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	July 24, 2004

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

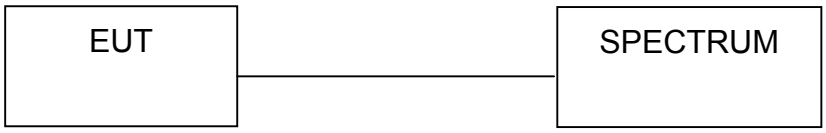
5.3.3 TEST PROCEDURE

4. The transmitter output was connected to the spectrum analyzer.
5. Set span to encompass the entire emission bandwidth of the signal.
6. Set RBW to 1MHz, VBW to 300kHz.
7. 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.

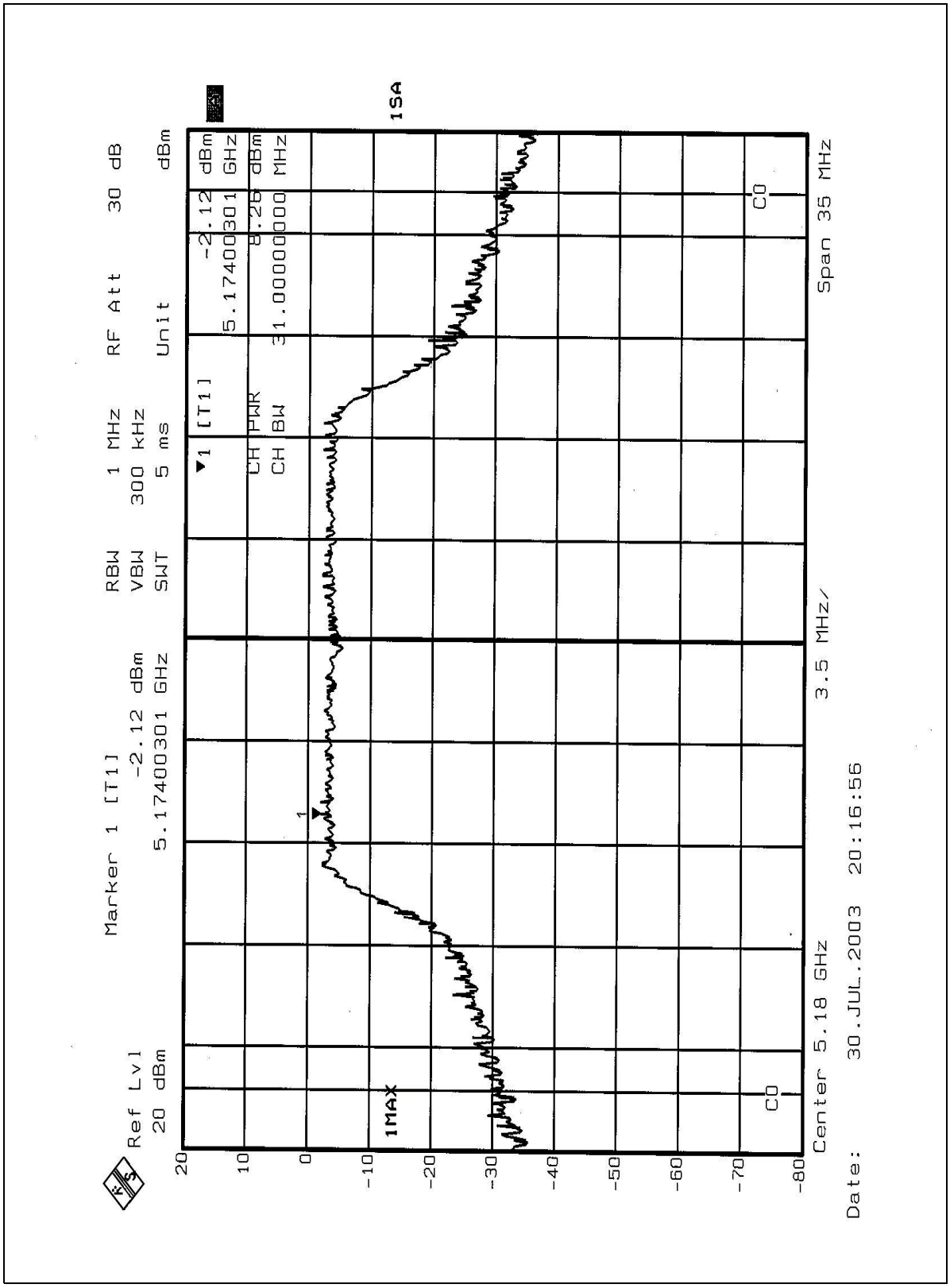
5.3.7 TEST RESULTS

EUT	802.11a+802.11g Dual Band Wireless Access Point	**MODEL**	SL-5354AP Aries
ENVIRONMENTAL CONDITIONS	28deg. C, 60%RH, 991 hPa	**INPUT POWER (SYSTEM)**	120Vac, 60 Hz
TESTED BY	Ansen Lei		

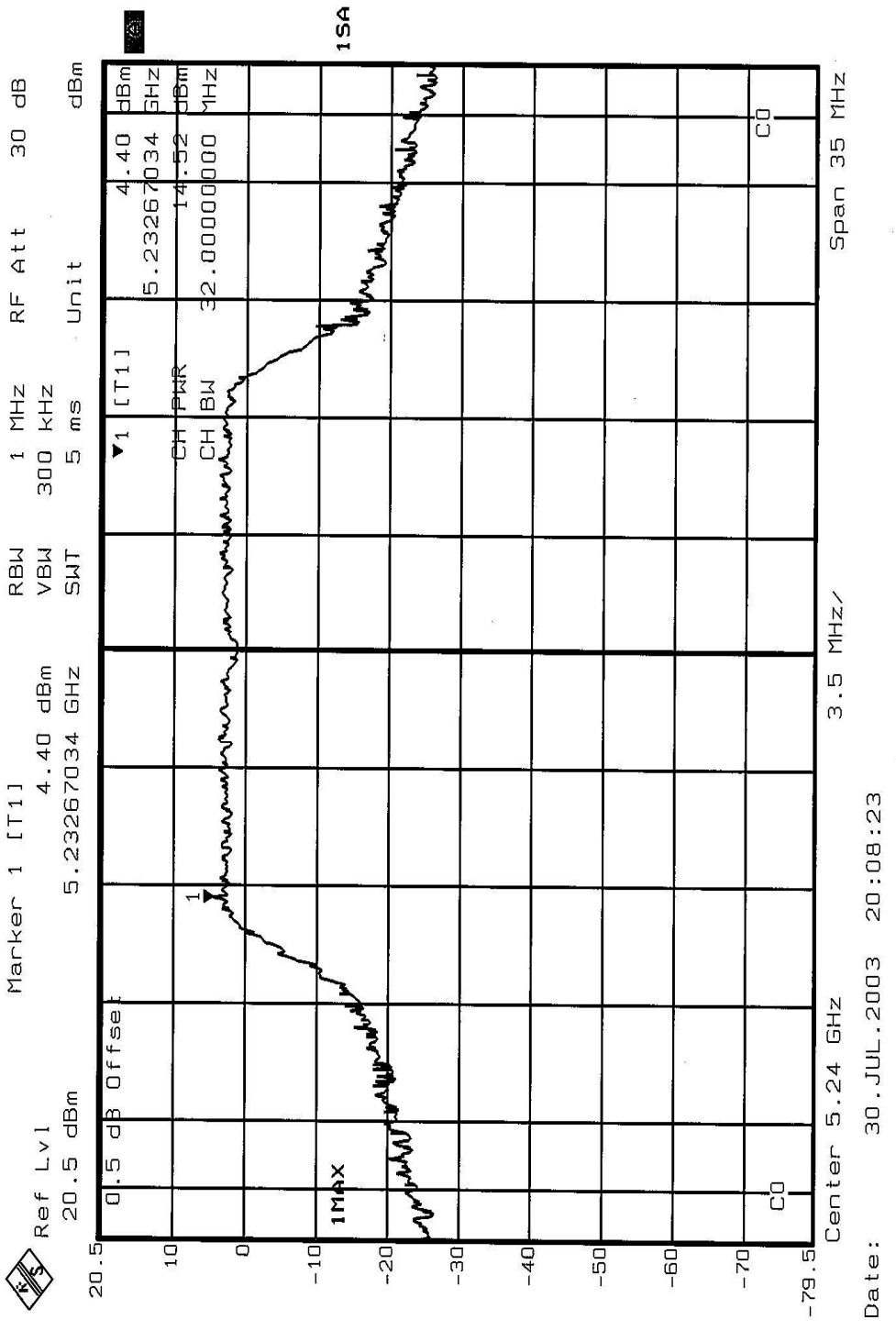
CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	26dBc Occupied Bandwidth (MHz)	PASS/FAIL
1	5180	8.26	17.00	30.86	PASS
4	5240	14.52	17.00	31.34	PASS
5	5260	16.25	24.00	30.62	PASS
8	5320	14.93	24.00	29.42	PASS
9	5745	17.82	30.00	34.31	PASS
12	5805	16.41	30.00	32.71	PASS

