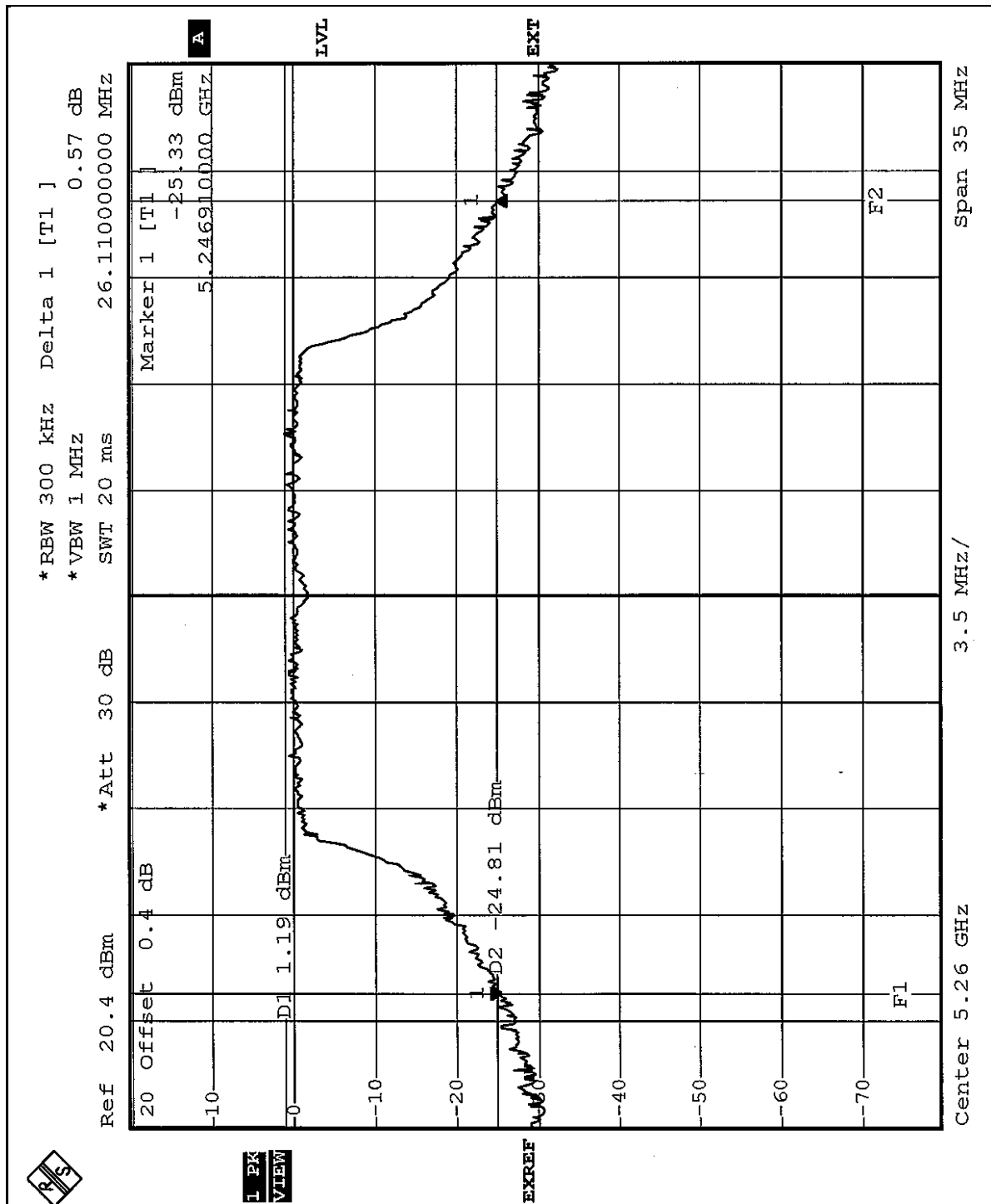


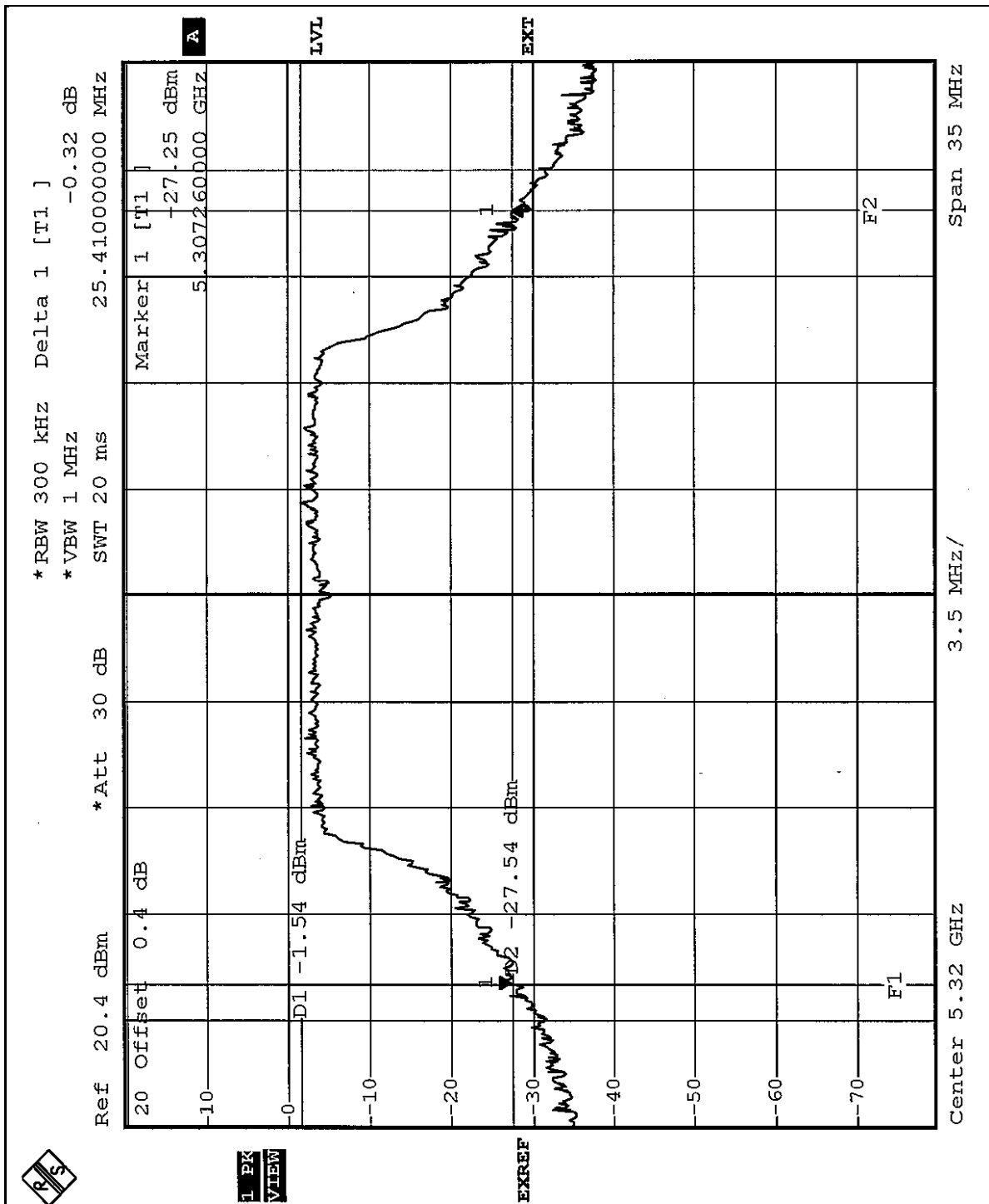


CH 5



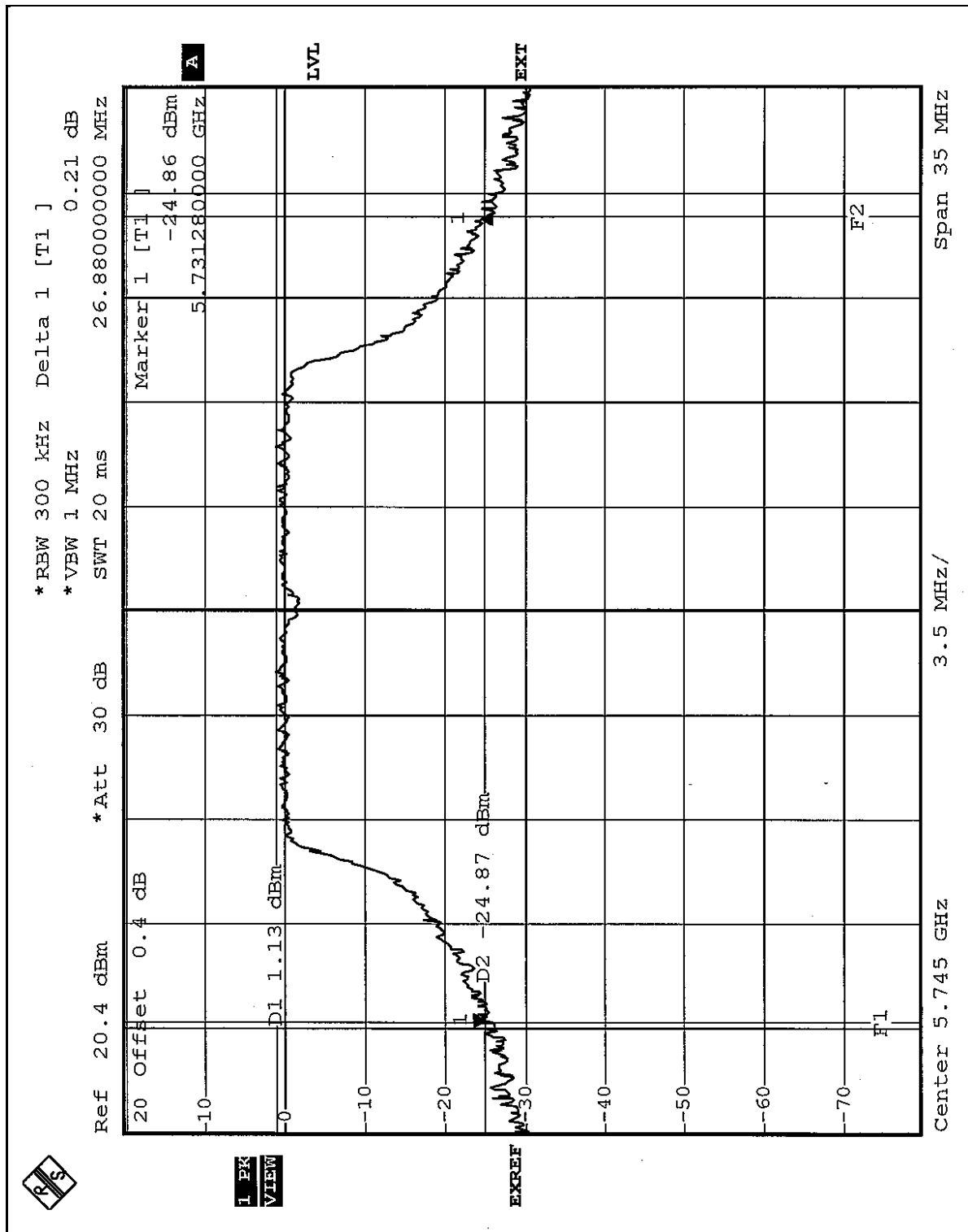


CH 8



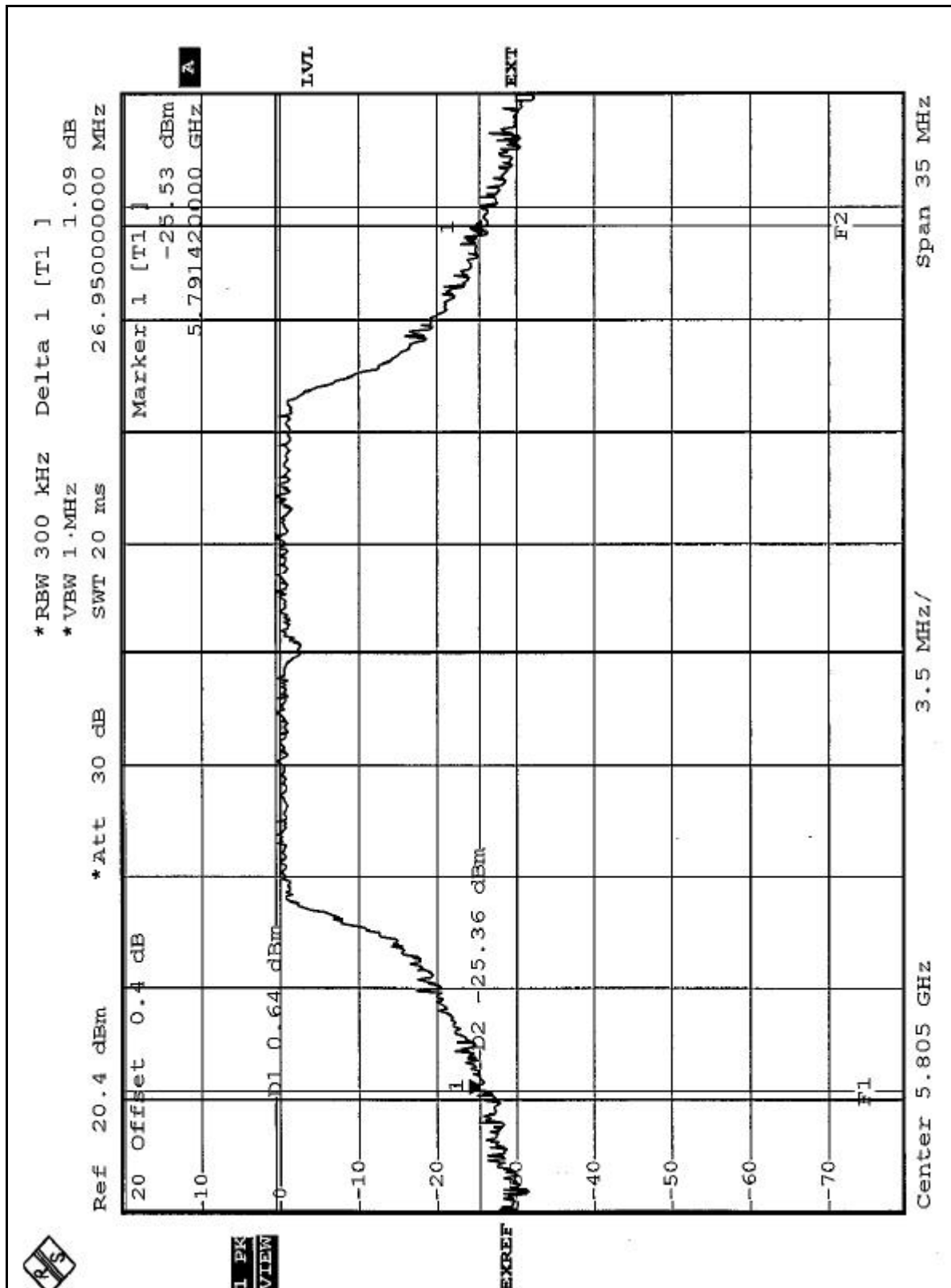


CH 9





CH 12





EUT	Wireless A+G Mini PCI Card	MODEL	WMCE54AG2
MODE	Turbo	INPUT POWER (SYSTEM)	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	24deg. C, 65%RH, 991hPa	TESTED BY	Match Tsui

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	26dBc Occupied Bandwidth (MHz)	PASS/FAIL
1	5210	15.922	12.02	17.00	54.96	PASS
2	5250	16.069	12.00	17.00	50.28	PASS
3	5290	15.922	12.02	24.00	47.40	PASS
4	5760	16.069	12.06	30.00	52.56	PASS
5	5800	15.922	12.02	30.00	52.80	PASS

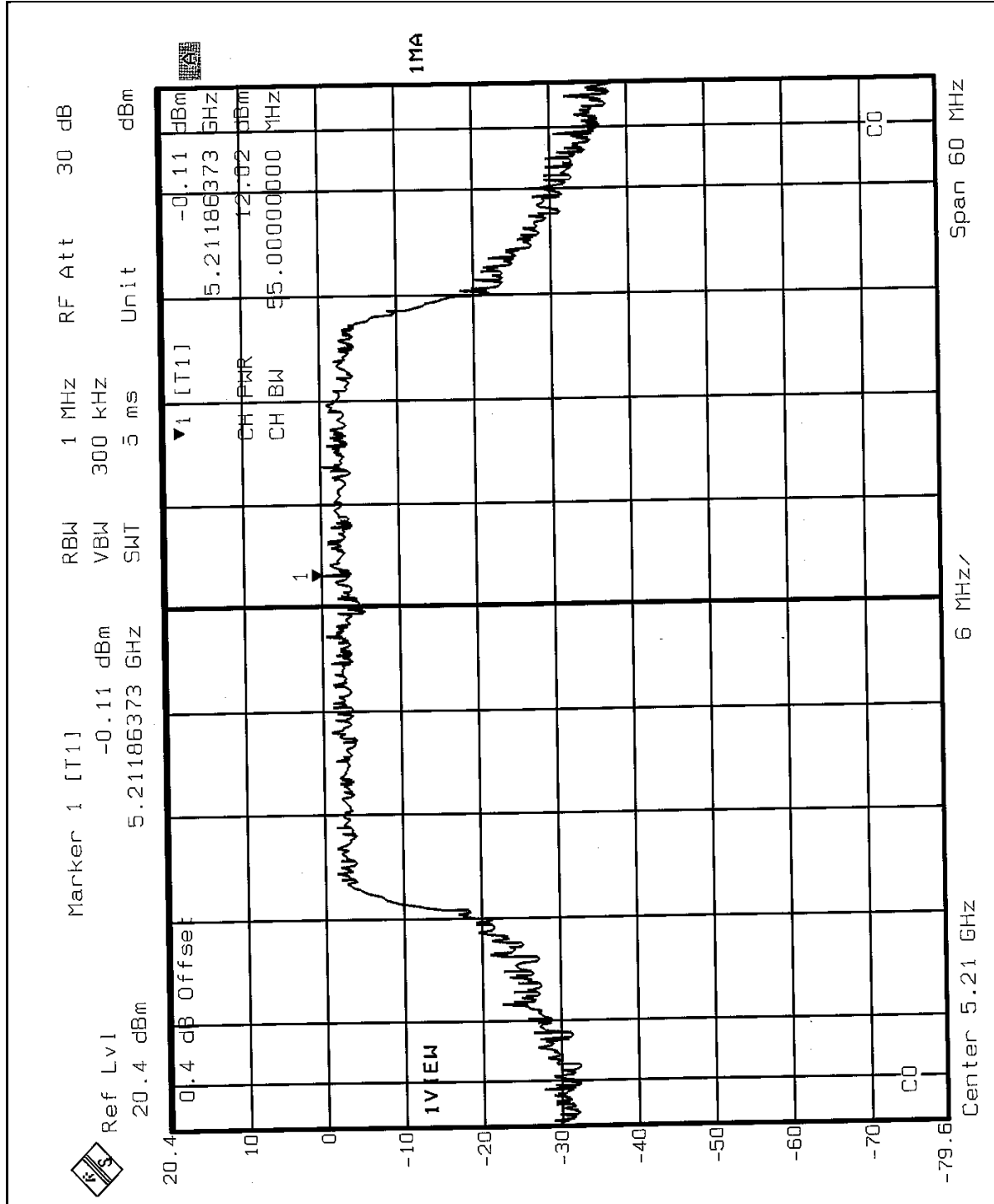
*(The test data is in accordance with ADT Report No.: RF930909L11.)

NOTE: The 26dBc Occupied Bandwidth plot, please refer to the following pages.



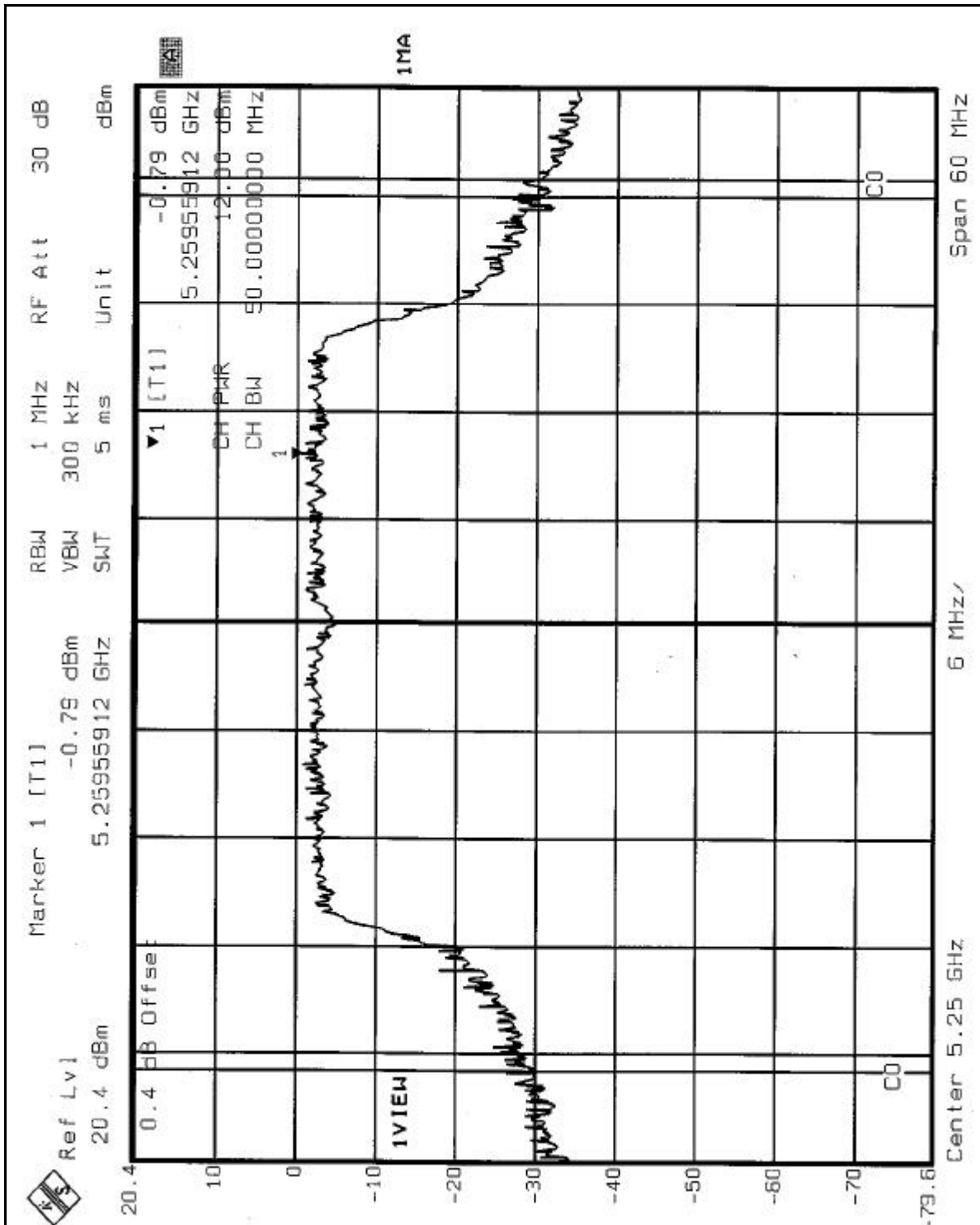
Peak Power Output:

