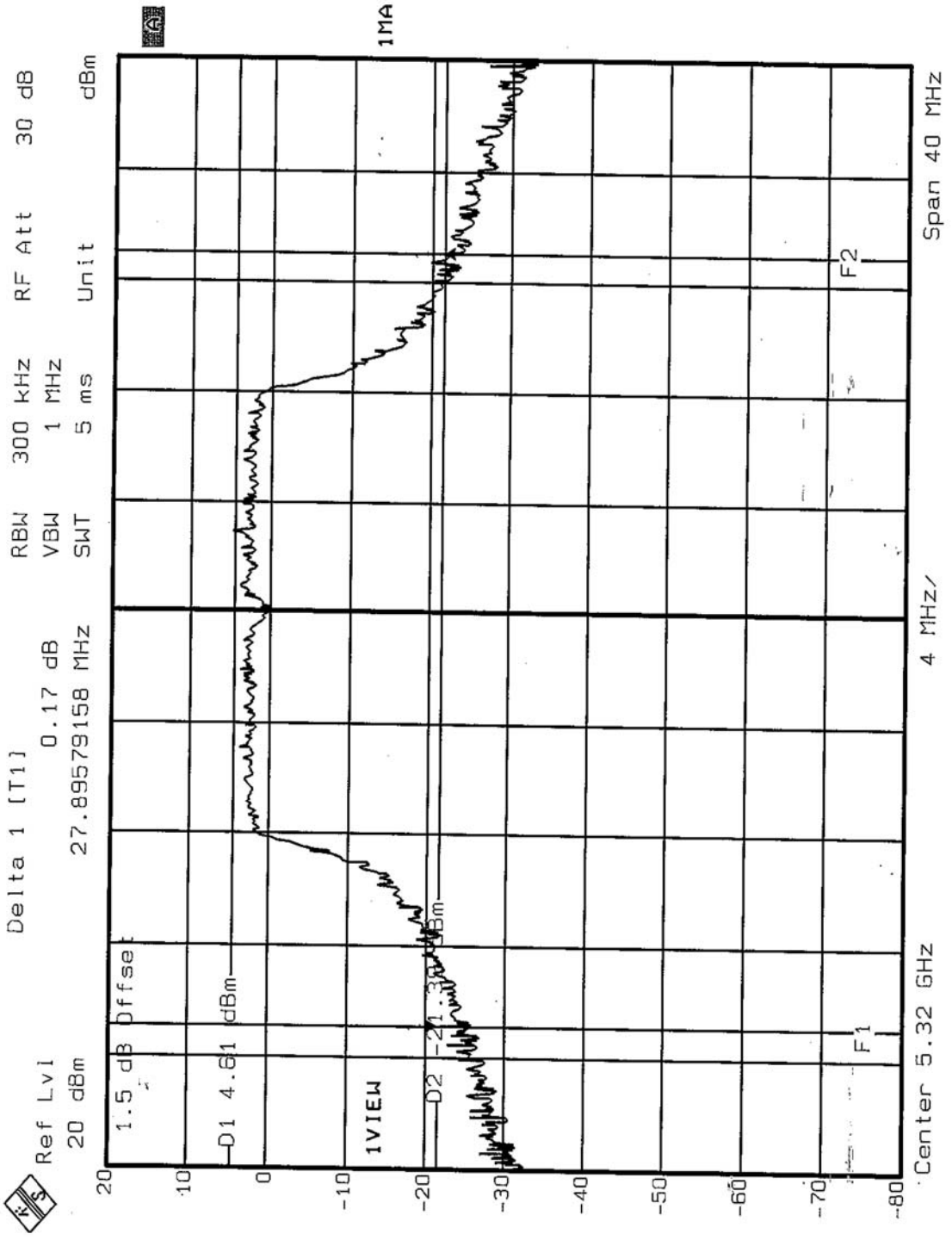
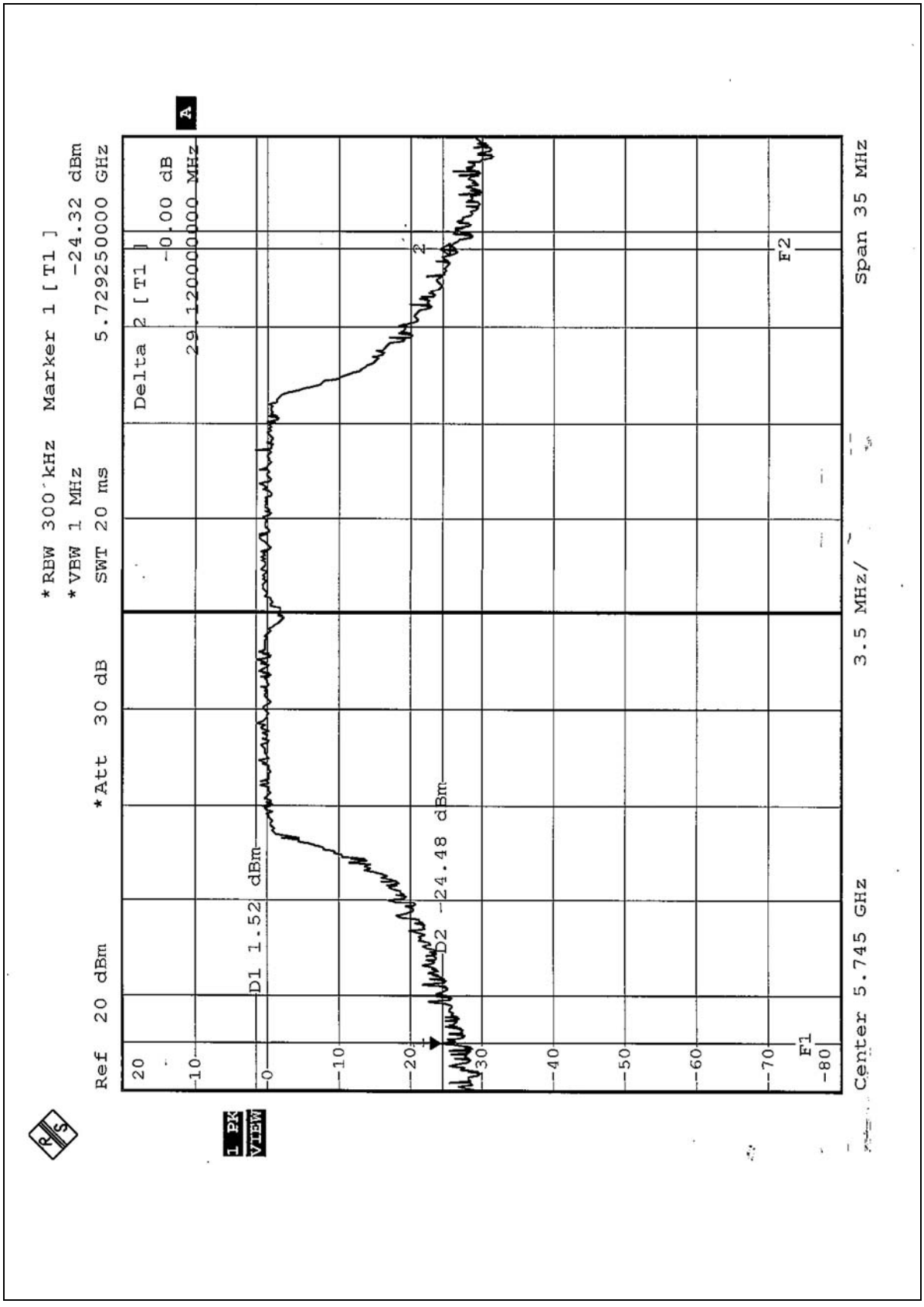
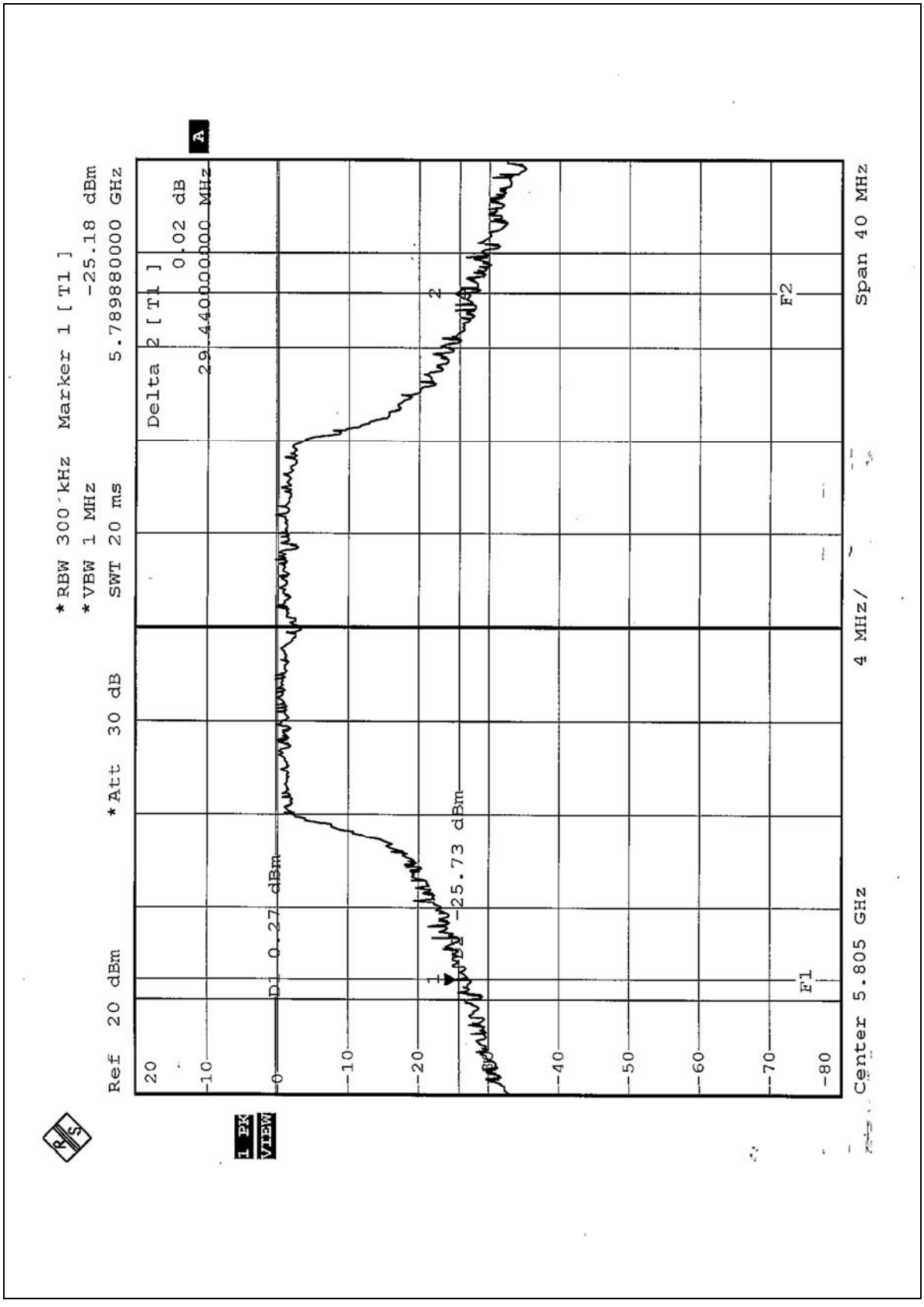
CH8


Delta 1 [T1]
0.17 dB
27.89579158 MHz
RBW 300 kHz
VBW 1 MHz
SWT 5 ms
RF Att 30 dB
Unit dBm
1MA
Ref Lvl
20 dBm
1.5 dB Offset
D1 4.61 dBm
D2 -21.31 dBm
1VIEW
F1
F2
Center 5.32 GHz
4 MHz/
Span 40 MHz
20
10
0
-10
-20
-30
-40
-50
-60
-70
-80

CH9


RBW 300 kHz
VBW 1 MHz
SWT 20 ms
Marker 1 [T1]
-24.32 dBm
5.729250000 GHz
Delta 2 [T1]
-0.00 dB
29.12000000 MHz
Ref 20 dBm
Att 30 dB
D1 1.52 dBm
D2 -24.48 dBm
Center 5.745 GHz
3.5 MHz/
Span 35 MHz
F1
F2
1 PK
VIEW

CH12


RBW 300 kHz
VBW 1 MHz
SWT 20 ms
Marker 1 [T1]
-25.18 dBm
5.789880000 GHz
Delta 2 [T1]
0.02 dB
29.440000000 MHz
Ref 20 dBm
Att 30 dB
D1 0.27 dBm
-25.73 dBm
Center 5.805 GHz
4 MHz/
Span 40 MHz
F1
F2
1 PK VIEW

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
SPECTRUM ANALYZER	FSEK30	100049	August 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.

