

Supplementary Material Contents Page

S1: ^1H NMR of **1**

S2: ^{13}C NMR of **1**

S3: ^1H NMR of **major intermediate 4**

S4: ^{13}C NMR of **major intermediate 4**

S5: ^1H NMR of **3**

S6: ^{13}C NMR of **3**

S7: ^1H NMR of **2**

S8: ^{13}C NMR of **2**

1: 25,27-Bis(benzyloxycarbonyloxy)-26,28-dihydroxycalix[4]arene

major intermediate 4: 5,17-Dinitro-25,27-bis(benzyloxycarbonyloxy)-26,28-dihydroxycalix[4]arene

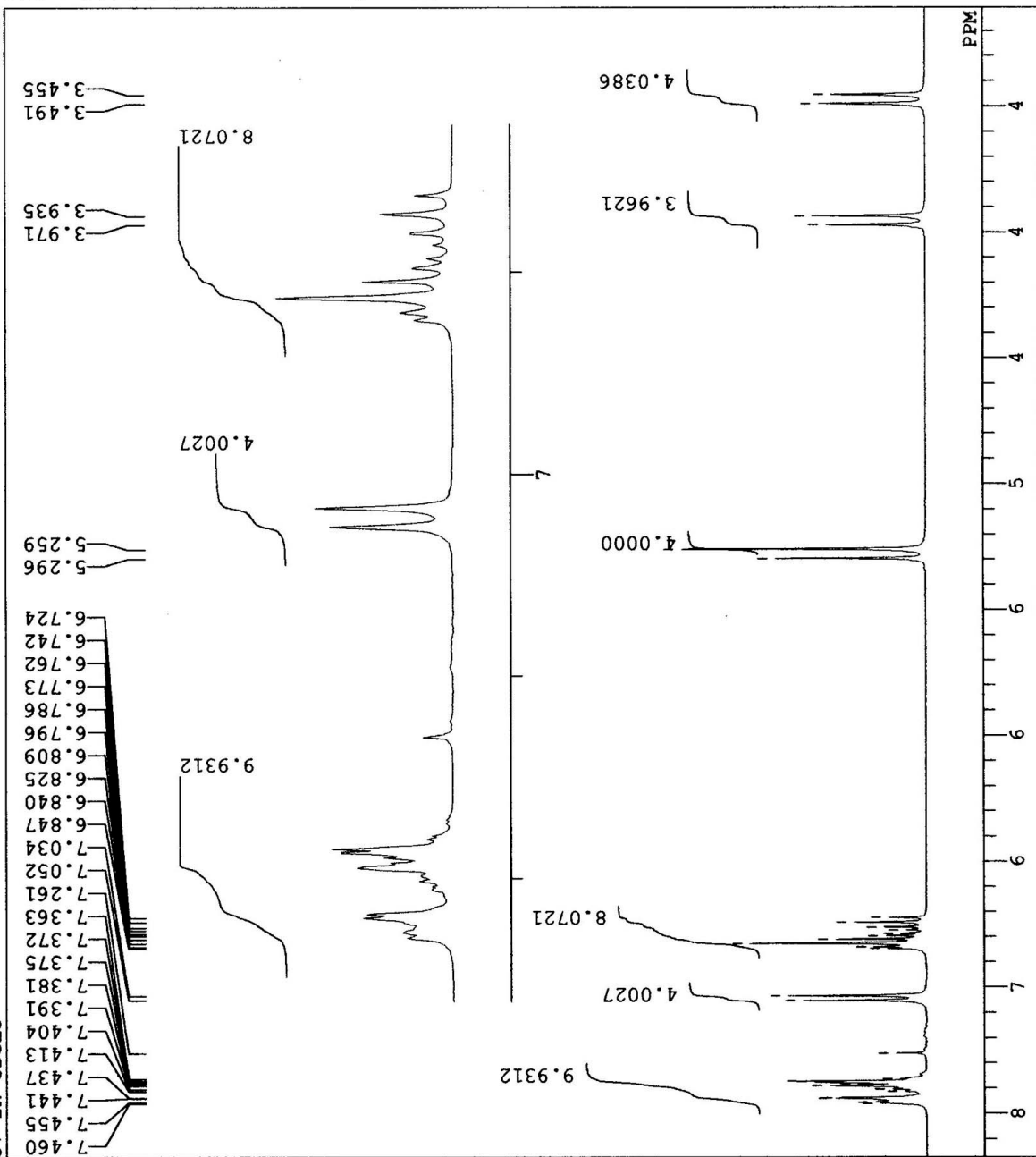
2: 5,11-Dinitro-25,26-bis(benzyloxycarbonyloxy)-27,28-bis(tolylsulfonyloxy)calix[4]arene

