FCC TEST REPORT

REPORT NO.: RF920804R01
MODEL NO.: SL-5354AP1 Aries2 (for Brand: SENAO)
OEM MODEL NO.: NL-5354AP1 Aries2 (for Brand: EnGenius)
RECEIVED: Aug. 04, 2003
TESTED: Aug. 04 to Sep. 03, 2003

APPLICANT: SENAO INTERNATIONAL CO., LTD.

ADDRESS: 2F, NO. 351, CHUNG CHENG RD., HSIEN-TIEN, TAIPEI, TAIWAN, R.O.C

ISSUED BY: Advance Data Technology Corporation

LAB LOCATION: No. 81-1, Lu Liao Keng, 9 Ling, Wu Lung Tsuen, Chiung Lin Hsiang, Hsin Chu Hsien, Taiwan, R.O.C.

0528
ILAC MRA

Lab Code: 200102-0

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1. CERTIFICATION

PRODUCT :	IEEE802.11a+802.11g Dual Band Wireless Access Point
MODEL NO. :	SL-5354AP1 Aries2 (for Brand: SENAO)
OEM MODEL NO. :	NL-5354AP1 Aries2 (for Brand: EnGenius)
BRAND NAME :	SENAO
TEST ITEM:	ENGINEERING SAMPLE
APPLICANT :	SENAO INTERNATIONAL CO., LTD.
STANDARDS :	47 CFR Part 15, Subpart C (Section 15.247), Subpart E (Section 15.407), ANSI C63.4-1992

We, **Advance Data Technology Corporation**, hereby certify that one sample of the designation has been tested in our facility from Aug. 04 to Sep. 03, 2003. The test record data evaluation and Equipment under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions herein specified.

PREPARED BY: _____ , **DATE:** Sep. 05, 2003
Stephanie Hung

APPROVED BY: _____ , **DATE:** Sep. 05, 2003
Dr. Alan Lane, JVP

2. SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: 47 CFR Part 15, Subpart C			
Standard Section	**Test Type and Limit**	**Result**	**REMARK**
15.207	AC Power Conducted Emission	PASS	Meet the requirement of limit Minimum passing margin is -1.54dB at 0.489MHz
15.247(a)(2)	Spectrum Bandwidth of a Direct Sequence Spread Spectrum System Limit: min. 500kHz	PASS	Meet the requirement of limit
15.247(b)	Maximum Peak Output Power Limit: max. 30dBm	PASS	Meet the requirement of limit
15.247(c)	Radiated Emissions Limit: Table 15.209	PASS	Meet the requirement of limit Minimum passing margin is –0.90dB at 220.00 MHz
15.247(d)	Power Spectral Density Limit: max. 8dBm	PASS	Meet the requirement of limit
15.247(c)	Band Edge Measurement Limit: 20dB less than the peak value of fundamental frequency	PASS	Meet the requirement of limit

APPLIED STANDARD: 47 CFR Part 15, Subpart E			
Standard Section	**Test Type**	**Result**	**REMARK**
15.407(b)(5)	AC Power Conducted Emission	PASS	Meet the requirement of limit Minimum passing margin is –1.63dB at 0.998MHz
15.407(b/1/2/3)(b)(5)	Electric Field Strength Spurious Emissions, 30 MHz – 40000 MHz	PASS	Meet the requirement of limit Minimum passing margin is –0.90dB at 220.00 MHz
15.407(a/1/2/3)	Peak Transmit Power	PASS	Meet the requirement of limit
15.407(a)(6)	Peak Power Excursion	PASS	Meet the requirement of limit
15.407(a/1/2/3)	Peak Power Spectral Density	PASS	Meet the requirement of limit
15.407(g)	Frequency Stability	PASS	Meet the requirement of limit

3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

PRODUCT	IEEE802.11a+802.11g Dual Band Wireless Access Point
MODEL NO.	SL-5354AP1 Aries2 (for Brand: SENAO)
OEM MODEL NO.	NL-5354AP1 Aries2 (for Brand: EnGenius)
POWER SUPPLY	12VDC from Adapter 48VDC from POE
MODULATION	BPSK, QPSK, CCK, 16QAM, 64QAM
TRANSFER RATE	802.11b and draft 802.11g: 1/2/5.5/6/9/11/12/18/24/36/48/54Mbps 802.11a:6 to 54Mbps (Turbo mode: up to 108Mbps *see note 1)
FREQUENCY RANGE	802.11b and draft 802.11g: 2400MHz ~ 2483.5MHz 802.11a: 5.15GHz ~ 5.35GHz, 5.725GHz ~ 5.825GHz
NUMBER OF CHANNEL	802.11b and draft 802.11g: 11 802.11a: 12 for Normal mode / 5 for Turbo mode
CHANNEL SPACING	802.11b and draft 802.11g: 5MHz 802.11a: 20MHz for Normal mode / 40MHz for Turbo mode
OUTPUT POWER	802.11b: 19.89dBm / draft 802.11g: 19.86dBm 802.11a: 19.81dBm
DATA CABLE	NA
ANTENNA TYPE	Dipole antenna
ANTENNA GAIN	802.11b: 4dBi 802.11a: 5dBi
I/O PORTS	RJ45
ASSOCIATED DEVICES	NA

NOTE:

1. This EUT is capable of providing data rates of up to 108Mbps in Turbo Mode depending upon reception quality.
2. Dual-band, the EUT communicates with Wireless-A (802.11a), Wireless-B, (802.11b), and Wireless-G (draft 802.11g) wireless networks.

3. The EUT was operated with following Adapter.

Model No.:	AM-121000
Input power :	120VAC, 60Hz, 20W
Output power :	12VDC, 1000mA

The EUT was operated with following POE (Power over Ethernet):

Model No.:	SAQ06L48-V
Input power :	100-240V-0.6A 50-60Hz
Output power :	48V-0.4A

4. For more detailed features description, please refer to the manufacturer's specifications or User's Manual.

3.2 DESCRIPTION OF TEST MODES

For spurious emissions below 1000MHz, there are two test results were presented in the test report. One is EUT powered by AC Adapter and the other is EUT powered by POE.

For 802.11b: Eleven channels are provided to this EUT.

Channel	Frequency	Channel	Frequency
1	2412 MHz	7	2442 MHz
2	2417 MHz	8	2447 MHz
3	2422 MHz	9	2452 MHz
4	2427 MHz	10	2457 MHz
5	2432 MHz	11	2462 MHz
6	2437 MHz		

NOTE:

1. Below 1 GHz, the channel 1, 6, and 11 were pre-tested in chamber. The channel 11, worst case one, was chosen for final test.
2. Above 1 GHz, the channel 1, 6, and 11 were tested individually.
3. Transfer rate, 11Mbps with CCK technique and 6Mbps with OFDM technique, the worst case, were chosen for final test.

For 802.11a: Twelve channels are provided to this EUT for Normal mode.

Channel	Frequency	Channel	Frequency
1	5180 MHz	7	5300 MHz
2	5200 MHz	8	5320 MHz
3	5220 MHz	9	5745MHz
4	5240 MHz	10	5765MHz
5	5260 MHz	11	5785MHz
6	5280 MHz	12	5805MHz

Five channels are provided to this EUT for Turbo Mode.

Channel	Frequency	Channel	Frequency
1	5210 MHz	4	5760MHz
2	5250 MHz	5	5800MHz
3	5290 MHz		

NOTE:

1. The EUT was tested in both normal mode (channel bandwidth of approximately 30MHz) and turbo mode (channel bandwidth of approximately 60MHz).
2. “Normal Mode” allows data rates of up to 54Mbps. The device was, therefore, tested in Normal mode at the data rate that produced the highest output power for normal mode (6Mbps).
3. “Turbo Mode” allows data rates of up to 108Mbps. At data rates higher than 12Mbps the PA gain is reduced to improve signal fidelity. The device was, therefore, tested in turbo mode at the data rate that produced the highest output power for turbo mode (12Mbps).
4. Channel 1, 4, 5, 8, 9 and 12 are the closest frequencies to the band edge, were chosen for final test of Normal Mode.
5. Channel 1 ~ 5 were chosen for final test of turbo mode.

3.3 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is an IEEE802.11a+802.11g Dual Band Wireless Access Point According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

47 CFR Part 15, Subpart C. (15.247),
Subpart E (15.407). ANSI C63.4 : 1992

All tests have been performed and recorded as per the above standards.

NOTE: The EUT is also considered as a kind of computer peripheral, because the connection to computer is necessary for typical use. It has been verified to comply with the requirements of 47CFR Part 15, Subpart B, Class B (DoC). The test report has been issued separately.

3.4 DESCRIPTION OF SUPPORT UNITS

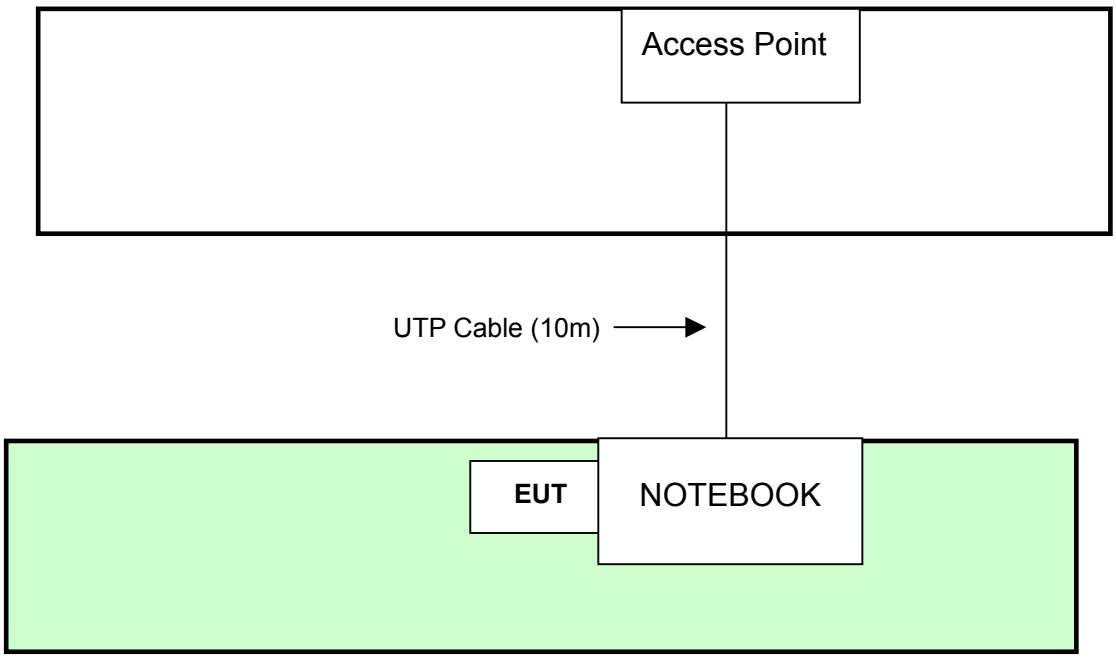
The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	NOTEBOOK	Dell	PP01L	TW-09C748-12800-193-C800	FCC DoC Approved
2	FAST ETHERNET PC CARD	D-Link	DFE-680TXD	RE1A044413	MQ4FE2K5MX

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	NA
2	NA

NOTE: All power cords of the above support units are non shielded (1.8m).

3.5 CONFIGURATION OF SYSTEM UNDER TEST



4.TEST TYPES AND RESULTS (FOR PART 802.11b & draft 802.11g)

4.1 CONDUCTED EMISSION MEASUREMENT

4.1.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

FREQUENCY OF EMISSION (MHz)	CONDUCTED LIMIT (dBμV)	
	Quasi-peak	Average
0.15-0.5 0.5-5 5-30	66 to 56 56 60	56 to 46 46 50

NOTE:
1. The lower limit shall apply at the transition frequencies.
2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50 MHz.
3. All emanations from a class A/B digital device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified above.

4.1.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED UNTIL
ROHDE & SCHWARZ Test Receiver	ESCS 30	838251/021	Jan. 20, 2004
ROHDE & SCHWARZ Artificial Mains Network (for EUT)	ESH3-Z5	100218	Dec. 18, 2003
ROHDE & SCHWARZ Artificial Mains Network (for peripherals)	ESH3-Z5	100219	Dec. 18, 2003
ROHDE & SCHWARZ Artificial Mains Network (for peripherals)	ESH3-Z5	100220	Dec. 18, 2003
ROHDE & SCHWARZ 4-wire ISN	ENY41	837032/016	Nov. 29, 2003
ROHDE & SCHWARZ 2-wire ISN	ENY22	837497/016	Nov. 29, 2003
Software	Cond-V2M3	NA	NA
RF cable (JYEBAO)	5D-FB	Cable-C10.01	May. 01, 2004
SUHNER Terminator (For ROHDE & SCHWARZ LISN)	65BNC-5001	E1-010770	Mar. 24, 2004
SUHNER Terminator (For ROHDE & SCHWARZ LISN)	65BNC-5001	E1-010773	Apr. 06, 2004

NOTE:
1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. "*": These equipment are used for conducted telecom port test only (if tested).
3. The test was performed in ADT Shielded Room No. 10.
4. The VCCI Site Registration No. is C-1312.

4.1.3 TEST PROCEDURES

a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.

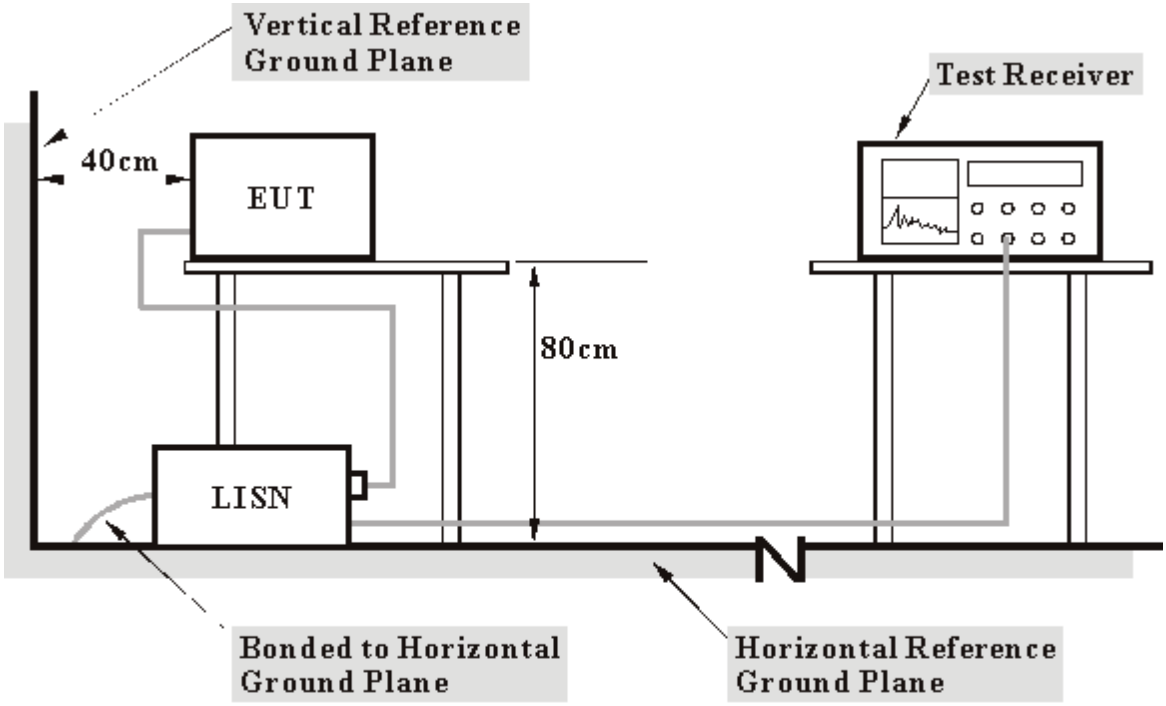
b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.

c. The frequency range from 150 kHz to 30 MHz was searched. Emission levels over 10dB under the prescribed limits could not be reported

4.1.4 DEVIATION FROM TEST STANDARD

No deviation

4.1.5 TEST SETUP



Note: 1. Support units were connected to second LISN.
2. Both of LISNs (AMN) 80 cm from EUT and at the least 80 cm from other units and other metal planes support units.

For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.

4.1.6 EUT OPERATING CONDITIONS

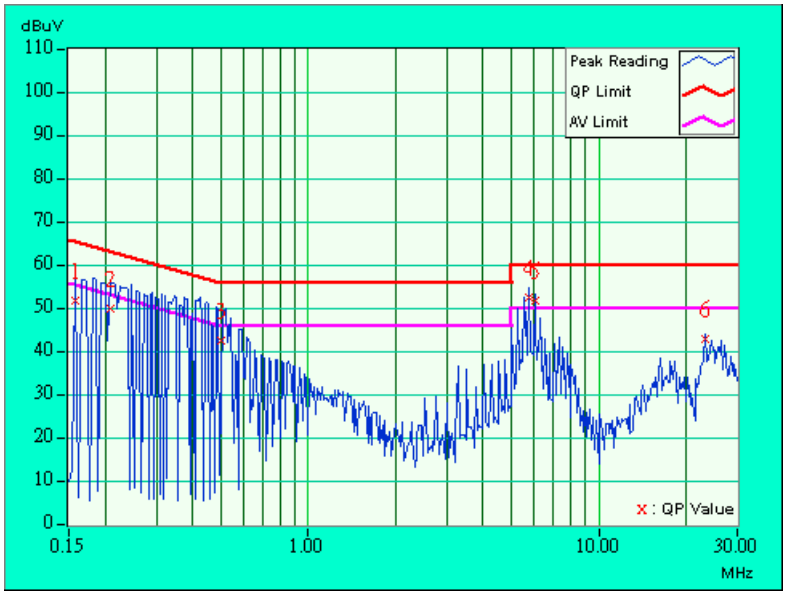
a. Placed the EUT on the testing table.
b. Prepared another computer system to act as a communication partner and placed it outside of testing area.
c. The communication partner run a test program to enable EUT under transmission/receiving condition continuously at specific channel frequency via an RJ 45 cable and wireless.
d. The communication partner sent data to EUT by command "PING".

4.1.7 TEST RESULTS

EUT	IEEE802.11a+802.11g Dual Band Wireless Access Point	**MODEL**	SL-5354AP1 Aries2
MODE	Channel 1, **EUT powered by AC Adapter**	**6dB BANDWIDTH**	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	**PHASE**	Line (L)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH, 991 hPa	**TESTED BY**: Jamison Chan	

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.158	0.06	50.97	-	51.03	-	65.58	55.58	-14.55	-
2	0.209	0.06	49.37	-	49.43	-	63.26	53.26	-13.83	-
3	0.500	0.08	41.62	-	41.70	-	56.00	46.00	-14.31	-
4	5.785	0.28	51.88	45.85	52.16	46.13	60.00	50.00	-7.84	-3.87
5	6.039	0.29	51.06	47.69	51.35	47.98	60.00	50.00	-8.65	-2.02
6	23.129	0.80	42.22	-	43.02	-	60.00	50.00	-16.98	-

REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.



EUT	IEEE802.11a+802.11g Dual Band Wireless Access Point	**MODEL**	SL-5354AP1 Aries2
MODE	Channel 1, **EUT powered by AC Adapter**	**6dB BANDWIDTH**	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	**PHASE**	Neutral (N)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH, 991 hPa	**TESTED BY**: Jamison Chan	

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.158	0.05	51.14	-	51.19	-	65.58	55.58	-14.39	-
2	0.205	0.05	49.41	-	49.46	-	63.42	53.42	-13.96	-
3	0.373	0.05	45.29	-	45.34	-	58.44	48.44	-13.10	-
4	5.535	0.25	48.88	-	49.13	-	60.00	50.00	-10.87	-
5	5.781	0.26	51.62	45.90	51.88	46.16	60.00	50.00	-8.12	-3.84
6	16.230	0.49	39.06	-	39.55	-	60.00	50.00	-20.45	-

REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
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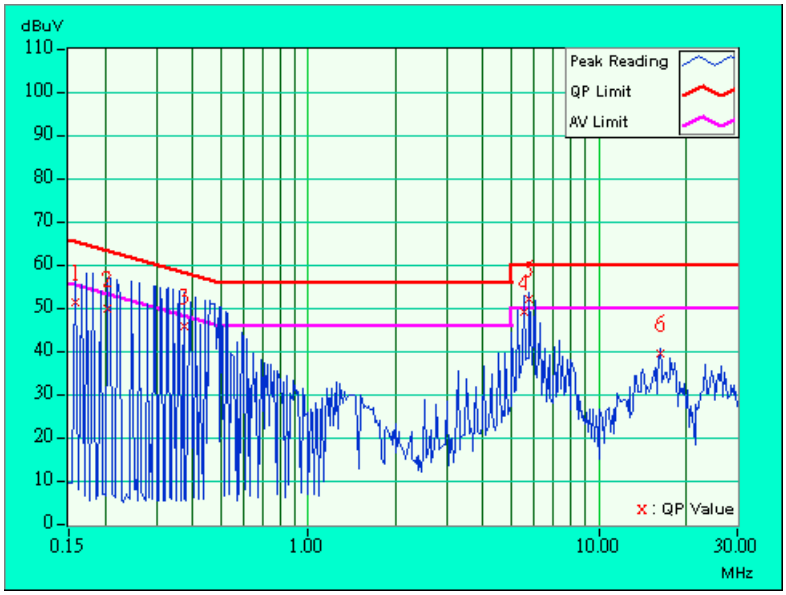
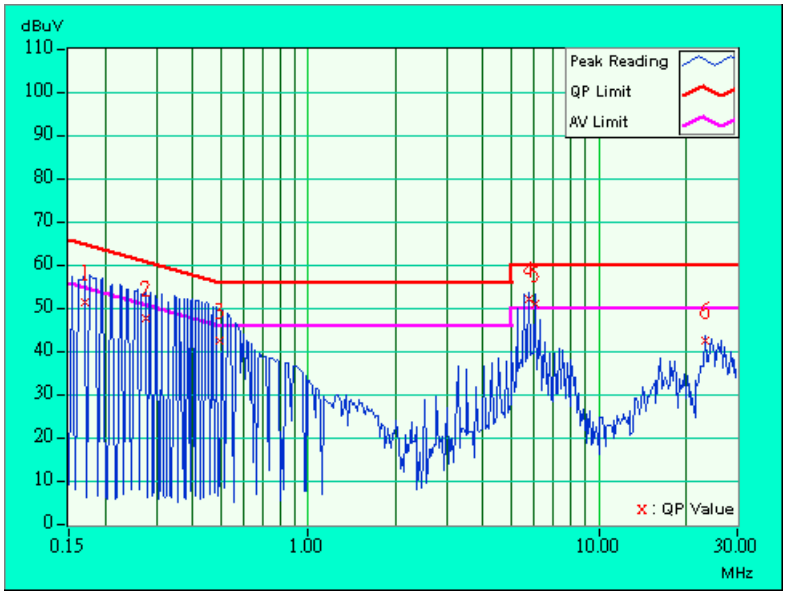


EUT	IEEE802.11a+802.11g Dual Band Wireless Access Point	**MODEL**	SL-5354AP1 Aries2
MODE	Channel 6, **EUT powered by AC Adapter**	**6dB BANDWIDTH**	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	**PHASE**	Line (L)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH, 991 hPa	**TESTED BY**: Jamison Chan	

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.170	0.06	50.54	-	50.60	-	64.98	54.98	-14.39	-
2	0.275	0.06	46.88	-	46.94	-	60.97	50.97	-14.03	-
3	0.498	0.08	41.62	-	41.70	-	56.04	46.04	-14.34	-
4	5.785	0.28	51.32	45.28	51.60	45.56	60.00	50.00	-8.40	-4.44
5	6.039	0.29	50.37	47.09	50.66	47.38	60.00	50.00	-9.34	-2.62
6	23.129	0.80	41.93	-	42.73	-	60.00	50.00	-17.27	-

REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.



EUT	IEEE802.11a+802.11g Dual Band Wireless Access Point	**MODEL**	SL-5354AP1 Aries2
MODE	Channel 6, **EUT powered by AC Adapter**	**6dB BANDWIDTH**	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	**PHASE**	Neutral (N)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH, 991 hPa	**TESTED BY**: Jamison Chan	

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.162	0.05	51.18	-	51.23	-	65.38	55.38	-14.15	-
2	0.220	0.05	48.94	-	48.99	-	62.81	52.81	-13.82	-
3	0.502	0.07	41.68	-	41.75	-	56.00	46.00	-14.25	-
4	5.785	0.26	52.55	45.85	52.81	46.11	60.00	50.00	-7.19	-3.89
5	6.039	0.27	51.18	47.86	51.45	48.13	60.00	50.00	-8.55	-1.87
6	16.230	0.49	39.12	-	39.61	-	60.00	50.00	-20.39	-

REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
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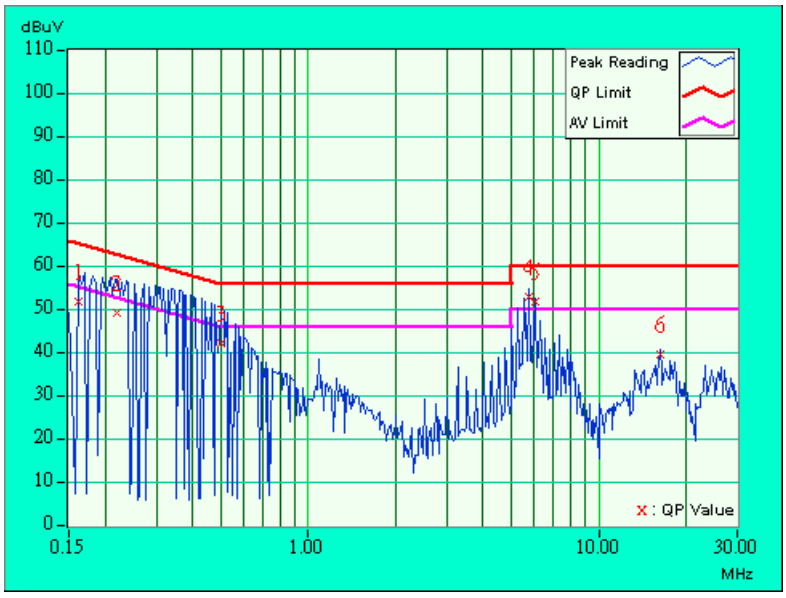

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MODE	Channel 11, **EUT powered by AC Adapter**	**6dB BANDWIDTH**	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	**PHASE**	Line (L)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH, 991 hPa	**TESTED BY**: Jamison Chan	

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.177	0.06	50.24	-	50.30	-	64.61	54.61	-14.31	-
2	0.267	0.06	47.07	-	47.13	-	61.20	51.20	-14.07	-
3	0.505	0.08	41.15	-	41.23	-	56.00	46.00	-14.77	-
4	5.535	0.27	49.20	-	49.47	-	60.00	50.00	-10.53	-
5	5.781	0.28	51.72	45.00	52.00	45.28	60.00	50.00	-8.00	-4.72
6	23.129	0.80	42.20	-	43.00	-	60.00	50.00	-17.00	-

REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
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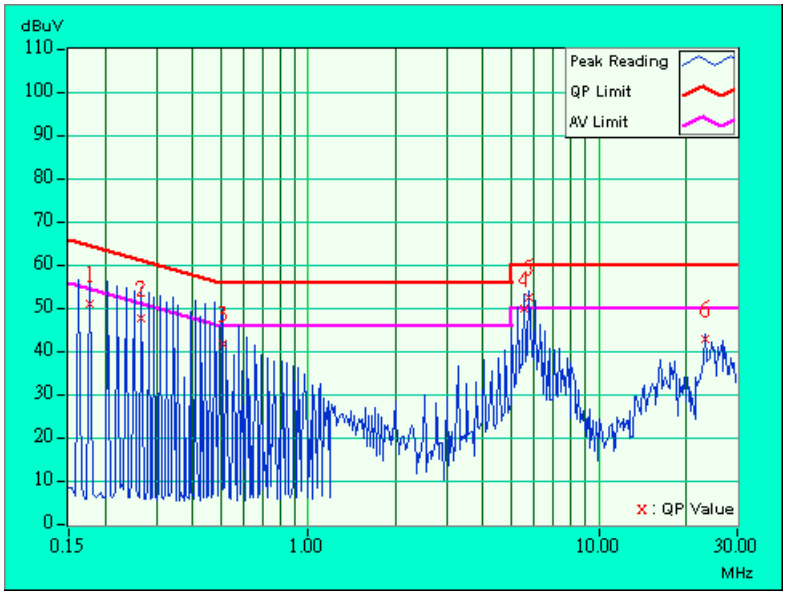

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MODE	Channel 11, **EUT powered by AC Adapter**	**6dB BANDWIDTH**	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	**PHASE**	Neutral (N)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH, 991 hPa	**TESTED BY**: Jamison Chan	

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.150	0.05	51.27	-	51.32	-	66.00	56.00	-14.68	-
2	0.213	0.05	49.17	-	49.22	-	63.11	53.11	-13.89	-
3	0.501	0.07	41.60	-	41.67	-	56.00	46.00	-14.33	-
4	5.785	0.26	51.78	45.58	52.04	45.84	60.00	50.00	-7.96	-4.16
5	6.039	0.27	51.12	47.94	51.39	48.21	60.00	50.00	-8.61	-1.79
6	16.168	0.49	38.14	-	38.63	-	60.00	50.00	-21.37	-

REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
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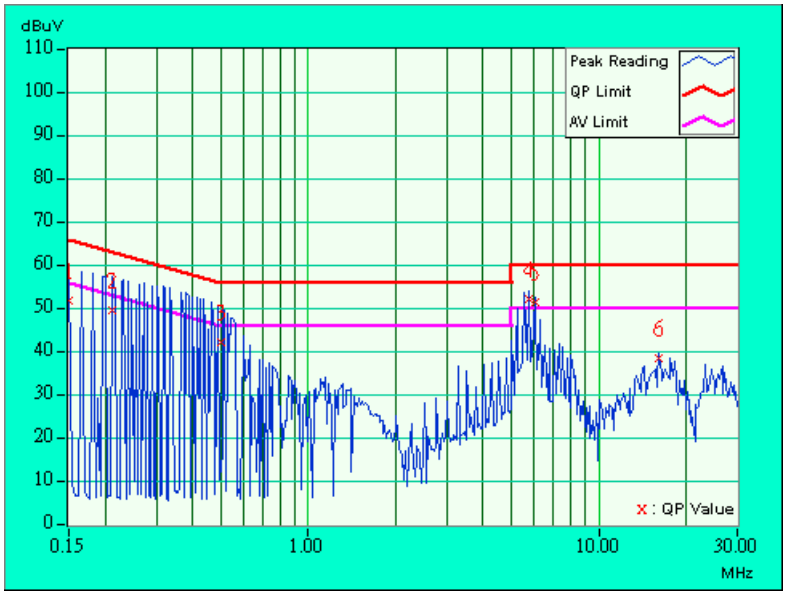
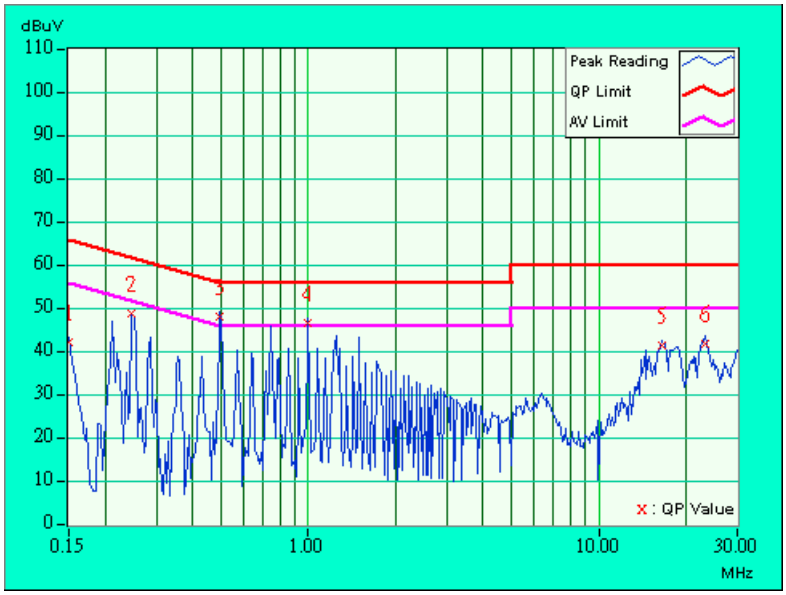


EUT	IEEE802.11a+802.11g Dual Band Wireless Access Point	**MODEL**	SL-5354AP1 Aries2
MODE	Channel 1, **EUT powered by POE**	**6dB BANDWIDTH**	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	**PHASE**	Line (L)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH, 991 hPa	**TESTED BY**: Jamison Chan	

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.150	0.05	41.36	-	41.41	-	66.00	56.00	-24.59	-
2	0.248	0.06	47.94	-	48.00	-	61.84	51.84	-13.84	-
3	0.498	0.08	47.42	43.58	47.50	43.66	56.04	46.04	-8.54	-2.38
4	0.998	0.16	45.83	-	45.99	-	56.00	46.00	-10.01	-
5	16.449	0.58	40.69	-	41.27	-	60.00	50.00	-18.73	-
6	23.176	0.80	41.16	-	41.96	-	60.00	50.00	-18.04	-

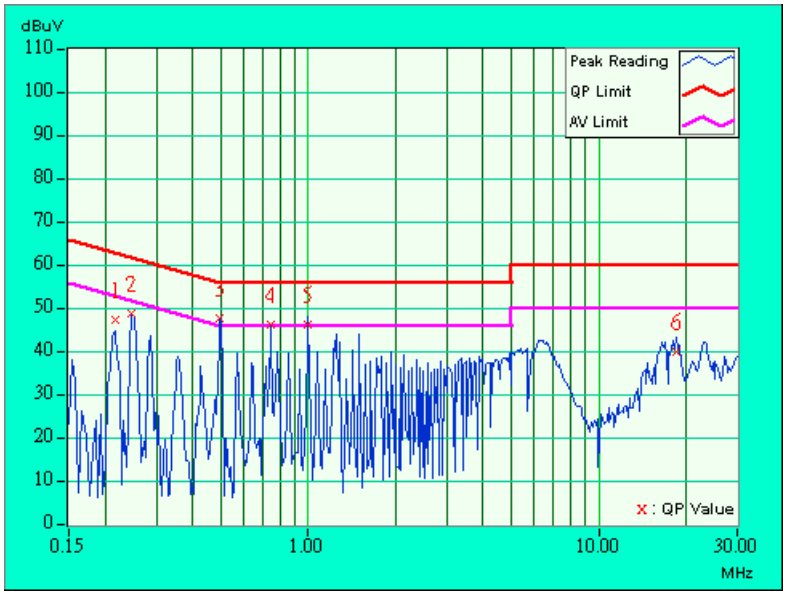
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.



EUT	IEEE802.11a+802.11g Dual Band Wireless Access Point	**MODEL**	SL-5354AP1 Aries2
MODE	Channel 1, **EUT powered by POE**	**6dB BANDWIDTH**	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	**PHASE**	Neutral (N)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH, 991 hPa	**TESTED BY**: Jamison Chan	

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.216	0.05	46.96	-	47.01	-	62.96	52.96	-15.95	-
2	0.248	0.05	48.27	-	48.32	-	61.84	51.84	-13.52	-
3	**0.498**	**0.07**	**47.42**	**44.43**	**47.49**	**44.50**	**56.04**	**46.04**	**-8.55**	**-1.54**
4	0.748	0.11	45.79	-	45.90	-	56.00	46.00	-10.10	-
5	0.998	0.16	45.95	43.93	46.11	44.09	56.00	46.00	-9.89	-1.91
6	18.441	0.50	39.59	-	40.09	-	60.00	50.00	-19.91	-

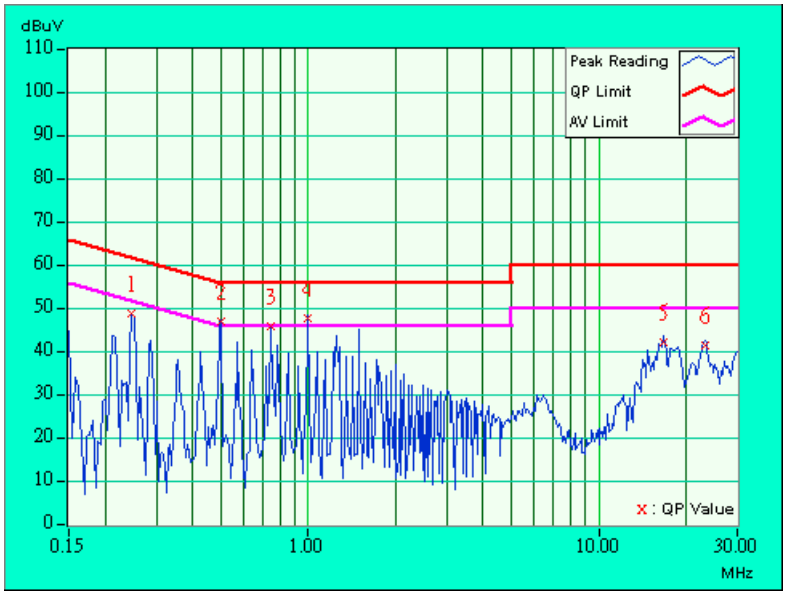
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.



EUT	IEEE802.11a+802.11g Dual Band Wireless Access Point	**MODEL**	SL-5354AP1 Aries2
MODE	Channel 6, **EUT powered by POE**	**6dB BANDWIDTH**	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	**PHASE**	Line (L)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH, 991 hPa	**TESTED BY**: Jamison Chan	

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.248	0.06	48.04	-	48.10	-	61.84	51.84	-13.74	-
2	0.502	0.08	46.13	41.81	46.21	41.89	56.00	46.00	-9.79	-4.11
3	0.748	0.12	45.15	-	45.27	-	56.00	46.00	-10.73	-
4	0.998	0.16	46.89	43.99	47.05	44.15	56.00	46.00	-8.95	-1.85
5	16.699	0.59	41.53	-	42.12	-	60.00	50.00	-17.88	-
6	23.176	0.80	40.79	-	41.59	-	60.00	50.00	-18.41	-

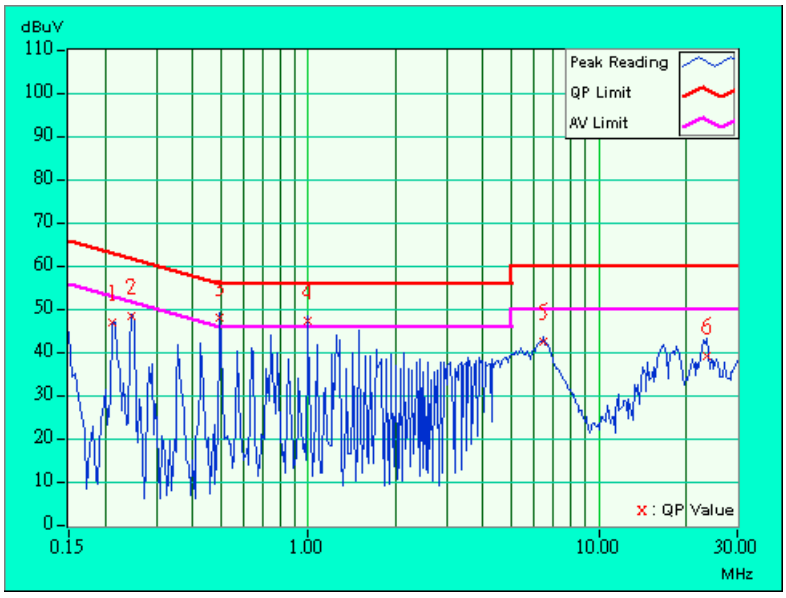
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.



EUT	IEEE802.11a+802.11g Dual Band Wireless Access Point	**MODEL**	SL-5354AP1 Aries2
MODE	Channel 6, **EUT powered by POE**	**6dB BANDWIDTH**	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	**PHASE**	Neutral (N)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH, 991 hPa	**TESTED BY**: Jamison Chan	

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.213	0.05	46.26	-	46.31	-	63.11	53.11	-16.80	-
2	0.248	0.05	47.96	-	48.01	-	61.84	51.84	-13.83	-
3	0.498	0.07	47.54	43.87	47.61	43.94	56.04	46.04	-8.43	-2.10
4	0.998	0.16	46.76	44.27	46.92	44.43	56.00	46.00	-9.08	-1.57
5	6.426	0.28	41.75	-	42.03	-	60.00	50.00	-17.97	-
6	23.430	0.66	38.58	-	39.24	-	60.00	50.00	-20.76	-

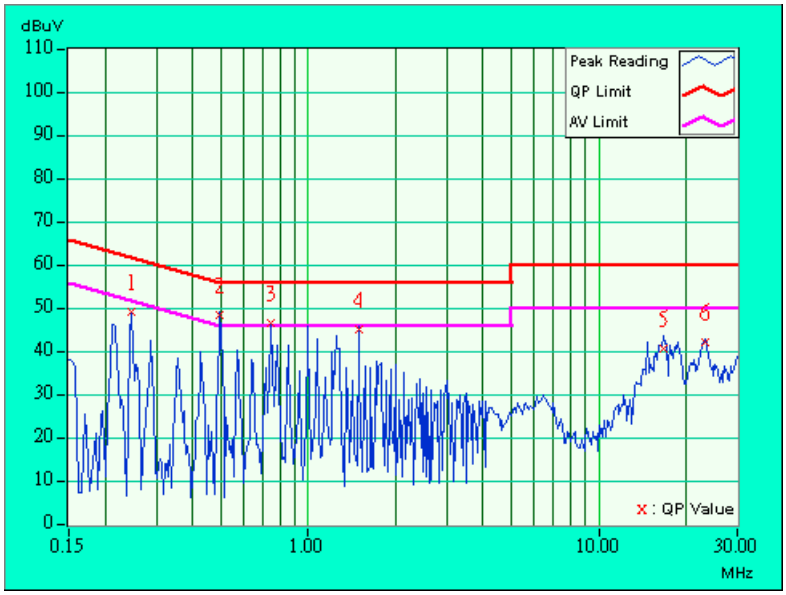
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.



EUT	IEEE802.11a+802.11g Dual Band Wireless Access Point	**MODEL**	SL-5354AP1 Aries2
MODE	Channel 11, **EUT powered by POE**	**6dB BANDWIDTH**	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	**PHASE**	Line (L)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH, 991 hPa	**TESTED BY**: Jamison Chan	

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.248	0.06	48.34	-	48.40	-	61.84	51.84	-13.44	-
2	0.498	0.08	47.64	44.30	47.72	44.38	56.04	46.04	-8.32	-1.66
3	0.748	0.12	45.87	-	45.99	-	56.00	46.00	-10.01	-
4	1.496	0.17	44.23	-	44.40	-	56.00	46.00	-11.60	-
5	16.695	0.59	39.85	-	40.44	-	60.00	50.00	-19.56	-
6	23.176	0.80	41.58	-	42.38	-	60.00	50.00	-17.62	-

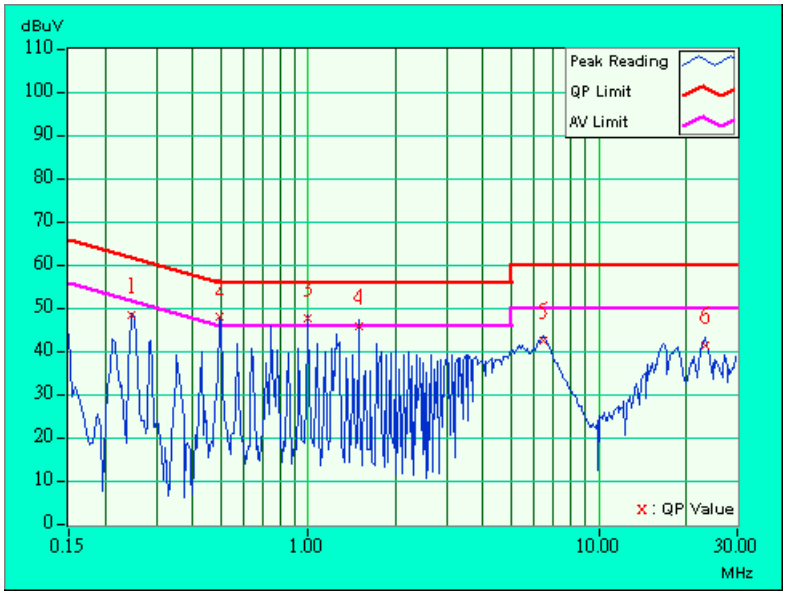
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.



EUT	IEEE802.11a+802.11g Dual Band Wireless Access Point	**MODEL**	SL-5354AP1 Aries2
MODE	Channel 11, **EUT powered by POE**	**6dB BANDWIDTH**	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	**PHASE**	Neutral (N)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH, 991 hPa	**TESTED BY**: Jamison Chan	

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.248	0.05	47.96	-	48.01	-	61.84	51.84	-13.83	-
2	0.498	0.07	47.68	43.76	47.75	43.83	56.04	46.04	-8.29	-2.21
3	0.998	0.16	47.03	44.21	47.19	44.37	56.00	46.00	-8.81	-1.63
4	1.496	0.17	45.37	-	45.54	-	56.00	46.00	-10.46	-
5	6.414	0.28	41.91	-	42.19	-	60.00	50.00	-17.81	-
6	23.176	0.65	40.75	-	41.40	-	60.00	50.00	-18.60	-

REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.



4.2 RADIATED EMISSION MEASUREMENT

4.2.1 LIMITS OF RADIATED EMISSION MEASUREMENT

Emissions radiated outside of the specified bands, shall be according to the general radiated limits in 15.209 as following:

Frequencies (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

NOTE:

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
3. As shown in 15.35(b), for frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.

4.2.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED UNTIL
* HP Spectrum Analyzer	8590L	3544A01176	Jun. 10, 2004
* HP Preamplifier	8447D	2944A08485	May. 01, 2004
* HP Preamplifier	8449B	3008A01201	Dec. 01, 2003
* HP Preamplifier	8449B	3008A01292	Aug. 13, 2004
ROHDE & SCHWARZ TEST RECEIVER	ESI7	838496/016	Feb. 23, 2004
* ROHDE & SCHWARZ TEST RECEIVER	ESMI	839013/007 839379/002	Feb. 13, 2004
SCHAFFNER Tunable Dipole Antenna SCHWARZBECK Tunable Dipole Antenna	VHBA 9123 UHA 9105	459 977	Nov. 22, 2003
* CHASE BILOG Antenna	CBL6112A	2221	July 26, 2004
* SCHWARZBECK Horn Antenna	BBHA9120-D1	D130	Jun 30, 2004
* EMCO Horn Antenna	3115	9312-4192	Mar. 23, 2004
* ADT. Ferrite Clamp	FC18	910043	Oct. 24, 2003
* ADT. Ferrite Clamp	FC18	910044	Oct. 24, 2003
* ADT. Ferrite Clamp	FC18	910045	Oct. 24, 2003
* EMCO Turn Table	1060	1115	NA
* CHANCE Tower	CM-AT40	CM-A010	NA
* Software	ADT_Radiated_V5.14	NA	NA
* ANRITSU RF Switches	MP59B	M35046	Jan. 05, 2004
* TIMES RF cable	LMR-600	CABLE-ST5-01	Jan. 05, 2004

NOTE: 1.The calibration interval of the above test instruments is 12 months. And the calibrations are traceable to NML/ROC and NIST/USA.

2. "*" = These equipment are used for the final measurement.
3. The horn antenna and HP preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.
4. The test was performed in ADT Open Site No. 5.
5. The VCCI Site Registration No. is R-1039.

4.2.3 TEST PROCEDURES

a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 10 meter open area test site. The table was rotated 360 degrees to determine the position of the highest radiation.

b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

c. The antenna is a broadband antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

f. If the emission level of the EUT in peak mode was 10 dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10 dB margin would be re-tested one by one using the quasi-peak method or average method as specified and then reported in Data sheet peak mode and QP mode.

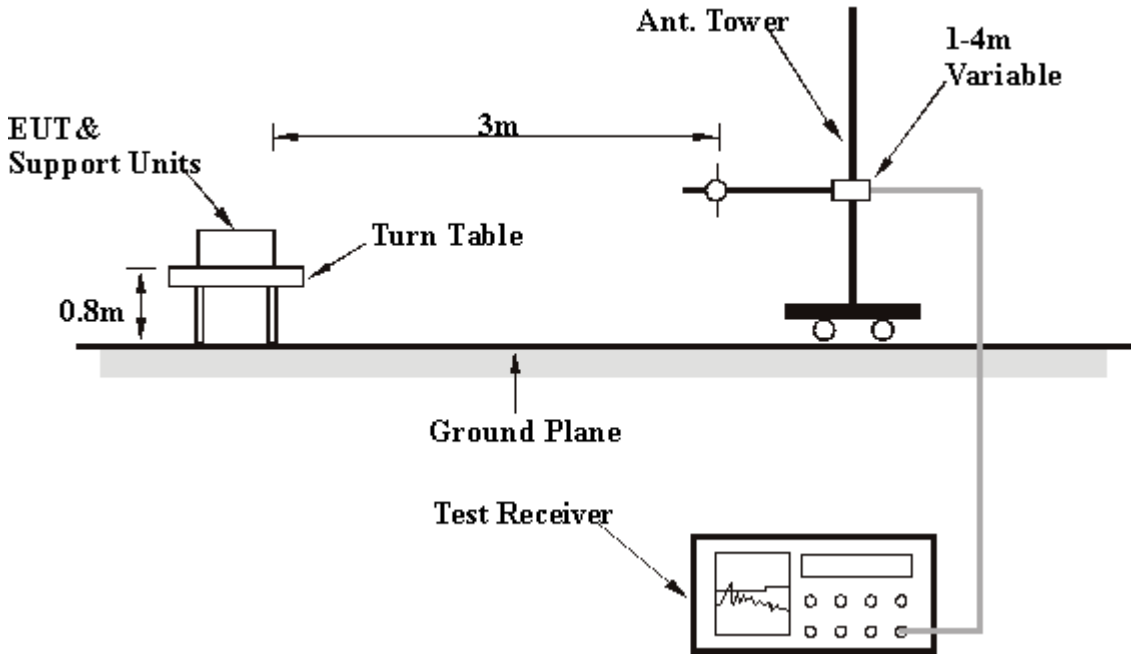
NOTE:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection at frequency below 1GHz.
2. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1 MHz for Peak detection (PK) at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 300 Hz for Average detection (AV) at frequency above 1GHz.

