



# FCC TEST REPORT

According to

## FCC Rules and Regulations

### Part 15 Subpart C

Applicant	: Netgear Inc.
Address	: 305 East Plumeria Drive San Jose, California 95134-1911
Equipment	: Digital Entertainer Elite
Model No.	: EVA9000
FCC ID	: PY308200088
Trade Name	: NETGEAR

Laboratory Accreditation



- The test result refers exclusively to the test presented test model / sample.,
- Without written approval of *Cerpass Technology Corporation* the test report shall not be reproduced except in full.
- The EUT is also considered as a kind of computer peripheral, because the connection to computer is necessary for typical use. It has been verified to comply with the requirements of FCC Part 15, Subpart B, Class B (DoC). The test report has been issued separately.



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# CERTIFICATE OF COMPLIANCE

According to

## FCC Rules and Regulations

### Part 15 Subpart C

Applicant : Netgear Inc.  
Address : 305 East Plumeria Drive San Jose,  
California 95134-1911  
Equipment : Digital Entertainer Elite  
Model No. : EVA9000  
FCC ID : PY308200088

**I HEREBY CERTIFY THAT :**

The measurements shown in this test report were made in accordance with the procedures given in **ANSI C63.4** The equipment was **passed** the test performed according to **FCC Rules and Regulations Part 15 Subpart C (2005)**.

The test was carried out on Nov. 13, 2008 at **CerpPASS Technology Corporation**.

Signature

Anson Chou /

EMC/RF B.U. Vice General Manager



## 1. Report of Measurements and Examinations

### 1.1 List of Measurements and Examinations

FCC Rule	Description of Test	Result
15.203	. Antenna Requirement	Pass
15.207	. Conducted Emission	Pass
15.209 15.247(d)	. Radiated Emission	Pass
15.247(a)(2)	. 6dB Bandwidth	Pass
15.247(b)	. Maximum Peak Output Power	Pass
15.247(d)	. 100kHz Bandwidth of Frequency Band Edges	Pass
15.247(e)	. Power Spectral Density	Pass
1.1307 1.1310 2.1091 2.1093	. RF Exposure Compliance	Pass



## 2. Test Configuration of Equipment under Test

### 2.1 Feature of Equipment under Test

Feature	Description
Data and routing protocols	TCP/IP, DHCP
Power adapter	<ul style="list-style-type: none"> <li>• North America: 120V, 60 Hz, input</li> <li>• United Kingdom, Australia: 240V, 50 Hz, input</li> <li>• Europe: 230V, 50 Hz, input</li> <li>• Japan: 100V, 50/60 Hz, input</li> <li>• Maximum input current NA: 0.24A; UK; AU: 0.15A; EU: 0.15A; JP: 0.27A</li> </ul>
Physical specifications	<ul style="list-style-type: none"> <li>• Dimensions (H x W x D): 1.5 x 17 x 10 in. (38.1 x 431.8 x 254 mm)</li> <li>• Weight: 4.4 lbs (2.0 kg)</li> </ul>
Environmental specifications	<ul style="list-style-type: none"> <li>• Operating temperature: 32°–104° F (0°–40° C)</li> <li>• Operating humidity: 90% maximum relative humidity, noncondensing</li> </ul>
Electromagnetic emissions	FCC Part 15 Class B, VCCI Class B, EN 55 022 (CISPR 22), Class B C-Tick N10947
Interface	LAN: 10BASE-T or 100BASE-Tx, RJ-45; WLAN: 802.11/b/g/n
Radio data rates	11a, 11b, 11g & 11n data rates (Auto Rate Sensing)
Frequency	2400 - 2483.5 MHz, 5150 - 5825MHz
Data encoding	Standards <ul style="list-style-type: none"> <li>• IEEE 802.11n draft</li> <li>• IEEE 802.11b, IEEE 802.11g, IEEE 802.11n - 2.4 GHz</li> <li>• IEEE 802.11a, IEEE 802.11n - 5.0 GHz</li> </ul>
Operating frequency ranges	<ul style="list-style-type: none"> <li>• US: 2.4 GHz: 2400 - 2462 MHz 5 GHz: non-DFS 5150 - 5250 MHz and 5725 - 5875 MHz</li> <li>• EU: 2.4 GHz: 2400 - 2483.5 MHz 5 GHz: 5150-5250 MHz, 5250-5350 MHz, 5470-5725 MHz,</li> </ul>
802.11 security	40-bit (also called 64-bit) and 128-bit WEP, WPA-PSK, WPA2-PSK
Data Rate	<ul style="list-style-type: none"> <li>• 802.11b (11, 5.5, 2, 1 Mbps)</li> <li>• 802.11g (54, 48, 36, 24, 18, 12, 9, 6 Mbps)</li> <li>• 802.11a (54, 48, 36, 24, 18, 12, 9, 6 Mbps)</li> <li>• 802.11n draft 2.0, 20MHz (130, 117, 104, 78, 58.5, 52, 39, 26, 19.5, 6.5 Mbps)</li> <li>• 802.11n draft 2.0, 40MHz (270, 243, 216, 162, 135, 121.5, 108, 81, 54, 40, 27, 13.5 Mbps)</li> </ul>



Feature	Description
Number of Channels	802.11b/g/n draft 2.0, 20MHz: -USA, Canada and Taiwan: CH 1 ~ 11 (11channels) -Most European Countries: CH 1 ~ 13 (13channels) -France: CH 1 ~ 7 (7channels) 802.11n draft 2.0, 40MHz: -USA, Canada and Taiwan: CH 3 ~ 9 (7channels) -Most European Countries: CH 1 ~ 13 (13channels) -France: CH 3 ~ 5 (3channels) 802.11a/n draft 2.0, 20MHz: -USA, Canada and Taiwan: CH 36,40,44,48 (4channels) -Most European Countries: CH 36,40,44,48 (4channels) -France: CH 36,40,44,48 (4channels) 802.11a/n draft 2.0, 40MHz: -USA, Canada and Taiwan: CH 38,42,46 (3channels) -Most European Countries: CH 38,42,46 (3channels) -France: CH 38,42,46 (3channels)
Output Power	FCC: 802.11b: 17-20 dBm, 802.11g: 15-18 dBm, 802.11n: 10-16 dBm 802.11a: 17-18 dBm, 802.11an: 12-17 dBm. CE: 802.11b: 15-19 dBm, 802.11g: 13-20 dBm, 802.11n: 14-19 dBm 802.11a: 12-24 dBm, 802.11an: 10-20 dBm.
Antenna Type and Gain	Right Antenna : Printed antenna, 4.2 dBi (2.4GHz Band) 7.7 dBi (5GHz Band) Left Antenna: Printed antenna, 3.9 dBi (2.4GHz Band) 6.7 dBi (5GHz Band)

## 2.2 Carrier Frequency of Channels

802.11b, 802.11g, 802.11n (2412 ~ 2462MHz)

Channel	Frequency(MHz)	Channel	Frequency(MHz)
01	2412	07	2442
02	2417	08	2447
03	2422	09	2452
04	2427	10	2457
05	2432	11	2462
06	2437	---	---

802.11a, 802.11Draft n, 20MHz (5725 ~ 5850MHz)

Channel	Frequency(MHz)	Channel	Frequency(MHz)
149	5745	161	5805
153	5765	165	5825
157	5785	---	---

802.11Draft n, 40MHz (5725 ~ 5850MHz)

Channel	Frequency(MHz)	Channel	Frequency(MHz)
151	5755	159	5795
155	5775	---	---



## 2.3 Test Mode and Test Software

- a. During testing, the interface cables and equipment positions were varied according to ANSI C63.4.
- b. The complete test system included remote workstation, PC, Monitor, Keyboard, Mouse, Modem, Printer, Flash memory and EUT for RF test. The remote workstation means Notebook.
- c. An executive program, "Hyper terminal" under WIN XP, which transmits and receives data to the remote workstation through LAN (100M) and Wireless (13.5M).
- d. The following test mode and test software was performed for test:
  - 802.11b/g/n, HT20: CH01: 2412MHz, CH06: 2437MHz, CH11: 2462MHz
  - 802.11n, HT40: CH03: 2422MHz, CH06: 2437MHz, CH09: 2452MHz
  - 802.11a/an, HT20: CH 149: 5745MHz, CH 157: 5785MHz, CH 165: 5825MHz
  - 802.11an, HT40: CH 151: 5755MHz, CH 159: 5795MHz

## 2.4 Description of Test System

Device	Manufacturer	Model No.	Description
PC	IBM	IGV	Power Cable, Unshielding 1.8 m
Monitor	SlimAGE	510A	Power Cable, Adapter Unshielding 1.8 m Data Cable, VGA Shielding 1.35 m
Monitor	BENQ	Q24W5	Power Cable, Adapter Unshielding 1.8 m Data Cable, VGA Shielding 1.35 m
Keyboard	IBM	KB-0225	Data Cable, PS2 Shielding 1.85 m
Mouse	IBM	MO28VO	Data Cable, USB Shielding 1.85 m
Modem	ACEXX	DM-1414	Power Cable, Adapter Unshielding 1.8 m Data Cable, RS232 Shielding 1.35 m
Printer	HP	Desk Jet 400	Power Cable, Adapter Unshielding 1.8 m Data Cable, Print Shielding 1.6 m
Flash memory * 2	Transcend	JF-512M	N/A
Notebook (Remote Workstation)	TOSHIBA	PSA50T-05M00C	Power Cable, Adapter Unshielding 1.8 m

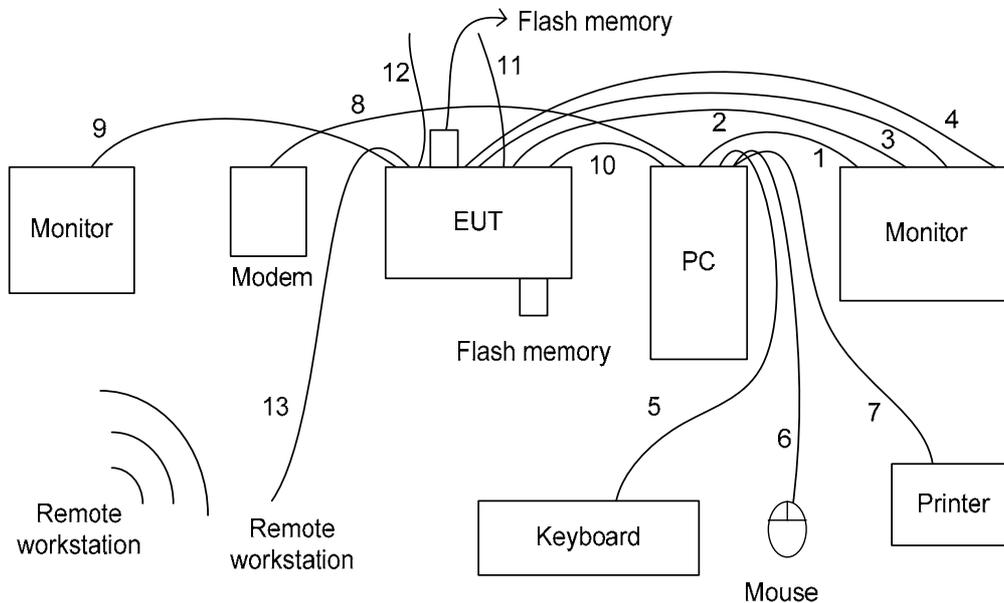
### Use Cable:

Cable	Quantity	Description
RJ45	1	Unshielding, 5.0m
YPbPr	1	Unshielding, 1.5m
AV	1	Unshielding, 1.5m
S-Video	1	Unshielding, 1.5m

Cable	Quantity	Description
HDMI	1	Shielding, 1.5m
S/PDIF	1	Unshielding, 0.5m
Fiber	1	Unshielding, 0.5m
USB	1	Shielding, 1.5m



## 2.5 Connection Diagram of Test System



1. The VGA cable is connected from PC to the Monitor.
2. The HDMI cable is connected from EUT to the Monitor.
3. The S-Video cable is connected from EUT to the Monitor.
4. The YPbPr cable is connected from EUT to the Monitor.
5. The PS2 cable is connected from PC to the Keyboard.
6. The USB cable is connected from PC to the Mouse.
7. The Print cable is connected from PC to the Printer.
8. The RS232 cable is connected from PC to the Modem.
9. The AV cable is connected from EUT to the Monitor.
10. The USB cable is connected from PC to the EUT.
11. The S/PDIF cable is floating.
12. The Fiber cable is floating.
13. The RJ45 cable is connected from EUT to the Remote workstation.



## 2.6 General Information of Test

Test Site :	CerpPASS Technology Corporation 4F-2, No. 28, Lane 78, Xing-Ai Rd. Nei-hu, Taipei City 114 Taiwan R.O.C.
FCC Registration Number :	632249
IC Registration Number :	4934B-1
VCCI Registration Number :	T-338 for Telecommunication Test C-2188 for Conducted emission test R-1902 for Radiated emission test
Test Voltage:	AC 120V
Test in Compliance with:	ANSI C63.4-2003 FCC Part 15 Subpart C
Frequency Range Investigated:	Conducted: from 150kHz to 30MHz Radiation: from 30MHz to 40,000MHz
Test Distance:	The test distance of radiated emission from antenna to EUT is 3 M.

## 2.7 Measurement Uncertainty

Measurement Item	Measurement Frequency	Polarization	Uncertainty
Conducted Emission	9 kHz ~ 30 MHz	LINE/NEUTRAL	2.71 dB
Radiated Emission	30 MHz ~ 40GHz	Vertical	4.11 dB
		Horizontal	4.10 dB
6 dB Bandwidth	---	---	7500 Hz
Maximum Peak Output Power	---	---	1.4 dB
100kHz Bandwidth of Frequency Band Edges	---	---	2.2 dB
Power Spectral Density	---	---	2.2 dB





### 3. Antenna Requirements

#### 3.1 Standard Applicable

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

And according to FCC 47 CFR Section 15.247 (b), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

#### 3.2 Antenna Construction and Directional Gain

Right Antenna (R): Printed antenna, 4.2 dBi (2.4GHz Band)  
7.7 dBi (5GHz Band)

Left Antenna (L): Printed antenna, 3.9 dBi (2.4GHz Band)  
6.7 dBi (5GHz Band)



## 4. Test of Conducted Emission

### 4.1 Test Limit

Conducted Emissions were measured from 150 kHz to 30 MHz with a bandwidth of 9 KHz on the 120 VAC power and return leads of the EUT according to the methods defined in ANSI C63.4-2003 Section 3.1. The EUT was placed on a nonmetallic stand in a shielded room 0.8 meters above the ground plane as shown in section 2.2. The interface cables and equipment positioning were varied within limits of reasonable applications to determine the position produced maximum conducted emissions.

Frequency (MHz)	Quasi Peak (dB $\mu$ V)	Average (dB $\mu$ V)
0.15 – 0.5	66-56*	56-46*
0.5 – 5.0	56	46
5.0 – 30.0	60	50

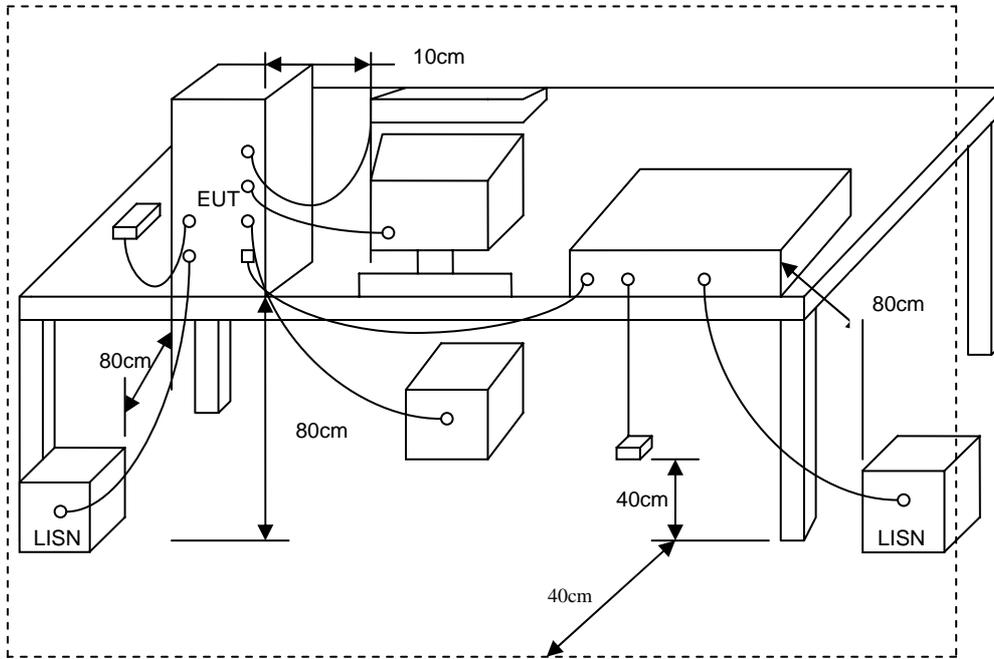
\*Decreases with the logarithm of the frequency.

### 4.2 Test Procedures

- a. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
- b. Connect EUT to the power mains through a line impedance stabilization network (LISN).
- c. All the support units are connecting to the other LISN.
- d. The LISN provides 50 ohm coupling impedance for the measuring instrument.
- e. The FCC states that a 50 ohm, 50 micro-Henry LISN should be used.
- f. Both sides of AC line were checked for maximum conducted interference.
- g. The frequency range from 150 kHz to 30 MHz was searched.
- h. Set the test-receiver system to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.



### 4.3 Typical Test Setup



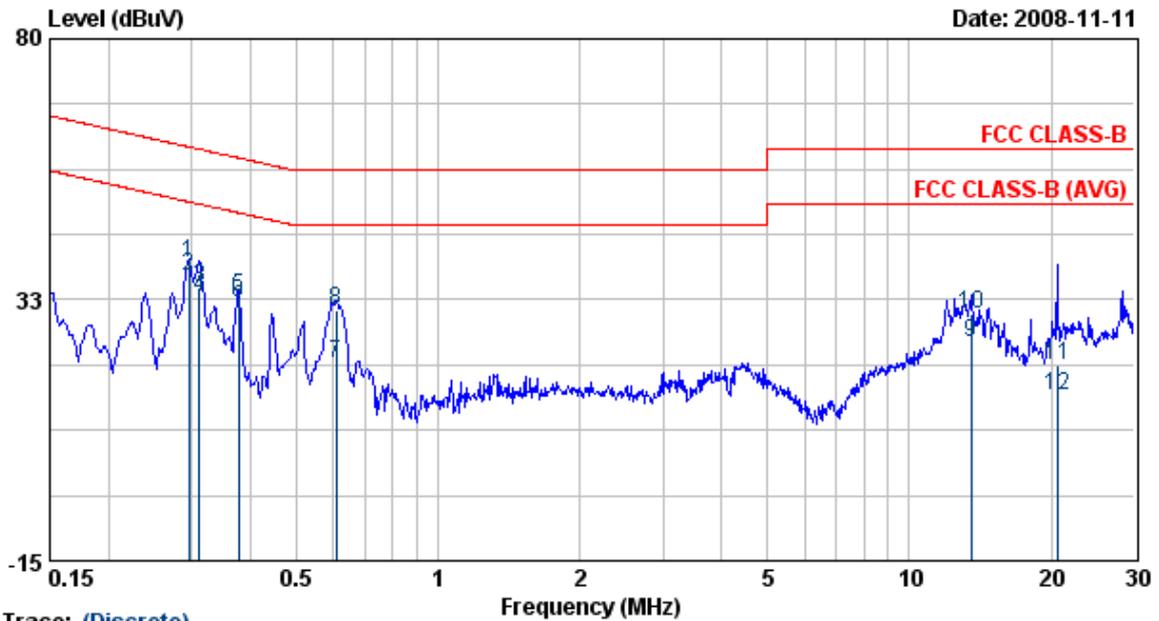
### 4.4 Measurement Equipment

Instrument/Ancillary	Model No.	Manufacturer	Serial No.	Calibration Date	Valid Date.
EMI Receiver	SCHAFFNER	SCR-3501	437	2007/11/26	2008/11/25
LISN	NNB-2/16Z	MESS TEC	02/10191	2008/06/03	2009/06/02
LISN	NNB-2/16Z	ROLF HEINE	03/10058	2008/04/19	2009/04/18



4.5 Test Result and Data

Power	: AC 120V	Pol/Phase	: LINE
Test Mode 1	: 802.11g, CH1	Temperature	: 24 °C
Memo	:	Humidity	: 55 %



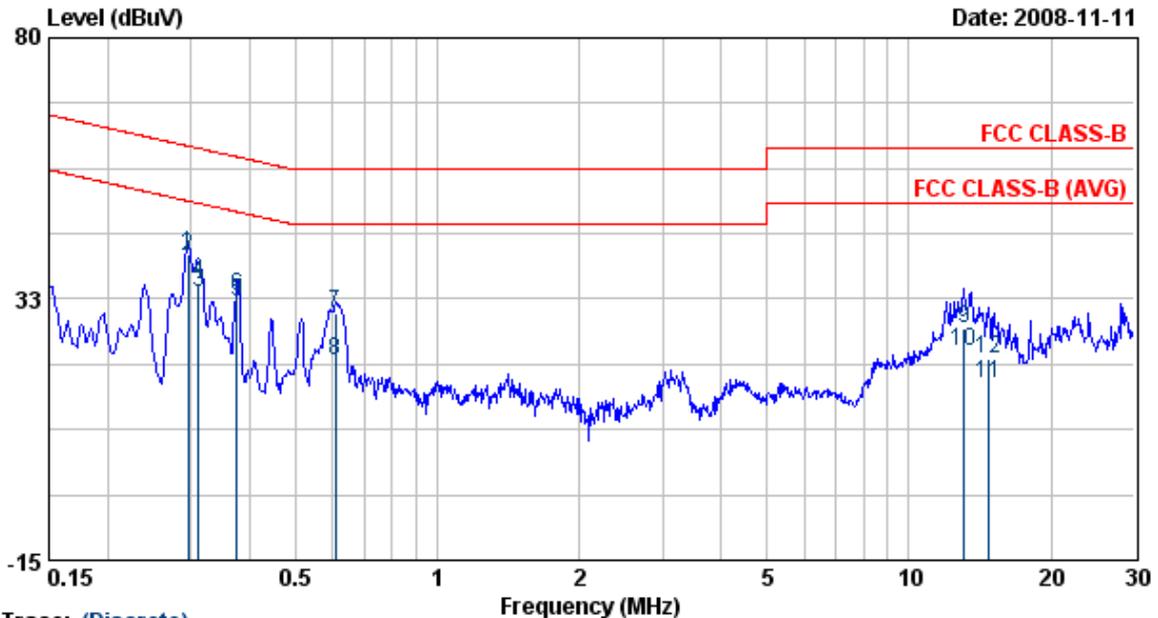
Trace: (Discrete)

Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark
	MHz	dBuV	dB	dBuV	dBuV	dBuV	
1	0.30	39.18	0.12	39.30	60.36	-21.06	QP
2	0.30	36.78	0.12	36.90	50.36	-13.46	AVERAGE
3	0.31	34.53	0.12	34.65	59.92	-25.26	QP
4	0.31	32.80	0.12	32.92	49.92	-17.00	AVERAGE
5	0.38	32.89	0.12	33.01	58.34	-25.33	QP
6	0.38	31.83	0.12	31.95	48.34	-16.38	AVERAGE
7	0.61	20.95	0.14	21.09	46.00	-24.91	AVERAGE
8	0.61	30.42	0.14	30.56	56.00	-25.44	QP
9	13.53	24.32	0.42	24.74	50.00	-25.26	AVERAGE
10	13.53	29.54	0.42	29.96	60.00	-30.04	QP
11	20.58	20.28	0.43	20.72	60.00	-39.28	QP
12	20.58	14.69	0.43	15.12	50.00	-34.88	AVERAGE

- Remarks:
1. Level = Read Level + Factor
  2. Factor = LISN(ISN) Factor + Cable Loss
  3. All emission below 1GHz at 802.11b/g mode are all the same,so the 802.11g mode chosen as representative in final test.
  4. According to technical experiences,all spurious emission of 802.11g mode at channel 1,6,11 are almost the same below 1GHz,so that the channel 1 was chosen as representative in final test.
  5. The data is worse case.



Power	: AC 120V	Pol/Phase	: NEUTRAL
Test Mode 1	: 802.11g, CH1	Temperature	: 24 °C
Memo	:	Humidity	: 55 %



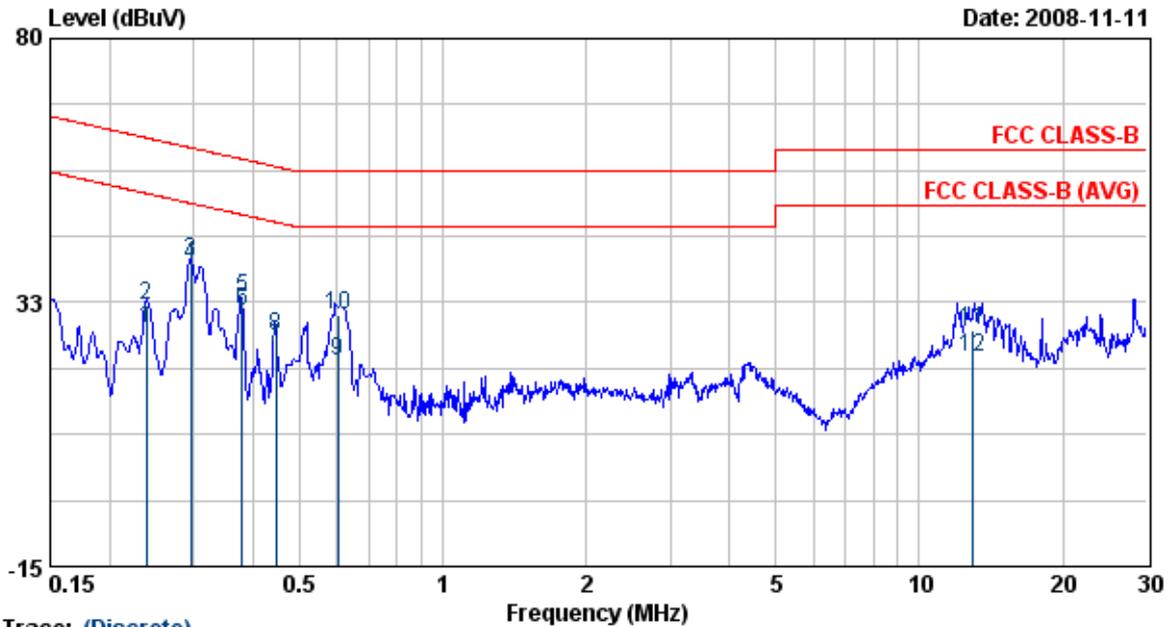
Trace: (Discrete)

Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark
	MHz	dBuV	dB	dBuV	dBuV	dBuV	
1	0.30	40.46	0.14	40.60	60.34	-19.75	QP
2	0.30	40.18	0.14	40.32	50.34	-10.03	AVERAGE
3	0.31	33.66	0.14	33.80	49.93	-16.13	AVERAGE
4	0.31	35.45	0.14	35.59	59.93	-24.33	QP
5	0.38	31.92	0.15	32.07	48.36	-16.29	AVERAGE
6	0.38	32.92	0.15	33.07	58.36	-25.29	QP
7	0.61	29.72	0.16	29.89	56.00	-26.11	QP
8	0.61	21.20	0.16	21.36	46.00	-24.64	AVERAGE
9	13.08	26.69	0.44	27.13	60.00	-32.87	QP
10	13.08	22.42	0.44	22.86	50.00	-27.14	AVERAGE
11	14.75	16.54	0.46	17.00	50.00	-33.00	AVERAGE
12	14.75	21.28	0.46	21.73	60.00	-38.27	QP

- Remarks:
- Level = Read Level + Factor
  - Factor = LISN(ISN) Factor + Cable Loss
  - All emission below 1GHz at 802.11g mode are all the same,so the 802.11g mode chosen as representative in final test.
  - According to technical experiences,all spurious emission of 802.11g mode at channel 1,6,11 are almost the same below 1GHz,so that the channel 1 was chosen as representative in final test.
  - The data is worse case.



Power	: AC 120V	Pol/Phase	: LINE
Test Mode 2	: 802.11n HT20, CH1	Temperature	: 24 °C
Memo	:	Humidity	: 55 %



Trace: (Discrete)

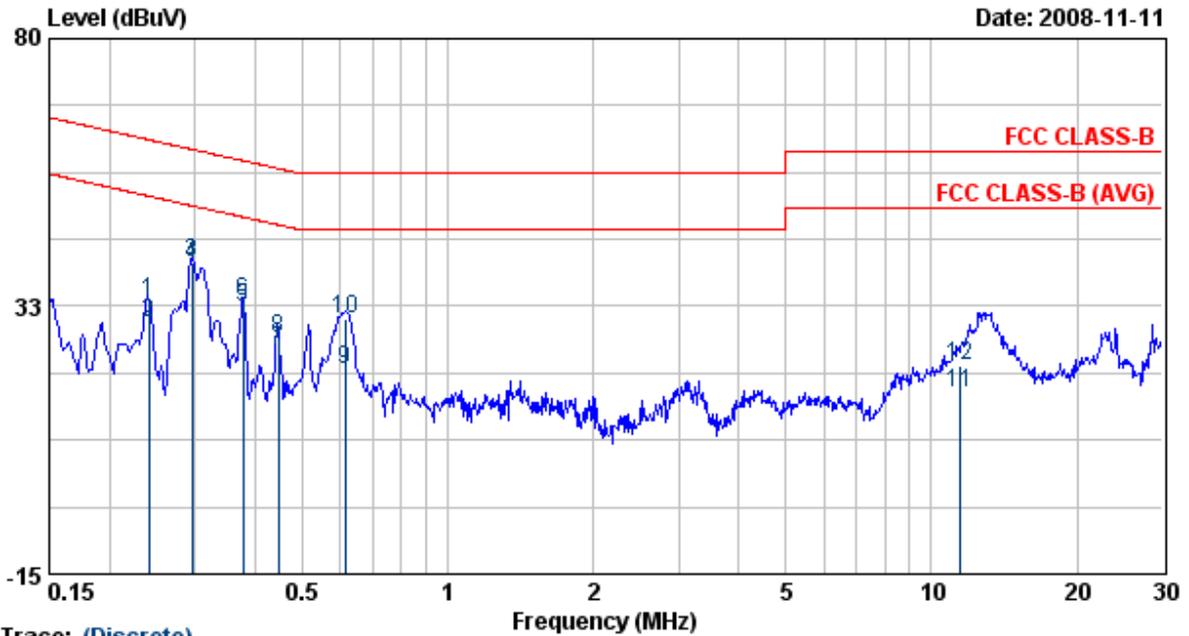
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark
	MHz	dBuV	dB	dBuV	dBuV	dBuV	
1	0.24	27.61	0.12	27.73	52.12	-24.39	AVERAGE
2	0.24	31.69	0.12	31.81	62.12	-30.31	QP
3	0.30	39.88	0.12	40.00	60.36	-20.36	QP
4	0.30	39.25	0.12	39.37	50.36	-10.99	AVERAGE
5	0.38	33.08	0.12	33.20	58.30	-25.10	QP
6	0.38	30.81	0.12	30.93	48.30	-17.37	AVERAGE
7	0.45	24.37	0.12	24.49	46.95	-22.46	AVERAGE
8	0.45	26.26	0.12	26.39	56.95	-30.57	QP
9	0.60	21.75	0.14	21.88	46.00	-24.12	AVERAGE
10	0.60	30.13	0.14	30.27	56.00	-25.73	QP
11	12.91	26.96	0.41	27.37	60.00	-32.63	QP
12	12.91	22.10	0.41	22.51	50.00	-27.49	AVERAGE

Remarks:

1. Level = Read Level + Factor
2. Factor = LISN(ISN) Factor + Cable Loss
3. According to technical experiences, all spurious emission of 802.11MIMO mode at channel 1,6,11 are almost the same below 1GHz, so that the channel 1 was chosen as representative in final test.
4. The data is worse case.



Power	: AC 120V	Pol/Phase	: NEUTRAL
Test Mode 2	: 802.11n HT20, CH1	Temperature	: 24 °C
Memo	:	Humidity	: 55 %



Trace: (Discrete)

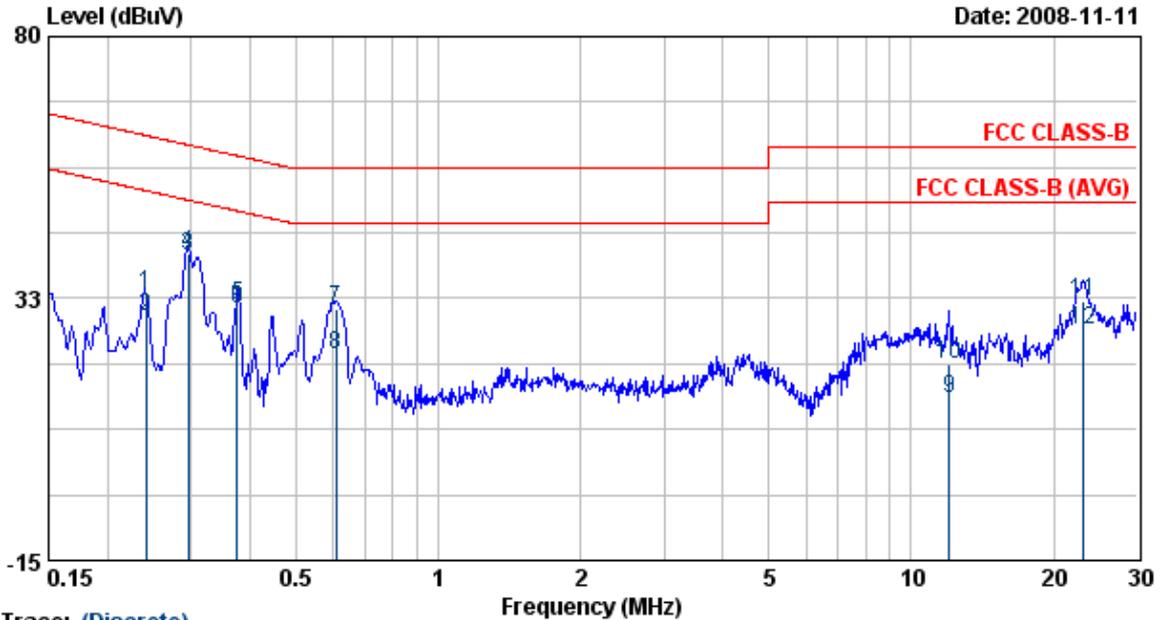
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark
	MHz	dBuV	dB	dBuV	dBuV	dBuV	
1	0.24	33.28	0.14	33.42	62.07	-28.65	QP
2	0.24	29.43	0.14	29.57	52.07	-22.50	AVERAGE
3	0.30	40.13	0.14	40.27	60.34	-20.07	QP
4	0.30	39.92	0.14	40.06	50.34	-10.28	AVERAGE
5	0.38	32.11	0.15	32.26	48.33	-16.07	AVERAGE
6	0.38	33.22	0.15	33.37	58.33	-24.95	QP
7	0.45	24.73	0.15	24.89	46.95	-22.06	AVERAGE
8	0.45	26.72	0.15	26.88	56.95	-30.07	QP
9	0.61	21.14	0.16	21.30	46.00	-24.70	AVERAGE
10	0.61	29.99	0.16	30.15	56.00	-25.85	QP
11	11.43	16.88	0.42	17.30	50.00	-32.70	AVERAGE
12	11.43	21.51	0.42	21.93	60.00	-38.07	QP

Remarks:

1. Level = Read Level + Factor
2. Factor = LISN(ISN) Factor + Cable Loss
3. According to technical experiences, all spurious emission of 802.11MIMO mode at channel 1,6,11 are almost the same below 1GHz, so that the channel 1 was chosen as representative in final test.
4. The data is worse case.



Power	: AC 120V	Pol/Phase	: LINE
Test Mode 3	: 802.11n HT40, CH3	Temperature	: 24 °C
Memo	:	Humidity	: 55 %



Trace: (Discrete)

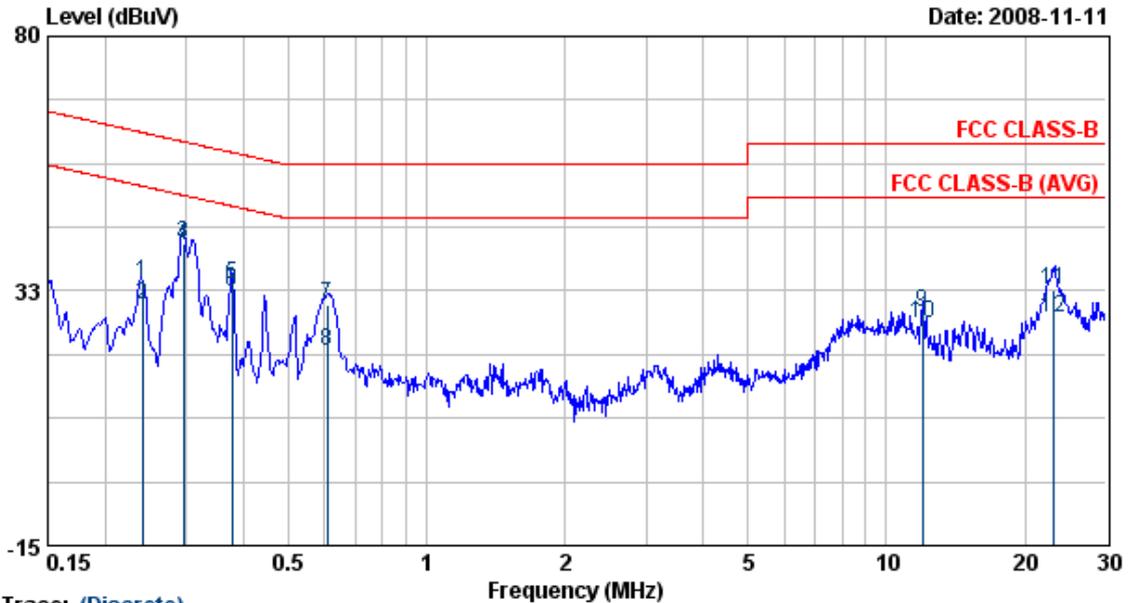
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark
	MHz	dBuV	dB	dBuV	dBuV	dBuV	
1	0.24	33.32	0.12	33.43	62.07	-28.63	QP
2	0.24	29.05	0.12	29.16	52.07	-22.90	AVERAGE
3	0.30	40.05	0.12	40.17	50.35	-10.19	AVERAGE
4	0.30	40.62	0.12	40.74	60.35	-19.61	QP
5	0.38	31.26	0.12	31.38	58.37	-26.99	QP
6	0.38	30.42	0.12	30.54	48.37	-17.83	AVERAGE
7	0.61	30.54	0.14	30.68	56.00	-25.32	QP
8	0.61	22.11	0.14	22.25	46.00	-23.75	AVERAGE
9	12.06	13.80	0.40	14.20	50.00	-35.80	AVERAGE
10	12.06	20.15	0.40	20.54	60.00	-39.46	QP
11	23.10	31.38	0.43	31.81	60.00	-28.19	QP
12	23.10	26.46	0.43	26.89	50.00	-23.11	AVERAGE

Remarks:

1. Level = Read Level + Factor
2. Factor = LISN(ISN) Factor + Cable Loss
3. According to technical experiences, all spurious emission of 802.11MIMO mode at channel 3,6,9 are almost the same below 1GHz, so that the channel 3 was chosen as representative in final test.
4. The data is worse case.



Power	: AC 120V	Pol/Phase	: NEUTRAL
Test Mode 3	: 802.11n HT40, CH3	Temperature	: 24 °C
Memo	:	Humidity	: 55 %



Trace: (Discrete)

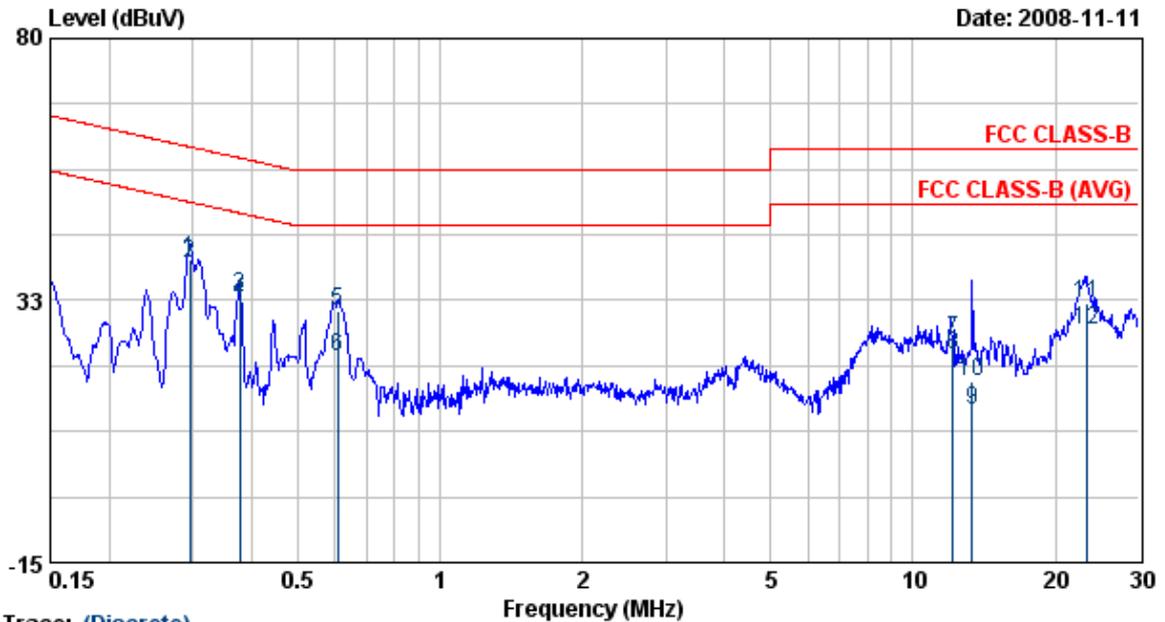
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark
	MHz	dBuV	dB	dBuV	dBuV	dBuV	
1	0.24	33.99	0.14	34.13	62.08	-27.95	QP
2	0.24	29.81	0.14	29.95	52.08	-22.13	AVERAGE
3	0.30	41.18	0.14	41.32	60.35	-19.03	QP
4	0.30	40.82	0.14	40.96	50.35	-9.39	AVERAGE
5	0.38	33.52	0.15	33.67	58.32	-24.66	QP
6	0.38	32.20	0.15	32.35	48.32	-15.97	AVERAGE
7	0.61	29.78	0.16	29.95	56.00	-26.05	QP
8	0.61	21.23	0.16	21.40	46.00	-24.60	AVERAGE
9	12.00	27.95	0.43	28.38	60.00	-31.62	QP
10	12.00	25.88	0.43	26.31	50.00	-23.69	AVERAGE
11	23.10	31.95	0.60	32.55	60.00	-27.45	QP
12	23.10	26.84	0.60	27.44	50.00	-22.56	AVERAGE

Remarks:

1. Level = Read Level + Factor
2. Factor = LISN(ISN) Factor + Cable Loss
3. According to technical experiences, all spurious emission of 802.11MIMO mode at channel 3,6,9 are almost the same below 1GHz, so that the channel 3 was chosen as representative in final test.
4. The data is worse case.



Power	: AC 120V	Pol/Phase	: LINE
Test Mode 4	: 802.11a, CH149	Temperature	: 24 °C
Memo	:	Humidity	: 55 %



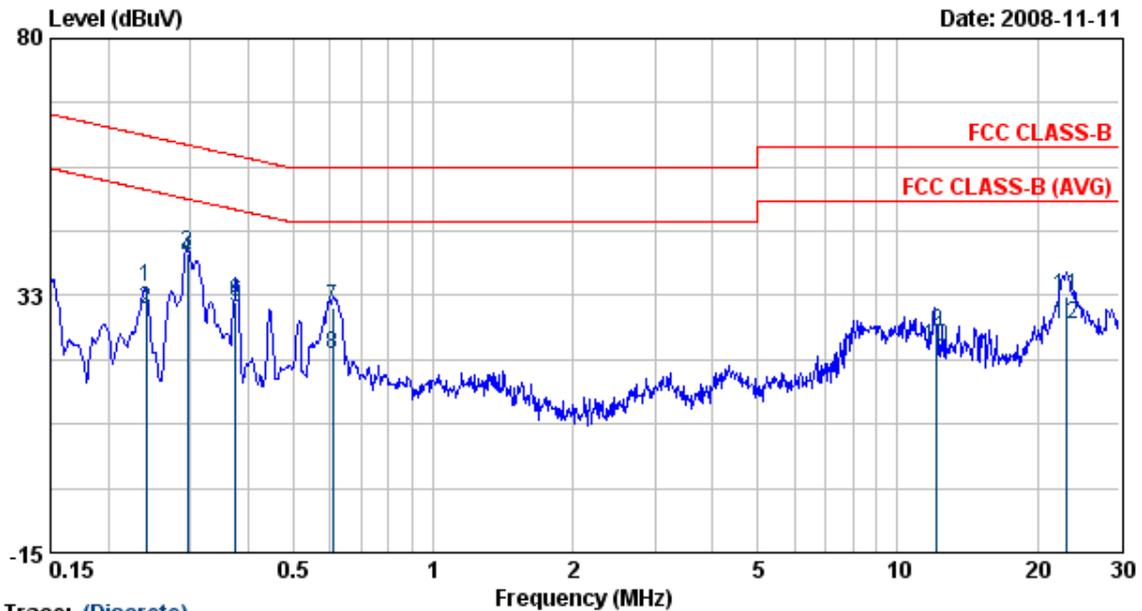
Trace: (Discrete)

Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark
	MHz	dBuV	dB	dBuV	dBuV	dBuV	
1	0.30	39.72	0.12	39.84	60.36	-20.52	QP
2	0.30	39.27	0.12	39.40	50.36	-10.96	AVERAGE
3	0.38	33.38	0.12	33.50	58.35	-24.85	QP
4	0.38	32.19	0.12	32.31	48.35	-16.04	AVERAGE
5	0.61	30.57	0.14	30.71	56.00	-25.29	QP
6	0.61	22.09	0.14	22.23	46.00	-23.77	AVERAGE
7	12.13	24.85	0.40	25.25	60.00	-34.75	QP
8	12.13	22.22	0.40	22.62	50.00	-27.38	AVERAGE
9	13.33	12.26	0.42	12.67	50.00	-37.33	AVERAGE
10	13.33	17.51	0.42	17.93	60.00	-42.07	QP
11	23.22	31.63	0.43	32.06	60.00	-27.94	QP
12	23.22	26.56	0.43	26.99	50.00	-23.01	AVERAGE

- Remarks:
1. Level = Read Level + Factor
  2. Factor = LISN(ISN) Factor + Cable Loss
  3. According to technical experiences, all spurious emission of 802.11a mode at channel 149,157,165 are almost the same below 1GHz, so that the channel 149 was chosen as representative in final test.
  4. The data is worse case.



Power	: AC 120V	Pol/Phase	: NEUTRAL
Test Mode 4	: 802.11a, CH149	Temperature	: 24 °C
Memo	:	Humidity	: 55 %



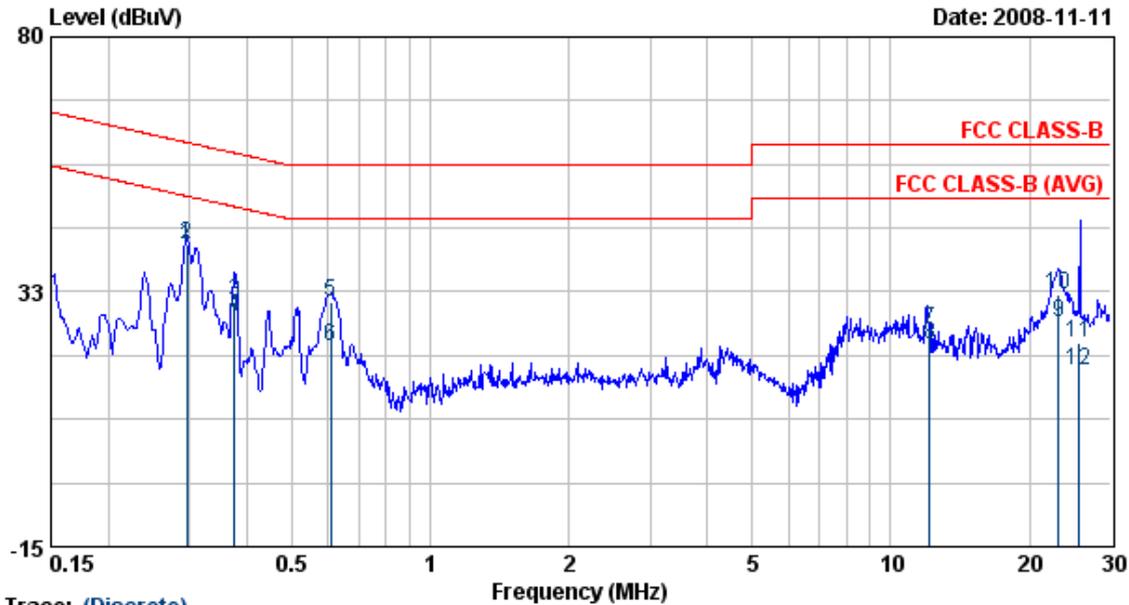
Trace: (Discrete)

Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark
	MHz	dBuV	dB	dBuV	dBuV	dBuV	
1	0.24	33.75	0.14	33.88	62.08	-28.19	QP
2	0.24	29.93	0.14	30.07	52.08	-22.01	AVERAGE
3	0.30	39.99	0.14	40.13	60.37	-20.24	QP
4	0.30	39.13	0.14	39.27	50.37	-11.09	AVERAGE
5	0.38	30.06	0.15	30.21	48.39	-18.18	AVERAGE
6	0.38	31.09	0.15	31.24	58.39	-27.15	QP
7	0.61	30.12	0.16	30.28	56.00	-25.72	QP
8	0.61	21.58	0.16	21.74	46.00	-24.26	AVERAGE
9	12.13	25.29	0.43	25.72	60.00	-34.28	QP
10	12.13	22.66	0.43	23.09	50.00	-26.91	AVERAGE
11	23.10	31.70	0.60	32.29	60.00	-27.71	QP
12	23.10	26.59	0.60	27.19	50.00	-22.81	AVERAGE

- Remarks:
1. Level = Read Level + Factor
  2. Factor = LISN(ISN) Factor + Cable Loss
  3. According to technical experiences, all spurious emission of 802.11a mode at channel 149, 157, 165 are almost the same below 1GHz, so that the channel 149 was chosen as representative in final test.
  4. The data is worse case.



Power	: AC 120V	Pol/Phase	: LINE
Test Mode 5	: 802.11an HT20, CH149	Temperature	: 24 °C
Memo	:	Humidity	: 55 %



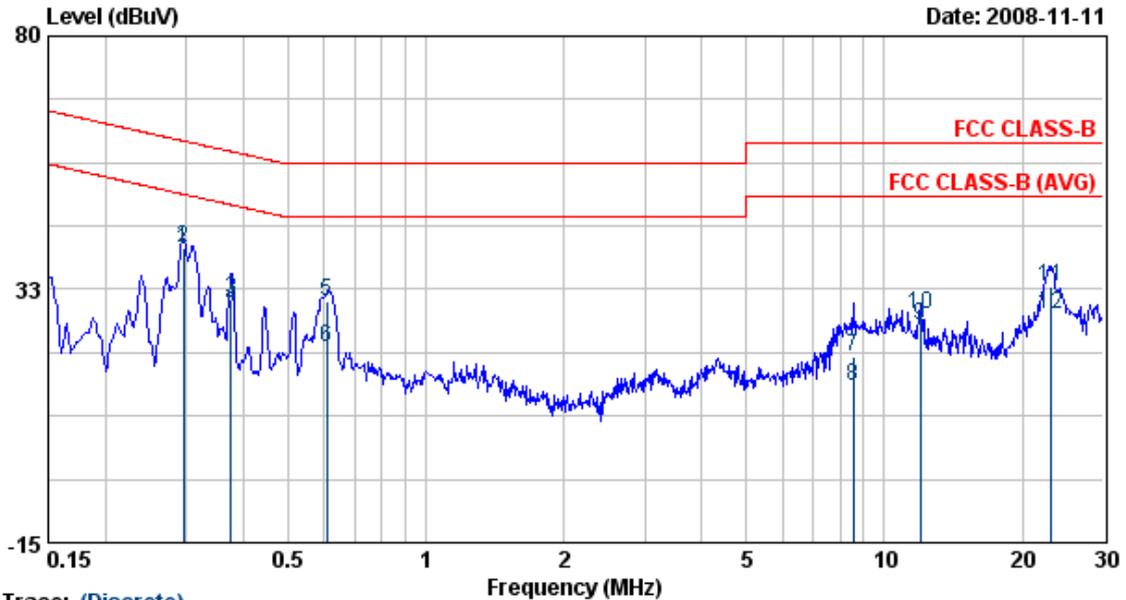
Trace: (Discrete)

Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark
	MHz	dBuV	dB	dBuV	dBuV	dBuV	
1	0.30	40.72	0.12	40.84	50.33	-9.49	AVERAGE
2	0.30	41.13	0.12	41.25	60.33	-19.08	QP
3	0.38	30.53	0.12	30.65	58.39	-27.74	QP
4	0.38	27.82	0.12	27.94	48.39	-20.44	AVERAGE
5	0.61	30.61	0.14	30.75	56.00	-25.25	QP
6	0.61	22.14	0.14	22.28	46.00	-23.72	AVERAGE
7	12.13	24.95	0.40	25.35	60.00	-34.65	QP
8	12.13	22.24	0.40	22.64	50.00	-27.36	AVERAGE
9	23.16	26.36	0.43	26.79	50.00	-23.21	AVERAGE
10	23.16	31.55	0.43	31.98	60.00	-28.02	QP
11	25.68	22.58	0.43	23.02	60.00	-36.98	QP
12	25.68	17.42	0.43	17.85	50.00	-32.15	AVERAGE

- Remarks:
1. Level = Read Level + Factor
  2. Factor = LISN(ISN) Factor + Cable Loss
  3. According to technical experiences, all spurious emission of 802.11an HT20 mode at channel 149,157,165 are almost the same below 1GHz, so that channel 149 was chosen as representative in final test.
  4. The data is worse case.



Power	: AC 120V	Pol/Phase	: NEUTRAL
Test Mode 5	: 802.11an HT20, CH149	Temperature	: 24 °C
Memo	:	Humidity	: 55 %



Trace: (Discrete)

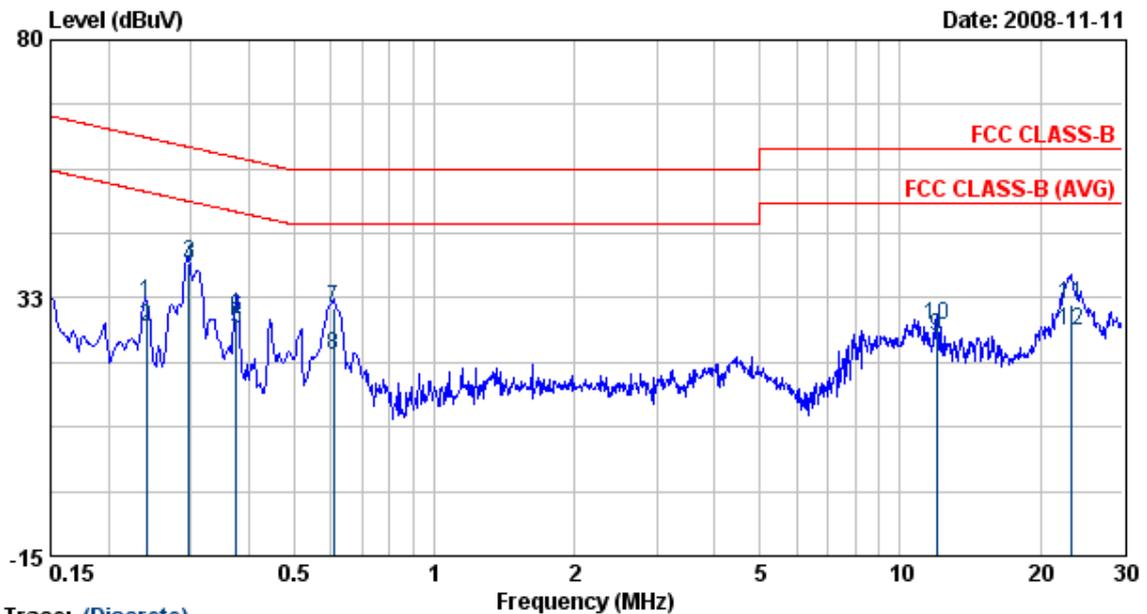
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark
	MHz	dBuV	dB	dBuV	dBuV	dBuV	
1	0.30	39.77	0.14	39.92	50.37	-10.45	AVERAGE
2	0.30	40.05	0.14	40.19	60.37	-20.18	QP
3	0.38	30.40	0.15	30.55	58.39	-27.84	QP
4	0.38	28.92	0.15	29.06	48.39	-19.32	AVERAGE
5	0.61	30.14	0.16	30.31	56.00	-25.69	QP
6	0.61	21.56	0.16	21.73	46.00	-24.27	AVERAGE
7	8.54	19.41	0.38	19.80	60.00	-40.20	QP
8	8.54	14.05	0.38	14.43	50.00	-35.57	AVERAGE
9	12.00	25.37	0.43	25.80	50.00	-24.20	AVERAGE
10	12.00	27.58	0.43	28.00	60.00	-32.00	QP
11	22.99	32.34	0.60	32.94	60.00	-27.06	QP
12	22.99	27.33	0.60	27.93	50.00	-22.07	AVERAGE

Remarks:

1. Level = Read Level + Factor
2. Factor = LISN(ISN) Factor + Cable Loss
3. According to technical experiences, all spurious emission of 802.11an HT20 mode at channel 149,157,165 are almost the same below 1GHz, so that channel 149 was chosen as representative in final test.
4. The data is worse case.



Power	: AC 120V	Pol/Phase	: LINE
Test Mode 6	: 802.11an HT40, CH151	Temperature	: 24 °C
Memo	:	Humidity	: 55 %



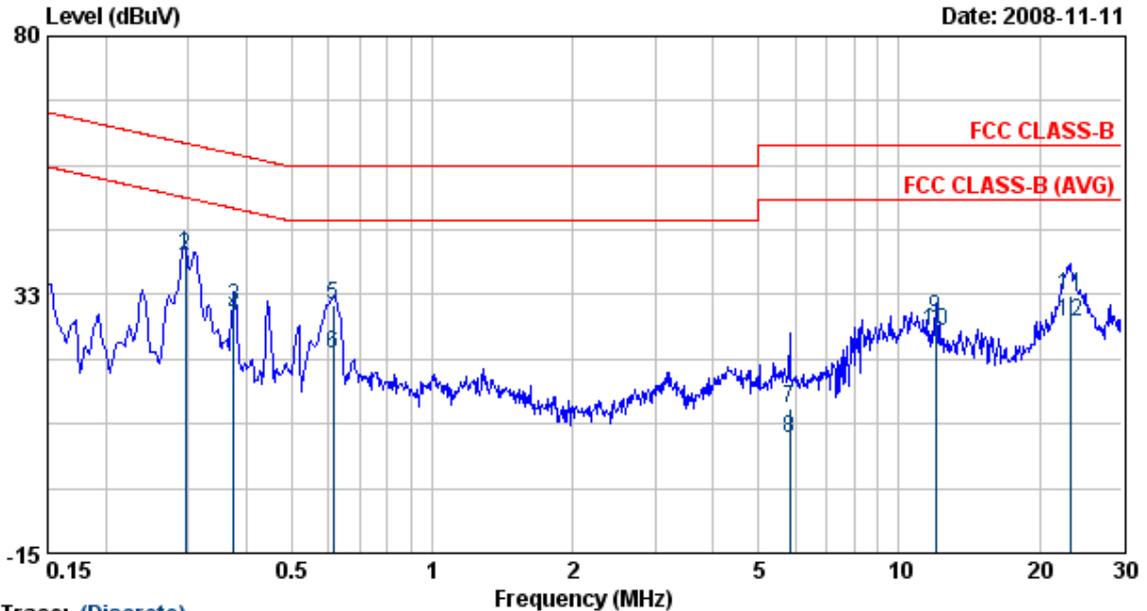
Trace: (Discrete)

Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark
	MHz	dBuV	dB	dBuV	dBuV	dBuV	
1	0.24	31.64	0.12	31.76	62.08	-30.32	QP
2	0.24	27.16	0.12	27.28	52.08	-24.80	AVERAGE
3	0.30	38.63	0.12	38.75	60.31	-21.56	QP
4	0.30	38.15	0.12	38.27	50.31	-12.04	AVERAGE
5	0.38	26.61	0.12	26.73	48.39	-21.66	AVERAGE
6	0.38	28.76	0.12	28.88	58.39	-29.51	QP
7	0.61	30.40	0.14	30.54	56.00	-25.46	QP
8	0.61	21.89	0.14	22.03	46.00	-23.97	AVERAGE
9	12.00	25.04	0.40	25.44	50.00	-24.56	AVERAGE
10	12.00	27.26	0.40	27.66	60.00	-32.34	QP
11	23.25	31.01	0.43	31.44	60.00	-28.56	QP
12	23.25	25.90	0.43	26.33	50.00	-23.67	AVERAGE

- Remarks:
1. Level = Read Level + Factor
  2. Factor = LISN(ISN) Factor + Cable Loss
  3. According to technical experiences, all spurious emission of 802.11an mode at channel 151,155,159 are almost the same below 1GHz, so that the channel 151 was chosen as representative in final test.
  4. The data is worse case.



Power	: AC 120V	Pol/Phase	: NEUTRAL
Test Mode 6	: 802.11an HT40, CH151	Temperature	: 24 °C
Memo	:	Humidity	: 55 %



Trace: (Discrete)

Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark
	MHz	dBuV	dB	dBuV	dBuV	dBuV	
1	0.30	39.92	0.14	40.06	60.37	-20.31	QP
2	0.30	39.32	0.14	39.46	50.37	-10.91	AVERAGE
3	0.38	30.02	0.15	30.16	58.39	-28.22	QP
4	0.38	28.38	0.15	28.53	48.39	-19.86	AVERAGE
5	0.61	30.34	0.16	30.50	56.00	-25.50	QP
6	0.61	21.55	0.16	21.72	46.00	-24.28	AVERAGE
7	5.84	11.23	0.34	11.57	60.00	-48.43	QP
8	5.84	5.80	0.34	6.14	50.00	-43.86	AVERAGE
9	12.00	27.67	0.43	28.10	60.00	-31.90	QP
10	12.00	25.43	0.43	25.85	50.00	-24.15	AVERAGE
11	23.27	31.87	0.60	32.46	60.00	-27.54	QP
12	23.27	26.75	0.60	27.35	50.00	-22.65	AVERAGE

- Remarks:
- Level = Read Level + Factor
  - Factor = LISN(ISN) Factor + Cable Loss
  - According to technical experiences, all spurious emission of 802.11an mode at channel 151,155,159 are almost the same below 1GHz, so that the channel 151 was chosen as representative in final test.
  - The data is worse case.

Test engineer: Ben



## 5. Test of Radiated Emission

### 5.1 Test Limit

Radiated emissions from 30 MHz to 40 GHz were measured according to the methods defines in ANSI C63.4-2003. The EUT was placed, 0.8 meter above the ground plane, as shown in section 5.6.3. The interface cables and equipment positions were varied within limits of reasonable applications to determine the positions producing maximum radiated emissions

For unintentional device, according to § 15.109(a), except for Class A digital devices, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values:

Frequency (MHz)	Distance Meters	Radiated ( $\mu$ V / M)	Radiated (dB $\mu$ V/ M)
30-88	3	100	40.0
88-216	3	150	43.5
216-960	3	200	46.0
Above 960	3	500	54.0

For unintentional device, according to CISPR PUB.22, for Class B digital devices, the general requirement of field strength of radiated emissions from intentional radiators at a distance of 10 meters shall not exceed the below table.

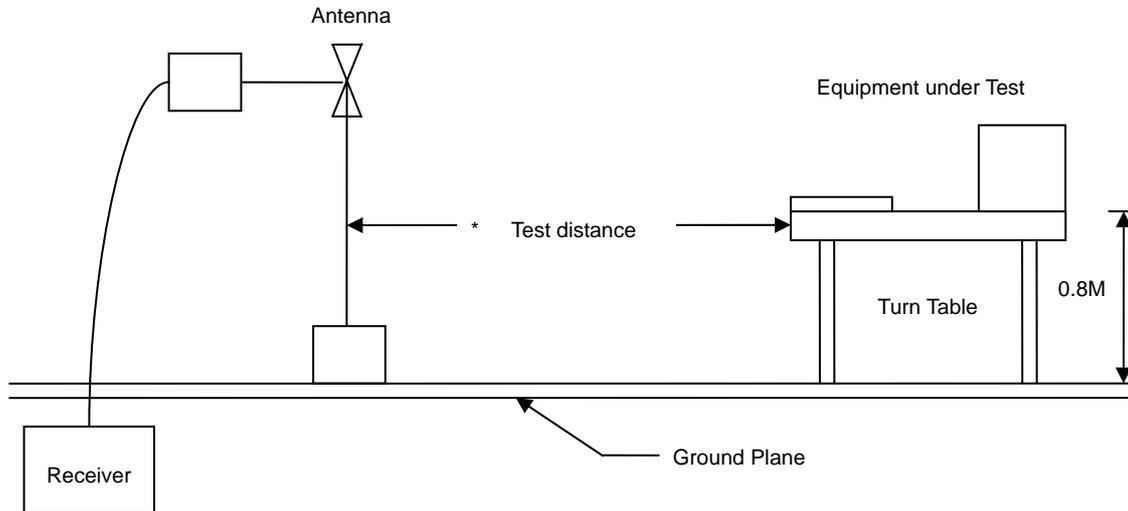
Frequency (MHz)	Distance Meters	Radiated (dB $\mu$ V/ M)
30-230	10	30
230-1000	10	37

### 5.2 Test Procedures

- The EUT was placed on a rotatable table top 0.8 meter above ground.
- The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
- The table was rotated 360 degrees to determine the position of the highest radiation.
- The antenna is a broadband antenna and its height is varied between one meter and four meters above ground to find the maximum value of the field strength both horizontal polarization and vertical polarization of the antenna are set to make the measurement.
- For each suspected emission the EUT was arranged to its worst case and then tune the antenna tower (from 1 M to 4 M) and turn table (from 0 degree to 360 degrees) to find the maximum reading.
- Set the test-receiver system to Peak or CISPR quasi-peak Detect Function and specified bandwidth with Maximum Hold Mode.
- If the emission level of the EUT in peak mode was 3 dB lower than the limit specified, then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions which do not have 3 dB margin will be repeated one by one using the quasi-peak method and reported.
- For testing above 1GHz, the emission level of the EUT in peak mode was 20dB lower than average limit (that means the emission level in peak mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.
- “Cone of radiation” has been considered to be 3dB beamwidth of the measurement antenna.



### 5.3 Typical Test Setup



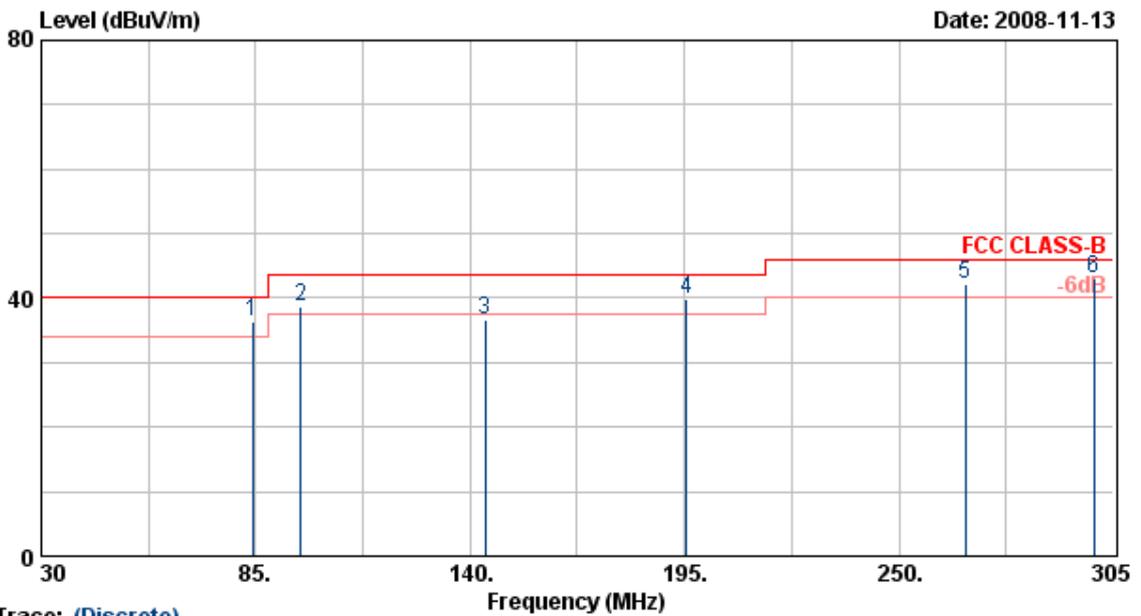
### 5.4 Measurement Equipment

Instrument/Ancillary	Model No.	Manufacturer	Serial No.	Calibration Date	Valid Date
Bilog Antenna	CBL6112B	Schaffner	2840	2008/05/15	2009/05/14
Signal Generator	8648B	HP	3629U00612	2008/10/08	2009/10/07
Amplifier	8447D	Agilent	2944A10593	2008/05/26	2009/05/25
EMI Receiver	SCR-3501	SCHAFFNER	437	2007/11/26	2008/11/25
Spectrum	FSP40	R&S	100047	2008/02/22	2009/02/21
Horn Antenna	3115	EMCO	31589	2008/04/01	2009/03/30
Amplifier	8449B	Agilent	3008A01954	2008/01/24	2009/01/23



5.5 Test Result and Data

Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode 1	: 802.11g, CH1	Temperature	: 22 °C
Memo	:	Humidity	: 70 %



Trace: (Discrete)

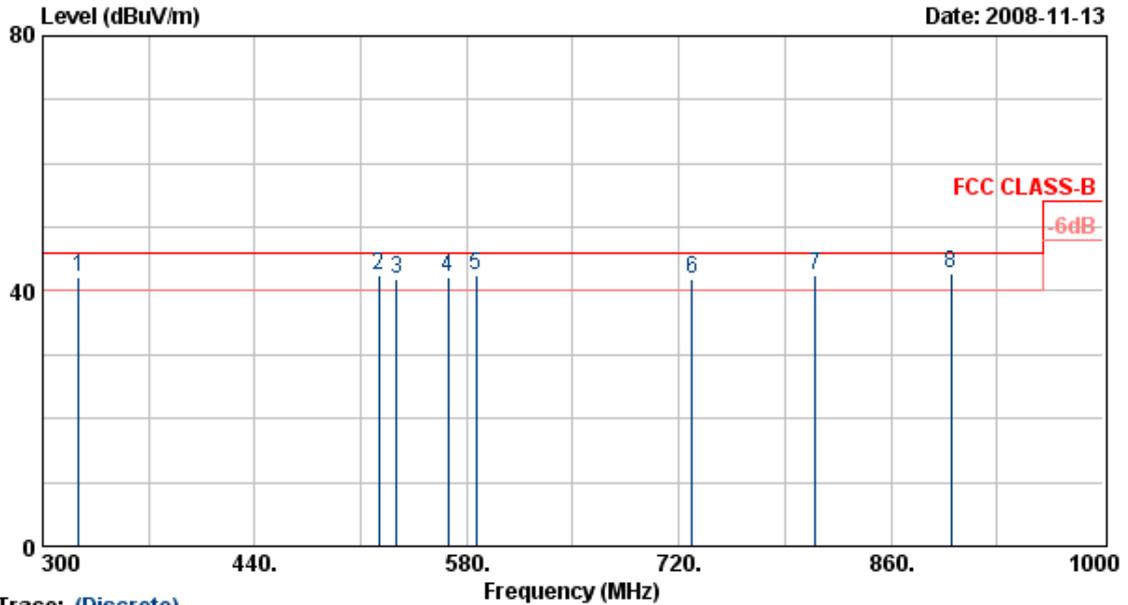
Item	Freq MHz	Read Value dBUV/m	Factor dB	Result dBUV/m	Limit dBUV/m	Margin dB	Remark	Ant Pos cm	Tab Pos Deg
1	84.18	53.30	-16.94	36.36	40.00	-3.64	QP	100	75
2	96.55	53.58	-14.92	38.66	43.50	-4.84	QP	100	78
3	143.85	50.05	-13.41	36.64	43.50	-6.86	Peak	100	65
4	195.55	51.06	-11.12	39.94	43.50	-3.56	QP	100	121
5	267.05	50.51	-8.47	42.05	46.00	-3.95	QP	100	88
6	300.05	52.48	-9.49	42.99	46.00	-3.01	QP	100	95

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. All emission below 1GHz at 802.11b/g mode are all the same,so the 802.11g mode chosen as representative in final test.
5. According to technical experiences,all spurious emission of 802.11g mode at channel 1,6,11 are almost the same below 1GHz,so that the channel 1 was chosen as representative in final test.
6. The data is worse case.



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode 1	: 802.11g, CH1	Temperature	: 22 °C
Memo	:	Humidity	: 70 %



Trace: (Discrete)

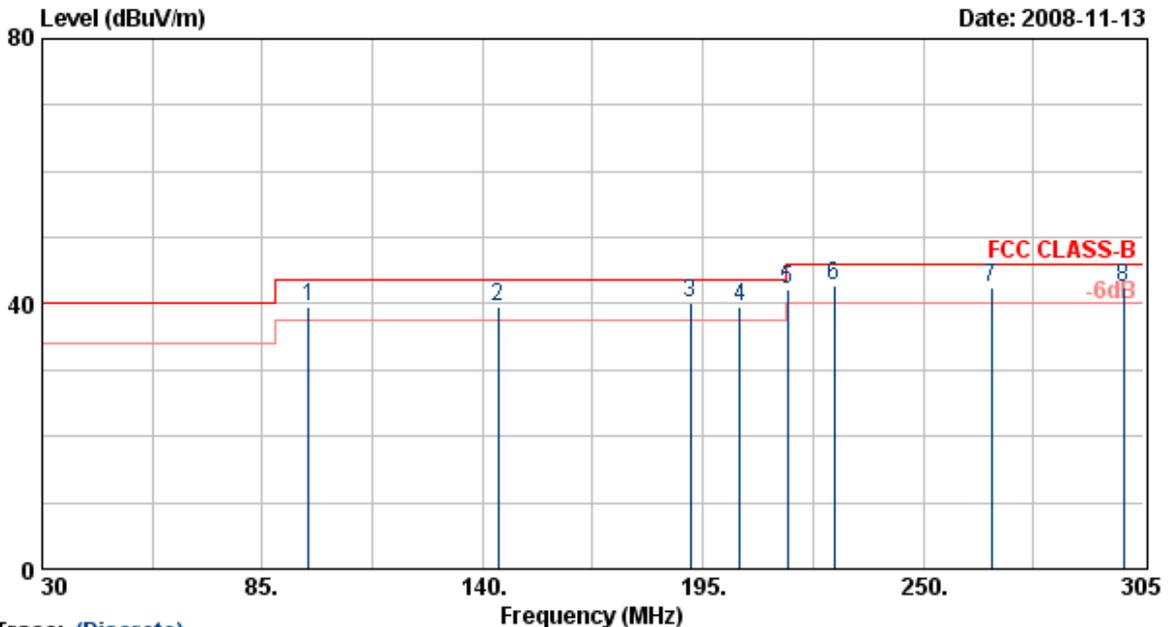
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	323.80	51.62	-9.42	42.21	46.00	-3.79	QP	100	95
2	521.90	46.57	-4.18	42.39	46.00	-3.61	QP	100	87
3	533.80	45.66	-3.83	41.83	46.00	-4.17	QP	100	91
4	567.40	40.80	1.35	42.15	46.00	-3.85	QP	100	88
5	586.30	42.89	-0.36	42.54	46.00	-3.46	QP	100	144
6	728.40	38.97	2.80	41.77	46.00	-4.23	QP	100	85
7	810.30	45.13	-2.62	42.51	46.00	-3.49	QP	100	144
8	899.90	41.62	1.29	42.91	46.00	-3.09	QP	100	50

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. All emission below 1GHz at 802.11b/g mode are all the same,so the 802.11g mode chosen as representative in final test.
5. According to technical experiences,all spurious emission of 802.11g mode at channel 1,6,11 are almost the same below 1GHz,so that the channel 1 was chosen as representative in final test.
6. The data is worse case.



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode 1	: 802.11g, CH1	Temperature	: 22 °C
Memo	:	Humidity	: 70 %



Trace: (Discrete)

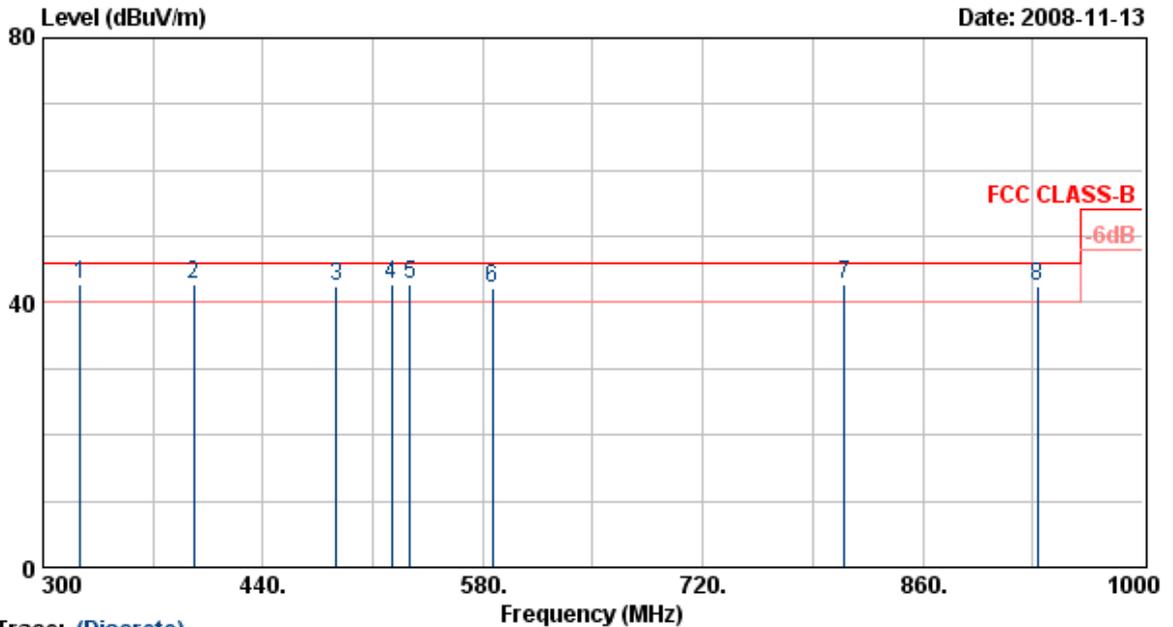
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	96.55	58.61	-19.09	39.51	43.50	-3.99	QP	100	124
2	143.85	57.19	-17.51	39.69	43.50	-3.81	QP	100	88
3	191.98	56.60	-16.47	40.13	43.50	-3.37	QP	100	124
4	204.35	55.80	-16.20	39.59	43.50	-3.91	QP	100	144
5	216.18	60.69	-18.40	42.29	46.00	-3.71	QP	100	102
6	227.73	60.92	-18.26	42.65	46.00	-3.35	QP	100	111
7	267.05	58.01	-15.45	42.56	46.00	-3.44	QP	100	132
8	300.05	56.99	-14.49	42.49	46.00	-3.51	QP	100	44

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. All emission below 1GHz at 802.11g mode are all the same,so the 802.11g mode chosen as representative in final test.
5. According to technical experiences,all spurious emission of 802.11g mode at channel 1,6,11 are almost the same below 1GHz,so that the channel 1 was chosen as representative in final test.
6. The data is worse case.



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode 1	: 802.11g, CH1	Temperature	: 22 °C
Memo	:	Humidity	: 70 %



Trace: (Discrete)

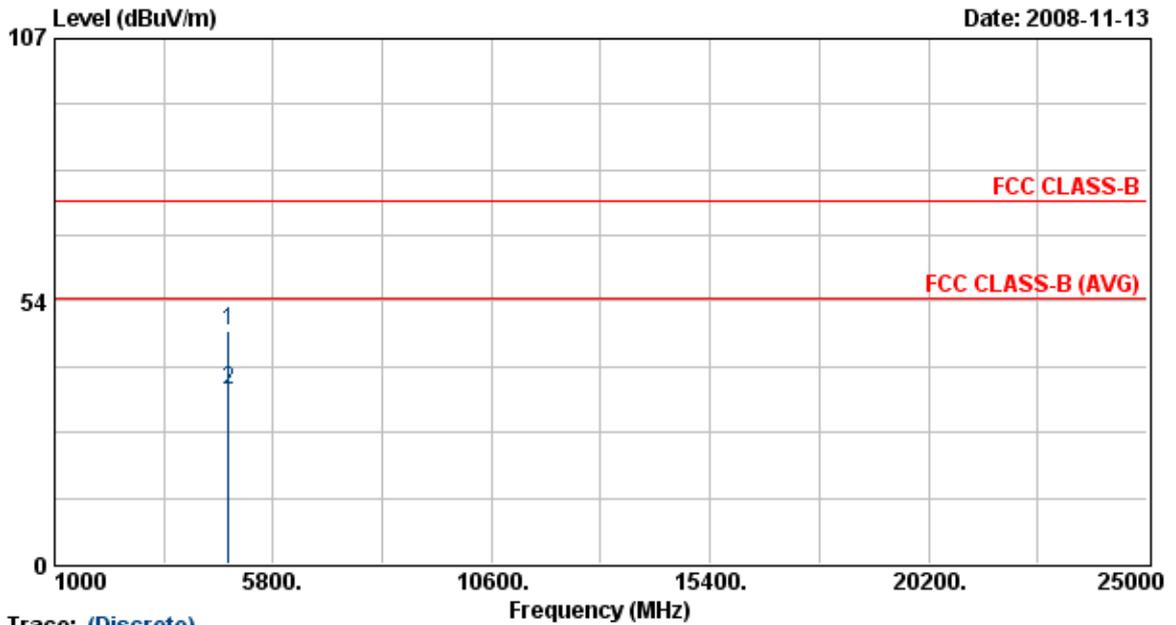
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	323.80	55.64	-12.77	42.86	46.00	-3.14	QP	100	57
2	395.90	52.14	-9.52	42.62	46.00	-3.38	QP	100	66
3	486.90	48.11	-5.70	42.41	46.00	-3.59	QP	100	77
4	521.90	46.53	-3.85	42.68	46.00	-3.32	QP	100	98
5	533.80	45.72	-2.88	42.84	46.00	-3.16	QP	100	155
6	586.30	44.71	-2.54	42.17	46.00	-3.83	QP	100	122
7	810.30	43.55	-0.87	42.68	46.00	-3.32	QP	100	104
8	932.80	37.47	5.06	42.53	46.00	-3.47	QP	100	95

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. All emission below 1GHz at 802.11g mode are all the same,so the 802.11g mode chosen as representative in final test.
5. According to technical experiences,all spurious emission of 802.11g mode at channel 1,6,11 are almost the same below 1GHz,so that the channel 1 was chosen as representative in final test.
6. The data is worse case.