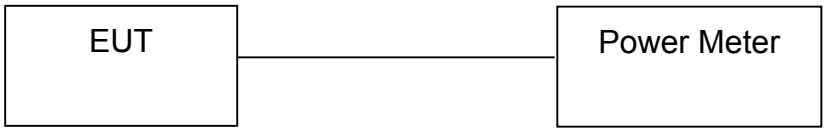
5.4.3 TEST PROCEDURE

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.

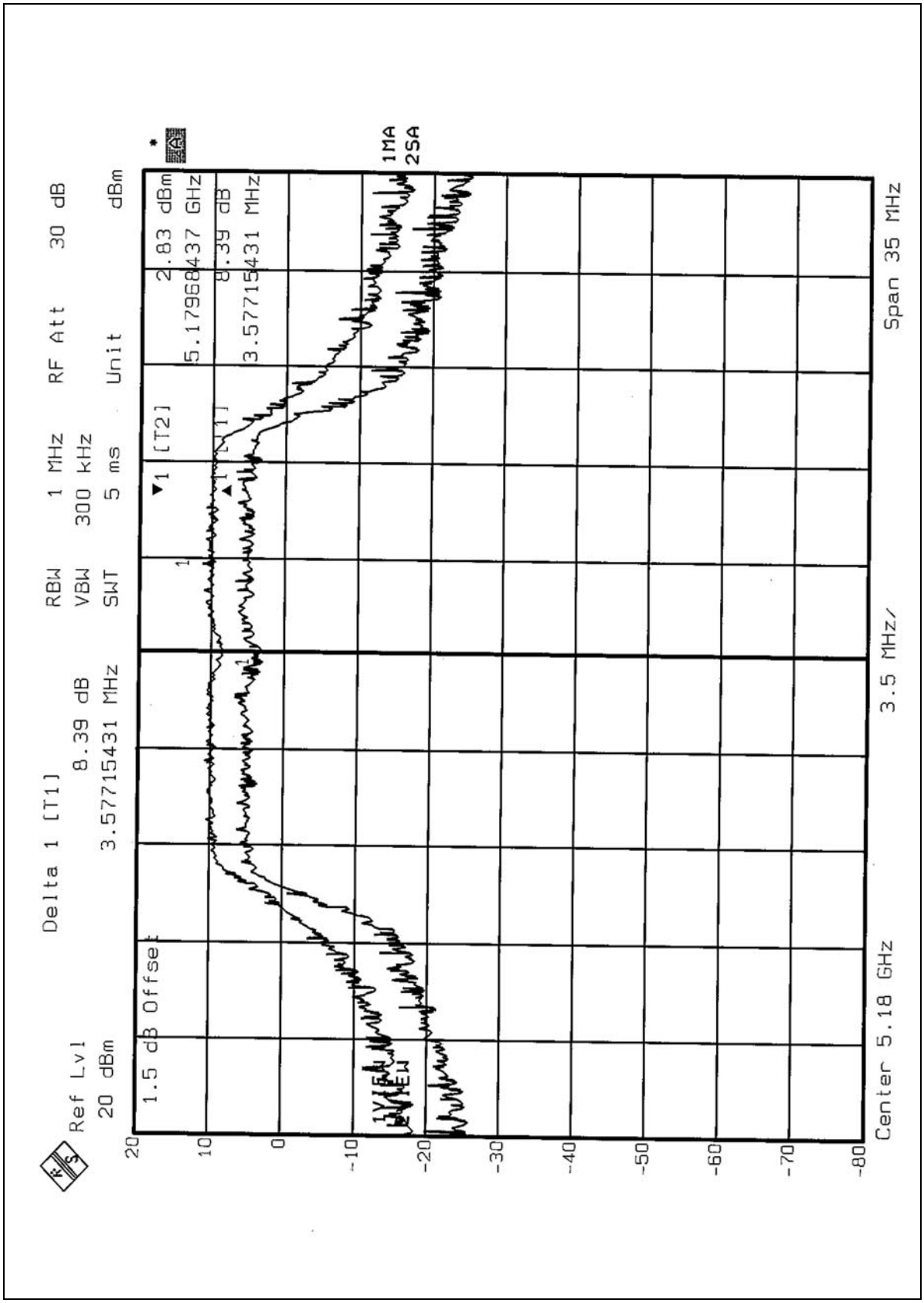
5.4.7 TEST RESULTS

NORMAL MODE (MODE 1、MODE 2)

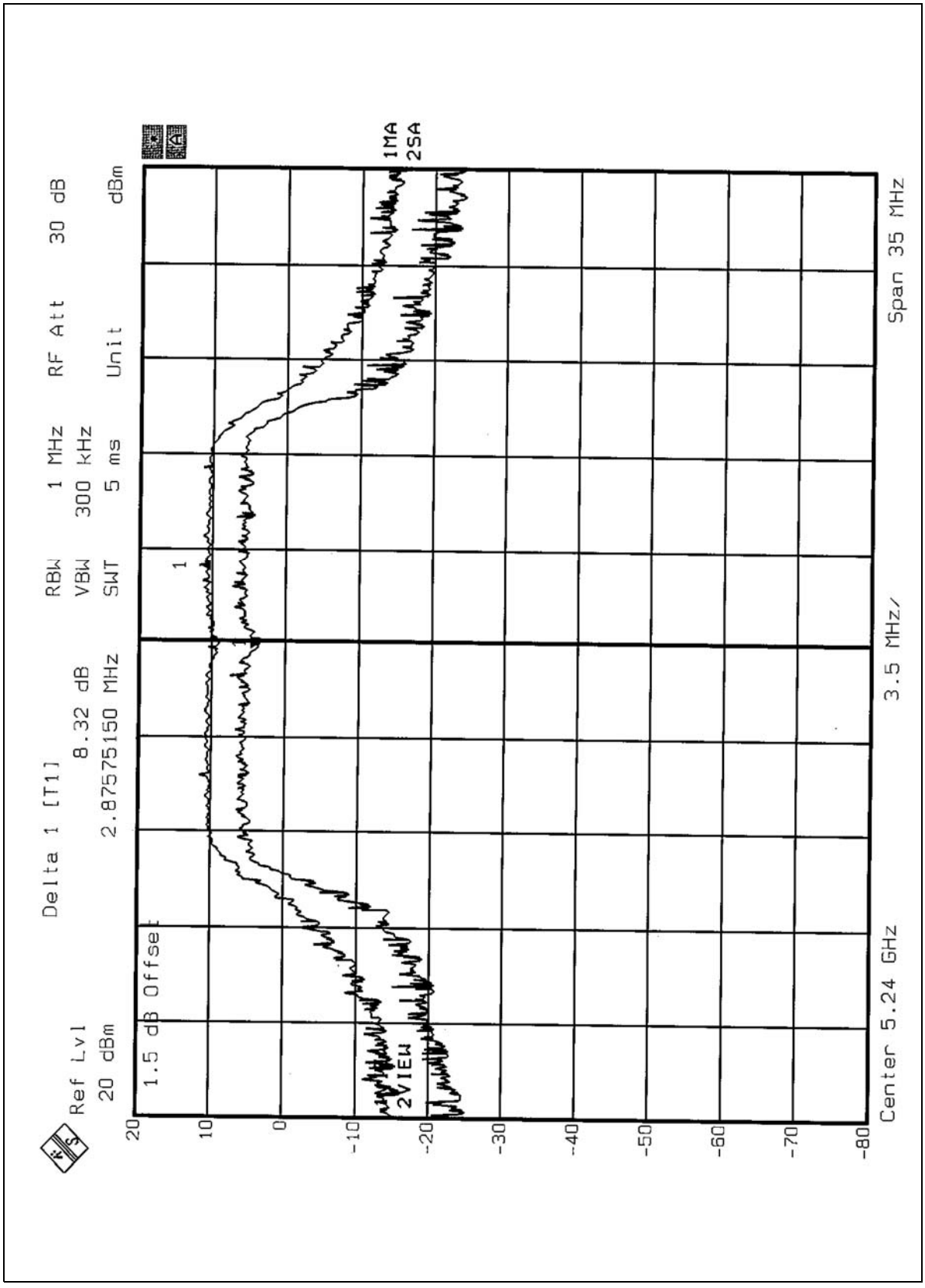
EUT	2.4/5GHz 54Mbps Wireless Mini PCI Card	**MODEL**	GL2554MP-1A
ENVIRONMENTAL CONDITIONS	24deg. C, 65%RH, 991hPa	**INPUT POWER (SYSTEM)**	120Vac, 60 Hz
TESTED BY	Ansen Lei		

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER EXCURSION (dB)	PEAK to AVERAGE EXCURSION LIMIT (dB)	PASS/FAIL
1	5180	8.39	13	PASS
4	5240	8.32	13	PASS
5	5260	7.92	13	PASS
8	5320	7.60	13	PASS
9	5745	7.86	13	PASS
12	5805	7.73	13	PASS

