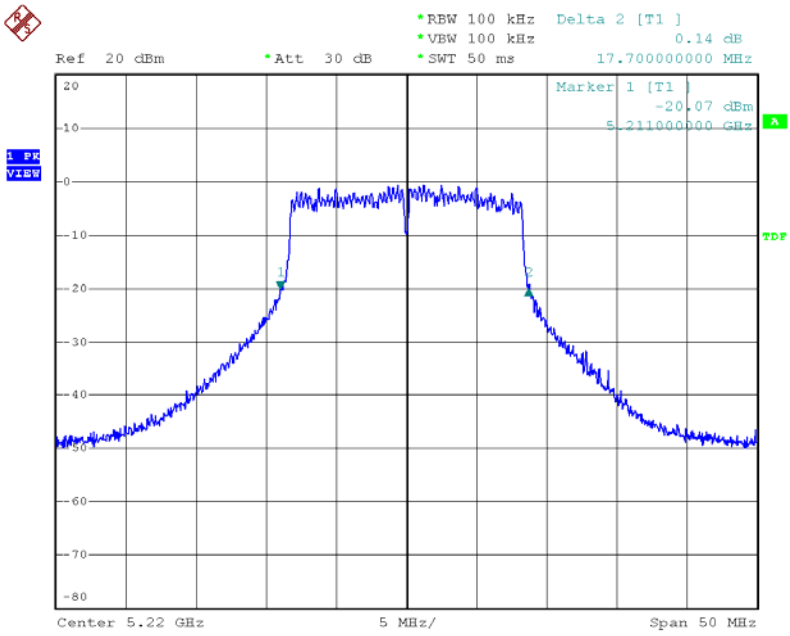
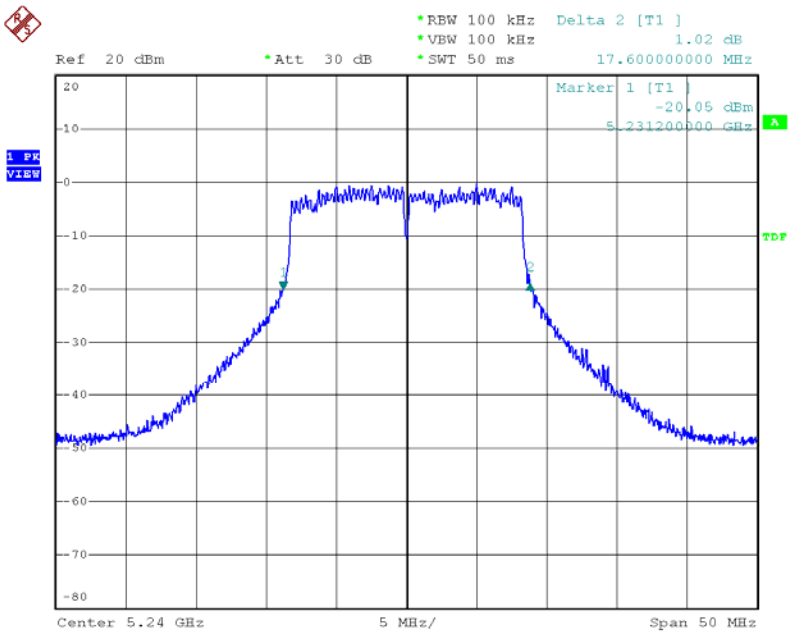
Modulation Standard: 802.11a (54Mbps), Ant2
Channel: 44



