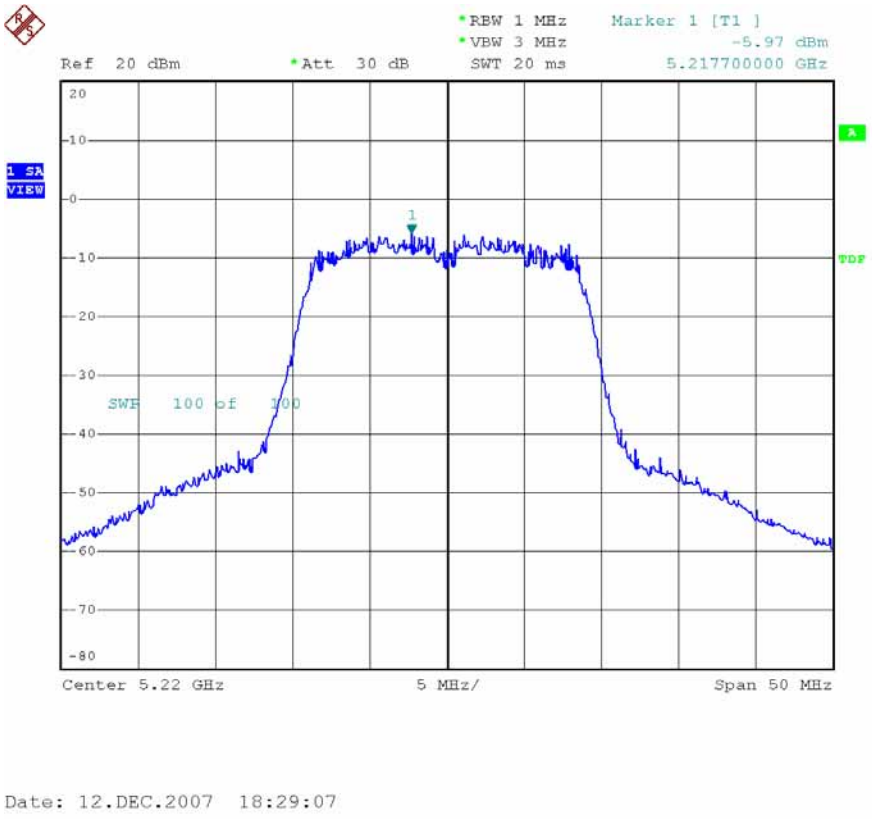
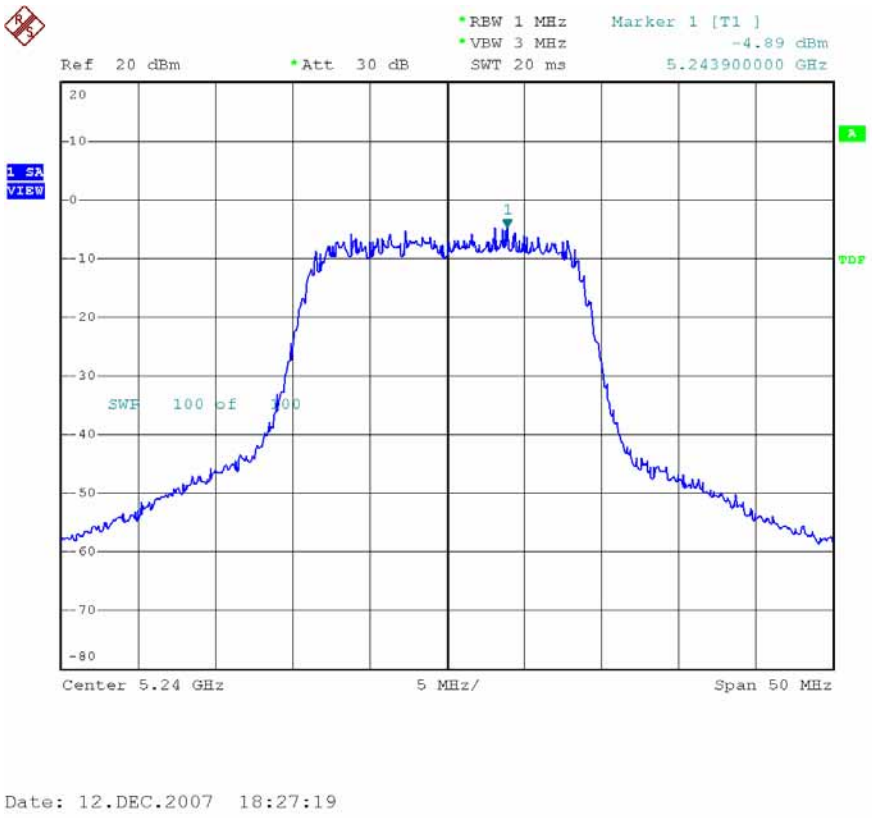
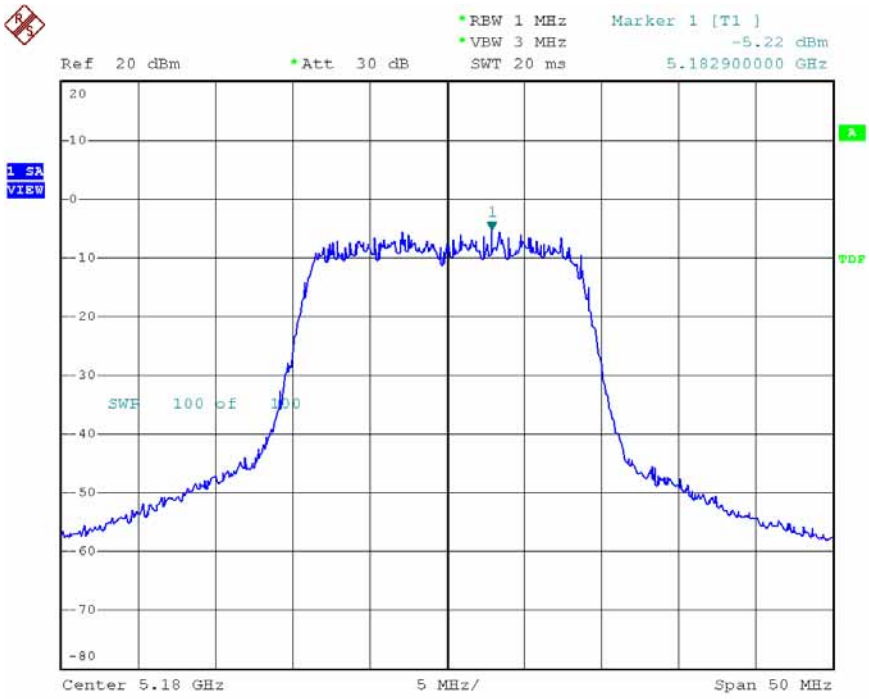
Modulation Standard: 802.11Draft n, 20MHz (130Mbps) – ANT-L1+ ANT-R3 (ANT-R3)
Channel: 44



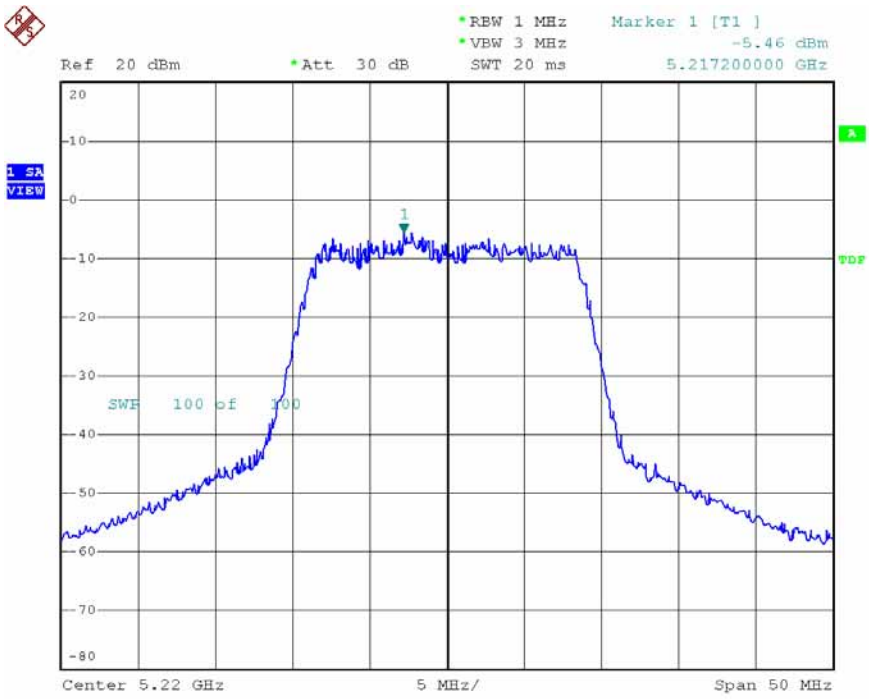
Modulation Standard: 802.11Draft n, 20MHz (130Mbps) – ANT-L1+ ANT-R3 (ANT-R3)
Channel: 48



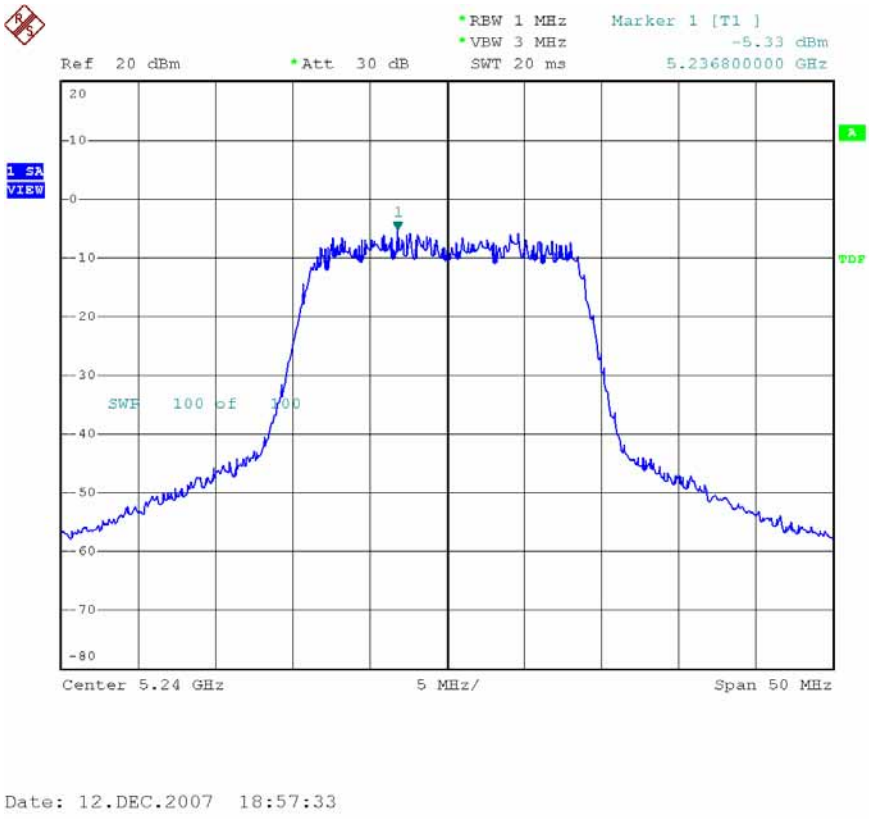
Modulation Standard: 802.11Draft n, 20MHz (130Mbps) – ANT-R1+ ANT-L3 (ANT-R1)
Channel: 36



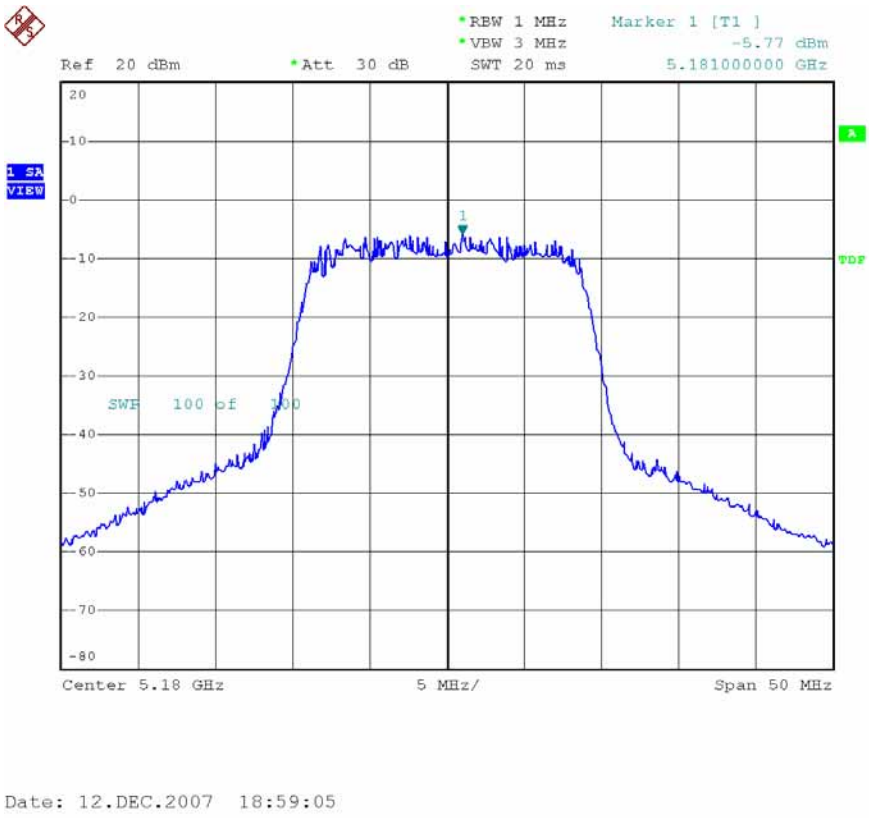
Modulation Standard: 802.11Draft n, 20MHz (130Mbps) – ANT-R1+ ANT-L3 (ANT-R1)
Channel: 44



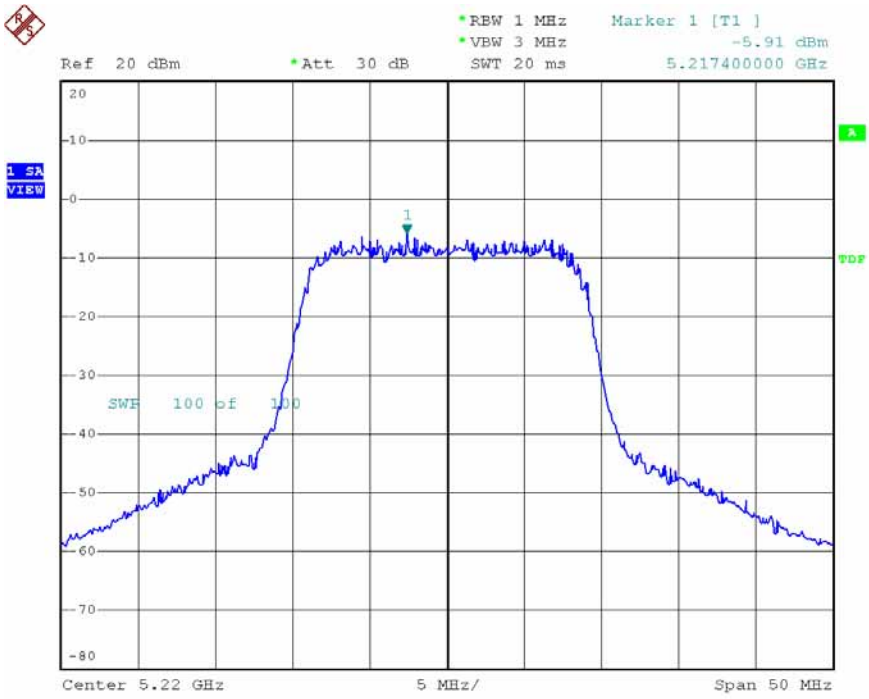
Modulation Standard: 802.11Draft n, 20MHz (130Mbps) – ANT-R1+ ANT-L3 (ANT-R1)
Channel: 48



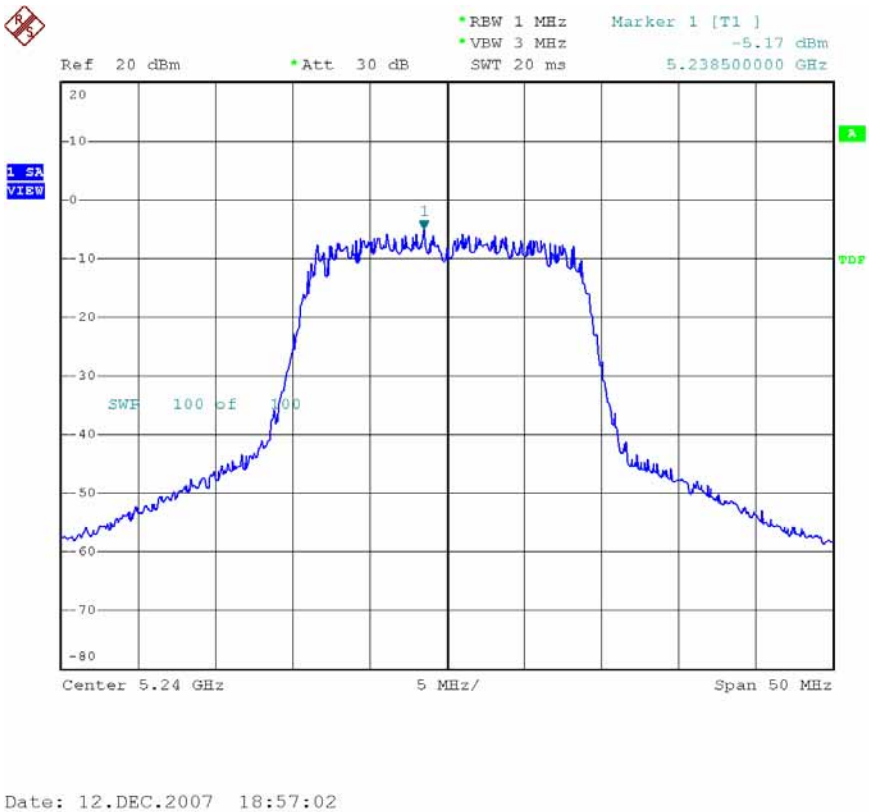
Modulation Standard: 802.11Draft n, 20MHz (130Mbps) – ANT-R1+ ANT-L3 (ANT-L3)
Channel: 36



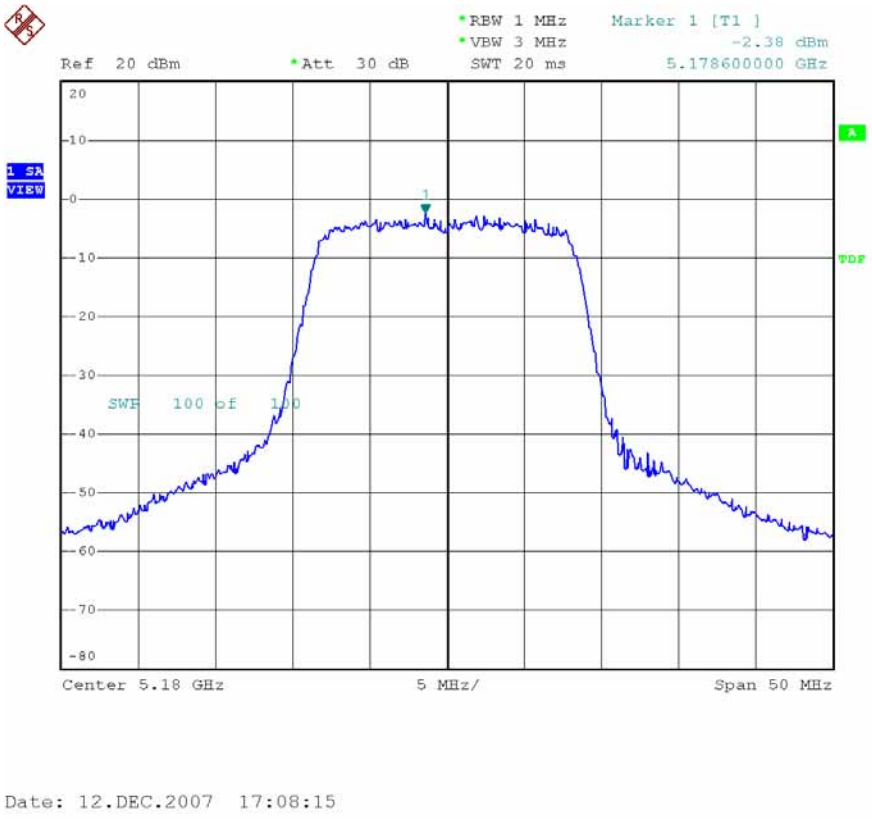
Modulation Standard: 802.11Draft n, 20MHz (130Mbps) – ANT-R1+ ANT-L3 (ANT-L3)
Channel: 44



