

EMC TEST REPORT

CFR 47 FCC Part 15.247

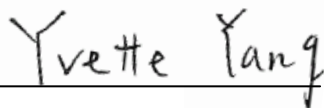
Report No. : TS08020065-EME**Model No. : NBG420N, 401741****Issued Date : Mar. 04, 2008**

Applicant : ZyXEL Communications Corporation
6, Innovation Rd II, Science-Based Industrial Park,
Hsin-Chu, Taiwan

Test By : Intertek Testing Services Taiwan Ltd.
No. 11, Lane 275, Ko-Nan 1 Street, Chia-Tung Li,
Shiang-Shan District, Hsinchu City, Taiwan

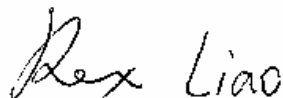
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Report Engineer



Yvette Yang

Project Engineer



Rex Liao

Reviewed By



Jimmie Liu

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1. Summary of Test Data

Test/Requirement Description	Applicable Rule	Result
Minimum 6dB Bandwidth	15.247(a)(2) KDB558074	Pass
Maximum Output Power	15.247(b) KDB558074	Pass
Power Spectral Density	15.247(e) KDB558074	Pass
RF Antenna Conducted Spurious	15.247(d) KDB558074	Pass
Radiated Spurious Emission	15.247(d), 15.205, 15.209 KDB558074, ANSI C63.4	Pass
Emission on the Band Edge	15.247(d), 15.205 KDB558074	Pass
AC Power Line Conducted Emission	15.207 KDB558074, ANSI C63.4	Pass

2. General Information

Identification of the EUT

Applicant	: ZyXEL Communications Corporation.
Product	: Wireless N Router
Model No.	: NBG420N
FCC ID.	: I88NBG420N
Frequency Range	: 2412MHz to 2462MHz for 802.11b, 802.11g, 802.11n HT20 2422MHz to 2452MHz for 802.11n HT40
Channel Number	: 11 channels for 802.11b, 802.11g, 802.11n HT20 : 7 channels for 802.11n HT40
Rated Power	: 100-240Vac, 50/60Hz with adapter (LEI, MU12-2120100-A1)
Power Cord	: N/A
Sample Received	: Feb. 19, 2008
Test Date(s)	: Feb. 27, 2008 ~ Feb. 29, 2008

Description of EUT

The EUT is a Wireless N Router; it ONLY supports two transmissions and receives functions, and was defined as information technology equipment.

The 401741 is series model to NBG420N (EUT), the different model number for different brand serves as marketing strategy.

For more detail features, please refer to User's manual as file name "Installation guide.pdf"

Description of Peripherals

Peripherals	Manufacturer	Product No.	Serial No.
Notebook PC	DELL	Latitude D610	5YWZK1S

Antenna description

Chain A & B

The antenna is affixed to the EUT using a unique connector, which allows for replacement of a broken antenna, but DOES NOT use a standard antenna jack or electrical connector.

Antenna Gain : 2 dBi max
Antenna Type : Dipole antenna
Connector Type : SMA Plug Reverse

Operation mode

The EUT operated under Tx (Dual), Rx and standby mode during all the tests. It ran the test program "ART"

With individual verifying, the maximum output power was found out 1Mbps data rate for 802.11b mode and 6Mbps data rate for 802.11g mode, 6.5Mbps data rate for 802.11n HT 20 mode, 13.5Mbps data rate for 802.11n HT 40 mode. The final tests were executed under these conditions recorded in this report individually. Please refer the details below (Dual Tx total output power).

802.11b CH6	
Date rate	PK power (dBm)
1M	23.32
2M	22.58
5.5M	21.96
11M	21.44

802.11g CH6	
Date rate	PK power (dBm)
6M	27.96
9M	27.54
12M	27.21
18M	26.94
24M	26.61
36M	26.34
48M	26.12
54M	25.99

802.11n HT20 CH6	
Date rate	PK power (dBm)
6.5M	27.87
13M	27.33
19.5M	27.08
26M	26.85
39M	26.57
52M	26.37
58.5M	26.09
65M	25.98

802.11n HT40 CH6	
Date rate	PK power (dBm)
13.5M	25.03
27M	24.93
40.5M	24.84
54M	24.51
81M	24.13
108M	23.82
121.5M	23.54
135M	23.31

3. Maximum 6dB Bandwidth

Name of Test	Maximum 6dB Bandwidth
Base Standard	FCC 15.247 a(2), KDB558074

Tested By: Rex Liao
Test Date: Feb. 29, 2008

Test Equipment: EC1365

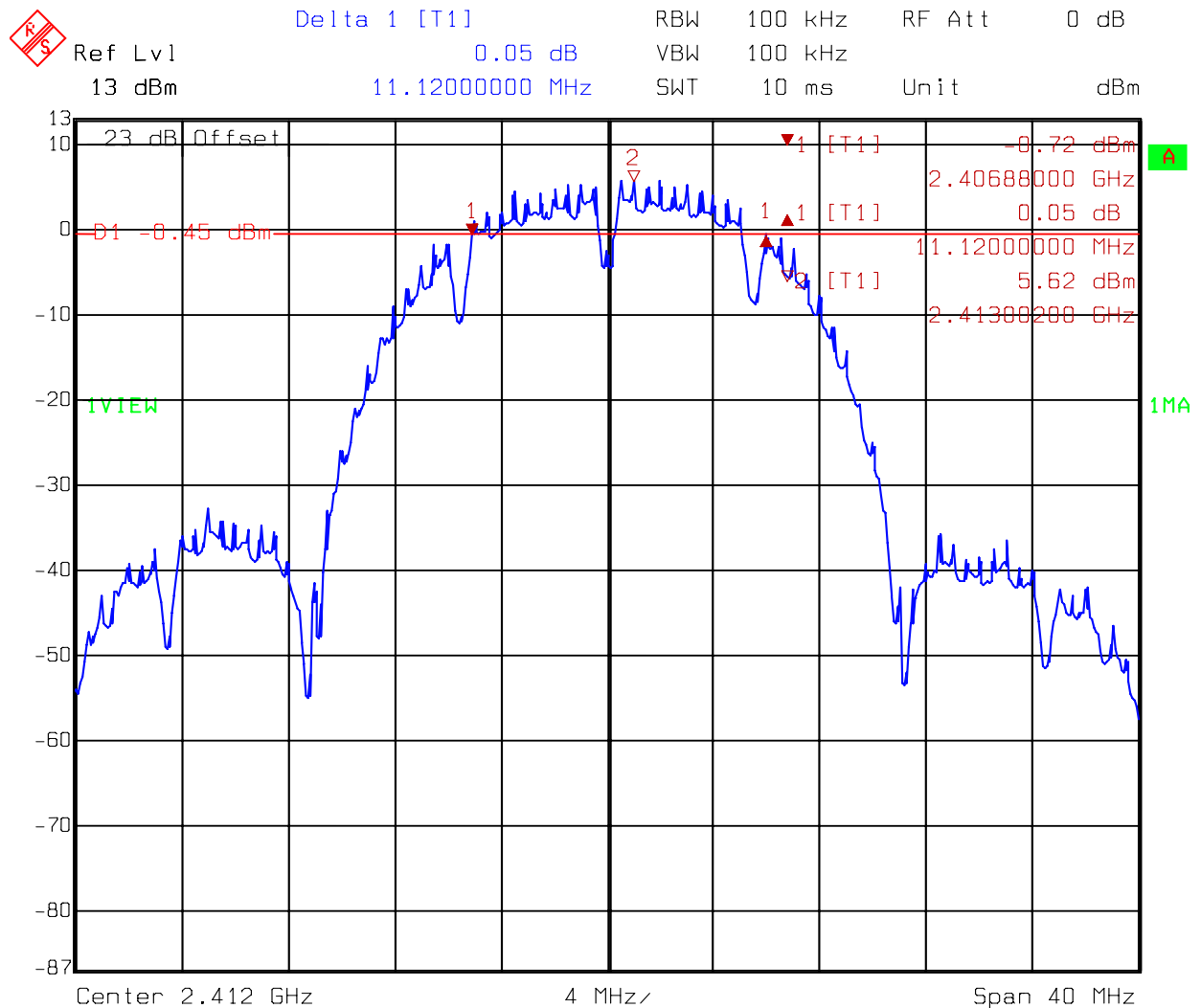
Test Result: Complies
Test Method: See Appendix B
Measurement Data: See Table & plots below

Note: The EUT was tested while in a continuous transmit mode. The EUT was tuned to a low, middle and high channel.

Table1. Maximum 6dB Bandwidth

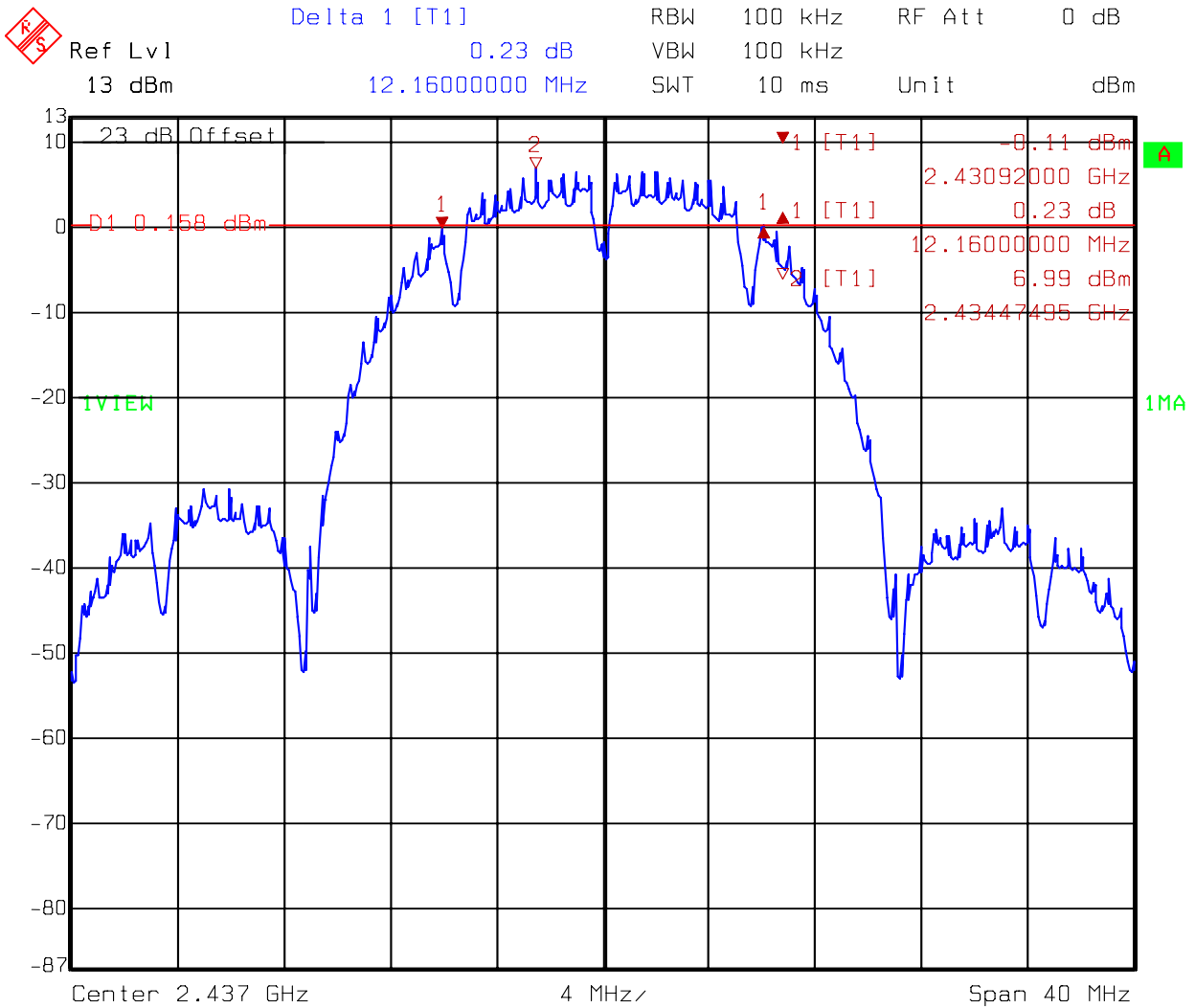
Mode	Channel	Frequency (MHz)	6dB Bandwidth (MHz)		Min. Limit (MHz)	Pass/Fail
			Chain A	Chain B		
802.11b	1	2412	11.12	12.64	0.5	Pass
	6	2437	12.16	12.56	0.5	Pass
	11	2462	12.64	12.56	0.5	Pass
802.11g	1	2412	16.64	16.64	0.5	Pass
	6	2437	16.48	16.56	0.5	Pass
	11	2462	16.64	16.72	0.5	Pass
802.11n HT20	1	2412	17.68	17.75	0.5	Pass
	6	2437	17.68	18.08	0.5	Pass
	11	2462	17.76	18.24	0.5	Pass
802.11n HT40	3	2422	36.90	36.78	0.5	Pass
	6	2437	36.78	36.78	0.5	Pass
	9	2452	36.78	36.78	0.5	Pass

Chain A: 6dB Bandwidth @ 802.11b mode channel 1



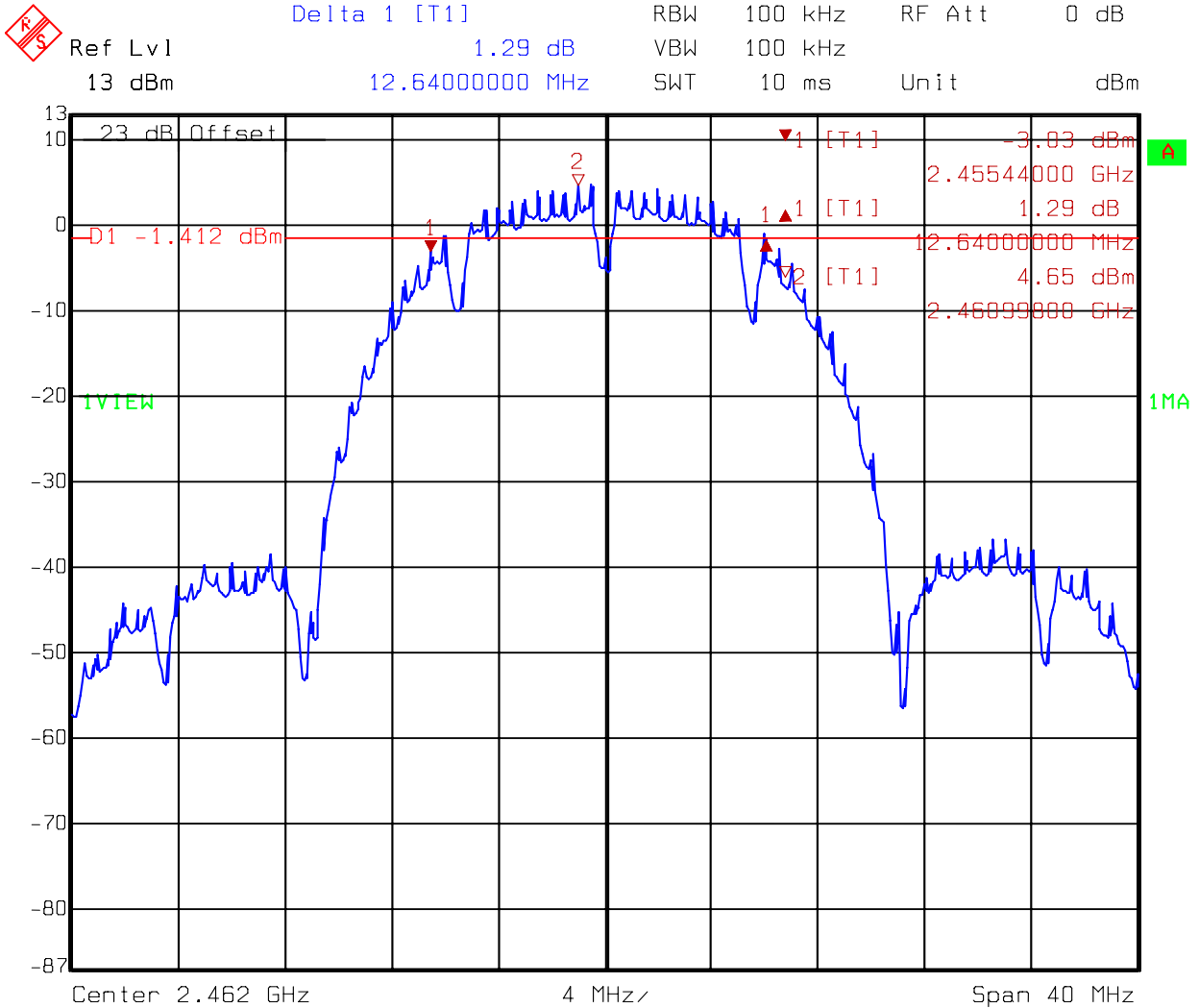
```
Title:      6dB Band-Width
Comment A: CH 1 at 802.11b mode
Date:      29.FEB.2008  09:54:40
```

Chain A: 6dB Bandwidth @ 802.11b mode channel 6



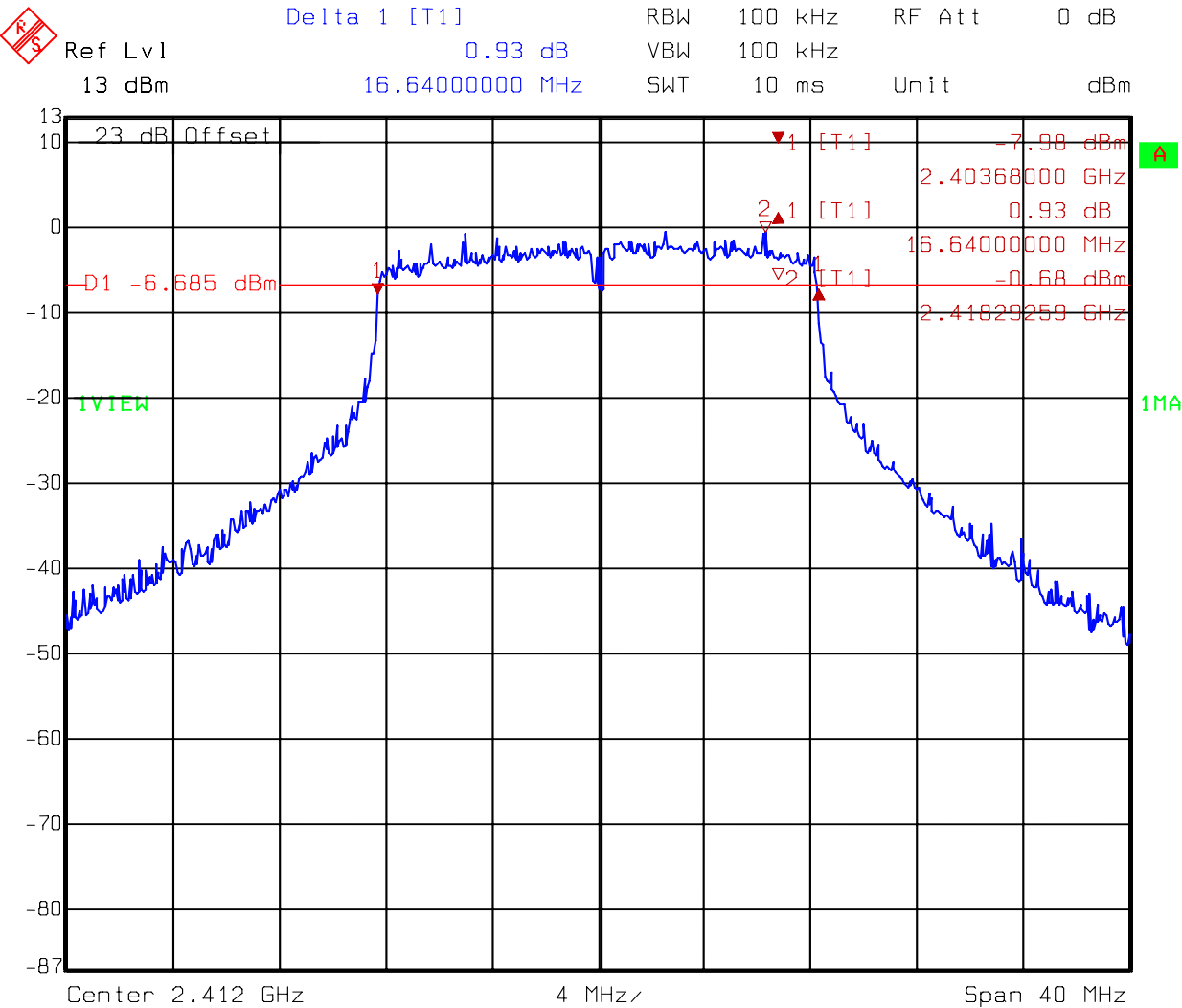
Title: 6dB Band-Width
Comment A: CH 6 at 802.11b mode
Date: 29.FEB.2008 10:05:45

Chain A: 6dB Bandwidth @ 802.11b mode channel 11



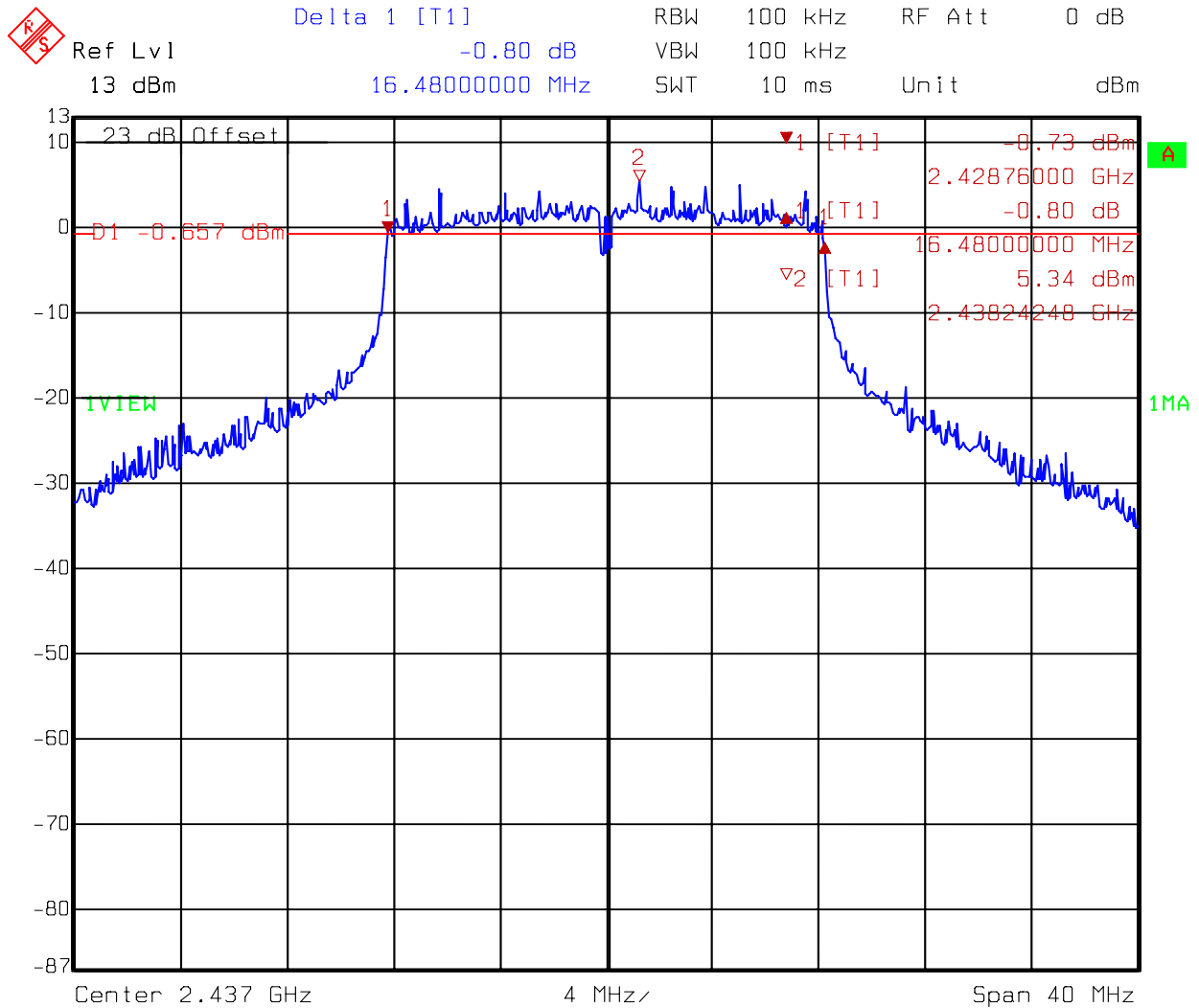
Title: 6dB Band-Width
Comment A: CH 11 at 802.11b mode
Date: 29.FEB.2008 10:14:13

Chain A: 6dB Bandwidth @ 802.11g mode channel 1



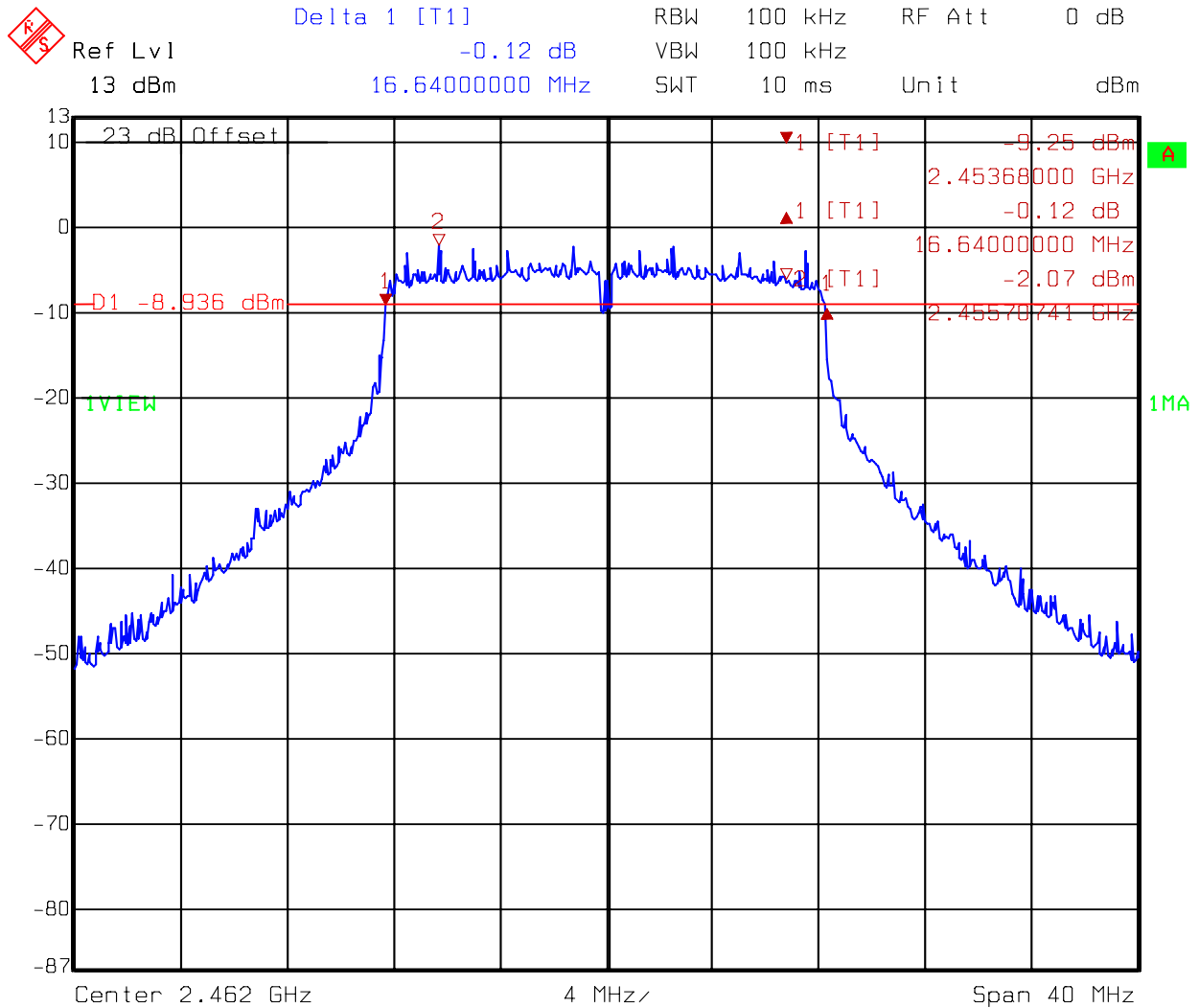
Title: 6dB Band-Width
Comment A: CH 1 at 802.11g mode
Date: 29.FEB.2008 10:23:05

Chain A: 6dB Bandwidth @ 802.11g mode channel 6



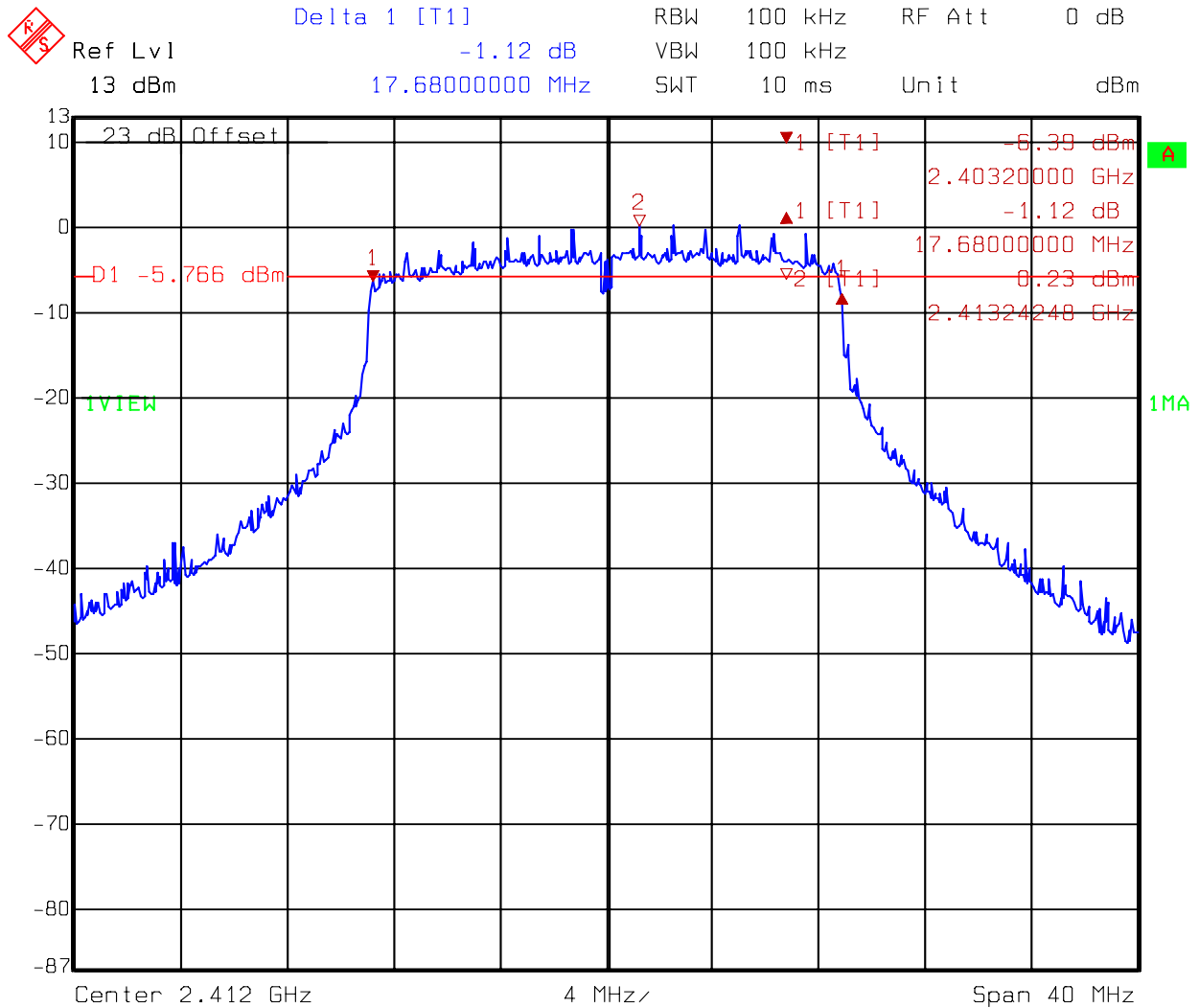
Title: 6dB Band-Width
Comment A: CH 6 at 802.11g mode
Date: 29.FEB.2008 10:35:43

Chain A: 6dB Bandwidth @ 802.11g mode channel 11



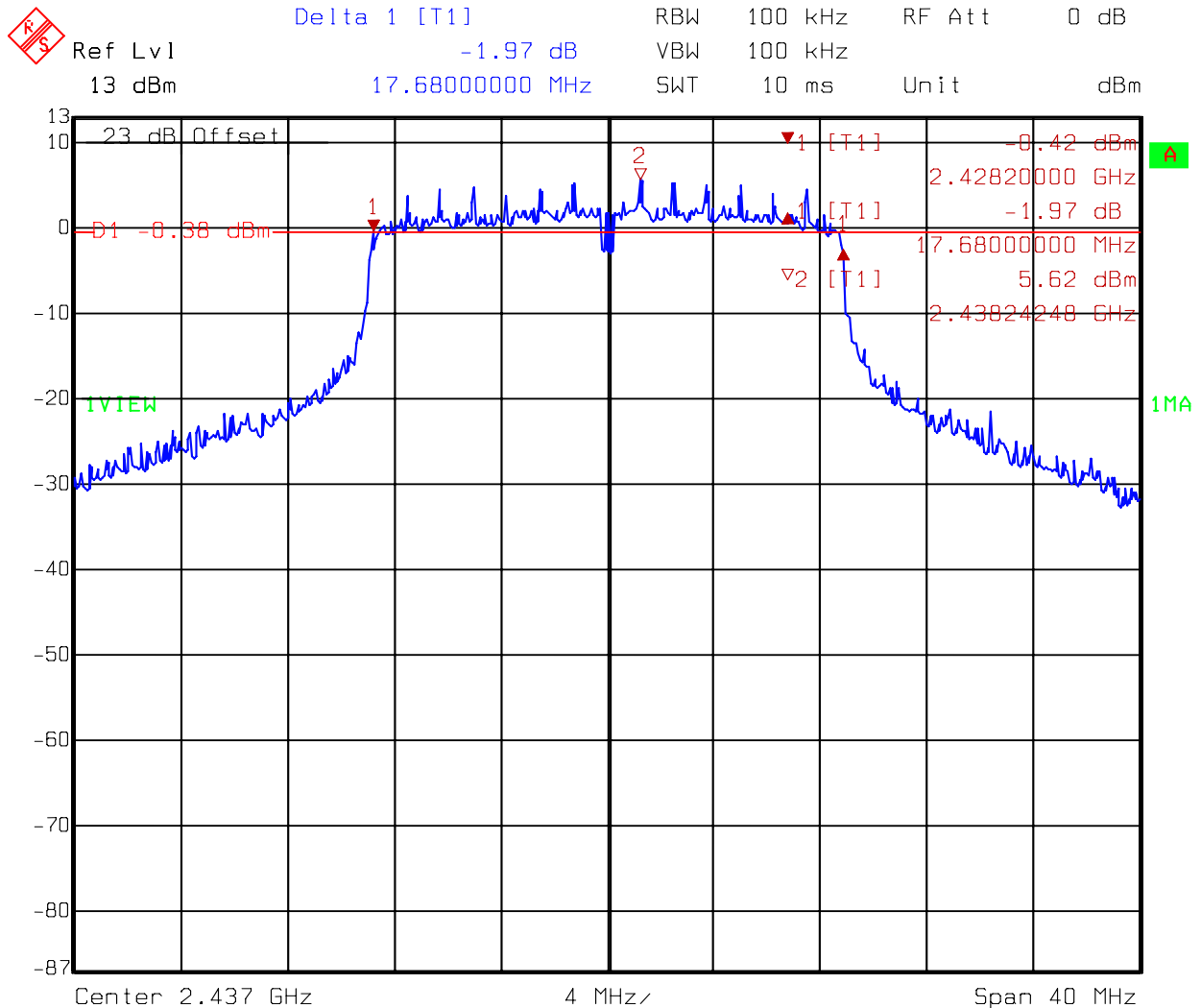
Title: 6dB Band-Width
Comment A: CH 11 at 802.11g mode
Date: 29.FEB.2008 10:40:15

Chain A: 6dB Bandwidth @ 802.11n HT20 mode channel 1



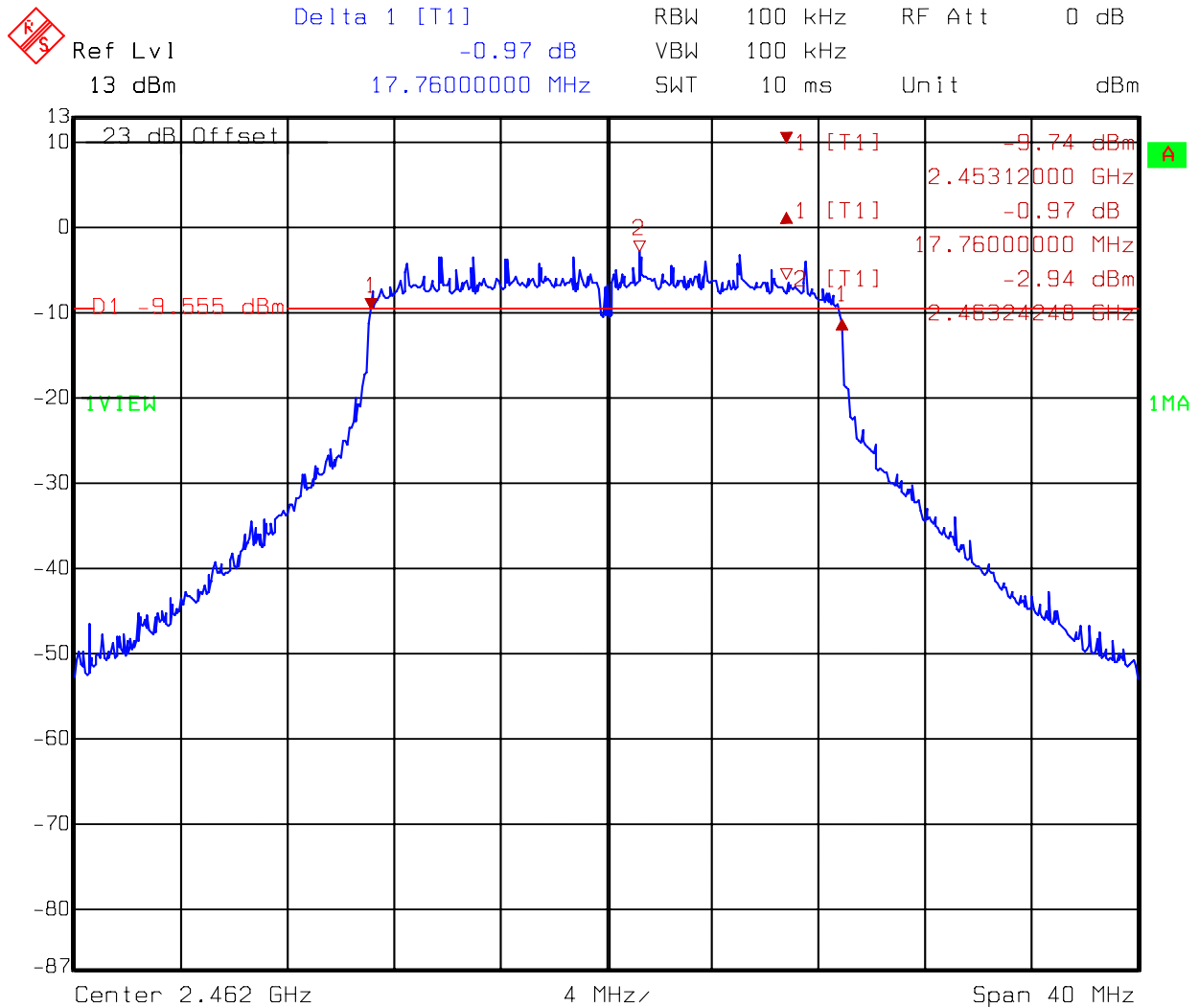
Title: 6dB Band-Width
Comment A: CH 1 at 802.11n 20MHz mode
Date: 29.FEB.2008 11:13:17

Chain A: 6dB Bandwidth @ 802.11n HT20 mode channel 6



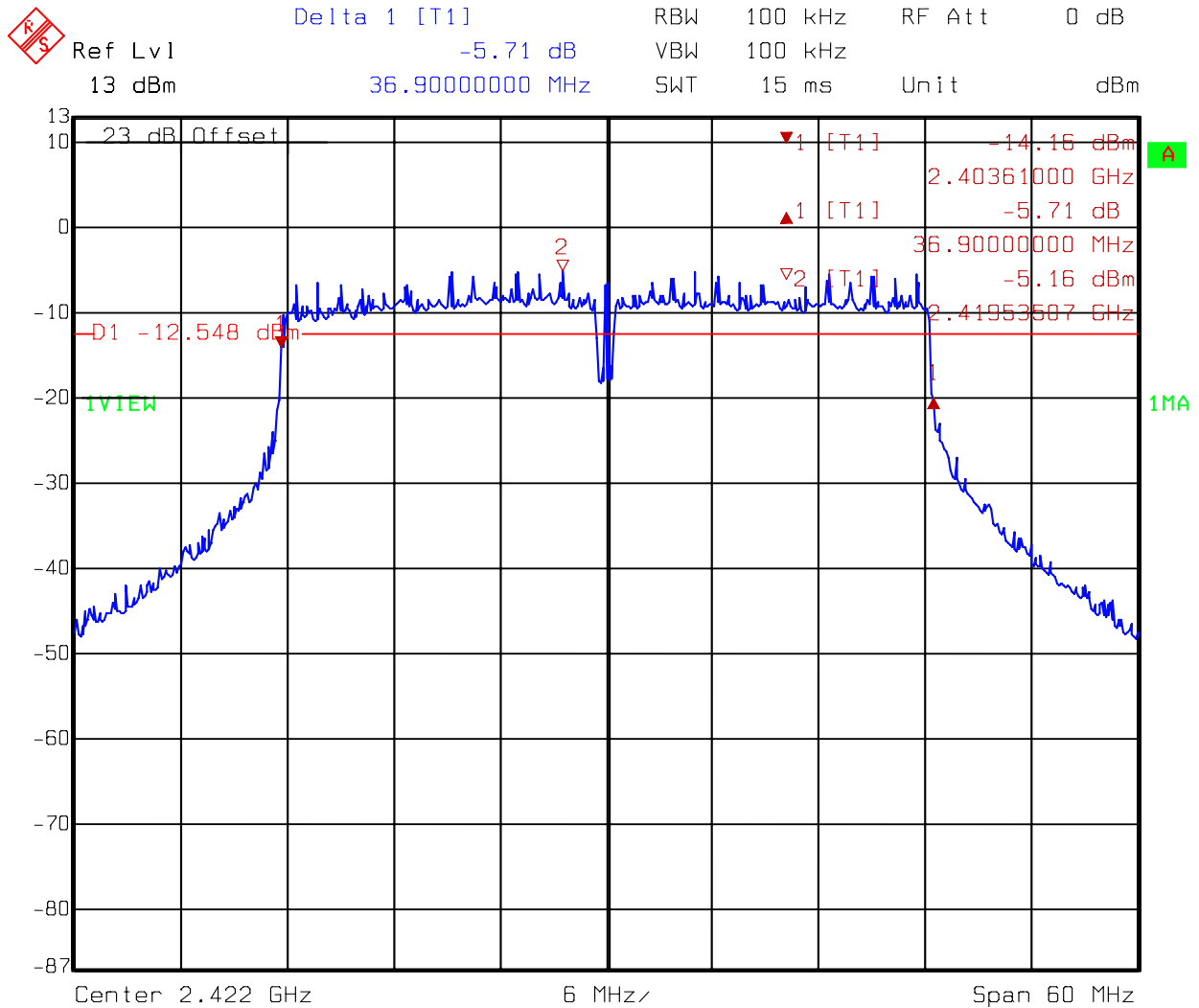
Title: 6dB Band-Width
Comment A: CH 6 at 802.11n 20MHz mode
Date: 29.FEB.2008 11:00:50

