



FCC 47 CFR PART 15 SUBPART C

TEST REPORT

For

Air Tune

Model: AVT-01



Trade Name: cideko

Issued to

Holy Investment Co., Ltd.

1F., No.2, Lane 25, Yong-an 2nd St., Yongkang City, Tainan County 710, Taiwan

Issued by

Compliance Certification Services Inc.

Tainan Lab.

**No. 8, Jiu Cheng Ling, Jiaokeng Village, Sinhua
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REVISION HISTORY

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1. TEST RESULT CERTIFICATION

Applicant: Holy Investment Co., Ltd.

1F., No.2, Lane 25, Yong-an 2nd St., Yongkang City, Tainan County
710, Taiwan

Manufacture: Jow Tong Technology CO., LTD.

46, Lane 337, Chung Cheng Rd., Yung Kang City, Tainan County 710,
Taiwan, R.O.C.

Equipment Under Test: Air Tune



Trade Name:

Model Number: AVT-01

Date of Test: August 25, 2009 ~ October 20, 2009

APPLICABLE STANDARDS	
STANDARD	TEST RESULT
FCC 47 CFR Part 15 Subpart C ANSI C63.4: 2003	No non-compliance noted
Deviation from Applicable Standard	
None	

We hereby certify that:

The above equipment was tested by Compliance Certification Services Inc. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in **ANSI C63.4: 2003** and the energy emitted by the sample EUT tested as described in this report is in compliance with the requirements of FCC Rules Part 15.207, 15.209, 15.247.

The test results of this report relate only to the tested sample EUT identified in this report.

Approved by:

Jeter Wu

Section Manager

Compliance Certification Services Inc.


Reviewed by:

Eric Yang

Senior Engineer

Compliance Certification Services Inc.

2. EUT DESCRIPTION

Product	Air Tune
Trade Name	
Model Number	AVT-01
Model Discrepancy	All the specification and layout are identical except they come with different model numbers for marketing purposes.
Power Supply	Powered by Adapter Brand: Sun fone Input: 100-240Vac, 50-60Hz, 1.0A Output: 12Vdc, 3A
Frequency Range	IEEE 802.11a mode: 5.745~5.825 GHz IEEE 802.11b/g mode: 2.412~2.462 GHz
Transmit Power	IEEE 802.11a mode: 18.63 dBm draft 802.11n Standard-20 MHz Channel mode: 17.96dBm draft 802.11n Wide-40 MHz Channel mode: 17.77 dBm IEEE 802.11b mode: 21.94 dBm IEEE 802.11g mode: 21.52 dBm draft 802.11n Standard-20 MHz Channel mode: 24.91 dBm draft 802.11n Wide-40 MHz Channel mode: 22.99 dBm
Modulation Technique	IEEE 802.11a: OFDM (QPSK, BPSK, 16-QAM, 64-QAM) (54, 48, 36, 24, 18, 12, 9, 6 Mbps) IEEE 802.11b mode: DSSS (1, 2, 5.5 and 11 Mbps) IEEE 802.11g mode: OFDM (6, 9, 12, 18, 24, 36, 48 and 54 Mbps) draft 802.11n Standard-20 MHz Channel mode: OFDM (6, 7, 13, 14, 19, 21, 26, 28, 39, 43, 52, 57, 58, 65, 72, 78, 86, 104, 115, 117, 130, 144 Mbps) draft 802.11n Wide-40 MHz Channel mode: OFDM(6, 13.5, 15, 27, 30, 40.5, 45, 54, 60, 81, 90, 108, 120, 121.5, 135, 150, 162, 180, 216, 240, 243, 270, 300 Mbps)



Number of Channels	IEEE 802.11a mode: 5 Channels draft 802.11n Standard-20 MHz Channel mode : 5 Channels draft 802.11n Wide-40 MHz Channel mode: 2 Channels IEEE 802.11b/g mode: 11 Channels draft 802.11n Standard-20 MHz Channel mode: 11 Channels draft 802.11n Wide-40 MHz Channel mode: 7 Channels
Antenna Specification	Antenna Type: Dipole Antenna X 3. (2TX 3RX) Antenna Model: RFA-25-X4M3-B20 Antenna Connector: RP SMA PLUG IEEE 802.11a: 2.0 dBi IEEE 802.11b/g/n mode: 1.5 dBi Impedance: 50Ω; Brand: ARISTOTLE

Remark:

1. The sample selected for test was production product and was provided by manufacturer.
2. This submittal(s) (test report) is intended for FCC ID: **XV3AVT01** filing to comply with Section 15.207, 15.209 and 15.247 of the FCC Part 15, Subpart C Rules.

IEEE 802.11b/g mode: 2.412~2.462 GHz	
Channel	frequency (MHz)
1	2412
2	2417
3	2422
4	2427
5	2432
6	2437
7	2442
8	2447
9	2452
10	2457
11	2462

IEEE 802.11a mode: 5.745~5.825 GHz	
Channel	frequency (MHz)
149	5745
153	5765
157	5785
161	5805
165	5825



3. TEST METHODOLOGY

The tests documented in this report were performed in accordance with ANSI C63.4: 2003 and FCC CFR 47 Part 15.207, 15.209 and 15.247.

3.1 EUT CONFIGURATION

The EUT configuration for testing is installed on RF field strength measurement to meet the Commissions requirement and operating in a manner that intends to maximize its emission characteristics in a continuous normal application.

3.2 EUT EXERCISE

The EUT was operated in the engineering mode to fix the TX frequency that was for the purpose of the measurements.

According to its specifications, the EUT must comply with the requirements of the Section 15.207, 15.209 and 15.247 under the FCC Rules Part 15 Subpart C.

3.3 GENERAL TEST PROCEDURES

Conducted Emissions

The EUT is placed on the turntable, which is 0.8 m above ground plane. According to the requirements in Section 13.1.4.1 of ANSI C63.4: 2003 Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30MHz using CISPR Quasi-peak and average detector modes.

Radiated Emissions

The EUT is placed on a turn table, which is 0.8 m above ground plane. The turntable shall rotate 360 degrees to determine the position of maximum emission level. EUT is set 3m away from the receiving antenna, which varied from 1m to 4m to find out the highest emission. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical. In order to find out the maximum emissions, exploratory radiated emission measurements were made according to the requirements in Section 13.1.4.1 of ANSI C63.4: 2003.



3.4 FCC PART 15.205 RESTRICTED BANDS OF OPERATIONS

- (a) Except as shown in paragraph (d) of this section, only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
¹ 0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 -	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.52525	2655 - 2900	22.01 - 23.12
8.41425 - 8.41475	156.7 - 156.9	3260 - 3267	23.6 - 24.0
12.29 - 12.293	162.0125 - 167.17	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	167.72 - 173.2	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	240 - 285	3600 - 4400	(²)
13.36 - 13.41	322 - 335.4		

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

² Above 38.6

- (b) Except as provided in paragraphs (d) and (e), the field strength of emissions appearing within these frequency bands shall not exceed the limits shown in Section 15.209. At frequencies equal to or less than 1000 MHz, compliance with the limits in Section 15.209 shall be demonstrated using measurement instrumentation employing a CISPR quasi-peak detector. Above 1000 MHz, compliance with the emission limits in Section 15.209 shall be demonstrated based on the average value of the measured emissions. The provisions in Section 15.35 apply to these measurements.

3.5 DESCRIPTION OF TEST MODES

The EUT (model: AVT-01) had been tested under operating condition.

The EUT is a 2x3 configuration spatial MIMO (2Tx & 3Rx) without beam forming function.

The 2x3 configuration is implemented with two outside TX & RX chains (Chain 0 and Chain1).

Software used to control the EUT for staying in continuous transmitting mode was programmed.

After verification, all tests were carried out with the worst case test modes as shown below except radiated spurious emission below 1GHz and power line conducted emissions below 30MHz, which worst case was in normal link mode only.

IEEE 802.11a mode:

Channel Low(5745MHz), Channel Mid(5785MHz) and Channel High(5825MHz) with 6Mbps data rate were chosen for full testing.

draft 802.11n Standard-20 MHz Channel mode:

Channel Low(5745MHz), Channel Mid(5785MHz) and Channel High(5825MHz) with 6Mbps data rate were chosen for full testing.

draft 802.11n Wide-40 MHz Channel mode:

Channel Low(5755MHz) and Channel High(5795MHz) with 13.5Mbps data rate were chosen for full testing.

IEEE 802.11b mode:

Channel Low (2412MHz), Channel Mid (2437MHz) and Channel High (2462MHz) with 1Mbps data rate and cyclic delay diversity were chosen for full testing.

IEEE 802.11g mode:

Channel Low (2412MHz), Channel Mid (2437MHz) and Channel High (2462MHz) with 6Mbps data rate and cyclic delay diversity were chosen for full testing.

draft 802.11n Standard-20 MHz Channel mode:

Channel Low (2412MHz), Channel Mid (2437MHz) and Channel High (2462MHz) with 6Mbps data rate were chosen for full testing.

draft 802.11n Wide-40 MHz Channel mode:

Channel Low (2422MHz), Channel Mid (2437MHz) and Channel High (2452MHz) with 13.5Mbps data rate were chosen for full testing.



4. INSTRUMENT CALIBRATION

4.1 MEASURING INSTRUMENT CALIBRATION

The measuring equipment, which was utilized in performing the tests documented herein, has been calibrated in accordance with the manufacturer's recommendations for utilizing calibration equipment, which is traceable to recognized national standards.

4.2 MEASUREMENT EQUIPMENT USED

Equipment Used for Emissions Measurement

Remark: Each piece of equipment is scheduled for calibration once a year.

Conducted Emissions Test Site				
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due
Spectrum Analyzer	R&S	FSEK 30	835253/002	OCT. 14, 2010

Open Area Test Site # 6				
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due
TYPE N COAXIAL CABLE	SUHNER	CHA9513	6	AUG. 31, 2010
EMI Receiver	R&S	ESVS10	833206/012	APR. 28, 2010
Spectrum Analyzer	R&S	FSEK 30	835253/002	OCT. 14, 2010
BI-LOG Antenna	Sunol	JB1	A070506-2	SEP. 8, 2010
Horn Antenna	Com-Power	AH-118	071032	DEC. 22, 2009
SMA RF CABLE	SUHNER	SUCOFLEX104PE A	20520/4PEA	NOV. 12, 2009
Pre-Amplifier	MITEQ	AFS44-00108650 -42-10P-44	1205908	OCT. 23, 2009
Signal Generator	HP	8673C	2938A00663	AUG. 25, 2010
Pre-Amplifier	HP	8447F	2944A03817	NOV. 01, 2009
Turn Table	Yo Chen	001	-----	N.C.R.
Antenna Tower	AR	TP1000A	309874	N.C.R.
Controller	CT	SC101	-----	N.C.R.
Test S/W	e-3 (5.04303e)			

Conducted Emission Room # 1				
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due
L.I.S.N.	SCHWARZBECK	NNLK 8121	8121-446	NOV. 19, 2009 For Insertion loss
	Rohde & Schwarz	ESH 3-Z5	840062/021	OCT. 05, 2010
TEST RECEIVER	Rohde & Schwarz	ESCS 30	100348	JUL. 02, 2010
TYPE N COAXIAL CABLE	SUHNER	BELDEN9913	2981	JAN. 14, 2010
Test S/W	e-3 (5.04211c) R&S (2.27)			



4.3 MEASUREMENT UNCERTAINTY

PARAMETER	UNCERTAINTY
Radiated Emission, 30 to 1000 MHz	+/- 3.2 dB
Radiated Emission, 1 to 26.5 GHz	+/- 3.2 dB
Power Line Conducted Emission	+/- 2.1 dB

Remark: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.



5. FACILITIES AND ACCREDITATIONS

5.1 FACILITIES

All measurement facilities used to collect the measurement data are located at

☒ No. 8, Jiu Cheng Ling, Jiaokeng Village, Sinhua Township, Tainan Hsien 712, Taiwan R.O.C.

The sites are constructed in conformance with the requirements of ANSI C63.7, ANSI C63.4 and CISPR Publication 22.

5.2 EQUIPMENT







Radiated emissions are measured with one or more of the following types of linearly polarized antennas: tuned dipole, biconical, log periodic, bi-log, and/or ridged waveguide, horn. Spectrum analyzers with pre-selectors and quasi-peak detectors are used to perform radiated measurements.

Conducted emissions are measured with Line Impedance Stabilization Networks and EMI Test Receivers.

Calibrated wideband preamplifiers, coaxial cables, and coaxial attenuators are also used for making measurements.

All receiving equipment conforms to CISPR Publication 16-1, "Radio Interference Measuring Apparatus and Measurement Methods."

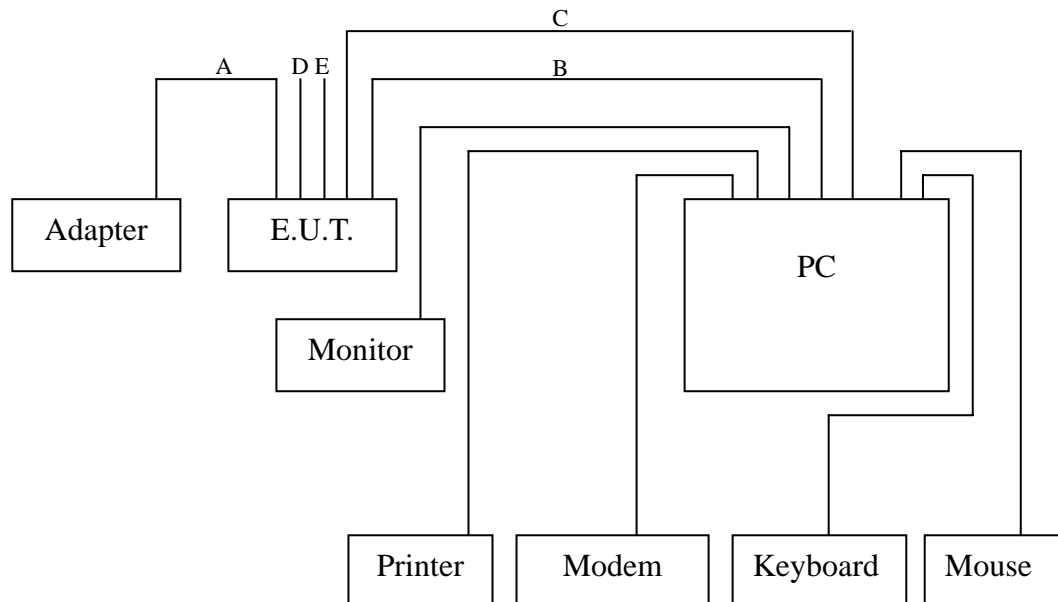
5.3 TABLE OF ACCREDITATIONS AND LISTINGS

Country	Agency	Scope of Accreditation	Logo
USA	FCC	3/10 meter Open Area Test Sites to perform FCC Part 15/18 measurements	 TW-1037
Japan	VCCI	3/10 meter Open Area Test Sites and conducted test sites to perform radiated/conducted measurements	 C-2882 R-2635
Taiwan	TAF	CISPR 11, FCC METHOD-47 CFR Part 18, EN 55011, EN 60601-1-2, CISPR 22, CNS 13438, EN 55022, EN 55024, AS/NZS CISPR 22 CISPR 14, EN 55014-1, EN 55014-2, CNS 13783-1, CISPR 22, CNS 13439, EN 55013, FCC Method-47 CFR Part 15 Subpart B, IC ICES-003, VCCI V-3 & V-4 FCC Method-47 CFR Part 15 Subpart C and ANSI C63.4, LP 0002 EN / IEC 61000-4-2 / -3 / -4 / -5 / -6 / -8 / -11 EN 61000-3-2, EN 61000-3-3 EN 61000-6-3, EN 61000-6-1, AS/NZS 4251.1, EN 61000-6-4, EN 61000-6-2, AS/NZS 4251.2, EN 61204-3, EN 50130-4, EN 62040-2, EN 50371, EN 50385, AS/NZS 4268, ETSI EN 300 386 ETSI EN 300 328, ETSI EN 301 489-1/-3/-9/-17 ETSI EN 300 220-2/-1 ETSI EN 300 440-2/-1 ETSI EN 301 357-2/-1 RSS-310, RSS-210 Issue 7, RSS-Gen Issue 2	 
Taiwan	BSMI	CNS 13438, CNS 13783-1, CNS13439	 SL2-IN-E-0039 SL2-R1/R2-0039 SL2-A1-E-0039
Canada	Industry Canada	RSS210, Issue 7	 IC 2324H-1

* No part of this report may be used to claim or imply product endorsement by TAF or any agency of the US Government.

6. SETUP OF EQUIPMENT UNDER TEST

6.1 SETUP CONFIGURATION OF EUT



6.2 SUPPORT EQUIPMENT

No.	Product	Manufacturer	Model No.	FCC ID	Signal Cable
1	PC	HP	D330uT	DOC	Power cable, unshd, 1.5m
2	LCD Monitor	BenQ	FP731	DOC	VGA cable, shd, 1.8m
3	Keyboard(PS2)	HP	KB-0133	DOC	Keyboard cable, shd, 1.9m
4	Mouse(PS2)	HP	M-S69	JNZ211443	Mouse cable, shd, 1.8m
5	Modem	LEMEL	MD-56K	DOC	RS232 cable, shd, 1.1m
6	Printer	HP	C2164A	B94C2164X	Printer cable, shd, 1.8m

Remark:

- All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.
- Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.

No.	Signal cable description	
A	DC cable	Unshielded, 1.2m, 1pc., with 2 cores
B	Audio cable	Shielded, 1.1m, 1pcs., with a core
C	VGA cable	Shielded, 1.1m, 1pcs., with 2 cores
D	RJ 45 cable	Unshielded, 3.0m, 1pcs., with a core
E	RJ45 cable	Unshielded, 3.0m, 3pcs.

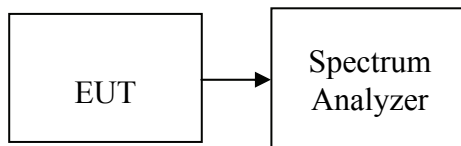
7. FCC PART 15.247 REQUIREMENTS

7.1 6DB BANDWIDTH

LIMIT

According to §15.247(a)(2), systems using digital modulation techniques may operate in the 902 - 928 MHz, 2400 - 2483.5 MHz, and 5725 - 5850 MHz bands. The minimum 6dB bandwidth shall be at least 500 kHz.

Test Configuration



TEST PROCEDURE

1. Place the EUT on the table and set it in the transmitting mode.
2. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.
3. Set the spectrum analyzer as RBW = 100 kHz, VBW = RBW, Span = 50 MHz, Sweep = auto.
4. Mark the peak frequency and -6dB (upper and lower) frequency.
5. Repeat until all the rest channels are investigated.



TEST RESULTS

No non-compliance noted

Test Data

Test mode: IEEE 802.11b mode

Channel	Frequency (MHz)	Bandwidth (MHz)	Limit (kHz)	Result
Low	2412	12.324	>500	PASS
Mid	2437	12.424		PASS
High	2462	12.352		PASS

Test mode: IEEE 802.11g mode

Channel	Frequency (MHz)	Bandwidth (MHz)	Limit (kHz)	Result
Low	2412	16.634	>500	PASS
Mid	2437	16.621		PASS
High	2462	16.633		PASS

Test mode: draft 802.11n Standard-20 MHz Channel mode / Chain 0

Channel	Frequency (MHz)	Bandwidth (kHz)	Limit (kHz)	Result
Low	2412	17.835	>500	PASS
Mid	2437	17.829		PASS
High	2462	17.828		PASS

Test mode: draft 802.11n Standard-20 MHz Channel mode / Chain 1

Channel	Frequency (MHz)	Bandwidth (kHz)	Limit (kHz)	Result
Low	2412	17.832	>500	PASS
Mid	2437	17.836		PASS
High	2462	17.837		PASS

Test mode: draft 802.11n Wide-40 MHz Channel mode / Chain 0

Channel	Frequency (MHz)	Bandwidth (kHz)	Limit (kHz)	Result
Low	2422	36.594	>500	PASS
Mid	2437	36.523		PASS
High	2452	36.472		PASS

Test mode: draft 802.11n Wide-40 MHz Channel mode / Chain 1

Channel	Frequency (MHz)	Bandwidth (kHz)	Limit (kHz)	Result
Low	2422	36.652	>500	PASS
Mid	2437	36.598		PASS
High	2452	36.673		PASS

**Test mode: IEEE 802.11a mode / 5745 ~ 5825MHz**

Channel	Frequency (MHz)	Bandwidth (MHz)	Limit (kHz)	Test Result
Low	5745	16.633	>500	PASS
Mid	5785	16.624		PASS
High	5825	16.635		PASS

Test mode: draft 802.11n Standard-20 MHz Channel mode / 5745 ~ 5825MHz / Chain 0

Channel	Frequency (MHz)	Bandwidth (MHz)	Limit (kHz)	Result
Low	5745	17.835	>500	PASS
Mid	5785	17.829		PASS
High	5825	17.845		PASS

Test mode: draft 802.11n Standard-20 MHz Channel mode / 5745 ~ 5825MHz / Chain 1

Channel	Frequency (MHz)	Bandwidth (MHz)	Limit (kHz)	Result
Low	5745	17.754	>500	PASS
Mid	5785	17.735		PASS
High	5825	17.535		PASS

Test mode: draft 802.11n Wide-40 MHz Channel mode / 5755 ~ 5795MHz / Chain 0

Channel	Frequency (MHz)	Bandwidth (MHz)	Limit (kHz)	Result
Low	5755	36.472	>500	PASS
High	5795	36.458		PASS

Test mode: draft 802.11n Wide-40 MHz Channel mode / 5755 ~ 5795MHz / Chain 1

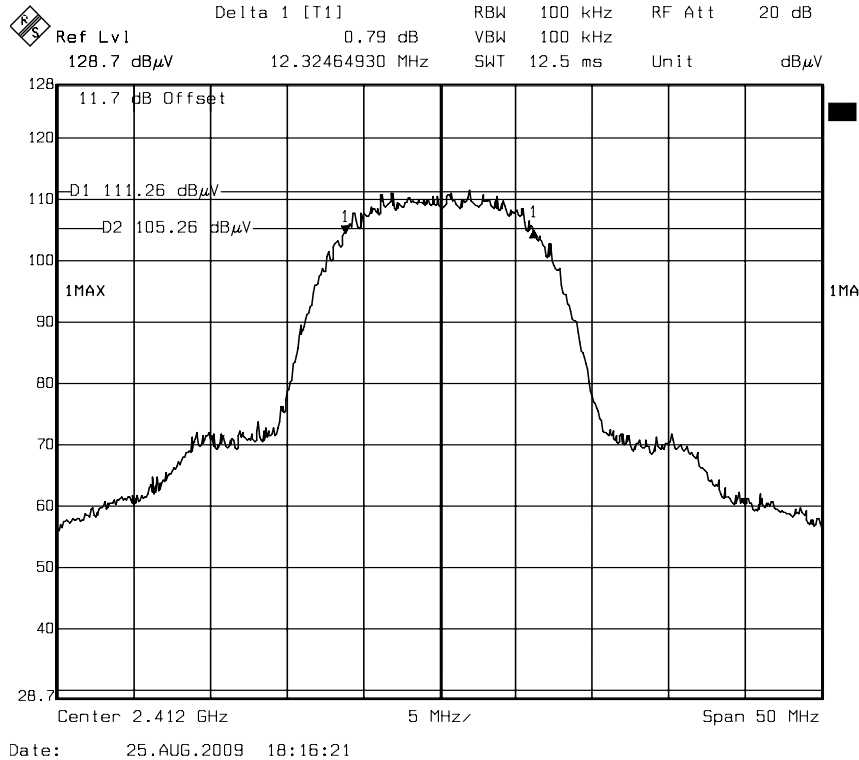
Channel	Frequency (MHz)	Bandwidth (MHz)	Limit (kHz)	Result
Low	5755	36.673	>500	PASS
High	5795	36.472		PASS



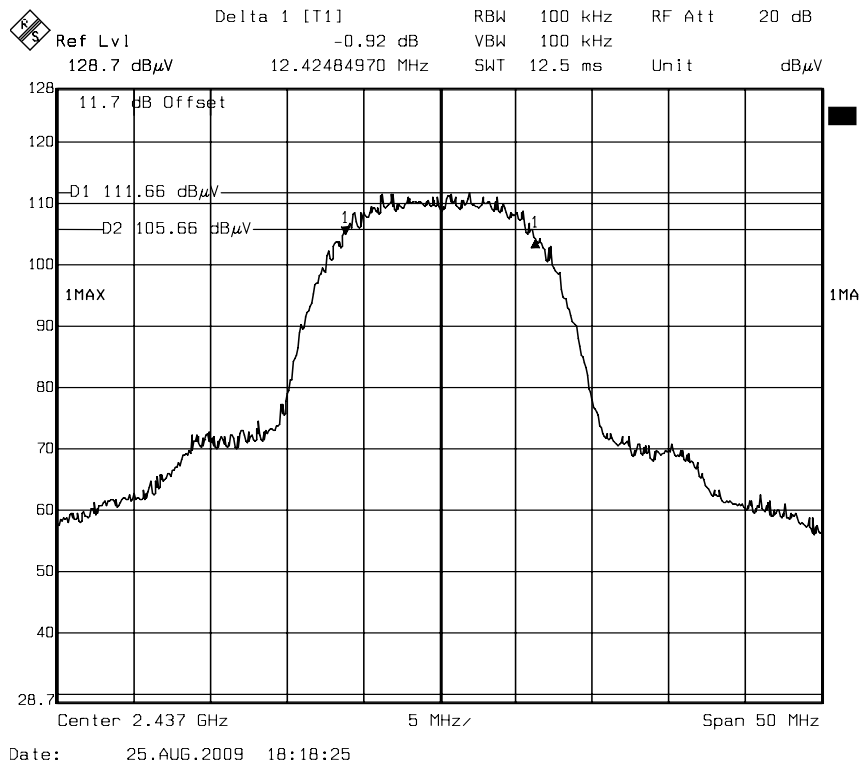
Test Plot

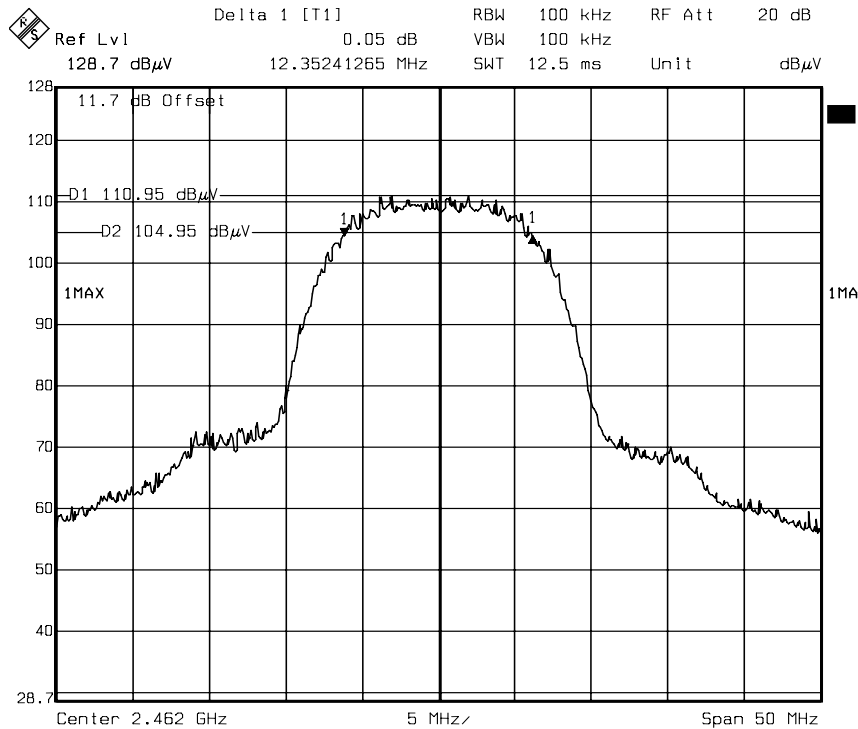
IEEE 802.11b mode

6dB Bandwidth (CH Low)

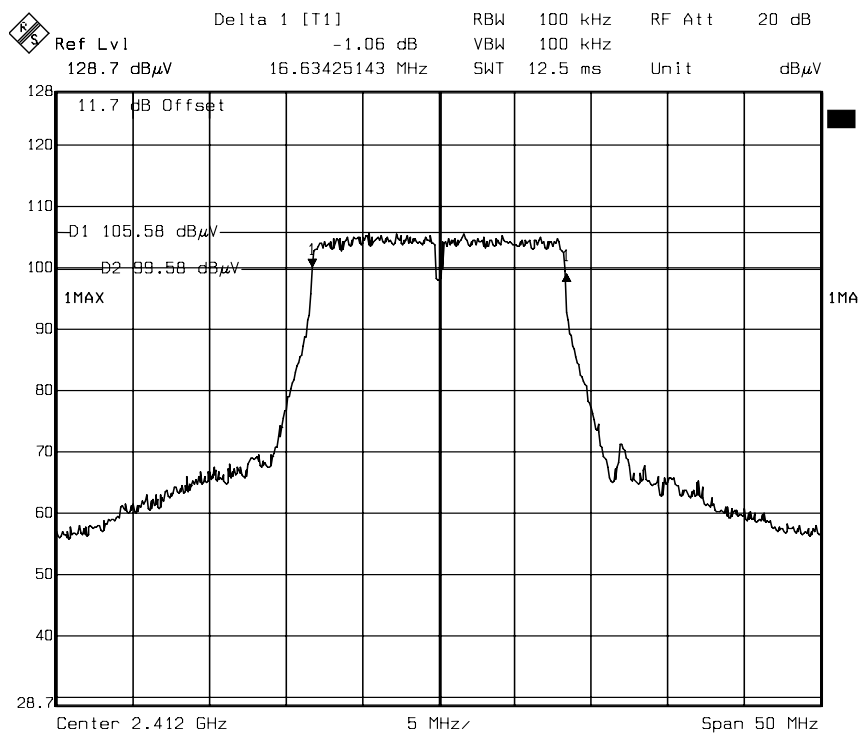


6dB Bandwidth (CH Mid)

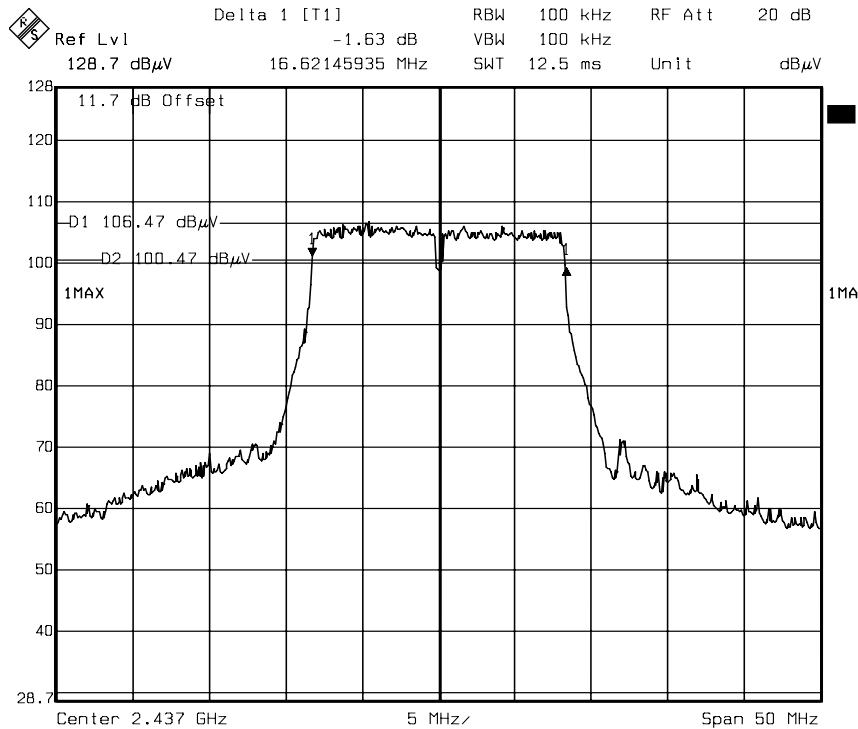


**6dB Bandwidth (CH High)**

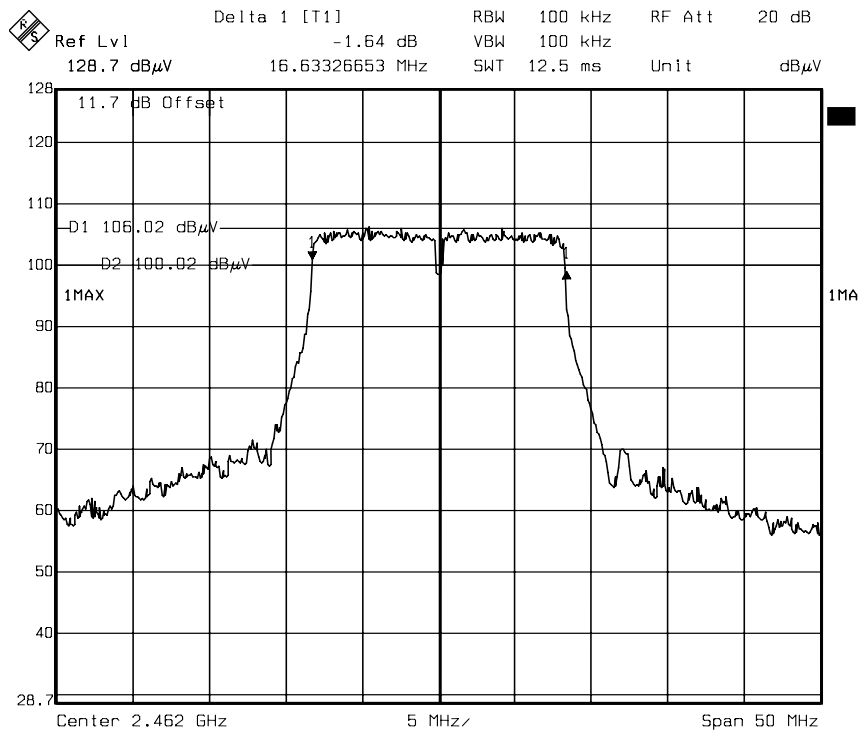
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IEEE 802.11g mode**6dB Bandwidth (CH Low)**

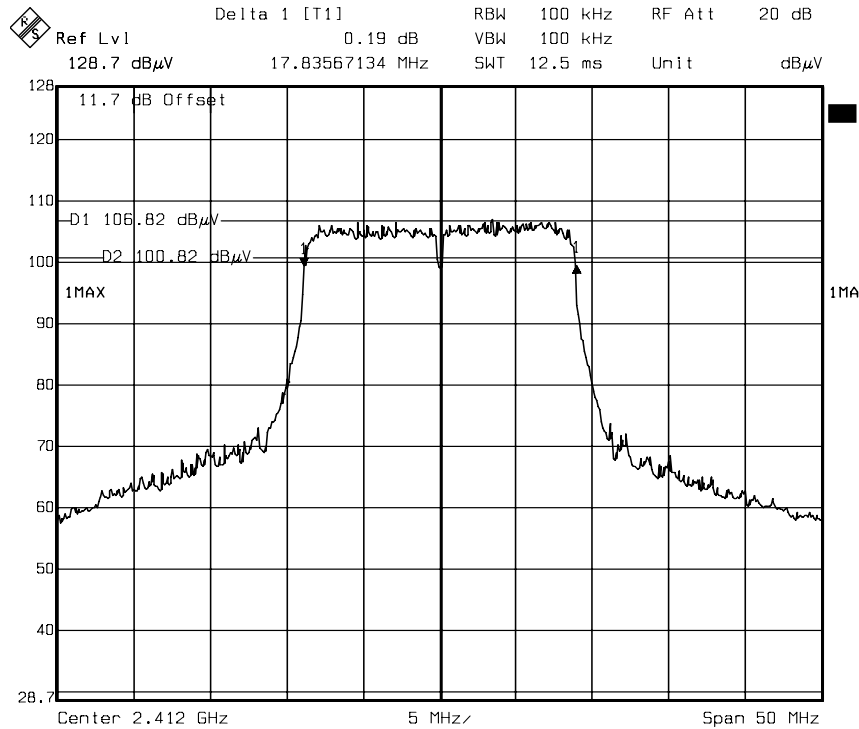
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**6dB Bandwidth (CH Mid)**

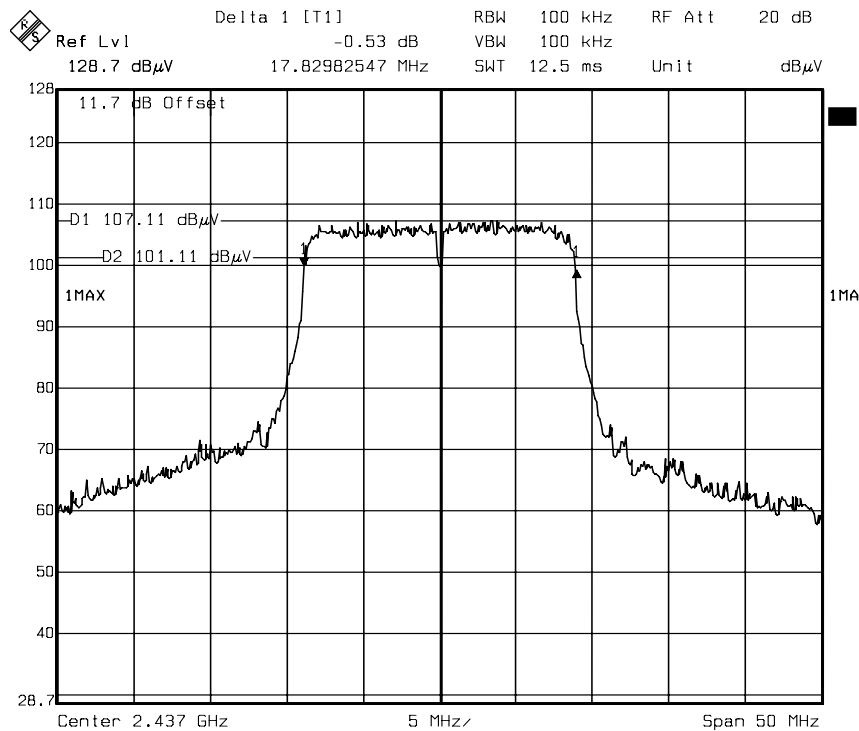
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6dB Bandwidth (CH High)

