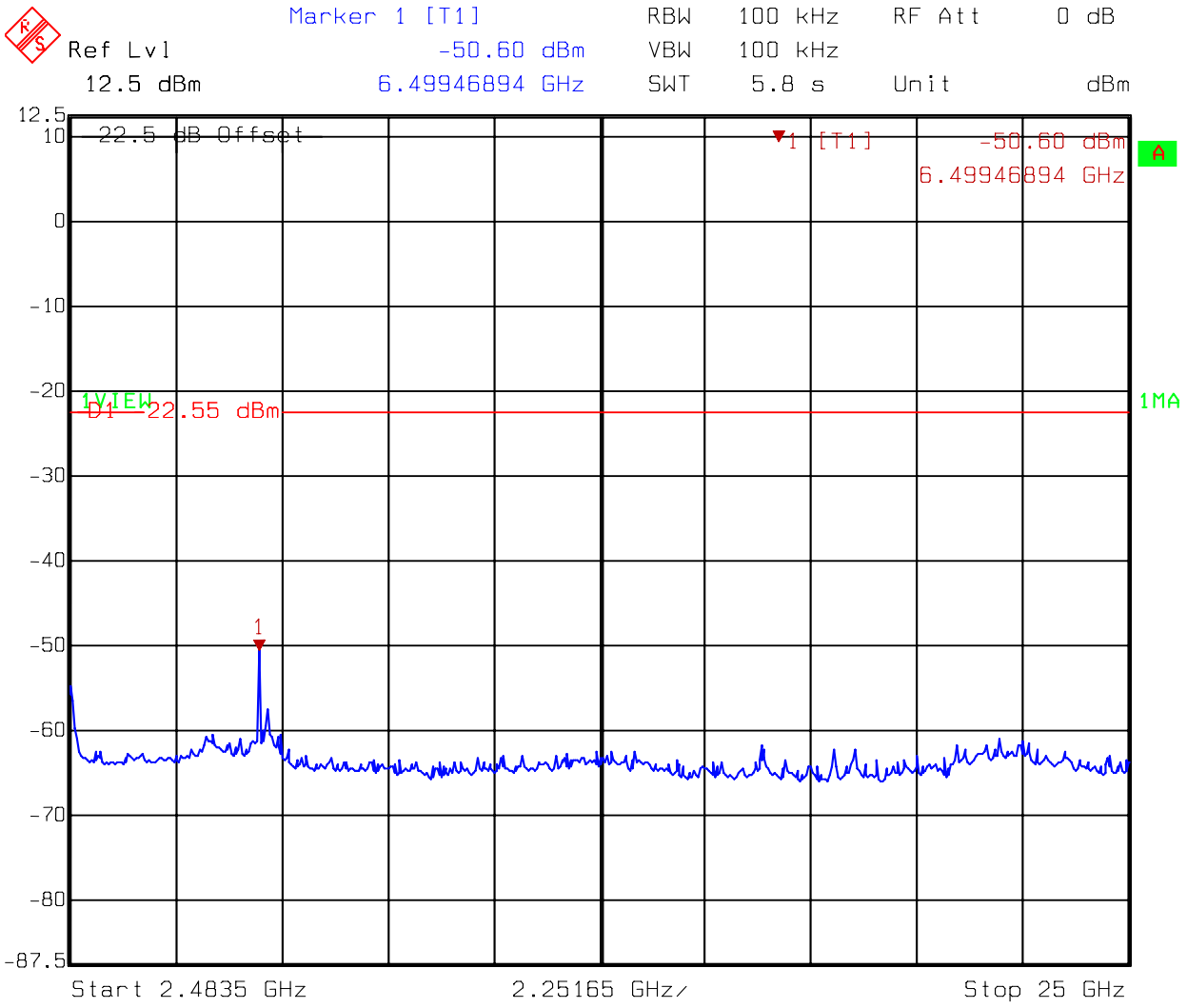
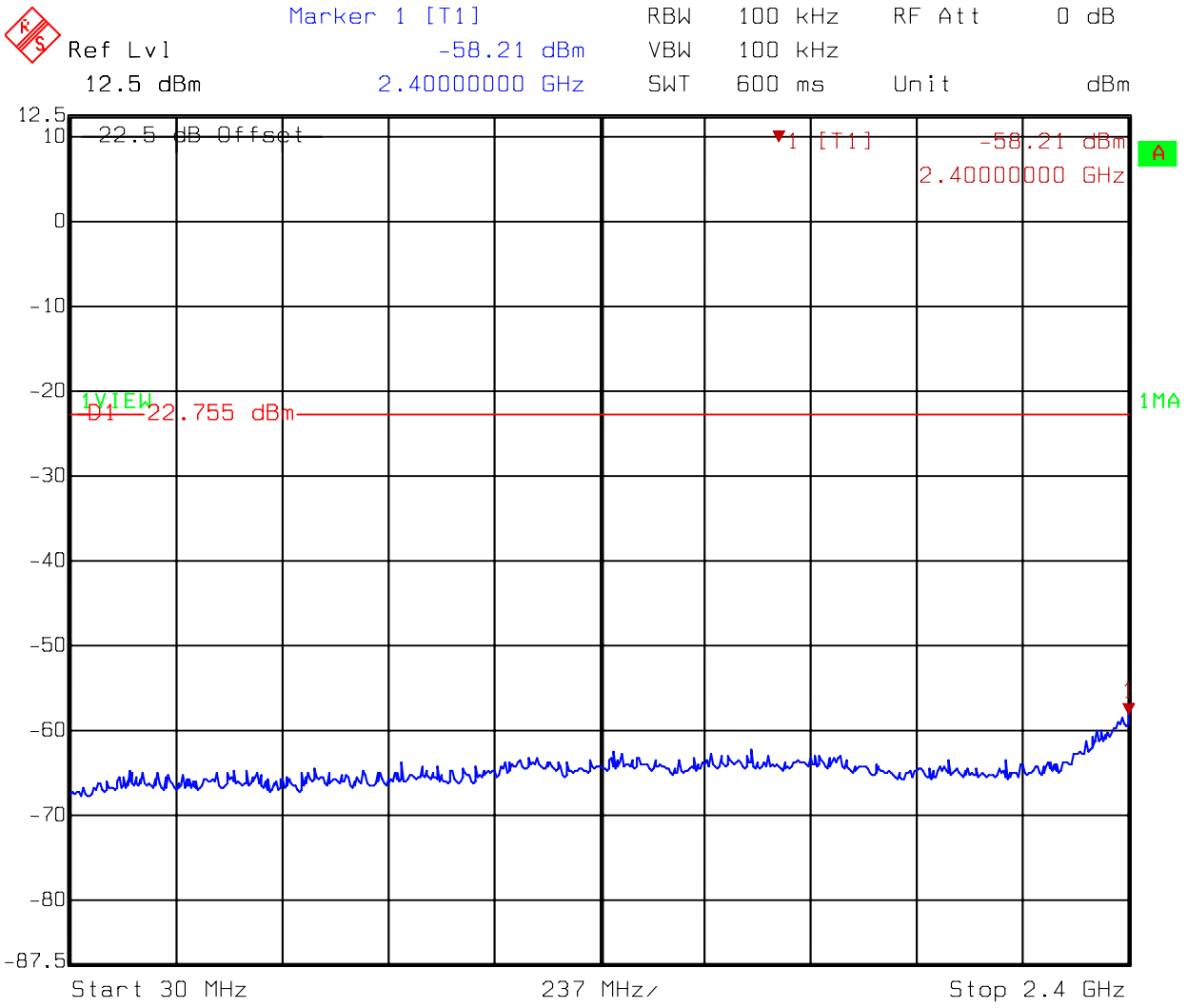
conducted spurious @ 802.11g mode channel 6 (3 of 3)



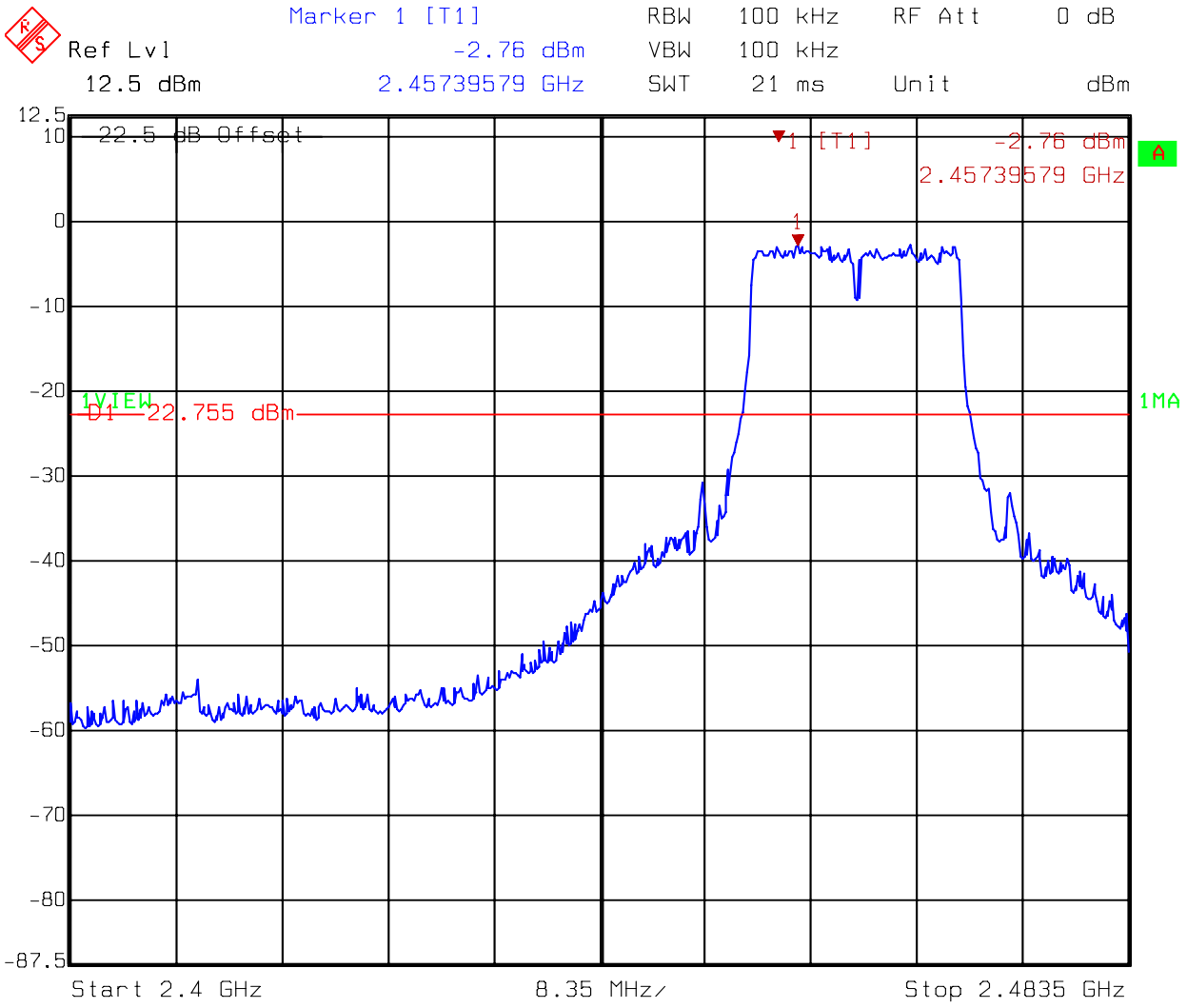
Title: Conductive-Spurious
Comment A: CH 6 at 802.11g mode 2483.5MHz~25000MHz
Date: 06.MAR.2008 10:29:01

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



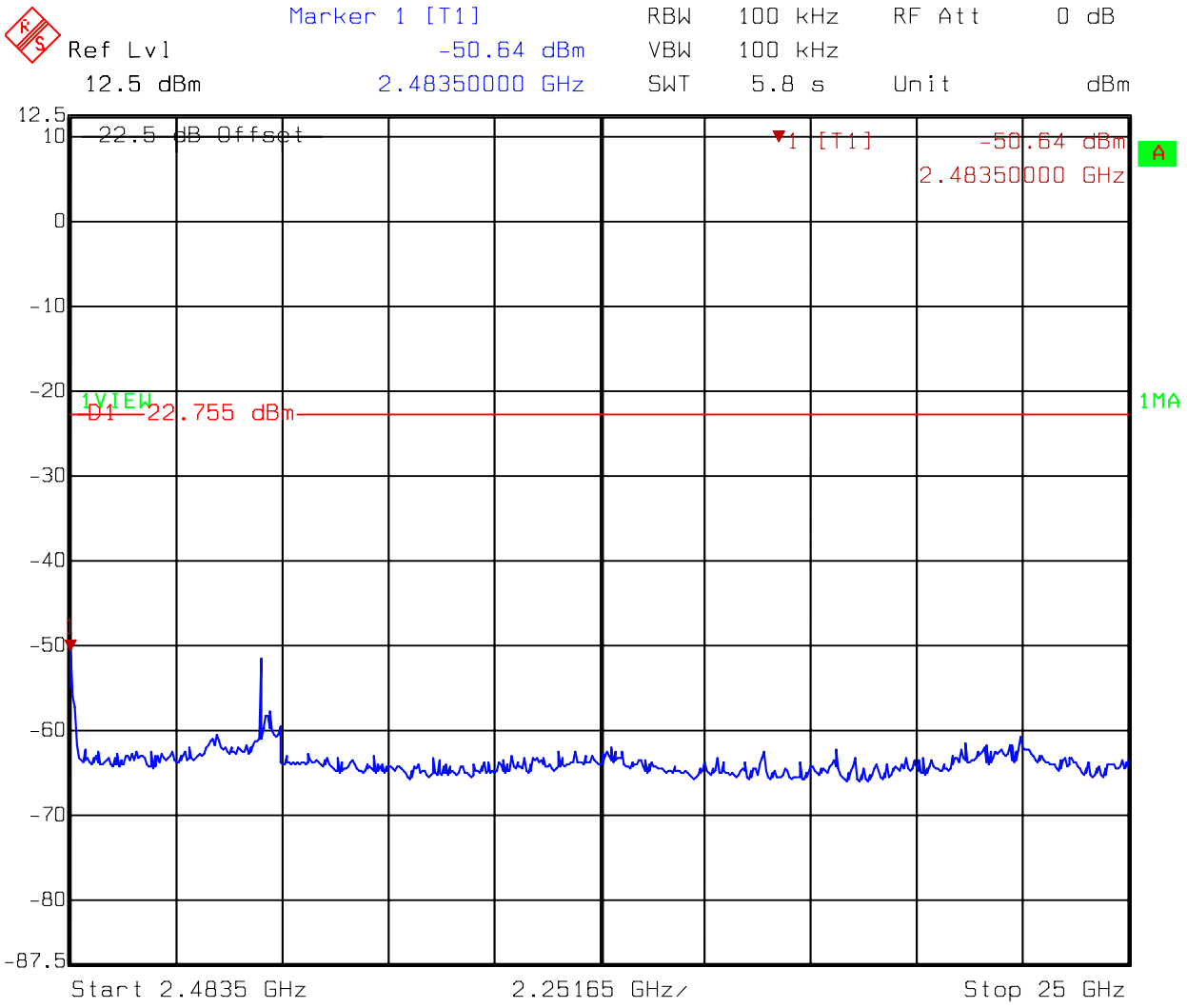
Title: Conductive-Spurious
Comment A: CH 11 at 802.11g mode 30MHz~2400MHz
Date: 06.MAR.2008 10:31:21

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



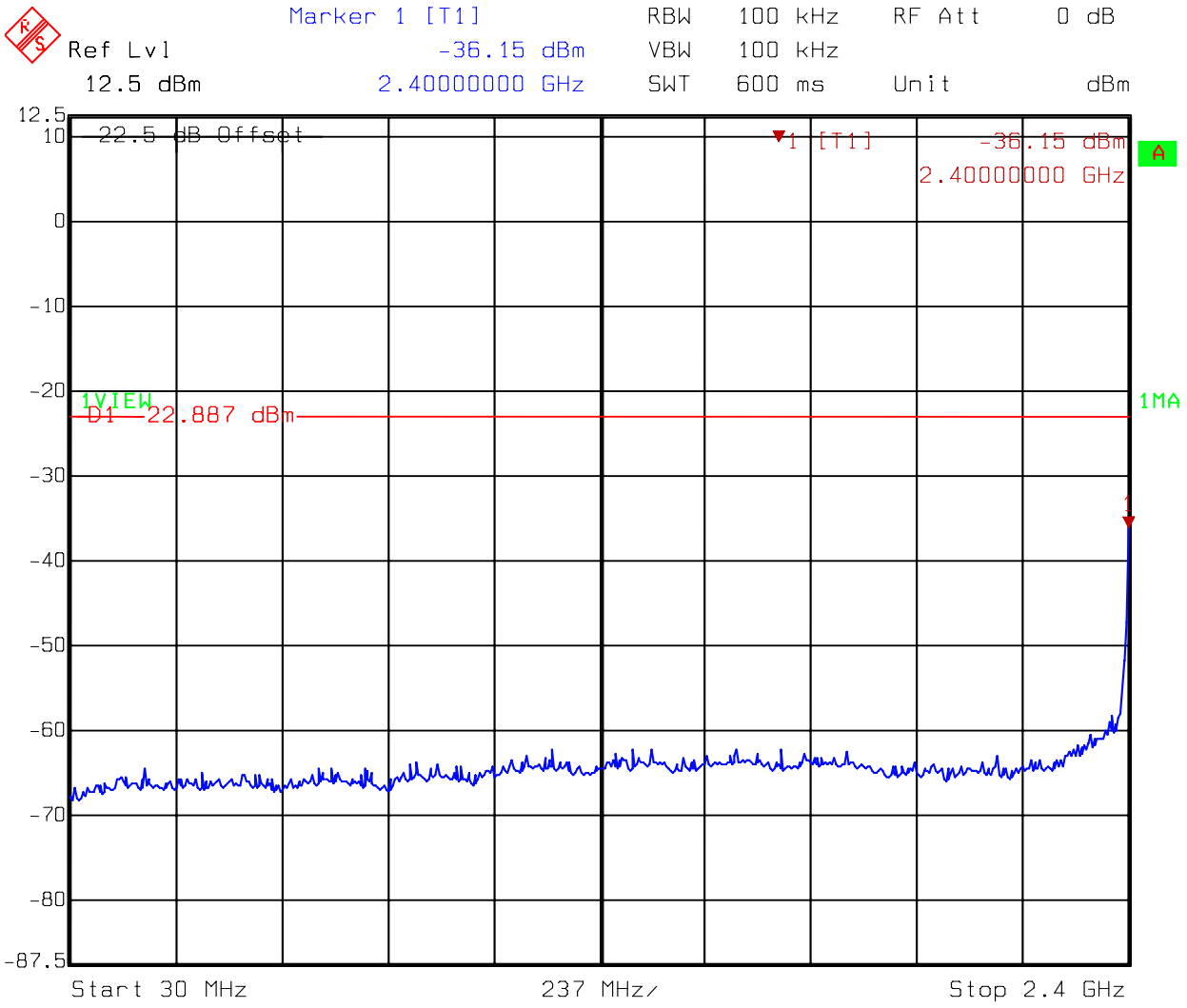
Title: Conductive-Spurious
Comment A: CH 11 at 802.11g mode 2400MHz~2483.5MHz
Date: 06.MAR.2008 10:30:59

conducted spurious @ 802.11g mode channel 11 (3 of 3)



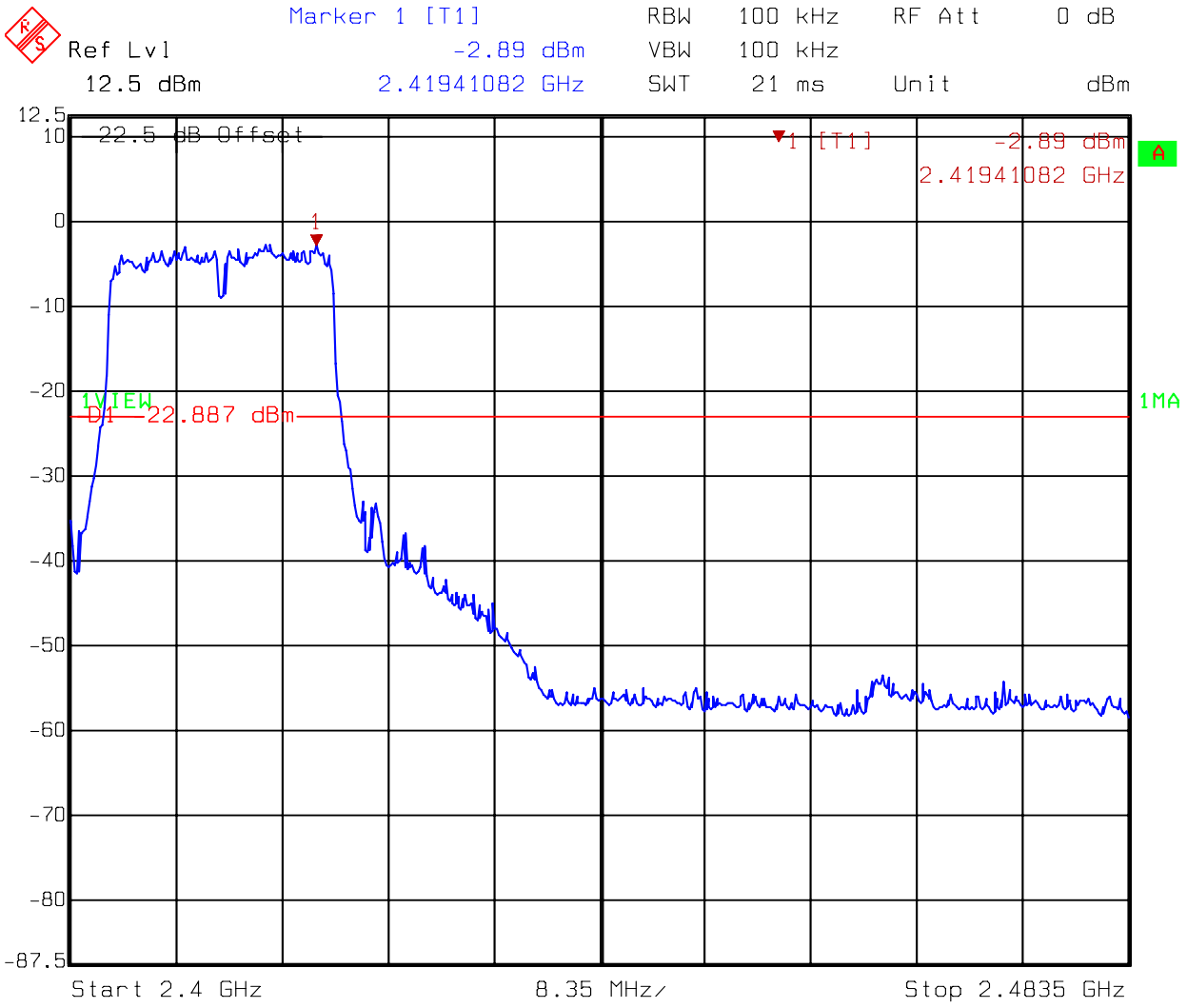
Title: Conductive-Spurious
Comment A: CH 11 at 802.11g mode 2483.5MHz~25000MHz
Date: 06.MAR.2008 10:31:48

conducted spurious @ draft 802.11n HT20 mode channel 1 (1 of 3)



