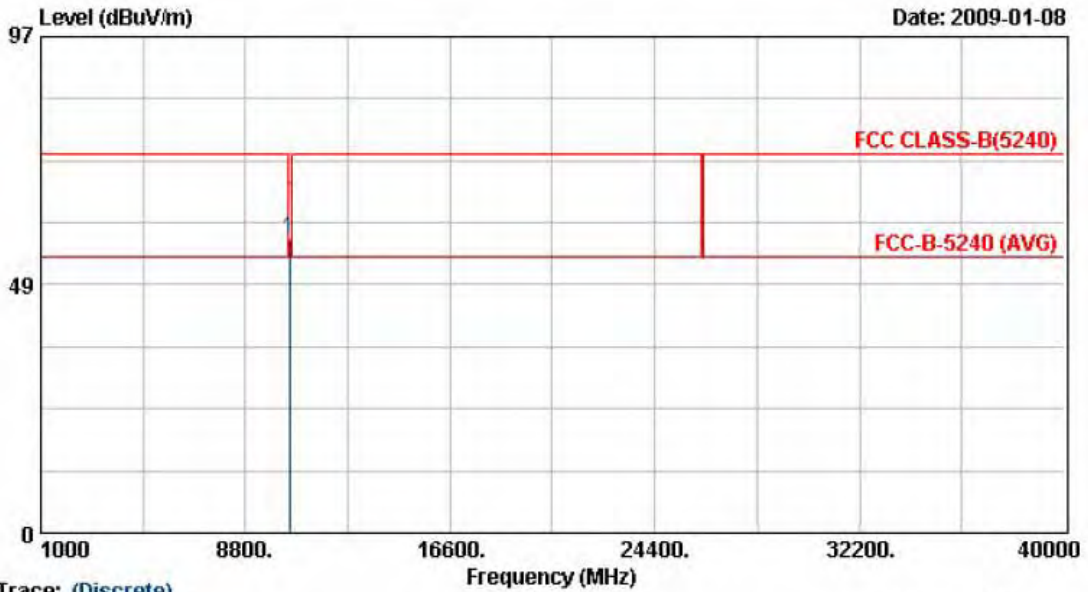




Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: 802.11an HT20, CH48	Temperature	: 25 °C
Memo	:	Humidity	: 70 %



Trace: (Discrete)

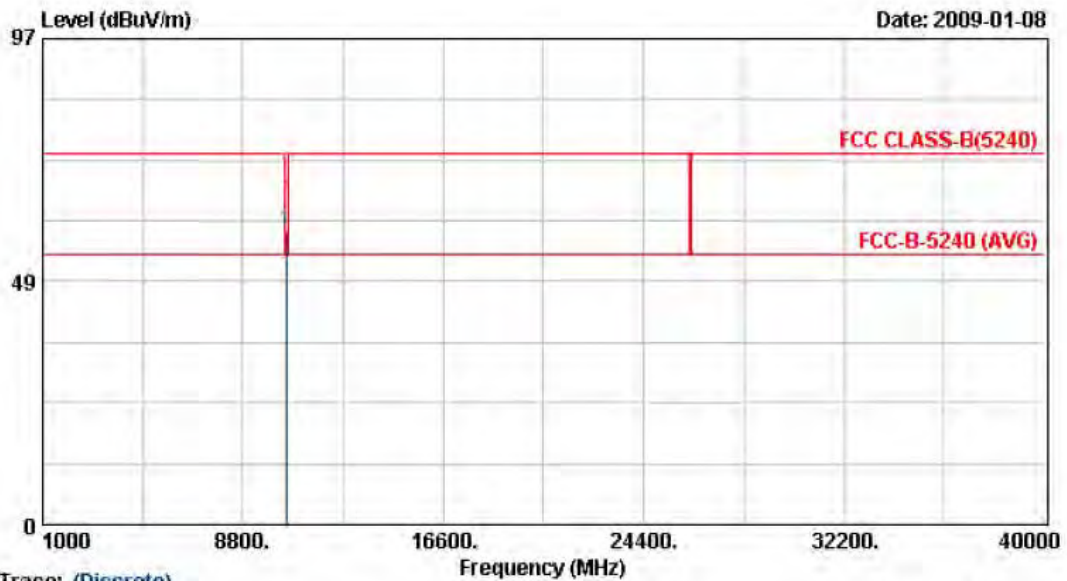
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	10482.80	42.14	15.37	57.51	68.30	-10.79	Peak	150	0

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
5. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz.
6. The other emissions is too low to be measured.



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11an HT20, CH48	Temperature	: 25 °C
Memo	:	Humidity	: 70%



Trace: (Discrete)

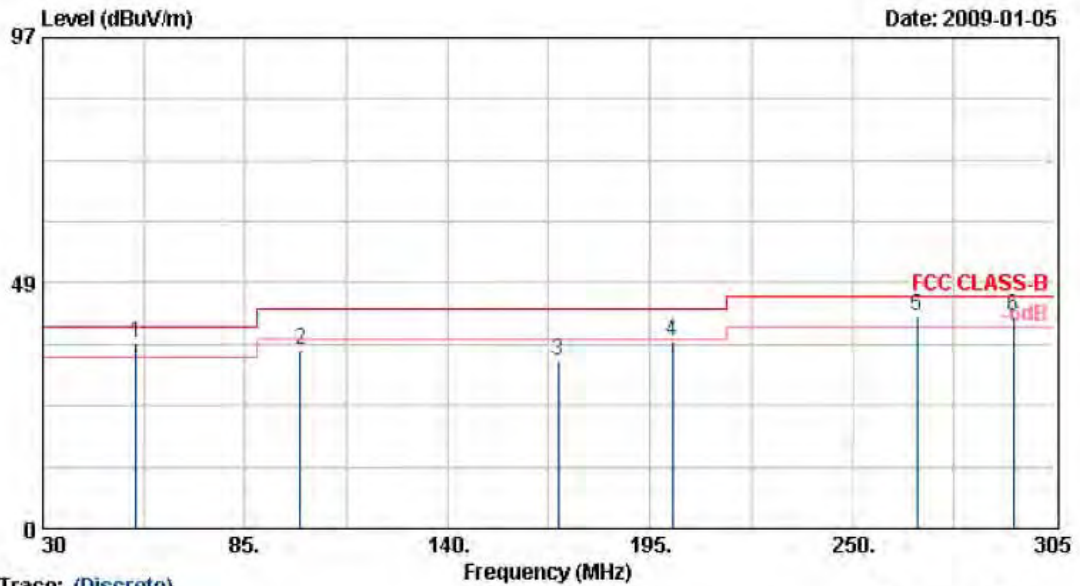
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	10479.38	43.25	15.36	58.62	68.30	-9.68	Peak	100	0

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
5. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz.
6. The other emissions is too low to be measured.



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: 802.11an HT40, CH38	Temperature	: 23 °C
Memo	:	Humidity	: 75 %



Trace: (Discrete)

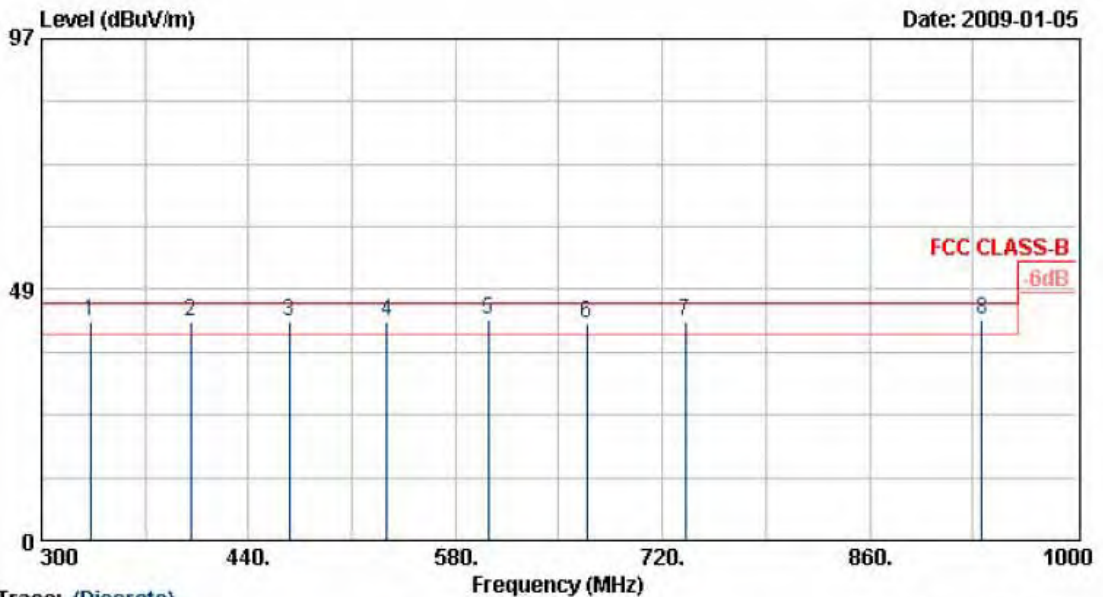
Item	Freq MHz	Read Value dBuV/m	Factor dB	Result dBuV/m	Limit dBuV/m	Margin dB	Remark	Ant Pos cm	Tab Pos Deg
1	55.30	44.80	-8.19	36.61	40.00	-3.39	QP	150	0
2	99.85	45.47	-10.30	35.17	43.50	-8.33	Peak	150	0
3	169.98	39.49	-6.49	33.00	43.50	-10.50	Peak	150	0
4	201.05	44.95	-7.86	37.09	43.50	-6.41	Peak	150	0
5	267.60	50.69	-8.61	42.08	46.00	-3.92	QP	150	0
6	293.73	48.57	-6.56	42.02	46.00	-3.98	QP	150	0

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. According to technical experiences, all spurious emission of 802.11an HT40 mode at channel 38,42,46 are almost the same below 1GHz, so that the channel 38 was chosen as representative in final test.
5. The data is worse case.



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: 802.11an HT40, CH38	Temperature	: 23 °C
Memo	:	Humidity	: 75 %



Trace: (Discrete)

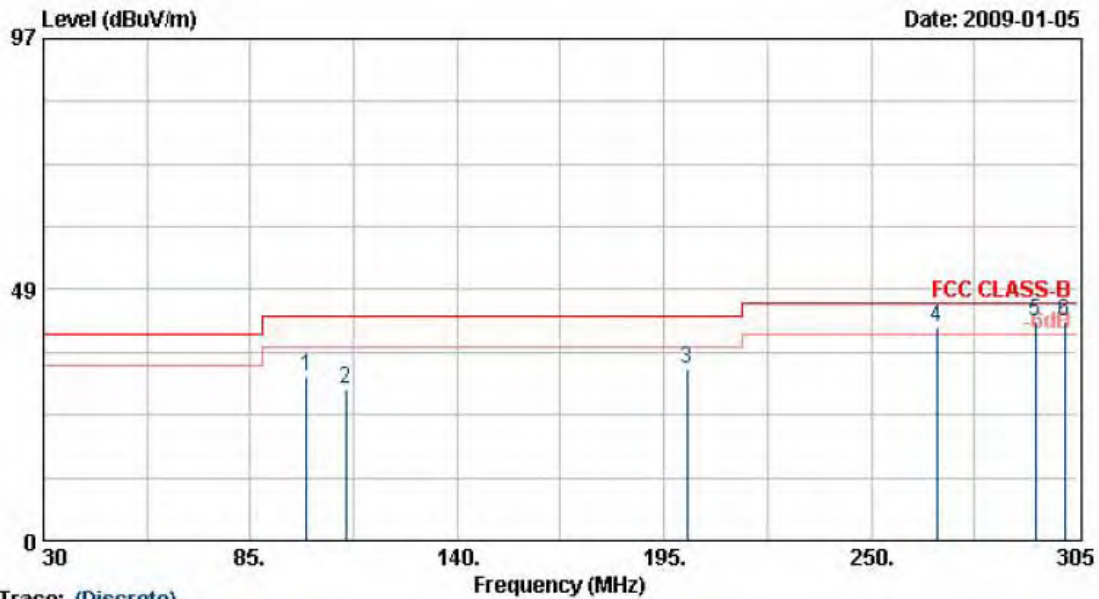
Item	Freq MHz	Read Value dBuV/m	Factor dB	Result dBuV/m	Limit dBuV/m	Margin dB	Remark	Ant Pos cm	Tab Pos Deg
1	332.90	50.31	-8.10	42.22	46.00	-3.78	QP	100	0
2	400.80	46.52	-4.06	42.45	46.00	-3.55	QP	100	0
3	467.30	44.03	-1.68	42.35	46.00	-3.65	QP	100	0
4	533.80	42.39	-0.09	42.30	46.00	-3.70	QP	100	0
5	602.40	41.97	0.71	42.67	46.00	-3.33	QP	100	0
6	668.90	41.96	0.07	42.02	46.00	-3.98	QP	100	0
7	735.40	35.96	6.36	42.33	46.00	-3.67	QP	100	0
8	936.30	32.90	9.62	42.51	46.00	-3.49	QP	100	0

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. According to technical experiences, all spurious emission of 802.11an HT40 mode at channel 38,42,46 are almost the same below 1GHz, so that the channel 38 was chosen as representative in final test.
5. The data is worse case.



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11an HT40, CH38	Temperature	: 23 °C
Memo	:	Humidity	: 75 %



Trace: (Discrete)

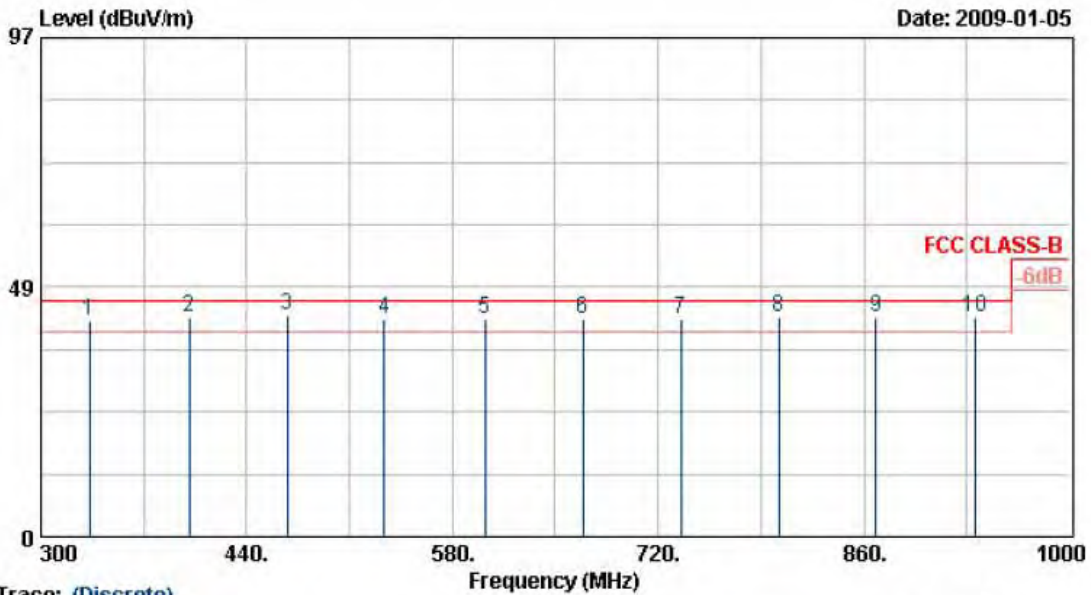
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	99.85	46.58	-14.81	31.77	43.50	-11.73	Peak	150	0
2	110.30	43.56	-14.41	29.15	43.50	-14.35	Peak	150	0
3	201.05	44.54	-11.24	33.30	43.50	-10.20	Peak	150	0
4	267.60	49.29	-7.99	41.30	46.00	-4.70	QP	150	0
5	293.73	48.28	-6.11	42.17	46.00	-3.83	QP	150	0
6	301.43	47.33	-5.02	42.31	46.00	-3.69	QP	150	0

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. According to technical experiences, all spurious emission of 802.11an HT40 mode at channel 38,42,46 are almost the same below 1GHz, so that the channel 38 was chosen as representative in final test.
5. The data is worse case.