Modulation Standard: 802.11Draft n, 20MHz (130Mbps) – ANT-R1+ ANT-L3 (ANT-L3)
Channel: 48

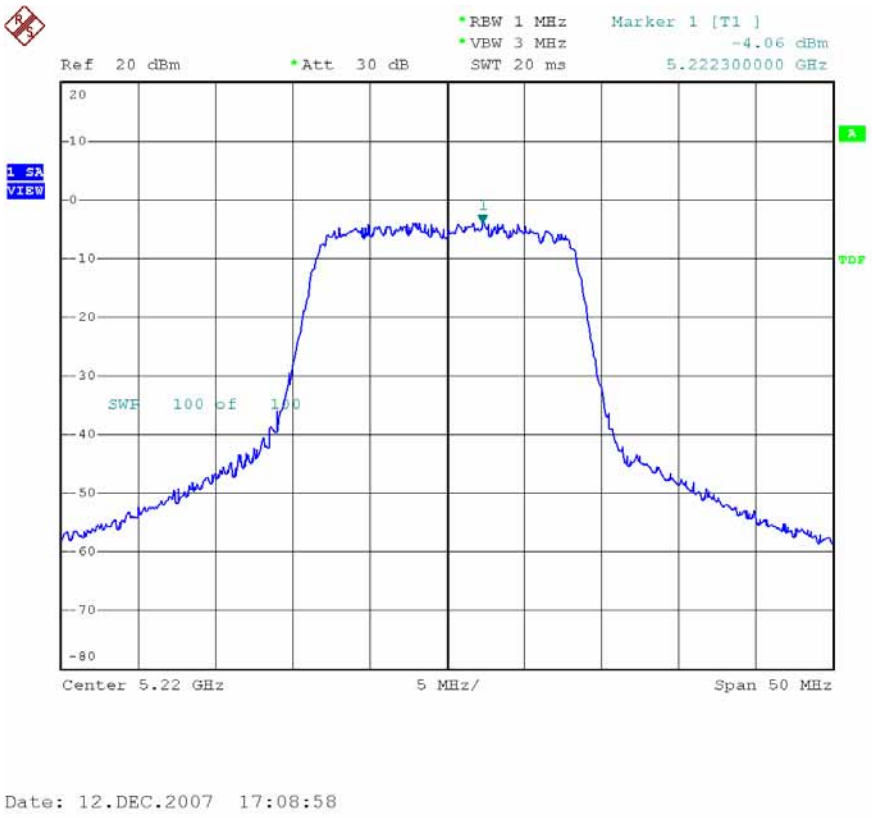


Modulation Standard: 802.11Draft n, 20MHz (130Mbps) – ANT-R1+ ANT-R3 (ANT-R1)
Channel: 36



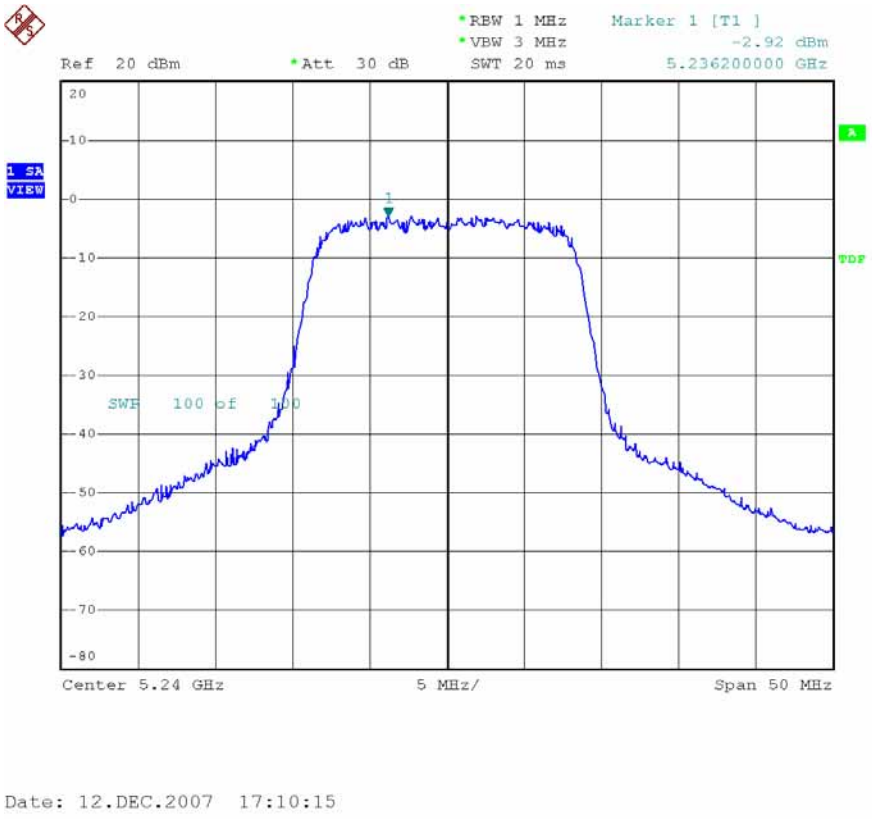
Date: 12.DEC.2007 17:08:15

Modulation Standard: 802.11Draft n, 20MHz (130Mbps) – ANT-R1+ ANT-R3 (ANT-R1)
Channel: 44

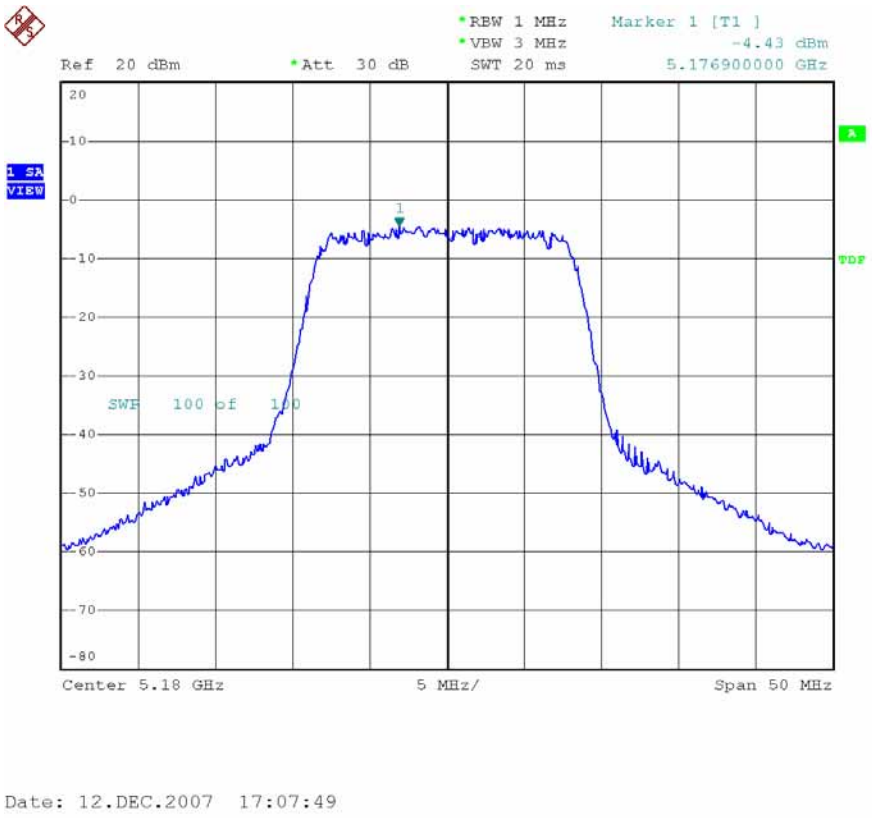


Date: 12.DEC.2007 17:08:58

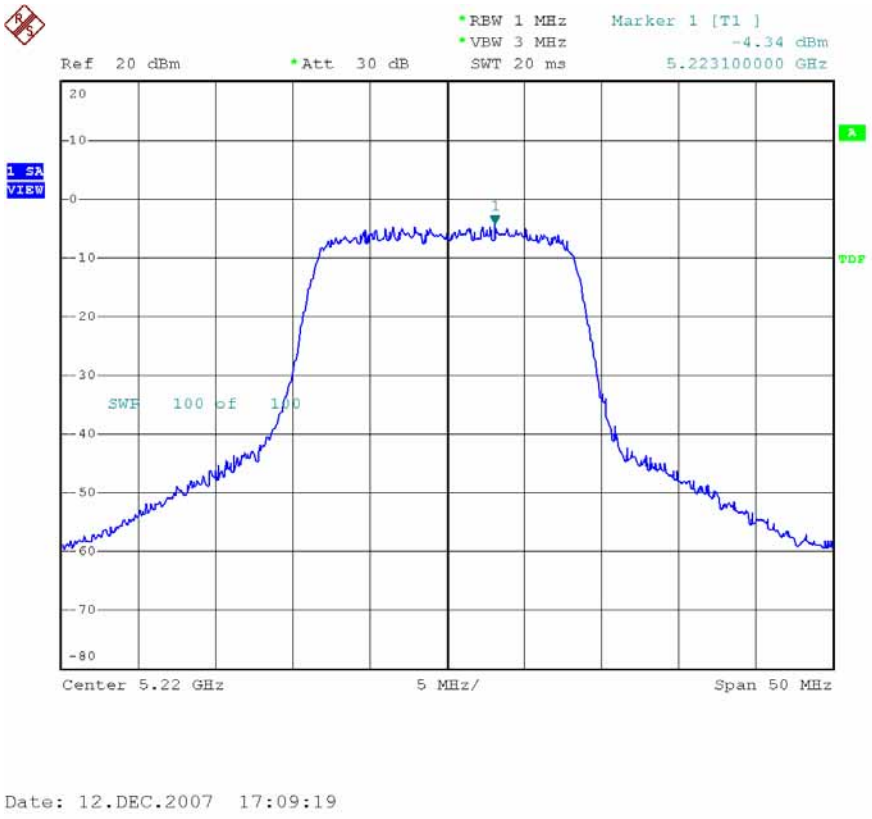
Modulation Standard: 802.11Draft n, 20MHz (130Mbps) – ANT-R1+ ANT-R3 (ANT-R1)
Channel: 48



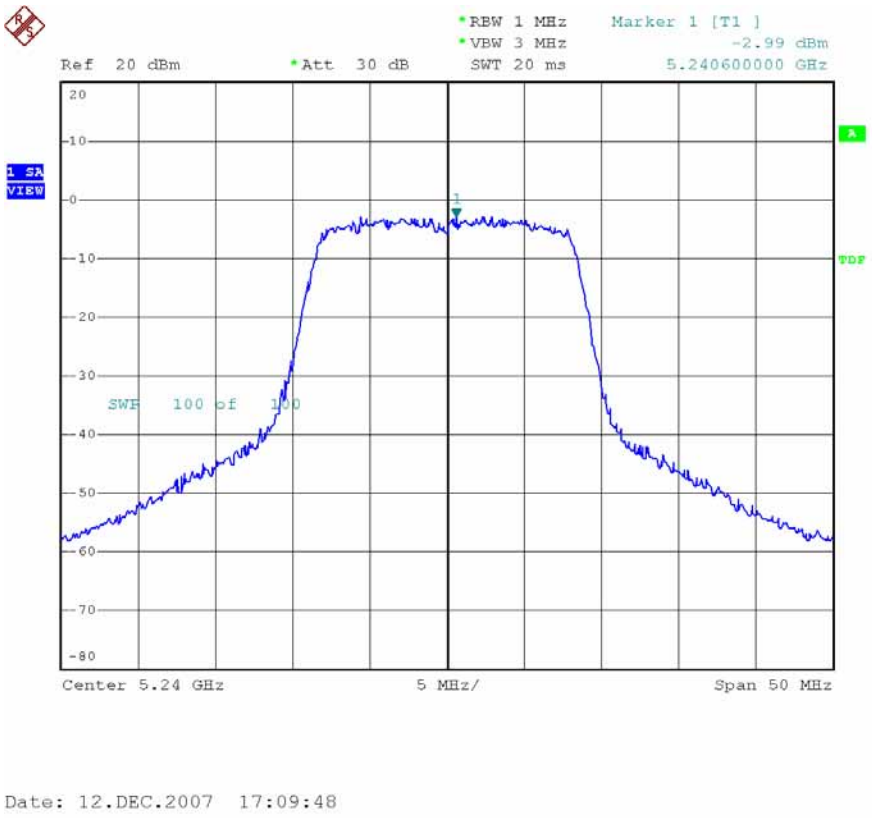
Modulation Standard: 802.11Draft n, 20MHz (130Mbps) – ANT-R1+ ANT-R3 (ANT-R3)
Channel: 36



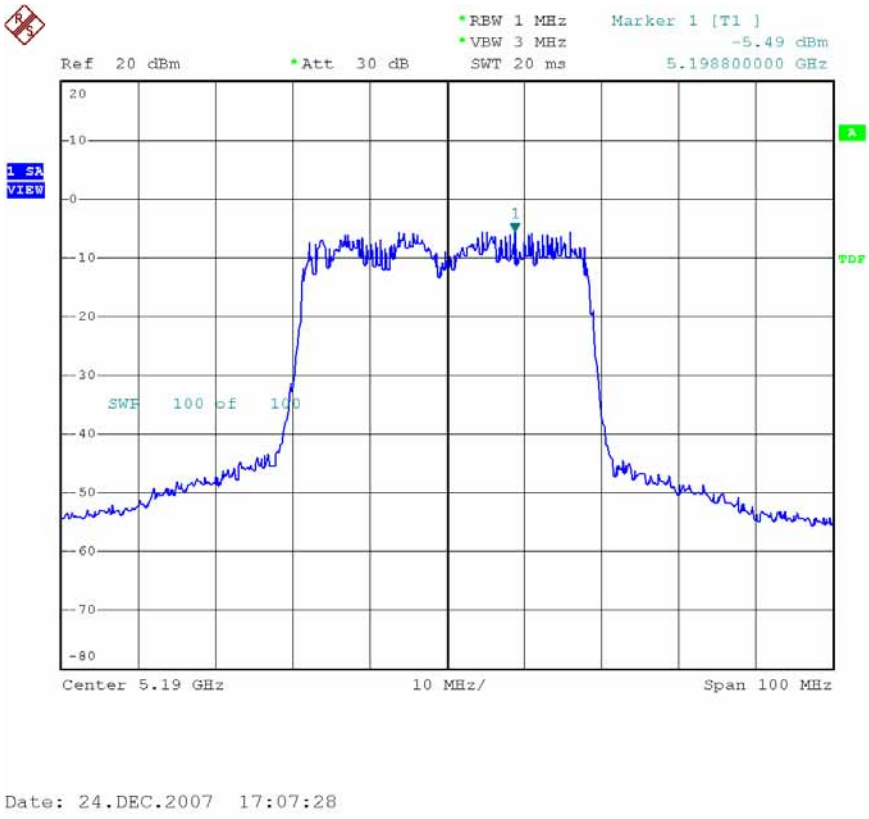
Modulation Standard: 802.11Draft n, 20MHz (130Mbps) – ANT-R1+ ANT-R3 (ANT-R3)
Channel: 44



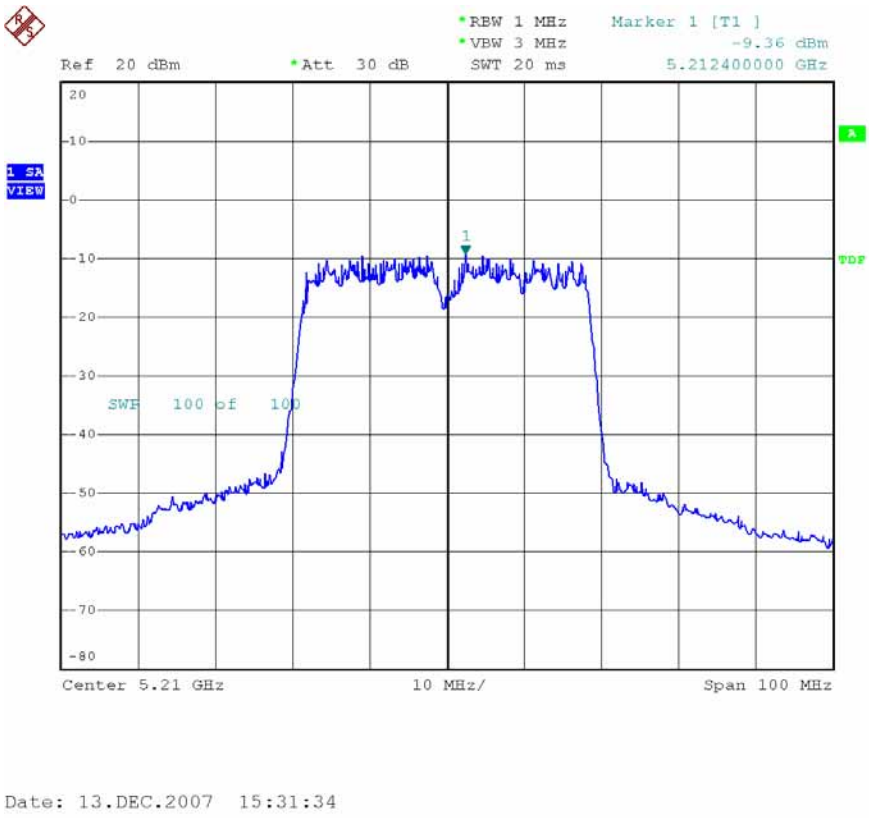
Modulation Standard: 802.11Draft n, 20MHz (130Mbps) – ANT-R1+ ANT-R3 (ANT-R3)
Channel: 48



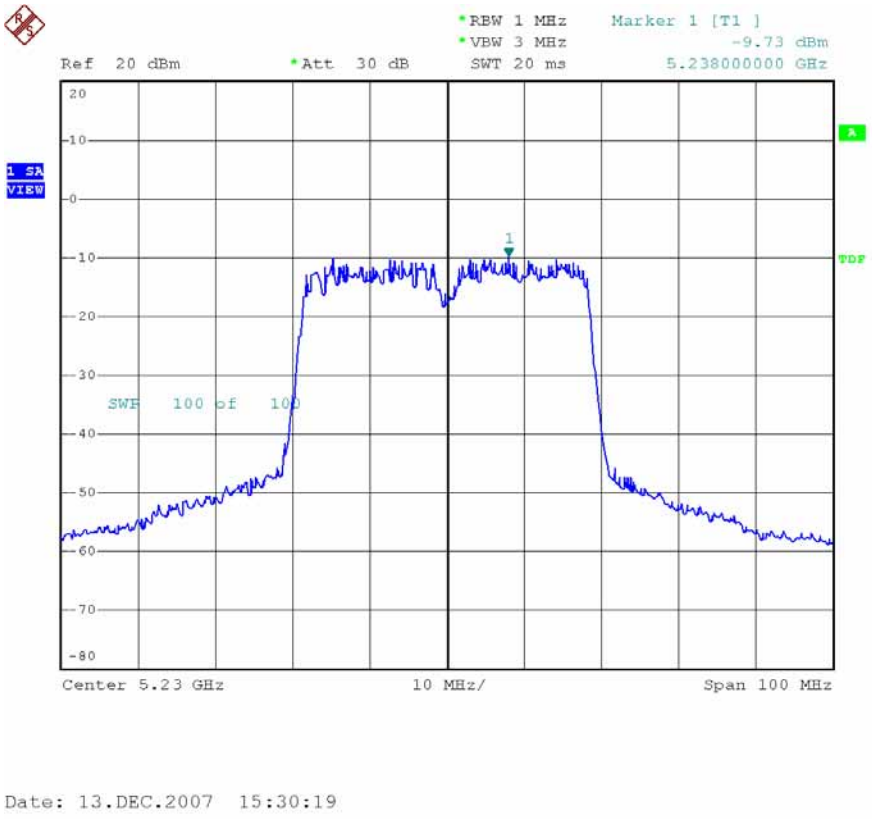
Modulation Standard: 802.11Draft n, 40MHz (270Mbps) – ANT-L1+ ANT-L3 (ANT-L1)
Channel: 38