Chain A: 6dB Bandwidth @ 802.11n HT20 mode channel 11



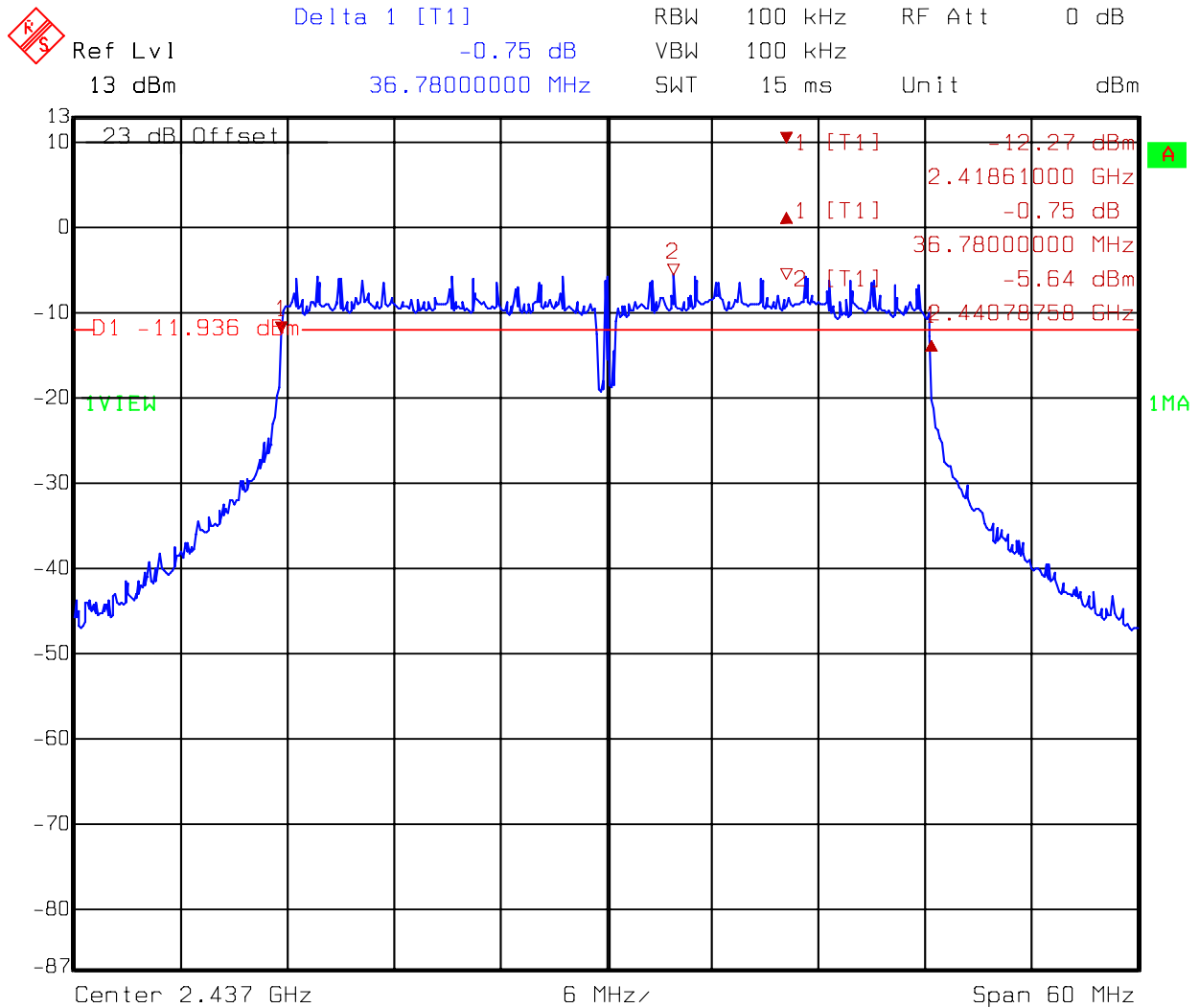
Title: 6dB Band-Width
Comment A: CH 11 at 802.11n 20MHz mode

Chain A: 6dB Bandwidth @ 802.11n HT40 mode channel 3



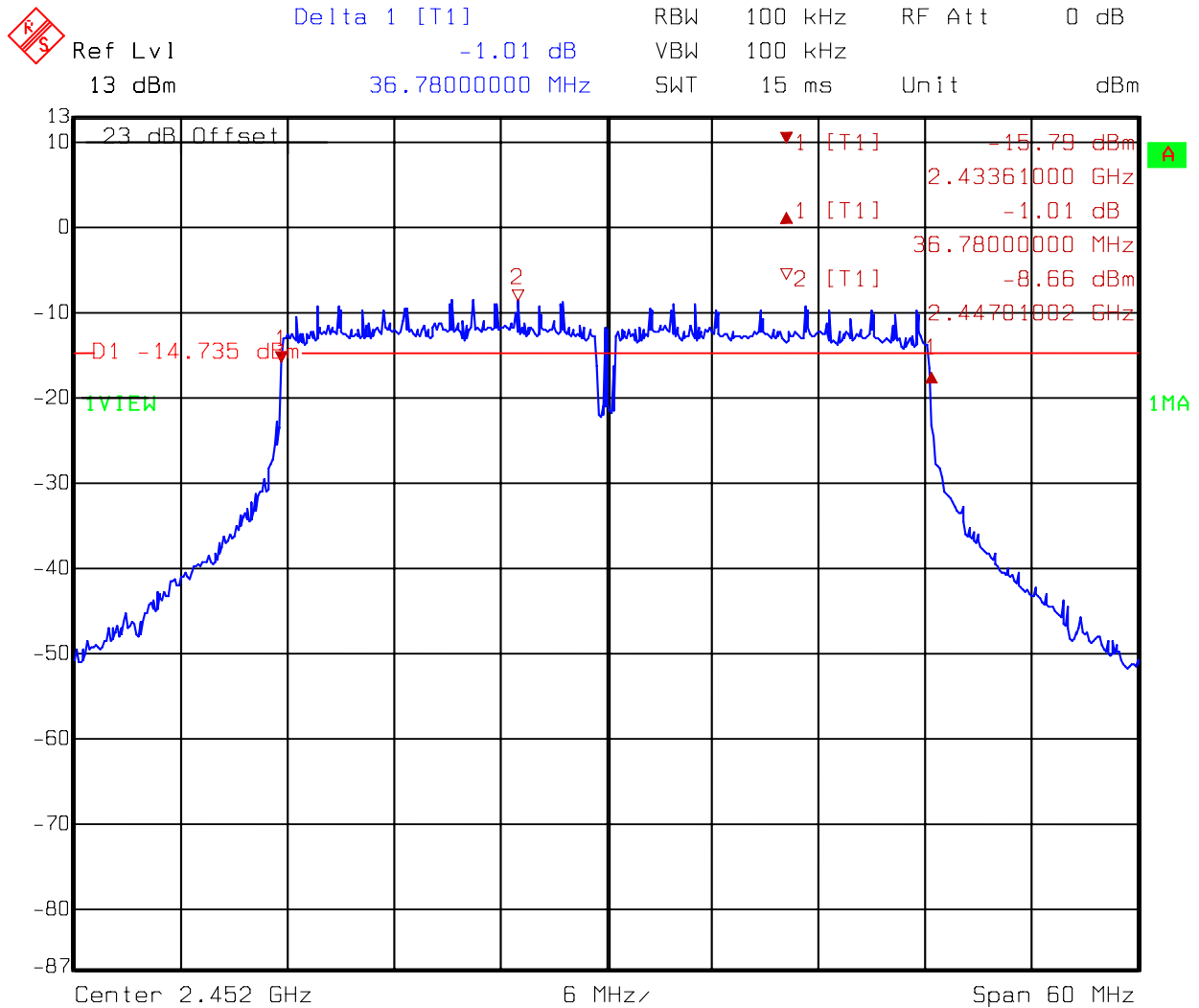
Title: 6dB Band-Width
Comment A: CH 3 at 802.11n 40MHz mode
Date: 29.FEB.2008 11:16:56

Chain A: 6dB Bandwidth @ 802.11n HT40 mode channel 6



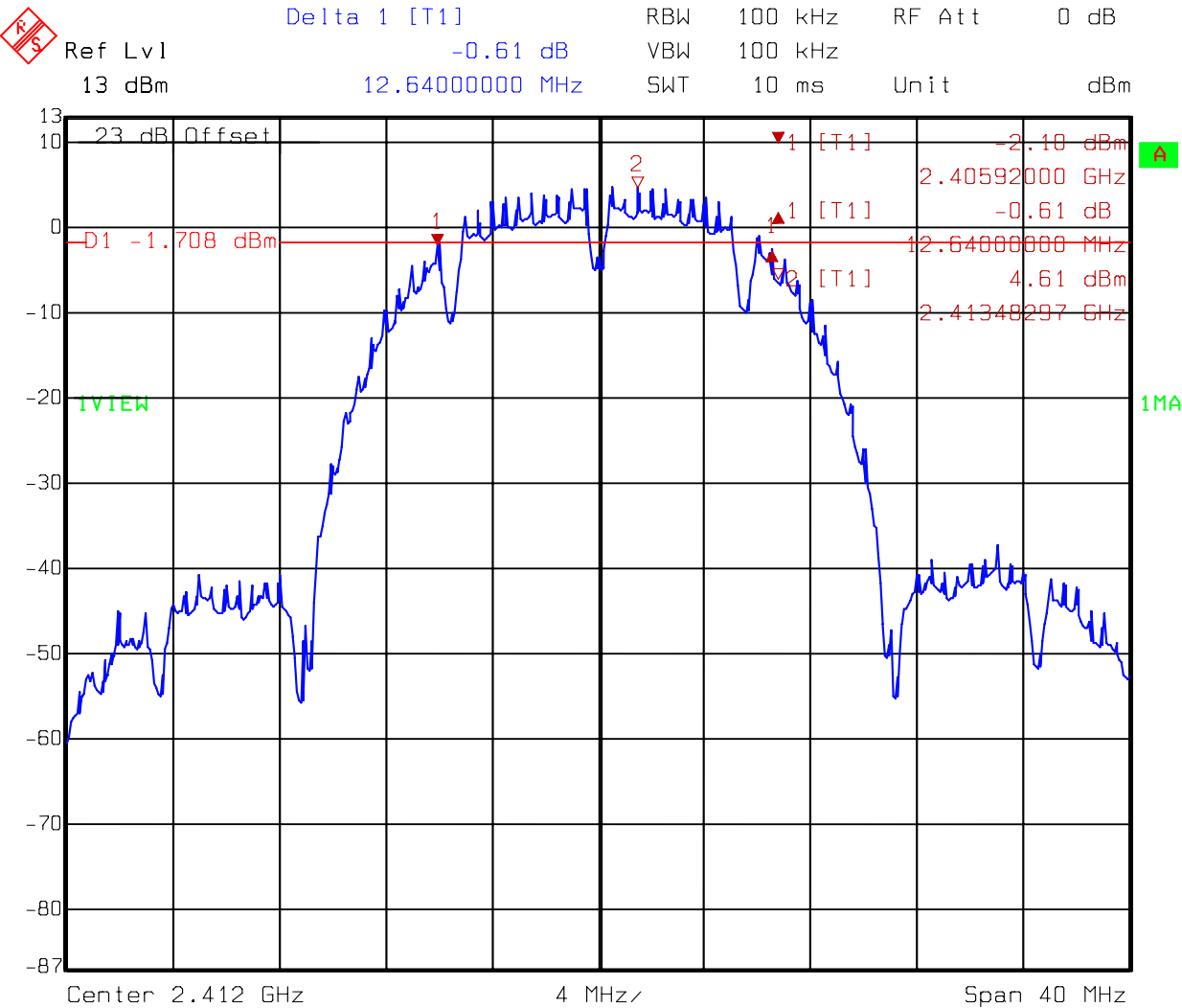
Title: 6dB Band-Width
Comment A: CH 6 at 802.11n 40MHz mode
Date: 03.MAR.2008 10:58:09

Chain A: 6dB Bandwidth @ 802.11n HT40 mode channel 9



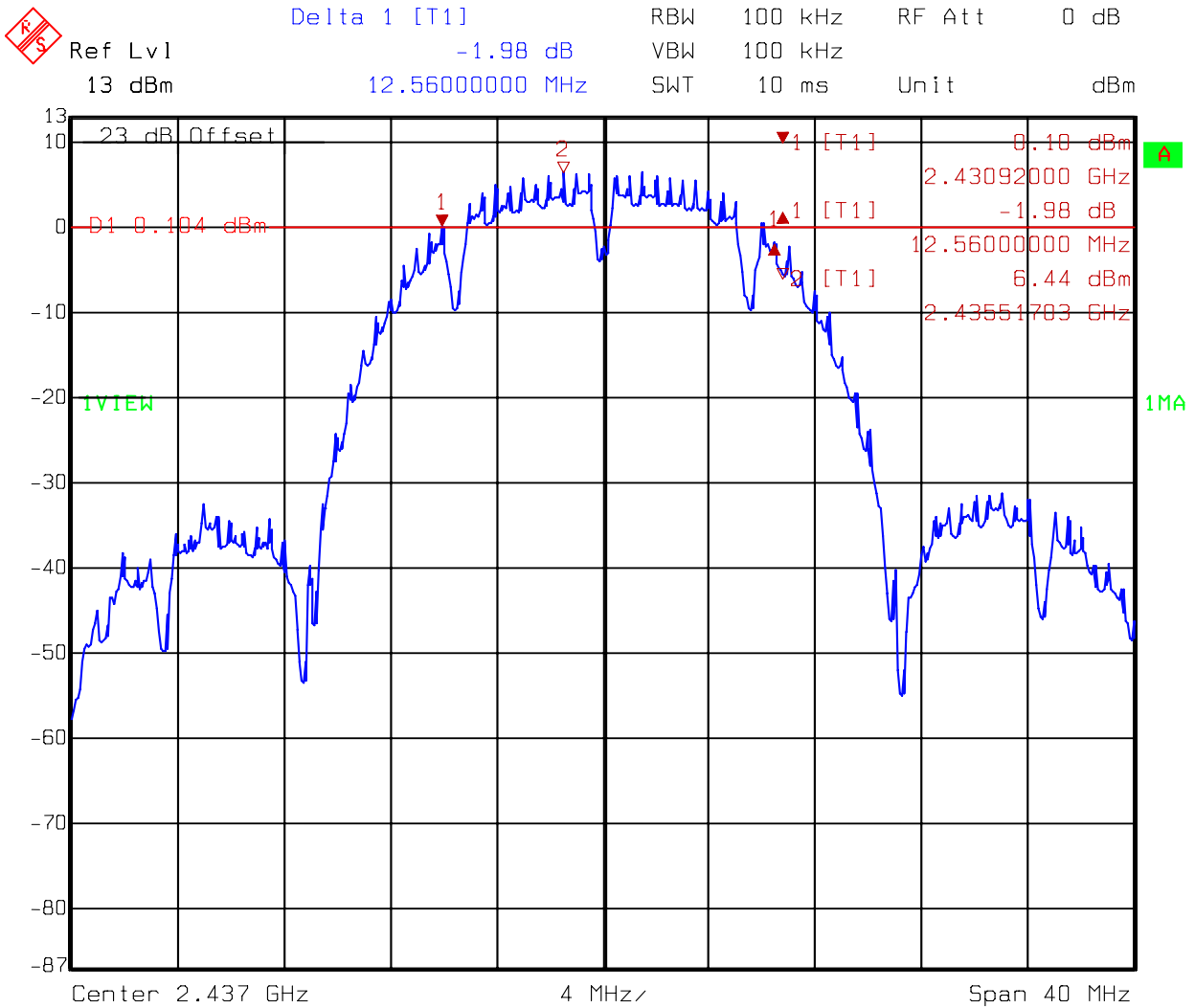
Title: 6dB Band-Width
Comment A: CH 9 at 802.11n 40MHz mode
Date: 29.FEB.2008 11:40:02

Chain B: 6dB Bandwidth @ 802.11b mode channel 1



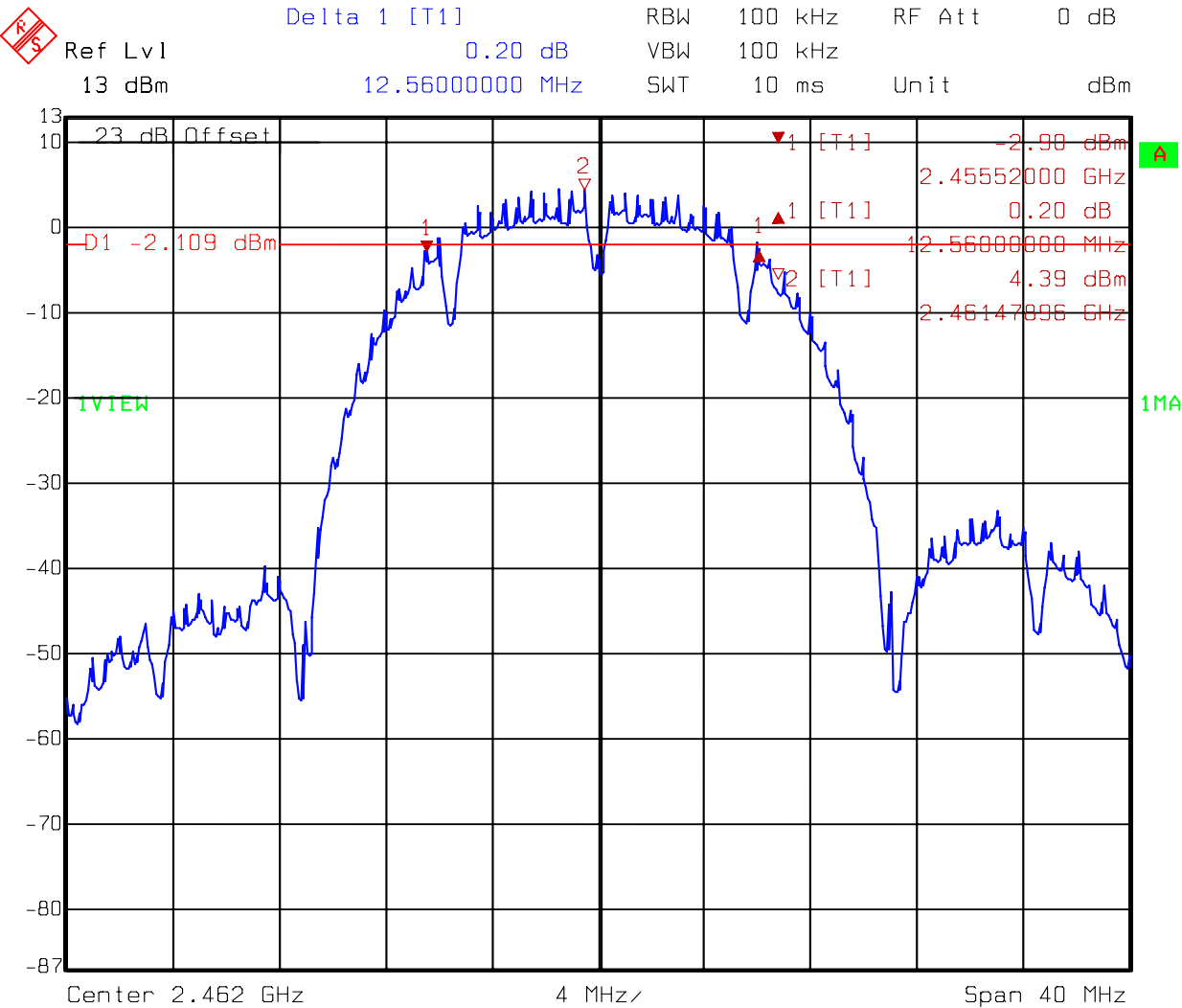
Title: 6dB Band-Width
Comment A: CH 1 at 802.11b mode
Date: 29.FEB.2008 09:58:22

Chain B: 6dB Bandwidth @ 802.11b mode channel 6



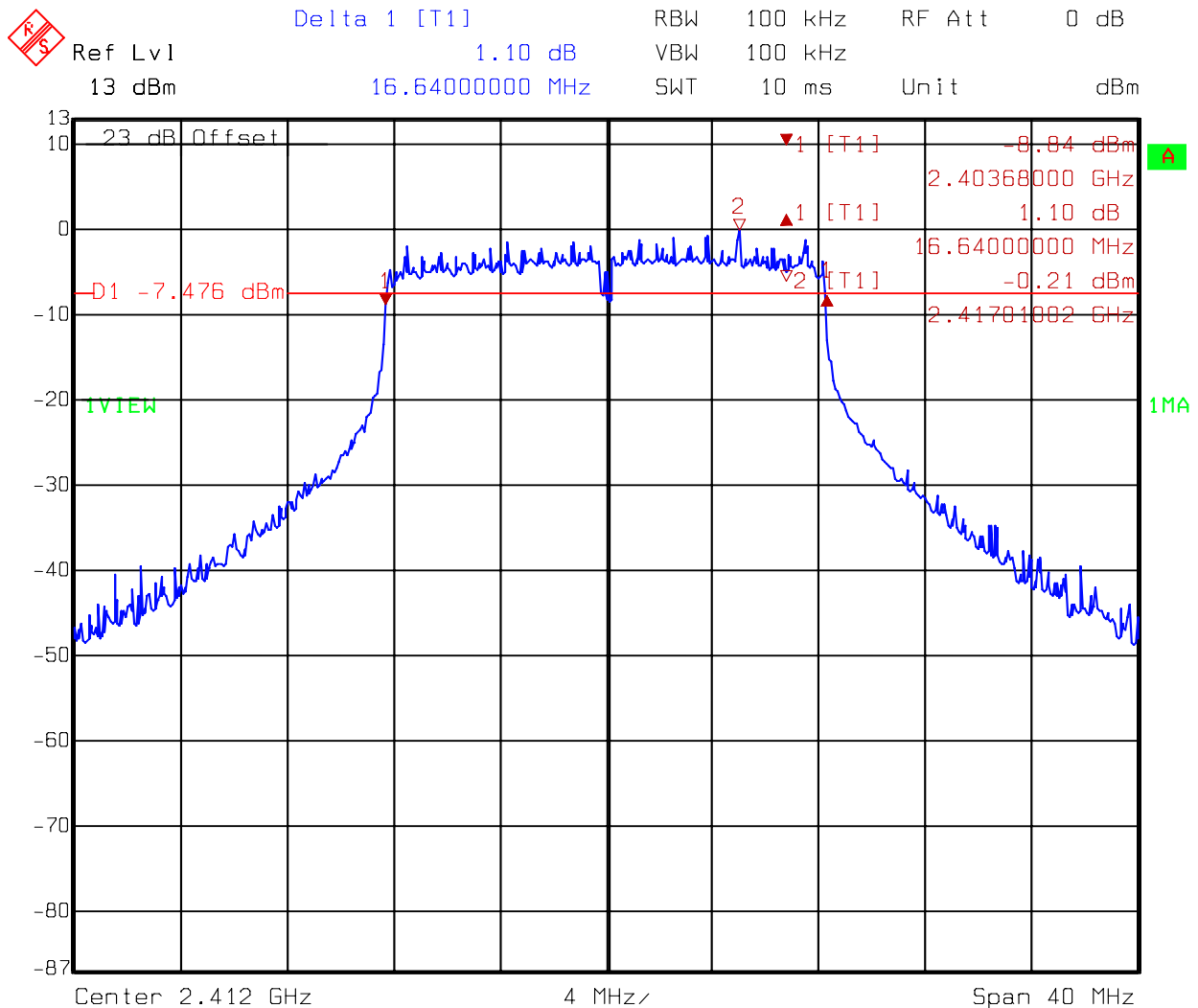
Title: 6dB Band-Width
Comment A: CH 6 at 802.11b mode
Date: 29.FEB.2008 10:08:54

Chain B: 6dB Bandwidth @ 802.11b mode channel 11



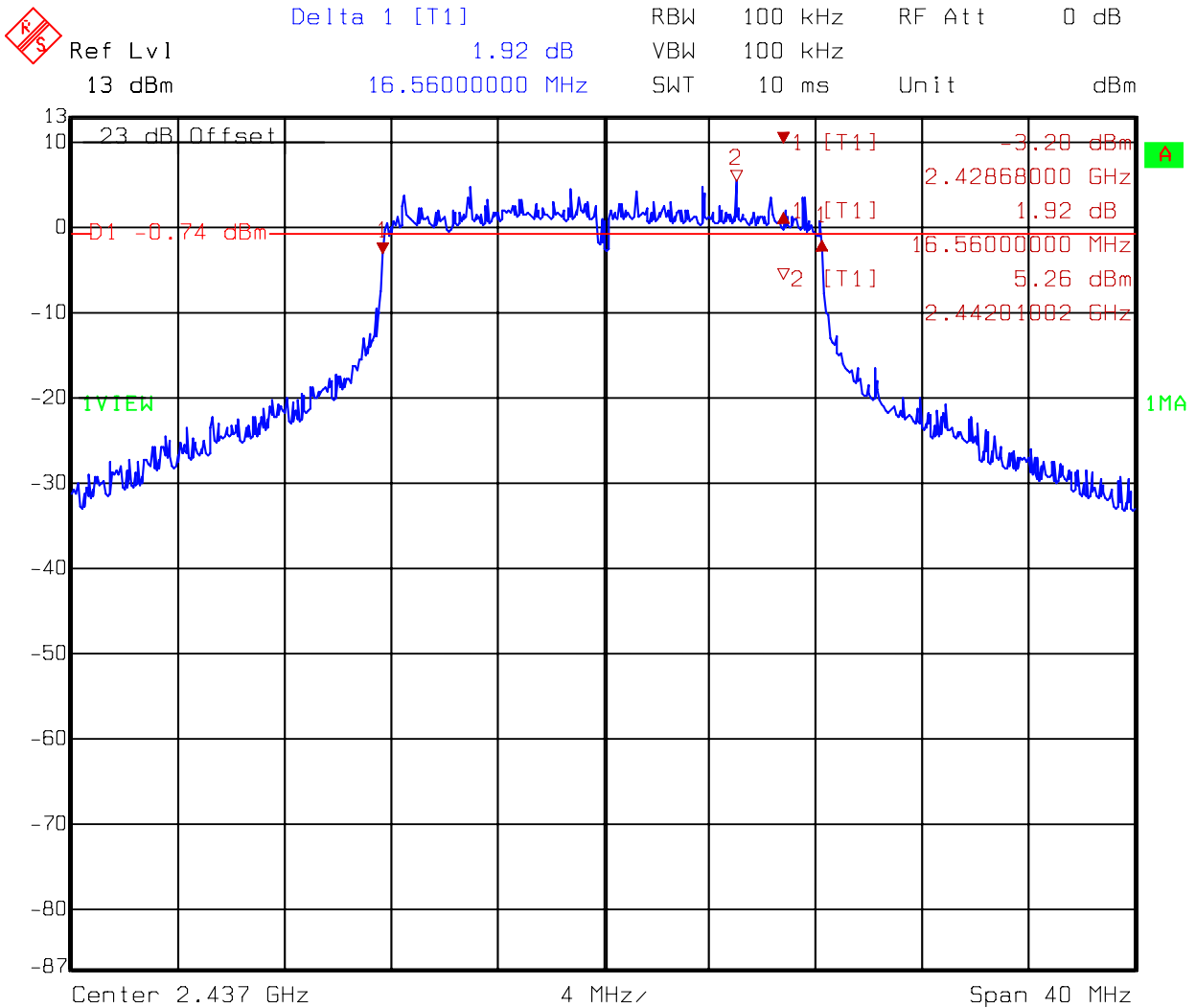
Title: 6dB Band-Width
Comment A: CH 11 at 802.11b mode
Date: 29.FEB.2008 10:17:40

Chain B: 6dB Bandwidth @ 802.11g mode channel 1



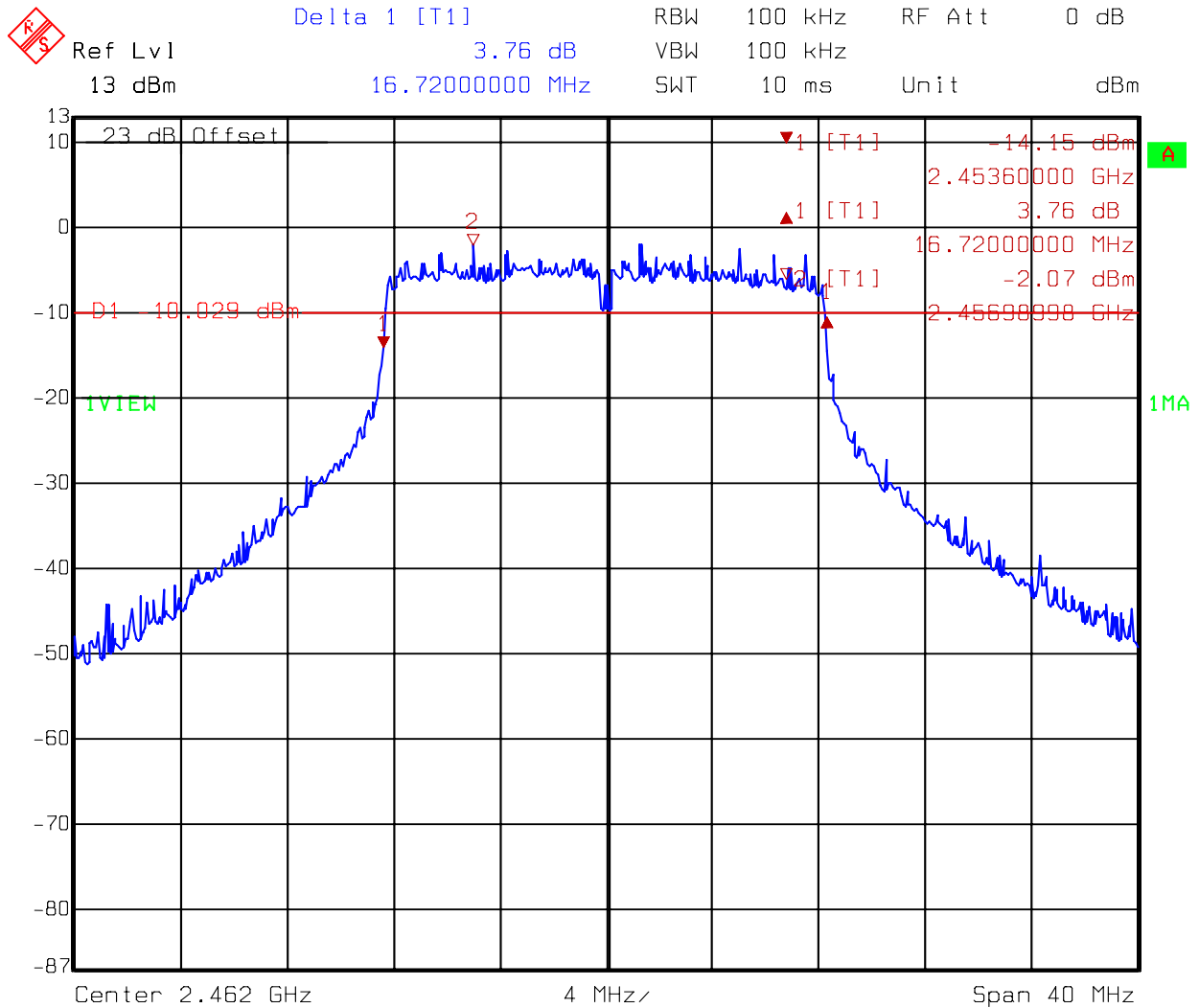
Title: 6dB Band-Width
Comment A: CH 1 at 802.11g mode
Date: 29.FEB.2008 10:26:16

Chain B: 6dB Bandwidth @ 802.11g mode channel 6



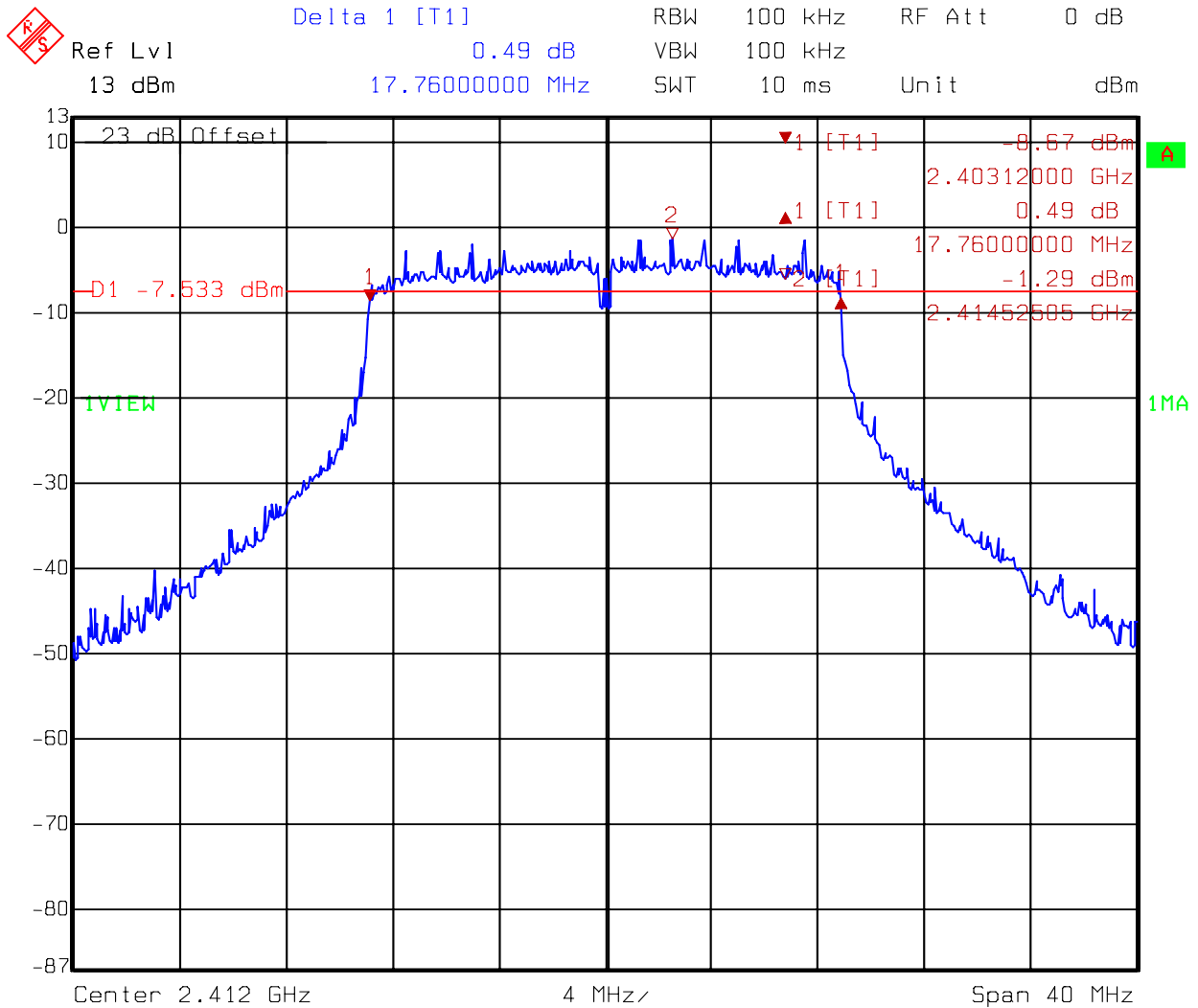
Title: 6dB Band-Width
Comment A: CH 6 at 802.11g mode
Date: 29.FEB.2008 10:32:14

Chain B: 6dB Bandwidth @ 802.11g mode channel 11



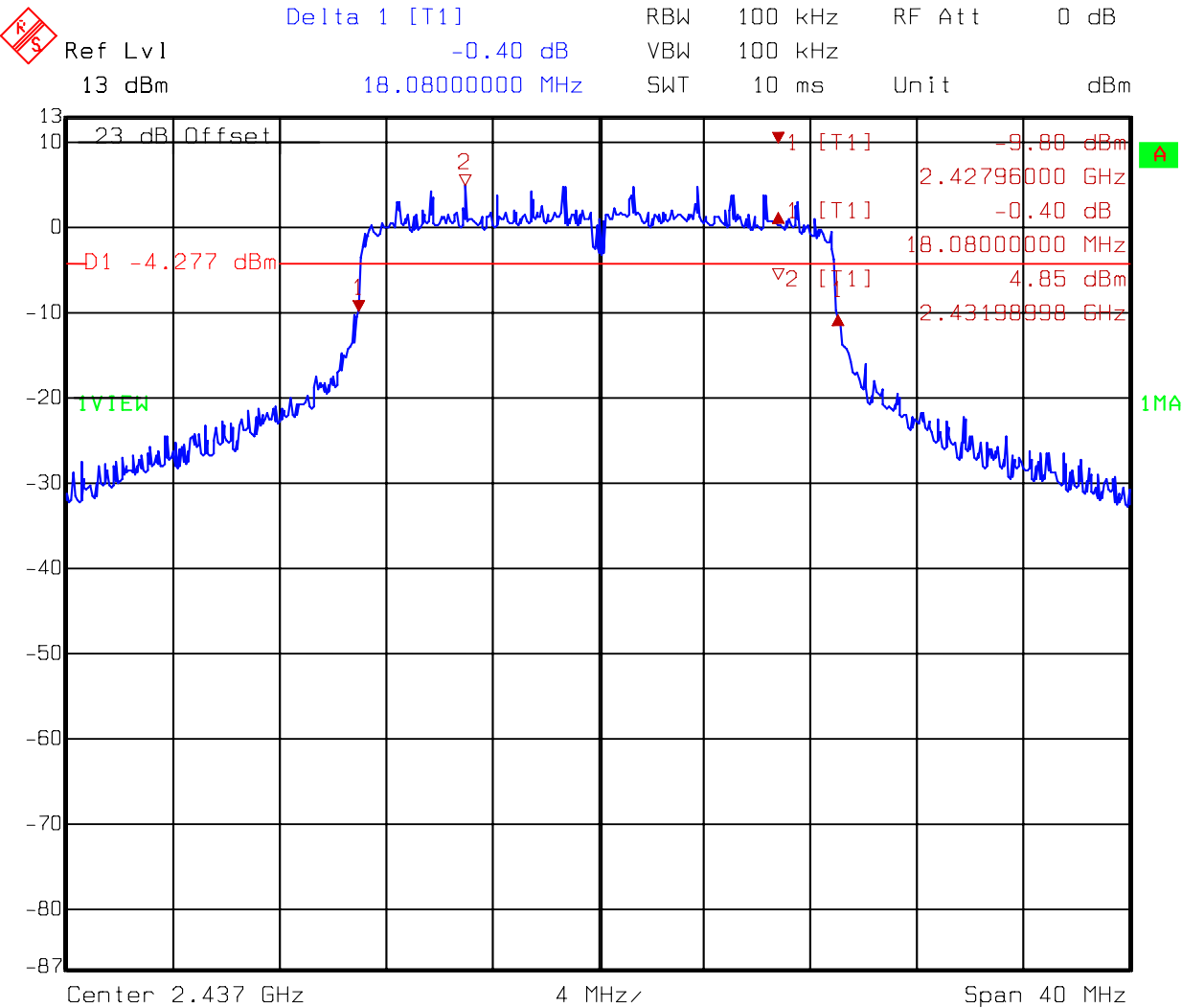
Title: 6dB Band-Width
Comment A: CH 11 at 802.11g mode
Date: 29.FEB.2008 10:43:27

Chain B: 6dB Bandwidth @ 802.11n HT20 mode channel 1



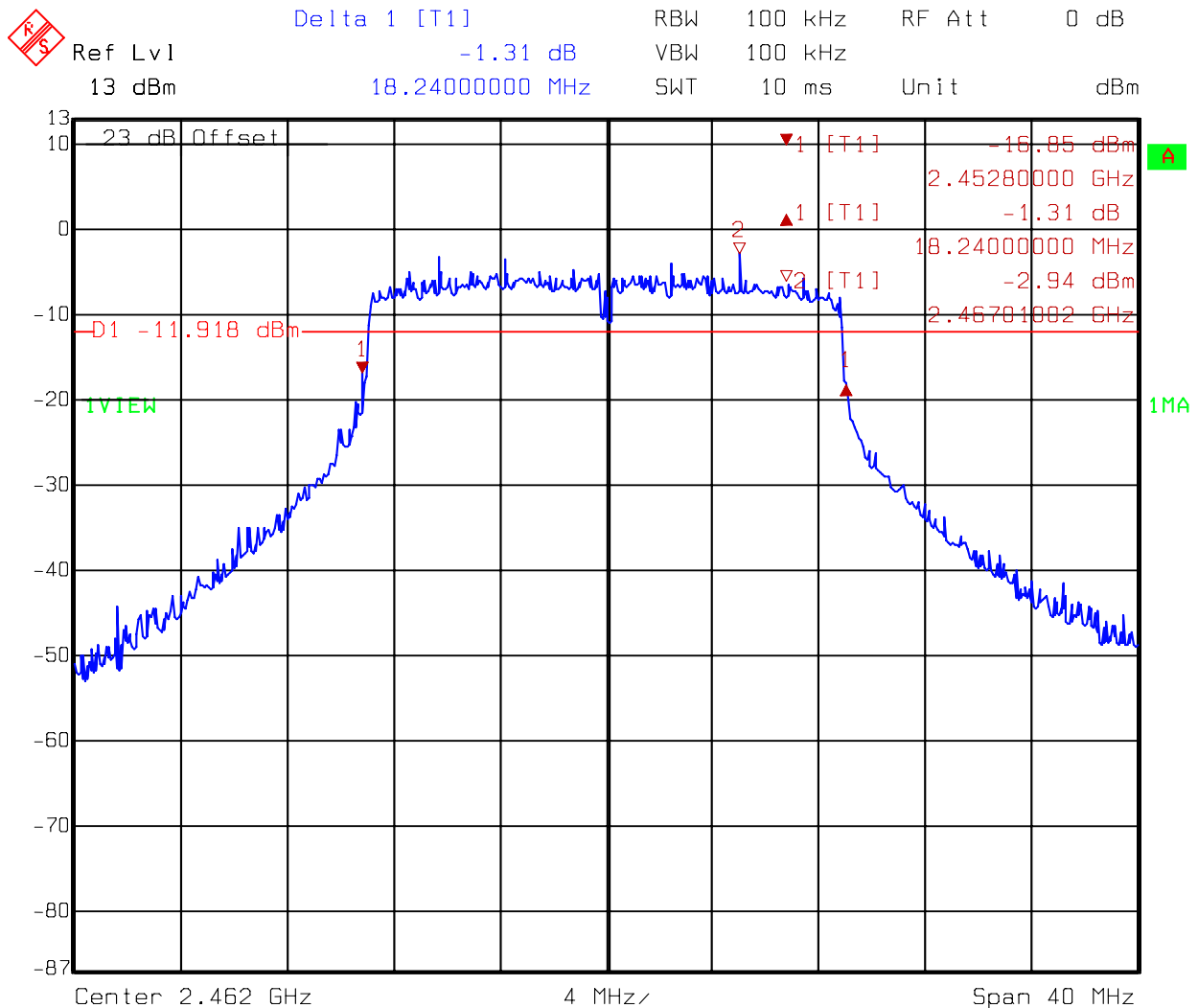
Title: 6dB Band-Width
Comment A: CH 1 at 802.11n 20MHz mode
Date: 29.FEB.2008 11:09:46

Chain B: 6dB Bandwidth @ 802.11n HT20 mode channel 6



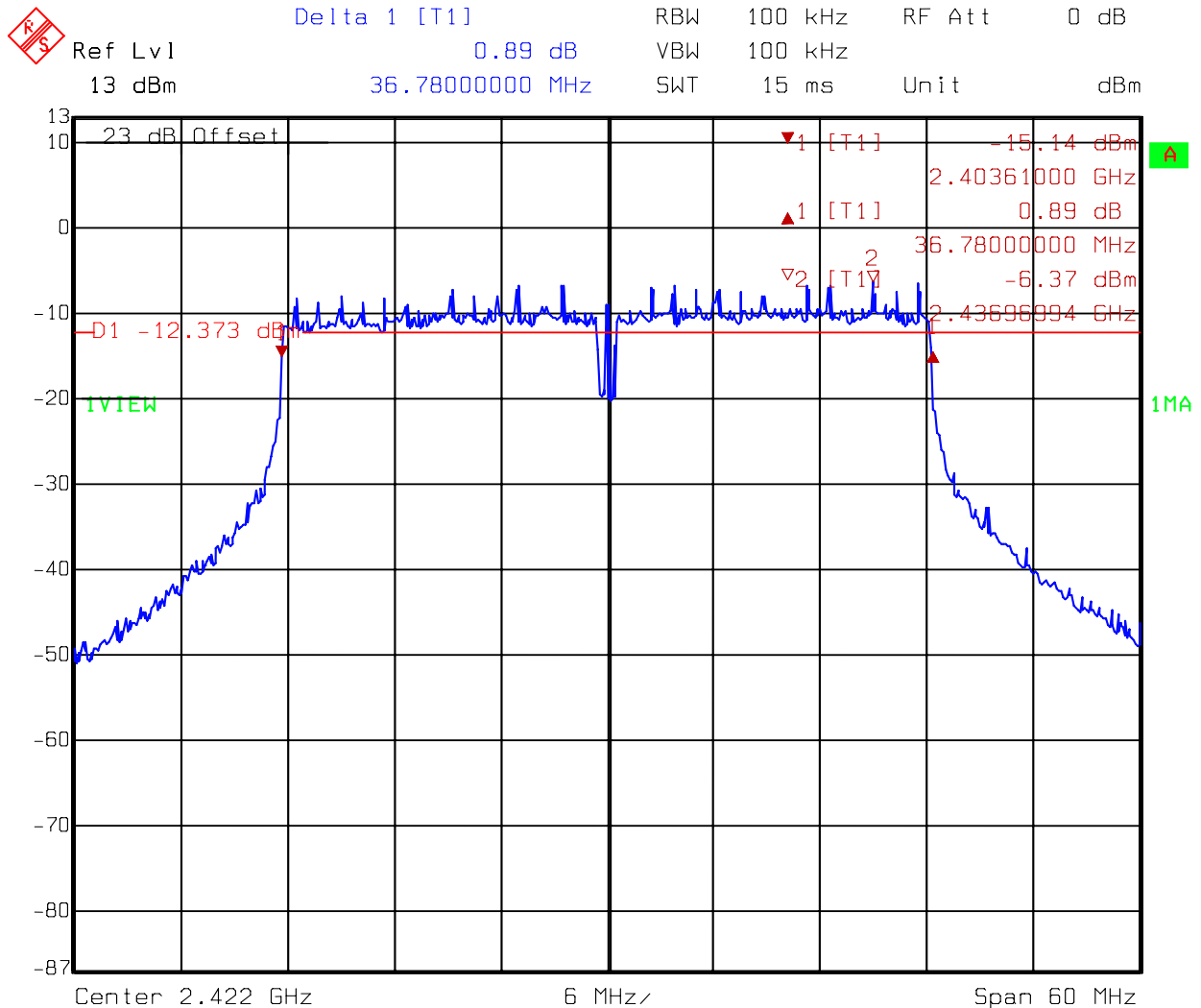
Title: 6dB Band-Width
 Comment A: CH 6 at 802.11n 20MHz mode
 Date: 29.FEB.2008 11:05:16

