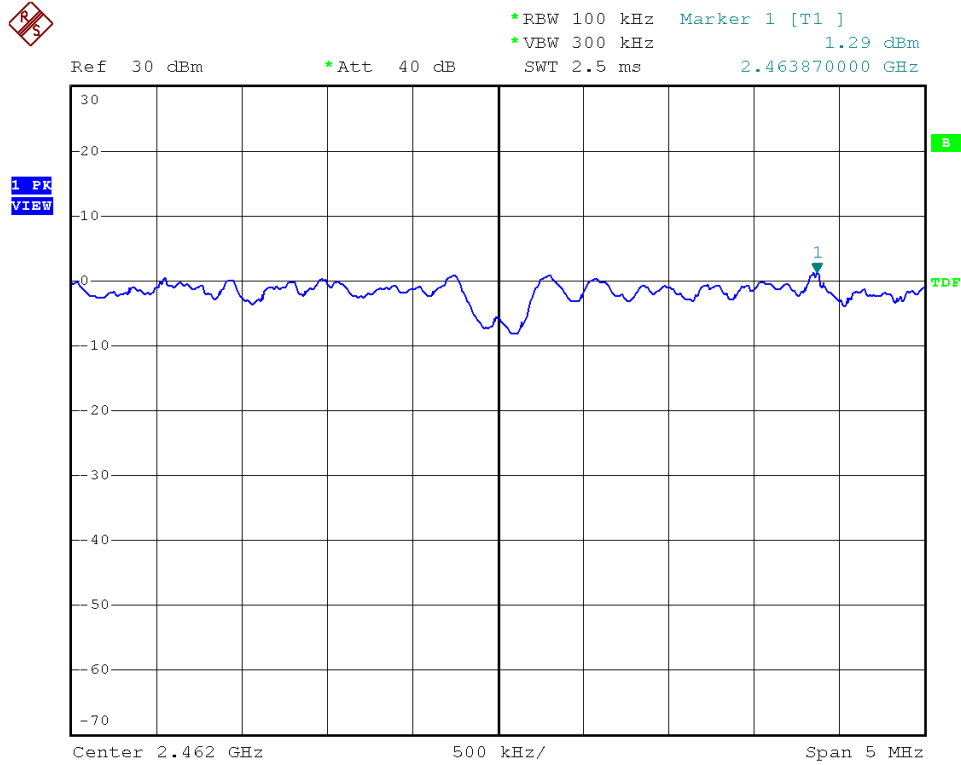


Modulation Standard: 802.11n HT20 (130Mbps), ANT R
Channel: 06

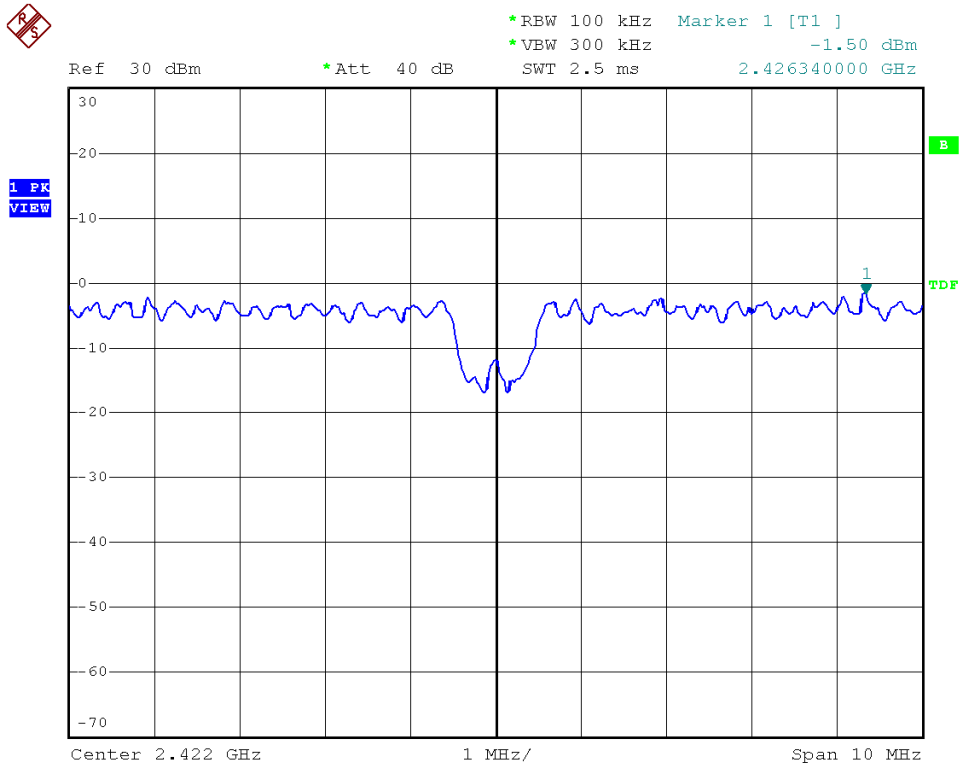




Modulation Standard: 802.11n HT20 (130Mbps), ANT R
Channel: 11

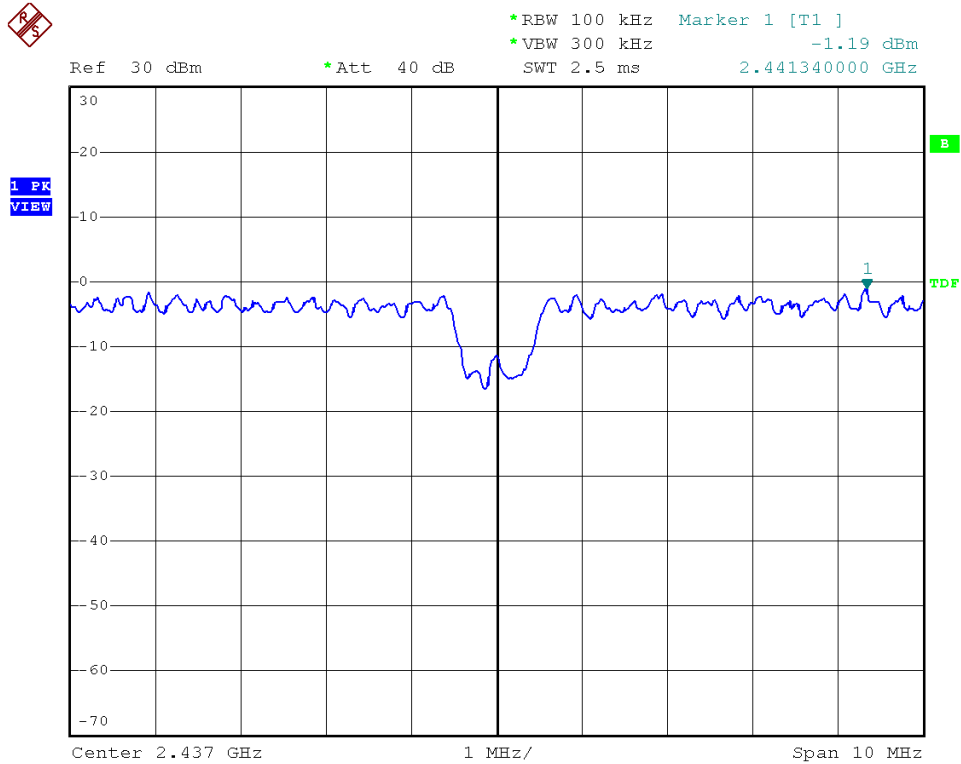


Modulation Standard: 802.11n HT40 (270Mbps), ANT R
Channel: 03

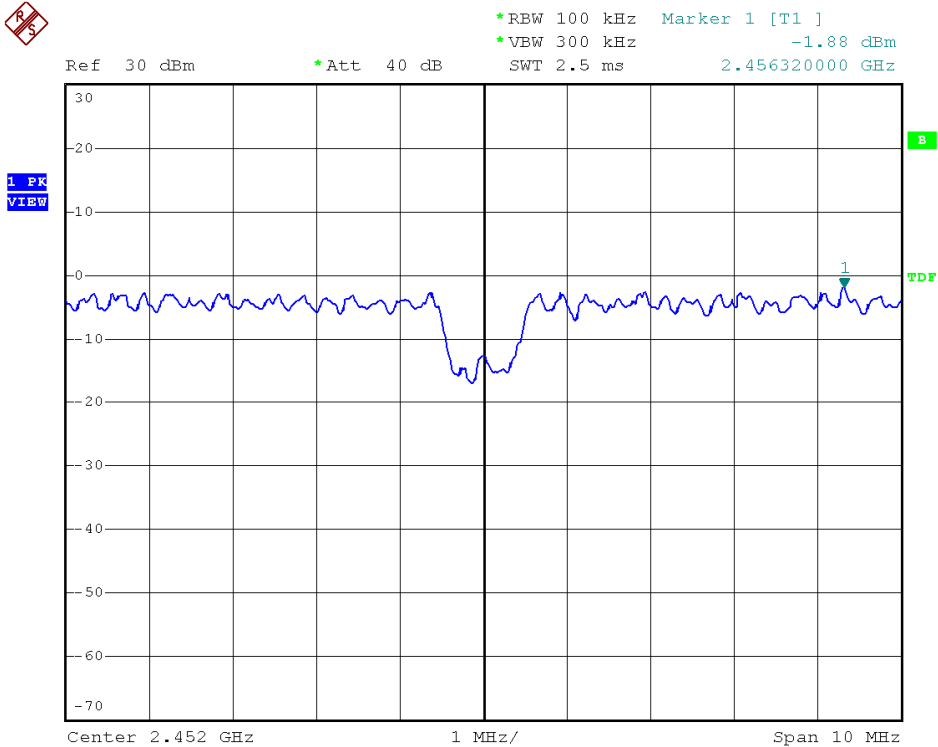




Modulation Standard: 802.11n HT40 (270Mbps), ANT R
Channel: 06

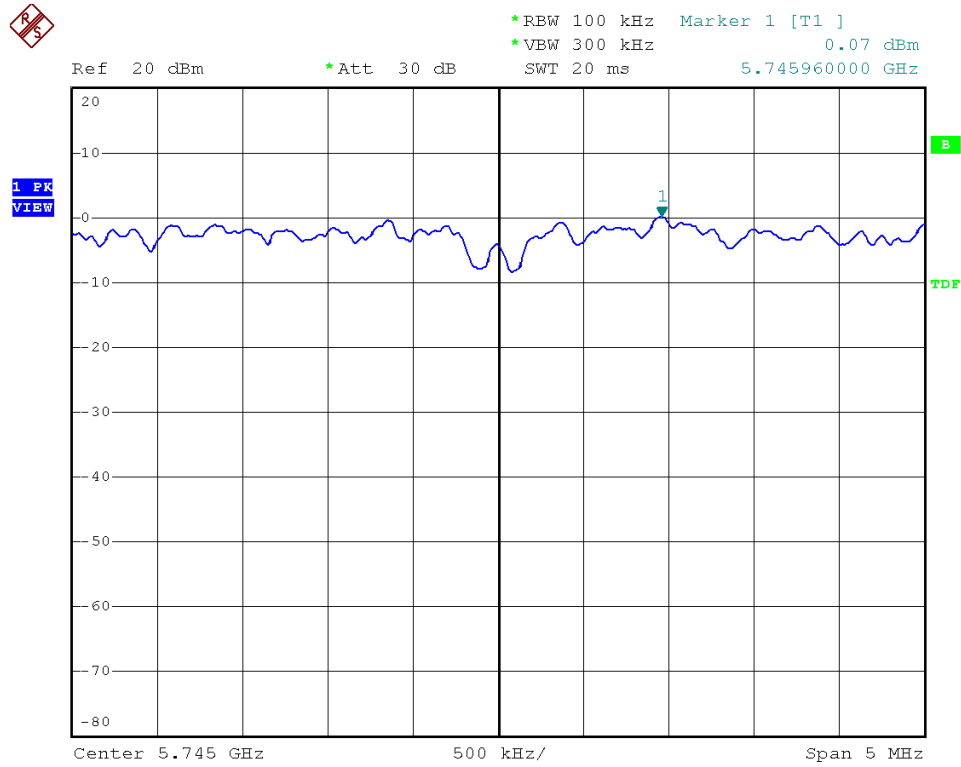


Modulation Standard: 802.11n HT40 (270Mbps), ANT R
Channel: 09

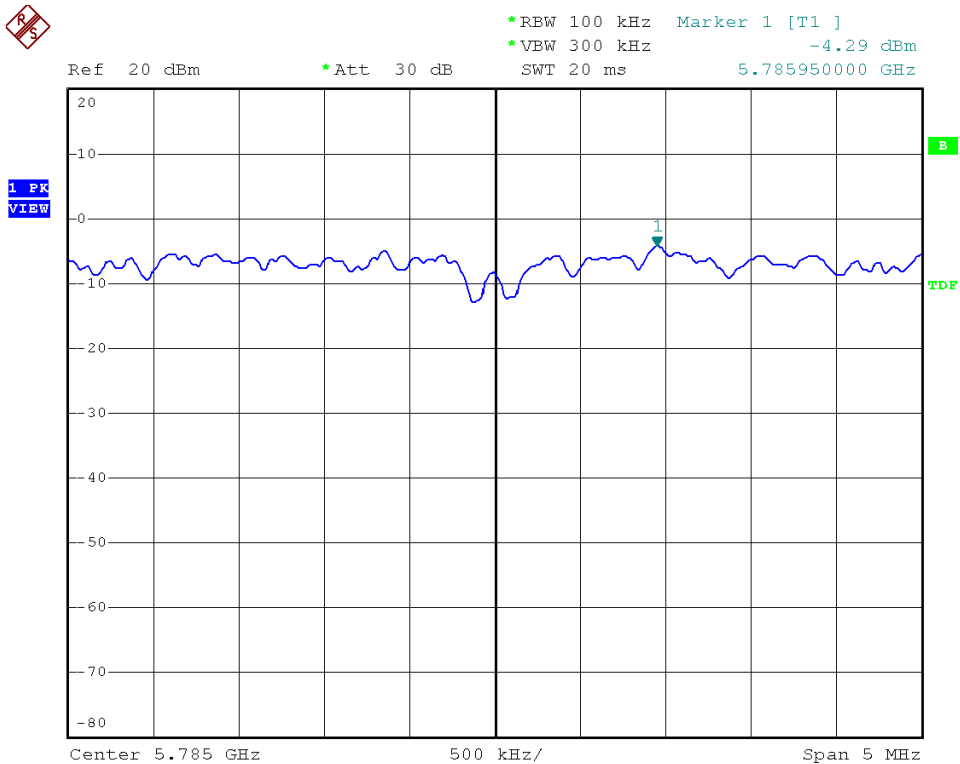




Modulation Standard: 802.11a (54Mbps), ANT R
Channel: 149

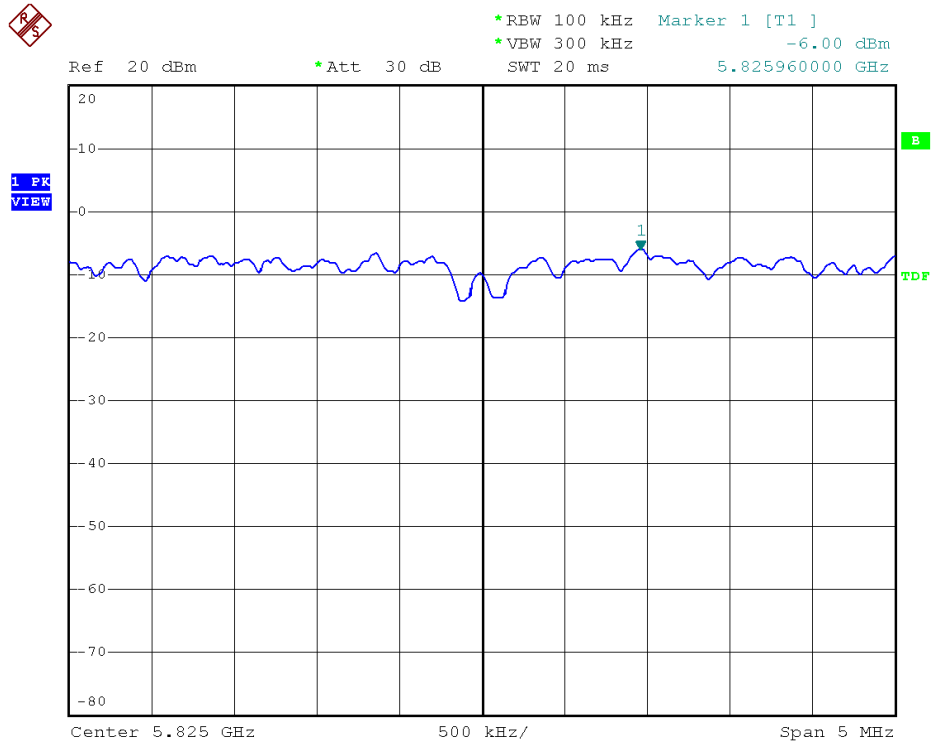


Modulation Standard: 802.11a (54Mbps), ANT R
Channel: 157

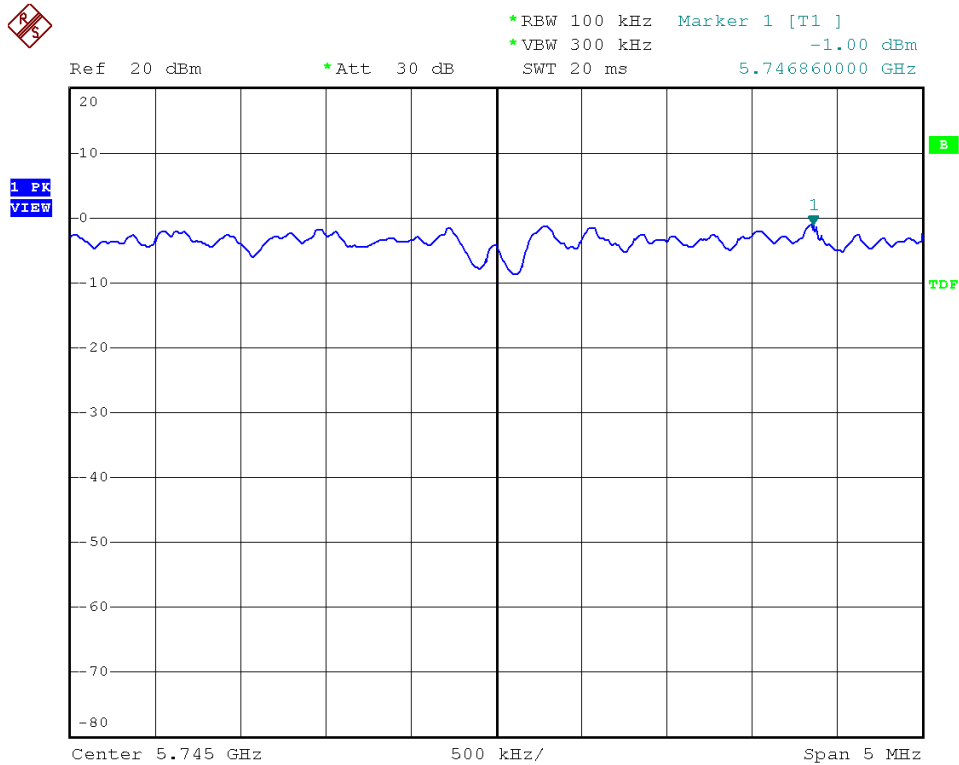




Modulation Standard: 802.11a (54Mbps), ANT R
Channel: 165

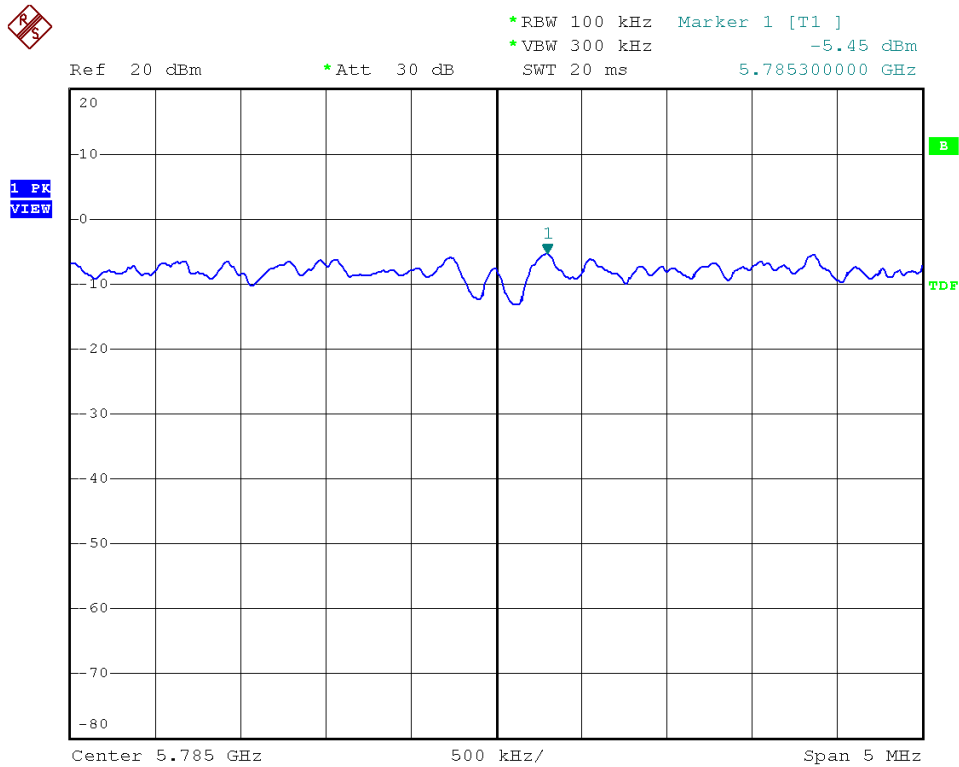


Modulation Standard: 802.11an HT20 (130Mbps), ANT R
Channel: 149

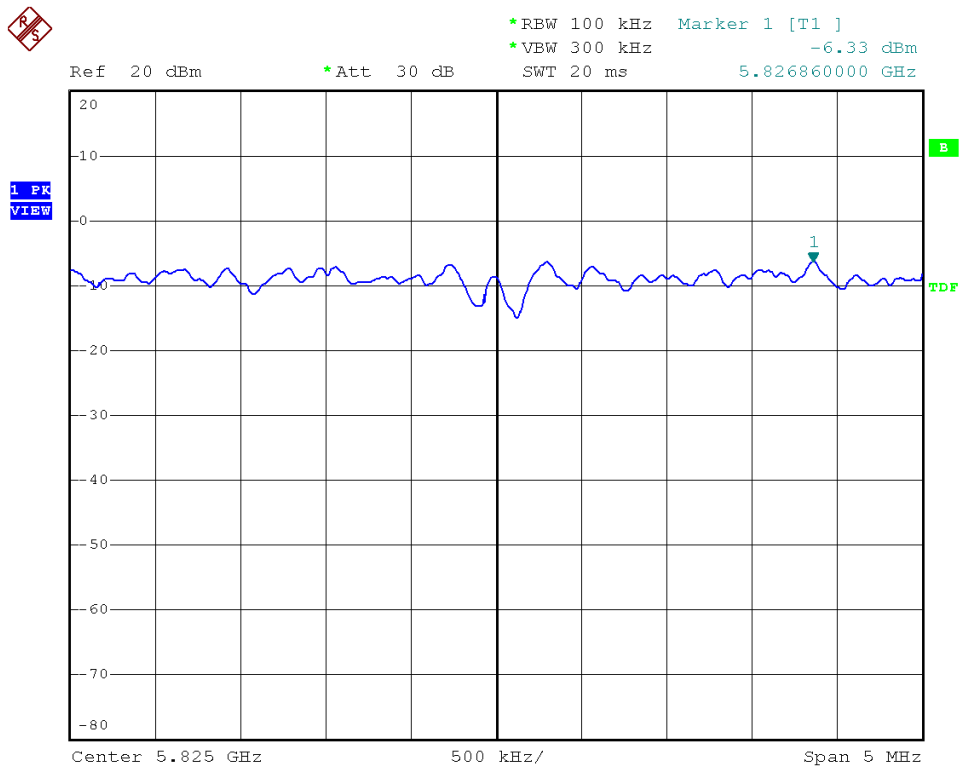




Modulation Standard: 802.11an HT20 (130Mbps), ANT R
Channel: 157

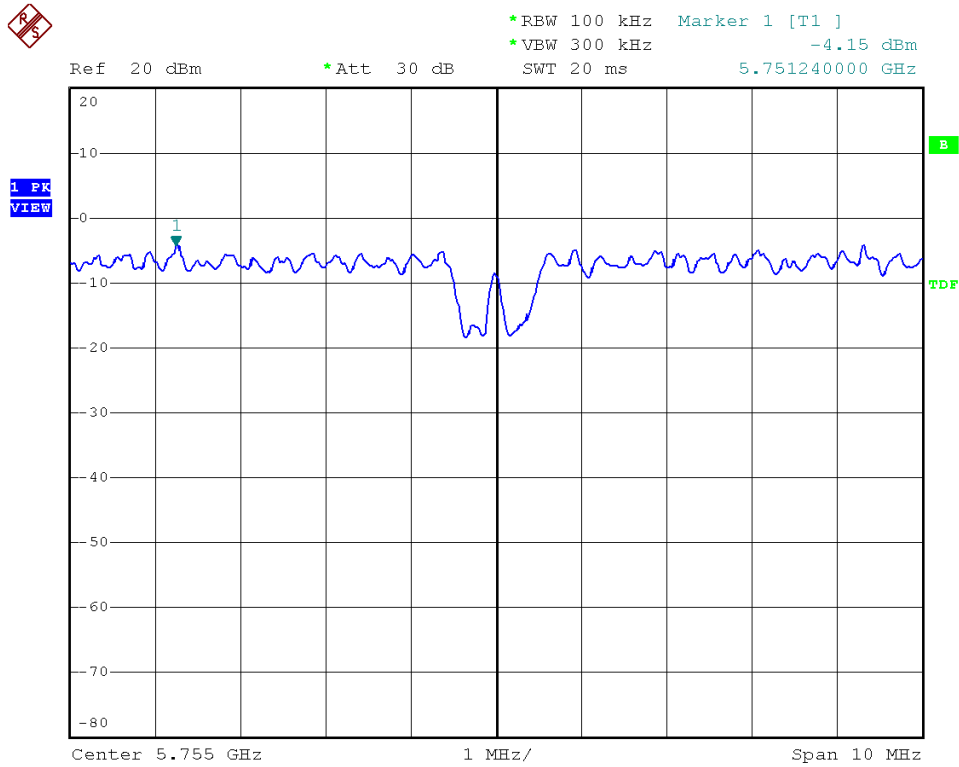


Modulation Standard: 802.11an HT20 (130Mbps), ANT R
Channel: 165

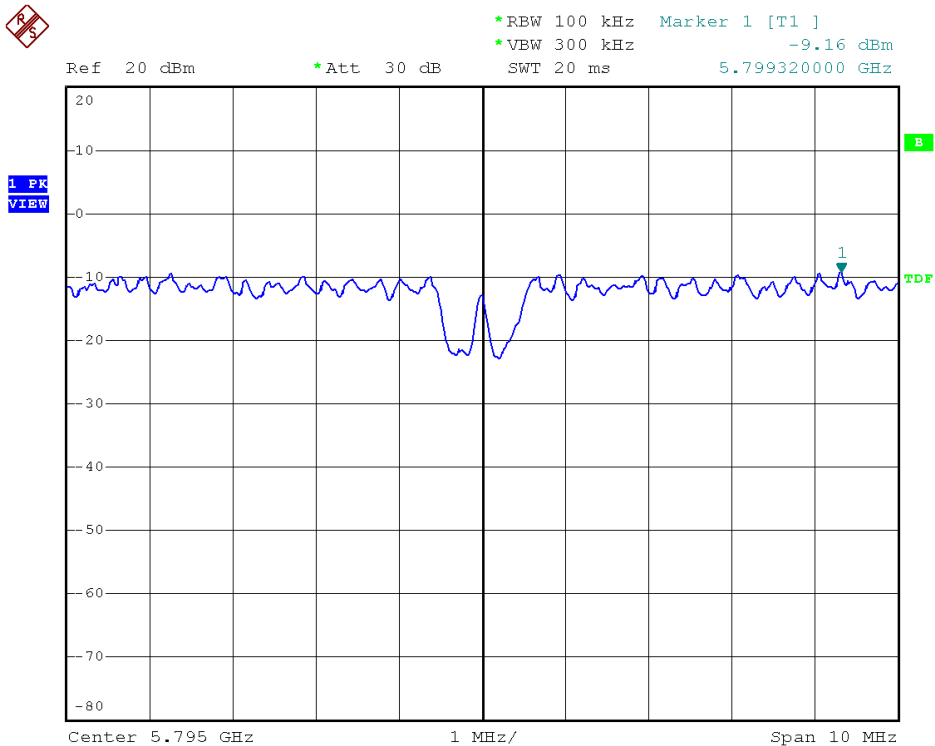




Modulation Standard: 802.11an HT40 (270Mbps), ANT R
Channel: 151

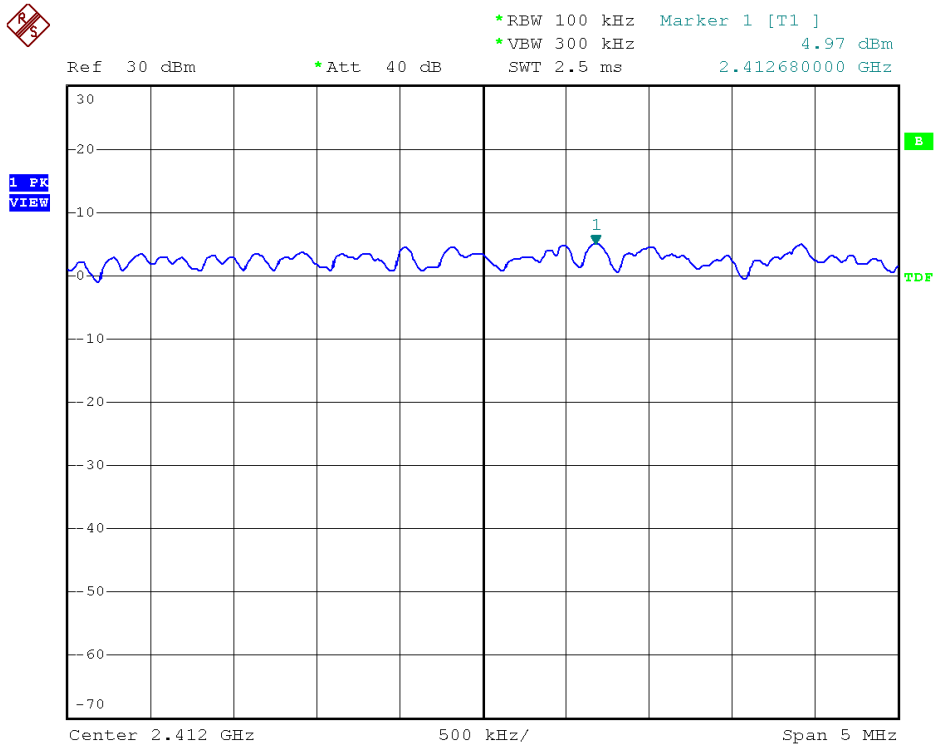


Modulation Standard: 802.11an HT40 (270Mbps), ANT R
Channel: 159

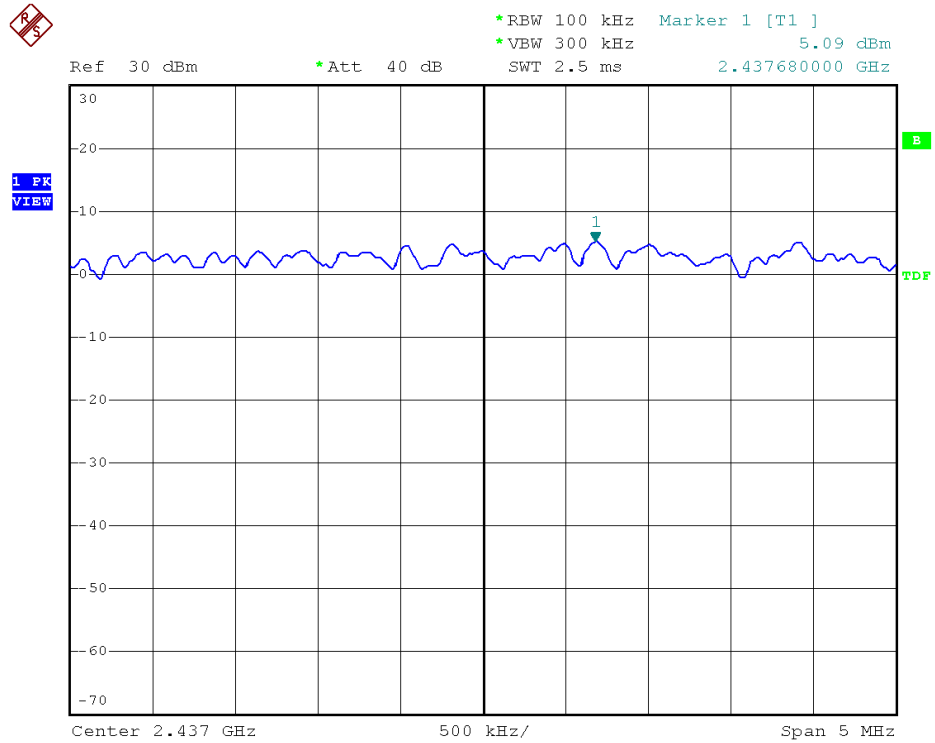




Modulation Standard: 802.11b (11Mbps), ANT L
Channel: 01

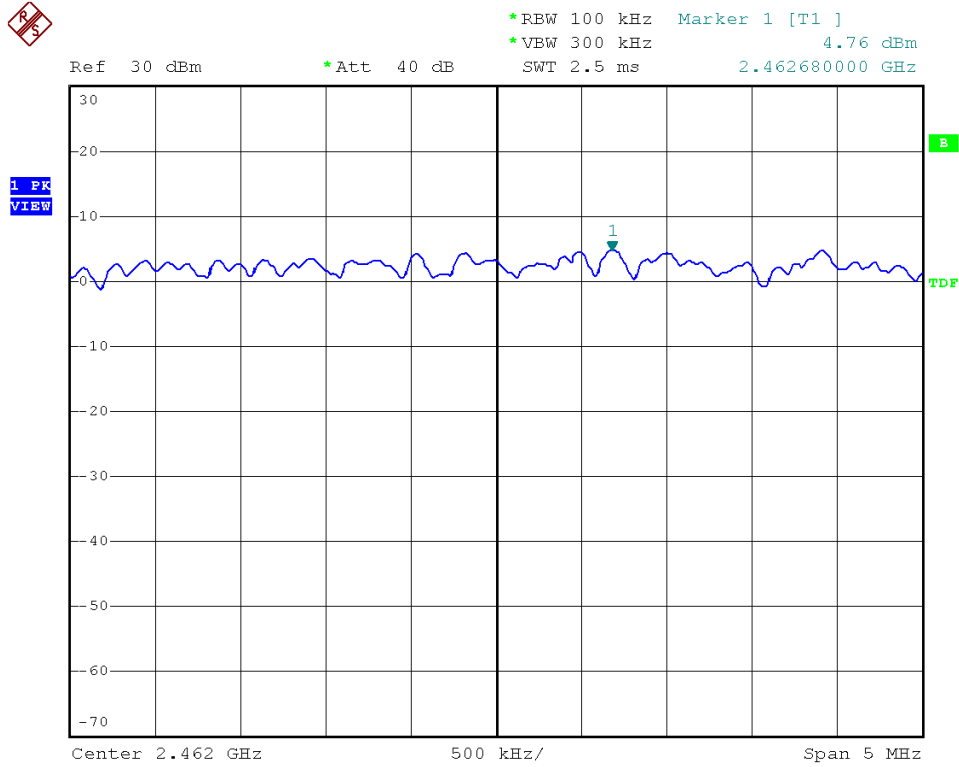


Modulation Standard: 802.11g (54Mbps), ANT L
Channel: 06

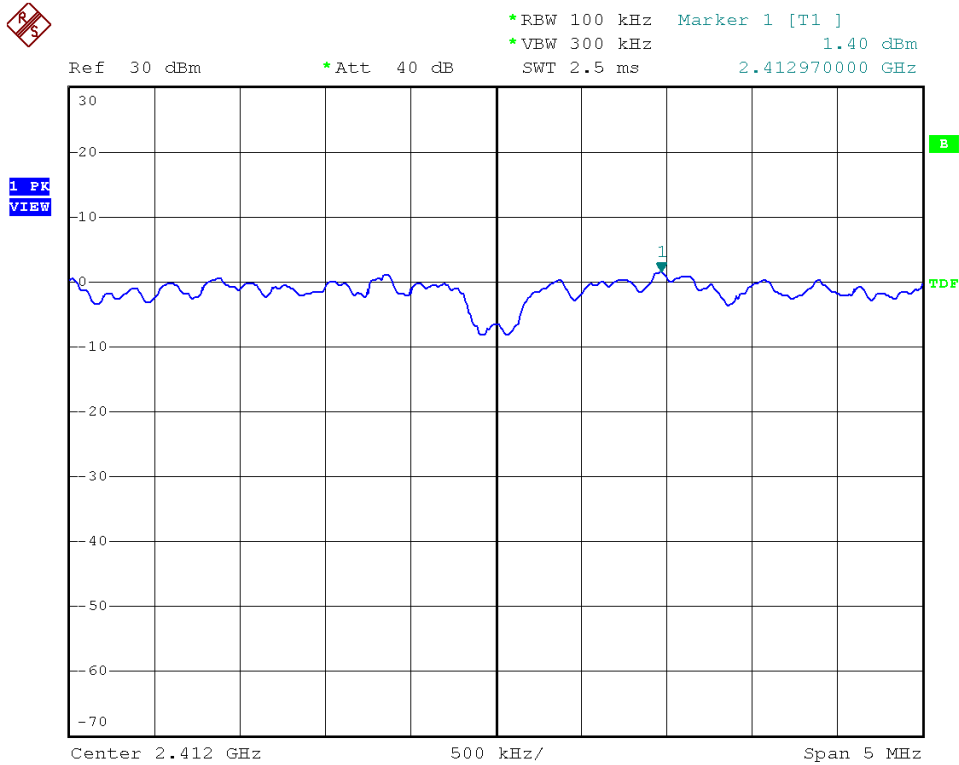




Modulation Standard: 802.11b (11Mbps), ANT L
Channel: 11

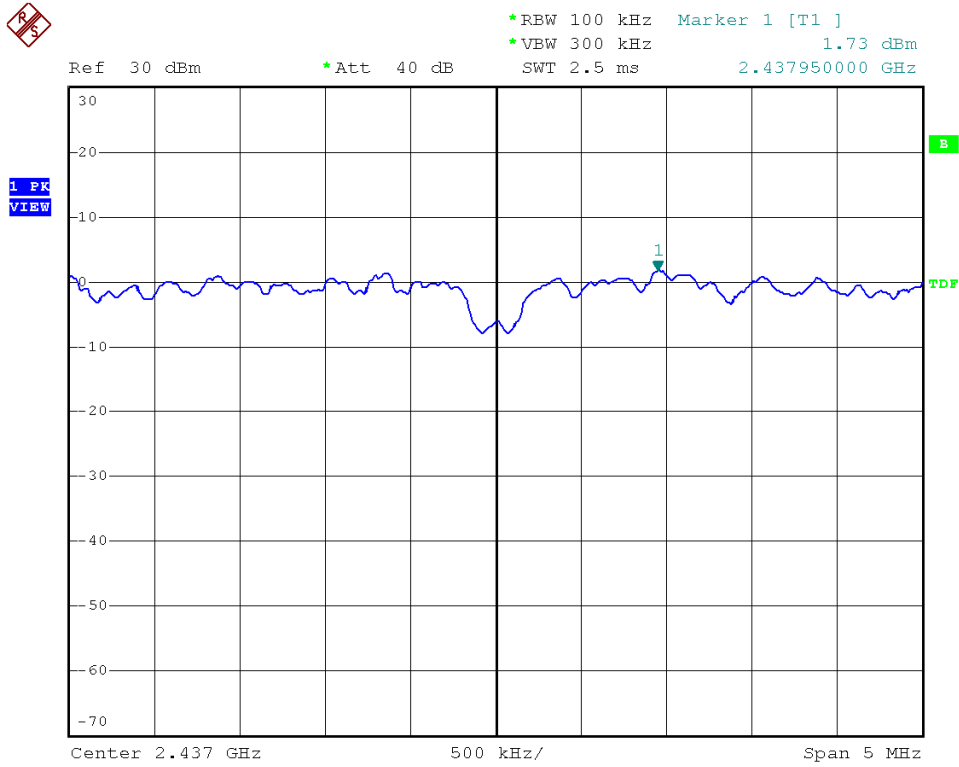


Modulation Standard: 802.11g (54Mbps), ANT L
Channel: 01

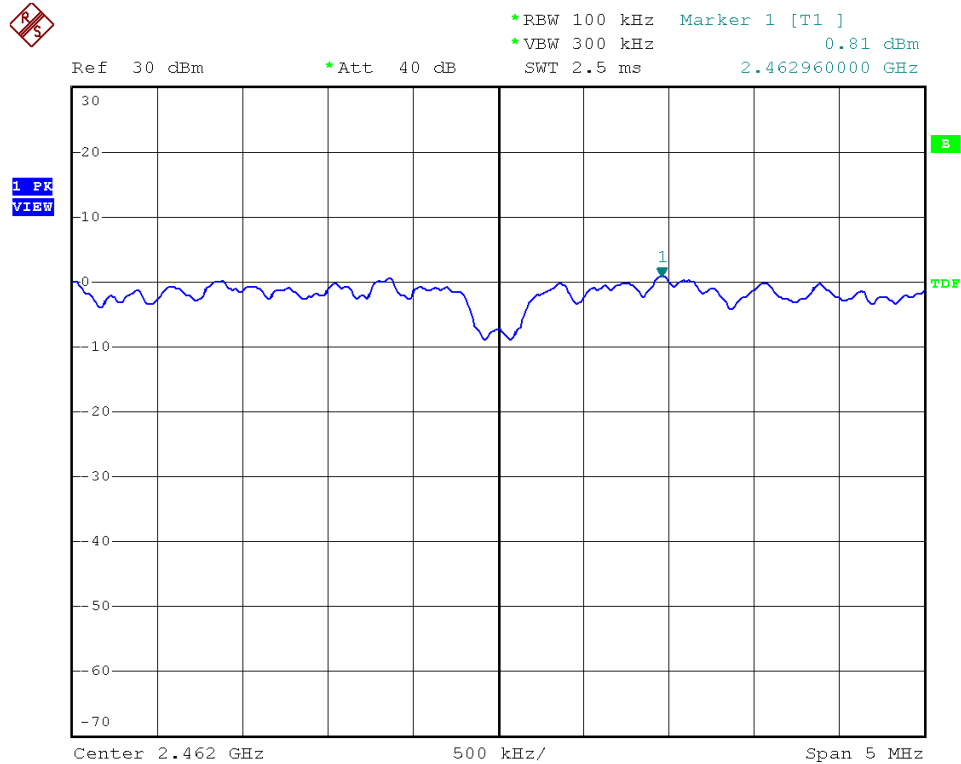