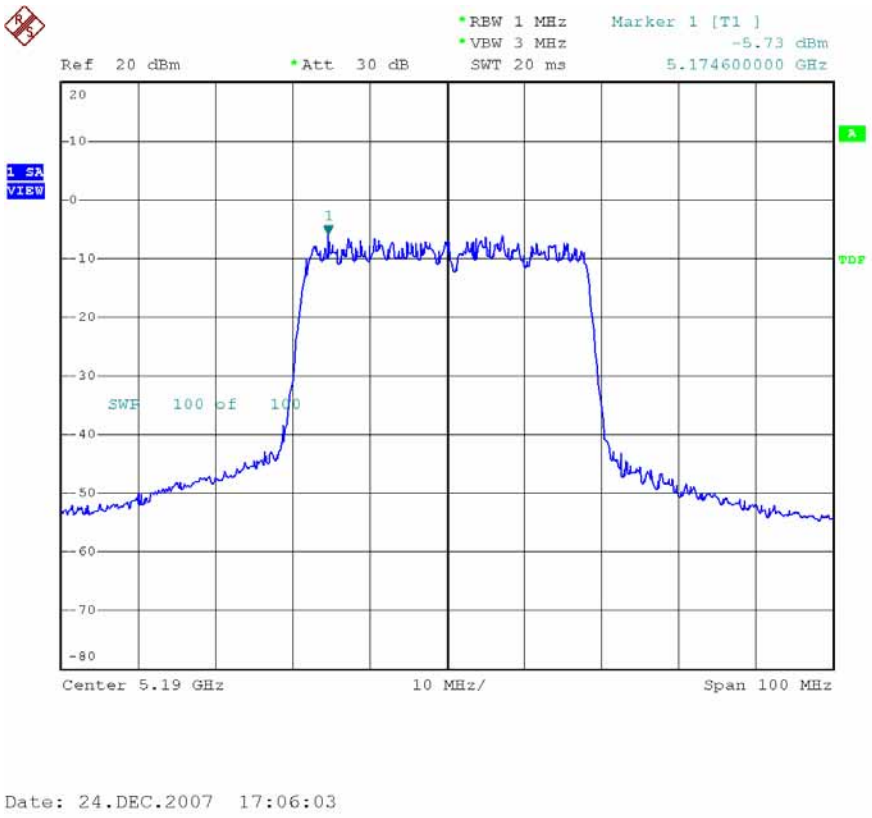
Modulation Standard: 802.11Draft n, 40MHz (270Mbps) – ANT-L1+ ANT-L3 (ANT-L1)
Channel: 42



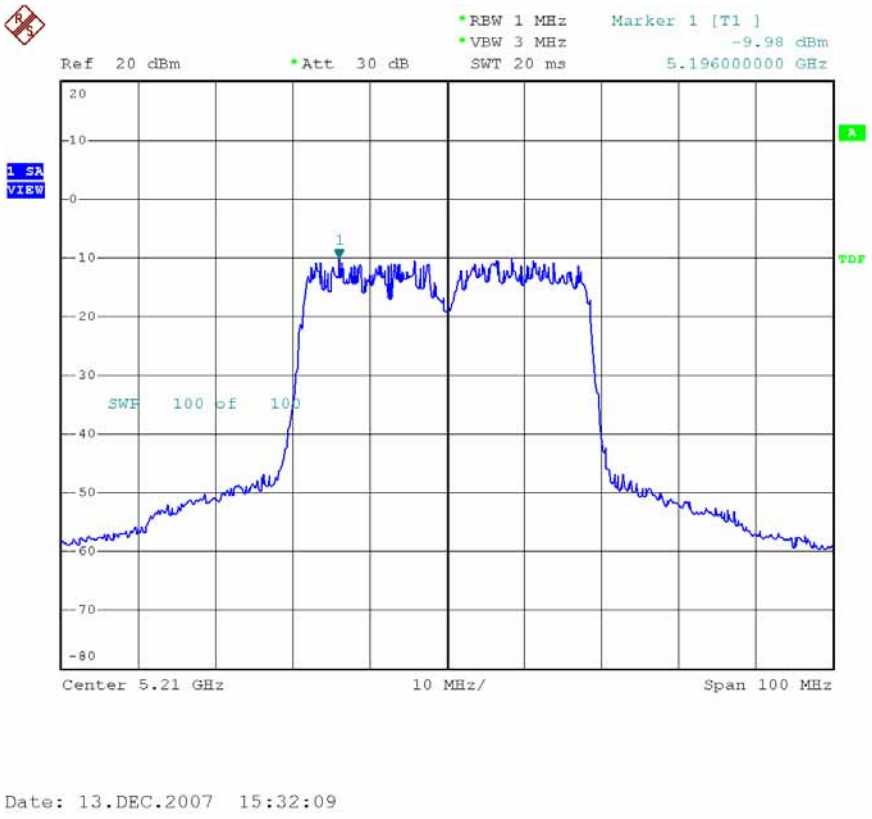
Modulation Standard: 802.11Draft n, 40MHz (270Mbps) – ANT-L1+ ANT-L3 (ANT-L1)
Channel: 46



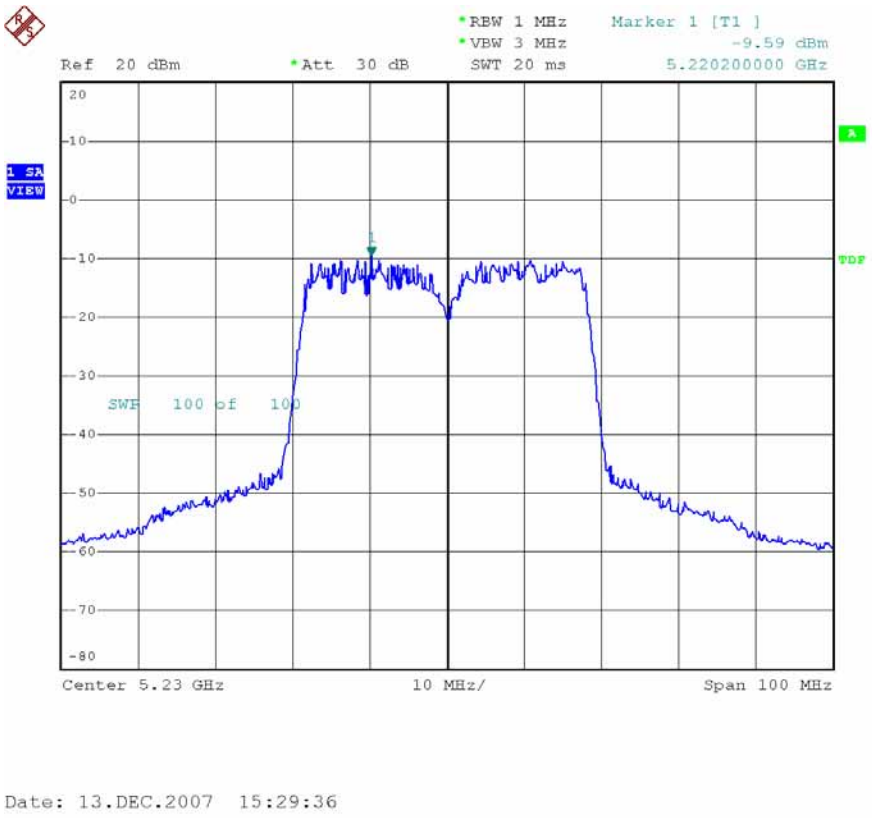
Modulation Standard: 802.11Draft n, 40MHz (270Mbps) – ANT-L1+ ANT-L3 (ANT-L3)
Channel: 38



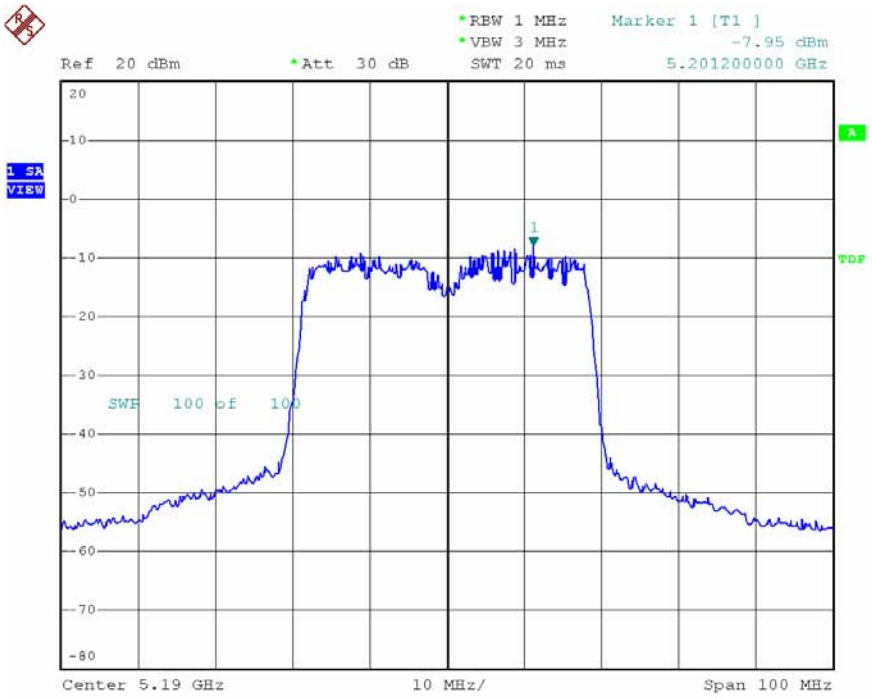
Modulation Standard: 802.11Draft n, 40MHz (270Mbps) – ANT-L1+ ANT-L3 (ANT-L3)
Channel: 42



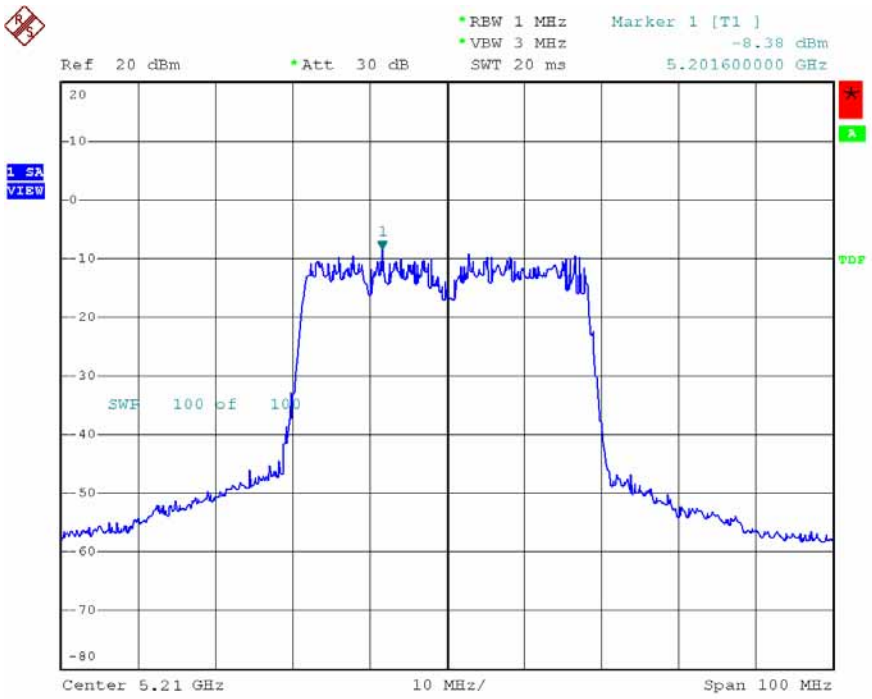
Modulation Standard: 802.11Draft n, 40MHz (270Mbps) – ANT-L1+ ANT-L3 (ANT-L3)
Channel: 46



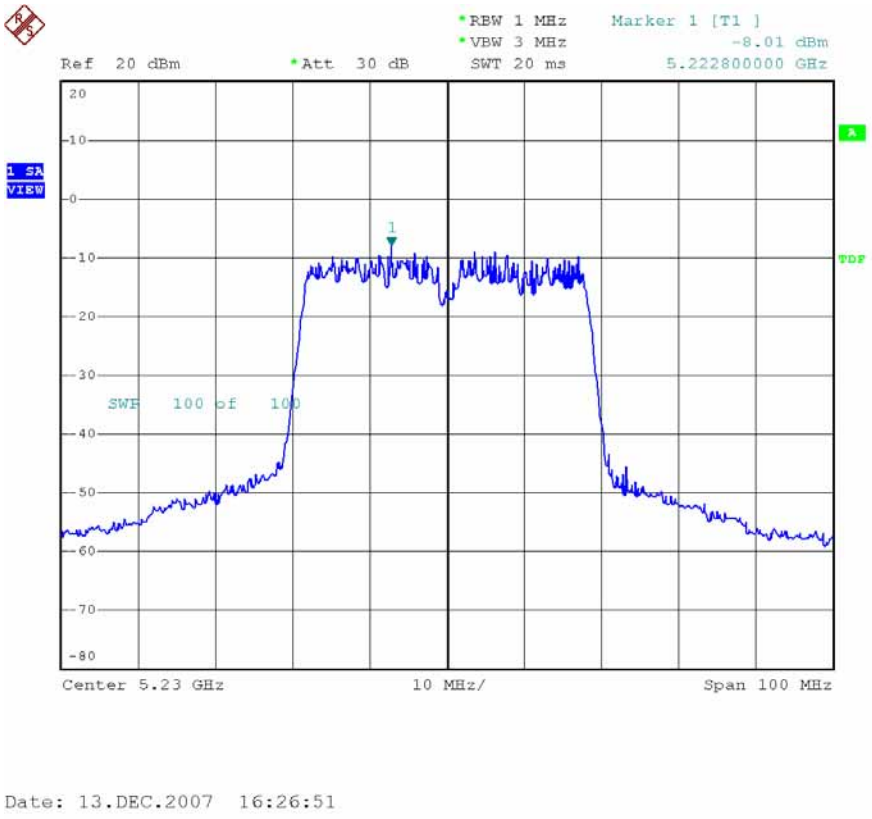
Modulation Standard: 802.11Draft n, 40MHz (270Mbps) – ANT-L1+ ANT-R3 (ANT-L1)
Channel: 38



Modulation Standard: 802.11Draft n, 40MHz (270Mbps) – ANT-L1+ ANT-R3 (ANT-L1)
Channel: 42



Modulation Standard: 802.11Draft n, 40MHz (270Mbps) – ANT-L1+ ANT-R3 (ANT-L1)
Channel: 46



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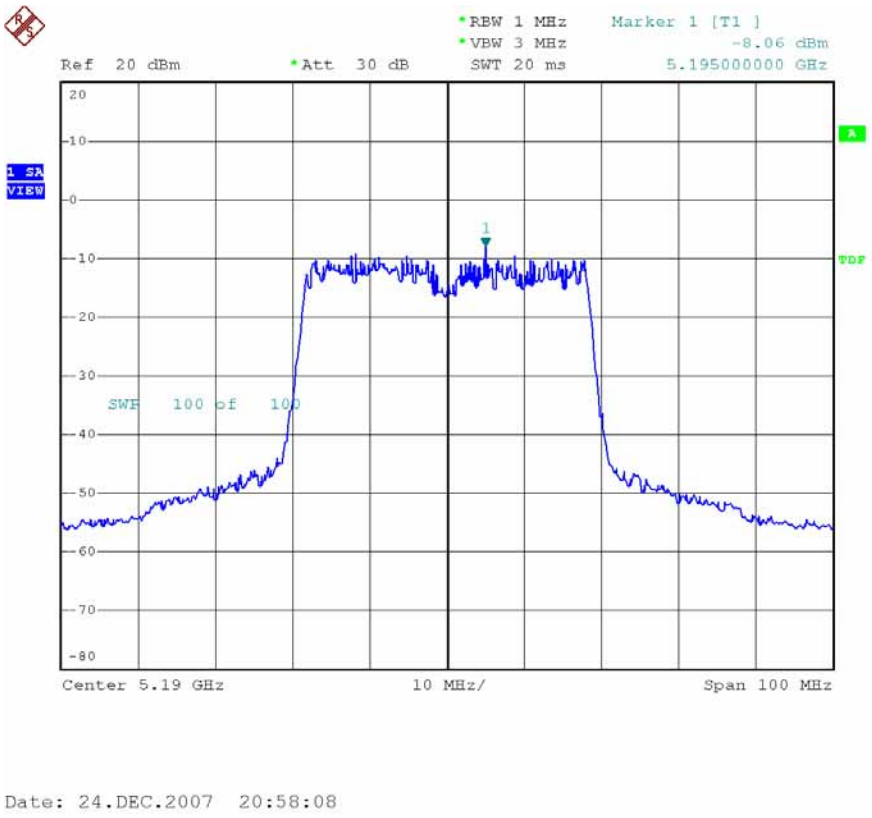
Channel: 38