CH 1



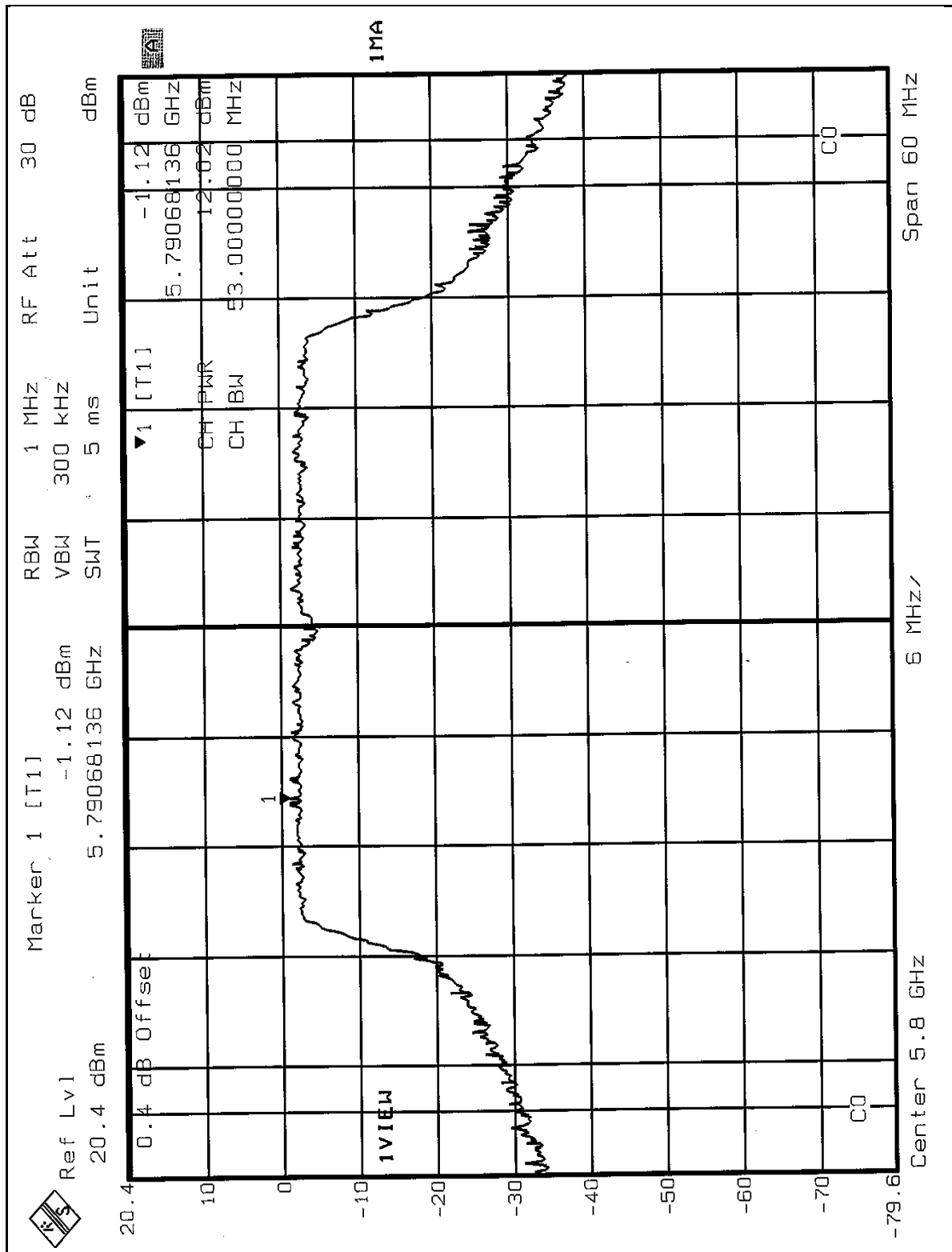


CH 2





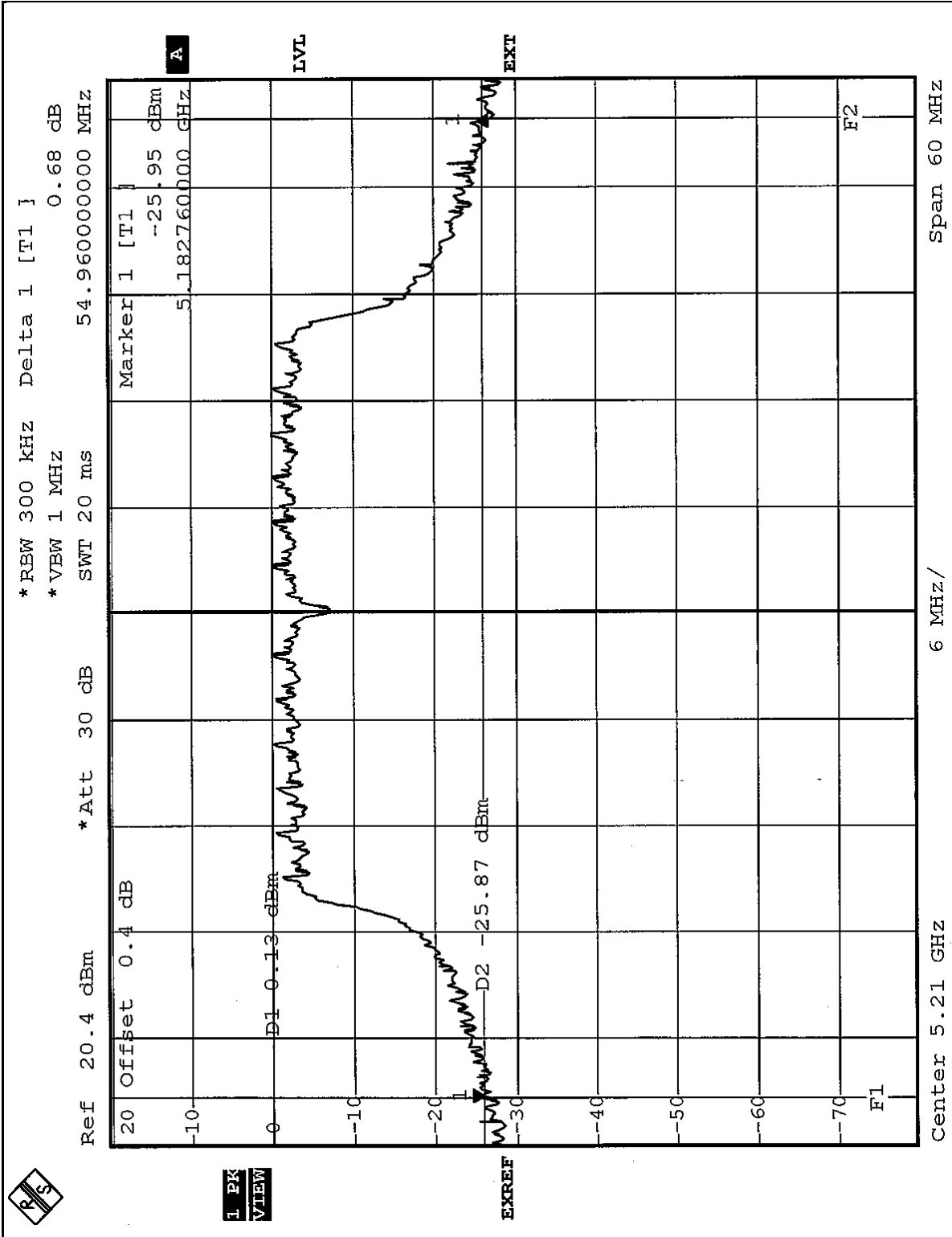
CH 5





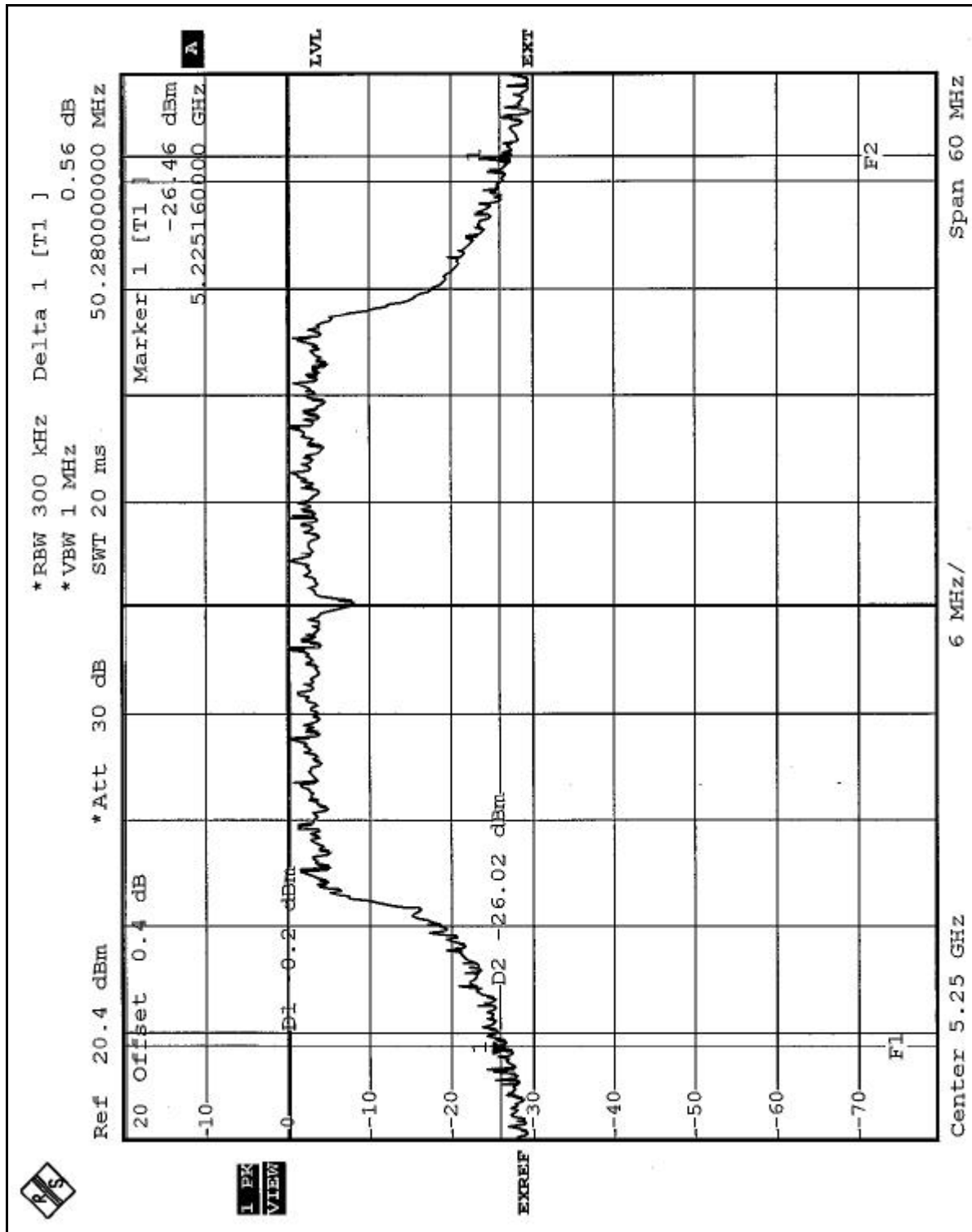
26dB Occupied Bandwidth:

CH 1



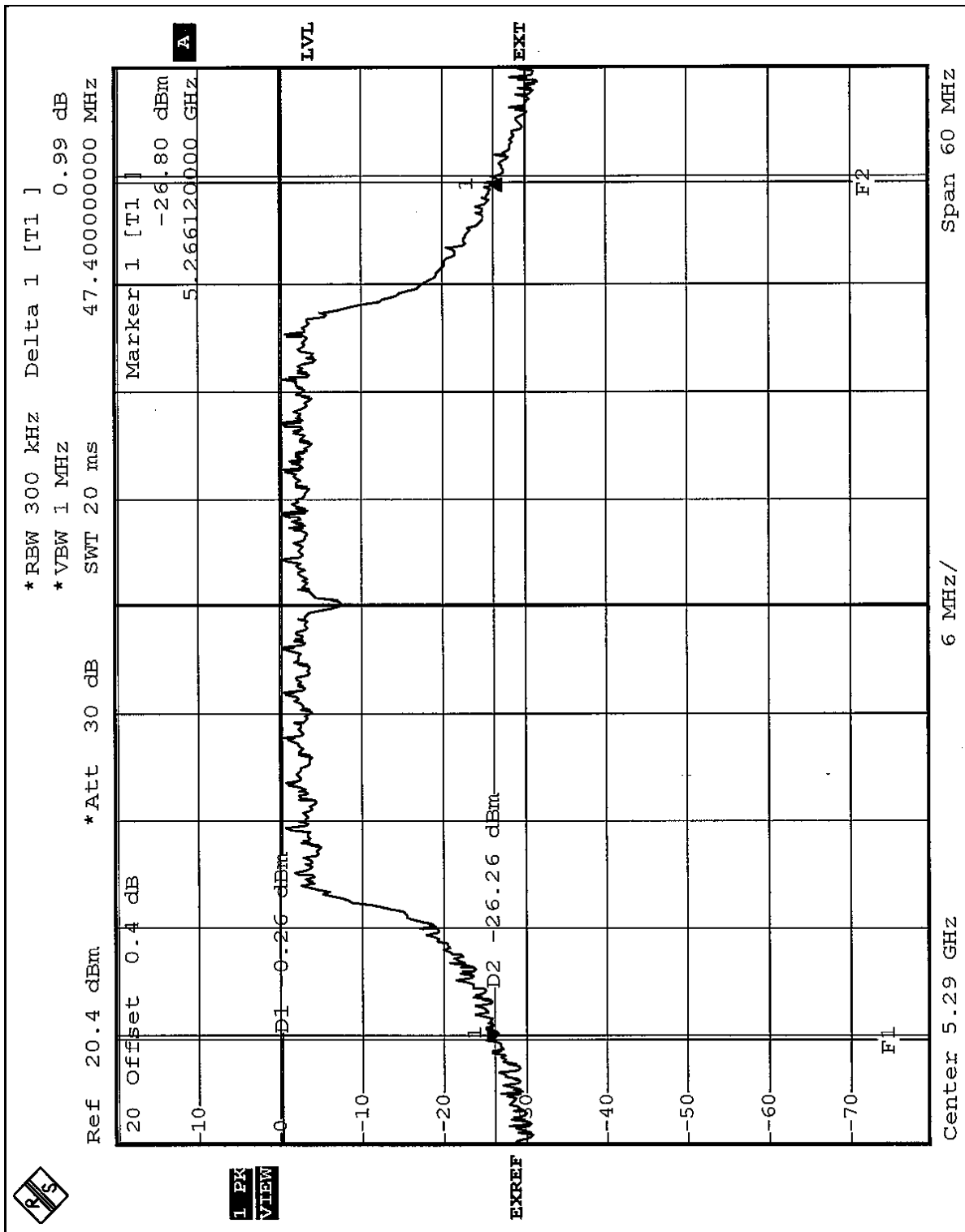


CH 2



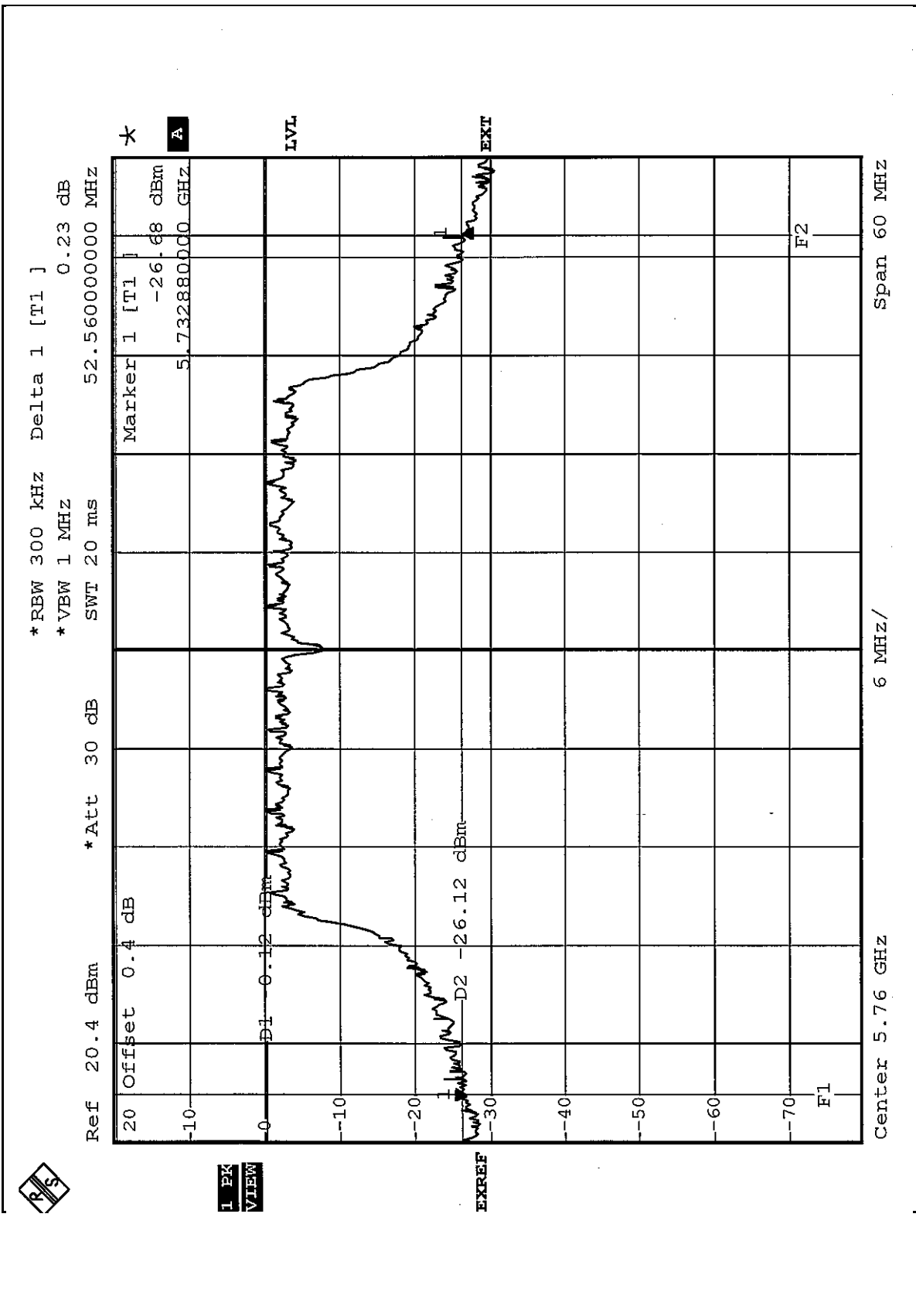


CH 3



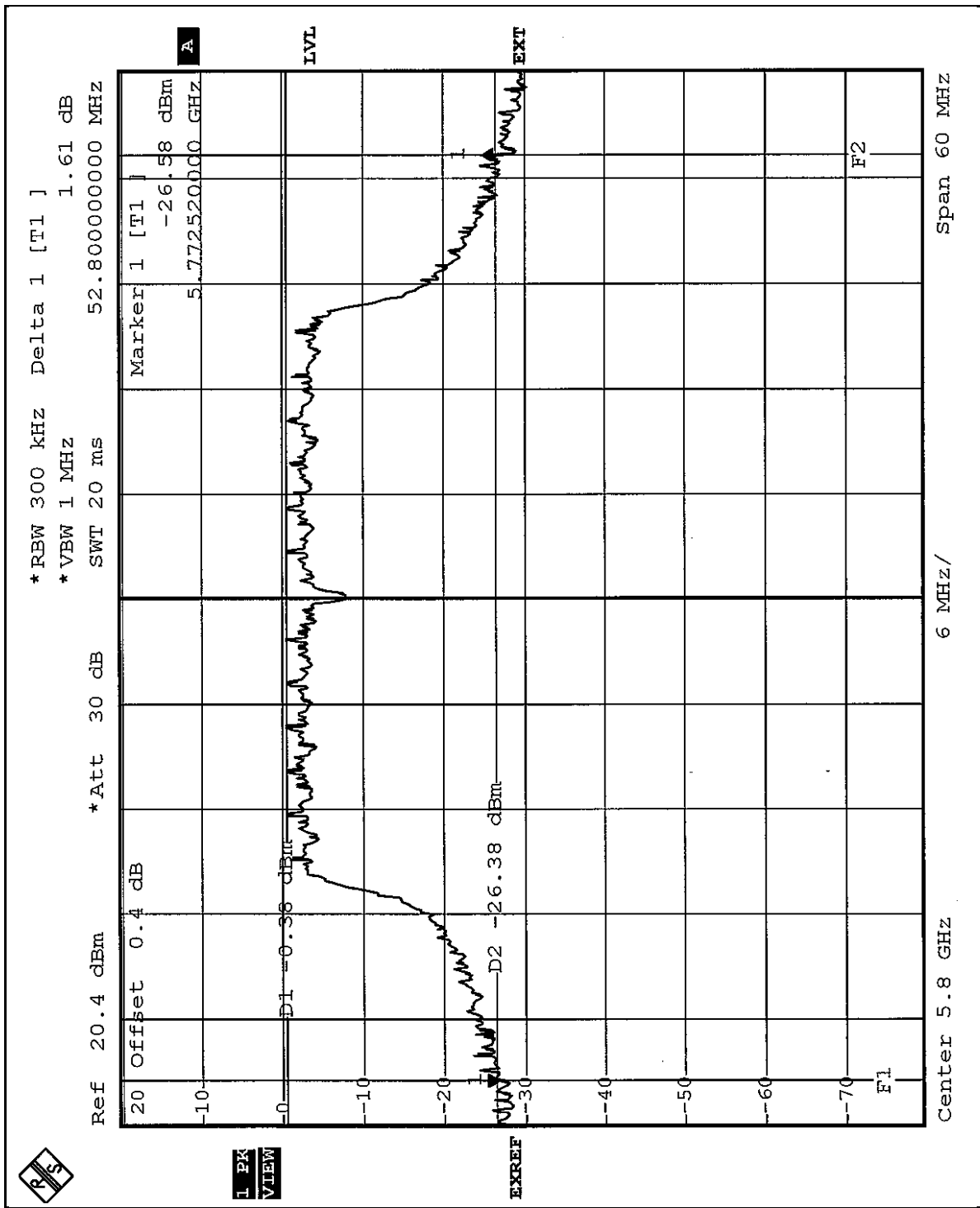


CH 4





CH 5





5.4 PEAK POWER EXCURSION MEASUREMENT

5.4.1 LIMITS OF PEAK POWER EXCURSION MEASUREMENT

Frequency Band	Limit
5.15 – 5.25 GHz	13dB
5.25 – 5.35 GHz	13dB
5.725 – 5.825 GHz	13dB

5.4.2 TEST INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
ROHDE&SCHWARZ SPECTRUM ANALYZER	FSEK30	100049	Aug. 12, 2005

NOTE:

The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.



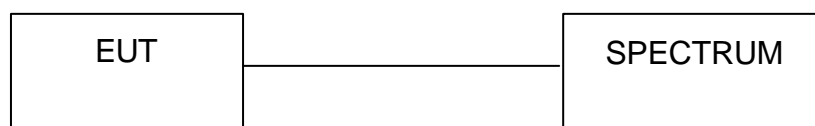
5.4.3 TEST PROCEDURE

1. The transmitter output was connected to the spectrum analyzer.
2. Set the spectrum bandwidth span to view the entire spectrum.
3. Using peak detector and Max-hold function for Trace 1 (RB=1MHz, VB=3MHz) and 2 (RB=1MHz, VB=300KHz).
4. The largest difference between Trace 1 and Trace 2 in any 1MHz band on any frequency was recorded.

5.4.4 DEVIATION FROM TEST STANDARD

No deviation

5.4.5 TEST SETUP



5.4.6 EUT OPERATING CONDITIONS

The software provided by client to enable the EUT under transmission condition continuously at specific channel frequencies individually.