3: 5,17-Dinitro-25,27-bis(benzyloxycarbonyloxy)-26,28-bis(tolylsulfonyloxy)calix[4]arene

57-IN-CDCL3

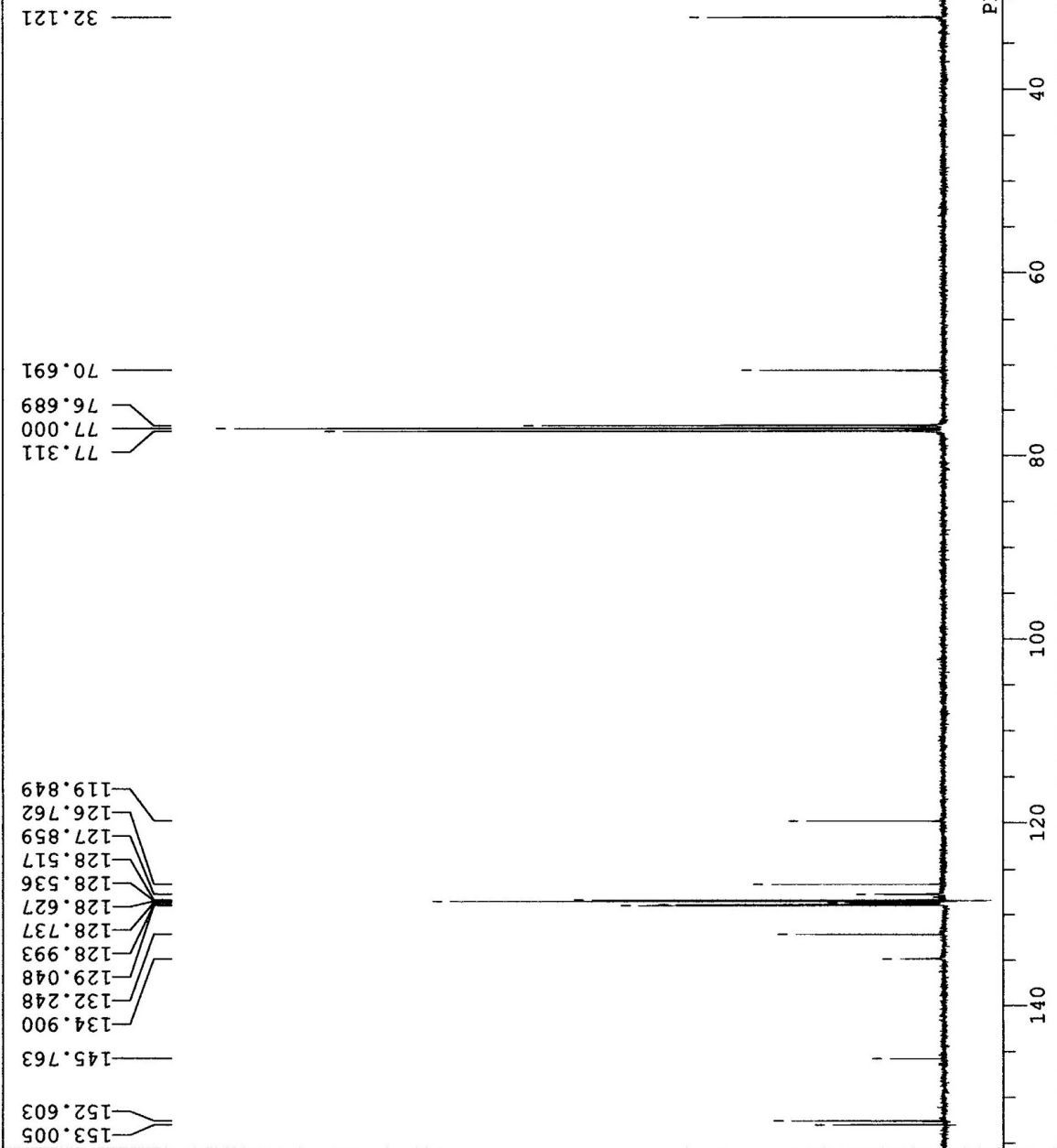
DFILE
COMNT
DATIM
OBNUC
EXMOD
OBFRO
OBSET
OBFIN
POINT
FREQU
SCANS
ACQTM
PD
PW1
IRNUC
CTEMP
SLVNT
EXREF
BF
RGAIN

D:\NMR199\CALIX\12c57h.
57-IN-CDCL3
07-JUL-99 11:04:32
1H
NON
399.65 MHz
124.00 KHz
10500.0 Hz
16384
8000.0 Hz
16
2.048 sec
4.952 sec
5.4 us
1H
25.1 c
CDCL3
7.26 ppm
0.12 Hz
20