Chain B: 6dB Bandwidth @ 802.11n HT20 mode channel 11



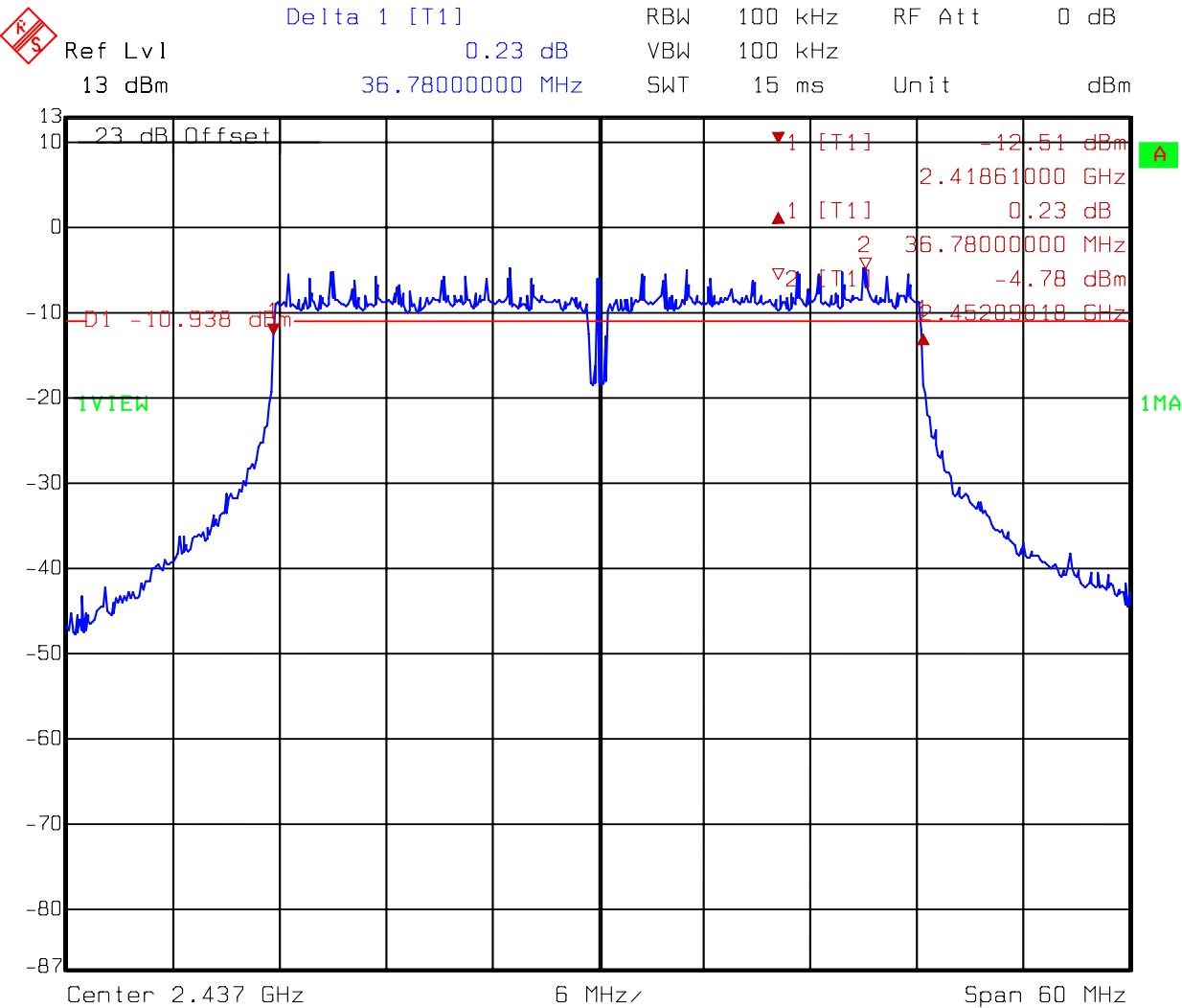
Title: 6dB Band-Width
Comment A: CH 11 at 802.11n 20MHz mode
Date: 29.FEB.2008 10:51:35

Chain B: 6dB Bandwidth @ 802.11n HT40 mode channel 3



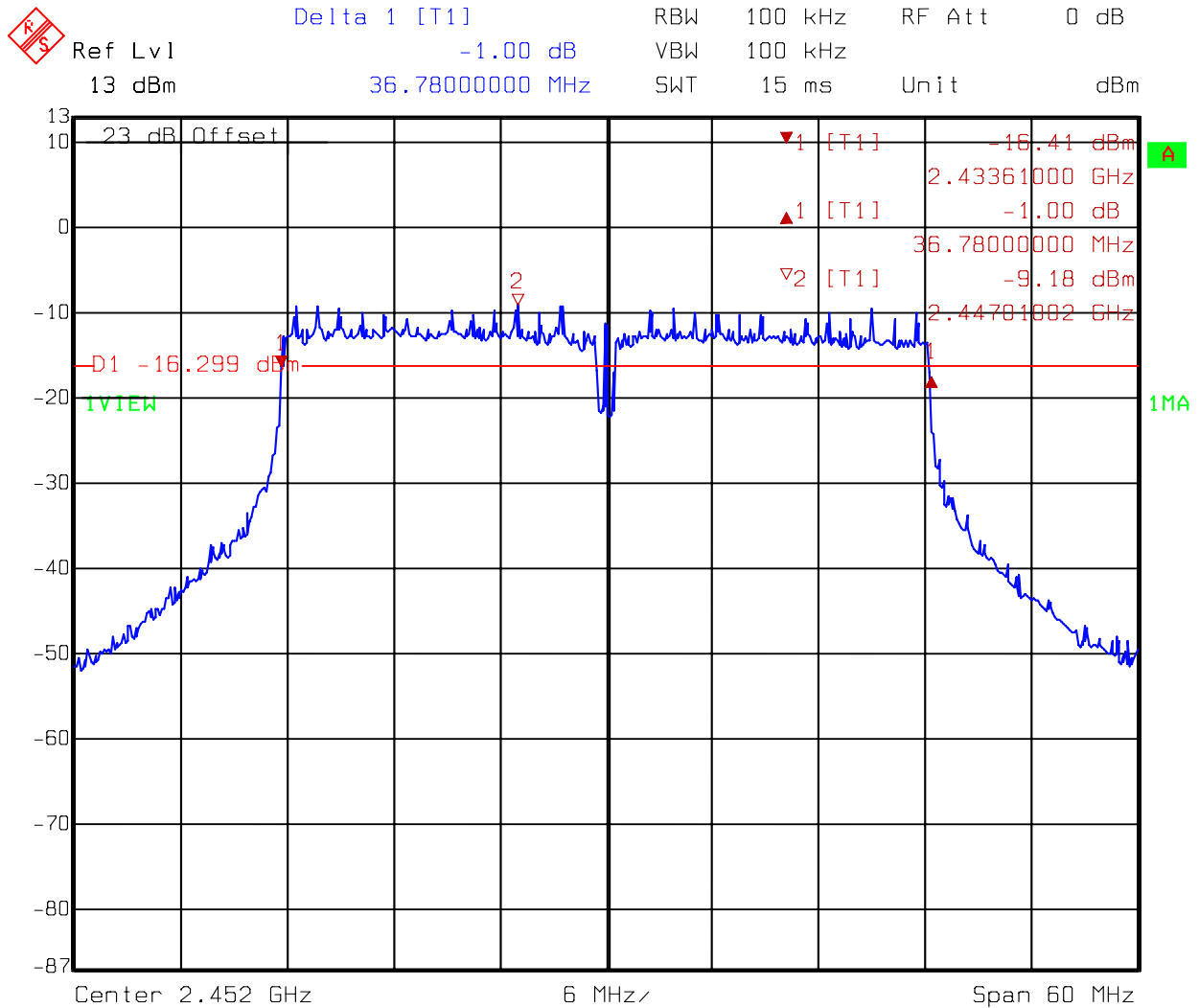
Title: 6dB Band-Width
Comment A: CH 3 at 802.11n 40MHz mode
Date: 29.FEB.2008 11:20:04

Chain B: 6dB Bandwidth @ 802.11n HT40 mode channel 6



Title: 6dB Band-Width
Comment A: CH 6 at 802.11n 40MHz mode
Date: 03.MAR.2008 11:49:13

Chain B: 6dB Bandwidth @ 802.11n HT40 mode channel 9



Title: 6dB Band-Width
Comment A: CH 9 at 802.11n 40MHz mode
Date: 29.FEB.2008 11:36:23

4. 99% Occupied Bandwidth

Name of Test	99% Occupied Bandwidth
Base Standard	None; for reporting purposes only

Tested By: Rex Liao
Test Date: Feb. 29, 2008

Test Equipment: EC1365

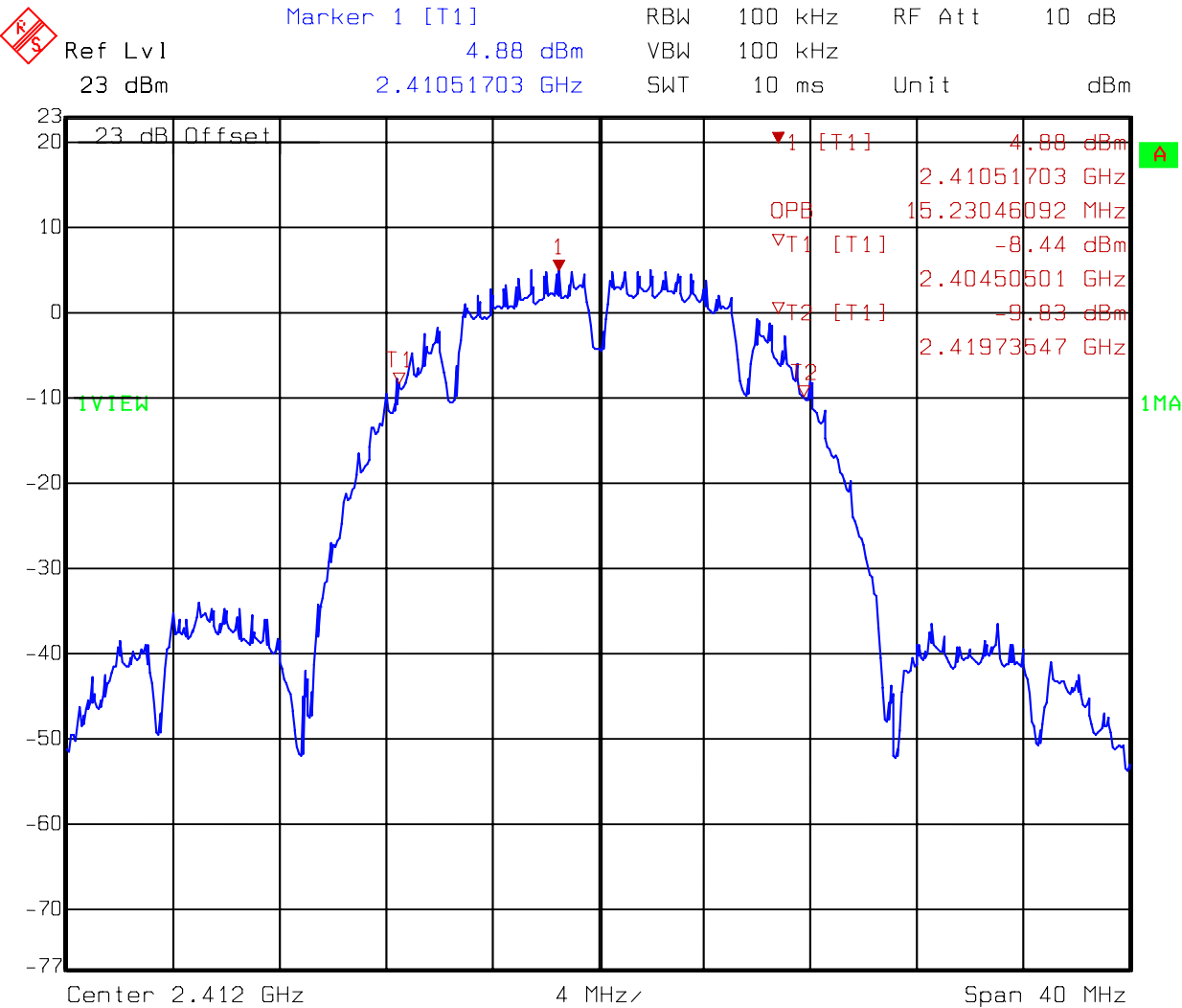
Test Result: Complies
Test Method: See Appendix B
Measurement Data: See Table & plots below

Note: The EUT was tested while in a continuous transmit mode. The EUT was tuned to a low, middle and high channel.

Table2. 99% Occupied Bandwidth

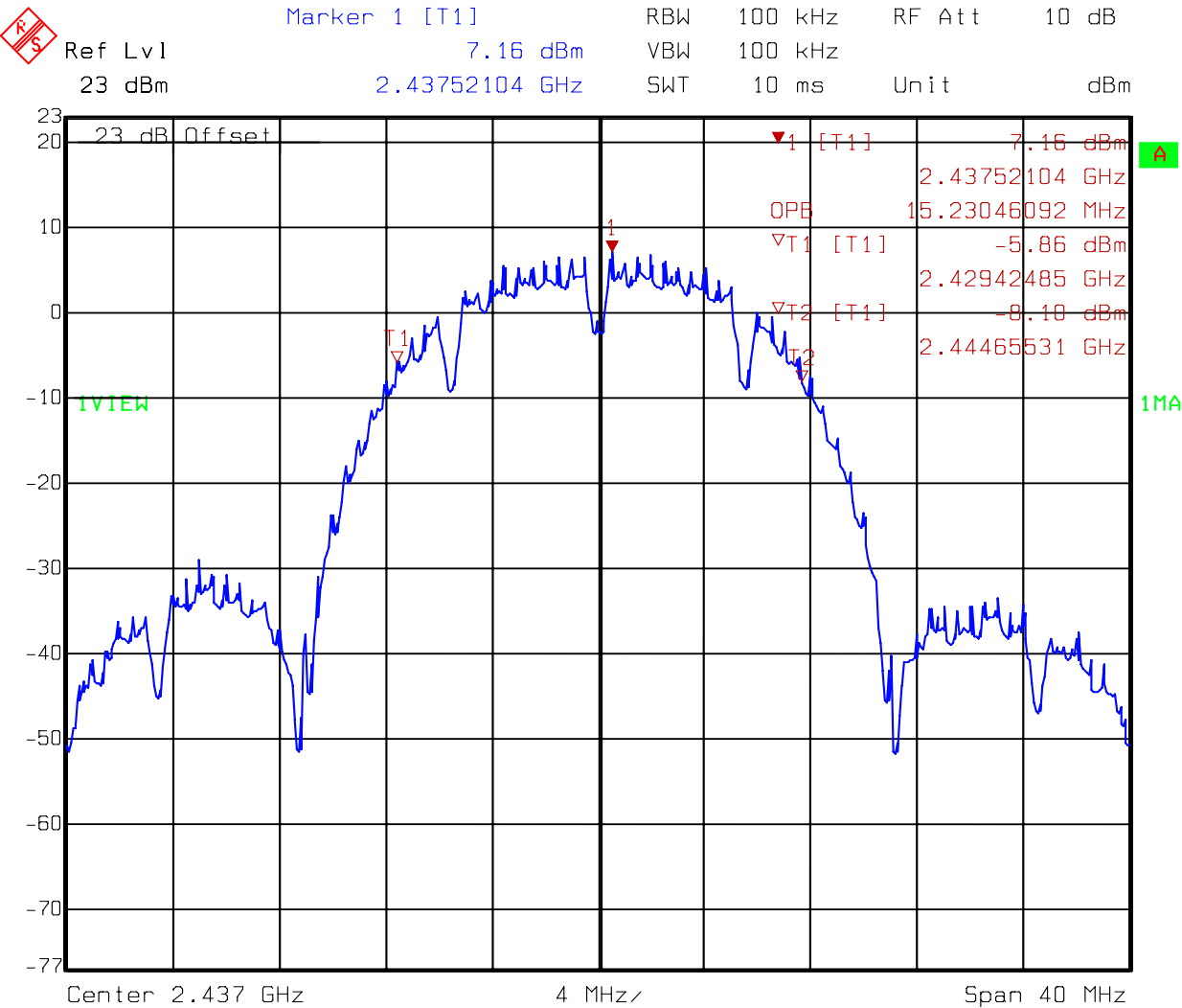
Mode	Channel	Frequency (MHz)	99% Bandwidth (MHz)	
			Chain A	Chain B
802.11b	1	2412	15.23	15.31
	6	2437	15.23	15.31
	11	2462	15.31	15.23
802.11g	1	2412	16.51	16.51
	6	2437	16.59	16.59
	11	2462	16.51	16.43
802.11n HT20	1	2412	17.72	17.64
	6	2437	17.88	17.80
	11	2462	17.72	17.72
802.11n HT40	3	2422	36.31	36.31
	6	2437	36.43	36.43
	9	2452	36.43	36.31

Chain A: 99% Occupied Bandwidth @ 802.11b mode channel 1



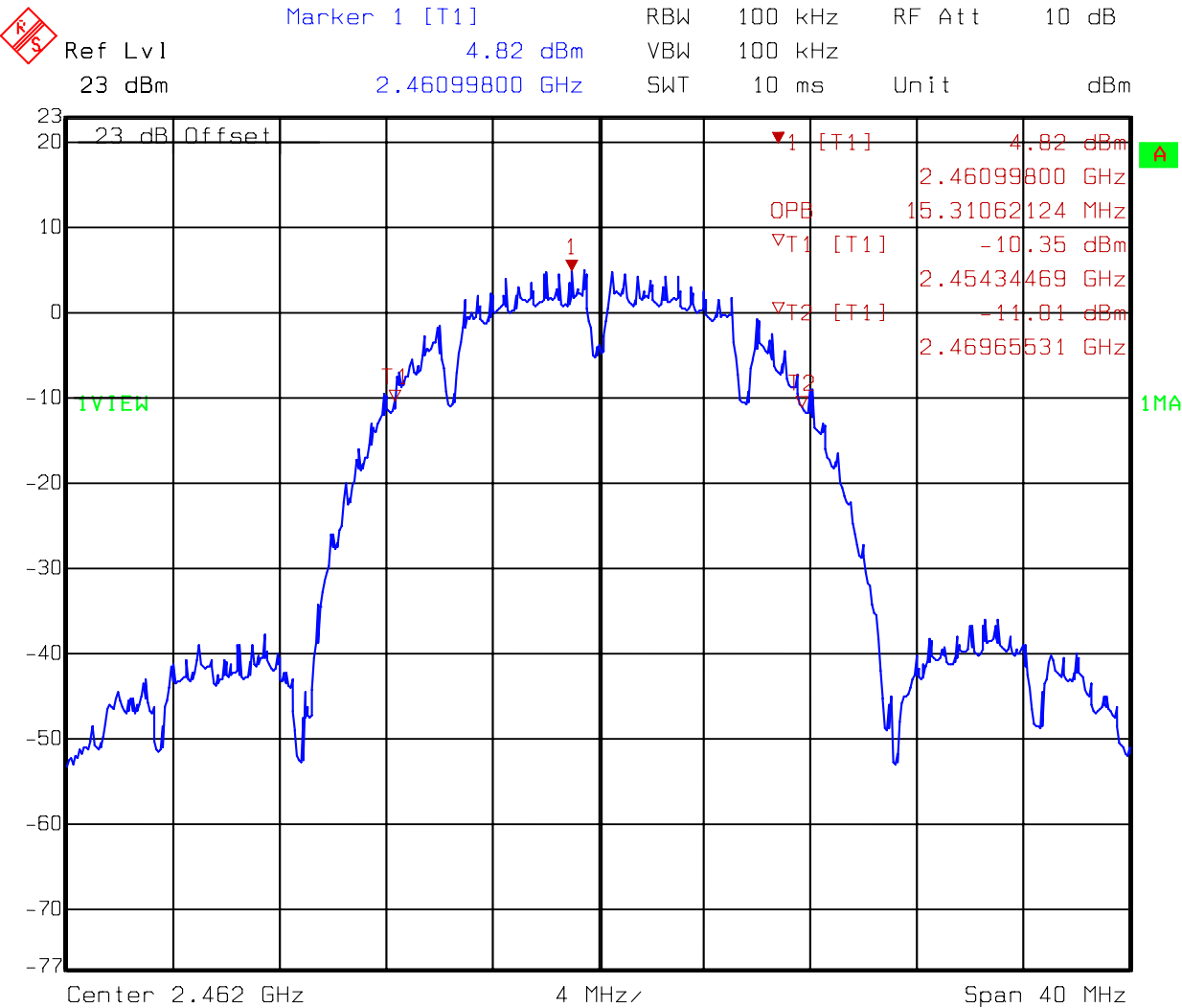
Title: Occupied Band-Width
Comment A: CH 1 at 802.11b mode
Date: 29.FEB.2008 09:56:35

Chain A: 99% Occupied Bandwidth @ 802.11b mode channel 6



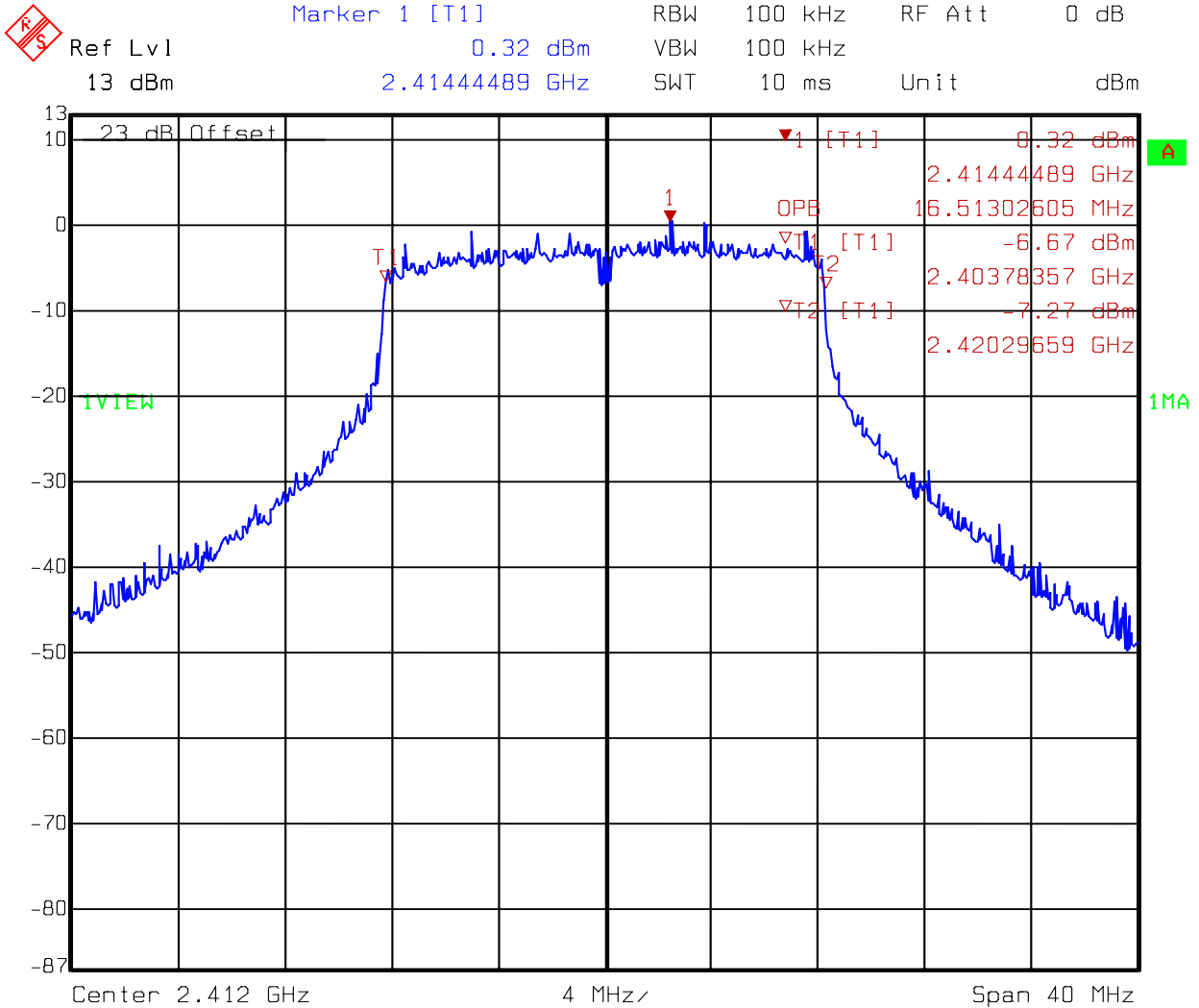
Title: Occupied Band-Width
Comment A: CH 6 at 802.11b mode
Date: 29.FEB.2008 10:07:37

Chain A: 99% Occupied Bandwidth @ 802.11b mode channel 11



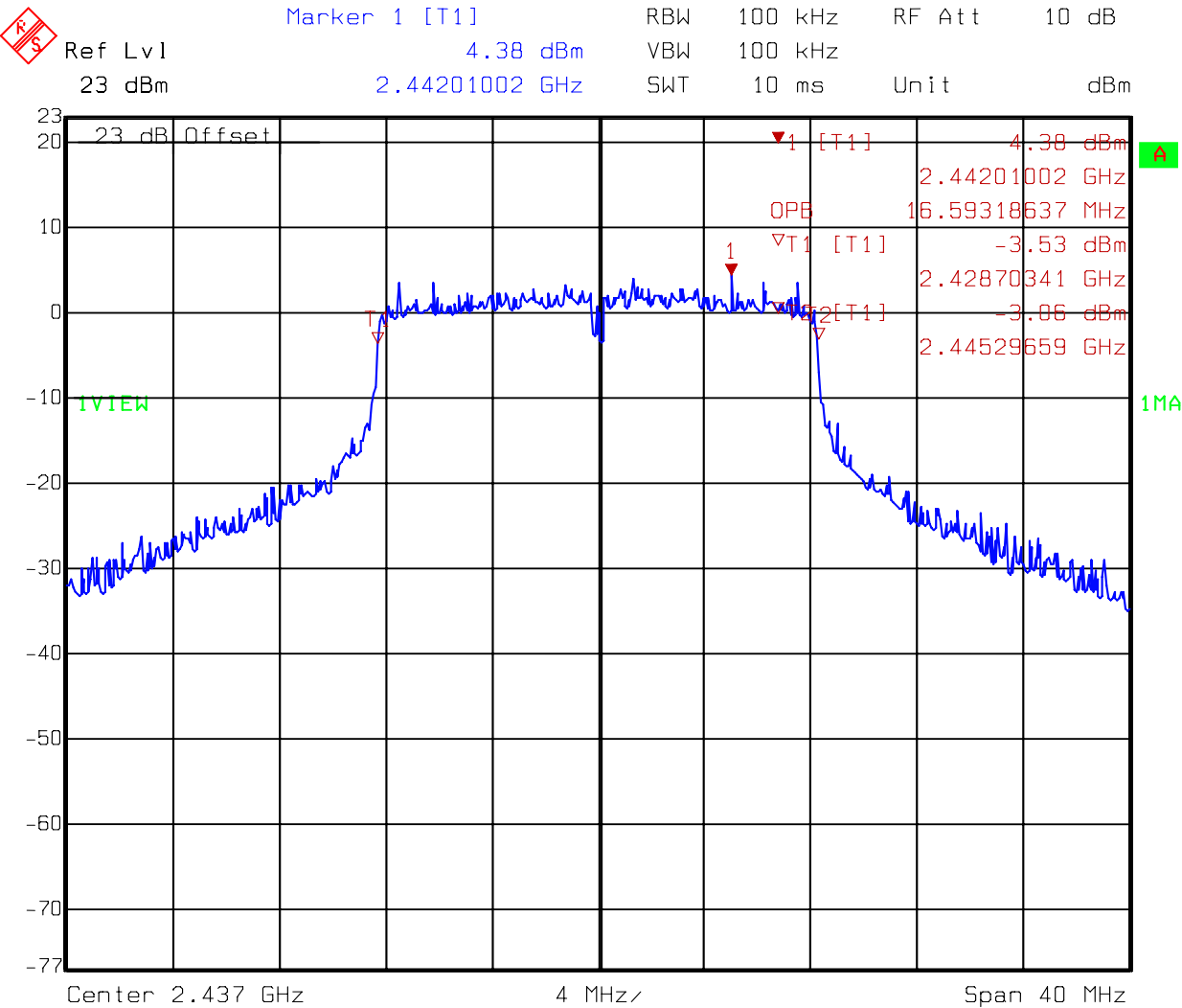
Title: Occupied Band-Width
Comment A: CH 11 at 802.11b mode
Date: 29.FEB.2008 10:16:05

Chain A: 99% Occupied Bandwidth @ 802.11g mode channel 1



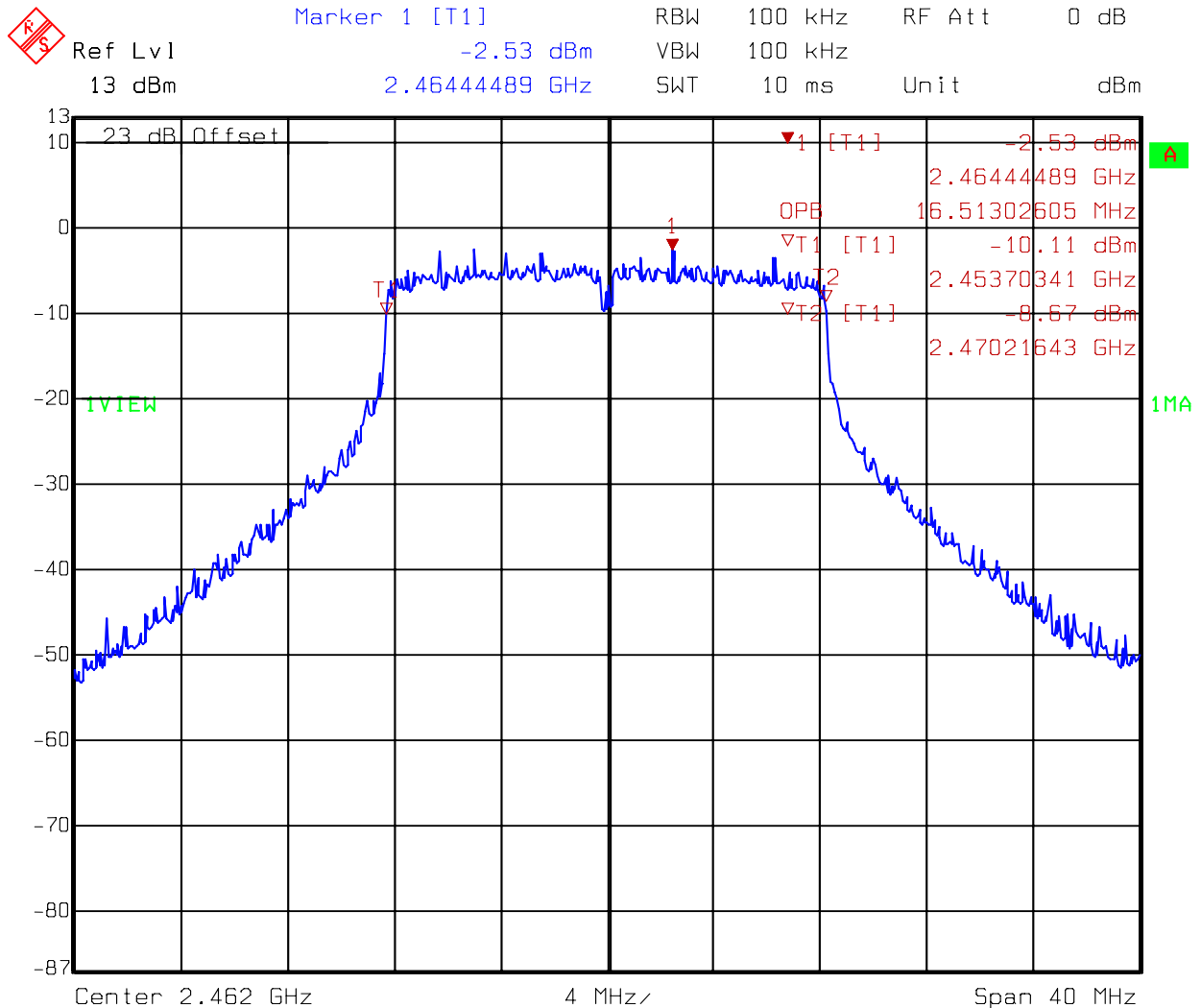
Title: Occupied Band-Width
Comment A: CH 1 at 802.11g mode
Date: 29.FEB.2008 10:24:50

Chain A: 99% Occupied Bandwidth @ 802.11g mode channel 6



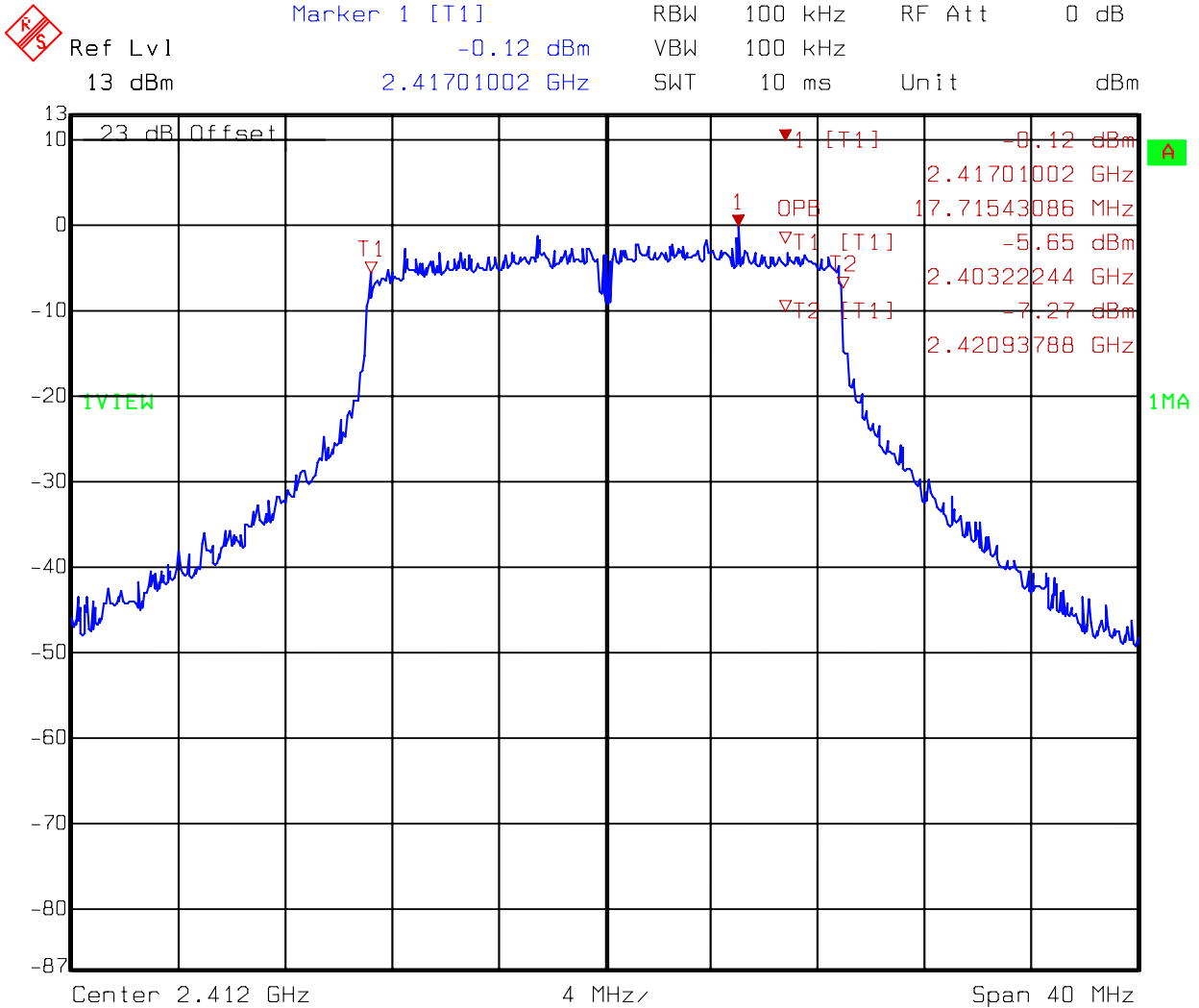
Title: Occupied Band-Width
Comment A: CH 6 at 802.11g mode
Date: 29.FEB.2008 10:37:35

Chain A: 99% Occupied Bandwidth @ 802.11g mode channel 11



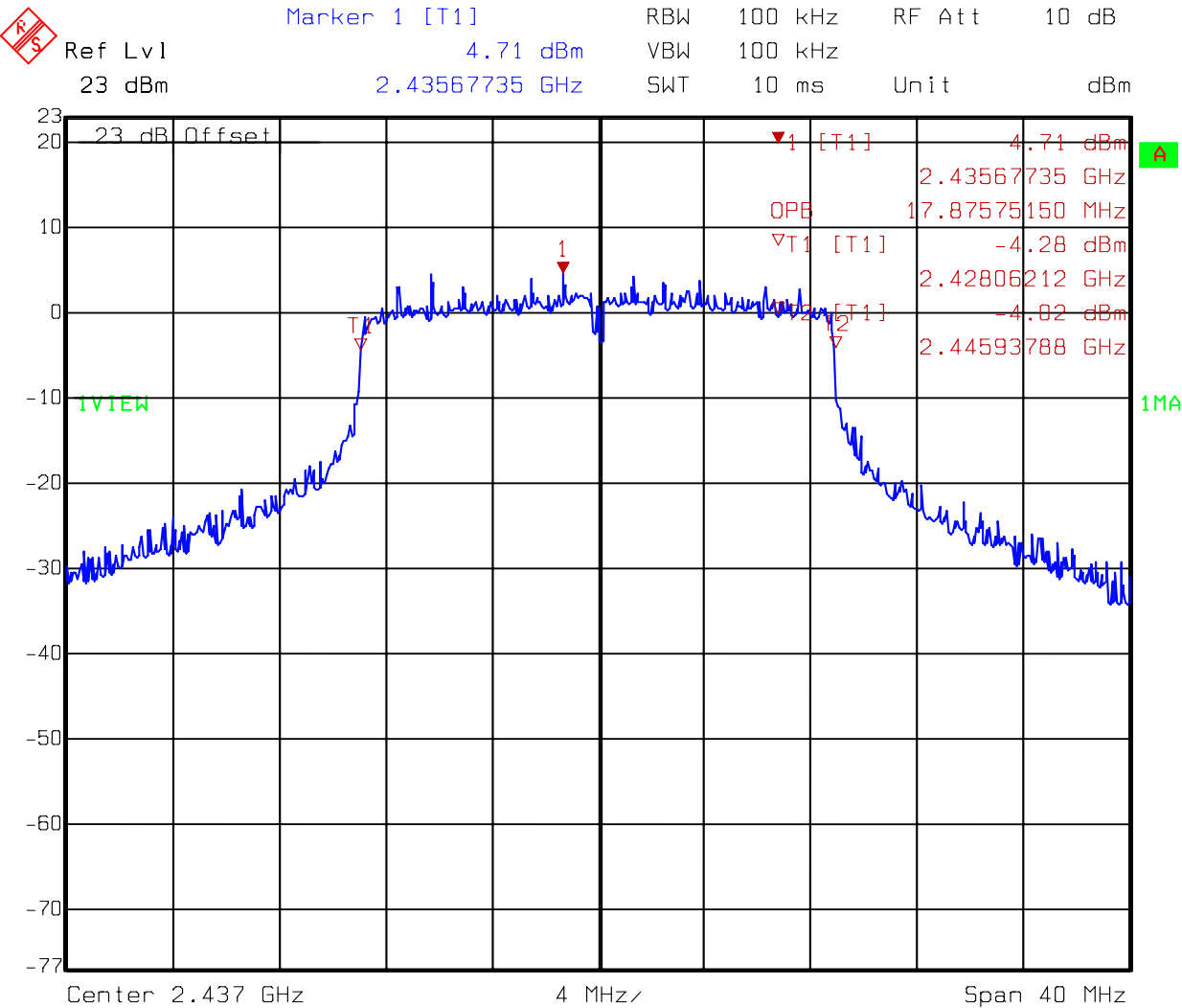
Title: Occupied Band-Width
Comment A: CH 11 at 802.11g mode
Date: 29.FEB.2008 10:42:01

Chain A: 99% Occupied Bandwidth @ 802.11n HT20 mode channel 1



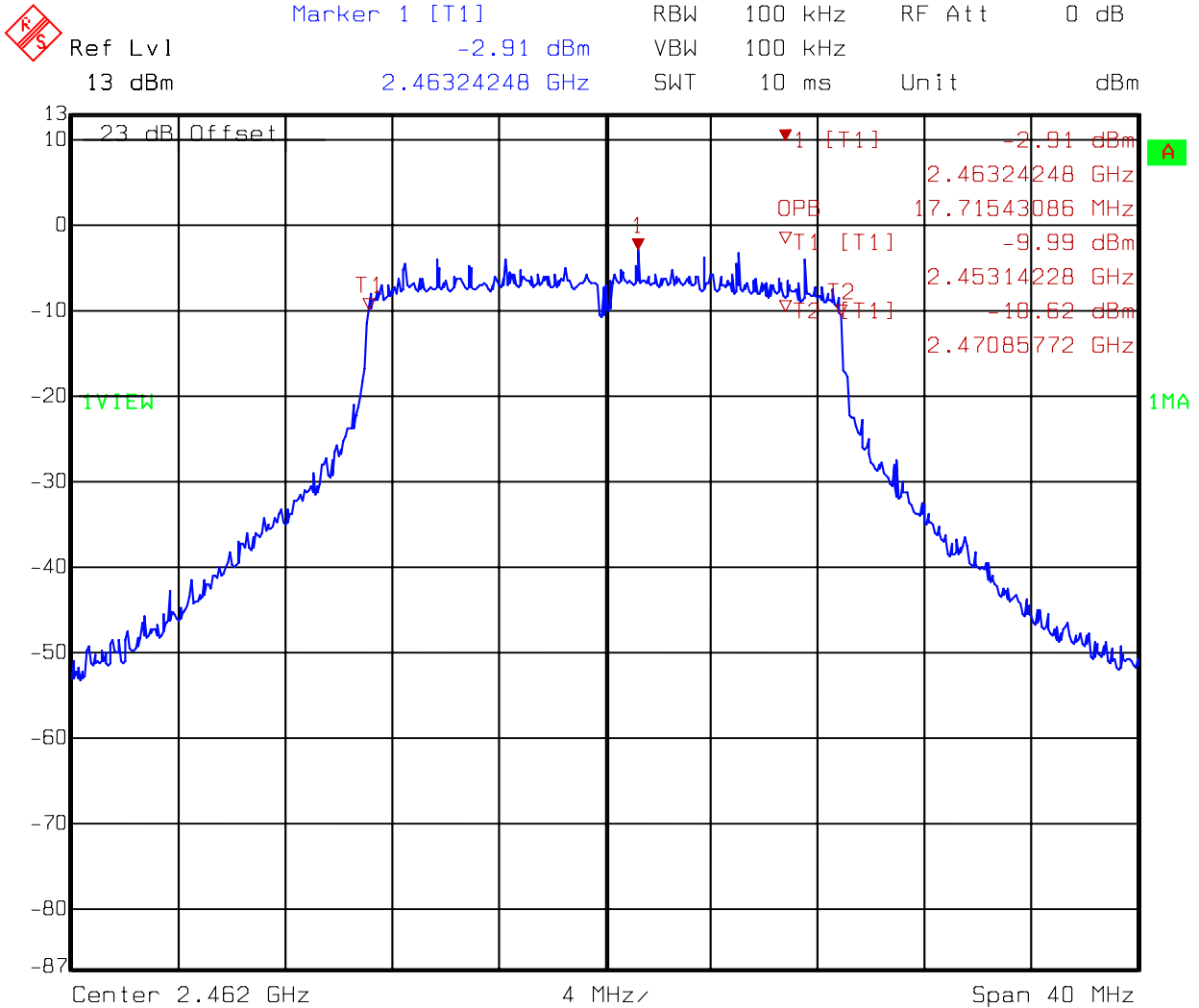
Title: Occupied Band-Width
Comment A: CH 1 at 802.11n 20MHz mode
Date: 29.FEB.2008 11:15:02