Modulation Standard: 802.11g (54Mbps), ANT L
Channel: 06

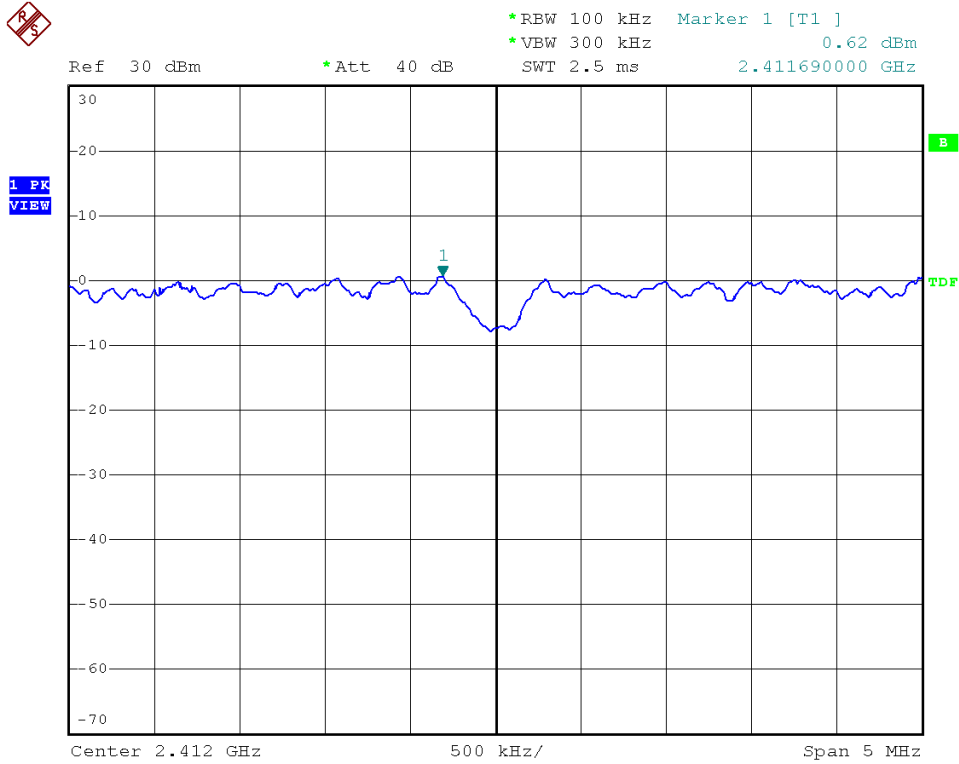


Modulation Standard: 802.11g (54Mbps), ANT L
Channel: 11

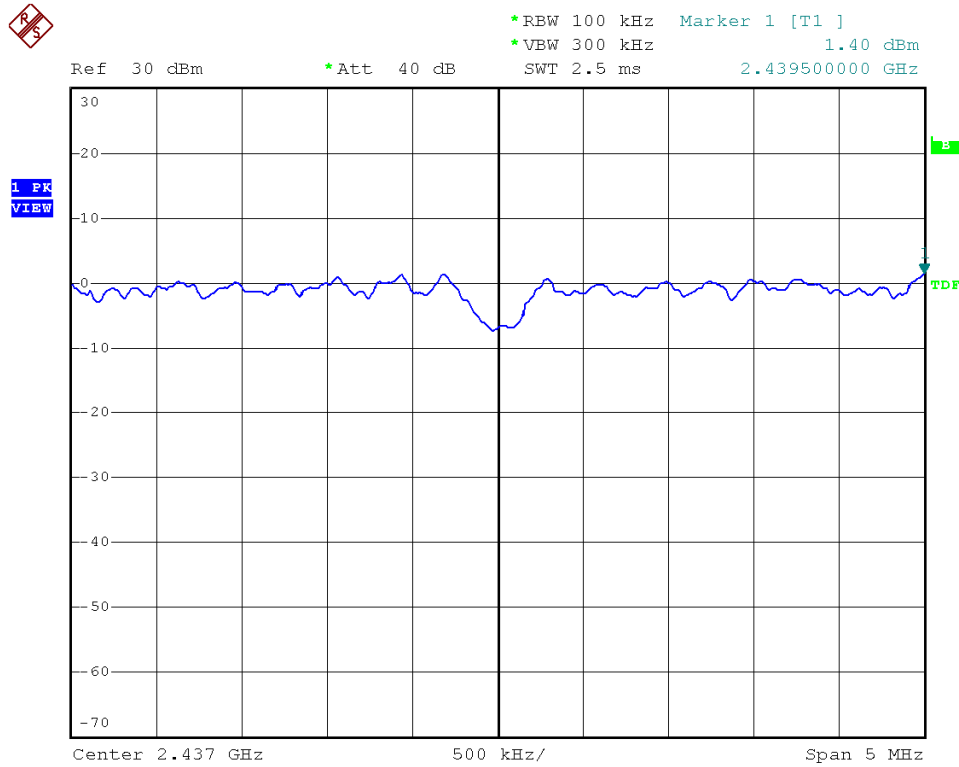




Modulation Standard: 802.11n HT20 (130Mbps), ANT L
Channel: 01

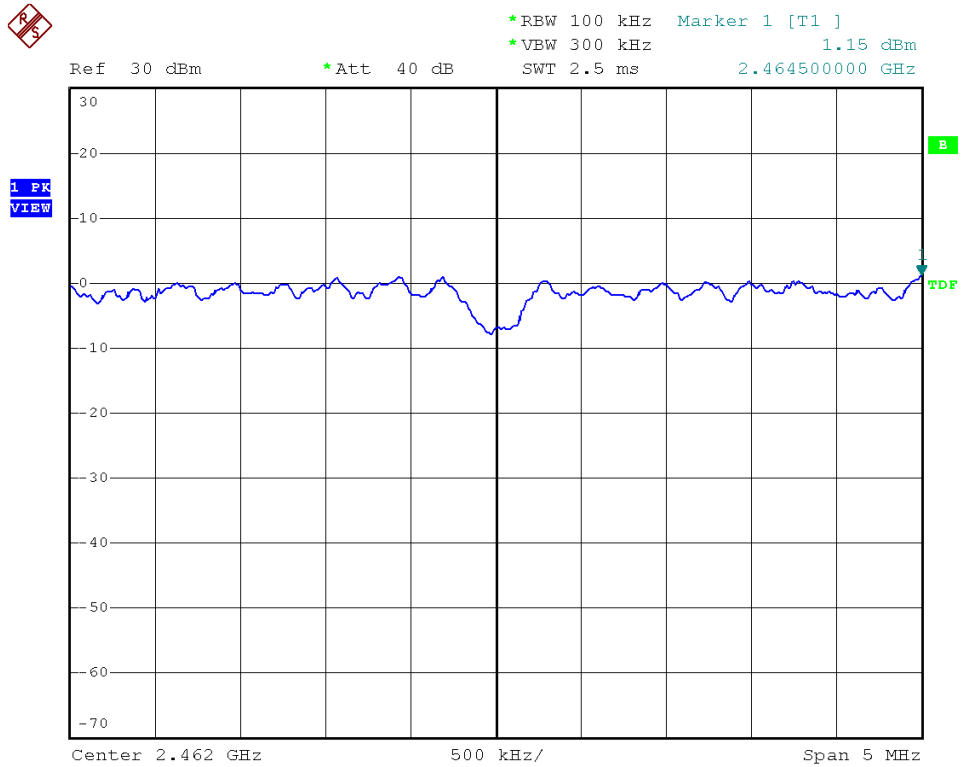


Modulation Standard: 802.11n HT20 (130Mbps), ANT L
Channel: 06

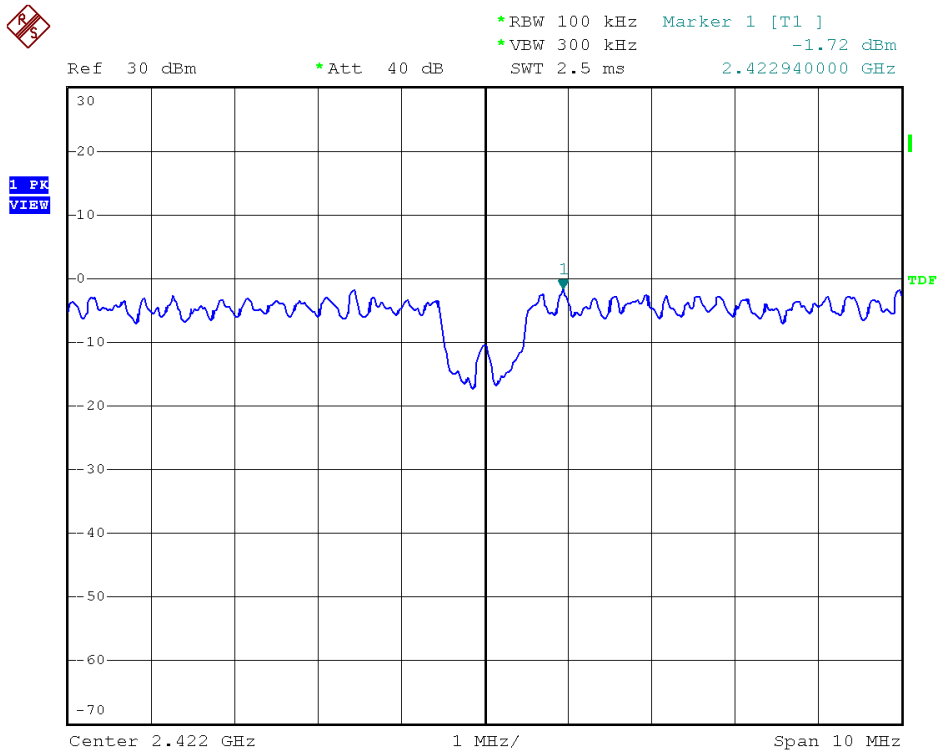




Modulation Standard: 802.11n HT20 (130Mbps), ANT L
Channel: 11

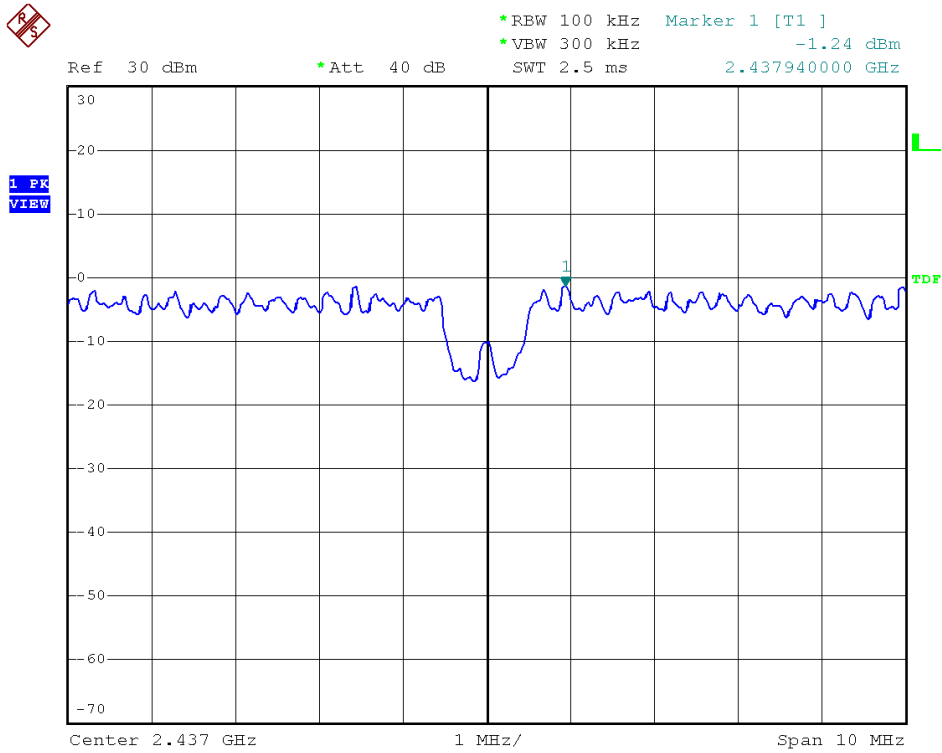


Modulation Standard: 802.11n HT40 (270Mbps), ANT L
Channel: 03

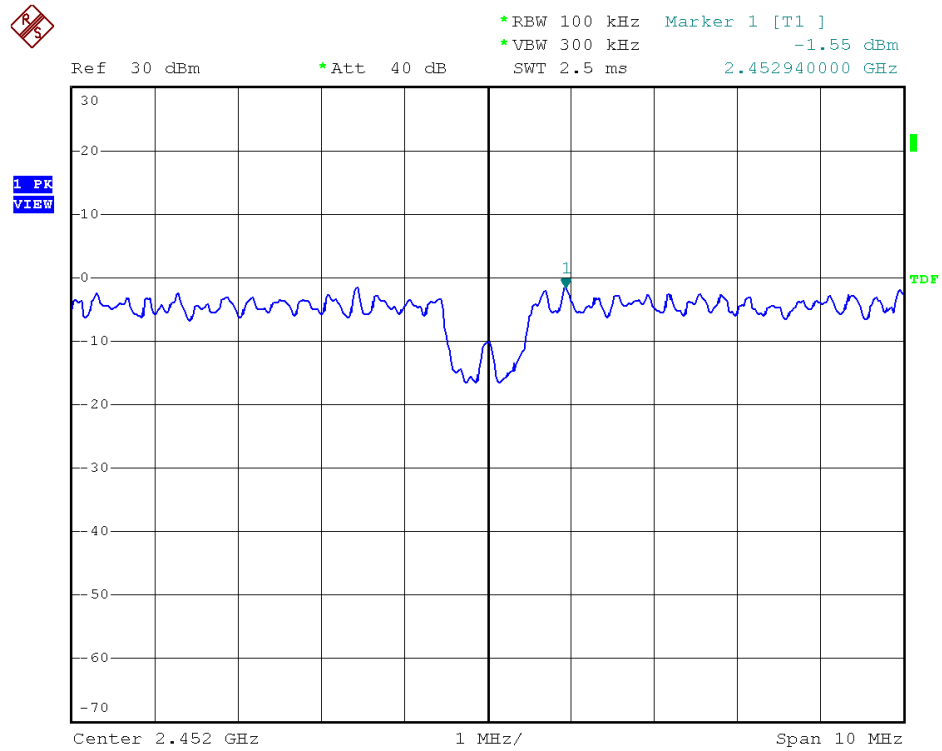




Modulation Standard: 802.11n HT40 (270Mbps), ANT L
Channel: 06

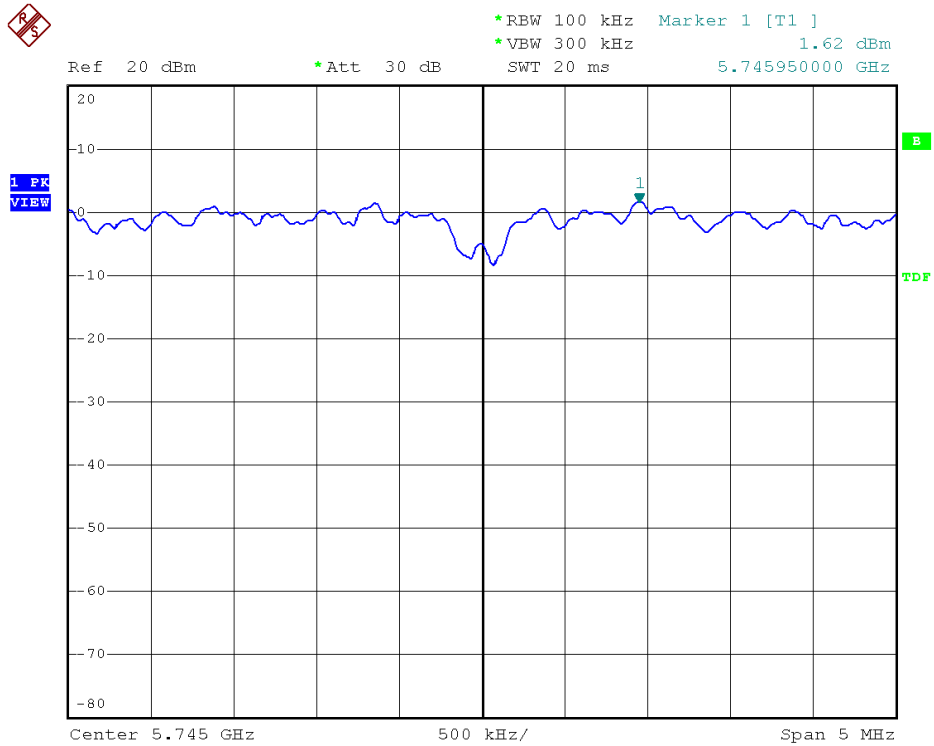


Modulation Standard: 802.11n HT40 (270Mbps), ANT L
Channel: 09

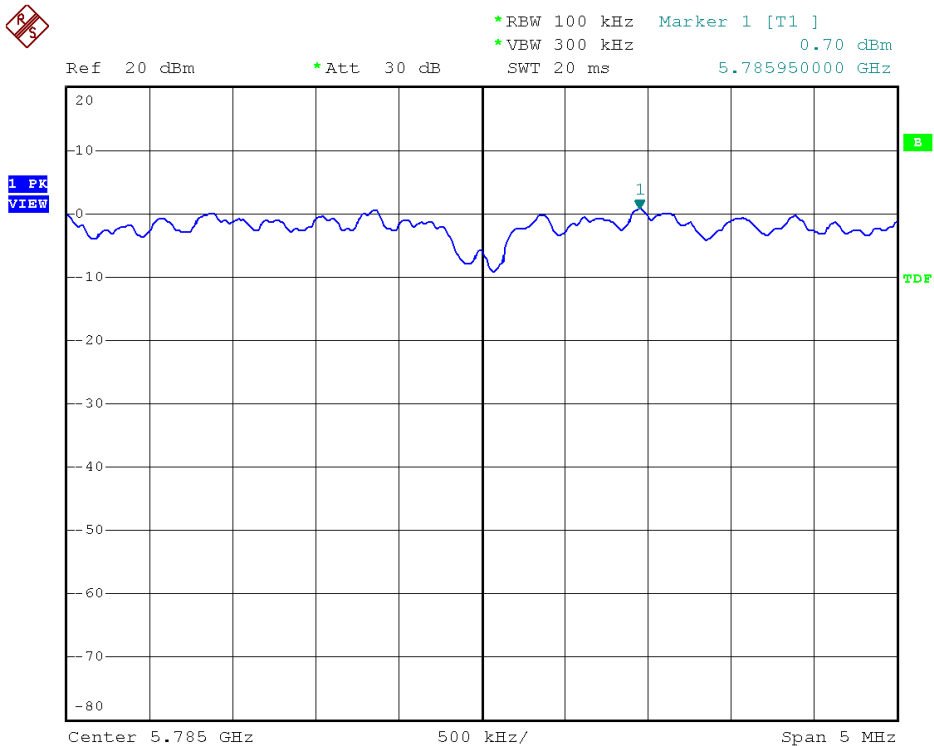




Modulation Standard: 802.11a (54Mbps), ANT L
Channel: 149

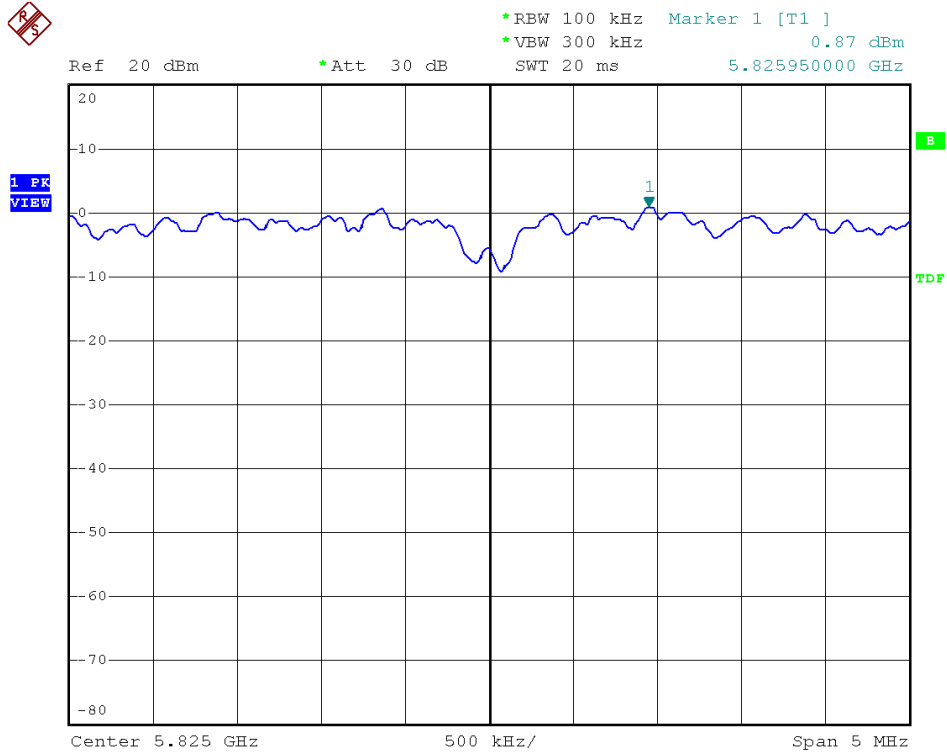


Modulation Standard: 802.11a (54Mbps), ANT L
Channel: 157

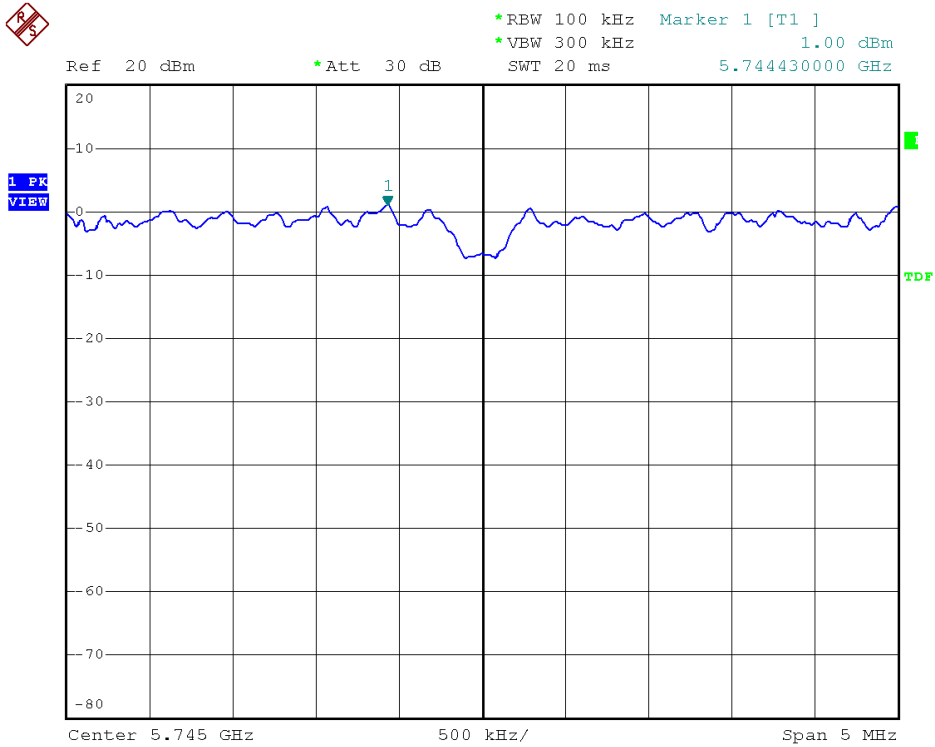




Modulation Standard: 802.11a (54Mbps), ANT L
Channel: 165



Modulation Standard: 802.11an HT20 (130Mbps), ANT L
Channel: 149

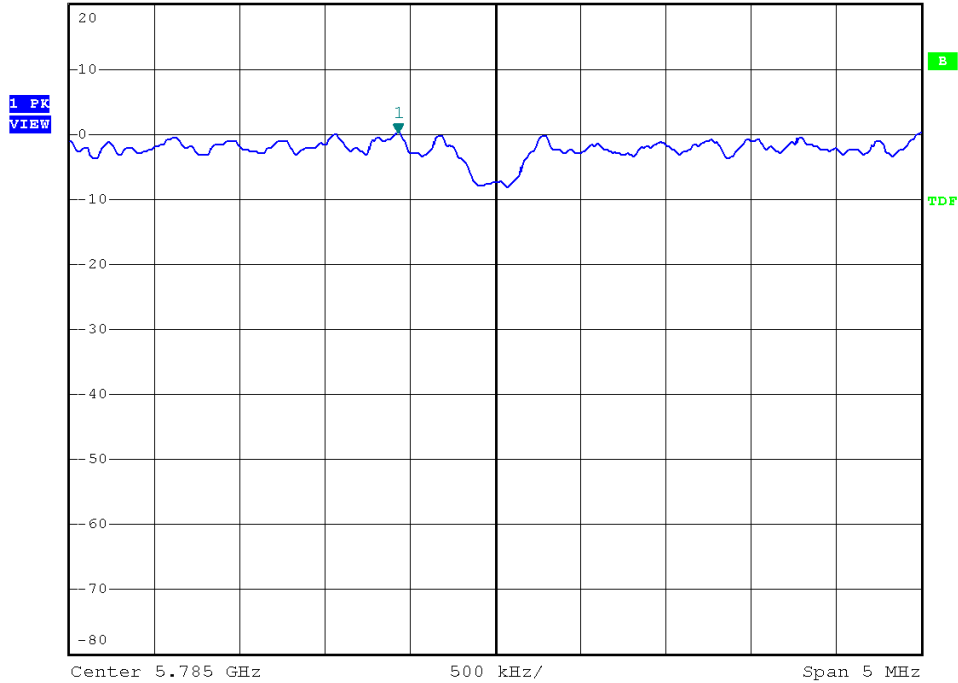




Modulation Standard: 802.11an HT20 (130Mbps), ANT L
Channel: 157



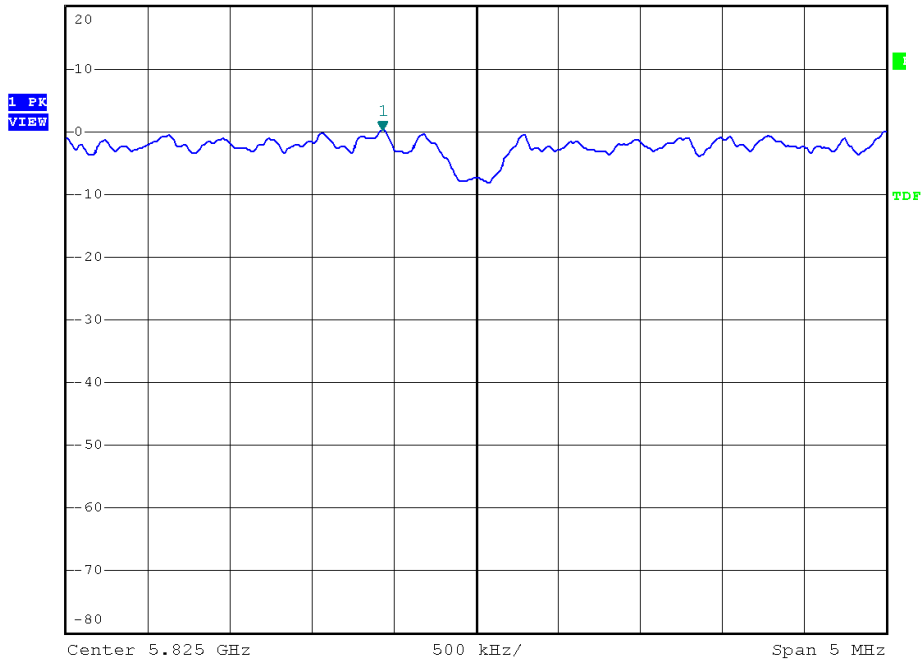
Ref 20 dBm *Att 30 dB *RBW 100 kHz Marker 1 [T1] 0.19 dBm
*VBW 300 kHz 5.784430000 GHz
SWT 20 ms



Modulation Standard: 802.11an HT20 (130Mbps), ANT L
Channel: 165

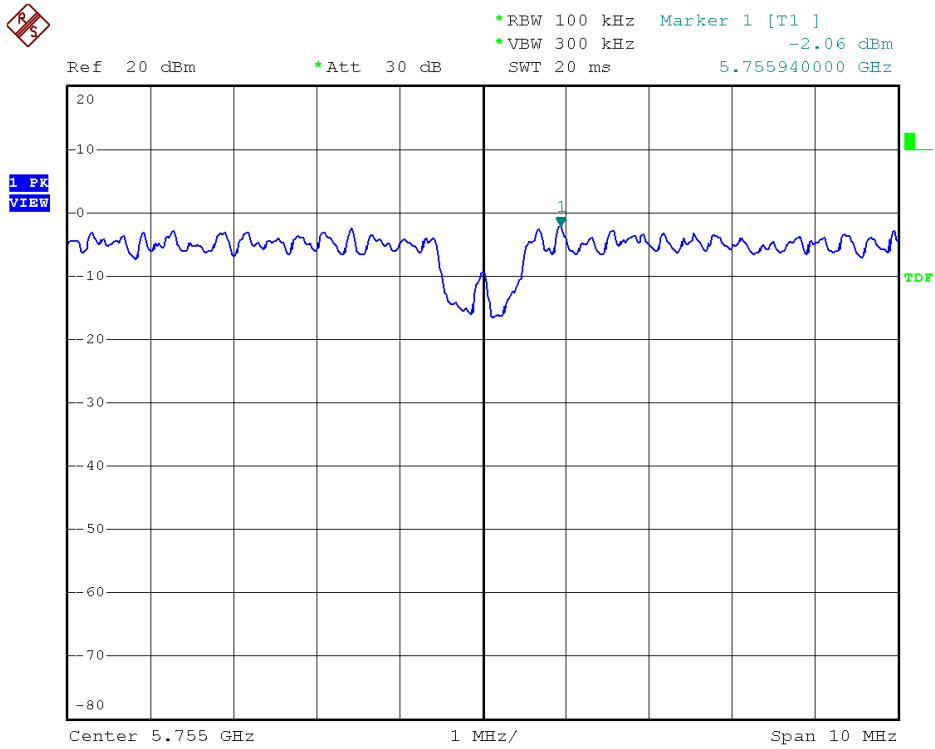


Ref 20 dBm *Att 30 dB *RBW 100 kHz Marker 1 [T1] 0.11 dBm
*VBW 300 kHz 5.824430000 GHz
SWT 20 ms

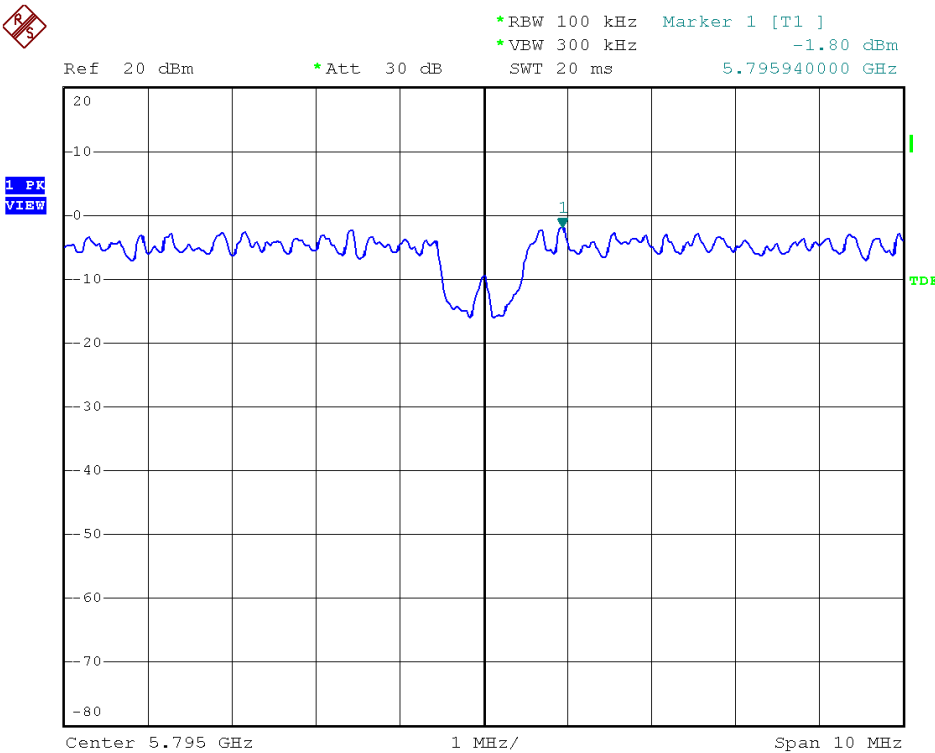




Modulation Standard: 802.11an HT40 (270Mbps), ANT L
Channel: 151



Modulation Standard: 802.11an HT40 (270Mbps), ANT L
Channel: 159





9. Band Edges Measurement

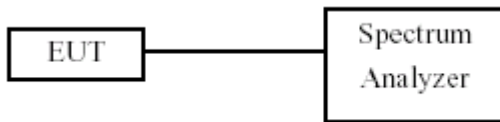