Date: 24.DEC.2007 20:58:08

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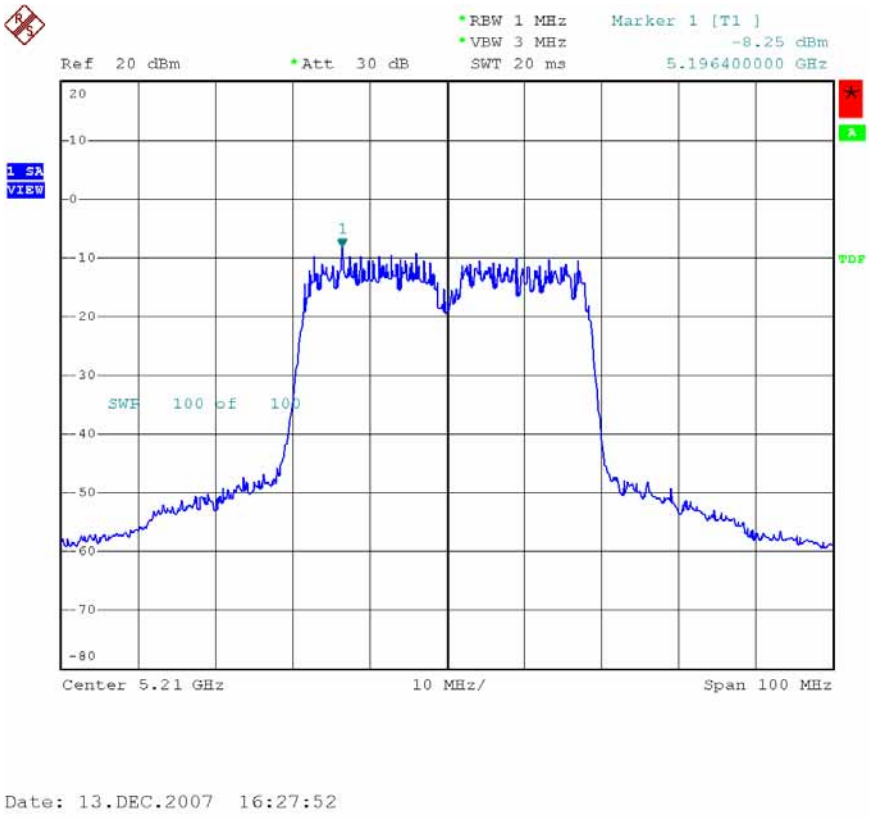
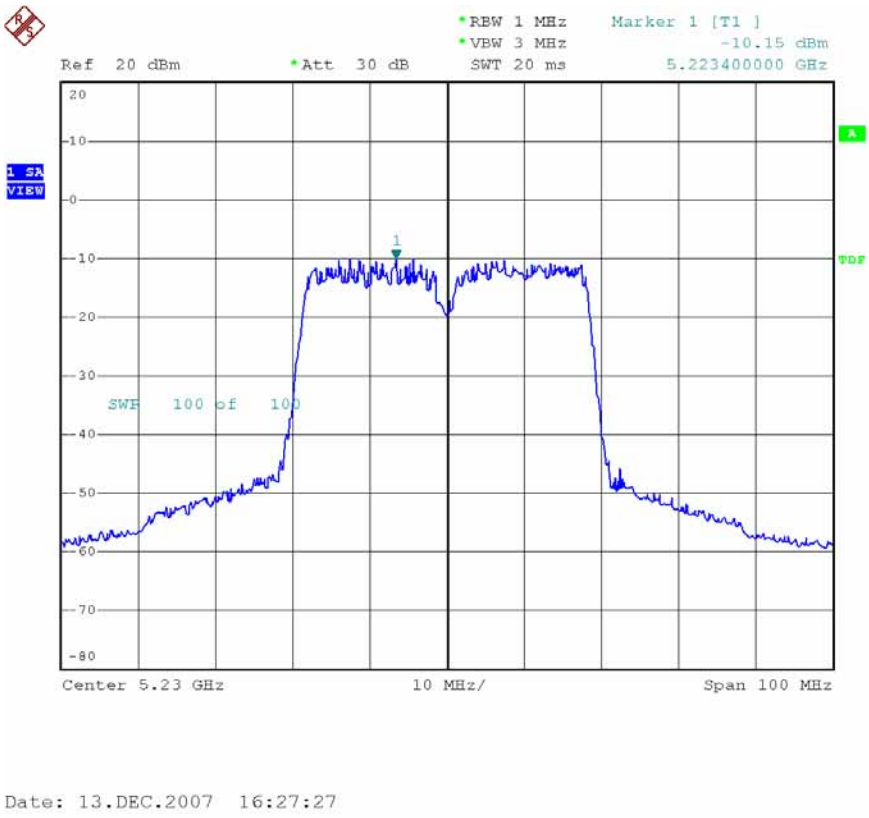
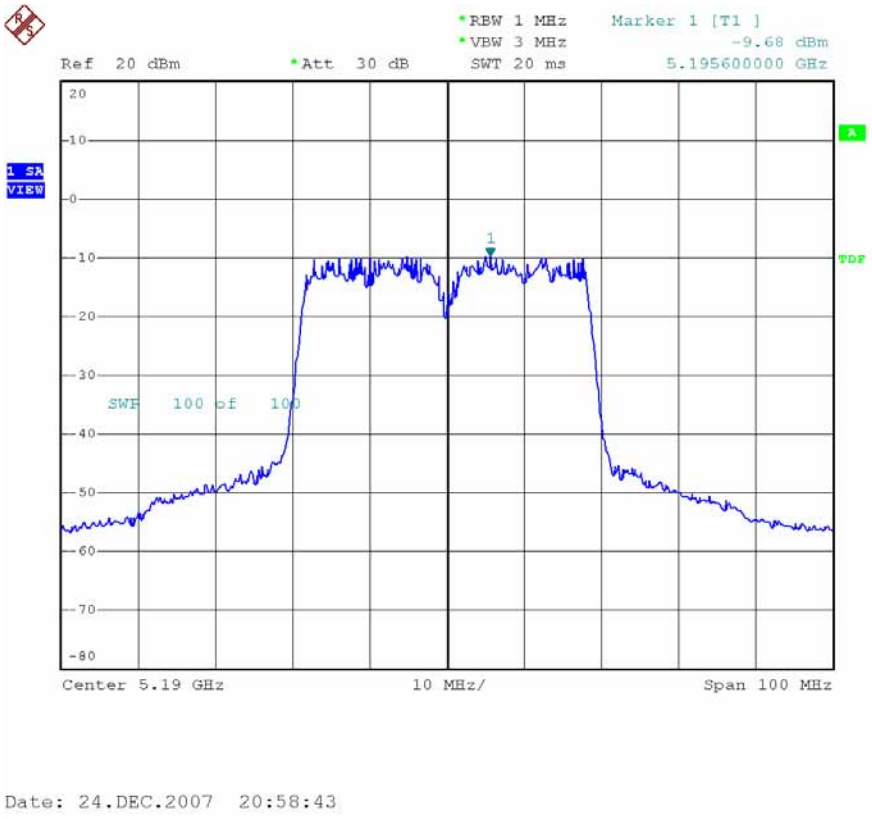
Channel: 42



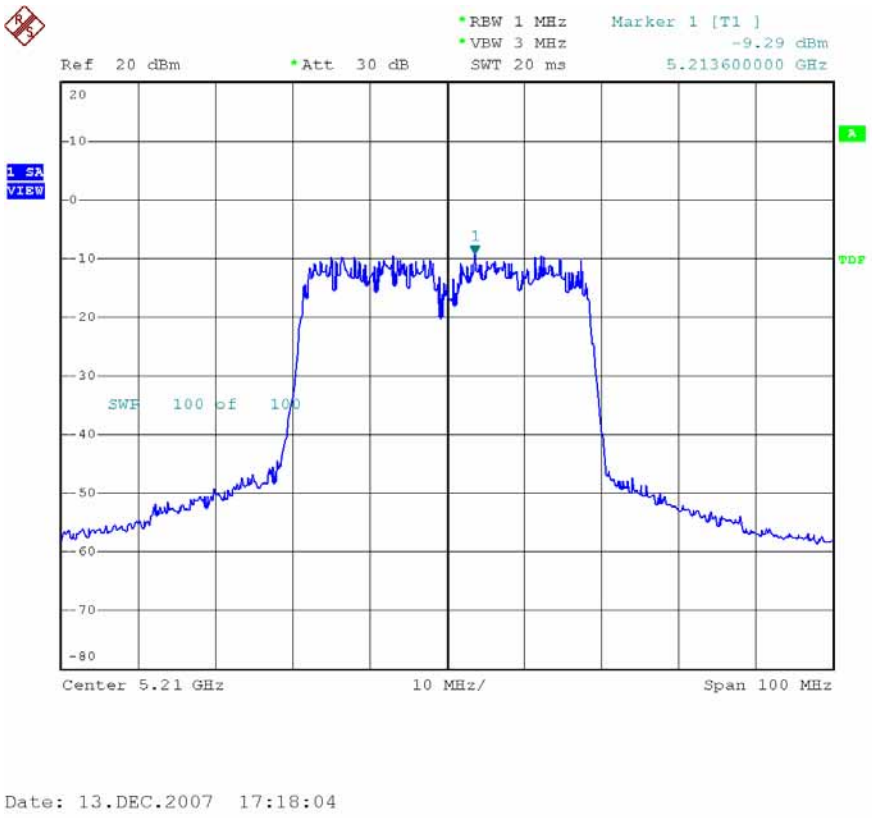
Modulation Standard: 802.11Draft n, 40MHz (270Mbps) – ANT-L1+ ANT-R3 (ANT-R3)
Channel: 46



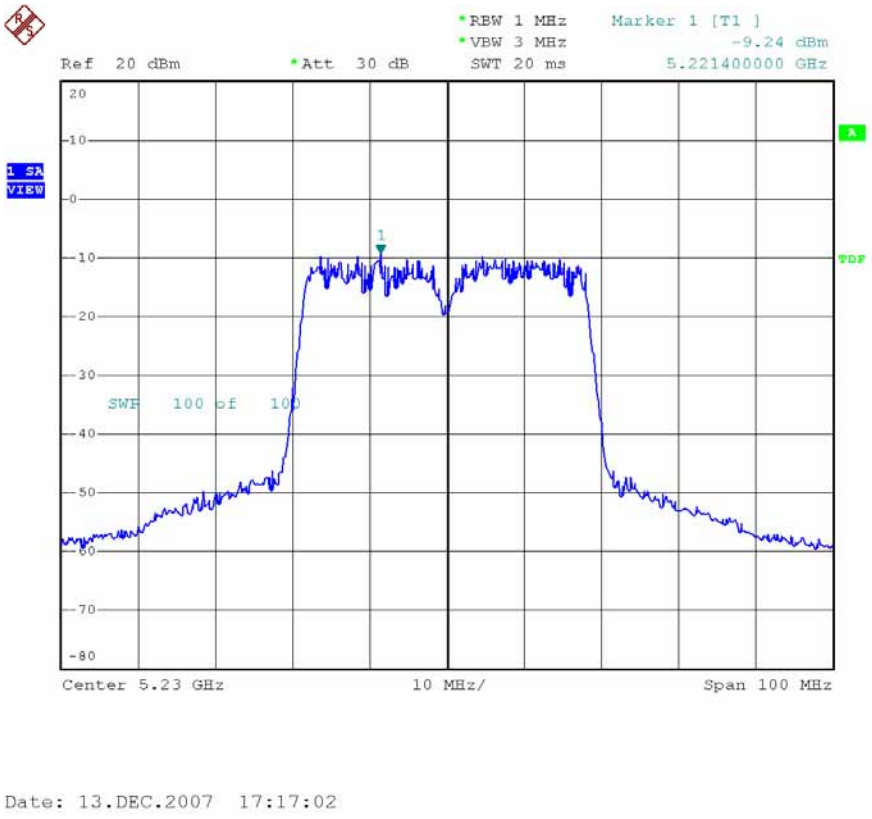
Modulation Standard: 802.11Draft n, 40MHz (270Mbps) – ANT-R1+ ANT-L3 (ANT-R1)
Channel: 38



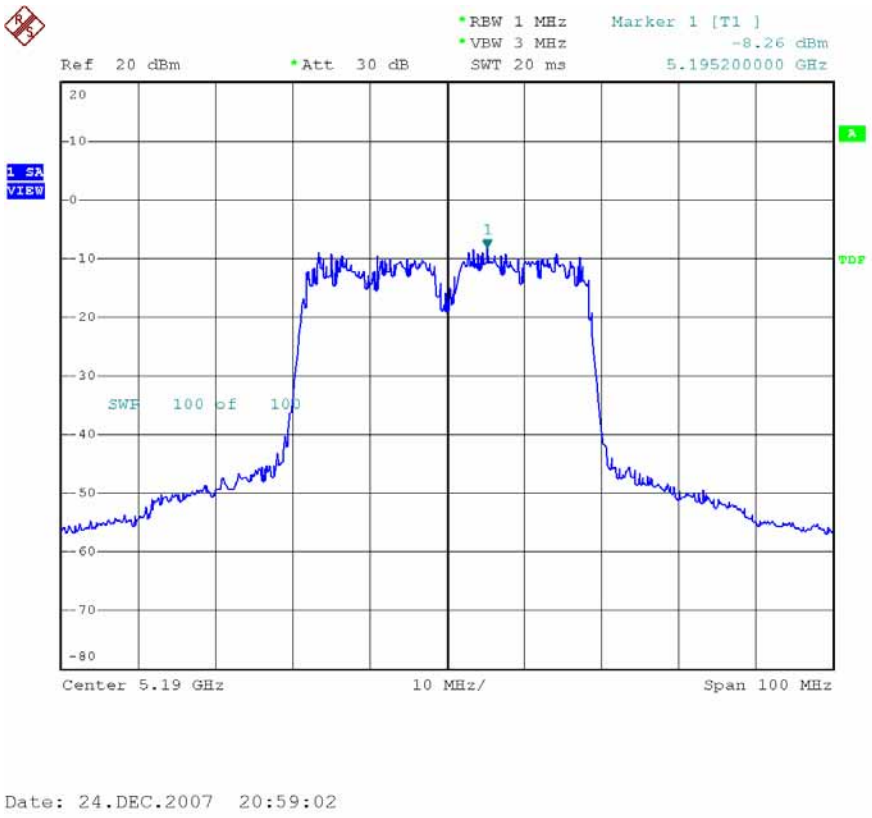
Modulation Standard: 802.11Draft n, 40MHz (270Mbps) – ANT-R1+ ANT-L3 (ANT-R1)
Channel: 42



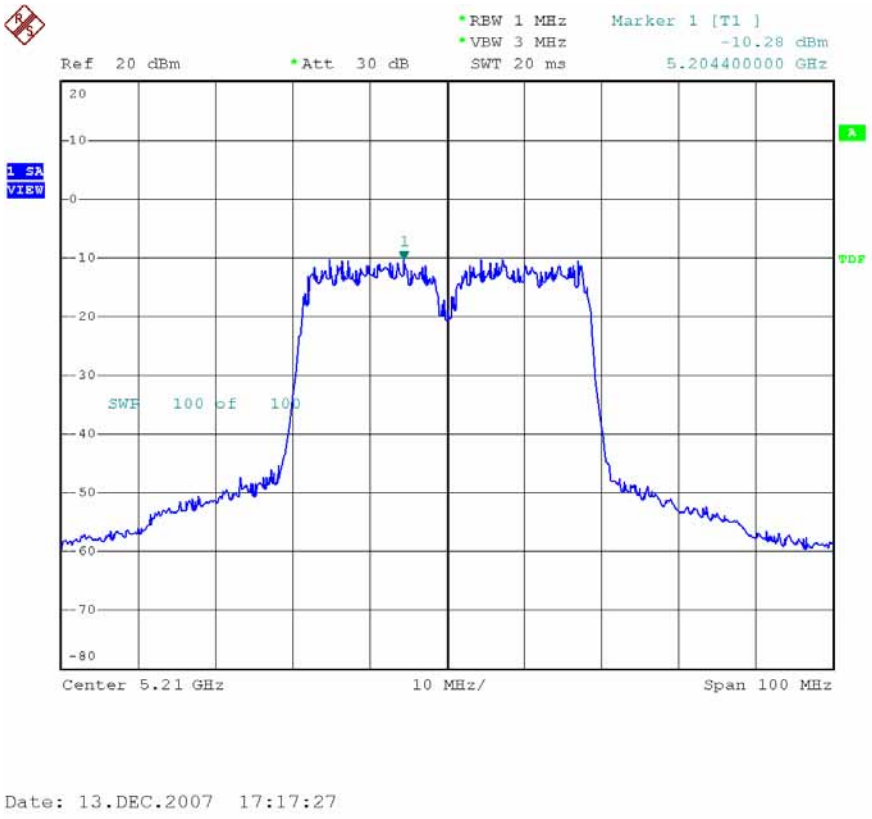
Modulation Standard: 802.11Draft n, 40MHz (270Mbps) – ANT-R1+ ANT-L3 (ANT-R1)
Channel: 46



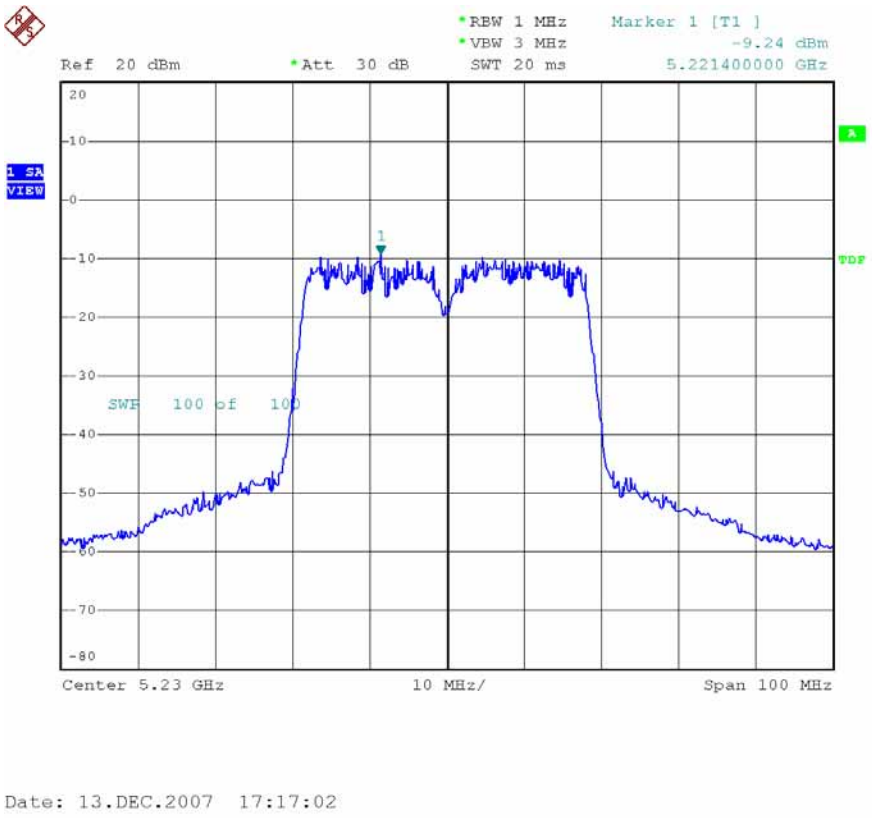
Modulation Standard: 802.11Draft n, 40MHz (270Mbps) – ANT-R1+ ANT-L3 (ANT-L3)
Channel: 38



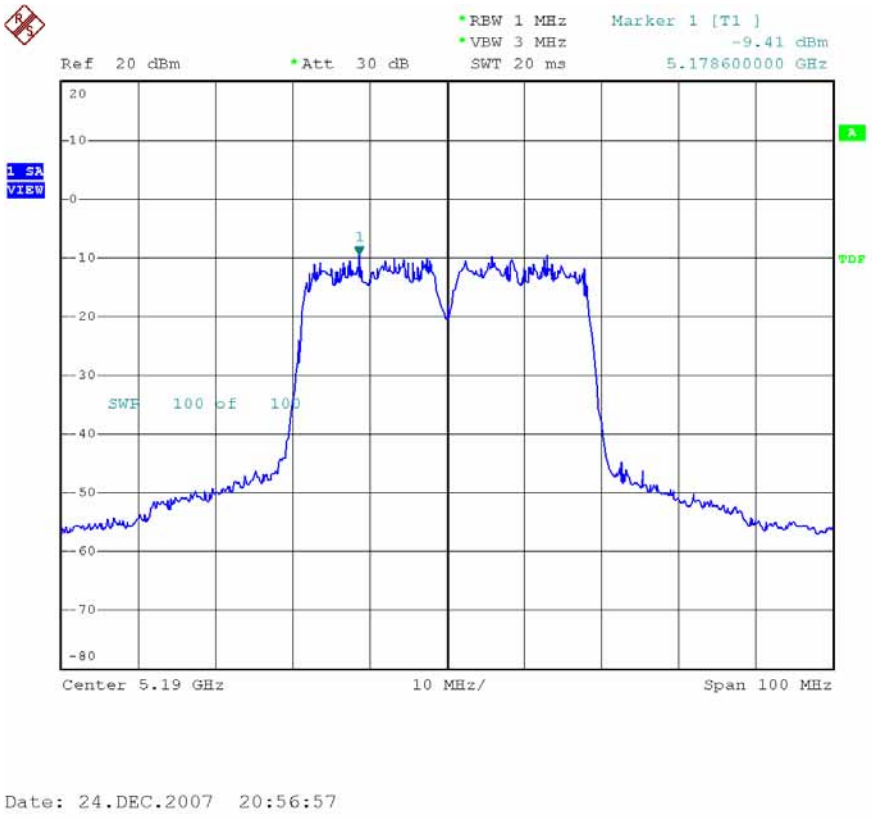
Modulation Standard: 802.11Draft n, 40MHz (270Mbps) – ANT-R1+ ANT-L3 (ANT-L3)
Channel: 42