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11an HT40, CH38	Temperature	: 23 °C
Memo	:	Humidity	: 75 %



Trace: (Discrete)

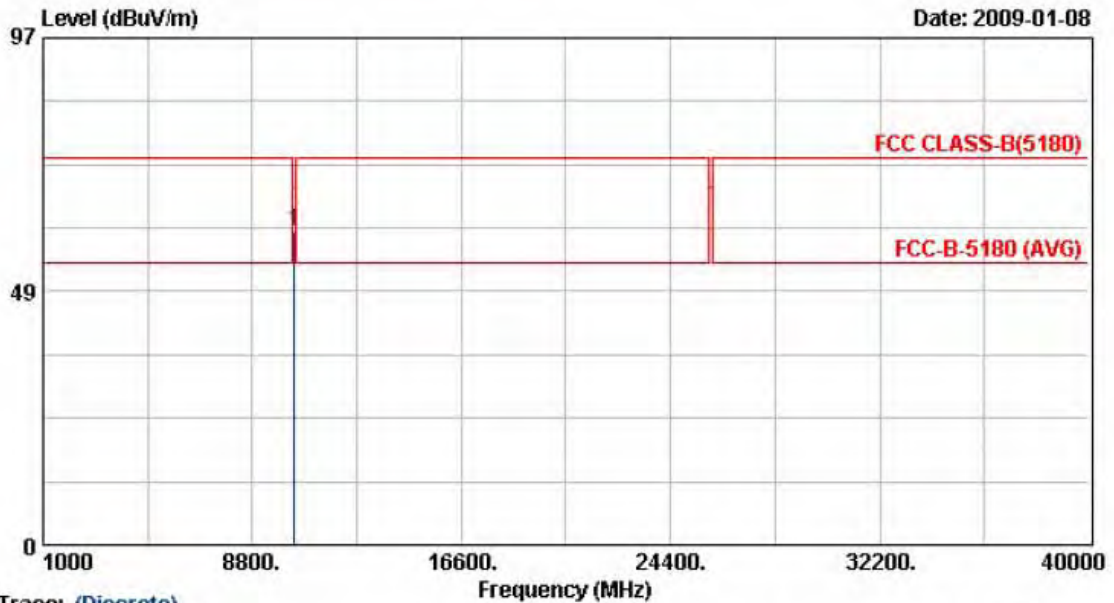
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	332.90	47.87	-5.74	42.13	46.00	-3.87	QP	100	0
2	400.80	44.94	-2.13	42.81	46.00	-3.19	QP	100	0
3	467.30	46.65	-3.74	42.91	46.00	-3.09	QP	100	0
4	533.80	44.48	-2.29	42.19	46.00	-3.81	QP	100	0
5	602.40	40.05	2.25	42.30	46.00	-3.70	QP	100	0
6	668.90	39.57	2.92	42.49	46.00	-3.51	QP	100	0
7	735.40	38.73	3.69	42.42	46.00	-3.58	QP	100	0
8	801.90	37.98	4.85	42.83	46.00	-3.17	QP	100	0
9	868.40	37.25	5.29	42.54	46.00	-3.46	QP	100	0
10	936.30	35.48	7.35	42.83	46.00	-3.17	QP	100	0

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. According to technical experiences, all spurious emission of 802.11an HT40 mode at channel 38,42,46 are almost the same below 1GHz, so that the channel 38 was chosen as representative in final test.
5. The data is worse case.



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: 802.11an HT40, CH38	Temperature	: 25 °C
Memo	:	Humidity	: 70 %



Trace: (Discrete)

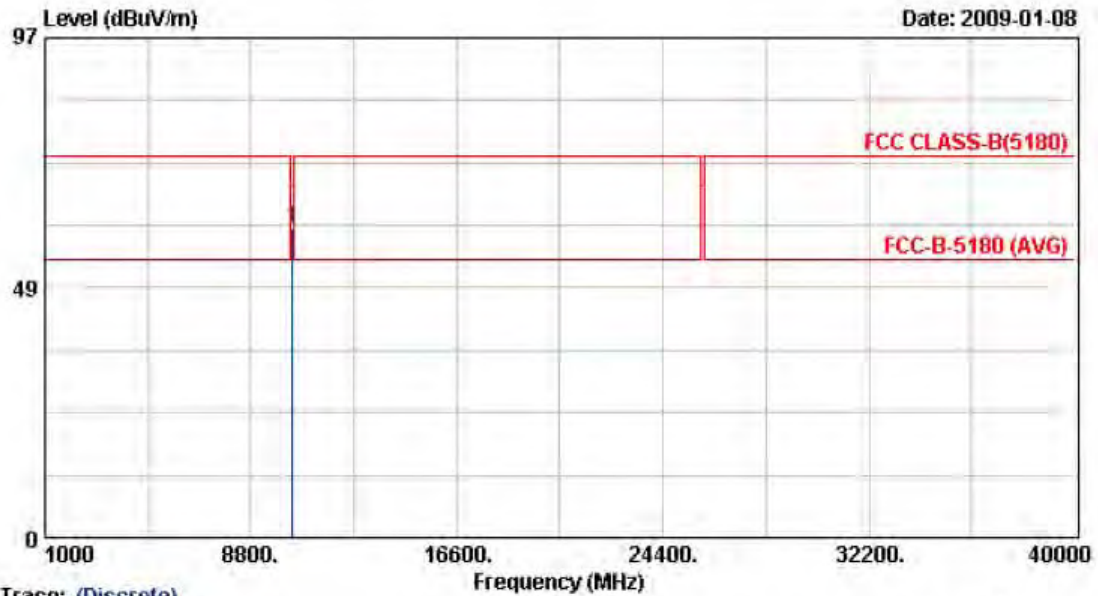
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	10379.62	44.75	15.18	59.94	68.30	-8.36	Peak	100	0

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
5. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz.
6. The other emissions is too low to be measured.



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11an HT40, CH38	Temperature	: 25 °C
Memo	:	Humidity	: 70 %



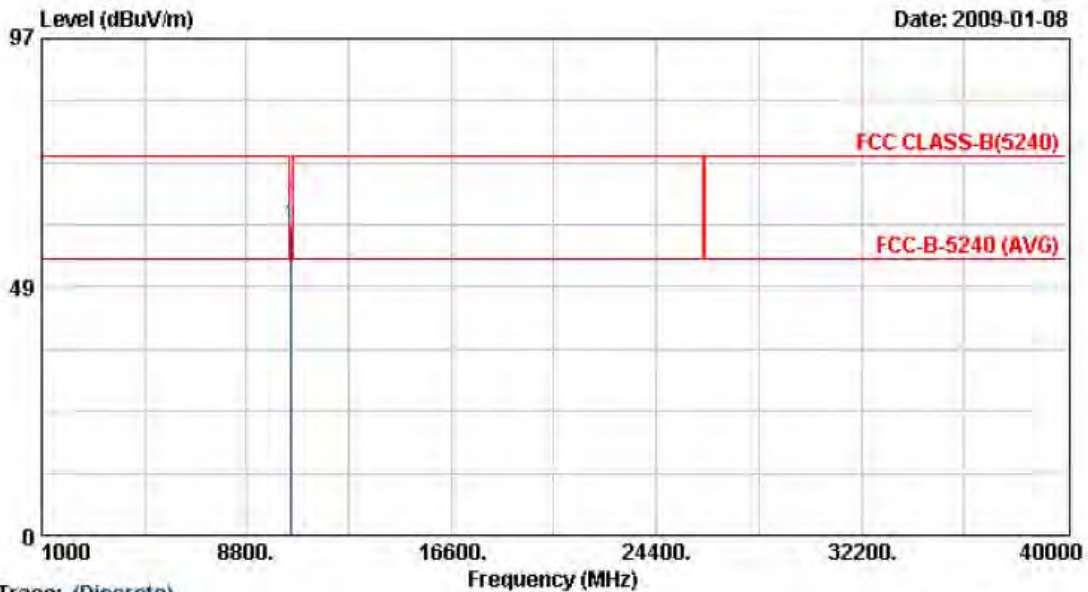
Trace: (Discrete)

Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	10381.70	44.80	15.19	59.99	58.30	-8.31	Peak	150	0

- Notes:
1. Result = Read Value + Factor
 2. Factor = Antenna Factor + Cable Loss - Amplifier
 3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
 4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
 5. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz.
 6. The other emissions is too low to be measured.



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: 802.11an HT40, CH46	Temperature	: 25 °C
Memo	:	Humidity	: 70 %



Trace: (Discrete)

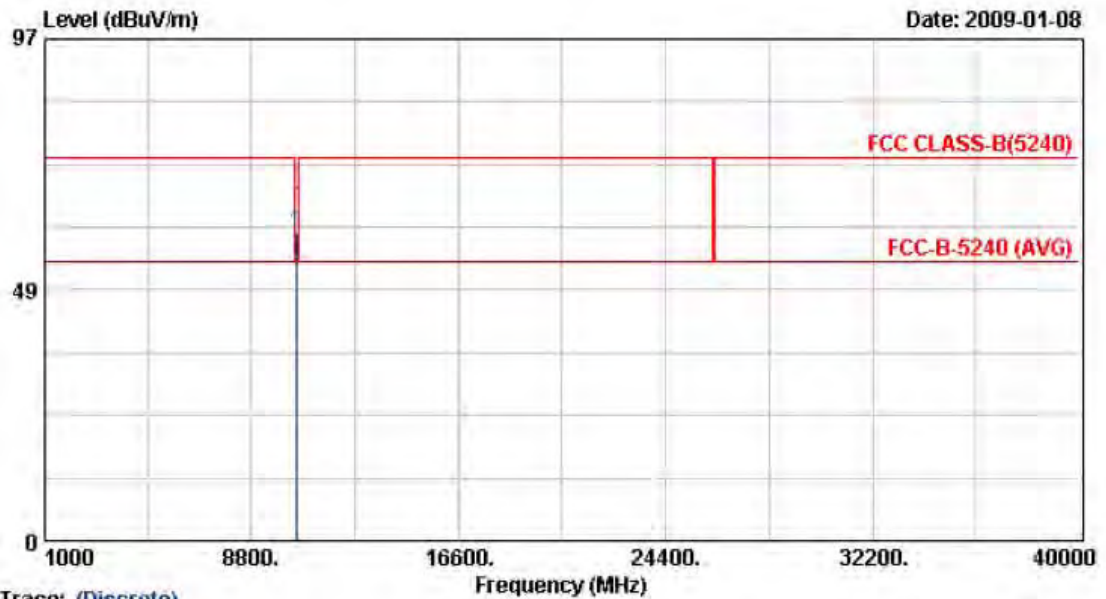
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	10460.30	45.03	15.33	60.36	68.30	-7.94	Peak	100	0

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
5. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz.
6. The other emissions is too low to be measured.



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11an HT40, CH46	Temperature	: 25 °C
Memo	:	Humidity	: 70 %



Trace: (Discrete)

Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	10463.92	44.37	15.34	59.71	68.30	-8.59	Peak	150	0

Notes:

1. Result = Read Value + Factor
2. Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
5. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz.
6. The other emissions is too low to be measured.

Test engineer: Ben

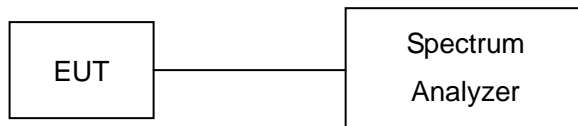


6. Peak Transmit Power

6.1. Test Procedure

The antenna port (RF output) of the EUT was connected to the input (RF input) of a spectrum analyzer. Power was read directly from the spectrum analyzer and cable loss connection was added to the reading to obtain power at the EUT antenna terminal. The EUT Output Power was set to maximum to produce the worse case test result.

6.2. Test Setup Layout



6.3. 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



6.4. Test Result and Data

Test Date: Jan. 09, 2009

Temperature: 25

Atmospheric pressure: 1026 hPa

Humidity: 65%

Modulation Standard: IEEE 802.11a (54Mbps)

Channel	Frequency (MHz)	Peak Power Output (dBm)			Peak Power Output(mW)		
		ANT 1	ANT 2	ANT 2	ANT 1	ANT 2	ANT 2
36	5180	17.00	16.60	15.79	50.1	45.7	37.9
44	5220	16.35	17.00	15.71	43.2	50.1	37.2
48	5240	16.32	17.00	15.91	42.9	50.1	39.0
Channel	Frequency (MHz)	26dB Occupied Bandwidth(MHz)			20dB Occupied Bandwidth(MHz)		
		ANT 1	ANT 2	ANT 2	ANT 1	ANT 2	ANT 2
36	5180	22.6	23.1	22.8	17.6	17.6	17.7
44	5220	22.0	22.1	22.35	17.5	17.7	17.6
48	5240	22.9	22.5	22.15	17.6	17.6	17.8

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

Channel	Frequency (MHz)	Peak Power Output (dBm)				Peak Power Output(mW)	
		Ant1	Ant2	Ant3	Total	Total	
36	5180	16.90	15.78	16.32	21.13	129.68	
44	5220	16.43	17.00	15.70	21.18	131.23	
48	5240	16.45	16.99	15.93	21.25	133.33	
Channel	Frequency (MHz)	26dB Occupied Bandwidth(MHz)			20dB Occupied Bandwidth(MHz)		
		Ant1	Ant2	Ant3	Ant1	Ant2	Ant3
36	5180	23.3	22.95	22.7	18.5	18.7	18.6
44	5220	23.35	23.05	22.55	18.7	18.7	18.6
48	5240	22.95	22.8	22.5	18.6	18.6	18.6



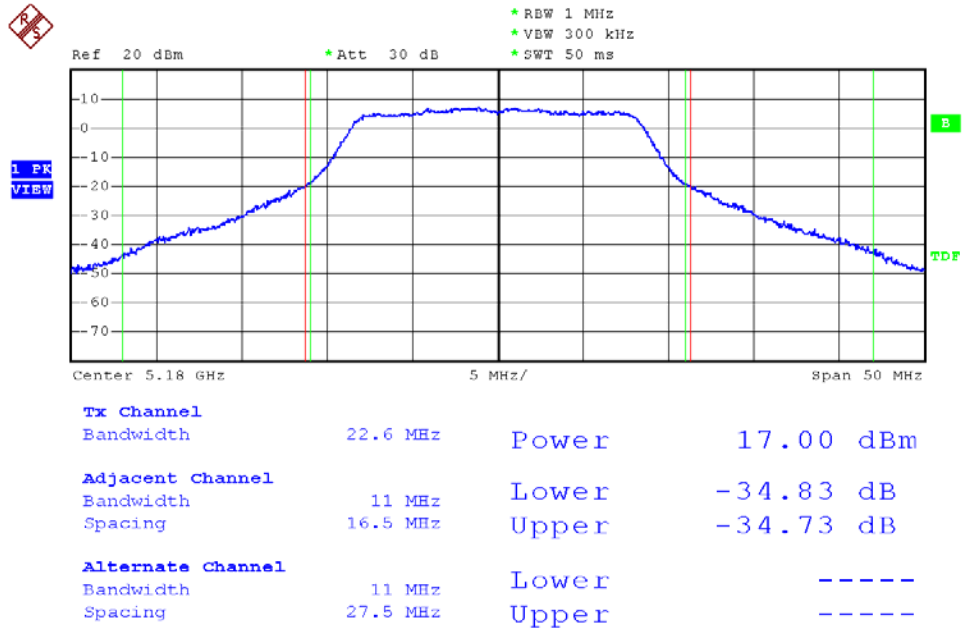
Modulation Standard: IEEE 802.11an, HT40 (270Mbps)

Channel	Frequency (MHz)	Peak Power Output (dBm)				Peak Power Output(mW)	
		Ant1	Ant2	Ant3	Total	Total	
38	5190	16.90	16.50	17.00	21.58	143.76	
42	5210	---	---	---	---	---	
46	5230	17.00	17.00	16.42	21.59	144.09	
Channel	Frequency (MHz)	26dB Occupied Bandwidth(MHz)			20dB Occupied Bandwidth(MHz)		
		Ant1	Ant2	Ant3	Ant1	Ant2	Ant3
38	5190	43.6	43.2	42.5	37.4	37.6	37.4
42	5210	---	---	---	---	---	---
46	5230	44.4	43.9	43	37.6	37.6	37.4