9.1 Test Limit

Below -20dB of the highest emission level of operating band (In 100 kHz Resolution Bandwidth)

9.2 Test Procedure

- a. The transmitter output was connected to the spectrum analyzer via a low lose cable.
- b. Set RBW of spectrum analyzer to 100 KHz and VBW of spectrum analyzer to 300 KHz with convenient frequency span including 100 KHz bandwidth from band edge.
- c. The band edges was measured and recorded.

9.3 Test Setup Layout



9.4 Measurement Equipment

Instrument/Ancillary	Manufacturer	Model No.	Serial No.	Calibration Date	Valid Date
Spectrum Analyzer	R&S	FSP40	100219	2011/11/24	2012/11/23



9.5 Test Result and Data

Test Date: Jun. 01, 2012

Temperature: 25°C

Atmospheric pressure: 1020 hPa

Humidity: 65%

Modulation Standard	Channel	Frequency (MHz)	maximum value in frequency (MHz)		maximum value (dBm)	
			ANT R	ANT L	ANT R	ANT L
802.11b (11Mbps)	01	2412	2399.80	2399.20	-42.61	-39.99
	11	2462	2498.90	2485.50	-46.47	-46.57
802.11g (54Mbps)	01	2412	2400.00	2399.60	-34.41	-30.21
	11	2462	2483.70	2483.90	-40.67	-41.23
802.11n HT20 (130Mbps)	01	2412	2399.80	2400.00	-36.16	-31.87
	11	2462	2483.50	2484.50	-40.79	-40.33
802.11n HT40 (270Mbps)	03	2422	2399.60	2399.80	-28.81	-36.55
	09	2452	2483.70	2485.50	-37.57	-34.58

Test Date: Jun. 01, 2012

Temperature: 25°C

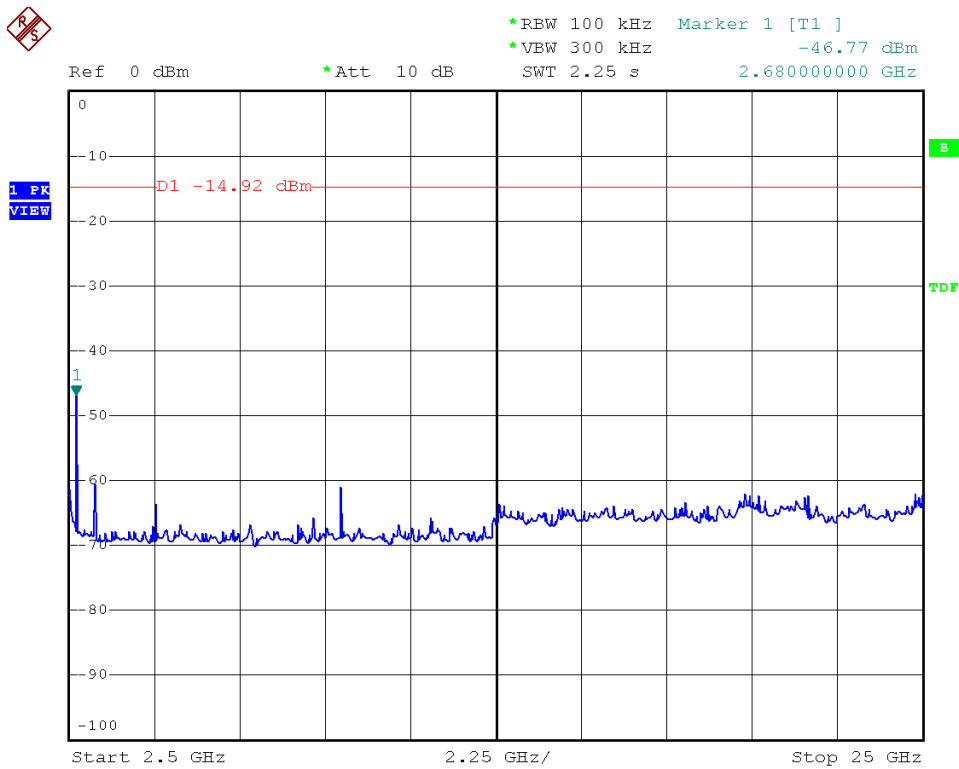
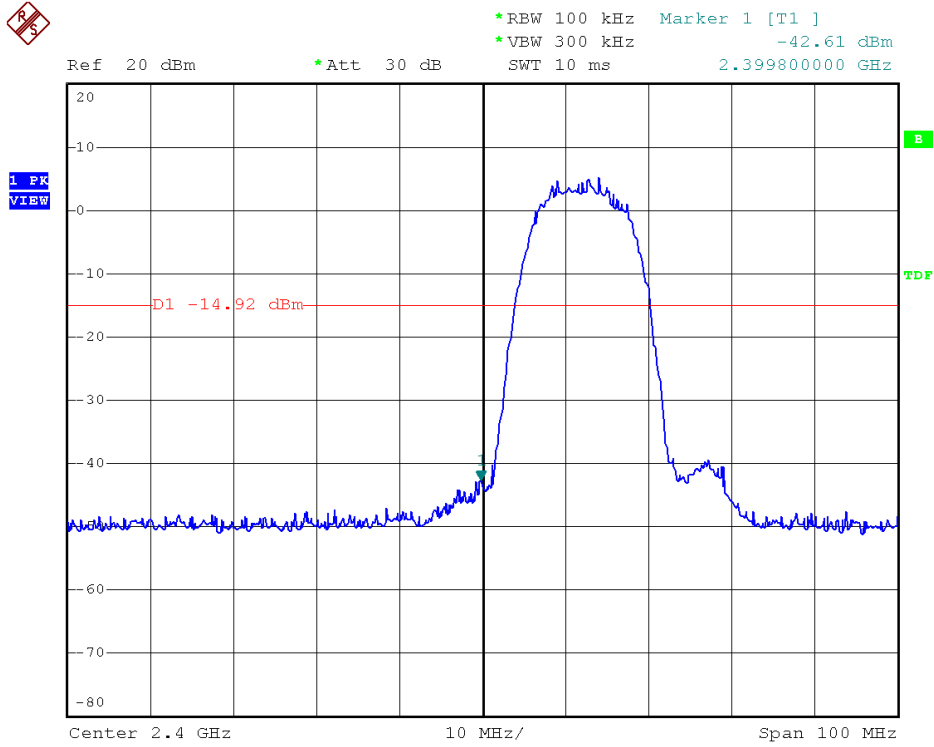
Atmospheric pressure: 1020 hPa

Humidity: 65%

Modulation Standard	Channel	Frequency (MHz)	maximum value in frequency (MHz)		maximum value (dBm)	
			ANT R	ANT L	ANT R	ANT L
802.11a (54Mbps)	149	5745	5724.80	5725.00	-37.57	-29.05
	165	5825	5850.00	5850.40	-44.18	-43.66
802.11an HT20 (130Mbps)	149	5745	5725.00	5725.00	-37.91	-30.80
	165	5825	5850.80	5850.00	-43.67	-42.48
802.11an HT40 (270Mbps)	151	5755	5722.00	5722.80	-35.58	-28.69
	159	5795	5850.40	5850.00	-48.24	-49.86

