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	July 24, 2003

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

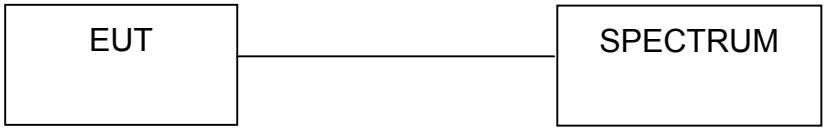
5.4.3 TEST PROCEDURE

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

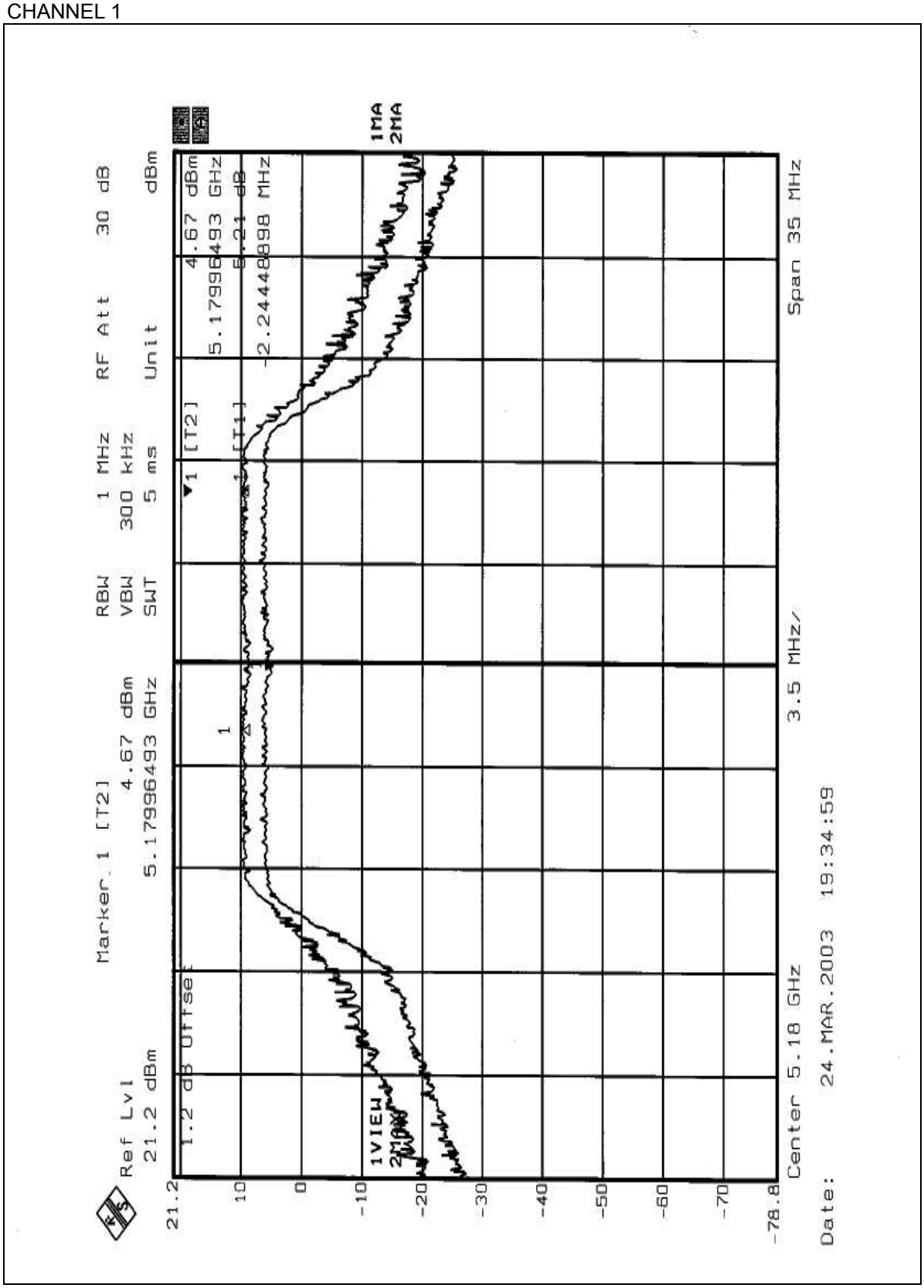
The software provided by client to enable the EUT under transmission condition continuously at specific channel frequencies individually.

5.4.7 TEST RESULTS

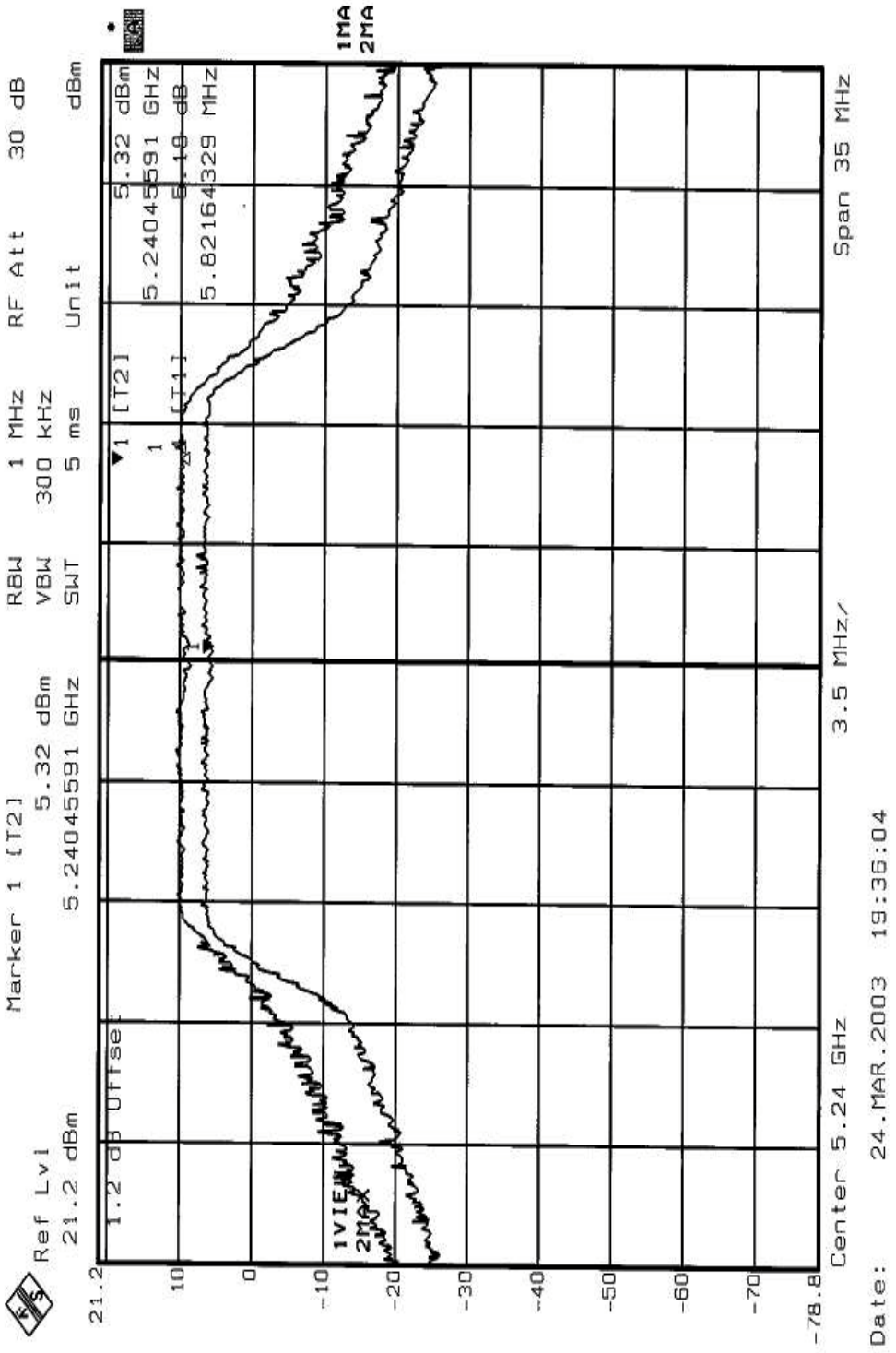
EUT	2.4GHz/5GHz Mini - PCI Card	**MODEL**	WLL220
MODE	Normal	**INPUT POWER (SYSTEM)**	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	19deg. C, 69RH, 991 hPa	**TESTED BY**	Ansen Lei

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER EXCURSION (dB)	PEAK to AVERAGE EXCURSION LIMIT (dB)	PASS/FAIL
1	5180	5.21	13	PASS
4	5240	5.18	13	PASS
5	5260	6.00	13	PASS
8	5320	5.94	13	PASS
9	5745	6.84	13	PASS
12	5805	5.88	13	PASS

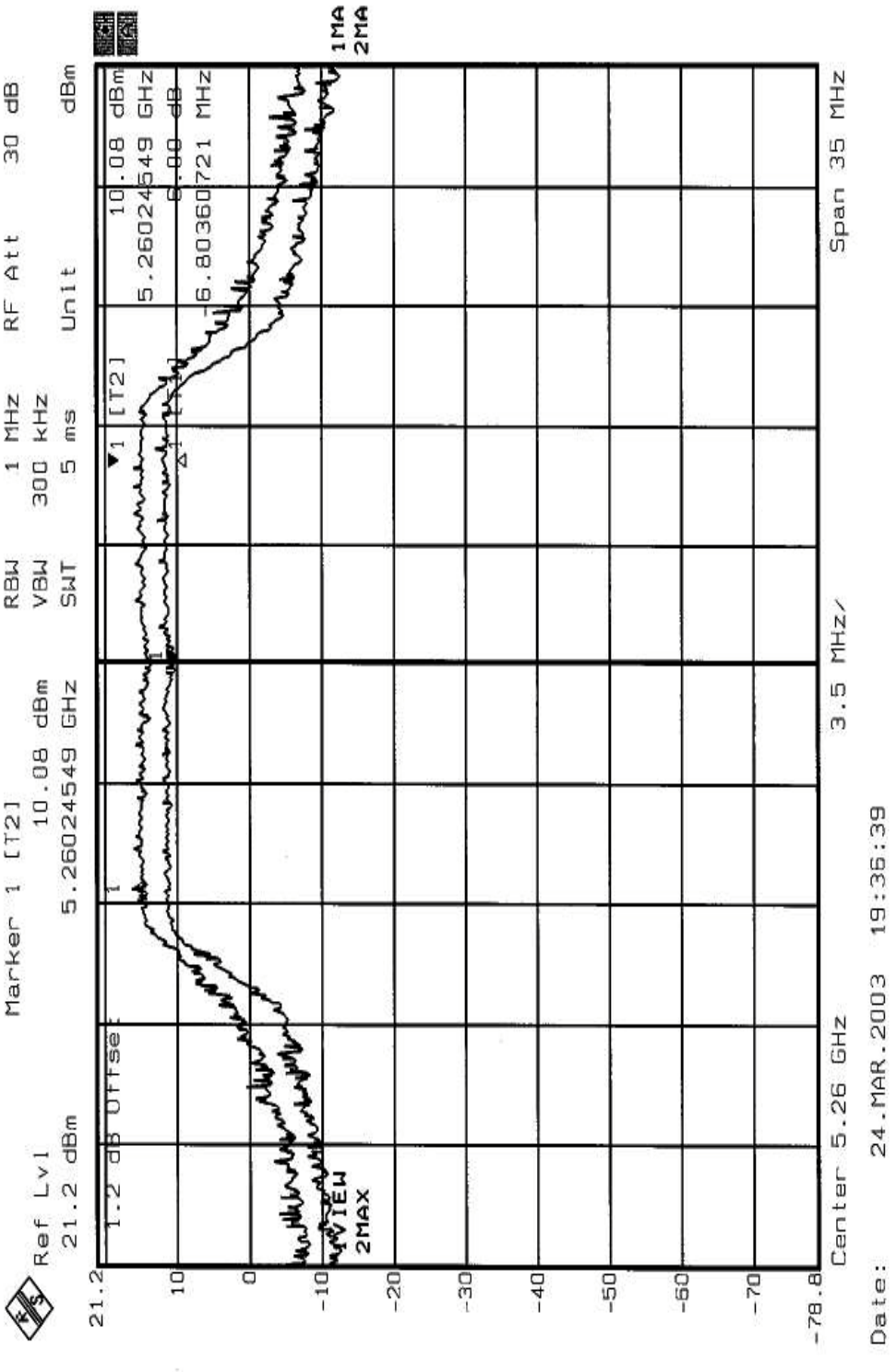
CHANNEL 1


Ref Lvl
21.2 dBm
1.2 dB Offset
Marker 1 [T2]
4.67 dBm
5.1799649 3 GHz
RBW 1 MHz
VBW 300 kHz
SWT 5 ms
RF Att 30 dB
Unit dBm
1 [T2] 4.67 dBm
5.1799649 3 GHz
[T1] 5.21 dB
-2.2444898 MHz
1MA
2MA
1VIEW
Center 5.18 GHz
3.5 MHz/
Span 35 MHz
Date: 24.MAR.2003 19:34:59
21.2
10
0
-10
-20
-30
-40
-50
-60
-70
-78.8

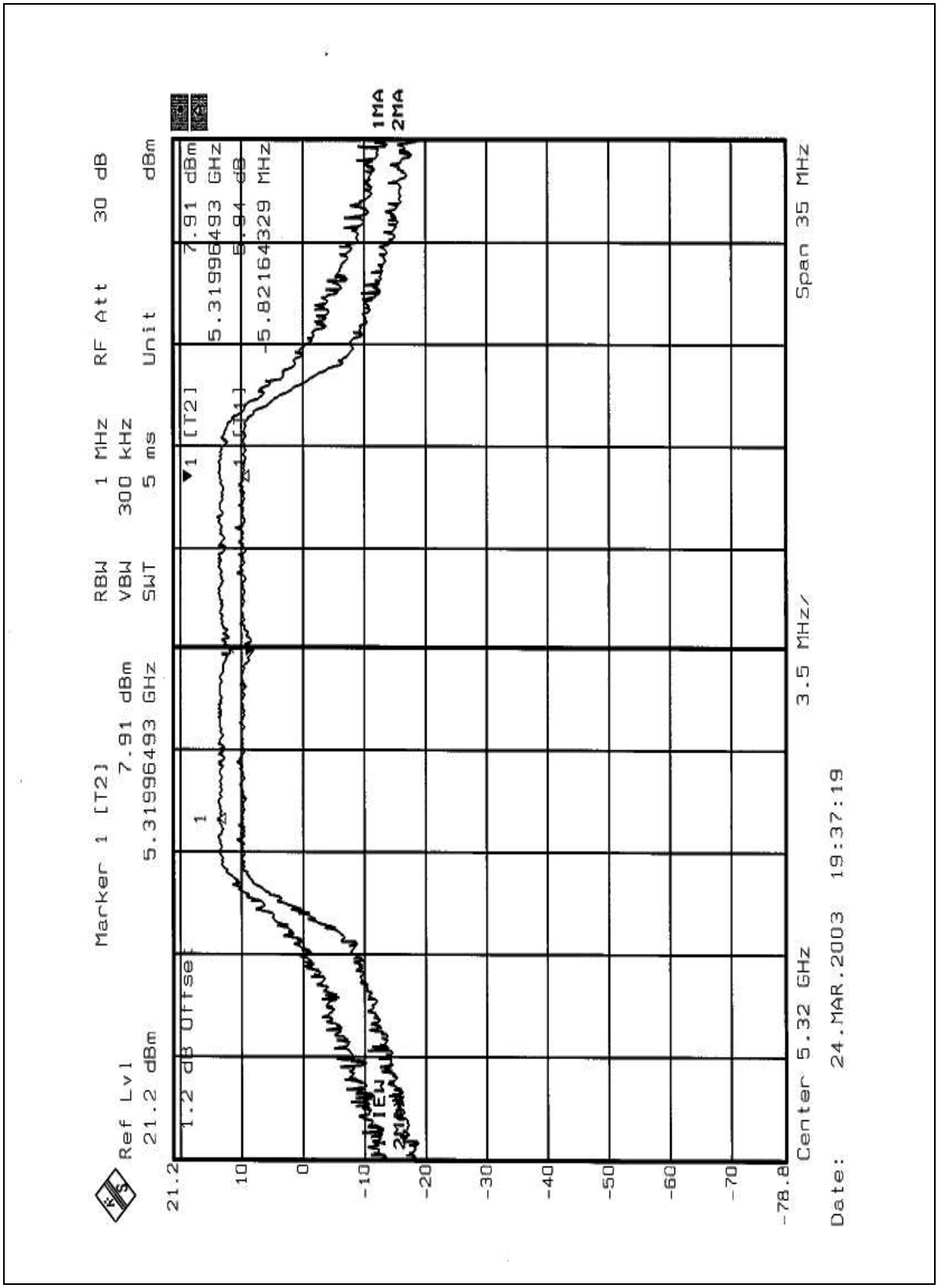
CHANNEL 4


Ref Lvl
21.2 dBm
1.2 dB Offset
Marker 1 [T2]
5.32 dBm
5.24045591 GHz
RBW 1 MHz
VBW 300 kHz
SWT 5 ms
RF Att 30 dB
Unit dBm
1 [T2] 5.32 dBm
5.24045591 GHz
1 [T1] 5.18 dB
5.82164329 MHz
1MA
2MA
1VIEW
2Max
21.2
10
0
-10
-20
-30
-40
-50
-60
-70
-78.8
Center 5.24 GHz
3.5 MHz/
Span 35 MHz
Date: 24.MAR.2003 19:36:04