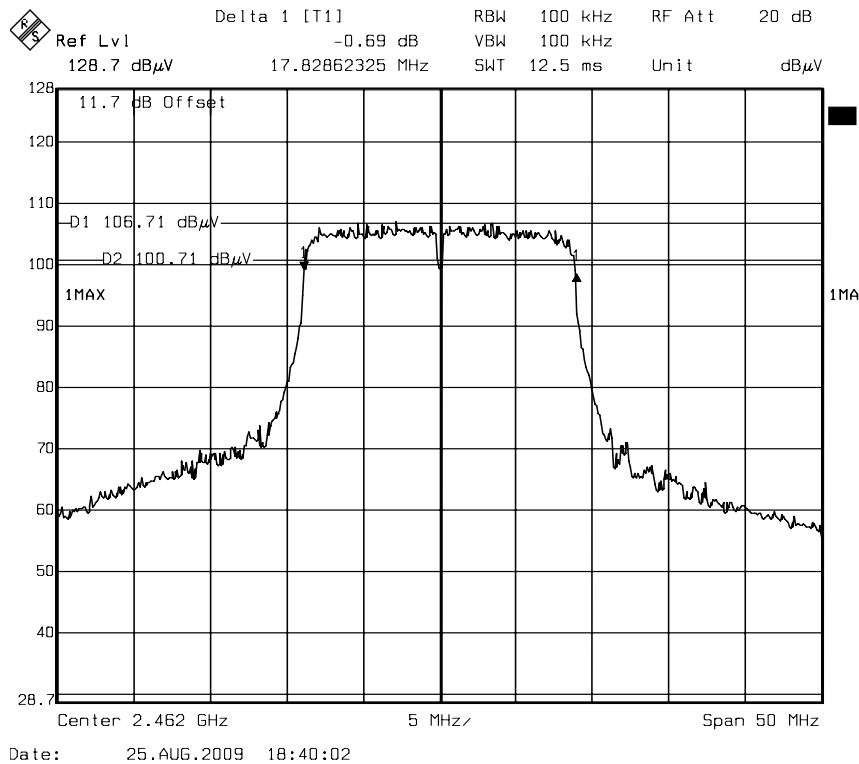
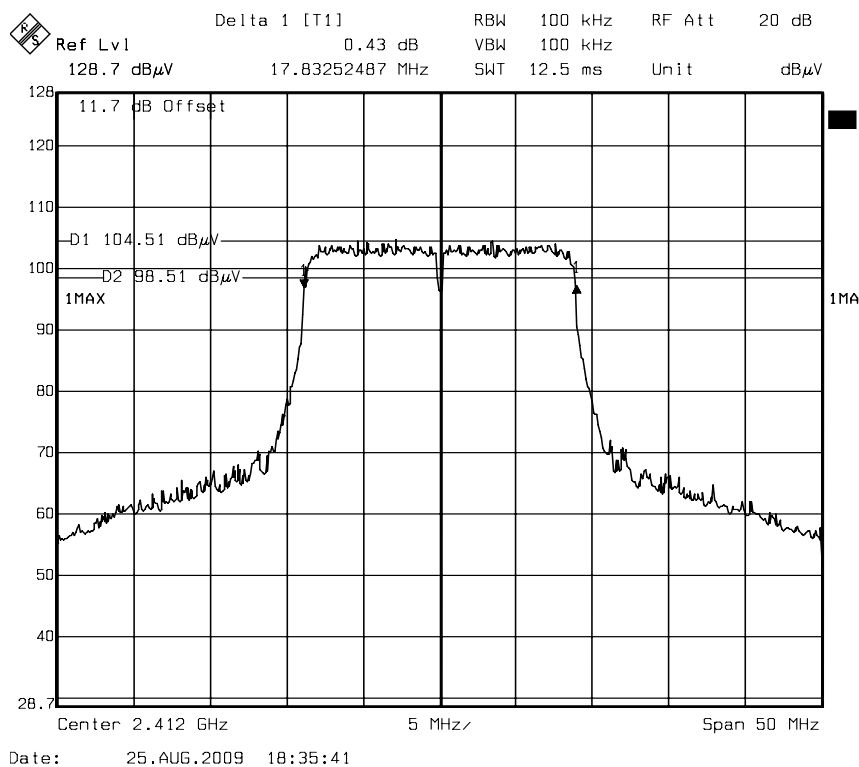
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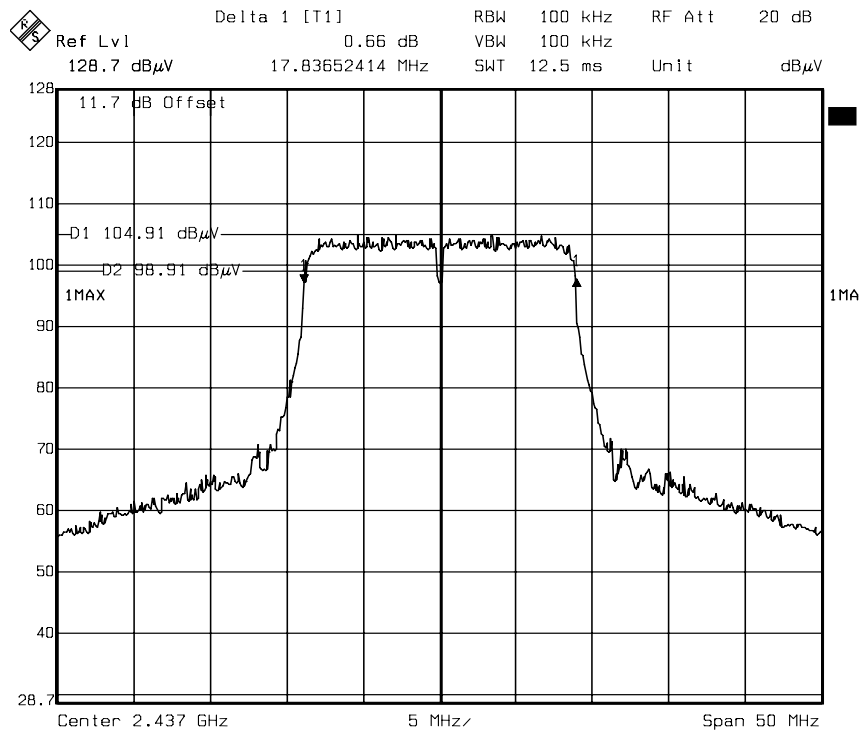
**draft 802.11n Standard-20 MHz Channel mode / Chain 0****6dB Bandwidth (CH Low)**

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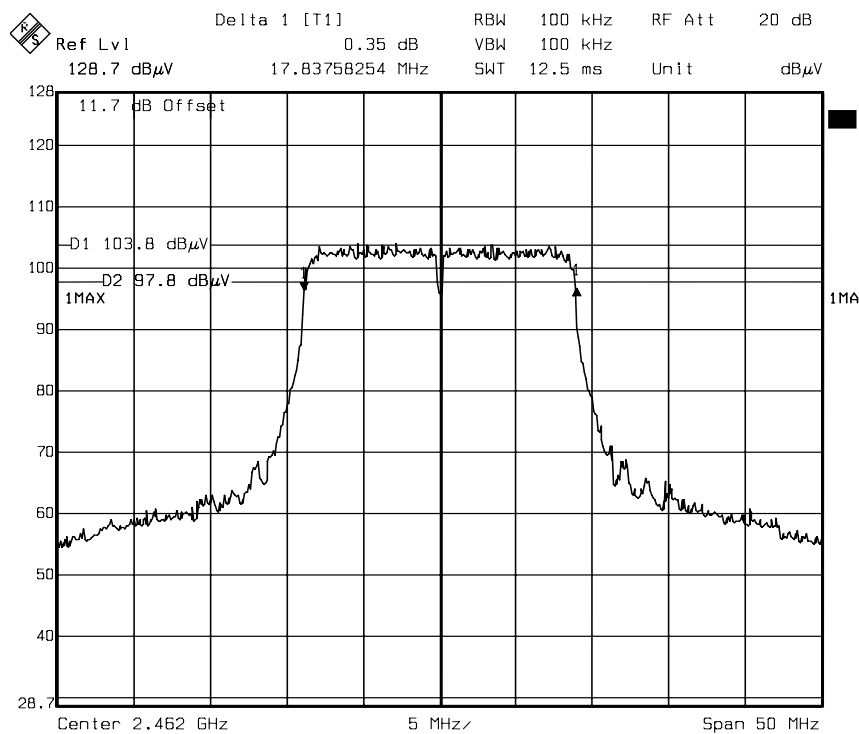
6dB Bandwidth (CH Mid)

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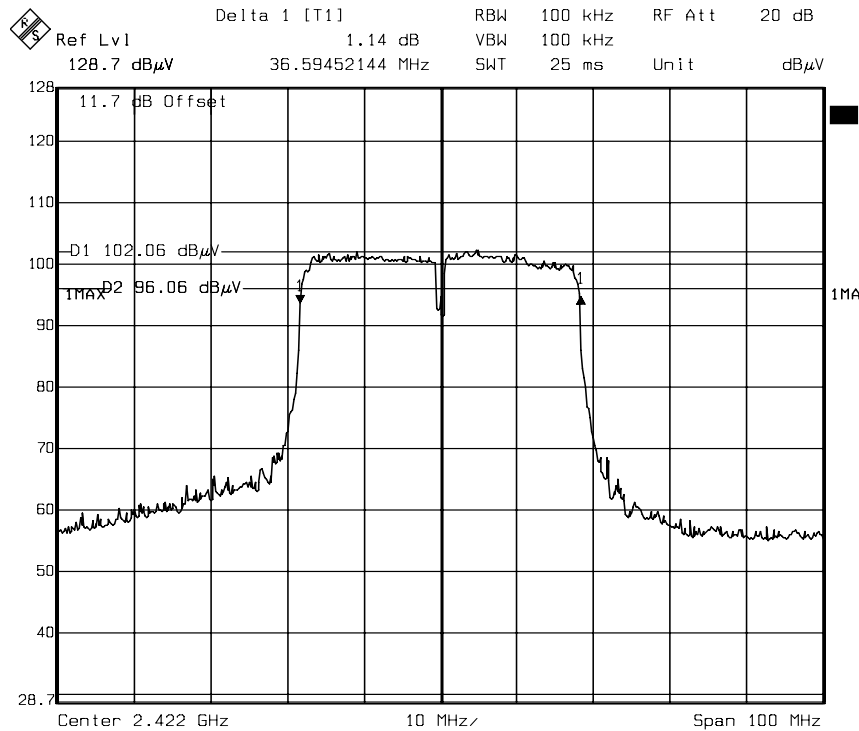
**6dB Bandwidth (CH High)****draft 802.11n Standard-20 MHz Channel mode / Chain 1****6dB Bandwidth (CH Low)**

**6dB Bandwidth (CH Mid)**

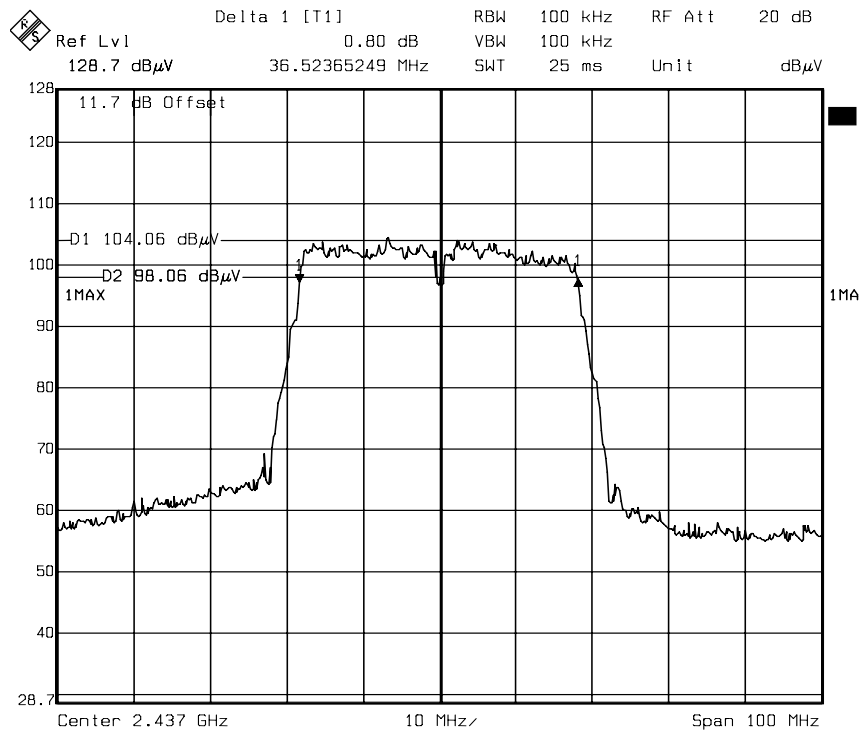
Date: 25.AUG.2009 18:37:23

6dB Bandwidth (CH High)

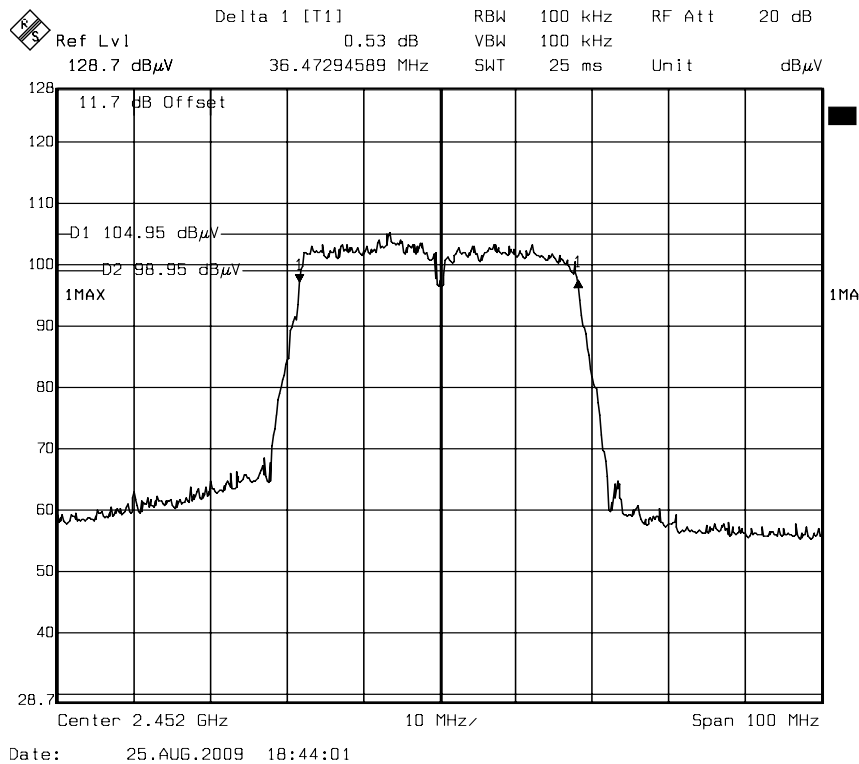
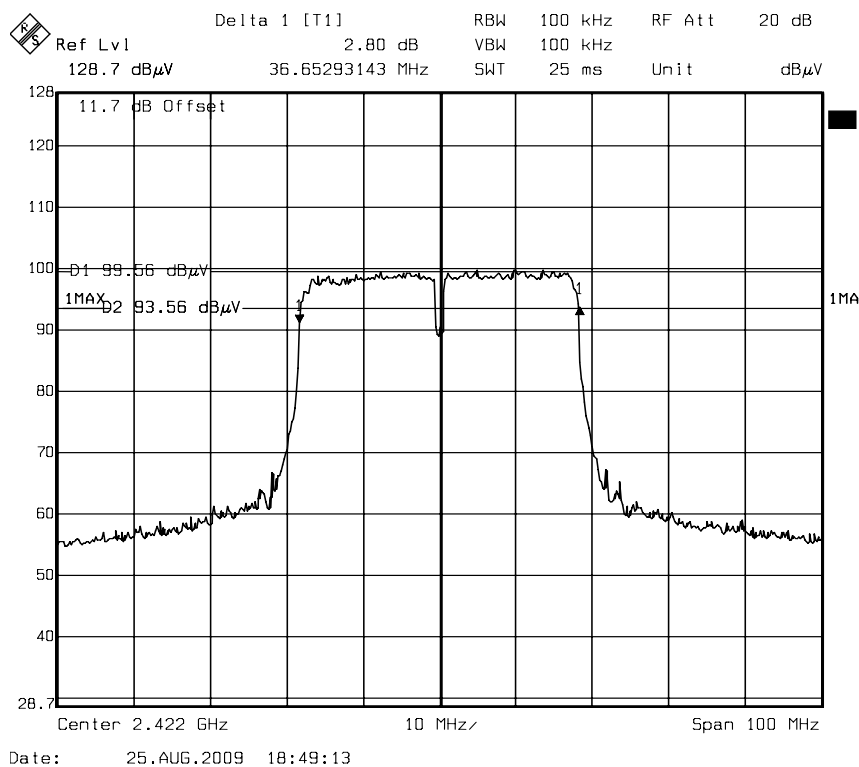
Date: 25.AUG.2009 18:41:06

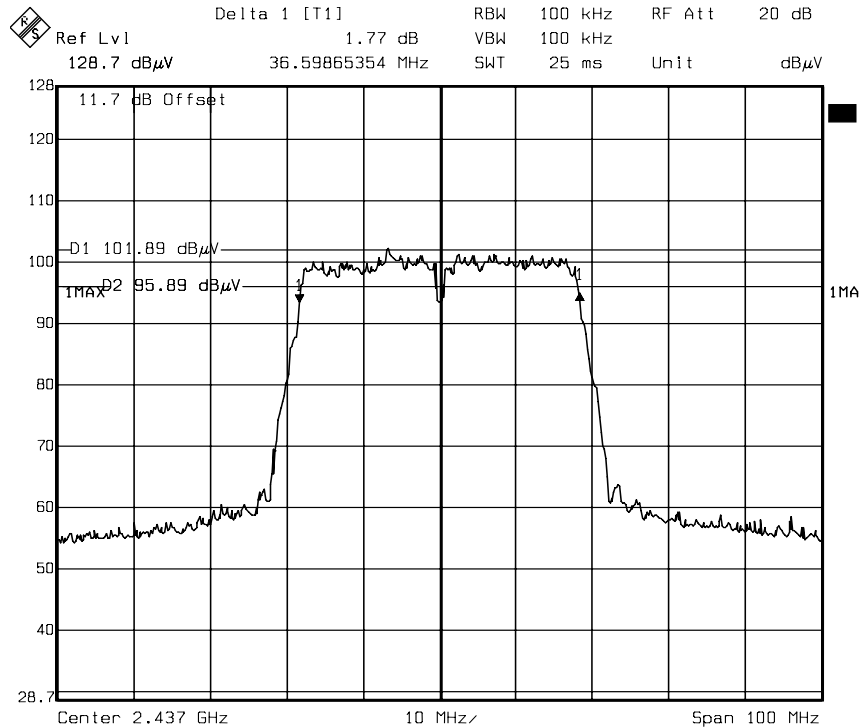
**draft 802.11n Wide-40 MHz Channel mode / Chain 0****6dB Bandwidth (CH Low)**

Date: 25.AUG.2009 18:52:02

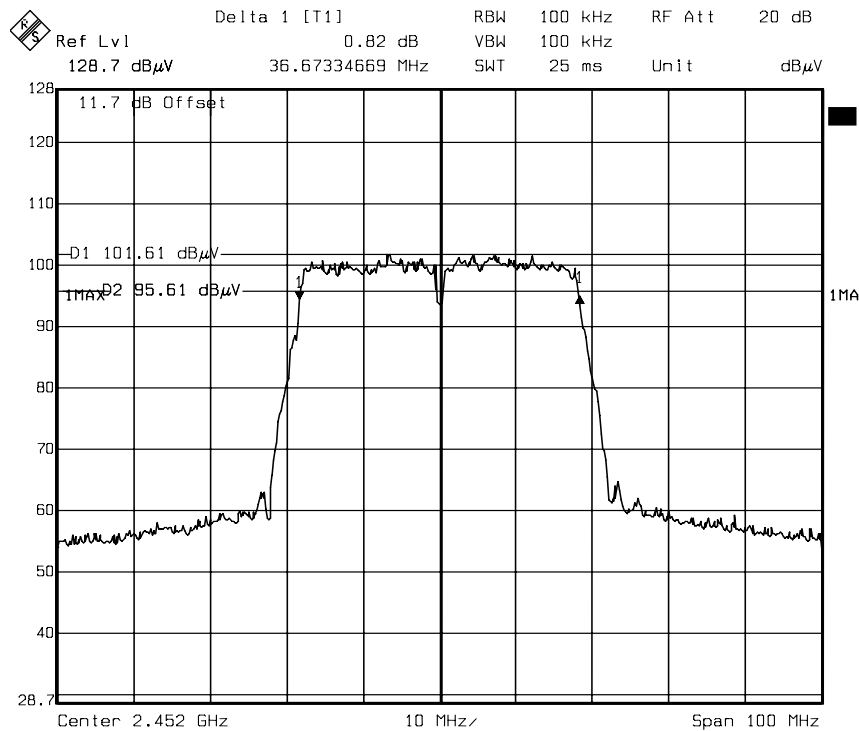
6dB Bandwidth (CH Mid)

Date: 25.AUG.2009 18:45:43

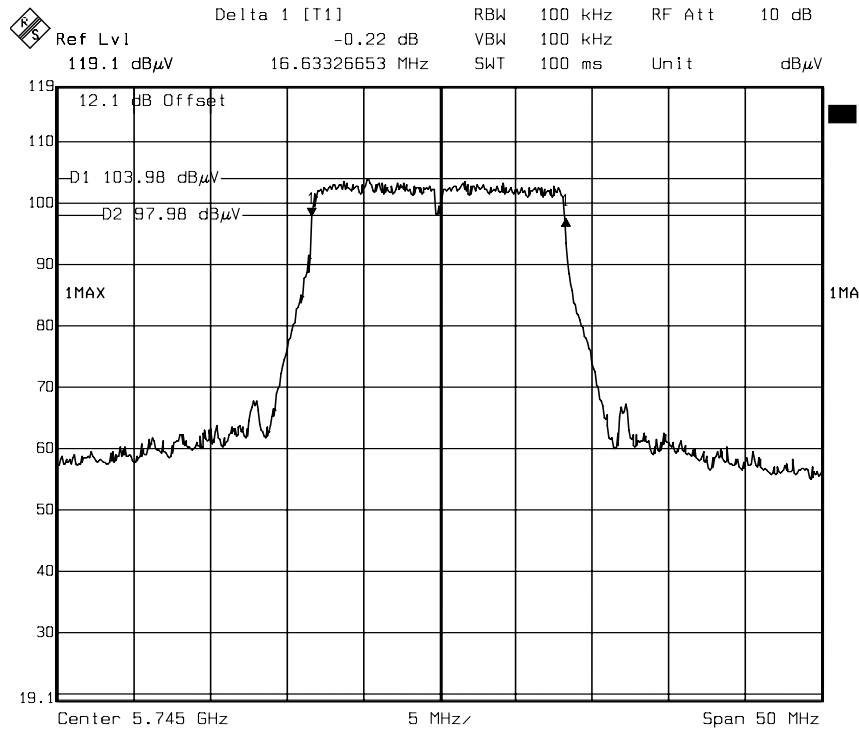
**6dB Bandwidth (CH High)****draft 802.11n Wide-40 MHz Channel mode / Chain 1****6dB Bandwidth (CH Low)**

**6dB Bandwidth (CH Mid)**

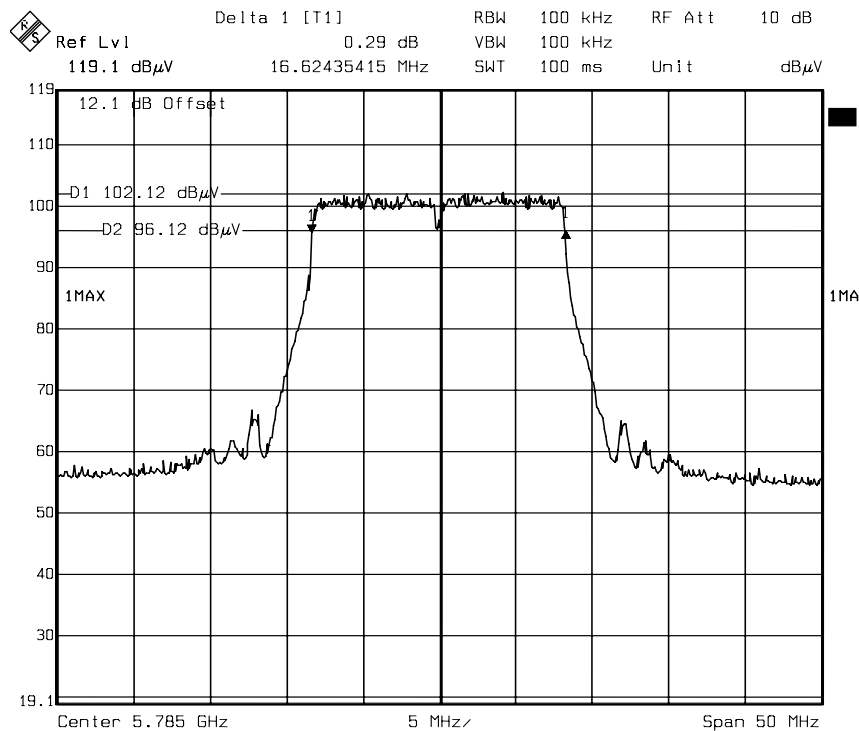
Date: 25.AUG.2009 18:47:00

6dB Bandwidth (CH High)

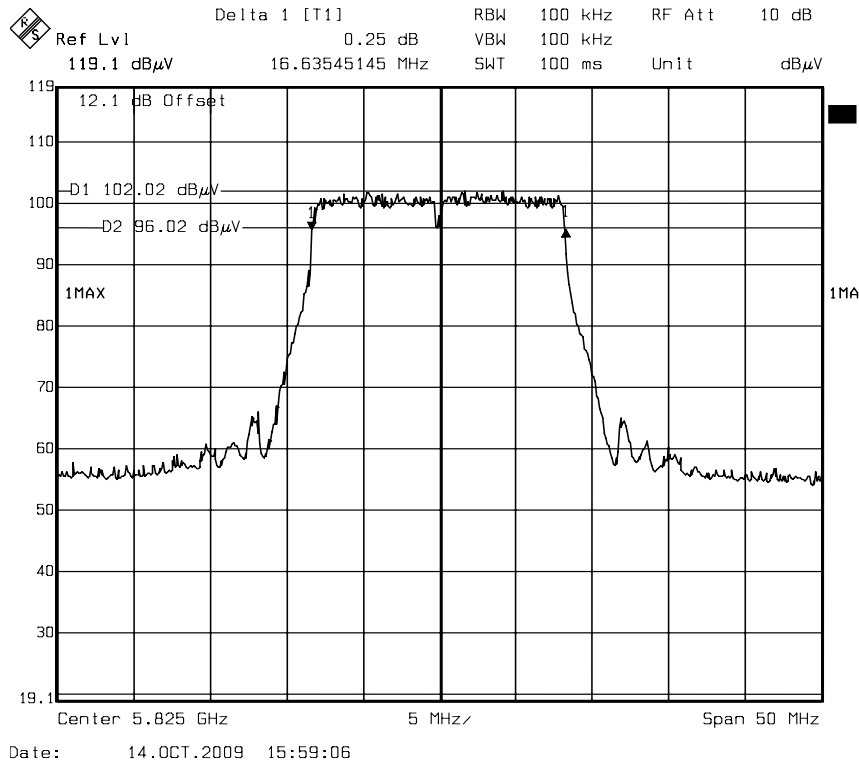
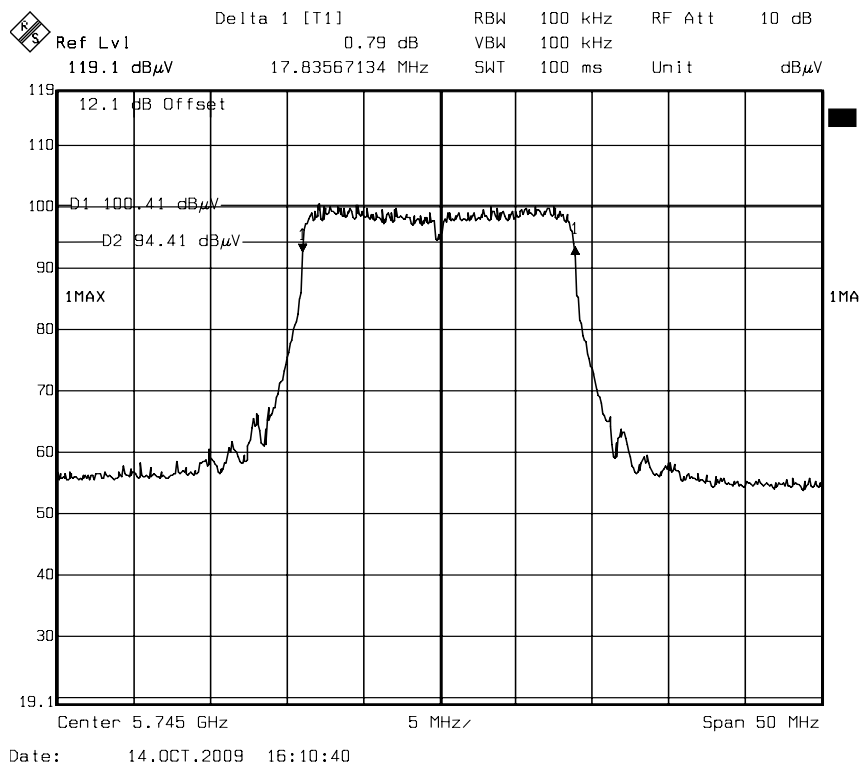
Date: 25.AUG.2009 18:42:50

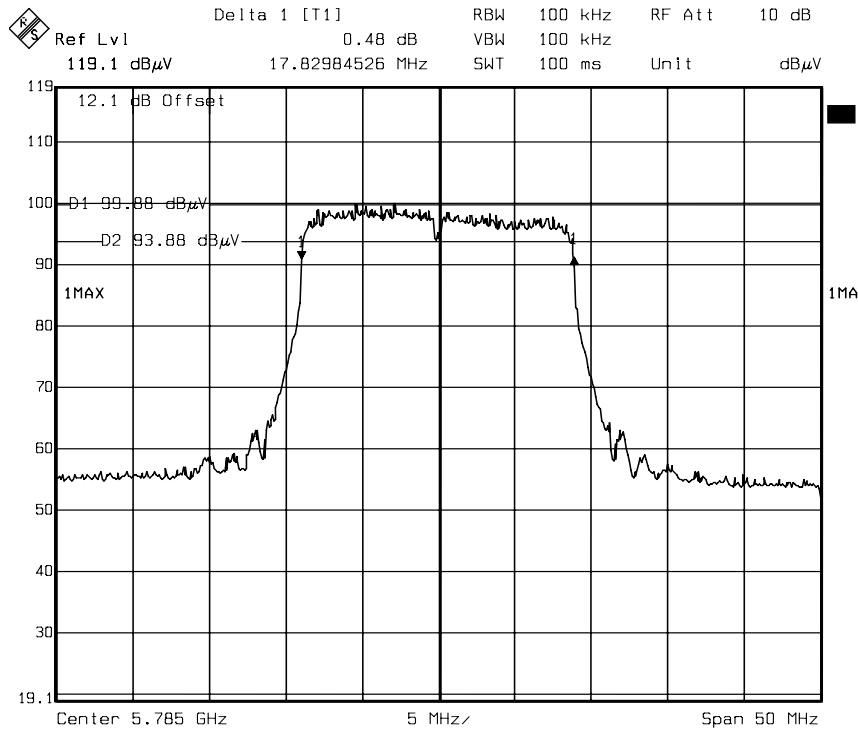
**IEEE 802.11a mode / 5745 ~ 5825MHz****6dB Bandwidth (CH Low)**

Date: 14.OCT.2009 15:54:41

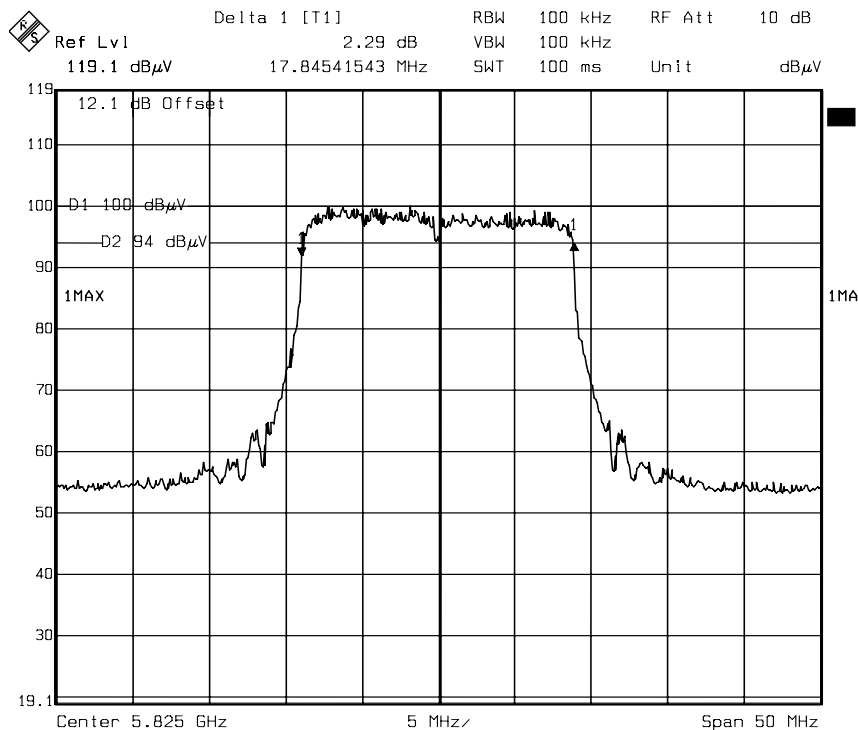
6dB Bandwidth (CH Mid)

Date: 14.OCT.2009 15:56:05

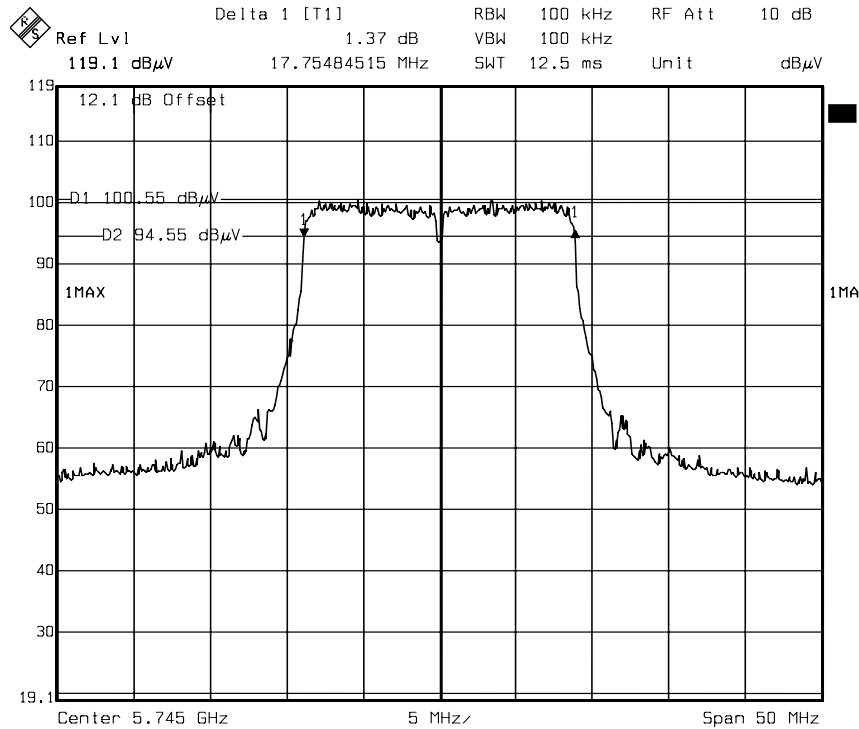
**6dB Bandwidth (CH High)****draft 802.11n Standard-20 MHz Channel mode / 5745 ~ 5825MHz / Chain 0****6dB Bandwidth (CH Low)**

