4.5 PEAK POWER SPECTRAL DENSITY MEASUREMENT

4.5.1 LIMITS OF PEAK POWER SPECTRAL DENSITY MEASUREMENT

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

4.5.2 TEST INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
ROHDE&SCHWARZ SPECTRUM ANALYZER	FSEK30	100049	July 17, 2002

NOTE:

1. The measurement uncertainty is less than +/- 2.6dB, which is calculated as per the NAMAS document NIS81.
2. 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 PROCEDURES

1. The transmitter output was connected to the spectrum analyzer.
2. Set RBW=1MHz, VBW=3MHz. The PPSD can be found.

4.5.4 TEST SETUP

4.5.5 EUT OPERATING CONDITIONS

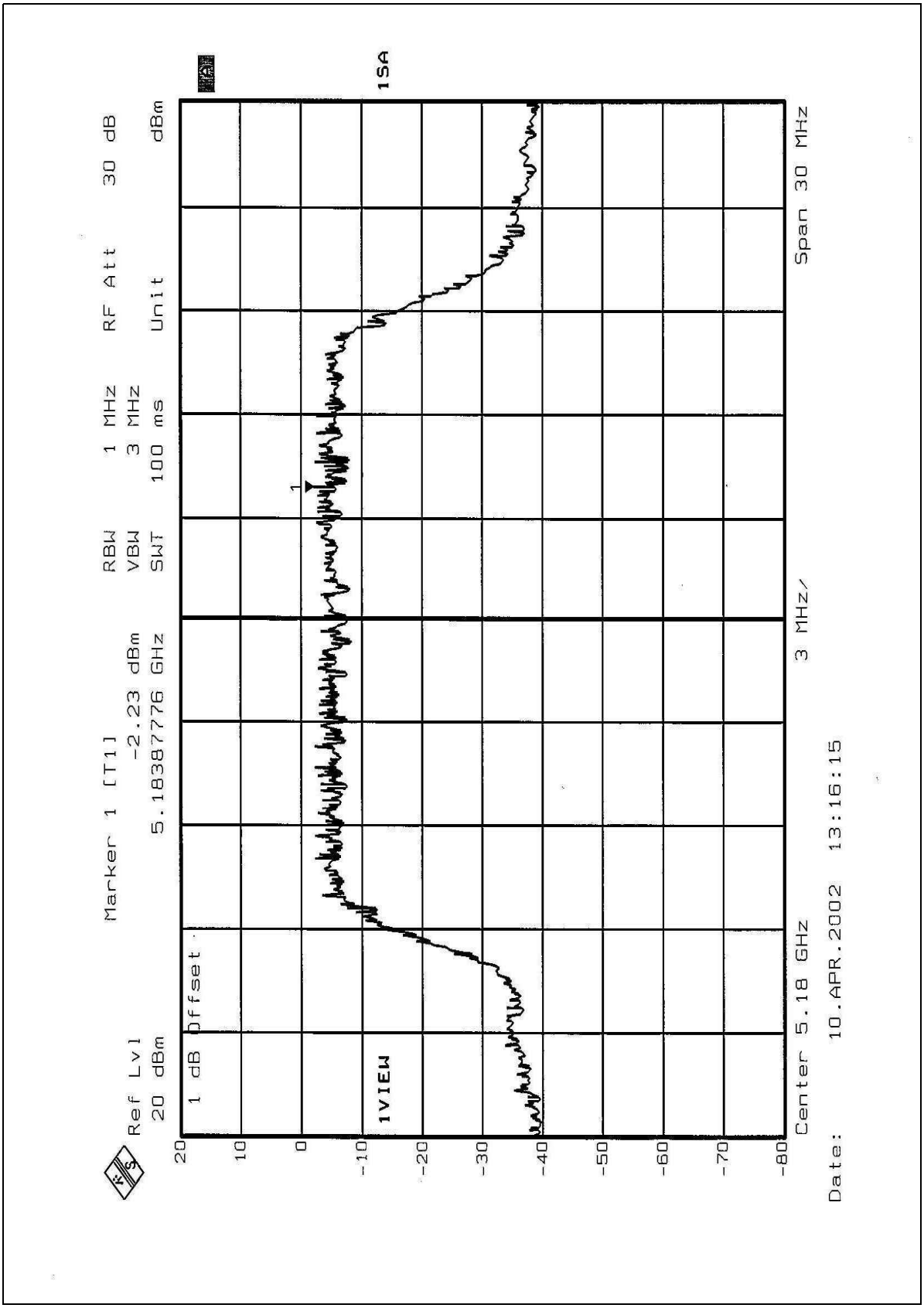
Same as 4.3.5

4.5.6 TEST RESULTS

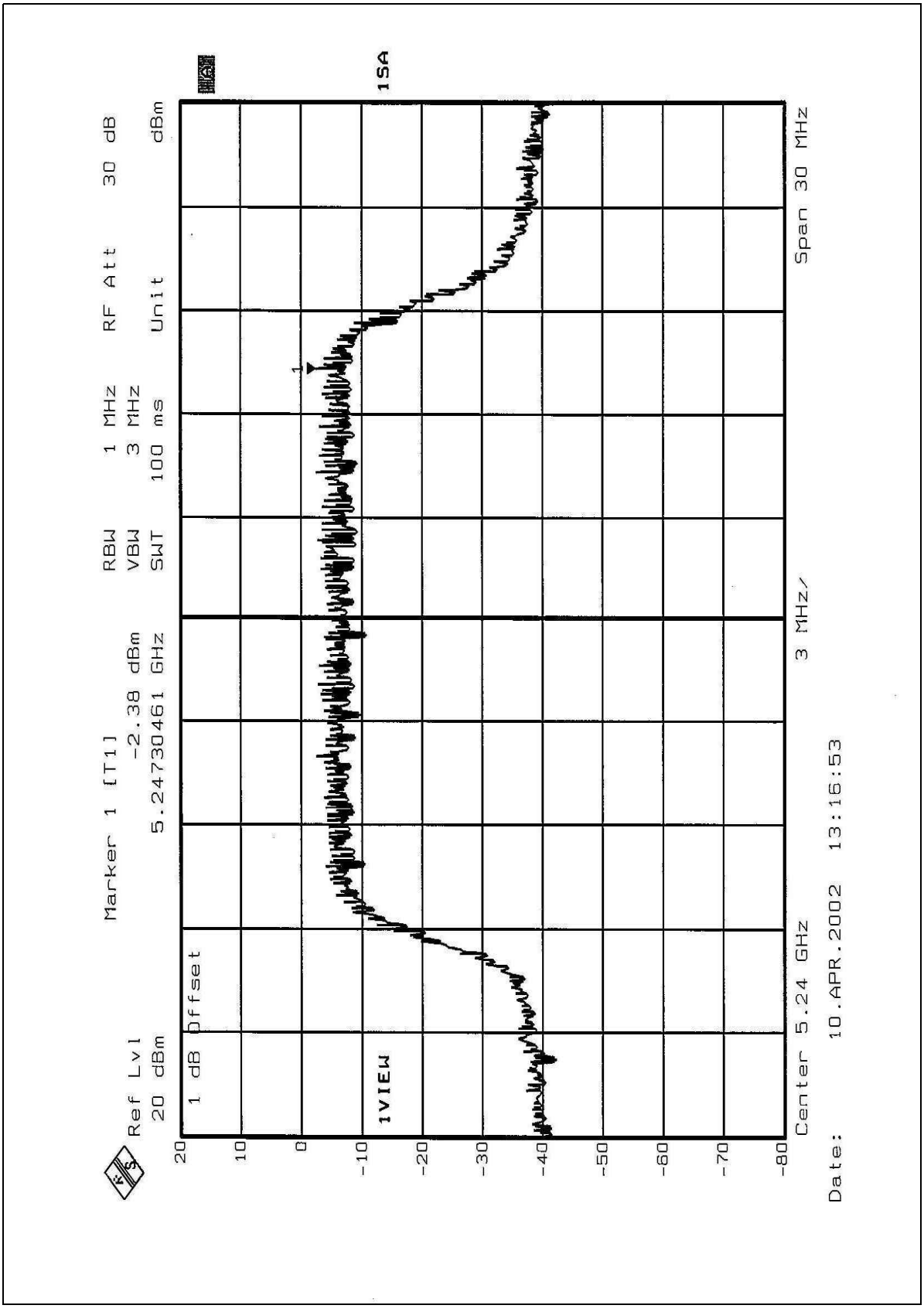
EUT	54Mbps Wireless Access Point	**MODEL**	WAP54A
MODE	Normal	**INPUT POWER (SYSTEM)**	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	27 deg. C, 52%RH, 1005 hPa	**TESTED BY**	Steven Lu

CHANNEL NUMBER	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 1 MHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	5180	-2.23	4	PASS
4	5240	-2.38	4	PASS
5	5260	-3.18	11	PASS
8	5320	-3.97	11	PASS