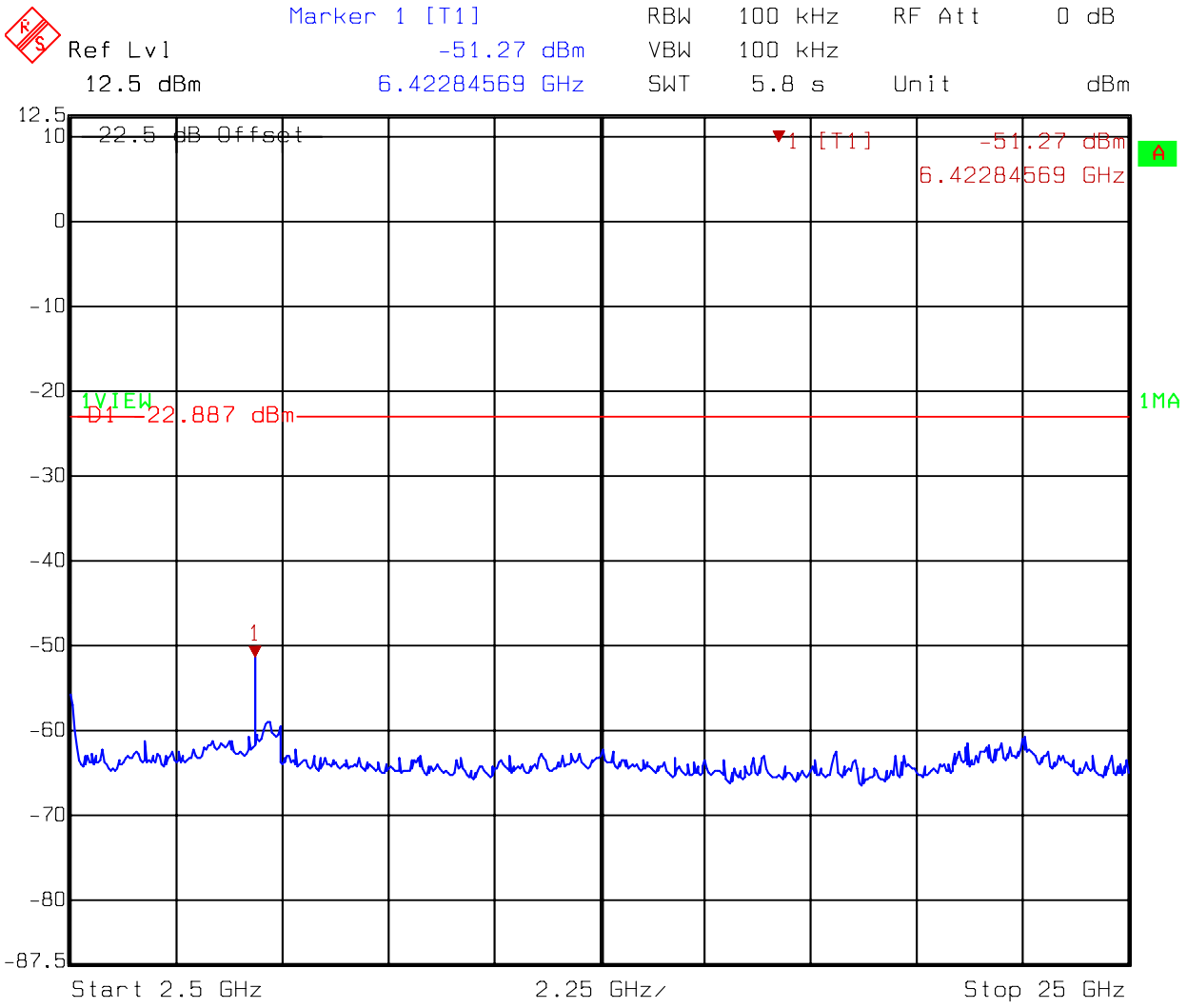
Title: Conductive-Spurious
Comment A: CH 1 at 802.11n 20MHz mode
Date: 06.MAR.2008 10:35:08

conducted spurious @ draft 802.11n HT20 mode channel 1 (2 of 3)



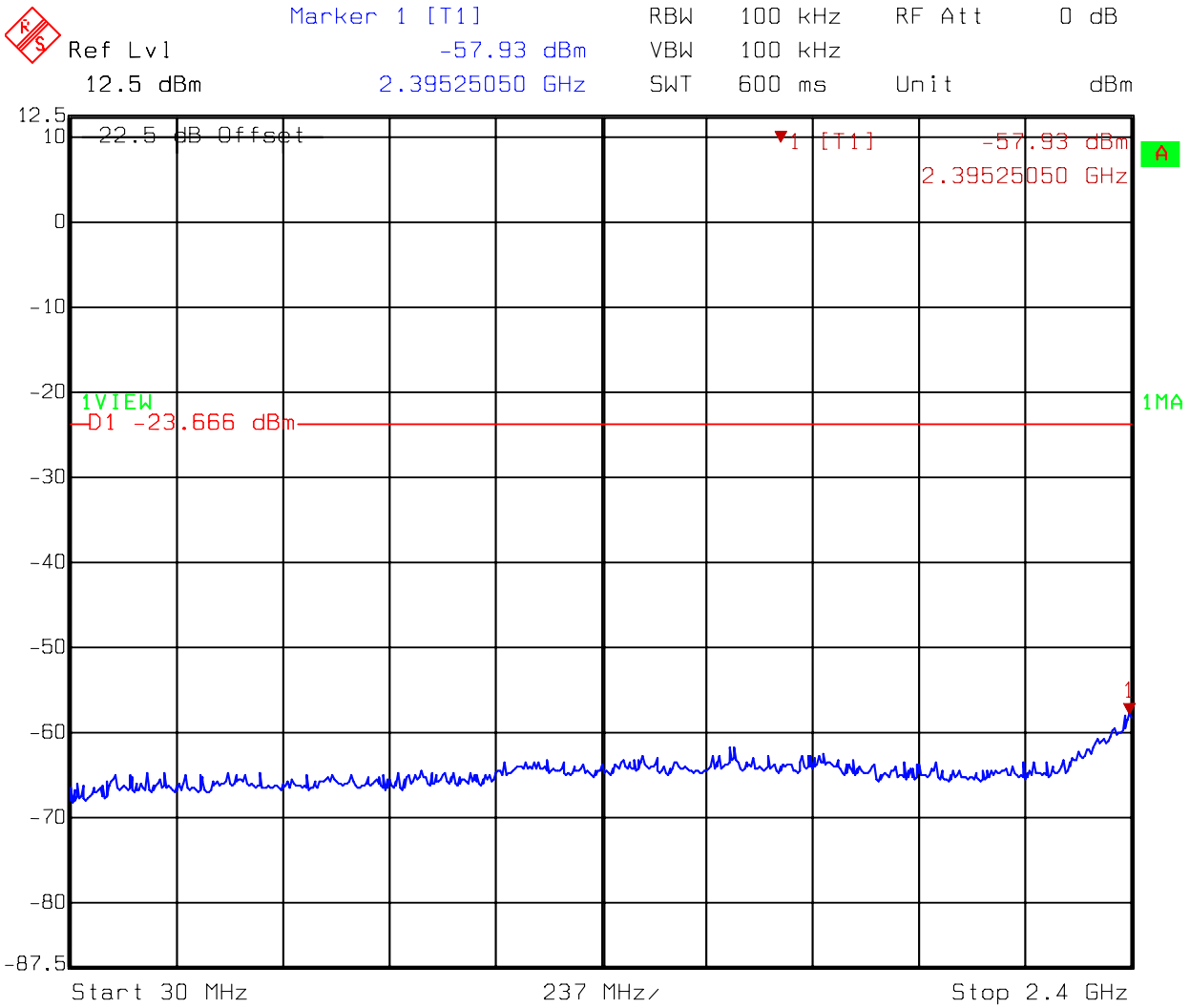
Title: Conductive-Spurious
Comment A: CH 1 at 802.11n 20MHz mode
Date: 06.MAR.2008 10:34:47

conducted spurious @ draft 802.11n HT20 mode channel 1 (3 of 3)



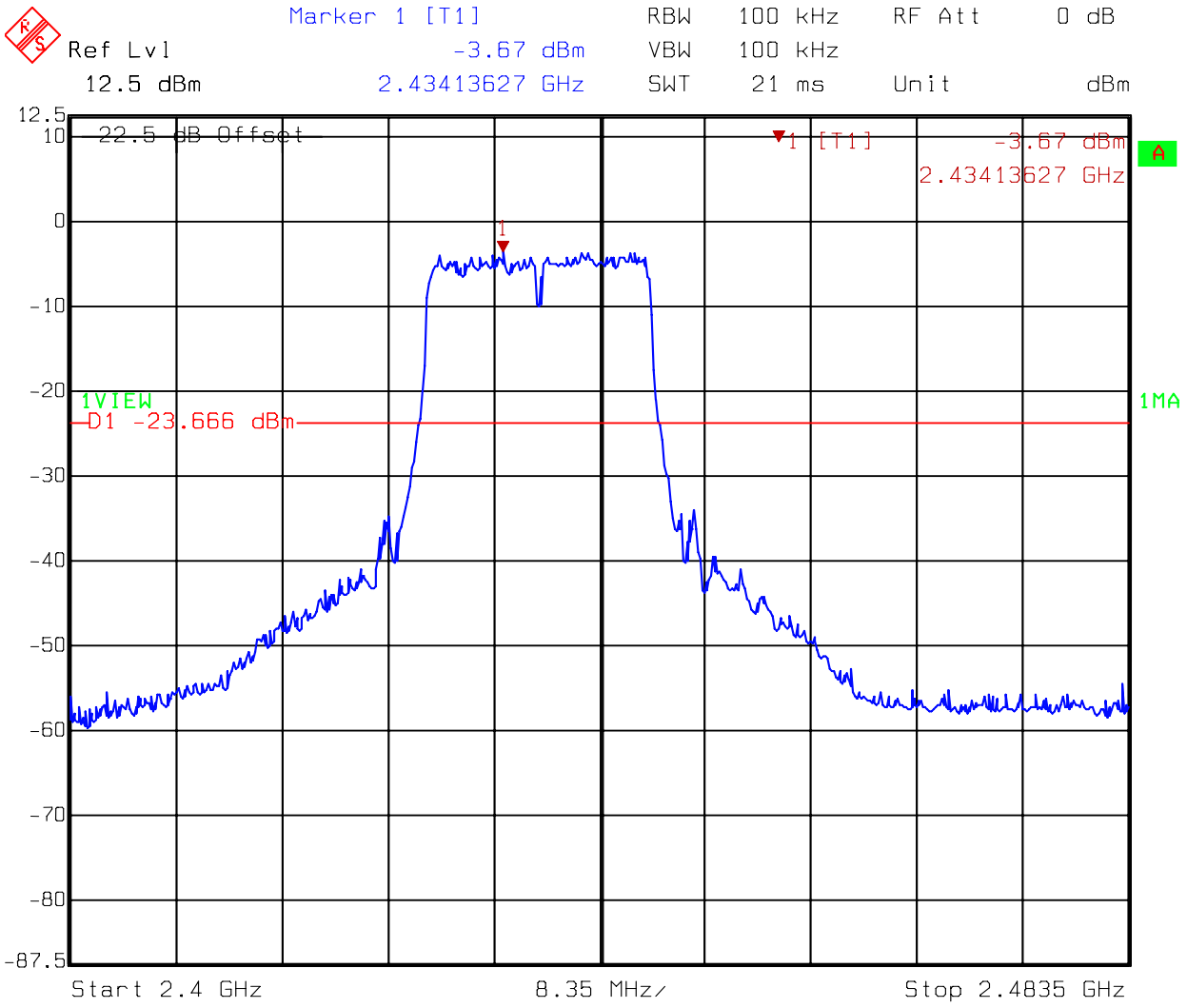
Title: Conductive-Spurious
Comment A: CH 1 at 802.11n 20MHz mode
Date: 06.MAR.2008 10:35:35

conducted spurious @ draft 802.11n HT20 mode channel 6 (1 of 3)



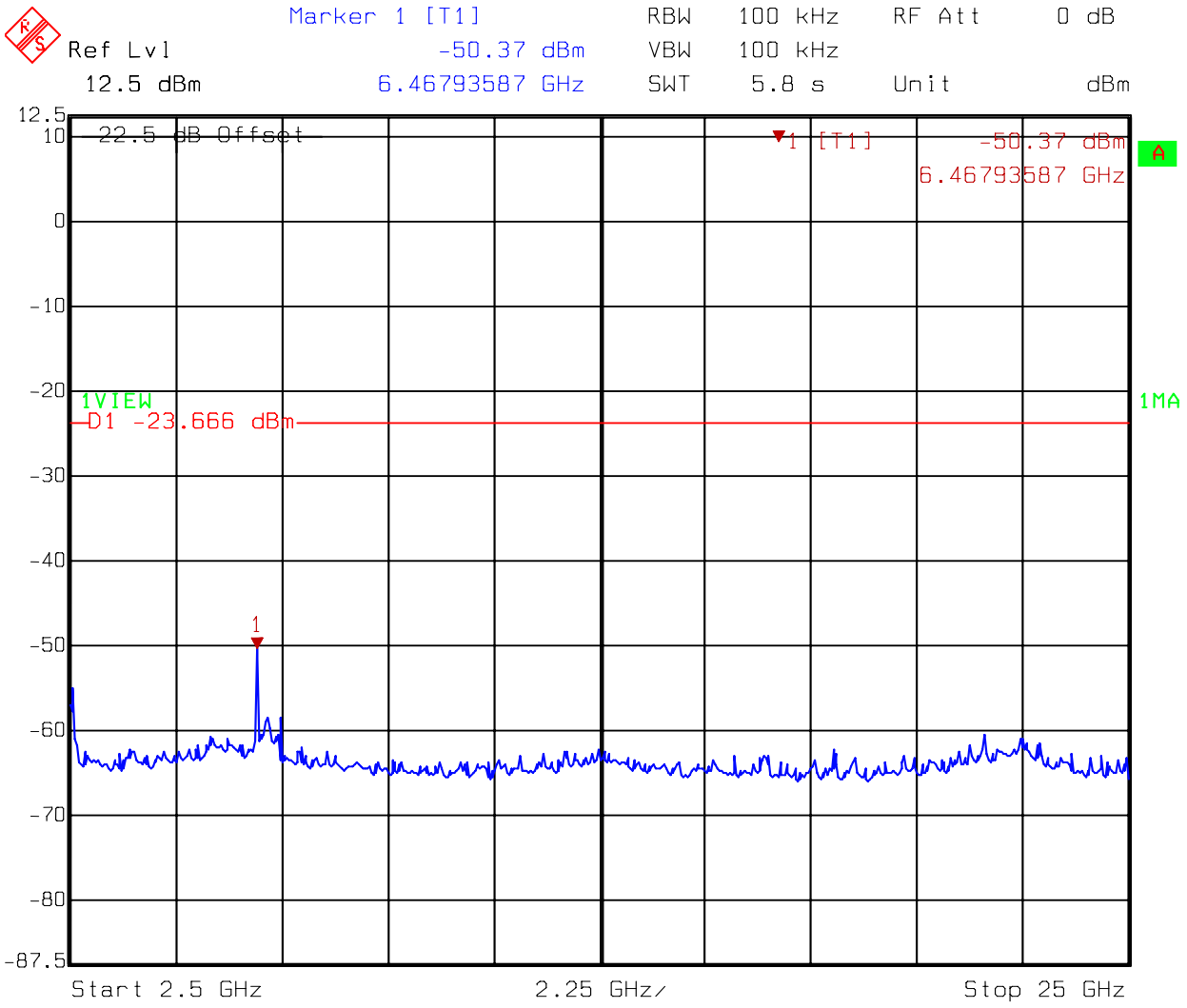
Title: Conductive-Spurious
Comment A: CH 6 at 802.11n 20MHz mode
Date: 06.MAR.2008 10:38:16

conducted spurious @ draft 802.11n HT20 mode channel 6 (2 of 3)



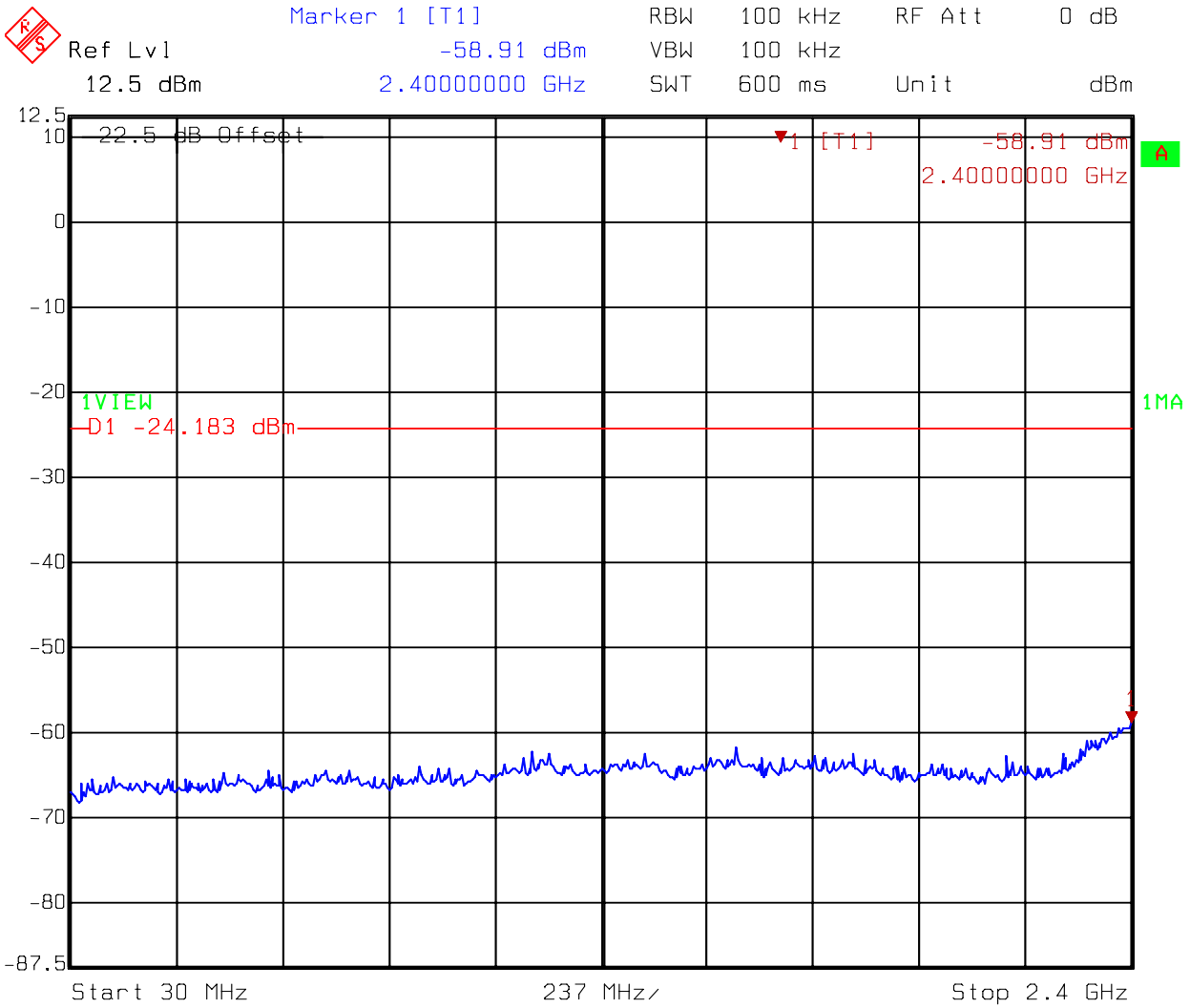
Title: Conductive-Spurious
Comment A: CH 6 at 802.11n 20MHz mode
Date: 06.MAR.2008 10:37:55

conducted spurious @ draft 802.11n HT20 mode channel 6 (3 of 3)



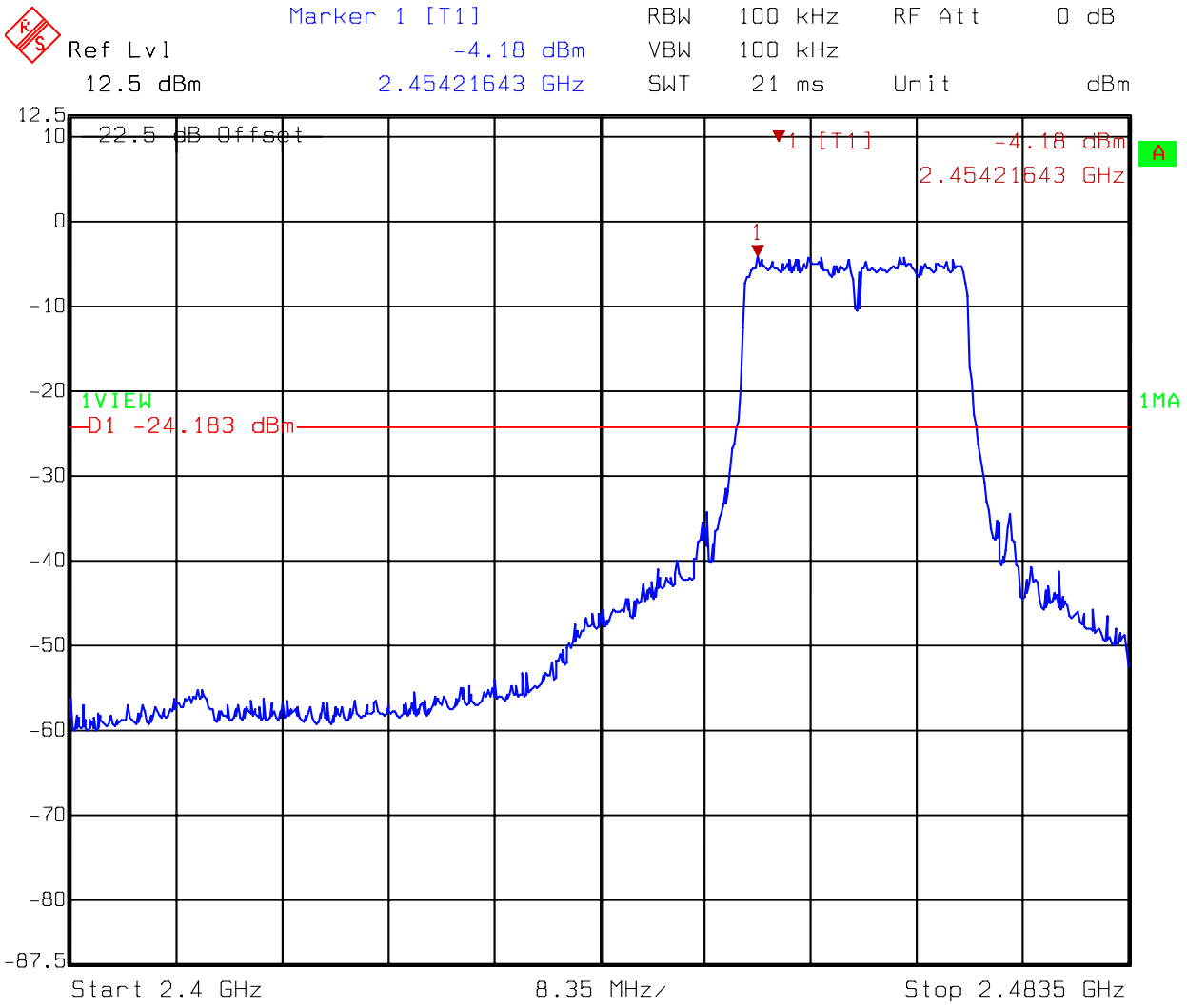
Title: Conductive-Spurious
Comment A: CH 6 at 802.11n 20MHz mode
Date: 06.MAR.2008 10:38:44

conducted spurious @ draft 802.11n HT20 mode channel 11 (1 of 3)