Chain A: 99% Occupied Bandwidth @ 802.11n HT20 mode channel 6



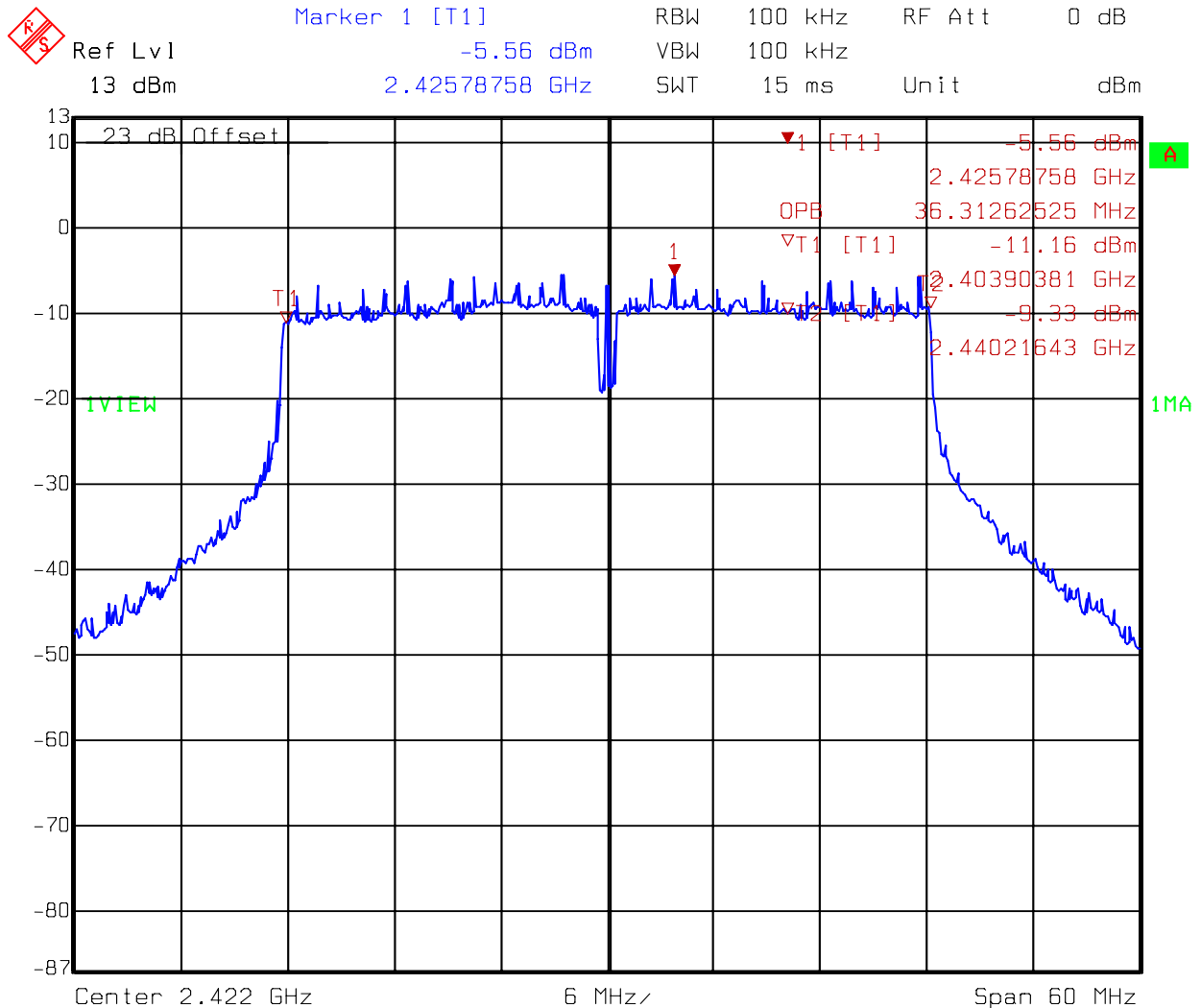
Title: Occupied Band-Width
Comment A: CH 6 at 802.11n 20MHz mode
Date: 29.FEB.2008 11:02:42

Chain A: 99% Occupied Bandwidth @ 802.11n HT20 mode channel 11



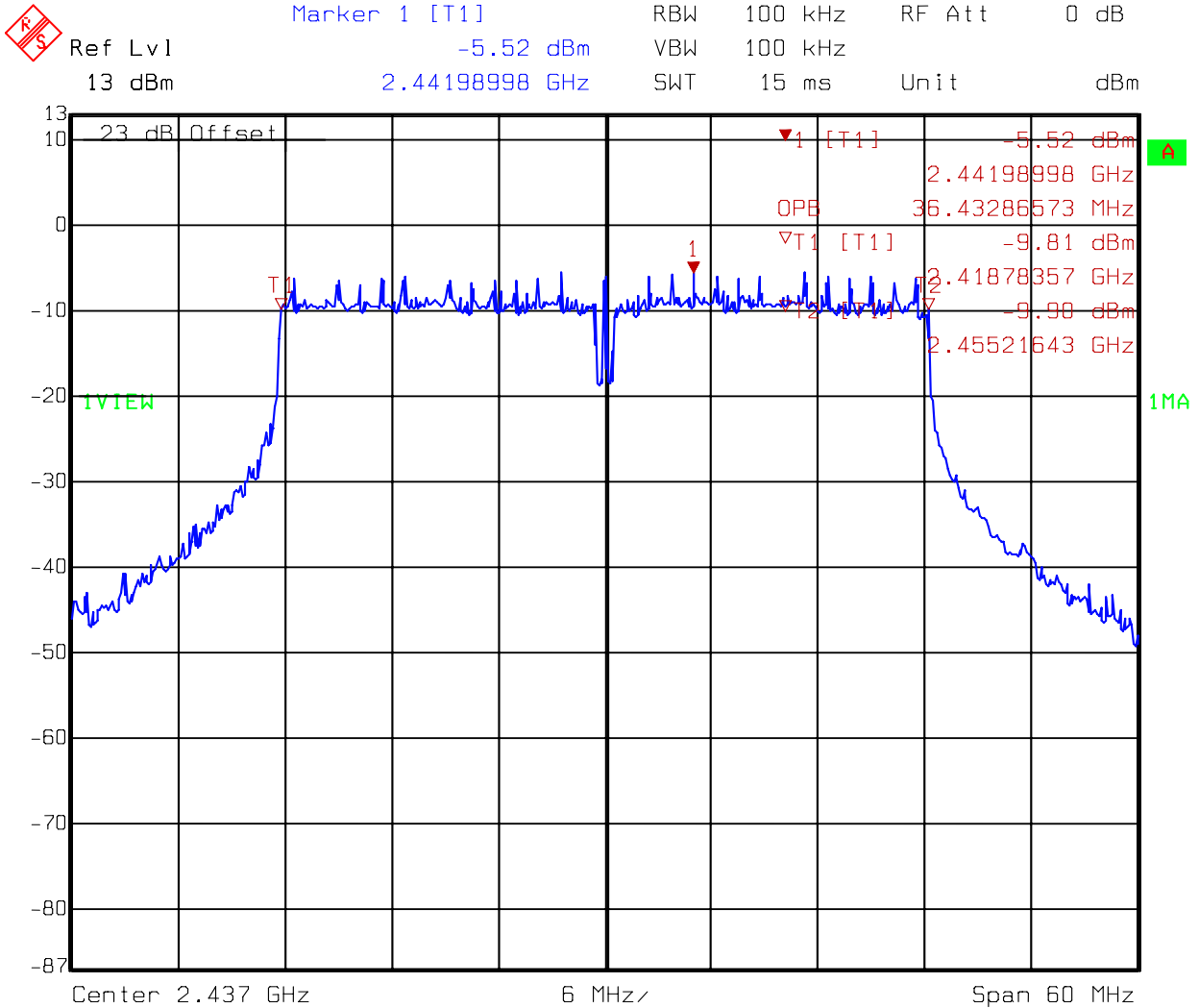
Title: Occupied Band-Width
Comment A: CH 11 at 802.11n 20MHz mode
Date: 29.FEB.2008 10:56:26

Chain A: 99% Occupied Bandwidth @ 802.11n HT40 mode channel 3



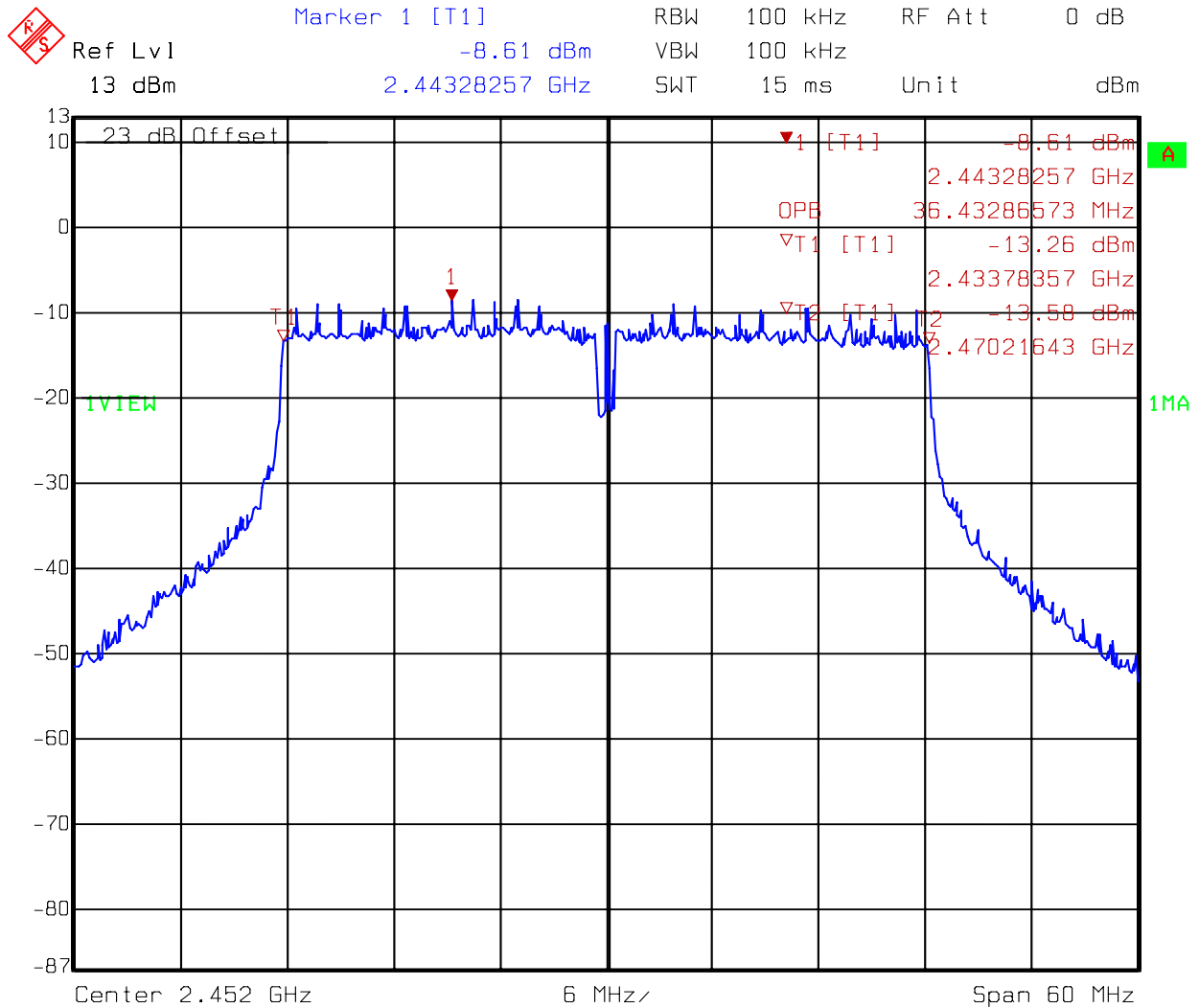
Title: Occupied Band-Width
Comment A: CH 3 at 802.11n 40MHz mode
Date: 29.FEB.2008 11:18:41

Chain A: 99% Occupied Bandwidth @ 802.11n HT40 mode channel 6



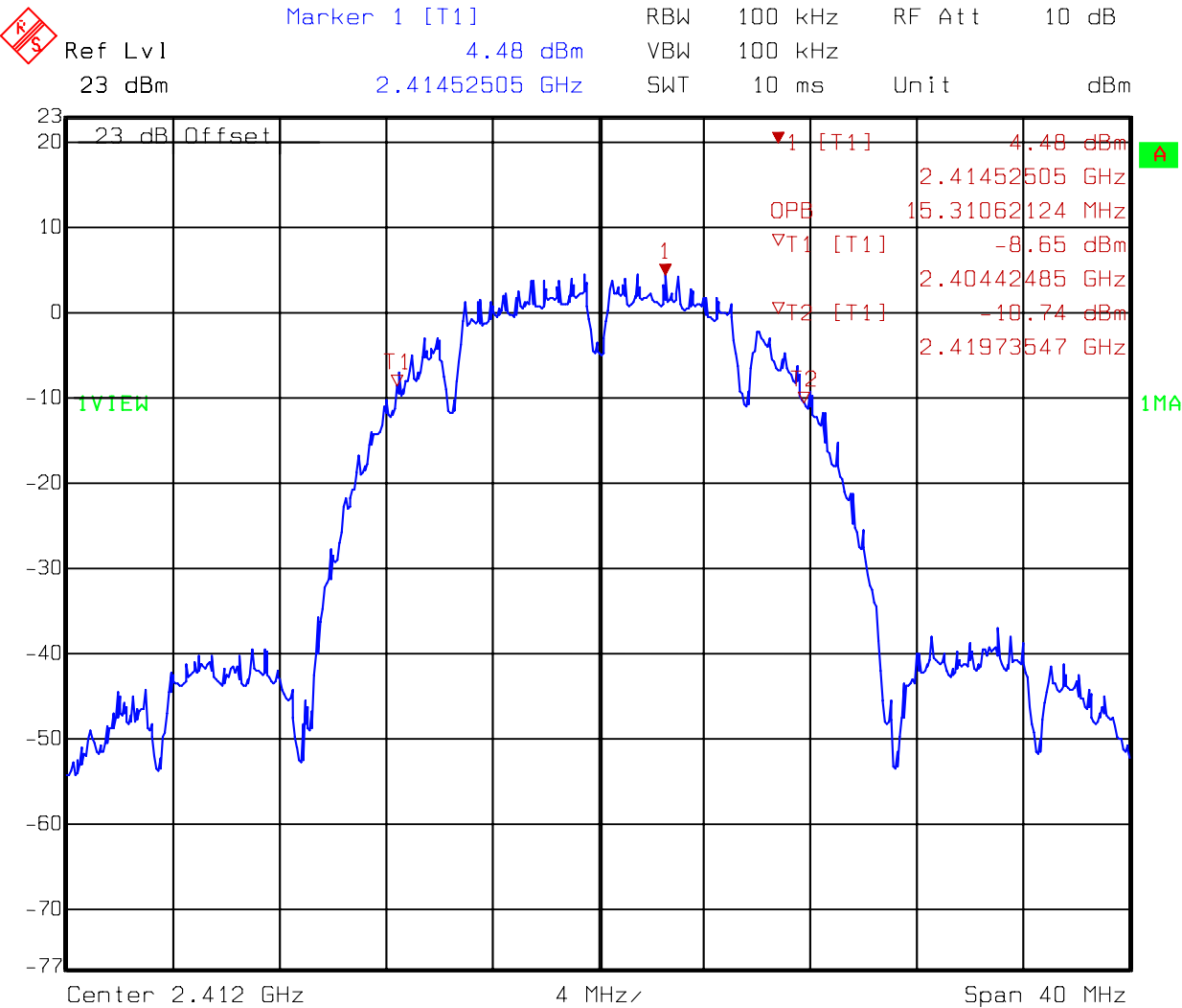
Title: Occupied Band-Width
Comment A: CH 6 at 802.11n 40MHz mode

Chain A: 99% Occupied Bandwidth @ 802.11n HT40 mode channel 9



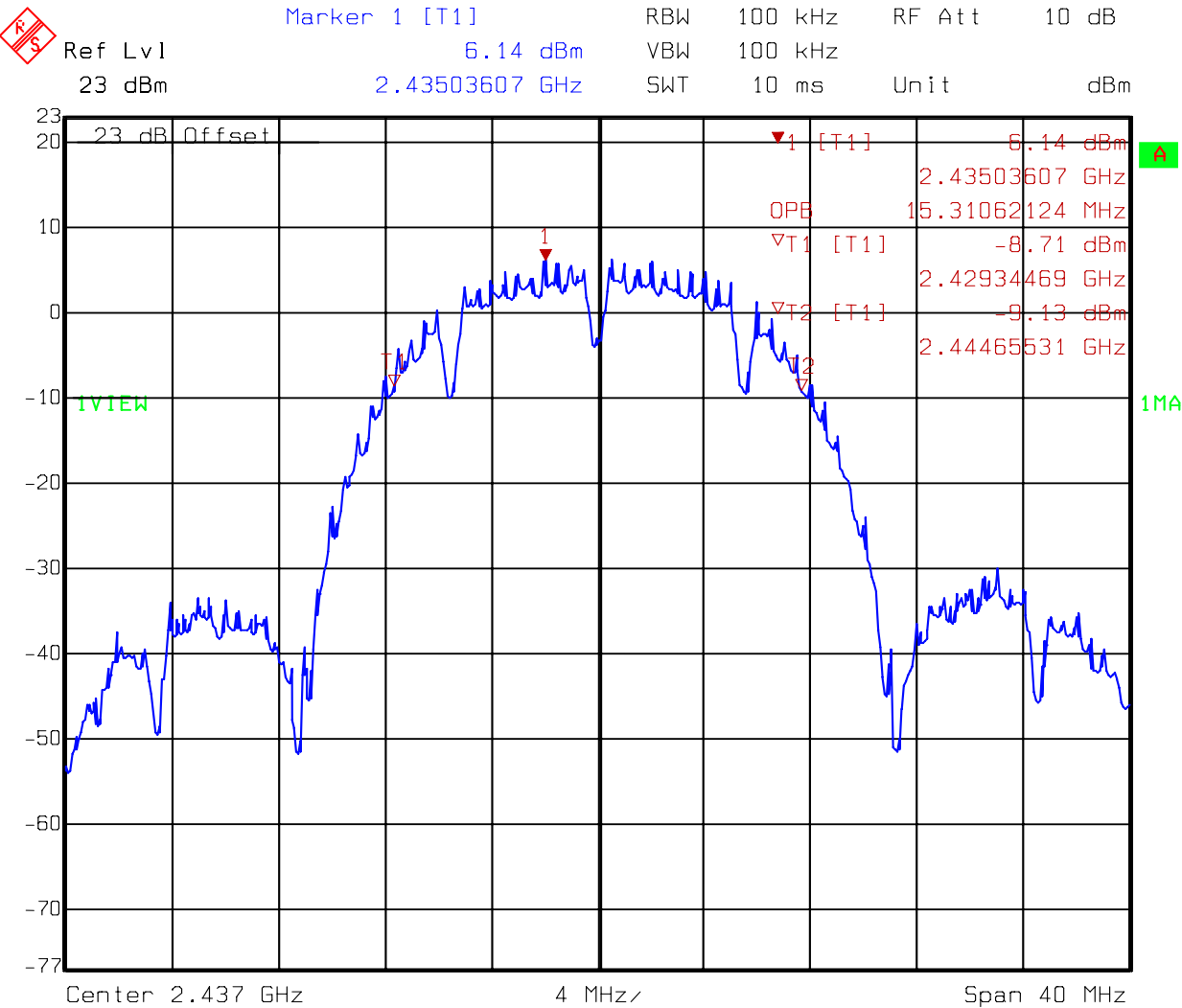
Title: Occupied Band-Width
Comment A: CH 9 at 802.11n 40MHz mode
Date: 29.FEB.2008 11:41:48

Chain B: 99% Occupied Bandwidth @ 802.11b mode channel 1



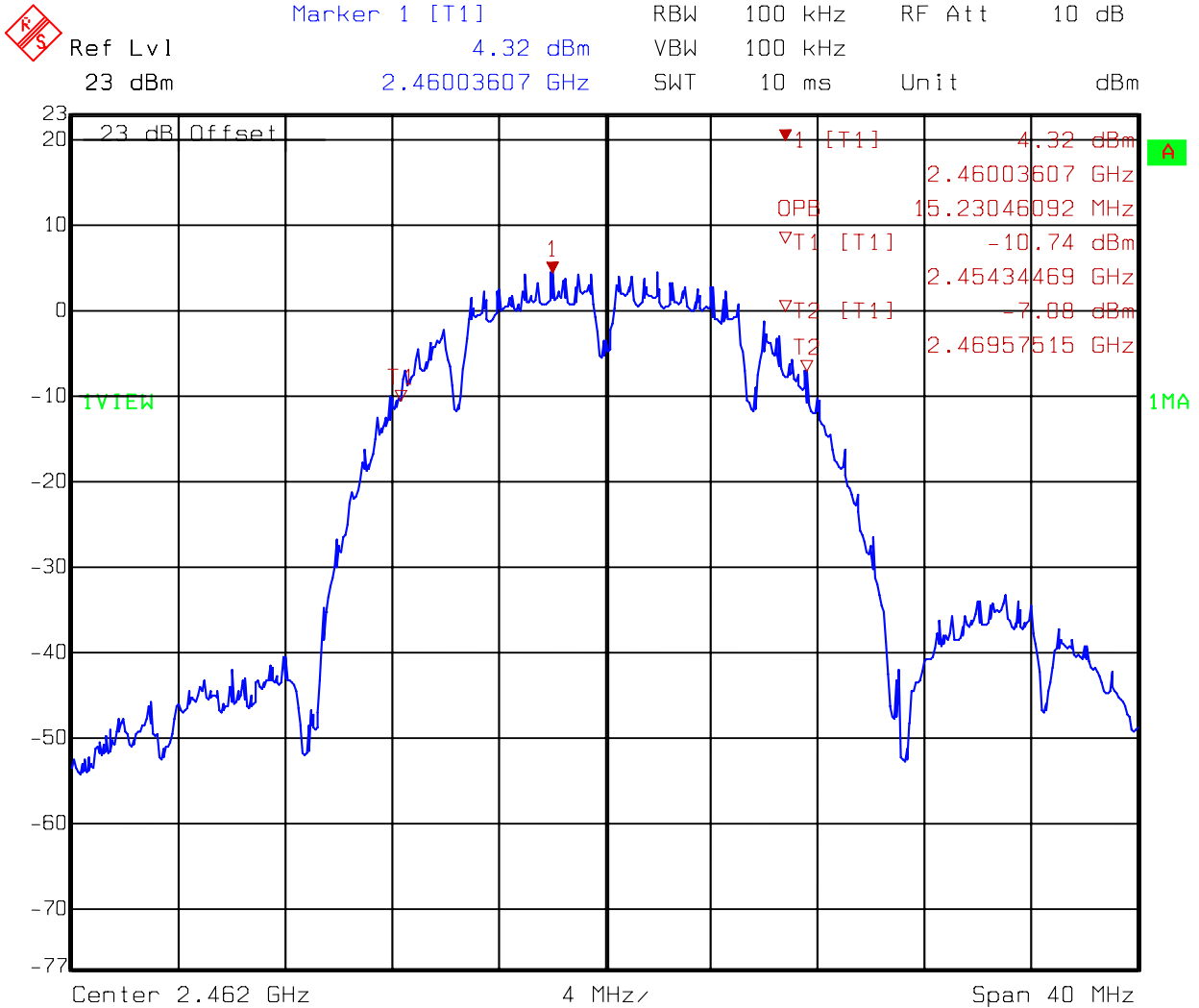
Title: Occupied Band-Width
 Comment A: CH 1 at 802.11b mode
 Date: 29.FEB.2008 10:00:17

Chain B: 99% Occupied Bandwidth @ 802.11b mode channel 6



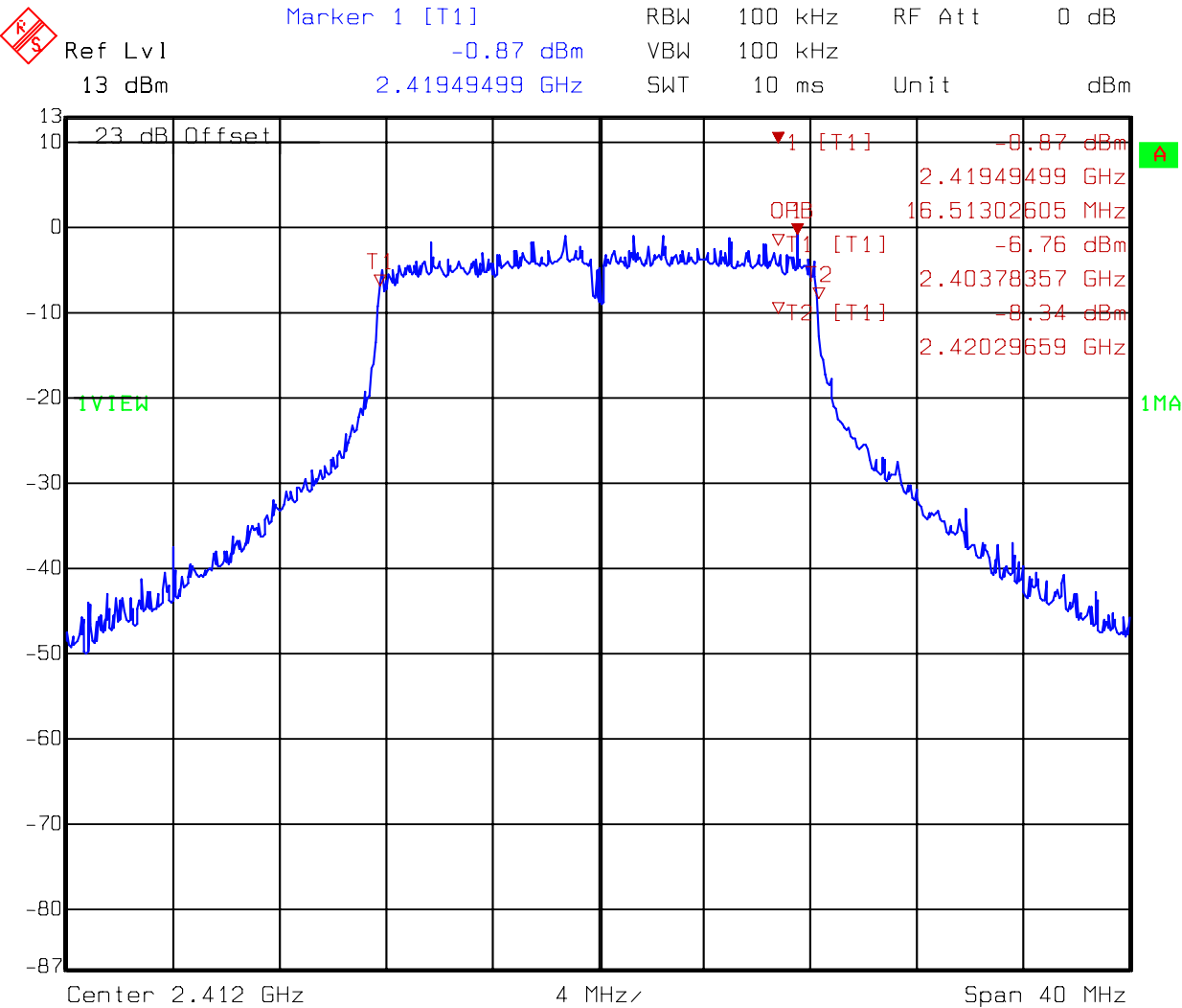
Title: Occupied Band-Width
Comment A: CH 6 at 802.11b mode
Date: 29.FEB.2008 10:10:46

Chain B: 99% Occupied Bandwidth @ 802.11b mode channel 11



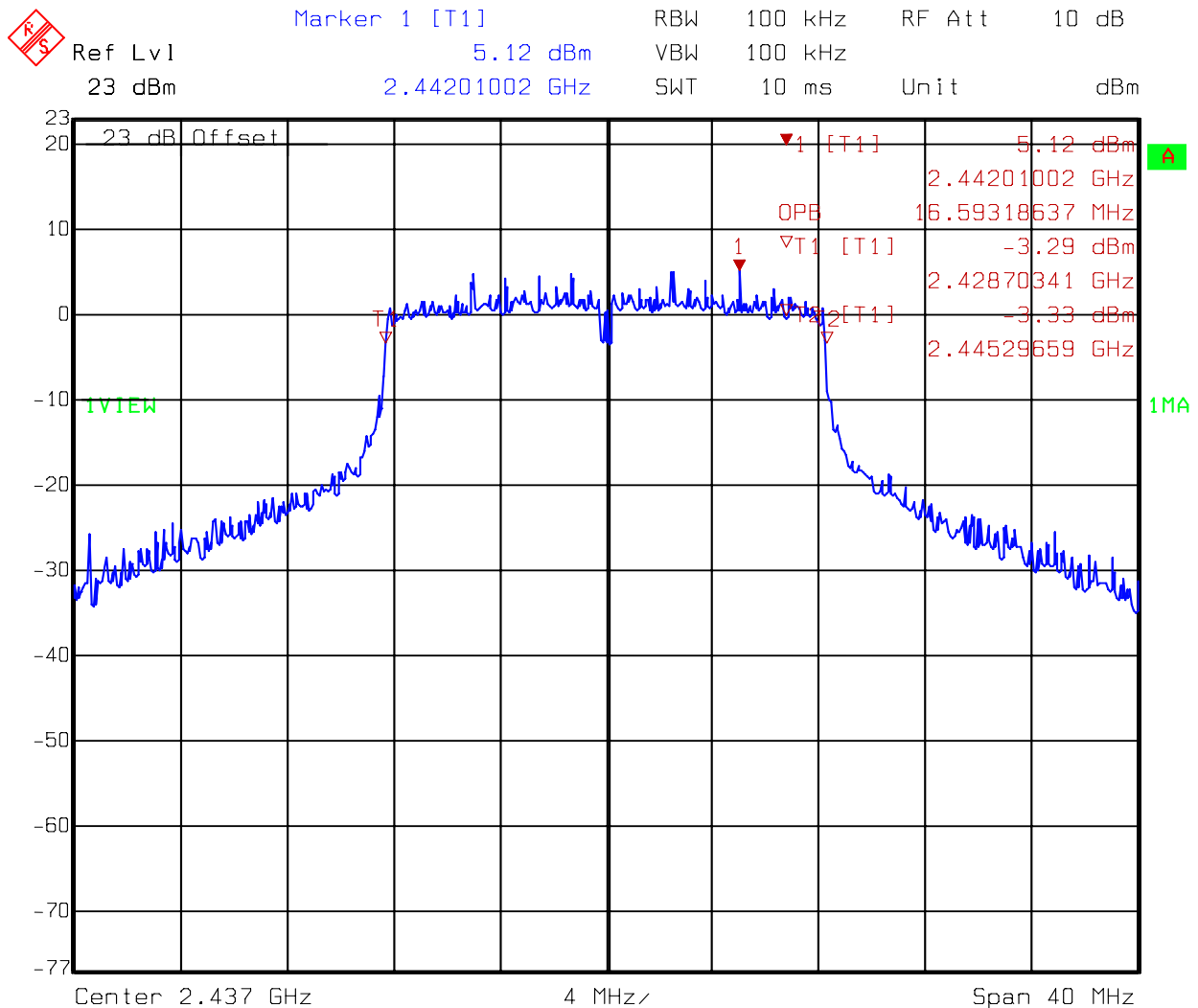
Title: Occupied Band-Width
Comment A: CH 11 at 802.11b mode
Date: 29.FEB.2008 10:19:32

Chain B: 99% Occupied Bandwidth @ 802.11g mode channel 1



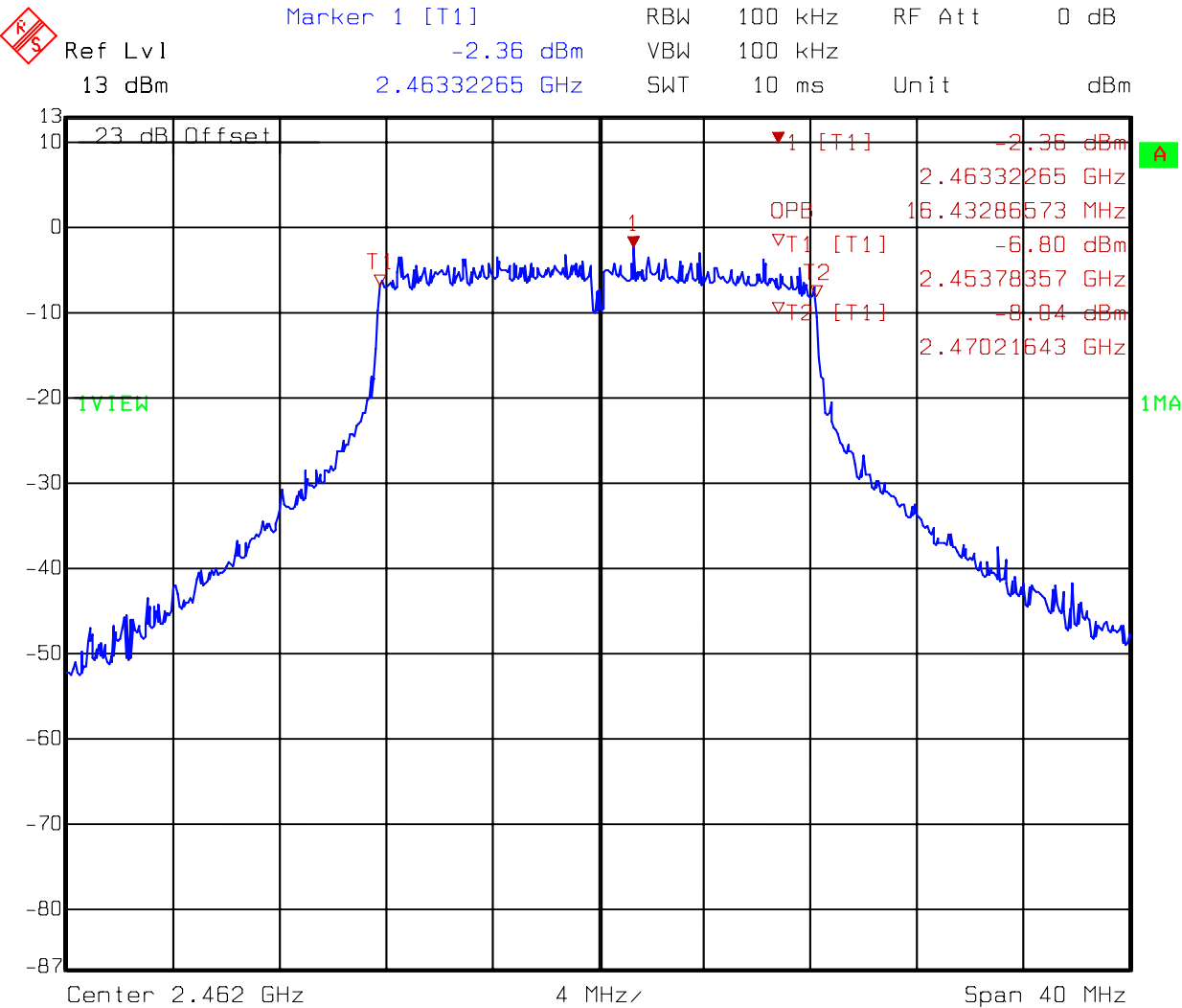
Title: Occupied Band-Width
Comment A: CH 1 at 802.11g mode
Date: 29.FEB.2008 10:28:01

Chain B: 99% Occupied Bandwidth @ 802.11g mode channel 6



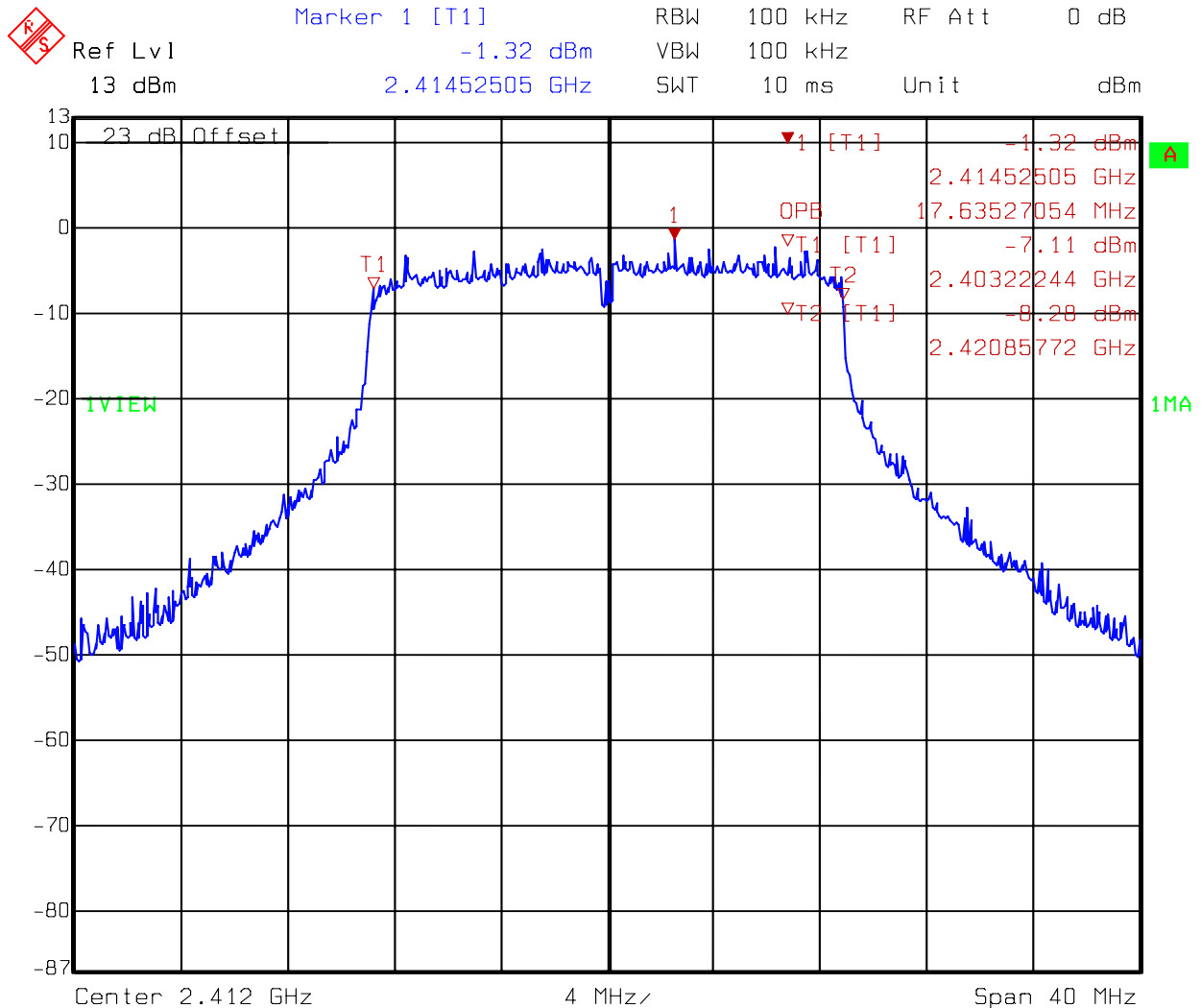
```
Title:      Occupied Band-Width
Comment A: CH 6 at 802.11g mode
Date:      29.FEB.2008  10:34:06
```

Chain B: 99% Occupied Bandwidth @ 802.11g mode channel 11



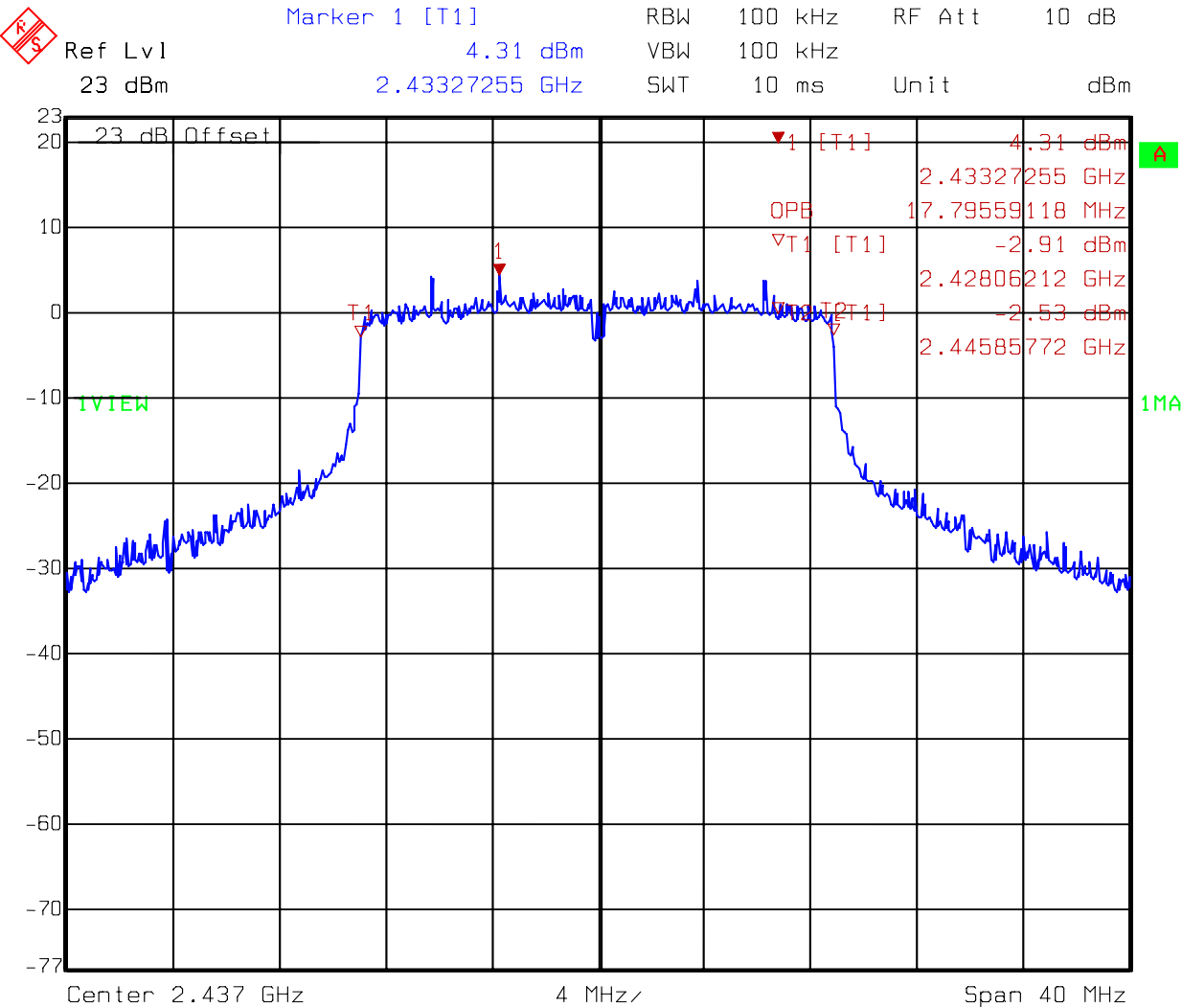
Title: Occupied Band-Width
Comment A: CH 11 at 802.11g mode
Date: 29.FEB.2008 10:45:13