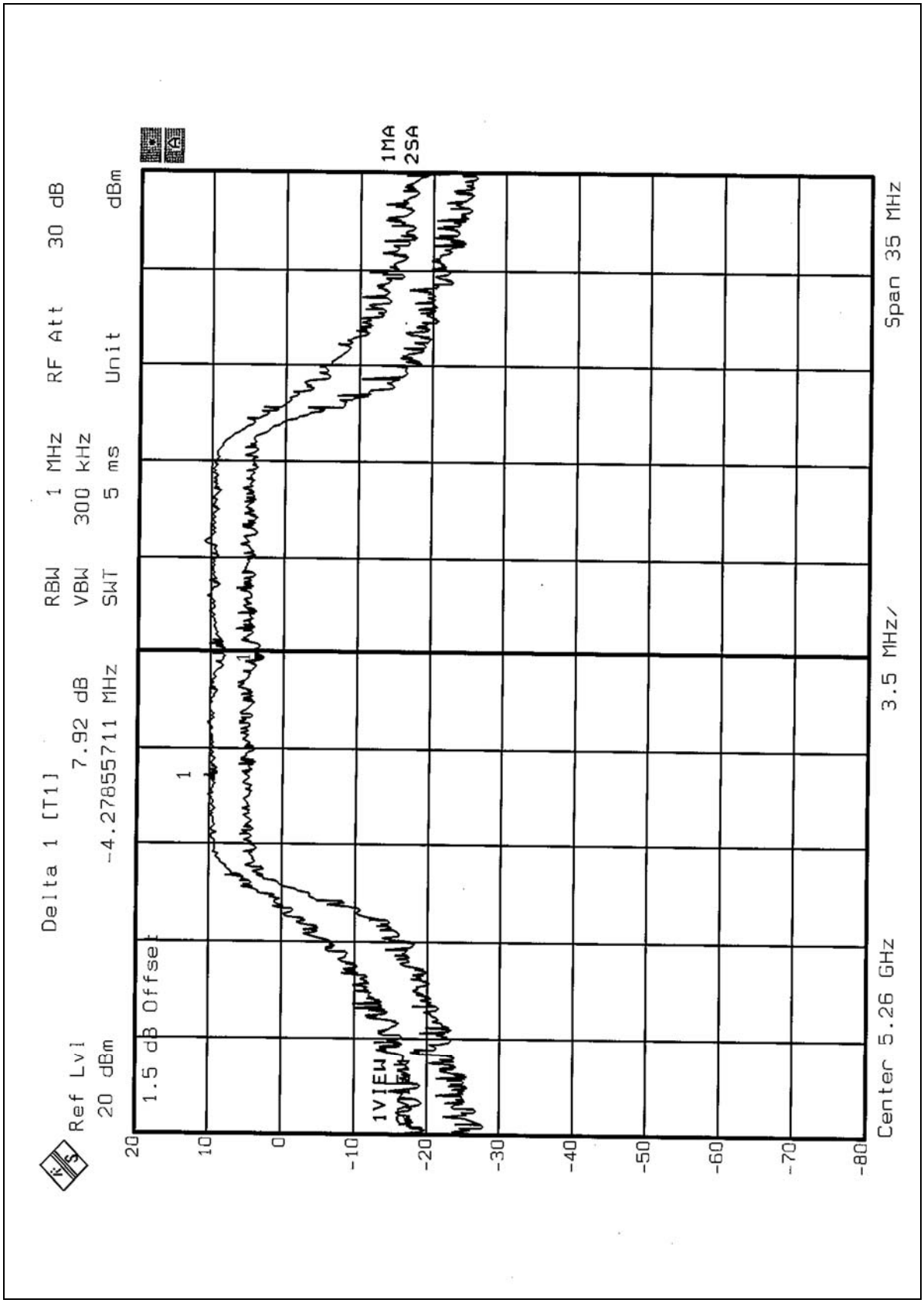
CH1


Delta 1 [T1]
8.39 dB
3.57715431 MHz
RBW 1 MHz
VBW 300 kHz
SWT 5 ms
RF Att 30 dB
Unit dBm
[T2]
2.83 dBm
5.17968437 GHz
8.39 dB
3.57715431 MHz
1MA
2SA
Ref Lvl
20 dBm
1.5 dB Offset
Center 5.18 GHz
3.5 MHz/
Span 35 MHz

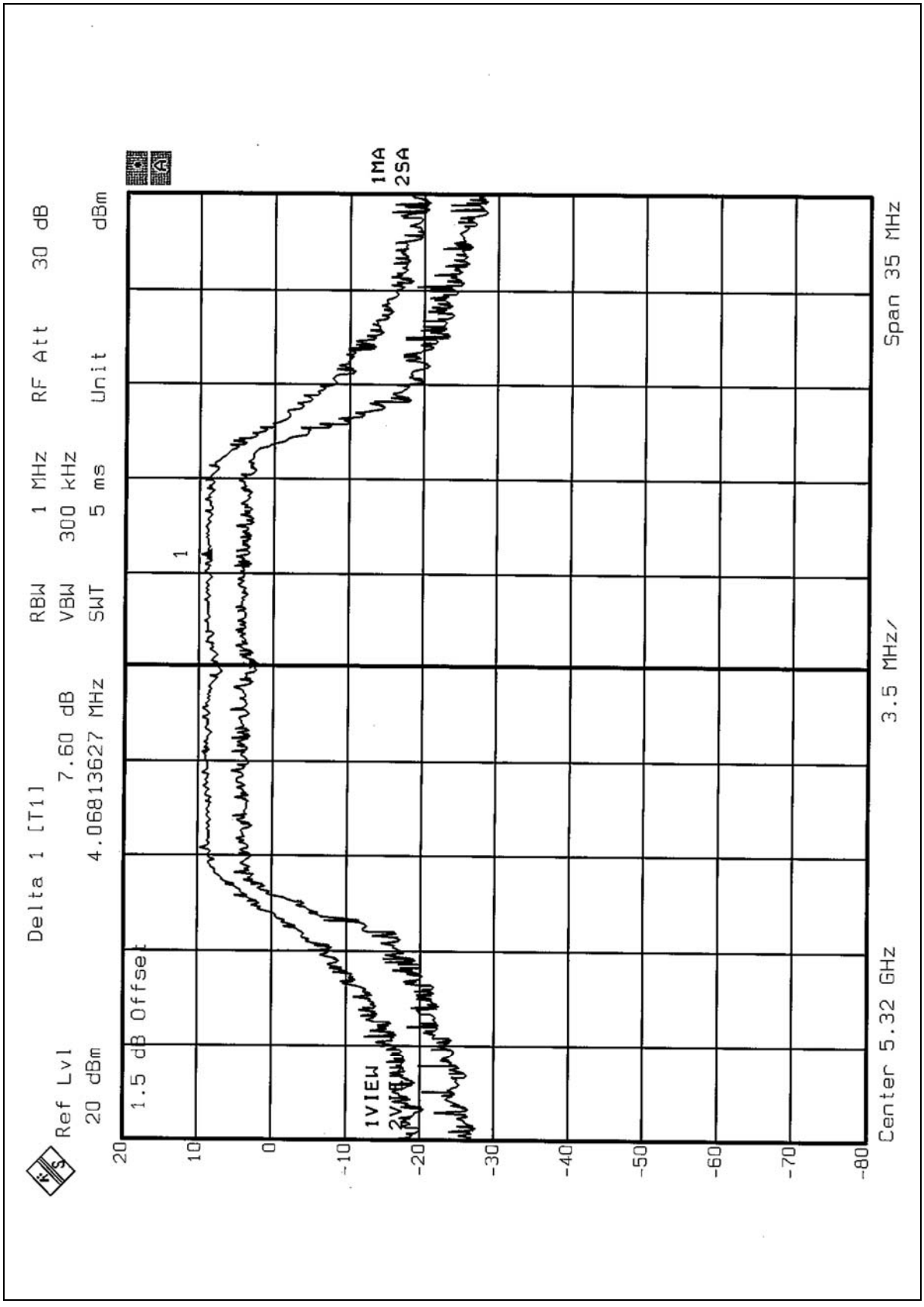
CH4


Delta 1 [T1]
8.32 dB
2.87575150 MHz
RBW 1 MHz
VBW 300 kHz
SWT 5 ms
RF Att 30 dB
Unit dBm
Ref Lvl
20 dBm
1.5 dB Offset
1MA
2SA
2VIEW
Center 5.24 GHz
3.5 MHz/
Span 35 MHz

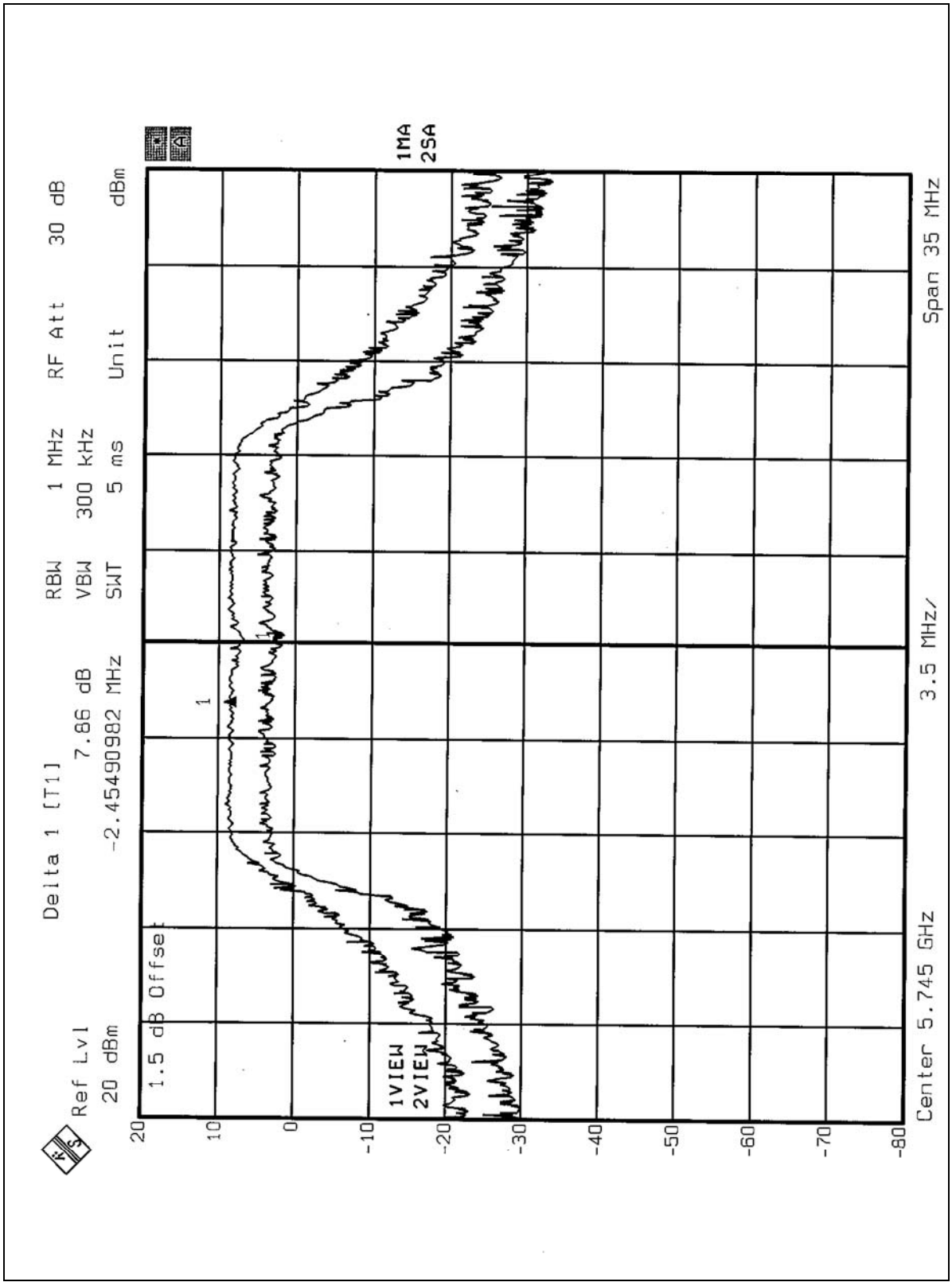
CH 5


Delta 1 [T1]
7.92 dB
-4.27855711 MHz
RBW 1 MHz
VBW 300 kHz
SWT 5 ms
RF Att 30 dB
Unit dBm
Ref Lvl
20 dBm
1.5 dB Offset
1MA
2SA
VIEW
Center 5.26 GHz
3.5 MHz/
Span 35 MHz