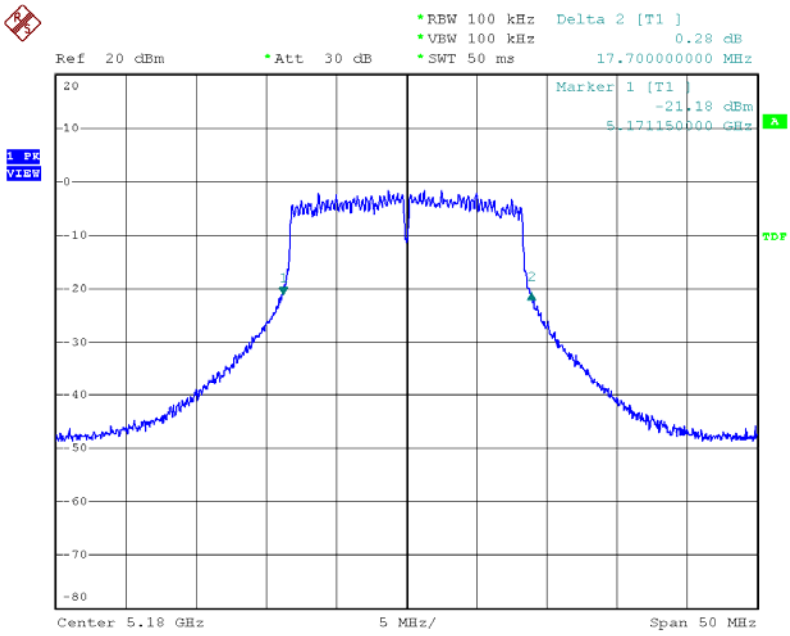
Date: 7.JAN.2009 17:38:04

Modulation Standard: 802.11a (54Mbps), Ant2
Channel: 48



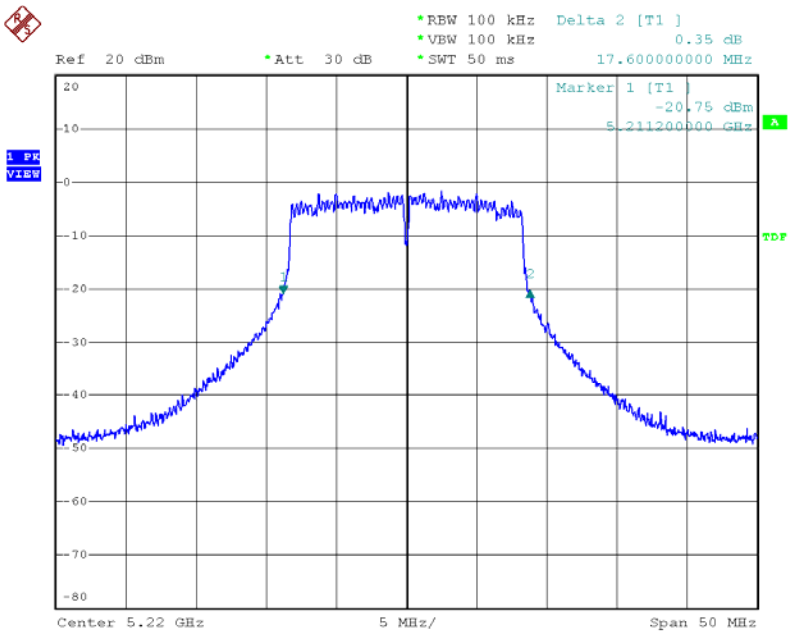
Date: 7.JAN.2009 17:45:53

Modulation Standard: 802.11a (54Mbps), Ant3
Channel: 36



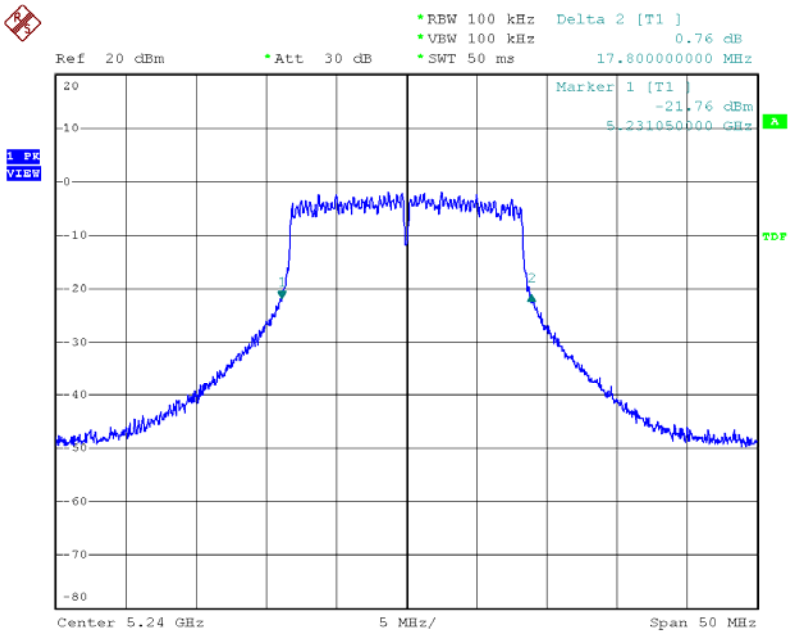
Date: 7.JAN.2009 17:15:39

Modulation Standard: 802.11a (54Mbps), Ant3
Channel: 44



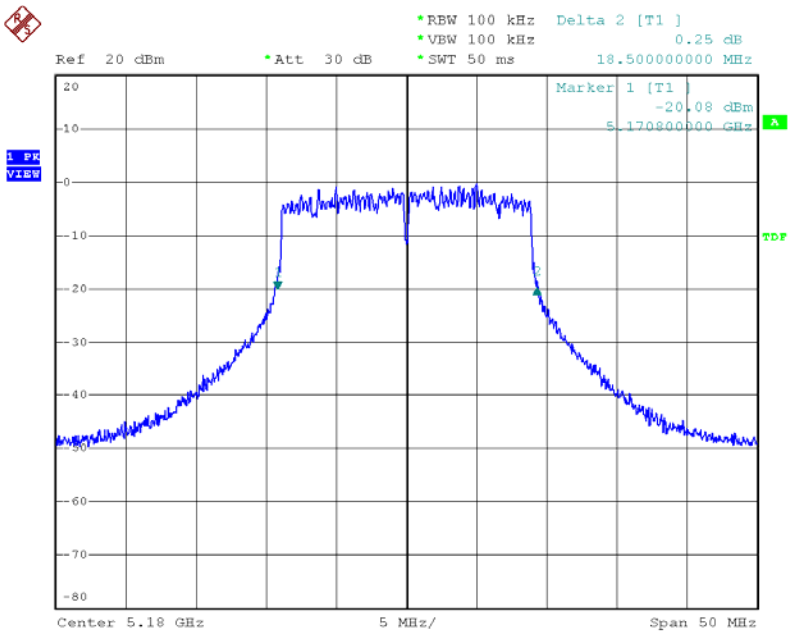
Date: 7.JAN.2009 17:36:01

Modulation Standard: 802.11a (54Mbps), Ant3
Channel: 48



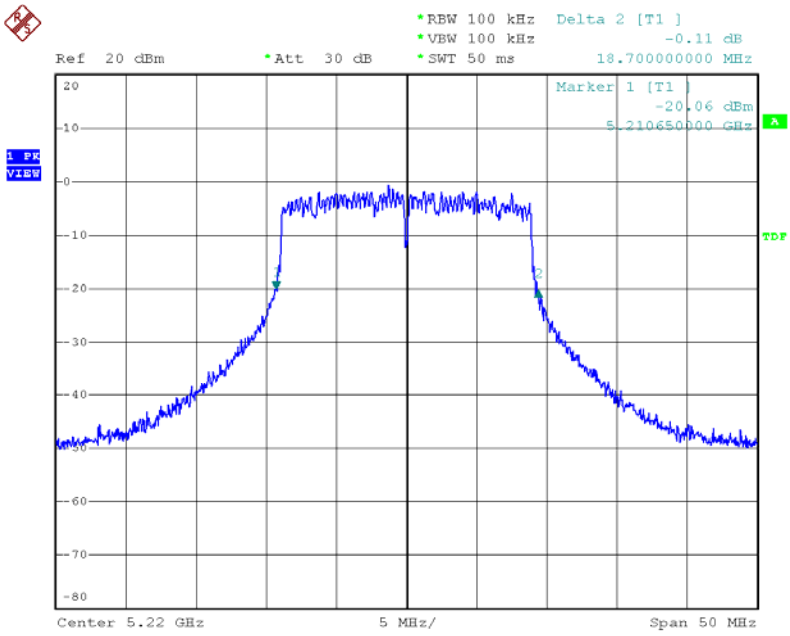
Date: 7.JAN.2009 17:43:19

Modulation Standard: 802.11an, HT20 (130Mbps), Ant1
Channel: 36



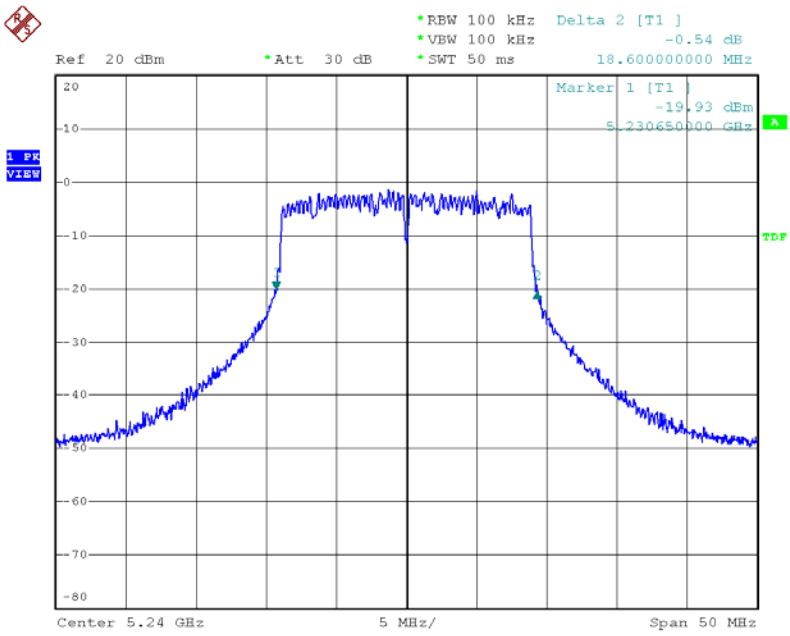
Date: 7.JAN.2009 17:57:06

Modulation Standard: 802.11an, HT20 (130Mbps), Ant1
Channel: 44



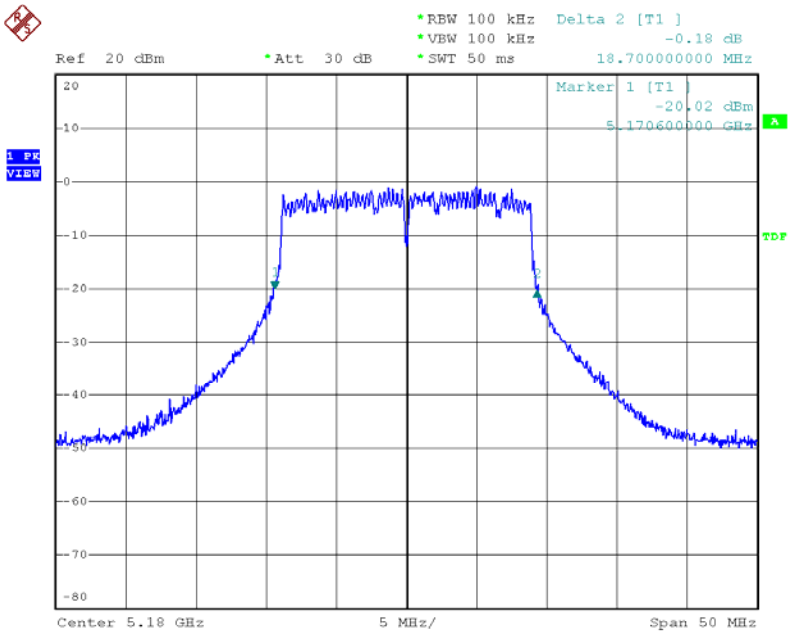
Date: 7.JAN.2009 18:22:25

Modulation Standard: 802.11an, HT20 (130Mbps), Ant1
Channel: 48



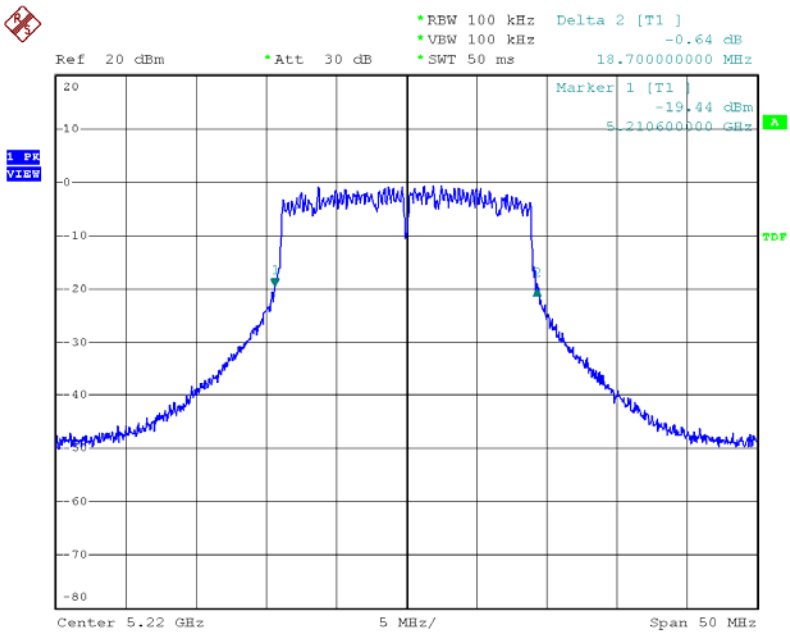
Date: 7.JAN.2009 19:08:59

Modulation Standard: 802.11an, HT20 (130Mbps), Ant2
Channel: 36



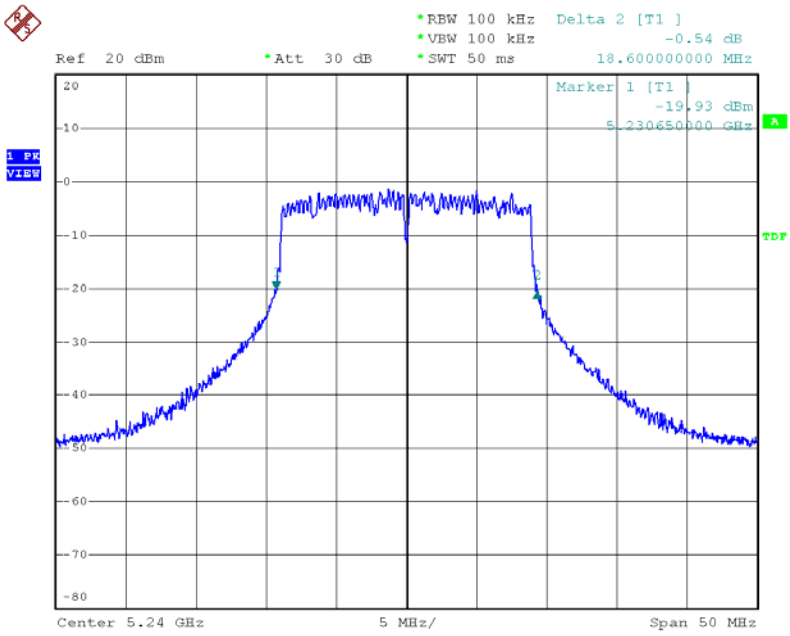
Date: 7.JAN.2009 17:54:33

Modulation Standard: 802.11an, HT20 (130Mbps), Ant2
Channel: 44



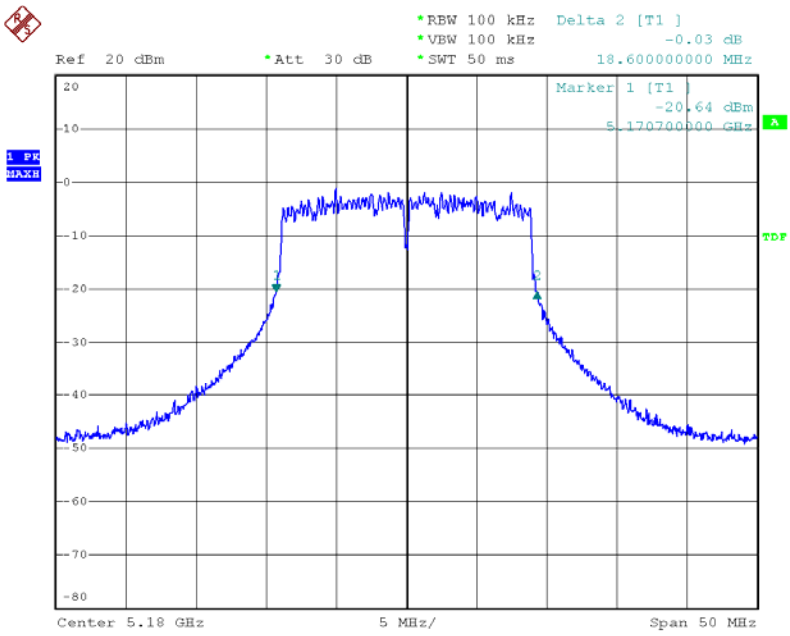
Date: 7.JAN.2009 18:20:02

Modulation Standard: 802.11an, HT20 (130Mbps), Ant2
Channel: 48



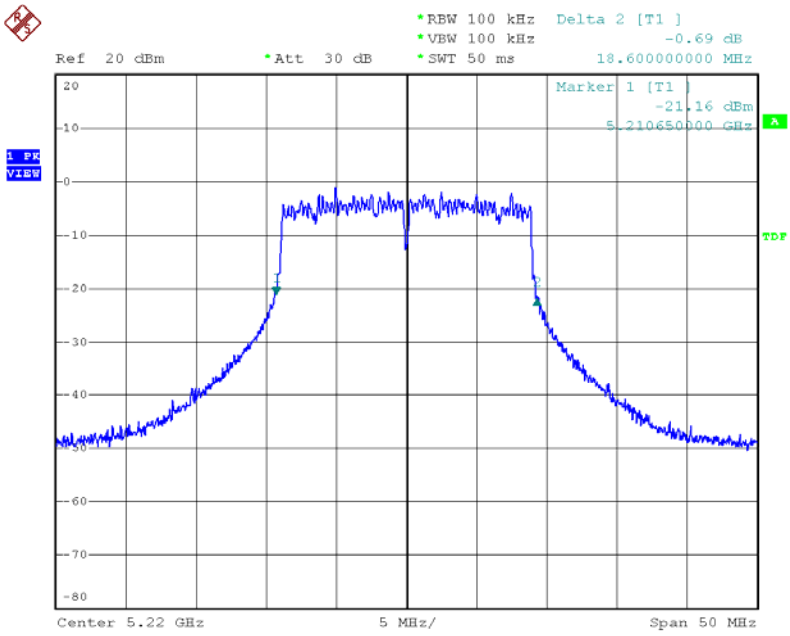
Date: 7.JAN.2009 19:08:59

Modulation Standard: 802.11an, HT20 (130Mbps), Ant3
Channel: 36



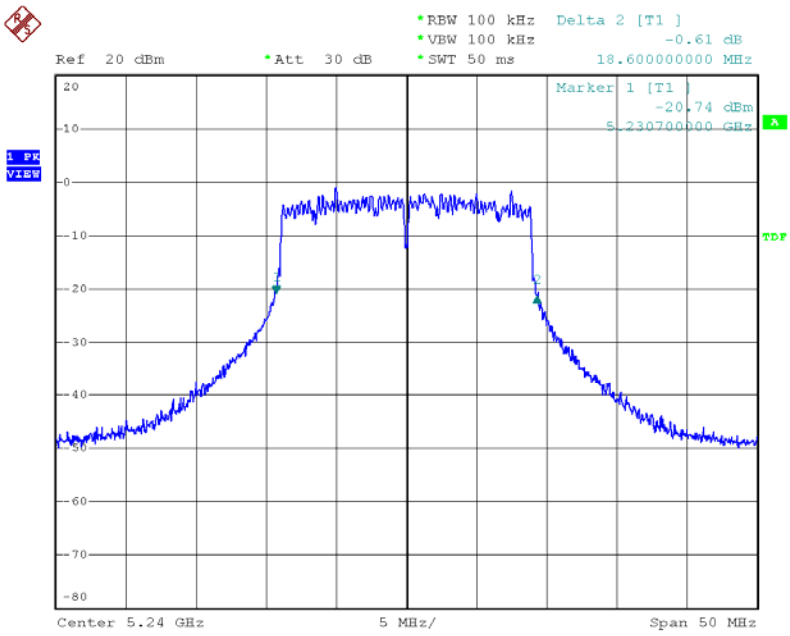
Date: 7.JAN.2009 17:51:52

Modulation Standard: 802.11an, HT20 (130Mbps), Ant3
Channel: 44



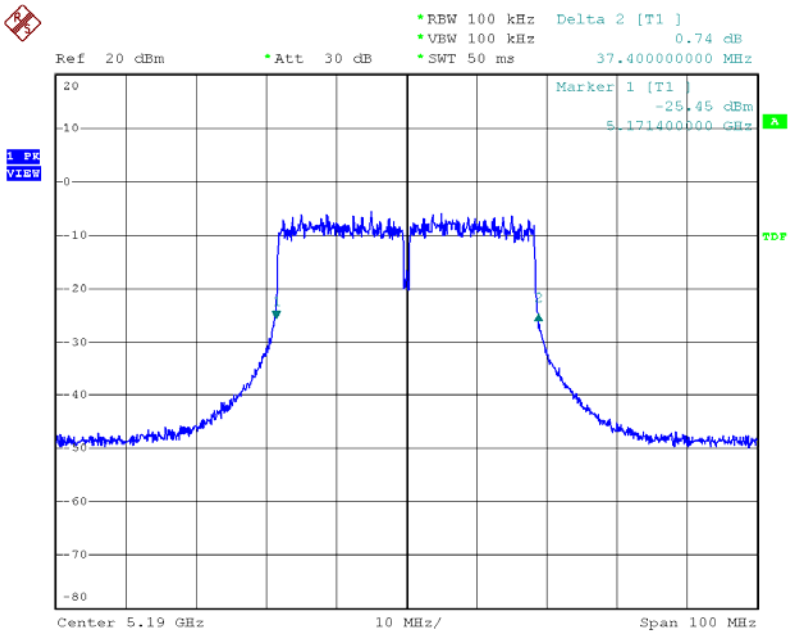
Date: 7.JAN.2009 18:17:17

Modulation Standard: 802.11an, HT20 (130Mbps), Ant3
Channel: 48



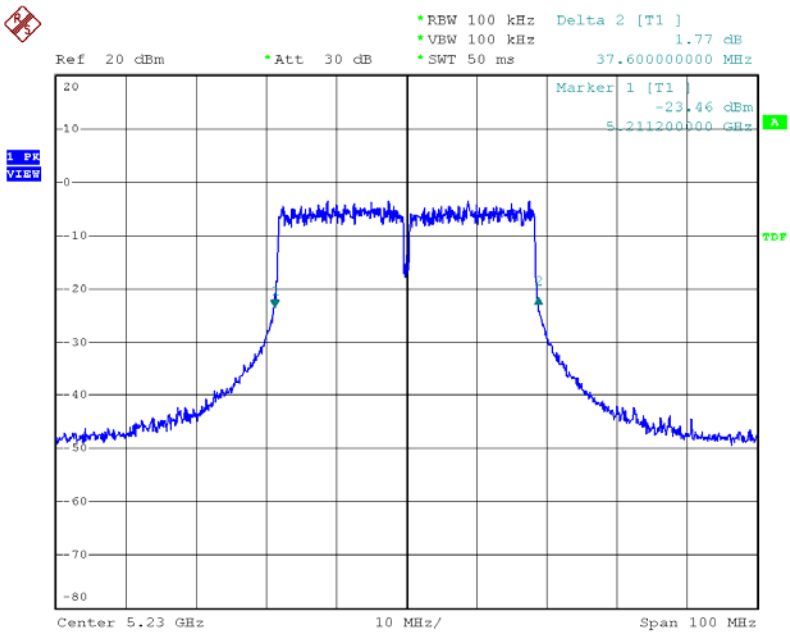
Date: 7.JAN.2009 18:29:31

Modulation Standard: 802.11an, HT40 (270Mbps), Ant1
Channel: 38



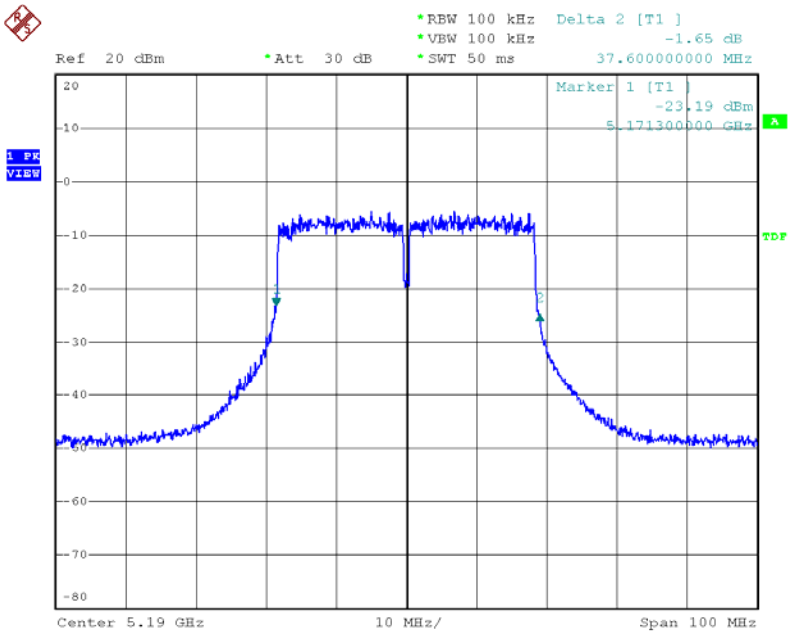
Date: 7.JAN.2009 19:21:06

Modulation Standard: 802.11an, HT40 (270Mbps), Ant1
Channel: 46



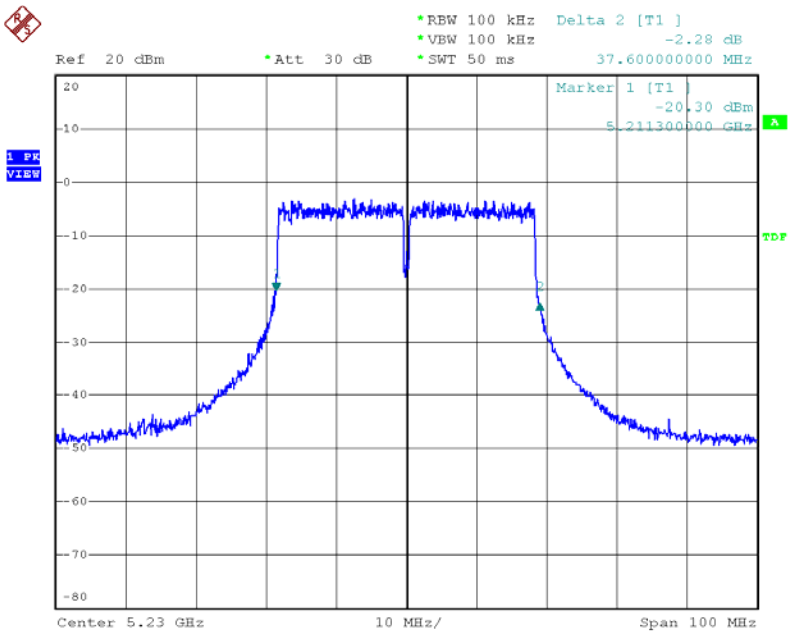
Date: 7.JAN.2009 19:34:06

Modulation Standard: 802.11an, HT40 (270Mbps), Ant2
Channel: 38



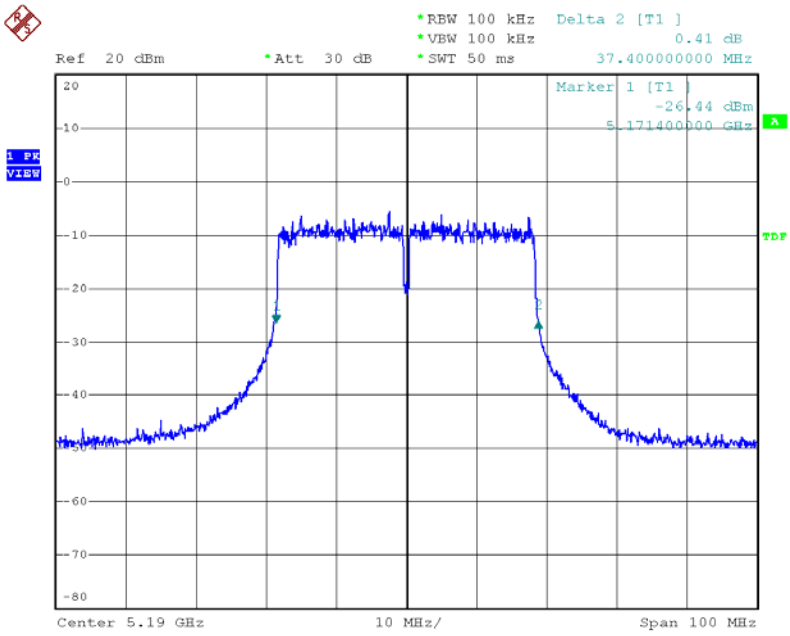
Date: 7.JAN.2009 19:17:47

Modulation Standard: 802.11an, HT40 (270Mbps), Ant2
Channel: 46



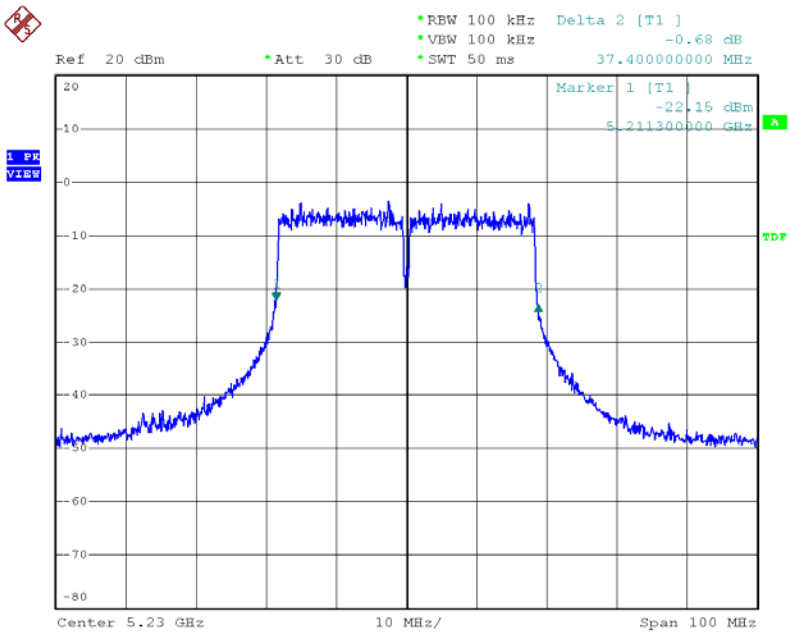
Date: 7.JAN.2009 19:31:16

Modulation Standard: 802.11an, HT40 (270Mbps), Ant3
Channel: 38



Date: 7.JAN.2009 19:14:15

Modulation Standard: 802.11an, HT40 (270Mbps), Ant3
Channel: 46



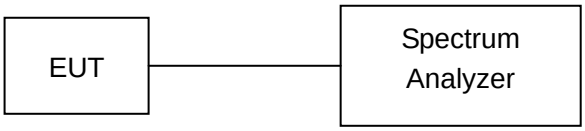
Date: 7.JAN.2009 19:28:45

7. Peak Power Excursion

7.1. Test Procedure

1. The transmitter output was connected to the spectrum analyzer
2. Using Peak detector and max-hold function for Trace 1 MHz and VBW to 3 MHz for Trace 1. Using average detector for Trace 2.
3. Set RBW of spectrum analyzer to 1 MHz and VBW to 3 MHz for Trace 1.
4. Set RBW of spectrum analyzer to 1 MHz and VBW to 300 kHz for Trace 2.
5. The largest difference between Trace 1 and Trace 2 in any 1 MHz band on any frequency was recorded.