5.4.7 TEST RESULTS

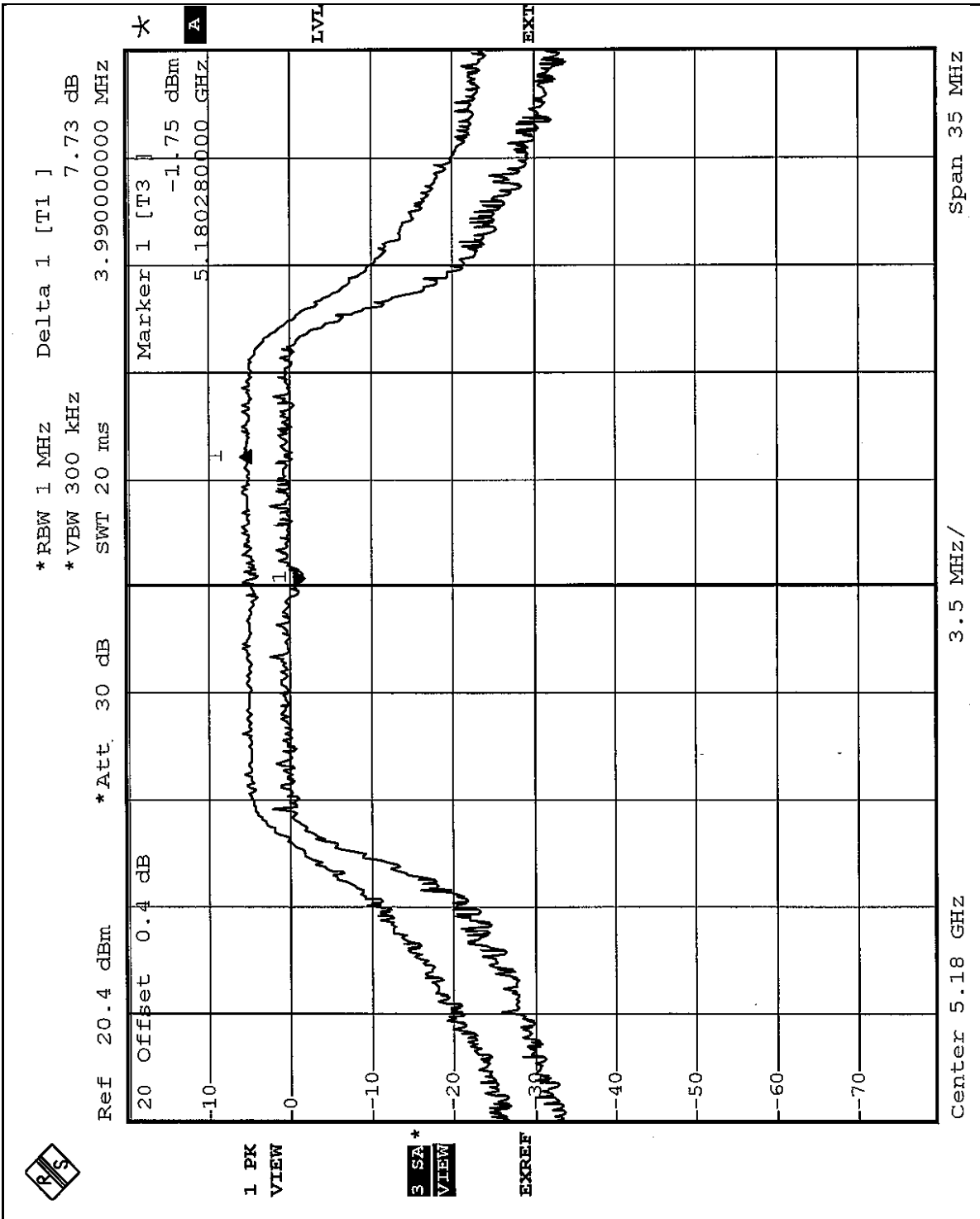
EUT	Wireless A+G Mini PCI Card	MODEL	WMCE54AG2
MODE	Normal	INPUT POWER (SYSTEM)	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	24deg. C, 65%RH, 991hPa	TESTED BY	Match Tsui

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER EXCURSION (dB)	PEAK to AVERAGE EXCURSION LIMIT (dB)	PASS/FAIL
1	5180	7.73	13	PASS
4	5240	8.08	13	PASS
5	5260	5.97	13	PASS
8	5320	7.87	13	PASS
9	5745	8.22	13	PASS
12	5805	7.56	13	PASS

*(The test data is in accordance with ADT Report No.: RF930909L11.)

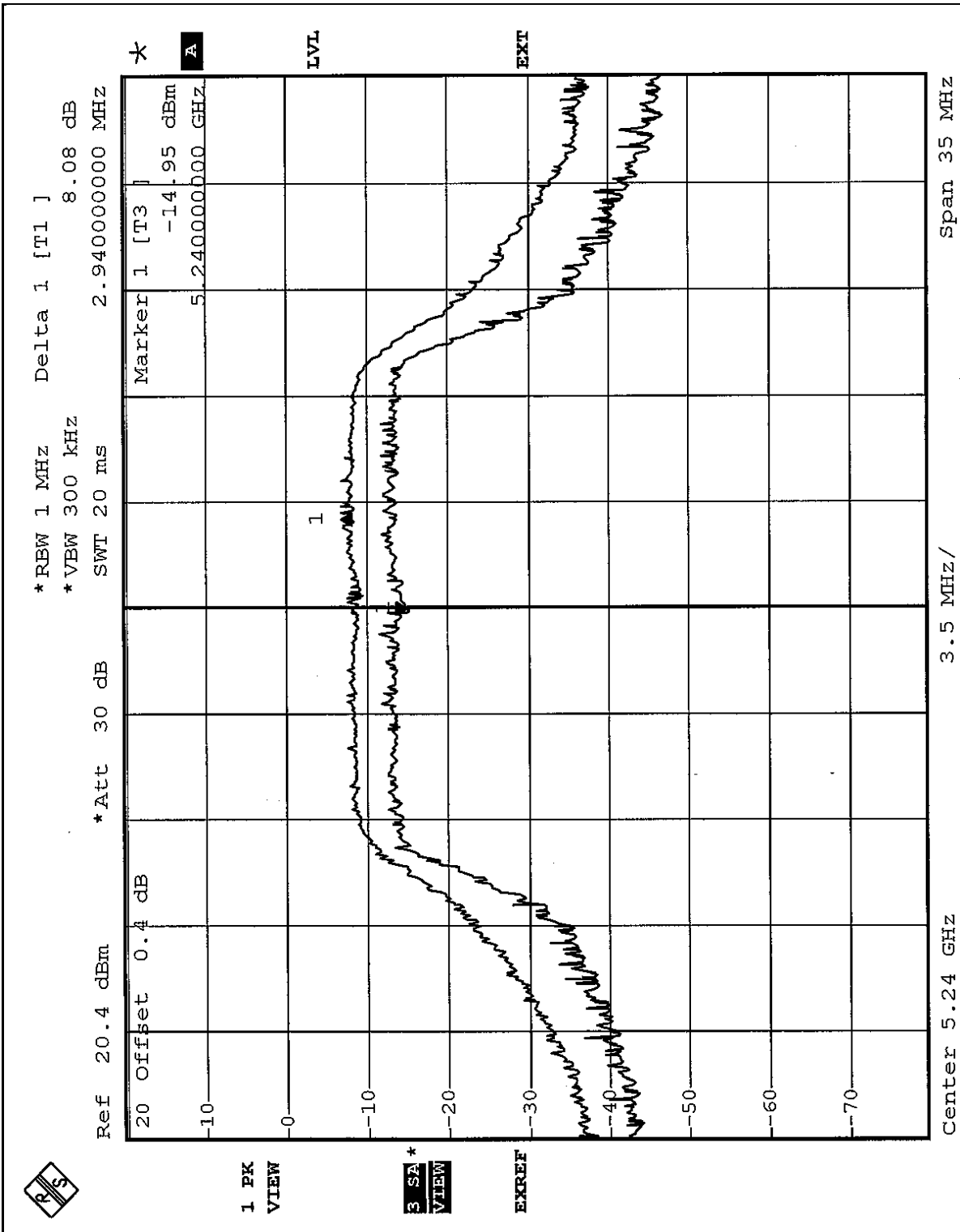


CH 1



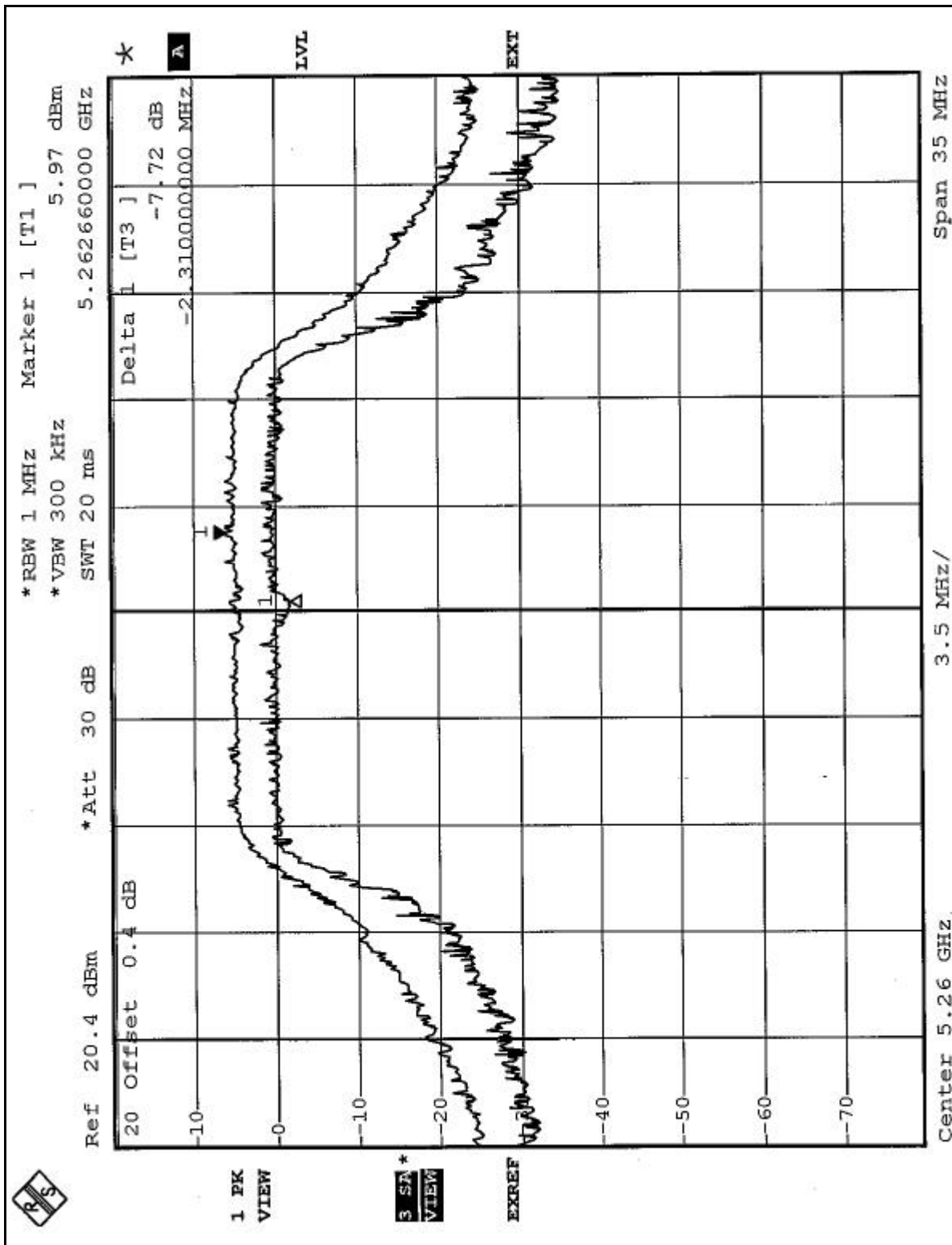


CH 4



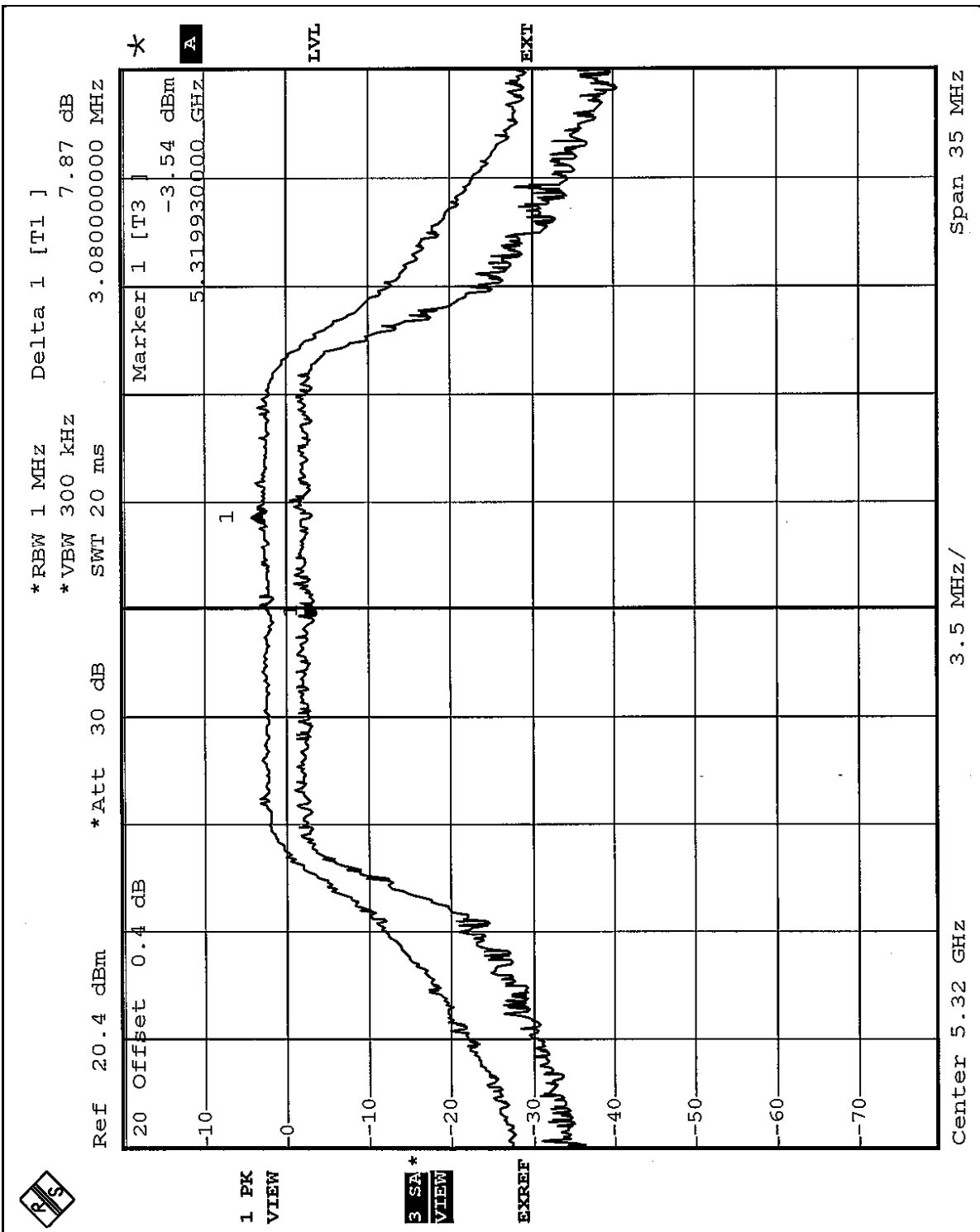


CH 5



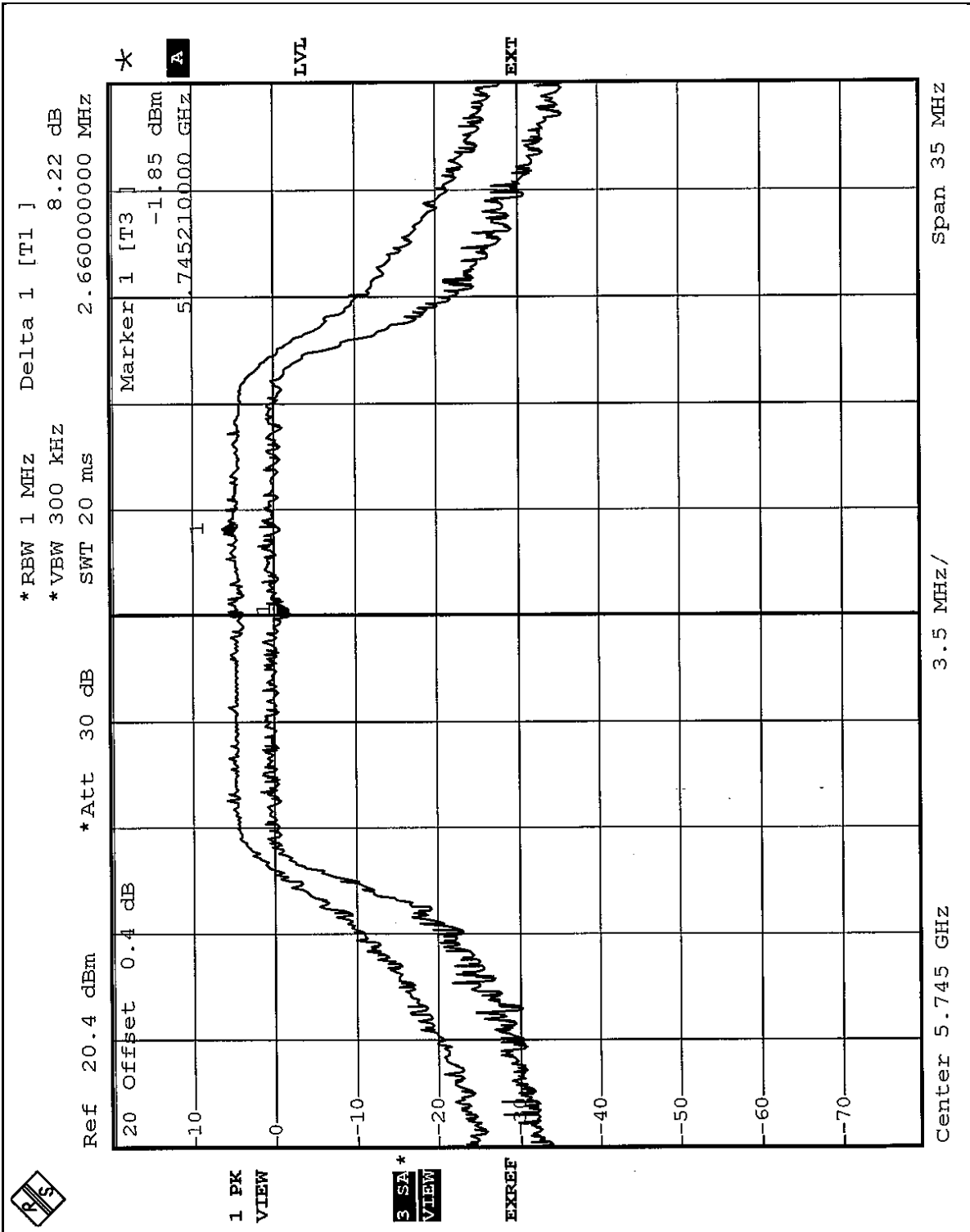


CH 8



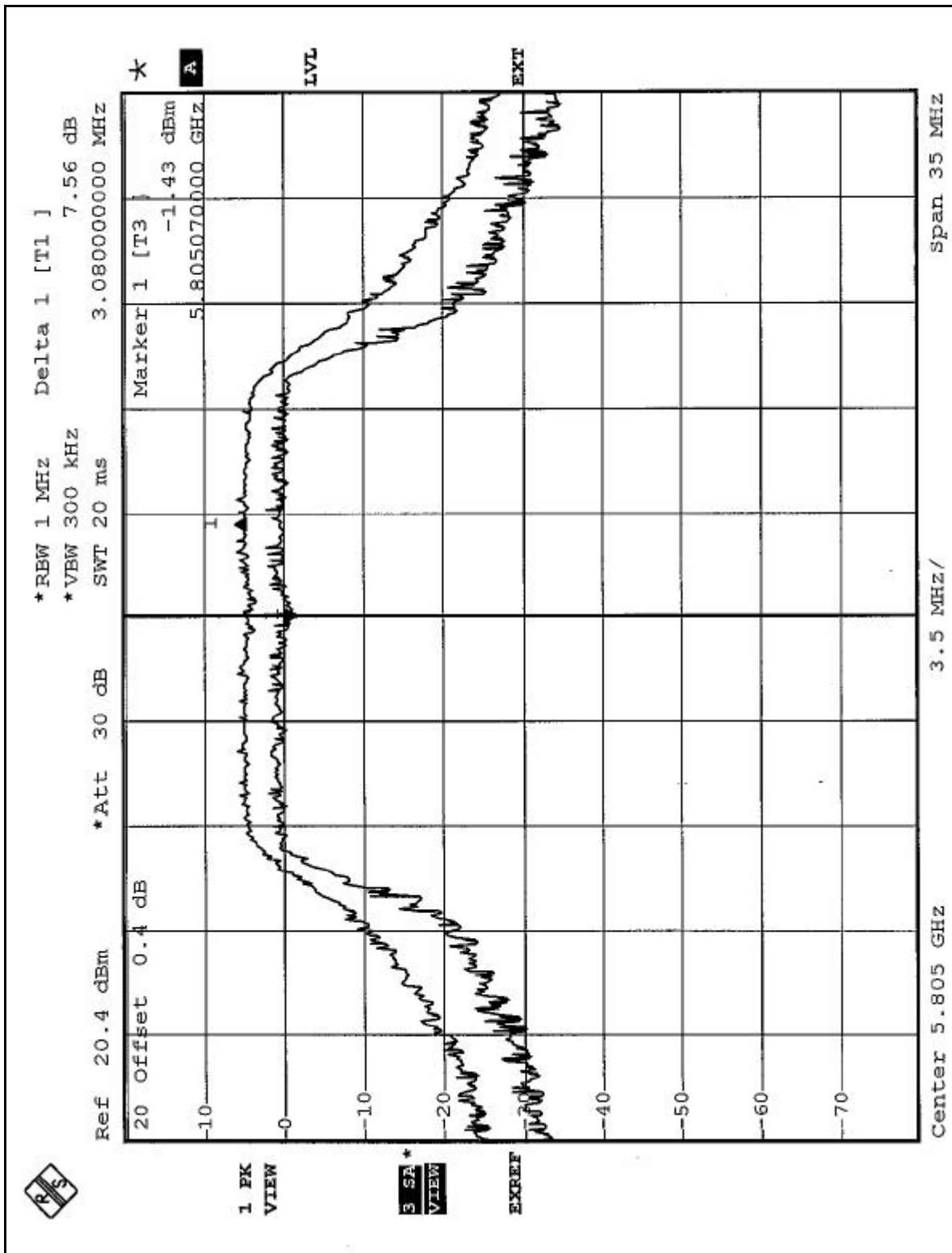


CH 9





CH 12





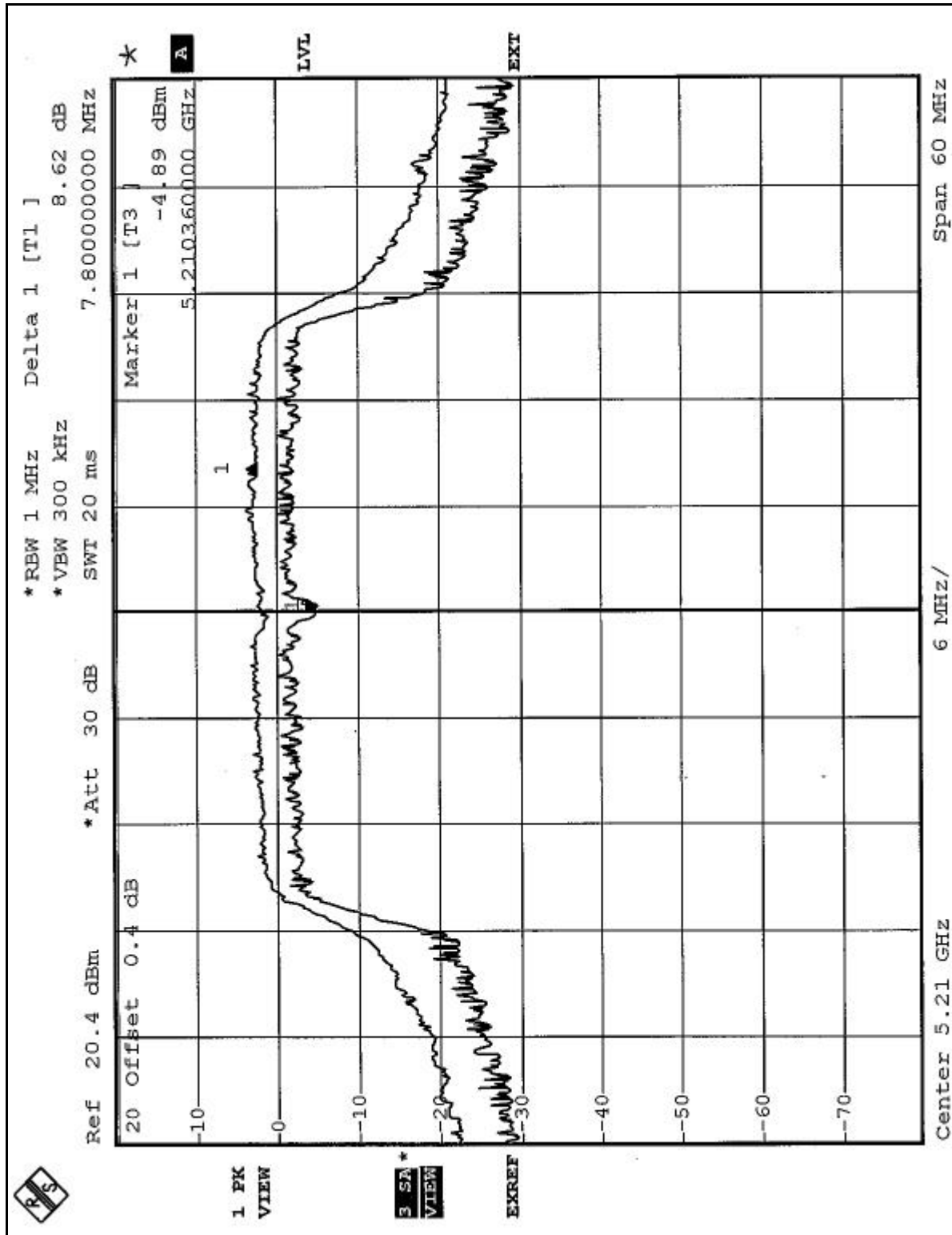
EUT	Wireless A+G Mini PCI Card	MODEL	WMCE54AG2
MODE	Turbo	INPUT POWER (SYSTEM)	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	24deg. C, 65%RH, 991hPa	TESTED BY	Match Tsui