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

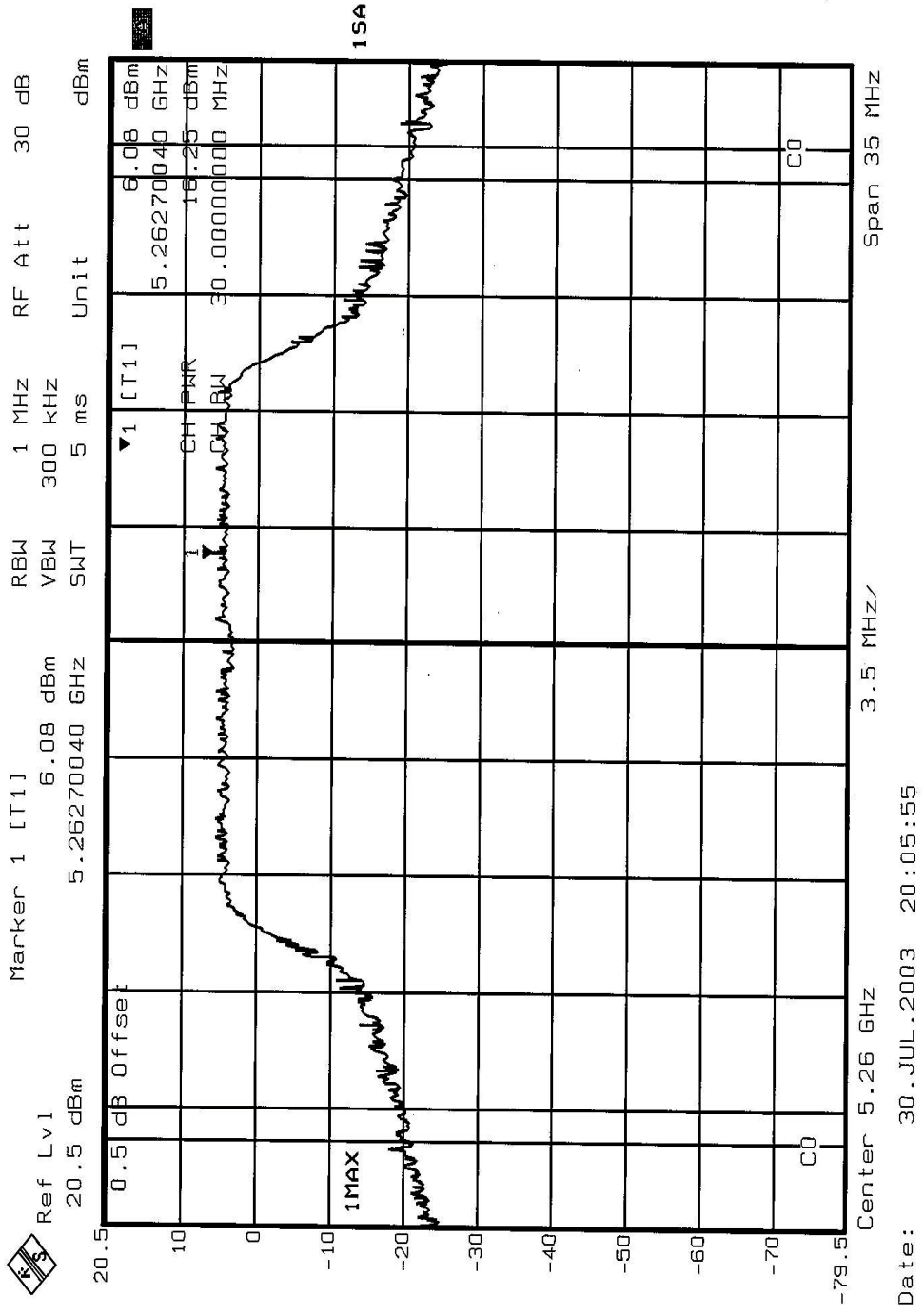
CHANNEL 1


Ref Lvl
20 dBm
RBW 1 MHz
VBW 300 kHz
SWT 5 ms
RF Att 30 dB
Unit dBm
Marker 1 [T1]
-2.12 dBm
5.17400301 GHz
1SA
1MAX
CH PWR -2.12 dBm
CH BW 8.26 MHz
31.000000000
Center 5.18 GHz
3.5 MHz/
Span 35 MHz
Date: 30.JUL.2003 20:16:56

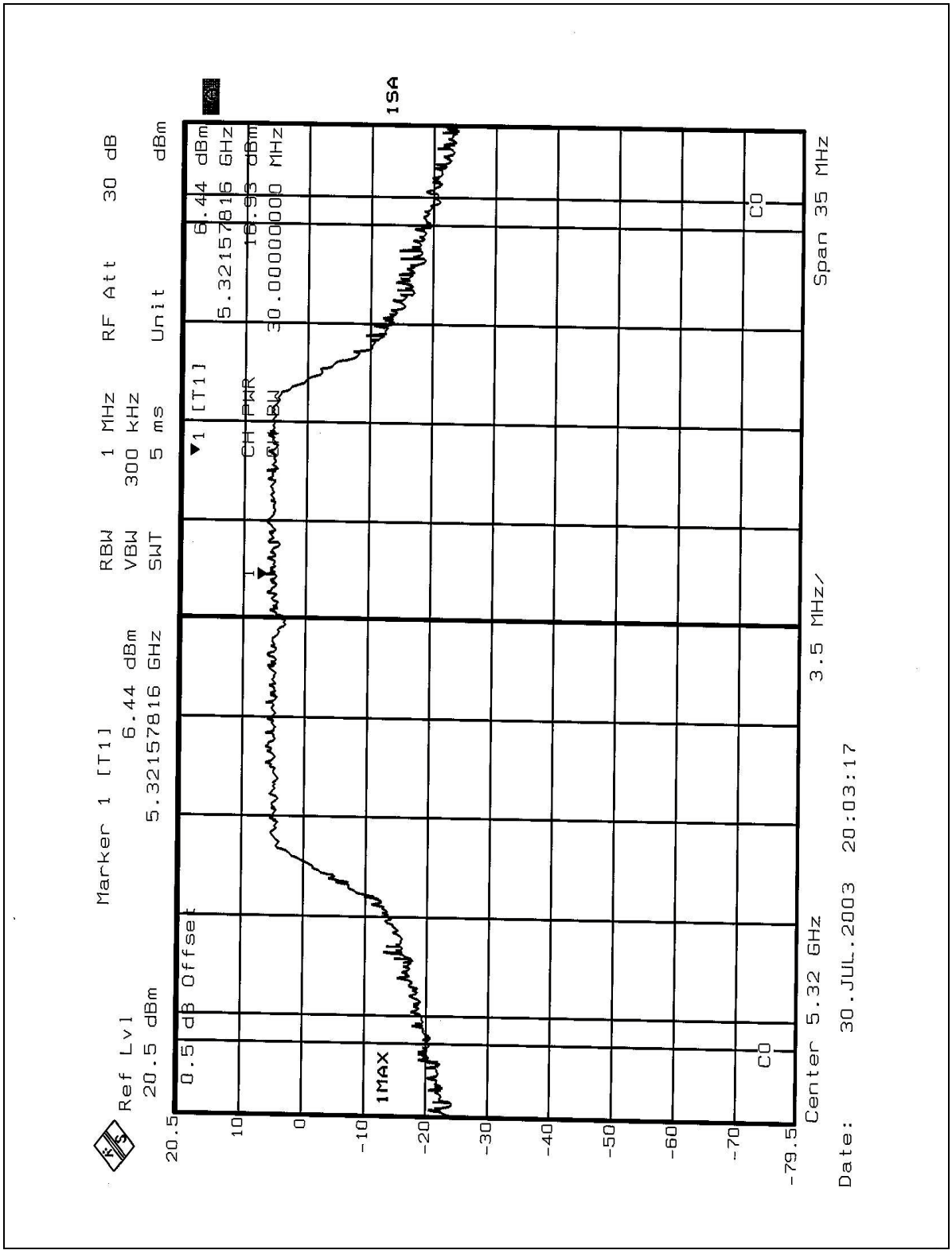
CHANNEL 4


Marker 1 [T1]
4.40 dBm
5.23267034 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
4.40 dBm
5.23267034 GHz
14.52 dBm
32.000000000 MHz
Center 5.24 GHz
3.5 MHz/
Span 35 MHz
Date: 30.JUL.2003 20:08:23