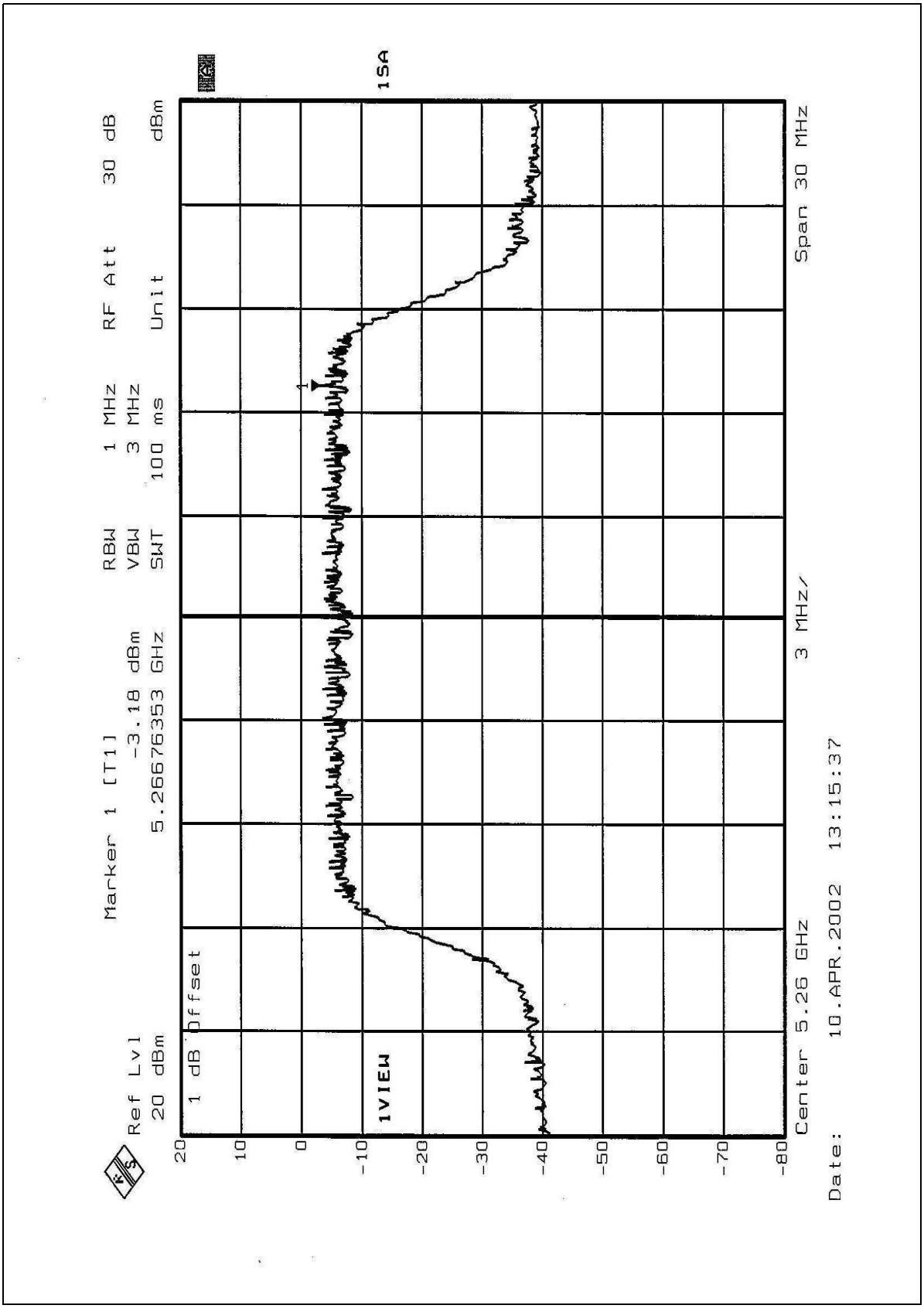
CHANNEL 1


Marker 1 [T1]
-2.23 dBm
5.18387776 GHz
RBW 1 MHz
VBW 3 MHz
SWT 100 ms
RF Att 30 dB
Unit dBm
Ref Lvl
20 dBm
1 dB Offset
1VIEW
1SA
Center 5.18 GHz
3 MHz/
Span 30 MHz
Date: 10.APR.2002 13:16:15