4.2.4 DEVIATION FROM TEST STANDARD

No deviation

4.2.5 TEST SETUP



For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.

4.2.6 EUT OPERATING CONDITIONS

Same as 4.1.6

4.2.7 TEST RESULTS

EUT	IEEE802.11a+802.11g Dual Band Wireless Access Point	**MODEL**	SL-5354AP1 Aries2
MODE	Channel 11, **EUT powered by AC Adapter**	**FREQUENCY RANGE**	Below 1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	**DETECTOR FUNCTION**	Quasi-Peak
ENVIRONMENTAL CONDITIONS	30deg. C, 60%RH, 991 hPa	**TESTED BY**	Hardaway Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	160.00	35.3 QP	43.50	-8.20	1.58 H	8	24.60	10.70
2	175.00	32.1 QP	43.50	-11.40	1.30 H	136	21.60	10.50
3	200.02	30.9 QP	43.50	-12.60	1.07 H	214	20.10	10.80
4	**220.00**	**45.1 QP**	**46.00**	**-0.90**	**1.72 H**	**111**	**33.20**	**11.90**
5	225.01	36.4 QP	46.00	-9.60	1.47 H	83	24.20	12.20
6	240.02	41.0 QP	46.00	-5.00	1.25 H	15	28.00	13.00
7	250.05	42.9 QP	46.00	-3.10	1.69 H	217	29.30	13.60
8	440.01	41.4 QP	46.00	-4.60	1.06 H	230	22.60	18.70
9	600.02	42.1 QP	46.00	-3.90	1.40 H	172	19.80	22.30
10	640.02	43.9 QP	46.00	-2.10	1.60 H	1	21.50	22.40
11	680.03	42.7 QP	46.00	-3.30	1.35 H	271	20.20	22.60
12	720.03	42.0 QP	46.00	-4.00	1.38 H	71	18.90	23.20
13	800.03	40.0 QP	46.00	-6.00	1.54 H	94	16.30	23.70

REMARKS:
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. The limit value is defined as per 15.247

EUT	IEEE802.11a+802.11g Dual Band Wireless Access Point	**MODEL**	SL-5354AP1 Aries2
MODE	Channel 11, **EUT powered by AC Adapter**	**FREQUENCY RANGE**	Below 1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	**DETECTOR FUNCTION**	Quasi-Peak
ENVIRONMENTAL CONDITIONS	30deg. C, 60%RH, 991 hPa	**TESTED BY**	Hardaway Lee

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	160.00	36.6 QP	43.50	-6.90	1.02 V	0	26.00	10.70
2	175.00	33.7 QP	43.50	-9.80	1.57 V	303	23.20	10.50
3	200.02	34.8 QP	43.50	-8.70	1.10 V	189	24.00	10.80
4	220.00	43.3 QP	46.00	-2.70	1.05 V	255	31.40	11.90
5	225.01	35.5 QP	46.00	-10.50	1.34 V	127	23.30	12.20
6	240.01	41.0 QP	46.00	-5.00	1.01 V	1	27.90	13.00
7	250.01	39.1 QP	46.00	-6.90	1.34 V	90	25.50	13.60
8	440.01	39.9 QP	46.00	-6.10	1.39 V	185	21.20	18.70
9	520.02	40.8 QP	46.00	-5.20	1.08 V	186	20.40	20.40
10	600.00	44.2 QP	46.00	-1.80	1.00 V	203	21.90	22.30
11	640.02	41.6 QP	46.00	-4.40	1.84 V	1	19.20	22.40
12	680.02	40.7 QP	46.00	-5.30	1.59 V	1	18.10	22.60
13	720.02	37.3 QP	46.00	-8.70	1.00 V	101	14.20	23.20
14	800.03	40.4 QP	46.00	-5.60	1.00 V	92	16.70	23.70

REMARKS:
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. The limit value is defined as per 15.247

EUT	IEEE802.11a+802.11g Dual Band Wireless Access Point	**MODEL**	SL-5354AP1 Aries2
MODE	Channel 11, **EUT powered by POE**	**FREQUENCY RANGE**	Below 1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	**DETECTOR FUNCTION**	Quasi-Peak
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH, 991 hPa	**TESTED BY**	Gary Chang

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	60.23	32.2 QP	40.00	-7.80	1.97 H	272	23.60	8.60
2	111.61	31.6 QP	43.50	-11.90	1.16 H	230	19.10	12.40
3	125.00	25.5 QP	43.50	-18.00	1.10 H	204	12.70	12.80
4	139.24	29.6 QP	43.50	-13.90	1.90 H	55	17.50	12.10
5	148.24	28.3 QP	43.50	-15.20	1.90 H	116	16.80	11.50
6	160.01	34.4 QP	43.50	-9.10	1.16 H	9	23.70	10.70
7	200.02	30.6 QP	43.50	-12.90	1.41 H	133	19.90	10.80
8	220.00	41.1 QP	46.00	-4.90	1.42 H	278	29.20	11.90
9	225.02	36.0 QP	46.00	-10.00	1.67 H	142	23.80	12.20
10	240.03	41.3 QP	46.00	-4.70	1.22 H	189	28.30	13.00
11	250.00	43.3 QP	46.00	-2.70	1.24 H	306	29.70	13.60
12	275.07	34.5 QP	46.00	-11.50	1.36 H	242	19.20	15.30
13	280.07	35.9 QP	46.00	-10.10	1.56 H	316	20.50	15.30
14	320.01	42.1 QP	46.00	-3.90	1.37 H	1	26.10	16.00
15	520.03	41.5 QP	46.00	-4.50	1.00 H	59	21.00	20.40
16	550.03	36.2 QP	46.00	-9.80	1.13 H	314	15.40	20.80
17	640.03	41.3 QP	46.00	-4.70	1.00 H	124	18.90	22.40
18	720.03	40.3 QP	46.00	-5.70	1.19 H	256	17.20	23.20
19	800.03	41.7 QP	46.00	-4.30	1.24 H	171	18.00	23.70

REMARKS:
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. The limit value is defined as per 15.247

EUT	IEEE802.11a+802.11g Dual Band Wireless Access Point	**MODEL**	SL-5354AP1 Aries2
MODE	Channel 11, **EUT powered by POE**	**FREQUENCY RANGE**	Below 1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	**DETECTOR FUNCTION**	Quasi-Peak
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH, 991 hPa	**TESTED BY**	Gary Chang

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	43.81	37.9 QP	40.00	-2.10	1.06 V	141	25.80	12.10
2	60.24	38.6 QP	40.00	-1.40	1.44 V	141	30.00	8.60
3	111.60	39.5 QP	43.50	-4.00	1.30 V	53	27.10	12.40
4	125.05	34.0 QP	43.50	-9.50	1.09 V	247	21.20	12.80
5	139.35	36.9 QP	43.50	-6.60	1.32 V	143	24.90	12.10
6	148.20	35.4 QP	43.50	-8.10	1.29 V	161	23.90	11.50
7	200.02	35.3 QP	43.50	-8.20	1.21 V	329	24.60	10.80
8	220.01	41.1 QP	46.00	-4.90	1.08 V	325	29.20	11.90
9	225.01	32.2 QP	46.00	-13.80	1.37 V	85	20.00	12.20
10	240.00	35.6 QP	46.00	-10.40	1.27 V	335	22.60	13.00
11	250.01	40.6 QP	46.00	-5.40	1.46 V	32	26.90	13.60
12	275.01	34.5 QP	46.00	-11.50	1.40 V	36	19.30	15.30
13	320.02	40.1 QP	46.00	-5.90	2.13 V	8	24.20	16.00
14	400.01	33.0 QP	46.00	-13.00	1.14 V	259	14.70	18.20
15	520.03	41.4 QP	46.00	-4.60	1.24 V	300	21.00	20.40
16	550.03	37.7 QP	46.00	-8.30	1.15 V	80	16.90	20.80
17	600.03	43.7 QP	46.00	-2.30	1.01 V	0	21.40	22.30
18	640.03	43.5 QP	46.00	-2.50	1.01 V	242	21.10	22.40
19	660.03	35.4 QP	46.00	-10.60	1.43 V	259	12.90	22.50
20	680.03	41.9 QP	46.00	-4.10	1.02 V	221	19.30	22.60
21	720.02	35.9 QP	46.00	-10.10	1.53 V	94	12.70	23.20
22	800.02	42.7 QP	46.00	-3.30	1.42 V	285	19.00	23.70
23	880.02	38.0 QP	46.00	-8.00	1.21 V	311	13.70	24.40

REMARKS:
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. The limit value is defined as per 15.247

FOR CCK

EUT	IEEE802.11a+802.11g Dual Band Wireless Access Point	**MODEL**	SL-5354AP1 Aries2
MODE	Channel 1	**FREQUENCY RANGE**	Above 1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	30deg. C, 60%RH, 991 hPa	**TESTED BY**	Hardaway Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2412.00	102.2 PK			1.40 H	148	72.50	29.70
1	*2412.00	94.8 AV			1.40 H	148	65.10	29.70
2	4824.00	48.4 PK	74.00	-25.60	1.68 H	129	13.20	35.30

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	56.3 PK	74.00	-17.70	1.51 V	182	26.70	29.60
1	2390.00	48.3 AV	54.00	-5.70	1.51 V	182	18.70	29.60
2	*2412.00	112.4 PK			1.51 V	182	82.80	29.70
2	*2412.00	104.4 AV			1.51 V	182	74.80	29.70
3	4824.00	52.0 PK	74.00	-22.00	1.25 V	48	16.70	35.30
3	4824.00	37.8 AV	54.00	-16.20	1.25 V	48	2.60	35.30
4	9648.00	56.4 PK	74.00	-17.60	1.40 V	148	12.90	43.60
4	9648.00	44.1 AV	54.00	-9.90	1.40 V	148	0.60	43.60

REMARKS: 1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * " : Fundamental frequency

EUT	IEEE802.11a+802.11g Dual Band Wireless Access Point	**MODEL**	SL-5354AP1 Aries2
MODE	Channel 6	**FREQUENCY RANGE**	Above 1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	30deg. C, 60%RH, 991 hPa	**TESTED BY**	Hardaway Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2437.00	104.5 PK			1.18 H	215	74.70	29.70
1	*2437.00	97.1 AV			1.18 H	215	67.30	29.70
2	4874.00	51.0 PK	74.00	-23.00	2.03 H	154	15.50	35.50
2	4874.00	36.9 AV	54.00	-17.10	2.03 H	154	1.40	35.50

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2437.00	109.9 PK			2.11 V	123	80.20	29.70
1	*2437.00	102.1 AV			2.11 V	123	72.30	29.70
2	4874.00	52.9 PK	74.00	-21.10	1.08 V	69	17.40	35.50
2	4874.00	38.4 AV	54.00	-15.60	1.08 V	69	2.90	35.50
3	9748.00	55.9 PK	74.00	-18.10	1.71 V	207	12.20	43.70
3	9748.00	44.7 AV	54.00	-9.30	1.71 V	207	1.00	43.70

REMARKS: 1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * " : Fundamental frequency

EUT	IEEE802.11a+802.11g Dual Band Wireless Access Point	**MODEL**	SL-5354AP1 Aries2
MODE	Channel 11	**FREQUENCY RANGE**	Above 1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	30deg. C, 60%RH, 991 hPa	**TESTED BY**	Hardaway Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	100.9 PK			1.46 H	125	71.10	29.80
1	*2462.00	93.6 AV			1.46 H	125	63.70	29.80
2	4924.00	52.4 PK	74.00	-21.60	1.53 H	125	16.70	35.70
2	4924.00	36.2 AV	54.00	-17.80	1.53 H	125	0.50	35.70

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	109.8 PK			2.05 V	42	80.00	29.80
1	*2462.00	101.5 AV			2.05 V	42	71.70	29.80
2	2483.50	57.1 PK	74.00	-16.90	2.05 V	42	27.20	29.90
2	2483.50	46.2 AV	54.00	-7.80	2.05 V	42	16.30	29.90
3	4924.00	51.8 PK	74.00	-22.20	1.64 V	25	16.10	35.70
4	9847.00	54.6 PK	74.00	-19.40	1.22 V	142	10.80	43.80
4	9847.00	43.8 AV	54.00	-10.20	1.22 V	142	0.10	43.80

REMARKS: 1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * " : Fundamental frequency

FOR OFDM

EUT	IEEE802.11a+802.11g Dual Band Wireless Access Point	**MODEL**	SL-5354AP1 Aries2
MODE	Channel 1	**FREQUENCY RANGE**	Above 1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	30deg. C, 60%RH, 991 hPa	**TESTED BY**	Hardaway Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2412.00	95.1 PK			1.58 H	165	65.40	29.70
1	*2412.00	86.2 AV			1.58 H	165	56.50	29.70
2	4824.00	45.3 PK	74.00	-28.70	1.17 H	133	10.00	35.30

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	60.1 PK	74.00	-13.90	1.59 V	33	30.50	29.60
1	2390.00	49.9 AV	54.00	-4.10	1.59 V	33	20.30	29.60
2	*2412.00	108.8 PK			1.59 V	33	79.10	29.70
2	*2412.00	98.6 AV			1.59 V	33	68.90	29.70
3	4824.00	46.4 PK	74.00	-27.60	1.60 V	133	11.20	35.30

REMARKS: 1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * " : Fundamental frequency

EUT	IEEE802.11a+802.11g Dual Band Wireless Access Point	**MODEL**	SL-5354AP1 Aries2
MODE	Channel 6	**FREQUENCY RANGE**	Above 1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	30deg. C, 60%RH, 991 hPa	**TESTED BY**	Hardaway Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2437.00	94.6 PK			1.24 H	44	64.90	29.70
1	*2437.00	85.9 AV			1.24 H	44	56.20	29.70
2	4874.00	45.6 PK	74.00	-28.40	1.64 H	239	10.10	35.50

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2437.00	107.6 PK			1.15 V	233	77.90	29.70
1	*2437.00	96.2 AV			1.15 V	233	66.50	29.70
2	4874.00	46.9 PK	74.00	-27.10	1.64 V	39	11.40	35.50

REMARKS: 1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * " : Fundamental frequency

EUT	IEEE802.11a+802.11g Dual Band Wireless Access Point	**MODEL**	SL-5354AP1 Aries2
MODE	Channel 11	**FREQUENCY RANGE**	Above 1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	30deg. C, 60%RH, 991 hPa	**TESTED BY**	Hardaway Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	93.5 PK			1.87 H	33	63.70	29.80
1	*2462.00	85.6 AV			1.87 H	33	55.80	29.80
2	4924.00	45.3 PK	74.00	-28.70	1.16 H	124	9.60	35.70

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	106.3 PK			1.73 V	165	76.50	29.80
1	*2462.00	95.0 AV			1.73 V	165	65.20	29.80
2	4924.00	47.2 PK	74.00	-26.80	1.16 V	24	11.50	35.70

REMARKS: 1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * " : Fundamental frequency

4.3 6dB BANDWIDTH MEASUREMENT

4.3.1 LIMITS OF 6dB BANDWIDTH MEASUREMENT

The minimum of 6dB Bandwidth Measurement is 0.5 MHz.

4.3.2 TEST INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
SPECTRUM ANALYZER	FSEK30	100049	Aug. 12, 2004

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

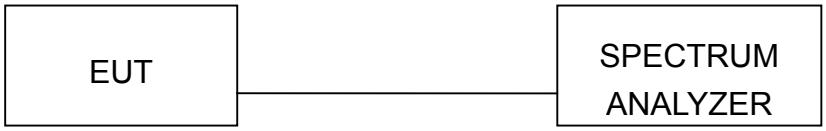
4.3.3 TEST PROCEDURE

The transmitter output was connected to the spectrum analyzer through an attenuator. The bandwidth of the fundamental frequency was measured by spectrum analyzer with 100kHz RBW and 100kHz VBW. The 6dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 6 dB.

4.3.4 DEVIATION FROM TEST STANDARD

No deviation

4.3.5 TEST SETUP



4.3.6 EUT OPERATING CONDITIONS

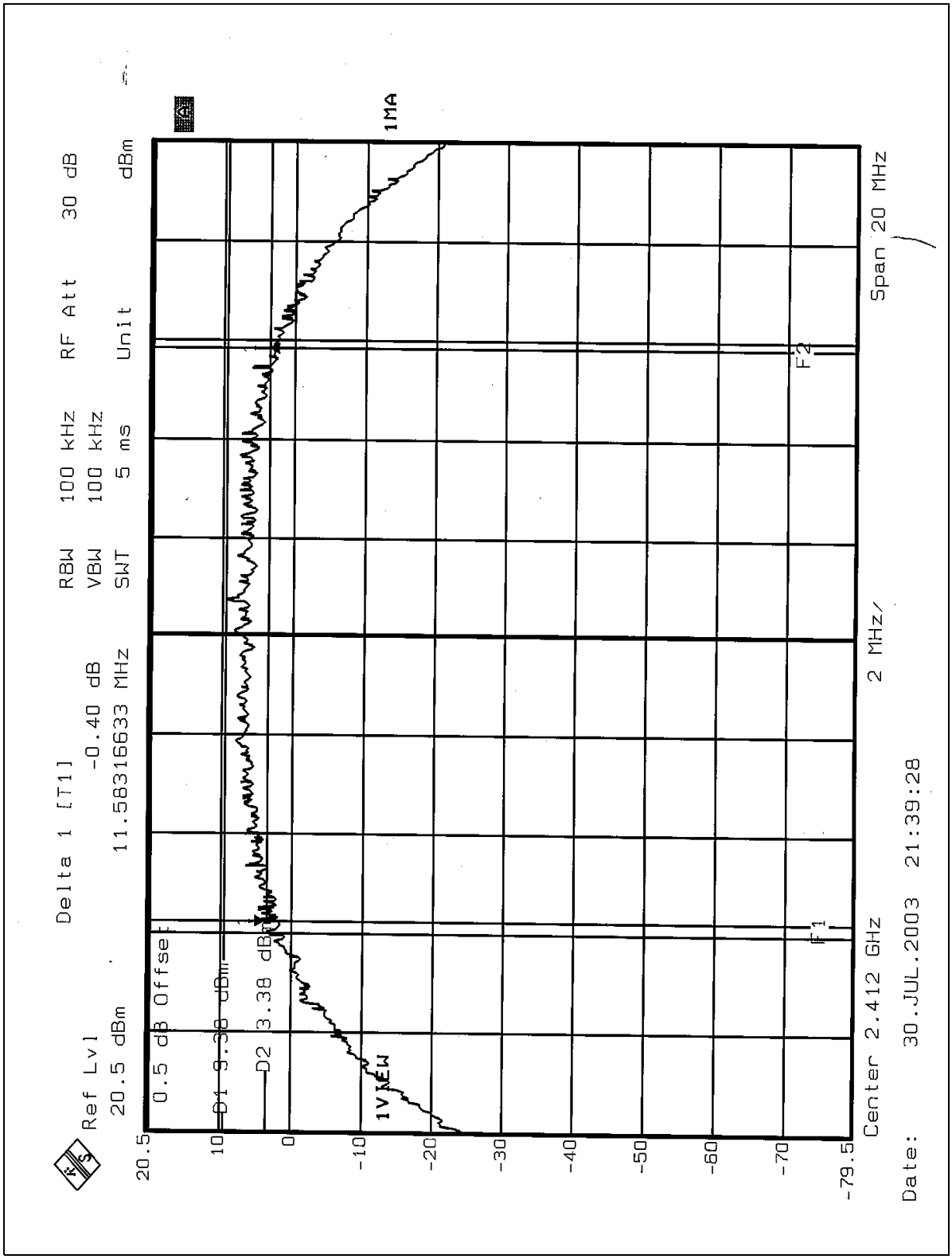
The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.

4.3.7 TEST RESULTS

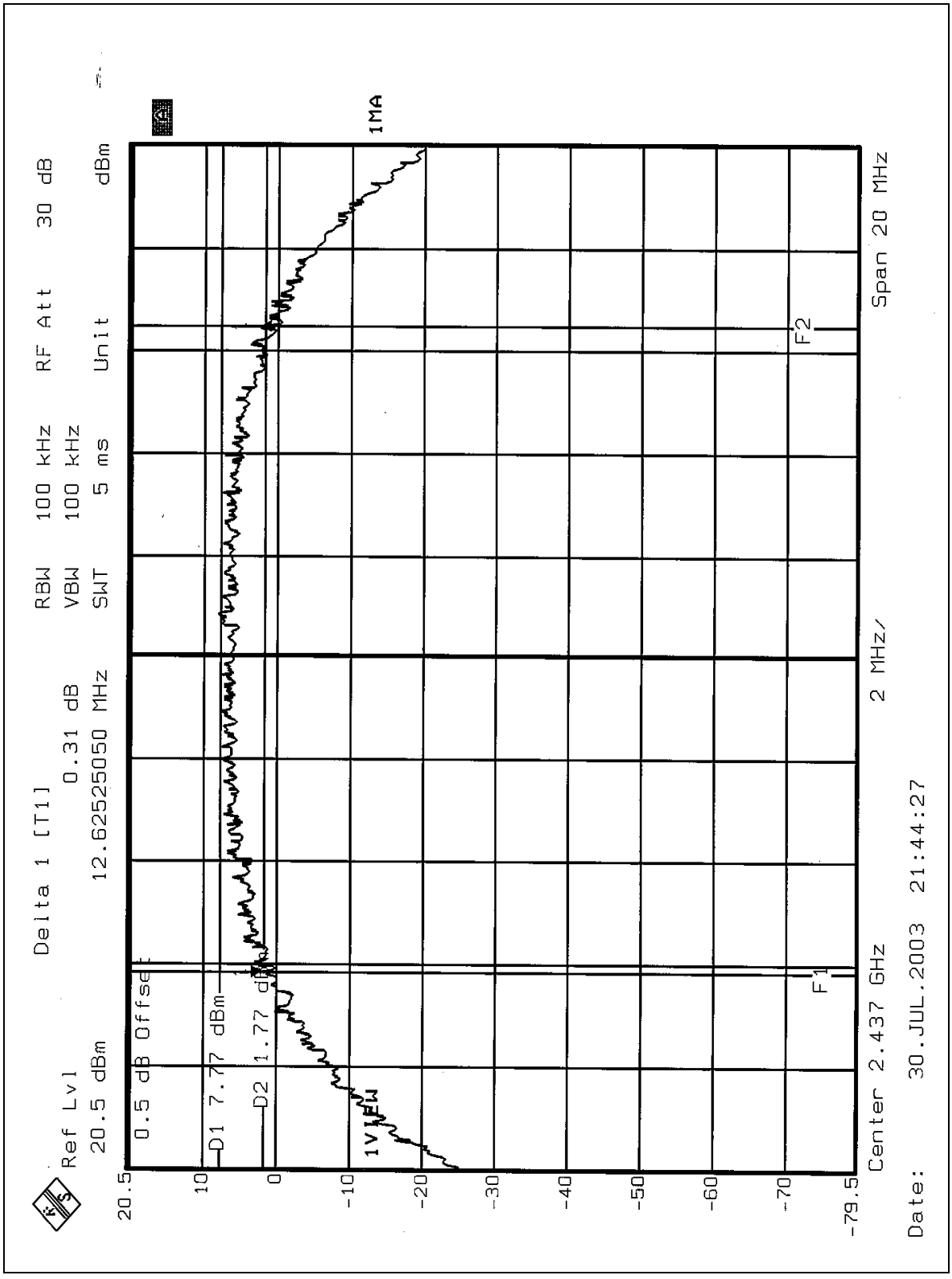
EUT	IEEE802.11a+802.11g Dual Band Wireless Access Point	**MODEL**	SL-5354AP1 Aries2
INPUT POWER (SYSTEM)	120Vac, 60Hz	**ENVIRONMENTAL CONDITIONS**	26deg. C, 63%RH, 991 hPa
TEST MODE	CCK	**TESTED BY**	Ansen Lei

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
1	2412	11.58	0.5	PASS
6	2437	12.63	0.5	PASS
11	2462	11.46	0.5	PASS

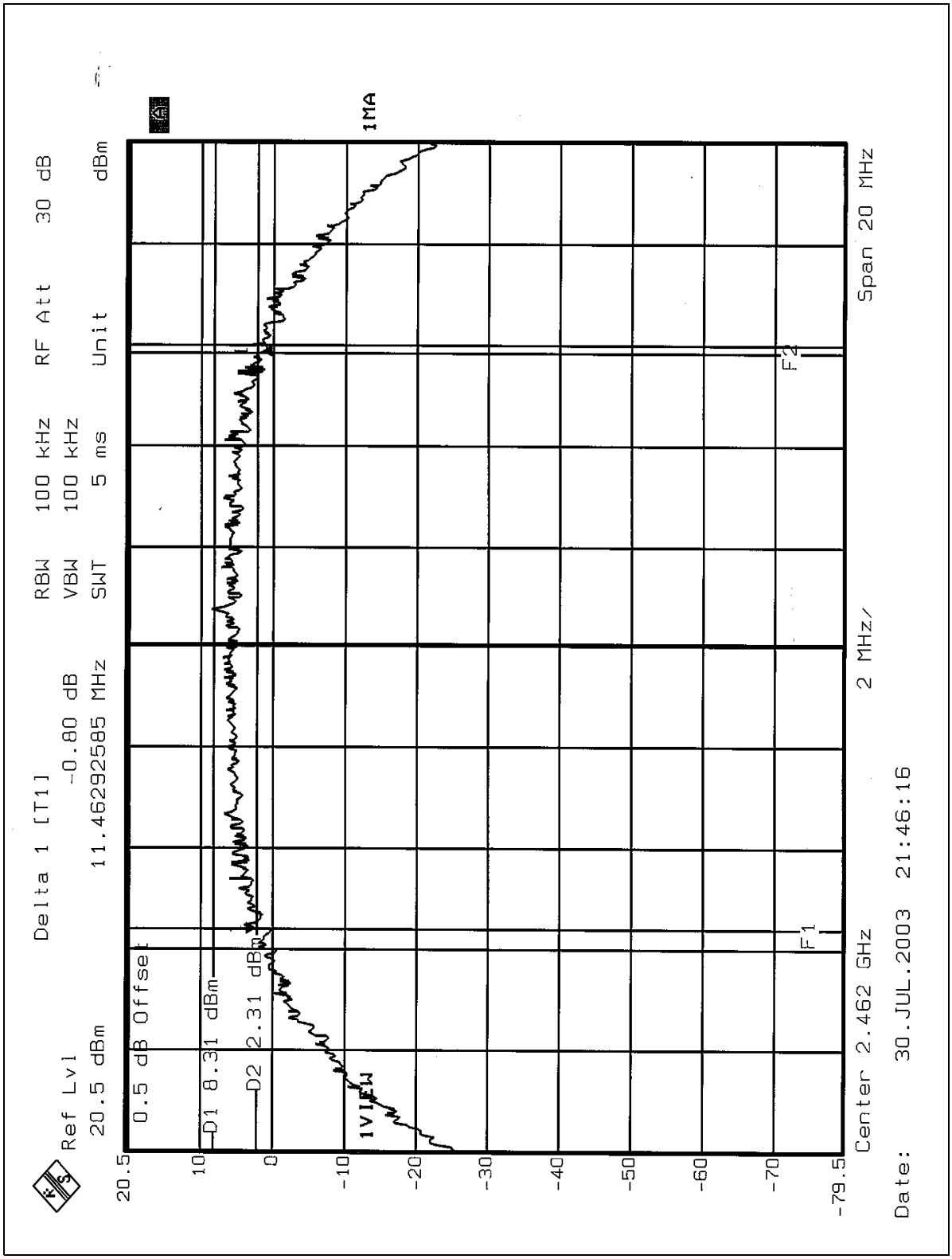
CH1


Delta 1 [T1]
-0.40 dB
11.58316633 MHz
RBW 100 kHz
VBW 100 kHz
SWT 5 ms
RF Att 30 dB
Unit dBm
Ref Lvl
20.5 dBm
0.5 dB Offset
D1 3.38 dBm
D2 3.38 dB
1VIEW
1MA
F1
F2
Center 2.412 GHz
2 MHz/
Span 20 MHz
Date: 30.JUL.2003 21:39:28
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5

CH6


Delta 1 [T1]
0.31 dB
12.6252050 MHz
RBW 100 kHz
VBW 100 kHz
SWT 5 ms
RF Att 30 dB
Unit dBm
Ref Lvl
20.5 dBm
0.5 dB Offset
D1 7.77 dBm
D2 1.77 dB
1MA
1VIEW
F1
F2
Center 2.437 GHz
2 MHz/
Span 20 MHz
Date: 30.JUL.2003 21:44:27
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5

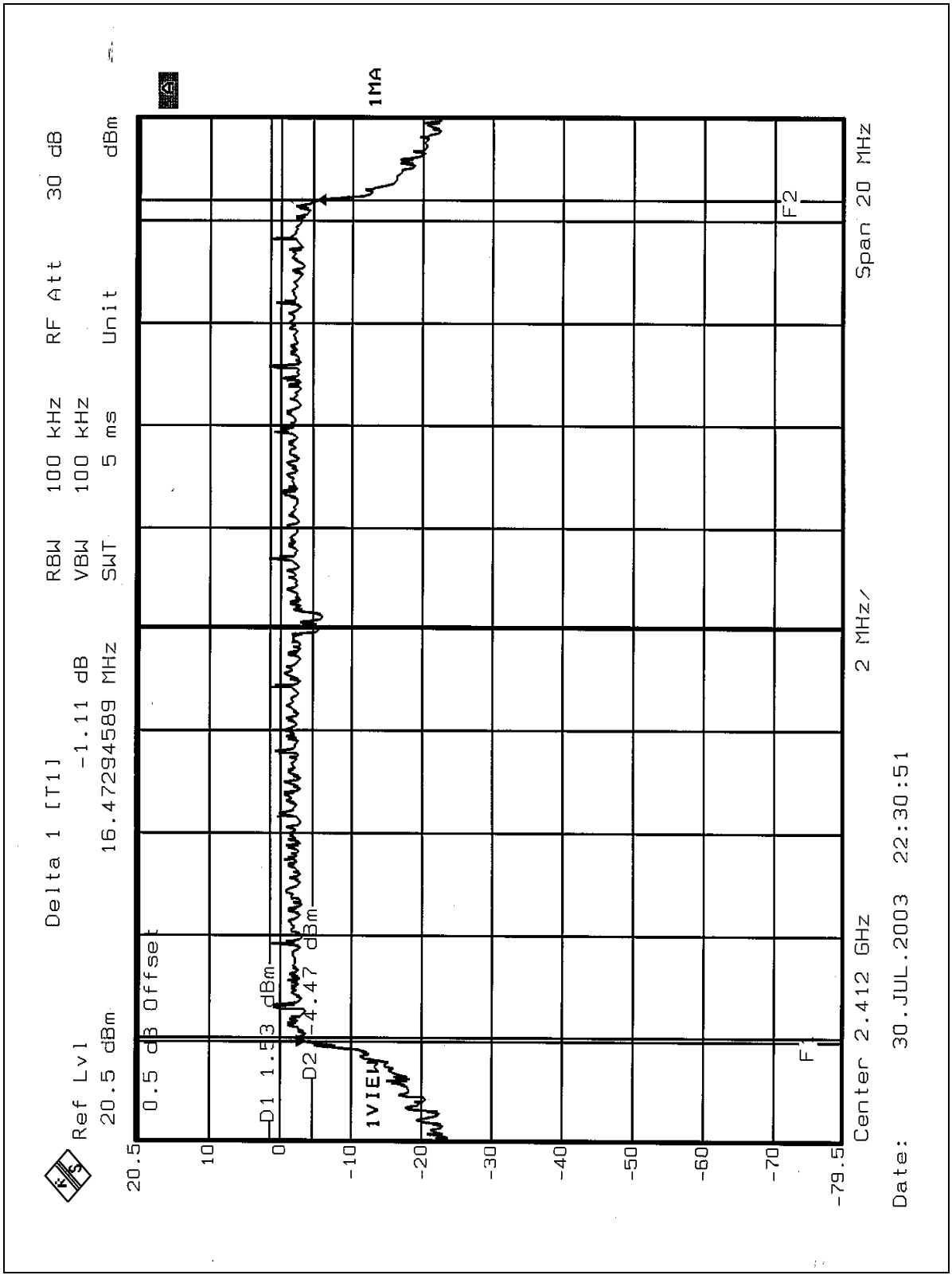
CH11


Delta 1 [T1]
-0.80 dB
11.46292585 MHz
RBW 100 kHz
VBW 100 kHz
SWT 5 ms
RF Att 30 dB
Unit dBm
Ref Lvl
20.5 dBm
0.5 dB Offset
D1 8.31 dBm
D2 2.31 dBm
1MA
1VIEW
F1
F2
Center 2.462 GHz
2 MHz/
Span 20 MHz
Date: 30.JUL.2003 21:46:16
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5

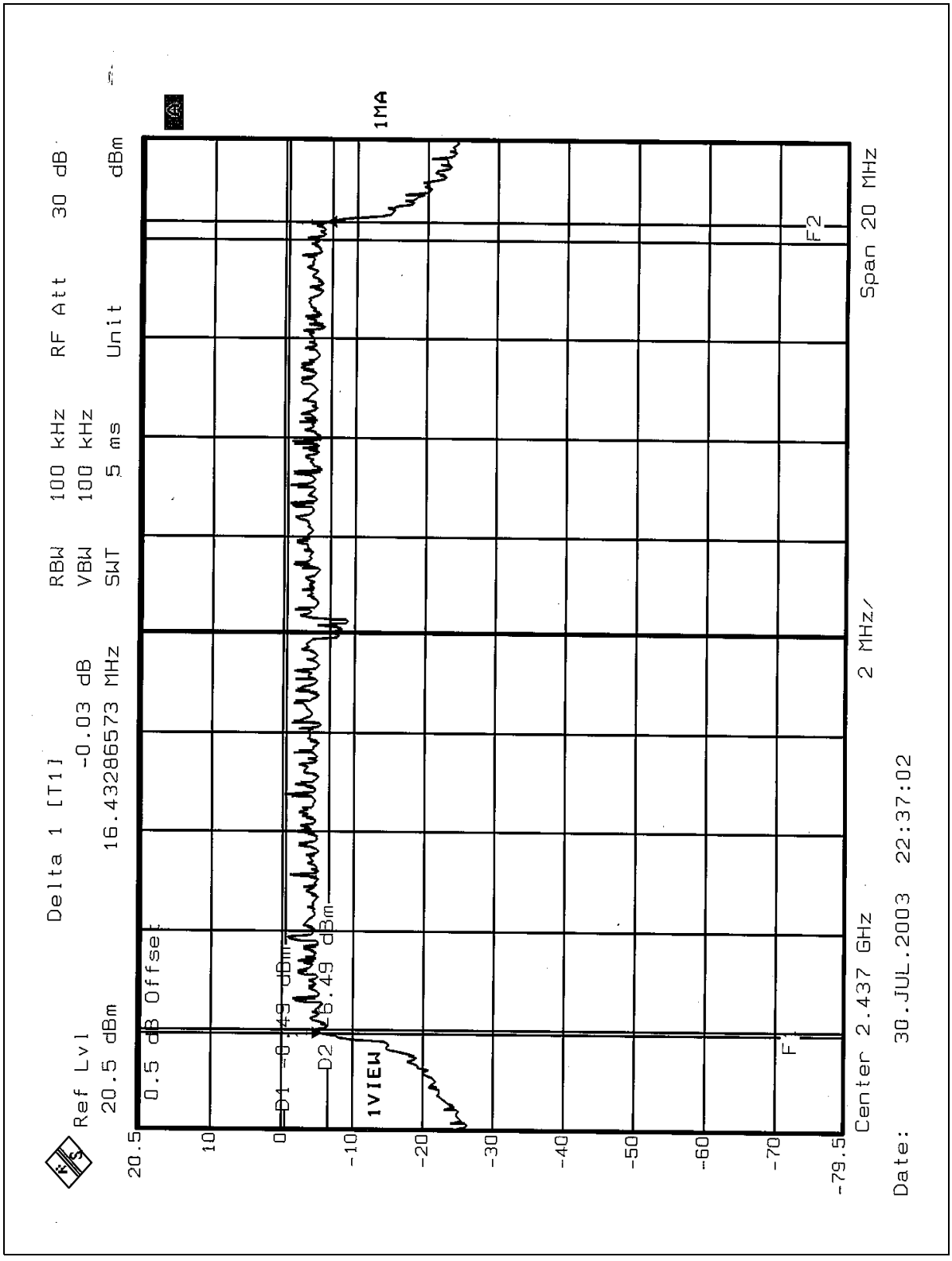
EUT	IEEE802.11a+802.11g Dual Band Wireless Access Point	**MODEL**	SL-5354AP1 Aries2
INPUT POWER (SYSTEM)	120Vac, 60Hz	**ENVIRONMENTAL CONDITIONS**	26deg. C, 63%RH, 991 hPa
TEST MODE	OFDM	**TESTED BY**	Ansen Lei

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
1	2412	16.47	0.5	PASS
6	2437	16.43	0.5	PASS
11	2462	16.35	0.5	PASS

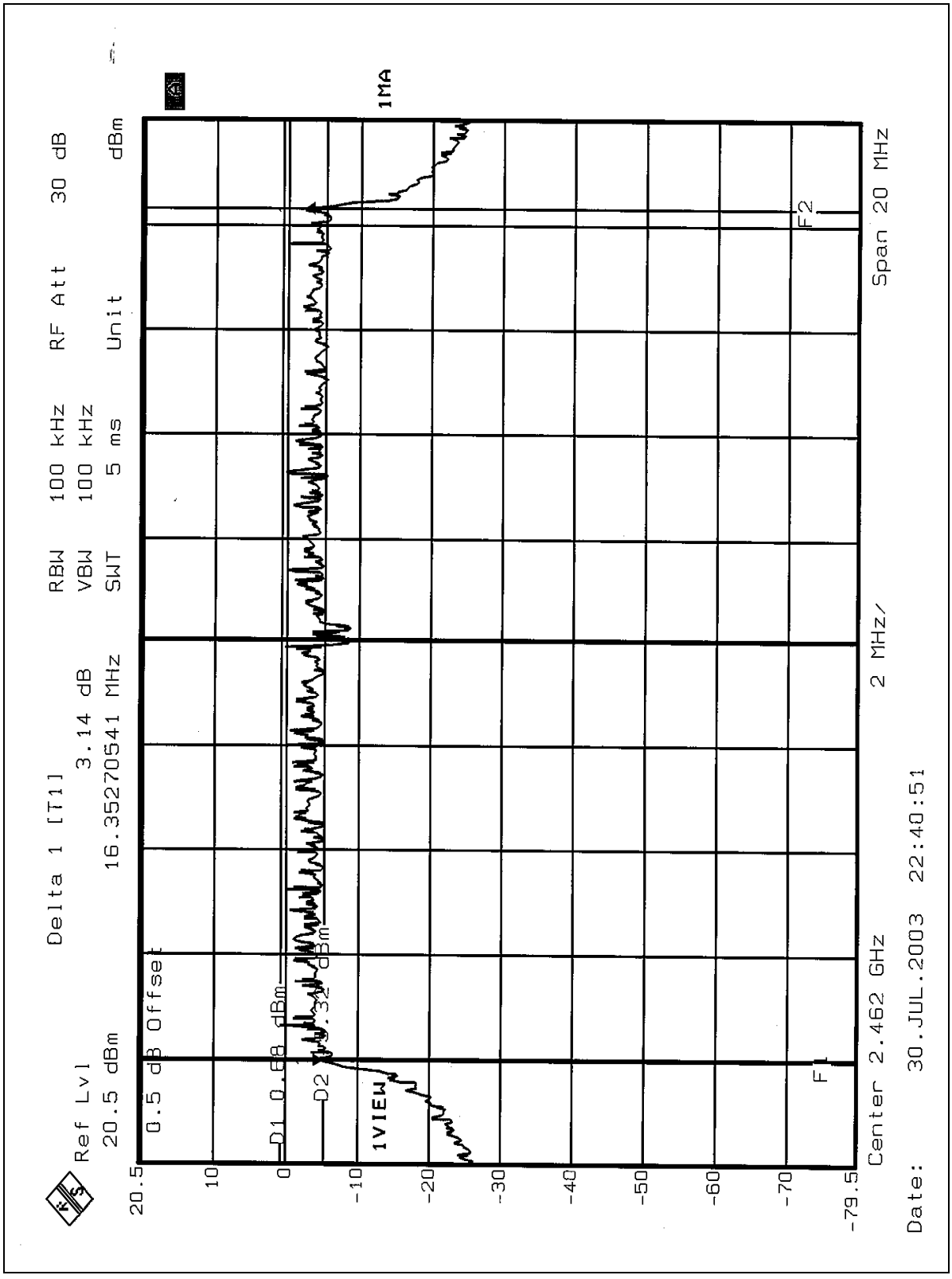
CH1


Delta 1 [T1]
-1.11 dB
16.4729589 MHz
RBW 100 kHz
VBW 100 kHz
SWT 5 ms
RF Att 30 dB
Unit dBm
Ref Lvl
20.5 dBm
0.5 dB Offset
D1 1.53 dBm
D2 4.47 dBm
1VIEW
1MA
F1
F2
Center 2.412 GHz
2 MHz/
Span 20 MHz
Date: 30.JUL.2003 22:30:51
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5

CH6


Delta 1 [T1]
-0.03 dB
16.43286573 MHz
RBW 100 kHz
VBW 100 kHz
SWT 5 ms
RF Att 30 dB
Unit dBm
Ref Lvl
20.5 dBm
0.5 dB Offset
D1 -0.49 dBm
D2 -8.49 dBm
1VIEW
1MA
F1
F2
Center 2.437 GHz
2 MHz/
Span 20 MHz
Date: 30.JUL.2003 22:37:02
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5

CH11


Delta 1 [T1]
3.14 dB
16.352705541 MHz
RBW 100 kHz
VBW 100 kHz
SWT 5 ms
RF Att 30 dB
Unit dBm
Ref Lvl
20.5 dBm
0.5 dB Offset
D1 0.68 dBm
D2 3.32 dBm
1VIEW
1MA
F1
F2
Center 2.462 GHz
2 MHz/
Span 20 MHz
Date: 30.JUL.2003 22:40:51
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5

4.4 MAXIMUM PEAK OUTPUT POWER

4.4.1 LIMITS OF MAXIMUM PEAK OUTPUT POWER MEASUREMENT

The Maximum Peak Output Power Measurement is 30dBm.

4.4.2 INSTRUMENTS

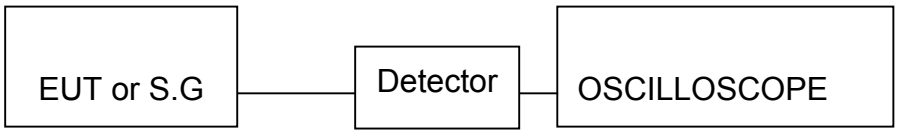
DESCRIPTION & MANUFACTURER	**Model No.**	**Serial No.**	**Calibrated Until**
R&S SPECTRUM ANALYZER	FSEK30	100049	Aug. 12, 2004
R&S SIGNAL GENERATOR	SMP04	100011	May 28, 2004
TEKTRONIX OSCILLOSCOPE	TDS 220	B048470	Mar. 05, 2004
NARDA DETECTOR	4503A	FSCM99899	NA

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

4.4.3 TEST PROCEDURES

1. A detector was used on the output port of the EUT. An oscilloscope was used to read the response of the detector.
2. Replaced the EUT by the signal generator. The center frequency of the S.G was adjusted to the center frequency of the measured channel.
3. Adjusted the power to have the same reading on oscilloscope. Record the power level.

4.4.4 TEST SETUP



4.4.5 EUT OPERATING CONDITIONS

Same as Item 4.3.6

4.4.6 TEST RESULTS

EUT	IEEE802.11a+802.11g Dual Band Wireless Access Point	**MODEL**	SL-5354AP1 Aries2
INPUT POWER (SYSTEM)	120Vac, 60Hz	**ENVIRONMENTAL CONDITIONS**	26deg. C, 63%RH, 991 hPa
TEST MODE	CCK	**TESTED BY**	Ansen Lei

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
1	2412	19.89	30	PASS
6	2437	19.51	30	PASS
11	2462	19.83	30	PASS

EUT	IEEE802.11a+802.11g Dual Band Wireless Access Point	**MODEL**	SL-5354AP1 Aries2
INPUT POWER (SYSTEM)	120Vac, 60Hz	**ENVIRONMENTAL CONDITIONS**	26deg. C, 63%RH, 991 hPa
TEST MODE	OFDM	**TESTED BY**	Ansen Lei

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
1	2412	19.86	30	PASS
6	2437	19.12	30	PASS
11	2462	19.01	30	PASS

4.5 POWER SPECTRAL DENSITY MEASUREMENT

4.5.1 LIMITS OF POWER SPECTRAL DENSITY MEASUREMENT

The Maximum of Power Spectral Density Measurement is 8dBm.

4.5.2 TEST INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
SPECTRUM ANALYZER	FSEK30	100049	Aug. 12, 2004

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

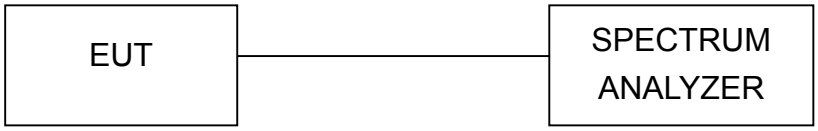
4.5.3 TEST PROCEDURE

The transmitter output was connected to the spectrum analyzer through an attenuator, the bandwidth of the fundamental frequency was measured with the spectrum analyzer using 3 kHz RBW and 30 kHz VBW, set sweep time = span/3 kHz. The power spectral density was measured and recorded.
The sweep time is allowed to be longer than span/3 kHz for a full response of the mixer in the spectrum analyzer.