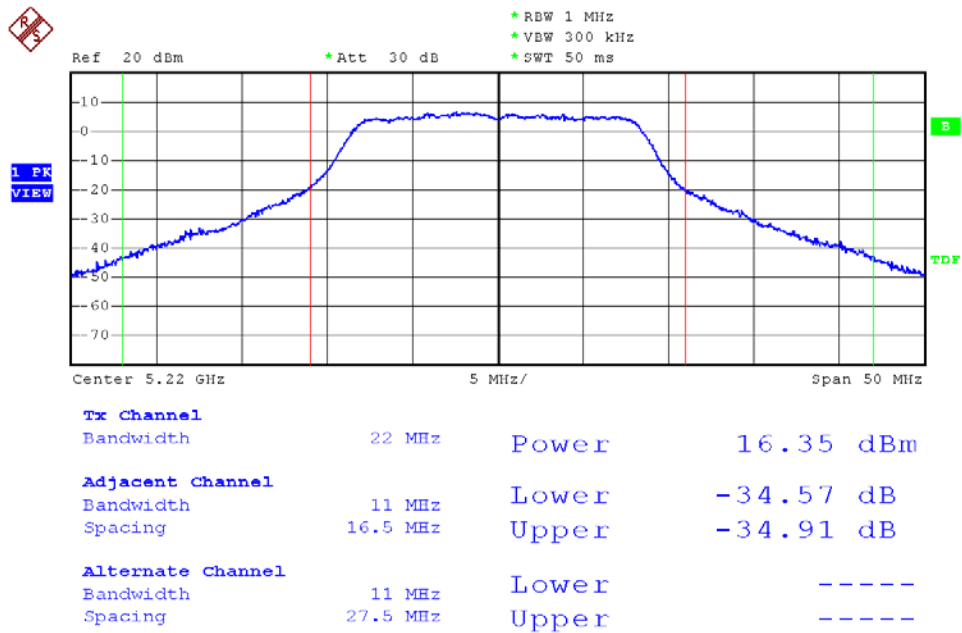


Peak Transmit Power

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

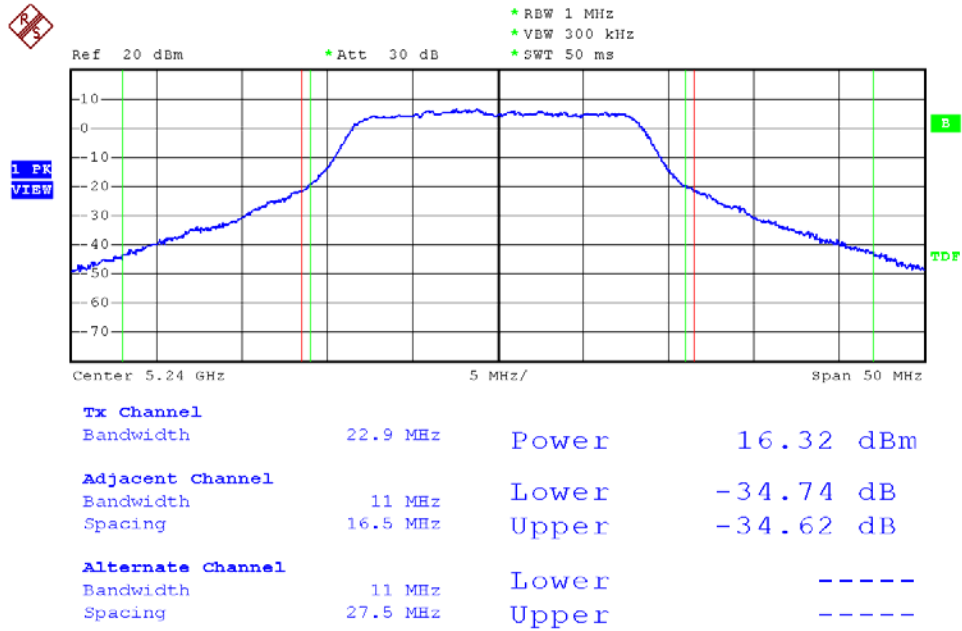


Modulation Standard: 802.11a (54Mbps), Ant1
Channel: 44

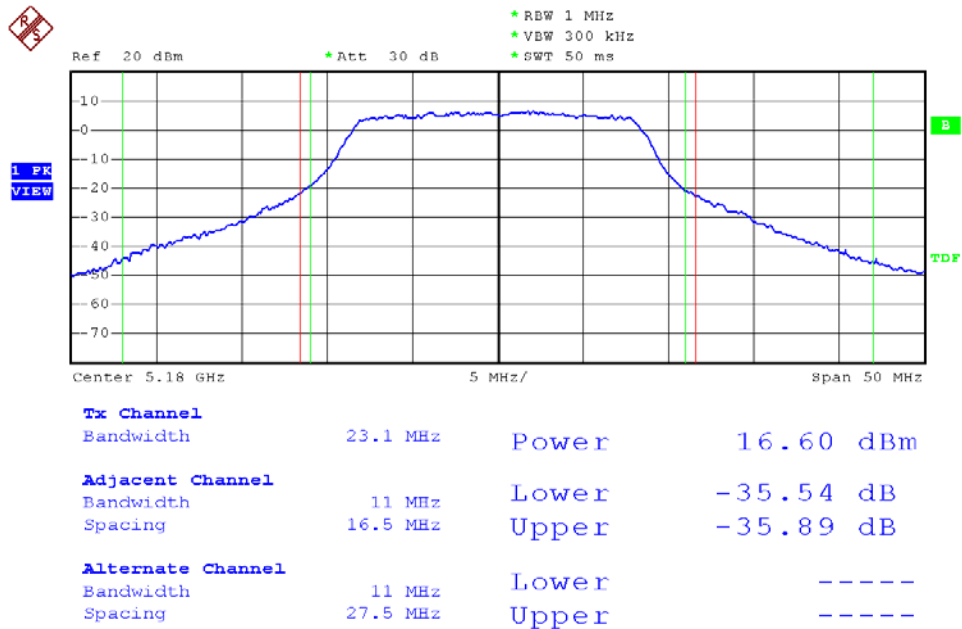




Modulation Standard: 802.11a (54Mbps), Ant1
Channel: 48

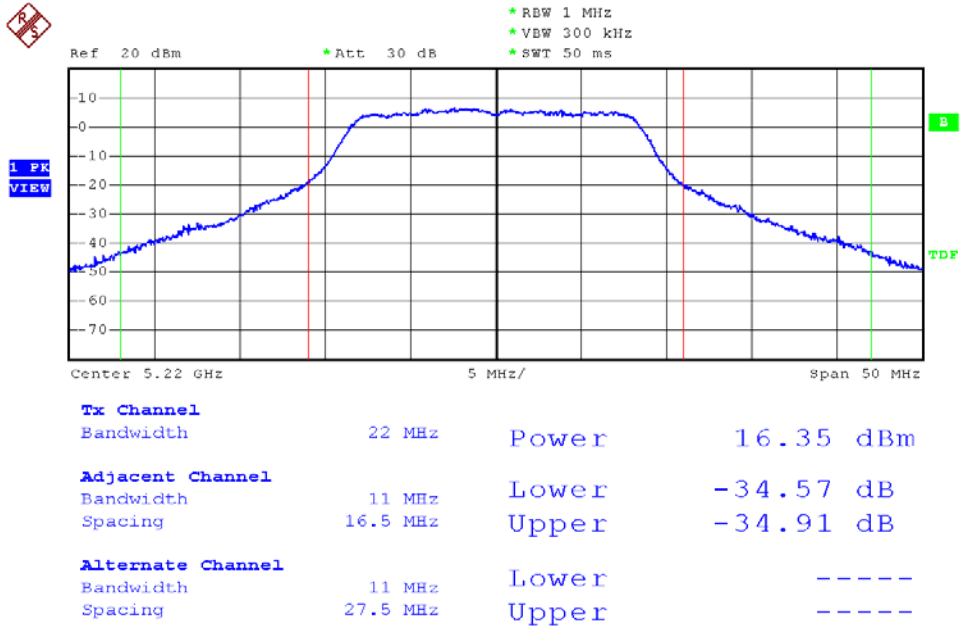


Modulation Standard: 802.11a (54Mbps), Ant2
Channel: 36

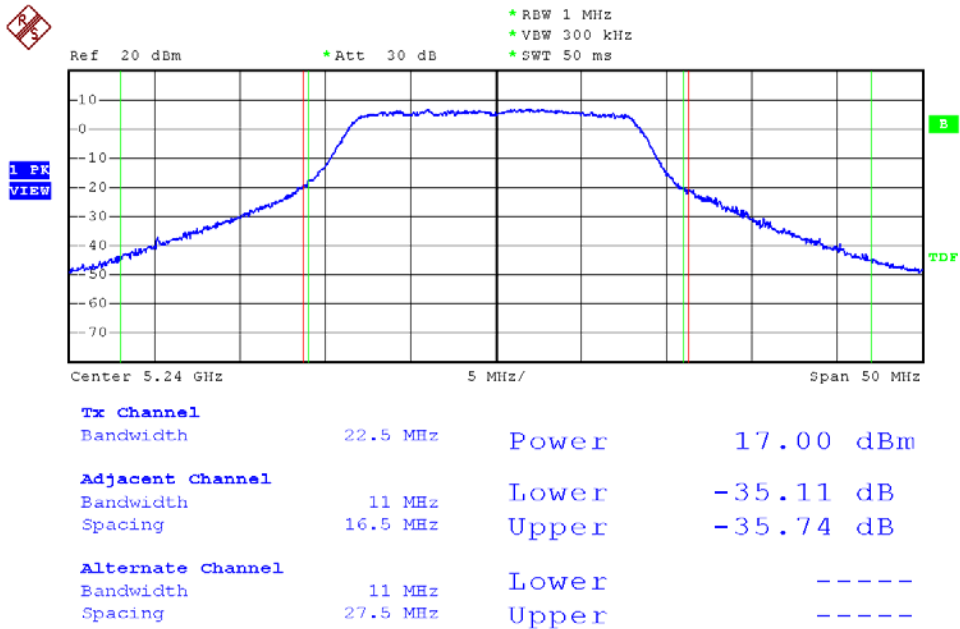




Modulation Standard: 802.11a (54Mbps), Ant2
Channel: 44

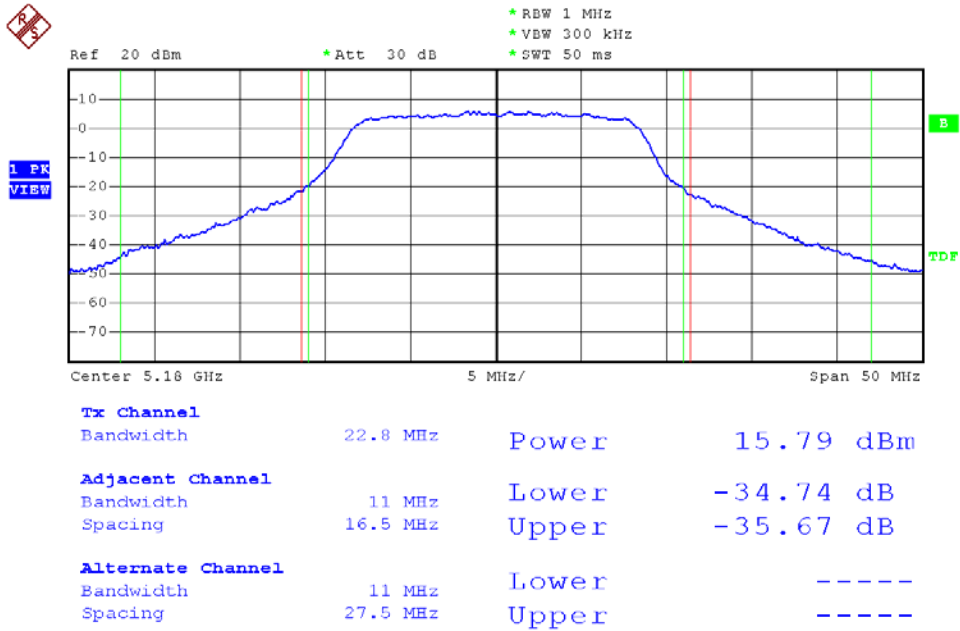


Modulation Standard: 802.11a (54Mbps), Ant2
Channel: 48

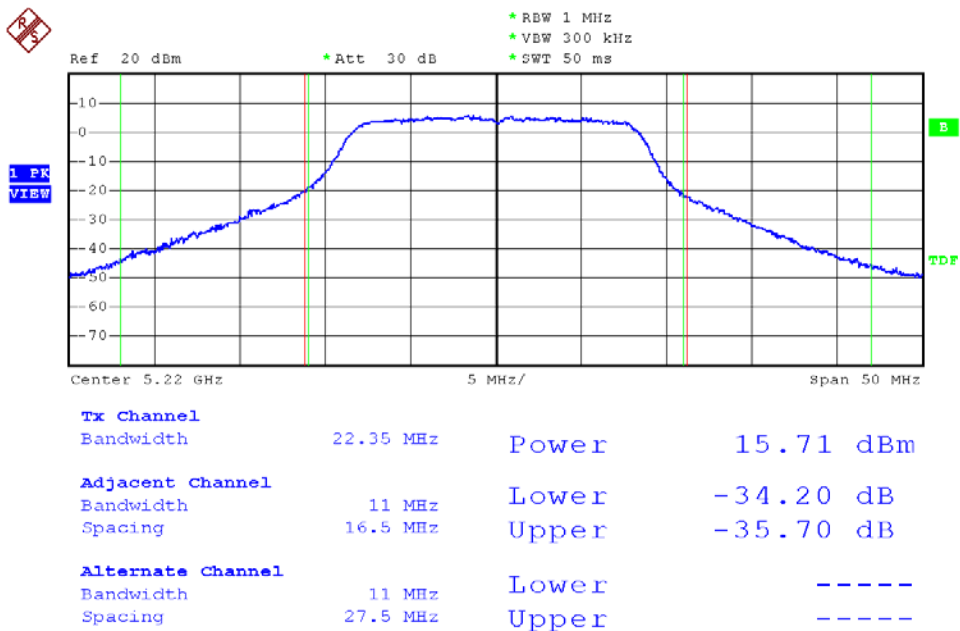




Modulation Standard: 802.11an HT20 (130Mbps), Ant3
Channel: 36

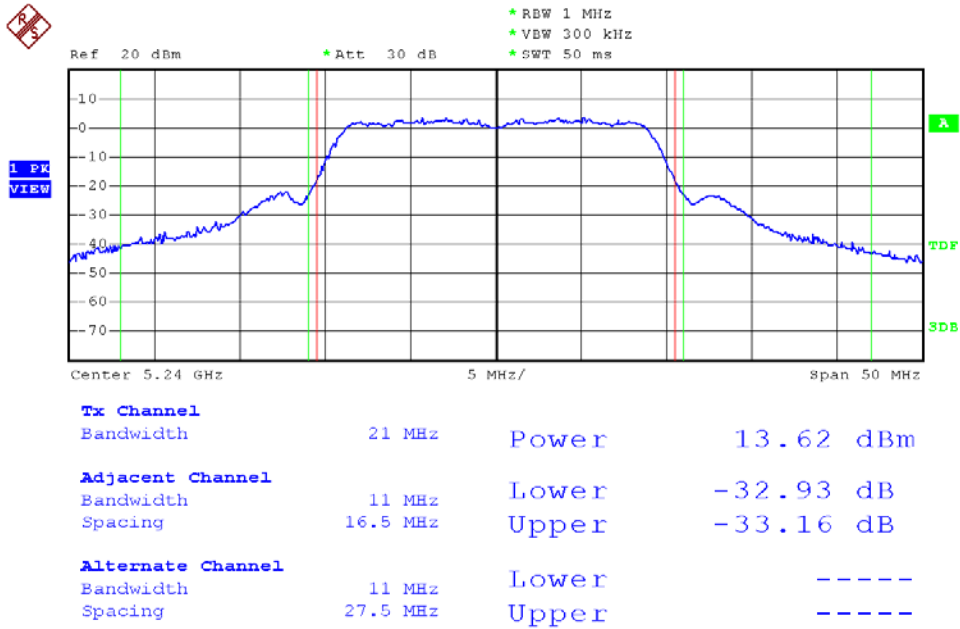


Modulation Standard: 802.11a (54Mbps), Ant3
Channel: 44

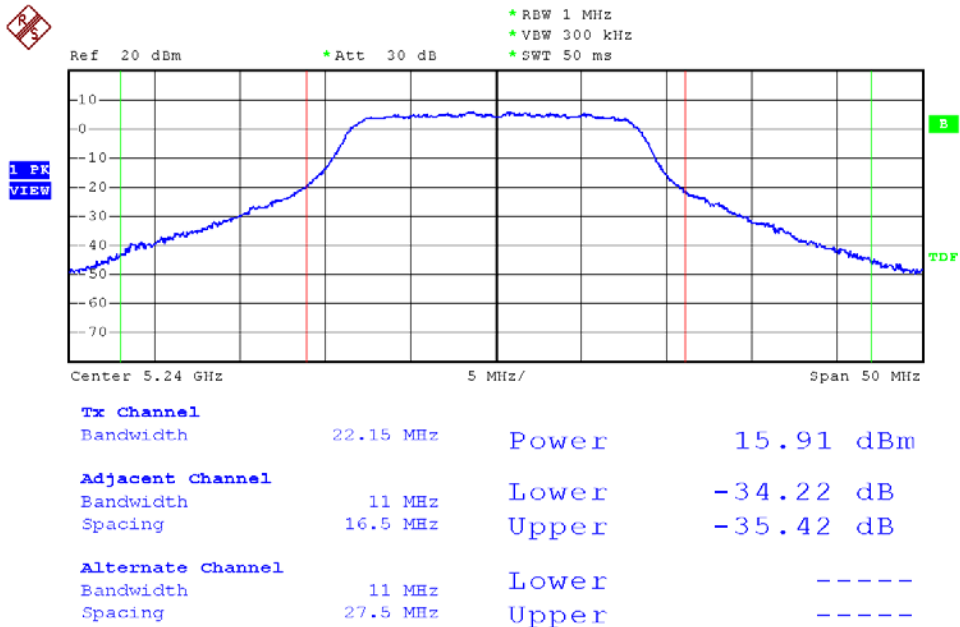