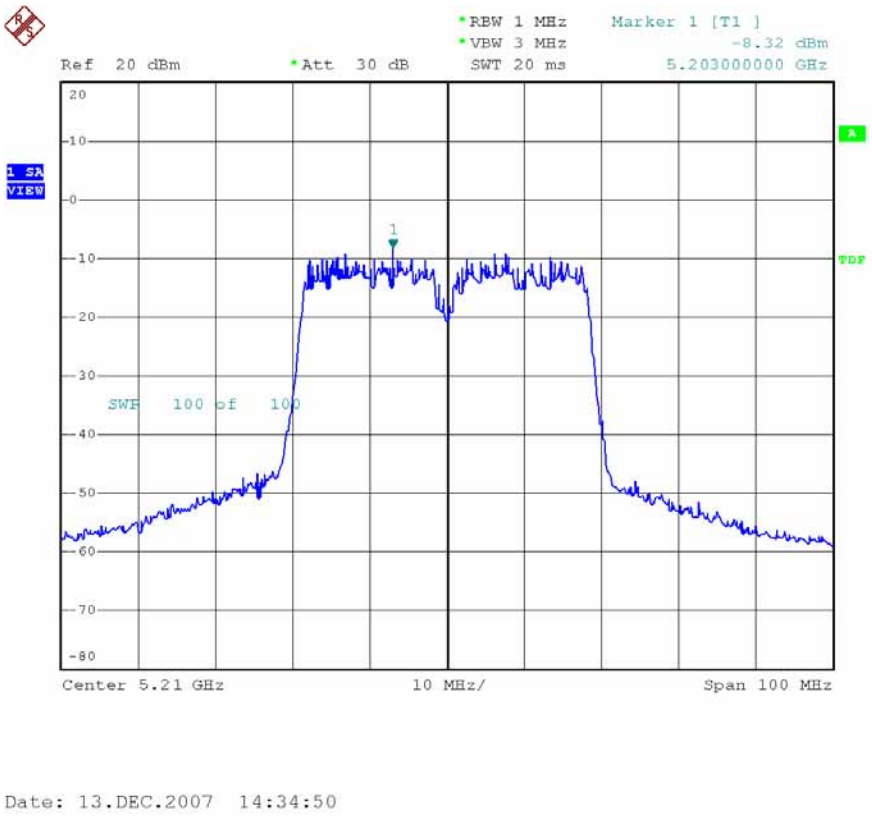
Modulation Standard: 802.11Draft n, 40MHz (270Mbps) – ANT-R1+ ANT-L3 (ANT-L3)
Channel: 46



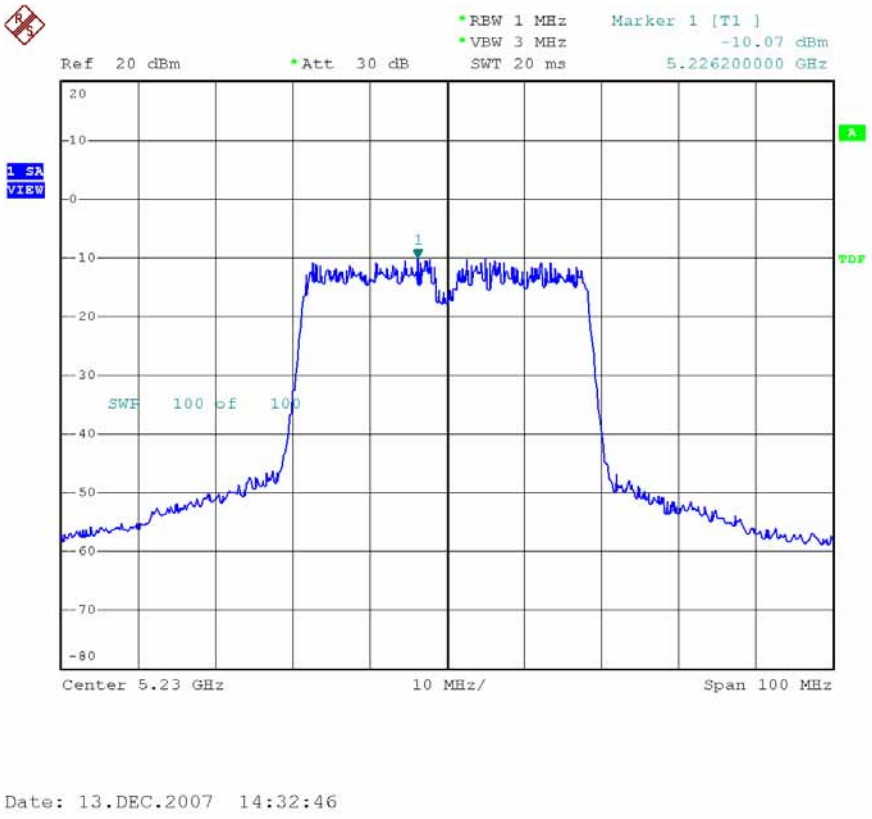
Modulation Standard: 802.11Draft n, 40MHz (270Mbps) – ANT-R1+ ANT-R3 (ANT-R1)
Channel: 38



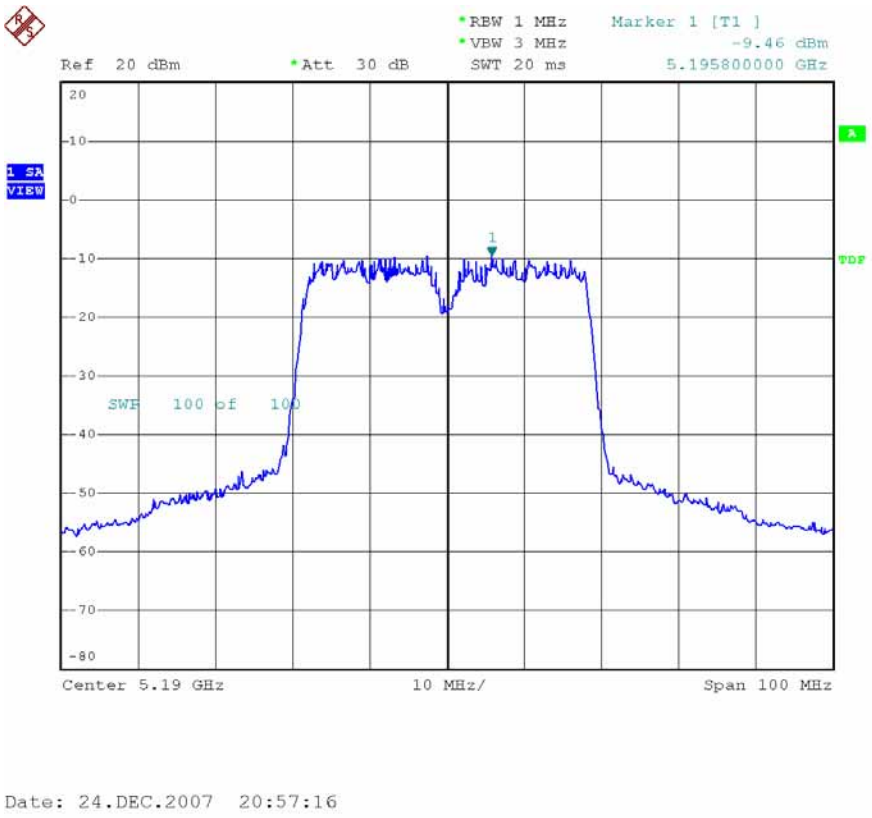
Modulation Standard: 802.11Draft n, 40MHz (270Mbps) – ANT-R1+ ANT-R3 (ANT-R1)
Channel: 42



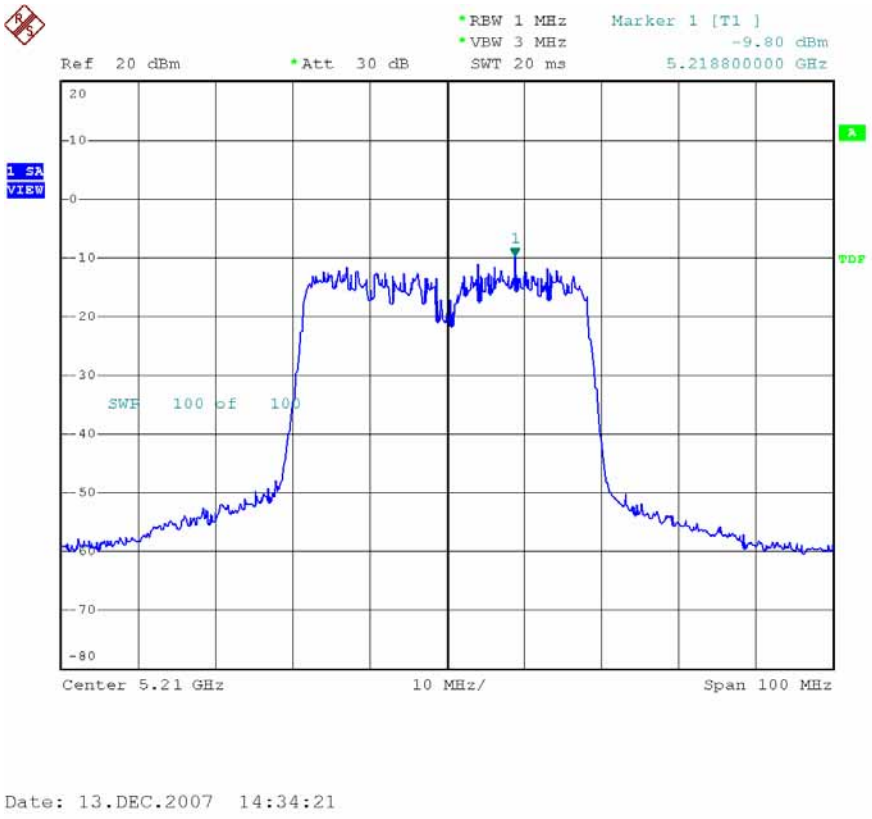
Modulation Standard: 802.11Draft n, 40MHz (270Mbps) – ANT-R1+ ANT-R3 (ANT-R1)
Channel: 46



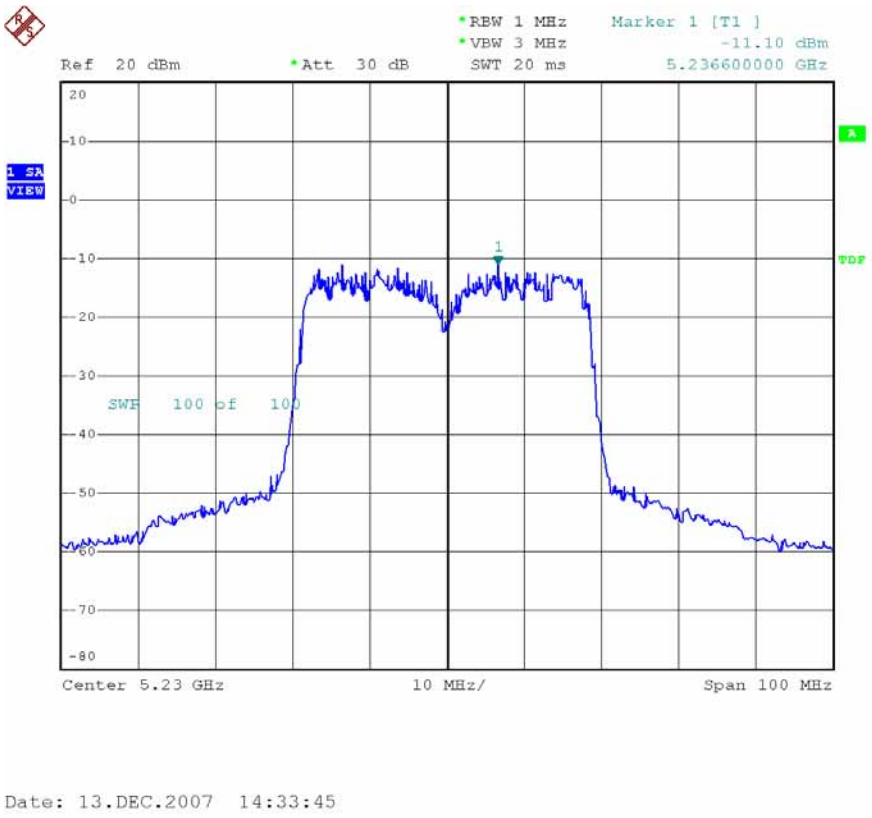
Modulation Standard: 802.11Draft n, 40MHz (270Mbps) – ANT-R1+ ANT-R3 (ANT-R3)
Channel: 38



Modulation Standard: 802.11Draft n, 40MHz (270Mbps) – ANT-R1+ ANT-R3 (ANT-R3)
Channel: 42



Modulation Standard: 802.11Draft n, 40MHz (270Mbps) – ANT-R1+ ANT-R3 (ANT-R3)
Channel: 46

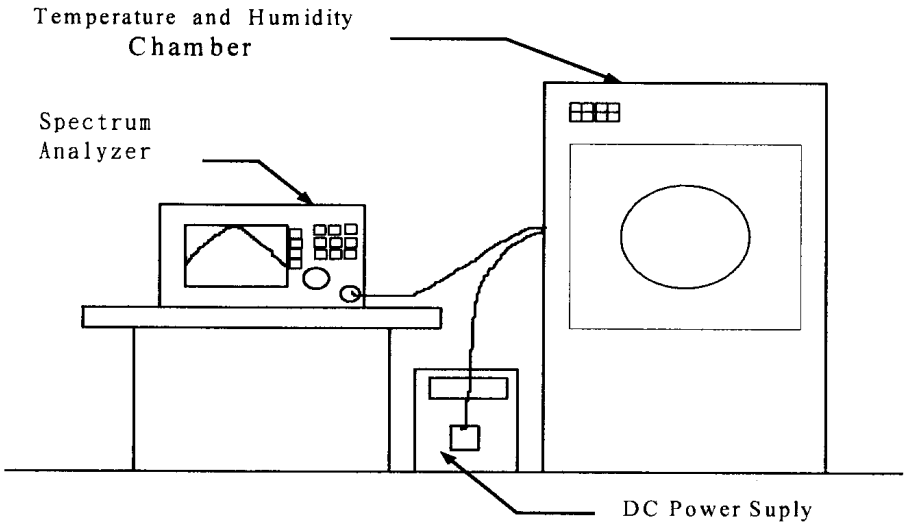


9. Frequency Stability

9.1. Test Procedure

1. The EUT was placed inside the Temperature and Humidity chamber.
2. The transmitter output was connected to spectrum analyzer.
3. Turn the EUT on and couple its output to a spectrum analyzer.
4. Turn the EUT off and set the chamber to the highest temperature specified.
5. Allow sufficient time (approximately 30 min) for the temperature of the chamber to stabilize, turn the EUT on and measure the operating frequency after 2, 5, and 10 minutes.
6. Repeat step 2 and 3 with the temperature chamber set to the lowest temperature.
7. The test chamber was allowed to stabilize at +20 degree C for a minimum of 30 minutes. The supply voltage was then adjusted on the EUT from 85% to 115% and the frequency record.

9.2. Test Setup Layout



9.3. Measurement equipment

Instrument/Ancillary	Model No.	Manufacturer	Serial No.	Calibration Date	Valid Date.
Spectrum Analyzer	FSP40	R&S	100047	2007/01/23	2008/01/22
Temperature Chamber	TMJ-9712	T MACHINE	T-12-040111	2007/01/24	2008/01/23
DC Power Supply	GPD-3030	GM	7020936	N/A	N/A
AC POWER CONVERTER	AFC-11005	APC	F103120008	N/A	N/A

9.4. Test Result and Data

Operating frequency: 5240 MHz							
Temp (°C)	Power supply (V)	2 minute		5 minute		10 minute	
		(MHz)	(%)	(MHz)	(%)	(MHz)	(%)
50	93.5	5239.9584	-0.000794	5239.9242	-0.001447	5239.9893	-0.000204
	110	5239.9753	-0.000471	5239.9483	-0.000987	5239.9985	-0.000029
	126.5	5239.9884	-0.000221	5239.9946	-0.000103	5239.9744	-0.000489
40	93.5	5239.9876	-0.000237	5239.9855	-0.000277	5240.0052	0.000099
	110	5239.9768	-0.000443	5240.0219	0.000418	5239.9775	-0.000429
	126.5	5239.9649	-0.000670	5239.9833	-0.000319	5239.9789	-0.000403
30	93.5	5239.9808	-0.000366	5240.0052	0.000099	5239.9679	-0.000613
	110	5239.9877	-0.000235	5240.0061	0.000116	5239.9849	-0.000288
	126.5	5239.9968	-0.000061	5240.0127	0.000242	5239.9726	-0.000523
20	93.5	5240.0025	0.000048	5240.0084	0.000160	5240.0032	0.000061
	110	5240.0044	0.000084	5239.9878	-0.000233	5240.0102	0.000195
	126.5	5240.0073	0.000139	5240.0022	0.000042	5239.9514	-0.000927
10	93.5	5240.0126	0.000240	5240.0169	0.000323	5240.0021	0.000040
	110	5240.0024	0.000046	5239.9898	-0.000195	5240.0174	0.000332
	126.5	5240.0008	0.000015	5240.0024	0.000046	5239.9941	-0.000113
0	93.5	5239.9747	-0.000483	5239.9751	-0.000475	5239.9653	-0.000662
	110	5239.9846	-0.000294	5239.9862	-0.000263	5239.9564	-0.000832
	126.5	5239.9755	-0.000468	5239.9788	-0.000405	5239.9744	-0.000489
-10	93.5	5240.0164	0.000313	5239.9831	-0.000323	5240.0295	0.000563
	110	5240.0233	0.000445	5240.0041	0.000078	5240.0181	0.000345
	126.5	5239.9962	-0.000073	5239.9876	-0.000237	5239.9877	-0.000235
-20	93.5	5240.0271	0.000517	5240.0084	0.000160	5240.0168	0.000321
	110	5240.0052	0.000099	5240.0073	0.000139	5240.0272	0.000519
	126.5	5240.0143	0.000273	5240.0125	0.000239	5240.0184	0.000351
-30	93.5	5240.0034	0.000065	5240.0034	0.000065	5240.0085	0.000162
	110	5240.0216	0.000412	5240.0032	0.000061	5240.0193	0.000368
	126.5	5240.0145	0.000277	5240.0007	0.000013	5240.0049	0.000094

Limit :

Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the users manual.

10. Band Edges Measurement

10.1. Test Procedure

1. The transmitter output was connected to the spectrum analyzer via a low lose cable.
2. Set both RBW and VBW of spectrum analyzer to 100 KHz with convenient frequency span including 100 MHz bandwidth from band edge
3. The band edges was measured and recorded..