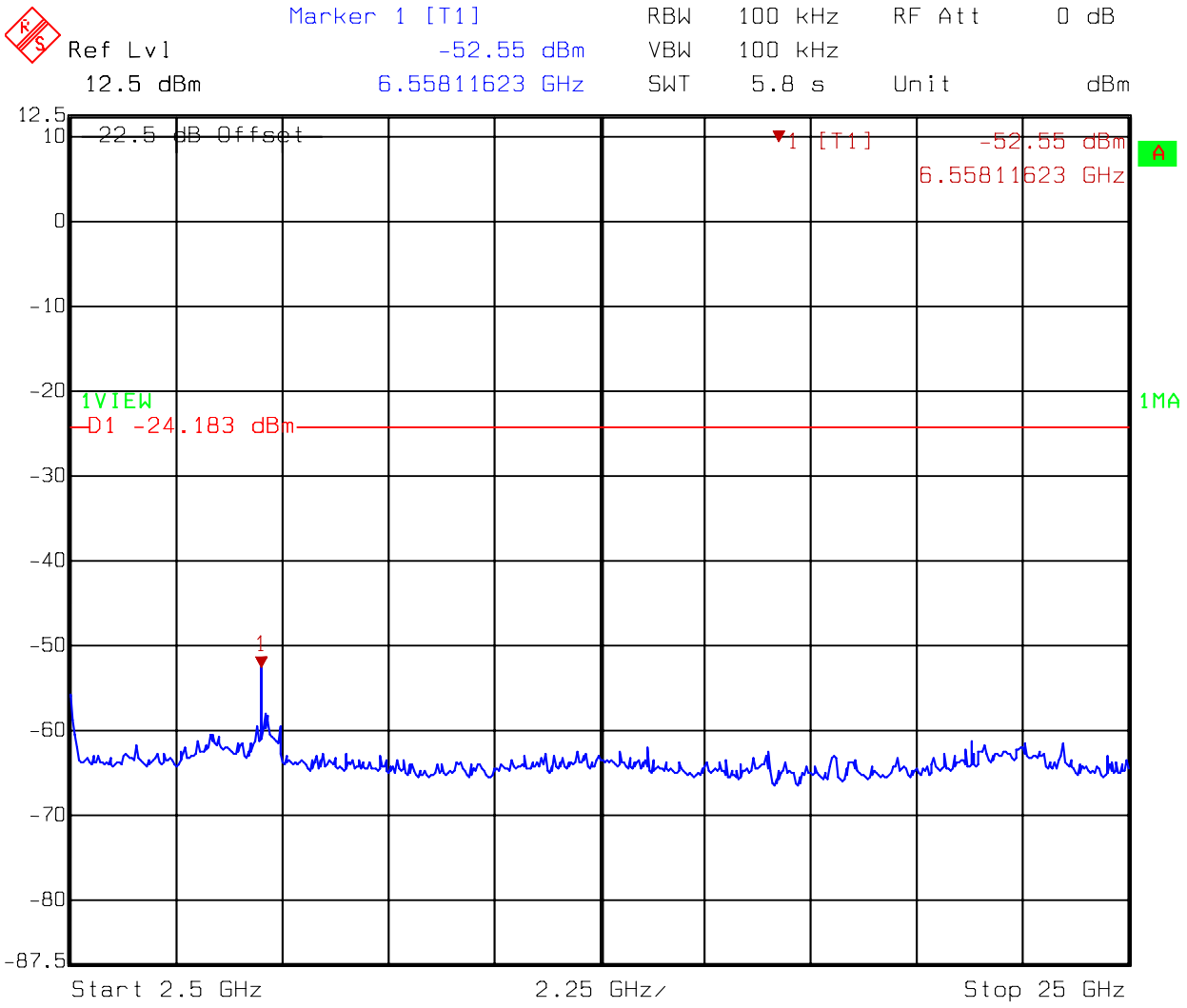
Title: Conductive-Spurious
Comment A: CH 11 at 802.11n 20MHz mode
Date: 06.MAR.2008 10:41:41

conducted spurious @ draft 802.11n HT20 mode channel 11 (2 of 3)



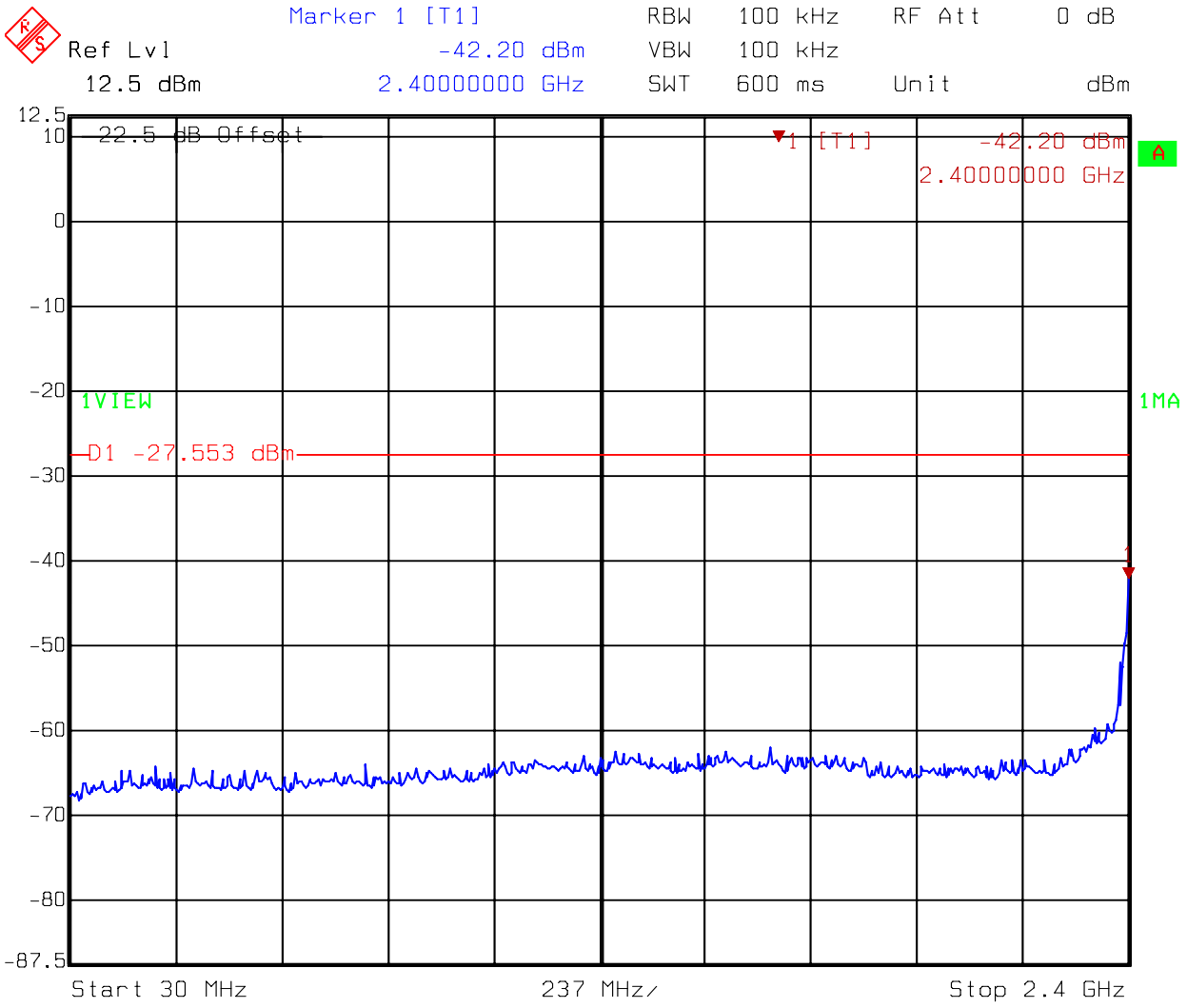
Title: Conductive-Spurious
Comment A: CH 11 at 802.11n 20MHz mode
Date: 06.MAR.2008 10:41:20

conducted spurious @ draft 802.11n HT20 mode channel 11 (3 of 3)



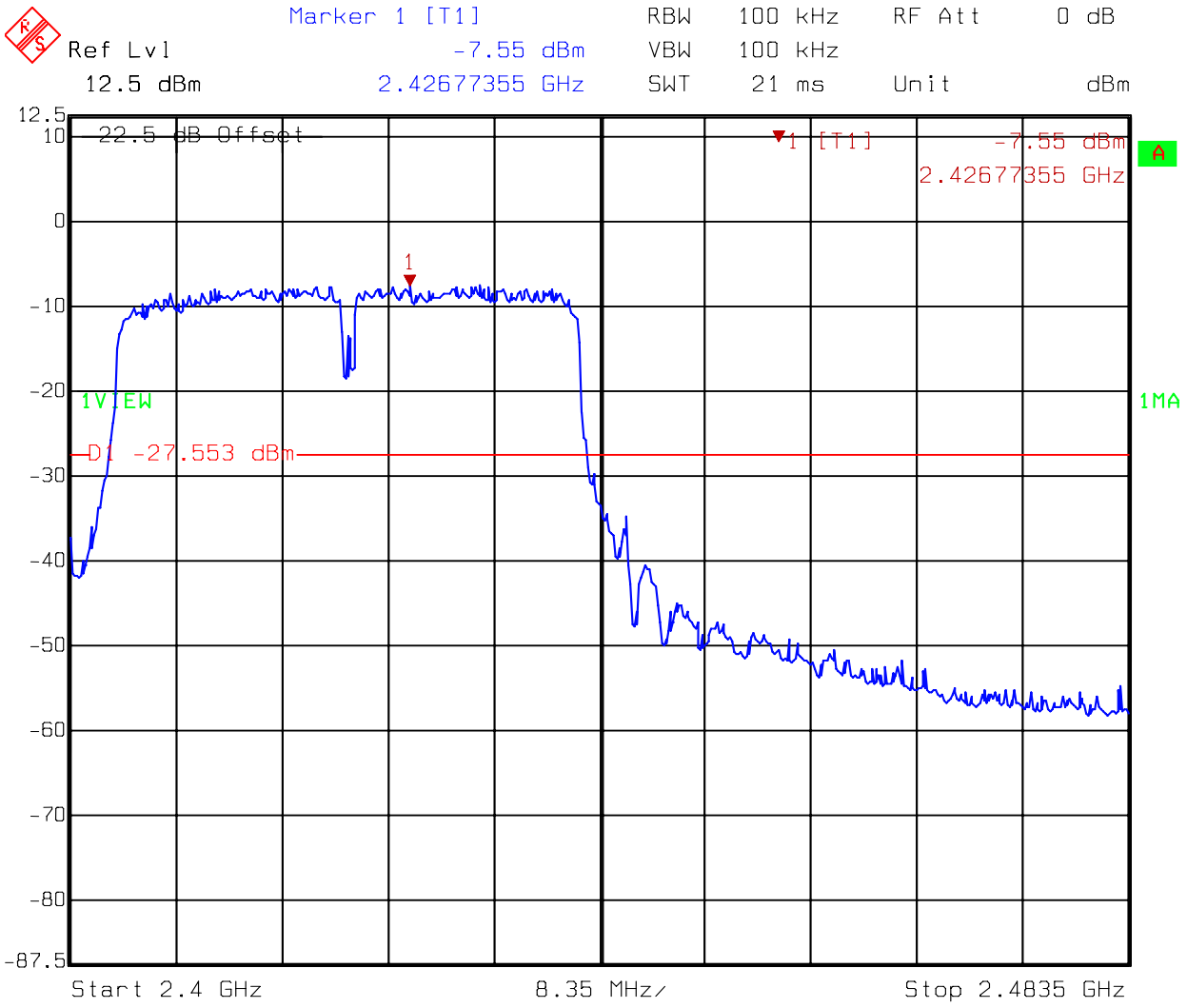
Title: Conductive-Spurious
Comment A: CH 11 at 802.11n 20MHz mode
Date: 06.MAR.2008 10:42:08

conducted spurious @ draft 802.11n HT40 mode channel 3 (1 of 3)



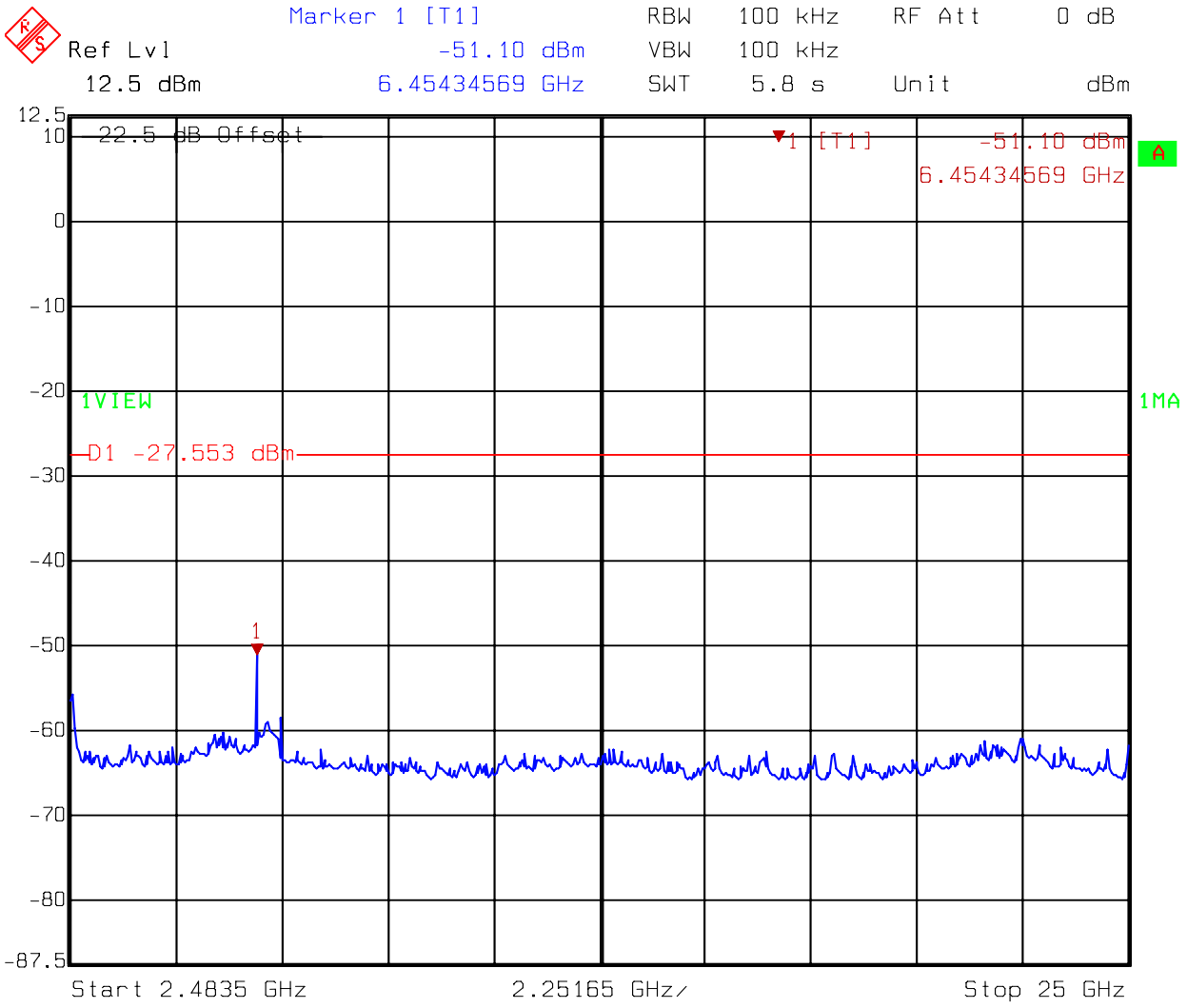
Title: Conductive-Spurious
Comment A: CH 3 at 802.11n 40MHz mode
Date: 06.MAR.2008 10:44:57

conducted spurious @ draft 802.11n HT40 mode channel 3 (2 of 3)



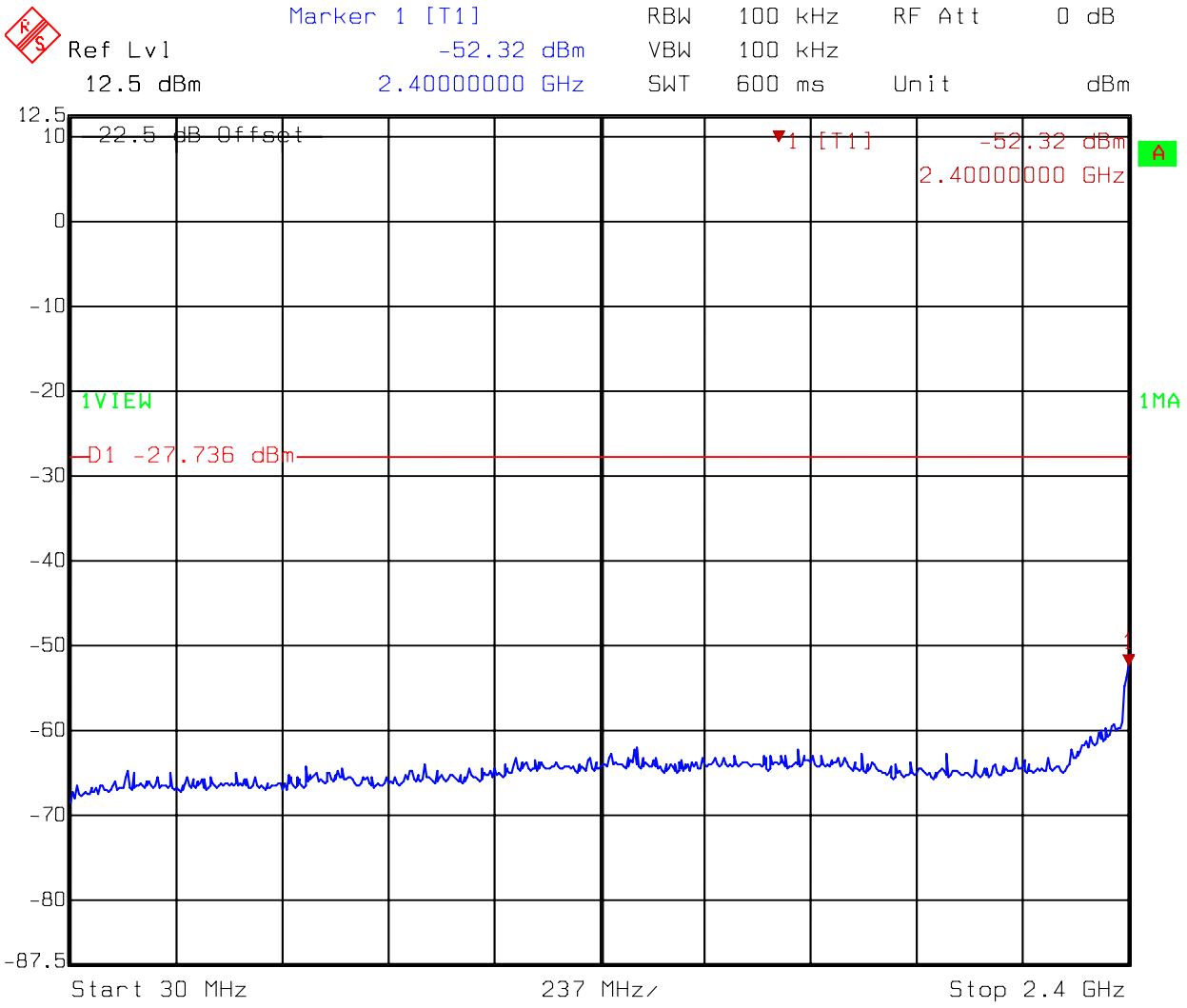
Title: Conductive-Spurious
Comment A: CH 3 at 802.11n 40MHz mode
Date: 06.MAR.2008 10:44:36

conducted spurious @ draft 802.11n HT40 mode channel 3 (3 of 3)