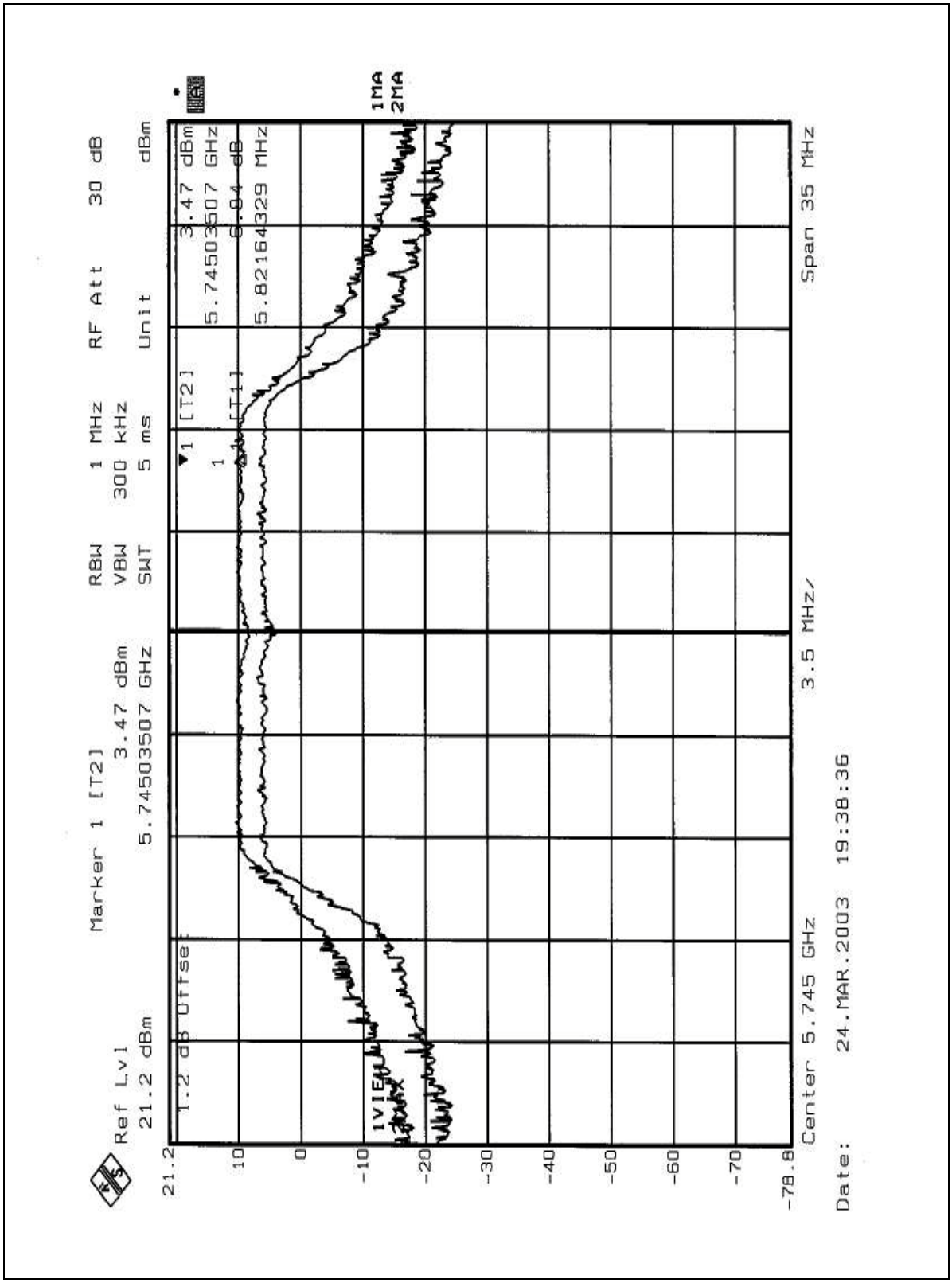
CHANNEL 5


Ref Lvl
21.2 dBm
1.2 dB Offset
Marker 1 [T2]
10.08 dBm
5.26024549 GHz
RBW 1 MHz
VBW 300 kHz
SWT 5 ms
RF Att 30 dB
Unit dBm
1 [T2] 10.08 dBm
5.26024549 GHz
Δ1 [T2] 0.00 dB
6.80360721 MHz
1MA
2MA
1VIEW
2MAX
21.2
10
0
-10
-20
-30
-40
-50
-60
-70
-78.8
Center 5.26 GHz
3.5 MHz/
Span 35 MHz
Date: 24.MAR.2003 19:36:39

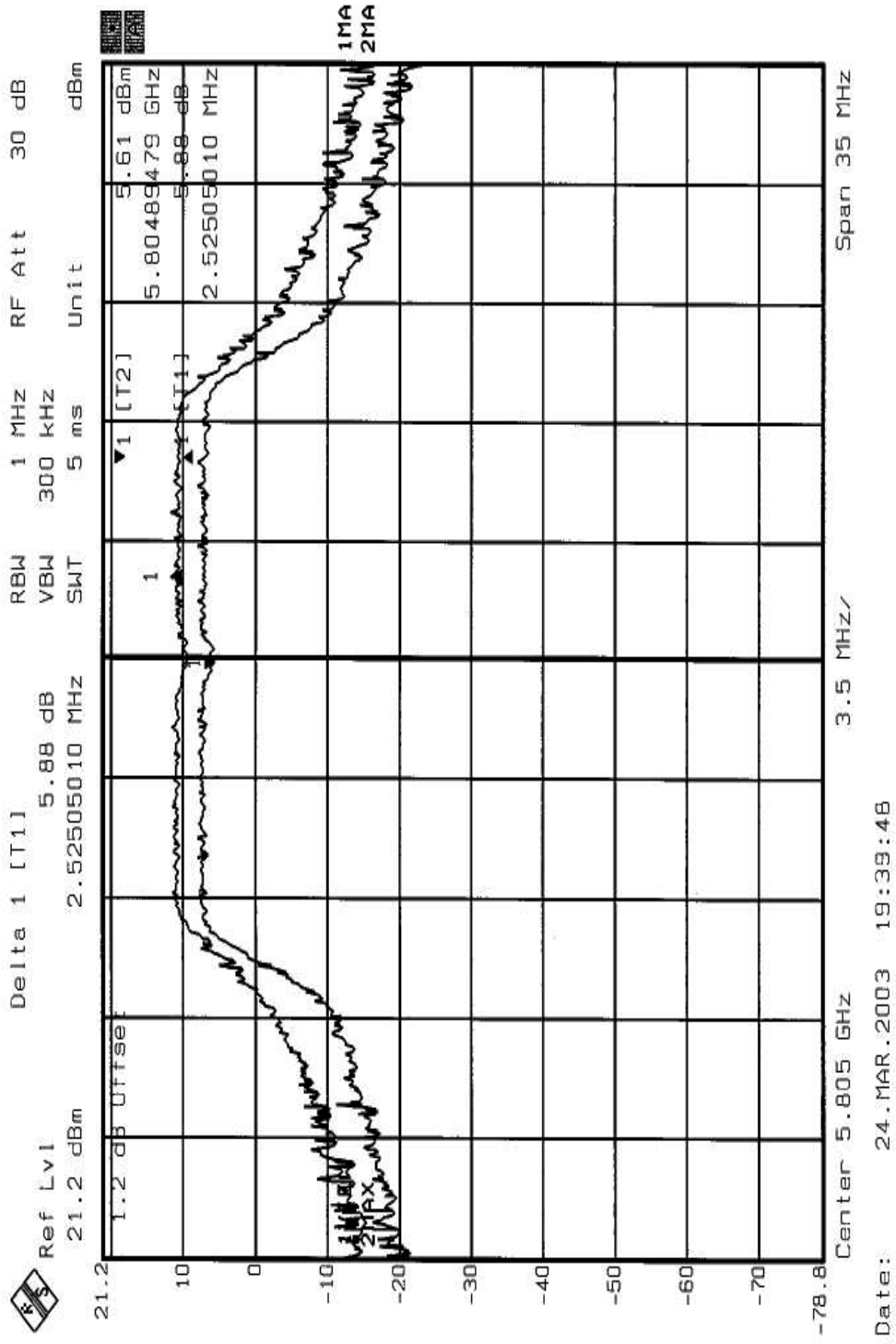
CHANNEL 8


Ref Lvl
21.2 dBm
1.2 dB Offset
Marker 1 [T2]
7.91 dBm
5.31996493 GHz
RBW 1 MHz
VBW 300 kHz
SWT 5 ms
RF Att 30 dB
Unit dBm
1 [T2] 7.91 dBm
5.31996493 GHz
Δ1 [T1] 5.94 dB
-5.82164329 MHz
1MA
2MA
21.2
10
0
-10
-20
-30
-40
-50
-60
-70
-78.8
Center 5.32 GHz
3.5 MHz/
Span 35 MHz
Date: 24.MAR.2003 19:37:19

CHANNEL 9


Marker 1 [T2]
3.47 dBm
5.7450507 GHz
RBW 1 MHz
VBW 300 kHz
SWT 5 ms
RF Att 30 dB
Unit dBm
Ref Lvl
21.2 dBm
1.2 dB Offset
[T2] 3.47 dBm 5.7450507 GHz
[T1] 6.84 dB 5.8216329 MHz
1MA
2MA
Center 5.745 GHz
3.5 MHz/
Span 35 MHz
Date: 24.MAR.2003 19:38:36

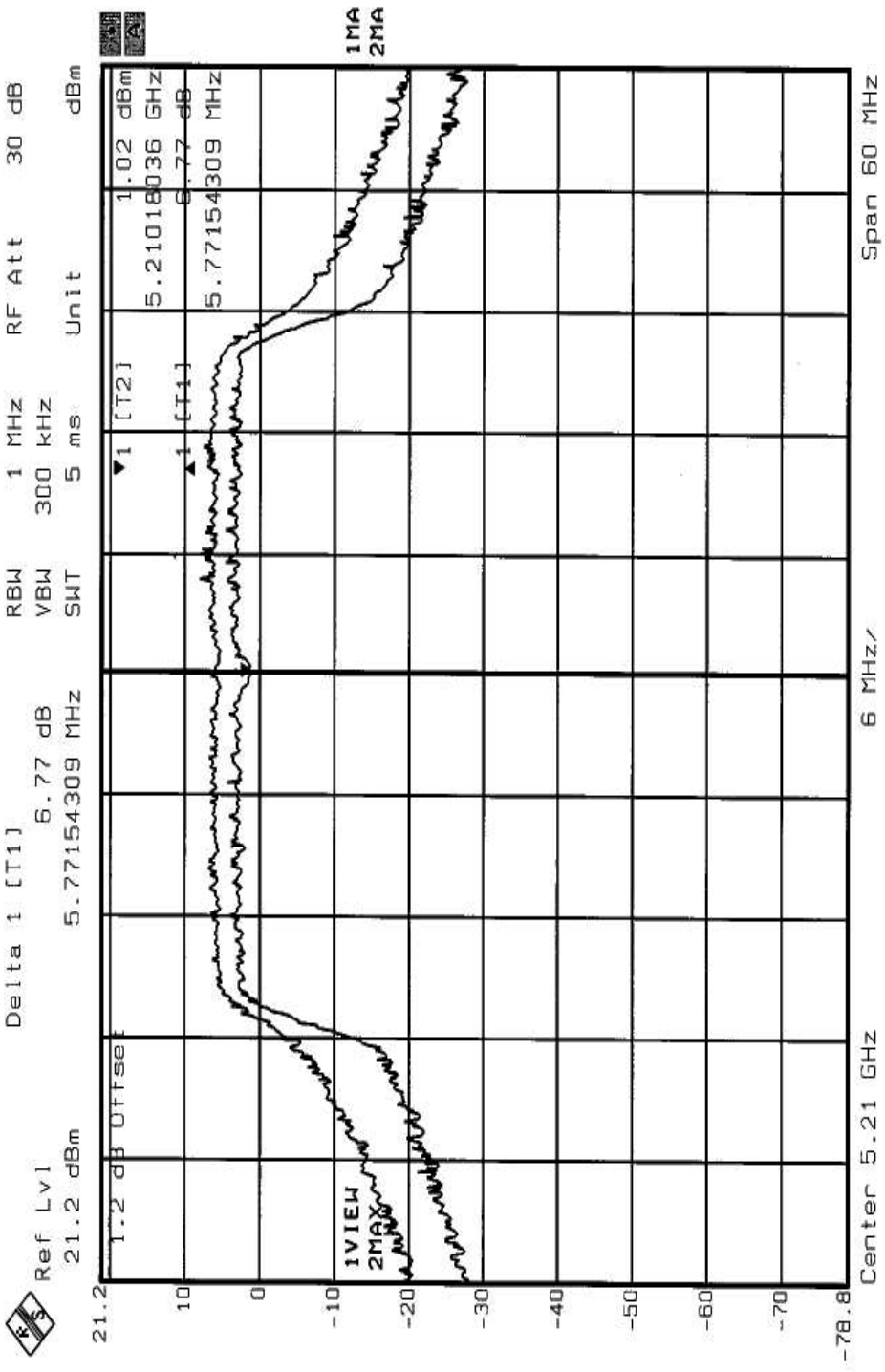
CHANNEL 12


Ref Lvl
21.2 dBm
1.2 dB Offset
Delta 1 [T1]
5.88 dB
2.52505010 MHz
RBW 1 MHz
VBW 300 kHz
SWT 5 ms
RF Att 30 dB
Unit dBm
1 [T2]
5.61 dBm
5.80489479 GHz
1 [T1]
5.88 dB
2.52505010 MHz
1MA
2MA
Center 5.805 GHz
3.5 MHz/
Span 35 MHz
Date: 24.MAR.2003 19:39:48

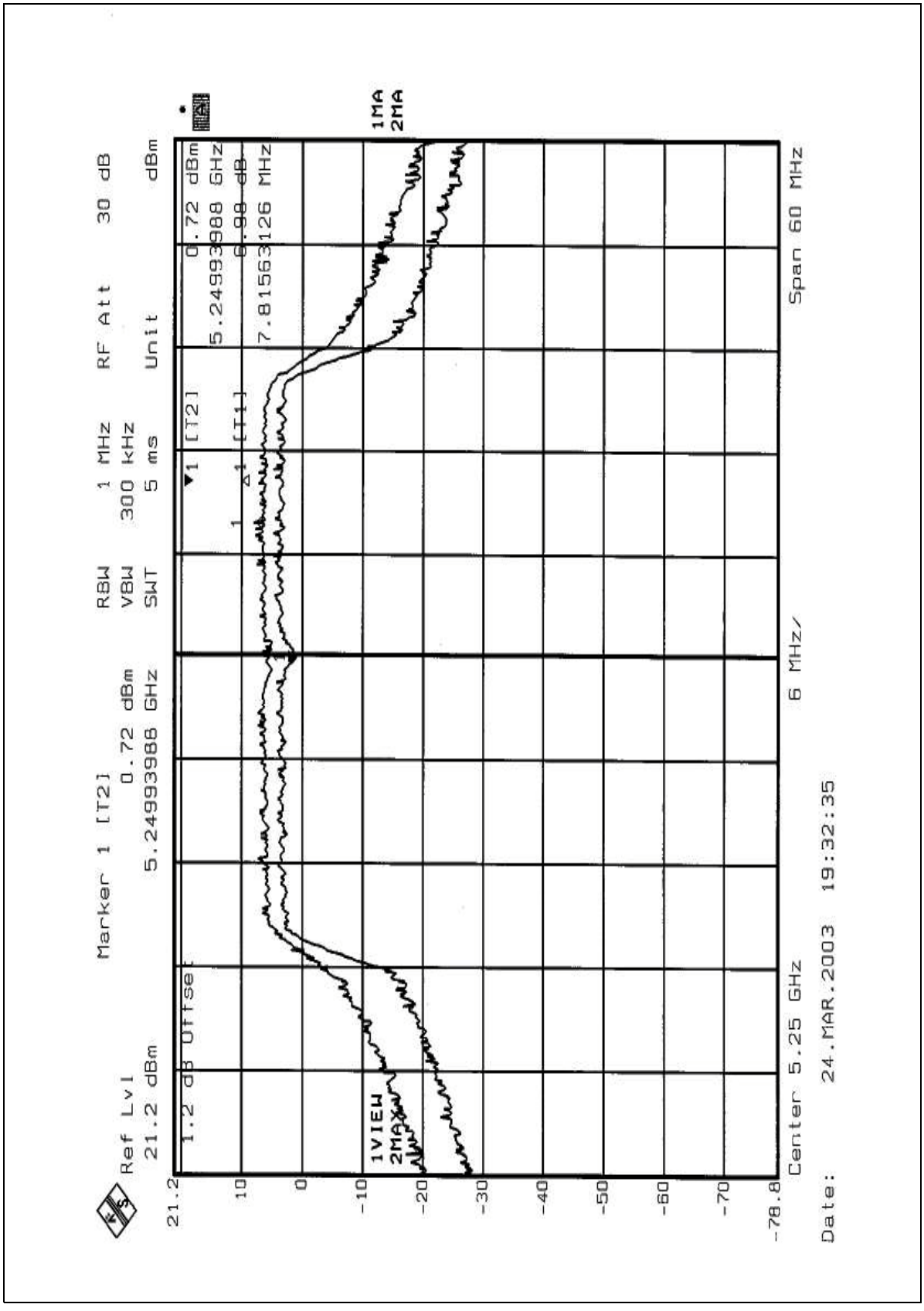
EUT	2.4GHz/5GHz Mini - PCI Card	**MODEL**	WLL220
MODE	Turbo	**INPUT POWER (SYSTEM)**	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	19 deg. C, 69RH, 991 hPa	**TESTED BY**	Ansen Lei