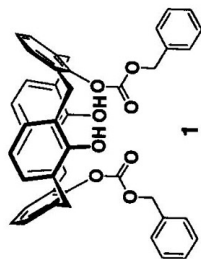
S1

57-IN-CDCL3



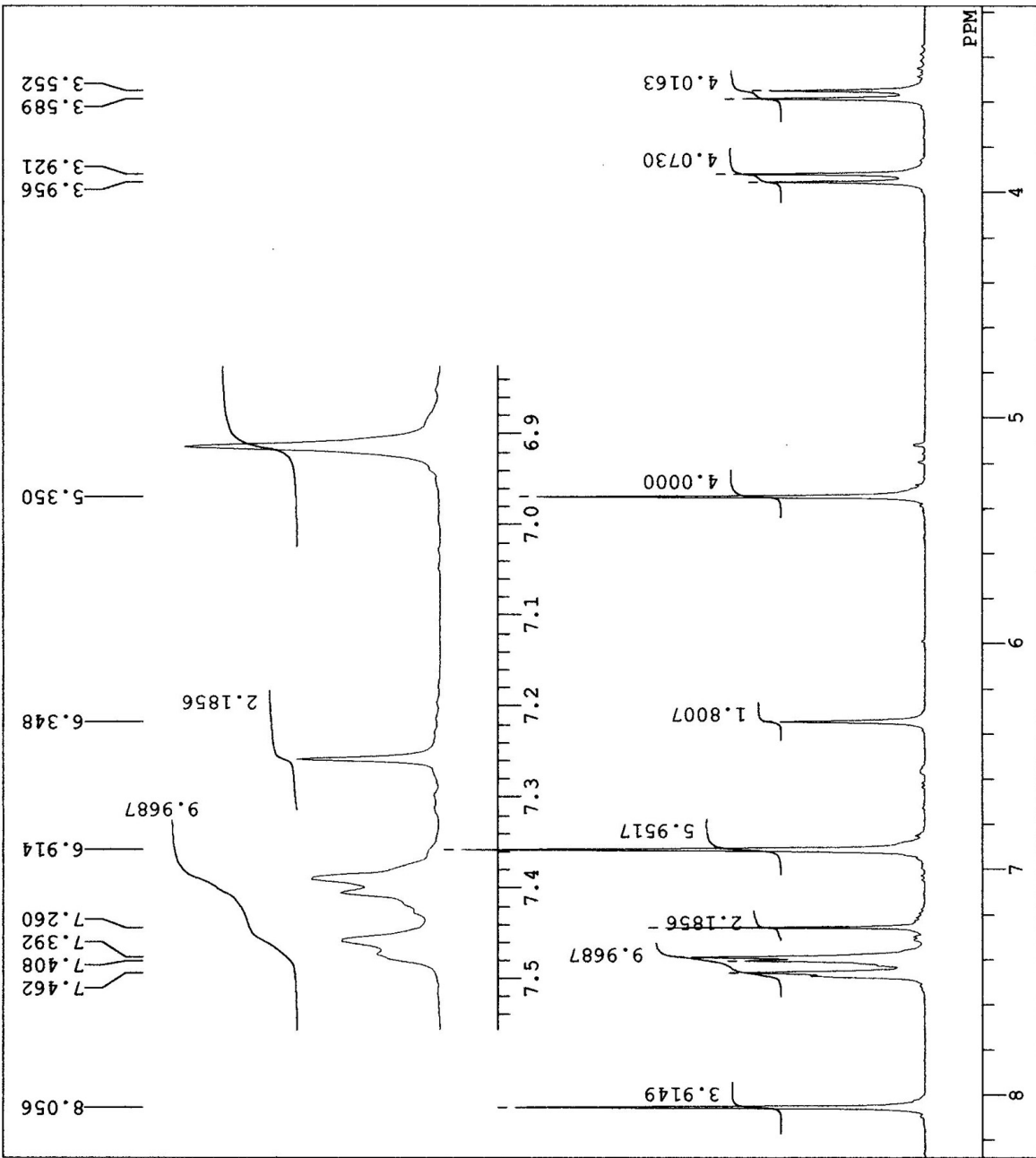
D:\NMR199\CALIX\12c57c.
 COMNT 57-IN-CDCL3
 DATIM 07-JUL-99 12:55:33
 OBNUC 13C
 EXMOD BCM
 OBFRO 100.40 MHz
 OBSET 125.00 KHz
 OBFIN 10500.0 Hz
 POINT 16384
 FREQU 30120.5 Hz
 SCANS 1771
 ACQTM 0.544 sec
 PD 2.456 sec
 PW1 4.5 us
 IRNUC 1H
 CTEMP 23.5 c
 SLVNT CDCL3
 EXREF 77.00 ppm
 BF 0.12 Hz
 RGAIN 28