7.2. Test Setup Layout



7.3. Measurement Equipment

Instrument/Ancillary	Model No.	Manufacturer	Serial No.	Calibration Date	Valid Date.
Spectrum Analyzer	FSP40	R&S	10047	2008/02/22	2009/02/21

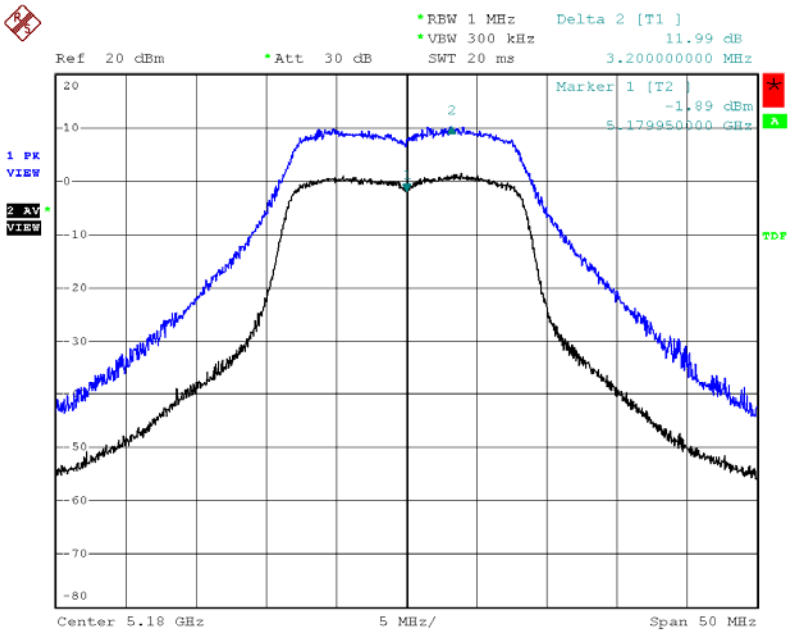
7.4. Test Result and Data

Test Date: Jan. 09, 2009 Temperature: 26℃

Atmospheric pressure: 1026 Pha Humidity: 65%

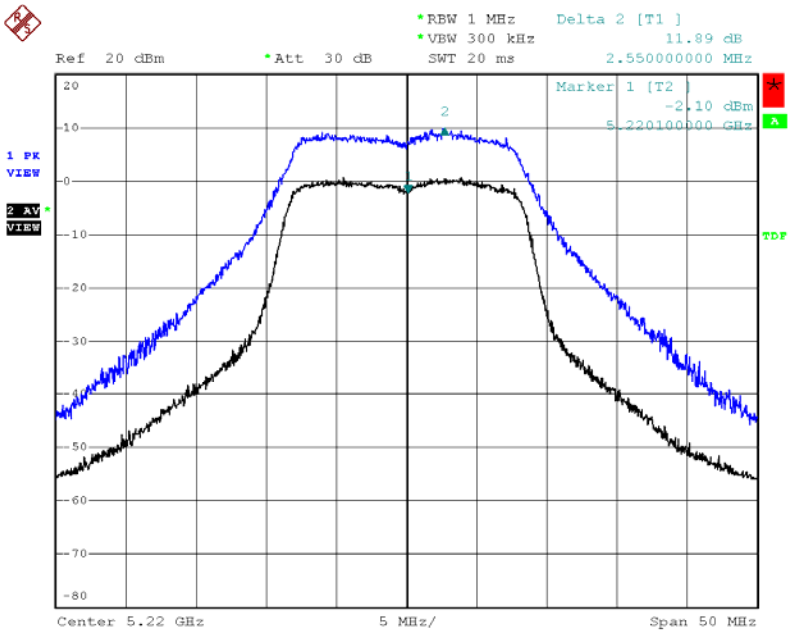
Modulation Standard	Channel	Frequency (MHz)	Peak Power Output (dBm)			Limit (dB)
			Ant1	Ant2	Ant3	
802.11a (54Mbps)	36	5180	11.99	11.09	11.74	13
	44	5220	11.89	11.94	10.97	13
	48	5240	11.62	10.91	11.41	13
802.11an HT20 (130Mbps)	36	5180	11.30	11.60	11.03	13
	44	5220	11.48	11.04	11.28	13
	48	5240	10.88	11.26	11.35	13
802.11an HT40 (270Mbps)	38	5190	10.42	9.54	9.39	13
	42	5210	---	---	---	13
	46	5230	9.68	10.33	9.38	13