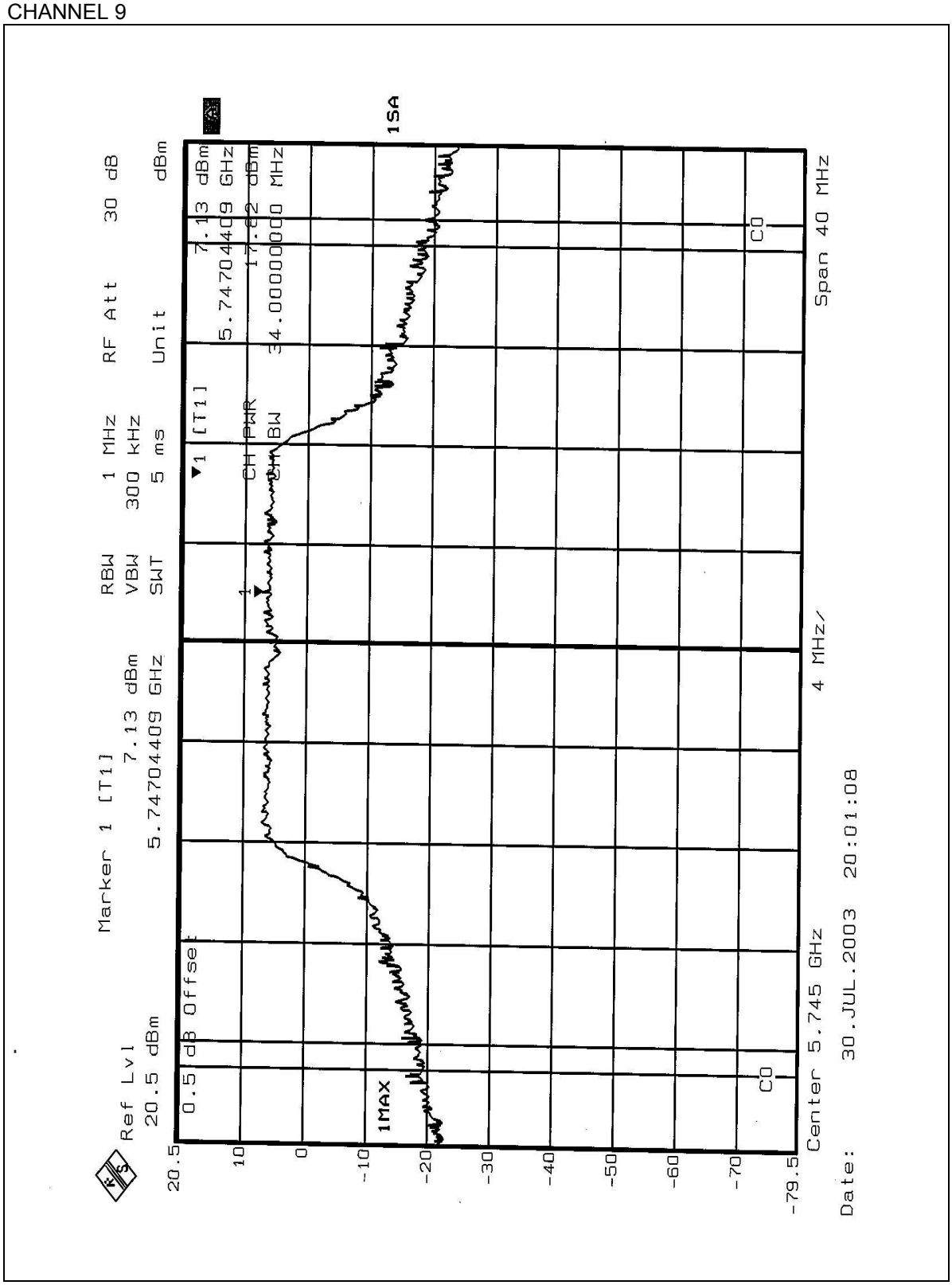
CHANNEL 5


Marker 1 [T1]
6.08 dBm
5.26270040 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
6.08 dBm
5.26270040 GHz
16.25 dBm
30.00000000 MHz
Center 5.26 GHz
3.5 MHz/
Span 35 MHz
Date: 30.JUL.2003 20:05:55

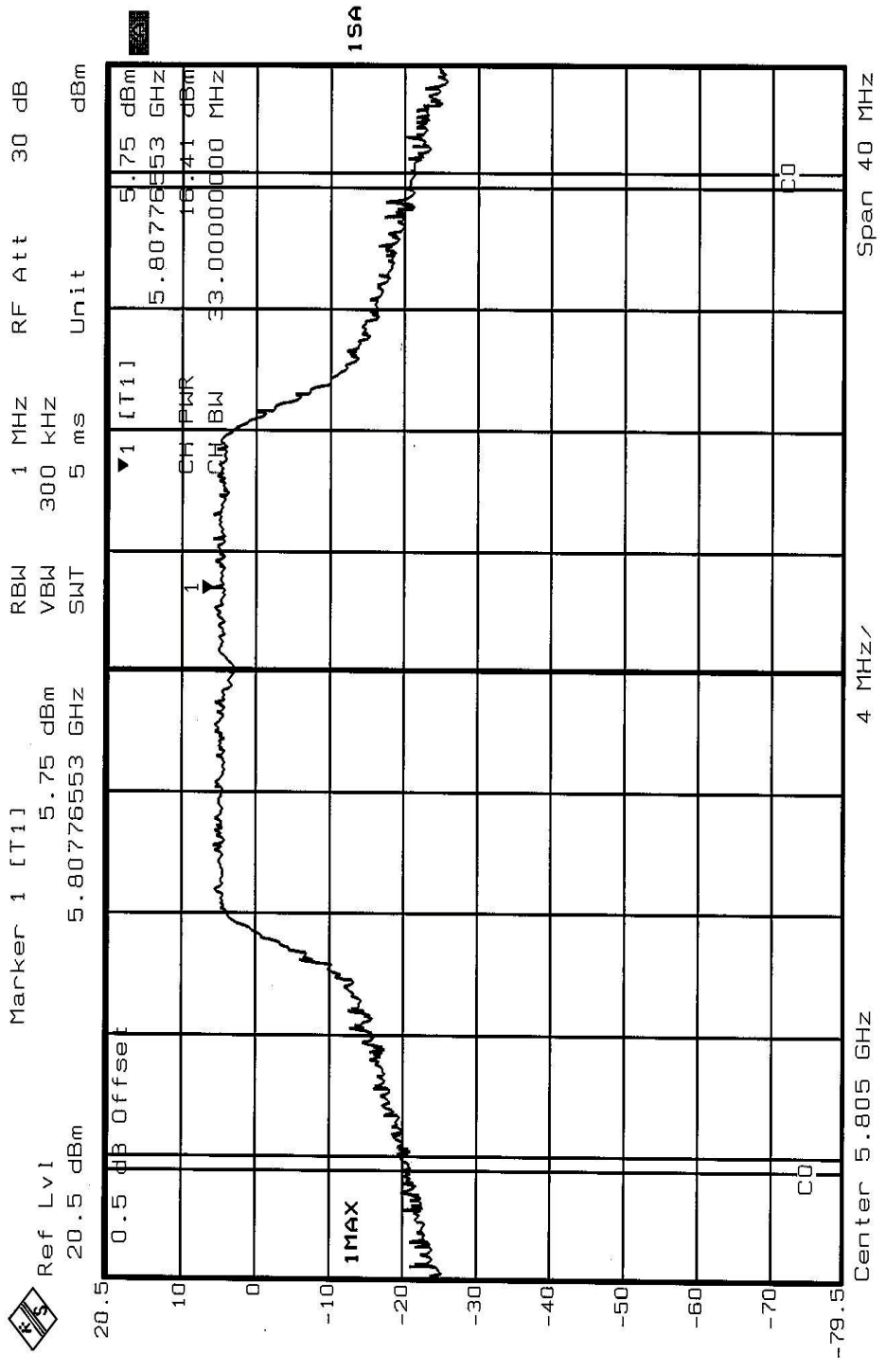
CHANNEL 8


Marker 1 [T1]
6.44 dBm
5.32157816 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
Center 5.32 GHz
Span 35 MHz
3.5 MHz/
Date: 30.JUL.2003 20:03:17

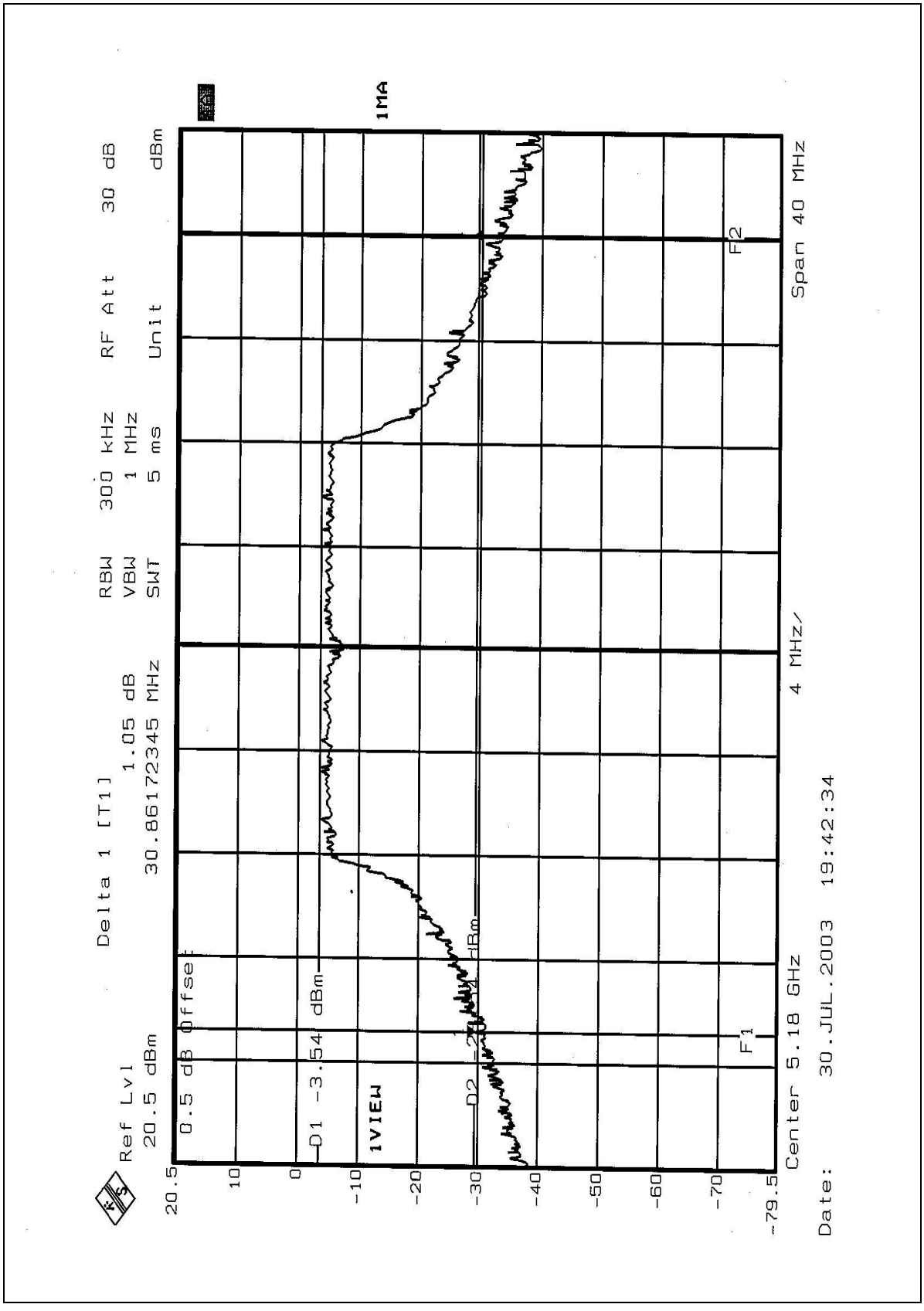
CHANNEL 9


Marker 1 [T1]
7.13 dBm
5.74704409 GHz
RBW 1 MHz
VBW 300 kHz
SWT 5 ms
Unit dBm
RF Att 30 dB
1SA
Ref Lvl
20.5 dBm
0.5 dB Offset
1MAX
CH PWR
BW
Center 5.745 GHz
Span 40 MHz
4 MHz/
Date: 30.JUL.2003 20:01:08