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER EXCURSION (dB)	PEAK to AVERAGE EXCURSION LIMIT (dB)	PASS/FAIL
1	5210	8.62	13	PASS
2	5250	8.46	13	PASS
3	5290	8.76	13	PASS
4	5760	8.03	13	PASS
5	5800	8.76	13	PASS

*(The test data is in accordance with ADT Report No.: RF930909L11.)

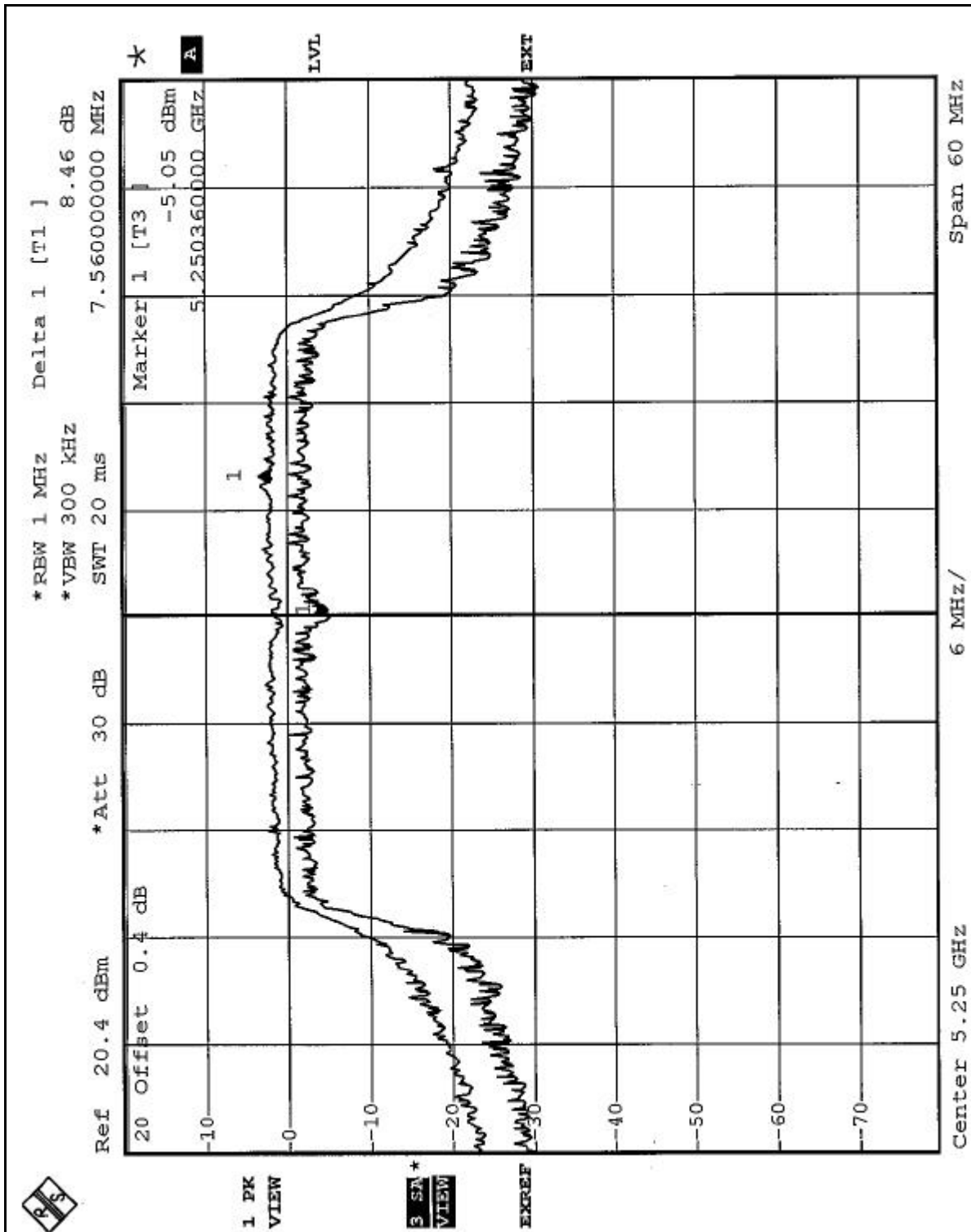


CH 1



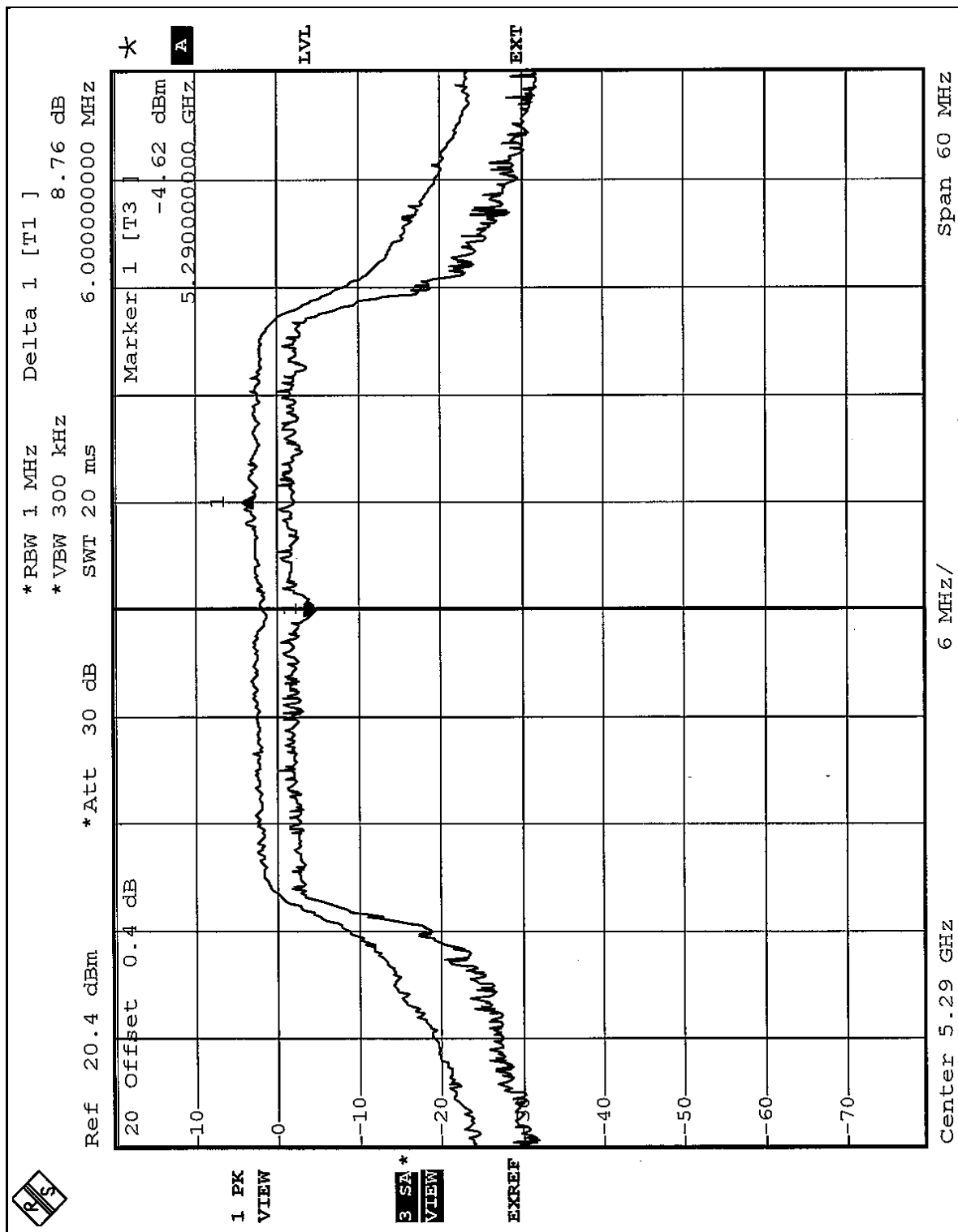


CH 2



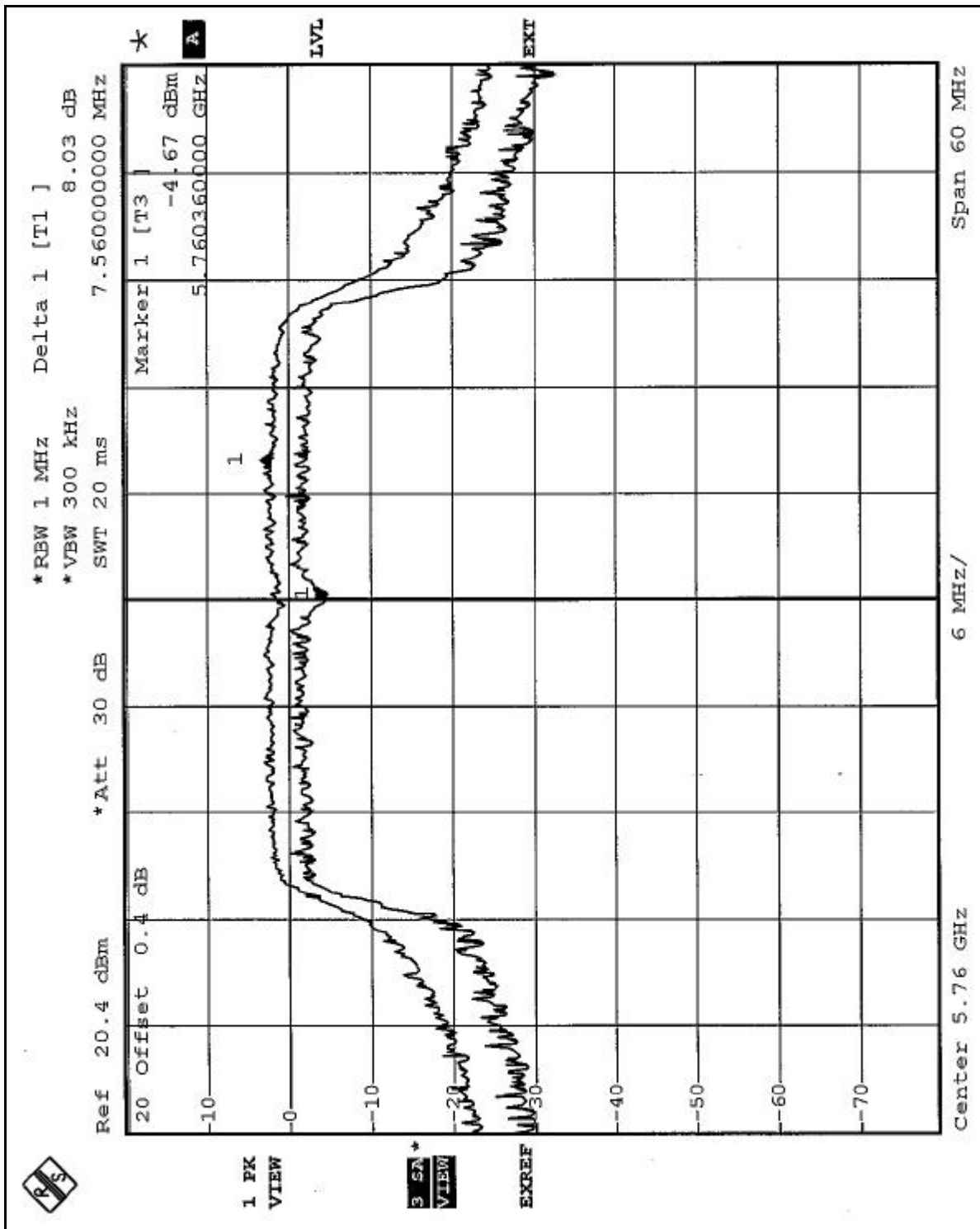


CH 3



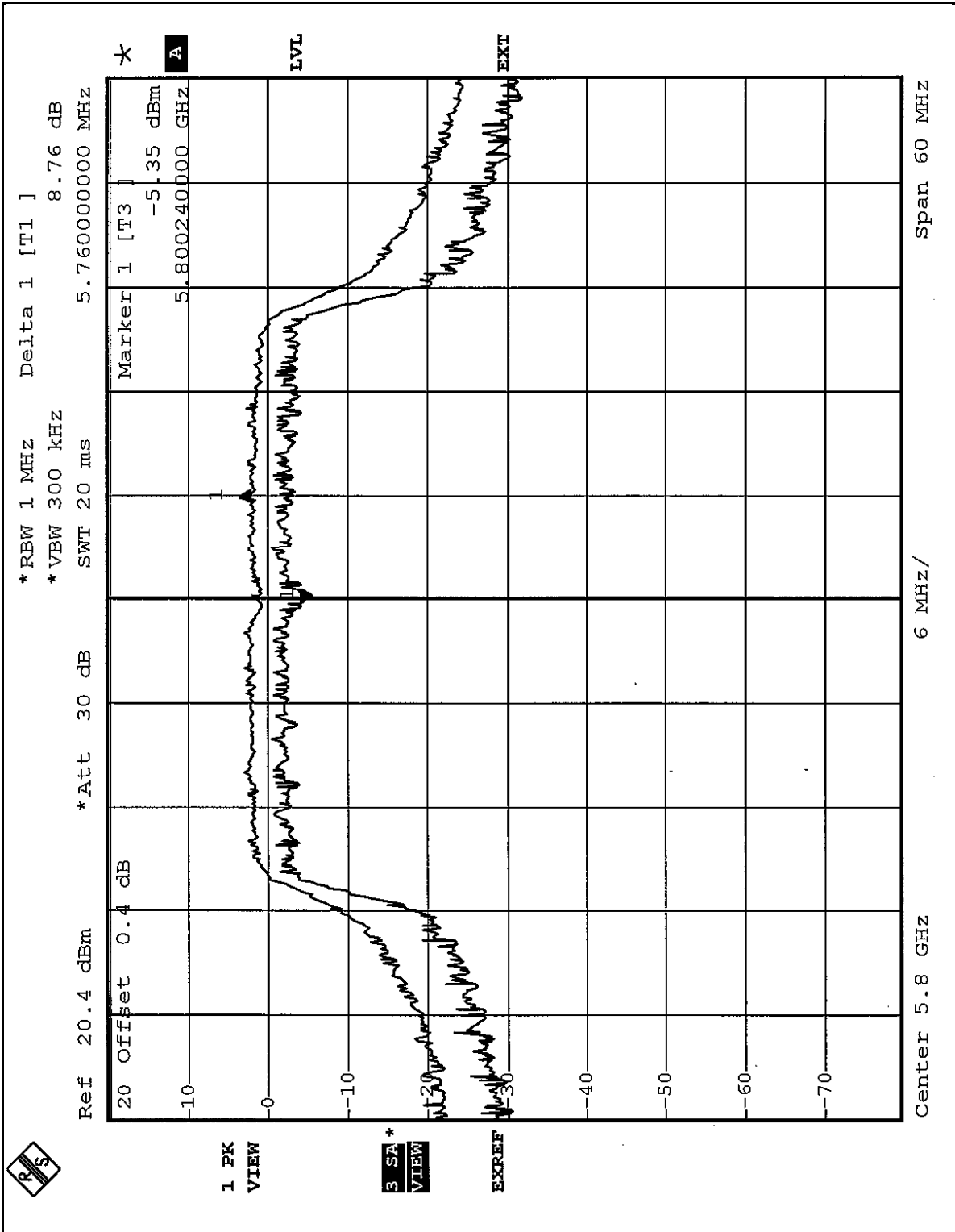


CH 4





CH 5





5.5 PEAK POWER SPECTRAL DENSITY MEASUREMENT

5.5.1 LIMITS OF PEAK POWER SPECTRAL DENSITY MEASUREMENT

Frequency Band	Limit
5.15 – 5.25 GHz	4dBm
5.25 – 5.35 GHz	11dBm
5.725 – 5.825 GHz	17dBm

5.5.2 TEST INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
ROHDE&SCHWARZ SPECTRUM ANALYZER	FSEK30	100049	Aug. 12, 2005

NOTE:

The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.



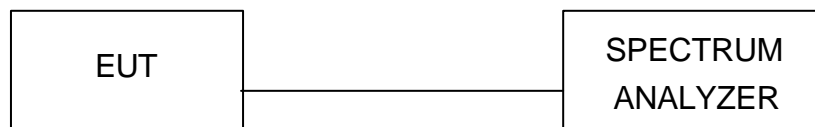
5.5.3 TEST PROCEDURES

1. The transmitter output was connected to the spectrum analyzer.
2. Set RBW=1MHz, VBW=3MHz. The PPSD is the highest level found across the emission in any 1MHz band.

5.5.4 DEVIATION FROM TEST STANDARD

No deviation

5.5.5 TEST SETUP



5.5.6 EUT OPERATING CONDITIONS

Same as 5.3.6



5.5.7 TEST RESULTS

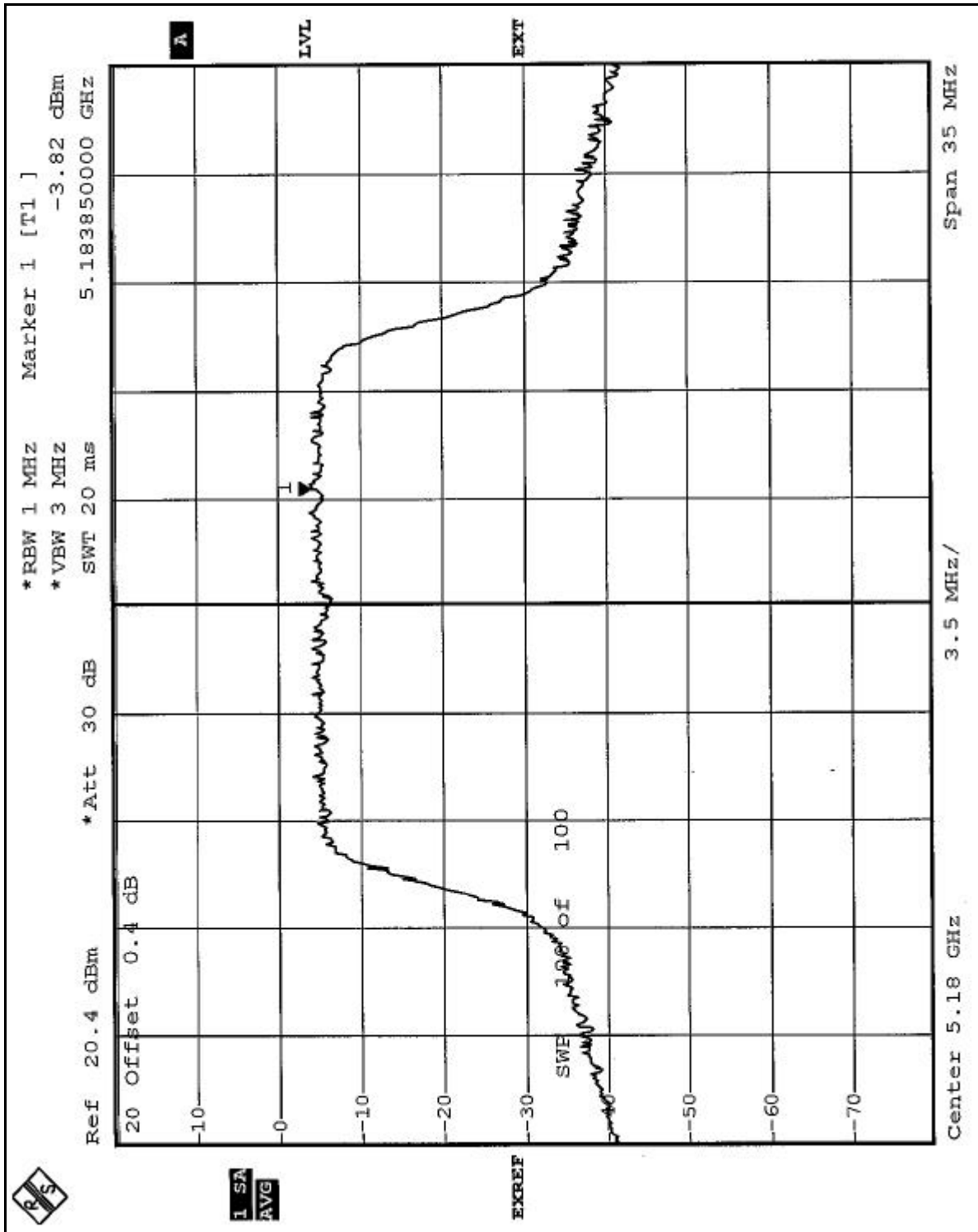
EUT	Wireless A+G Mini PCI Card	MODEL	WMCE54AG2
MODE	Normal	INPUT POWER (SYSTEM)	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	24deg. C, 65%RH, 991hPa	TESTED BY	Match Tsui

CHANNEL NUMBER	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 1 MHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	5180	-3.82	4	PASS
4	5240	-3.58	4	PASS
5	5260	-4.77	11	PASS
8	5320	-7.03	11	PASS
9	5745	-4.38	17	PASS
12	5805	-3.97	17	PASS

*(The test data is in accordance with ADT Report No.: RF930909L11.)