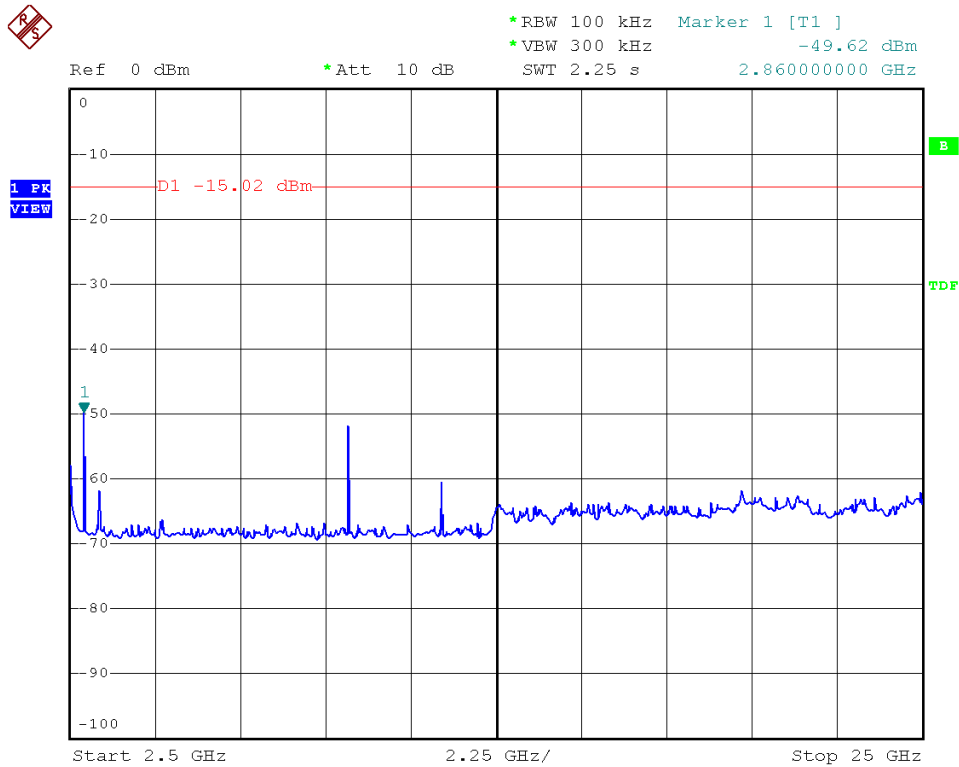
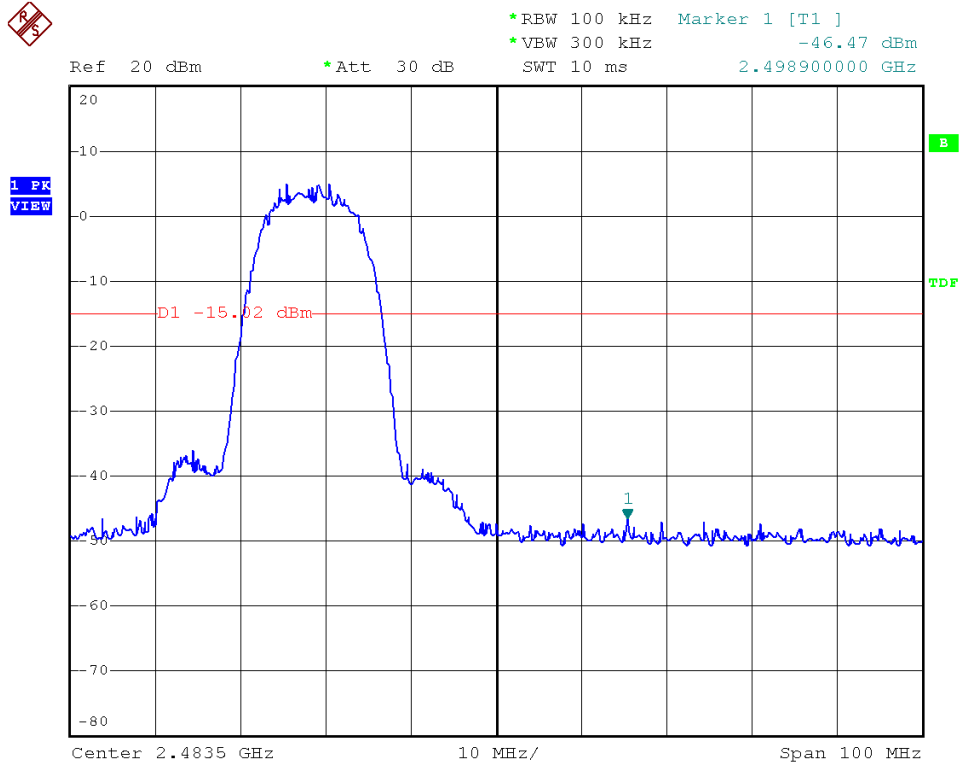


Modulation Standard: 802.11b (11Mbps), ANT R
Channel: 01





Modulation Standard: 802.11b (11Mbps), ANT R
Channel: 11

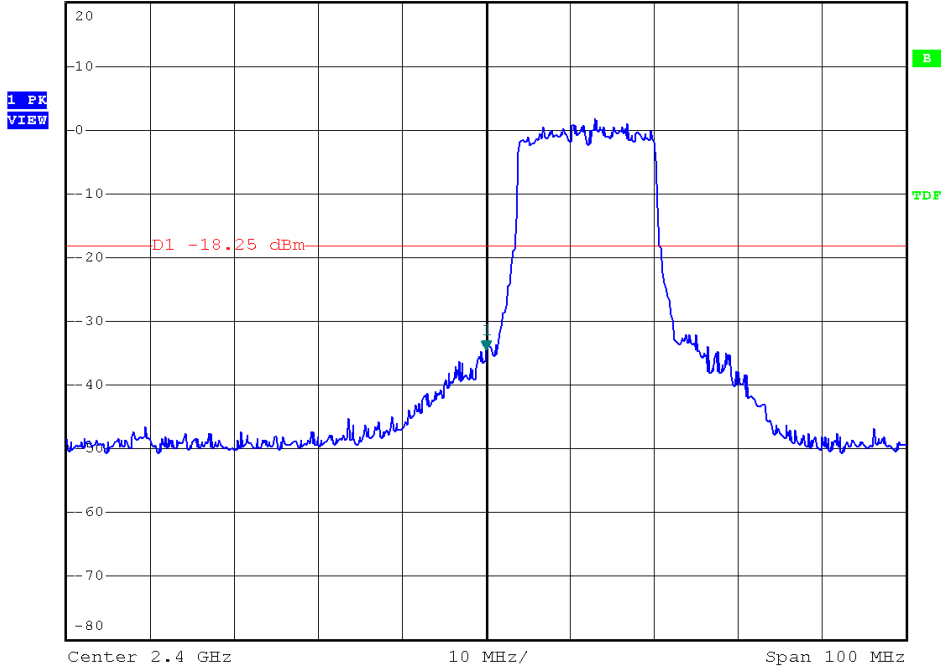




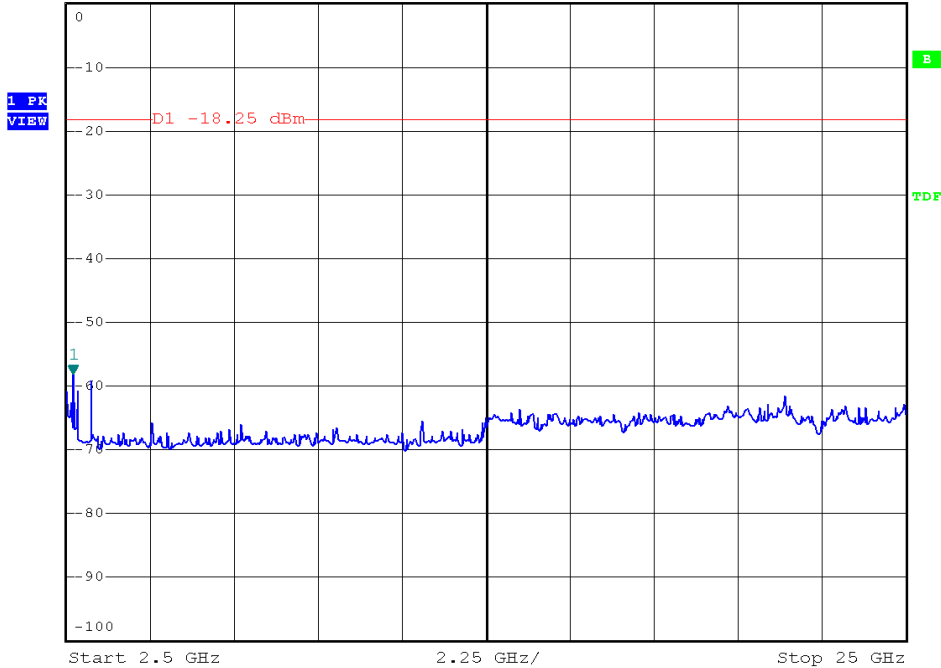
Modulation Standard: 802.11g (54Mbps), ANT R
Channel: 01



Ref 20 dBm *Att 30 dB *RBW 100 kHz Marker 1 [T1]
*VBW 300 kHz -34.41 dBm
SWT 10 ms 2.400000000 GHz



Ref 0 dBm *Att 10 dB *RBW 100 kHz Marker 1 [T1]
*VBW 300 kHz -58.05 dBm
SWT 2.25 s 2.680000000 GHz

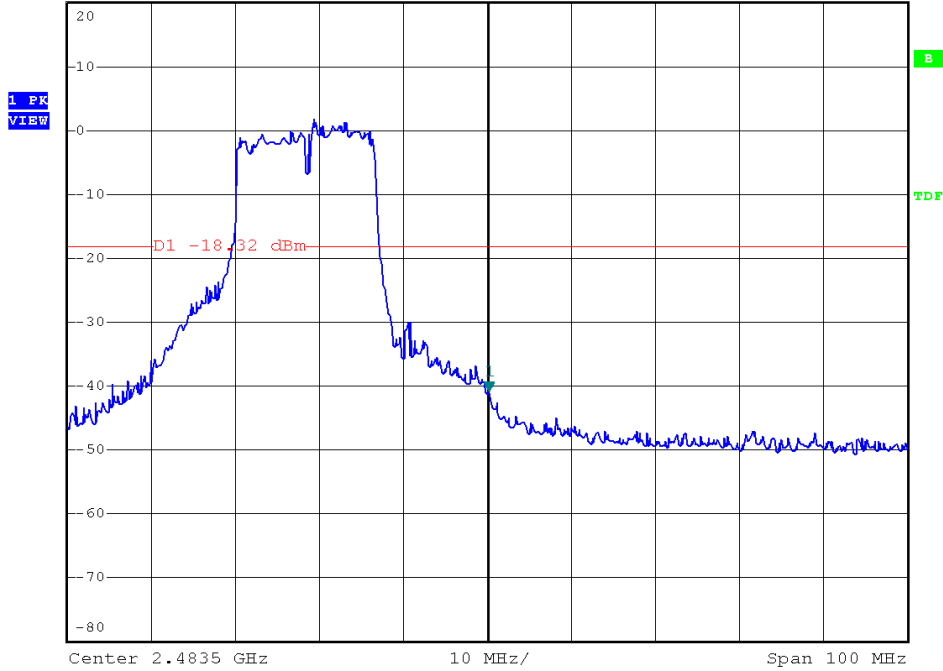




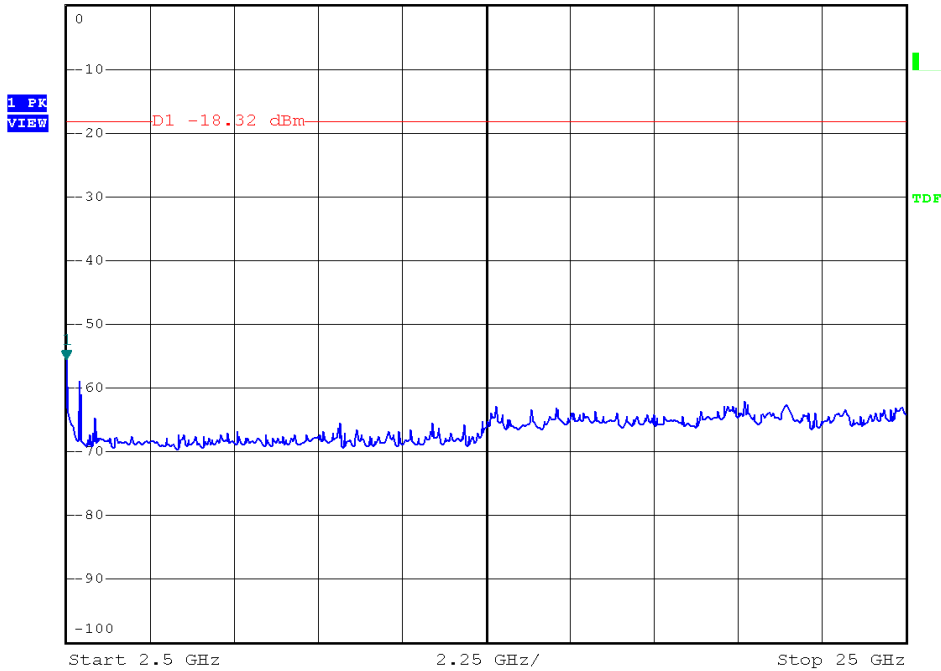
Modulation Standard: 802.11g (54Mbps), ANT R
Channel: 11



Ref 20 dBm *Att 30 dB *RBW 100 kHz Marker 1 [T1]
*VBW 300 kHz -40.67 dBm
SWT 10 ms 2.483700000 GHz

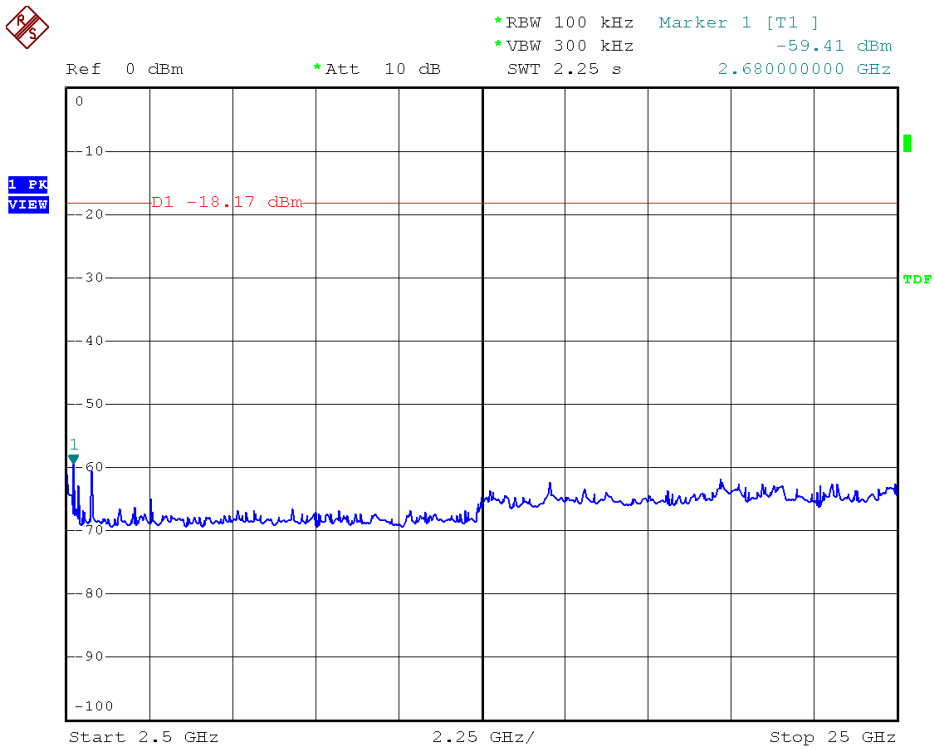
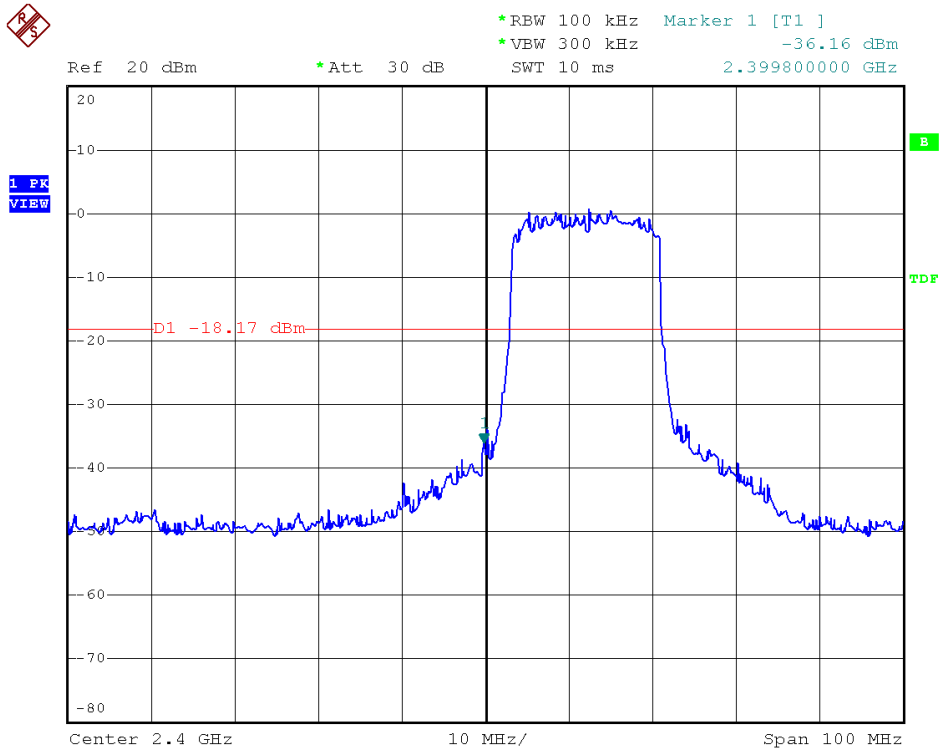


Ref 0 dBm *Att 10 dB *RBW 100 kHz Marker 1 [T1]
*VBW 300 kHz -55.42 dBm
SWT 2.25 s 2.500000000 GHz



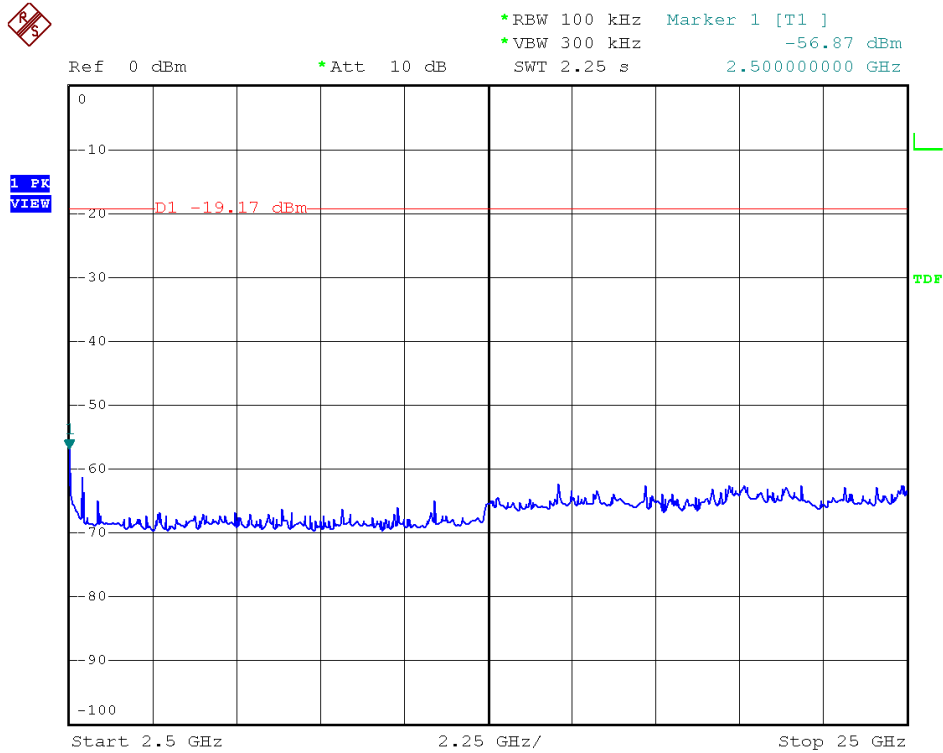
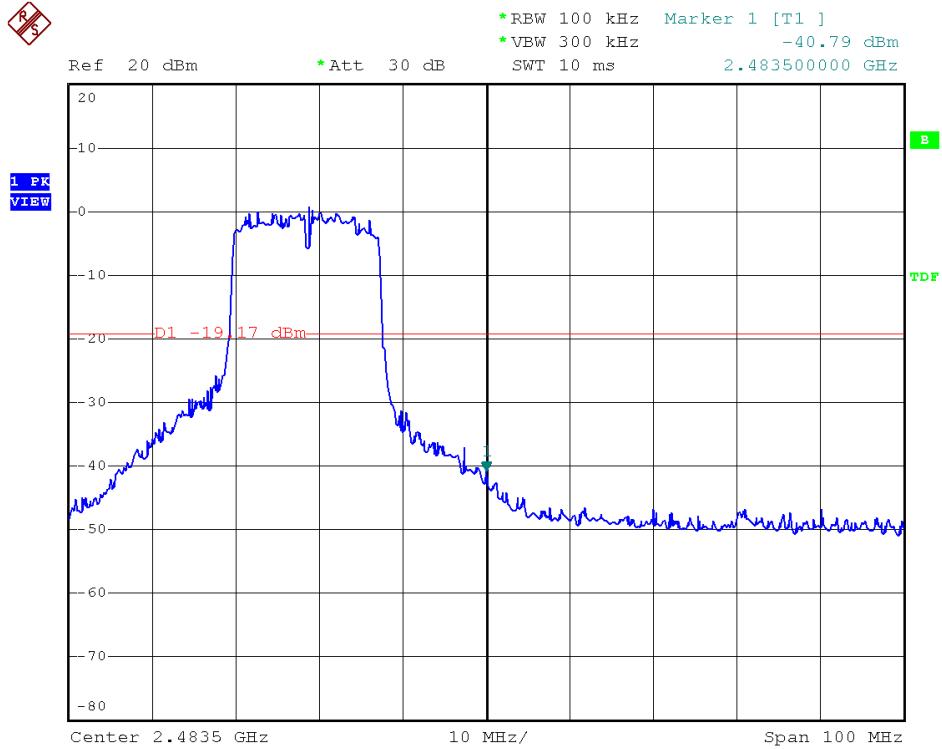


Modulation Standard: 802.11n HT20 (130Mbps), ANT R
Channel: 01



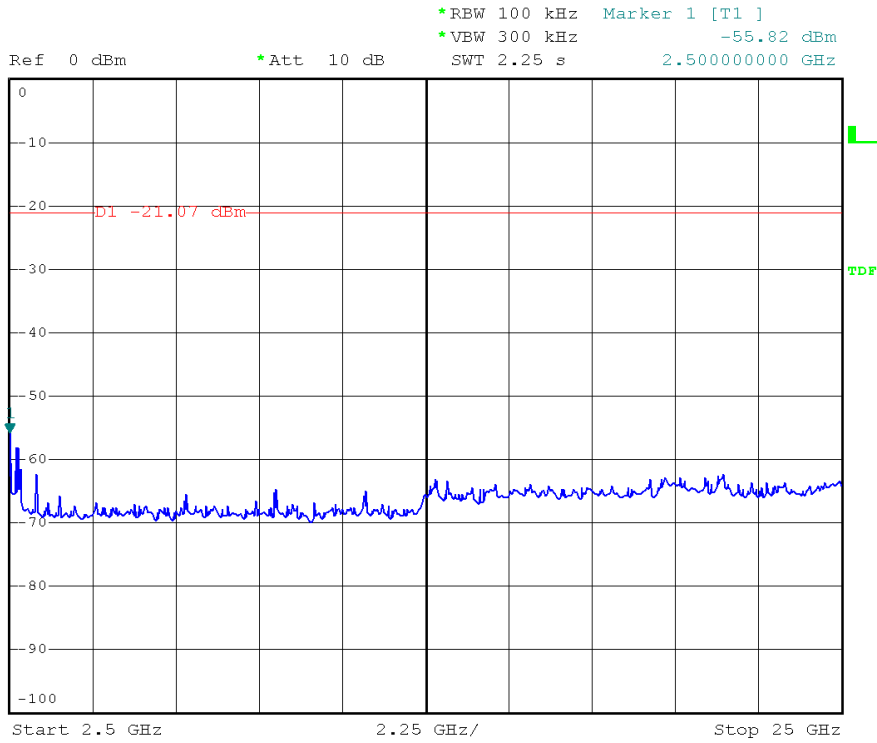
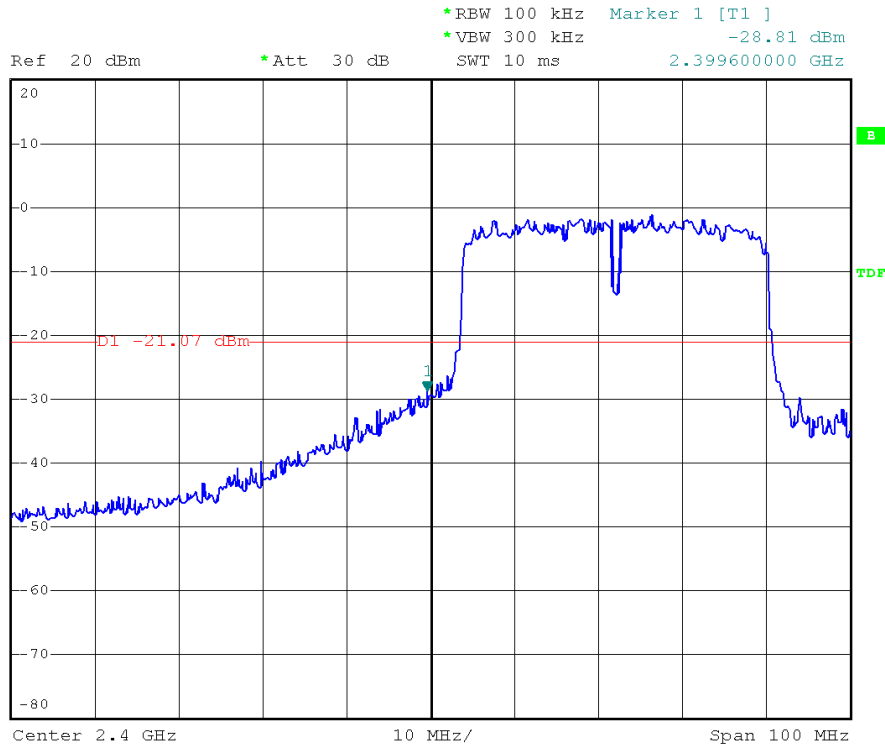