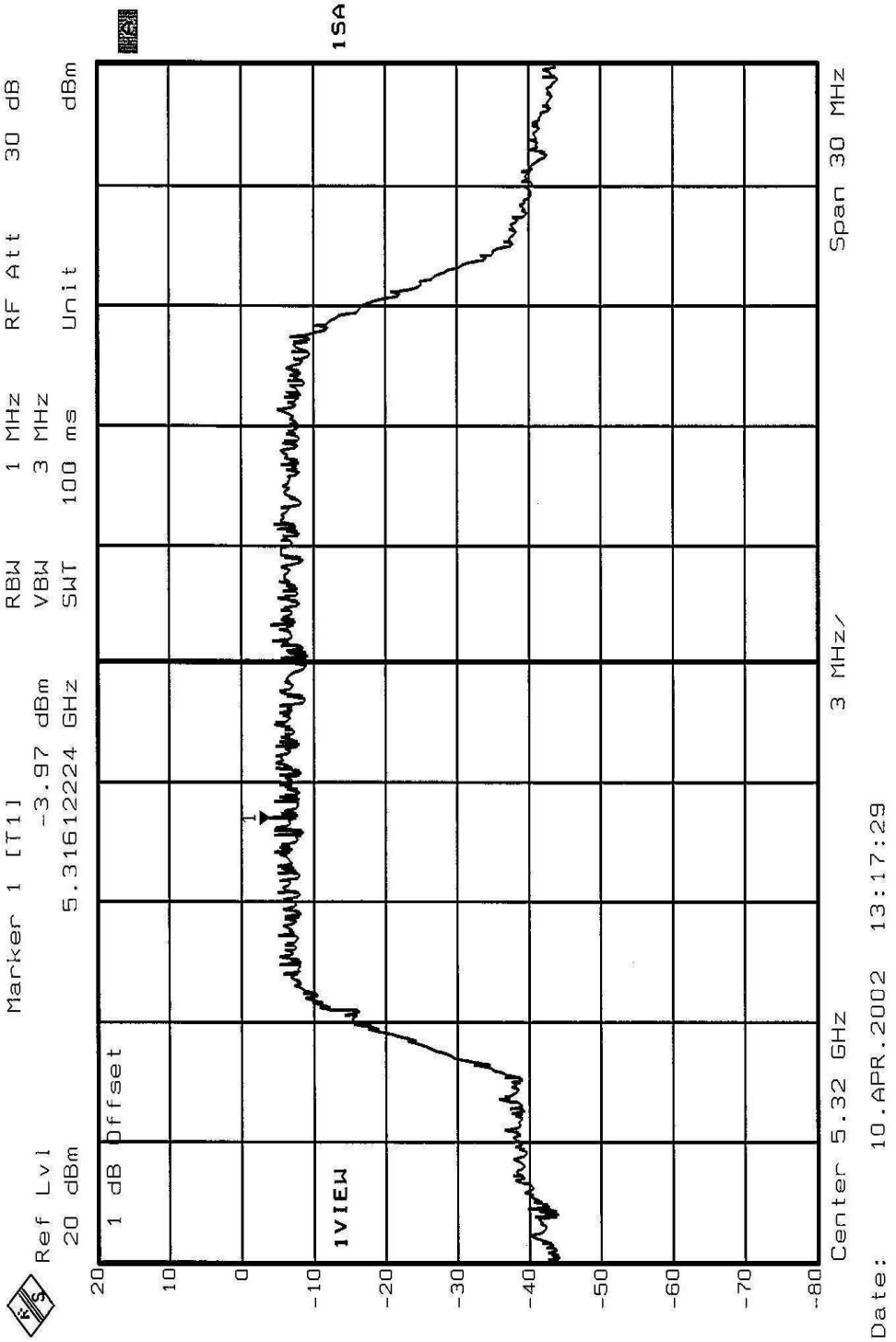
CHANNEL 4


Ref Lvl
20 dBm
1 dB Offset
VIEW
Marker 1 [T1]
-2.38 dBm
5.24730461 GHz
RBW 1 MHz
VBW 3 MHz
SWT 100 ms
RF Att 30 dB
Unit dBm
1SA
Center 5.24 GHz
3 MHz/
Span 30 MHz
Date: 10.APR.2002 13:16:53
20
10
0
-10
-20
-30
-40
-50
-60
-70
-80

CHANNEL 5


Ref Lvl
20 dBm
1 dB Offset
Marker 1 [T1]
-3.18 dBm
5.26676353 GHz
RBW 1 MHz
VBW 3 MHz
SWT 100 ms
RF Att 30 dB
Unit dBm
1VIEW
1SA
Center 5.26 GHz
3 MHz/
Span 30 MHz
Date: 10.APR.2002 13:15:37