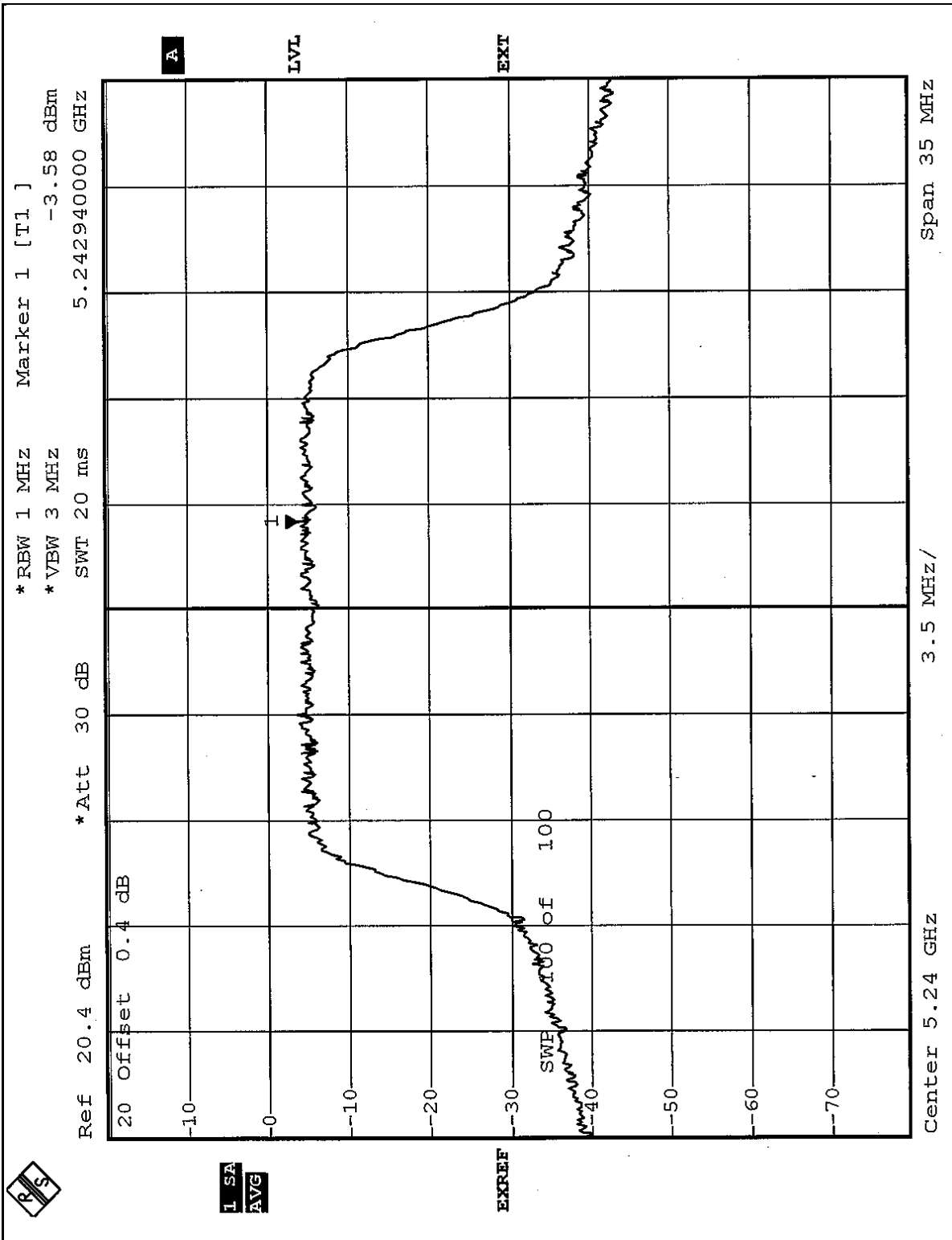


CH 1



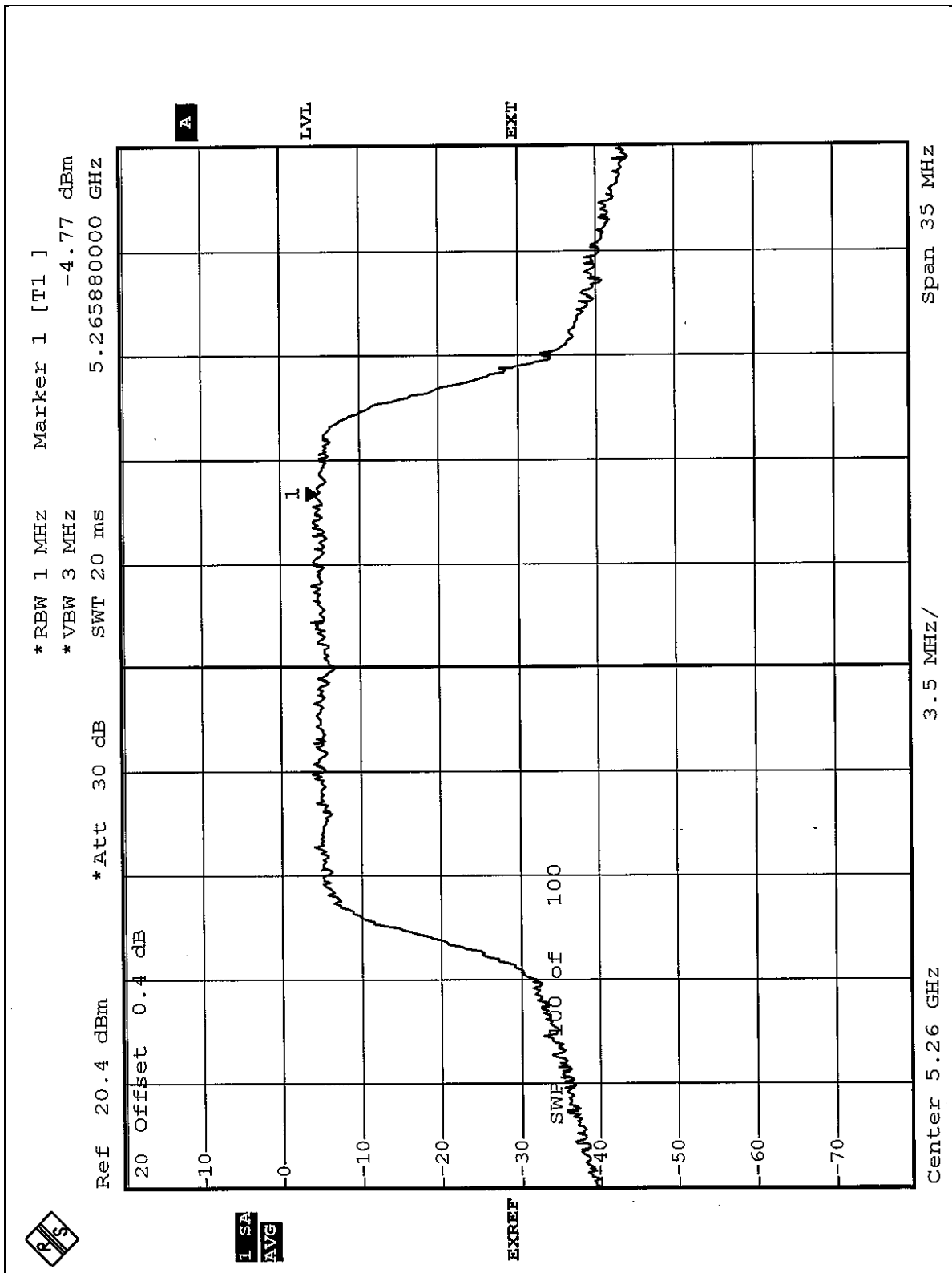


CH 4



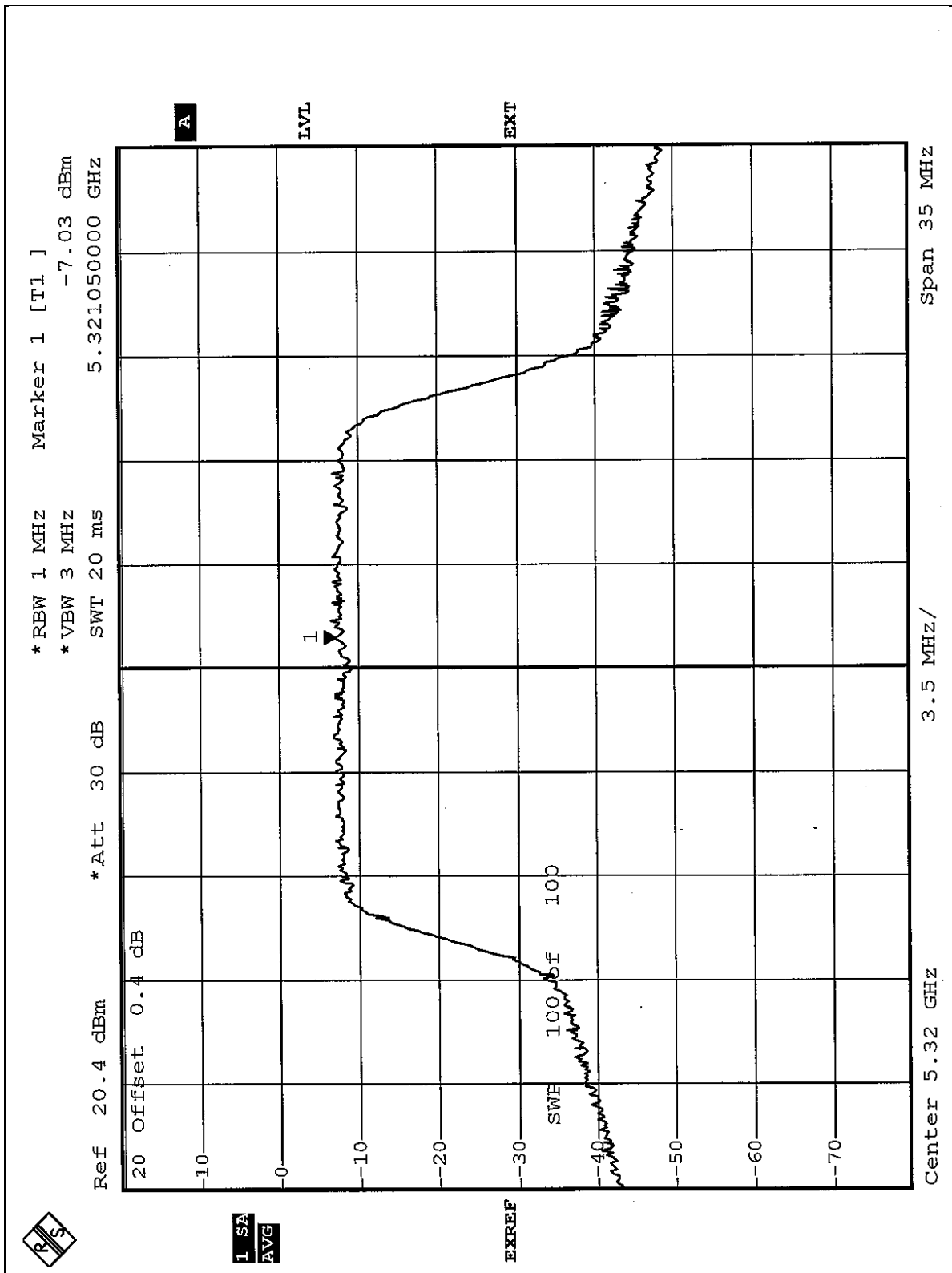


CH 5



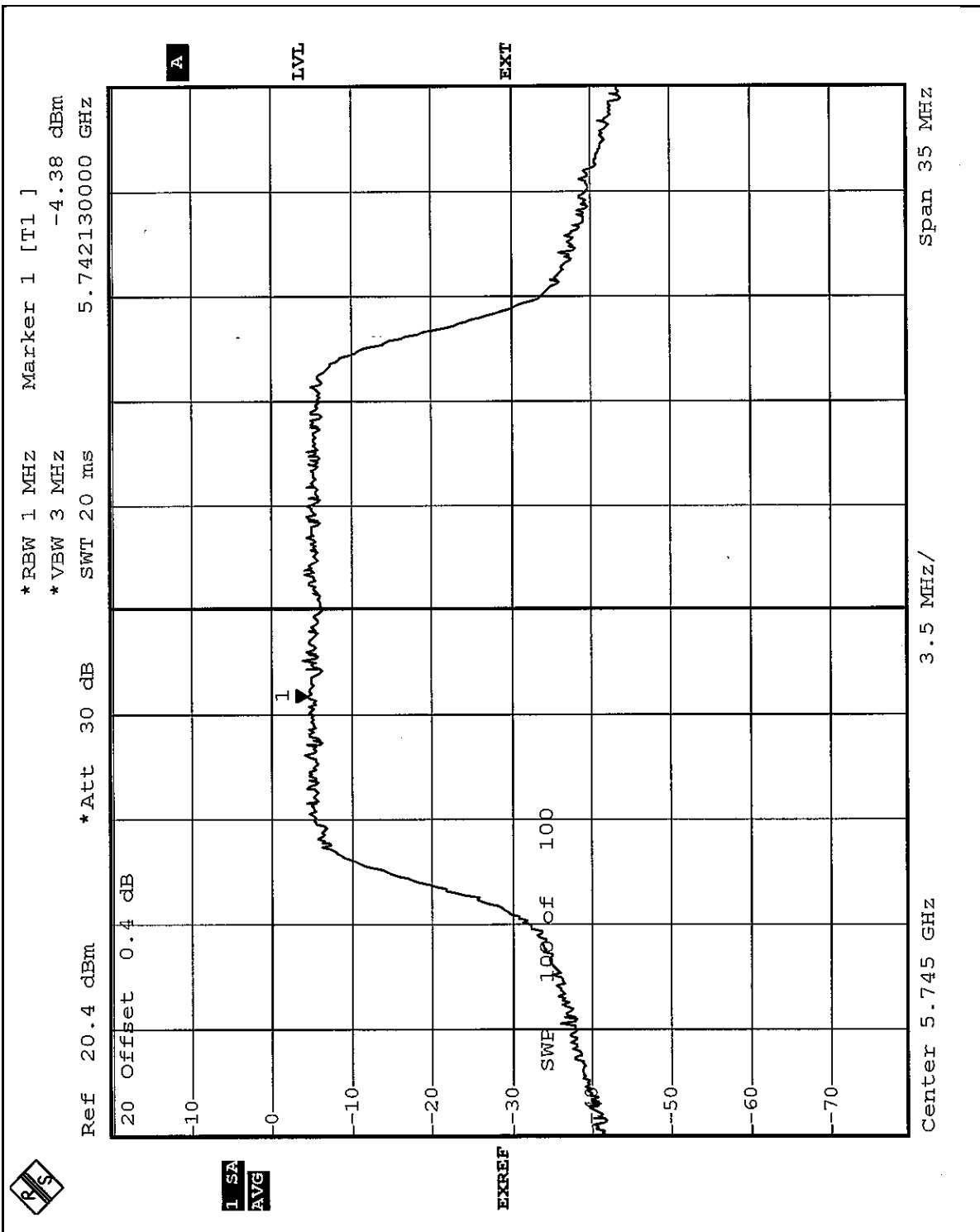


CH 8



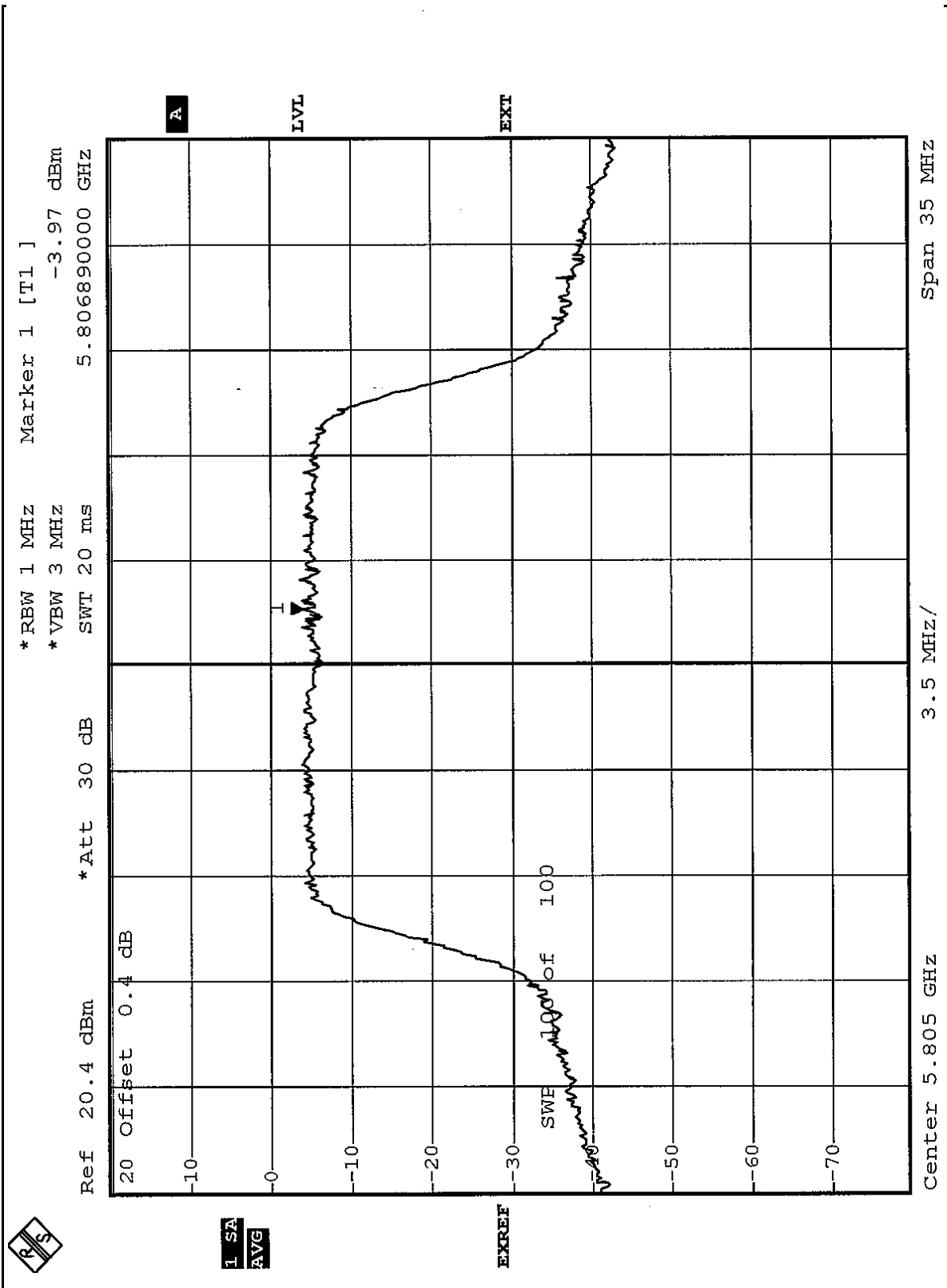


CH 9





CH 12





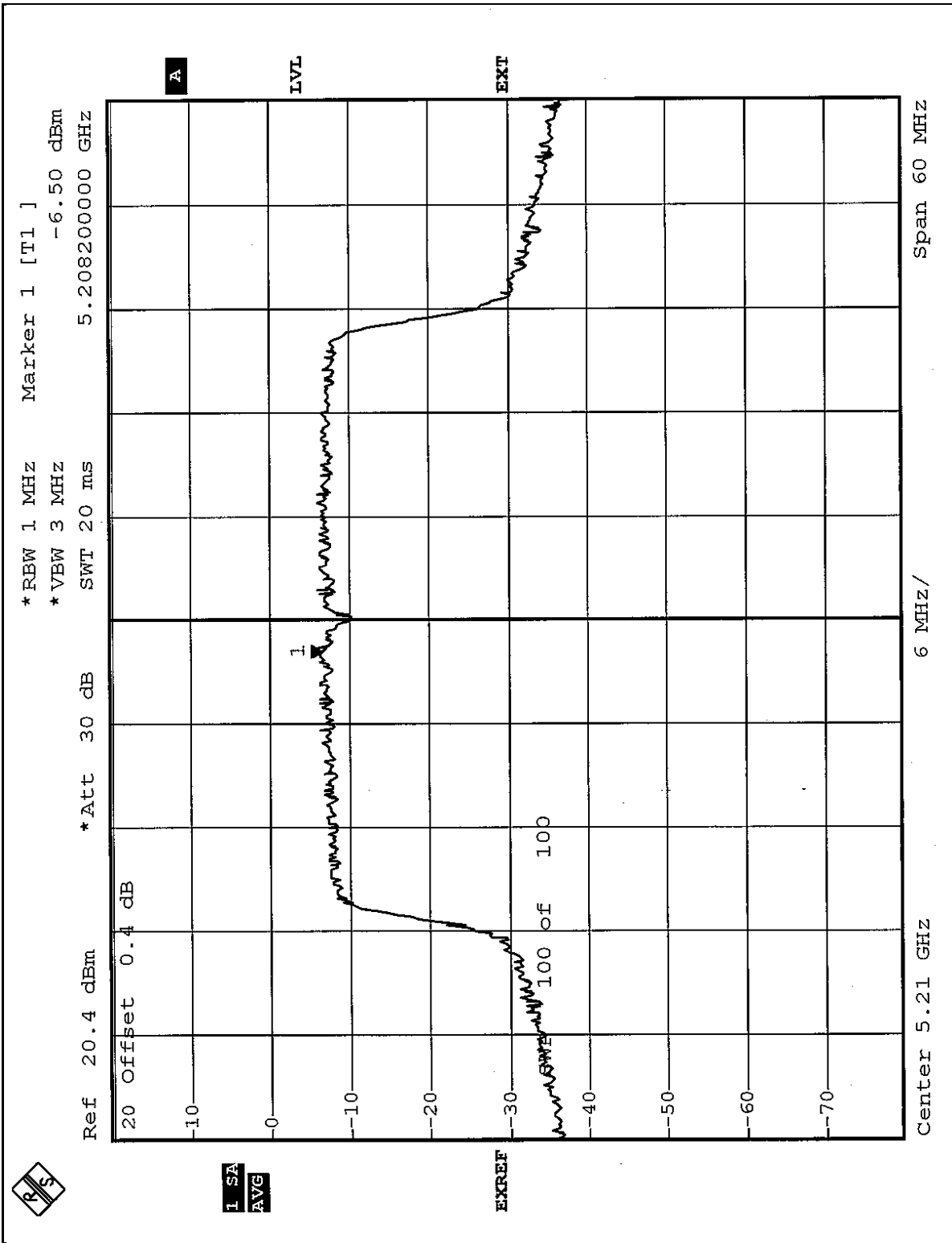
EUT	Wireless A+G Mini PCI Card	MODEL	WMCE54AG2
MODE	Turbo	INPUT POWER (SYSTEM)	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	24deg. C, 65%RH, 991hPa	TESTED BY	Match Tsui

CHANNEL NUMBER	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 1 MHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	5210	-6.50	4	PASS
2	5250	-7.03	4	PASS
3	5290	-6.58	11	PASS
4	5760	-6.60	17	PASS
5	5800	-7.17	17	PASS

*(The test data is in accordance with ADT Report No.: RF930909L11.)