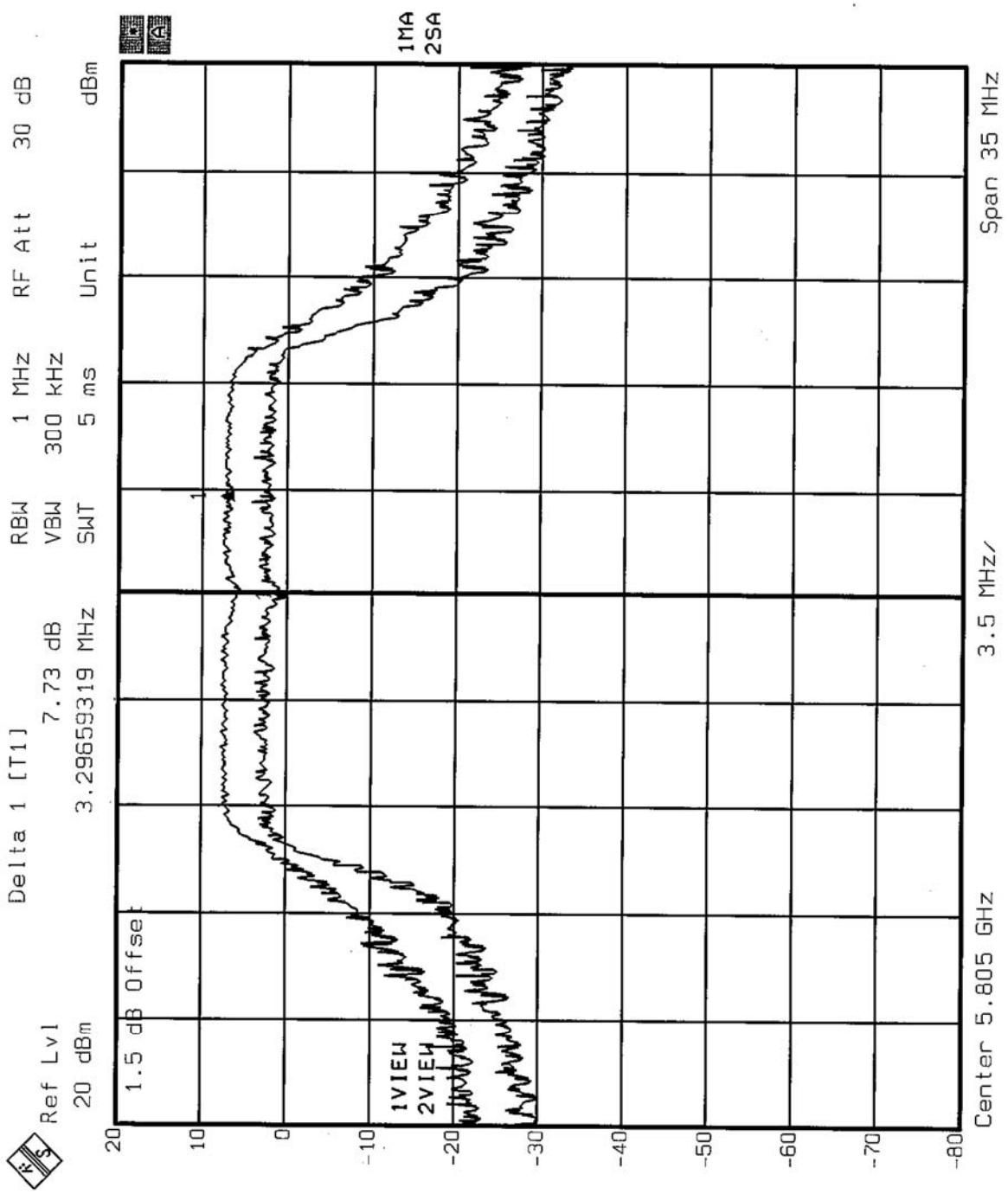
CH 8


Delta 1 [T1]
7.60 dB
4.06813627 MHz
RBW 1 MHz
VBW 300 kHz
SWT 5 ms
RF Att 30 dB
Unit dBm
Ref Lvl
20 dBm
1.5 dB Offset
1VIEW
1MA
2SA
Center 5.32 GHz
3.5 MHz/
Span 35 MHz

CH 9


Delta 1 [T1]
7.86 dB
-2.45490982 MHz
RBW 1 MHz
VBW 300 kHz
SWT 5 ms
RF Att 30 dB
Unit dBm
Ref Lvl
20 dBm
1.5 dB Offset
1MA
2SA
1VIEW
2VIEW
Center 5.745 GHz
3.5 MHz/
Span 35 MHz

CH 12

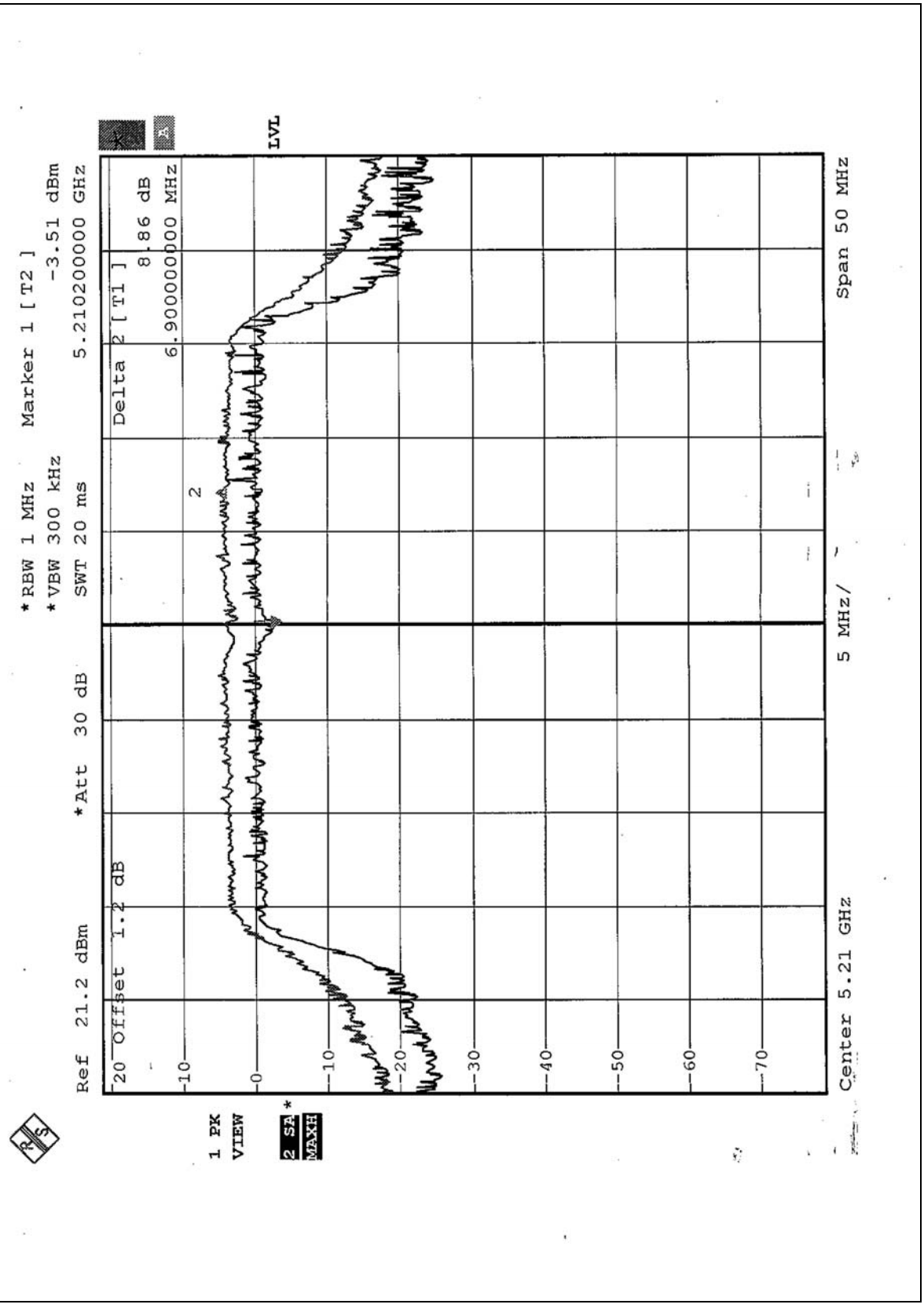

Delta 1 [T1]
7.73 dB
3.29659319 MHz
RBW 1 MHz
VBW 300 kHz
SWT 5 ms
RF Att 30 dB
Unit dBm
1MA
2SA
Ref Lvl
20 dBm
1.5 dB Offset
1VIEW
2VIEW
Center 5.805 GHz
3.5 MHz/
Span 35 MHz

TURBO MODE (MODE2)

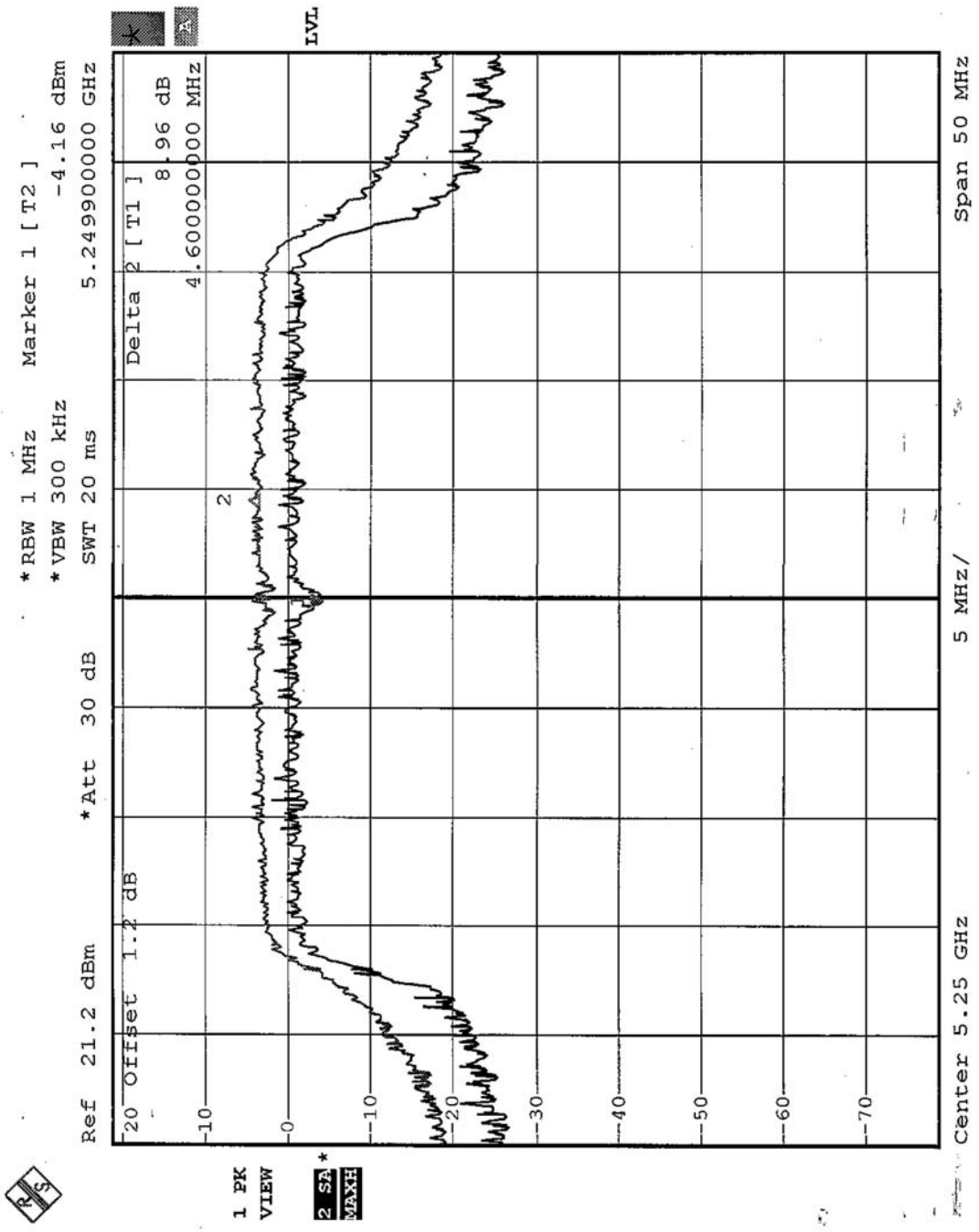
EUT	2.4/5GHz 54Mbps Wireless Mini PCI Card	**MODEL**	GL2554MP-1A
ENVIRONMENTAL CONDITIONS	24deg. C, 63%RH, 991hPa	**INPUT POWER (SYSTEM)**	120Vac, 60 Hz
TESTED BY	Ansen Lei		

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER EXCURSION (dB)	PEAK to AVERAGE EXCURSION LIMIT (dB)	PASS/FAIL
1	5210	8.86	13	PASS
2	5250	8.96	13	PASS
3	5290	9.05	13	PASS
4	5760	8.35	13	PASS
5	5800	9.08	13	PASS