S2

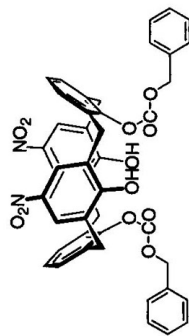


CALIX-58A

D:\NMR1999\CALIX\12c58a
 COMNT CALIX-58A
 DATIM 24-JUL-99 19:17:48
 OBNUC 1H
 EXMOD NON
 OBFRO 399.65 MHz
 OBSET 124.00 KHz
 OBFIN 10500.0 Hz
 POINT 16384
 FREQU 8000.0 Hz
 SCANS 16
 ACQTM 2.048 sec
 PD 4.952 sec
 PW1 5.4 us
 IRNUC 1H
 CTEMP 24.4 c
 SLVNT CDCL3
 EXREF 7.26 ppm
 BF 0.12 Hz
 RGAIN 20



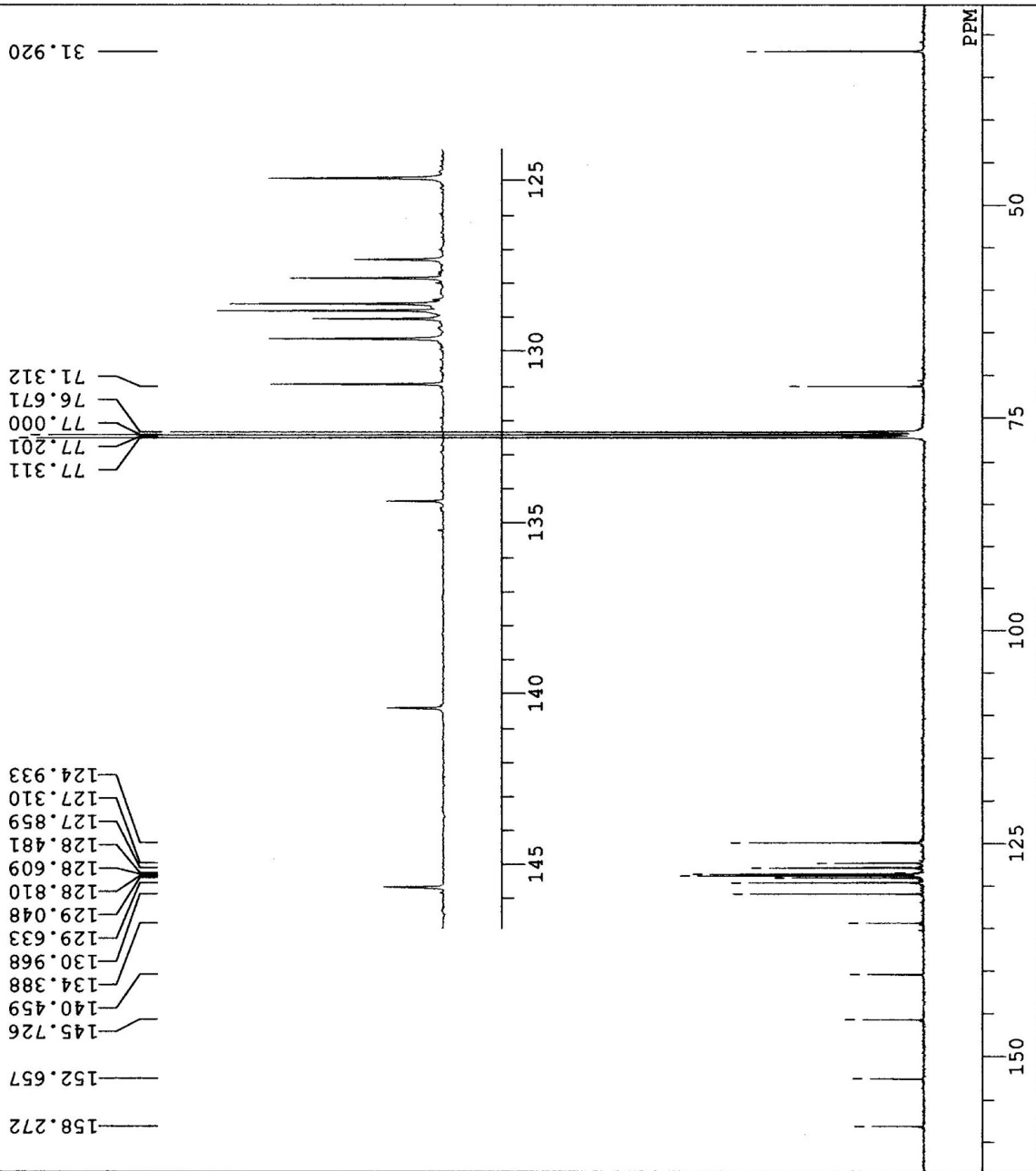
S3



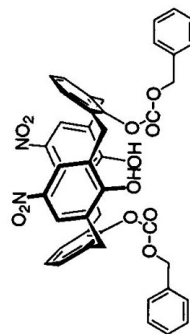
major intermediate

CALIX-58A

D:\NMR1999\CALIX\12c58ac
COMNT CALIX-58A
DATIM 25-JUL-99 07:09:35
OBNUC 13C
EXMOD BCM
OBFRO 100.40 MHz
OBSET 125.00 KHz
OBFIN 10500.0 Hz
POINT 16384
FREQU 30120.5 Hz
SCANS 14172
ACQTM 0.544 sec
PD 2.456 sec
PW1 4.5 us
IRNUC 1H
CTEMP 24.5 c
SLVNT CDCL3
EXREF 77.00 ppm
BF 1.20 Hz
RGAIN 29