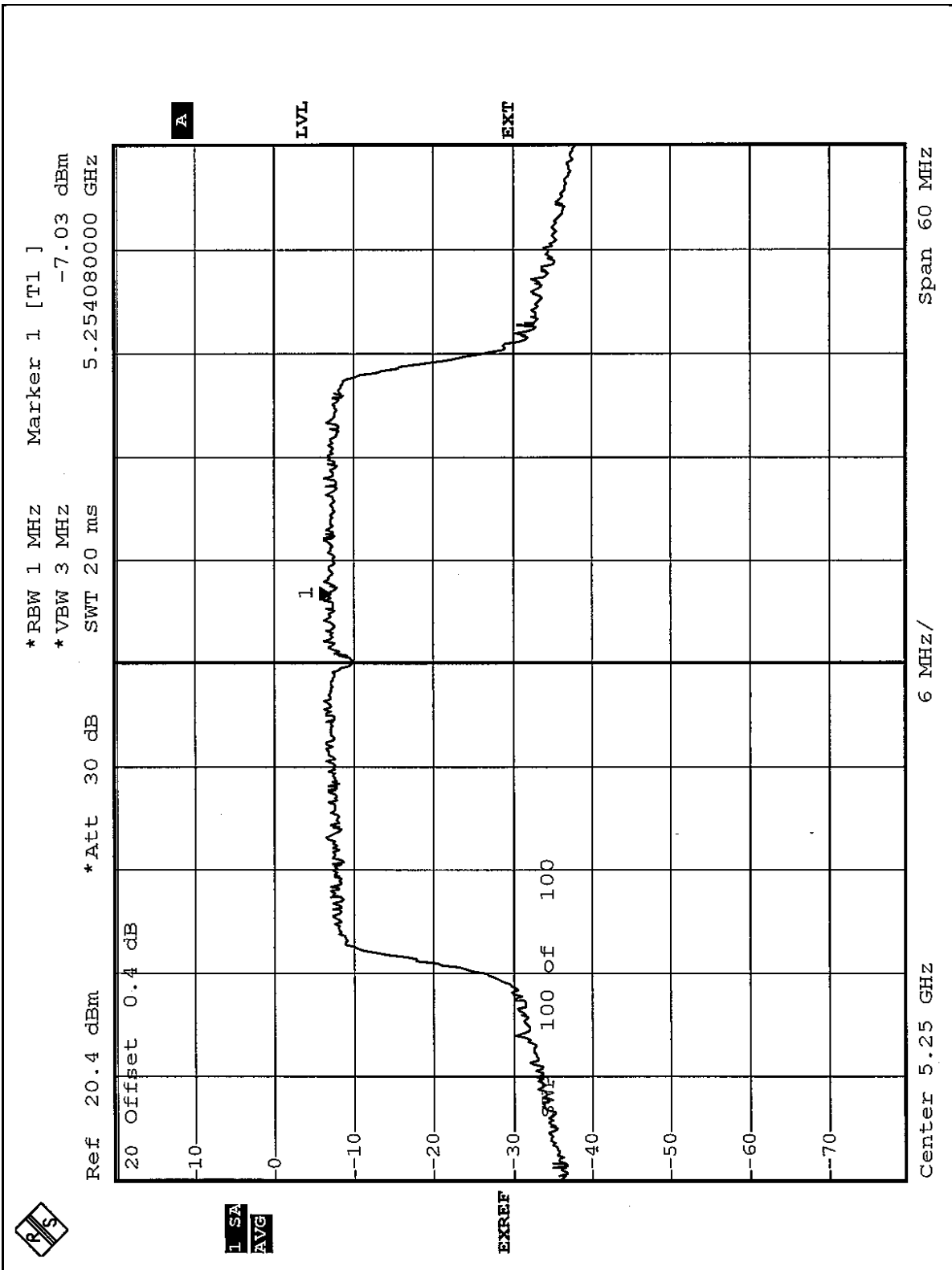


CH 1



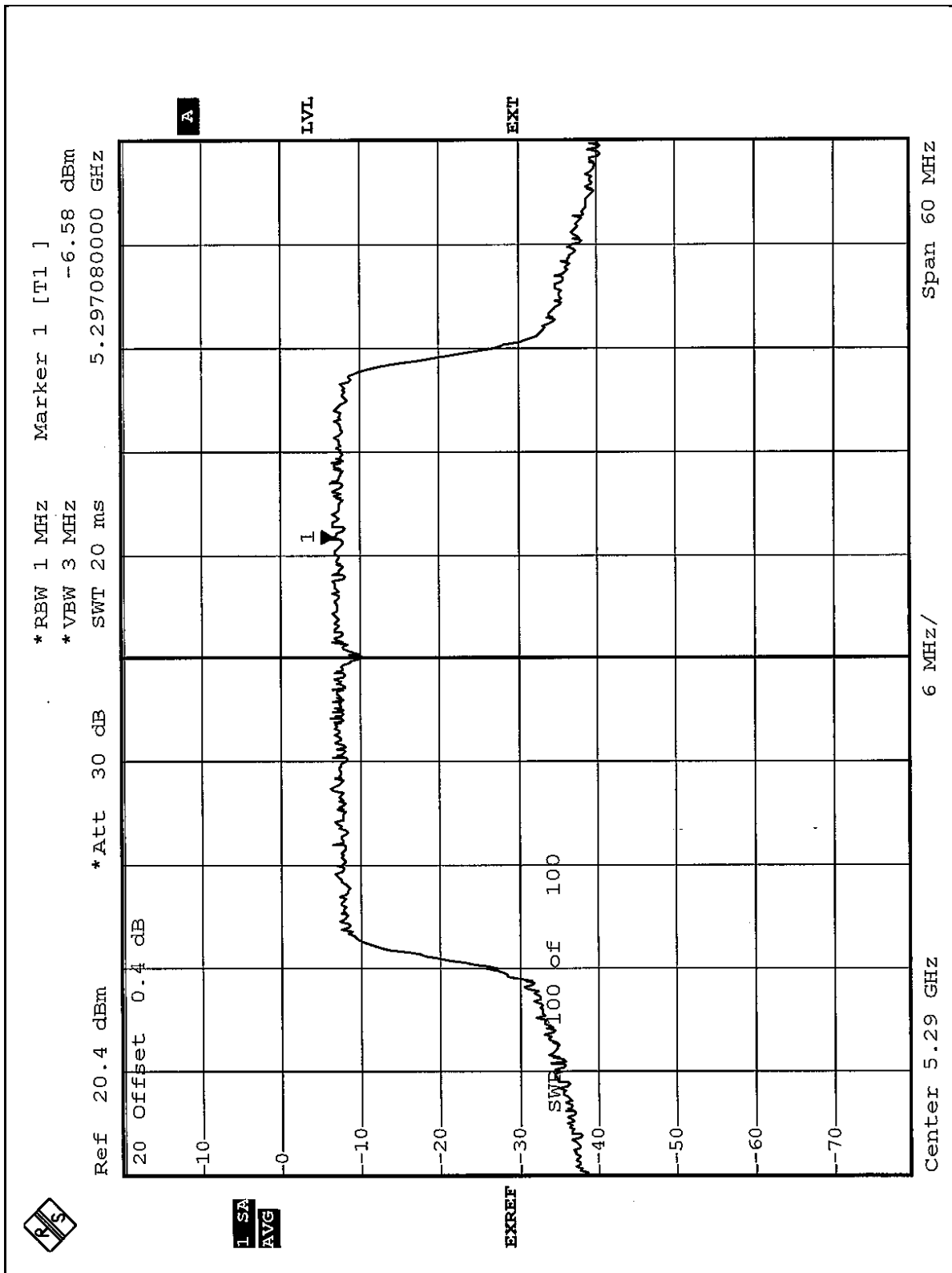


CH 2



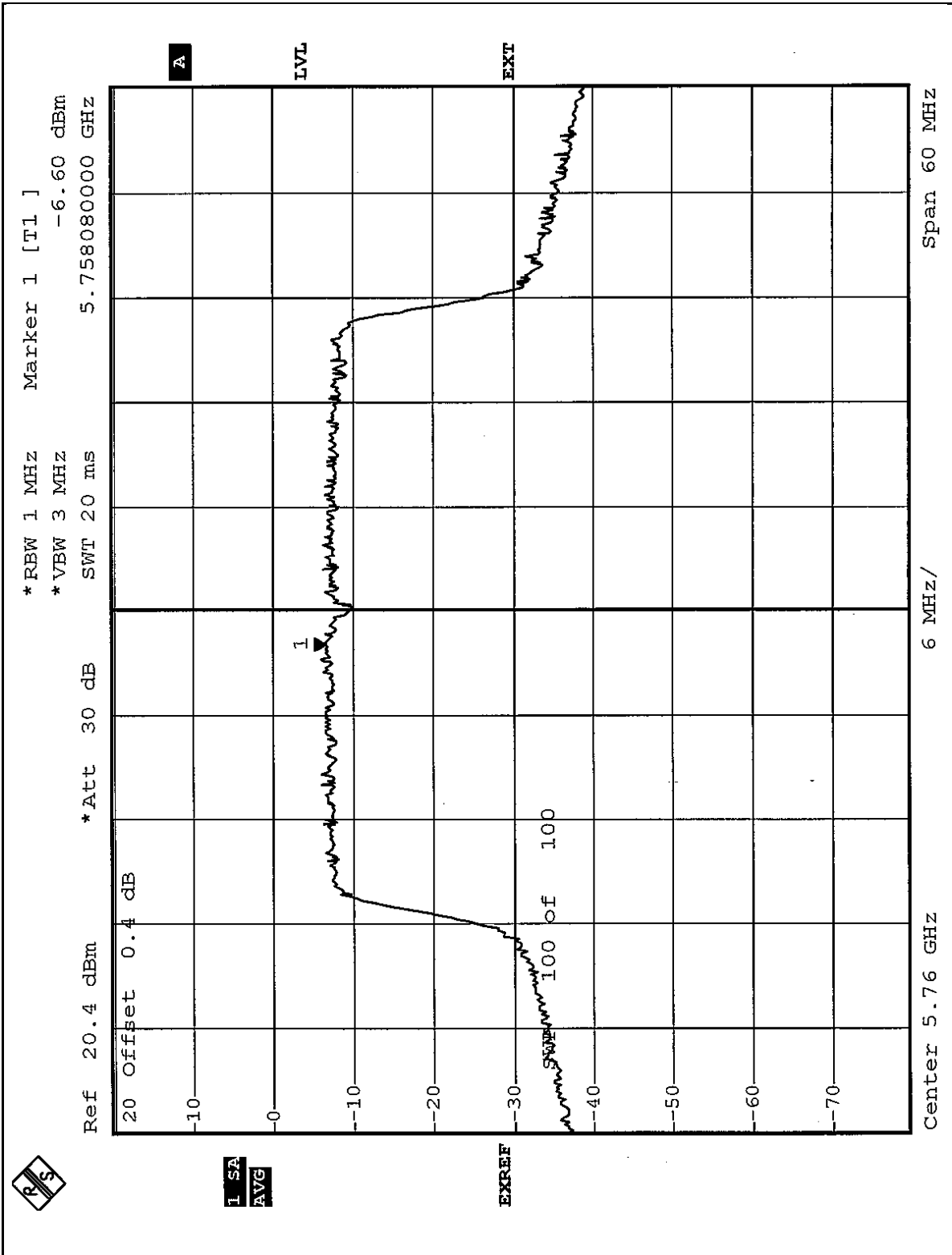


CH 3



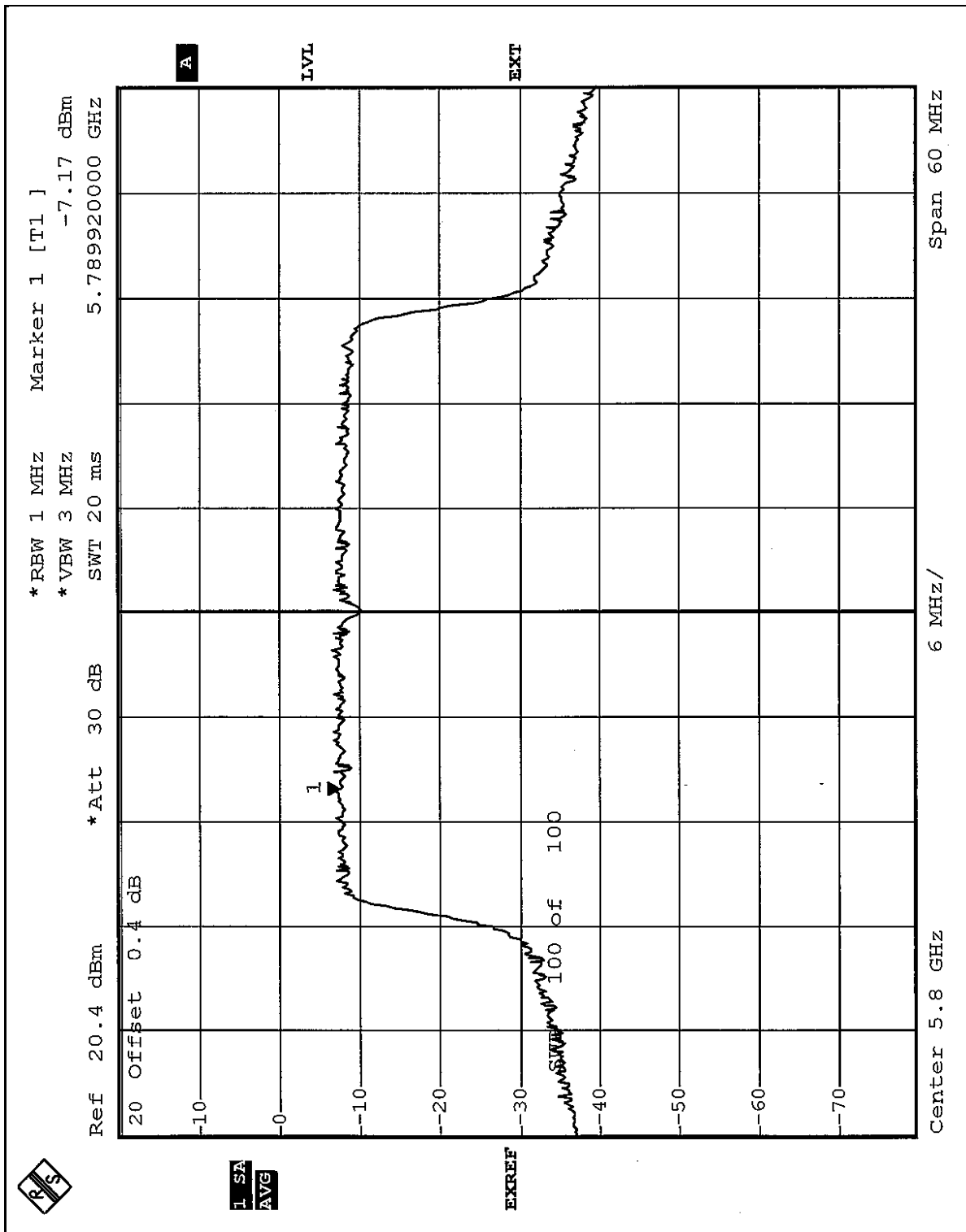


CH 4





CH 5





5.6 FREQUENCY STABILITY

5.6.1 LIMITS OF FREQUENCY STABILITY MEASUREMENT

The frequency tolerance of the carrier signal shall be maintained within +/- 0.02% of the operating frequency over a temperature variation of -30 degrees to 50 degrees C at normal supply voltage, and for a variation in the primary supply voltage from 85% to 115% of the rated supply voltage at a temperature of 20 degrees C.

5.6.2 TEST INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
ANRITSU SPECTRUM ANALYZER	MS2667C	M10281	Feb. 09, 2005
WIT STANDARD TEMPERATURE AND HUMIDITY CHAMBER	TH-4S-C	W981030	Jul. 18, 2005

NOTE: The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

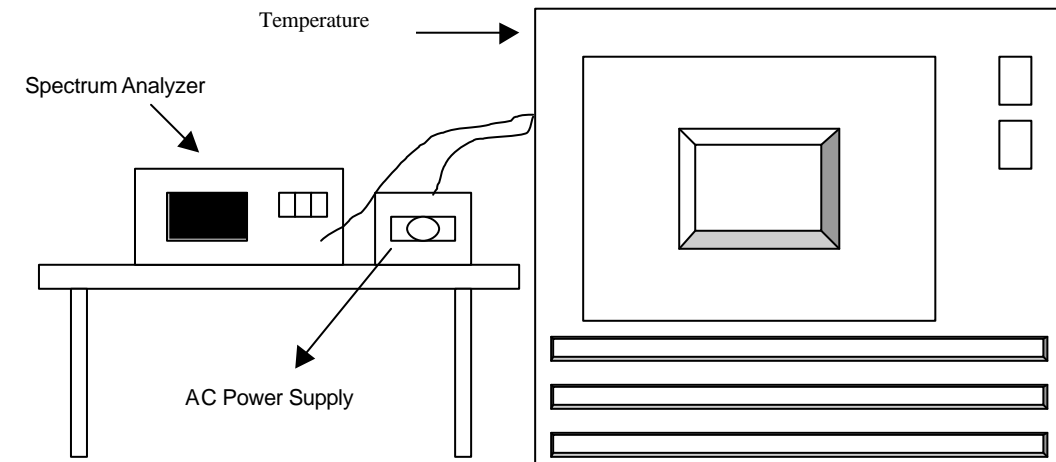
5.6.3 TEST PROCEDURE

1. The EUT was placed inside the environmental test chamber and powered by nominal DC voltage.
2. Turn the EUT on and couple its output to a spectrum analyzer.
3. Turn the EUT off and set the chamber to the highest temperature specified.
4. Allow sufficient time (approximately 30 min) for the temperature of the chamber to stabilize, turn the EUT on and measure the operating frequency after 2, 5, and 10 minutes.
5. Repeat step 2 and 3 with the temperature chamber set to the lowest temperature.
6. The test chamber was allowed to stabilize at +20 degree C for a minimum of 30 minutes. The supply voltage was then adjusted on the EUT from 85% to 115% and the frequency record.

5.6.4 DEVIATION FROM TEST STANDARD

No deviation

5.6.5 TEST SETUP



5.6.6 EUT OPERATING CONDITION

Same as Item 4.1.6



5.6.7 TEST RESULTS

		Operating frequency: 5320MHz				Limit : ± 0.01%	
Temp. ()	Power supply (VDC)	2 minute		5 minute		10 minute	
		(MHz)	(%)	(MHz)	(%)	(MHz)	(%)
50	102	5319.9480	-0.0009774	5319.9780	-0.0004135	5319.9480	-0.0009774
	120	5319.9480	-0.0009774	5319.9480	-0.0009774	5319.9481	-0.0009756
	138	5319.9480	-0.0009774	5319.9480	-0.0009774	5319.9480	-0.0009774
40	102	5319.9486	-0.0009662	5319.9486	-0.0009662	5319.9483	-0.0009718
	120	5319.9486	-0.0009662	5319.9486	-0.0009662	5319.9486	-0.0009662
	138	5319.9486	-0.0009662	5319.9486	-0.0009662	5319.9486	-0.0009662
30	102	5319.9516	-0.0009098	5319.9520	-0.0009023	5319.9520	-0.0009023
	120	5319.9520	-0.0009023	5319.9520	-0.0009023	5319.9520	-0.0009023
	138	5319.9513	-0.0009154	5319.9520	-0.0009023	5319.9520	-0.0009023
20	102	5319.9590	-0.0007707	5319.9590	-0.0007707	5319.9590	-0.0007707
	120	5319.9590	-0.0007707	5319.9587	-0.0007763	5319.9590	-0.0007707
	138	5319.9590	-0.0007707	5319.9590	-0.0007707	5319.9593	-0.0007650
10	102	5319.9677	-0.0006071	5319.9683	-0.0005959	5319.9687	-0.0005883
	120	5319.9677	-0.0006071	5319.9683	-0.0005959	5319.9683	-0.0005959
	138	5319.9683	-0.0005959	5319.9683	-0.0005959	5319.9690	-0.0005827
0	102	5319.9810	-0.0003571	5319.9807	-0.0003628	5319.9810	-0.0003571
	120	5319.9807	-0.0003628	5319.9810	-0.0003571	5319.9813	-0.0003515
	138	5319.9807	-0.0003628	5319.9810	-0.0003571	5319.9813	-0.0003515
-10	102	5319.9897	-0.0001936	5319.9890	-0.0002068	5319.9893	-0.0002011
	120	5319.9890	-0.0002068	5319.9893	-0.0002011	5319.9897	-0.0001936
	138	5319.9887	-0.0002124	5319.9897	-0.0001936	5319.9897	-0.0001936
-20	102	5319.9973	-0.0000508	5319.9960	-0.0000752	5319.9960	-0.0000752
	120	5319.9963	-0.0000695	5319.9960	-0.0000752	5319.9960	-0.0000752
	138	5319.9963	-0.0000695	5319.9960	-0.0000752	5319.9960	-0.0000752
-30	102	5319.9930	-0.0001316	5319.9930	-0.0001316	5319.9933	-0.0001259
	120	5319.9927	-0.0001372	5319.9927	-0.0001372	5319.9923	-0.0001447
	138	5319.9933	-0.0001259	5319.9930	-0.0001316	5319.9930	-0.0001316

*(The test data is in accordance with ADT Report No.: RF930909L11.)



5.7 BAND EDGES MEASUREMENT

5.7.1 TEST INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
SPECTRUM ANALYZER	FSEK30	100049	Aug. 12, 2005

NOTE:

The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

5.7.2 TEST PROCEDURE

The transmitter output was connected to the spectrum analyzer via a low lose cable. Set both RBW and VBW of spectrum analyzer to 1MHz with suitable frequency span including 100 MHz bandwidth from band edge. The band edges was measured and recorded.

5.7.3 EUT OPERATING CONDITION

The software provided by client to enable the EUT under transmission condition continuously at specific channel frequencies individually.