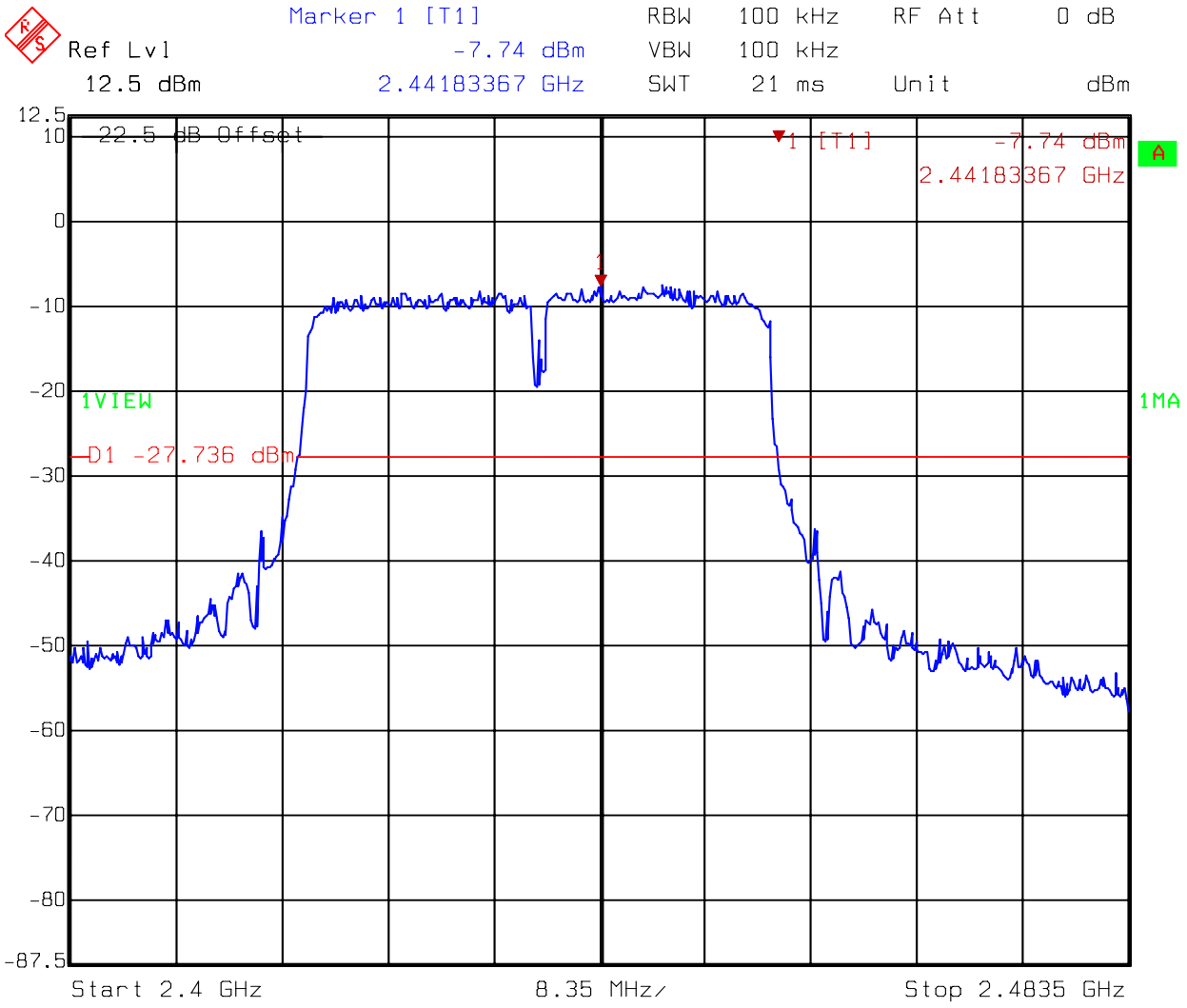
Title: Conductive-Spurious
Comment A: CH 3 at 802.11n 40MHz mode
Date: 06.MAR.2008 10:45:24

conducted spurious @ draft 802.11n HT40 mode channel 6 (1 of 3)



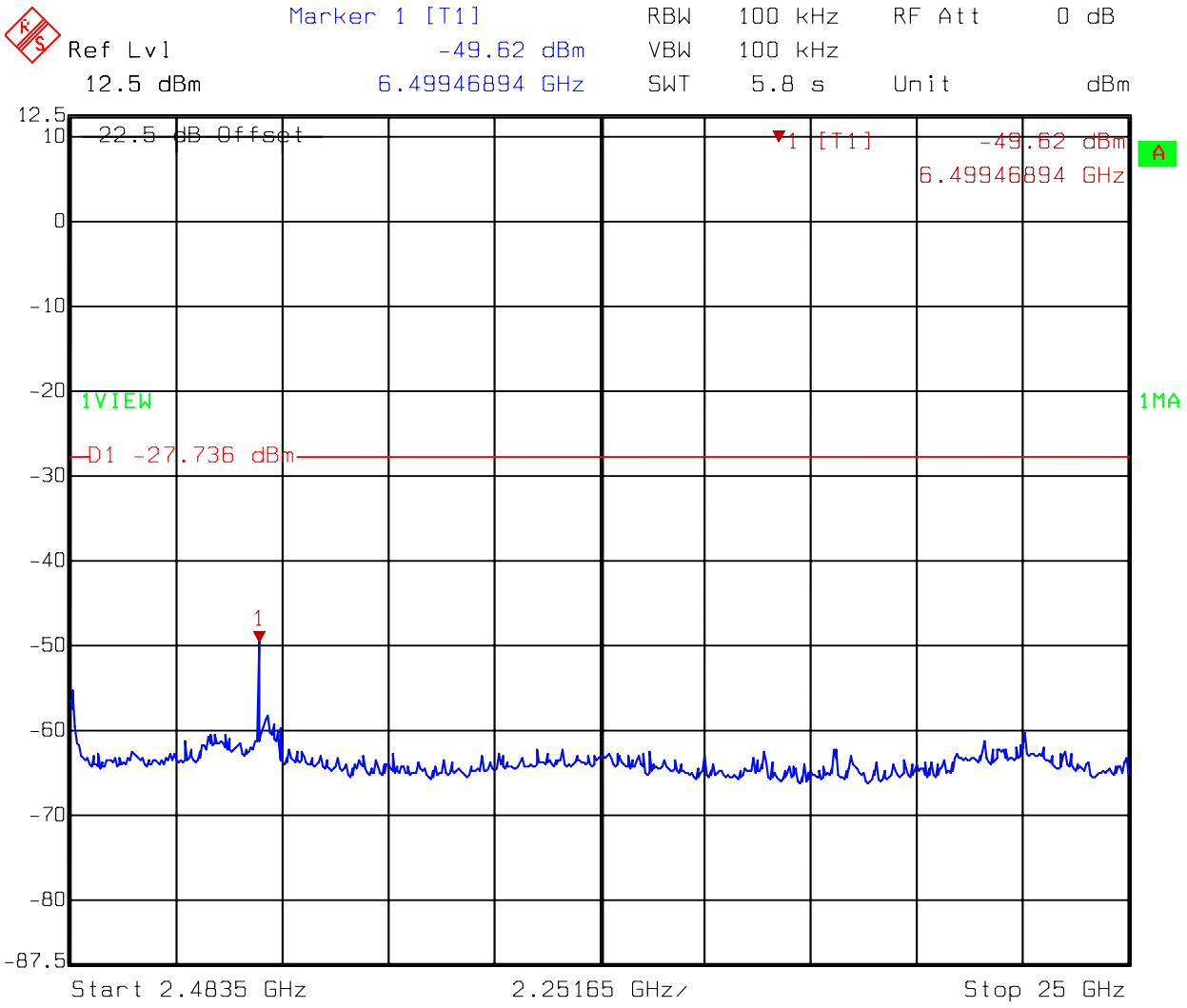
Title: Conductive-Spurious
Comment A: CH 6 at 802.11n 40MHz mode
Date: 06.MAR.2008 10:47:50

conducted spurious @ draft 802.11n HT40 mode channel 6 (2 of 3)



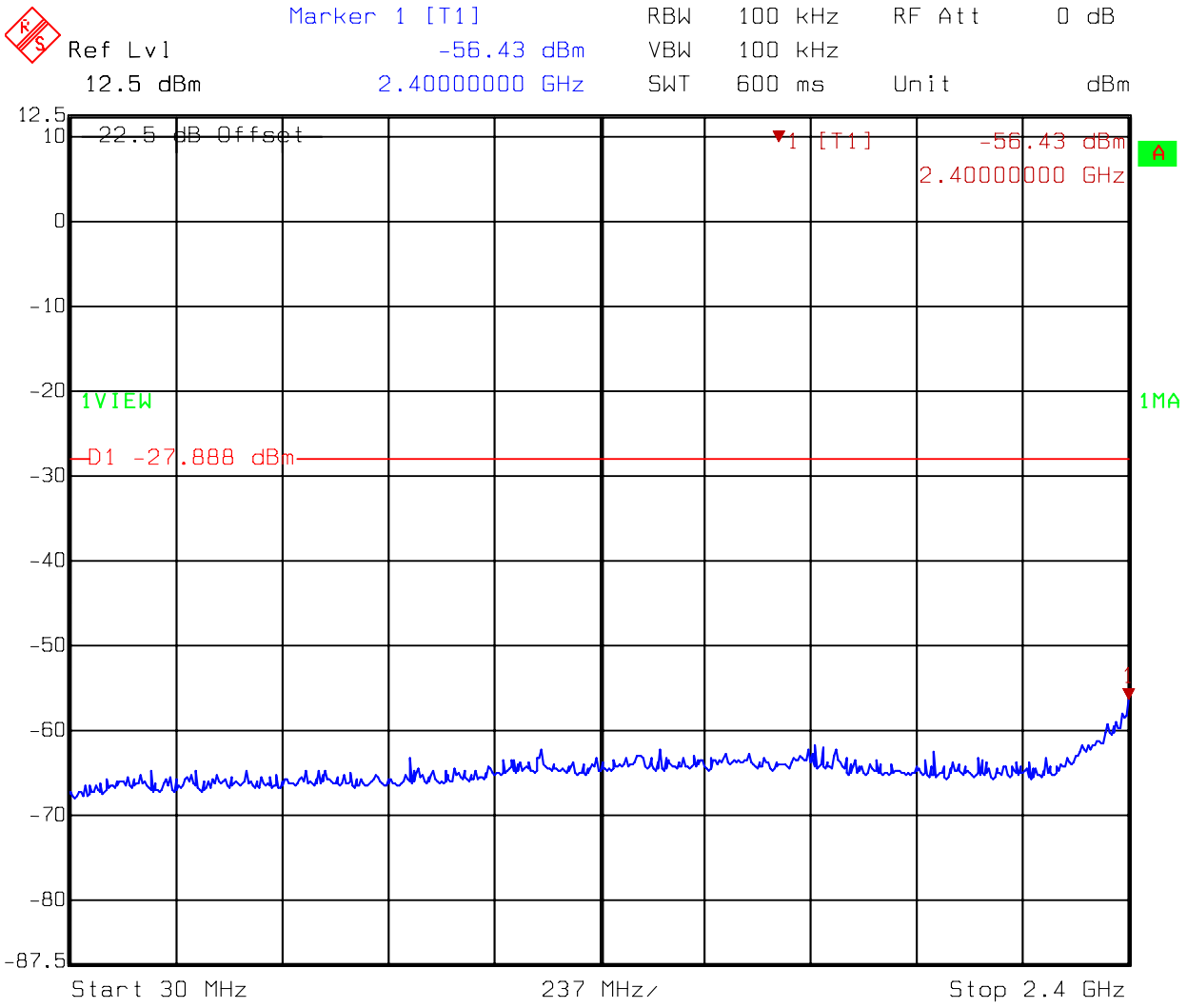
Title: Conductive-Spurious
Comment A: CH 6 at 802.11n 40MHz mode
Date: 06.MAR.2008 10:47:29

conducted spurious @ draft 802.11n HT40 mode channel 6 (3 of 3)



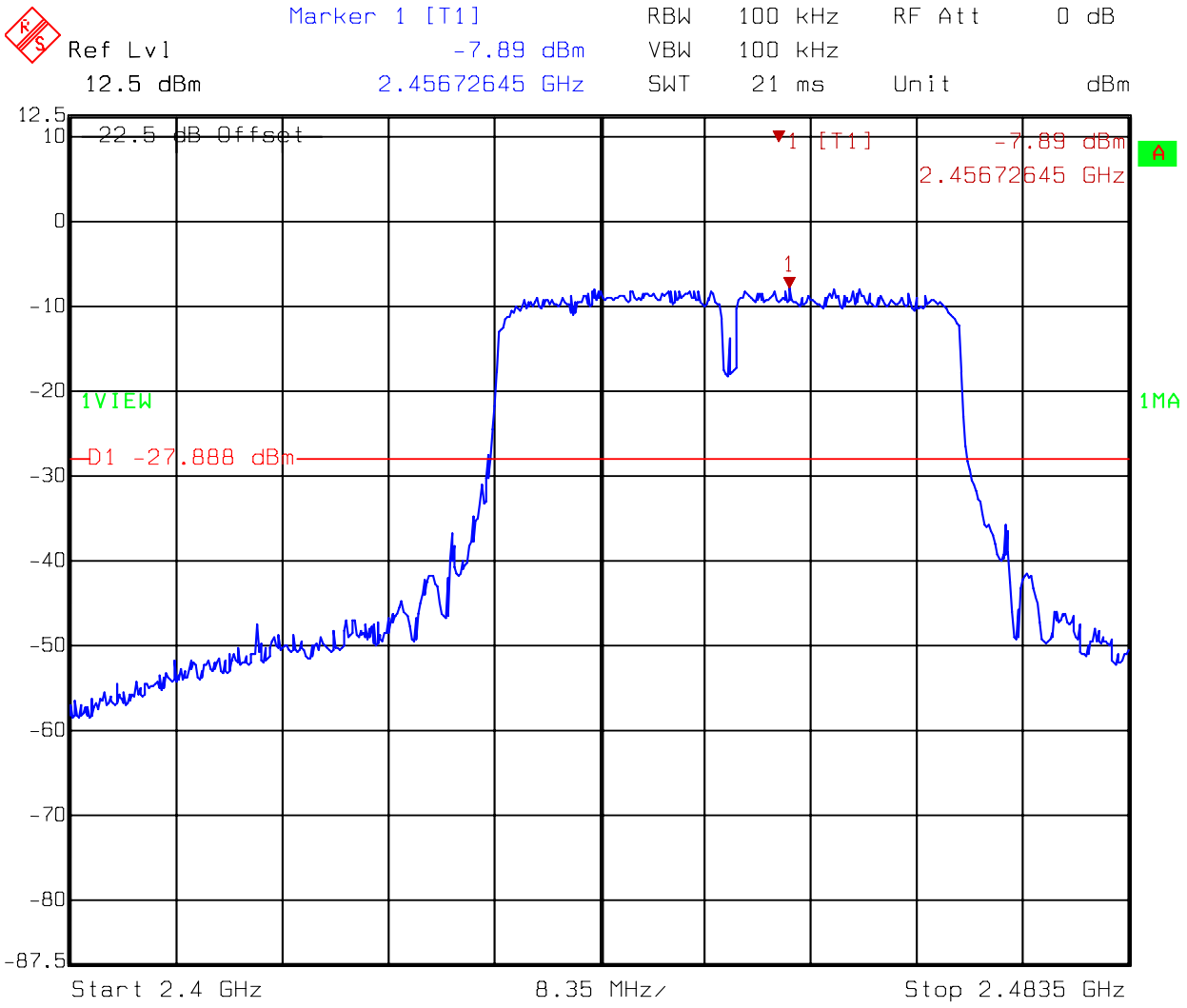
Title: Conductive-Spurious
Comment A: CH 6 at 802.11n 40MHz mode
Date: 06.MAR.2008 10:48:17

conducted spurious @ draft 802.11n HT40 mode channel 9 (1 of 3)



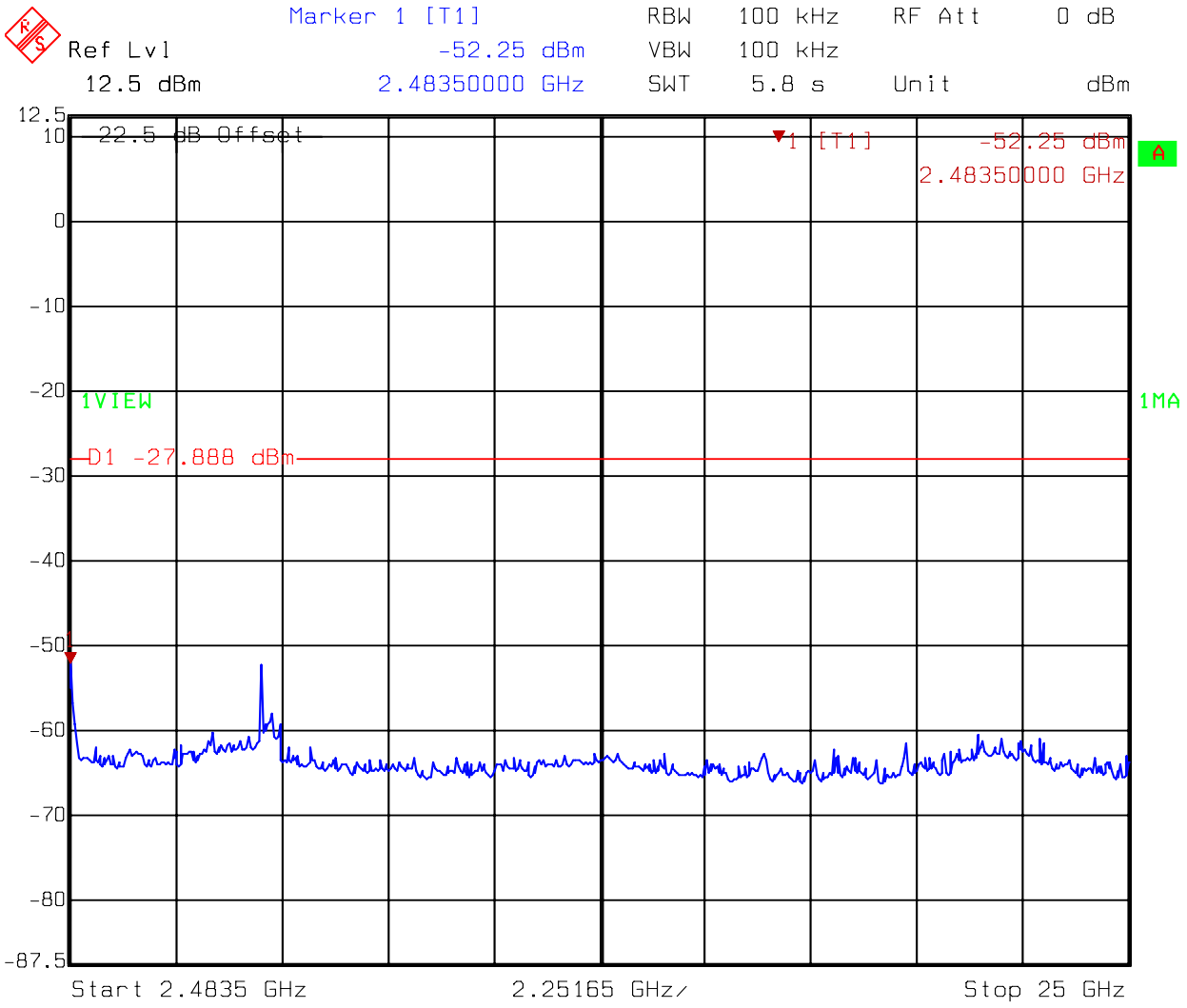
Title: Conductive-Spurious
Comment A: CH 9 at 802.11n 40MHz mode
Date: 06.MAR.2008 10:50:38

conducted spurious @ draft 802.11n HT40 mode channel 9 (2 of 3)



Title: Conductive-Spurious
Comment A: CH 9 at 802.11n 40MHz mode
Date: 06.MAR.2008 10:50:17

conducted spurious @ draft 802.11n HT40 mode channel 9 (3 of 3)



Title: Conductive-Spurious
Comment A: CH 9 at 802.11n 40MHz mode
Date: 06.MAR.2008 10:51:05

8. Radiated Spurious Emission

Name of Test	Radiated Spurious Emission
Base Standard	FCC 15.247(d), 15.209, 15.205

Tested By: Rex Liao
Test Date: Mar. 06, 2008

Test Equipment: EC1365

Test Result: Complies
Test Method: See Appendix E
Measurement Data: See Tables 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.

Measurement results: frequencies equal to or less than 1 GHz

The test was performed on EUT under 802.11b/g/n continuously transmitting mode. The worst case occurred at 802.11b Tx channel 1.

EUT : GLM-100
Worst Case : 802.11b Tx at channel 1

Antenna Polariz. (V/H)	Freq. (MHz)	Receiver Detector	Corr. Factor (dB/m)	Reading (dBuV)	Corrected Level (dBuV/m)	Limit @ 3 m (dBuV/m)	Margin (dB)
V	165.800	QP	15.70	14.54	30.24	43.50	-13.26
V	249.220	QP	12.22	19.02	31.24	46.00	-14.77
V	399.570	QP	16.40	17.39	33.79	46.00	-12.21
V	480.080	QP	18.43	13.48	31.91	46.00	-14.10
V	599.390	QP	20.71	6.78	27.49	46.00	-18.51
V	799.210	QP	23.19	9.48	32.67	46.00	-13.33
H	249.220	QP	12.36	26.42	38.78	46.00	-7.22
H	359.800	QP	15.48	18.68	34.16	46.00	-11.85
H	480.080	QP	18.64	12.49	31.13	46.00	-14.87
H	599.390	QP	20.84	7.65	28.49	46.00	-17.52
H	719.670	QP	22.44	8.61	31.05	46.00	-14.95
H	877.780	QP	24.62	7.69	32.31	46.00	-13.70

Remark:

1. Corr. Factor = Antenna Factor + Cable Loss
2. Corrected Level = Reading + Corr. Factor

Measurement results: frequency above 1GHz

EUT : XN-791
Test : 802.11b Tx at channel 1

Frequency (MHz)	Spectrum Analyzer Detector	Antenna Polariz. (H/V)	Preamp. Gain (dB)	Correction Factor (dB/m)	Reading (dBuV)	Corrected Level (dBuV/m)	Limit @ 3 m (dBuV/m)	Margin (dB)
4824.00	PK	V	36.07	37.77	40.85	42.55	54	-11.45
4824.00	PK	H	36.07	37.77	38.41	40.11	54	-13.89

Remark:

1. Correction Factor = Antenna Factor + Cable Loss
2. Corrected Level = Reading + Correction Factor – Preamp. Gain
3. The frequency measured ranges from 1GHz to 25GHz.The data value listed above which is higher than the system noise floor.

EUT : XN-791
Test : 802.11b Tx at channel 6

Frequency (MHz)	Spectrum Analyzer Detector	Antenna Polariz. (H/V)	Preamp. Gain (dB)	Correction Factor (dB/m)	Reading (dBuV)	Corrected Level (dBuV/m)	Limit @ 3 m (dBuV/m)	Margin (dB)
4874.00	PK	V	36.07	37.77	40.87	42.57	54	-11.43
4874.00	PK	H	36.07	37.77	39.63	41.33	54	-12.67

Remark:

1. Correction Factor = Antenna Factor + Cable Loss
2. Corrected Level = Reading + Correction Factor – Preamp. Gain
3. The frequency measured ranges from 1GHz to 25GHz.The data value listed above which is higher than the system noise floor.