4.5.4 DEVIATION FROM TEST STANDARD

No deviation

4.5.5 TEST SETUP



4.5.6 EUT OPERATING CONDITION

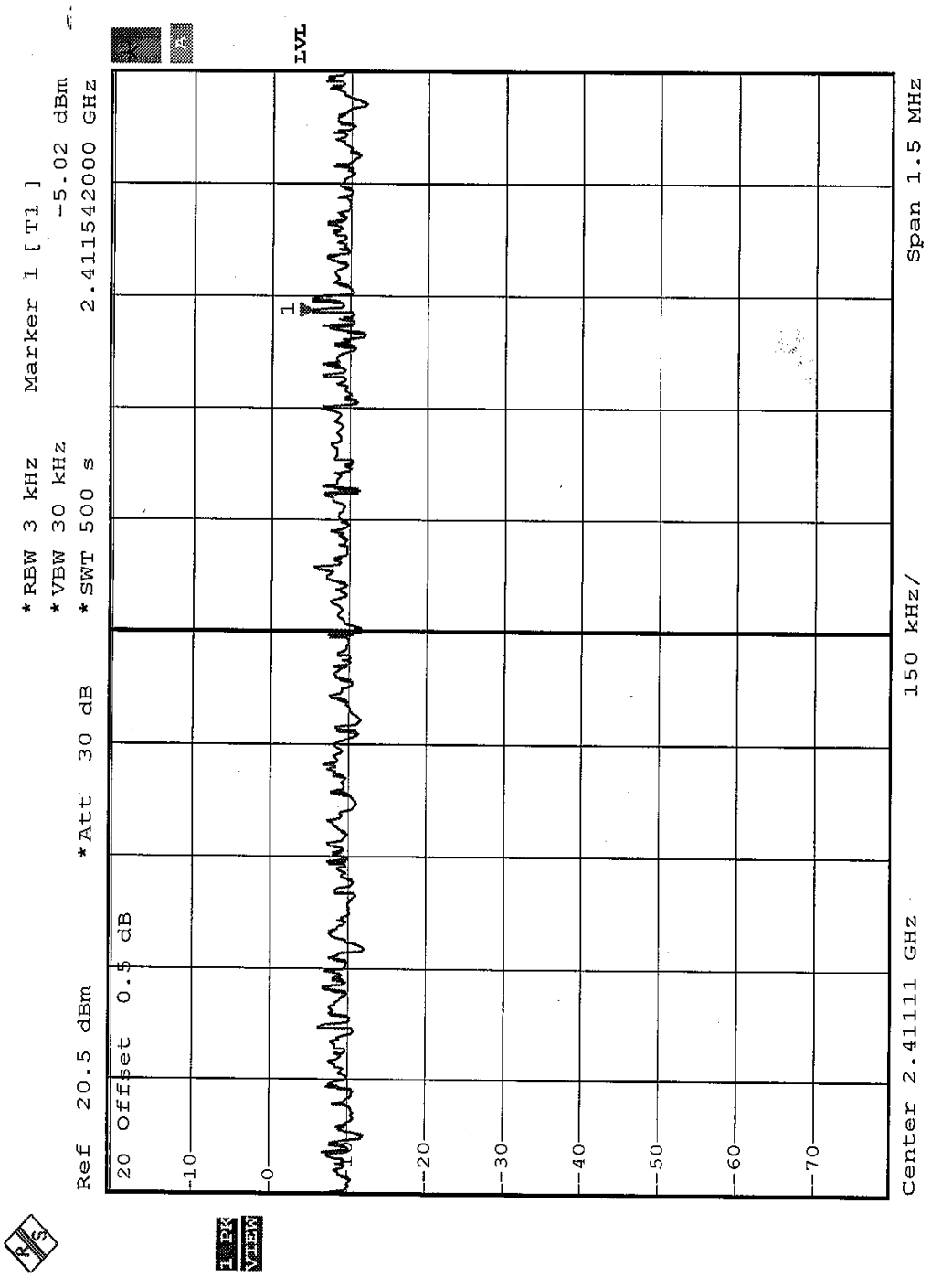
Same as Item 4.3.6

4.5.7 TEST RESULTS

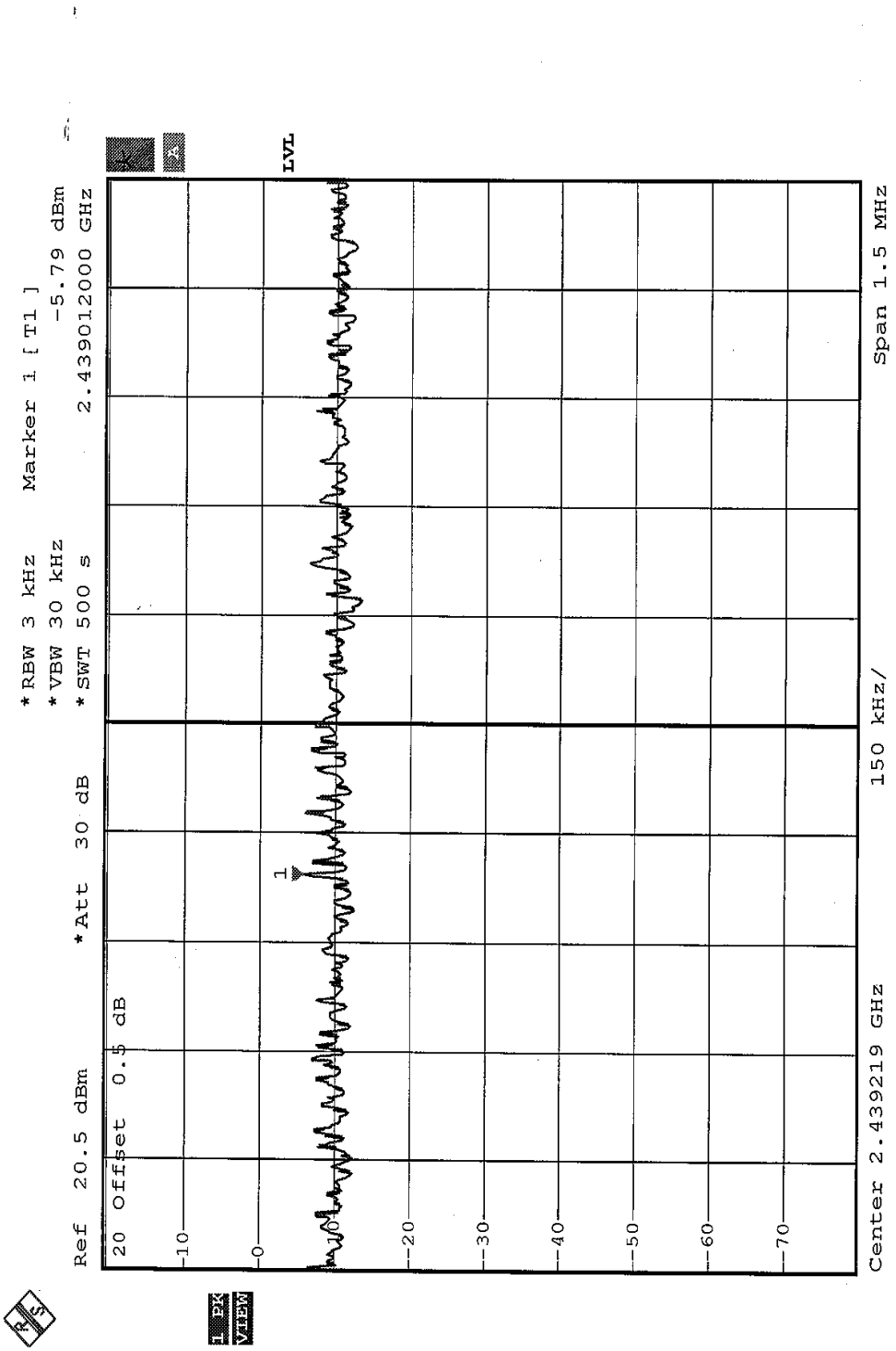
EUT	IEEE802.11a+802.11g Dual Band Wireless Access Point	**MODEL**	SL-5354AP1 Aries2
INPUT POWER (SYSTEM)	120Vac, 60Hz	**ENVIRONMENTAL CONDITIONS**	26deg. C, 63RH, 965 hPa
TEST MODE	CCK	**TESTED BY**	Ansen Lei

CHANNEL NUMBER	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3 kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	2412	-5.02	8	PASS
6	2437	-5.79	8	PASS
11	2462	-4.61	8	PASS

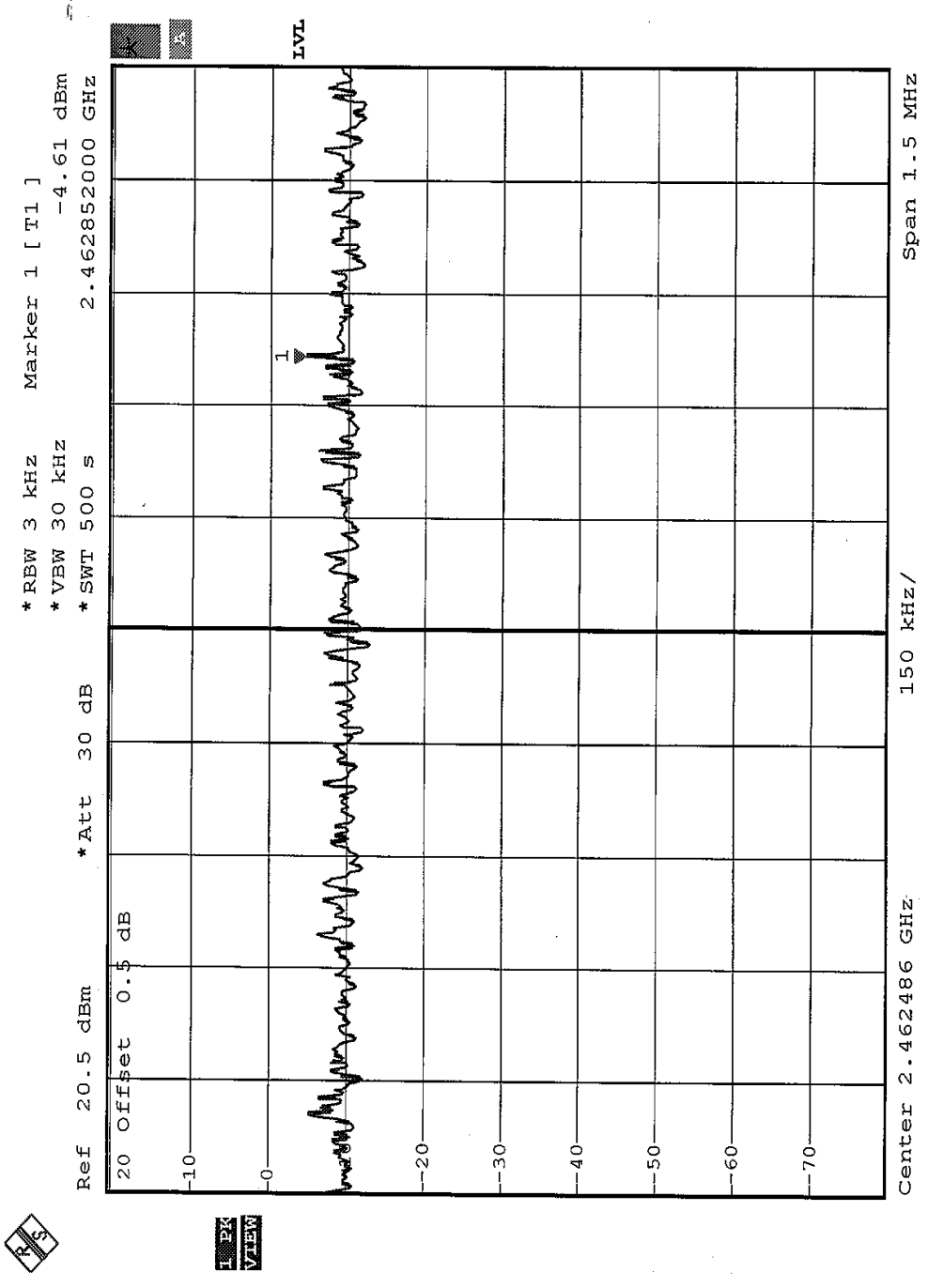
CH1


Ref 20.5 dBm
20 Offset 0.5 dB
*Att 30 dB
*RBW 3 kHz
*VBW 30 kHz
*SWT 500 s
Marker 1 [T1]
-5.02 dBm
2.411542000 GHz
1 PK
MEAS
LVL
Center 2.41111 GHz
150 kHz/
Span 1.5 MHz
Date: 3.SEP.2003 21:13:49

CH6


Ref 20.5 dBm
20 Offset 0.5 dB
*Att 30 dB
*RBW 3 kHz
*VBW 30 kHz
*SWT 500 s
Marker 1 [T1]
-5.79 dBm
2.439012000 GHz
1 PK VIEW
Center 2.439219 GHz
150 kHz/
Span 1.5 MHz
Date: 3.SEP.2003 21:15:30

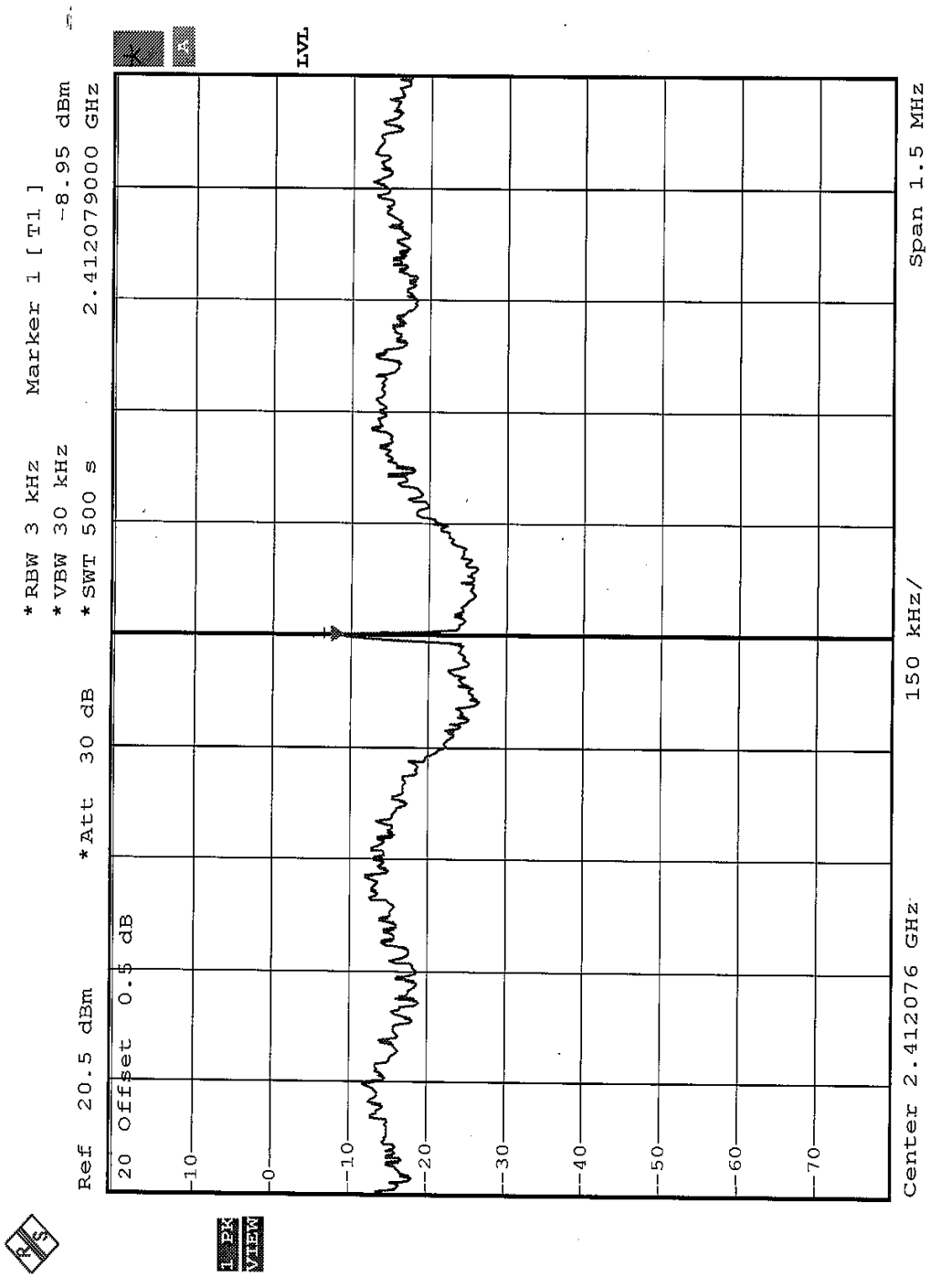
CH11


Ref 20.5 dBm
20 Offset 0.5 dB
*Att 30 dB
*RBW 3 kHz
*VBW 30 kHz
*SWT 500 s
Marker 1 [T1]
-4.61 dBm
2.46285200 GHz
1 PK VIEW
LVL
Center 2.462486 GHz
150 kHz/
Span 1.5 MHz
Date: 3.SEP.2003 21:16:32

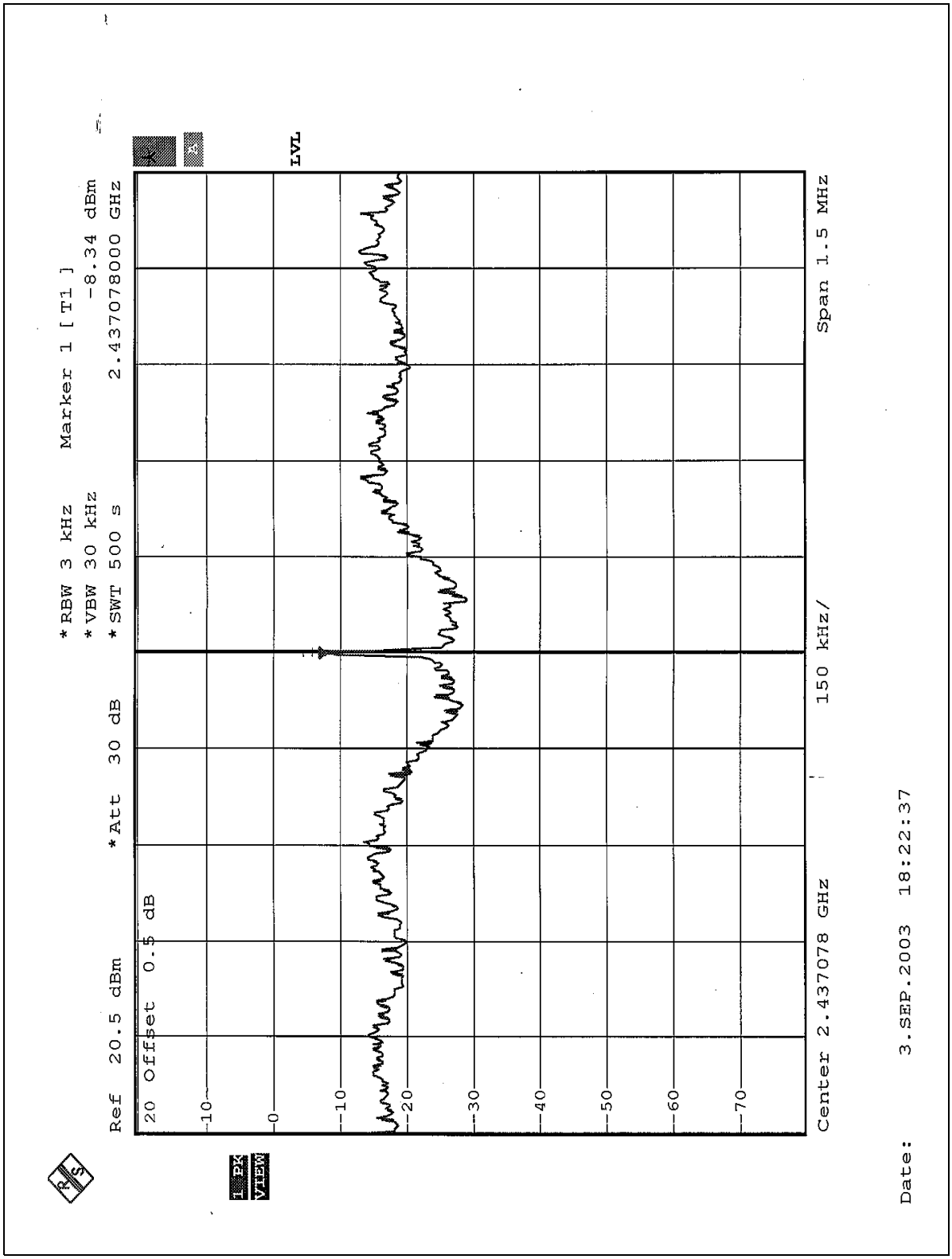
EUT	IEEE802.11a+802.11g Dual Band Wireless Access Point	**MODEL**	SL-5354AP1 Aries2
INPUT POWER (SYSTEM)	120Vac, 60Hz	**ENVIRONMENTAL CONDITIONS**	26deg. C, 63RH, 991 hPa
TEST MODE	OFDM	**TESTED BY**	Ansen Lei

CHANNEL NUMBER	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3 kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	2412	-8.95	8	PASS
6	2437	-8.34	8	PASS
11	2462	-9.90	8	PASS

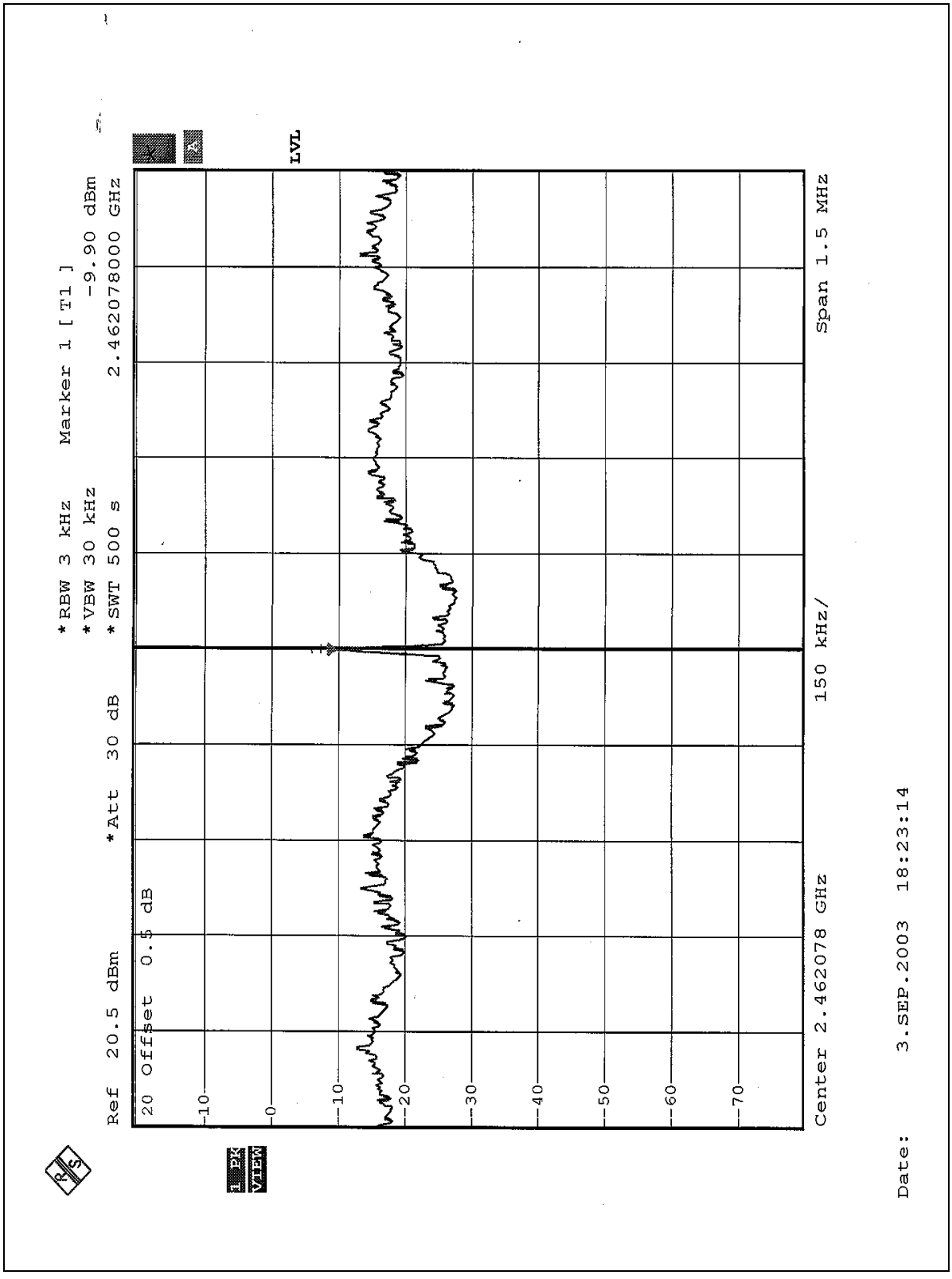
CH1


Marker 1 [T1]
-8.95 dBm
2.412079000 GHz
*RBW 3 kHz
*VBW 30 kHz
*SWT 500 s
*Att 30 dB
Ref 20.5 dBm
20 Offset 0.5 dB
Center 2.412076 GHz
150 kHz/
Span 1.5 MHz
Date: 3.SEP.2003 18:21:29

CH6


Ref 20.5 dBm
20 Offset 0.5 dB
*Att 30 dB
*RBW 3 kHz
*VBW 30 kHz
*SWT 500 s
Marker 1 [T1]
-8.34 dBm
2.437078000 GHz
TVL
Center 2.437078 GHz
150 kHz/
Span 1.5 MHz
Date: 3.SEP.2003 18:22:37
1 PK VIEW

CH11


Ref 20.5 dBm
20 Offset 0.5 dB
*Att 30 dB
*RBW 3 kHz
*VBW 30 kHz
*SWT 500 s
Marker 1 [T1]
-9.90 dBm
2.462078000 GHz
LVL
Center 2.462078 GHz
150 kHz/
Span 1.5 MHz
Date: 3.SEP.2003 18:23:14
1 PK
VIEW

4.6 BAND EDGES MEASUREMENT

4.6.1 LIMITS OF BAND EDGES MEASUREMENT

Below –20dB of the highest emission level of operating band (in 100KHz Resolution Bandwidth).

4.6.2 TEST INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
SPECTRUM ANALYZER	FSEK30	100049	Aug. 12, 2004

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

4.6.3 TEST PROCEDURE

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

4.6.4 DEVIATION FROM TEST STANDARD

No deviation

4.6.5 EUT OPERATING CONDITION

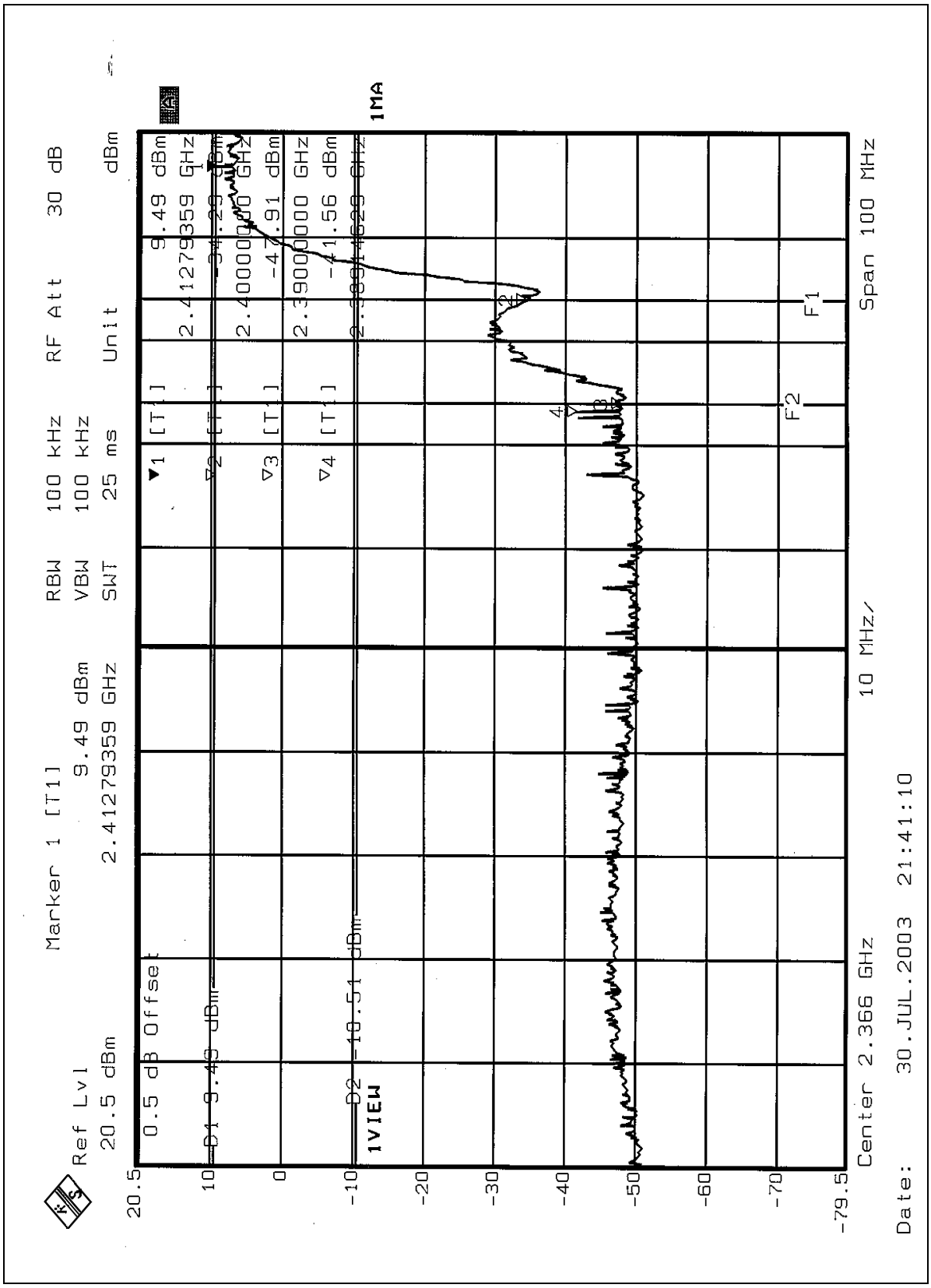
Same as Item 4.3.6

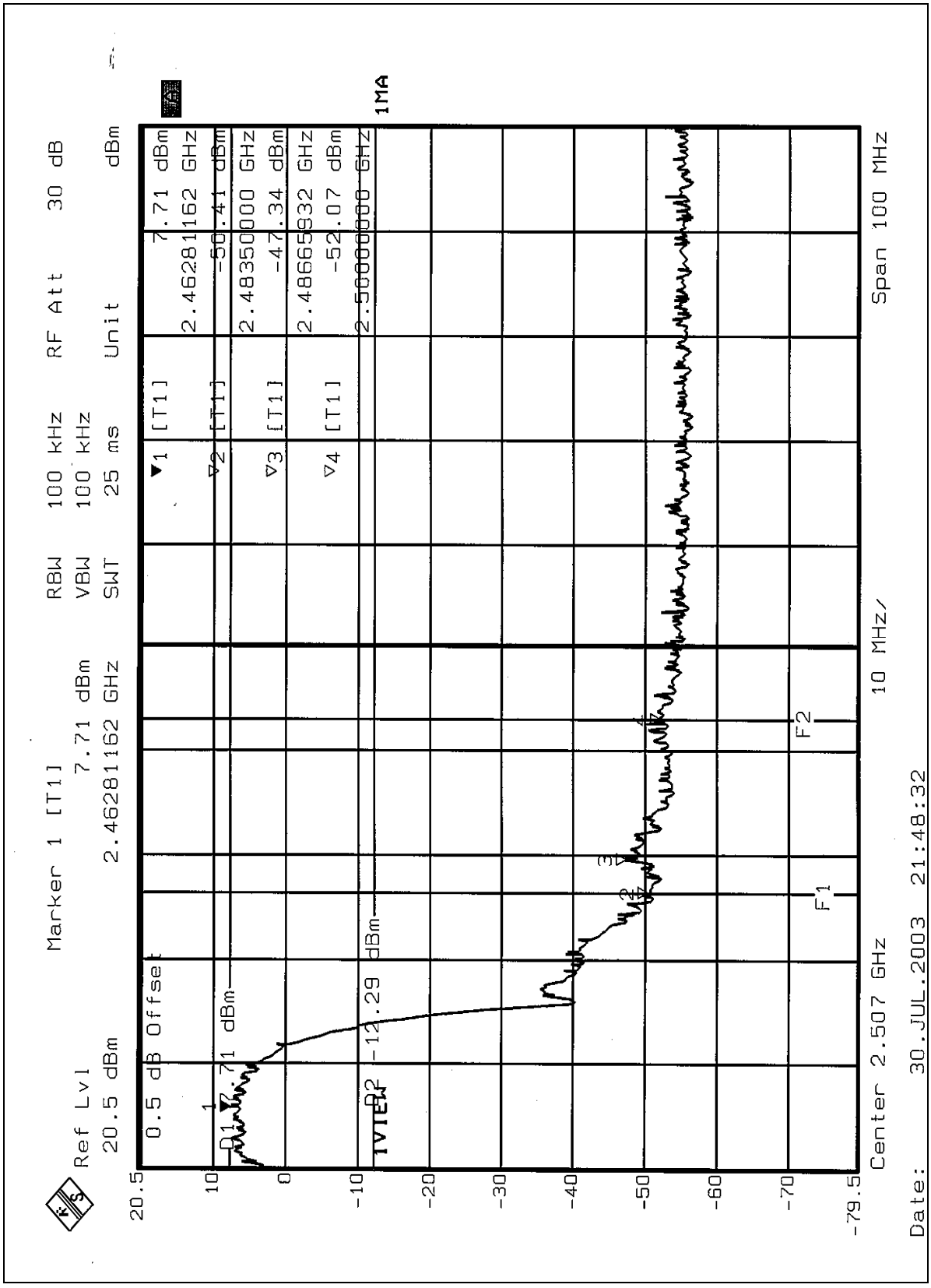
4.6.6 TEST RESULTS

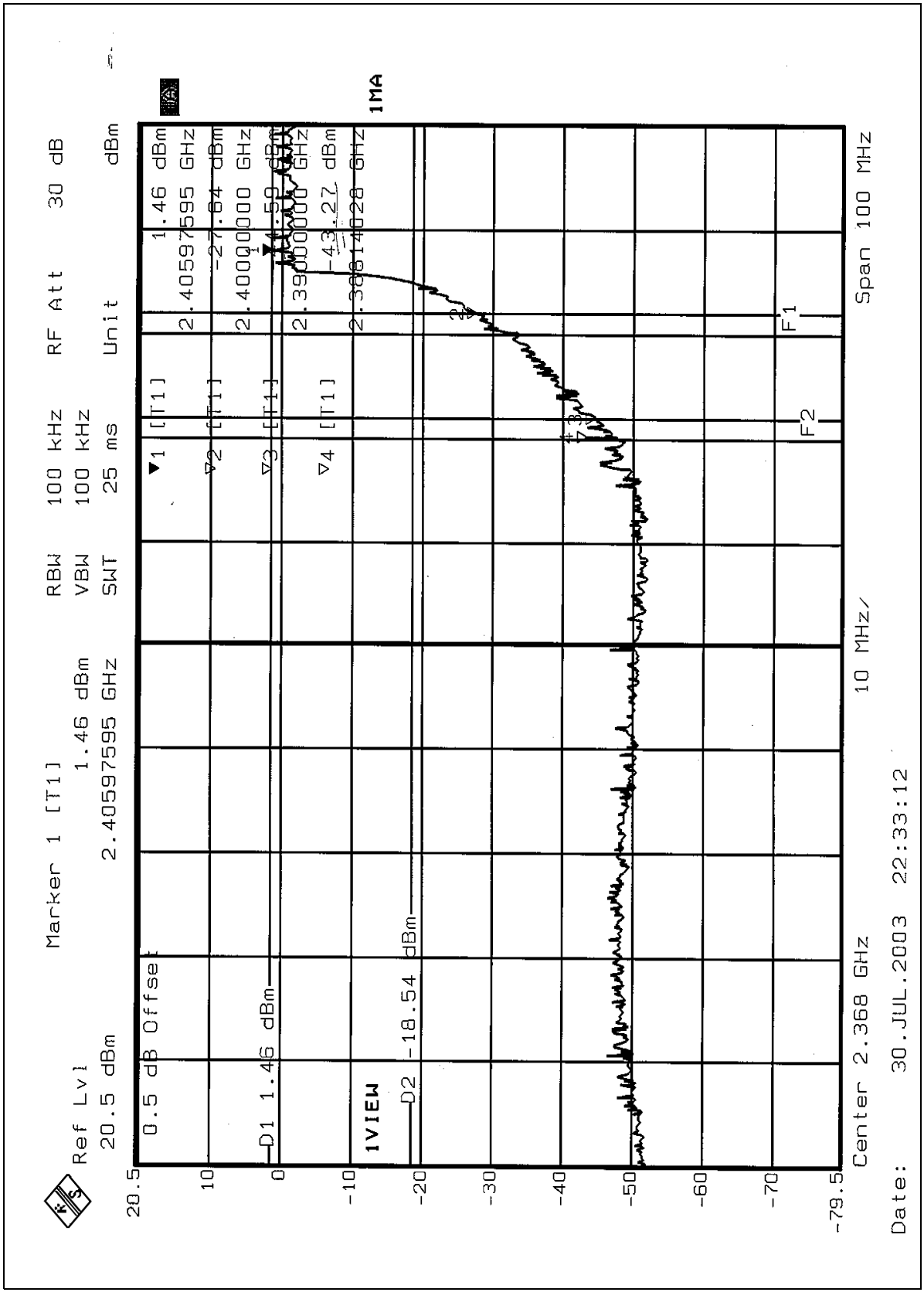
The spectrum plots are attached on the following 2 pages. D1 line indicates the highest level, and D2 line indicates the 20dB offset below D2. It shows compliance with the requirement in part 15.247(C).

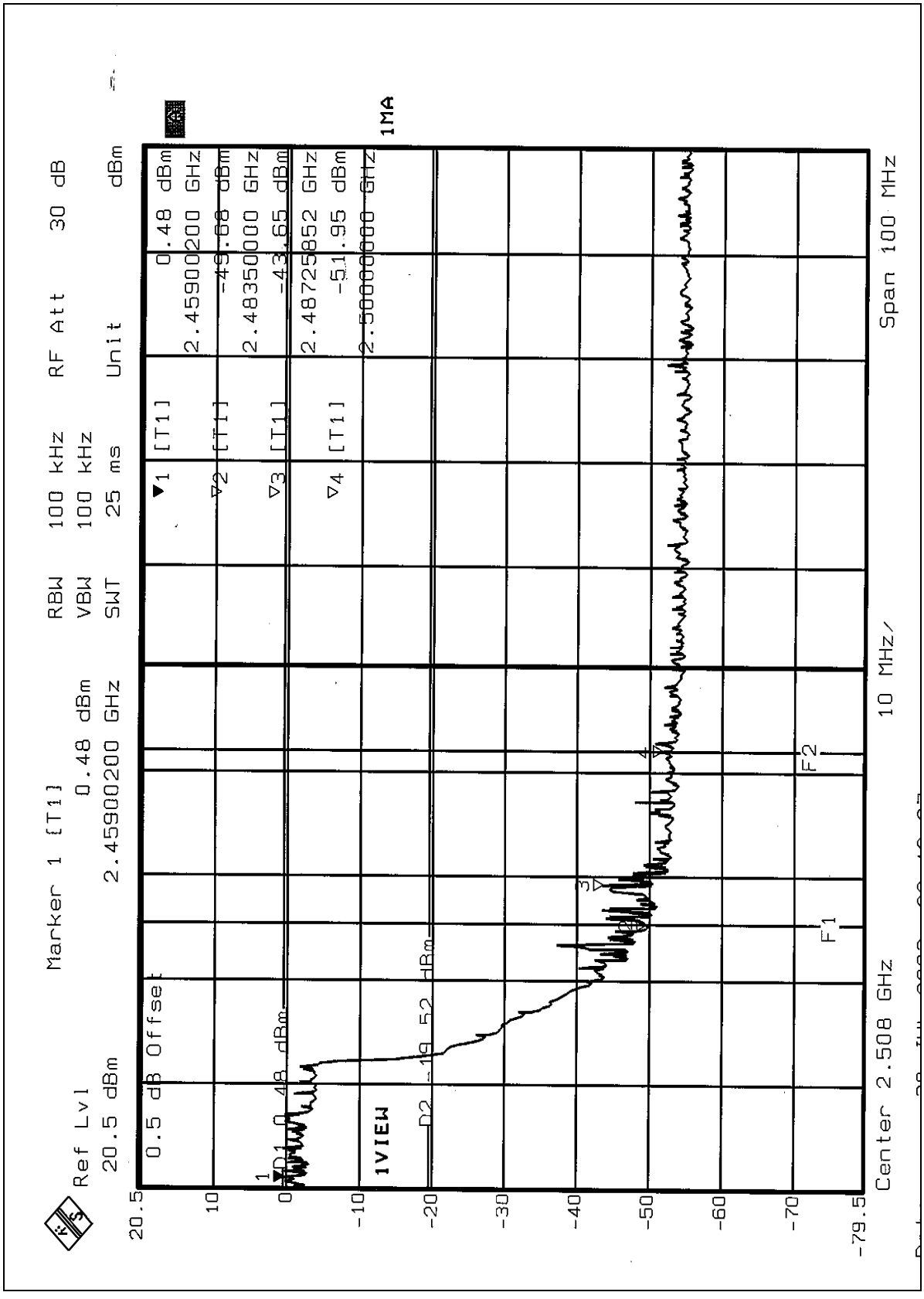
NOTE1: The band edge emission plot on the following 1-2 shows 51.05dB / 55.05dB delta between carrier maximum power and local maximum emission in restrict band (2.3891GHz / 2.4867GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.7 (page 39) with CCK mode is 104.4dBuV/m, so the maximum field strength in restrict band is 104.4-51.05=53.35dBuV/m which is under 54dBuV/m limit.

NOTE2: The band edge emission plot on the following 3-4 shows 44.73dB / 44.13dB delta between carrier maximum power and local maximum emission in restrict band (2.3881GHz / 2.4873GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.7 (page 42) with OFDM mode is 91.1dBuV/m, so the maximum field strength in restrict band is 98.6-44.73=53.87dBuV/m which is under 54dBuV/m limit.


Marker 1 [T1]
9.49 dBm
2.41279359 GHz
RBW 100 kHz
VBW 100 kHz
SWT 25 ms
RF Att 30 dB
Unit dBm
Ref Lvl
20.5 dBm
0.5 dB Offset
D1 -9.49 dBm
D2 -18.51 dBm
1VIEW
1MA
Center 2.366 GHz
10 MHz/
Span 100 MHz
Date: 30.JUL.2003 21:41:10


Marker 1 [T1]
7.71 dBm
2.46281162 GHz
RBW 100 kHz
VBW 100 kHz
SWT 25 ms
RF Att 30 dB
Unit dBm
Ref Lvl
20.5 dBm
0.5 dB Offset
1 MA
1 [T1] 7.71 dBm
2.46281162 GHz
2 [T1] -50.41 dBm
2.48350000 GHz
3 [T1] -47.34 dBm
2.48665932 GHz
4 [T1] -52.07 dBm
2.50000000 GHz
D1 7.71 dBm
D2 -12.29 dBm
F1
F2
Center 2.507 GHz
10 MHz/
Span 100 MHz
Date: 30.JUL.2003 21:48:32


Ref Lvl
20.5 dBm
0.5 dB Offset
D1 1.46 dBm
1VIEW
D2 -18.54 dBm
Marker 1 [T1]
1.46 dBm
2.40597595 GHz
RBW 100 kHz
VBW 100 kHz
SWT 25 ms
RF Att 30 dB
Unit dBm
1MA
1 [T1] 1.46 dBm 2.40597595 GHz
2 [T1] -27.64 dBm 2.40000000 GHz
3 [T1] 1.50 dBm 2.39000000 GHz
4 [T1] -43.27 dBm 2.30814028 GHz
F1
F2
Center 2.368 GHz
10 MHz/
Span 100 MHz
Date: 30.JUL.2003 22:33:12


Ref Lvl
20.5 dBm
0.5 dB Offset
Marker 1 [T1]
0.48 dBm
2.45900200 GHz
RBW 100 kHz
VBW 100 kHz
SWT 25 ms
RF Att 30 dB
Unit dBm
1 [T1] 0.48 dBm 2.45900200 GHz
2 [T1] -49.68 dBm 2.48350000 GHz
3 [T1] -43.65 dBm 2.48725852 GHz
4 [T1] -51.95 dBm 2.50000000 GHz
1MA
1VIEW
D1 0.48 dBm
D2 -19.52 dBm
F1
F2
Center 2.508 GHz
10 MHz/
Span 100 MHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5

4.7 ANTENNA REQUIREMENT

4.7.1 STANDARD APPLICABLE

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. And according to FCC 47 CFR Section 15.247 (b), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

4.7.2 ANTENNA CONNECTED CONSTRUCTION

The maximum Gain antenna used in this product is Dipole antenna without antenna connector. And the maximum Gain of these antennas is 4 dBi.

5. TEST TYPES AND RESULTS (FOR PART 802.11a)

5.1 CONDUCTED EMISSION MEASUREMENT

5.1.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

FREQUENCY OF EMISSION (MHz)	CONDUCTED LIMIT (dBμV)	
	Quasi-peak	Average
0.15-0.5 0.5-5 5-30	66 to 56 56 60	56 to 46 46 50

NOTE:
1. The lower limit shall apply at the transition frequencies.
2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50 MHz.
3. All emanations from a class A/B digital device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified above.

5.1.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED UNTIL
ROHDE & SCHWARZ Test Receiver	ESCS 30	838251/021	Jan. 20, 2004
ROHDE & SCHWARZ Artificial Mains Network (for EUT)	ESH3-Z5	100218	Dec. 18, 2003
ROHDE & SCHWARZ Artificial Mains Network (for peripherals)	ESH3-Z5	100219	Dec. 18, 2003
ROHDE & SCHWARZ Artificial Mains Network (for peripherals)	ESH3-Z5	100220	Dec. 18, 2003
ROHDE & SCHWARZ 4-wire ISN	ENY41	837032/016	Nov. 29, 2003
ROHDE & SCHWARZ 2-wire ISN	ENY22	837497/016	Nov. 29, 2003
Software	Cond-V2M3	NA	NA
RF cable (JYEBAO)	5D-FB	Cable-C10.01	May. 01, 2004
SUHNER Terminator (For ROHDE & SCHWARZ LISN)	65BNC-5001	E1-010770	Mar. 24, 2004
SUHNER Terminator (For ROHDE & SCHWARZ LISN)	65BNC-5001	E1-010773	Apr. 06, 2004

NOTE: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. "*": These equipment are used for conducted telecom port test only (if tested).
3. The test was performed in ADT Shielded Room No. 10.
4. The VCCI Site Registration No. is C-1312.

5.1.3 TEST PROCEDURES

a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.

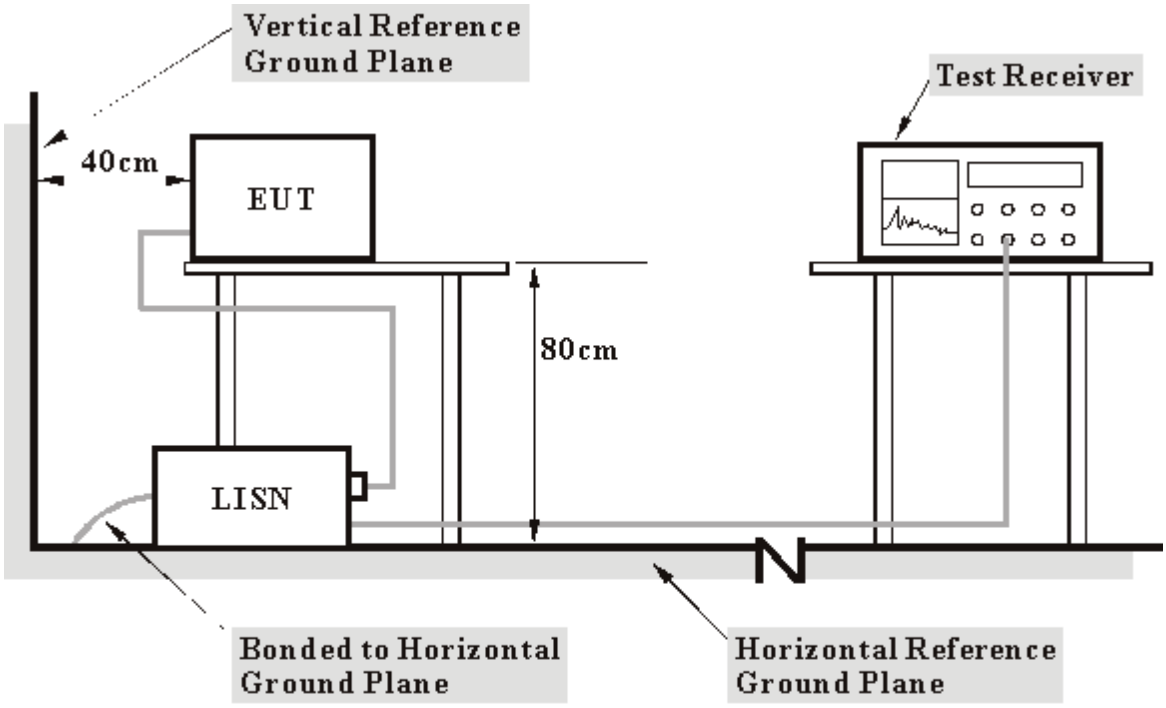
b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.

c. The frequency range from 150 kHz to 30 MHz was searched. Emission levels over 10dB under the prescribed limits could not be reported

5.1.4 DEVIATION FROM TEST STANDARD

No deviation

5.1.5 TEST SETUP



Note: 1. Support units were connected to second LISN.
2. Both of LISNs (AMN) 80 cm from EUT and at the least 80 cm from other units and other metal planes support units.

For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.

5.1.6 EUT OPERATING CONDITIONS

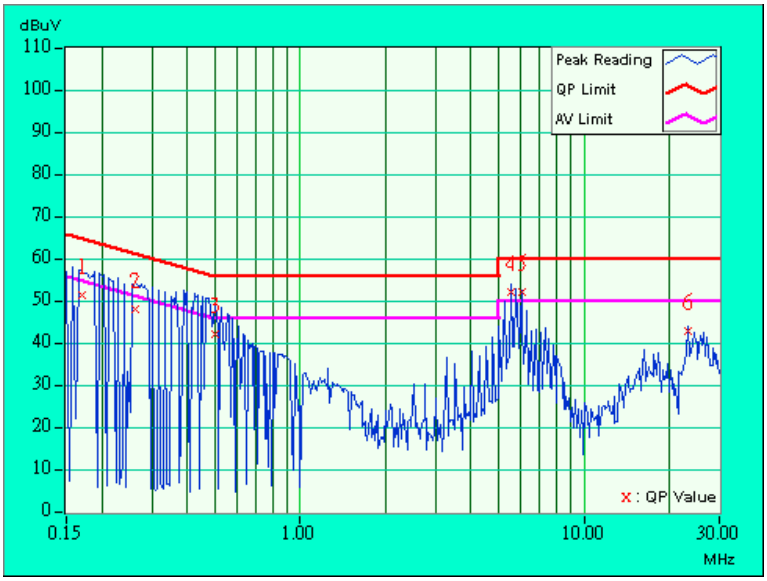
Same as 4.1.6

5.1.7 TEST RESULTS

EUT	IEEE802.11a+802.11g Dual Band Wireless Access Point	**MODEL**	SL-5354AP1 Aries2
		6dB BANDWIDTH	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**PHASE**	Line (L)
MODE	**EUT powered by AC Adapter**	**ENVIRONMENTAL CONDITIONS**	25deg. C, 65RH, 991 hPa
TESTED BY: Jamison Chan			

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.170	0.06	50.60	-	50.66	-	64.98	54.98	-14.33	-
2	0.263	0.06	47.31	-	47.37	-	61.33	51.33	-13.96	-
3	0.501	0.08	41.52	-	41.60	-	56.00	46.00	-14.40	-
4	5.535	0.27	51.56	46.15	51.83	46.42	60.00	50.00	-8.17	-3.58
5	6.039	0.29	51.42	47.43	51.71	47.72	60.00	50.00	-8.29	-2.28
6	23.129	0.80	42.04	-	42.84	-	60.00	50.00	-17.16	-

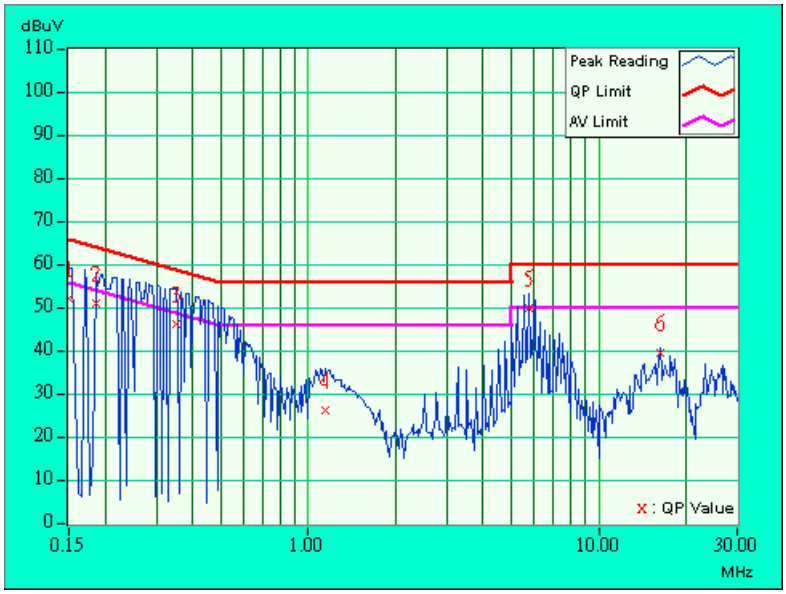
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.