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode 1	: 802.11b, CH1	Temperature	: 22 °C
Memo	:	Humidity	: 70 %



Trace: (Discrete)

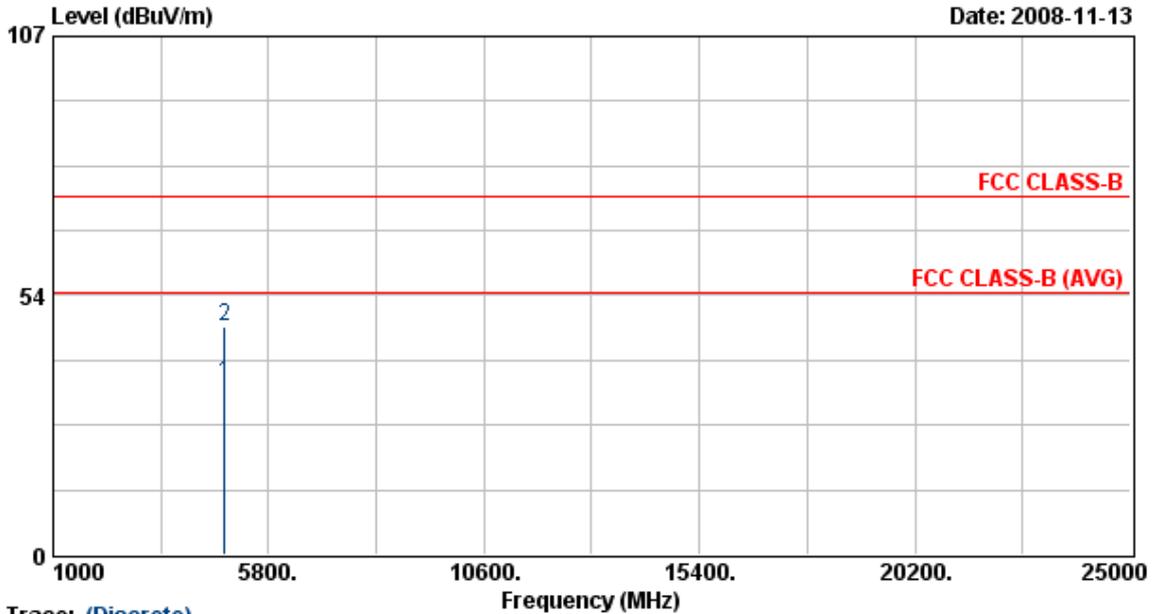
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	4823.98	41.81	5.54	47.35	74.00	-26.65	Peak	116	264
2	4823.98	29.84	5.54	35.37	54.00	-18.63	Average	116	264

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 1	: 802.11b, CH1	Temperature	: 22 °C
Memo	:	Humidity	: 70 %



Trace: (Discrete)

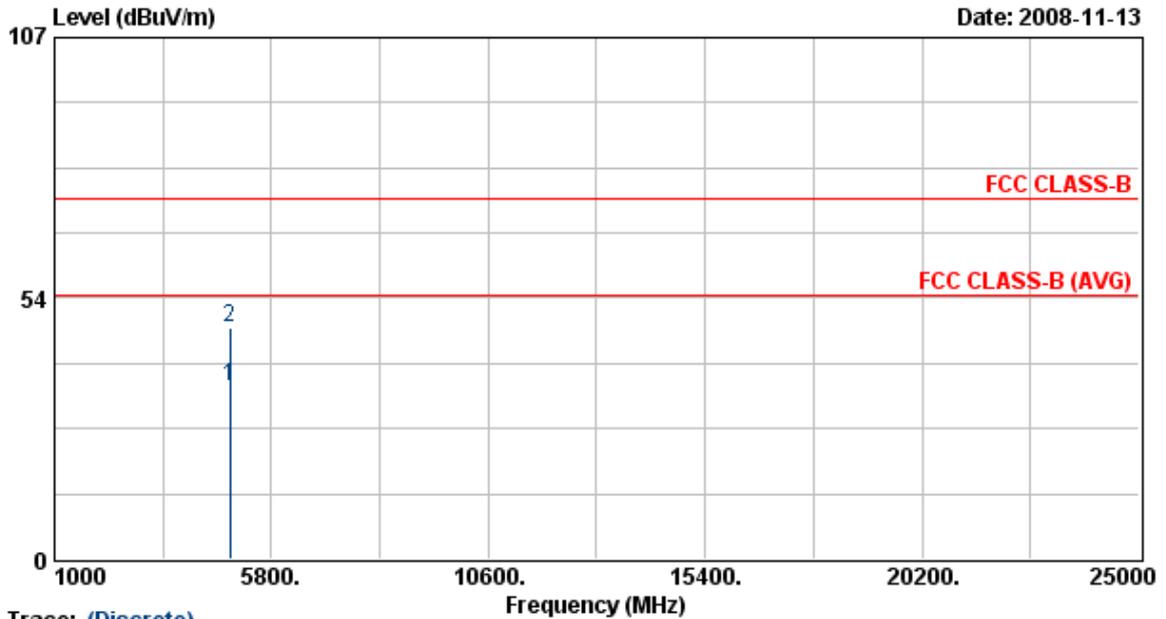
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	4824.05	29.84	5.54	35.38	54.00	-18.62	Average	116	158
2	4824.05	41.40	5.54	46.93	74.00	-27.07	Peak	116	158

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 1	: 802.11b, CH6	Temperature	: 22 °C
Memo	:	Humidity	: 70 %



Trace: (Discrete)

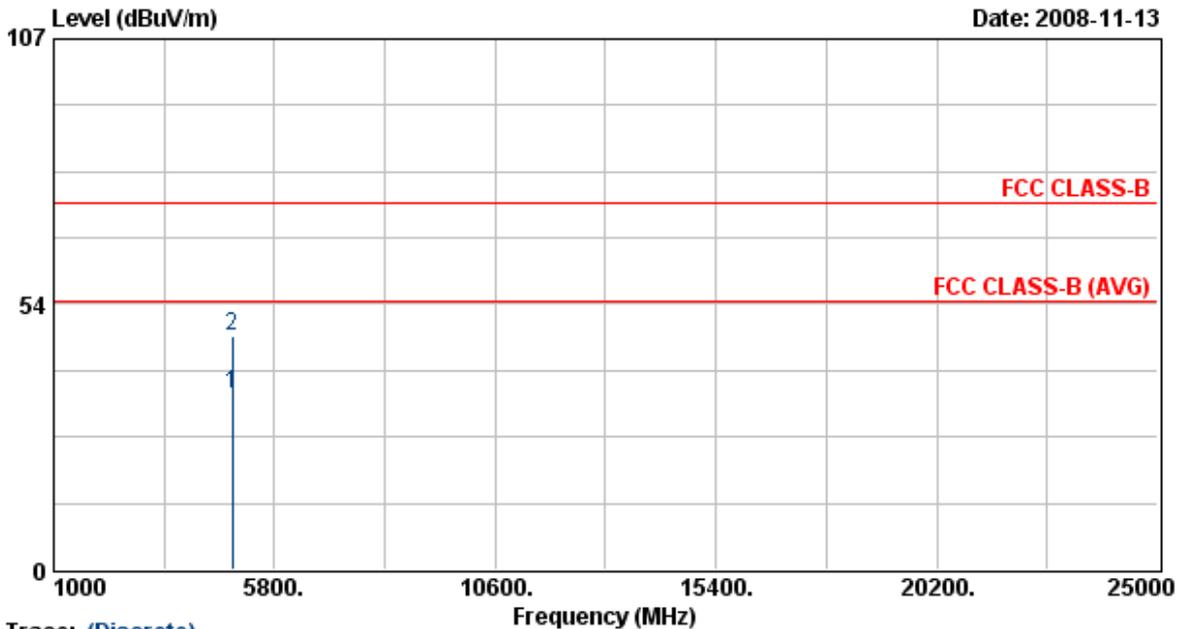
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	4873.95	29.67	5.68	35.35	54.00	-18.65	Average	116	264
2	4873.95	41.69	5.68	47.36	74.00	-26.64	Peak	116	264

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 1	: 802.11b, CH6	Temperature	: 22 °C
Memo	:	Humidity	: 70 %



Trace: (Discrete)

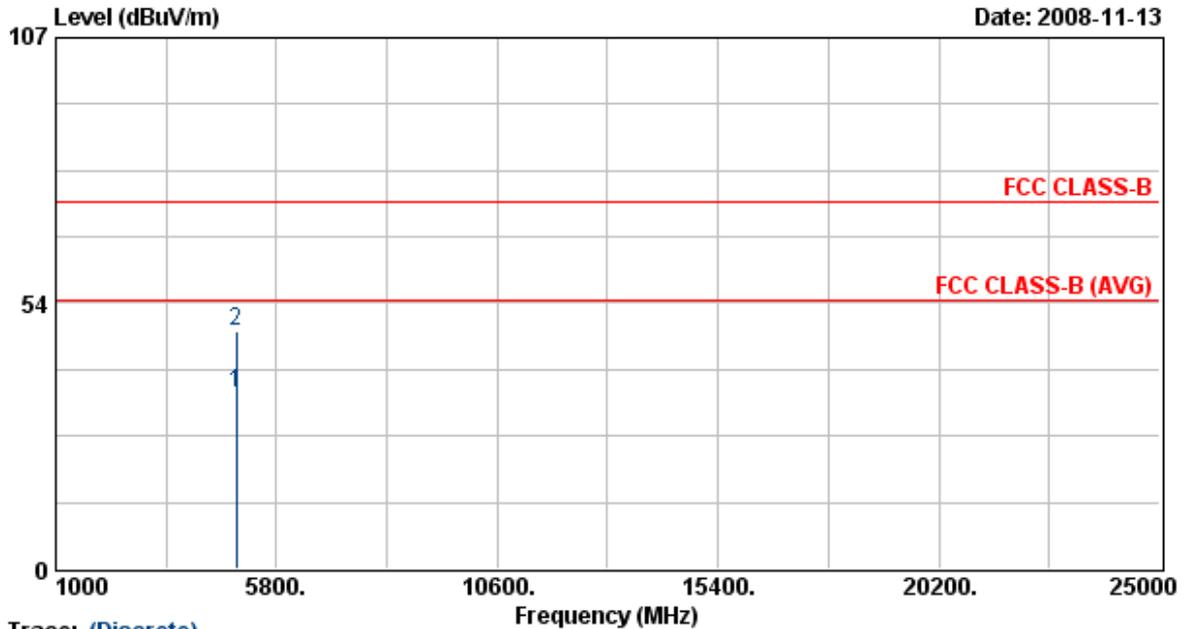
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	4874.03	29.64	5.68	35.31	54.00	-18.69	Average	116	158
2	4874.03	41.36	5.68	47.03	74.00	-26.97	Peak	116	158

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 1	: 802.11b, CH11	Temperature	: 22 °C
Memo	:	Humidity	: 70 %



Trace: (Discrete)

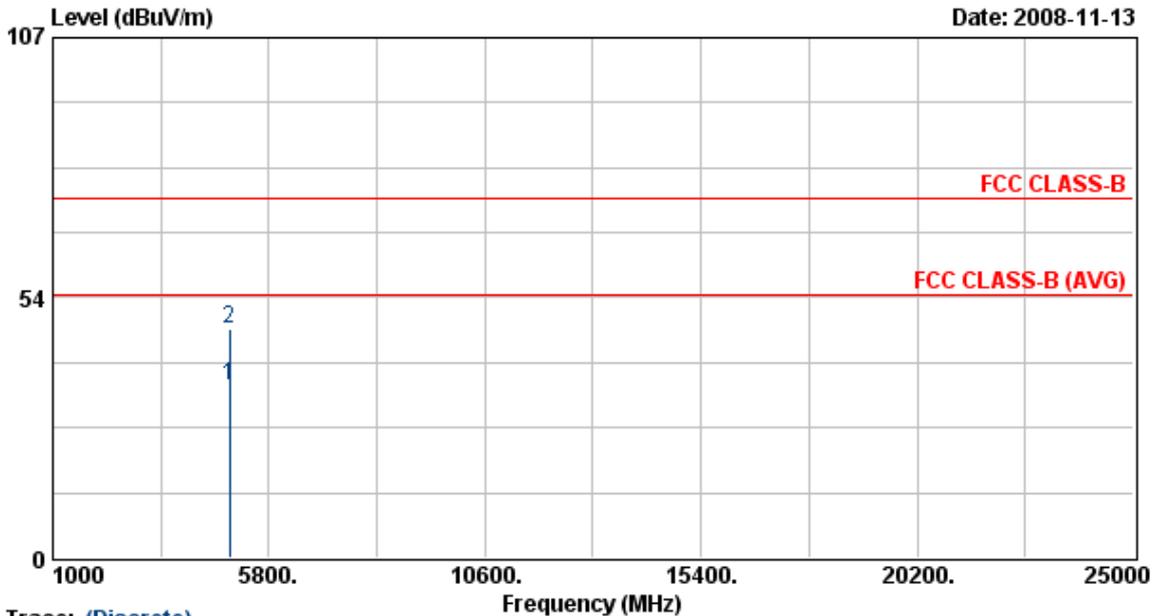
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	4923.95	29.49	5.82	35.30	54.00	-18.70	Average	116	264
2	4923.95	41.86	5.82	47.67	74.00	-26.33	Peak	116	264

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 1	: 802.11b, CH11	Temperature	: 22 °C
Memo	:	Humidity	: 70 %



Trace: (Discrete)

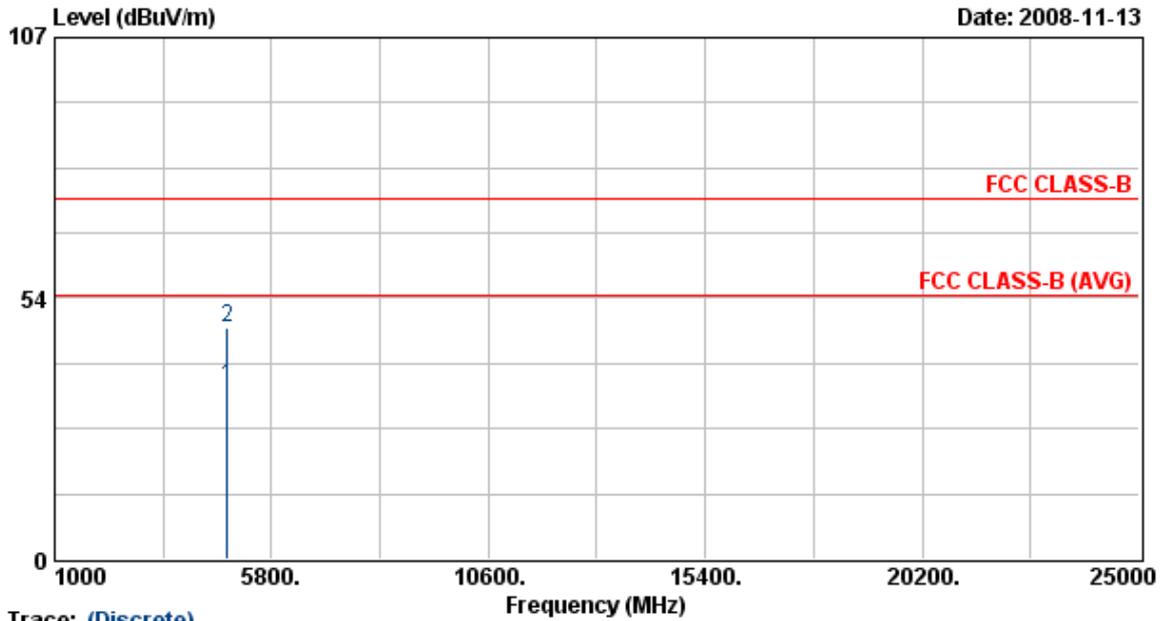
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	4924.00	29.46	5.82	35.28	54.00	-18.72	Average	116	158
2	4924.00	41.07	5.82	46.89	74.00	-27.11	Peak	116	158

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 1	: 802.11g, CH1	Temperature	: 22 °C
Memo	:	Humidity	: 70 %



Trace: (Discrete)

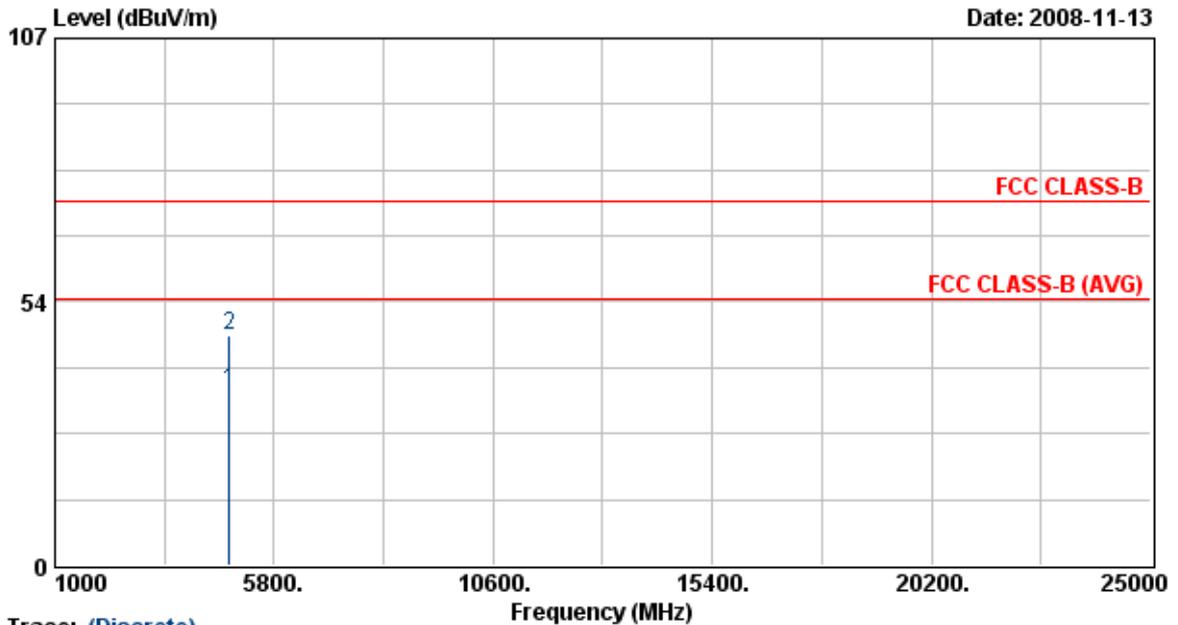
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	4823.93	29.84	5.54	35.37	54.00	-18.63	Average	116	264
2	4823.93	41.88	5.54	47.41	74.00	-26.59	Peak	116	264

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 1	: 802.11g, CH1	Temperature	: 22 °C
Memo	:	Humidity	: 70 %



Trace: (Discrete)

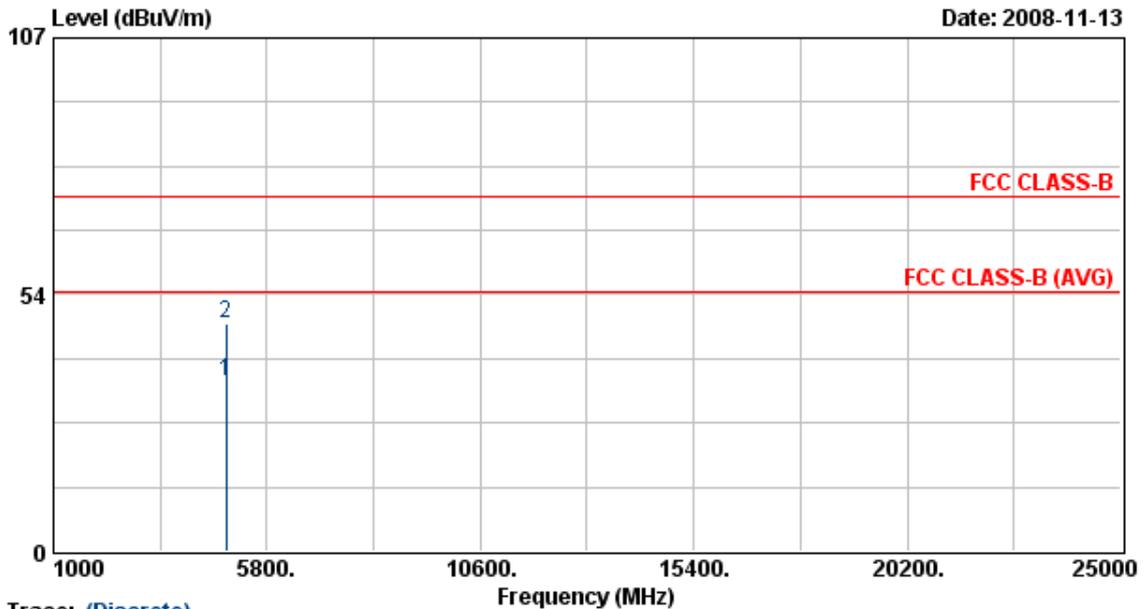
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	4823.85	29.83	5.54	35.37	54.00	-18.63	Average	116	158
2	4823.85	41.33	5.54	46.86	74.00	-27.14	Peak	116	158

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 1	: 802.11g, CH6	Temperature	: 22 °C
Memo	:	Humidity	: 70 %



Trace: (Discrete)

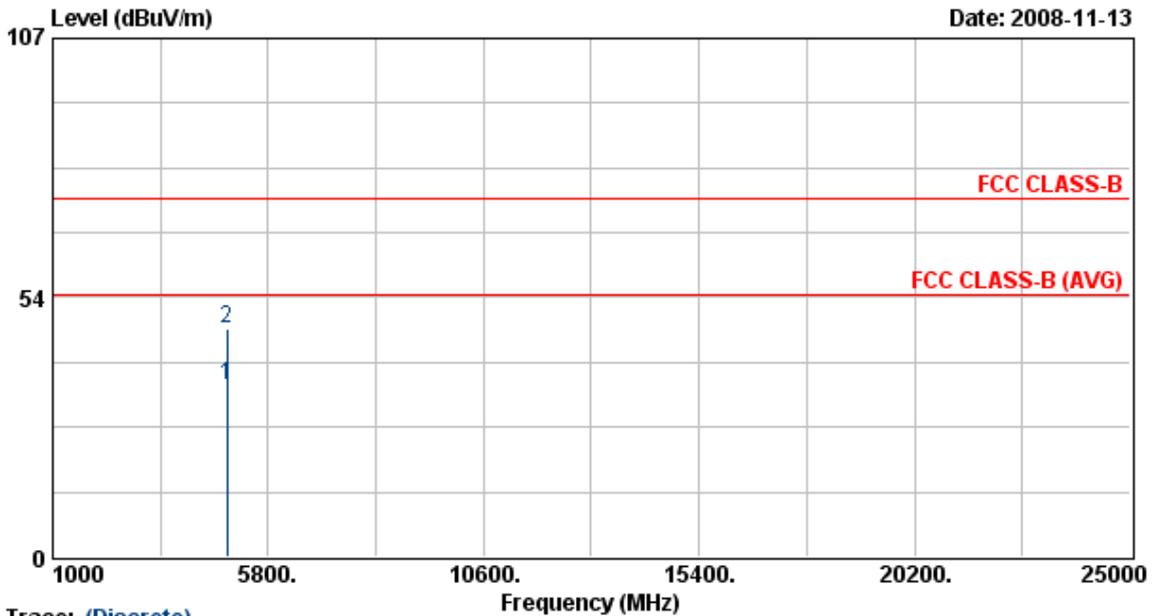
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	4873.90	29.63	5.68	35.30	54.00	-18.70	Average	116	264
2	4873.90	41.67	5.68	47.35	74.00	-26.65	Peak	116	264

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 1	: 802.11g, CH6	Temperature	: 22 °C
Memo	:	Humidity	: 70 %



Trace: (Discrete)

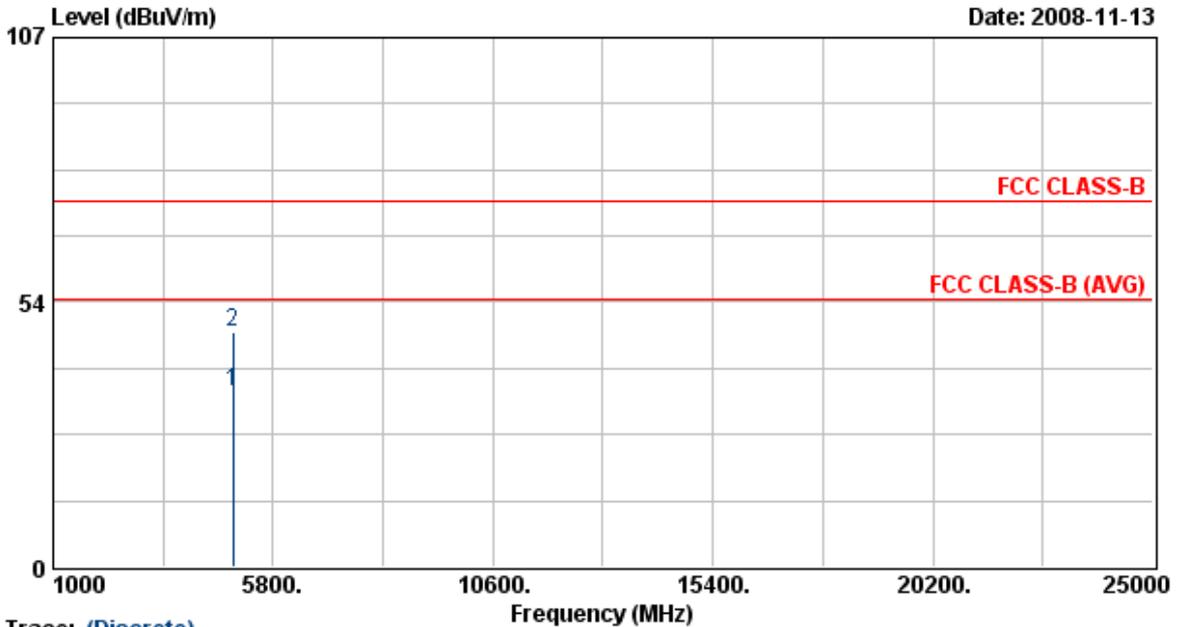
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	4874.05	29.67	5.68	35.35	54.00	-18.65	Average	116	158
2	4874.05	41.58	5.68	47.25	74.00	-26.75	Peak	116	158

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 1	: 802.11g, CH11	Temperature	: 22 °C
Memo	:	Humidity	: 70 %



Trace: (Discrete)

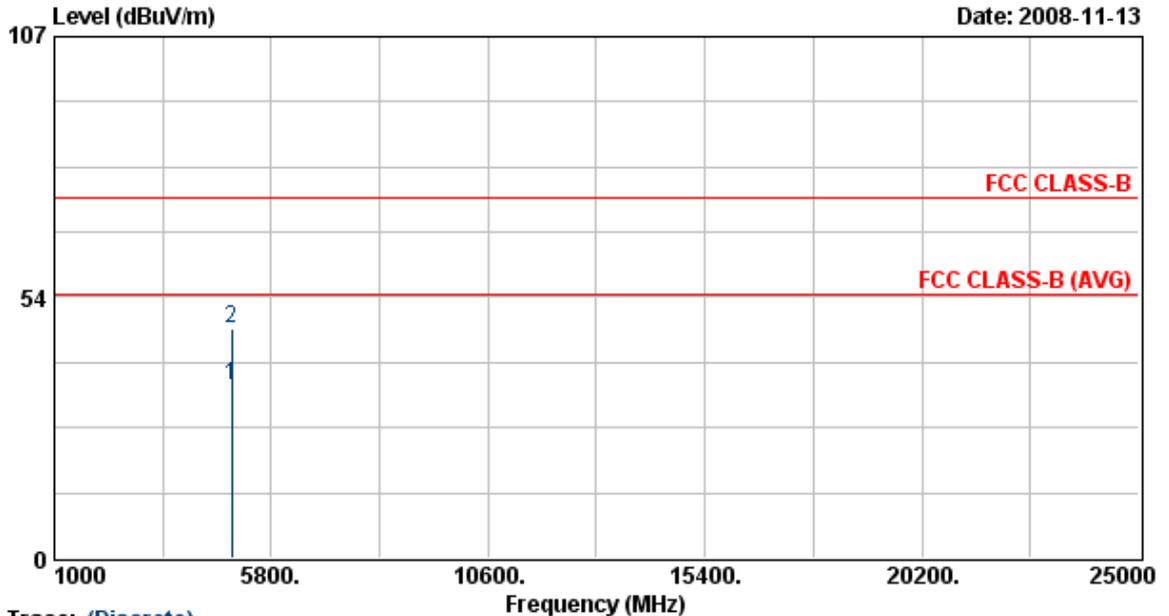
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	4924.15	29.46	5.82	35.28	54.00	-18.72	Average	116	264
2	4924.15	41.65	5.82	47.46	74.00	-26.54	Peak	116	264

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 1	: 802.11g, CH11	Temperature	: 22 °C
Memo	:	Humidity	: 70 %



Trace: (Discrete)

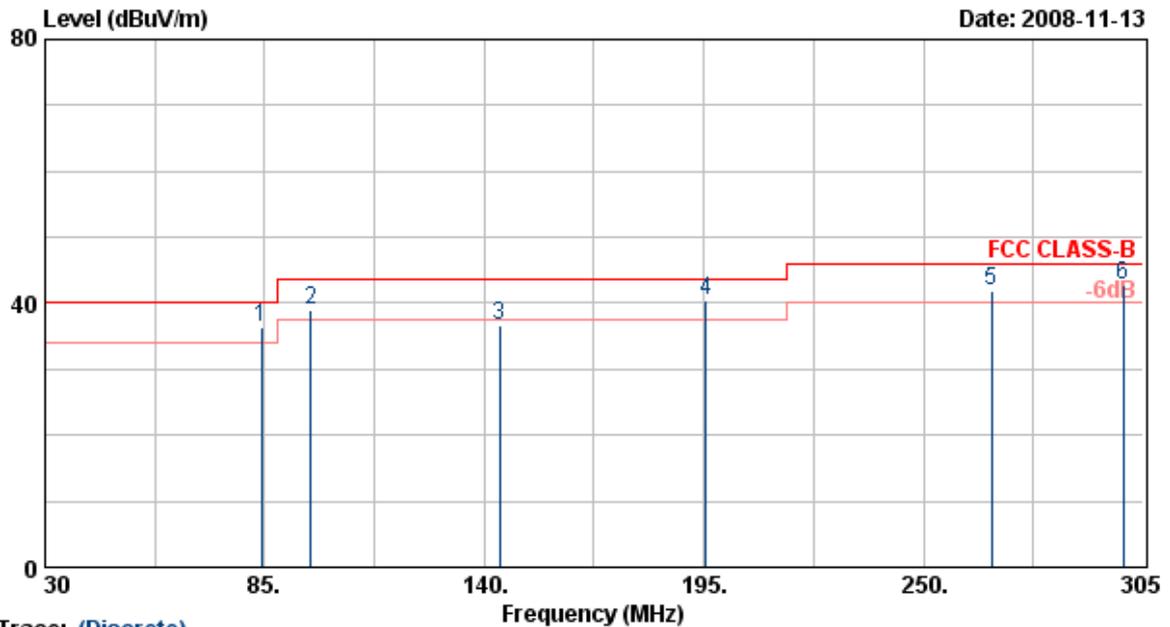
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	4923.93	29.45	5.82	35.27	54.00	-18.73	Average	116	158
2	4923.93	41.17	5.82	46.99	74.00	-27.01	Peak	116	158

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 2	: 802.11n HT20, CH1	Temperature	: 22 °C
Memo	:	Humidity	: 70 %



Trace: (Discrete)

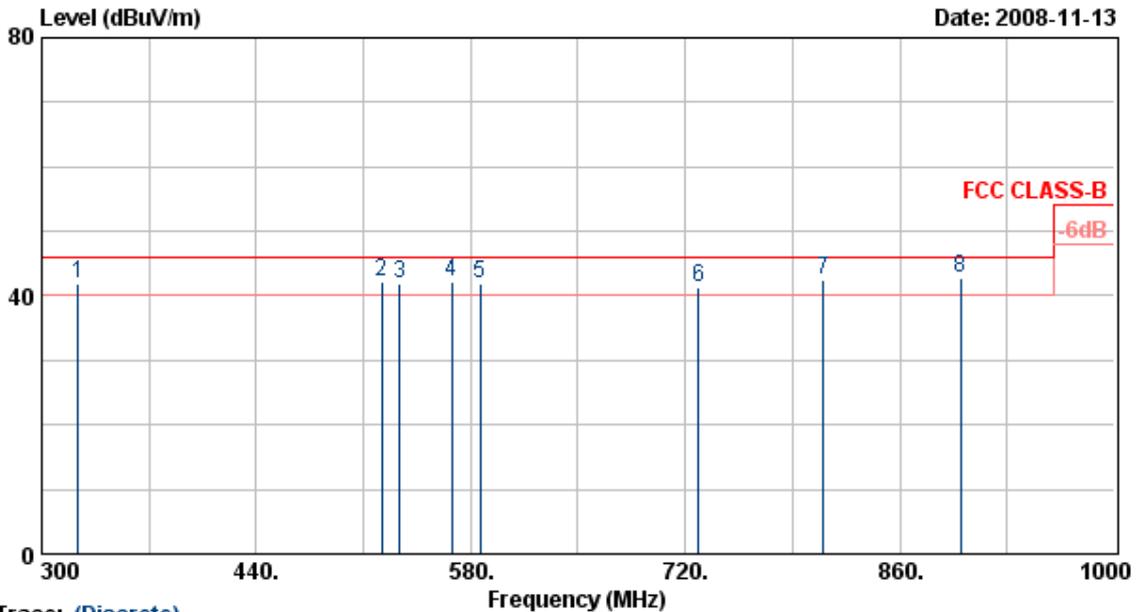
Item	Freq MHz	Read Value dBuV/m	Factor dB	Result dBuV/m	Limit dBuV/m	Margin dB	Remark	Ant Pos cm	Tab Pos Deg
1	84.18	53.34	-16.94	36.40	40.00	-3.60	QP	100	75
2	96.55	53.84	-14.92	38.92	43.50	-4.58	QP	100	78
3	143.85	50.01	-13.41	36.59	43.50	-6.91	Peak	100	65
4	195.55	51.58	-11.12	40.46	43.50	-3.04	QP	100	121
5	267.05	50.26	-8.47	41.80	46.00	-4.20	QP	100	88
6	300.05	52.24	-9.49	42.75	46.00	-3.25	QP	100	95

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 802.11MIMO mode at channel 1,6,11 are almost the same below 1GHz, so that the channel 1 was chosen as representative in final test.
5. The data is worse case.



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode 2	: 802.11n HT20, CH1	Temperature	: 22 °C
Memo	:	Humidity	: 70 %



Trace: (Discrete)

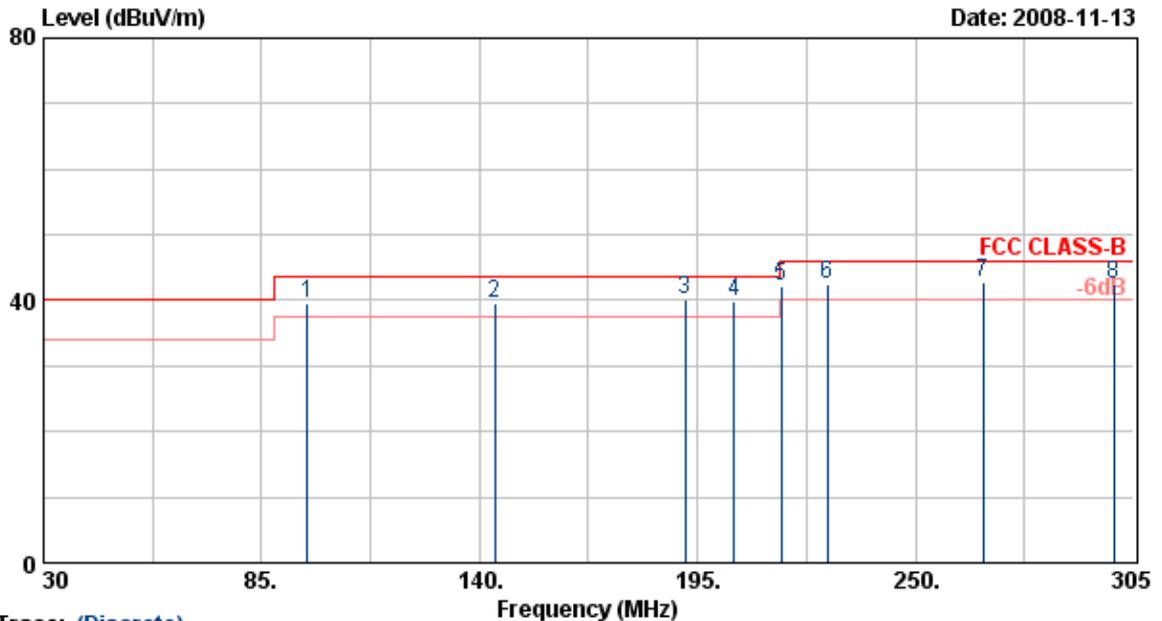
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	323.80	51.33	-9.42	41.92	46.00	-4.08	QP	100	95
2	521.90	46.46	-4.18	42.28	46.00	-3.72	QP	100	87
3	533.80	45.65	-3.83	41.81	46.00	-4.19	QP	100	91
4	567.40	40.85	1.35	42.20	46.00	-3.80	QP	100	88
5	586.30	42.39	-0.36	42.04	46.00	-3.96	QP	100	144
6	728.40	38.56	2.80	41.36	46.00	-4.64	QP	100	85
7	810.30	45.13	-2.62	42.51	46.00	-3.49	QP	100	144
8	899.90	41.60	1.29	42.89	46.00	-3.12	QP	100	50

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 802.11MIMO mode at channel 1,6,11 are almost the same below 1GHz, so that the channel 1 was chosen as representative in final test.
5. The data is worse case.



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode 2	: 802.11n HT20, CH1	Temperature	: 22 °C
Memo	:	Humidity	: 70 %



Trace: (Discrete)

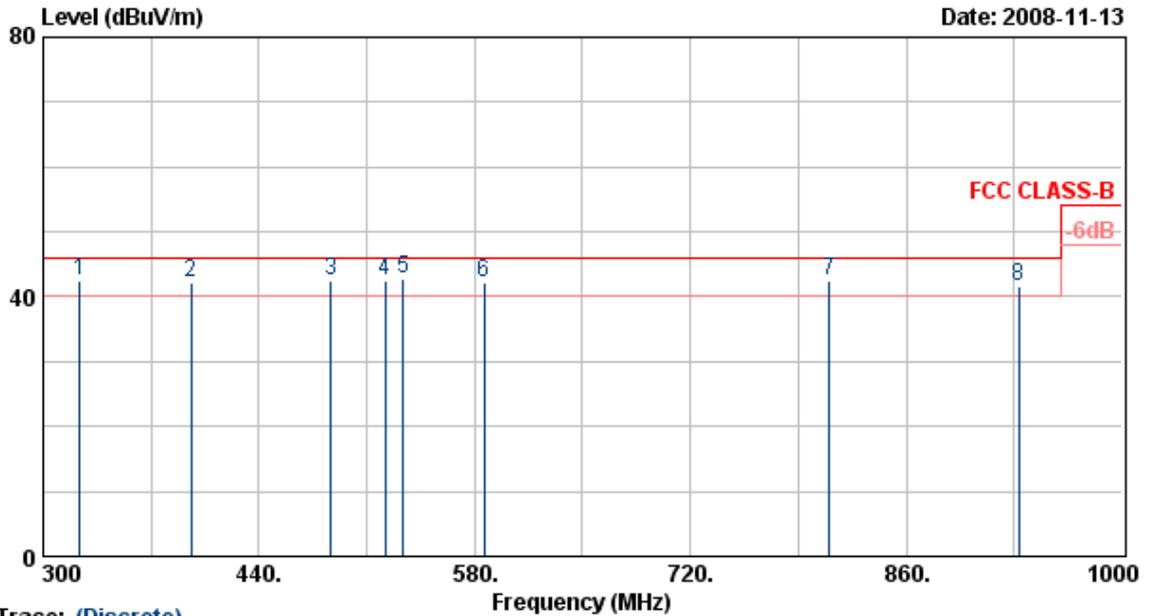
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	96.55	58.59	-19.09	39.49	43.50	-4.01	QP	100	124
2	143.85	57.14	-17.51	39.63	43.50	-3.87	QP	100	88
3	191.98	56.63	-16.47	40.16	43.50	-3.34	QP	100	124
4	204.35	55.97	-16.20	39.76	43.50	-3.74	QP	100	144
5	216.18	60.58	-18.40	42.17	46.00	-3.83	QP	100	102
6	227.73	60.86	-18.26	42.60	46.00	-3.40	QP	100	111
7	267.05	58.12	-15.45	42.66	46.00	-3.34	QP	100	132
8	300.05	56.97	-14.49	42.47	46.00	-3.53	QP	100	44

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 802.11MIMO mode at channel 1,6,11 are almost the same below 1GHz, so that the channel 1 was chosen as representative in final test.
5. The data is worse case.



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode 2	: 802.11n HT20, CH1	Temperature	: 22 °C
Memo	:	Humidity	: 70 %



Trace: (Discrete)

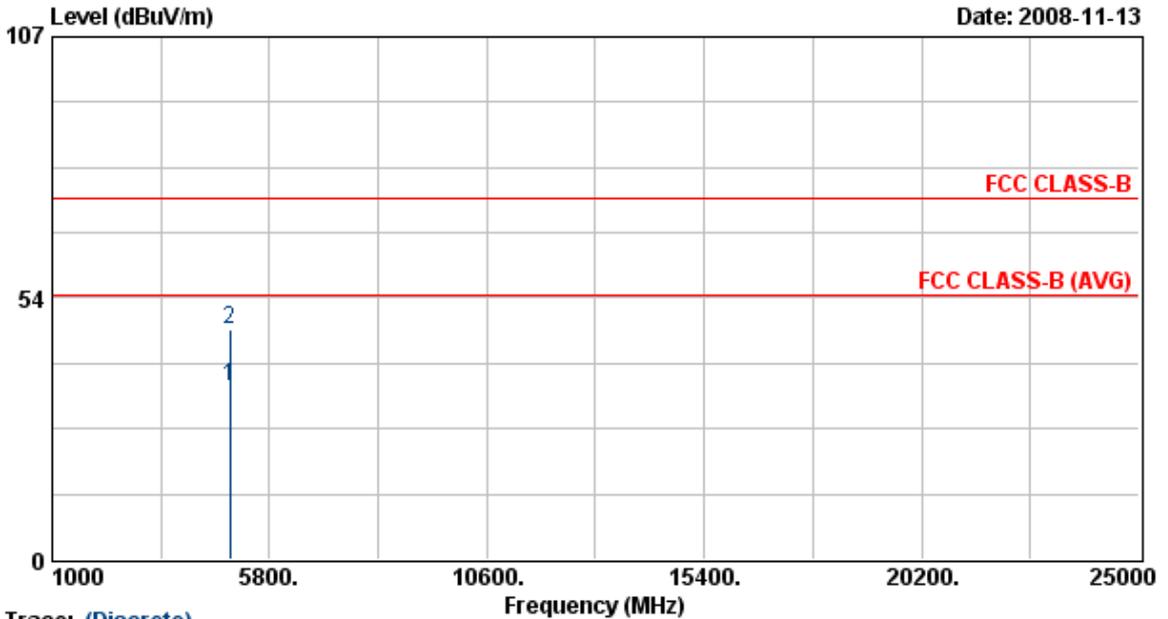
Item	Freq MHz	Read Value dBUV/m	Factor dB	Result dBUV/m	Limit dBUV/m	Margin dB	Remark	Ant Pos cm	Tab Pos Deg
1	323.80	55.36	-12.77	42.58	46.00	-3.42	QP	100	57
2	395.90	51.74	-9.52	42.21	46.00	-3.79	QP	100	66
3	486.90	48.13	-5.70	42.42	46.00	-3.58	QP	100	77
4	521.90	46.43	-3.85	42.58	46.00	-3.42	QP	100	98
5	533.80	45.57	-2.88	42.69	46.00	-3.31	QP	100	155
6	586.30	44.78	-2.54	42.24	46.00	-3.76	QP	100	122
7	810.30	43.34	-0.87	42.47	46.00	-3.53	QP	100	104
8	932.80	36.47	5.06	41.53	46.00	-4.47	QP	100	95

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 802.11MIMO mode at channel 1,6,11 are almost the same below 1GHz, so that the channel 1 was chosen as representative in final test.
5. The data is worse case.



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode 2	: 802.11n HT20, CH1	Temperature	: 22 °C
Memo	:	Humidity	: 70 %



Trace: (Discrete)

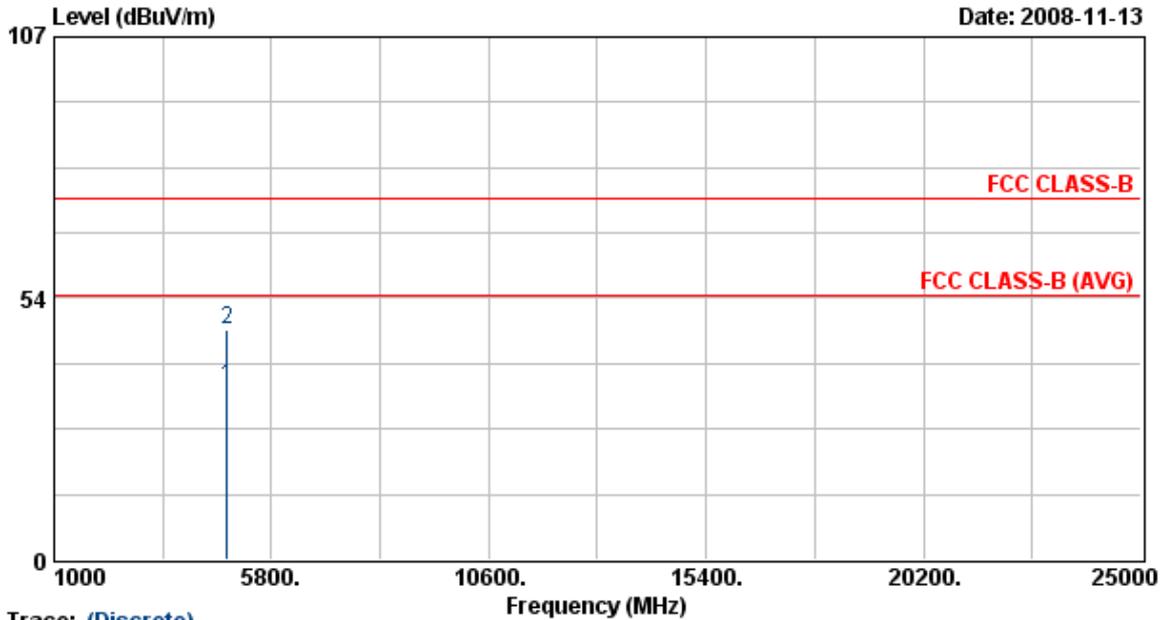
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	4924.03	29.51	5.82	35.33	54.00	-18.67	Average	116	264
2	4924.03	41.39	5.82	47.20	74.00	-26.80	Peak	116	264

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 2	: 802.11n HT20, CH1	Temperature	: 22 °C
Memo	:	Humidity	: 70 %



Trace: (Discrete)

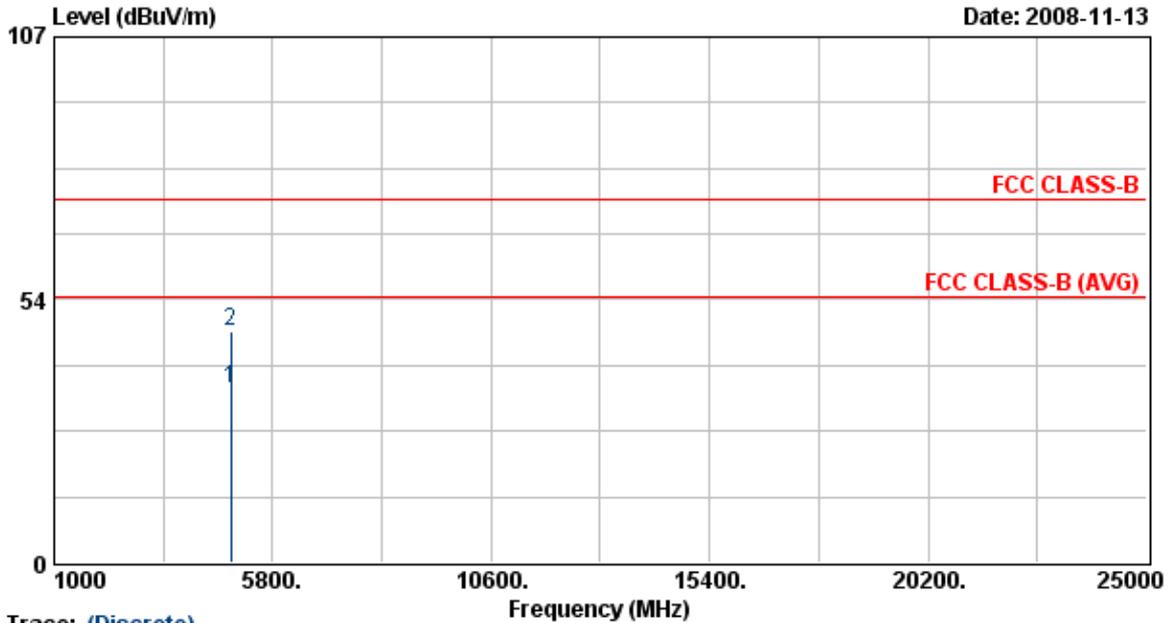
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBUV/m	dB	dBUV/m	dBUV/m	dB		cm	Deg
1	4824.05	29.80	5.54	35.34	54.00	-18.66	Average	116	158
2	4824.05	41.59	5.54	47.12	74.00	-26.88	Peak	116	158

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 2	: 802.11n HT20, CH6	Temperature	: 22 °C
Memo	:	Humidity	: 70 %



Trace: (Discrete)

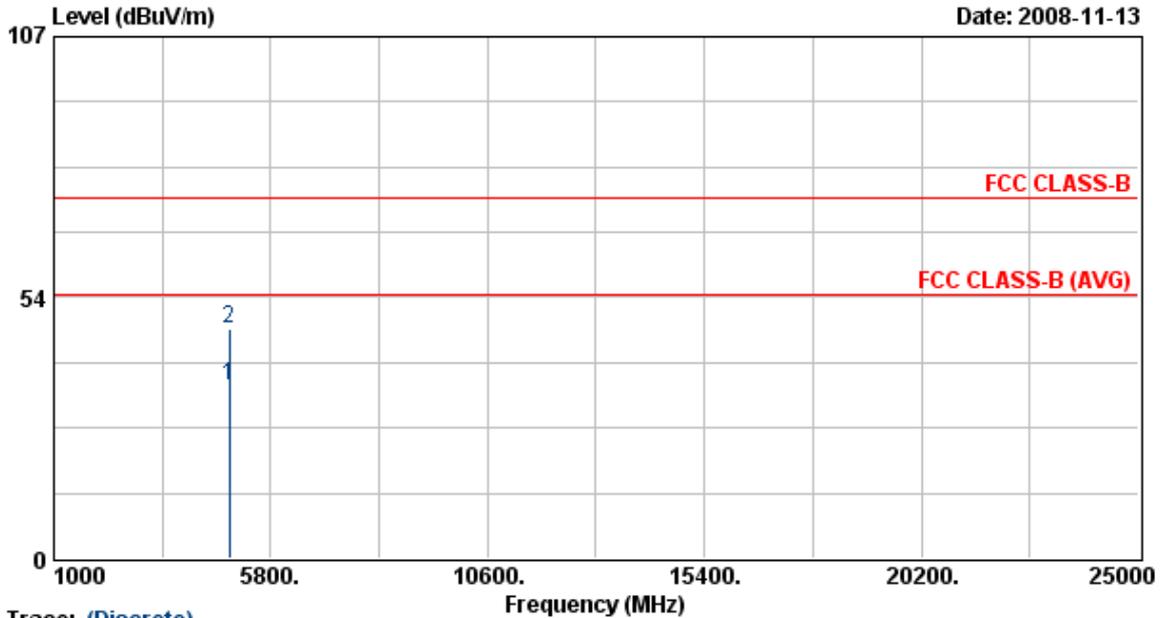
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	4873.88	29.64	5.68	35.31	54.00	-18.69	Average	116	264
2	4873.88	41.36	5.68	47.03	74.00	-26.97	Peak	116	264

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 2	: 802.11n HT20, CH6	Temperature	: 22 °C
Memo	:	Humidity	: 70 %



Trace: (Discrete)

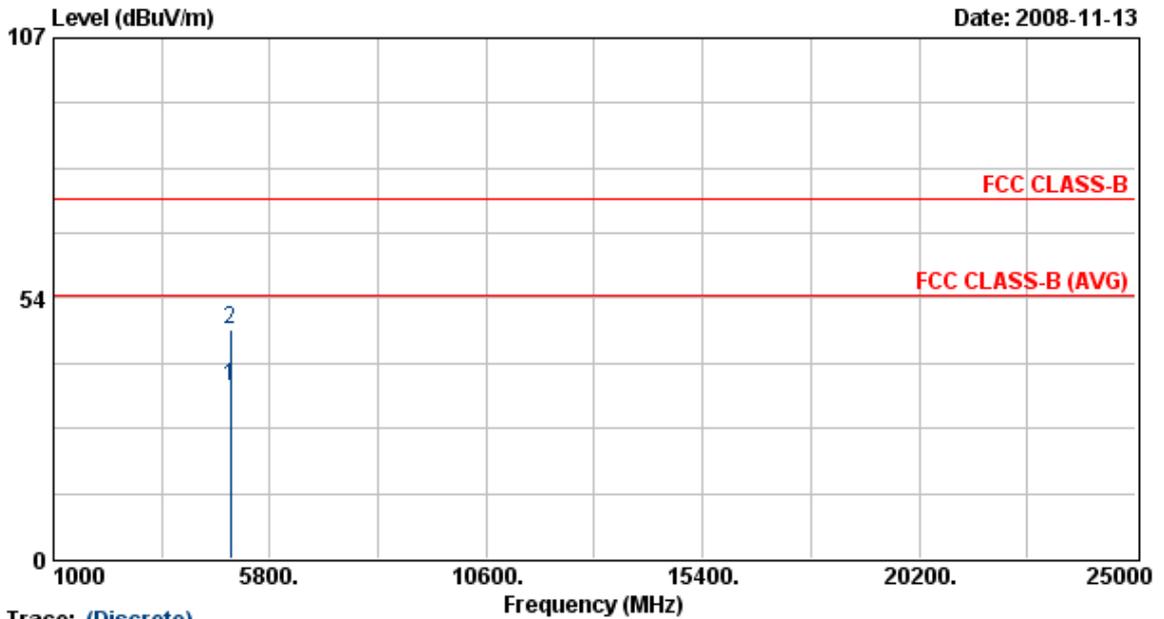
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	4873.93	29.66	5.68	35.34	54.00	-18.66	Average	116	158
2	4873.93	41.59	5.68	47.26	74.00	-26.74	Peak	116	158

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 2	: 802.11n HT20, CH11	Temperature	: 22 °C
Memo	:	Humidity	: 70 %



Trace: (Discrete)

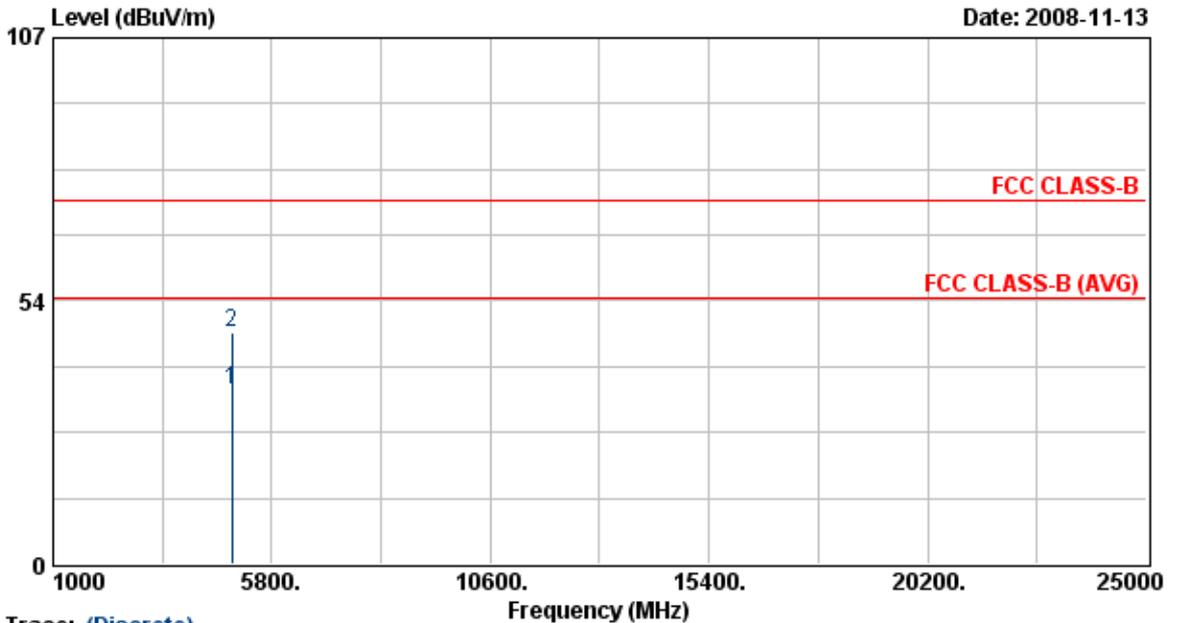
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	4923.95	29.44	5.82	35.26	54.00	-18.74	Average	116	264
2	4923.95	41.40	5.82	47.21	74.00	-26.79	Peak	116	264

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 2	: 802.11n HT20, CH11	Temperature	: 22 °C
Memo	:	Humidity	: 70 %



Trace: (Discrete)

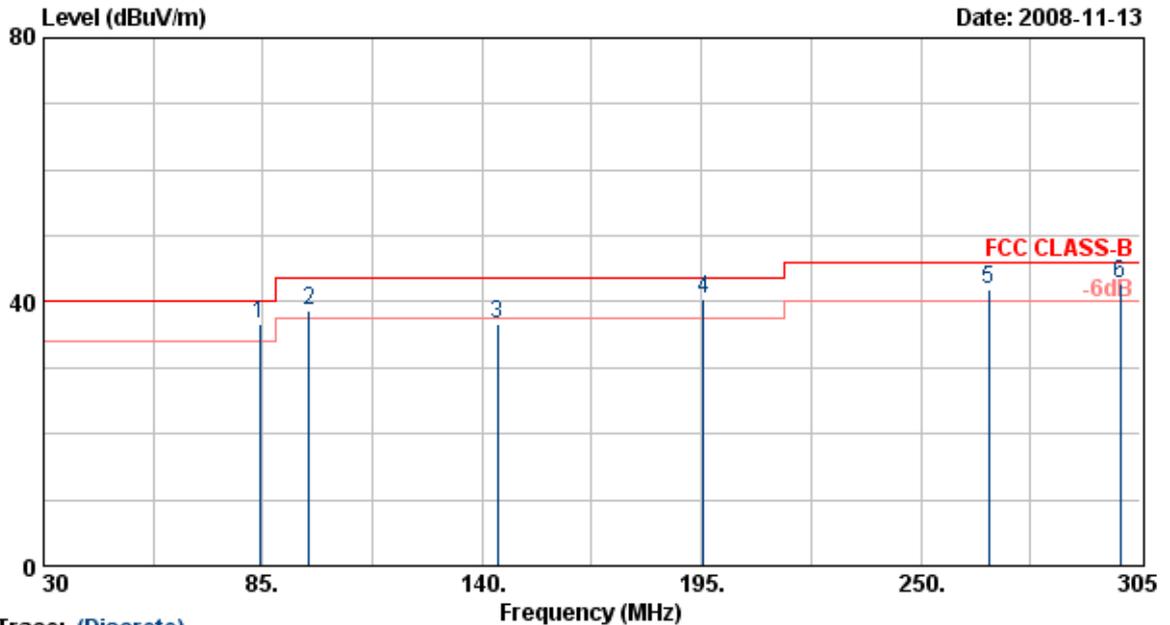
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	4923.93	29.47	5.82	35.28	54.00	-18.72	Average	116	158
2	4923.93	41.27	5.82	47.08	74.00	-26.92	Peak	116	158

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 3	: 802.11n HT40, CH3	Temperature	: 22 °C
Memo	:	Humidity	: 70 %



Trace: (Discrete)

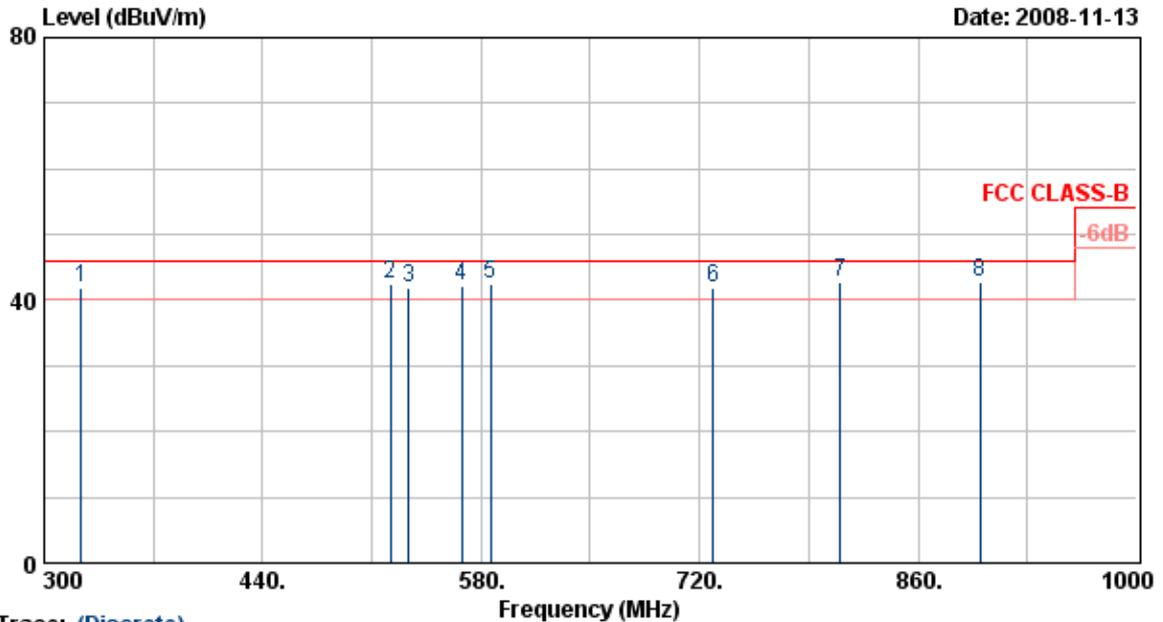
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	84.18	53.54	-16.94	36.60	40.00	-3.40	QP	100	75
2	96.55	53.64	-14.92	38.72	43.50	-4.78	QP	100	78
3	143.85	50.03	-13.41	36.62	43.50	-6.88	Peak	100	65
4	195.55	51.58	-11.12	40.46	43.50	-3.04	QP	100	121
5	267.05	50.35	-8.47	41.88	46.00	-4.12	QP	100	88
6	300.05	52.36	-9.49	42.87	46.00	-3.13	QP	100	95

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 802.11MIMO mode at channel 3,6,9 are almost the same below 1GHz, so that the channel 3 was chosen as representative in final test.
5. The data is worse case.



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode 3	: 802.11n HT40, CH3	Temperature	: 22 °C
Memo	:	Humidity	: 70 %



Trace: (Discrete)

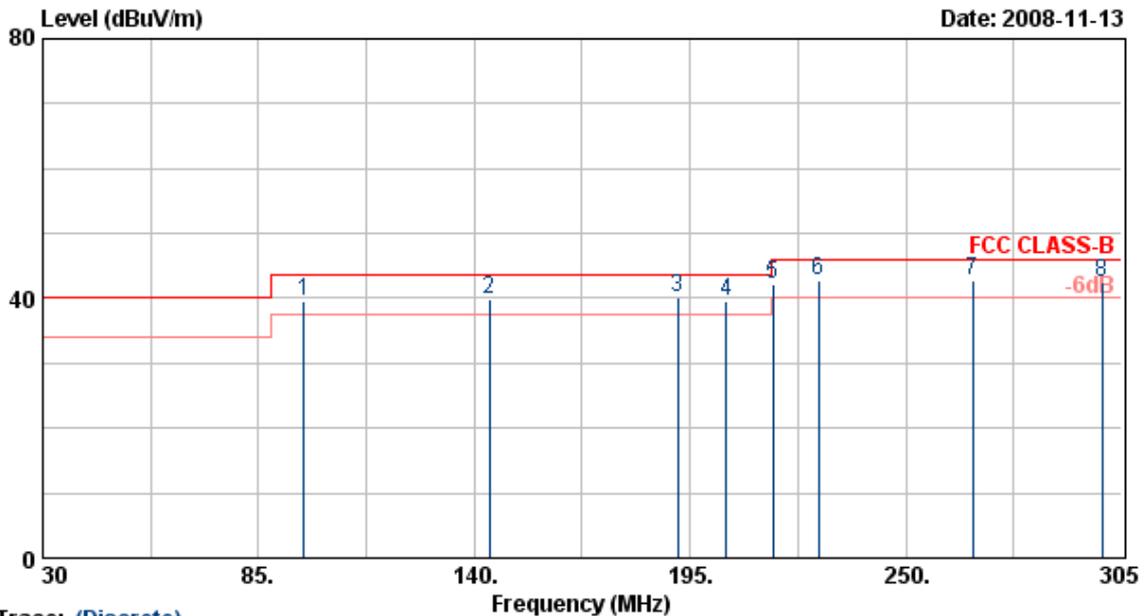
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	323.80	51.25	-9.42	41.83	46.00	-4.17	QP	100	95
2	521.90	46.54	-4.18	42.36	46.00	-3.64	QP	100	87
3	533.80	45.65	-3.83	41.81	46.00	-4.19	QP	100	91
4	567.40	40.81	1.35	42.15	46.00	-3.85	QP	100	88
5	586.30	42.93	-0.36	42.57	46.00	-3.43	QP	100	144
6	728.40	38.98	2.80	41.78	46.00	-4.22	QP	100	85
7	810.30	45.27	-2.62	42.65	46.00	-3.35	QP	100	144
8	899.90	41.40	1.29	42.69	46.00	-3.32	QP	100	50

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 802.11MIMO mode at channel 3,6,9 are almost the same below 1GHz, so that the channel 3 was chosen as representative in final test.
5. The data is worse case.



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode 3	: 802.11n HT40, CH3	Temperature	: 22 °C
Memo	:	Humidity	: 70 %



Trace: (Discrete)

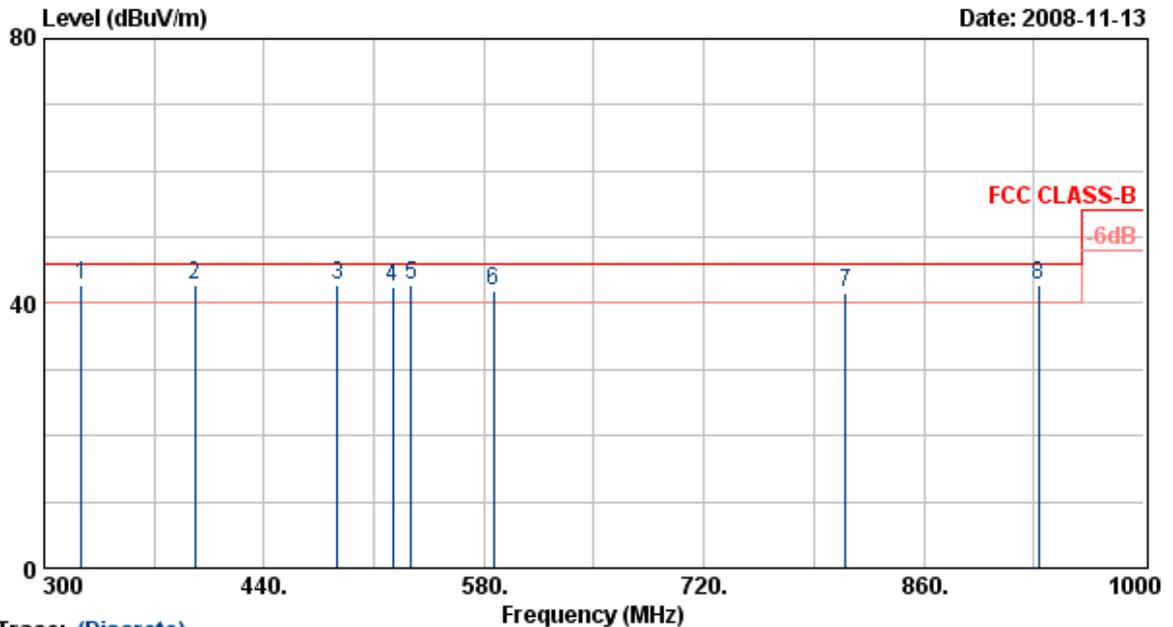
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	96.55	58.69	-19.09	39.59	43.50	-3.91	QP	100	124
2	143.85	57.44	-17.51	39.93	43.50	-3.57	QP	100	88
3	191.98	56.63	-16.47	40.16	43.50	-3.34	QP	100	124
4	204.35	55.77	-16.20	39.56	43.50	-3.94	QP	100	144
5	216.18	60.58	-18.40	42.17	46.00	-3.83	QP	100	102
6	227.73	60.96	-18.26	42.70	46.00	-3.30	QP	100	111
7	267.05	58.32	-15.45	42.86	46.00	-3.14	QP	100	132
8	300.05	56.87	-14.49	42.37	46.00	-3.63	QP	100	44

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 802.11MIMO mode at channel 3,6,9 are almost the same below 1GHz, so that the channel 3 was chosen as representative in final test.
5. The data is worse case.



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode 3	: 802.11n HT40, CH3	Temperature	: 22 °C
Memo	:	Humidity	: 70 %



Trace: (Discrete)

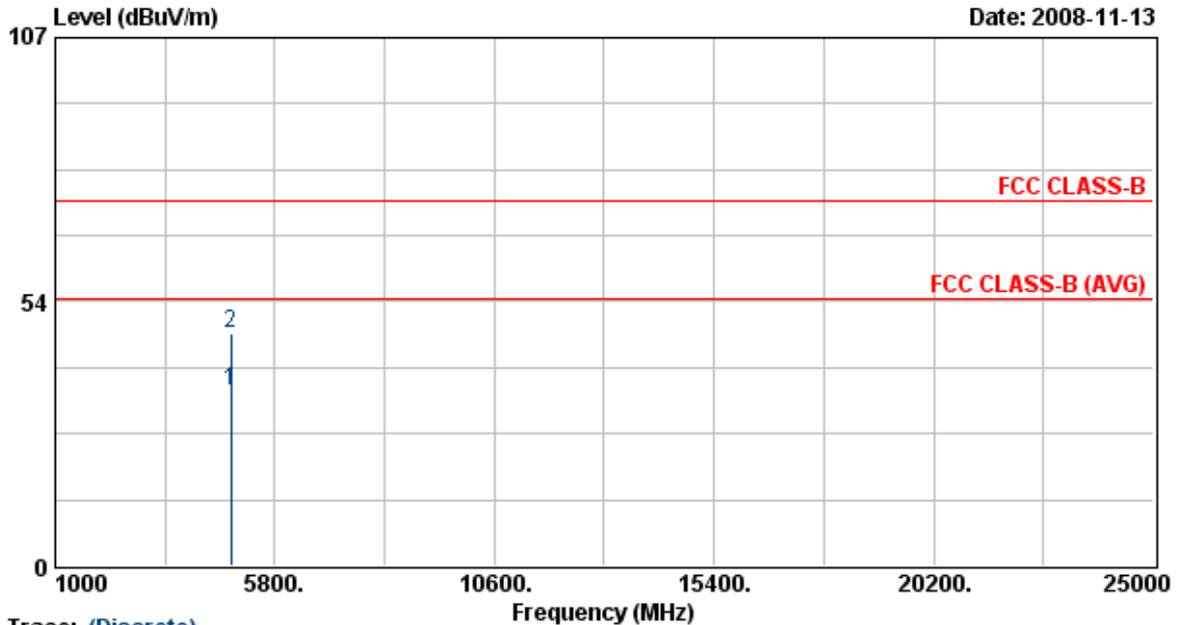
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	323.80	55.66	-12.77	42.88	46.00	-3.12	QP	100	57
2	395.90	52.24	-9.52	42.71	46.00	-3.29	QP	100	66
3	486.90	48.33	-5.70	42.62	46.00	-3.38	QP	100	77
4	521.90	46.33	-3.85	42.48	46.00	-3.52	QP	100	98
5	533.80	45.77	-2.88	42.89	46.00	-3.11	QP	100	155
6	586.30	44.57	-2.54	42.03	46.00	-3.97	QP	100	122
7	810.30	42.55	-0.87	41.68	46.00	-4.32	QP	100	104
8	932.80	37.75	5.06	42.80	46.00	-3.20	QP	100	95

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 802.11MIMO mode at channel 3,6,9 are almost the same below 1GHz,so that the channel 3 was chosen as representative in final test.
5. The data is worse case.