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER EXCURSION (dB)	PEAK to AVERAGE EXCURSION LIMIT (dB)	PASS/FAIL
1	5210	6.77	13	PASS
2	5250	6.98	13	PASS
3	5290	7.21	13	PASS
4	5760	7.05	13	PASS
5	5800	5.84	13	PASS

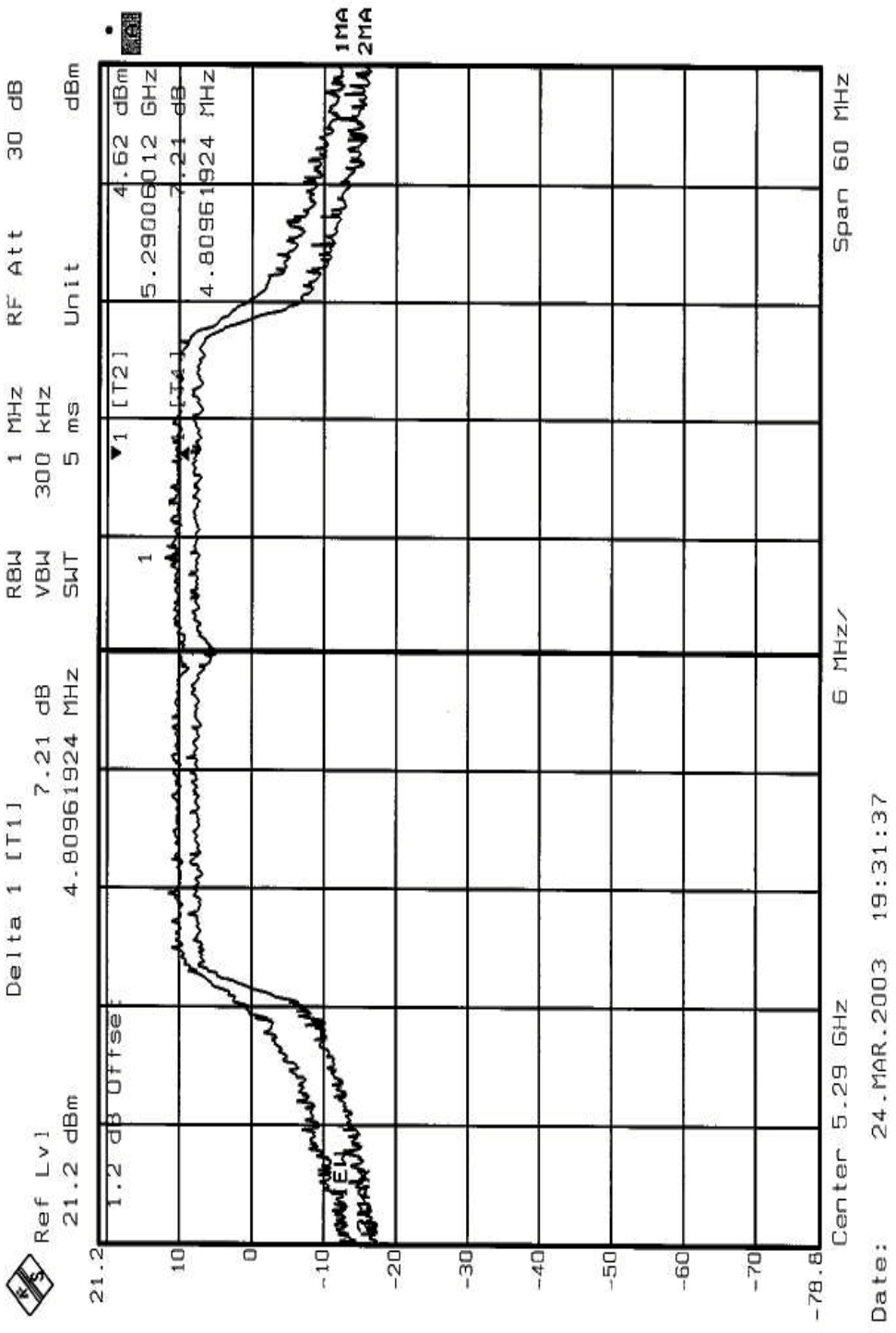
CHANNEL 1


Ref Lvl
21.2 dBm
1.2 dB Offset
Delta 1 [T1]
6.77 dB
5.77154309 MHz
RBW 1 MHz
VBW 300 kHz
SWT 5 ms
RF Att 30 dB
Unit dBm
[T2]
1.02 dBm
5.21018036 GHz
[T1]
6.77 dB
5.77154309 MHz
1MA
2MA
1VIEW
2MAX
21.2
10
0
-10
-20
-30
-40
-50
-60
-70
-78.8
Center 5.21 GHz
6 MHz/
Span 60 MHz
Date: 24.MAR.2003 19:33:33

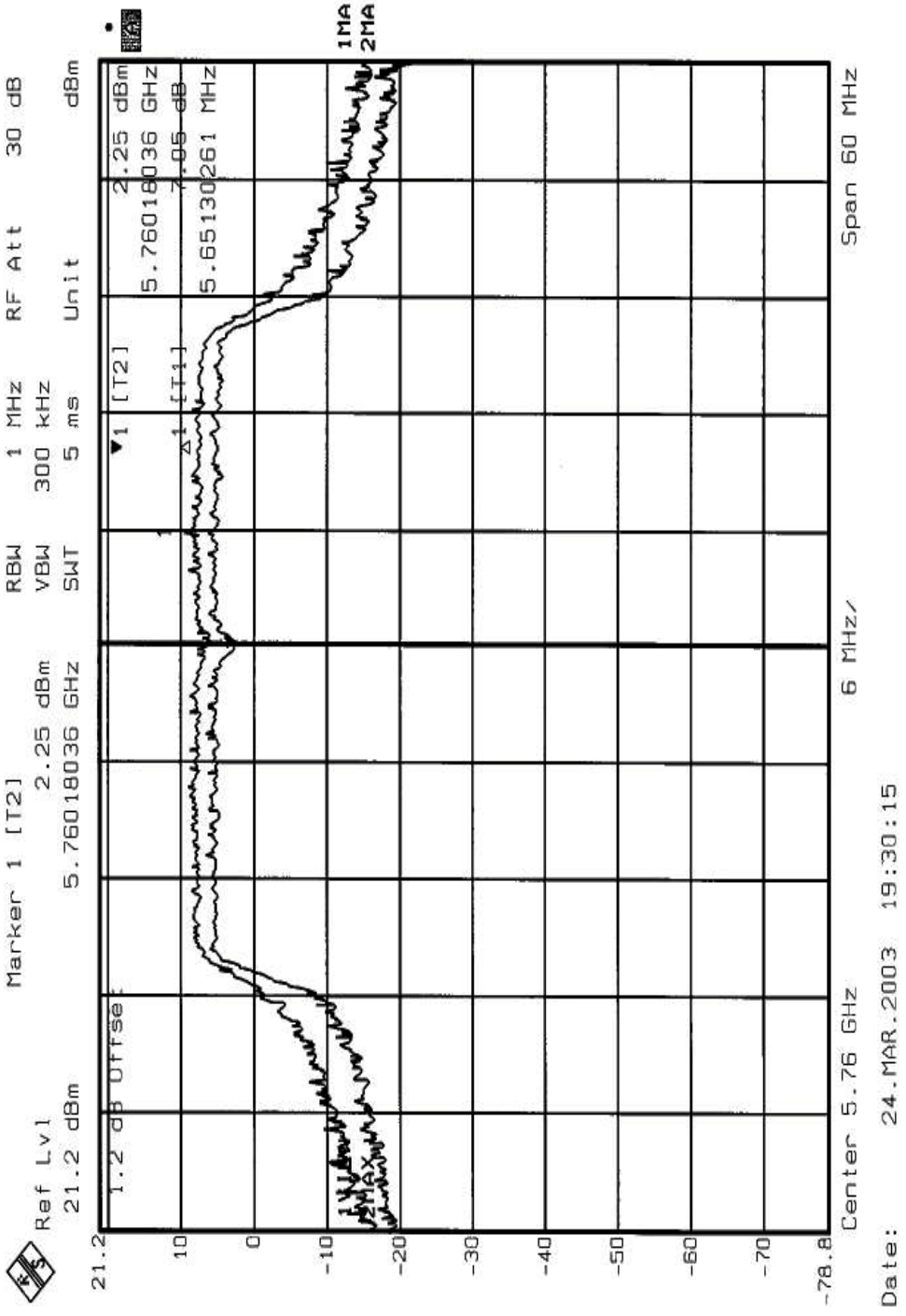
CHANNEL 2


Ref Lvl
21.2 dBm
1.2 dB Offset
Marker 1 [T2]
0.72 dBm
5.24993988 GHz
RBW 1 MHz
VBW 300 kHz
SWT 5 ms
RF Att 30 dB
Unit dBm
1VIEW
2MAXH
1MA
2MA
Center 5.25 GHz
6 MHz/
Span 60 MHz
Date: 24.MAR.2003 19:32:35

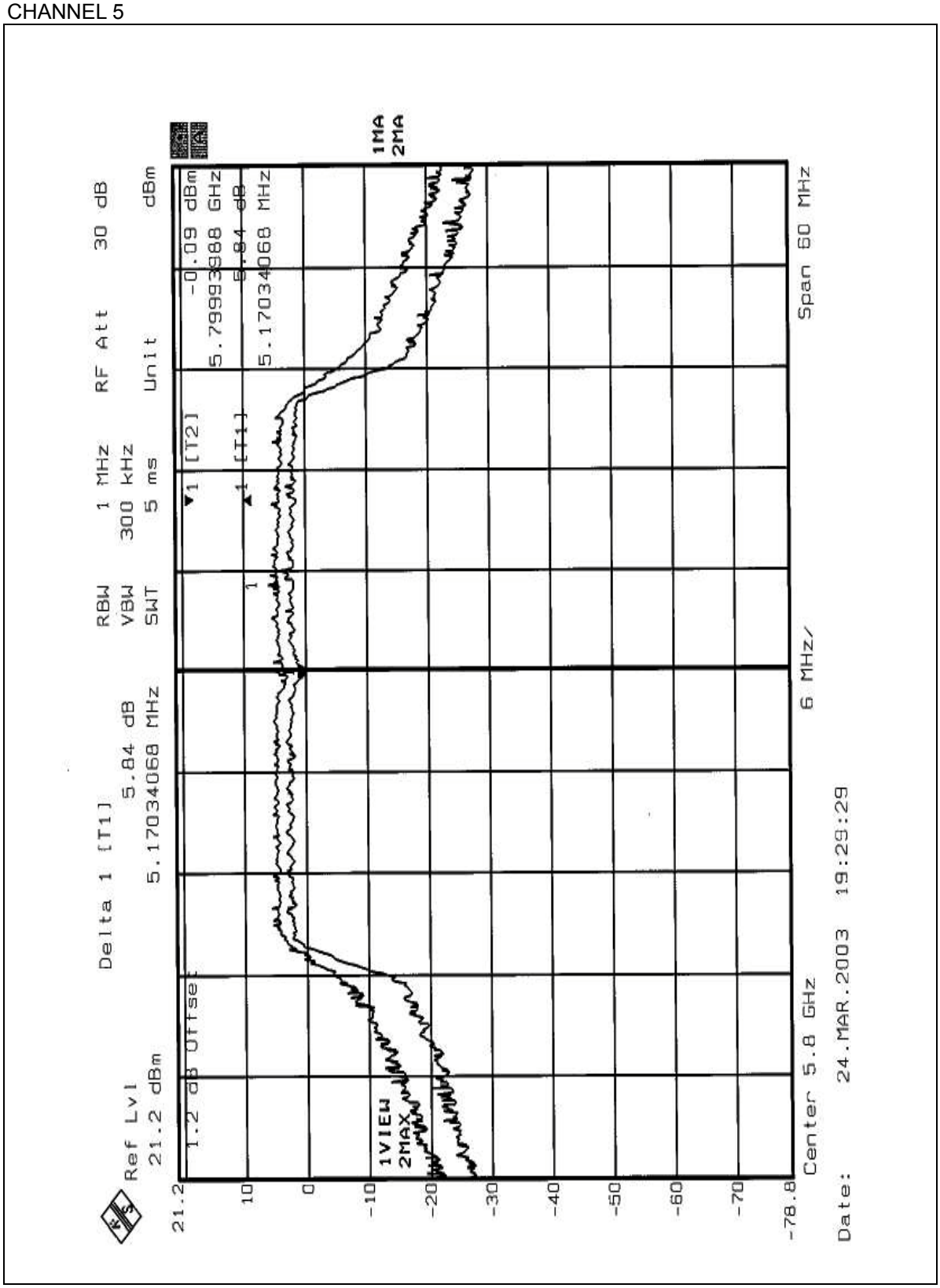
CHANNEL 3


Ref Lvl
21.2 dBm
1.2 dB Offset
Delta 1 [T1]
7.21 dB
4.80961924 MHz
RBW 1 MHz
VBW 300 kHz
SWT 5 ms
RF Att 30 dB
Unit dBm
1 [T2]
4.62 dBm
5.29006012 GHz
[T4]
7.21 dB
4.80961924 MHz
1MA
2MA
21.2
10
0
-10
-20
-30
-40
-50
-60
-70
-78.8
Center 5.29 GHz
6 MHz/
Span 60 MHz
Date: 24.MAR.2003 19:31:37

CHANNEL 4


Marker 1 [T2]
2.25 dBm
5.76018036 GHz
RBW 1 MHz
VBW 300 kHz
SWT 5 ms
RF Att 30 dB
Unit dBm
Ref Lvl
21.2 dBm
1.2 dB Offset
Center 5.76 GHz
6 MHz/
Span 60 MHz
Date: 24.MAR.2003 19:30:15
1MA
2MA
[T2]
2.25 dBm
5.76018036 GHz
[T1]
7.05 dB
5.65130261 MHz

CHANNEL 5


Ref Lvl
21.2 dBm
1.2 dB Offset
Delta 1 [T1]
5.84 dB
5.17034068 MHz
RBW 1 MHz
VBW 300 kHz
SWT 5 ms
RF Att 30 dB
Unit dBm
1 [T2]
-0.09 dBm
5.79993388 GHz
1 [T1]
5.84 dB
5.17034068 MHz
1MA
2MA
1VIEW
2MAX
21.2
10
0
-10
-20
-30
-40
-50
-60
-70
-78.8
Center 5.8 GHz
6 MHz/
Span 60 MHz
Date: 24.MAR.2003 19:29:29