Modulation Standard: 802.11n HT20 (130Mbps), ANT R
Channel: 11



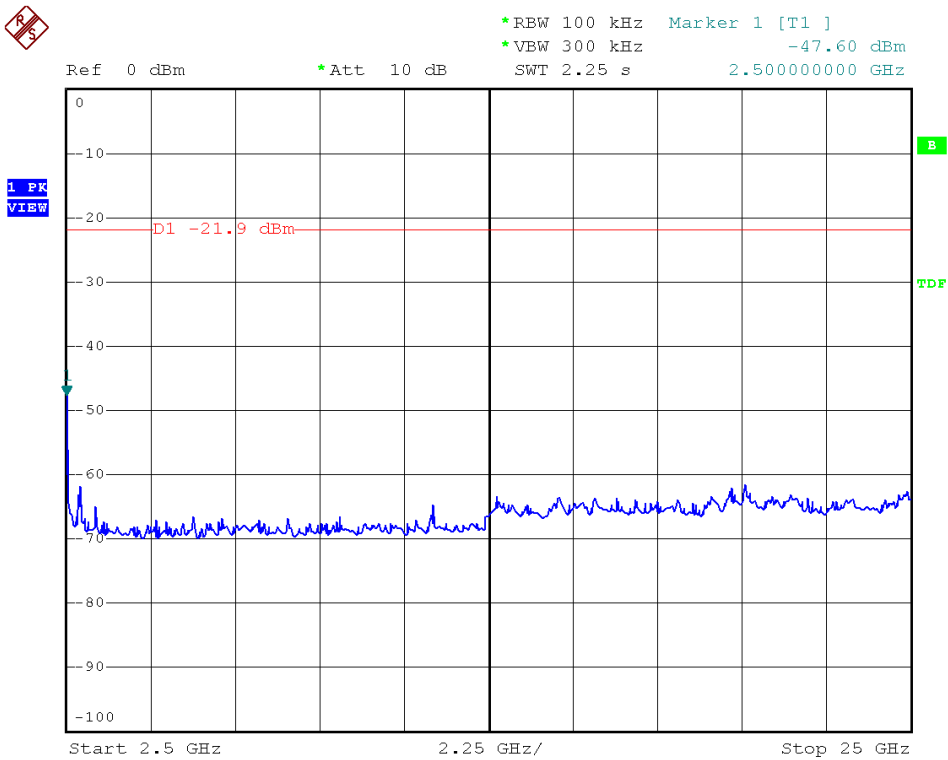
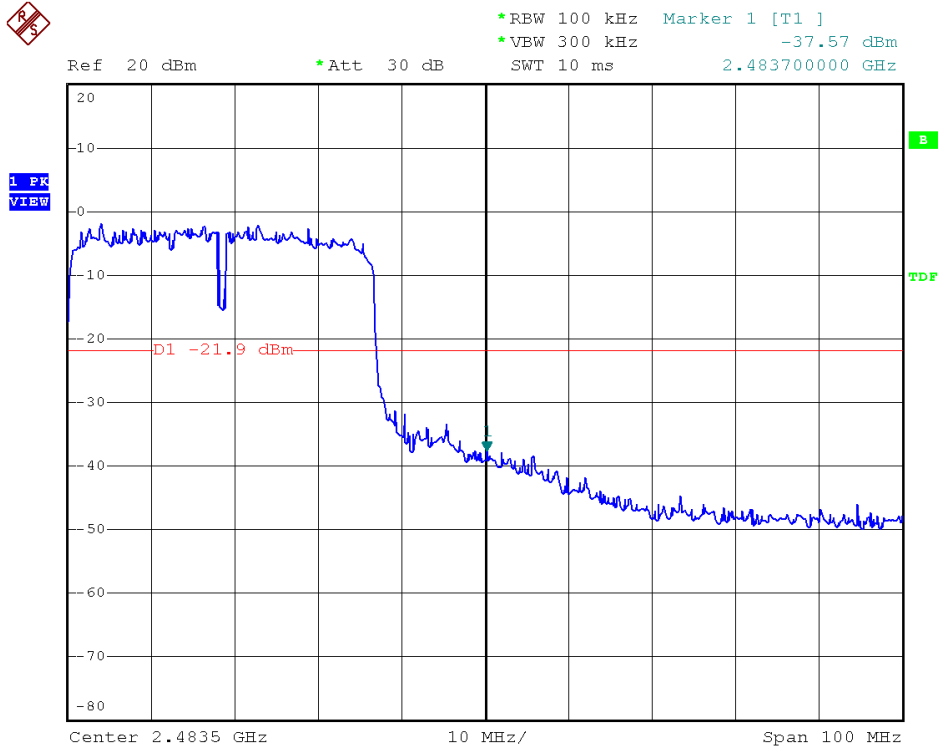


Modulation Standard: 802.11n HT40 (270Mbps), ANT R
Channel: 03



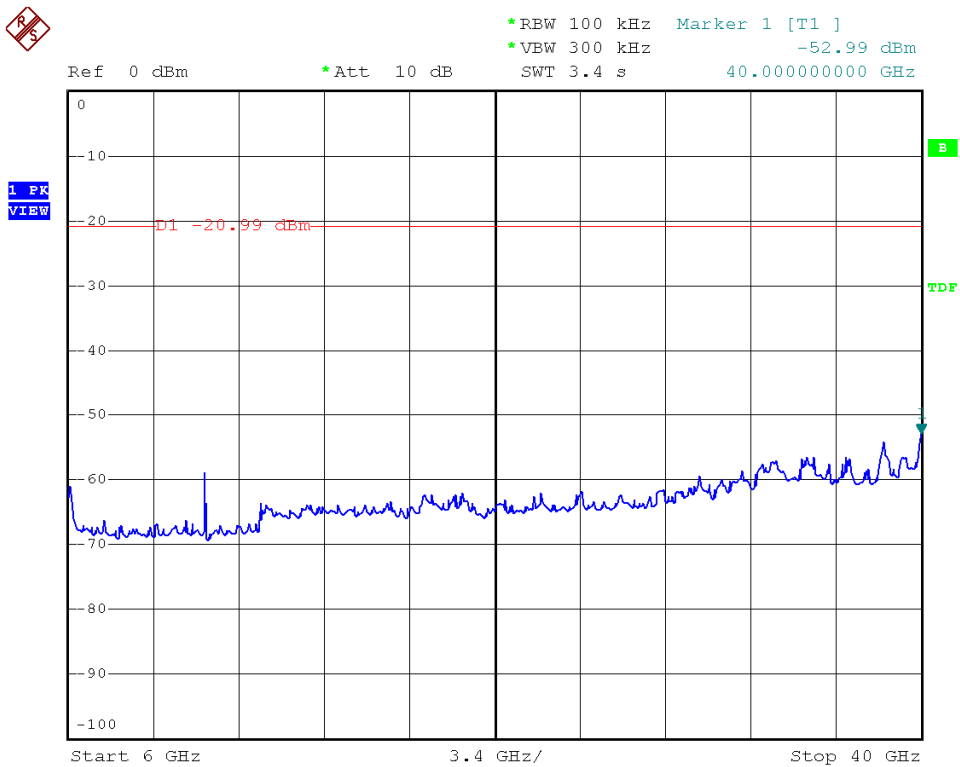
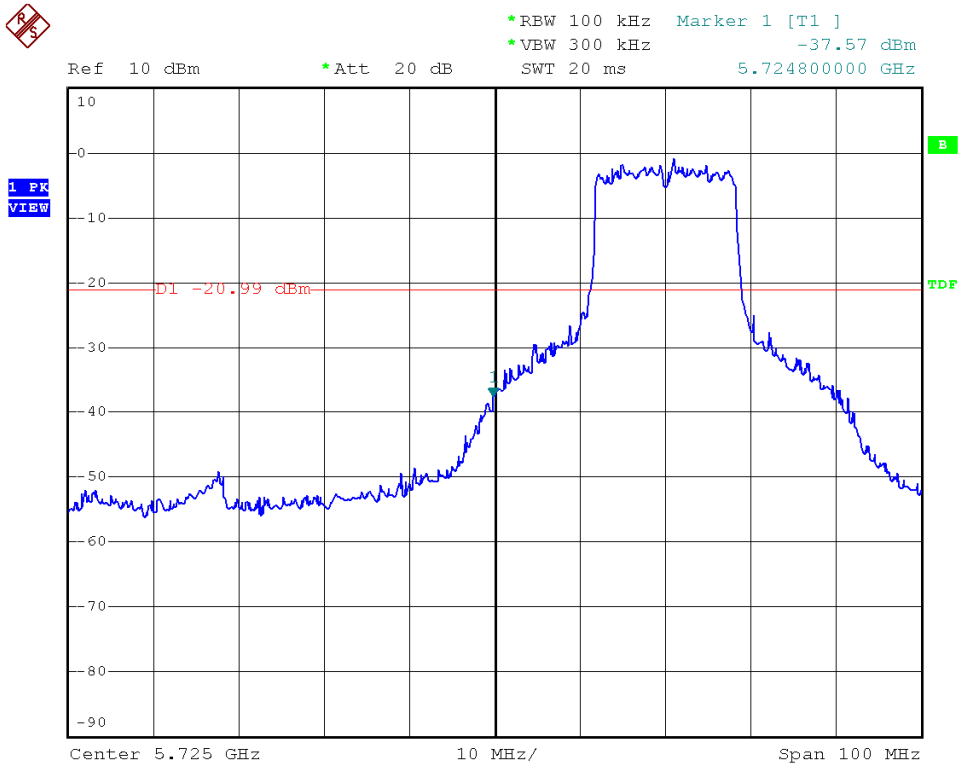


Modulation Standard: 802.11n HT40 (270Mbps), ANT R
Channel: 09





Modulation Standard: 802.11a (54Mbps), ANT R
Channel: 149

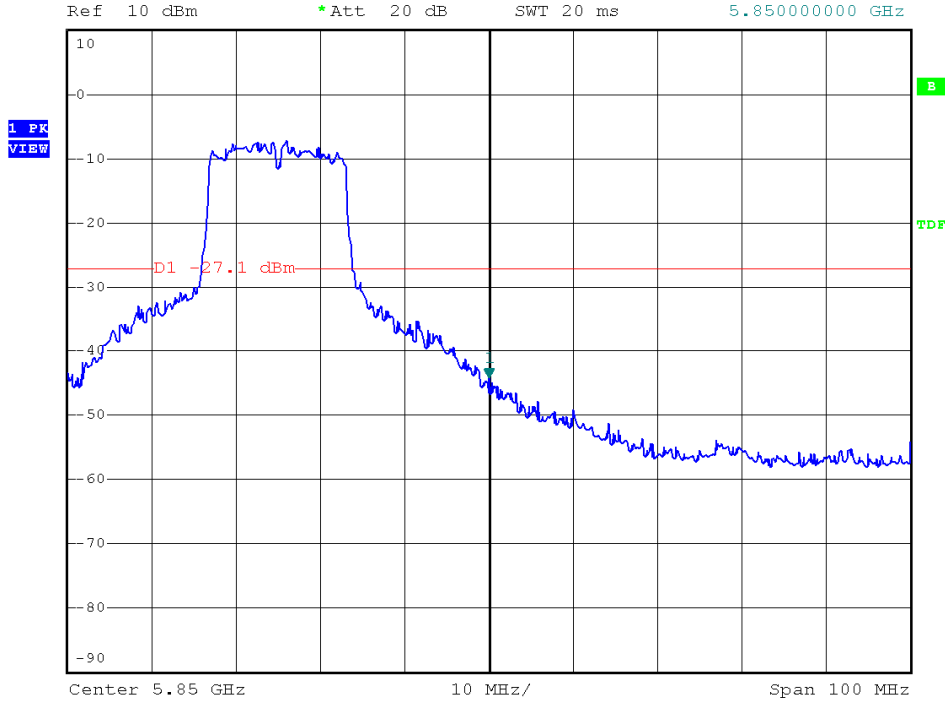




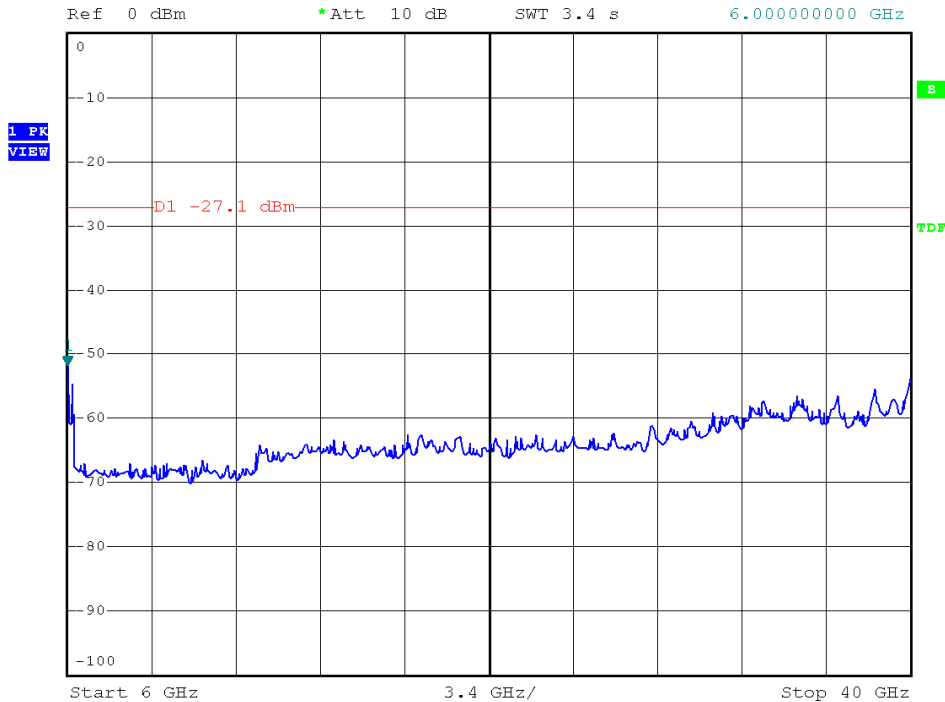
Modulation Standard: 802.11a (54Mbps), ANT R
Channel: 165



*RBW 100 kHz Marker 1 [T1]
*VBW 300 kHz -44.18 dBm
SWT 20 ms 5.850000000 GHz

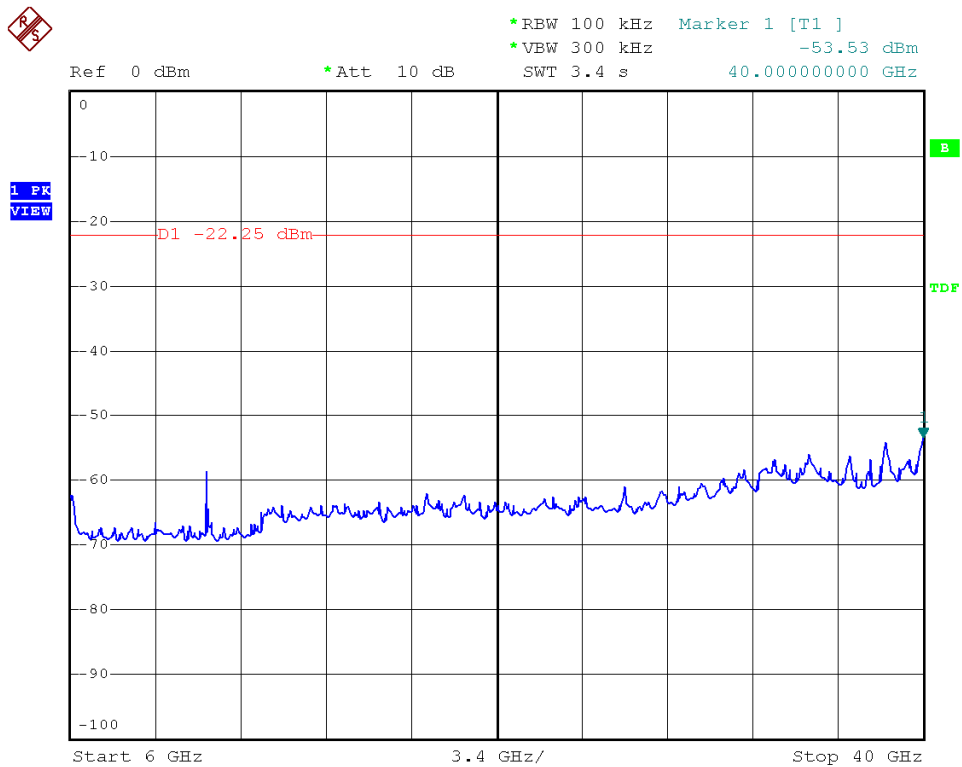
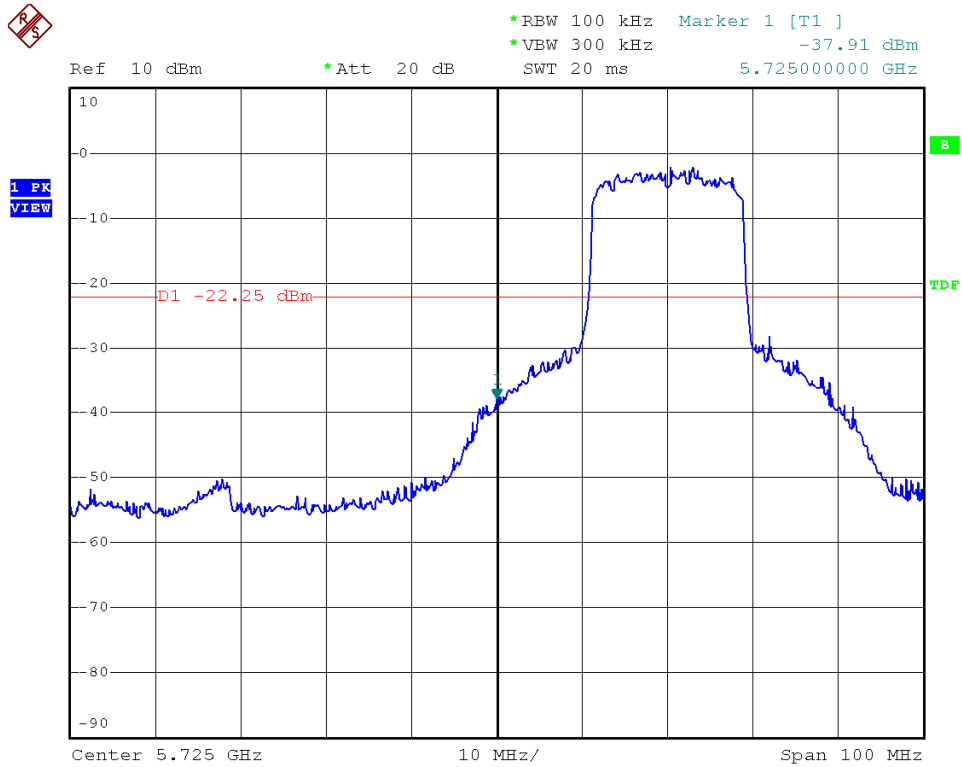


*RBW 100 kHz Marker 1 [T1]
*VBW 300 kHz -51.83 dBm
SWT 3.4 s 6.000000000 GHz



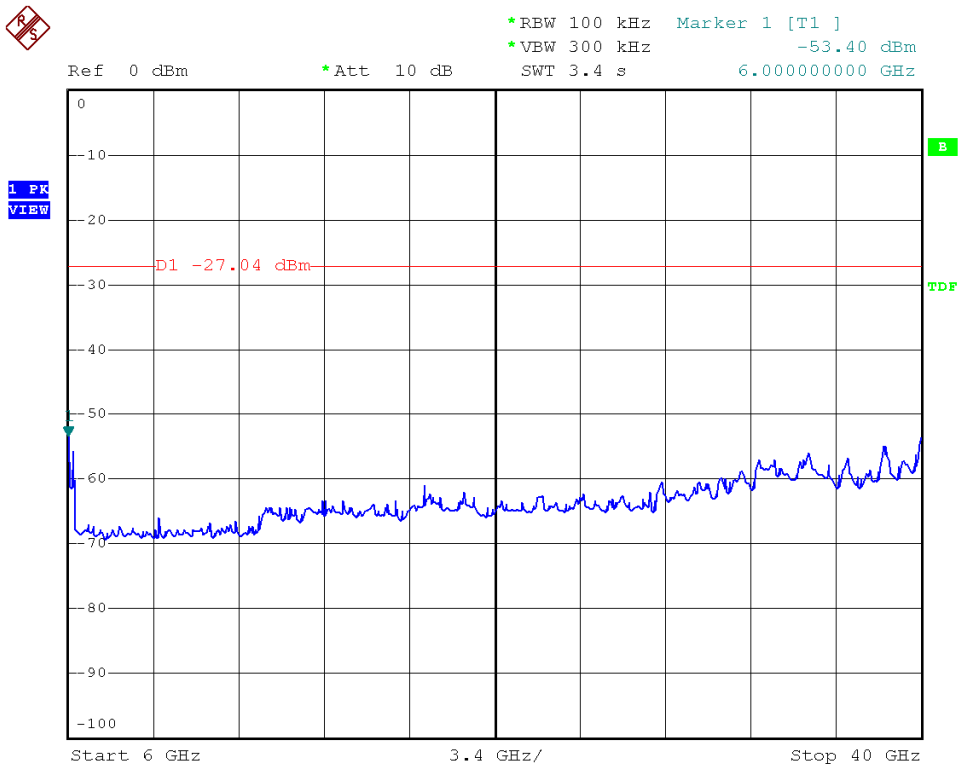
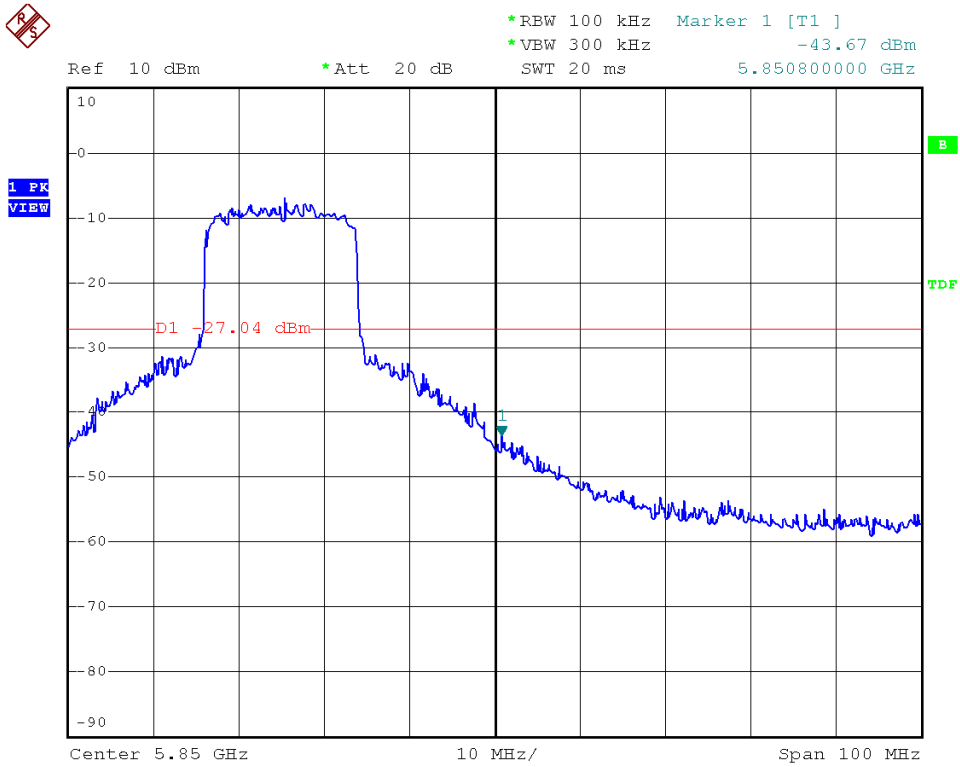


Modulation Standard: 802.11an (130Mbps), ANT R
Channel: 149



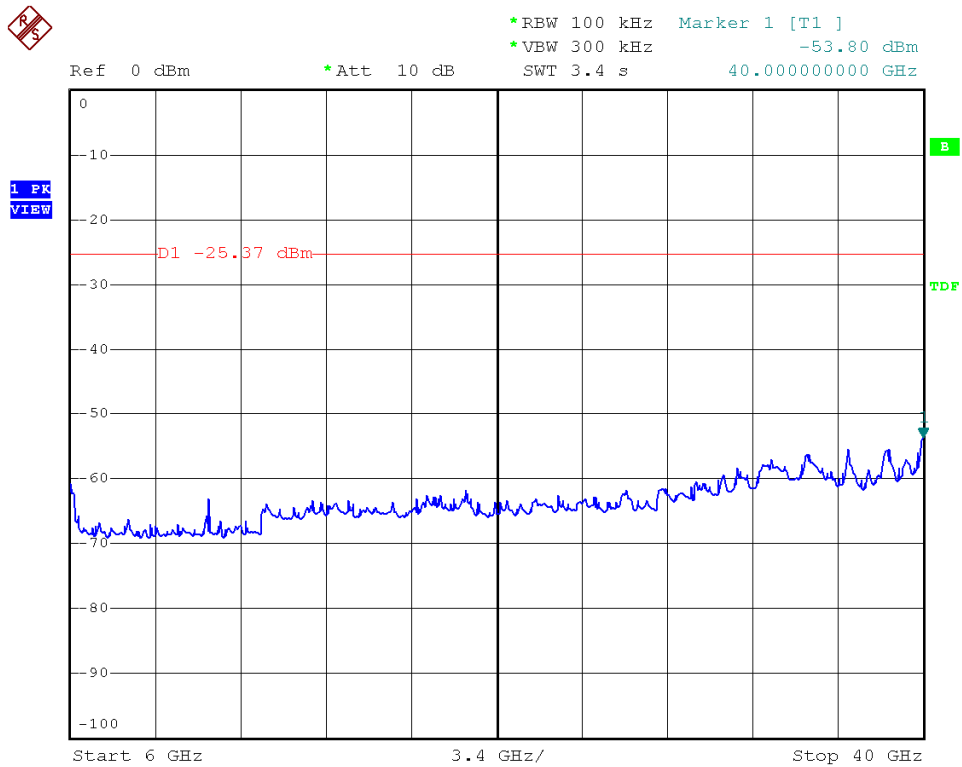
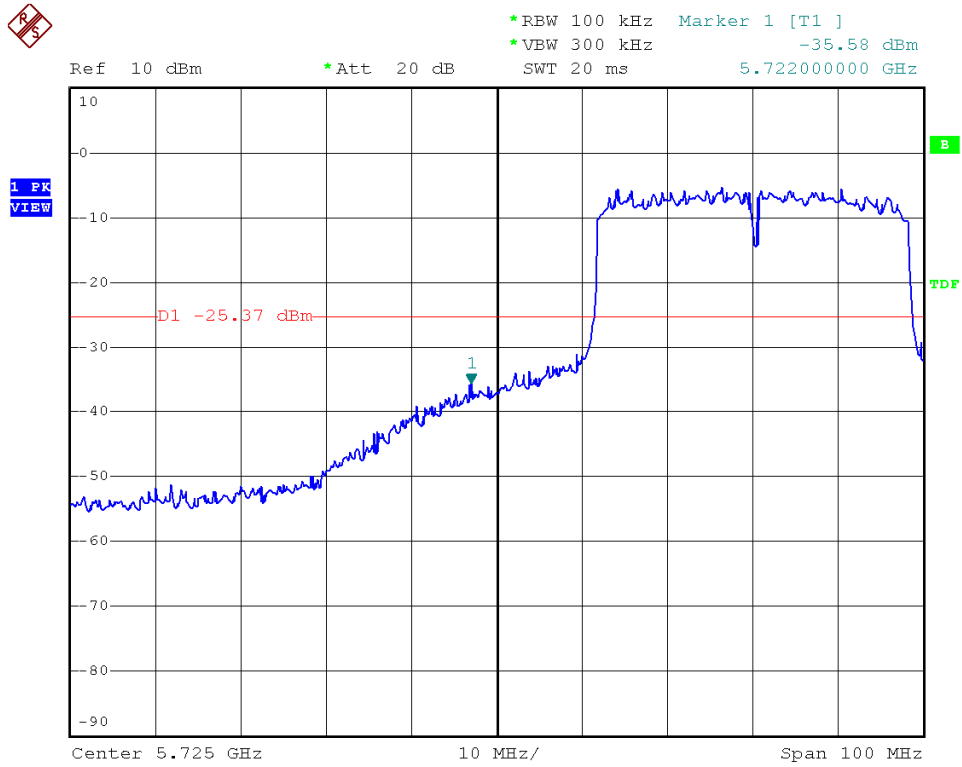