10.2. Measurement equipment

Instrument/Ancillary	Model No.	Manufacturer	Serial No.	Calibration Date	Valid Date
EMI Receiver	85460A	HP	3807A00454	2007/06/05	2008/06/04
Spectrum Analyzer	FSP40	R&S	10047	2007/01/23	2008/01/22
Horn Antenna	3115	EMCO	31589	2007/03/05	2008/03/04
Horn Antenna	3116	EMCO	31970	2007/03/06	2008/03/05
Bilog Antenna	CBL6112B	Schaffner	2840	2007/04/26	2008/04/25
Amplifier	8449B	Agilent	3008A01954	2007/01/12	2008/01/11
Amplifier	8447D	Agilent	2944A10531	2007/09/26	2008/09/25
Amplifier	PA-840	Com-Power	711885	2007/08/28	2008/08/27

10.3. Test Result and Data

Test Mode 1: 802.11a, Transmit Rate: 6Mbps, ANT-L1

Test Date: Dec. 12, 2007 Temperature: 23℃ Humidity: 60% Atmospheric pressure: 1008 hPa

Channel	Frequency (MHz)	Maximum Value In Frequency (MHz)	Maximum Value (dBm)
36	5180	5149.00	-48.76

Test Mode 2: 802.11a, Transmit Rate: 6Mbps, ANT-L3

Test Date: Dec. 12, 2007 Temperature: 23℃ Humidity: 60% Atmospheric pressure: 1008 hPa

Channel	Frequency (MHz)	Maximum Value In Frequency (MHz)	Maximum Value (dBm)
36	5180	5136.60	-53.32

Test Mode 3: 802.11a, Transmit Rate: 6Mbps, ANT-R1

Test Date: Dec. 12, 2007 Temperature: 23℃ Humidity: 60% Atmospheric pressure: 1008 hPa

Channel	Frequency (MHz)	Maximum Value In Frequency (MHz)	Maximum Value (dBm)
36	5180	5149.60	-49.51

Test Mode 4: 802.11a, Transmit Rate: 6Mbps, ANT-R3

Test Date: Dec. 12, 2007 Temperature: 23℃ Humidity: 60% Atmospheric pressure: 1008 hPa

Channel	Frequency (MHz)	Maximum Value In Frequency (MHz)	Maximum Value (dBm)
36	5180	5149.20	-50.76

Test Mode 5: 802.11Draft n, 20MHz, Transmit Rate: 130Mbps, ANT-L1+ ANT-L3

Test Date: Dec. 12, 2007 Temperature: 23℃ Humidity: 60% Atmospheric pressure: 1008 hPa

Channel	Frequency (MHz)	Maximum Value In Frequency (MHz)	Maximum Value (dBm)	Antenna Remarks
36	5180	5147.40	-52.96	L1
36	5180	5117.20	-54.15	L3

Test Mode 6: 802.11Draft n, 20MHz, Transmit Rate: 130Mbps, ANT-L1+ ANT-R3

Test Date: Dec. 12, 2007 Temperature: 23℃ Humidity: 60% Atmospheric pressure: 1008 hPa

Channel	Frequency (MHz)	Maximum Value In Frequency (MHz)	Maximum Value (dBm)	Antenna Remarks
36	5180	5143.00	-53.37	L1
36	5180	5117.20	-54.23	R3

Test Mode 7: 802.11Draft n, 20MHz, Transmit Rate: 130Mbps, ANT-R1+ ANT-L3

Test Date: Dec. 12, 2007 Temperature: 23℃ Humidity: 60% Atmospheric pressure: 1008 hPa

Channel	Frequency (MHz)	Maximum Value In Frequency (MHz)	Maximum Value (dBm)	Antenna Remarks
36	5180	5132.20	-54.05	R1
36	5180	5149.40	-54.13	L3

Test Mode 8: 802.11Draft n, 20MHz, Transmit Rate: 130Mbps, ANT-R1+ ANT-R3

Test Date: Dec. 12, 2007 Temperature: 23℃ Humidity: 60% Atmospheric pressure: 1008 hPa

Channel	Frequency (MHz)	Maximum Value In Frequency (MHz)	Maximum Value (dBm)	Antenna Remarks
36	5180	5127.00	-54.77	R1
36	5180	5102.00	-54.70	R3

Test Mode 9: 802.11Draft n, 40MHz, Transmit Rate: 270Mbps, ANT-L1+ ANT-L3

Test Date: Dec. 12, 2007 Temperature: 23℃ Humidity: 60% Atmospheric pressure: 1008 hPa

Channel	Frequency (MHz)	Maximum Value In Frequency (MHz)	Maximum Value (dBm)	Antenna Remarks
38	5190	5149.60	-36.66	L1
38	5190	5149.80	-37.20	L3

Test Mode 10: 802.11Draft n, 40MHz, Transmit Rate: 270Mbps, ANT-L1+ ANT-R3

Test Date: Dec. 12, 2007 Temperature: 23℃ Humidity: 60% Atmospheric pressure: 1008 hPa

Channel	Frequency (MHz)	Maximum Value In Frequency (MHz)	Maximum Value (dBm)	Antenna Remarks
38	5190	5147.80	-34.49	L1
38	5190	5147.80	-33.80	R3

Test Mode 11: 802.11Draft n, 40MHz, Transmit Rate: 270Mbps, ANT-R1+ ANT-L3

Test Date: Dec. 12, 2007 Temperature: 23℃ Humidity: 60% Atmospheric pressure: 1008 hPa

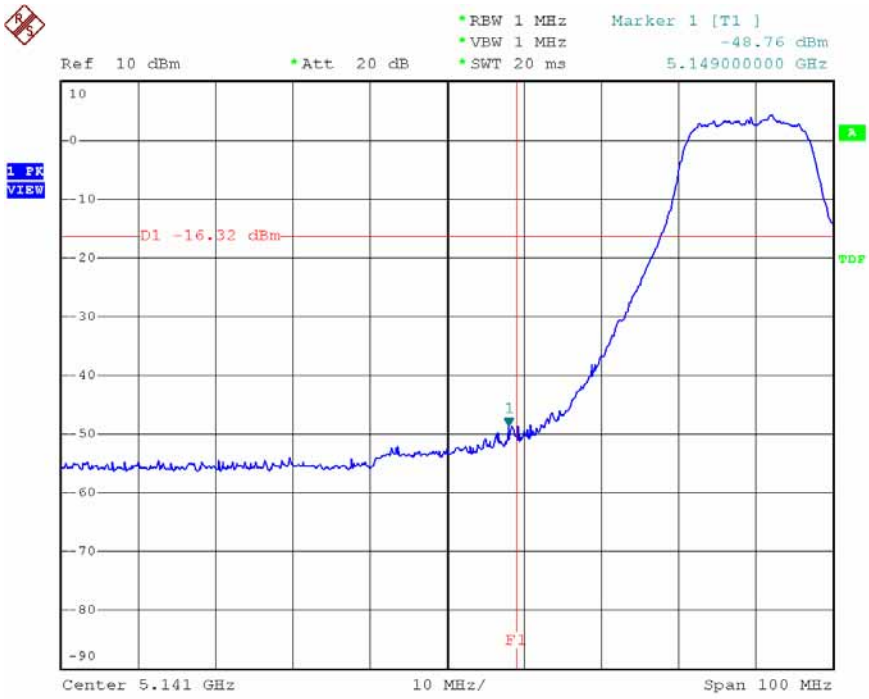
Channel	Frequency (MHz)	Maximum Value In Frequency (MHz)	Maximum Value (dBm)	Antenna Remarks
38	5190	5149.80	-35.76	R1
38	5190	5149.80	-34.58	L3

Test Mode 12: 802.11Draft n, 40MHz, Transmit Rate: 270Mbps, ANT-R1+ ANT-R3

Test Date: Dec. 12, 2007 Temperature: 23℃ Humidity: 60% Atmospheric pressure: 1008 hPa

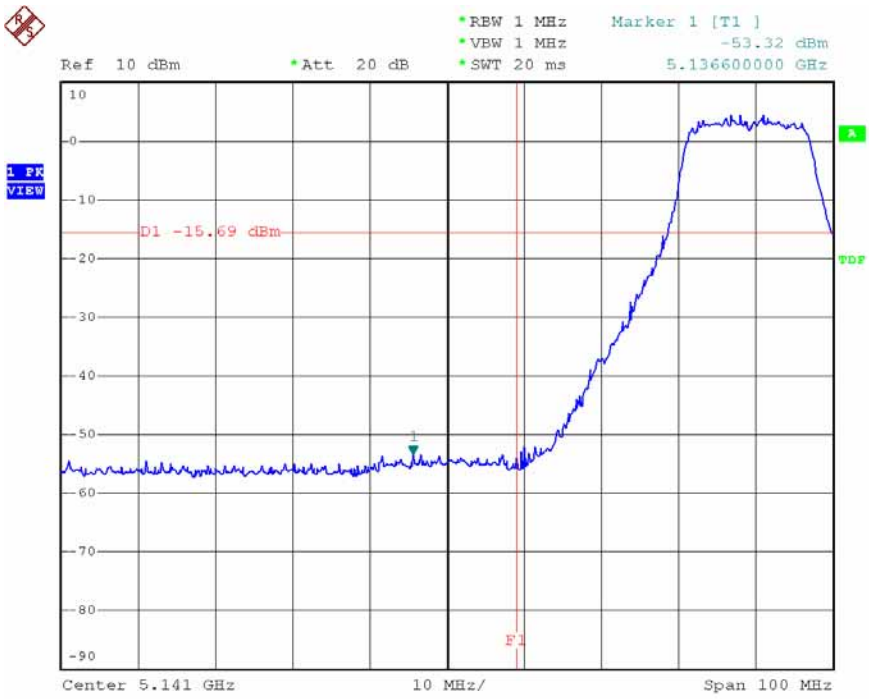
Channel	Frequency (MHz)	Maximum Value In Frequency (MHz)	Maximum Value (dBm)	Antenna Remarks
38	5190	5149.60	-35.04	R1
38	5190	5149.80	-33.70	R3

Modulation Standard: 802.11a (6Mbps) – ANT-L1
Channel: 36



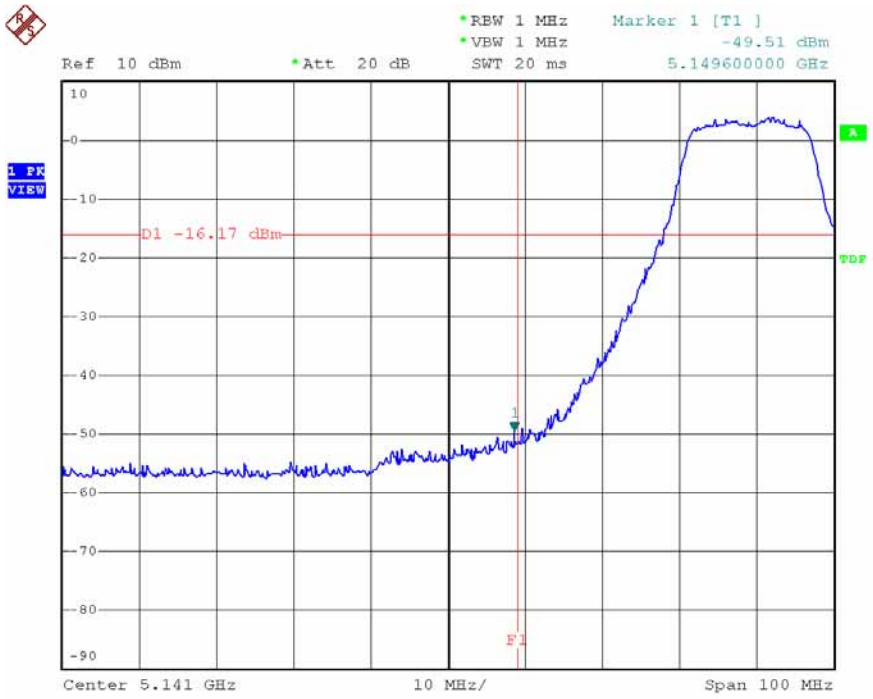
Date: 10.DEC.2007 13:54:07

Modulation Standard: 802.11a (6Mbps) – ANT-L3
Channel: 36

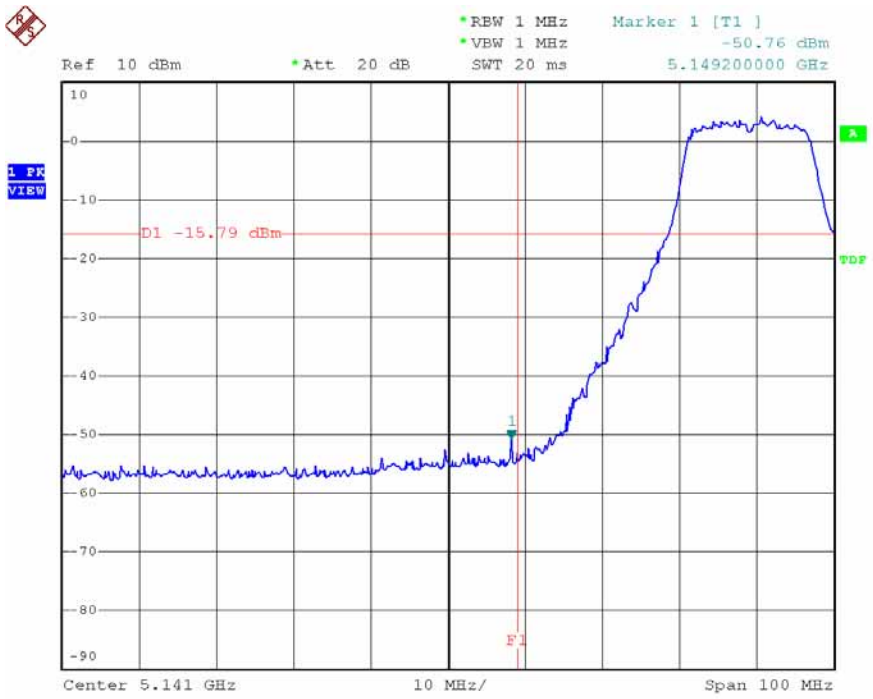


Date: 7.DEC.2007 18:43:26

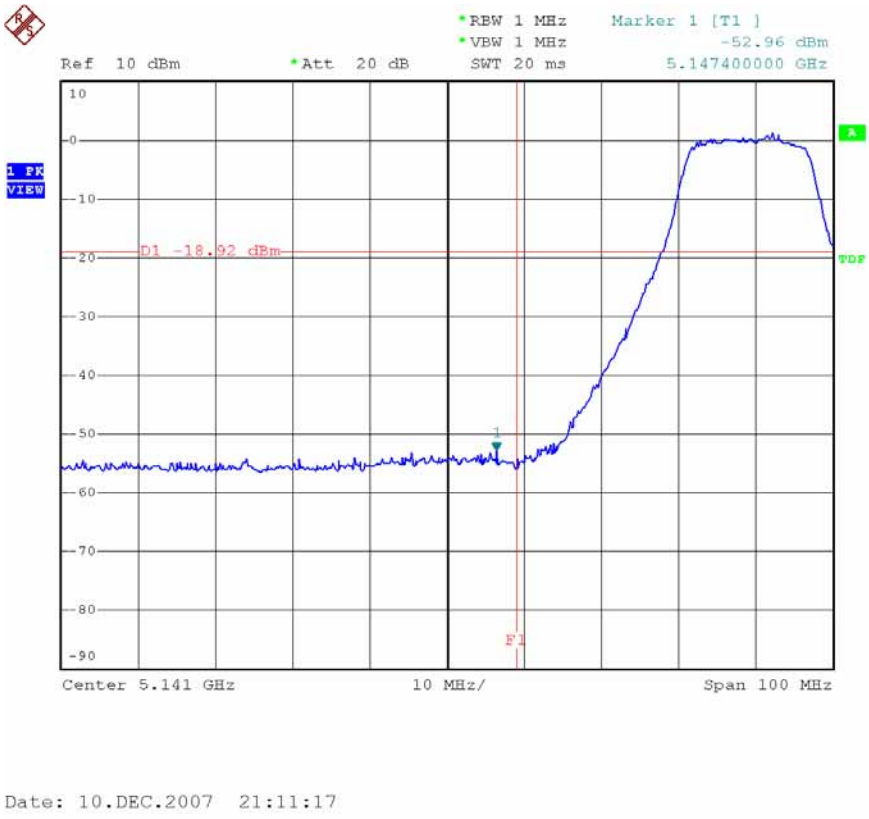
Modulation Standard: 802.11a (6Mbps) – ANT-R1
Channel: 36



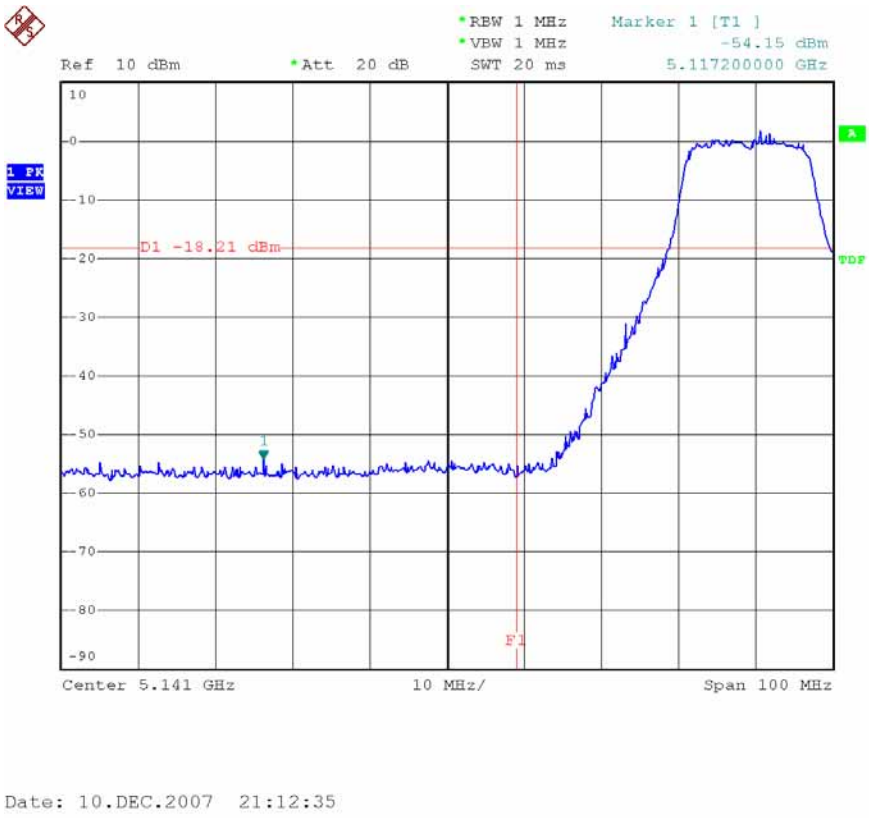
Modulation Standard: 802.11a (6Mbps) – ANT-R3
Channel: 36



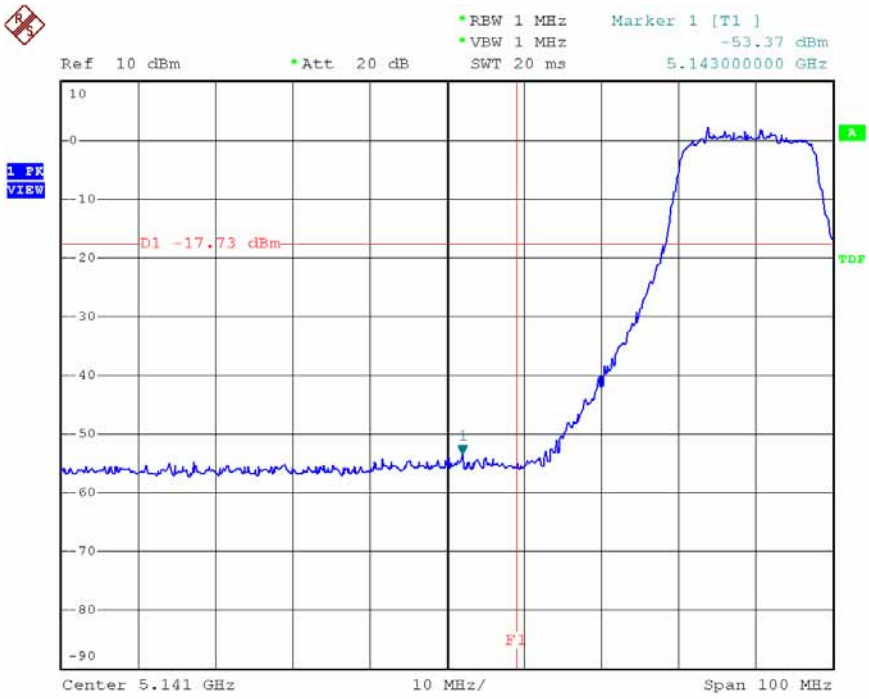
Modulation Standard: 802.11Draft n, 20MHz (130Mbps) – ANT-L1+ ANT-L3 (ANT-L1)
Channel: 36



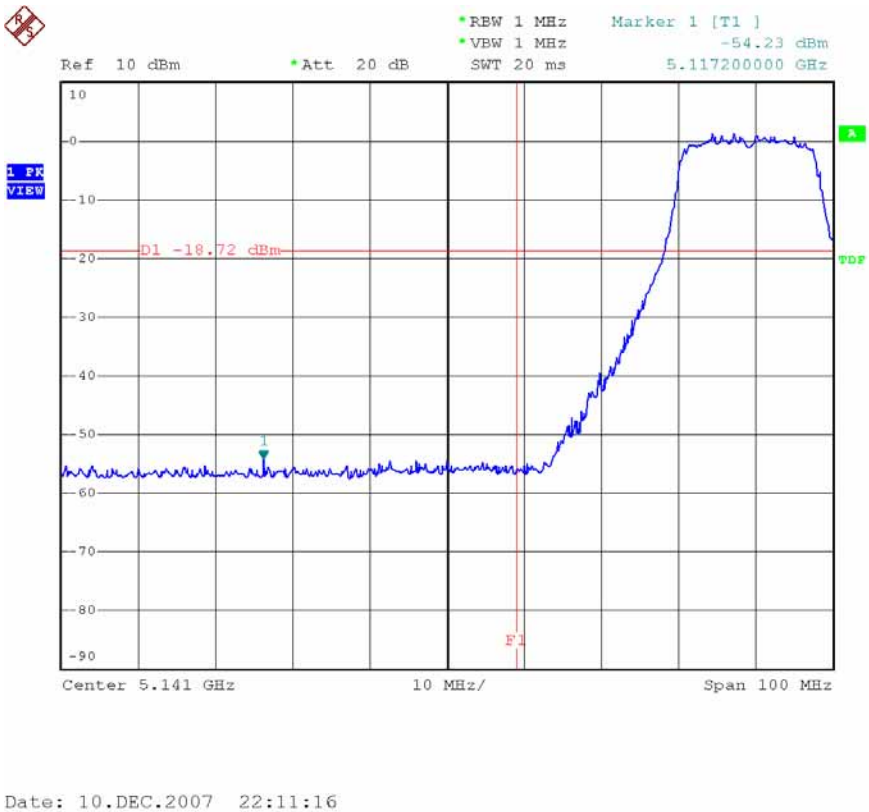
Modulation Standard: 802.11Draft n, 20MHz (130Mbps) – ANT-L1+ ANT-L3 (ANT-L3)
Channel: 36