Chain B: 99% Occupied Bandwidth @ 802.11n HT20 mode channel 1



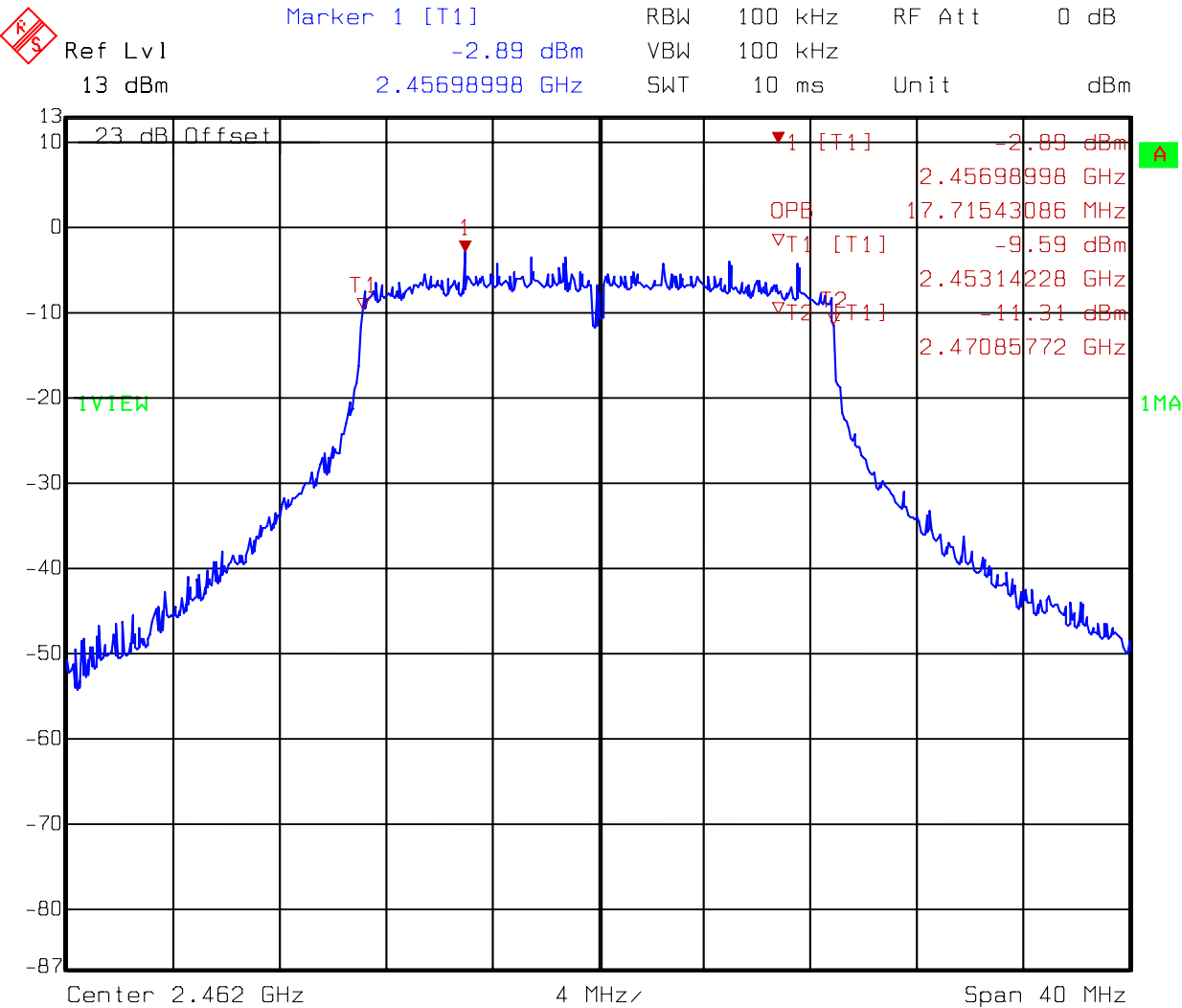
Title: Occupied Band-Width
Comment A: CH 1 at 802.11n 20MHz mode
Date: 29.FEB.2008 11:11:31

Chain B: 99% Occupied Bandwidth @ 802.11n HT20 mode channel 6



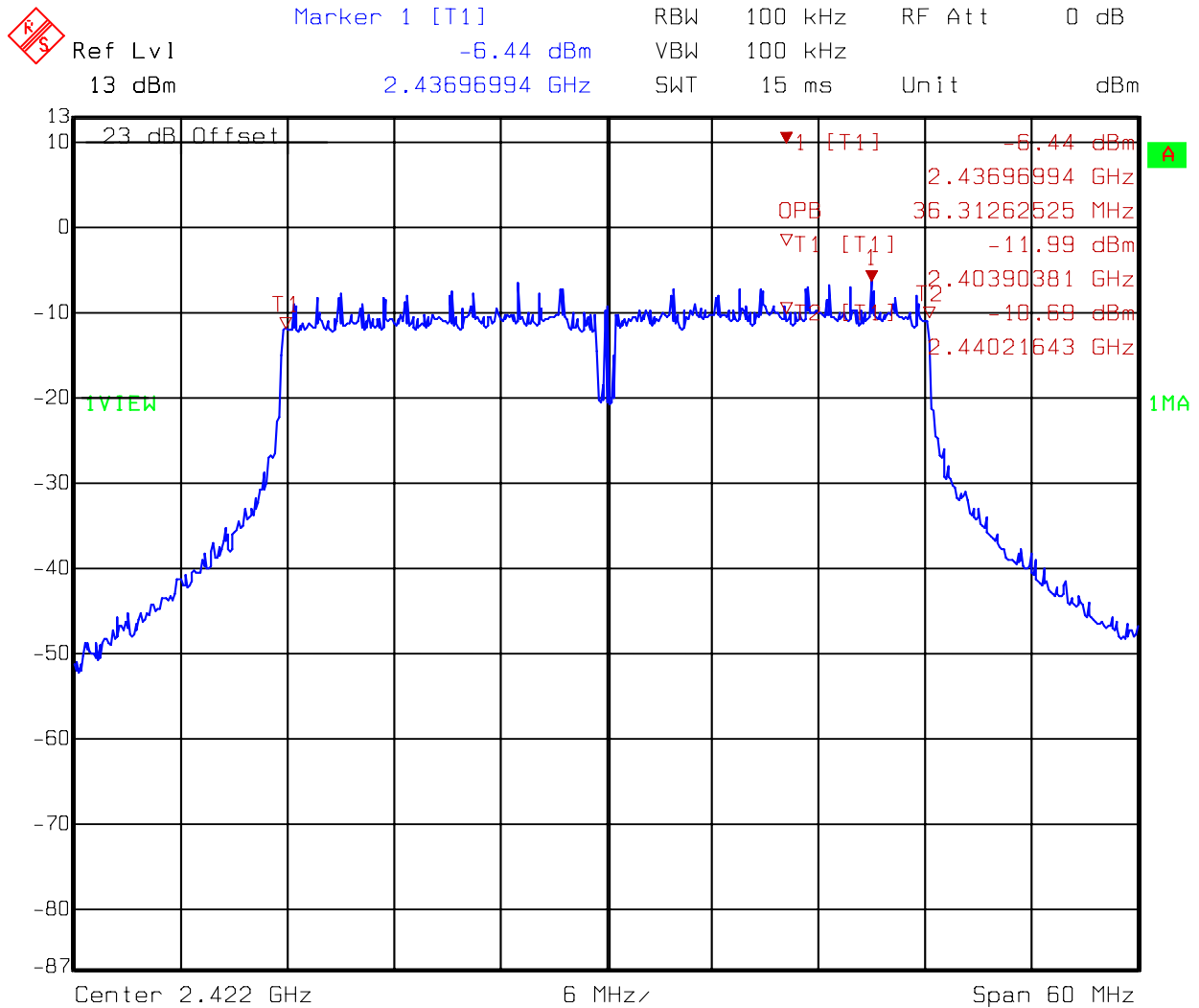
Title: Occupied Band-Width
 Comment A: CH 6 at 802.11n 20MHz mode
 Date: 29.FEB.2008 11:07:08

Chain B: 99% Occupied Bandwidth @ 802.11n HT20 mode channel 11



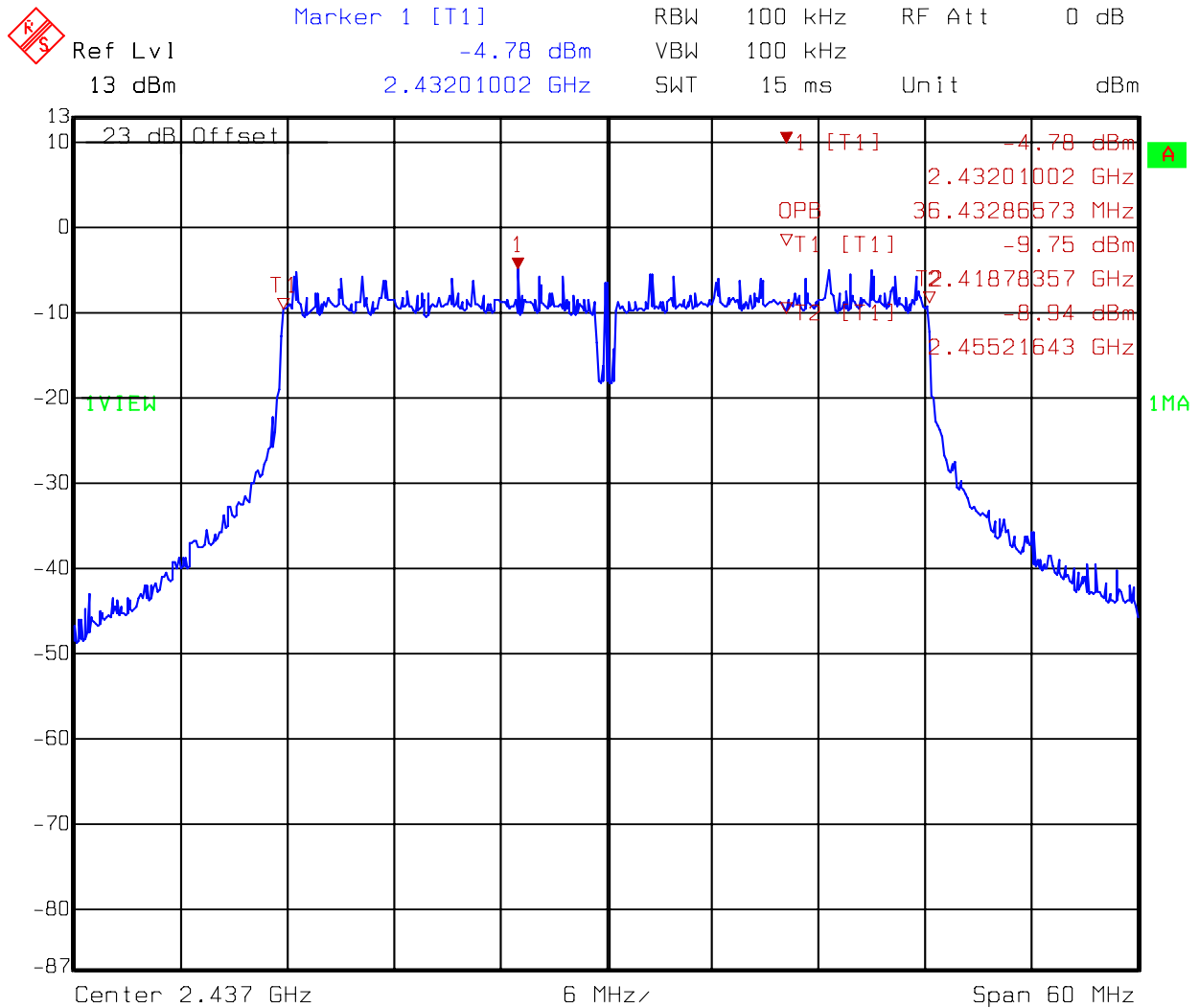
Title: Occupied Band-Width
 Comment A: CH 11 at 802.11n 20MHz mode
 Date: 29.FEB.2008 10:53:22

Chain B: 99% Occupied Bandwidth @ 802.11n HT40 mode channel 3



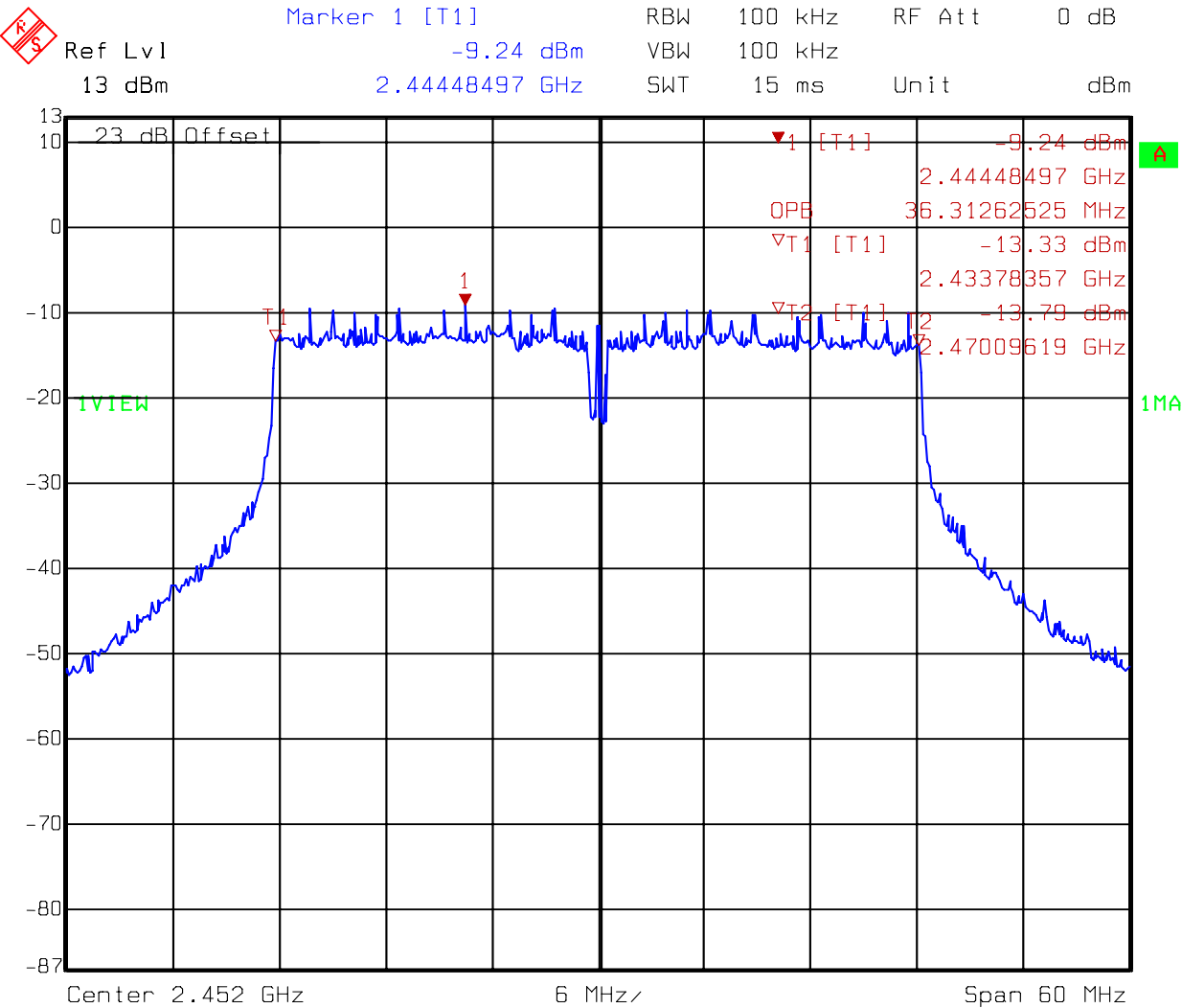
Title: Occupied Band-Width
Comment A: CH 3 at 802.11n 40MHz mode
Date: 29.FEB.2008 11:21:50

Chain B: 99% Occupied Bandwidth @ 802.11n HT40 mode channel 6



Title: Occupied Band-Width
Comment A: CH 6 at 802.11n 40MHz mode
Date: 03.MAR.2008 11:50:56

Chain B: 99% Occupied Bandwidth @ 802.11n HT40 mode channel 9



Title: Occupied Band-Width
Comment A: CH 9 at 802.11n 40MHz mode
Date: 29.FEB.2008 11:38:09

5. Maximum Output Power

Name of Test	Maximum output power
Base Standard	FCC 15.247(b), KDB558074

Tested By: Rex Liao
Test Date: Feb. 29, 2008

Test Equipment: EC1396, EC1396-1
Measurement Uncertainty: $\pm 2\text{dB}$ (k=2)

Test Result: Complies
Test Method: See Appendix A
Measurement Data: See Table below

Note: The EUT was tested while in a continuous transmit mode. The EUT was tuned to a low, middle and high channel.

Table3. Maximum output power
Dual Tx

Mode	Channel	Frequency (MHz)	Data Rate (Mbps)	Output Power (dBm)		Total Power (PK)		Limit (dBm)	Margin (dB)
				Chain A	Chain B				
				PK	PK	mW	dBm		
11b	1	2412	1	18.99	18.66	152.70	21.84	30	-8.16
	6	2437		20.29	20.32	214.55	23.32	30	-6.68
	11	2462		18.75	18.74	149.81	21.76	30	-8.24
11g	1	2412	6	21.91	21.52	297.14	24.73	30	-5.27
	6	2437		24.88	25.01	624.57	27.96	30	-2.04
	11	2462		20.76	20.93	243.00	23.86	30	-6.14
11n HT20	1	2412	6.5	21.68	21.19	278.75	24.45	30	-5.55
	6	2437		24.90	24.82	612.42	27.87	30	-2.13
	11	2462		20.15	19.98	203.05	23.08	30	-6.92
11n HT40	3	2422	13.5	21.52	20.73	260.21	24.15	30	-5.85
	6	2437		22.11	21.92	318.15	25.03	30	-4.97
	9	2452		19.36	19.52	175.83	22.45	30	-7.55

6. Power Spectral Density

Name of Test	Power Spectral Density
Base Standard	FCC 15.247(e), KDB558074

Tested By: Rex Liao
Test Date: Feb. 29, 2008

Test Equipment: EC1365

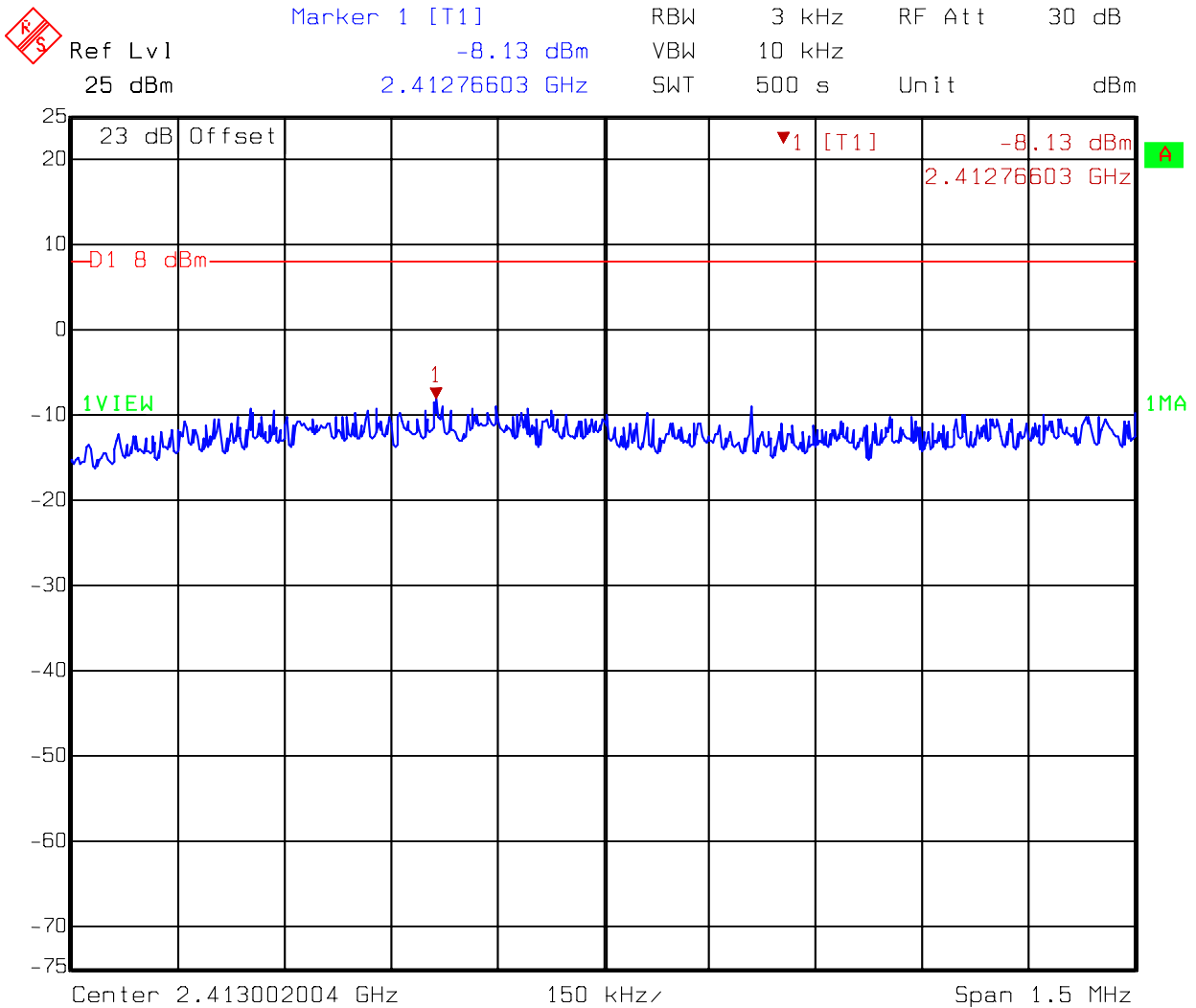
Test Result: Complies
Test Method: See Appendix A
Measurement Data: See Table & plots below

Note: The EUT was tested while in a continuous transmit mode. The EUT was tuned to a low, middle and high channel.

Table4. Power Spectral Density
Dual Tx

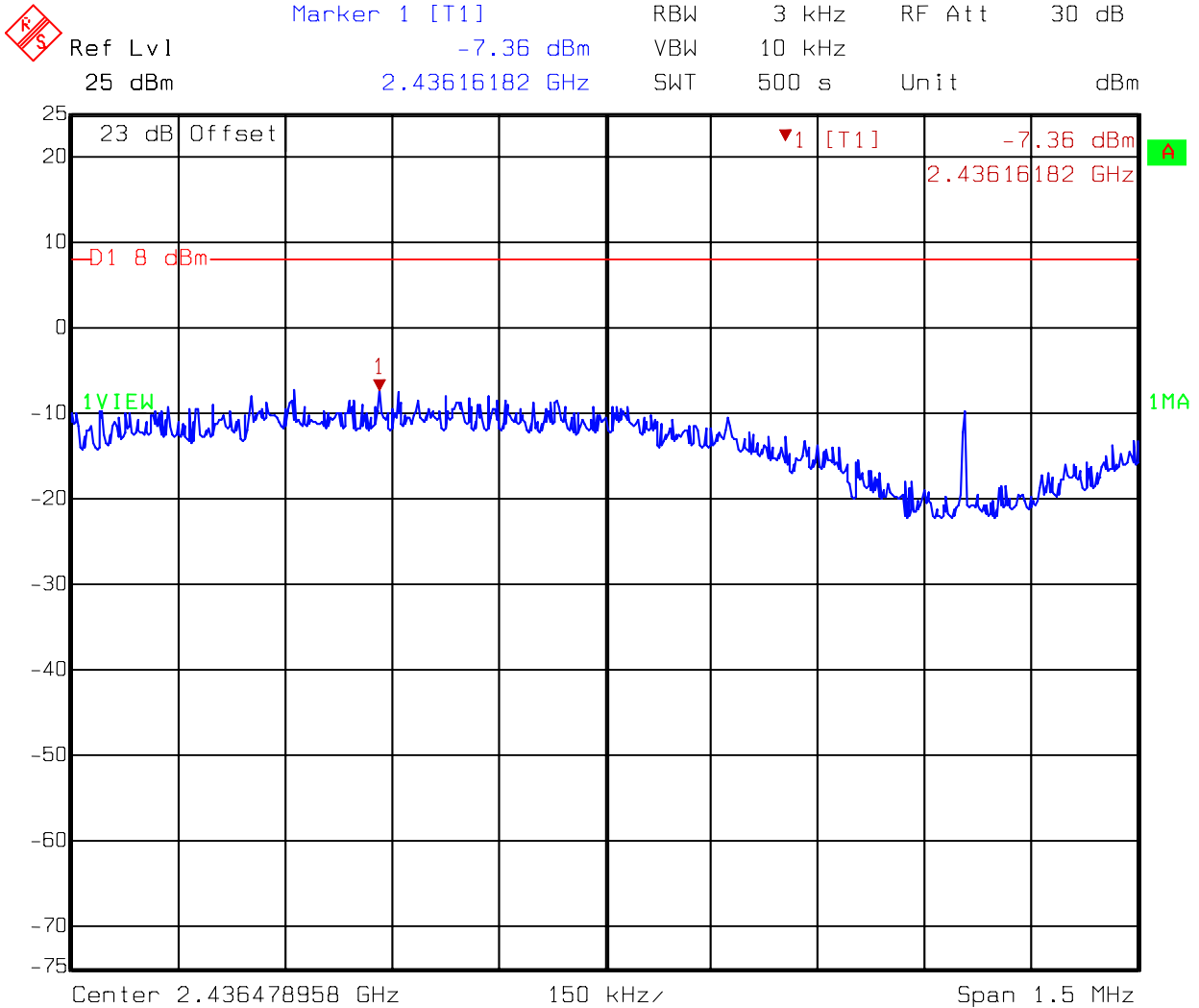
Mode	Channel	Frequency (MHz)	Data Rate (Mbps)	Output Power (dBm)		Total Power (PK)		Limit (dBm)	Margin (dB)
				Chain A PK	Chain B PK	mW	dBm		
11b	1	2412	1	-8.13	-9.26	0.27	-5.65	8	-13.65
	6	2437		-7.36	-7.15	0.38	-4.24	8	-12.24
	11	2462		-8.30	-9.21	0.27	-5.72	8	-13.72
11g	1	2412	6	-13.37	-14.29	0.08	-10.80	8	-18.80
	6	2437		-7.58	-8.38	0.32	-4.95	8	-12.95
	11	2462		-13.8	-15.63	0.07	-11.61	8	-19.61
11n HT20	1	2412	6.5	-13.98	-14.91	0.07	-11.41	8	-19.41
	6	2437		-8.48	-8.30	0.29	-5.38	8	-13.38
	11	2462		-15.28	-16.15	0.05	-12.68	8	-20.68
11n HT40	3	2422	13.5	-18.24	-19.99	0.03	-16.02	8	-24.02
	6	2437		-19.38	-19.39	0.02	-16.37	8	-24.37
	9	2452		-21.58	-22.75	0.01	-19.12	8	-27.12

Chain A: Power Spectral Density @ 802.11b mode channel 1



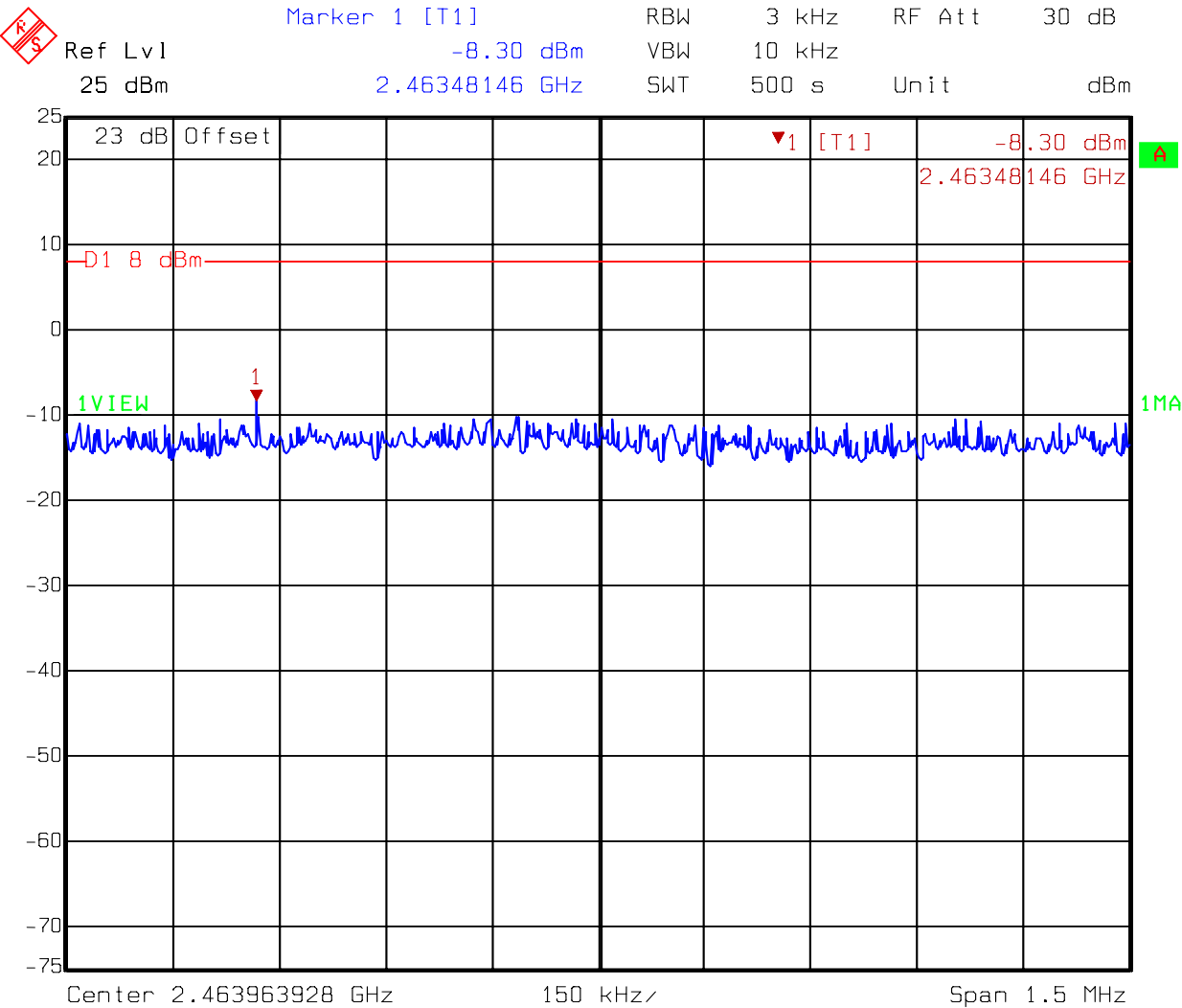
Title: Power density
Comment A: CH 1 at 802.11b mode
Date: 29.FEB.2008 09:54:57

Chain A: Power Spectral Density @ 802.11b mode channel 6



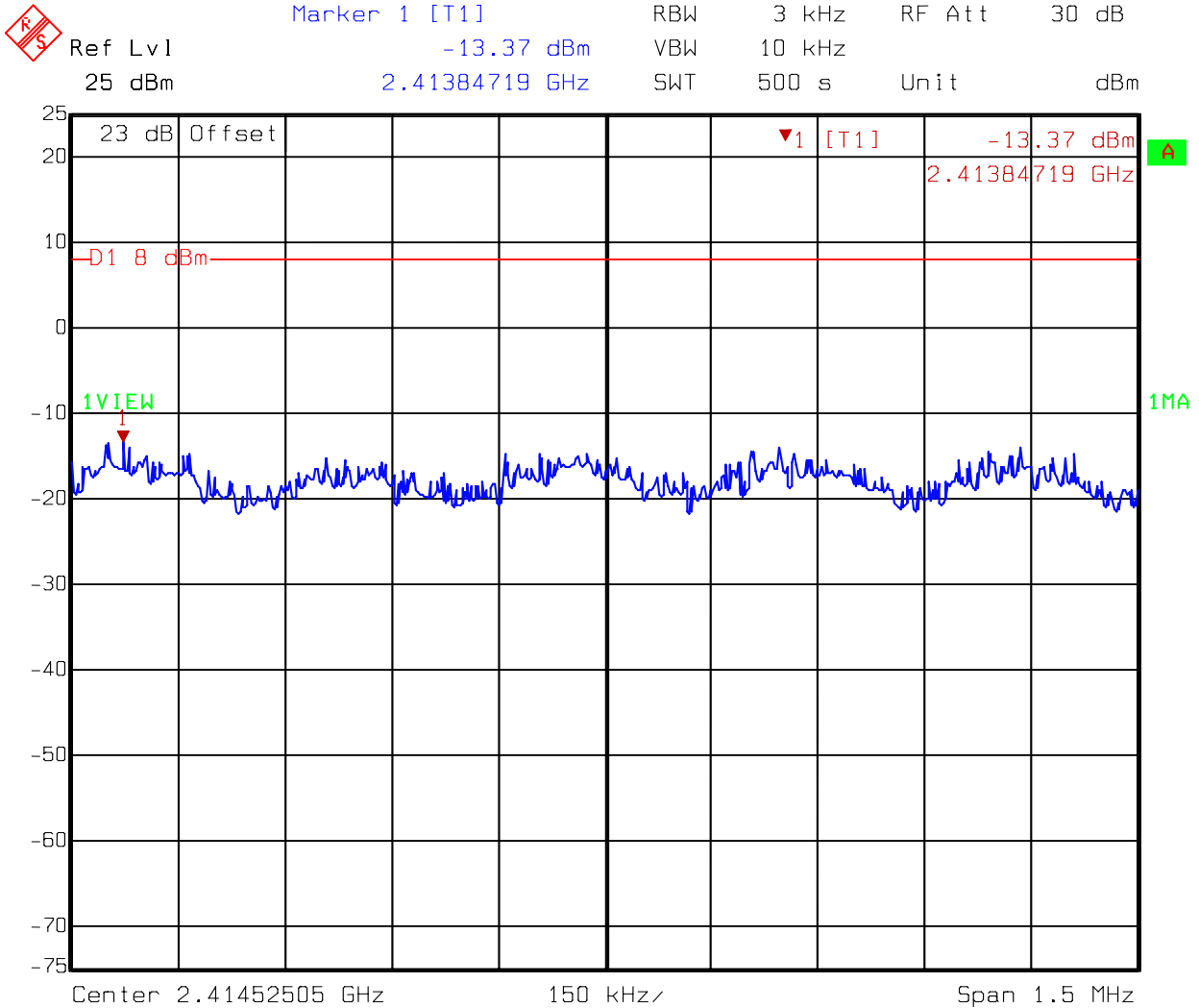
Title: Power density
Comment A: CH 6 at 802.11b mode
Date: 29.FEB.2008 10:06:01

Chain A: Power Spectral Density @ 802.11b mode channel 11



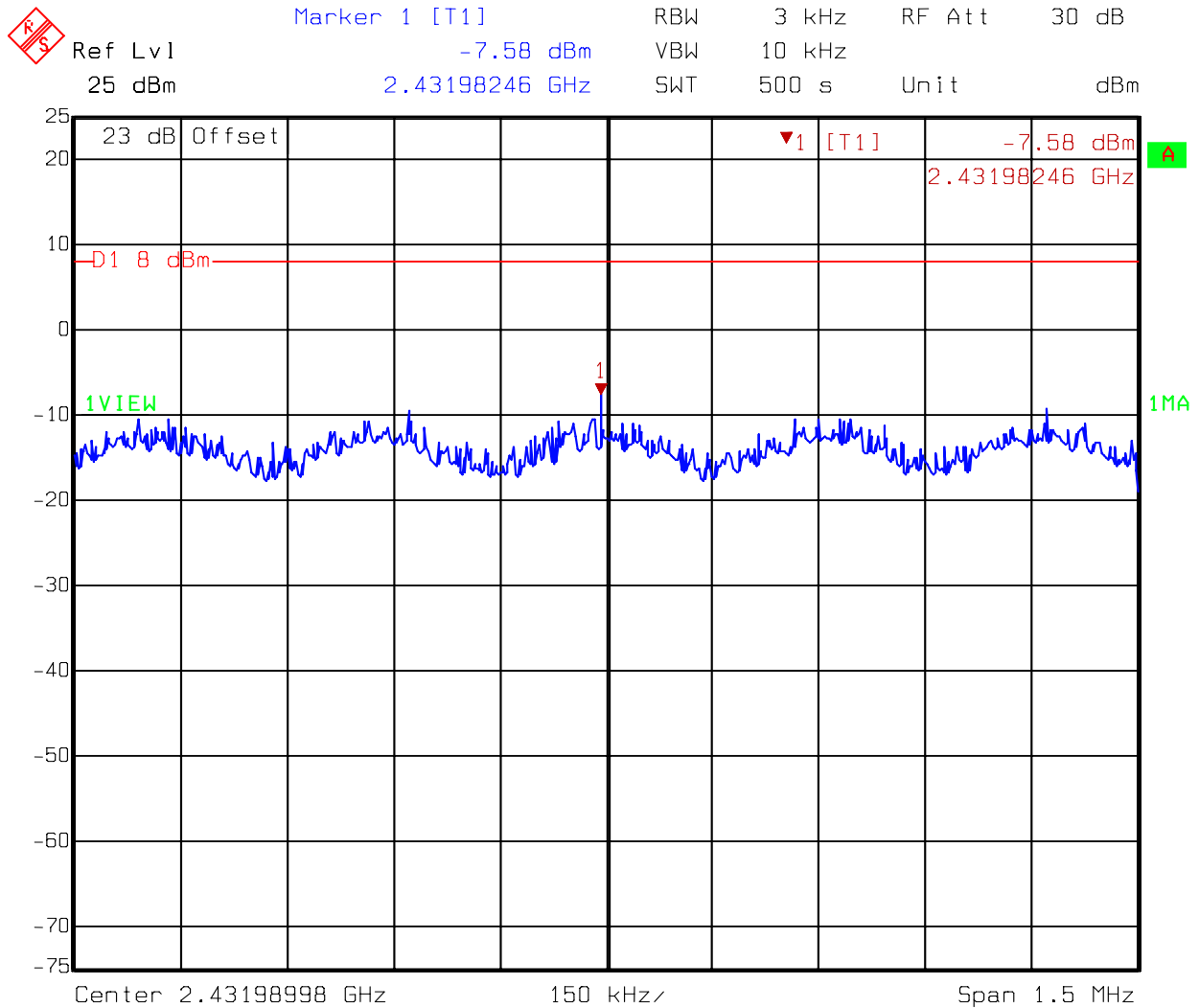
Title: Power density
Comment A: CH 11 at 802.11b mode
Date: 29.FEB.2008 10:14:29

Chain A: Power Spectral Density @ 802.11g mode channel 1



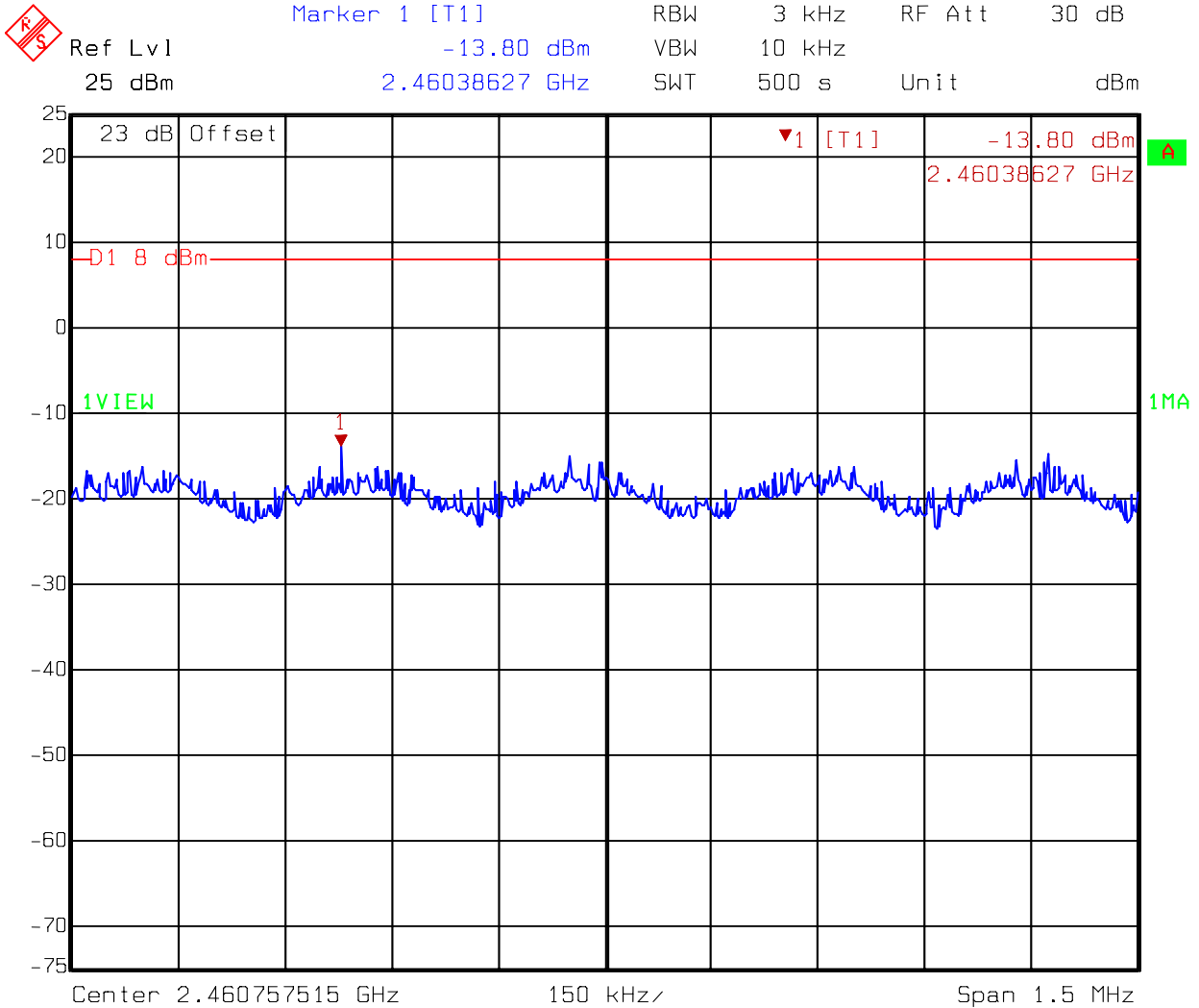
Title: Power density
Comment A: CH 1 at 802.11g mode
Date: 29.FEB.2008 10:23:21

Chain A: Power Spectral Density @ 802.11g mode channel 6



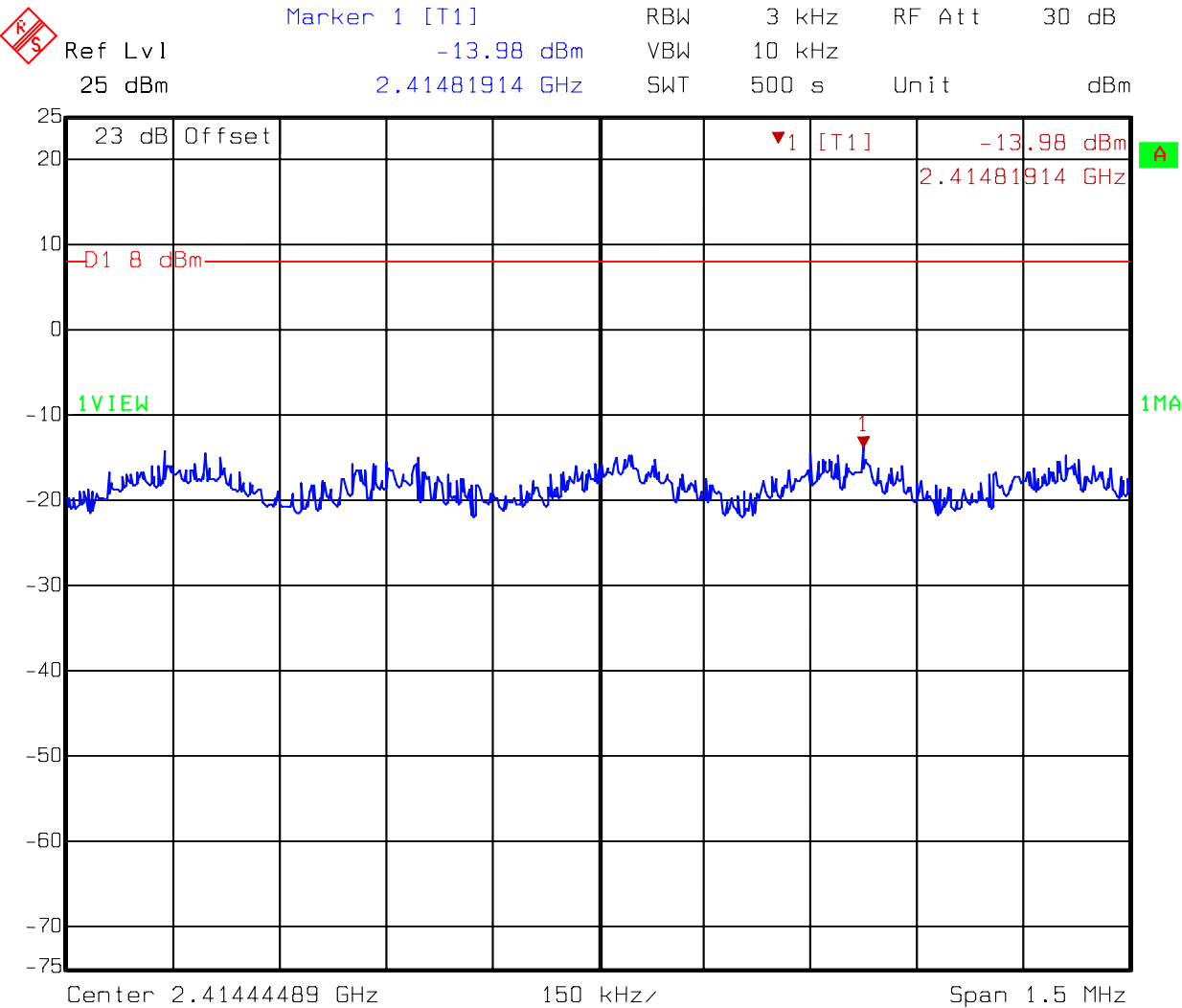
Title: Power density
 Comment A: CH 6 at 802.11g mode
 Date: 29.FEB.2008 10:35:59