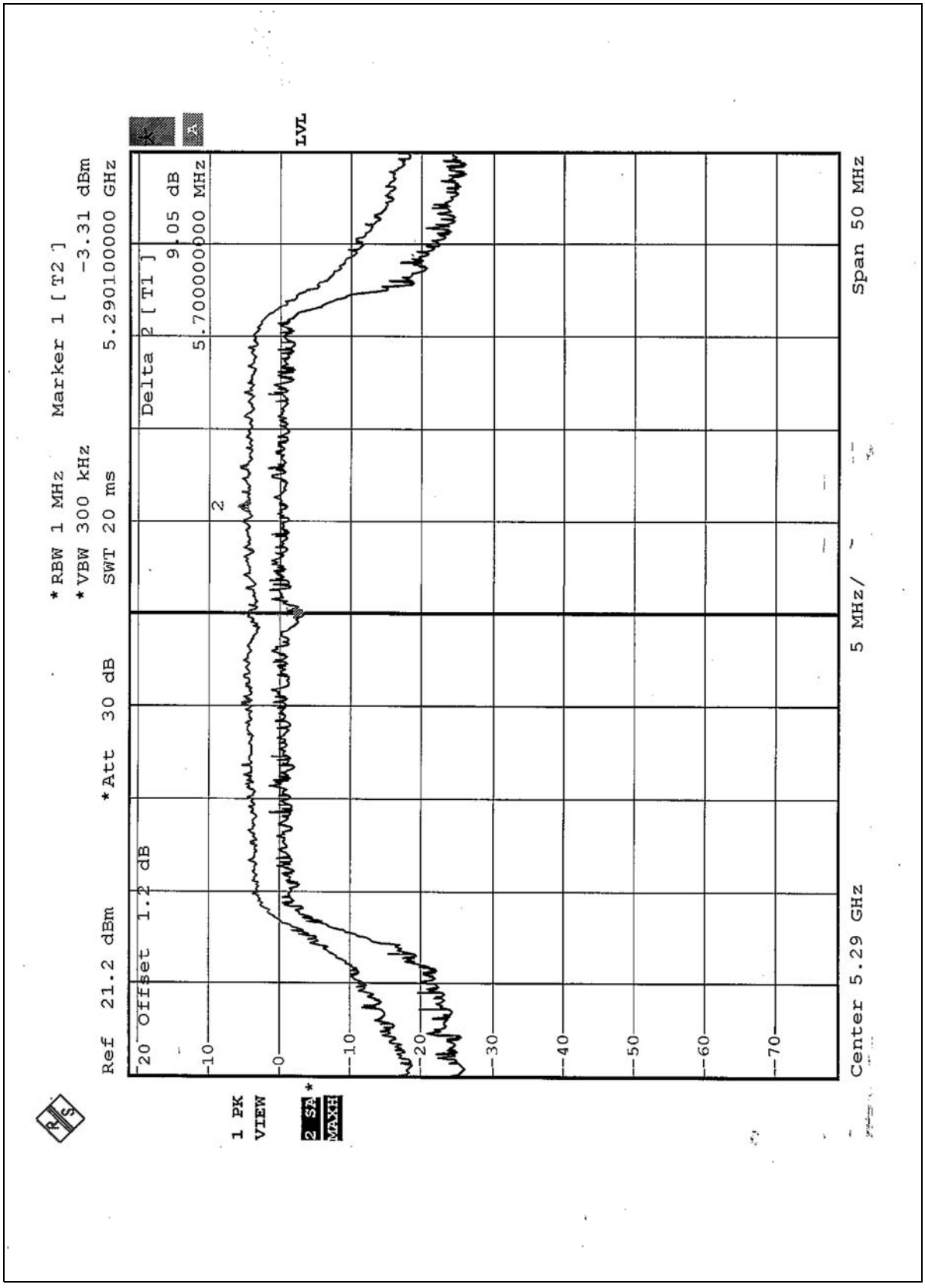
CH1


Ref 21.2 dBm
Offset 1.2 dB
*Att 30 dB
SWT 20 ms
*VBW 300 kHz
*RBW 1 MHz
Marker 1 [T2]
-3.51 dBm
5.210200000 GHz
Delta 2 [T1]
8.86 dB
6.900000000 MHz
LVL
Center 5.21 GHz
5 MHz/
Span 50 MHz
1 PK
VIEW
2 SA
MAXH

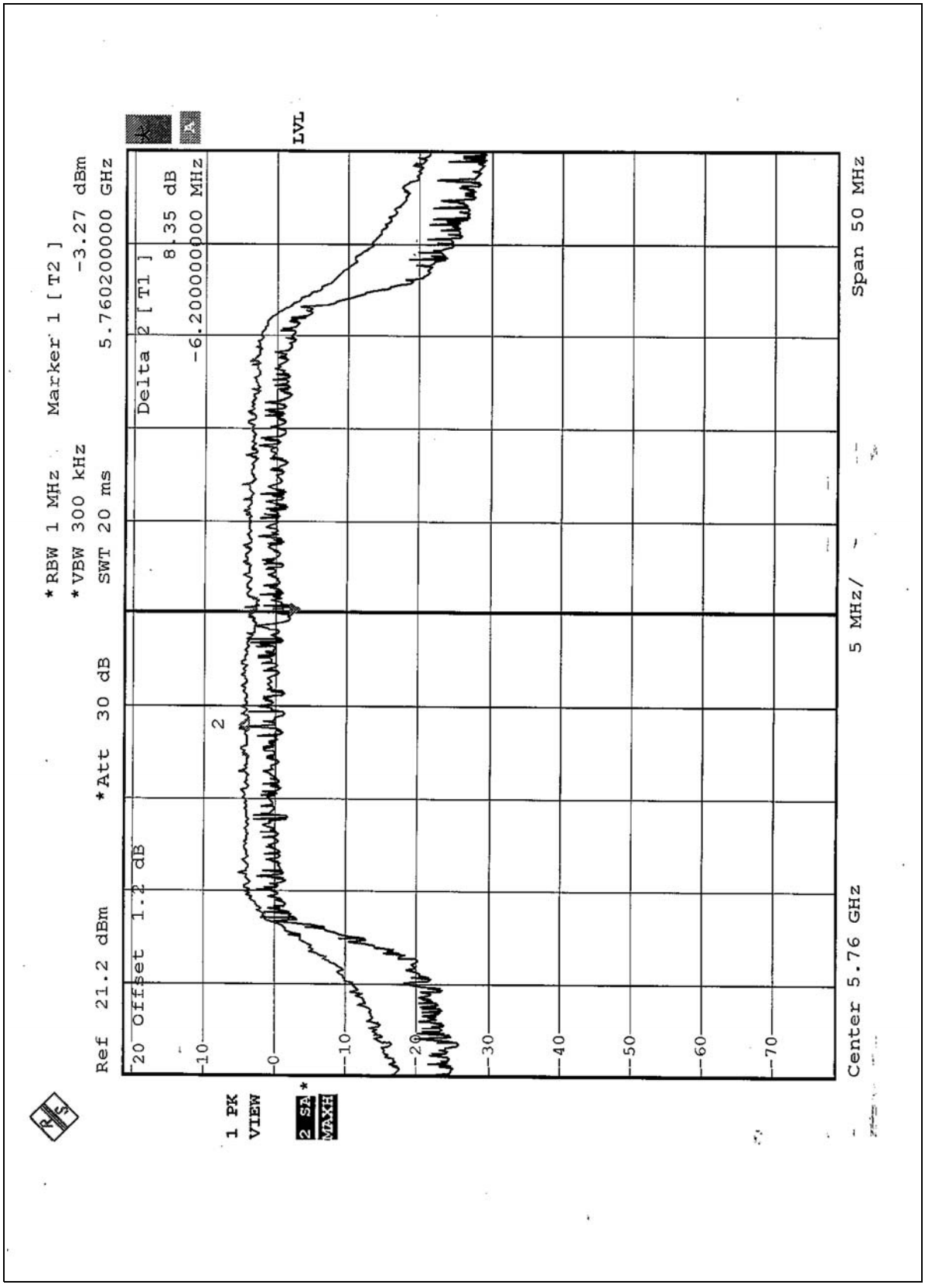
CH2


Ref 21.2 dBm
Offset 1.2 dB
*Att 30 dB
*VBW 300 kHz
SWT 20 ms
*RBW 1 MHz
Marker 1 [T2]
-4.16 dBm
5.249900000 GHz
Delta 2 [T1]
8.96 dB
4.600000000 MHz
LVL
Center 5.25 GHz
5 MHz/
Span 50 MHz
1 PK
VIEW
2 SA
MAXH

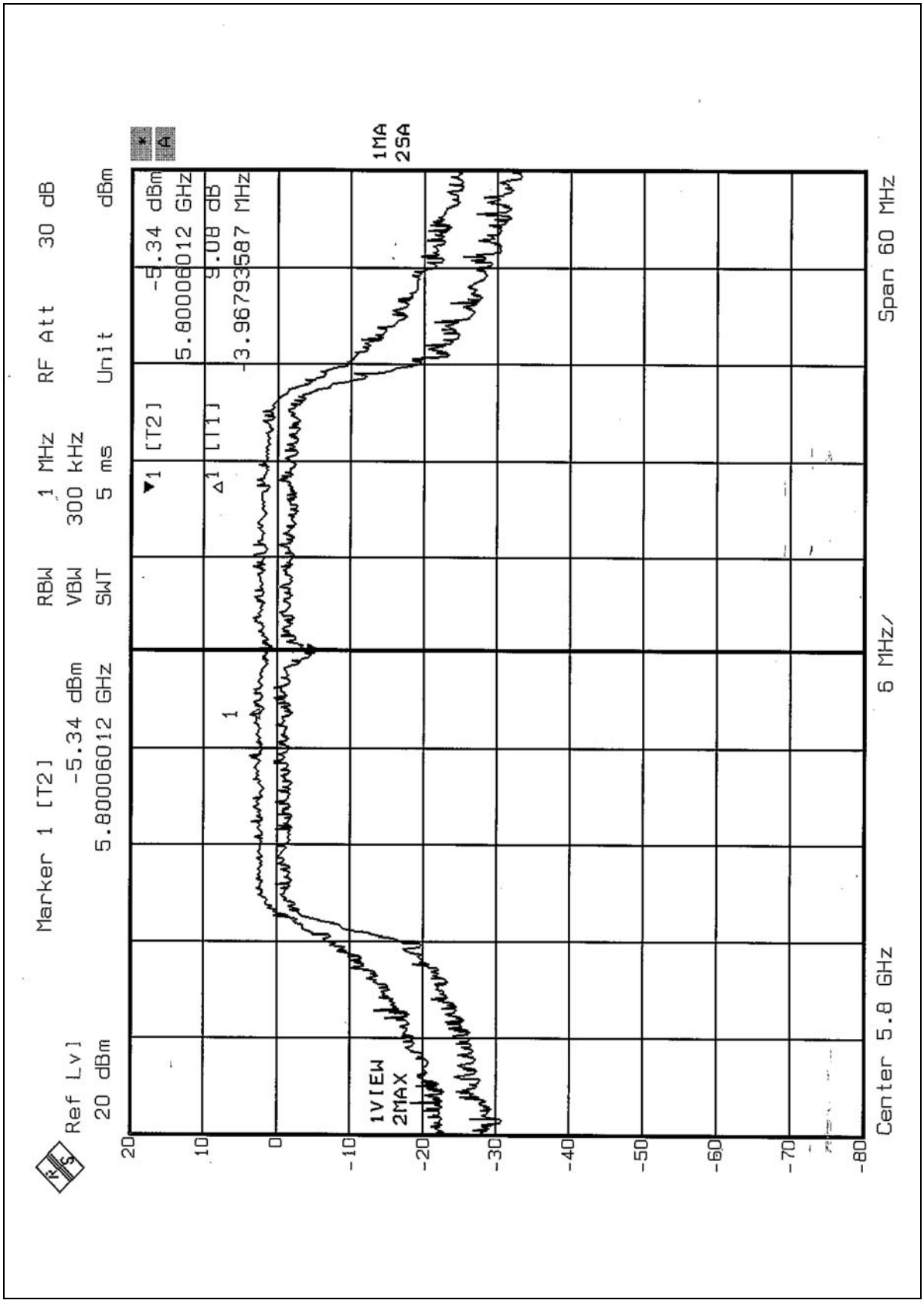
CH 3


Ref 21.2 dBm
Offset 1.2 dB
*Att 30 dB
*VBW 300 kHz
SWT 20 ms
*RBW 1 MHz
Marker 1 [T2]
-3.31 dBm
5.290100000 GHz
Delta 2 [T1]
9.05 dB
5.700000000 MHz
LVL
Center 5.29 GHz
5 MHz/
Span 50 MHz
1 PK
VIEW
2 SA *
MAXH