S4



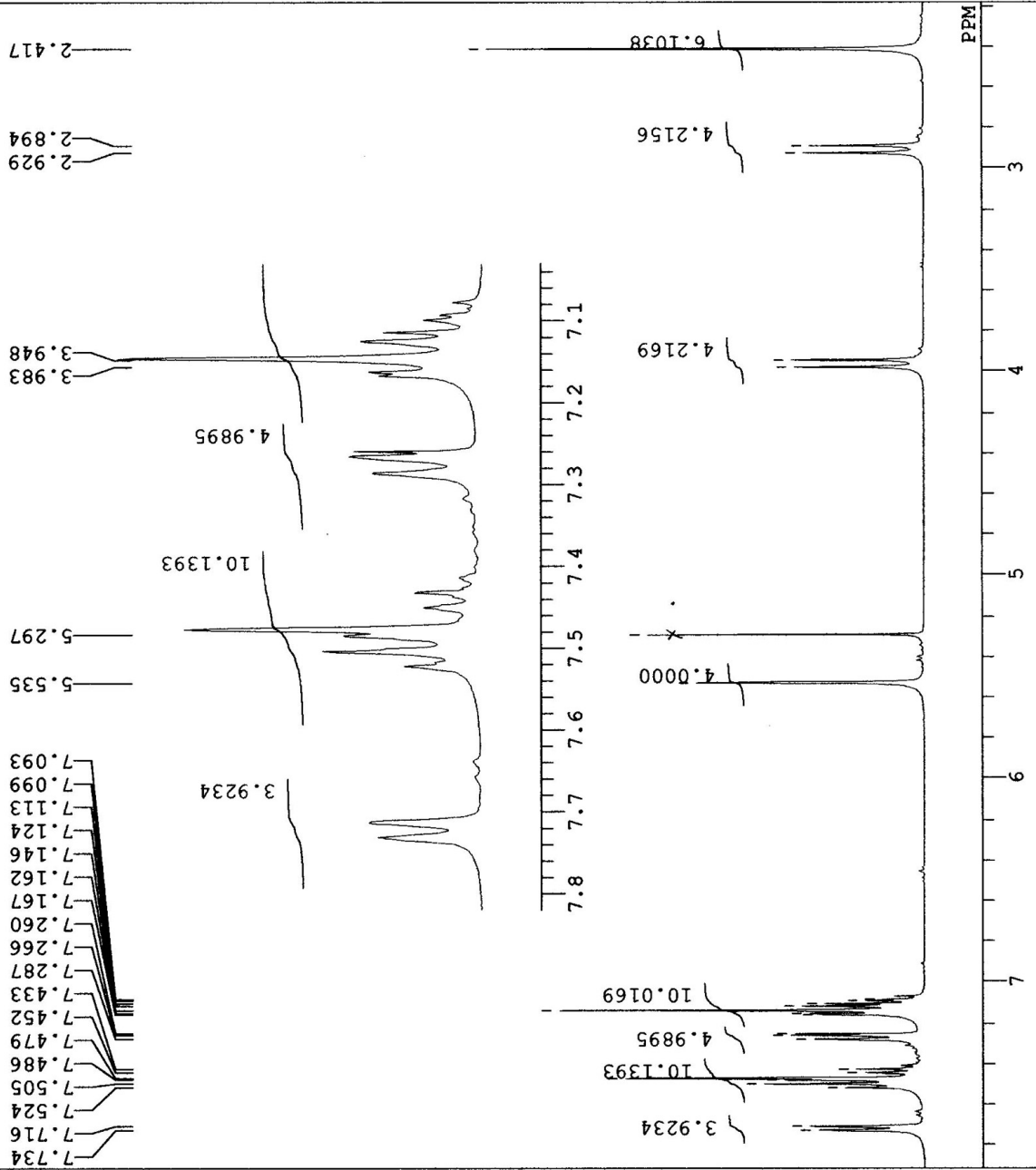
major intermediate

CALIX[4]-FR-B-IN-CDCL3

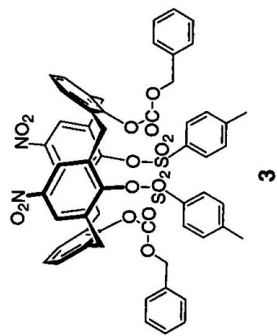
DFILE
COMNT
DATIM
OBNUC
EXMOD
OBFRO
OBSET
OBFIN
POINT
FREQU
SCANS
ACQTM
PD
PW1
IRNUC
CTEMP
SLVNT
EXREF
BF
RGAIN

D:\NMR1999\CALIX\12c61b1:
CALIX[4]-FR-B-IN-CDCL3
07-JUL-99 13:01:48
1H
NON

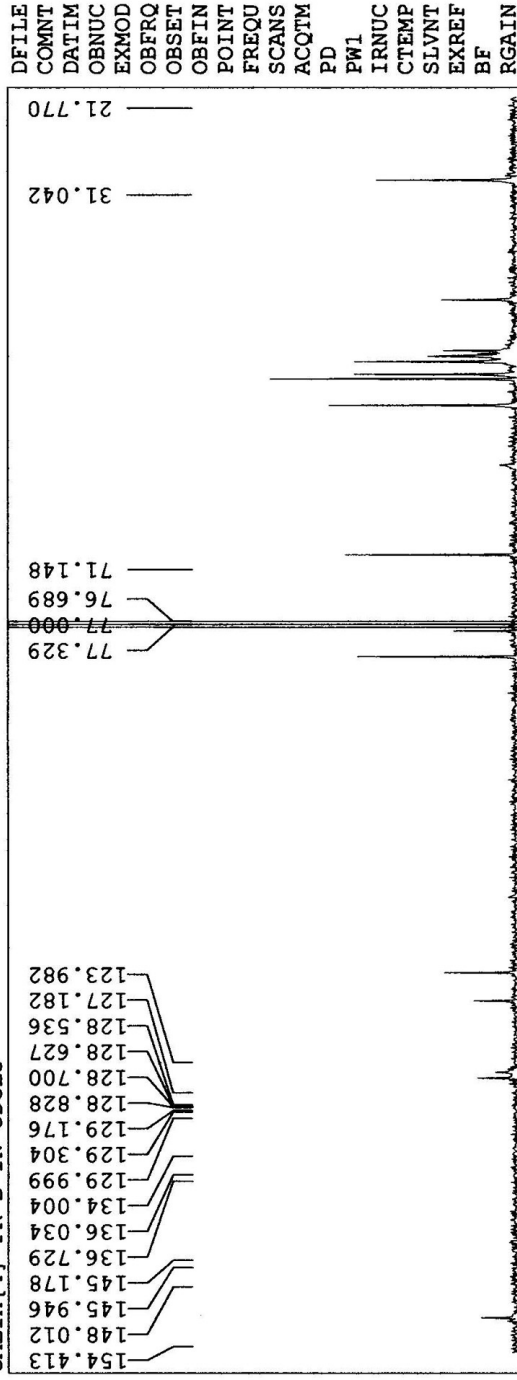
399.65 MHz
124.00 KHz
10500.0 Hz
16384
8000.0 Hz
16
2.048 sec
4.952 sec
5.4 us
1H
23.4 C
CDCL3
7.26 ppm
1.20 Hz
21



S5



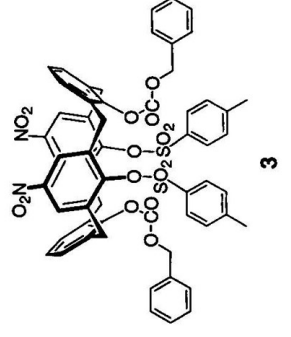
CALIX[4]-FR-B-IN-CDCL3



DFILE D:\NMR1999\CALIX\12c61bc
COMNT CALIX[4]-FR-B-IN-CDCL3
DATIM 07-JUL-99 14:47:43
OBNUC 13C
EXMOD BCM

OBFRQ 100.40 MHz
OBSET 125.00 KHz
OBFIN 10500.0 Hz
POINT 16384
FREQU 30120.5 Hz
SCANS 2053
ACQTM 0.544 sec
PD 2.456 sec
PW1 4.5 us
IRNUC 1H
CTEMP 23.8 c
SLVNT CDCL3
EXREF 77.00 ppm
BF 1.20 Hz
RGAIN 29