Chain A: Power Spectral Density @ 802.11g mode channel 11



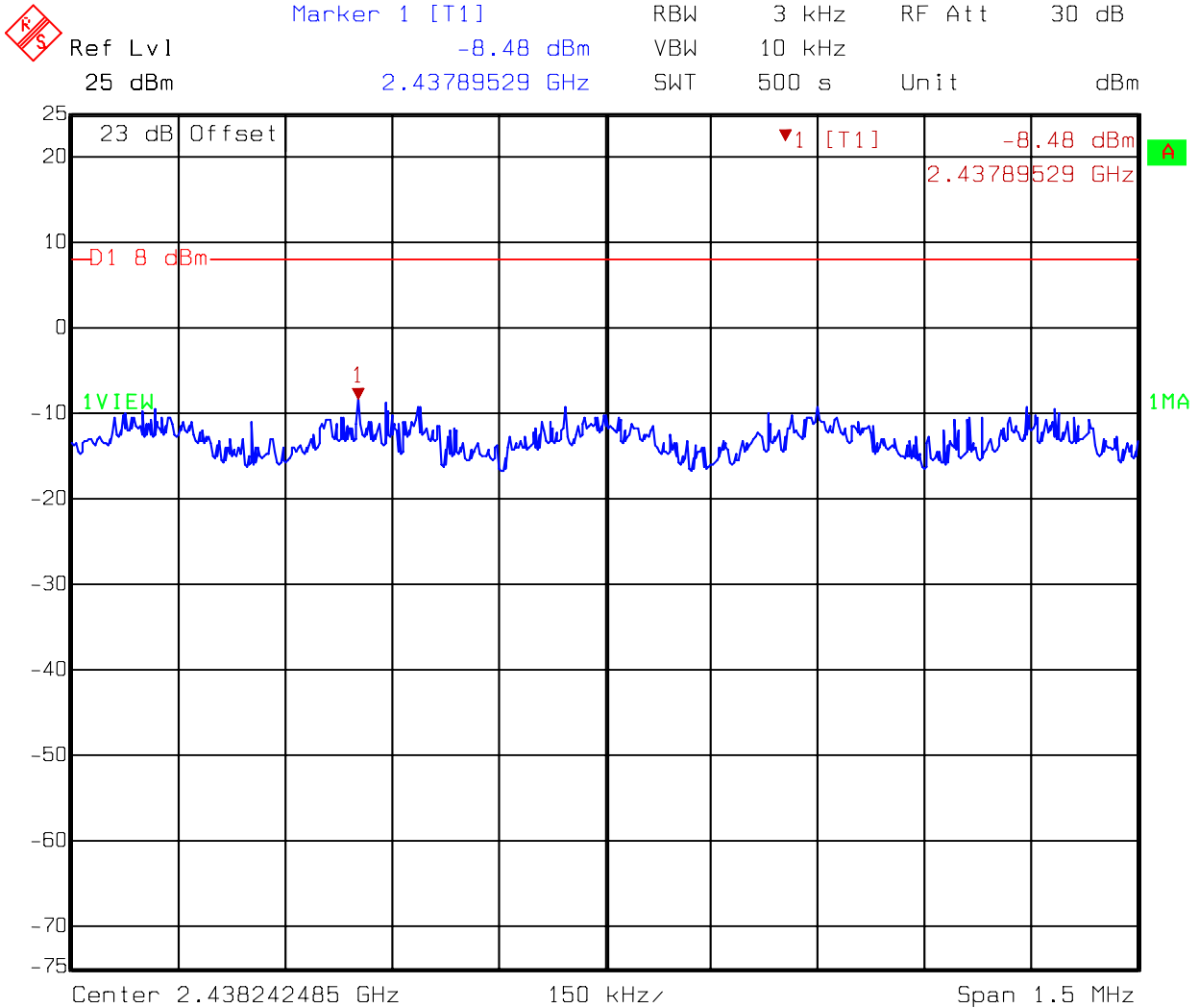
Title: Power density
Comment A: CH 11 at 802.11g mode
Date: 29.FEB.2008 10:40:31

Chain A: Power Spectral Density @ 802.11n HT20 mode channel 1



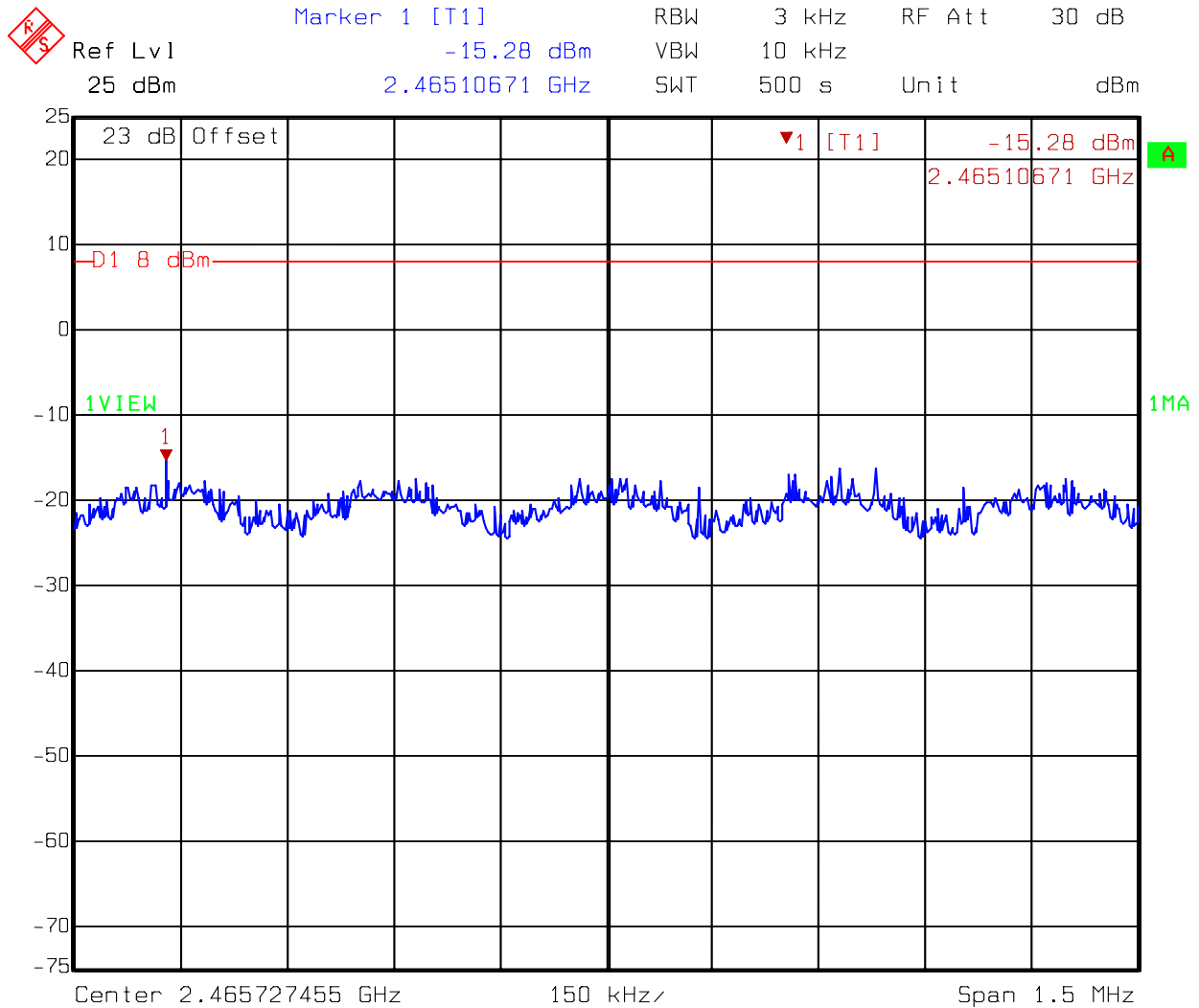
Title: Power density
Comment A: CH 1 at 802.11n 20MHz mode
Date: 29.FEB.2008 11:13:33

Chain A: Power Spectral Density @ 802.11n HT20 mode channel 6



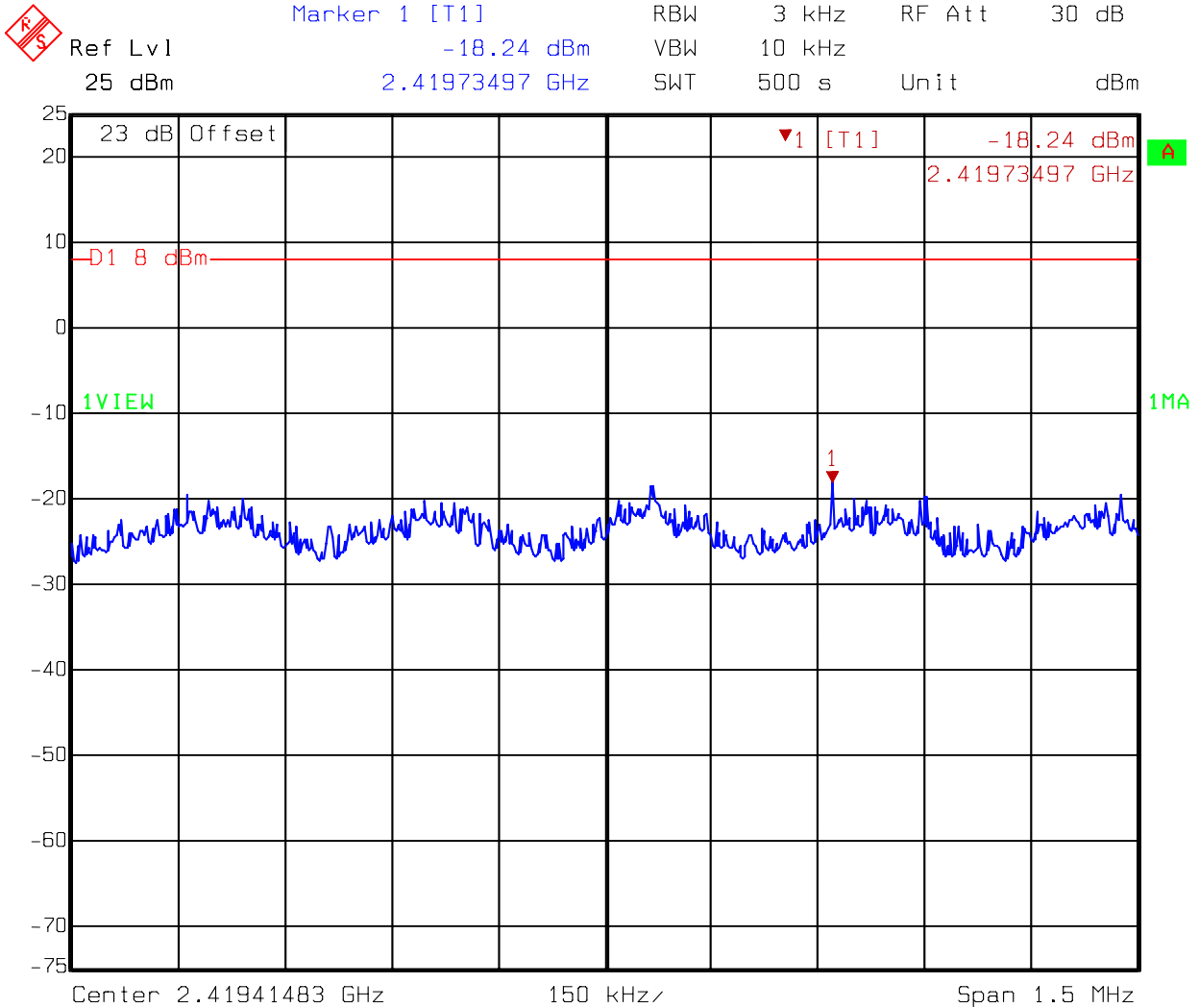
Title: Power density
Comment A: CH 6 at 802.11n 20MHz mode
Date: 29.FEB.2008 11:01:07

Chain A: Power Spectral Density @ 802.11n HT20 mode channel 11



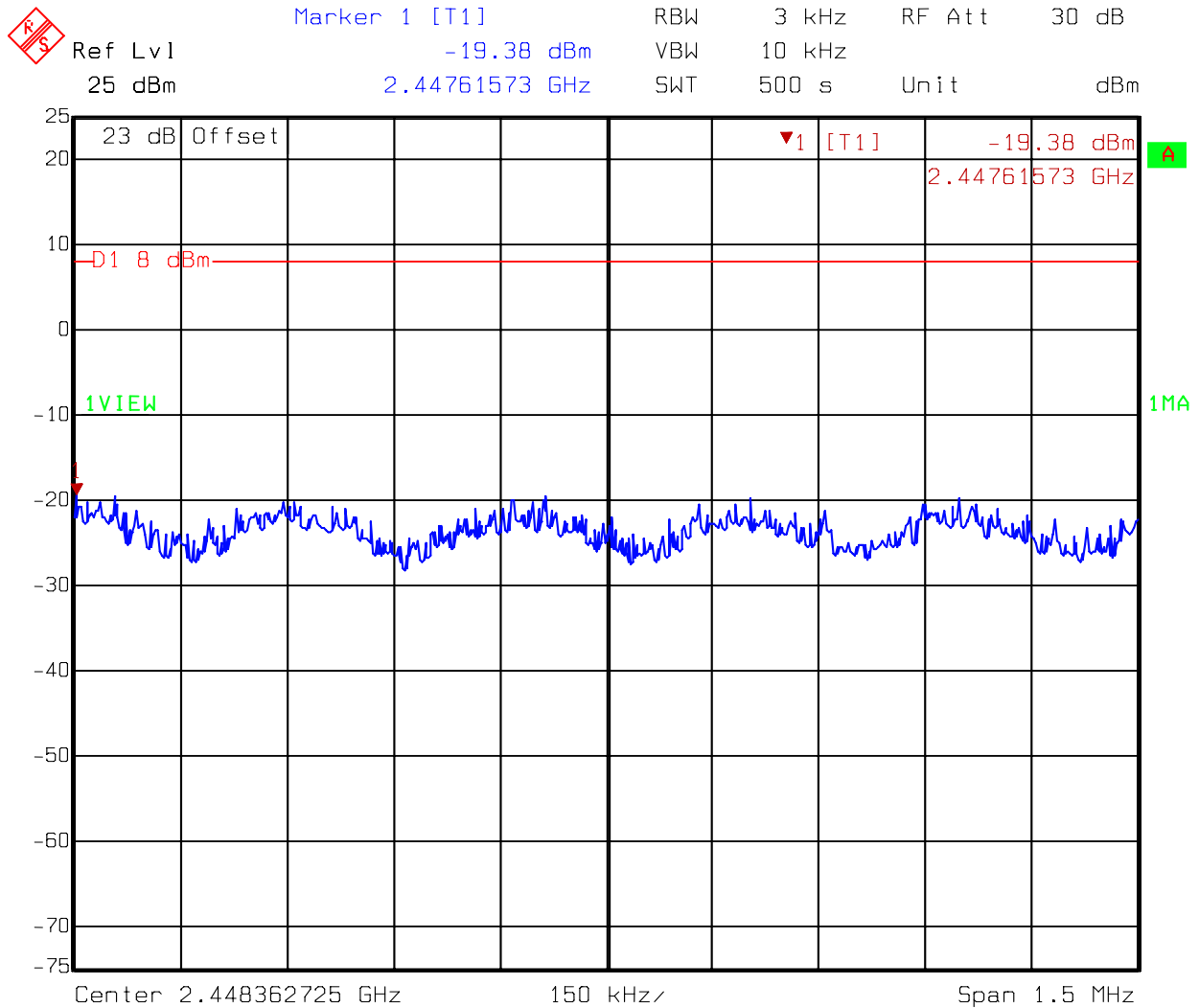
Title: Power density
Comment A: CH 11 at 802.11n 20MHz mode
Date: 29.FEB.2008 10:54:56

Chain A: Power Spectral Density @ 802.11n HT40 mode channel 3



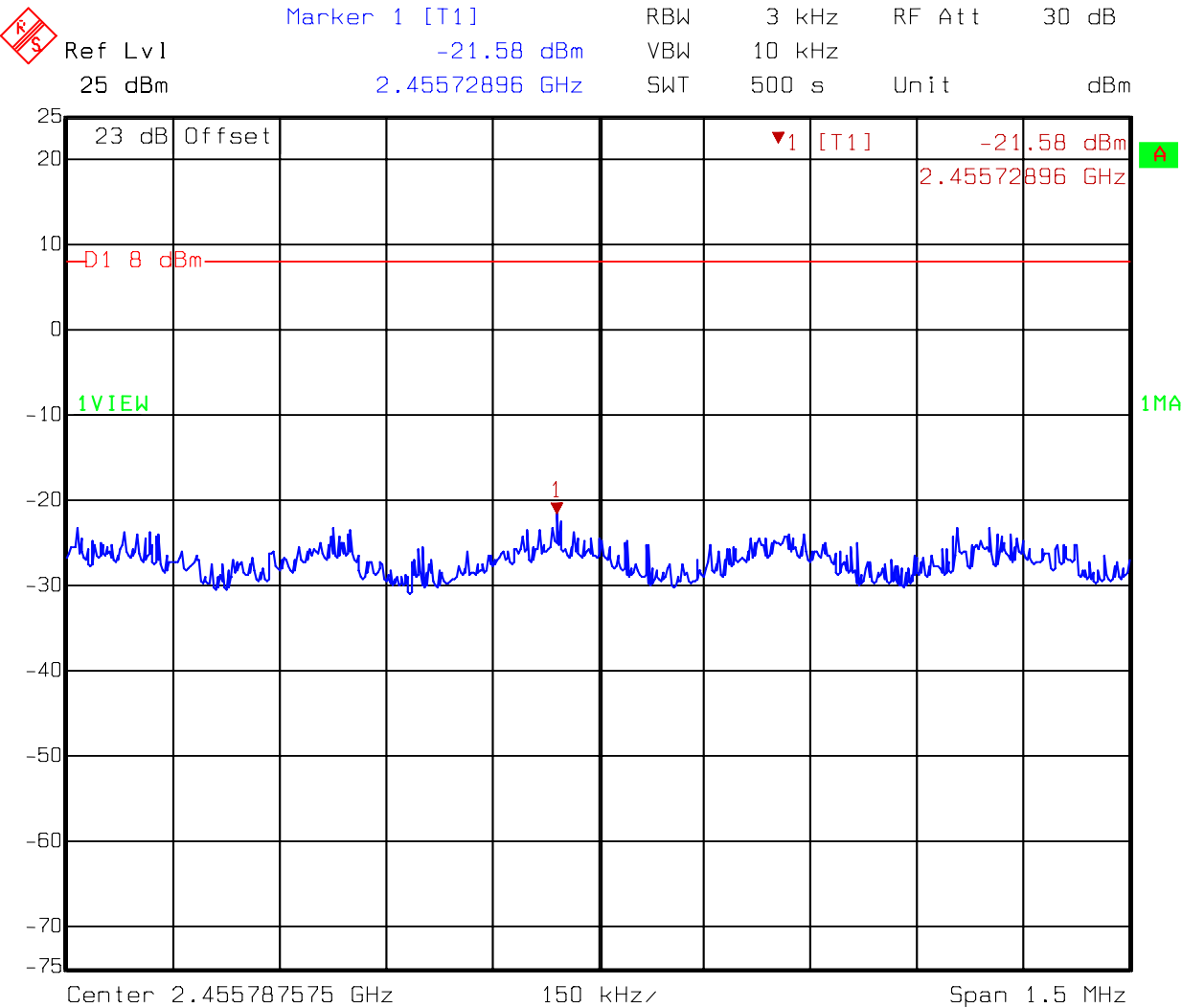
Title: Power density
Comment A: CH 3 at 802.11n 40MHz mode
Date: 29.FEB.2008 11:17:12

Chain A: Power Spectral Density @ 802.11n HT40 mode channel 6



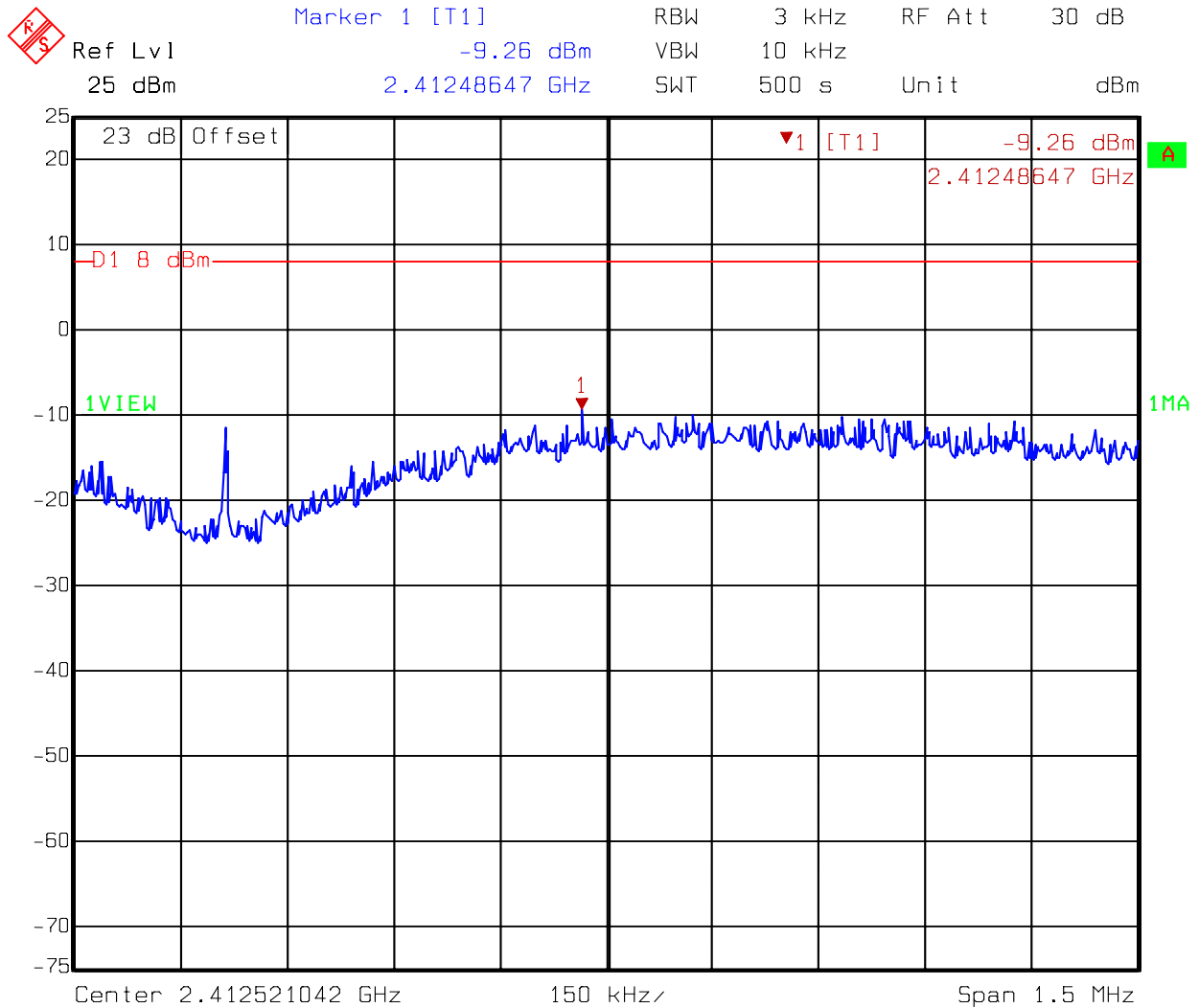
Title: Power density
Comment A: CH 6 at 802.11n 40MHz mode
Date: 03.MAR.2008 10:58:25

Chain A: Power Spectral Density @ 802.11n HT40 mode channel 9



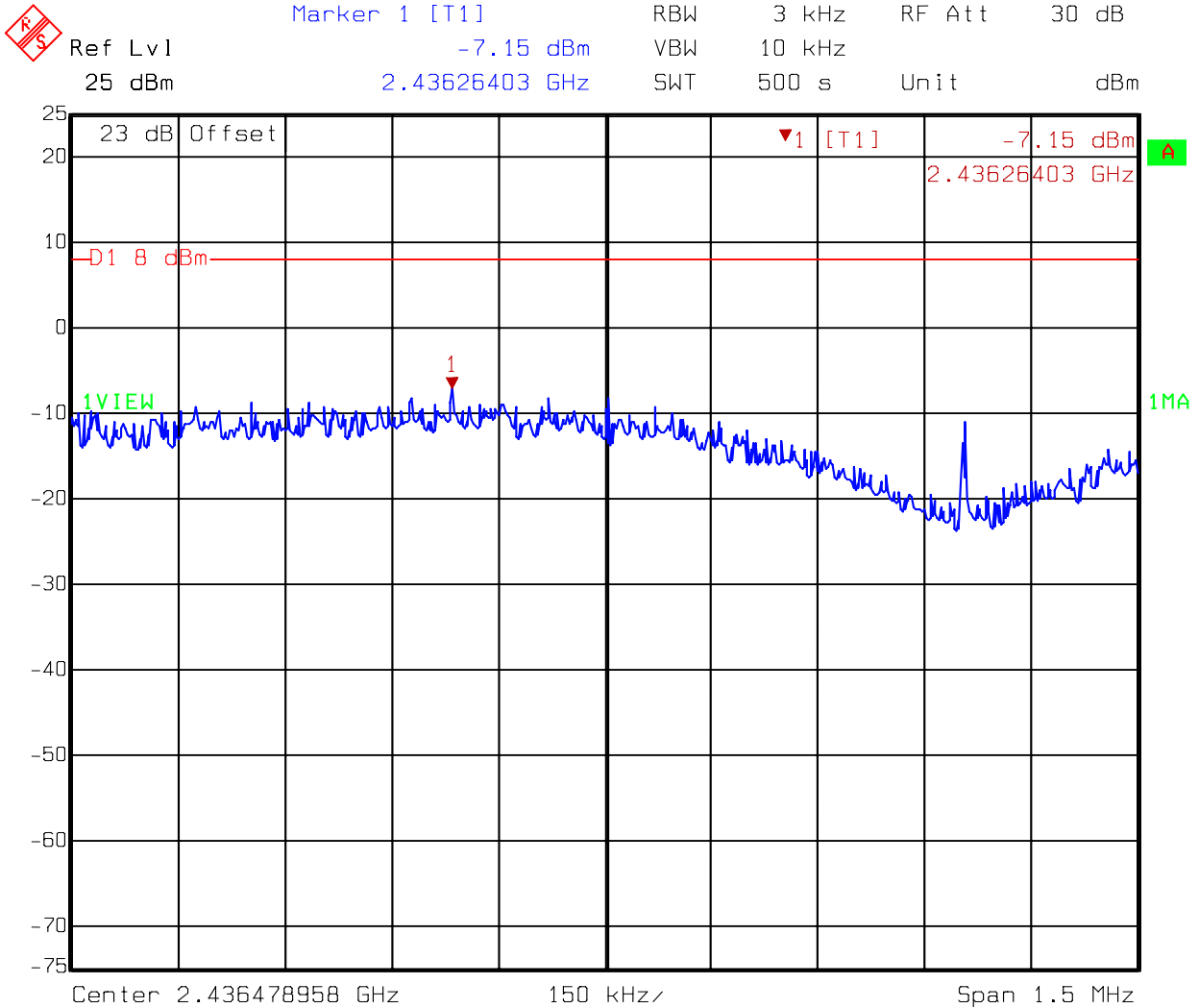
Title: Power density
Comment A: CH 9 at 802.11n 40MHz mode
Date: 29.FEB.2008 11:40:18

Chain B: Power Spectral Density @ 802.11b mode channel 1



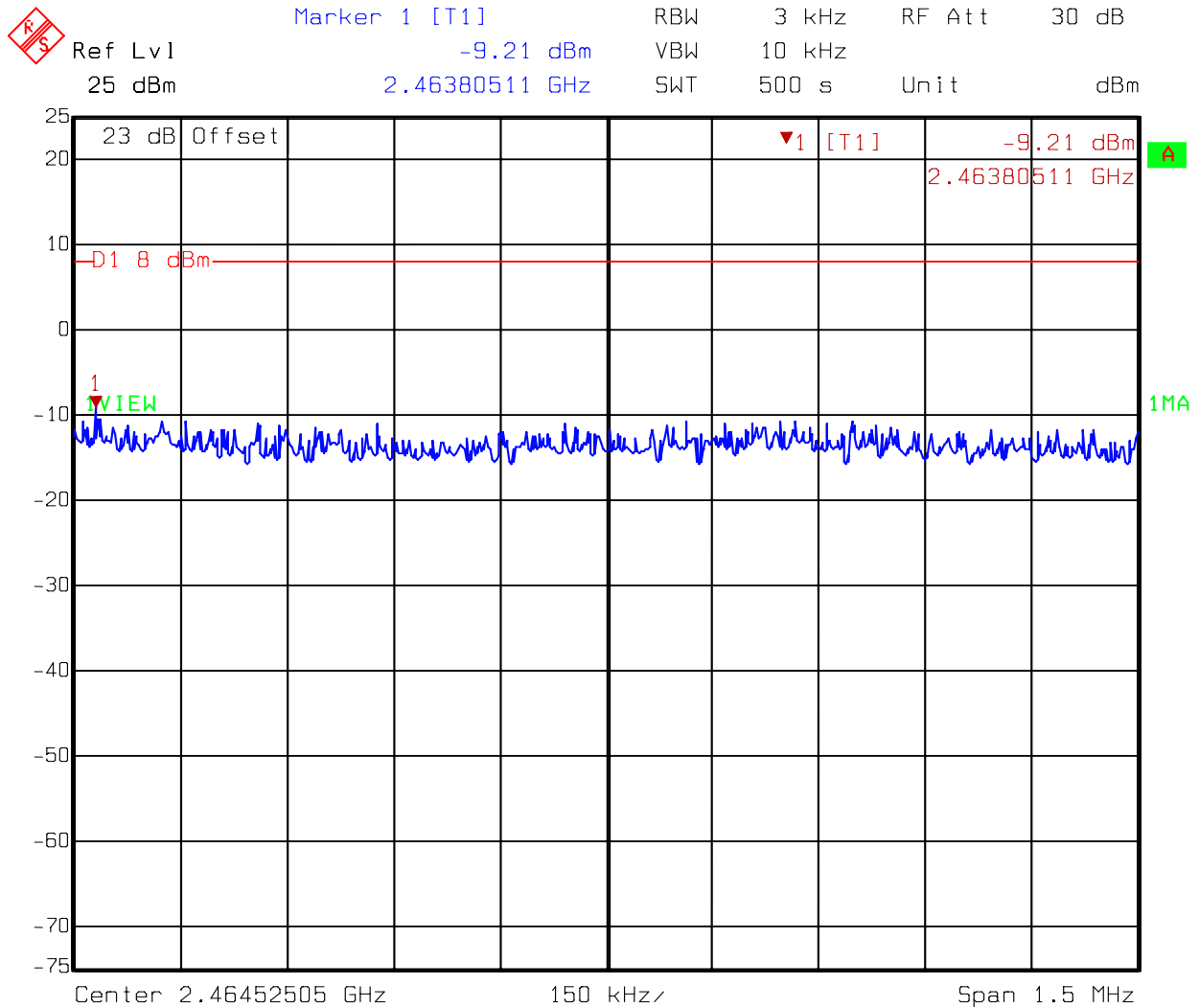
Title: Power density
 Comment A: CH 1 at 802.11b mode
 Date: 29.FEB.2008 09:58:39

Chain B: Power Spectral Density @ 802.11b mode channel 6



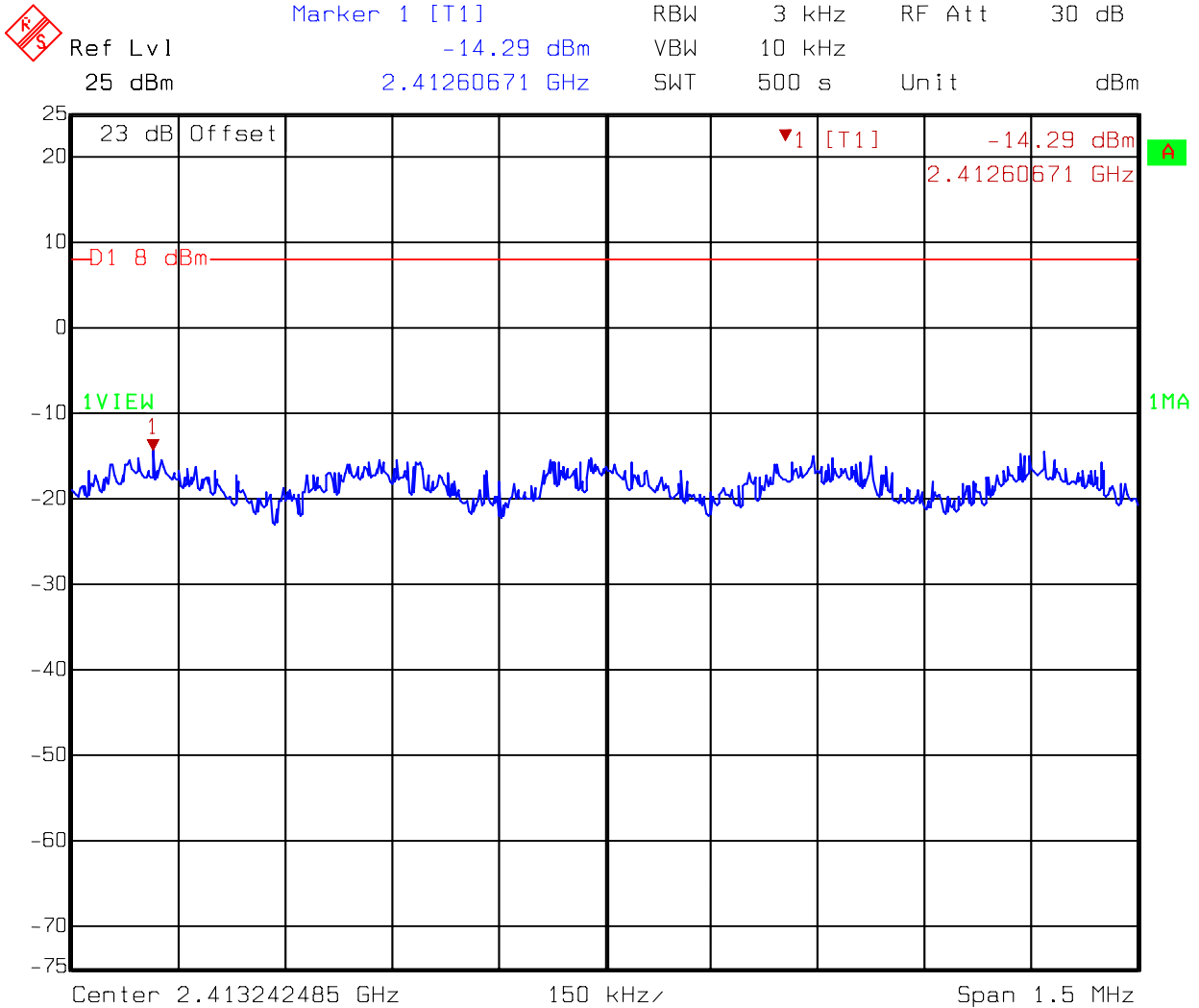
Title: Power density
Comment A: CH 6 at 802.11b mode
Date: 29.FEB.2008 10:09:10

Chain B: Power Spectral Density @ 802.11b mode channel 11



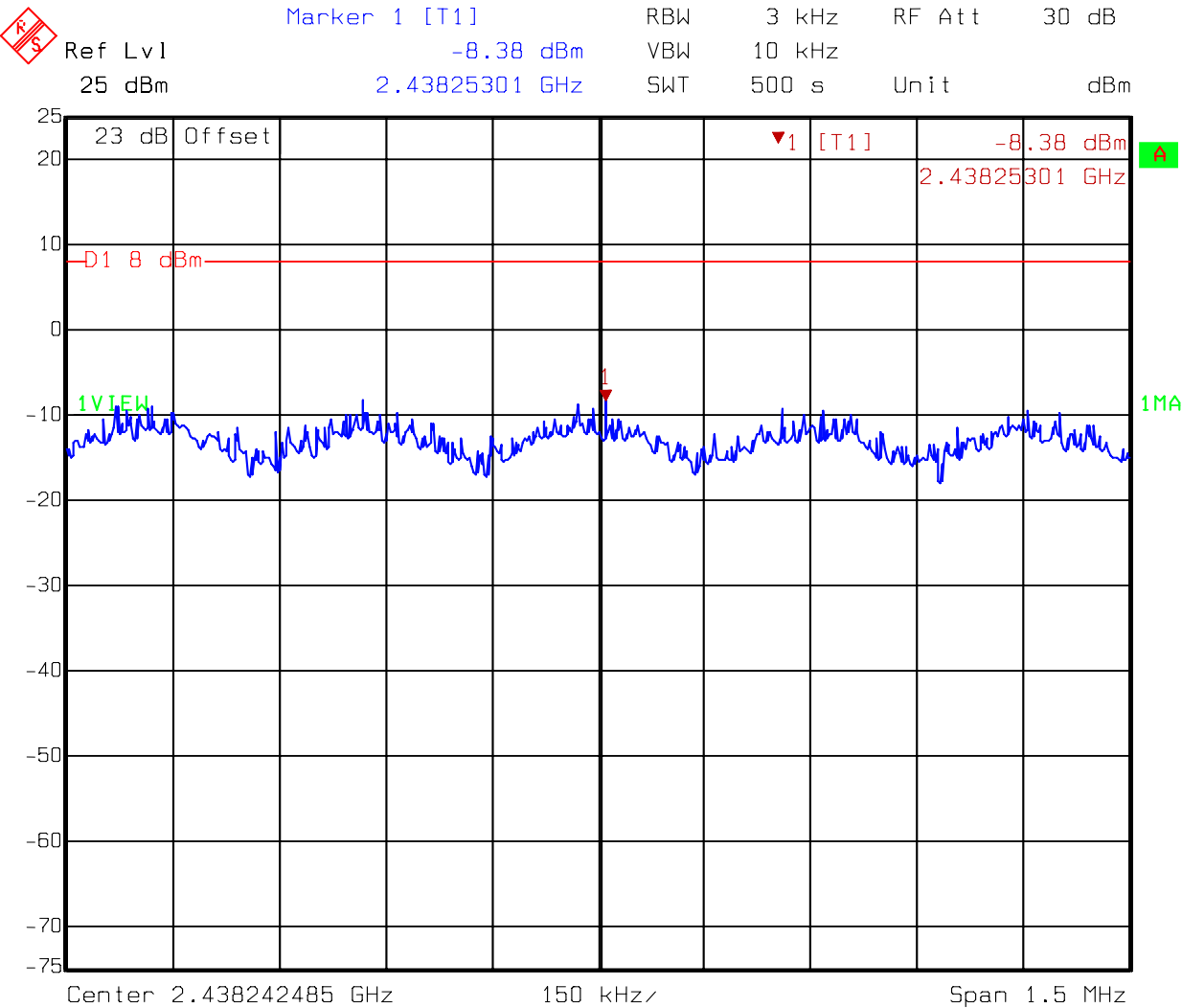
Title: Power density
Comment A: CH 11 at 802.11b mode
Date: 29.FEB.2008 10:17:56

Chain B: Power Spectral Density @ 802.11g mode channel 1



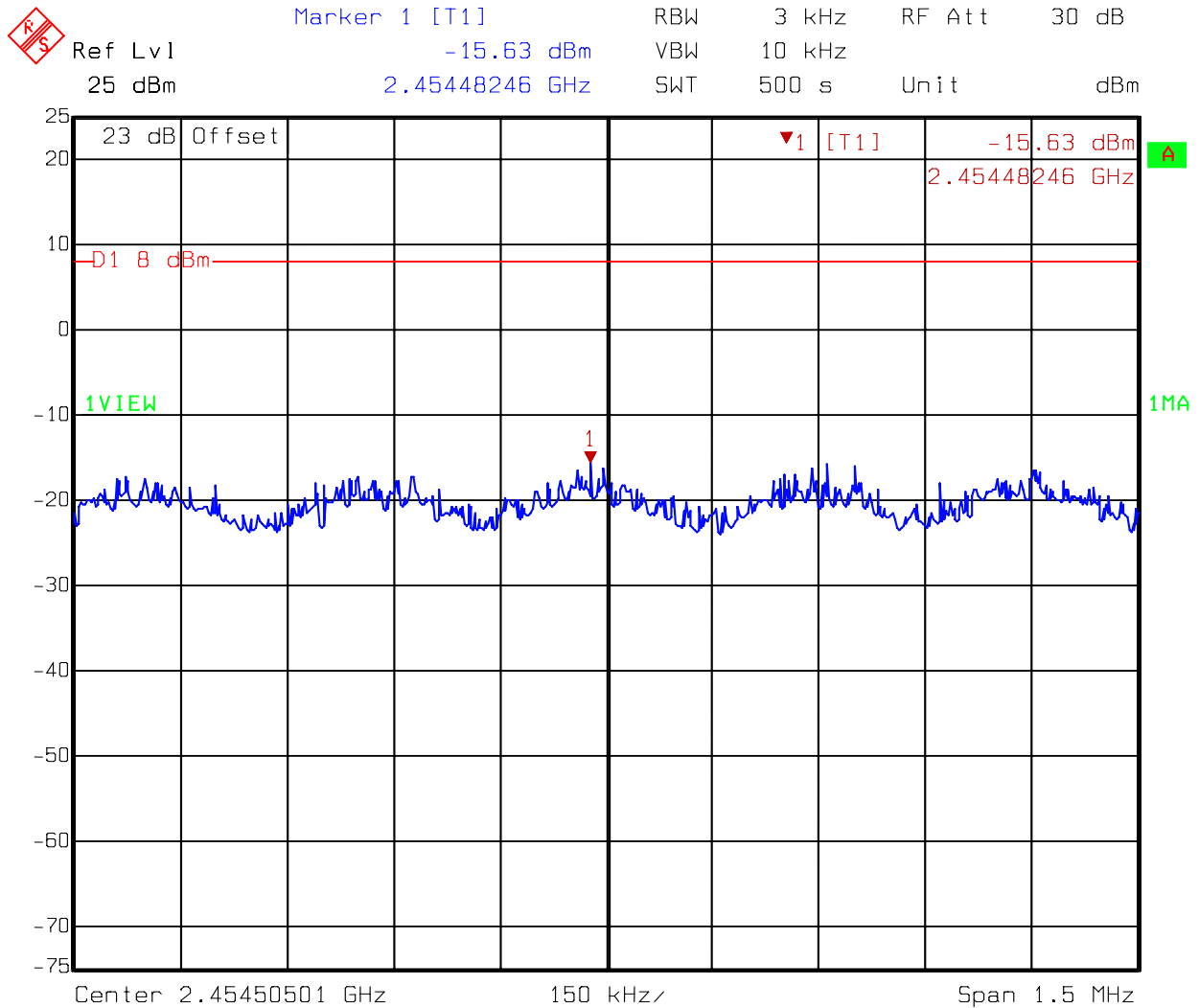
Title: Power density
Comment A: CH 1 at 802.11g mode
Date: 29.FEB.2008 10:26:32