**6dB Bandwidth (CH Mid)**

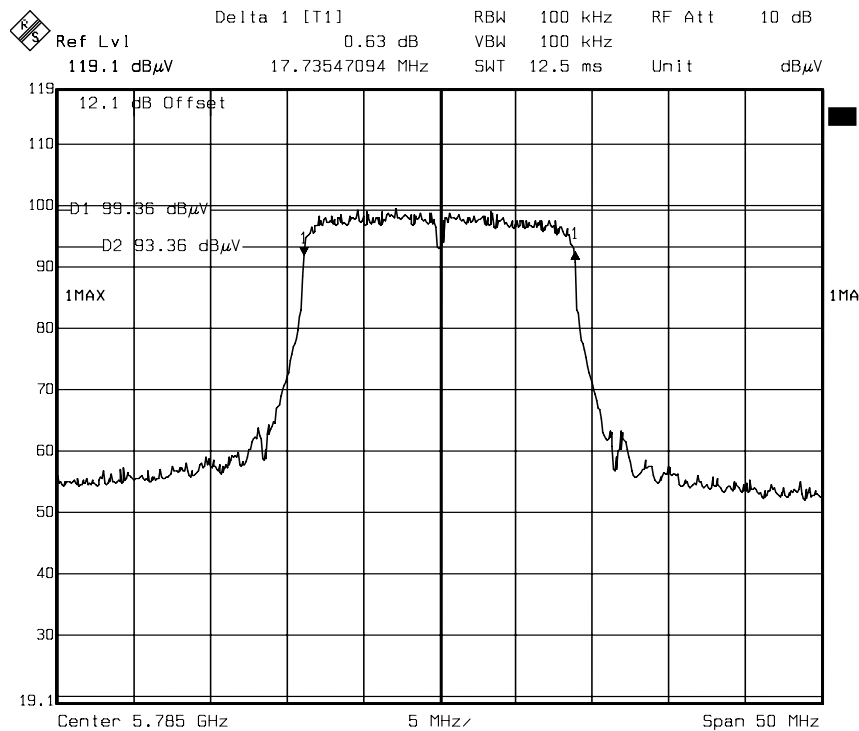
Date: 14.OCT.2009 16:15:06

6dB Bandwidth (CH High)

Date: 14.OCT.2009 16:17:25

**draft 802.11n Standard-20 MHz Channel mode / 5745 ~ 5825MHz / Chain 1****6dB Bandwidth (CH Low)**

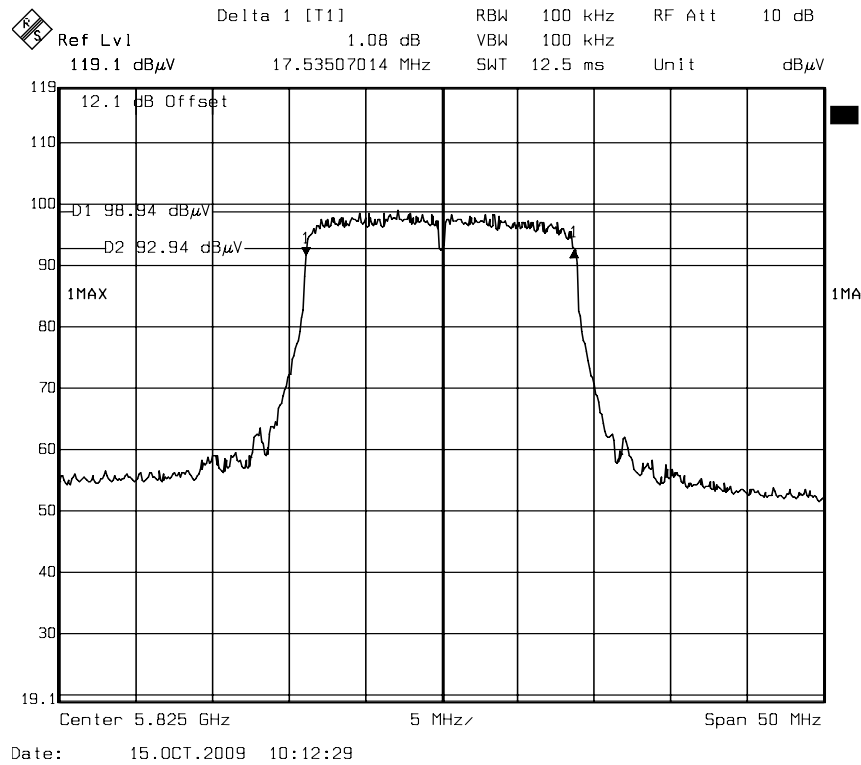
Date: 15.OCT.2009 10:15:06

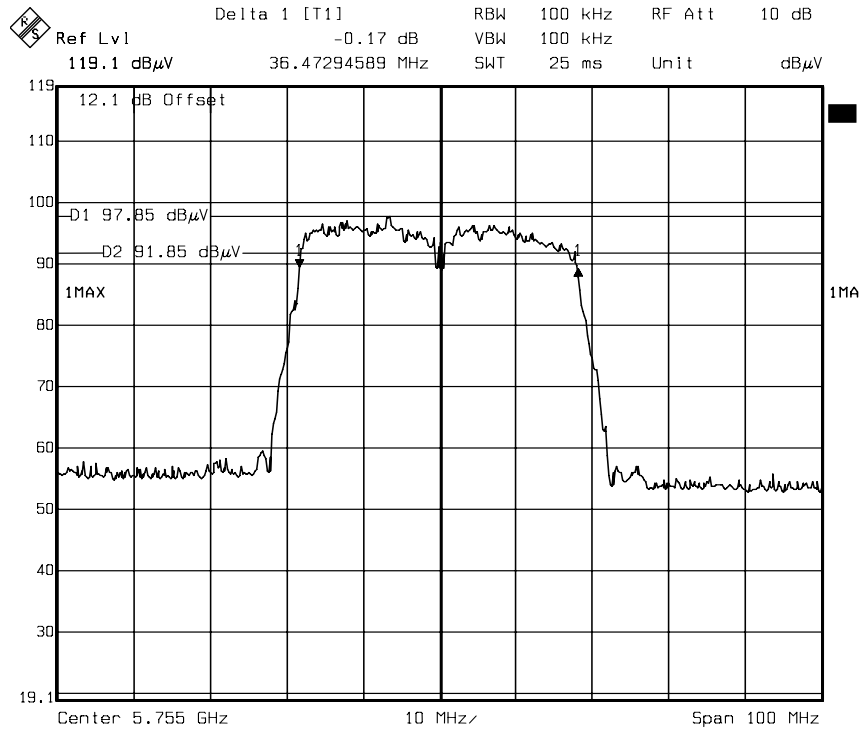
6dB Bandwidth (CH Mid)

Date: 15.OCT.2009 10:13:47

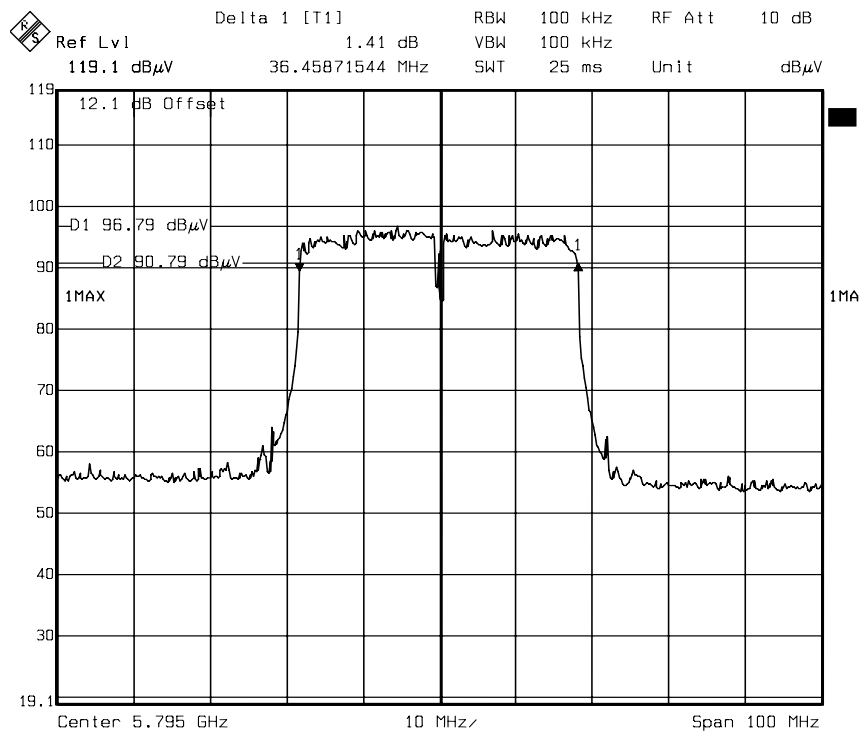


6dB Bandwidth (CH High)

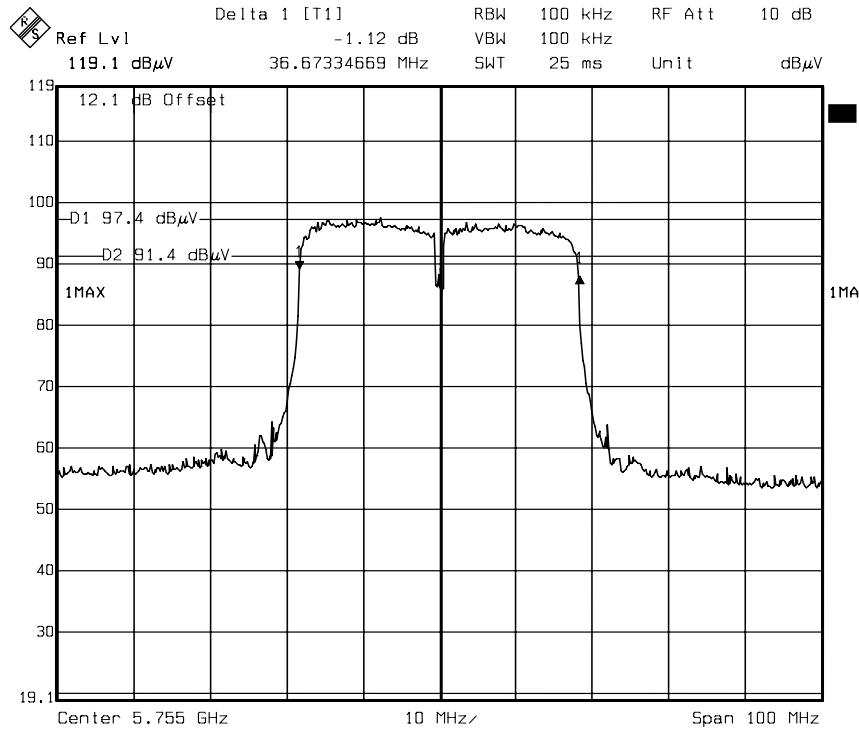


**draft 802.11n Wide-40 MHz Channel mode / 5755 ~ 5795MHz / Chain 0****6dB Bandwidth (CH Low)**

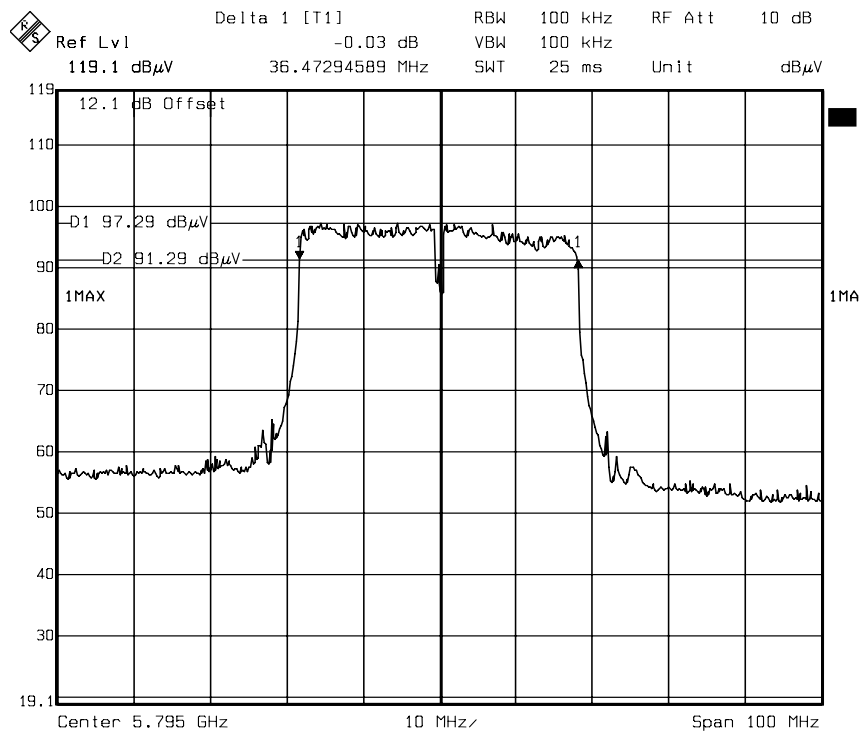
Date: 15.OCT.2009 10:31:56

6dB Bandwidth (CH High)

Date: 15.OCT.2009 10:29:42

**draft 802.11n Wide-40 MHz Channel mode / 5755 ~ 5795MHz / Chain 1****6dB Bandwidth (CH Low)**

Date: 15.OCT.2009 10:23:28

6dB Bandwidth (CH High)

Date: 15.OCT.2009 10:25:05



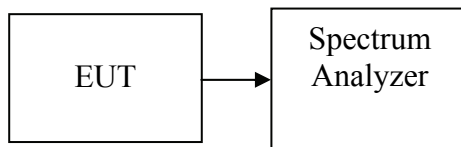
7.2 PEAK POWER

LIMIT

The maximum peak output power of the intentional radiator shall not exceed the following:

1. According to §15.247(b)(3), for systems using digital modulation in the bands of 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz: 1 Watt.
2. According to §15.247(b)(4), the conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Test Configuration



TEST PROCEDURE

1. Peak power is measured using the spectrum analyzer's internal channel power integration function.
2. Power is integrated over a bandwidth greater than or equal to the 99% bandwidth.



TEST RESULTS

No non-compliance noted

Test Data

Test mode: IEEE 802.11b mode

Channel	Frequency (MHz)	Output Power (dBm)	Limit (dBm)	Result
Low	2412	21.56	30.00	PASS
Mid	2437	21.94		PASS
High	2462	21.34		PASS

Test mode: IEEE 802.11g mode

Channel	Frequency (MHz)	Output Power (dBm)	Limit (dBm)	Result
Low	2412	20.85	30.00	PASS
Mid	2437	21.52		PASS
High	2462	21.33		PASS

Test mode: draft 802.11n Standard-20 MHz Channel mode

Channel	Frequency (MHz)	Chain 0 Output Power (dBm)	Chain 1 Output Power (dBm)	Total Output Power (dBm)	Limit (dBm)	Result
Low	2412	22.35	19.88	24.30	30.00	PASS
Mid	2437	22.99	20.44	24.91		PASS
High	2462	22.50	19.63	24.31		PASS

Test mode: draft 802.11n Wide-40 MHz Channel mode

Channel	Frequency (MHz)	Chain 0 Output Power (dBm)	Chain 1 Output Power (dBm)	Total Output Power (dBm)	Limit (dBm)	Result
Low	2422	20.92	18.78	22.99	30.00	PASS
Mid	2437	21.12	18.37	22.97		PASS
High	2452	20.75	18.43	22.75		PASS

Remark: Total Output Power (w) = Chain 0 ($10^{(\text{Output Power}/10)/1000}$) + Chain 1 ($10^{(\text{Output Power}/10)/1000}$)

**Test mode: IEEE 802.11a mode / 5745 ~ 5825MHz**

Channel	Frequency (MHz)	Output Power (dBm)	Limit (dBm)	Result
Low	5745	18.63	30.00	PASS
Mid	5785	17.37		PASS
High	5825	17.52		PASS

Test mode: draft 802.11n Standard-20 MHz Channel mode / 5745 ~ 5825MHz

Channel	Frequency (MHz)	Chain 0 Output Power (dBm)	Chain 1 Output Power (dBm)	Total Output Power (dBm)	Limit (dBm)	Result
Low	5745	13.99	15.73	17.96	30.00	PASS
Mid	5785	13.60	14.50	17.08		PASS
High	5825	13.69	13.24	16.48		PASS

Test mode: draft 802.11n Wide-40 MHz Channel mode / 5755 ~ 5795MHz

Channel	Frequency (MHz)	Chain 0 Output Power (dBm)	Chain 1 Output Power (dBm)	Total Output Power (dBm)	Limit (dBm)	Result
Low	5755	13.40	15.80	17.77	30.00	PASS
Mid	5795	14.32	14.79	17.57		PASS

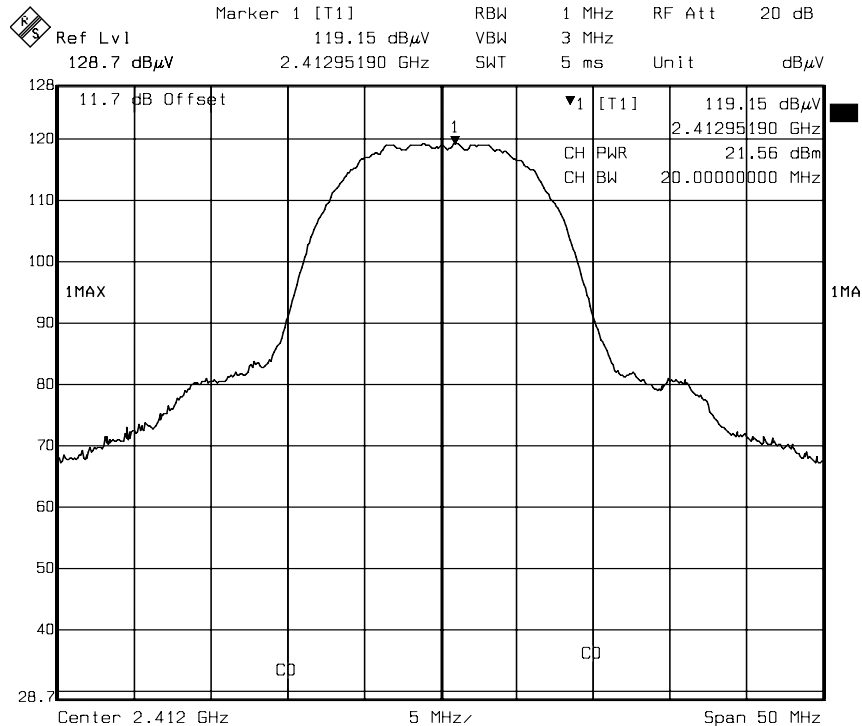
Remark: Total Output Power (w) = Chain 0 ($10^{(\text{Output Power}/10)/1000}$) + Chain 1 ($10^{(\text{Output Power}/10)/1000}$)



Test Plot

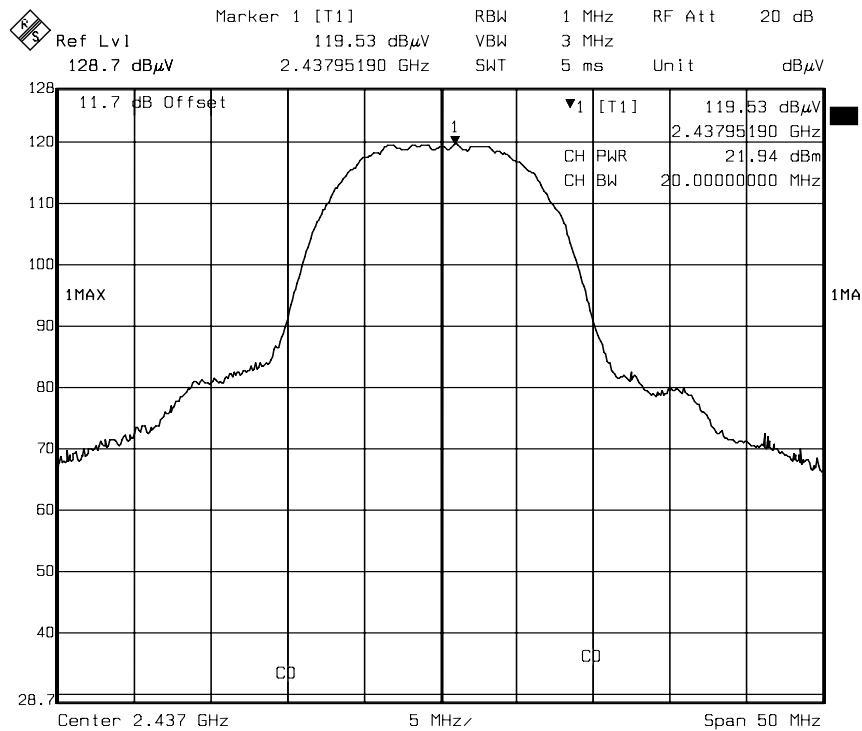
IEEE 802.11b mode

Peak Power (CH Low)

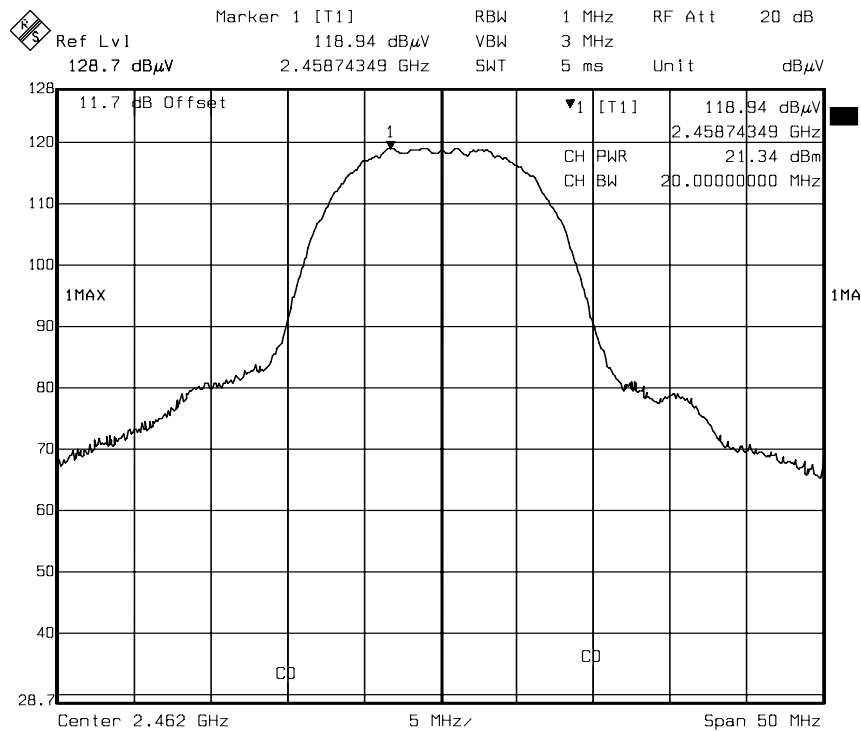


Date: 25.AUG.2009 20:21:04

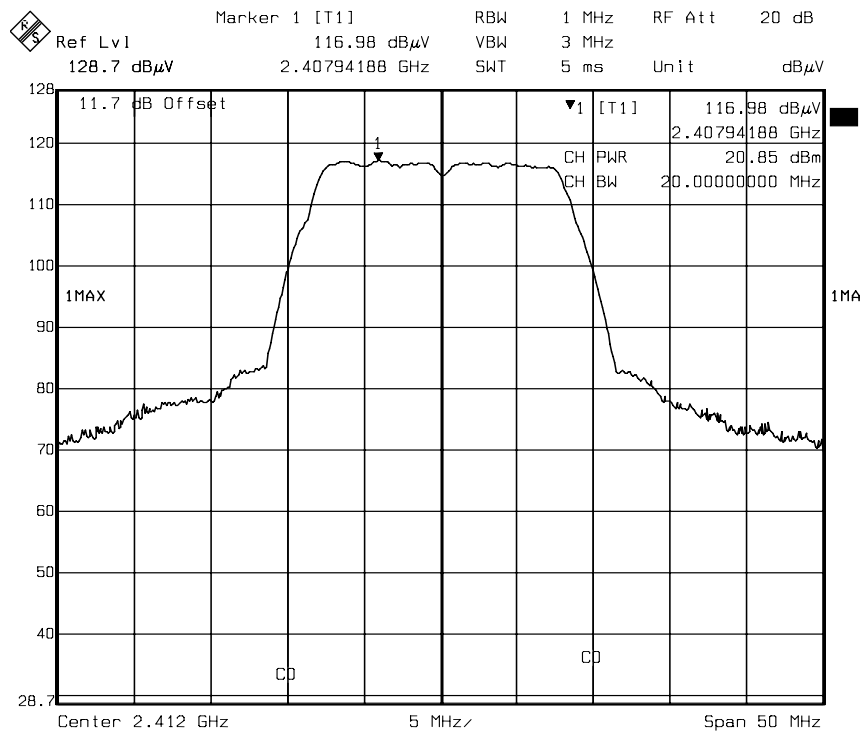
Peak Power (CH Mid)



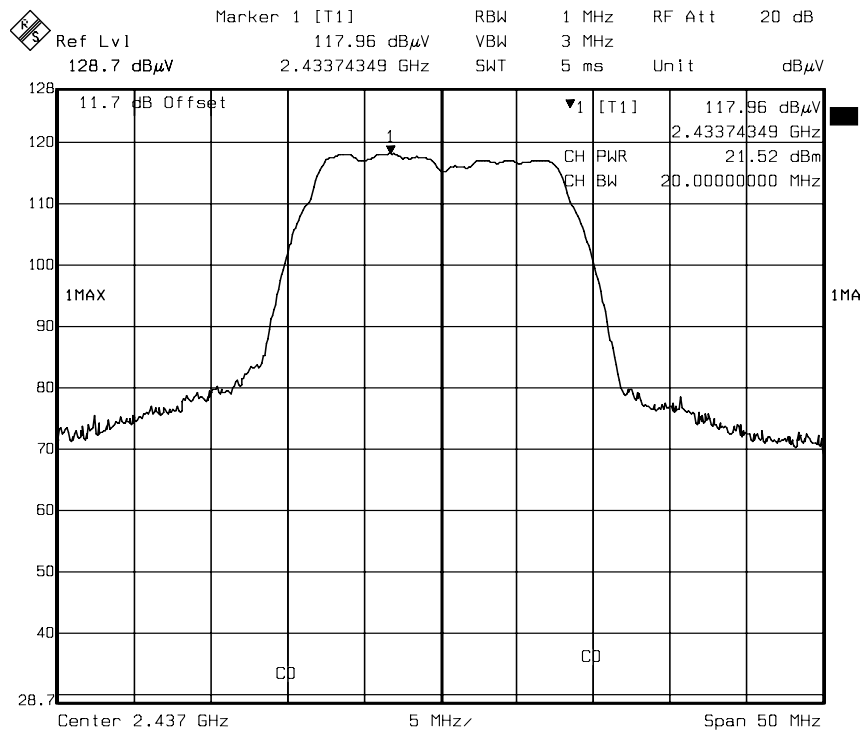
Date: 25.AUG.2009 20:21:34

**Peak Power (CH High)**

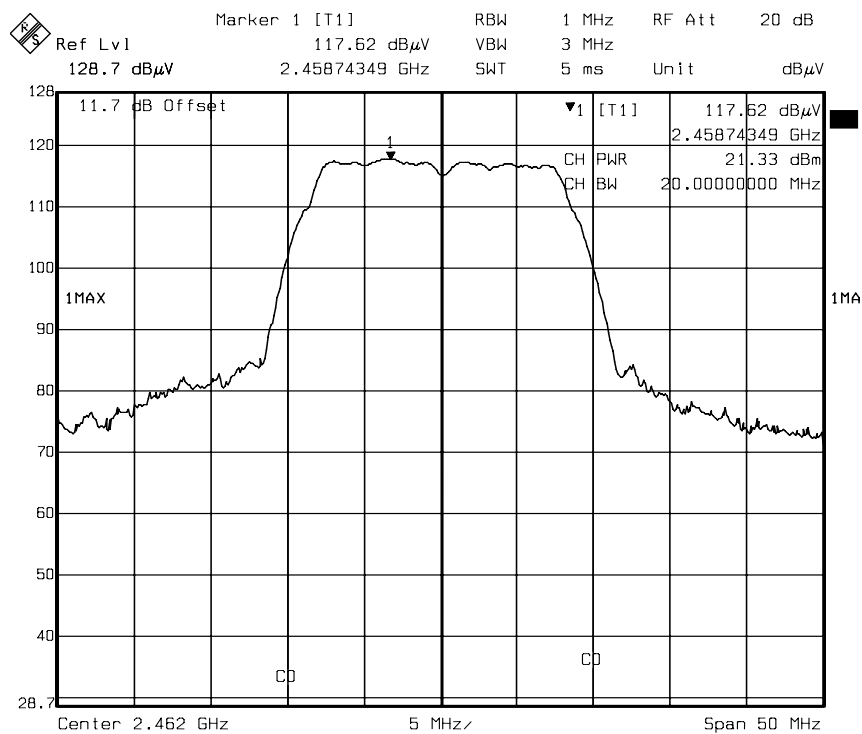
Date: 25.AUG.2009 20:22:07

IEEE 802.11g mode**Peak Power (CH Low)**

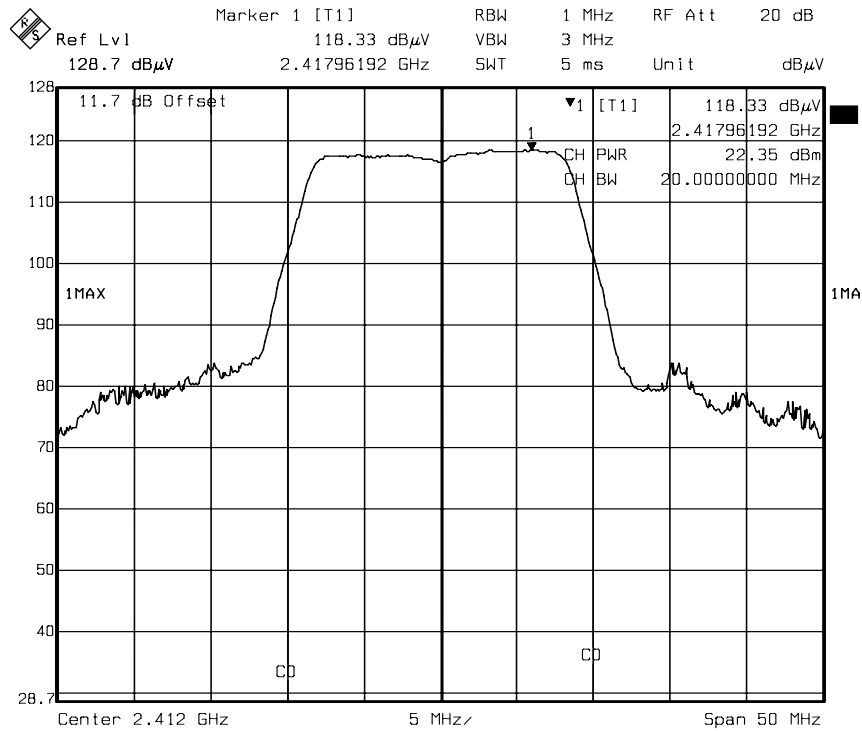
Date: 25.AUG.2009 20:25:02

**Peak Power (CH Mid)**

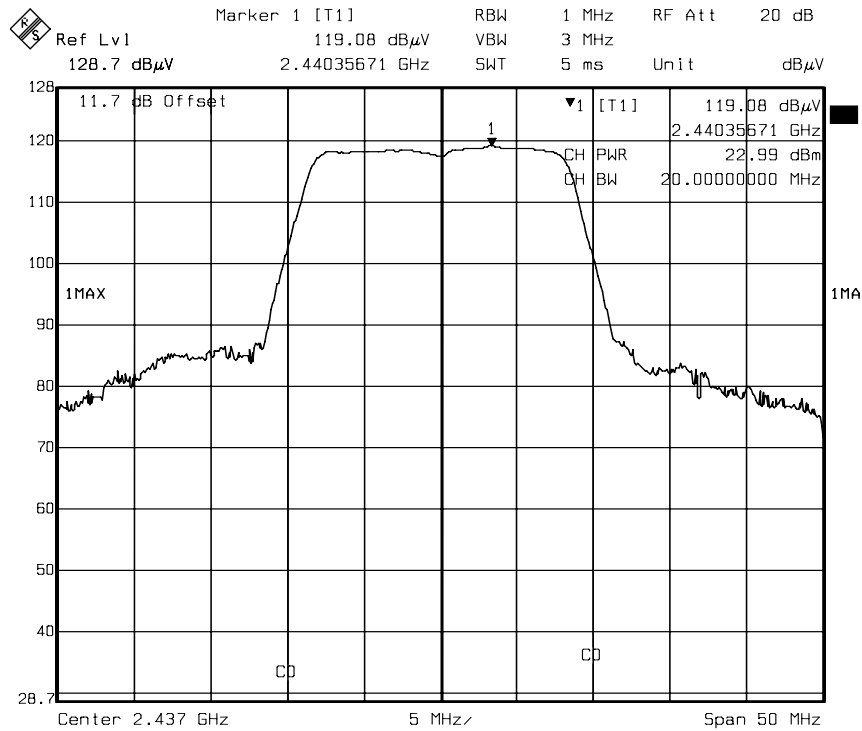
Date: 25.AUG.2009 20:24:00

Peak Power (CH High)

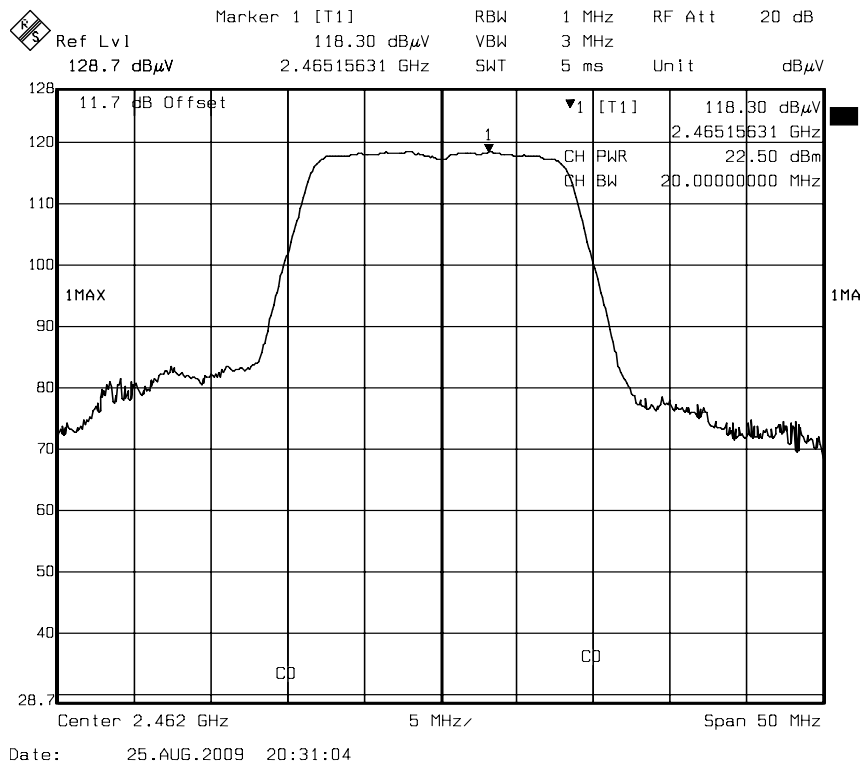
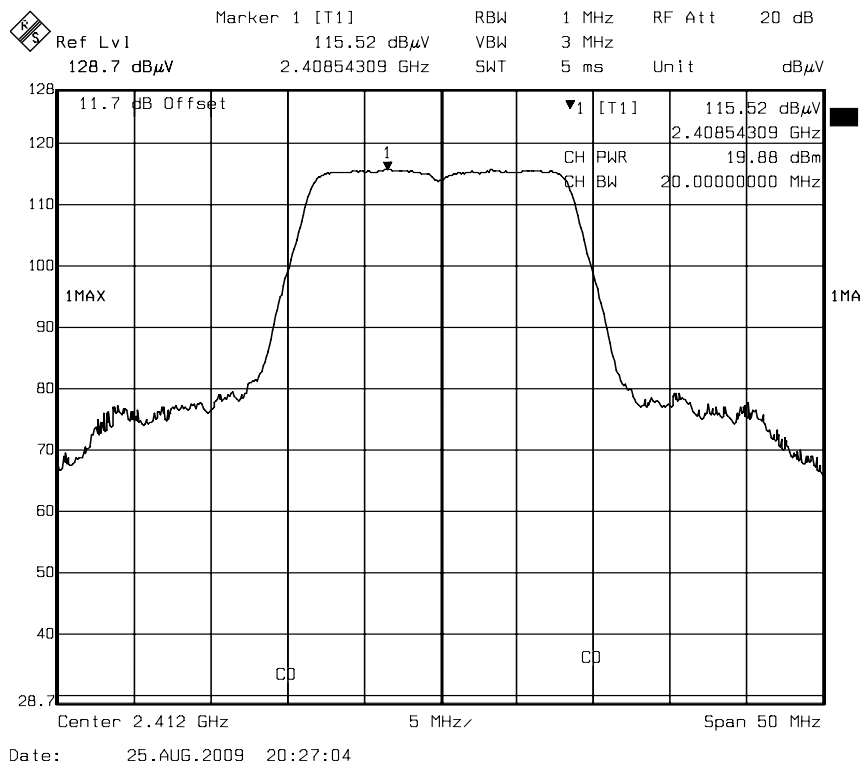
Date: 25.AUG.2009 20:23:06