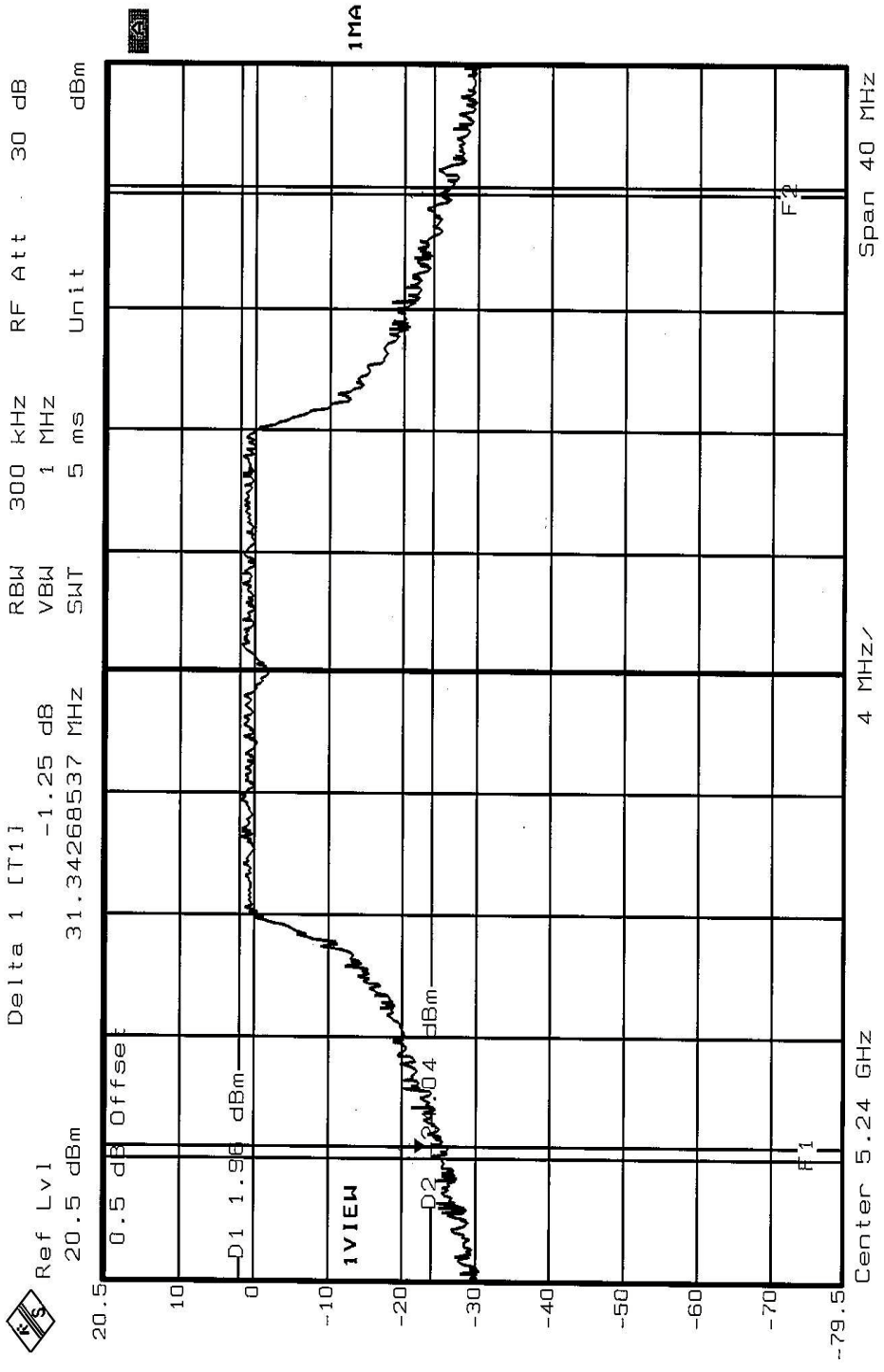
CHANNEL 12


Marker 1 [T1]
5.75 dBm
5.80776553 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 16.41 dBm
CH BW 33.000000000 MHz
5.75 dBm
5.80776553 GHz
Center 5.805 GHz
4 MHz/
Span 40 MHz
Date: 30.JUL.2003 19:59:32

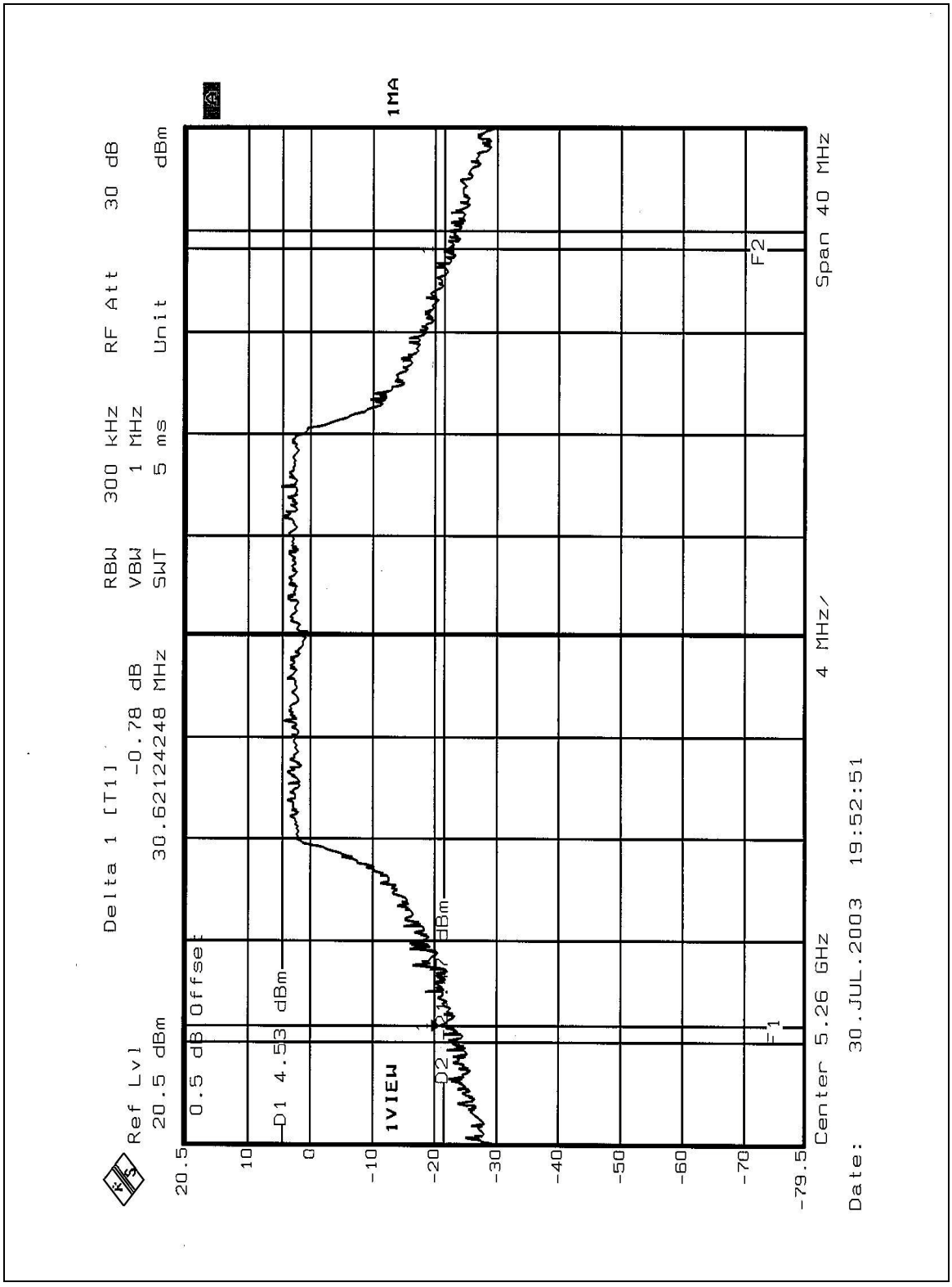
CHANNEL 1


Ref Lvl
20.5 dBm
0.5 dB Offset
Delta 1 [T1]
1.05 dB
30.86172345 MHz
RBW 300 kHz
VBW 1 MHz
SWT 5 ms
RF Att 30 dB
Unit dBm
1MA
1VIEW
D1 -3.54 dBm
D2 -20 dBm
F1
F2
Center 5.18 GHz
4 MHz/
Span 40 MHz
Date: 30.JUL.2003 19:42:34
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5