Chain B: Power Spectral Density @ 802.11g mode channel 6



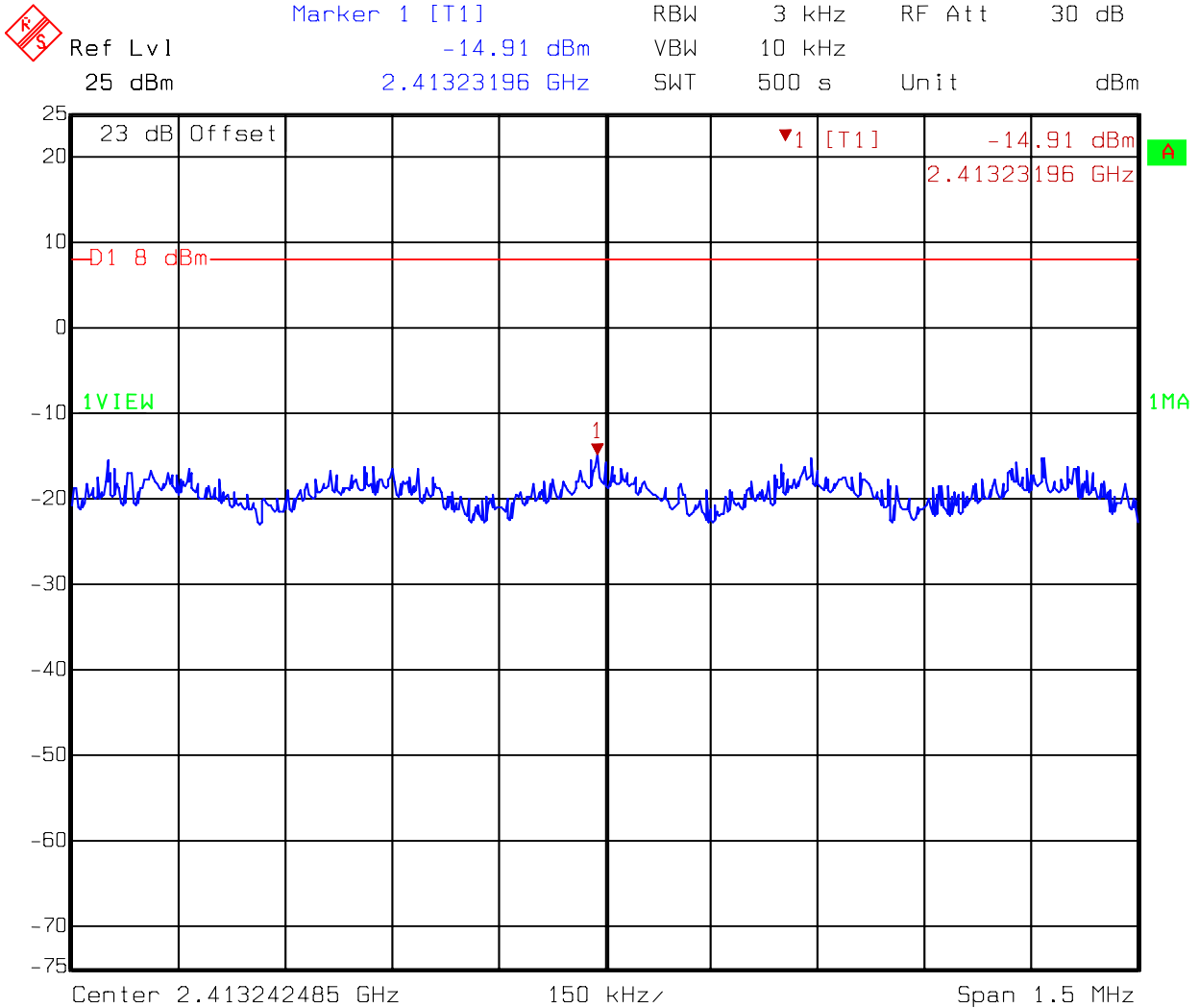
Title: Power density
Comment A: CH 6 at 802.11g mode
Date: 29.FEB.2008 10:32:30

Chain B: Power Spectral Density @ 802.11g mode channel 11



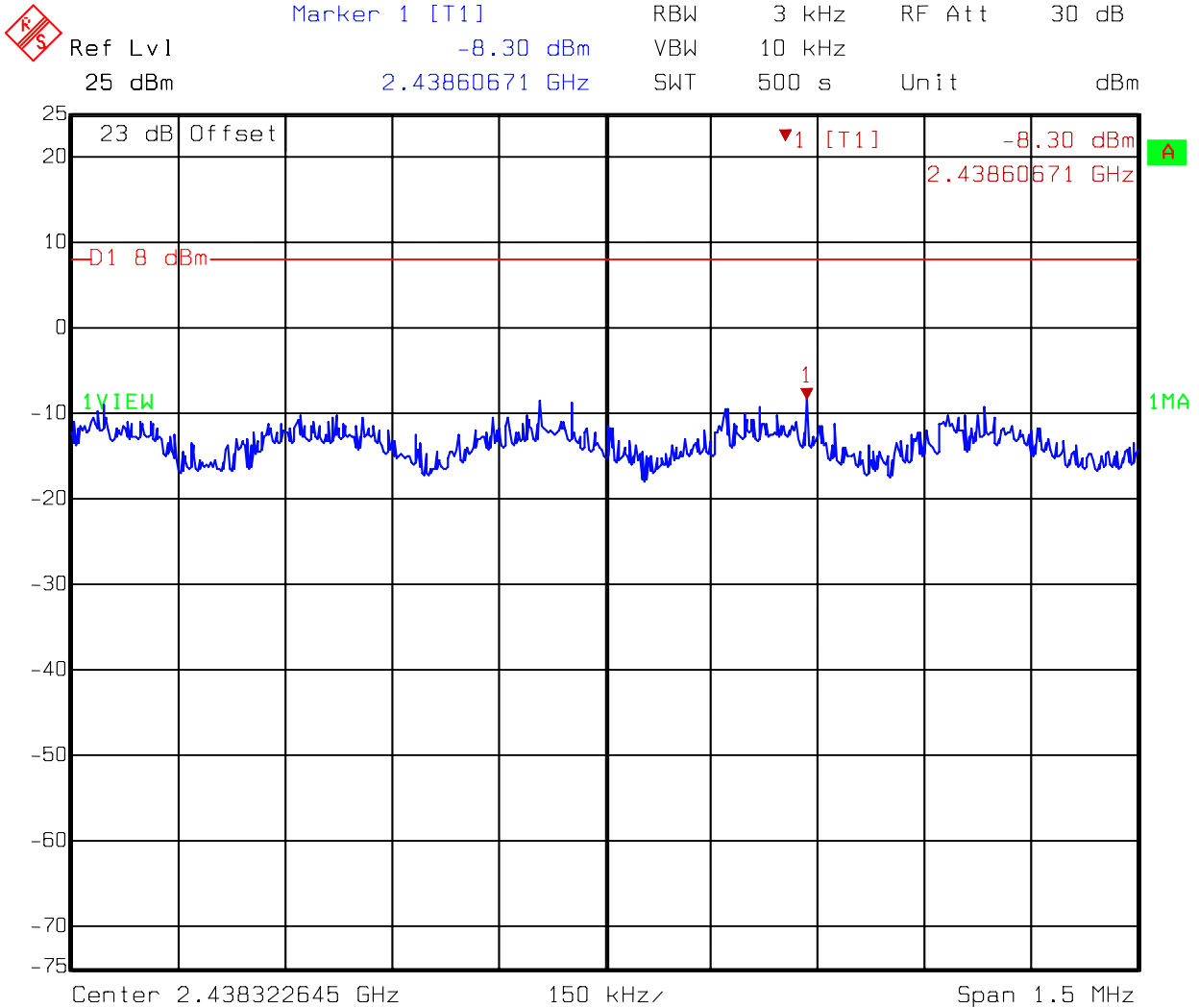
Title: Power density
Comment A: CH 11 at 802.11g mode
Date: 29.FEB.2008 10:43:44

Chain B: Power Spectral Density @ 802.11n HT20 mode channel 1



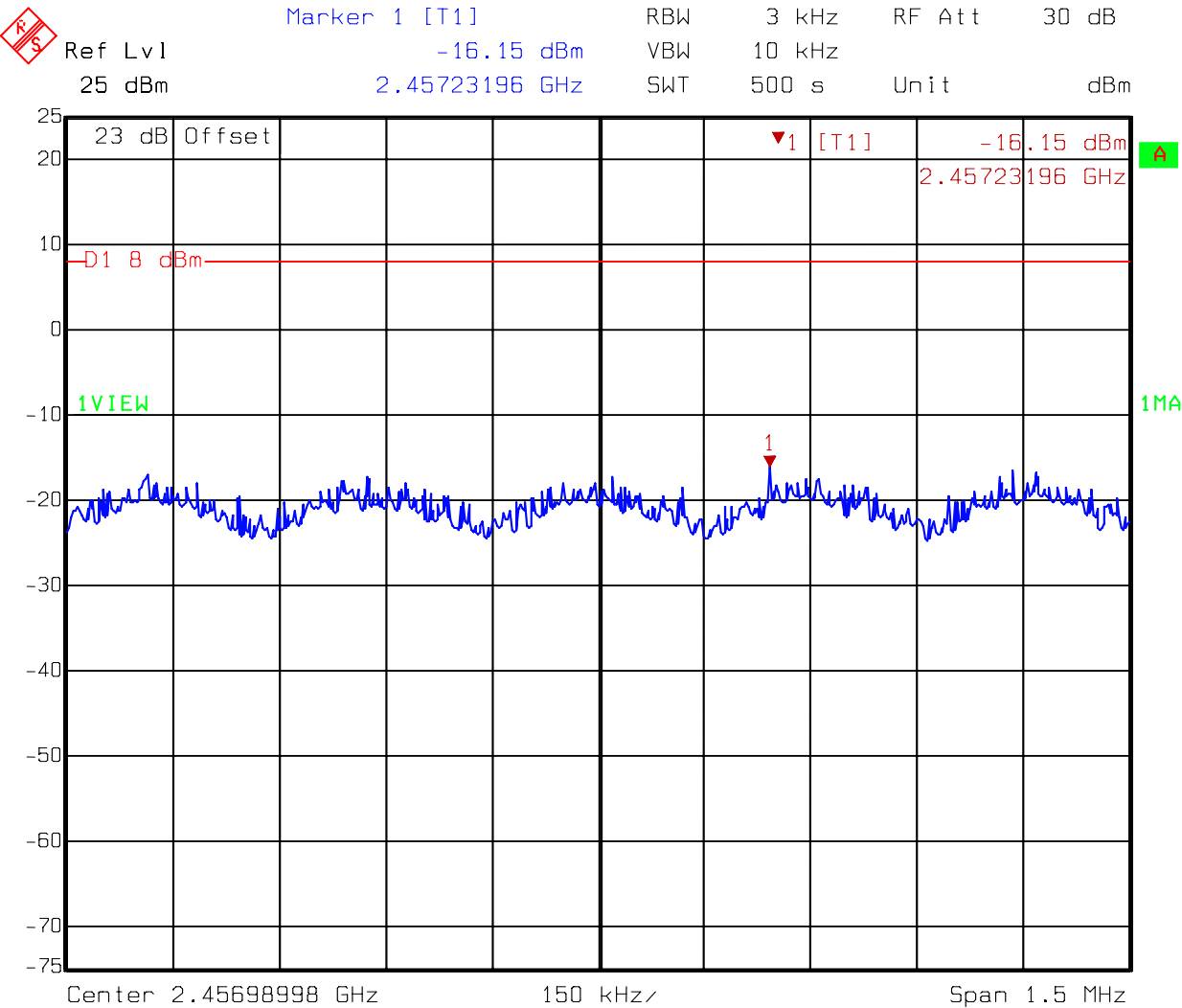
Title: Power density
Comment A: CH 1 at 802.11n 20MHz mode
Date: 29.FEB.2008 11:10:02

Chain B: Power Spectral Density @ 802.11n HT20 mode channel 6



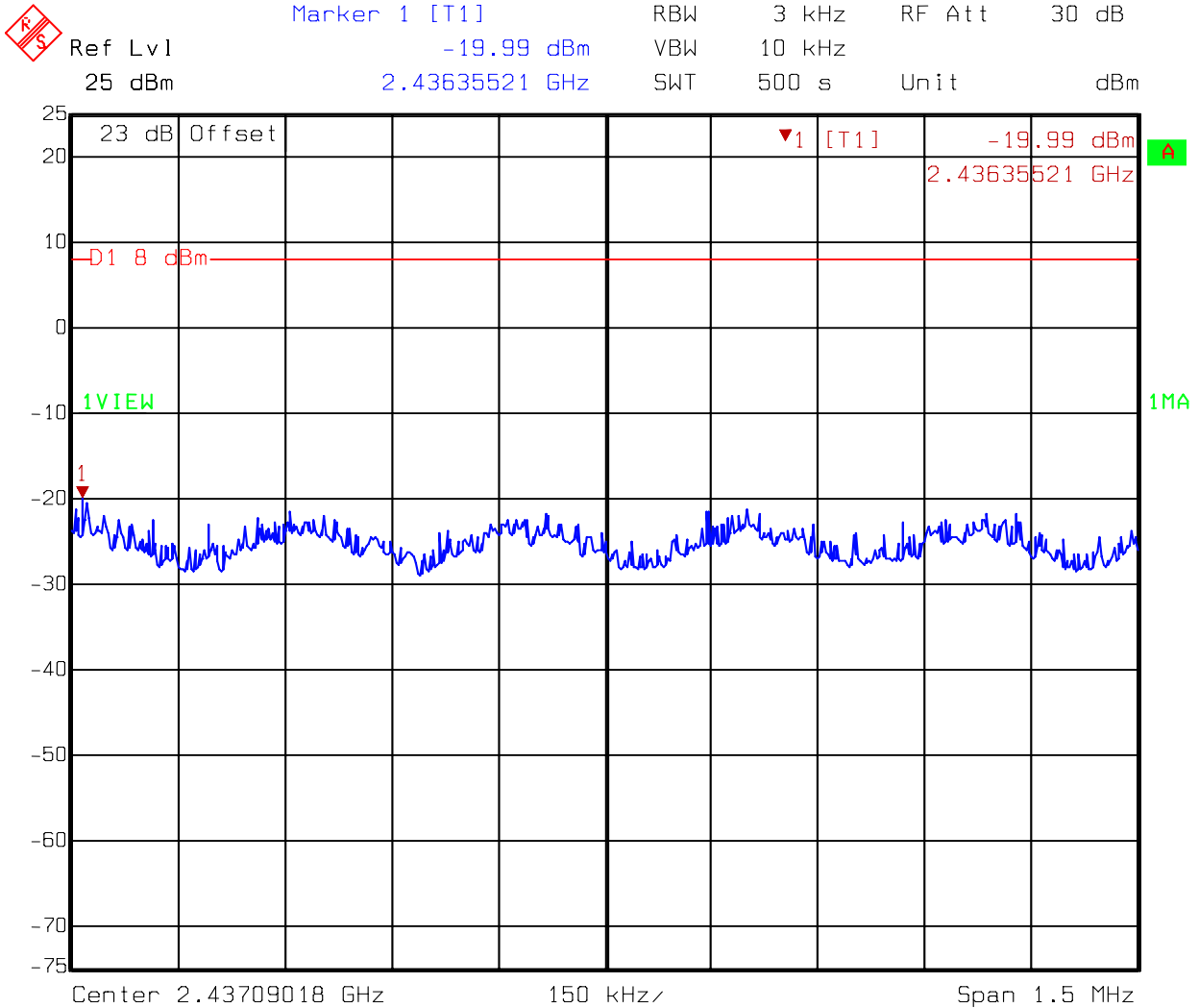
Title: Power density
 Comment A: CH 6 at 802.11n 20MHz mode
 Date: 29.FEB.2008 11:05:32

Chain B: Power Spectral Density @ 802.11n HT20 mode channel 11



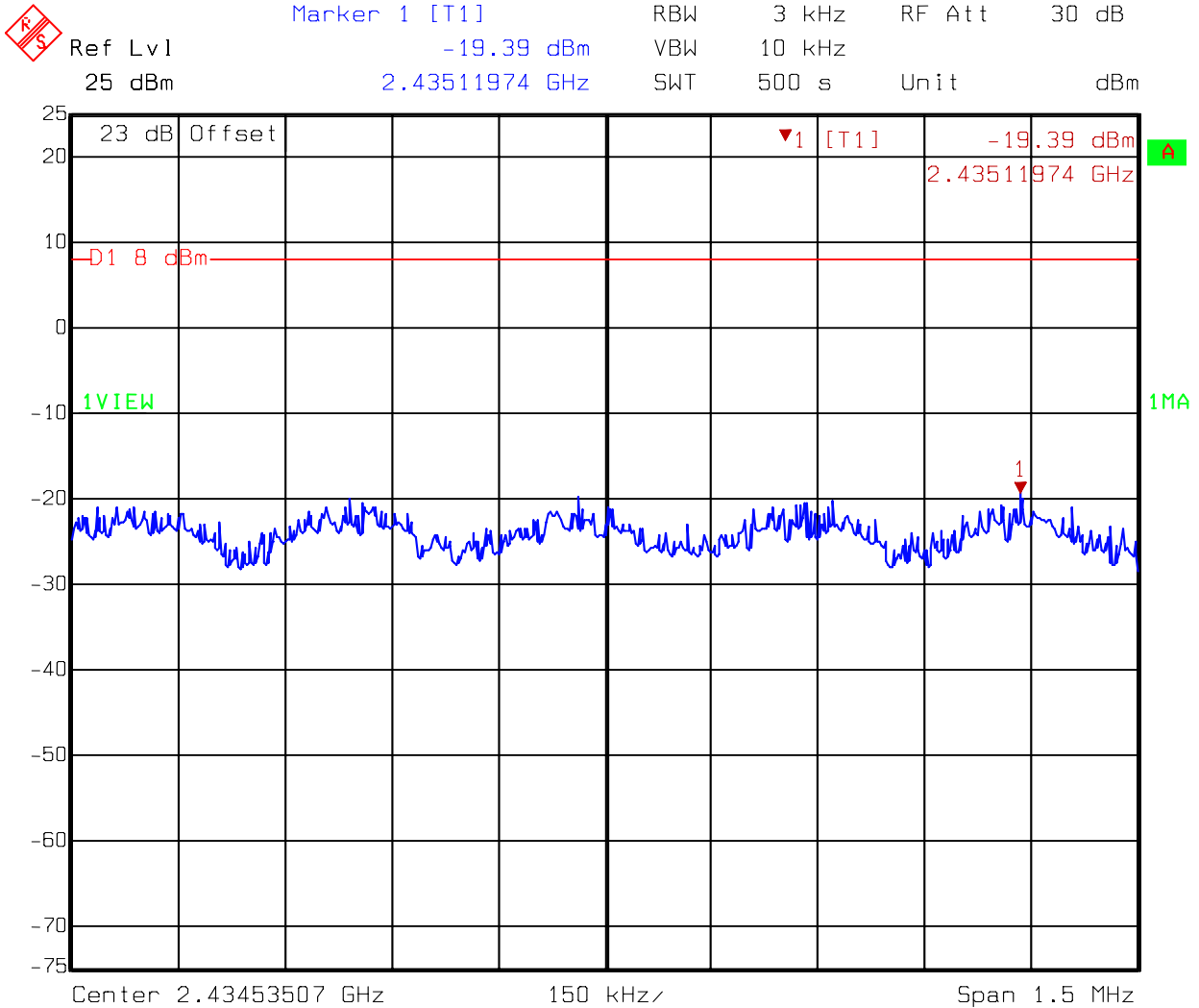
Title: Power density
Comment A: CH 11 at 802.11n 20MHz mode

Chain B: Power Spectral Density @ 802.11n HT40 mode channel 3



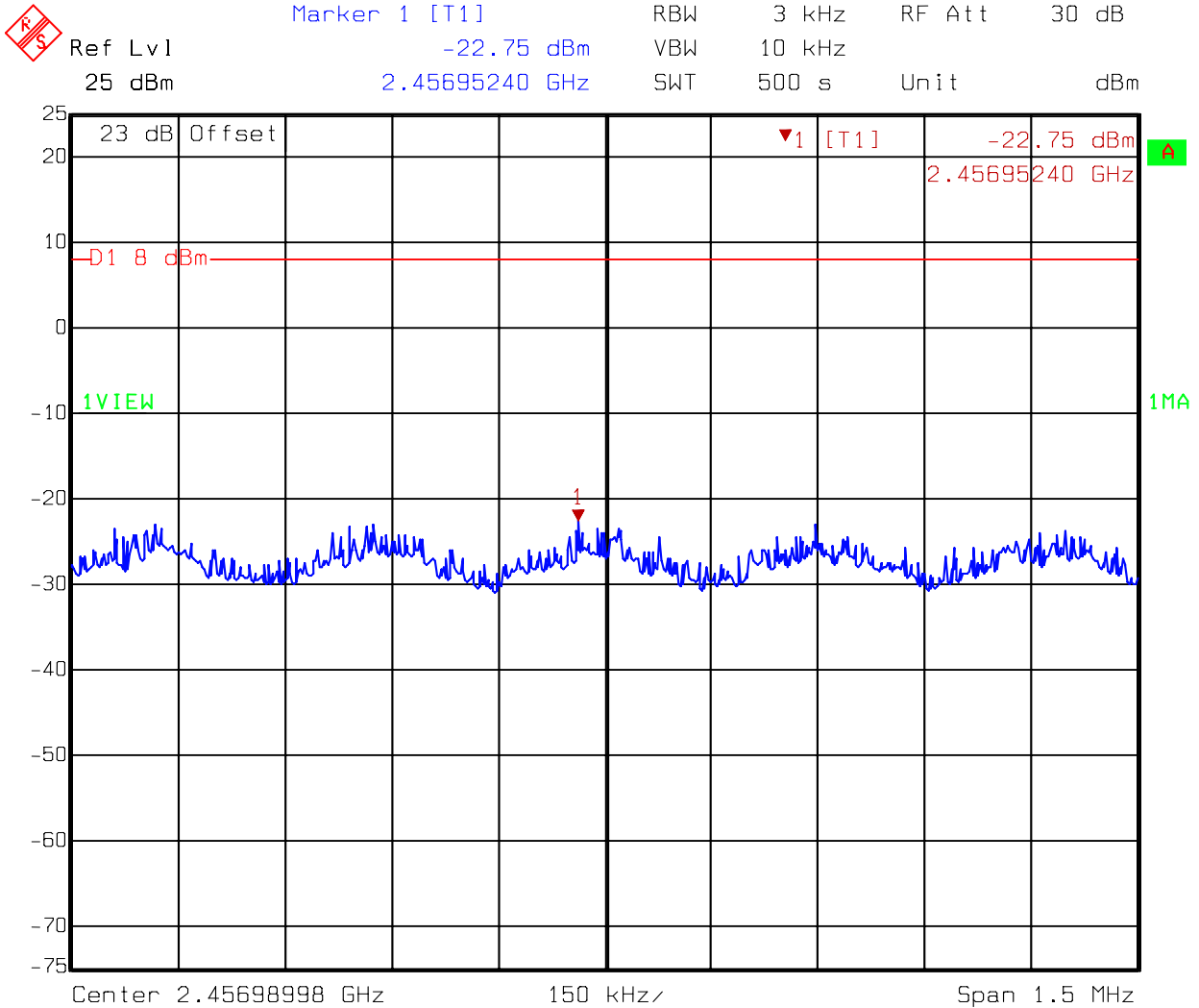
Title: Power density
Comment A: CH 3 at 802.11n 40MHz mode
Date: 29.FEB.2008 11:20:20

Chain B: Power Spectral Density @ 802.11n HT40 mode channel 6



Title: Power density
Comment A: CH 6 at 802.11n 40MHz mode
Date: 03.MAR.2008 11:49:28

Chain B: Power Spectral Density @ 802.11n HT40 mode channel 9



Title: Power density
Comment A: CH 9 at 802.11n 40MHz mode
Date: 29.FEB.2008 11:36:39

7. RF Antenna conducted Spurious

Name of Test	RF Antenna Conducted Spurious
Base Standard	FCC 15.247(d), KDB558074

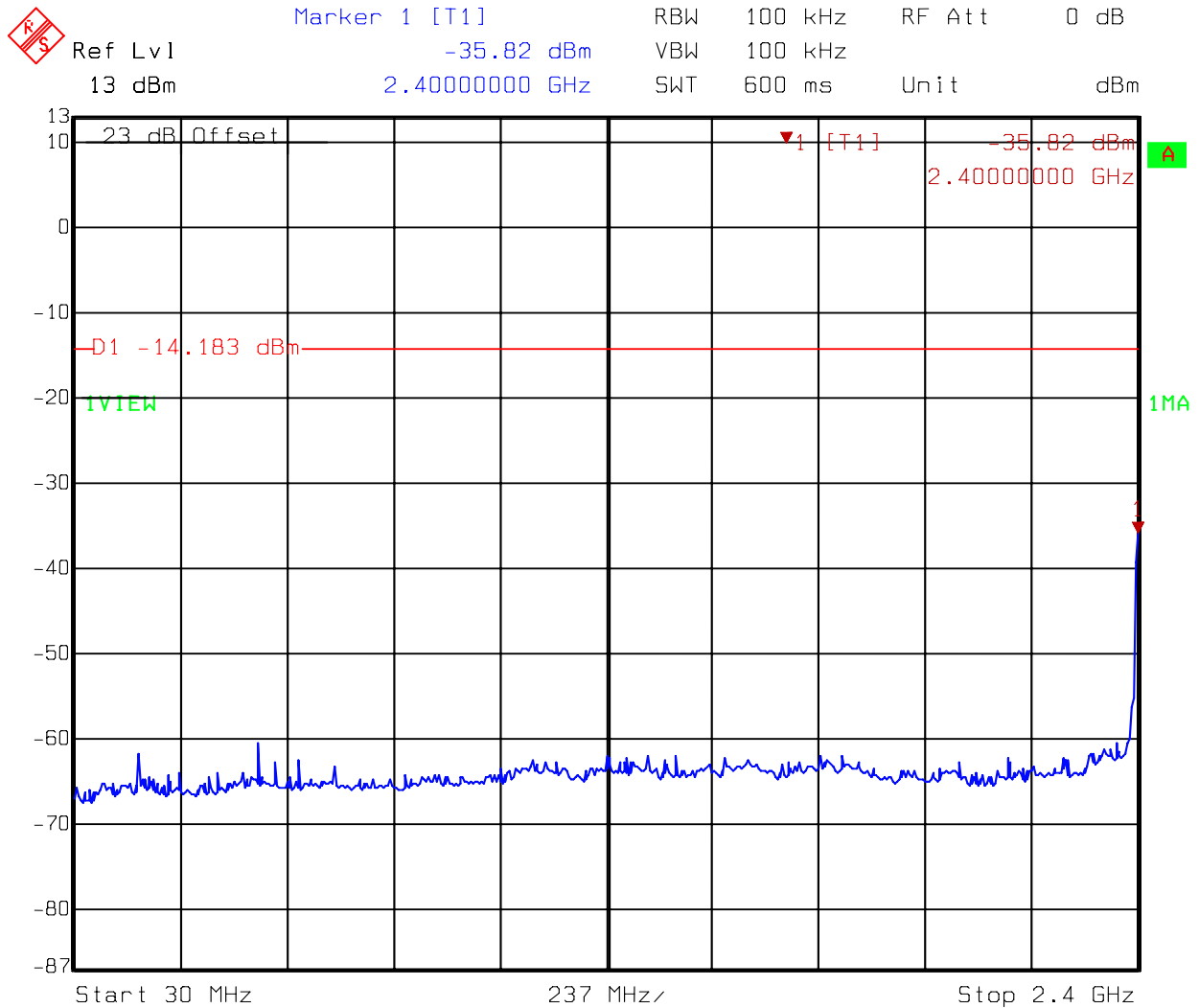
Tested By: Rex Liao
Test Date: Feb. 29, 2008

Test Equipment: EC1365

Test Result: Complies
Test Method: See Appendix C
Measurement Data: See plots below

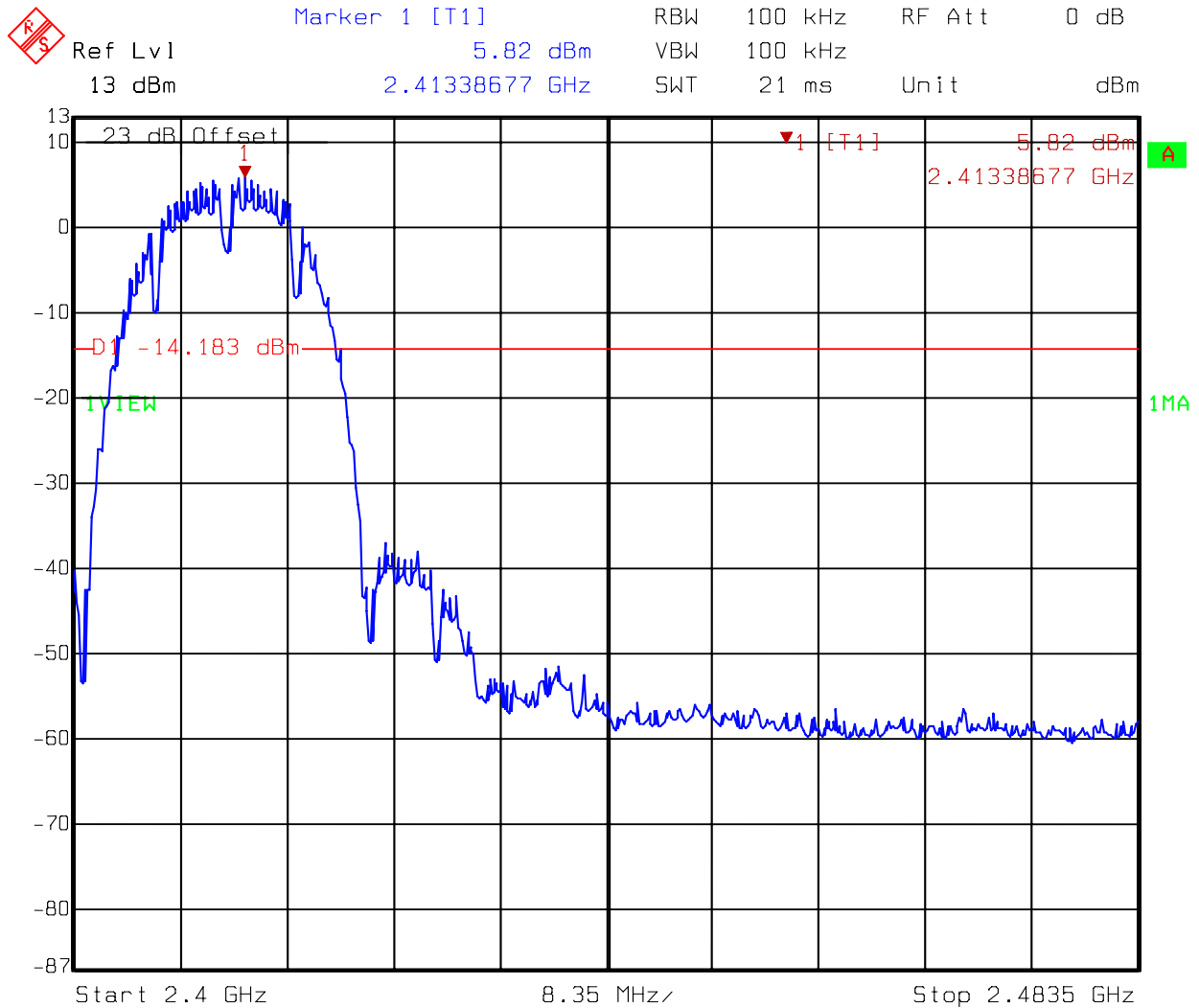
Note: (1) The EUT was tested while in a continuous transmit mode. The EUT was tuned to a low, middle and high channel.
(2) The EUT operating at 2.4GHz ISM band. Frequency Range scanned from 30MHz to 25GHz.

Chain A: conducted spurious @ 802.11b mode channel 1 (1 of 3)



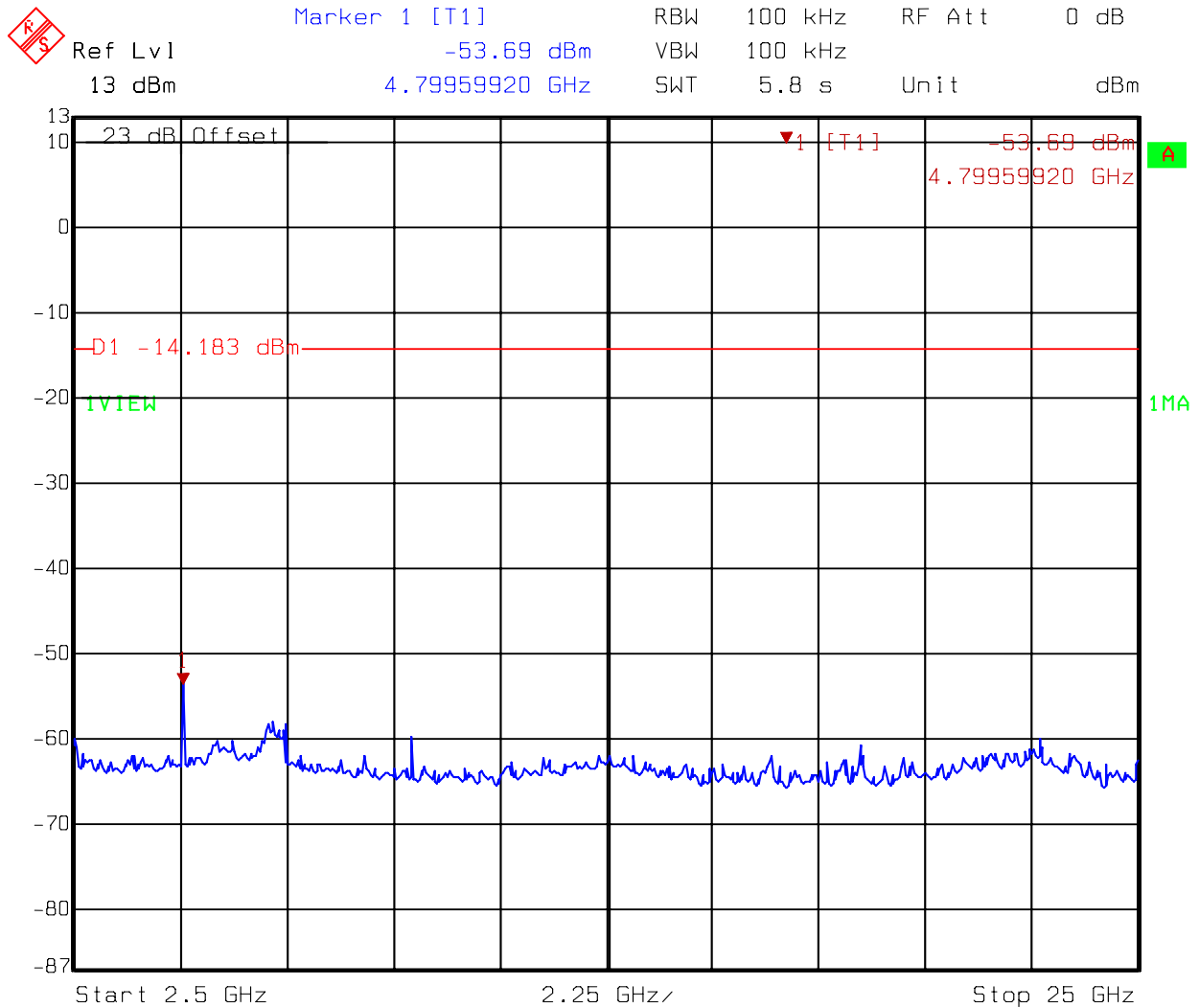
Title: Conductive-Spurious
Comment A: CH 1 at 802.11b mode 30MHz~2400MHz
Date: 29.FEB.2008 09:55:40

Chain A: conducted spurious @ 802.11b mode channel 1 (2 of 3)



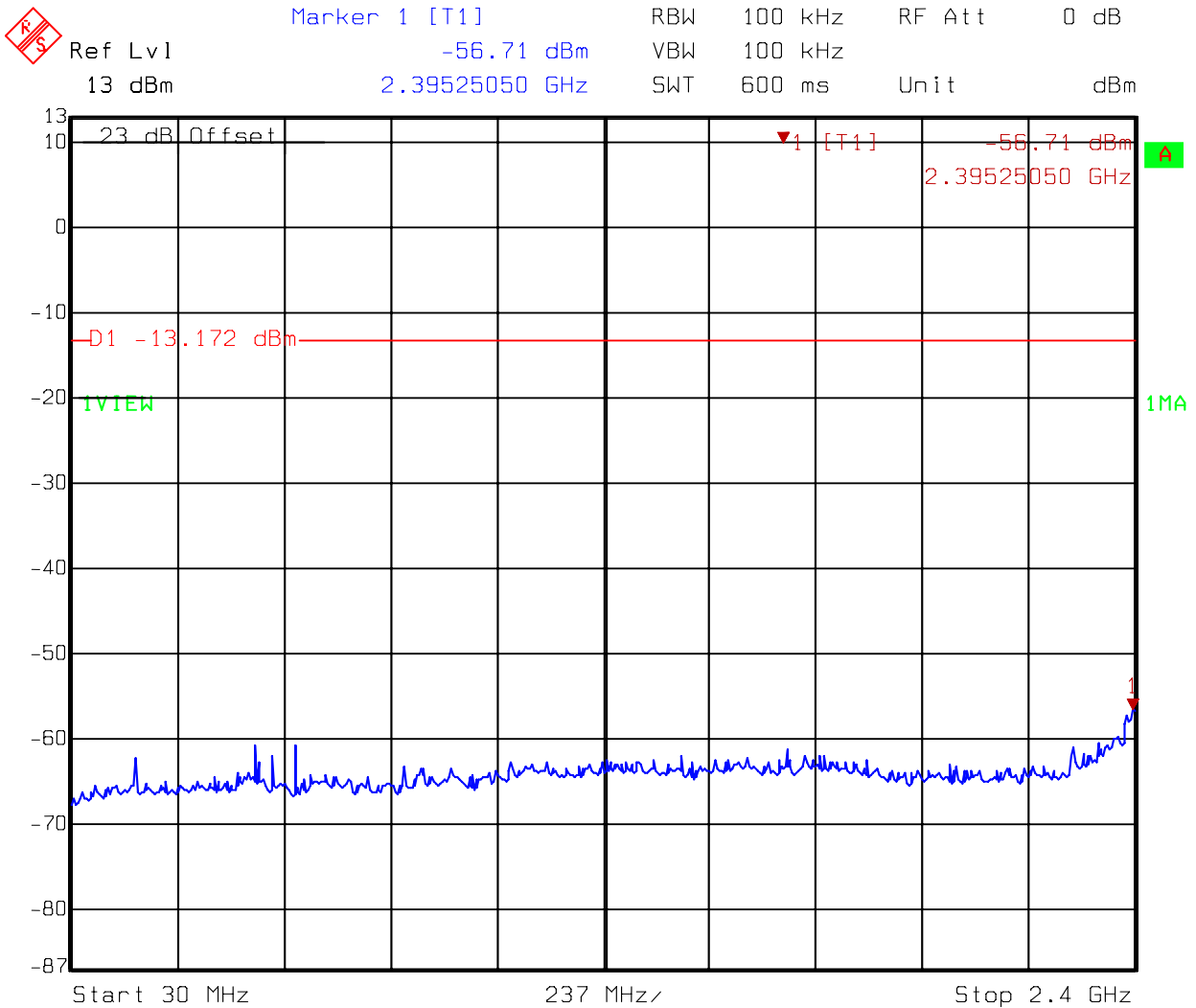
Title: Conductive-Spurious
Comment A: CH 1 at 802.11b mode 2400MHz~2483.5MHz
Date: 29.FEB.2008 09:55:18

Chain A: conducted spurious @ 802.11b mode channel 1 (3 of 3)



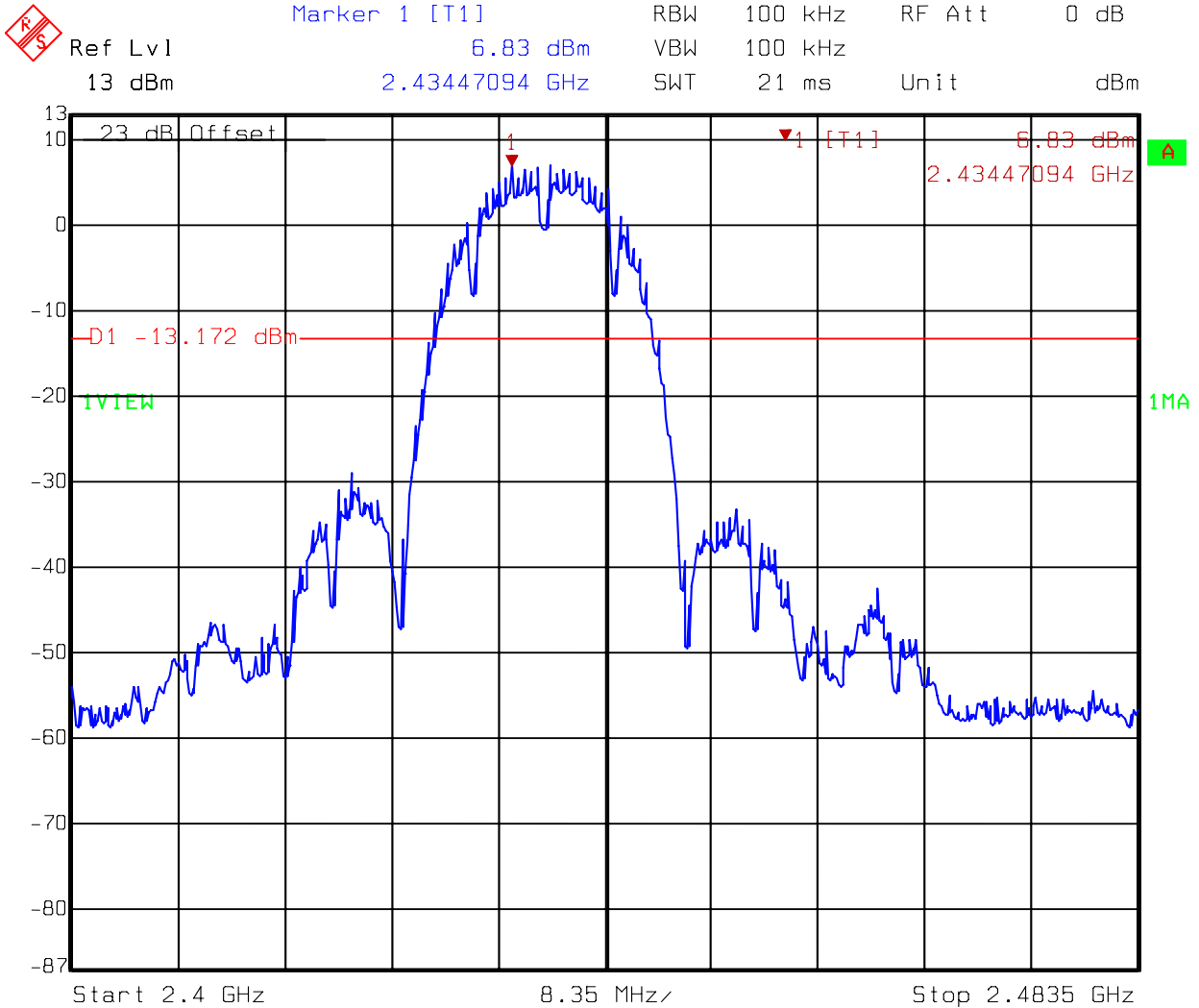
Title: Conductive-Spurious
Comment A: CH 1 at 802.11b mode 2483.5MHz~25GHz
Date: 29.FEB.2008 09:56:09

Chain A: conducted spurious @ 802.11b mode channel 6 (1 of 3)



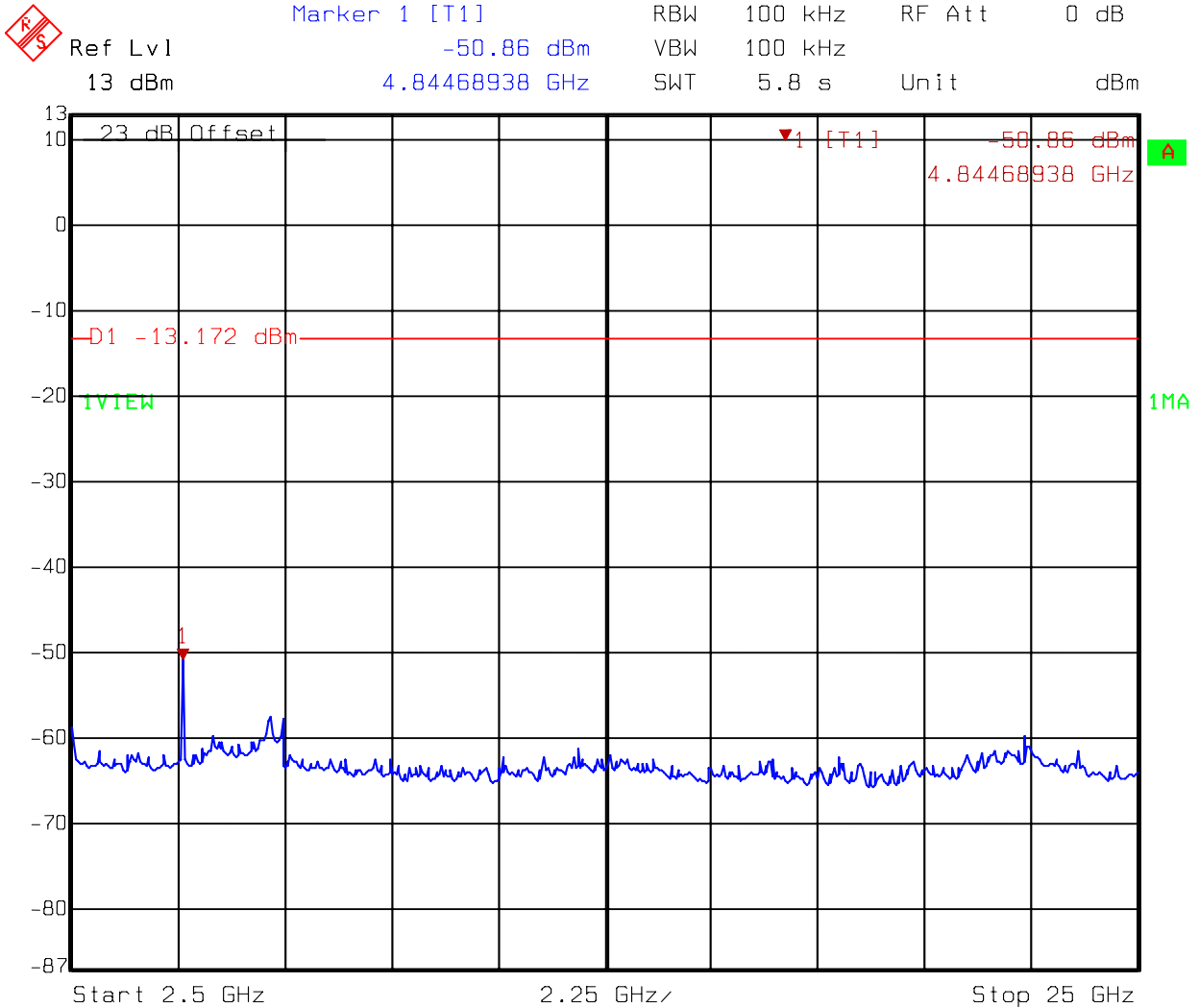
Title: Conductive-Spurious
Comment A: CH 6 at 802.11b mode 30MHz~2400MHz
Date: 29.FEB.2008 10:06:43