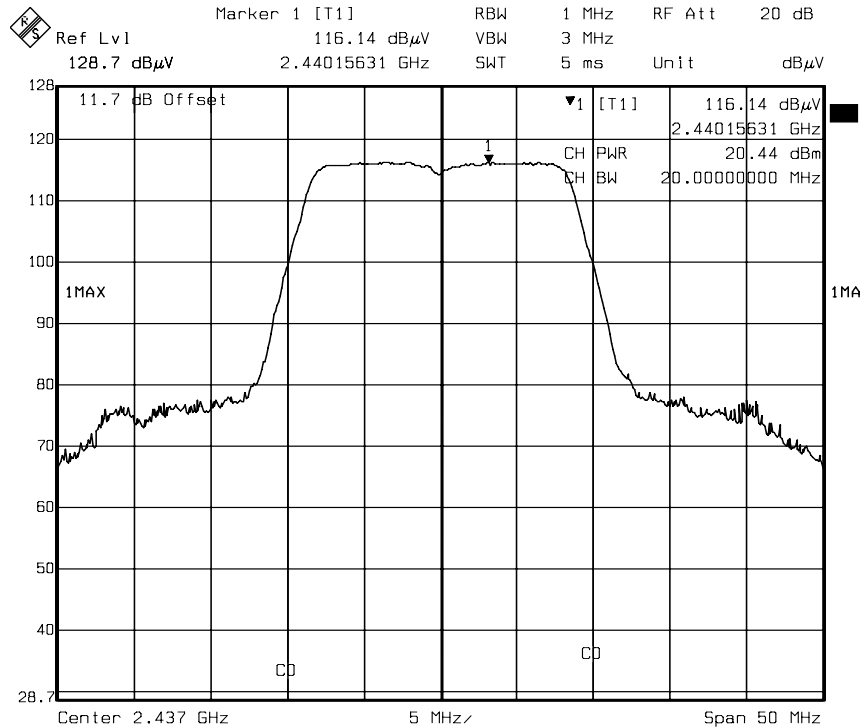
**draft 802.11n Standard-20 MHz Channel mode / Chain 0****Peak Power (CH Low)**

Date: 25.AUG.2009 20:26:15

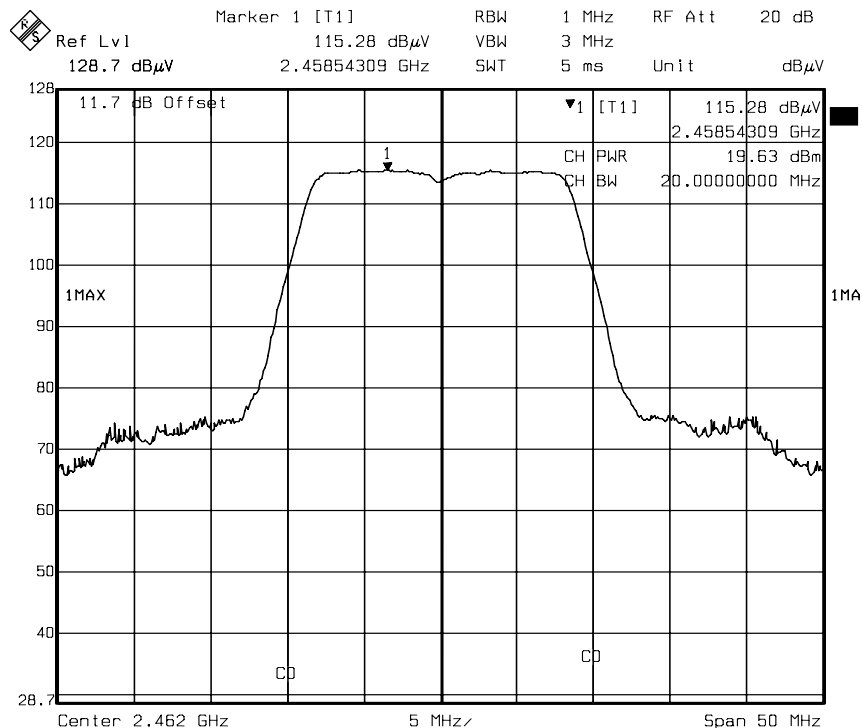
Peak Power (CH Mid)

Date: 25.AUG.2009 20:28:56

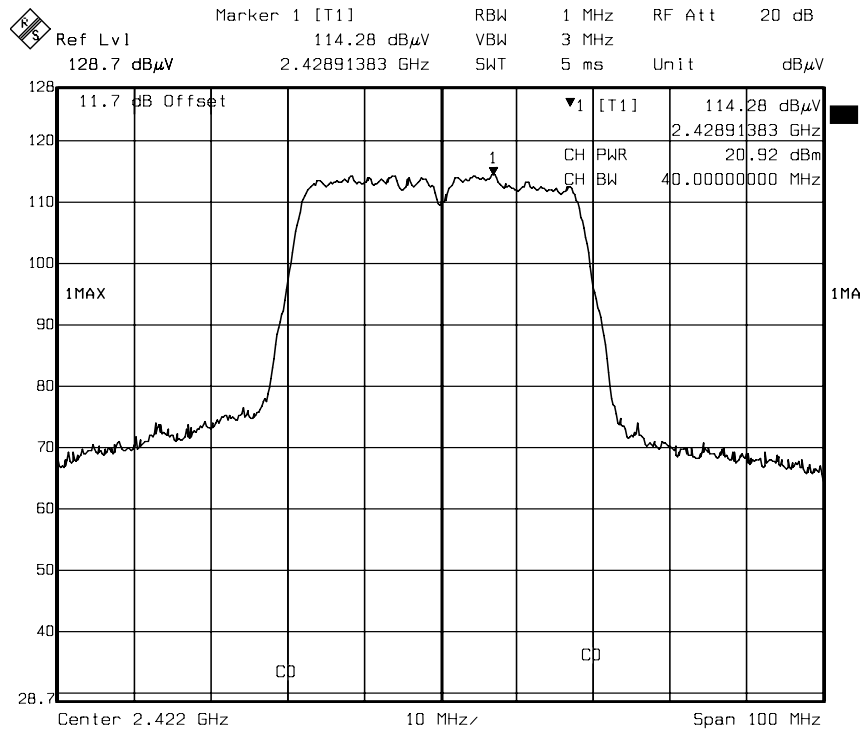
**Peak Power (CH High)****draft 802.11n Standard-20 MHz Channel mode / Chain 1****Peak Power (CH Low)**

**Peak Power (CH Mid)**

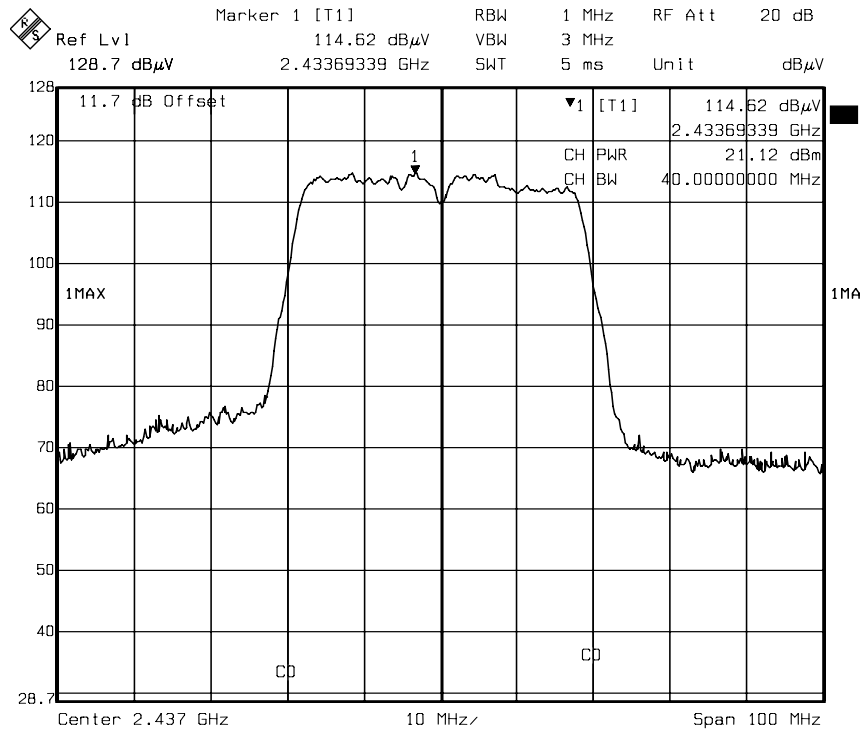
Date: 25.AUG.2009 20:28:09

Peak Power (CH High)

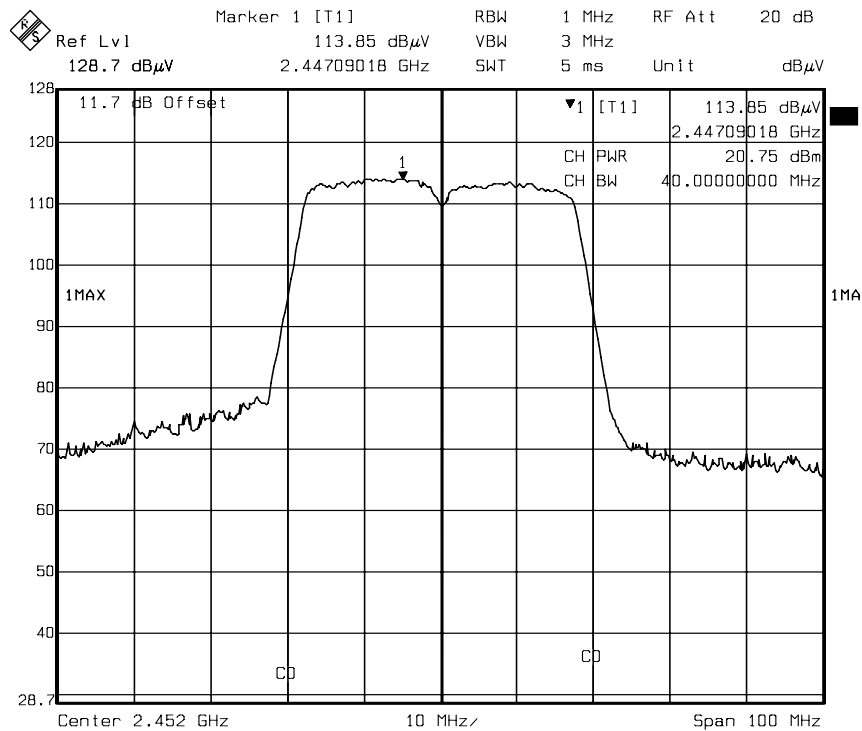
Date: 25.AUG.2009 20:32:23

**draft 802.11n Wide-40 MHz Channel mode / Chain 0****Peak Power (CH Low)**

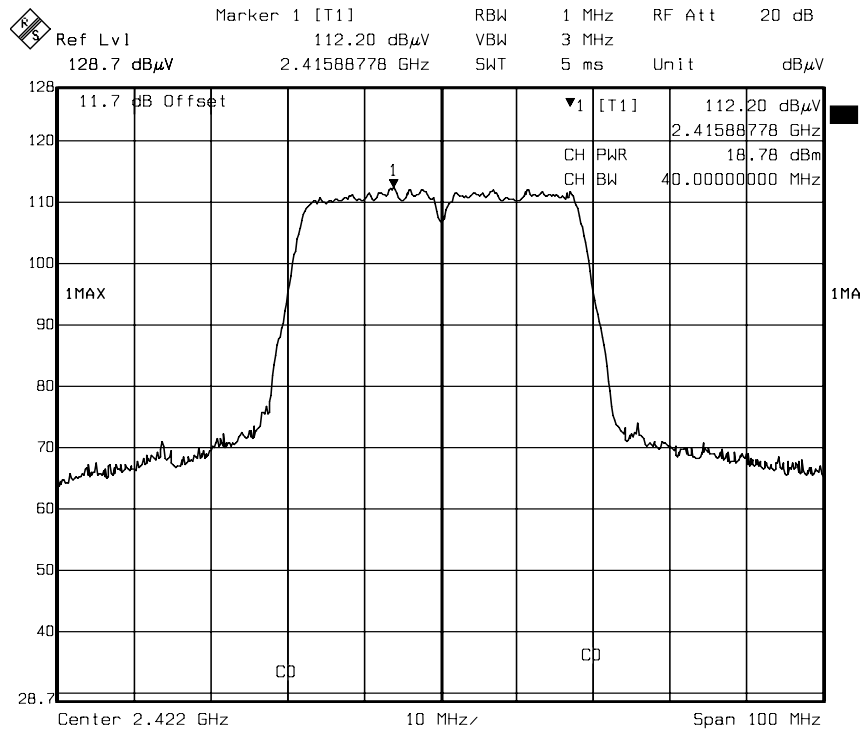
Date: 25.AUG.2009 20:39:34

Peak Power (CH Mid)

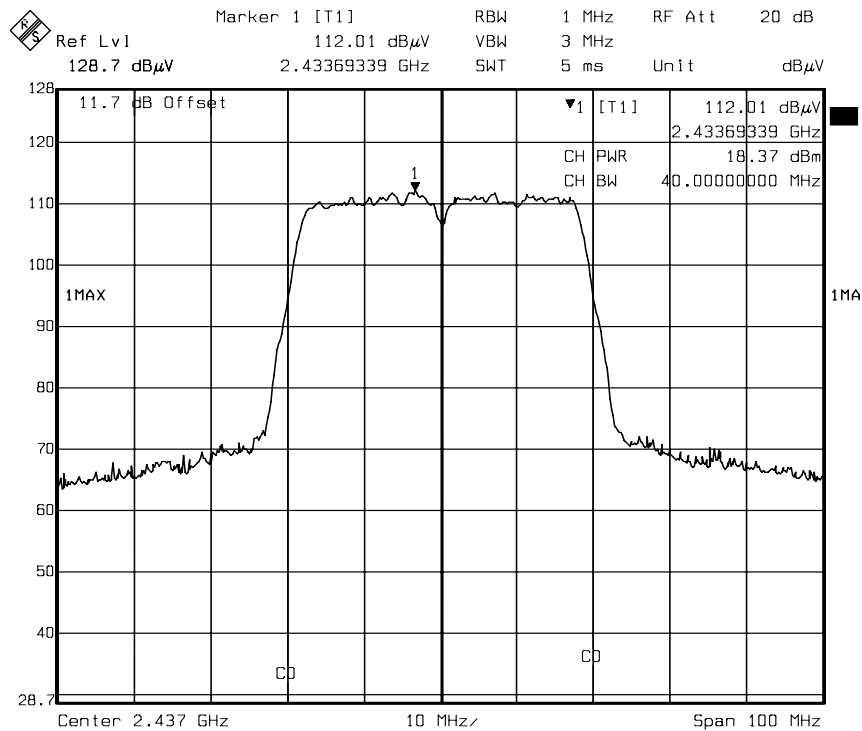
Date: 25.AUG.2009 20:37:00

**Peak Power (CH High)**

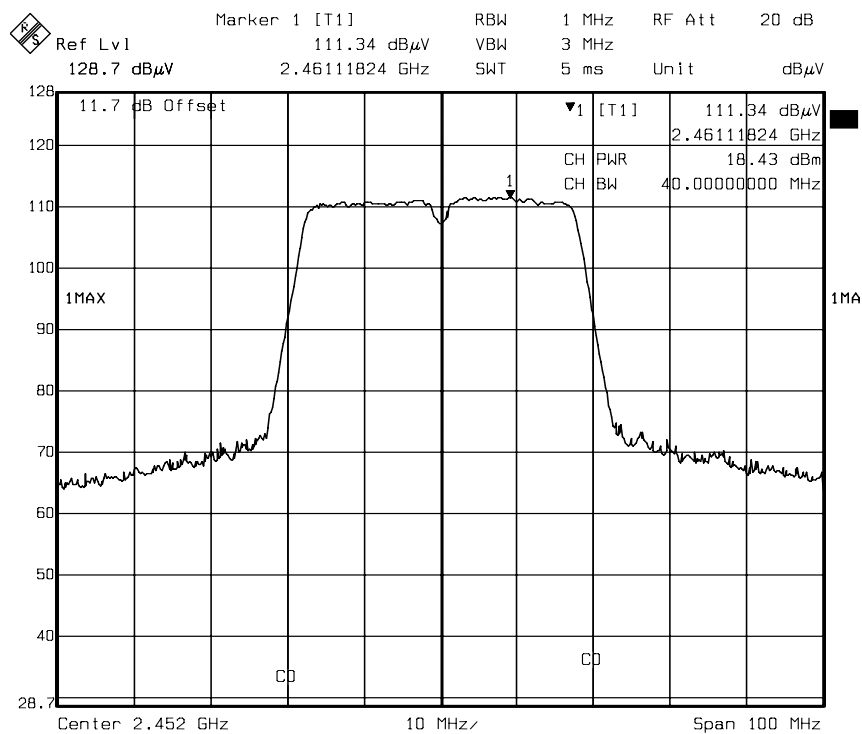
Date: 25.AUG.2009 20:35:34

draft 802.11n Wide-40 MHz Channel mode / Chain 1**Peak Power (CH Low)**

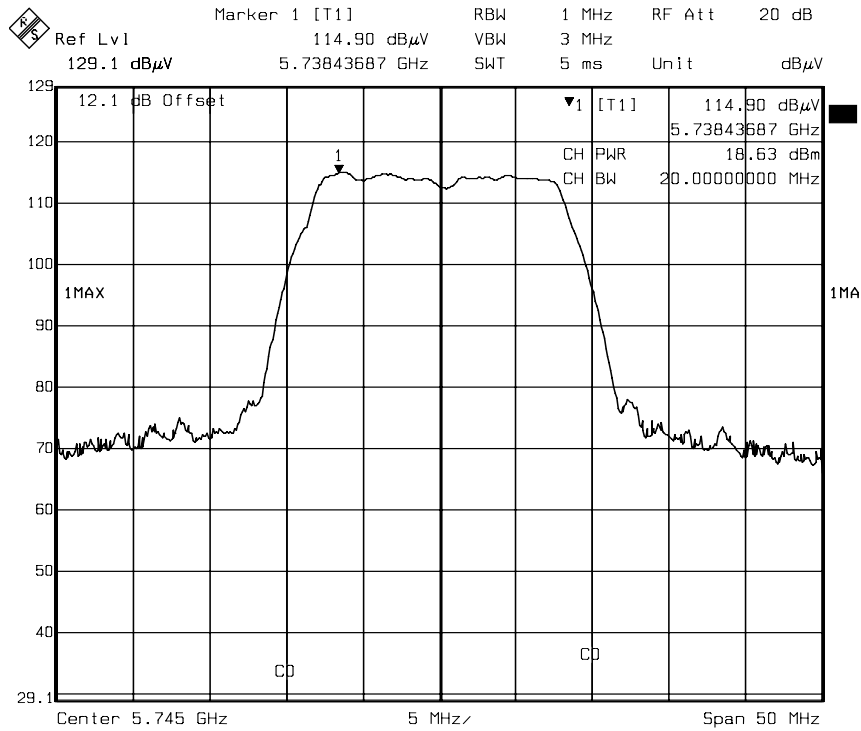
Date: 25.AUG.2009 20:38:50

**Peak Power (CH Mid)**

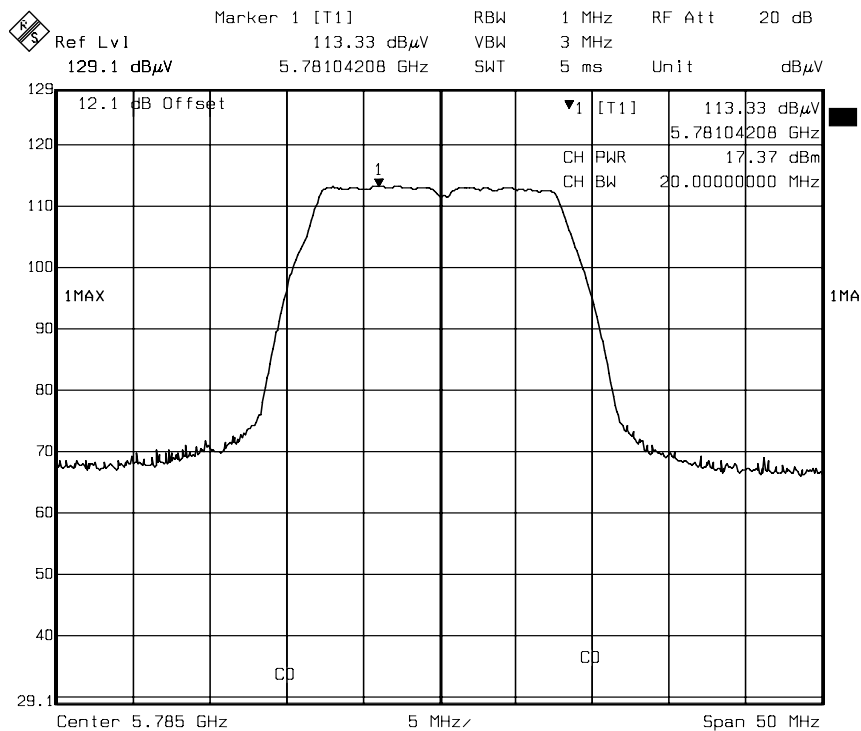
Date: 25.AUG.2009 20:37:47

Peak Power (CH High)

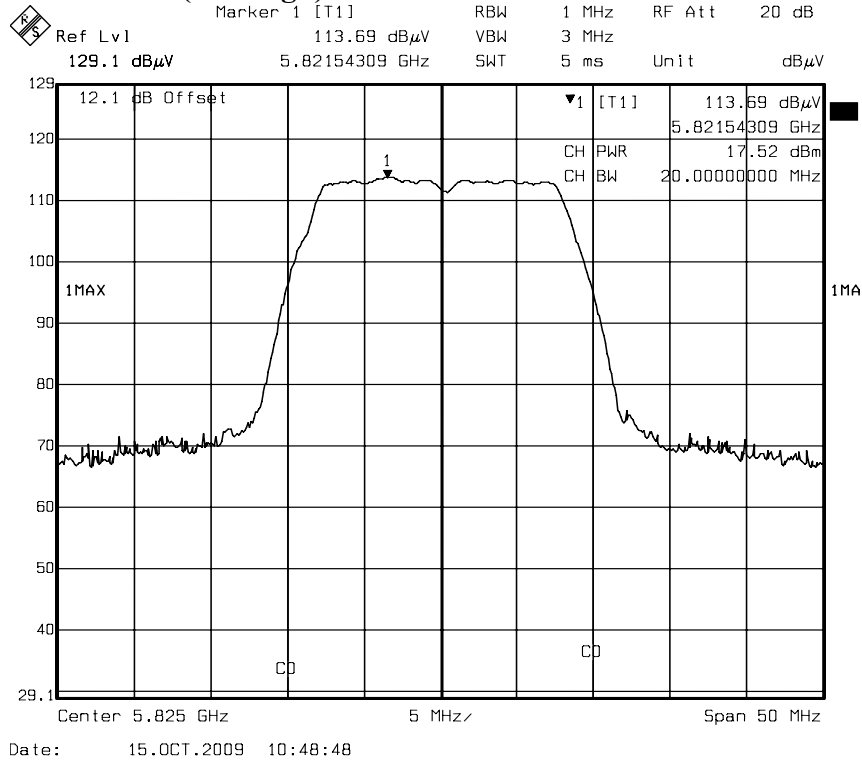
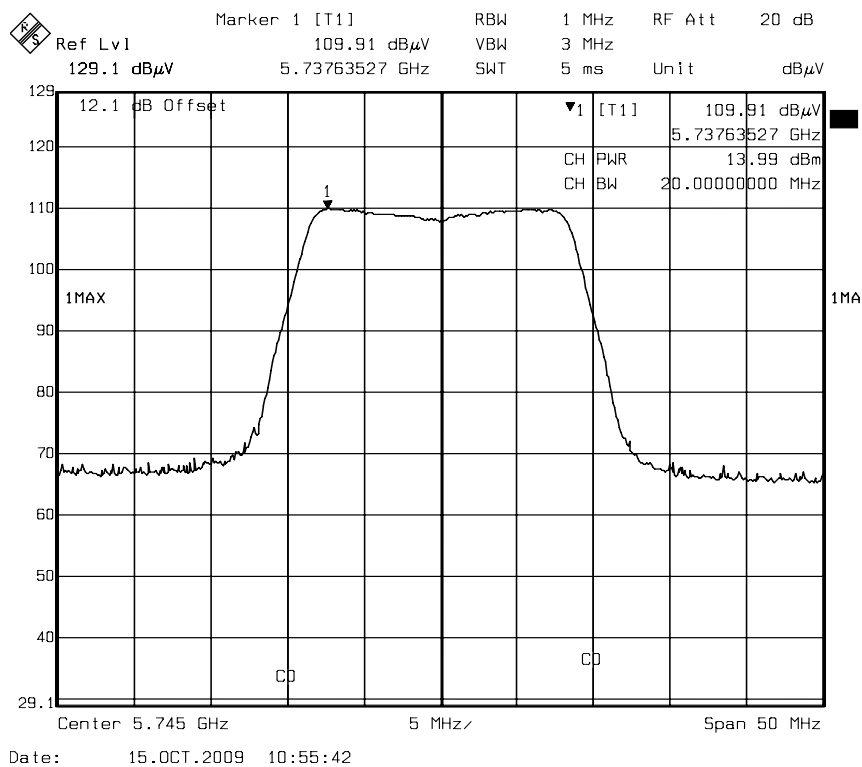
Date: 25.AUG.2009 20:34:41

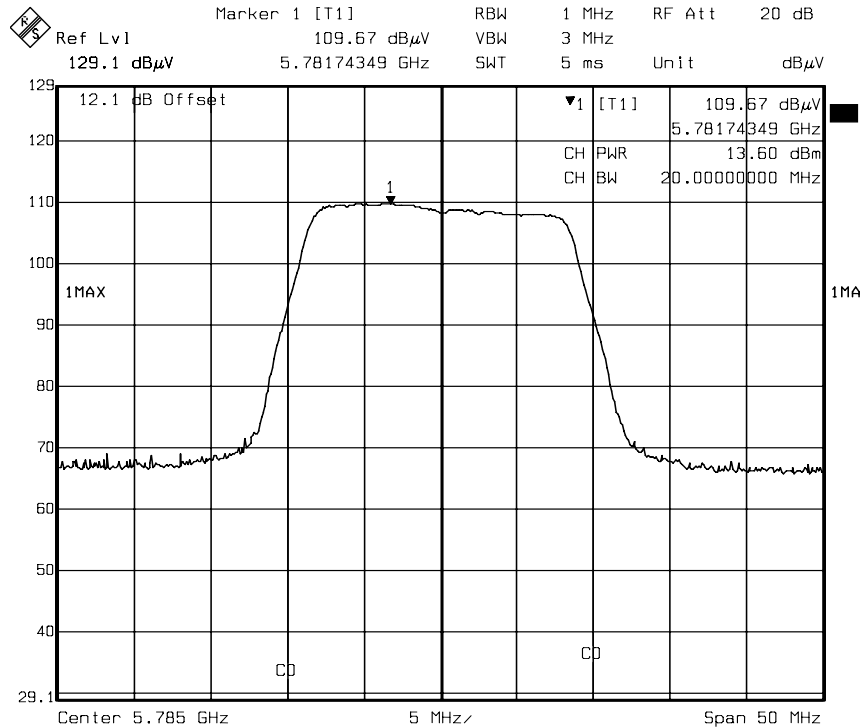
**IEEE 802.11a mode / 5745 ~ 5825MHz****Peak Power (CH Low)**

Date: 15.OCT.2009 10:46:44

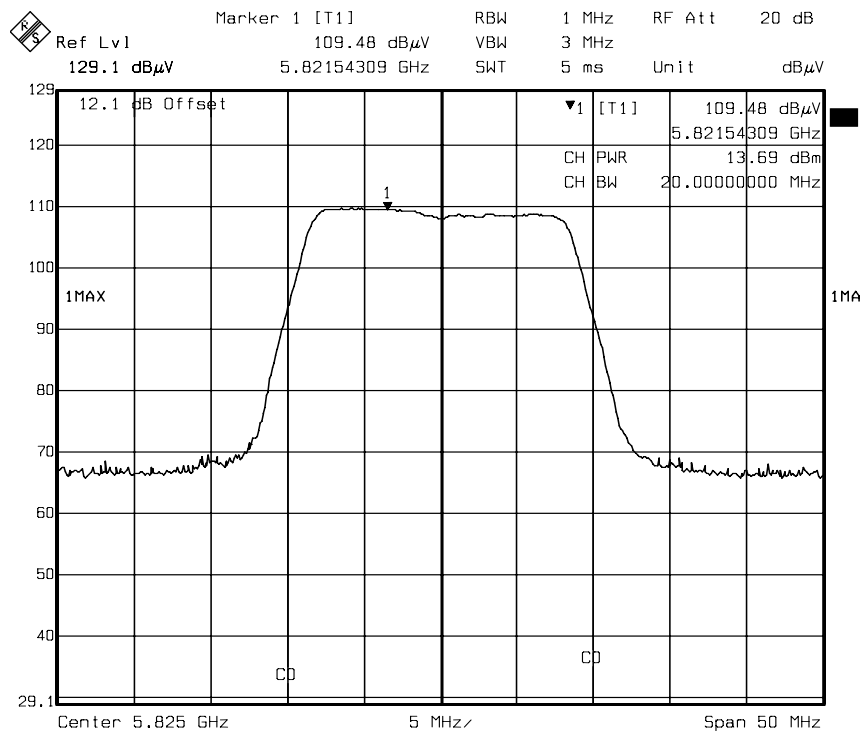
Peak Power (CH Mid)

Date: 15.OCT.2009 10:47:56

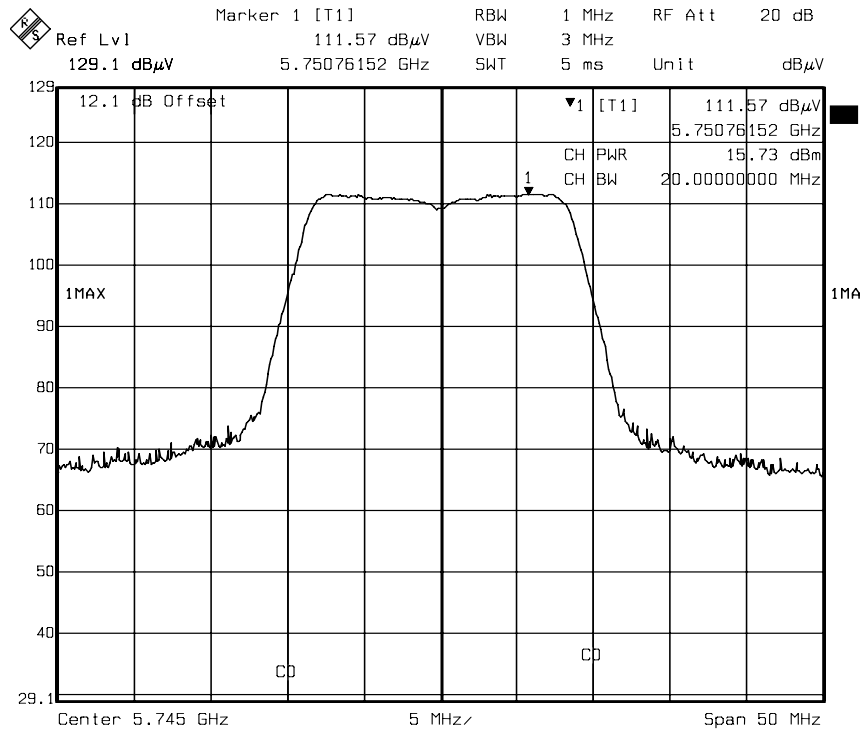
**Peak Power (CH High)****draft 802.11n Standard-20 MHz Channel mode / 5745 ~ 5825MHz / Chain 0****Peak Power (CH Low)**

**Peak Power (CH Mid)**

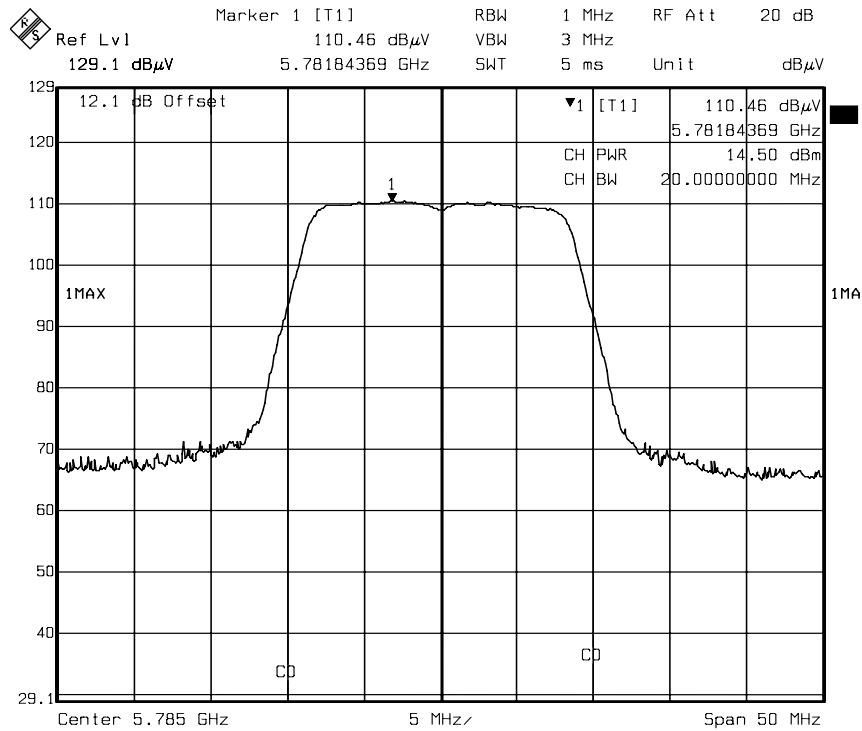
Date: 15.OCT.2009 10:54:49

Peak Power (CH High)

Date: 15.OCT.2009 10:52:03

**draft 802.11n Standard-20 MHz Channel mode / 5745 ~ 5825MHz / Chain 1****Peak Power (CH Low)**

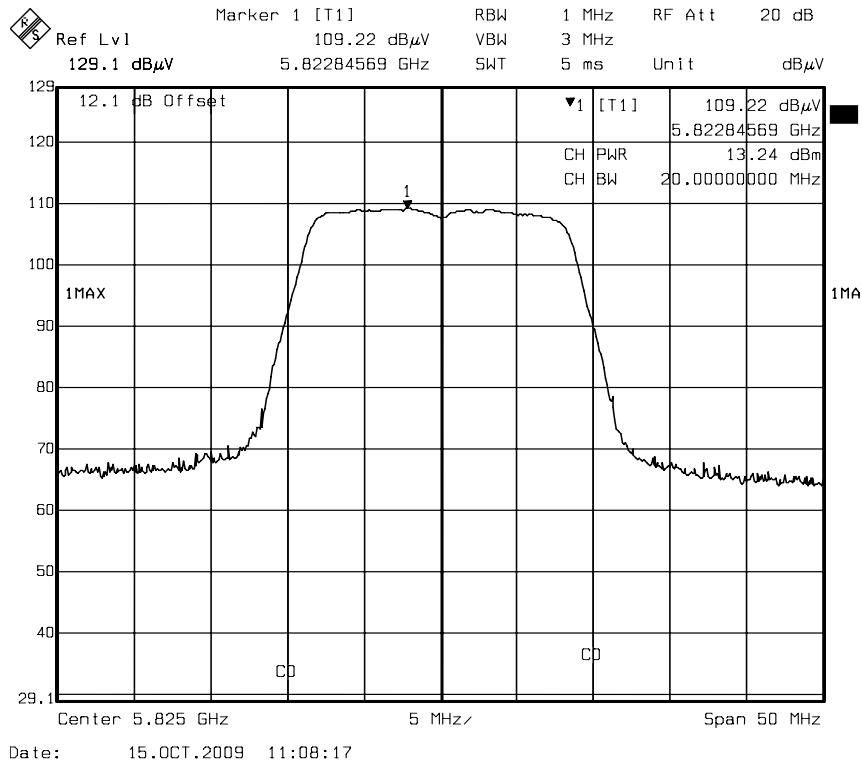
Date: 15.OCT.2009 11:06:27

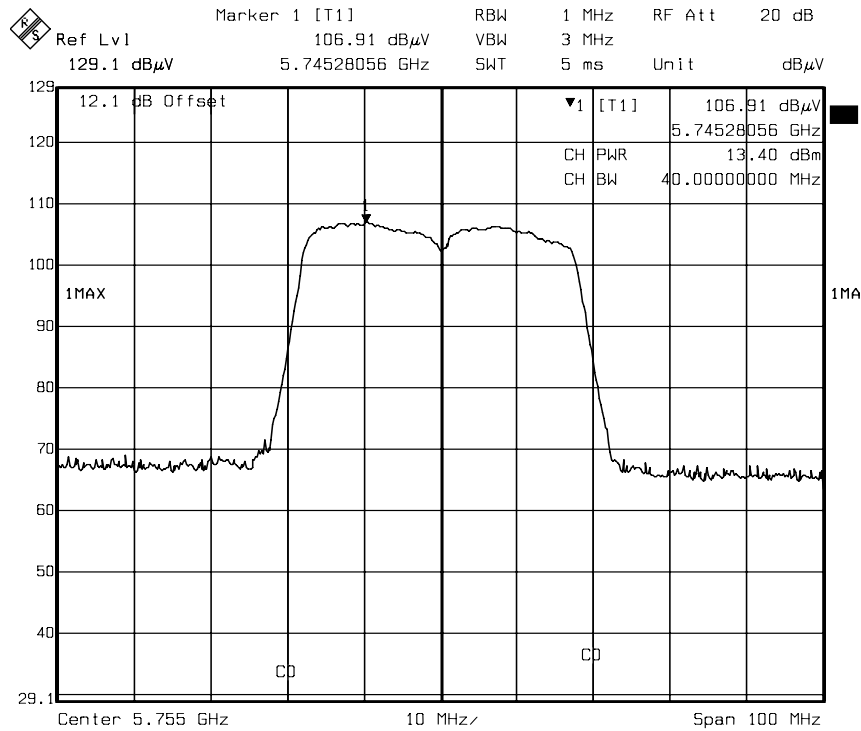
Peak Power (CH Mid)