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode 3	: 802.11n HT40, CH3	Temperature	: 22 °C
Memo	:	Humidity	: 70 %



Trace: (Discrete)

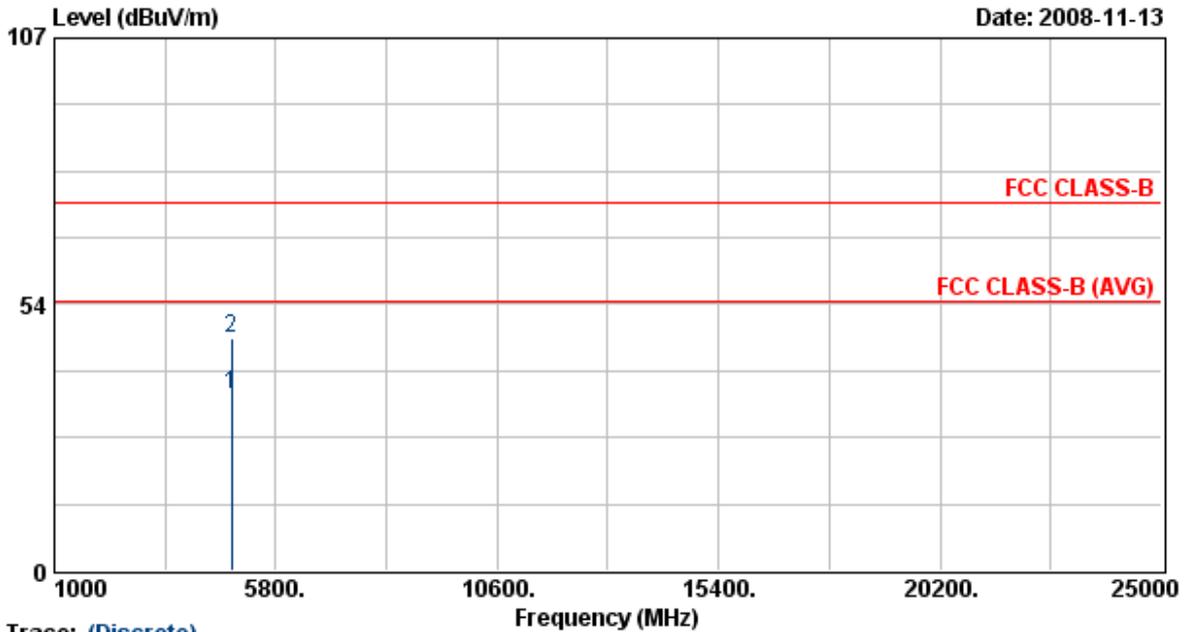
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	4844.08	29.84	5.59	35.44	54.00	-18.56	Average	116	264
2	4844.08	41.42	5.59	47.01	74.00	-26.99	Peak	116	264

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 3	: 802.11n HT40, CH3	Temperature	: 22 °C
Memo	:	Humidity	: 70 %



Trace: (Discrete)

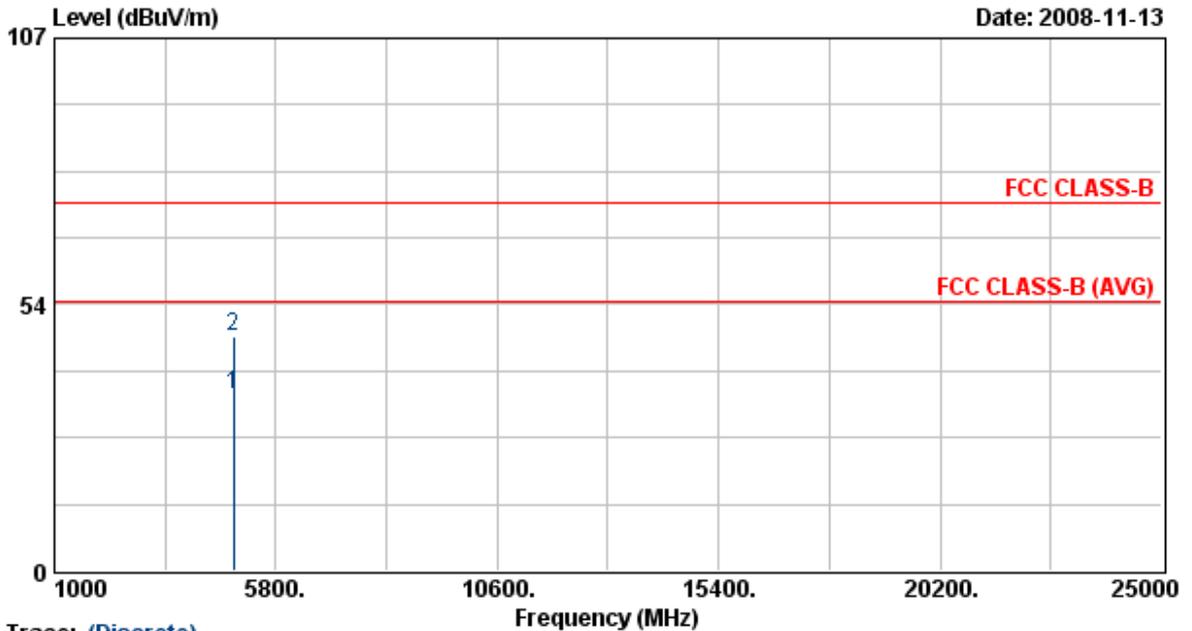
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	4844.55	29.82	5.59	35.42	54.00	-18.58	Average	116	158
2	4844.55	41.21	5.59	46.80	74.00	-27.20	Peak	116	158

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 3	: 802.11n HT40, CH6	Temperature	: 22 °C
Memo	:	Humidity	: 70 %



Trace: (Discrete)

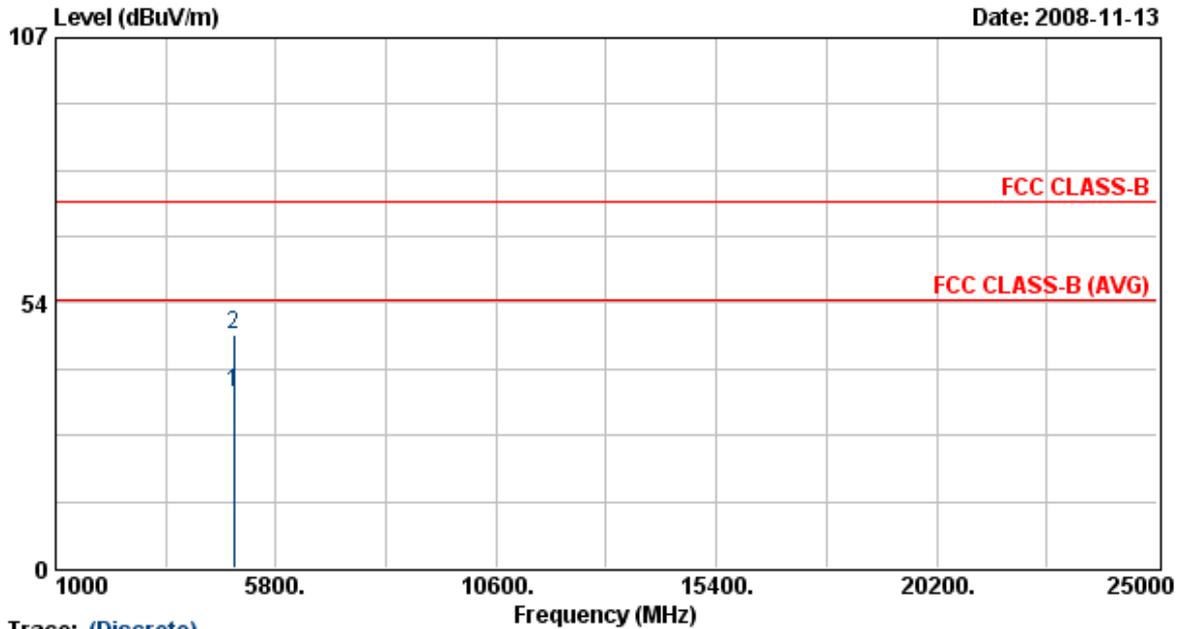
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	4874.03	29.63	5.68	35.31	54.00	-18.69	Average	116	264
2	4874.03	41.32	5.68	46.99	74.00	-27.01	Peak	116	264

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 3	: 802.11n HT40, CH6	Temperature	: 22 °C
Memo	:	Humidity	: 70 %



Trace: (Discrete)

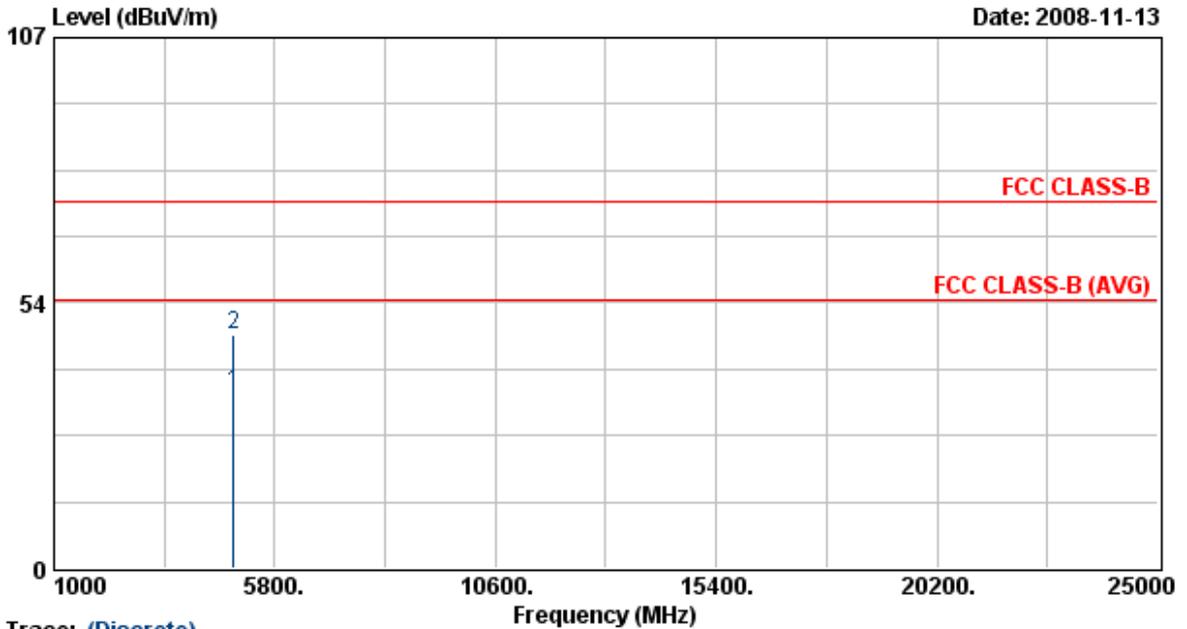
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	4873.95	29.62	5.68	35.30	54.00	-18.70	Average	116	158
2	4873.95	41.25	5.68	46.92	74.00	-27.08	Peak	116	158

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 3	: 802.11n HT40, CH9	Temperature	: 22 °C
Memo	:	Humidity	: 70 %



Trace: (Discrete)

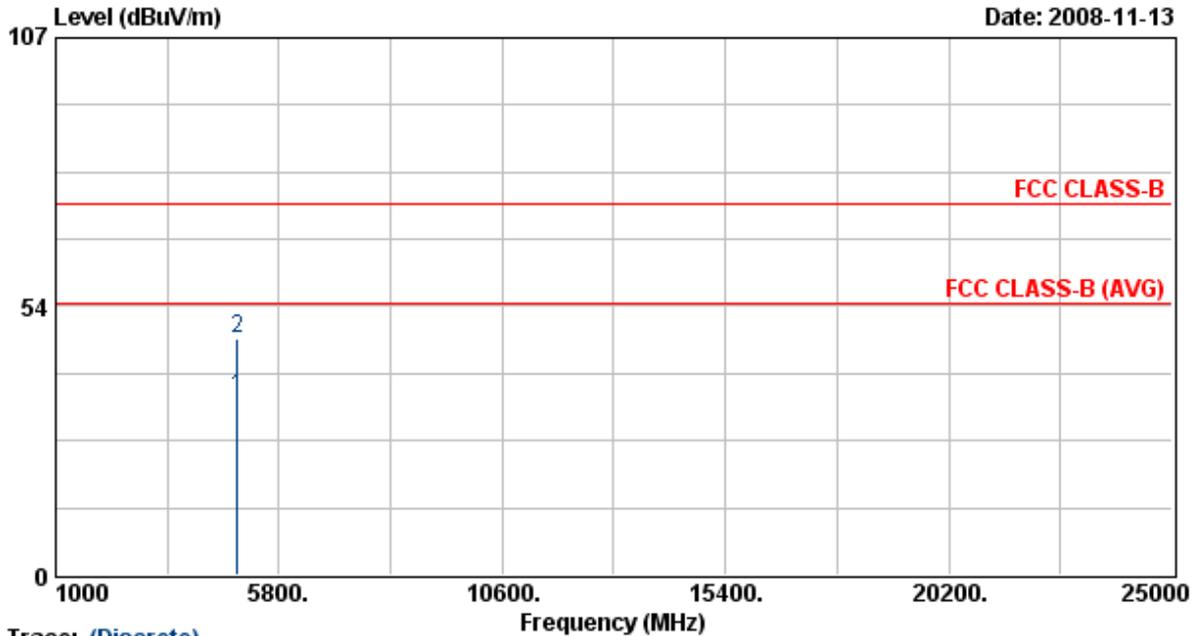
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	4903.95	29.60	5.76	35.36	54.00	-18.64	Average	116	264
2	4903.95	41.37	5.76	47.13	74.00	-26.87	Peak	116	264

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 3	: 802.11n HT40, CH9	Temperature	: 22 °C
Memo	:	Humidity	: 70 %



Trace: (Discrete)

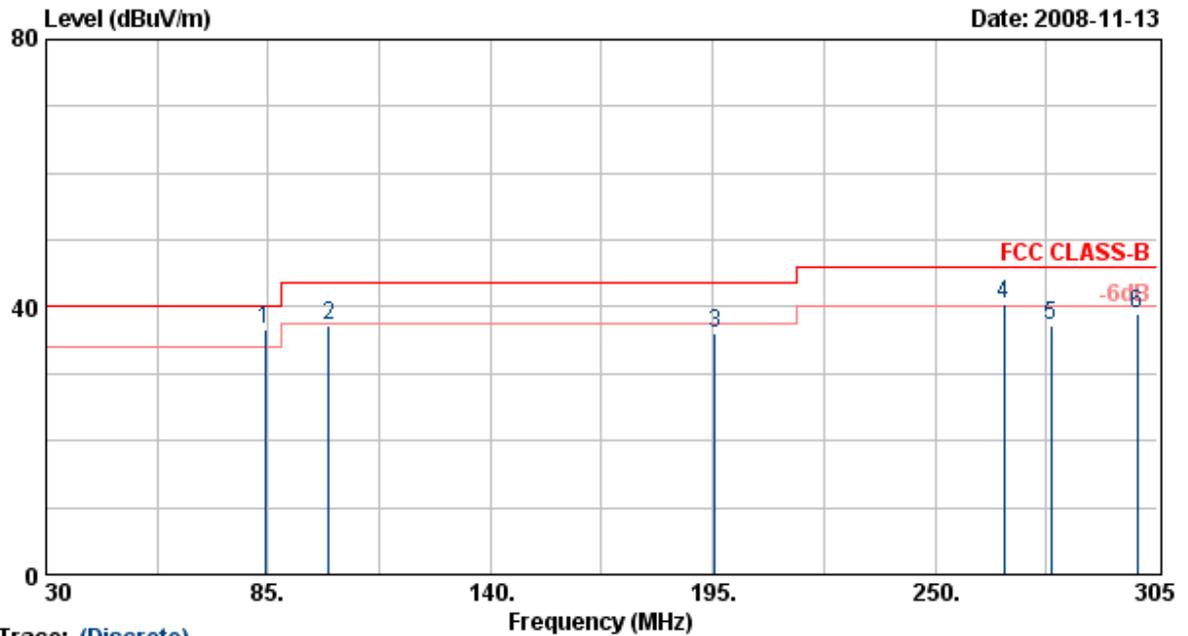
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	4904.00	29.53	5.76	35.29	54.00	-18.71	Average	116	158
2	4904.00	41.32	5.76	47.08	74.00	-26.92	Peak	116	158

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 4	: 802.11a, CH149	Temperature	: 22 °C
Memo	:	Humidity	: 70 %



Trace: (Discrete)

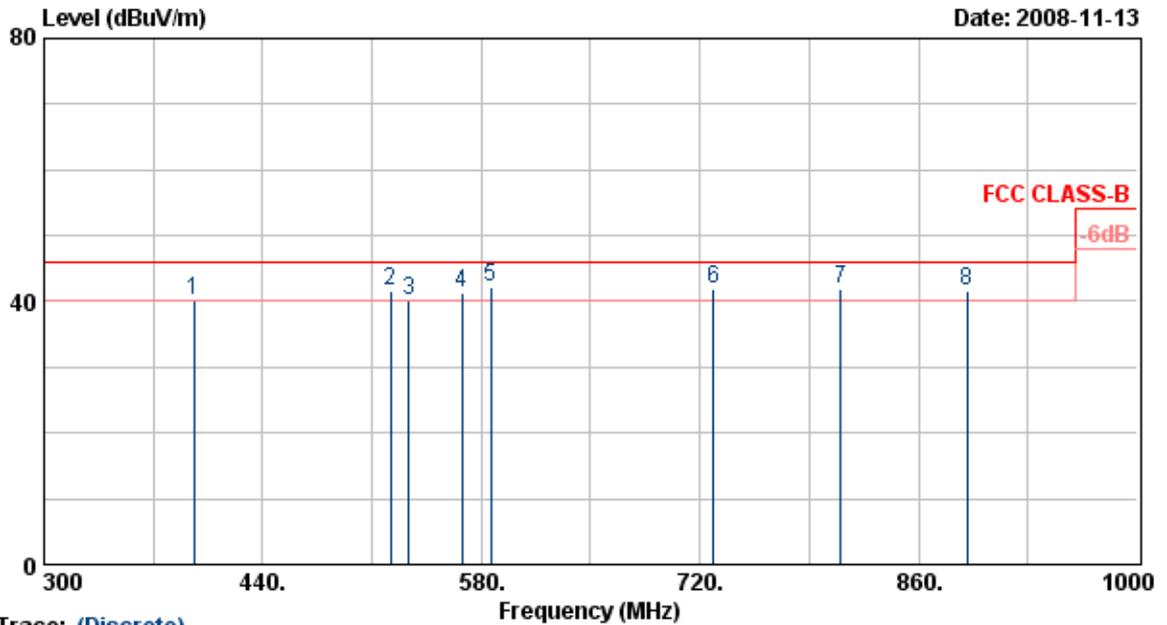
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	84.18	53.47	-16.94	36.53	40.00	-3.47	QP	100	154
2	99.85	51.53	-14.37	37.16	43.50	-6.34	Peak	100	88
3	195.55	47.05	-11.12	35.93	43.50	-7.57	Peak	100	62
4	267.05	48.84	-8.47	40.38	46.00	-5.62	QP	100	102
5	278.60	44.21	-7.10	37.11	46.00	-8.89	Peak	100	122
6	300.05	48.44	-9.49	38.95	46.00	-7.05	Peak	100	88

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 802.11a mode at channel 149,157,165 are almost the same below 1GHz, so that the channel 149 was chosen as representative in final test.
5. The data is worse case.



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode 4	: 802.11a, CH149	Temperature	: 22 °C
Memo	:	Humidity	: 70 %



Trace: (Discrete)

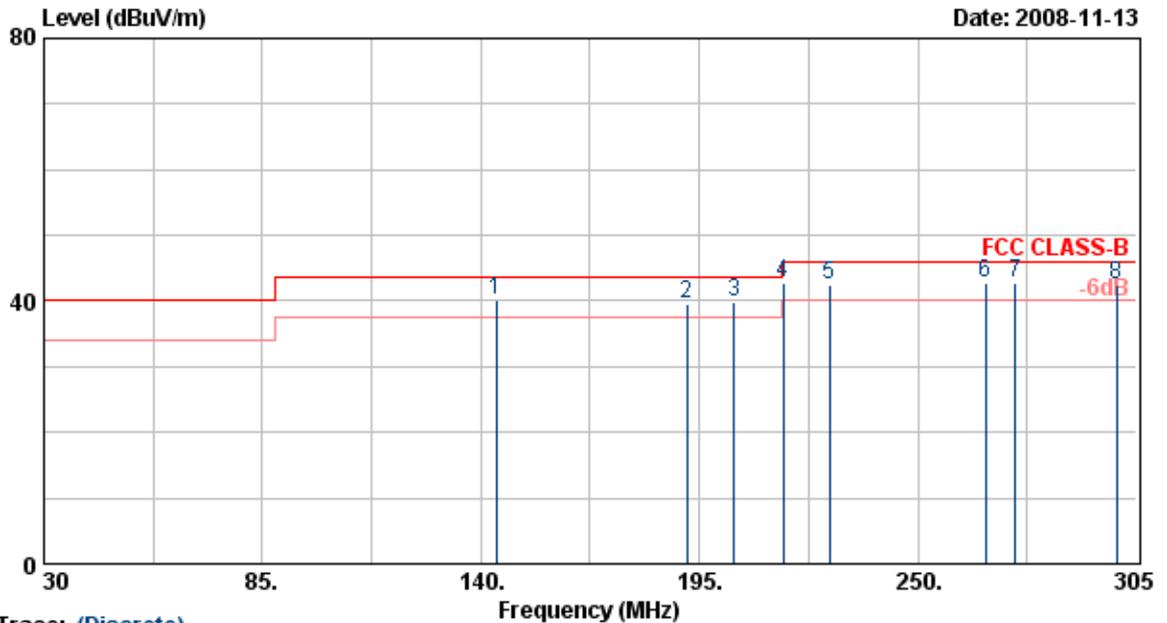
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	395.90	47.33	-7.20	40.12	46.00	-5.88	QP	100	92
2	521.90	45.69	-4.18	41.51	46.00	-4.49	QP	100	80
3	533.80	43.99	-3.83	40.15	46.00	-5.85	QP	100	105
4	567.40	39.97	1.35	41.32	46.00	-4.68	QP	100	147
5	586.30	42.51	-0.36	42.15	46.00	-3.85	QP	100	82
6	728.40	39.10	2.80	41.90	46.00	-4.10	QP	100	103
7	810.30	44.59	-2.62	41.97	46.00	-4.03	QP	100	105
8	890.80	39.82	1.72	41.54	46.00	-4.46	QP	100	99

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 802.11a mode at channel 149, 157, 165 are almost the same below 1GHz, so that the channel 149 was chosen as representative in final test.
5. The data is worse case.



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode 4	: 802.11a, CH149	Temperature	: 22 °C
Memo	:	Humidity	: 70 %



Trace: (Discrete)

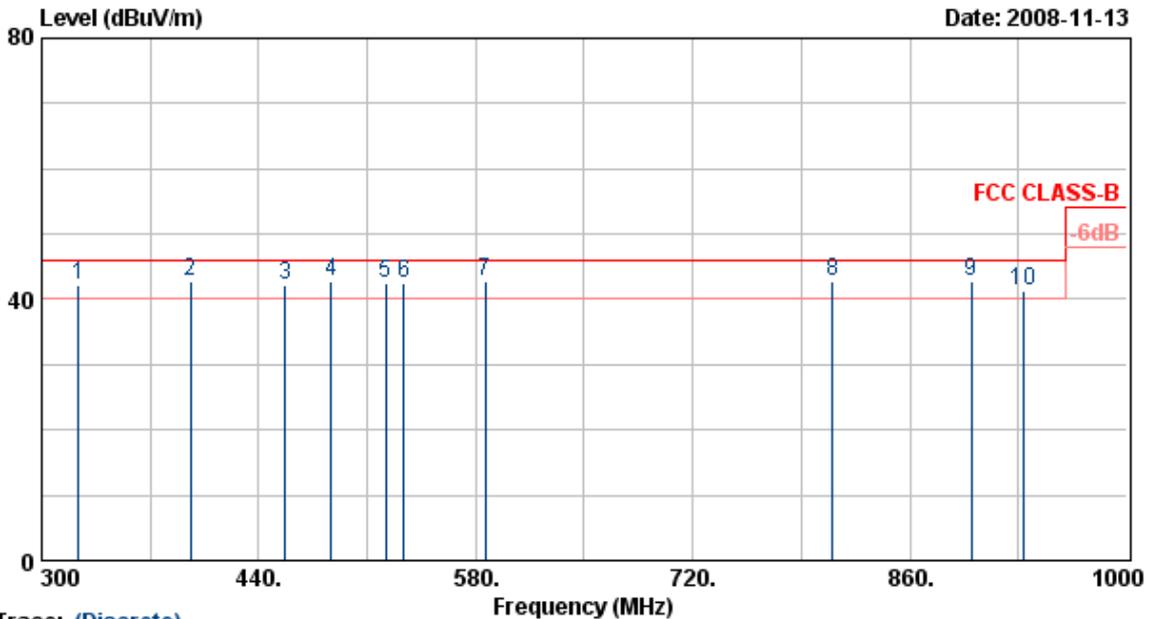
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	143.85	57.61	-17.51	40.11	43.50	-3.39	QP	100	102
2	191.98	56.14	-16.47	39.67	43.50	-3.83	QP	100	124
3	203.80	55.70	-15.99	39.71	43.50	-3.79	QP	100	108
4	216.18	61.23	-18.40	42.82	46.00	-3.18	QP	100	85
5	227.73	60.80	-18.26	42.54	46.00	-3.46	QP	100	75
6	267.05	58.33	-15.45	42.87	46.00	-3.13	QP	100	82
7	274.48	57.20	-14.57	42.62	46.00	-3.38	QP	100	122
8	300.05	56.95	-14.49	42.46	46.00	-3.54	QP	100	77

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 802.11a mode at channel 149,157,165 are almost the same below 1GHz, so that the channel 149 was chosen as representative in final test.
5. The data is worse case.



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode 4	: 802.11a, CH149	Temperature	: 22 °C
Memo	:	Humidity	: 70 %



Trace: (Discrete)

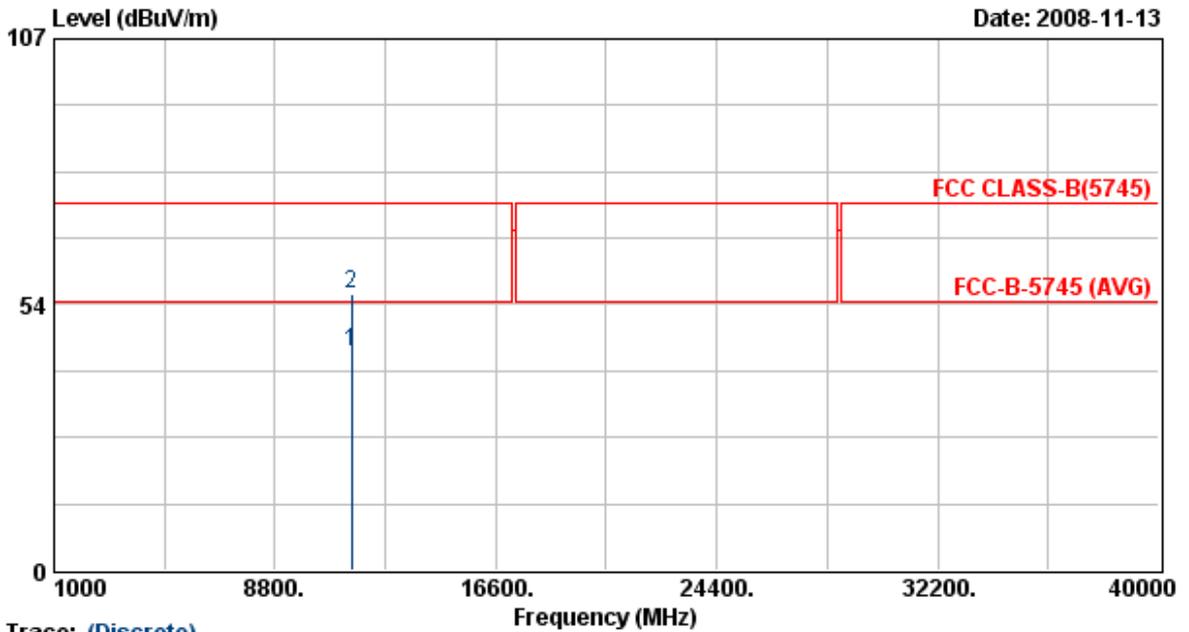
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBUV/m	dB	dBUV/m	dBUV/m	dB		cm	Deg
1	323.80	54.94	-12.77	42.16	46.00	-3.84	QP	100	95
2	395.90	52.40	-9.52	42.87	46.00	-3.13	QP	100	111
3	456.80	50.96	-8.73	42.23	46.00	-3.77	QP	100	132
4	486.90	48.51	-5.70	42.80	46.00	-3.20	QP	100	145
5	521.90	46.20	-3.85	42.35	46.00	-3.65	QP	100	125
6	533.80	45.36	-2.88	42.48	46.00	-3.52	QP	100	86
7	586.30	45.34	-2.54	42.80	46.00	-3.20	QP	100	63
8	810.30	43.63	-0.87	42.76	46.00	-3.24	QP	100	123
9	899.90	38.80	3.86	42.65	46.00	-3.35	QP	100	99
10	932.80	36.22	5.06	41.27	46.00	-4.73	QP	100	122

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 802.11a mode at channel 149,157,165 are almost the same below 1GHz, so that the channel 149 was chosen as representative in final test.
5. The data is worse case.



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode 4	: 802.11a, CH149	Temperature	: 22 °C
Memo	:	Humidity	: 70 %



Trace: (Discrete)

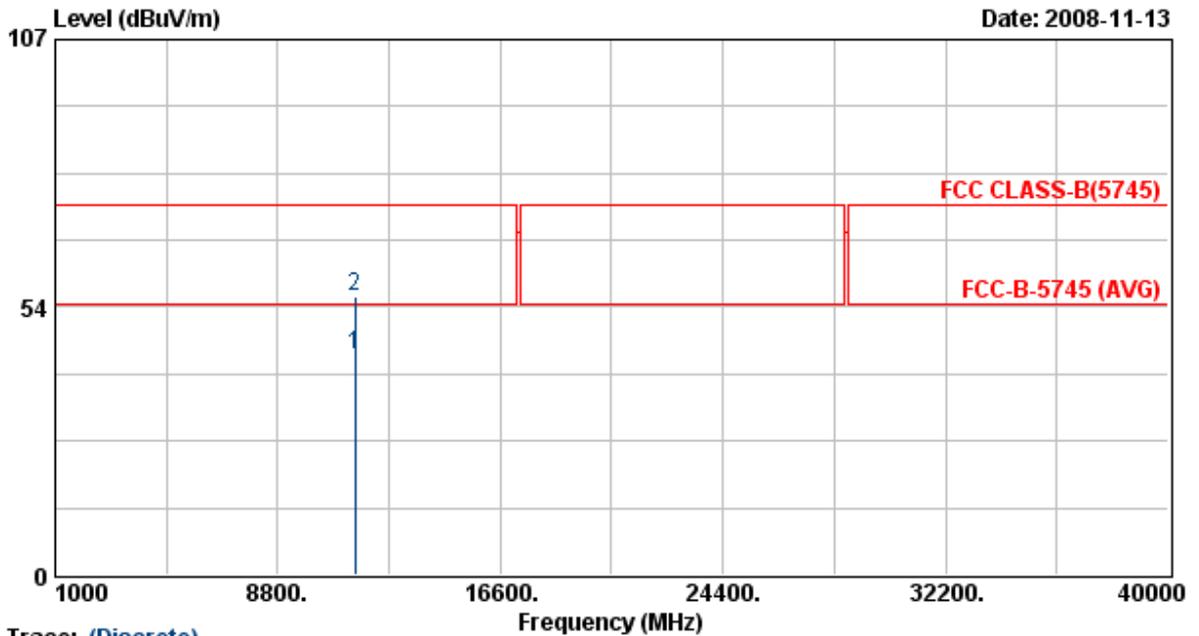
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	11490.05	29.86	14.09	43.95	54.00	-10.05	Average	116	267
2	11490.05	41.62	14.09	55.71	74.00	-18.29	Peak	116	267

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 4	: 802.11a, CH149	Temperature	: 22 °C
Memo	:	Humidity	: 70 %



Trace: (Discrete)

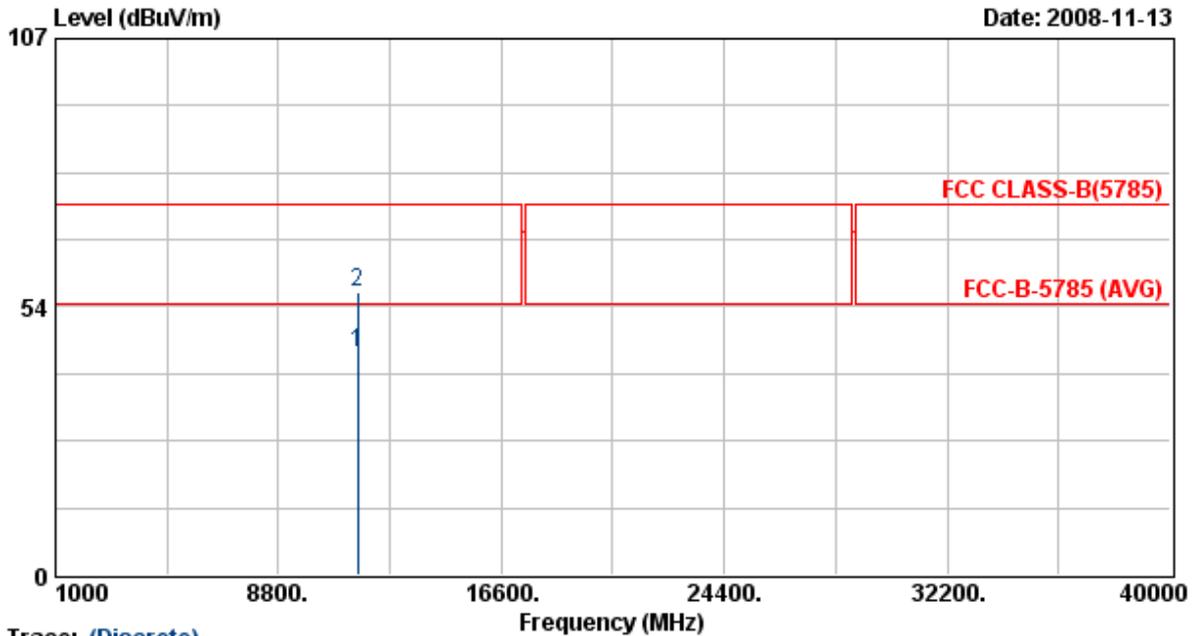
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	11490.05	29.82	14.09	43.91	54.00	-10.09	Average	116	267
2	11490.05	41.67	14.09	55.76	74.00	-18.24	Peak	116	267

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 4	: 802.11a, CH157	Temperature	: 22 °C
Memo	:	Humidity	: 70 %



Trace: (Discrete)

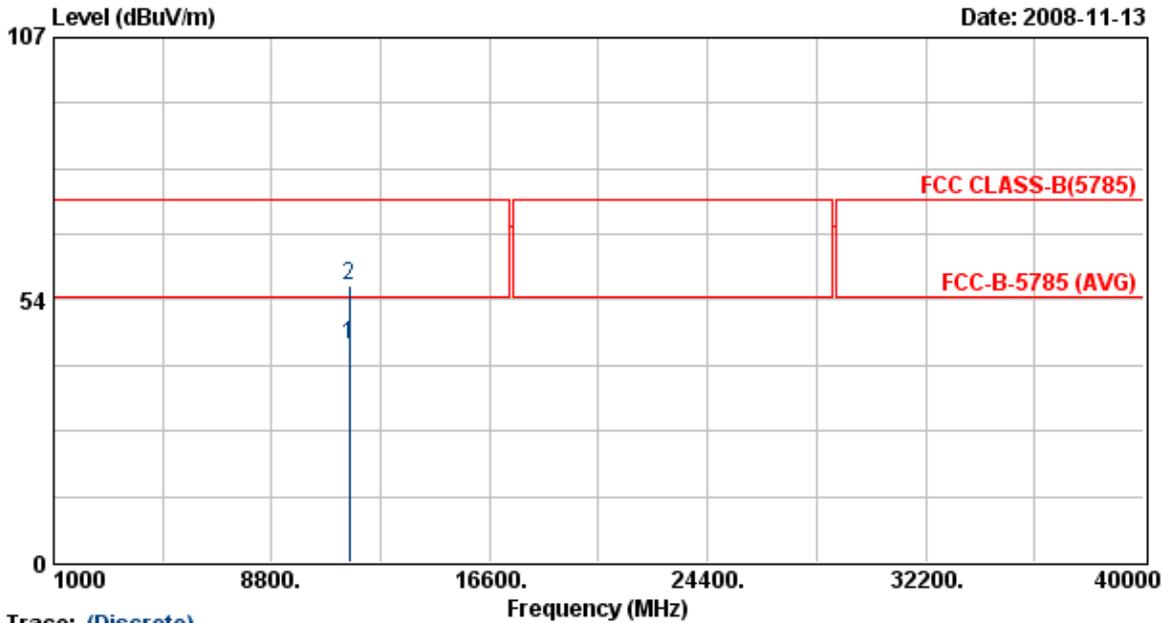
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	11570.03	30.13	14.16	44.29	54.00	-9.71	Average	116	267
2	11570.03	42.14	14.16	56.29	74.00	-17.71	Peak	116	267

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 4	: 802.11a, CH157	Temperature	: 22 °C
Memo	:	Humidity	: 70 %



Trace: (Discrete)

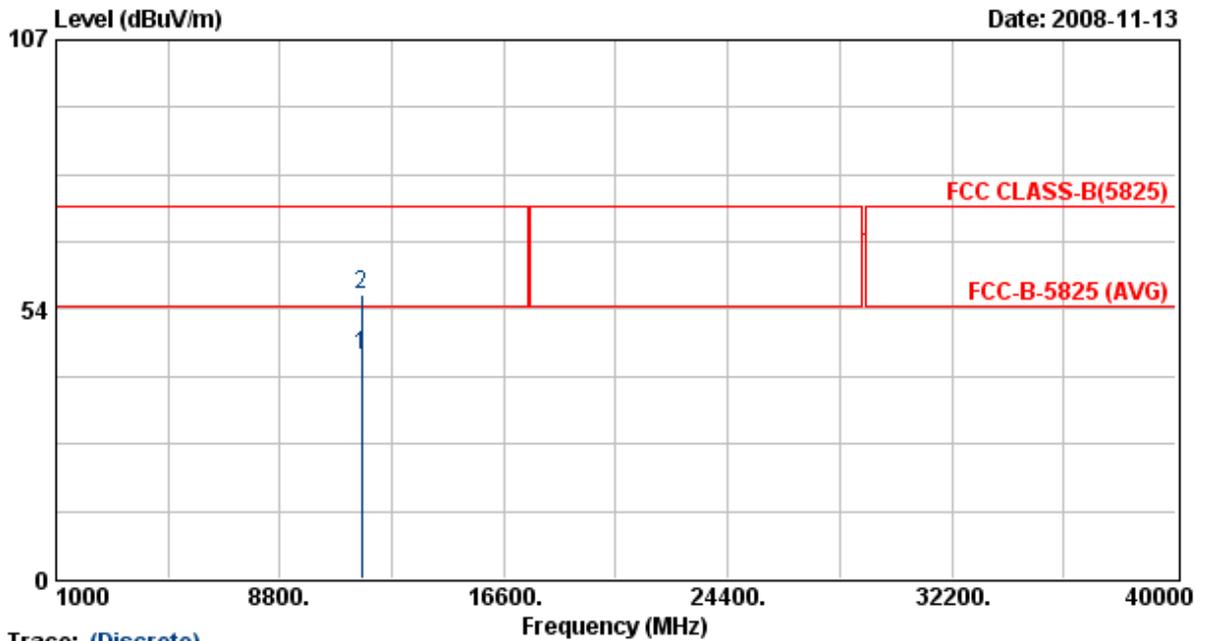
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	11570.03	30.34	14.16	44.49	54.00	-9.51	Average	116	267
2	11570.03	42.37	14.16	56.53	74.00	-17.47	Peak	116	267

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 4	: 802.11a, CH165	Temperature	: 22 °C
Memo	:	Humidity	: 70 %



Trace: (Discrete)

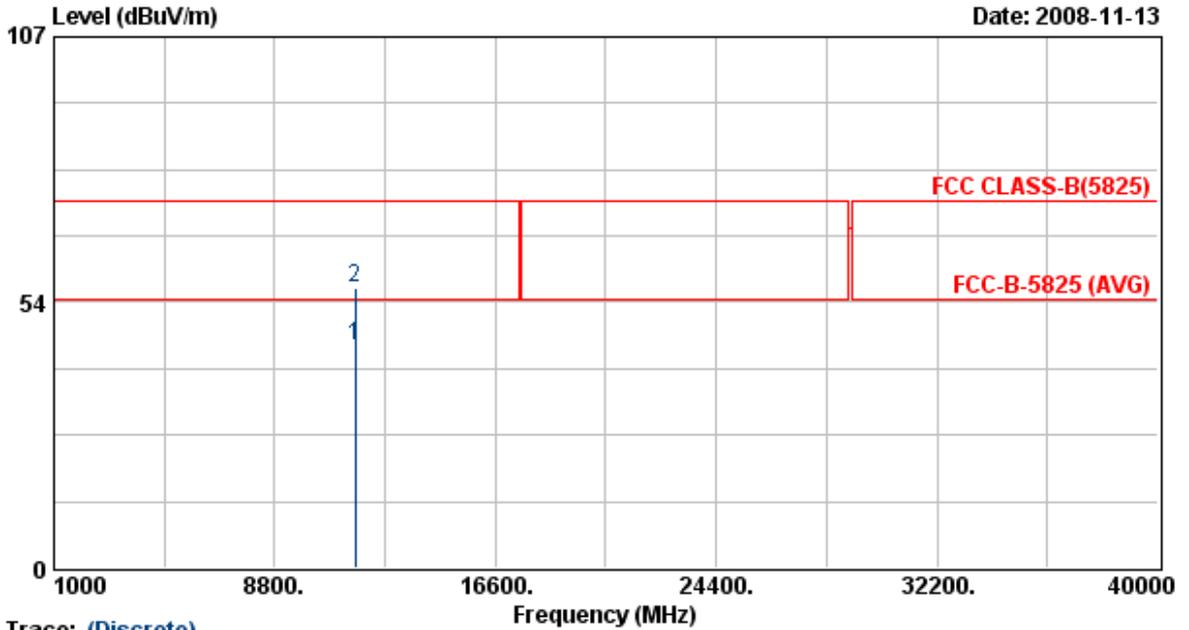
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	11650.08	30.04	14.22	44.26	54.00	-9.74	Average	116	267
2	11650.08	42.04	14.22	56.26	74.00	-17.74	Peak	116	267

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 4	: 802.11a, CH165	Temperature	: 22 °C
Memo	:	Humidity	: 70 %



Trace: (Discrete)

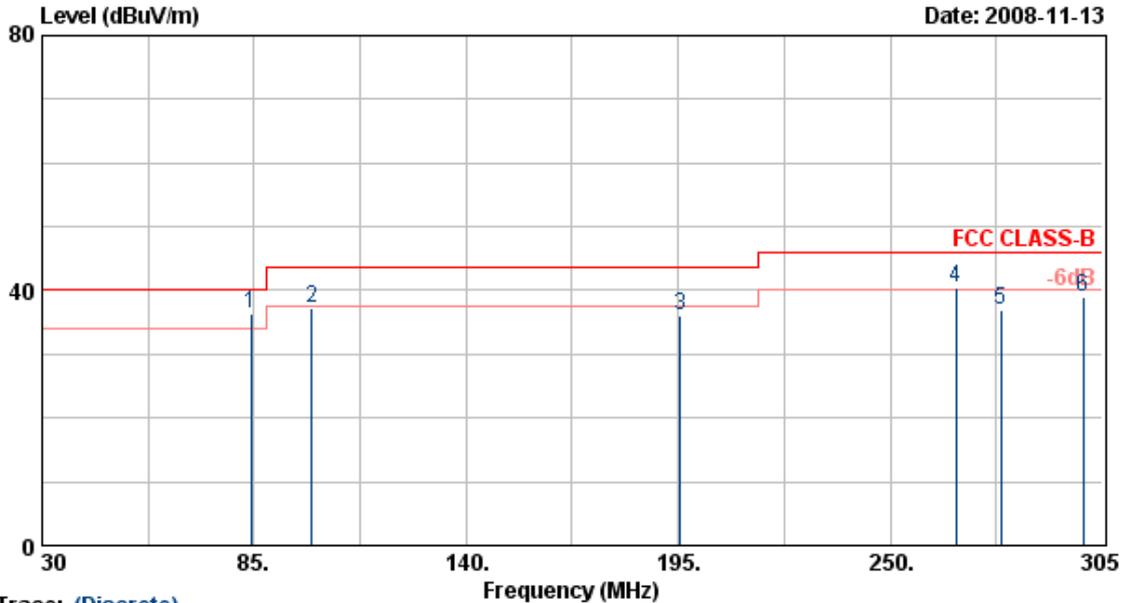
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	11650.08	30.39	14.22	44.61	54.00	-9.39	Average	116	267
2	11650.08	42.39	14.22	56.61	74.00	-17.39	Peak	116	267

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 5	: 802.11an HT20, CH149	Temperature	: 22 °C
Memo	:	Humidity	: 70 %



Trace: (Discrete)

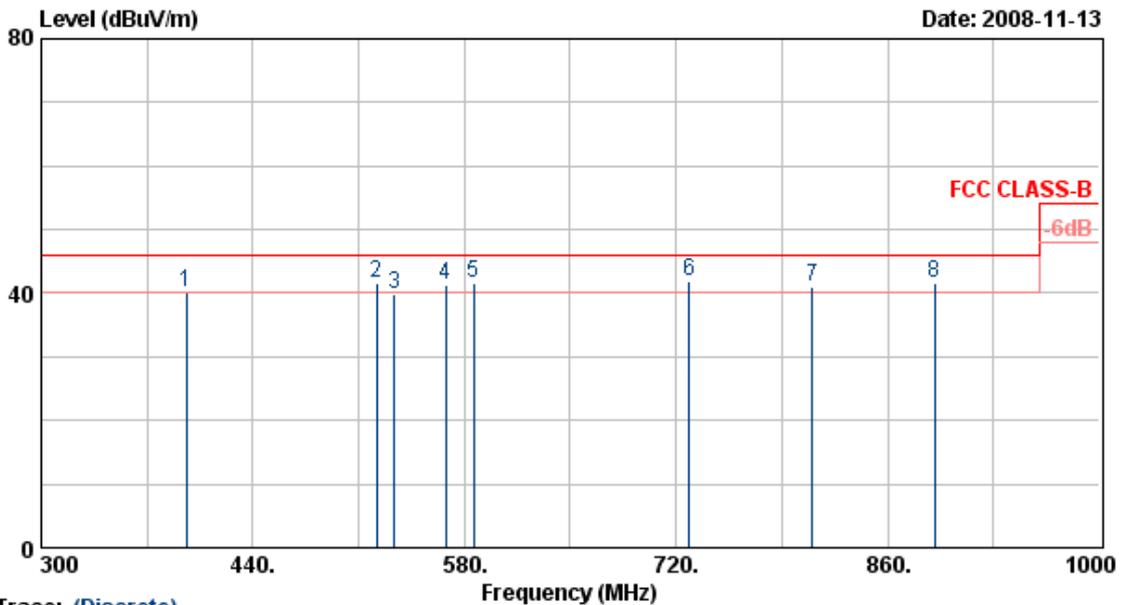
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	84.18	53.35	-16.94	36.41	40.00	-3.59	QP	100	154
2	99.85	51.53	-14.37	37.16	43.50	-6.34	Peak	100	88
3	195.55	47.25	-11.12	36.13	43.50	-7.37	Peak	100	62
4	267.05	48.84	-8.47	40.38	46.00	-5.62	QP	100	102
5	278.60	44.15	-7.10	37.05	46.00	-8.95	Peak	100	122
6	300.05	48.44	-9.49	38.95	46.00	-7.05	Peak	100	88

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 HT20 mode at channel 149,157,165 are almost the same below 1GHz, so that the channel 149 was chosen as representative in final test.
5. The data is worse case.



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode 5	: 802.11an HT20, CH149	Temperature	: 22 °C
Memo	:	Humidity	: 70 %



Trace: (Discrete)

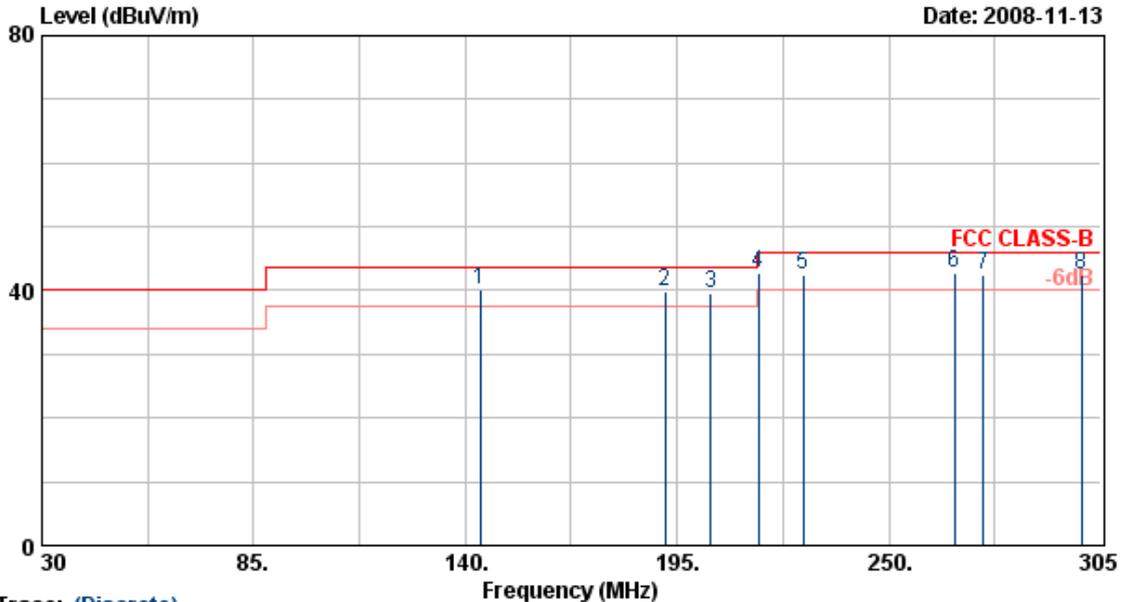
Item	Freq MHz	Read Value dBuV/m	Factor dB	Result dBuV/m	Limit dBuV/m	Margin dB	Remark	Ant Pos cm	Tab Pos Deg
1	395.90	47.33	-7.20	40.12	46.00	-5.88	QP	100	92
2	521.90	45.69	-4.18	41.51	46.00	-4.49	QP	100	80
3	533.80	43.67	-3.83	39.84	46.00	-6.16	Peak	100	105
4	567.40	39.97	1.35	41.32	46.00	-4.68	QP	100	147
5	586.30	41.96	-0.36	41.60	46.00	-4.40	QP	100	82
6	728.40	39.10	2.80	41.90	46.00	-4.10	QP	100	103
7	810.30	43.69	-2.62	41.07	46.00	-4.93	QP	100	105
8	890.80	39.82	1.72	41.54	46.00	-4.46	QP	100	99

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 HT20 mode at channel 149,157,165 are almost the same below 1GHz, so that the channel 149 was chosen as representative in final test.
5. The data is worse case.



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode 5	: 802.11an HT20, CH149	Temperature	: 22 °C
Memo	:	Humidity	: 70 %



Trace: (Discrete)

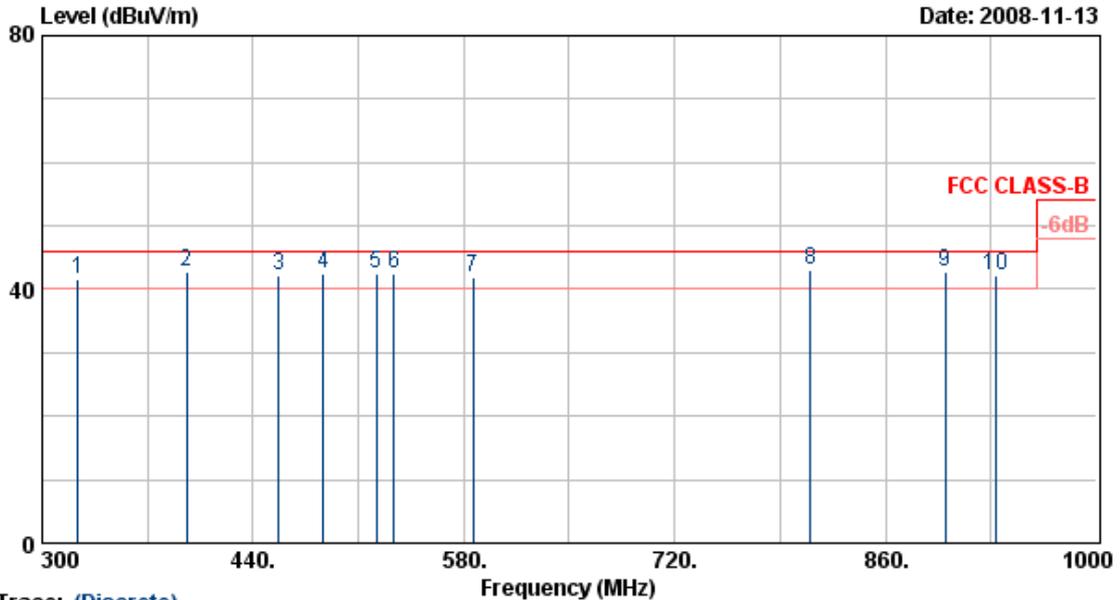
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	143.85	57.54	-17.51	40.03	43.50	-3.47	QP	100	102
2	191.98	56.19	-16.47	39.72	43.50	-3.78	QP	100	124
3	203.80	55.69	-15.99	39.70	43.50	-3.80	QP	100	108
4	216.18	61.20	-18.40	42.80	46.00	-3.20	QP	100	85
5	227.73	60.63	-18.26	42.37	46.00	-3.63	QP	100	75
6	267.05	58.21	-15.45	42.76	46.00	-3.24	QP	100	82
7	274.48	57.17	-14.57	42.59	46.00	-3.41	QP	100	122
8	300.05	56.95	-14.49	42.46	46.00	-3.54	QP	100	77

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 HT20 mode at channel 149,157,165 are almost the same below 1GHz, so that the channel 149 was chosen as representative in final test.
5. The data is worse case.



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode 5	: 802.11an HT20, CH149	Temperature	: 22 °C
Memo	:	Humidity	: 70 %



Trace: (Discrete)

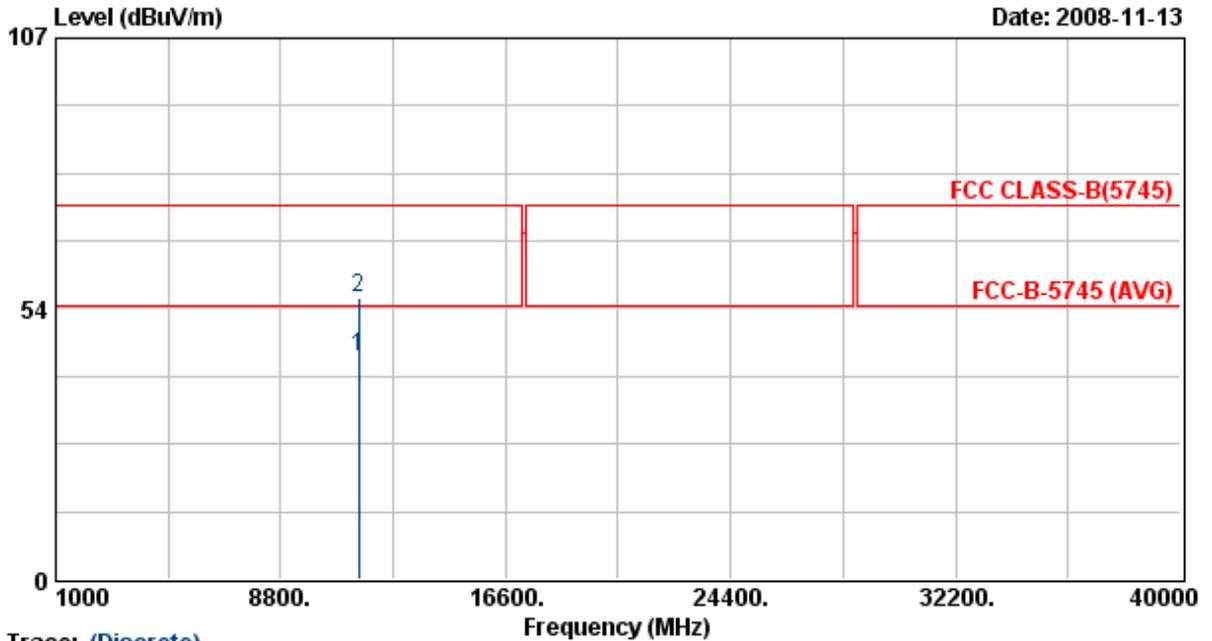
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	323.80	54.37	-12.77	41.59	46.00	-4.41	QP	100	95
2	395.90	52.40	-9.52	42.88	46.00	-3.12	QP	100	111
3	456.80	50.98	-8.73	42.25	46.00	-3.75	QP	100	132
4	486.90	48.21	-5.70	42.51	46.00	-3.49	QP	100	145
5	521.90	46.22	-3.85	42.37	46.00	-3.63	QP	100	125
6	533.80	45.32	-2.88	42.44	46.00	-3.56	QP	100	86
7	586.30	44.34	-2.54	41.80	46.00	-4.20	QP	100	63
8	810.30	43.83	-0.87	42.96	46.00	-3.04	QP	100	123
9	899.90	38.77	3.86	42.62	46.00	-3.38	QP	100	99
10	932.80	37.22	5.06	42.27	46.00	-3.73	QP	100	122

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 HT20 mode at channel 149,157,165 are almost the same below 1GHz, so that the channel 149 was chosen as representative in final test.
5. The data is worse case.



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode 5	: 802.11an HT20, CH149	Temperature	: 22 °C
Memo	:	Humidity	: 70 %



Trace: (Discrete)

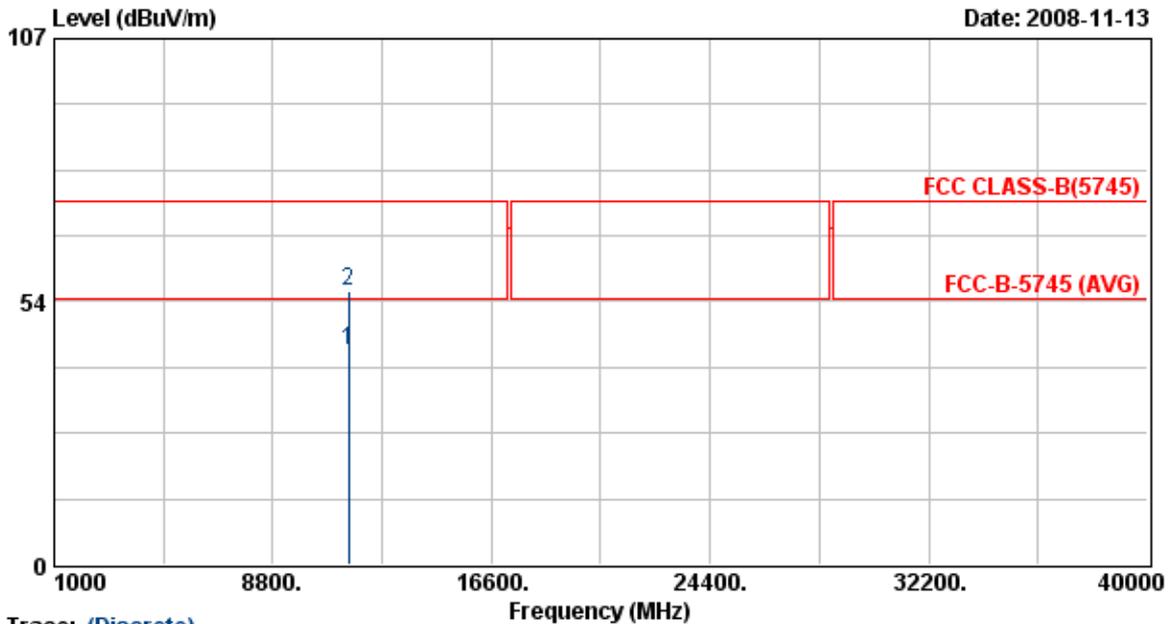
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	11490.05	29.86	14.09	43.95	54.00	-10.05	Average	116	267
2	11490.05	41.62	14.09	55.71	74.00	-18.29	Peak	116	267

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 5	: 802.11an HT20, CH149	Temperature	: 22 °C
Memo	:	Humidity	: 70 %



Trace: (Discrete)

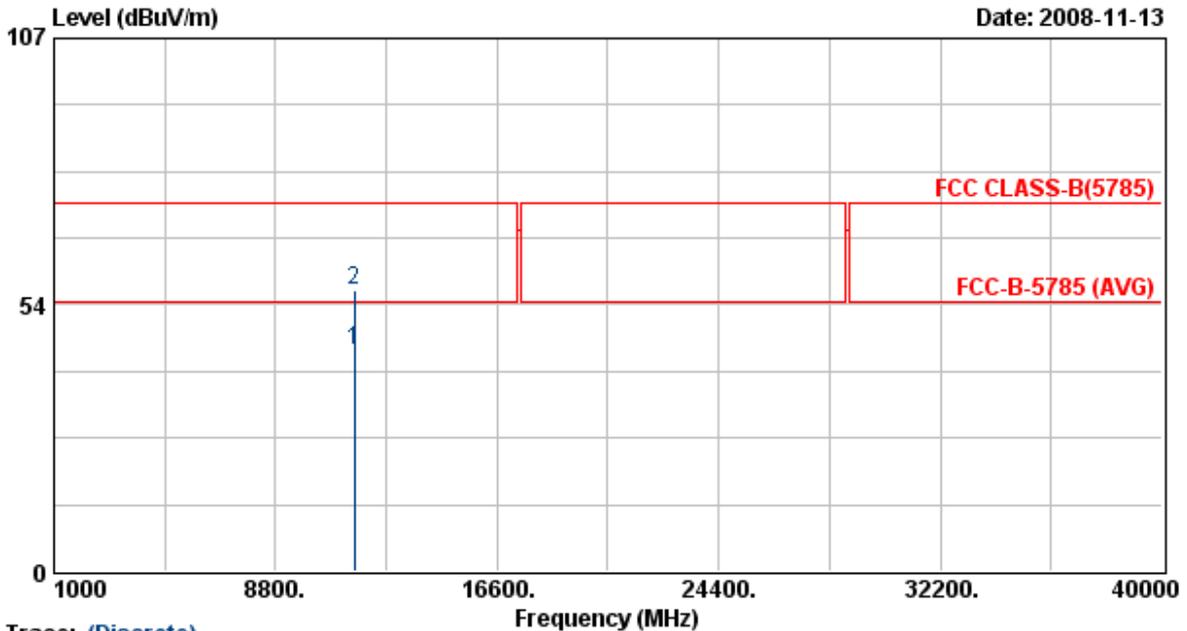
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	11490.05	29.62	14.09	43.71	54.00	-10.29	Average	116	267
2	11490.05	41.67	14.09	55.76	74.00	-18.24	Peak	116	267

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 5	: 802.11an HT20, CH157	Temperature	: 22 °C
Memo	:	Humidity	: 70 %



Trace: (Discrete)

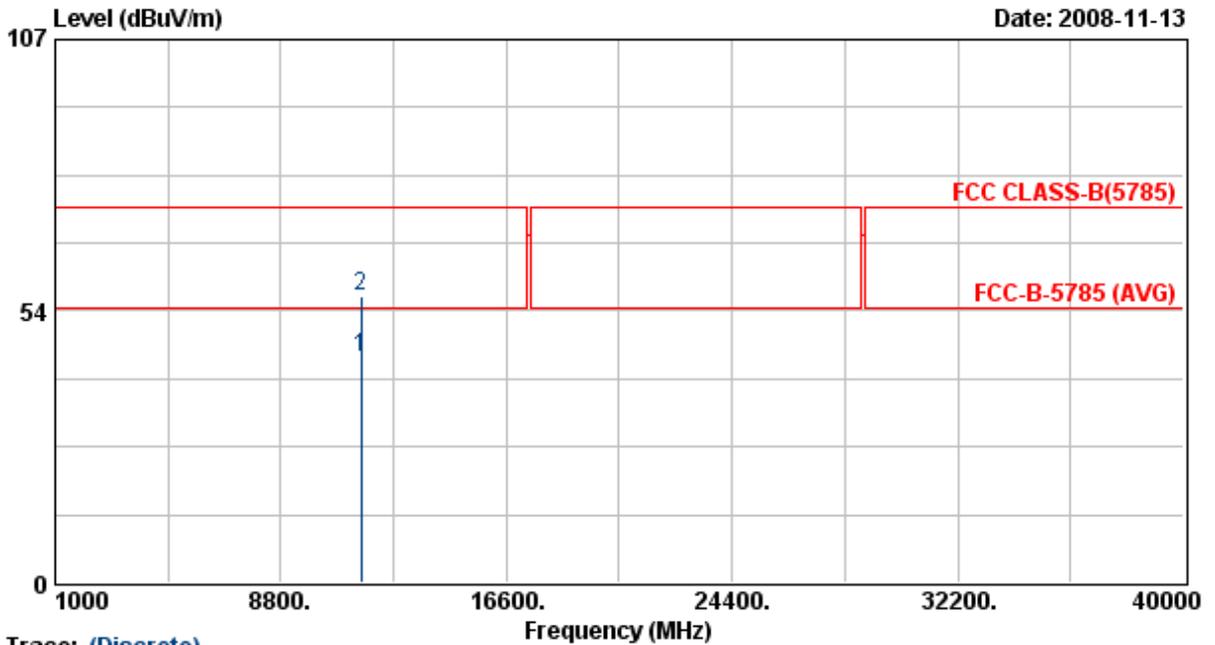
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	11570.03	30.13	14.16	44.29	54.00	-9.71	Average	116	267
2	11570.03	42.14	14.16	56.29	74.00	-17.71	Peak	116	267

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 5	: 802.11an HT20, CH157	Temperature	: 22 °C
Memo	:	Humidity	: 70 %



Trace: (Discrete)

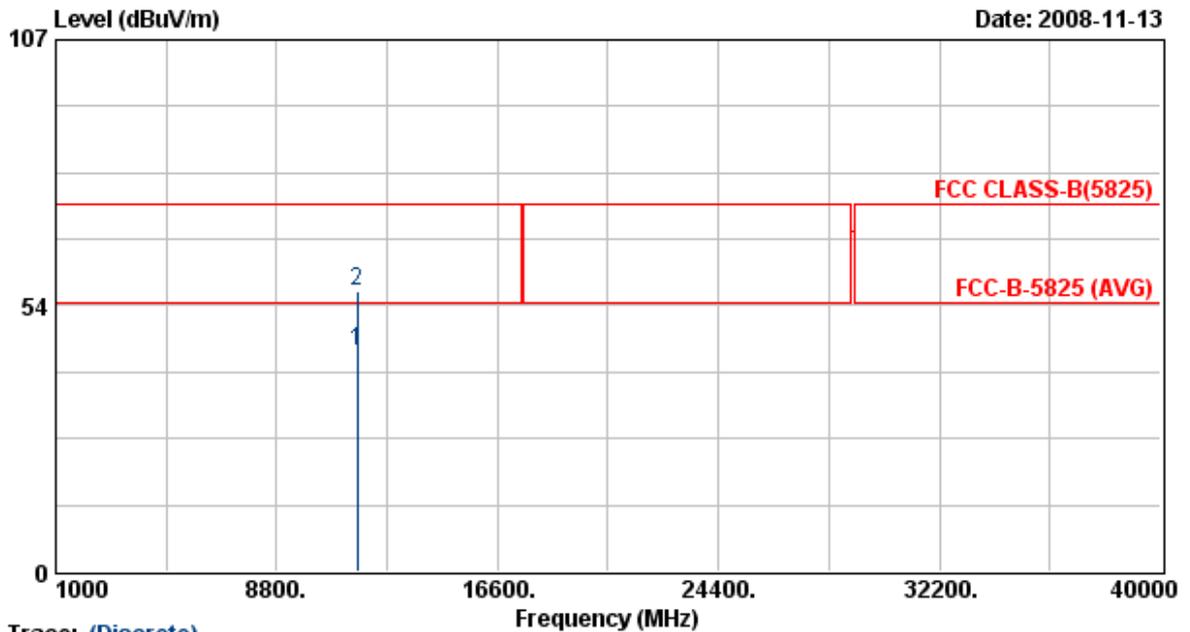
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	11570.03	30.34	14.16	44.49	54.00	-9.51	Average	116	267
2	11570.03	42.37	14.16	56.53	74.00	-17.47	Peak	116	267

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 5	: 802.11an HT20, CH165	Temperature	: 22 °C
Memo	:	Humidity	: 70 %



Trace: (Discrete)

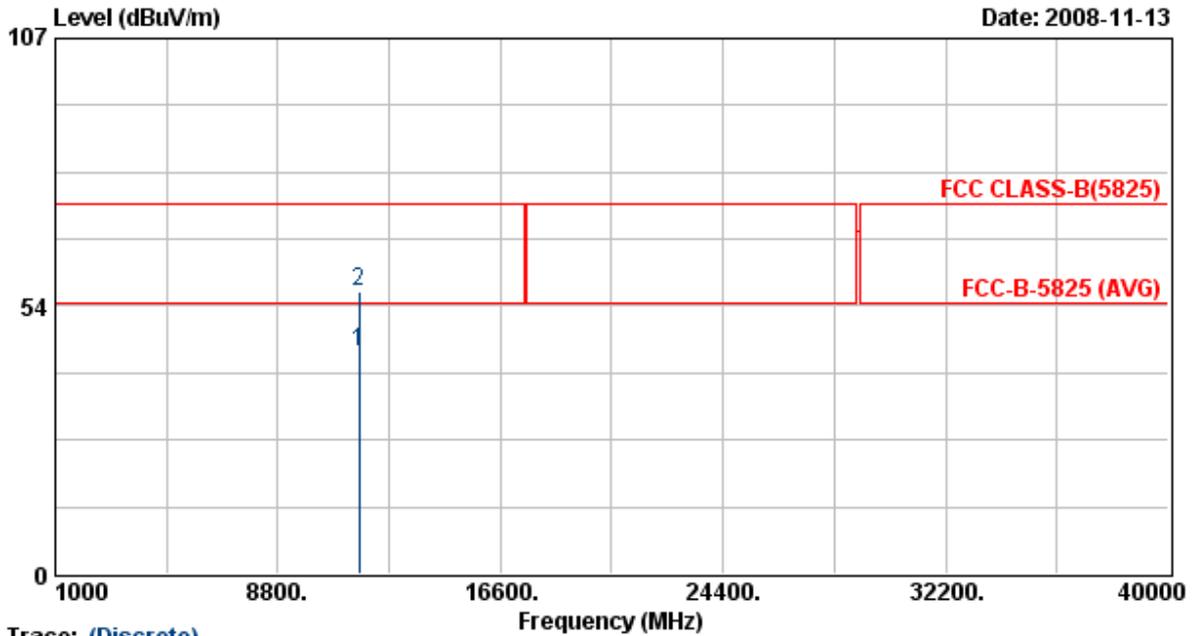
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	11650.08	30.04	14.22	44.26	54.00	-9.74	Average	116	267
2	11650.08	42.04	14.22	56.26	74.00	-17.74	Peak	116	267

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 5	: 802.11an HT20, CH165	Temperature	: 22 °C
Memo	:	Humidity	: 70 %



Trace: (Discrete)

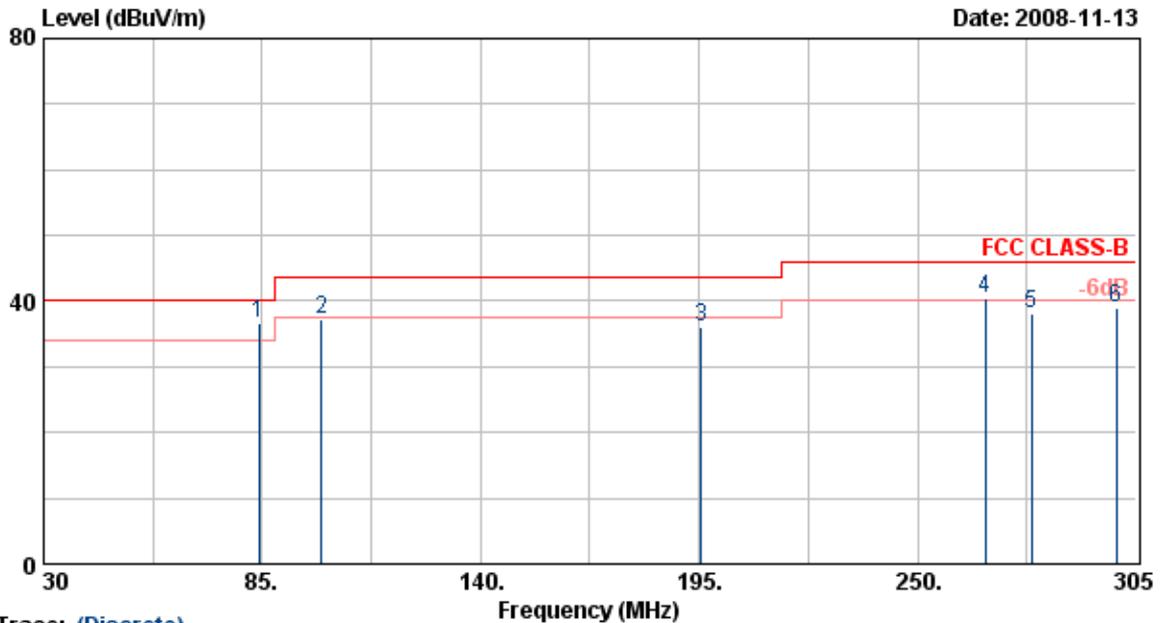
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	11650.08	30.09	14.22	44.31	54.00	-9.69	Average	116	267
2	11650.08	42.09	14.22	56.31	74.00	-17.69	Peak	116	267

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 6	: 802.11an HT40, CH151	Temperature	: 22 °C
Memo	:	Humidity	: 70 %



Trace: (Discrete)

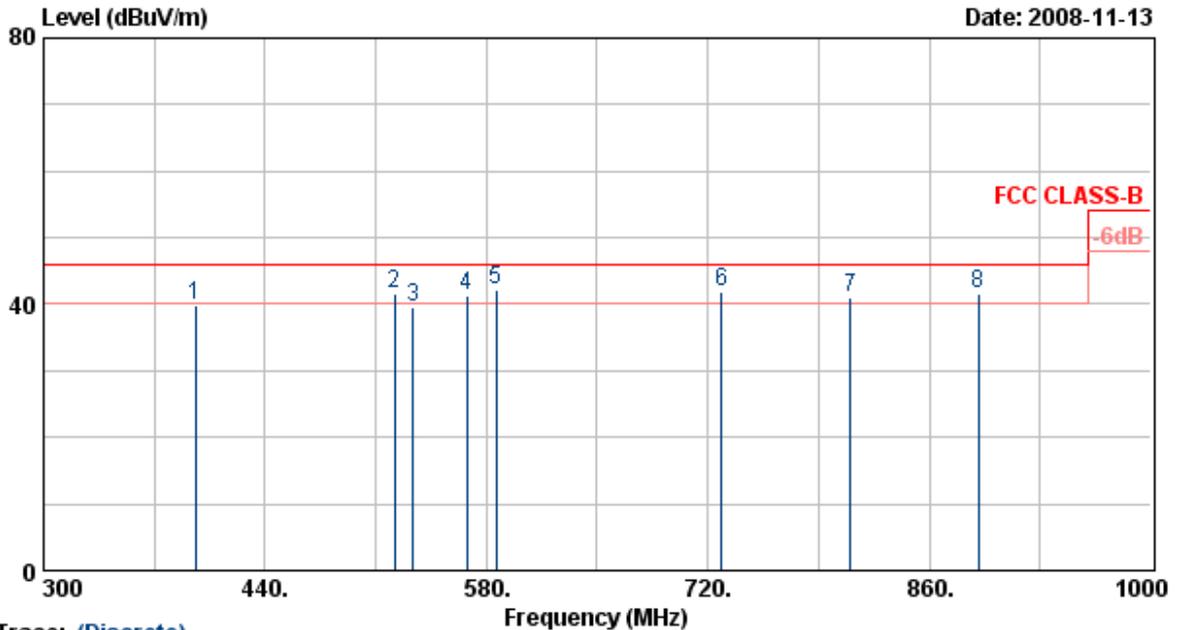
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	84.18	53.55	-16.94	36.61	40.00	-3.39	QP	100	154
2	99.85	51.53	-14.37	37.16	43.50	-6.34	Peak	100	88
3	195.55	47.25	-11.12	36.13	43.50	-7.37	Peak	100	62
4	267.05	48.84	-8.47	40.38	46.00	-5.62	QP	100	102
5	278.60	45.11	-7.10	38.01	46.00	-7.99	Peak	100	122
6	300.05	48.44	-9.49	38.95	46.00	-7.05	Peak	100	88

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 mode at channel 151,155,159 are almost the same below 1GHz, so that the channel 151 was chosen as representative in final test.
5. The data is worse case.



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode 6	: 802.11an HT40, CH151	Temperature	: 22 °C
Memo	:	Humidity	: 70 %



Trace: (Discrete)

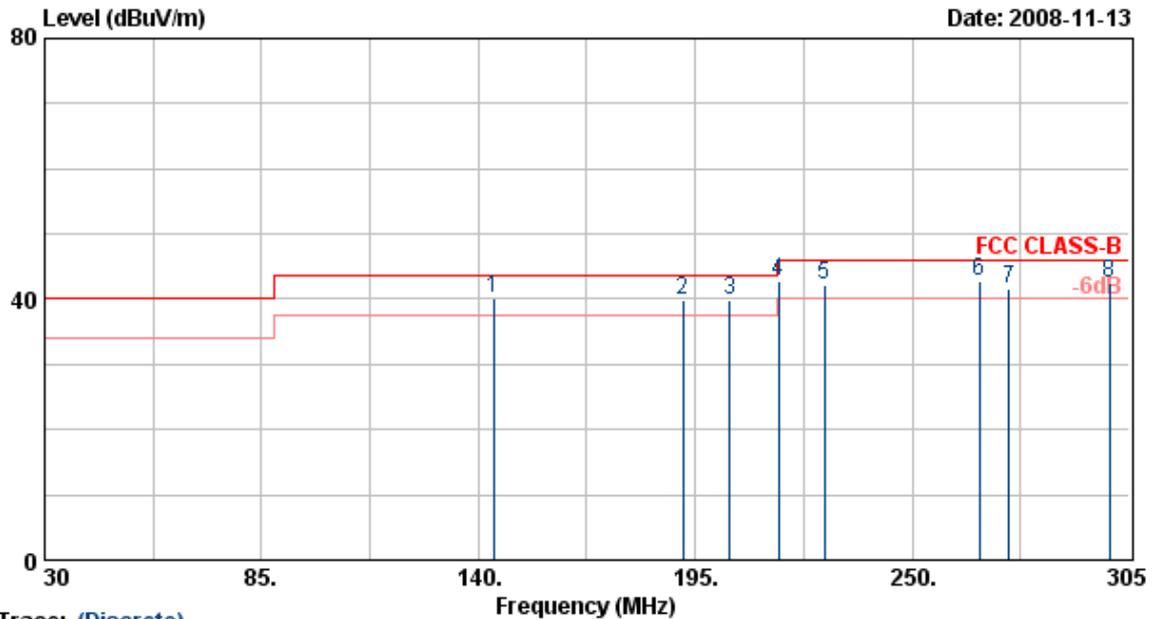
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	395.90	47.10	-7.20	39.90	46.00	-6.10	Peak	100	92
2	521.90	45.69	-4.18	41.51	46.00	-4.49	QP	100	80
3	533.80	43.39	-3.83	39.55	46.00	-6.45	Peak	100	105
4	567.40	39.97	1.35	41.32	46.00	-4.68	QP	100	147
5	586.30	42.61	-0.36	42.25	46.00	-3.75	QP	100	82
6	728.40	39.10	2.80	41.90	46.00	-4.10	QP	100	103
7	810.30	43.69	-2.62	41.07	46.00	-4.93	QP	100	105
8	890.80	39.82	1.72	41.54	46.00	-4.46	QP	100	99

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 mode at channel 151,155,159 are almost the same below 1GHz, so that the channel 151 was chosen as representative in final test.
5. The data is worse case.



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode 6	: 802.11an HT40, CH151	Temperature	: 22 °C
Memo	:	Humidity	: 70 %



Trace: (Discrete)

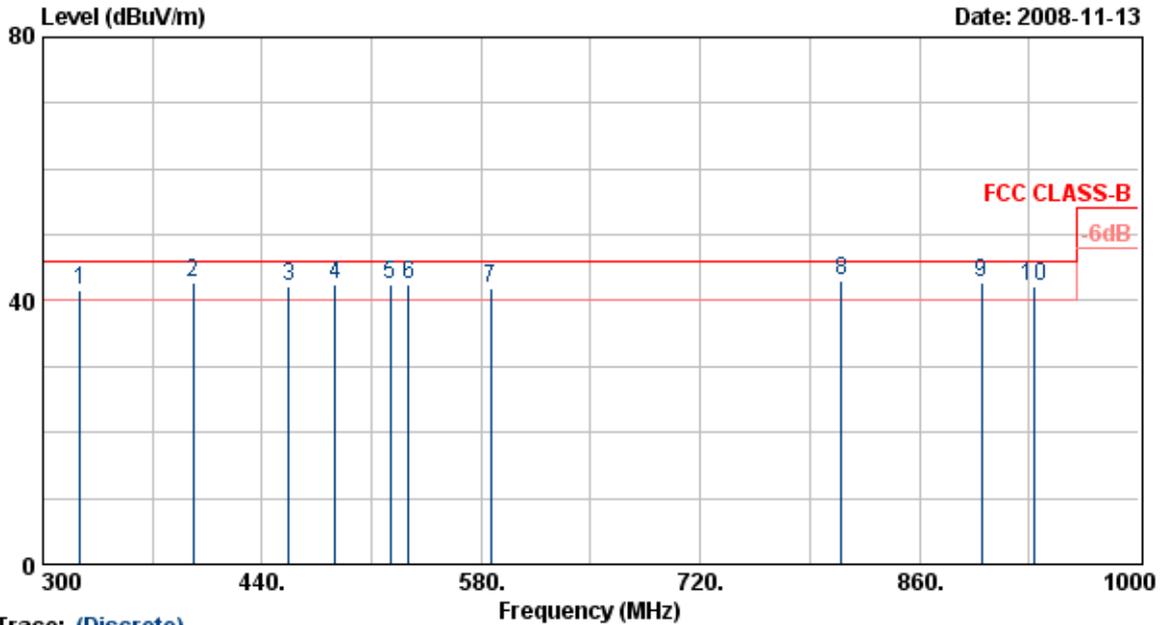
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	143.85	57.64	-17.51	40.13	43.50	-3.37	QP	100	102
2	191.98	56.19	-16.47	39.72	43.50	-3.78	QP	100	124
3	203.80	55.99	-15.99	40.00	43.50	-3.50	QP	100	108
4	216.18	61.20	-18.40	42.80	46.00	-3.20	QP	100	85
5	227.73	60.33	-18.26	42.07	46.00	-3.93	QP	100	75
6	267.05	58.21	-15.45	42.76	46.00	-3.24	QP	100	82
7	274.48	56.20	-14.57	41.62	46.00	-4.38	QP	100	122
8	300.05	56.95	-14.49	42.46	46.00	-3.54	QP	100	77

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 mode at channel 151,155,159 are almost the same below 1GHz, so that the channel 151 was chosen as representative in final test.
5. The data is worse case.



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode 6	: 802.11an HT40, CH151	Temperature	: 22 °C
Memo	:	Humidity	: 70 %



Trace: (Discrete)

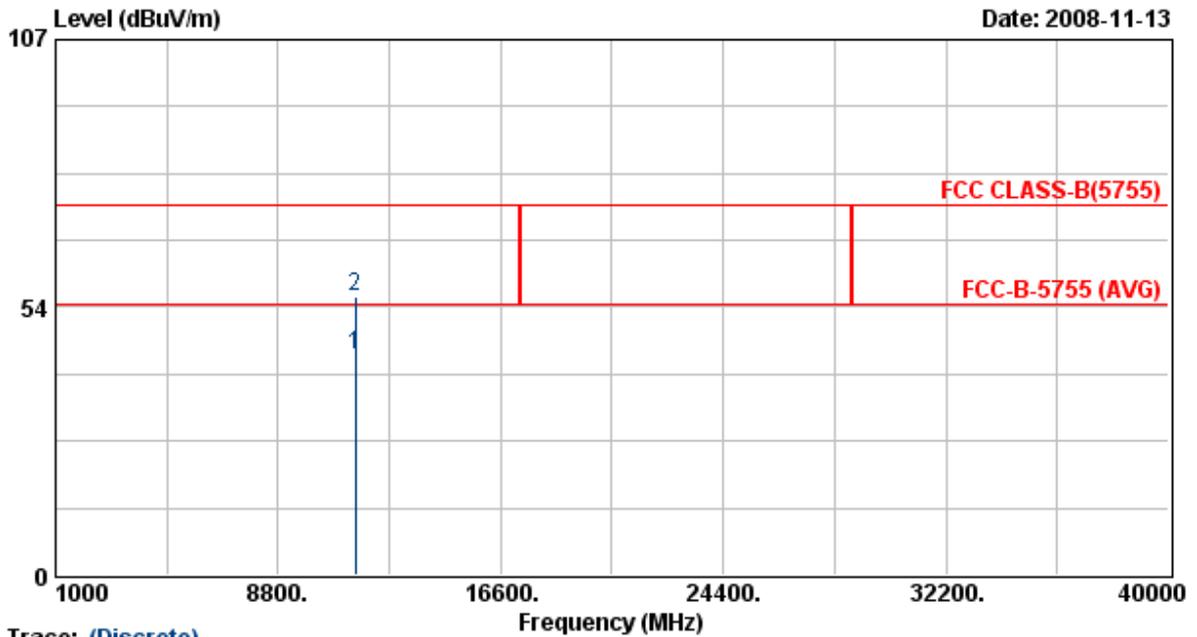
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	323.80	54.37	-12.77	41.59	46.00	-4.41	QP	100	95
2	395.90	52.40	-9.52	42.88	46.00	-3.12	QP	100	111
3	456.80	50.94	-8.73	42.21	46.00	-3.79	QP	100	132
4	486.90	48.21	-5.70	42.51	46.00	-3.49	QP	100	145
5	521.90	46.22	-3.85	42.37	46.00	-3.63	QP	100	125
6	533.80	45.32	-2.88	42.44	46.00	-3.56	QP	100	86
7	586.30	44.34	-2.54	41.80	46.00	-4.20	QP	100	63
8	810.30	43.83	-0.87	42.96	46.00	-3.04	QP	100	123
9	899.90	38.77	3.86	42.62	46.00	-3.38	QP	100	99
10	932.80	37.22	5.06	42.27	46.00	-3.73	QP	100	122

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 mode at channel 151,155,159 are almost the same below 1GHz, so that the channel 151 was chosen as representative in final test.
5. The data is worse case.