CH 4


RBW 1 MHz
VBW 300 kHz
SWT 20 ms
Marker 1 [T2]
-3.27 dBm
5.760200000 GHz
Delta 2 [T1]
8.35 dB
-6.200000000 MHz
Ref 21.2 dBm
Offset 1.2 dB
Att 30 dB
LVL
1 PK
VIEW
2 SR
MAXH
Center 5.76 GHz
5 MHz/
Span 50 MHz

CH 5

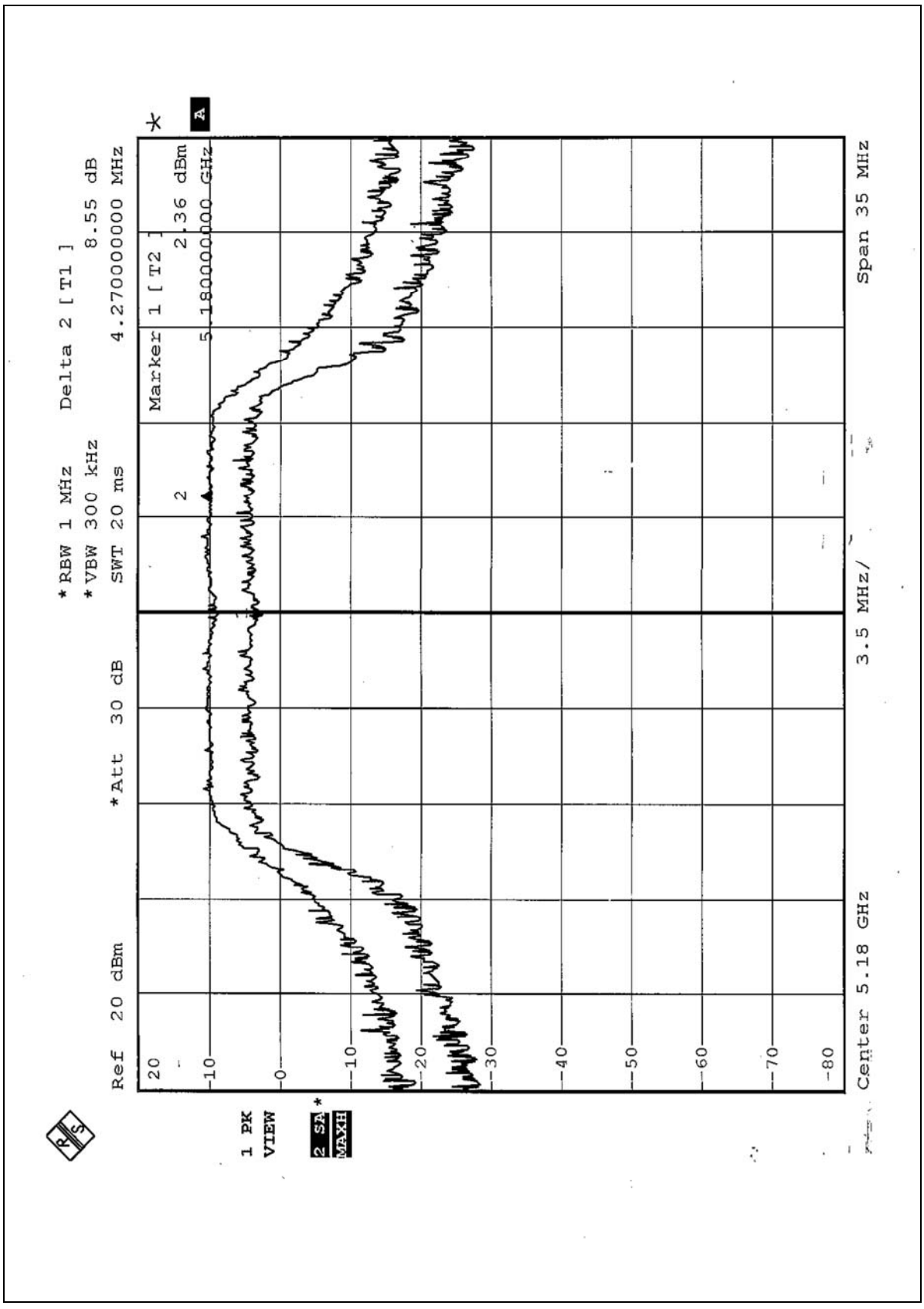

Marker 1 [T2]
-5.34 dBm
5.80006012 GHz
RBW 1 MHz
VBW 300 kHz
SWT 5 ms
RF Att 30 dB
Unit dBm
Ref Lvl
20 dBm
1VIEW
2MAX
1MA
2SA
Center 5.8 GHz
6 MHz/
Span 60 MHz
[T2]
-5.34 dBm
5.80006012 GHz
[T1]
9.08 dB
-3.96793587 MHz

NORMAL MODE (MODE 3、MODE 4)

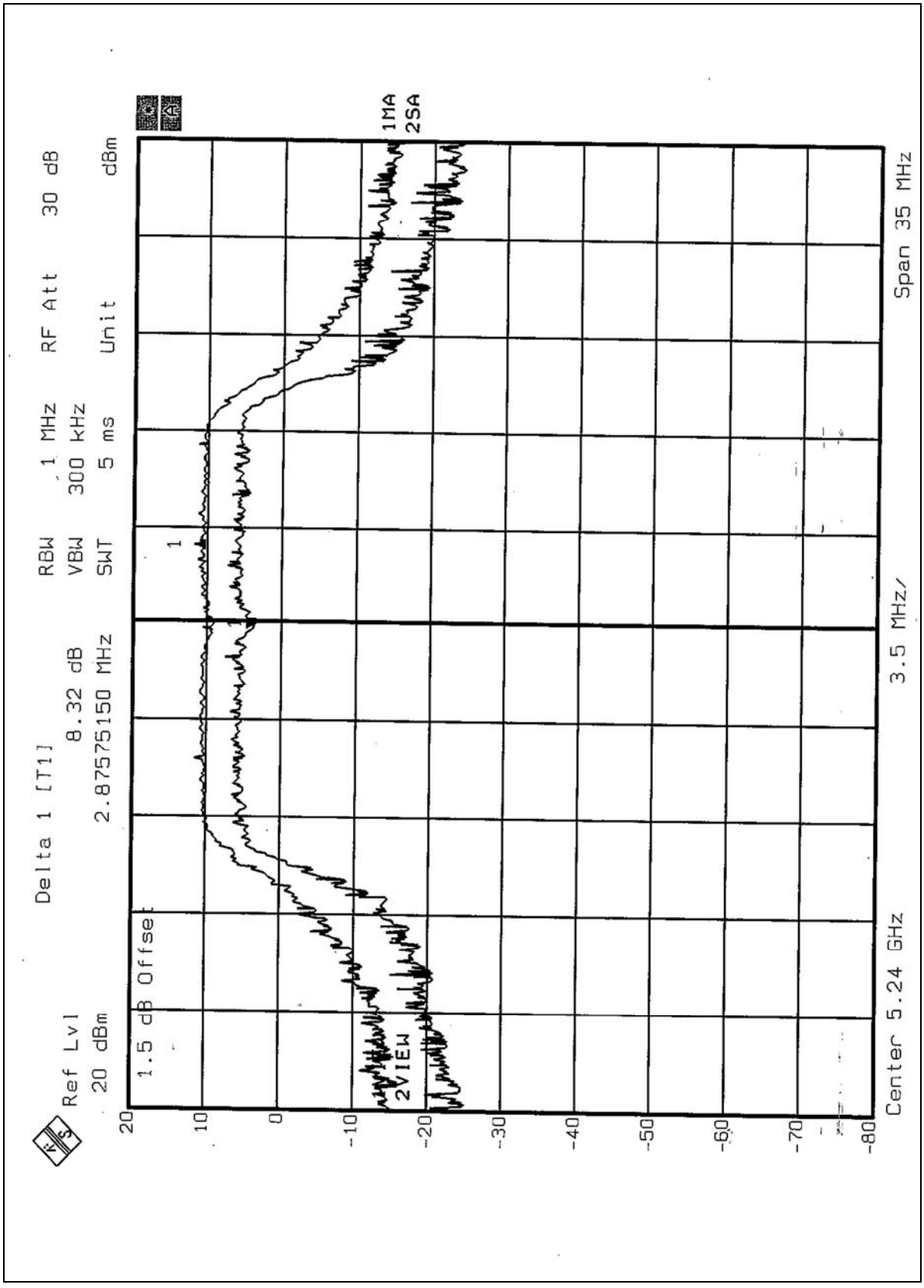
EUT	2.4/5GHz 54Mbps Wireless Mini PCI Card	**MODEL**	GL2554MP-1A
ENVIRONMENTAL CONDITIONS	24deg. C, 65%RH, 991hPa	**INPUT POWER (SYSTEM)**	120Vac, 60 Hz
TESTED BY	Ansen Lei		

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER EXCURSION (dB)	PEAK to AVERAGE EXCURSION LIMIT (dB)	PASS/FAIL
1	5180	8.55	13	PASS
4	5240	8.32	13	PASS
5	5260	7.92	13	PASS
8	5320	7.60	13	PASS
9	5745	8.19	13	PASS
12	5805	8.82	13	PASS

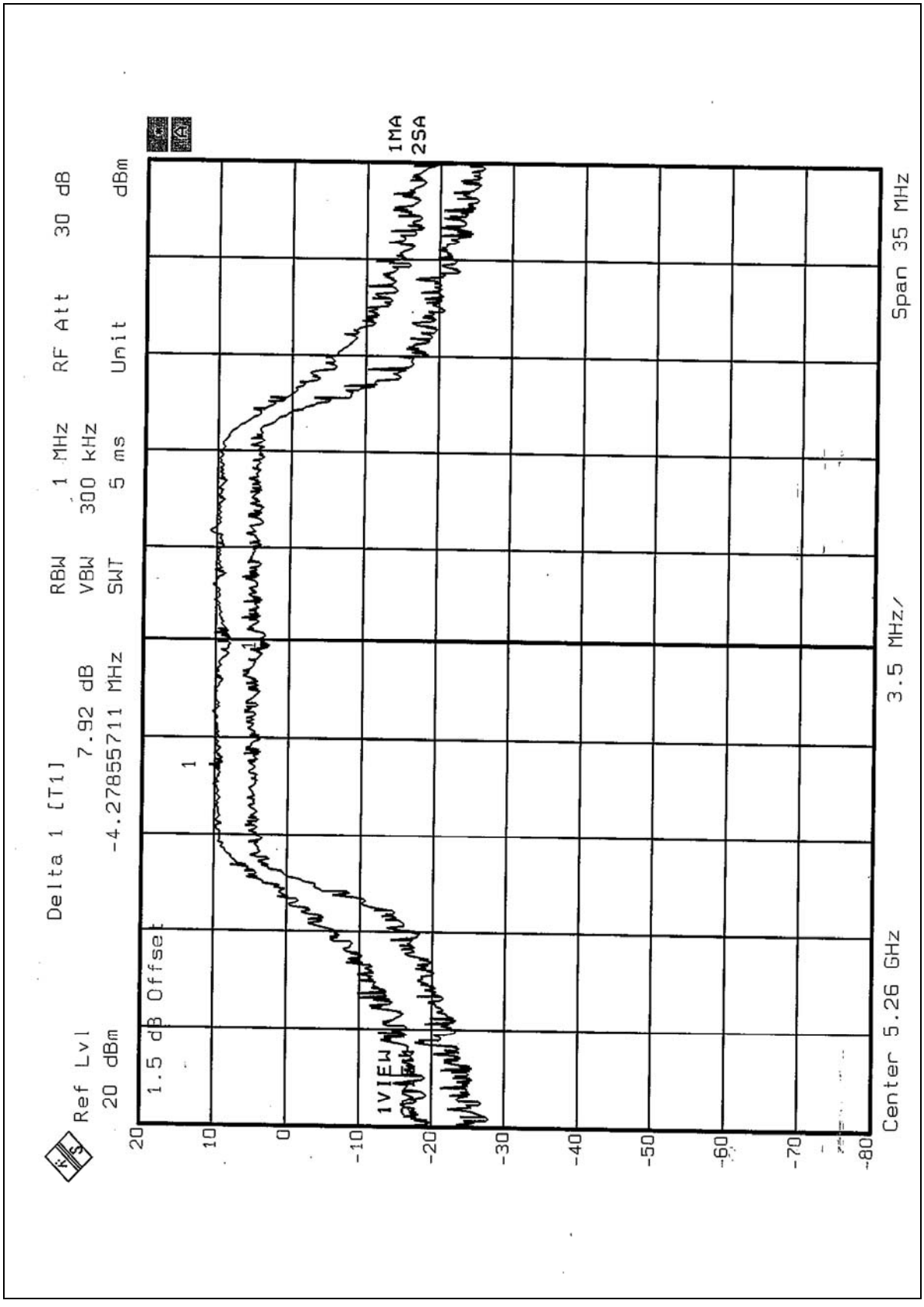
CH1


Ref 20 dBm
*Att 30 dB
SWT 20 ms
*VBW 300 kHz
*RBW 1 MHz
Delta 2 [T1] 8.55 dB
4.270000000 MHz
Marker 1 [T2] 2.36 dBm
5.180000000 GHz
Center 5.18 GHz
3.5 MHz/
Span 35 MHz
1 PK VIEW
2 SA MAXH