Date: 15.OCT.2009 11:07:19

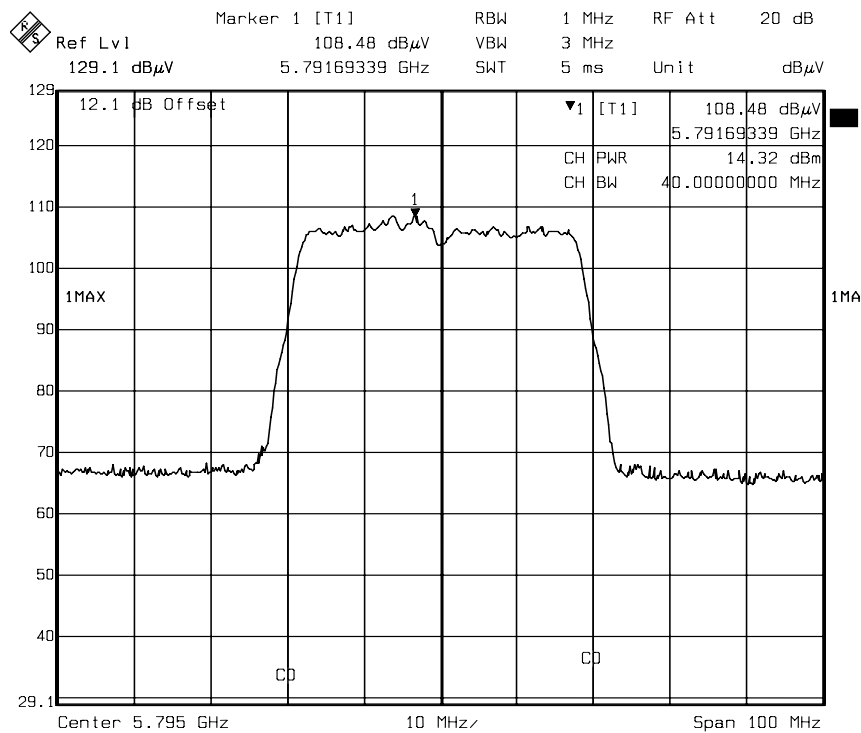


Peak Power (CH High)

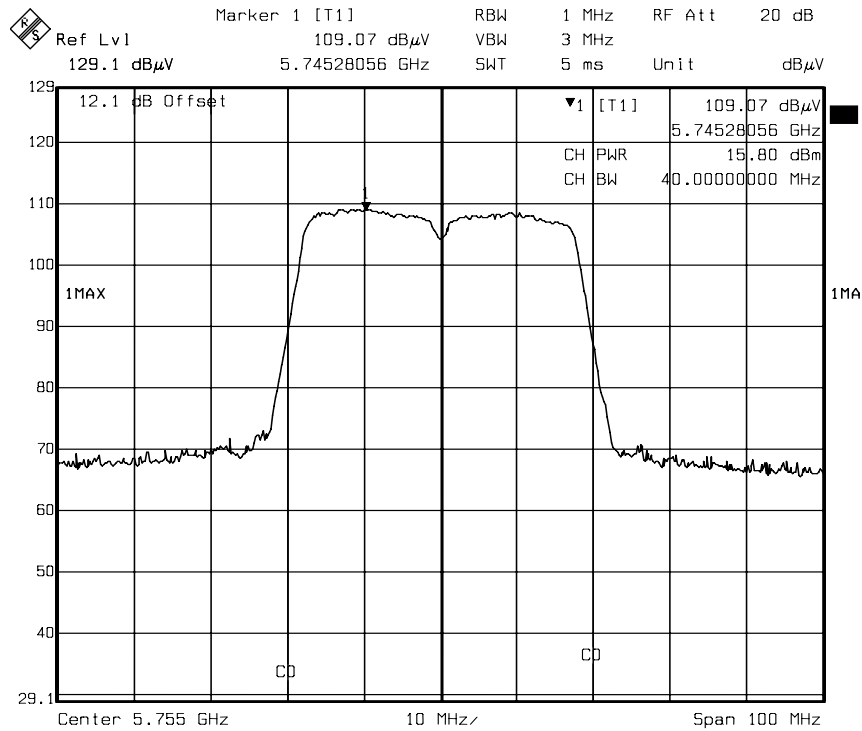


**draft 802.11n Wide-40 MHz Channel mode / 5755 ~ 5795MHz / Chain 0****Peak Power (CH Low)**

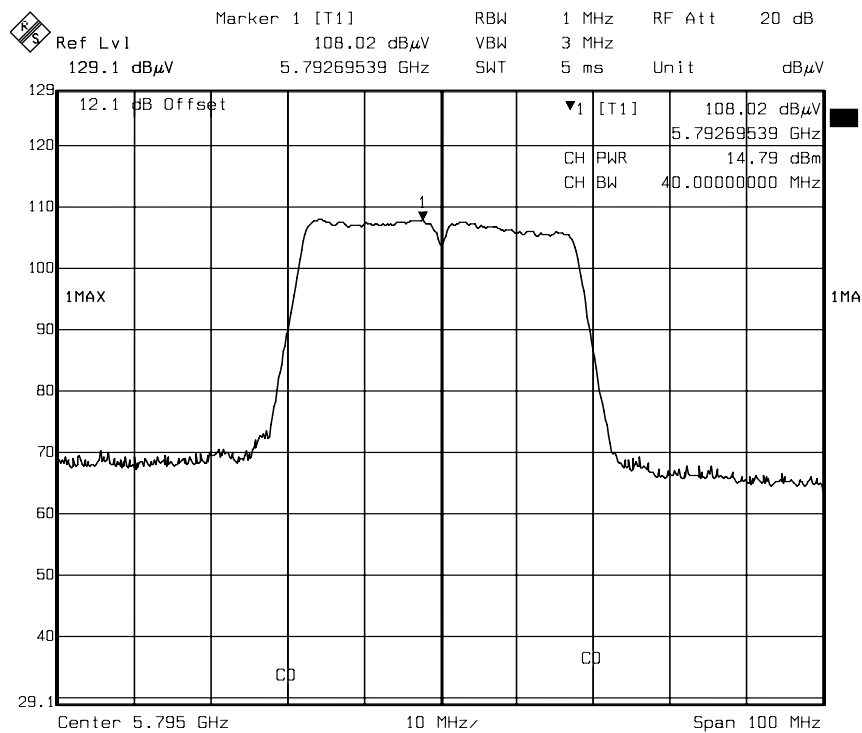
Date: 15.OCT.2009 11:11:33

Peak Power (CH High)

Date: 15.OCT.2009 11:12:18

**draft 802.11n Wide-40 MHz Channel mode / 5755 ~ 5795MHz / Chain 1****Peak Power (CH Low)**

Date: 15.OCT.2009 11:10:38

Peak Power (CH High)

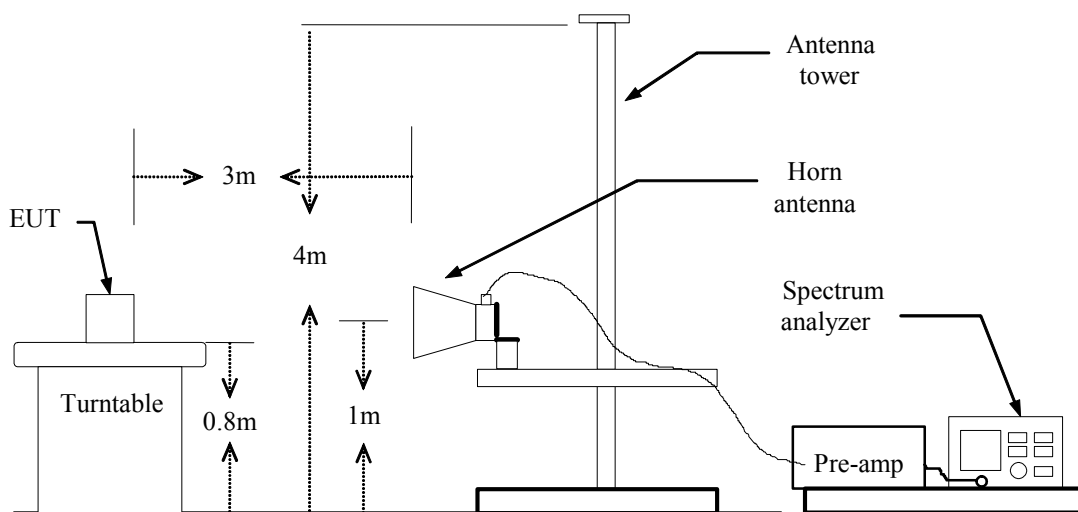
Date: 15.OCT.2009 11:09:29

7.3 BAND EDGES MEASUREMENT

LIMIT

According to §15.247(d), in any 100 kHz bandwidth outside the frequency bands in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in 15.209(a) (see Section 15.205(c)).

Test Configuration



TEST PROCEDURE

1. The EUT is placed on a turntable, which is 0.8m above the ground plane.
2. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
3. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emission.
4. Set the spectrum analyzer in the following setting in order to capture the lower and upper band-edges of the emission:
 - (a) PEAK: RBW=VBW=1MHz / Sweep=AUTO
 - (b) AVERAGE: RBW=1MHz / VBW=10Hz / Sweep=AUTO
5. Repeat the procedures until all the PEAK and AVERAGE versus POLARIZATION are measured.

TEST RESULTS

Refer to attach spectrum analyzer data chart.



802.11a Mode

1. Operating Frequency: 5745-5825MHz
2. CH Low: 5745MHz, CH High: 5825MHz
3. 6dB bandwidth: CH Low: 16.42MHz, CH High: 16.50MHz

Because the mentioned conditions, the test is not applicable.

802.11b Mode

Channel	Polarity	Freq.(MHz)	Level(dBuV)	Limit(dBuV)	Margin(dB)	Detector
LOW	H	2390.00	58.53	74	-15.47	Peak
	H	2390.00	46.08	54	-7.92	Average
	V	2390.00	62.63	74	-11.37	Peak
	V	2390.00	49.6	54	-4.40	Average
HIGH	H	2483.50	59.14	74	-14.86	Peak
	H	2483.50	46.05	54	-7.95	Average
	V	2483.50	61.48	74	-12.52	Peak
	V	2483.50	49.34	54	-4.66	Average

802.11g Mode

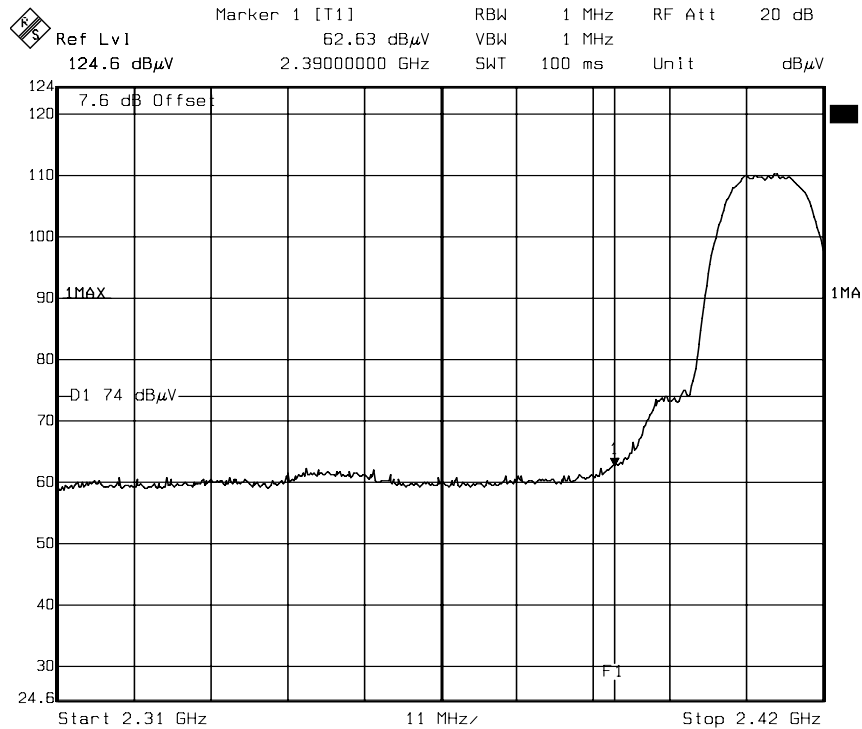
Channel	Polarity	Freq.(MHz)	Level(dBuV)	Limit(dBuV)	Margin(dB)	Detector
LOW	H	2390.00	58.23	74	-15.77	Peak
	H	2390.00	46.32	54	-7.68	Average
	V	2390.00	63.19	74	-10.81	Peak
	V	2390.00	48.94	54	-5.06	Average
HIGH	H	2483.50	60.17	74	-13.83	Peak
	H	2483.50	46.11	54	-7.89	Average
	V	2483.50	62.8	74	-11.20	Peak
	V	2483.50	48.79	54	-5.21	Average

802.11n HT-20 Mode

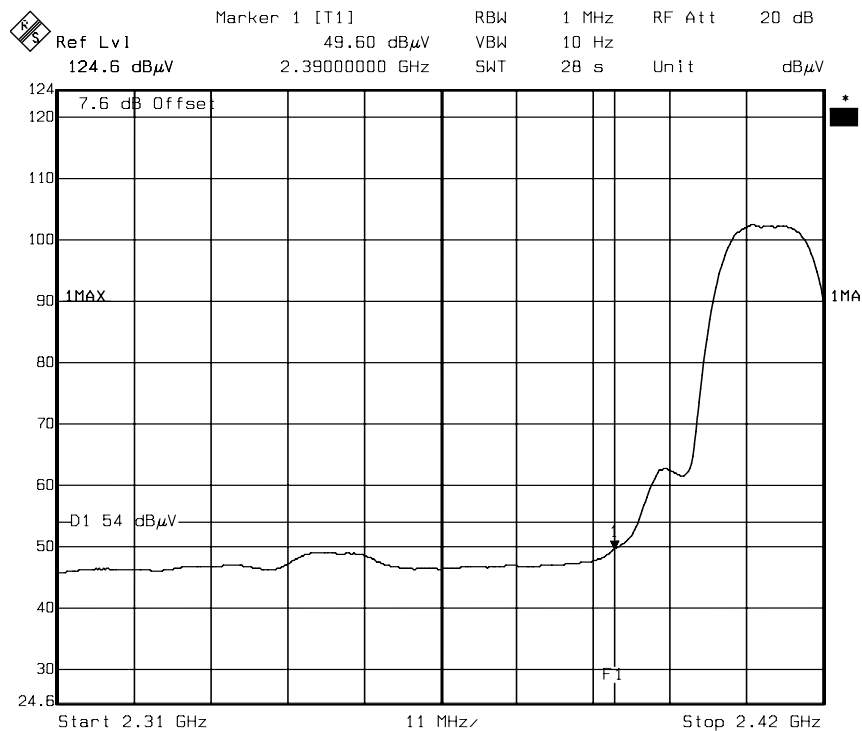
Channel	Polarity	Freq.(MHz)	Level(dBuV)	Limit(dBuV)	Margin(dB)	Detector
LOW	H	2390.00	61.47	74	-12.53	Peak
	H	2390.00	47.36	54	-6.64	Average
	V	2390.00	72.11	74	-1.89	Peak
	V	2390.00	51.78	54	-2.22	Average
HIGH	H	2483.50	58.72	74	-15.28	Peak
	H	2483.50	46.54	54	-7.46	Average
	V	2483.50	69.41	74	-4.59	Peak
	V	2483.50	52.47	54	-1.53	Average

802.11n HT-40 Mode

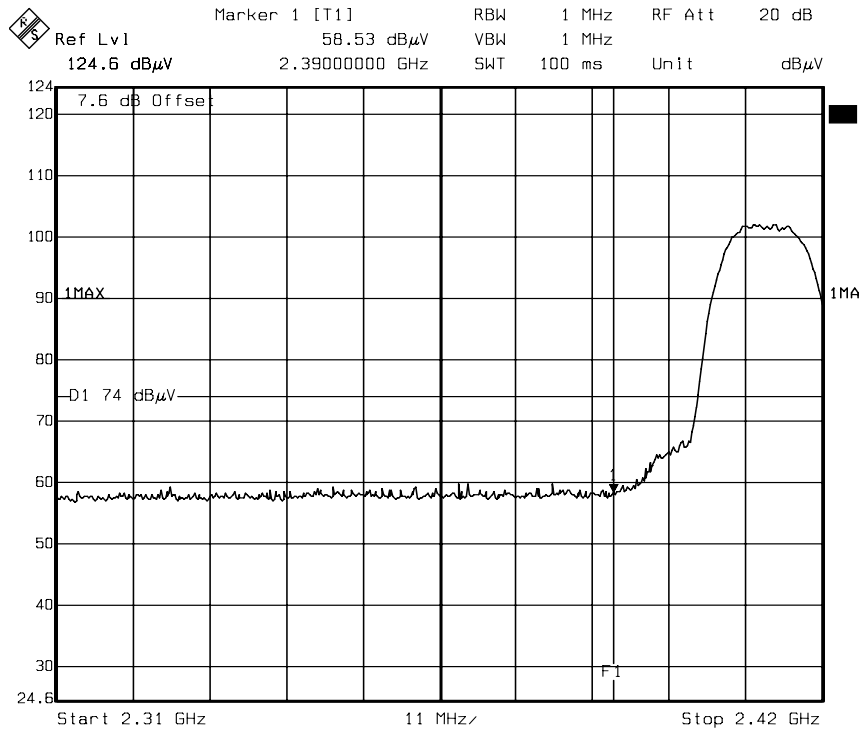
Channel	Polarity	Freq.(MHz)	Level(dBuV)	Limit(dBuV)	Margin(dB)	Detector
LOW	H	2390.00	61.13	74	-12.87	Peak
	H	2390.00	48.19	54	-5.81	Average
	V	2390.00	68.19	74	-5.81	Peak
	V	2390.00	52.96	54	-1.04	Average
HIGH	H	2483.50	58.09	74	-15.91	Peak
	H	2483.50	45.7	54	-8.30	Average
	V	2483.50	68.15	74	-5.85	Peak
	V	2483.50	53.08	54	-0.92	Average