Modulation Standard: 802.11a (54Mbps), Ant1
Channel: 36



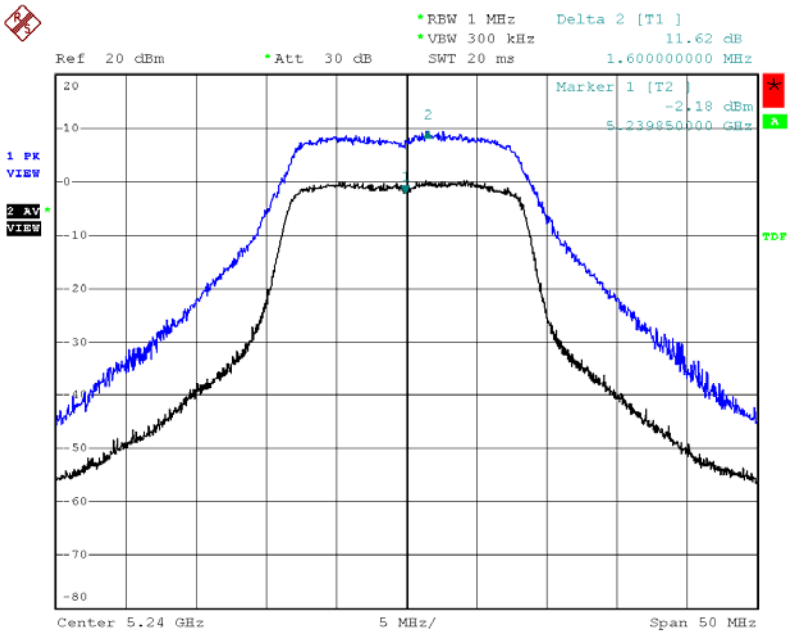
Date: 7.JAN.2009 20:22:20

Modulation Standard: 802.11a (54Mbps), Ant1
Channel: 44



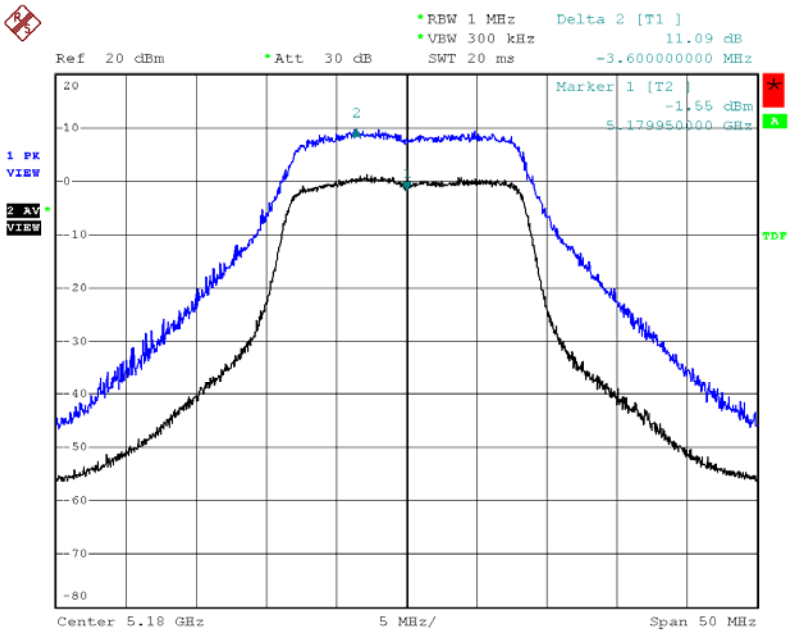
Date: 7.JAN.2009 20:19:25

Modulation Standard: 802.11a (54Mbps), Ant1
Channel: 48



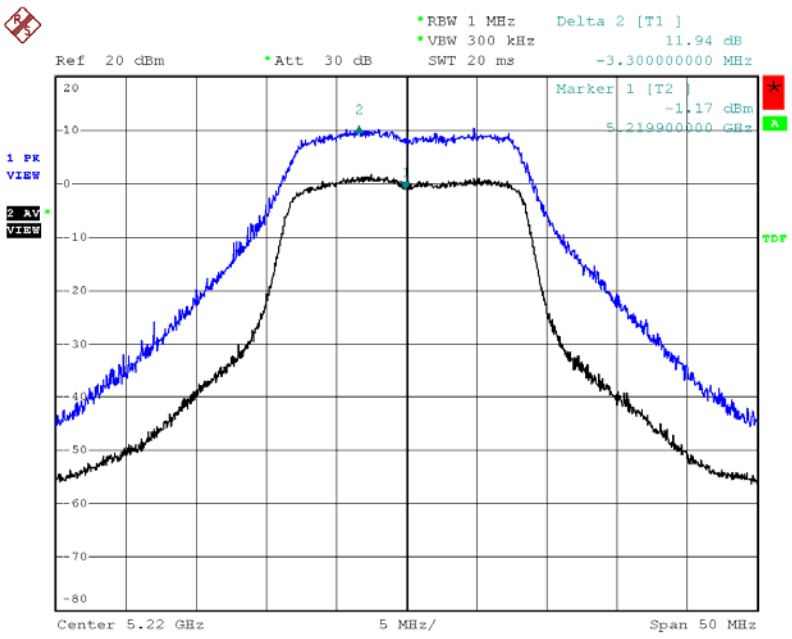
Date: 7.JAN.2009 20:30:27

Modulation Standard: 802.11a (54Mbps), Ant2
Channel: 36



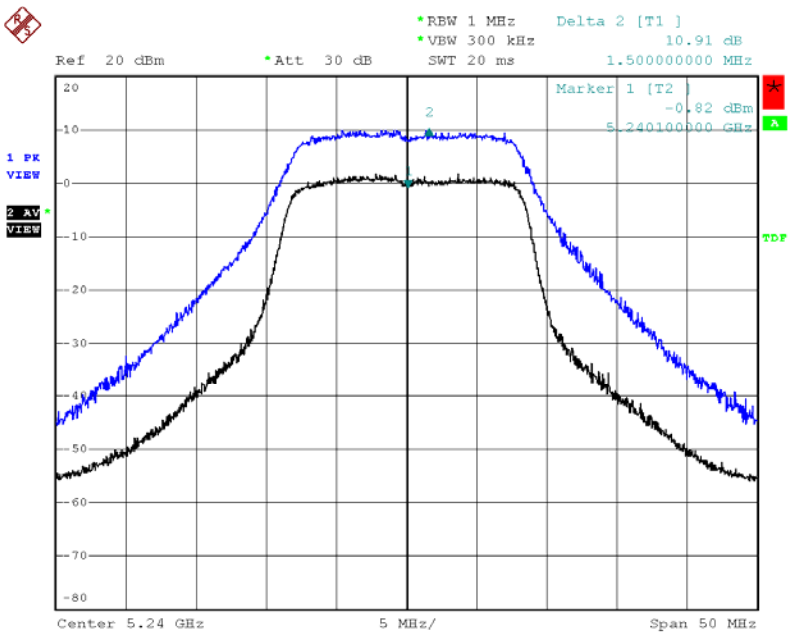
Date: 7.JAN.2009 20:23:39

Modulation Standard: 802.11a (54Mbps), Ant2
Channel: 44



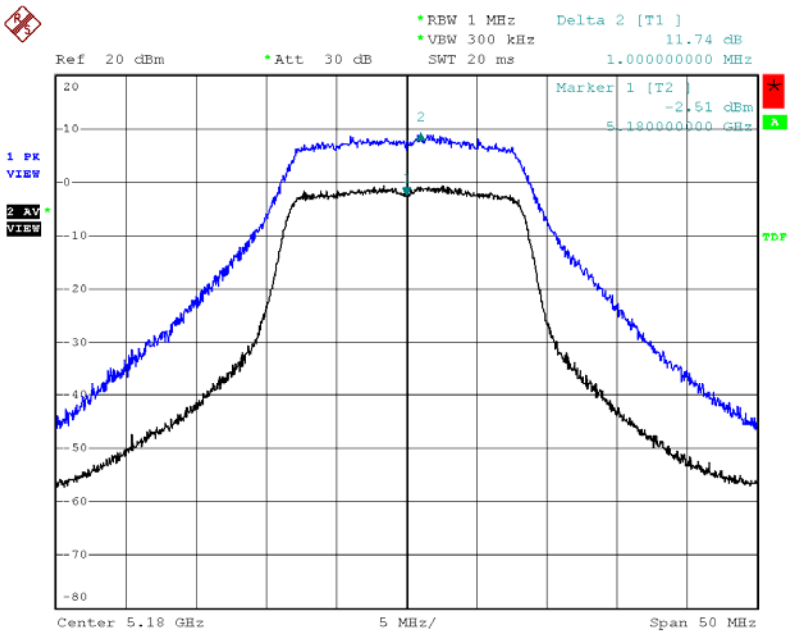
Date: 7.JAN.2009 20:17:38

Modulation Standard: 802.11a (54Mbps), Ant2
Channel: 48



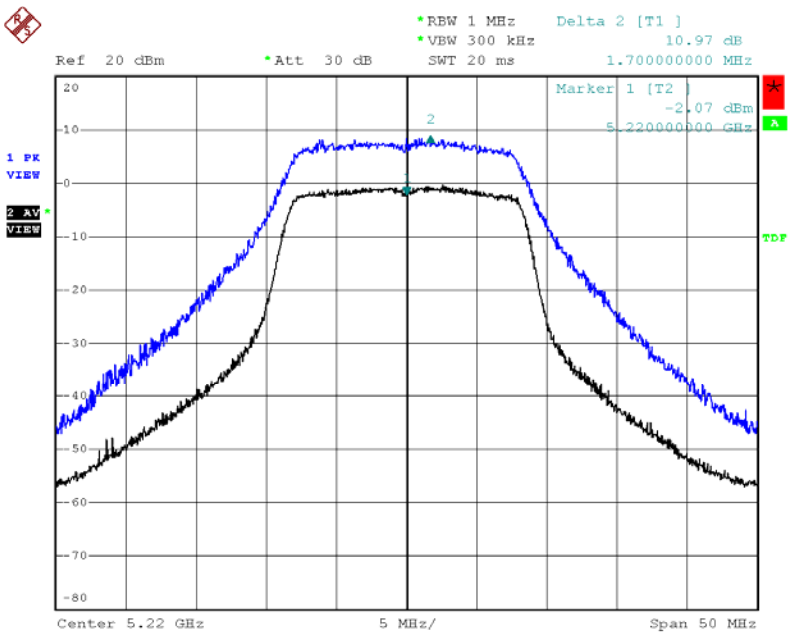
Date: 7.JAN.2009 20:27:41

Modulation Standard: 802.11a (54Mbps), Ant3
Channel: 36



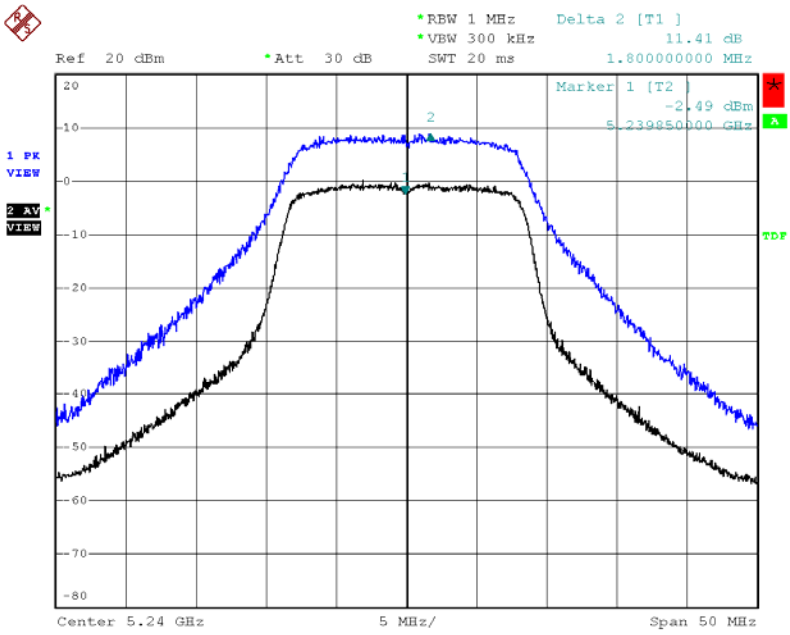
Date: 7.JAN.2009 19:57:58

Modulation Standard: 802.11a (54Mbps), Ant3
Channel: 44



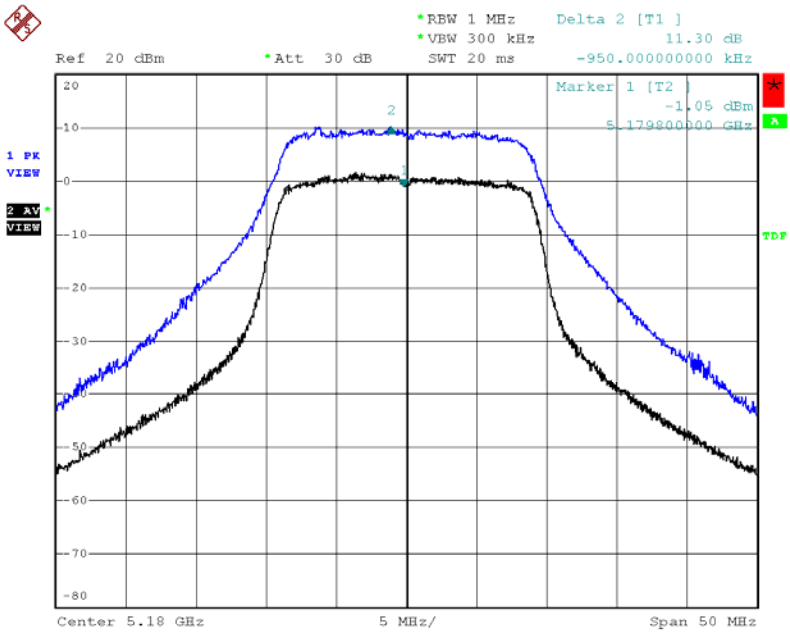
Date: 7.JAN.2009 20:16:21

Modulation Standard: 802.11a (54Mbps), Ant3
Channel: 48



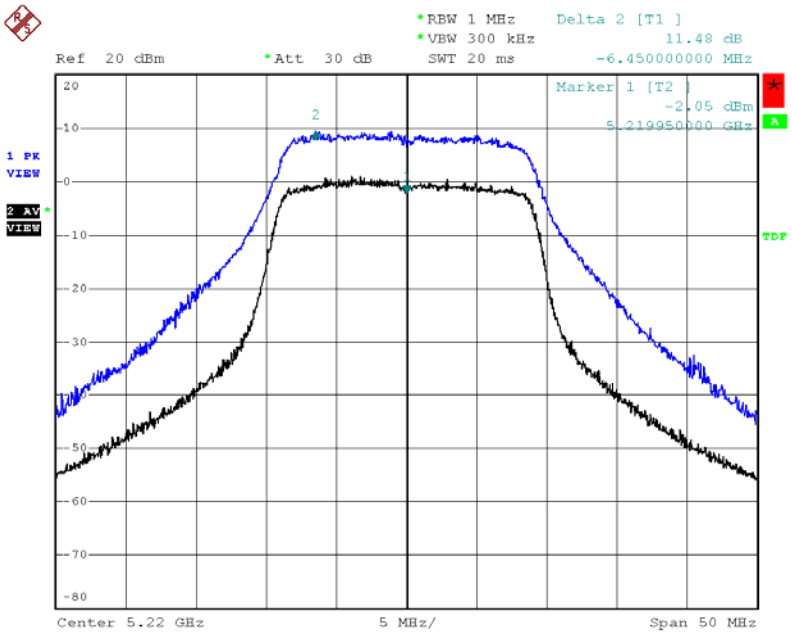
Date: 7.JAN.2009 20:12:45

Modulation Standard: 802.11an HT20 (130Mbps), Ant1
Channel: 36



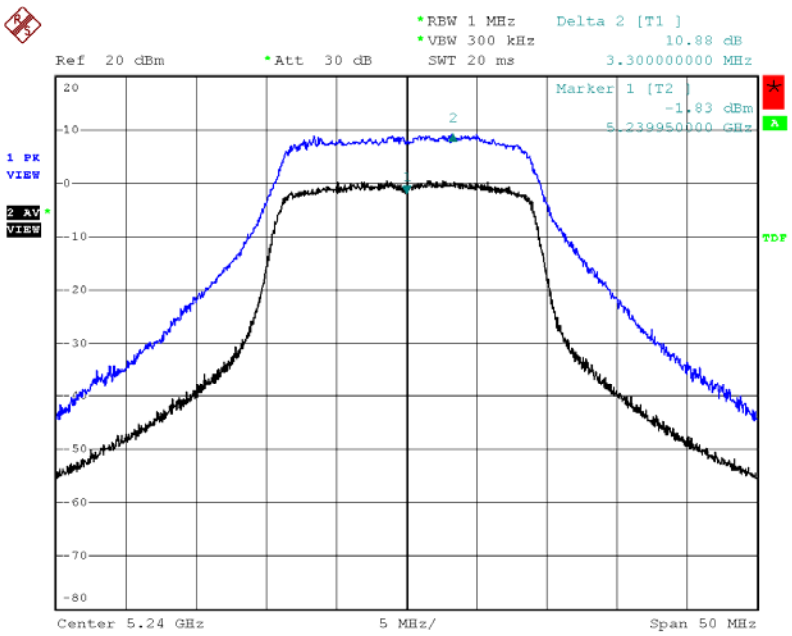
Date: 7.JAN.2009 20:44:15

Modulation Standard: 802.11an HT20 (130Mbps), Ant1
Channel: 44



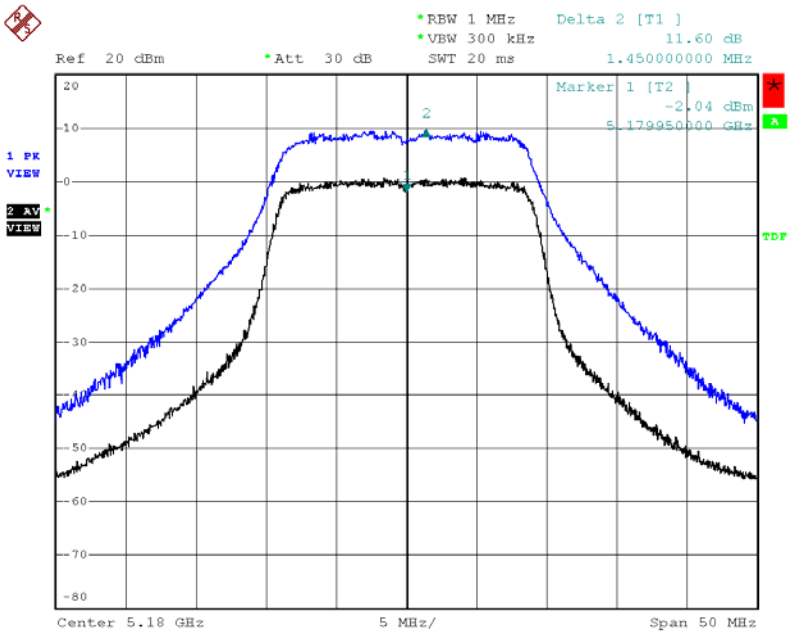
Date: 7.JAN.2009 20:51:56

Modulation Standard: 802.11an HT20 (130Mbps), Ant1
Channel: 48



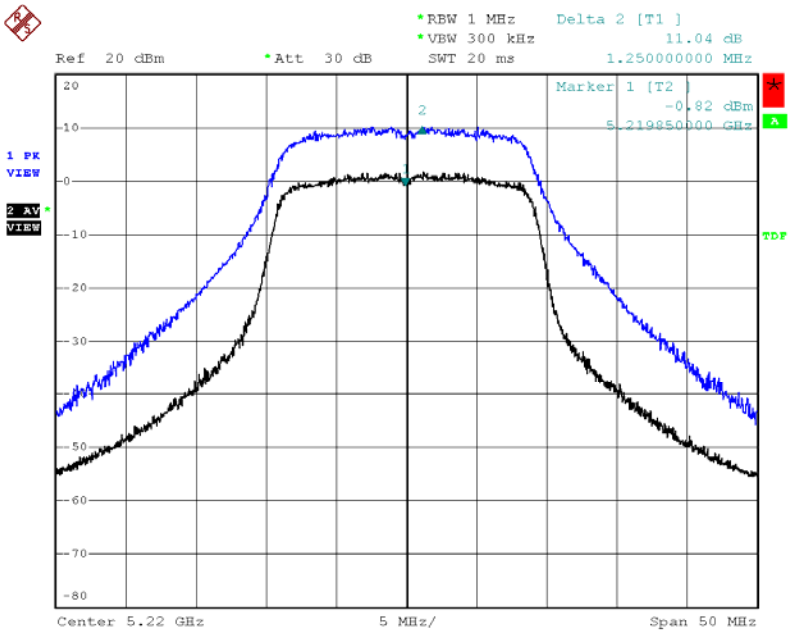
Date: 7.JAN.2009 21:03:17

Modulation Standard: 802.11an HT20 (130Mbps), Ant2
Channel: 36



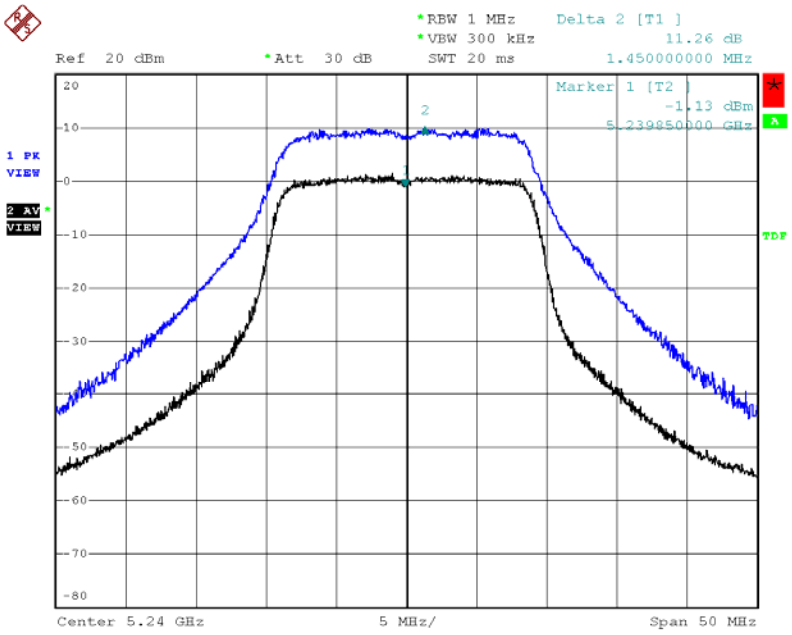
Date: 7.JAN.2009 20:36:18

Modulation Standard: 802.11an HT20 (130Mbps), Ant2
Channel: 44



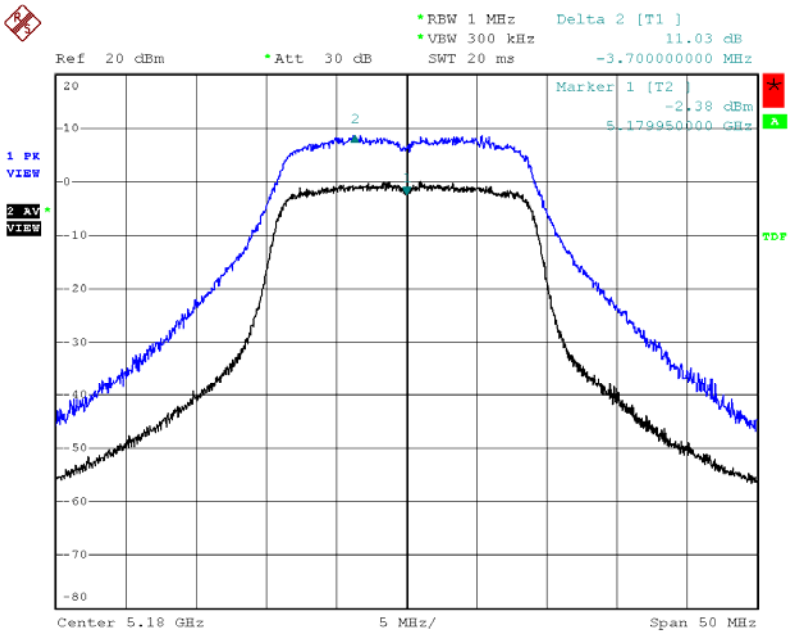
Date: 7.JAN.2009 20:49:41

Modulation Standard: 802.11an HT20 (130Mbps), Ant2
Channel: 48



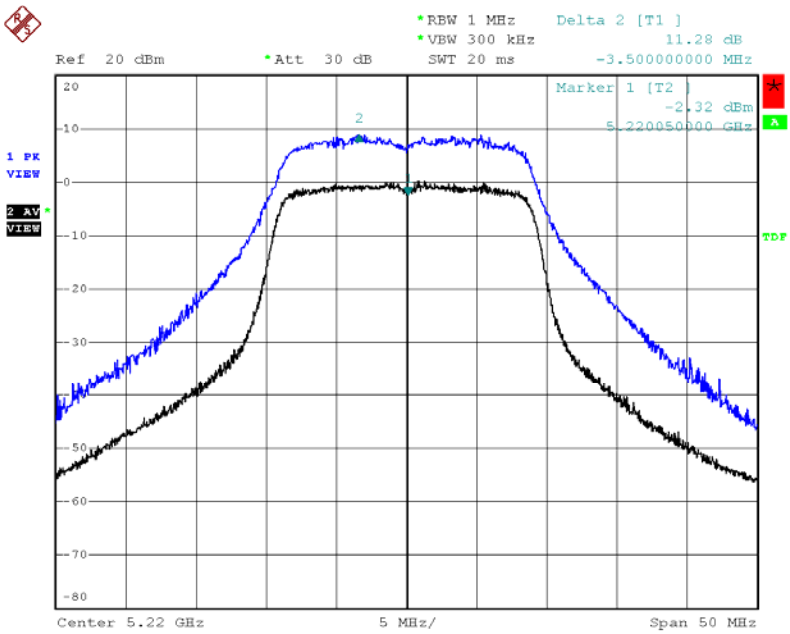
Date: 7.JAN.2009 20:58:07

Modulation Standard: 802.11an HT20 (130Mbps), Ant3
Channel: 36



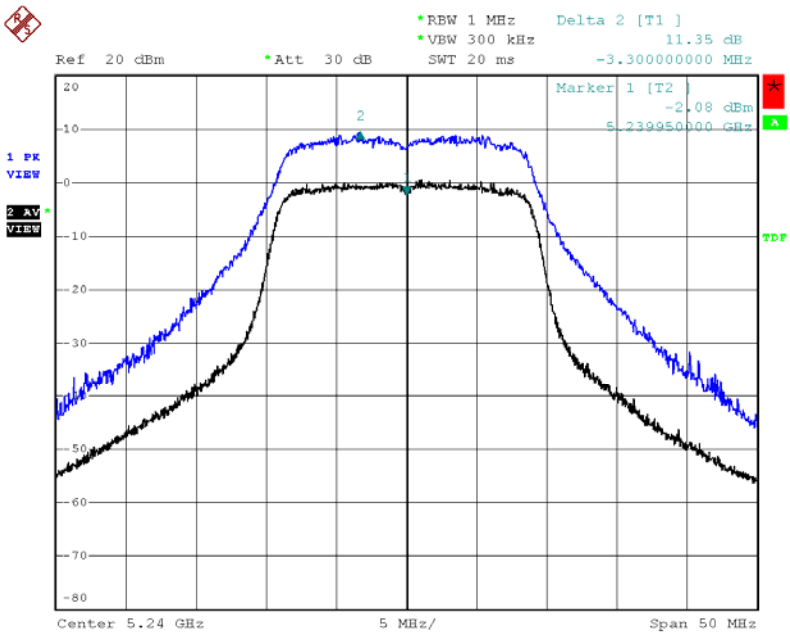
Date: 7.JAN.2009 20:33:36

Modulation Standard: 802.11an HT20 (130Mbps), Ant3
Channel: 44



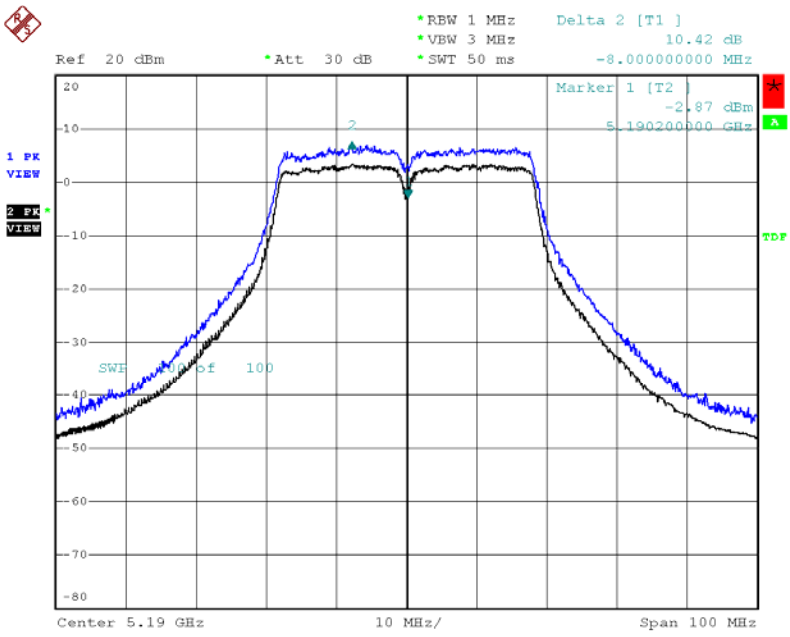
Date: 7.JAN.2009 20:47:41