5.7.4 TEST RESULTS

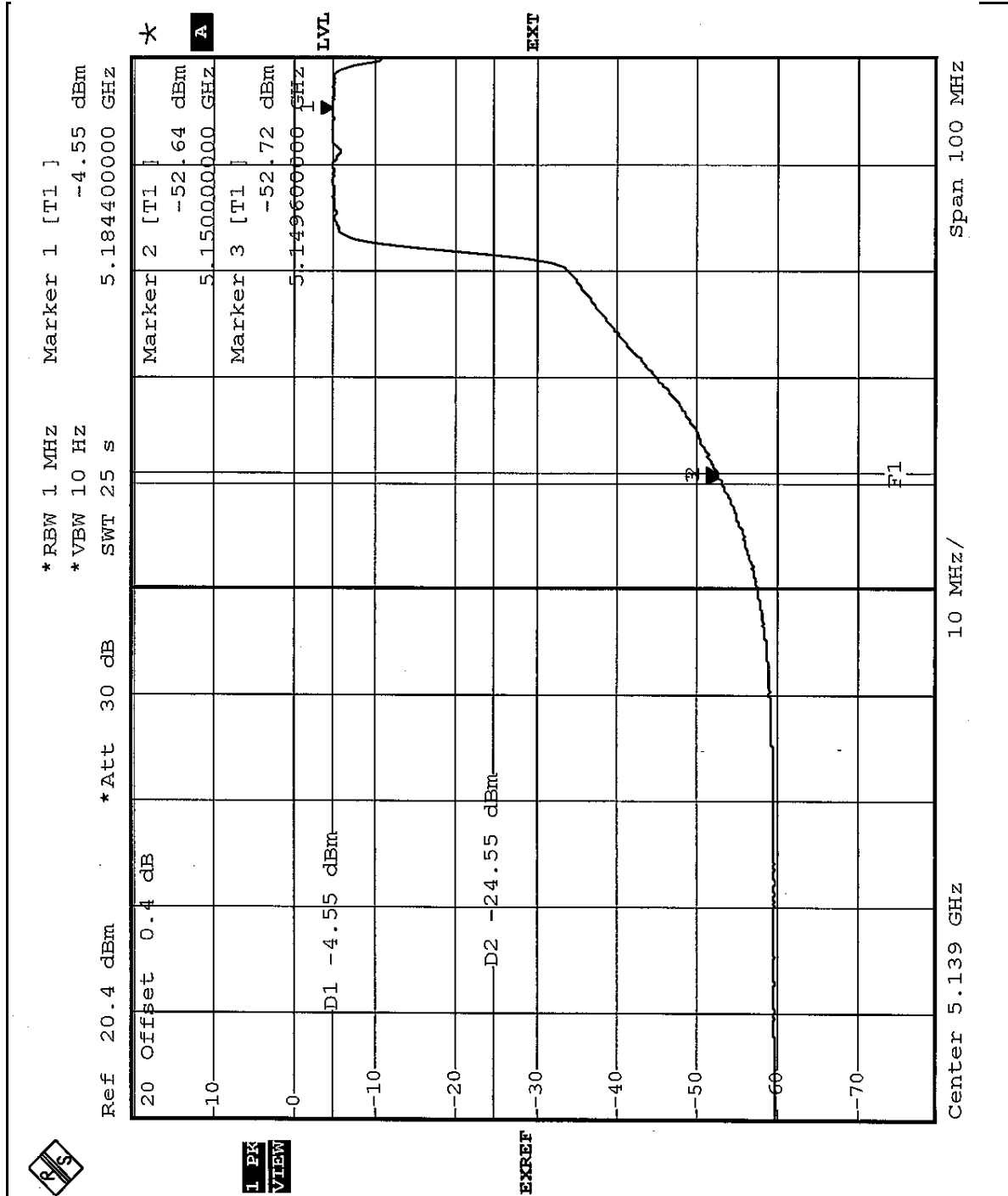
For signals in the restricted bands above and below the 5.15 to 5.35GHz allocated band a measurement was made of the amplitude of the spurious emissions with respect to the intentional signals. The relative amplitude, in dBc, was applied to the average and peak filed strength of the intentional signal made on the OATS to calculate the field strength of the unintentional signals.

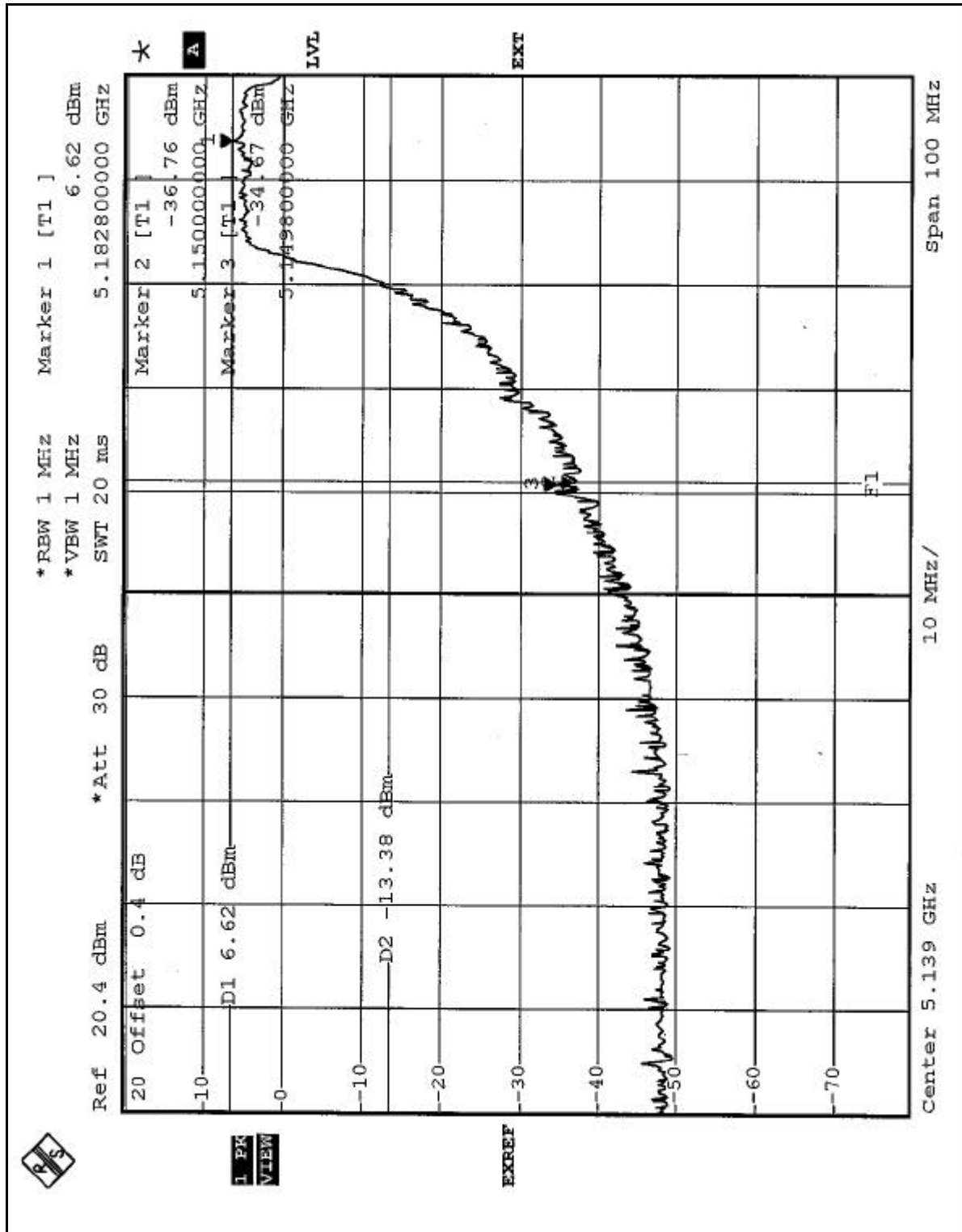
The spectrum plots (Average RBW=1MHz, VBW=300Hz) are attached on the following 4 pages.



Normal Mode: Channel 1 (5180 MHz)

The band edge emission plot on the following page shows 48.09dBc (Average) / 41.29dBc (Peak) between carrier maximum power and local maximum emission in restrict band. The emission of carrier strength list in the test result of channel 1 (normal mode) is 98.57dBuV/m, so the maximum field strength in restrict band is 98.57-48.09=50.48dBuV/m which is under 54dBuV/m limit.

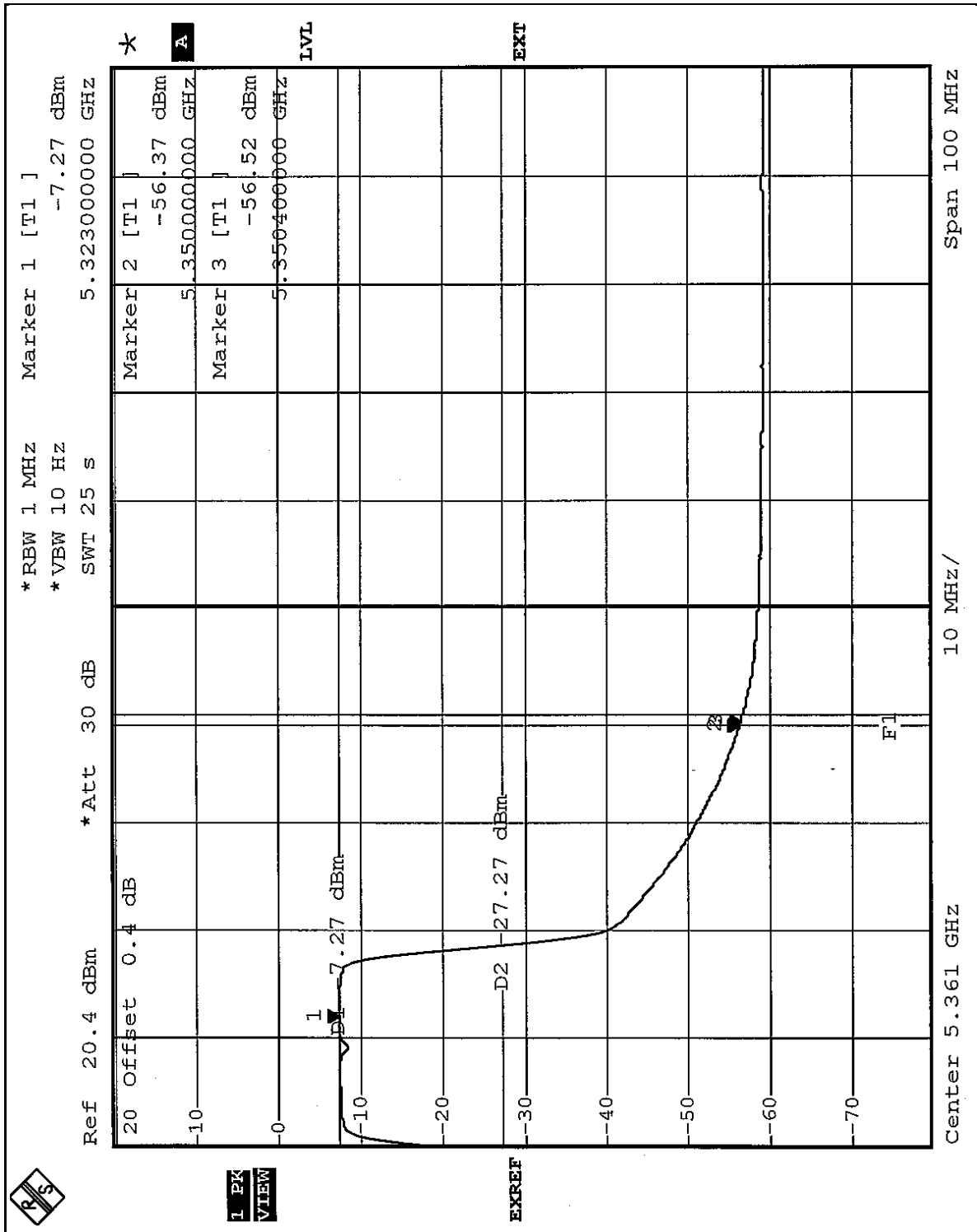


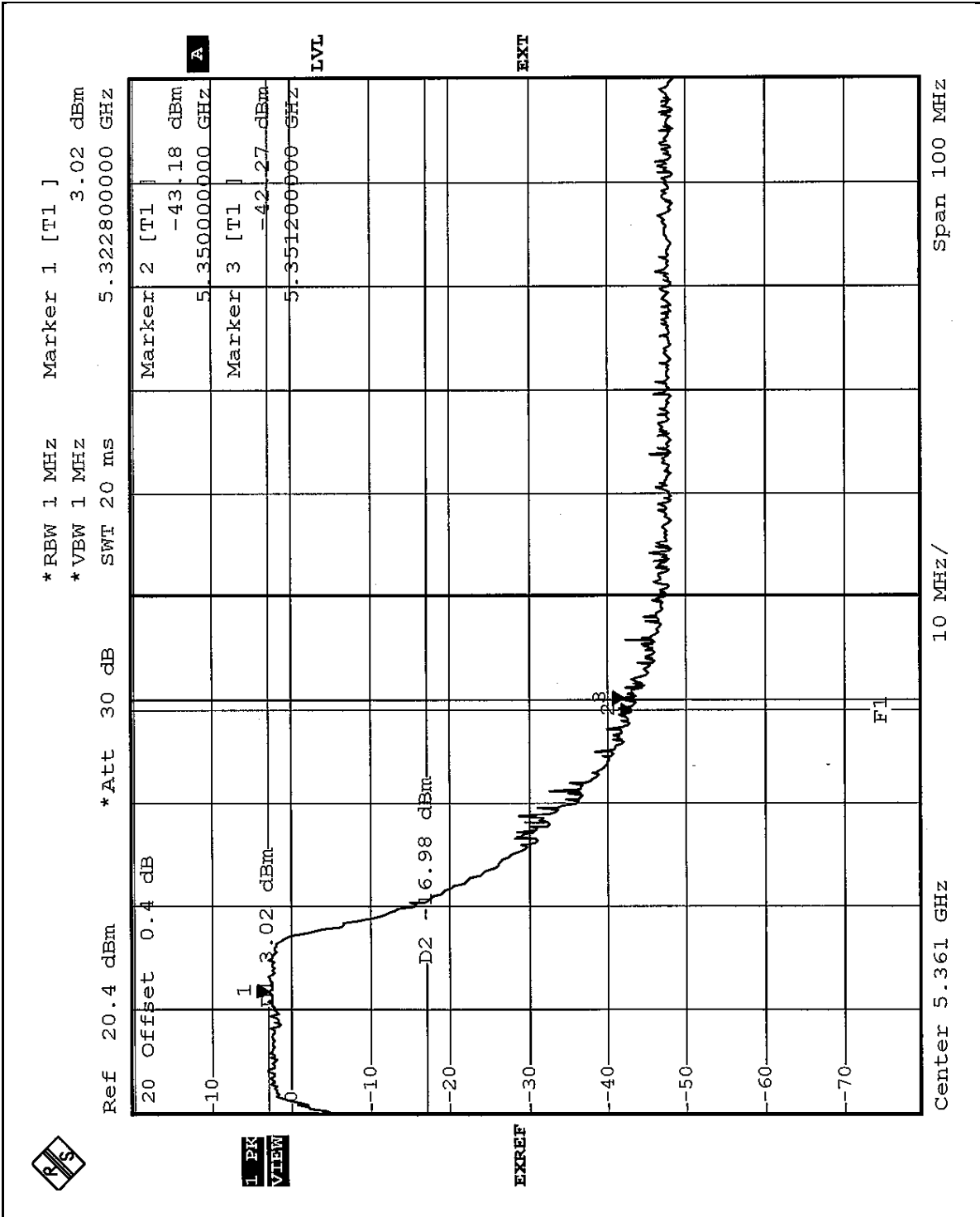




Normal Mode: Channel 8 (5320 MHz)

The band edge emission plot on the following page shows 49.10dBc (Average) / 45.29dBc (Peak) between carrier maximum power and local maximum emission in restrict band. The emission of carrier strength list in the test result of channel 8 (normal mode) is 95.08dBuV/m, so the maximum field strength in restrict band is 95.08-49.10=45.98dBuV/m which is under 54dBuV/m limit.

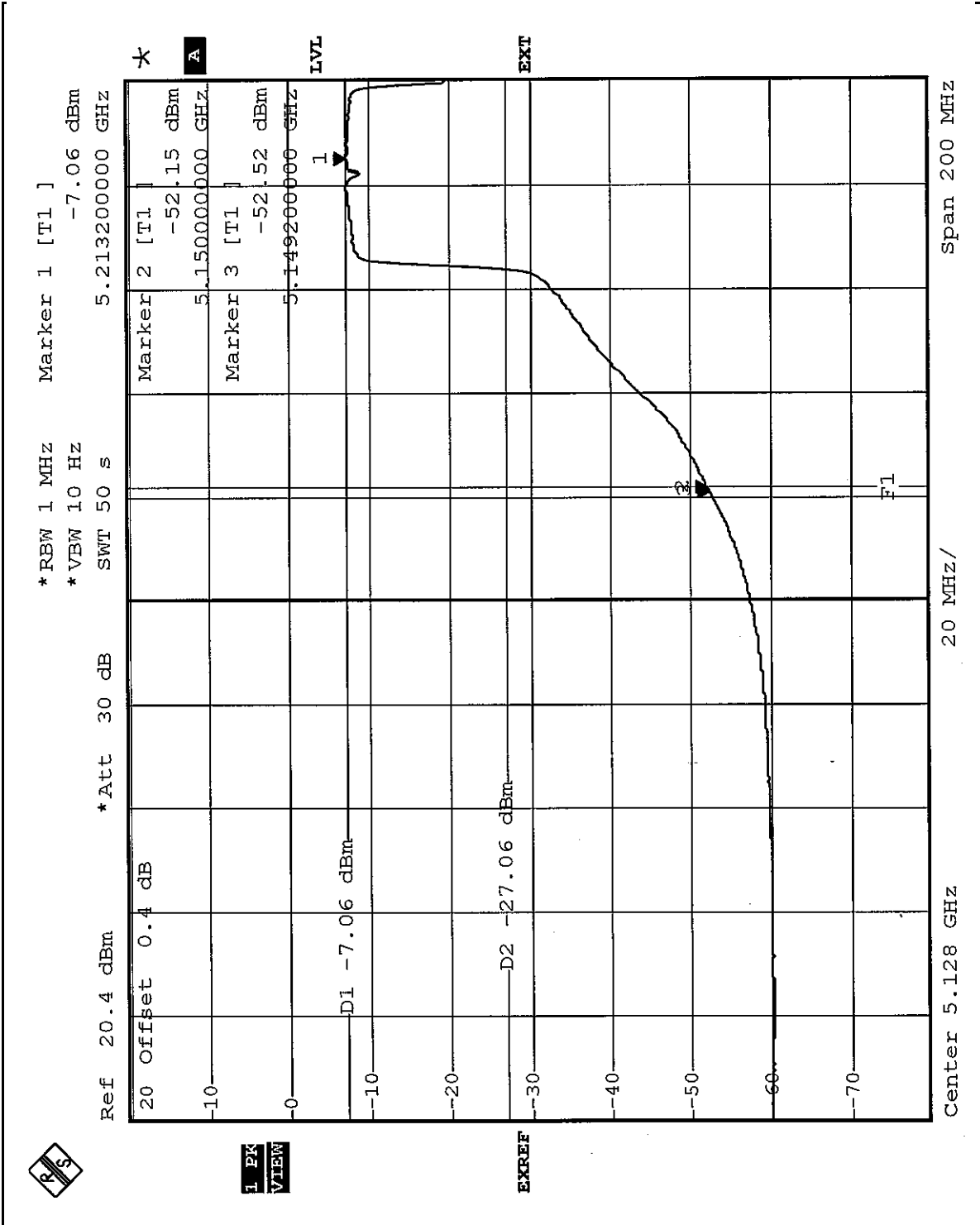


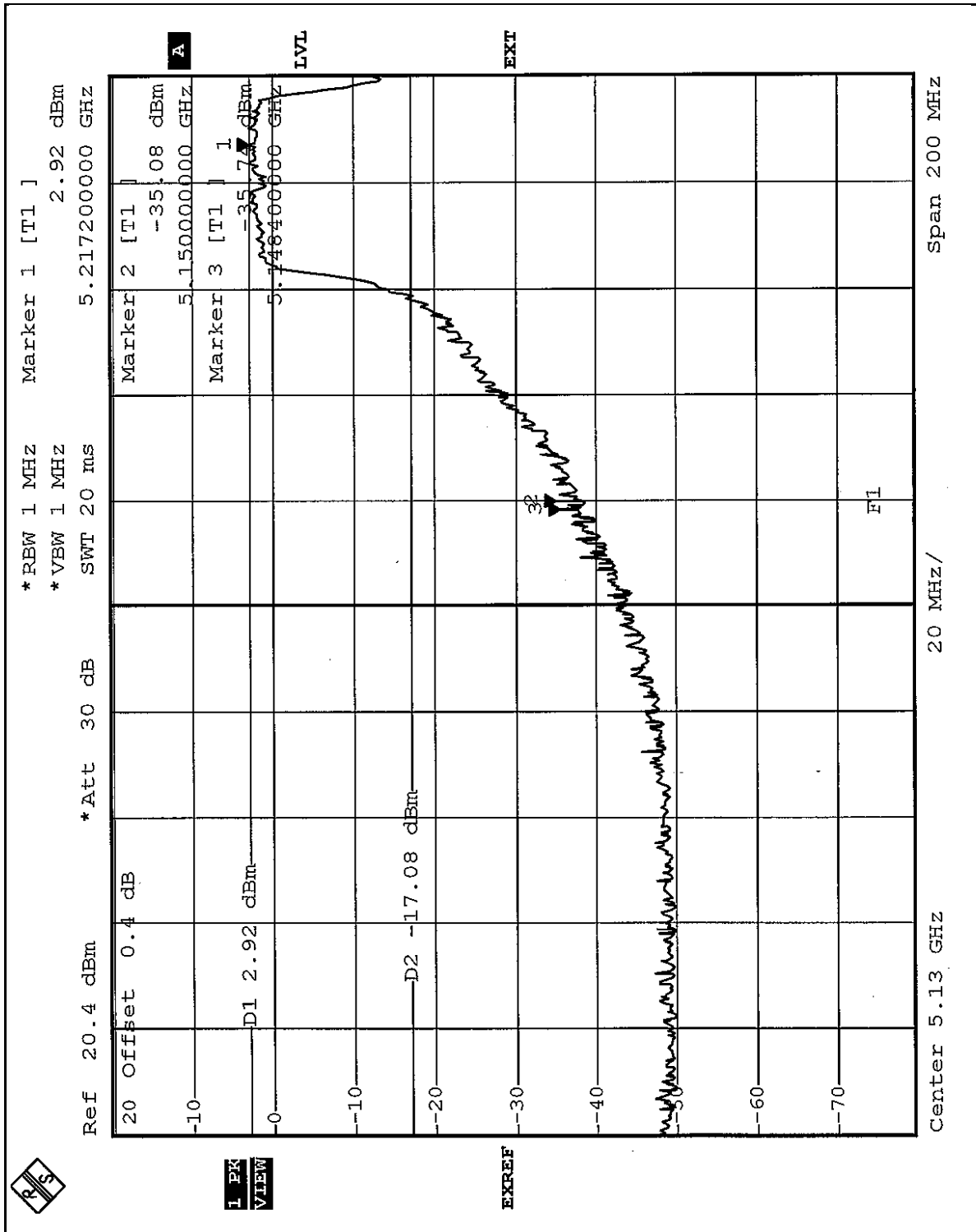




Turbo Mode: Channel 1 (5210 MHz)

The band edge emission plot on the following page shows 45.09dBc (Average) / 38.00dBc (Peak) between carrier maximum power and local maximum emission in restrict band. The emission of carrier strength list in the test result of channel 1 (turbo mode) is 94.47dBuV/m, so the maximum field strength in restrict band is $94.47 - 45.09 = 49.38$ dBuV/m which is under 54dBuV/m limit.