Modulation Standard: 802.11an HT20 (130Mbps), Ant3
Channel: 48

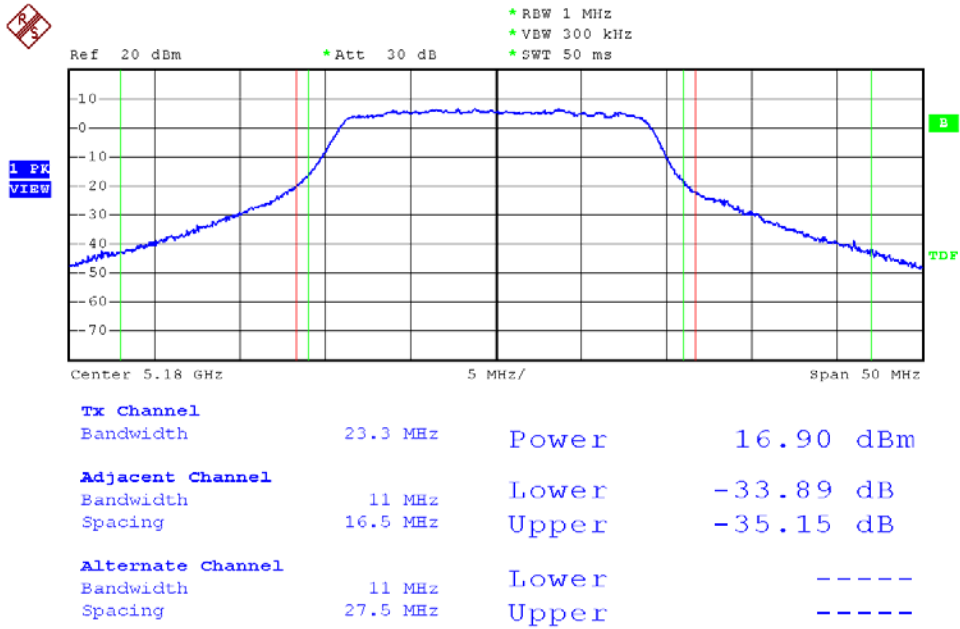


Modulation Standard: 802.11an HT20 (130Mbps), Ant3
Channel: 48

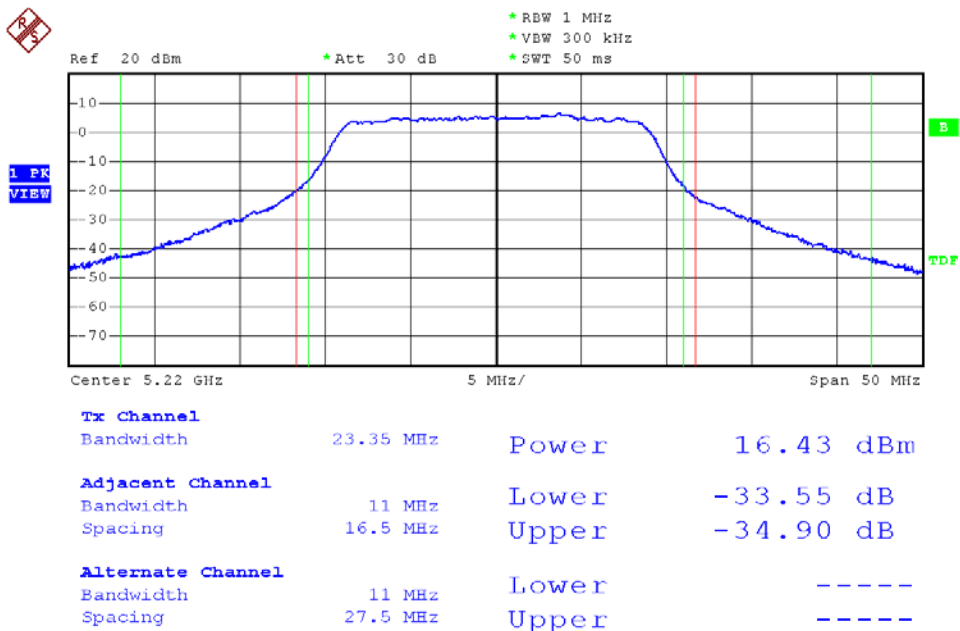




Modulation Standard: 802.11an HT20 (130Mbps), Ant1
Channel: 36

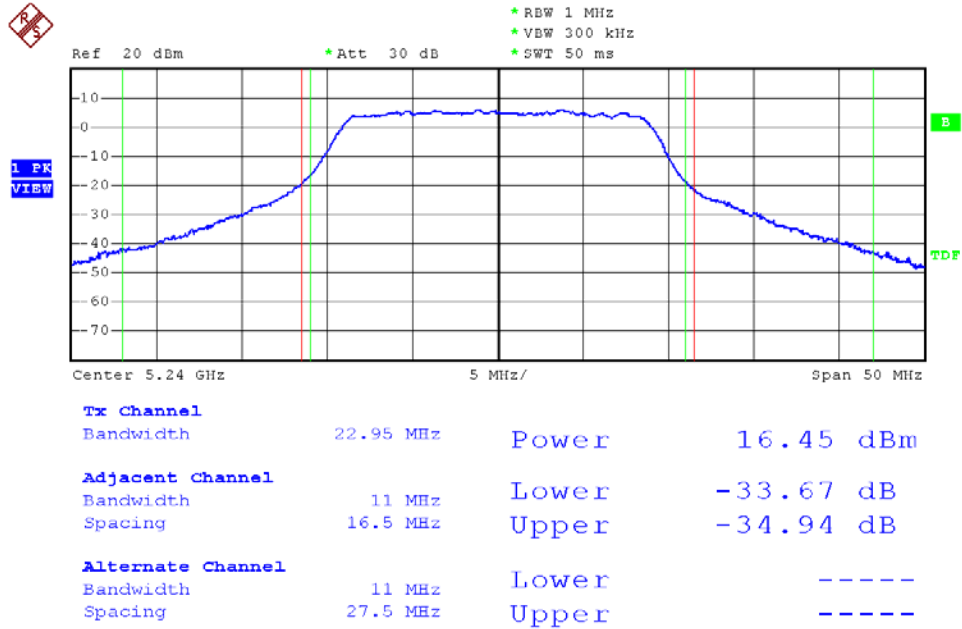


Modulation Standard: 802.11an HT20 (130Mbps), Ant1
Channel: 44

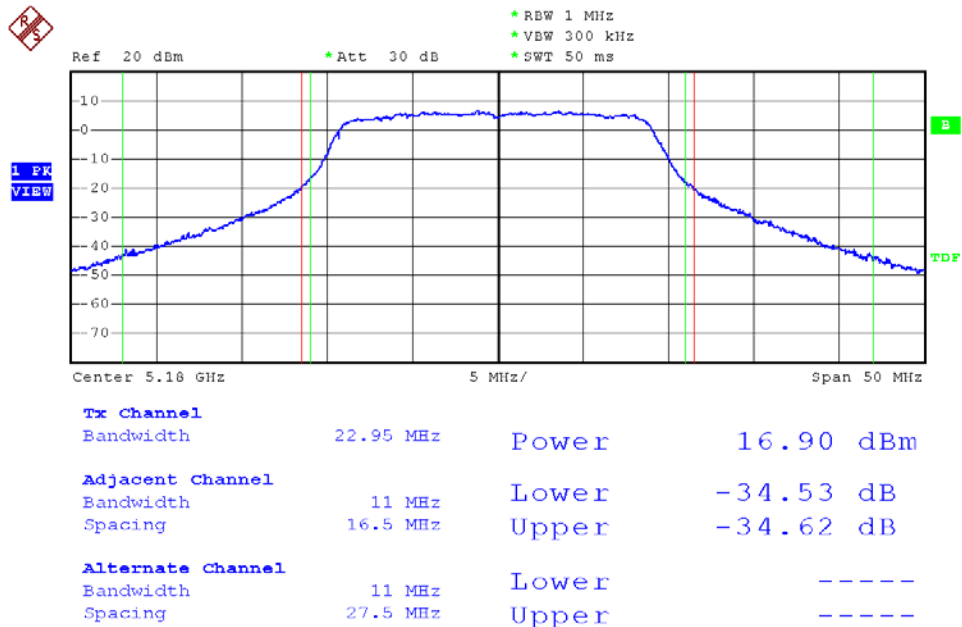




Modulation Standard: 802.11an HT20 (130Mbps), Ant1
Channel: 48

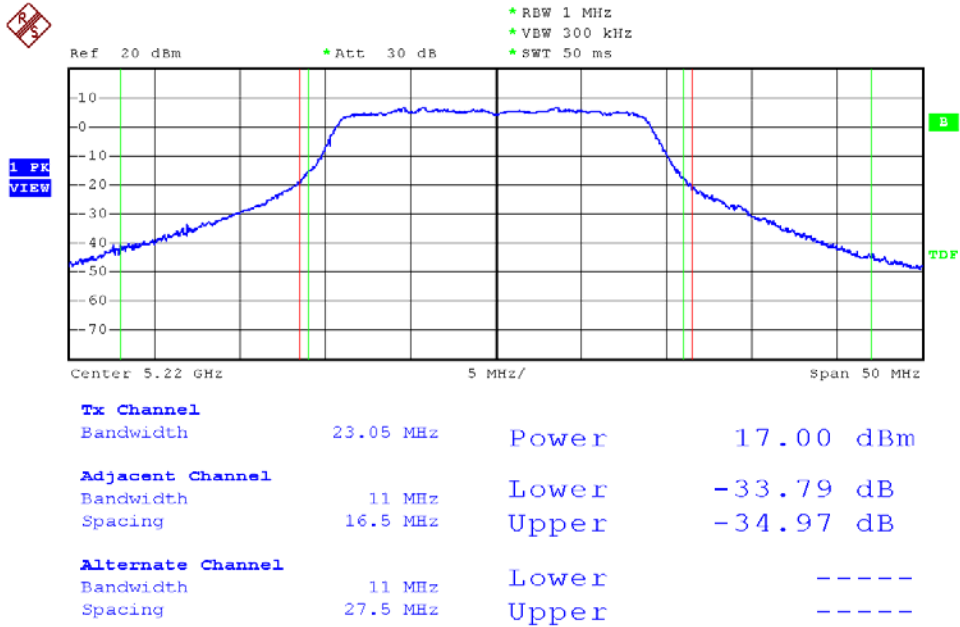


Modulation Standard: 802.11an HT20 (130Mbps), Ant2
Channel: 36

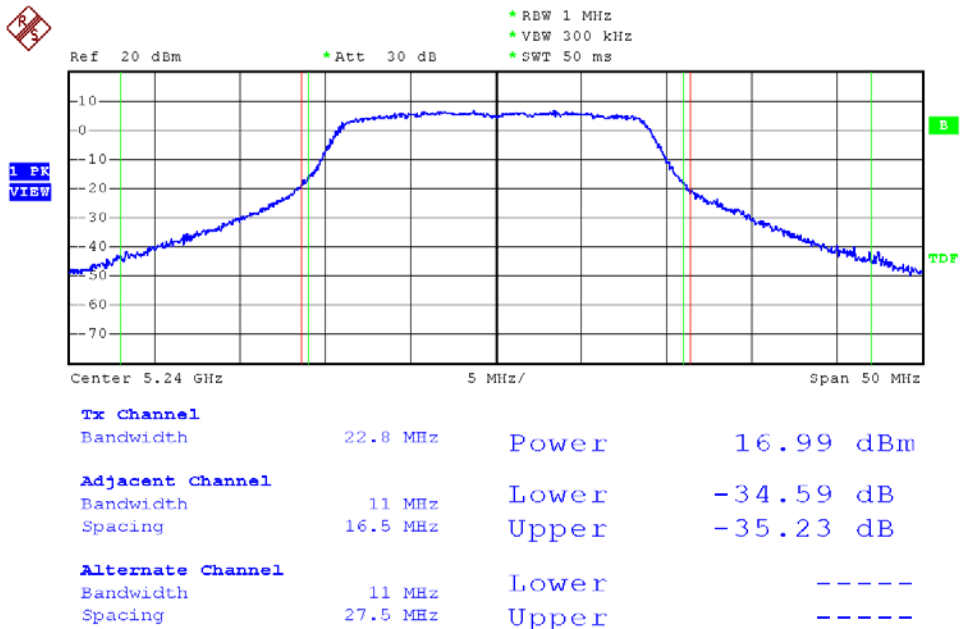




Modulation Standard: 802.11an HT20 (130Mbps), Ant2
Channel: 44

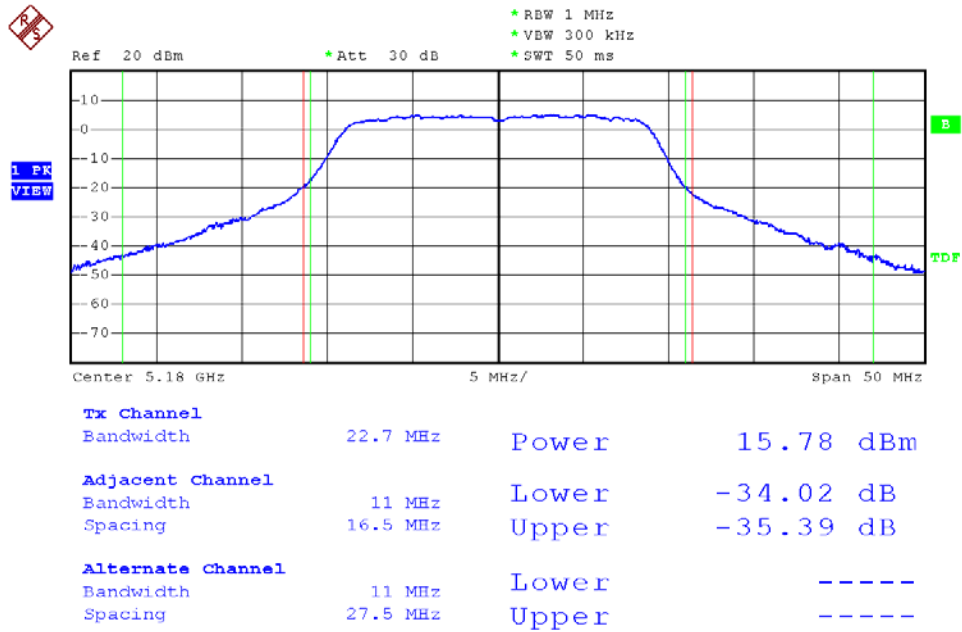


Modulation Standard: 802.11an HT20 (130Mbps), Ant2
Channel: 48

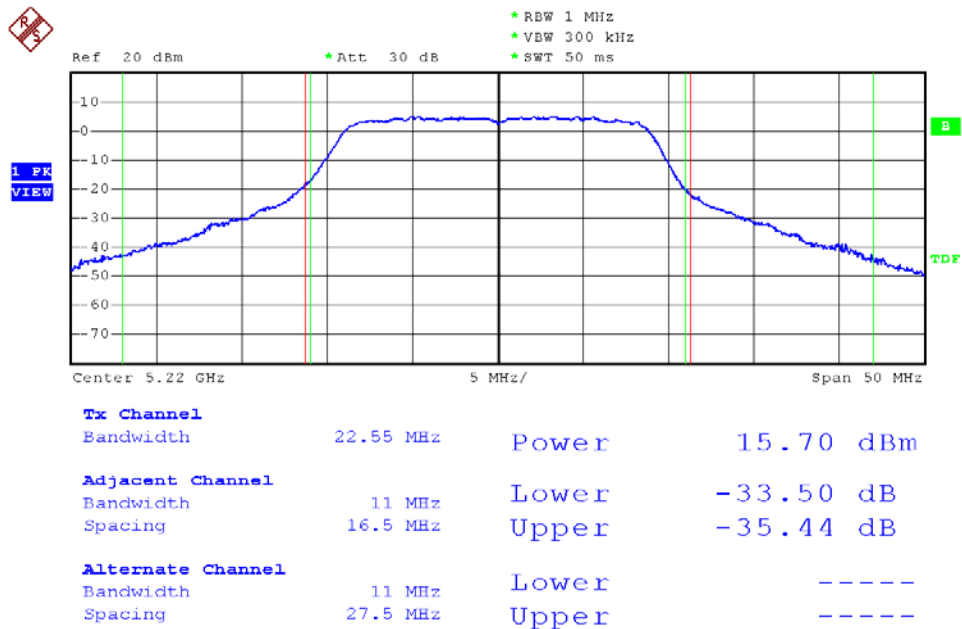




Modulation Standard: 802.11an HT20 (130Mbps), Ant3