Chain A: conducted spurious @ 802.11b mode channel 6 (2 of 3)



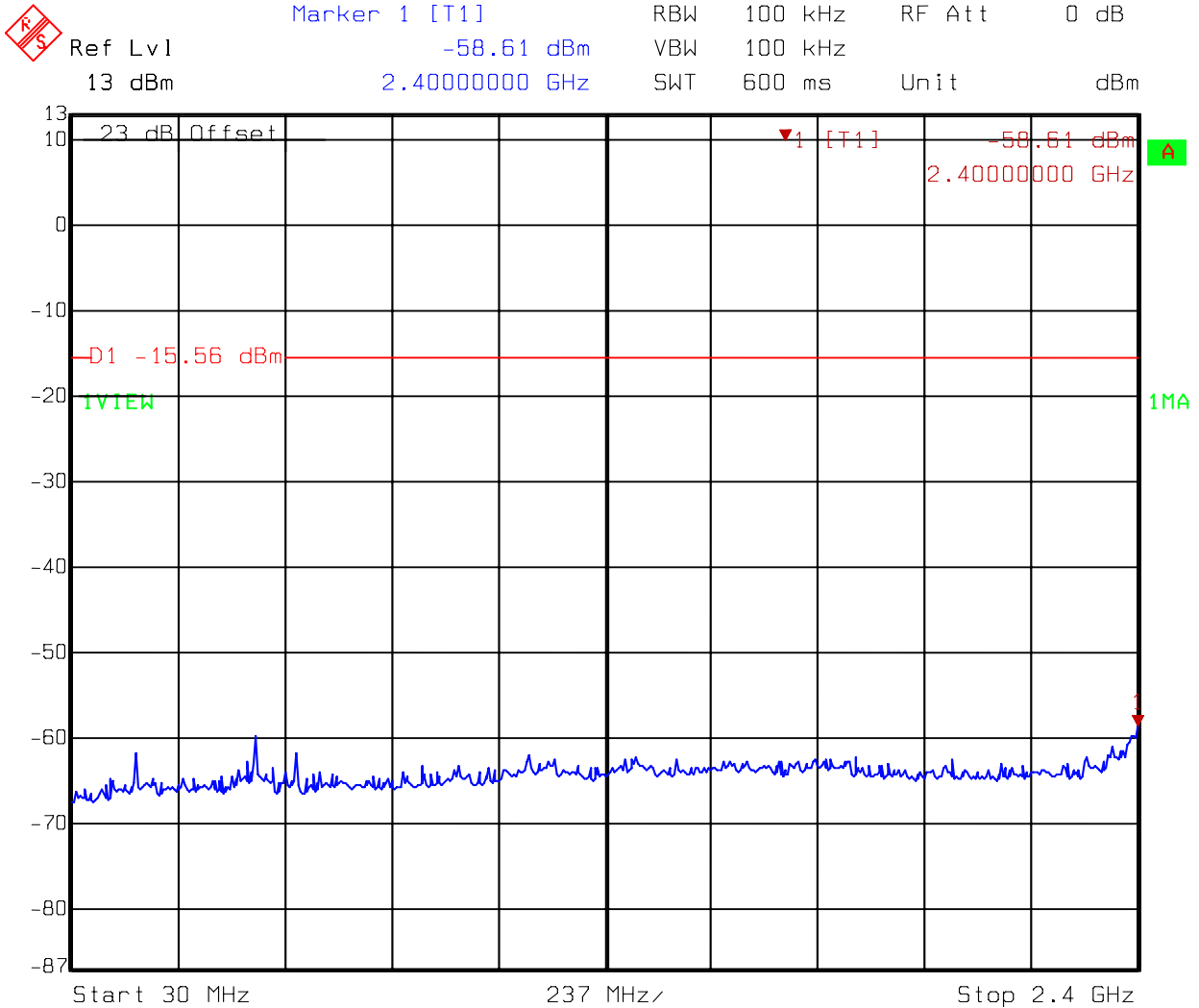
Title: Conductive-Spurious
Comment A: CH 6 at 802.11b mode 2400MHz~2483.5MHz
Date: 29.FEB.2008 10:06:22

Chain A: conducted spurious @ 802.11b mode channel 6 (3 of 3)



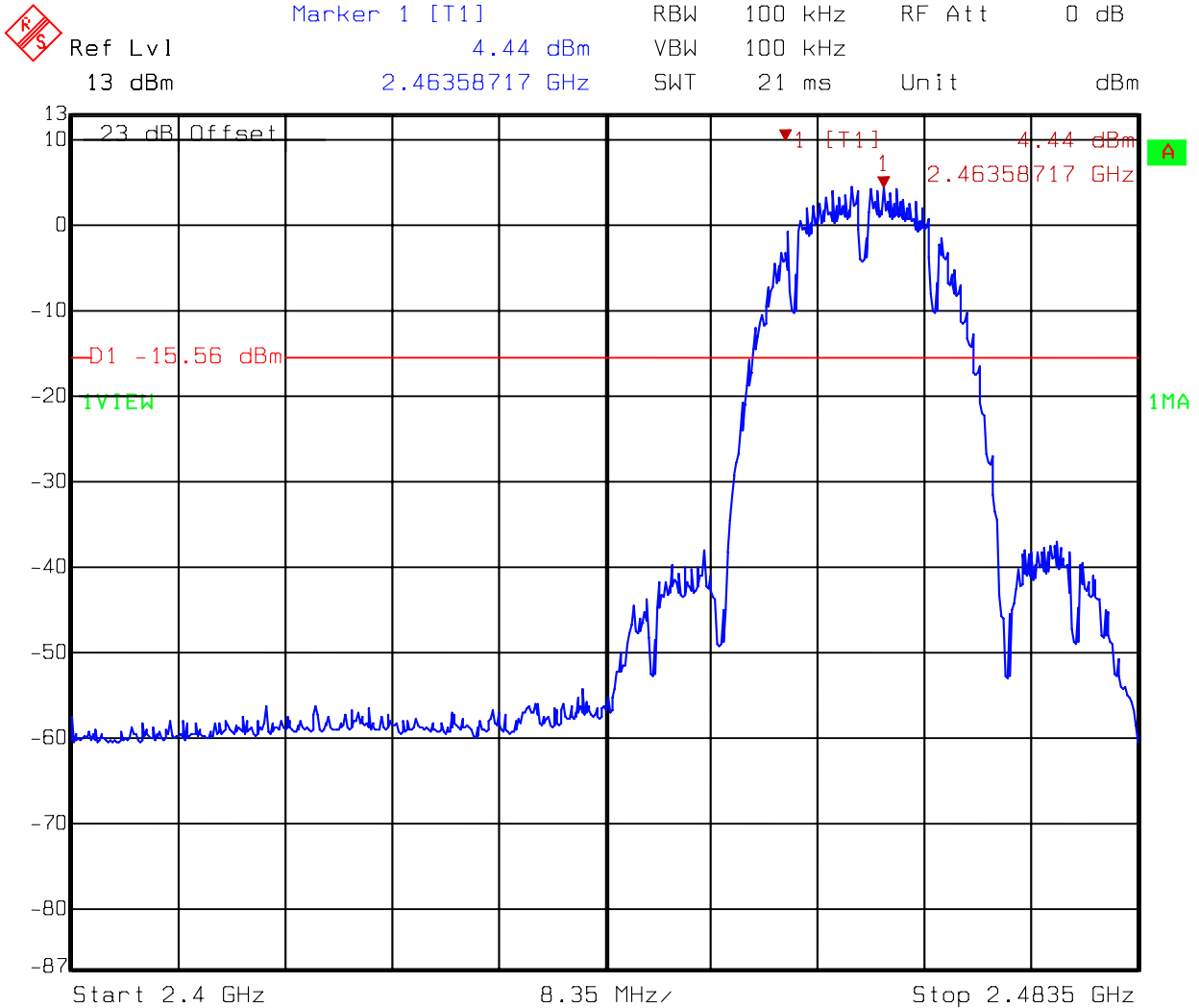
Title: Conductive-Spurious
Comment A: CH 6 at 802.11b mode 2483.5MHz~25GHz
Date: 29.FEB.2008 10:07:11

Chain A: conducted spurious @ 802.11b mode channel 11 (1 of 3)



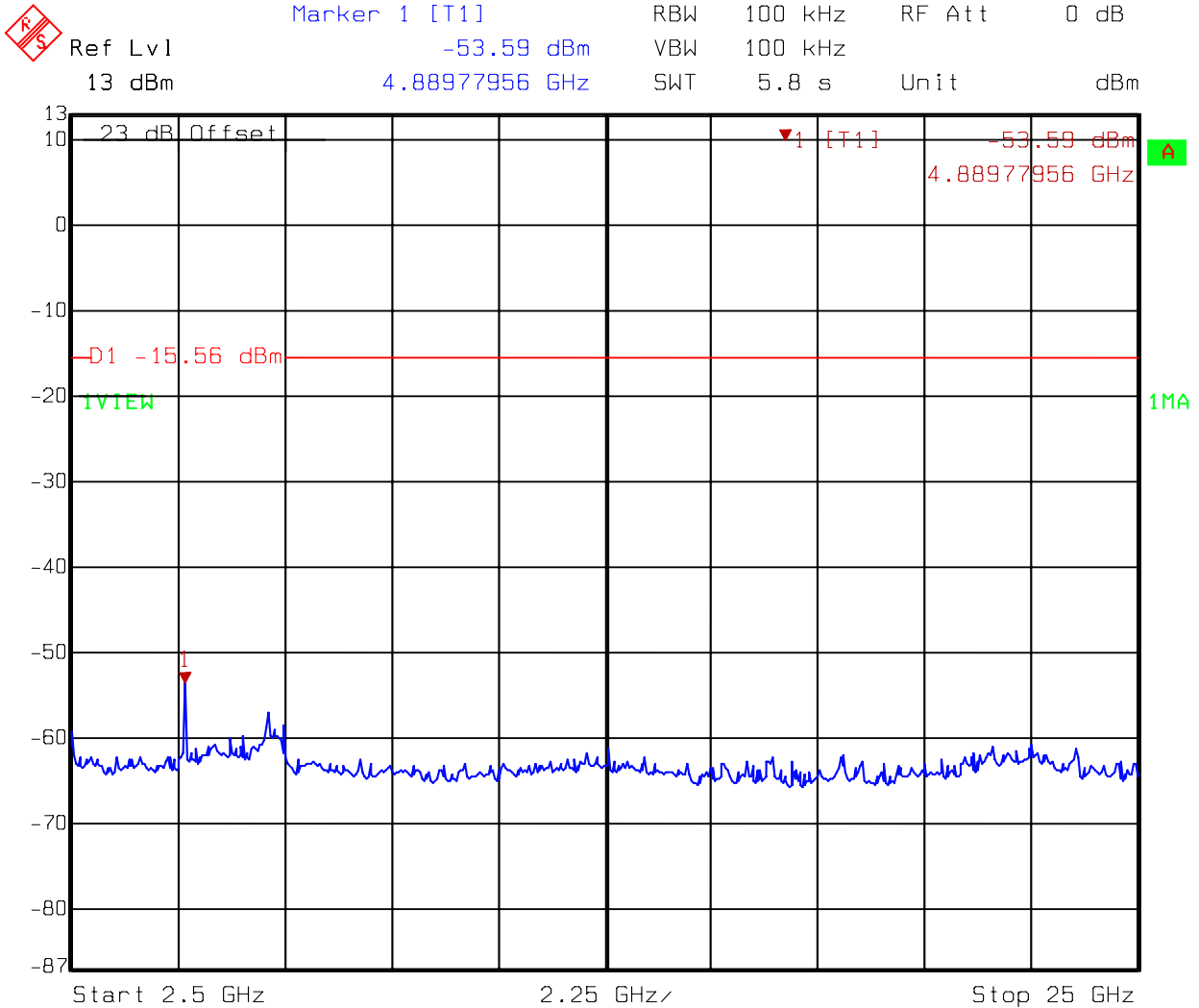
Title: Conductive-Spurious
Comment A: CH 11 at 802.11b mode 30MHz~2400MHz
Date: 29.FEB.2008 10:15:11

Chain A: conducted spurious @ 802.11b mode channel 11 (2 of 3)



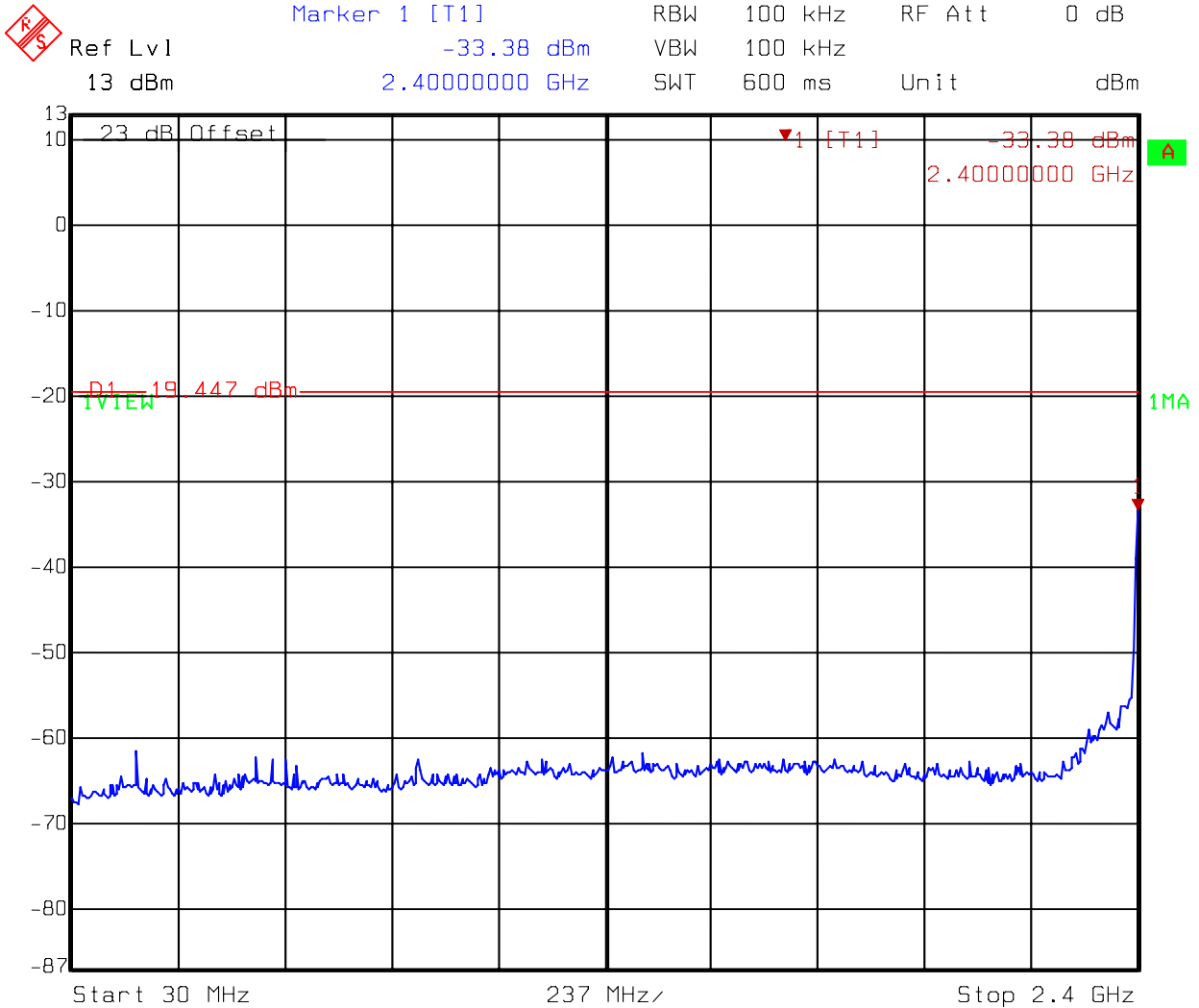
Title: Conductive-Spurious
Comment A: CH 11 at 802.11b mode 2400MHz~2483.5MHz
Date: 29.FEB.2008 10:14:50

Chain A: conducted spurious @ 802.11b mode channel 11 (3 of 3)



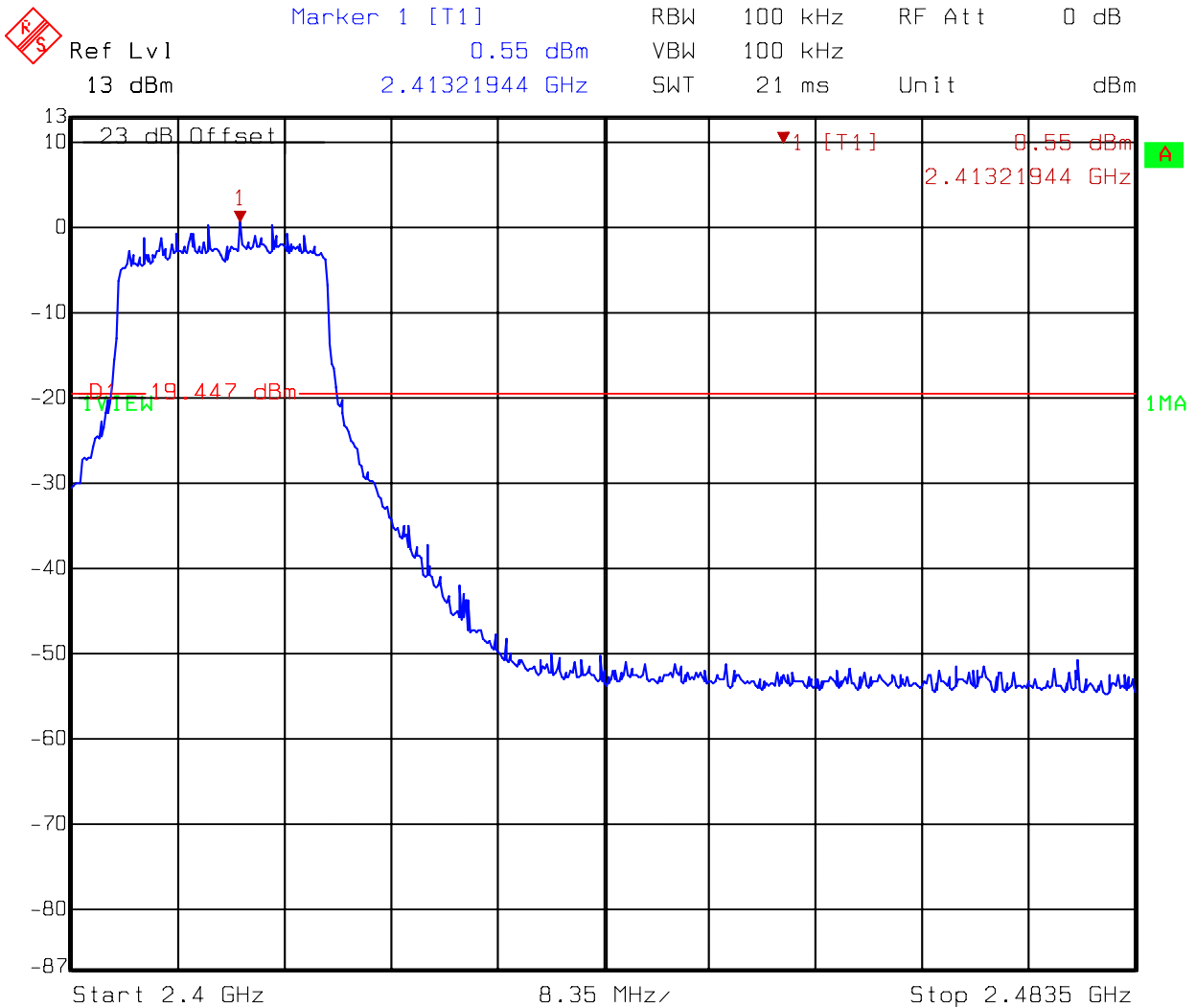
Title: Conductive-Spurious
Comment A: CH 11 at 802.11b mode 2483.5MHz~25GHz
Date: 29.FEB.2008 10:15:39

Chain A: conducted spurious @ 802.11g mode channel 1 (1 of 3)



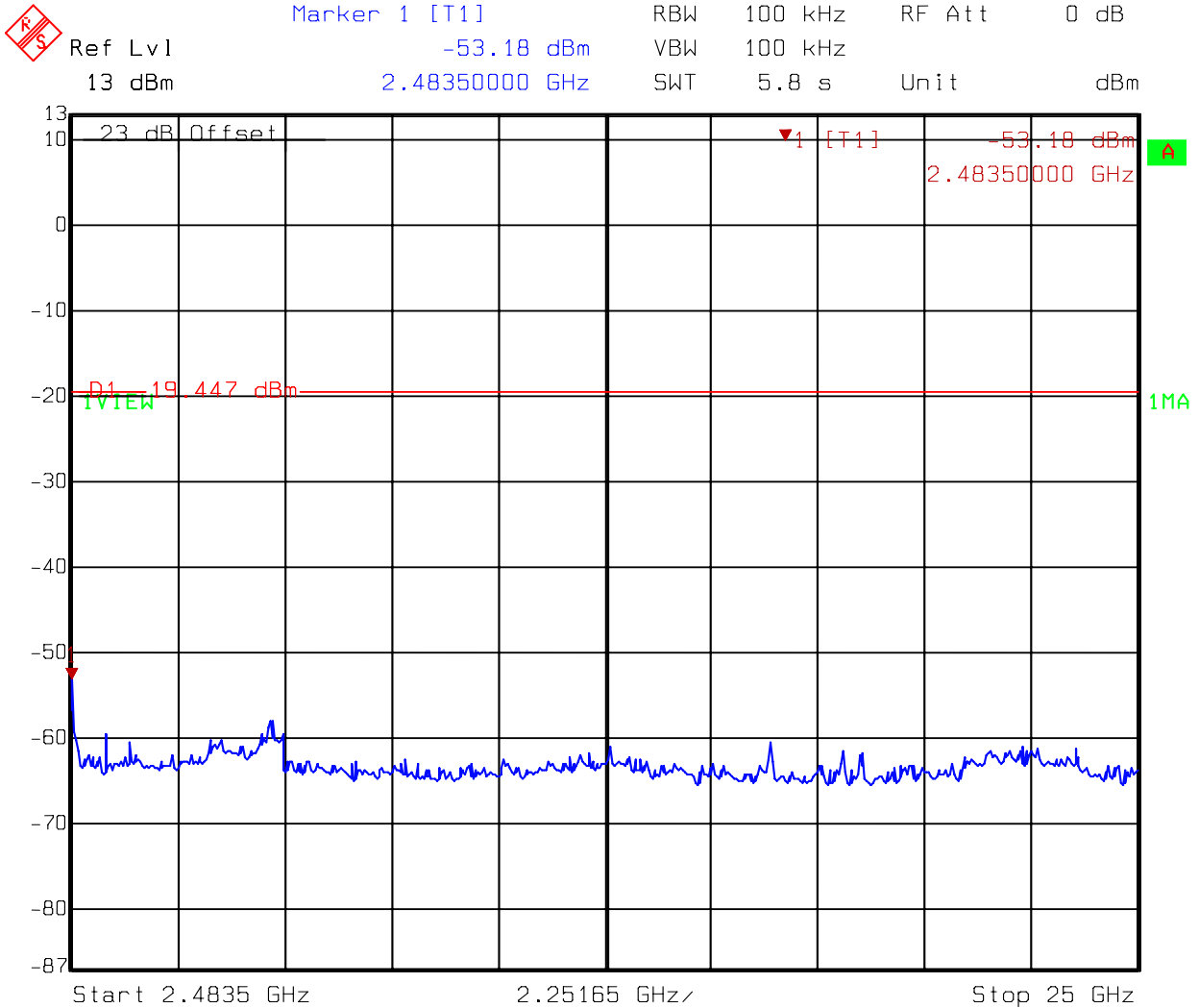
Title: Conductive-Spurious
Comment A: CH 1 at 802.11g mode 30MHz~2400MHz
Date: 29.FEB.2008 10:24:03

Chain A: conducted spurious @ 802.11g mode channel 1 (2 of 3)



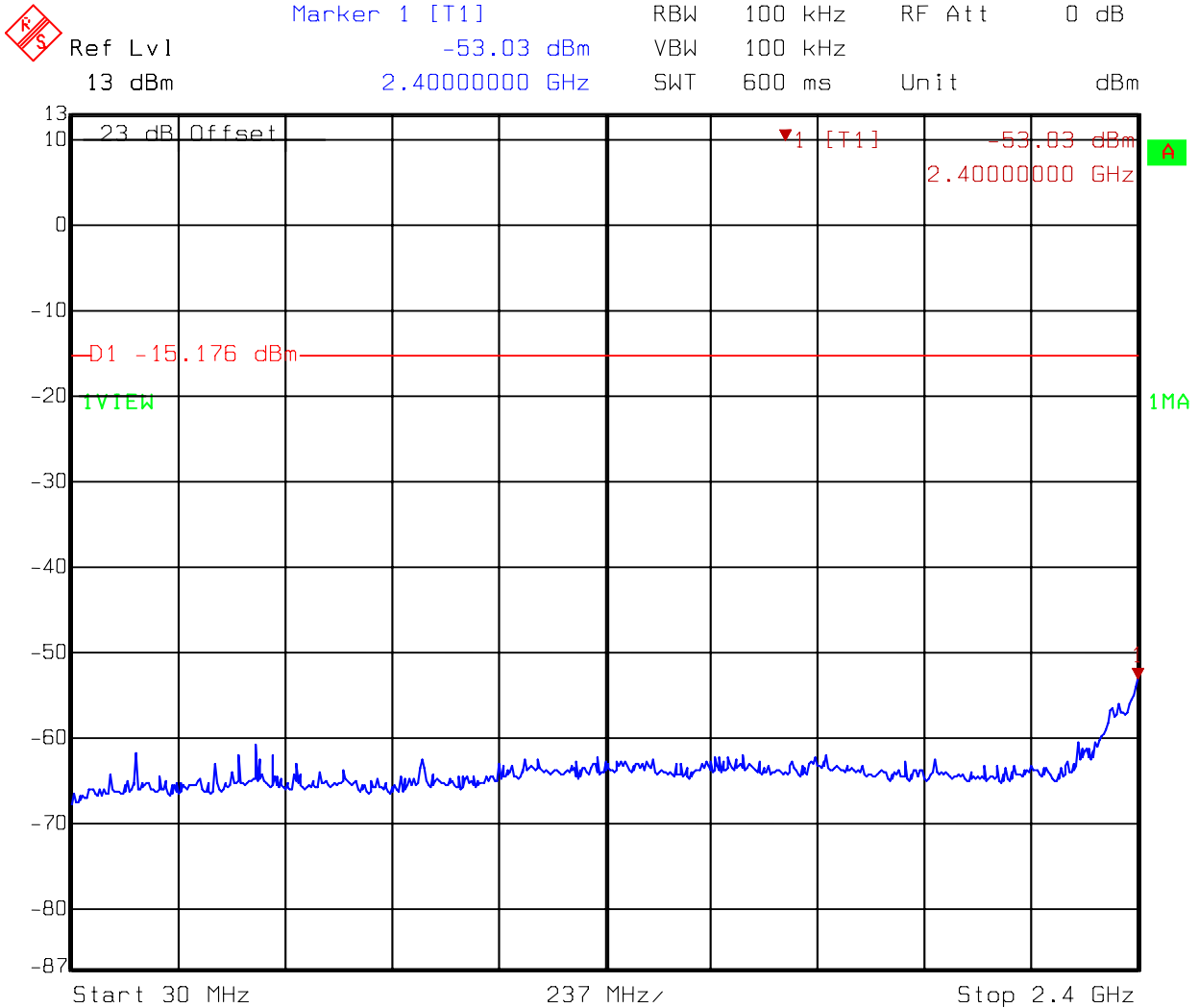
Title: Conductive-Spurious
Comment A: CH 1 at 802.11g mode 2400MHz~2483.5MHz
Date: 29.FEB.2008 10:23:41

Chain A: conducted spurious @ 802.11g mode channel 1 (3 of 3)



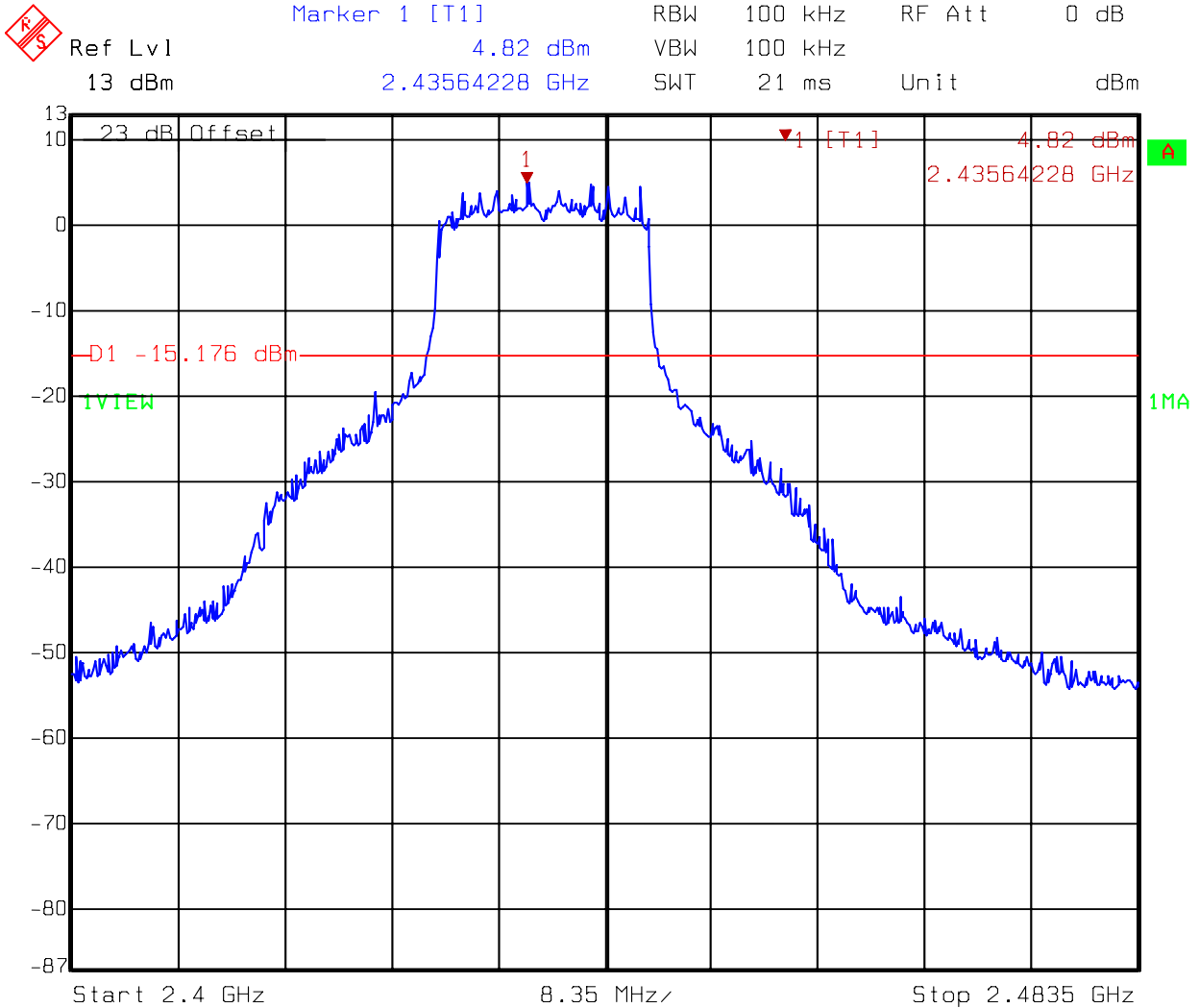
Title: Conductive-Spurious
Comment A: CH 1 at 802.11g mode 2483.5MHz~25000MHz
Date: 29.FEB.2008 10:24:30

Chain A: conducted spurious @ 802.11g mode channel 6 (1 of 3)



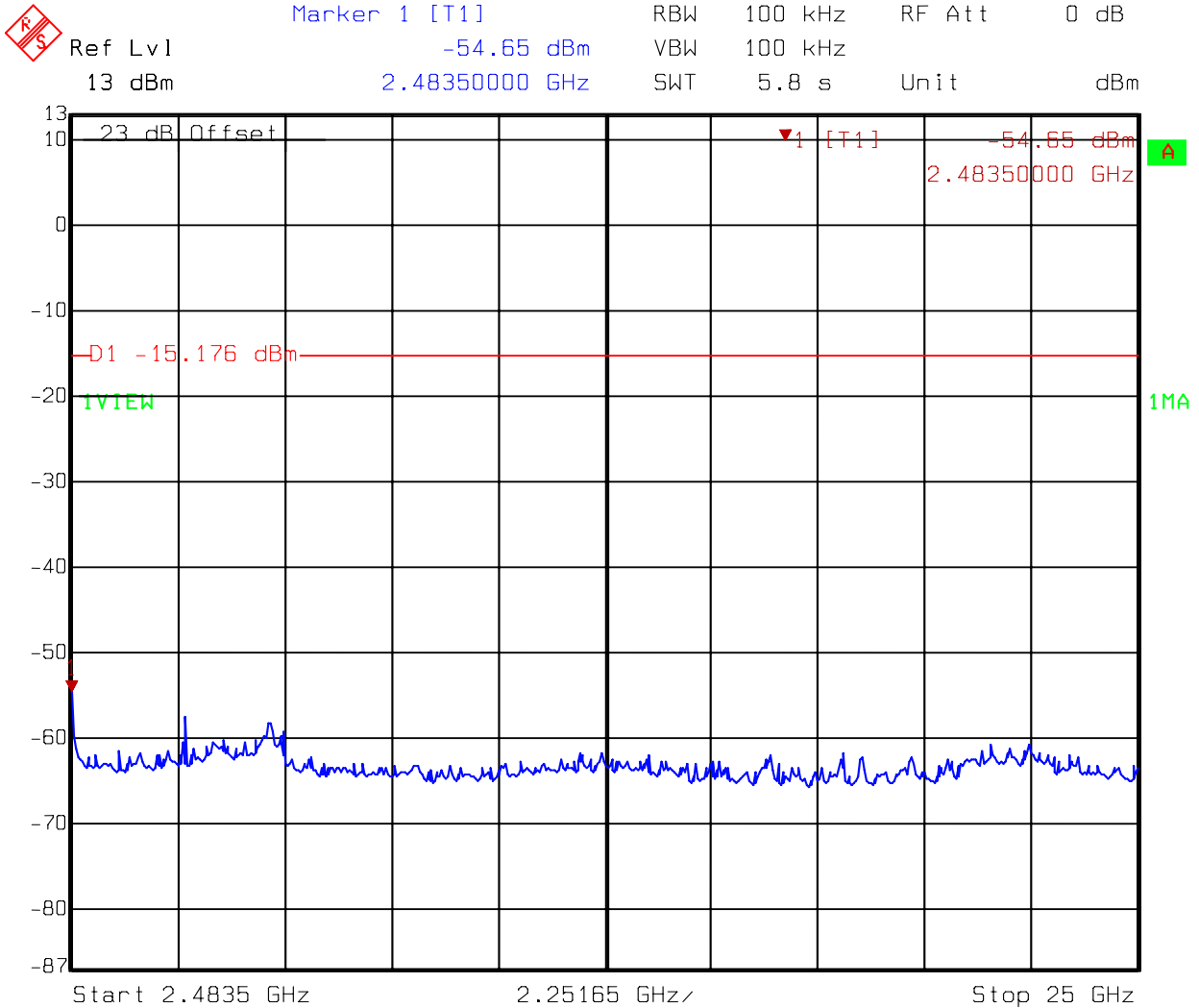
Title: Conductive-Spurious
Comment A: CH 6 at 802.11g mode 30MHz~2400MHz
Date: 29.FEB.2008 10:36:42

Chain A: conducted spurious @ 802.11g mode channel 6 (2 of 3)



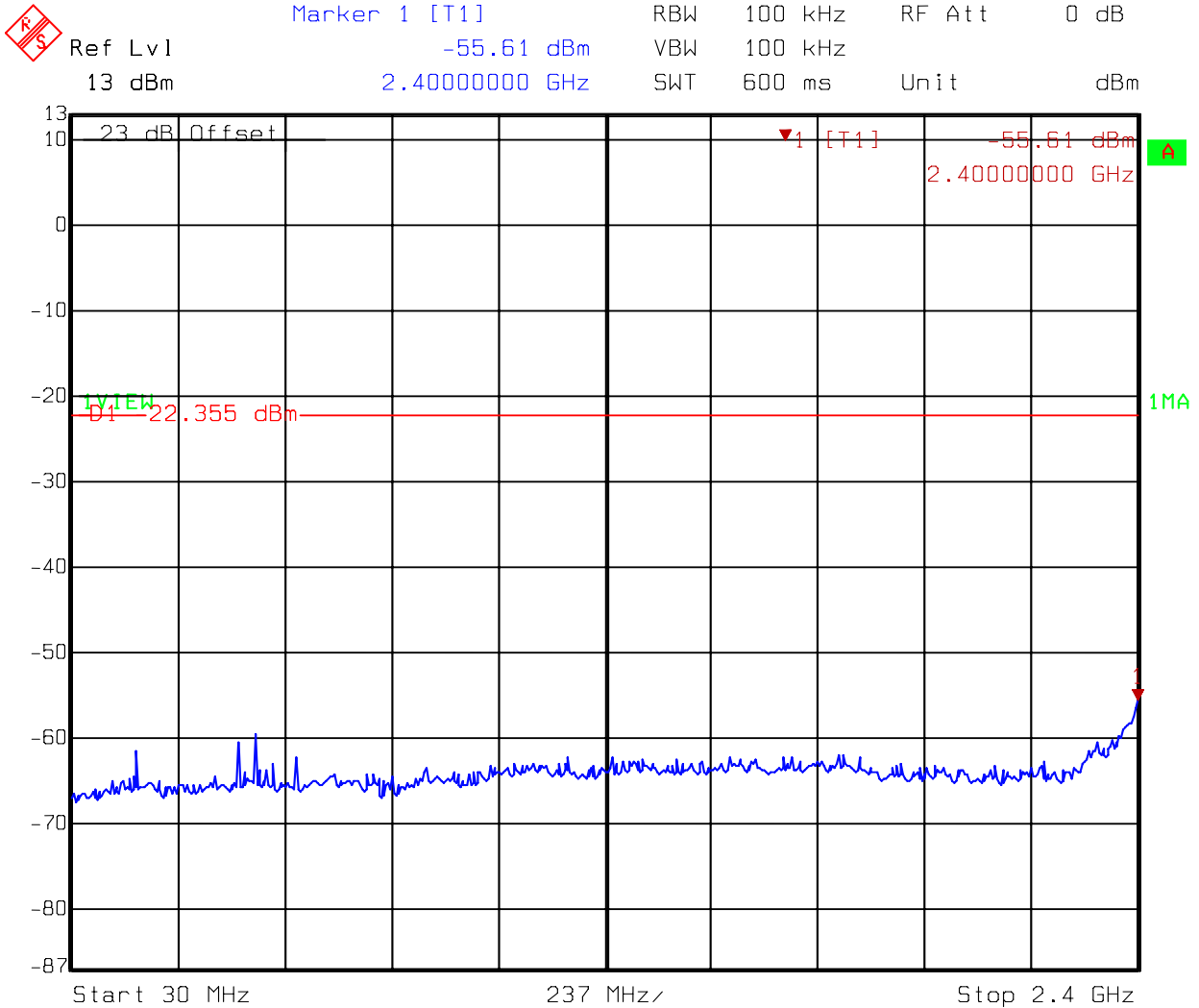
Title: Conductive-Spurious
Comment A: CH 6 at 802.11g mode 2400MHz~2483.5MHz
Date: 29.FEB.2008 10:36:20

Chain A: conducted spurious @ 802.11g mode channel 6 (3 of 3)



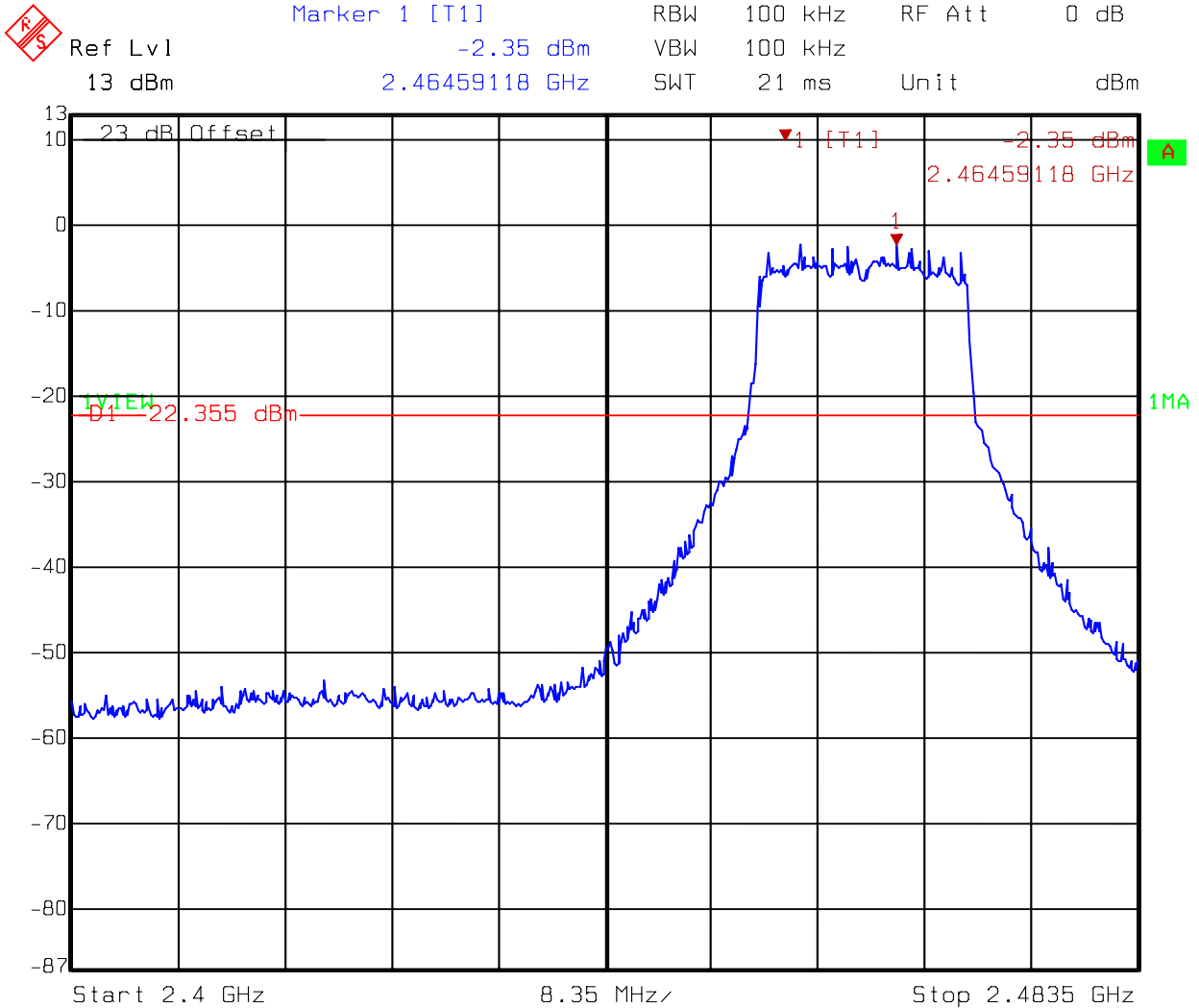
Title: Conductive-Spurious
Comment A: CH 6 at 802.11g mode 2483.5MHz~25000MHz
Date: 29.FEB.2008 10:37:09

Chain A: conducted spurious @ 802.11g mode channel 11 (1 of 3)



Title: Conductive-Spurious
Comment A: CH 11 at 802.11g mode 30MHz~2400MHz
Date: 29.FEB.2008 10:41:13

Chain A: conducted spurious @ 802.11g mode channel 11 (2 of 3)



Title: Conductive-Spurious
Comment A: CH 11 at 802.11g mode 2400MHz~2483.5MHz
Date: 29.FEB.2008 10:40:52