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	July 24, 2003

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

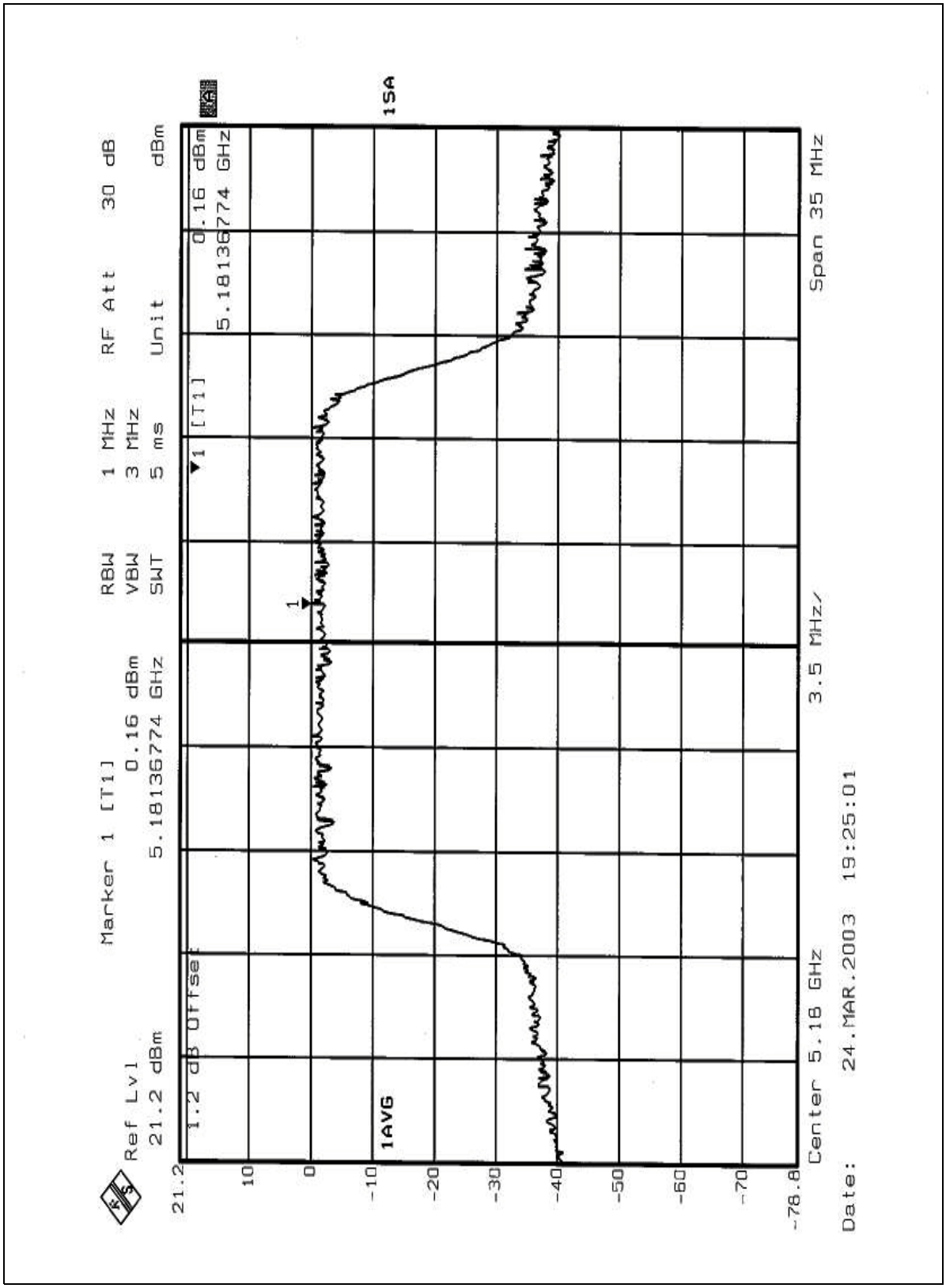
Same as 5.3.6

5.5.7 TEST RESULTS

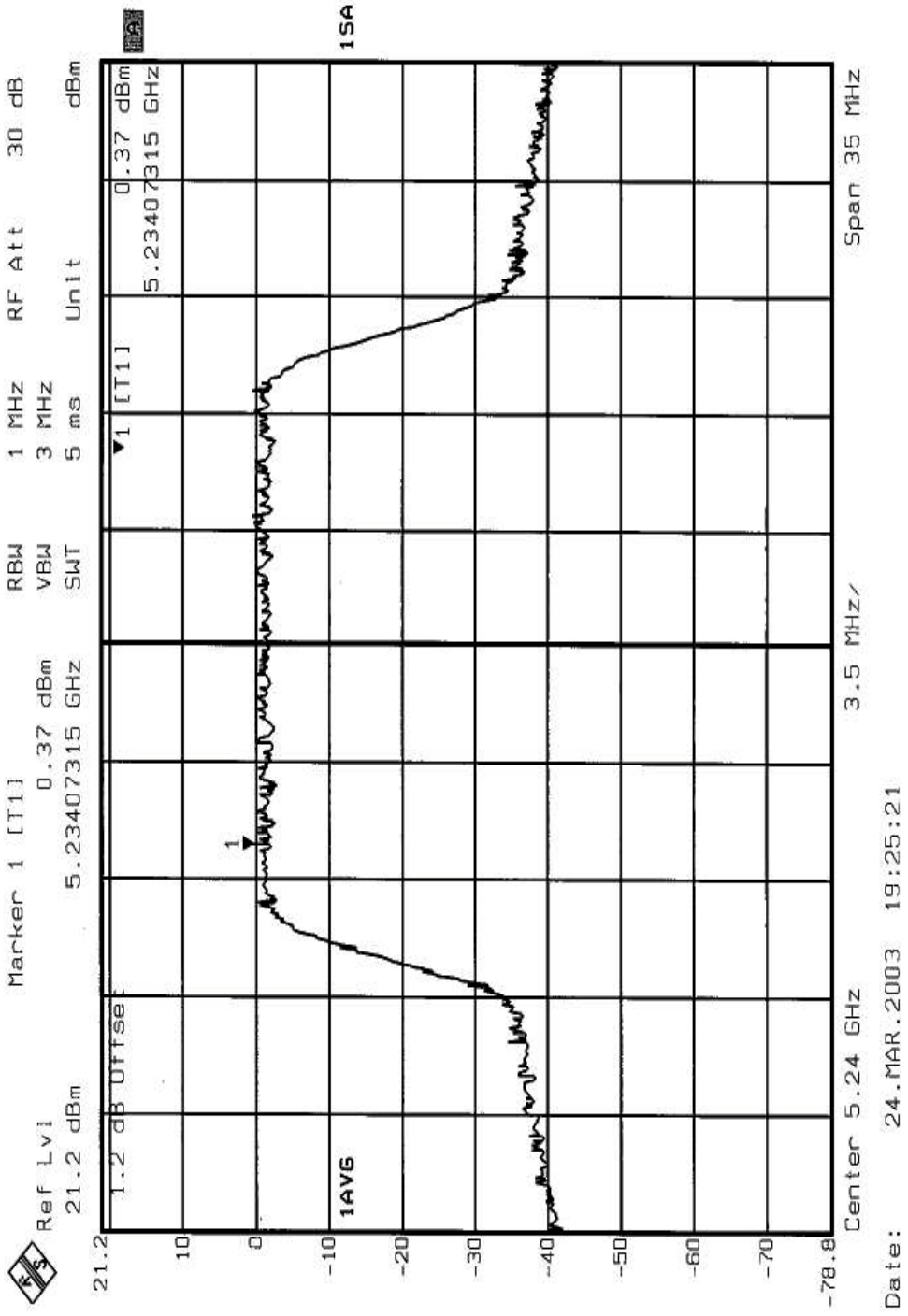
EUT	2.4GHz/5GHz Mini - PCI Card	**MODEL**	WLL220
MODE	Normal	**INPUT POWER (SYSTEM)**	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	19deg. C, 69RH, 991 hPa	**TESTED BY**	Ansen Lei

CHANNEL NUMBER	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 1 MHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	5180	0.16	4	PASS
4	5240	0.37	4	PASS
5	5260	5.64	11	PASS
8	5320	4.16	11	PASS
9	5745	0.04	17	PASS
12	5805	1.20	17	PASS

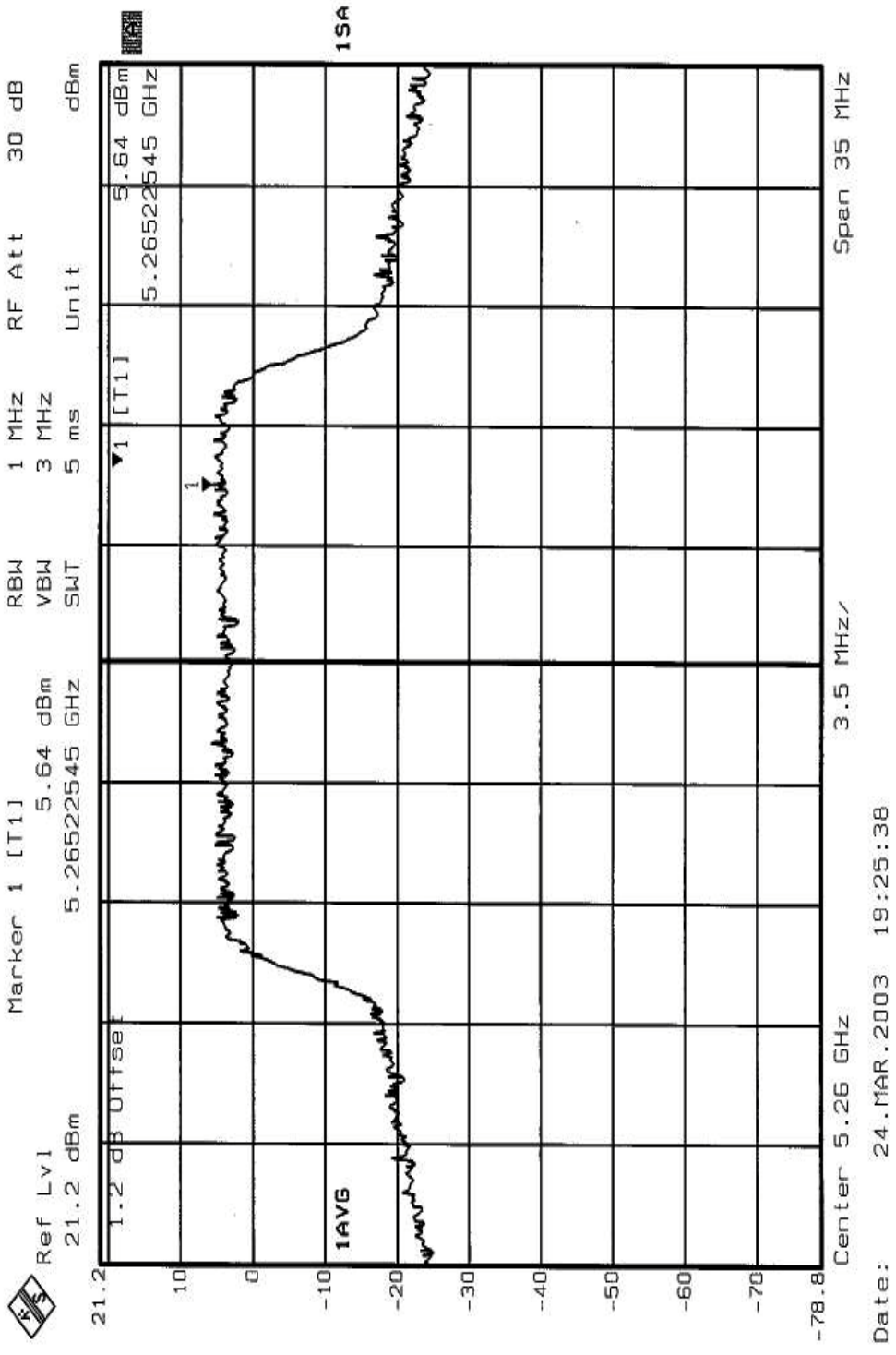
CHANNEL 1


Marker 1 [T1]
0.16 dBm
5.18136774 GHz
Ref Lvl
21.2 dBm
1.2 dB Offset
RBW 1 MHz
VBW 3 MHz
SWT 5 ms
RF Att 30 dB
Unit dBm
1SA
1AVG
Center 5.18 GHz
3.5 MHz/
Span 35 MHz
Date: 24.MAR.2003 19:25:01

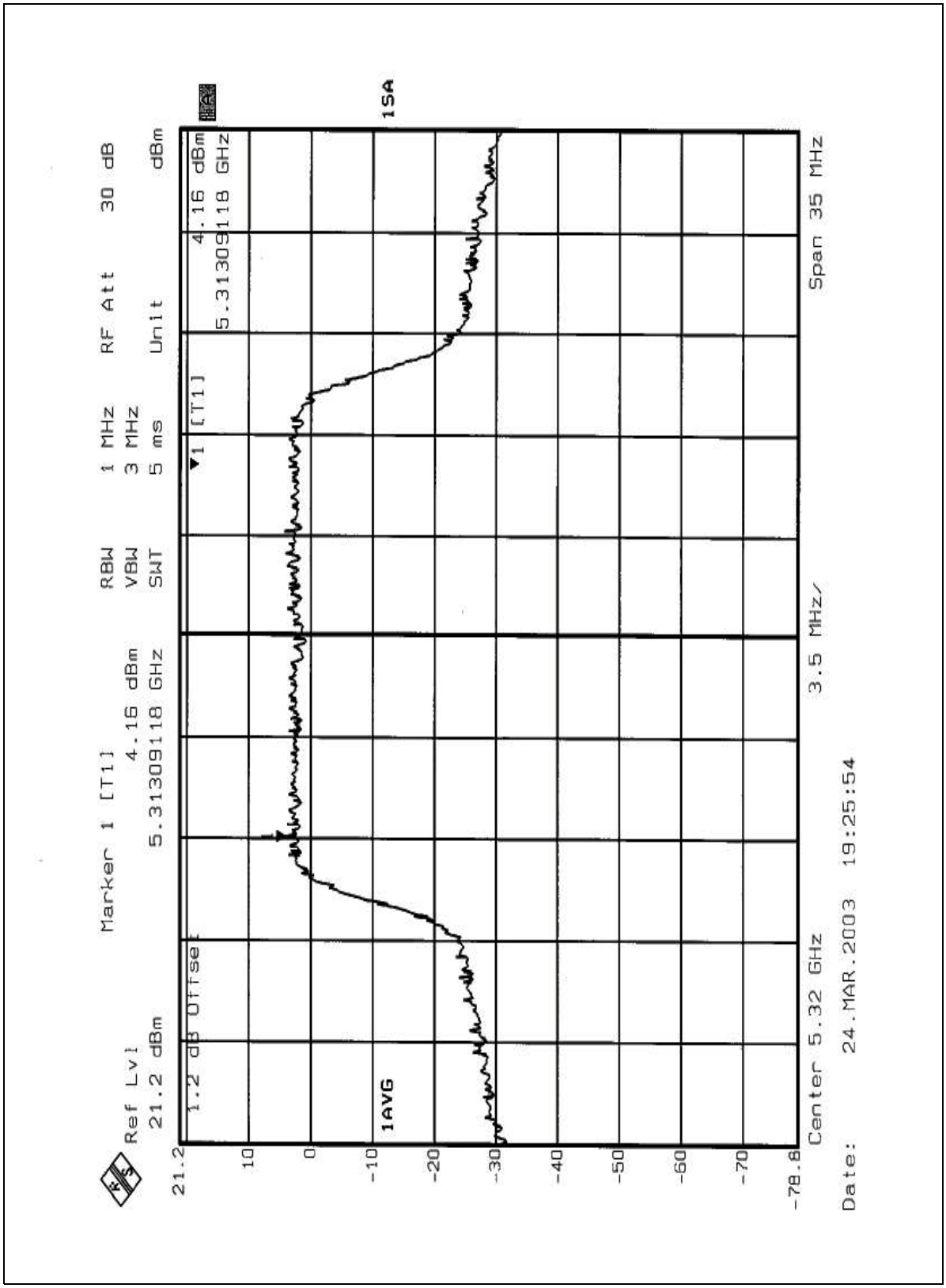
CHANNEL 4


Marker 1 [T1]
0.37 dBm
5.23407315 GHz
RBW 1 MHz
VBW 3 MHz
SWT 5 ms
RF Att 30 dB
Unit dBm
Ref Lvl
21.2 dBm
1.2 dB Offset
1SA
1AVG
Center 5.24 GHz
3.5 MHz/
Span 35 MHz
Date: 24.MAR.2003 19:25:21

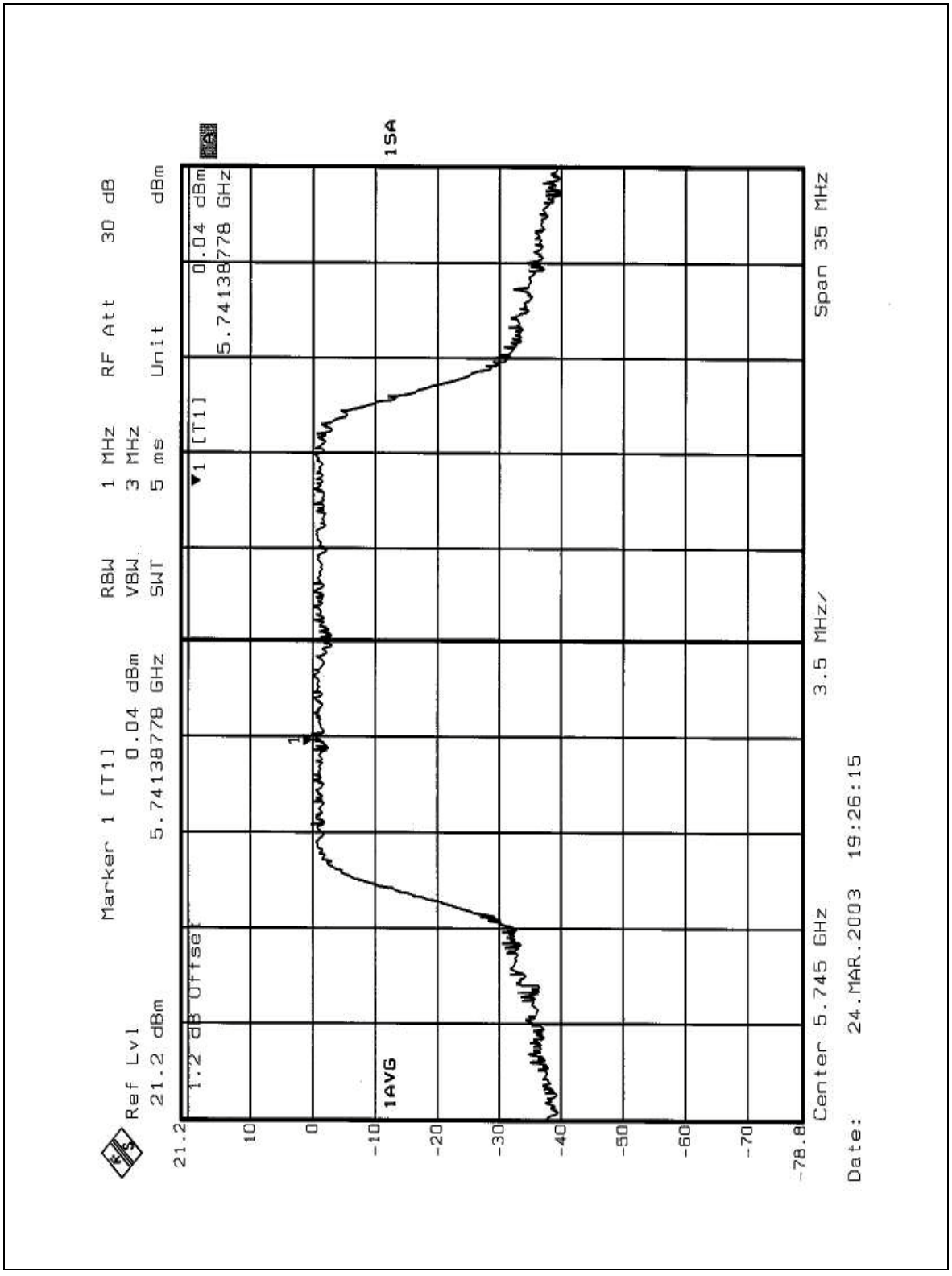
CHANNEL 5


Ref Lvl
21.2 dBm
1.2 dB Offset
Marker 1 [T1]
5.64 dBm
5.26522545 GHz
RBW 1 MHz
VBW 3 MHz
SWT 5 ms
RF Att 30 dB
Unit dBm
1 [T1]
5.64 dBm
5.26522545 GHz
1SA
1AVG
21.2
10
0
-10
-20
-30
-40
-50
-60
-70
-78.8
Center 5.26 GHz
3.5 MHz/
Span 35 MHz
Date: 24.MAR.2003 19:25:38