Channel: 36

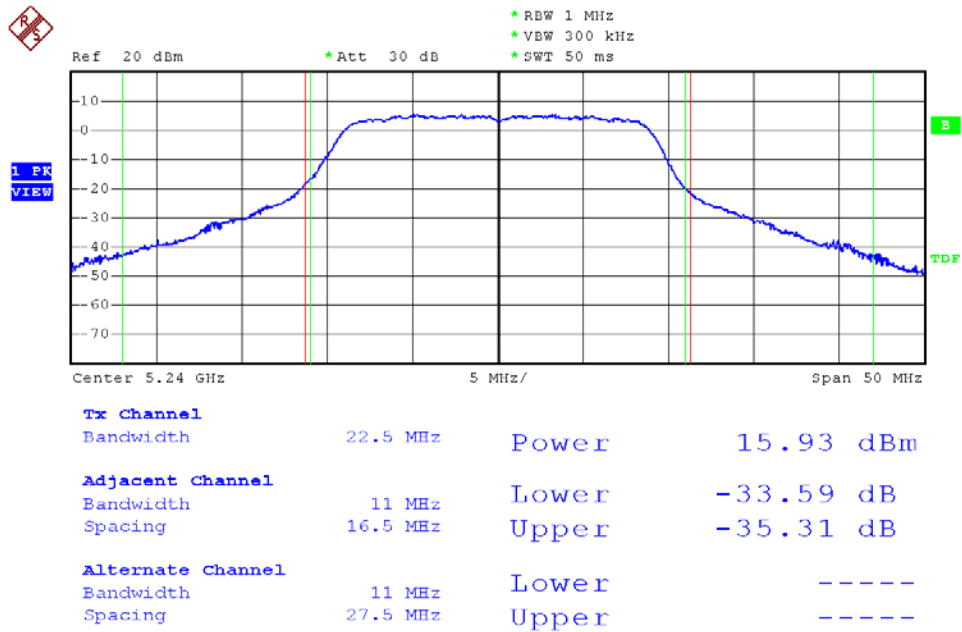


Modulation Standard: 802.11an HT20 (130Mbps), Ant3
Channel: 44

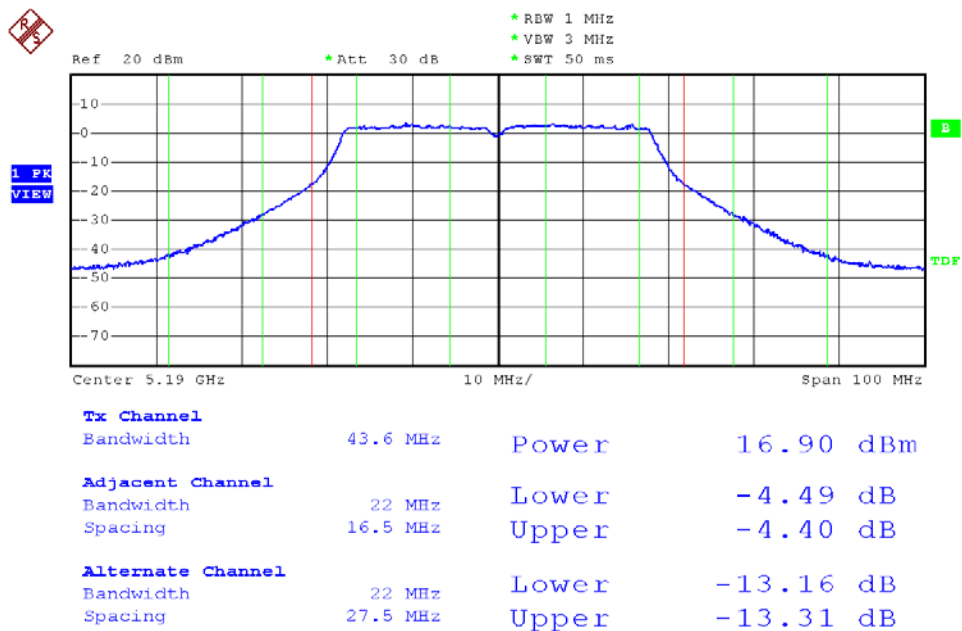




Modulation Standard: 802.11an HT20 (130Mbps), Ant3
Channel: 48

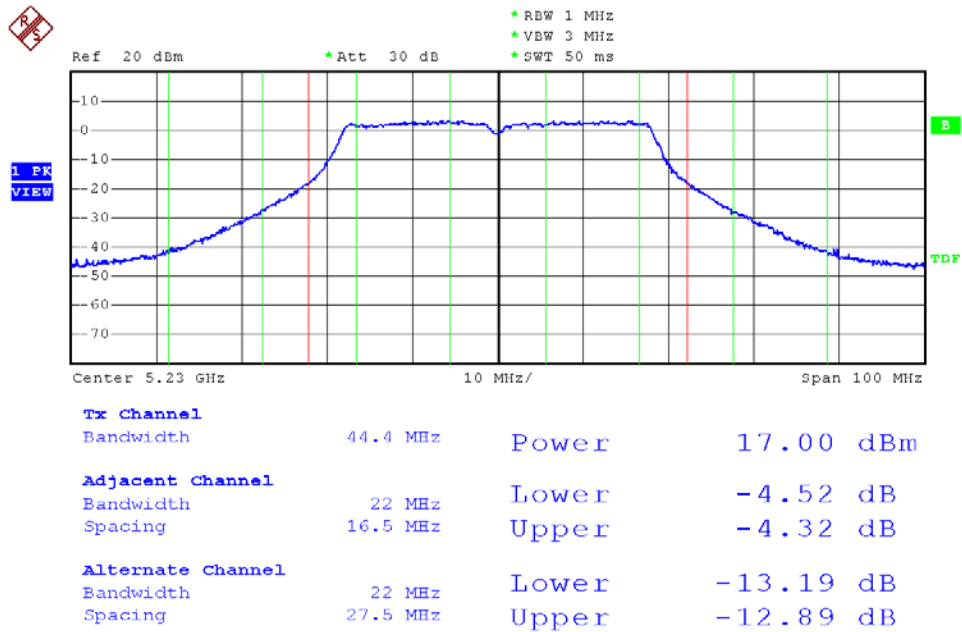


Modulation Standard: 802.11an HT40 (270Mbps), Ant1
Channel: 38

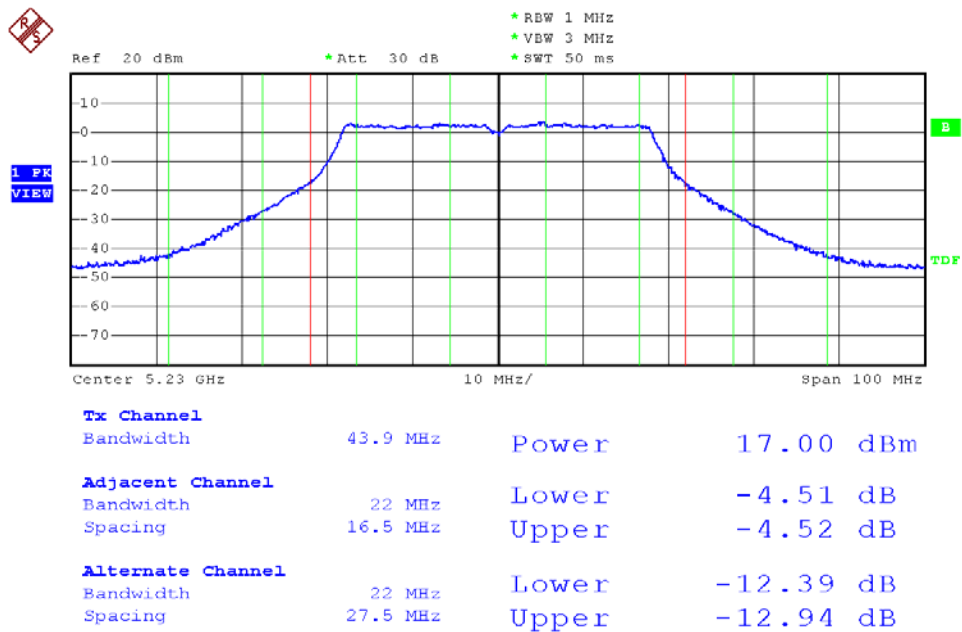




Modulation Standard: 802.11an HT40 (270Mbps), Ant1
Channel: 46

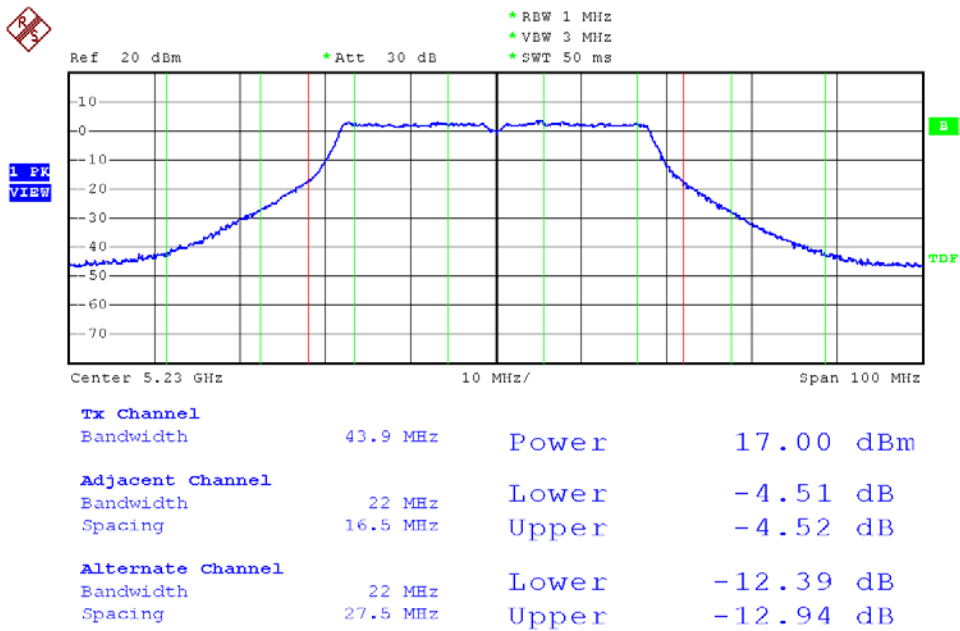


Modulation Standard: 802.11an HT40 (270Mbps), Ant2
Channel: 38

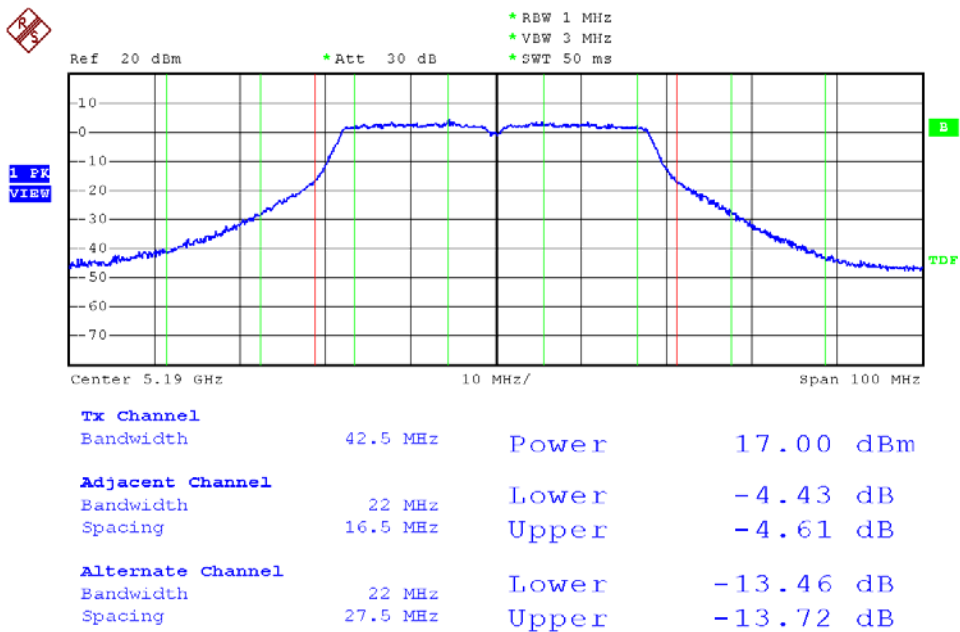




Modulation Standard: 802.11an HT40 (270Mbps), Ant2
Channel: 46

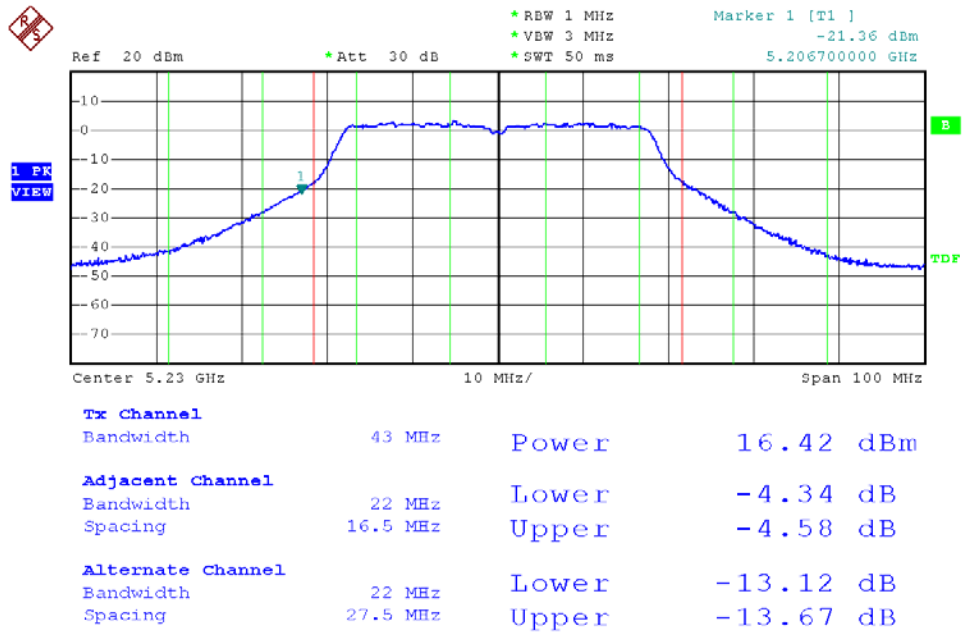


Modulation Standard: 802.11an HT40 (270Mbps), Ant3
Channel: 38





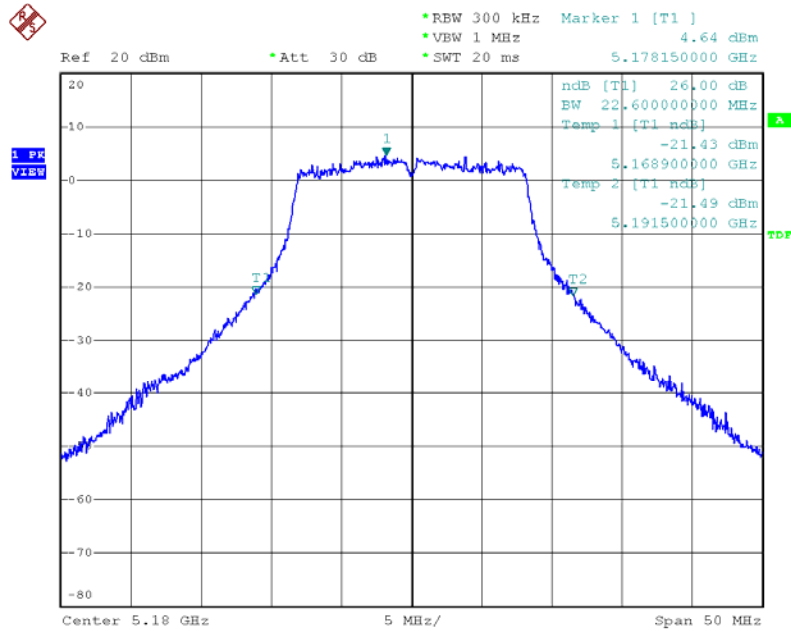
Modulation Standard: 802.11an HT40 (270Mbps), Ant3
Channel: 46