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode 6	: 802.11an HT40, CH151	Temperature	: 22 °C
Memo	:	Humidity	: 70 %



Trace: (Discrete)

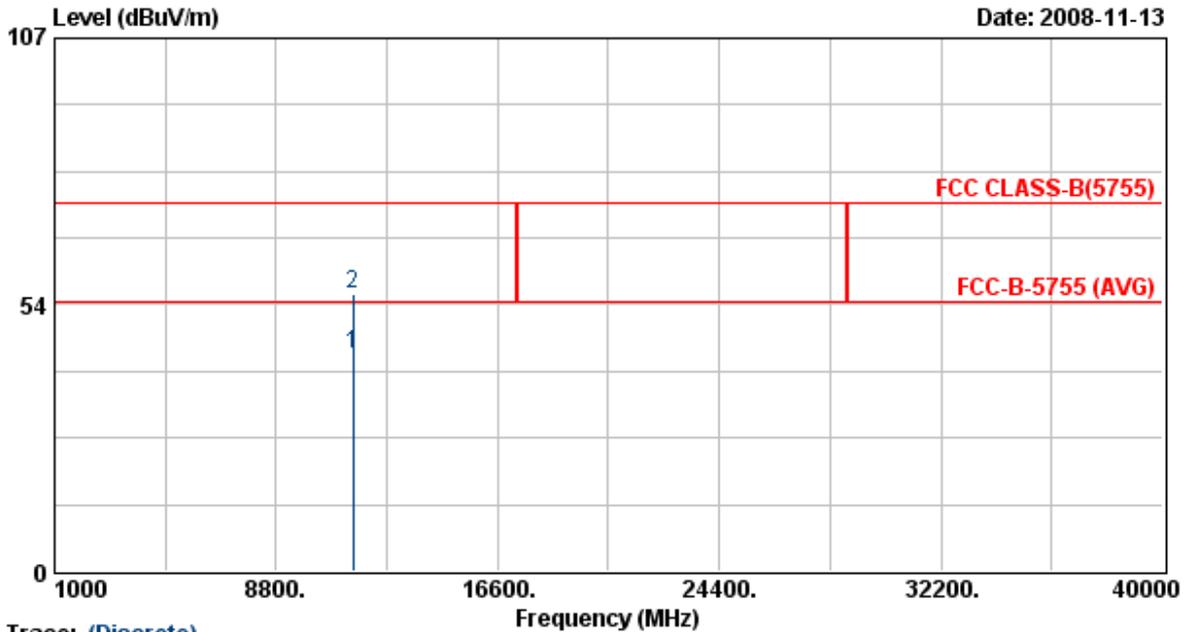
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	11510.05	29.84	14.11	43.95	54.00	-10.05	Average	116	267
2	11510.05	41.60	14.11	55.71	74.00	-18.29	Peak	116	267

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 6	: 802.11an HT40, CH151	Temperature	: 22 °C
Memo	:	Humidity	: 70 %



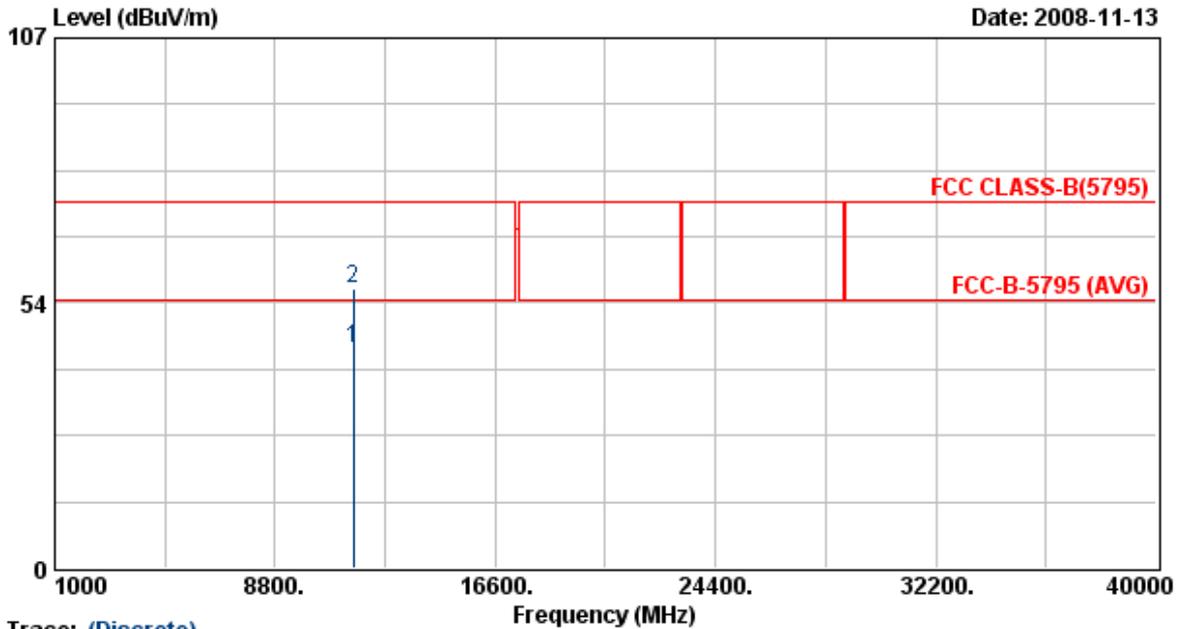
Trace: (Discrete)

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	11510.05	29.42	14.11	43.53	54.00	-10.47	Average	116	267
2	11510.05	41.57	14.11	55.68	74.00	-18.32	Peak	116	267

- 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 6	: 802.11an HT40, CH159	Temperature	: 22 °C
Memo	:	Humidity	: 70 %



Trace: (Discrete)

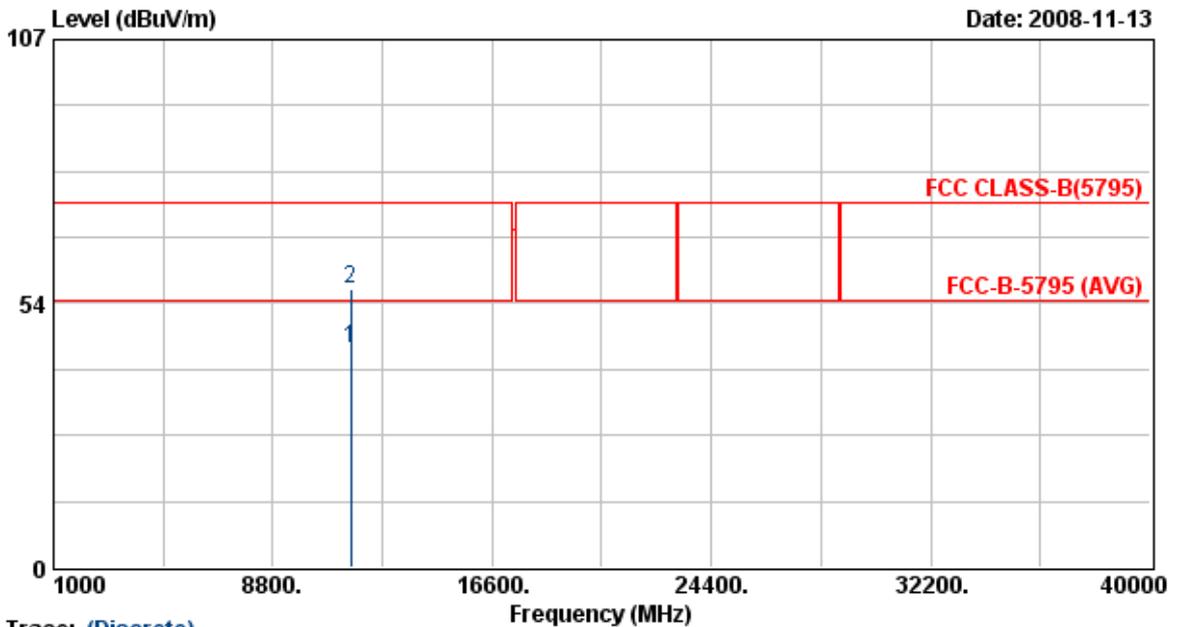
Item	Freq	Read Value	Factor	Result	Limit	Margin	Remark	Ant Pos	Tab Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		cm	Deg
1	11590.03	30.12	14.17	44.29	54.00	-9.71	Average	116	267
2	11590.03	42.12	14.17	56.29	74.00	-17.71	Peak	116	267

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 6	: 802.11an HT40, CH159	Temperature	: 22 °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	11590.03	30.18	14.17	44.35	54.00	-9.65	Average	116	267
2	11590.03	42.21	14.17	56.38	74.00	-17.62	Peak	116	267

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. 6dB Bandwidth Measurement Data

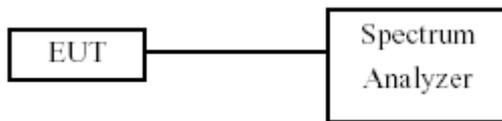
### 6.1 Test Limit

The minimum of 6dB Bandwidth Measurement is 0.5 MHz.

### 6.2 Test Procedures

- a. The transmitter output was connected to the spectrum analyzer.
- b. Set RBW of spectrum analyzer to 100 KHz and VBW to 100 KHz.
- c. The 6 dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 6 dB.

### 6.3 Test Setup Layout



### 6.4 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



### 6.5 Test Result and Data

Test Date: Nov. 08, 2008

Temperature: 20

Atmospheric pressure: 1008 hPa

Humidity: 60%

Modulation Standard	Channel	Frequency (MHz)	6dB Bandwidth (MHz)	
			L	R
802.11b (11Mbps)	01	2412	12.10	11.50
	06	2437	12.10	12.10
	11	2462	12.20	12.10
802.11g (6Mbps)	01	2412	16.60	16.50
	06	2437	16.50	16.50
	11	2462	16.40	16.50
802.11n HT20 (6.5Mbps)	01	2412	17.50	17.60
	06	2437	17.40	17.60
	11	2462	17.60	17.50
802.11n HT40 (13.5Mbps)	03	2422	36.40	36.40
	06	2437	36.20	36.40
	09	2452	36.40	36.40

Test Date: Nov. 10, 2008

Temperature: 20

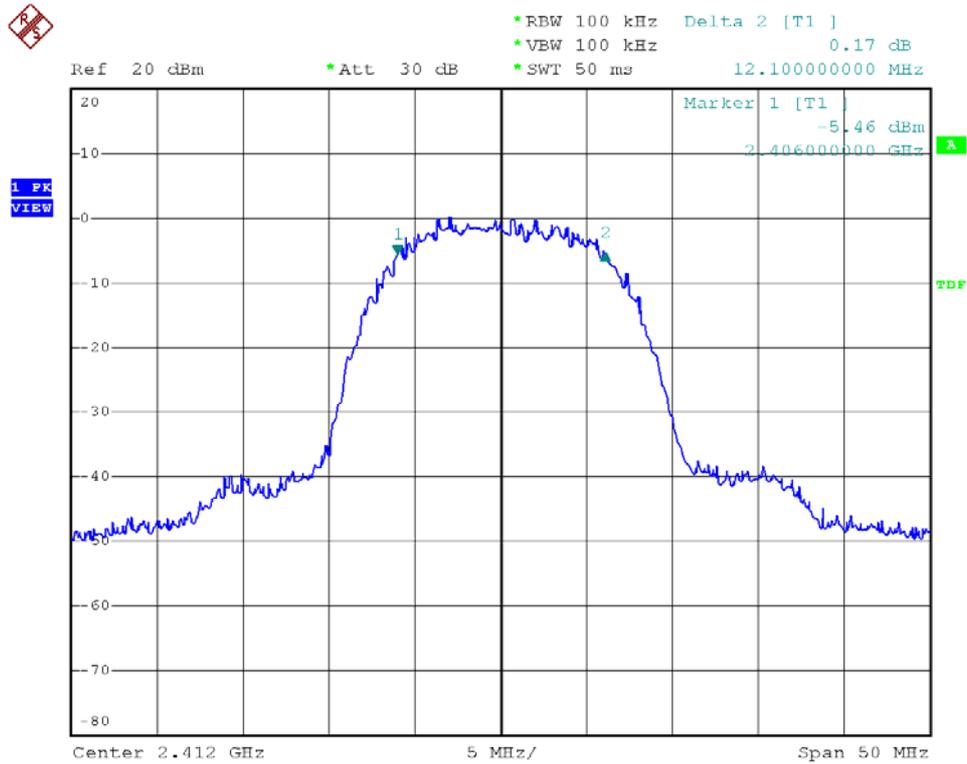
Atmospheric pressure: 1008 hPa

Humidity: 60%

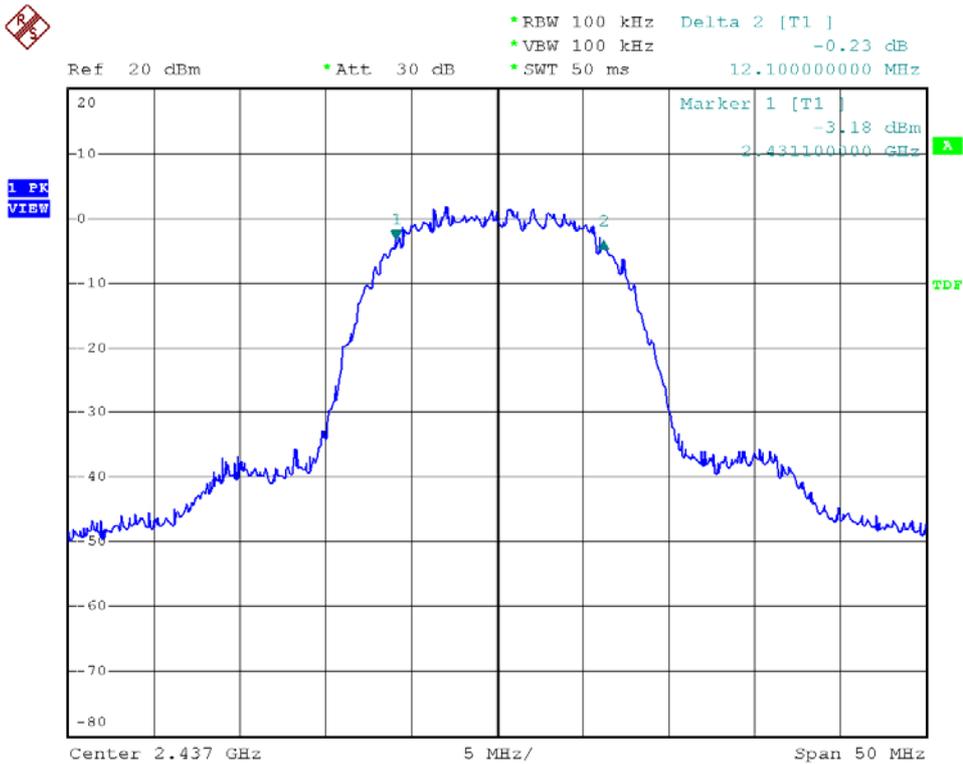
Modulation Standard	Channel	Frequency (MHz)	6dB Bandwidth (MHz)	
			L	R
802.11a (6Mbps)	149	5745	16.60	16.50
	157	5785	16.60	16.60
	165	5825	16.60	16.60
802.11an HT20 (6.5Mbps)	149	5745	17.60	17.60
	157	5785	17.50	17.60
	165	5825	17.60	17.60
802.11an HT40 (13.5Mbps)	151	5755	36.40	36.40
	159	5795	36.40	36.40



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

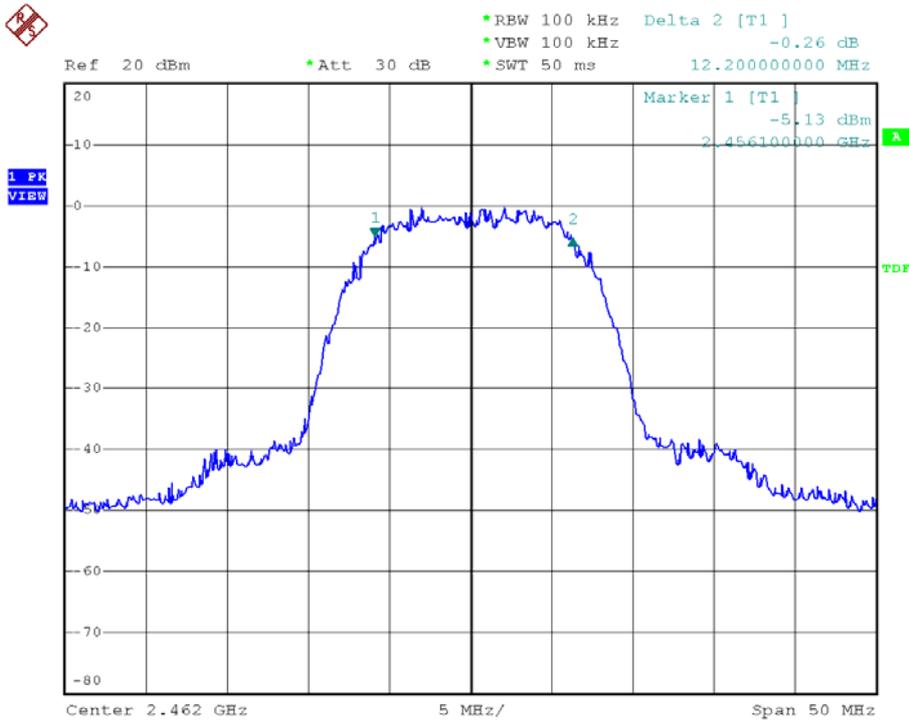


Modulation Standard: 802.11b (11Mbps), Antenna: L  
Channel: 06

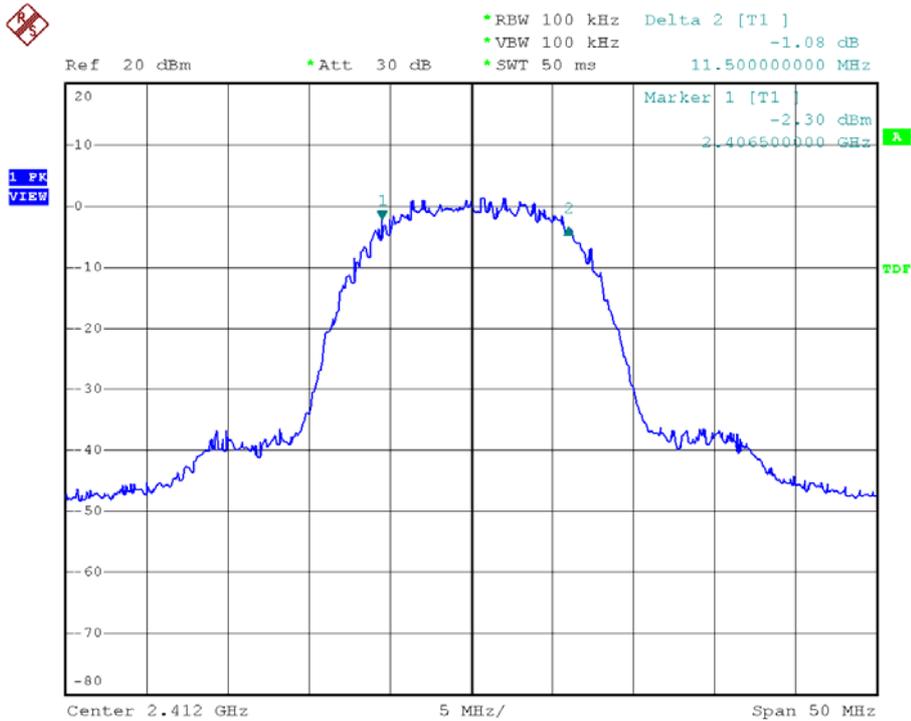




Modulation Standard: 802.11b (11Mbps), Antenna: L  
Channel: 11

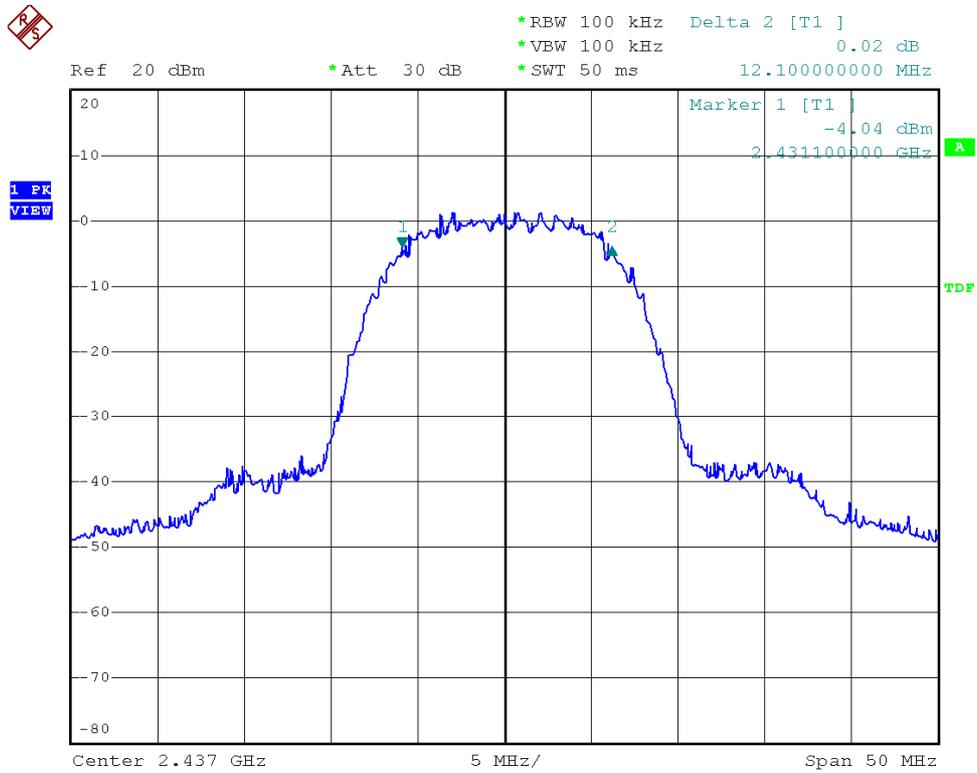


Modulation Standard: 802.11b (11Mbps), Antenna: R  
Channel: 01

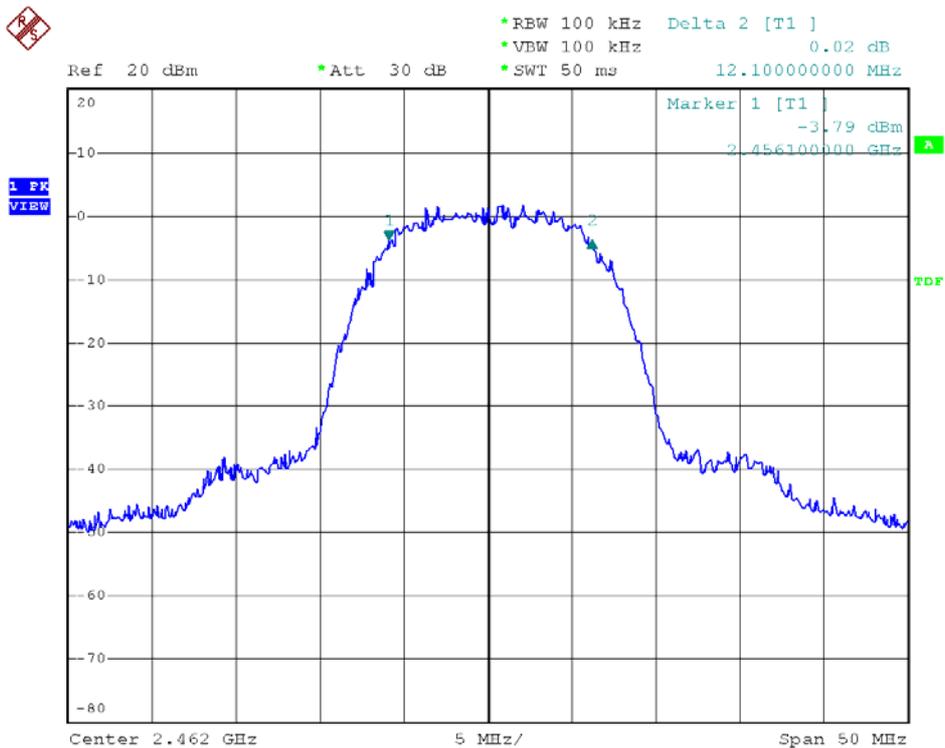




Modulation Standard: 802.11b (11Mbps), Antenna: R  
Channel: 06

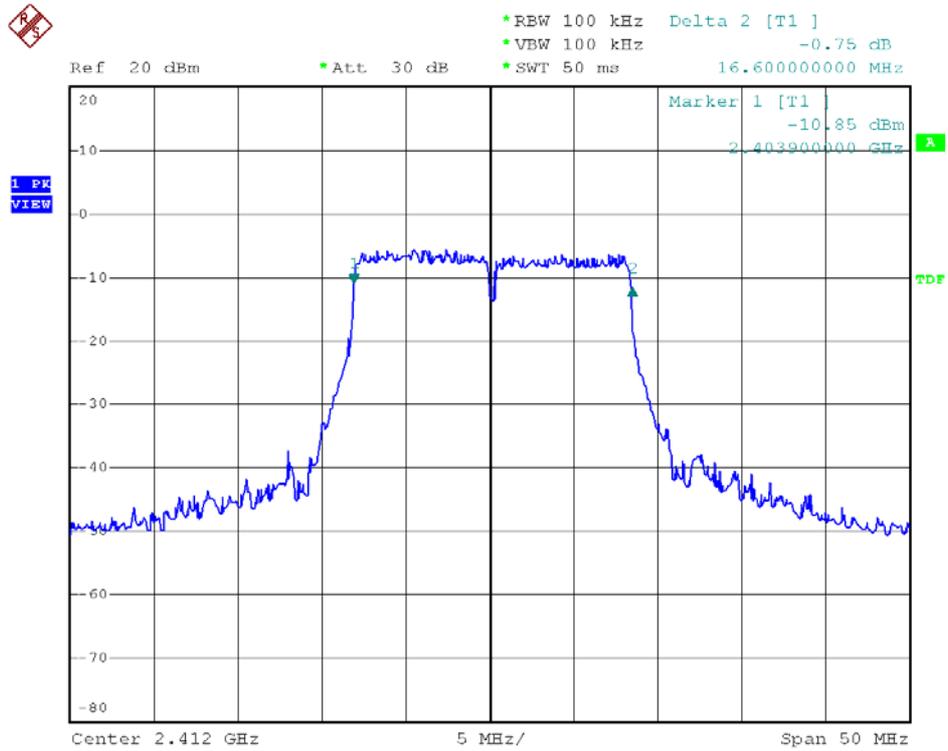


Modulation Standard: 802.11b (11Mbps), Antenna: R  
Channel: 11

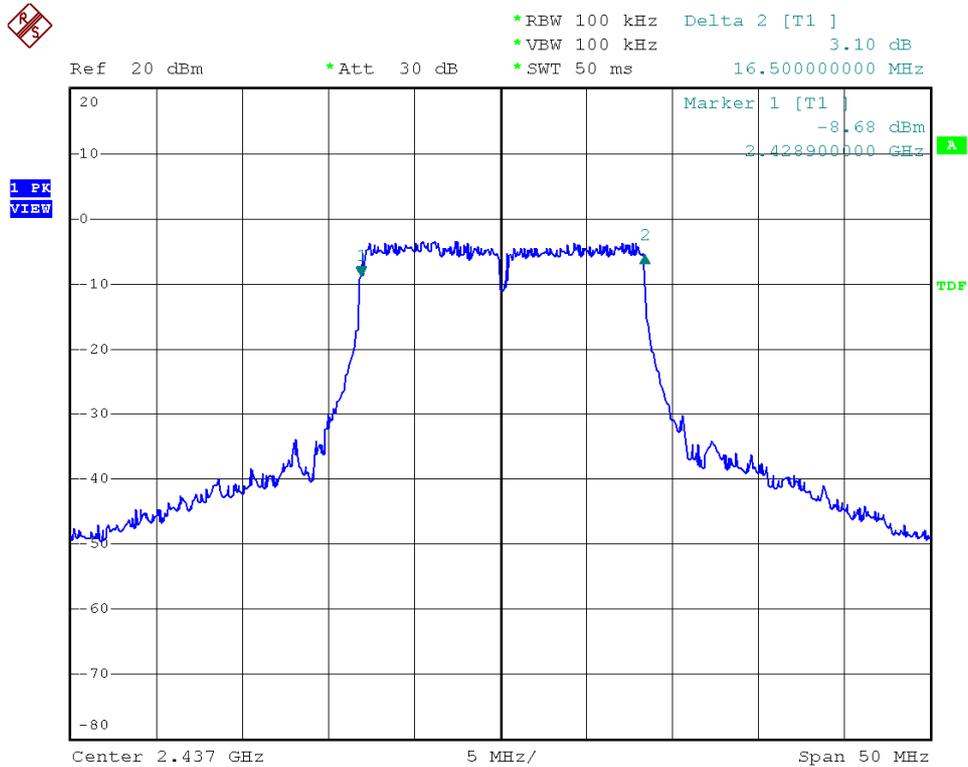




Modulation Standard: 802.11g (6Mbps), Antenna: L  
Channel: 01

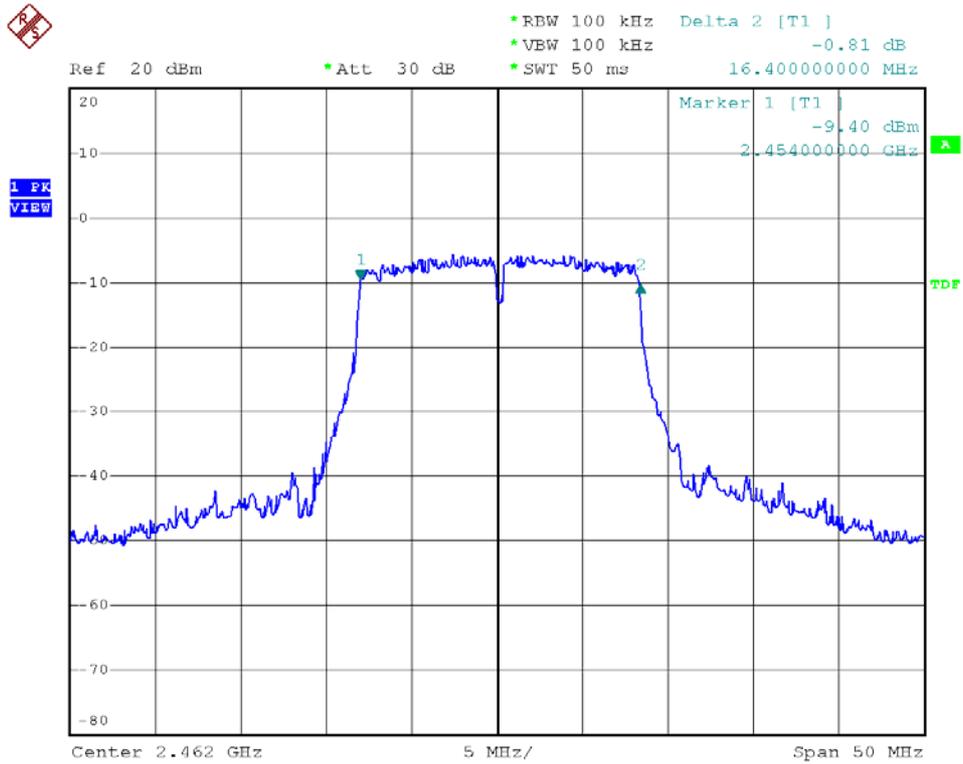


Modulation Standard: 802.11g (6Mbps), Antenna: L  
Channel: 06

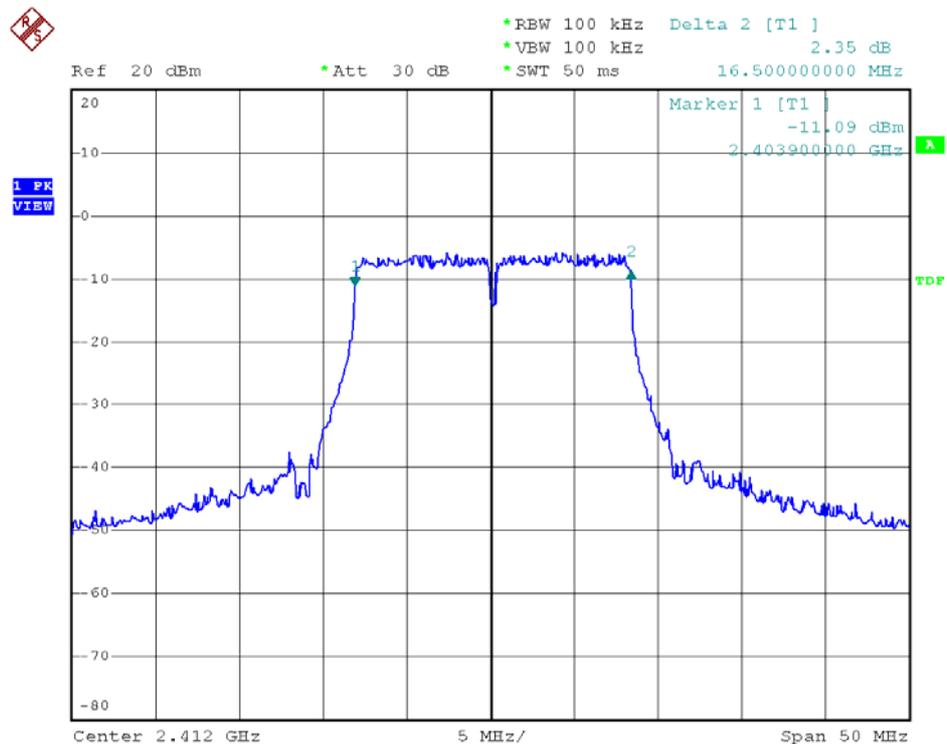




Modulation Standard: 802.11g (6Mbps), Antenna: L  
Channel: 11

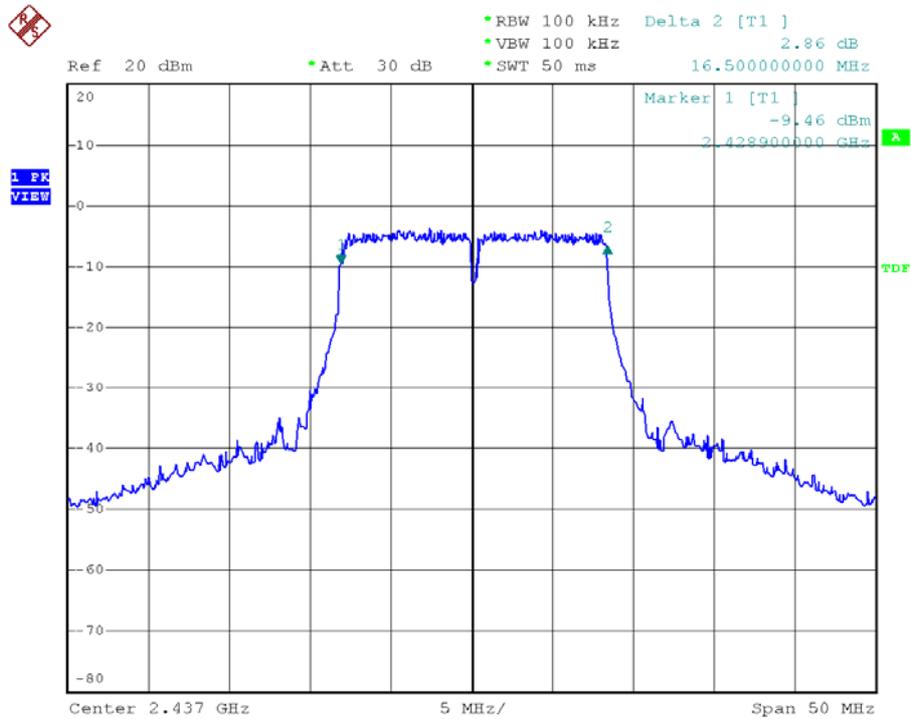


Modulation Standard: 802.11g (6Mbps), Antenna: R  
Channel: 01

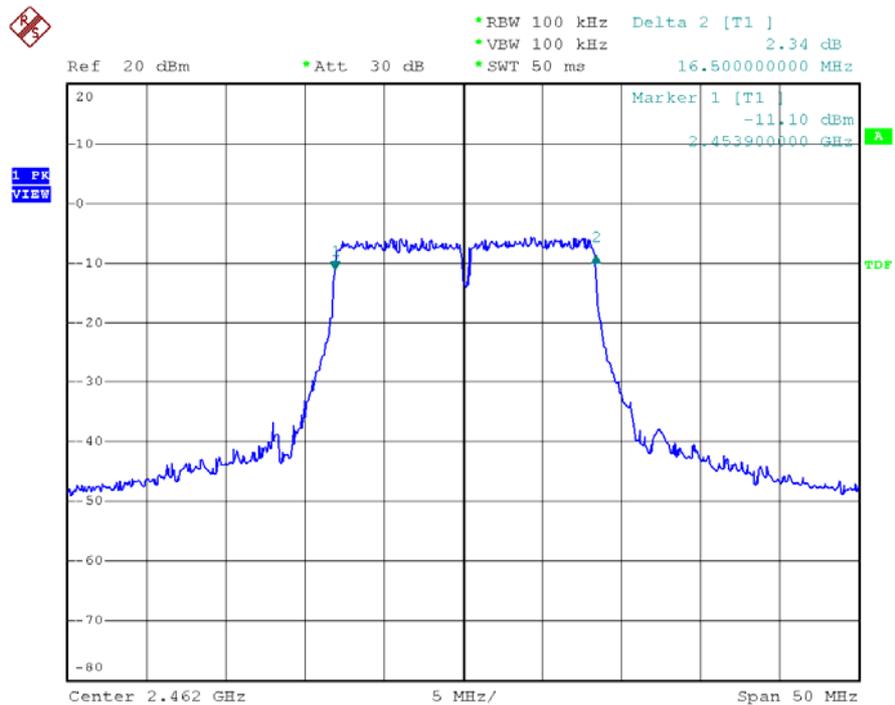




Modulation Standard: 802.11g (6Mbps), Antenna: R  
Channel: 06

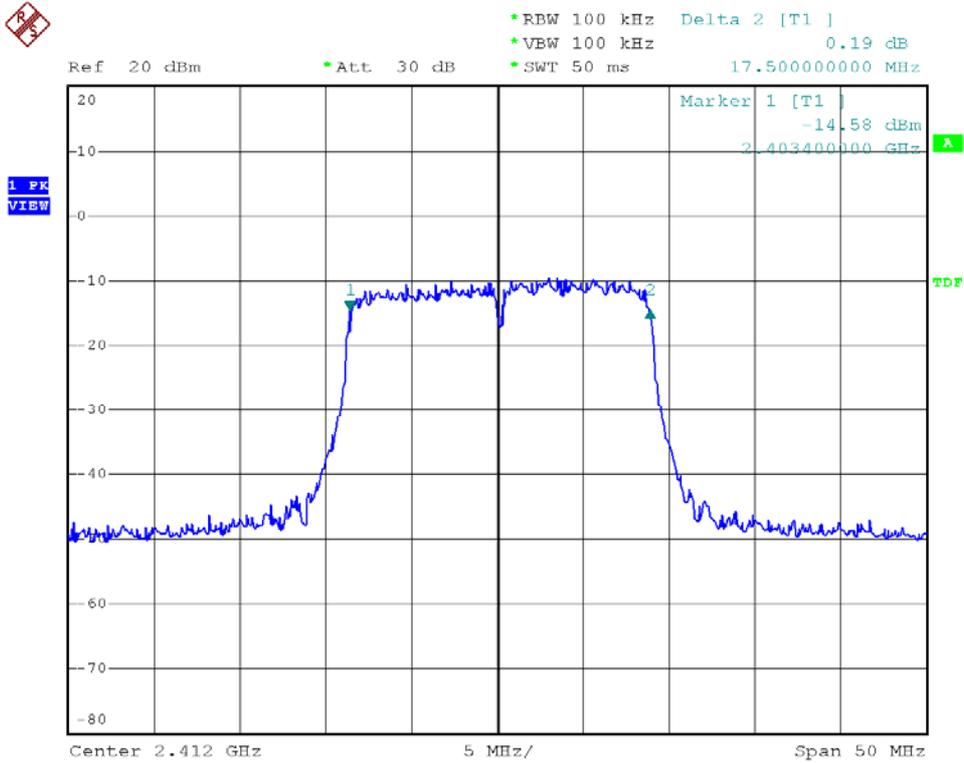


Modulation Standard: 802.11g (6Mbps), Antenna: R  
Channel: 11

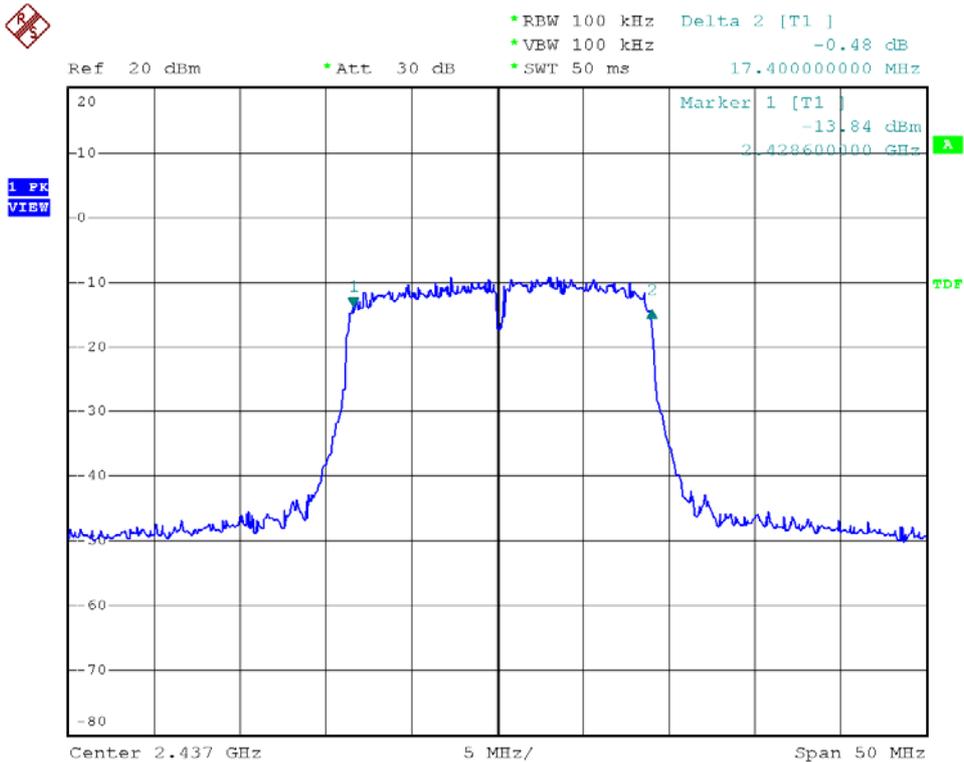




Modulation Standard: 802.11n HT20 (6.5Mbps), Antenna: L  
Channel: 01

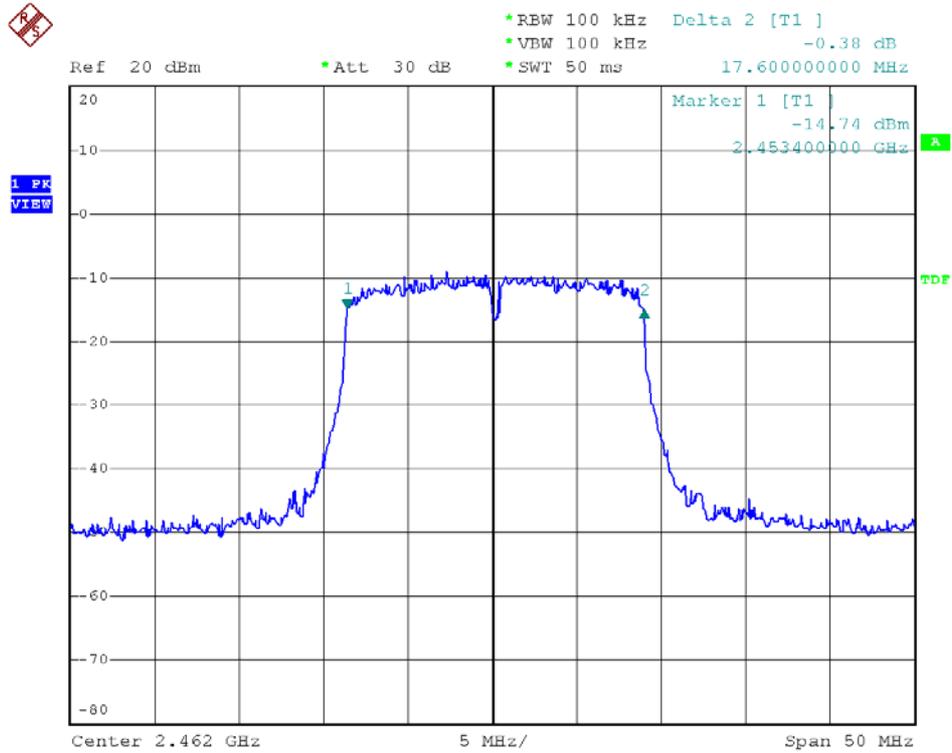


Modulation Standard: 802.11n HT20 (6.5Mbps), Antenna: L  
Channel: 06

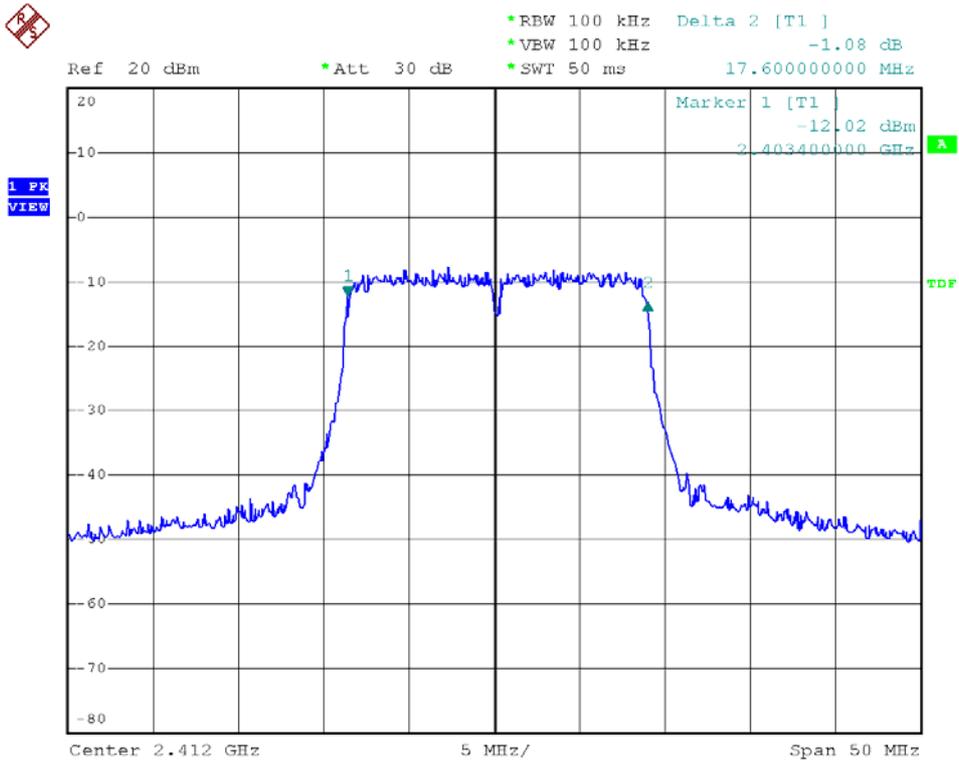




Modulation Standard: 802.11n HT20 (6.5Mbps), Antenna: L  
Channel: 11



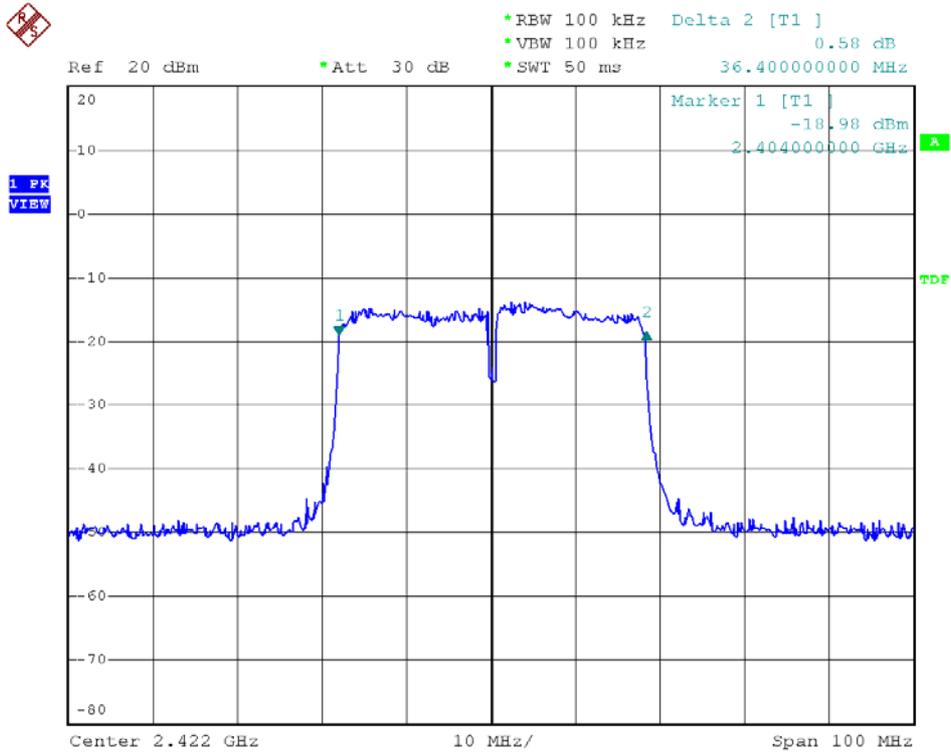
Modulation Standard: 802.11n HT20 (6.5Mbps), Antenna: R  
Channel: 01