EUT : XN-791
Test : 802.11b Tx at channel 11

Frequency (MHz)	Spectrum Analyzer Detector	Antenna Polariz. (H/V)	Preamp. Gain (dB)	Correction Factor (dB/m)	Reading (dBuV)	Corrected Level (dBuV/m)	Limit @ 3 m (dBuV/m)	Margin (dB)
4924.00	PK	V	36.07	37.77	40.65	42.35	54	-11.65
4924.00	PK	H	36.07	37.77	38.32	40.02	54	-13.98

Remark:

1. Correction Factor = Antenna Factor + Cable Loss
2. Corrected Level = Reading + Correction Factor – Preamp. Gain
3. The frequency measured ranges from 1GHz to 25GHz.The data value listed above which is higher than the system noise floor.

EUT : XN-791
Test : 802.11g Tx at channel 1

Frequency (MHz)	Spectrum Analyzer Detector	Antenna Polariz. (H/V)	Preamp. Gain (dB)	Correction Factor (dB/m)	Reading (dBuV)	Corrected Level (dBuV/m)	Limit @ 3 m (dBuV/m)	Margin (dB)
4824.00	PK	V	36.07	37.77	40.21	41.91	54	-12.09
4824.00	PK	H	36.07	37.77	37.99	39.69	54	-14.31

Remark:

1. Correction Factor = Antenna Factor + Cable Loss
2. Corrected Level = Reading + Correction Factor – Preamp. Gain
3. The frequency measured ranges from 1GHz to 25GHz.The data value listed above which is higher than the system noise floor.

EUT : XN-791
Test : 802.11g Tx at channel 6

Frequency (MHz)	Spectrum Analyzer Detector	Antenna Polariz. (H/V)	Preamp. Gain (dB)	Correction Factor (dB/m)	Reading (dBuV)	Corrected Level (dBuV/m)	Limit @ 3 m (dBuV/m)	Margin (dB)
4874.00	PK	V	36.07	37.77	38.27	39.97	54	-14.03
4874.00	PK	H	36.07	37.77	37.62	39.32	54	-14.68

Remark:

1. Correction Factor = Antenna Factor + Cable Loss
2. Corrected Level = Reading + Correction Factor – Preamp. Gain
3. The frequency measured ranges from 1GHz to 25GHz.The data value listed above which is higher than the system noise floor.

EUT : XN-791
Test : 802.11g Tx at channel 11

Frequency (MHz)	Spectrum Analyzer Detector	Antenna Polariz. (H/V)	Preamp. Gain (dB)	Correction Factor (dB/m)	Reading (dBuV)	Corrected Level (dBuV/m)	Limit @ 3 m (dBuV/m)	Margin (dB)
4924.00	PK	V	36.07	37.77	38.24	39.94	54	-14.06
4924.00	PK	H	36.07	37.77	37.89	39.59	54	-14.41

Remark:

1. Correction Factor = Antenna Factor + Cable Loss
2. Corrected Level = Reading + Correction Factor – Preamp. Gain
3. The frequency measured ranges from 1GHz to 25GHz.The data value listed above which is higher than the system noise floor.

EUT : XN-791
Test : 802.11n HT20 Tx at channel 1

Frequency (MHz)	Spectrum Analyzer Detector	Antenna Polariz. (H/V)	Preamp. Gain (dB)	Correction Factor (dB/m)	Reading (dBuV)	Corrected Level (dBuV/m)	Limit @ 3 m (dBuV/m)	Margin (dB)
4824.00	PK	V	36.07	37.77	38.11	39.81	54	-14.19
4824.00	PK	H	36.07	37.77	36.74	38.44	54	-15.56

Remark:

1. Correction Factor = Antenna Factor + Cable Loss
2. Corrected Level = Reading + Correction Factor – Preamp. Gain
3. The frequency measured ranges from 1GHz to 25GHz.The data value listed above which is higher than the system noise floor.

EUT : XN-791
Test : 802.11n HT20 Tx at channel 6

Frequency (MHz)	Spectrum Analyzer Detector	Antenna Polariz. (H/V)	Preamp. Gain (dB)	Correction Factor (dB/m)	Reading (dBuV)	Corrected Level (dBuV/m)	Limit @ 3 m (dBuV/m)	Margin (dB)
4874.00	PK	V	36.07	37.77	39.66	41.36	54	-12.64
4874.00	PK	H	36.07	37.77	37.37	39.07	54	-14.93

Remark:

1. Correction Factor = Antenna Factor + Cable Loss
2. Corrected Level = Reading + Correction Factor – Preamp. Gain
3. The frequency measured ranges from 1GHz to 25GHz.The data value listed above which is higher than the system noise floor.

EUT : XN-791
Test : 802.11n HT20 Tx at channel 11

Frequency (MHz)	Spectrum Analyzer Detector	Antenna Polariz. (H/V)	Preamp. Gain (dB)	Correction Factor (dB/m)	Reading (dBuV)	Corrected Level (dBuV/m)	Limit @ 3 m (dBuV/m)	Margin (dB)
4924.00	PK	V	36.07	37.77	41.23	42.93	54	-11.07
4924.00	PK	H	36.07	37.77	37.61	39.31	54	-14.69
4924.00	PK	V	36.07	37.77	41.23	42.93	54	-11.07

Remark:

1. Correction Factor = Antenna Factor + Cable Loss
2. Corrected Level = Reading + Correction Factor – Preamp. Gain
3. The frequency measured ranges from 1GHz to 25GHz.The data value listed above which is higher than the system noise floor.

EUT : XN-791
Test : 802.11n HT40 Tx at channel 3

Frequency (MHz)	Spectrum Analyzer Detector	Antenna Polariz. (H/V)	Preamp. Gain (dB)	Correction Factor (dB/m)	Reading (dBuV)	Corrected Level (dBuV/m)	Limit @ 3 m (dBuV/m)	Margin (dB)
4844.00	PK	V	36.07	37.77	40.14	41.84	54	-12.16
4844.00	PK	H	36.07	37.77	38.13	39.83	54	-14.17

Remark:

1. Correction Factor = Antenna Factor + Cable Loss
2. Corrected Level = Reading + Correction Factor – Preamp. Gain
3. The frequency measured ranges from 1GHz to 25GHz.The data value listed above which is higher than the system noise floor.

EUT : XN-791
Test : 802.11n HT40 Tx at channel 6

Frequency (MHz)	Spectrum Analyzer Detector	Antenna Polariz. (H/V)	Preamp. Gain (dB)	Correction Factor (dB/m)	Reading (dBuV)	Corrected Level (dBuV/m)	Limit @ 3 m (dBuV/m)	Margin (dB)
4874.00	PK	V	36.07	37.77	39.19	40.89	54	-13.11
4874.00	PK	H	36.07	37.77	38.29	39.99	54	-14.01

Remark:

1. Correction Factor = Antenna Factor + Cable Loss
2. Corrected Level = Reading + Correction Factor – Preamp. Gain
3. The frequency measured ranges from 1GHz to 25GHz.The data value listed above which is higher than the system noise floor.

EUT : XN-791
Test : 802.11n HT40 Tx at channel 9

Frequency (MHz)	Spectrum Analyzer Detector	Antenna Polariz. (H/V)	Preamp. Gain (dB)	Correction Factor (dB/m)	Reading (dBuV)	Corrected Level (dBuV/m)	Limit @ 3 m (dBuV/m)	Margin (dB)
4904.00	PK	V	36.07	37.77	39.4	41.1	54	-12.90
4904.00	PK	H	36.07	37.77	38.16	39.86	54	-14.14

Remark:

1. Correction Factor = Antenna Factor + Cable Loss
2. Corrected Level = Reading + Correction Factor – Preamp. Gain
3. The frequency measured ranges from 1GHz to 25GHz.The data value listed above which is higher than the system noise floor.

9. Emission on Band Edge

Name of Test	Emission Band Edge
Base Standard	FCC 15.247(d)

Tested By: Rex Liao
Test Date: Mar. 06, 2008

Test Equipment: EC1365

Test Result: Complies
Test Method: See Appendix F
Measurement Data: See Tables & plots below

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

Test Mode: 802.11b

Channel	Measurement Freq.Band (MHz)	Detector	The Max. Field Strength in Restrict Band (dBuV/m)	Limit @ 3 m (dBuV/m)	Margin (dB)
1 (lowest)	2310-2390	PK	59.12	74	-14.88
		AV	51.29	54	-2.71
11 (highest)	2483.5-2500	PK	60.39	74	-13.61
		AV	48.47	54	-5.53

Test Mode: 802.11g

Channel	Measurement Freq.Band (MHz)	Detector	The Max. Field Strength in Restrict Band (dBuV/m)	Limit @ 3 m (dBuV/m)	Margin (dB)
1 (lowest)	2310-2390	PK	72.24	74	-1.76
		AV	53.34	54	-0.66
11 (highest)	2483.5-2500	PK	68.89	74	-5.11
		AV	52.27	54	-1.73

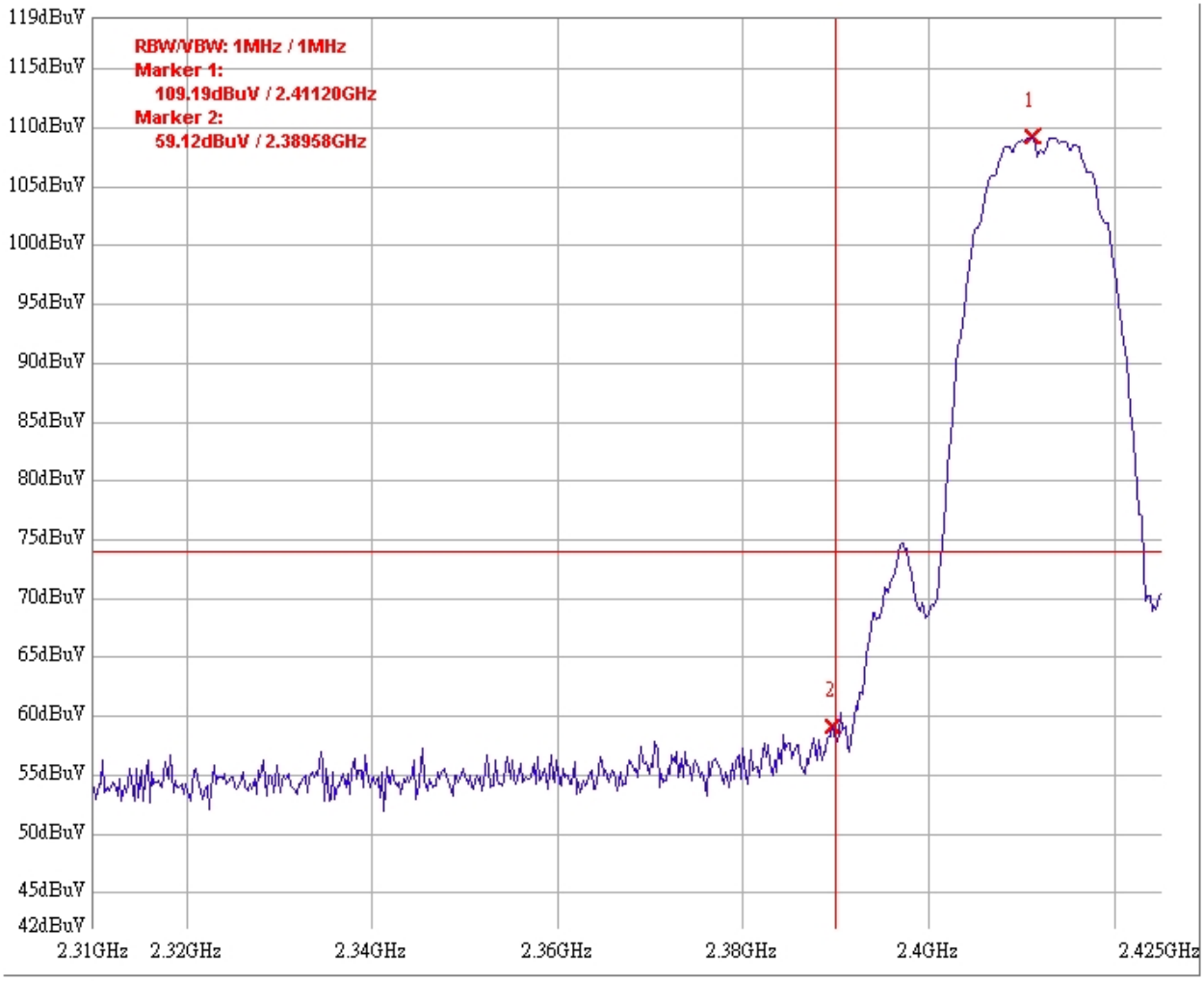
Test Mode: 802.11n HT20

Channel	Measurement Freq.Band (MHz)	Detector	The Max. Field Strength in Restrict Band (dBuV/m)	Limit @ 3 m (dBuV/m)	Margin (dB)
1 (lowest)	2310-2390	PK	72.60	74	-1.40
		AV	53.10	54	-0.90
11 (highest)	2483.5-2500	PK	68.89	74	-5.11
		AV	51.11	54	-2.89

Test Mode: 802.11n HT40

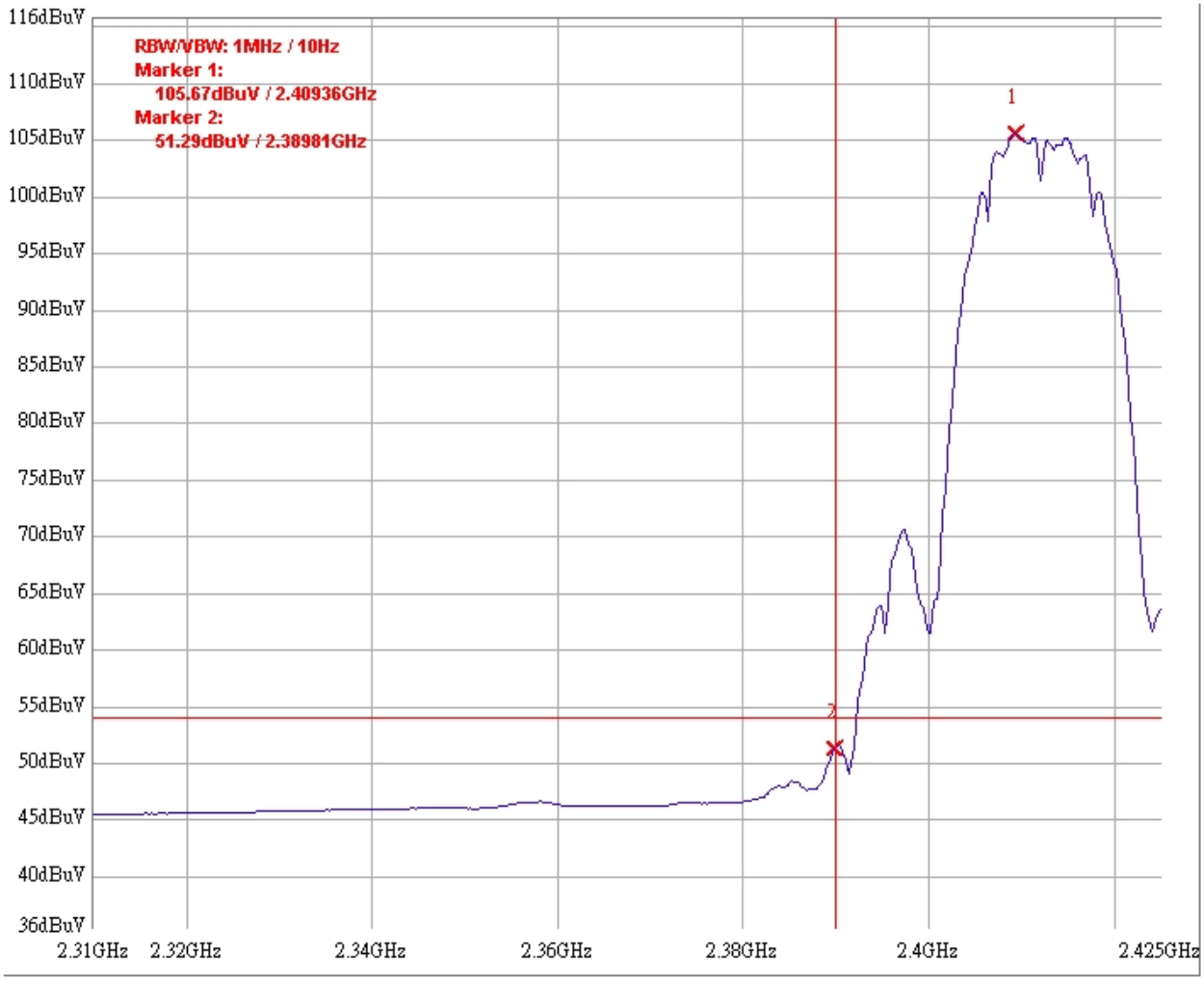
Channel	Measurement Freq.Band (MHz)	Detector	The Max. Field Strength in Restrict Band (dBuV/m)	Limit @ 3 m (dBuV/m)	Margin (dB)
3 (lowest)	2310-2390	PK	66.73	74	-7.27
		AV	53.33	54	-0.67
9 (highest)	2483.5-2500	PK	66.80	74	-7.20
		AV	52.74	54	-1.26