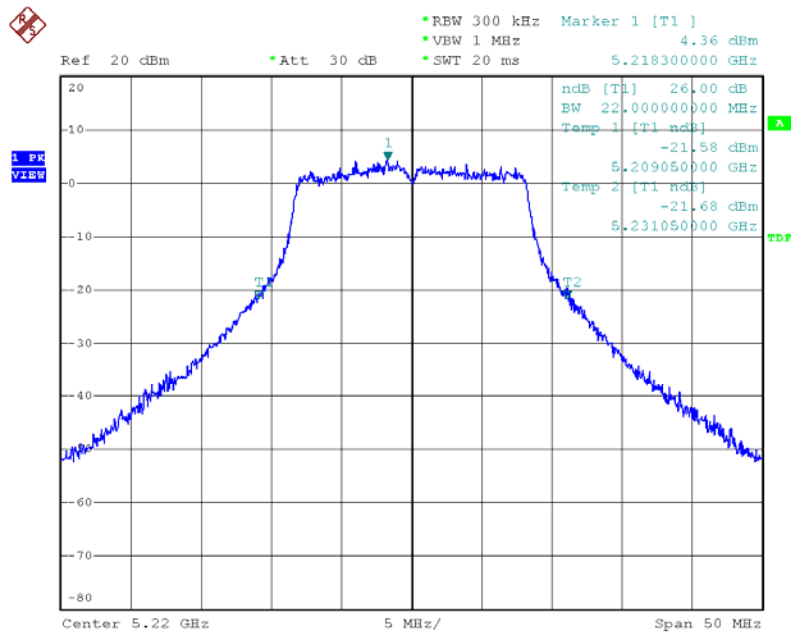
26dB Occupied Bandwidth

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



Date: 7.JAN.2009 11:41:41

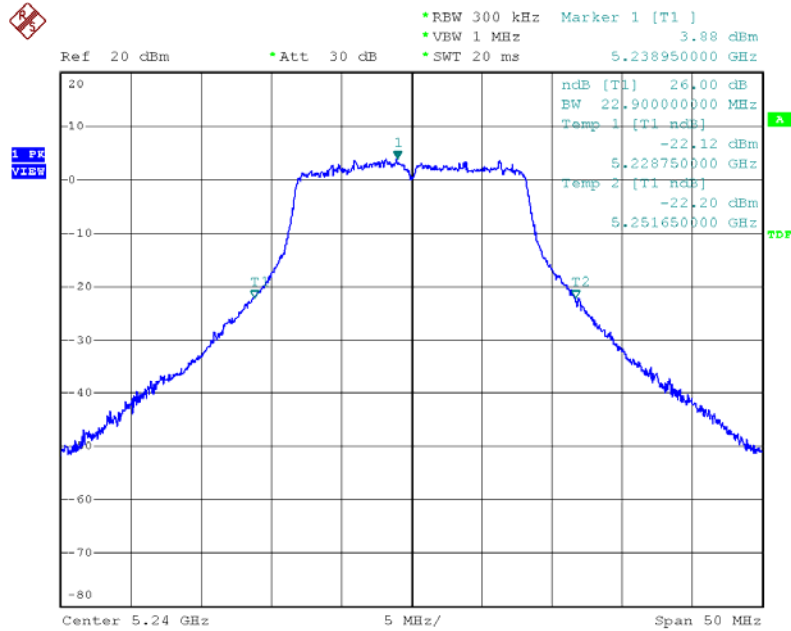
Modulation Standard: 802.11a (54Mbps), Ant1
Channel: 44



Date: 7.JAN.2009 11:52:43

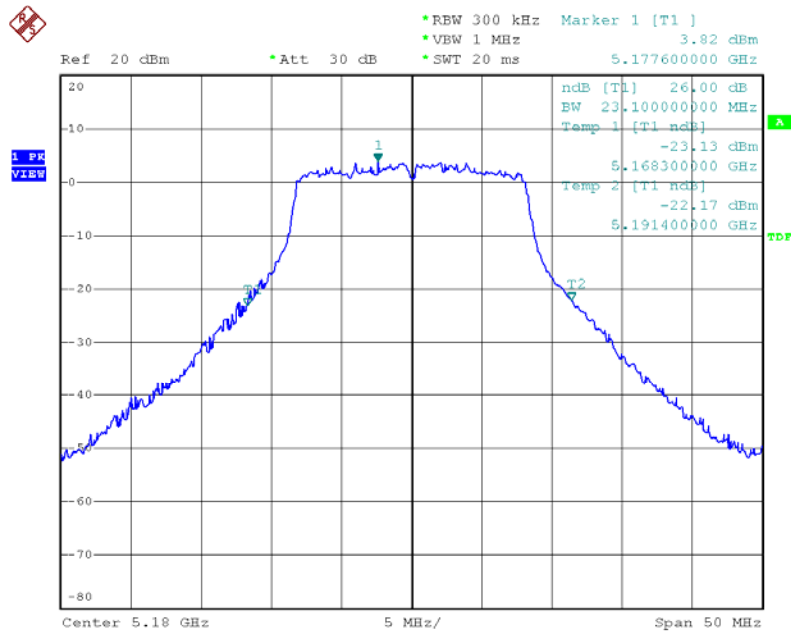


Modulation Standard: 802.11a (54Mbps), Ant1
Channel: 48



Date: 7.JAN.2009 13:13:53

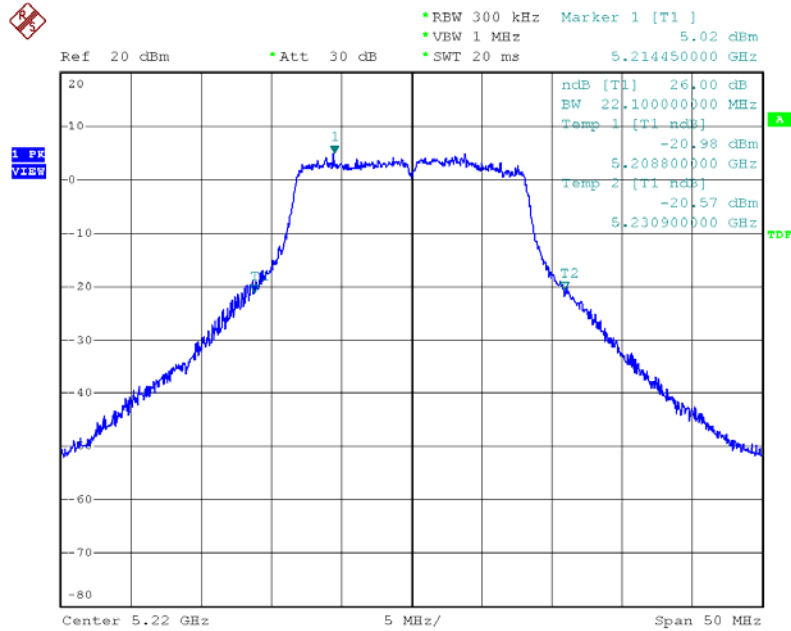
Modulation Standard: 802.11a (54Mbps), Ant2
Channel: 36



Date: 7.JAN.2009 11:30:27

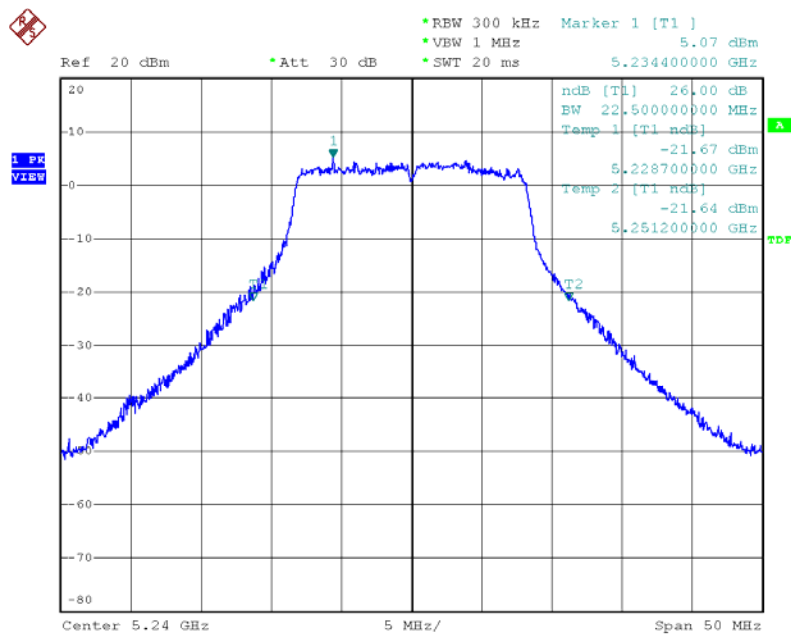


Modulation Standard: 802.11a (54Mbps), Ant2
Channel: 44



Date: 7.JAN.2009 11:49:10

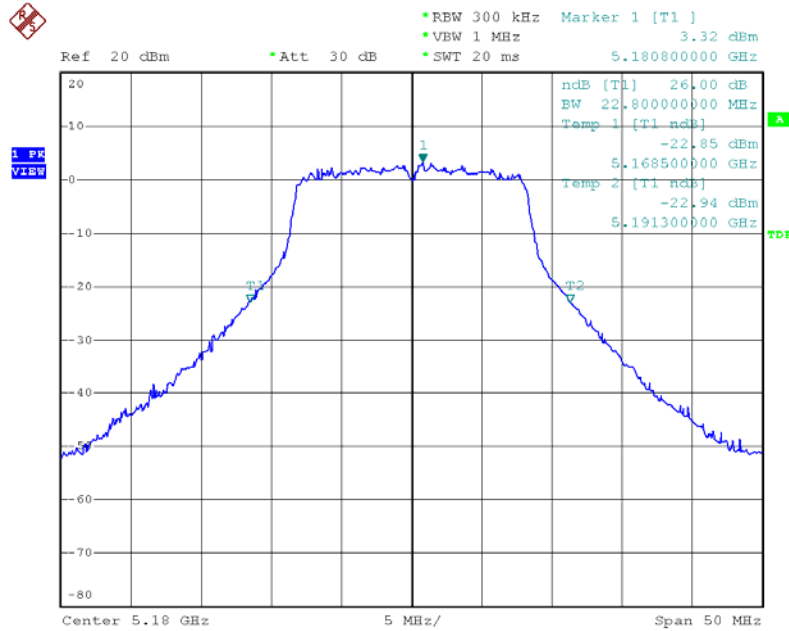
Modulation Standard: 802.11a (54Mbps), Ant2
Channel: 48



Date: 7.JAN.2009 13:09:26

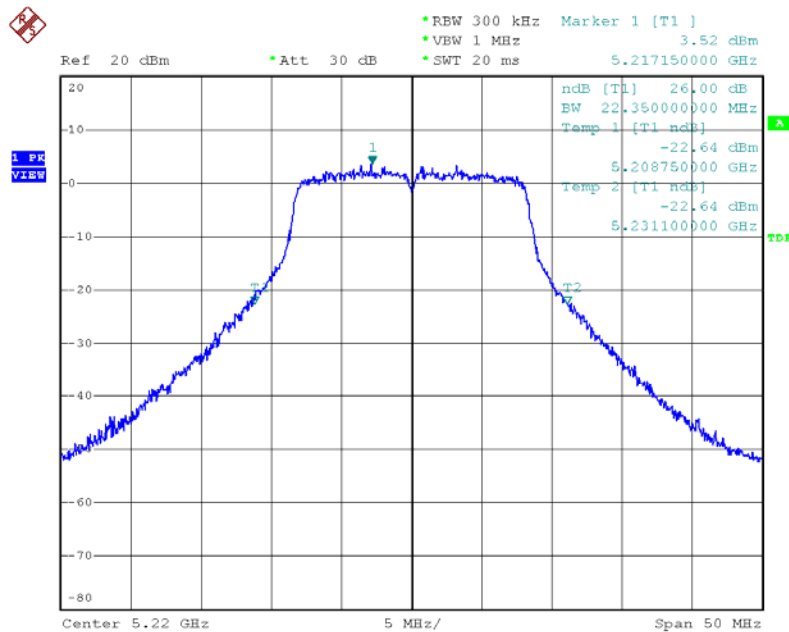


Modulation Standard: 802.11a (54Mbps), Ant3
Channel: 36



Date: 7.JAN.2009 11:20:15

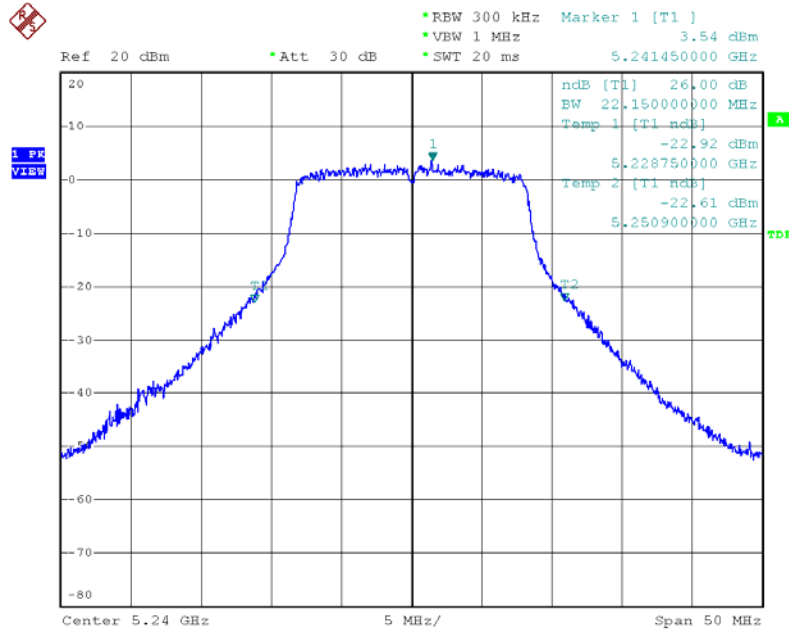
Modulation Standard: 802.11a (54Mbps), Ant3
Channel: 44