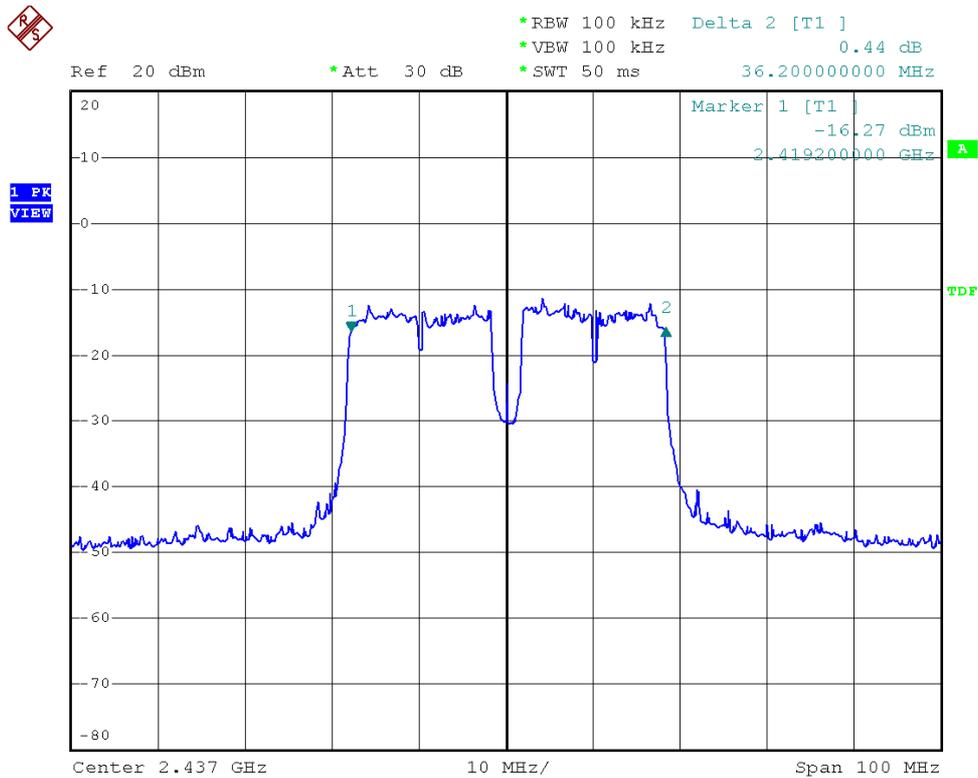




Modulation Standard: 802.11n HT40 (13.5Mbps), Antenna: L  
Channel: 03

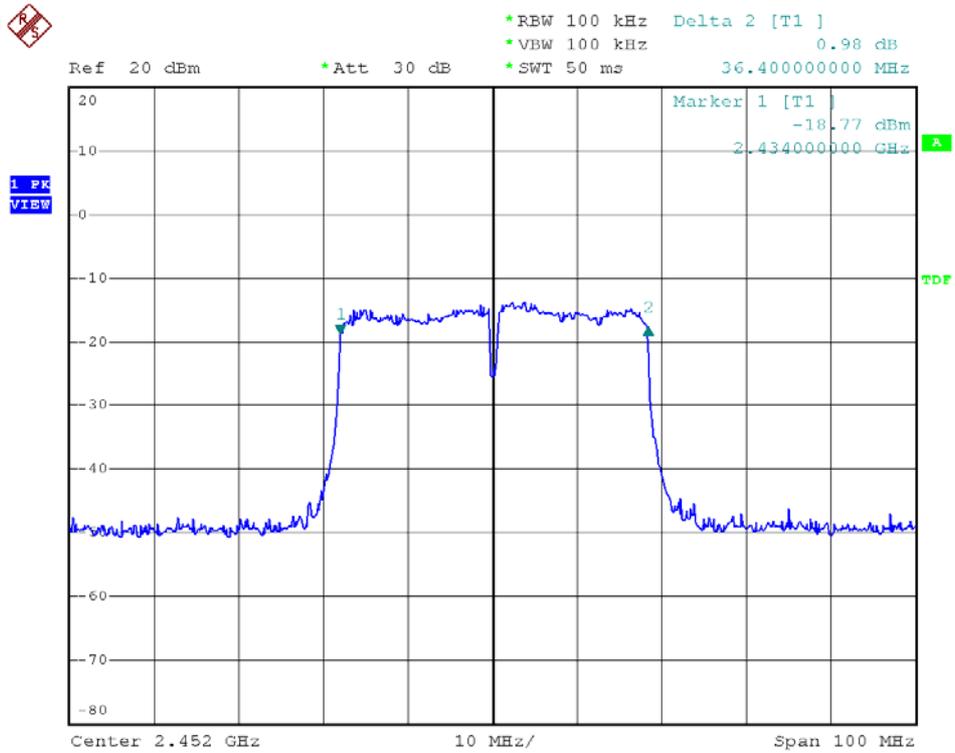


Modulation Standard: 802.11n HT40 (13.5Mbps), Antenna: L  
Channel: 06

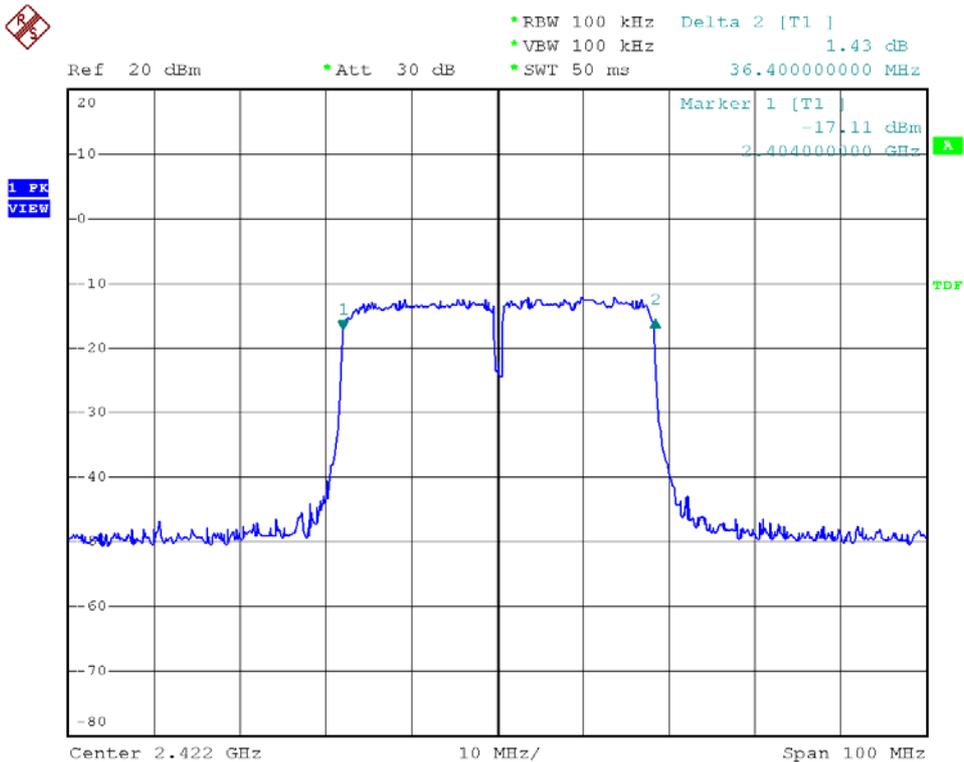




Modulation Standard: 802.11n HT40 (13.5Mbps), Antenna: L  
Channel: 09

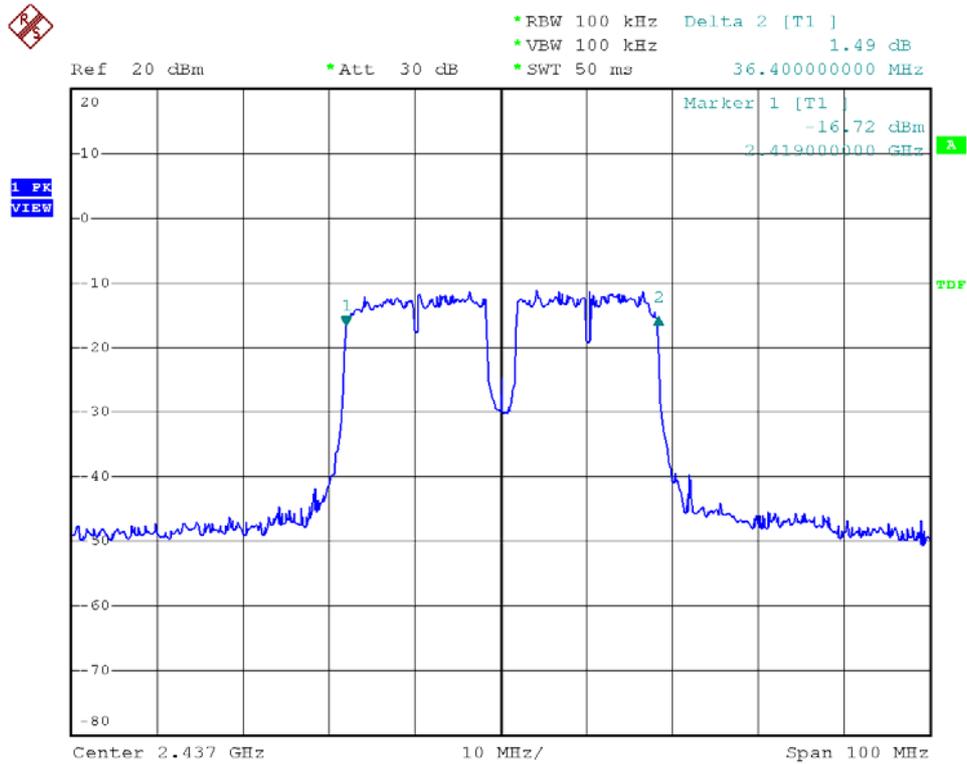


Modulation Standard: 802.11n HT40 (13.5Mbps), Antenna: R  
Channel: 03

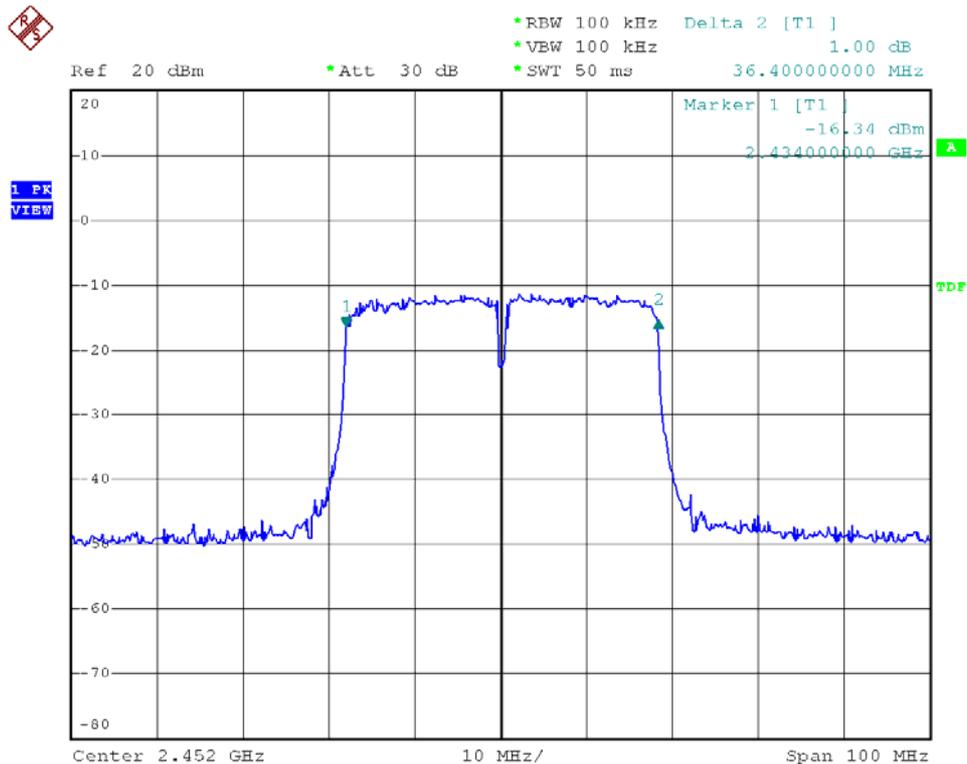




Modulation Standard: 802.11n HT40 (13.5Mbps), Antenna: R  
Channel: 06

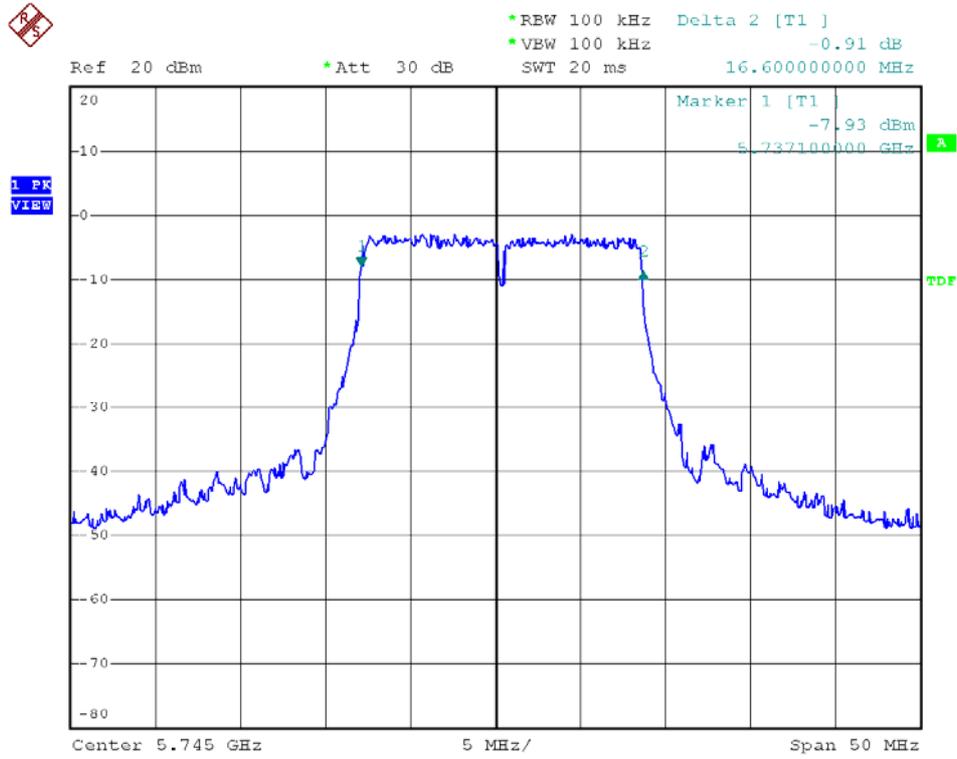


Modulation Standard: 802.11n HT40 (13.5Mbps), Antenna: R  
Channel: 09

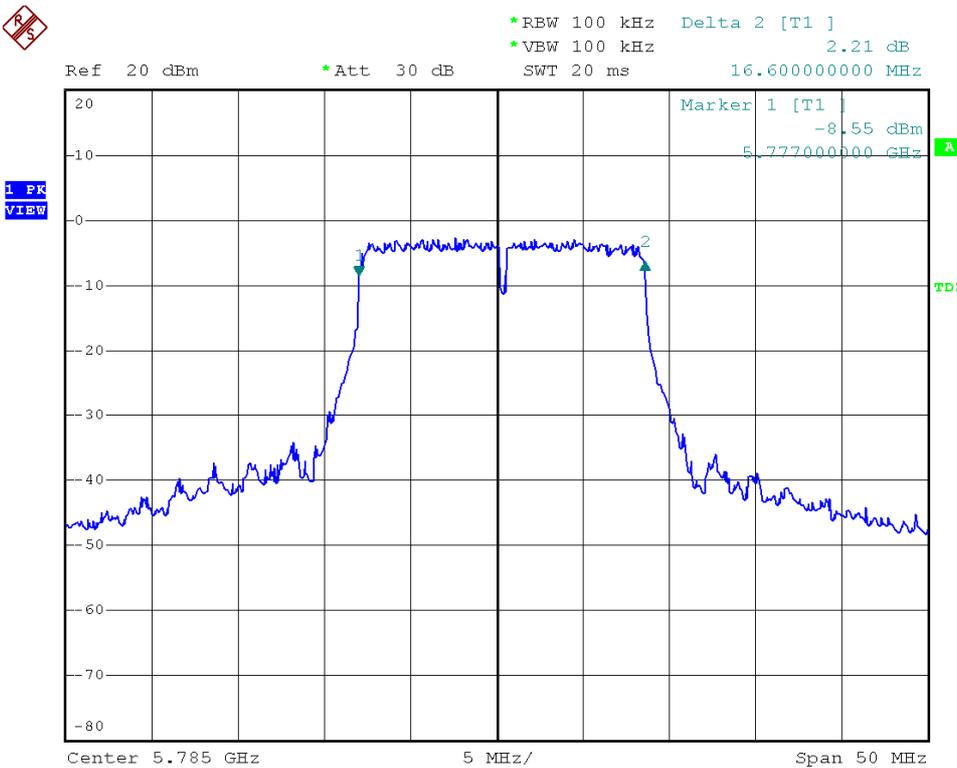




Modulation Standard: 802.11a (6Mbps), Antenna: L  
Channel: 149

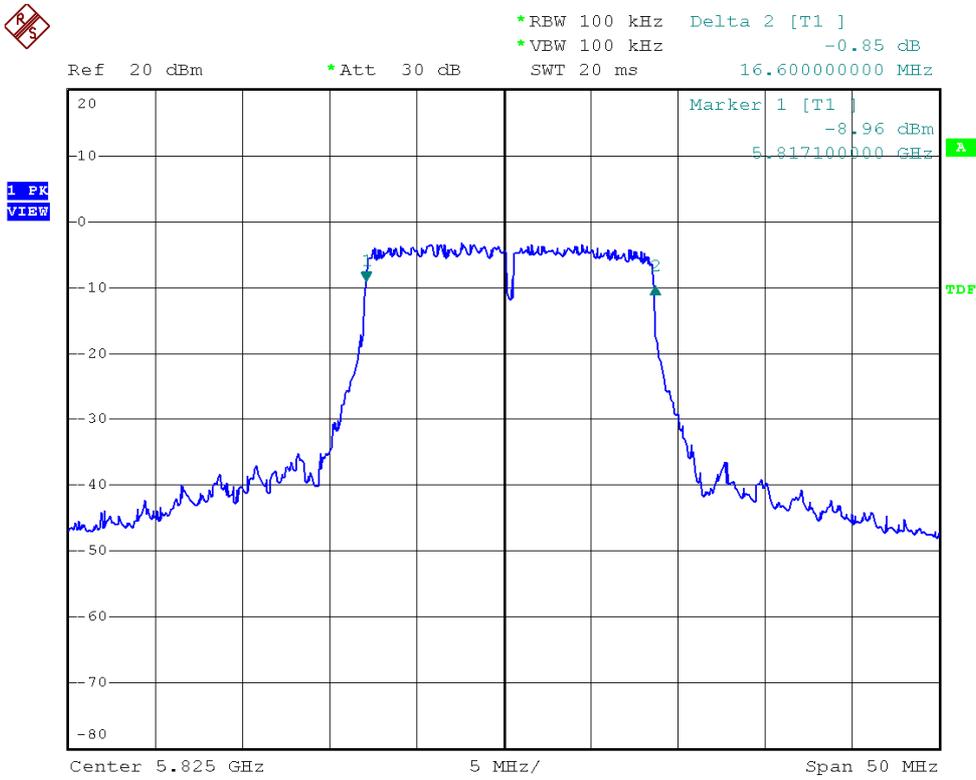


Modulation Standard: 802.11a (6Mbps), Antenna: L  
Channel: 157

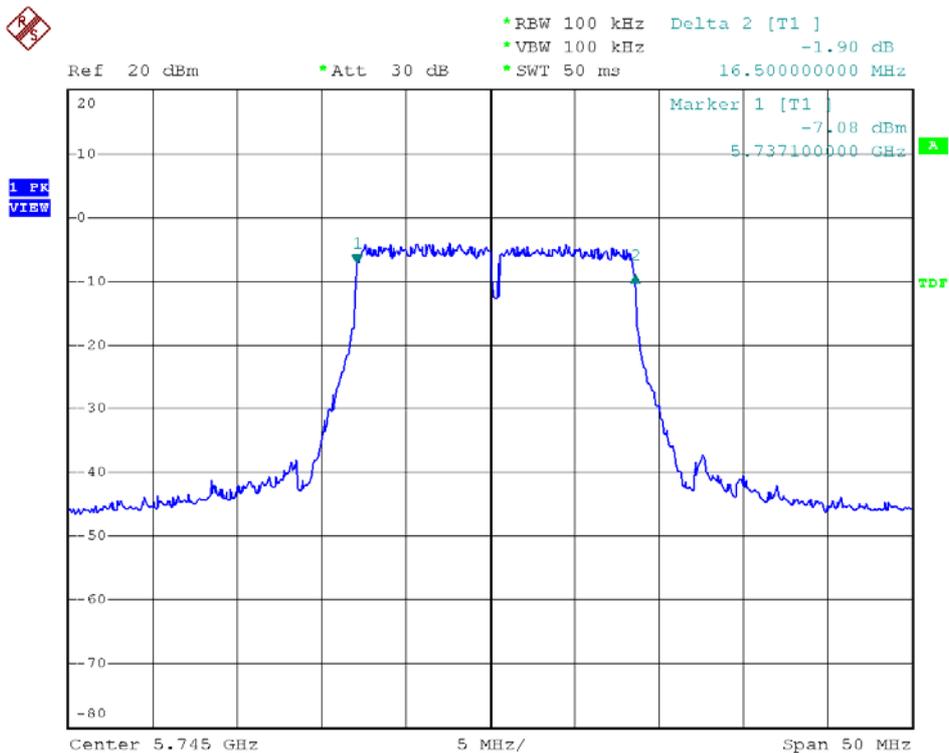




Modulation Standard: 802.11a (6Mbps), Antenna: L  
Channel: 165

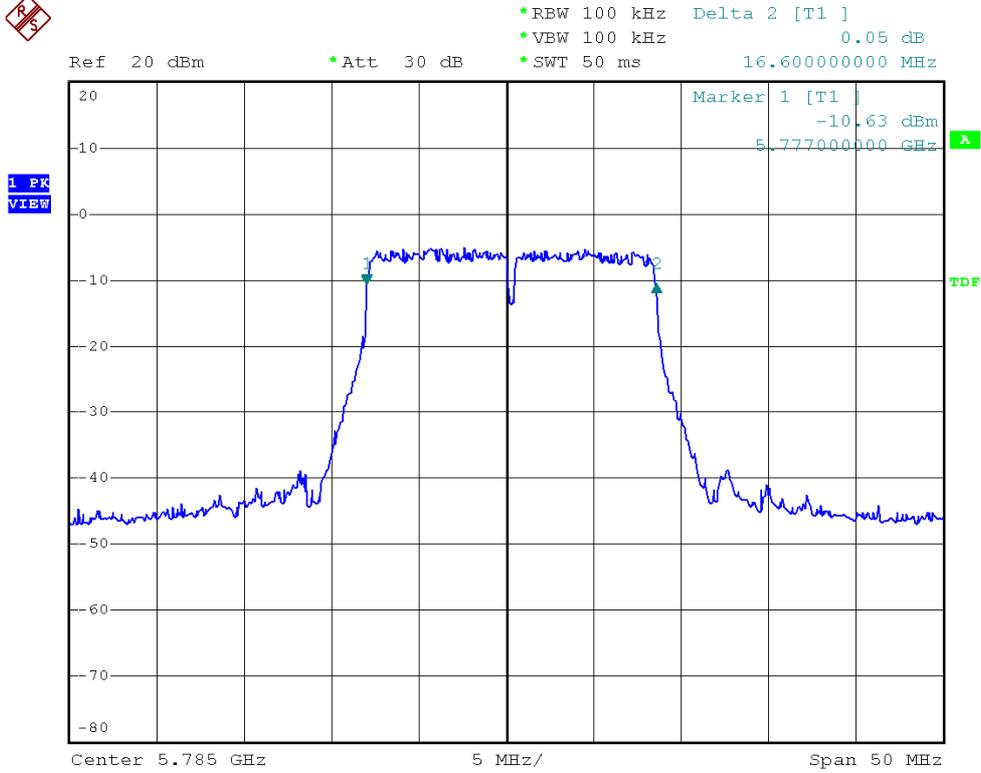


Modulation Standard: 802.11a (6Mbps), Antenna: R  
Channel: 149

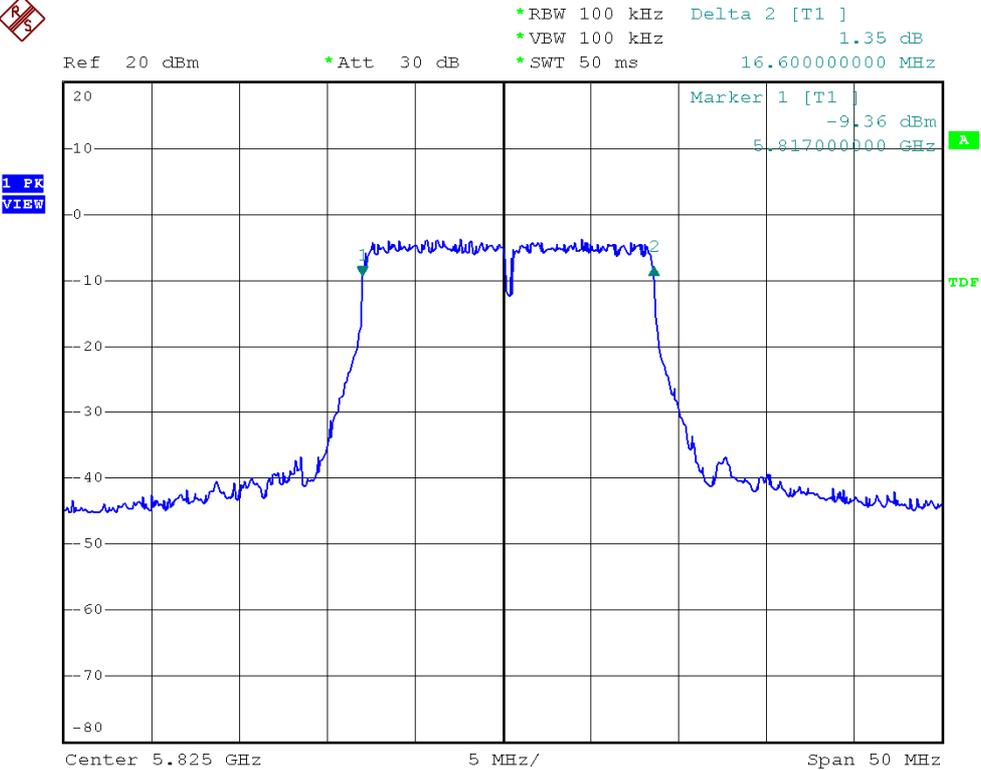




Modulation Standard: 802.11a (6Mbps), Antenna: R  
Channel: 157

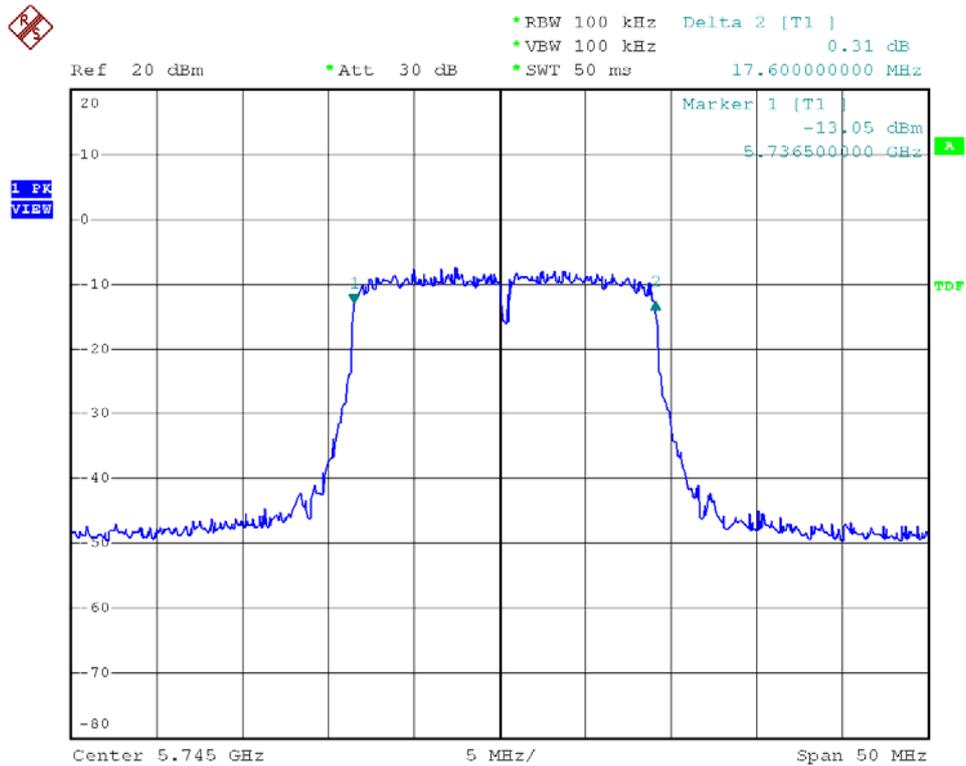


Modulation Standard: 802.11a (6Mbps), Antenna: R  
Channel: 165

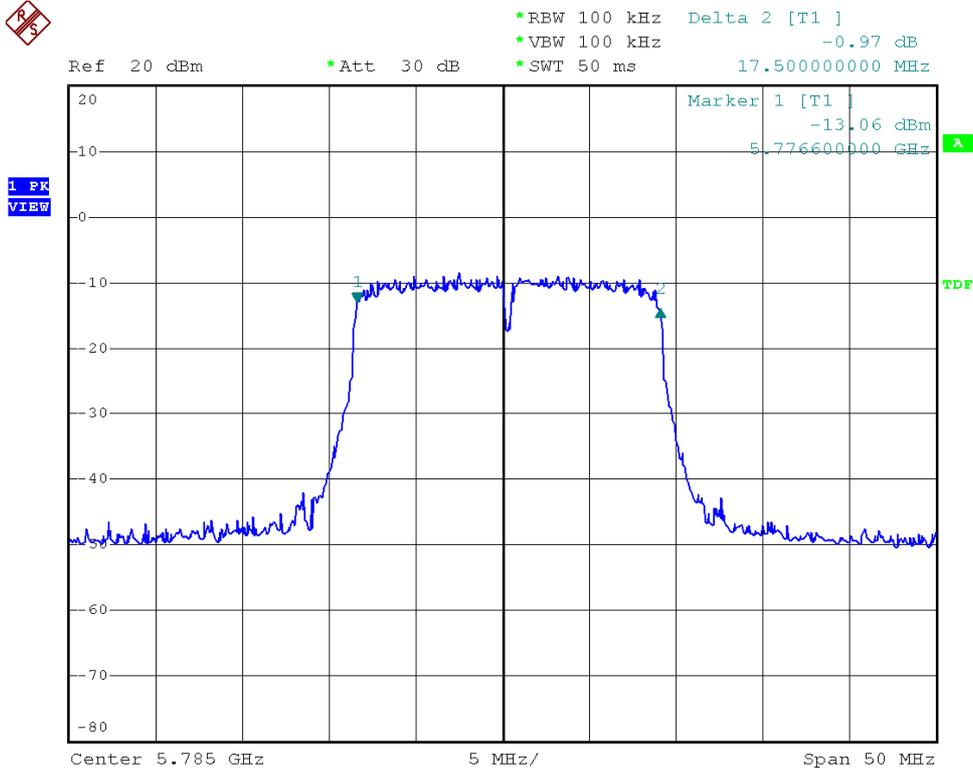




Modulation Standard: 802.11an HT20 (6.5Mbps), Antenna: L  
Channel: 149

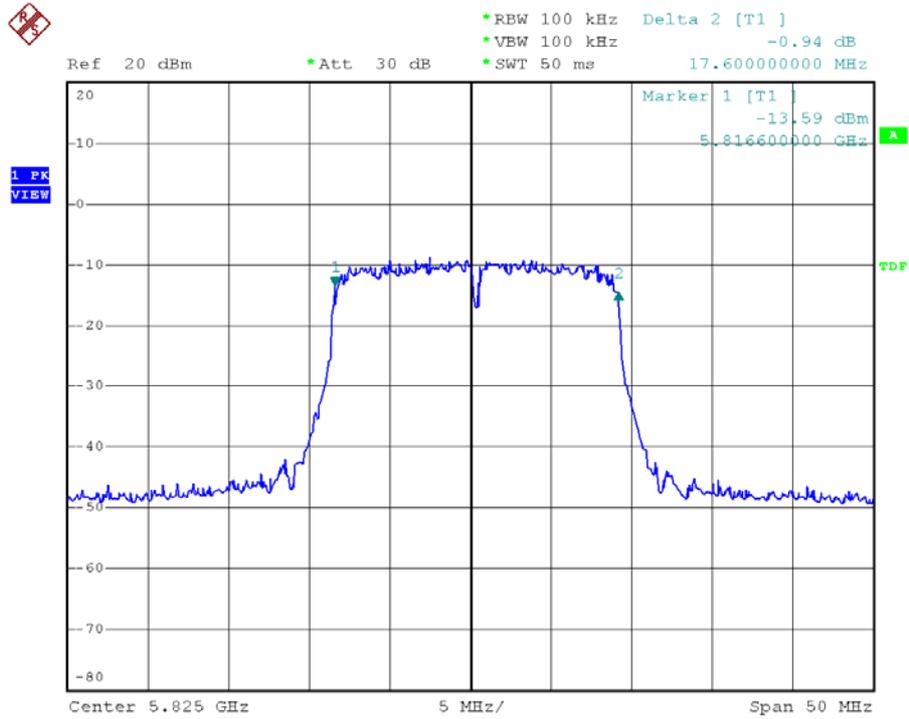


Modulation Standard: 802.11an HT20 (6.5Mbps), Antenna: L  
Channel: 157

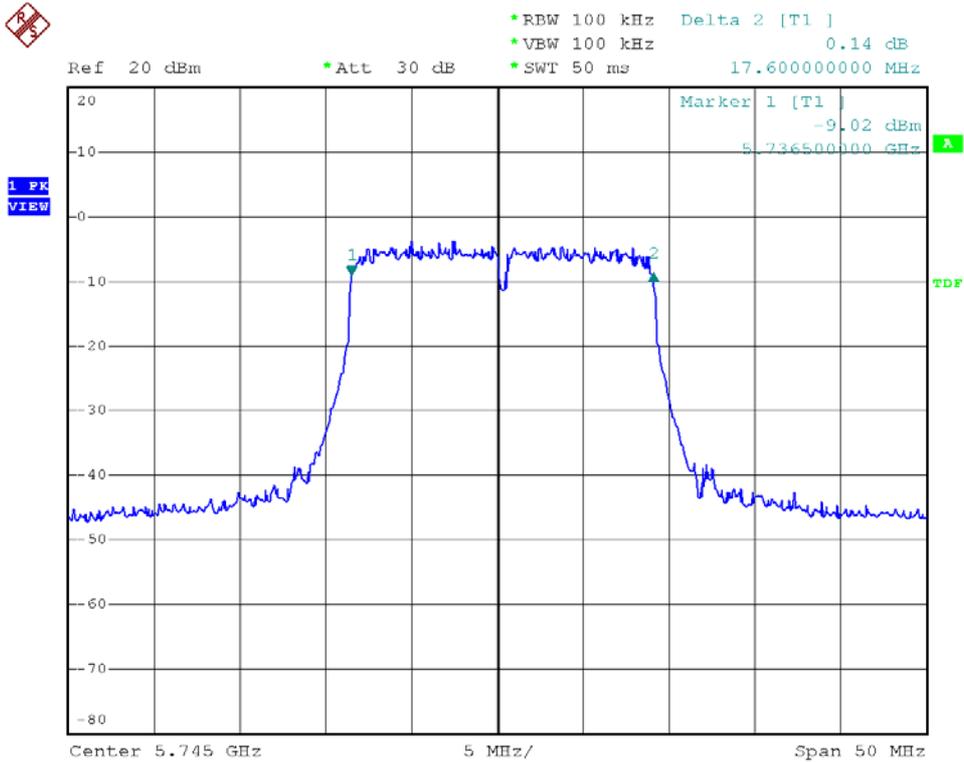




Modulation Standard: 802.11an HT20 (6.5Mbps), Antenna: L  
Channel: 165

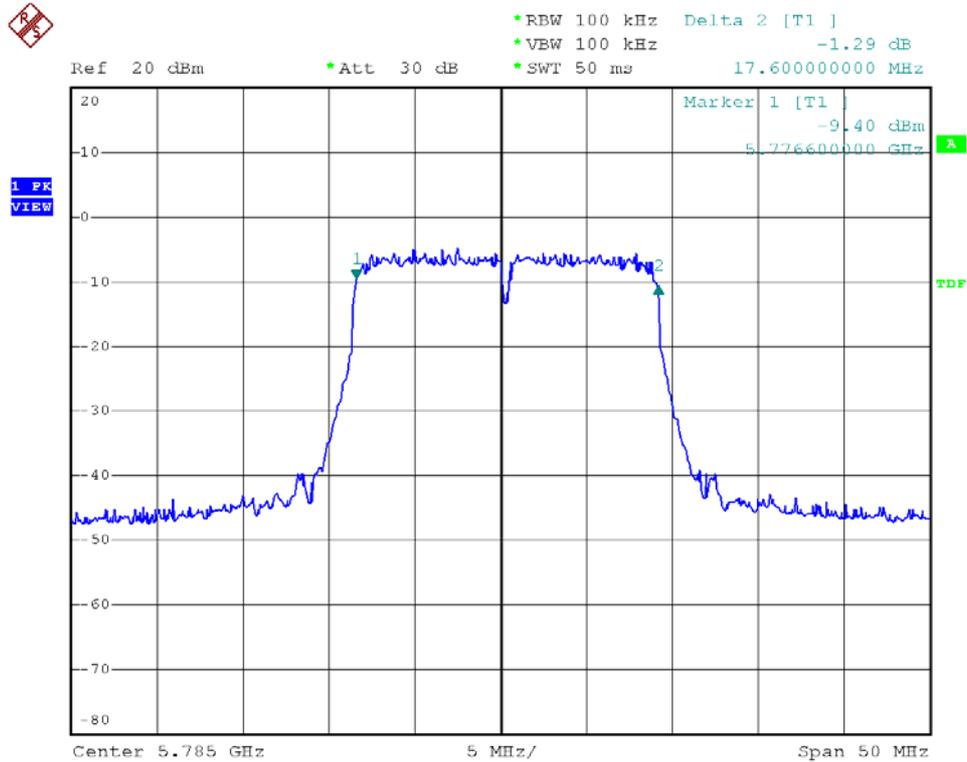


Modulation Standard: 802.11an HT20 (6.5Mbps), Antenna: R  
Channel: 149

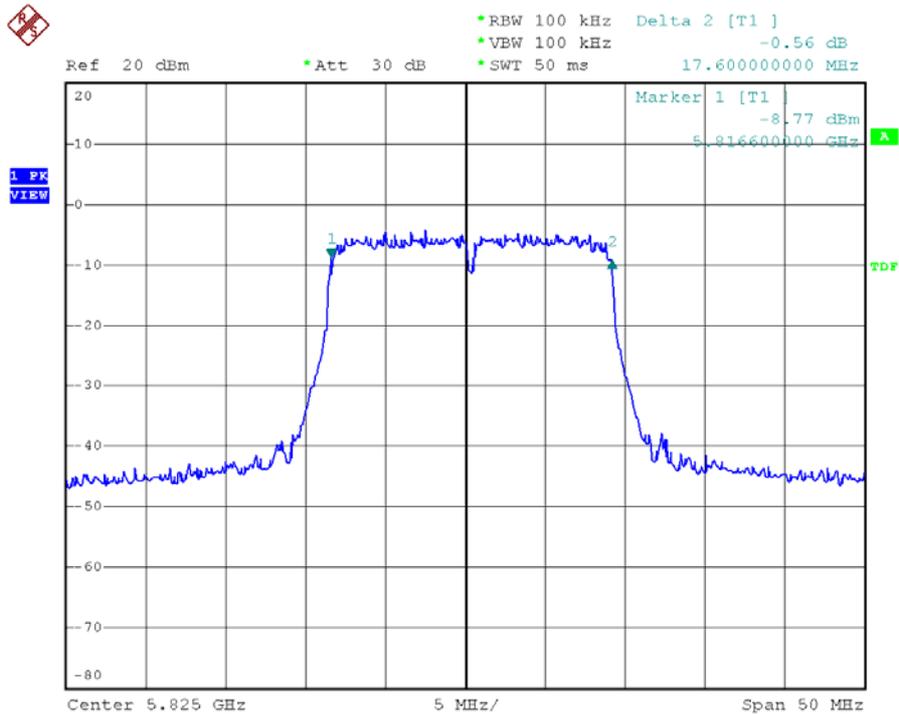




Modulation Standard: 802.11an HT20 (6.5Mbps), Antenna: R  
Channel: 157

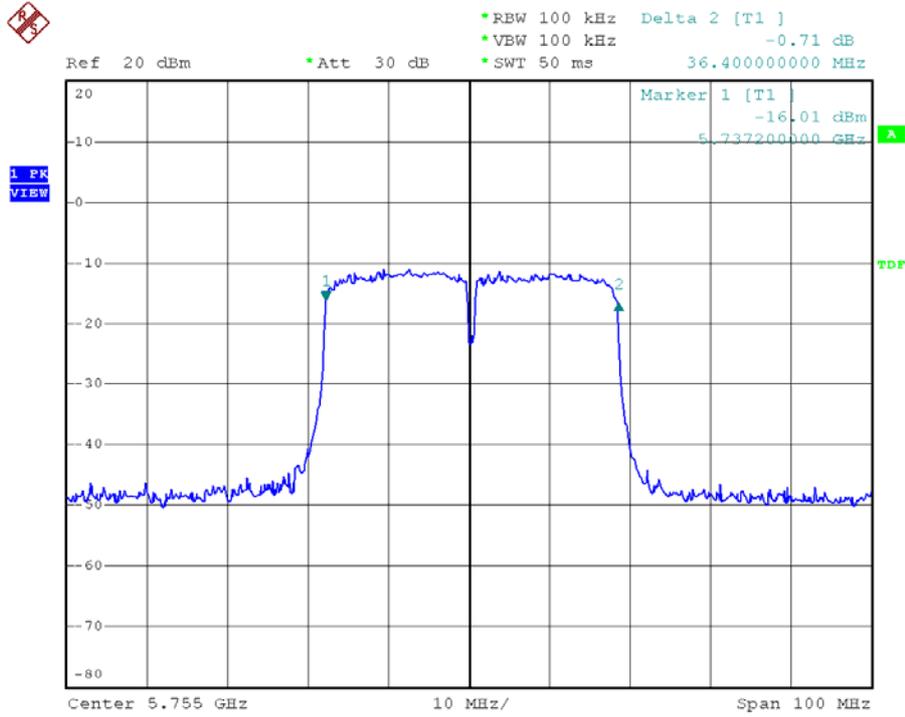


Modulation Standard: 802.11an HT20 (6.5Mbps), Antenna: R  
Channel: 165

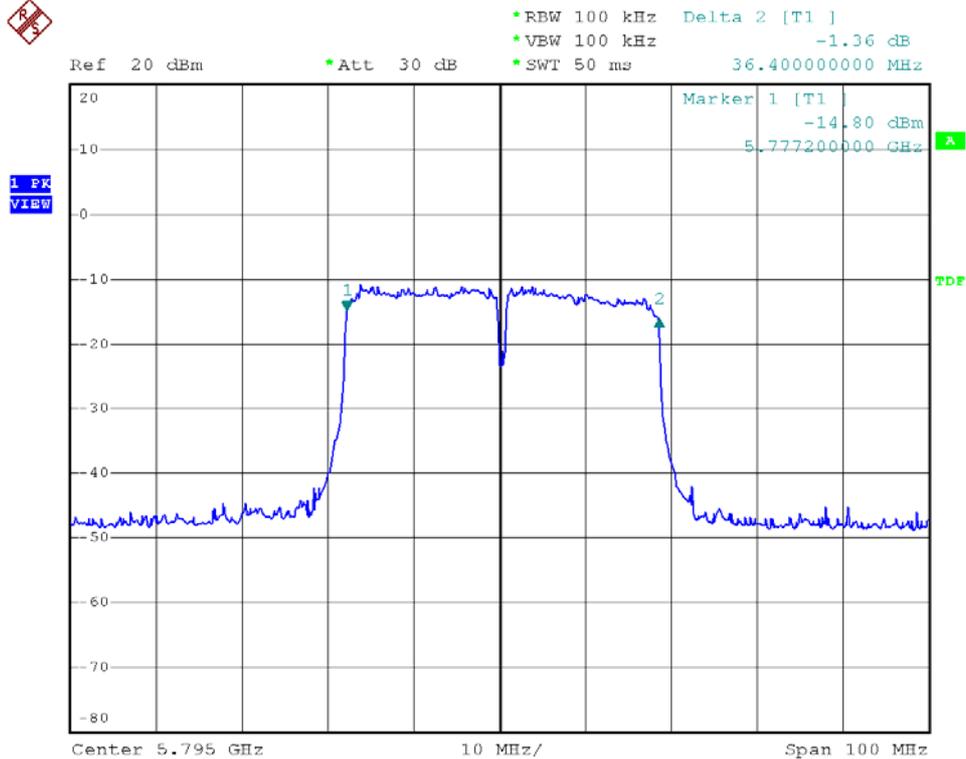




Modulation Standard: 802.11an HT40 (13.5Mbps), Antenna: L  
Channel: 151

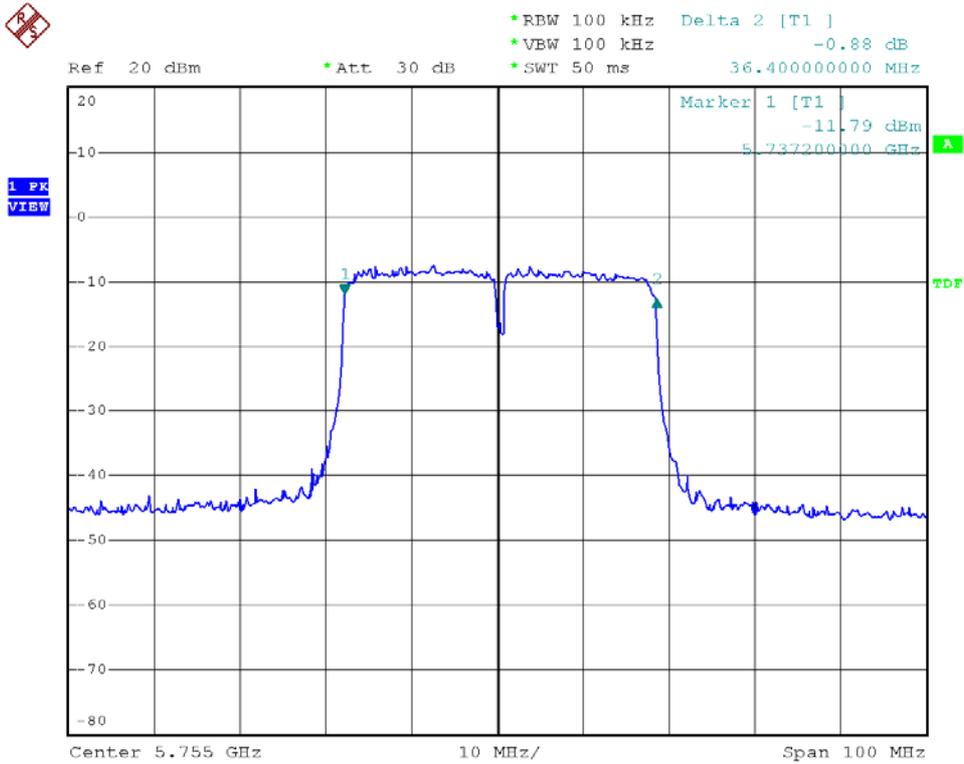


Modulation Standard: 802.11an HT40 (13.5Mbps), Antenna: L  
Channel: 159

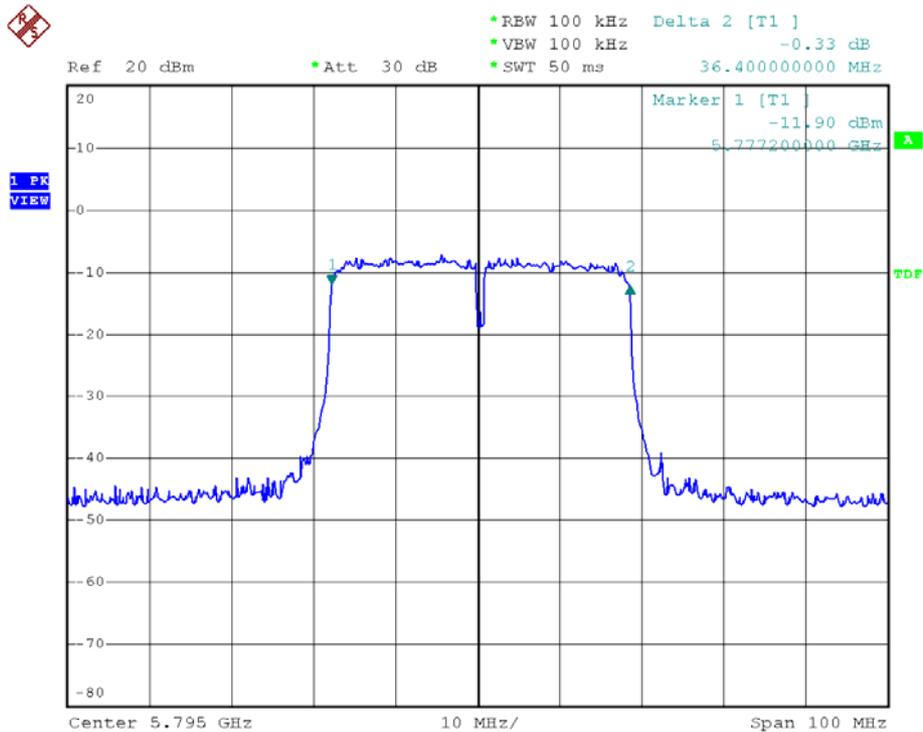




Modulation Standard: 802.11an HT40 (13.5Mbps), Antenna: R  
Channel: 151



Modulation Standard: 802.11an HT40 (13.5Mbps), Antenna: R  
Channel: 159





## 7. Maximum Peak Output Power

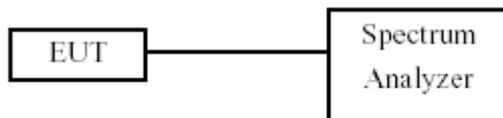
### 7.1 Test Limit

The Maximum Peak Output Power Measurement is 30dBm.

### 7.2 Test Procedures

The antenna port( RF output )of the EUT was connected to the input( RF input )of a power meter. Power was read directly from the meter 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.

### 7.3 Test Setup Layout



### 7.4 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

### 7.5 Test Result and Data

Test Date: Nov. 08, 2008

Temperature: 20

Atmospheric pressure: 1008 hPa

Humidity: 60%

Modulation Standard	Channel	Frequency (MHz)	Peak Power Output (dBm)		Peak Power Output (mW)	
			L	R	L	R
802.11b (11Mbps)	01	2412	17.86	18.17	61.1	65.6
	06	2437	19.55	19.78	90.2	95.1
	11	2462	17.90	17.77	61.7	59.8
802.11g (6Mbps)	01	2412	16.00	15.87	39.8	38.6
	06	2437	17.90	17.82	61.7	60.5
	11	2462	15.95	16.15	39.4	41.2



Test Date: Nov. 08, 2008

Temperature: 20

Atmospheric pressure: 1008 hPa

Humidity: 60%

Modulation Standard	Channel	Frequency (MHz)	Peak Power Output (dBm)			Peak Power Output (mW)
			L	R	L + R	L + R
802.11n HT20 (6.5Mbps)	01	2412	12.30	13.30	15.84	38.36
	06	2437	12.31	13.42	15.91	39.00
	11	2462	12.47	13.63	16.10	40.73
802.11n HT40 (13.5Mbps)	03	2422	10.24	13.58	15.23	33.37
	06	2437	11.66	14.67	16.43	43.96
	09	2452	11.36	13.87	15.80	38.06

Test Date: Nov. 10, 2008

Temperature: 20

Atmospheric pressure: 1008 hPa

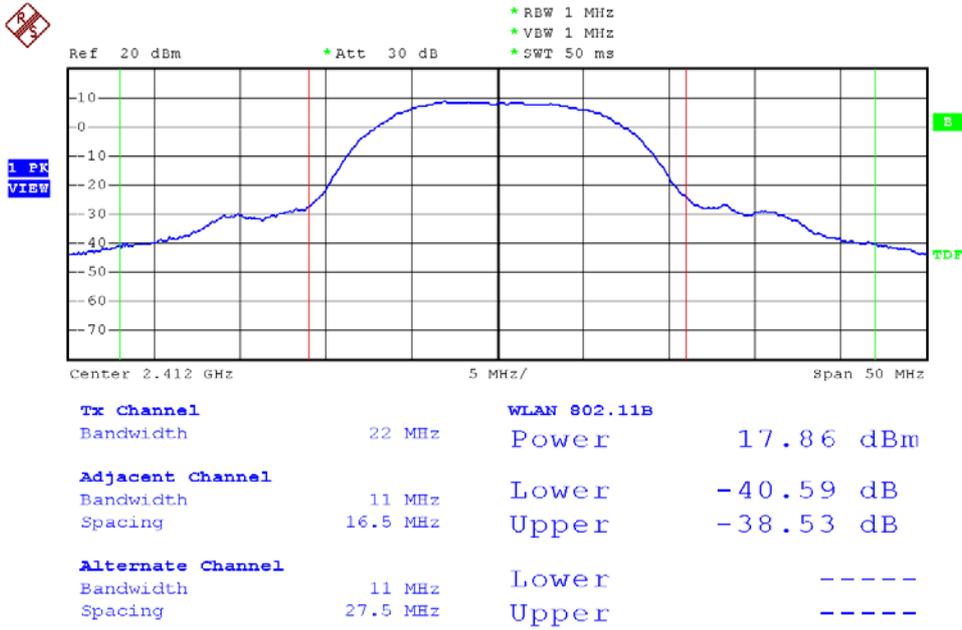
Humidity: 60%

Modulation Standard	Channel	Frequency (MHz)	Peak Power Output (dBm)		Peak Power Output (mW)	
			L	R	L	R
802.11a (6Mbps)	149	5745	18.32	18.40	67.90	69.20
	157	5785	18.48	18.37	70.50	68.70
	165	5825	18.18	17.75	65.80	59.60

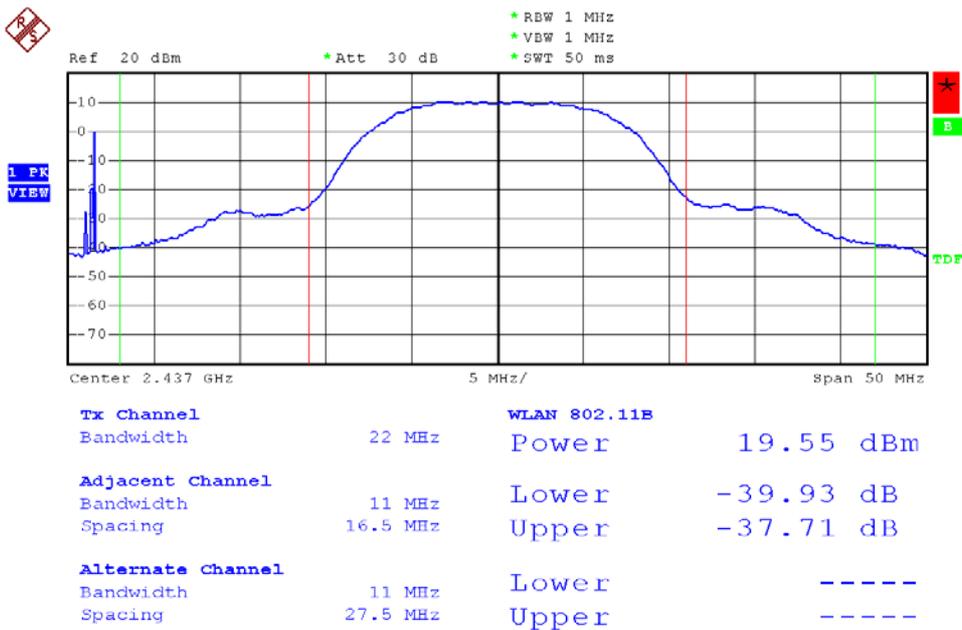
Modulation Standard	Channel	Frequency (MHz)	Peak Power Output (dBm)			Peak Power Output (mW)
			L	R	L + R	L + R
802.11an HT20 (6.5Mbps)	149	5745	13.50	17.06	18.65	73.20
	157	5785	12.52	16.68	18.09	64.42
	165	5825	12.43	17.01	18.31	67.73
802.11an HT40 (13.5Mbps)	151	5755	13.36	16.75	18.39	68.99
	159	5795	13.26	17.12	18.62	72.71



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

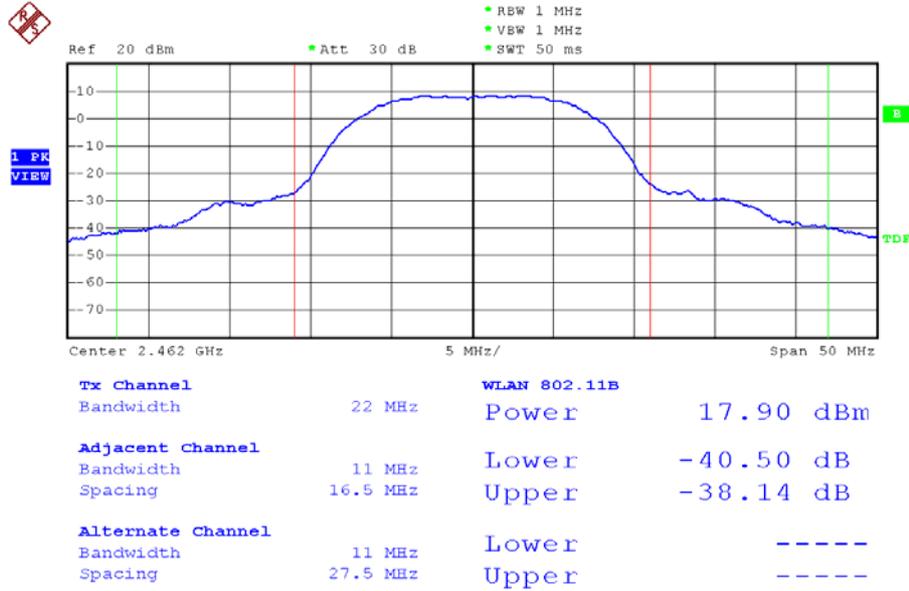


Modulation Standard: 802.11b (11Mbps), Antenna: L  
Channel: 06

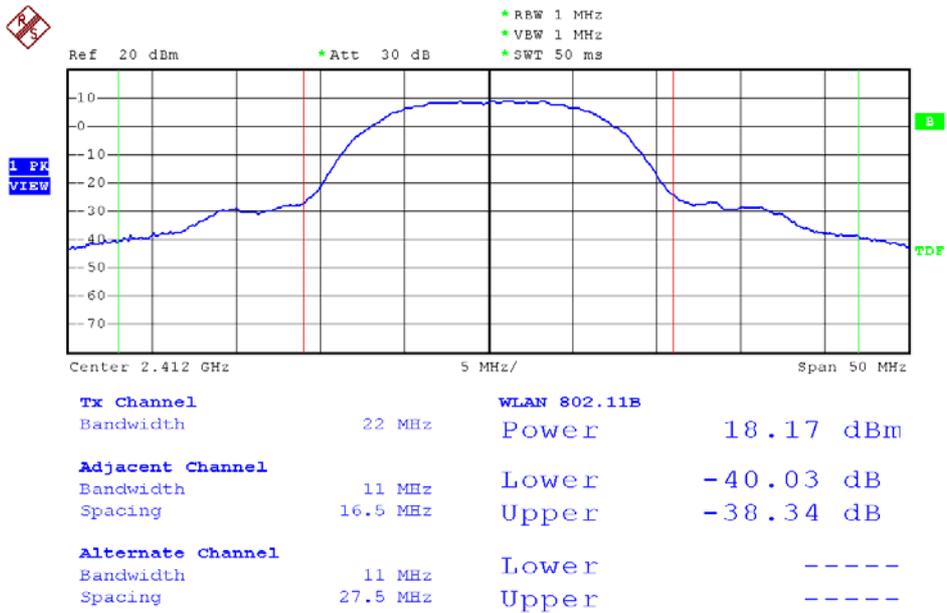




Modulation Standard: 802.11b (11Mbps), Antenna: L  
Channel: 11

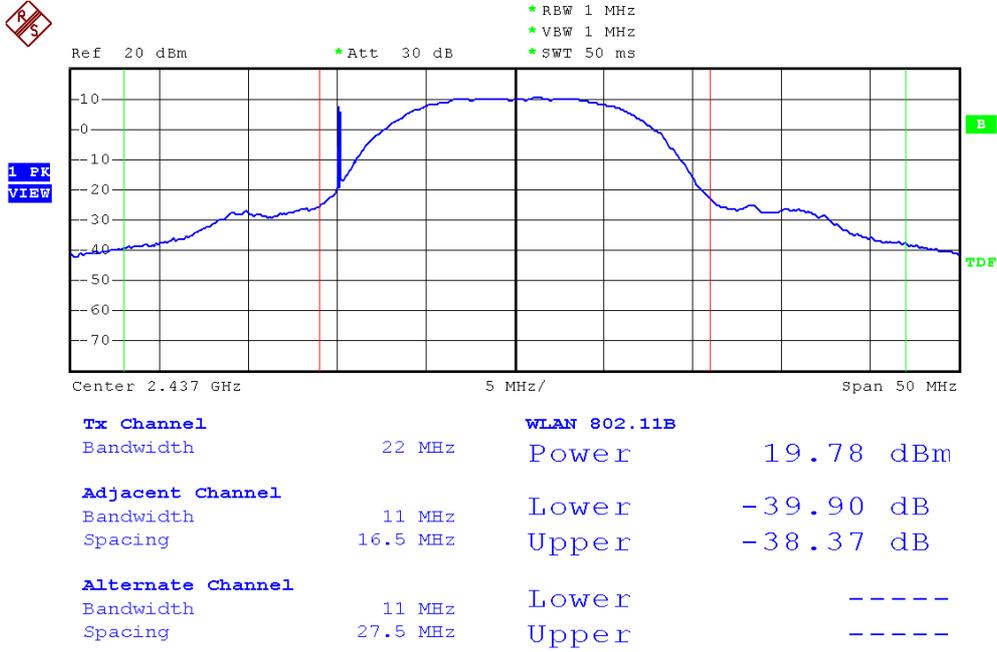


Modulation Standard: 802.11b (11Mbps), Antenna: R  
Channel: 01

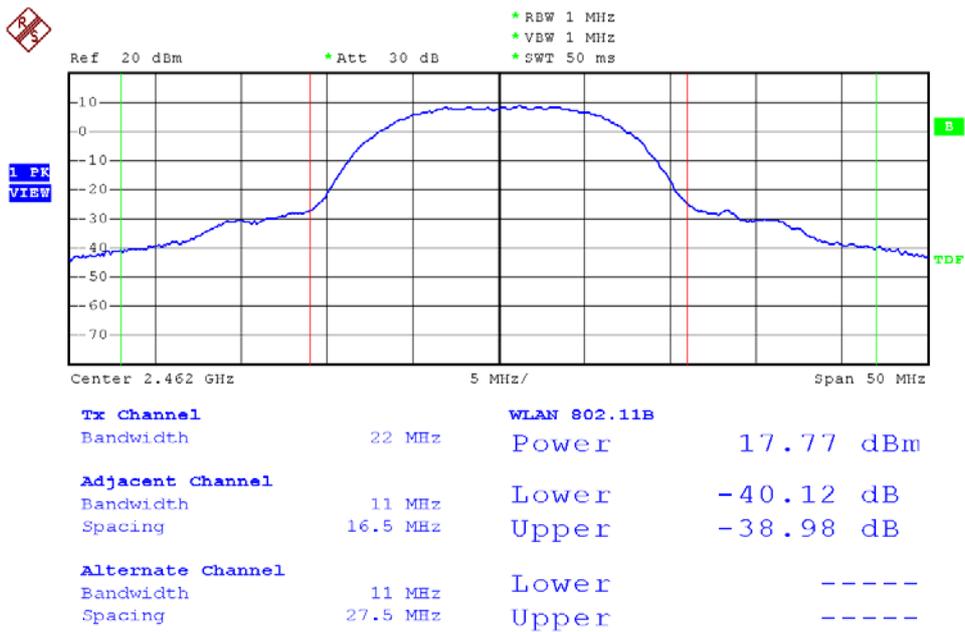




Modulation Standard: 802.11b (11Mbps), Antenna: R  
Channel: 06

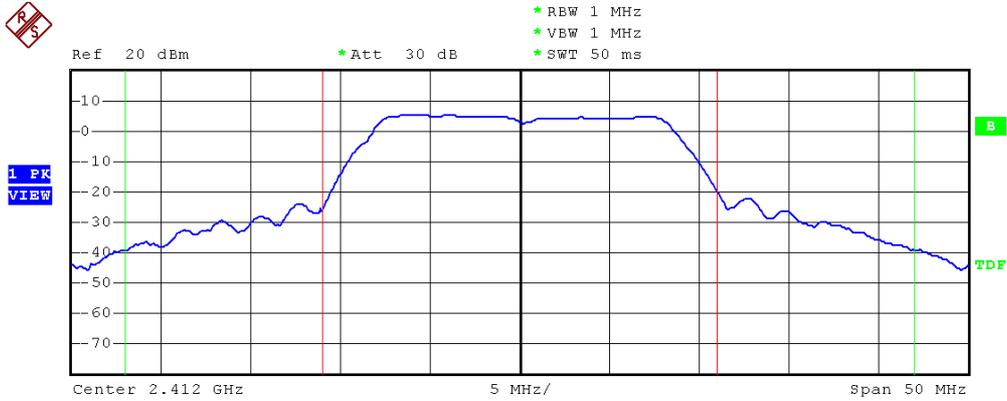


Modulation Standard: 802.11b (11Mbps), Antenna: R  
Channel: 11



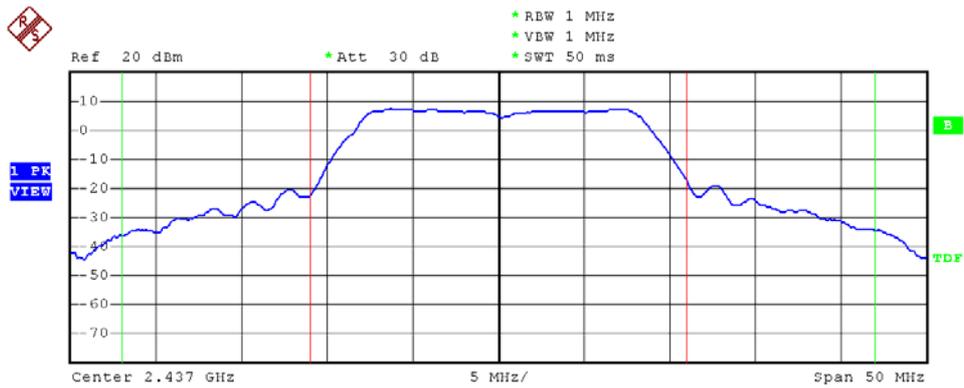


Modulation Standard: 802.11g (6Mbps), Antenna: L  
Channel: 01



<b>Tx Channel</b>		<b>WLAN 802.11B</b>	
Bandwidth	22 MHz	Power	16.00 dBm
<b>Adjacent Channel</b>		Lower	-36.05 dB
Bandwidth	11 MHz	Upper	-33.95 dB
Spacing	16.5 MHz		
<b>Alternate Channel</b>		Lower	-----
Bandwidth	11 MHz	Upper	-----
Spacing	27.5 MHz		

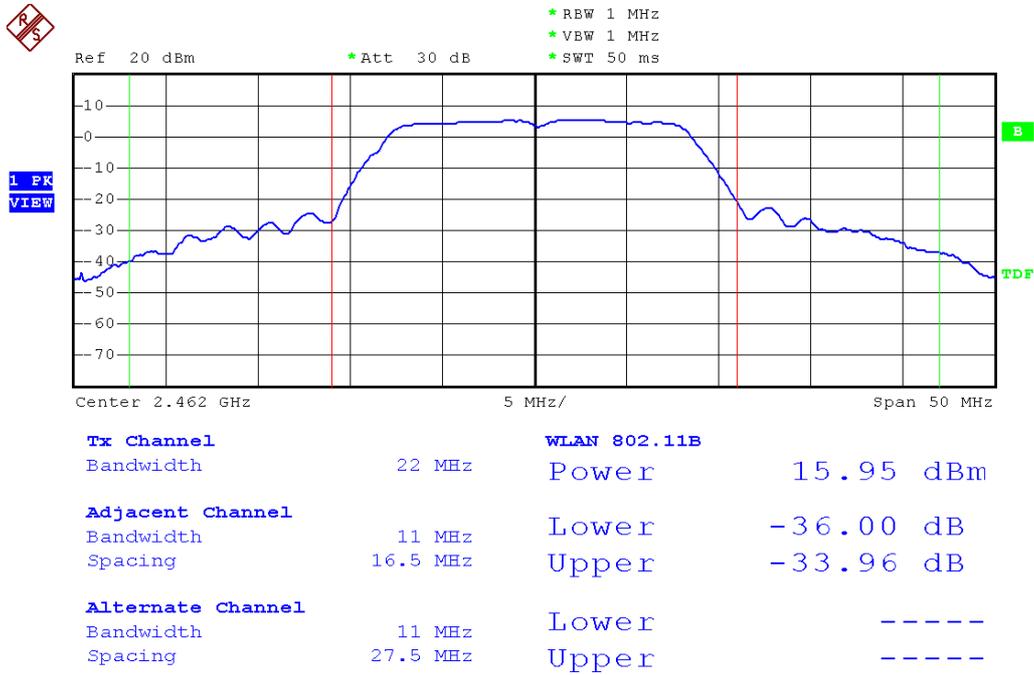
Modulation Standard: 802.11g (6Mbps), Antenna: L  
Channel: 06



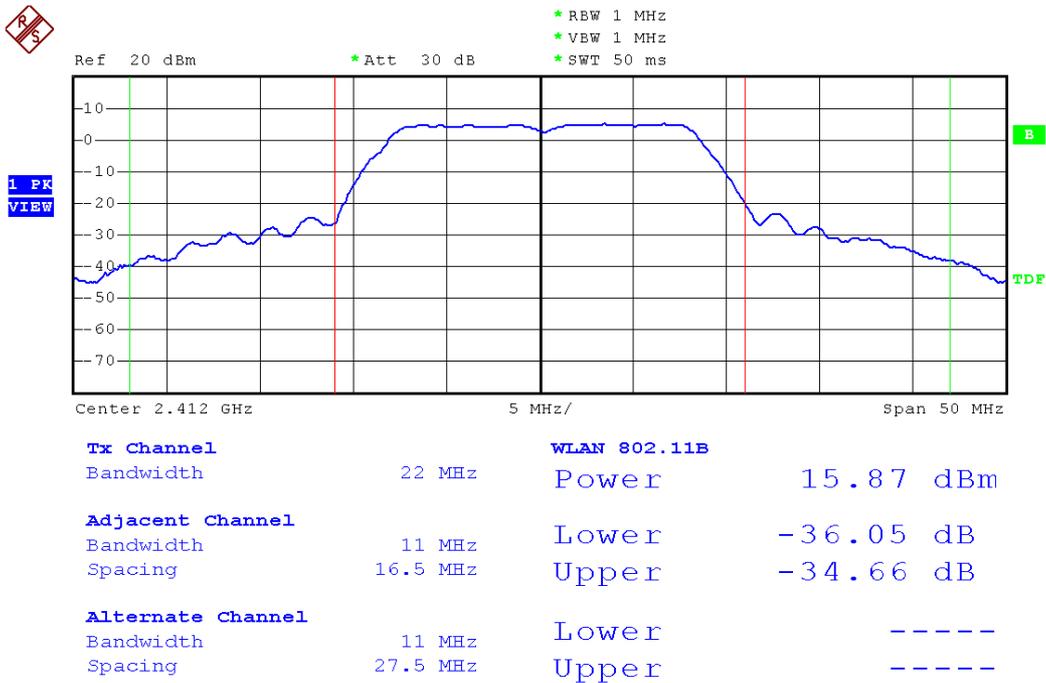
<b>Tx Channel</b>		<b>WLAN 802.11B</b>	
Bandwidth	22 MHz	Power	17.90 dBm
<b>Adjacent Channel</b>		Lower	-34.57 dB
Bandwidth	11 MHz	Upper	-32.79 dB
Spacing	16.5 MHz		
<b>Alternate Channel</b>		Lower	-----
Bandwidth	11 MHz	Upper	-----
Spacing	27.5 MHz		



Modulation Standard: 802.11g (6Mbps), Antenna: L  
Channel: 11

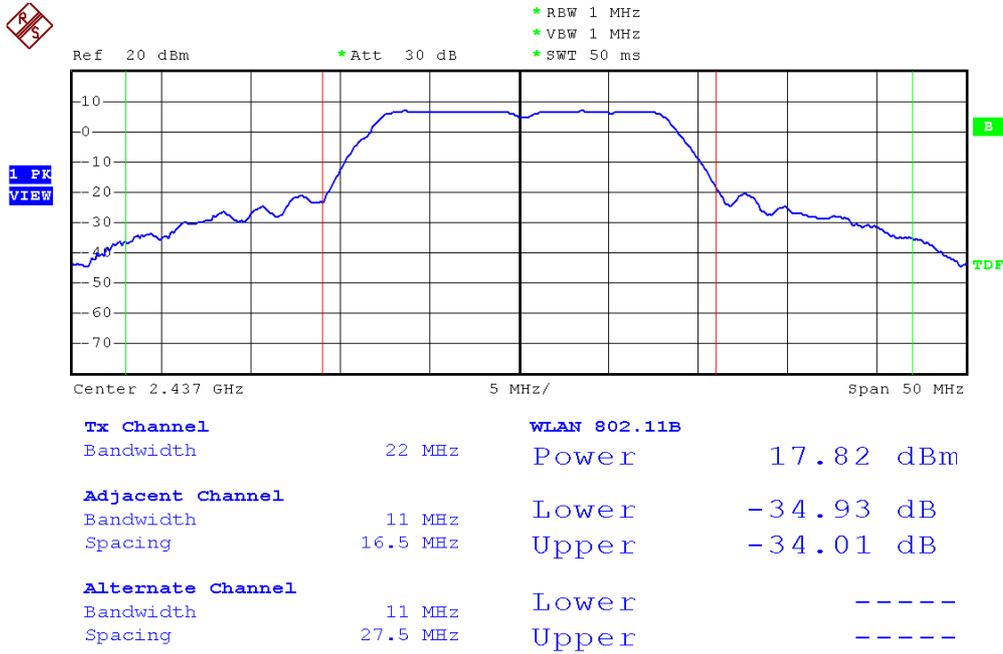


Modulation Standard: 802.11g (6Mbps), Antenna: R  
Channel: 01

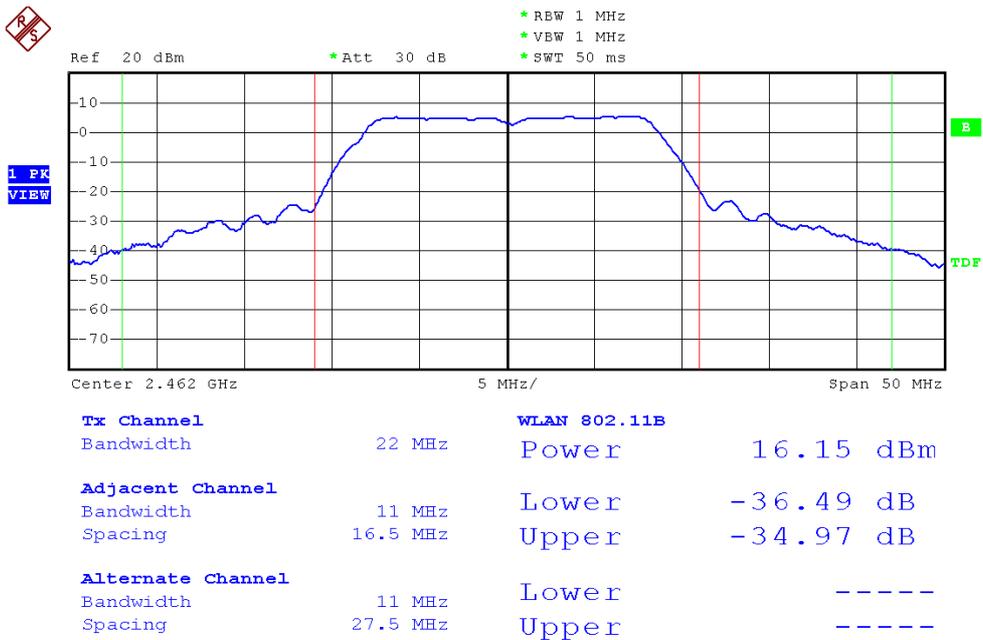




Modulation Standard: 802.11g (6Mbps), Antenna: R  
Channel: 06

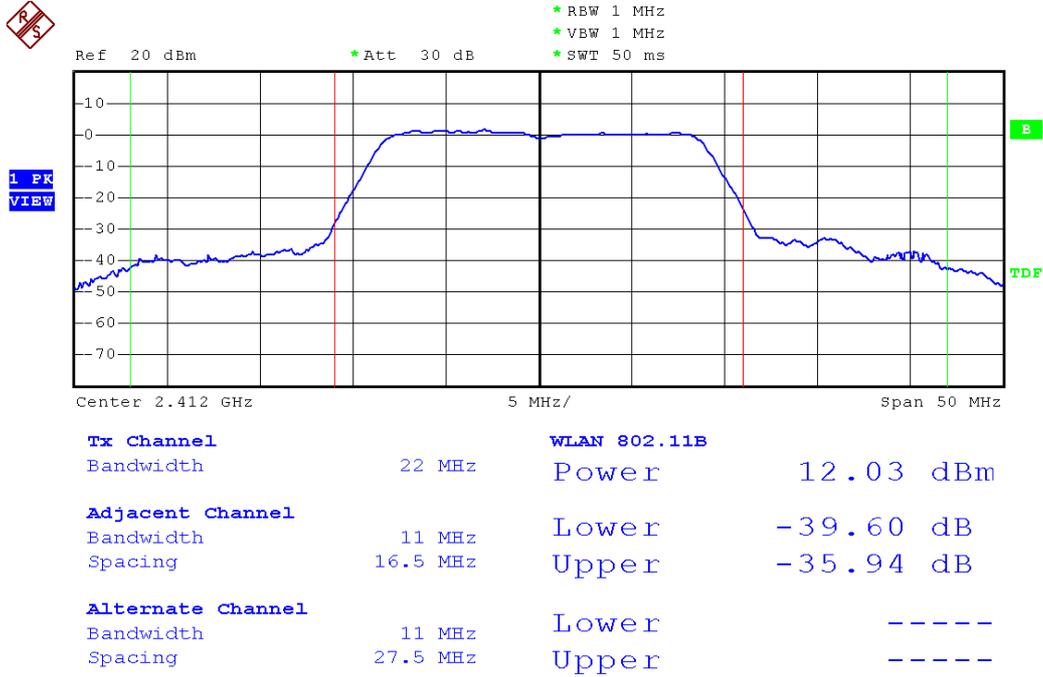


Modulation Standard: 802.11g (6Mbps), Antenna: R  
Channel: 11

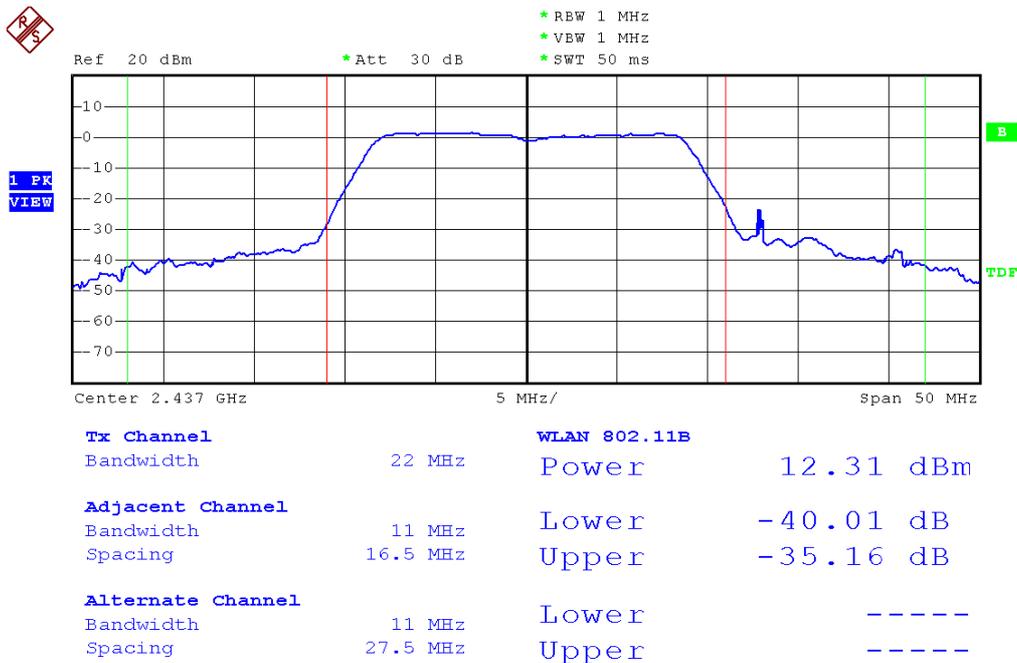




Modulation Standard: 802.11n HT20 (6.5Mbps), Antenna: L  
Channel: 01

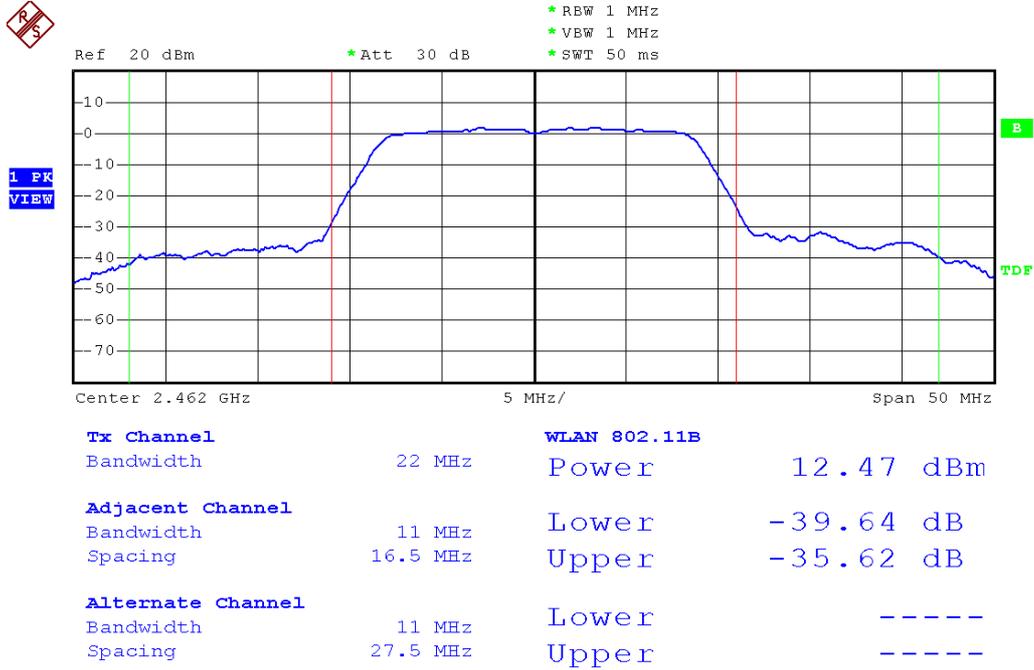


Modulation Standard: 802.11n HT20 (6.5Mbps), Antenna: L  
Channel: 06

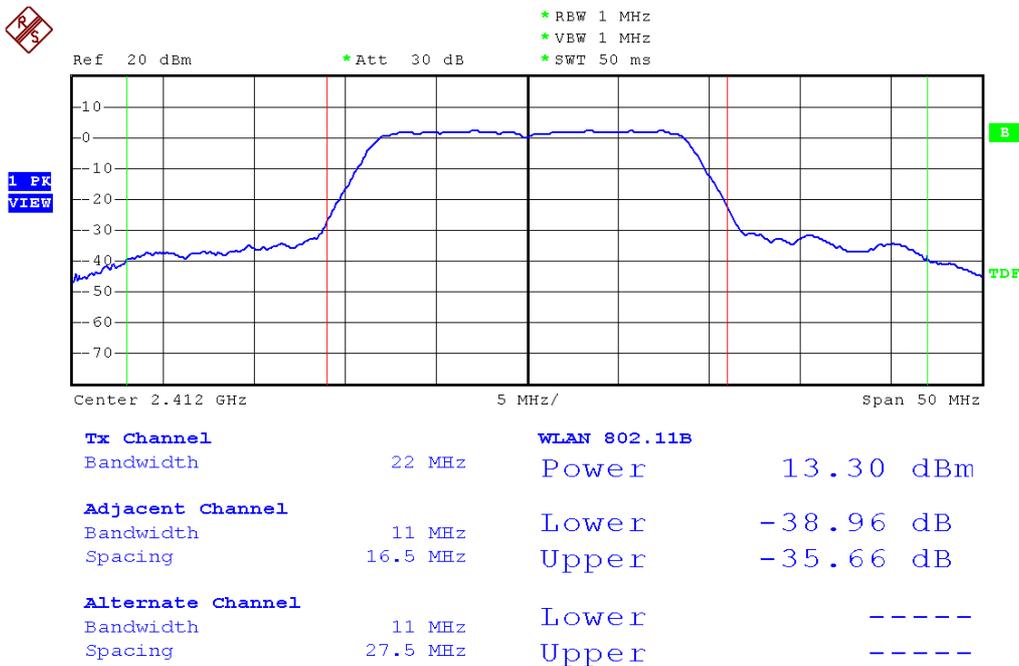




Modulation Standard: 802.11n HT20 (6.5Mbps), Antenna: L  
Channel: 11

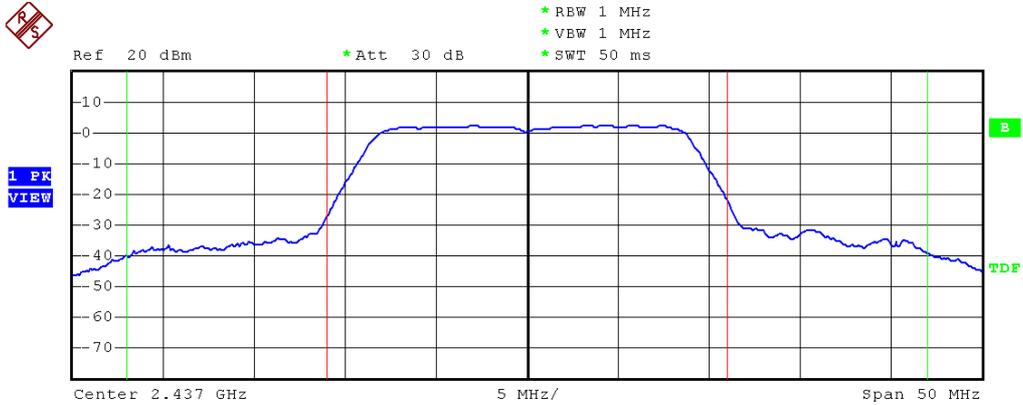


Modulation Standard: 802.11n HT20 (6.5Mbps), Antenna: R  
Channel: 01



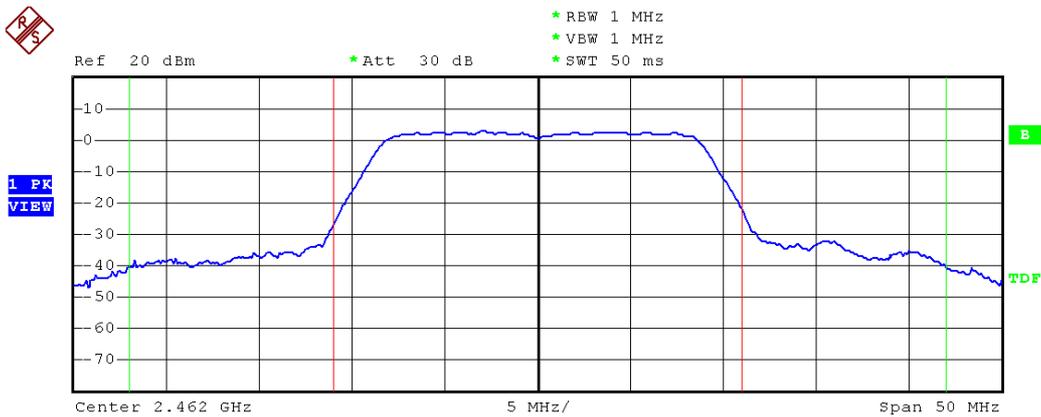


Modulation Standard: 802.11n HT20 (6.5Mbps), Antenna: R  
Channel: 06



<b>Tx Channel</b>		<b>WLAN 802.11B</b>	
Bandwidth	22 MHz	Power	13.42 dBm
<b>Adjacent Channel</b>		Lower	-39.14 dB
Bandwidth	11 MHz	Upper	-35.69 dB
Spacing	16.5 MHz		
<b>Alternate Channel</b>		Lower	-----
Bandwidth	11 MHz	Upper	-----
Spacing	27.5 MHz		

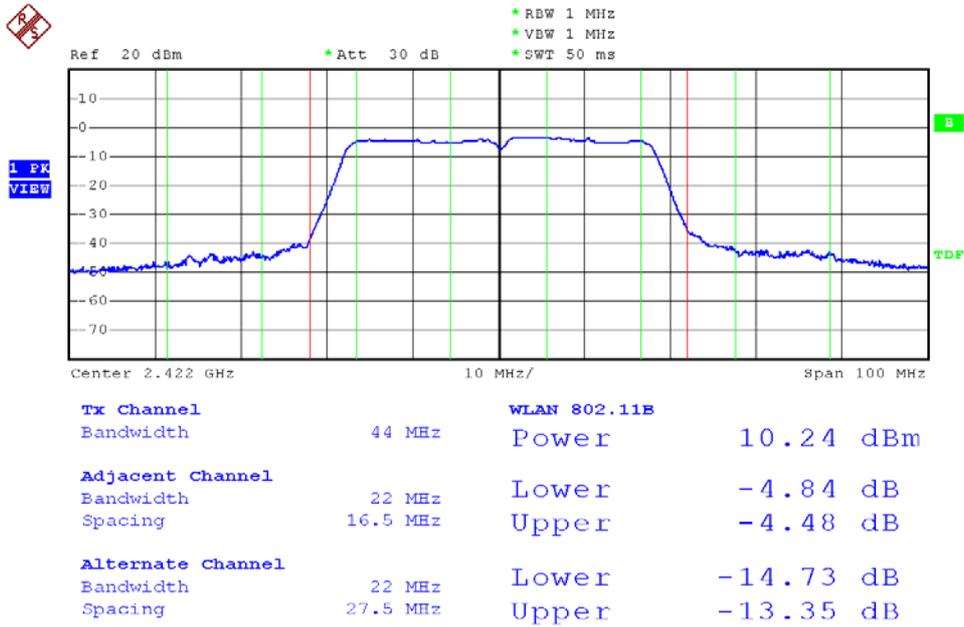
Modulation Standard: 802.11n HT20 (6.5Mbps), Antenna: R  
Channel: 11



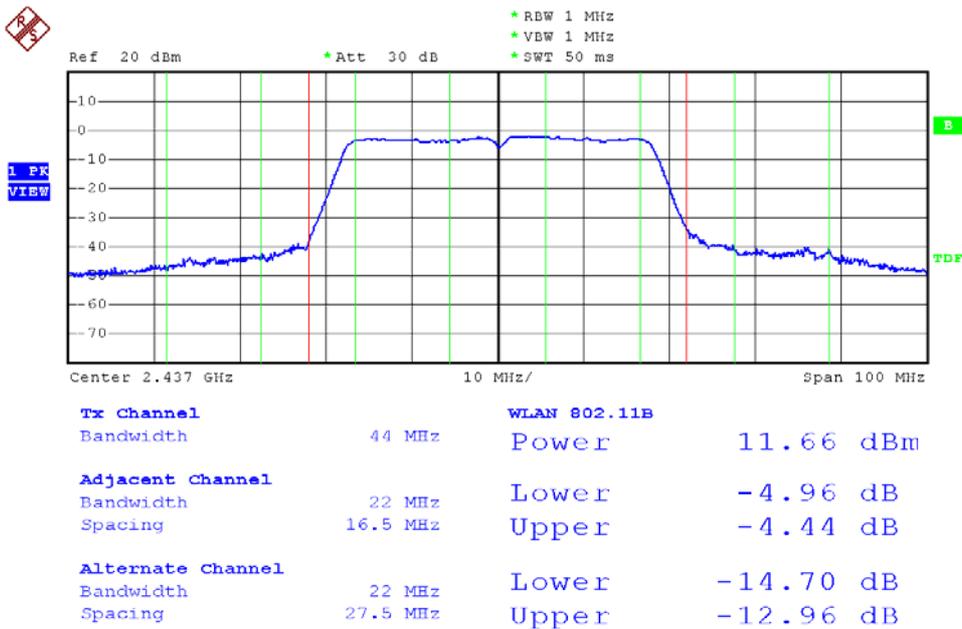
<b>Tx Channel</b>		<b>WLAN 802.11B</b>	
Bandwidth	22 MHz	Power	13.63 dBm
<b>Adjacent Channel</b>		Lower	-40.01 dB
Bandwidth	11 MHz	Upper	-36.36 dB
Spacing	16.5 MHz		
<b>Alternate Channel</b>		Lower	-----
Bandwidth	11 MHz	Upper	-----
Spacing	27.5 MHz		



Modulation Standard: 802.11n HT40 (13.5Mbps), Antenna: L  
Channel: 03

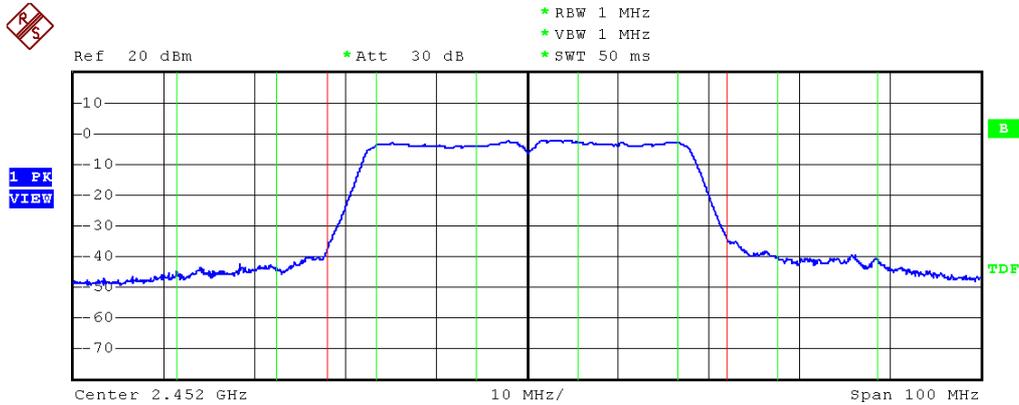


Modulation Standard: 802.11n HT40 (13.5Mbps), Antenna: L  
Channel: 06



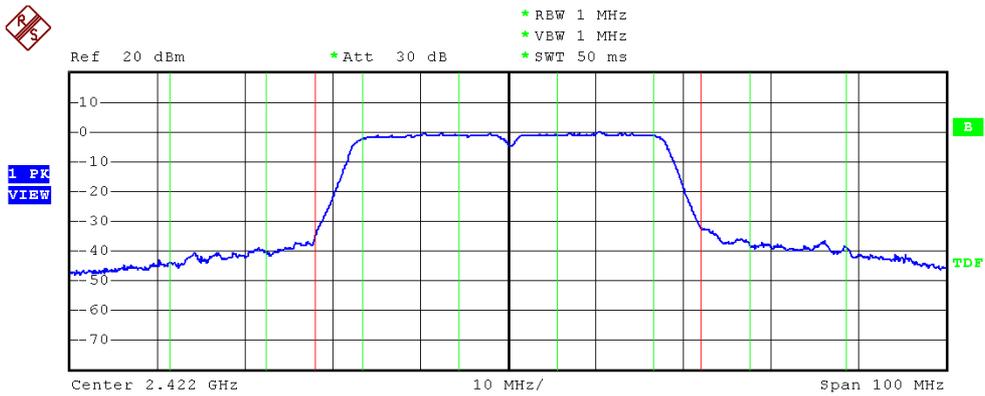


Modulation Standard: 802.11n HT40 (13.5Mbps), Antenna: L  
Channel: 09



<b>Tx Channel</b>		<b>WLAN 802.11B</b>	
Bandwidth	44 MHz	Power	11.36 dBm
<b>Adjacent Channel</b>		Lower	-5.07 dB
Bandwidth	22 MHz	Upper	-4.40 dB
Spacing	16.5 MHz		
<b>Alternate Channel</b>		Lower	-14.64 dB
Bandwidth	22 MHz	Upper	-12.66 dB
Spacing	27.5 MHz		

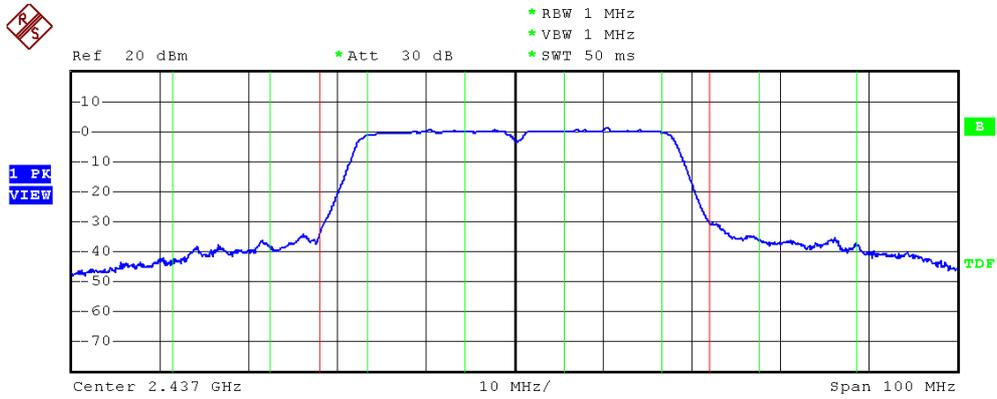
Modulation Standard: 802.11n HT40 (13.5Mbps), Antenna: R  
Channel: 03



<b>Tx Channel</b>		<b>WLAN 802.11B</b>	
Bandwidth	44 MHz	Power	13.58 dBm
<b>Adjacent Channel</b>		Lower	-4.88 dB
Bandwidth	22 MHz	Upper	-4.17 dB
Spacing	16.5 MHz		
<b>Alternate Channel</b>		Lower	-15.27 dB
Bandwidth	22 MHz	Upper	-13.11 dB
Spacing	27.5 MHz		

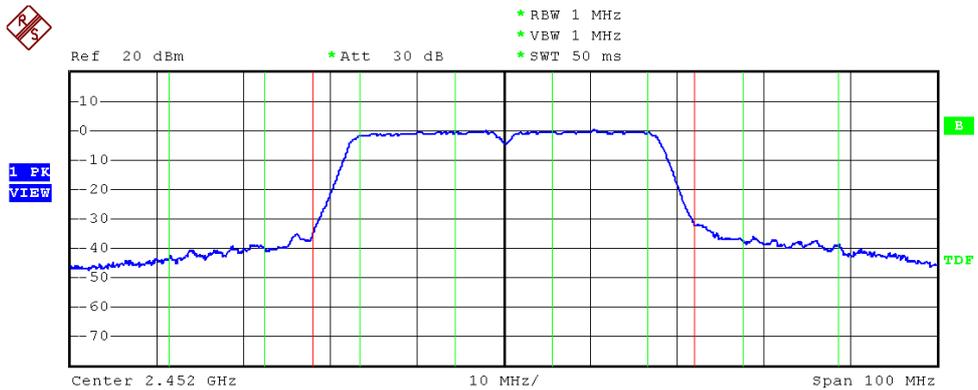


Modulation Standard: 802.11n HT40 (13.5Mbps), Antenna: R  
Channel: 06



<b>Tx Channel</b>		<b>WLAN 802.11B</b>	
Bandwidth	44 MHz	Power	14.67 dBm
<b>Adjacent Channel</b>		Lower	-4.87 dB
Bandwidth	22 MHz	Upper	-4.20 dB
Spacing	16.5 MHz		
<b>Alternate Channel</b>		Lower	-15.31 dB
Bandwidth	22 MHz	Upper	-13.11 dB
Spacing	27.5 MHz		

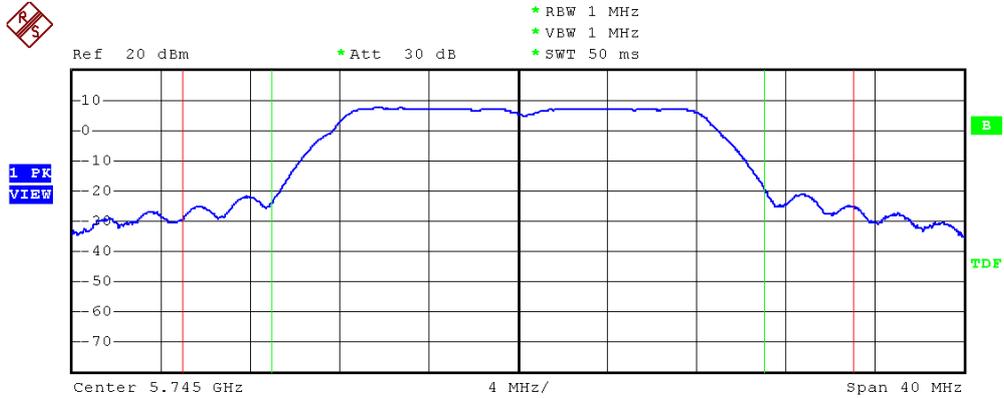
Modulation Standard: 802.11n HT40 (13.5Mbps), Antenna: R  
Channel: 09



<b>Tx Channel</b>		<b>WLAN 802.11B</b>	
Bandwidth	44 MHz	Power	13.87 dBm
<b>Adjacent Channel</b>		Lower	-4.86 dB
Bandwidth	22 MHz	Upper	-4.23 dB
Spacing	16.5 MHz		
<b>Alternate Channel</b>		Lower	-15.26 dB
Bandwidth	22 MHz	Upper	-13.11 dB
Spacing	27.5 MHz		

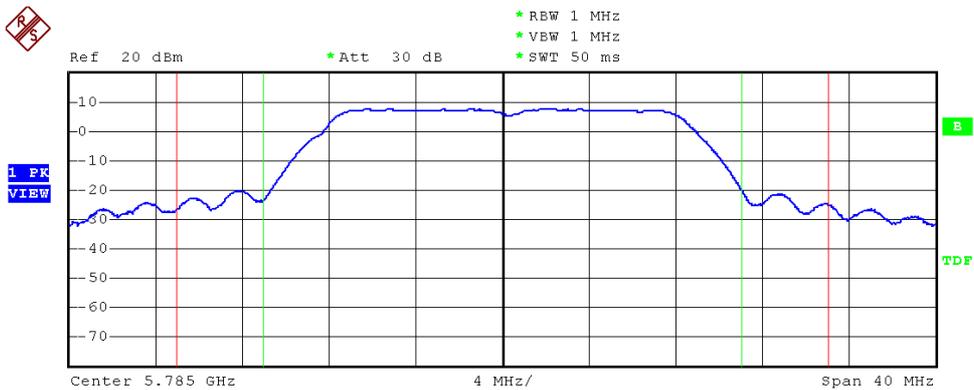


Modulation Standard: 802.11a (6Mbps), Antenna: L  
Channel: 149



<b>Tx Channel</b>			
Bandwidth	30 MHz	Power	18.32 dBm
<b>Adjacent Channel</b>			
Bandwidth	11 MHz	Lower	-----
Spacing	16.5 MHz	Upper	-----
<b>Alternate Channel</b>			
Bandwidth	11 MHz	Lower	-----
Spacing	27.5 MHz	Upper	-----

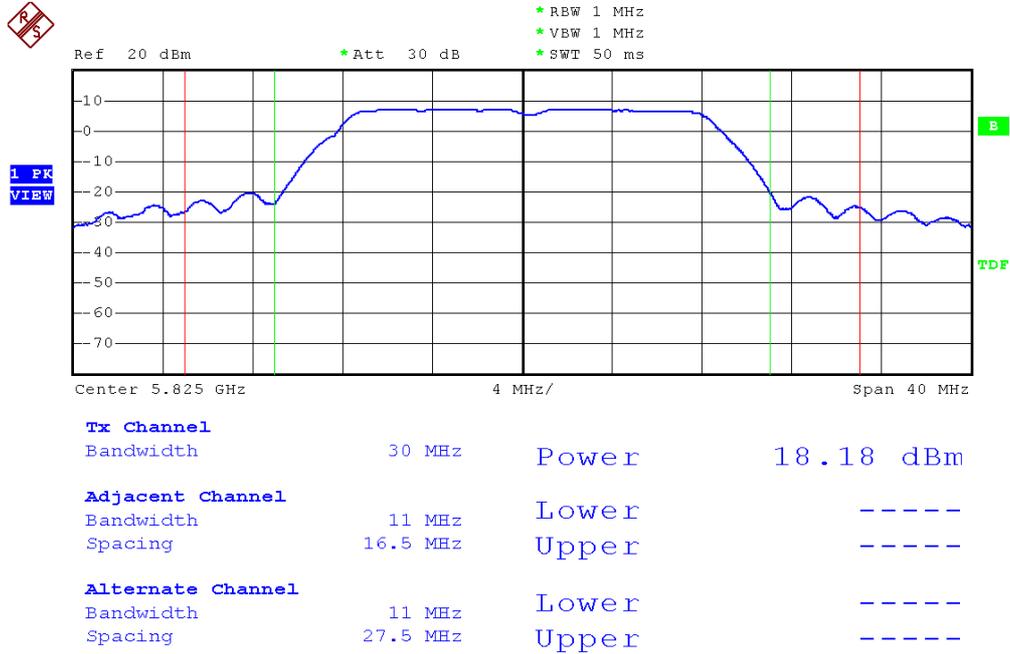
Modulation Standard: 802.11a (6Mbps), Antenna: L  
Channel: 157



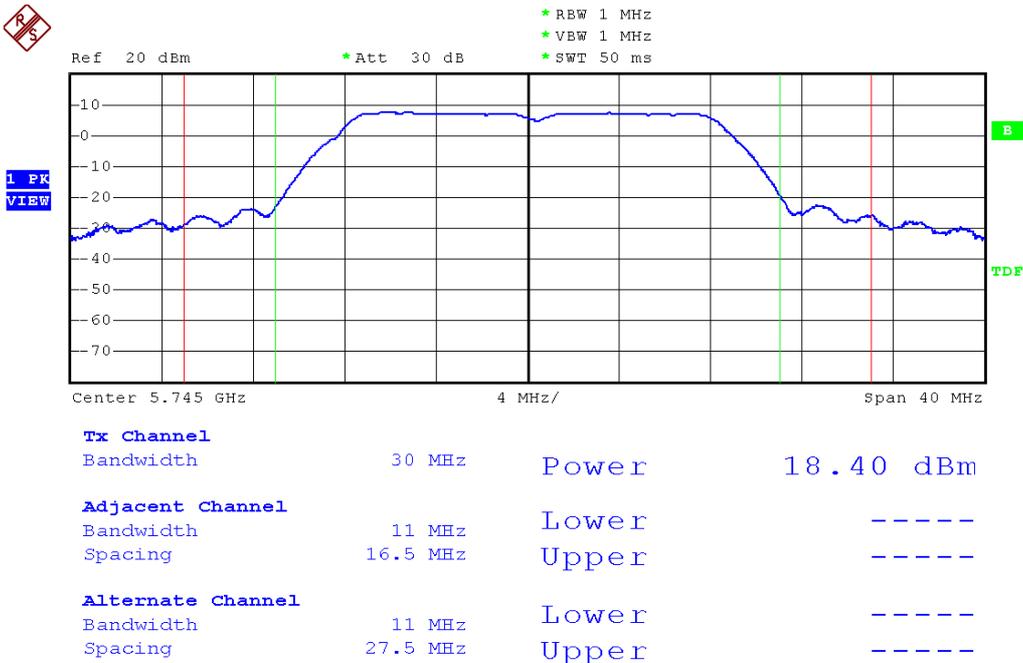
<b>Tx Channel</b>			
Bandwidth	30 MHz	Power	18.48 dBm
<b>Adjacent Channel</b>			
Bandwidth	11 MHz	Lower	-----
Spacing	16.5 MHz	Upper	-----
<b>Alternate Channel</b>			
Bandwidth	11 MHz	Lower	-----
Spacing	27.5 MHz	Upper	-----



Modulation Standard: 802.11a (6Mbps), Antenna: L  
Channel: 165

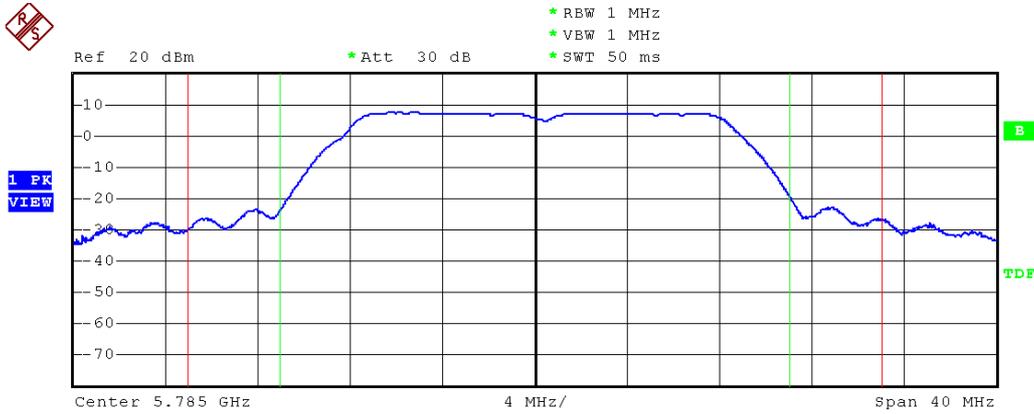


Modulation Standard: 802.11a (6Mbps), Antenna: R  
Channel: 149



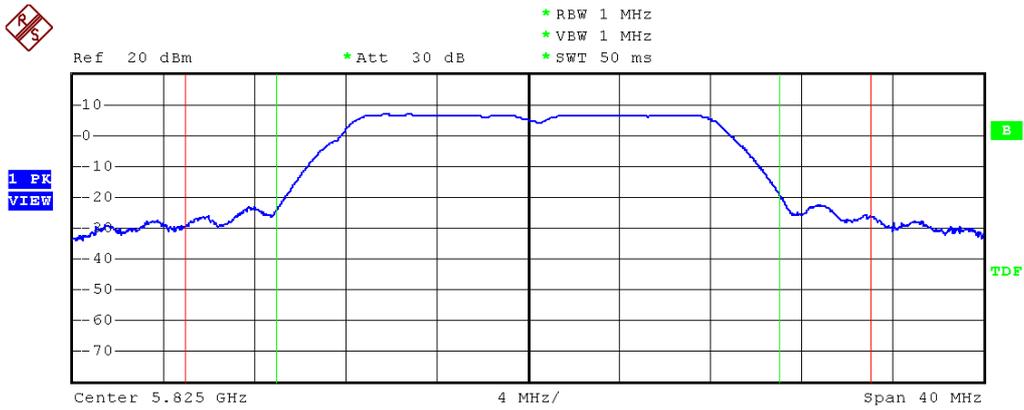


Modulation Standard: 802.11a (6Mbps), Antenna: R  
Channel: 157



<b>Tx Channel</b>			
Bandwidth	30 MHz	Power	18.37 dBm
<b>Adjacent Channel</b>			
Bandwidth	11 MHz	Lower	-----
Spacing	16.5 MHz	Upper	-----
<b>Alternate Channel</b>			
Bandwidth	11 MHz	Lower	-----
Spacing	27.5 MHz	Upper	-----

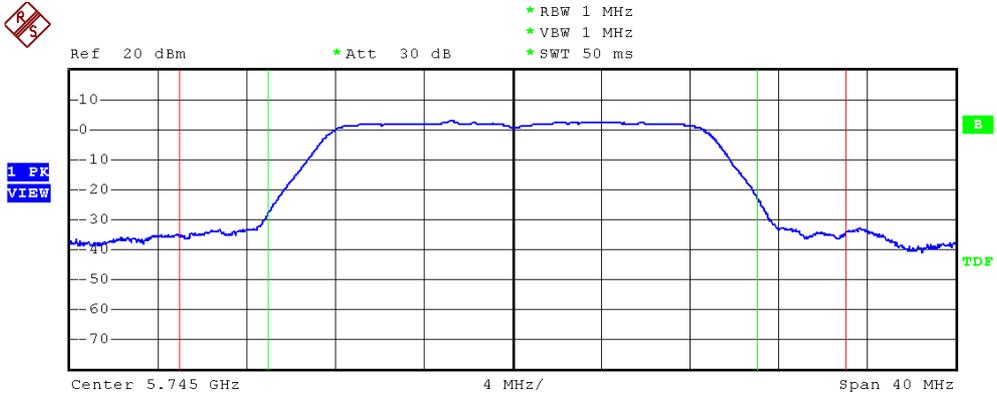
Modulation Standard: 802.11a (6Mbps), Antenna: R  
Channel: 165



<b>Tx Channel</b>			
Bandwidth	30 MHz	Power	17.75 dBm
<b>Adjacent Channel</b>			
Bandwidth	11 MHz	Lower	-----
Spacing	16.5 MHz	Upper	-----
<b>Alternate Channel</b>			
Bandwidth	11 MHz	Lower	-----
Spacing	27.5 MHz	Upper	-----

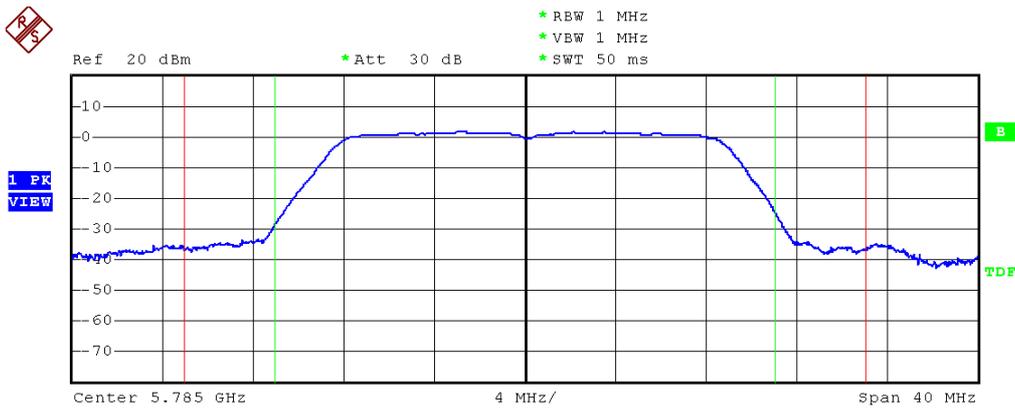


Modulation Standard: 802.11an HT20 (6.5Mbps), Antenna: L  
Channel: 149



<b>Tx Channel</b>			
Bandwidth	30 MHz	Power	13.50 dBm
<b>Adjacent Channel</b>			
Bandwidth	11 MHz	Lower	-----
Spacing	16.5 MHz	Upper	-----
<b>Alternate Channel</b>			
Bandwidth	11 MHz	Lower	-----
Spacing	27.5 MHz	Upper	-----

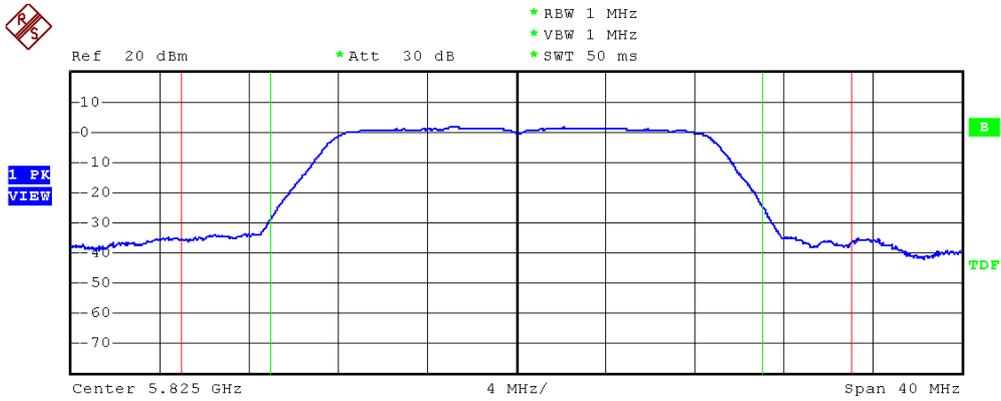
Modulation Standard: 802.11an HT20 (6.5Mbps), Antenna: L  
Channel: 157



<b>Tx Channel</b>			
Bandwidth	30 MHz	Power	12.52 dBm
<b>Adjacent Channel</b>			
Bandwidth	11 MHz	Lower	-----
Spacing	16.5 MHz	Upper	-----
<b>Alternate Channel</b>			
Bandwidth	11 MHz	Lower	-----
Spacing	27.5 MHz	Upper	-----

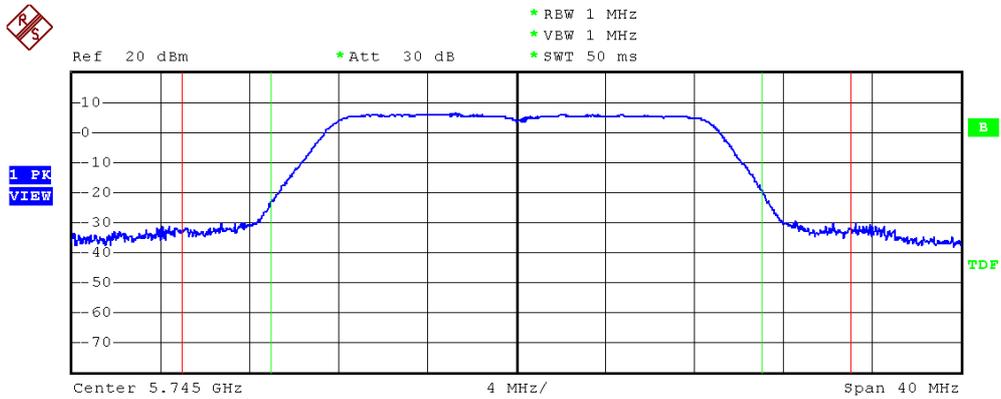


Modulation Standard: 802.11an HT20 (6.5Mbps), Antenna: L  
Channel: 165



<b>Tx Channel</b>			
Bandwidth	30 MHz	Power	12.43 dBm
<b>Adjacent Channel</b>			
Bandwidth	11 MHz	Lower	-----
Spacing	16.5 MHz	Upper	-----
<b>Alternate Channel</b>			
Bandwidth	11 MHz	Lower	-----
Spacing	27.5 MHz	Upper	-----