Modulation Standard: 802.11an HT20 (130Mbps), Ant3
Channel: 48



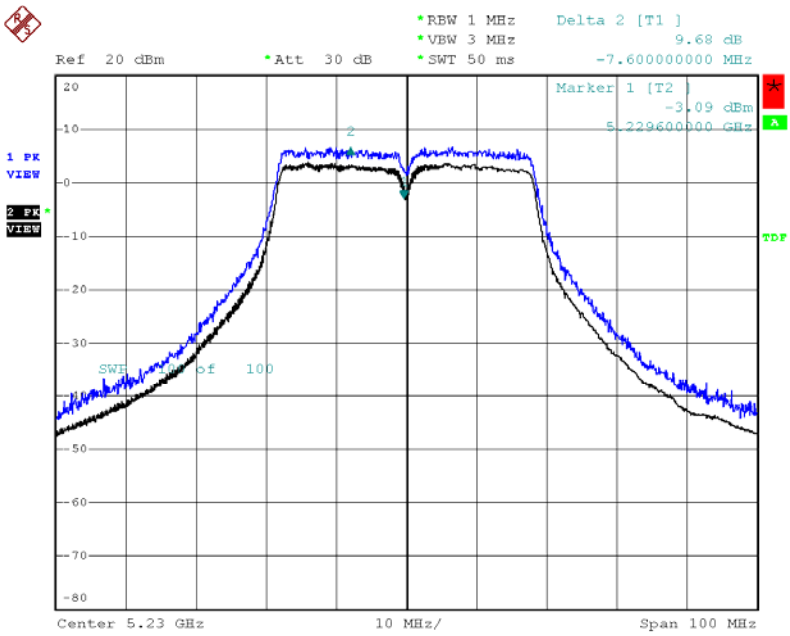
Date: 7.JAN.2009 20:56:16

Modulation Standard: 802.11an HT40 (270Mbps), Ant1
Channel: 38



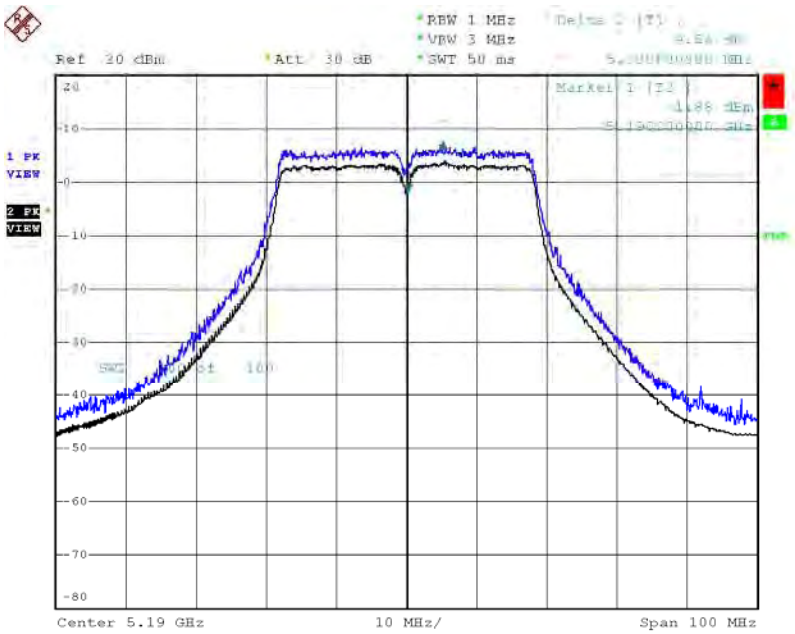
Date: 7.JAN.2009 21:10:08

Modulation Standard: 802.11an HT40 (270Mbps), Ant1
Channel: 46



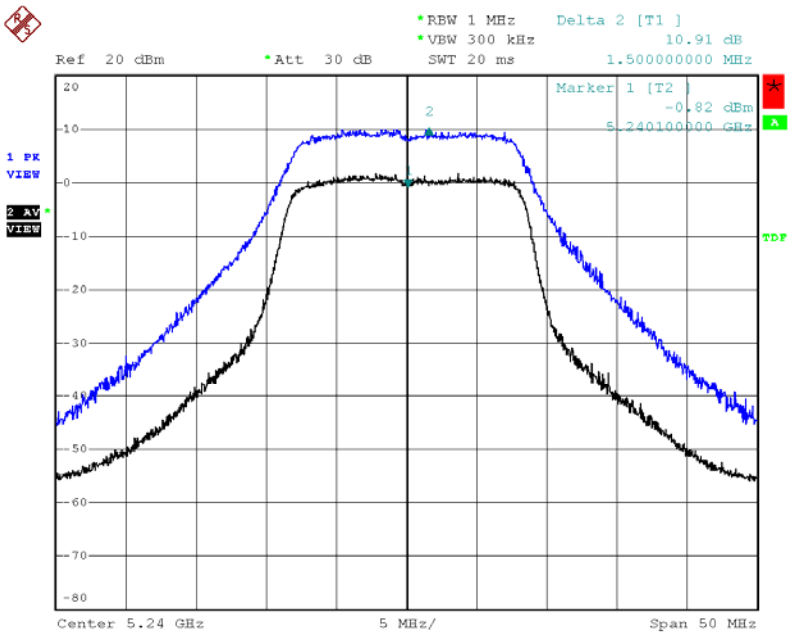
Date: 7.JAN.2009 21:22:57

Modulation Standard: 802.11an HT40 (270Mbps), Ant2
Channel: 38



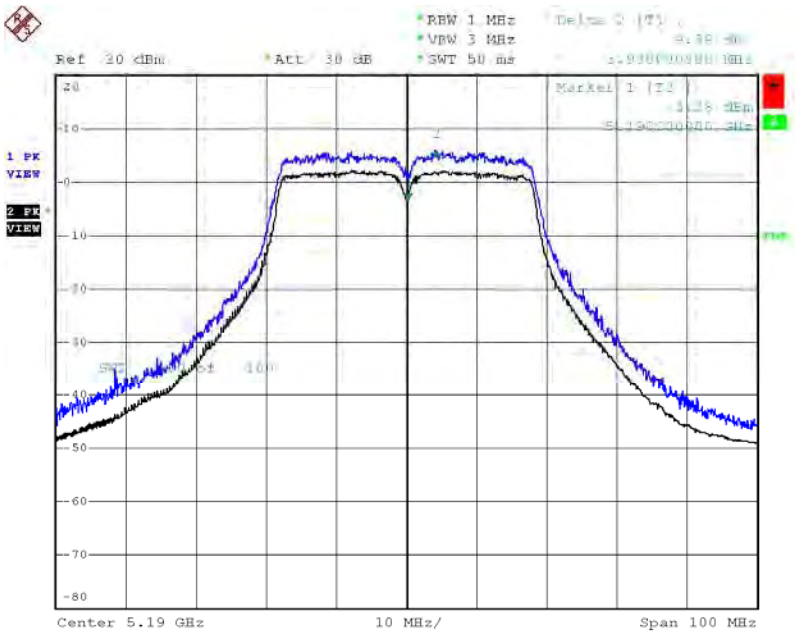
Date: 7.JAN.2009 21:12:24

Modulation Standard: 802.11an HT40 (270Mbps), Ant2
Channel: 46



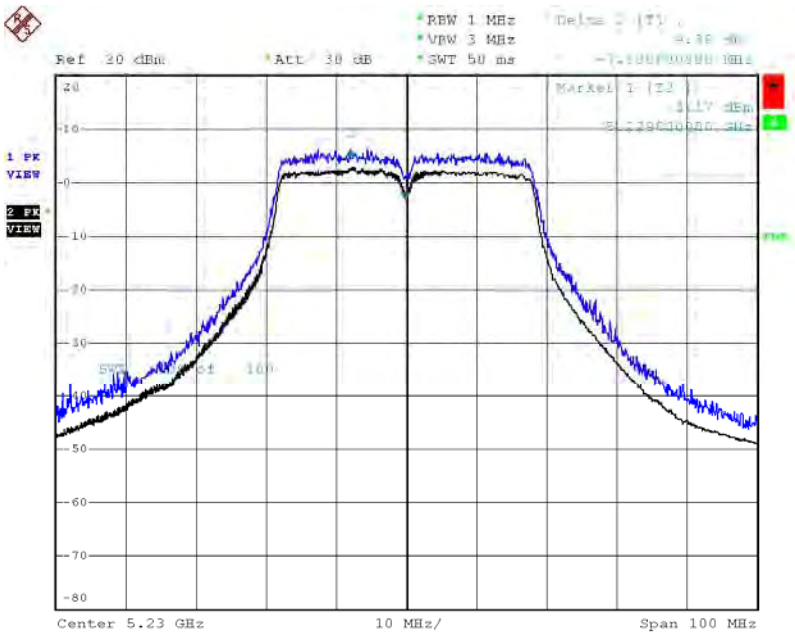
Date: 7.JAN.2009 20:27:41

Modulation Standard: 802.11an HT40 (270Mbps), Ant3
Channel: 38



Date: 7.JAN.2009 21:13:58

Modulation Standard: 802.11an HT40 (270Mbps), Ant3
Channel: 46



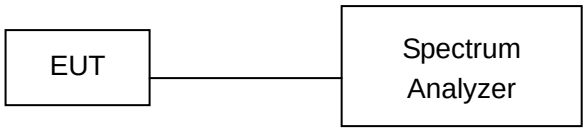
Date: 7.JAN.2009 21:20:29

8. Peak Power Spectral Density

8.1. Test Procedure

1. The transmitter output was connected to spectrum analyzer.
2. Set RBW of spectrum analyzer to 1 MHz and VBW to 3 MHz
3. The Peak Power Spectral Density is the highest level found across the emission in any 1MHz Band

8.2. Test Setup Layout



8.3. Measurement Equipment

Instrument/Ancillary	Model No.	Manufacturer	Serial No.	Calibration Date	Valid Date.
Spectrum Analyzer	FSP40	R&S	10047	2008/02/22	2009/02/21

8.4. Test Result and Data

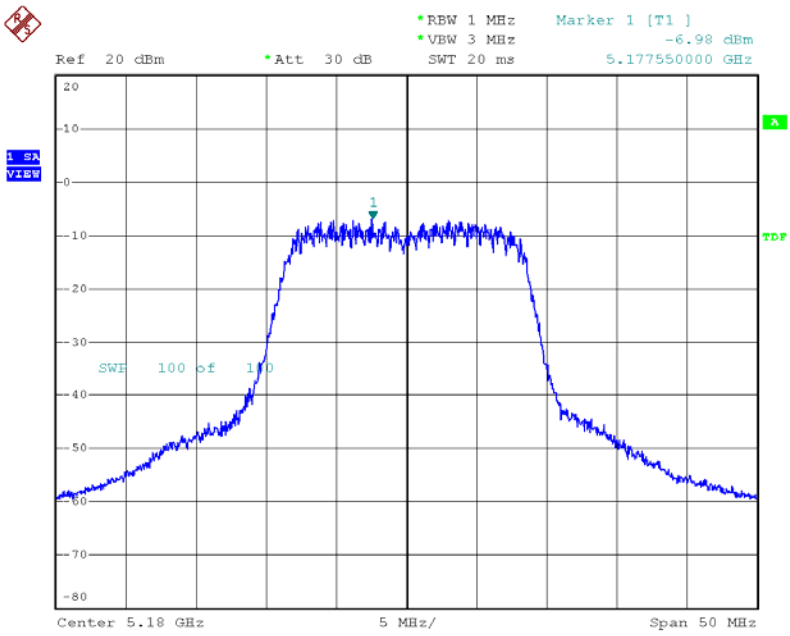
Test Date: Jan. 09, 2009 Temperature: 25℃

Atmospheric pressure: 1026 hPa Humidity: 65%

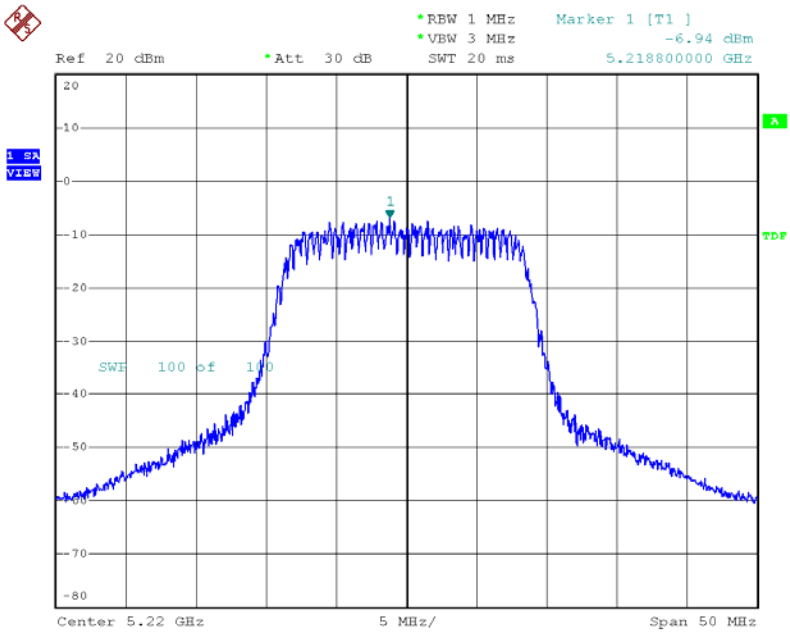
Modulation Standard	Channel	Frequency (MHz)	RF Power Level In 1MHz BW (dBm)			Limit (dB)
			Ant1	Ant2	Ant3	
802.11a (54Mbps)	36	5180	-6.98	-7.13	-7.64	4
	44	5220	-6.94	-4.84	-6.23	4
	48	5240	-6.69	-5.83	-6.46	4

Modulation Standard	Channel	Frequency (MHz)	RF Power Level In 1MHz BW (dBm)				Limit (dB)
			Ant1	Ant2	Ant3	Total	
802.11an HT20 (130Mbps)	36	5180	-8.04	-9.00	-10.32	-4.25	4
	44	5220	-10.69	-8.62	-9.90	-4.88	4
	48	5240	-8.99	-9.46	-10.01	-4.70	4
802.11an HT40 (270Mbps)	38	5190	-11.29	-10.79	-10.71	-6.15	4
	42	5210	---	---	---	---	4
	46	5230	-9.97	-8.68	-11.10	-5.03	4

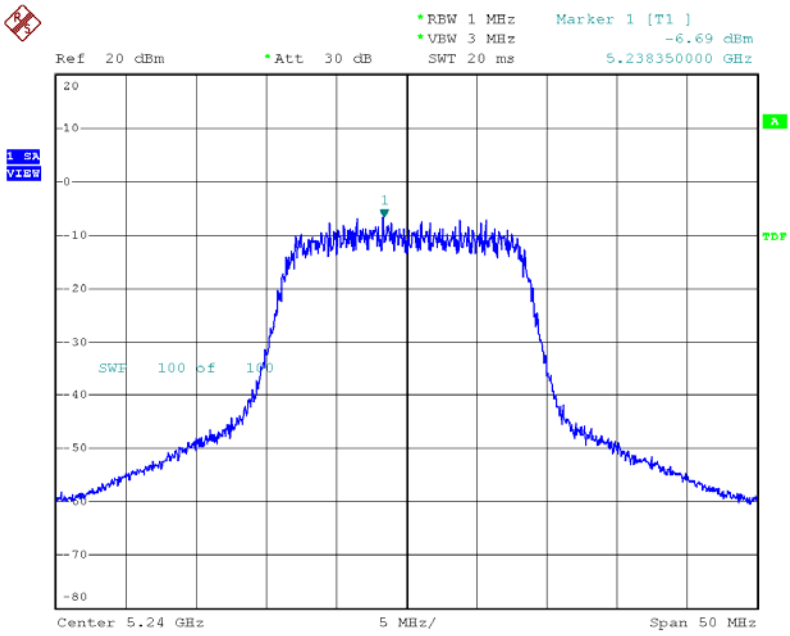
Modulation Standard: 802.11a (54Mbps), Ant1
Channel: 36