EUT	IEEE802.11a+802.11g Dual Band Wireless Access Point	**MODEL**	SL-5354AP1 Aries2
		6dB BANDWIDTH	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**PHASE**	Neutral (N)
MODE	**EUT powered by AC Adapter**	**ENVIRONMENTAL CONDITIONS**	25deg. C, 65RH, 991 hPa
TESTED BY: Jamison Chan			

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.150	0.05	51.68	-	51.73	-	66.00	56.00	-14.27	-
2	0.185	0.05	50.44	-	50.49	-	64.25	54.25	-13.76	-
3	0.353	0.05	45.89	-	45.94	-	58.89	48.89	-12.95	-
4	1.141	0.16	25.79	-	25.95	-	56.00	46.00	-30.05	-
5	5.781	0.26	49.33	-	49.59	-	60.00	50.00	-10.41	-
6	16.230	0.49	39.07	-	39.56	-	60.00	50.00	-20.44	-

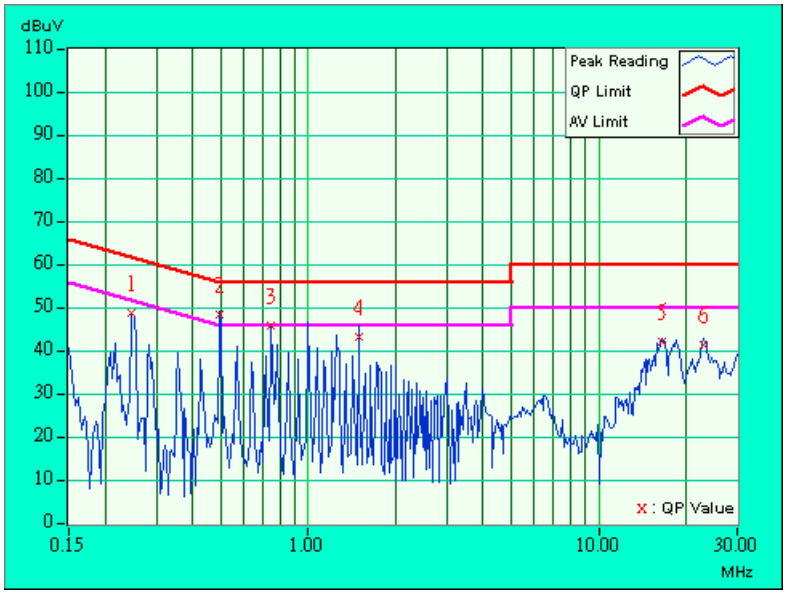
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.



EUT	IEEE802.11a+802.11g Dual Band Wireless Access Point	**MODEL**	SL-5354AP1 Aries2
		6dB BANDWIDTH	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**PHASE**	Line (L)
MODE	**EUT powered by POE**	**ENVIRONMENTAL CONDITIONS**	25deg. C, 65RH, 991 hPa
TESTED BY: Jamison Chan			

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.248	0.06	47.96	-	48.02	-	61.84	51.84	-13.82	-
2	0.498	0.08	47.72	43.52	47.80	43.60	56.04	46.04	-8.24	-2.44
3	0.748	0.12	45.15	-	45.27	-	56.00	46.00	-10.73	-
4	1.496	0.17	42.72	-	42.89	-	56.00	46.00	-13.11	-
5	16.449	0.58	41.38	-	41.96	-	60.00	50.00	-18.04	-
6	22.926	0.79	40.52	-	41.31	-	60.00	50.00	-18.69	-

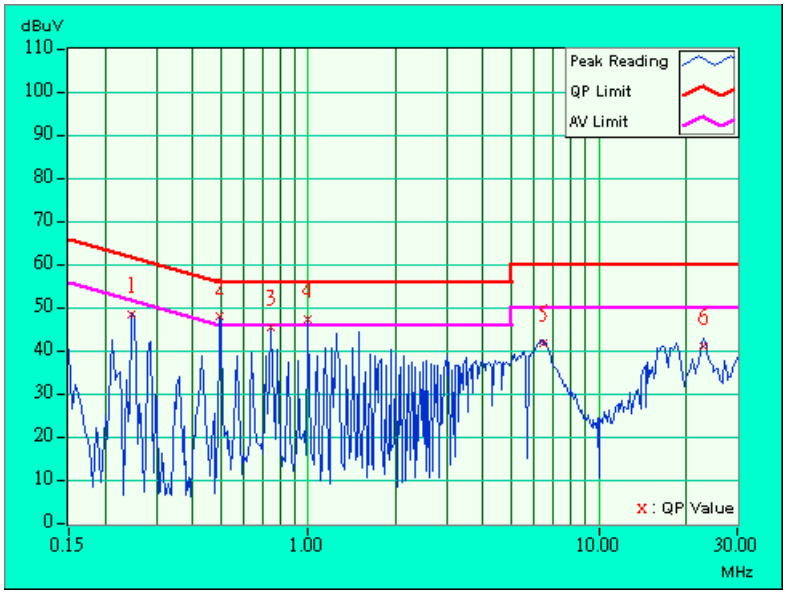
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.



EUT	IEEE802.11a+802.11g Dual Band Wireless Access Point	**MODEL**	SL-5354AP1 Aries2
		6dB BANDWIDTH	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**PHASE**	Neutral (N)
MODE	**EUT powered by POE**	**ENVIRONMENTAL CONDITIONS**	25deg. C, 65RH, 991 hPa
TESTED BY: Jamison Chan			

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.248	0.05	48.06	-	48.11	-	61.84	51.84	-13.73	-
2	0.498	0.07	47.66	43.76	47.73	43.83	56.04	46.04	-8.31	-2.21
3	0.748	0.11	45.07	-	45.18	-	56.00	46.00	-10.82	-
4	**0.998**	**0.16**	**46.93**	**44.21**	**47.09**	**44.37**	**56.00**	**46.00**	**-8.91**	**-1.63**
5	6.410	0.28	41.17	-	41.45	-	60.00	50.00	-18.55	-
6	22.926	0.64	40.50	-	41.14	-	60.00	50.00	-18.86	-

REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.



5.2 RADIATED EMISSION MEASUREMENT

5.2.1 LIMITS OF RADIATED EMISSION MEASUREMENT

Emissions radiated outside of the specified bands, shall be according to the general radiated limits in 15.209 as following:

Frequencies (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

NOTE:

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
3. As shown in 15.35(b), for frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.

5.2.2 LIMITS OF UNWANTED EMISSION OUT OF THE RESTRICTED BANDS

Frequencies (MHz)	**EIRP Limit (dBm)**	**Equivalent Field Strength at 3m (dBμV/m)** *note 3
5150~5250	-27	73.3
5250~5350	-27	73.3
5725~5825	-27 *note 1	73.3
	-17 *note 2	83.3

NOTE:

1. For frequencies 10MHz or greater above or below the band edge.
2. All emissions within the frequency range from the band edge to 10MHz above or below the band edge.
3. The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength

$$E=\frac{1000000\sqrt{30P}}{3} \quad \mu V/m, \quad \text{where P is the eirp (Watts)}$$

5.2.3 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED UNTIL
* HP Spectrum Analyzer	8590L	3544A01176	Jun. 10, 2004
* HP Preamplifier	8447D	2944A08485	May. 01, 2004
* HP Preamplifier	8449B	3008A01201	Dec. 01, 2003
* HP Preamplifier	8449B	3008A01292	Aug. 13, 2004
ROHDE & SCHWARZ TEST RECEIVER	ESI7	838496/016	Feb. 23, 2004
* ROHDE & SCHWARZ TEST RECEIVER	ESMI	839013/007 839379/002	Feb. 13, 2004
SCHAFFNER Tunable Dipole Antenna SCHWARZBECK Tunable Dipole Antenna	VHBA 9123 UHA 9105	459 977	Nov. 22, 2003
* CHASE BILOG Antenna	CBL6112A	2221	July 26, 2004
* SCHWARZBECK Horn Antenna	BBHA9120-D1	D130	Jun. 30, 2004
* EMCO Horn Antenna	3115	9312-4192	Mar. 23, 2004
* ADT. Ferrite Clamp	FC18	910043	Oct. 24, 2003
* ADT. Ferrite Clamp	FC18	910044	Oct. 24, 2003
* ADT. Ferrite Clamp	FC18	910045	Oct. 24, 2003
* EMCO Turn Table	1060	1115	NA
* CHANCE Tower	CM-AT40	CM-A010	NA
* Software	ADT_Radiated_V5.14	NA	NA
* ANRITSU RF Switches	MP59B	M35046	Jan. 05, 2004
* TIMES RF cable	LMR-600	CABLE-ST5-01	Jan. 05, 2004

NOTE: 1.The calibration interval of the above test instruments is 12 months. And the calibrations are traceable to NML/ROC and NIST/USA.

2. "*" = These equipment are used for the final measurement.
3. The horn antenna and HP preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.
4. The test was performed in ADT Open Site No. 5.
5. The VCCI Site Registration No. is R-1039.

5.2.4 TEST PROCEDURES

a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 10 meter open area test site. The table was rotated 360 degrees to determine the position of the highest radiation.

b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

c. The antenna is a broadband antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

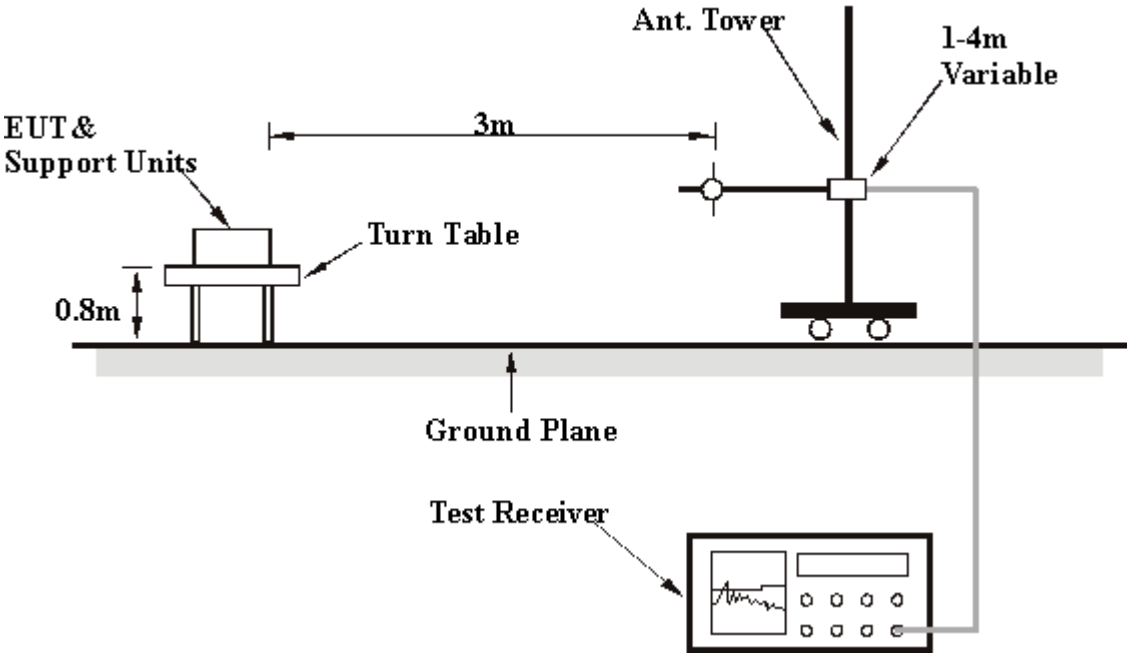
NOTE:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Peak detection (PK) and Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1 MHz for Peak detection at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 300 Hz for Average detection (AV) at frequency above 1GHz.

5.2.5 DEVIATION FROM TEST STANDARD

No deviation

5.2.6 TEST SETUP



For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.

5.2.7 EUT OPERATING CONDITIONS

Same as 4.1.6

5.2.8 TEST RESULTS

EUT	IEEE802.11a+802.11g Dual Band Wireless Access Point	**MODEL**	SL-5354AP1 Aries2
MODE	Channel 11, **EUT powered by AC Adapter**	**FREQUENCY RANGE**	Below 1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	**DETECTOR FUNCTION**	Quasi-Peak
ENVIRONMENTAL CONDITIONS	30deg. C, 60%RH, 991 hPa	**TESTED BY**	Hardaway Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	160.00	35.3 QP	43.50	-8.20	1.58 H	8	24.60	10.70
2	175.00	32.1 QP	43.50	-11.40	1.30 H	136	21.60	10.50
3	200.02	30.9 QP	43.50	-12.60	1.07 H	214	20.10	10.80
4	**220.00**	**45.1 QP**	**46.00**	**-0.90**	**1.72 H**	**111**	**33.20**	**11.90**
5	225.01	36.4 QP	46.00	-9.60	1.47 H	83	24.20	12.20
6	240.02	41.0 QP	46.00	-5.00	1.25 H	15	28.00	13.00
7	250.05	42.9 QP	46.00	-3.10	1.69 H	217	29.30	13.60
8	440.01	41.4 QP	46.00	-4.60	1.06 H	230	22.60	18.70
9	600.02	42.1 QP	46.00	-3.90	1.40 H	172	19.80	22.30
10	640.02	43.9 QP	46.00	-2.10	1.60 H	1	21.50	22.40
11	680.03	42.7 QP	46.00	-3.30	1.35 H	271	20.20	22.60
12	720.03	42.0 QP	46.00	-4.00	1.38 H	71	18.90	23.20
13	800.03	40.0 QP	46.00	-6.00	1.54 H	94	16.30	23.70

REMARKS:
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. The limit value is defined as per 15.247

EUT	IEEE802.11a+802.11g Dual Band Wireless Access Point	**MODEL**	SL-5354AP1 Aries2
MODE	Channel 11, **EUT powered by AC Adapter**	**FREQUENCY RANGE**	Below 1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	**DETECTOR FUNCTION**	Quasi-Peak
ENVIRONMENTAL CONDITIONS	30deg. C, 60%RH, 991 hPa	**TESTED BY**	Hardaway Lee

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	160.00	36.6 QP	43.50	-6.90	1.02 V	0	26.00	10.70
2	175.00	33.7 QP	43.50	-9.80	1.57 V	303	23.20	10.50
3	200.02	34.8 QP	43.50	-8.70	1.10 V	189	24.00	10.80
4	220.00	43.3 QP	46.00	-2.70	1.05 V	255	31.40	11.90
5	225.01	35.5 QP	46.00	-10.50	1.34 V	127	23.30	12.20
6	240.01	41.0 QP	46.00	-5.00	1.01 V	1	27.90	13.00
7	250.01	39.1 QP	46.00	-6.90	1.34 V	90	25.50	13.60
8	440.01	39.9 QP	46.00	-6.10	1.39 V	185	21.20	18.70
9	520.02	40.8 QP	46.00	-5.20	1.08 V	186	20.40	20.40
10	600.00	44.2 QP	46.00	-1.80	1.00 V	203	21.90	22.30
11	640.02	41.6 QP	46.00	-4.40	1.84 V	1	19.20	22.40
12	680.02	40.7 QP	46.00	-5.30	1.59 V	1	18.10	22.60
13	720.02	37.3 QP	46.00	-8.70	1.00 V	101	14.20	23.20
14	800.03	40.4 QP	46.00	-5.60	1.00 V	92	16.70	23.70

REMARKS:
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. The limit value is defined as per 15.247

EUT	IEEE802.11a+802.11g Dual Band Wireless Access Point	**MODEL**	SL-5354AP1 Aries2
MODE	Channel 11, **EUT powered by POE**	**FREQUENCY RANGE**	Below 1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	**DETECTOR FUNCTION**	Quasi-Peak
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH, 991 hPa	**TESTED BY**	Gary Chang

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	60.23	32.2 QP	40.00	-7.80	1.97 H	272	23.60	8.60
2	111.61	31.6 QP	43.50	-11.90	1.16 H	230	19.10	12.40
3	125.00	25.5 QP	43.50	-18.00	1.10 H	204	12.70	12.80
4	139.24	29.6 QP	43.50	-13.90	1.90 H	55	17.50	12.10
5	148.24	28.3 QP	43.50	-15.20	1.90 H	116	16.80	11.50
6	160.01	34.4 QP	43.50	-9.10	1.16 H	9	23.70	10.70
7	200.02	30.6 QP	43.50	-12.90	1.41 H	133	19.90	10.80
8	220.00	41.1 QP	46.00	-4.90	1.42 H	278	29.20	11.90
9	225.02	36.0 QP	46.00	-10.00	1.67 H	142	23.80	12.20
10	240.03	41.3 QP	46.00	-4.70	1.22 H	189	28.30	13.00
11	250.00	43.3 QP	46.00	-2.70	1.24 H	306	29.70	13.60
12	275.07	34.5 QP	46.00	-11.50	1.36 H	242	19.20	15.30
13	280.07	35.9 QP	46.00	-10.10	1.56 H	316	20.50	15.30
14	320.01	42.1 QP	46.00	-3.90	1.37 H	1	26.10	16.00
15	520.03	41.5 QP	46.00	-4.50	1.00 H	59	21.00	20.40
16	550.03	36.2 QP	46.00	-9.80	1.13 H	314	15.40	20.80
17	640.03	41.3 QP	46.00	-4.70	1.00 H	124	18.90	22.40
18	720.03	40.3 QP	46.00	-5.70	1.19 H	256	17.20	23.20
19	800.03	41.7 QP	46.00	-4.30	1.24 H	171	18.00	23.70

REMARKS:
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. The limit value is defined as per 15.247

EUT	IEEE802.11a+802.11g Dual Band Wireless Access Point	**MODEL**	SL-5354AP1 Aries2
MODE	Channel 11, **EUT powered by POE**	**FREQUENCY RANGE**	Below 1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	**DETECTOR FUNCTION**	Quasi-Peak
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH, 991 hPa	**TESTED BY**	Gary Chang

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	43.81	37.9 QP	40.00	-2.10	1.06 V	141	25.80	12.10
2	60.24	38.6 QP	40.00	-1.40	1.44 V	141	30.00	8.60
3	111.60	39.5 QP	43.50	-4.00	1.30 V	53	27.10	12.40
4	125.05	34.0 QP	43.50	-9.50	1.09 V	247	21.20	12.80
5	139.35	36.9 QP	43.50	-6.60	1.32 V	143	24.90	12.10
6	148.20	35.4 QP	43.50	-8.10	1.29 V	161	23.90	11.50
7	200.02	35.3 QP	43.50	-8.20	1.21 V	329	24.60	10.80
8	220.01	41.1 QP	46.00	-4.90	1.08 V	325	29.20	11.90
9	225.01	32.2 QP	46.00	-13.80	1.37 V	85	20.00	12.20
10	240.00	35.6 QP	46.00	-10.40	1.27 V	335	22.60	13.00
11	250.01	40.6 QP	46.00	-5.40	1.46 V	32	26.90	13.60
12	275.01	34.5 QP	46.00	-11.50	1.40 V	36	19.30	15.30
13	320.02	40.1 QP	46.00	-5.90	2.13 V	8	24.20	16.00
14	400.01	33.0 QP	46.00	-13.00	1.14 V	259	14.70	18.20
15	520.03	41.4 QP	46.00	-4.60	1.24 V	300	21.00	20.40
16	550.03	37.7 QP	46.00	-8.30	1.15 V	80	16.90	20.80
17	600.03	43.7 QP	46.00	-2.30	1.01 V	0	21.40	22.30
18	640.03	43.5 QP	46.00	-2.50	1.01 V	242	21.10	22.40
19	660.03	35.4 QP	46.00	-10.60	1.43 V	259	12.90	22.50
20	680.03	41.9 QP	46.00	-4.10	1.02 V	221	19.30	22.60
21	720.02	35.9 QP	46.00	-10.10	1.53 V	94	12.70	23.20
22	800.02	42.7 QP	46.00	-3.30	1.42 V	285	19.00	23.70
23	880.02	38.0 QP	46.00	-8.00	1.21 V	311	13.70	24.40

REMARKS:
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. The limit value is defined as per 15.247

EUT	IEEE802.11a+802.11g Dual Band Wireless Access Point	**MODEL**	SL-5354AP1 Aries2
MODE	Normal Mode	**CHANNEL**	1
FREQUENCY RANGE	Above 1000 MHz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	30 deg. C, 60%RH, 991 hPa	**INPUT POWER (SYSTEM)**	120Vac, 60Hz
TESTED BY	Hardaway Lee		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5180.00	98.0 PK			2.04 H	200	61.80	36.20
1	*5180.00	88.2 AV			2.04 H	200	52.00	36.20
2	10358.00	55.1 PK	73.30	-18.20	1.00 H	122	10.60	44.50

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5150.00	57.2 PK	74.00	-16.80	1.77 V	81	21.00	36.20
1	#5150.00	46.9 AV	54.00	-7.10	1.77 V	81	10.70	36.20
2	*5180.00	108.6 PK			1.77 V	81	72.40	36.20
2	*5180.00	98.3 AV			1.77 V	81	62.10	36.20
3	10358.00	54.6 PK	73.30	-18.70	1.59 V	181	10.20	44.50

REMARKS:

1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. “*” : Fundamental frequency
6. “# “ : The radiated frequency falling in the restricted band.

EUT	IEEE802.11a+802.11g Dual Band Wireless Access Point	**MODEL**	SL-5354AP1 Aries2
MODE	Normal Mode	**CHANNEL**	4
FREQUENCY RANGE	Above 1000 MHz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	30 deg. C, 60%RH, 991 hPa	**INPUT POWER (SYSTEM)**	120Vac, 60Hz
TESTED BY	Hardaway Lee		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5240.00	99.4 PK			2.05 H	233	63.10	36.30
1	*5240.00	89.7 AV			2.05 H	233	53.30	36.30
2	10479.00	53.5 PK	73.30	-19.80	1.70 H	44	8.80	44.70

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5240.00	109.1 PK			1.28 V	23	72.80	36.30
1	*5240.00	99.5 AV			1.28 V	23	63.10	36.30
2	10479.00	48.3 PK	73.30	-25.00	1.40 V	244	3.60	44.70

REMARKS:

1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. “*” : Fundamental frequency

EUT	IEEE802.11a+802.11g Dual Band Wireless Access Point	**MODEL**	SL-5354AP1 Aries2
MODE	Normal Mode	**CHANNEL**	5
FREQUENCY RANGE	Above 1000 MHz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	30 deg. C, 60%RH, 991 hPa	**INPUT POWER (SYSTEM)**	120Vac, 60Hz
TESTED BY	Hardaway Lee		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5260.00	97.0 PK			2.17 H	199	60.60	36.40
1	*5260.00	88.0 AV			2.17 H	199	51.60	36.40
2	10521.00	49.2 PK	73.30	-24.10	1.77 H	224	4.40	44.80

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5260.00	109.2 PK			1.29 V	223	72.90	36.40
1	*5260.00	99.6 AV			1.29 V	223	63.20	36.40
2	10521.00	50.3 PK	73.30	-23.00	1.16 V	24	5.50	44.80

REMARKS:

1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. “*” : Fundamental frequency

EUT	IEEE802.11a+802.11g Dual Band Wireless Access Point	**MODEL**	SL-5354AP1 Aries2
MODE	Normal Mode	**CHANNEL**	8
FREQUENCY RANGE	Above 1000 MHz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	30 deg. C, 60%RH, 991 hPa	**INPUT POWER (SYSTEM)**	120Vac, 60Hz
TESTED BY	Hardaway Lee		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5320.00	98.1 PK			1.81 H	110	61.60	36.40
1	*5320.00	88.1 AV			1.81 H	110	51.60	36.40
2	10641.00	57.0 PK	74.00	-17.00	1.42 H	97	12.00	45.10
2	10641.00	46.3 AV	54.00	-7.70	1.42 H	97	1.20	45.10

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5320.00	108.7 PK			1.21 V	234	72.30	36.40
1	*5320.00	98.7 AV			1.21 V	234	62.20	36.40
2	#5350.00	52.2 PK	74.00	-21.80	1.00 V	185	15.70	36.50
2	#5350.00	42.2 AV	54.00	-11.80	1.00 V	185	5.70	36.50
3	10641.00	59.0 PK	74.00	-15.00	1.46 V	211	14.00	45.10
3	10641.00	45.9 AV	54.00	-8.10	1.46 V	211	0.80	45.10

REMARKS:

1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. “*” : Fundamental frequency
6. “# “ : The radiated frequency falling in the restricted band.

EUT	IEEE802.11a+802.11g Dual Band Wireless Access Point	**MODEL**	SL-5354AP1 Aries2
MODE	Normal Mode	**CHANNEL**	9
FREQUENCY RANGE	Above 1000 MHz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	30 deg. C, 60%RH, 991 hPa	**INPUT POWER (SYSTEM)**	120Vac, 60Hz
TESTED BY	Hardaway Lee		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5715.00	60.8 PK	73.30	-12.50	2.00 H	105	23.70	37.10
2	5725.00	72.2 PK	83.30	-11.10	2.00 H	105	35.10	37.10
3	*5745.00	94.7 PK			2.00 H	105	57.60	37.10
3	*5745.00	84.2 AV			2.00 H	105	47.10	37.10
4	11488.00	59.0 PK	74.00	-15.00	1.33 H	166	13.20	45.80
4	11488.00	45.7 AV	54.00	-8.30	1.33 H	166	0.00	45.80

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5715.00	60.5 PK	73.30	-12.80	1.35 V	18	23.40	37.10
2	5725.00	71.8 PK	83.30	-11.50	1.35 V	18	34.70	37.10
3	*5745.00	108.0 PK			1.35 V	18	70.90	37.10
3	*5745.00	98.6 AV			1.35 V	18	61.50	37.10
4	11488.00	60.8 PK	74.00	-13.20	2.07 V	66	15.00	45.80
4	11488.00	45.9 AV	54.00	-8.10	2.07 V	66	0.20	45.80

REMARKS:

1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. "*" : Fundamental frequency

EUT	IEEE802.11a+802.11g Dual Band Wireless Access Point	**MODEL**	SL-5354AP1 Aries2
MODE	Normal Mode	**CHANNEL**	12
FREQUENCY RANGE	Above 1000 MHz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	30 deg. C, 60%RH, 991 hPa	**INPUT POWER (SYSTEM)**	120Vac, 60Hz
TESTED BY	Hardaway Lee		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5805.00	97.4 PK			1.17 H	131	60.10	37.20
1	*5805.00	87.1 AV			1.17 H	131	49.90	37.20
2	11612.00	57.7 PK	74.00	-16.30	1.33 H	207	12.00	45.60
2	11612.00	45.7 AV	54.00	-8.30	1.33 H	207	0.00	45.60

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5805.00	104.6 PK			2.02 V	31	67.40	37.20
1	*5805.00	94.5 AV			2.02 V	31	57.30	37.20
2	5823.00	61.2 PK	83.30	-22.10	2.02 V	31	23.90	37.30
3	5825.00	67.7 PK	83.30	-15.60	2.02 V	31	30.40	37.30
4	11612.00	60.9 PK	74.00	-13.10	1.33 V	207	15.30	45.60
4	11612.00	46.1 AV	54.00	-7.90	1.33 V	207	0.50	45.60

REMARKS:

1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. “*” : Fundamental frequency

EUT	IEEE802.11a+802.11g Dual Band Wireless Access Point	**MODEL**	SL-5354AP1 Aries2
MODE	Turbo Mode	**CHANNEL**	1
FREQUENCY RANGE	Above 1000 MHz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	30 deg. C, 60%RH, 991 hPa	**INPUT POWER (SYSTEM)**	120Vac, 60Hz
TESTED BY	Hardaway Lee		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5210.00	96.0 PK			2.16 H	111	59.80	36.30
1	*5210.00	86.3 AV			2.16 H	111	50.00	36.30
2	10420.00	54.9 PK	68.30	-13.40	1.36 H	130	10.30	44.60
2	10420.00	44.7 AV	54.00	-9.30	1.36 H	130	0.10	44.60

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5150.00	56.5 PK	74.00	-17.50	1.31 V	99	20.30	36.20
1	#5150.00	46.3 AV	54.00	-7.70	1.31 V	99	10.10	36.20
2	*5210.00	106.6 PK			1.31 V	99	70.30	36.30
2	*5210.00	96.4 AV			1.31 V	99	60.10	36.30
3	10420.00	58.7 PK	73.30	-14.60	1.41 V	30	14.10	44.60

REMARKS:

1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. "*" : Fundamental frequency
6. "# " : The radiated frequency falling in the restricted band.

EUT	IEEE802.11a+802.11g Dual Band Wireless Access Point	**MODEL**	SL-5354AP1 Aries2
MODE	Turbo Mode	**CHANNEL**	2
FREQUENCY RANGE	Above 1000 MHz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	30 deg. C, 60%RH, 991 hPa	**INPUT POWER (SYSTEM)**	120Vac, 60Hz
TESTED BY	Hardaway Lee		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5250.00	96.7 PK			2.16 H	22	60.40	36.30
1	*5250.00	86.8 AV			2.16 H	22	50.40	36.30
2	10500.00	53.2 PK	73.30	-20.10	2.22 H	122	8.50	44.70

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5250.00	106.0 PK			1.52 V	299	69.60	36.30
1	*5250.00	95.9 AV			1.52 V	299	59.60	36.30
2	10500.00	55.4 PK	73.30	-17.90	2.10 V	99	10.70	44.70

REMARKS:

1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. “*” : Fundamental frequency

EUT	IEEE802.11a+802.11g Dual Band Wireless Access Point	**MODEL**	SL-5354AP1 Aries2
MODE	Turbo Mode	**CHANNEL**	3
FREQUENCY RANGE	Above 1000 MHz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	30 deg. C, 60%RH, 991 hPa	**INPUT POWER (SYSTEM)**	120Vac, 60Hz
TESTED BY	Hardaway Lee		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5290.00	96.2 PK			1.24 H	225	59.80	36.40
1	*5290.00	86.4 AV			1.24 H	225	50.00	36.40
2	10579.00	55.9 PK	73.30	-17.40	1.54 H	3	11.00	44.90

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5290.00	106.8 PK			1.32 V	105	70.40	36.40
1	*5290.00	96.6 AV			1.32 V	105	60.20	36.40
2	#5350.00	53.4 PK	74.00	-20.60	1.32 V	105	17.00	36.50
2	#5350.00	43.2 AV	54.00	-10.80	1.32 V	105	6.80	36.50
3	10579.00	57.9 PK	73.30	-15.40	1.24 V	225	13.00	44.90

REMARKS:

1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. “*” : Fundamental frequency
6. “# “ : The radiated frequency falling in the restricted band.

EUT	IEEE802.11a+802.11g Dual Band Wireless Access Point	**MODEL**	SL-5354AP1 Aries2
MODE	Turbo Mode	**CHANNEL**	4
FREQUENCY RANGE	Above 1000 MHz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	30 deg. C, 60%RH, 991 hPa	**INPUT POWER (SYSTEM)**	120Vac, 60Hz
TESTED BY	Hardaway Lee		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5760.00	94.8 PK			1.54 H	15	57.70	37.20
1	*5760.00	85.7 AV			1.54 H	15	48.50	37.20
2	11512.00	57.6 PK	74.00	-16.40	1.45 H	315	11.90	45.70
2	11512.00	46.9 AV	54.00	-7.10	1.45 H	315	1.20	45.70

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5715.00	61.2 PK	73.30	-12.10	1.22 V	13	24.10	37.10
2	5725.00	71.0 PK	83.30	-12.30	1.22 V	13	34.00	37.10
3	*5760.00	105.4 PK			1.22 V	13	68.30	37.20
3	*5760.00	95.5 AV			1.22 V	13	58.40	37.20
4	11512.00	59.8 PK	74.00	-14.20	1.22 V	13	14.10	45.70
4	11512.00	47.0 AV	54.00	-7.00	1.22 V	13	1.30	45.70

REMARKS:

1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. “*” : Fundamental frequency

EUT	IEEE802.11a+802.11g Dual Band Wireless Access Point	**MODEL**	SL-5354AP1 Aries2
MODE	Turbo Mode	**CHANNEL**	5
FREQUENCY RANGE	Above 1000 MHz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	30 deg. C, 60%RH, 991 hPa	**INPUT POWER (SYSTEM)**	120Vac, 60Hz
TESTED BY	Hardaway Lee		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5800.00	95.2 PK			1.54 H	277	58.00	37.20
1	*5800.00	85.9 AV			1.54 H	277	48.70	37.20
2	11597.00	55.8 PK	74.00	-18.20	1.59 H	33	10.10	45.70
2	11597.00	36.4 AV	54.00	-17.60	1.59 H	33	-9.30	45.70

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5800.00	103.6 PK			1.45 V	315	66.30	37.20
1	*5800.00	93.7 AV			1.45 V	315	56.50	37.20
2	5825.00	76.3 PK	83.30	-7.00	1.45 V	315	39.00	37.30
3	5835.00	64.2 PK	73.30	-9.10	1.45 V	315	26.90	37.30
4	11597.00	57.1 PK	74.00	-16.90	1.39 V	77	11.40	45.70
4	11597.00	35.9 AV	54.00	-18.10	1.39 V	77	-9.80	45.70

REMARKS:

1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. “*” : Fundamental frequency

5.3 PEAK TRANSMIT POWER MEASUREMENT

5.3.1 LIMITS OF PEAK TRANSMIT POWER MEASUREMENT

Frequency Band	Limit
5.15 – 5.25 GHz	The lesser of 50mW (17dBm) or 4dBm + 10logB
5.25 – 5.35 GHz	The lesser of 250mW (24dBm) or 11dBm + 10logB
5.725 – 5.825 GHz	The lesser of 1W (30dBm) or 17dBm + 10logB

Note: Where B is the 26dB emission bandwidth in MHz.

5.3.2 TEST INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
SPECTRUM ANALYZER	FSEK30	100049	Aug. 12, 2004

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

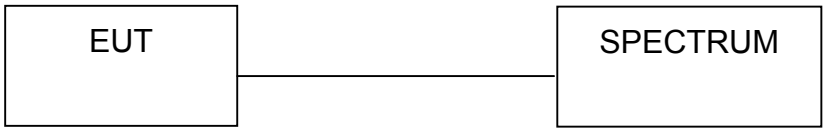
5.3.3 TEST PROCEDURE

1. The transmitter output was connected to the spectrum analyzer.
2. Set span to encompass the entire emission bandwidth of the signal.
3. Set RBW to 1MHz, VBW to 300kHz.
4. Using the spectrum analyzer's channel power measurement function to measure the output power.

5.3.4 DEVIATION FROM TEST STANDARD

No deviation

5.3.5 TEST SETUP



5.3.6 EUT OPERATING CONDITIONS

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

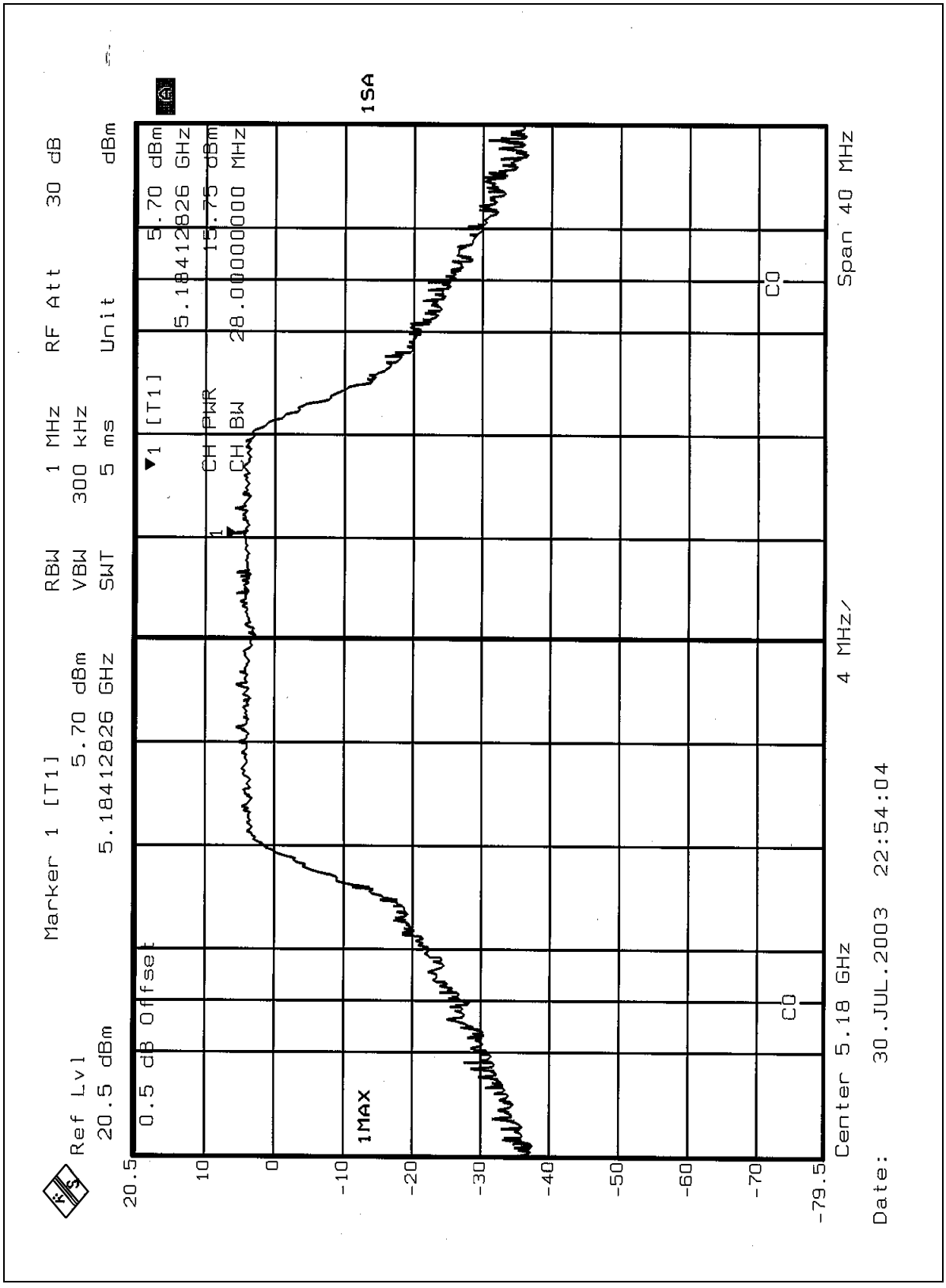
5.3.7 TEST RESULTS

EUT	IEEE802.11a+802.11g Dual Band Wireless Access Point	**MODEL**	SL-5354AP1 Aries2
MODE	Normal	**INPUT POWER (SYSTEM)**	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	26 deg. C, 65RH, 991 hPa	**TESTED BY**	Ansen Lei

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	26dBc Occupied Bandwidth (MHz)	PASS/FAIL
1	5180	15.75	17	24.62	PASS
4	5240	15.34	17	25.46	PASS
5	5260	19.81	24	24.76	PASS
8	5320	19.37	24	33.60	PASS
9	5745	19.06	30	27.64	PASS
12	5805	19.22	30	28.76	PASS

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

CHANNEL 1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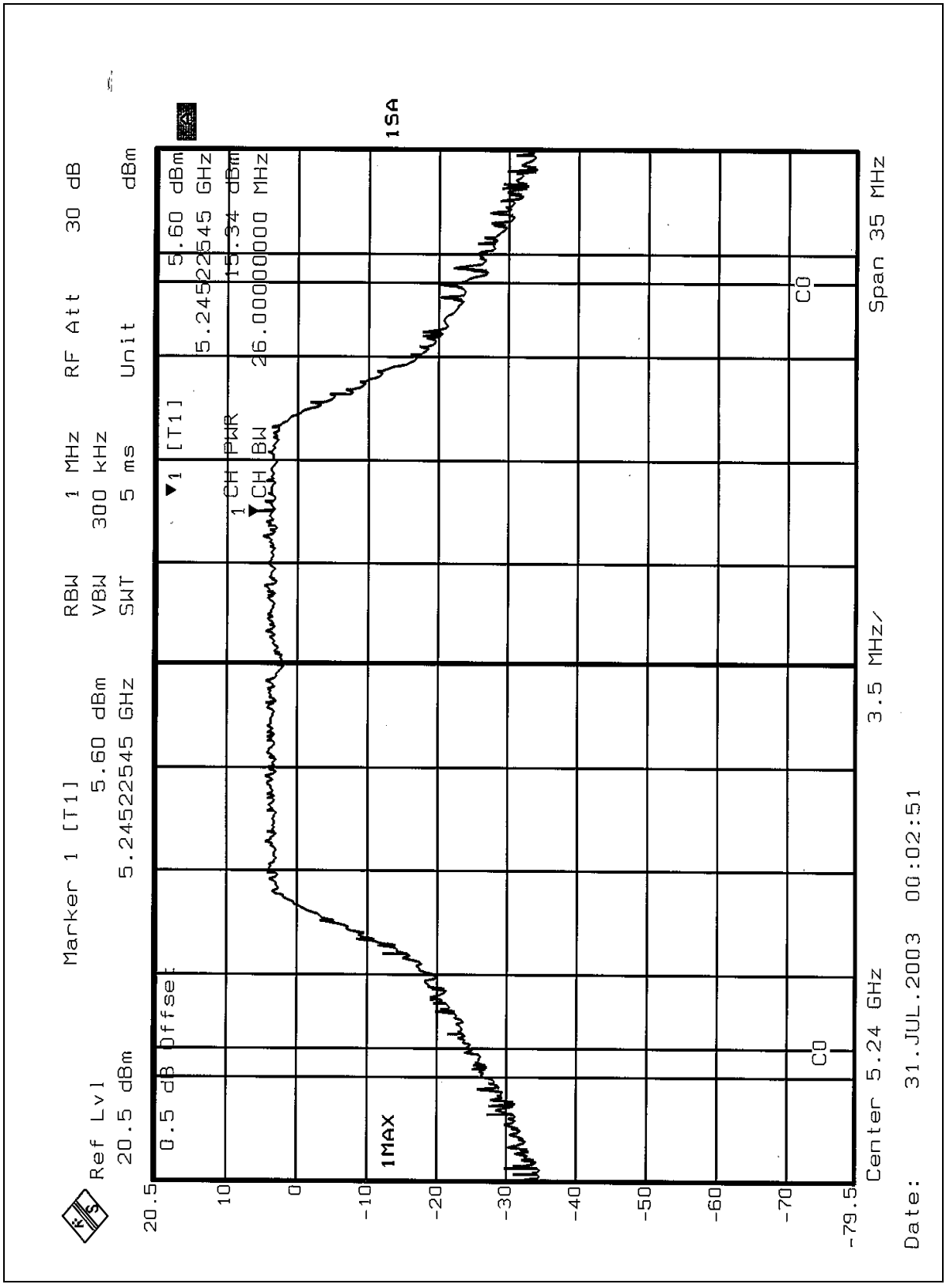
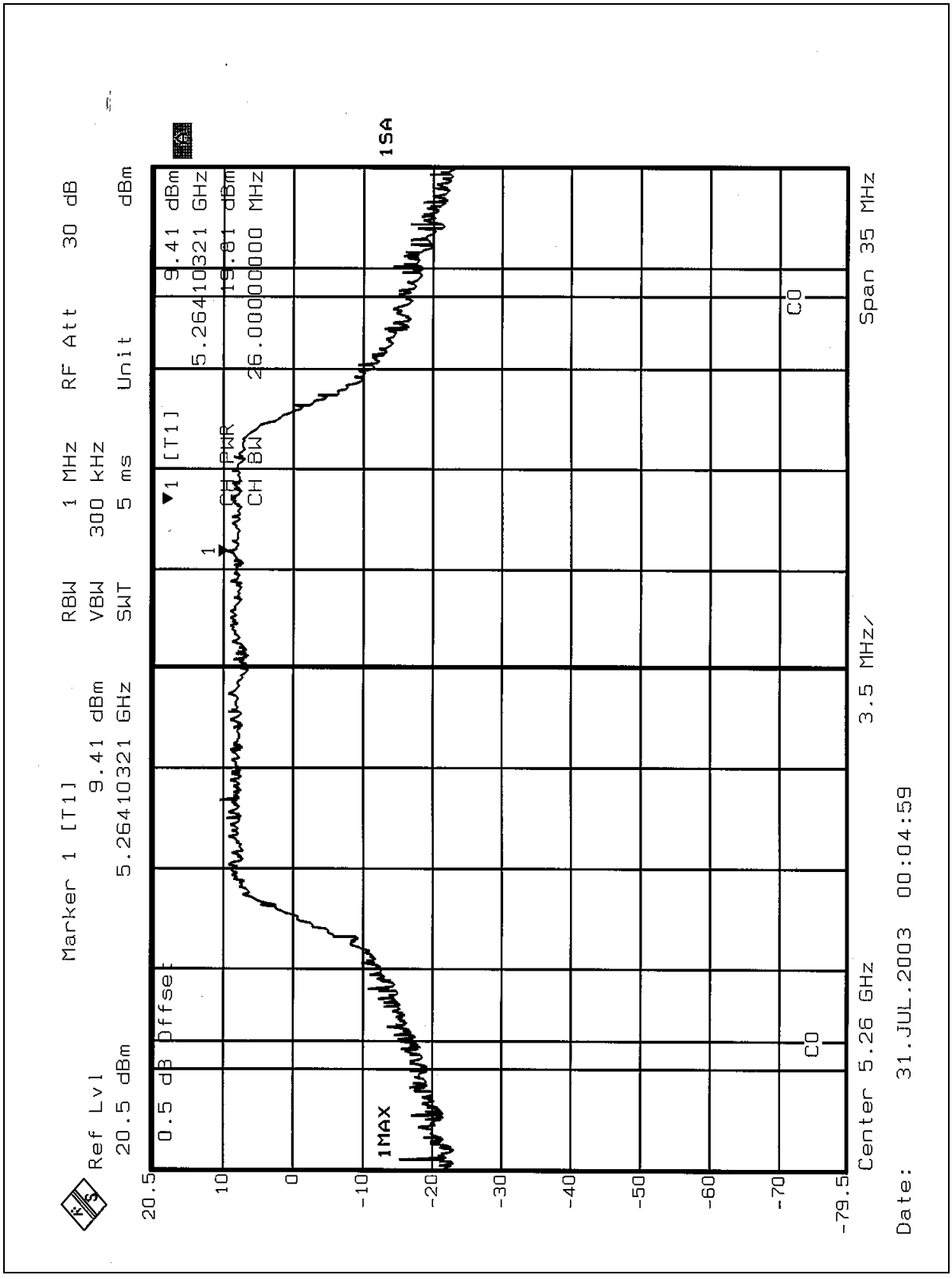
5.70 dBm
5.18412826 GHz
RBW 1 MHz
VBW 300 kHz
SWT 5 ms
RF Att 30 dB
Unit dBm
Ref Lvl
20.5 dBm
0.5 dB Offset
1MAX
1SA
CH PWR
CH BW
Center 5.18 GHz
4 MHz/
Span 40 MHz
Date: 30.JUL.2003 22:54:04