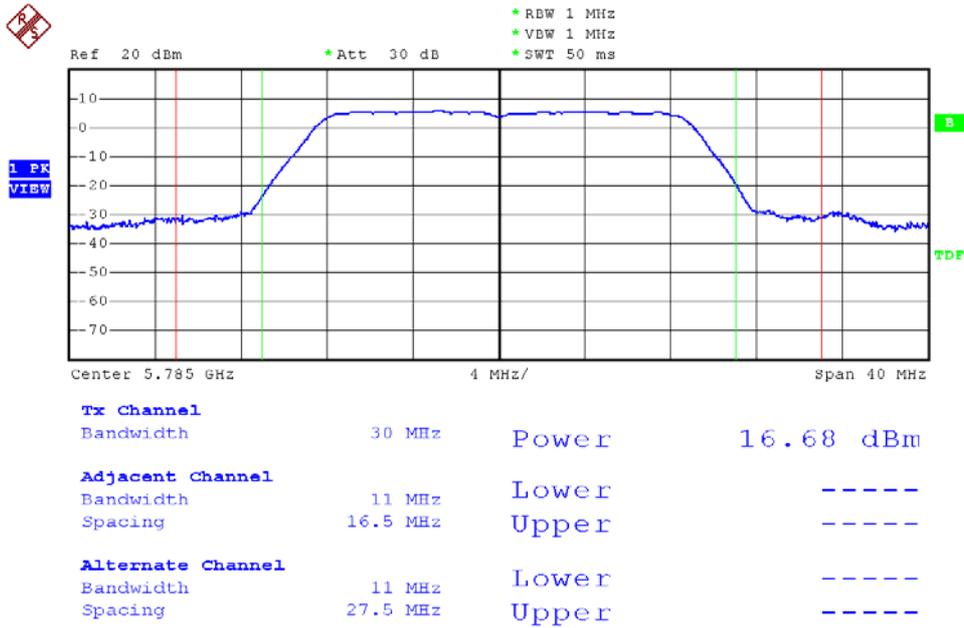
Modulation Standard: 802.11an HT20 (6.5Mbps), Antenna: R  
Channel: 149



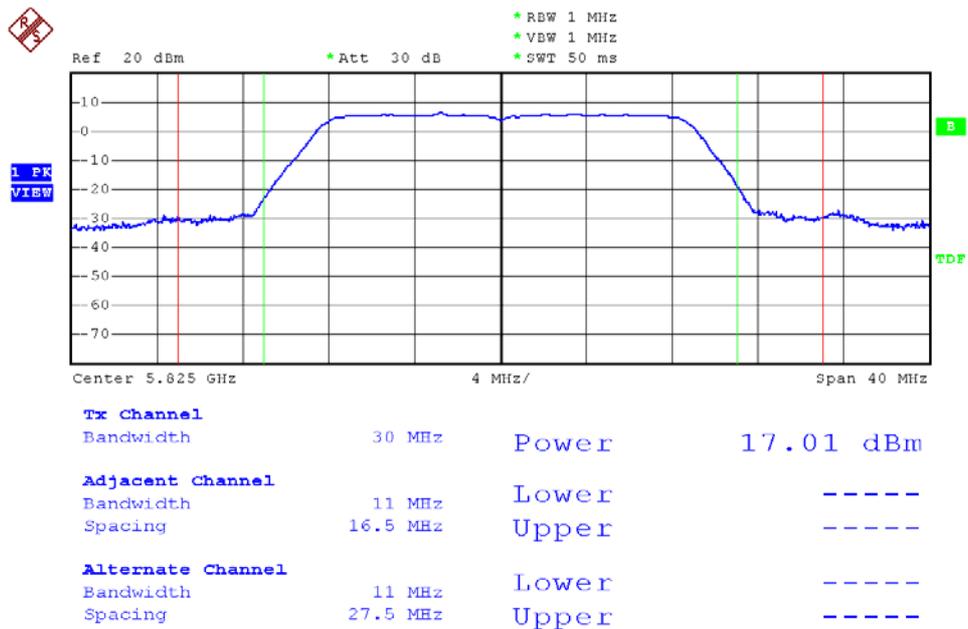
<b>Tx Channel</b>			
Bandwidth	30 MHz	Power	17.06 dBm
<b>Adjacent Channel</b>			
Bandwidth	11 MHz	Lower	-----
Spacing	16.5 MHz	Upper	-----
<b>Alternate Channel</b>			
Bandwidth	11 MHz	Lower	-----
Spacing	27.5 MHz	Upper	-----



Modulation Standard: 802.11an HT20 (6.5Mbps), Antenna: R  
Channel: 157

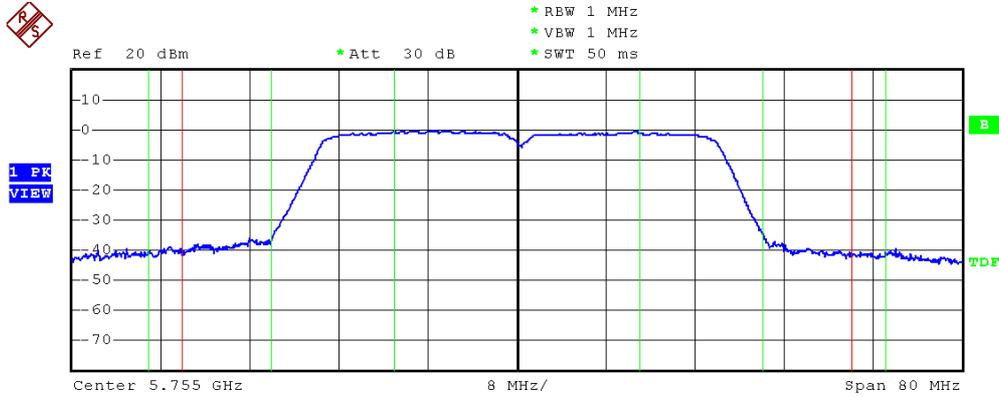


Modulation Standard: 802.11an HT20 (6.5Mbps), Antenna: R  
Channel: 165



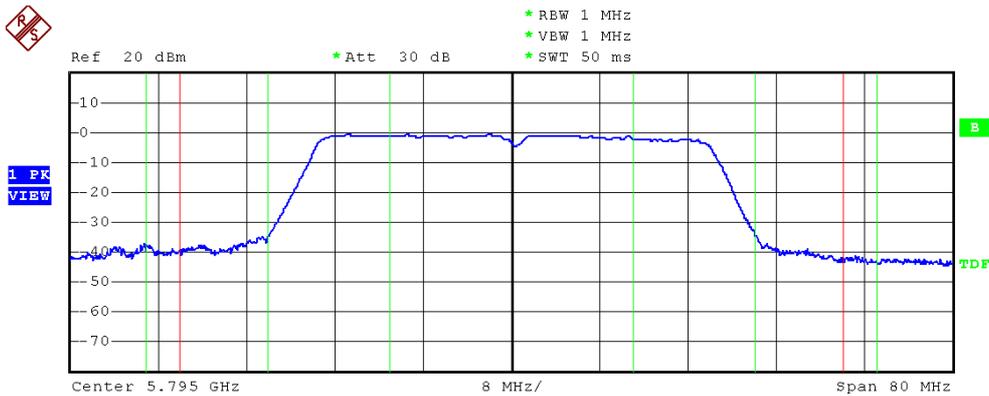


Modulation Standard: 802.11an HT40 (13.5Mbps), Antenna: L  
Channel: 151



<b>Tx Channel</b>			
Bandwidth	60 MHz	Power	13.36 dBm
<b>Adjacent Channel</b>			
Bandwidth	11 MHz	Lower	-7.50 dB
Spacing	16.5 MHz	Upper	-7.28 dB
<b>Alternate Channel</b>			
Bandwidth	11 MHz	Lower	-42.45 dB
Spacing	27.5 MHz	Upper	-43.67 dB

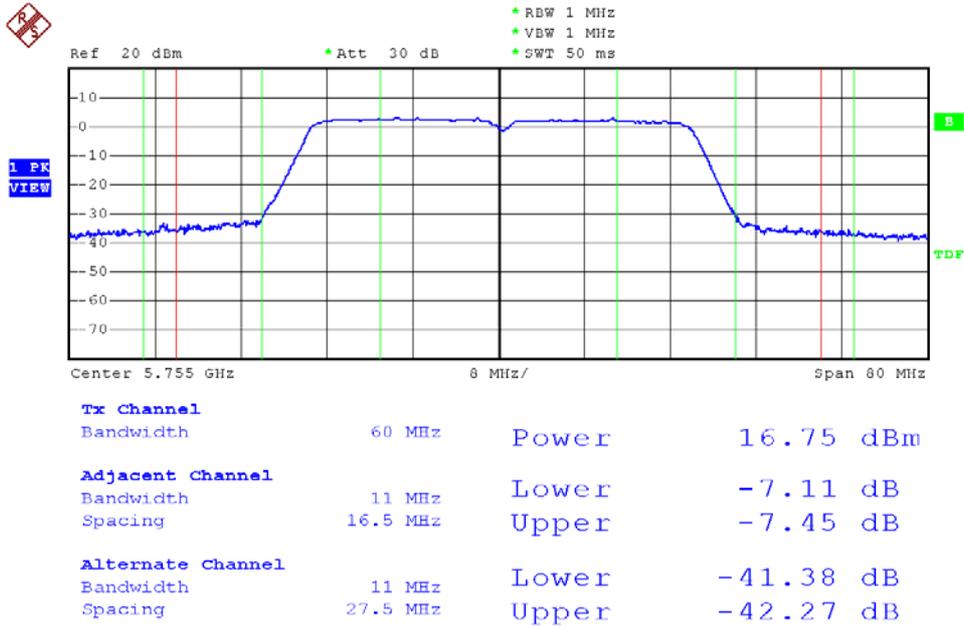
Modulation Standard: 802.11an HT40 (13.5Mbps), Antenna: L  
Channel: 159



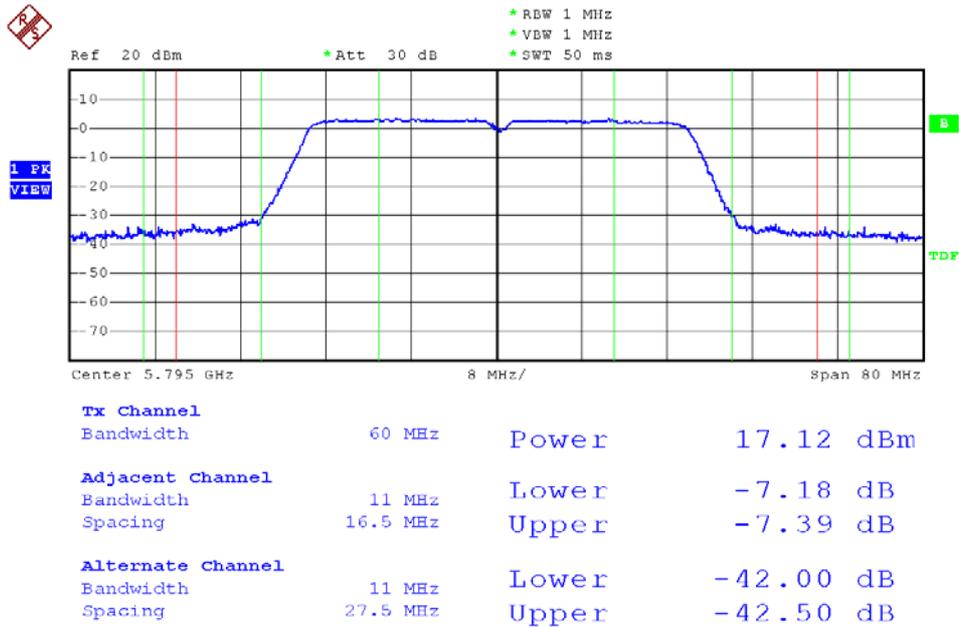
<b>Tx Channel</b>			
Bandwidth	60 MHz	Power	13.26 dBm
<b>Adjacent Channel</b>			
Bandwidth	11 MHz	Lower	-6.87 dB
Spacing	16.5 MHz	Upper	-7.98 dB
<b>Alternate Channel</b>			
Bandwidth	11 MHz	Lower	-41.81 dB
Spacing	27.5 MHz	Upper	-43.66 dB



Modulation Standard: 802.11an HT40 (13.5Mbps), Antenna: R  
Channel: 151



Modulation Standard: 802.11an HT40 (13.5Mbps), Antenna: R  
Channel: 159





## 8. Power Spectral Density

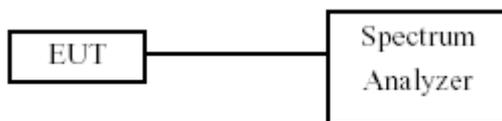
### 8.1 Test Limit

The Maximum of Power Spectral Density Measurement is 8dBm.

### 8.2 Test Procedures

- a. The transmitter output was connected to spectrum analyzer.
- b. The spectrum analyzer's resolution bandwidth were set at 3KHz RBW and 30KHz VBW as that of the fundamental frequency. Set the sweep time=span/3KHz.
- c. The power spectral density was measured and recorded.
- d. The Sweep time is allowed to be longer than span/3KHz for a full response of the mixer in the spectrum analyzer.

### 8.3 Test Setup Layout



### 8.4 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



## 8.5 Test Result and Data

Test Date: Nov. 08, 2008

Temperature: 20

Atmospheric pressure: 1008 hPa

Humidity: 60%

Modulation Standard	Channel	Frequency (MHz)	Maximum Power Density of 3 kHz Bandwidth (dBm)		
			L	R	L + R
802.11b (11Mbps)	01	2412	-14.27	-9.75	
	06	2437	-12.56	-9.44	
	11	2462	-13.83	-9.04	
802.11g (6Mbps)	01	2412	-20.05	-18.40	
	06	2437	-17.86	-18.08	
	11	2462	-19.63	-17.86	
			L	R	L + R
802.11n HT20 (6.5Mbps)	01	2412	-24.26	-21.69	-19.78
	06	2437	-23.65	-21.40	-19.37
	11	2462	-24.90	-23.00	-20.84
802.11n HT40 (13.5Mbps)	03	2422	-29.15	-26.99	-24.93
	06	2437	-30.25	-28.07	-26.01
	09	2452	-28.92	-26.99	-24.84

Test Date: Nov. 10, 2008

Temperature: 20

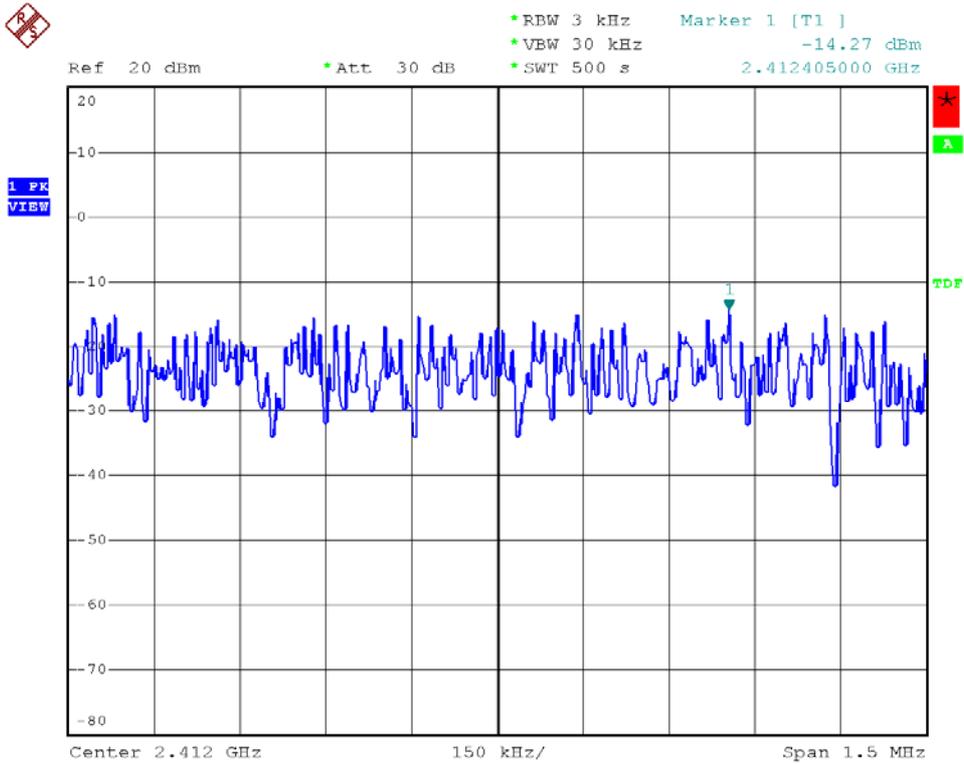
Atmospheric pressure: 1008 hPa

Humidity: 60%

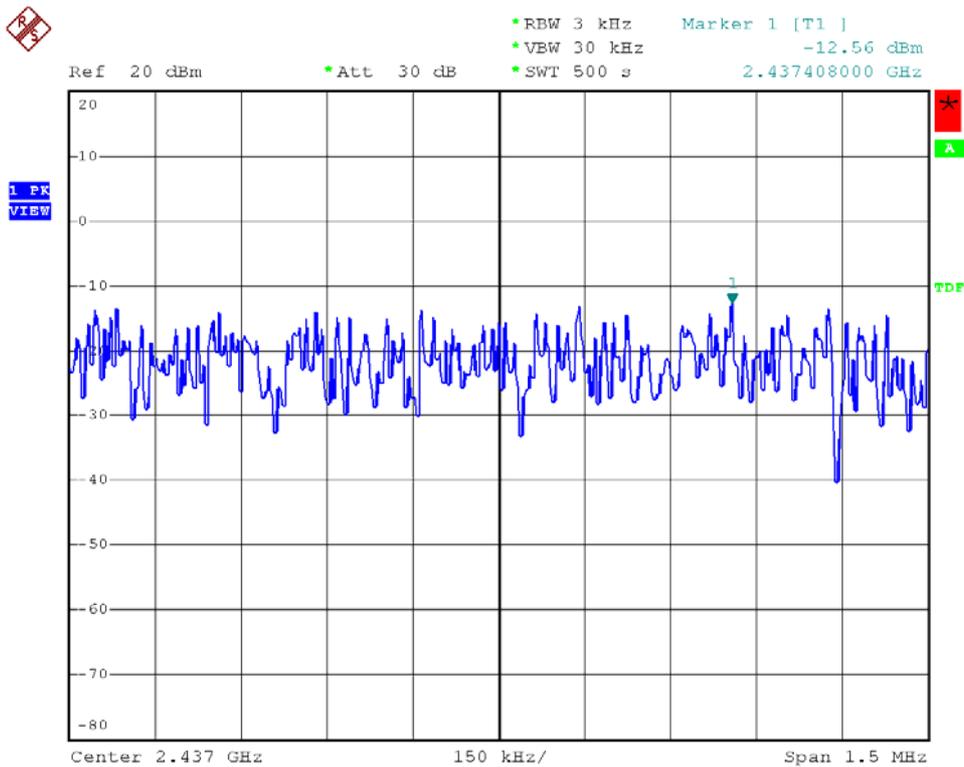
Modulation Standard	Channel	Frequency (MHz)	Maximum Power Density of 3 kHz Bandwidth (dBm)		
			L	R	L + R
802.11a (6Mbps)	149	5745	-16.70	-19.57	
	157	5785	-24.44	-20.69	
	165	5825	-24.70	-19.21	
			L	R	L + R
802.11an HT20 (6.5Mbps)	149	5745	-21.32	-19.58	-17.35
	157	5785	-23.42	-20.00	-18.37
	165	5825	-23.93	-19.88	-18.44
802.11an HT40 (13.5Mbps)	151	5755	-25.35	-21.78	-20.20
	159	5795	-25.65	-22.17	-20.56



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



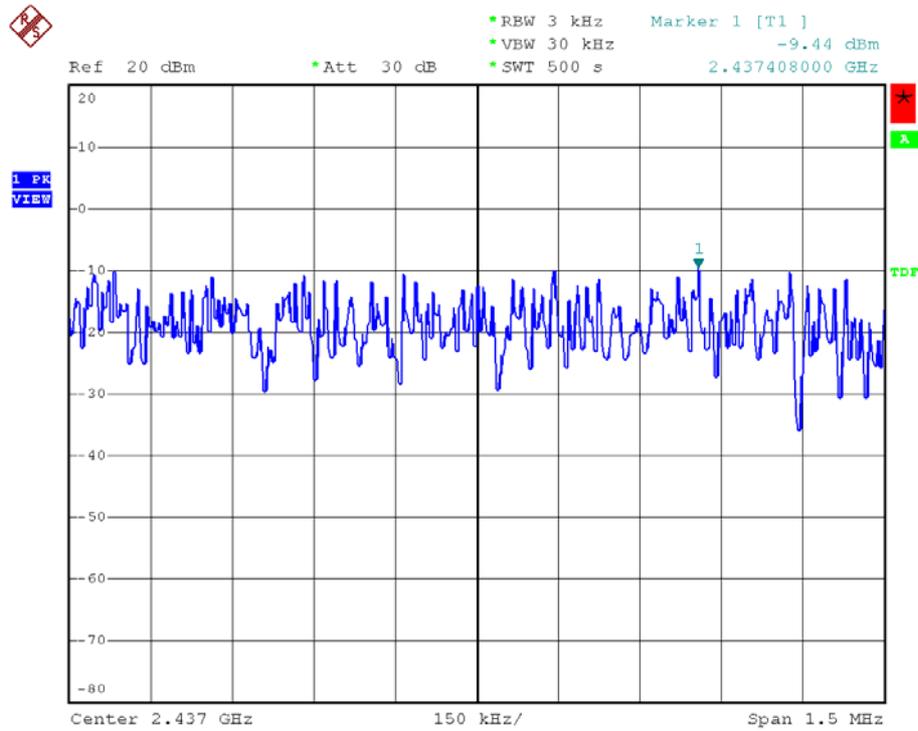
Modulation Standard: 802.11b (11Mbps), Antenna: L  
Channel: 06