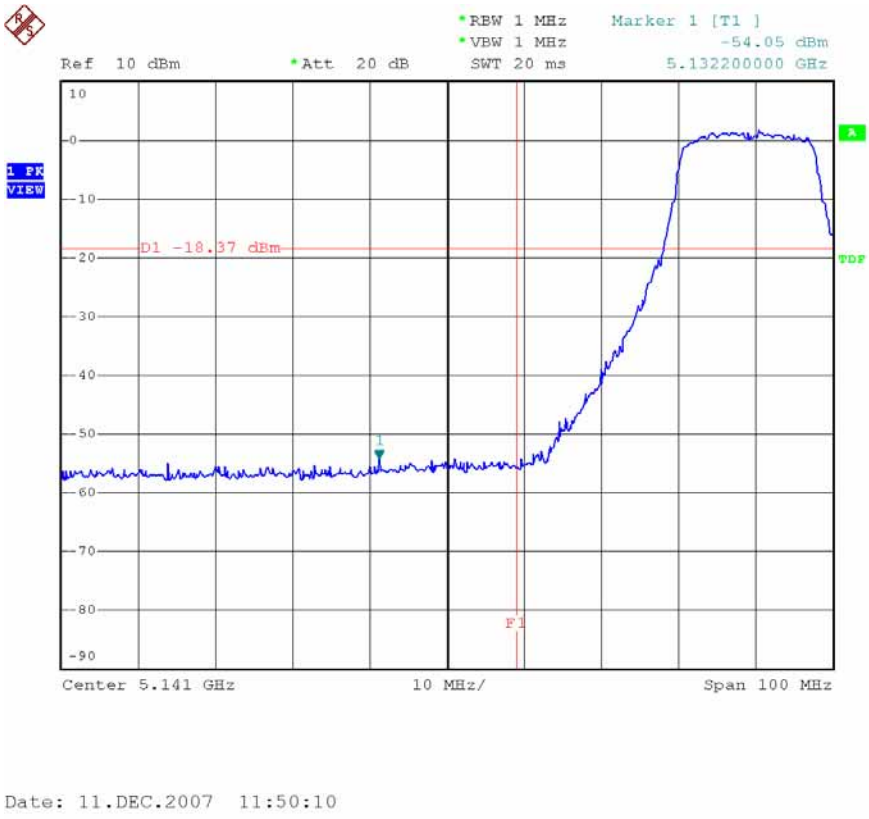
Modulation Standard: 802.11Draft n, 20MHz (130Mbps) – ANT-L1+ ANT-R3 (ANT-L1)
Channel: 36



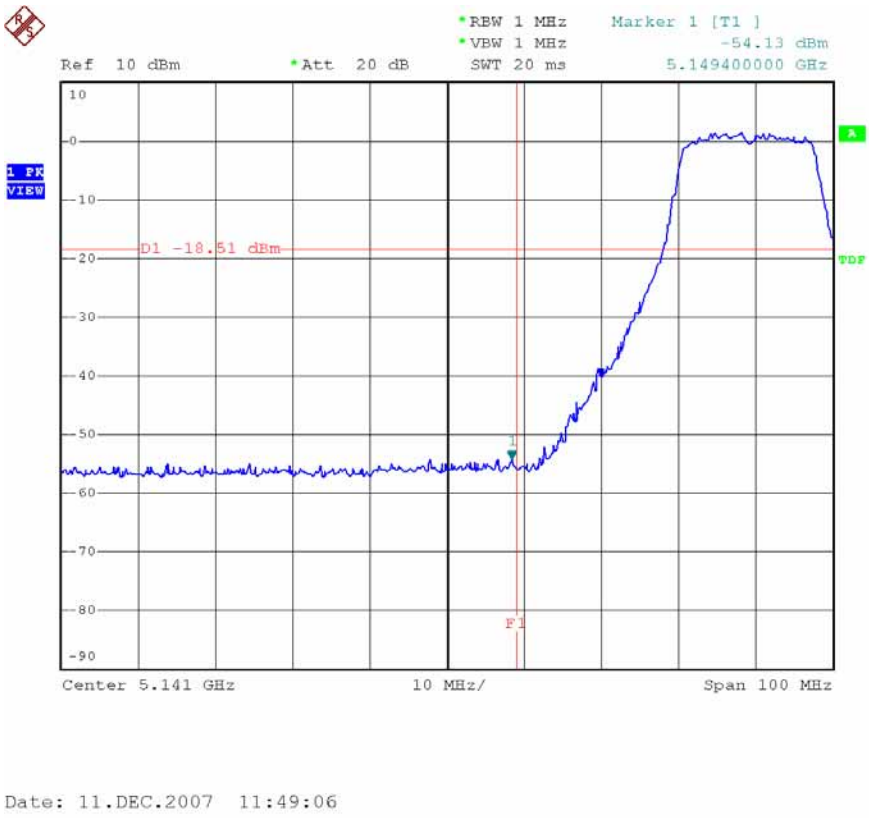
Modulation Standard: 802.11Draft n, 20MHz (130Mbps) – ANT-L1+ ANT-R3 (ANT-R3)
Channel: 36



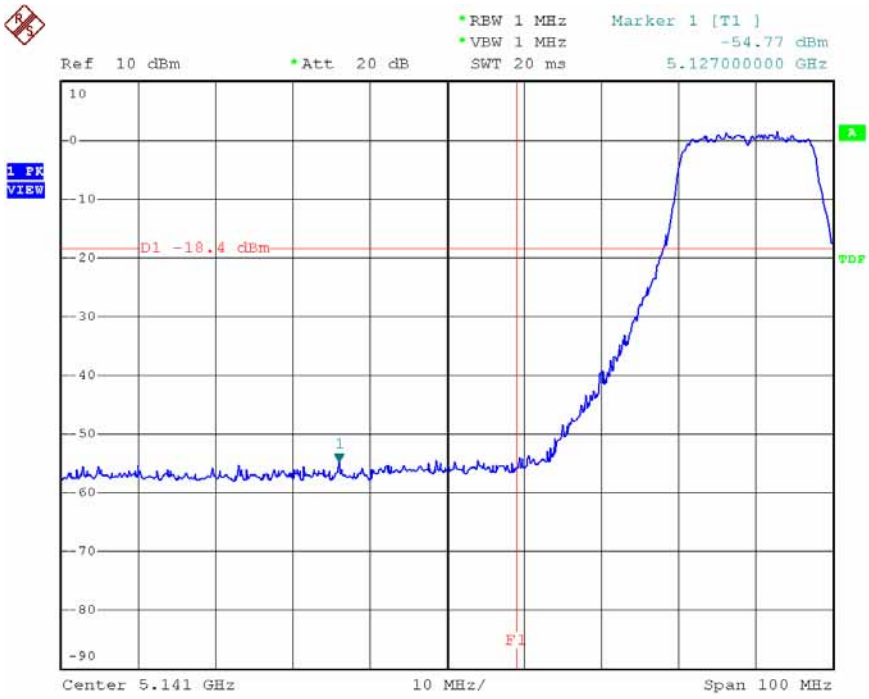
Modulation Standard: 802.11Draft n, 20MHz (130Mbps) – ANT-R1+ ANT-L3 (ANT-R1)
Channel: 36



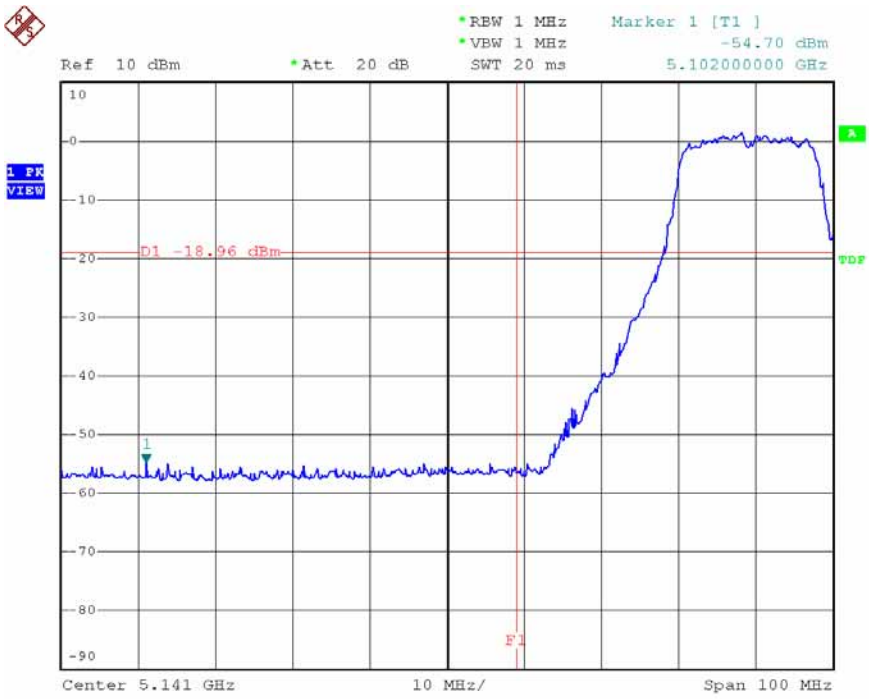
Modulation Standard: 802.11Draft n, 20MHz (130Mbps) – ANT-R1+ ANT-L3 (ANT-L3)
Channel: 36



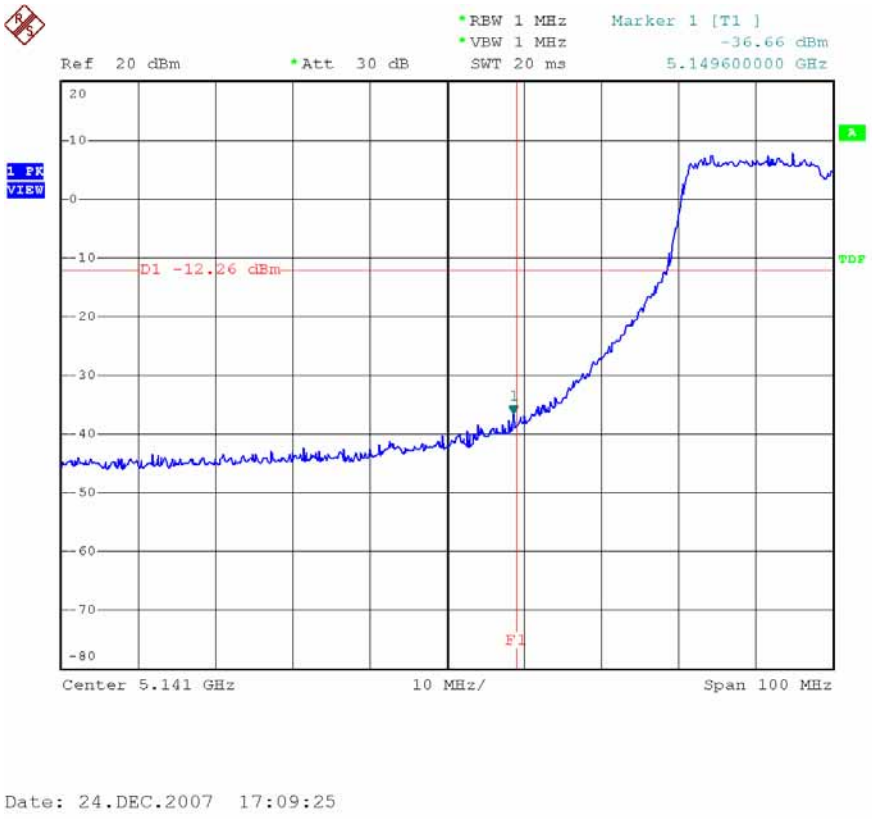
Modulation Standard: 802.11Draft n, 20MHz (130Mbps) – ANT-R1+ ANT-R3 (ANT-R1)
Channel: 36



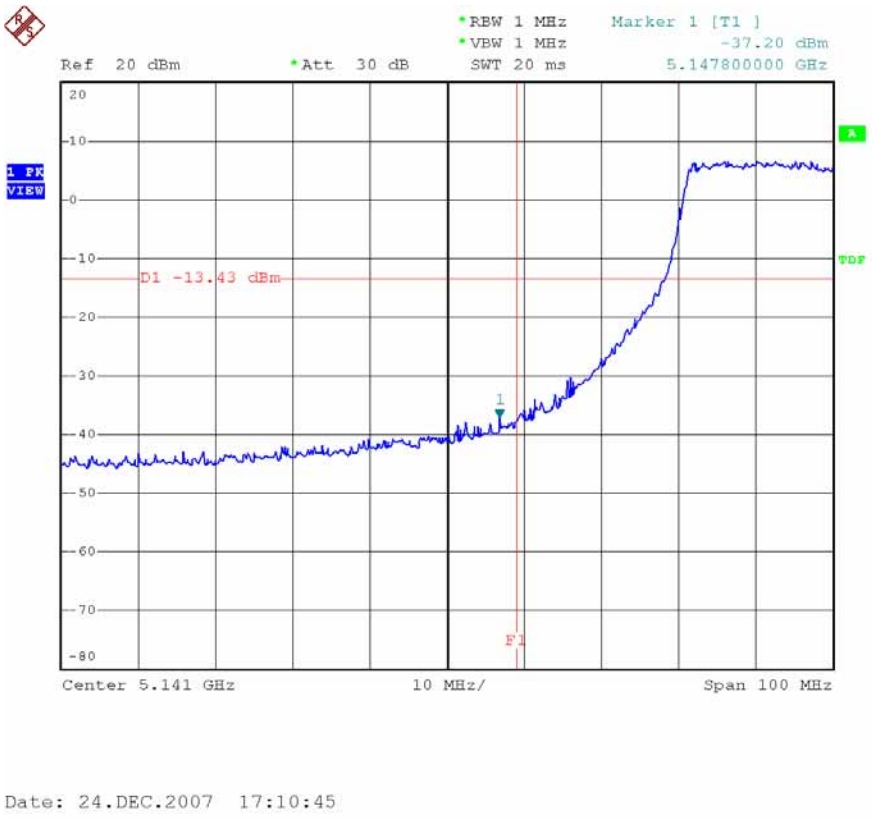
Modulation Standard: 802.11Draft n, 20MHz (130Mbps) – ANT-R1+ ANT-R3 (ANT-R3)
Channel: 36



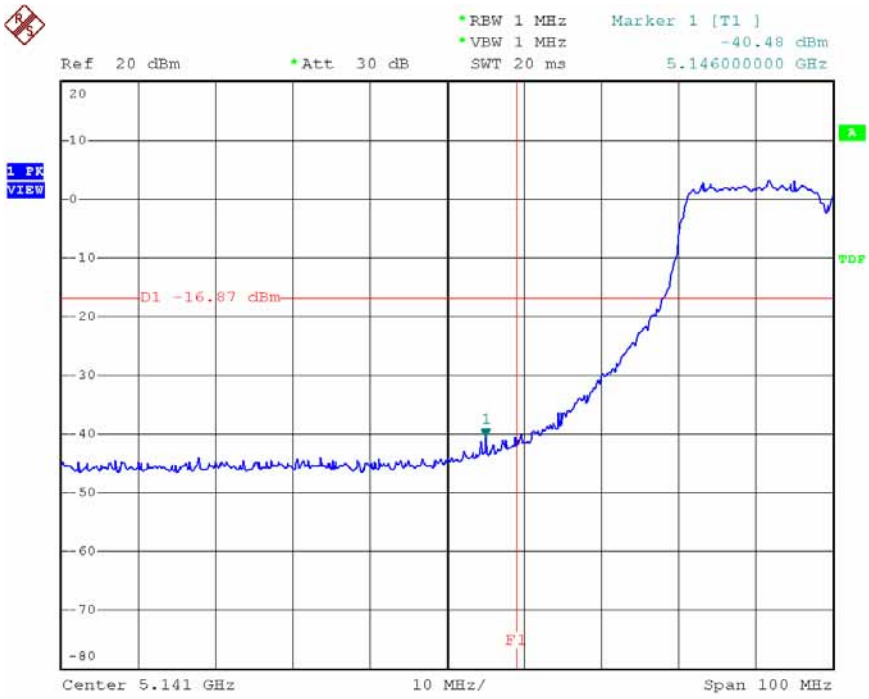
Modulation Standard: 802.11Draft n, 40MHz (270Mbps) – ANT-L1+ ANT-L3 (ANT-L1)
Channel: 36



Modulation Standard: 802.11Draft n, 40MHz (270Mbps) – ANT-L1+ ANT-L3 (ANT-L3)
Channel: 36

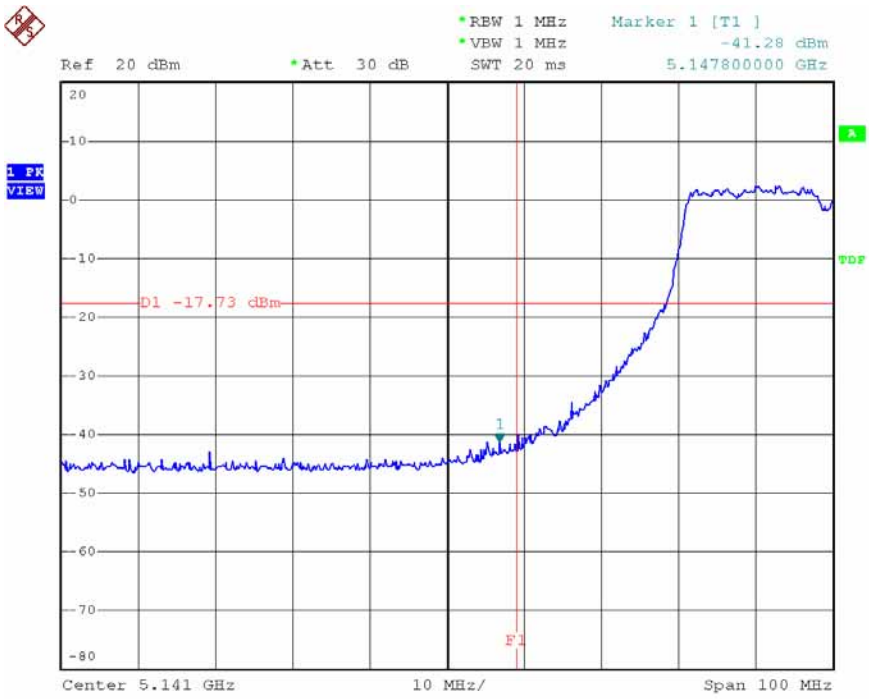


Modulation Standard: 802.11Draft n, 40MHz (270Mbps) – ANT-L1+ ANT-R3 (ANT-L1)
Channel: 36