Band Edge @ 802.11b mode channel 1 PK



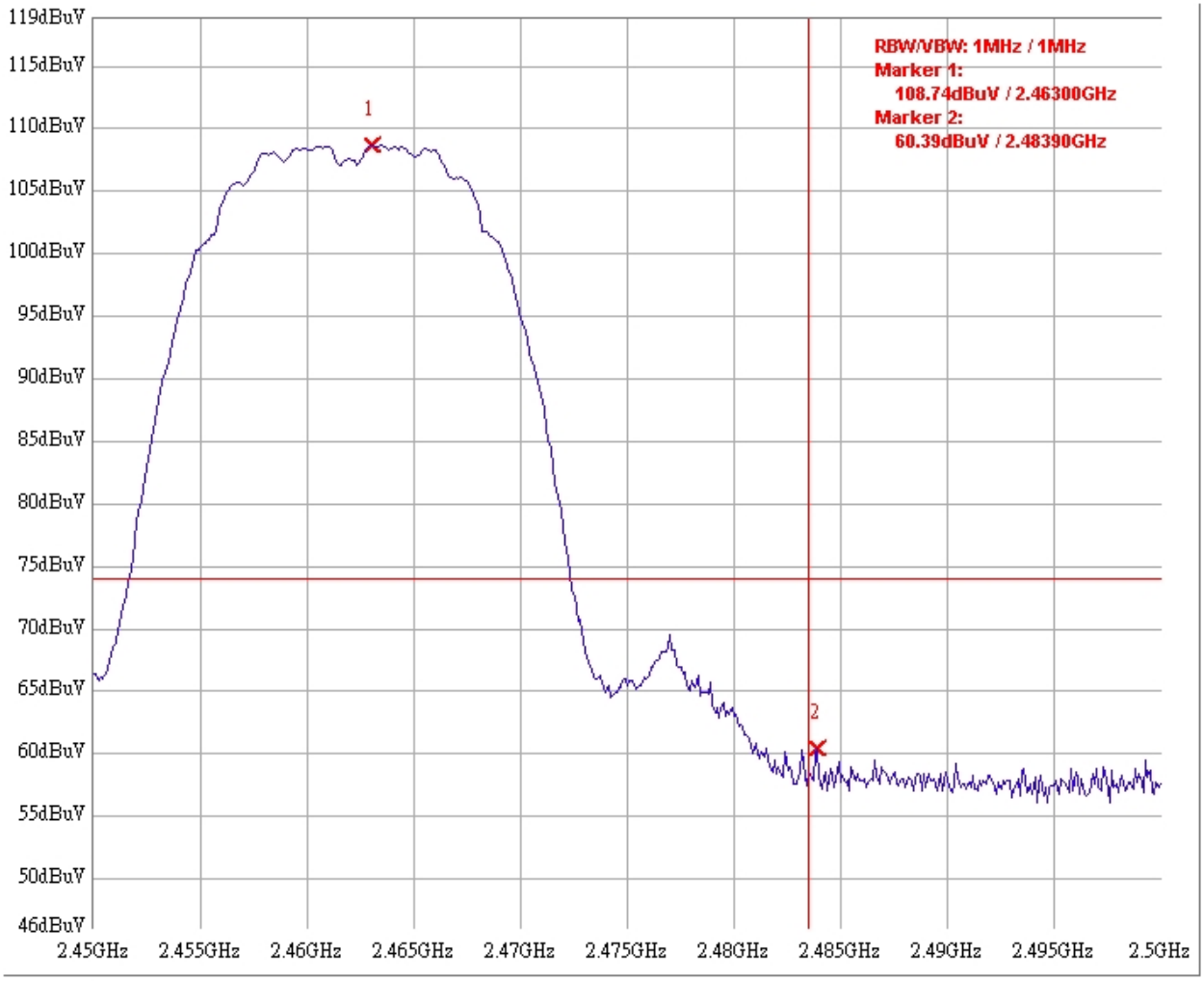
Band-Edge
11b ch1
PK

Band Edge @ 802.11b mode channel 1 AV



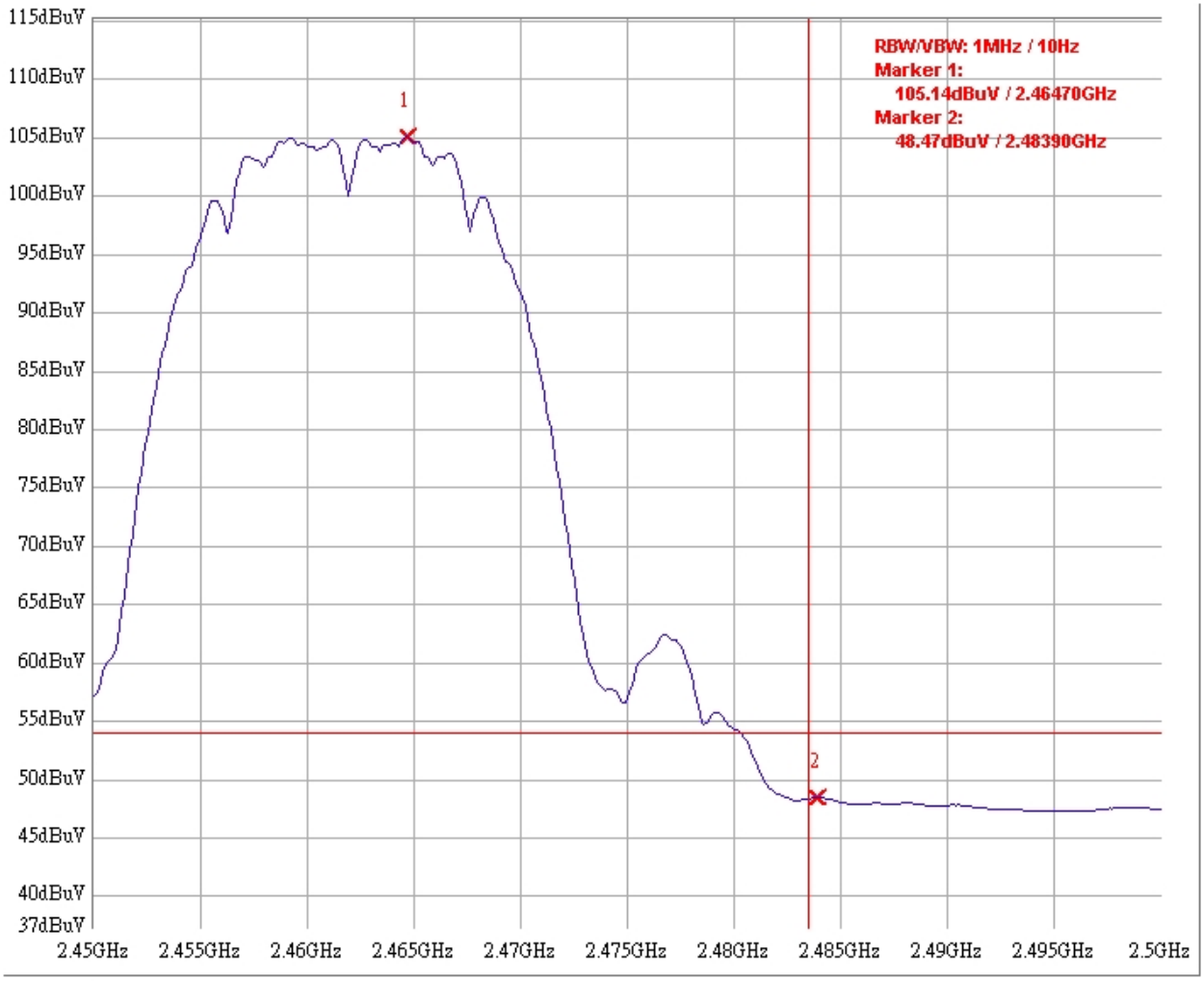
Band-Edge
11b ch1
AV

Band Edge @ 802.11b mode channel 11 PK



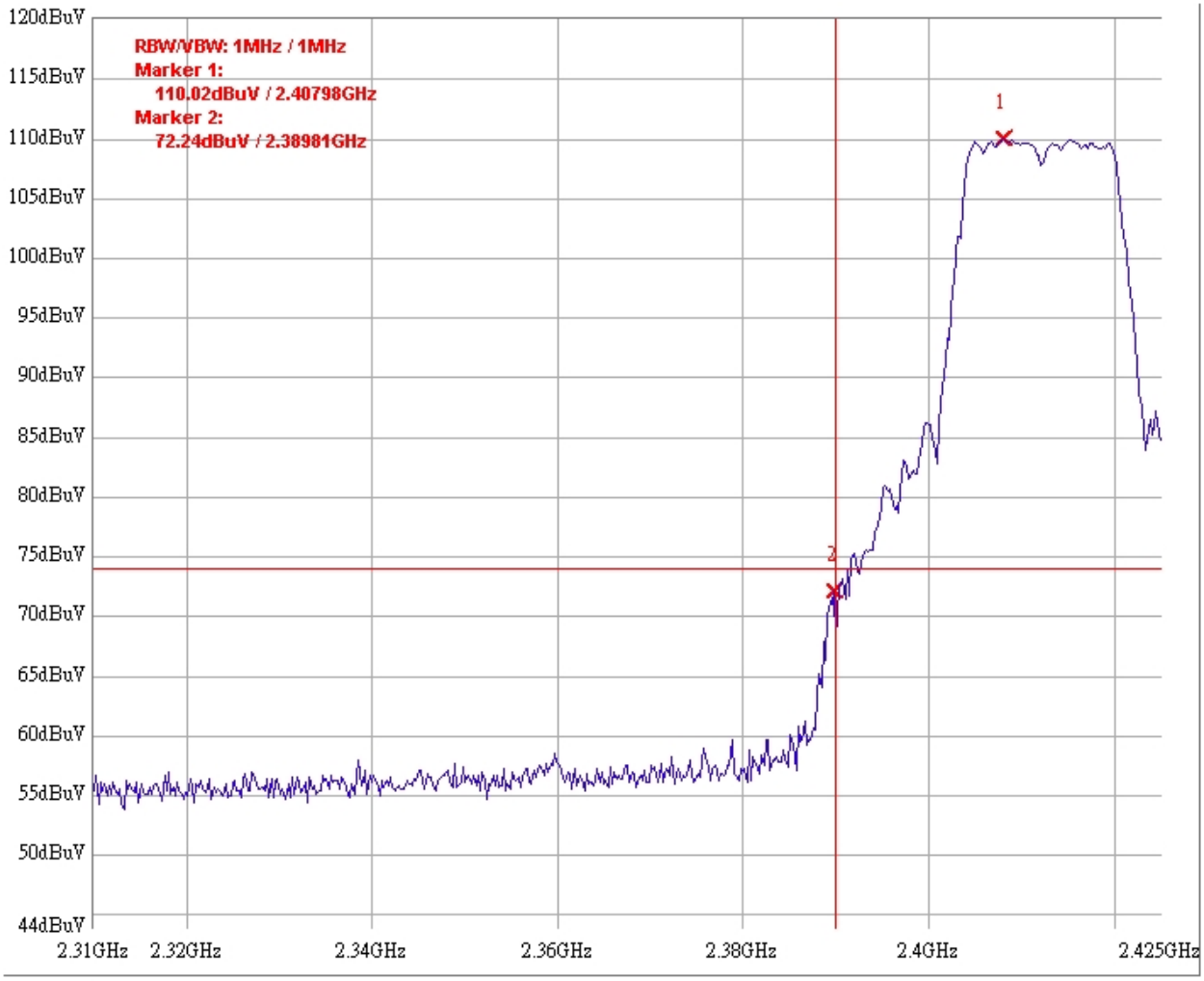
Band-Edge
11b ch11
PK

Band Edge @ 802.11b mode channel 11 AV



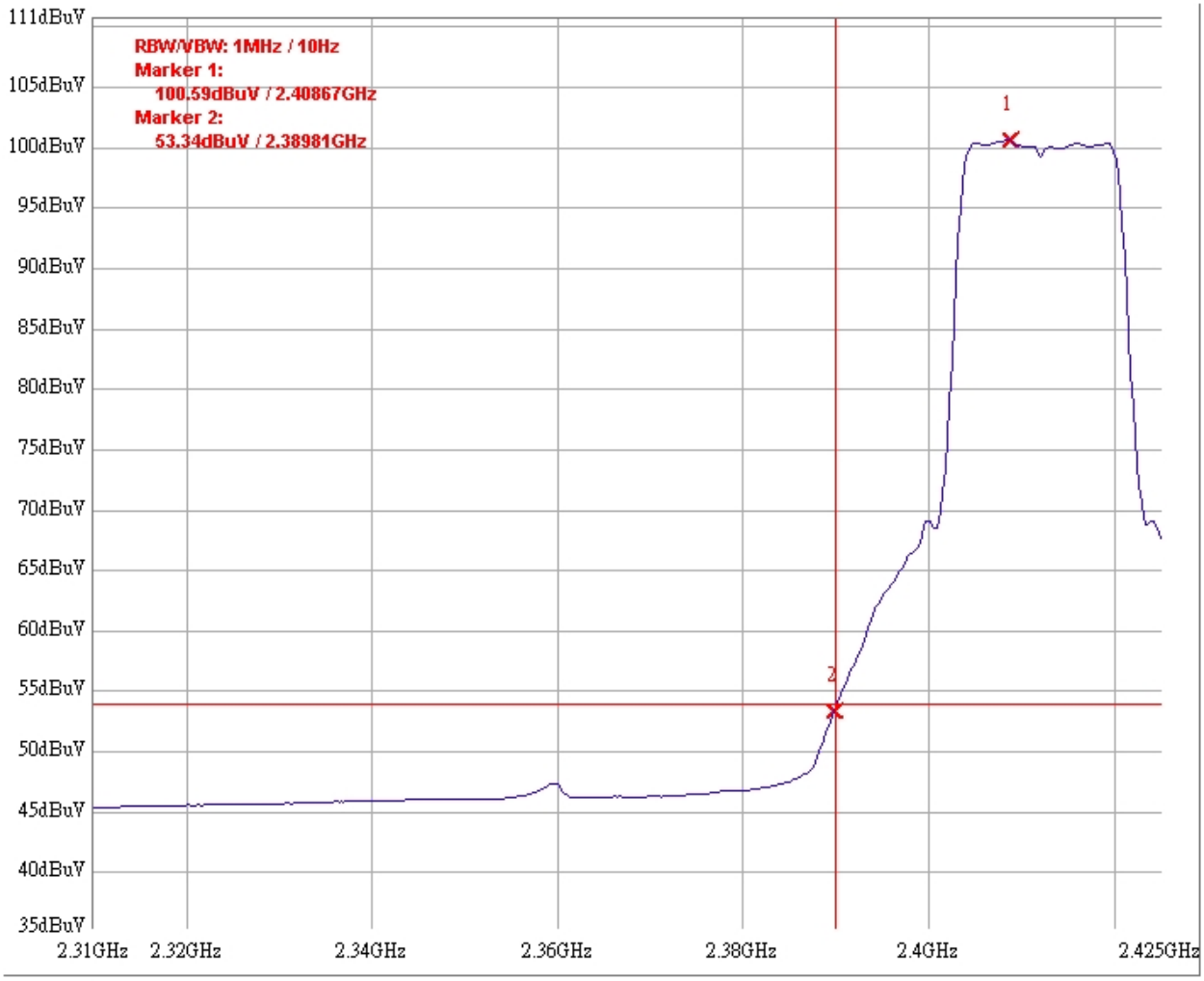
Band-Edge
11b ch11
AV

Band Edge @ 802.11g mode channel 1 PK



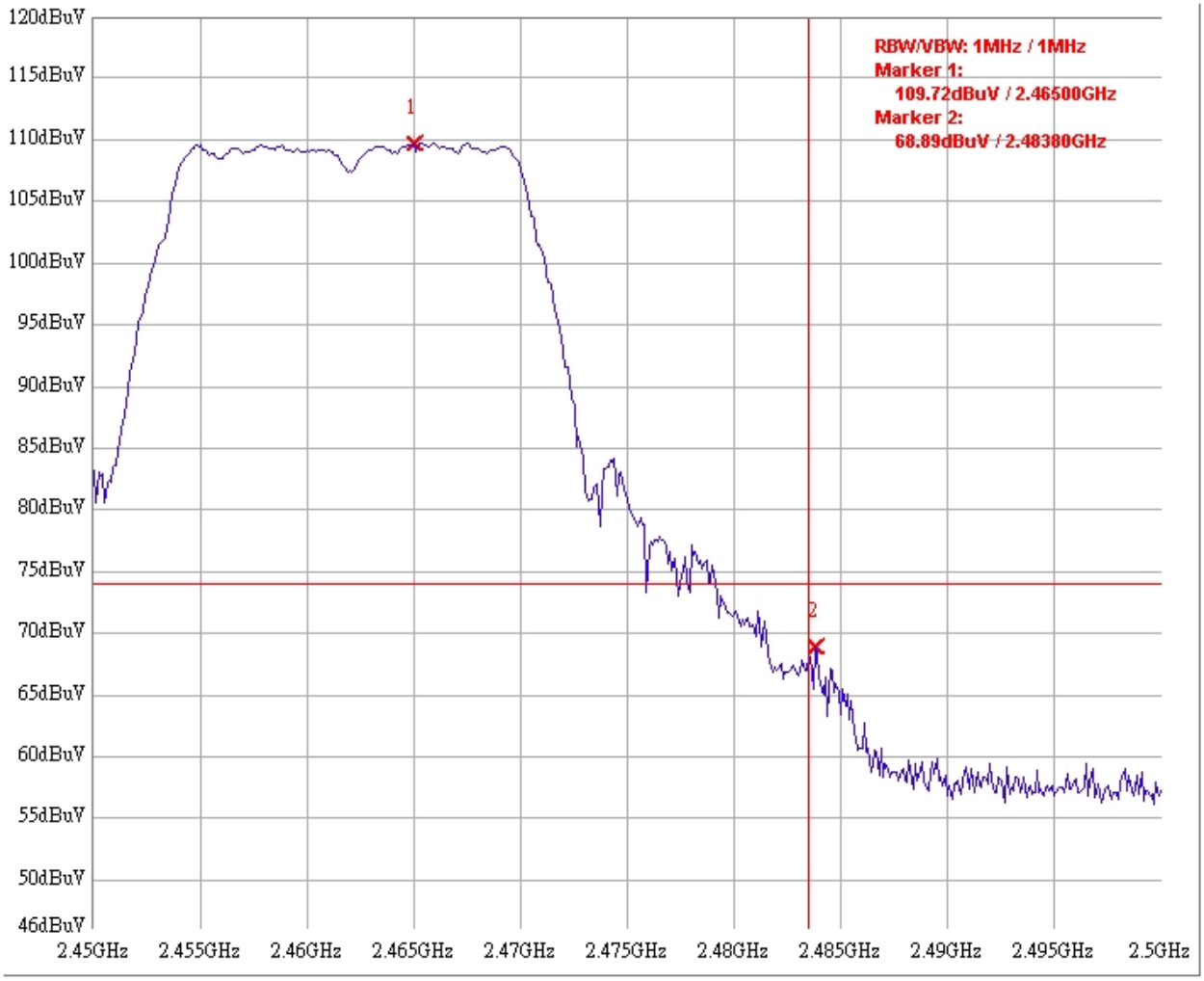
Band-Edge
11g ch1
PK

Band Edge @ 802.11g mode channel 1 AV



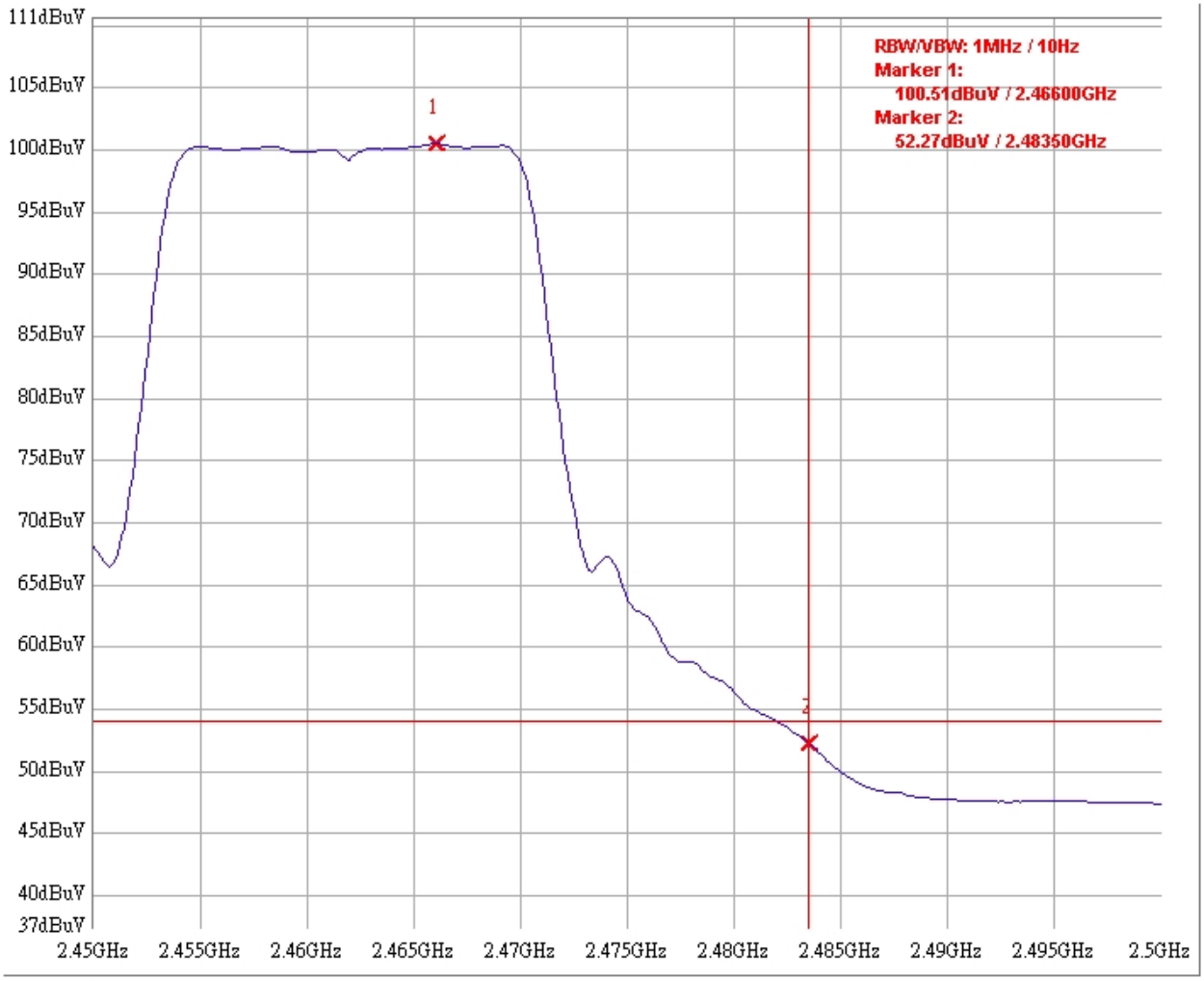
Band-Edge
11g ch1
AV

Band Edge @ 802.11g mode channel 11 PK



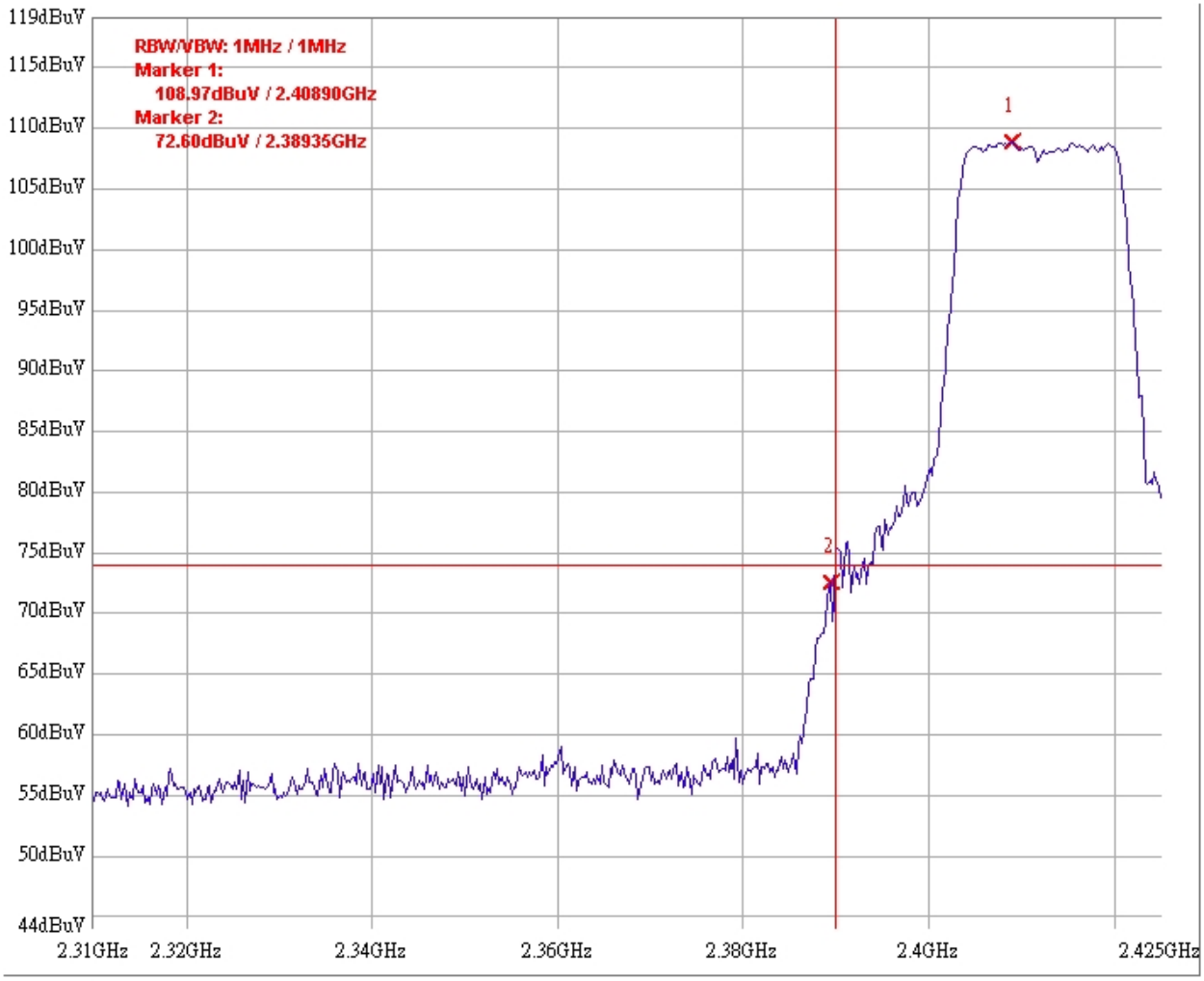
Band-Edge
11g ch11
PK

Band Edge @ 802.11g mode channel 11 AV



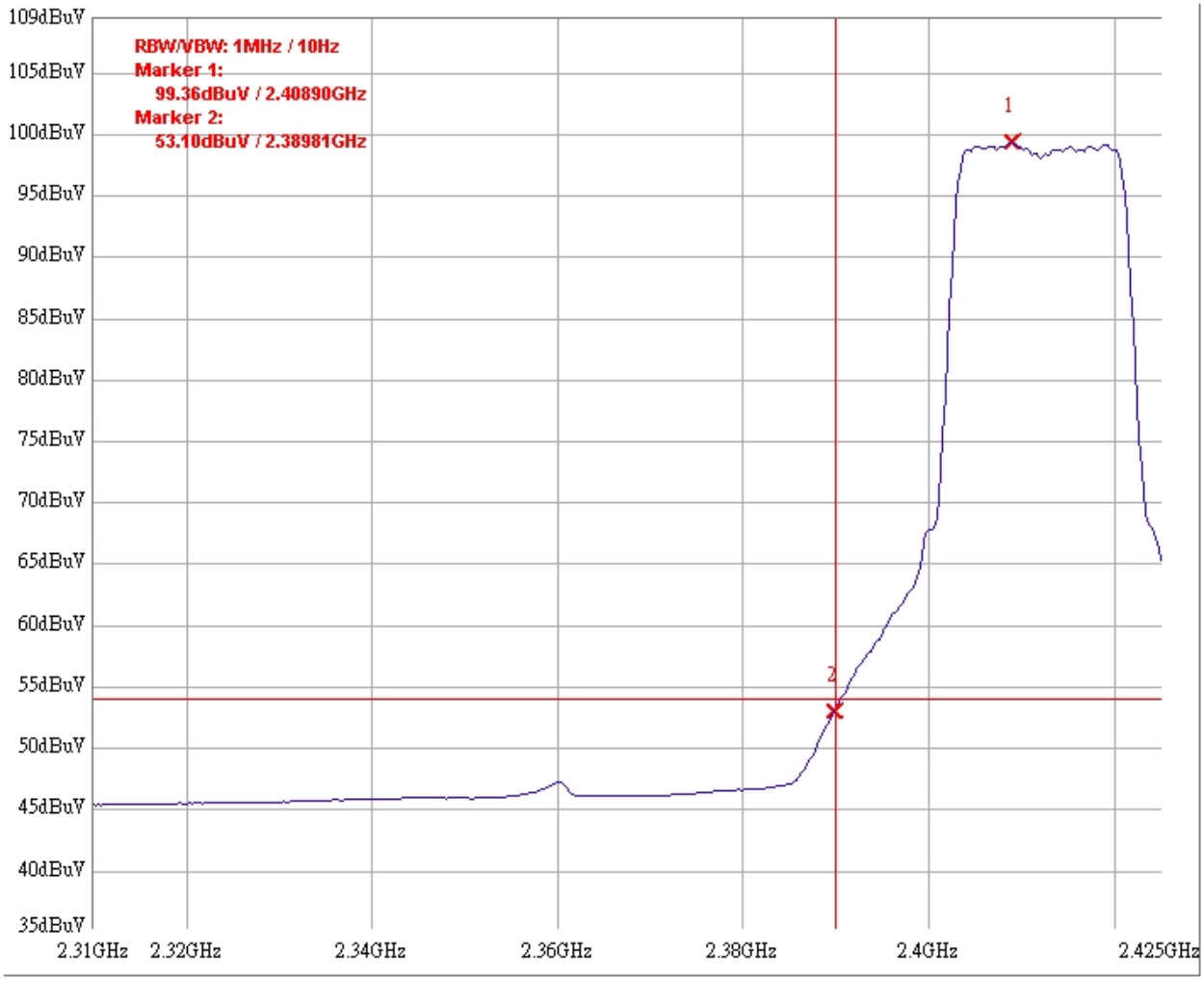
Band-Edge
11g ch11
AV

Band Edge @ 802.11n 20MHz mode channel 1 PK



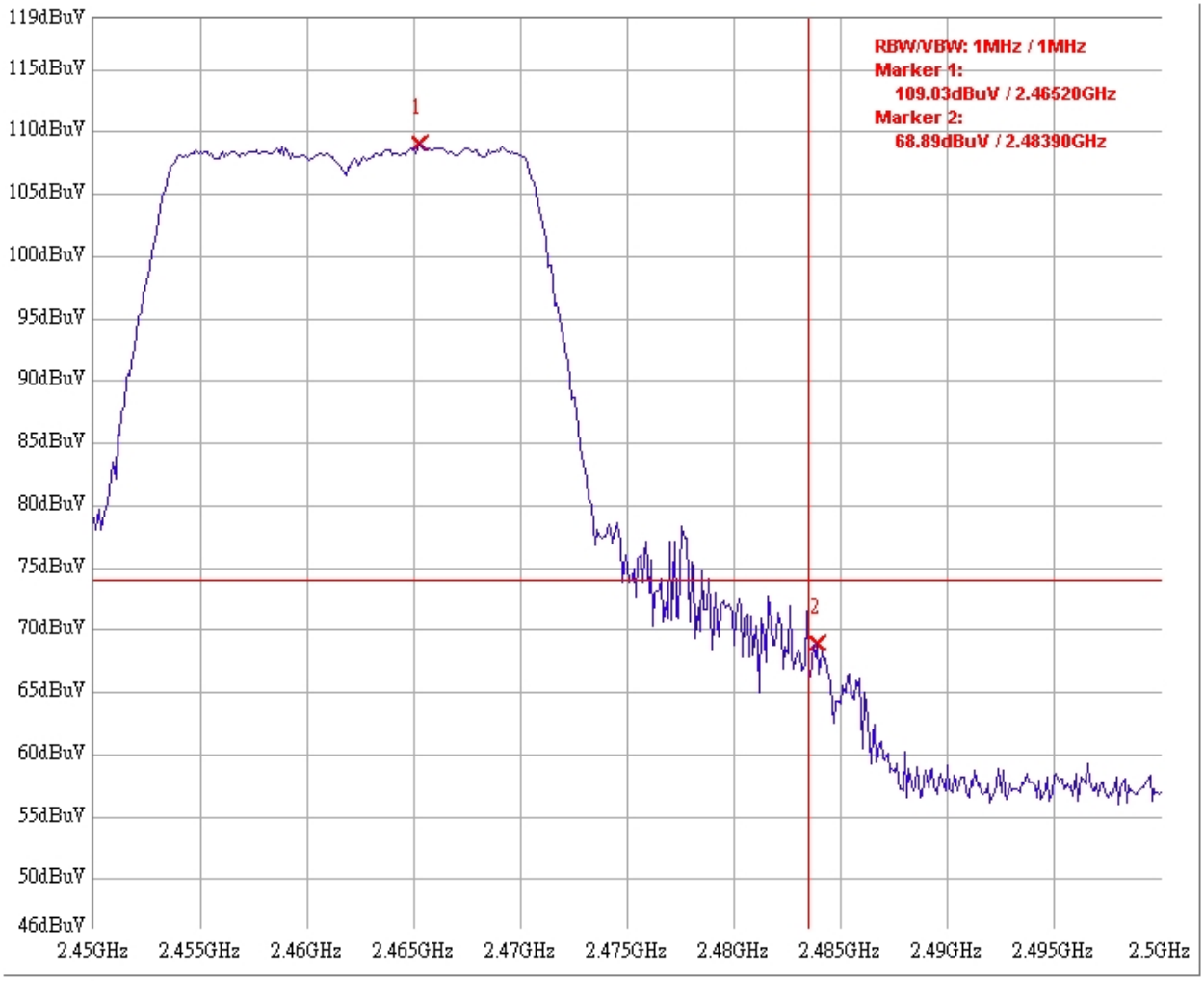
Band-Edge
11n(20) ch1
PK

Band Edge @ 802.11n 20MHz mode channel 1 AV



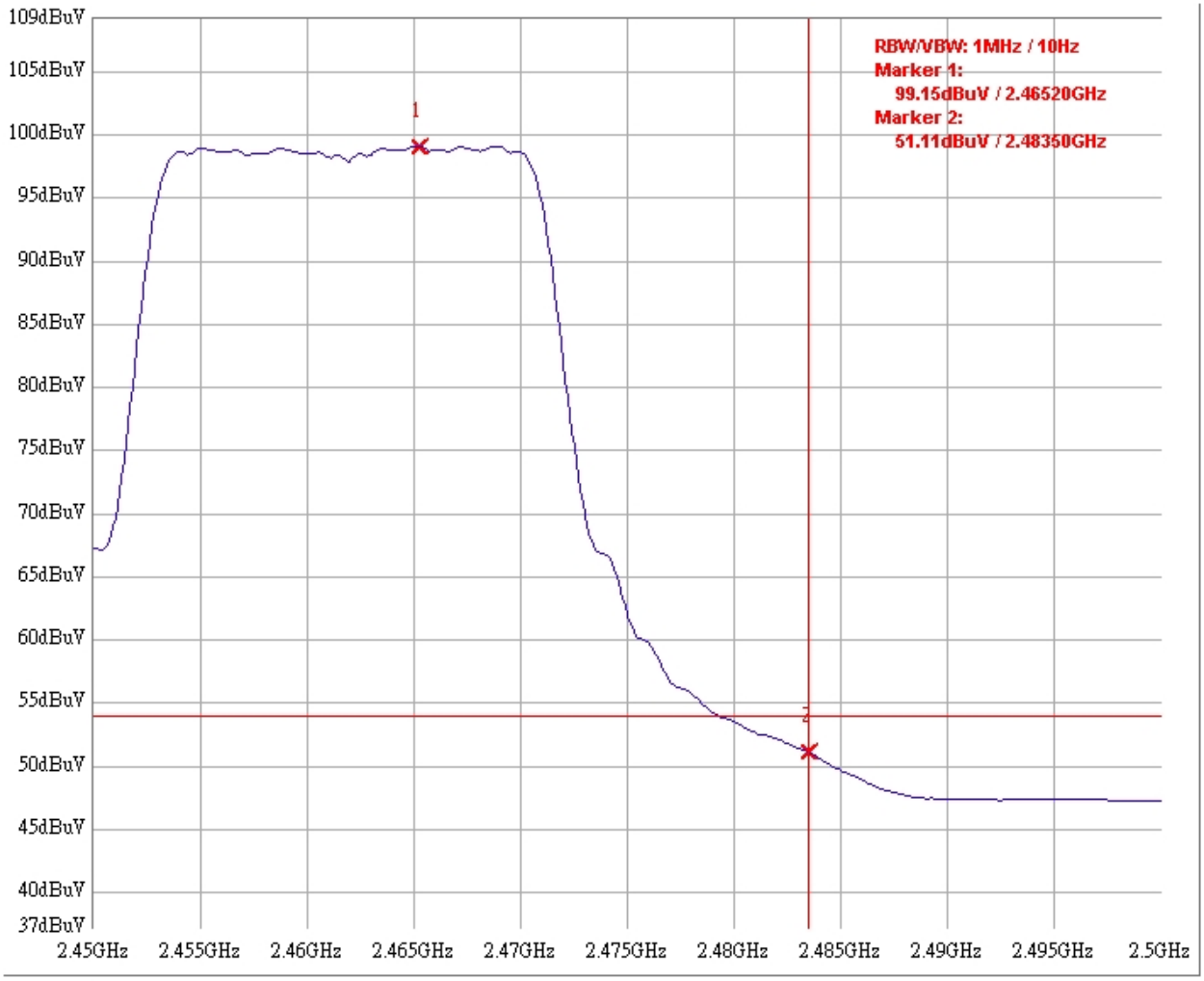
Band-Edge
11n(20) ch1
AV

Band Edge @ 802.11n 20MHz mode channel 11 PK



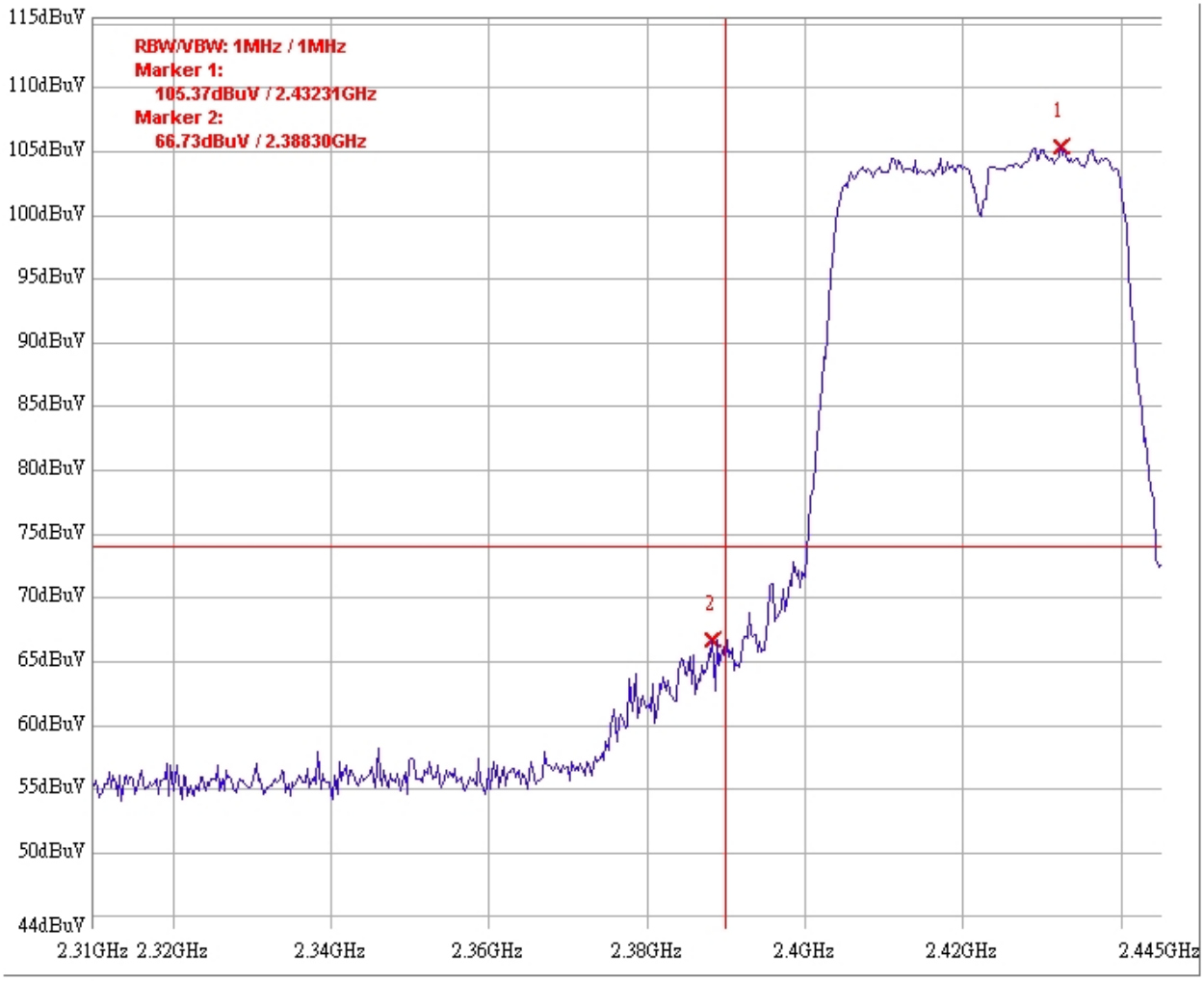
Band-Edge
11n(20) ch11
PK

Band Edge @ 802.11n 20MHz mode channel 11 AV



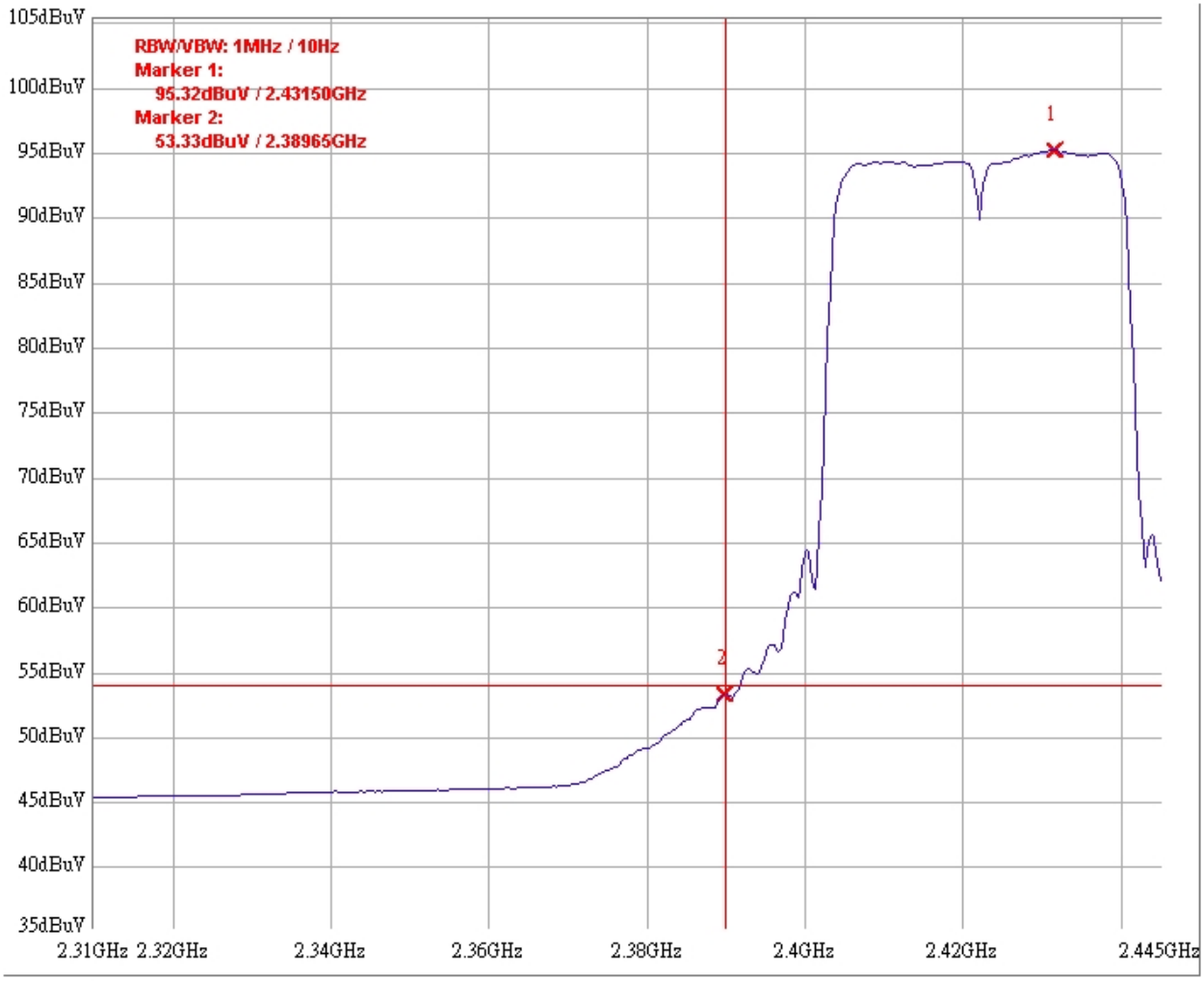
Band-Edge
11n(20) ch11
AV

Band Edge @ 802.11n 40MHz mode channel 3 PK



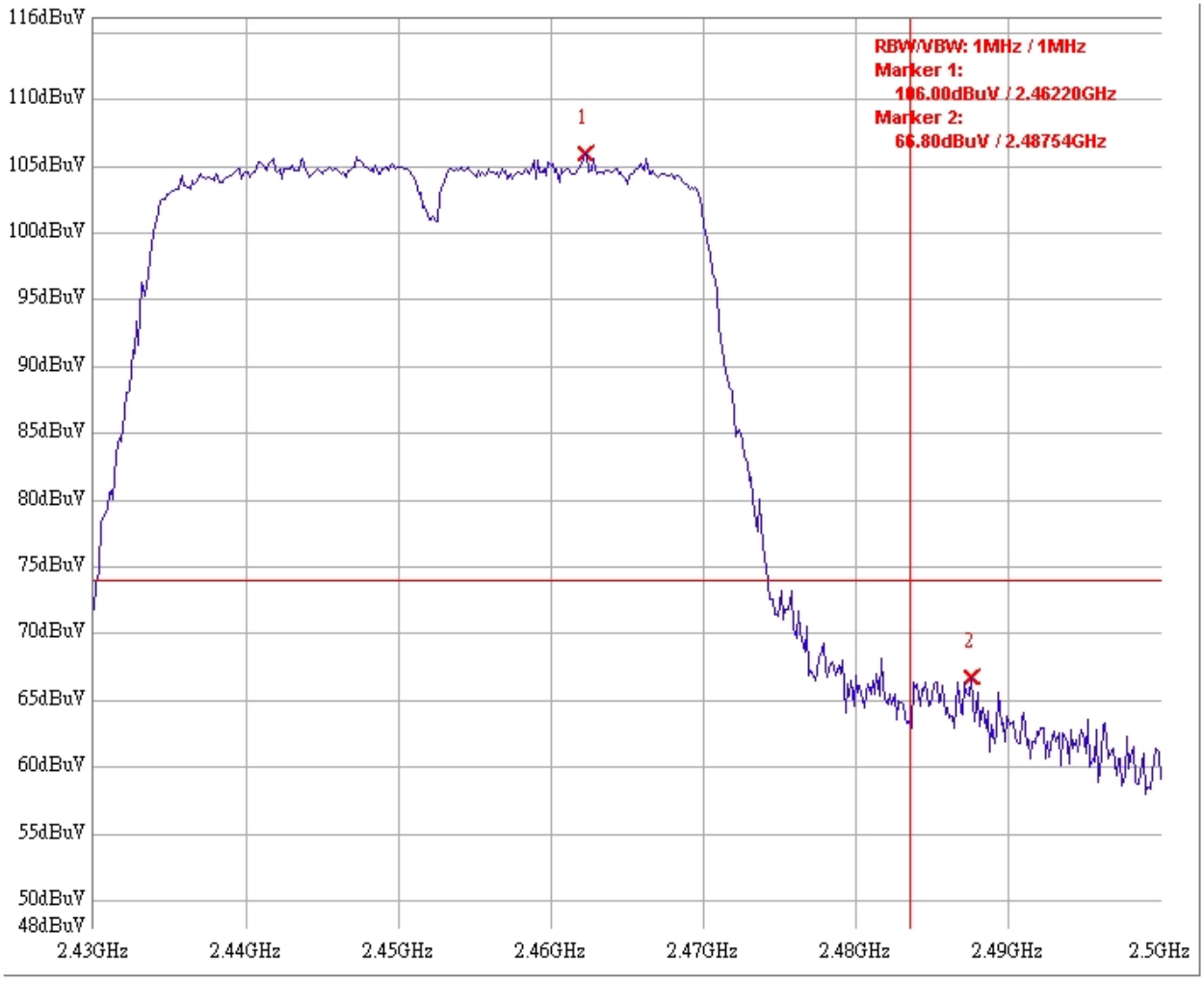
Band-Edge
11n(40) ch3
PK

Band Edge @ 802.11n 40MHz mode channel 3 AV



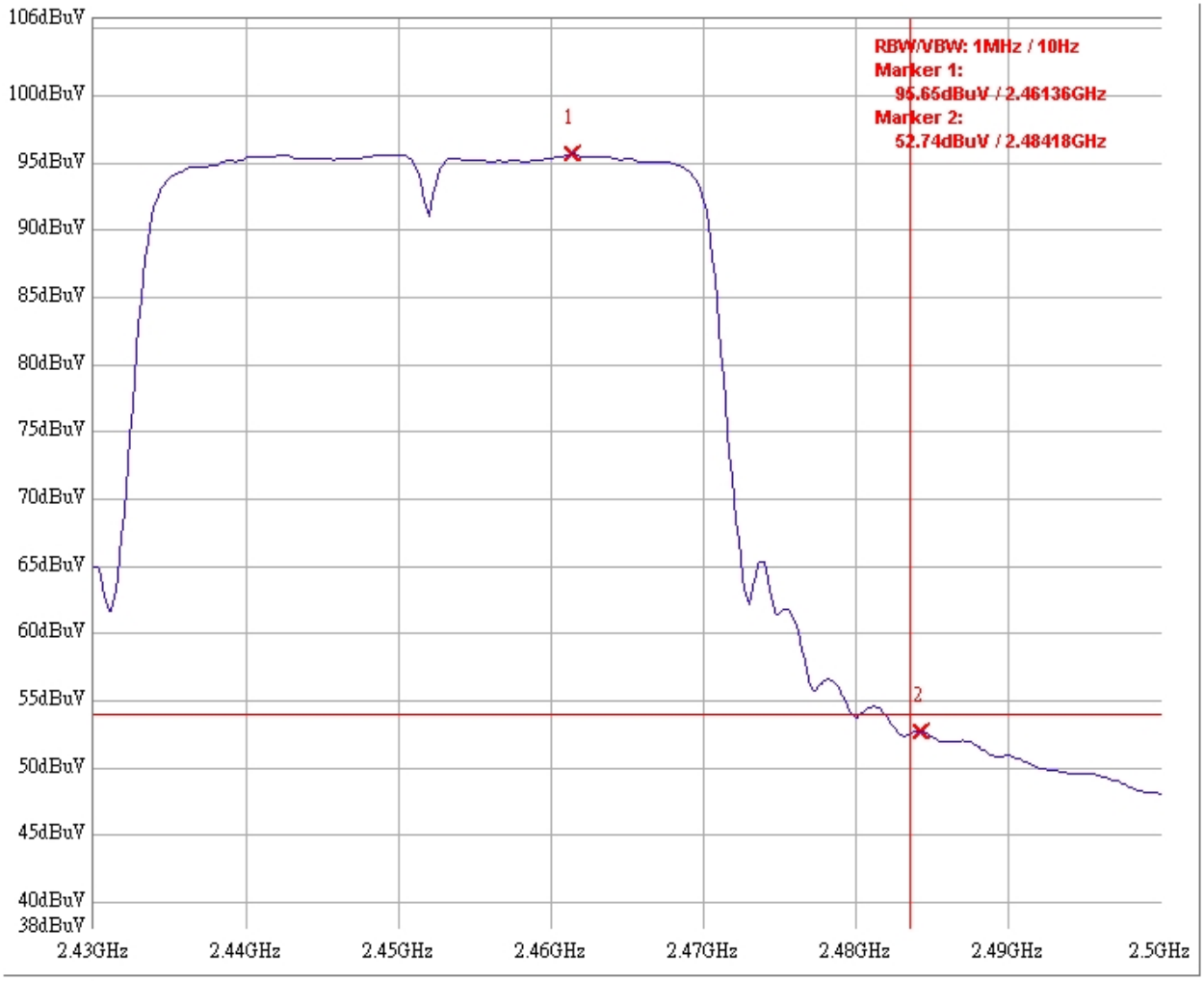
Band-Edge
11n(40) ch3
AV

Band Edge @ 802.11n 40MHz mode channel 9 PK



Band-Edge
11n(40) ch9
PK

Band Edge @ 802.11n 40MHz mode channel 9 AV



Band-Edge
11n(40) ch9
AV

10. AC power line conducted emission

Name of Test	AC power line conducted emission
Base Standard	FCC 15.207

Tested By: Rex Liao
Test Date: Mar. 05, 2008

Test Equipment: EC1365

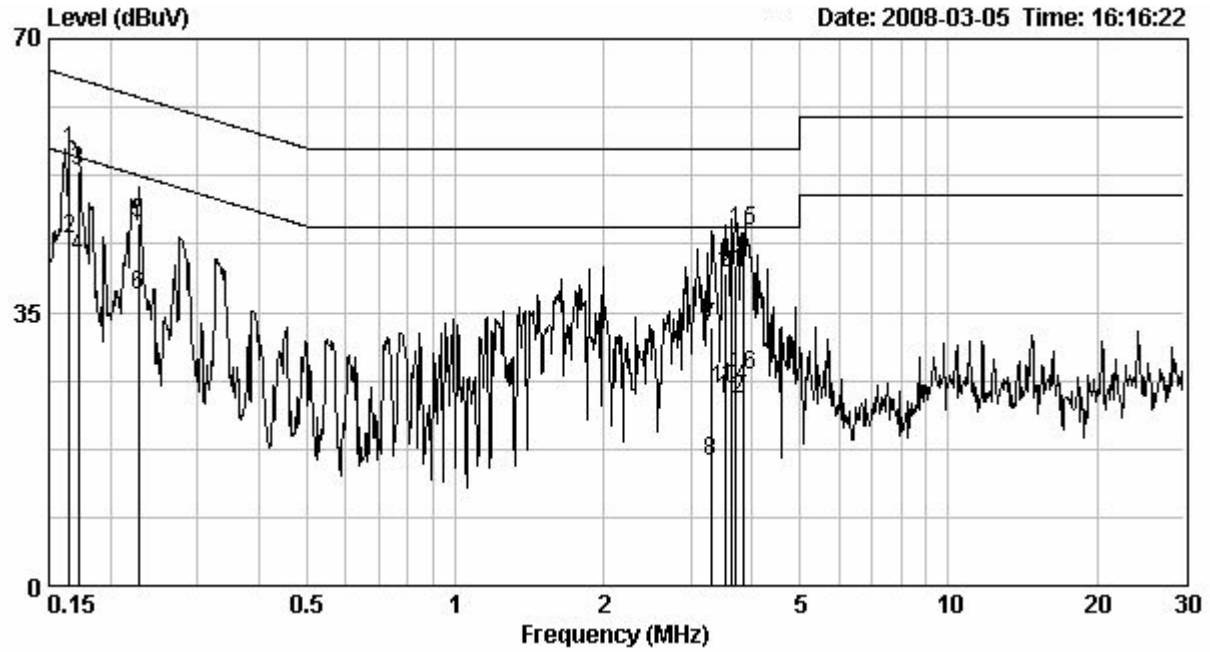
Test Result: Complies
Test Method: See Appendix G
Measurement Data: See Tables & plots below

Note: The EUT was tested while in normal communication mode.

Phase : Line
EUT : XN-791
Worst : 802.11b normal operating mode

Frequency (MHz)	Corr. Factor (dB)	Level Qp (dBuV)	Limit Qp (dBuV)	Level AV (dBuV)	Limit Av (dBuV)	Margin (dB) Qp	Margin (dB) Av
0.165	0.80	55.60	65.20	44.35	55.20	-9.60	-10.85
0.172	0.80	53.12	64.87	41.94	54.87	-11.75	-12.93
0.228	0.66	46.29	62.52	37.24	52.52	-16.23	-15.28
3.296	0.25	33.10	56.00	15.88	46.00	-22.90	-30.12
3.542	0.26	40.12	56.00	25.16	46.00	-15.88	-20.84
3.627	0.27	39.95	56.00	23.73	46.00	-16.05	-22.27
3.701	0.27	41.09	56.00	25.44	46.00	-14.91	-20.56
3.851	0.28	45.39	56.00	26.87	46.00	-10.61	-19.13

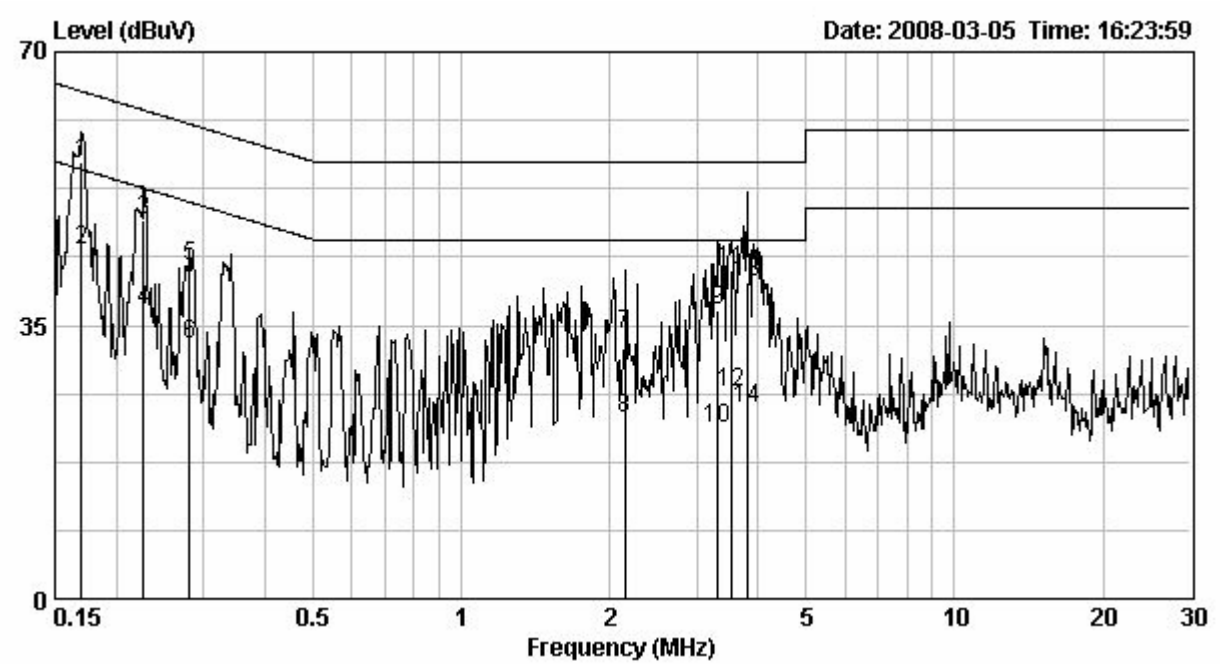
Remark:
1. Correction Factor (dB)= LISN Factor (dB) + Cable Loss (dB)
2. Margin (dB) = Level (dBuV) – Limit (dBuV)



Phase : Neutral
EUT : G-570S v2
Worst : 802.11b normal operating mode