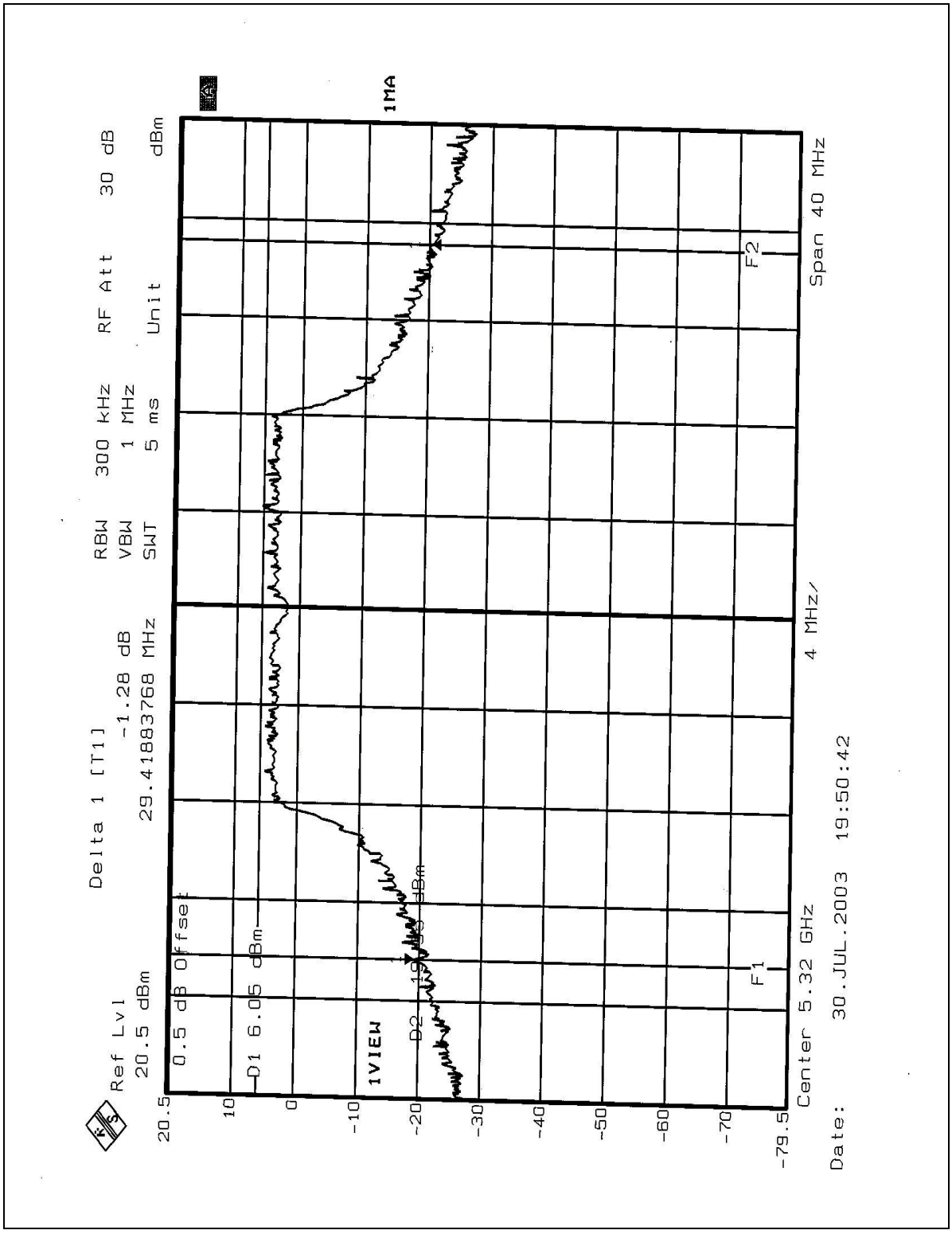
CHANNEL 4


Delta 1 [T1]
-1.25 dB
31.34268537 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 1.96 dBm
D2 dBm
1VIEW
1MA
F1
F2
Span 40 MHz
4 MHz/
Center 5.24 GHz
Date: 30.JUL.2003 19:47:23
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5

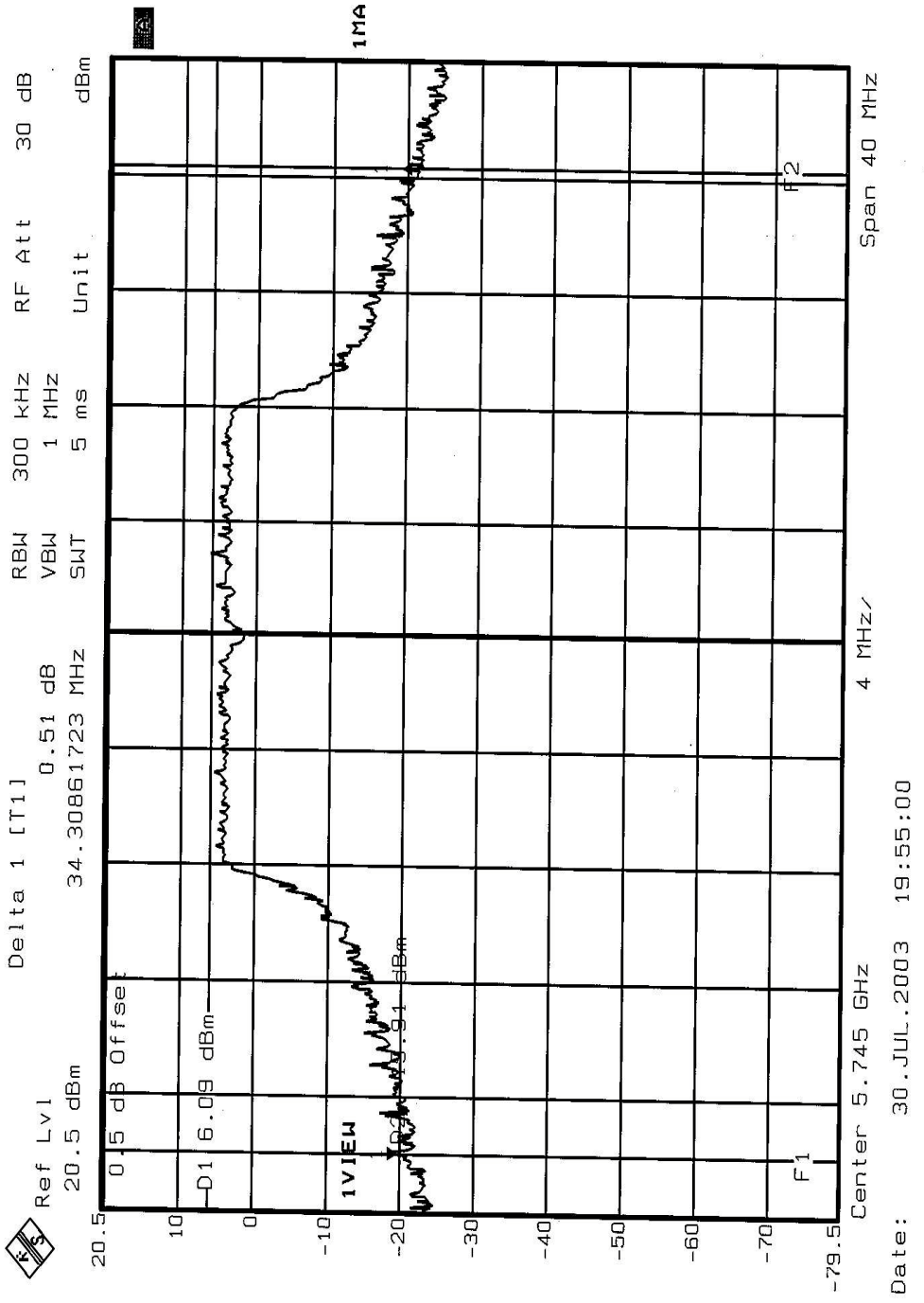
CHANNEL 5


Delta 1 [T1]
-0.78 dB
30.62124248 MHz
RBW 300 kHz
VBW 1 MHz
SWT 5 ms
RF Att 30 dB
Unit dBm
1MA
Ref Lvl
20.5 dBm
0.5 dB Offset
D1 4.53 dBm
1VIEW
D2
dBm
F1
F2
Span 40 MHz
4 MHz/
Center 5.26 GHz
Date: 30.JUL.2003 19:52:51
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5