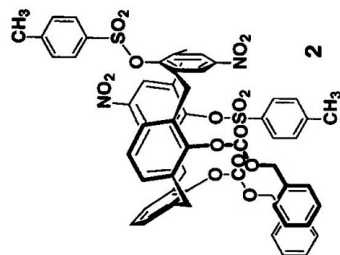
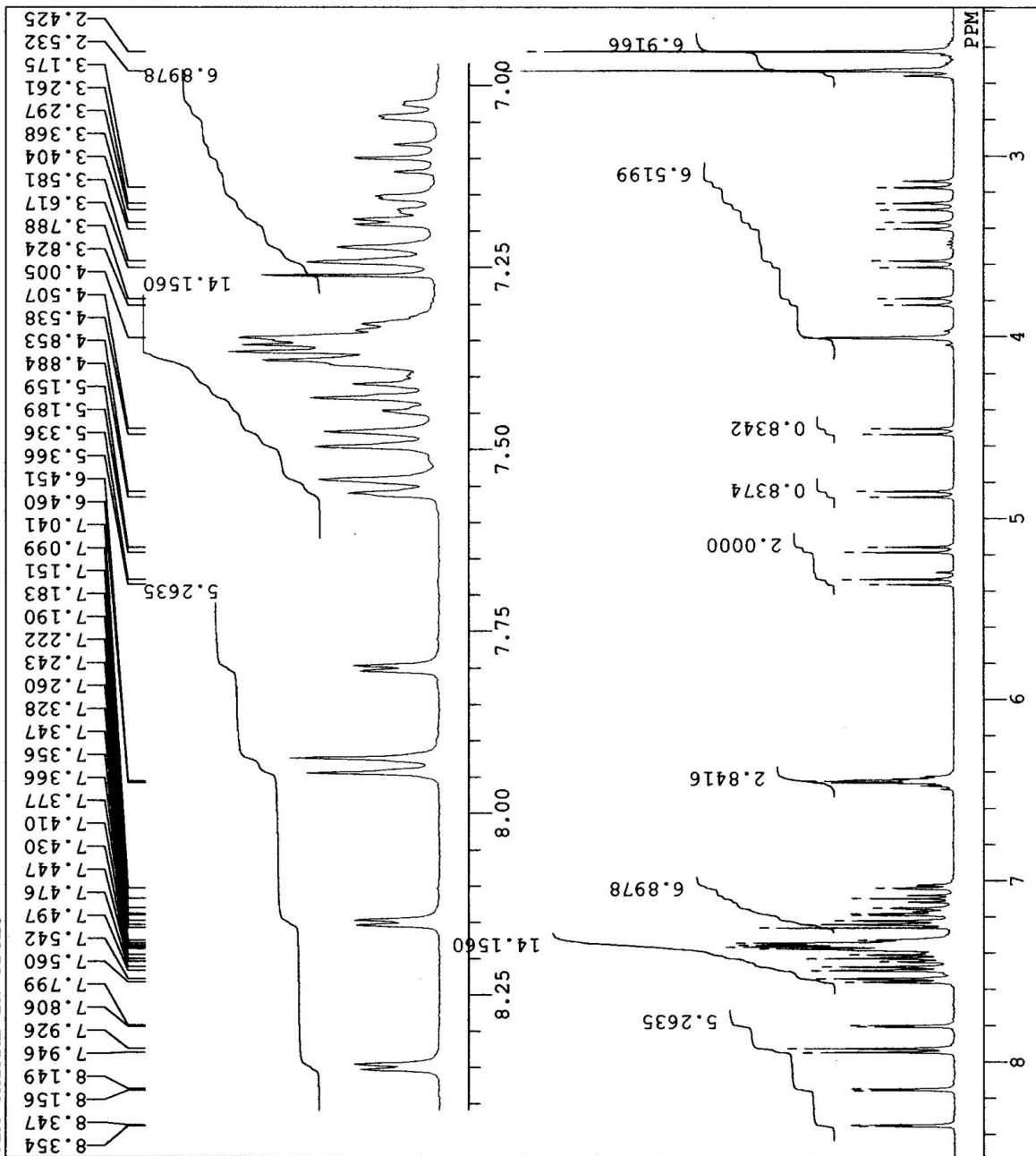
S6