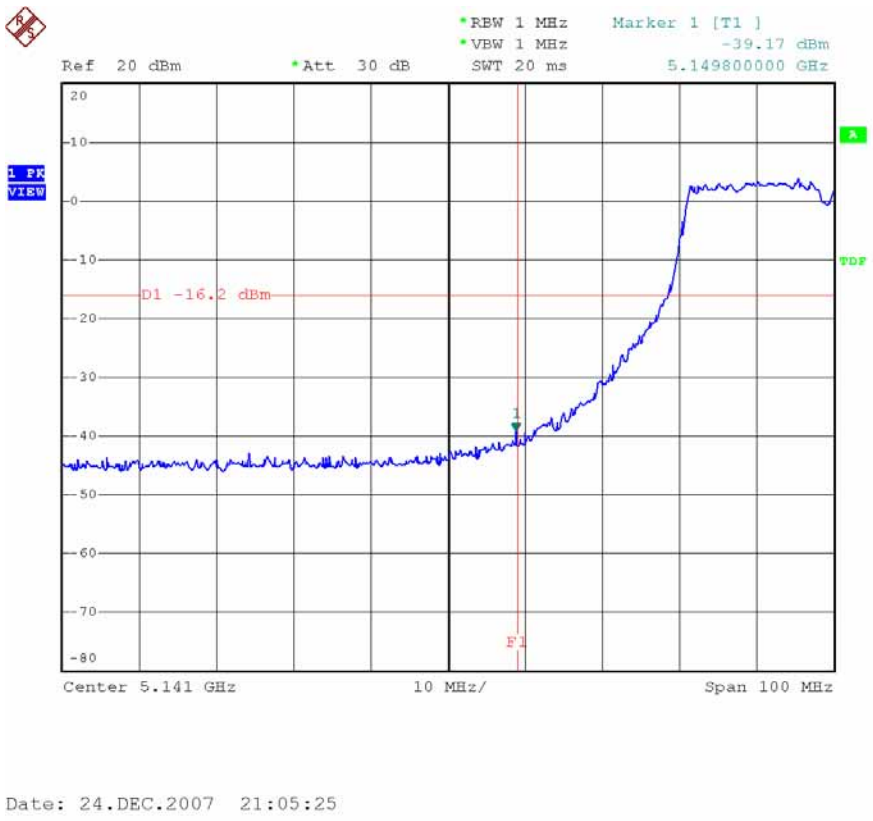
Date: 24.DEC.2007 21:03:53

Modulation Standard: 802.11Draft n, 40MHz (270Mbps) – ANT-L1+ ANT-R3 (ANT-R3)
Channel: 36

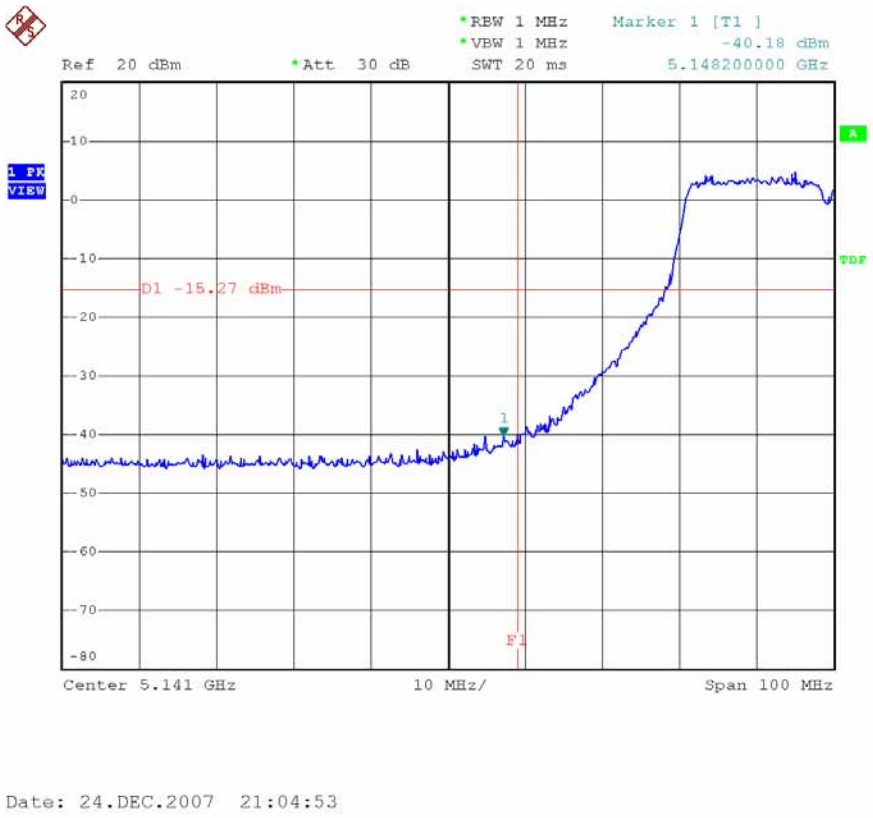


Date: 24.DEC.2007 21:02:59

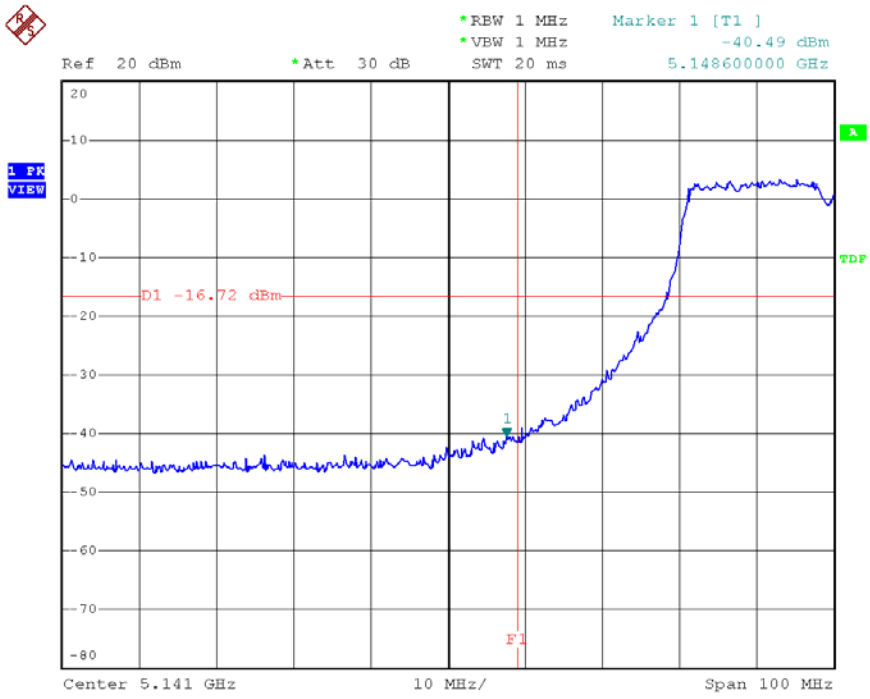
Modulation Standard: 802.11Draft n, 40MHz (270Mbps) – ANT-R1+ ANT-L3 (ANT-R1)
Channel: 36



Modulation Standard: 802.11Draft n, 40MHz (270Mbps) – ANT-R1+ ANT-L3 (ANT-L3)
Channel: 36

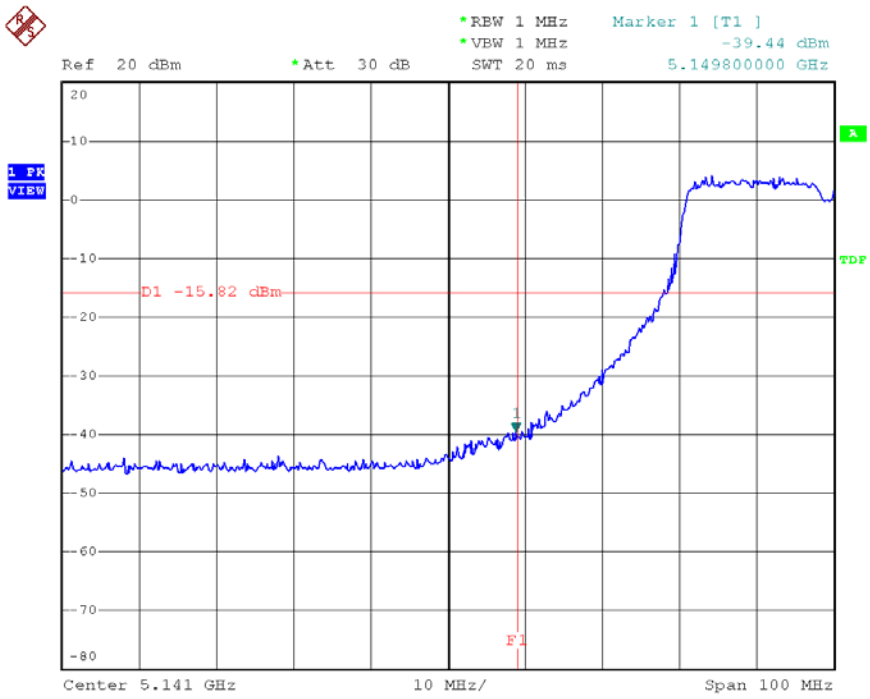


Modulation Standard: 802.11Draft n, 40MHz (270Mbps) – ANT-R1+ ANT-R3 (ANT-R1)
Channel: 36



Date: 24.DEC.2007 21:01:49

Modulation Standard: 802.11Draft n, 40MHz (270Mbps) – ANT-R1+ ANT-R3 (ANT-R3)
Channel: 36



Date: 24.DEC.2007 21:00:48

10.4. Restrict Band Emission Measurement Data

Test Mode 1: 802.11a, Transmit Rate: 6Mbps, - ANT-L1

Test Date: Dec. 07, 2007 Temperature: 22℃ Humidity: 70% Atmospheric pressure: 1023 hPa

Channel 01, Fundamental Frequency: 5180 MHz

Frequency (MHz)	Ant-Pol H/V	Meter Reading (dBuV)		Corrected Factor (dB)	Result (dBuV/m)		Limit (dBuV/m)		Margin (dB)	Table Deg.	Ant High (m)
		Peak	Ave		Peak	Ave	Peak	Ave			
5148.90	H	52.22	40.92	5.46	57.68	46.38	74	54	-7.62	203	1.11
5148.90	V	55.26	43.97	5.46	60.72	49.43	74	54	-4.57	178	1.12

Test Mode 1: 802.11a, Transmit Rate: 6Mbps, - ANT-L3

Test Date: Dec. 07, 2007 Temperature: 22℃ Humidity: 70% Atmospheric pressure: 1023 hPa

Channel 01, Fundamental Frequency: 5180 MHz

Frequency (MHz)	Ant-Pol H/V	Meter Reading (dBuV)		Corrected Factor (dB)	Result (dBuV/m)		Limit (dBuV/m)		Margin (dB)	Table Deg.	Ant High (m)
		Peak	Ave		Peak	Ave	Peak	Ave			
5148.90	H	51.80	40.47	5.46	57.26	45.93	74	54	-8.07	203	1.11
5148.90	V	54.39	42.83	5.46	59.85	48.29	74	54	-5.71	178	1.12

Test Mode 1: 802.11a, Transmit Rate: 6Mbps, - ANT-R1

Test Date: Dec. 07, 2007 Temperature: 22℃ Humidity: 70% Atmospheric pressure: 1023 hPa

Channel 01, Fundamental Frequency: 5180 MHz

Frequency (MHz)	Ant-Pol H/V	Meter Reading (dBuV)		Corrected Factor (dB)	Result (dBuV/m)		Limit (dBuV/m)		Margin (dB)	Table Deg.	Ant High (m)
		Peak	Ave		Peak	Ave	Peak	Ave			
5148.90	H	51.93	40.62	5.46	57.39	46.08	74	54	-7.92	203	1.11
5148.90	V	54.79	42.80	5.46	60.25	48.26	74	54	-5.74	178	1.12

Test Mode 1: 802.11a, Transmit Rate: 6Mbps, - ANT-R3

Test Date: Dec. 07, 2007 Temperature: 22℃ Humidity: 70% Atmospheric pressure: 1023 hPa

Channel 01, Fundamental Frequency: 5180 MHz

Frequency (MHz)	Ant-Pol H/V	Meter Reading (dBuV)		Corrected Factor (dB)	Result (dBuV/m)		Limit (dBuV/m)		Margin (dB)	Table Deg.	Ant High (m)
		Peak	Ave		Peak	Ave	Peak	Ave			
5148.90	H	51.79	40.82	5.46	57.25	46.28	74	54	-7.72	203	1.11
5148.90	V	54.80	42.55	5.46	60.26	48.01	74	54	-5.99	178	1.12

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 for Peak detection at frequency above 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10 MHz for Average detection at frequency above 1GHz.

Test Mode 5: 802.11Draft n, 20MHz, Transmit Rate: 130Mbps, - ANT-L1+ANT-L3

Test Date: Dec. 07, 2007 Temperature: 22℃ Humidity: 70% Atmospheric pressure: 1023 hPa

Channel 01, Fundamental Frequency: 5180 MHz

Frequency (MHz)	Ant-Pol H/V	Meter Reading (dBuV)		Corrected Factor (dB)	Result (dBuV/m)		Limit (dBuV/m)		Margin (dB)	Table Deg.	Ant High (m)
		Peak	Ave		Peak	Ave	Peak	Ave			
5148.90	H	52.22	40.88	5.46	57.68	46.34	74	54	-7.66	203	1.11
5149.70	V	55.90	43.50	5.46	61.36	48.96	74	54	-5.04	112	1.78

Test Mode 6: 802.11Draft n, 20MHz, Transmit Rate: 130Mbps, - ANT-L1+ANT-R3

Test Date: Dec. 07, 2007 Temperature: 22℃ Humidity: 70% Atmospheric pressure: 1023 hPa

Channel 01, Fundamental Frequency: 5180 MHz

Frequency (MHz)	Ant-Pol H/V	Meter Reading (dBuV)		Corrected Factor (dB)	Result (dBuV/m)		Limit (dBuV/m)		Margin (dB)	Table Deg.	Ant High (m)
		Peak	Ave		Peak	Ave	Peak	Ave			
5149.40	H	52.09	40.55	5.46	57.55	46.01	74	54	-7.99	203	1.11
5249.70	V	55.79	43.80	5.46	61.25	49.26	74	54	-4.74	112	1.78

Test Mode7: 802.11Draft n, 20MHz, Transmit Rate: 130Mbps, - ANT-R1+ANT-L3

Test Date: Dec. 07, 2007 Temperature: 22℃ Humidity: 70% Atmospheric pressure: 1023 hPa

Channel 01, Fundamental Frequency: 5180 MHz

Frequency (MHz)	Ant-Pol H/V	Meter Reading (dBuV)		Corrected Factor (dB)	Result (dBuV/m)		Limit (dBuV/m)		Margin (dB)	Table Deg.	Ant High (m)
		Peak	Ave		Peak	Ave	Peak	Ave			
5148.90	H	52.26	40.26	5.46	57.72	45.72	74	54	-8.28	203	1.11
5149.70	V	55.79	43.80	5.46	61.25	49.26	74	54	-4.74	112	1.78

Test Mode 8: 802.11Draft n, 20MHz, Transmit Rate: 130Mbps, - ANT-R1+ANT-R3

Test Date: Dec. 07, 2007 Temperature: 22℃ Humidity: 70% Atmospheric pressure: 1023 hPa

Channel 01, Fundamental Frequency: 5180 MHz

Frequency (MHz)	Ant-Pol H/V	Meter Reading (dBuV)		Corrected Factor (dB)	Result (dBuV/m)		Limit (dBuV/m)		Margin (dB)	Table Deg.	Ant High (m)
		Peak	Ave		Peak	Ave	Peak	Ave			
5148.90	H	52.11	40.91	5.46	57.57	46.37	74	54	-7.63	203	1.11
5149.70	V	55.58	43.36	5.46	61.04	48.82	74	54	-5.18	112	1.78

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 for Peak detection at frequency above 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10 MHz for Average detection at frequency above 1GHz.

Test Mode 9: 802.11Draft n, 40MHz, Transmit Rate: 270Mbps, - ANT-L1+ANT-L3

Test Date: Dec. 07, 2007 Temperature: 22℃ Humidity: 70% Atmospheric pressure: 1023 hPa

Channel 01, Fundamental Frequency: 5180 MHz

Frequency (MHz)	Ant-Pol H/V	Meter Reading (dBuV)		Corrected Factor (dB)	Result (dBuV/m)		Limit (dBuV/m)		Margin (dB)	Table Deg.	Ant High (m)
		Peak	Ave		Peak	Ave	Peak	Ave			
5149.40	H	54.77	42.90	5.46	60.23	48.36	74	54	-5.64	200	1.19
5149.40	V	56.54	44.50	5.46	62.00	49.96	74	54	-4.04	172	1.38

Test Mode 10: 802.11Draft n, 40MHz, Transmit Rate: 270Mbps, - ANT-L1+ANT-R3

Test Date: Dec. 07, 2007 Temperature: 22℃ Humidity: 70% Atmospheric pressure: 1023 hPa

Channel 01, Fundamental Frequency: 5180 MHz

Frequency (MHz)	Ant-Pol H/V	Meter Reading (dBuV)		Corrected Factor (dB)	Result (dBuV/m)		Limit (dBuV/m)		Margin (dB)	Table Deg.	Ant High (m)
		Peak	Ave		Peak	Ave	Peak	Ave			
5149.40	H	54.80	42.70	5.46	60.26	48.16	74	54	-5.84	200	1.19
5149.40	V	56.25	44.69	5.46	61.71	50.16	74	54	-3.85	172	1.38

Test Mode 11: 802.11Draft n, 40MHz, Transmit Rate: 270Mbps, - ANT-R1+ANT-L3

Test Date: Dec. 07, 2007 Temperature: 22℃ Humidity: 70% Atmospheric pressure: 1023 hPa

Channel 01, Fundamental Frequency: 5180 MHz

Frequency (MHz)	Ant-Pol H/V	Meter Reading (dBuV)		Corrected Factor (dB)	Result (dBuV/m)		Limit (dBuV/m)		Margin (dB)	Table Deg.	Ant High (m)
		Peak	Ave		Peak	Ave	Peak	Ave			
5149.40	H	54.80	42.64	5.46	60.26	48.10	74	54	-5.90	260	1.19
5149.40	V	56.77	44.90	5.46	62.23	50.36	74	54	-3.64	172	1.38

Test Mode 12: 802.11Draft n, 40MHz, Transmit Rate: 270Mbps, - ANT-R1+ANT-R3

Test Date: Dec. 07, 2007 Temperature: 22℃ Humidity: 70% Atmospheric pressure: 1023 hPa

Channel 01, Fundamental Frequency: 5180 MHz

Frequency (MHz)	Ant-Pol H/V	Meter Reading (dBuV)		Corrected Factor (dB)	Result (dBuV/m)		Limit (dBuV/m)		Margin (dB)	Table Deg.	Ant High (m)
		Peak	Ave		Peak	Ave	Peak	Ave			
5149.40	H	54.64	42.89	5.46	60.10	48.35	74	54	-5.65	200	1.19
5149.40	V	56.44	44.94	5.46	61.90	50.40	74	54	-3.60	172	1.38

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 for Peak detection at frequency above 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10 MHz for Average detection at frequency above 1GHz.

11. 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

11.1. 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.

12. RF Exposure

FCC Rules and Regulations Part 1.1307, 1.1310, 2.1091, 2.1093:
RF Exposure Compliance

12.1. Limit for Maximum Permissible Exposure (MPE)

(A) Limits for Occupational / Controlled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/ cm²)	Averaging Time |E|²,|H|² or S (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842/f	4.89/f	(900/f)*	6
30-300	61.4	0.163	1.0	6
300-1500			F/300	6
1500-100,000			5	6

(B) Limits for General Population / Uncontrolled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm²)	Averaging Time |E|²,|H|² or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f)*	30
30-300	27.5	0.073	0.2	30
300-1500			F/1500	30
1500-100,000			1.0	30

F=frequency in MHz *Plane-wave equivalent power density

12.2. MPE Calculations

$$\text{E (V/m)} = \frac{\sqrt{30 \times P \times G}}{d} \qquad \text{Power Density:} \quad \text{Pd (mW/cm}^2\text{)} = \frac{E^2}{3770}$$

E＝Electric field (V/m)

P＝Peak output power (W)

G＝Antenna numeric gain (numeric)

d＝Separation distance (m)

Because the EUT is belong to General Population/ Uncontrolled Exposure. So the Limit of Power Density is 10 W/m². We can change the formula to:

$$d = \sqrt{\frac{30 \times P \times G}{3770}}$$

12.3. FCC Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. In order to avoid the possibility of exceeding the FCC radio frequency exposure limits, human proximity to the antenna shall not be less than 20cm (8 inches) during normal operation. Proposed RF exposure safety information to include in User's Manual.