Date: 7.JAN.2009 11:46:19

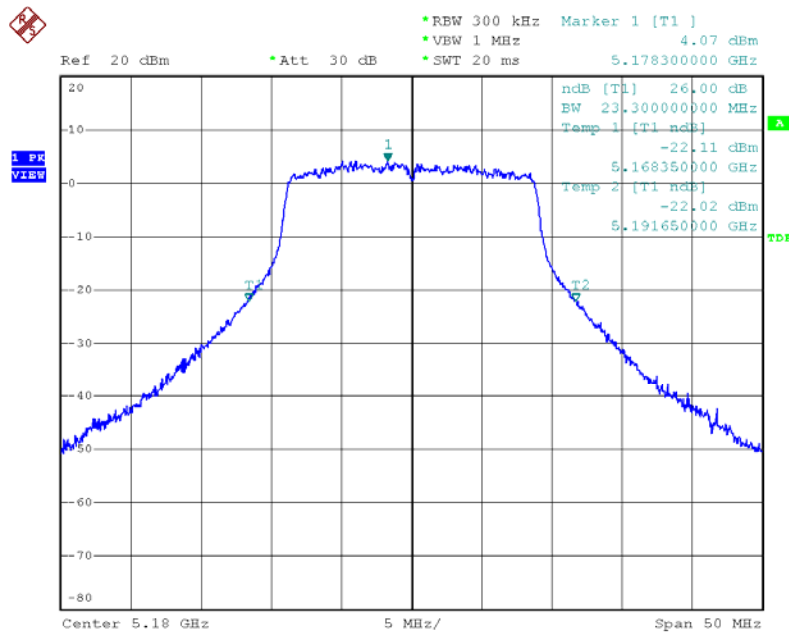


Modulation Standard: 802.11a (54Mbps), Ant3
Channel: 48



Date: 7.JAN.2009 11:56:23

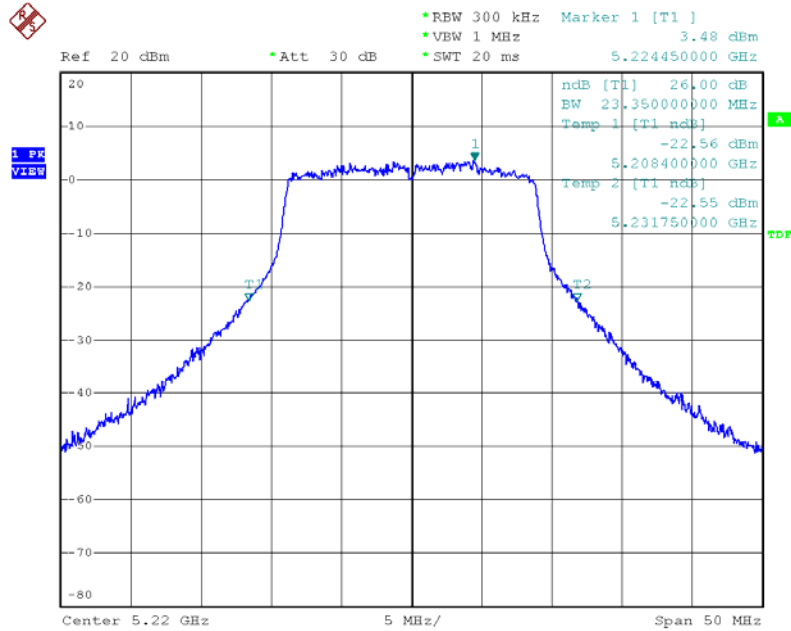
Modulation Standard: 802.11an HT20 (130Mbps), Ant1
Channel: 36



Date: 7.JAN.2009 13:26:57

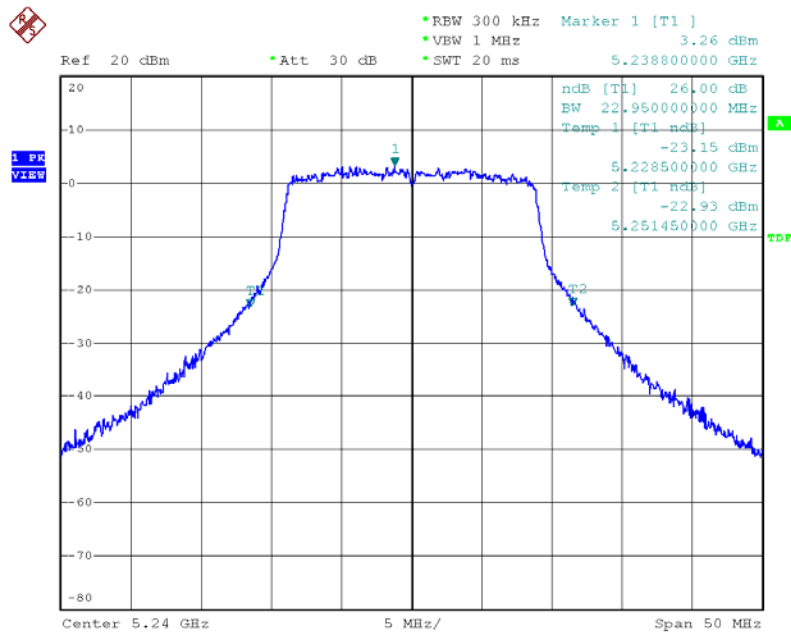


Modulation Standard: 802.11an HT20 (130Mbps), Ant1
Channel: 44



Date: 7.JAN.2009 13:37:03

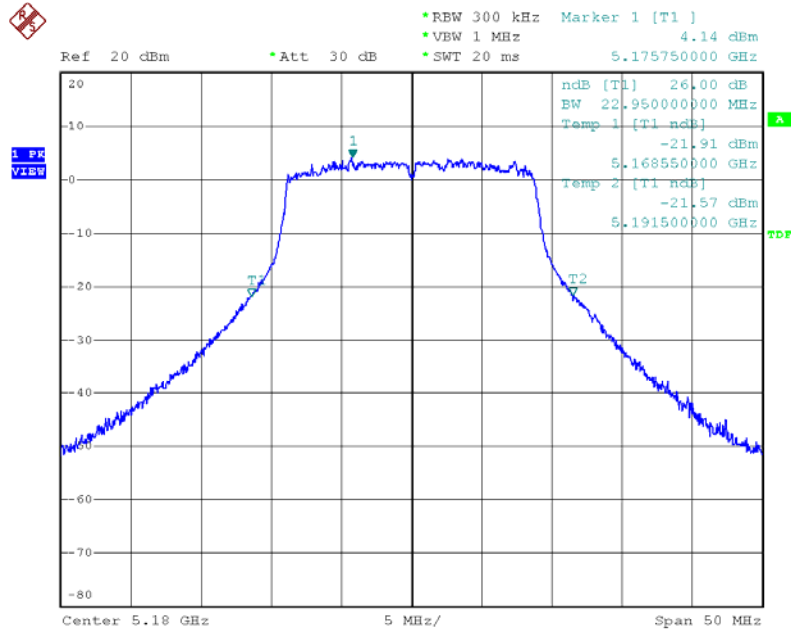
Modulation Standard: 802.11an HT20 (130Mbps), Ant1
Channel: 48



Date: 7.JAN.2009 13:51:03

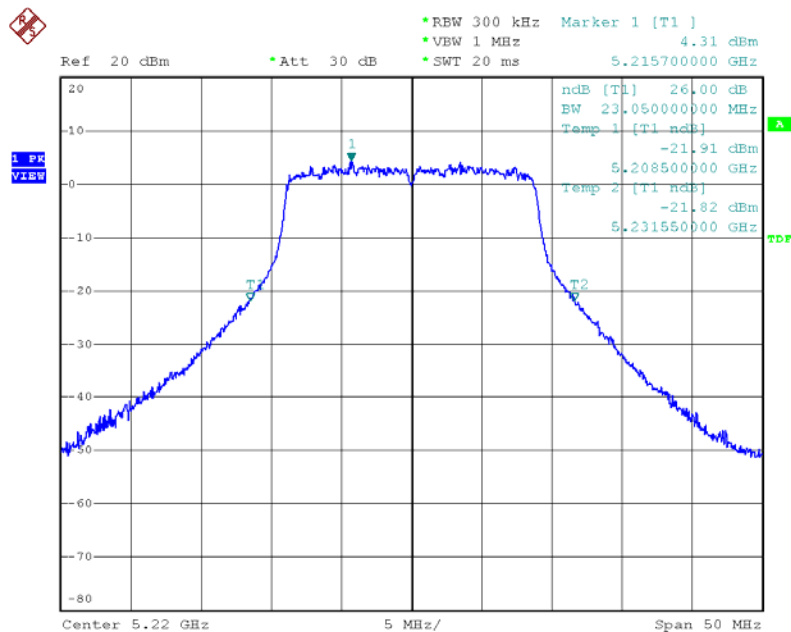


Modulation Standard: 802.11an HT20 (130Mbps), Ant2
Channel: 36



Date: 7.JAN.2009 13:24:00

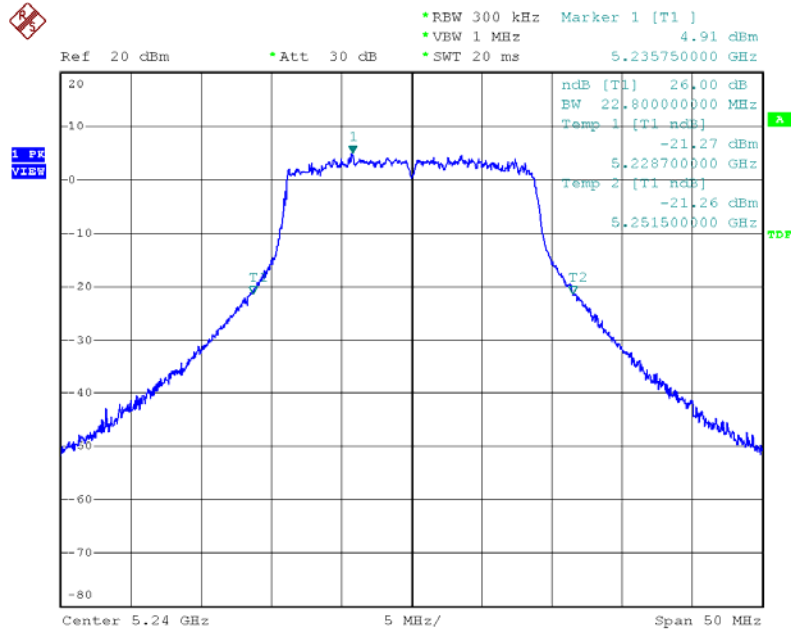
Modulation Standard: 802.11an HT20 (130Mbps), Ant2
Channel: 44



Date: 7.JAN.2009 13:34:17

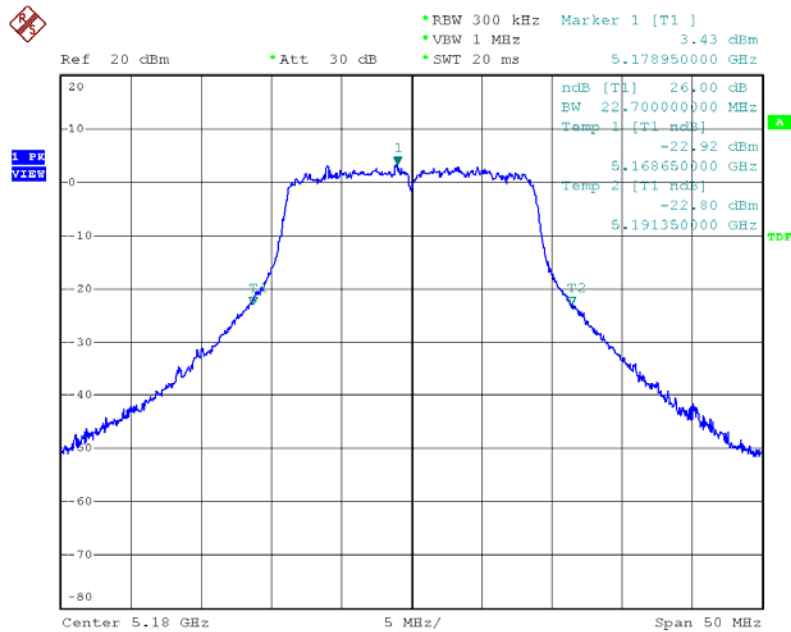


Modulation Standard: 802.11an HT20 (130Mbps), Ant2
Channel: 48



Date: 7.JAN.2009 13:45:39

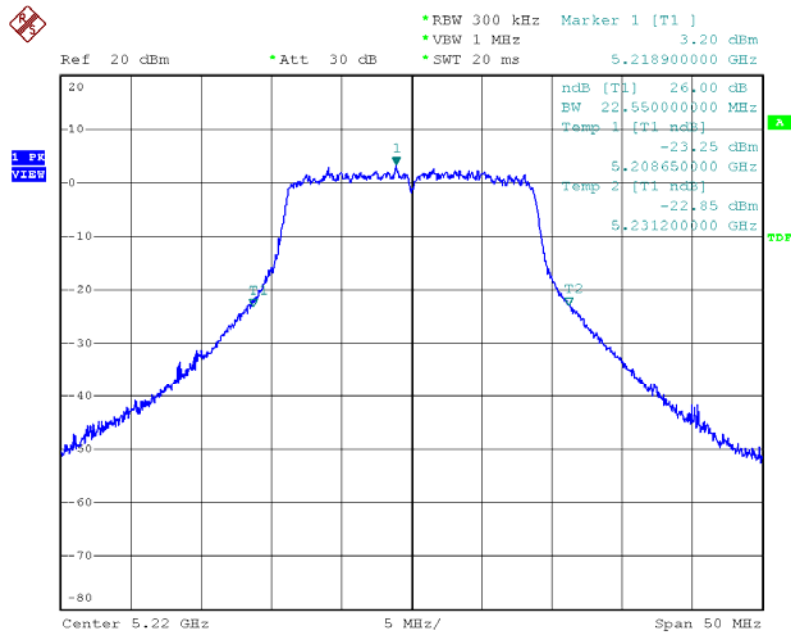
Modulation Standard: 802.11an HT20 (130Mbps), Ant3
Channel: 36



Date: 7.JAN.2009 13:19:58

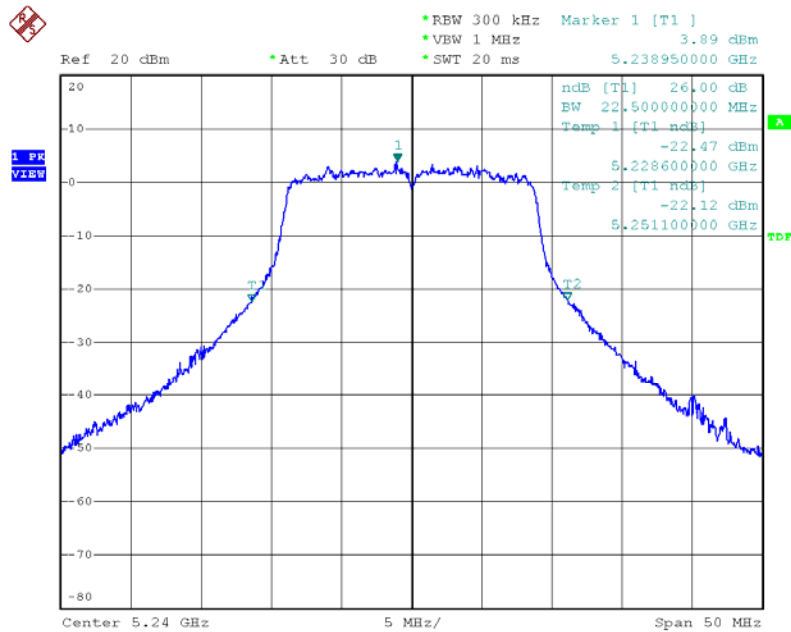


Modulation Standard: 802.11an HT20 (130Mbps), Ant3
Channel: 44



Date: 7.JAN.2009 13:31:09

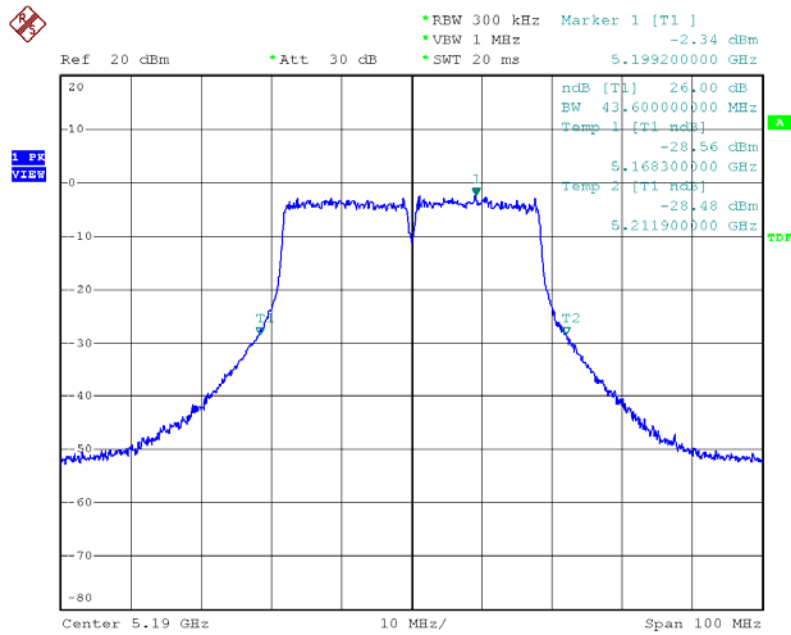
Modulation Standard: 802.11an HT20 (130Mbps), Ant3
Channel: 48