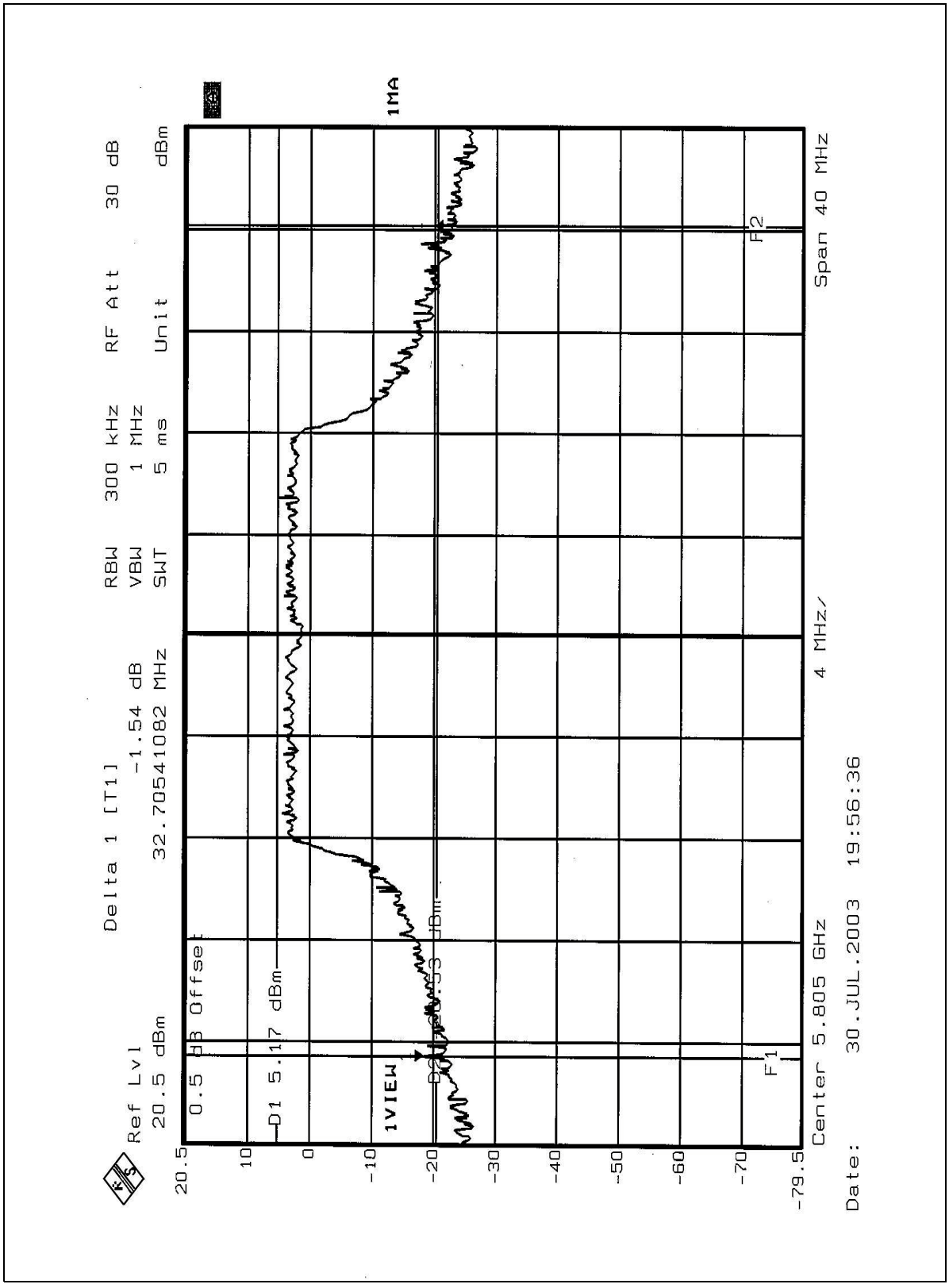
CHANNEL 8


Delta 1 [T1]
-1.28 dB
29.41883768 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 6.05 dBm
1VIEW
D2
1MA
Span 40 MHz
4 MHz/
Center 5.32 GHz
F1
F2
Date: 30.JUL.2003 19:50:42
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 6.09 dBm
1VIEW
Delta 1 [T1]
0.51 dB
34.30861723 MHz
RBW 300 kHz
VBW 1 MHz
SWT 5 ms
RF Att 30 dB
Unit dBm
1MA
Center 5.745 GHz
4 MHz/
Span 40 MHz
Date: 30.JUL.2003 19:55:00

CHANNEL 12


Ref Lvl
20.5 dBm
0.5 dB Offset
D1 5.17 dBm
1VIEW
Delta 1 [T1]
-1.54 dB
32.70541082 MHz
RBW 300 kHz
VBW 1 MHz
SWT 5 ms
RF Att 30 dB
Unit dBm
1MA
F2
F1
Center 5.805 GHz
4 MHz/
Span 40 MHz
Date: 30.JUL.2003 19:56:36
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	July 24, 2004

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

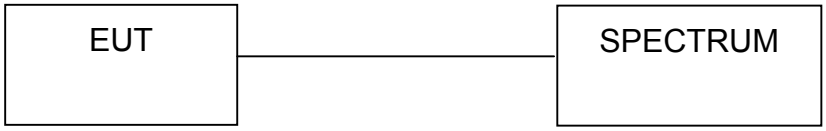
5.4.3 TEST PROCEDURE

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

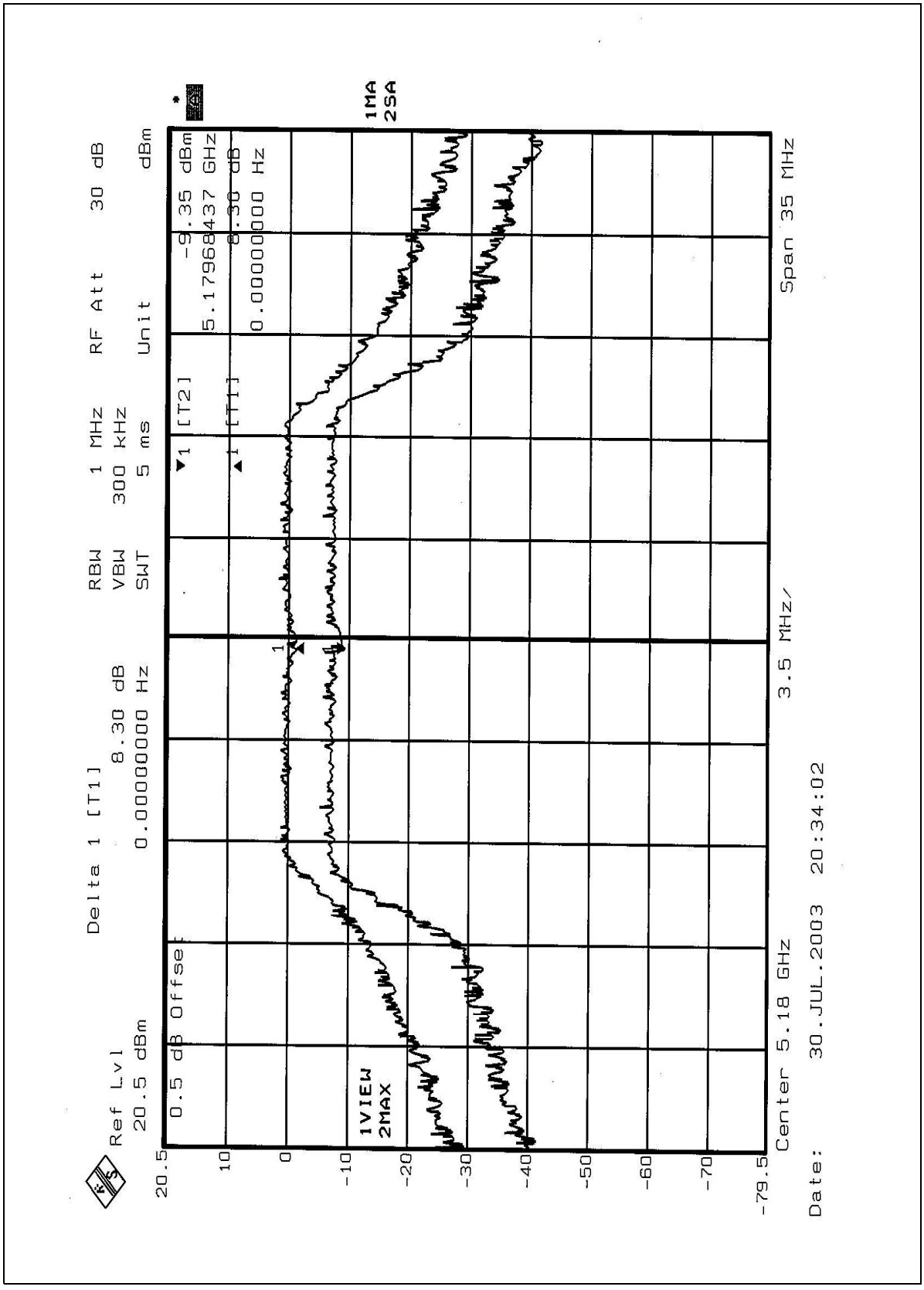
The software provided by client to enable the EUT under transmission condition continuously at specific channel frequencies individually.

5.4.7 TEST RESULTS

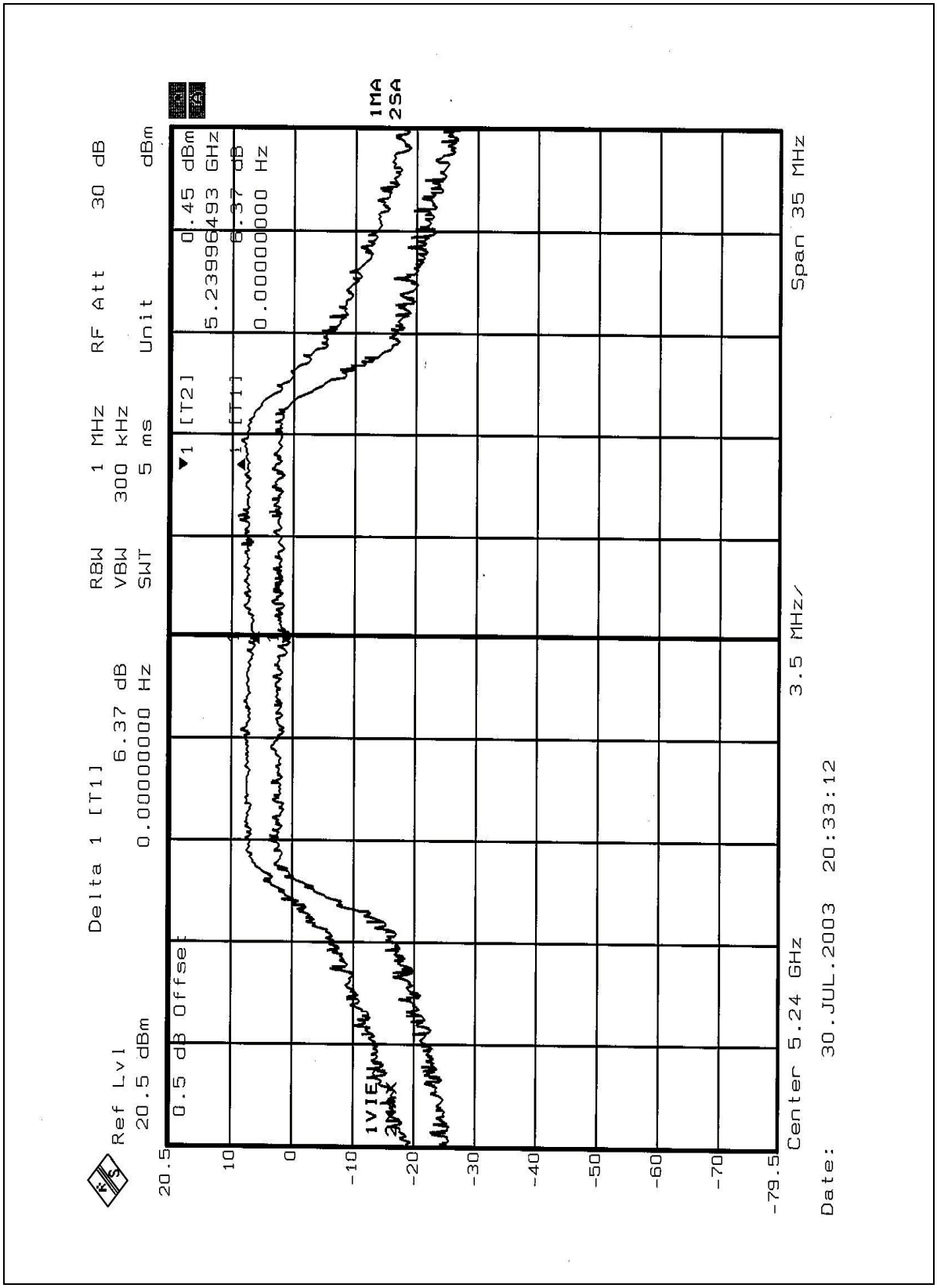
EUT	802.11a+802.11g Dual Band Wireless Access Point	**MODEL**	SL-5354AP Aries
ENVIRONMENTAL CONDITIONS	28deg. C, 60%RH, 991 hPa	**INPUT POWER (SYSTEM)**	120Vac, 60 Hz
TESTED BY	Ansen Lei		