**Band Edges (IEEE 802.11b mode / CH Low)****Detector mode: Peak****Polarity: Vertical**

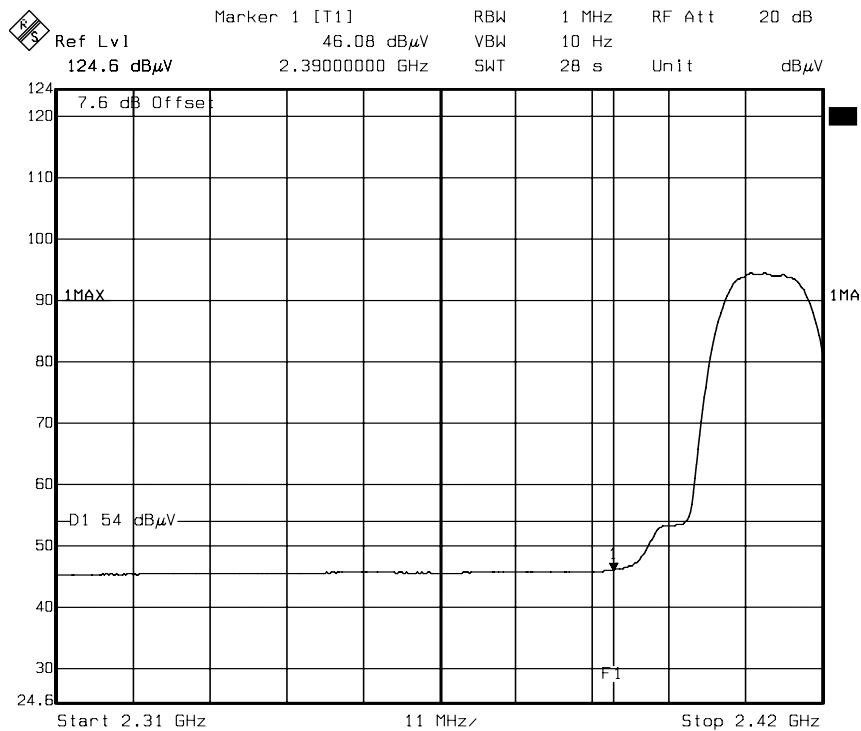
Date: 24.AUG.2009 19:39:29

Detector mode: Average**Polarity: Vertical**

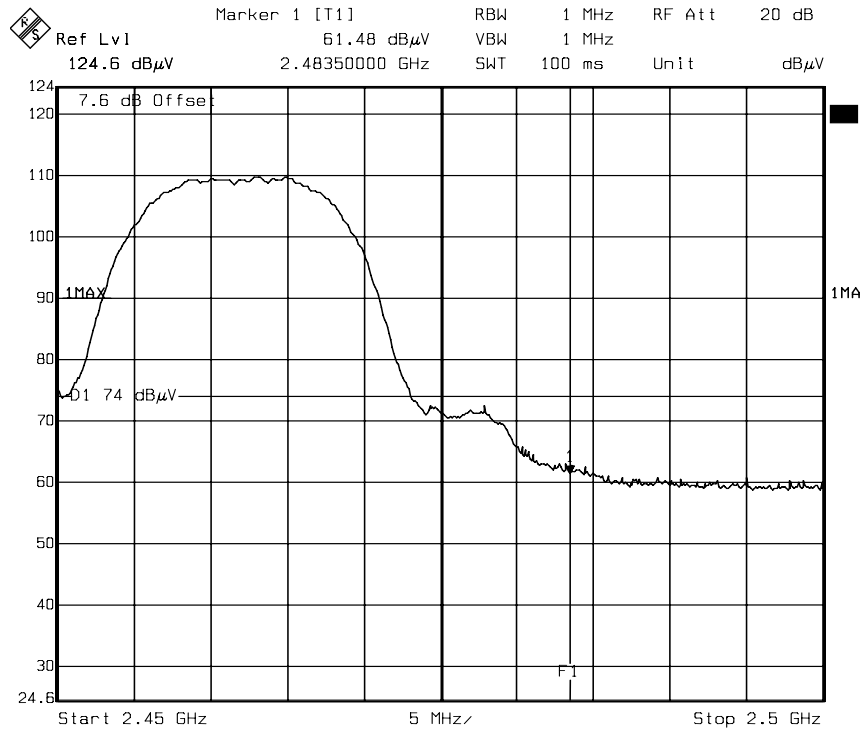
Date: 24.AUG.2009 19:40:25

**Detector mode: Peak****Polarity: Horizontal**

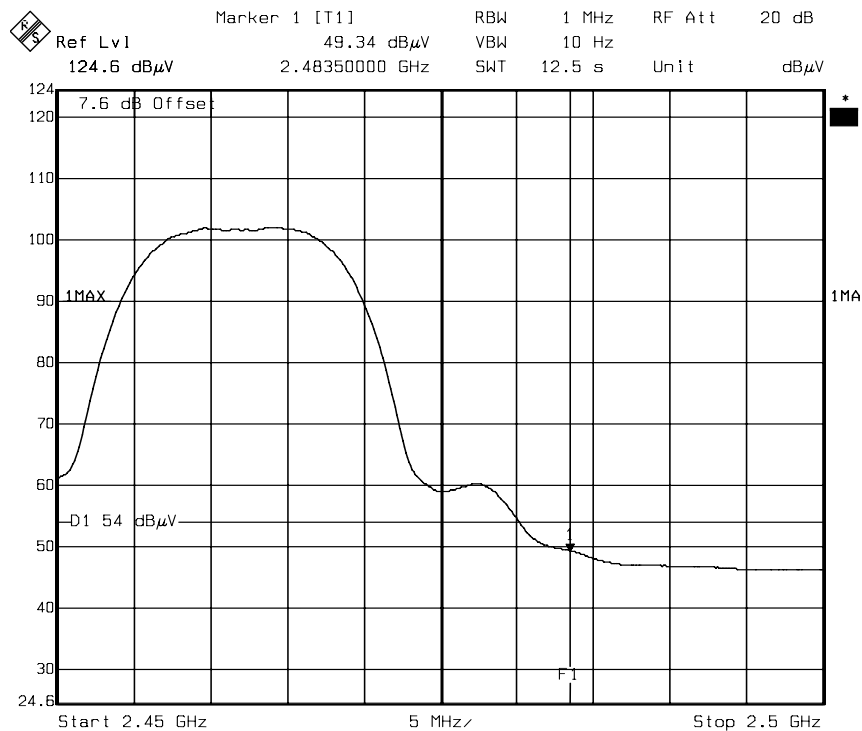
Date: 25.AUG.2009 10:32:58

Detector mode: Average**Polarity: Horizontal**

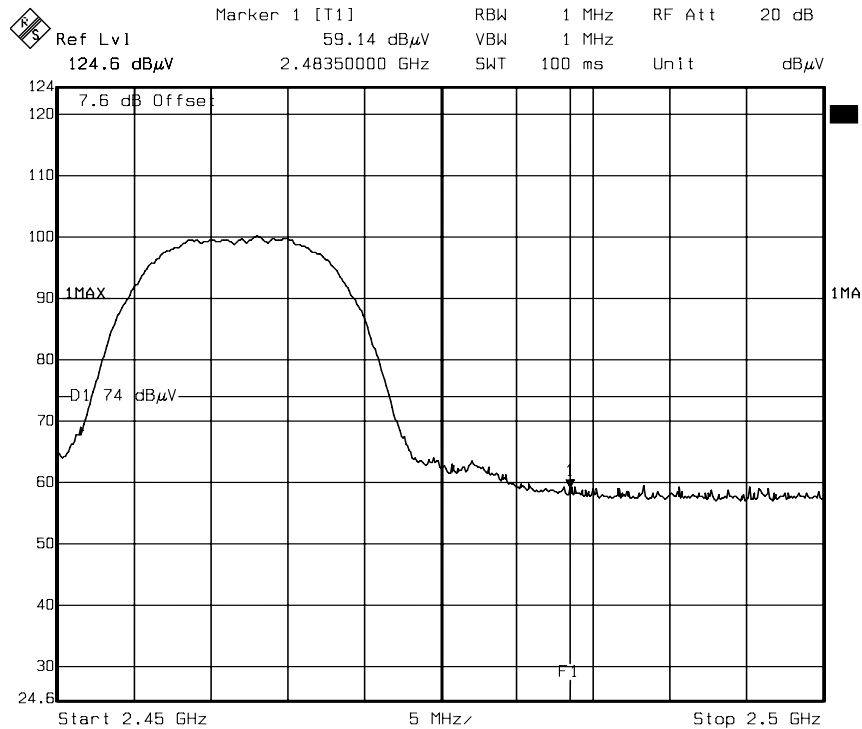
Date: 25.AUG.2009 10:33:47

**Band Edges (IEEE 802.11b mode / CH High)****Detector mode: Peak****Polarity: Vertical**

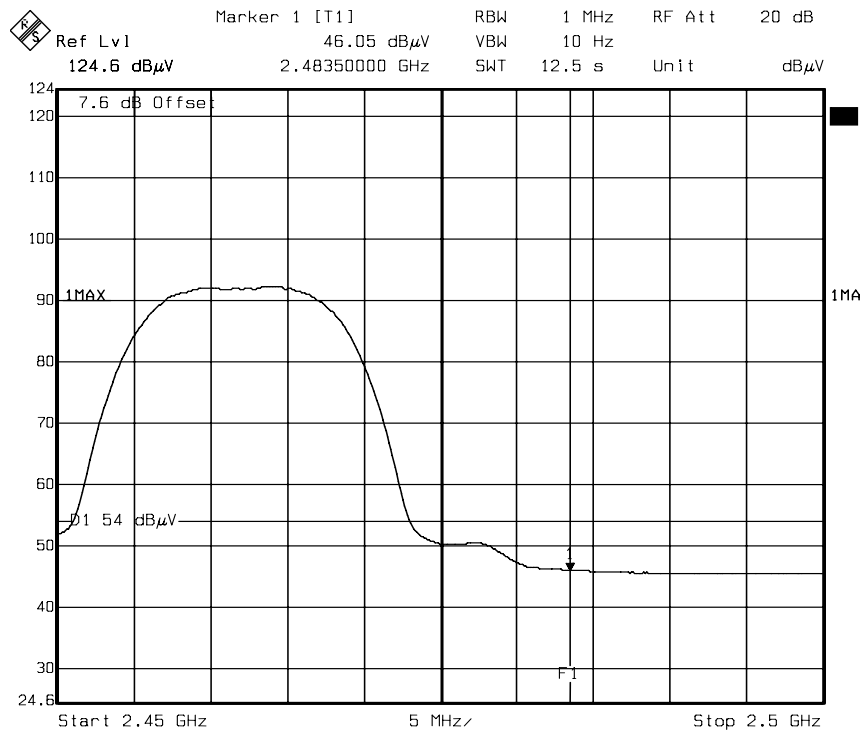
Date: 24.AUG.2009 19:46:20

Detector mode: Average**Polarity: Vertical**

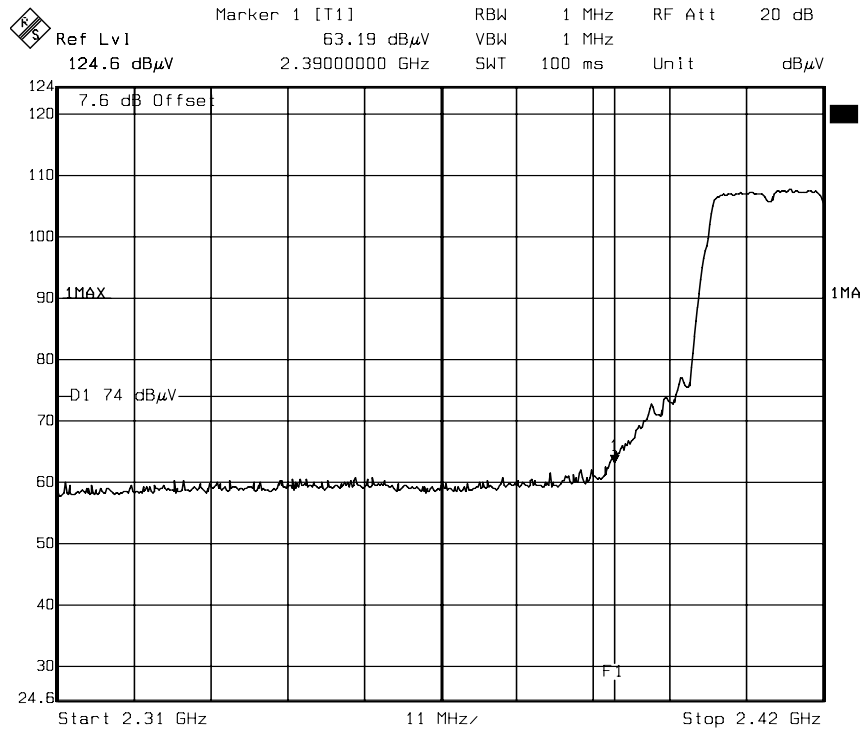
Date: 24.AUG.2009 19:47:01

**Detector mode: Peak****Polarity: Horizontal**

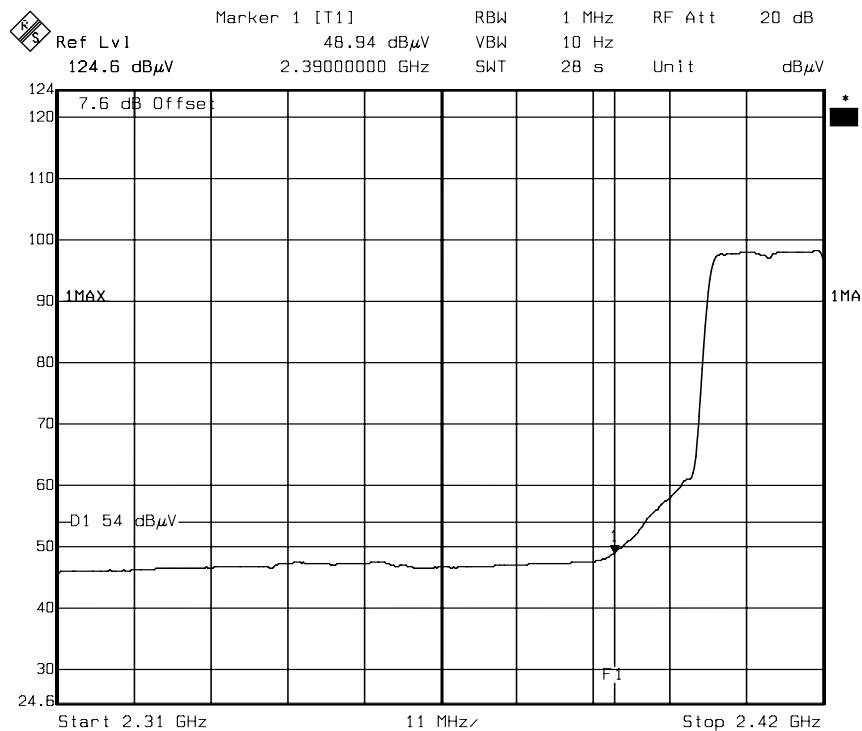
Date: 25.AUG.2009 10:45:12

Detector mode: Average**Polarity: Horizontal**

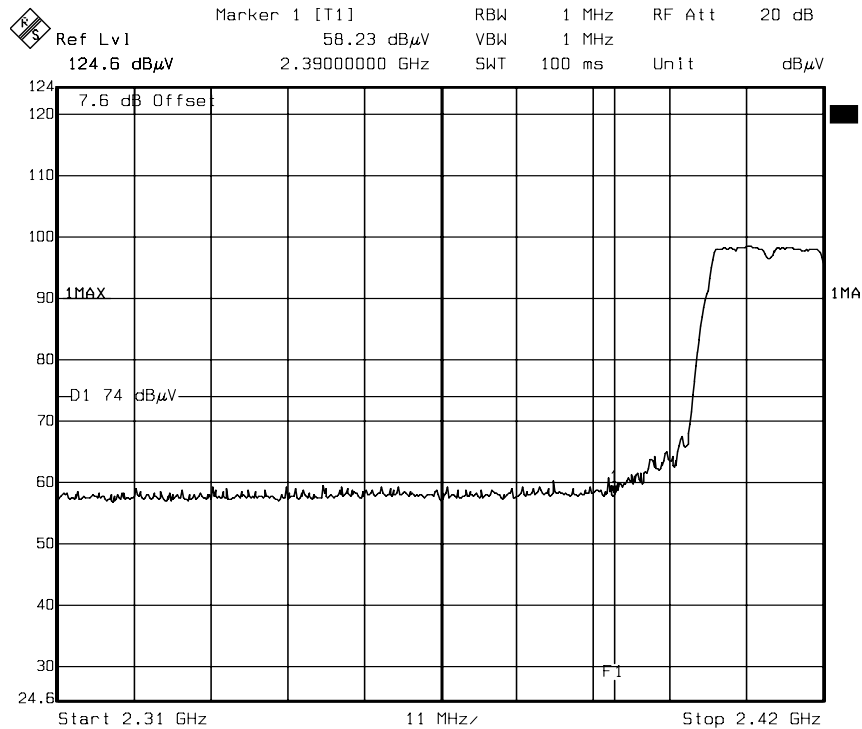
Date: 25.AUG.2009 10:45:43

**Band Edges (IEEE 802.11g mode / CH Low)****Detector mode: Peak****Polarity: Vertical**

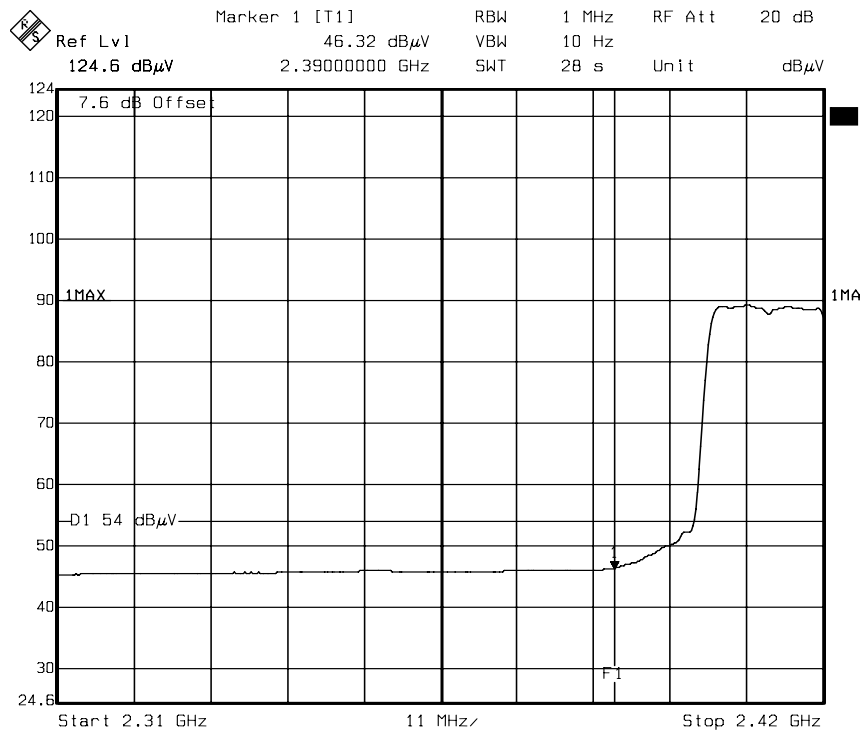
Date: 24.AUG.2009 20:18:28

Detector mode: Average**Polarity: Vertical**

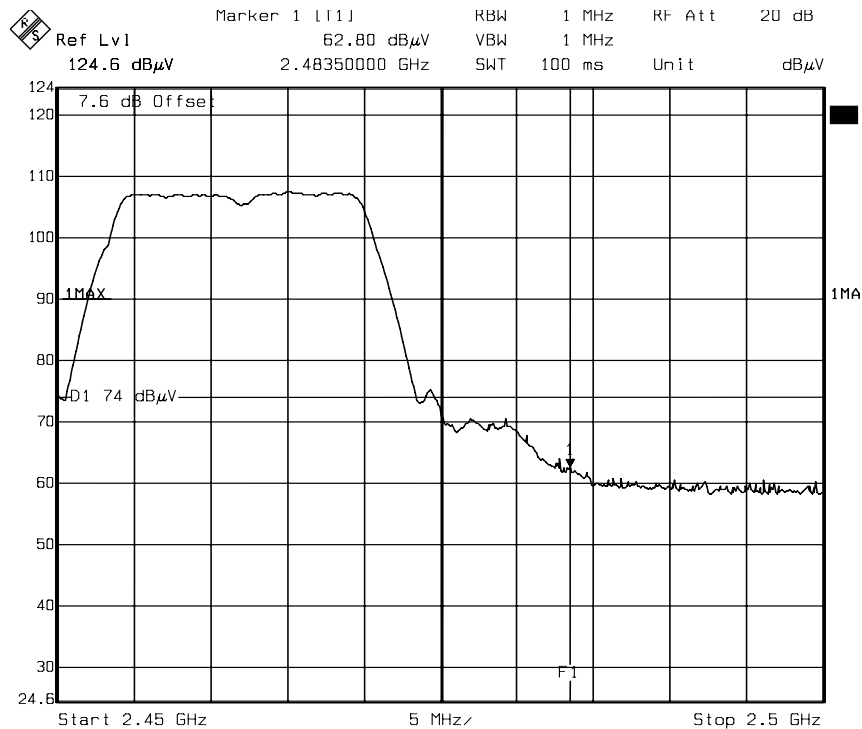
Date: 24.AUG.2009 20:19:34

**Detector mode: Peak****Polarity: Horizontal**

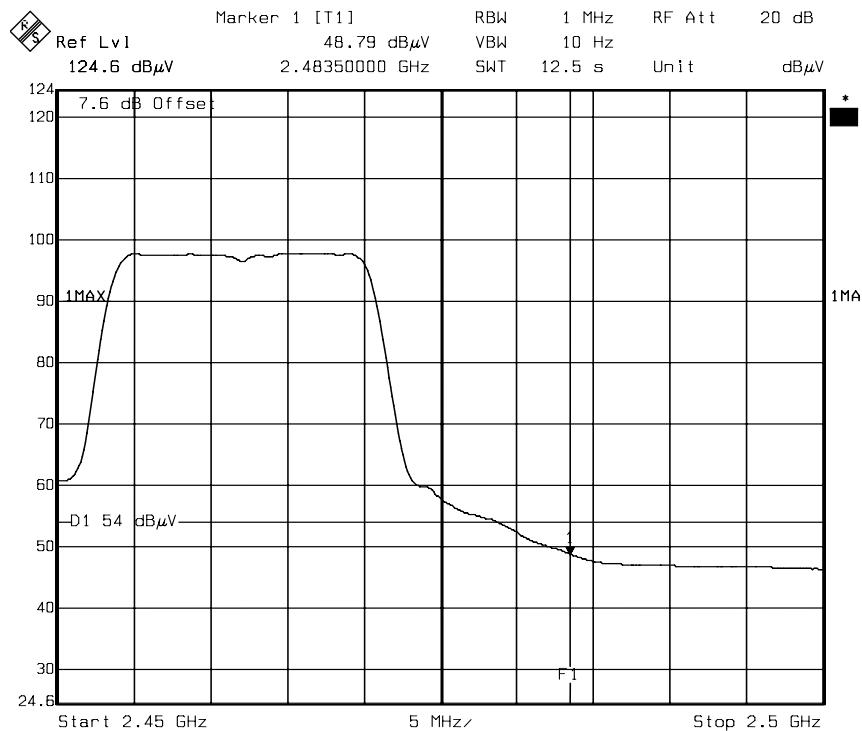
Date: 25.AUG.2009 11:14:30

Detector mode: Average**Polarity: Horizontal**

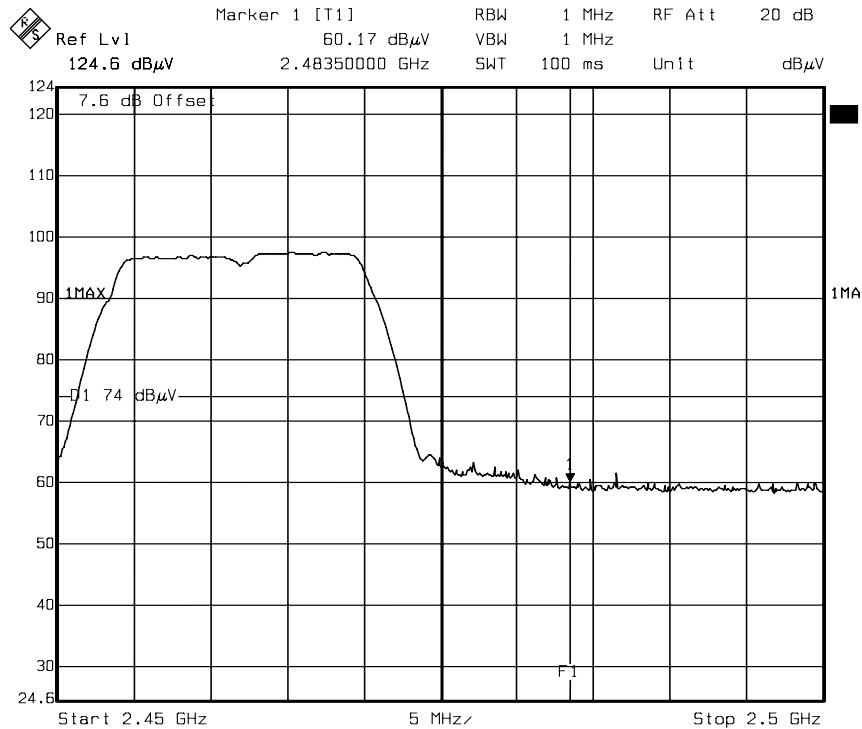
Date: 25.AUG.2009 11:17:55

**Band Edges (IEEE 802.11g mode / CH High)****Detector mode: Peak****Polarity: Vertical**

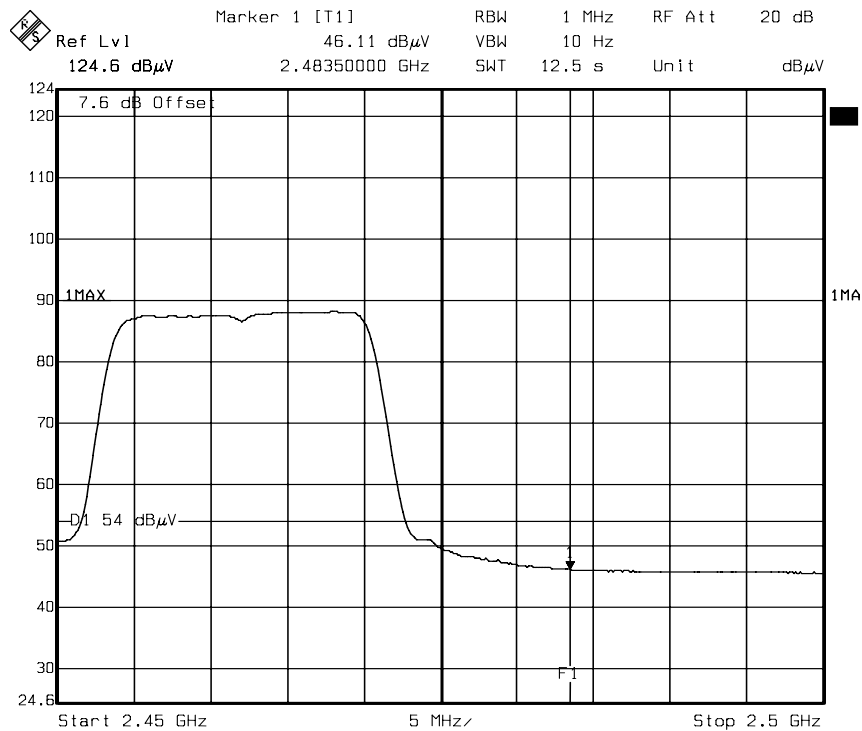
Date: 24.AUG.2009 20:02:21

Detector mode: Average**Polarity: Vertical**

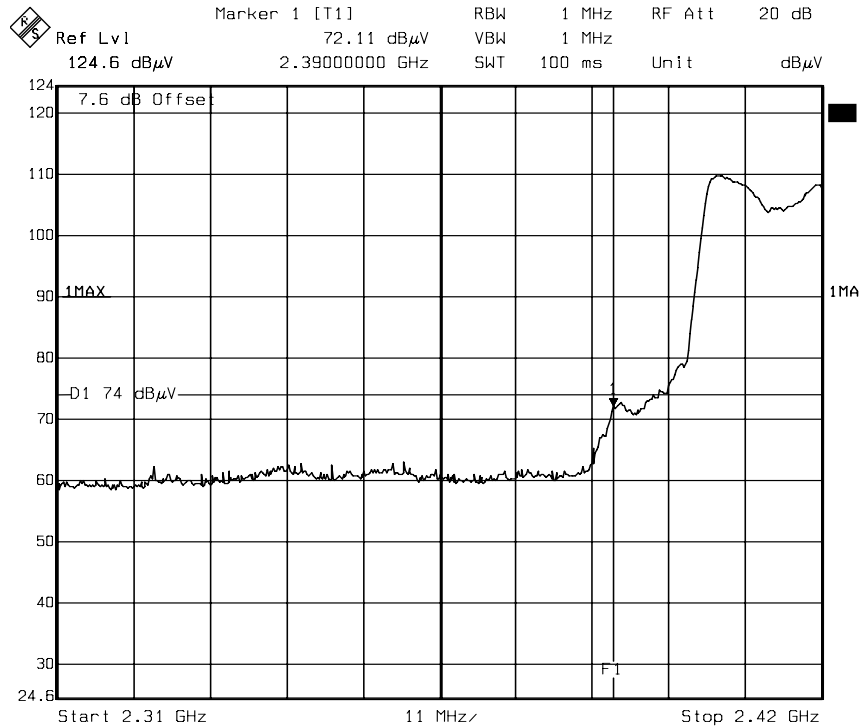
Date: 24.AUG.2009 20:02:51

**Detector mode: Peak****Polarity: Horizontal**

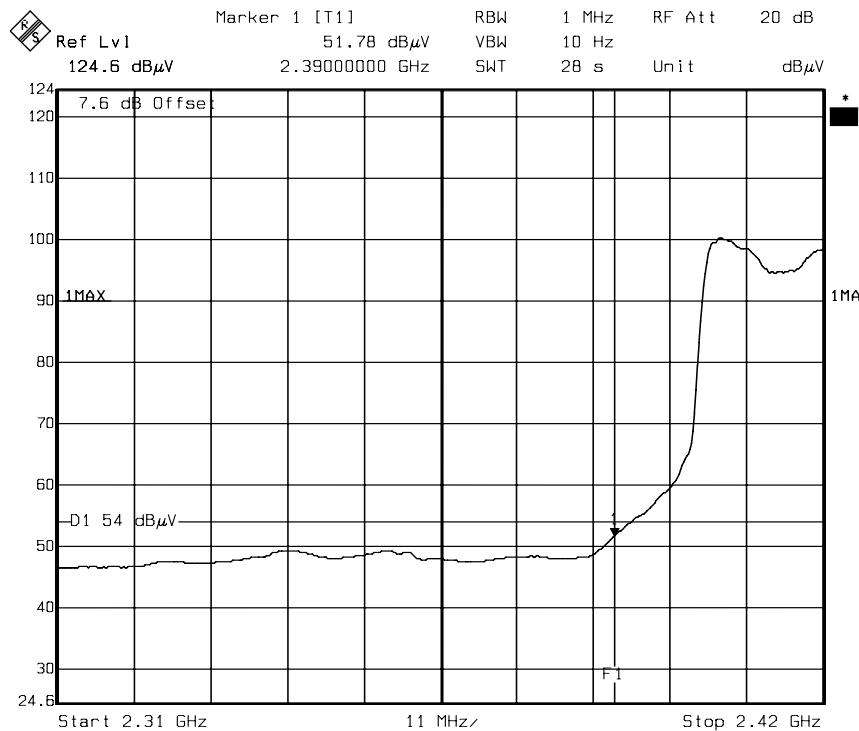
Date: 25.AUG.2009 11:03:36

Detector mode: Average**Polarity: Horizontal**

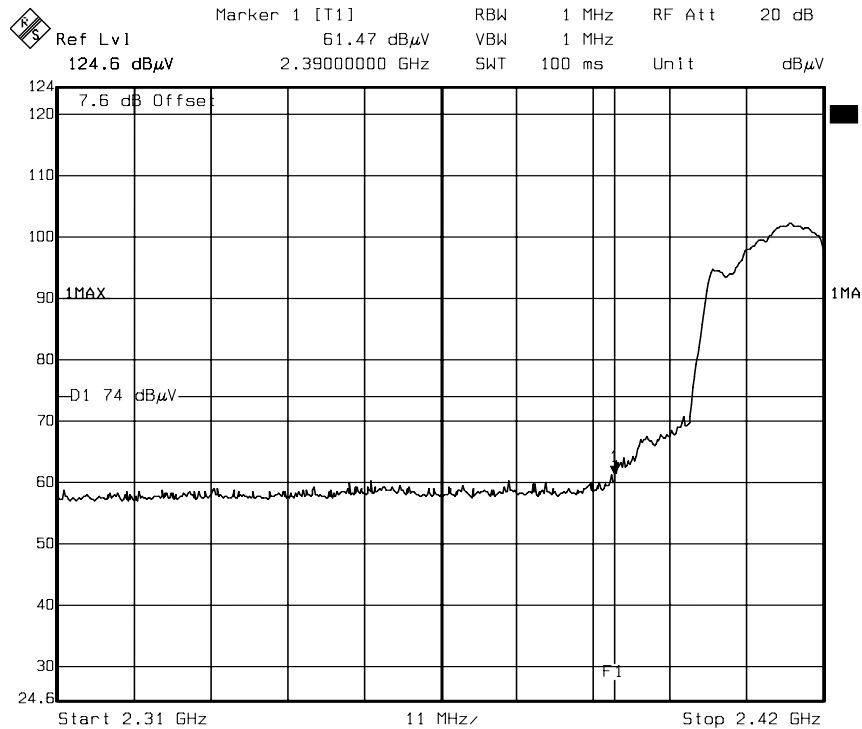
Date: 25.AUG.2009 11:07:46

**Band Edges (draft 802.11n Standard-20 MHz Channel mode / CH Low)****Detector mode: Peak****Polarity: Vertical**

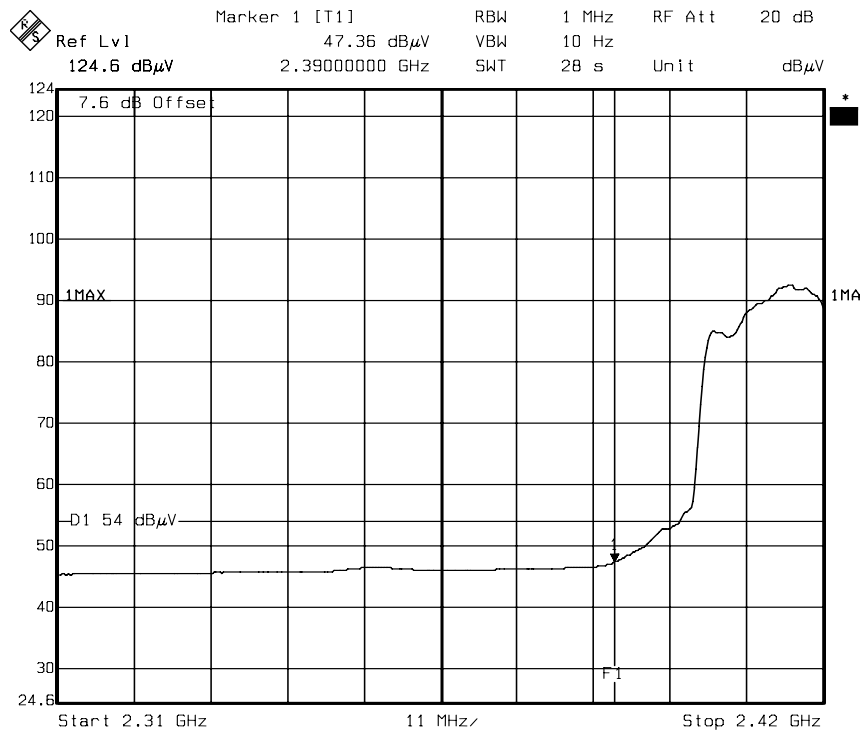
Date: 24.AUG.2009 20:46:56

Detector mode: Average**Polarity: Vertical**

Date: 24.AUG.2009 20:48:00

**Detector mode: Peak****Polarity: Horizontal**

Date: 25.AUG.2009 11:35:32

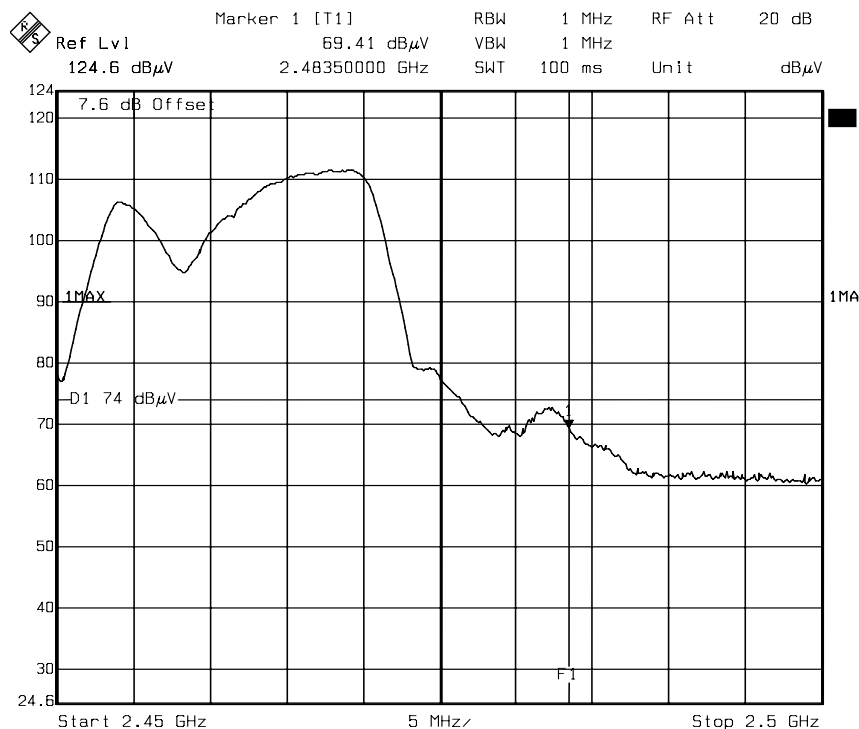
Detector mode: Average**Polarity: Horizontal**

Date: 25.AUG.2009 11:37:08

Band Edges (draft 802.11n Standard-20 MHz Channel mode / CH High)

Detector mode: Peak

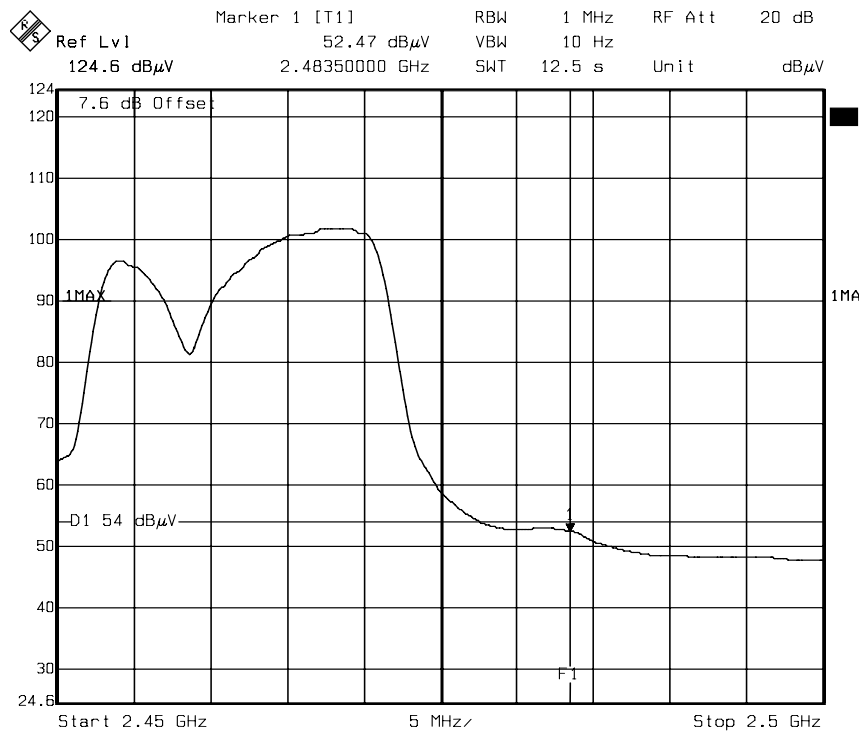
Polarity: Vertical



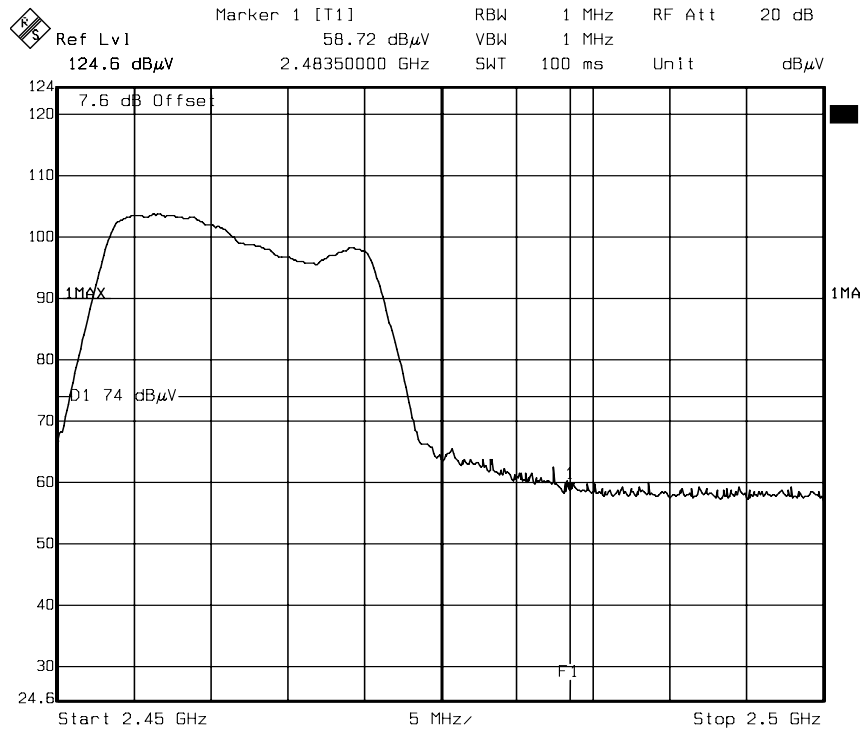
Date: 24.AUG.2009 21:04:07

Detector mode: Average

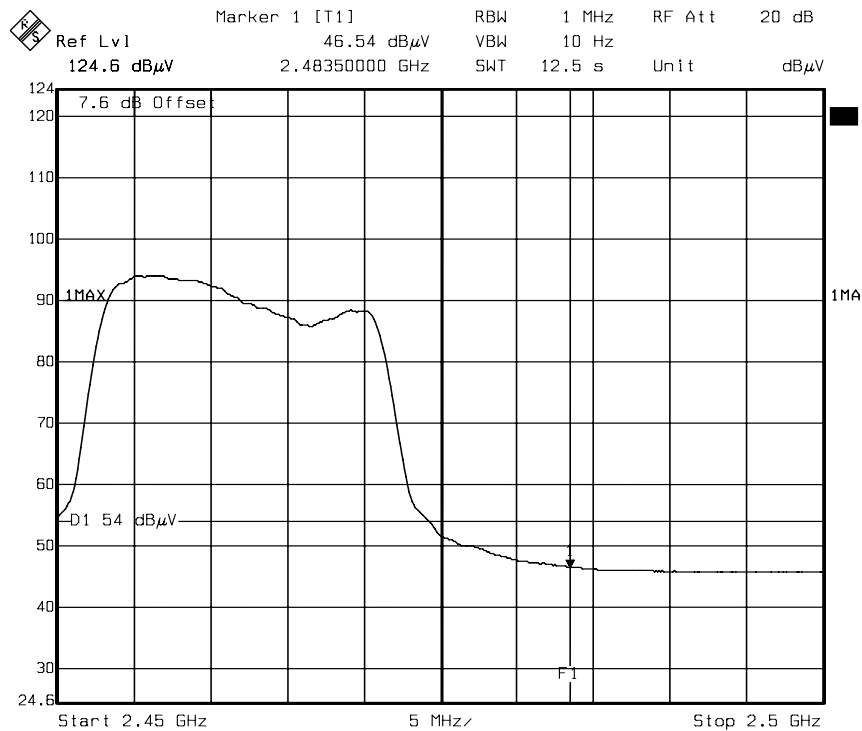
Polarity: Vertical



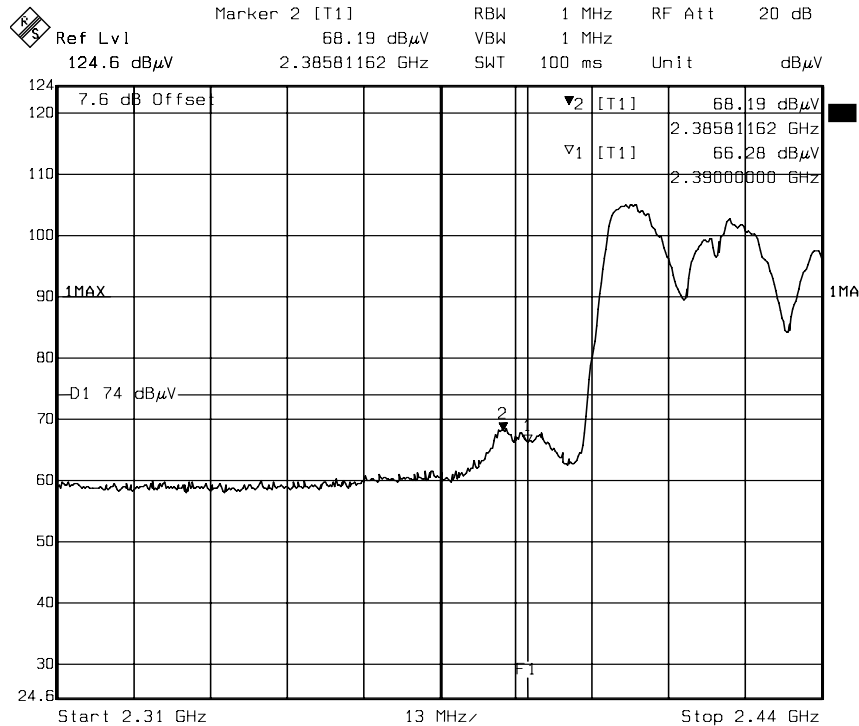
Date: 24.AUG.2009 21:11:03

**Detector mode: Peak****Polarity: Horizontal**

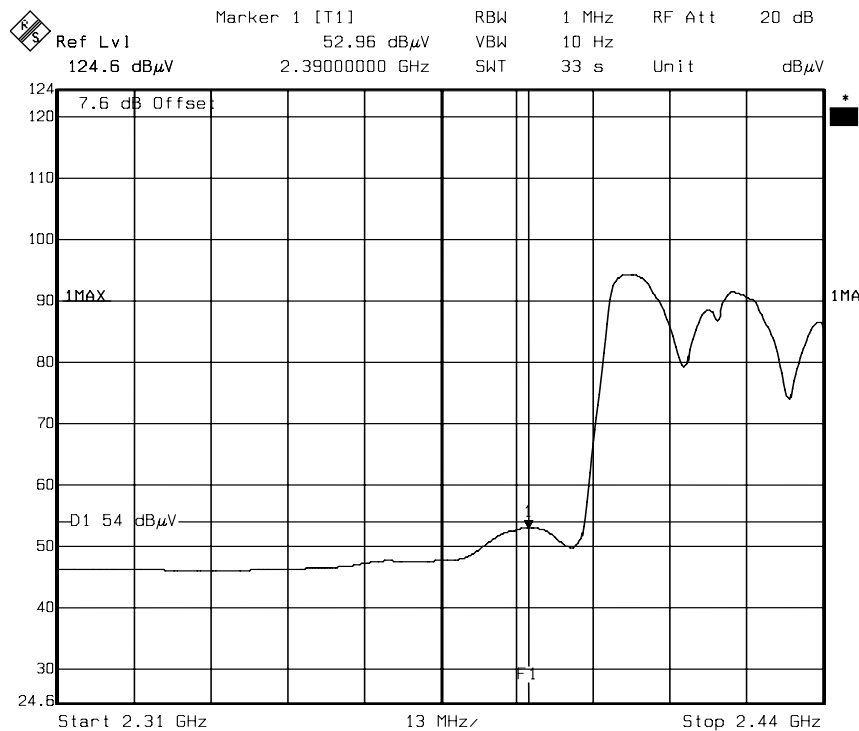
Date: 25.AUG.2009 11:43:02

Detector mode: Average**Polarity: Horizontal**

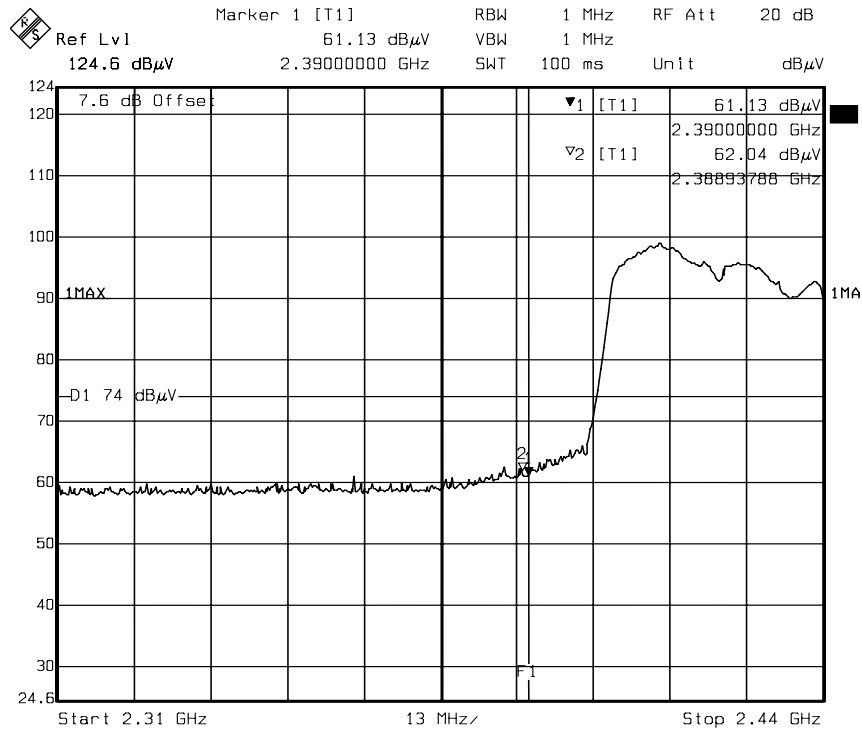
Date: 25.AUG.2009 11:44:09

**Band Edges (draft 802.11n Wide-40 MHz Channel mode / CH Low)****Detector mode: Peak****Polarity: Vertical**

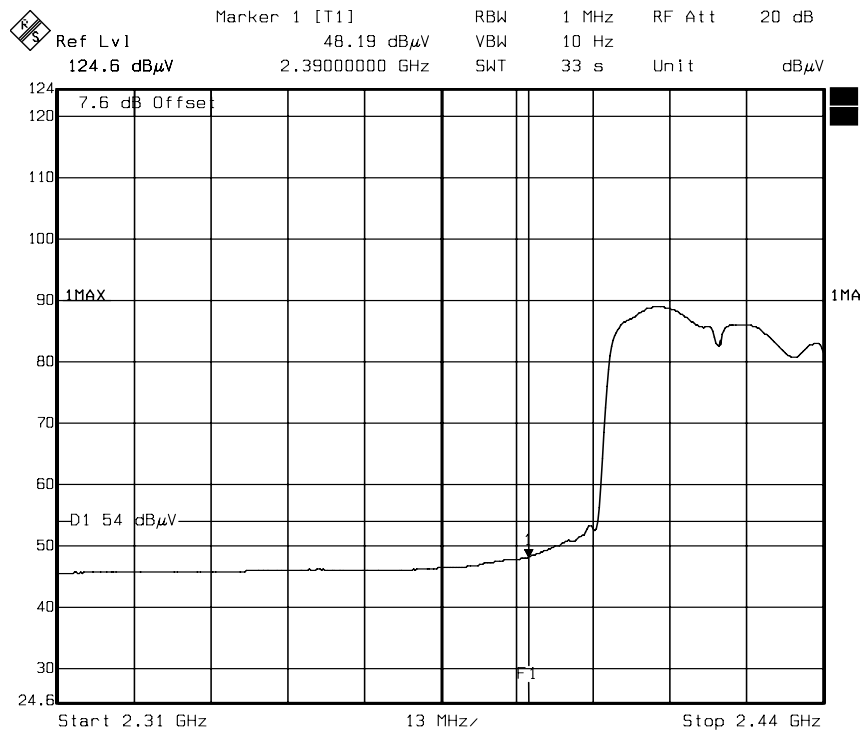
Date: 24.AUG.2009 21:46:39

Detector mode: Average**Polarity: Vertical**

Date: 24.AUG.2009 21:44:44

**Detector mode: Peak****Polarity: Horizontal**

Date: 25.AUG.2009 11:57:38

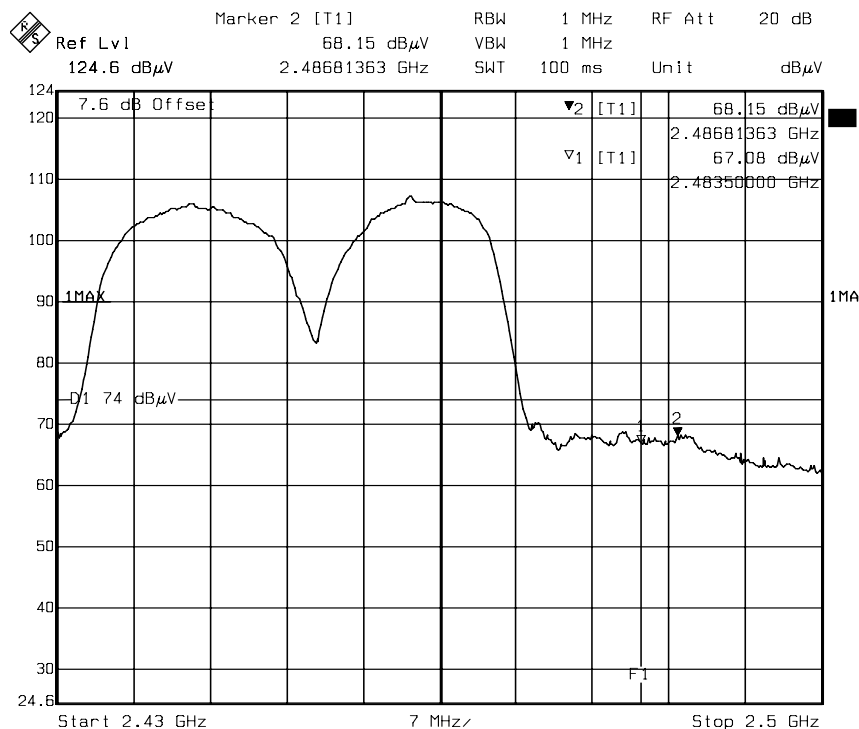
Detector mode: Average**Polarity: Horizontal**

Date: 25.AUG.2009 11:58:37

Band Edges (draft 802.11n Wide-40 MHz Channel mode / CH High)

Detector mode: Peak

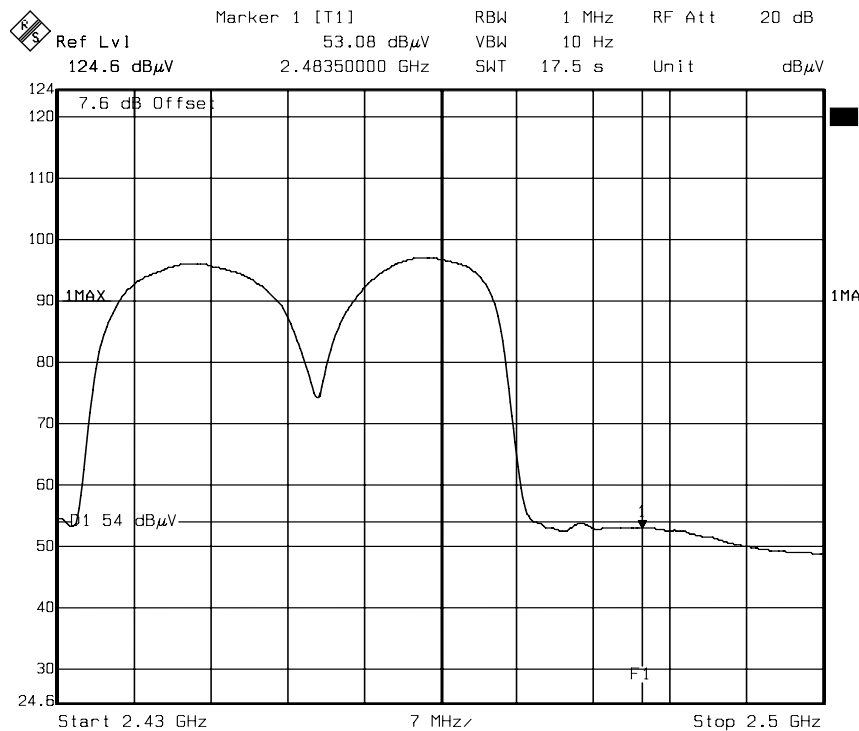
Polarity: Vertical



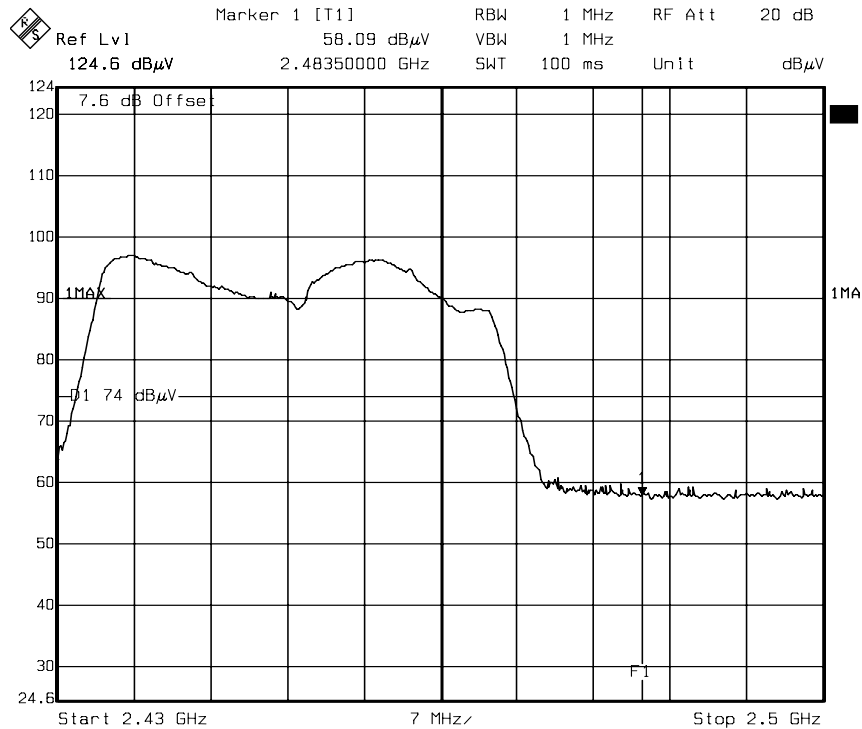
Date: 24.AUG.2009 21:31:15

Detector mode: Average

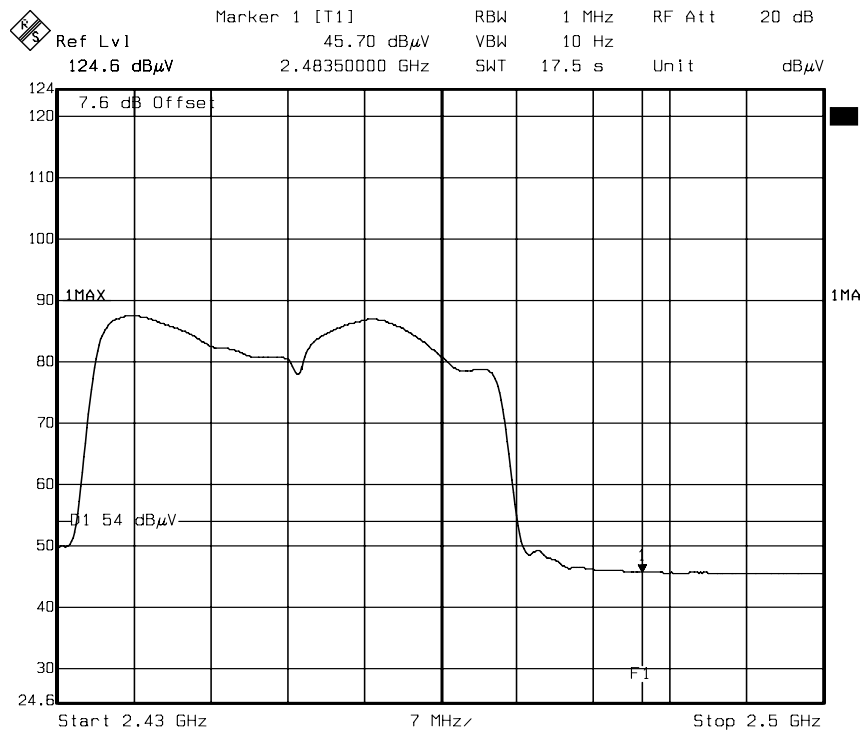
Polarity: Vertical



Date: 24.AUG.2009 21:32:13

**Detector mode: Peak****Polarity: Horizontal**

Date: 25.AUG.2009 11:51:54

Detector mode: Average**Polarity: Horizontal**

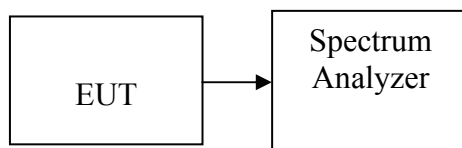
Date: 25.AUG.2009 11:52:53

7.4 PEAK POWER SPECTRAL DENSITY

LIMIT

1. According to §15.247(e), for digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.
2. According to §15.247(f), the digital modulation operation of the hybrid system, with the frequency hopping turned off, shall comply with the power density requirements of paragraph (d) of this section.