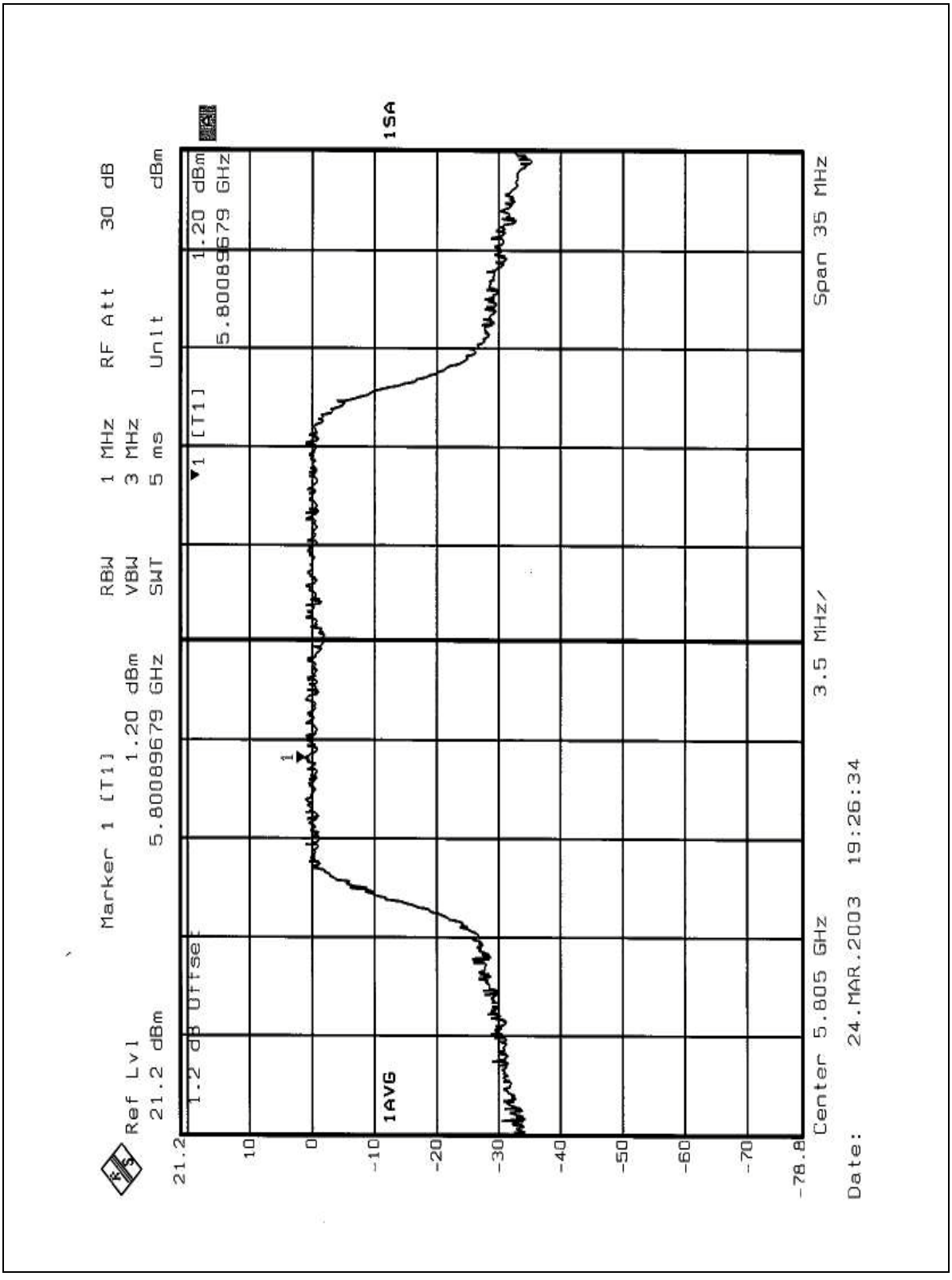
CHANNEL 8


Ref Lvl
21.2 dBm
1.2 dB Offset
Marker 1 [T1]
4.16 dBm
5.31309118 GHz
RBW 1 MHz
VBW 3 MHz
SWT 5 ms
RF Att 30 dB
Unit dBm
1 [T1]
4.16 dBm
5.31309118 GHz
1SA
1AVG
21.2
10
0
-10
-20
-30
-40
-50
-60
-70
-78.8
Center 5.32 GHz
3.5 MHz/
Span 35 MHz
Date: 24.MAR.2003 19:25:54

CHANNEL9


Marker 1 [T1]
0.04 dBm
5.74138778 GHz
RBW 1 MHz
VBW 3 MHz
SWT 5 ms
RF Att 30 dB
Unit dBm
Ref Lvl
21.2 dBm
1.2 dB Offset
1SA
1AVG
Center 5.745 GHz
3.5 MHz/
Span 35 MHz
Date: 24.MAR.2003 19:26:15

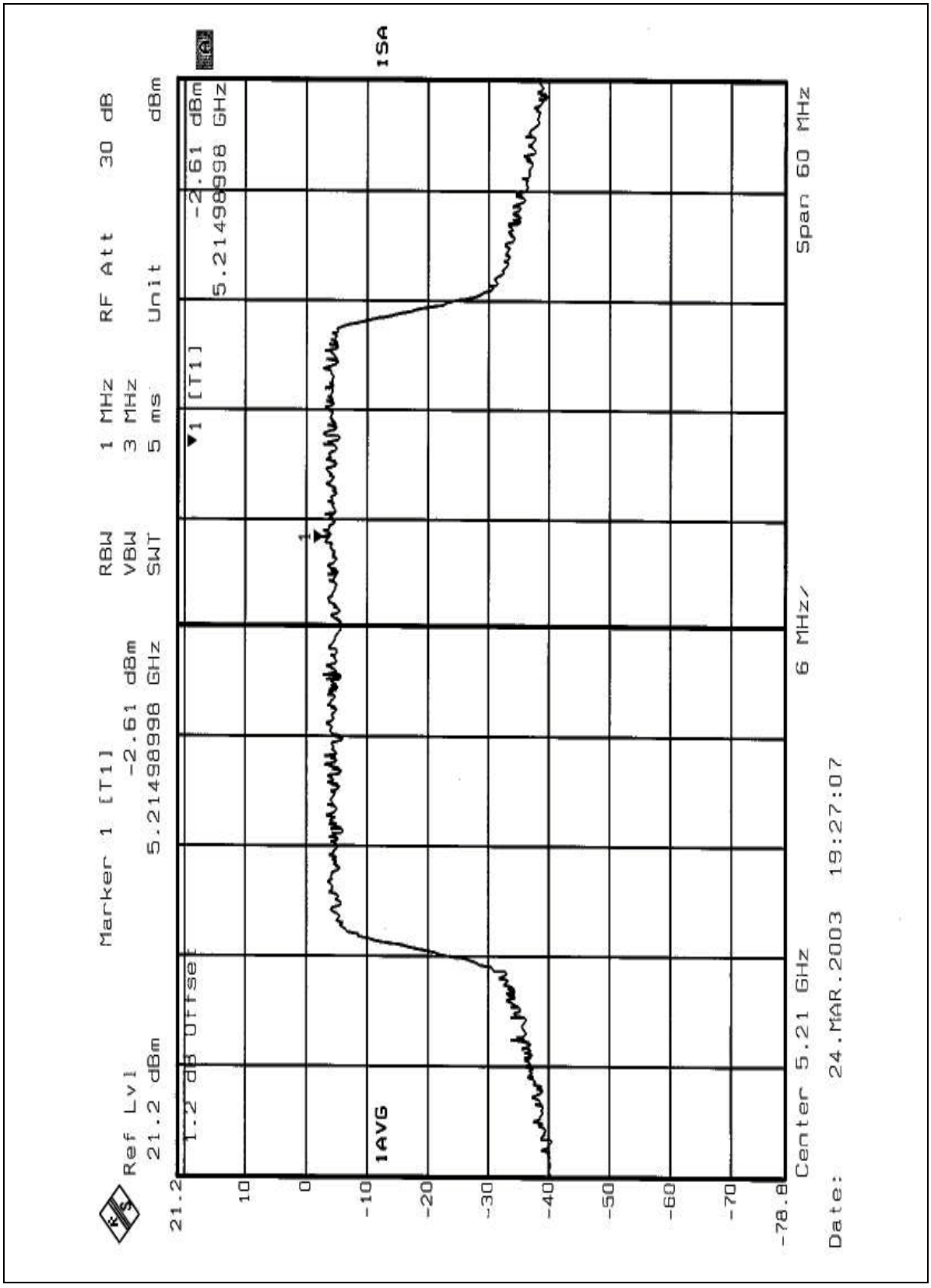
CHANNEL 12


Ref Lvl
21.2 dBm
1.2 dB Offset
Marker 1 [T1]
1.20 dBm
5.800896679 GHz
RBW 1 MHz
VBW 3 MHz
SWT 5 ms
RF Att 30 dB
Unit dBm
1SA
1AVG
Center 5.805 GHz
3.5 MHz/
Span 35 MHz
Date: 24.MAR.2003 19:26:34

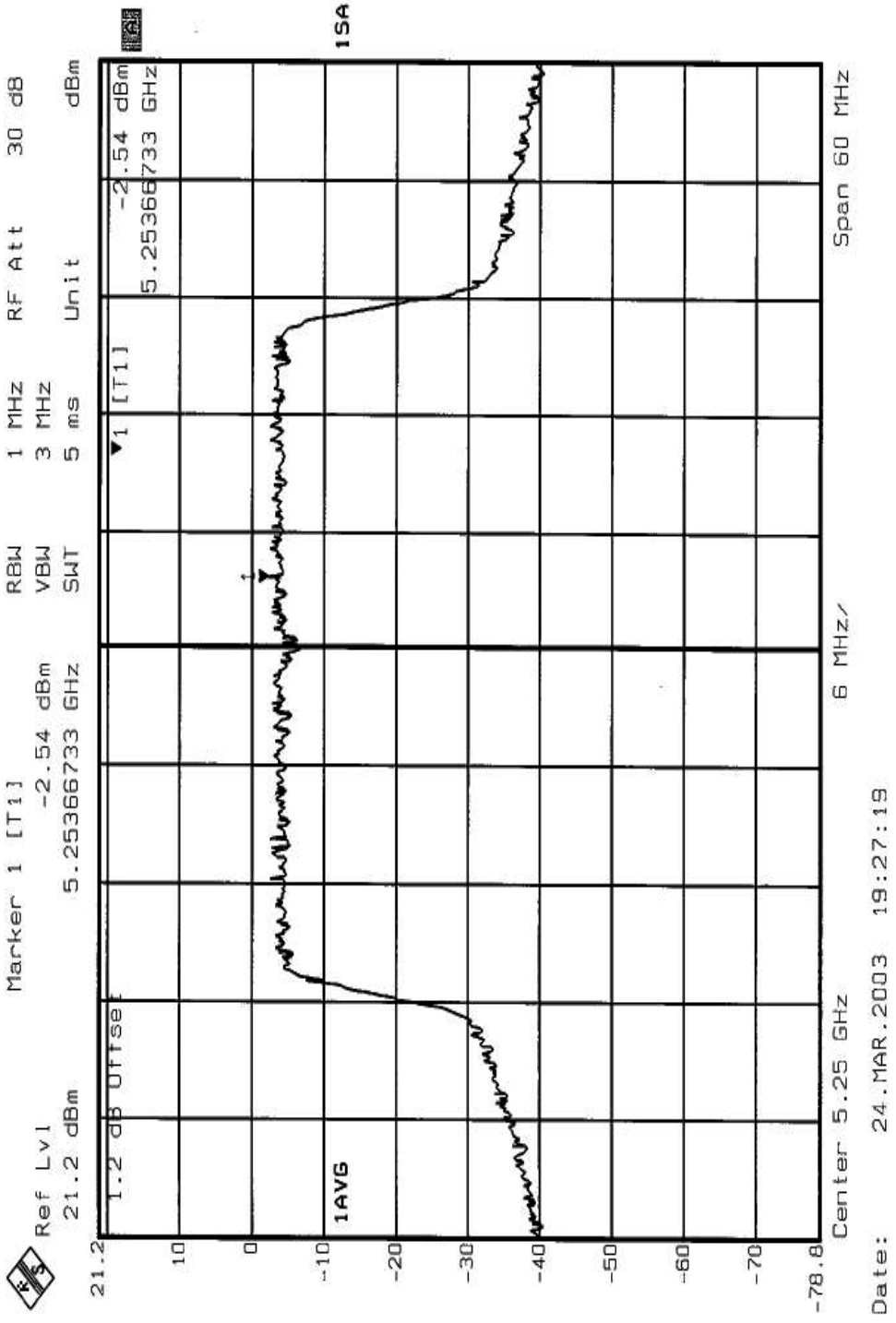
EUT	2.4GHz/5GHz Mini - PCI Card	**MODEL**	WLL220
MODE	Turbo	**INPUT POWER (SYSTEM)**	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	19 deg. C, 69RH, 991 hPa	**TESTED BY**	Ansen Lei

CHANNEL NUMBER	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 1 MHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	5210	-2.61	4	PASS
2	5250	-2.54	4	PASS
3	5290	2.64	11	PASS
4	5760	-0.64	17	PASS
5	5800	-3.58	17	PASS

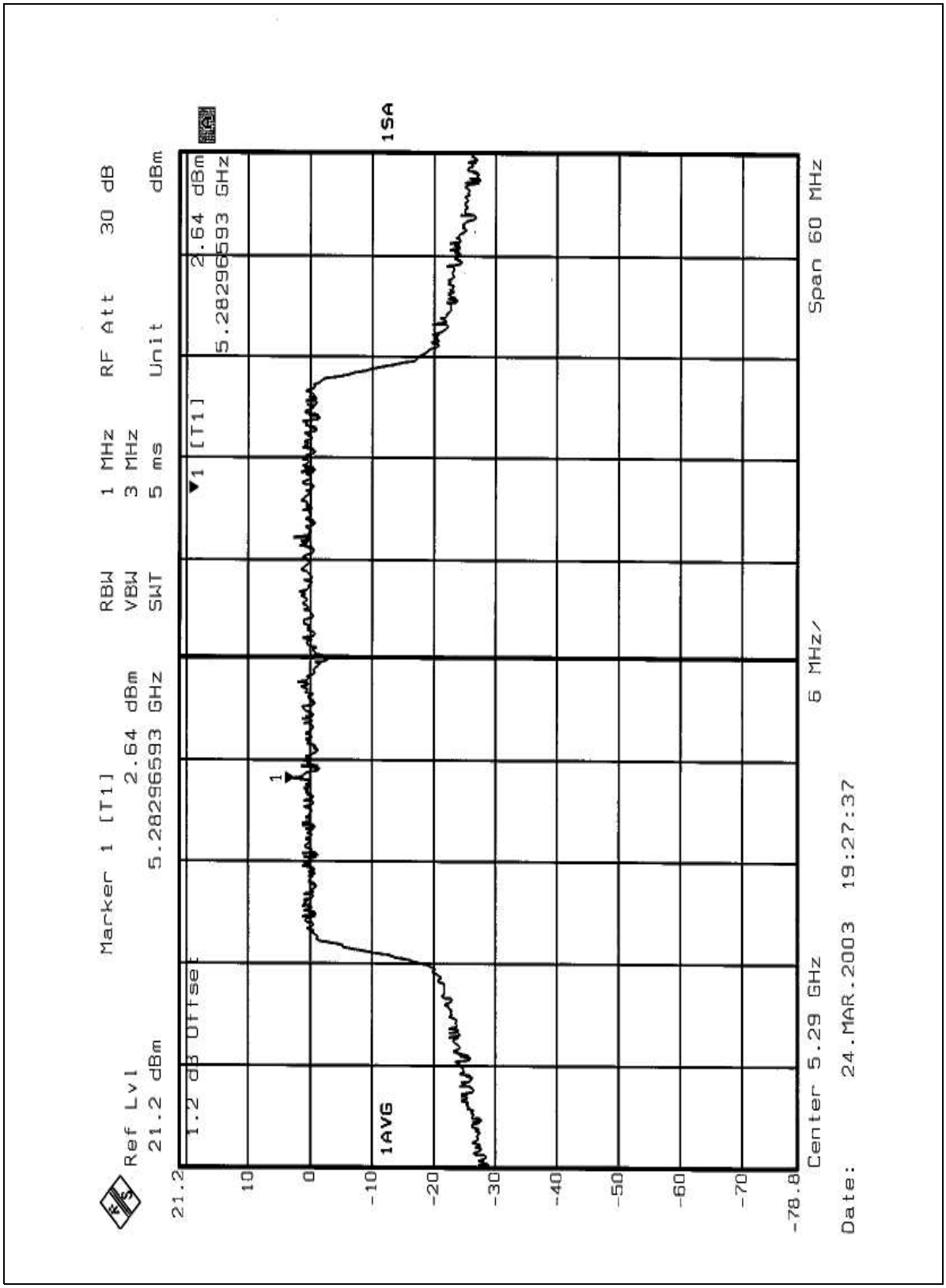
CHANNEL 1


Ref Lvl
21.2 dBm
1.2 dB Offset
Marker 1 [T1]
-2.61 dBm
5.21498998 GHz
RBW 1 MHz
VBW 3 MHz
SWT 5 ms
RF Att 30 dB
Unit dBm
1SA
1AVG
Center 5.21 GHz
6 MHz/
Span 60 MHz
Date: 24.MAR.2003 19:27:07