Modulation Standard: 802.11a (54Mbps), Ant1
Channel: 44

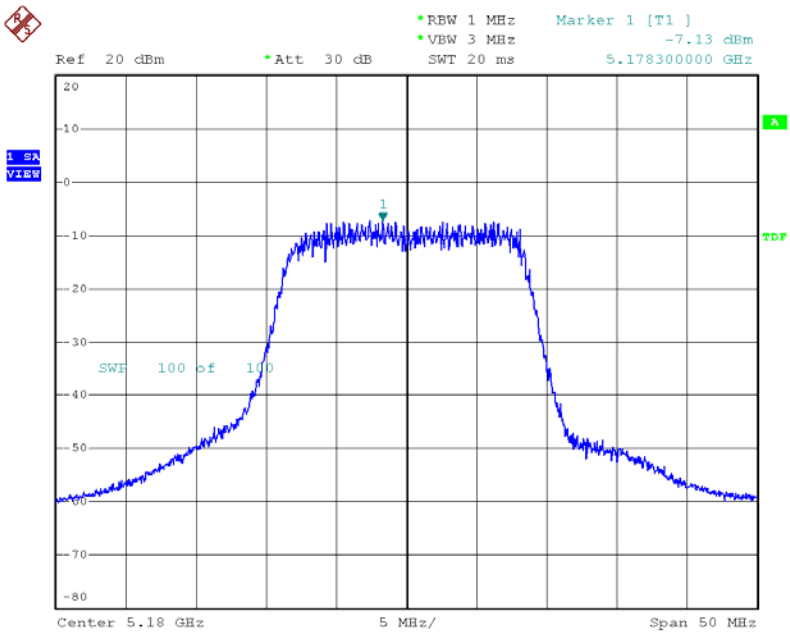


Modulation Standard: 802.11a (54Mbps), Ant1
Channel: 48



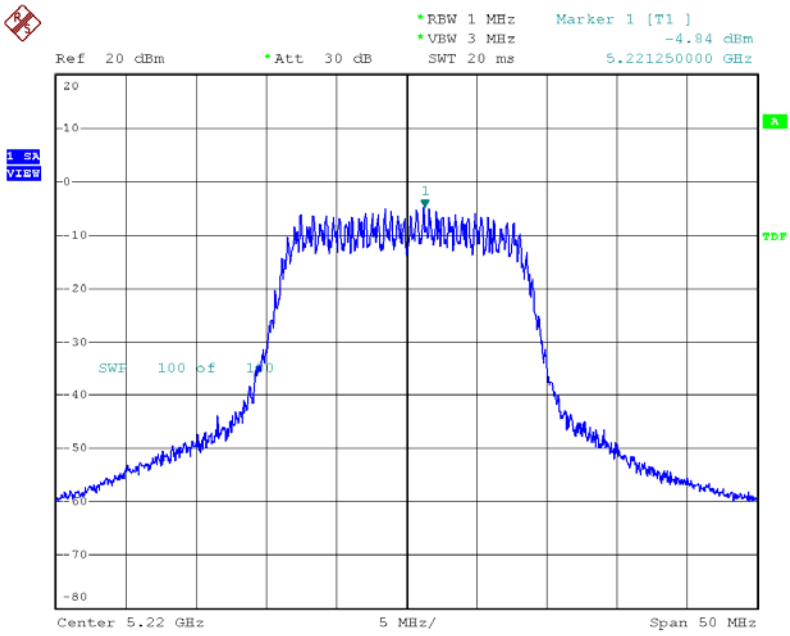
Date: 8.JAN.2009 14:49:42

Modulation Standard: 802.11a (54Mbps), Ant2
Channel: 36



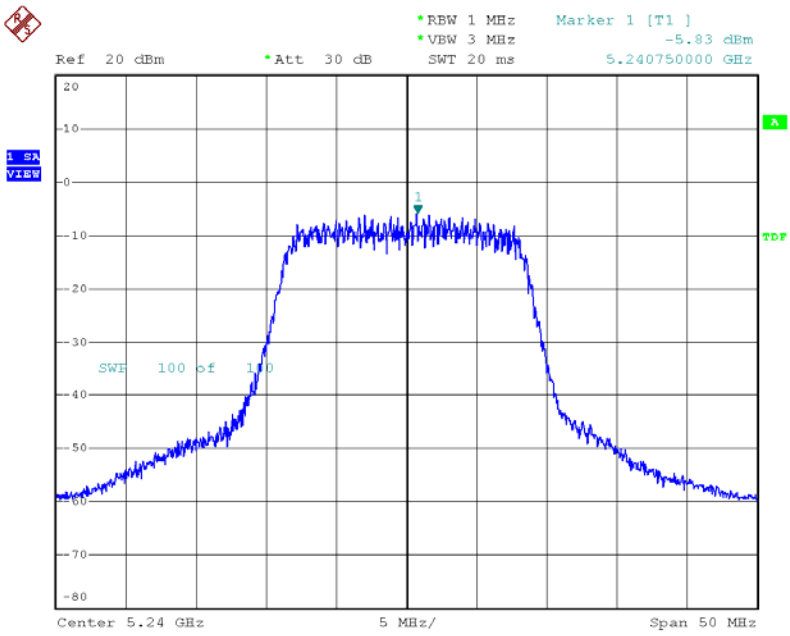
Date: 8.JAN.2009 14:42:11

Modulation Standard: 802.11a (54Mbps), Ant2
Channel: 44



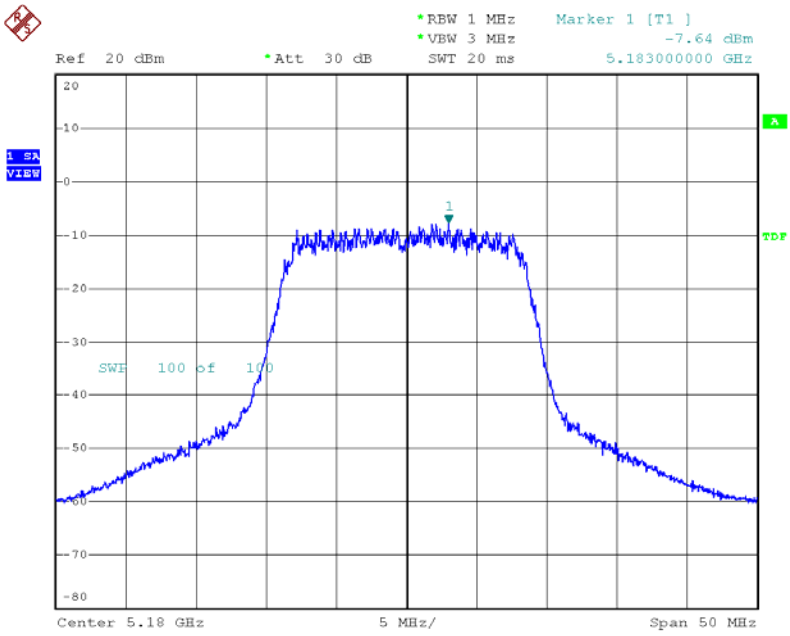
Date: 8.JAN.2009 14:48:33

Modulation Standard: 802.11a (54Mbps), Ant2
Channel: 48

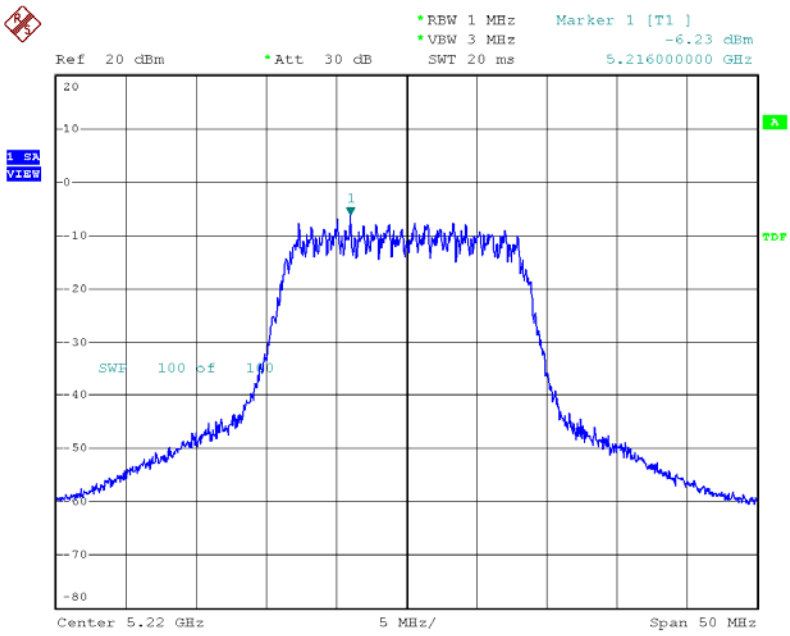


Date: 8.JAN.2009 14:50:03

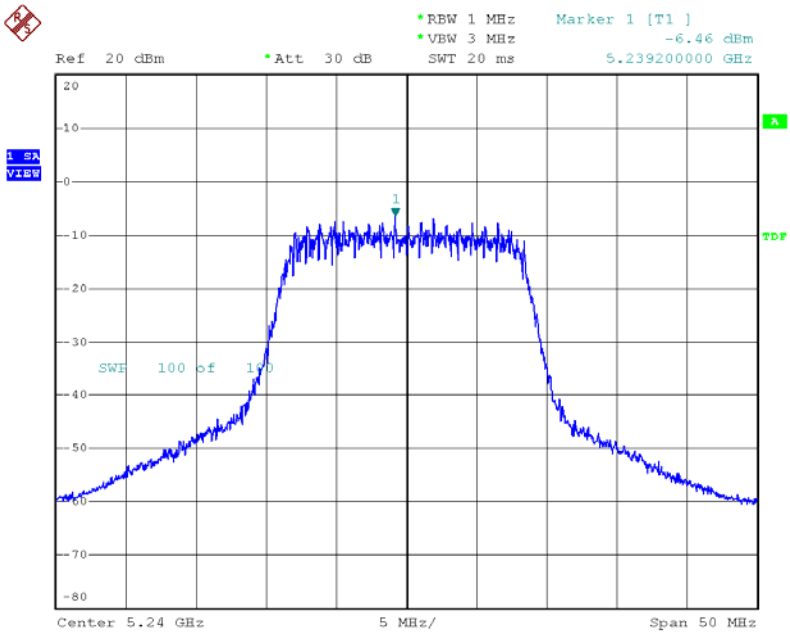
Modulation Standard: 802.11a (54Mbps), Ant3
Channel: 36



Modulation Standard: 802.11a (54Mbps), Ant3
Channel: 44

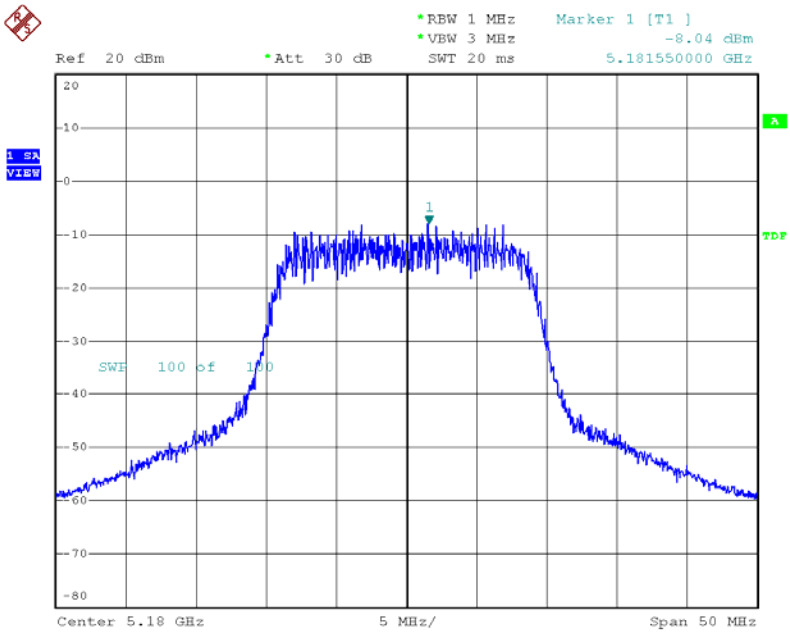


Modulation Standard: 802.11a (54Mbps), Ant3
Channel: 48



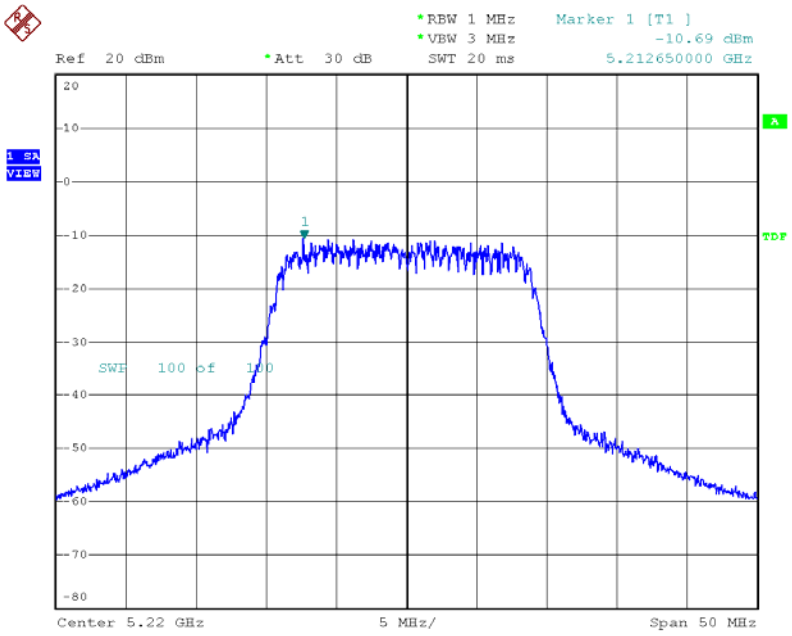
Date: 8.JAN.2009 14:51:16

Modulation Standard: 802.11an HT20 (130Mbps), Ant1
Channel: 36

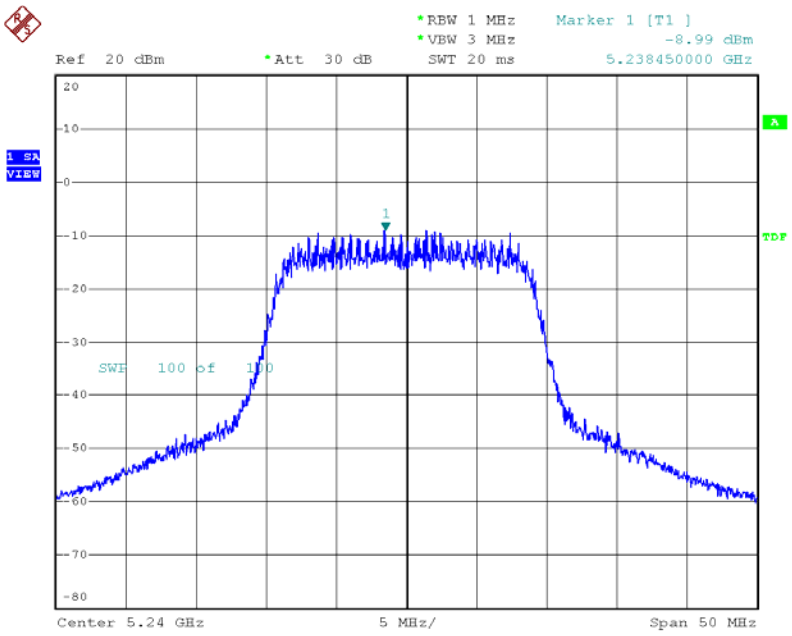


Date: 8.JAN.2009 14:53:14

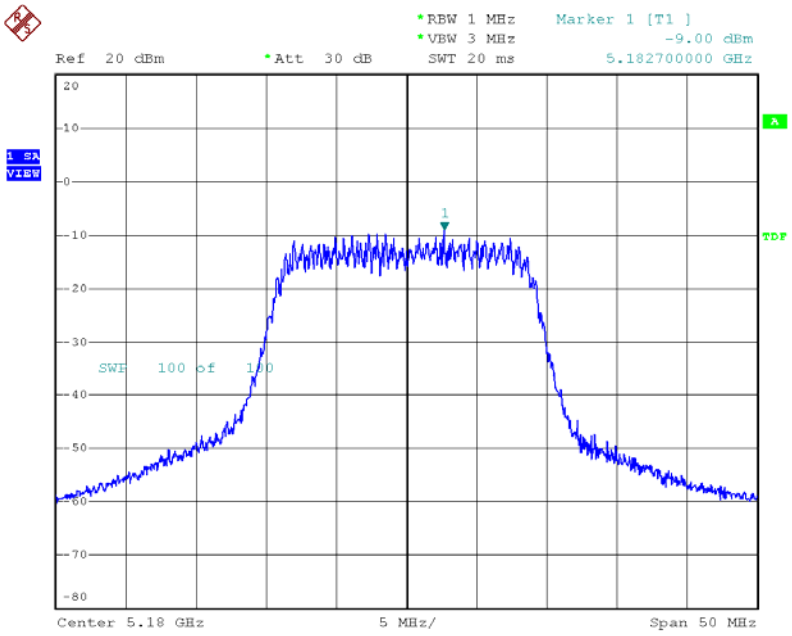
Modulation Standard: 802.11an HT20 (130Mbps), Ant1
Channel: 44