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER EXCURSION (dB)	PEAK to AVERAGE EXCURSION LIMIT (dB)	PASS/FAIL
1	5180	8.30	13	PASS
4	5240	6.37	13	PASS
5	5260	5.88	13	PASS
8	5320	6.16	13	PASS
9	5745	5.68	13	PASS
12	5805	6.11	13	PASS

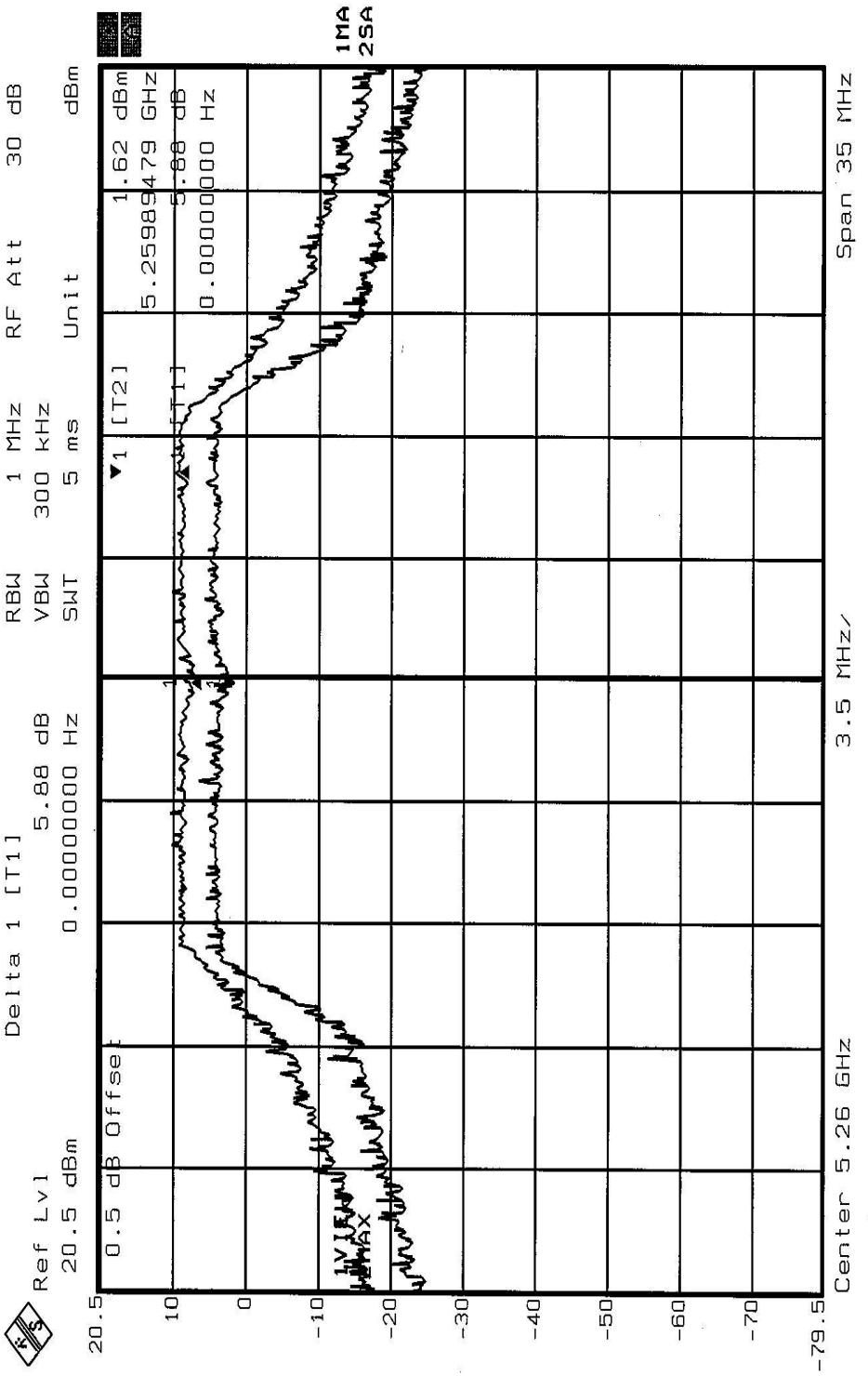
CHANNEL 1


Ref Lvl
20.5 dBm
0.5 dB Offset
Delta 1 [T1]
8.30 dB
0.00000000 Hz
RBW 1 MHz
VBW 300 kHz
SWT 5 ms
RF Att 30 dB
Unit dBm
[T2]
-9.35 dBm
5.17968437 GHz
[T1]
8.30 dB
0.00000000 Hz
1MA
2SA
1VIEW
2MAX
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Center 5.18 GHz
3.5 MHz/
Span 35 MHz
Date: 30.JUL.2003 20:34:02

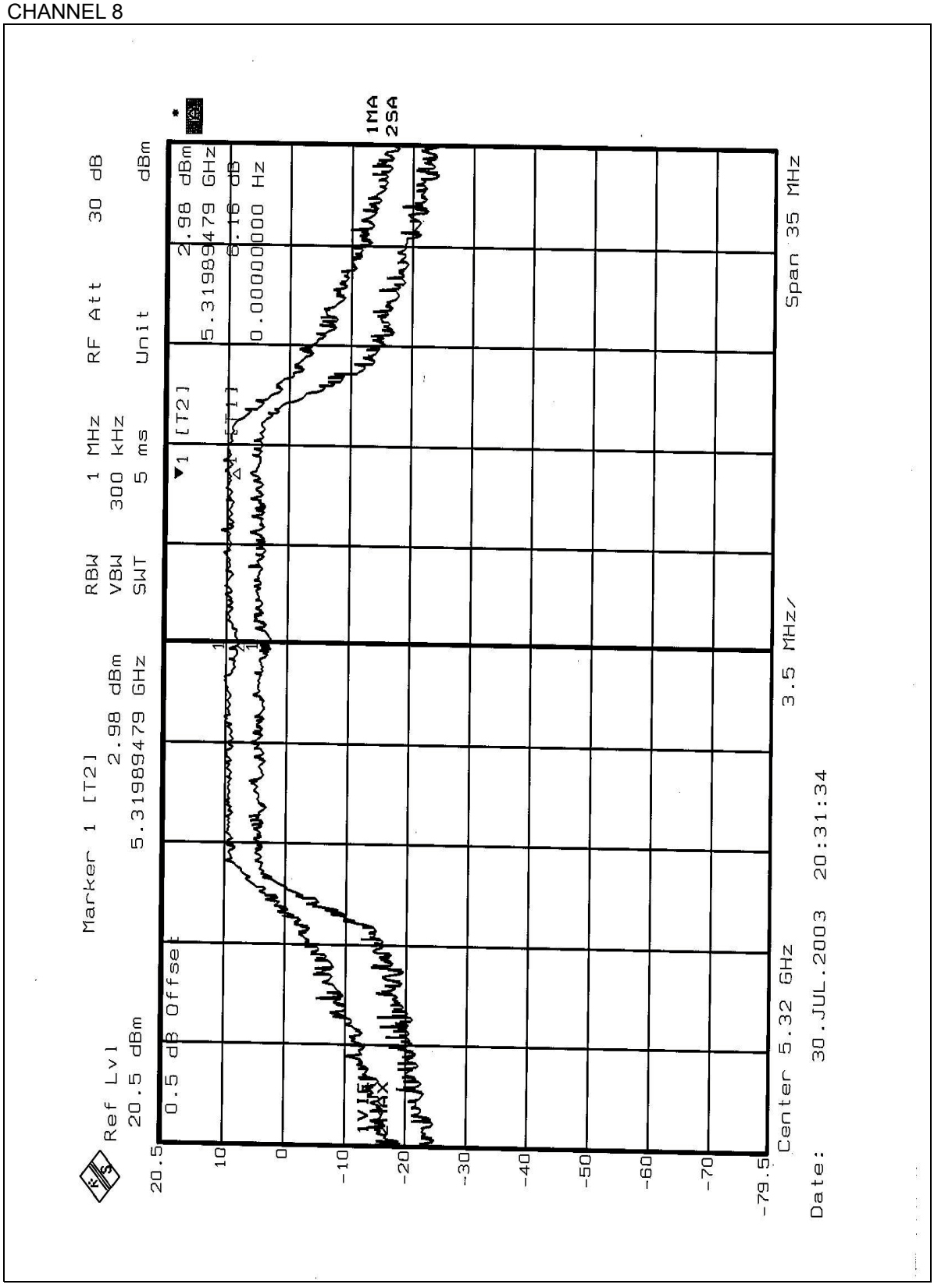
CHANNEL 4


Ref Lvl
20.5 dBm
0.5 dB Offset
Delta 1 [T1]
6.37 dB
0.00000000 Hz
RBW 1 MHz
VBW 300 kHz
SWT 5 ms
RF Att 30 dB
Unit dBm
1 [T2]
0.45 dBm
5.23996493 GHz
[T1]
6.37 dB
0.00000000 Hz
1MA
2SA
1VIEW
2Max
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Center 5.24 GHz
3.5 MHz/
Span 35 MHz
Date: 30.JUL.2003 20:33:12