Modulation Standard: 802.11an HT20 (130Mbps), ANT R
Channel: 165



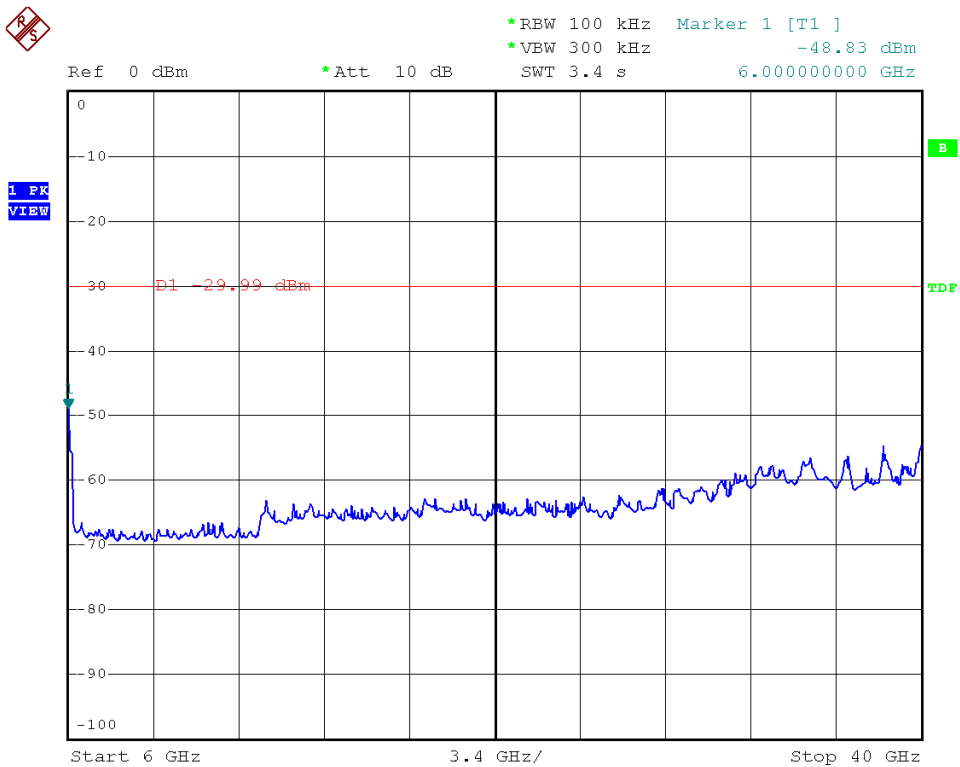
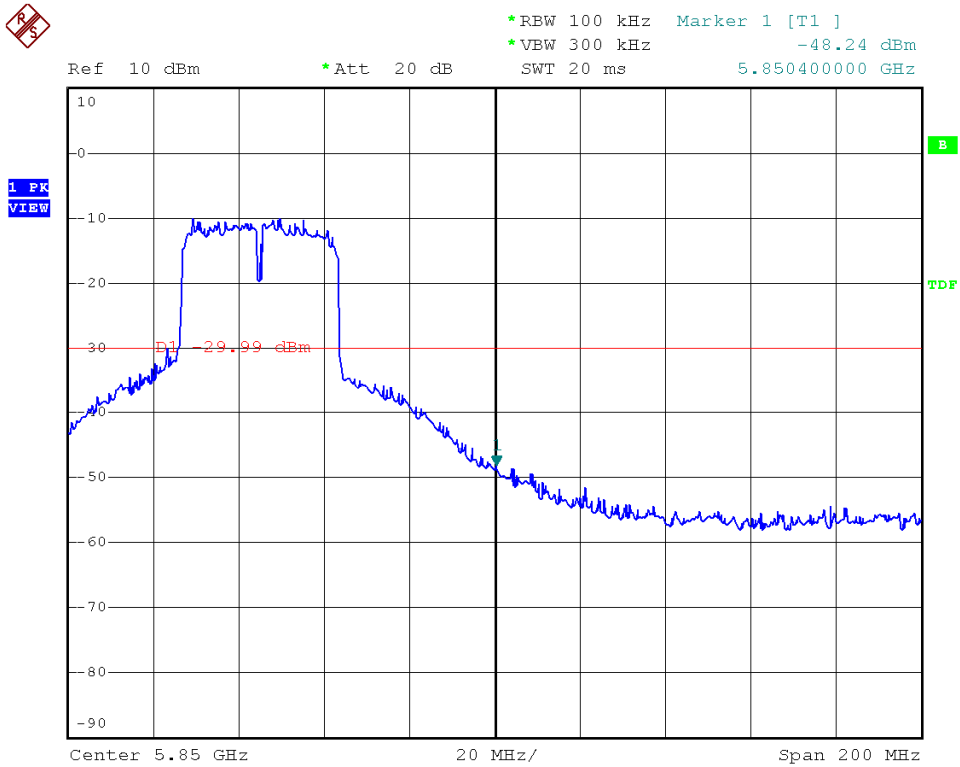


Modulation Standard: 802.11an HT40 (270Mbps), ANT R
Channel: 151



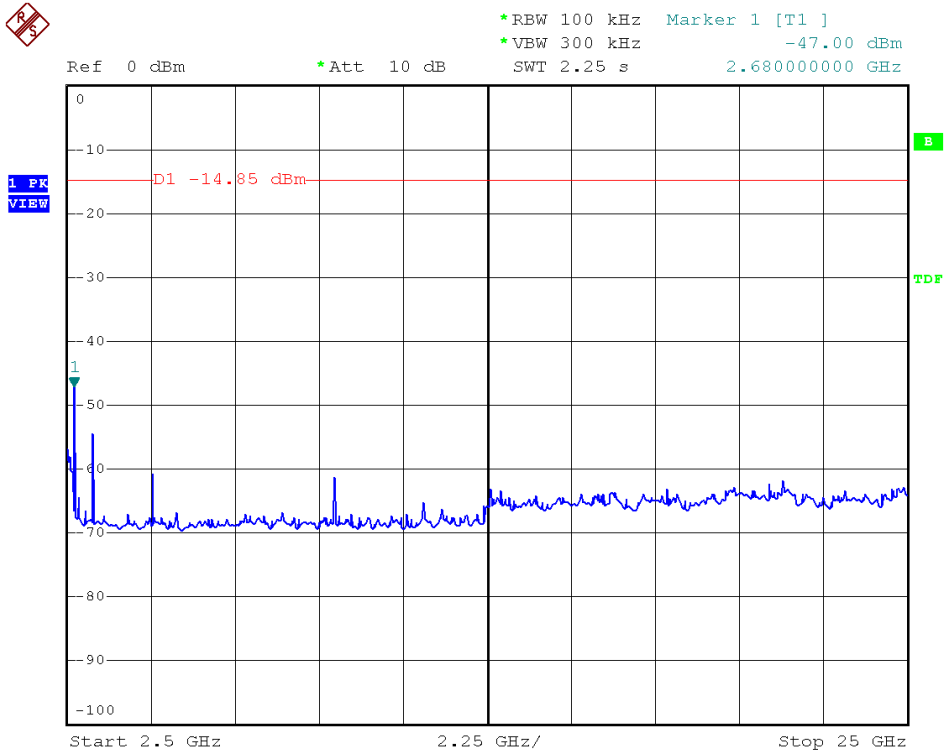
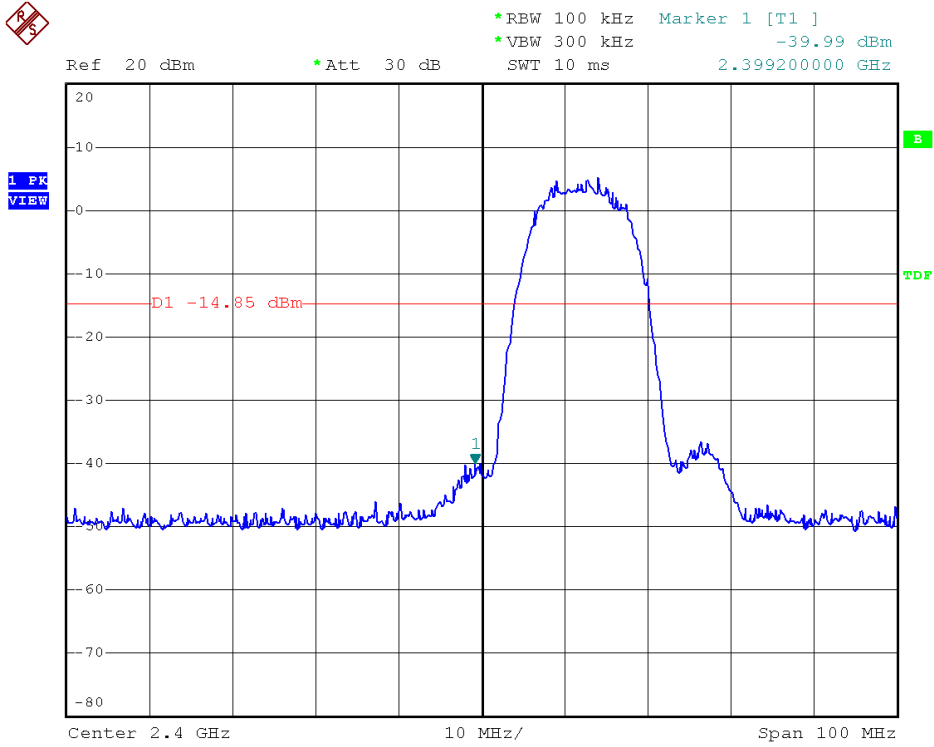


Modulation Standard: 802.11an HT40 (270Mbps), ANT R
Channel: 159





Modulation Standard: 802.11b (11Mbps), ANT L
Channel: 01

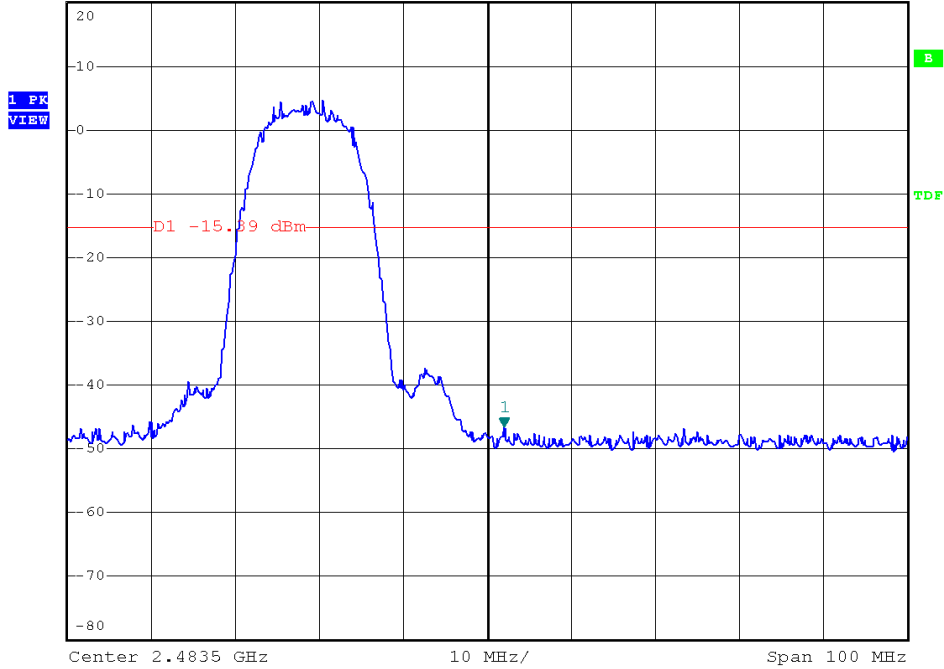




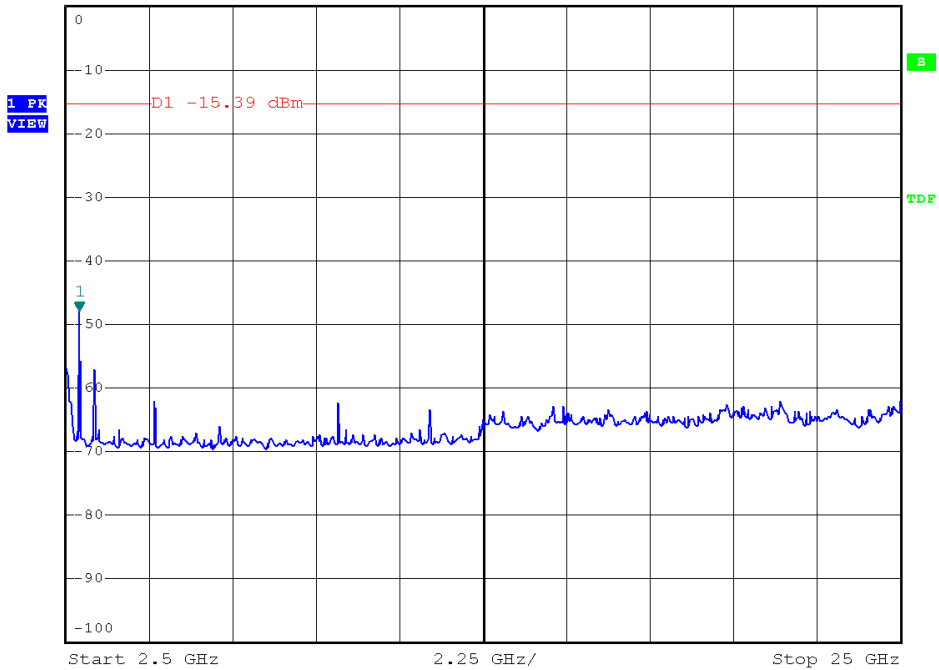
Modulation Standard: 802.11b (11Mbps), ANT L
Channel: 11



Ref 20 dBm *Att 30 dB *RBW 100 kHz Marker 1 [T1]
*VBW 300 kHz -46.57 dBm
SWT 10 ms 2.485500000 GHz



Ref 0 dBm *Att 10 dB *RBW 100 kHz Marker 1 [T1]
*VBW 300 kHz -48.03 dBm
SWT 2.25 s 2.860000000 GHz

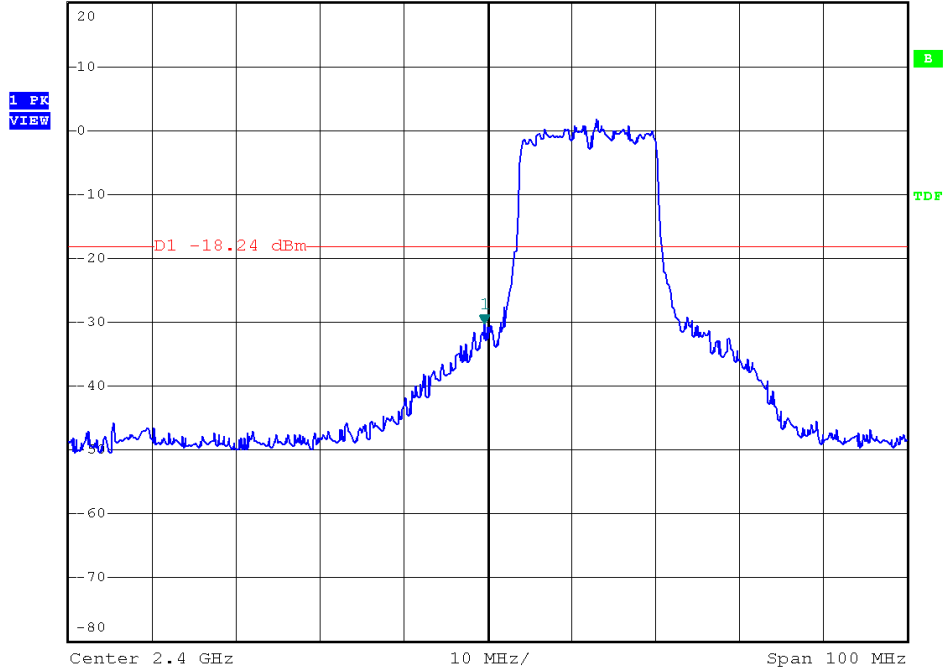




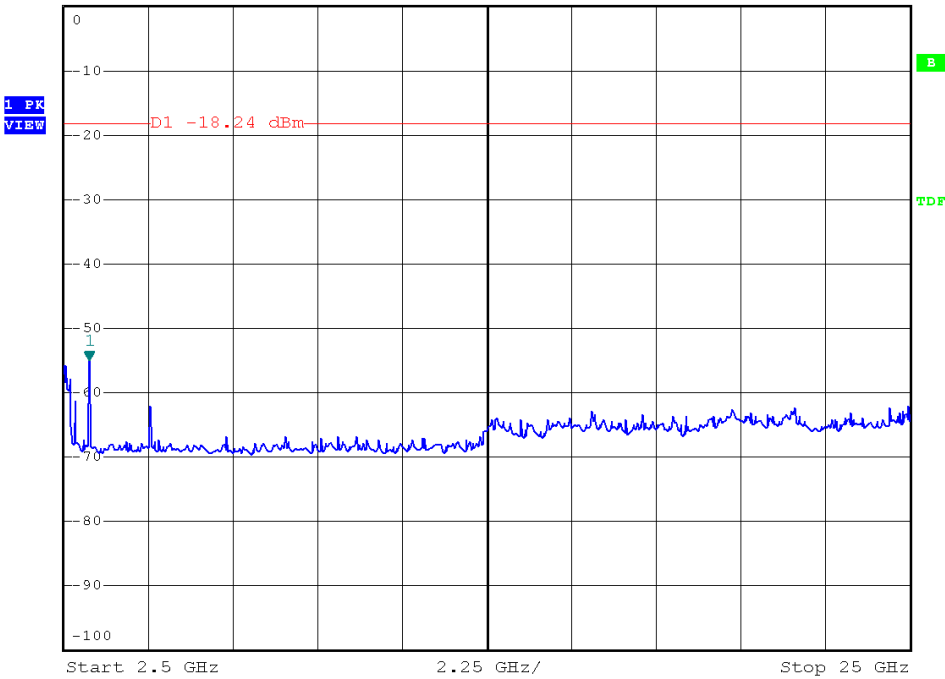
Modulation Standard: 802.11g (54Mbps), ANT L
Channel: 01



Ref 20 dBm *Att 30 dB *RBW 100 kHz Marker 1 [T1]
*VBW 300 kHz -30.21 dBm
SWT 10 ms 2.399600000 GHz

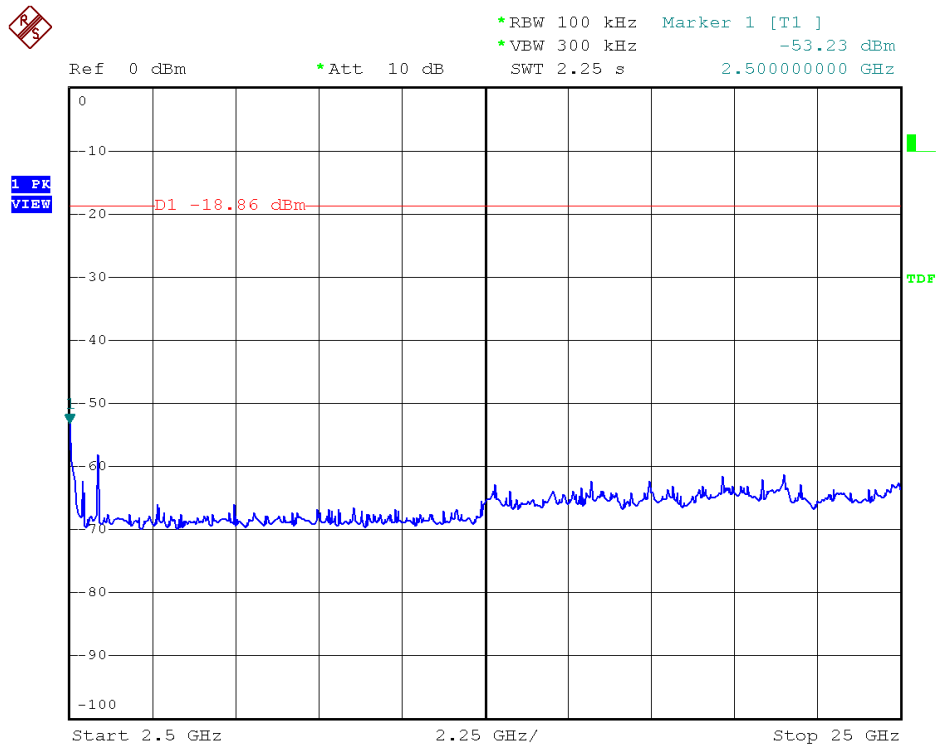
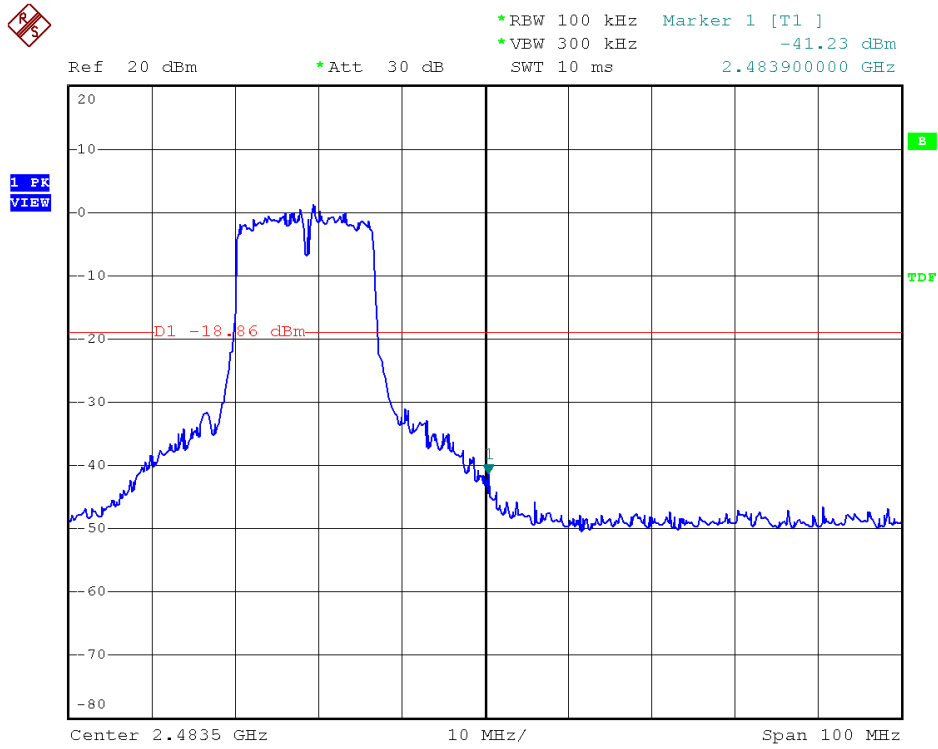


Ref 0 dBm *Att 10 dB *RBW 100 kHz Marker 1 [T1]
*VBW 300 kHz -54.97 dBm
SWT 2.25 s 3.175000000 GHz



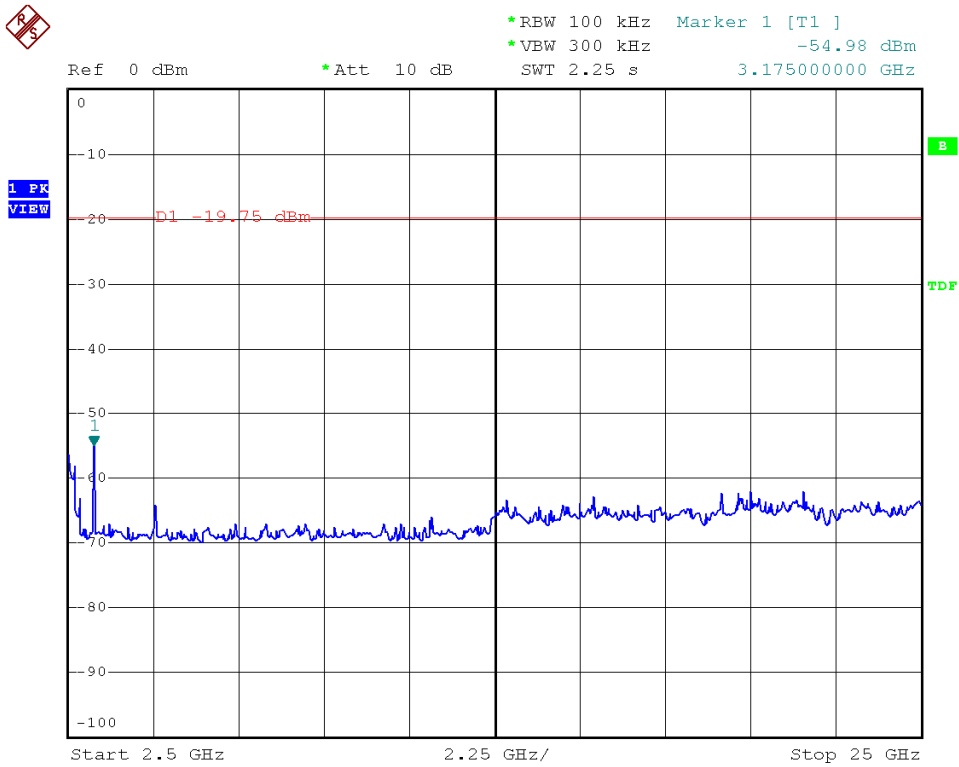
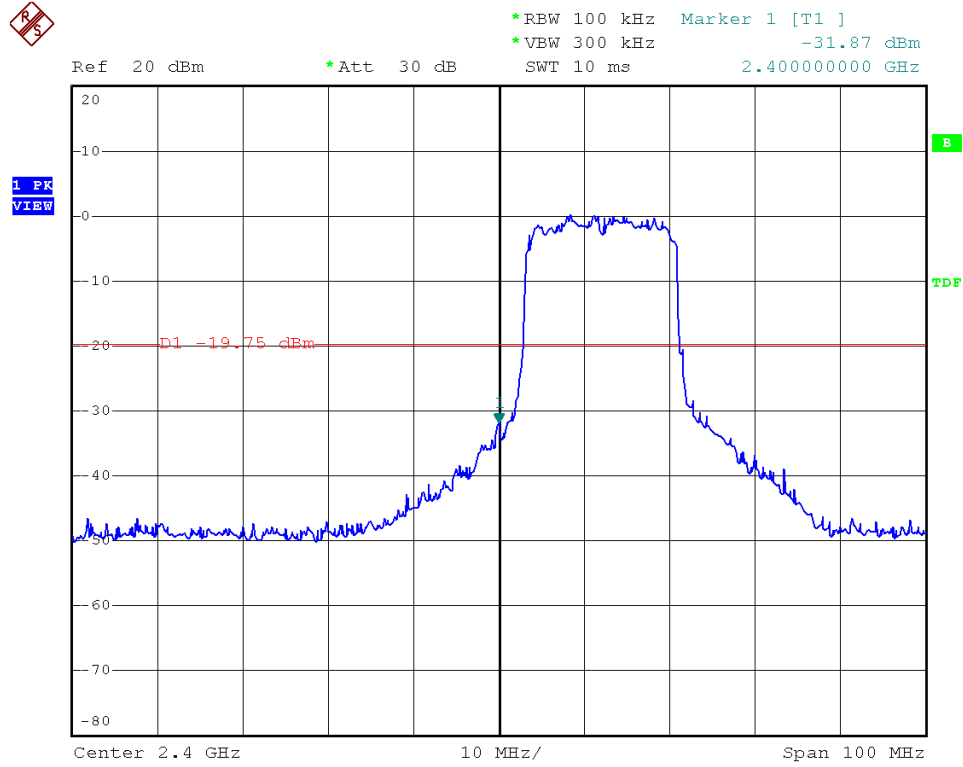