Modulation Standard: 802.11an HT20 (130Mbps), Ant1
Channel: 48

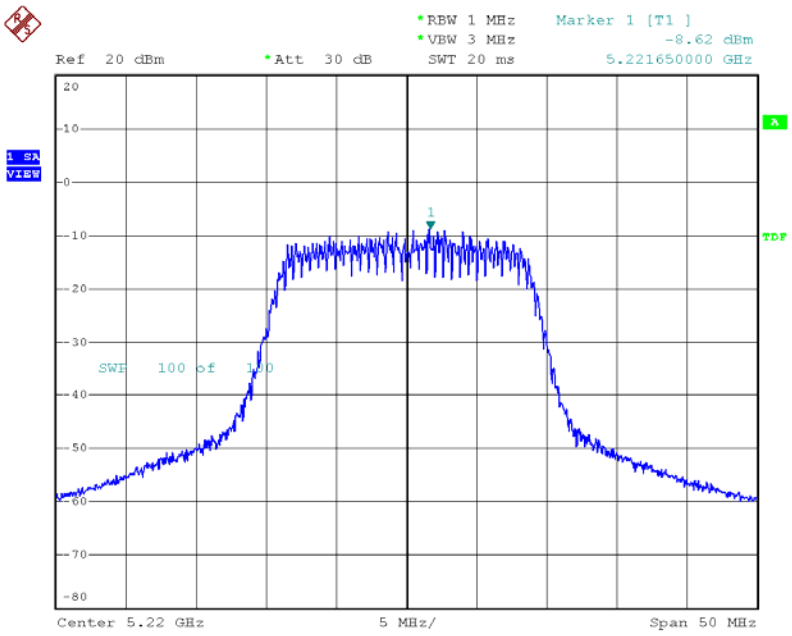


Modulation Standard: 802.11an HT20 (130Mbps), Ant2
Channel: 36



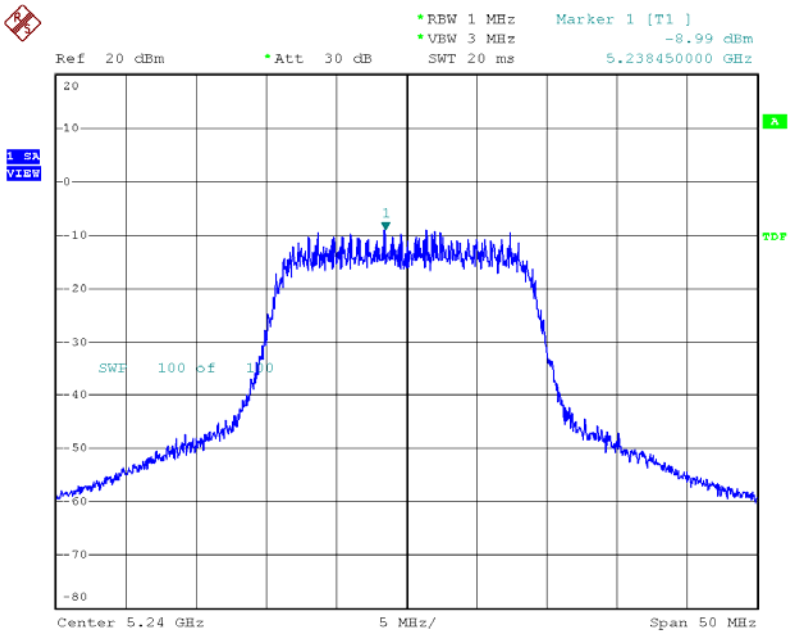
Date: 8.JAN.2009 14:53:51

Modulation Standard: 802.11an HT20 (130Mbps), Ant2
Channel: 44

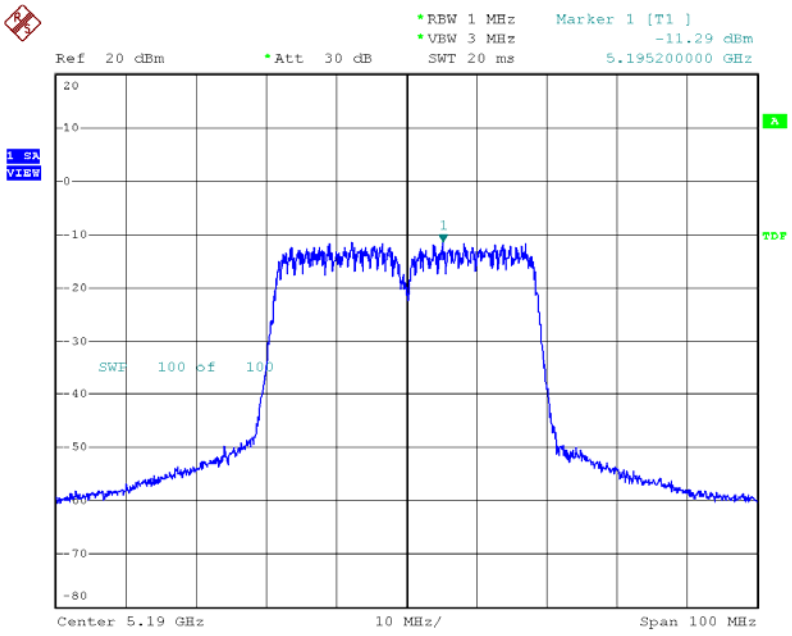


Date: 8.JAN.2009 14:56:11

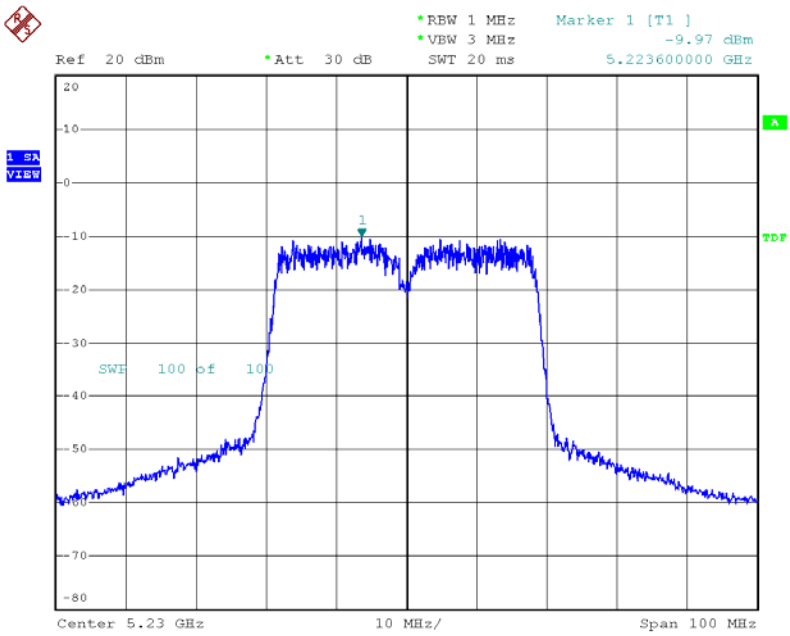
Modulation Standard: 802.11an HT20 (130Mbps), Ant2
Channel: 48



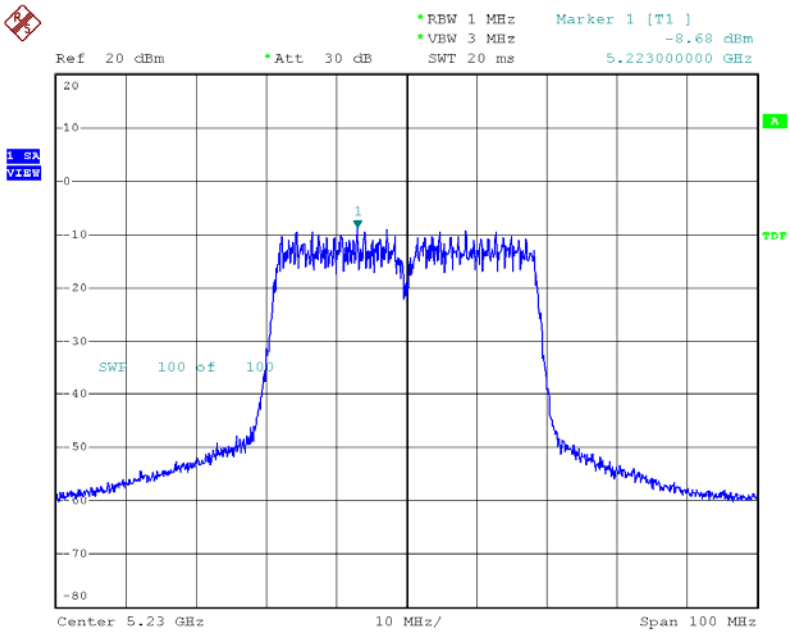
Modulation Standard: 802.11an HT40 (270Mbps), Ant1
Channel: 38



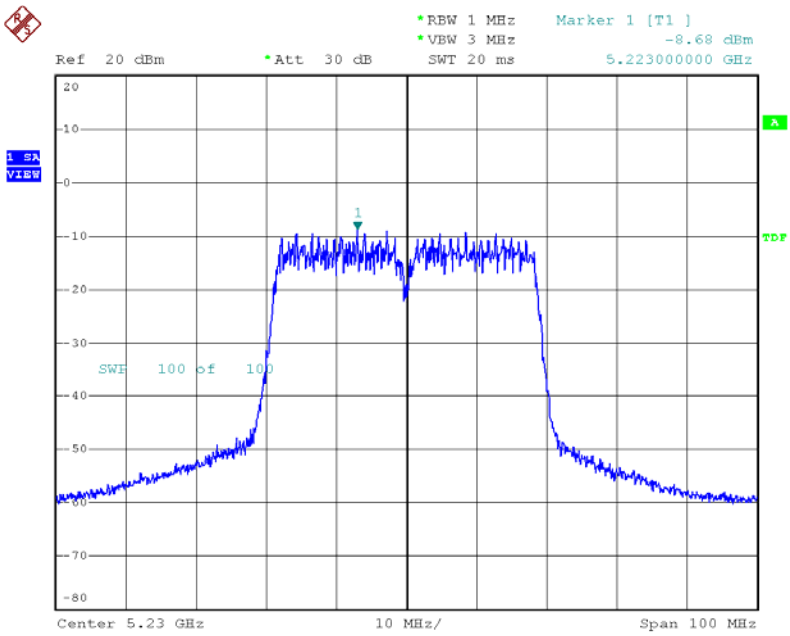
Modulation Standard: 802.11an HT40 (270Mbps), Ant1
Channel: 46



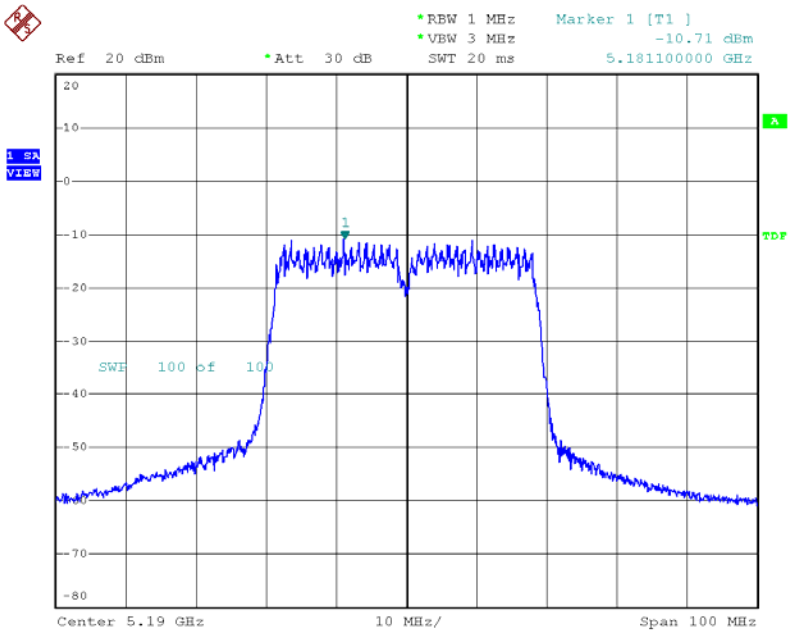
Modulation Standard: 802.11an HT40 (270Mbps), Ant2
Channel: 38



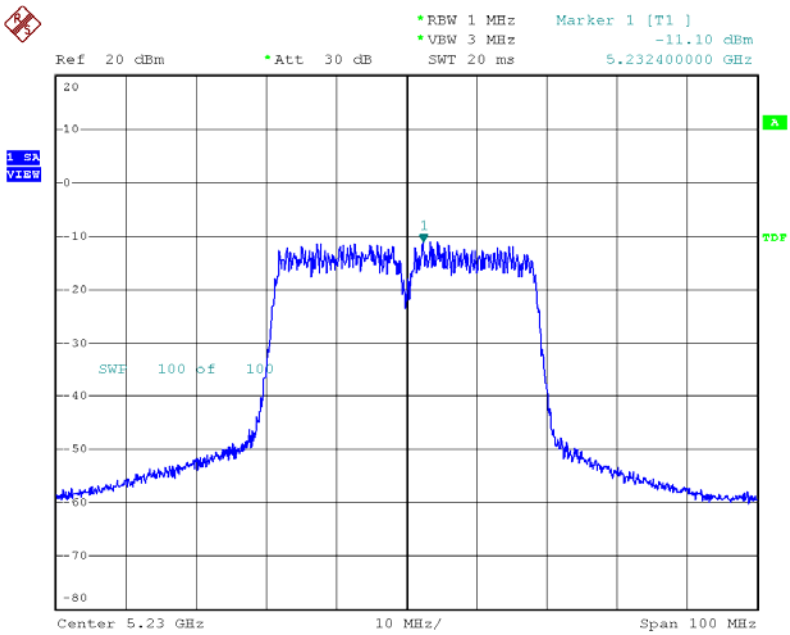
Modulation Standard: 802.11an HT40 (270Mbps), Ant2
Channel: 46



Modulation Standard: 802.11an HT40 (270Mbps), Ant3
Channel: 38



Modulation Standard: 802.11an HT40 (270Mbps), Ant3
Channel: 46

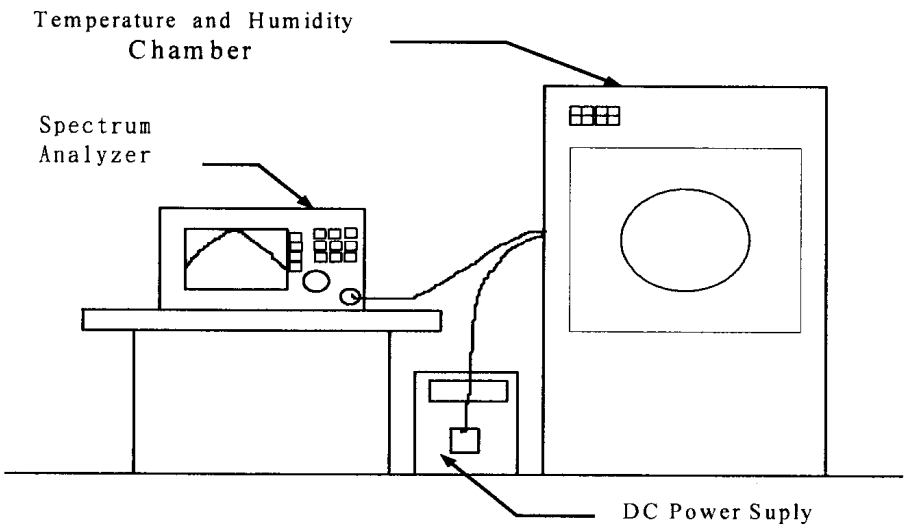


9. Frequency Stability

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	10047	2008/02/22	2009/02/21
Temperature Chamber	TMJ-9712	T MACHINE	T-12-040111	2008/01/15	2009/01/14
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: 5230 MHz							
Temp (°C)	Power supply (V)	2 minute		5 minute		10 minute	
		(MHz)	(%)	(MHz)	(%)	(MHz)	(%)
50	93.5	5239.9211	-0.001506	5239.9757	-0.000845	5239.9857	-0.000273
	110.0	5239.9481	-0.000990	5239.9782	-0.000473	5239.9748	-0.000481
	126.5	5239.9513	-0.000929	5239.9889	-0.000218	5239.9649	-0.000670
40	93.5	5239.9804	-0.000374	5239.9808	-0.000233	5239.9738	-0.000500
	110.0	5240.0079	0.000151	5239.9859	-0.000462	5240.0147	0.000281
	126.5	5239.9891	-0.000208	5239.9614	-0.000746	5239.9876	-0.000237
30	93.5	5240.0072	0.000137	5239.9826	-0.000370	5240.0028	0.000053
	110.0	5240.0055	0.000105	5239.9837	-0.000254	5240.0047	0.000090
	126.5	5240.0167	0.000319	5239.9934	-0.000118	5240.0126	0.000240
20	93.5	5239.9211	-0.001506	5240.0054	0.000040	5240.0035	0.000067
	110.0	5239.9481	-0.000990	5240.0065	0.000065	5240.0044	0.000084
	126.5	5239.9513	-0.000929	5240.0077	0.000145	5240.0013	0.000025
10	93.5	5239.9804	-0.000374	5240.0061	0.000116	5240.0013	0.000025
	110.0	5240.0079	0.000151	5240.0174	0.000332	5240.0144	0.000275
	126.5	5239.9891	-0.000208	5239.9945	-0.000105	5239.9958	-0.000080
0	93.5	5239.9895	-0.000200	5239.9657	-0.000655	5239.9808	-0.000233
	110.0	5239.9656	-0.000656	5239.9563	-0.000834	5239.9859	-0.000462
	126.5	5239.9767	-0.000445	5239.9782	-0.000416	5239.9614	-0.000746
-10	93.5	5240.0058	0.000111	5240.0292	0.000557	5239.9826	-0.000370
	110.0	5239.9787	-0.000406	5240.0182	0.000347	5239.9837	-0.000254
	126.5	5239.9724	-0.000527	5239.9879	-0.000231	5239.9934	-0.000118
-20	93.5	5239.9603	-0.000758	5240.0165	0.000315	5240.0054	0.000040
	110.0	5239.9816	-0.000351	5240.0274	0.000523	5240.0065	0.000065
	126.5	5239.9725	-0.000525	5240.0183	0.000349	5240.0077	0.000145
-30	93.5	5240.0014	0.000027	5240.0083	0.000158	5240.0108	0.000202
	110.0	5240.0102	0.000195	5240.0194	0.000370	5240.0019	0.000027
	126.5	5239.9583	-0.000796	5240.0247	0.000471	5240.0012	0.000015

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
Spectrum Analyzer	FSP40	R&S	10047	2008/02/22	2009/02/21