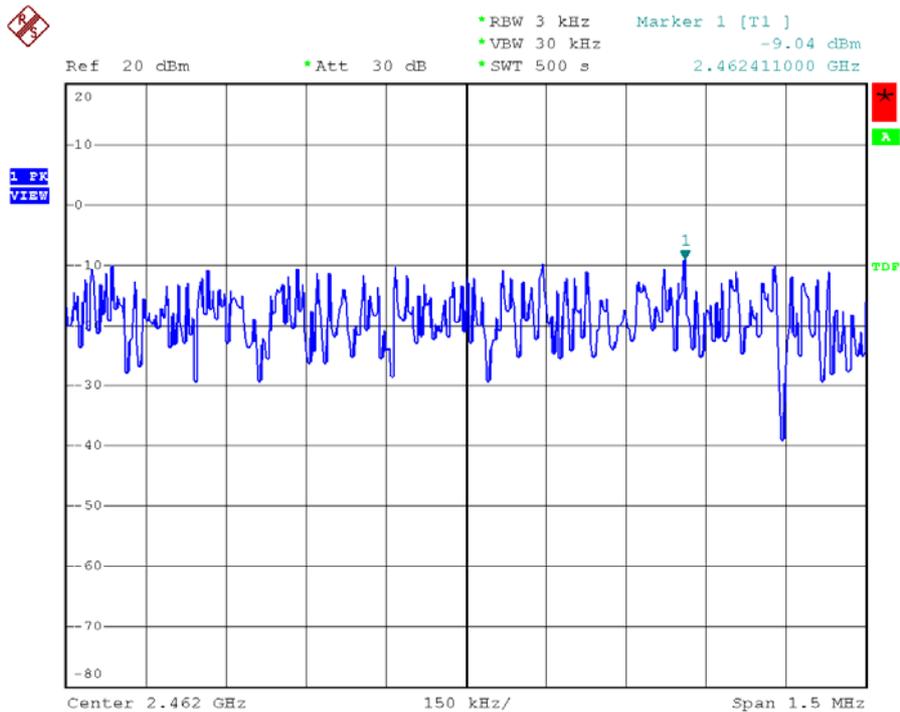




Modulation Standard: 802.11b (11Mbps), Antenna: R  
Channel: 06

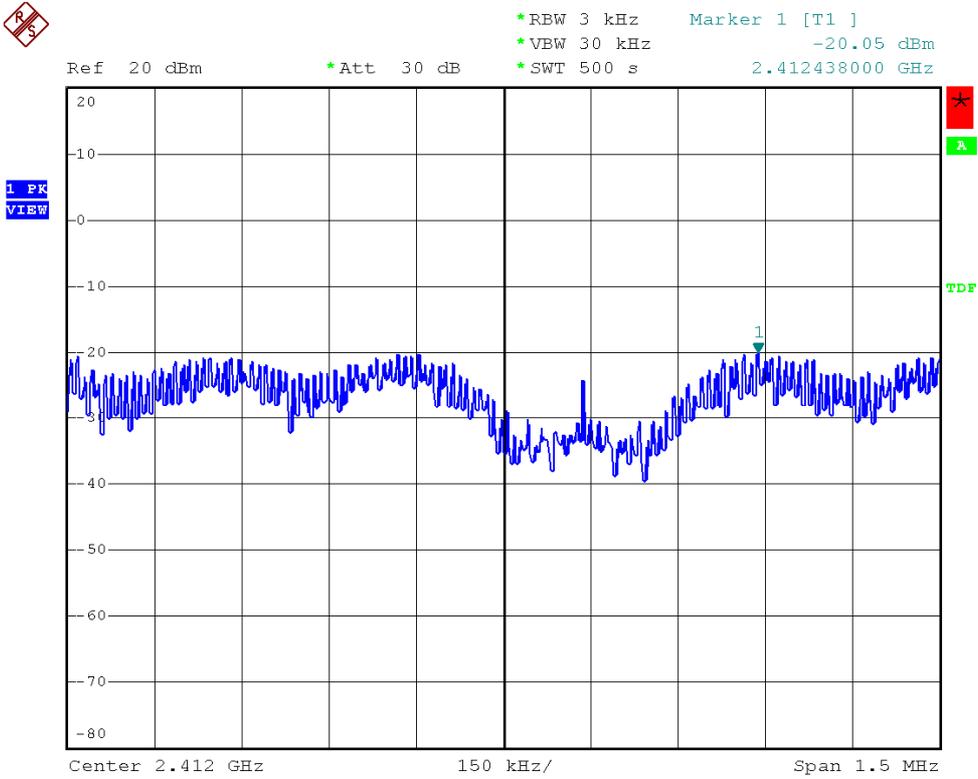


Modulation Standard: 802.11b (11Mbps), Antenna: R  
Channel: 11

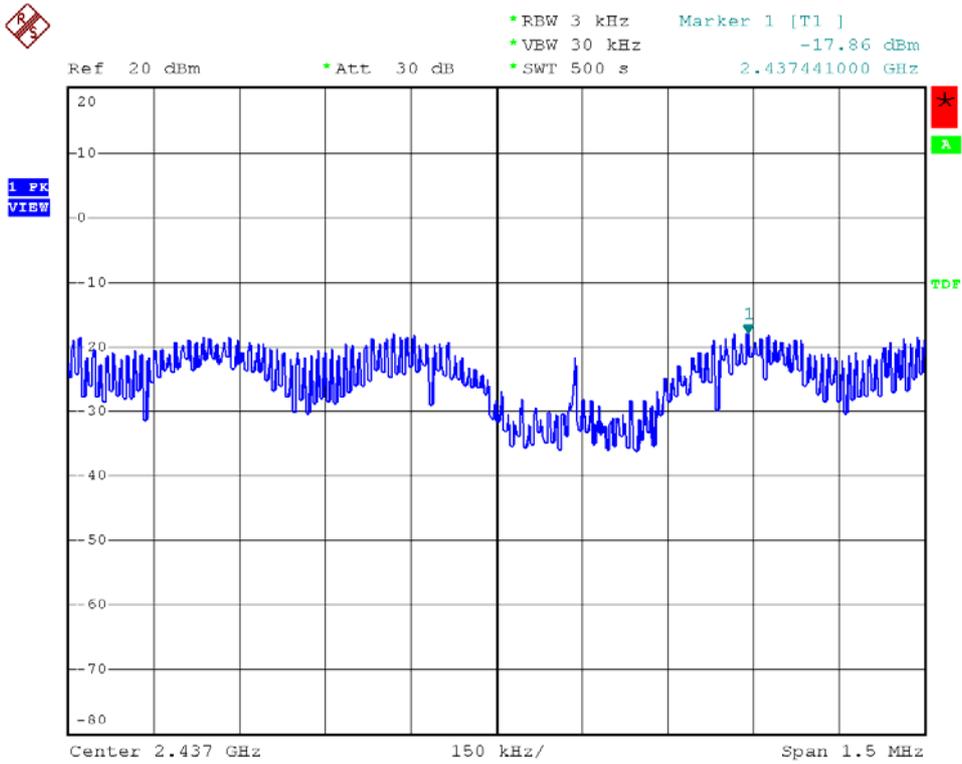




Modulation Standard: 802.11g (6Mbps), Antenna: L  
Channel: 01

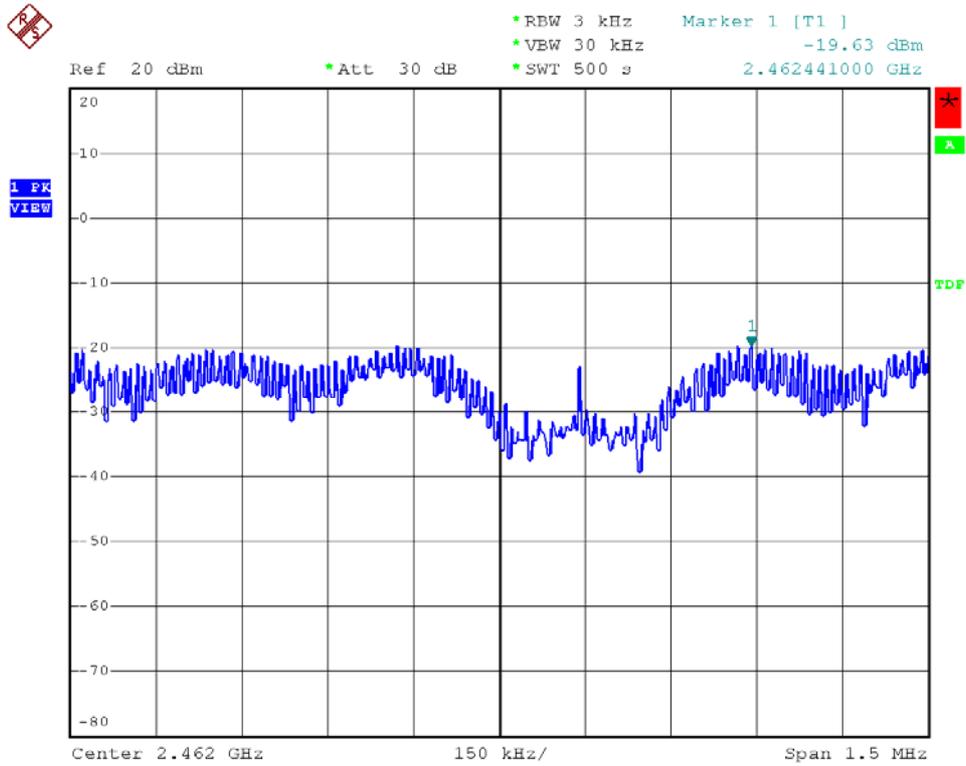


Modulation Standard: 802.11g (6Mbps), Antenna: L  
Channel: 06

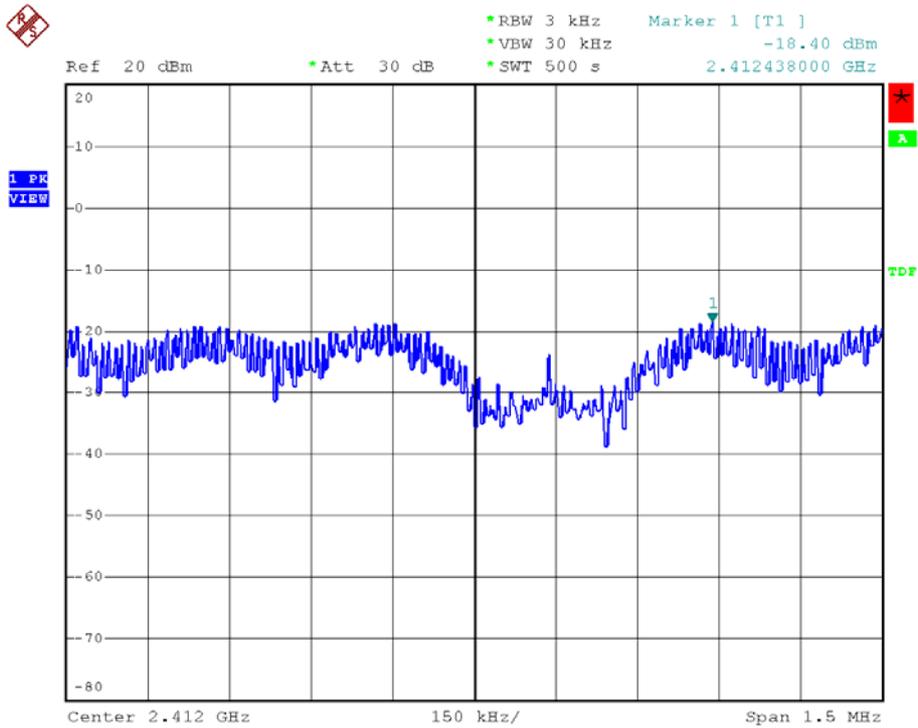




Modulation Standard: 802.11g (6Mbps), Antenna: L  
Channel: 11

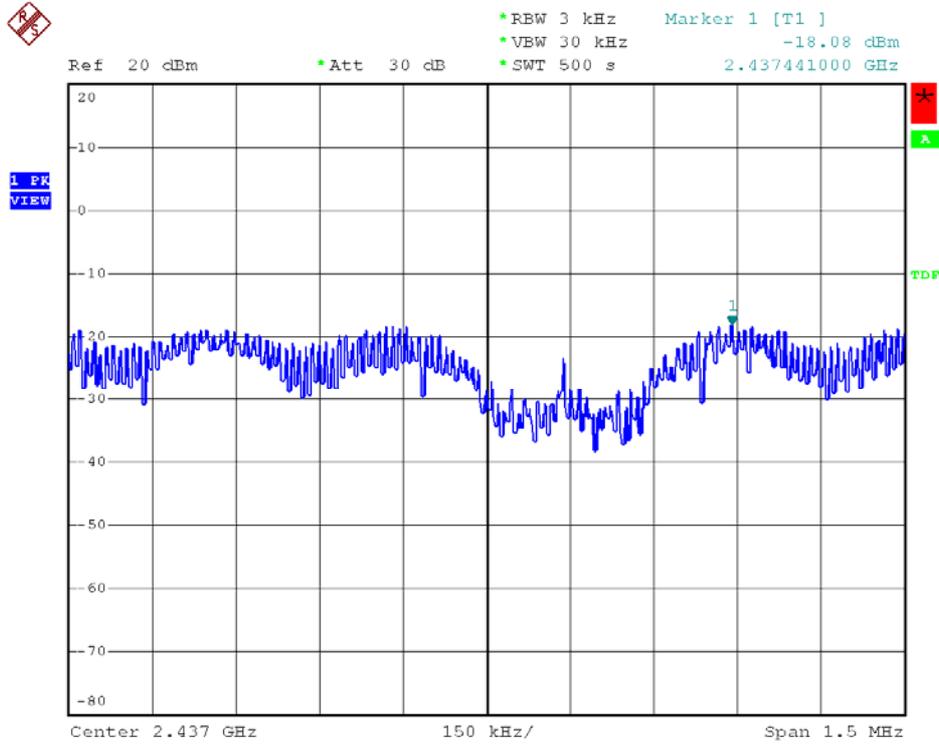


Modulation Standard: 802.11g (6Mbps), Antenna: R  
Channel: 01

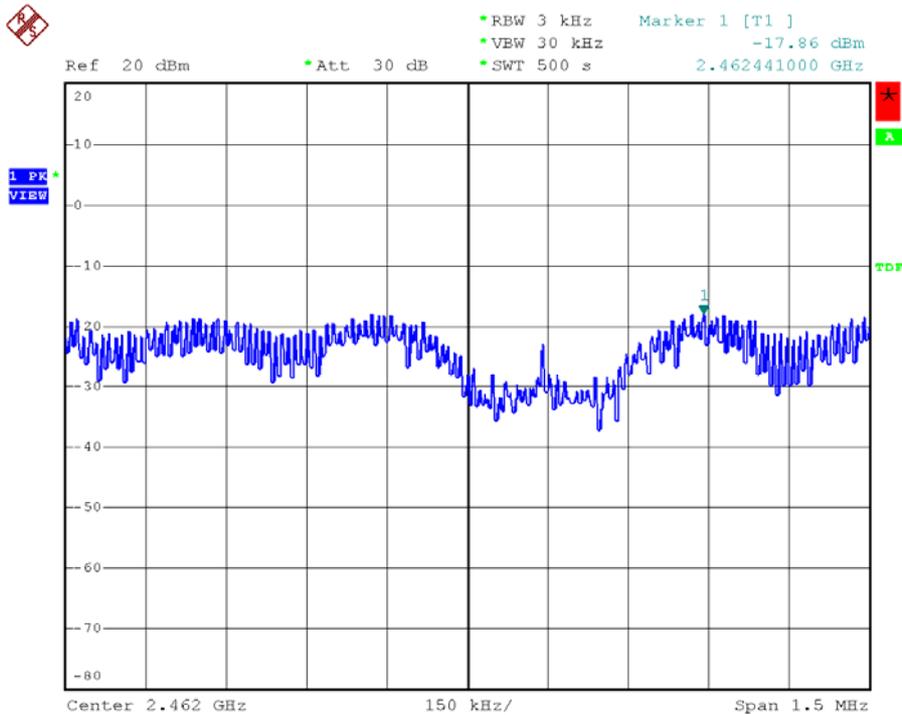




Modulation Standard: 802.11g (6Mbps), Antenna: R  
Channel: 06

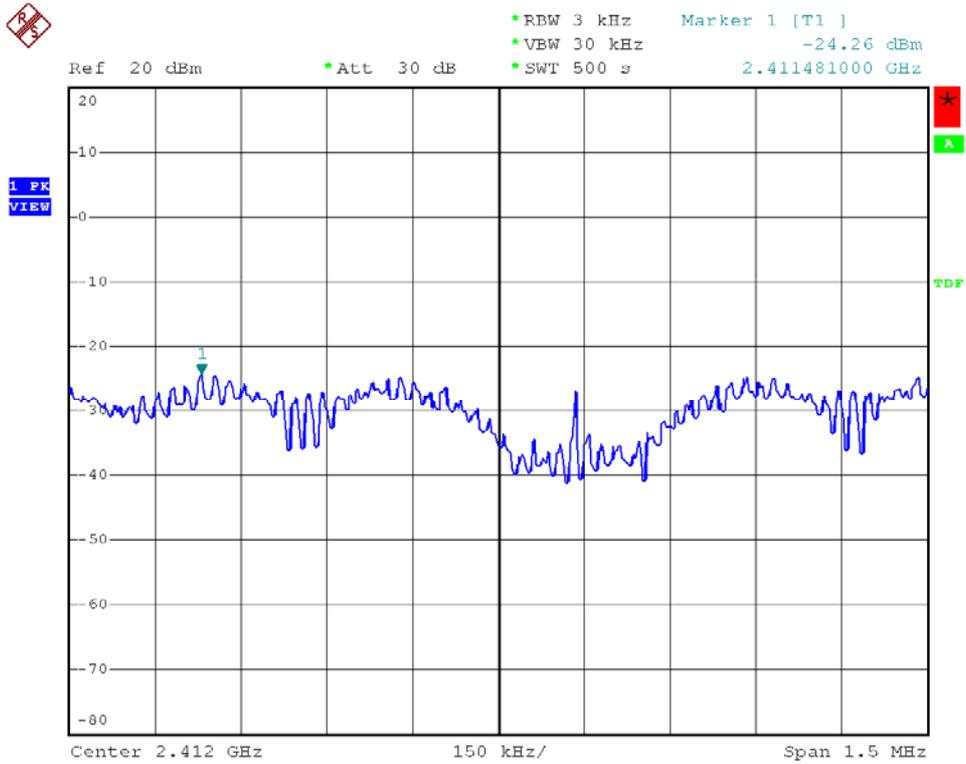


Modulation Standard: 802.11g (6Mbps), Antenna: R  
Channel: 11

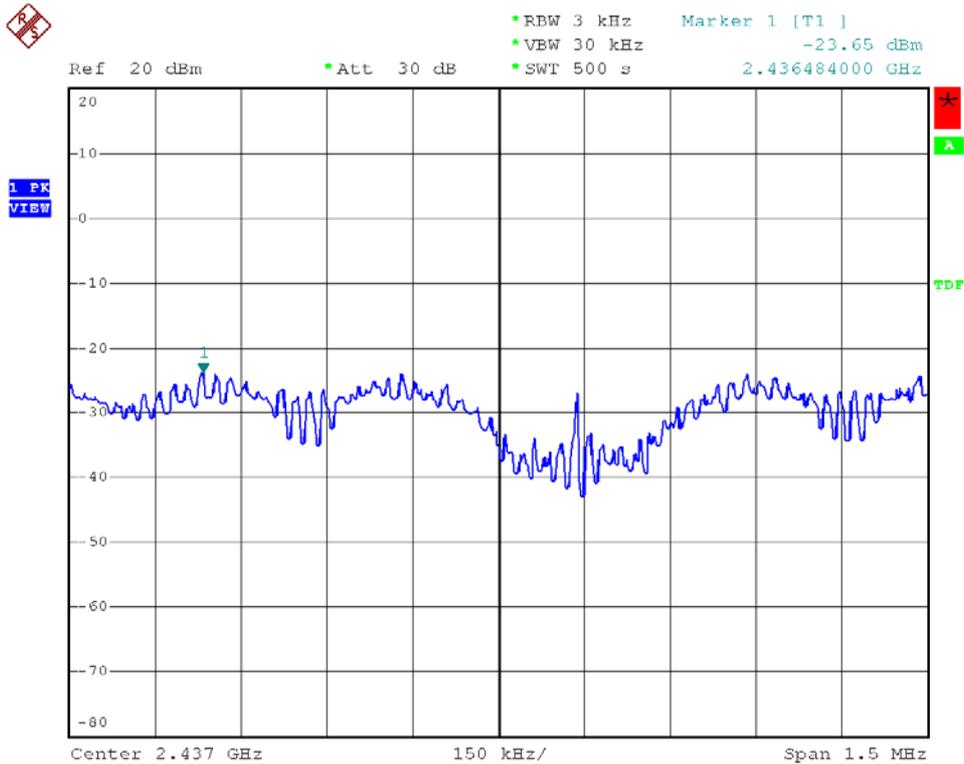




Modulation Standard: 802.11n HT20 (6.5Mbps), Antenna: L  
Channel: 01

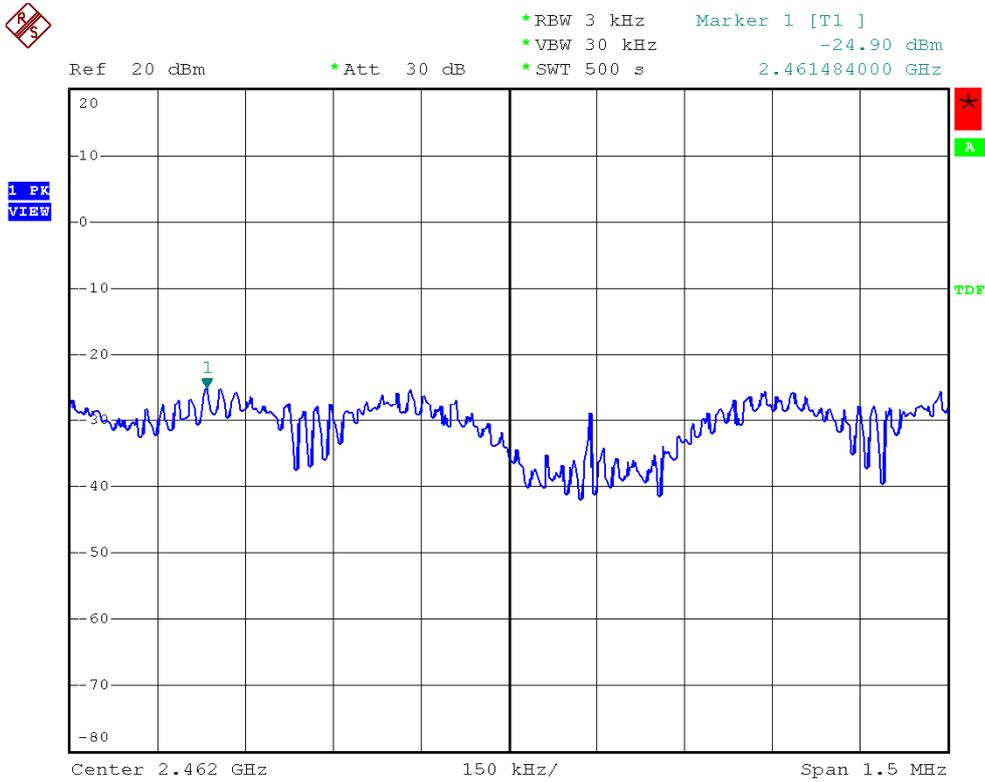


Modulation Standard: 802.11n HT20 (6.5Mbps), Antenna: L  
Channel: 06

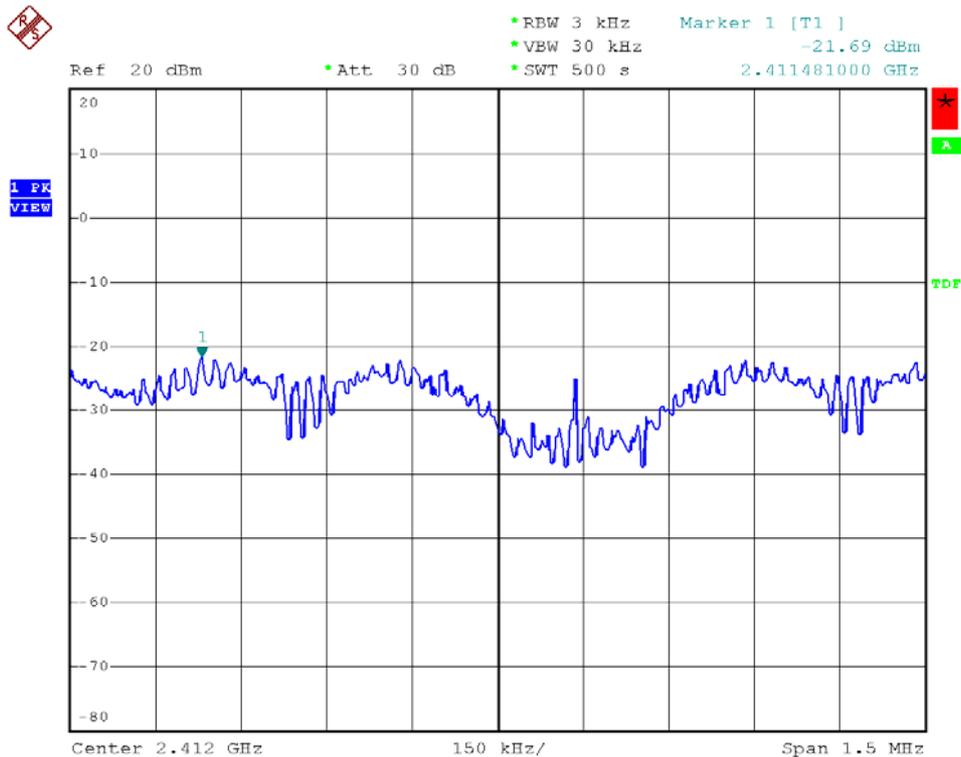




Modulation Standard: 802.11n HT20 (6.5Mbps), Antenna: L  
Channel: 11

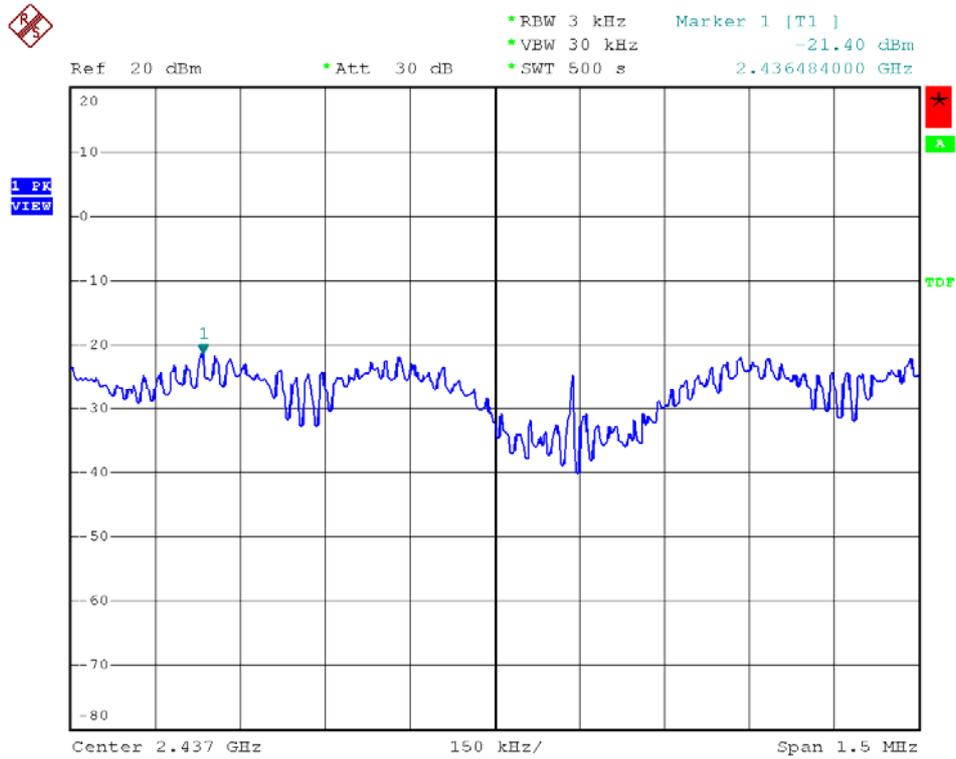


Modulation Standard: 802.11n HT20 (6.5Mbps), Antenna: R  
Channel: 01

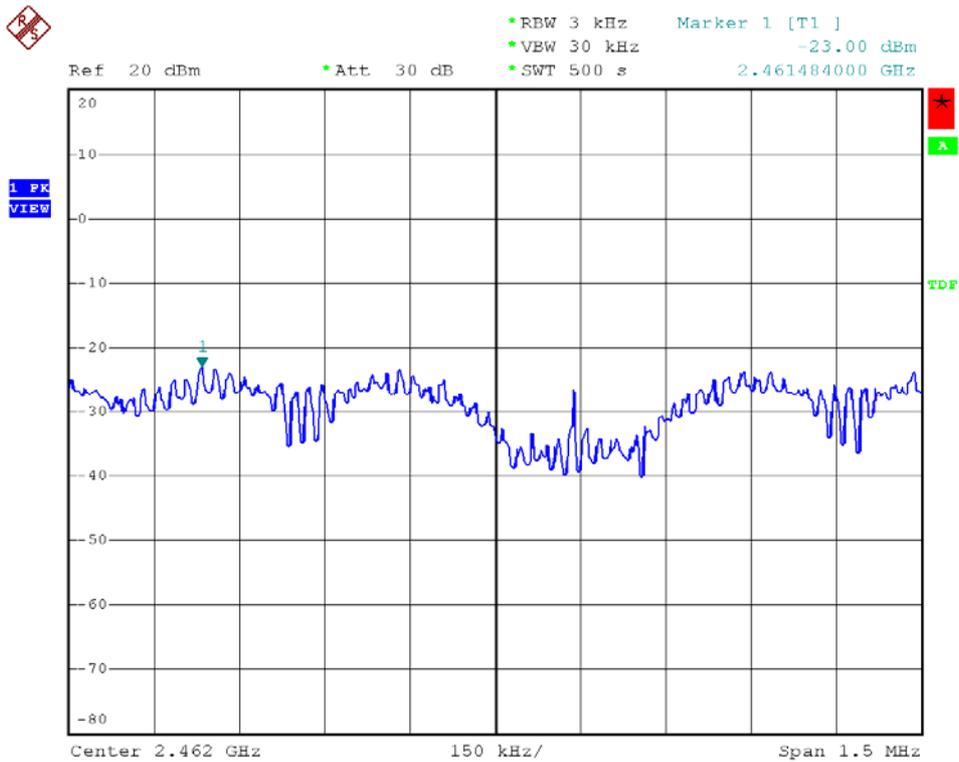




Modulation Standard: 802.11n HT20 (6.5Mbps), Antenna: R  
Channel: 06

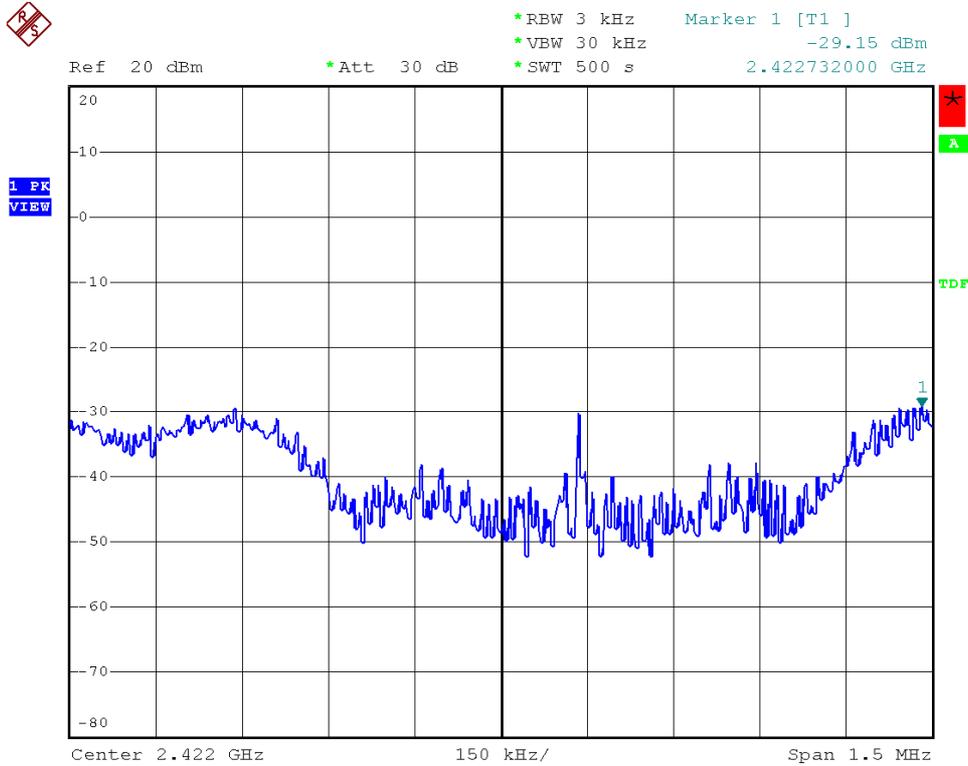


Modulation Standard: 802.11n HT20 (6.5Mbps), Antenna: R  
Channel: 11

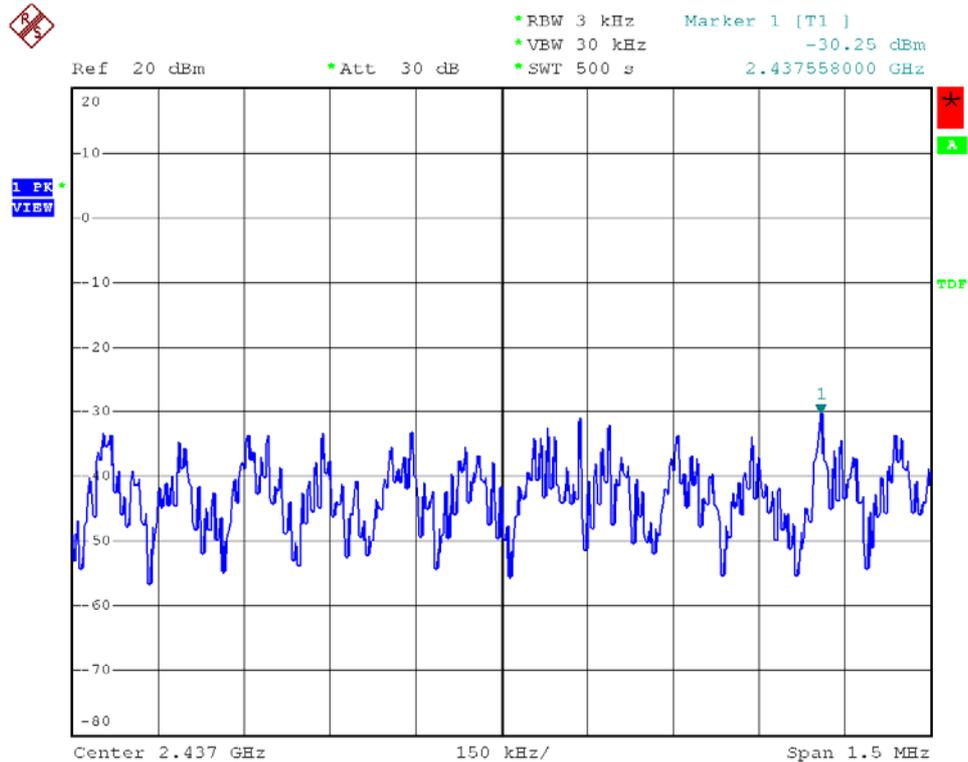




Modulation Standard: 802.11n HT40 (13.5Mbps), Antenna: L  
Channel: 03

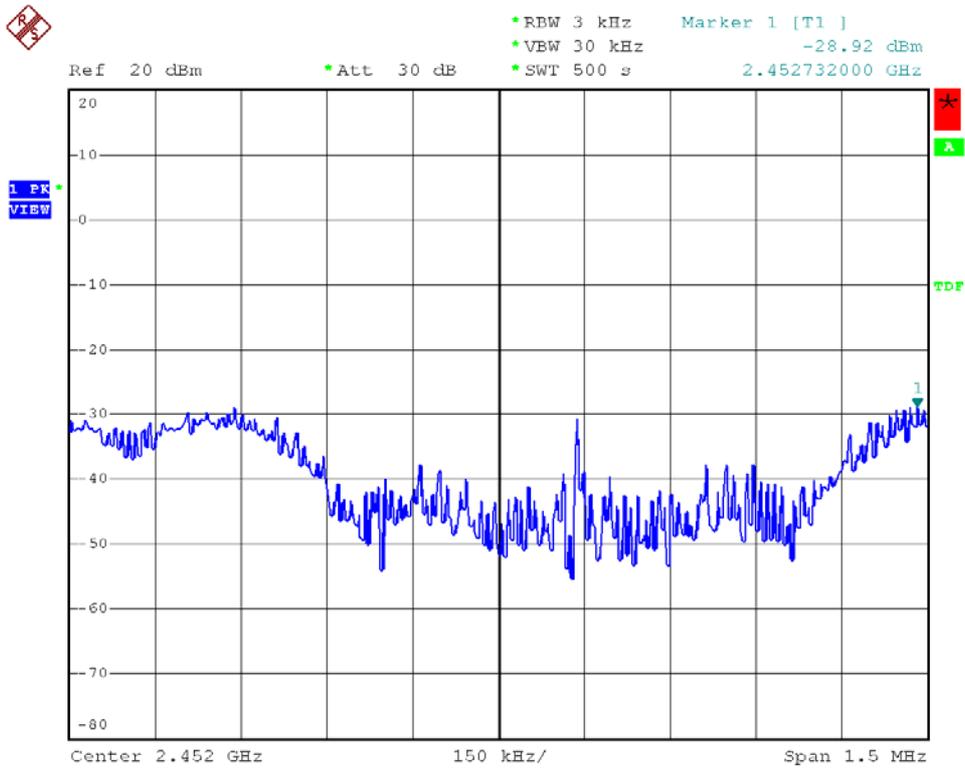


Modulation Standard: 802.11n HT40 (13.5Mbps), Antenna: L  
Channel: 06

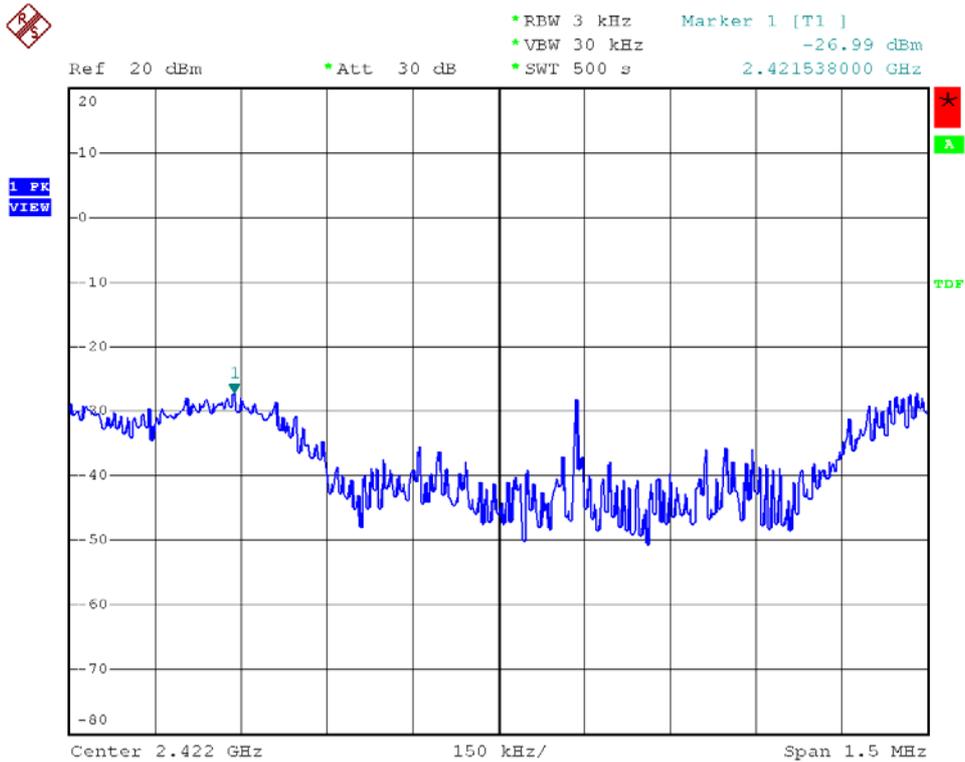




Modulation Standard: 802.11n HT40 (13.5Mbps), Antenna: L  
Channel: 09

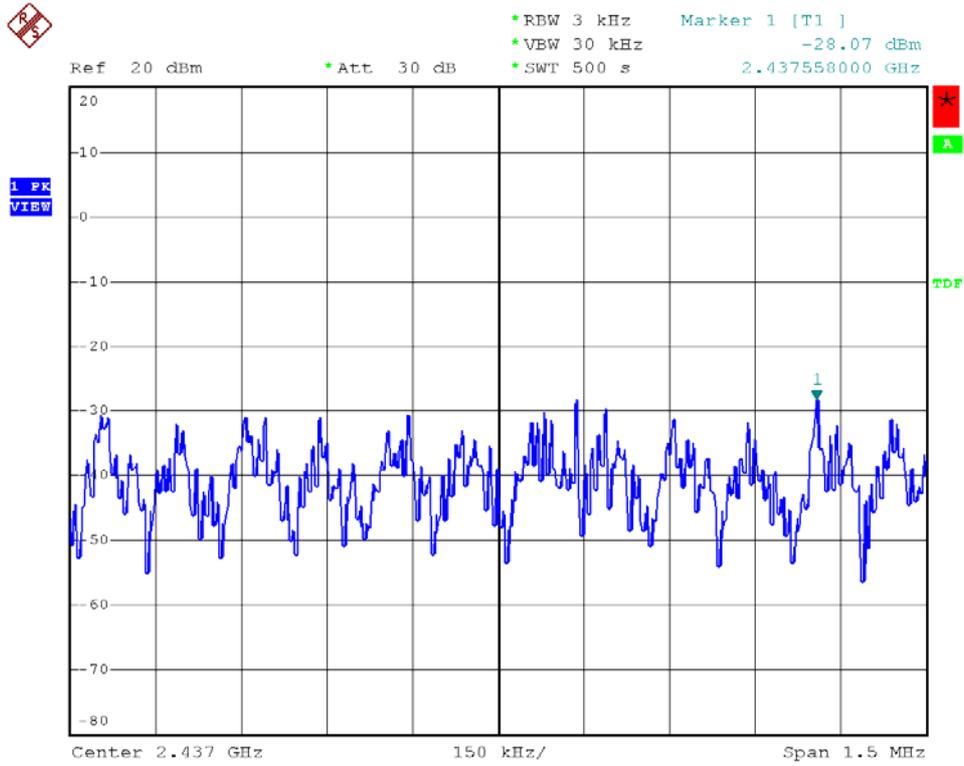


Modulation Standard: 802.11n HT40 (13.5Mbps), Antenna: R  
Channel: 03

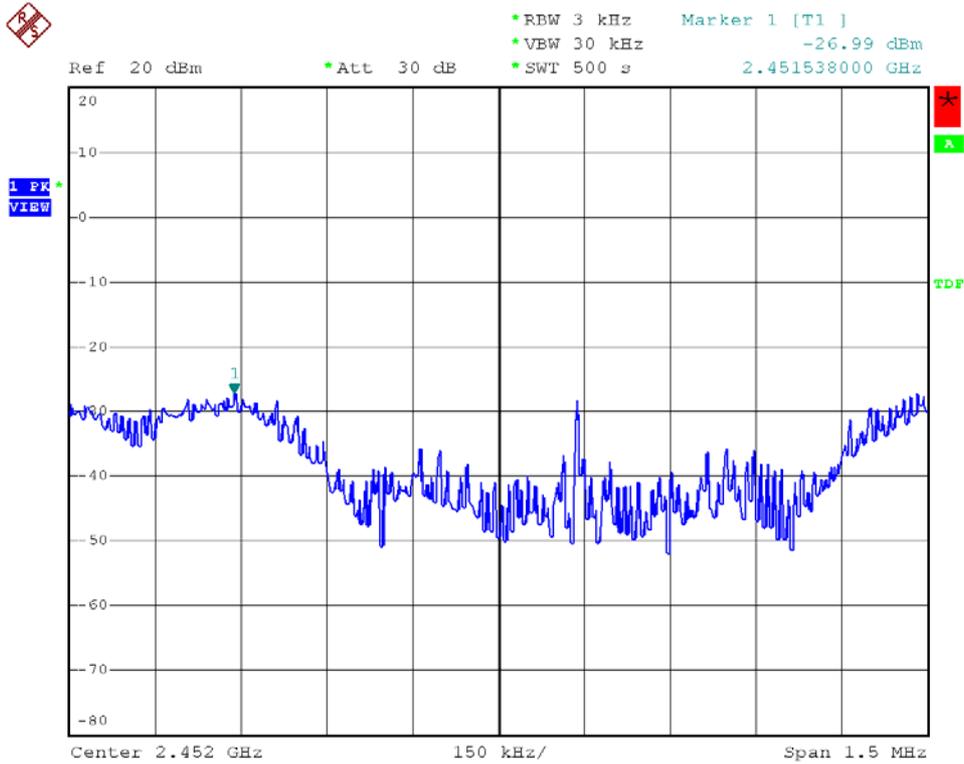




Modulation Standard: 802.11n HT40 (13.5Mbps), Antenna: R  
Channel: 06

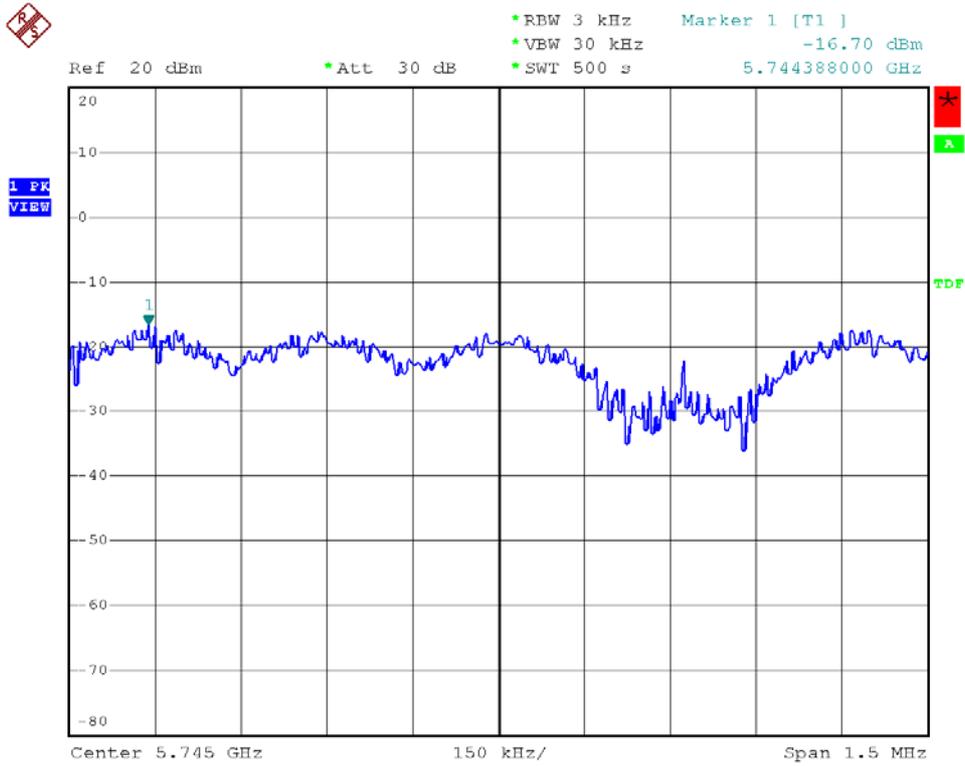


Modulation Standard: 802.11n HT40 (13.5Mbps), Antenna: R  
Channel: 09

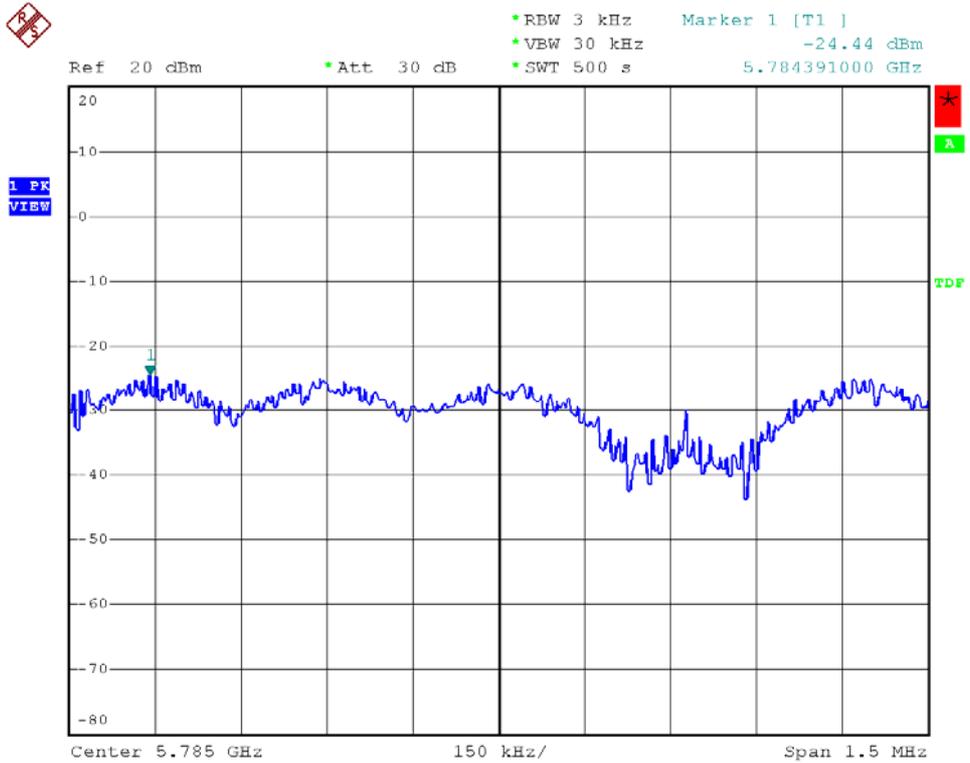




Modulation Standard: 802.11a (6Mbps), Antenna: L  
Channel: 149

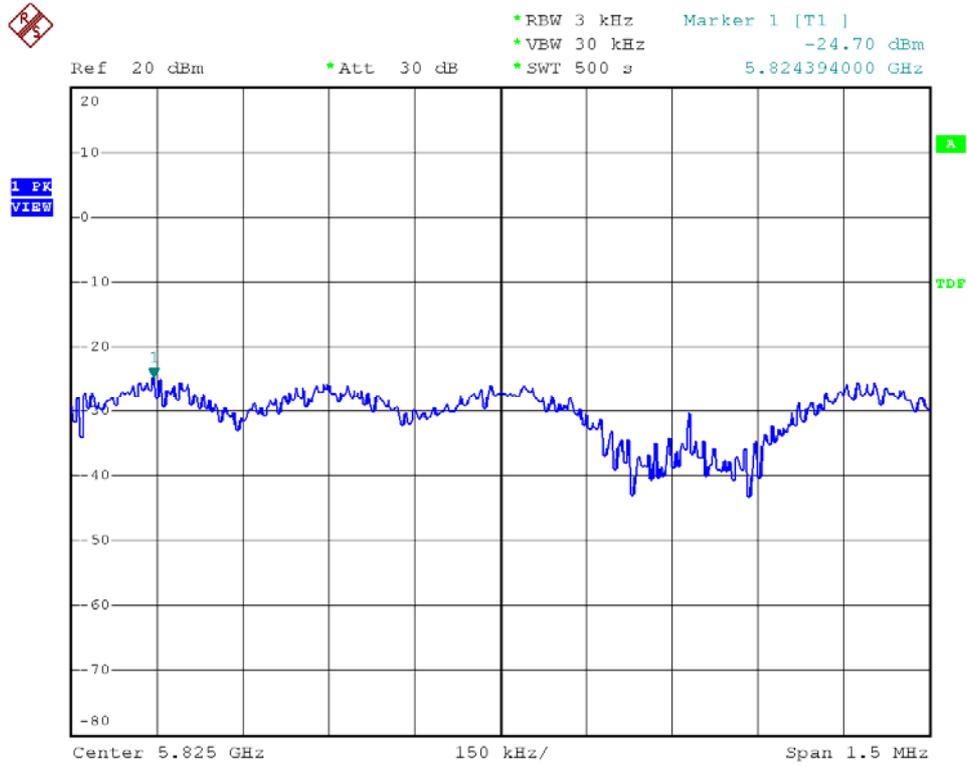


Modulation Standard: 802.11a (6Mbps), Antenna: L  
Channel: 157

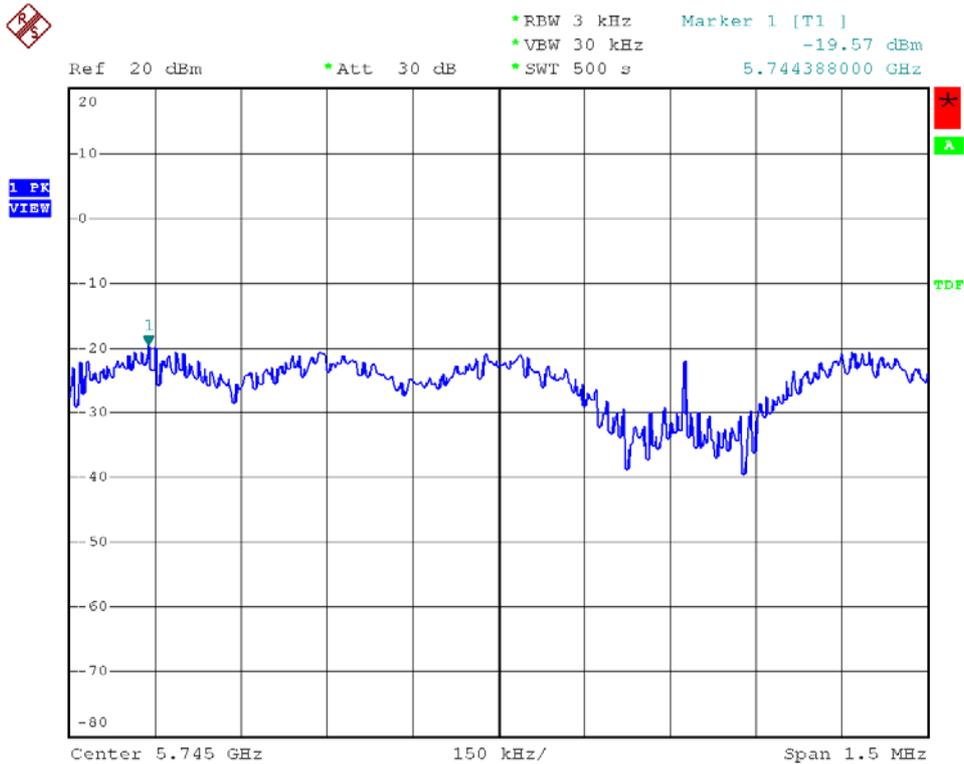




Modulation Standard: 802.11a (6Mbps), Antenna: L  
Channel: 165

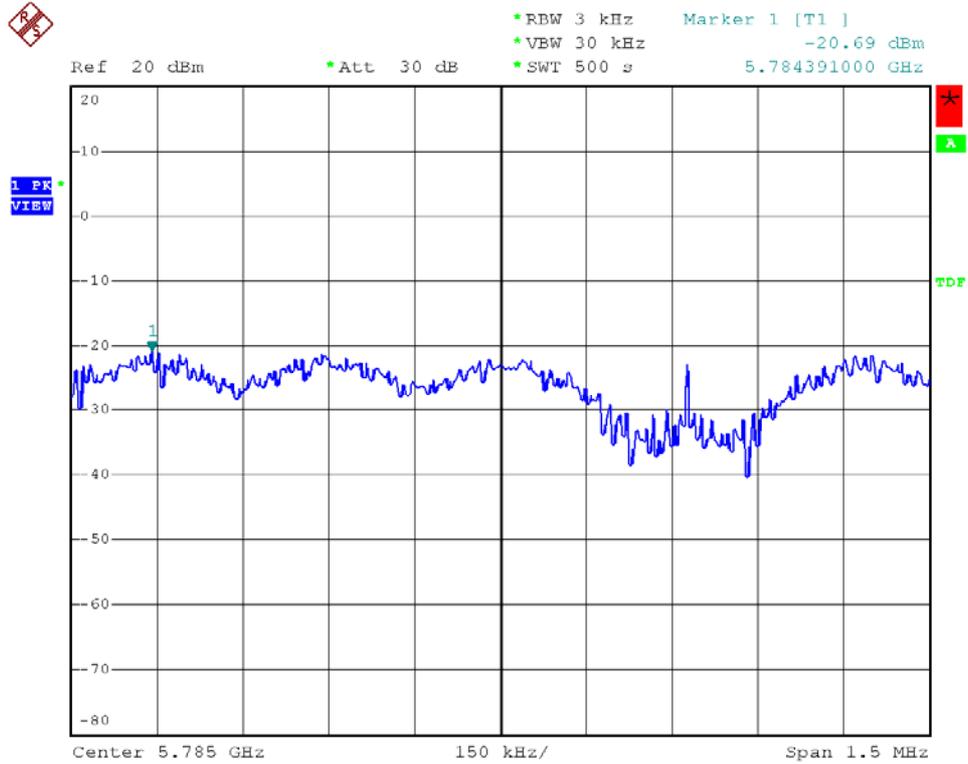


Modulation Standard: 802.11a (6Mbps), Antenna: R  
Channel: 149

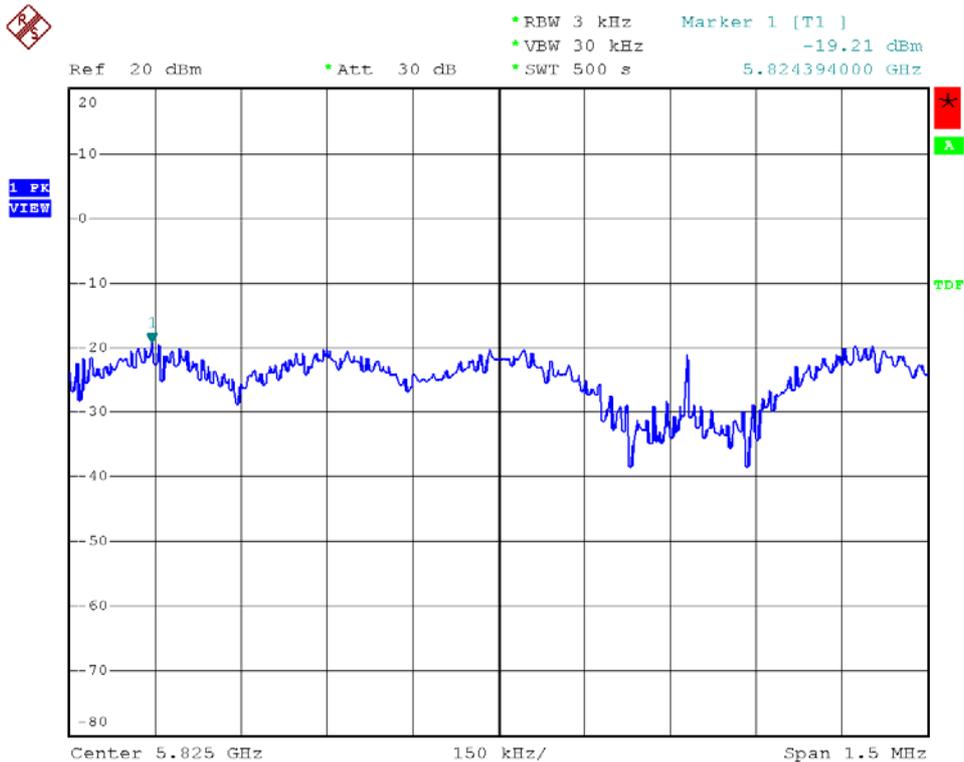




Modulation Standard: 802.11a (6Mbps), Antenna: R  
Channel: 157

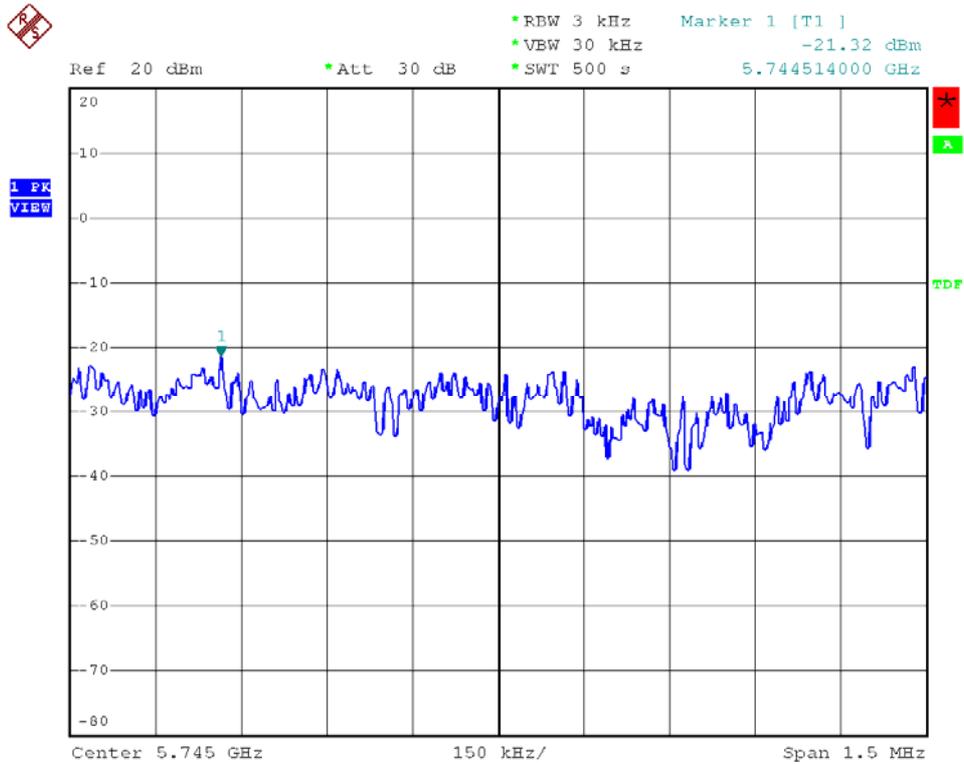


Modulation Standard: 802.11a (6Mbps), Antenna: R  
Channel: 165

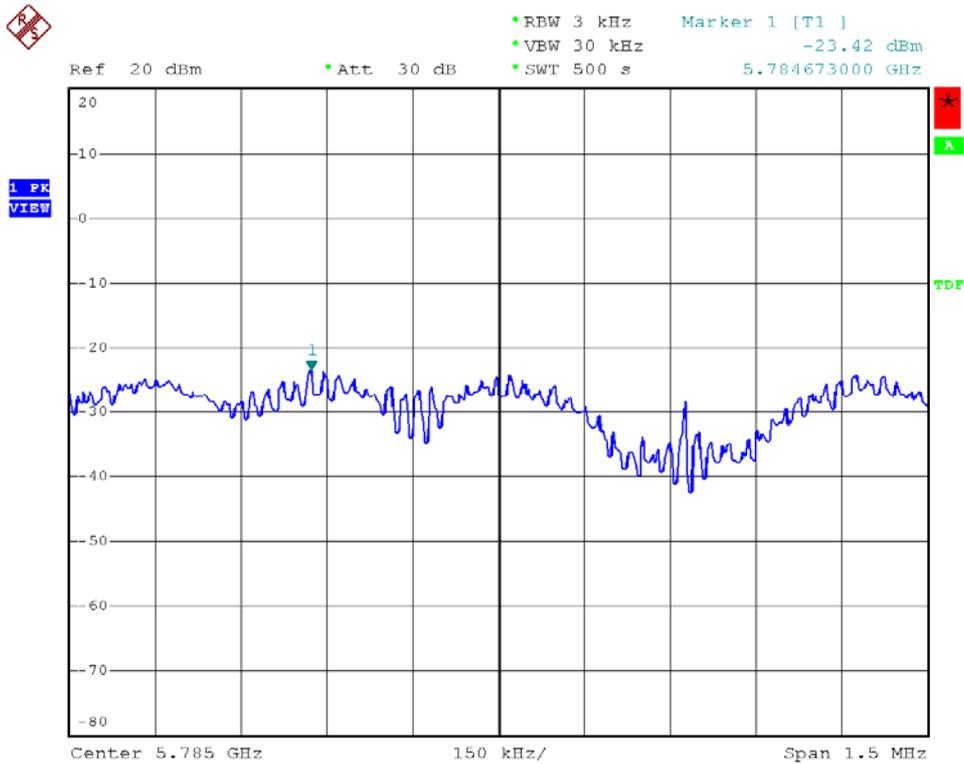




Modulation Standard: 802.11an HT20 (6.5Mbps), Antenna: L  
Channel: 149

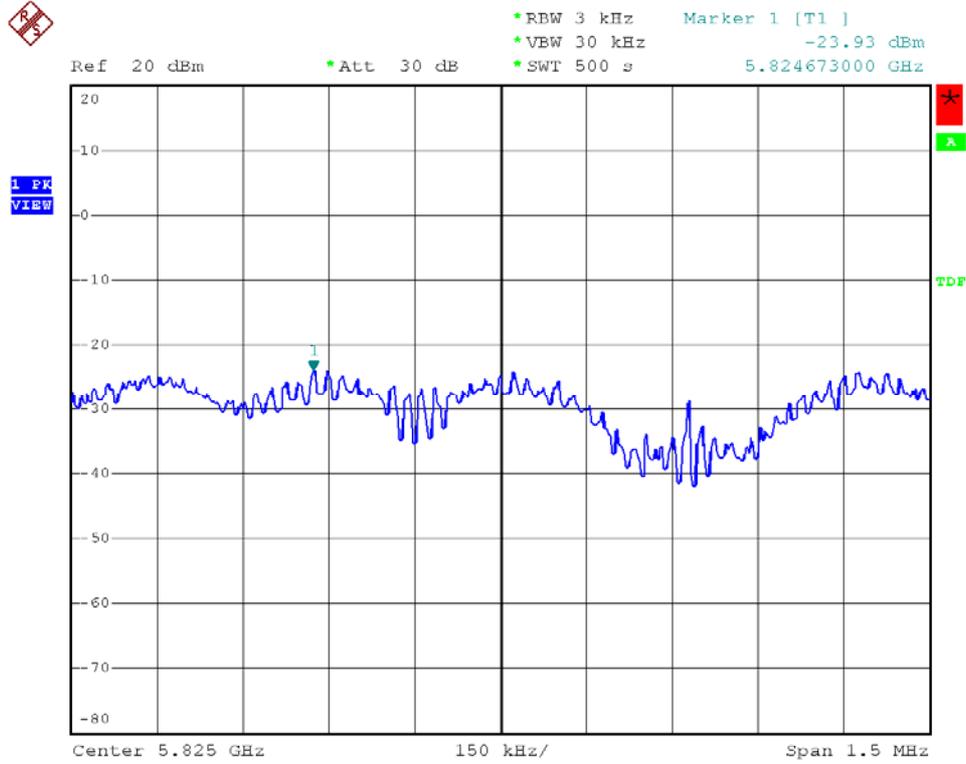


Modulation Standard: 802.11an HT20 (6.5Mbps), Antenna: L  
Channel: 157

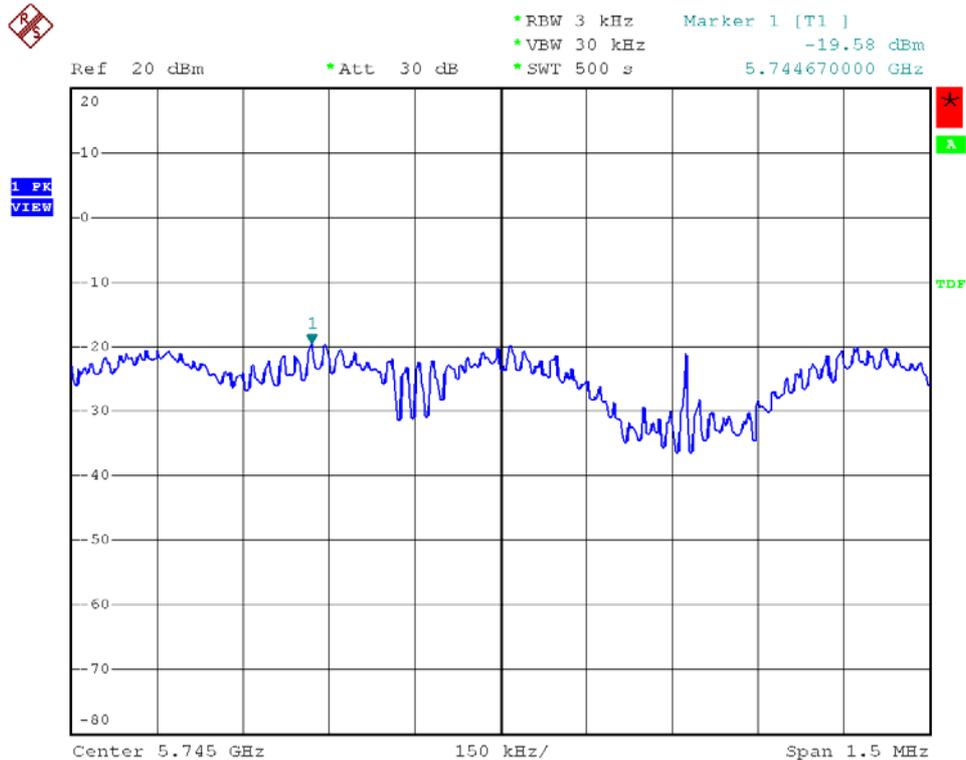




Modulation Standard: 802.11an HT20 (6.5Mbps), Antenna: L  
Channel: 165

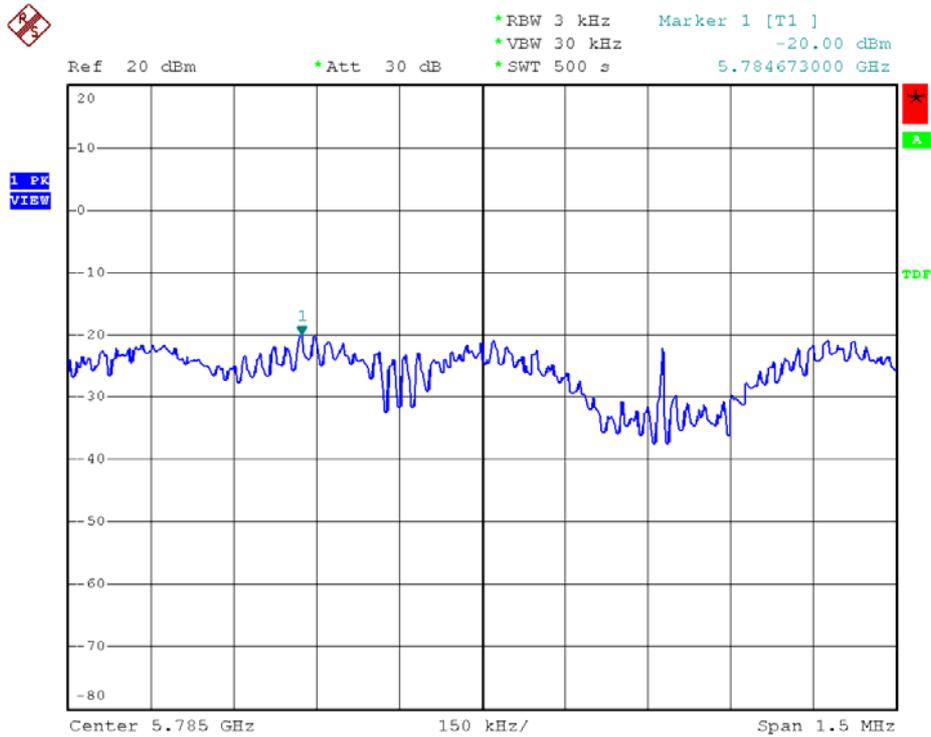


Modulation Standard: 802.11an HT20 (6.5Mbps), Antenna: R  
Channel: 149

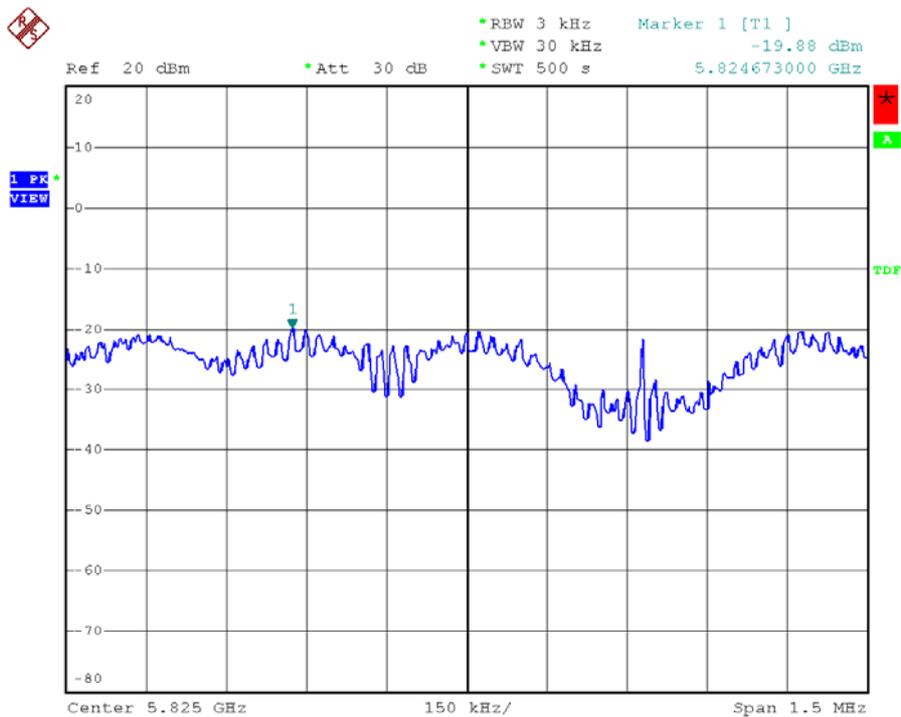




Modulation Standard: 802.11an HT20 (6.5Mbps), Antenna: R  
Channel: 157

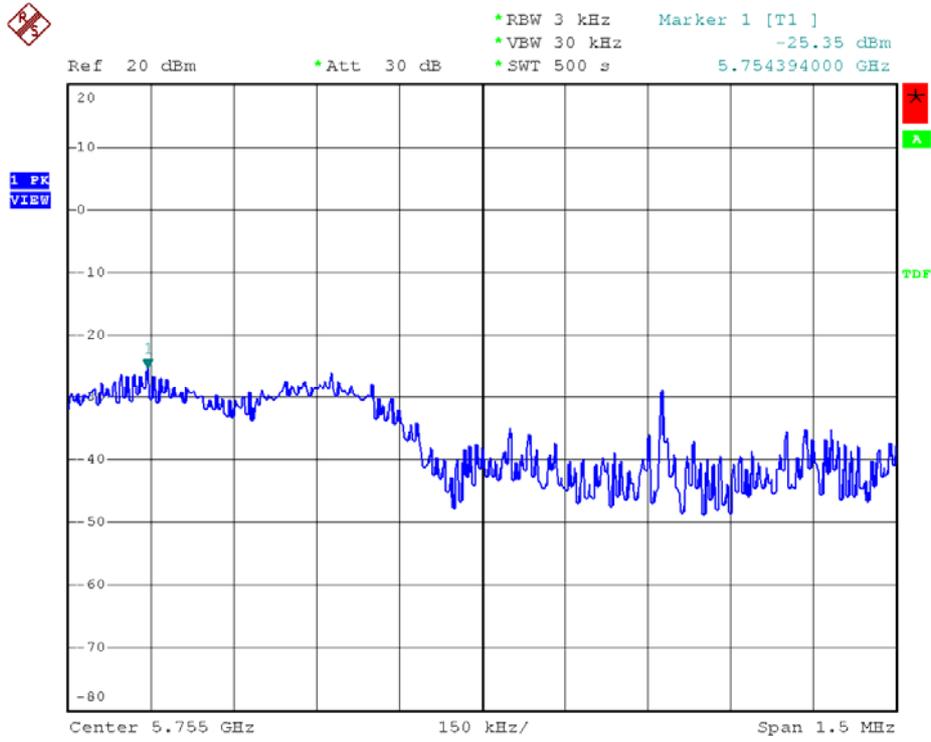


Modulation Standard: 802.11an HT20 (6.5Mbps), Antenna: R  
Channel: 165

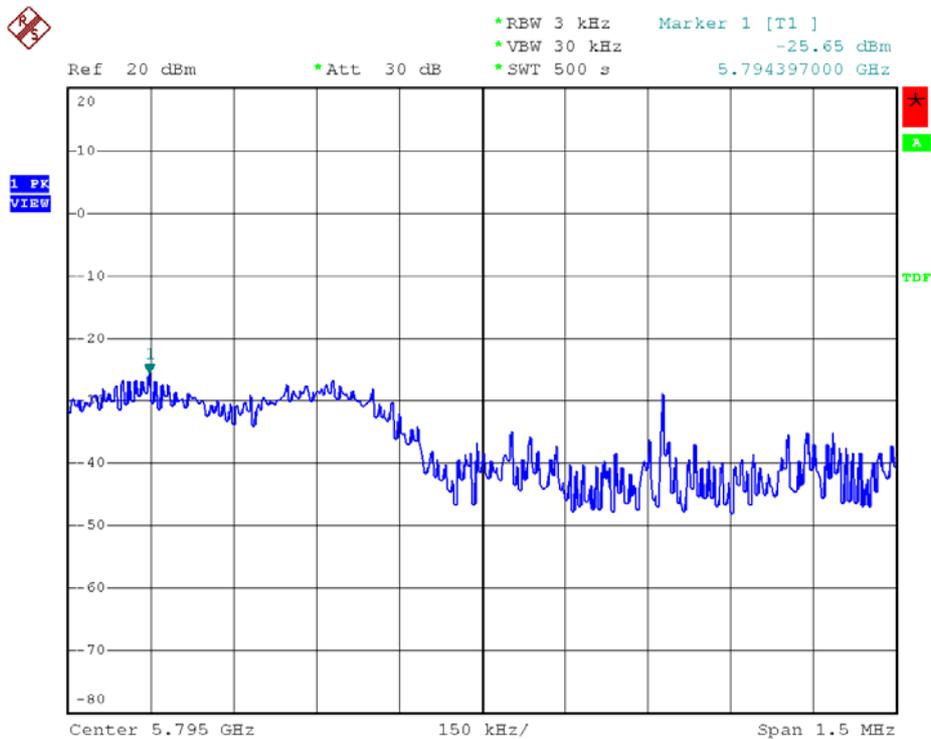




Modulation Standard: 802.11an HT40 (13.5Mbps), Antenna: L  
Channel: 151

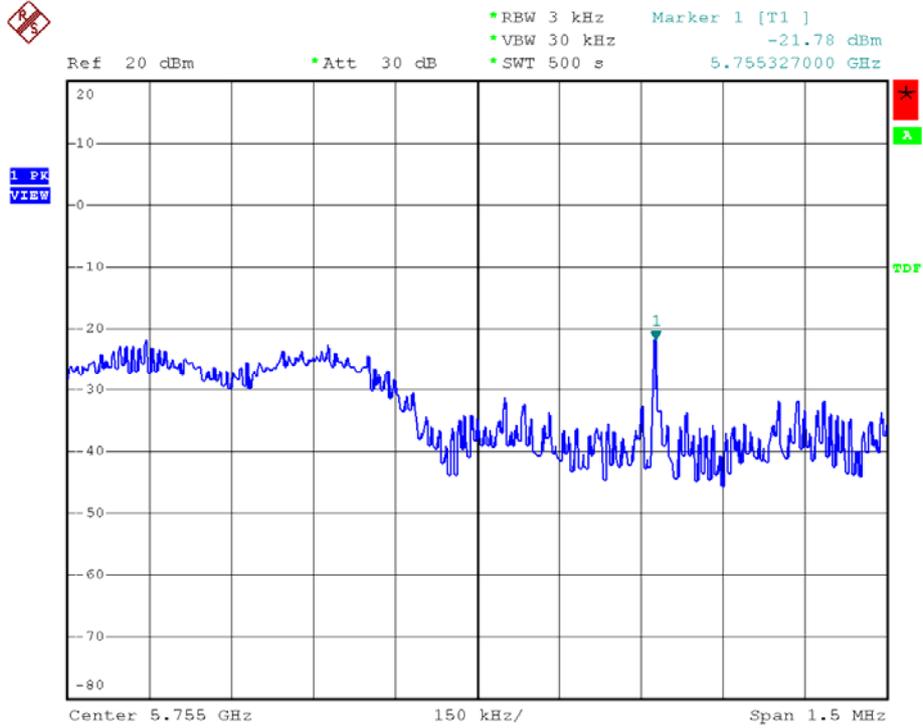


Modulation Standard: 802.11an HT40 (13.5Mbps), Antenna: L  
Channel: 159

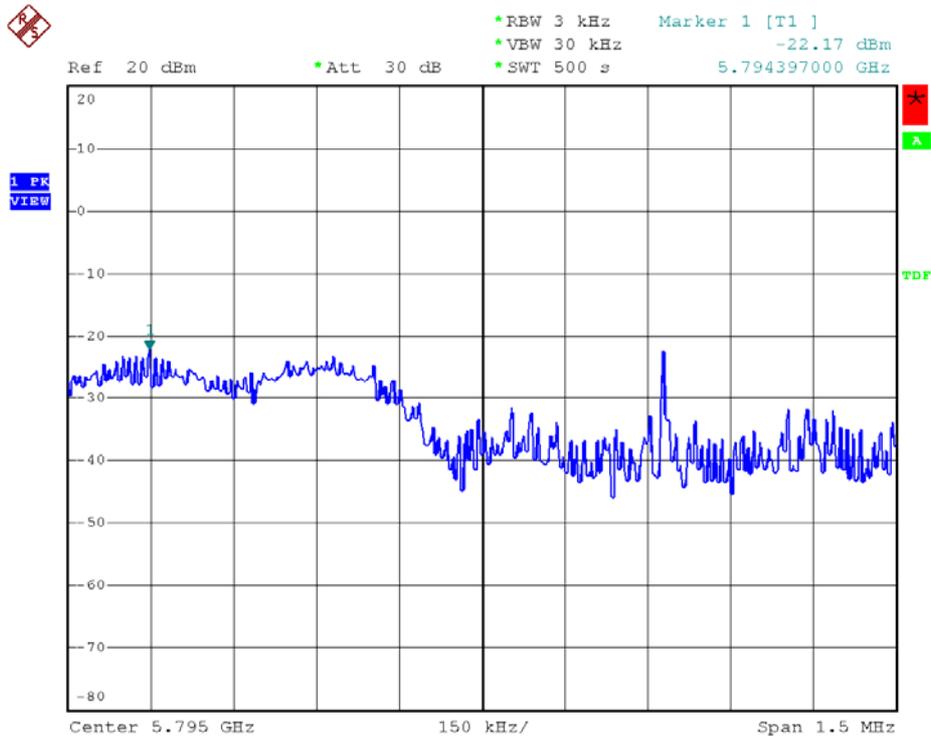




Modulation Standard: 802.11an HT40 (13.5Mbps), Antenna: R  
Channel: 151



Modulation Standard: 802.11an HT40 (13.5Mbps), Antenna: R  
Channel: 159





## 9. Band Edges Measurement

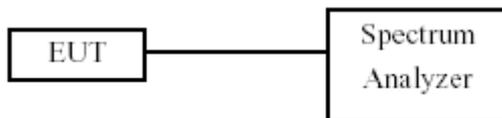
### 9.1 Test Limit

Below  $-20\text{dB}$  of the highest emission level of operating band (In 100 kHz Resolution Bandwidth)

### 9.2 Test Procedure

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

### 9.3 Test Setup Layout



### 9.4 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



## 9.5 Test Result and Data

Test Date: Nov. 08, 2008

Temperature: 20

Atmospheric pressure: 1008 hPa

Humidity: 60%

Modulation Standard	Channel	Frequency (MHz)	maximum value in frequency (MHz)		maximum value (dBm)	
			L	R	L	R
802.11b (11Mbps)	01	2412	2397.00	2396.20	-40.69	-36.80
	11	2462	2483.70	2483.90	-49.79	-49.57
802.11g (6Mbps)	01	2412	2399.80	2399.60	-41.67	-38.73
	11	2462	2483.70	2484.30	-50.29	-49.01
802.11n HT20 (6.5Mbps)	01	2412	2397.40	2397.40	-48.35	-45.42
	11	2462	2484.10	-2484.10	-53.90	-52.38
802.11n HT40 (13.5Mbps)	03	2422	2399.20	2399.20	-50.54	-49.04
	09	2452	2486.10	2484.70	-51.93	-52.28

Test Date: Nov. 10, 2008

Temperature: 20

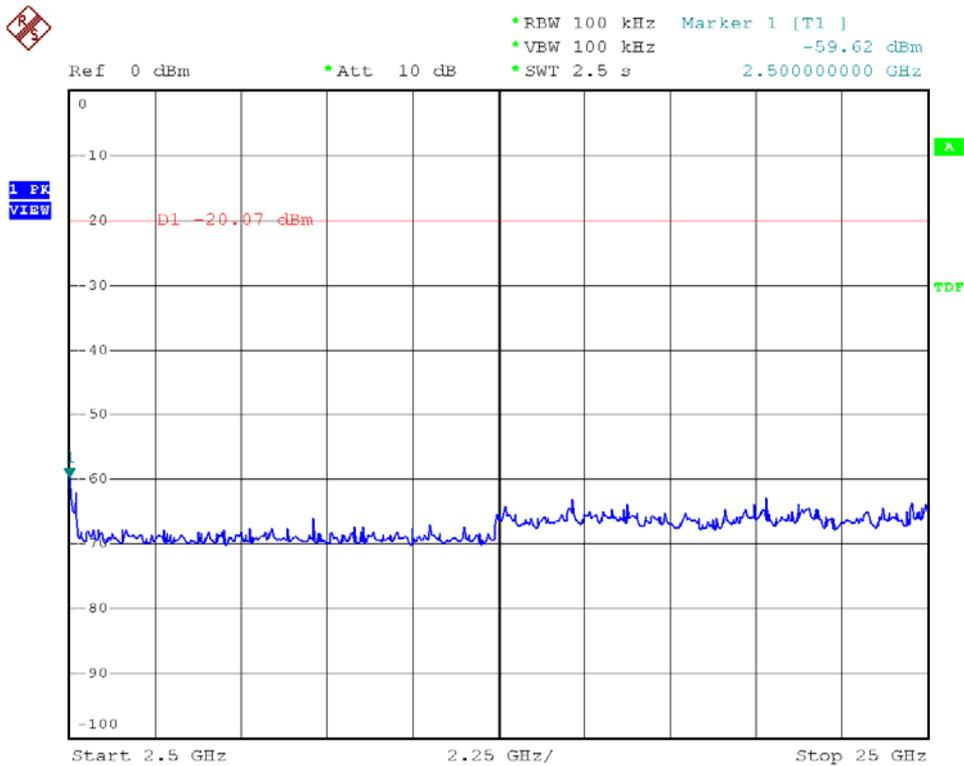
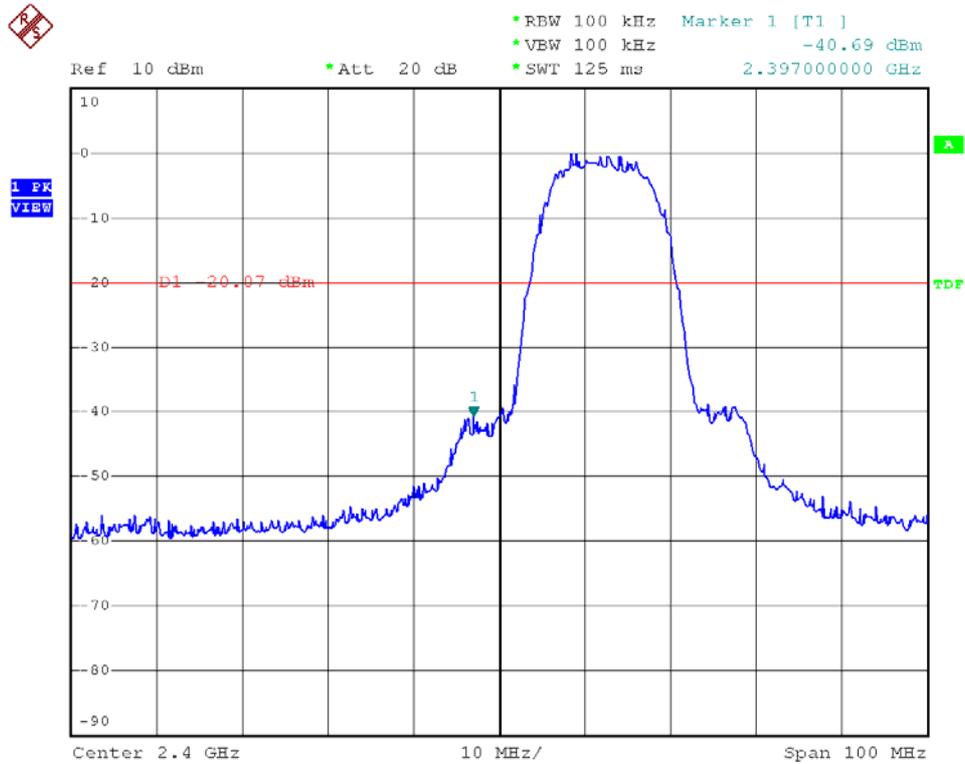
Atmospheric pressure: 1008 hPa

Humidity: 60%

Modulation Standard	Channel	Frequency (MHz)	maximum value in frequency (MHz)		maximum value (dBm)	
			L	R	L	R
802.11a (6Mbps)	149	5745	17220.00	5698.80	-43.00	-45.63
	165	5825	40000.00	5868.00	-46.19	-45.33
802.11an HT20 (6.5Mbps)	149	5745	40000.00	5698.20	-46.16	-45.02
	165	5825	40000.00	5860.20	-46.47	-44.70
802.11an HT40 (13.5Mbps)	151	5755	40000.00	39932.00	-46.20	-46.17
	159	5795	39932.00	40000.00	-46.11	-46.04

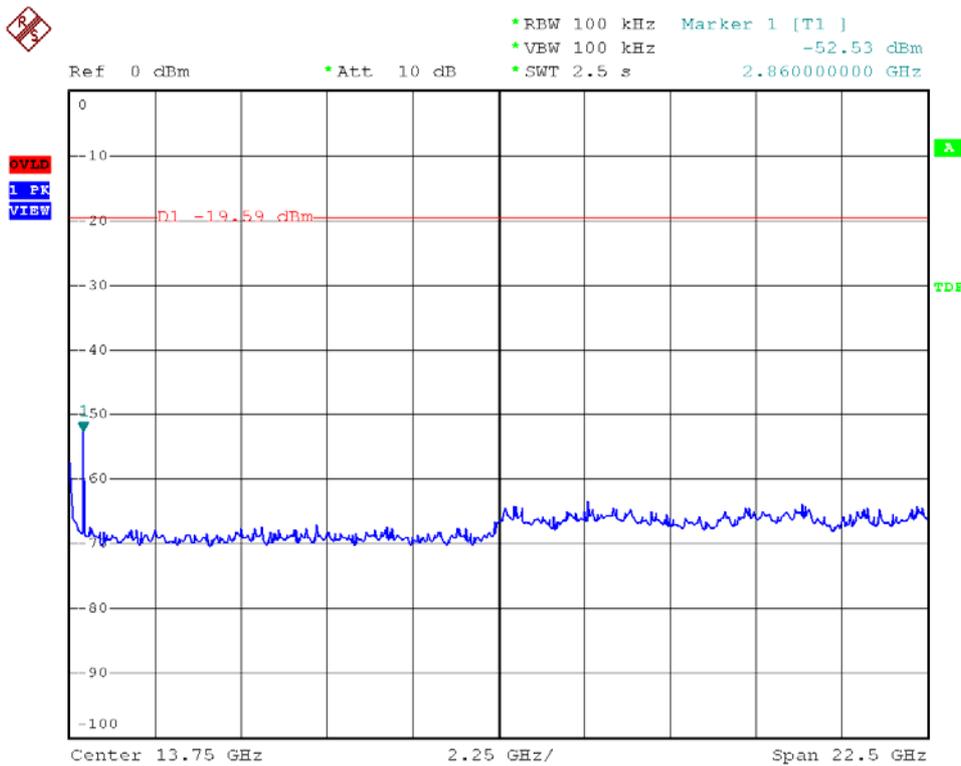
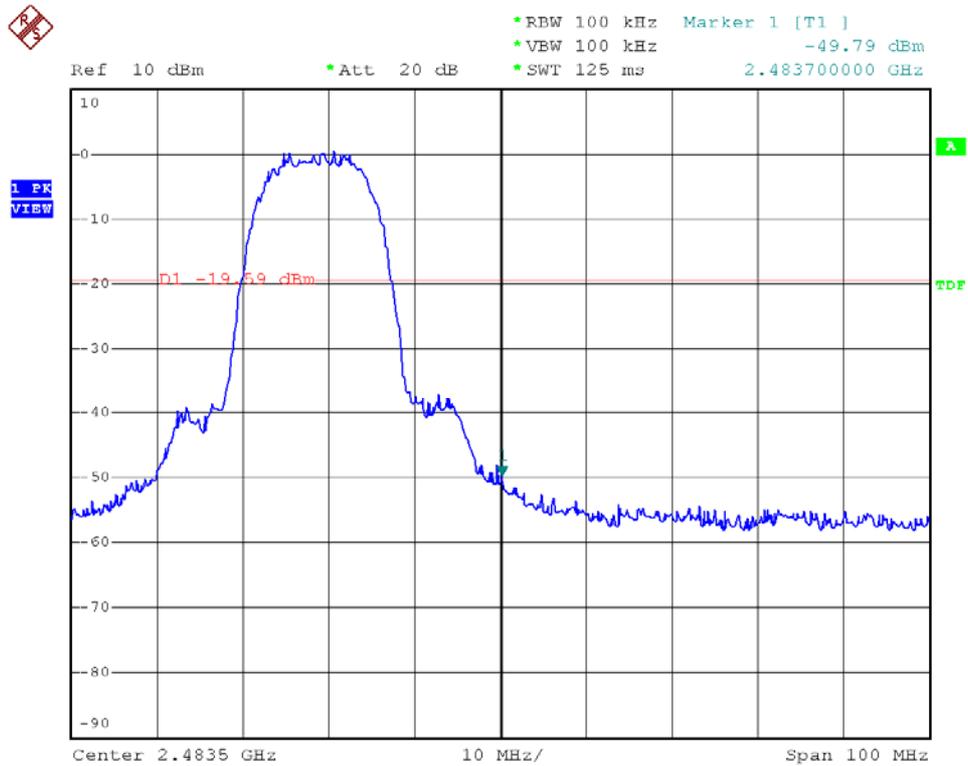


Modulation Standard: 802.11b (11Mbps), Antenna: L  
Channel: 01



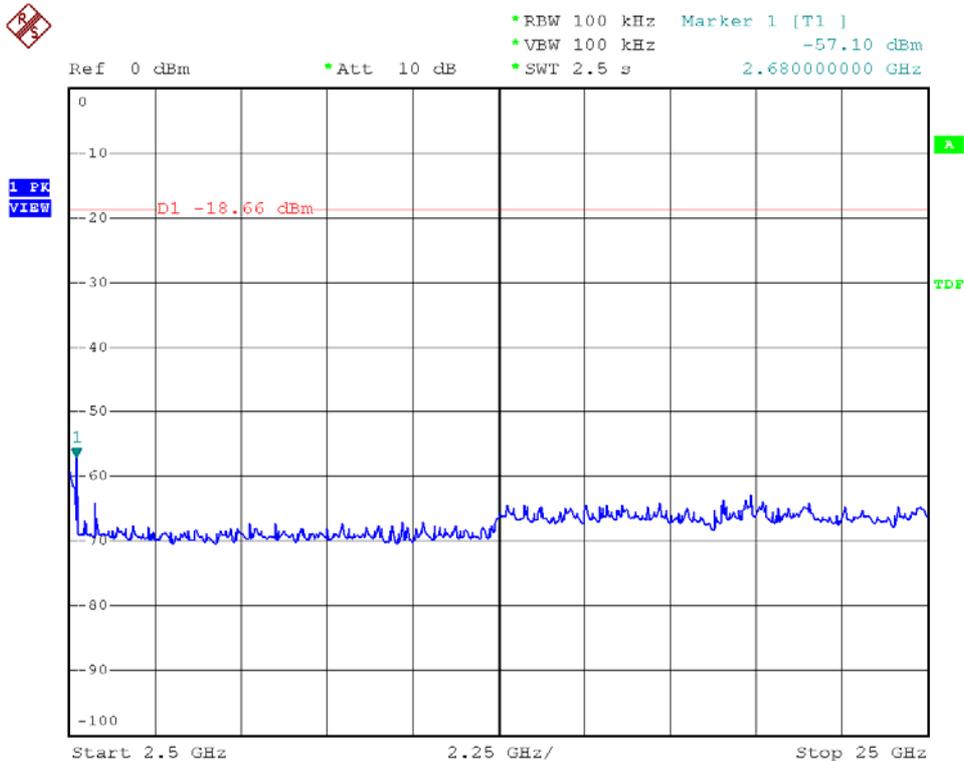
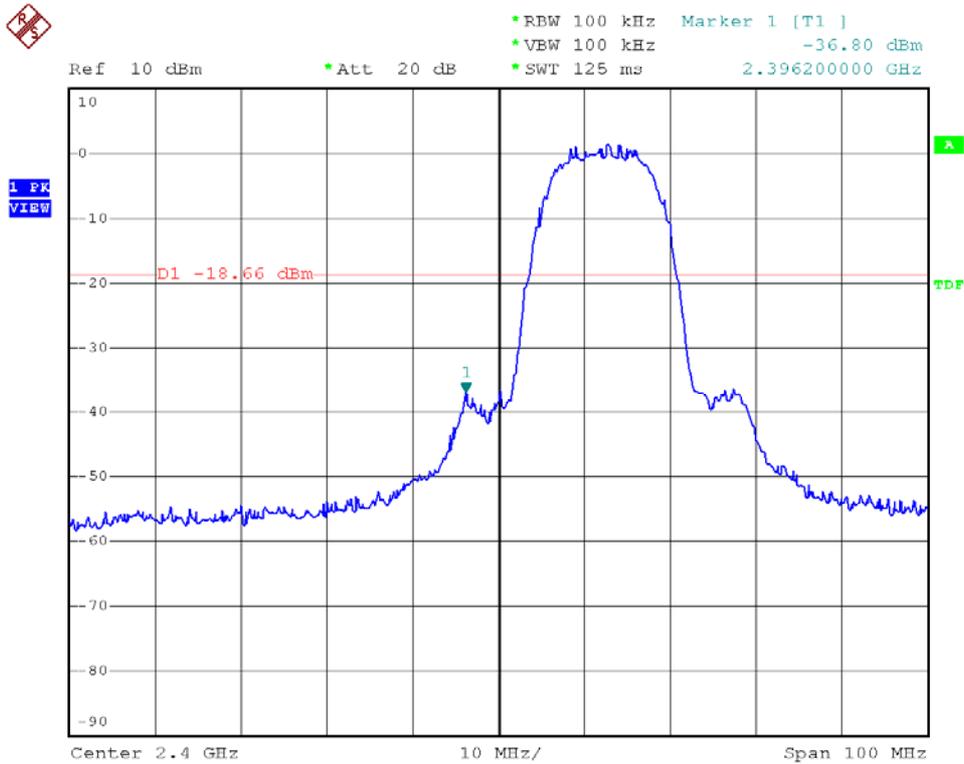


Modulation Standard: 802.11b (11Mbps), Antenna: L  
Channel: 11



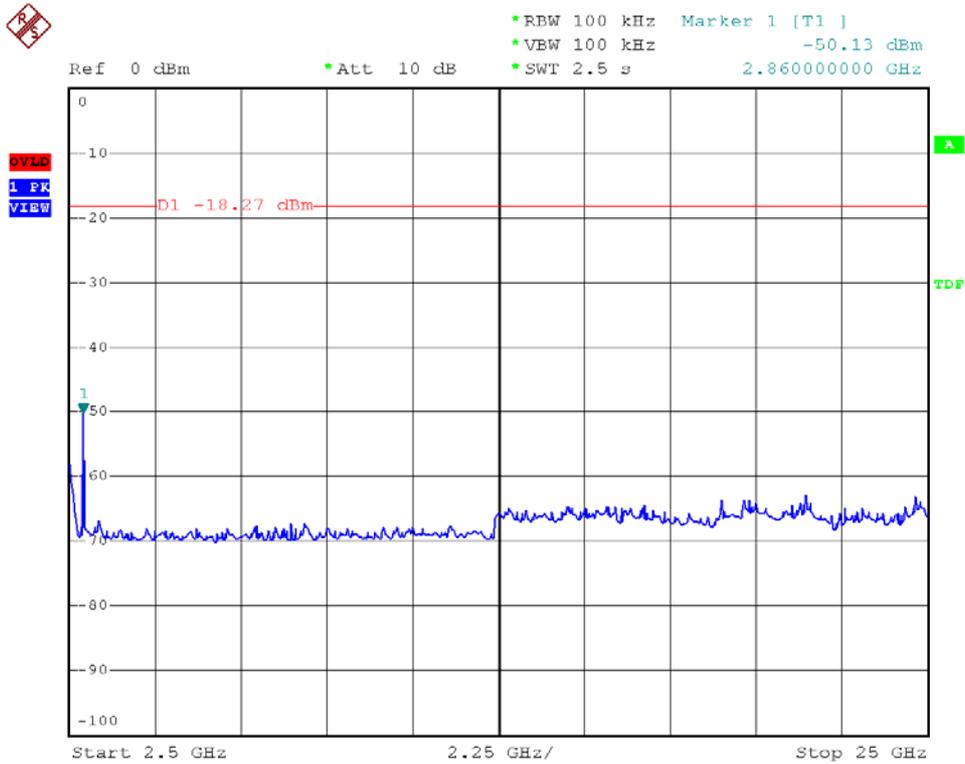
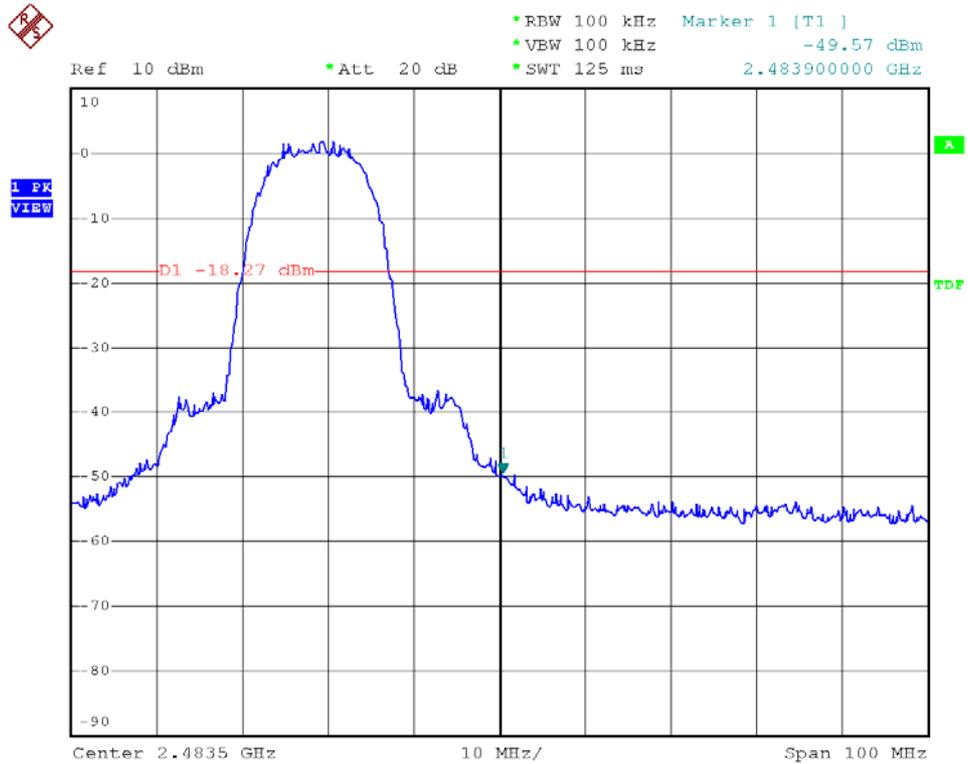


Modulation Standard: 802.11b (11Mbps), Antenna: R  
Channel: 01



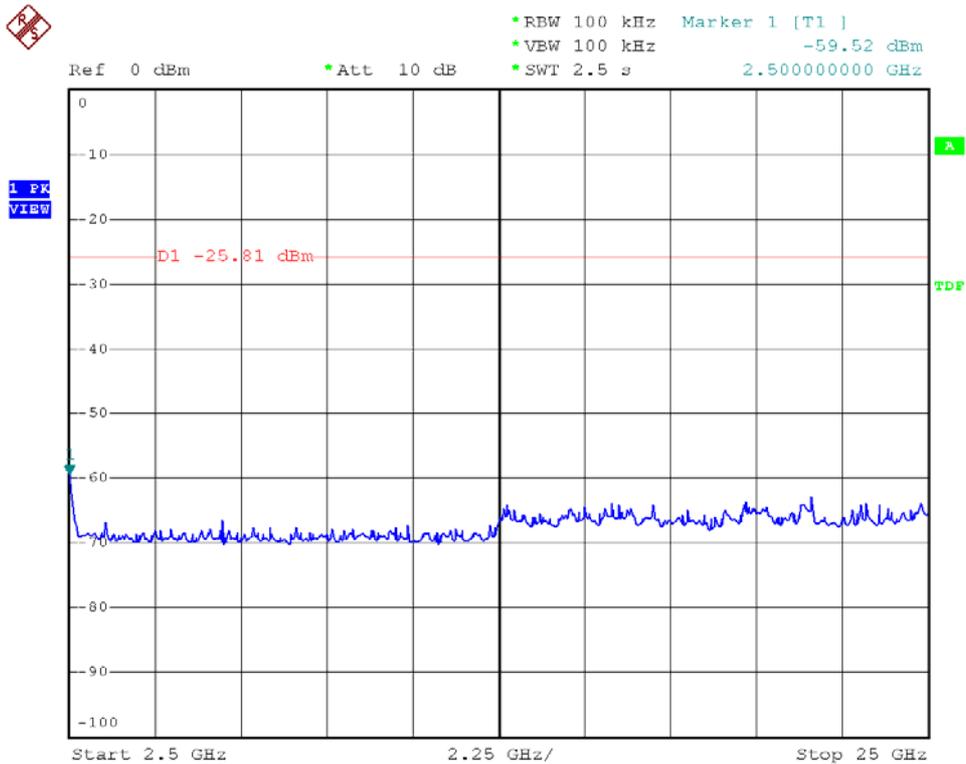
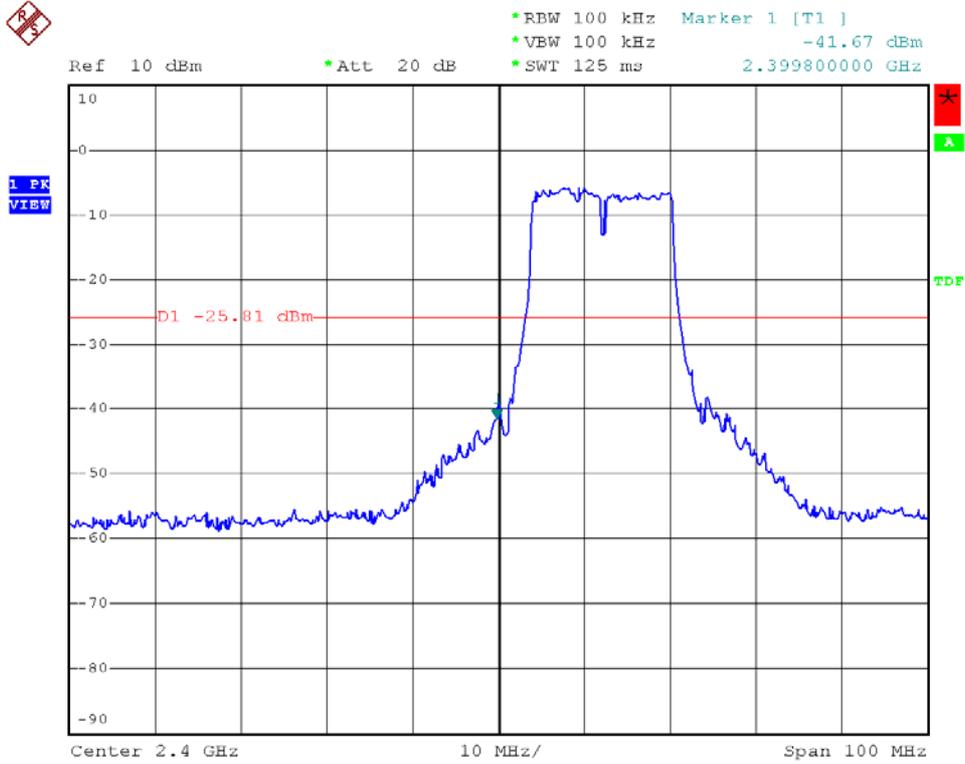


Modulation Standard: 802.11b (11Mbps), Antenna: R  
Channel: 11



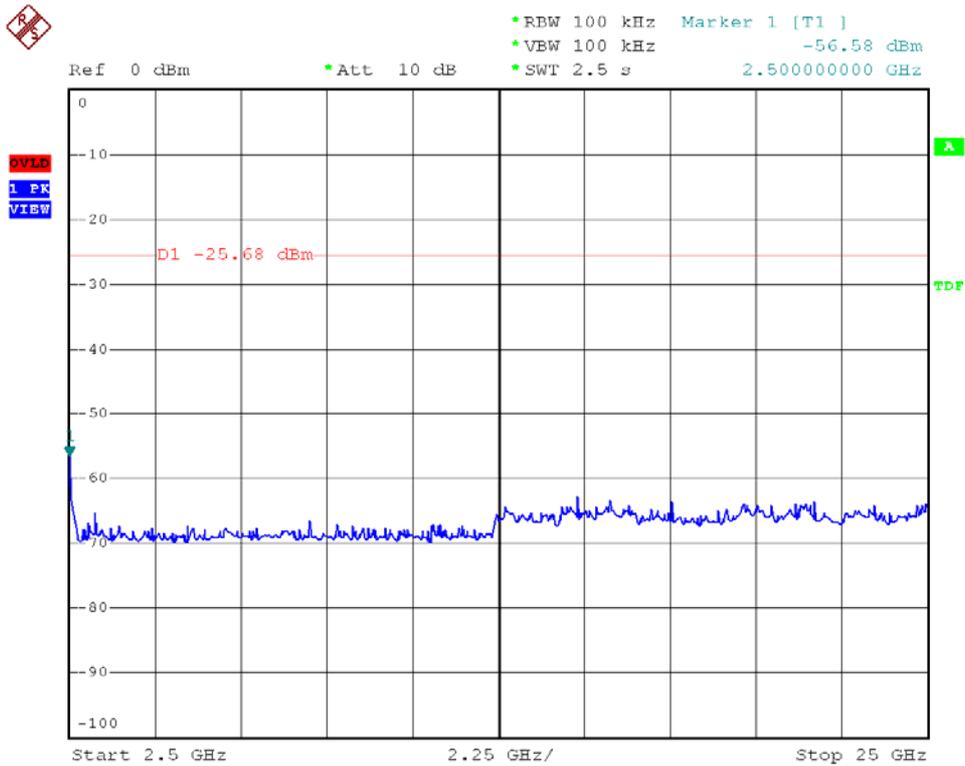
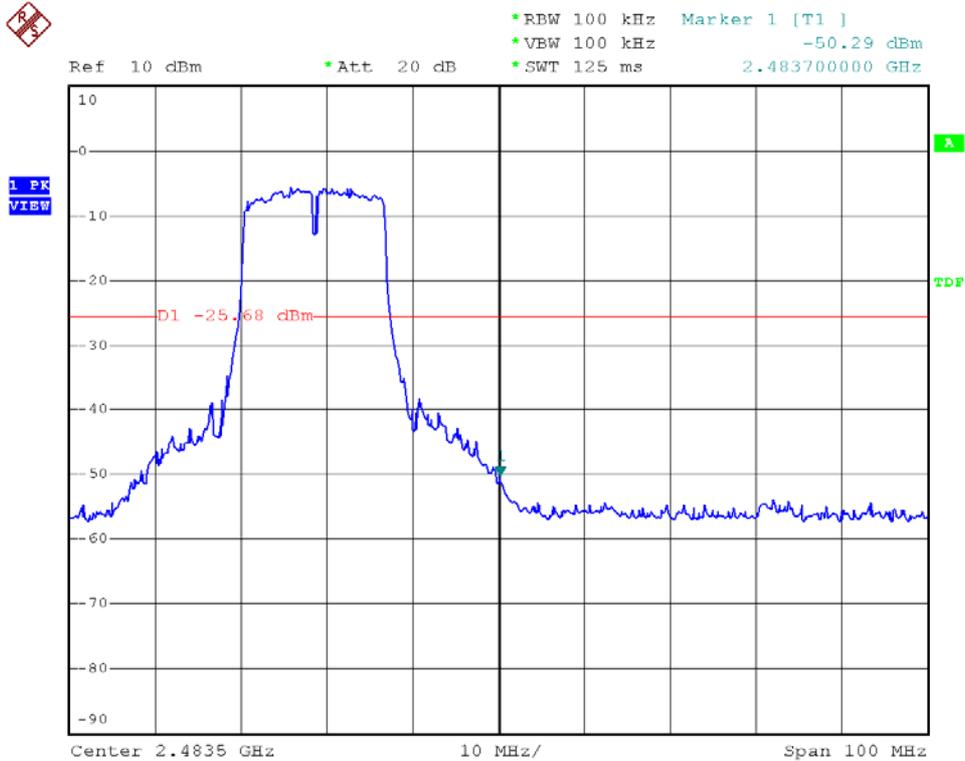


Modulation Standard: 802.11g (6Mbps), Antenna: L  
Channel: 01



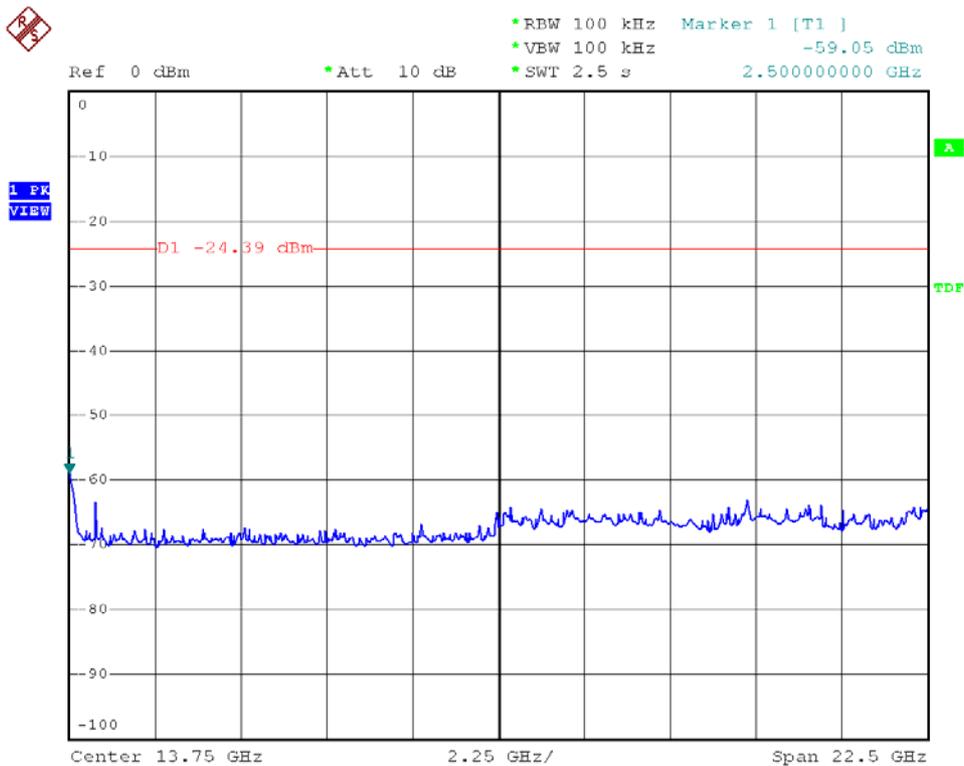
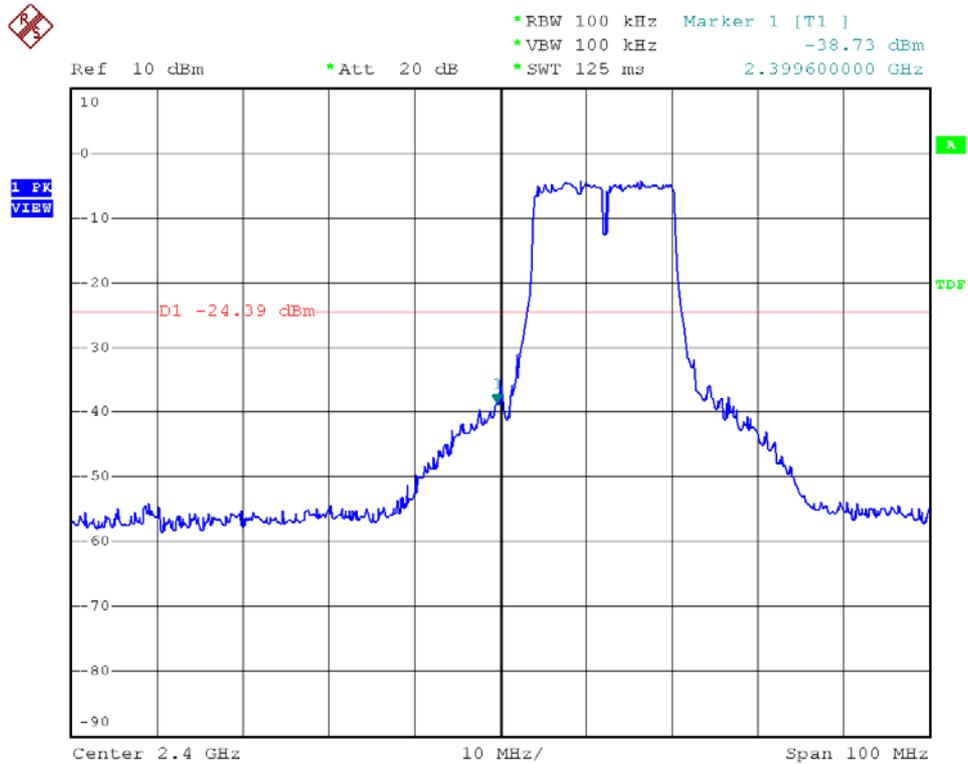


Modulation Standard: 802.11g (6Mbps), Antenna: L  
Channel: 11



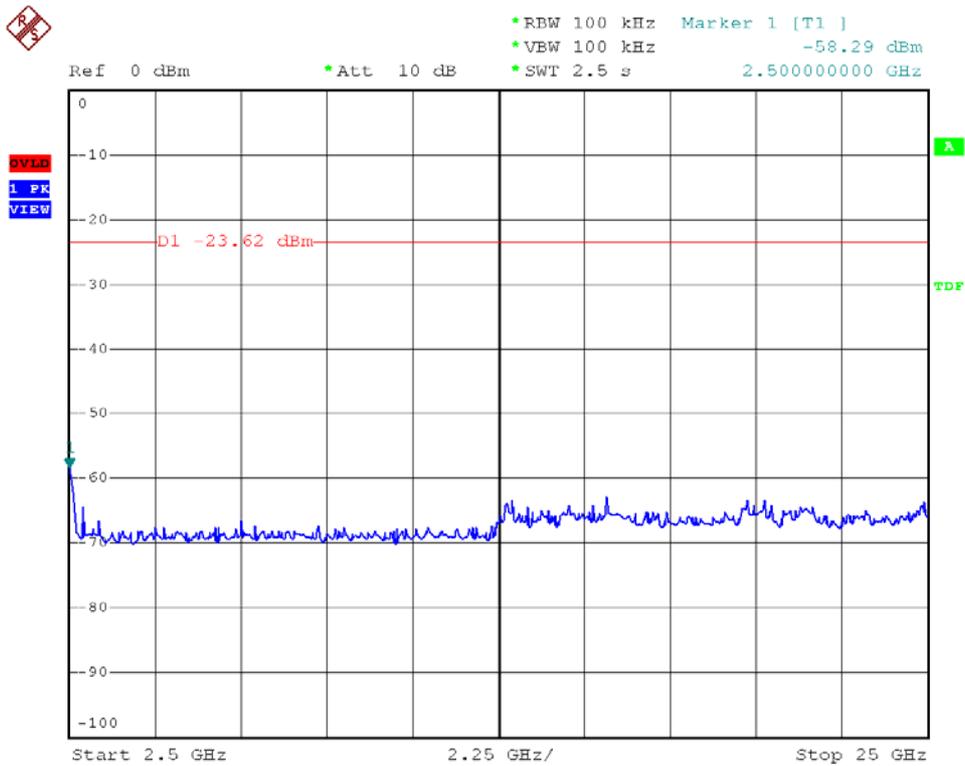
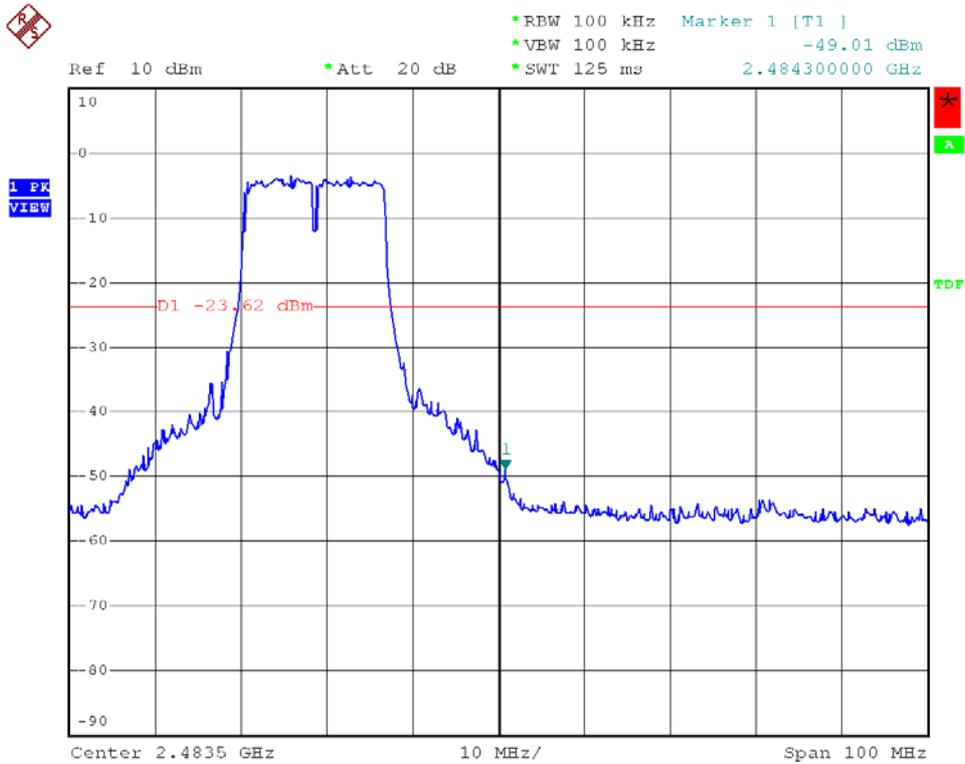


Modulation Standard: 802.11g (06Mbps), Antenna: R  
Channel: 01



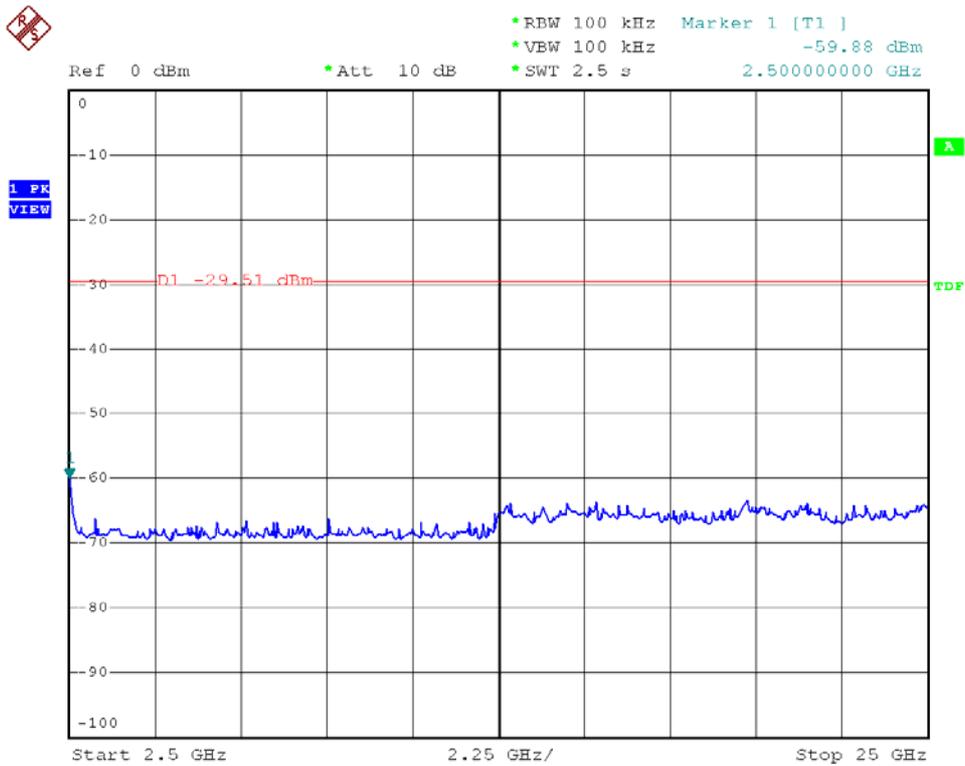
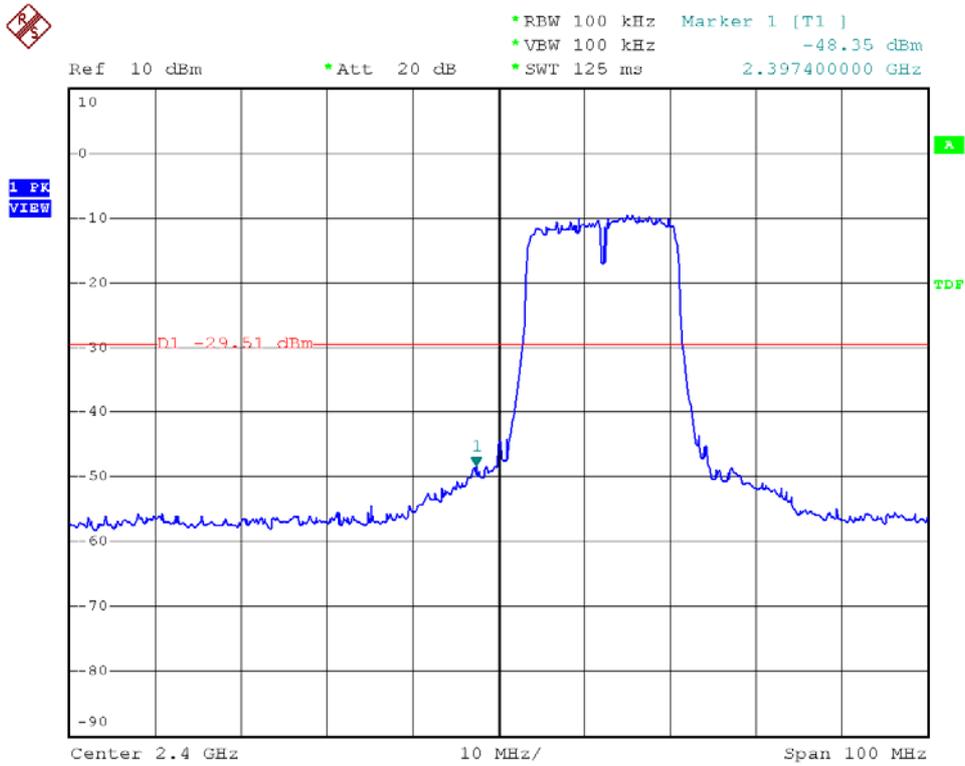


Modulation Standard: 802.11g (06Mbps), Antenna: R  
Channel: 11



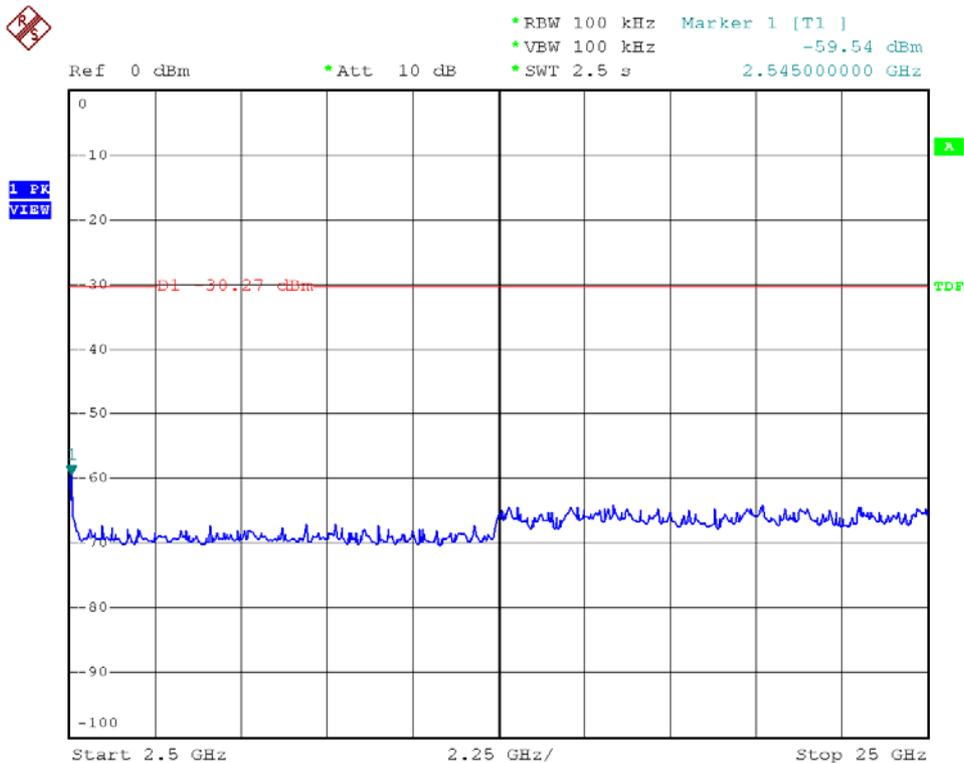
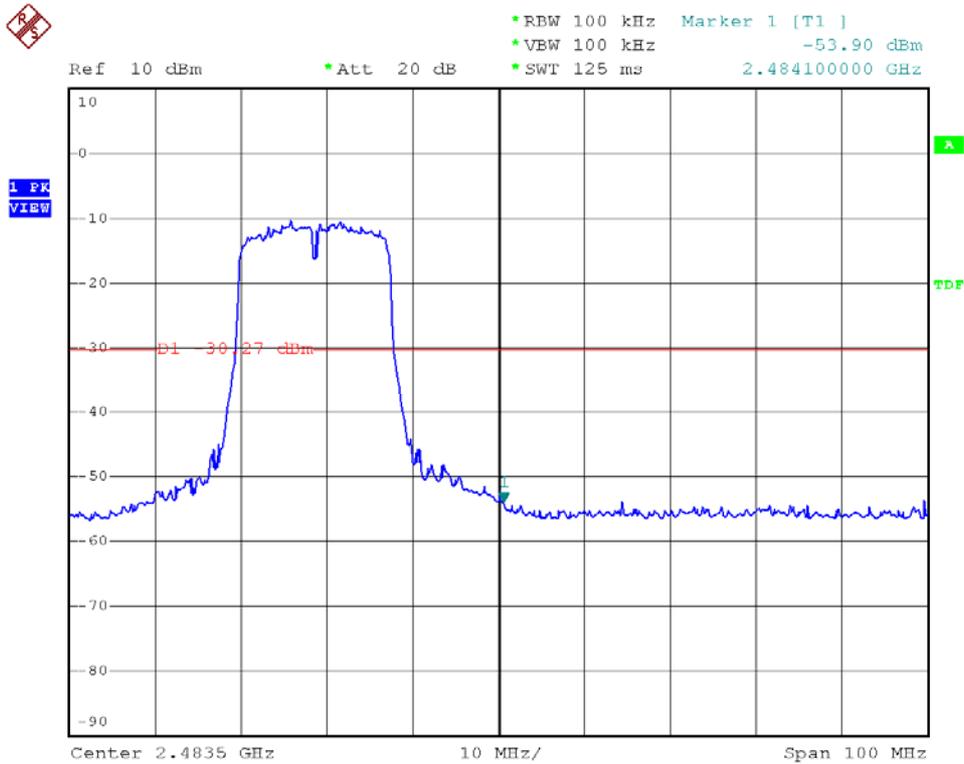


Modulation Standard: 802.11n HT20 (6.5Mbps), Antenna: L  
Channel: 01



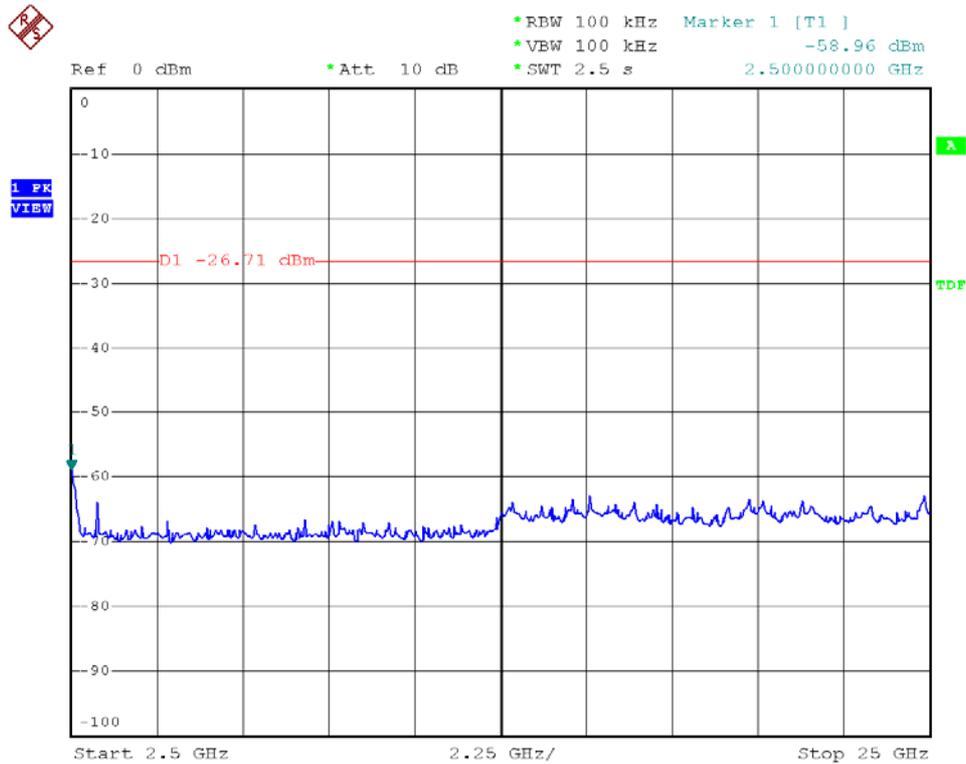
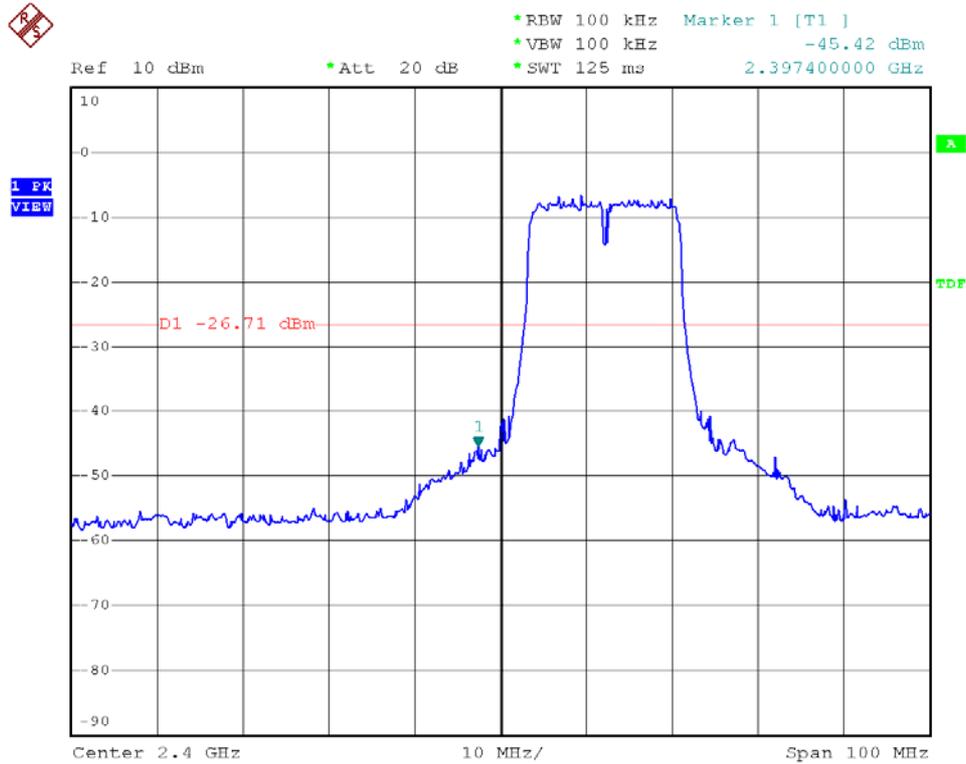


Modulation Standard: 802.11n HT20 (6.5Mbps), Antenna: L  
Channel: 11



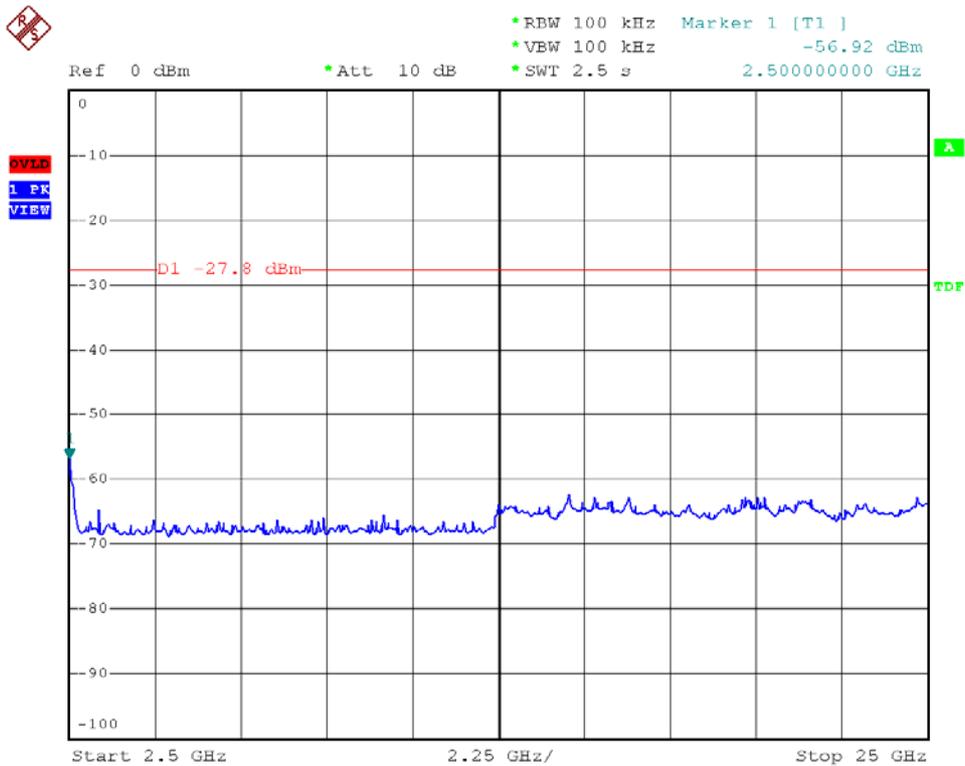
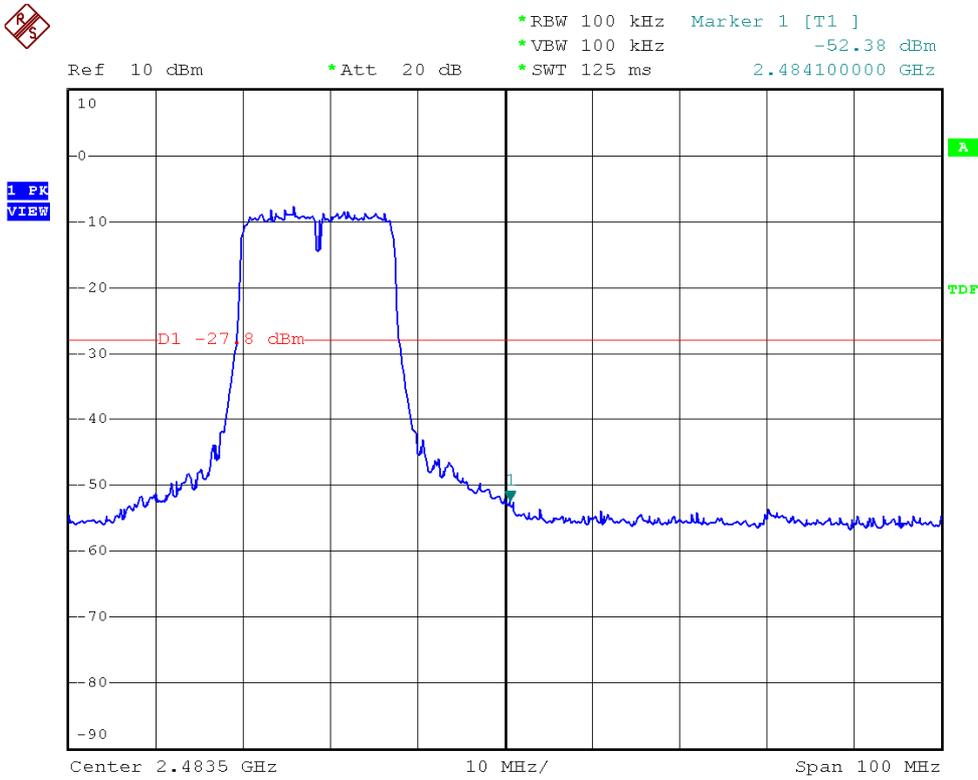