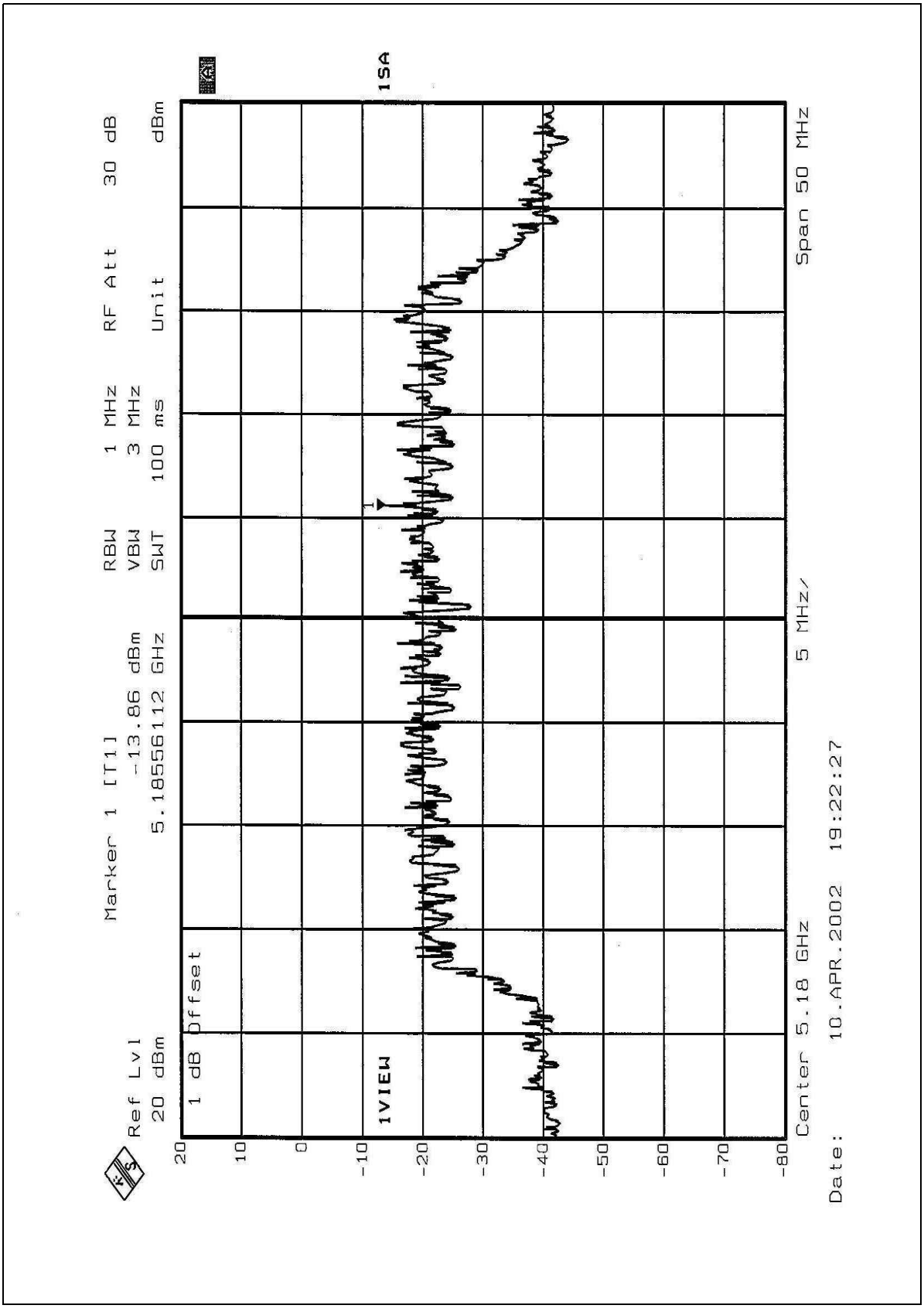
CHANNEL 8


Marker 1 [T1]
-3.97 dBm
5.31612224 GHz
RBW 1 MHz
VBW 3 MHz
SWT 100 ms
RF Att 30 dB
Unit dBm
Ref Lvl
20 dBm
1 dB Offset
1VIEW
1SA
Center 5.32 GHz
3 MHz/
Span 30 MHz
Date: 10.APR.2002 13:17:29