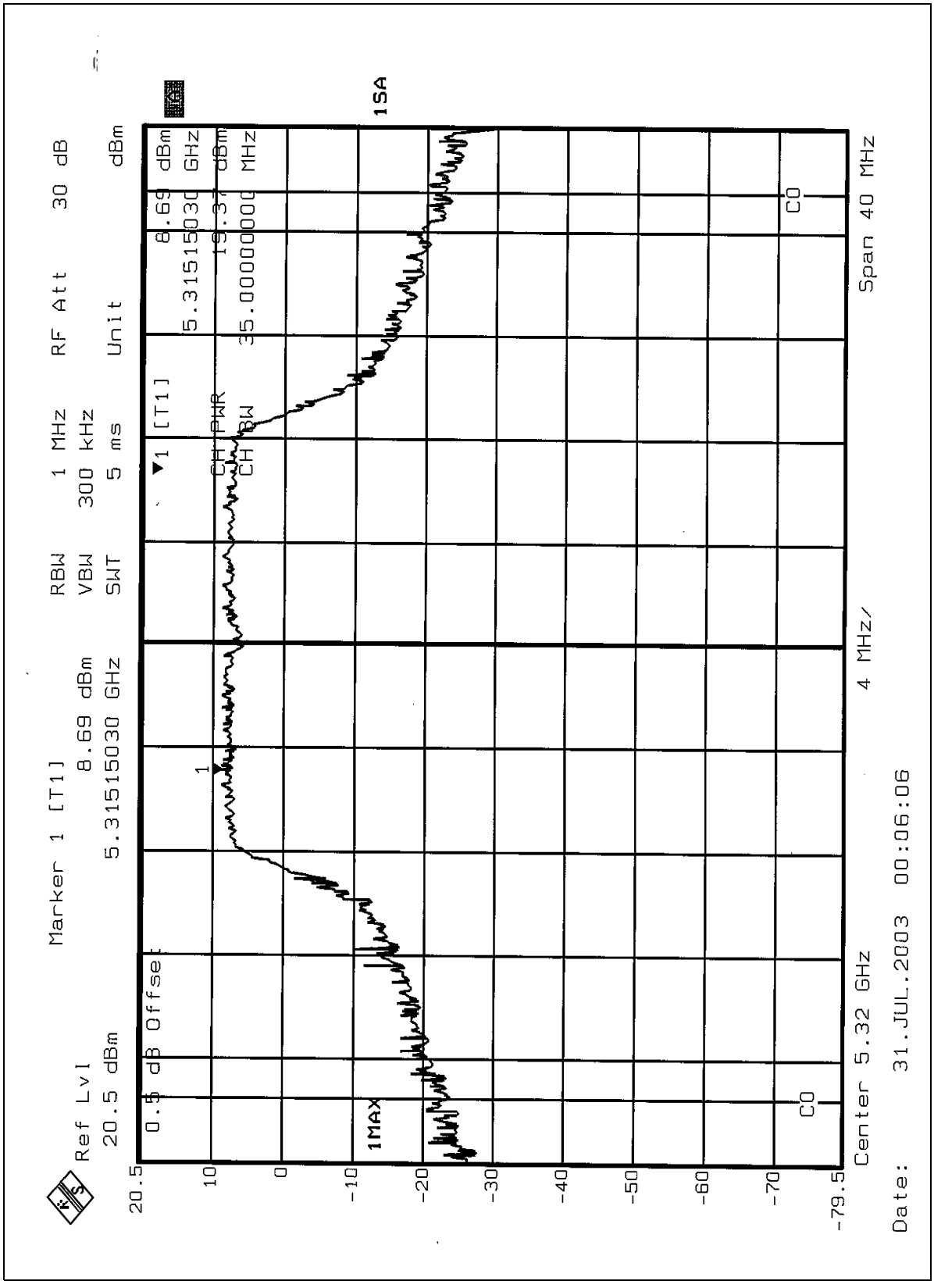
CHANNEL 4


Ref Lvl
20.5 dBm
0.5 dB Offset
Marker 1 [T1]
5.60 dBm
5.24522545 GHz
RBW 1 MHz
VBW 300 kHz
SWT 5 ms
RF Att 30 dB
Unit dBm
1 [T1]
5.60 dBm
5.24522545 GHz
1 CH PWR 15.34 dBm
1 CH BW 26.000000000 MHz
1SA
1MAX
CO
Center 5.24 GHz
3.5 MHz/
Span 35 MHz
Date: 31.JUL.2003 00:02:51

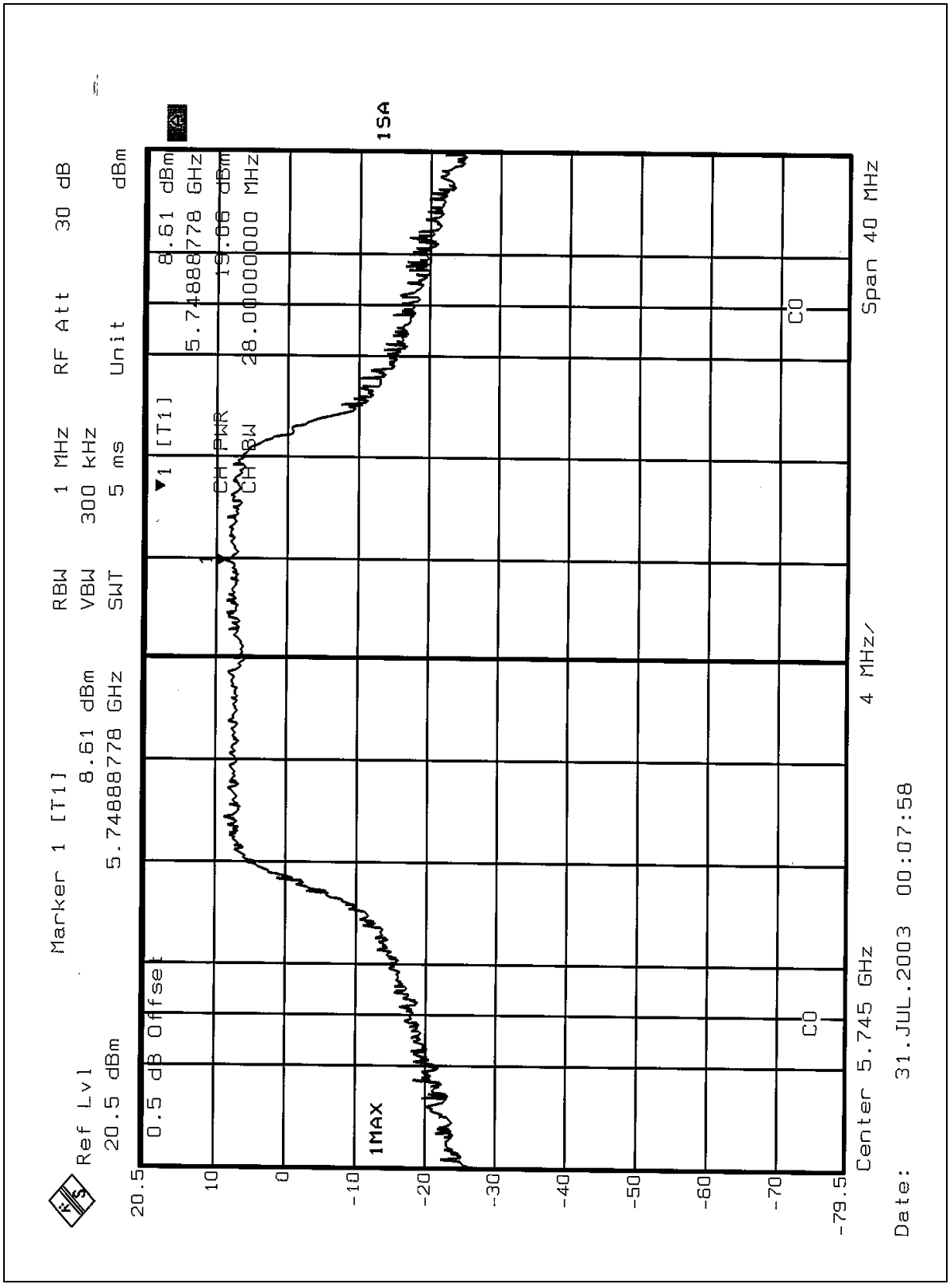
CHANNEL 5


Marker 1 [T1]
9.41 dBm
5.26410321 GHz
RBW 1 MHz
VBW 300 kHz
SWT 5 ms
RF Att 30 dB
Unit dBm
Ref Lvl
20.5 dBm
0.5 dB Offset
1MAX
1SA
CH PWR
CH BW
9.41 dBm
5.26410321 GHz
19.81 dBm
26.000000000 MHz
Center 5.26 GHz
3.5 MHz/
Span 35 MHz
Date: 31.JUL.2003 00:04:59

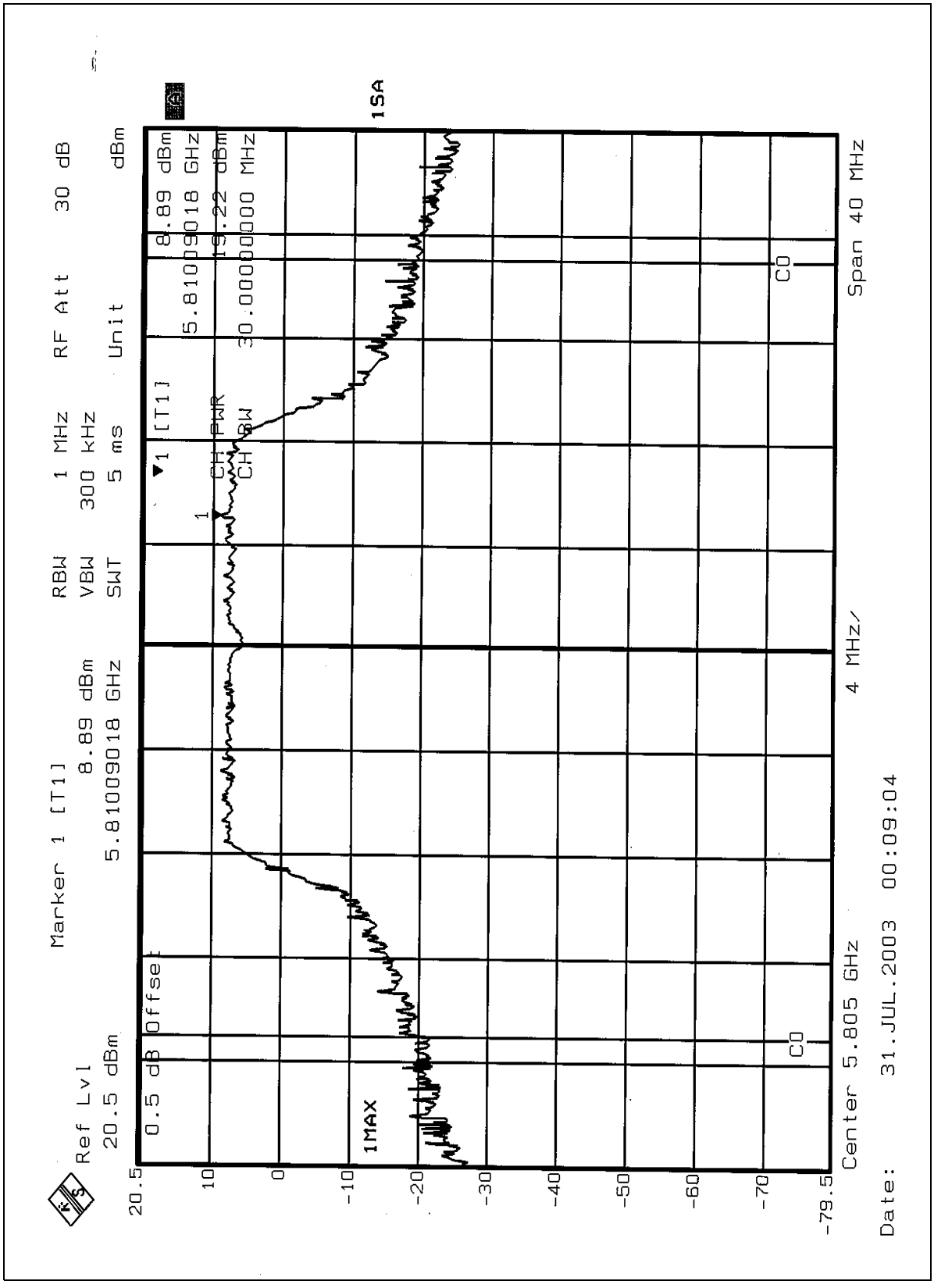
CHANNEL 8


Marker 1 [T1]
8.69 dBm
5.31515030 GHz
Ref Lvl
20.5 dBm
0.5 dB Offset
RBW 1 MHz
VBW 300 kHz
SWT 5 ms
RF Att 30 dB
Unit dBm
1SA
1MAX
CH PWR
CH BW
Center 5.32 GHz
4 MHz/
Span 40 MHz
Date: 31.JUL.2003 00:06:06

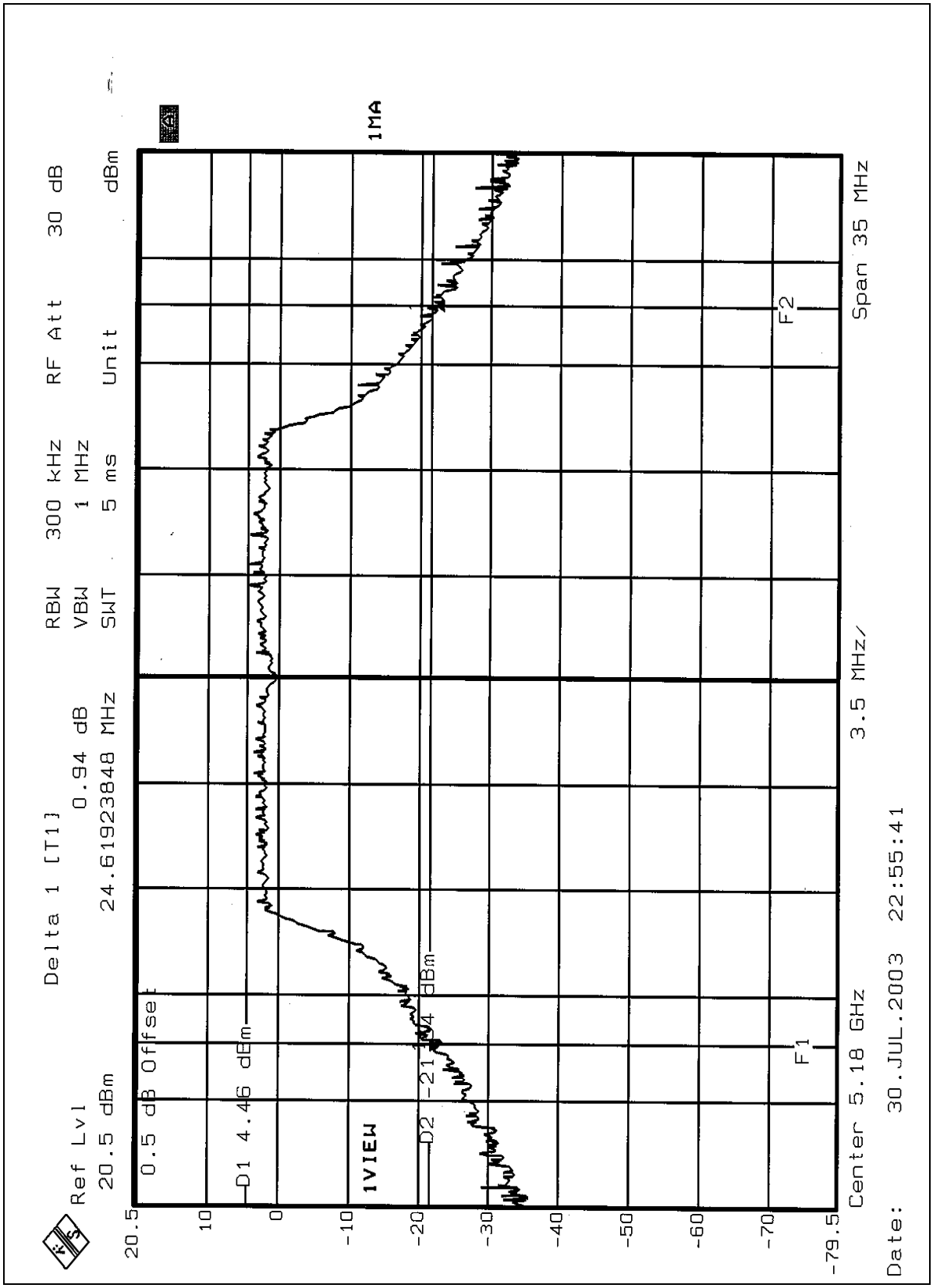
CHANNEL 9


Marker 1 [T1]
8.61 dBm
5.74888778 GHz
Ref Lvl
20.5 dBm
0.5 dB Offset
RBW 1 MHz
VBW 300 kHz
SWT 5 ms
RF Att 30 dB
Unit dBm
1SA
1MAX
CH PWR
CH BW
8.61 dBm
5.74888778 GHz
19.06 dBm
28.000000000 MHz
Center 5.745 GHz
4 MHz/
Span 40 MHz
Date: 31.JUL.2003 00:07:58

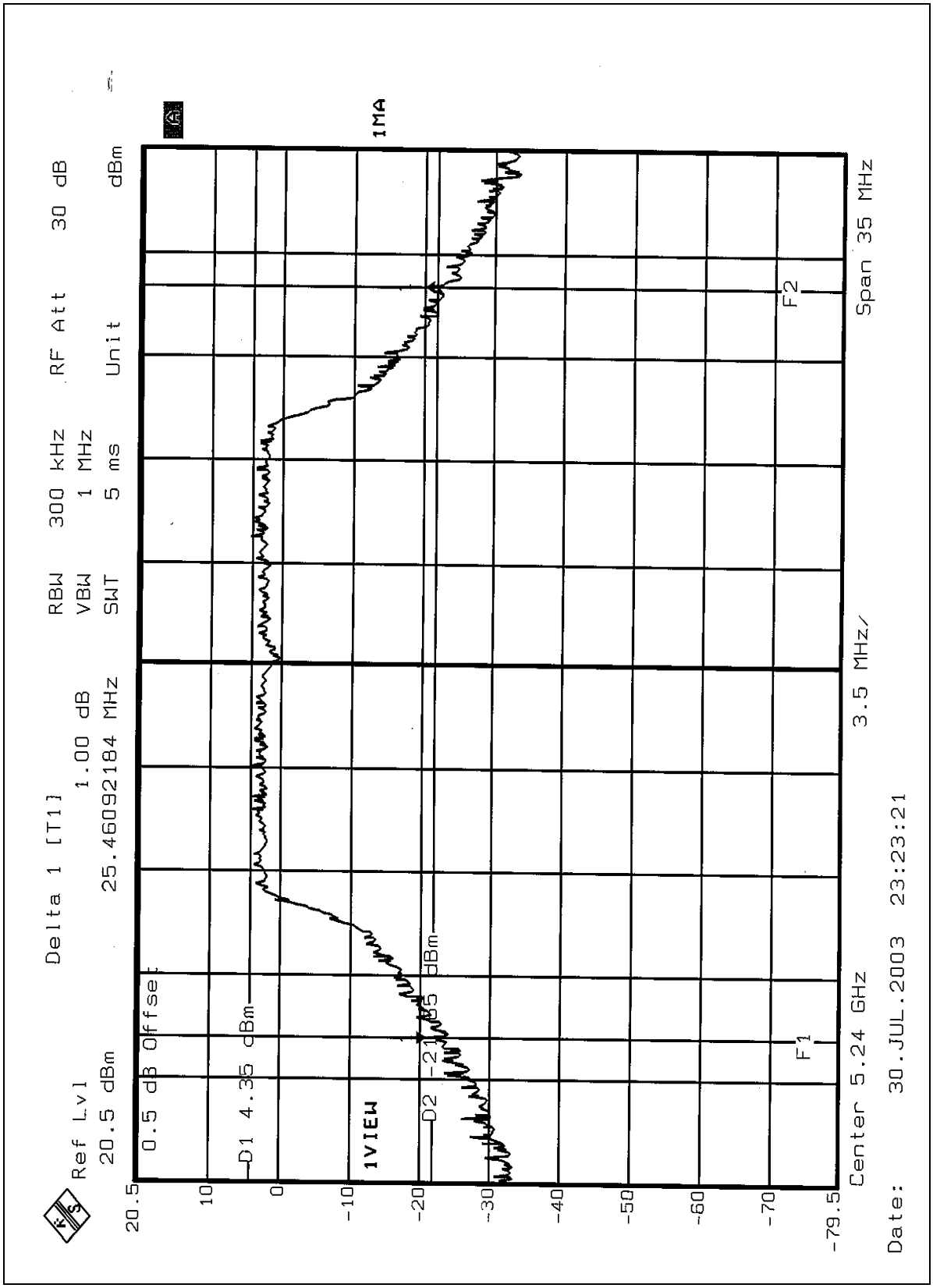
CHANNEL 12


Marker 1 [T1]
8.89 dBm
5.81009018 GHz
Ref Lvl
20.5 dBm
0.5 dB Offset
RBW 1 MHz
VBW 300 kHz
SWT 5 ms
RF Att 30 dB
Unit dBm
1SA
1MAX
1 [T1]
CH PWR
CH BW
8.89 dBm
5.81009018 GHz
19.22 dBm
30.000000000 MHz
Center 5.805 GHz
4 MHz/
Span 40 MHz
Date: 31.JUL.2003 00:09:04

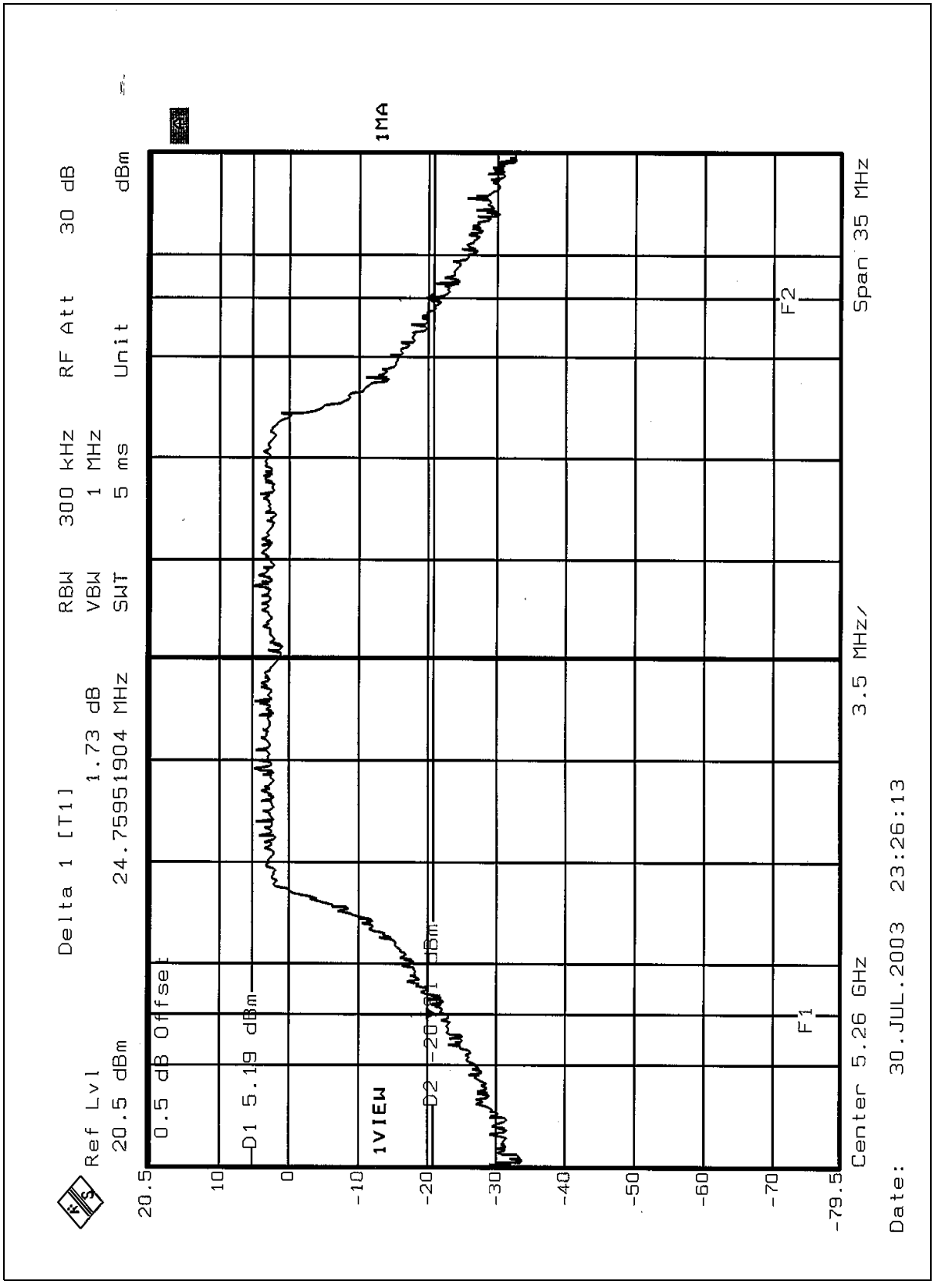
CHANNEL 1


Delta 1 [T1]
0.94 dB
24.61923848 MHz
RBW 300 kHz
VBW 1 MHz
SWT 5 ms
RF Att 30 dB
Unit dBm
Ref Lvl
20.5 dBm
0.5 dB Offset
D1 4.46 dBm
D2 -21.14 dBm
1VIEW
1MA
F1
F2
Center 5.18 GHz
3.5 MHz/
Span 35 MHz
Date: 30.JUL.2003 22:55:41
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5

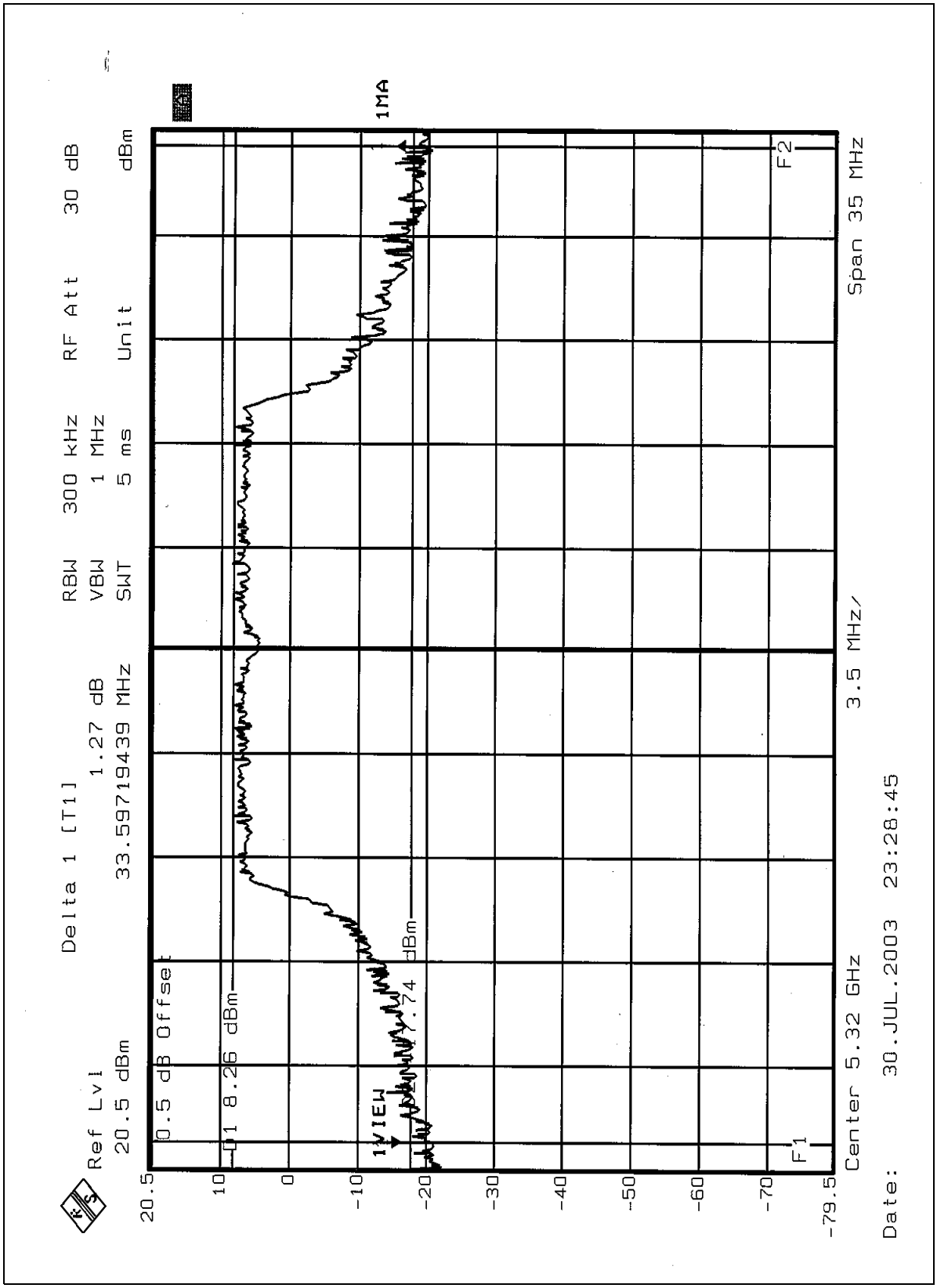
CHANNEL 4


Ref Lvl
20.5 dBm
0.5 dB Offset
D1 4.35 dBm
1VIEW
D2 -21.65 dBm
F1
F2
Center 5.24 GHz
3.5 MHz/
Span 35 MHz
Delta 1 [T1]
1.00 dB
25.46092184 MHz
RBW 300 kHz
VBW 1 MHz
SWT 5 ms
RF Att 30 dB
Unit dBm
1MA
Date: 30.JUL.2003 23:23:21
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5

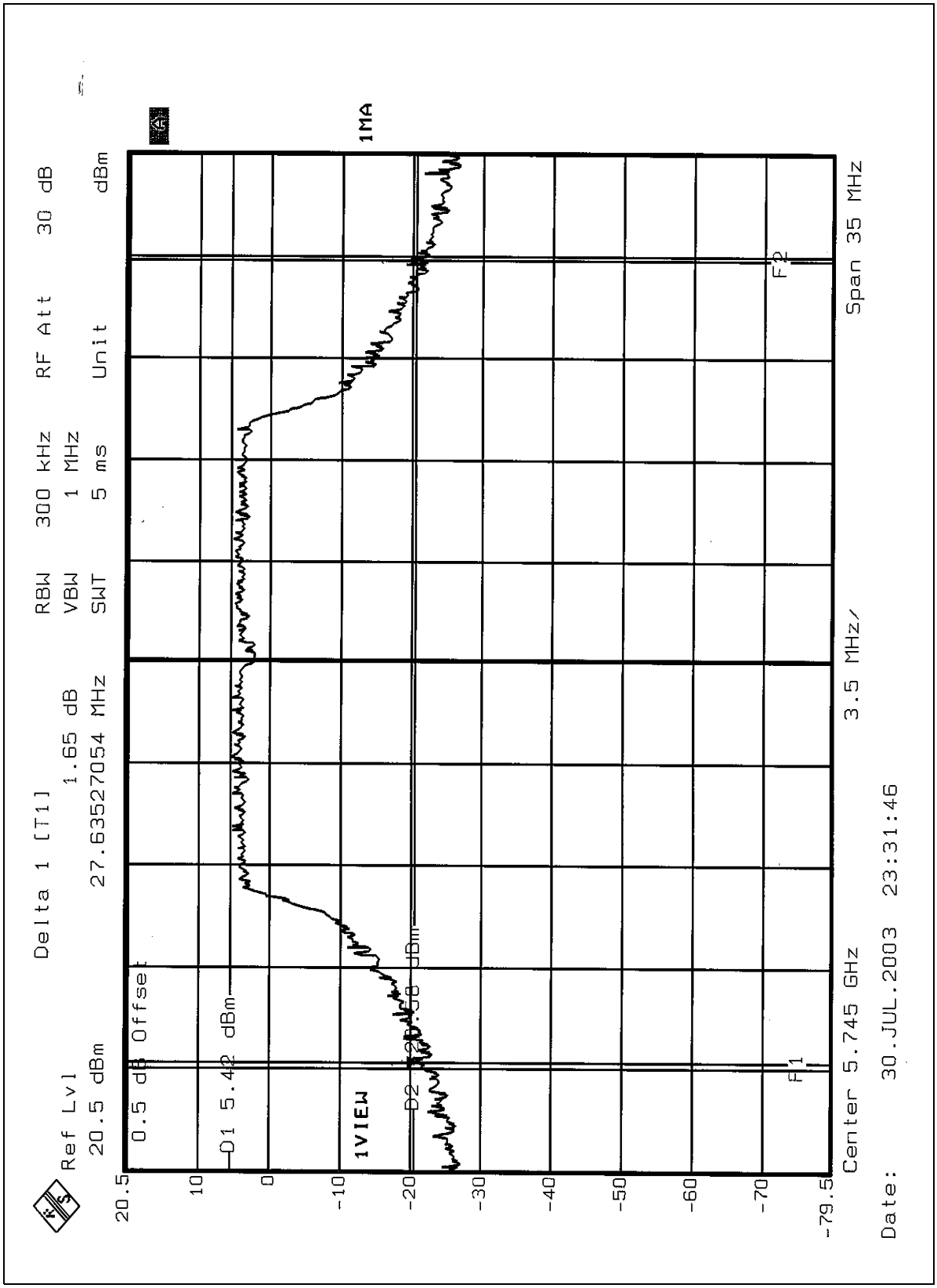
CHANNEL 5


Ref Lvl
20.5 dBm
0.5 dB Offset
D1 5.19 dBm
Delta 1 [T1]
1.73 dB
24.75951904 MHz
RBW 300 kHz
VBW 1 MHz
SWT 5 ms
RF Att 30 dB
Unit dBm
1MA
1VIEW
D2 -20.61 dBm
F1
F2
Center 5.26 GHz
3.5 MHz/
Span 35 MHz
Date: 30.JUL.2003 23:26:13
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5

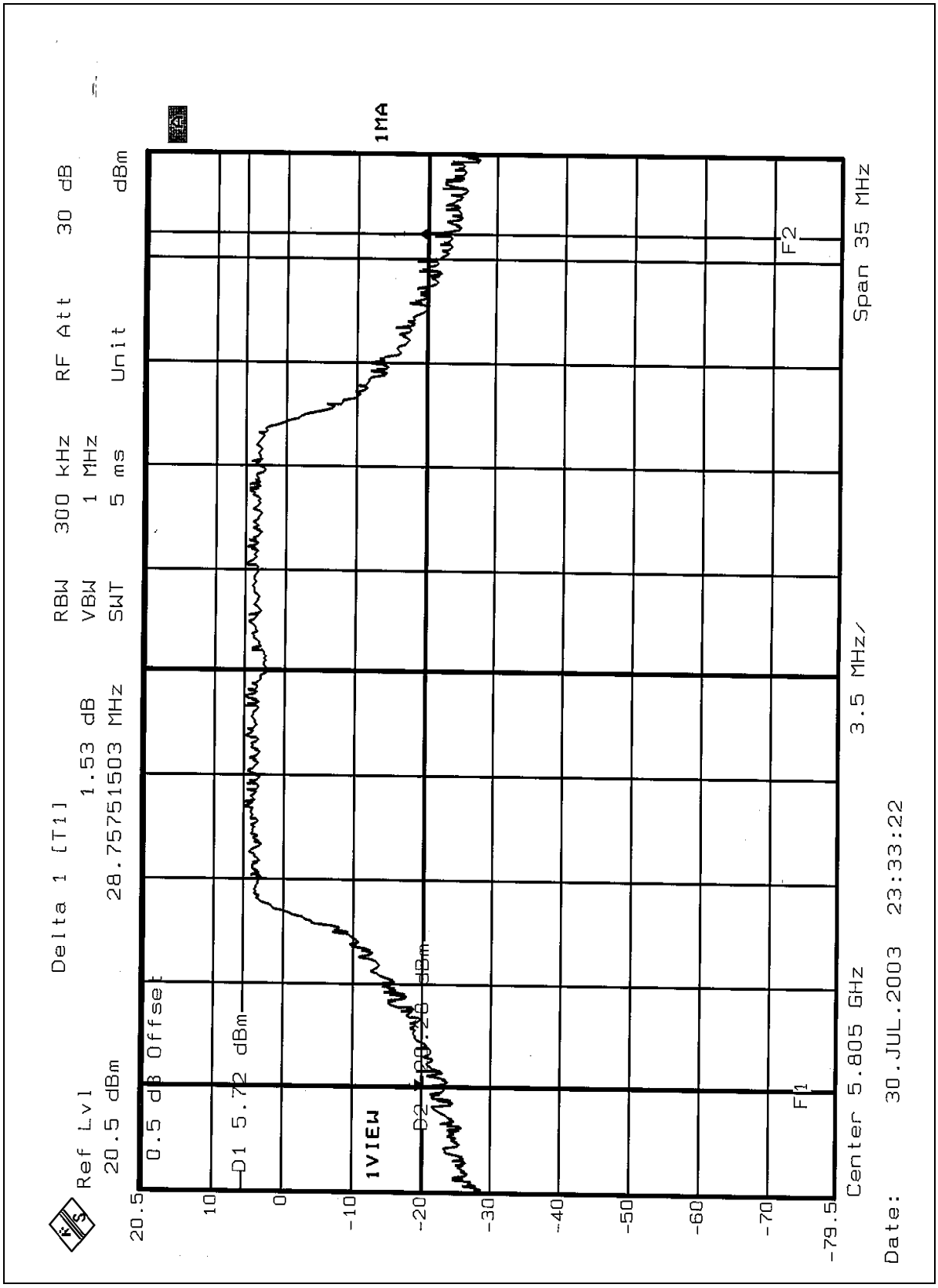
CHANNEL 8


Ref Lvl
20.5 dBm
0.5 dB Offset
D1 8.26 dBm
Delta 1 [T1]
1.27 dB
33.59719439 MHz
RBW 300 kHz
VBW 1 MHz
SWT 5 ms
RF Att 30 dB
Unit dBm
1MA
1VIEW
dBm
F2
F1
Span 35 MHz
3.5 MHz/
Center 5.32 GHz
Date: 30.JUL.2003 23:28:45
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5

CHANNEL 9


Ref Lvl
20.5 dBm
0.5 dB Offset
D1 5.42 dBm
1VIEW
D2
Delta 1 [T1]
1.65 dB
27.63527054 MHz
RBW 300 kHz
VBW 1 MHz
SWT 5 ms
RF Att 30 dB
Unit dBm
1MA
F2
F1
Center 5.745 GHz
3.5 MHz/
Span 35 MHz
Date: 30.JUL.2003 23:31:46
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5

CHANNEL 12

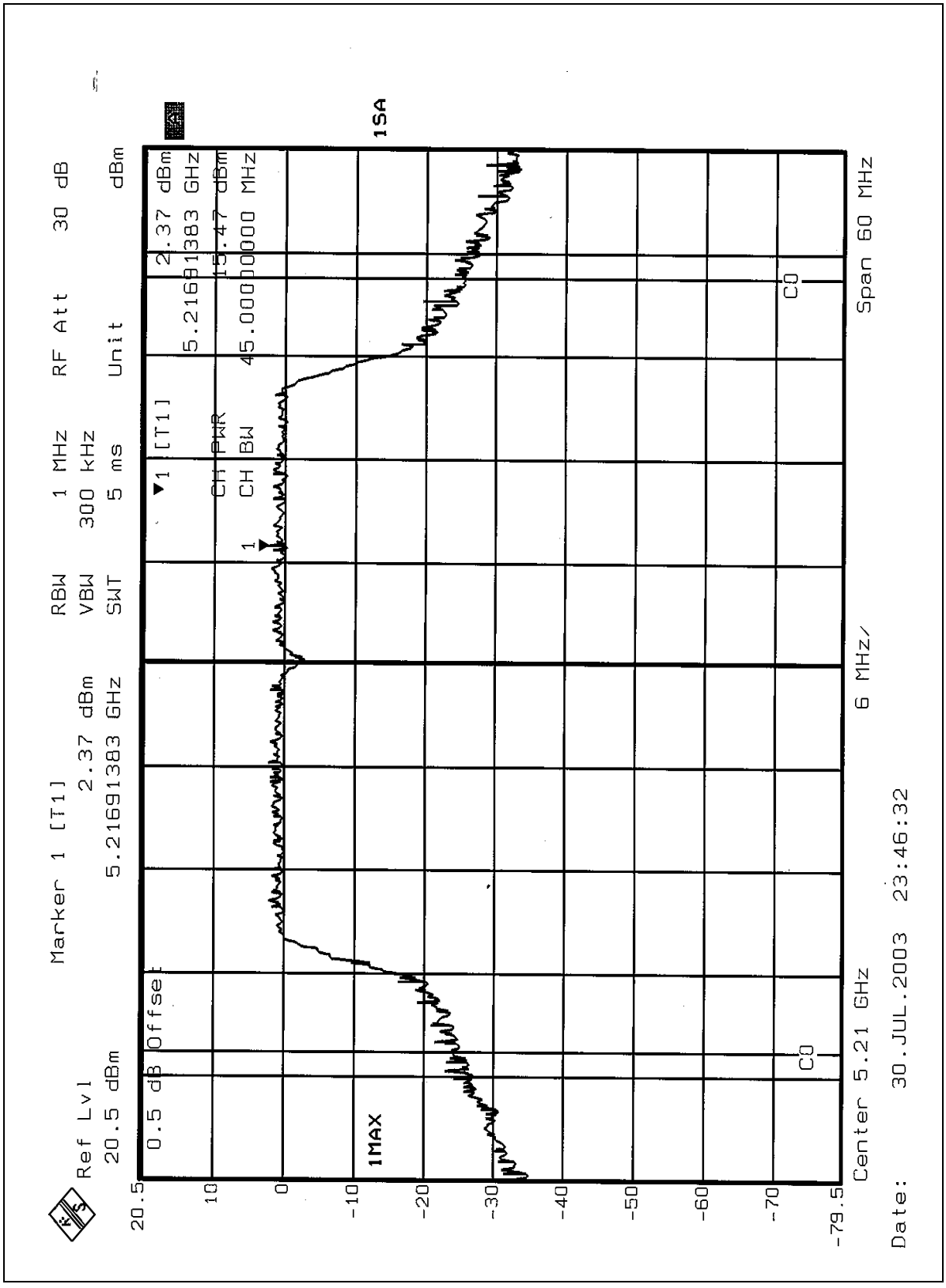

Delta 1 [T1]
1.53 dB
28.75751503 MHz
RBW 300 kHz
VBW 1 MHz
SWT 5 ms
RF Att 30 dB
Unit dBm
Ref Lvl
20.5 dBm
0.5 dB Offset
D1 5.72 dBm
1VIEW
D2 -20.28 dBm
1MA
F2
F1
Span 35 MHz
3.5 MHz/
Center 5.805 GHz
Date: 30.JUL.2003 23:33:22
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5

EUT	IEEE802.11a+802.11g Dual Band Wireless Access Point	**MODEL**	SL-5354AP1 Aries2
MODE	Turbo	**INPUT POWER (SYSTEM)**	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	26deg. C, 65RH, 991 hPa	**TESTED BY**	Ansen Lei

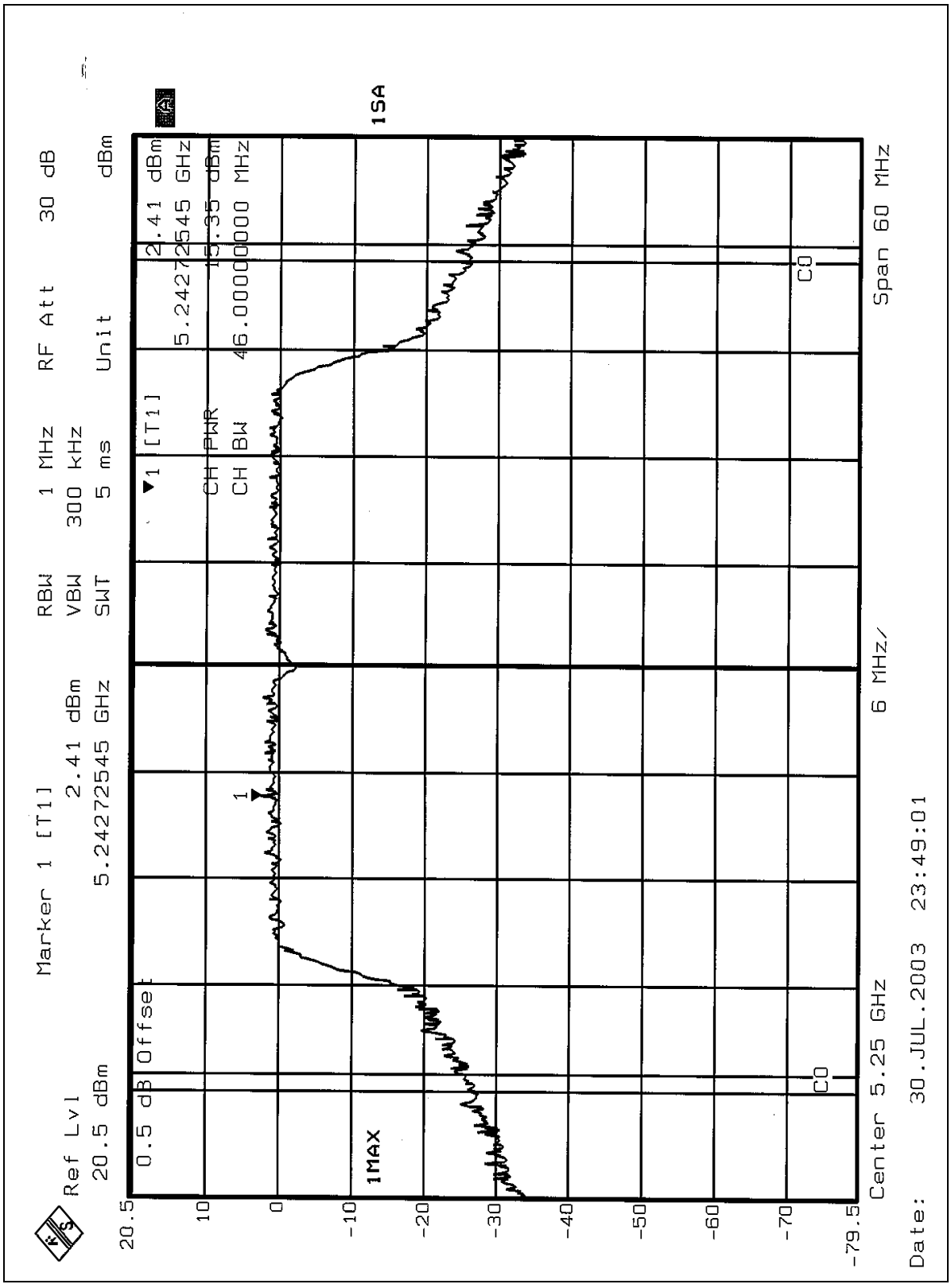
CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	26dBc Occupied Bandwidth (MHz)	PASS/FAIL
1	5210	15.47	17	42.81	PASS
2	5250	15.35	17	45.45	PASS
3	5290	16.07	24	45.69	PASS
4	5760	14.89	30	45.93	PASS
5	5800	14.35	30	46.29	PASS

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

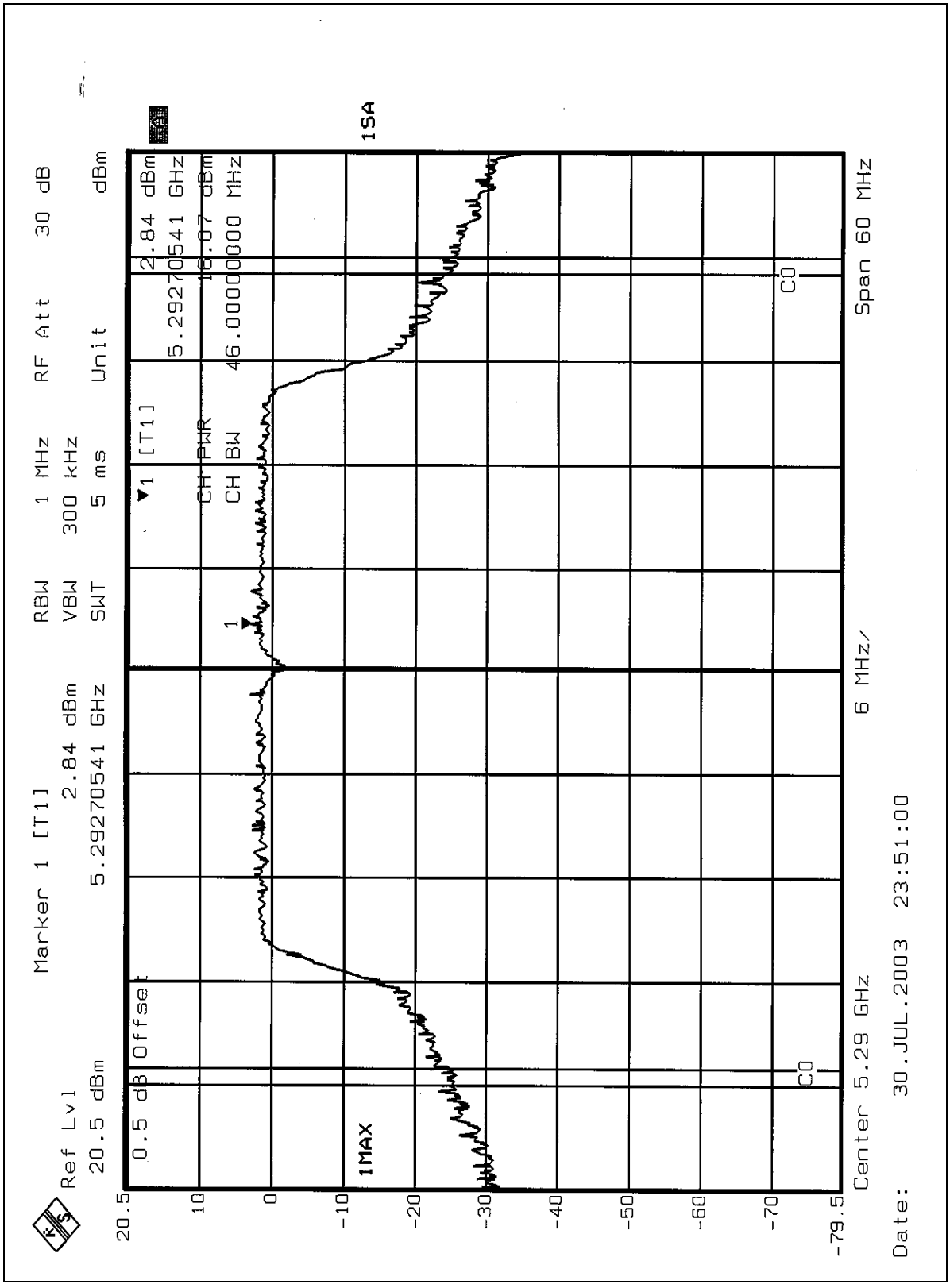
CHANNEL 1


Marker 1 [T1]
2.37 dBm
5.21691383 GHz
Ref Lvl
20.5 dBm
0.5 dB Offset
RBW 1 MHz
VBW 300 kHz
SWT 5 ms
RF Att 30 dB
Unit dBm
1 [T1]
CH PWR
CH BW
5.21691383 GHz
45.00000000 MHz
1MAX
1SA
Center 5.21 GHz
6 MHz/
Span 60 MHz
Date: 30.JUL.2003 23:46:32