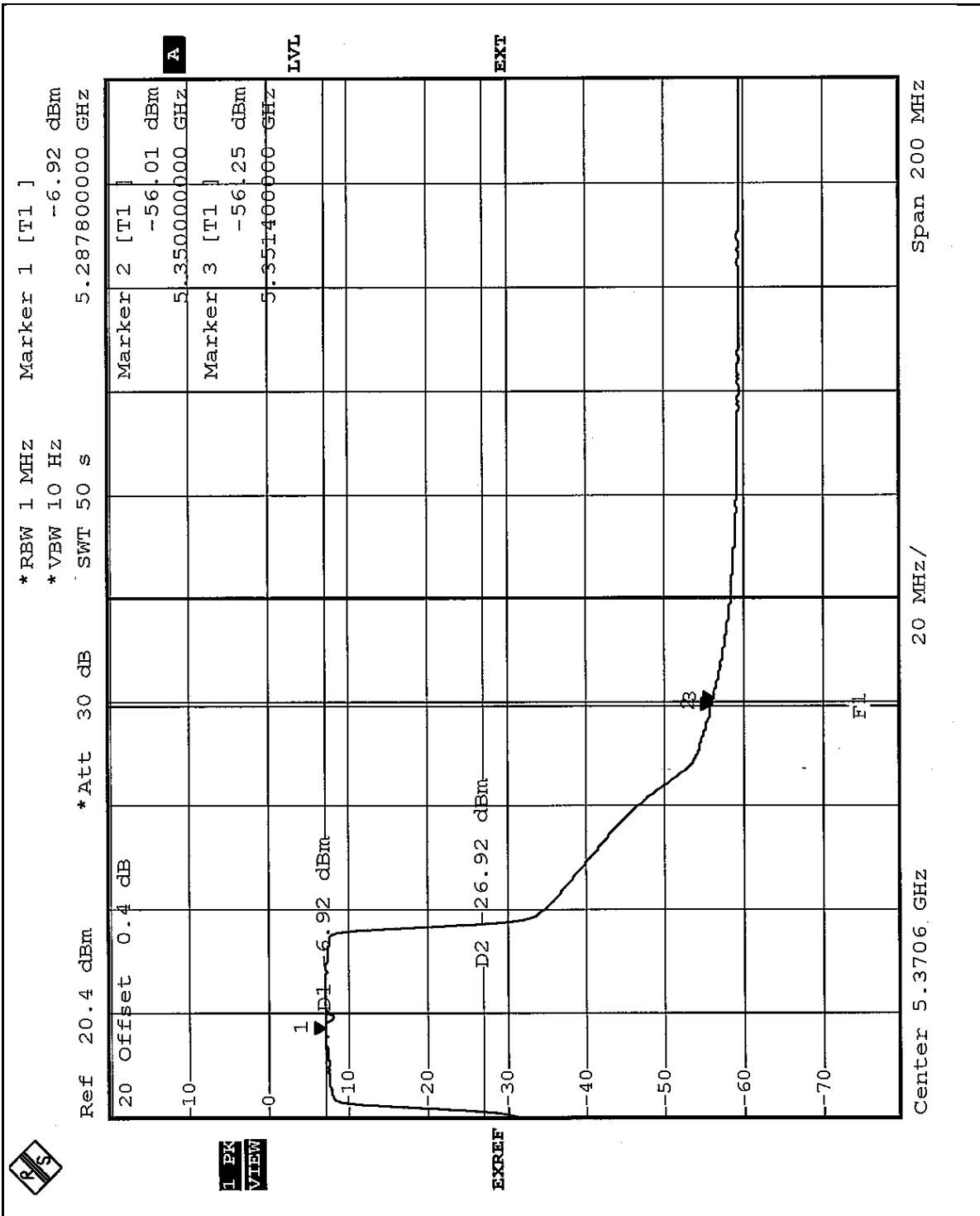


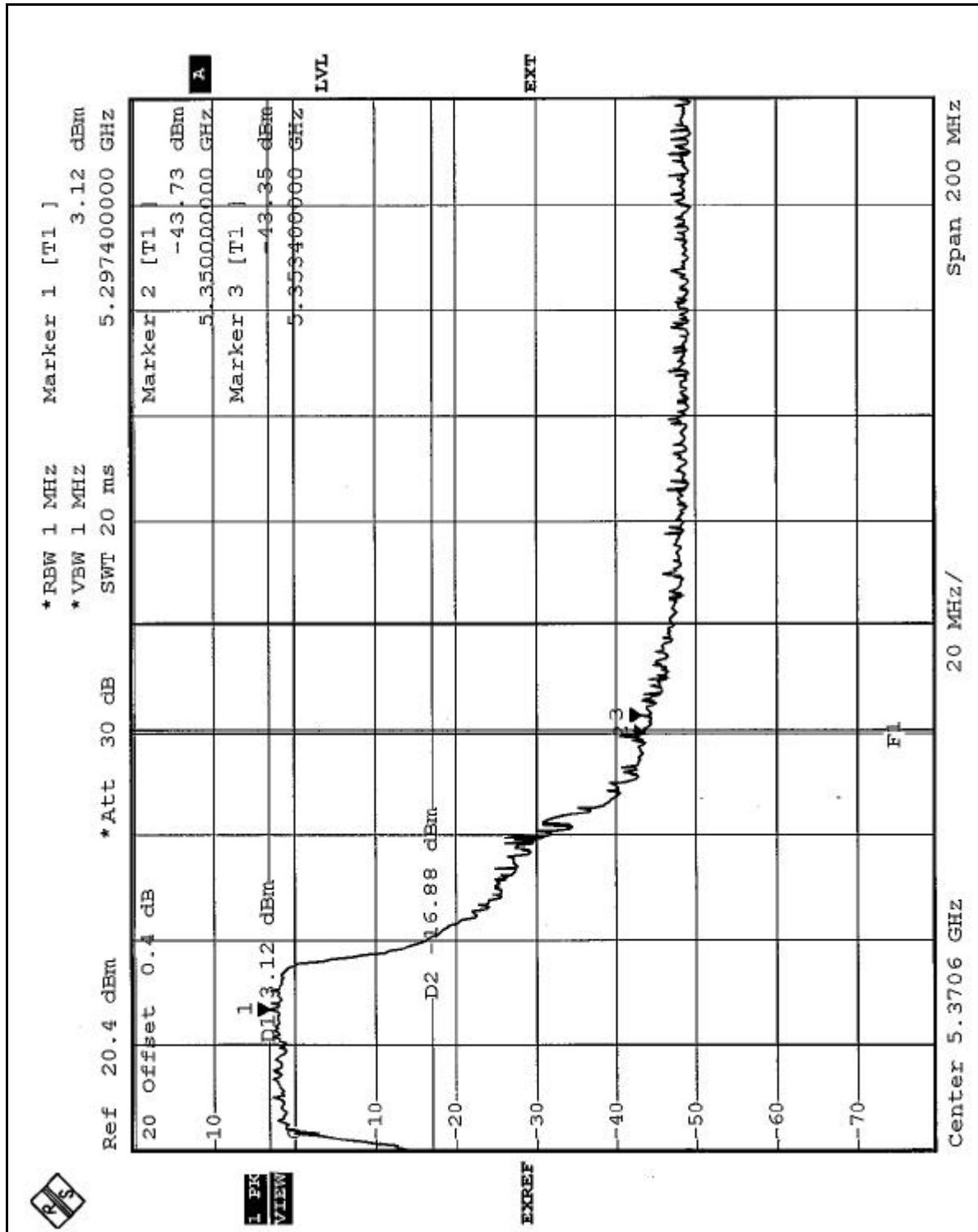




Turbo Mode: Channel 3 (5290 MHz)

The band edge emission plot on the following page shows 49.09dBc (Average) / 46.47dBc (Peak) between carrier maximum power and local maximum emission in restrict band. The emission of carrier strength list in the test result of channel 3 (turbo mode) is 95.44dBuV/m, so the maximum field strength in restrict band is 95.44-49.09=46.35dBuV/m which is under 54dBuV/m limit.







5.8 ANTENNA REQUIREMENT

5.8.1 STANDARD APPLICABLE

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

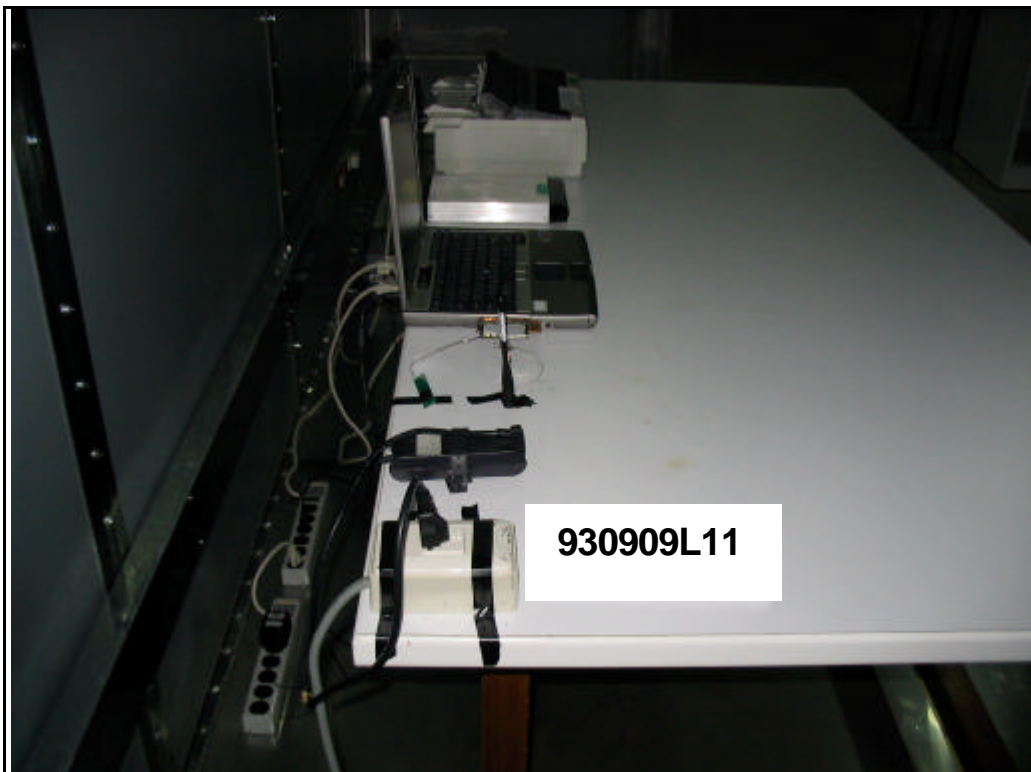
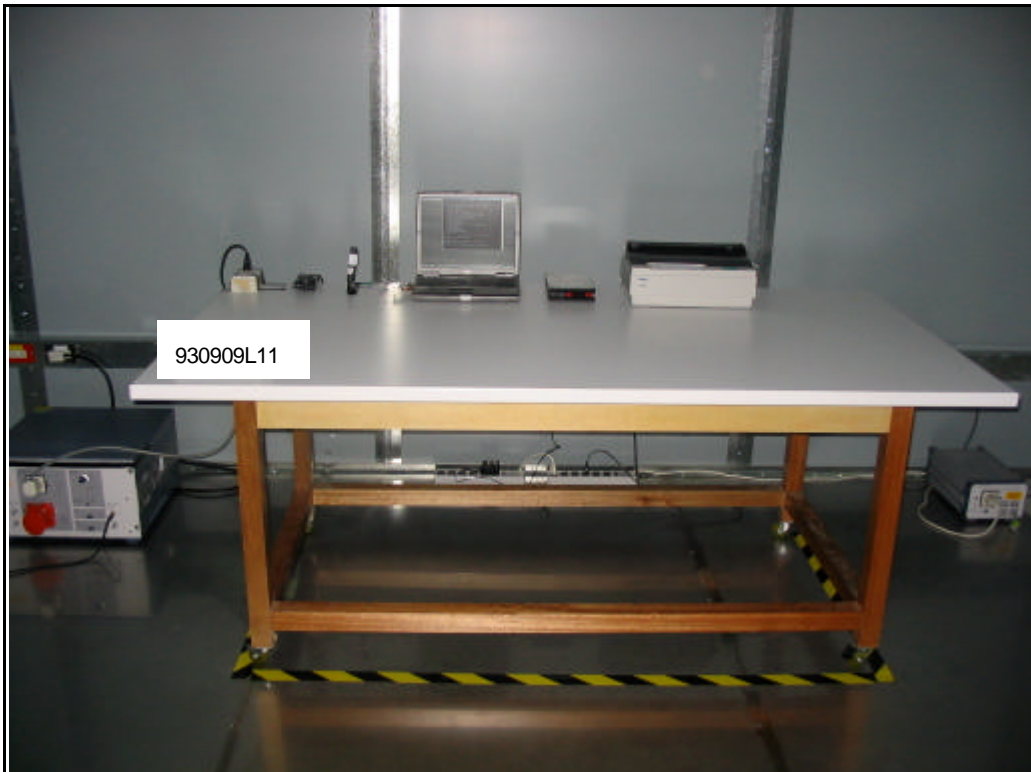
And according to FCC 47 CFR Section 15.407(a), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

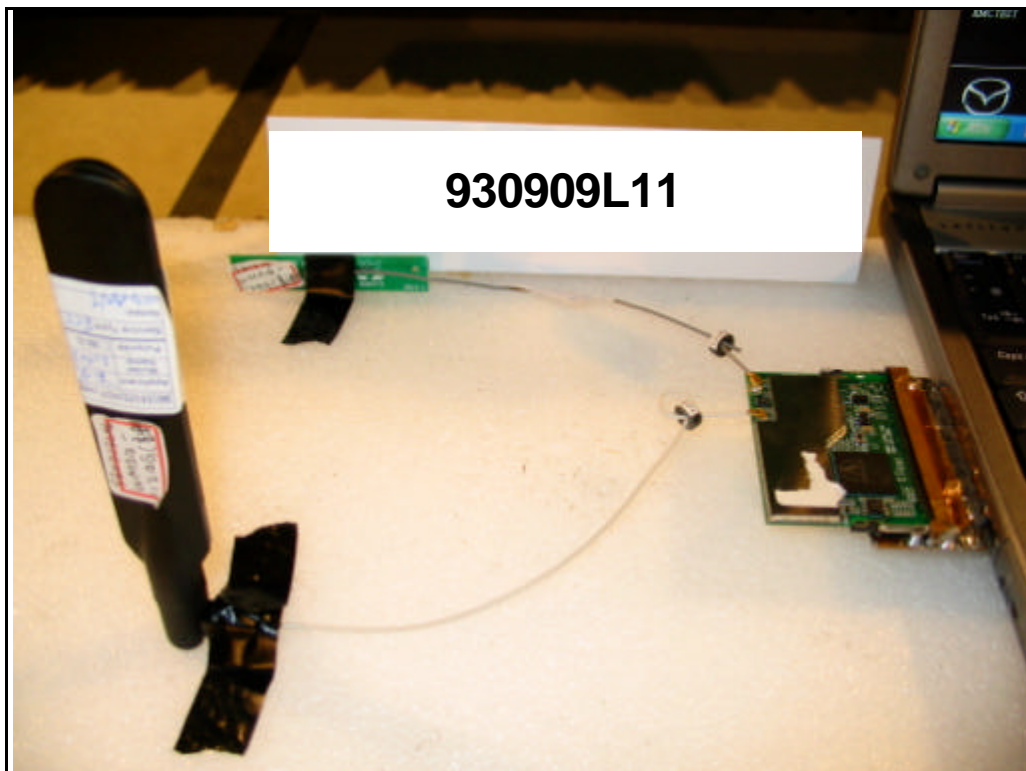
5.8.2 ANTENNA CONNECTED CONSTRUCTION

The antennas used in this product are Printed antenna and Dipole and printed antenna with UFL antenna connector. The maximum Gain of the antenna is 5.0dBi.

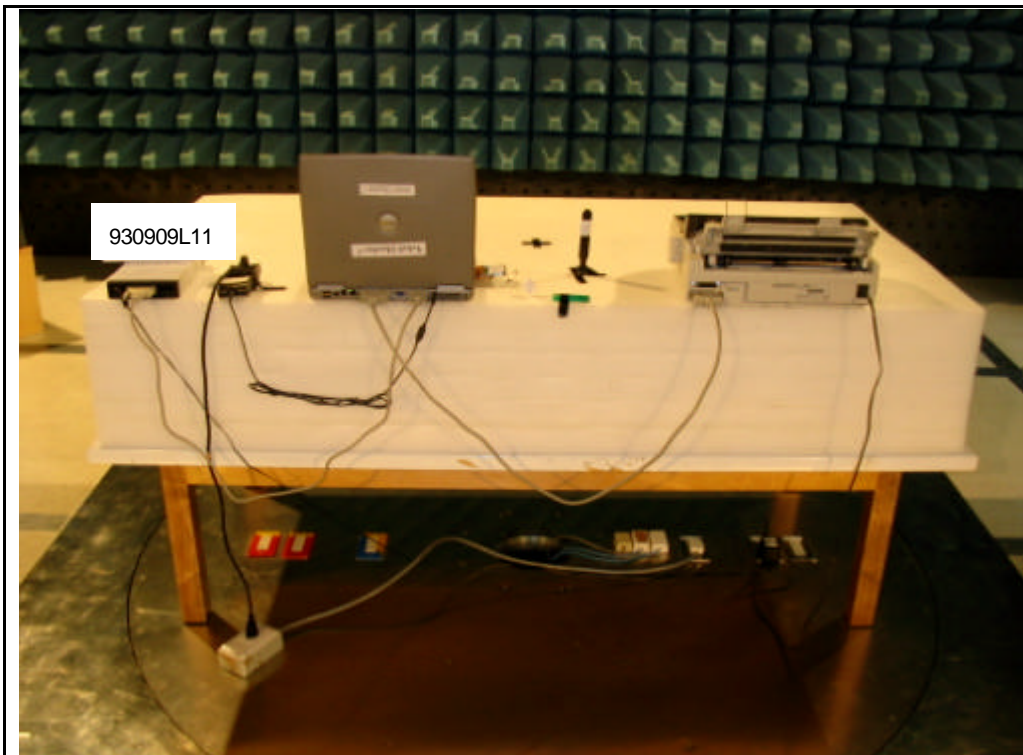
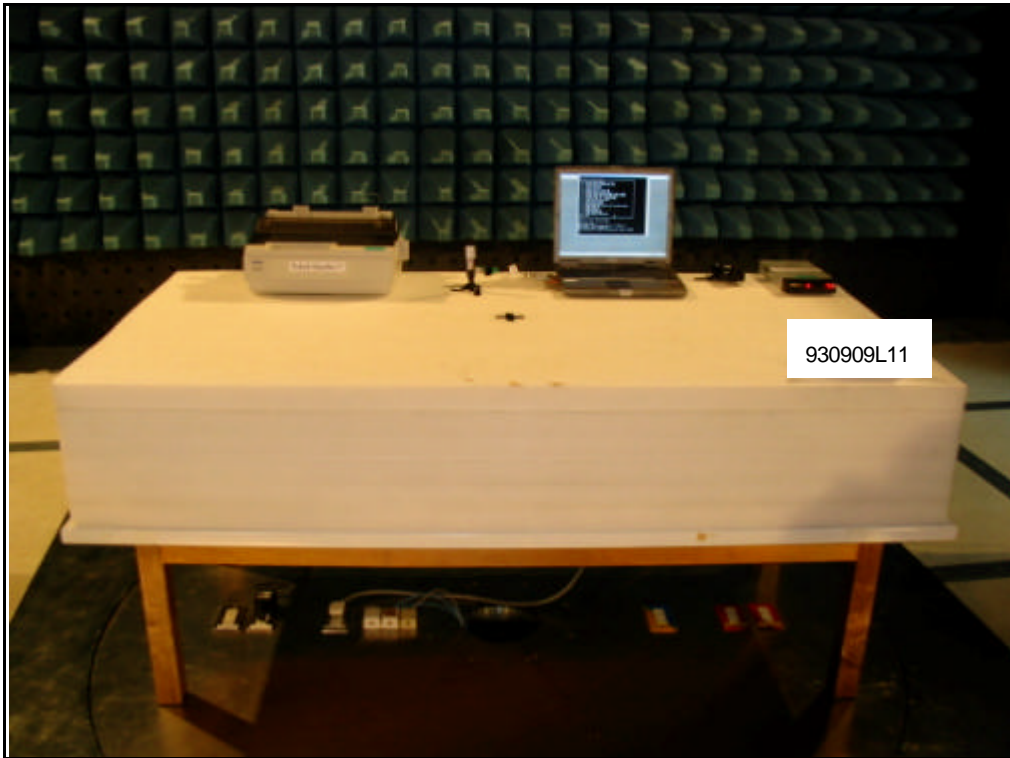
6. PHOTOGRAPHS OF THE TEST CONFIGURATION

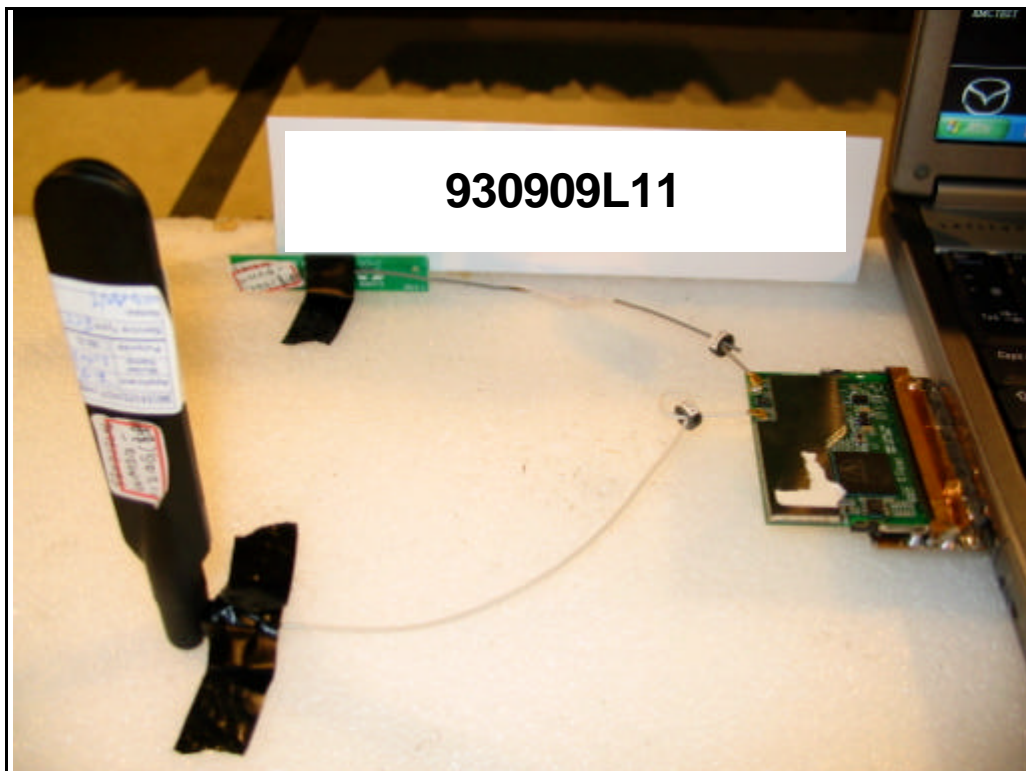
CONDUCTED EMISSION TEST





RADIATED EMISSION TEST







7. INFORMATION ON THE TESTING LABORATORIES

We, ADT Corp., were founded in 1988 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are accredited and approved by the following approval agencies according to ISO/IEC 17025, Guide 25 or EN 45001:

USA	FCC, NVLAP, UL, A2LA
Germany	TUV Rheinland
Japan	VCCI
Norway	NEMKO
Canada	INDUSTRY CANADA , CSA
R.O.C.	CNLA, BSMI, DGT
Netherlands	Telefication
Singapore	PSB , GOST-ASIA(MOU)
Russia	CERTIS(MOU)

Copies of accreditation certificates of our laboratories obtained from approval agencies can be downloaded from our web site:

www.adt.com.tw/index.5/phtml. If you have any comments, please feel free to contact us at the following:

Linko EMC/RF Lab:

Tel: 886-2-26052180

Fax: 886-2-26052943

Hsin Chu EMC/RF Lab:

Tel: 886-3-5935343

Fax: 886-3-5935342

Hwa Ya EMC/RF/Safety Telecom Lab: Linko RF Lab.

Tel: 886-3-3183232

Fax: 886-3-3185050

Tel: 886-3-3270910

Fax: 886-3-3270892

Email: service@mail.adt.com.tw

Web Site: www.adt.com.tw

The address and road map of all our labs can be found in our web site also

Report Format Version 1.5