Modulation Standard: 802.11n HT20 (6.5Mbps), Antenna: R  
Channel: 01



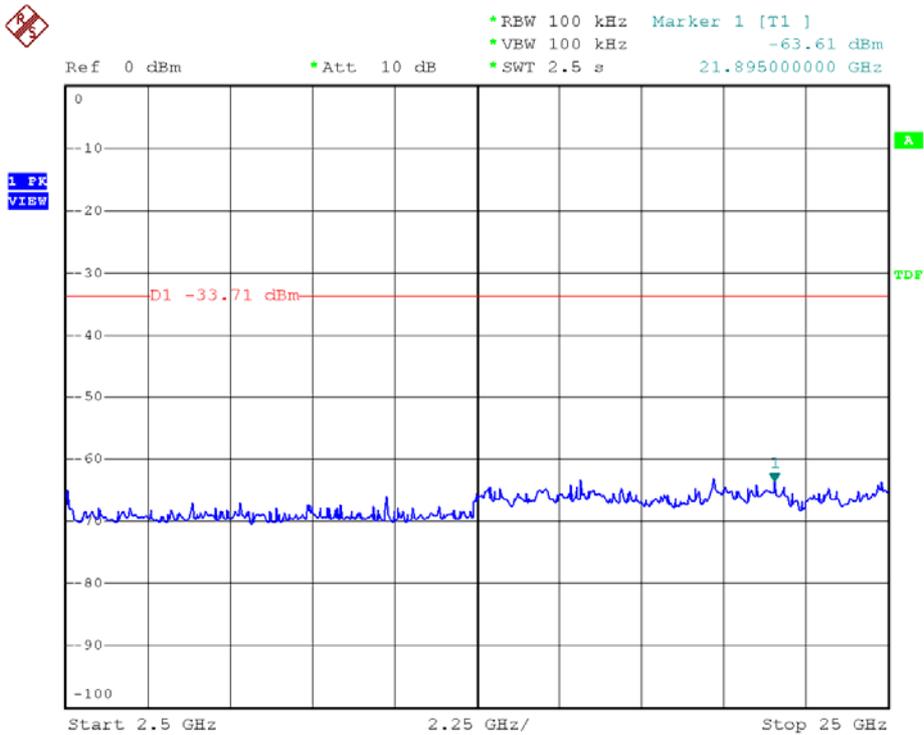
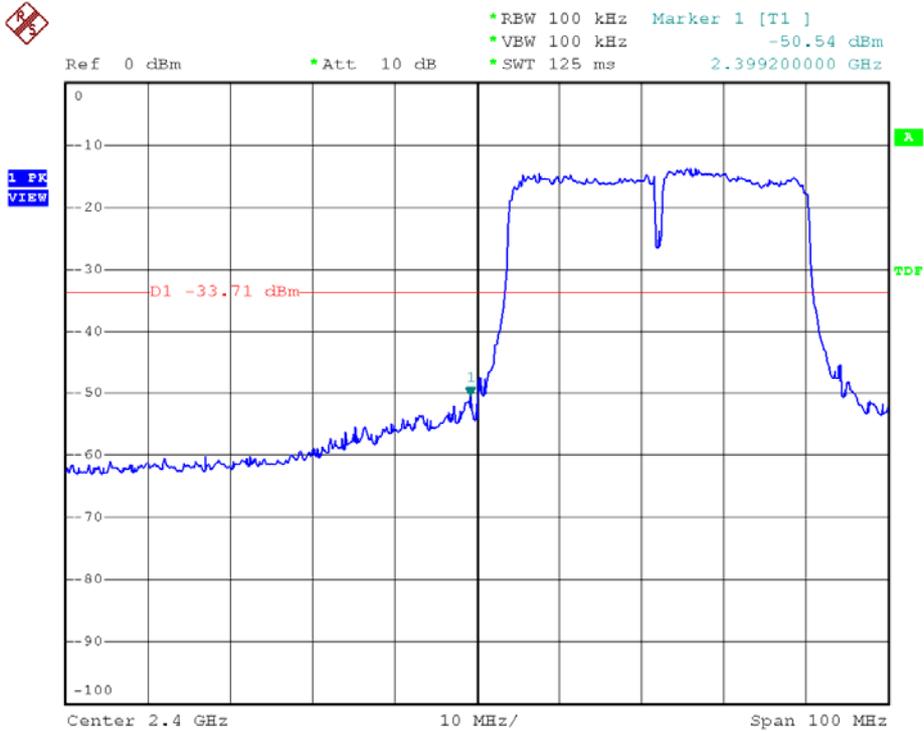


Modulation Standard: 802.11n HT20 (6.5Mbps), Antenna: R  
Channel: 11



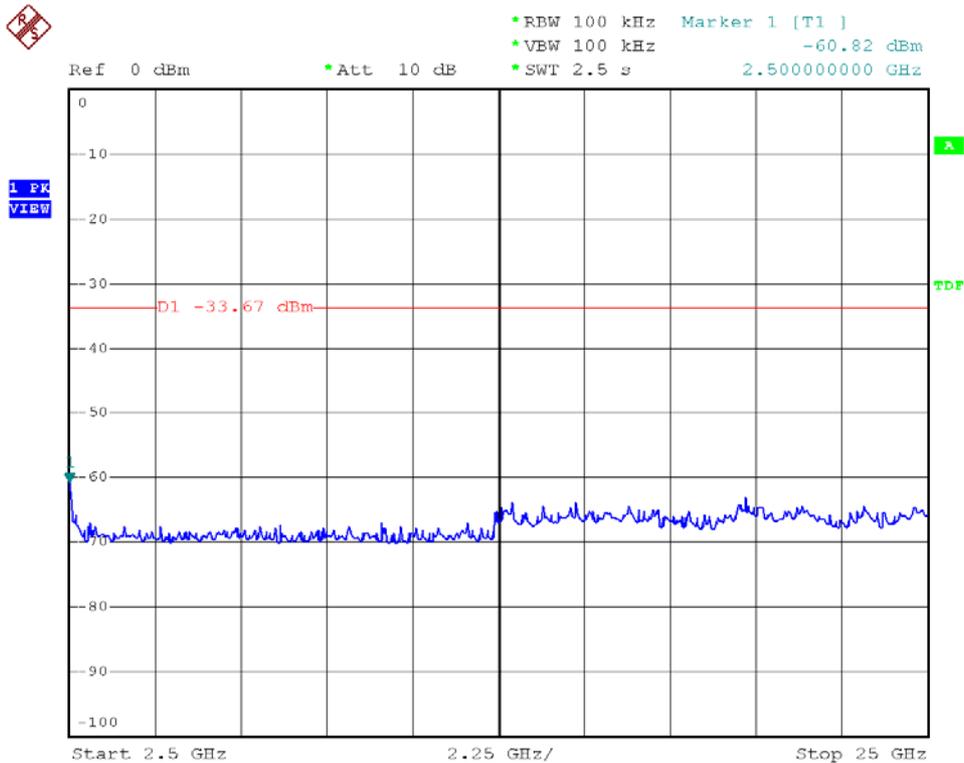
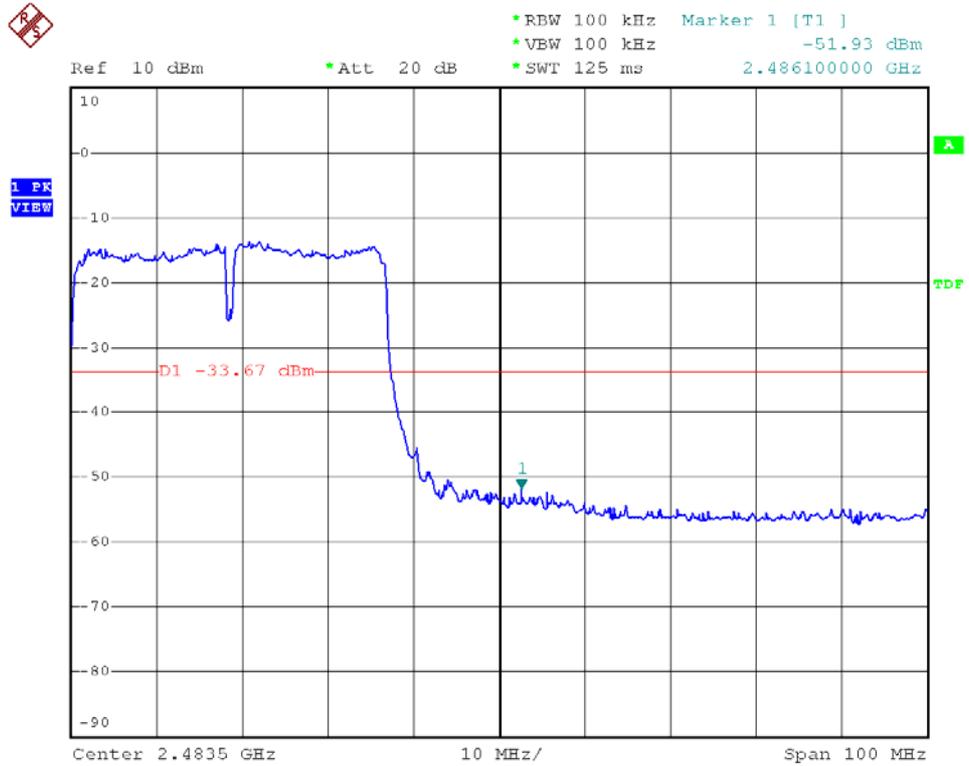


Modulation Standard: 802.11n HT40 (13.5Mbps), Antenna: L  
Channel: 03



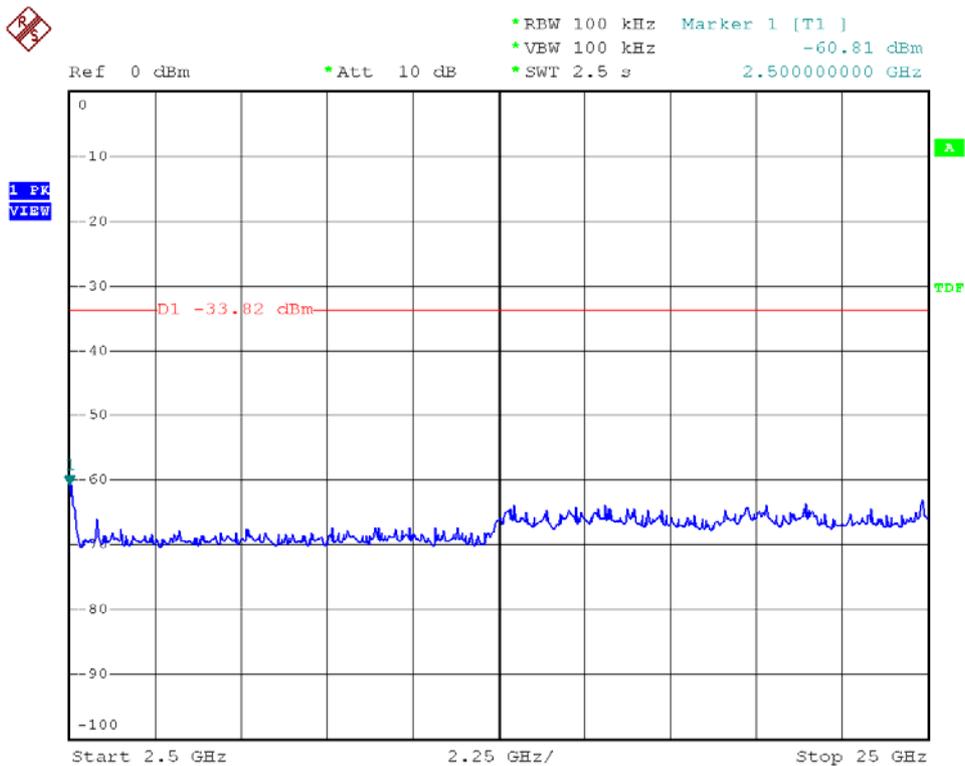
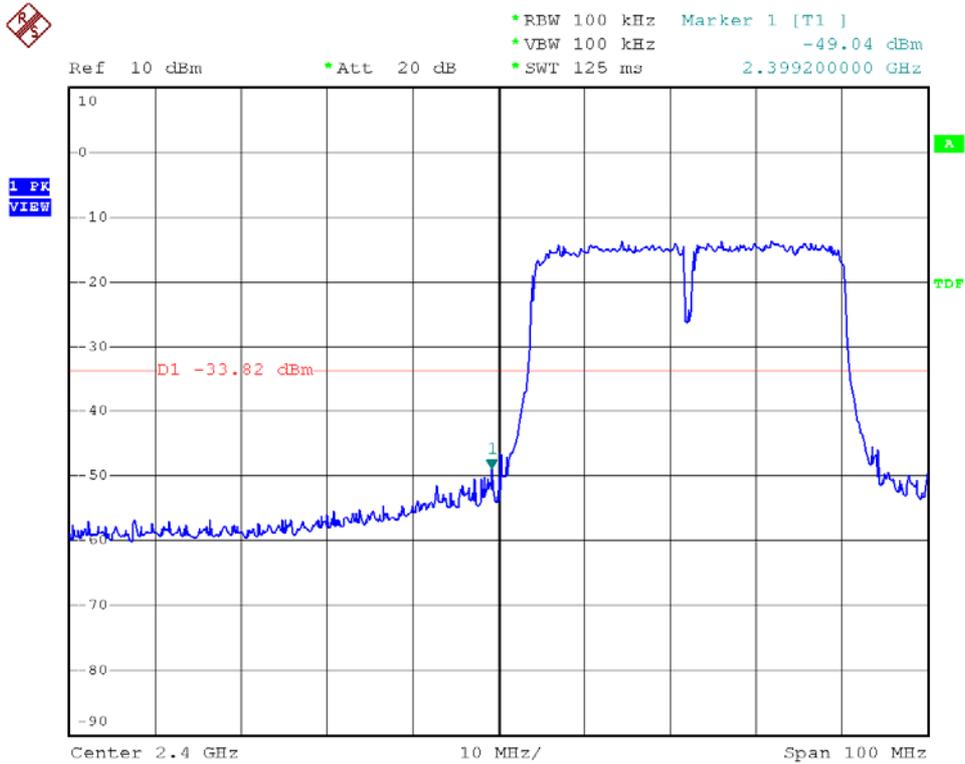


Modulation Standard: 802.11n HT40 (13.5Mbps), Antenna: L  
Channel: 09



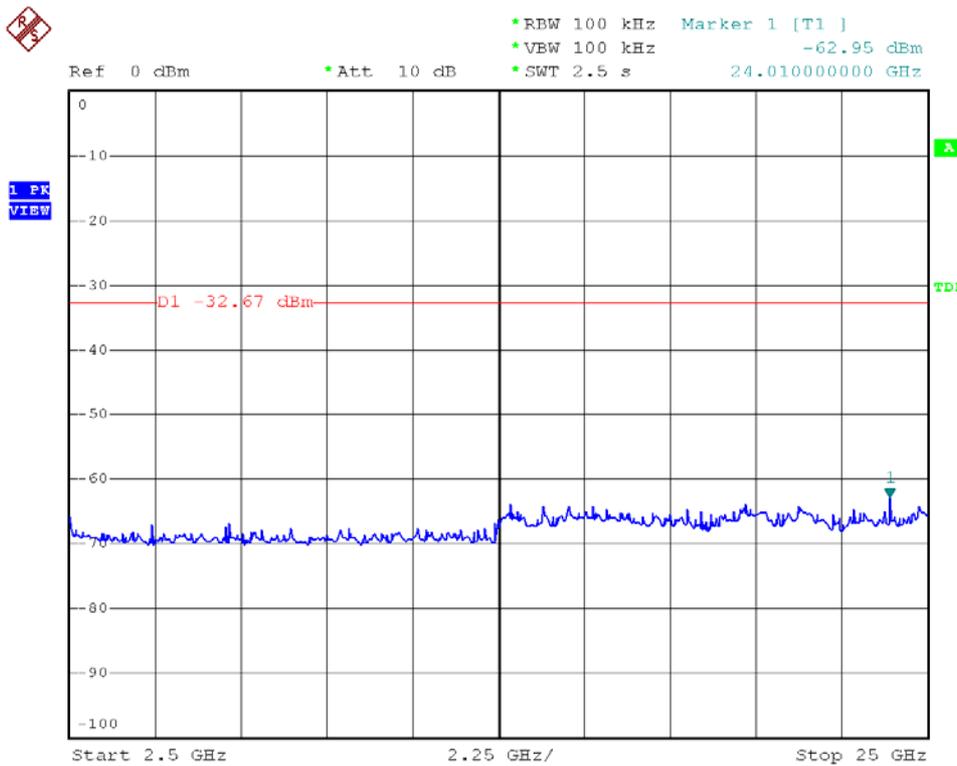
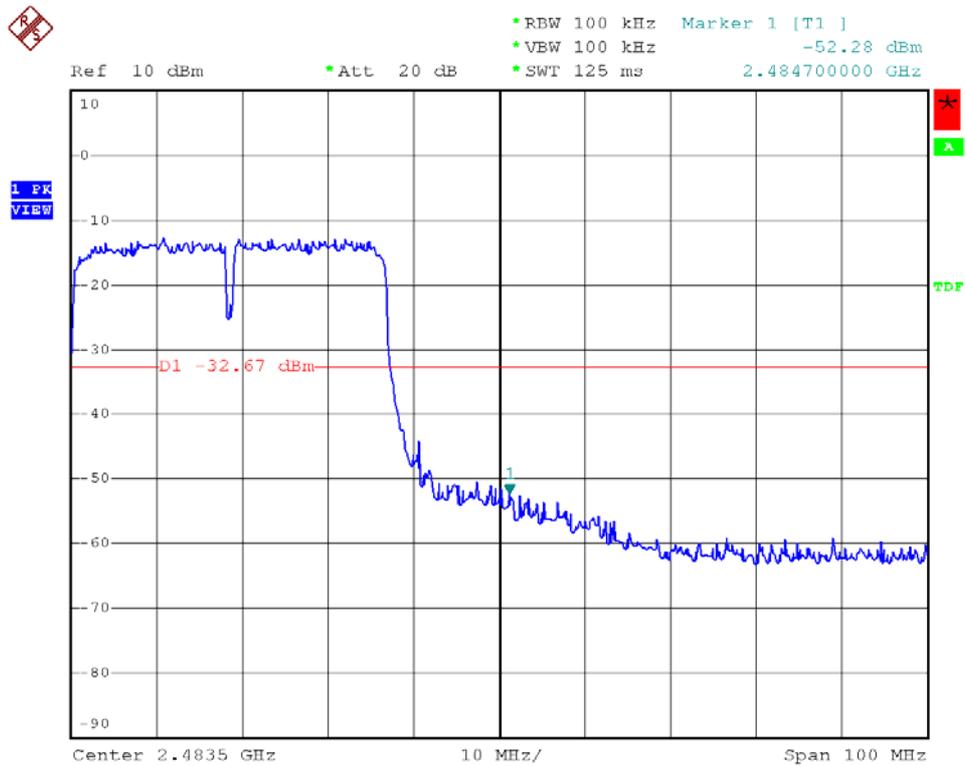


Modulation Standard: 802.11n HT40 (13.5Mbps), Antenna: R  
Channel: 03



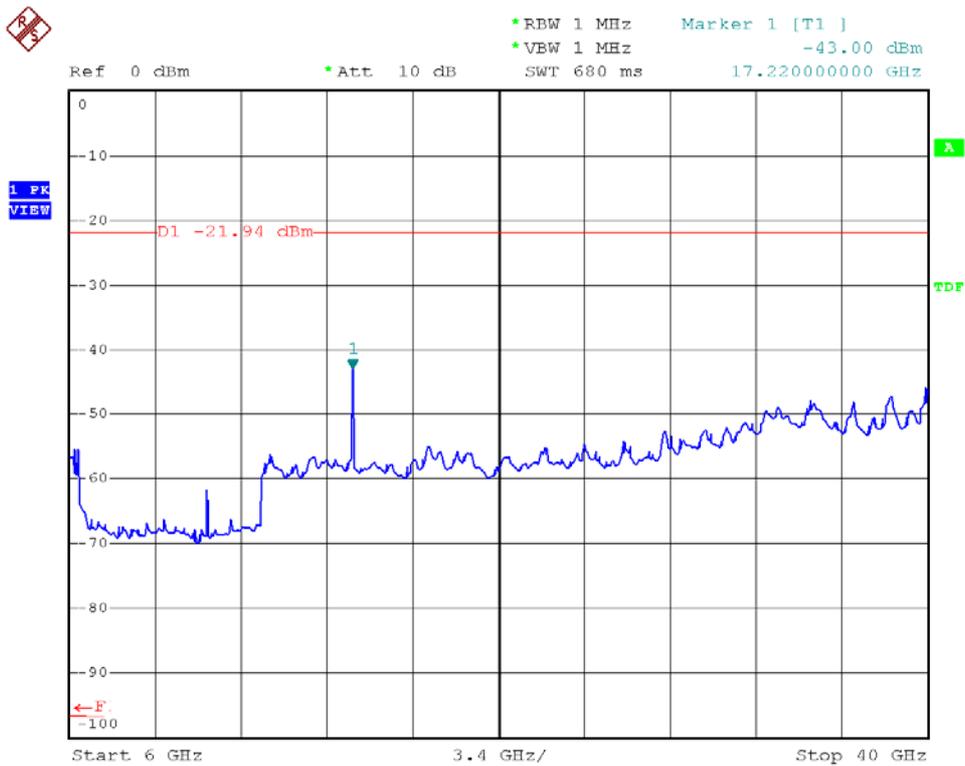
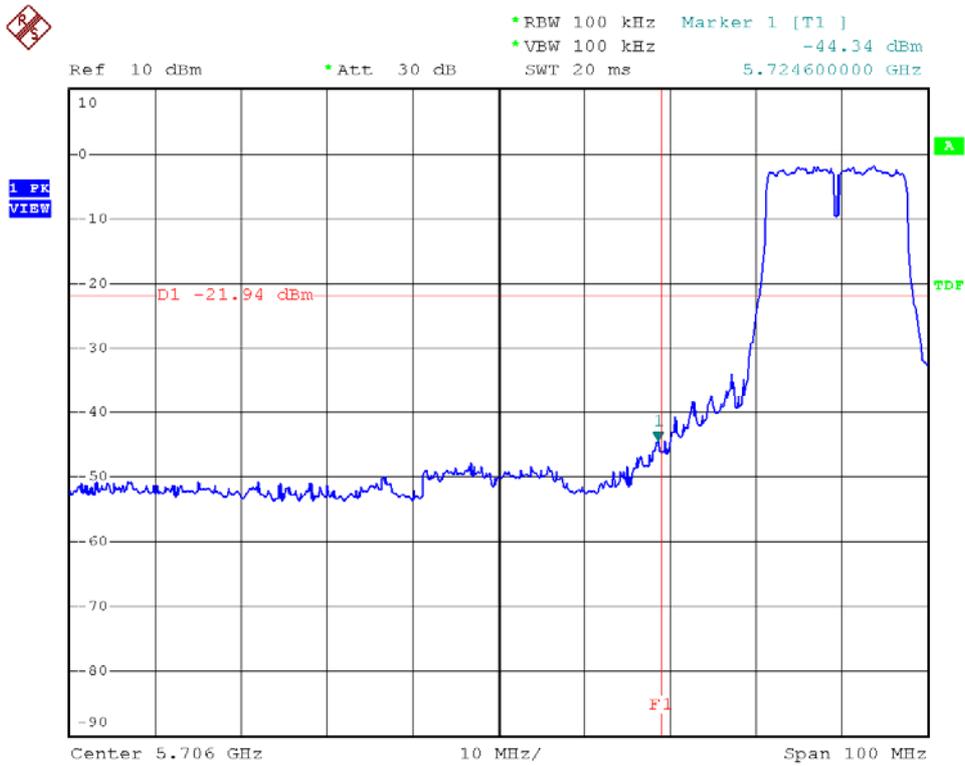


Modulation Standard: 802.11n HT40 (13.5Mbps), Antenna: R  
Channel: 09



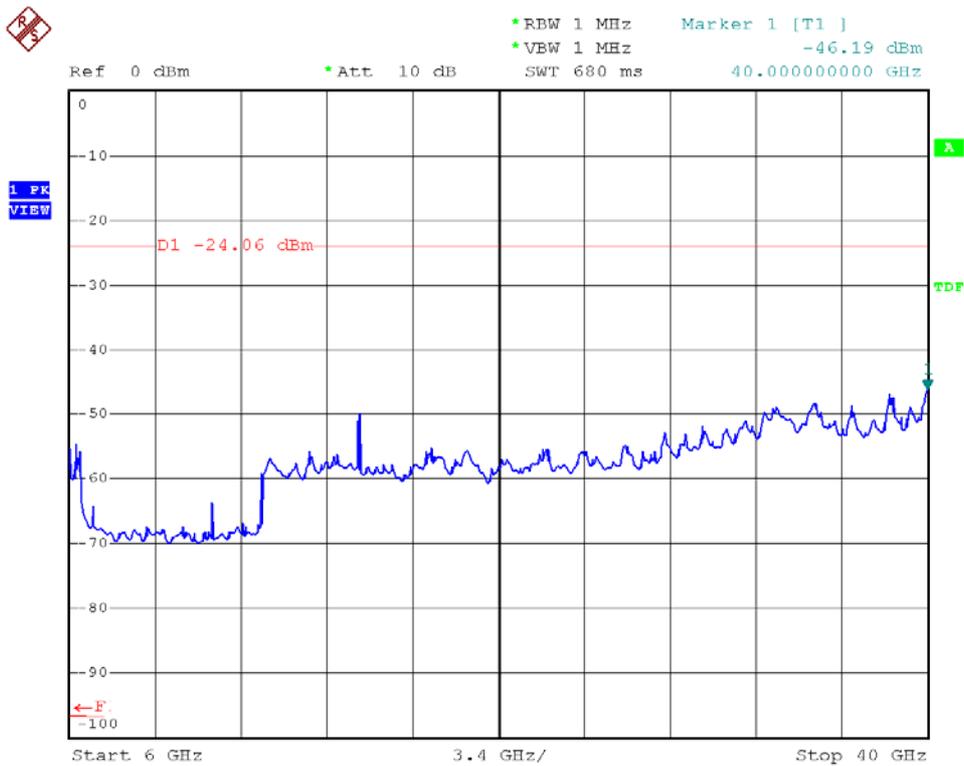
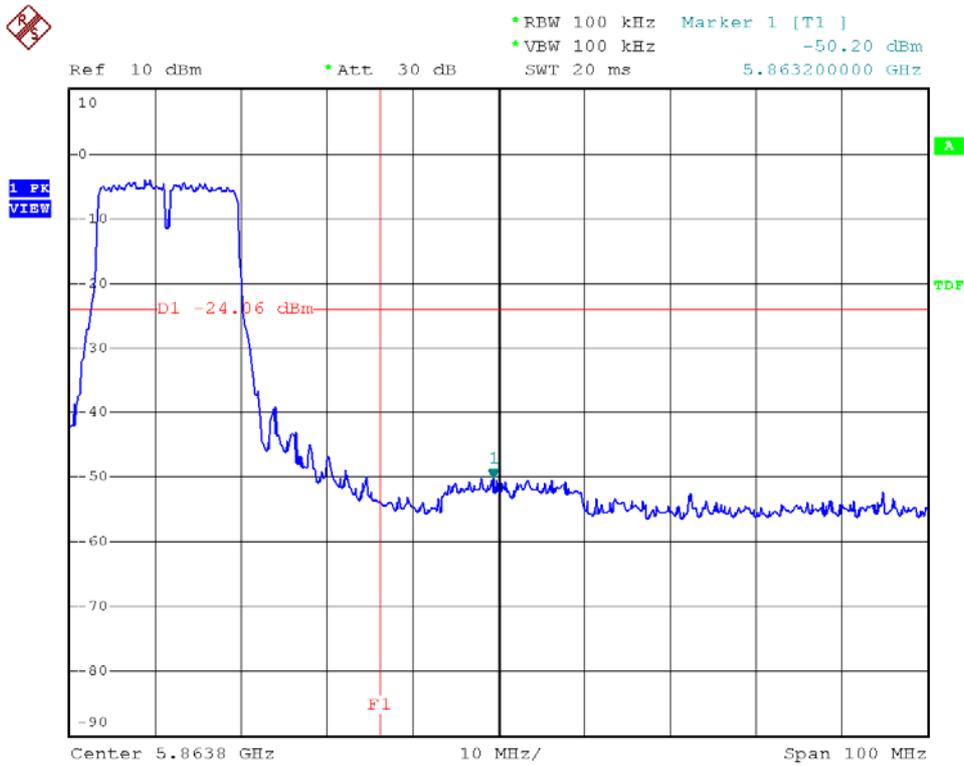


Modulation Standard: 802.11a (6Mbps), Antenna: L  
Channel: 149



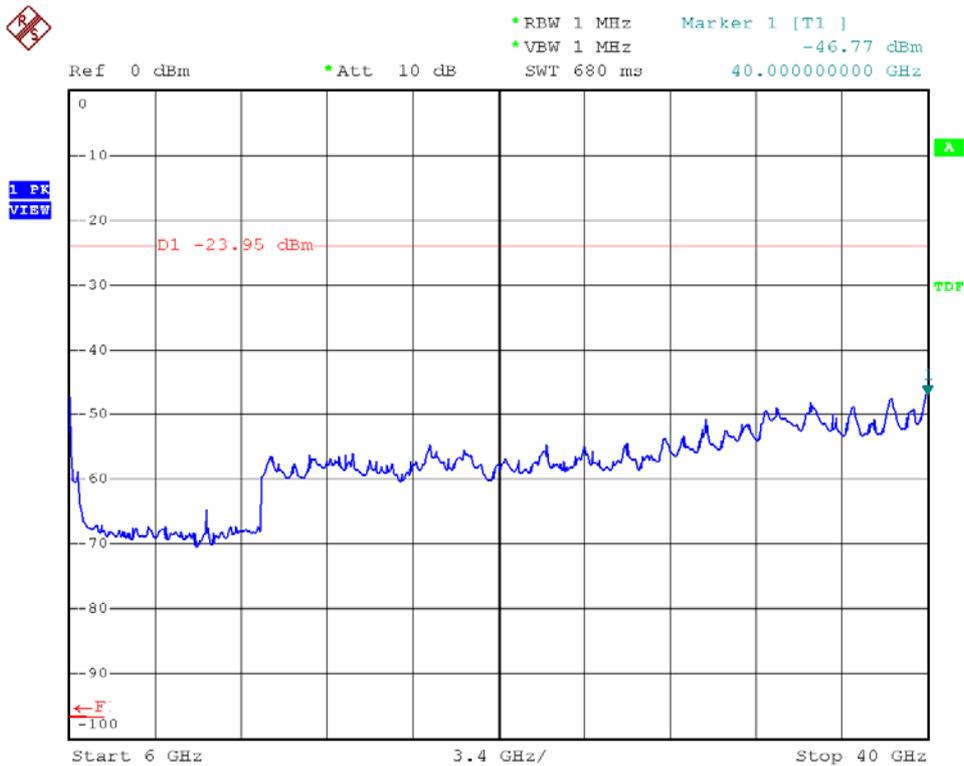
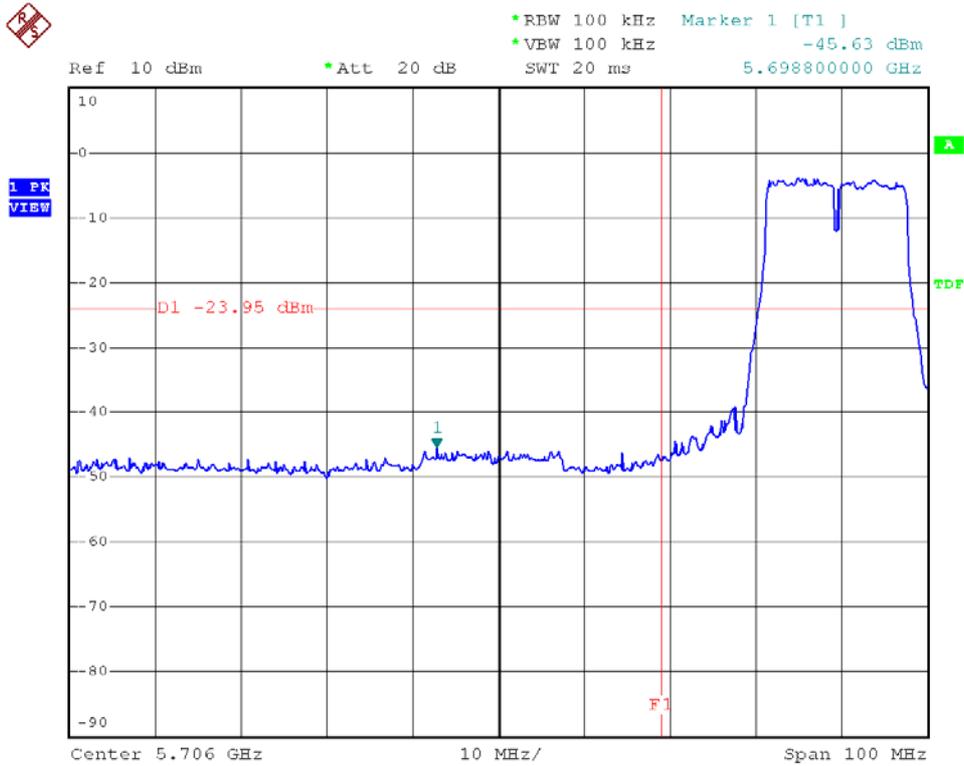


Modulation Standard: 802.11a (6Mbps), Antenna: L  
Channel: 165



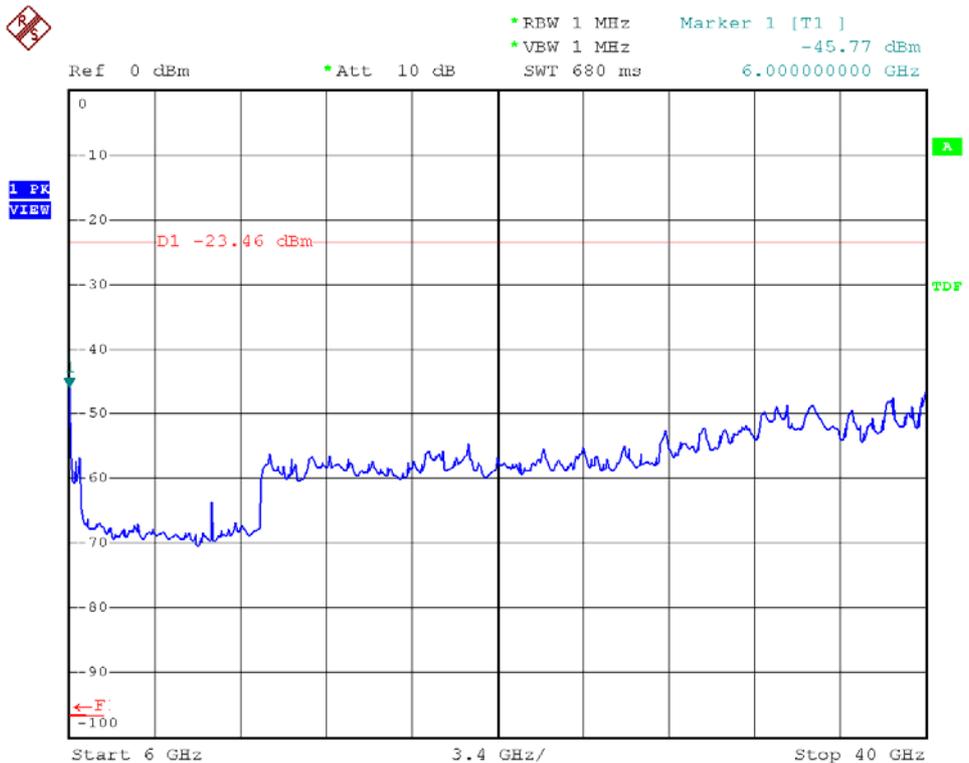
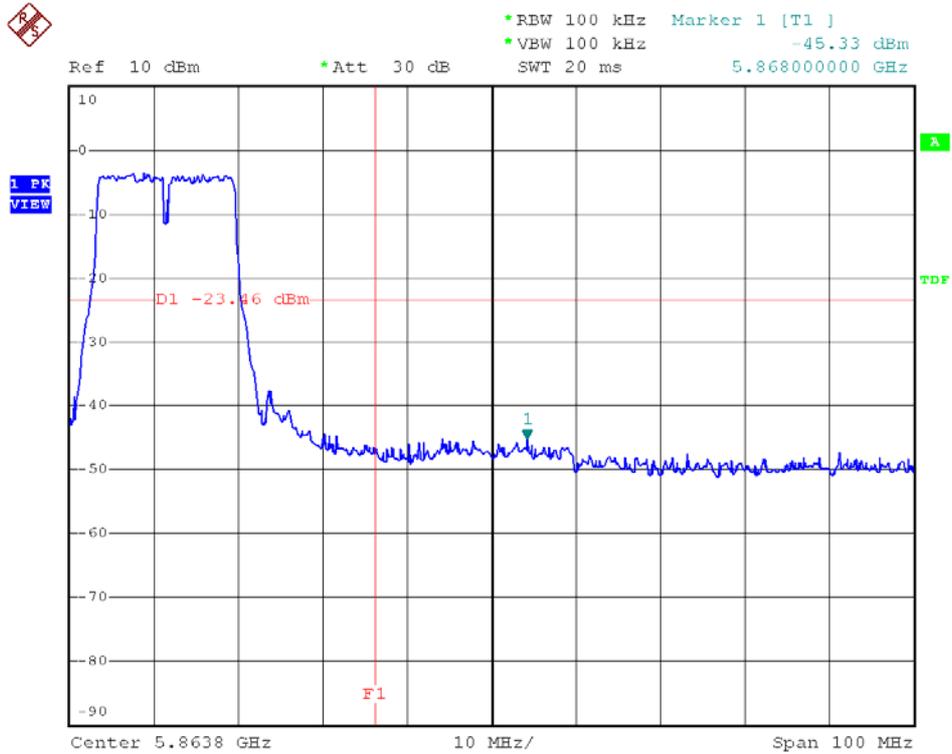


Modulation Standard: 802.11a (6Mbps), Antenna: R  
Channel: 149



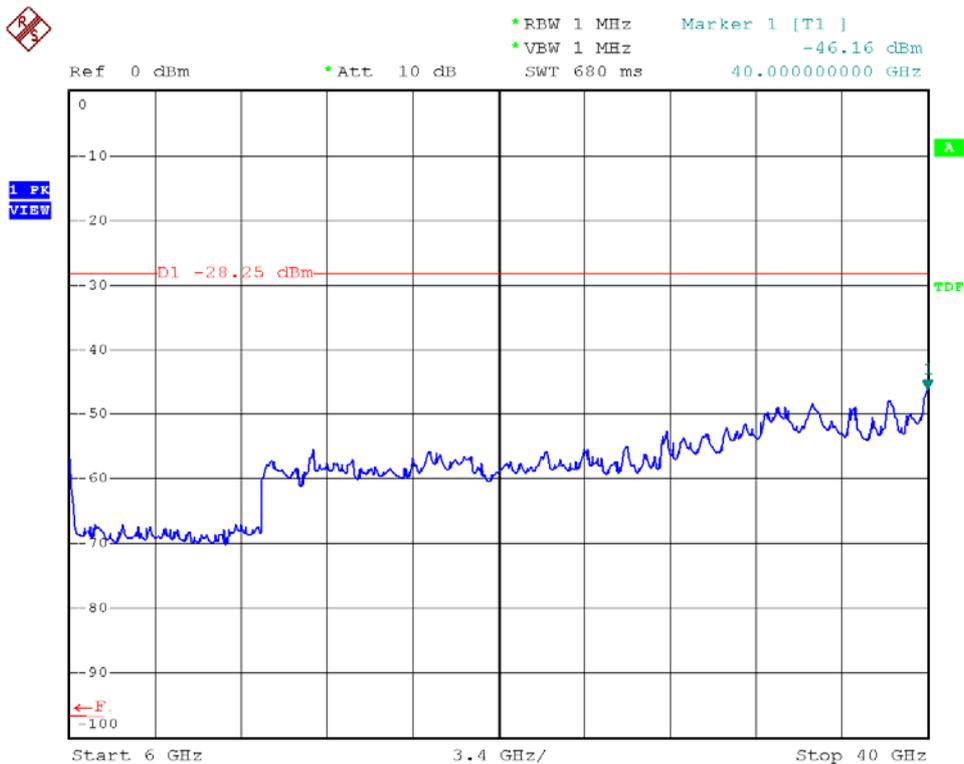
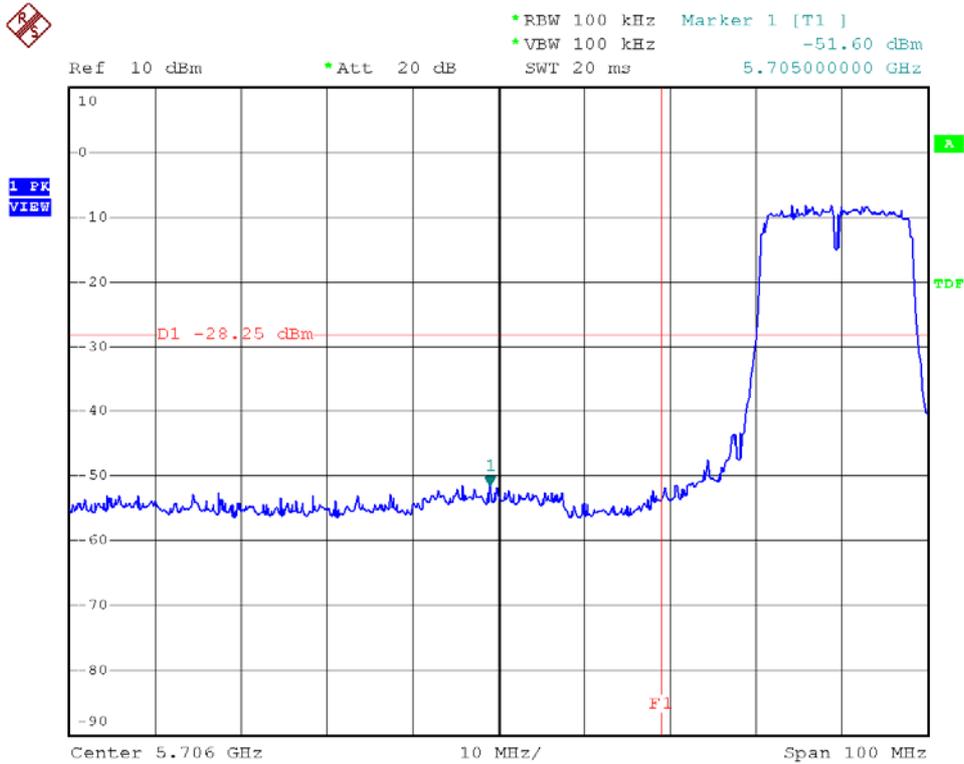


Modulation Standard: 802.11a (6Mbps), Antenna: R  
Channel: 165



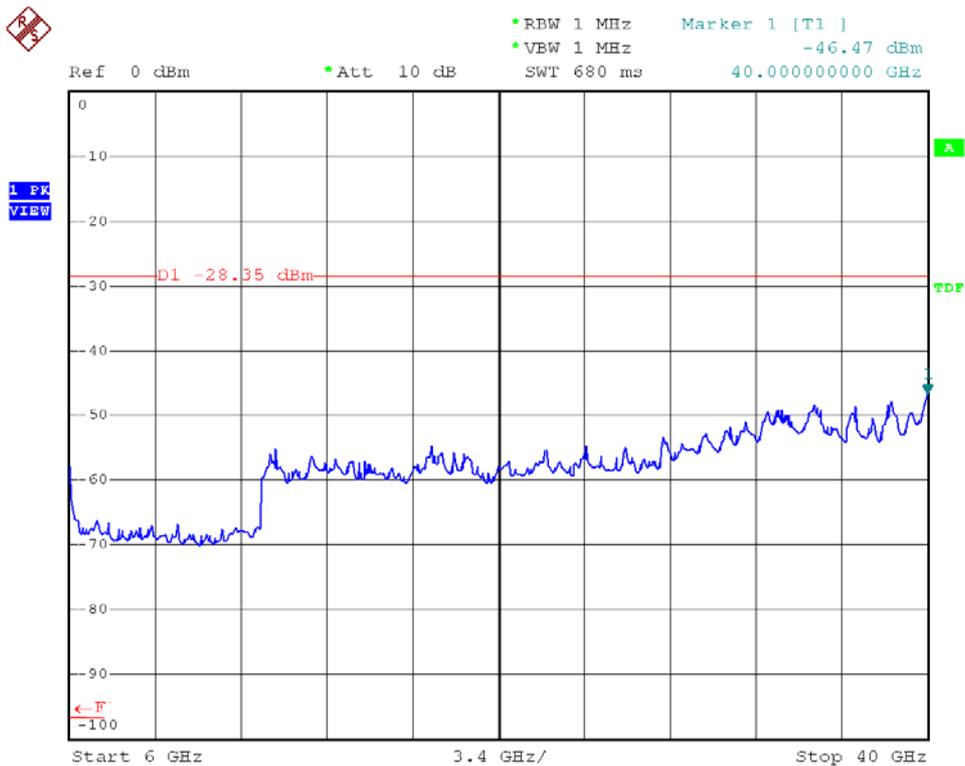
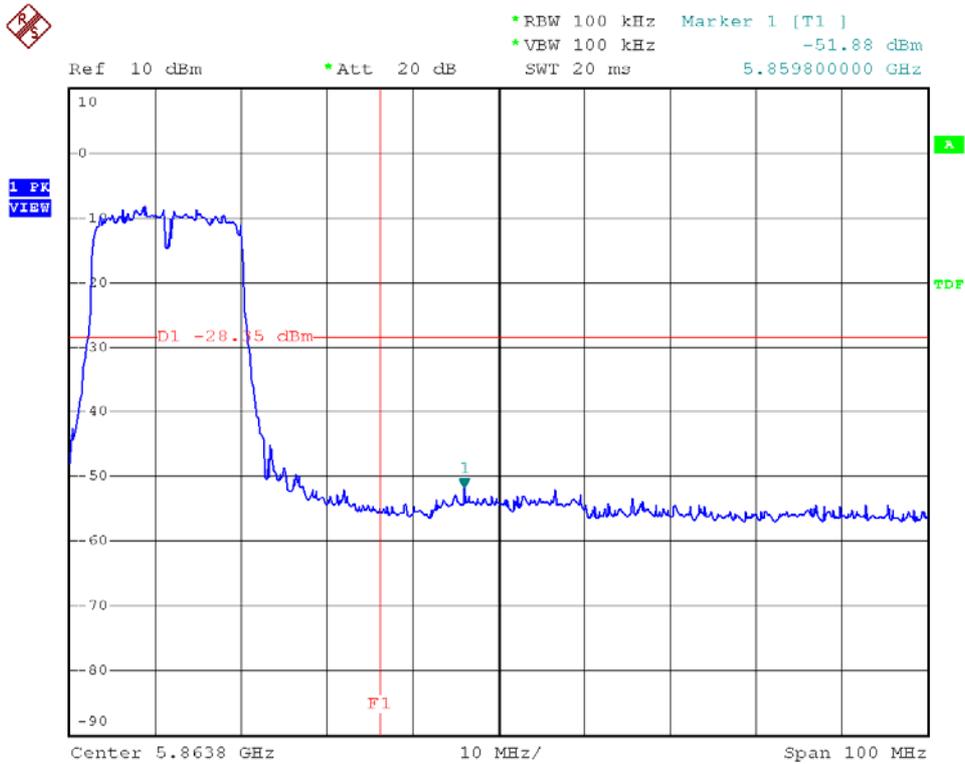


Modulation Standard: 802.11an HT20 (6.5Mbps), Antenna: L  
Channel: 149



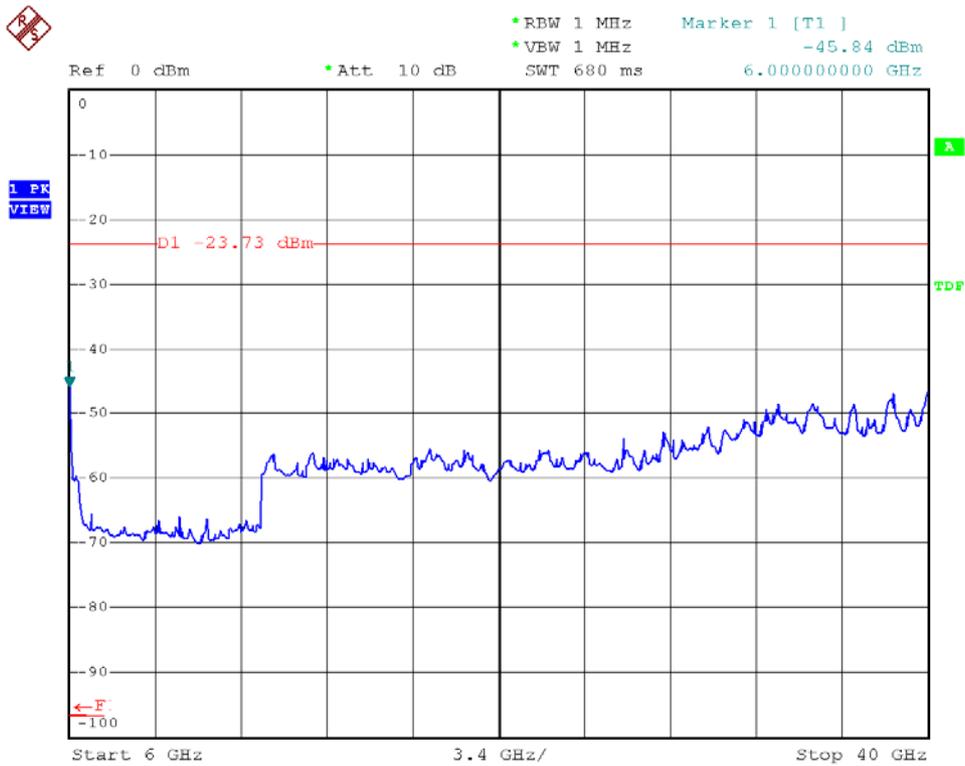
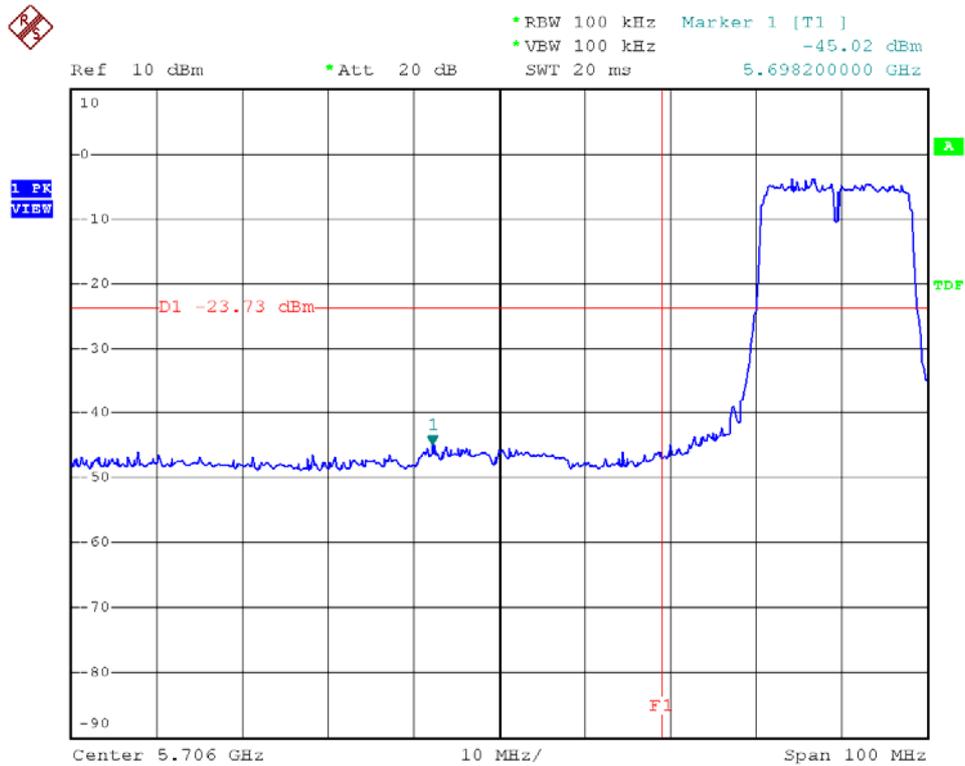


Modulation Standard: 802.11an HT20 (6.5Mbps), Antenna: L  
Channel: 165



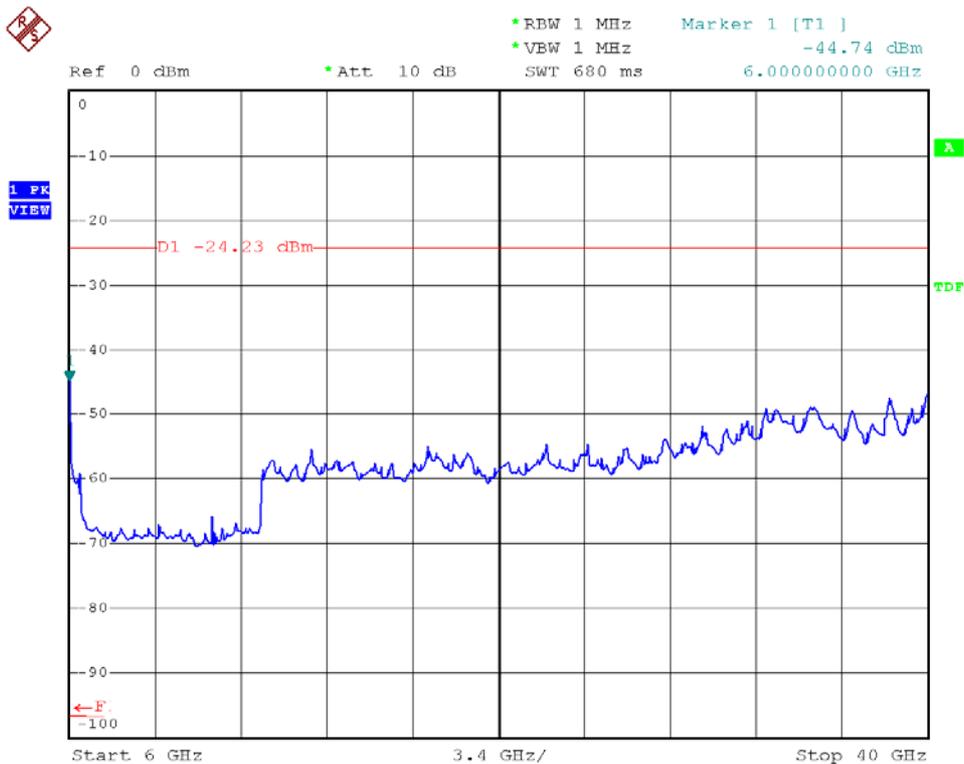
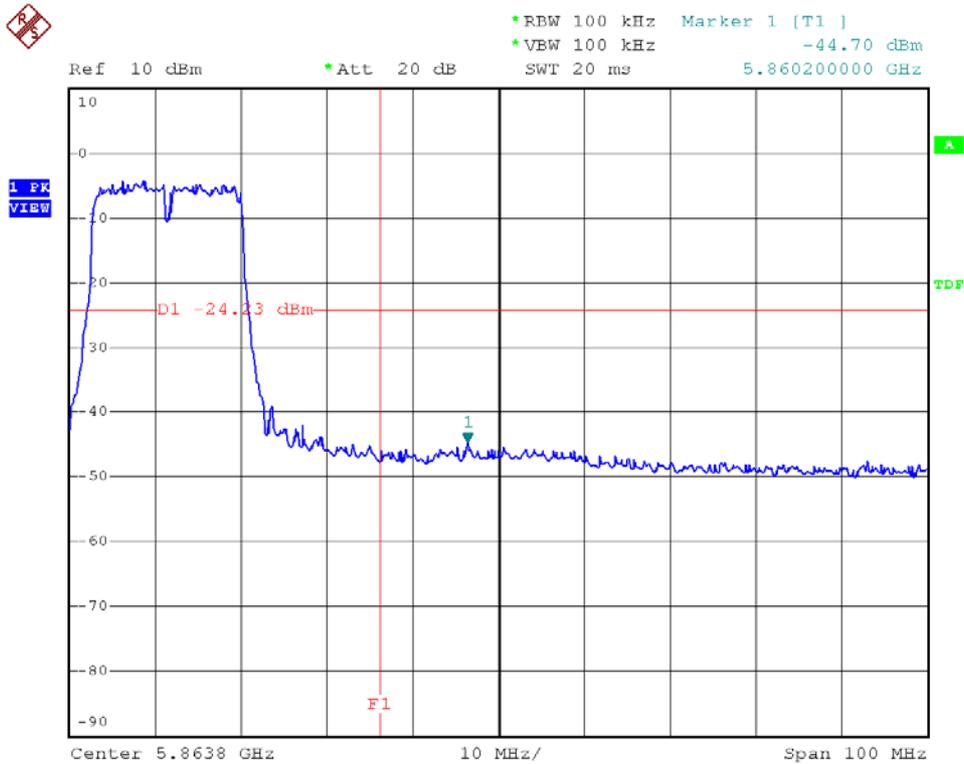


Modulation Standard: 802.11an HT20 (6.5Mbps), Antenna: R  
Channel: 149



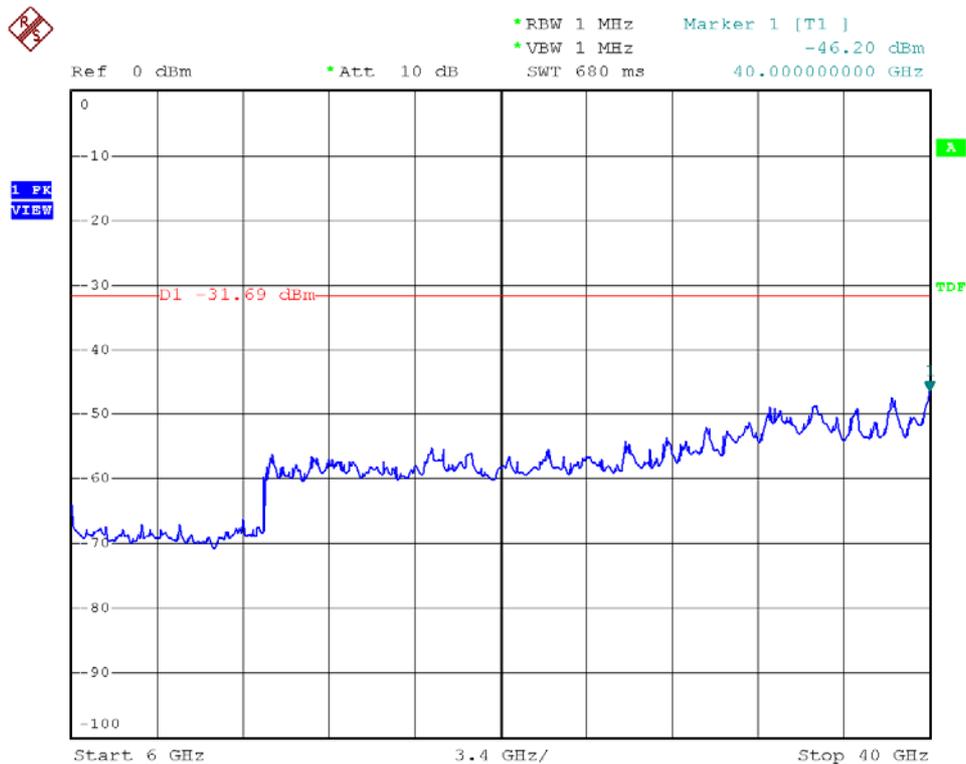
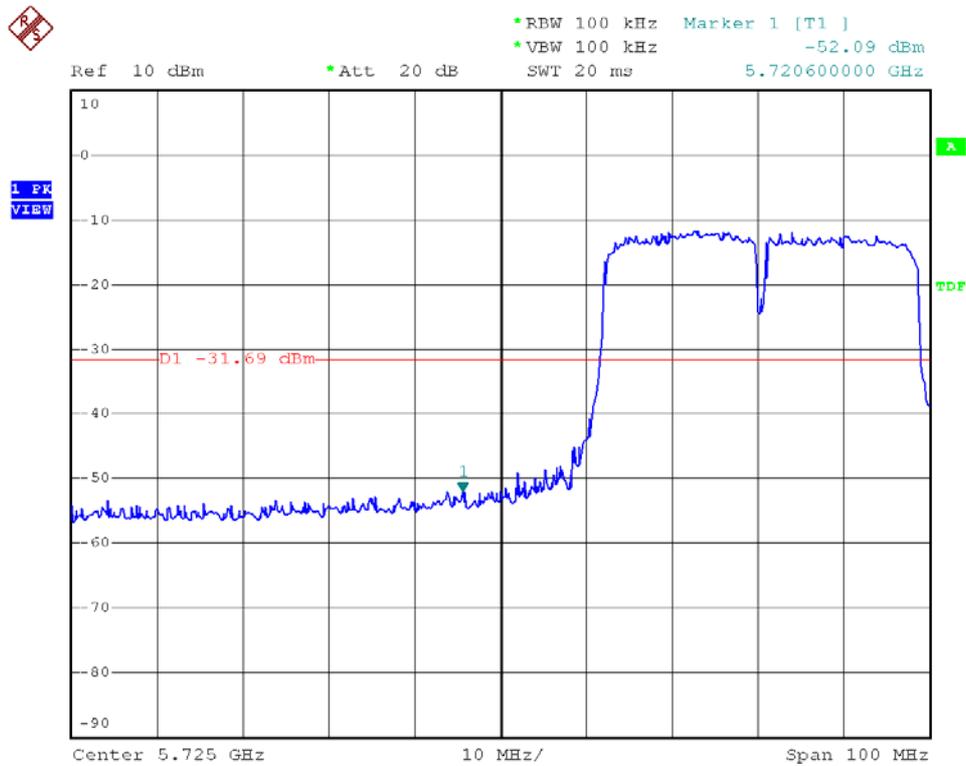


Modulation Standard: 802.11an HT20 (6.5Mbps), Antenna: R  
Channel: 165



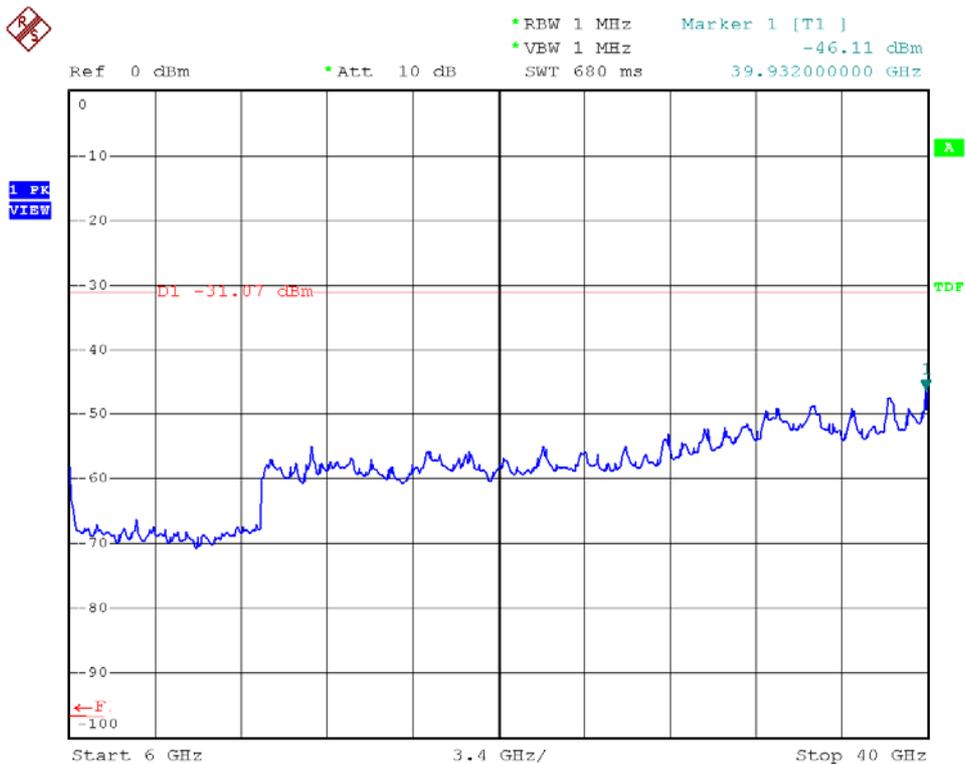
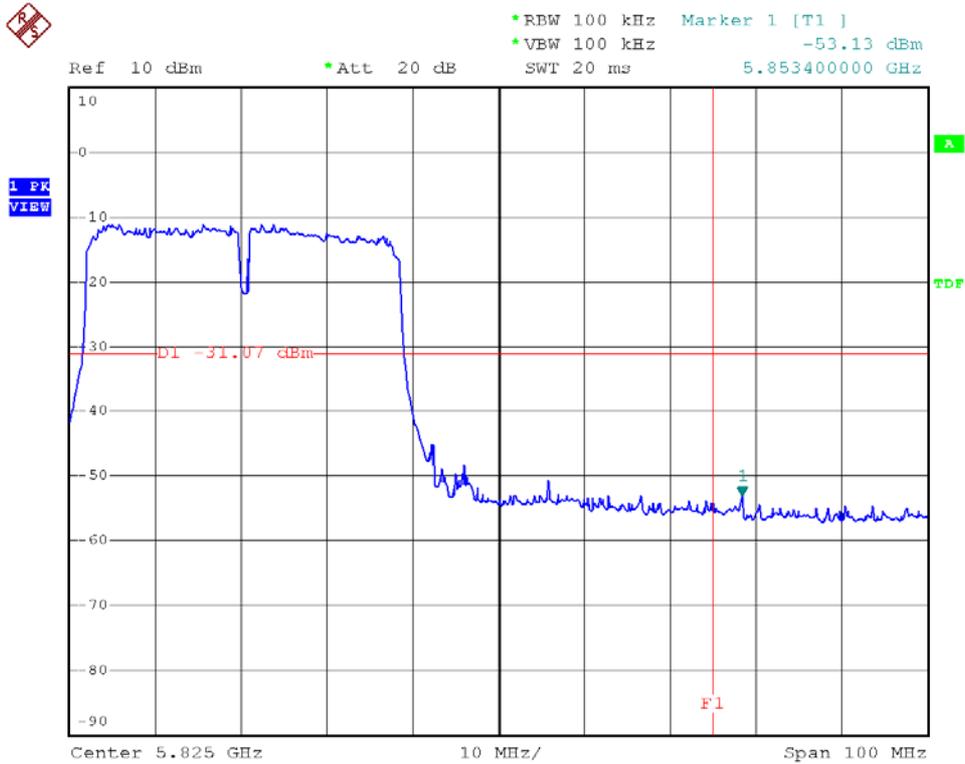


Modulation Standard: 802.11an HT40 (13.5Mbps), Antenna: L  
Channel: 151



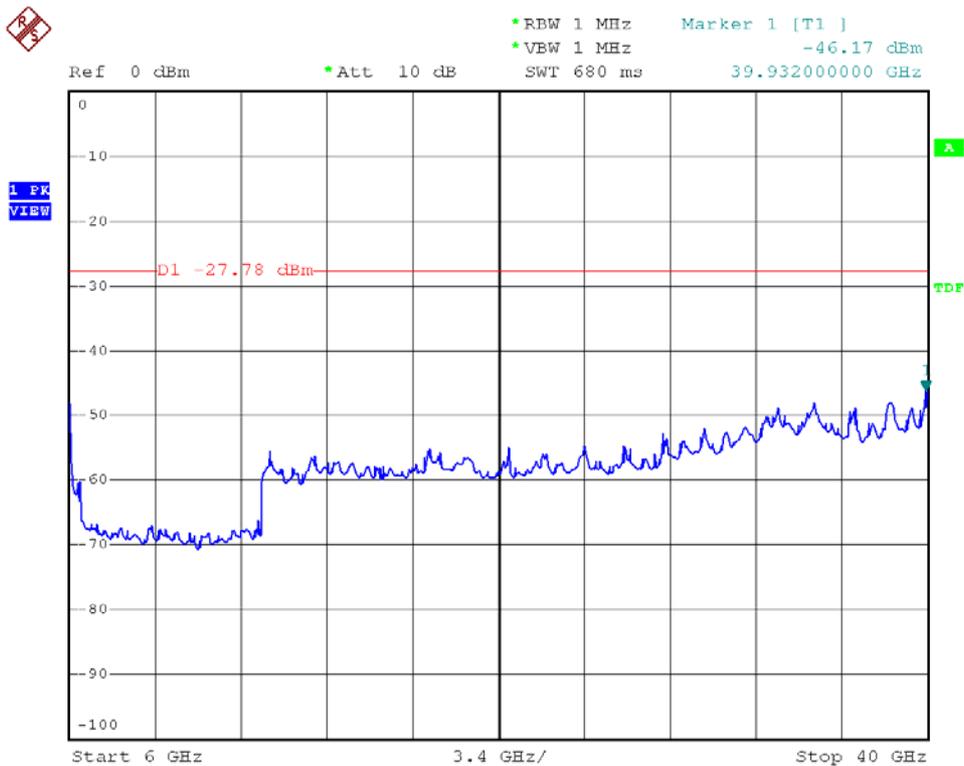
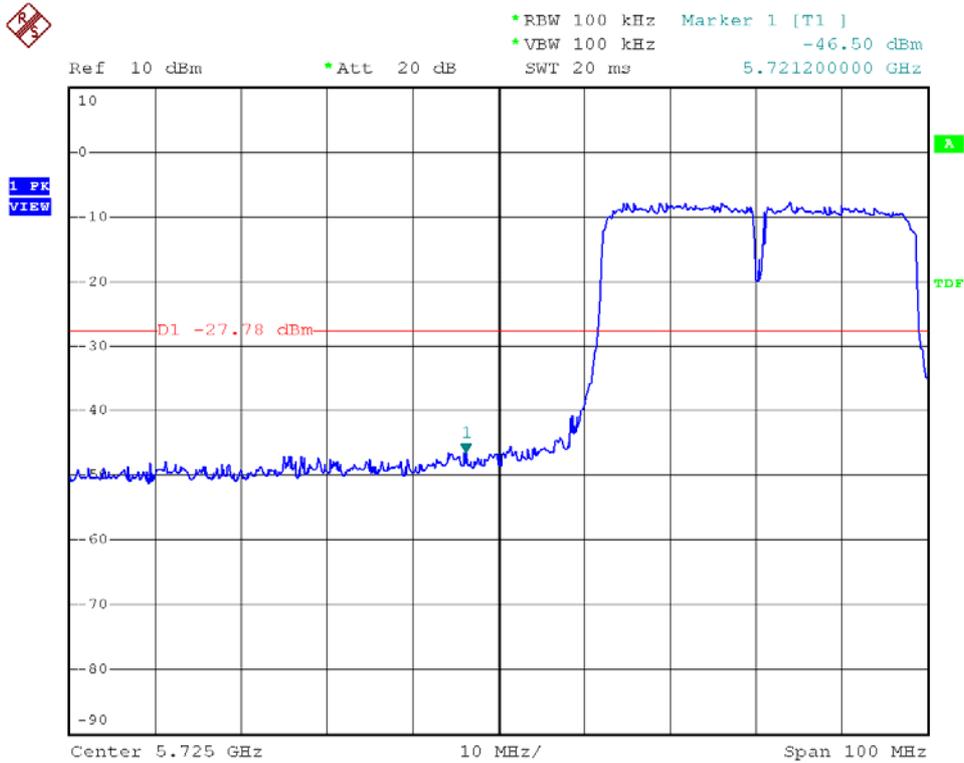


Modulation Standard: 802.11an HT40 (13.5Mbps), Antenna: L  
Channel: 159



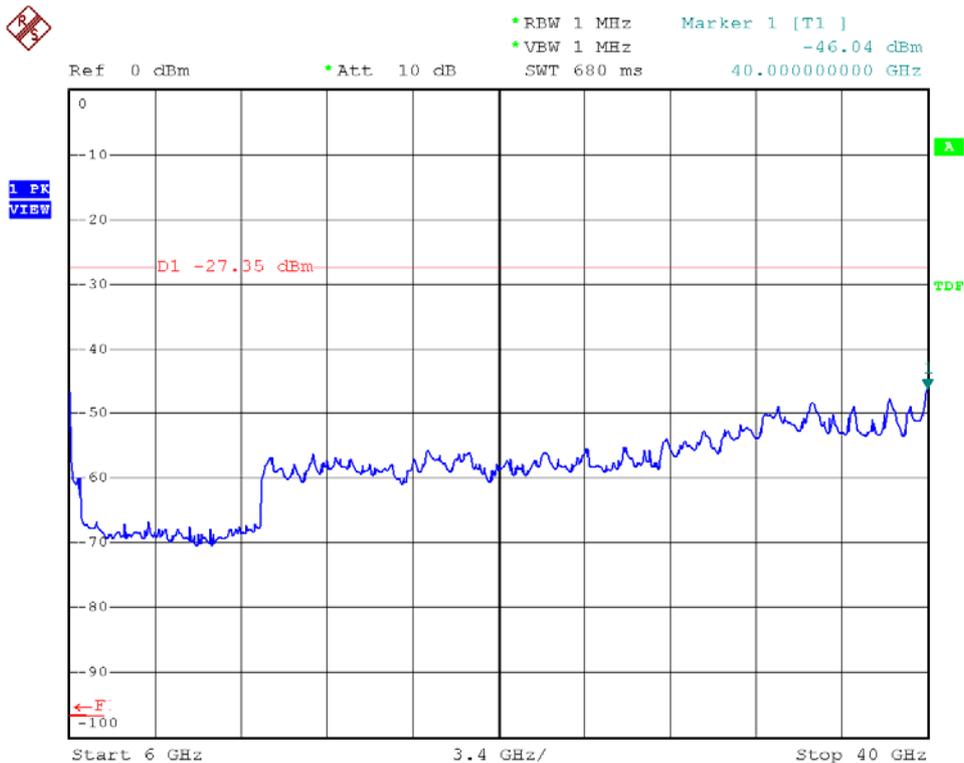
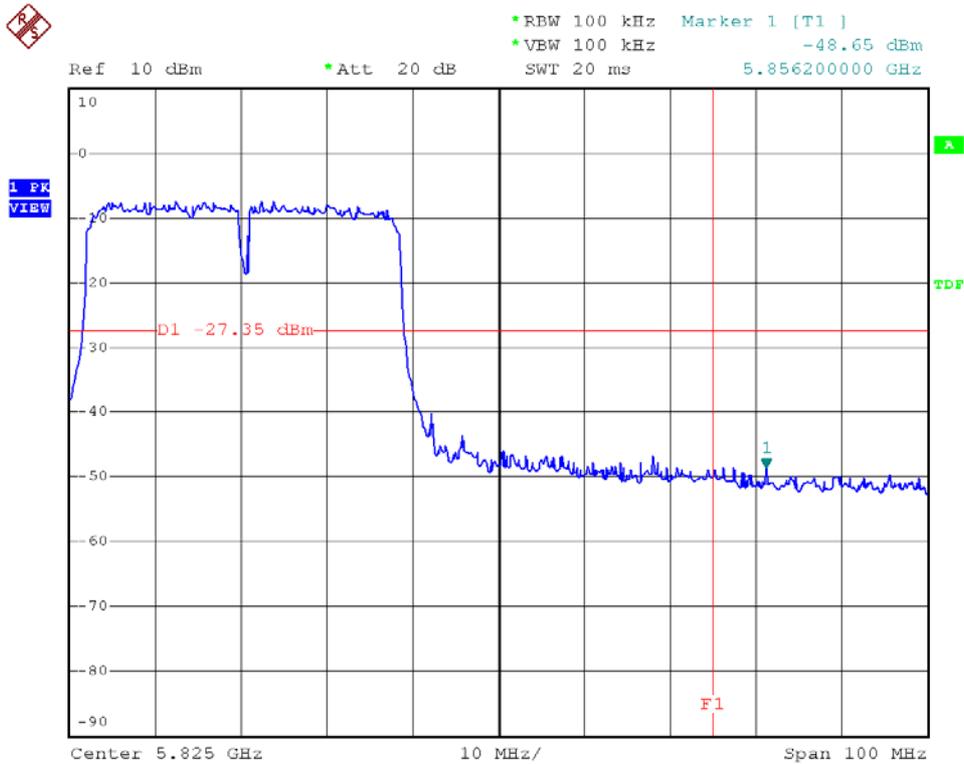


Modulation Standard: 802.11an HT40 (13.5Mbps), Antenna: R  
Channel: 151





Modulation Standard: 802.11an HT40 (13.5Mbps), Antenna: R  
Channel: 159





**9.6 Restrict Band Emission Measurement Data**

Test Date : Nov. 13, 2008 Temperature : 22  
 Atmospheric pressure : 1010 hPa Humidity : 70%

Modulation Standard: IEEE 802.11b (11Mbps)

Channel 1						Fundamental Frequency: 2412 MHz				
Frequency (MHz)	Ant-Pol H/V	Meter Reading (dBuV)	Corrected Factor (dB)	Result (dBuV/m)	Remark	Limit (dBuV/m)		Margin (dB)	Table Deg.	Ant High (m)
						Peak	Ave			
2389.97	H	50.93	-3.50	47.44	Peak	74	54	-26.56	151	1.18
2389.87	H	38.58	-3.50	35.09	Ave	74	54	-18.91	151	1.18
2389.76	V	57.30	-3.50	53.80	Peak	74	54	-20.20	266	1.18
2389.87	V	45.46	-3.50	41.96	Ave	74	54	-12.04	266	1.18
Channel 11						Fundamental Frequency: 2462 MHz				
Frequency (MHz)	Ant-Pol H/V	Meter Reading (dBuV)	Corrected Factor (dB)	Result (dBuV/m)	Remark	Limit (dBuV/m)		Margin (dB)	Table Deg.	Ant High (m)
						Peak	Ave			
2484.38	H	50.28	-3.16	47.12	Peak	74	54	-26.88	151	1.18
2483.51	H	38.54	-3.16	35.38	Ave	74	54	-18.62	151	1.18
2483.74	V	59.77	-3.16	56.61	Peak	74	54	-17.39	266	1.18
2483.51	V	47.73	-3.16	44.57	Ave	74	54	-9.43	266	1.18

Modulation Standard: IEEE 802.11g (6Mbps)

Channel 1						Fundamental Frequency: 2412 MHz				
Frequency (MHz)	Ant-Pol H/V	Meter Reading (dBuV)	Corrected Factor (dB)	Result (dBuV/m)	Remark	Limit (dBuV/m)		Margin (dB)	Table Deg.	Ant High (m)
						Peak	Ave			
2387.72	H	50.33	-3.50	46.83	Peak	74	54	-27.17	151	1.18
2389.87	H	38.44	-3.50	34.95	Ave	74	54	-19.05	151	1.18
2389.76	V	59.65	-3.50	56.16	Peak	74	54	-17.85	266	1.18
2389.87	V	42.97	-3.50	39.47	Ave	74	54	-14.53	266	1.18
Channel 11						Fundamental Frequency: 2462 MHz				
Frequency (MHz)	Ant-Pol H/V	Meter Reading (dBuV)	Corrected Factor (dB)	Result (dBuV/m)	Remark	Limit (dBuV/m)		Margin (dB)	Table Deg.	Ant High (m)
						Peak	Ave			
2484.12	H	50.39	-3.16	47.24	Peak	74	54	-26.76	151	1.18
2483.51	H	38.59	-3.16	35.43	Ave	74	54	-18.57	151	1.18
2483.51	V	61.65	-3.16	58.49	Peak	74	54	-15.51	266	1.18
2483.51	V	45.05	-3.16	41.89	Ave	74	54	-12.11	266	1.18



Modulation Standard: IEEE 802.11n HT20 (6.5Mbps)

Channel 1						Fundamental Frequency: 2412 MHz				
Frequency (MHz)	Ant-Pol H/V	Meter Reading (dBuV)	Corrected Factor (dB)	Result (dBuV/m)	Remark	Limit (dBuV/m)		Margin (dB)	Table Deg.	Ant High (m)
						Peak	Ave			
2383.13	H	50.21	-3.52	46.69	Peak	74	54	-27.31	151	1.18
2389.87	H	38.09	-3.50	34.60	Ave	74	54	-19.40	151	1.18
2389.76	V	57.64	-3.50	54.14	Peak	74	54	-19.86	266	1.18
2389.87	V	41.55	-3.50	38.05	Ave	74	54	-15.95	266	1.18

Channel 11						Fundamental Frequency: 2462 MHz				
Frequency (MHz)	Ant-Pol H/V	Meter Reading (dBuV)	Corrected Factor (dB)	Result (dBuV/m)	Remark	Limit (dBuV/m)		Margin (dB)	Table Deg.	Ant High (m)
						Peak	Ave			
2492.36	H	49.35	-3.13	46.23	Peak	74	54	-27.77	151	140
2497.42	H	38.18	-3.11	35.08	Ave	74	54	-18.92	151	140
2483.51	V	58.54	-3.16	55.38	Peak	74	54	-18.62	266	1.18
2483.51	V	42.80	-3.16	39.64	Ave	74	54	-14.36	266	1.18

Modulation Standard: IEEE 802.11n HT40 (13.5Mbps)

Channel 3						Fundamental Frequency: 2422 MHz				
Frequency (MHz)	Ant-Pol H/V	Meter Reading (dBuV)	Corrected Factor (dB)	Result (dBuV/m)	Remark	Limit (dBuV/m)		Margin (dB)	Table Deg.	Ant High (m)
						Peak	Ave			
2370.59	H	50.31	-3.57	46.74	Peak	74	54	-27.26	157	1.18
2389.46	H	38.03	-3.50	34.53	Ave	74	54	-19.47	157	1.18
2388.74	V	56.95	-3.50	53.45	Peak	74	54	-20.55	266	1.18
2388.74	V	41.81	-3.50	38.31	Ave	74	54	-15.69	266	1.18

Channel 9						Fundamental Frequency: 2452 MHz				
Frequency (MHz)	Ant-Pol H/V	Meter Reading (dBuV)	Corrected Factor (dB)	Result (dBuV/m)	Remark	Limit (dBuV/m)		Margin (dB)	Table Deg.	Ant High (m)
						Peak	Ave			
2489.63	H	51.01	-3.14	47.87	Peak	74	54	-26.13	157	1.18
2495.02	H	38.24	-3.12	35.13	Ave	74	54	-18.87	157	1.18
2488.11	V	59.60	-3.14	56.46	Peak	74	54	-17.54	266	1.18
2483.51	V	43.92	-3.16	40.76	Ave	74	54	-13.24	266	1.18

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.



## 10. Restricted Bands of Operation

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

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

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

### 10.1 Labeling Requirement

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

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