Frequency (MHz)	Corr. Factor (dB)	Level Qp (dBuV)	Limit Qp (dBuV)	Level AV (dBuV)	Limit Av (dBuV)	Margin (dB) Qp	Margin (dB) Av
0.170	0.10	55.83	64.97	44.52	54.97	-9.14	-10.45
0.227	0.10	48.35	62.55	37.01	52.55	-14.20	-15.54
0.282	0.10	42.47	60.76	32.57	50.76	-18.29	-18.19
2.150	0.16	33.86	56.00	23.09	46.00	-22.14	-22.91
3.309	0.25	37.05	56.00	21.69	46.00	-18.95	-24.31
3.542	0.26	42.15	56.00	26.38	46.00	-13.85	-19.62
3.790	0.28	40.44	56.00	24.42	46.00	-15.56	-21.58

Remark:
1. Correction Factor (dB)= LISN Factor (dB) + Cable Loss (dB)
2. Margin (dB) = Level (dBuV) – Limit (dBuV)



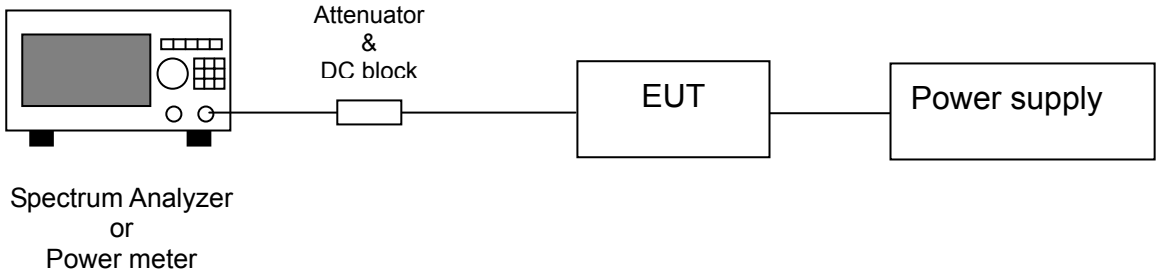
APPENDICES

Appendix A: 2.1046 - RF Power Output

A1. Method of Measurement:

The peak power at antenna terminals is measured using a Power Meter. Power output is measured with the maximum rated input level.

A2. Test Diagram:

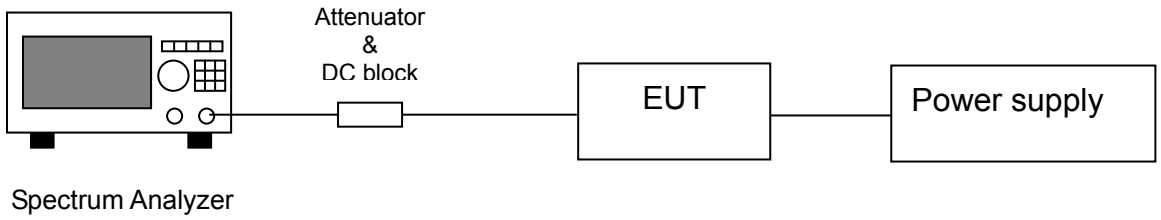


Appendix B: 2.1049 - Occupied Bandwidth

B1. Method of Measurement:

A portion of the transmitted signal is coupled to a Spectrum Analyzer with a resolution bandwidth of at least 1% of the bandwidth of the transmitted signal. The resolution bandwidth is chosen so as not to reduce the peak level of the measured waveform. The appropriate bandwidth mask is applied to the output waveform to verify compliance.

B1. Test Diagram:

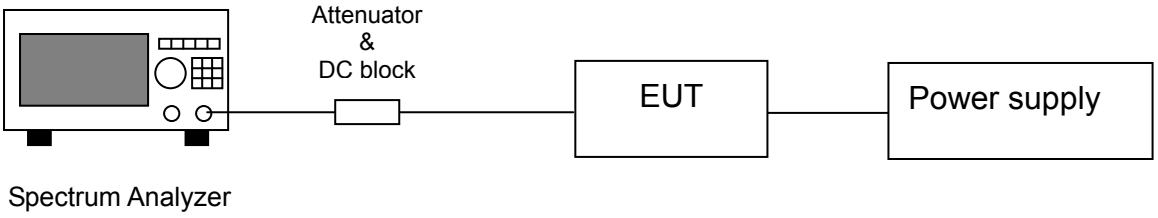


Appendix C: 2.1051 - Spurious Emission at Antenna Terminal

C1. Method of Measurement:

The measurements were performed from 30MHz to 25GHz RF antenna conducted per FCC 15.247 (d) was measured from the EUT antenna port using a 50ohm spectrum analyzer with the resolution bandwidth set at 100 kHz, and the video bandwidth set at 100 kHz. Harmonics and spurious noise must be at least 20dB down from the highest emission level within the authorized band as measured with a 100 kHz RBW. The table below is the results from the highest emission for each channel within the authorized band. This table was used to determine the spurious limits for each channel.

C2. Test Diagram:



Appendix D: 2.1053 – Field Strength of Spurious Radiation

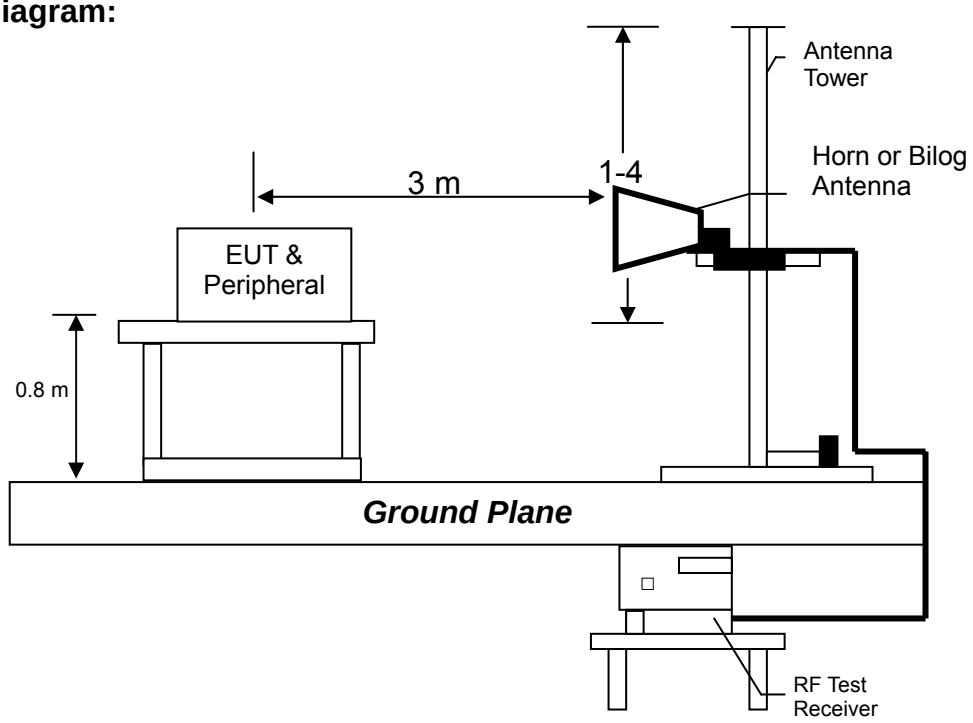
D1. Method of Measurement:

The frequency range from 30MHz to 1000MHz using Bilog Antenna.
The frequency range over 1GHz using Horn Antenna.

Radiated emissions were invested cover the frequency range from 30MHz to 1000MHz using a receiver RBW of 120kHz record QP reading, and the frequency over 1GHz using a spectrum analyzer RBW of 1MHz and 10Hz VBW record Average reading. (15.209 paragraph), the Peak reading (1MHz RBW/VBW) recorded also on the report.