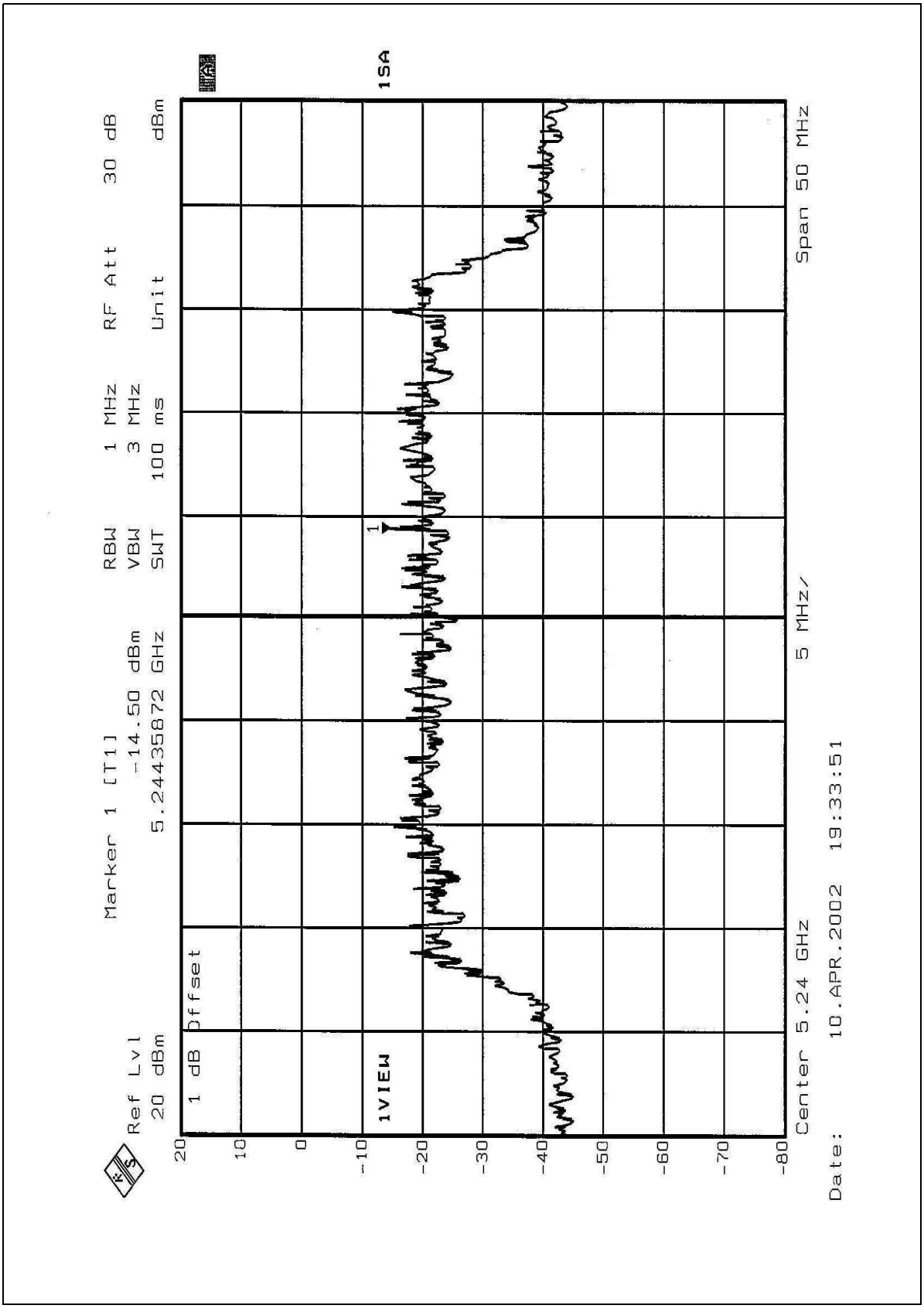
EUT	54Mbps Wireless Access Point	**MODEL**	WAP54A
MODE	Turbo	**INPUT POWER (SYSTEM)**	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	27 deg. C, 52%RH, 1005 hPa	**TESTED BY**	Steven Lu

CHANNEL NUMBER	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 1 MHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	5180	-13.86	4	PASS
4	5240	-14.50	4	PASS
5	5260	-13.32	11	PASS
8	5320	-12.81	11	PASS