Modulation Standard: 802.11g (54Mbps), ANT L
Channel: 11



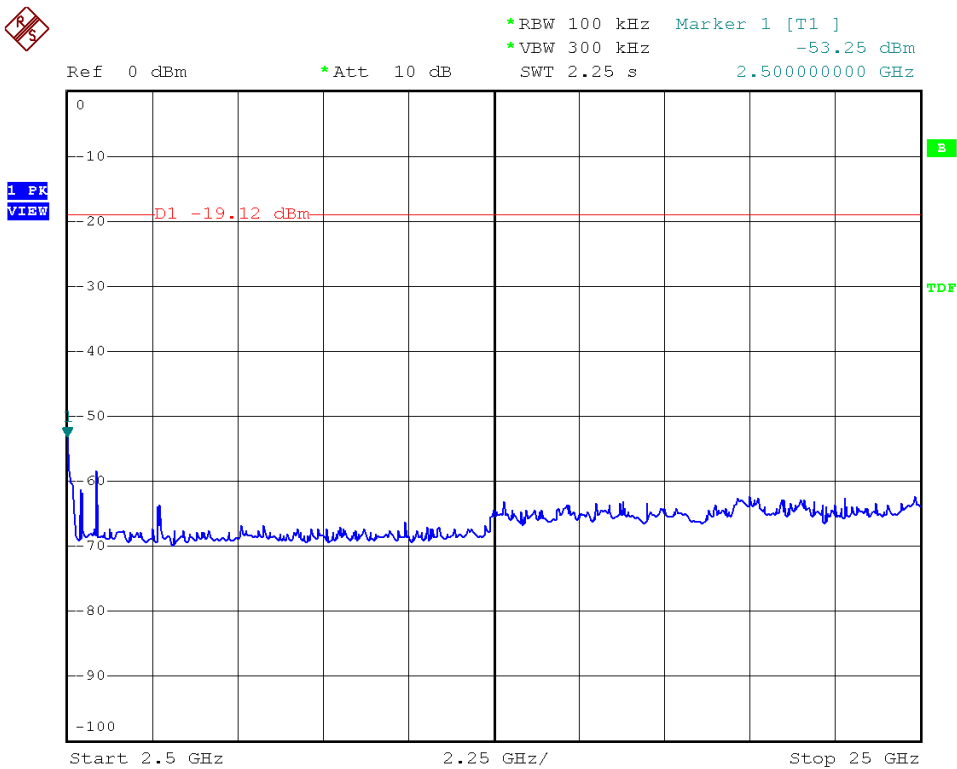
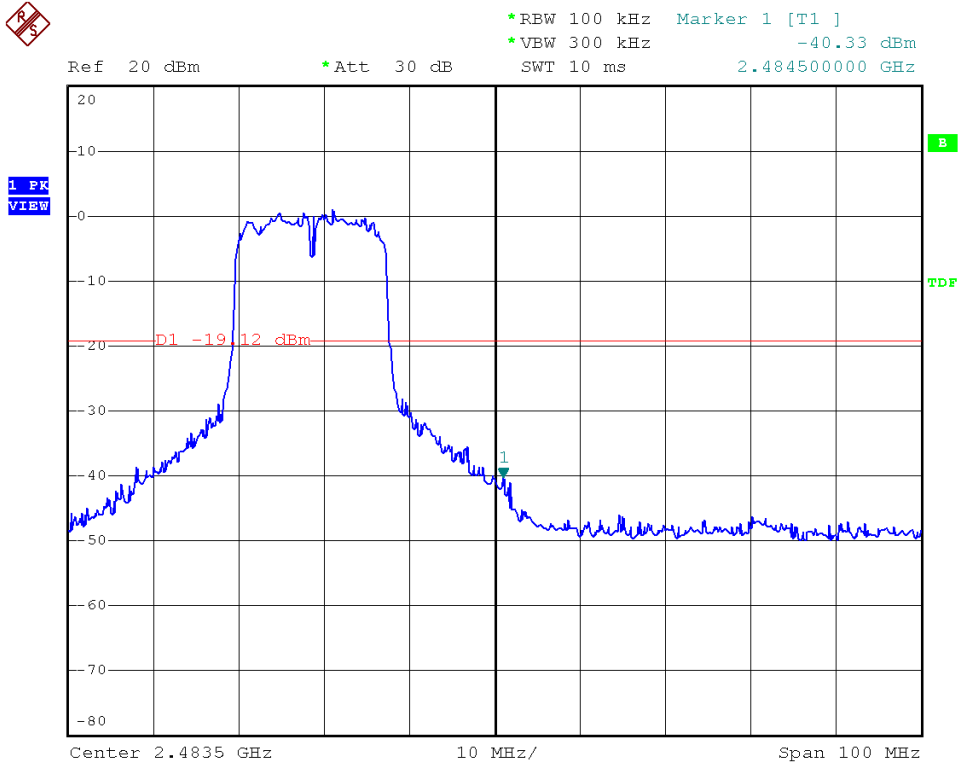


Modulation Standard: 802.11n HT20 (130Mbps), ANT L
Channel: 01



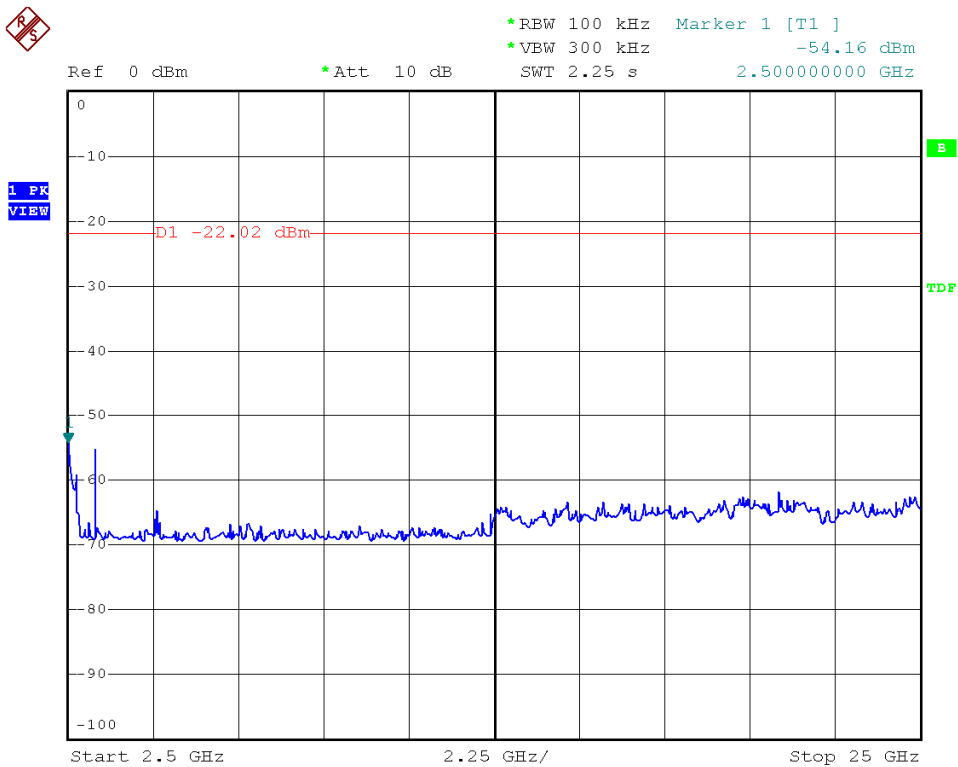
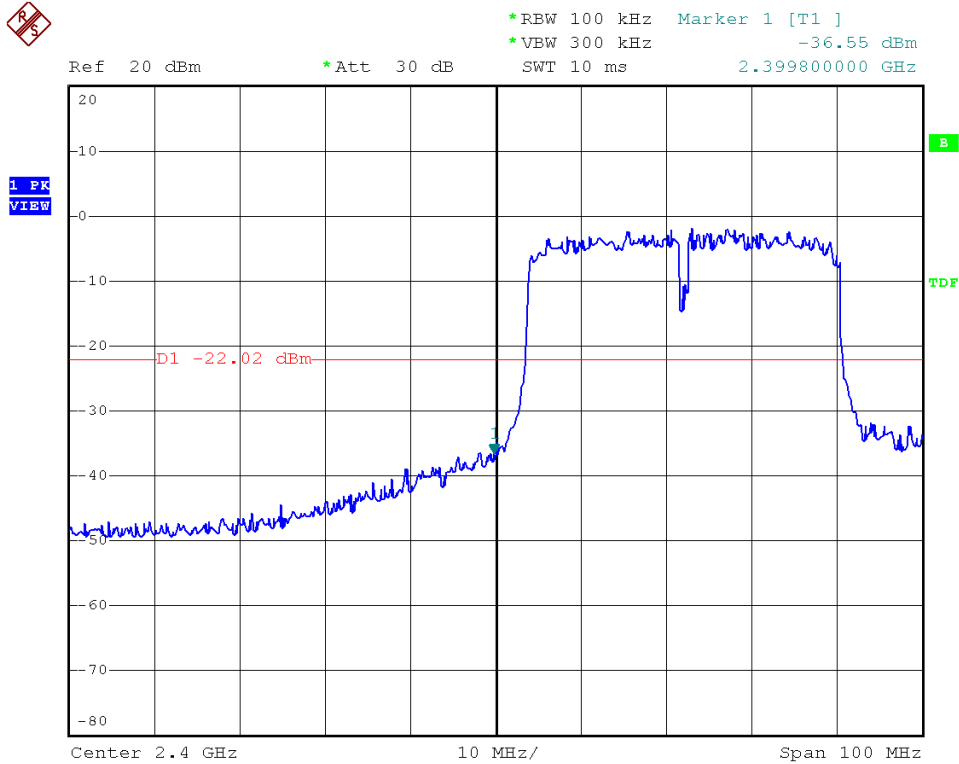


Modulation Standard: 802.11n HT20 (130Mbps), ANT L
Channel: 11



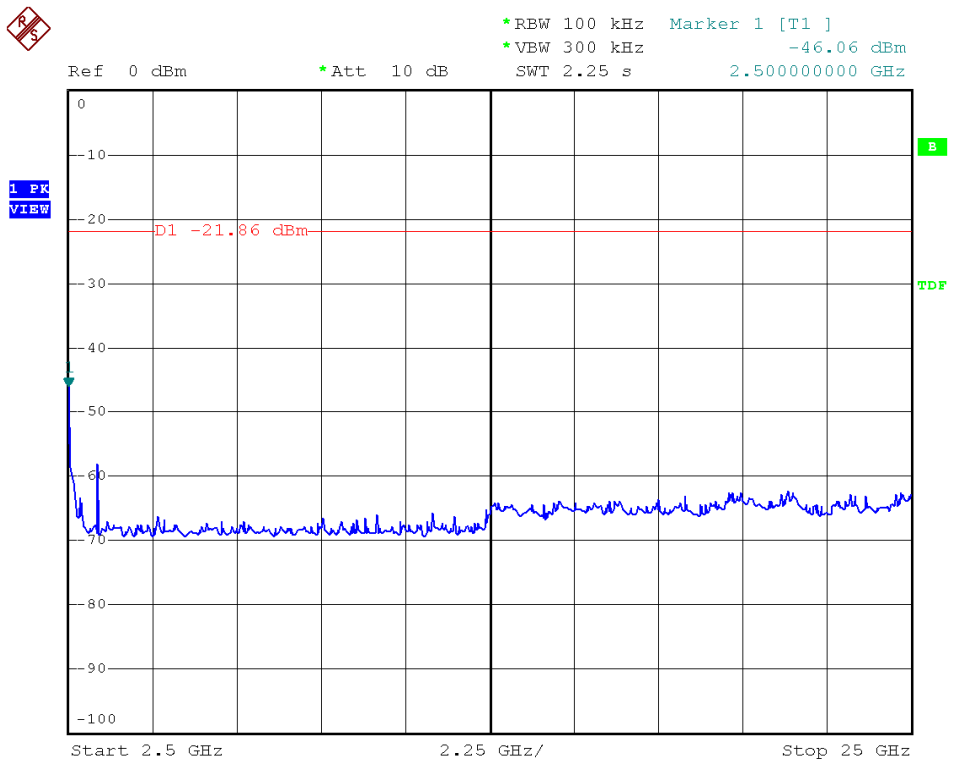
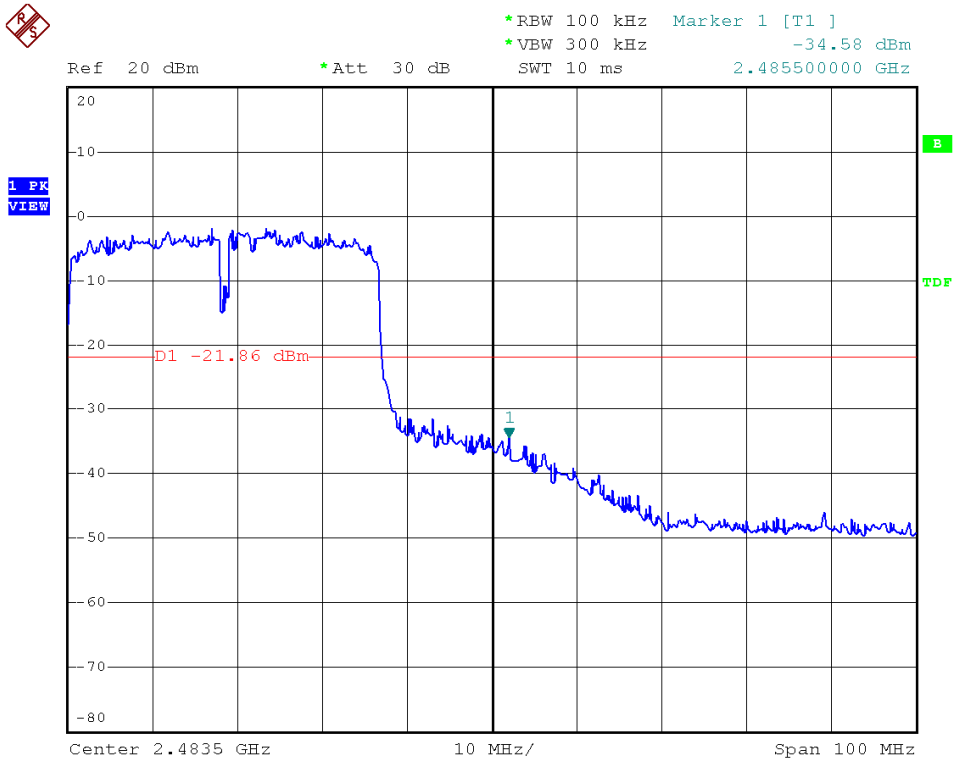


Modulation Standard: 802.11n HT40 (270Mbps), ANT L
Channel: 03



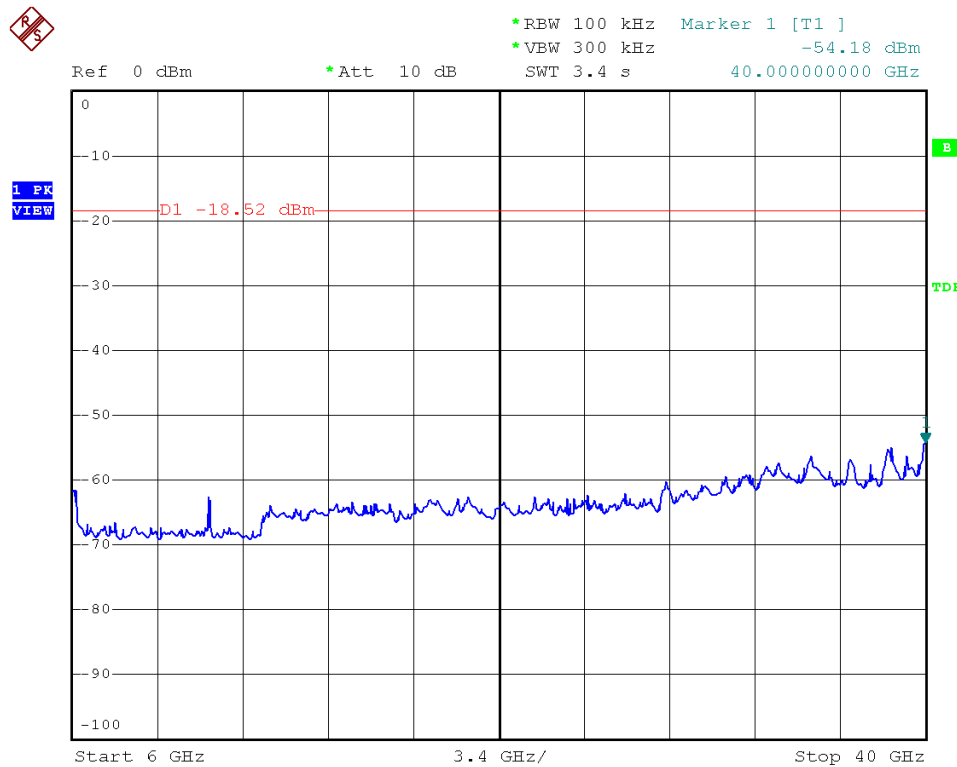
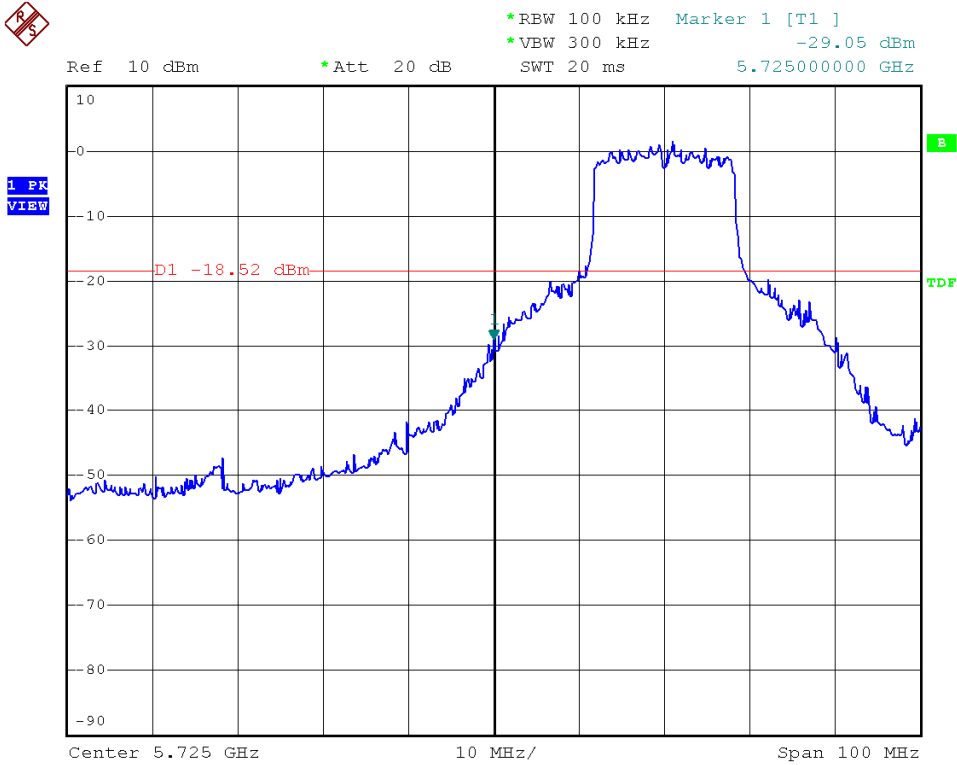


Modulation Standard: 802.11n HT40 (270Mbps), ANT L
Channel: 09



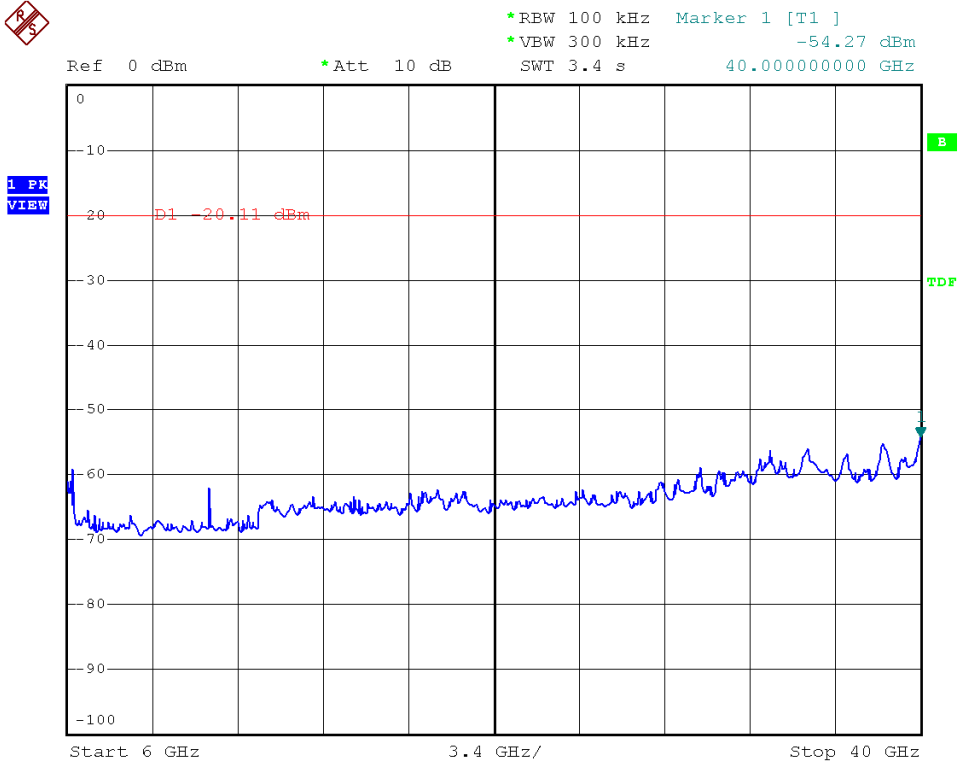
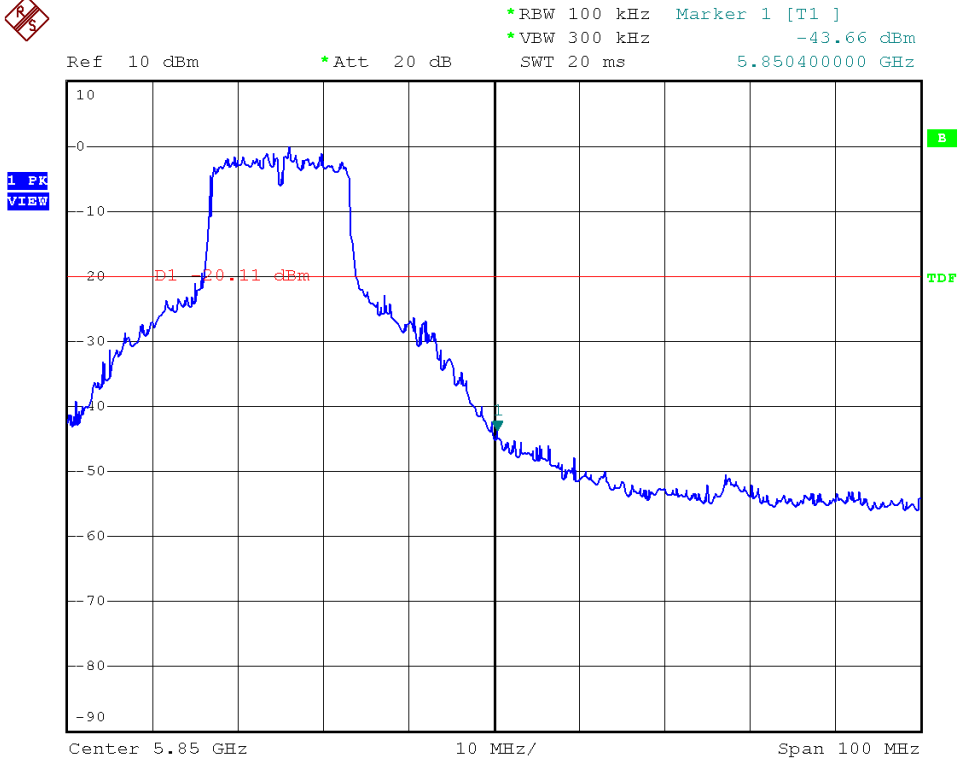


Modulation Standard: 802.11a (54Mbps), ANT L
Channel: 149



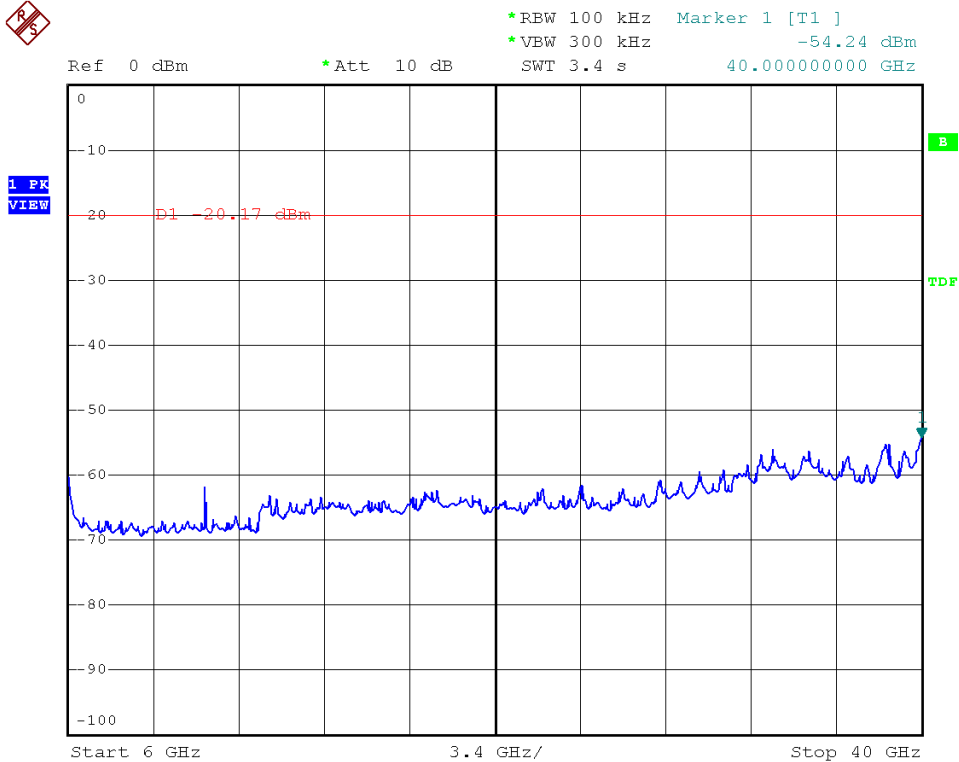
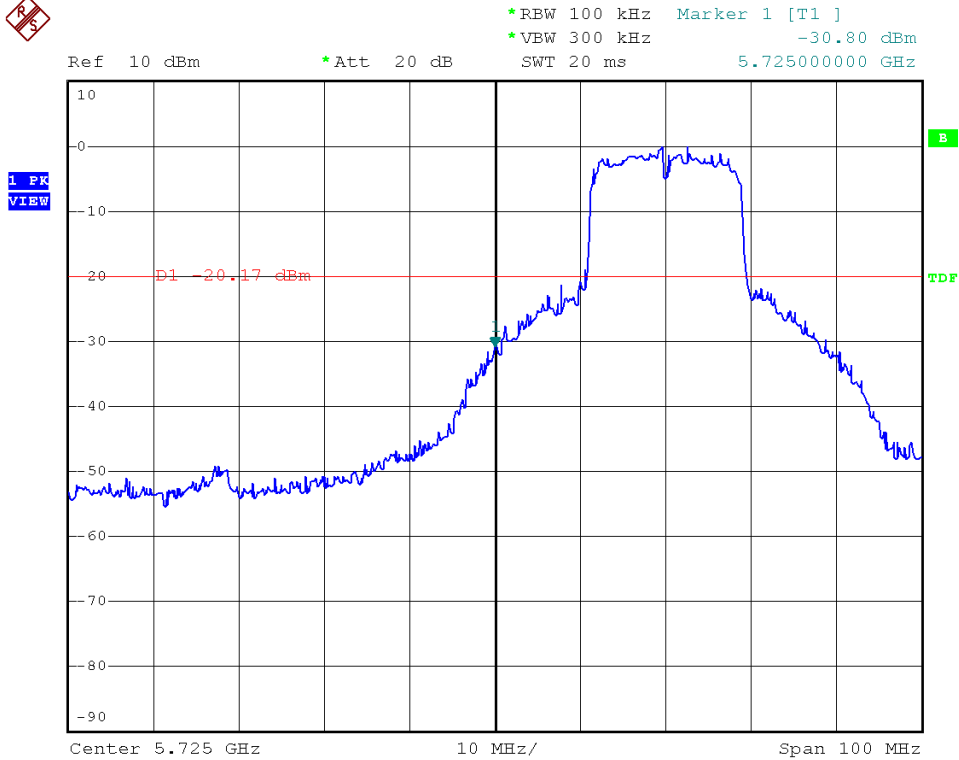