Date: 7.JAN.2009 13:40:58

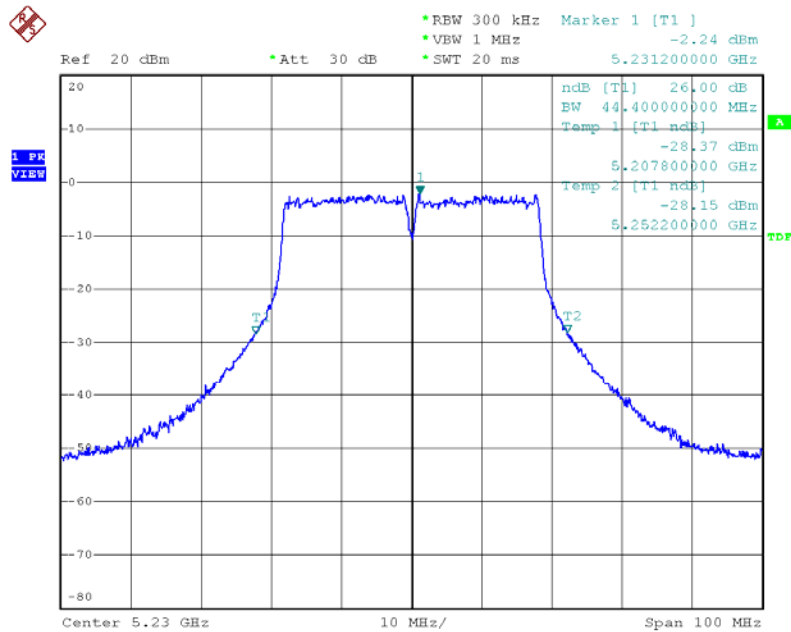


Modulation Standard: 802.11an HT40 (270Mbps), Ant1
Channel: 38



Date: 7.JAN.2009 14:15:52

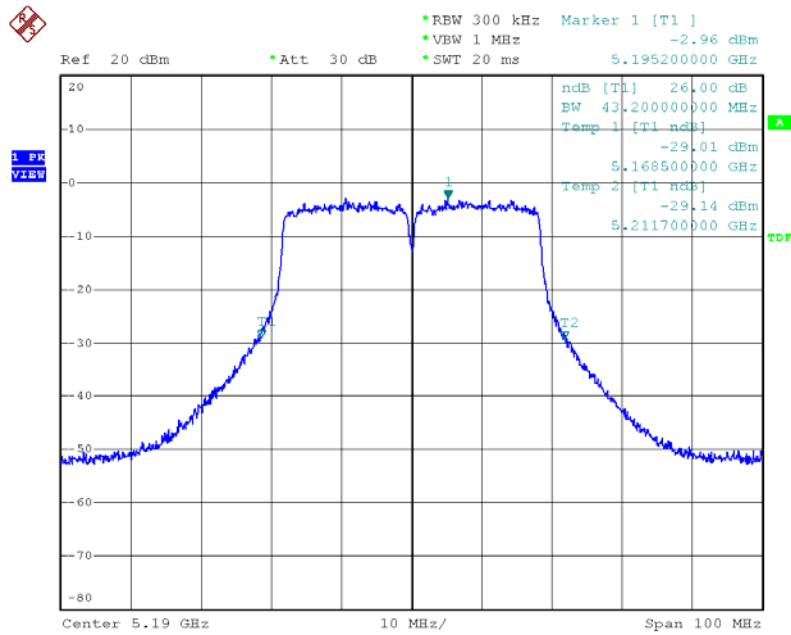
Modulation Standard: 802.11an HT20 (130Mbps), Ant1
Channel: 46



Date: 7.JAN.2009 14:48:16

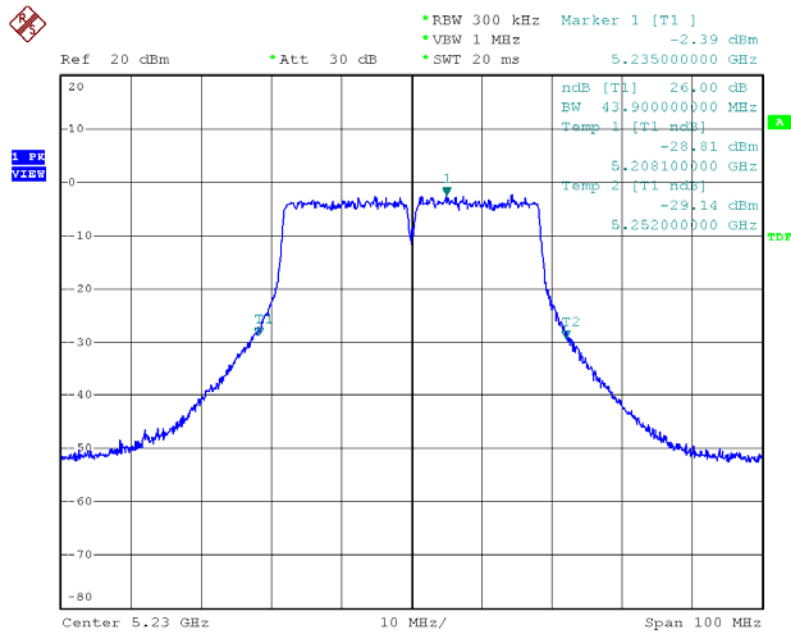


Modulation Standard: 802.11an HT40 (270Mbps), Ant2
Channel: 38



Date: 7.JAN.2009 14:10:15

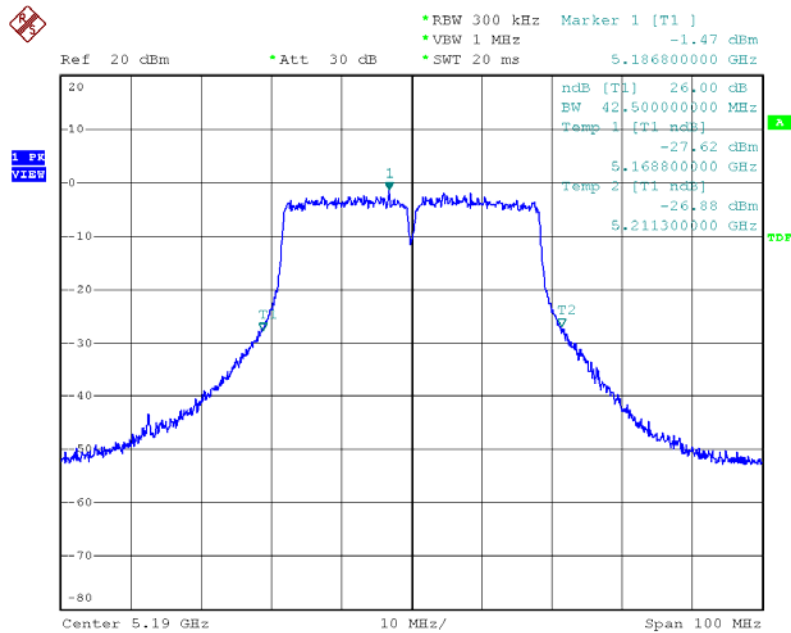
Modulation Standard: 802.11an HT20 (130Mbps), Ant2
Channel: 46



Date: 7.JAN.2009 14:41:16

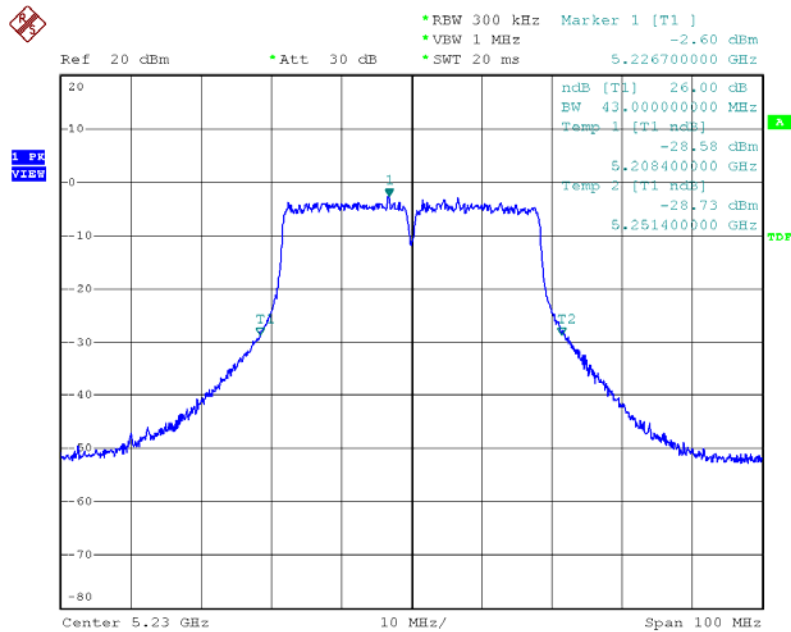


Modulation Standard: 802.11an HT40 (270Mbps), Ant3
Channel: 38



Date: 7.JAN.2009 14:04:58

Modulation Standard: 802.11an HT20 (130Mbps), Ant3
Channel: 46

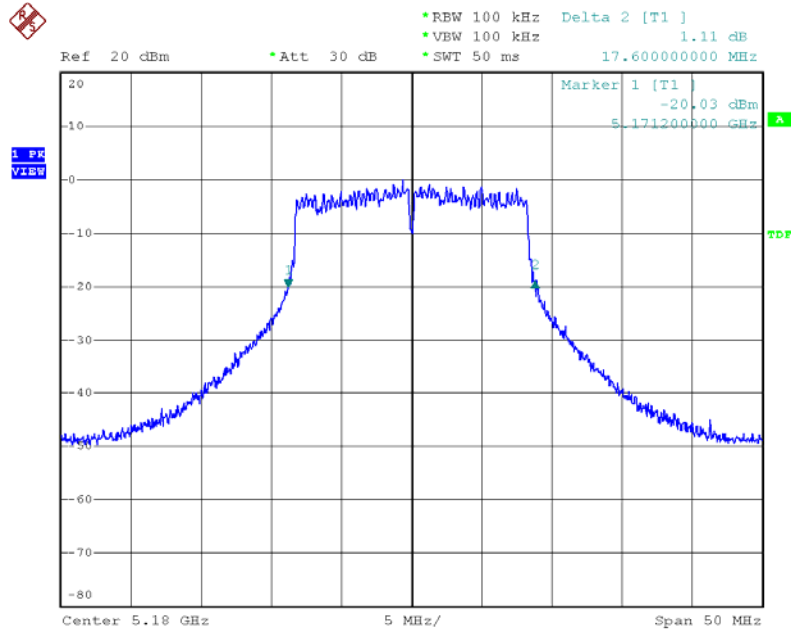


Date: 7.JAN.2009 14:38:07



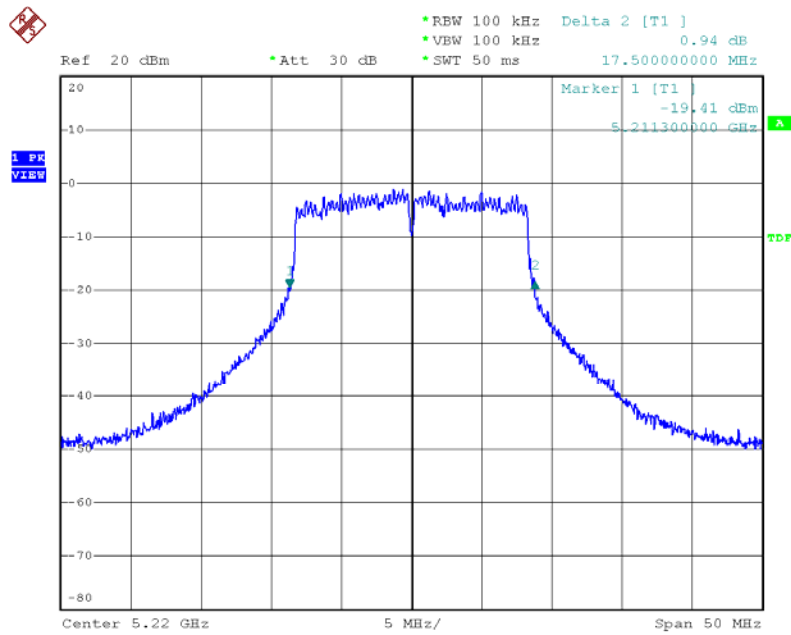
20dB Occupied Bandwidth

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



Date: 7.JAN.2009 17:22:36

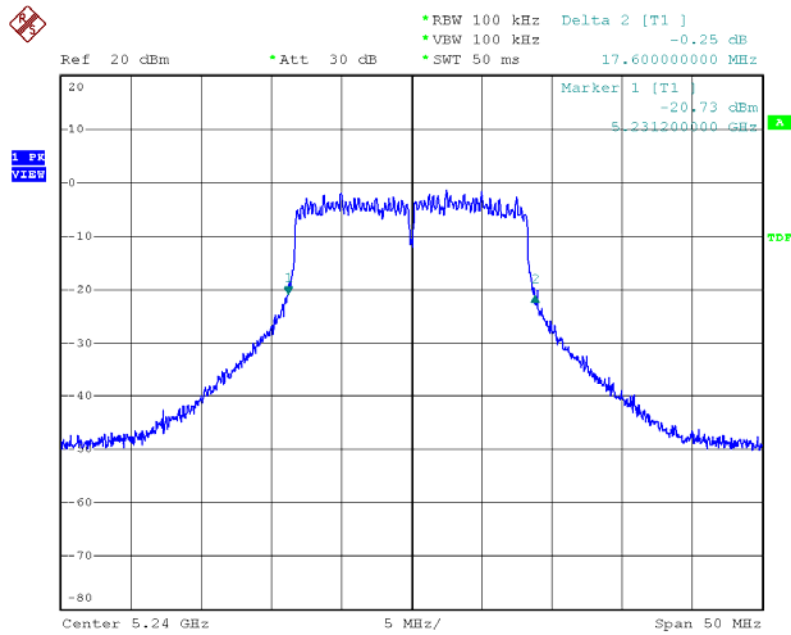
Modulation Standard: 802.11a (54Mbps), Ant1
Channel: 44



Date: 7.JAN.2009 17:40:24

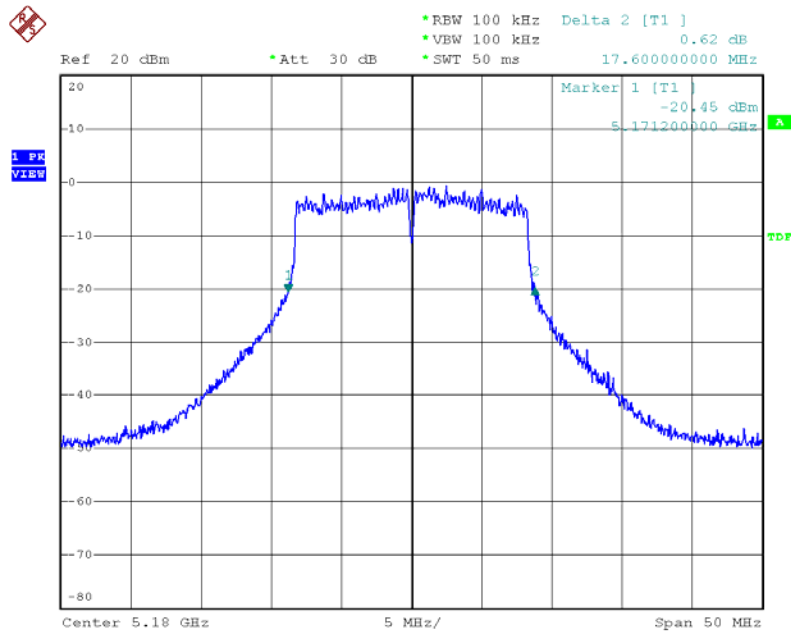


Modulation Standard: 802.11a (54Mbps), Ant1
Channel: 48



Date: 7.JAN.2009 17:48:18

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



Date: 7.JAN.2009 17:19:36