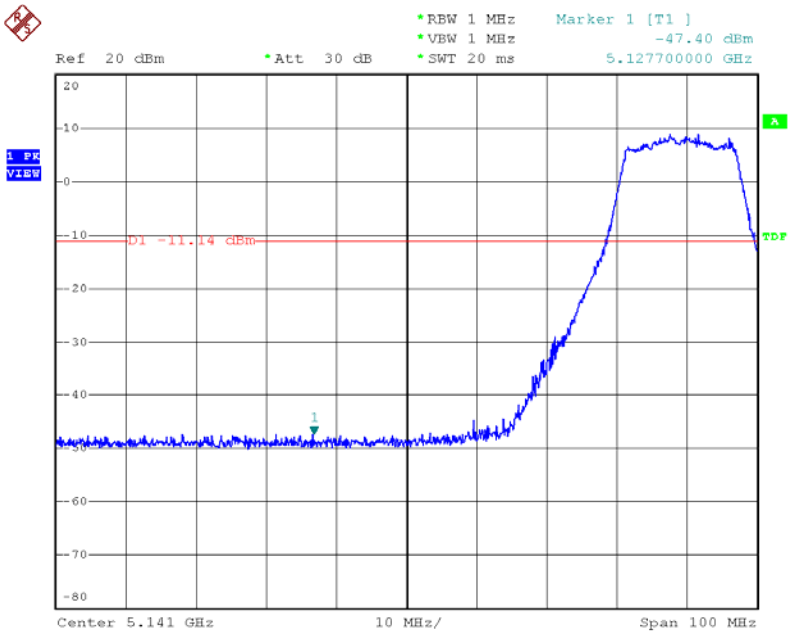
10.3. Test Result and Data

Test Date: Dec. 26, 2008 Temperature: 20℃

Atmospheric pressure: 1008 Pha Humidity: 60%

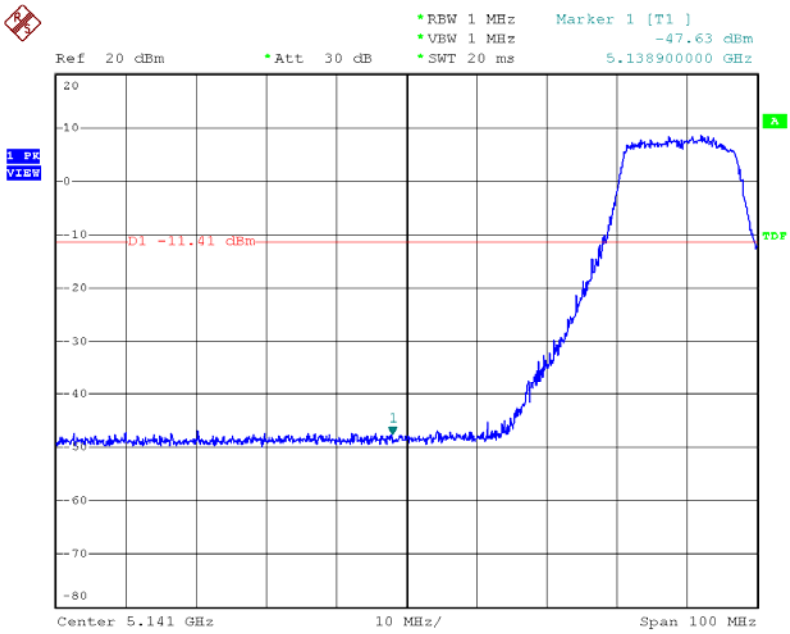
Modulation Standard	Channel	Frequency (MHz)	maximum value in frequency (MHz)		
			Ant1	Ant2	Ant3
802.11a (54Mbps)	36	5180	5127.70	5138.90	5139.20
802.11an HT20 (130Mbps)	36	5180	5126.10	5110.20	5124.70
802.11an HT40 (270Mbps)	38	5190	5138.30	5129.00	5139.80
Modulation Standard	Channel	Frequency (MHz)	maximum value (dBm)		
			Ant1	Ant2	Ant3
802.11a (54Mbps)	36	5180	-46.89	-46.64	-46.68
802.11an HT20 (130Mbps)	36	5180	-47.40	-47.63	-47.16
802.11an HT40 (270Mbps)	38	5190	-45.57	-46.77	-45.61

Modulation Standard: 802.11a (54Mbps), Ant1
Channel: 36



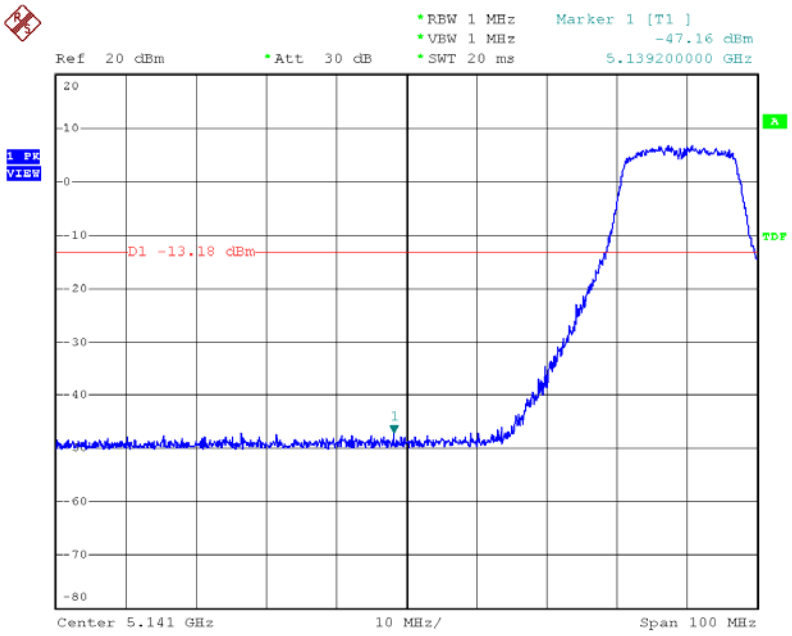
Date: 8.JAN.2009 16:26:14

Modulation Standard: 802.11a (54Mbps), Ant2
Channel: 36



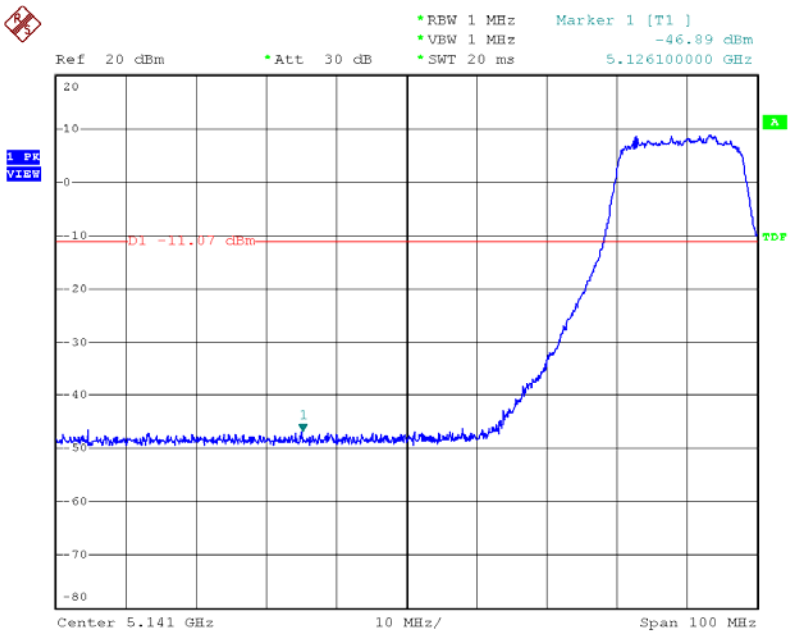
Date: 8.JAN.2009 16:25:04

Modulation Standard: 802.11a (54Mbps), Ant3
Channel: 36



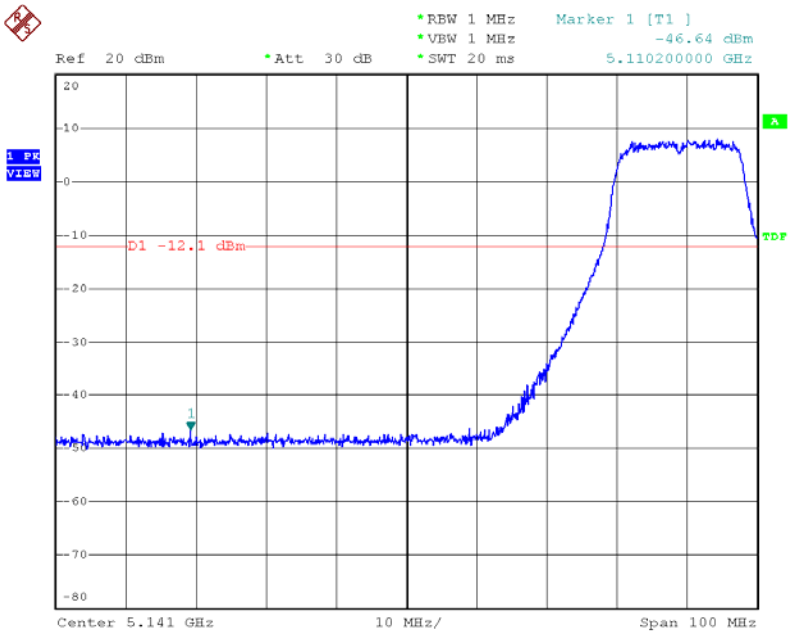
Date: 8.JAN.2009 16:23:25

Modulation Standard: 802.11an HT20 (130Mbps), Ant1
Channel: 36



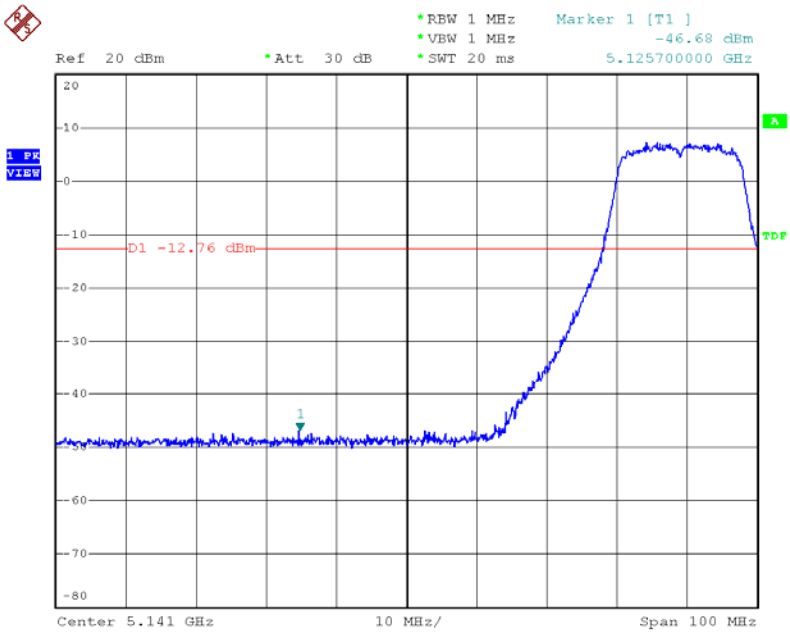
Date: 8.JAN.2009 16:31:40

Modulation Standard: 802.11an HT20 (130Mbps), Ant2
Channel: 36



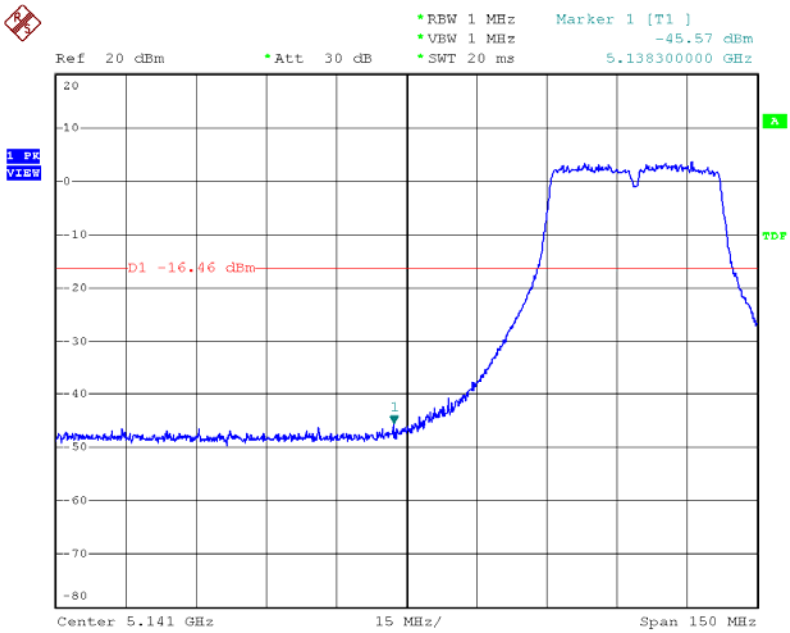
Date: 8.JAN.2009 16:29:51

Modulation Standard: 802.11an HT20 (130Mbps), Ant3
Channel: 36



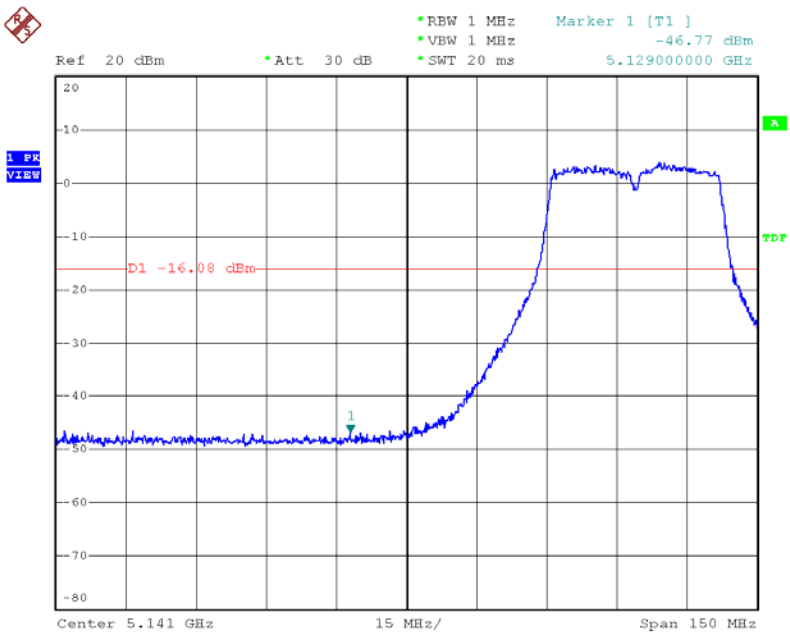
Date: 8.JAN.2009 16:28:17

Modulation Standard: 802.11an HT40 (270Mbps), Ant1
Channel: 38



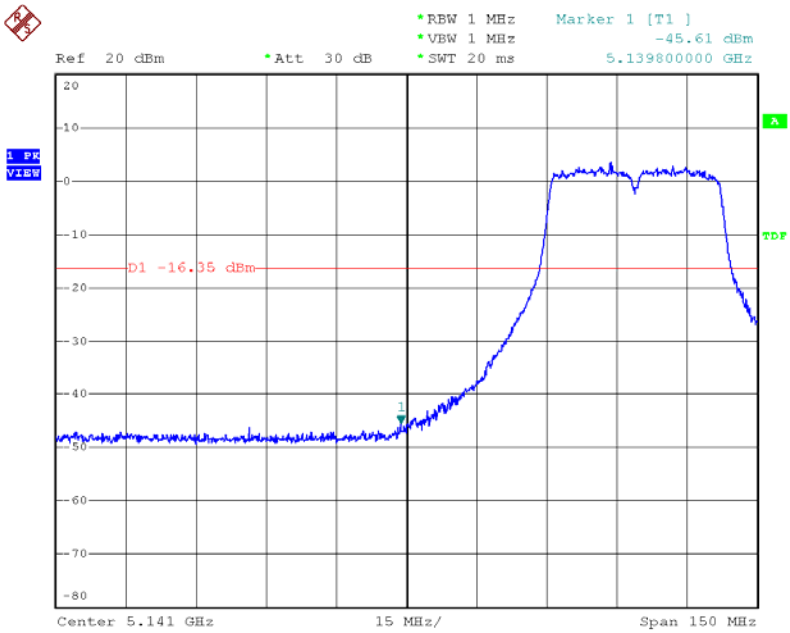
Date: 8.JAN.2009 16:45:14

Modulation Standard: 802.11an HT40 (270Mbps), Ant2
Channel: 38



Date: 8.JAN.2009 16:41:18

Modulation Standard: 802.11an HT40 (270Mbps), Ant3
Channel: 38



10.4. Restrict Band Emission Measurement Data

Test Date: Jan. 06, 2009 Temperature: 24℃

Atmospheric pressure: 1007 hPa Humidity: 75%

Modulation Standard: IEEE 802.11a (54Mbps)

Channel 36										Fundamental Frequency: 5180 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			
5135.5	H	50.57	6.69	57.27	Peak	74	54	-21.73	55	100
5145.5	H	36.13	6.72	42.85	Ave	74	54	-11.15	55	100
5103	V	50.68	6.62	57.31	Peak	74	54	-16.69	58	100
5143.1	V	36.297	6.714	43.00	Ave	74	54	-10.99	58	100
Channel 64										Fundamental Frequency: 5320
5393.5	H	50.60	7.26	57.87	Peak	74	54	-16.12	63	100
5352.7	H	36.39	7.17	43.57	Ave	74	54	-10.42	63	100
5359.9	V	51.52	7.19	58.71	Peak	74	54	-15.28	122	100
5350.1	V	36.58	7.17	43.75	Ave	74	54	-10.24	122	100

Modulation Standard: IEEE 802.11an, HT20, (130Mbps)

Channel 36										Fundamental Frequency: 5180
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			
5133.1	H	50.64	6.69	57.33	Peak	74	54	-16.66	327	100
5142.7	H	36.11	6.71	42.82	Ave	74	54	-11.17	327	100
5138.6	V	50.92	6.70	57.63	Peak	74	54	-16.36	175	100
5147.8	V	36.17	6.72	42.90	Ave	74	54	-11.09	175	100
Channel 64										Fundamental Frequency: 5320
5367.5	H	50.68	7.20	57.89	Peak	74	54	-16.10	332	100
5405.5	H	36.21	7.29	43.51	Ave	74	54	-10.48	332	100
5375	V	50.76	7.22	57.98	Peak	74	54	-16.01	110	100
5350.1	V	36.46	7.17	43.63	Ave	74	54	-10.36	110	100

Modulation Standard: IEEE 802.11an, HT40(270Mbps)

Channel 38										Fundamental Frequency: 5190
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			
5121.5	H	50.57	6.66	57.24	Peak	74	54	-16.75	317	100
5145.4	H	36.13	6.71	42.85	Ave	74	54	-11.14	317	100
5145.9	V	50.51	6.72	57.24	Peak	74	54	-16.75	185	100
5149.9	V	36.41	6.72	43.14	Ave	74	54	-10.85	185	100
Channel 62										Fundamental Frequency: 5310
5351.4	H	50.90	7.17	58.08	Peak	74	54	-15.91	333	100
5350.3	H	36.39	7.17	43.56	Ave	74	54	-10.43	333	100
5385	V	50.81	7.24	58.05	Peak	74	54	-15.94	120	100
5350.2	V	36.59	7.17	43.76	Ave	74	54	-10.23	120	100

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

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

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.

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)
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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

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

E＝Electric field (V/m)

P＝Peak output power (W)

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