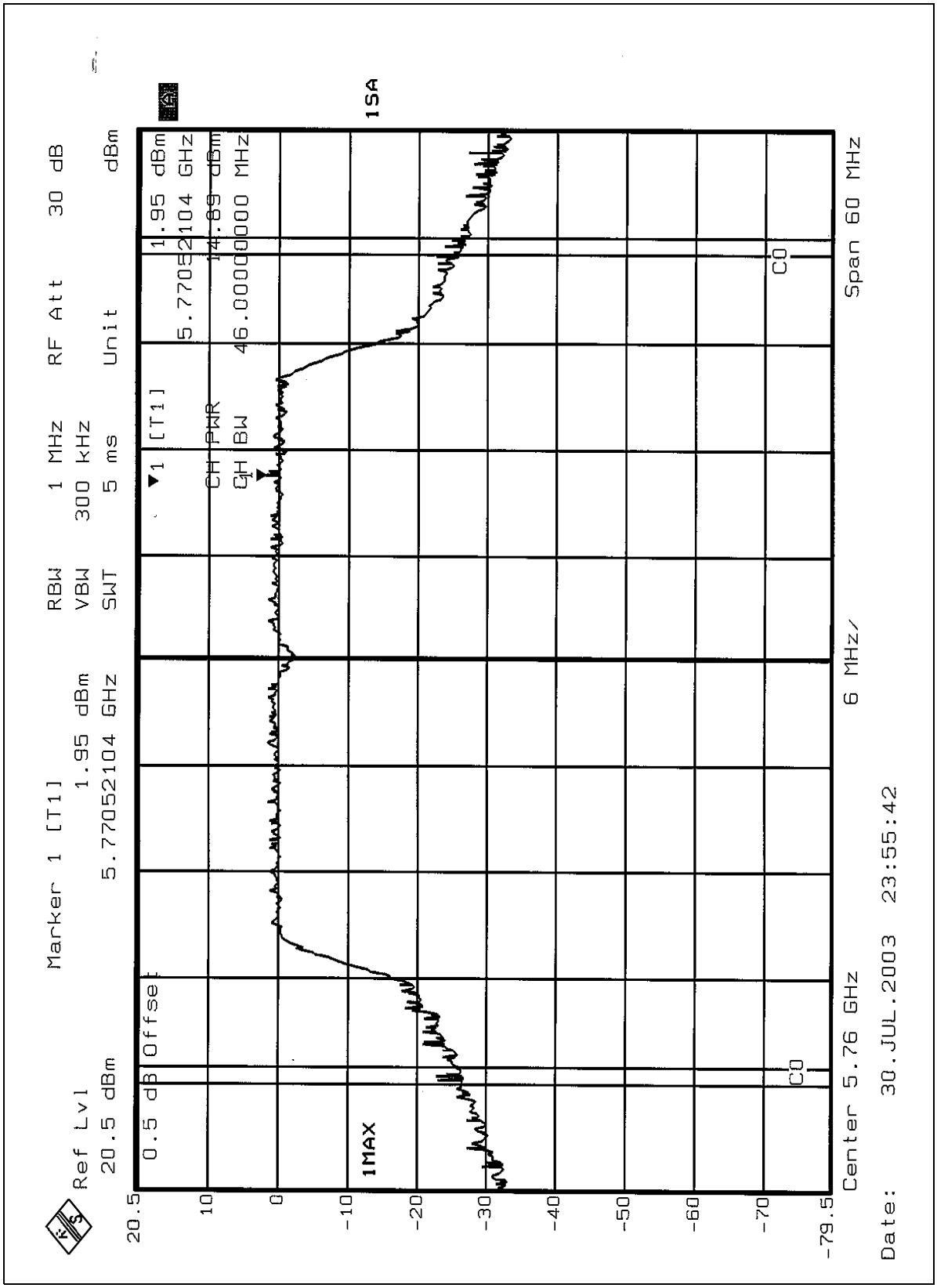
CHANNEL 2


Ref Lvl
20.5 dBm
0.5 dB Offset
Marker 1 [T1]
2.41 dBm
5.24272545 GHz
RBW 1 MHz
VBW 300 kHz
SWT 5 ms
RF Att 30 dB
Unit dBm
1SA
1MAX
1 [T1]
CH PWR 2.41 dBm
CH BW 15.35 dBm
5.24272545 GHz
46.000000000 MHz
Center 5.25 GHz
6 MHz/
Span 60 MHz
Date: 30.JUL.2003 23:49:01

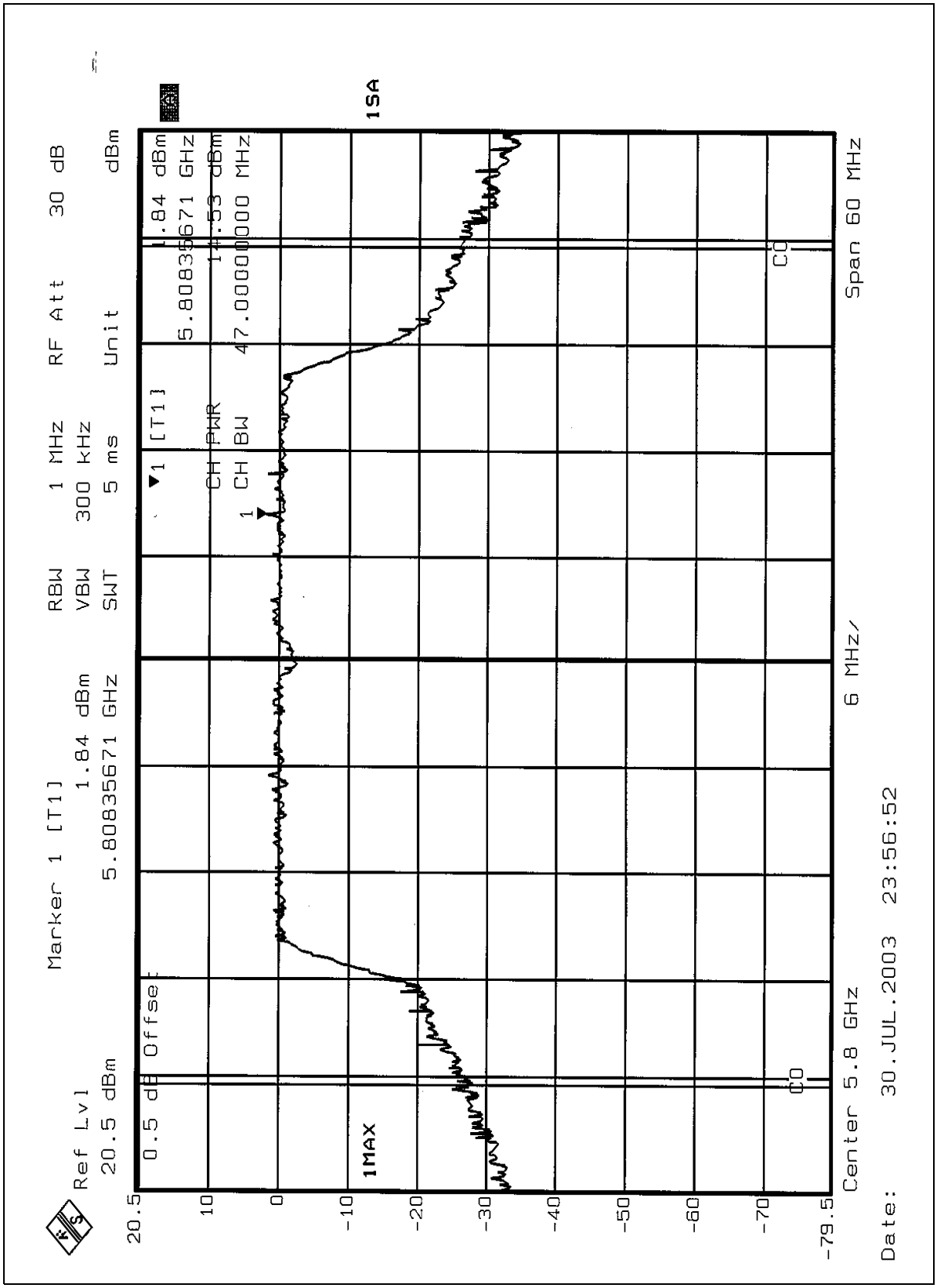
CHANNEL 3


Marker 1 [T1]
2.84 dBm
5.29270541 GHz
RBW 1 MHz
VBW 300 kHz
SWT 5 ms
RF Att 30 dB
Unit dBm
Ref Lvl
20.5 dBm
0.5 dB Offset
1MAX
1SA
CH PWR 16.07 dBm
CH BW 46.000000000 MHz
Center 5.29 GHz
Span 60 MHz
6 MHz/
Date: 30.JUL.2003 23:51:00

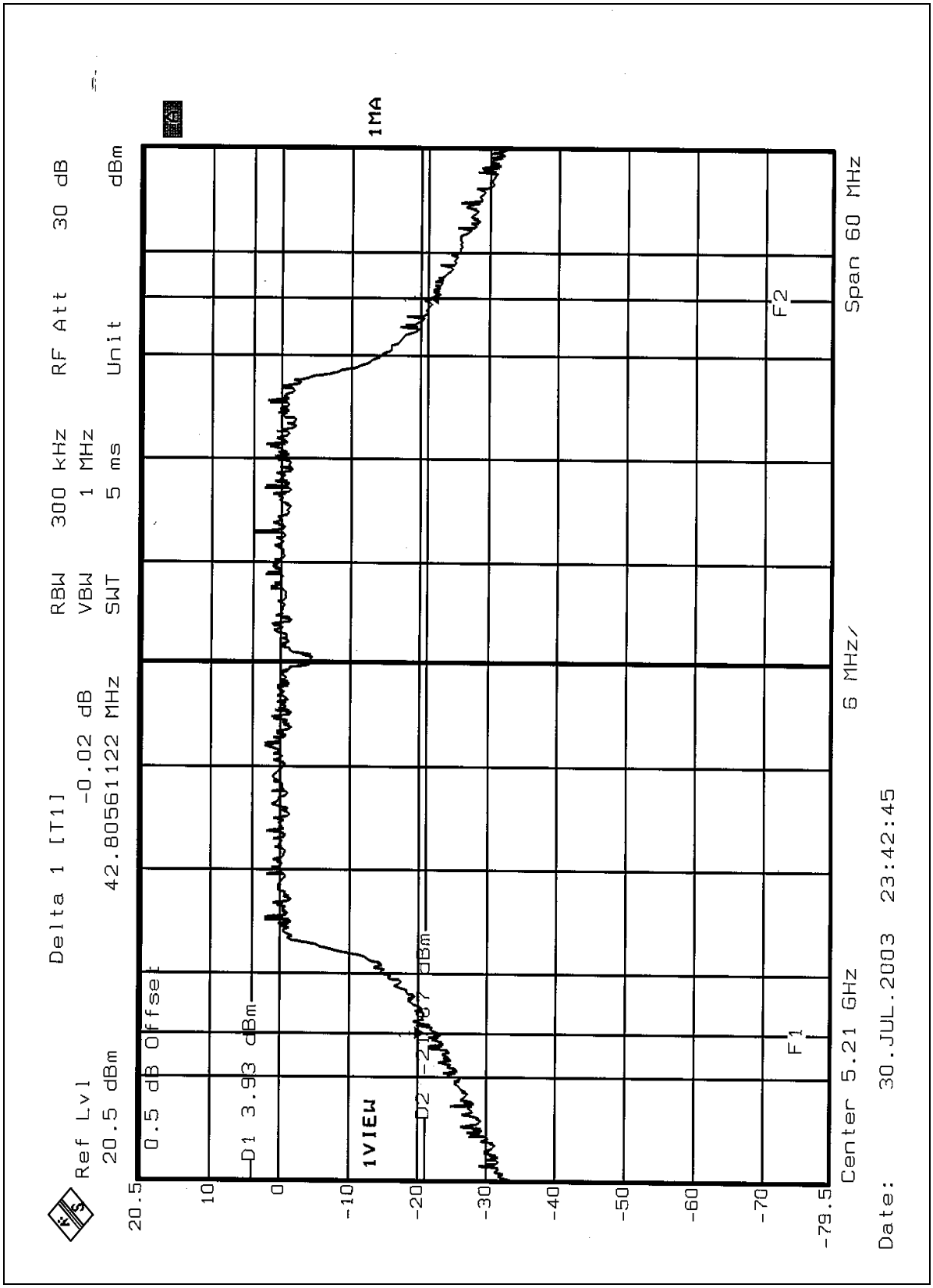
CHANNEL 4


Ref Lvl
20.5 dBm
0.5 dB Offset
Marker 1 [T1]
1.95 dBm
5.77052104 GHz
RBW 1 MHz
VBW 300 kHz
SWT 5 ms
RF Att 30 dB
Unit dBm
1SA
1MAX
[T1]
CH PWR
CH BW
5.77052104 GHz
14.89 dBm
46.000000000 MHz
Center 5.76 GHz
6 MHz/
Span 60 MHz
Date: 30.JUL.2003 23:55:42

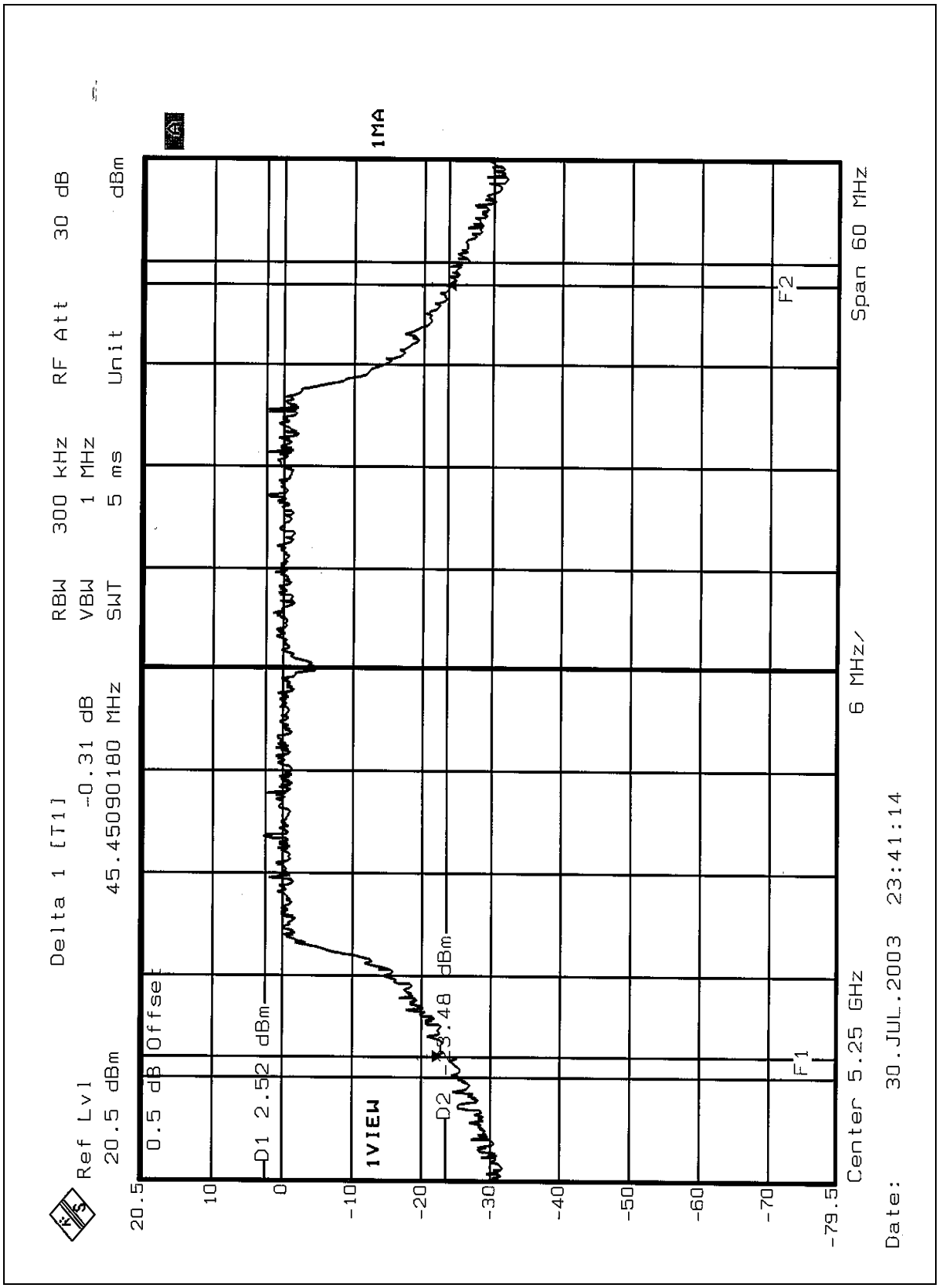
CHANNEL 5


Marker 1 [T1]
1.84 dBm
5.80835671 GHz
RBW 1 MHz
VBW 300 kHz
SWT 5 ms
RF Att 30 dB
Unit dBm
Ref Lvl
20.5 dBm
0.5 dB Offset
1MAX
1SA
CH PWR
1 CH BW
1.84 dBm
5.80835671 GHz
14.53 dBm
47.000000000 MHz
Center 5.8 GHz
6 MHz/
Span 60 MHz
Date: 30.JUL.2003 23:56:52

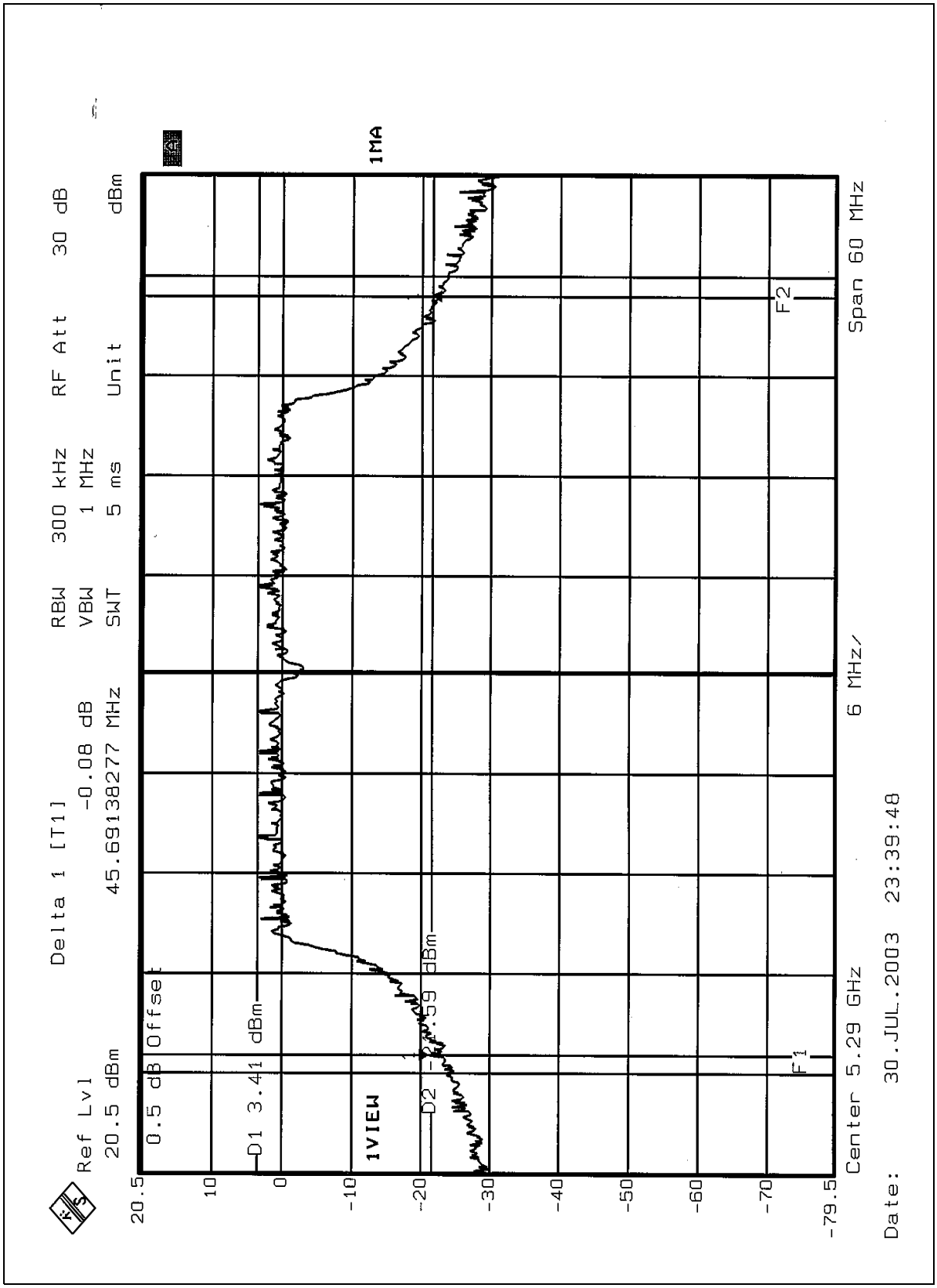
CHANNEL 1


Delta 1 [T1]
-0.02 dB
42.80561122 MHz
RBW 300 kHz
VBW 1 MHz
SWT 5 ms
RF Att 30 dB
Unit dBm
Ref Lvl
20.5 dBm
0.5 dB Offset
D1 3.93 dBm
D2 -21.07 dBm
1VIEW
1MA
F1
F2
Center 5.21 GHz
6 MHz/
Span 60 MHz
Date: 30.JUL.2003 23:42:45
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5

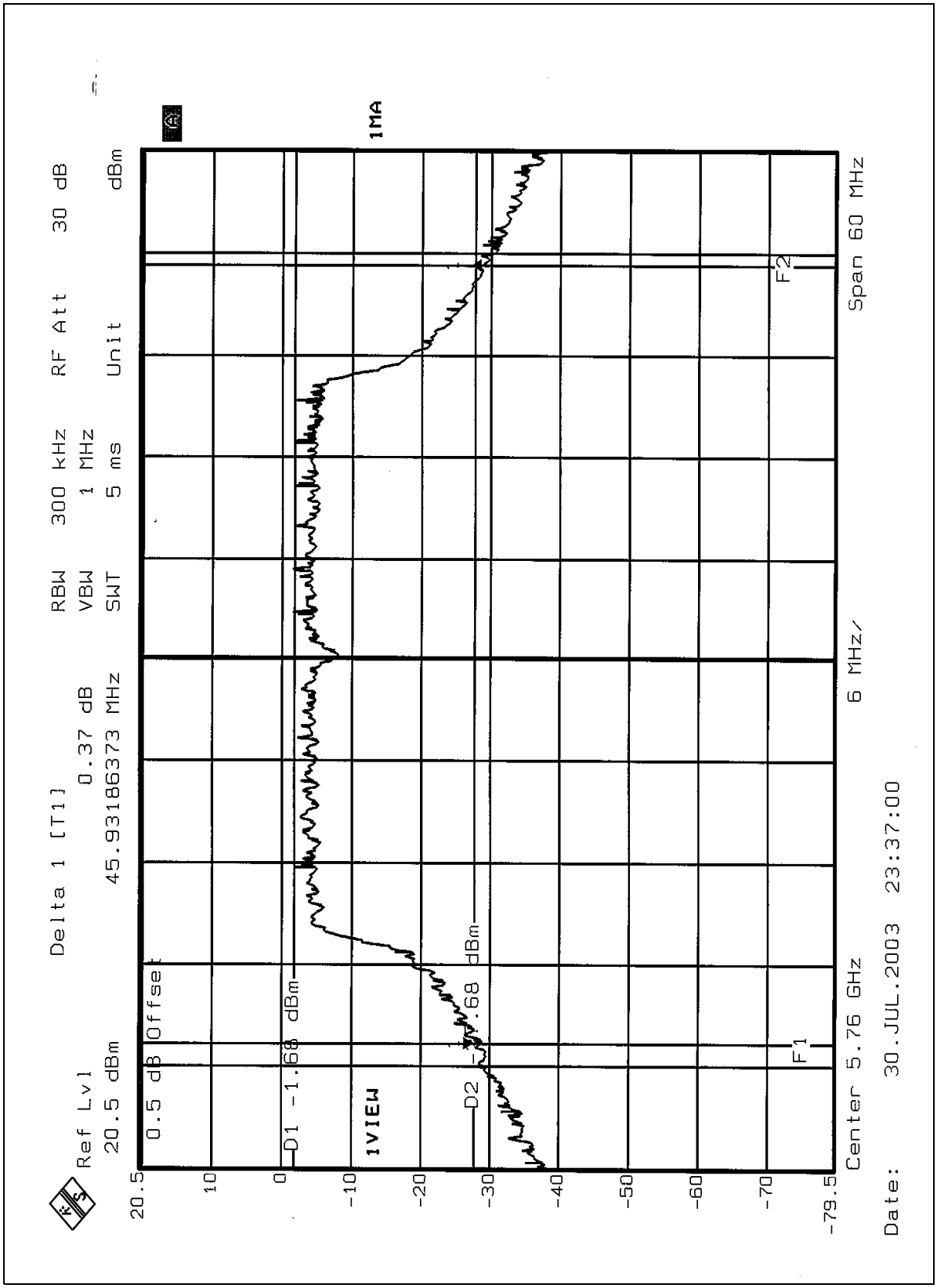
CHANNEL 2


Ref Lvl
20.5 dBm
0.5 dB Offset
D1 2.52 dBm
1VIEW
D2 -3.48 dBm
F1
F2
Center 5.25 GHz
6 MHz/
Span 60 MHz
Date: 30.JUL.2003 23:41:14
Delta 1 [T1]
-0.31 dB
45.450901 80 MHz
RBW 300 kHz
VBW 1 MHz
SWT 5 ms
RF Att 30 dB
Unit dBm
1MA
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5

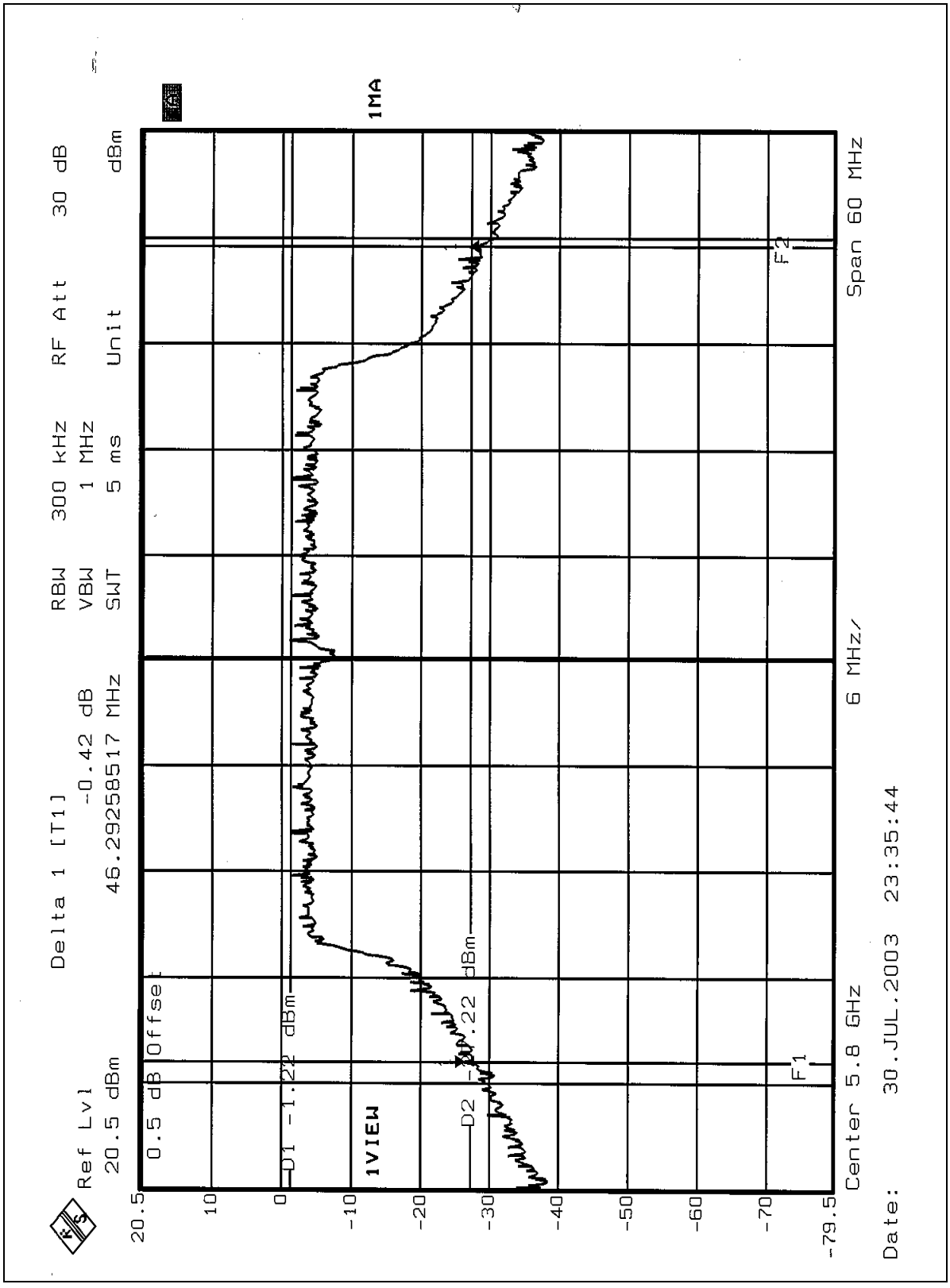
CHANNEL 3


Delta 1 [T1]
-0.08 dB
45.69138277 MHz
RBW 300 kHz
VBW 1 MHz
SWT 5 ms
RF Att 30 dB
Unit dBm
Ref Lvl
20.5 dBm
0.5 dB Offset
D1 3.41 dBm
D2 -2.59 dBm
1VIEW
1MA
F1
F2
Center 5.29 GHz
6 MHz/
Span 60 MHz
Date: 30.JUL.2003 23:39:48
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5

CHANNEL 4


Delta 1 [T1]
0.37 dB
45.93186373 MHz
RBW 300 kHz
VBW 1 MHz
SWT 5 ms
RF Att 30 dB
Unit dBm
Ref Lvl
20.5 dBm
0.5 dB Offset
1MA
1VIEW
D1 -1.68 dBm
D2 -7.68 dBm
F1
F2
6 MHz/
Span 60 MHz
Center 5.76 GHz
Date: 30.JUL.2003 23:37:00
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5

CHANNEL 5


Ref Lvl
20.5 dBm
0.5 dB Offset
Delta 1 [T1]
-0.42 dB
46.29258517 MHz
RBW 300 kHz
VBW 1 MHz
SWT 5 ms
RF Att 30 dB
Unit dBm
1MA
1VIEW
D1 -1.22 dBm
D2 -7.22 dBm
F1
F2
Center 5.8 GHz
6 MHz/
Span 60 MHz
Date: 30.JUL.2003 23:35:44
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5

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, 2004

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

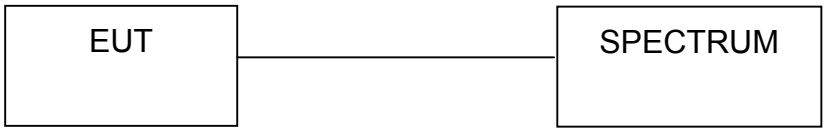
5.4.3 TEST PROCEDURE

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

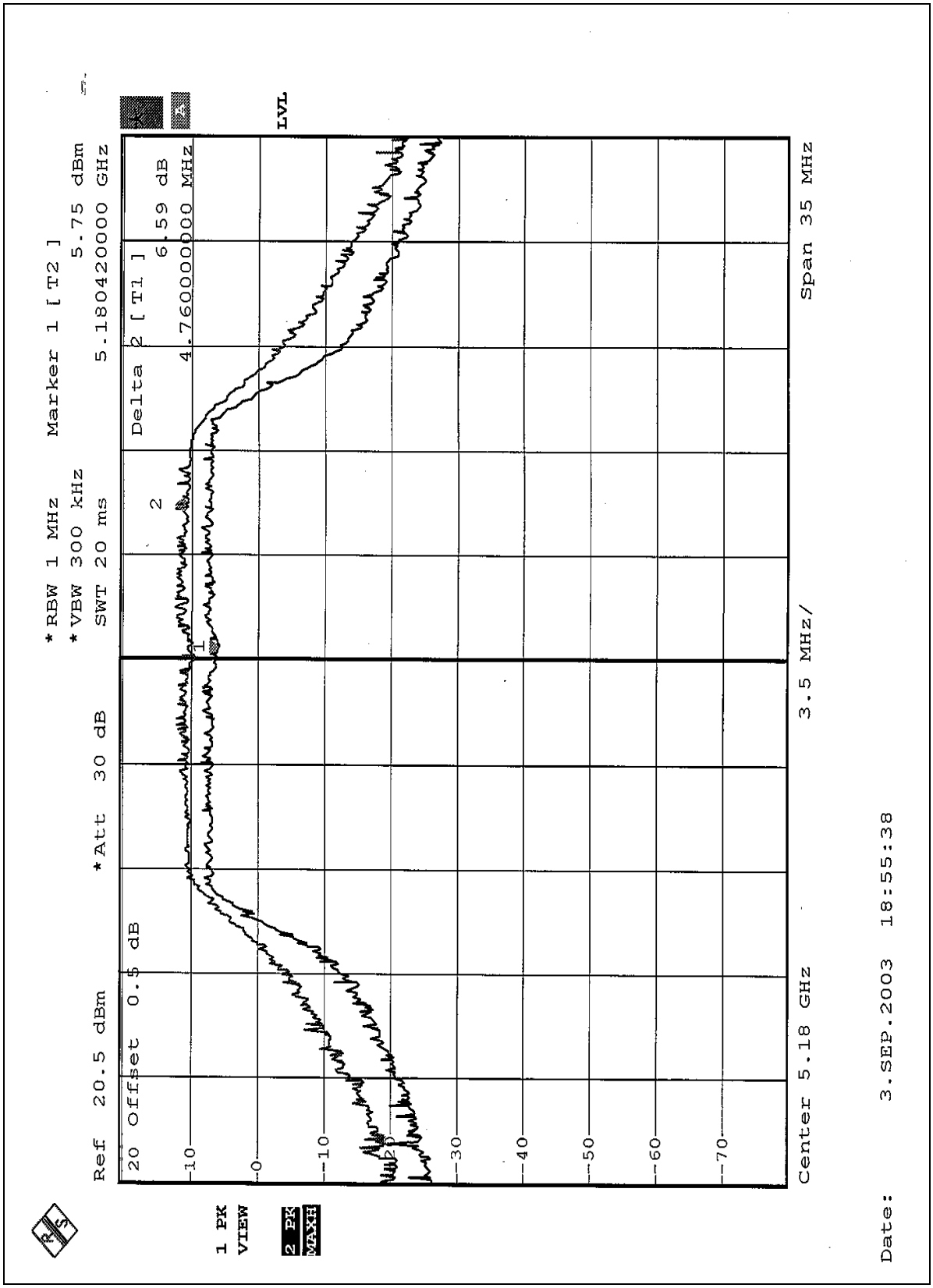
The software provided by client to enable the EUT under transmission condition continuously at specific channel frequencies individually.

5.4.7 TEST RESULTS

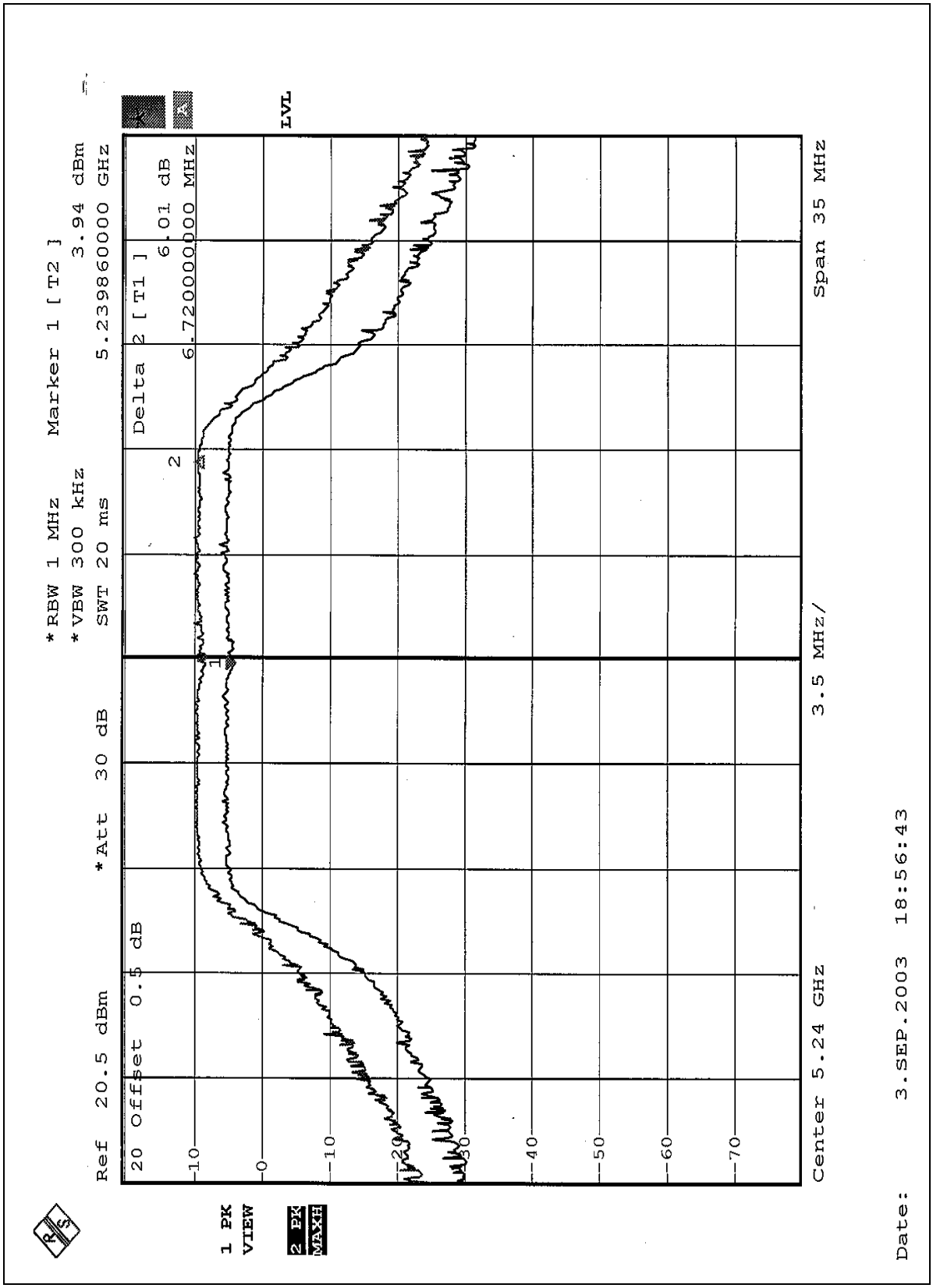
EUT	IEEE802.11a+802.11g Dual Band Wireless Access Point	**MODEL**	SL-5354AP1 Aries2
MODE	Normal	**INPUT POWER (SYSTEM)**	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	26deg. C, 65RH, 991 hPa	**TESTED BY**	Ansen Lei

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER EXCURSION (dB)	PEAK to AVERAGE EXCURSION LIMIT (dB)	PASS/FAIL
1	5180	6.59	13	PASS
4	5240	6.01	13	PASS
5	5260	7.17	13	PASS
8	5320	7.28	13	PASS
9	5745	5.86	13	PASS
12	5805	6.95	13	PASS

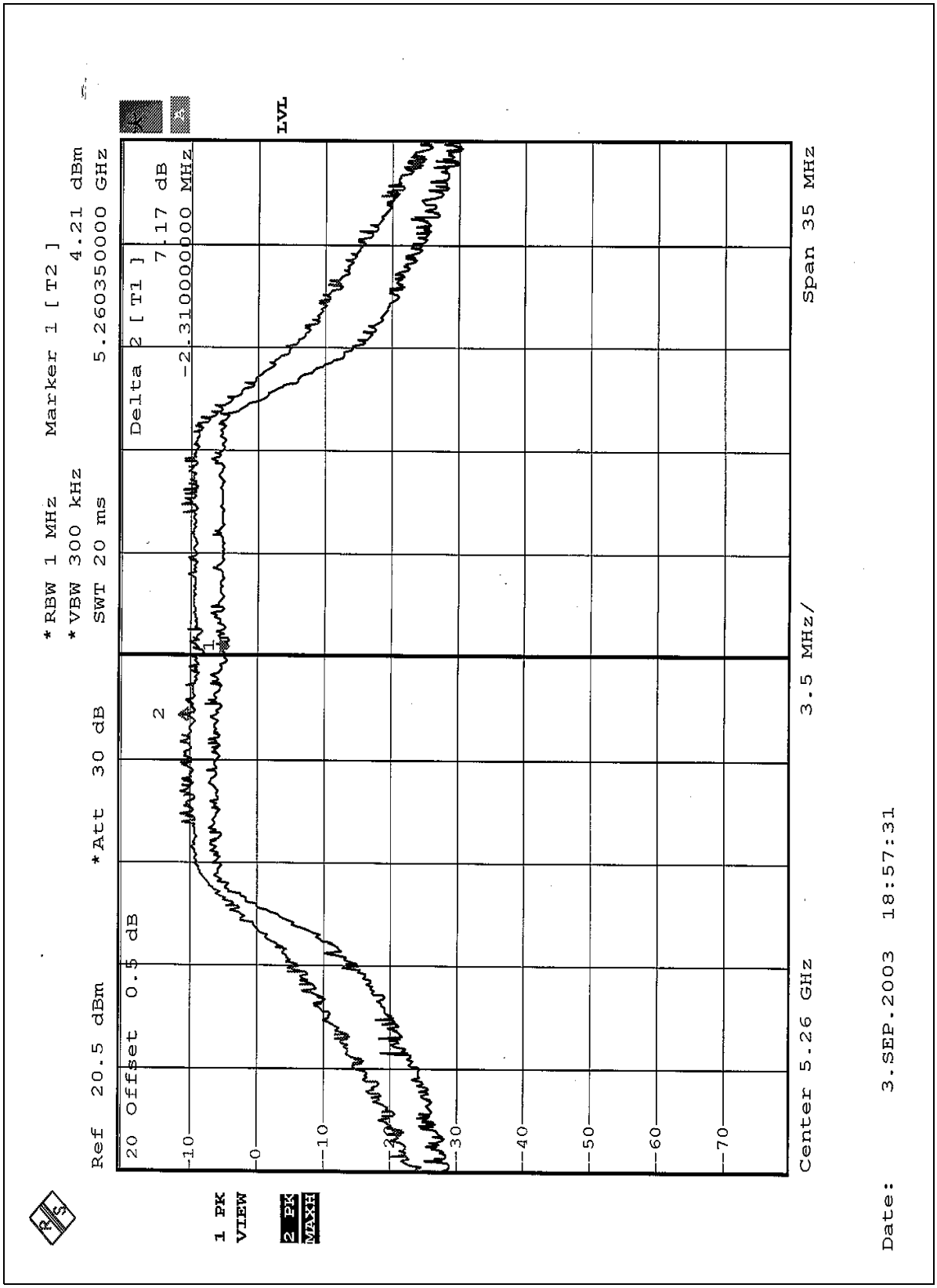
CHANNEL 1


Ref 20.5 dBm
20 Offset 0.5 dB
*Att 30 dB
* RBW 1 MHz
* VBW 300 kHz
SWT 20 ms
Marker 1 [T2]
5.75 dBm
5.180420000 GHz
Delta 2 [T1]
6.59 dB
4.760000000 MHz
LVL
Center 5.18 GHz
3.5 MHz/
Span 35 MHz
Date: 3.SEP.2003 18:55:38
1 PK VIEW
2 PK MAXH

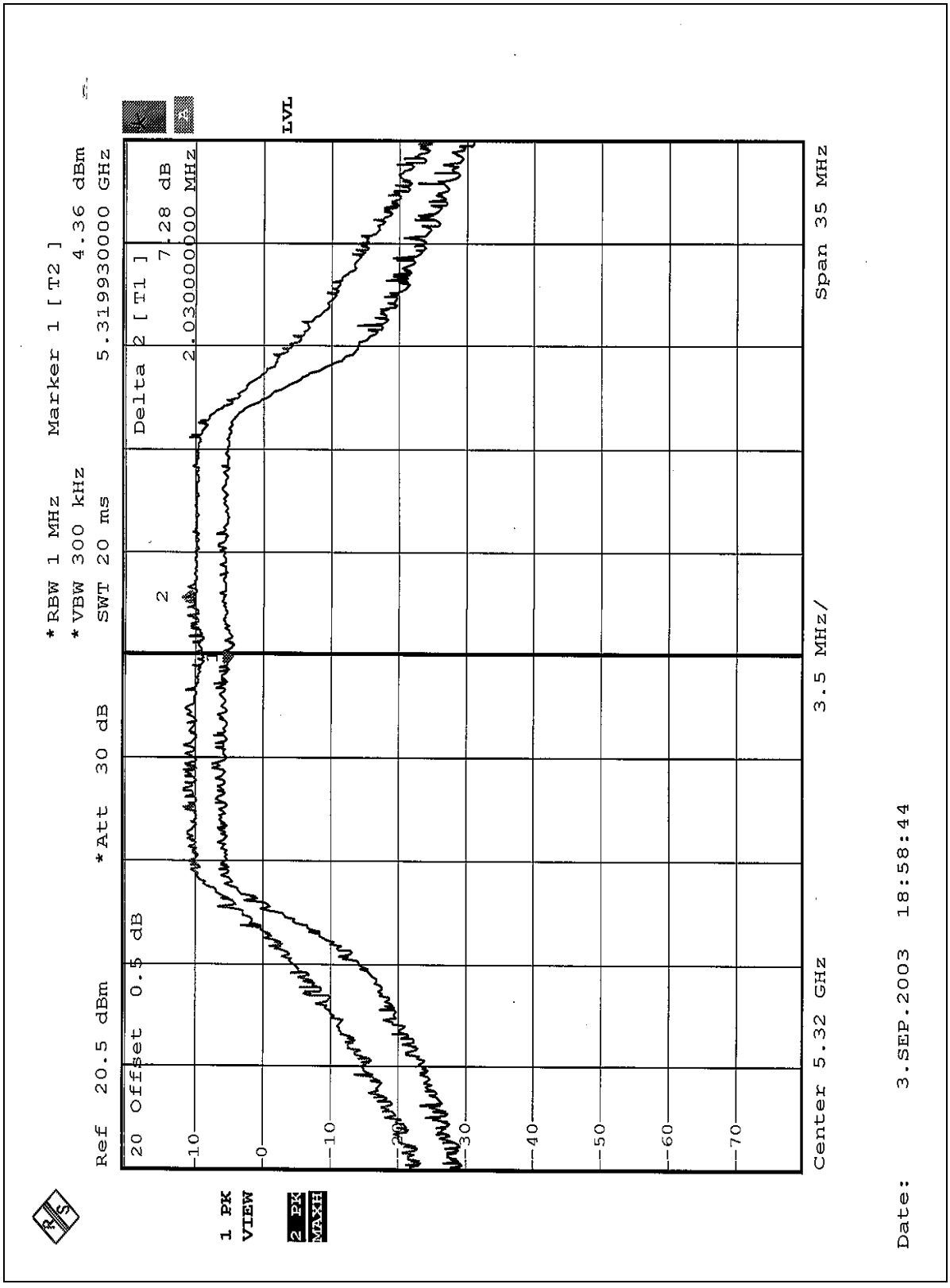
CHANNEL 4


Ref 20.5 dBm
20 Offset 0.5 dB
*Att 30 dB
*RBW 1 MHz
*VBW 300 kHz
SWT 20 ms
Marker 1 [T2]
3.94 dBm
5.239860000 GHz
Delta 2 [T1]
6.01 dB
6.720000000 MHz
LVL
Center 5.24 GHz
3.5 MHz/
Span 35 MHz
1 PK VIEW
2 PK MAXH
Date: 3.SEP.2003 18:56:43