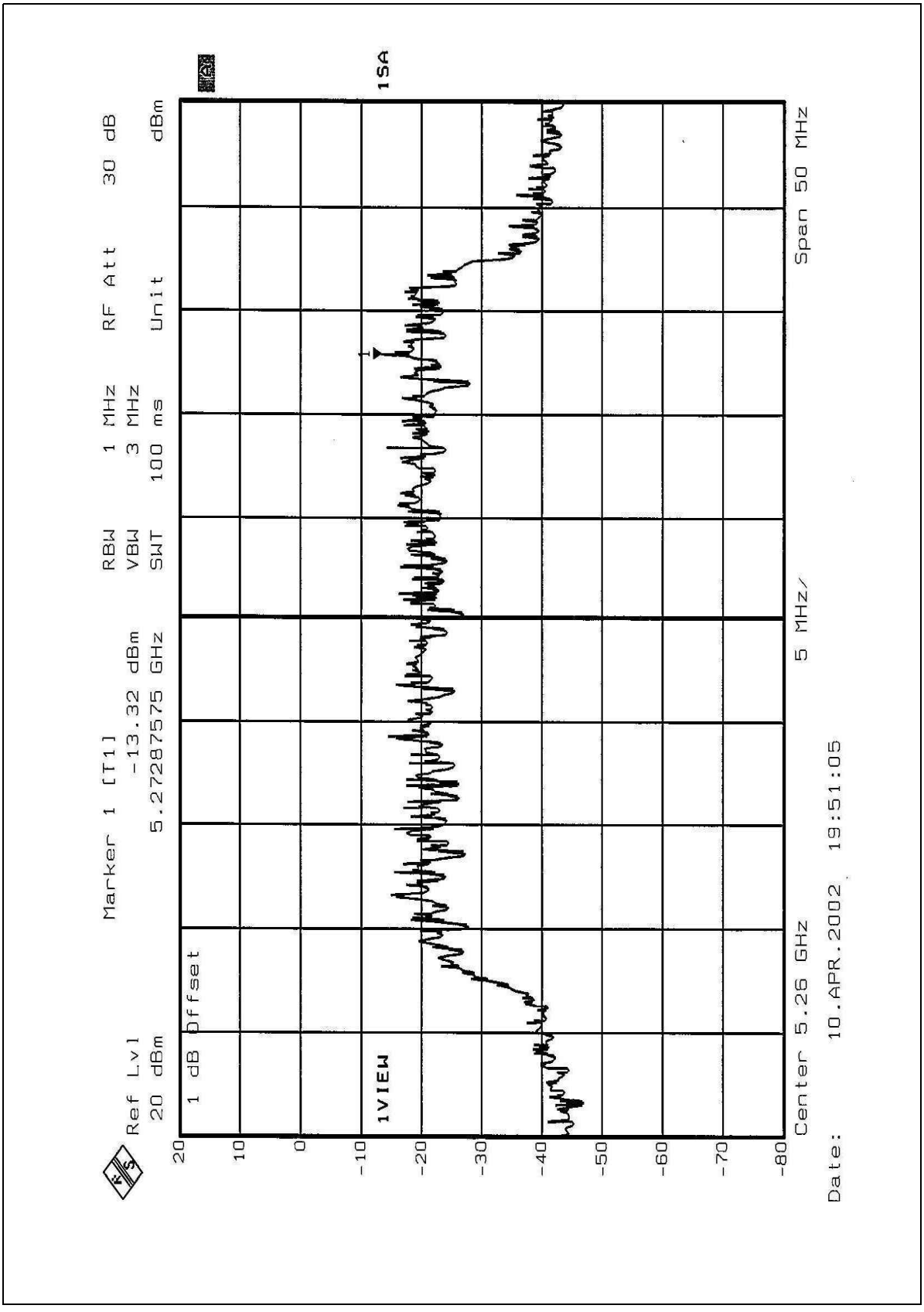
CHANNEL 1


Ref Lvl
20 dBm
1 dB offset
Marker 1 [T1]
-13.86 dBm
5.18556112 GHz
RBW 1 MHz
VBW 3 MHz
SWT 100 ms
RF Att 30 dB
Unit dBm
1VIEW
1SA
Center 5.18 GHz
5 MHz/
Span 50 MHz
Date: 10.APR.2002 19:22:27