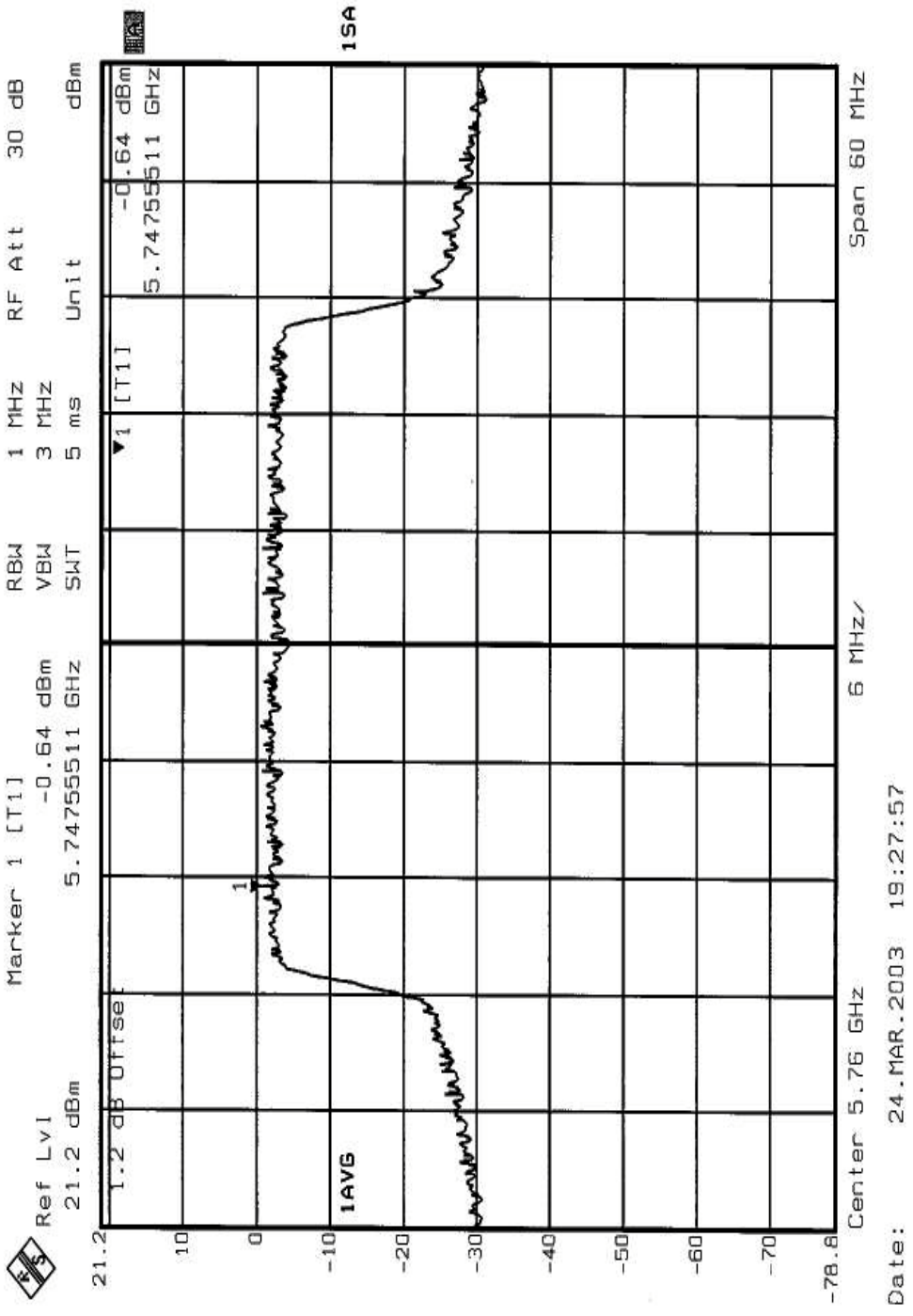
CHANNEL 2


Marker 1 [T1]
-2.54 dBm
5.25366733 GHz
RBW 1 MHz
VBW 3 MHz
SWT 5 ms
RF Att 30 dB
Unit dBm
Ref Lvl
21.2 dBm
1.2 dB Offset
1AVG
1SA
Center 5.25 GHz
6 MHz/
Span 60 MHz
Date: 24.MAR.2003 19:27:19

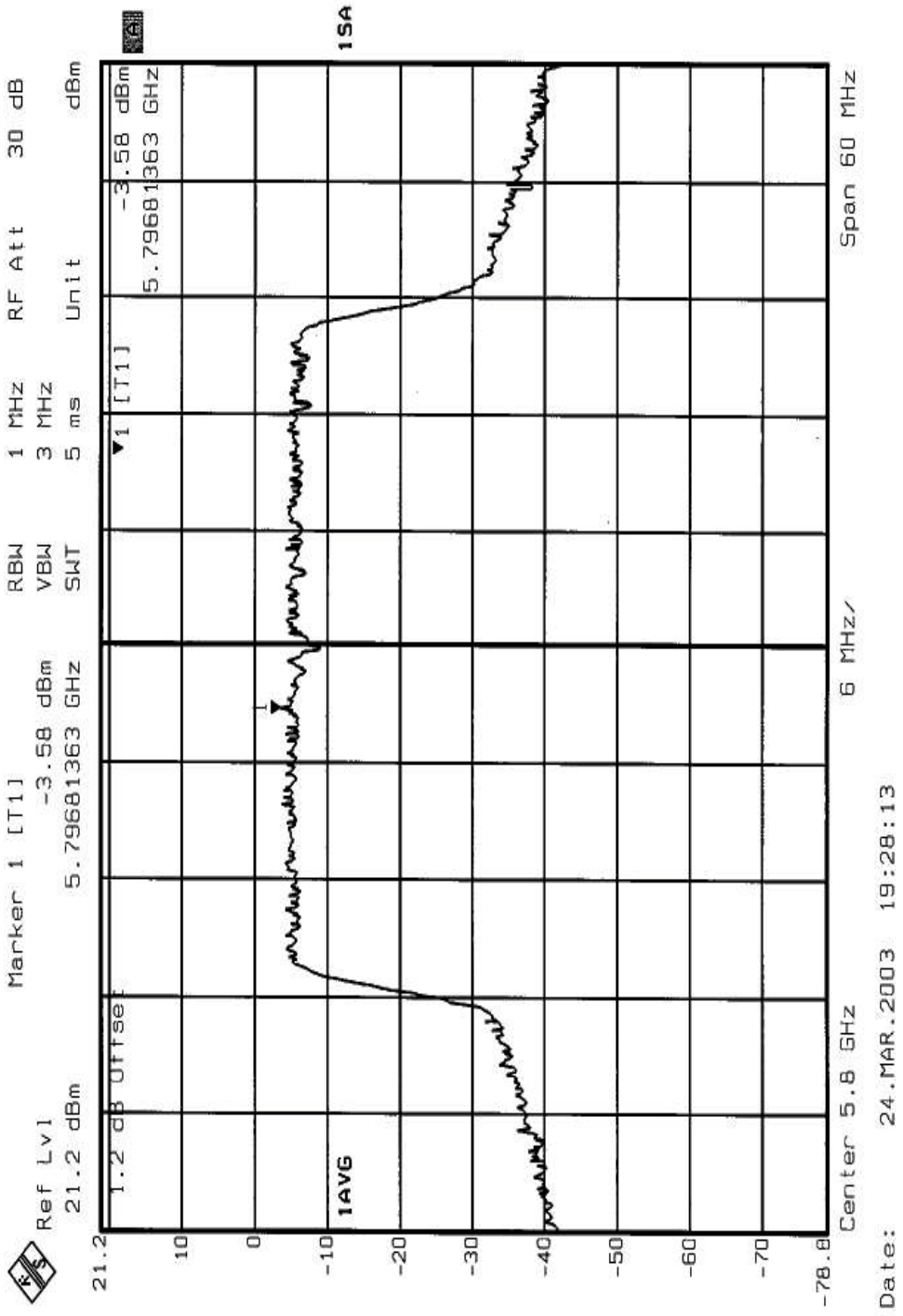
CHANNEL 3


Ref Lvl
21.2 dBm
1.2 dB Offset
Marker 1 [T1]
2.64 dBm
5.28296593 GHz
RBW 1 MHz
VBW 3 MHz
SWT 5 ms
RF Att 30 dB
Unit dBm
1 [T1]
2.64 dBm
5.28296593 GHz
1SA
1AVG
Center 5.29 GHz
6 MHz/
Span 60 MHz
Date: 24.MAR.2003 19:27:37
21.2
10
0
-10
-20
-30
-40
-50
-60
-70
-78.8

CHANNEL 4


Marker 1 [T1]
-0.64 dBm
5.74755511 GHz
Ref Lvl
21.2 dBm
1.2 dB Offset
RBW 1 MHz
VBW 3 MHz
SWT 5 ms
RF Att 30 dB
Unit dBm
1SA
1AVG
Center 5.76 GHz
6 MHz/
Span 60 MHz
Date: 24.MAR.2003 19:27:57

CHANNEL 5


Ref Lvl
21.2 dBm
1.2 dB Offset
Marker 1 [T1]
-3.58 dBm
5.79681363 GHz
RBW 1 MHz
VBW 3 MHz
SWT 5 ms
RF Att 30 dB
Unit dBm
1 [T1]
-3.58 dBm
5.79681363 GHz
1SA
1AVG
21.2
10
0
-10
-20
-30
-40
-50
-60
-70
-78.8
Center 5.8 GHz
6 MHz/
Span 60 MHz
Date: 24.MAR.2003 19:28:13

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	Jun. 24, 2003

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

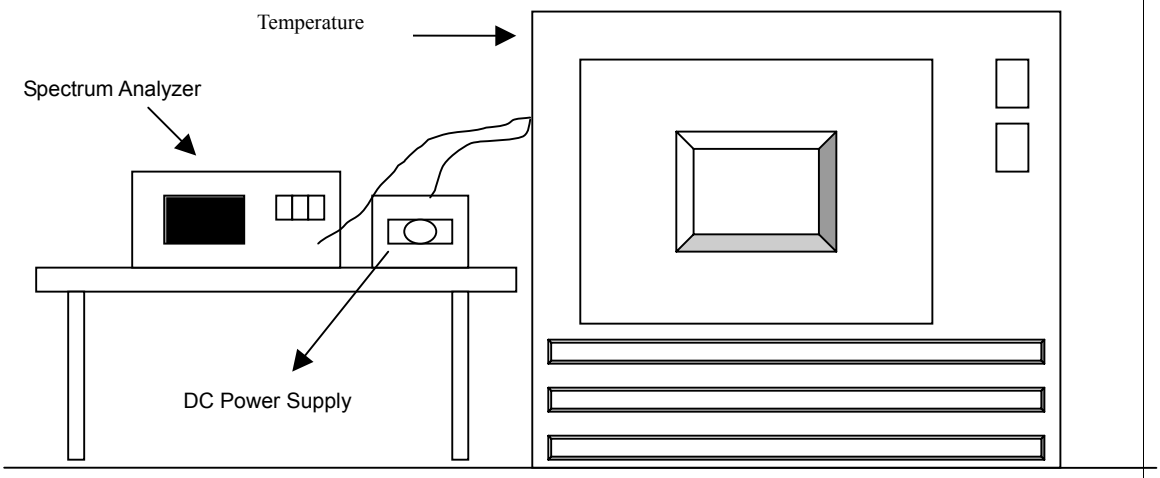
5.6.3 TEST PROCEDURE

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

5.6.4 DEVIATION FROM TEST STANDARD

No deviation

5.6.5 TEST SETUP



5.6.6 EUT OPERATING CONDITION

Same as Item 4.1.6

5.6.7 TEST RESULTS

Operating frequency: 5320MHz				Limit : ± 0.02%			
Temp. (℃)	Power supply (VDC)	2 minute		5 minute		10 minute	
		(MHz)	(%)	(MHz)	(%)	(MHz)	(%)
50	126.5	5320.0131	0.0002462	5320.0135	0.0002538	5320.0138	0.0002594
	110.0	5320.0130	0.0002444	5320.0133	0.0002500	5320.0137	0.0002575
	93.5	5320.0130	0.0002444	5320.0134	0.0002519	5320.0141	0.0002650
40	126.5	5320.0072	0.0001353	5320.0076	0.0001429	5320.0092	0.0001729
	110.0	5320.0075	0.0001410	5320.0078	0.0001466	5320.0093	0.0001748
	93.5	5320.0076	0.0001429	5320.0078	0.0001466	5320.0093	0.0001748
30	126.5	5320.0038	0.0000714	5320.0037	0.0000695	5320.0038	0.0000714
	110.0	5320.0040	0.0000752	5320.0035	0.0000658	5320.0038	0.0000714
	93.5	5320.0041	0.0000771	5320.0036	0.0000677	5320.0039	0.0000733
20	126.5	5320.0032	0.0000602	5320.0022	0.0000414	5320.0027	0.0000508
	110.0	5320.0035	0.0000658	5320.0023	0.0000432	5320.0027	0.0000508
	93.5	5320.0035	0.0000658	5320.0023	0.0000432	5320.0028	0.0000526
10	126.5	5320.0045	0.0000846	5320.0051	0.0000959	5320.0053	0.0000996
	110.0	5320.0047	0.0000883	5320.0050	0.0000940	5320.0052	0.0000977
	93.5	5320.0047	0.0000883	5320.0050	0.0000940	5320.0054	0.0001015
0	126.5	5320.0039	0.0000733	5320.0047	0.0000883	5320.0041	0.0000771
	110.0	5320.0038	0.0000714	5320.0047	0.0000883	5320.0040	0.0000752
	93.5	5320.0040	0.0000752	5320.0049	0.0000921	5320.0042	0.0000789
-10	126.5	5320.0113	0.0002124	5320.0109	0.0002049	5320.0103	0.0001936
	110.0	5320.0112	0.0002105	5320.0108	0.0002030	5320.0102	0.0001917
	93.5	5320.0114	0.0002143	5320.0108	0.0002030	5320.0102	0.0001917
-20	126.5	5320.0109	0.0002049	5320.0117	0.0002199	5320.0114	0.0002143
	110.0	5320.0107	0.0002011	5320.0117	0.0002199	5320.0115	0.0002162
	93.5	5320.0106	0.0001992	5320.0118	0.0002218	5320.0117	0.0002199
-30	126.5	5320.0176	0.0003308	5320.0174	0.0003271	5320.0178	0.0003346
	110.0	5320.0177	0.0003327	5320.0173	0.0003252	5320.0178	0.0003346
	93.5	5320.0177	0.0003327	5320.0173	0.0003252	5320.0179	0.0003365

5.7 BAND EDGES MEASUREMENT

5.7.1 TEST INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
SPECTRUM ANALYZER	FSEK30	100049	July 24, 2003

NOTE:

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

5.7.2 TEST PROCEDURE

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

5.7.3 EUT OPERATING CONDITION

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

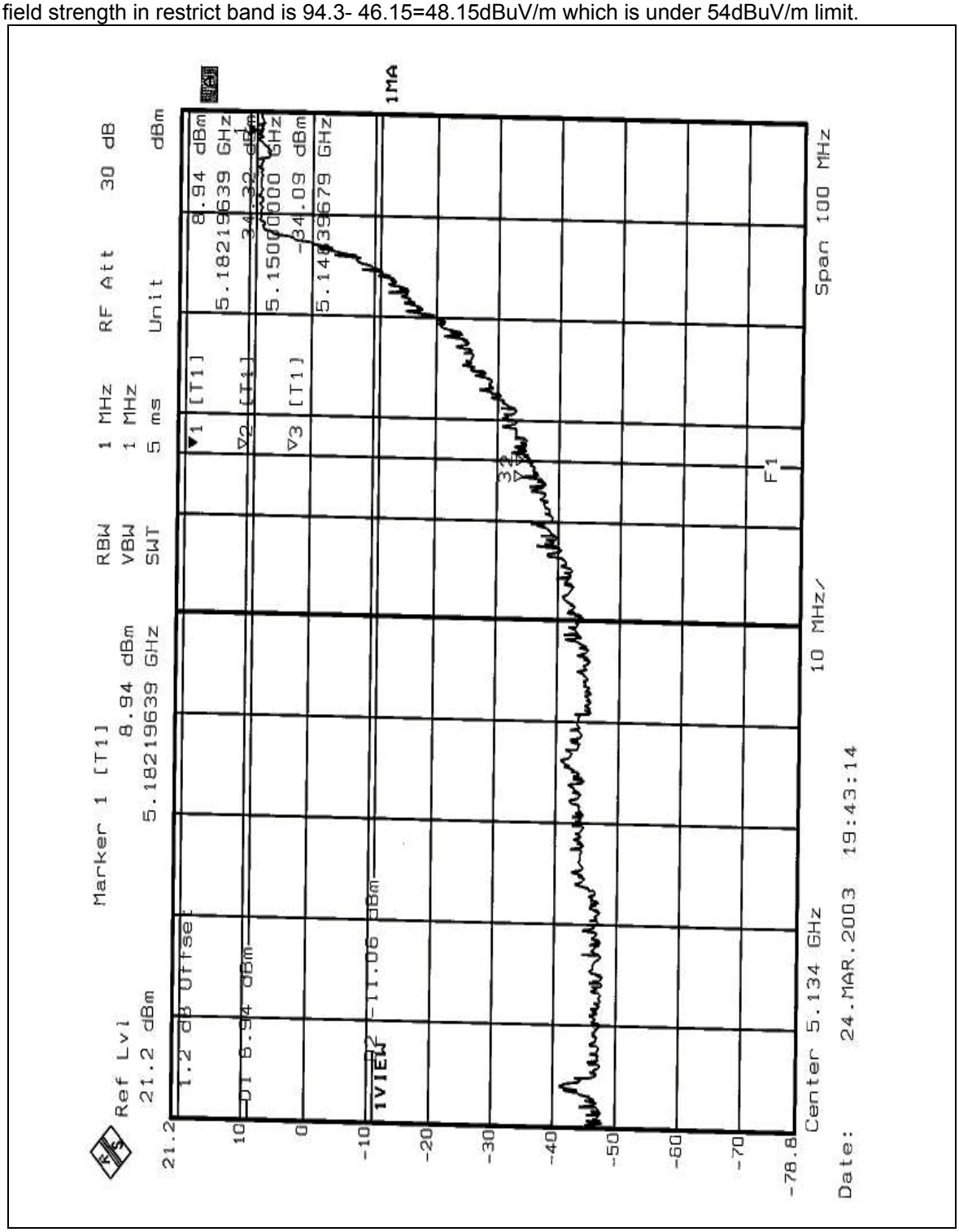
5.7.4 TEST RESULTS

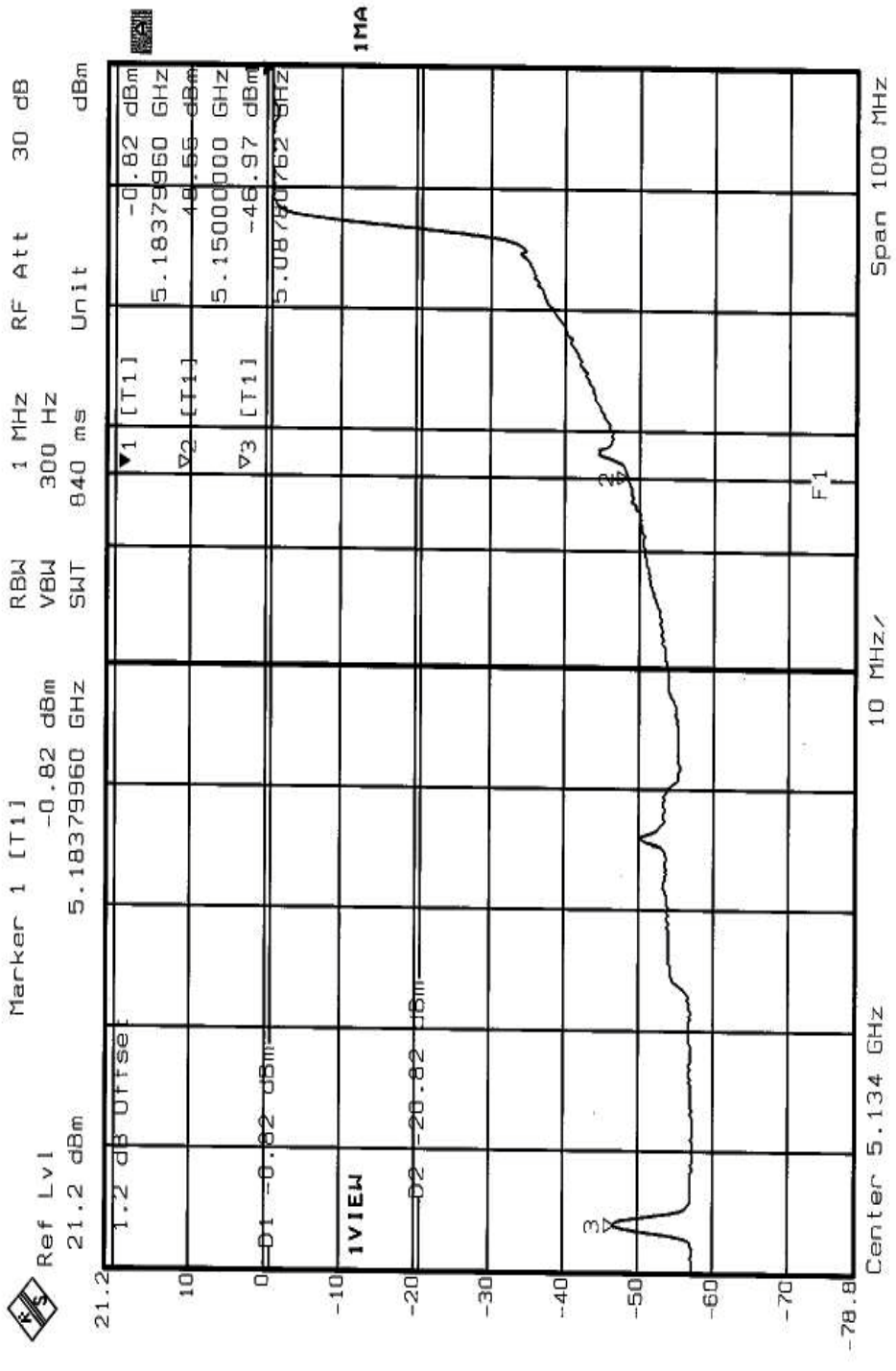
For signals in the restricted bands above and below the 5.15 to 5.35 GHz allocated band a measurement was made of the amplitude of the spurious emissions with respect to the intentional signals. The relative amplitude, in dBc, was applied to the average and peak filed strength of the intentional signal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

The spectrum plots (Peak RBW=VBW=1MHz; Average RBW=1MHz, VBW=300Hz) are attached on the following 8 pages.

Normal Mode: Channel 1 (5180 MHz)

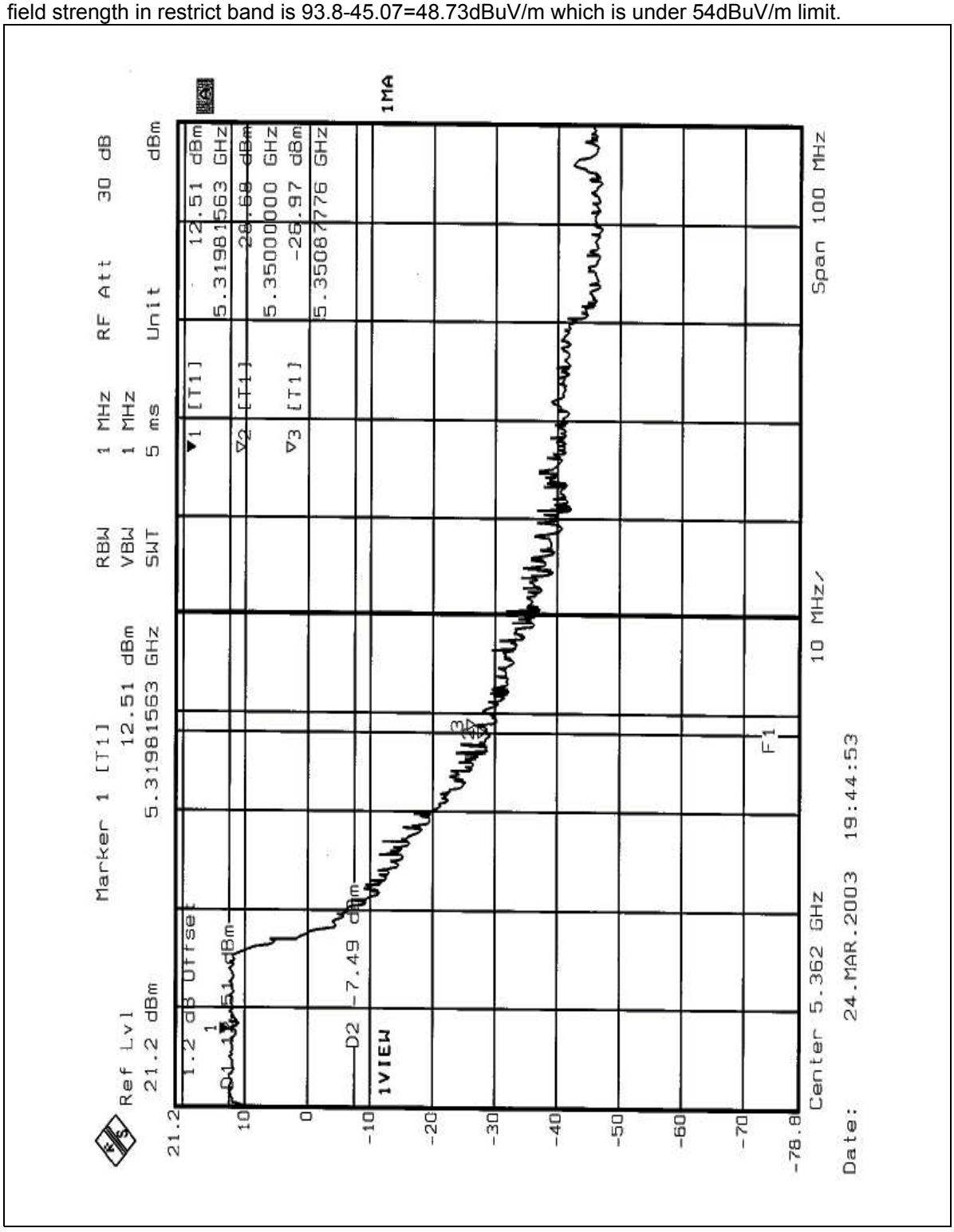
The band edge emission plot on the following 2 pages shows 43.03dBc (Peak) / 46.15dBc (Average) between carrier maximum power and local maximum emission in restrict band. The emission of carrier strength list in the test result of channel 1 (normal mode) is 94.3dBuV/m, so the maximum field strength in restrict band is 94.3- 46.15=48.15dBuV/m which is under 54dBuV/m limit.

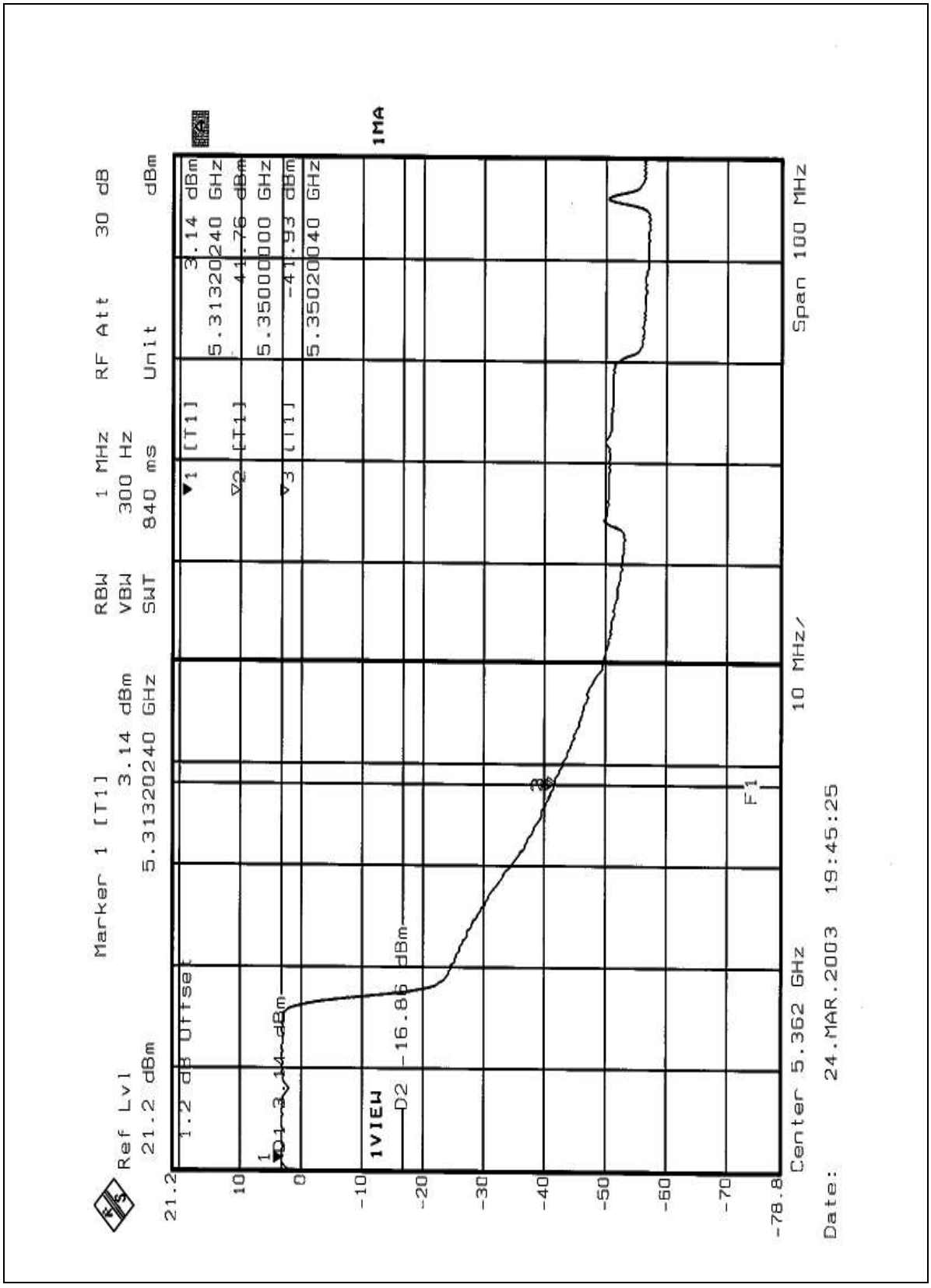



Marker 1 [T1]
-0.82 dBm
5.18379960 GHz
RBW 1 MHz
VBW 300 Hz
SWT 840 ms
RF Att 30 dB
Unit dBm
Ref Lvl
21.2 dBm
1.2 dB Offset
1VIEW
D1 -0.82 dBm
D2 -20.82 dBm
1MA
Center 5.134 GHz
Span 100 MHz
10 MHz/
Date: 24.MAR.2003 19:43:47

Normal Mode: Channel 8 (5320 MHz)