Test Configuration



TEST PROCEDURE

1. Place the EUT on the table and set it in transmitting mode.
Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.
2. Set the spectrum analyzer as RBW = 3 kHz, VBW = 10 kHz, Span = 300 kHz, Sweep time = 100 s
3. Record the max reading.
4. Repeat the above procedure until the measurements for all frequencies are completed.

TEST RESULTS

No non-compliance noted

**Test Data****Test mode: IEEE 802.11b**

Channel	Frequency (MHz)	PPSD (dBm)	Limit (dBm)	Result
Low	2412	-10.30	8.00	PASS
Mid	2437	-9.93		PASS
High	2462	-10.67		PASS

Test mode: IEEE 802.11g

Channel	Frequency (MHz)	PPSD (dBm)	Limit (dBm)	Result
Low	2412	-16.18	8.00	PASS
Mid	2437	-15.71		PASS
High	2462	-16.19		PASS

Test mode: draft 802.11n Standard-20 MHz Channel mode

Channel	Frequency (MHz)	Chain 0 PSD (dBm)	Chain 1 PSD (dBm)	PPSD (dBm)	Limit (dBm)	Result
Low	2412	-15.15	-16.94	-12.94	8.00	PASS
Mid	2437	-13.83	-16.71	-12.03		PASS
High	2462	-15.10	-17.37	-13.08		PASS

Test mode: draft 802.11n Wide-40 MHz Channel mode

Channel	Frequency (MHz)	Chain 0 PSD (dBm)	Chain 1 PSD (dBm)	PPSD (dBm)	Limit (dBm)	Result
Low	2422	-18.80	-21.37	-16.89	8.00	PASS
Mid	2437	-19.60	-22.77	-17.89		PASS
High	2452	-19.79	-22.17	-17.81		PASS

Remark: Total PSD (dBm) = $10 \cdot \log(10^{\text{Chain 0 PSD} / 10} + 10^{\text{Chain 1 PSD} / 10})$

**Test mode: IEEE 802.11a mode / 5745 ~ 5825MHz**

Channel	Frequency (MHz)	PPSD (dBm)	Limit (dBm)	Result
Low	5745	-11.13	8	PASS
Mid	5785	-12.92		PASS
High	5825	-13.05		PASS

Test mode: draft 802.11n Standard-20 MHz Channel mode / 5745 ~ 5825MHz

Channel	Frequency (MHz)	Chain 0 PSD (dBm)	Chain 1 PSD (dBm)	PPSD (dBm)	Limit (dBm)	Result
Low	5745	-17.00	-20.82	-15.49	8	PASS
Mid	5785	-17.03	-20.51	-15.42		PASS
High	5825	-17.41	-21.92	-17.37		PASS

Test mode: draft 802.11n Wide-40 MHz Channel mode / 5755 ~ 5795MHz

Channel	Frequency (MHz)	Chain 0 PSD (dBm)	Chain 1 PSD (dBm)	PPSD (dBm)	Limit (dBm)	Result
Low	5755	-18.05	-21.40	-16.40	8	PASS
High	5795	-16.62	-20.38	-15.09		PASS

Remark: Total PSD (dBm) = $10 \cdot \log(10^{\text{Chain 0 PSD} / 10} + 10^{\text{Chain 1 PSD} / 10})$

**Test mode: draft 802.11n Standard-20 MHz Channel mode with combiner**

Channel	Frequency (MHz)	PPSD (dBm)	Limit (dBm)	Result
Low	2412	-10.84	8	PASS
Mid	2437	-10.72		PASS
High	2462	-10.85		PASS

Test mode: draft 802.11n Wide-40 MHz Channel mode with combiner

Channel	Frequency (MHz)	PPSD (dBm)	Limit (dBm)	Result
Low	2422	-15.94	8	PASS
Mid	2437	-16.04		PASS
High	2452	-15.36		PASS

Test mode: draft 802.11n Standard-20 MHz Channel / 5745 ~ 5825MHz / mode with combiner

Channel	Frequency (MHz)	PPSD (dBm)	Limit (dBm)	Result
Low	5745	-12.17	8	PASS
Mid	5785	-12.79		PASS
High	5825	-13.11		PASS

Test mode: draft 802.11n Wide-40 MHz Channel mode / 5755 ~ 5795MHz with combiner

Channel	Frequency (MHz)	PPSD (dBm)	Limit (dBm)	Result
Low	5755	-14.73	8	PASS
High	5795	-13.09		PASS

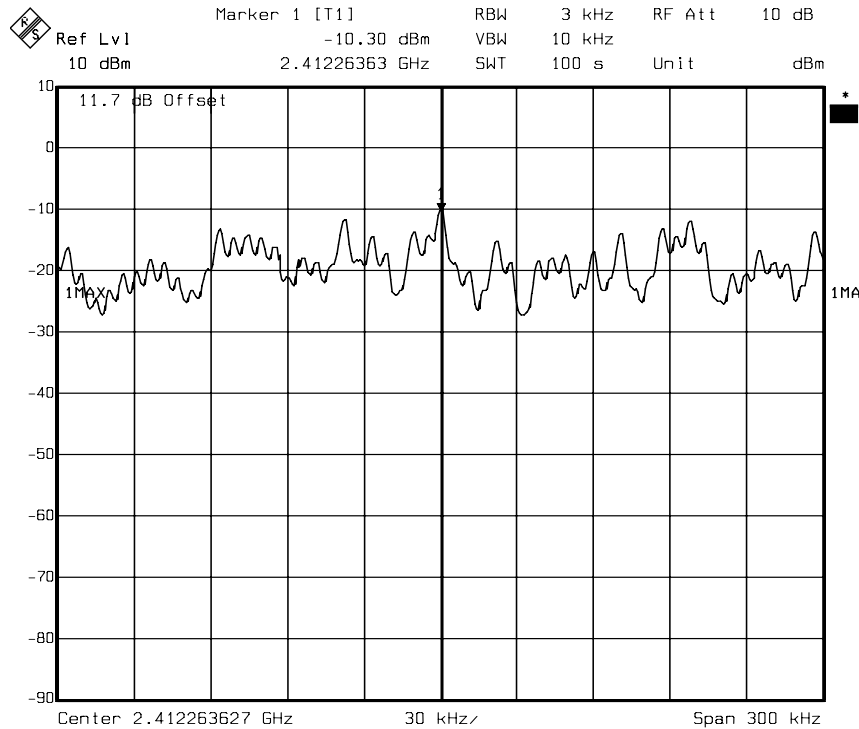
Remark: Total PPSD (dBm) = $10 \cdot \log(10^{\text{Chain 0 PPSD} / 10} + 10^{\text{Chain 1 PPSD} / 10})$



Test Plot

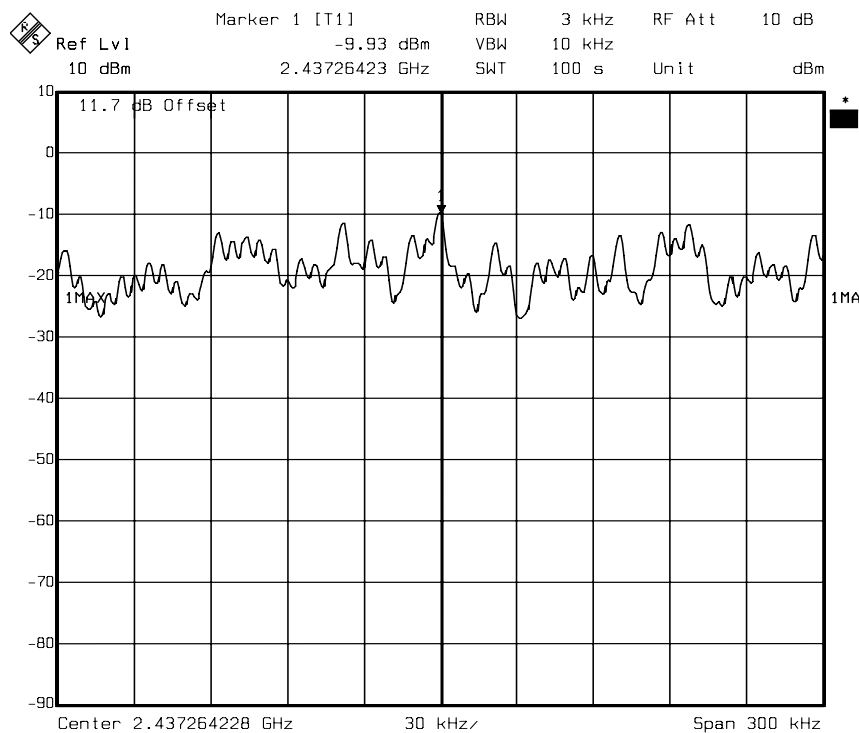
IEEE 802.11b mode

PPSD (CH Low)

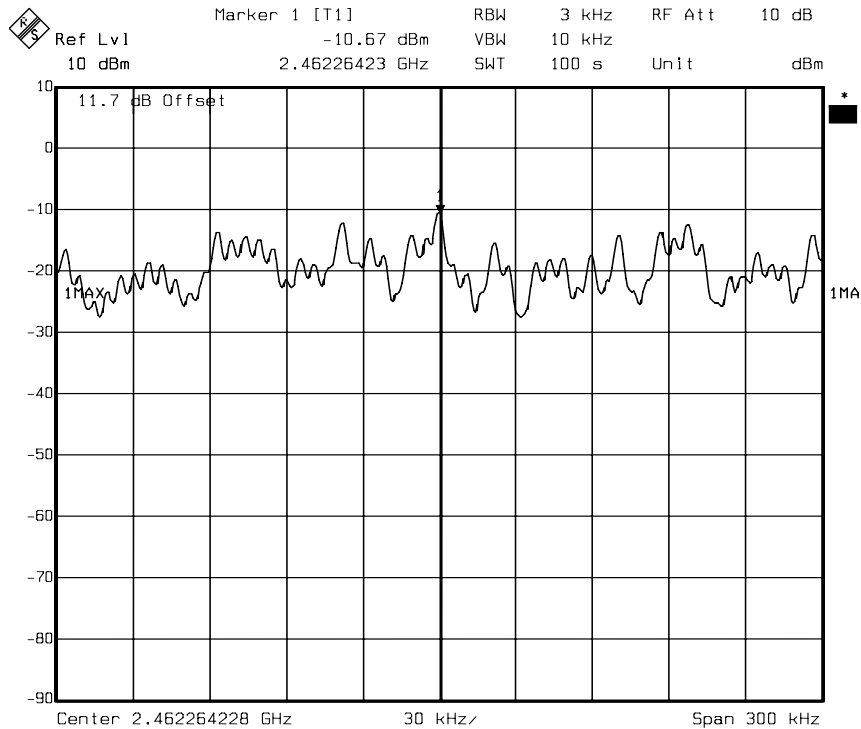


Date: 25.AUG.2009 21:07:02

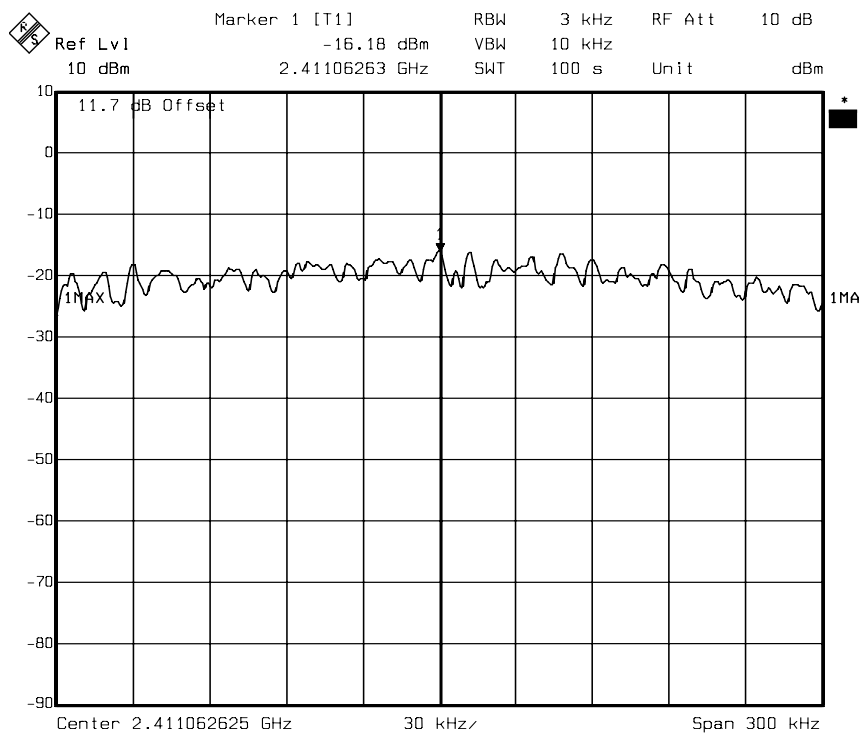
PPSD (CH Mid)



Date: 25.AUG.2009 21:05:38

**PPSD (CH High)**

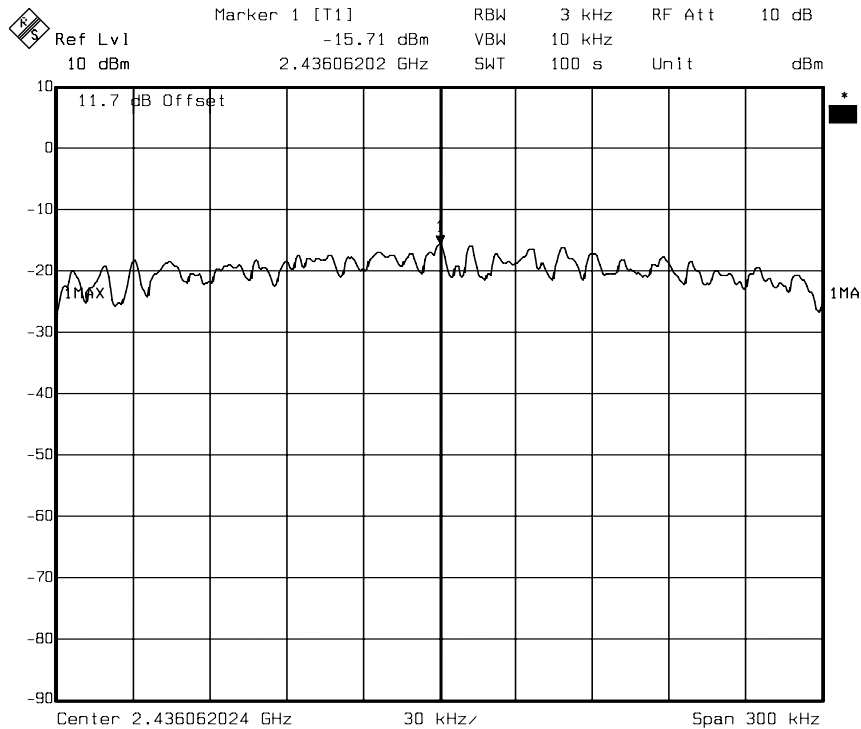
Date: 25.AUG.2009 21:04:37

IEEE 802.11g mode**PPSD (CH Low)**

Date: 25.AUG.2009 21:00:21

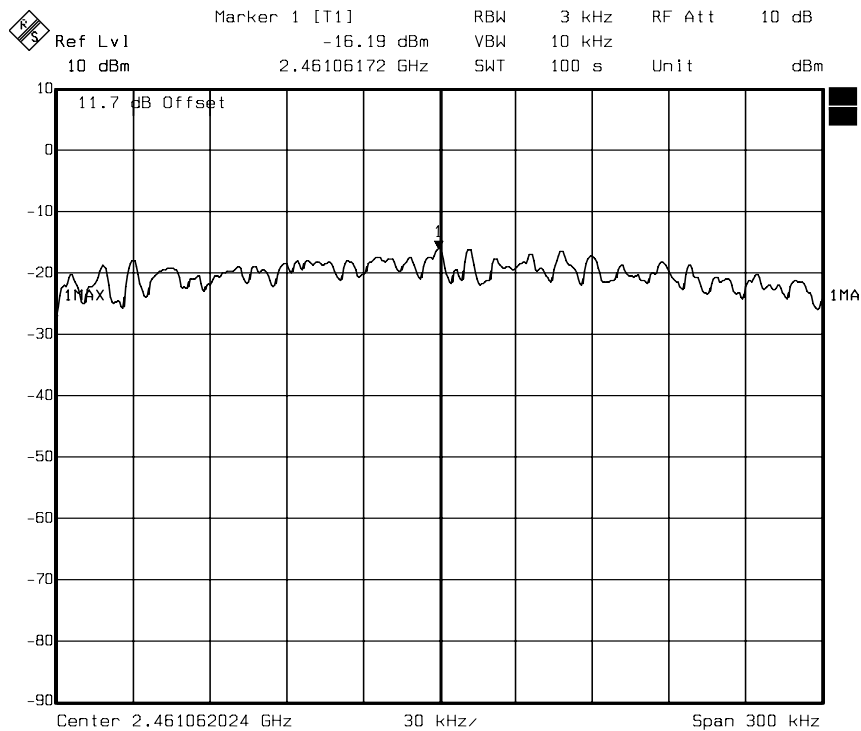


PPSD (CH Mid)

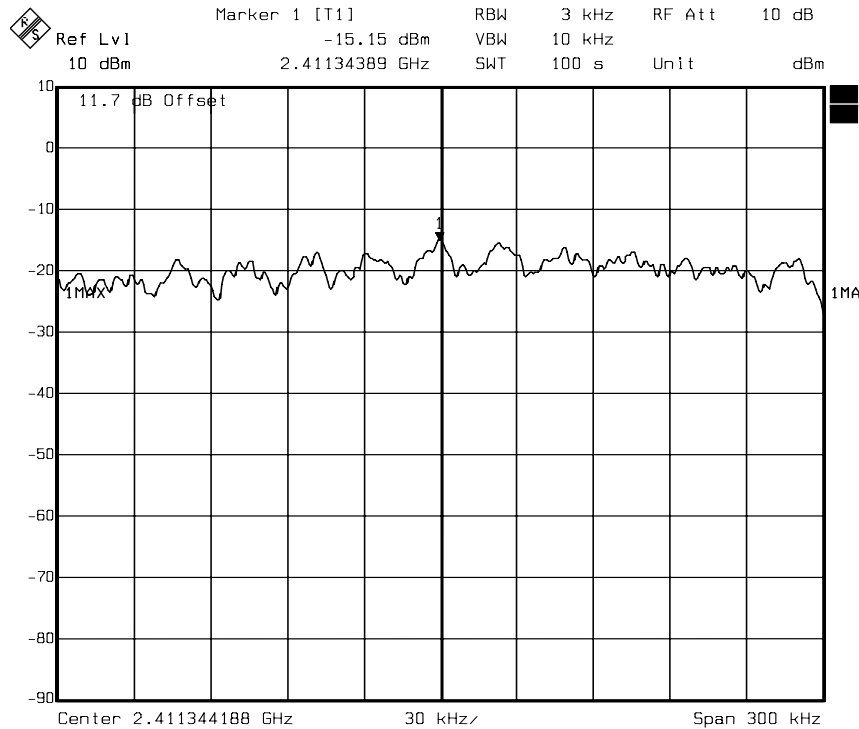


Date: 25.AUG.2009 21:01:37

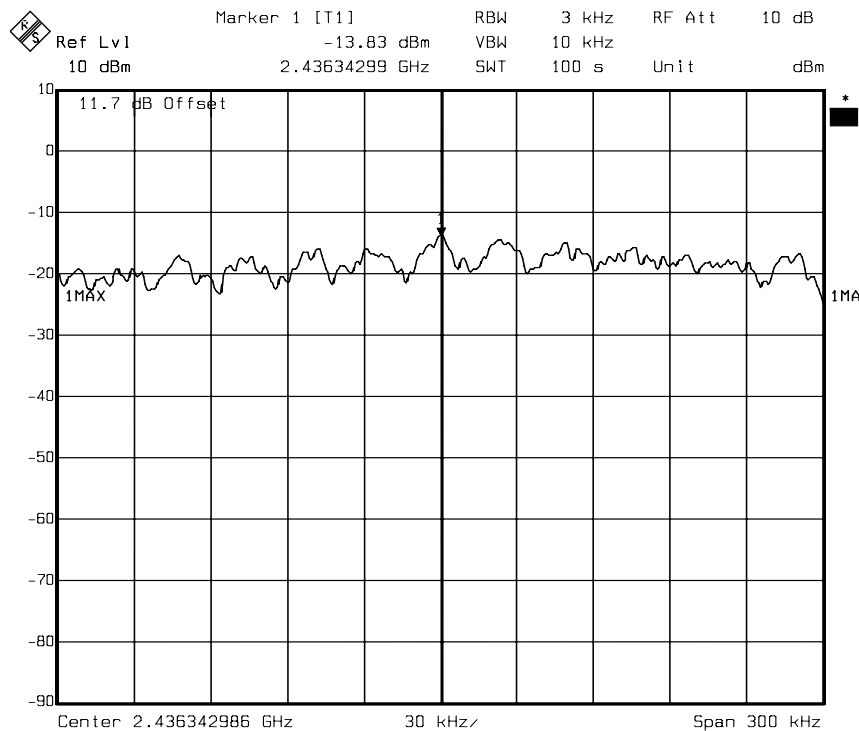
PPSD (CH High)



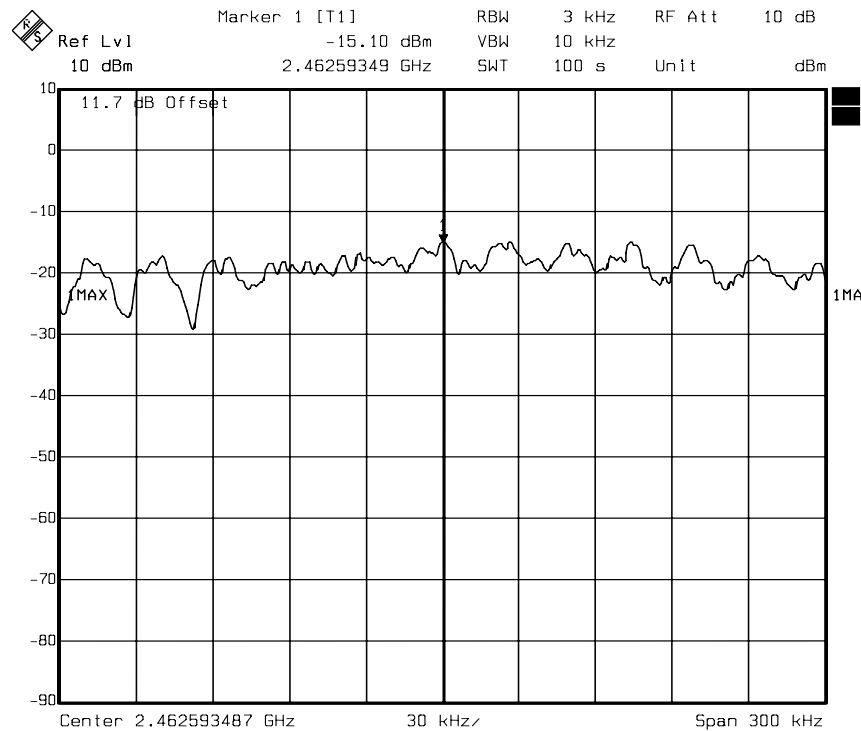
Date: 25.AUG.2009 21:03:01

**draft 802.11n Standard-20 MHz Channel mode / Chain 0****PPSD (CH Low)**

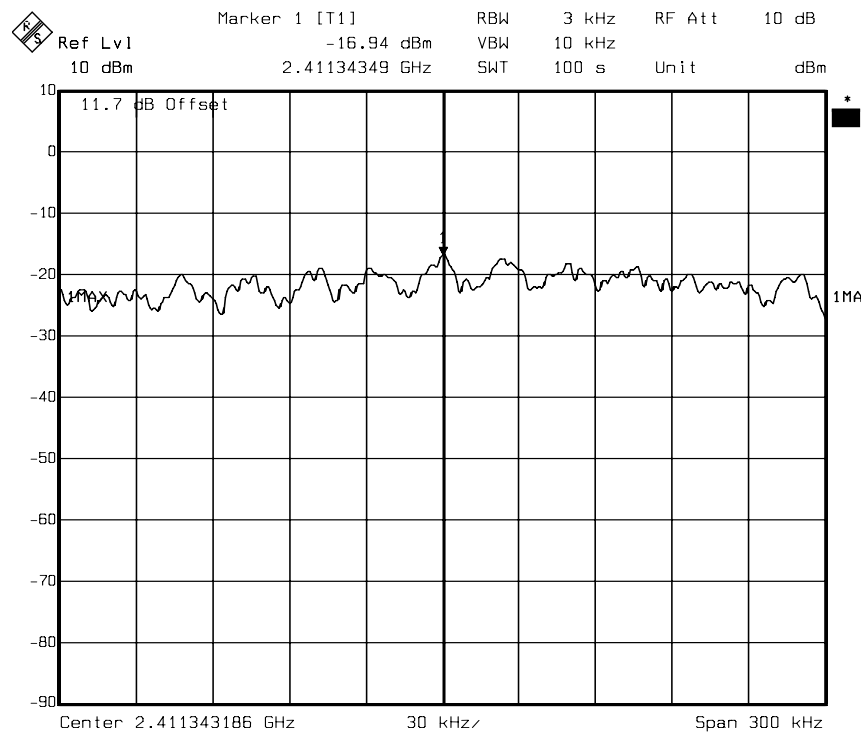
Date: 25.AUG.2009 20:58:05

PPSD (CH Mid)

Date: 25.AUG.2009 20:54:15

**PPSD (CH High)**

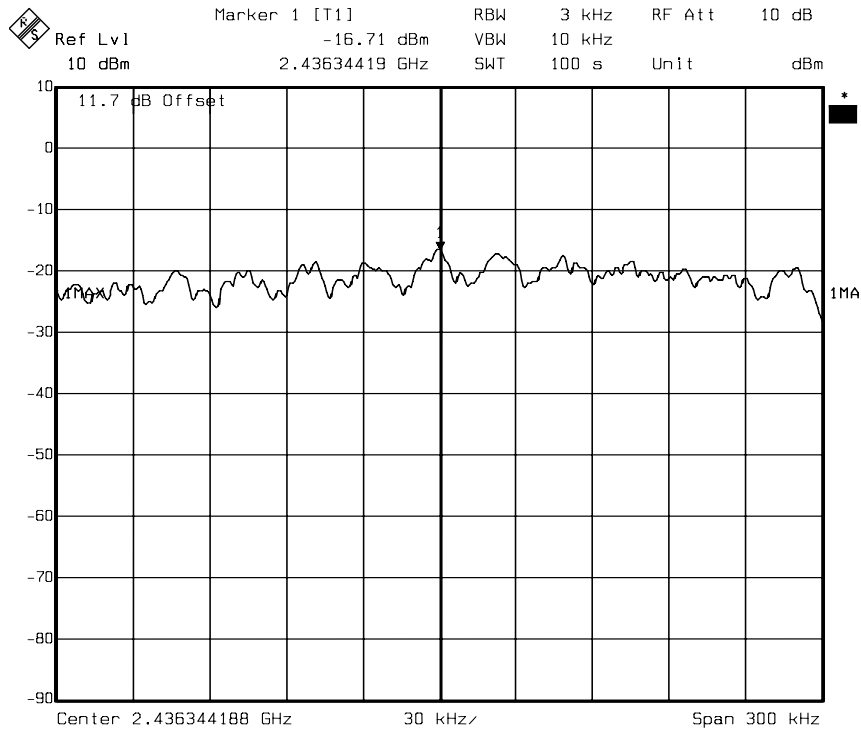
Date: 25.AUG.2009 20:53:07

draft 802.11n Standard-20 MHz Channel mode / Chain 1**PPSD (CH Low)**

Date: 25.AUG.2009 20:57:08

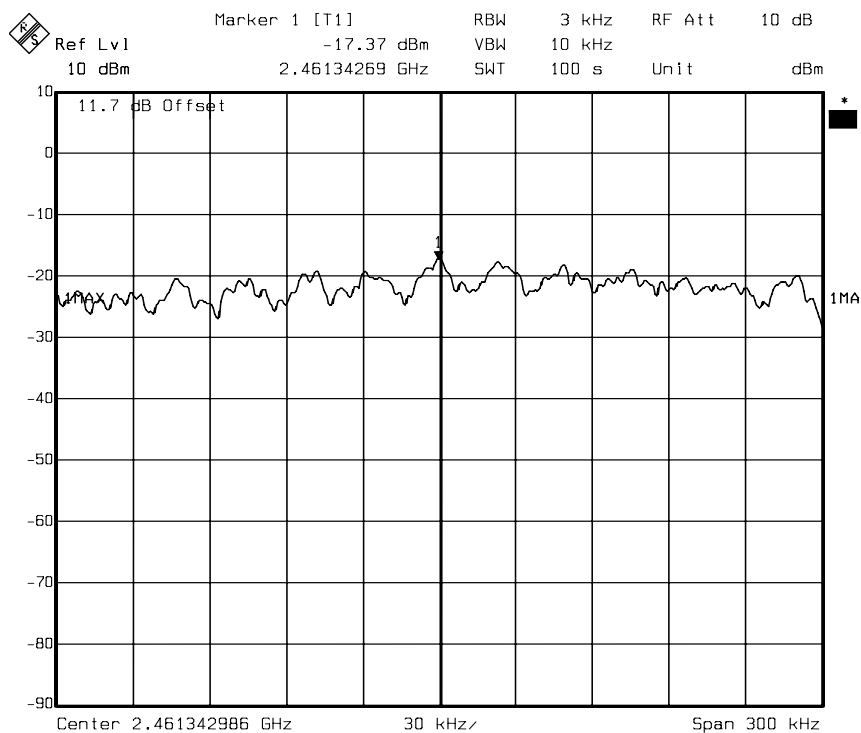


PPSD (CH Mid)

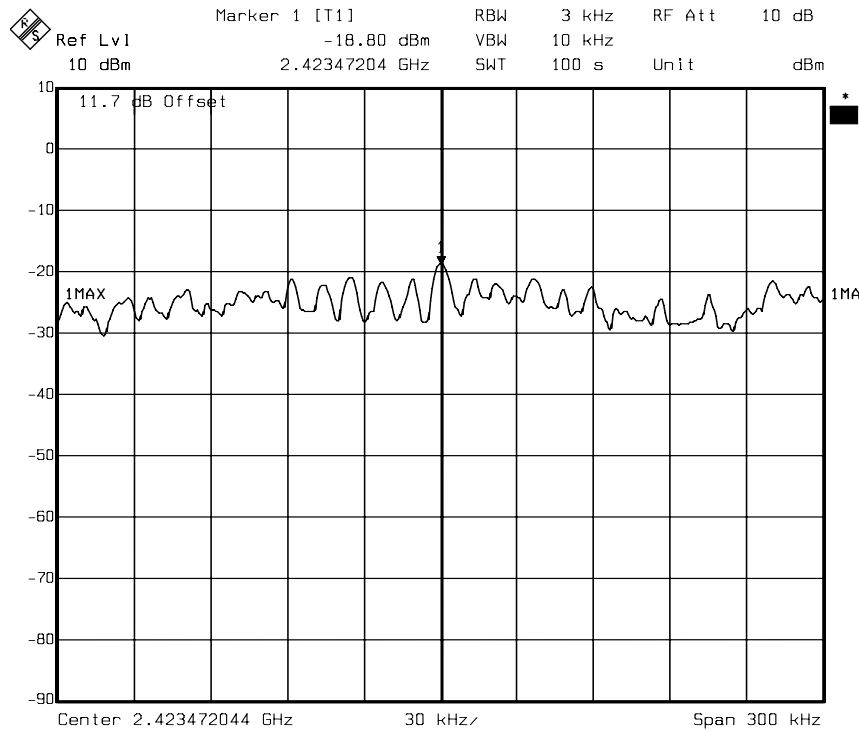
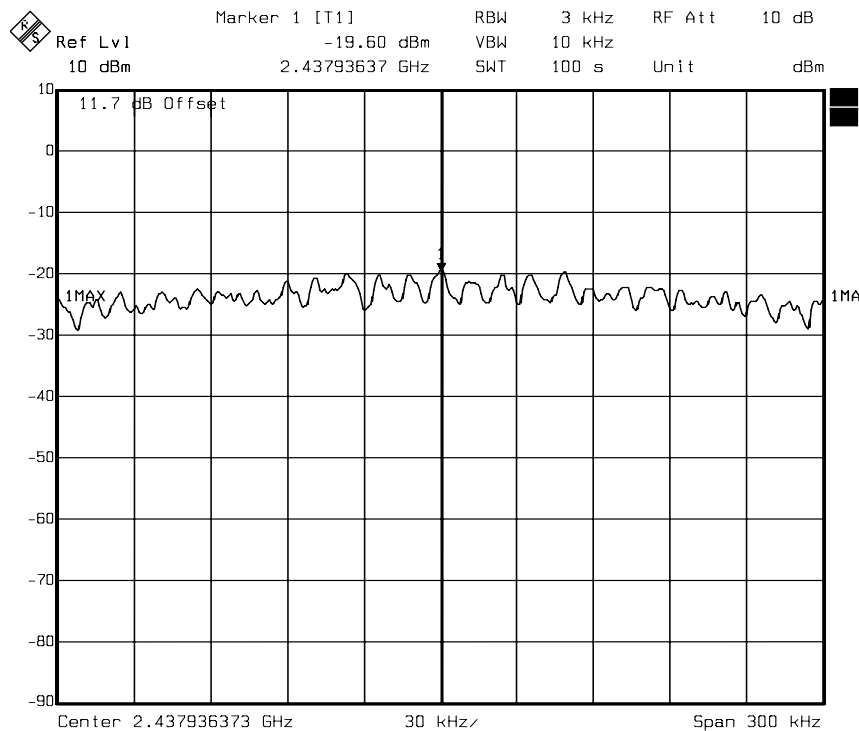