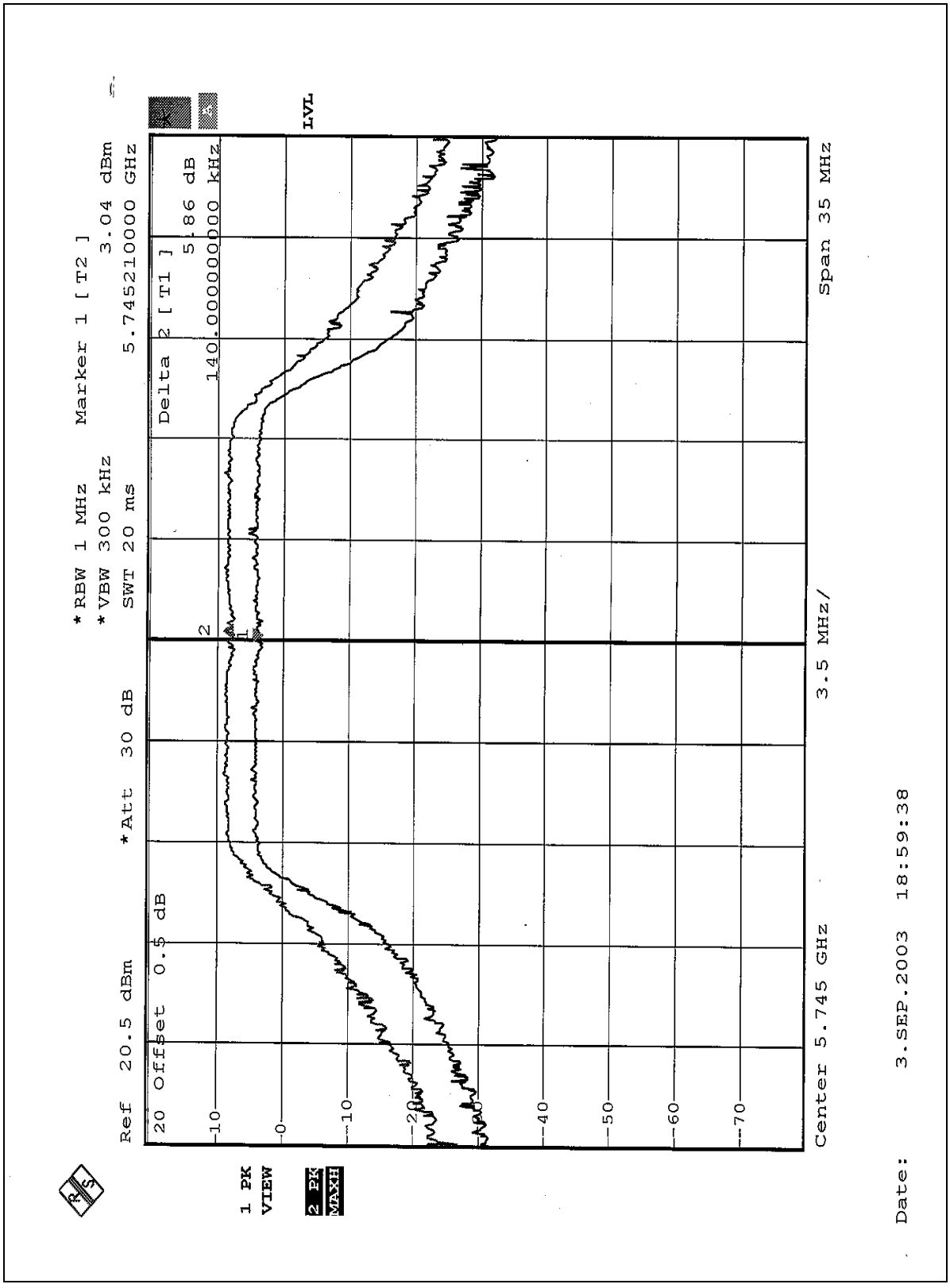
CHANNEL 5


RBW 1 MHz
VBW 300 kHz
SWT 20 ms
Marker 1 [T2]
4.21 dBm
5.260350000 GHz
Delta 2 [T1]
7.17 dB
-2.310000000 MHz
Ref 20.5 dBm
20 Offset 0.5 dB
Att 30 dB
Center 5.26 GHz
3.5 MHz/
Span 35 MHz
Date: 3.SEP.2003 18:57:31
1 PK VIEW
2 PK MAXH

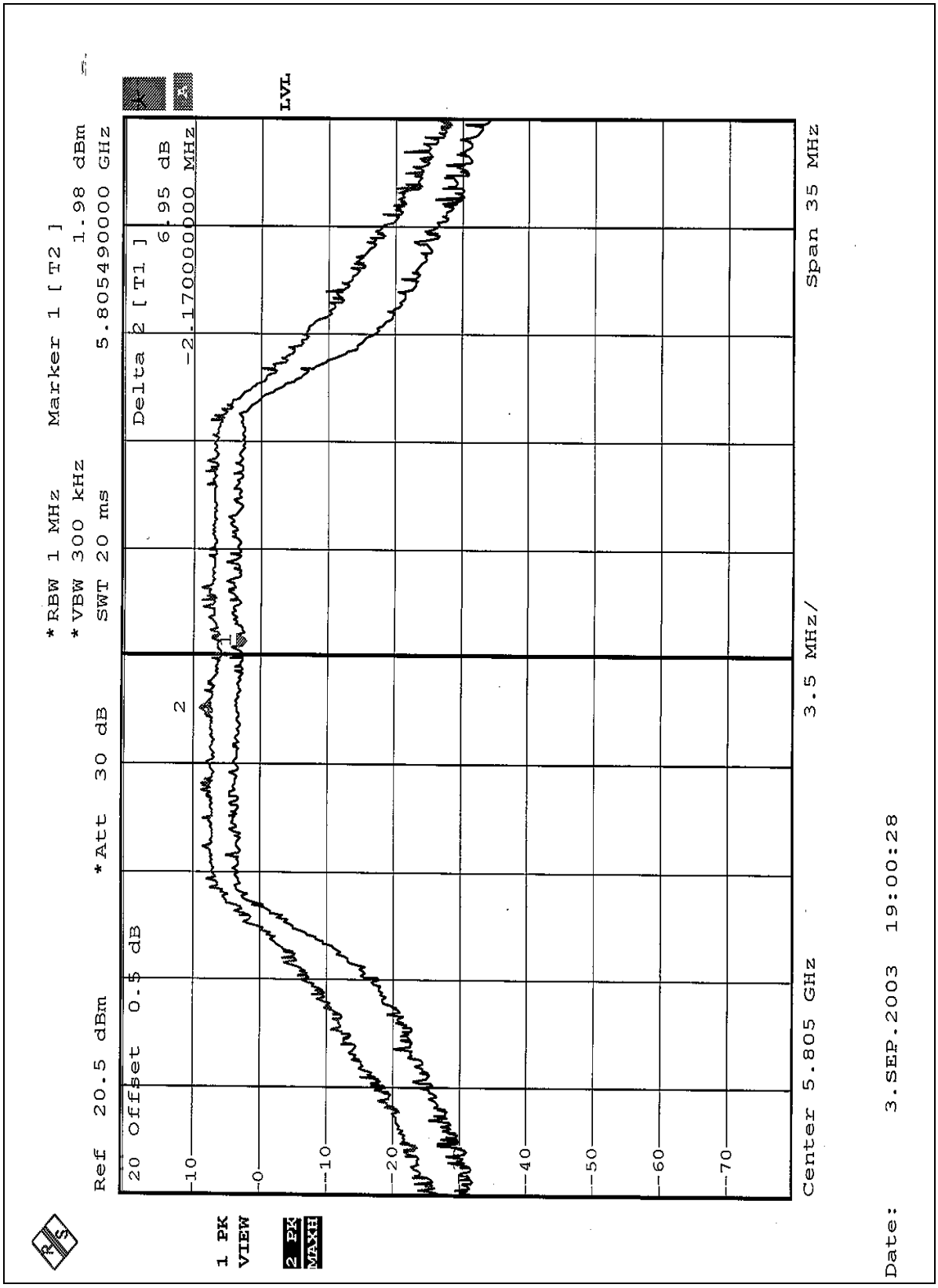
CHANNEL 8


Ref 20.5 dBm
20 Offset 0.5 dB
*Att 30 dB
*RBW 1 MHz
*VBW 300 kHz
SWT 20 ms
Marker 1 [T2]
4.36 dBm
5.319930000 GHz
Delta 2 [T1]
7.28 dB
2.030000000 MHz
LVL
1 PK VIEW
2 PK MAXH
Center 5.32 GHz
3.5 MHz/
Span 35 MHz
Date: 3.SEP.2003 18:58:44

CHANNEL 9


Ref 20.5 dBm
20 Offset 0.5 dB
*Att 30 dB
*RBW 1 MHz
*VBW 300 kHz
SWT 20 ms
Marker 1 [T2]
3.04 dBm
5.745210000 GHz
Delta 2 [T1]
5.86 dB
140.000000000 kHz
LVL
Center 5.745 GHz
3.5 MHz/
Span 35 MHz
1 PK VIEW
2 PK MAXH
Date: 3.SEP.2003 18:59:38

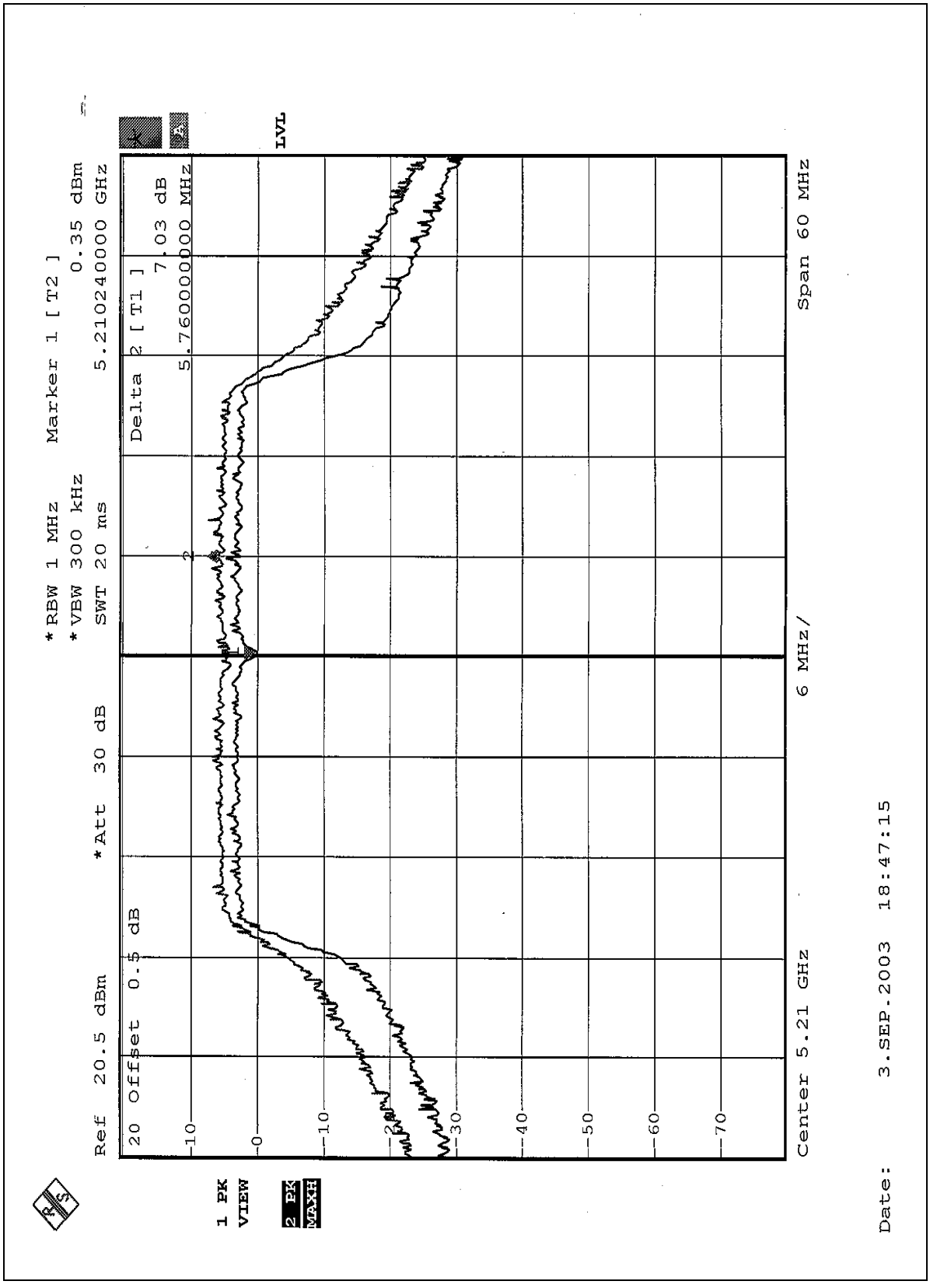
CHANNEL 12


Ref 20.5 dBm
20 Offset 0.5 dB
*Att 30 dB
*RBW 1 MHz
*VBW 300 kHz
SWT 20 ms
Marker 1 [T2]
1.98 dBm
5.805490000 GHz
Delta 2 [T1]
6.95 dB
-2.170000000 MHz
LVL
Center 5.805 GHz
3.5 MHz/
Span 35 MHz
Date: 3.SEP.2003 19:00:28
1 PK VIEW
2 PK MAXH

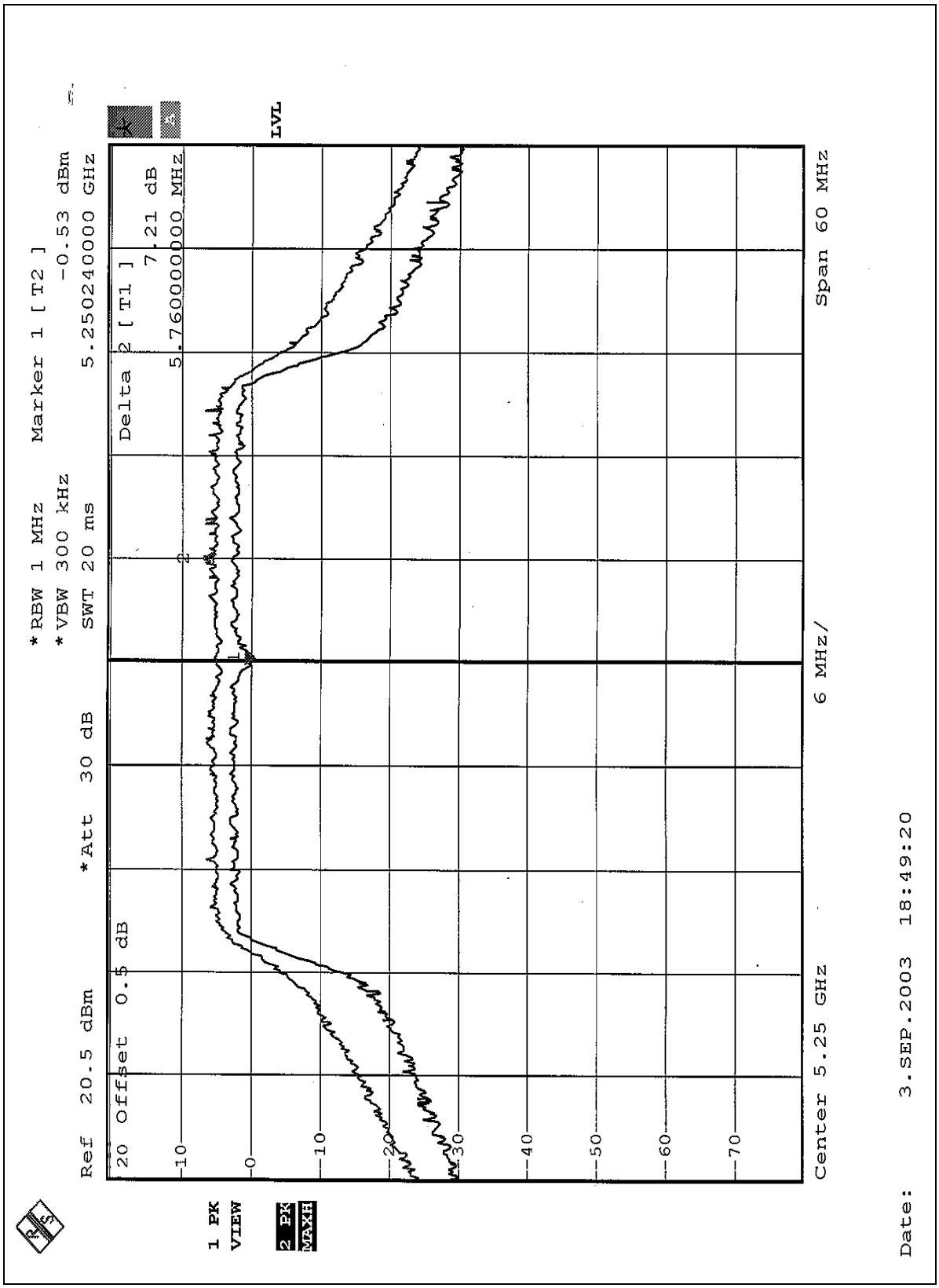
EUT	IEEE802.11a+802.11g Dual Band Wireless Access Point	**MODEL**	SL-5354AP1 Aries2
MODE	Turbo	**INPUT POWER (SYSTEM)**	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	26deg. C, 65RH, 991 hPa	**TESTED BY**	Ansen Lei

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER EXCURSION (dB)	PEAK to AVERAGE EXCURSION LIMIT (dB)	PASS/FAIL
1	5210	7.03	13	PASS
2	5250	7.21	13	PASS
3	5290	7.13	13	PASS
4	5760	6.79	13	PASS
5	5800	7.24	13	PASS

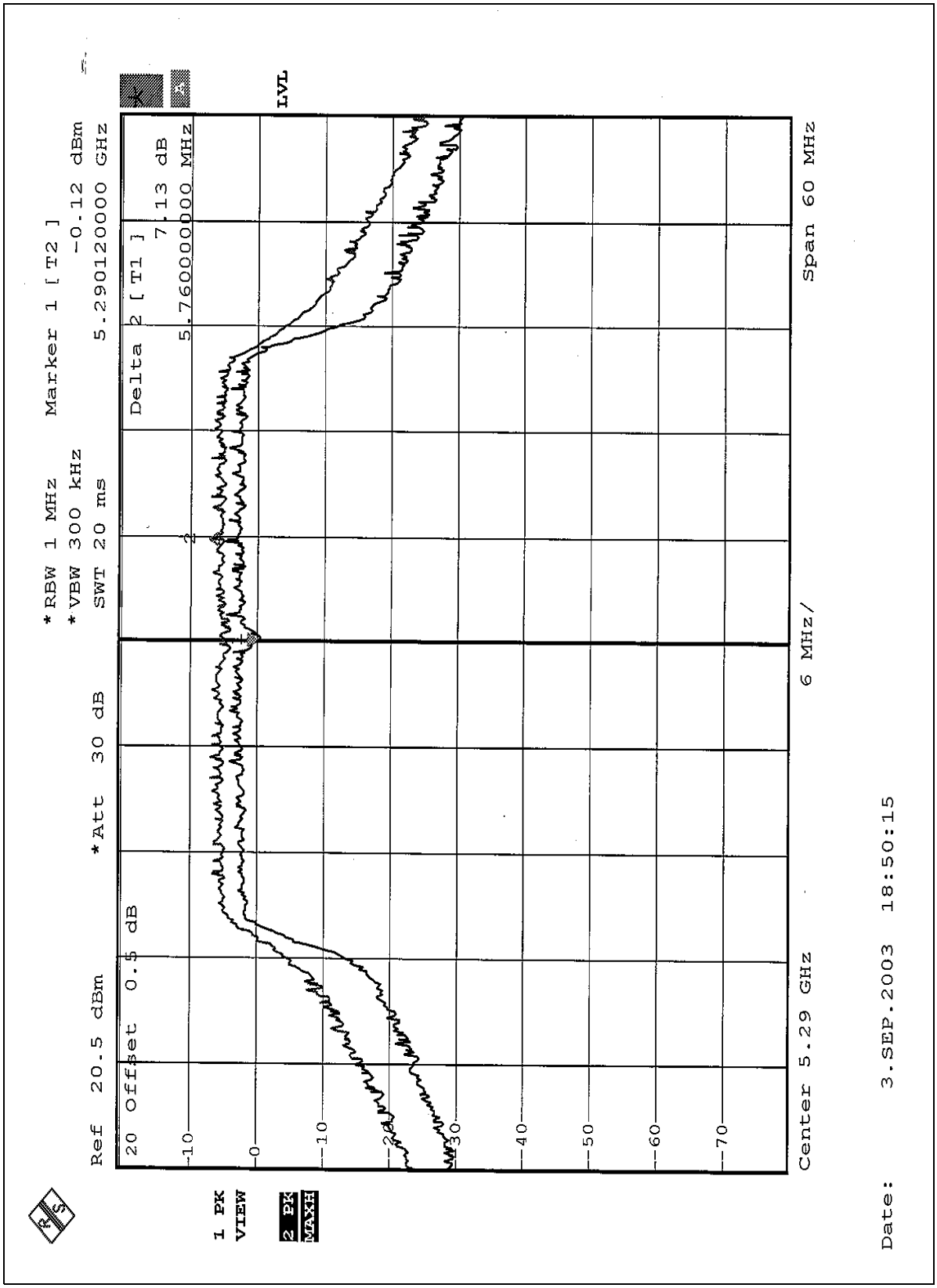
CHANNEL 1


Ref 20.5 dBm
20 Offset 0.5 dB
*Att 30 dB
*RBW 1 MHz
*VBW 300 kHz
SWT 20 ms
Marker 1 [T2]
0.35 dBm
5.210240000 GHz
Delta 2 [T1]
7.03 dB
5.760000000 MHz
LVL
1 PK VIEW
2 PK MAXH
Center 5.21 GHz
6 MHz/
Span 60 MHz
Date: 3.SEP.2003 18:47:15

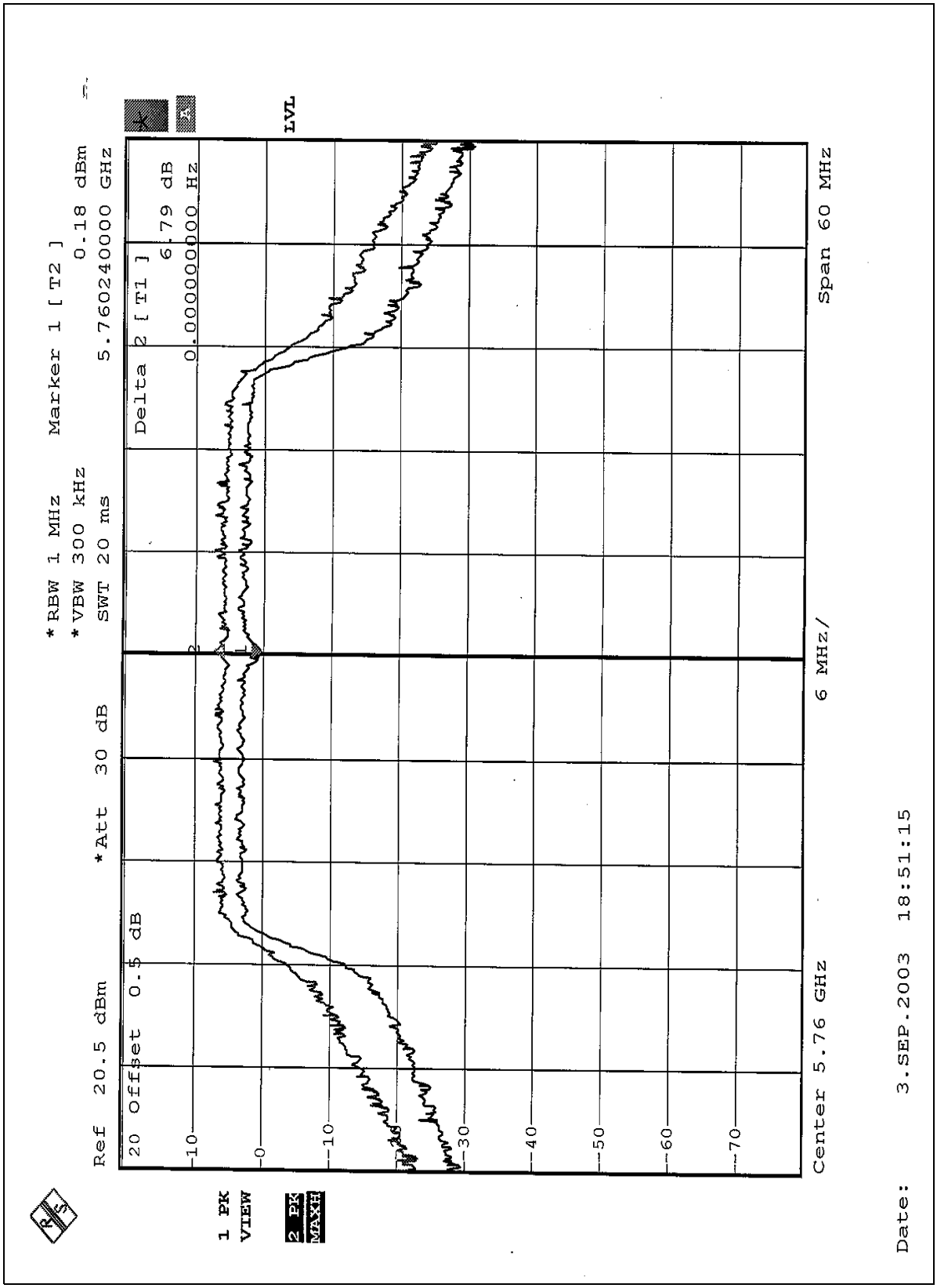
CHANNEL 2


*RBW 1 MHz
*VBW 300 kHz
SWT 20 ms
Marker 1 [T2]
-0.53 dBm
5.250240000 GHz
Delta 2 [T1]
7.21 dB
5.760000000 MHz
Ref 20.5 dBm
20 Offset 0.5 dB
*Att 30 dB
LVL
Center 5.25 GHz
6 MHz/
Span 60 MHz
Date: 3.SEP.2003 18:49:20
1 PK VIEW
2 PK MAXH

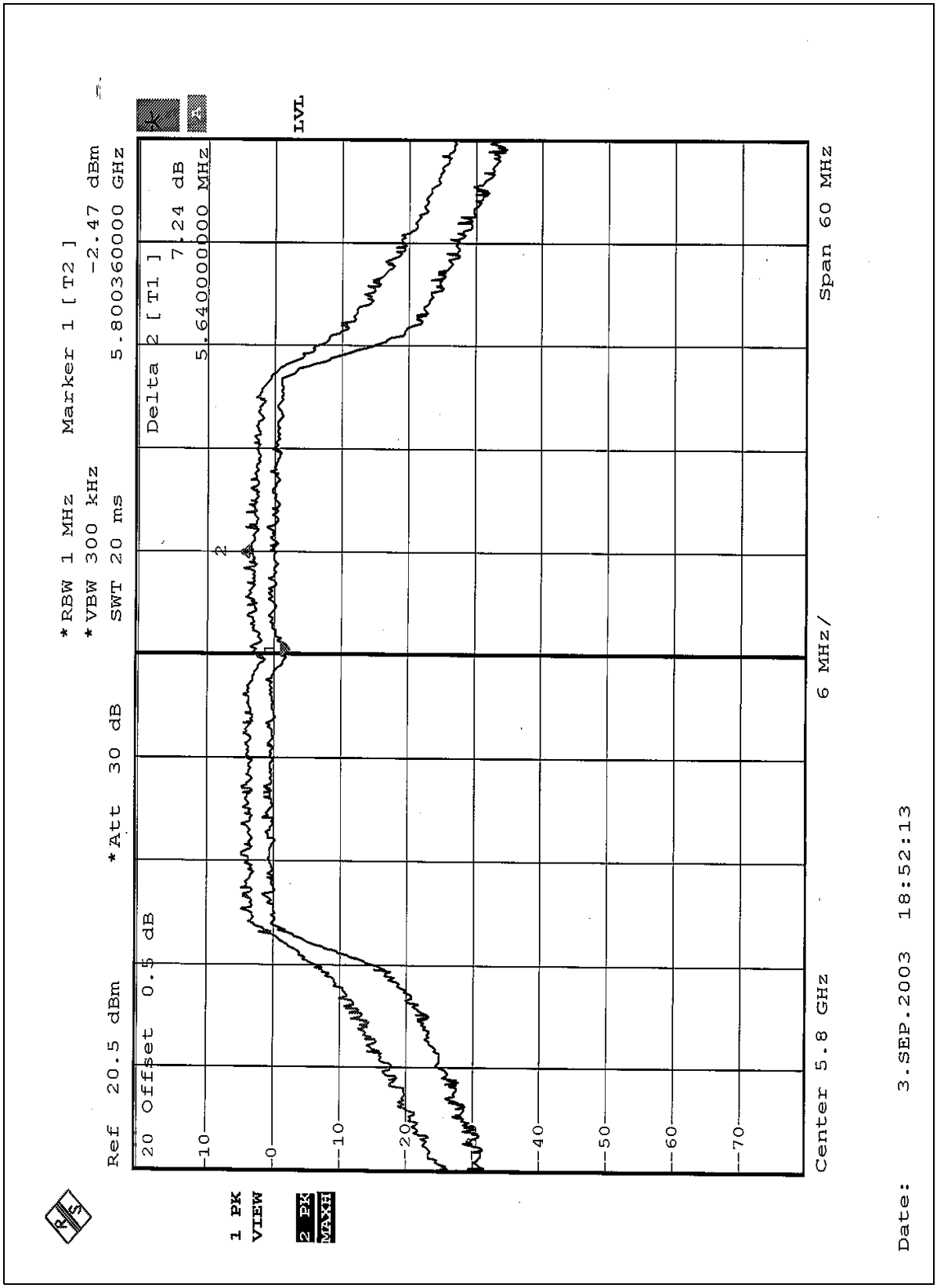
CHANNEL 3


*RBW 1 MHz
*VBW 300 kHz
SWT 20 ms
Marker 1 [T2]
-0.12 dBm
5.290120000 GHz
Delta 2 [T1]
7.13 dB
5.760000000 MHz
Ref 20.5 dBm
20 Offset 0.5 dB
*Att 30 dB
LVL
Center 5.29 GHz
6 MHz/
Span 60 MHz
1 PK VIEW
2 PK MAXH
Date: 3.SEP.2003 18:50:15

CHANNEL 4


Ref 20.5 dBm
20 Offset 0.5 dB
*Att 30 dB
*RBW 1 MHz
*VBW 300 kHz
SWT 20 ms
Marker 1 [T2]
0.18 dBm
5.760240000 GHz
Delta 2 [T1]
6.79 dB
0.000000000 Hz
Center 5.76 GHz
6 MHz/
Span 60 MHz
Date: 3.SEP.2003 18:51:15
1 PK VIEW
2 PK MAXH

CHANNEL 5


Ref 20.5 dBm
20 Offset 0.5 dB
*Att 30 dB
*RBW 1 MHz
*VBW 300 kHz
SWT 20 ms
Marker 1 [T2]
-2.47 dBm
5.800360000 GHz
Delta 2 [T1]
7.24 dB
5.640000000 MHz
LVL
Center 5.8 GHz
6 MHz/
Span 60 MHz
1 PK VIEW
2 PK MAXH
Date: 3.SEP.2003 18:52:13

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, 2004

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

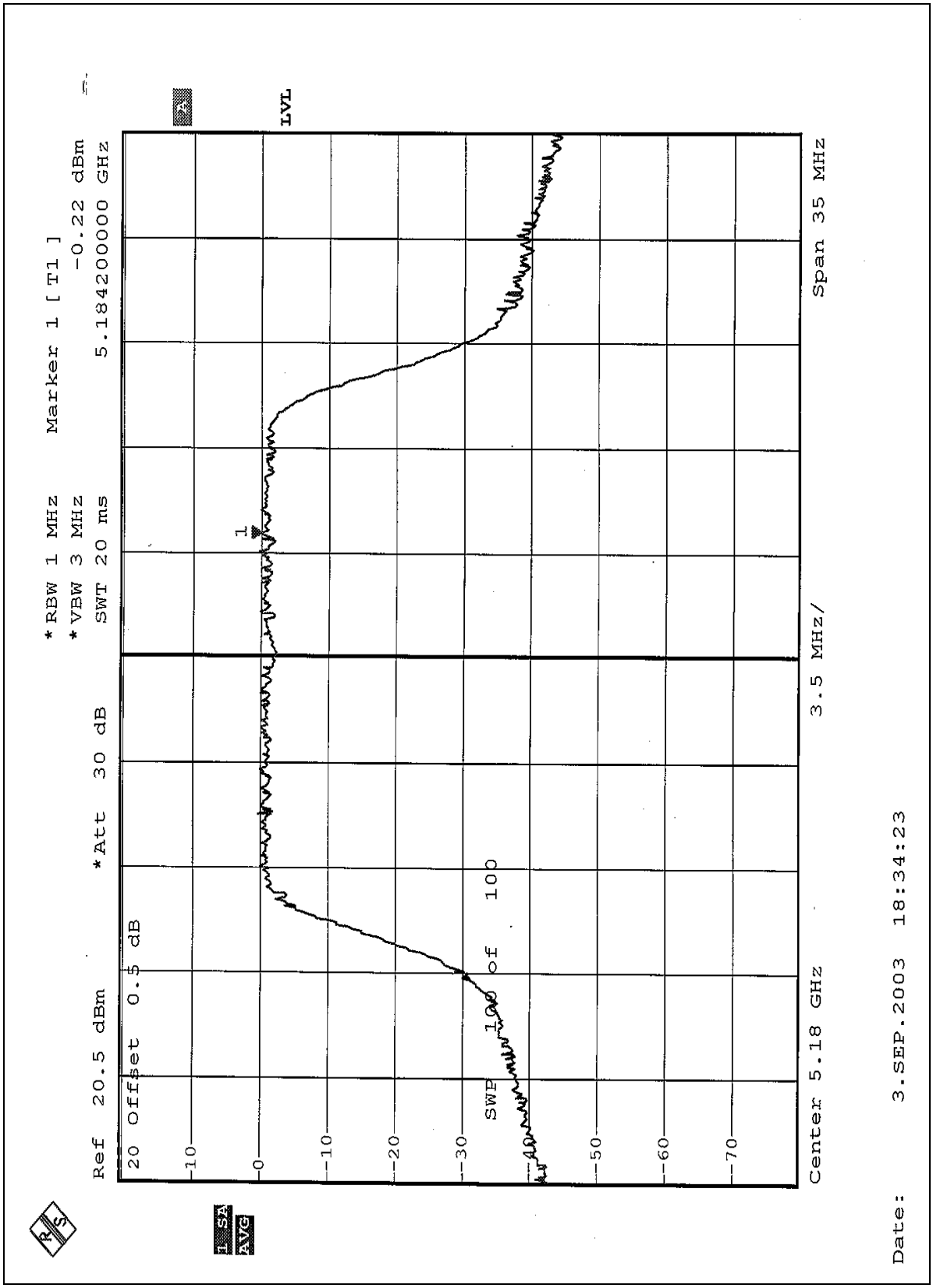
Same as 5.3.6

5.5.7 TEST RESULTS

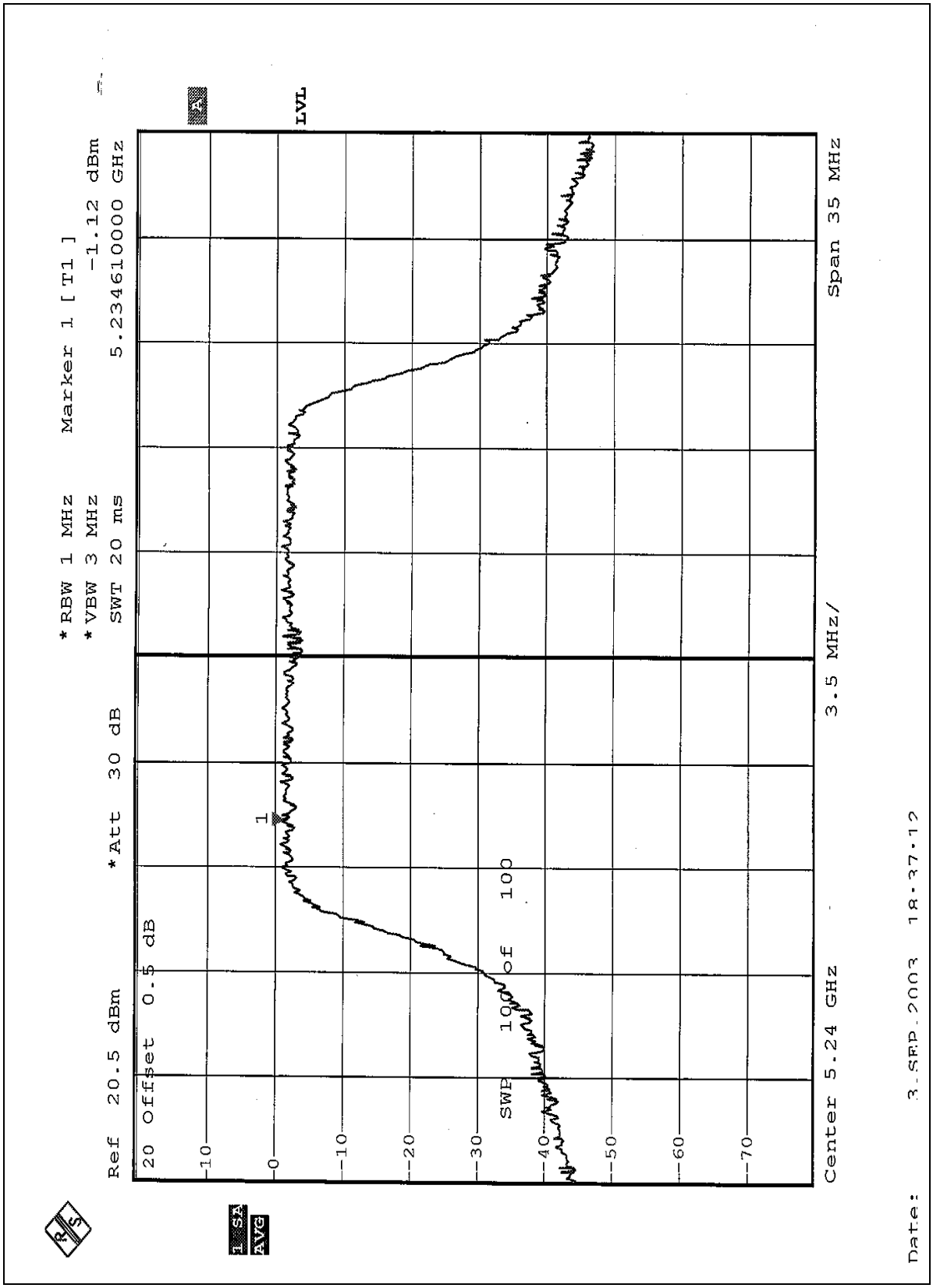
EUT	IEEE802.11a+802.11g Dual Band Wireless Access Point	**MODEL**	SL-5354AP1 Aries2
MODE	Normal	**INPUT POWER (SYSTEM)**	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	26 deg. C, 65 RH, 991 hPa	**TESTED BY**	Ansen Lie

CHANNEL NUMBER	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 1 MHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	5180	-0.22	4	PASS
4	5240	-1.12	4	PASS
5	5260	-0.69	11	PASS
8	5320	-0.94	11	PASS
9	5745	-1.83	17	PASS
12	5805	-2.52	17	PASS

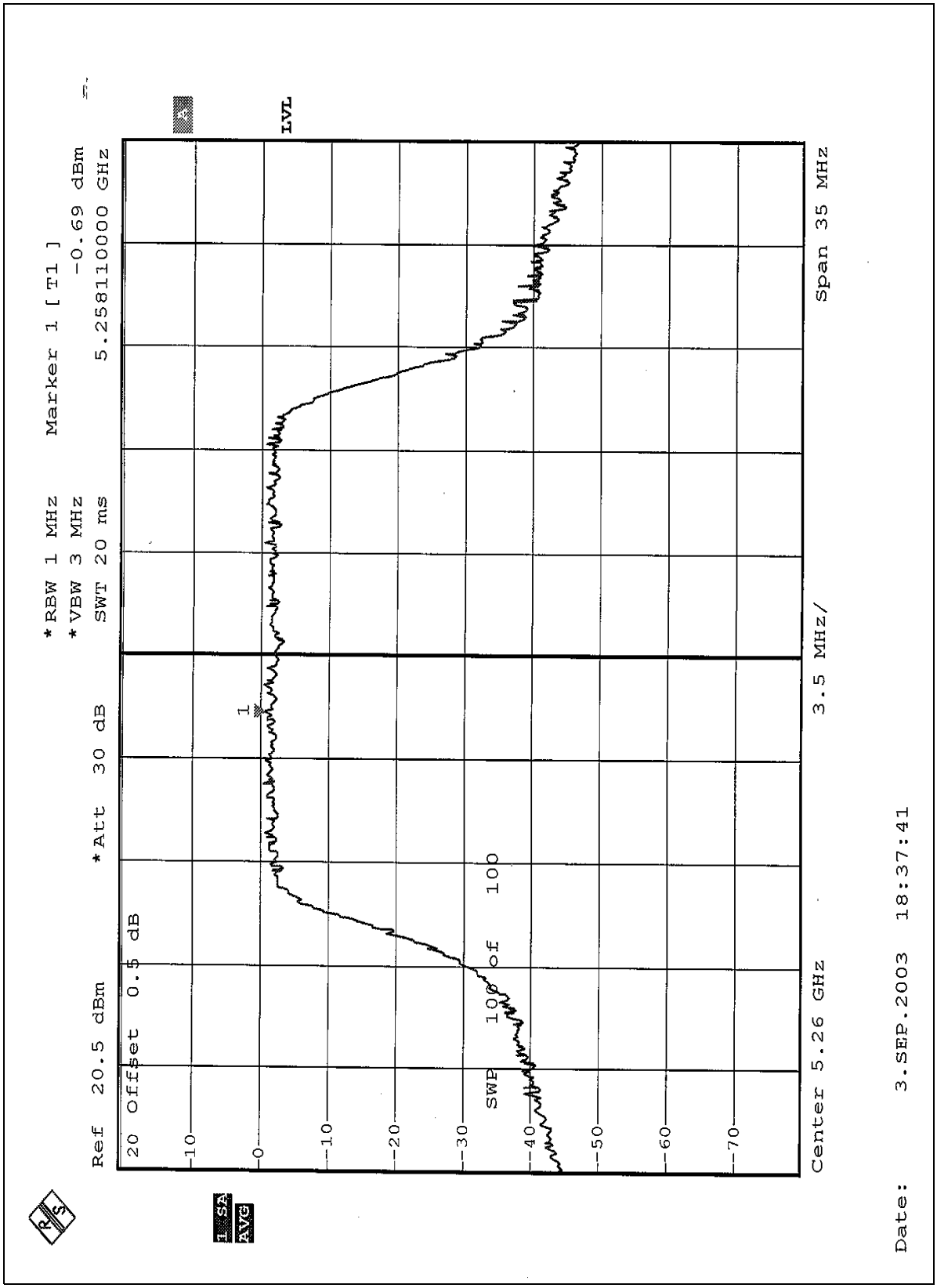
CHANNEL 1


Ref 20.5 dBm
20 Offset 0.5 dB
*Att 30 dB
*RBW 1 MHz
*VBW 3 MHz
SWT 20 ms
Marker 1 [T1]
-0.22 dBm
5.18420000 GHz
1
SWP 100 of 100
Center 5.18 GHz
3.5 MHz/
Span 35 MHz
Date: 3.SEP.2003 18:34:23
1 SA
AVG
LVL

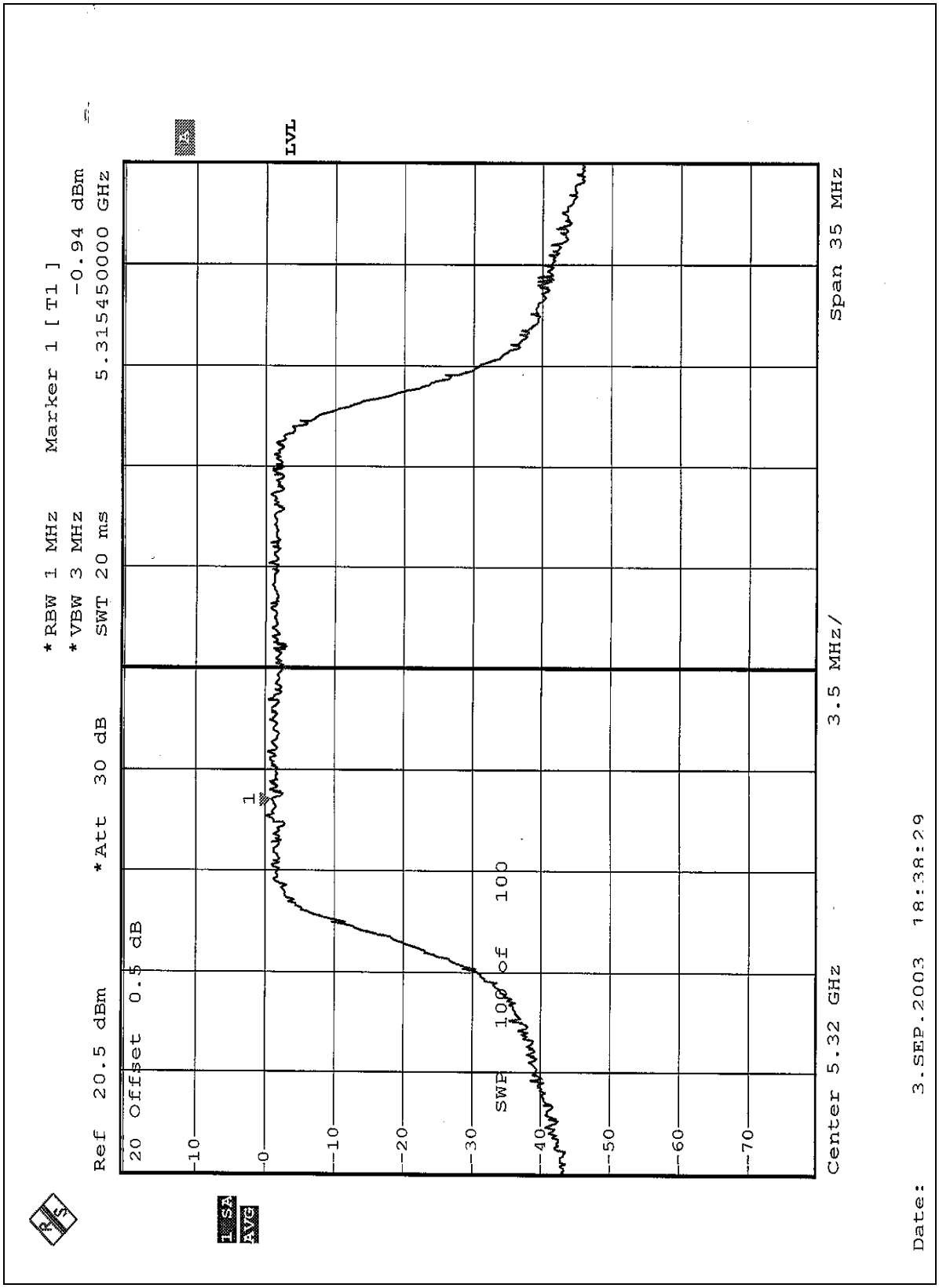
CHANNEL 4


Ref 20.5 dBm
20 Offset 0.5 dB
*Att 30 dB
*RBW 1 MHz
*VBW 3 MHz
SWT 20 ms
Marker 1 [T1]
-1.12 dBm
5.234610000 GHz
LVL
Span 35 MHz
3.5 MHz/
Center 5.24 GHz
SWP 100 of 100
Date: 3.SEP.2003 18:37:12
1 SA
AVG

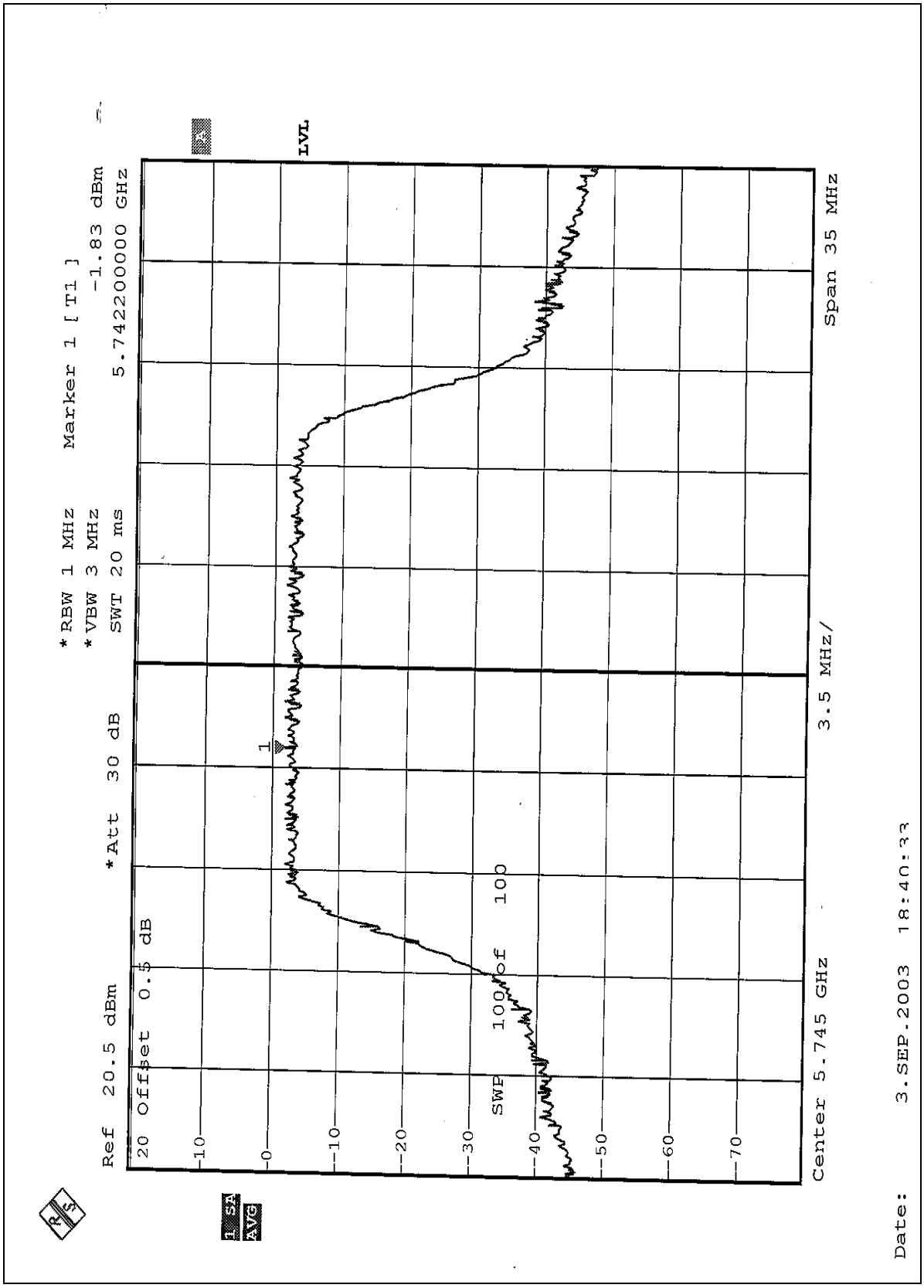
CHANNEL 5


Marker 1 [T1]
-0.69 dBm
5.25811000 GHz
*RBW 1 MHz
*VBW 3 MHz
SWT 20 ms
*Att 30 dB
Offset 0.5 dB
Ref 20.5 dBm
Center 5.26 GHz
3.5 MHz/
Span 35 MHz
SWP 100 of 100
Date: 3.SEP.2003 18:37:41
1 SA
AVG