Modulation Standard: 802.11a (54Mbps), ANT L
Channel: 165



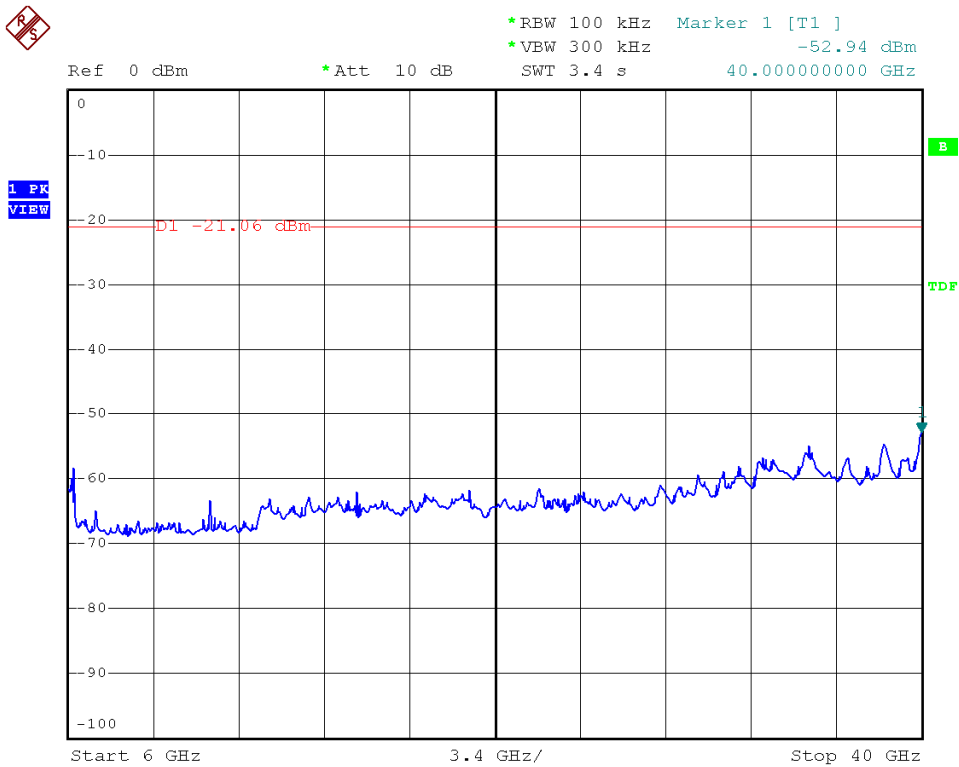
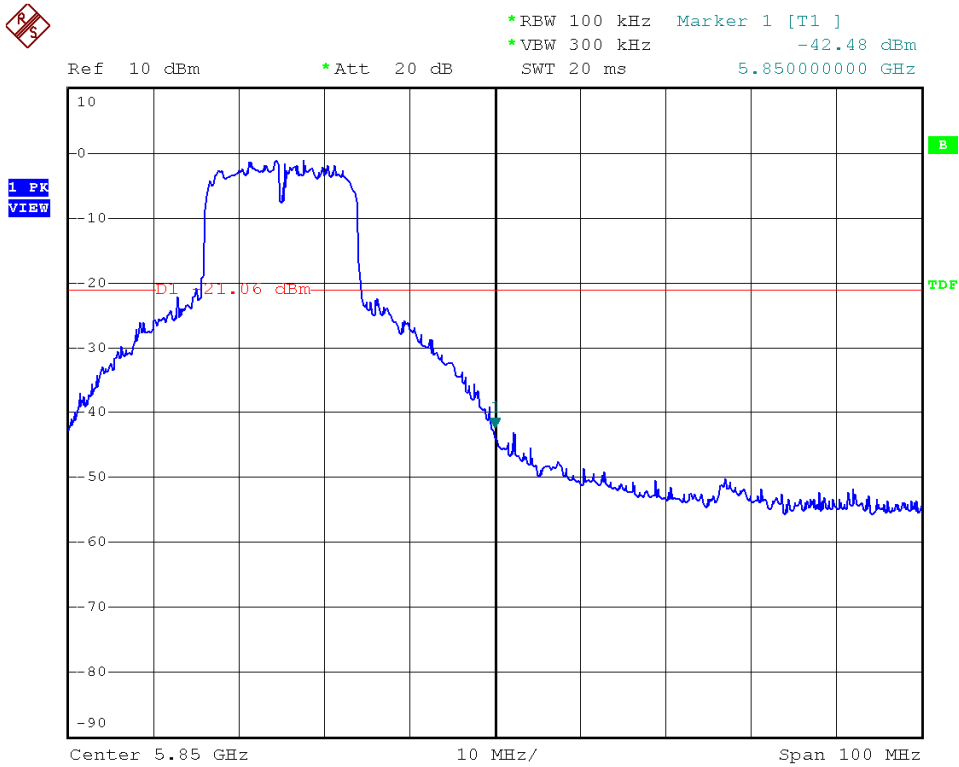


Modulation Standard: 802.11an HT20 (130Mbps), ANT L
Channel: 149



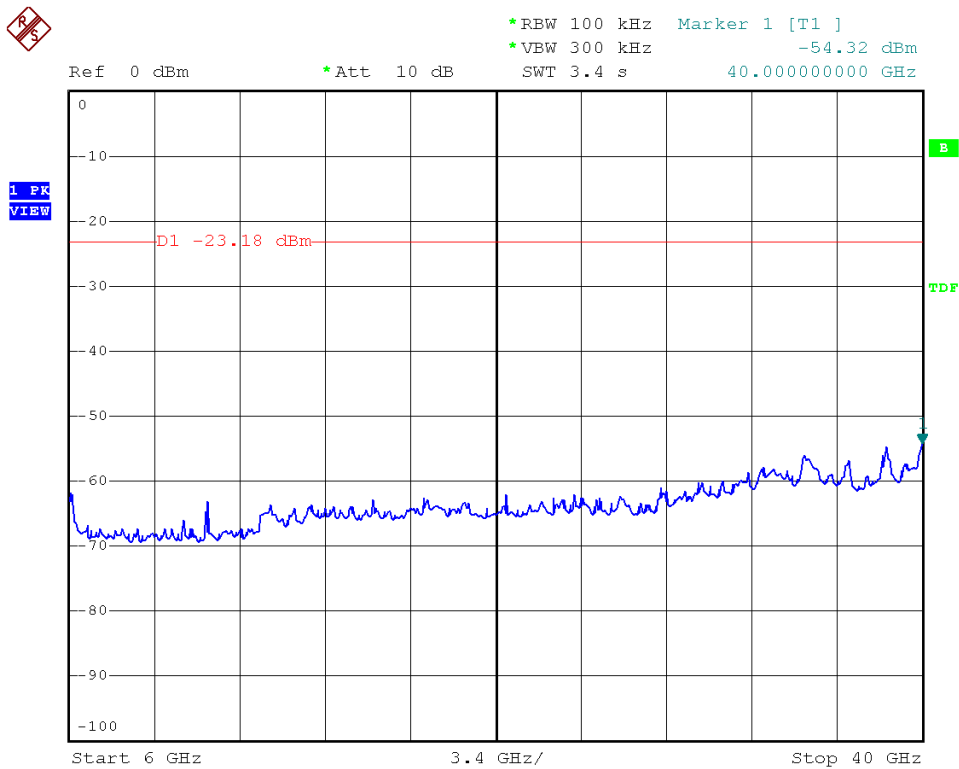
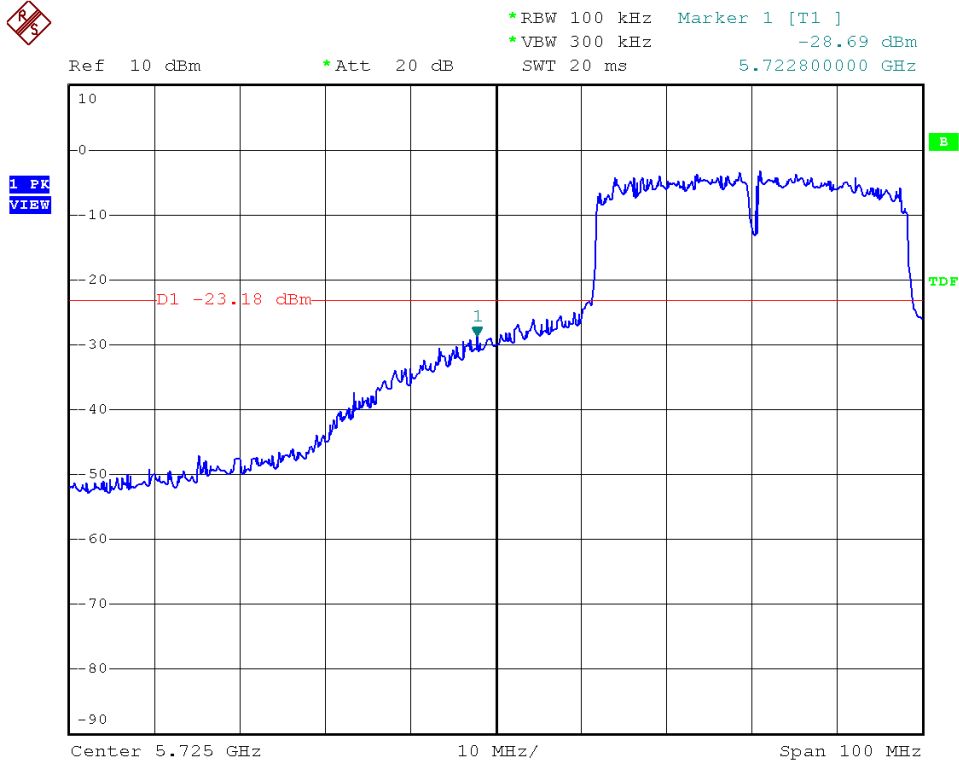


Modulation Standard: 802.11an HT20 (130Mbps), ANT L
Channel: 165



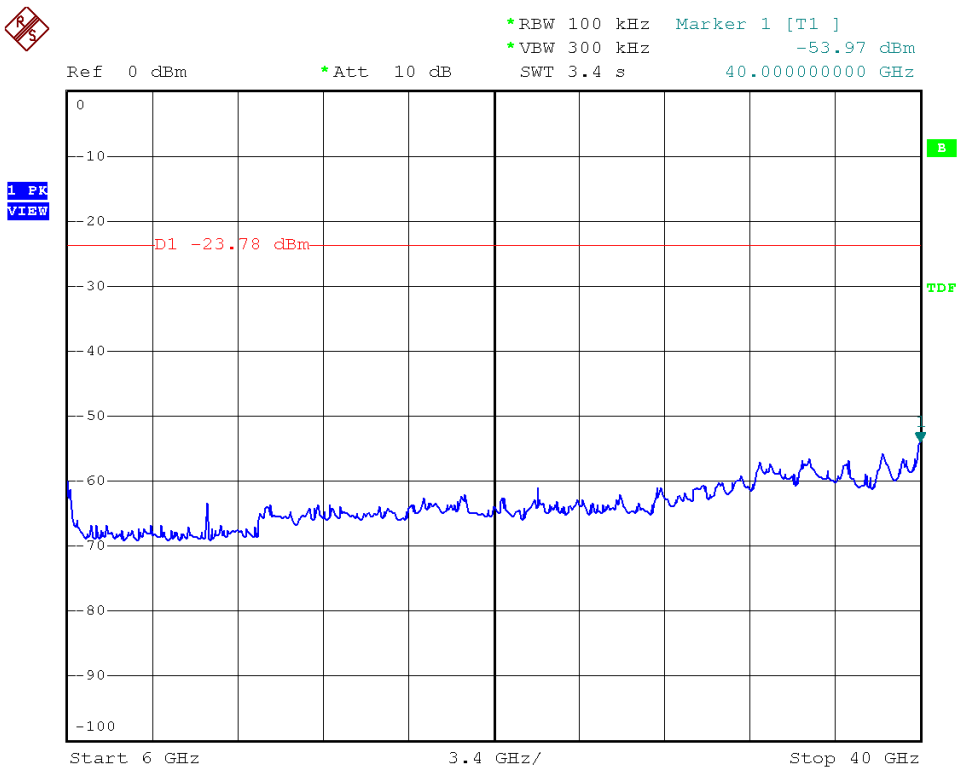
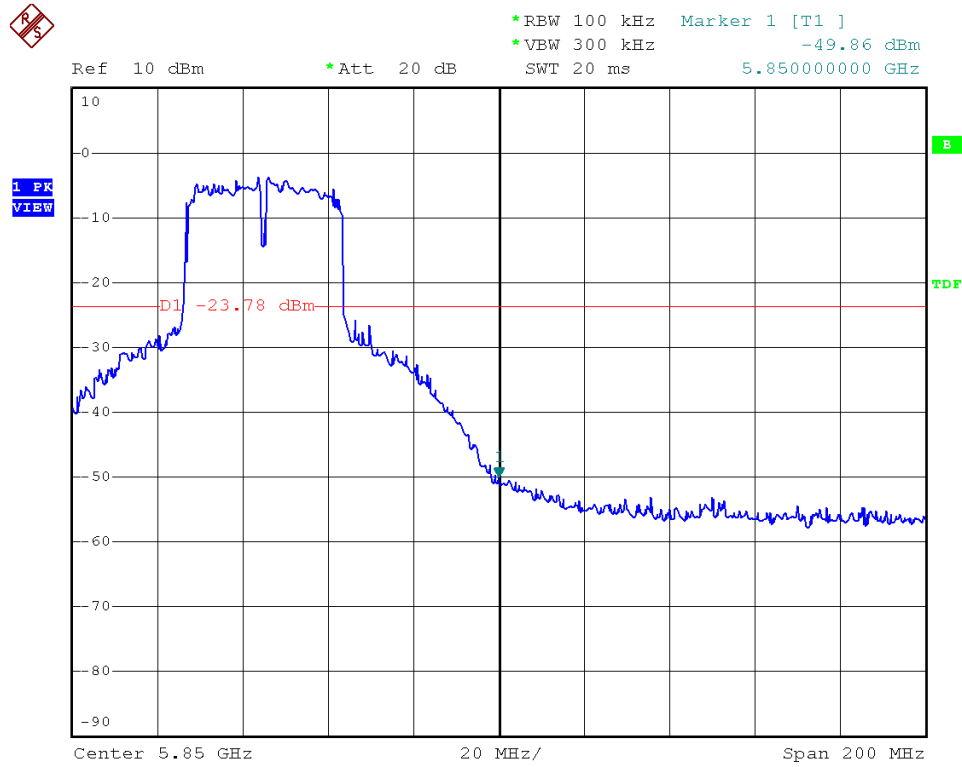


Modulation Standard: 802.11an HT40 (270Mbps), ANT L
Channel: 151





Modulation Standard: 802.11an HT40 (270Mbps), ANT L
Channel: 159





9.6 Restrict Band Emission Measurement Data

Test Mode 1:

Test Date: Jun. 28, 2012

Temperature: 25 °C

Atmospheric pressure: 1020 hPa

Humidity: 65 %

Modulation Standard: IEEE 802.11b (11Mbps)

Channel 1						Fundamental Frequency: 2412 MHz				
Frequency (MHz)	Ant-Pol H/V	Meter Reading (dBuV)	Corrected Factor (dB)	Result (dBuV/m)	Remark	Limit (dBuV/m)		Margin (dB)	Table Deg.	Ant High (m)
						Peak	Ave			
2319.69	H	50.97	1.90	52.87	Peak	74	54	-21.13	112	1.00
---	H	---	---	---	Ave	74	54	---	---	---
2389.05	V	56.85	2.27	59.12	Peak	74	54	-14.08	233	1.00
2389.81	V	45.05	2.25	47.30	Ave	74	54	-6.70	233	1.00
Channel 11						Fundamental Frequency: 2462 MHz				
Frequency (MHz)	Ant-Pol H/V	Meter Reading (dBuV)	Corrected Factor (dB)	Result (dBuV/m)	Remark	Limit (dBuV/m)		Margin (dB)	Table Deg.	Ant High (m)
						Peak	Ave			
2493.73	H	50.84	0.15	50.99	Peak	74	54	-23.01	117	1.00
---	H	---	---	---	Ave	74	54	---	---	---
2485.10	V	57.68	-2.43	55.25	Peak	74	54	-18.75	218	1.00
2483.56	V	45.10	-2.35	42.75	Ave	74	54	-11.25	218	1.00

Modulation Standard: IEEE 802.11g (54Mbps)

Channel 1						Fundamental Frequency: 2412 MHz				
Frequency (MHz)	Ant-Pol H/V	Meter Reading (dBuV)	Corrected Factor (dB)	Result (dBuV/m)	Remark	Limit (dBuV/m)		Margin (dB)	Table Deg.	Ant High (m)
						Peak	Ave			
2358.45	H	51.62	1.75	53.37	Peak	74	54	-20.63	140	1.00
---	H	---	---	---	Ave	74	54	---	---	---
2389.86	V	60.87	2.25	63.12	Peak	74	54	-10.88	144	1.00
2389.81	V	46.32	2.25	48.57	Ave	74	54	-5.43	144	1.00
Channel 11						Fundamental Frequency: 2462 MHz				
Frequency (MHz)	Ant-Pol H/V	Meter Reading (dBuV)	Corrected Factor (dB)	Result (dBuV/m)	Remark	Limit (dBuV/m)		Margin (dB)	Table Deg.	Ant High (m)
						Peak	Ave			
2483.73	H	52.16	0.29	52.45	Peak	74	54	-21.55	102	1.00
---	H	---	---	---	Ave	74	54	---	---	---
2483.66	V	58.68	-2.36	56.32	Peak	74	54	-17.68	135	1.00
2483.56	V	45.48	-2.35	43.13	Ave	74	54	-10.87	135	1.00



Modulation Standard: IEEE 802.11n HT20 (130Mbps)

Channel 1						Fundamental Frequency: 2412 MHz				
Frequency (MHz)	Ant-Pol H/V	Meter Reading (dBuV)	Corrected Factor (dB)	Result (dBuV/m)	Remark	Limit (dBuV/m)		Margin (dB)	Table Deg.	Ant High (m)
						Peak	Ave			
2360.79	H	50.26	1.73	51.99	Peak	74	54	-22.01	139	1.00
---	H	---	---	---	Ave	74	54	---	---	---
2389.86	V	59.48	2.25	61.73	Peak	74	54	-12.27	143	1.00
2359.98	V	46.22	2.74	48.98	Ave	74	54	-5.04	143	1.00
Channel 11						Fundamental Frequency: 2462 MHz				
Frequency (MHz)	Ant-Pol H/V	Meter Reading (dBuV)	Corrected Factor (dB)	Result (dBuV/m)	Remark	Limit (dBuV/m)		Margin (dB)	Table Deg.	Ant High (m)
						Peak	Ave			
2483.58	H	51.33	0.30	51.63	Peak	74	54	-22.37	119	1.00
---	H	---	---	---	Ave	74	54	---	---	---
2483.66	V	60.41	-2.36	58.05	Peak	74	54	-15.95	136	1.00
2483.56	V	46.65	-2.35	44.03	Ave	74	54	-9.70	136	1.00

Modulation Standard: IEEE 802.11n HT40 (270Mbps)

Channel 3						Fundamental Frequency: 2422 MHz				
Frequency (MHz)	Ant-Pol H/V	Meter Reading (dBuV)	Corrected Factor (dB)	Result (dBuV/m)	Remark	Limit (dBuV/m)		Margin (dB)	Table Deg.	Ant High (m)
						Peak	Ave			
2389.56	H	51.29	1.62	52.91	Peak	74	54	-21.09	113	1.00
---	H	---	---	---	Ave	74	54	---	---	---
2389.76	V	63.31	2.25	65.56	Peak	74	54	-8.44	142	1.00
2389.81	V	47.64	2.25	49.89	Ave	74	54	-4.11	142	1.00
Channel 9						Fundamental Frequency: 2452 MHz				
Frequency (MHz)	Ant-Pol H/V	Meter Reading (dBuV)	Corrected Factor (dB)	Result (dBuV/m)	Remark	Limit (dBuV/m)		Margin (dB)	Table Deg.	Ant High (m)
						Peak	Ave			
2483.96	H	54.10	0.29	54.39	Peak	74	54	-19.61	101	1.00
2483.65	H	41.37	0.30	41.67	Ave	74	54	-12.33	101	1.00
2483.73	V	65.62	-2.36	63.26	Peak	74	54	-10.74	133	1.00
2483.56	V	51.80	-2.35	49.45	Ave	74	54	-4.55	133	1.00

Notes:

1. Result = Meter Reading + Factor
2. Factor = Antenna Factor + Cable Loss – Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3 MHz (detector peak mode) for Peak detection at frequency above 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3 MHz (detector sample mode) for Average detection at frequency above 1GHz.



Test Mode 2:

Test Date: Jun. 11, 2012

Temperature: 25 °C

Atmospheric pressure: 1020 hPa

Humidity: 65 %

Modulation Standard: IEEE 802.11b (11Mbps)

Channel 1						Fundamental Frequency: 2412 MHz				
Frequency (MHz)	Ant-Pol H/V	Meter Reading (dBuV)	Corrected Factor (dB)	Result (dBuV/m)	Remark	Limit (dBuV/m)		Margin (dB)	Table Deg.	Ant High (m)
						Peak	Ave			
2355.39	H	50.40	1.76	52.16	Peak	74	54	-21.84	190	1.04
---	H	---	---	---	Ave	74	54	---	---	---
2314.28	V	58.12	3.50	61.62	Peak	74	54	-12.38	212	1.00
2389.82	V	47.39	2.25	49.64	Ave	74	54	-4.36	212	1.00
Channel 11						Fundamental Frequency: 2462 MHz				
Frequency (MHz)	Ant-Pol H/V	Meter Reading (dBuV)	Corrected Factor (dB)	Result (dBuV/m)	Remark	Limit (dBuV/m)		Margin (dB)	Table Deg.	Ant High (m)
						Peak	Ave			
2496.28	H	50.83	0.11	50.94	Peak	74	54	-23.06	160	1.04
---	H	---	---	---	Ave	74	54	---	---	---
2500.00	V	63.23	-3.22	60.01	Peak	74	54	-13.99	224	1.00
2500.00	V	53.88	-3.22	50.66	Ave	74	54	-3.34	224	1.00

Modulation Standard: IEEE 802.11g (54Mbps)

Channel 1						Fundamental Frequency: 2412 MHz				
Frequency (MHz)	Ant-Pol H/V	Meter Reading (dBuV)	Corrected Factor (dB)	Result (dBuV/m)	Remark	Limit (dBuV/m)		Margin (dB)	Table Deg.	Ant High (m)
						Peak	Ave			
2389.56	H	54.30	1.62	55.92	Peak	74	54	-18.08	191	1.04
2389.82	H	40.50	1.62	42.12	Ave	74	54	-11.88	191	1.04
2375.28	V	59.10	2.49	61.59	Peak	74	54	-12.41	220	1.00
2389.82	V	47.24	2.25	49.49	Ave	74	54	-4.51	220	1.00
Channel 11						Fundamental Frequency: 2462 MHz				
Frequency (MHz)	Ant-Pol H/V	Meter Reading (dBuV)	Corrected Factor (dB)	Result (dBuV/m)	Remark	Limit (dBuV/m)		Margin (dB)	Table Deg.	Ant High (m)
						Peak	Ave			
2483.55	H	55.65	0.30	55.95	Peak	74	54	-18.05	216	1.04
2483.57	H	41.00	0.30	41.30	Ave	74	54	-12.07	216	1.04
2499.81	V	63.82	-3.21	60.61	Peak	74	54	-13.39	229	1.00
2500.00	V	52.62	-3.22	49.40	Ave	74	54	-4.60	229	1.00



Modulation Standard: IEEE 802.11n HT20 (130Mbps)

Channel 1						Fundamental Frequency: 2412 MHz				
Frequency (MHz)	Ant-Pol H/V	Meter Reading (dBuV)	Corrected Factor (dB)	Result (dBuV/m)	Remark	Limit (dBuV/m)		Margin (dB)	Table Deg.	Ant High (m)
						Peak	Ave			
2389.36	H	56.30	1.62	57.92	Peak	74	54	-16.08	176	1.04
2389.82	H	41.27	1.62	42.89	Ave	74	54	-11.11	176	1.04
2338.56	V	59.43	3.10	62.53	Peak	74	54	-11.47	211	1.00
2389.82	V	47.28	2.25	49.53	Ave	74	54	-4.47	211	1.00
Channel 11						Fundamental Frequency: 2462 MHz				
Frequency (MHz)	Ant-Pol H/V	Meter Reading (dBuV)	Corrected Factor (dB)	Result (dBuV/m)	Remark	Limit (dBuV/m)		Margin (dB)	Table Deg.	Ant High (m)
						Peak	Ave			
2483.85	H	56.50	0.29	56.79	Peak	74	54	-17.21	161	1.04
2483.57	H	41.62	0.30	41.92	Ave	74	54	-12.08	161	1.04
2499.81	V	61.62	-3.21	58.41	Peak	74	54	-15.59	211	1.00
2500.00	V	50.09	-3.22	46.87	Ave	74	54	-7.13	211	1.00

Modulation Standard: IEEE 802.11n HT40 (270Mbps)

Channel 3						Fundamental Frequency: 2422 MHz				
Frequency (MHz)	Ant-Pol H/V	Meter Reading (dBuV)	Corrected Factor (dB)	Result (dBuV/m)	Remark	Limit (dBuV/m)		Margin (dB)	Table Deg.	Ant High (m)
						Peak	Ave			
2389.56	H	60.64	1.62	62.26	Peak	74	54	-11.74	193	1.04
2389.82	H	45.66	1.62	47.28	Ave	74	54	-6.72	193	1.04
2321.73	V	58.54	3.39	61.93	Peak	74	54	-12.07	221	1.00
2389.82	V	47.35	2.25	49.60	Ave	74	54	-4.40	221	1.00
Channel 9						Fundamental Frequency: 2452 MHz				
Frequency (MHz)	Ant-Pol H/V	Meter Reading (dBuV)	Corrected Factor (dB)	Result (dBuV/m)	Remark	Limit (dBuV/m)		Margin (dB)	Table Deg.	Ant High (m)
						Peak	Ave			
2483.85	H	59.97	0.29	60.26	Peak	74	54	-13.74	160	1.04
2483.57	H	47.08	0.30	47.38	Ave	74	54	-6.62	160	1.04
2499.81	V	63.72	-3.21	60.51	Peak	74	54	-13.49	216	1.00
2500.00	V	48.82	-3.22	45.60	Ave	74	54	-8.40	216	1.00

Notes:

1. Result = Meter Reading + Factor
2. Factor = Antenna Factor + Cable Loss – Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3 MHz (detector peak mode) for Peak detection at frequency above 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3 MHz (detector sample mode) for Average detection at frequency above 1GHz.



10. Restricted Bands of Operation

Only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.09000 – 0.11000	16.42000 – 16.42300	399.9 – 410.0	4.500 – 5.250
0.49500 – 0.505**	16.69475 – 16.69525	608.0 – 614.0	5.350 – 5.460
2.17350 – 2.19050	16.80425 – 16.80475	960.0 – 1240.0	7.250 – 7.750
4.12500 – 4.12800	25.50000 – 25.67000	1300.0 – 1427.0	8.025 – 8.500
4.17725 – 4.17775	37.50000 – 38.25000	1435.0 – 1626.5	9.000 – 9.200
4.20725 – 4.20775	73.00000 – 74.60000	1645.5 – 1646.5	9.300 – 9.500
6.21500 – 6.21800	74.80000 – 75.20000	1660.0 – 1710.0	10.600 – 12.700
6.26775 – 6.26825	108.00000 – 121.94000	1718.8 – 1722.2	13.250 – 13.400
6.31175 – 6.31225	123.00000 – 138.00000	2200.0 – 2300.0	14.470 – 14.500
8.29100 – 8.29400	149.90000 – 150.05000	2310.0 – 2390.0	15.350 – 16.200
8.36200 – 8.36600	156.52475 – 156.52525	2483.5 – 2500.0	17.700 – 21.400
8.37625 – 8.38675	156.70000 – 156.90000	2655.0 – 2900.0	22.010 – 23.120
8.41425 – 8.41475	162.01250 – 167.17000	3260.0 – 3267.0	23.600 – 24.000
12.29000 – 12.29300	167.72000 – 173.20000	3332.0 – 3339.0	31.200 – 31.800
12.51975 – 12.52025	240.00000 – 285.00000	3345.8 – 3358.0	36.430 – 36.500
12.57675 – 12.57725	322.00000 – 335.40000	3600.0 – 4400.0	Above 38.6
13.36000 – 13.41000			

** : Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz

10.1 Labeling Requirement

The device shall bear the following statement in a conspicuous location on the device:

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.