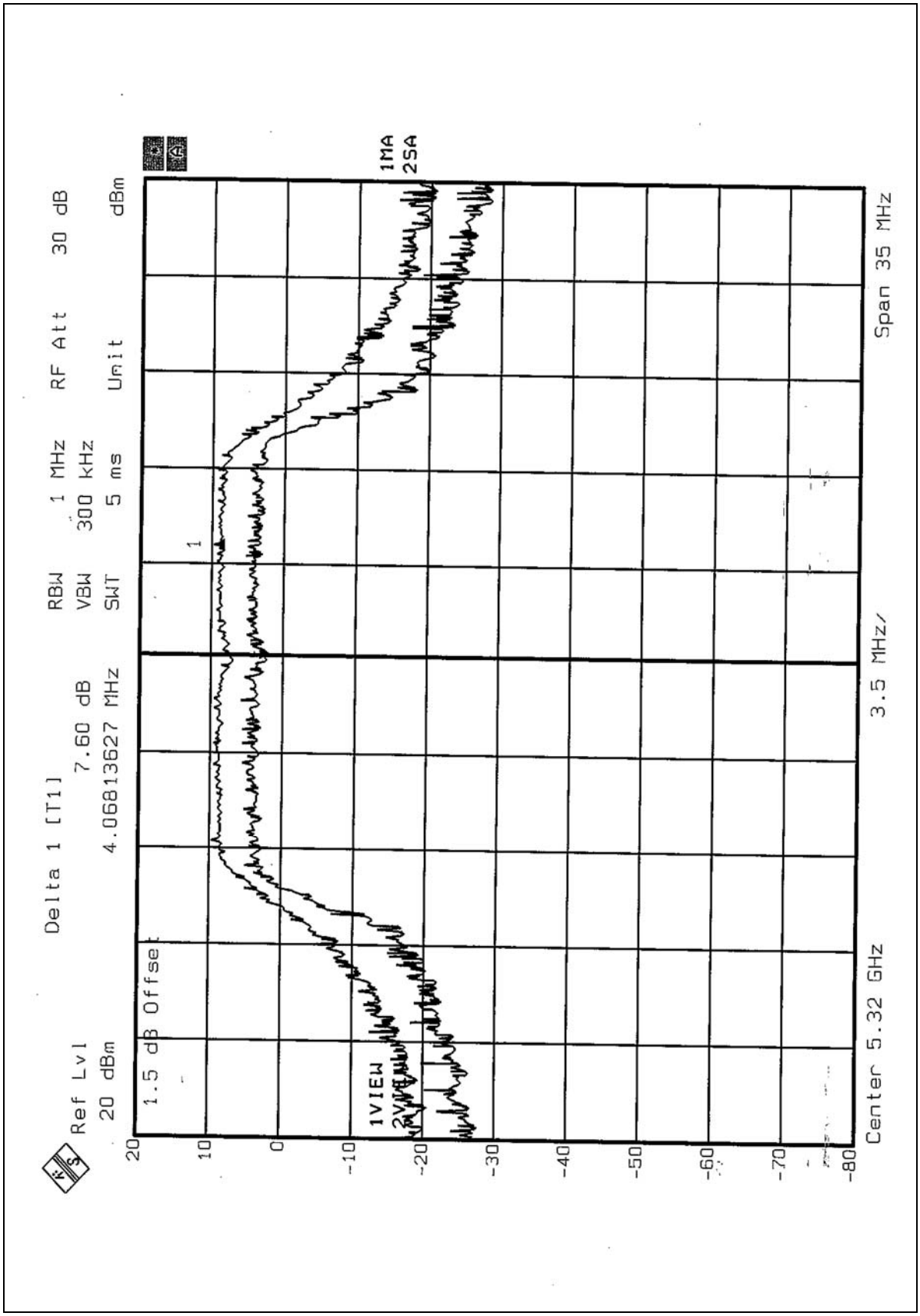
CH4


Ref Lvl
20 dBm
1.5 dB Offset
Delta 1 [T1]
8.32 dB
2.87575150 MHz
RBW 1 MHz
VBW 300 kHz
SWT 5 ms
RF Att 30 dB
Unit dBm
1MA
2SA
2VIEW
Center 5.24 GHz
3.5 MHz/
Span 35 MHz
20
10
0
-10
-20
-30
-40
-50
-60
-70
-80

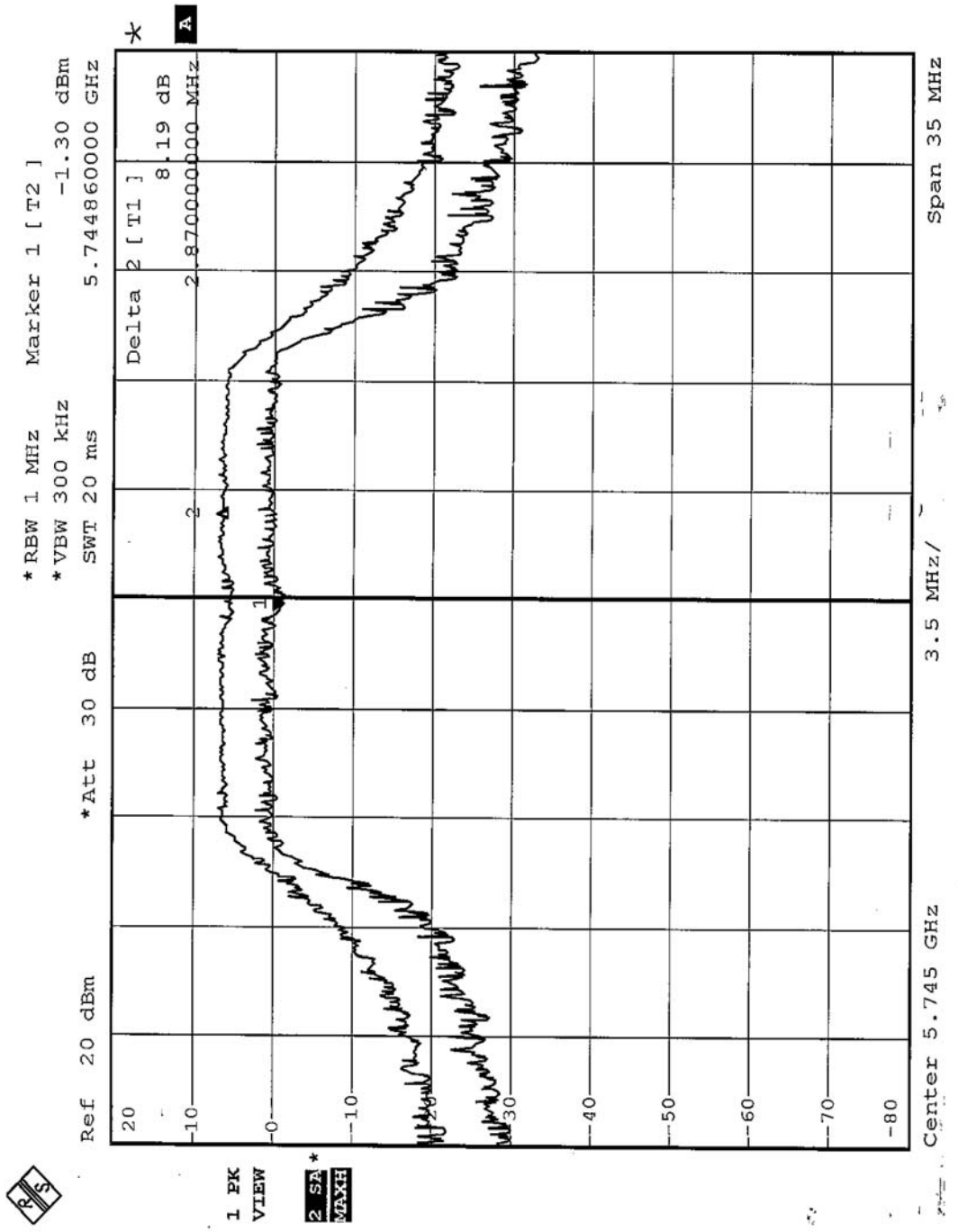
CH 5


Ref Lvl
20 dBm
1.5 dB Offset
Delta 1 [T1]
7.92 dB
-4.27855711 MHz
RBW 1 MHz
VBW 300 kHz
SWT 5 ms
RF Att 30 dB
Unit dBm
1MA
2SA
1VIEW
Center 5.26 GHz
3.5 MHz/
Span 35 MHz