The EUT for testing is arranged on a wooden turntable. If some peripherals apply to the EUT, the peripherals will be connected to EUT and the whole system. During the test, all cables were arranged to produce worst-case emissions. The signal is maximized through rotation. The height of antenna and polarization is changing constantly for exploring for maximum signal level. The height of antenna can be up to 4 meters and down to 1 meter. The measurement for radiated emission will be done at the distance of three meters unless the signal level is too low to measure at that distance. In the case of the reading under noise floor, a pre-amplifier is used and/or the test is conducted at a closer distance. And then all readings are extrapolated back to the equivalent 3 meter reading using inverse scaling with distance.

The EUT configuration please refer to the “Spurious set-up photo.pdf”.

D2. Test Diagram:



D3. Emission Limit:

The spurious Emission shall test through the 10th harmonic. 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).

Frequency (MHz)	Limits (dBμV/m@3m)
30-88	40
88-216	43.5
216-960	46
Above 960	54

Remark:
1. In the above table, the tighter limit applies at the band edges.
2. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system

Appendix E: 15.207 – AC power line conducted emission

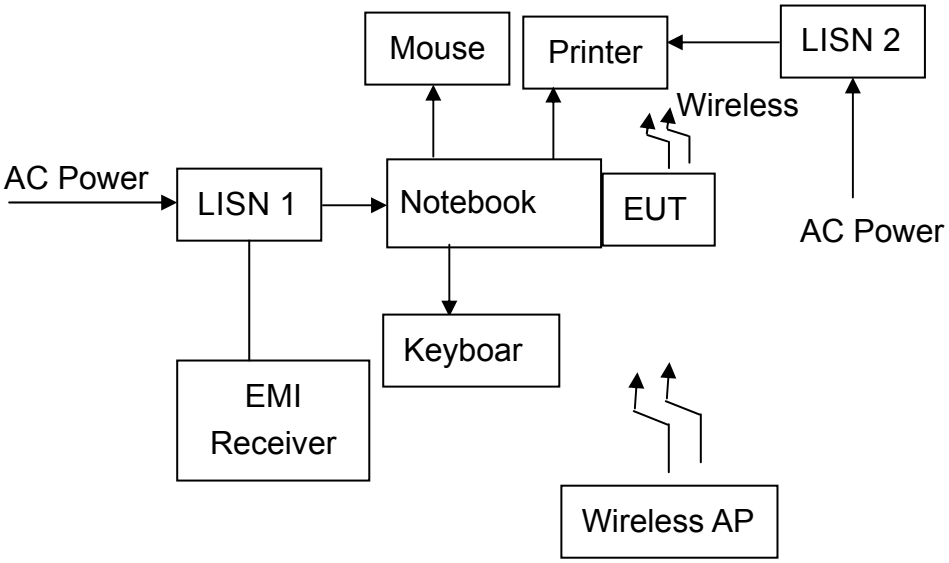
E1. Method of Measurement:

The EUT are connected to the main power through a line impedance stabilization network (LISN). This provides a 50 ohm/50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination.

Both sides (Line and Neutral) of AC line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.4/2003 on conducted measurement.
The bandwidth of the field strength meter (R & S Test Receiver ESCS 30) is set at 9kHz.

The EUT configuration please refer to the “Conducted set-up photo.pdf”.

E2. Test Diagram:



E3. Emission Limit:

Freq. (MHz)	Conducted Limit (dBuV)	
	Q.P.	Ave.
0.15~0.50	66 – 56*	56 – 46*
0.50~5.00	56	46
5.00~30.0	60	50

*Decreases with the logarithm of the frequency.

Appendix F: Test Equipment List

Intertek ID No.	Equipment	Brand	Model No.	Calculation Due
EC1303	EMI Test Receiver	Rohde & Schwarz	ESCS 30	04/26/2008
EC1353	Spectrum Analyzer	Rohde & Schwarz	FSP 30	08/05/2008
EC1365	Spectrum Analyzer	Rohde & Schwarz	FSEK 30	11/14/2008
EC1354	Signal Generator	Rohde & Schwarz	SMR27	11/13/2008
EC1371	Horn Antenna	SCHWARZBECK	BBHA 9120 D	12/24/2008
EC1351	Horn Antenna	SCHWARZBECK	BBHA 9170	03/04/2008
EC1347	Bilog Antenna	SCHWARZBECK	VULB 9168	12/22/2008
EC1373	Pre-Amplifier	MITEQ	919981	03/07/2009
EC1374	Pre-Amplifier	MITEQ	828825	01/15/2008
EP1346	Controller	HDGmbH	CM 100	N/A
EP1347	Antenna Tower	HDGmbH	MA 2400	N/A
EC1344	LISN	Rohde & Schwarz	ESH3-Z5	03/29/2008
EC1396	Wideband Peak Power Meter/ Sensor	Anritsu	ML2497A/ MA2491A	11/11/20087
EC1363	Temperature Humidity Test Chamber	Juror	TR-4010	09/17/2008

Note: 1. The above equipments are within the valid calibration period.
2. The test antennas (receiving antenna) are calibration per 3 years.

Measurement Uncertainty:

Measurement uncertainty was calculated in accordance with NAMAS NIS 81.

Parameter	Uncertainty
Radiated Emission	±4.98 dB
Conducted Emission	±2.6 dB

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