DFILE
COMNT
DATIM
OBNUC
EXMOD
OBFREQ
OBSET
OBFIN
POINT
FREQU
SCANS
ACQTM
PD
PW1
IRNUC
CTEMP
SLVNT
EXREF
BF
RGAIN

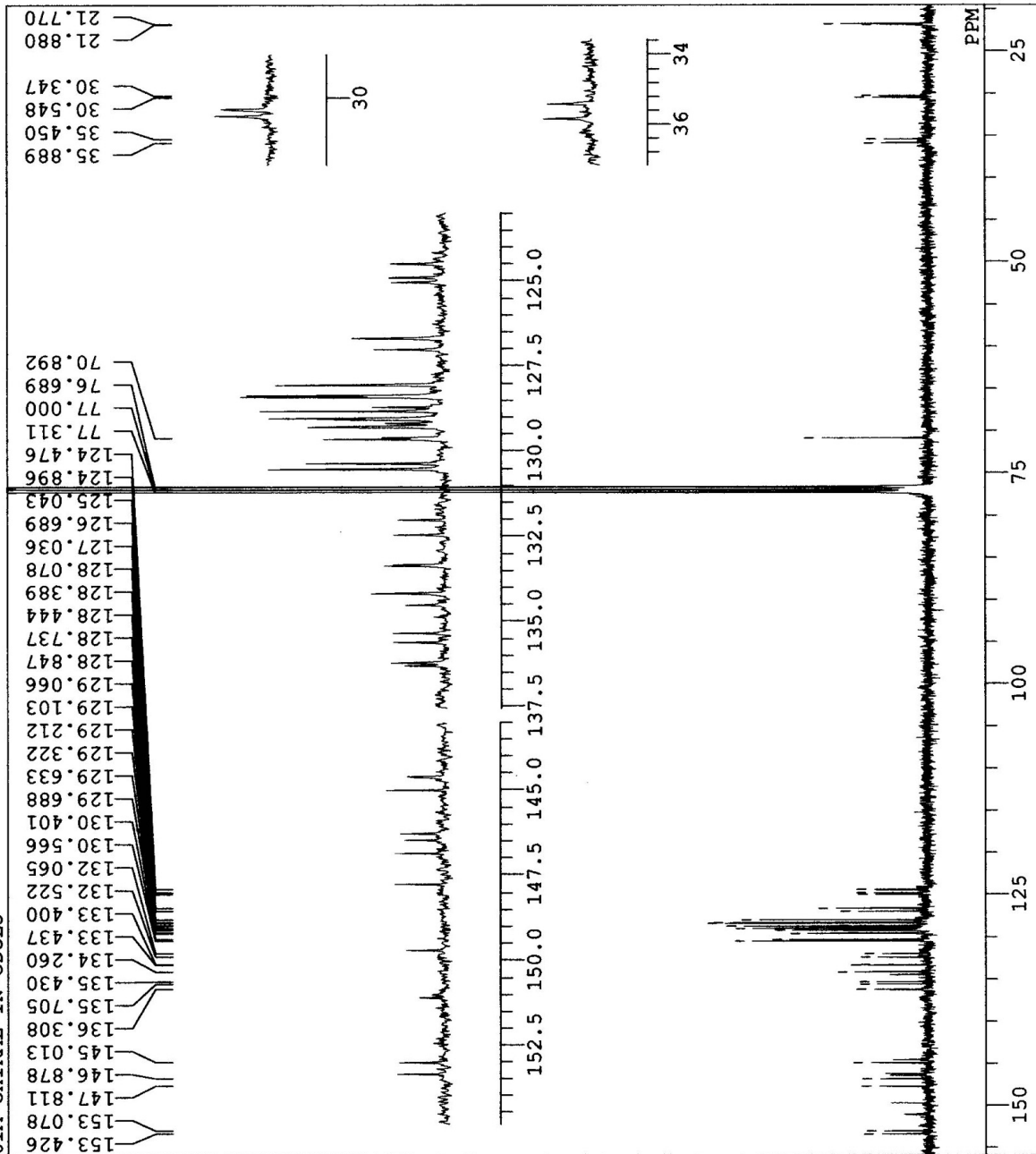
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61A-CHIRAL-IN-CDCL3
06-JUL-99 12:28:08

¹ H	399.65 MHz
NON	124.00 KHz
	10500.0 Hz
	16384
	8000.0 Hz
	32
	2.048 sec
	4.952 sec
	5.4 us
¹ H	24.2 C
CDCL3	
	7.26 ppm
	1.20 Hz
	21



75

61A-CHIRAL-IN-CDCL3



DFILE
COMNT
DATIM
OBNUC
EXMOD
OBFRO
OBSET
OBFIN
POINT
FREQU
SCANS
ACQTM
PD
PW1
IRNUC
CTEMP
SLVNT
EXREF
BF
RGAIN

D:\NMR199\CALIX\12c61ac
61A-CHIRAL-IN-CDCL3
06-JUL-99 14:16:31
13C
BCM

100.40 MHz
125.00 KHz
10500.0 Hz
16384
30120.5 Hz
2103
0.544 sec
2.456 sec
4.5 us
1H
23.7 c
CDCL3
77.00 ppm
1.20 Hz
29

S8