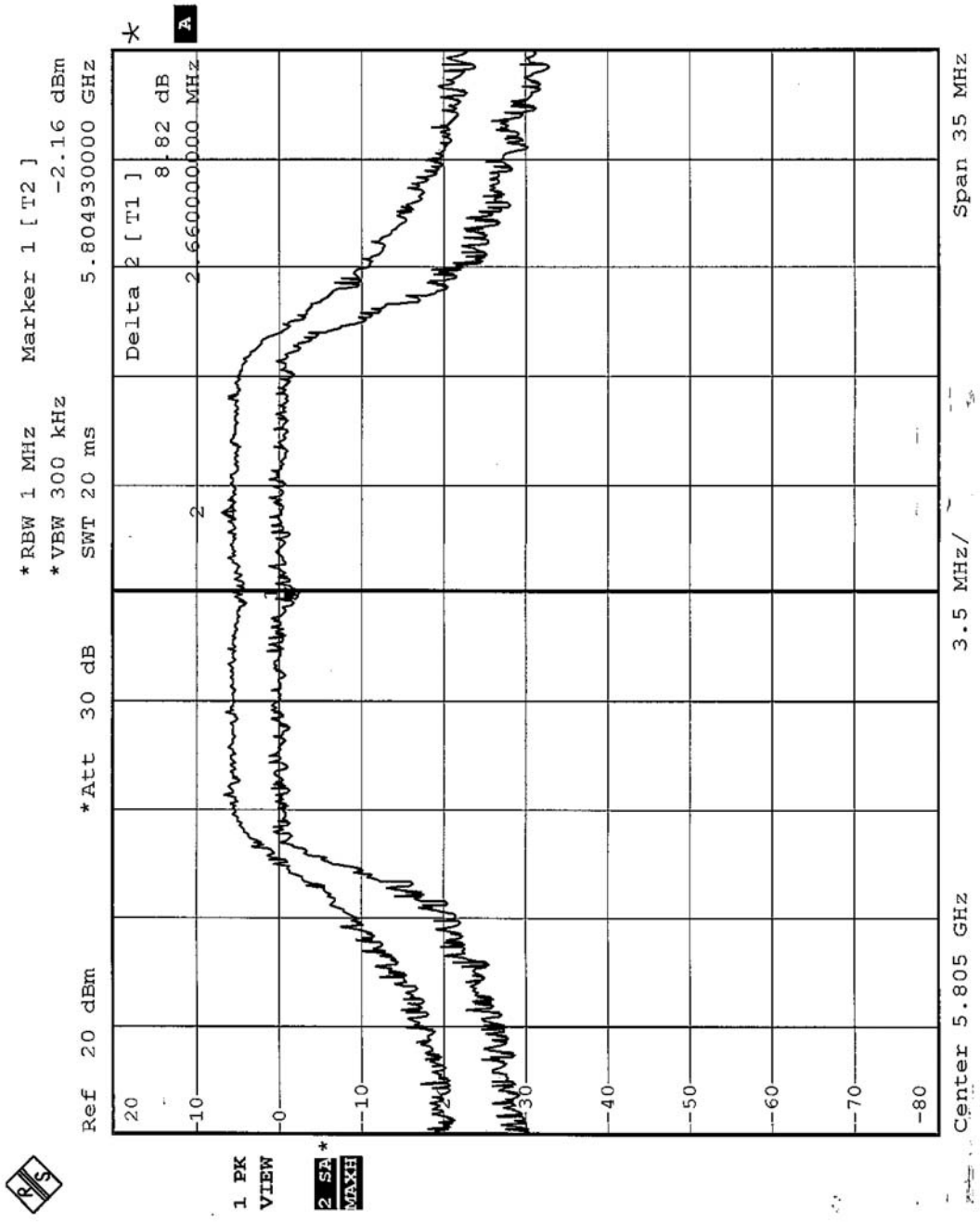
CH 8


Delta 1 [T1]
7.60 dB
4.06813627 MHz
RBW 1 MHz
VBW 300 kHz
SWT 5 ms
RF Att 30 dB
Unit dBm
Ref Lvl
20 dBm
1.5 dB Offset
1MA
2SA
1VIEW
2VIEW
Center 5.32 GHz
3.5 MHz/
Span 35 MHz

CH 9


*RBW 1 MHz
*VBW 300 kHz
SWT 20 ms
Marker 1 [T2]
-1.30 dBm
5.744860000 GHz
Delta 2 [T1]
8.19 dB
2.870000000 MHz
*Att 30 dB
Ref 20 dBm
Center 5.745 GHz
3.5 MHz/
Span 35 MHz
1 PK
VIEW
2 SA
MAXH

CH 12


Marker 1 [T2]
-2.16 dBm
5.804930000 GHz
Delta 2 [T1]
8.82 dB
2.660000000 MHz
*RBW 1 MHz
*VBW 300 kHz
SWT 20 ms
*Att 30 dB
Ref 20 dBm
Center 5.805 GHz
3.5 MHz/
Span 35 MHz
1 PK
VIEW
2 SA
MAXH

5.5 PEAK POWER SPECTRAL DENSITY MEASUREMENT

5.5.1 LIMITS OF PEAK POWER SPECTRAL DENSITY MEASUREMENT

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

5.5.2 TEST INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
SPECTRUM ANALYZER	FSEK30	100049	August 12, 2004
SPECTRUM ANALYZER	8564EC	4208A00660	Nov. 20, 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

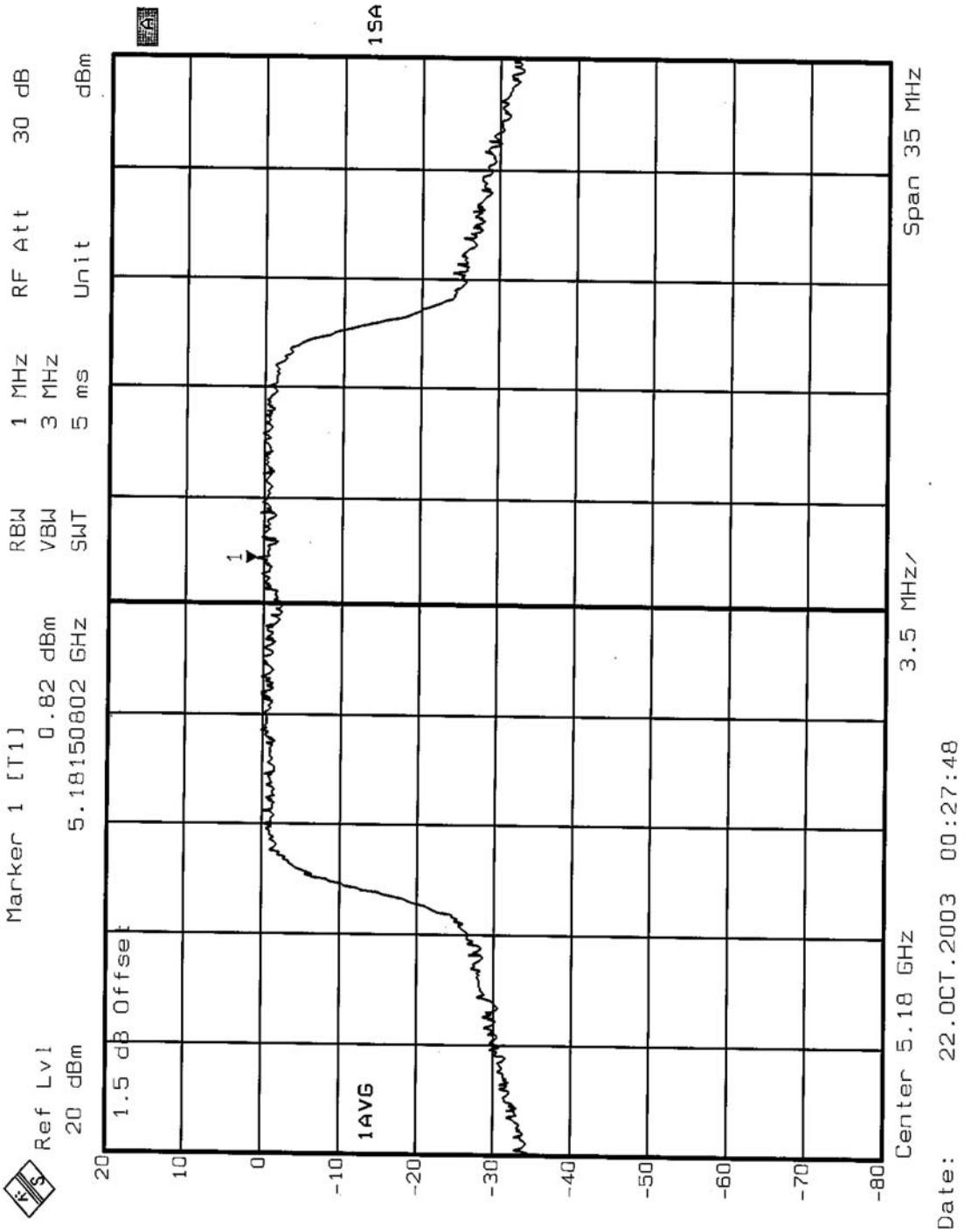
5.5.7 TEST RESULTS

NORMAL MODE (MODE1、MODE2)

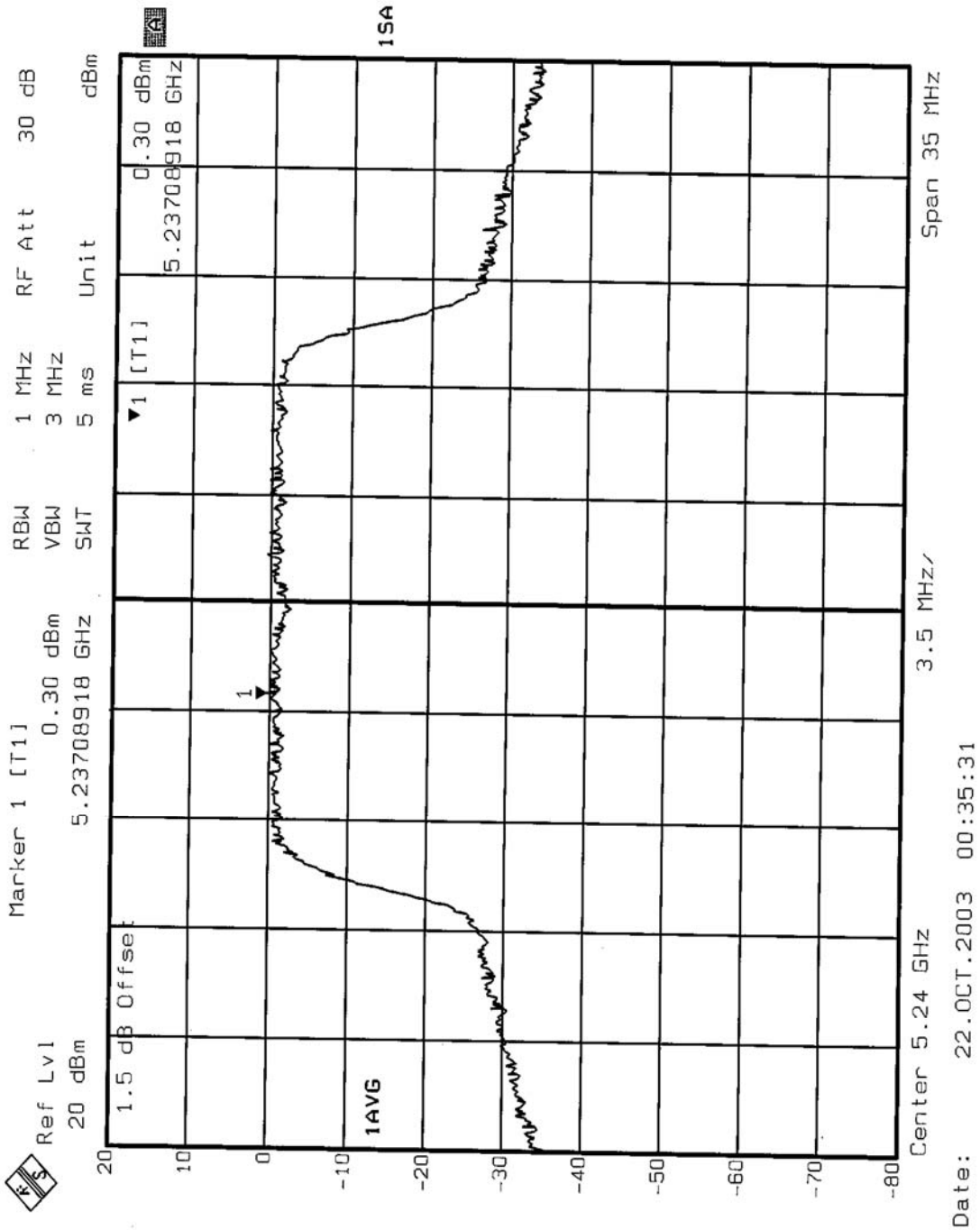
EUT	2.4/5GHz 54Mbps Wireless Mini PCI Card	**MODEL**	GL2554MP-1A
ENVIRONMENTAL CONDITIONS	24deg. C, 65%RH, 991hPa	**INPUT POWER (SYSTEM)**	120Vac, 60 Hz
TESTED BY	Ansen Lei		

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 1MHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	5180	0.82	4	PASS
4	5240	0.30	4	PASS
5	5260	-0.17	11	PASS
8	5320	-1.06	11	PASS
9	5745	-1.60	17	PASS
12	5805	-1.98	17	PASS

CH 1


Marker 1 [T1]
0.82 dBm
5.18150802 GHz
RBW 1 MHz
VBW 3 MHz
SWT 5 ms
RF Att 30 dB
Unit dBm
Ref Lvl
20 dBm
1.5 dB Offset
1AVG
1SA
Center 5.18 GHz
3.5 MHz/
Span 35 MHz
Date: 22.OCT.2003 00:27:48

CH 4


Marker 1 [T1]
0.30 dBm
5.23708918 GHz
RBW 1 MHz
VBW 3 MHz
SWT 5 ms
RF Att 30 dB
Unit dBm
Ref Lvl
20 dBm
1.5 dB Offset
1AVG
1SA
Center 5.24 GHz
3.5 MHz/
Span 35 MHz
Date: 22.OCT.2003 00:35:31