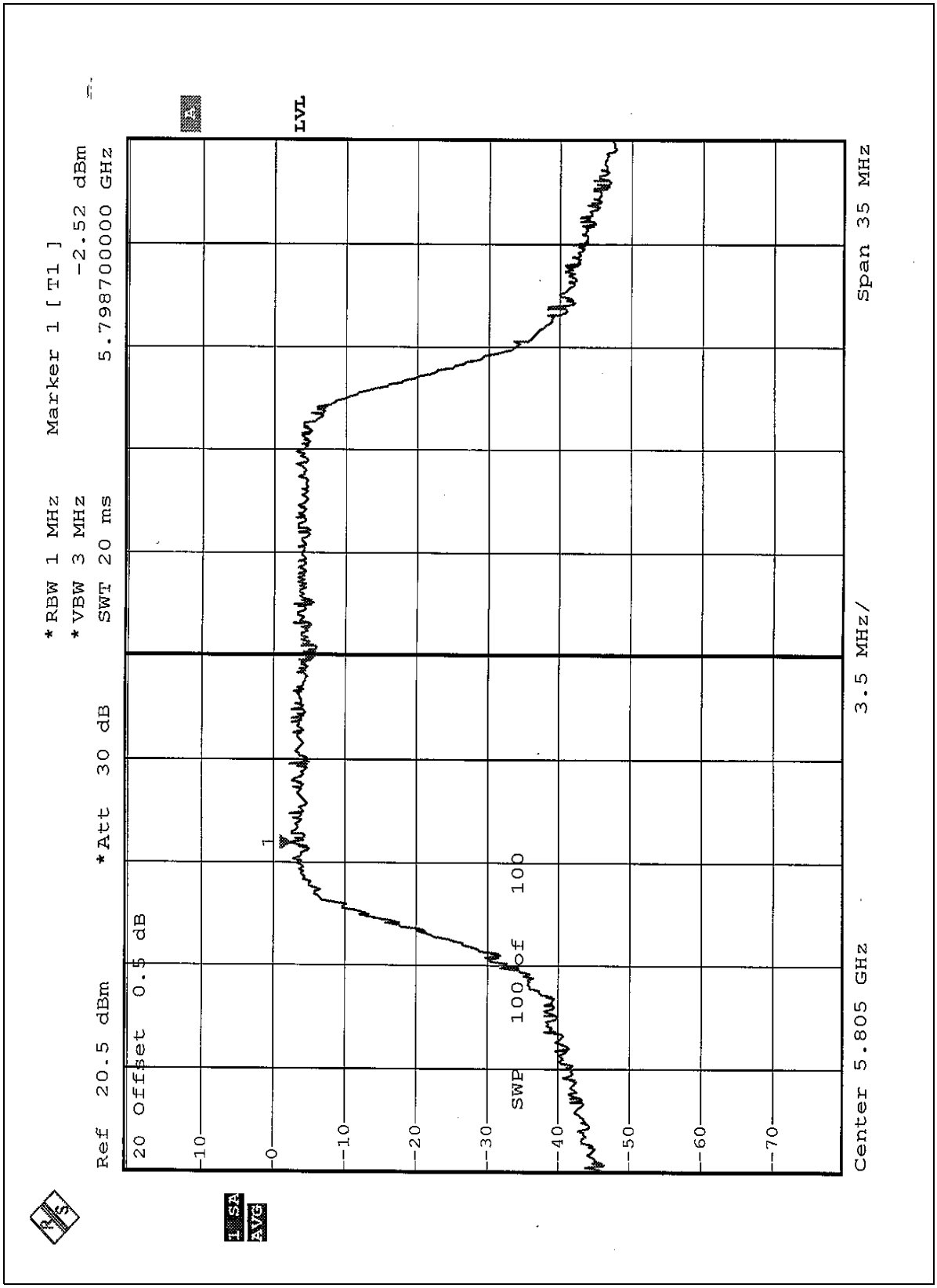
CHANNEL 8


Ref 20.5 dBm
20 Offset 0.5 dB
*Att 30 dB
*RBW 1 MHz
*VBW 3 MHz
SWT 20 ms
Marker 1 [T1]
-0.94 dBm
5.315450000 GHz
LVL
SWP 100 of 100
Center 5.32 GHz
3.5 MHz/
Span 35 MHz
Date: 3.SEP.2003 18:38:29
1 SA AVG

CHANNEL 9


Marker 1 [T1]
-1.83 dBm
5.742200000 GHz
*RBW 1 MHz
*VBW 3 MHz
SWT 20 ms
*Att 30 dB
Offset 0.5 dB
Ref 20.5 dBm
Center 5.745 GHz
3.5 MHz/
Span 35 MHz
SWP 100.0 of 100
Date: 3.SEP.2003 18:40:33
1 SA
AVG

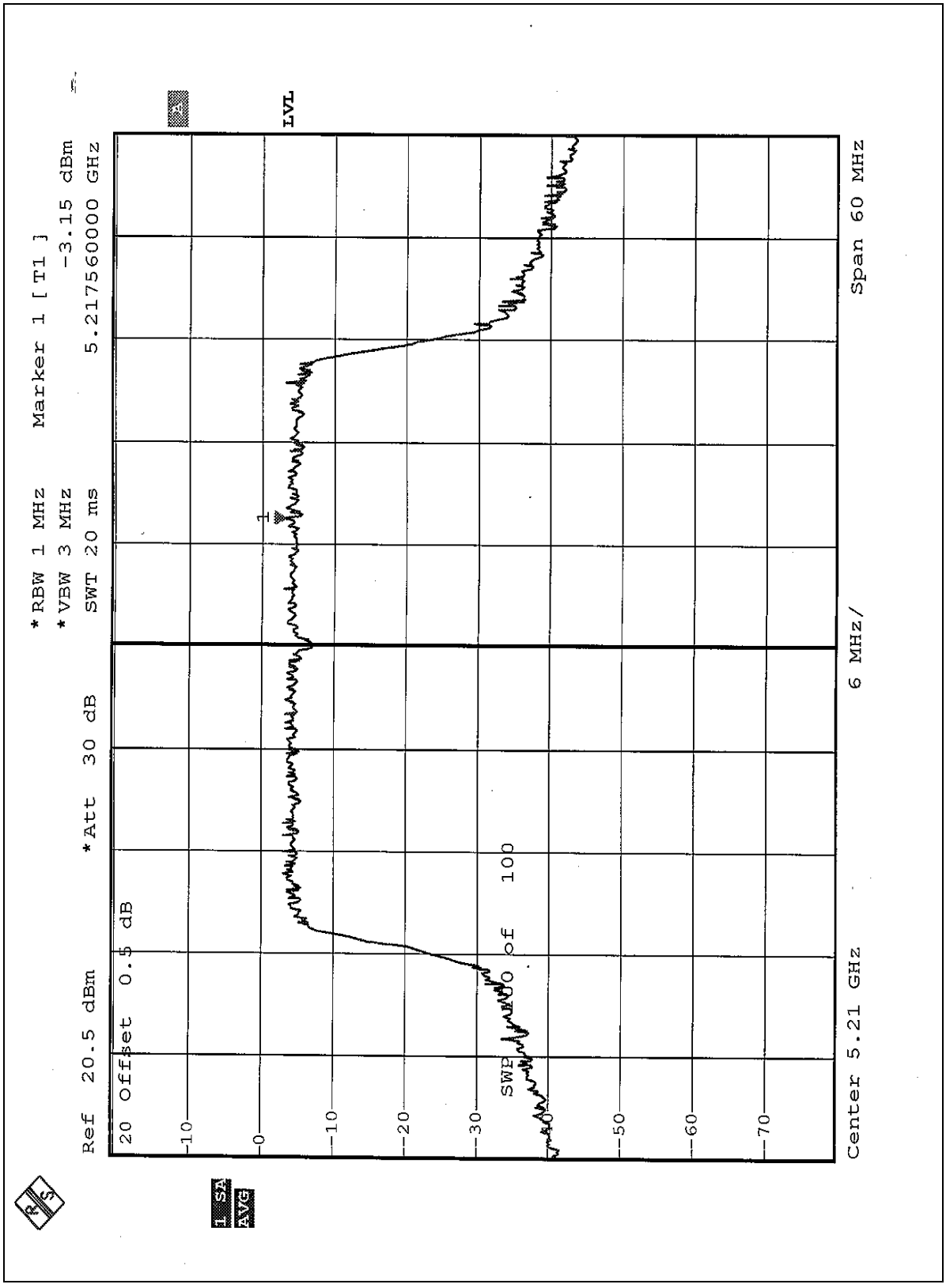
CHANNEL 12


Ref 20.5 dBm
20 Offset 0.5 dB
*Att 30 dB
*RBW 1 MHz
*VBW 3 MHz
SWT 20 ms
Marker 1 [T1]
-2.52 dBm
5.798700000 GHz
SWP 100 of 100
Center 5.805 GHz
3.5 MHz/
Span 35 MHz
1 SA
AVG

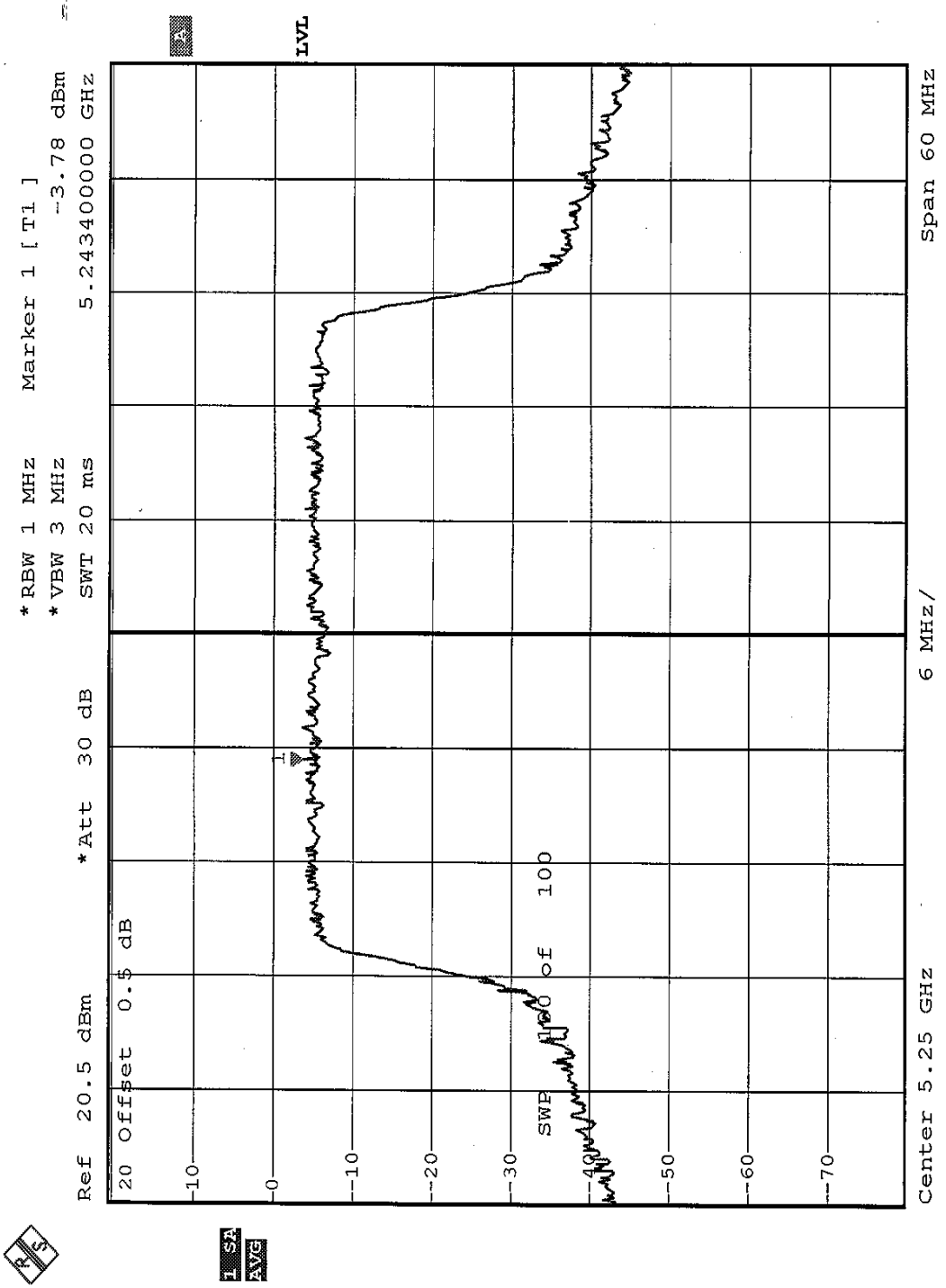
EUT	IEEE802.11a+802.11g Dual Band Wireless Access Point	**MODEL**	SL-5354AP1 Aries2
MODE	Turbo	**INPUT POWER (SYSTEM)**	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	26d eg. C, 65 RH, 991 hPa	**TESTED BY**	Ansen Lei

CHANNEL NUMBER	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 1 MHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	5210	-3.15	4	PASS
2	5250	-3.78	4	PASS
3	5290	-3.87	11	PASS
4	5760	-2.91	17	PASS
5	5800	-5.34	17	PASS

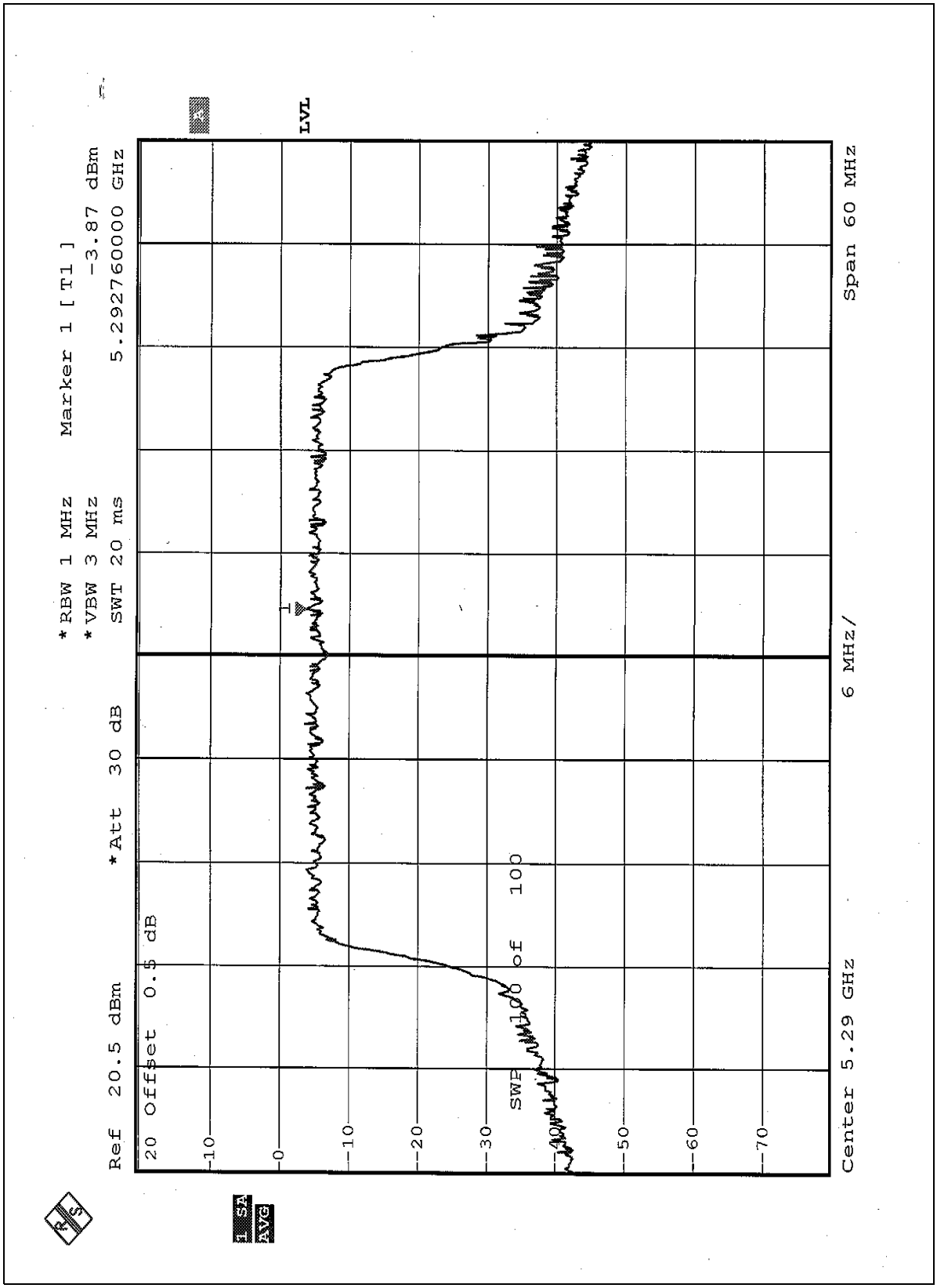
CHANNEL 1


Marker 1 [T1]
-3.15 dBm
5.217560000 GHz
*RBW 1 MHz
*VBW 3 MHz
SWT 20 ms
*Att 30 dB
Ref 20.5 dBm
20 Offset 0.5 dB
Center 5.21 GHz
6 MHz/
Span 60 MHz
SWP 100.0 of 100
LVL
1 SA
AVG

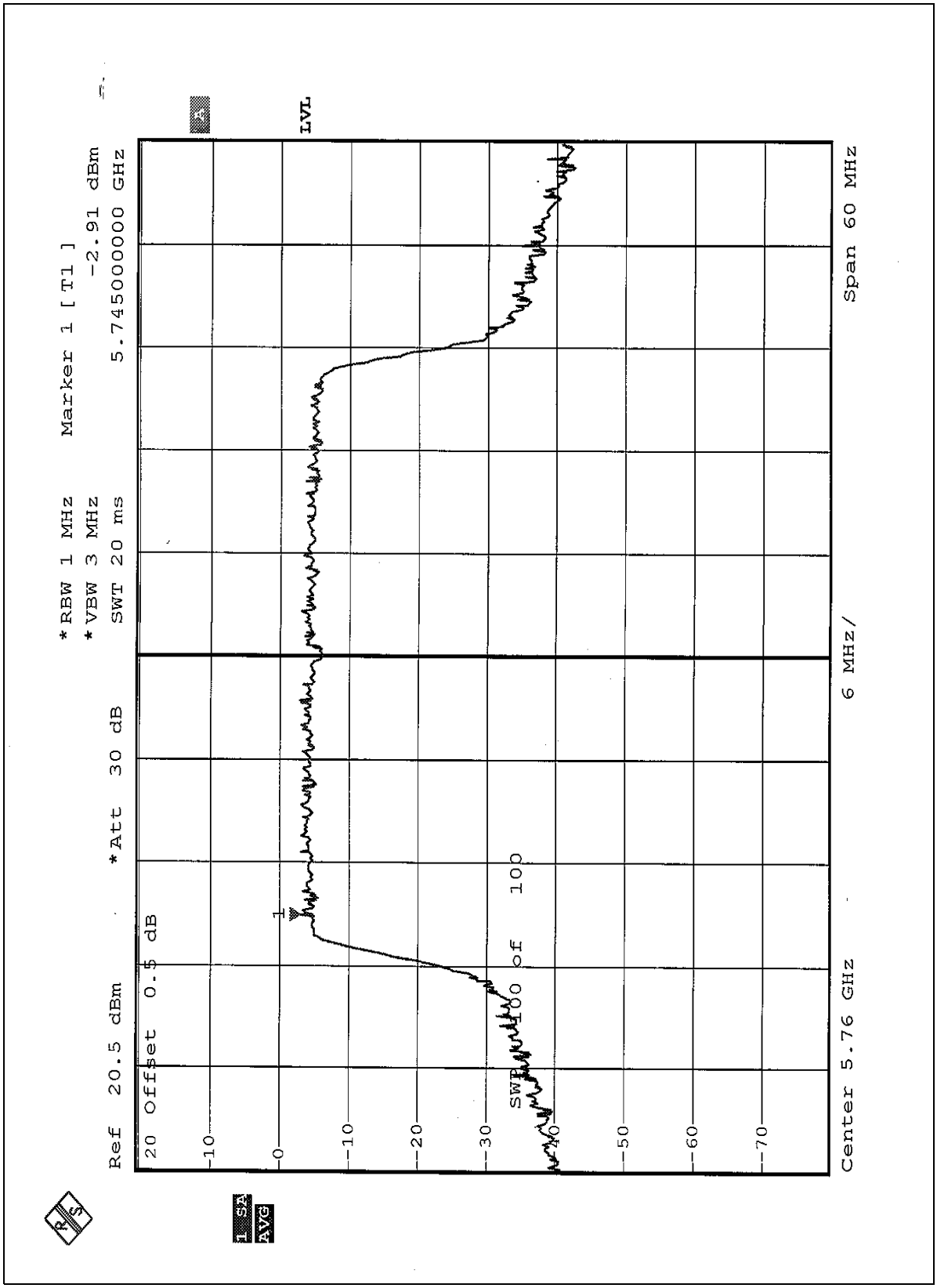
CHANNEL 2


Ref 20.5 dBm
20 Offset 0.5 dB
*Att 30 dB
*RBW 1 MHz
*VBW 3 MHz
SWT 20 ms
Marker 1 [T1]
-3.78 dBm
5.243400000 GHz
LVL
SWP
Center 5.25 GHz
6 MHz/
Span 60 MHz

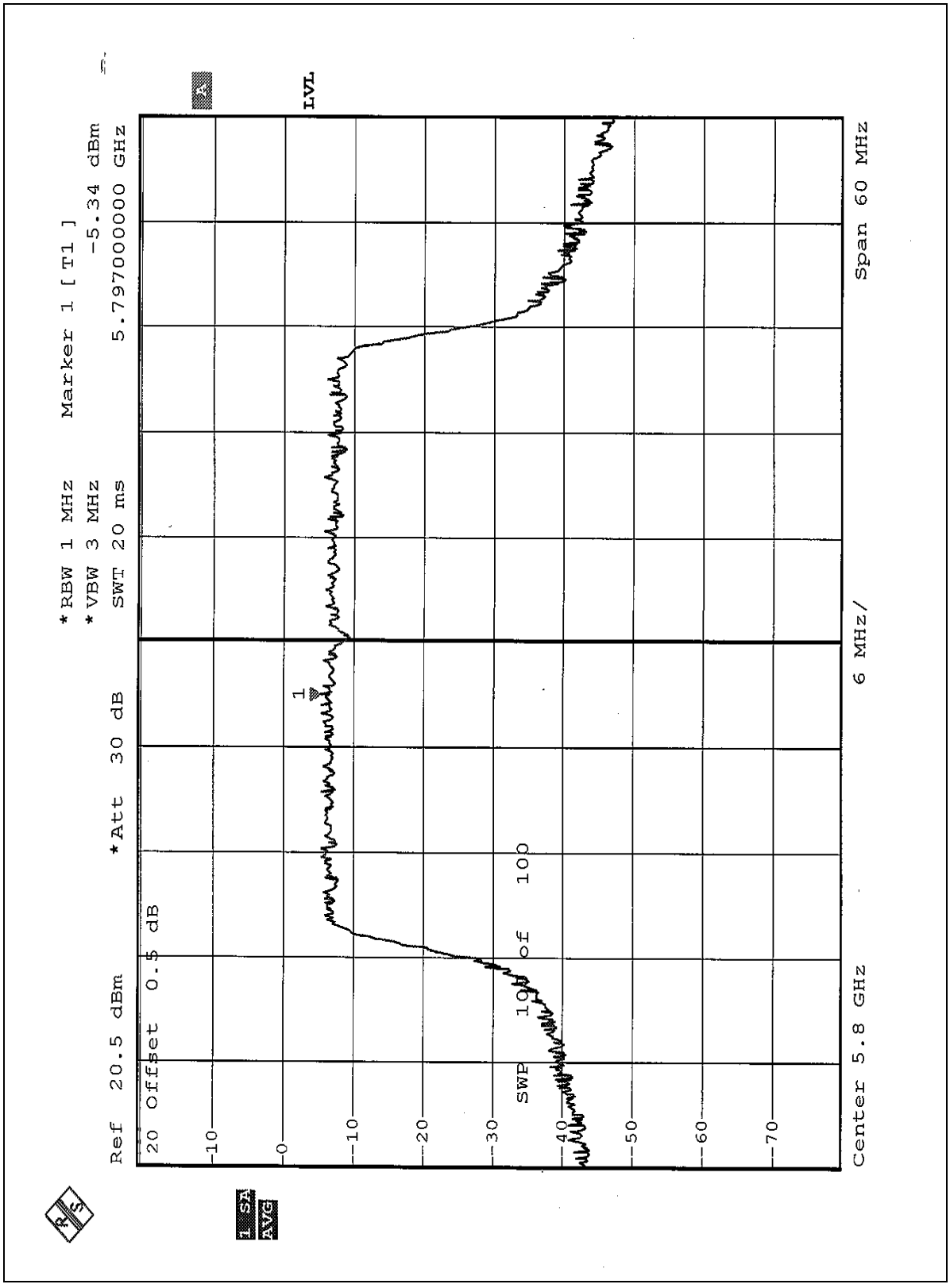
CHANNEL 3


Ref 20.5 dBm
20 Offset 0.5 dB
*Att 30 dB
*RBW 1 MHz
*VBW 3 MHz
SWT 20 ms
Marker 1 [T1]
-3.87 dBm
5.292760000 GHz
LVL
SWP 100.0 % of 100
Center 5.29 GHz
6 MHz/
Span 60 MHz
1 SA
AVG

CHANNEL 4


Ref 20.5 dBm
20 Offset 0.5 dB
*Att 30 dB
*RBW 1 MHz
*VBW 3 MHz
SWT 20 ms
Marker 1 [T1]
-2.91 dBm
5.745000000 GHz
1VL
Center 5.76 GHz
6 MHz/
Span 60 MHz
SWP 100 of 100
1 SA
AVG

CHANNEL 5


Ref 20.5 dBm
20 Offset 0.5 dB
*Att 30 dB
*RBW 1 MHz
*VBW 3 MHz
SWT 20 ms
Marker 1 [T1]
-5.34 dBm
5.797000000 GHz
LVL
SWP 10 of 100
Center 5.8 GHz
6 MHz/
Span 60 MHz
1 SA
AVG

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	Apr. 10, 2004
WIT STANDARD TEMPERATURE AND HUMIDITY CHAMBER	TH-4S-C	W901030	Jul. 17, 2004

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

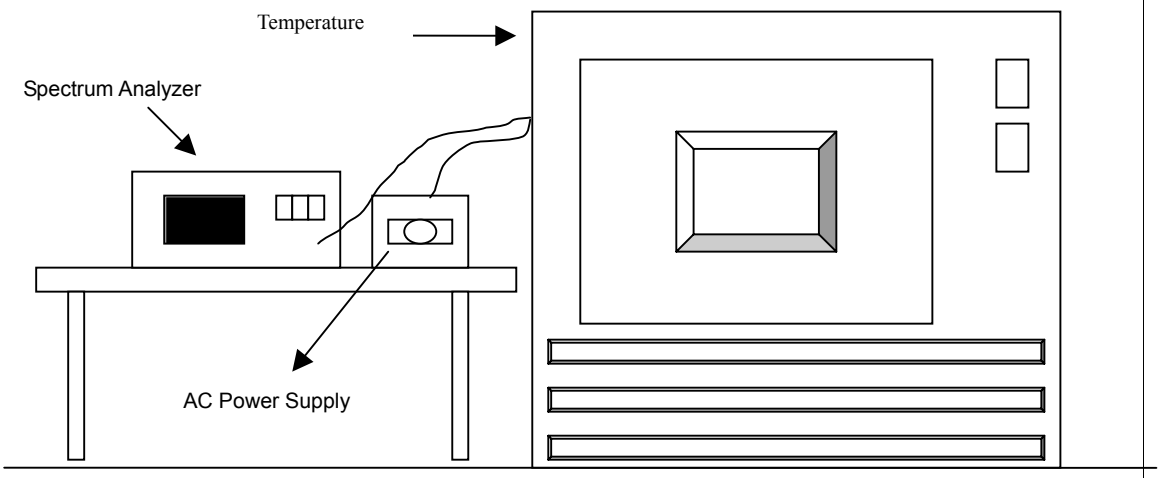
5.6.3 TEST PROCEDURE

1. The EUT was placed inside the environmental test chamber and powered by nominal AC 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 : ± 0.02%			
Temp. (℃)	Power supply (VDC)	2 minute		5 minute		10 minute	
		(MHz)	(%)	(MHz)	(%)	(MHz)	(%)
50	93.5	5319.9994	-0.0000113	5320.0009	0.0000169	5320.0019	0.0000357
	110	5319.9992	-0.0000150	5320.0006	0.0000113	5320.0018	0.0000338
	126.5	5319.9996	-0.0000075	5320.0007	0.0000132	5320.0021	0.0000395
40	93.5	5319.9778	-0.0004173	5319.9788	-0.0003985	5319.9796	-0.0003835
	110	5319.9776	-0.0004211	5319.9786	-0.0004023	5319.9792	-0.0003910
	126.5	5319.9777	-0.0004192	5319.9789	-0.0003966	5319.9794	-0.0003872
30	93.5	5319.9667	-0.0006259	5319.9668	-0.0006241	5319.9668	-0.0006241
	110	5319.9666	-0.0006278	5319.9667	-0.0006259	5319.9669	-0.0006222
	126.5	5319.9668	-0.0006241	5319.9667	-0.0006259	5319.9669	-0.0006222
20	93.5	5319.9630	-0.0006955	5319.9630	-0.0006955	5319.9627	-0.0007011
	110	5319.9630	-0.0006955	5319.9631	-0.0006936	5319.9626	-0.0007030
	126.5	5319.9631	-0.0006936	5319.9629	-0.0006974	5319.9628	-0.0006992
10	93.5	5319.9596	-0.0007594	5319.9590	-0.0007707	5319.9592	-0.0007669
	110	5319.9596	-0.0007594	5319.9592	-0.0007669	5319.9590	-0.0007707
	126.5	5319.9595	-0.0007613	5319.9591	-0.0007688	5319.9593	-0.0007650
0	93.5	5319.9585	-0.0007801	5319.9588	-0.0007744	5319.9588	-0.0007744
	110	5319.9586	-0.0007782	5319.9588	-0.0007744	5319.9587	-0.0007763
	126.5	5319.9586	-0.0007782	5319.9587	-0.0007763	5319.9589	-0.0007726
-10	93.5	5319.9630	-0.0006955	5319.9632	-0.0006917	5319.9637	-0.0006823
	110	5319.9632	-0.0006917	5319.9634	-0.0006880	5319.9636	-0.0006842
	126.5	5319.9633	-0.0006898	5319.9634	-0.0006880	5319.9634	-0.0006880
-20	93.5	5319.9715	-0.0005357	5319.9717	-0.0005320	5319.9719	-0.0005282
	110	5319.9716	-0.0005338	5319.9717	-0.0005320	5319.9718	-0.0005301
	126.5	5319.9716	-0.0005338	5319.9718	-0.0005301	5319.9718	-0.0005301
-30	93.5	5319.9772	-0.0004286	5319.9779	-0.0004154	5319.9778	-0.0004173
	110	5319.9774	-0.0004248	5319.9778	-0.0004173	5319.9779	-0.0004154
	126.5	5319.9776	-0.0004211	5319.9778	-0.0004173	5319.9779	-0.0004154

5.7 BAND EDGES MEASUREMENT

5.7.1 TEST INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
SPECTRUM ANALYZER	FSEK30	100049	Aug. 12, 2004

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 RBW of spectrum analyzer to 1MHz and VBW of spectrum analyzer to 300Hz 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.

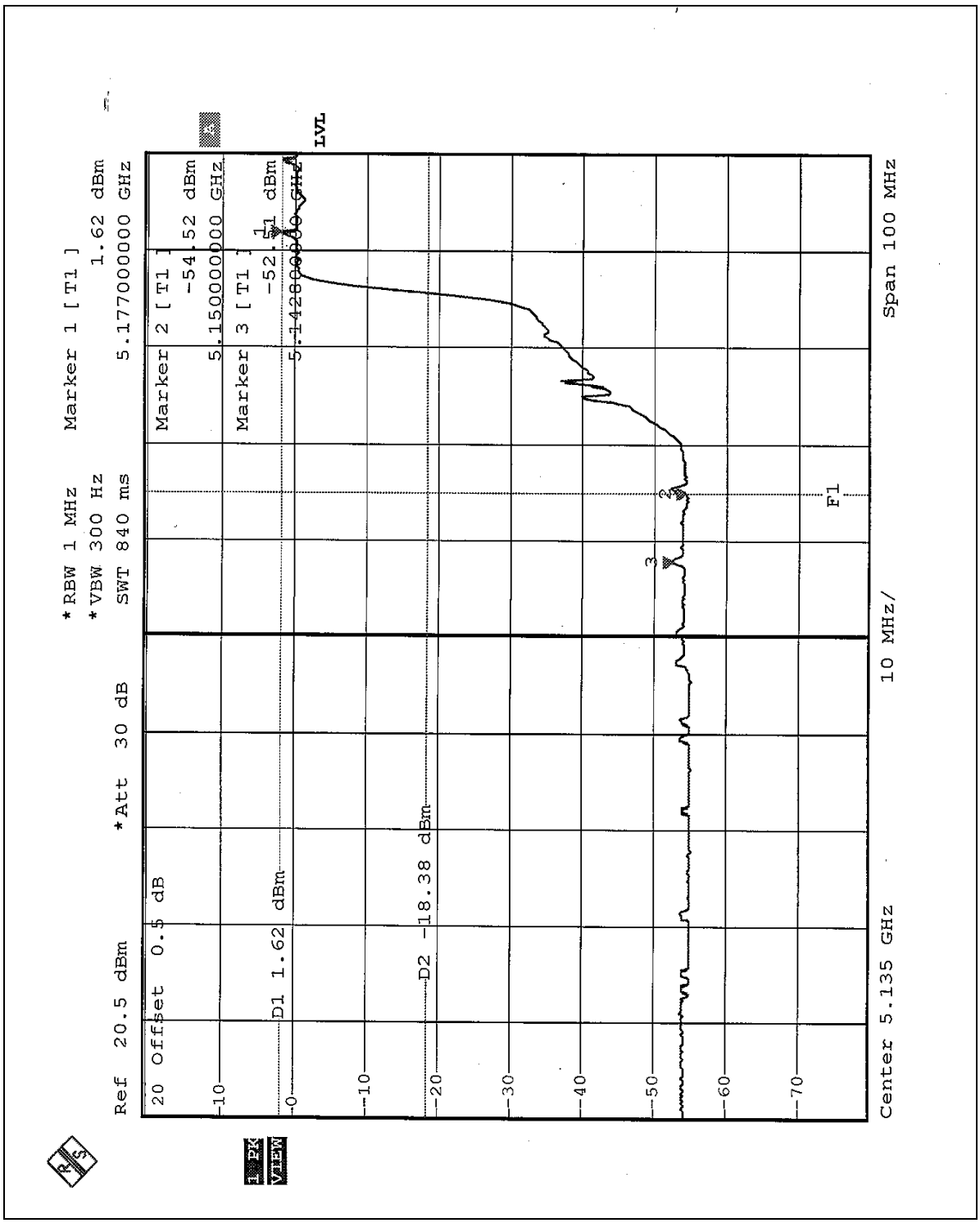
5.7.4 TEST RESULTS

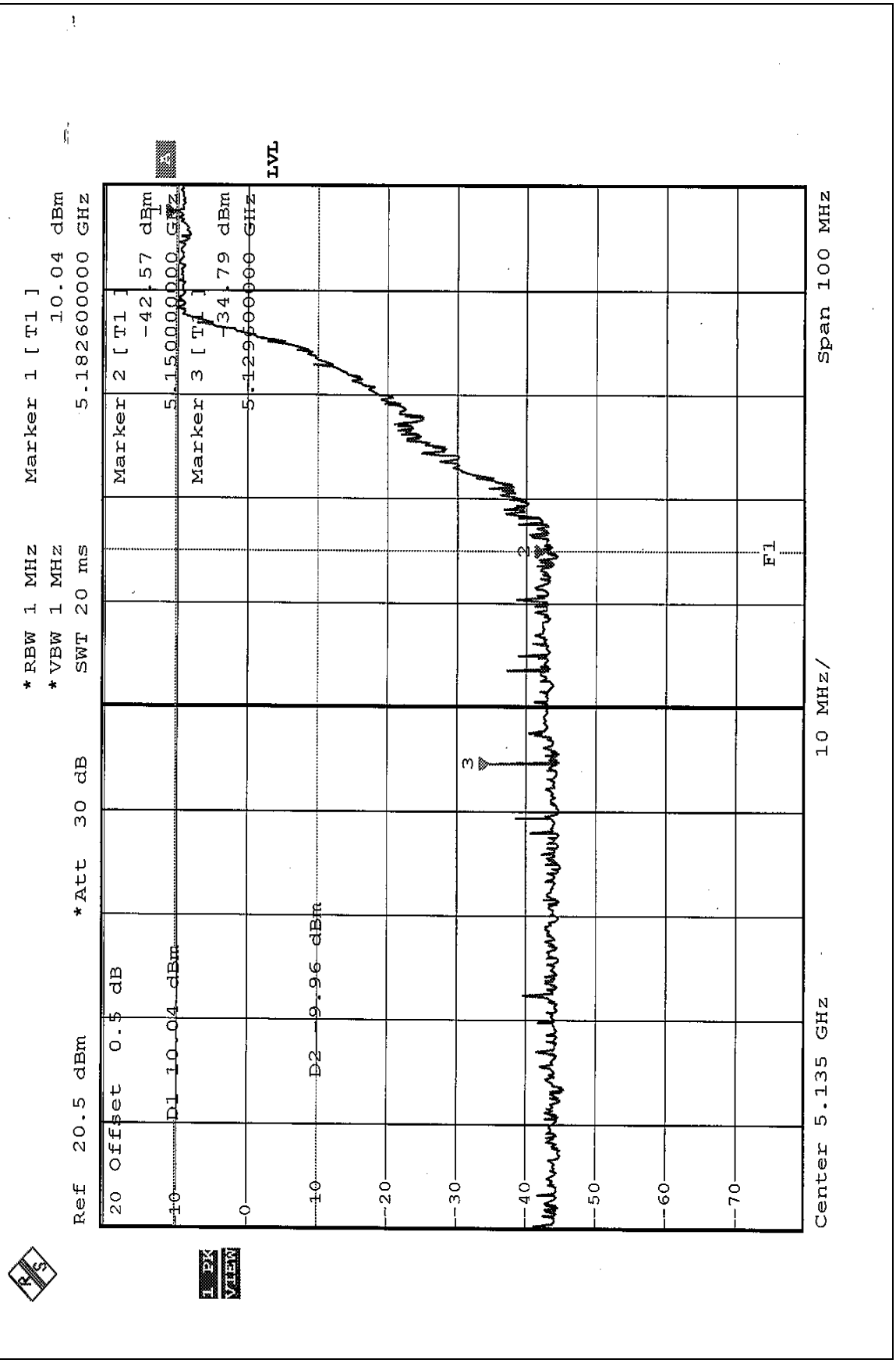
For signals in the restricted bands above and below the 5.15 to 5.35GHz allocated band a measurement was made of the amplitude of the spurious emissions with respect to the intentional signals. The relative amplitude, in dBc, was applied to the average and peak filed strength of the intentional signal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

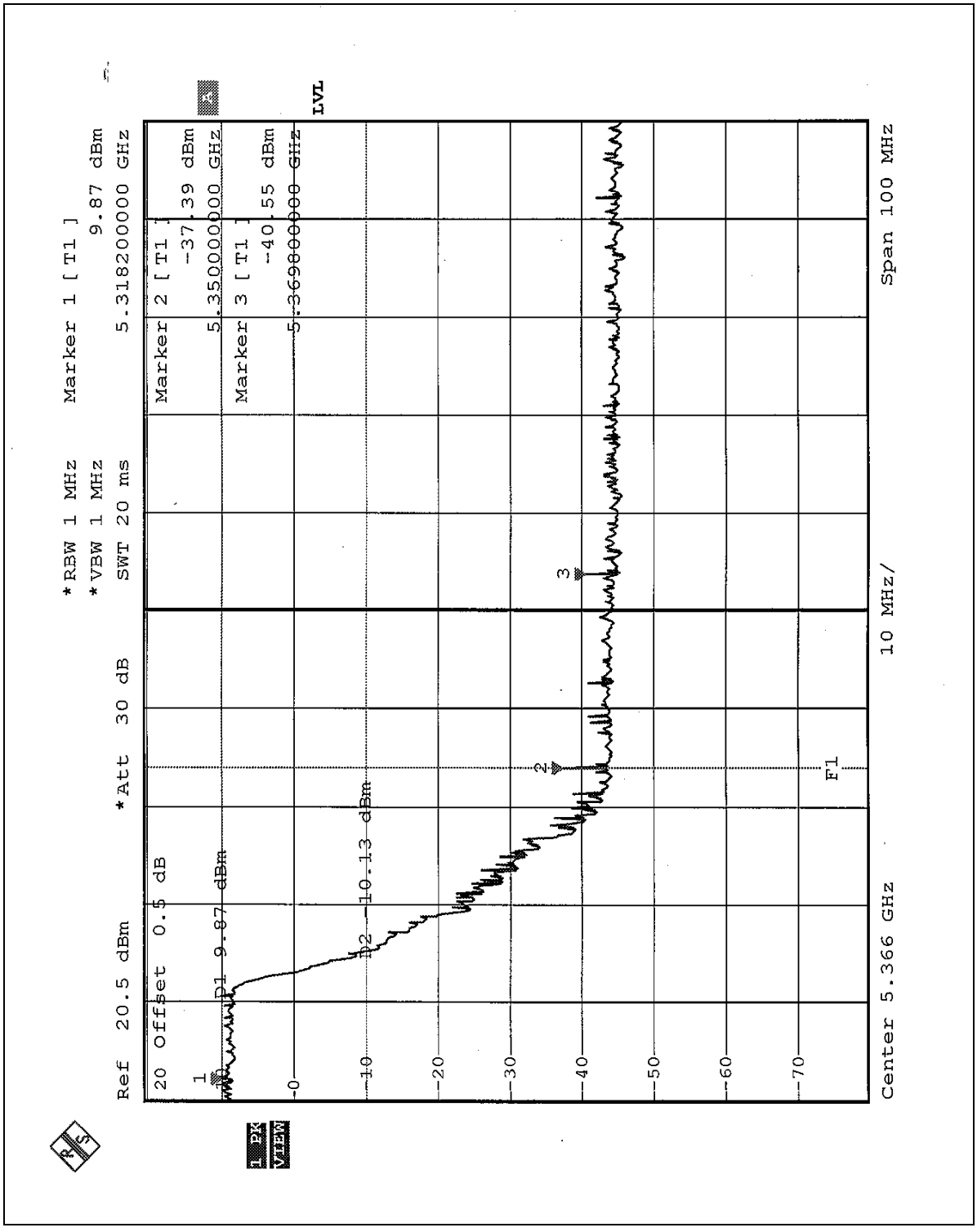
The band edge emission plot on the following page shows 54.13dBc (Average) between carrier maximum power and local maximum emission in restrict band. The emission of carrier strength list in the test result of channel 1 (normal mode) is 98.3dBuV/m, so the maximum field strength in restrict band is 98.3-54.13=44.17dBuV/m which is under 54dBuV/m limit.

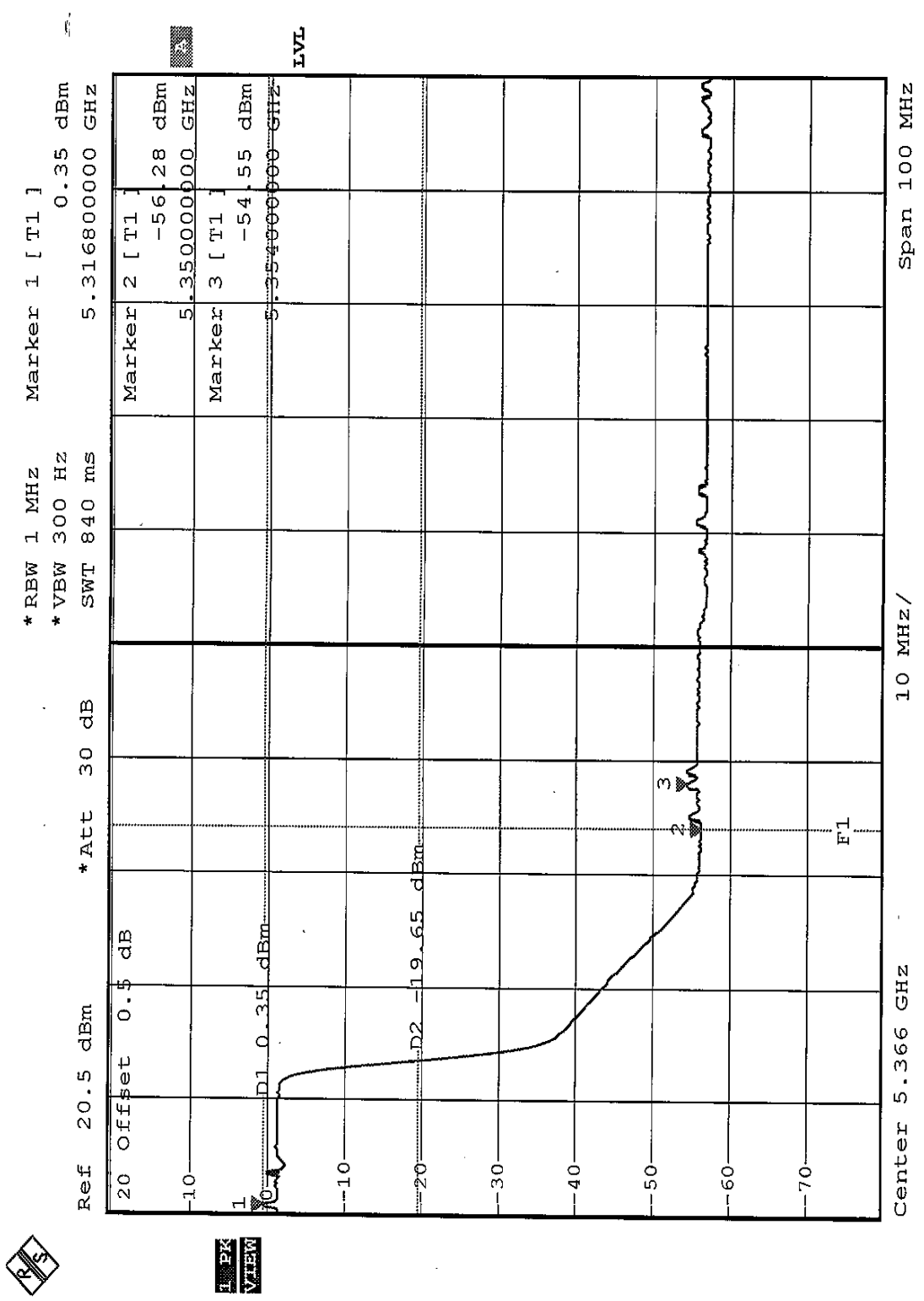



RBW 1 MHz
VBW 1 MHz
SWT 20 ms
Marker 1 [T1]
10.04 dBm
5.182600000 GHz
Marker 2 [T1]
-42.57 dBm
5.150000000 GHz
Marker 3 [T1]
-34.79 dBm
5.129000000 GHz
LVL
Ref 20.5 dBm
20 Offset 0.5 dB
Att 30 dB
D1 10.04 dBm
D2 -9.96 dBm
Center 5.135 GHz
10 MHz/
Span 100 MHz
F1
1 PK
VIEW

Normal Mode: Channel 8 (5320 MHz)

The band edge emission plot on the following page shows 50.42dBc (Average) 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 98.7dBuV/m, so the maximum field strength in restrict band is 98.7-50.42=48.28dBuV/m which is under 54dBuV/m limit.




Ref 20.5 dBm
20 Offset 0.5 dB
*Att 30 dB
*RBW 1 MHz
*VBW 300 Hz
SWT 840 ms
Marker 1 [T1]
0.35 dBm
5.316800000 GHz
Marker 2 [T1]
-56.28 dBm
5.350000000 GHz
Marker 3 [T1]
-54.55 dBm
5.354000000 GHz
LVL
D1 0.35 dBm
D2 -19.65 dBm
F1
Center 5.366 GHz
10 MHz/
Span 100 MHz
1 PK
VIEW

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 maximum Gain antenna used in this product is Dipole antenna without antenna connector. And the maximum Gain of these antennas is 5dBi.

6. PHOTOGRAPHS OF THE TEST CONFIGURATION

CONDUCTED EMISSION TEST

(EUT powered by AC Adapter)

(EUT powered by POE)

RADIATED EMISSION TEST

(EUT powered by AC Adapter)

(EUT powered by POE)

7. INFORMATION ON THE TESTING LABORATORIES

We, ADT Corp., were founded in 1988 to provide our best service in EMC 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
Germany	TUV Rheinland
Japan	VCCI
New Zealand	MoC
Norway	NEMKO
R.O.C.	BSMI, DGT, CNLA

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:

Lin Kou EMC Lab:
Tel: 886-2-26052180
Fax: 886-2-26052943

Hsin Chu EMC Lab:
Tel: 886-35-935343
Fax: 886-35-935342

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