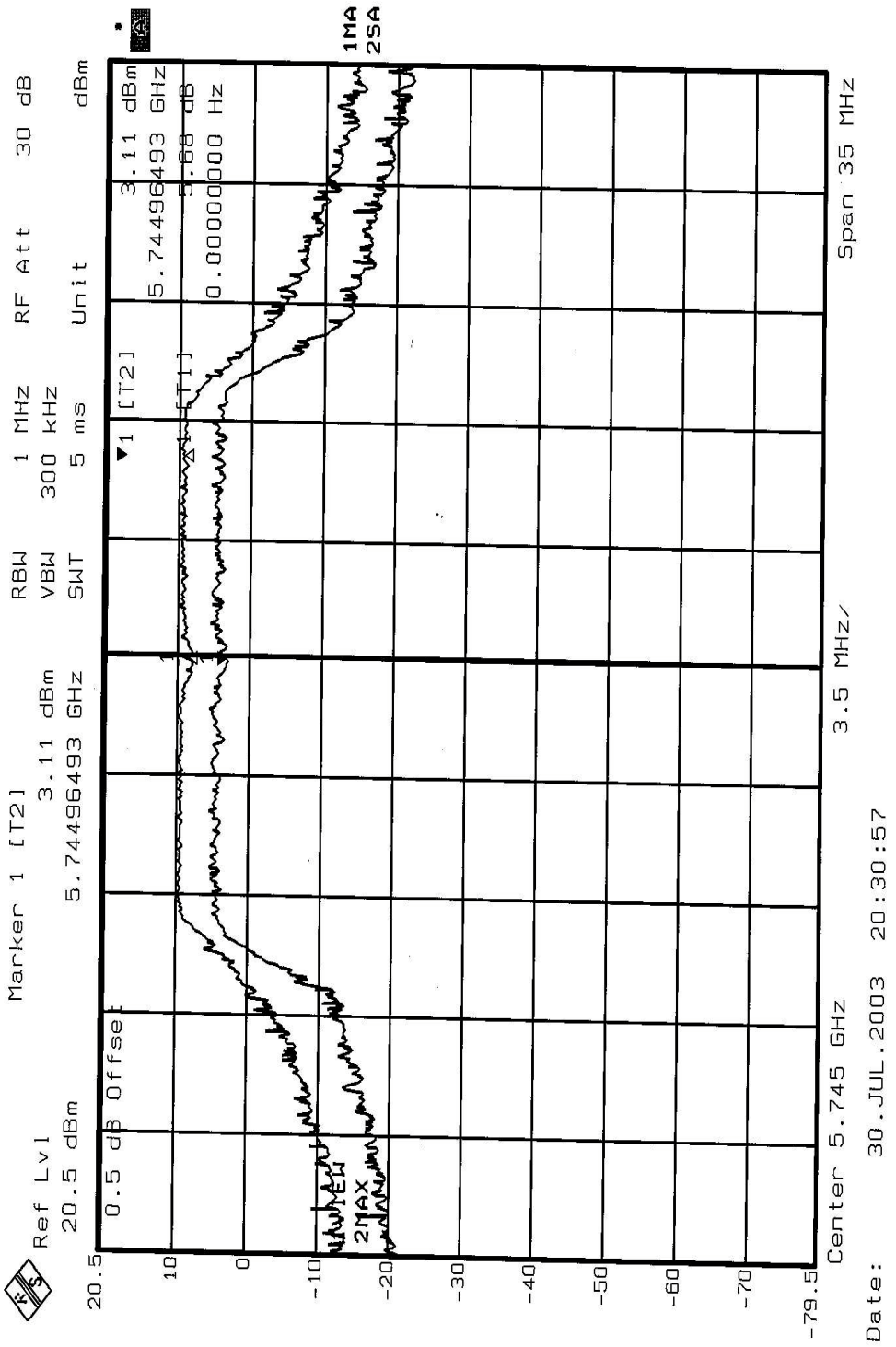
CHANNEL 5


Ref Lvl
20.5 dBm
0.5 dB Offset
Delta 1 [T1]
5.88 dB
0.00000000 Hz
RBW 1 MHz
VBW 300 kHz
SWT 5 ms
RF Att 30 dB
Unit dBm
1 [T2]
1.62 dBm
5.25989479 GHz
[T1]
5.88 dB
0.00000000 Hz
1MA
2SA
1VIEW
MAX
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Center 5.26 GHz
3.5 MHz/
Span 35 MHz
Date: 30.JUL.2003 20:32:30

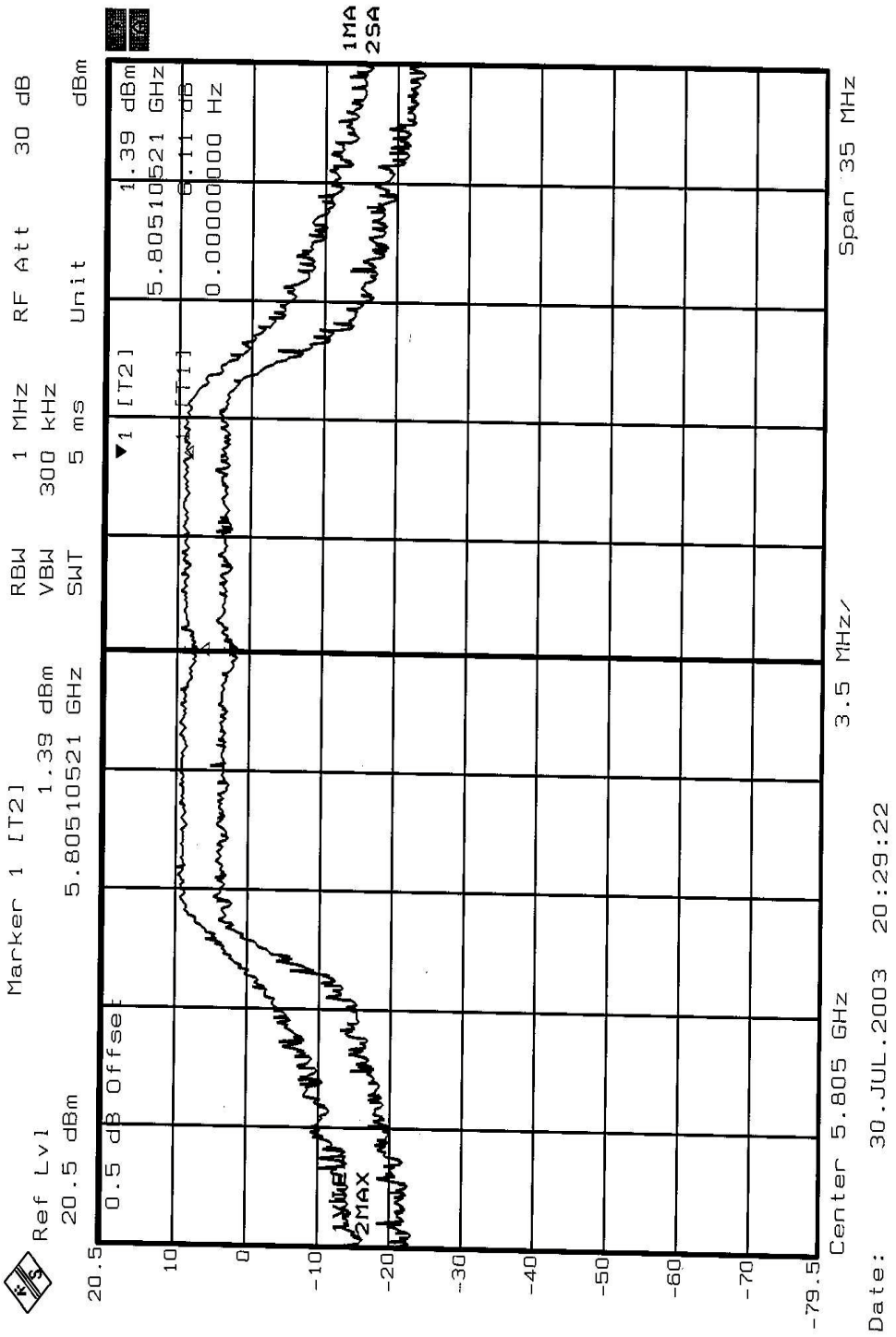
CHANNEL 8


Marker 1 [T2]
2.98 dBm
5.31989479 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
1MA
2SA
Span 35 MHz
3.5 MHz/
Center 5.32 GHz
Date: 30.JUL.2003 20:31:34

CHANNEL 9


Ref Lvl
20.5 dBm
0.5 dB Offset
Marker 1 [T2]
3.11 dBm
5.74496493 GHz
RBW 1 MHz
VBW 300 kHz
SWT 5 ms
RF Att 30 dB
Unit dBm
1 [T2]
3.11 dBm
5.74496493 GHz
[T1]
5.68 dB
0.00000000 Hz
1MA
2SA
1MAXH
2MAX
Center 5.745 GHz
3.5 MHz/
Span 35 MHz
Date: 30.JUL.2003 20:30:57

CHANNEL 12


Marker 1 [T2]
1.39 dBm
5.80510521 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
1MA
2SA
1VIEW
2MAX
Center 5.805 GHz
3.5 MHz/
Span 35 MHz
Date: 30.JUL.2003 20:29:22