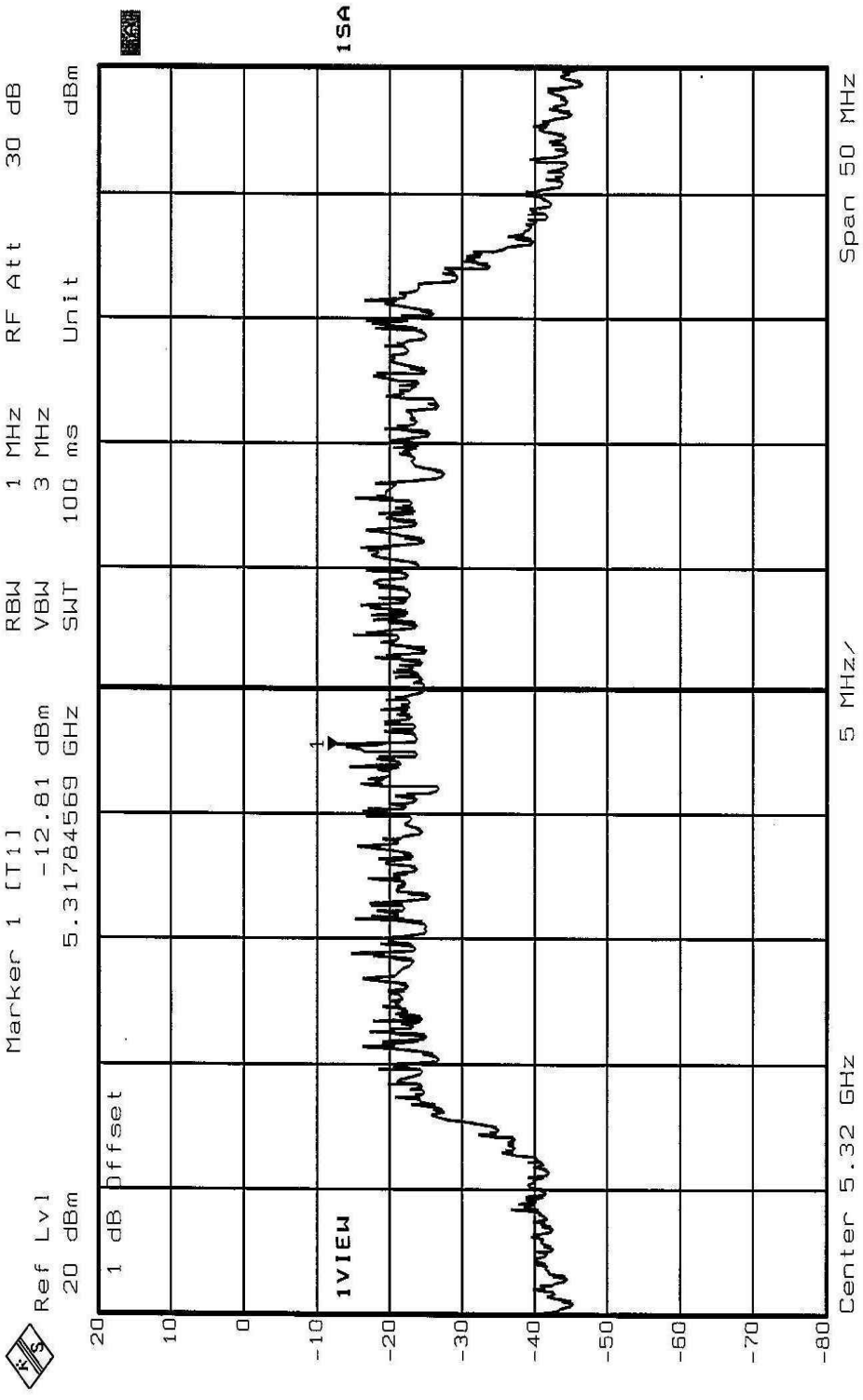
CHANNEL 4


Ref Lvl
20 dBm
1 dB Offset
Marker 1 [T1]
-14.50 dBm
5.24435872 GHz
RBW 1 MHz
VBW 3 MHz
SWT 100 ms
RF Att 30 dB
Unit dBm
1VIEW
1SA
Center 5.24 GHz
5 MHz/
Span 50 MHz
Date: 10.APR.2002 19:33:51

CHANNEL 5


Marker 1 [T1]
-13.32 dBm
5.27287575 GHz
RBW 1 MHz
VBW 3 MHz
SWT 100 ms
RF Att 30 dB
Unit dBm
Ref Lvl
20 dBm
1 dB Offset
1VIEW
1SA
Center 5.26 GHz
5 MHz/
Span 50 MHz
Date: 10.APR.2002 19:51:05

CHANNEL 8


Marker 1 [T1]
-12.81 dBm
5.31784569 GHz
Ref Lvl
20 dBm
1 dB Offset
RBW 1 MHz
VBW 3 MHz
SWT 100 ms
RF Att 30 dB
Unit dBm
1VIEW
1SA
Center 5.32 GHz
5 MHz/
Span 50 MHz
Date: 10.APR.2002 19:14:57