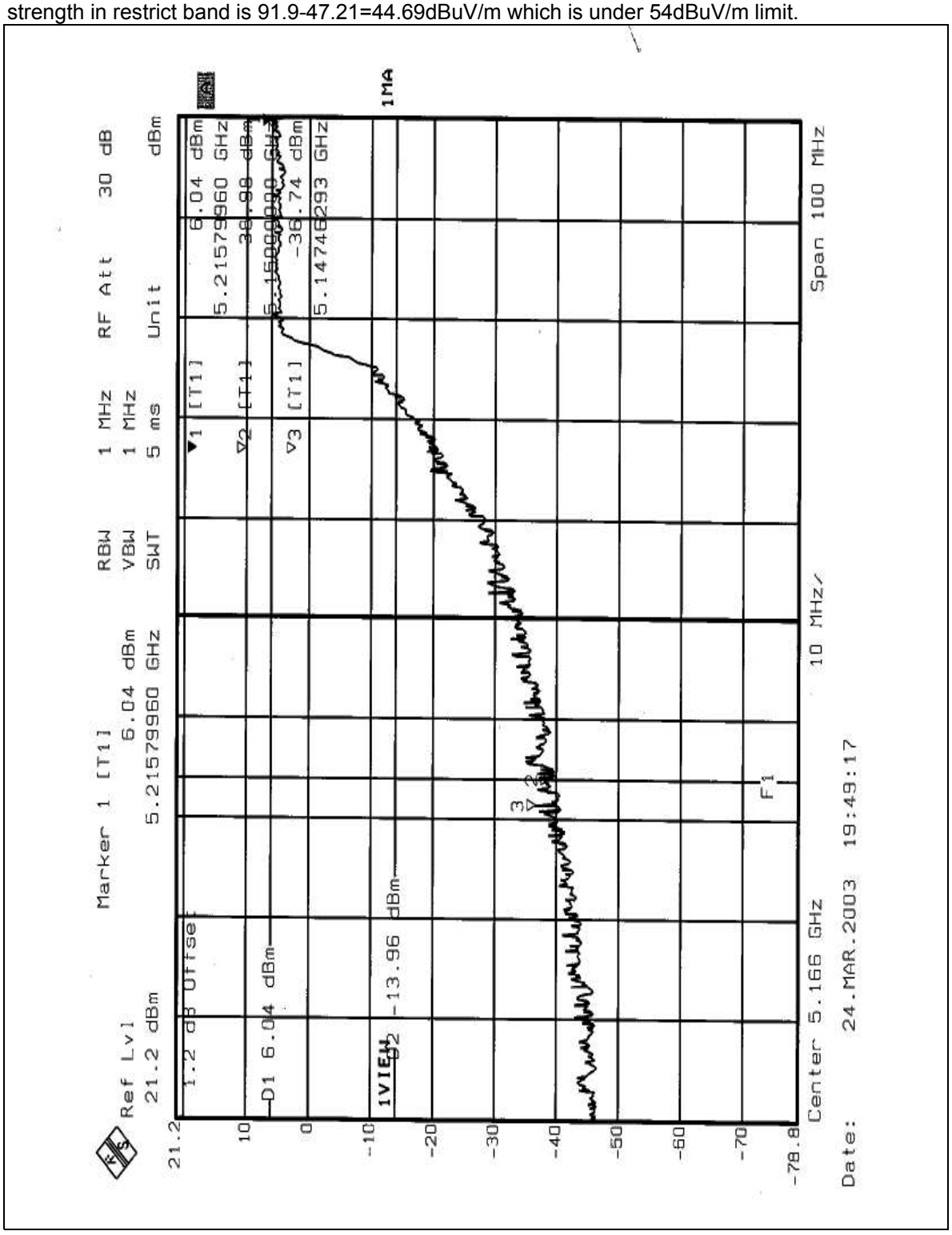
The band edge emission plot on the following 2 pages shows 39.48dBc (Peak) / 45.07dBc (Average) between carrier maximum power and local maximum emission in restrict band. The emission of carrier strength list in the test result of channel 8 (normal mode) is 93.8dBuV/m, so the maximum field strength in restrict band is 93.8-45.07=48.73dBuV/m which is under 54dBuV/m limit.

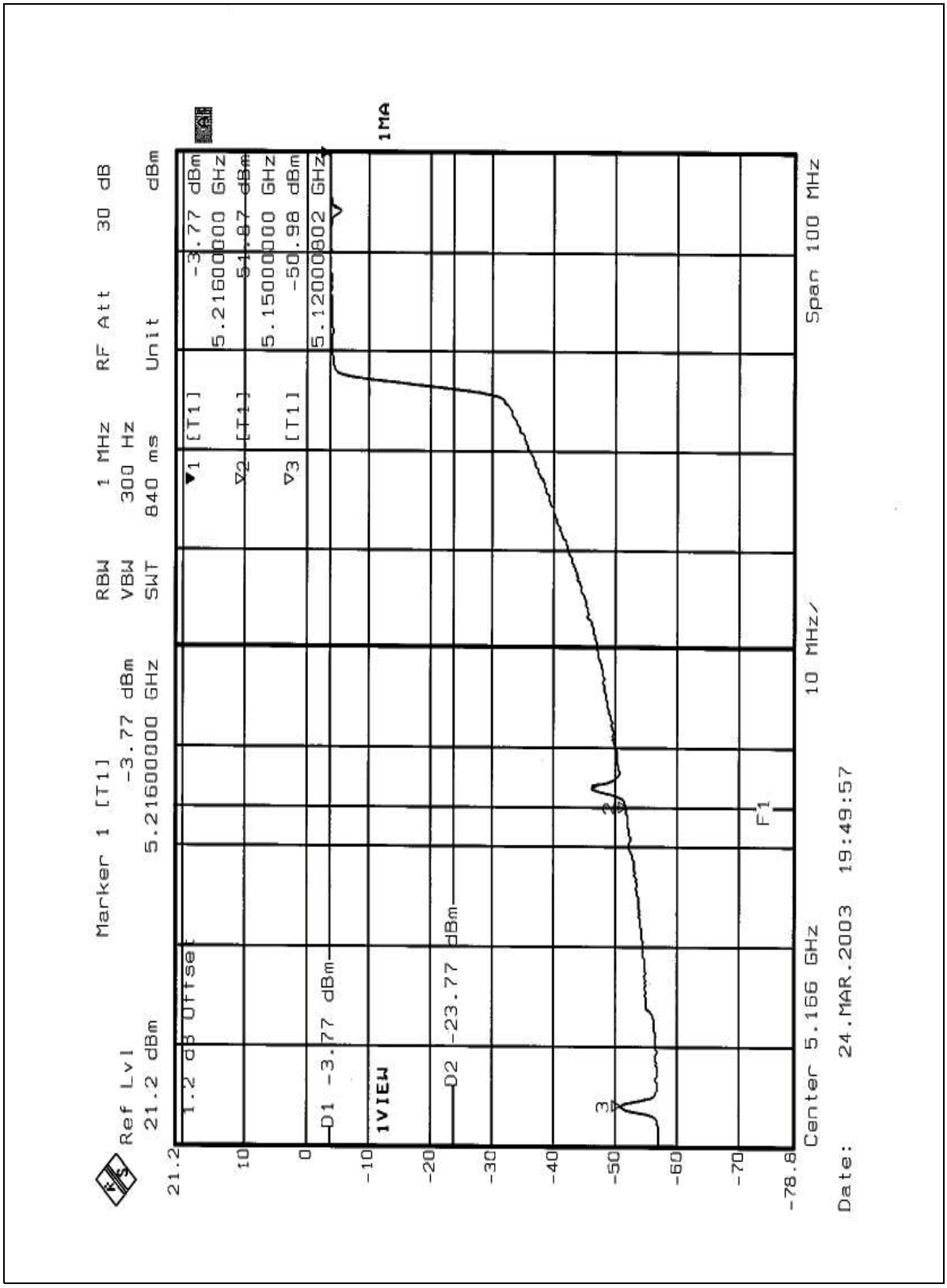



Ref Lvl
21.2 dBm
1.2 dB Offset
Marker 1 [T1]
3.14 dBm
5.3132024 0 GHz
RBW 1 MHz
VBW 300 Hz
SWT 840 ms
RF Att 30 dB
Unit dBm
1 [T1] 3.14 dBm
5.3132024 0 GHz
2 [T1] 41.76 dBm
5.3500000 0 GHz
3 [T1] -41.93 dBm
5.3502004 0 GHz
1MA
1VIEW
D2 -16.86 dBm
D1 3.14 dBm
F1
21.2
10
0
-10
-20
-30
-40
-50
-60
-70
-78.8
Center 5.362 GHz
10 MHz/
Span 100 MHz
Date: 24.MAR.2003 19:45:25

Turbo Mode: Channel 1 (5210 MHz)

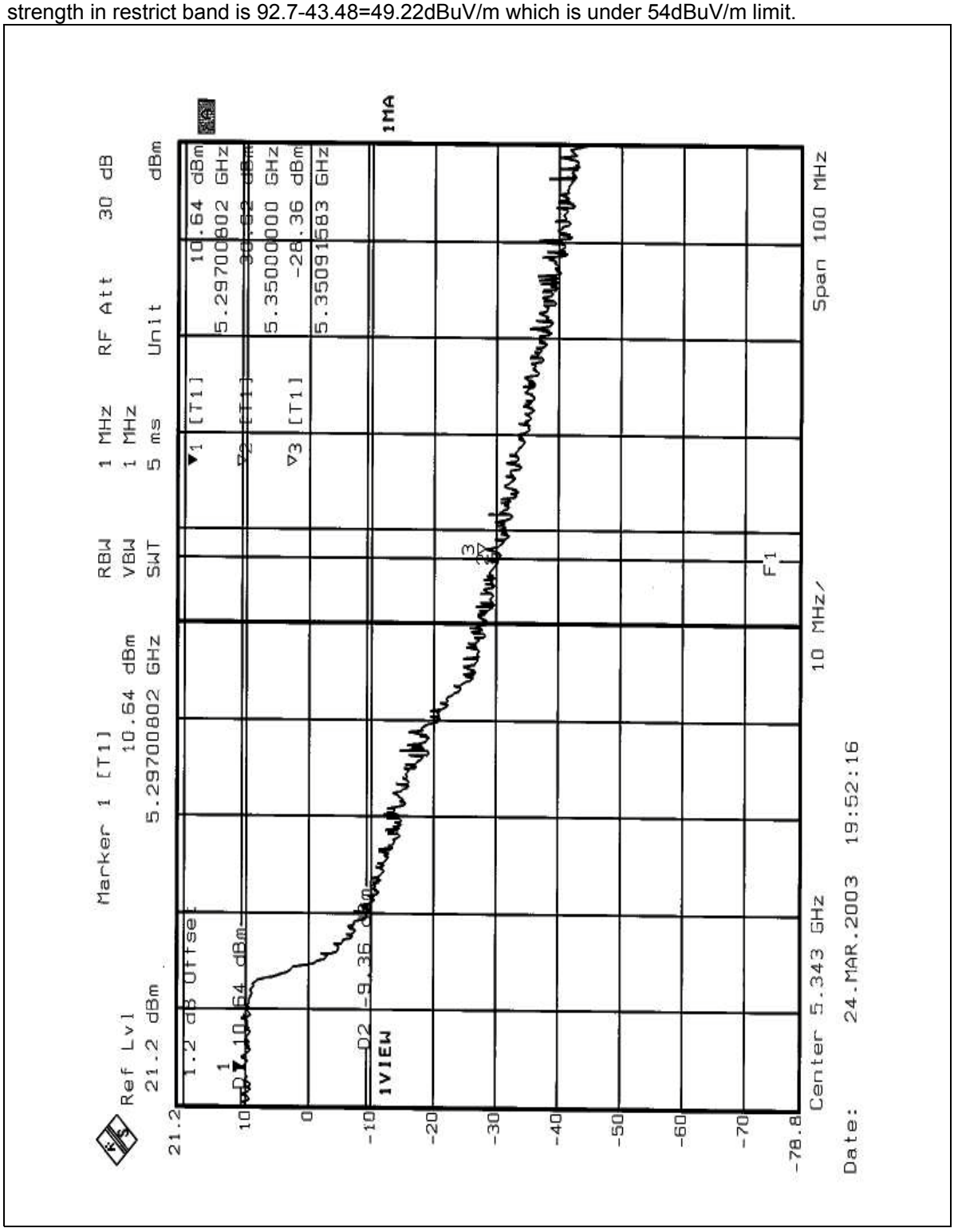
The band edge emission plot on the following 2 pages shows 42.78dBc (Peak) / 47.21dBc (Average) between carrier maximum power and local maximum emission in restrict band. The emission of carrier strength list in the test result of channel 1 (turbo mode) is 91.9dBuV/m, so the maximum field strength in restrict band is 91.9-47.21=44.69dBuV/m which is under 54dBuV/m limit.

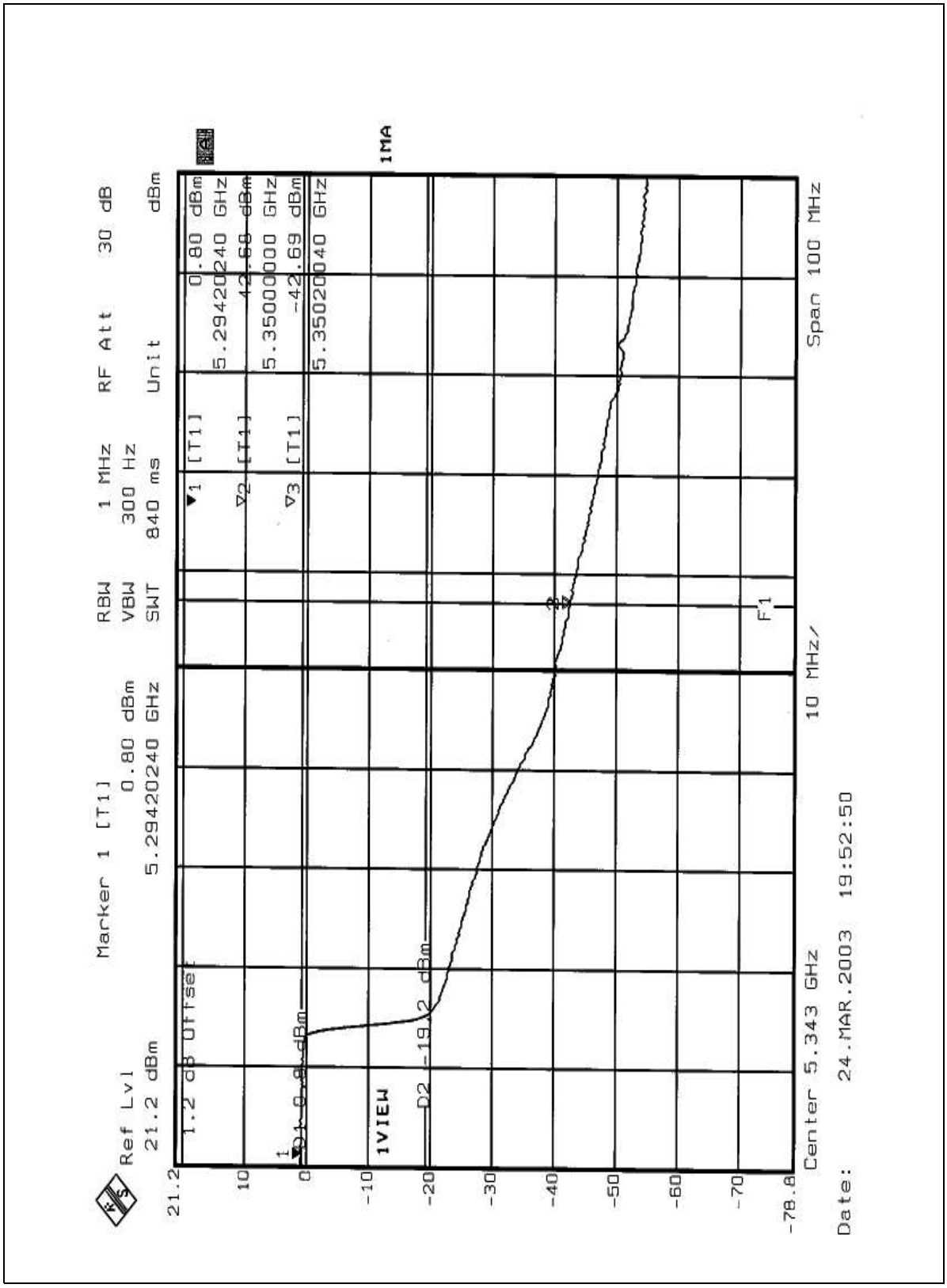



Ref Lvl
21.2 dBm
1.2 dB Offset
Marker 1 [T1]
-3.77 dBm
5.21600000 GHz
RBW 1 MHz
VBW 300 Hz
SWT 840 ms
RF Att 30 dB
Unit dBm
1 [T1] -3.77 dBm 5.21600000 GHz
2 [T1] 51.87 dBm 5.15000000 GHz
3 [T1] -50.98 dBm 5.12000802 GHz
1MA
D1 -3.77 dBm
D2 -23.77 dBm
1VIEW
Center 5.166 GHz
10 MHz/
Span 100 MHz
Date: 24.MAR.2003 19:49:57

Turbo Mode: Channel 3 (5290 MHz)

The band edge emission plot on the following 2 pages shows 39.00dBc (Peak) / 43.48dBc (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 (turbo mode) is 92.7dBuV/m, so the maximum field strength in restrict band is 92.7-43.48=49.22dBuV/m which is under 54dBuV/m limit.




Marker 1 [T1]
0.80 dBm
5.29420240 GHz
RBW 1 MHz
VBW 300 Hz
SWT 840 ms
RF Att 30 dB
Unit dBm
Ref Lvl
21.2 dBm
1.2 dB Offset
1VIEW
D2 -19.2 dBm
1MA
Center 5.343 GHz
10 MHz/
Span 100 MHz
Date: 24.MAR.2003 19:52:50

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 antenna used in this product is PIFA antenna with UFL connector. The maximum Gain of the antenna is -1.25dBi

6. PHOTOGRAPHS OF THE TEST CONFIGURATION

CONDUCTED EMISSION TEST

RADIATED EMISSION TEST

7. INFORMATION ON THE TESTING LABORATORIES

We, ADT Corp., were founded in 1988 to provide our best service in EMC 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:

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