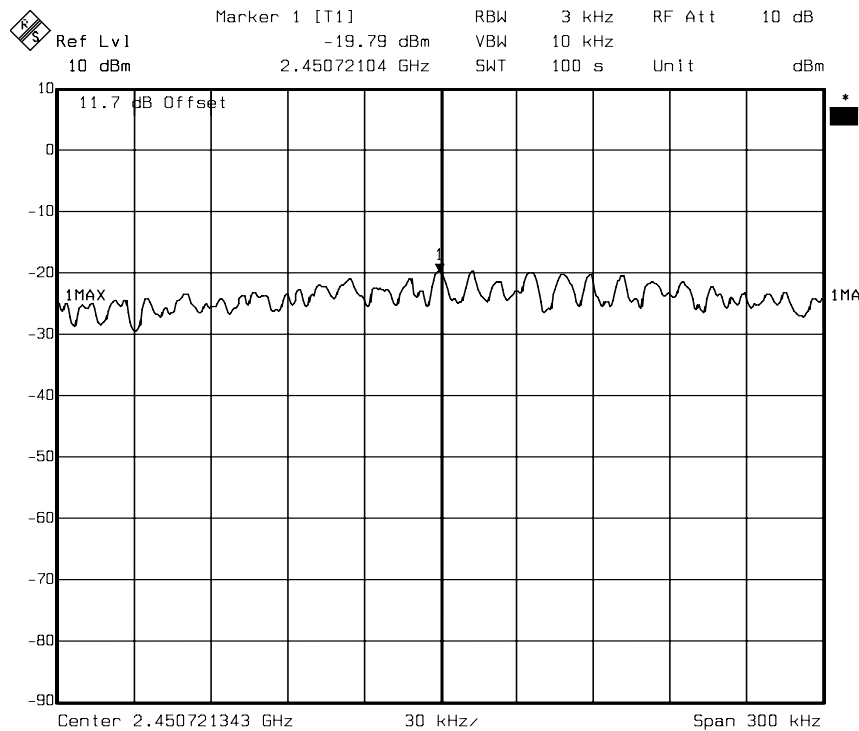
Date: 25.AUG.2009 20:55:10

PPSD (CH High)

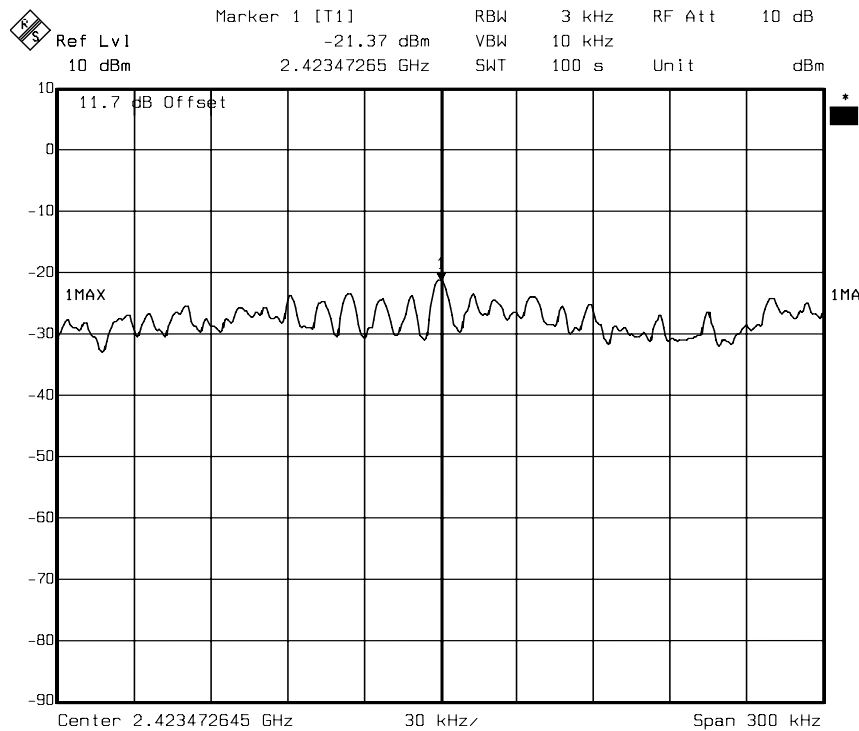


Date: 25.AUG.2009 20:52:04

**draft 802.11n Wide-40 MHz Channel mode / Chain 0****PPSD (CH Low)****PPSD (CH Mid)**

**PPSD (CH High)**

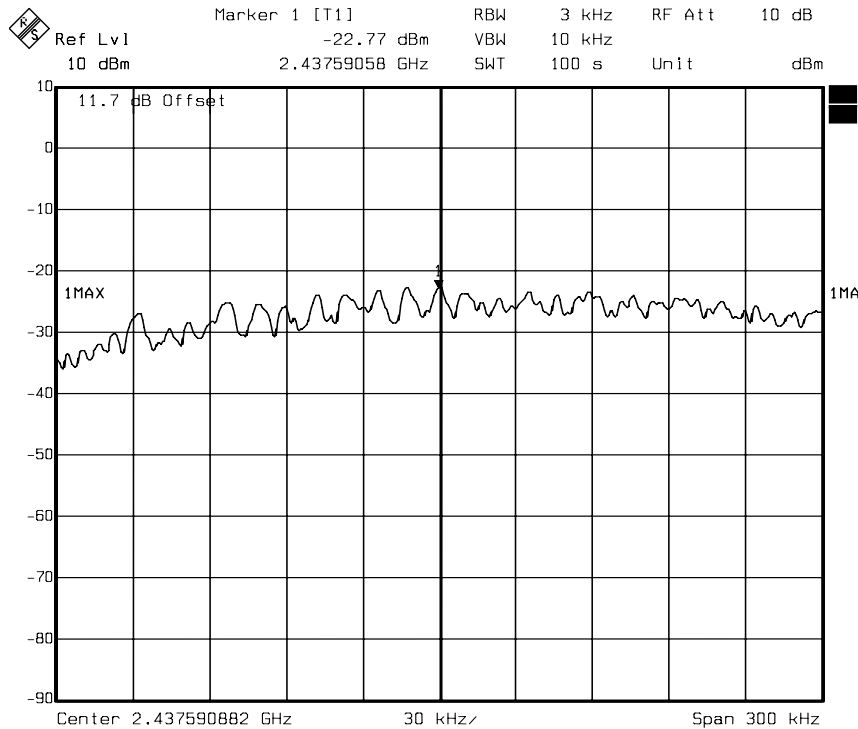
Date: 25.AUG.2009 20:49:29

draft 802.11n Wide-40 MHz Channel mode / Chain 1**PPSD (CH Low)**

Date: 25.AUG.2009 20:46:01

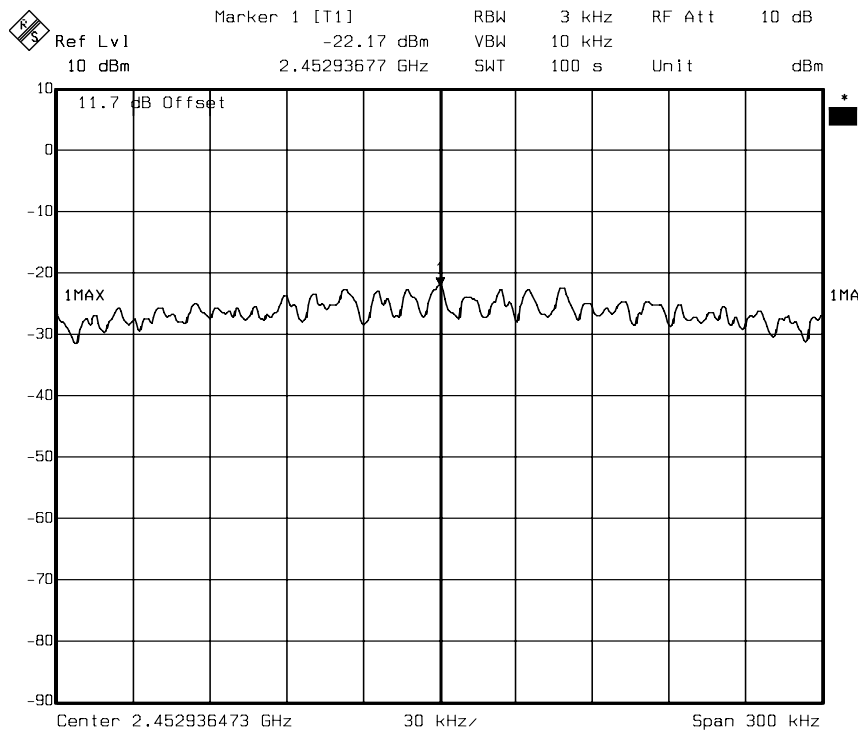


PPSD (CH Mid)

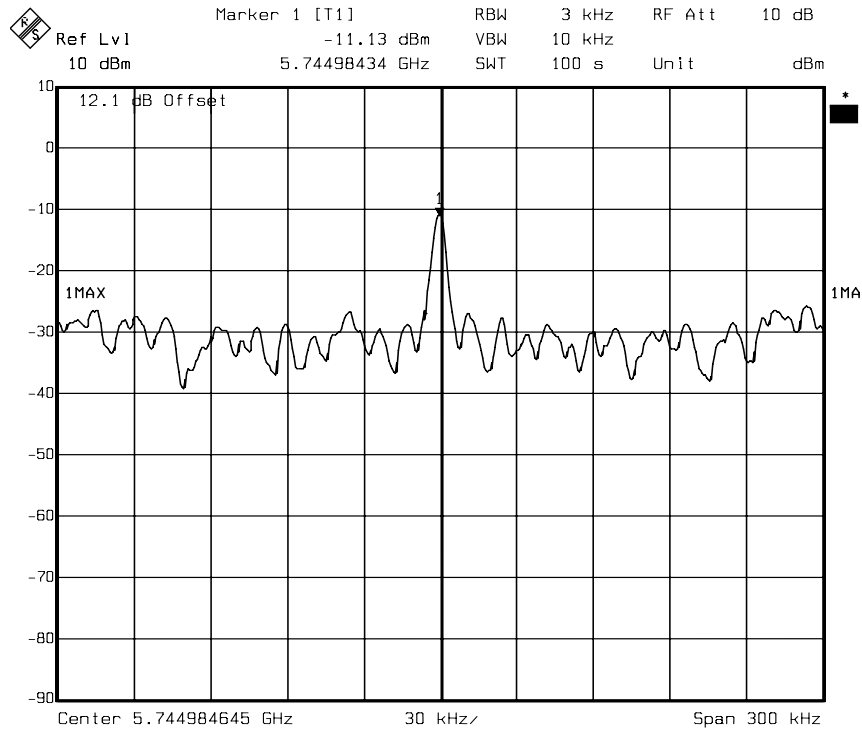


Date: 25.AUG.2009 20:47:10

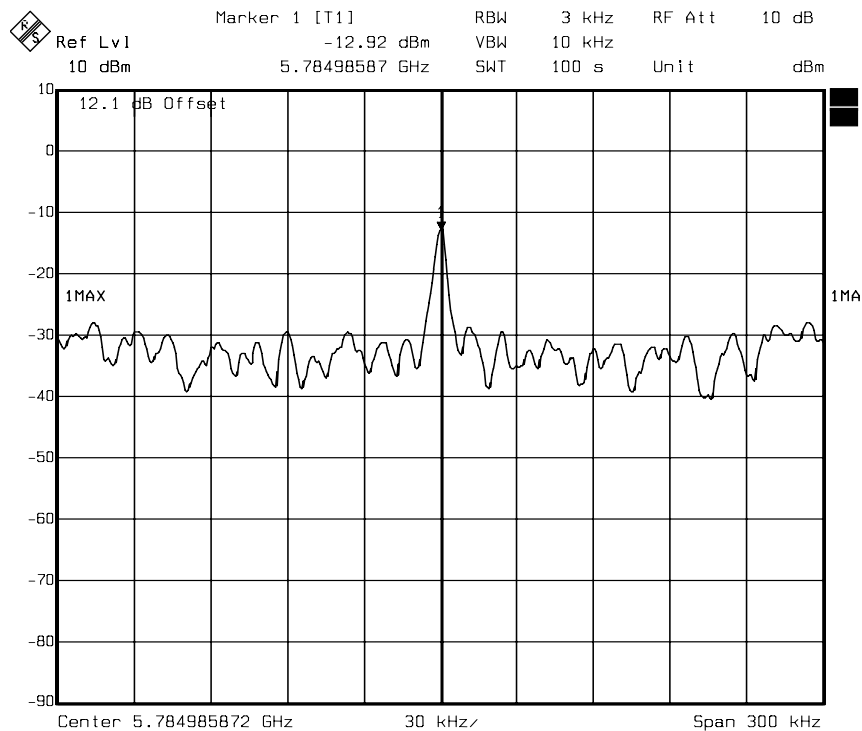
PPSD (CH High)



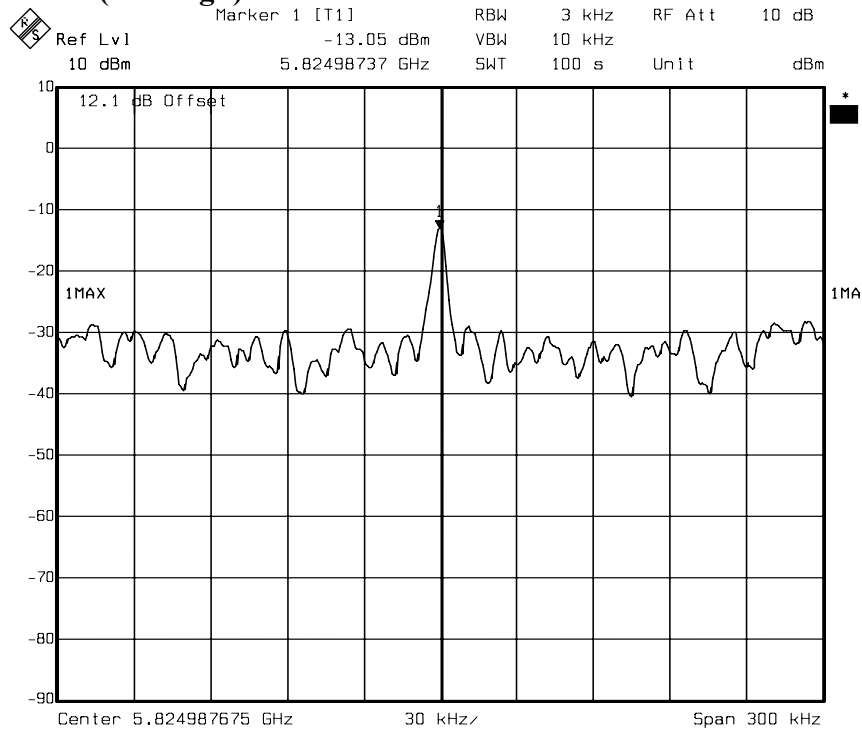
Date: 25.AUG.2009 20:50:31

**Test mode: IEEE 802.11a mode / 5745 ~ 5825MHz****PPSD (CH Low)**

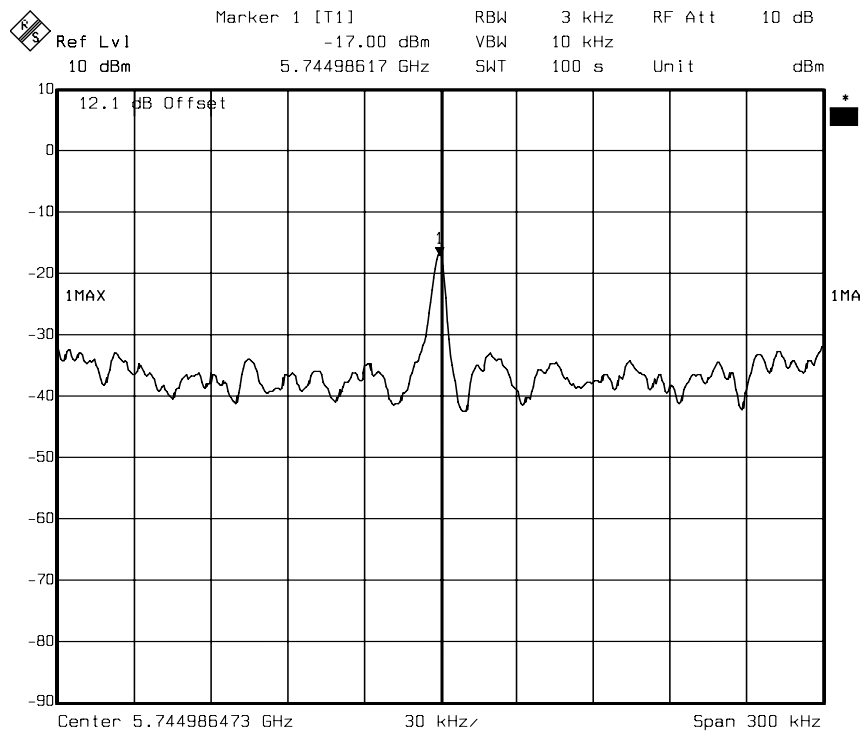
Date: 15.OCT.2009 15:47:29

PPSD (CH Mid)

Date: 15.OCT.2009 15:51:48

**PPSD (CH High)**

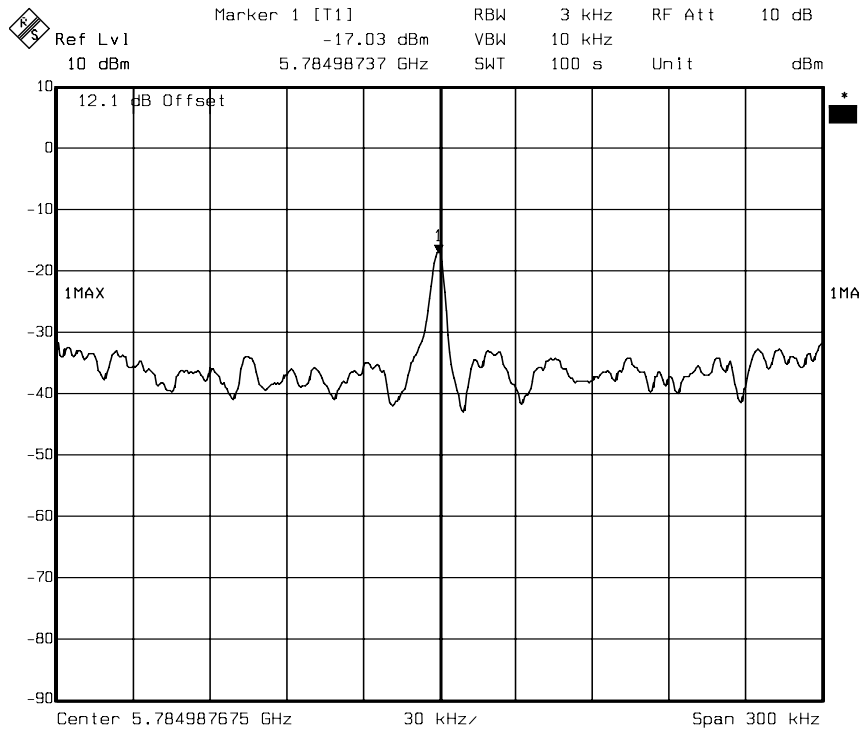
Date: 15.OCT.2009 15:52:51

draft 802.11n Standard-20 MHz Channel mode / 5745 ~ 5825MHz / Chain 0**PPSD (CH Low)**

Date: 15.OCT.2009 16:15:15

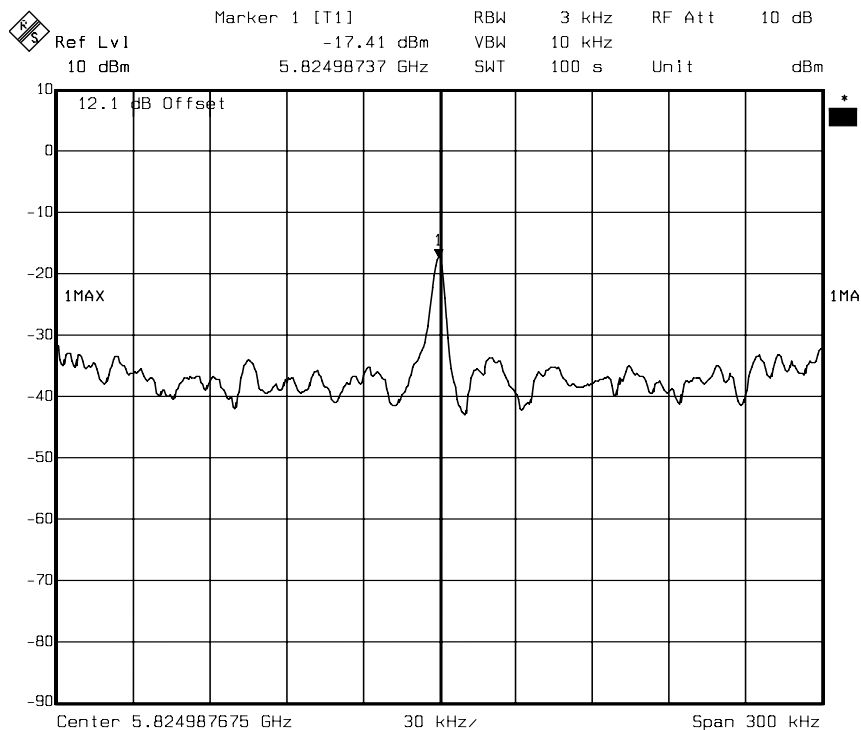


PPSD (CH Mid)

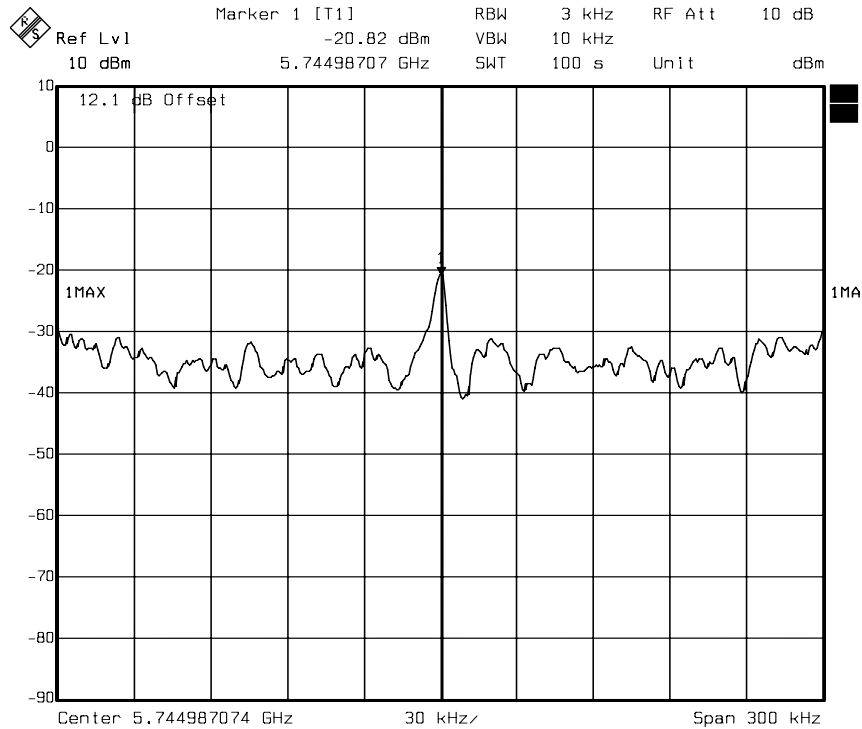


Date: 15.OCT.2009 16:14:32

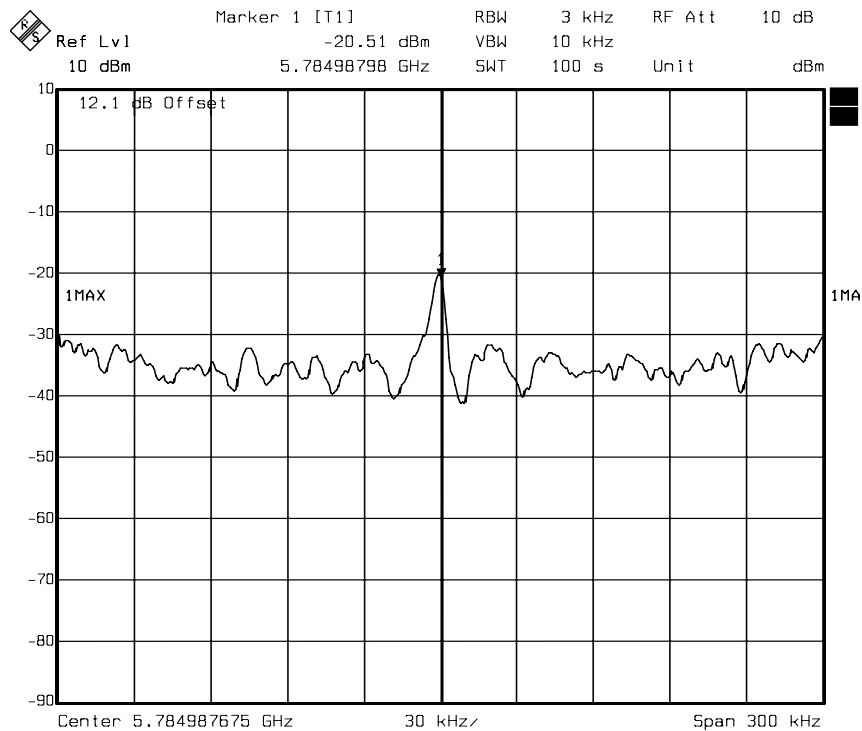
PPSD (CH High)



Date: 15.OCT.2009 16:13:56

**draft 802.11n Standard-20 MHz Channel mode / 5745 ~ 5825MHz / Chain 1****PPSD (CH Low)**

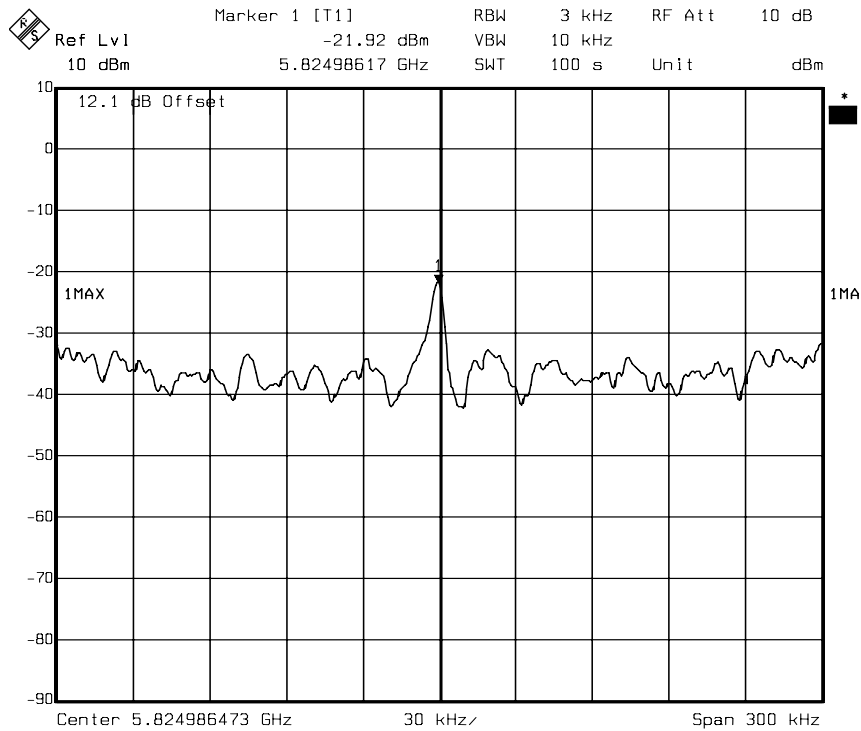
Date: 15.OCT.2009 16:16:09

PPSD (CH Mid)

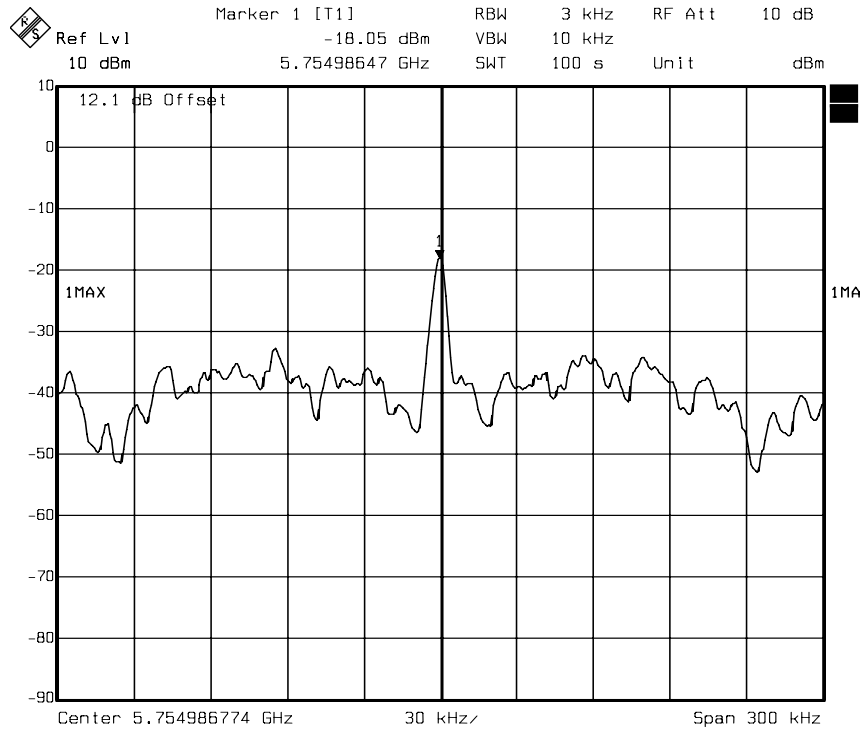
Date: 15.OCT.2009 16:16:47



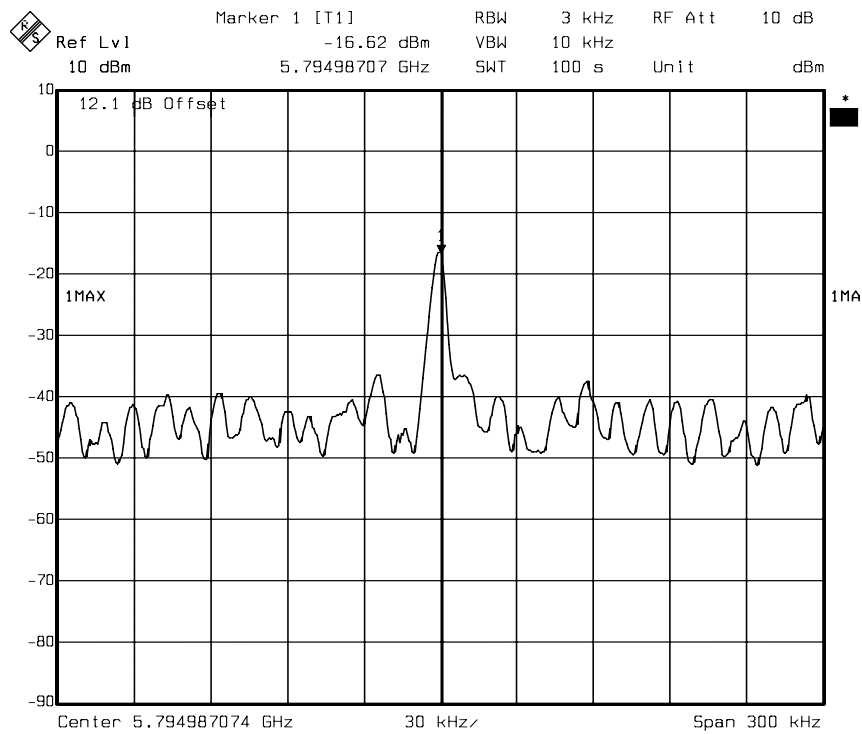
PPSD (CH High)



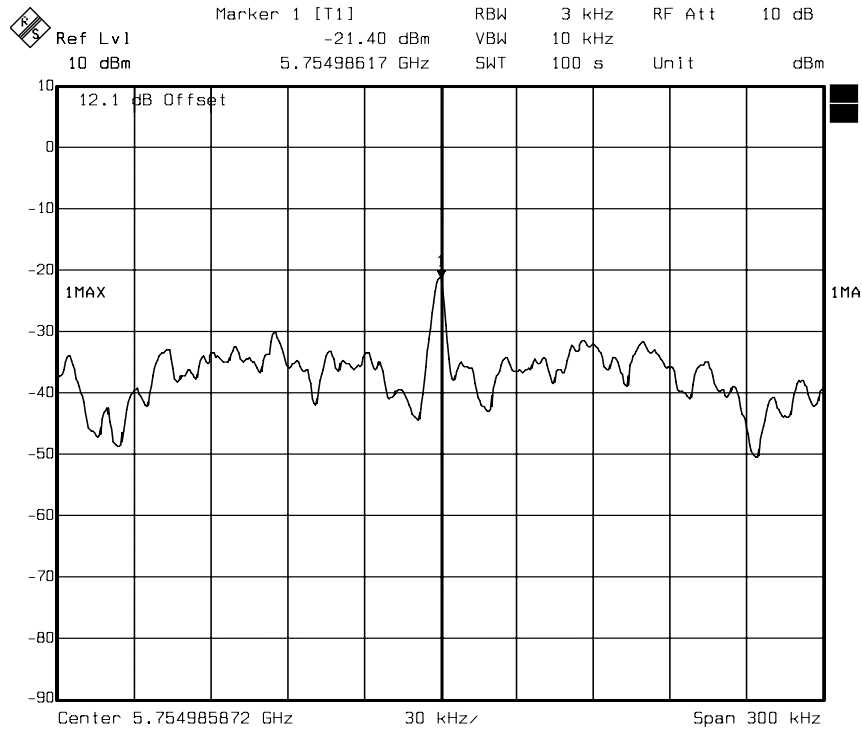
Date: 15.OCT.2009 16:17:28

**draft 802.11n Wide-40 MHz Channel mode / 5755 ~ 5795MHz / Chain 0****PPSD (CH Low)**

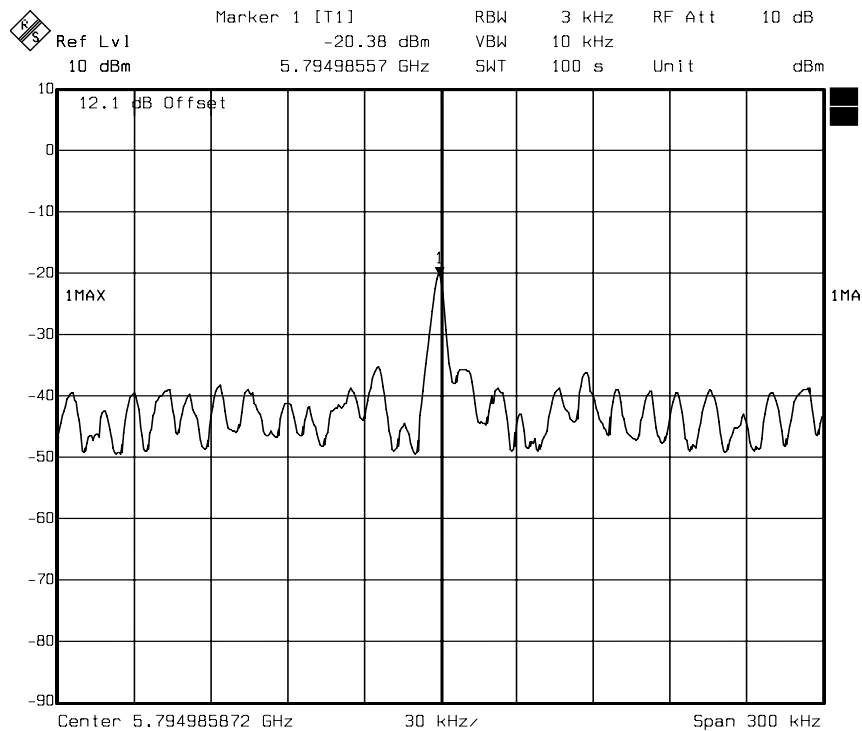
Date: 15.OCT.2009 16:19:31

PPSD (CH High)

Date: 15.OCT.2009 16:20:18

**draft 802.11n Wide-40 MHz Channel mode / 5755 ~ 5795MHz / Chain 1****PPSD (CH Low)**

Date: 15.OCT.2009 16:18:54

PPSD (CH High)

Date: 15.OCT.2009 16:18:15